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Let's go



Troubleshooting UCM calling in the Webex App

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BRKCOL-3818

Agenda

- Introduction
- Tools
- Registration troubleshooting
- Call flow troubleshooting
- Conclusion



Introduction



Topology - On premises registration





Topology - Mobile Remote Access







Supported Call Solution versions

Call Solution	Version
Cisco Unified Callmanager	Unified CM Release 12.5(1) and later for SIP Oath encrypted calls support. (CAPF is not supported.) Unified CM Release 12.5(1) SU3 and later for Push Notifications on Android and iOS (APNs) Unified CM release 14.0 or later for MRA failure
Expressway	X8.11.4 or later is required for Calling in Webex (Unified CM) X12.6 or later for Push Notifications.

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Configuration steps

Configuration step	Where
1. Configure UC Services Workflow	UCM
2. Service Discovery	DNS, Webex Control Hub
3. User Authentication	UCM, Webex Control Hub
4. Phone Configuration for Desktop Clients	UCM
5. Configure Unified CM End Users	UCM
6. Configure softphone devices	UCM
7. Configure Push Notifications and Recommended Settings	UCM
8. Client Configuration	UCM
9. Calling Experience for Users Workflow on Webex	Webex Control Hub
10.Configure SIP Address Routing for Your Organization	Webex Control Hub

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Configuration steps - Auto Registration

Configuration step	Where
1. Active Cloud Connected UC	Webex Control Hub
2. Service Discovery	DNS, Webex Control Hub
3. Enable Auto-provisioning for Webex App	Webex Control Hub
4. User-id configuration	Webex Control Hub, Unified CM
5. Calling Experience for Users Workflow on Webex	Webex Control Hub
6. Configure SIP Address Routing for Your Organization	Webex Control Hub

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Tools

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How to collect Webex app logs?

- 1. Send logs from Webex App to Control Hub
- 2. Collect logs from Webex Control Hub
- 3. Download logs from Webex App to local system

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Control Hub > Management > Organisation settings > Help and support information





About

Control Hub > Management > Organisation settings > Help and support information





Webex Help About



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Control Hub > Troubleshooting > Logs

webex Control Hub		Q Search				L	çº 0 e 🔺		
Overview Alerts centre Amonitoring	ubleshooting	.ive meetings 🤄) Status 💿 Vid	leo Mesh 🛛 🔒 A	dmin activities	⊜ Connected UC	Logs »	Ente	er Feedbackld or
Analytics Troubleshooting Reports	1 Feb 2024 to	8 Feb 2024	(GM	T +01:00) Europe/Bru	ussels V	0 records	Collect logs	user	r email address
Q user1@brkcol.wbx	to iii 8 F	eb 2024	(GMT +	01:00) Europe/Br	ussels	✓ 2 records		Collect logs	
Date	User logs	Email Addr	Call start ti	Feedback ID	Correlation	Locus ID	User agent	Metadata	
Feb 08, 2024 9:30:34 a	im 🔟	user1@br	-	9227fa8e	-	-	sparkwin	₿	Download
Feb 01, 2024 2:06:24 p	m 🔶 👱	user1@br	-	cb7c7951	-	-	sparkwin		'User logs'

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Method 2# : Collect logs from Webex Control Hub

Control Hub > Troubleshooting > Logs







Method 3# : Download logs from Webex App

- Click 'Profile and Preferences' (top left)
- Go to Help > Health Checker
- Go to Diagnostics > Export all data (select 'save problem report')
- Includes Calling Environment Data





Webex App - Calling Environment Data



- By default all logs collected have the PII data replaced with hashed valued
- The user must manually export the Calling environment data
- This files contains mapping of PII data and corresponding hashes in JSON
- Export right after logs have been send

Note: Logs collected following method #1 and #2 will NOT include the 'Calling Environment data'



Calling environment data file

"02778545dcf6869c": "user2@brkcol.wbx.ai",	
••••••"04b760d8756a7c38":•"EnableCallPickup,EnableGroupCallPickup,EnableHuntGroup,EnableOtherGroupPickup,PreventDeclineOnHuntCall,	
${\tt RemoteDestination} {\tt Editing With MultipleDevices, UserDefined RemoteDestinations, {\tt SelfCareURL, EnableADLockPrevention, ShowSelfCarePortal, the set of the s$	
RemoteInUsePresencePrimaryLineOnly,EnableCallPark,EnableFecc,EnableE9110nPremLocationPolicy,EnableE911EdgeLocationPolicy,E911Notification	JRL,
${\tt E911NotificationFrequency,ShowCallAlerts,SoftPhoneModeWindowBehavior,DeskPhoneModeWindowBehavior,EnableClusterCheck,}$	
${\tt PeriodicClusterSwitchDetection, {\tt EnableMeetingPowerUp, E911EdgeLocationWhiteList, LocalPushSSIDList, {\tt EnableVideo, {\tt EnableBFCPVideoDesktopShare, the set of the set o$	
${\tt EnableNGEPolicy, CucmShareLinePrivacy, CucmCallBargeMode, {\tt EnablePhoneDialerOptionOverMRA, DisableUnencryptedSrtcp, {\tt EnableRecordingTone, the state of t$	
NearEndRecordingToneVolume,LocalRecordingToneVolume,RecordingToneInterval,RecordingToneDuration,MinorConfigCollection,EnableNAT64,IP_MODE	,
Fecc_Start_Port_Range,Fecc_End_Port_Range,ShowPhoneNumberInLineSelection,CtiGatewayURL,RecordingLockDownCodec,SIP_REGISTER_ACK_timer,",	
•••••"0a6a10d5b5768712":•"SystemServiceEventDescriptions_en-US.xml",	
••••• <mark>•0fa6363175bbef08</mark> ":•"/Applications/Webex.app/Contents/Resources/services/SystemService/SystemServiceStrings_en-US.xml",	
"3e1723b4d64e76f8": "_cisco-udstcp.brkcol.wbx.ai.",	
"4ba76a8cb05dbe11": "brkcol.wbx.ai.",	
••••• <mark>"5cd1d5b6ae414f09":</mark> •"/Applications/Webex.app/Contents/Resources/services/SystemService/SystemServiceEventDescriptions_en-US.xml",	
"5feceb66ffc86f38":-"0",	
"6b86b273ff34fce1": "1",	
·····"6f1845f880752c7f":·"DESKTOP_MOBILE",	
···· 72529b60c24bd81f": · "10.227.65.60" ,	
····**********************************	
·····a4c3ed04a95a3da1":··"done",	
·····"d4735e3a265e16ee":-"2",	
<pre>"db2bd84ff431e3df": "/Applications/Webex.app/Contents/Resources//jabber-config-defaults.xml",</pre>	
·····"dfe88090c5ed7ac2":-"TRUE",	
····"e3b0c44298fc1c14":-"",	
•••••"ef49715e5b1f2a25":•"SystemServiceEventDescriptions_",	
···· [*] f9b92b59146e94d2":·"_collab-edgetls.brkcol.wbx.ai.",	
"fcbcf165908dd18a": "false"	
B	

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Webex App = Calling environment data mapping

*"64c4c3f7446186ac": "pub.coluc.com",

"570b340fc8466bee": "10.48.79.47",

From current_log.txt

[csf.sip-call-control] [platform_print_sip_msg] - sipio-sent---> REGISTER sip:{!64c4c3f7446186ac!} SIP/2.0

Via: SIP/2.0/TCP {!d4787d92e6e23091!}:branch=z9hG4bK0000338f

From: <sip: [!81a83544cf93c245!]@ [!64c4c3f7446186ac!]>;tag=db423814f040000200005cdb-00000c16

To: <sip:{!81a83544cf93c245!]@{!64c4c3f7446186ac!}>

Call-ID: db423814-f0400003-00006053-000001ed@{!570b340fc8466bee!}

Max-Forwards: 70 Date: Fri, 27 Jan 2024 13:23:28 GMT

CSeq: 101 REGISTER

User-Agent: Cisco-CSF

Contact: {!e45728e3f0d0eca1!}

"81a83544cf93c245": "2000",

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Reference

Webex App - Log Metadata

webex co	ntrol Hub Q. Search	4 🤉 🖓
Overview	Log Metadata	×
 ⊘ Getting Started ↓ Alerts center 	<pre>{ "filename": "c755cd7b-fb66-4724-96a5-07f47378c428_FB.zip", "orgId": "e7b4b666-aa51-4908-abd6-68540cb2ae62", "userId": "f82184c9-8ff8-4958-bc5e-43db2bc88ed2",</pre>	
MONITORING	"userAgent": "sparkmac/43.1.0.24716", "emailAddress": "user2@brkcol.wbx.ai", "logId": "9282eac0-95a1-11ed-83f0-9307568b872b", "timestamp": "2023-01-16T13:27:57.2262", "meta": {	Collect Beta
- Troubleshootin	"downloadable": "true", "logtype": "unified", "catalog": "Calling"	Metadata
MANAGEMENT	"feedbackid": "c755c7d7b-fb66-4724-96a5-07f47378c428", "description": "Service discovery no SRV records found", "autoupload": "false",	
Q Users	"subcatalog": "CUCM" }, "downloadUrl": "https://client-logs-r.wbx2.com/api/v1/logs/organizations/e7b4b666-aa51-4908-	
요 Groups 뫒 Workspaces	abd6-68540cb2ae62/users/f82184c9-8ff8-4958-bc5e-43db2bc88ed2/files/9282eac0-95a1-11ed-83f0-9307568b872b", "lastModified": "2023-01-16T13:27:57.226Z", "platform": "sparkmac", "	
Devices	"userAgentVersion": "43.1.0.24/16" }	
Crganization S		
SERVICES	Ciose Copy	
C Updates & Migrati	ions	

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Webex Organisation ID
 Email address user
 Timestamp
 Meta
 Description

Reference

Upload logs from Webex App – Mobile (iOS)

× Profile & Pre	ferences	
user user1@brkc	1 J.wbx.ai	
Activ		
Phone service (8)	Disconnected	
Availability		
Set a Status		
Profile		
Settings		
About		
What's New		
Help		
Send Fee	dback	
Send L	ogs	
Sign C	Dut	

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60								
<		Settings		<		Callir	ıg	
	General		>		A You're not s			
	Notifications		>		Phone Services		Disconnected	
	Audio		>		TROUBLESHOOTIN	١G		
	Video		>		Export Calling En	vironm	nent Data	
	Privacy		>		Support may instru calling environmen	ict you t data f	to export and send or troubleshooting	d J.
	Calendar		>		No personal data is	stored	in the logs.	
	Messaging		>					
	Calling		>					
	Devices		>					
	-				-			

Calling Environment Data 🕥
Aan:
Kopie/Blind, Van: Verberg mijn e-mailadres
Onderwerp: Calling Environment Data
CallingEnvintData.dat 3 KB

Webex App - Log location

	Windows	MAC
Main log	%LOCALAPPDATA%\CiscoSpark\current_log.txt	\$HOME/Library/Logs/SparkMacDesktop/
UC Login log	%LOCALAPPDATA%\CiscoSpark\uclogin\uclogin.log	\$HOME/Library/Logs/SparkMacDesktop/uclogin /uclogin.log

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Health Checker

four reconnected to the interne	ι.	a full on survivability rest mode
Server connection	All services are accessible	Services impacted Everything looks good here!
Cloud	Operational	Information taken from status.webex.com
Reflexit	~	✓ Softphone server Status: Connected Server: pub.coluc.com (IPv4) Protocol: SIP
Phone services	Softphone connected	Device: CSFUSER2 Line: 2000 X Desk phone server Status: Disconnected Server: 10.48.79.160

