





Setup for Q-SYS[™] Softphone

Cisco Unified Communication Manager (CUCM) 10.5

This document applies to this Cisco product: **CUCM 10.5**

Introduction

When you add users and extensions to the Cisco Unified Communications Management (CUCM) system, make sure you have adequate licensing to proceed. The Q-SYS Core is a third-party SIP endpoint in the CUCM system, and therefore each extension may require available licenses. Purchase any needed licenses from Cisco.

Concepts in this procedure can be applied also to other versions of CUCM.

NOTE: In Q-SYS Designer Software 5.2.x and earlier the QSC Softphone required SIP V2 early offer for proper functionality. Version 5.3.x and later can use early offer *or* late offer.

clisco Unified CM Administration For Clisco Unified Communications Solutions
System • Call Routing • Media Resources • Advanced Features • Device • Application • User Management • Bulk Adm
Phone Security Profile Configuration
🔚 Save 🗙 Delete 🗈 Copy 🥞 Reset 🥒 Apply Config 🕂 Add New
_ Status
i Status: Ready
Phone Security Profile Information
Product Type: Third-party SIP Device (Basic) Device Protocol: SIP Name* Q-SysCoreSIP Description Description
Nonce Validity Time* 600
Transport Type* UDP 🔻
Carable Digest Authentication
Parameters used in Phone SIP Phone Port* 5060
Save Delete Copy Reset Apply Config Add New
(i) *- indicates required item.
Figure 1.

Security Profile

You must first have a Security Profile set up in Cisco Unified CM Administration. To create one or to verify that you have an existing one, select **System > Security Profile > Phone Security Profile**.

- 1. To find an existing profile, enter the search parameters, patterns, and text, if there are any. Click **Find**. Click on the record that you need to view.
- 2. To add a new profile, click Add New. Select Phone Security Profile Type. Then select Third-party SIP Device (Basic).
- 3. In the **Phone Security Profile Configuration** page, enter the information shown in Figure 1. Click **Apply Config** and then click **Reset**. Click **Save**.

Add an end user

- 4. Next, configure the End User account. Select User Management > End User > Add New.
- 5. In End User Configuration, enter the information shown in Figures 2 through 5. Click Save.

Please note that what CUCM calls **User ID**, a Q-SYS softphone calls **Authentication ID**, and what CUCM calls **Digest Credentials**, a Q-SYS softphone calls **Password**.



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System - Call Routing -	Media Resources - Advanced Features - Device - Application -	User Management 🖣	Bulk Administration - Help -				
End User Configuratio	n			Re	elated Links: Back to Fi	nd List User	rs 🔻 Go
Save 🗙 Delete	Add New						
- Status							
i Status: Ready							
User Information							
User Status	Active Local User						
User ID*	qsysvoip]					
Password	•••••	Edit Credential					
Confirm Password	••••••]					
Self-Service User ID	123456]					
PIN	••••••	Edit Credential					
Confirm PIN	••••••]					
Last name*	qsysvoip]					
Middle name]					
First name]					
Title]					
Directory URI]					
Telephone Number]					
Home Number]					
Mobile Number]					
Pager Number]					
Mail ID]					
Manager User ID							
Department							
User Locale	< None >	-					
Associated PC		1					
Digest Credentials	••••••	1					
Confirm Digest Credent	als	1					
User Profile	Use System Default("Standard (Factory Default) U 🔻 View De	tails					

Figure 2. User Information

Service Settings		
Home Cluster		
Enable User for	Unified CM IM and Presence (Configure IM	Presence in the associated UC Service Profile)
🔲 Include me	eeting information in presence(Requires Ex	ge Presence Gateway to be configured on CUCM IM and Presence server)
UC Service Profile	Use System Default	View Details
Device Information —		
Controlled Devices Available Profiles		Device Association Line Appearance Association for Presence
	**	
CTI Controlled Device Pr	ofiles	

