Goal: Setup a Routed Mode WanLink with WanPaths.

In this test scenario, LANforge-ICE is used to filter traffic by IP address on a WanLink with the use of WanPaths.

1. Setup a Netsmith connection.
   A. Go to the Status tab and click Netsmith
B. Right-click in the Netsmith window and select **New Connection**

C. Accept defaults, **Auto Create** everything and click **OK**
D. Click **Apply** in the Netsmith window to create the connection

E. The Netsmith window after applying changes
2. Setup the WanLink.
   A. Right-click the WanLink and select **Modify WanLink**

   ![Image of NetSmith configuration](image)

   B. Setup the WanLink with values larger than what each of the WanPaths will use

   ![Image of VRWL-1.1.000 - Create/Modify WanLink](image)

   A. WanPaths are subordinate to WanLinks. WanLinks, therefore, should be configured with sufficient bandwidth and buffering required by all of its WanPaths.

   B. Click **Apply** and leave the Create/Modify WanLink window open.

For more information see **LANforge-GUI User Guide: WanLinks**
   A. Click **Create-WP** on Entry Point A to create a new WanPath on this WanLink

   ![Create/Modify WanPath for Endpoint: VRWL-1.1.000-A](image)

   A. **NOTE:** In order to filter by specific IP address, use a Source and Dest Mask of 32 to exactly match the IP coming in on the Entry Point

   B. Click **OK** to create the WanPath
B. Click **Create-WP** on Entry Point B to create a new WanPath on this WanLink.

A. **NOTE:** The Source and Destination IPs for this WanPath are the reverse of those for Entry Point A.

B. Click **OK** to create the WanPath.
C. Create a second WanPath for this WanLink using the next set of IP addresses.
D. Reverse the Source and Destination IPs for this corresponding WanPath

![Create/Modify WanPath for Endpoint: VRWL-1.1.000-B](image)

E. Verify that the WanPaths on this WanLink are setup correctly, then click **OK** on the Create/Modify WanLink window shown here

![VRWL-1.1.000 - Create/Modify WanLink](image)
4. Setup the ports with IP addresses.
   A. Right-click on the WanLink and select **Toggle Wanlink**
B. Right-click port rddVR0 and select **Modify Port**

C. Setup an IP address that is on a different network than the WanPath entry points
D. Setup an IP address on port rddVR1 that is on the same network as rddVR0.

For more information see LANforge-GUI User Guide: WanLinks
5. Add the Virtual Routers.
   A. Right-click in the Netsmith window and select New Router
B. Accept the defaults or change the Virtual Router name and graphical size.
C. Click the **Apply** button and repeat for the second Virtual Router

A. **NOTE:** After making any changes to the Netsmith window, you must click **Apply** or your changes will NOT be implemented and could be lost.

B. **NOTE:** Clicking **Sync** makes sure any changes are synchronized with the current database.
D. Left-click rddVR0 and drag it inside Router R0(1)

E. Left-click rddVR1 and drag it inside Router R1(2)
For more information see LANforge-GUI User Guide: WanLinks
6. Setup the external interfaces.
   A. Right-click port eth1 and select Modify Port

B. Setup eth1 with a valid IP address and IP mask that is on the same network as the WanPath entry points ep-1 and ep-3
C. Left-click port eth1 and drag it inside Router R0(1)

D. Setup eth2 with a valid IP address and IP mask that is on the same network as the WanPath entry points ep-2 and ep-4
E. Drag eth2 inside Router R1(2) and Apply changes in Netsmith

For more information see [LANforge-GUI User Guide: WanLinks](#)

7. Run traffic to LANforge-ICE ports eth1 and eth2, then display results. Refer to the [LANforge FIRE Cookbook](#) to run traffic.
A. Right-click the WanLink and select **Display Wanlink & WanPaths**
B. The lower half of the WanLink display shows traffic passing on WanPath entry points ep-3 and ep-4 and other IP address are excluded from passing on the WanLink.

C. Select a WanPath and click Display Selected Paths in the lower left corner of the WanLink display window.