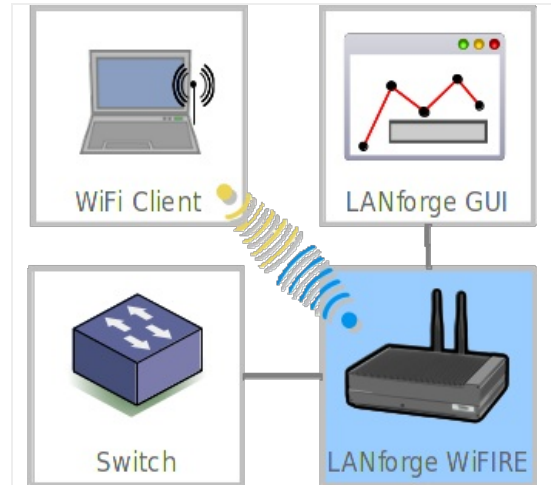
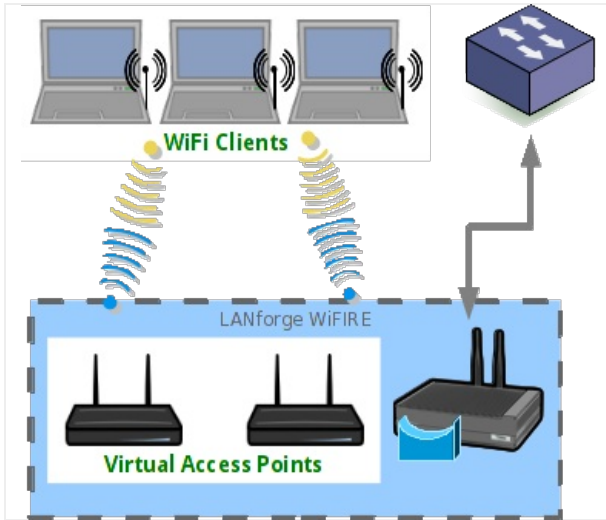


Create Virtual AP in Bridge Mode

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

The screenshot shows the 'LANforge Manager Version(5.3.6)' interface. The 'Port Manager' tab is active, displaying a table of 'All Ethernet Interfaces (Ports) for all Resources'. The table has columns for Port, Phase, Down, IP, SEC, Alias, Parent Dev, RX Bytes, RX Pkts, Pps RX, bps RX, TX Bytes, TX Pkts, and Pps TX. The 'wiphy1' interface is highlighted in blue.

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	<input type="checkbox"/>	<input type="checkbox"/>	192.168.100.239	0	eth0		14,160,660...	14,169,...	7	39,006	1,022,729,...	8,469,733	5
1.1.1	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	eth1		18,374	89	0	196	1,516,866	14,599	0
1.1.2	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	eth2		7,842,954,...	5,180,2...	0	0	47,057,254,...	31,081,...	0
1.1.3	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	eth3		47,056,710,...	31,081,...	0	0	7,842,959,...	5,180,2...	0
1.1.4	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	eth4		0	0	0	0	3,118	35	0
1.1.5	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	eth5		0	0	0	0	2,590	29	0
1.1.6	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	wiphy0		0	0	0	0	66,739,308	2,893,286	0
1.1.7	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	wiphy1		0	0	0	0	0	0	0
1.2.0	<input type="checkbox"/>	<input type="checkbox"/>	192.168.100.164	0	eth0		725,106	7,851	8	5,792	4,869,024	5,509	5
1.2.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.0.0.0	0	eth1		10,602	31	0	0	2,434	31	0
1.2.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.0.0.0	0	wiphy0		0	0	0	0	0	0	0
1.2.3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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**:

Create VLANs on Port: 1.1.7

1 MAC-VLAN 802.1Q-VLAN Redirect Bridge Bond GRE Tunnel
 WiFi STA **WiFi VAP** WiFi Monitor WiFi Virtual Radio

2 Shelf: 1 Resource: 1 (ct524-ffb0) Port: 7 (wiphy1)

3 VLAN ID: DHCP-IPv4
Parent MAC: 04:f0:21:20:37:00 DHCP Client ID: None
MAC Addr: xxx:xx:*:*:xx 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

4 Down
Apply

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**.

wiphy1 (ct524-ffb0) Configure Settings

Port Status Information
Current: LINK-DOWN NONE
Driver Info: Port Type: WIFI-Radio Driver: ath10k(988x) Bus: 0000:04:00.0