Figure OK. Service Settings and Device Information



2

Setup for Q-SYS Softphone

Cisco Unified Communication Manager (CUCM) 10.5

Extension Mobility		
Available Profiles	· ·	
-	**	
Controlled Profiles		
Default Profile	Not Selected 🔻	
BLF Presence Group*	Standard Presence group	
SUBSCRIBE Calling Search Space	e < None >	
Allow Control of Device from CT	СТІ	
Enable Extension Mobility Cross	oss Cluster	
Directory Number Associations	15	
Primary Extension < None >	T	
Mobility Information		
Enable Mobility		
Enable Mobile Voice Access		
Maximum Wait Time for Desk Picku	ckup* 10000	
Remote Destination Limit*	4	
Remote Destination Profiles	▲ View Details	

Figure 4. Extension Mobility; Directory Number Associations; and Mobility Information

Mutilevel Precedence and Preemption	uthorization	
MLPP User Identification Number		
MLPP Password		
Confirm MIPP Password		
MIRE Presedence Authorization Lovel		
MEPP Precedence Addionization Level Da		
CAPF Information		
Associated CAPF Profiles		
	View Dataile	
	- Terr Celuna	
Permissions Information		
Groups	A	
	Add to Access Control Group	
	Remove from Access Control Group	
	View Details	
Roles	A	
	View Details	
Save Delete Add New		

(i) *- indicates required item.

Figure 5. Multilevel Precedence and Preemption Authorization; CAPF Information; and Permissions Information

When you have completed the settings in this window, click Save.







Sip profile

- 6. Next, configure the SIP profile for Q-SYS. Select **Device > Device Settings**. Click **Sip Profile**.
- 7. Find Standard SIP Profile in the list. Click its Copy icon.
- 8. In the **SIP Profile Configuration** window (Figure 6), give the configuration a new **Name** that describes its status as both a standard SIP profile and a Q-SYS softphone (such as **Standard SIP Profile Q-SYS**).
- 9. Configure the SIP profile as shown in Figures 6 through 8.



Parameters used in Phone	
Timer Invite Expires (seconds)*	180
Timer Register Delta (seconds)*	5
Timer Register Expires (seconds)*	3600
Timer T1 (msec)*	500
Timer T2 (msec)*	4000
Retry INVITE*	6
Retry Non-INVITE*	10
Start Media Port*	16384
Stop Media Port*	32766
Call Pickup URI*	x-cisco-serviceuri-pickup
Call Pickup Group Other URI*	x-cisco-serviceuri-opickup
Call Pickup Group URI*	x-cisco-serviceuri-apickup
Meet Me Service URI*	x-cisco-serviceuri-meetme
User Info*	None
DTMF DB Level*	Nominal
Call Hold Ring Back*	Off
Anonymous Call Block*	Off
Caller ID Blocking*	Off
Do Not Disturb Control*	User 🔻
Telnet Level for 7940 and 7960*	Disabled 🔻
Resource Priority Namespace	< None > T
Timer Keep Alive Expires (seconds)*	120
Timer Subscribe Expires (seconds)*	120
Timer Subscribe Delta (seconds)*	5
Maximum Redirections*	70
Off Hook To First Digit Timer (milliseconds)*	15000
Call Forward URI*	x-cisco-serviceuri-cfwdall
Speed Dial (Abbreviated Dial) URI*	x-cisco-serviceuri-abbrdial
Conference Join Enabled	
RFC 2543 Hold	
Semi Attended Transfer	
Enable VAD	
Stutter Message Waiting	
MLPP User Authorization	
Normalization Script	
Normalization Script < None >	T
Enable Trace	
Parameter Name	Parameter Value
1	
- Incoming Requests FROM URI Settings	

