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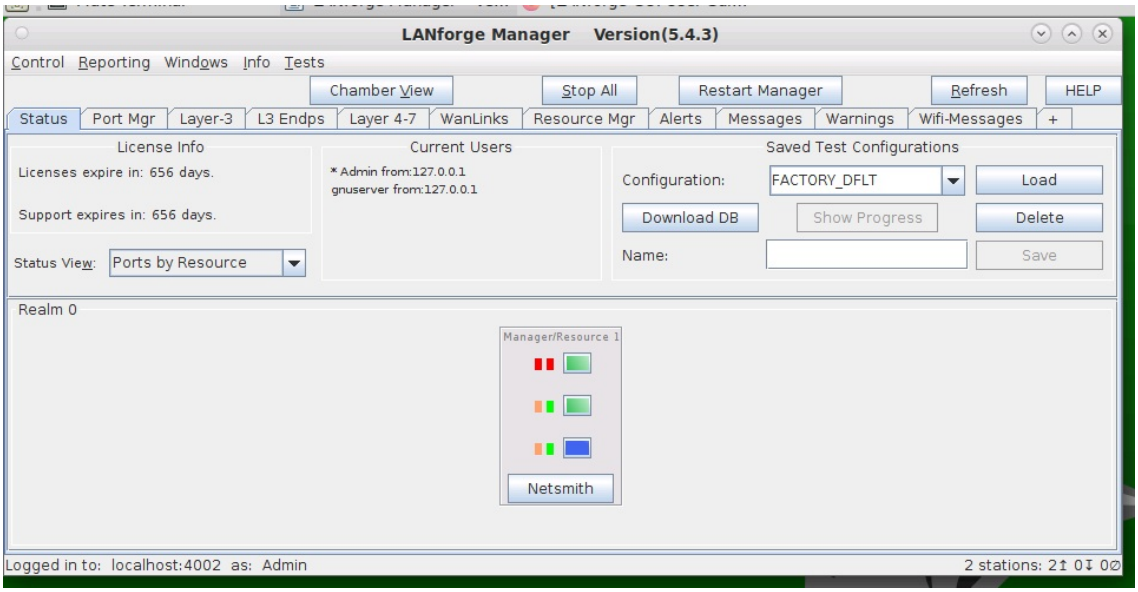
Bridged Mode WanLink with Virtual Ports and Redirect Devices

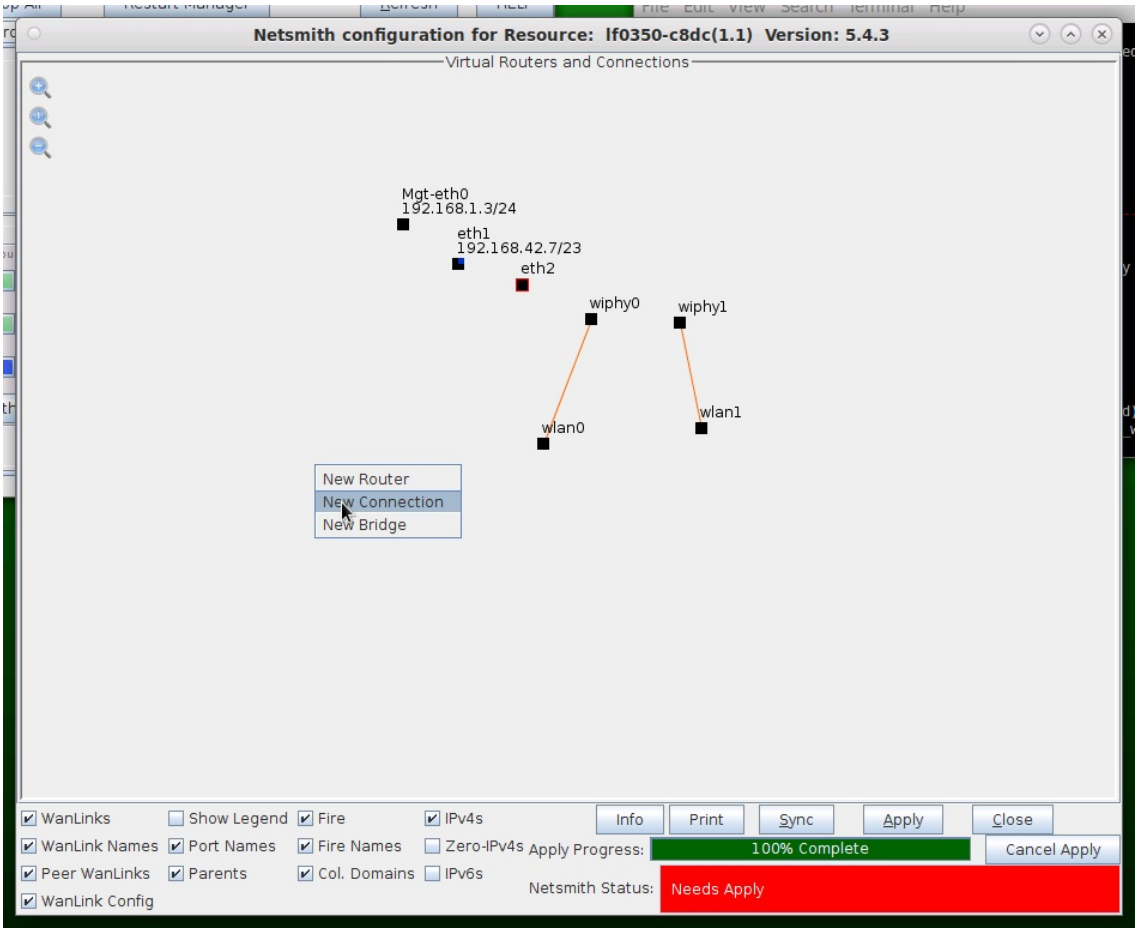
Goal: Setup a Bridged Mode WanLink using RDDs (Redirect Devices).

In this test scenario, a LANforge-ICE WanLink is created in Bridged Mode using Redirect Devices to illustrate an example of how to send LANforge-FIRE traffic to yourself through LANforge-ICE. This is useful when physical ports are in short supply and a proof-of-concept test is needed. NOTE: THIS WILL NOT WORK PROPERLY WITHOUT THE INSTALLATION OF THE CANDELA KERNEL.