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Internet
 Health Checker verifies if your computer is connected to a network

Server Connection

 Health Checker confirms that the Webex app can connect to the Cisco Webex cloud components

Cloud

 Health Checker gets the status of the Cisco Webex cloud from https://status.webex.com

Phone Services

Health Checker tests the connection of your phone services

Health Checker - Internet Connection

You're not connected to the	e internet.	
Server connection		Services Impacted
Cloud Refresh		Information taken from status.webex.com
Phone services	×	X Softphone server Status: Disconnected Server: pub.coluc.com Protocol: SIP Device: CSFUSER1 Line: 1000

current_log.txt

NetworkStateMachine.cpp:108 onNetworkStatusChanged:NetworkStateMachine - onNetworkStatusChanged NetworkLost

StateMachine.h:121 handleEvent:ConnectivityStateMachine::Network - Connected -> NoNetwork : {NetworkLost}

StateMachine.h:117

handleEvent:ConnectivityStateMachine::ConnectivityBannerStaying in state [Connected] - event {NoNetwork}

- Set a status < > +	Q Search, meet, and call	⑦ Connect to a device − □ ×
	No network connect	tion
All Missed		My number: 1000
÷		Search or dial a number
8		



Health Checker – Webex service Connections



Performs a HTTP request (PING) for:

https://settings-service-r.wbx2.com/ https://raindrop-r.wbx2.com/ https://filtering-r.wbx2.com/ https://conv-r.wbx2.com/ https://acl-r.wbx2.com/ https://encryption-r.wbx2.com/ https://csdm-r.wbx2.com/ https://avatar-r.wbx2.com/ https://idbroker-b-us.webex.com/ https://client-logs-r.wbx2.com/ https://u2c-r.wbx2.com/ https://atlas-api-a.wbx2.com/ https://mrs-sjc02-dfw01.webex.com/ https://calendar-r.wbx2.com/ https://meeting-container-r.wbx2.com/ https://files-api-r.wbx2.com/ https://jabber-integration-r.wbx2.com/ https://conv-r.wbx2.com/ https://license-r.wbx2.com/ https://janus-r.wbx2.com/ https://web-authentication-r.wbx2.com/ https://locus-r.wbx2.com/ https://call-rendezvous-r.wbx2.com/ https://nps-collector-service-a.wbx2.com/ https://insights-r.webex.com/ https://oauth-helper-r.wbx2.com/ https://ediscoverv-r.wbx2.com/ https://wdm-r.wbx2.com/ https://encryption-r.wbx2.com/ https://argonaut-r.wbx2.com/ https://files-api-r.wbx2.com/ https://directory-search-r.wbx2.com/ https://calliope-anycast.prod.infra.webex.com/ttps://client-upgrade-a.wbx2.com/ https://storage101.dfw1.clouddrive.com https://board-r.wbx2.com/ https://files-prod-us-west-2.webexcontent.com https://lyra-r.wbx2.com/ https://usersub-r.wbx2.com/ https://feature-r.wbx2.com/

https://help.webex.com/en-us/article/WBX000028782/Network-Requirements-for-Webex-Services

Health Checker - Server Connection

user2	- 🗆 X
Active	0 0 0
Messages Profile Content Meetings +Apps	£ Q
(⊘ Share a file) (Je Send a GIF) (S N	Nake a call
Hello user2	
You 15:49	
You 15:49 hello	c 0
You 15:49 hello You You 15:50 Image: State of the state o	8 0
You 15:49 hello You 15:50 You 15:50 I afd5f2a5-a26a_FB.zip I3.3 MB Unable to send your message	Ø ð
You 15:49 hello You You 15:50 Image: State of the send your message Ø Tr Go Ø Tr Go Go	Shift+Enter for a new line

Unable to send a data file

		Services impacted
Server connection	One or more services are inaccessib	Content Storage
Test		
Cloud	×	Information taken from status.webex.com
Refresh		
Phone services	\checkmark	 Softphone server Status: Connected Server: pub.coluc.com Protocol: SIP Device: CSFUSER1 Line: 1000
Test	Softphone connected	× Desk phone server Status: Disconnected Server: 10.48.79.160 Protecto: CTL



Health Checker - Server Connection - NOK

"visitedUrls":[

"https://files-prod-us-west-2.webexcontent.com", "https://files-prod-us-west-2.webexcontent.com", "https://files-prod-us-west-2.webexcontent.com"] }

<Warn> [208] HttpRequestManager.cpp:2058 network::HttpRequestManager::_httpRestRequest::<...>::operator ():

{"id":"HTTP request failed and we have no more retries or the error is non-retrieable",

"uri":"https://files-prod-us-west-2.webexcontent.com",

"method":"GET",

"action":"/", ...

"trackingId":"CLIENT_b0414a63-f60f-412b-86f4-521e2a920384",

"cancellationId":"3e31dab1-daed-4350-a334-c210d3a74769",

"requestRetryCount":0,

"clientRetryCount":5,

"visitedUrls":[...],

"networkTimings":[4,0,0,0] }

First check 'status.webex.com'

Next network

<Error> [208] ServiceReachabilityManager.cpp:217 FileSpaceReachabilityCheckAction::checkUrl::<...>::operator ():Unable to reach files URL: https://files-prod-us-west-2.webexcontent.com

Health Checker - Server Connection - OK

<Debug> [10556] InternetConnectivityChecker.cpp:228 network::InternetConnectivityChecker::checklsWebexBlocked:Checking if Webex services are blocked

```
<Debug>[10556] HttpRequestManager.cpp:1951 network::HttpRequestManager::httpRestRequest:
{"id":"Making HTTP request",
"uri":"https://wdm-r.wbx2.com/",
"method":"GET",
"action":"/wdm/api/v1/ping", ...
"trackingId":"CLIENT_457d52e7-5ee1-4f19-90e8-32c0ec130391",
"cancellationId":"7b2341e0-f137-4c7b-a15e-5ee9631a7f78"
```

<Debug> [1400] HttpRequestManager.cpp:2066 network::HttpRequestManager::_httpRestRequest::<lambda_97d0d0486392e3a99a0dae24ce8d27a1>::operator ()
{ "id":"HTTP request succeeded.",
 "uri":"https://wdm-r.wbx2.com/",
 "method":"GET",
 "action":"/wdm/api/v1/ping", ...
"trackingld":"CLIENT_457d52e7-5ee1-4f19-90e8-32c0ec130391",
 "cancellationId":"7b2341e0-f137-4c7b-a15e-5ee9631a7f78",
 "responseLen":5474,
 "networkTimings":[271,612,382,0]

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Health Checker - Status

You re connected to the interne	с.	Turn on Survivability lest Mod
Server connection	All services are accessible	Services impacted Everything looks good here!
Cloud Refresh	Operational	Information taken from status.webex.com
Phone services	Softphone connected	 Softphone server Status Connected Server: pub.coluc.com (IPv4 Protocol: SIP Device: CSFUSER2 Line: 2000 Desk phone server Status Disconnected Server: 10.487 91 50

webex	Commercial Status	Government Status	Incident Hi	story	Maintenance	Updates/Upgrades	Calendar	Help	۲
		Latest	Webex	Statu	s Informa	ition			
	Welcome to the C	ommercial Status pa	age for Wel	bex. Issu	es affecting V	Webex services are t	racked belov	v.	
open Inc	idents								
Webex	Calling Service Maintenan	ce: February 08, 2024							
Web	ex Meetings	() >	Webex Ap	p		63	۲
Web	ex User Hub	æ	()) >	Webex Co	ntrol Hub		(@)	۲
Web	ex Cloud Registered De	evice	6) >	Webex Ca	lling		C	۲
Deve	eloper API	Ę	()) >	Webex Hy	brid Services		Q	۲
Web	ex Contact Center	6) (3)) >	UCM Cloud	d		H	۲
Web	ex for BroadWorks		§ (\$) >	Gateway a	nd Solutions		0-0 0-0	۲
Web	ex Events (formerly So	cio)	88 6) >	Slido			(s)	(2)

Health Checker - Status

1 four reconnected to the intern	с .	
Server connection	All services are accessible	Services impacted Everything looks good here!
Cloud	Operational	Information taken from <u>status.webex.com</u>
retresh		
B Phone services	Softphone connected	 Softphone server Status: Connected Server: pub.coluc.com (IPv4 Protocol: SIP Device: CSFUSER2 Line: 2000
Test		X Desk phone server Status: Disconnected Server: 10.48.79.160

- Phone Services validation:
 - Softphone server SIP UCM
 - Desk Phone Server CTI UCM
 - Voicemail Server HTTPS CUC

Health Checker – Phone services

		Services impacted	$\bullet \bullet \bullet = -$ Set a status $\langle \rangle + 0$	Q Search, meet, and call		Auto 10
Server connection	All services are accessible	Everything looks good here!	All Missed ∰ 	Sea	Connected	0
Cloud Refresh	Operational	Information taken from status.webex.com		GHI PQRS	Disconnect	
Phone services	Desk phone connected	 Softphone server Status: Disconnected Server; pub coluc.com Protocol: SIP Desk phone server Status: Connected Server: 10.48.73.160 Protocol: CTI Device: SEP88098D73D686 Line: 1001 		*	O # Auto 1001 ~ Video device	

Health Checker - Reset Database

Server connection	All services are a	Services impacted Everything looks good here!
Test		
Cloud	Reset your database? Database reset Gicking "Yes' will clear your datab	Abase and restart Webex Yes No
S Phone services	Softphone co	✓ Softphone server Status: Connected Server: pub.coluc.com (IPv4 Protocol: SIP Device: CSFUSER2 Line: 2000
122		× Desk phone server Status: Disconnected

• Database reset

- Clears all configuration
- Clears all cache
- When?
 - Messages are not getting decrypted
 - Configuration changes are not applied

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For any other weird behavior (2)

Reference

Health Checker

Note : 'Turn on Survivabiliy Test mode' only applicable for Webex
 Calling

I You're connected to the internet.