Figure 7. Parameters Used in Phone



Setup for Q-SYS Softphone

Cisco Unified Communication Manager (CUCM) 10.5



Trunk Specific Configuration					 	
Reroute Incoming Request to new Trunk based on*	Never		¥			
RSVP Over SIP*	Local RSVP		T			
Resource Priority Namespace List	< None >		•			
Fall back to local RSVP						
SIP Rel1XX Options*	Disabled		•			
Video Call Traffic Class*	Mixed		Ŧ			
Calling Line Identification Presentation*	Default		T			
Session Refresh Method*	Invite		•			
Early Offer support for voice and video calls*	Mandatory (insert M	TP if needed)	•			
Enable ANAT			_			
Deliver Conference Bridge Identifier						
Allow Passthrough of Configured Line Device Ca	ller Information					
Reject Anonymous Incoming Calls						
Reject Anonymous Outgoing Calls						
Send ILS Learned Destination Route String						
SIP OPTIONS Ping						
Enable OPTIONS Ping to monitor destination st	tatus for Trunks with S	Service Type "None (Default)				
Ping Interval for In-service and Partially In-servic	e Trunks (seconds)*	60		-		
Ping Interval for Out-of-service Trunks (seconds)	*	120				
Ping Retry Timer (milliseconds)*	1	500				
Ping Retry Count*		6		2		
- SDB Information						
Send send-receive SDP in mid-call INVITE						
Allow Presentation Sharing using BFCP						
Allow iX Application Media						
Allow multiple codecs in answer SDP						
Saus Delate Conu Beest Apply Confi	a Add Now					
Save Delete Copy Reset Apply Comm	g Add New					
(i) *- indicates required item.						
Figure 8. Trunk Specific Configuration	n					
gan and a provide the second data and a						

NOTE: As of Q-SYS Designer Software version 5.3.x the Q-SYS softphone allows both SIP Early Offer - with or without Media Termination Point (MTP)-with Session Description Protocol (SDP) and SIP Late Offer. However, if DTMF or other problems arise with SIP Early Offer and without MTP, try enabling MTP. If you are using Q-SYS Designer Software 5.2.x or earlier, you must designate SIP Early Offer; enable MTP in Cisco Unified CM to allow this.

When you have completed the settings in this window, click Apply Config.

10. Click Reset and then click Save.

Add and configure a Softphone

11. Select Device > Phone. Click Add New. In Phone Type, select Third-party SIP Device (Basic) and click Next.

12. Configure the settings as shown in Figures 9 through 11





SCO For Cisco Unified CM Adminis	stration			Navigation Cisco Unified CM Adm	inistration ▼ About Loc
m ▼ Call Routing ▼ Media Resources ▼ Advance	d Features ▼ Device ▼ Application ▼ User Man	agement ▼ Bulk Administration ▼ Help ▼	_		
C		-		Deleted Higher Deale To Field Link	
				Related Links: Back To Find/List	
Save 🗙 Delete 🕒 Copy 資 Reset 🧷 A	pply Config 🔓 Add New				
us					
Status: Ready					
ociation	Phone Type Product Type Third-party SIP Device	re (Basic)			
Modiry Button Items	Device Protocol: SIP				
Line 11 2010 (no partition)	☐ Real-time Device Status				
erns Line [2] - Add a new DN	Registration: Registered with Cisco	Unified Communications Manager pub			
The second s	IPv4 Address: 192.168.1.9				
	Active Load ID: None Download Status: None				
	Device Information				
	Device Information				
	Device is not trusted				
	MAC Address*	00190F2435AB			
	Description	SEP00190F2435AB			
	Device Pool*	Default	View D	etails	
	Common Device Configuration	< None >	View D	etails	
	Common Phone Profile *	Third-party SIP Device (Basic)	View D	etaile	
	Calling Search Space	< None >	• <u>view D</u>		
	AAR Calling Search Space	< None >	T		
	Media Resource Group List	< None >	Y		
	Location*	Hub_None	T		
	Device Mobility Mode*	< None >	View C	urrent Device Mobility Settings	
	Owner	Ilser Anonymous (Public/Shared Snace)	view c	arent bevice Mobility Settings	
	Owner User ID*	dsysvoip	T		
	Use Trusted Relay Point*	Default	T		
	Always Use Prime Line*	Default	•		
	Always Use Prime Line for Voice Message" Geolocation	Default	• •		
	Innore Presentation Indicators (interna				
	Logged Into Hunt Group	(calls only)			
	Remote Device				
e 9. Device Information					
	- Number Presentation Transformation-			<u>_</u>	
	Calling Party Transformation CSS				
	Use Device Pool Calling Party Transfo	rmation CSS (Caller ID For Calls From This Phone)			
	a ose bevice root caning raity transio	Thaton C35 (Caller 15 For Calls From This Filone,).		
	Remote Number				
	Calling Party Transformation CSS	ne > 🔻			
	Use Device Pool Calling Party Transfo	rmation CSS (Device Mobility Related Information)		
	Protocol Specific Information				
	BLF Presence Group* Standa	rd Presence group 🔻	[NOTE: As of Q-SYS Designer So	oftware
	MTP Preferred Originating Codec* 711ula	N T		version 5.3.x the Q-SYS softpho	ne allow
	Device Security Profile* Q-SysC	oreSIP Y		both SIP Early Offer-with or with	nout Me
	Rerouting Calling Search Space < None	× T		Termination Point (MTP)-with Se	ession
	SIP Profile* Standa	rd SIP Profile O-SYS	ew Details	Description Protocol (SDP) and S	IP Late
uire DTMF Reception	Digest User gsysvo	ip V	e e como	Offer. However, if DTMF or other	problem
	the second se			arise with SIP Early Offer and with	nout MT
nt be necessary if dialing 9	🗹 Media Termination Point Required 🗲			and white the Early offer and white	0.01/0
ht be necessary if dialing 9 putbound PSTN calling does	Media Termination Point Required			try enabling MTP. If you are using	Q-SYS