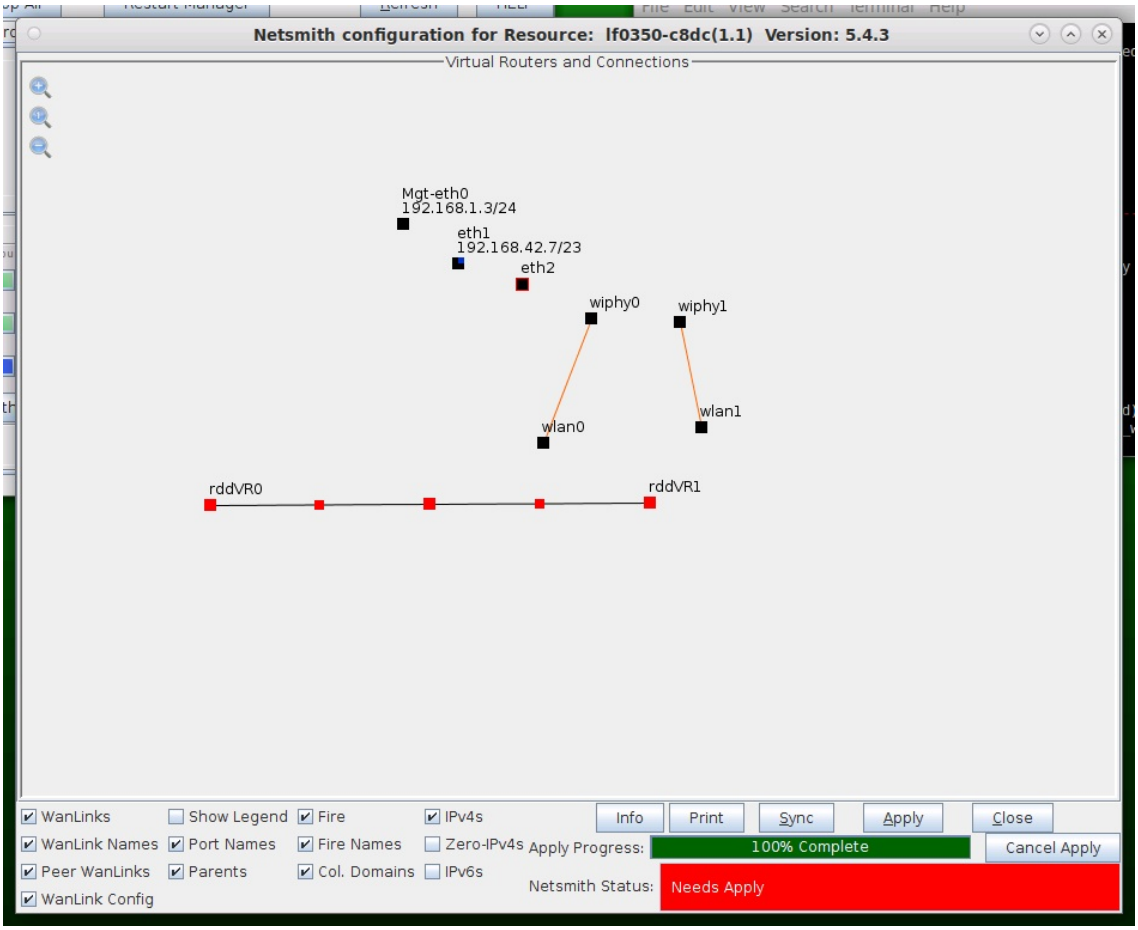
1. Setup a Netsmith Connection.
   A. Go to the **Status** tab and click **Netsmith**



B. Right-click inside the Netsmith window and select **New Connection**

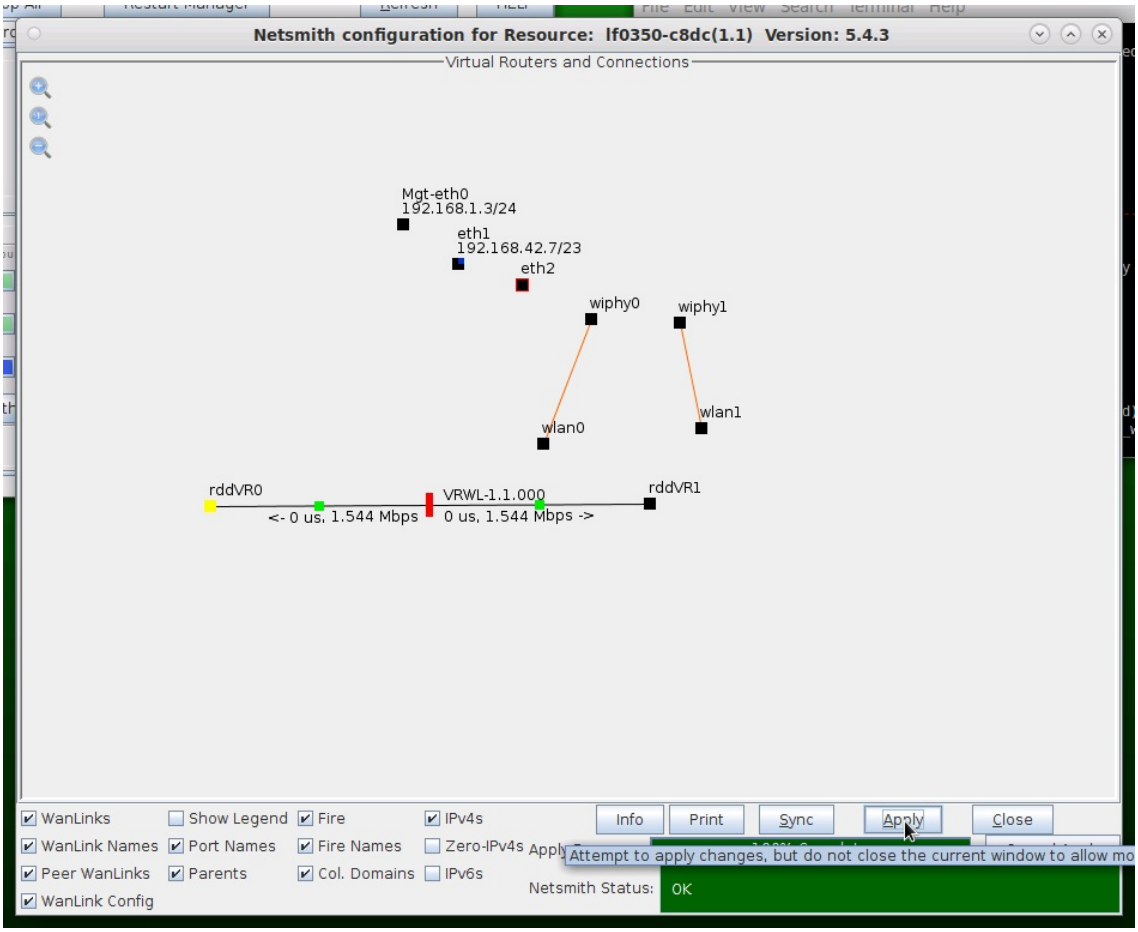


C. Accept defaults, Auto Create everything and click **OK**



A. **NOTE:** The new connection consists of two pairs of Redirect Devices, Port 1A, 1B and Port 2A, 2B and a WanLink. The new connection is not created until you click the **Apply** button in the Netsmith window.