Turn on Survivability Test Mode

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Diagnostics



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Diagnostics

		Diagnostics	
ĝ} G	eneral	🗞 Calling 🖾 Device	
K C	onfiguration	Call on Webex	
∿ St	atistics	Video capability	Enabled(Control Hub)
		Share capability	Enabled(Control Hub)
∿ P€	erformance	Reachable media server	8 View dotails
		Calling entitled	No.
		Hybrid calling enabled	No
		Advanced Calling	
		Video capability	Enabled(Control Hub)
		Share capability	Enabled(Control Hub)
	\rightarrow	Voice services domain	coluc.com
	\rightarrow	Internal visibility	Visible
		Edge visibility	Not visible
		 Device configuration 	https://pub.coluc.com:6972 /CSFUSER2.cnf.xml
		Global settings configuration	https://pub.coluc.com:6972 /global-settings.xml
		Home UDS	https://sub.coluc.com:8443 /cucm-uds/user/user2
		Service profile	https://pub.coluc.com:6972
		configuration	/SPDefault.cnf.xml
	\rightarrow	UCM version	14.0.1
		TFTP servers	https://pub.coluc.com
		UDS servers	https://sub.coluc.com

●●● 🗈 👻 🏠 < > D 🗉 🔒 pub.coluc.com	c) + C
<pre><device ctiid="19" uuid="{83fbf82e-e165-de2a-6afd-f91c0fdc</pre></td><td>:c164}" xsi:type="axl:XIPPhone"></device></pre>	
<fullconfig>true</fullconfig>	
<pre><portaldefaultserver>pub.coluc.com</portaldefaultserver></pre>	
<deviceprotocol>SIP</deviceprotocol>	
<sshuserid></sshuserid>	
<sshrassword></sshrassword>	
<pre><lphdaressmode <="" ipadressmode="" li="" u=""></lphdaressmode></pre>	
<adpashlottuc dadpashlot<="" td=""><td></td></adpashlottuc>	
<pre>credirectEnable>false</pre> /redirectEnable>	
<echomultienable>false</echomultienable>	
<pre><ippreferencemodecontrol>0</ippreferencemodecontrol></pre>	
<pre><ipmediaaddressfamilypreference>0</ipmediaaddressfamilypreference></pre>	
<tzdata></tzdata>	
<tzolsonversion>2021c-2023</tzolsonversion>	
<tzupdater>tzupdater.jar</tzupdater>	
<pre><mlpblomainid>000000</mlpblomainid> </pre>	
<pre>smtppindtcattonstatus>oft</pre> /mtppindtcattonstatus> <pre>cnreemption>Disabled</pre> /mtpon>	
<pre><executiveoverridepreemptable>false</executiveoverridepreemptable></pre>	
<pre><devicepool uuid="{1b1b9eb6-7803-11d3-bdf0-00108302ead1}"></devicepool></pre>	
<revertpriority>0</revertpriority>	
<pre><name>Default</name></pre>	
<pre><datetimesetting uuid="{9ec4850a-7748-11d3-bdf0-00108302ead1}"></datetimesetting></pre>	
<name>CMLocal</name>	
<pre><datetemplate>M/D/X</datetemplate> </pre>	
<pre>colsourine@creewich Standard Time</pre> /colsourine@creewich	
<pre><callmanagergroup></callmanagergroup></pre>	
<name>Default</name>	
<tftpdefault>true</tftpdefault>	
<members></members>	
<pre><member priority="0"></member></pre>	
<callmanager></callmanager>	
<pre><name>pub.coluc.com</name> </pre>	
<pre>clastiption>pub/description> </pre>	
<pre><ethernetphoneport>2000</ethernetphoneport></pre>	
<sipport>5060</sipport>	
<pre><securedsipport>5061</securedsipport></pre>	
<sipoauthport>5090</sipoauthport>	
<pre><sipmraoauthport>5091</sipmraoauthport></pre>	
<mgcpports></mgcpports>	
listen>242/ chorphive>242/s/listen>	
<pre></pre>	
<pre></pre>	
<pre><pre>cessNodeName>pub.coluc.com</pre></pre>	
<member priority="1"></member>	
<calimanager></calimanager>	
<name>sub.coluc.com</name>	
<pre><pre><pre><pre>college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:college:co</pre></pre></pre></pre>	
<pre><pre>cethernetPhonePort>2000</pre>/ethernetPhonePort></pre>	
Diagnostics



Server Certificate validation result
DNS SRV resolution results for "_cisco-uds" and "_collab_edge"

Diagnostics

	Diagno	ostics	
🕸 General	⊴) Audio 🗆 \	/ideo (↑) Conter	nt sharing
% Configuration			
∽ Statistics		Send	Receive
	Codec	Opus	Opus
✓ Performance	Bit rate	18 kbps	16 kbps
	Packet loss	0 %	0 %
	Latency	-	-
	Jitter	16 ms	27 ms
	Transport	UDP	UDP

•	Diagno	ostics				Referenc
 General ※ Configuration 	⊲ಿ Audio 🗔 🕅	<mark>/ideo</mark> (≜) (Content sharing			
✓ Statistics	Resolution	Send 640 x 36	Receive			
✓ Performance	Frame rate	23 fps				
	Bit rate Packet loss	0 %	•	Diagno	ostics	
	Jitter	0 ms 22 ms	 General Configuration 	্বী» Audio □া	Video (<u>^)</u> Conten	t sharing
	Transport	UDP	∽ Statistics	Codec	Send	Receive
			~ Performance	Resolution	1204 x 752	-
				Frame rate		
				Packet loss	0 %	-
				Latency	66 ms	
				Transport	UDP	-
						Export all data

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Deference

Collaboration Solution Analyzer

https://cway.cisco.com/csa-new/



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Collaboration Solution Analyzer Log Analysis – Upload

Exported Diagnostics (Problem report, CED and Diagnostics)

~
No files found in the user sandbox. Start by uploading them below.
WebexDiagnosticL 3.5 MB 1 Selected (Total: 3.5 MB) Upload
✓ Filename Product type Run □ □ □ □ 0.01.2024 10.08.05 tio ₩/EPCYADD
VerbexblagnosticLogs - 29-01-2024 10-08-05.2p WEBEXAPP 3.7 MB Delete selected files Run analysis Delete all

Problem report & CED

	Upload and	analyze files	~
No files found in the	e user sandbox. Start by uploa	ding them below.	
Ced.dat 26.1 KB	X Af23cd16-97c1-4 3.7 MB		
	2 Selected	(Total: 3.8 MB)	
		pload	
[
✓ Filename ✓ ⊕ df23cd16-	97c1-406b-b0d0-47c03bfc2	Product type 39f_FB.zip WEBEXAPP 3.9 MB	Run
Delete selected files		Run analysis	Delete all

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Collaboration Solution Analyzer Log Analysis – Download unredacted files

Home	Collaboration Sol CISCO Log Analyzer	utions Analyzer 🔟 🛈 UTC	•	?	⇔
**	System inform	nation			
Tools	General Calling	Configuration			
Analyzer					
↑ Upload	Host configura	tion			
files	Product	Webex App			
-^-	Version	44.1.0.28423			
Diagnostics	Organization ID	e7b4b666-aa51-4908-abd6-68540cb2ae62			
<u>1.1</u>	Calling Behaviour	NATIVE SIP CALL TO UCM			_
Analysis	IP	2001:420:44ff:1029:ac25:6904:c4d8:d879			
+	User ID	F82184C9-8FF8-4958-BC5E-43DB2BC88ED2			
Download	OS	WINDOWS 10.0.22000.120 (64 bit)			
file	Timezone	UTC -0700			
	Hardware	VMware7,1 ; VMware, Inc. ; None ; Intel(R) Xeon(R) CPU E7-2890 v2 @ 2.80GHz			

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Collaboration Solution Analyzer System information

System informa	tion	System informat	ion
General Calling C	Configuration	General Calling C	Configuration
Host configuratio	n	General	
Product	Webex App	UCM Version	14.0.1
Organization ID	e7b4b666-aa51-4908-abd6-68540cb2ae62	Device Registration	eReady
Calling Behaviour	NATIVE SIP CALL TO UCM 2001:420:44ff:1029:ac25:6904:c4d8:d879	Device Line Configuration	line 1 (2000) is REGISTERED
User ID	F82184C9-8FF8-4958-BC5E-43DB2BC88ED2	 Device Pool Name 	Default
OS Timezone	WINDOWS 10.0.22000.120 (64 bit)	UCM Group Name	Default
Hardware	VMware7,1 ; VMware, Inc. ; None ; Intel(R) Xeon(R) CPU E7-2890 v2 @ 2.80GHz	com alles computation	 sub.coluc.com (sub.coluc.com)
Over All Webex App CPU Usage	2.34%		
Webex Main Process CPU Usage	2.03%		
Webex Media Process CPU Usage	0.31%		
Overall System CPU Usage	7.34%		
Overall Webex App Memory Usage	15.36% (1258MB/8191MB)		
Webex Main Process	4.69% (384MB/8191MB)		

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Collaboration Solution Analyzer System information

System information			Advanced Calling	
General Calling Configu	iration		Video Capability	Enabled(Control Hub)
			Share capability	Enabled(Control Hub)
General		 ┢	Internal visibility	Visible
		 ┢	Edge visibility	Not visible
DNS record for cisco-uds	pub.coluc.com		Device configuration	https://pub.coluc.com:6972/CSFUSER2.cnf.xml
DNS record for collab-edge	Domain does not exist		Global settings configuration	https://pub.coluc.com:6972/global-settings.xml
			Home UDS	https://pub.coluc.com:8443/cucm-uds/user/user2
			Service profile configuration	https://pub.coluc.com:6972/SPDefault.cnf.xml
Call on Webex			UCM version	14.0.1
			TFTP servers	https://pub.coluc.com
Video Capability	Enabled(Control Hub)		UDS servers	https://pub.coluc.com, https://sub.coluc.com
Share capability	Enabled(Control Hub)	 ┢	Voicemail server	10.48.79.112
Reachable media server number	7		authentication	Password
Calling entitled	No		credentialSource	Sync
Hybrid calling enabled	No			

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Collaboration Solution Analyzer Log overview



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Call analysis

Call		
Call leg info Ladder	diagram Signalling	
SIP - incoming]	Ladder tags Use for signaling
General inform	nation	
SIP call leg type	Call	
From	Call 1000@10.48.79.160	
From To	Call 1000@10.48.79.160 2000@pub.coluc.com	
From To Signaling source	Call 1000@10.48.79.160 2000@pub.coluc.com 10.48.79.160 : 0	
From To Signaling source Signaling destination	Call 1000@10.48.79.160 2000@pub.coluc.com 10.48.79.160 : 0 10.48.29.32 : 0	
From To Signaling source Signaling destination Call ID	Call 1000@10.48.79.160 2000@pub.coluc.com 10.48.79.160 : 0 10.48.29.32 : 0 cabc6c80-1ef1da5b-23ae- a04f300a@10.48.79.160	

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Call analysis



Message

uclogin.log

Lines in log

2024-01-26 23:40:12,108 DEBUG [0x0000229c] [\sipcc\core\sipstack\ccsip_debug.c[2405)] [csf.sip-call-control] [platform_print_sip_msg] - siplo-sent---> SIP[2.0 200 CK

Message body

SIP/2.0 200 OK Via: SIP/2.0/TCP 10.48.79.160.5060.branch=z9hG4bK23ad283b11e7 From: "user1" <sio:1000@10.48.79.160>tao=18332~6ba989f3-de10-4fc2-b4e9-a0a7c8e851e1-17164257 To: <sip:2000@pub.coluc.com>;tag=daab3faeb69c0005 Call-ID: cabc6c80-1ef1da5b-23ae-a04f300a@10.48.79.160 Session-ID: 0000629e00105000a000daab3faeb69c;remote=0000757200105000a000cee932649d13 Date: Fri, 26 Jan 2024 23:40:12 GMT CSeq: 101 INVITE Server: Cisco-CSF Contact: <sip:d7/37c17-1af8-be78-c0e1-559b5d5c15c7@10.48.29.32:50918;transport+tcp>;+u.sip1devicename.ccm.cisco.com=*C SFUSER2*;video;bfcp;x-cisco-client=desktop;x-cisco-rdc=allow Allow: ACK, BYE, CANCEL, INVITE, NOTIFY, OPTIONS, REFER, REGISTER, UPDATE, SUBSCRIBE, INFO Remote-Party-ID: "2000" <sip:2000@pub.coluc.com>;party=called;id-type=subscriber;privacy=off;screen=yes Supported: replaces.join.sdp-anat.norefersub.resource-priority.extended-refer.X-cisco-callinfo.X-cisco-serviceuri,X-cisco-escapecod es,X-cisco-service-control,X-cisco-srtp-fallback,X-cisco-monrec,X-cisco-config,X-cisco-sis-7.0.0,X-cisco-sessionpersist,X-cisco-x si-8.5.1 Allow-Events: koml.dialog Recy-Info: conference Recv-Info: x-cisco-conference Content-Length: 2253 Content-Type: application/sdp Content-Disposition: session;handling=optional o=Cisco-SIPUA 2389 0 IN IP4 10.48.29.32 s=SIP Call b=AS:4000 t=0 0 a=cisco-mari.v1