Port Configurables
Standard Configuration RF Patterns Firmware

Enable Set IF Down

General Interface Settings
 Down
Alias:
MAC Addr: 04:f0:21:20:37:00
Rpt Timer: fast (3 s)

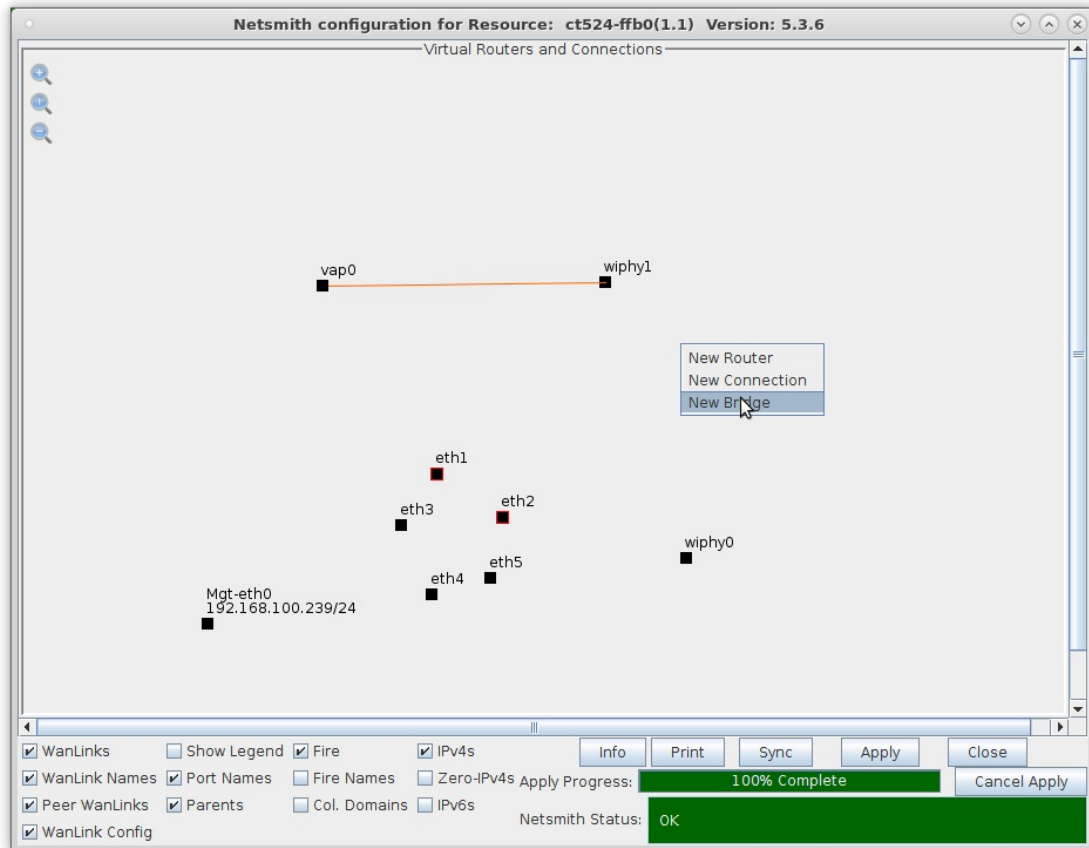
WiFi Settings
Max-VIFs: 64 Max-Stations: 127 Max-APs: 7 Supports: 802.11abgn-AC
Country: United States (840)
Channel/Freq: 44 (5220 Mhz) AP: DEFAULT
Antenna: All (3x3) Tx-Power: DEFAULT (-1)
RTS: DEFAULT Frag: 2346
 Verbose Debug