Figure 10. Number Presentations; Protocol Specific Information



Cisco Unified CM to allow this.

Setup for Q-SYS Softphone

Cisco Unified Communication Manager (CUCM) 10.5



When you have completed the settings in this window, click Apply Config.

13. Click **Reset** and then click **Save**.

	Modify Button Items
1	erre Line [1] - Add a new DN

Add Directory Number

14. Click Add a New DN (Figure 12).

15. Configure the settings as shown in Figures 13 through 17.

SYSTEMS

Figure 12.

cisco	Cisco U For Cisco Un	nified CM Ad	ministration					Navigation Cisco Unified CM Administration cisco Search Documentation About	▼ Go Logout
System - 0	Call Routing 👻	Media Resources 👻	Advanced Features 👻	Device - Application -	User Management 👻	Bulk Administration -	Help 🔻		
Directory N	lumber Conf	iguration						Related Links: Configure Device (SEP00190F2435AB)	▼ Go
Save	🗙 Delete 🦻	👌 Reset 🏒 Apply	Config 🕂 Add New						
Status	: Ready								Î
Directory I Directory N Route Partit Description	Number Info lumber* tion	2010 < None >		T	Urgent Priority				
Alerting Nar ASCII Alert External Ca Associated	me ing Name Ill Control Prof Devices	ile < None > SEP00190F2435A	ıВ	×	Edit Device	rance			
Dissociate [Devices	~	*	*	Edit Line Appear	rance			

Figure 13. Directory Number Information





Directory Number Settings						
Voice Mail Profile	< None >	▼ (Choose <	None> to use system default)			
Calling Search Space	< None >	•				
BLF Presence Group*	Standard Presence group	¥				
User Hold MOH Audio Source	< None >	¥				
Network Hold MOH Audio Source	<pre>< None ></pre>	¥				
Reject Anonymous Calls						
Enterprise Alternate Number						
Add Enterprise Alternate Numb	er					
+E.164 Alternate Number —						
Add +E.164 Alternate Number]					
	a.					
Directory URIs						1016
Primary	URI		Partition		Advertise Globally via ILS	Remove
۲			< None >	•	 Image: A start of the start of	
Add Row						
PSTN Failover for Enterprise	Alternate Number, +E.164 Alternate	Number, and URI Dialing				
Advertised Failover Number 🛛 <	None > V					
AAR Settings						
	Voice Mail		AAR Destination Mask		AAR Group	
AAR 🔲 d	or .			< 1	ione >	Ŧ

Figure 14. Directory Number Settings; Enterprise Alternate Number; +E.164 Alternate Number; Directory URIs; PSTN Failover for Enterprise Alternate Number, +E.164 Alternate Number, and URI Dialing; AAR Settings

