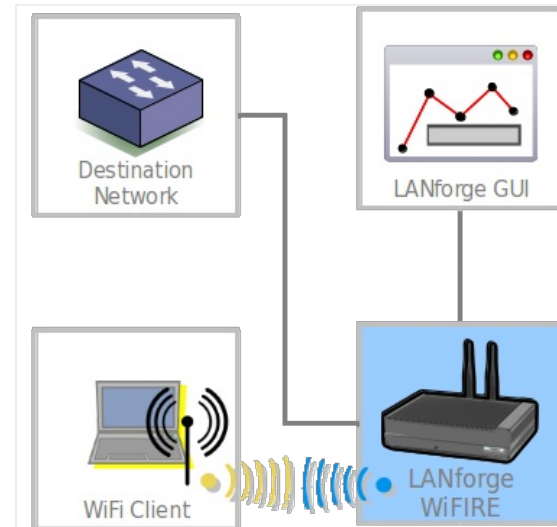
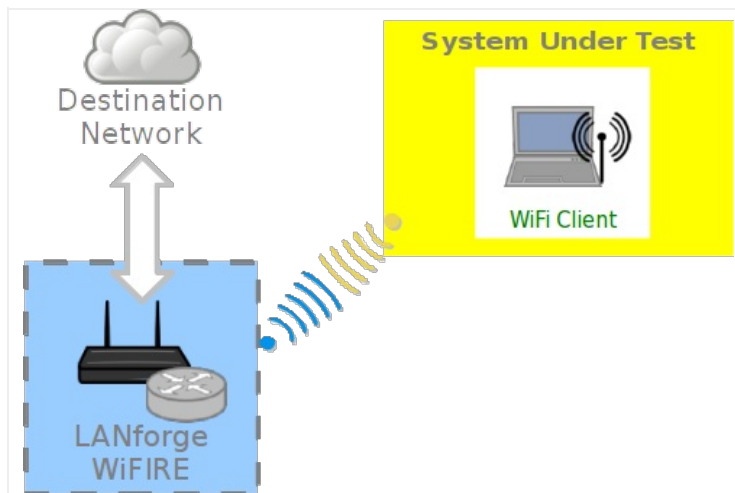


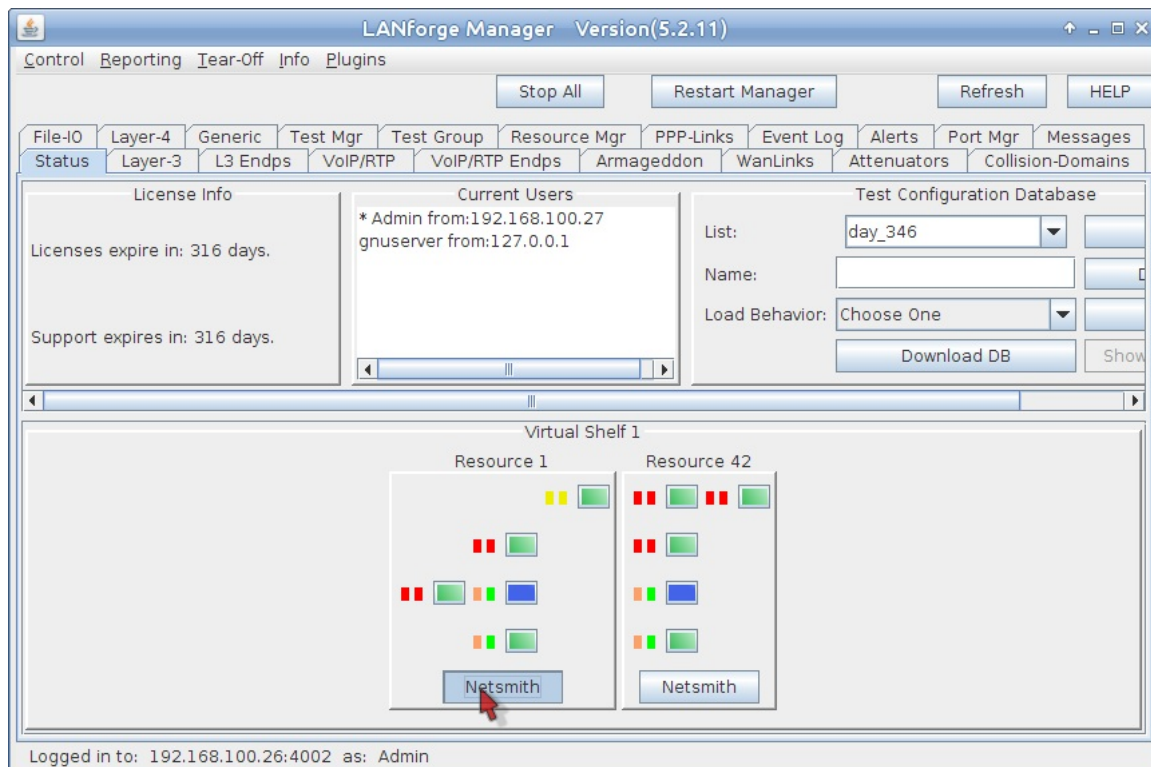
Wifi: Routed Virtual AP with Ethernet Gateway

