# Layer-3 UDP Traffic Generator

Goal: Generate one-sided traffic to a network device with a fixed destination IP address.

This scenario is useful for testing switches, firewalls and data loggers that have to handle highly varied or very fast UDP packet streams with a fixed destination. A one-sided traffic stream is used to send packets to a network device under test when round-trip reporting is not required.
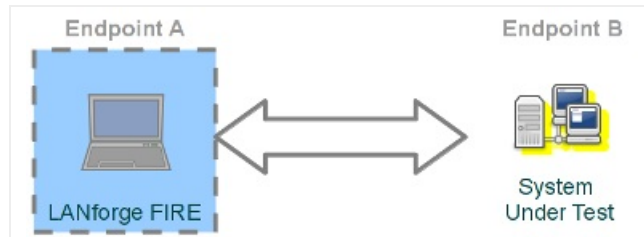
1. Configure an ethernet port.

    A. On the **Port Mgr** tab, select a port within the table and click the **Modify** button.

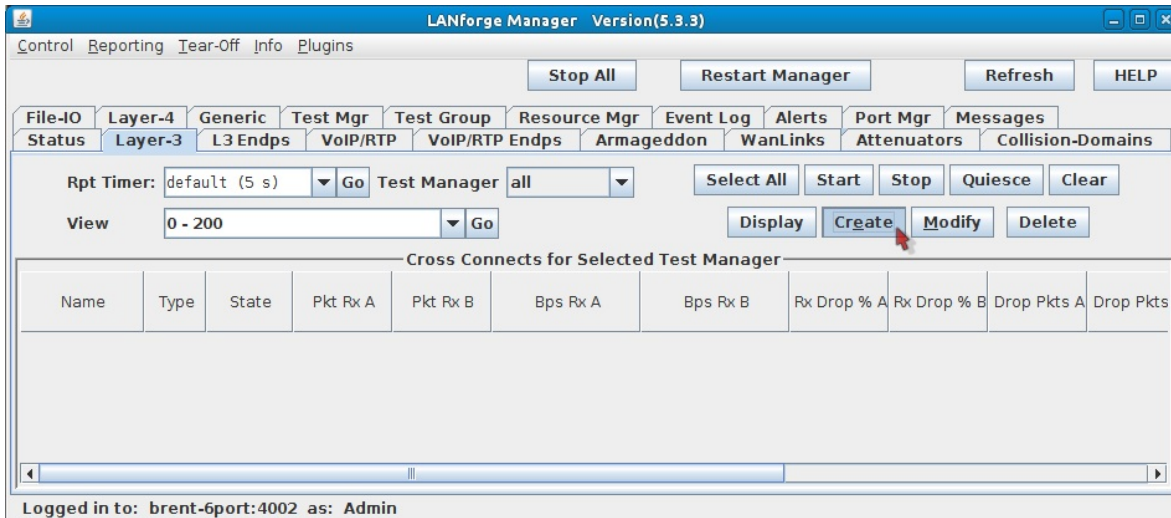   A. This example will use port `eth1`.

