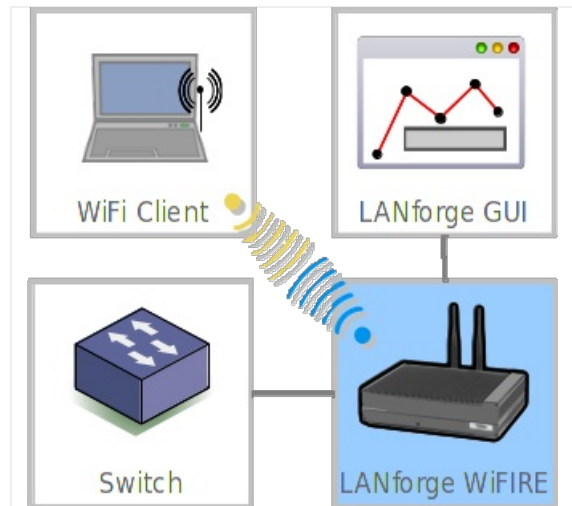
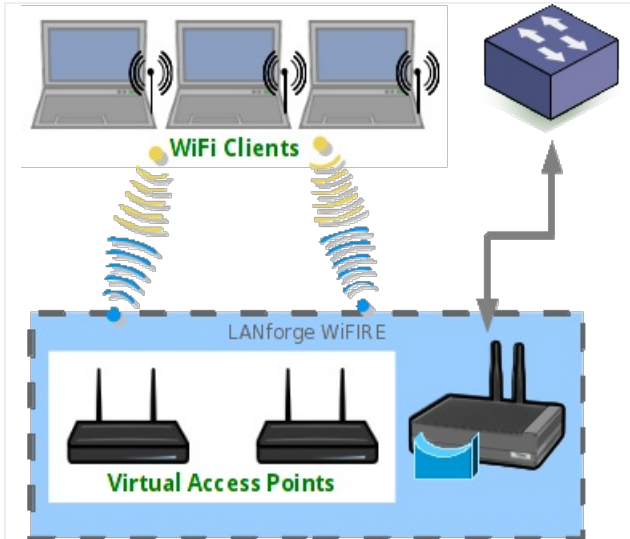


Create Virtual AP in Bridge Mode

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 CT520, CT523, CT524 and similar systems.



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

LANforge Manager Version(5.2.8)

Control Reporting Tear-Off Info

Stop All Restart Manager Refresh HELP

Layer-4 Generic Test Mgr Test Group Resource Mgr Serial Spans PPP-Links Event Log Alerts Port Mgr Messages
 Status Layer-3 L3 Endps VoIP/RTP VoIP/RTP Endps Armageddon WanLinks Attenuators Collision-Domains File-IO

Disp: 192.168.100.226:0.0 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	Phan...	Down	IP	SEC	Alias	RX Bytes	RX Pkts	Pps RX	bps RX	TX Bytes	TX Pkts	Pps TX	bps TX	C
1.1.0	<input type="checkbox"/>	<input type="checkbox"/>	192.168.100.195	0	eth0	147,800	1,160	5	5,070	656,766	865	3	24,068	0
1.1.1	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	eth1	0	0	0	0	0	0	0	0	0
1.1.2	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	wiphy0	14,032	62	0	0	2,758	40	0	0	0
1.1.3	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	wiphy1	0	0	0	0	0	0	0	0	0
1.1.4	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	wlan0	0	0	0	0	0	0	0	0	0
1.1.5	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	wlan1	0	0	0	0	0	0	0	0	0

Logged in to: 192.168.100.195:4002 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: 1.1.3

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

2 Shelf: 1 Resource: 1 (brent-521) Port: 3 (wiphy1)

3 VLAN ID: DHCP-IPv4
 Parent MAC: 04:f0:21:0e:39:31 DHCP Client ID: None
 MAC Addr: 00:01:03:ee:05:01 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: ben-195-1a
 WiFi AP: Key/Phrase:
 WPA WPA2 WEP

4 Down

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 (brent-521) Configure Settings

Port Status Information
 Current: LINK-DOWN NONE
 Driver Info: Port Type: WIFI-Radio Driver: ath10k0 Bus:

Port Configurables

Enable

- Set IF Down
- Set MAC
- Set TX Q Len
- Set MTU
- Set Offload
- Set PROMISC

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:f0:21:0e:39:31 TX Q Len: 0
 Rpt Timer: medium (8 s) WiFi Bridge: NONE