Apply

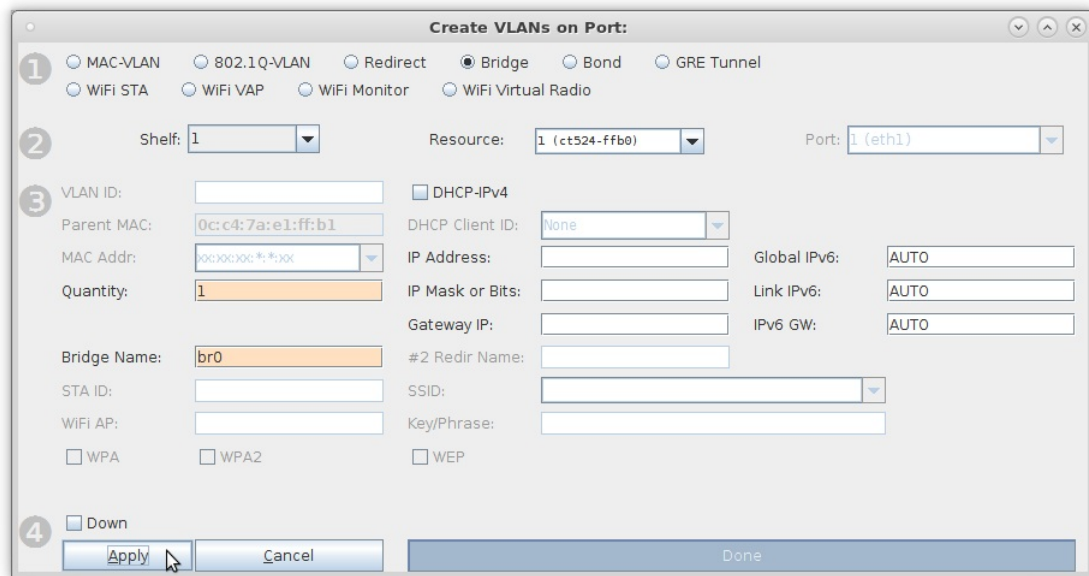
For more information see [LANforge User's Guide: Ports \(Interfaces\)](#)

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.

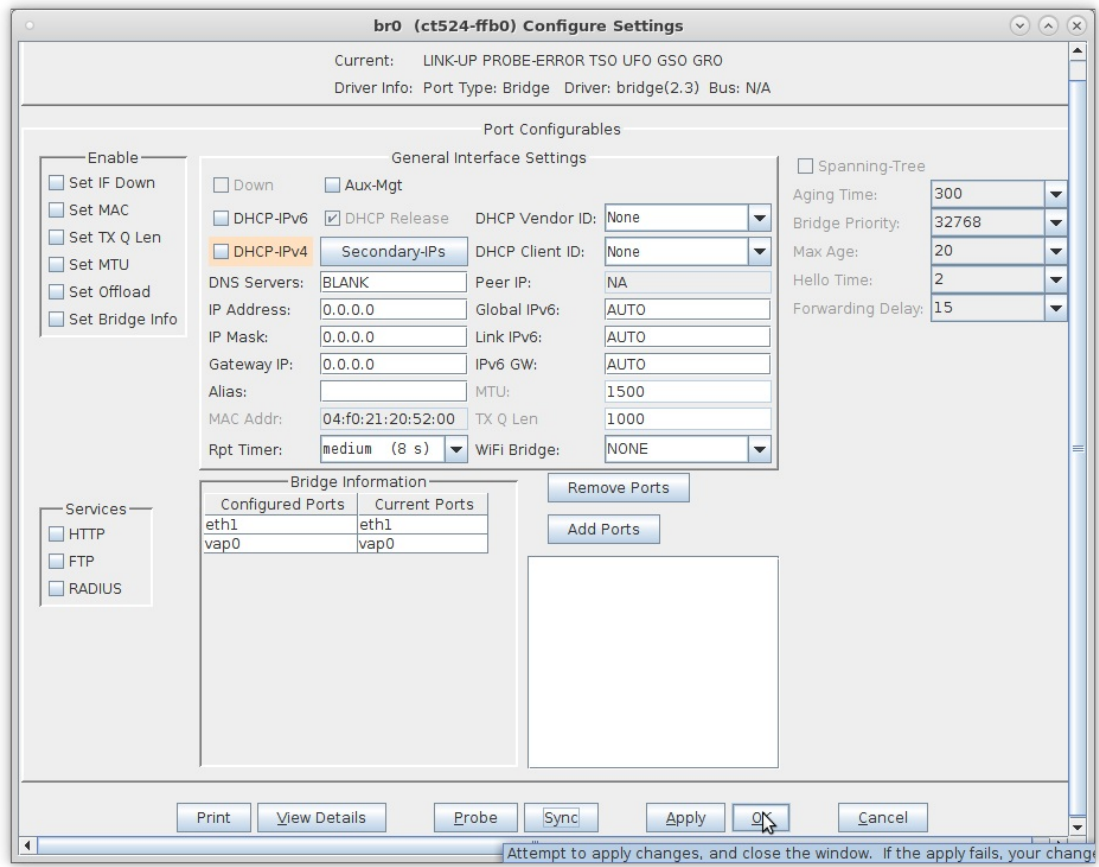


D. Enter Quantity **1**, and give it a name such as **br0**, and then click **Apply**



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

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



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.

