

Create Virtual AP in Bridge Mode

Goal: Create a Virtual AP and set it up to bridge with the wired Ethernet port.

Create a Virtual AP and set it up to bridge with the wired Ethernet port. This example uses the LANforge CT523 but the procedure should work on all CT521, CT522, CT523, CT525 and similar systems.





- 1. Create a virtual AP on wiphy1.
 - A. Go to the Port Manager

LANforge Manager Version(5.3.6)														
Control Reporting Tear-Off Info Plugins														
Stop All Restart Manager Refresh HELP														
Layer-4	Layer-4 Generic Test Mgr Test Group Resource Mgr Event Log Alerts Port Mgr VAP Stations Messages													
Status	Status Layer-3 L3 Endps VolP/RTP VolP/RTP Endps Armageddon WanLinks Attenuators File-10													
	Disp: 127.0.0.1:0 Sniff Packets 1 Clear Counters Reset Port Delete													
	Rot Tir	ner: li	nedium	(8 s) 🔻		Apply		I Vie	w Details	Crea	ate	Modify	Batch Modif	v
							ernet I	nterfaces (Por	ts) for all Re	SOURCES				
			1			AILLI	lennet i	incentaces (i of	coy for all rie	sources	reate a vii	tual interface	of some typ	e.
Port	Pha	Dowr	r	IP	SEC	Alias	Parent Dev	RX Bytes	RX Pkts	Pps RX	bps RX	TX Bytes	TX Pkts	Pps TX
1.1.0			192.10	68.100.239	0	eth0		14,160,660	14,169,	7	39,006	1.022.729	8,469,733	5
1.1.1			0.0.0.0	0	0	eth1		18,374	89	0	196	1,516,866	14,599	0
1.1.2			0.0.0.0	D	0	eth2		7,842,954,	5,180,2	0	0	47,057,254	31,081,	0
1.1.3			0.0.0.0	0	0	eth3		47,056,710	31,081,	0	0	7,842,959,	5,180,2	0
1.1.4			0.0.0.0	0	0	eth4		0	0	0	0	3,118	35	0
1.1.5			0.0.0.0	0	0	eth5		0	0	0	0	2,590	29	0
1.1.6			0.0.0.0	0	0	wiphy0		0	0	0	0	66,739,308	2,893,286	0
1.1.7			0.0.0.0	0	0	wiphyl		0	0	0	0	0	0	0
1.2.0			192.10	68.100.164	0	eth0		725,106	7,851	8	5,792	4,869,024	5,509	5
1.2.1			0.0.0.0	0	0	ethi		10,602	31	0	0	2,434	31	0
1.2.2			0.0.0.0	0	0	wipnyu	unia huno	0	0	0	0	0	0	0
1.2.3			0.0.0.0	0	U	wiano	wiphyu	0	U	0	U	U	U	
p.	-				1-									
Logged	Logged in to: localhost:4002 as: Admin													

B. Select port wiphy1 and click Create.

C. Select the Wifi VAP button, then enter MAC, Quantity, STA ID, and SSID:

0			Create VLANs	on Port: 1.1.7		\odot \otimes \otimes
O	○ MAC-VLAN ○ WiFi STA ④	○ 802.1Q-VLAN ○ Rec WiFi VAP ○ WiFi Monit	lirect 🔾 Bridge tor 🔾 WiFi Virtu	○ Bond ○ GRE Tur al Radio	nnel	
0	Shelf:	1	Resource:	1 (ct524-ffb0)	Port: 7 (v	viphyl)
B	VLAN ID:		DHCP-IPv4			
_	Parent MAC:	04:f0:21:20:37:00	DHCP Client ID:	None 🗸		
	MAC Addr:	>>>:>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	IP Address:		Global IPv6:	AUTO
	Quantity:	1	IP Mask or Bits:		Link IPv6:	AUTO
			Gateway IP:		IPv6 GW:	AUTO
	#1 Redir Name:		#2 Redir Name:			
	STA ID:	0	SSID:	elliottsnetwork	•	•
	WIFI AP:		Key/Phrase:			
	WPA	WPA2	WEP			
	Down					
Ľ	Apply	<u>C</u> ancel		R	eady	

D. Configure the radio's channel (which will apply to the VAP that was just created). Select the wiphy1 interface in the Port-Mgr tab and click **Modify**. Select the channel, and optionally the country-code, and then press **OK**.

