

Cisco Unified Communications Manager 5.1 SIP Configuration Guide

Valcom Session Initiation Protocol (SIP) VIP devices are compatible with Cisco Unified Communications Manager (formerly Cisco Unified CallManager) (SIP enabled versions). The Valcom device is added to the Communications Manager as a Third-party SIP Device (Basic or Advanced). Third-party SIP Device (Basic) supports one line and requires three Cisco license units. Third-party SIP Device (Advanced) supports up to eight lines and requires six Cisco license units.

The following steps outline the typical configuration process:

1. Navigate your web browser to the name or IP address of your Cisco Communications Manager Server. *In this example the IP address is: 192.168.97.52*



2. Login, using the proper credentials for your system.



3. Under "User Management", select "End User"





4. Click on "Add New"



- 5. Complete the following steps:
 - A) Enter "User ID*" (ex. 6001) –[required for Valcom device]
 - B) Enter "Password*" (ex. valcom) -[required for Communications Manager only]
 - C) Enter "Confirm Password*" (ex. valcom) -[required for Communications Manager only]
 - D) Enter "PIN*" (ex. 12345) -[required for Communications Manager only]
 - E) Enter "Confirm PIN*" (ex. 12345) -[required for Communications Manager only]
 - F) Enter "Last name*" (ex. 6001) –[required for Communications Manager only]
 - G) Enter "Digest Credentials" (ex. valcom) -[required for Valcom device]
 - H) Enter "Confirm Digest Credentials" (ex. valcom) –[required for Valcom device]
 - I) Select "Save" at the bottom of the screen

Cisco Unified Cal	lManager	Adminis	tration	For Cisco	Unifie
System 👻 Call Routing 👻 Med	dia Resources 👻	Voice Mail 👻	Device 👻	Application \bullet	User
End User Configuration					
⋳⋇∻					
_ Status					
i Status: Ready					
User Information					
User ID*	6001				
Password*	****		olololololok		
Confirm Password*			dolololololok		=
PIN*			olololololok		=
Confirm PIN*			olololololok		=
Last name*	6001				=
Middle name					=
First name					=
Telephone Number					=
Mail ID					=
Manager User ID					=
Department					=
User Locale	<none></none>				-
Associated PC					-
Digest Credentials	valcom				=
Confirm Digest Credentials	Valcom				=



6. Click on "Device", and then click on "Phone"

Cisco Unified CallManager Adminis	tra	ition	For Cisco	Unifie	ed Communic
System Call Routing Media Resources Voice Mail	Dev	vice 👻	Application 👻	User	Management 👻
Find and List Phones		CTI Ro	ute Point		
÷		Gateke	eper		
Search Options		Gatew	ay		
Find Phone where Device Name 💽 begins wit		Phone			Find 🗆 s
		Trunk			Select item
Search Results		Device	Settings	•	
No active query. Please enter your search Add New	h a	riteria	a using the	e op	itions abov

7. Click on "Add New"

Cisco Unified CallManager Administration For Cisco Unifie	d Communica
System 👻 Call Routing 👻 Media Resources 👻 Voice Mail 👻 Device 👻 Application 👻 User M	/lanagement 👻
Find and List Phones	
÷	
Search Options	
Find Phone where Device Name 🔹 begins with 🔹	Find 🗖 Se
	Select item c
Search Results	
No active query. Please enter your search criteria using the opt	ions abov
Add New	

8. Select "Third-party SIP Device (Basic)" or "Third-party SIP Device (Advanced)" from the dropdown, then click "Next" (Valcom single-identity devices (IP speakers, VIP-801, VIP-172L, etc) would be "Basic", other Valcom IP devices can be either. If you intend to only use one SIP identity on the Valcom IP device, then choose Basic. Otherwise, choose Advanced.)



*- indicates required item.



