

Valcom SIP devices can integrate with Avaya Aura[®] Communication Manager and Avaya Aura[®] Session Manager as SIP endpoints. Some devices are single-channel (using one SIP extension), while other devices can be configured with up to 8 extension numbers (in Station mode) or up to 100 extension numbers (in Trunk mode). The following information illustrates the minimum configuration for a Valcom SIP device to register on an Avaya Aura[®] Communication Manager and Avaya Aura[®] Session Manager version 6.3.

 Valcom uses UDP to communicate with Session Manager. To confirm UDP is enabled, log on to the Avaya System Manager web page and navigate to Elements ⇒ Routing ⇒SIP Entities. On the SIP Entities page, select the Session Manager to which the SIP device will register. On the SIP Entities Detail page for the Session Manager, verify in the Port section that UDP protocol is available. If not, click the Add button to open an additional line and add it to the list. The default SIP port is 5060, although this can be changed to a different value if necessary. The Default Domain value should be chosen appropriate to your environment. The screen capture below shows a Session Manager configured to communicate on UDP port 5060.

Port				
ТСР	Failover port:			
FLS I	Failover port:			
Δdd	Remove			
3 Ite	ms 🞅			
	Port	Protocol	Default Domain	Notes
	5060	TCP 💌	sip.avaya.com 💌	
	5060	UDP 💌	sip.avaya.com 💌	
	5061	TLS 💌	sip.avaya.com 💌	
Selec	t : All, None			

- 2. Create new Endpoints for each SIP extension that will be assigned to the Valcom SIP device.
 - A. The following instructions are for creating a single SIP extension. For multi-channel devices, Communication Manager provides a method to add multiple extensions in one step. Skip to section 2.B for instructions on adding multiple extensions to one Valcom device.

In System Manager, navigate to Elements \Rightarrow Communication Manager \Rightarrow Endpoints \Rightarrow Manage Endpoints. Click the "New" button to add a single endpoint.

Endpoint List											
🔲 Vie <u>w</u> 🖉 Ed <u>i</u> t	lew 😡 Delete	Dup	licate More	Actions 🝷	Mainte	enance 🔹					
30 Items 🍣 Show ALL	-										
Name	Extension	Port	Set Type	cos	COR	User					



On the New Endpoint page, enter the required information for System, Template, Port and Extension. Fill in other items as necessary for your system. For our example, the 9620SIP_DEFAULT_CM_6_3 template was selected. A description of the Valcom device was entered in the optional Name field. For the extension, 3027 was chosen from the list of available numbers. Enter a numeric Security Code. Note that this code will be used for the Communication Profile password (in Step 4) and will be used by the Valcom SIP device as its "Secret" to register the extension with Session Manager. Click the Commit button to create the new endpoint.

				[Save	e As Temp
System Template	CommunicationManager1 9620SIP DEFAULT CM 6 3		* Extension Set Type	Q 3027 9620SIP	
Port	IP		Security Code	•••••	
Name General Options (G) * Feat Button Assignment (B) Gro	Valcom Talkback Speaker ture Options (F) Site Data (S pup Membership (M)	S) Abbi	reviated Call Dialing (A) Enl	nanced Call Fwd (E)	
Name General Options (G) * Button Assignment (B) Groc	Valcom Talkback Speaker	S) Abbi	reviated Call Dialing (A) Enl	nanced Call Fwd (E)	
Name General Options (G) * Feat Button Assignment (B) Gro Class of Restriction (COR) Emergency Location Ext	Valcom Talkback Speaker ture Options (F) Site Data (Soup Membership (M) 1 3027	S) Abbi	eviated Call Dialing (A) Enl Class Of Service (COS) Message Lamp Ext.	nanced Call Fwd (E) 1 3027	
Name General Options (G) Button Assignment (B) Grow * Class of Restriction (COR) * Emergency Location Ext * Tenant Number * CD Torch	Valcom Talkback Speaker ture Options (F) Site Data (Soup Membership (M) 1 3027 1 0 5 5 5 5 1 5 5 5 5 5 5 5 5 5 5 5 5 5	S) Abbi	reviated Call Dialing (A) Enl Class Of Service (COS) Message Lamp Ext.	nanced Call Fwd (E)	
Name General Options (G) * Feat Button Assignment (B) Gro Class of Restriction (COR) Emergency Location Ext Tenant Number SIP Trunk Coverage Path 1	Valcom Talkback Speaker ture Options (F) Site Data (S pup Membership (M) 1 3027 1 Q,aar	S) Abbi	 Class Of Service (COS) Message Lamp Ext. Type of 3PCC Enabled Coverage Path 2 	1 3027 None 💌	
Name General Options (G) * Feat Button Assignment (B) Gro Class of Restriction (COR) Class of Restriction (COR) Coverage Name SIP Trunk Coverage Path 1 Lock Message	Valcom Talkback Speaker ture Options (F) Site Data (S pup Membership (M) 1 3027 1 Q.aar	s) Abbr	reviated Call Dialing (A) Enl Class Of Service (COS) Message Lamp Ext. Type of 3PCC Enabled Coverage Path 2 Localized Display Name	nanced Call Fwd (E)	

B. For Valcom multi-channel devices that can use more than one SIP extension, Communication Manager provides a method to add multiple extensions at one time.