Goal: Configure LANforge CT523 or similar with as a virtual access point with access to an ethernet network.

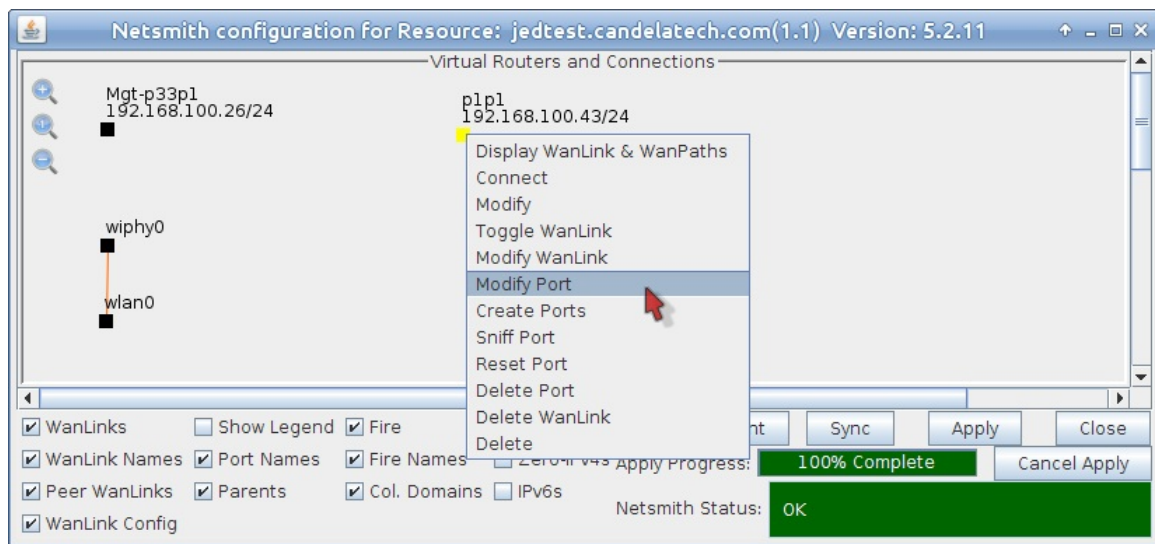
LANforge WiFi systems can be configured as wireless access points that are gateways to wired networks where the wired network is a separate broadcast domain.