- 9. Complete the following steps:
 - A) Enter "MAC Address*" (ex. 00D05F004867)
 - B) Select "Device Pool*" \rightarrow "Default" (or what is valid for your installation)
 - C) Select "Phone Button Template*" → "Third-party SIP Device (Basic)" or "Third-party SIP Device (Advanced)"
 - D) Select "Common Phone Profile" \rightarrow "Standard Common Phone Profile"
 - E) Select "Location*" \rightarrow "Hub_None" (or what is valid for your installation)
 - F) Select "Owner User ID" \rightarrow The "User ID" that was created in Step 5A. (ex. 6001)
 - G) Select "Presence Group*" → "Standard Presence group" (or what is valid for your installation)
 - H) Select "MTP Preferred Originating Codec*" \rightarrow "711ulaw"
 - I) Select "Device Security Profile*" → "Third-party SIP Device Basic Standard SIP Non-Secure Profile"
 - J) Select "SIP Profile*" → "Standard SIP Profile"
 - K) Select "Digest User" \rightarrow The "User ID" that was created in Step 5A. (ex. 6001)
 - L) Select "Save" at the bottom of the screen.

Phone Type					
Product Type: Third-party SIP Device (Basic) Device Protocol: SIP					
Device Information					
Registration IP Address MAC Address*	Registered with Cisco Unified CallManager 192.168.97.52 192.168.100.162 00D05F004867				
Description	Door Speaker - VIP-172L				
Device Pool*	Default 🔹				
Phone Button Template*	Third-party SIP Device (Basic)				
Common Phone Profile*	Standard Common Phone Profile				
Calling Search Space	<none></none>				
AAR Calling Search Space	< None >				
Media Resource Group List < None >					
Location*	Hub_None				
Owner User ID	6001				
🗖 Ignore Presentation Inc	licators (internal calls only)				
Protocol Specific Informa	tion				
Presence Group*	Standard Presence group				
MTP Preferred Originating (Codec* 711ulaw				
Device Security Profile*	Third-party SIP Device Basic - Standard SIP Non-S				
Rerouting Calling Search Sp	oace <none></none>				
SUBSCRIBE Calling Search	Space <none></none>				
SIP Profile* Standard SIP Profile					
Digest User 6001					
Media Termination Point Unattended Port Require DTMF Reception	Required				



10. Select "Line [1] - Add a new DN" under "Association Information".

Association Information	Phone Type	
Modify Button Items	Product Type: Thi Device Protocol: SIP	rd-party SIP Device (Basic) '
	Device Information-	
2 Privacy	Registration	Unregistered
3 None	IP Address	192.168.100.162
	MAC Address*	00D05F004867

- 11. Complete the following steps:
 - A) Enter "Directory Number*" (ex. 6001)
 - B) Enter "Description" (ex. DoorSpeaker VIP-172L)
 - C) Select "Presence Group*" → "Standard Presence group" (or other choice valid for your installation)
 - D) Enter "Maximum Number of Calls*" \rightarrow "2"
 - E) Enter "Busy Trigger*" \rightarrow "2"
 - F) Check "Caller Name"
 - G) Check " Dialed Number"
 - H) Select "Save" at the bottom of the screen

Directory Number Information					
Directory Number*	6001	6001			
Route Partition	< None >	< None >			
Description	DoorSpeake	DoorSpeaker - VIP-172L			
Alerting Name					
ASCII Alerting Name					
🗹 Active					
\Box Directory Number 9	Settings —				
Voice Mail Profile		< None >	•		
Calling Search Space	Э	< None >	•		
Presence Group*		Standard Presence group	•		
AAR Group <pre></pre>			•		
User Hold MOH Audi	o Source	< None >	-		
Network Hold MOH #	Audio Source	< None >	•		

basy mggor	4
Forwarded Call Information Display on D	evice SEPOODO5FOO4867-
🗹 Caller Name	
🗖 Caller Number	
🗖 Redirected Number	
🗹 Dialed Number	
- Save	