In System Manager, navigate to Elements \Rightarrow Communication Manager \Rightarrow Endpoints \Rightarrow Manage Endpoints. To simplify creating multiple Endpoints, use the "More Actions" button, and choose "Bulk Add Endpoints".

Endpoint List					
🔍 Vie <u>w</u> 📝 Ed <u>i</u> t 🚺 🞯 <u>N</u> e	w 😔 Delete 🛃	Duplicate Mor	e Actions 🔹	Maintenanc	e •
15 Items 💝 Show ALL 🗸					
Name	Extension	Port	Set Type	COS	COR



Now

Schedule

Clear

Cancel

In the Bulk Add Endpoints page, choose the System where the endpoints will be created from the drop-down list. Choose an appropriate Template. For our example, the 9620SIP_DEFAULT_CM_6_3 template is selected. For the Endpoint Name Prefix, enter a descriptive name. The extension number will be appended to the prefix entered. In the Enter Extensions box, enter the extension numbers that will be assigned to the new endpoints. A consecutive range can be specified using a colon (:) separator. Non-consecutive numbers can be entered using a comma separator. In our example, a range of endpoints beginning with 3011 and ending with 3018 will be created. Click the Now button to create the new endpoints, or click the Schedule button to defer processing until a maintenance window.

* System	CommunicationManager1	-
Template	9620SIP_DEFAULT_CM_6_3	-
Endpoint Name Prefix	PagePro Ch-	
Available Extensions	Select 1000000 : 1900049 1900052 : 1999994 199996 : 1999997 2000000 : 2999999 3000 3000000 : 3999999 3006 : 3007 3011 : 3020 3024 3026 : 3998 4000000 : 4999999 5000000 : 5350000 5350002 : 5350003 5350007 : 5999999 6000000 : 6999999 7000000 : 7999999 8000000 : 8999999	*
Enter Extensions	3011:3018	
Select Error Configuration	Caption First Error	orda

Bulk Add Endpoints

*Required

Now Schedule Clear Cancel



After the Endpoints are created, navigate back to the Manage Endpoints page and edit each endpoint to add the Security Code. In the Endpoint List, check the box for one of the new Endpoints, and then click on the Edit button.

End	points								[Switch to Classic View]
Se	lect device(s) fr	om Comm	unicatio	n Manag	er Li	st 🛛			
									Show List
End v	point List	<u>N</u> ew	Delete	D <u>u</u> plica	te	More	Actions •	Maintenance 🔹	Advanced Search •
23 It	ems 🍣 Show 15	•							Filter: Enable
	Name	Extension	Port	Set Type	COS	COR	User	Tenant Number	System
	PagePro Ch-3018	3018	S00035	9620SIP	1	1		1	CommunicationManager1
1	PagePro Ch-3017	3017	S00034	9620SIP	1	1		1	CommunicationManager1
1	PagePro Ch-3016	3016	S00033	9620SIP	1	1		1	CommunicationManager1

On the Edit Endpoint page, add a numeric Security Code. Note that this code will be used for the Communication Profile password (in Step 4) and will be used by the Valcom SIP device as its "Secret" to register the extension with Session Manager.

Edit Endpo	bint	Com	nit Sched <u>u</u> le <u>R</u> es	et <u>C</u> ancel
			[Save	As Template]
System	CommunicationManager1	Extension	3018	
Template	9620SIP_DEFAULT_CM_6_3	Set Type	9620SIP	
Port	S00035	Security Code	•••••	
Name	PagePro Ch-3018			

 Create a new user for the PagePro IP. In System Manager, navigate to Users
 → User Management
 → Manage Users. On the User Management screen, click the New button to add a user. If this Valcom device will have more than one SIP extension assigned, create one user for each SIP extension.



On the Identity tab of the User Profile Edit page, fill in the First Name and Last Name fields with appropriate values. The Login Name should be the new user ID, followed by the domain this user account will be used in. Select Basic for the Authentication Type.

entity *	Communication Profile	Membership	Contacts	
User Prov	isioning Rule 🖷 🚽 🚽			
	User	Provisioning Rule:		
Identity	*			
		* Last Name:	Valcom	
	Last Name ((Latin Translation):	Valcom	
		* First Name:	PagePro IP	
	First Name ((Latin Translation):	PagePro IP	
		Middle Name:		
		Description:		
		* Login Name:	vip201@sip.avaya.com	2
	* Au	uthentication Type:	Basic	*
	L	Password:		
		Confirm Password:		
	Locali	ized Display Name:		
	Endp	oint Display Name:		

4. On the Communication Profile tab, edit the Communication Profile Password. This should be the same as the Security Code entered for the Endpoint configuration in Step 2 above, and is used by the Valcom SIP device to register with Session Manager.

(dentity *	Communi	cation Profile	Membership	Contacts	
Commu	ication Pro	file 🔹	_		
		Communication	n Profile Password:		



5. In the Communication Address section, click on New to enter details for the SIP extensions that will be assigned to the Valcom SIP device.