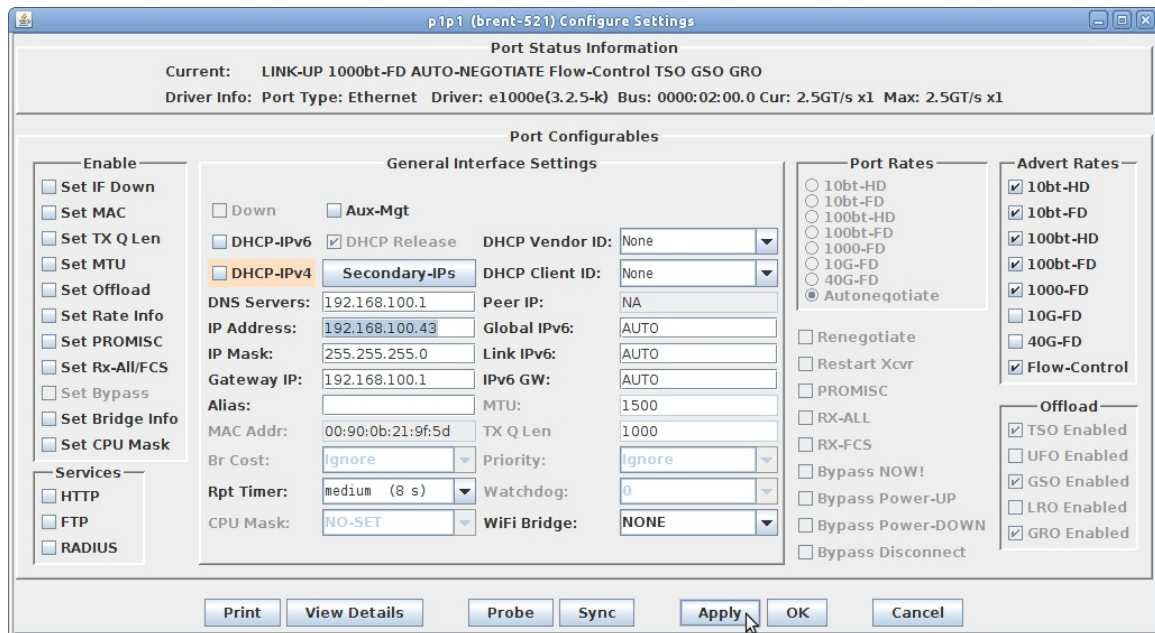
1. Configure the gateway port
2. From the **Status** tab, click **Netsmith**



3. In the **Netsmith** window, right click the ethernet port connected to the destination network and click **Modify Port**



4. Configure the gateway port with these settings:



- A. DNS Servers: 192.168.100.1
- B. IP Address: 192.168.100.43
- C. IP Mask: 255.255.255.0
- D. Gateway IP: 192.168.100.1
- E. Click **OK** to commit changes.

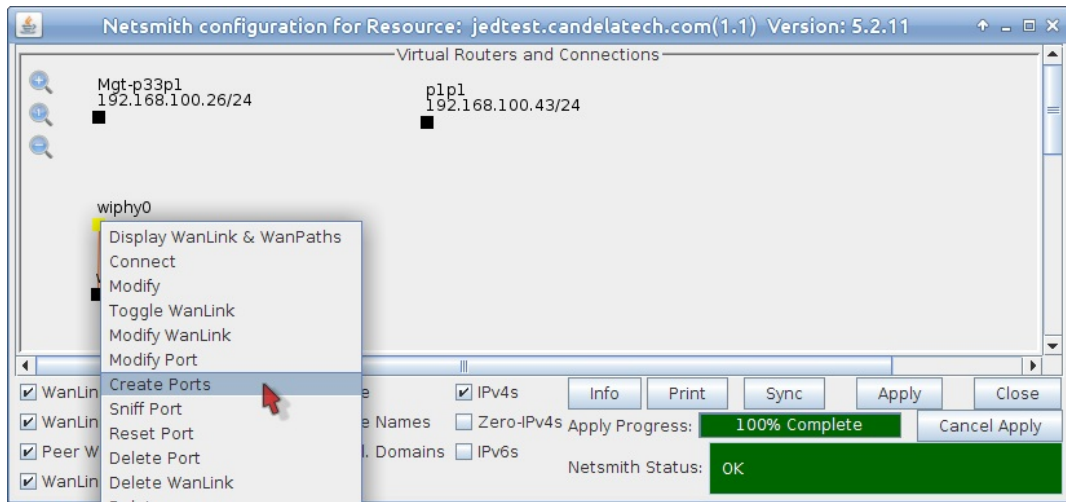
5. In the **NetSmith** window, click **Sync**