12. Click "User Management", then "End User"

Cisco Unified	CallManager Administration For Cisco	Unit	fied Communica	ations Sol
System 👻 Call Routing	✓ Media Resources Voice Mail Device Application	Use	er Management 👻	Bulk Adminis
Directory Number Co	nfiguration		Application User	
			End User	
			Role	-
			User Group	
UStatus: Ready			User/Phone Add	
Directory Number Information			Application User C	APF
Directory Number*	6001		Profile	
Route Partition	< None >		End User CAPF Pro	ofile
Description	DoorSpeaker-VIP-172L		SIP Realm	

13. Click "Find"

Find and List Users
🕂 🌐 🌐 🚟 😽
⊂ Status
i 37 records found
Search Options
Find user where User ID 💽 begins with 🗹 Find 🗖 Search Within Results (userid begins with any)

14. From the search results click on the user ID previously created in step 5A

_ Search Re	esults		
	User ID	First Name	Last Name
	<u>2410</u>		2410
	<u>204test</u>		valcom
	<u>7001</u>		7001
	7002		Valcom
	<u>7004</u>		7004
	7005		7005
	7006		7006
	7007		7007
	<u>3999</u>		FRcisco
	7010		7010-7017
	<u>6542</u>		6543
	lab1		Watt
	<u>6001</u>		6001

15. In the "Device Associations" section, click on the "Device Association" button

- Douico Accociation	c	
Device Association	5	
Controlled Devices	<u>a</u>	
		Device Association
	<u>v</u>	



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16. Locate the device created in step 9 (ex. 6001) and click on the checkbox at it's left, then select "Save Selected/Changes" at the bottom of the screen

-Device	associa	tion for 6001(6001)		
🗹 Shov	w the de	vices already associated with	user	
		Device Name	Directory Number	Description
) SIP	SEP00D05F0036BB	5801	Test RCG-VIP-204
) SP	SEP00D05F0036BB	5802	Test RCG-VIP-204
	÷	SEP00D05F0036BB	5803	Test RCG-VIP-204
) III	SEP00D05F0036BB	5804	Test RCG-VIP-204
) SF	SEPOODO5F0036BB	5805	Test RCG-VIP-204
) SF	SEP00D05F0036BB	5806	Test RCG-VIP-204
) F	SEP00D05F0036BB	5807	Test RCG-VIP-204
) F	SEP00D05F0036BB	5808	Test RCG-VIP-204
) F	SEP00D05F0038DC	8095	Test RCG- VIP-410
	a F	SEP00D05F003D6C	6181	Test RCG- VIP-130
) F	SEP00D05F004069	7100	7100 for Tom (vip 801)
) SIP	SEP00D05F004867	6001	DoorSpeaker - VIP-172L
	A	SEP00D05F0053FD	7006	7006 for Tom (VIP-172L)

Select All on Page	Select All In Search	Save Selected/Changes	
Clear All on Page	Clear All In Search	Remove All Associated Devices	

NOTE: Unselect one or more items or click Clear All in Page will undo the Select All In Search and only devices on the current page will be be processed when Save Selected is clicked. Use the search within result to narrow down the device list.



17. Open the Valcom VIP-102B IP Solutions Setup tool and select the Valcom SIP-enabled VIP device.

Note: The information contained in this guide is limited to configuration of the "SIP" tab in the VIP-102B IP Solutions Setup Tool for the Valcom VIP device that is to be registered to the SIP server. More information on Valcom VIP device configuration, such as IP address assignment, relay activation, etc, may be found in the VIP-102B Reference Manual. This document may be downloaded from our website at http://www.valcom.com

Required Fields: Phone Number, Secret, SIP Server, Register, SIP Server Port, SIP Port, RTP Port, Auto Destination

Optional Fields: Authentication Name, CID Name, CID Number

In our example, the SIP Server IP address is the Cisco Communications Manager, "192.168.97.52". Phone Number is the same as Directory Number in the Cisco Communications Manager configuration, "6001". Secret is the same as our Digest Credentials in the Cisco Communications Manager configuration, "valcom". SIP Server Port is the port number, on which the Cisco Communications Manager SIP server is listening for SIP data.