Collaboration Solution Analyzer Log overview - HTTP queries



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Collaboration Solution Analyzer Log overview – SIP registration

Log overview									
Calls HTTP queries	s S	IP registration	DNS qu	ueries A	nnotated logs				
Q Search									
Start time	User	DN		Device	Call ID	Successful	Туре	Src IP	Dest IP
2024-01-26 23:40:59		2000@pub.colu	ic.com	CSFUSER2	daab3fae-b69c0003-00003bc6-00004d5d@10.48.29.32		Registration	10.48.29.32	10.48.79.160



Collaboration Solution Analyzer Log overview – DNS queries





Collaboration Solution Analyzer Log overview – Annotated logs

Log ove	erview
Calls H	TTP queries SIP registration DNS queries Annotated logs
Annota	ated logs
Category	✓ All ✓ Login ✓ SSO and OAuth ✓ Edge ✓ SIP
Severity	✓ All ✓ Info ✓ Debug
Filename	✓ All ✓ uclogin.log.1 ✓ uclogin.log

	HTTP 1970-01-01T00:00:00 Received successfull HTTP 200 response for request #18 to URL "https://pub.coluc.com:8443/cucm-uds/user/user2/remoteDestinations"	Info	dup uc	ogin.log
•	2024-01-26 23:39:04,526 INFO [0x0000073c] [Is\src\http\BasicHttpClientImpl.cpp(675)] [csf.httpclient] [csf::http::performRequest] - ** HTTP response code 200 connect code 0 for request pub.coluc.com:8443/cucm-uds/user/user2/remoteDestinations	iest #18 to ht	:ps://	
	INS 1970-01-01T00:00:00 DNS resolution for _collab-edgetls.coluc.com. failed with error DNS name does not exist	Warning	up uclo	gin.log.1

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CED file - Important note

Log overview							
Calls HTTP queries	SIP registration	DNS queries Annotated logs					
Q Search							
From	То	Call ID	Call initiated (UTC)	Call connects (UTC)	Log duration (sec)	Disconnect reason	Issues found
1000@ <redacted by="" clie<br="">nt</redacted>	<redacted by="" clie="" nt<="" th=""><th>cee93264-9d13000b-0000573c-00005179@10.48.2 9.44</th><th>2024-01-29 22:39:03</th><th>No</th><th></th><th></th><th>None</th></redacted>	cee93264-9d13000b-0000573c-00005179@10.48.2 9.44	2024-01-29 22:39:03	No			None
1000@ <redacted by="" clie<br="">nt</redacted>	<redacted by="" clie<br="">nt</redacted>	cee93264-9d13000e-00001347-00004e2d@10.48.2 9.44	2024-01-29 14:19:00	No			None

- Collect CED file at the same time problem report is collected
- After a reset, CED file is reset but logs are not
- This may result in the CSA being unable to 'unredact' the log files

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Registration troubleshooting





Registration – Webex Control Hub configuration for UCM calling



- User License (Users, Management)
- UC Manager Profiles (Organisation settings, Management)
- · Calling Behaviour (Calling, Services)
- Unified CM Settings (Calling, Services)
- Unified CM SIP Address Routing (Calling, Services)
- Webex app Provisioning for Unified CM Calling (Connected UC, Services)

											Active	user1@brkcol.w	bx.ai					
Registration – User license										Cal	trofile General	Meetings d: None	Calling	Messaging	Hybrid Services	Devices	Vidcast	
webex Contro	ol Hub		Q Search	1					4 Ø		Cisco Webex S user1@brkcol-sb	IP Address	m					
MANAGEMENT	< _	user1			Р	rofile	General >	>	Action	h	Primary Work N	umber						
요 Users	· ·	,			-		,				1000		X					
_ Groups		Liconsos			Basic Messaging						Client Settings							
怨 Workspaces		LICCHSCS		Advanced Messaging				In-call feature access						>				
📋 Devices				🛱 Meeting	Basic Space Meetings	i					Calling Behavio	r					>	
🗄 Apps											Unified Commu	nications Man	ager settings					
Account				& Calling	Register to Unified Co	mmunicati	ions Manager	(UCM)			Allow auto-prov	isioning for W	/ebex 🛈					
② Organization Settings				Edit Licenses							Allowed device ty	pes						
BRKCOL-3818											Desktop and m	obile	~)					

- License 'Register to Unified Communications Manager
- Enables 'Unified Communications Manager settings' under 'Calling' settings 'User' configuration

Wdm.cpp:2497 network::WdmImpl::storeFeatureFlags:WDM value with key and value: ucm-calling:true

'current_log.txt'

Calling Behaviour

NATIVE SIP CALL TO UCM

CSA > System information > General

🔝 user1

Registration – User license

Automatic Licensing

Users	
△ Users ⊘ Licenses	i≡ Contacts
Licenses assignment Licenses can be assigned to new users. Learn more	Organization-based management Manage license assignment for new users in your organization. Set up
	Group-based management Go to the Groups list page and manage license assignment for each group.

Organization licenses assignment Select the license you want to assign to your users. Subscription: Register to Unified Communications Manager (UCM) Messaging Register to Unified Communication Manager (UCM) Meeting Subscription: Call on Webex (1:1 call, non-PSTN) S Calling • Call on Webex (1:1 call, non-PSTN) Subscription: Enterprise Trial - 12/07/2022 Webex Calling ① Professional Future users Apply scope Existing users Preserve licenses for existing users ① When enabled, existing users will keep the assigned licenses from the previous assignment.



Registration – Webex Discovery User Validated to be enabled for UCM calling

From current_log.txt

Wdm.cpp:383 network::WdmImpl::parseDeviceJson:Adding policy << callingBehavior with value: NATIVE_WEBEX_TEAMS_CALLING

Wdm.cpp:383 network::WdmImpl::parseDeviceJson:Adding policy << callingBehavior with value: NATIVE_SIP_CALL_TO_UCM

Wdm.cpp:383 network::WdmImpl::parseDeviceJson:Adding policy << callingBehavior with value: CALL_WITH_APP_REGISTERED_FOR_WEBEXCALLTEL

Wdm.cpp:383 network::WdmImpl::parseDeviceJson:Adding policy << callingBehavior with value: CALL_WITH_APP_REGISTERED_FOR_CISCOTEL

Wdm.cpp:383 network::WdmImpl::parseDeviceJson:Adding policy << callingBehavior with value: CALL_WITH_APP_REGISTERED_FOR_TEL

Registration - UC Service discovery

webex Contro	l Hub	Q Sear	ch				4 0 A	
& Workspaces Devices Apps Account	Calling Numbers	Locations	Call Routing	Features	PSTN Orders	Service Settings	Client Settings	
ⓒ Organization Settings	Calling I	Behavior	Ur	ified CM Users				
SERVICES C Updates & Migrations Messaging Meeting				Use my user's e Use UC Manage Select a Pro	email domain er Profile for calling file	арр		
S Calling ▷ Vidcast				Making a call thro	ugh Webex will open Jabl	Der.		
Connected UC			Us	Open third-part Allow users to ma calling in Webex.	d Calling Services fi ty app from Webex ke calls through a third-pa	rom Cisco arty app, even if they haven't	enabled	

- Calling > Client Settings
- 'Use my user's email domain' for UC service discovery
- Default configuration



Registration - UC Service discovery -----Q Search, meet, and cal Connect to a de... $\langle \rangle +$ Missed 8 Search or dial a number *** Webex login 2 ABC L 3 Sign in DFF Start by entering your email address. 曲 5 6 IKI MNO N user2@brkcol.wbx.ai 7 8 9 PORS TUV WXY7 # □ My Computer ∨ SRV record options All calls See your call and meeting 1. _cisco-uds._tcp.<domain> history here. Audio Video 84 DNS 2. collab-edge. tls.<domain> 0 You're not signed in to phone services. Open Settings *Ethernet0 × _ File Go Capture Analyze Statistics Telephony Wireless Tools Help Edit 🛅 🗙 🖸 🍳 👄 🔿 🕾 🖉 🕹 🥃 🗮 🍳 Q Q 🖉 🎹 UC services login × - + dns.gry.name == "_cisco-uds._tcp.brkcol.wbx.ai" Source Destination Length Info Time Protocol 18166 109,728786 10.48.79.47 10.48.36.146 DNS 89 Standard guery 0x4aa8 SRV cisco-uds. tcp.brkcol.wbx.ai 10.48.36.146 10.48.79.47 18193 109.780816 DNS 170 Standard guery response 0x4aa8 SRV cisco-uds. tcp.brkcol.wbx.ai SOA ns-368.awsdns-46.com 10.48.79.47 10.48.36.146 89 Standard guery 0x4d89 SRV cisco-uds. tcp.brkcol.wbx.ai 18212 109,920072 DNS 10.48.36.146 10.48.79.47 170 Standard query response 0x4d89 SRV _cisco-uds. tcp.brkcol.wbx.ai SOA ns-368.awsdns-46.com 18213 109.920993 DNS 10.48.36.146 89 Standard query 0x4cdb SRV _cisco-uds._tcp.brkcol.wbx.ai 18219 109.932987 10.48.79.47 DNS 18220 109,934043 10.48.36.146 10.48.79.47 DNS 170 Standard query response 0x4cdb SRV _cisco-uds. tcp.brkcol.wbx.ai SOA ns-368.awsdns-46.com 10.48.79.47 10.48.36.146 DNS 89 Standard query 0x5ca9 SRV _cisco-uds._tcp.brkcol.wbx.ai 20955 111.862301 20957 111.863138 10.48.36.146 10.48.79.47 170 Standard guery response 0x5ca9 SRV cisco-uds. tcp.brkcol.wbx.ai SOA ns-368.awsdns-46.com DNS

Packet capture

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Registration – UC Service discovery Manually enter UC domain

Settings > Phone Service

Webex domain	UC domain	UCM UDS login
Server and domain settings Enter the telephony server address or Unified Communication Domain provided by your administrator to connect to the phone service. Server address Uc domain: brkcol.wbx.ai You haven't signed in to your phone services yet. Sign in to your phone services to get the most of your calling experience. Connect	Server and domain settings Enter the telephony server address or Unified Communication Domain provided by your administrator to connect to the phone service. Server address UC domain Vou haven't signed in to your phone services yet. Sign in to your phone services to get the most of your calling experience.	Account information Sign in to your account to use phone service. Username: user2 × Password: •••••••• • You haven't signed in to your phone services yet. Sign in to your phone services to get the most of your calling experience. Sign in

dns.qry.n	dns.qry.name == "_cisco-udstcp.coluc.com"									
Time	Source	Destination	Protocol	Length Info						
4.749441	10.48.79.47	10.48.36.146	DNS	85 Standard query 0x9571 SRV _cisco-udstcp.coluc.com						
4.751844	10.48.36.146	10.48.79.47	DNS	134 Standard query response 0x9571 SRV _cisco-udstcp.coluc.com SRV 0 0 8443 pub.coluc.com A 10.48.79.160						
4.761999	10.48.79.47	10.48.36.146	DNS	85 Standard query 0xd585 SRV _cisco-udstcp.coluc.com						
4.765130	10.48.36.146	10.48.79.47	DNS	134 Standard query response 0xd585 SRV _cisco-udstcp.coluc.com SRV 0 0 8443 pub.coluc.com A 10.48.79.160						