6. NOTE: It is also possible to assign NAT to the outbound gateway port.

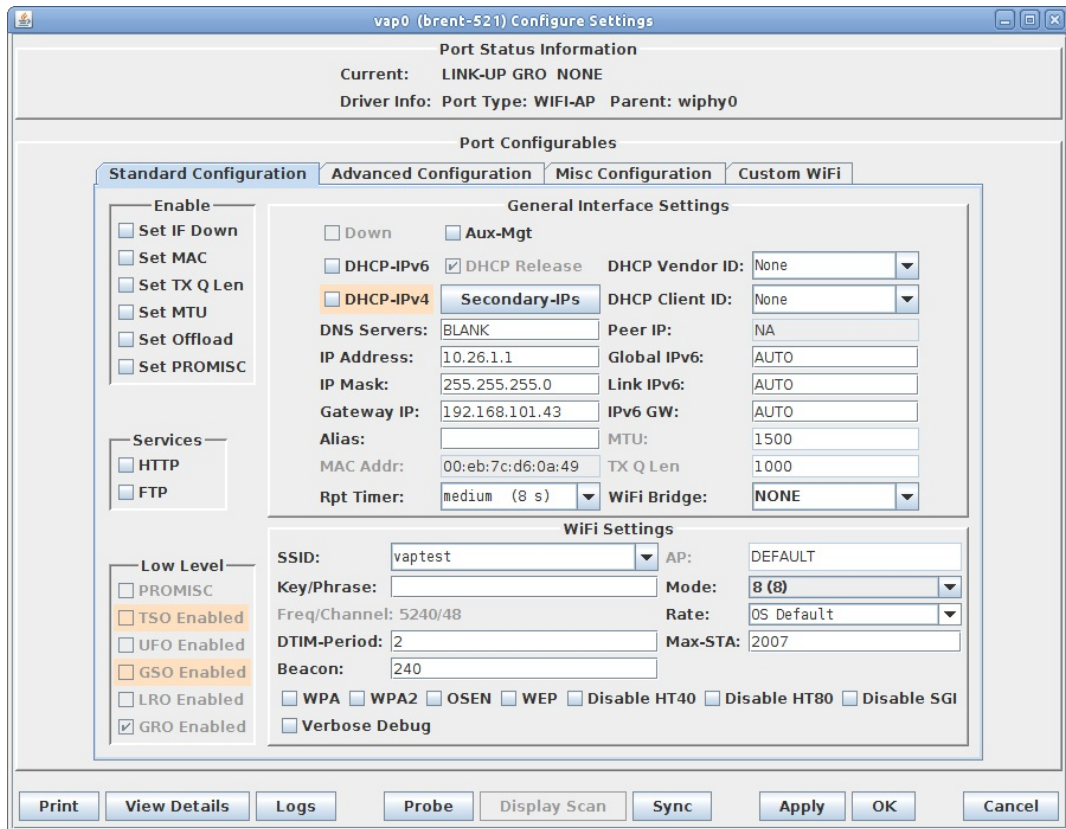
- A. From the **NetSmith** screen, you would right click on **p1p1**
- B. Choose **Modify**
- C. Select **NAT**
- D. Click **OK**
- E. Click **Apply** in the **NetSmith** window.

7. Create the virtual access point (AP)

- A. Right click the radio `wiphy0` and select **Create Port**:

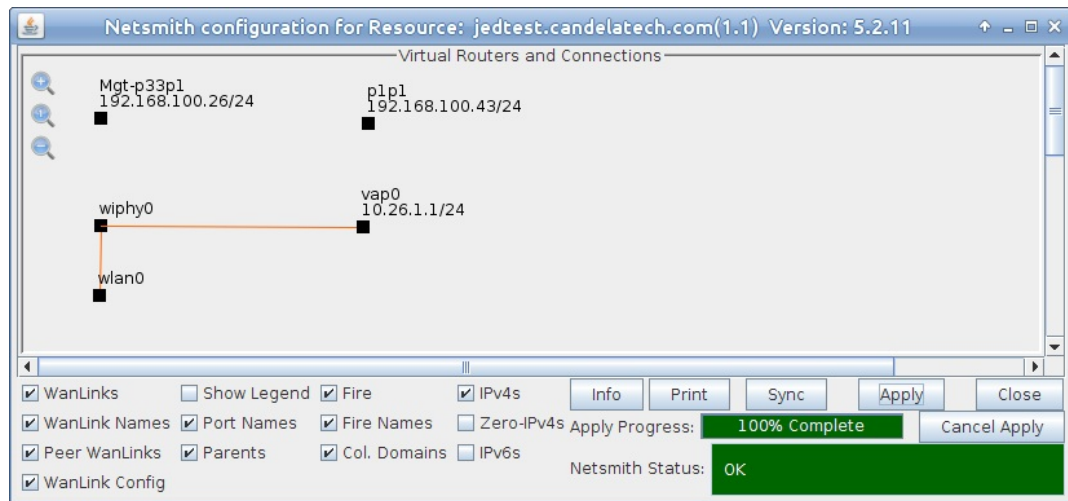


- B. Configure the AP with these settings:

