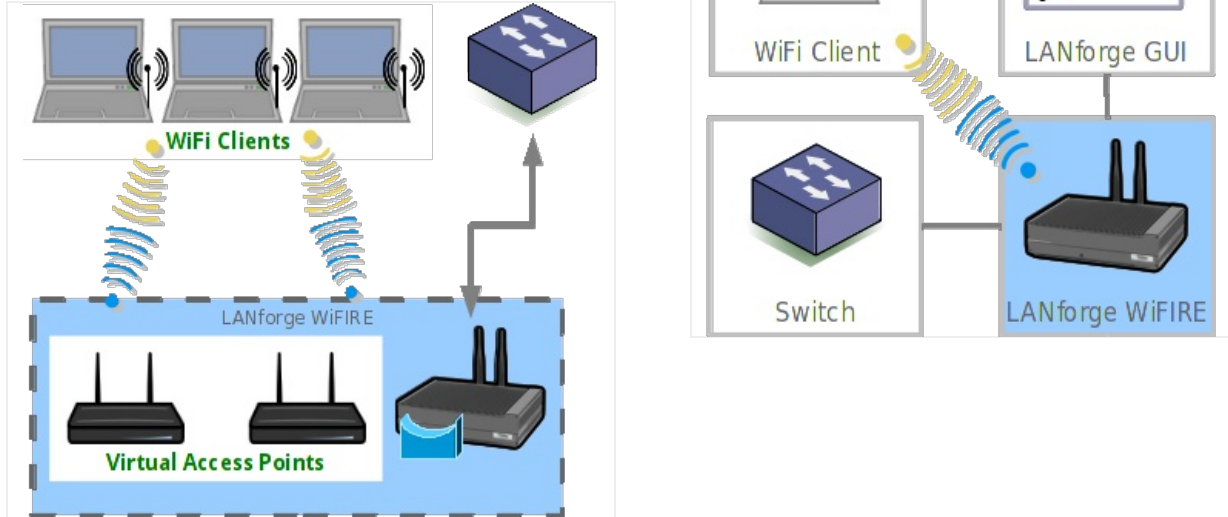


Create Virtual AP in Bridge Mode

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 Generic Test Mgr Test Group Resource Mgr Event Log Alerts Port Mgr vAP Stations Messages

Status Layer-3 L3 Endps VoIP/RTP VoIP/RTP Endps Armageddon WanLinks Attenuators File-I/O

Disp: 127.0.0.1:0 Sniff Packets Clear Counters Reset Port Delete

Rpt Timer: medium (8 s) Apply View Details Create Modify Batch Modify

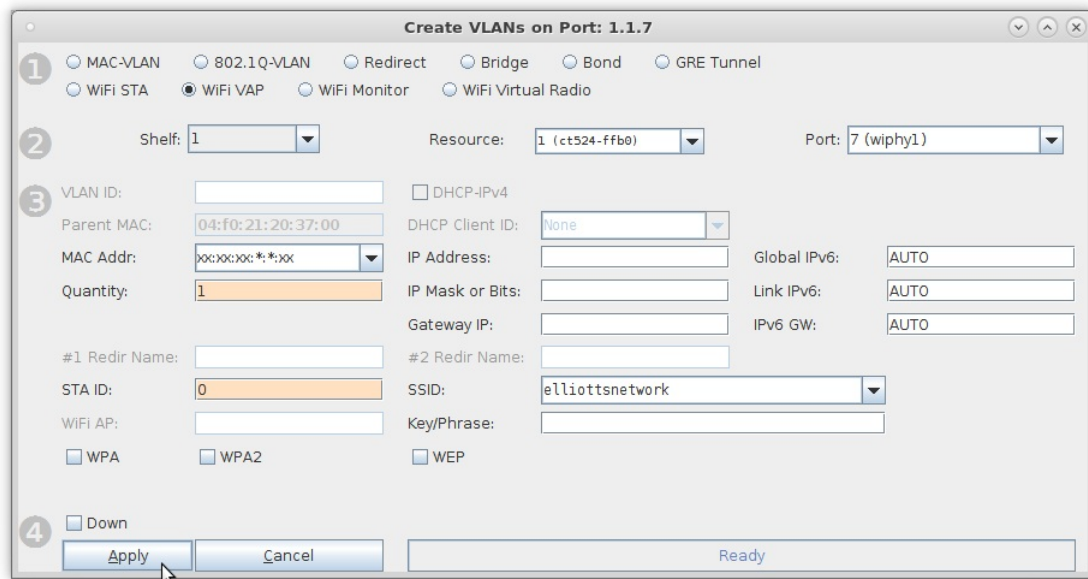
All Ethernet Interfaces (Ports) for all Resources