🕽 New	🖉 Edit	🔘 Delete
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Choose Avaya SIP for the Type, enter the SIP extension for Handle and choose the appropriate Domain from the drop-down list. Click the Add button when finished.

0	New 🛛 🥖 Edit 🗋 🥥 Delete 📄							
V	Туре		Handle		C	Domain		
V	Avaya SIP		3018		1	sip.avaya.com	1	
Sele	ct : All, None							
		Type:	Avaya SIP					
	* Fully C	* Fully Qualified Address:		3018 @ sip.avaya		a.com		
								Add Cance

6. Click the checkbox for Session Manager Profile and complete the required fields. At a minimum, the Primary Session Manager and Home Location must be selected. Fill in other fields as appropriate for your Aura installation, particularly the Application Sequences.

* Primary Session Manager			Primary	Secondary	Maximum
АСТ (82) К. 	SessionManager1		10	0	10
Secondary Session Manager	(None)	•			
Survivability Server	(None)	-			
Max. Simultaneous Devices	1				
Block New Registration When Maximum Registrations Active?					
Application Sequences					
Origination Sequence	cm1	•			
Termination Sequence	cm1	•			
Call Routing Settings					
* Home Location	Home				
		100 million (100 million)			



7. Click the checkbox for CM Endpoint Profile and complete the required fields. Choose the correct Communication Manager server in the System list. For Profile Type, select Endpoint. Check the Use Existing Endpoints checkbox, and then enter one of the new extension numbers that was previously created. The Template, Security Code and Port should fill in automatically after selecting the existing Extension. Click the Commit button when all selections have been entered.

🔽 CM Endpoint Profile 💌						
* System	CommunicationManager	1 💌				
* Profile Type	Endpoint	*				
Use Existing Endpoints						
* Extension	Q 3011 En	dpoint Editor				
Template	9620SIP_DEFAULT_CM_6_3					
Set Type	9620SIP					
Security Code	•••••					
* Port	Q 500025					
Voice Mail Number						
Preferred Handle	3011@sip.avaya.com 💌					
Enhanced Callr-Info display for 1-line phones	[≥] □					
Delete Endpoint on Unassign of Endpoin from User or on Delete User.	t 🔲					
Override Endpoint Name and Localized Name						

8. Using the Valcom VIP-102B programming tool, complete the usual entries for IP address, Group Membership, Relays, etc. for the SIP device. On the SIP tab, enter the values created on the Avaya system to enable the Valcom SIP device to register and receive calls. Multichannel devices can have up to 8 sub-tabs corresponding to each of the Endpoints created on the Communication Manager.

For the Phone Number, enter one of the Endpoint extensions created in Step 2. The Authentication Name is the same as the Phone Number. The Secret is the numeric value entered for the Communication Profile Password in Step 4 and Security Code in Step 2. In the SIP Servers area, enter the name or IP address of the Session Manager server where the PagePro IP will register. If the UDP port was changed from the default (5060, in Step 1), enter the same value in the Port column.

Click the Register checkbox.

For multi-channel devices, repeat this process for each sub-tab on the SIP main tab, changing the Phone Number/Authentication Name and Secret as necessary for each Endpoint that was created.



After making all required settings, update the Valcom device and allow it to reboot to make the changes effective.

1	2	3	4	5	6	7	8					
	-	3				1						
	Phone Numb	oer:		3011								
	Description:											
	Authenticatio	n Name:		3011								
	Secret:			201201								
	Realm:			1							_	
	SIP Servers:			-		Serve	r:		Port			
				► Prim	ary	192.16	8.97.126		5060	D		
				Bac	cup 1				5060	1		
				Back	kup 2	_			5060)		
		Bac	Backup 3				5060					
				Register:		DNS	SRV:					
Outbound Proxy: SIP Port:						-	Outbound Port:		5060			
			5060				Idle Timeout (secs):		0	•		
RTP Port:		20000				Max Call Timer (sec	s):	0	•			
Night Ring:												
		-			G	1.01				0		
	Pre-Annound	ce lone:			Store	e and Play	/: 🔳	Play Count: 1		0		
	Audio Group	s:		✓ 100 - 200 -	Phone G Phone G	roup 1 roup 2	945 - 202					
			All	201 - 300 -	Phone G Emergen	roup 2 (Sp cv Messa	okrs) ae					
		N	one	301 -	Emergen	cy Messa	ge (Spkrs)					

 To verify successful registration, navigate in System Manager to Elements
 ⇒ Session Manager
 ⇒ System Status
 ⇒ User Registrations. Verify the User created previously is shown as registered to the Primary server.

	Detaile	Address	First Name	Last Name	Actual Location	IP Address	Remote Office	Shared Control	Simult. Devices	AST Device	Registered	
	Details										Prim 🔻	Sec
	⊳Show	3999@sip.avaya.com	Valcom	Bill-K	Home	192.168.6.210:5060			1/1		(AC)	
	▶ Show	3018@sip.avaya.com	PagePro IP	Valcom	Home	192.168.96.117:5060			1/1		(AC)	
10000			- 50-				6992	<u> </u>		2		