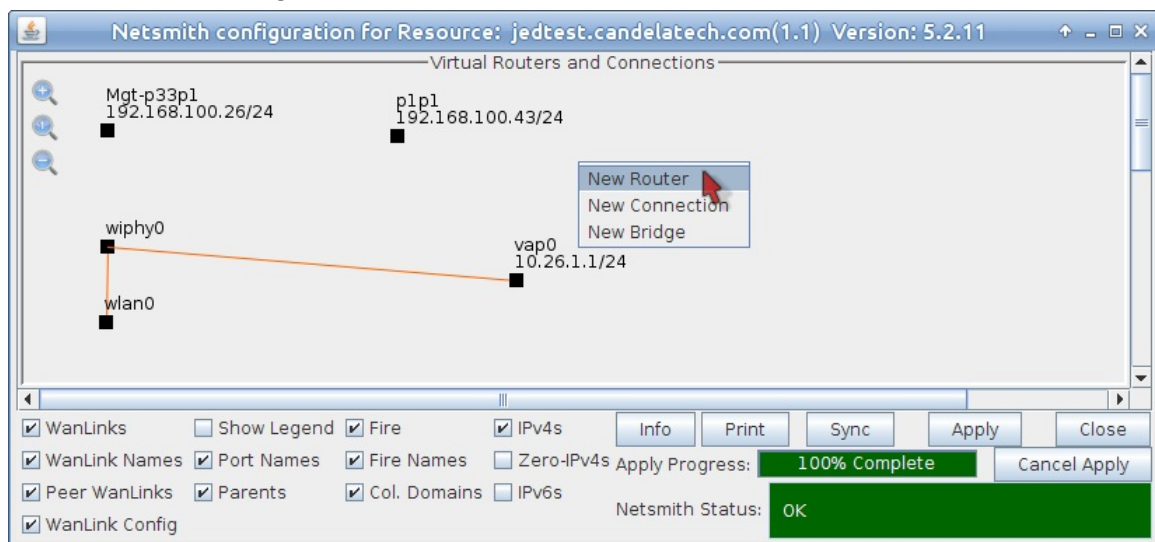


- A. Select **WIFI VAP**
- B. Select a MAC Address: `00:eb:7c:d6:0a:49`
- C. IP Address: `10.26.1.1`
- D. IP Mask: `255.255.255.0`
- E. Gateway IP: `192.168.100.43`
- F. STA ID: `0`
- G. SSID: `vapttest`

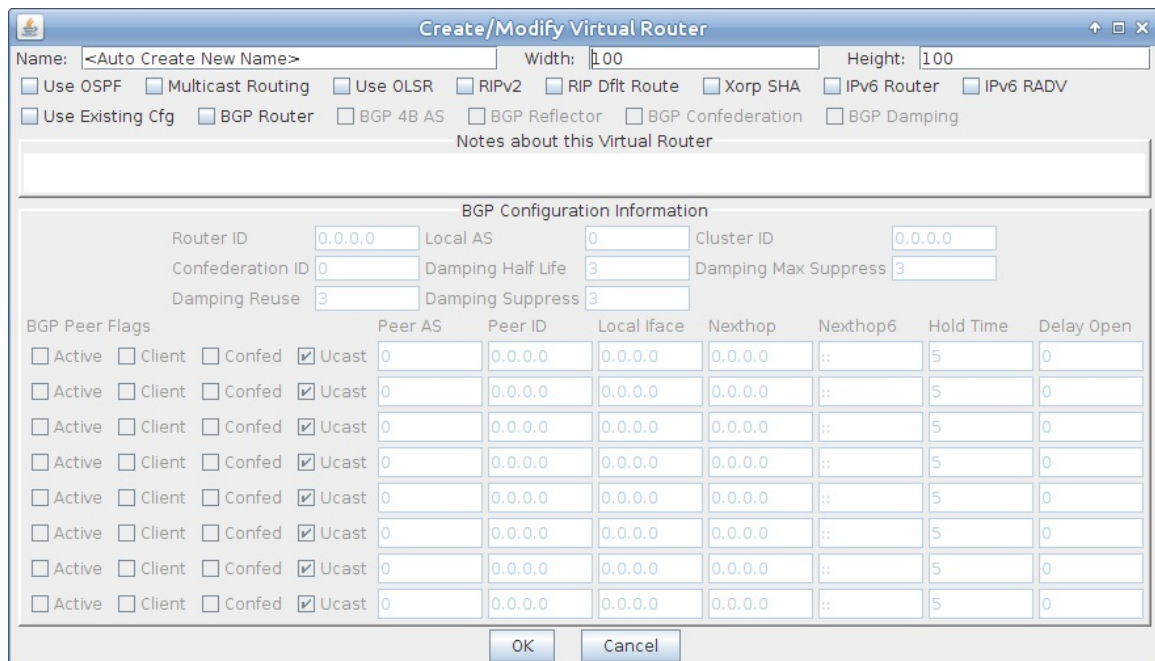
C. In the **Netsmith** window, click **Sync**