Port	Pha...	Down	IP	SEC	Alias	Parent Dev	RX Bytes	RX Pkts	Pps RX	bps RX	TX Bytes	TX Pkts	Pps TX
1.1.0			192.168.100.239	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	eth1		18,374	89	0	196	1,516,866	14,599	0
1.1.2			0.0.0.0	0	eth2		7,842,954,...	5,180,2...	0	0	47,057,254...	31,081,...	0
1.1.3			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	eth4		0	0	0	0	3,118	35	0
1.1.5			0.0.0.0	0	eth5		0	0	0	0	2,590	29	0
1.1.6			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	wiphy1		0	0	0	0	0	0	0
1.2.0			192.168.100.164	0	eth0		725,106	7,851	8	5,792	4,869,024	5,509	5
1.2.1			0.0.0.0	0	eth1		10,602	31	0	0	2,434	31	0
1.2.2			0.0.0.0	0	wiphy0		0	0	0	0	0	0	0
1.2.3			0.0.0.0	0	wlan0	wiphy0	0	0	0	0	0	0	0

Logged in to: localhost:4002 as: Admin

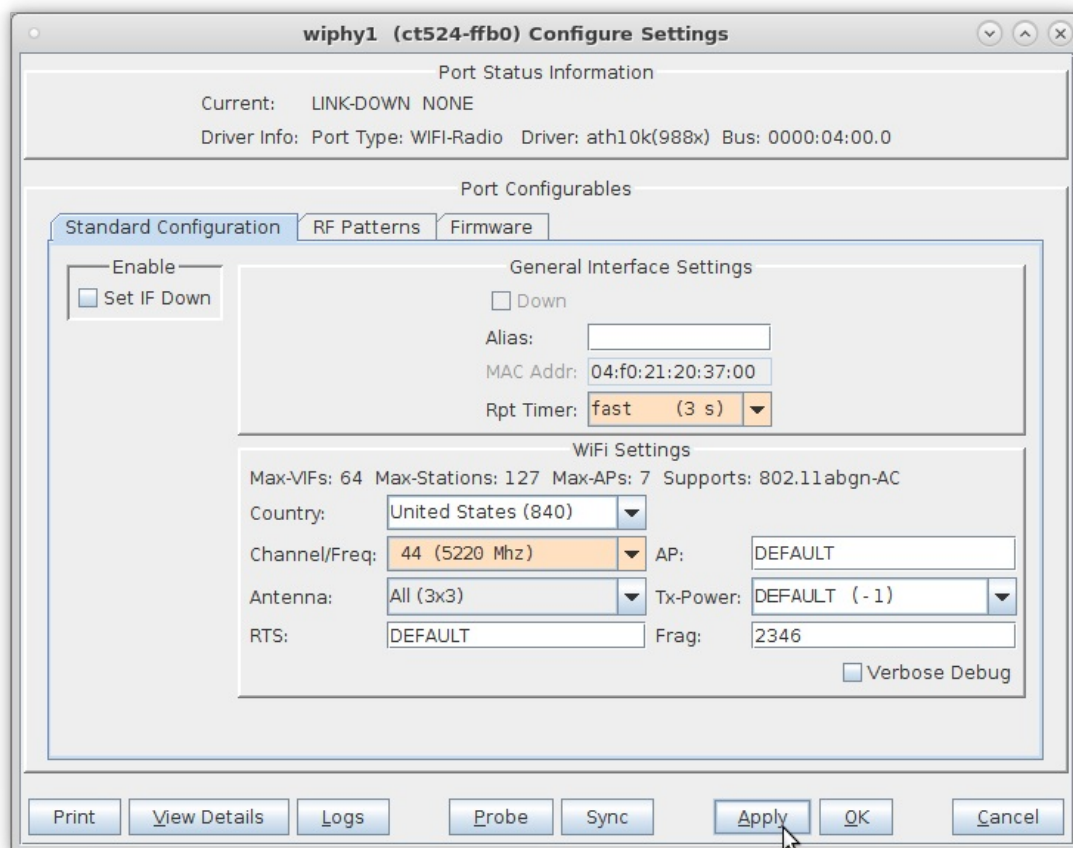
- B. Select port **wiphy1** and click **Create**.