D. Apply the new connection

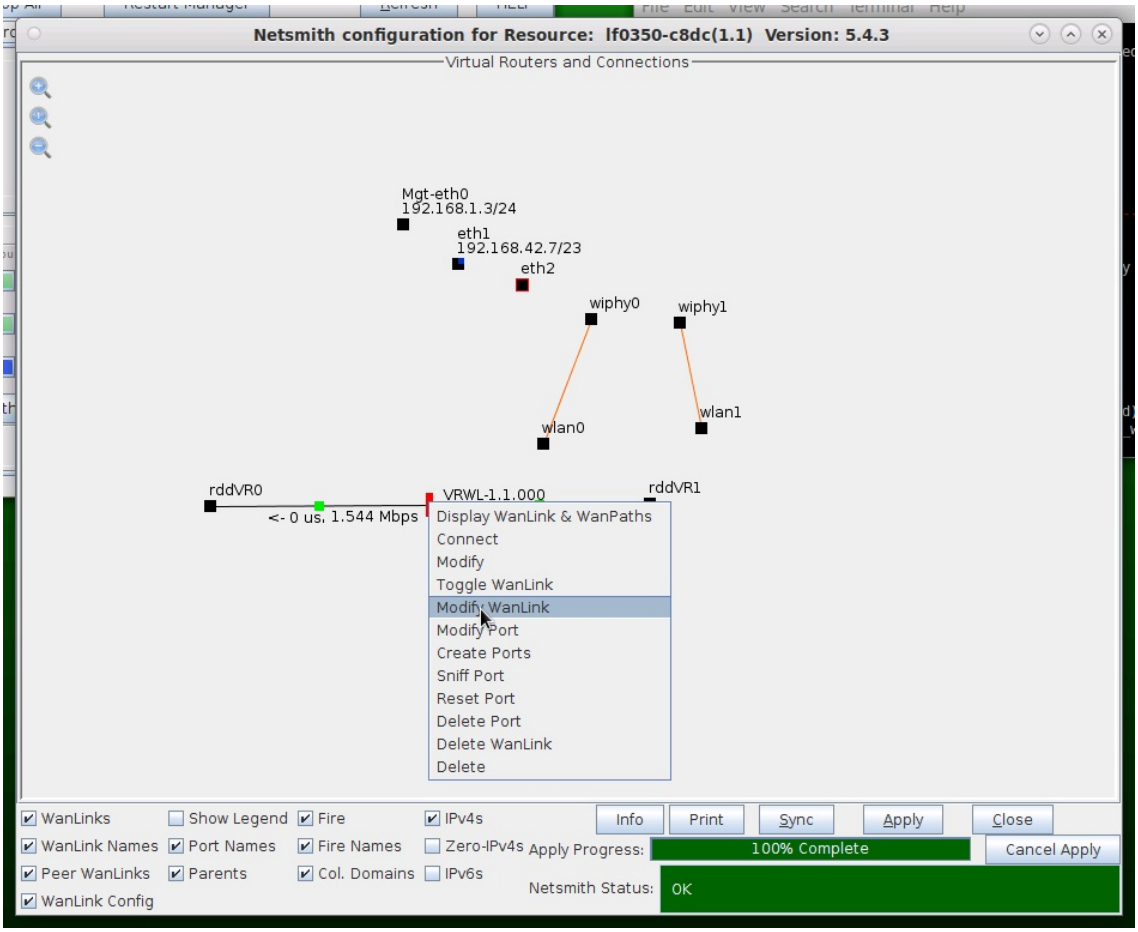


A. **NOTE**: The new connection is created and has a Bridged Mode WanLink between Redirect Device ports 1B and 2B which are shown as smaller, green squares (B-Ports) connected by a vertical bar (WanLink).

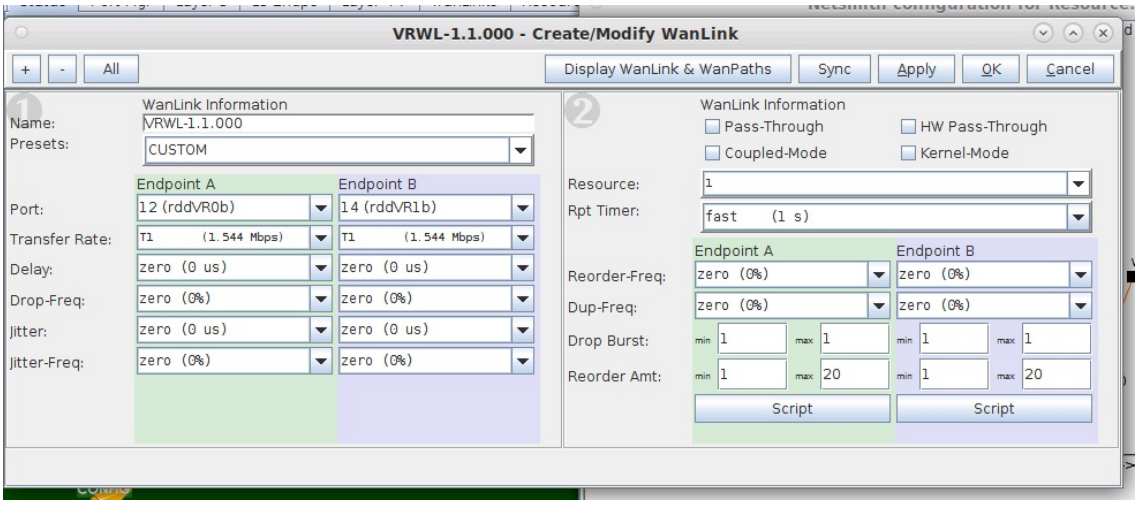
For more information see LANforge-GUI User Guide: Virtual Interfaces

2. Setup the WanLink.

A. Right-click the WanLink and select **Modify WanLink**



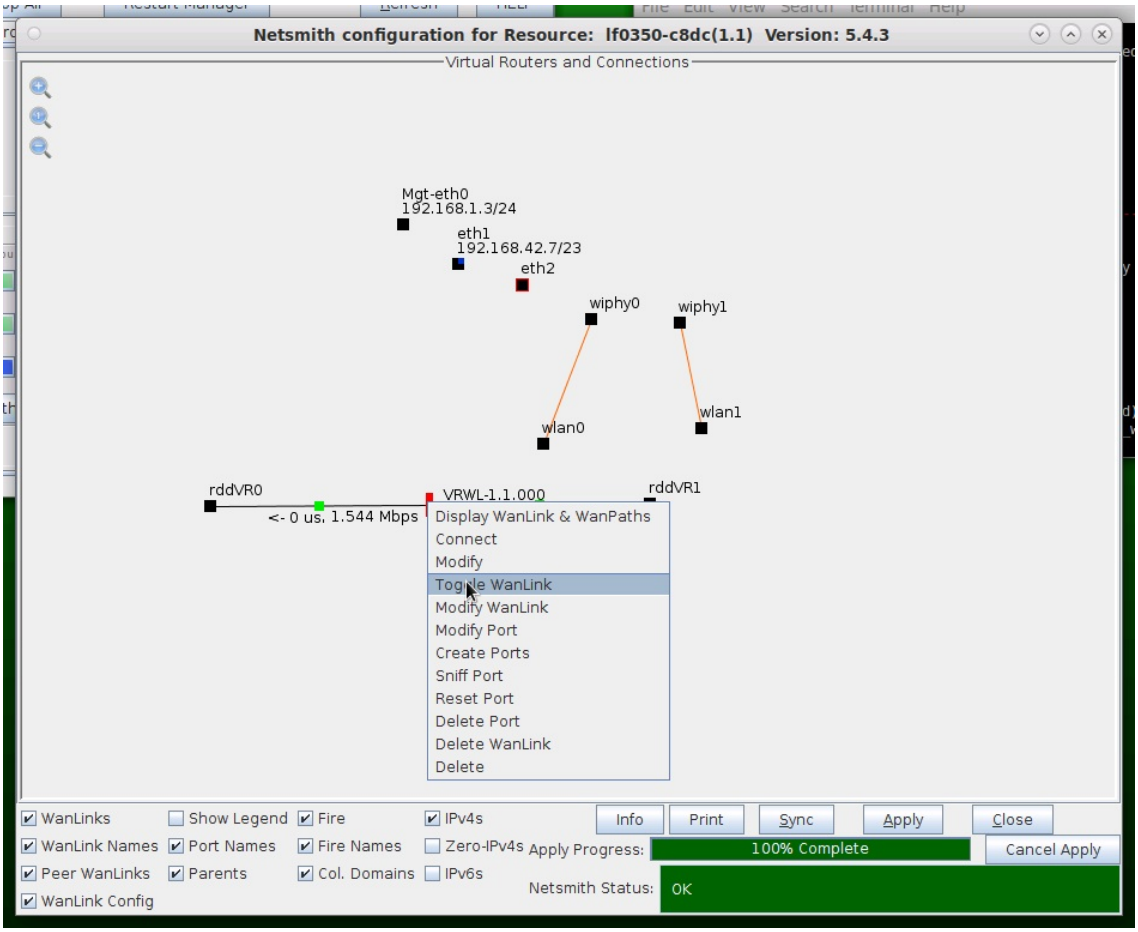
B. Verify that the B-side ports of the Redirect Device pairs (rddVR0b and rddVR1b) are configured