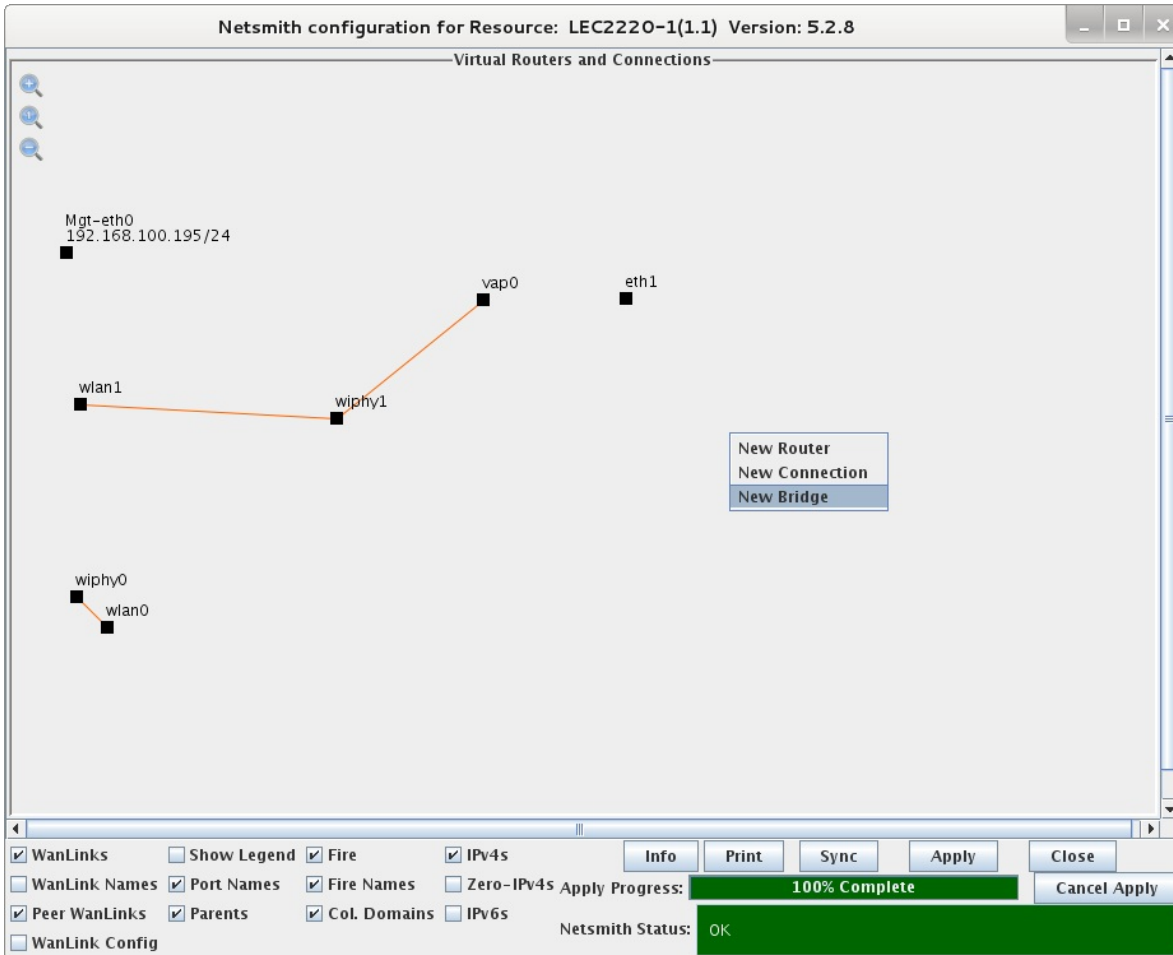
WiFi Settings

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

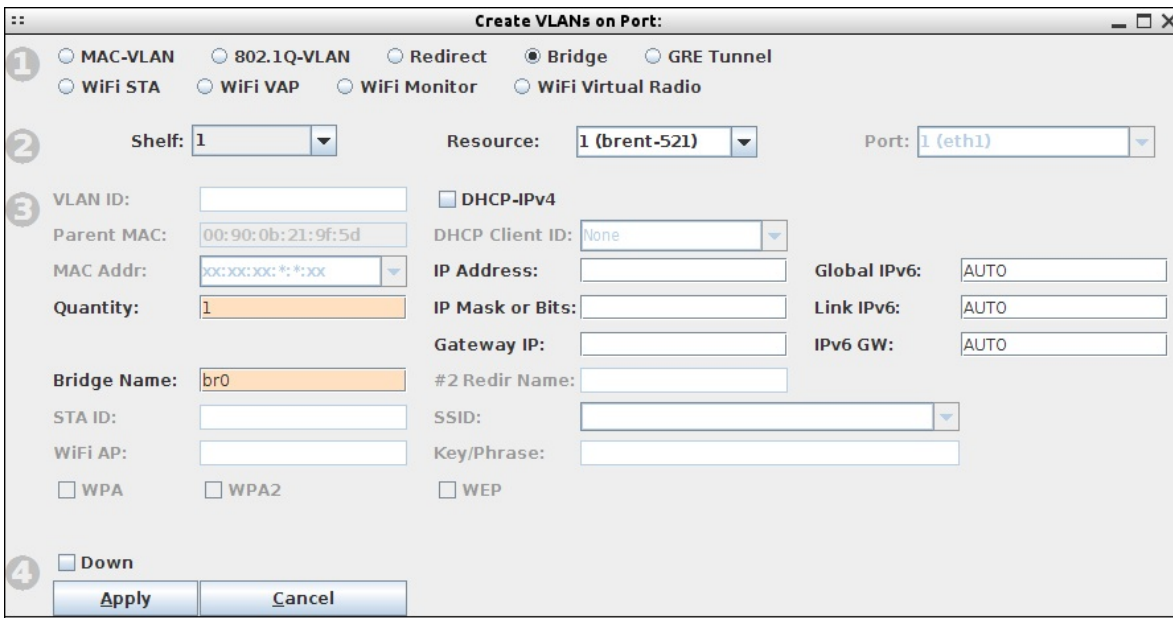
For more information see [LANforge User's Guide: Ports \(Interfaces\)](#)

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 **Refresh** in the Netsmith window and the **br0** interface should appear.

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

Port Status Information
 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: 00:01:03:ee:05:01 TX Q Len: 0
 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

Services

 HTTP
 FTP
 RADIUS

Bridge Information

Configured Ports	Current Ports
vap0	vap0
eth1	eth1

Type the name of one or more ports in this field (Ex: rddVR0) and click the Add Ports button. Then click Apply or OK to submit the changes to the LANforge server.

- 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.