8. In the **Netsmith** window, right click and select **New Router**

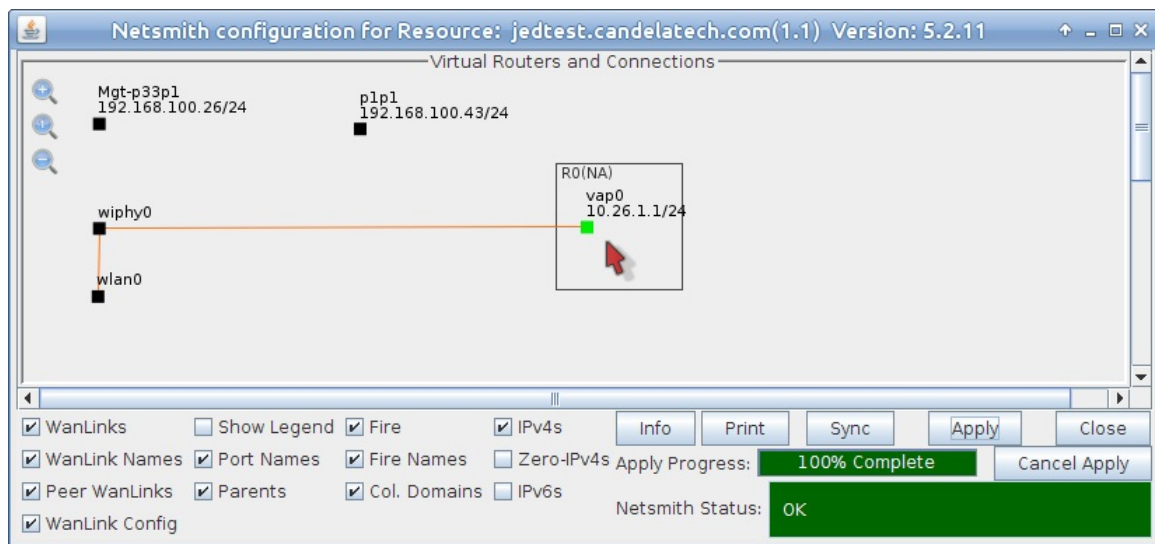


9. Create a router using default settings: click **OK**.



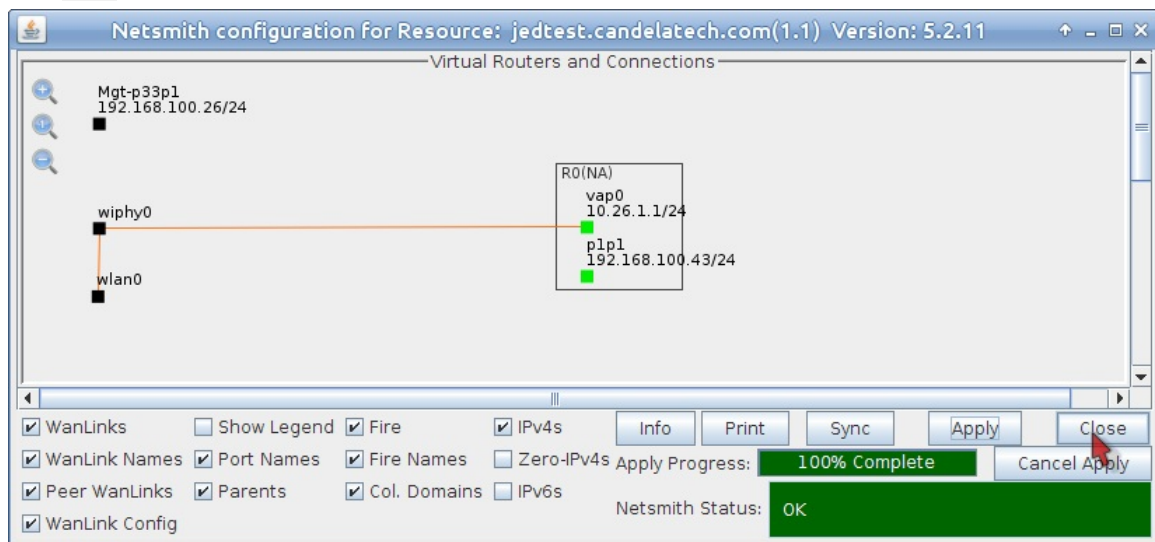
A. In the **Netsmith** window, click **Apply**