Packet capture

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Registration - UC Service Discovery

webex Contro	l Hub	Q Search			4 0 A
战 Workspaces	Calling				
Devices	Caning				
C Apps	Numbers Lo	cations Call Routing	Features PSTN Orders	Service Settings	Client Settings
Account					
୍ଦେର୍ଣ୍ଣ Organization Settings	Calling Beha	avior	Unified CM Users	7	
SERVICES			 Use my user's email domain Use UC Manager Profile for calling 		
C Updates & Migrations			Select a Profile 🗸		
O Messaging					
📋 Meeting		P		qq	
℅ Calling		L	Unihed CM users can make calls directly in C Making a call through Webex will open Jabbe	isco Jabber or through Webe er.	ex.
> Vidcast					
S Connected UC		l	Jsers without Paid Calling Services fro	om Cisco	
→ Hybrid		[Open third-party app from Webex Allow users to make calls through a third-par calling in Webex.	ty app, even if they haven't e	enabled
BRKCOL-3818					

Calling > Client Settings

- 'Use UC Manager profile for calling'
- Users do not have to manually enter the UC domain (=voice services domain)

Registration - UC Service discovery

webex Cont	Q Search	4 0 A
齿 Workspaces	Organization Settings	Settings Templates
Devices		
80 Apps		
Account	UC Manager Profiles UC Manager Profiles	
Organization Settings	Your Unified CM connection defaults to your organization's domain. You	
	can create Unified CM Profiles to Add Profile	
SERVICES	Manager server/cluster.	
C Updates & Migrations		
O Messaging		
Meeting	Directory Synchronization Directory Synchronization	
BRKCOL-3818	New users will be automatically	
\rightarrow	Profile Name BRULAB Voice Services Domain Domain Name coluc.com UDS Server UDS Server UDS Server Address 10.48.79.160 UDS Backup Server Address Address Address Address Address Address Address This option is only supported for Jabber.	
		Cancel Save

- Organisation Settings > UC Manager Profiles
- Domain configuration for 'Voice Services Domain'
- Specify an individual CUCM server for discovery (optional)
- Used by client to resolve following DNS SRV records:
 - _cisco-uds._tcp.<voice services domain>
 - _collab-edge._tls.<voice services domain>

Registration - UC Service discovery

Account in	formation	
Sign in to yo	ur account to use phone se	ervice.
Username:	user2	×
Password:	•••••	۲
	You haven't signed in t	to your phone services yet.
	Sign in to your phone	services to get the most of

network::WdmImpl::parseUCProfileConfig:**voiceServicesDomain is set** CUCMLoginAdapter::setManualUCDomain:setManualUCDomain: **coluc.com**

'current_log.txt'

Voice Service Domain

coluc.com

CSA > Calling > General

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Registration - uclogin.log walkthrough

[service-discovery] [CSFUnified::ServiceDiscoveryHandler::setupDiscovery] - *----* Discovery is setup with ServicesDomain: brkcol.wbx.ai and VoiceServicesDomain: coluc.com

[csf::dns::DnsUtils::executeSRVRecordQuery] - About to make DNS SRV record query _cisco-uds._tcp.coluc.com [csf::dns::mapFromWindowsDNSResult] - *----* DNS query _cisco-uds._tcp.coluc.com has succeeded.

[csf::dns::DnsUtils::executeSRVRecordQuery] - About to make DNS SRV record query _collab-edge._tls.coluc.com [csf::dns::mapFromWindowsDNSResult] - *----* DNS query _collab-edge._tls.coluc.com has failed: DNS name does not exist.

ucm-config Library DNS Information Highest Priority Domain: coluc.com DNS Record: pub.coluc.com:8443 [weight: 0, priority: 0] Domain Source: coluc.com : LOCATOR_UDS_DOMAIN Domain Source: coluc.com : SERVICE_DISCOVERY_DOMAIN

_____*

UC service discovery

Registration - uclogin.log walkthrough

[csf::ucm90::UcmConfigQueryImpl::fetchXmlFileSet] - ---[UCM Configuration Data]---

UCM version: 14.0.1 UCM domain: coluc.com Current Home UDS URL: https://pub.coluc.com:8443/cucm-uds/user/MASKED_USERNAME [HOME CLUSTER XML] [URL] https://pub.coluc.com:8443/cucm-uds/user/MASKED_USERNAME [Host] pub.coluc.com [Filename] homeClusterUser.xml [XML] <not empty> [SERVICE PROFILE XML] ... [DEVICE XML] ... [GLOBAL_SETTINGS_XML] ... [UDS SERVERS] [1] pub.coluc.com [2] sub.coluc.com [HOME UDS NODES] [1] https://pub.coluc.com:8443/cucm-uds/user/MASKED_USERNAME [2] https://sub.coluc.com:8443/cucm-uds/user/MASKED USERNAME [TFTP_SERVERS] [1] pub.coluc.com

Registration - uclogin.log walkthrough

[csf.ecc.api] [csf::ecc::CallControlManagerImpl::doAuthenticate] - doAuthenticate()

[csf.ecc] [csf::ecc::Authenticator::doUdsLogin] - Trying to authenticate the user with UDS

User authentication (Unified CM UDS)

[csf.ecc] [csf::ecc::UDSClient::fetchDevices] - fetchDevices [csf.ecc] [csf::ecc::UDSClient::doUdsQuery] - doUdsQuery(): eDevices

Fetch associated devices

[services-dispatcher] [CSFUnified::ServicesDispatcher::enqueue] - ServicesDispatcher.enqueue: BT-CUCMLoginManager::isUCLoginCompleted [services-dispatcher] [CSFUnified::ServicesDispatcher::executeTask] - executing (BT-CUCMLoginManager::isUCLoginCompleted

Login completed

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[csf.sip-call-control] [platform_print_sip_msg] - sipio-sent---> REGISTER sip:sub.coluc.com SIP/2.0 Via: SIP/2.0/TCP 10.48.79.47:57306;branch=z9hG4bK00003e53 From: <sip:2000@sub.coluc.com>;tag=db423814f040000300003c5e-00002225 To: <sip:2000@sub.coluc.com> Call-ID: db423814-f0400002-0000163e-00004b5e@10.48.79.47 Max-Forwards: 70 Date: Mon, 06 Feb 2023 17:20:06 GMT CSeg: 101 REGISTER User-Agent: Cisco-CSF Contact: <sip:d7f37c17-1af8-be78-c0e1-559b5d5c15c7@10.48.79.47:57306;transport=tcp>; +sip.instance="< urn:uuid:ad90263d-2710-41bb-88bd-24f11699d93b>";+u.sip!devicename.ccm.cisco.com="CSFUSER2";+u.sip! model.ccm.cisco.com="503";video Supported: replaces, join, sdp-anat, norefersub, resource-priority,... Expires: 0 Content-Length: 0

"uclogin.log"

	SIP Registration	S						
	Time (UTC)	Leg 1	Leg 2	CSeq	Source	Destination	Expires	Message
	00:56:31.694			101 REGISTER	10.48.29.32	10.48.79.160	3600	REGISTER sip:pub.coluc.com SIP/2.0
	00:56:31.696			101 REGISTER	10.48.79.160	10.48.29.32		SIP/2.0 100 Trying
	00:56:31.827			101 REGISTER	10.48.79.160	10.48.29.32	120	SIP/2.0 200 OK
•	00:56:31.847			102 REGISTER	10.48.29.32	10.48.79.160	3600	REGISTER sip:pub.coluc.com SIP/2.0
	00:56:31.848			102 REGISTER	10.48.79.160	10.48.29.32		SIP/2.0 100 Trying
	00:56:31.850			102 REGISTER	10.48.79.160	10.48.29.32	120	SIP/2.0 200 OK
•	00:58:26.840			103 REGISTER	10.48.29.32	10.48.79.160	3600	REGISTER sip:pub.coluc.com SIP/2.0
	00:58:26.842			103 REGISTER	10.48.79.160	10.48.29.32		SIP/2.0 100 Trying
	00:58:26.843			103 REGISTER	10.48.79.160	10.48.29.32	120	SIP/2.0 200 OK
•	01:00:21.854			104 REGISTER	10.48.29.32	10.48.79.160	3600	REGISTER sip:pub.coluc.com SIP/2.0
	01:00:21.856			104 REGISTER	10.48.79.160	10.48.29.32		SIP/2.0 100 Trying
	01:00:21.857			104 REGISTER	10.48.79.160	10.48.29.32	120	SIP/2.0 200 OK

CSA



Time (UTC)	Leg 1	Leg 2	CSeq	Source	Destination	Expires	Message
							REGISTER sip:pub.coluc.com SIP/2.0
							Via: SIP/2.0/TCP 10.48.29.32:54336;branch=z9hG4bK000020dd
							From: <sip:2000@pub.coluc.com>;tag=daab3faeb69c000200007002-00007415</sip:2000@pub.coluc.com>
							10: stp:2000@pub.couc.com>
							Max-Forwards: 70
							Date: Wed, 31 Jan 2024 00:56:31 GMT
							CSeq: 101 REGISTER
							Contact: <sip:0 -1at6-be="" 01="" 10-4106-880d-2411169409365="" 13="" ;+tu.sip:<br="" <urn:uuid:ad90265d-2="" @10.48.29.32:6436="" s-cue1-5595bacc15c="" transport="top;+sip.instance=">devicename crm_sics_com="CSEI"SEP2"++11;Sipmodel crm_sics_com="Sigma"Sigma"Sigma"Sigma Comparison (Sigma) Sigma</sip:0>
							Supported: replaces.join.sdp-anat.norefersub.resource-priority.extended-refer,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-escapecodes,X-cisco-service-control,X-cisco-strp-
							fallback,X-cisco-monrec,X-cisco-config,X-cisco-sis-7.0.0,X-cisco-sessionpersist,X-cisco-xsi-8.5.1,X-cisco-graceful-reg,X-cisco-duplicate-reg
							Reason: SIP;cause=200;text="cisco-alarm:25 Name=CSFUSER2 ActiveLoad=Webex_for_Windows-44.1.0.28423 InactiveLoad=Webex_for_Windows-44.1.0.28423 InactiveLoa
							Expires: 3600
							Vine-Version: 1.0
							Content-Length: 1068
00.56.21.604			101	10 49 20 22	10 49 70 160	2600	uniqueBoundary
00.56.51.694			REGISTER	10.46.29.32	10.46.79.160	3000	Content-Type: application/x-cisco-remotecc-request+xml
							Content-Disposition: session;handling=optional
							xml version="1.0" encoding="UTF-8"?
							<x-cisco-remotecc-request></x-cisco-remotecc-request>
							 volukregisterreq>
							<contact all="true"> cranister></contact>
							<pre></pre>