A. **NOTE:** Be sure to set the impairment, if any, and transfer rate

B. Click **OK** when done

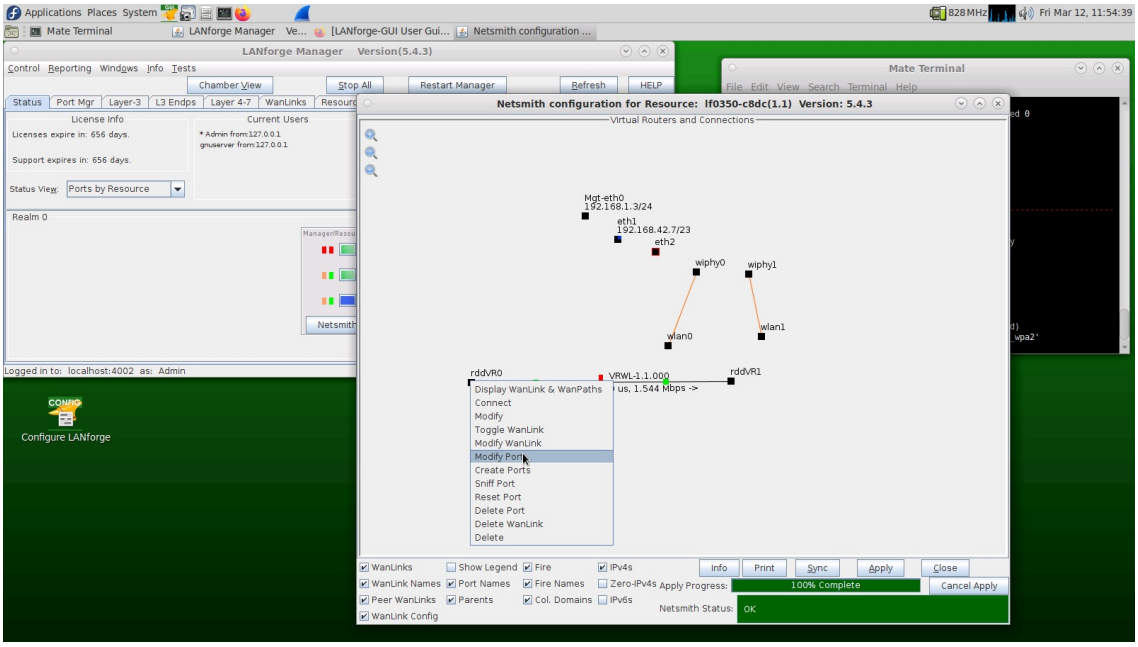
C. Right-click on the WanLink and select **Toggle WanLink** to Running (green)



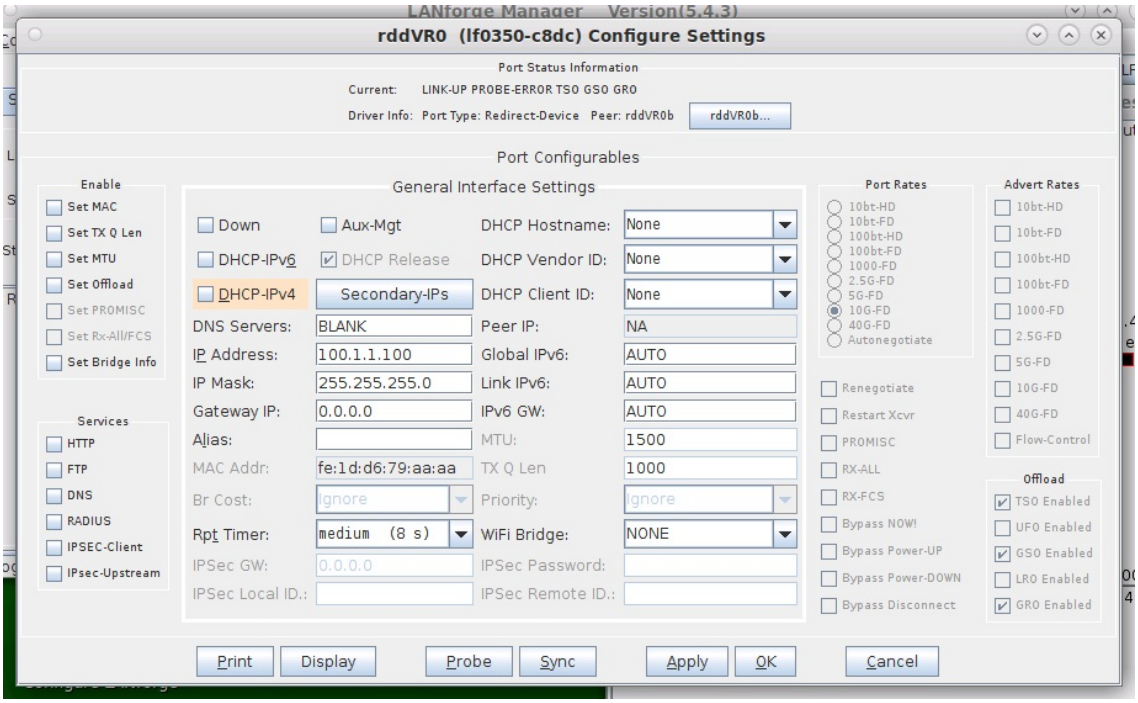
For more information see LANforge-GUI User Guide: WanLinks (ICE)