B. Assign an IP and Mask as necessary.
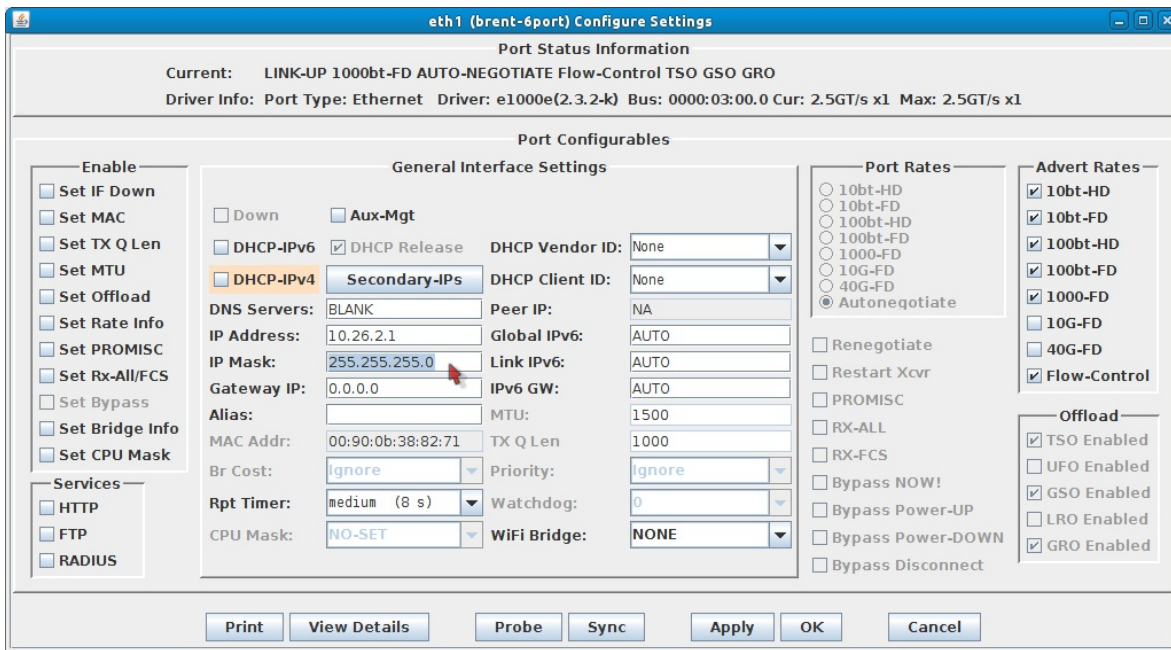
C. Click **OK**.

2. Configure the Layer-3 connection.
   A. On the **Layer-3** tab, click **Create**.

B. Assign port `eth1` to **Endpoint-A**.

A. You will not need to assign **Endpoint-B** because that will become unmanaged.

C. Configure the attributes in section 1:

A. Endpoint-A Min Tx Rate: `1Gbps`

B. Endpoint-**B** Min Tx Rate: `Zero (0 bps)`

C. Endpoint-A Min PDU Size: `UDP Pld (1,472 B)`

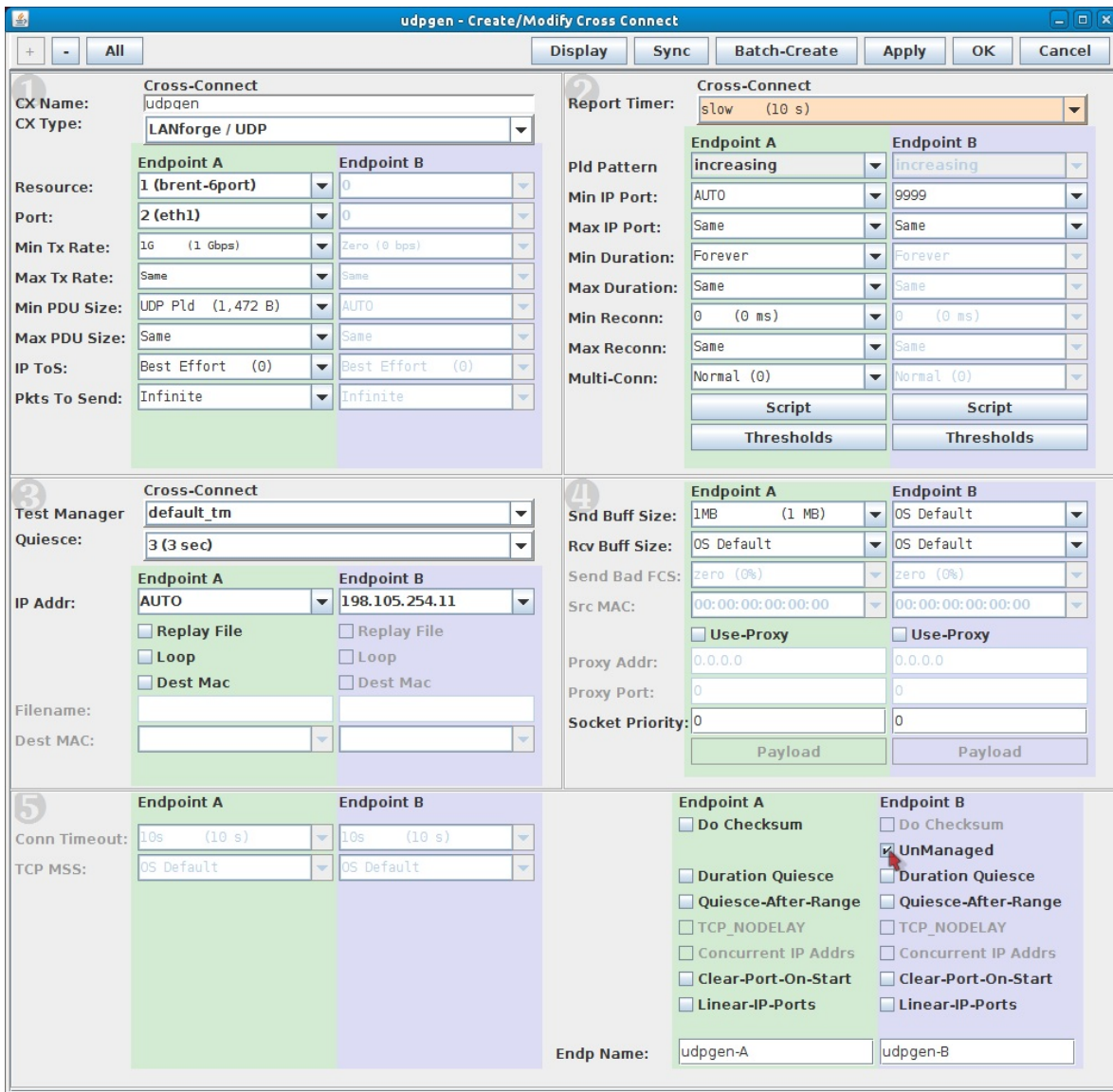D. Use the **All** button at the top to expand to the last detail level.

E. Configure the Layer-3 connection to the *system under test* (Endpoint-B) by following these steps:

A. In section 5, on the right side, Endpoint-B (blue), select **UnManaged**. This will gray-out most of the Endpoint-B options.

B. In section 2, set the Report Timer to `slow (10 s)`. Also, set the Endpoint-B Min IP port: `9999`. If you have a *service under test* this port should match, if not, this setting still needs to be present to generate valid traffic.

C. In section 3, set the Endpoint-B IP to the *system under test* IP address. Our example shows `198.105.254.11`.

D. In section 4, set the send buffer size (Snd Buff Size) to `1MB`.

E. Click **OK** at the top to commit the changes.

3. Start generating traffic.

A. In the **Layer-3** tab, select the connection `udpgen`.

B. Click **Start**.