SIP Port is the port number, on which the Valcom VIP device is listening for SIP data. By default this is set for "5060". RTP Port is the port number on which the Valcom VIP device is set to send/receive audio packets. The default is "20000".

After entering the required values, select the "Update Changed Devices" button, at the upper left. When the update is complete, click reset to reboot the device.

■ VIP-102B IP Solutions Setup Tool												
File Communications Device Password Programming System Conflicts Help												
≞ 🔚 & 1 // 1 🐙 🗿 🖓 🗰 🔤 🚹 🦃												
In the second se	Summary Properties Network SIP Identity 1 Phone Number: Authentication Name: Secret: Realm: SIP Server: Outbound Proxy: SIP Server Port: Outbound Port: Auto Destination: CID Name: CID Number:	Talkback Channels Inputs Group I 6001	Membership SIP Register:									



18. To verify a successful registration, return to Communications Manager and click the "Device" menu, then "Phone"

Cisco Unified CallManager Adminis	tra	tion	For Cisco	Unifie	ed Communic
System - Call Routing - Media Resources - Voice Mail -	Dev	vice 🔻	Application \bullet	Management 👻	
Find and List Phones		CTI Route Point			
÷		Gateke	eper		
Search Options		Gateway			
Find Phone where Device Name 🗾 begins wit		Phone			Find 🗆 🤋
		Trunk			Select item
Search Results		Device	Settings		
No active query. Please enter your search Add New	n cr	iteri	a using th	e op	tions abov

19. Click "Find"

Cisco	Unified (CallManage	r Admir	istratio	1 For Cisco	Unified Communica				
System 👻	Call Routing 👻	Media Resources	 Voice Mail 	✓ Device ✓	Application 👻	User Management 👻				
Find and L	ist Phones									
÷										
┌ Search Options										
Find Phor	ne where Dev	rice Name	- begins	with 💌		Find St				
Search Results										
No acti	ve query. F Add	Please enter New	your sea	ırch criter	ia using th	e options abov				

20. Locate the VIP device in the search results and confirm the Status column shows "Registered".

2											Navigati	on Cisc	o Unified CallMa	nager Adm	ninistrati
Cisco	Unified	CallMa	anager	Adminis	stratio	n For (Cisco Uni	ied Commu	nications S	olutions			Logge	d in as:	ccma
System 👻	Call Routing 👻	 Media Re 	sources 👻	Voice Mail 👻	Device 👻	Applicati	on 👻 Use	r Management		nistration •					
ind and List Phones Related Links: CAPF Report in Fil															
+=															
– Status –															
i)6 re	6 records found														
- Search	Options —														
Find Pho	ne where De	escription				,		Find	l Soarch W	thin Roci	ulte				
								Select its	em or enter s	earch tex	t -				
(device.o	description co	ontains VII	P)								-				
Search	Results														
	Device Nam	e(Line)	Descripti	ion		Device Po	ool Devid	e Protocol	Status			I	P Address	Cop	у Сору
	SEPOODOSE	F0053FD	7006 for	r Tom (VIP-:	172L)	<u>Default</u>	SIP		Unknown				Unknown	ß	1
🗆 🛱	SEPOODOSE	F004069	7100 for	r Tom (vip 8	01)	Default	SIP		Rejected				192.168.6.103	6	1
🗆 🛱	SEPOODOSE	-004867	DoorSpe	eaker - VIP-1	172L	Default	SIP		Registered	with 19	2.168.97	.52	192.168.100.16	i2 🗅	C)
🗆 🛱	SEP00D05	F003D6C	Test RC	G- VIP-130		<u>Default</u>	SIP		Unknown			1	Unknown	0	1
□ 🛱	SEP00D05	F0038DC	Test RC	G- VIP-410		Default	SIP		Unknown			1	Unknown	6	1
□ 🛱	SEPOODOSE	F0036BB	Test RC	G-VIP-204		<u>Default</u>	SIP		Unknown				Unknown	6	1
Add New Select All Clear All Delete Selected Reset Selected Rows per Page 50 🕑															