3. Setup the ports.

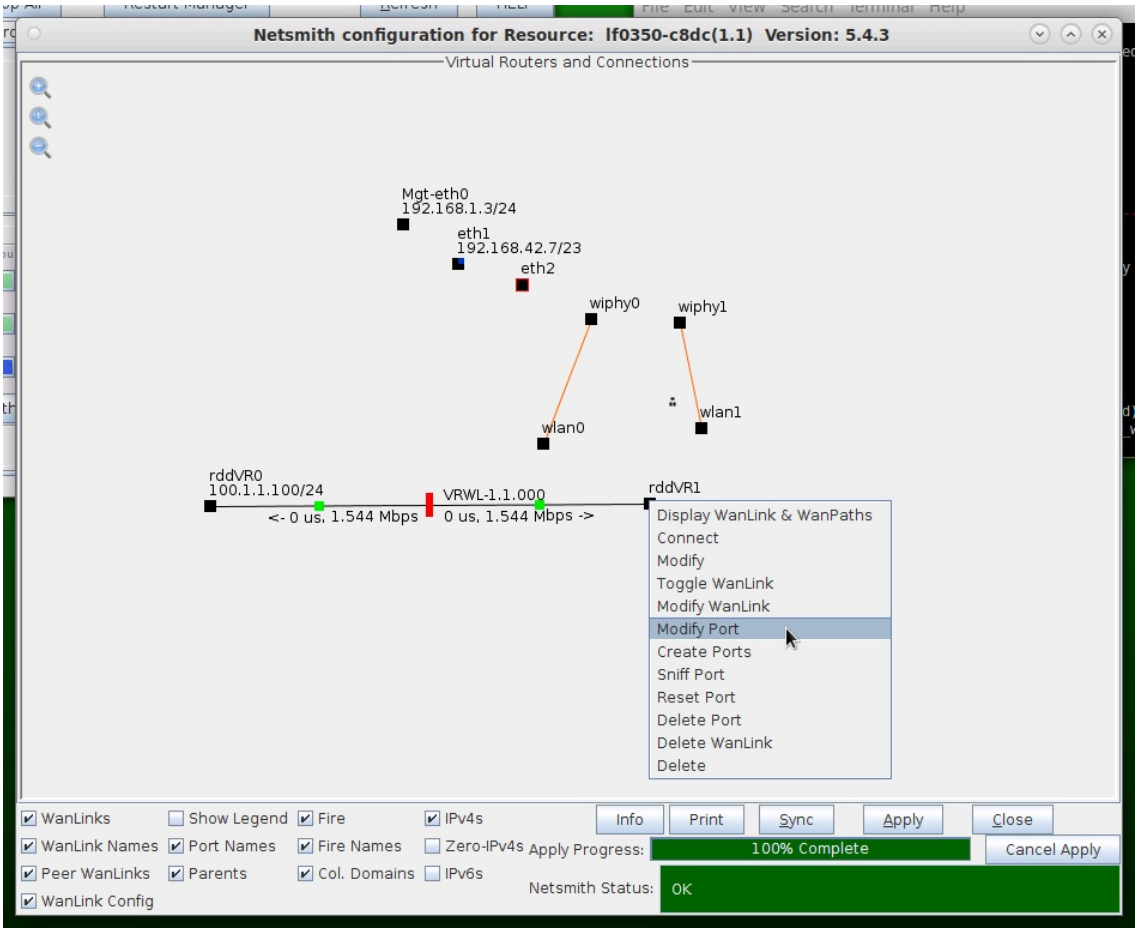
A. Right-click port rddVR0 and select **Modify Port**



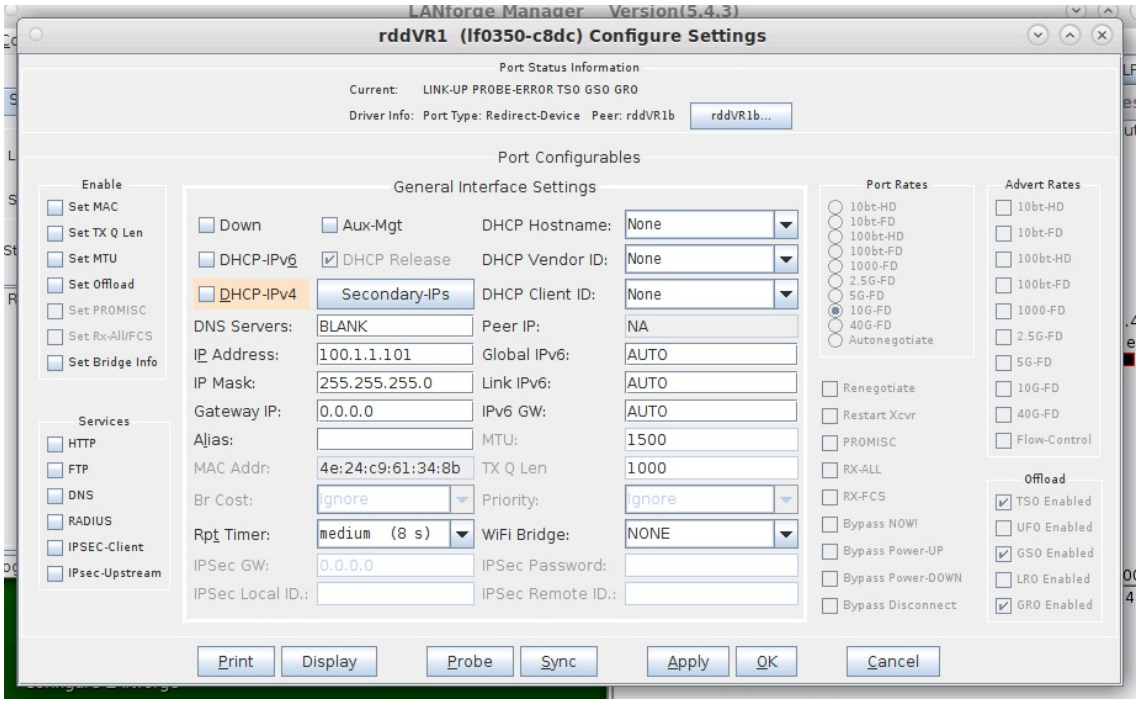
B. Assign an IP address and Network Mask to rddVR0