all Forward and Call Pickup Settin	gs			
	Voice Mail	Destination		Calling Search Space
Calling Search Space Activation Policy	/		Use System Default	
forward All	or 📃		< None >	τ.
econdary Calling Search Space for F	Forward All		< None >	•
orward Busy Internal	🔲 or		< None >	
orward Busy External	🗐 or		< None >	T
orward No Answer Internal	🔲 or		< None >	¥
orward No Answer External	or		< None >	•
orward No Coverage Internal	or		< None >	•
orward No Coverage External	🔲 or		< None >	
orward on CTI Failure	🔲 or		< None >	•
orward Unregistered Internal	🗖 or		< None >	•
orward Unregistered External	or		< None >	▼
Answer Ring Duration (seconds)				
ll Pickup Group <	None >	T		
rk Monitoring				
	Voice Mail	Destination	c	alling Search Space
ark Monitoring Forward No Retrieve xternal	Destination 🔲 or		< None > parker's line.	 A blank value means to call the
ark Monitoring Forward No Retrieve Iternal	Destination 🔲 or		< None > parker's line.	 A blank value means to call the
k Monitoring Reversion Timer		A blank value will use va	lue set in Park Monitoring Reversion Timer service p	arameter

Figure 15. Call Forward and Call Pickup Settings; Park Monitoring



- Directory Number Setting



MLPP Alternate Party And Confidenti	al Access Level Settings		
Target (Destination)			
MLPP Calling Search Space	< None >	•	
MLPP No Answer Ring Duration (seconds)		
Confidential Access Mode	< None >	T	
Confidential Access Level	< None >	¥	
Call Control Agent Profile	< None >	T	
Line Settings for All Devices			
Hold Reversion Ring Duration (seconds)			Setting the Hold Reversion Ring Duration to zero will disable the feature
Hold Reversion Notification Interval (sec	onds)		Setting the Hold Reversion Notification Interval to zero will disable the feature
Party Entrance Tone*	Default	۲	
Line 1 on Device SEP00190F2435AB	4		
Display (Caller ID)		Display text fo	r a line appearance is intended for displaying text such as a name instead of a directory number for calls. If you specify a
number, the p	erson receiving a call may not see	the proper identity of the calle	r.
ASCII Display (Caller ID)			
External Phone Number Mask			
Monitoring Calling < None > Search Space		T	
-Multiple Call/Call Waiting Settings o	n Device SEP00190F2435AB —		
Note:The range to select the Max Numbe	er of calls is: 1-2		
Maximum Number of Calls*	2		
Busy Trigger*	2		(Less than or equal to Max. Calls)

Figure 16. MLPP Alternate Party and Confidential Access Level Settings; Line Settings for All Devices; Line 1 on Device; Multiple Call/Call Waiting Settings on Device

Caller Name		
Caller Number		
Redirected Number		
🗹 Dialed Number		
Users Associated with	ne	
	Associate End Users	
Save Delete Res	Apply Config Add New	
(i) *- indicates require	tem.	
(i) **- Changes to Line	r Directory Number settings require restart.	
- Figure 17. Forward	d Call Information Display on Device; Users Associate	ed with

When you have completed the settings in this window, click Apply Config.

16. Click Reset and then click Save

Set up softphone for CUCM in Q-SYS

- 17. Open Q-SYS Designer Software. Go to File > Load from Core & Connect and then select the Core processor.
- 18. Go to Tools > Show Q-SYS Administrator. Select Softphone. Double click Softphone-1.
- 19. Configure the parameters in the Edit Softphone window (Figure 18). Click OK.



Line



MR_Core110f_with_IO22_basic_setup_spear MR_Core110f_with_IO22_basic_setup_spear	aker_out_Softphone_to_CUCM	M10_5_Test_8_11_16_one	Softphone_B - Q-SYS Designe	r [build 5.1.57]	Contraction of the local division of the loc	A Construction of the local division of the		- 0 X
File Edit View Tools Help								
Core-35a9								۵
Inventory	🕊 🗋 Page 1 🗔 Q	-Sys Configurator	-Sys Administrator 🗙					
Default Location	Second Se	Softphones			LAN A			
4 🔘 Core : Core-35a9		Softphone-1		SIP Port	5060			
Status	Command Sched	dule						
Elex In	A			Enable DTMF INFO	No			
	Users			RFC2833 DTMF Type	101			
Flex Out	User Control Inte	erfaces		Enable Logging	Yes 💌			
POTS In				Enable Stun	No			
POTS Out	Audio Files			A				
GPIO In				Audio Codecs				
GPIO Out	Event Log			G.711 ulaw				
Serial Port	Softphones			G.726 40k				
Loudspeaker Monitor				G.726 32k	5			
▶ I/O-22 : /O-22-1	Contacts			🔲 G.726 24k				
Softphone : Softphone-1	CALLAD			G.726 16k				
TSC-3 : TSC3-Gary	SINIMP	Edit Softphone	8	G.711 alaw				
		Name	Softphone-1	G.726 40k (AAL2)				
		User Name	2010					
		CID Name	17149572010					
		Proxy	192.168.1.227					
		Register With Prove	Ver					
Schematic Pages		Authentication ID						
User Control Interfaces		Password	123456					
Snapshots		Domain (Optional)						
Named Controls			OK Cancel					
Design Inspector			Cancel				Logg	ed on as : <u>Guest</u>