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					Message	×	
Time (UTC)	Leg 1 L	.eg 2 CSeq	Source	Destinatio			
					Lines in log		
					2024-01-31 00:56:31,694 DEBUG [0x0000225c] [\sipcc\core\sipstack\ccsip_debug.c(2405)] [csf.sip-call-control] [platform_print_sip_msg] - sipio-sent> REGISTER sip:pub.coluc.com SIP/2.0		
00:56:31.694		101 REGISTER	10.48.29.32	10.48.79.1	Message body REGISTER sip:pub.coluc.com SIP/2.0 Via: SIP/2.0/TCP 10.48.29.32:54336;branch=z9hG4bK0000200d From: <sip:2000@pub.coluc.com>tag=daab3faeb69c00020007002-00007415 To: <sip:2000@pub.coluc.com> Call-ID: daab3fae-b69c0003-000040db-00005f33@10.48.29.32 Max-Forwards: 70 Date: Wed, 31 Jan 2024 00:56:31 GMT CSeq: 101 REGISTER User-Agent: Cisco-CSF Contact: <sip:d7f3rc17-1af8-be78-c0e1-559b5d5c15c7@10.48.29.32:54336;transport=tcp>;+sip.instance="<urn:uuid:ad90263d-2< td=""> 710-41bb-88bd-24f11699d93b>";+u.sipIdevicename.ccm.cisco.com="CSFUSER2",+u.sipImodel.cm.cisco.com=503",video Supported: replaces.join,sdp-anat,norefersub,resource-priority,extended-refer,X-cisco-serviceur,X-cisco-escapecod esX-cisco-graceful-reg,X-cisco-duplicate-reg Reason: SIP;cause=200;text="cisco-alarm:25 Name=CSFUSER2 ActiveLoad=Webex_for_Windows-44.1.0.28423 InactiveLoad=Webex_for_Windows-44.1.0.28423 InactiveLoad=Webex_for_Windows-44.1.0.28423 Last=initialized" Expires: 3600 Content-Type: multipart/mixed; boundary=uniqueBoundary Mime-Version: 1.0 Content-Type: anolication/x-cisco-remotecc-request+xml</urn:uuid:ad90263d-2<></sip:d7f3rc17-1af8-be78-c0e1-559b5d5c15c7@10.48.29.32:54336;transport=tcp></sip:2000@pub.coluc.com></sip:2000@pub.coluc.com>		41bb-88bd-24f11699d93b>";+u.sip! -cisco-service-control,X-cisco-srtp- ite-reg '_Windows-44.1.0.28423 Last=initialized"
		1			Content-Disposition: session;handling=optional		

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					SIP/2.0 200 OK
					Via: SIP/2.0/TCP 10.48.29.32:54336;branch=z9hG4bK000020dd From: <sip:2000@pub.coluc.com>;tag=daab3faeb69c000200007002-00007415 To: <sip:2000@pub.coluc.com>;tag=1284390424 Date: Tue, 30 Jan 2024 15:56:44 GMT Call-ID: daab3fae-b69c0003-000040db-00005f33@10.48.29.32 Server: Cisco-CUCM14.0 CSeq: 101 REGISTER Expires: 120 Contact: <sip:d7f37c17-1af8-be78-c0e1-559b5d5c15c7@10.48.29.32:54336;transport=tcp>;+sip.instance="<um:uuid:ad90263d-2710-41bb-88bd-24f11699d93b>";+u.sip! devicename.ccm.cisco.com="CSFUSER2";+u.sip!model.ccm.cisco.com="503";video;x-cisco-newreg Supported: X-cisco-stp-fallback,X-cisco-sis-10.0.0 Content-Type: application/x-cisco-remotecc-response+xml Content-Length: 381</um:uuid:ad90263d-2710-41bb-88bd-24f11699d93b></sip:d7f37c17-1af8-be78-c0e1-559b5d5c15c7@10.48.29.32:54336;transport=tcp></sip:2000@pub.coluc.com></sip:2000@pub.coluc.com>
00:56:31.827	101 REGISTER	10.48.79.160	10.48.29.32	120	<x-cisco-remotecc-response> <response> <code>200</code></response></x-cisco-remotecc-response>

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Registration most common issues



Registration failure Secure phone registration

- CAPF is not supported
- Must enable SIPOAuth •

		10115					
	SIP registration						
	Time (UTC) Leg 1	Leg 2	CSeq	Source	Destination	Expires	Message
	16:09:16.740		112 REGISTER	10.48.29.44	10.48.79.160	3600	REGISTER sip:pub.coluc.com SIP/2.0
	16:09:16.741		112 REGISTER	10.48.79.160	10.48.29.44		SIP/2.0 100 Trying
4	16:09:16.861		112 REGISTER	10.48.79.160	10.48.29.44		SIP/2.0 403 Forbidden Via: SIP/2.0/TCP <redacted by="" client="">;branch=z9hG4bK00007cb7 From: <sip:1000@pub.coluc.com>;tag=cee932649d1300100000145b-00003fae To: <sip:1000@pub.coluc.com>;tag=231258033 Date: Mon, 29 Jan 2024 16:09:17 GMT Call-ID: cee93264-9d130014-00007198-000032bc@10.48.29.44 Server: Cisco-CUCM14.0 Codeq: 112 REGISTER Warning: 399 pub "Device security mismatch: expected TLS, received TCP/UDP" Content=Length: 0</sip:1000@pub.coluc.com></sip:1000@pub.coluc.com></redacted>
1. Check if SIPOAuth is enabled

г	Security Parameters		
I			
I	Cluster Security Mode **	1	
I	Cluster SIPOAuth Mode *	Disabled	
	LBM Security Mode *	Insecure ~	Insecure
	CAPF Phone Port *	3804	3804

2. Enable SIPOAuth CLI

admin:utils sipOAuth-mode enable SIP OAuth mode enabled. Please restart the Cisco CallManager service on all nodes in the cluster where it is running. admin:

3. Configure Phone Security Profile

Phone Security Prof	ile Configuration
🔚 Save 🗙 Delete	📄 🕞 Copy 🎦 Reset 🥒 Apply Config 🔓 Add New
Status	
i Status: Ready	
- Phone Security Prof	ile Information
Product Type:	Cisco Unified Client Services Framework
Device Protocol:	SIP
Name*	Cisco Unified Client Services Framework - SIP Secure Profile
Description	Cisco Unified Client Services Framework - SIP Secure Profile
Device Security Mode	Encrypted
Transport Type*	TLS v
TFTP Encrypted Co	nfig
Enable OAuth Auth	entication
Phone Security Prof	ile CAPF Information
Authentication Mode*	By Null String
Key Order*	RSA Only
RSA Key Size (Bits)*	2048
EC Key Size (Bits)	< None >
Note: These fields are	related to the CAPF Information settings on the Phone Configuration page.
- Parameters used in	Phone
SIP Phone Port* 5060)
Save Delete C	opy Reset Apply Config Add New

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• With SIPOAuth enabled you get a different login prompt

	Set a status	۲۰۰۶ Account Login	O Search meet and call	(+)	P Conn ×	ect to a device			
	Messaging	alulu							
8	All Direct Sp	cisco	Cisco Unified Collaboratio	ก					
د. ۵	user1 Active 9 hours		Username						
N			Password						
			Login						
::						Create	Clos	e	
?					-				
😵 Call	settings 🔒 A Phone se	rvices are disconnected.	Open Settings						

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SIP registration							
Fime (UTC)	l ea 1	leg 2	CSeq	Source	Destination	Expires	Message
	209 .	209 2	0004	course	Dootmation	Expiroo	
09:39:35.505			102 REGISTER	10.48.29.44	10.48.79.160	3600	REGISTER sip:pub.coluc.com SIP/2.0
09:39:35.506			102 REGISTER	10.48.79.160	10.48.29.44		SIP/2.0 100 Trying
09:39:35.620			102 REGISTER	10.48.79.160	10.48.29.44		SIP/2.0 407 Proxy Authentication Required
09:39:35.623			103 REGISTER	10.48.29.44	10.48.79.160	3600	REGISTER sip:pub.coluc.com SIP/2.0
09:39:35.625			103 REGISTER	10.48.79.160	10.48.29.44		SIP/2.0 100 Trying
09:39:35.640			103 REGISTER	10.48.79.160	10.48.29.44	120	SIP/2.0 200 OK
09:39:35.667			104 REGISTER	10.48.29.44	10.48.79.160	3600	REGISTER sip:pub.coluc.com SIP/2.0
09:39:35.669			104 REGISTER	10.48.79.160	10.48.29.44		SIP/2.0 100 Trying
09.39.35.671				10 49 70 160	10 49 20 44	120	SIR/2 0 200 OK

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CSA

Time (UTC) Leg 1 Leg 2	CSeq Sourc	ce Destination	Expires	Message
09:39:35.505	102 REGISTER 10.48	3.29.44 10.48.79.160	3600	REGISTER sip:pub.coluc.com SIP/2.0
09:39:35.506	102 REGISTER 10.48	3.79.160 10.48.29.44		SIP/2.0 100 Trying
09:39:35.620	102 REGISTER 10.48	3.79.160 10.48.29.44		SIP/2.0 407 Proxy Authentication Required
				REGISTER sip:pub.coluc.com SIP/2.0
	Token acqu	uired at UC log	gin	Via: SIP/2.0/TLS 10.48.29.44:56126;branch=z9hG4bK00002edf From: <sip:1000@pub.coluc.com> Call-ID: cee93264-9d130005-00000267-00001787@10.48.29.44 Max-Forwards: 70 Date: Tue, 30 Jan 2024 09:39:35 GMT CSeq: 103 REGISTER User-Agent: Cisco-CSF Contact: <sip:0477c9eb-d594-4284-9a09-de06a1b653c7@10.48.29.44:56126;transport=tls>; +sip.instance="<urn:uuid:c2496e19-e265-4d16-bbac-487229cfc828>";+u.sip! devicename.ccm.cisco.com="CSFUSER";+u.sip!model.ccm.cisco.com="503";video Proxy-Authorization: Bearer token="" Supported: replaces.join;sdp-anat,norefersub,resource-priority,extended-refer,X-cisco-callinfo,X-cisco- serviceuri,X-cisco-escapecodes,X-cisco-service-control,X-cisco-srtp-fallback,X-cisco-monrec,X-cisco- config,X-cisco-sis-7.0.0,X-cisco-sessionpersist,X-cisco-xsi-8.5.1,X-cisco-graceful-reg,X-cisco-duplicate-</urn:uuid:c2496e19-e265-4d16-bbac-487229cfc828></sip:0477c9eb-d594-4284-9a09-de06a1b653c7@10.48.29.44:56126;transport=tls></sip:1000@pub.coluc.com>

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CSA



Time	Source	Destination	Protocol	Length	Info
32.776076	10.48.79.47	10.48.79.160	TCP	66	59618 → 8443 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM
32.777125	10.48.79.160	10.48.79.47	TCP	66	8443 → 59618 [SYN, ACK] Seq=0 Ack=1 Win=29200 Len=0 MSS=1460 SACK_PERM WS=128
32.777179	10.48.79.47	10.48.79.160	TCP	54	59618 → 8443 [ACK] Seq=1 Ack=1 Win=262656 Len=0
32.777862	10.48.79.47	10.48.79.160	TLSv1.2	571	Client Hello
32.803442	10.48.79.160	10.48.79.47	TLSv1.2	1486	Server Hello, Certificate, Server Key Exchange, Server Hello Done
32.828770	10.48.79.47	10.48.79.160	TLSv1.2	61	Alert (Level: Fatal, Description: Certificate Unknown)
32.829065	10.48.79.47	10.48.79.160	тср	54	59618 → 8443 [RST, ACK] Seq=525 Ack=1433 Win=0 Len=0

Packet capture

CUCMLoginAdapter::CreateCUCMLoginManager:Setting accepting invalid certs to : 0

•••

EccWrapper.cpp:970 EccWrapper::httpResponse:http result = CERTIFICATE_VALIDATION_ERROR, response code = 0, request id:0, len:0

current_log

[csf.common.DefaultPoliciesStore] [csf::common::DefaultPoliciesStore::setPolicy] - Policy set : INVALID_CERT_MANAGEMENT[SILENTLY_FAIL]

uclogin.txt

- CUCM must be configured with certificates that the Webex App can validate
- Preferably a Certificate Authority (CA) root that signed the tomcat certificate (which is known to the operating system that the Webex App is on, Windows or MacOS by default)
- Or a self-signed trusted certificate (which must be deployed to the OS in advance by the enterprise administrator).