C. Right-click port rddVR1 and select **Modify Port**

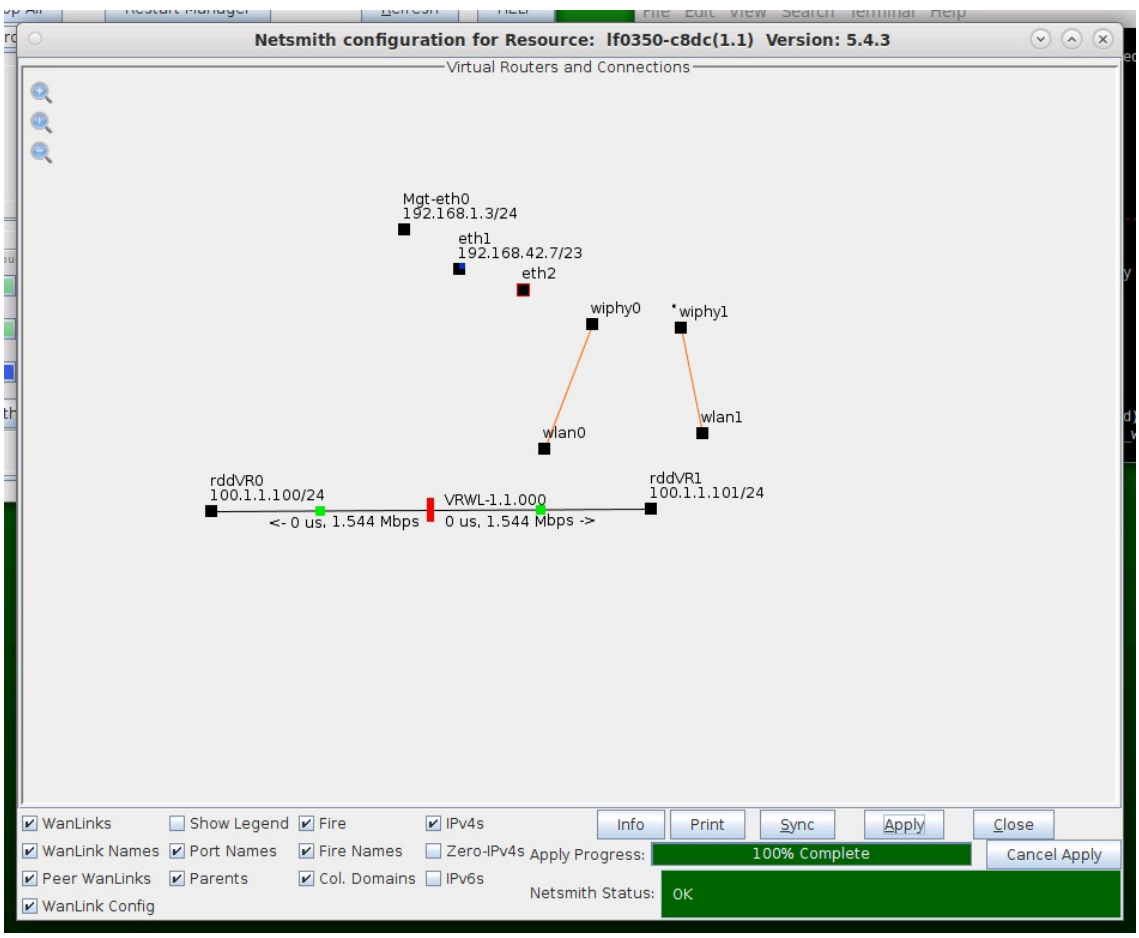


D. Assign an IP address and Network Mask to rddVR1

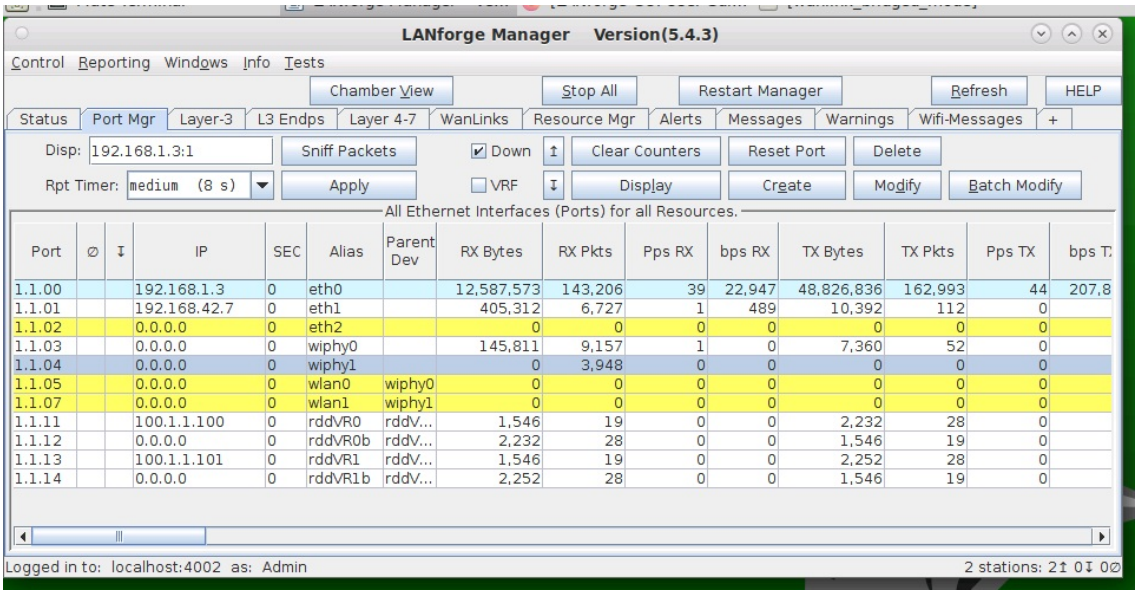


A. **NOTE:** As an alternate method to set Network Mask, enter a / followed by the number of mask bits after the IP address. In this case, /24 is equivalent to 255.255.255.0

E. Select the **IPv4s** checkbox at the bottom of the Netsmith window to verify port configuration



F. Go to the **Port Mgr** tab to verify port configuration

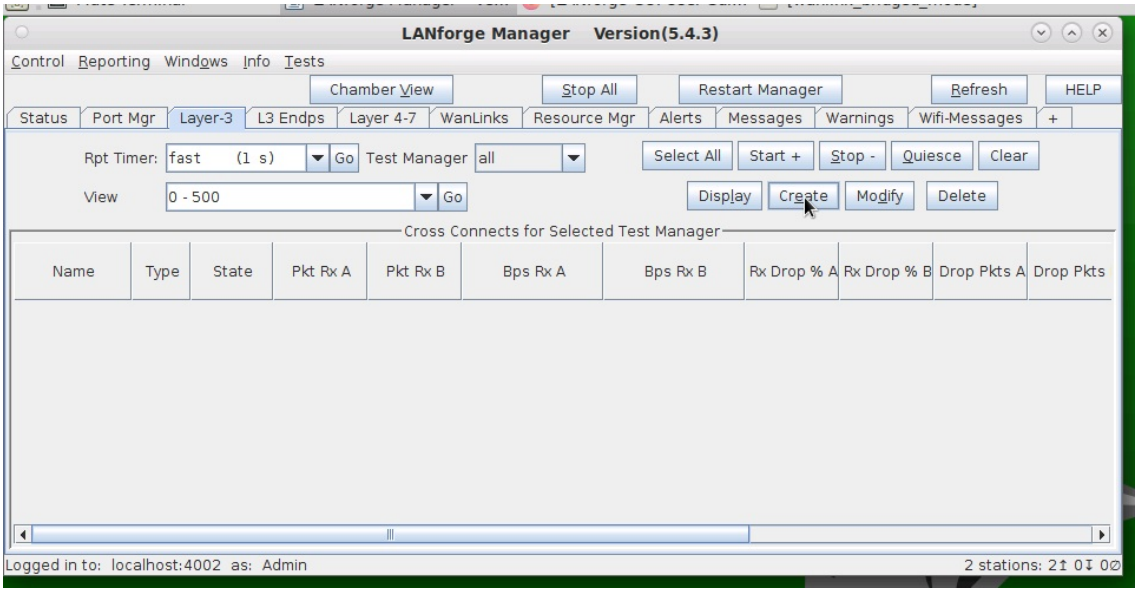


A. **NOTE:** The Bridged Mode WanLink is connected between rddVR0b and rddVR1b which both have 0.0.0.0 IP addresses

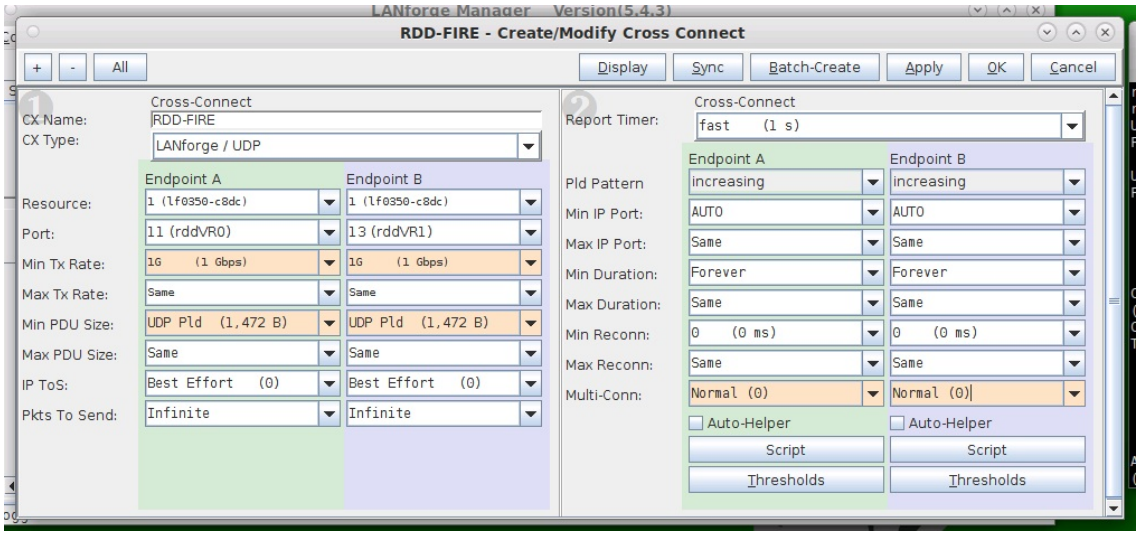
For more information see LANforge-GUI User Guide: Ports (Interfaces)

