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**
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 18 and 28 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 **Toggie 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)](https://www.lanforge.com/documentation/).
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.