0	wiphy1	(ct524-ffb0) Configure	Settings		\odot \otimes \times						
		Port Status Informat	on		1						
Curr	Current: LINK-DOWN NONE										
Driv	Driver Info: Port Type: WIFI-Radio Driver: ath10k(988x) Bus: 0000:04:00.0										
Port Configurables											
Standard Configura	ation RF Patte	erns Firmware									
Enable		General Inter	face Setting	s							
Set IF Down		Down		-							
		Alias:									
		MAC Addr: 04:f):21:20:37:0	0							
		Rpt Timer: fast	(3 s)	•							
		WiFi Settings									
	Max-VIFs: 64 M	lax-Stations: 127 Max-APs									
	Country:	United States (840)	-								
	Channel/Freq:	44 (5220 Mhz)	AP:	DEFAULT							
	Antenna:	All (3x3)	Tx-Power:	DEFAULT (-1)	-						
	RTS:	DEFAULT	Frag:	2346							
				🗌 Verbose 🛙	ebug						
Print View Deta	ails <u>L</u> ogs	<u>P</u> robe Sync	4		<u>C</u> ancel						

For more information see LANforge User's Guide: Ports (Interfaces)

- 2. Use the Netsmith feature to create a bridge device to hold the VAP and the Ethernet Port.
 - A. Go to the **Status** tab, and click the **Netsmith** button for *Resource 1*.
 - B. Drag the existing interfaces into a more pleasing layout and click Apply

C. Right-click in empty space and chose the New Bridge option.



D. Enter Quantity 1, and give it a name such as br0, and then click Apply

0			Create VLA	Ns on Port:				\sim \times
0	○ MAC-VLAN ○ WiFi STA	○ 802.1Q-VLAN ○ Red ○ WiFi VAP ○ WiFi Monit	lirect 💿 Bridge or 🔾 WiFi Virtu	⊖ Bond al Radio	⊖ GRE Tun	nel		
2	Shelf:	1	Resource:	l (ct524-ffb0)	•	Port:	l (ethl)	-
B	VLAN ID:		DHCP-IPv4					
1	Parent MAC:	0c:c4:7a:e1:ff:b1	DHCP Client ID:	None	-			
	MAC Addr:	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	IP Address:			Global IPv6:	AUTO	
	Quantity:	1	IP Mask or Bits:			Link IPv6:	AUTO	
			Gateway IP:			IPv6 GW:	AUTO	
	Bridge Name:	br0	#2 Redir Name:					
	STA ID:		SSID:				-	
	WIFI AP:		Key/Phrase:					
	WPA	WPA2	WEP					
4	Down							
		<u>C</u> ancel						

E. Click SYNC in the Netsmith window and the br0 interface should appear.

F. Right-click on the br0 interface and select Modify Port

br0 (ct524-ffb0) Configure Settings									
		Current: LINK-L	IP PROBE-ERROR TS	SO UFO GSO GRO			^		
Driver Info: Port Type: Bridge Driver: bridge(2.3) Bus: N/A									
			Port Configurab	les					
Enable		General In	Spanning-Tree						
Set IF Down	🗌 Down	🗌 Aux-Mgt			Aging Time:	300	-		
Set MAC	DHCP-IPv6	DHCP Release	DHCP Vendor ID:	None 💌	Bridge Priority:	32768	-		
Set TX Q Len	DHCP-IPv4	Secondary-IPs	DHCP Client ID:	None 💌	Max Age:	20	-		
Set Offload	DNS Servers:	BLANK	Peer IP:	NA	Hello Time:	2	-		
Set Bridge Info	IP Address:	0.0.0.0	Global IPv6:	AUTO	Forwarding Delay:	15	-		
	IP Mask:	0.0.0.0	Link IPv6:	AUTO					
	Gateway IP:	0.0.0.0	IPv6 GW:	AUTO					
	Alias:		MTU:	1500					
	MAC Addr:	04:f0:21:20:52:00	TX Q Len	1000					
	Rpt Timer:	medium (8 s) 🔻	WiFi Bridge:	NONE			=		
	Brid	lge Information ——	Rem	ove Ports					
Services —	Configured P eth1								
	vap0	vap0	Add	Ports					
FTP									
RADIUS									
	,								
Print View Details Probe Sync Apply O									
Attempt to apply changes, and close the window. If the apply fails, your change									

A. Add vap0 and eth1 to the bridge.

B. Click **Apply**, and then **Sync**.

G. Go back to the **Netsmith** window, and you should see the **br0** device connected to **vap0** and **eth1** with purple lines. If you do not, try clicking once on the **br0** icon to force a re-draw. You now have a VAP in bridge mode. Connect the upstream network to **eth1**, and stations associated with **vap0** will be able to communicate with that upstream network.



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