Figure 18. Edit the softphone parameters in Q-SYS Administrator.

- 20. Also, select only the audio codecs G.722 and either G.711 ulaw or G.711 alaw (largely depending on the system's location). In North America, G.711 ulaw is prevalent; outside North America, G.711 alaw is more common. Contact your phone system admin if you are not sure.
- 21. Click **Update**. Registration may take from a few seconds up to a few minutes to complete.

If registration fails select Yes in Enable Logging and click Update again. Use a web browser to view the Q-SYS Core processor's SIP web page at http://<IP address of Q-SYS Core>/sip.txt. The SIP response codes listed should help indicate the type of issue occurring with registration.

View the registered phones in CUCM

- 22. Cisco Unified CM will list the phones that are successfully registered. To view the list in CUCM, go to Device > Phone. The phones will be listed by device name.
- 23. The Q-SYS softphone should appear in the list. Its Status should be Registered with pub as Figure 19 shows.





Cisco Unified CM Administration Navigation Cisco Unified CM Administration Go Cisco For Cisco Unified Communications Solutions Cisco Search Documentation About Logout								
System - Call Routing -	Media Resources - Advanced Featu	res - Device - Application -	User Management 👻 E	Bulk Administration 👻 Help	•			
Find and List Phones						Related Links: Actively	Logge <mark>d</mark> In De	vice Report 🔻 🛛 G
Add New E Selec	t All 🔠 Clear All 🙀 Delete Selecte	ed 💁 Reset Selected 🥢 Apply	Config to Selected					
- Status								
(1) 11 records found								
Phone (1 - 11 of 1)	1)						Rows	per Page 50 V
Find Phone where Devi	ce Name 🔻 begins	with 🔻	Find Clear Filte	er ege 🚥				
		Select item or enter sea	rch text 🔻					
	Device Name(Line) [▲]	Description	Device Pool	Device Protocol	Status	IPv4 Address	Сору	Super Copy
	SEP00190F2435AA	SEP00190F2435AA	Default	SIP	None	None	ß	1. And
	SEP00190F2435AB	SEP00190F2435AB	Default	SIP	Registered with pub	192.168.1.9	6	1
	SEP003067076BE5	Auto 2000	Default	SCCP	None	None	ß	r 🕐
	SEP010101010103	SEP010101010103	Default	SIP	Registered with pub	192.168.1.180	ß	1
	SEP010101010104	SEP010101010104	Default	SIP	None	None	6	1
	SEP010101010105	SEP010101010105	Default	SIP	None	None	6	1
	SEP010101010109	SEP010101010109	Default	SIP	None	None	ß	r)
	SEP010101010111	SEP010101010111	Default	SIP	Unregistered	192.168.1.9	ß	1
	SEP201A064FEAF3	Auto 2002	Default	SCCP	None	None	ß	1
	SEP3C970E1CB228	Auto 2001	Default	SCCP	Registered with pub	192.168.1.180	ß	1
	SEP883188318831	SEP883188318831	Default	SIP	None	None	ß	1
Add New Select All	Clear All Delete Selected Res	et Selected Apply Config to Sel	ected					

Figure 19. View the list of registered phones. The Q-SYS softphone should appear, with status "Registered with pub." In this example, the Q-SYS softphone has the device name SEP00190F2435AB.