4. Create a Layer-3 Connection.

A. Go to the **Layer-3** tab and click **Create**

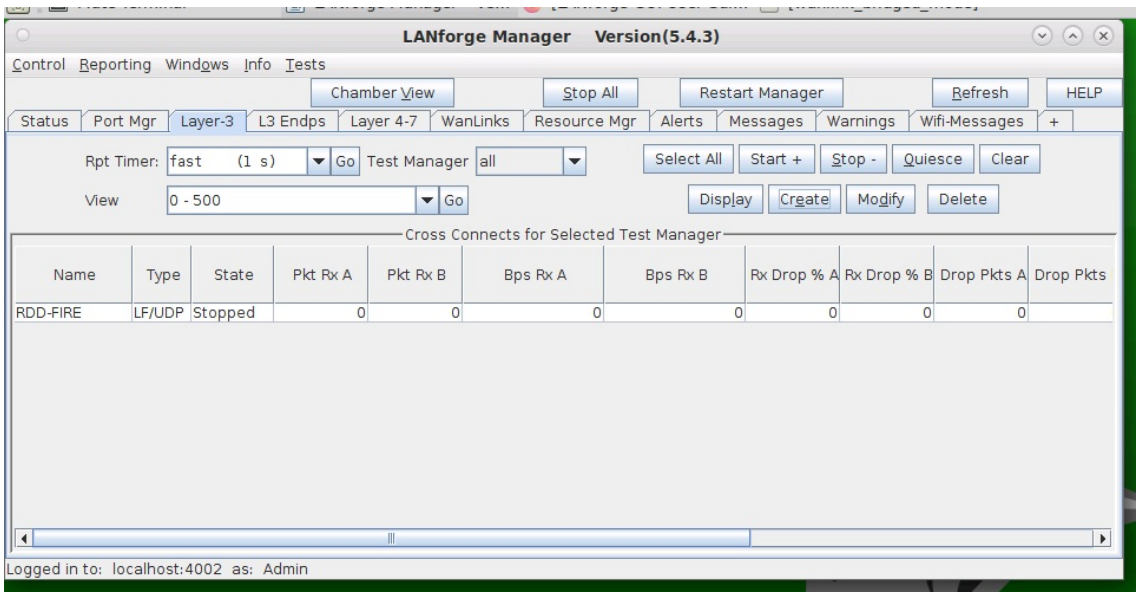


B. The RDD-FIRE connection will use the A-side ports of the Redirect Device pairs



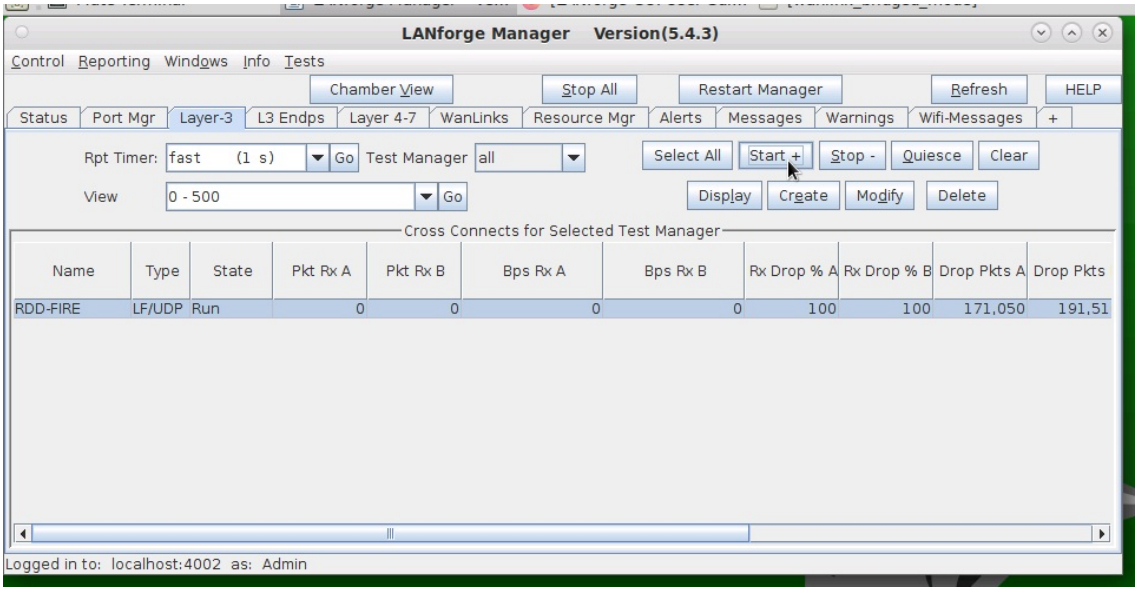
A. **NOTE:** These are the ports rddVR0 and rddVR1 that were assigned IP addresses in step 2

C. Verify the Layer-3 connection was created

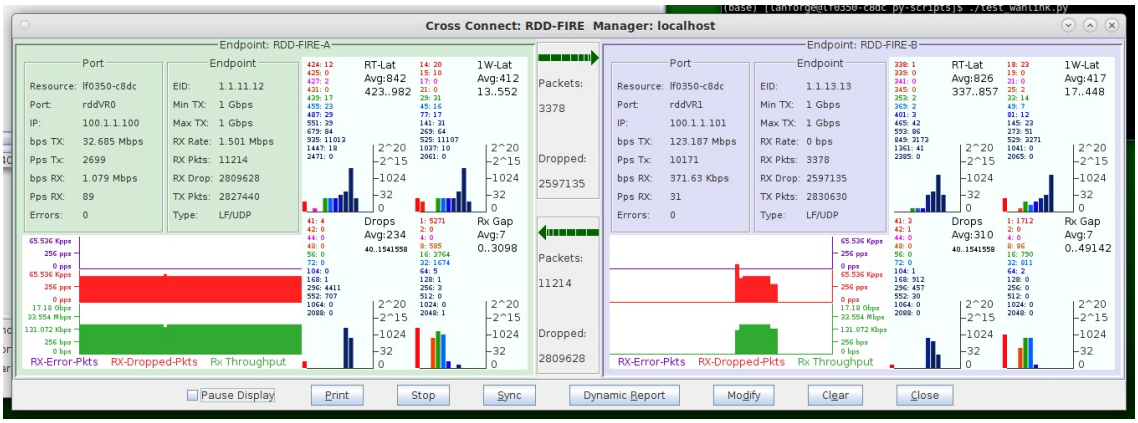


For more information see LANforge-GUI User Guide: Layer-3 Cross Connects (FIRE)