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



The 'Create VLANs on Port: 1.1.7' dialog box is shown. It has four numbered steps. Step 1 shows radio buttons for MAC-VLAN, 802.1Q-VLAN, Redirect, Bridge, Bond, GRE Tunnel, WiFi STA, **WiFi VAP** (selected), WiFi Monitor, and WiFi Virtual Radio. Step 2 shows Shelf: 1, Resource: 1 (ct524-ffb0), and Port: 7 (wiphy1). Step 3 shows fields for VLAN ID, Parent MAC (04:f0:21:20:37:00), MAC Addr (xxxxxx:*:*xx), Quantity (1), DHCP Client ID (None), IP Address, Global IPv6 (AUTO), 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, and WEP checkboxes. Step 4 shows a 'Down' checkbox and 'Apply', 'Cancel', and 'Ready' buttons.

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**.

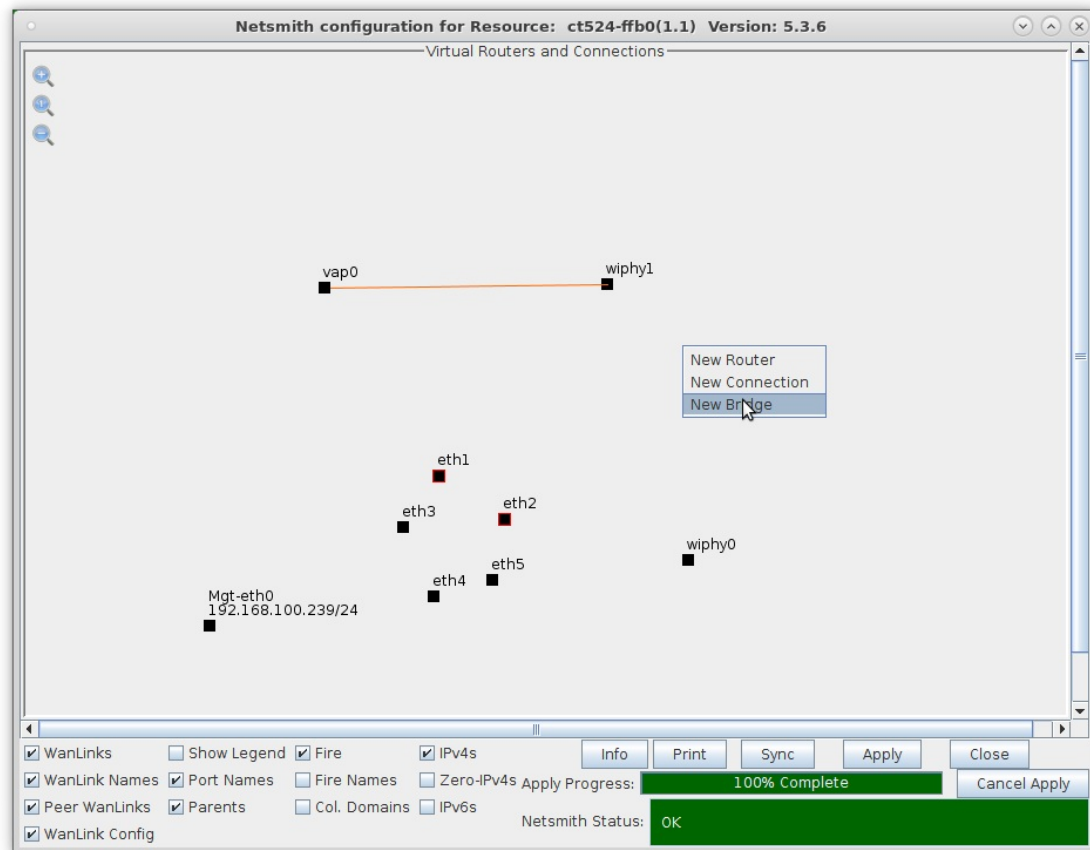


The 'wiphy1 (ct524-ffb0) Configure Settings' dialog box is shown. It has tabs for Standard Configuration, RF Patterns, and Firmware. The Standard Configuration tab is active. It shows 'Enable' and 'Set IF Down' checkboxes. The 'General Interface Settings' section includes 'Down' checkbox, Alias, MAC Addr (04:f0:21:20:37:00), and Rpt Timer (fast (3 s)). The 'WiFi Settings' section includes Max-VIFs (64), Max-Stations (127), Max-APs (7), Supports (802.11abgn-AC), Country (United States (840)), Channel/Freq (44 (5220 Mhz)), AP (DEFAULT), Antenna (All (3x3)), Tx-Power (DEFAULT (-1)), RTS (DEFAULT), Frag (2346), and a 'Verbose Debug' checkbox. At the bottom are buttons for Print, View Details, Logs, Probe, Sync, **Apply**, OK, and Cancel.

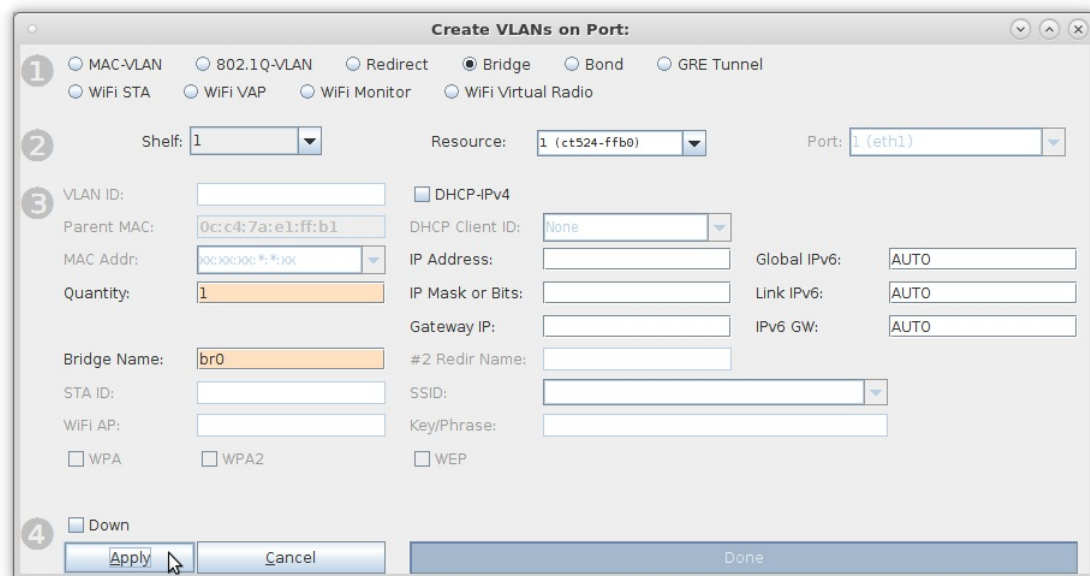
For more information see [LANforge User's Guide: Ports \(Interfaces\)](#)

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**



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-UP PROBE-ERROR TSO UFO GSO GRO
Driver Info: Port Type: Bridge Driver: bridge(2.3) Bus: N/A

Port Configurables

Enable

- ☐ Set IF Down
- ☐ Set MAC
- ☐ Set TX Q Len
- ☐ Set MTU
- ☐ Set Offload
- ☐ Set Bridge Info

General Interface Settings

☐ Down ☐ Aux-Mgt

☐ DHCP-IPv6 ☒ DHCP Release DHCP Vendor ID: None

☐ DHCP-IPv4 **Secondary-IPs** DHCP Client ID: None

DNS Servers: BLANK Peer IP: NA

IP Address: 0.0.0.0 Global IPv6: AUTO

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

☐ Spanning-Tree

Aging Time: 300

Bridge Priority: 32768

Max Age: 20

Hello Time: 2

Forwarding Delay: 15

Bridge Information

Configured Ports	Current Ports
eth1	eth1
vap0	vap0

Remove Ports

Add Ports

Print View Details Probe Sync Apply **OK** Cancel

Attempt to apply changes, and close the window. If the apply fails, your chang

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.