24. Click on the Q-SYS softphone's Device Name. Its Phone Configuration page will appear (Figure 20).

Cisco Unified For Cisco Unified Con	CM Administration	Navigation Cisco Unified CM Administration V Go cisco Search Documentation About Logout	
System - Call Routing - Media Re	sources ▼ Advanced Features ▼ Device ▼ Application ▼ Use	er Management 👻 Bulk Administration 👻 Help 👻	
Phone Configuration			Related Links: Back To Find/List Go
Save 🗙 Delete 🕞 Copy	🗣 Reset 🥒 Apply Config 📮 Add New		
Status: Ready			Î
Association Modify Button 1 ems Line [1] - 2010 (no partii Unassigned Associa 2 ems Line [2] - Add a new DN	Items ion ited Items Registration: Registred with C IPv4 Address: 192.168.1.9 Active Load Its None Download Status: None Device Information	Device (Basic) Cisco Unified Communications Manager pub	
	Device is Active AC Address* Description Device Pool* Common Device Configuration Phone Button Template* Common Phone Profile* Calling Search Space AAR Calling Search Space Media Resource Group List	00190F2435AB SEP00190F2435AB Default < None > Third-party SIP Device (Basic) Standard Common Phone Profile < None > < None > < None >	View Details

Figure 20. Real-time Device Status shows the details of the phone's registration with CUCM.





Check gateway and DNS configuration

25. Go to Q-SYS Designer Software and open Q-SYS Administrator.

26. Click on the Q-SYS core processor (Figure 21).

MR_Core110f_with_IO22_basic_setup_speak	cer_out_Softphone_to_CUCM10_5_Te	est_8_11_16_one_Softphone_B - Q-S	SYS Designer [build 5.1.57]	Contractor of Array Inc. or March	
File Edit View Tools Help					
Core-35a9					•
Inventory	🕊 🚺 Page 1 🖉 Q-Sys Conf	figurator 🗙 🗖 G-Sys Administrator			•
Default Location Ore : Core-35a9	Core Core : core-35a9	Name Firmware Version	core-35a9 5.1.57	ID	
Mic/Line In Flex In Flex Out POTS In POTS Out POTS Controller GPIO In GPIO Out	I/O Devices I/O-22 : io-22-1 Touch Screen Controllers TSC-3 : tsc3-gary	Design Design Uptime Hardware ID Feature Keys + LAN A IP Address : 192	MR_Core110f_with_JO22_basic_set 32 Minutes 9 Seconds <i>3-64A439D566F5B7320317104D6</i> , Model = Core 110f Mode: [tup_speaker_out_Softphone_to_CUCM10_5_Test_8_11_1 222EFB84 MAC : 00:19:0F:24:35:A Static 255:255.255:0 Gateway : 192.168.1.1	6_one_Softphone (Running)
Serial Port Loudspeaker Monitor MI/0-22 : /0-22-1		Static Routes	Mode : [Off	*
 Softphone : Softphone-1 TSC-3 : TSC3-Gary 		DNS Zenable DNS Primary DNS 192.11 Secondary DNS 0.0.00	58.1.226		
Schematic Pages					
User Control Interfaces					
Snapshots					
Named Controls			Download Los Arch	Fdit Davice Time/Data	Reboot Davice
Design Inspector			Download Log Arch		opuate settings

Figure 21. Check the gateway and DNS configurations.

27. If you are using only one LAN port, configure one gateway, as shown. Do not add gateways in Static Routes.

28. If you are using more one LAN port, configure only one gateway but add Static Routes for the second LAN port.





Typical SIP Response Codes for troubleshooting

SIP Response	
Code	
401	SIP/2.0 401 Unauthorized
	Typically caused by incorrect credentials from the calling user agent (Q-SYS Softphone), and/or miscon-
	figured CUCM end user settings, and/or 3rd party SIP Phone settings.
404	SIP/2.0 404 Not Found
	Typically has the same causes as SIP code 401 (see above).
503	Registration Failed with status Service Unavailable [503]
	Typically caused by CUCM CallManager service not being enabled. Seen in clustered CUCM environ-
	ments where only certain CUCM servers run the CallManager service.
	Remedy: Make sure the Q-SYS Softphone is configured with the correct CUCM server (i.e., one running CallManager service).
	Other common causes: Having the wrong IP address configured in Q-SYS softphone for the CUCM server. Network issues preventing communication with CUCM.



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