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- Certificates issued with a deprecated signature hash algorithm (such as Secure Hash Alogorithm (SHA-1)) do not work, you must use a supported secure signature has algorithm such as SHA-256 or later)
- The certificates that are deployed on CUCM servers must include the Fully Qualified Domain Name (FQDN) as the server identity rather than a simple hostname or IP address (for example, cucm-server-1.example.com rather than cucmserver-1 or 203.0.113.11).



Control Hub > Services > Calling > Client Settings > Unified CM Settings



= Presented UCM Certificated is not validated



CUCMLoginAdapter::CreateCUCMLoginManager:Setting accepting invalid certs to : 1

current_log

[csf.common.DefaultPoliciesStore] [csf::common::DefaultPoliciesStore::setPolicy] - Policy set : INVALID_CERT_MANAGEMENT[SILENTLY_SUCCEED]

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Registration problems Not enabled to use phone services

- Problem: "You are not enabled to use phone service"
- Solution: Webex Control Hub > Users > User go to Profile > Licenses

Settings		×
🕸 General		
Si Audio	Account information	
Dr. Maler	You are signed in to Cisco	Unified Communications Manager.
U Video	Username:	user1
🗱 Background	Server address:	sub.coluc.com
Sharing content	Status	
A Notifications	Phone service disc	connected
ය Appearance	You're not enabled to use	ephone service.
岔 Accessibility		
Privacy		
III Phone Service		
D Messaging		
🛱 Meetings		
☐ Join options		
⑦ Calling		
ති Devices		
		Save Cancel



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Registration problems - Auto-registration fails

- Problem: Autoregistration fails and phone service settings show "Can't find your phone service"
- Cause: For auto registration, user configuration on UCM has no primary extension configured
- Solution:
 - Add primary extension with BAT or
 - 'Quick user/phone'

Server address:		
UC Domain:	coluc.com	
	Can't find your phone 1000:1001	service. Erron
		Connect



Reference

Auto-Registration

Control Hub > Connected UC

	Cluster Group	N CI	JCM-BRU						Events History	
UC Management	Services	En	abled (8) Analytics	, Borderless	CTI, Direc	ory Service, Certi	ficate Managen	nent, Operatior	CCUC Module Upgrade Schedule	
-		Di	sabled						Service Management	
	Node Name 🔺	Node Ve	IP Addre	Prod	Туре	Verific	Age	Events	Delete Cluster	
	ub.coluc.com	14	10.48.79.160	CUCM	PUBLIS	HER REQFJU/I	Online	Info	02-07-2023 09:06:07	7
P involtory	ub.coluc.com	14	10.48.79.192	CUCM	SUBS			Servic	e Management	
Agent Install Files						Changes to t	hese settings	will take a sl	hort time to take effect.	
Telemetry Module Invent						Analytics			Enabl	led
Events History						Borderless C	ті		Enab	led
						Directory Ser	vice		Enabl	led
						Certificate M	anagement		Enab	led
						Operational N	Vetrics		Enab	led
						Presence Sta	atus Sync		Enabl	led
						Vebex app F	Provisioning fo	or Unified CN	1 Calling 🛛 💽 Enabl	led
						Deployment	Insights		Enabl	led
									Cancel	Submi

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- Webex App is registered
- Voicemail server shows disconnected
- "UC credential is not verified"

Diagnostics shows
 "Authentication : Unknown"





Service Profile Configuration	Related Links:	Back To Find/List	∨ Go
Save 🗶 Delete 🗋 Copy 🕂 Add New			
- Status			
(i) Status: Ready			
Service Profile Information			
Name* DefaultServiceProfile			
Description			
Make this the default service profile for the system			
Voicemail Profile			
Primary CUC ~			
Secondary <pre></pre>			
Tertiary <pre></pre>			
Credentials source for voicemail service*			
MailStore Profile Web Conferencing			

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^	Image: Collaboration Solutions Analyzer Image: Collaboration Solutions Analyzer CISCO Log Analyzer 621ba991-4221-406d-8ad7-aa69697c19ca_FB.zip O UTC p	< ? 🌘 Philip Smeuninx
Home	Filename 🗹 All 🔽 uclogin.log.1 🔽 uclogin.log.3 🔽 uclogin.log.2 🖉 last_run_current_log.txt	
Tools >	Q Search	
Log Analyzer	Vocemail 2023-01-10T13:27:11.639000 Volcemail connection status - Connecting	Info last_run_current_log.txt
Utilities >	Vocemail 2023-01-10T13:27:11.639000 Voicemail connection status - Connecting	Info last_run_current_log.txt
†	2023-01-10T13:27:11.639Z <debug> [6196] VoicemailService.cpp:438 VoicemailService::onVoicemailConnectionStateChanged:connectionStateChanged.Connecting</debug>	
Upload files	Vocemai 2023-01-10T13:27:17.061000 Volcemail connection status - Disconnected	Info last_run_current_log.txt
Diagnostics	2023-01-10T13:27:17.061Z <debug> [6200] VoicemailService.cpp:438 VoicemailService::onVoicemailConnectionStateChanged:onVoicemailConnectionStateChanged,Disconnected</debug>	
LL. Analysis	Vocemai 2023-01-10T13:27:17.061000 Voicemail connection status - Disconnected	Info last_run_current_log.txt
	2023-01-10T13:27:17.061Z <debug> [6200] VoicemailService.cpp:438 VoicemailService::onVoicemailConnectionStateChanged:onVoicemailConnectionStateChanged.Disconnected</debug>	
	Vecenar 2023-01-10T13:27:17.061000 The voicemail is disconnected. Expand this annotation for more details.	Warning last_run_current_log.txt
	2023-01-10T13:27:17.061Z <wam> [4860] UCVoicemailAdapter.cpp:483 UCVoicemailAdapter.:reportVoicemailError.Voicemail connection status: [Disconnected], reason: [InvalidCredentials], description: [Authentication failed. Invalid username or password.]</wam>	
	Vocemal 2023-01-10T13:27:17.061000 The voicemail is disconnected. Expand this annotation for more details.	Warning last_run_current_log.txt
	Vocemail 2023-01-10T13:34:32.777000 Voicemail connection status - Connecting	Info current_log.txt
	Vicemail 2023-01-10T13:34:33.552000 Voicemail connection status - Disconnected	Info current_log.txt
	Vectoreal 2023-01-10T13:34:33.552000 The voicemail is disconnected. Expand this annotation for more details.	Warning current_log.txt

Contacts Feedback Help Site Map Terms & Conditions Privacy Statement Cookies Trademarks

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• Finally did reset of CUC user password

t Refresh Help	~
User Basics	
Password Settings	
Change Password	
Roles	
Message Waiting Indicators	
Transfer Rules	
Message Settings	
Caller Input	
Mailbox	
Phone Menu	Recommended Web Application Authentication Rule ~
Playback Message Settings	1/16/23 10:39 AM
Send Message Settings	0
Message Actions	1/12/23 12:07 AM
Greetings	
Post Greeting Recording	ts
Notification Devices	
Alternate Extensions	
Alternate Names	
Private Distribution Lists	
Unified Messaging Accounts	
Video Services Accounts	
SMTP Proxy Addresses	



Call flow troubleshooting









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- From Log Overview > Calls, select the call you want to troubleshoot
- Log analyzer shows : Call Leg Info, Ladder Diagram and Signalling

Log overview										
Calls HTTP querie	s SIP registration	DNS queries Annotations					Call			
Q Search							Call leg info	Ladder diag	gram Signalling	
From	То	Call ID	Call initiated (UTC)	Call connects (UTC)	Log duration (sec)	Disconn				
1000@10.48.79.160	2000@pub.coluc.com	dab02080-1ee1bb69-71-a04f300a@10.48.79.160	2023-01-26 10:47:40	2023-01-26 10:47:46	35.6 seconds	Unknow	SIP - inco	oming		Ladder tags 🗹 Use for signaling and ladder
2000@pub.coluc.com	1000@pub.coluc.com	db423814-f0400006-00004422-0000376b@10.48.79.47	2023-01-26 10:12:25	No						
1000@10.48.79.160	2000@pub.coluc.com	8df3180-1ee1bb65-6b-a04f300a@10.48.79.160	2023-01-26 10:13:10	2023-01-26 10:13:15	20.52 seconds	Unknow	General in	nformat	tion	
2000@pub.coluc.com	1000@pub.coluc.com	db423814-f0400007-000018d8-000031a3@10.48.79.47	2023-01-26 10:14:04	2023-01-26 10:14:09	15.52 seconds	16 - No				
1000@10.48.79.160	2000@pub.coluc.com	4cd23680-1ee1bb65-6d-a04f300a@10.48.79.160	2023-01-26 10:15:04	2023-01-26 10:15:06	9 seconds	Unknow	SIP call leg type		Call	
2000@pub.coluc.com	1000@pub.coluc.com	db423814-f0400008-00000592-0000099b@10.48.79.47	2023-01-26 10:15:54	2023-01-26 10:15:58	68.31 seconds	16 - No	From		1000@10.48.79.160	
1000@10.48.79.160	2000@pub.coluc.com	c538f780-1ee1bb65-70-a04f300a@10.48.79.160	2023-01-26 10:18:26	2023-01-26 10:18:29	75.5 seconds	16 - No	То		2000@pub.coluc.com	
							Signaling source	9	10.48.79.160 : 0	
							Signaling destination	ation	10.48.79.47 : 0	
							Call ID		dab02080-1ee1bb69-71-a04f300a@10.48.2	79.160
							Call leg connects	S	2023-01-26 10:47:46 UTC	
							No RTP stream	ams linked fo	or this call leg	



Ladder diagram

SDP parameters

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Х Message Langle Contraction Log Lines in log 2023-01-26 10:47:40,217 DEBUG [0x00001f1c] [\sipcc\core\sipstack\ccsip_debug.c(1925)] [csf.sip-call-control] [platform_print_sip_msq] - sipio-recv<--- INVITE sip:d7f37c17-1af8-be78-c0e1-559b5d5c15c7@10.48.79.47;51424;transport=tcp SIP/2.0 Message body INVITE sip:d7f37c17-1af8-be78-c0e1-559b5d5c15c7@10.48.79.47:51424;transport=tcp SIP/2.0 Via: SIP/2.0/TCP 10.48.79.160:5060:branch=z9hG4bK9942893f2a From: "user1" <sip:1000@10.48.79.160>;tag=10210~6ba989f3-de10-4fc2-b4e9-a0a7c8e851e1-18110540 To: <sip:2000@pub.coluc.com> Date: Thu, 26 Jan 2023 10:47:42 GMT Call-ID: dab02080-1ee1bb69-71-a04f300a@10.48.79.160 Supported: timer, resource-priority, replaces Min-SE: 1800 User-Agent: Cisco-CUCM14.0 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY CSea: 101 INVITE Expires: 180 Allow-Events: presence Call-Info: <urn:x-cisco-remotecc:callinfo>; security= Unknown; orientation= from; gci= 1-1020; isVoip; call-instance= 1 Send-Info: conference, x-cisco-conference Alert-Info: <file://Bellcore-dr1/> Remote-Party-ID: " user1" <sip:1000@10.48.79.160;x-cisco-callback-number=1000>;party=calling;screen=yes;privacy=off Contact: <sip:1000@10.48.79.160:5060:transport=tcp>:video:audio:+u.sip!devicename.ccm.cisco.com="CSFUSER1":bfcp:x-cisco-cli ent=desktop Max-Forwards: 69 Content-Length: 0



