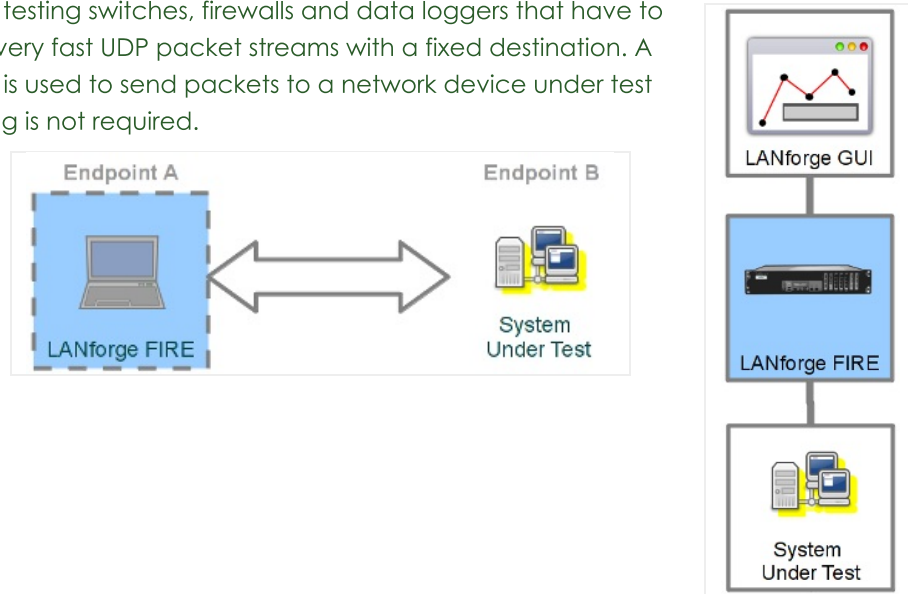


## Layer-3 UDP Traffic Generator

**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.

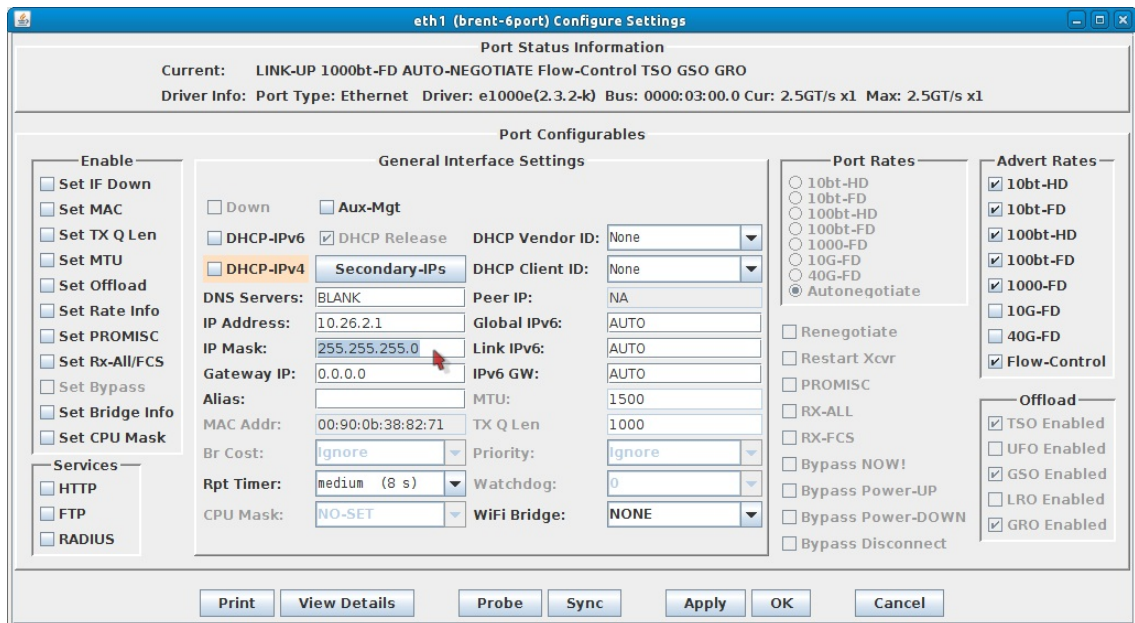
The screenshot shows the LANforge Manager Version(5.3.3) interface. The 'Port Mgr' tab is active, displaying a table of Ethernet interfaces for all resources. The table has columns for Port, Phase, Down, IP, SEC, Alias, Parent Dev, RX Bytes, RX Pkts, Pps RX, bps RX, TX Bytes, TX Pkts, and Pps TX. The row for port 'eth1' is highlighted, and a mouse cursor is pointing at the 'Modify' button.