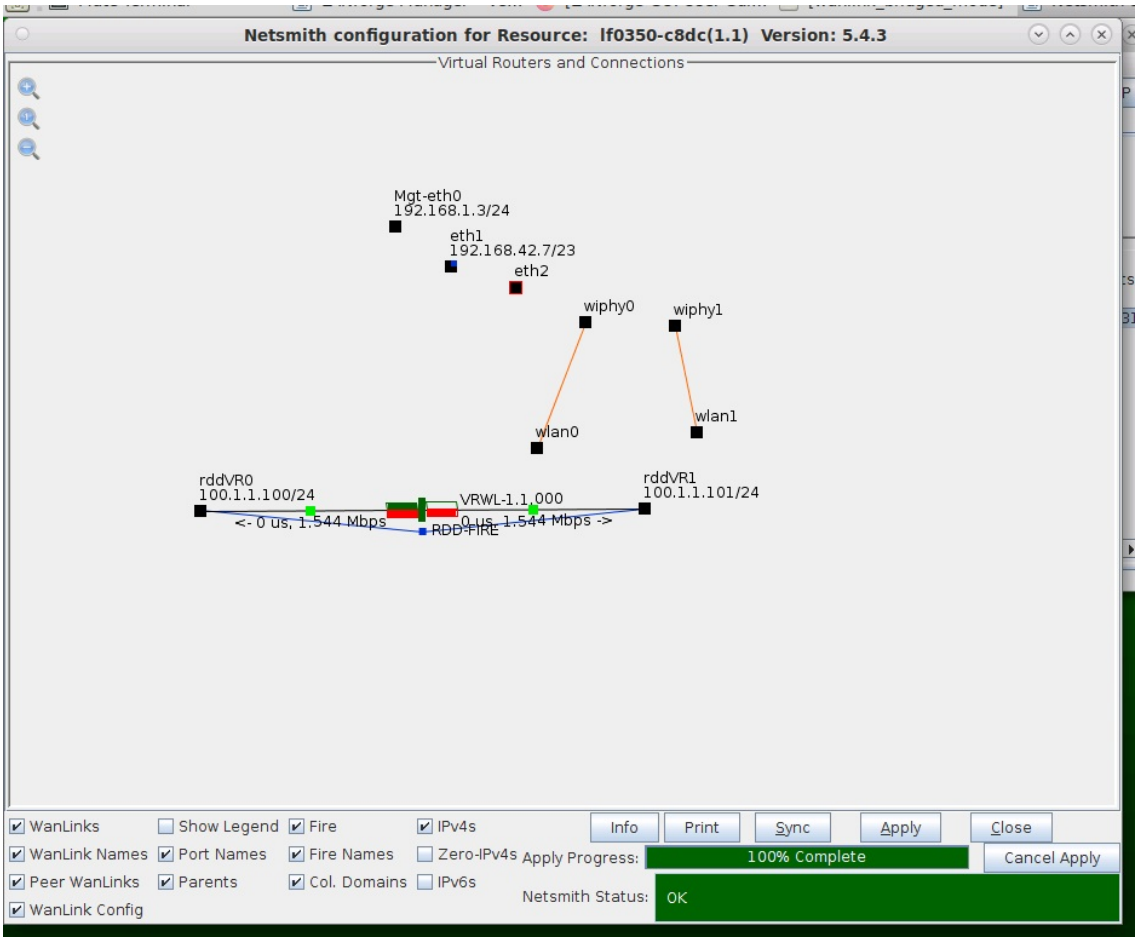
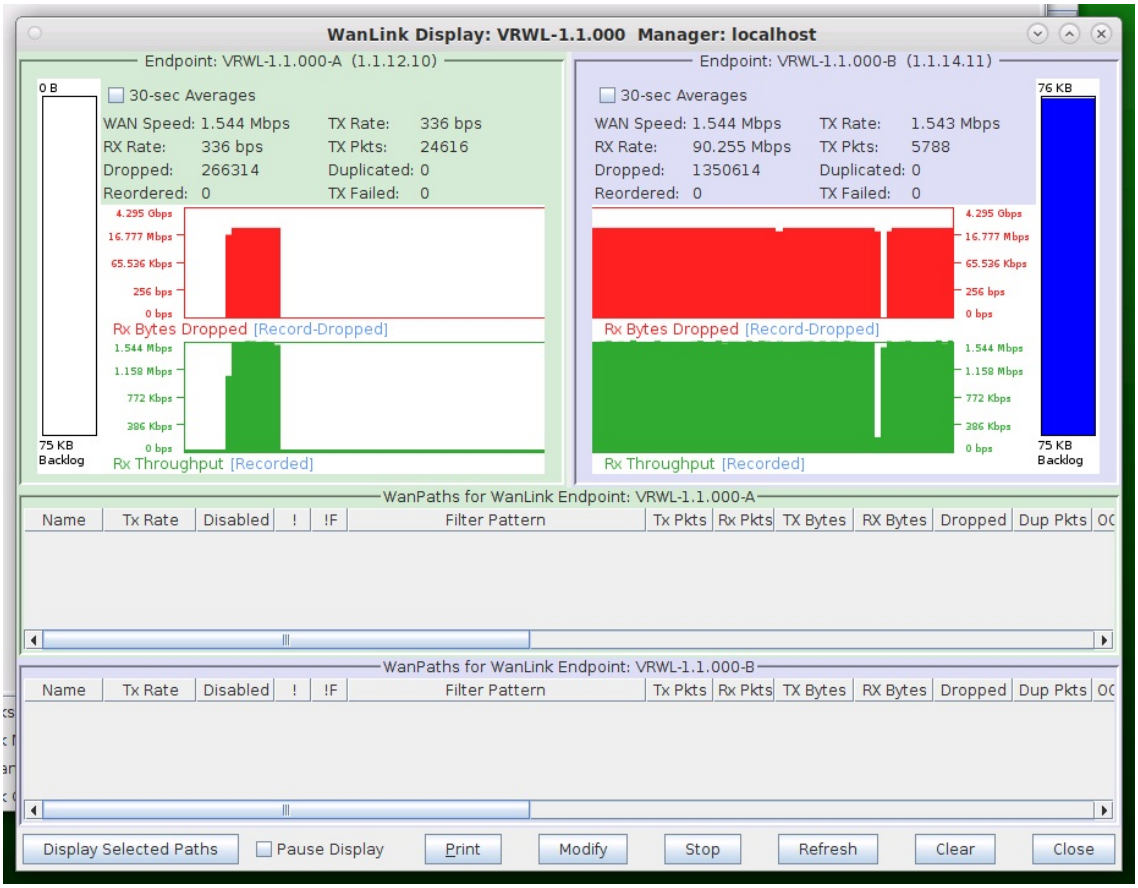
5. Run LANforge-FIRE to yourself through LANforge-ICE!
   A. Select the Layer-3 Cross Connect and click **Start**



   B. Click **Display** to show the Layer-3 Cross Connect details



C. Go to the **Status** tab and click **Netsmith** to view the graphical representation of the setup



D. Right-click on the WanLink and select **Display WanLink** to display the WanLink details