Ladder diagram

Ok



Time (UTC)	Incoming legs	Outgoing legs	CSeq	Source	Destination	Message
10:47:40.217	→ Invite		101 INVITE	10.48.79.180.0	10.48.79.47.0	INVTE sip:d737c17-1af8-be78-c0e1-559b5d515c7@10.48.79.47:51424;transport-tcp.SIP/2.0 Via: SIP/2.0/TCP 10.48.79.160:5060;branch=29h64bK9942803f2a From: "use1" <sip:10000[pub.60ib.com></sip:10000[pub.60ib.com> sip:10210-68x989f3:-de10-4fc2-b4e9- a0x7c8e5161-18110540 To: sip:2000[Pub.colib.com/> Data: Thue, 26 au 2023 10:47:24 CMT Call-Dt: datb026b6-1*e10b669-71-a0df300d810.48.79.160 Supported: time; resource-priority;replaces Min-SE: 1800 User-Agent: Claoc-OUCM14.0 Allow: FWTE; OPTIONS, INFO, BYE; CANCEL, ACK, IPACK, UPDATE, REFER, SUBSCRIBE, NOTFY Seq: 101 INVTE Seq: 101 INVTE Seq: 101 INVTE Allow: Funct; Data Allow: Funct; Presence Call-Indiaced-strip: presence Call-Indiaced-strip: resource-priority;replaces Min-SE: 1800 Laser-Agent: Claoc-OUCM14.0 Allow: Funct; presence Call-Indiaced-strip: resource Allow: Funct; presence Call-Indiaced-strip: resource-sologe-conference Aller-Krit: "HighEnder-solf1" Session-ID: 0000047600105000a00dbdds6711cdc;remote=000000000000000000000000000000000000
10:47:40.219	← 100 Trying		101 INVITE	10.48.79.47:0	10.48.79.160:0	SIP/2.0 100 Trying

SIP message

Signalling

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Media Call Statistics



Diagn	ostics		
Audio □	Video (*) Conte	ent sharing	
	Send	Receive	
Codec	Opus	Opus	
Bit rate	26 kbps	25 kbps	
Packet loss	0 %	0 %	
Latency		2	
Jitter	32 ms	30 ms	
Transport	UDP	UDP	
	⊴) Audio □ Codec Bit rate Packet loss Latency Jitter Transport	Image: Audio Image: Video (1) Control Send Send Codec Opus Bit rate 26 kbps Packet loss 0 % Latency - Jitter 32 ms Transport UDP	Image: Audio Image: Video Content sharing Send Receive Codec Opus Opus Bit rate 26 kbps 25 kbps Packet loss 0 % 0 % Latency - - Jitter 32 ms 30 ms Transport UDP UDP

Audio	h

- Codec
- Bit rate
- Packet loss
- Roundtrip/Latency
- Jitter
- Transport

	Diagn	ostics	
General	⊲) Audio □	Video 🟥 Conte	nt sharing
Configuration			
- Statistics		Send	Receive
	Resolution	640 x 360	480 x 270: 1
Performance	Frame rate	23 fps	2 fps (max)
	Bit rate	242 kbps	151 kbps
	Packet loss	0 %	0 %
	Latency	16 ms	
	Jitter	24 ms	92 ms
	Transport	UDP	UDP

Video

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- Resolution
- Frame rate
- Bit rate
- Packet loss
 - Latency
 - Jitter
 - Transport



Media Call Statistics

- Log bundle includes 'Call logs' which capture media call statistics
- Below are printed every second

	Name	~
~	344239c3-e3a4-442c-adf0-e2e310ce951e_FB	<
	✓ in callLogs	<
	1674666082384_c66282f7-3826-4683-989b-599ea5f68cf5.log	÷
	1674666310181_6b8ab71c-d64d-4905-911f-517dfec92b7f.log	÷
	1674668470884_f60570c7-b179-4c1f-b1e2-41caf71e556a.log	
	current_log.txt	
	last_run_current_log.txt	
	> 🚞 logArchive	
	> 🚞 media	
	> 🚞 meetings	
	spark-windows-host-log-ProcessCleaner.dll.txt	
	spark-windows-host-log-spark-windows-app-impl.dll.txt	
	spark-windows-host-log-spark-windows-media.dll.txt	
	spark-windows-host-log.txt	
	spark-windows-loader-log.txt	
	> 🚞 uclogin	
	344239c3-e3a4-442c-adf0-e2e310ce951e_FB.zip	
	ced.dat	
	correlation-logic.txt	
	WebexDiagnosticInfo-25-01-2023 18-41-48.html	

INFO: **SQAudioTX** - vid= csi=1441708800 did=0 ssrc=3153415302 loss=0.000 drop=0.000 jitter=19 bytes=7383 rtp=97 failed=0 bitrate=43336

INFO: **SQAudioRX** - vid=0:174 csi=0 ssrc=529695150 loss=0.000 lossCnt=0 drop=0.000 jitter=23 bytes=12138 rtp=174 processed=174 bitrate=28368 ...

INFO: **SQVideoTX** - vid= csi=1441708801 did=0 ssrc=2877578215 loss=0.000 jitter=0 bytes=28564 rtp=37 failed=0 bitrate=228512 rtt=0 bw=458240 ...

INFO: SQVideoRX - vid=0:19 scrPcy=2 csi=0 w*h=640x360 fps=0 br=0 idrReq=0 idrRcvd=1 decodeDrp=0.000 rendered=4 codecType=100 ssrc=882168780 loss=0.000 lossCnt=0 drop=0.000 ...

Media Using CSA to Analyze PCAP Files

• List of RTP Streams, Packet Counts, Payload Types, and Packet Loss



Media	Packet loss information		
CSA RTP Stream Statis	Sequence Number	Timestamp	
RTP Stream		====================================	======================================
Packet loss summary		1546	18:51:10,616
RTP Stream statistics 135.84.172.12:26290 -> 192.168.1.71:19594	≡	1549 1553 1557	18:51:10,675 18:51:10,755 18:51:10 836
1000		1561	18:51:10,916 18:51:10 996
\$00 750	-●- Packet interval time ◆ Packet loss	1569 1573	18:51:11,076 18:51:11,155
		1577 1581	18:51:11,236 18:51:11,317
$ \begin{array}{c} 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ $	Highcharts.com	1585 1589 1593	18:51:11,396 18:51:11,476 18:51:11,556
		1597	18:51:11,636

Media Call Statistics

Below are printed every 6 – 8 seconds

2023-01-25T17:41:19.440Z <Debug> [868] MediaStatistics.cpp:493 media::MediaStatistics::logStats

sendResolution: 640 x 360 sendFrameRate: 5 fps sendBitRate Video: 74 kbps sendLossRatio_Video: 0 % sendRTT Video: 0 ms sendJitter Video: 33 ms sendTransport Video: UDP sendAudioCodec: Opus sendShareCodec: Unknown sendBitRate Audio: 18 kbps sendLossRatio Audio: 0 % sendRTT Audio: 0 ms sendJitter Audio: 25 ms sendTransport Audio: UDP localVideoDowngrade: None remoteVideoDowngrade: None packetsSent_Audio: 192 packetsSent ShareAudio: 0 packetsSent Video: 54 packetsSent Screen: 0

sendScreenShareResolution: 0 x 0 sendFrameRate_ScreenShare: 0 fps sendBitRate_ScreenShare: 0 kbps sendLossRatio_ScreenShare: 0 % sendRTT_ScreenShare: 0 ms sendJitter_ScreenShare: 0 ms sendTransport_ScreenShare: UDP sendShareAudioCodec: Unknown receiveShareCodec: Unknown sendBitRate_ShareAudio: 0 kbps sendLossRatio_ShareAudio: 0 % sendRTT_ShareAudio: 0 ms sendJitter_ShareAudio: 0 ms sendJitter_ShareAudio: 0 ms

packetsReceived_Audio: 262
packetsReceived_ShareAudio: 0
packetsReceived_Video: 60
packetsReceived_Screen: 0

ediaStatistics::logStats:	
<pre>receiveResolution: 640 x 360 receiveFrameRate: 5 fps receiveBitRate_Video: 156 kbps receiveLossRatio_Video: 0 %</pre>	<pre>receiveScreenShareResolution: 0 x 0 receiveFrameRate_ScreenShare: 0 fps receiveBitRate_ScreenShare: 0 kbps receiveLossRatio_ScreenShare: 0 %</pre>
<pre>receiveJitter_Video: 66 ms</pre>	<pre>receiveJitter_ScreenShare: 0 ms</pre>
receiveAudioCodec: Opus	receiveShareAudioCodec: Unknown
receiveBitRate_Audio: 18 kbps receiveLossRatio_Audio: 0 %	receiveBitRate_ShareAudio: 0 kbps receiveLossRatio_ShareAudio: 0 %
receiveJitter_Audio: 30 ms	<pre>receiveJitter_ShareAudio: 0 ms</pre>

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- User 2 wants to call User 1 Enters the email address of the user in the search bar Returns 2 search results
- Question: Which 'call' button should user1 use?

•	< > + Q user1¦@brkcol.wbx.ai	× Cancel ☞ - □ >
	user1@brkcol.wbx.ai	
•	Q Search all spaces for 'user1@brkcol.wbx.ai'	\bigcirc
j j	People	
	Active	

[service-discovery] [CSFUnified::ServiceDiscoveryHandler::setupDiscovery] - *----* Discovery is setup with ServicesDomain: brkcol.wbx.ai and VoiceServicesDomain: coluc.com

TIP



<Debug> [2192] CallHandler.cpp:58 CallHandler::makeCall:makeCall, callId[u***1@br**ol.wbx.ai, origin[search_room], isUseSipUrIToCallTheDevice: 0

<Debug> [2192] EccManager.cpp:2637 EccManager::canClaimCallImpl:Route call to Locus, call will be Locus call

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- 'brkcol.wbx.ai' domain matches Webex domain.
- By default routes to Webex Services

Unified (CM SIP Address	SIP Address Call Route Path
Routing		Take note of all calls routing to your enterprise call control center for users dialing a SIP address in Webex.
-		 All SIP address calls, except for addresses that match cloud Webe services
		Only calls that match the specified (comma separated) domains

 < > + Q user1 ^l @brkcol.wbx.ai	X Cancel 💿	_	×
user1@brkcol.wbx.ai			

Why does this call fail? Answer User not licensed for 'Call on Webex'

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	Licenses	O Messaging	Basic Messaging Advanced Messaging
		📋 Meeting	Basic Space Meetings
		🗞 Calling	Register to Unified Communications Manager (UCM)
		Edit Licenses	
	Control Hub > Users >	User > Summary> Lic	enses
/			

Select second search result succeeds	◎ ☆ user1	
People	Messages Profile Content Meetings +Apps	S⊒ Q
Active	Add to contacts Phone Work: 1000	
	Email user1@brkcol.wbx.ai	

<Debug> [2192] CallHandler.cpp:58 CallHandler::makeCall:makeCall, callId[1000, origin[search_room],
isUseSipUrlToCallTheDevice: 0

<Debug> [2192] EccManager.cpp:2609 EccManager::canClaimCallImpl:Invite call thats a one2one and Ecc is registered: Call will be an Ecc call

<Debug> [2192] CallManager.cpp:2164 CallManager::getConflictedCalls:Session created: softphone call


Unified CM SIP Address Routing



Domain matches allow list for SIP calls to UCM

<Debug> [1372] CallHandler.cpp:58 CallHandler::makeCall:makeCall, callId[u***1@br**ol.wbx.ai, origin[search_room], isUseSipUrIToCallTheDevice: 0

<Debug> [1372] SipUriRoutingHelper.cpp:85 SipUriRoutingHelper::isRoutedToEcc:Match allowlist domain

<Debug> [1372] CallManager.cpp:2164 CallManager::getConflictedCalls:Session created: softphone call

Conclusions





Thank you





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Let's go