10. Drag **vap0** into the virtual router



A. In the **Netsmith** window, click **Apply**

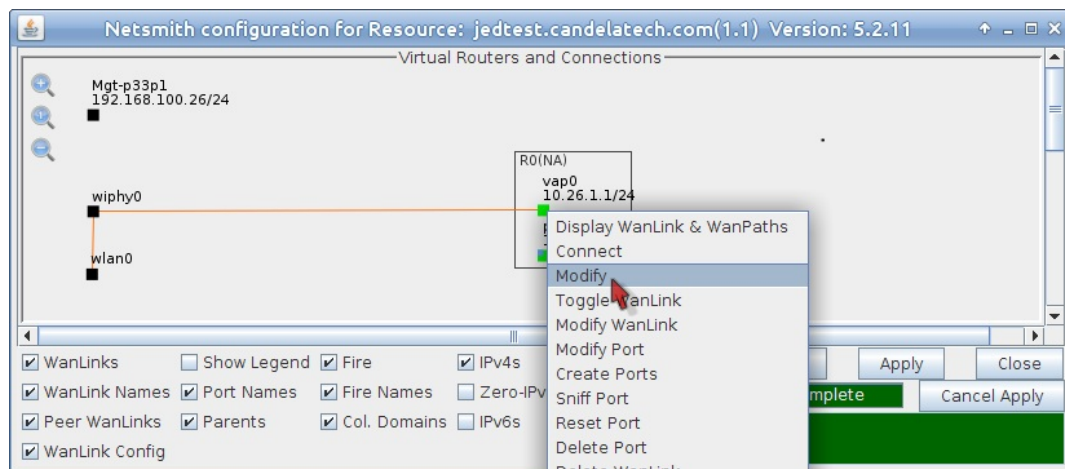
11. Drag **p1p1** into the virtual router



A. In the **Netsmith** window, click **Apply**

12. Assign DHCP to the **vap0** port

A. Right click on **vap0** and select **Modify**



B. Configure DHCP with these settings:

Create/Modify Connection

Port 1-A: 3 (p1p1)
Port 1-B: ☒ Skip <Auto Create New Port>
WanLink: ☒ Skip <Auto Create New WanLink>
Port 2-B: ☒ Skip <Auto Create New Port>
Port 2-A: ☒ Skip <Auto Create New Port>
DHCP Lease Time: 43200
DHCP DNS: 192.168.100.1
DHCP Range Min: 10.26.1.20
DHCP Range Max: 10.26.1.50
DHCP Domain:
DHCPv6 DNS:
DHCPv6 Range Min:
DHCPv6 Range Max:
DHCPd Config File:

Interface-Cost: 1
RIP-Metric: 1
OSPF Area: 0.0.0.0
VRRP IP: 0.0.0.0/24
VRRP ID: 1
VRRP Priority: 100
VRRP Interval: 1
Next-Hop: 0.0.0.0
Subnets (a.b.c.d/xx):
Next-Hop-IPv6:
IPv6 Subnets (aaa::0/xx):

☐ NAT ☒ DHCP ☐ DHCPv6 ☐ Custom DHCP ☐ VRRP ☐ Cand-RP

Should this interface serve DHCP?

OK Cancel

- A. DHCP DNS: 192.168.100.1
- B. DHCP Range Min: 10.26.1.20
- C. DHCP Range Max: 10.26.1.50
- D. Select **DHCP**
- E. Click **OK** to commit the settings.

C. In the **NetSmith** window, click **Apply**

13. NOTE: To test this setup, you could use a laptop with WiFi or a desktop system with a USB WiFi dongle to associate with the Virtual AP. If you have a second radio in your LANforge CT523 you could create a virtual station on one of those extra radios, as well.