Port	Pha...	Down	IP	SEC	Alias	Parent Dev	RX Bytes	RX Pkts	Pps RX	bps RX	TX Bytes	TX Pkts	Pps TX
1.1.0			192.168.100.86	0	eth5		272,959,695	346,073	6	7,949	276,256,112	322,422	6
1.1.1			0.0.0.0	0	eth0		0	0	0	0	2,032	22	0
1.1.2			0.0.0.0	0	eth1		0	0	0	0	2,032	22	0
1.1.3			0.0.0.0	0	eth2		0	0	0	0	0	0	0
1.1.4			0.0.0.0	0	eth3		0	0	0	0	2,032	22	0
1.1.5			0.0.0.0	0	eth4		0	0	0	0	2,032	22	0

Logged in to: brent-6port:4002 as: Admin

A. This example will use port `eth1`.

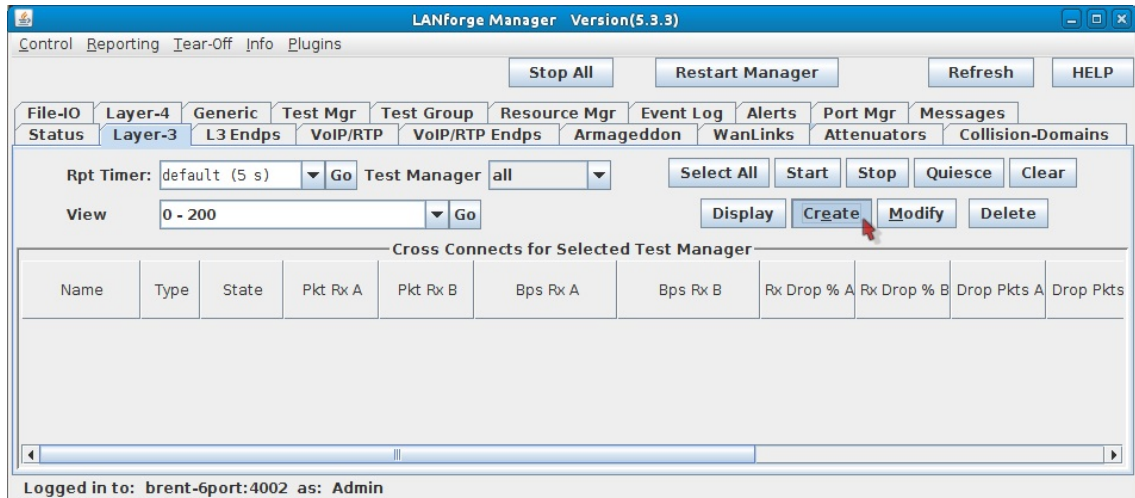
B. Assign an IP and Mask as necessary.



C. Click **OK**.

2. Configure the Layer-3 connection.

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



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

udpgen - Create/Modify Cross Connect

+ - All Display Sync Batch-Create Apply OK Cancel

**Cross-Connect**

CX Name: judpaen

CX Type: LANforge / UDP

	Endpoint A	Endpoint B
Resource:	1 (brent-6port)	1 (brent-6port)
Port:	2 (eth1)	5 (eth4)
Min Tx Rate:	New Modem (56 Kbps)	New Modem (56 Kbps)
Max Tx Rate:	Same	Same
Min PDU Size:	AUTO	AUTO
Max PDU Size:	Same	Same
IP ToS:	Best Effort (0)	Best Effort (0)
Pkts To Send:	Infinite	Infinite

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

C. Configure the attributes in section 1:

udpgen - Create/Modify Cross Connect

+ - All Display Sync Batch-Create Apply OK Cancel

**Cross-Connect**

CX Name: judpaen

CX Type: LANforge / UDP

	Endpoint A	Endpoint B
Resource:	1 (brent-6port)	1 (brent-6port)
Port:	2 (eth1)	5 (eth4)
Min Tx Rate:	1G (1 Gbps)	Zero (0 bps)
Max Tx Rate:	Same	Same
Min PDU Size:	UDP Pld (1,472 B)	AUTO
Max PDU Size:	Same	Same
IP ToS:	Best Effort (0)	Best Effort (0)
Pkts To Send:	Infinite	Infinite

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.

**udpqgen - Create/Modify Cross Connect**

Buttons: +, -, **All**, Display, Sync, Batch-Create, Apply, OK, Cancel

**1 Cross-Connect**

CX Name: udpqgen  
CX Type: LANforge / UDP

	Endpoint A	Endpoint B
Resource:	1 (brent-6port)	1 (brent-6port)
Port:	2 (eth1)	5 (eth4)
Min Tx Rate:	1G (1 Gbps)	Zero (0 bps)
Max Tx Rate:	Same	Same
Min PDU Size:	UDP Pld (1,472 B)	AUTO
Max PDU Size:	Same	Same
IP ToS:	Best Effort (0)	Best Effort (0)
Pkts To Send:	Infinite	Infinite

**2 Cross-Connect**

Report Timer: default (5 s)

	Endpoint A	Endpoint B
Pld Pattern	increasing	increasing
Min IP Port:	AUTO	AUTO
Max IP Port:	Same	Same
Min Duration:	Forever	Forever
Max Duration:	Same	Same
Min Reconn:	0 (0 ms)	0 (0 ms)
Max Reconn:	Same	Same
Multi-Conn:	Normal (0)	Normal (0)

Buttons: Script, Thresholds

**3 Test Manager**

Test Manager: default\_tm  
Quiesce: 3 (3 sec)

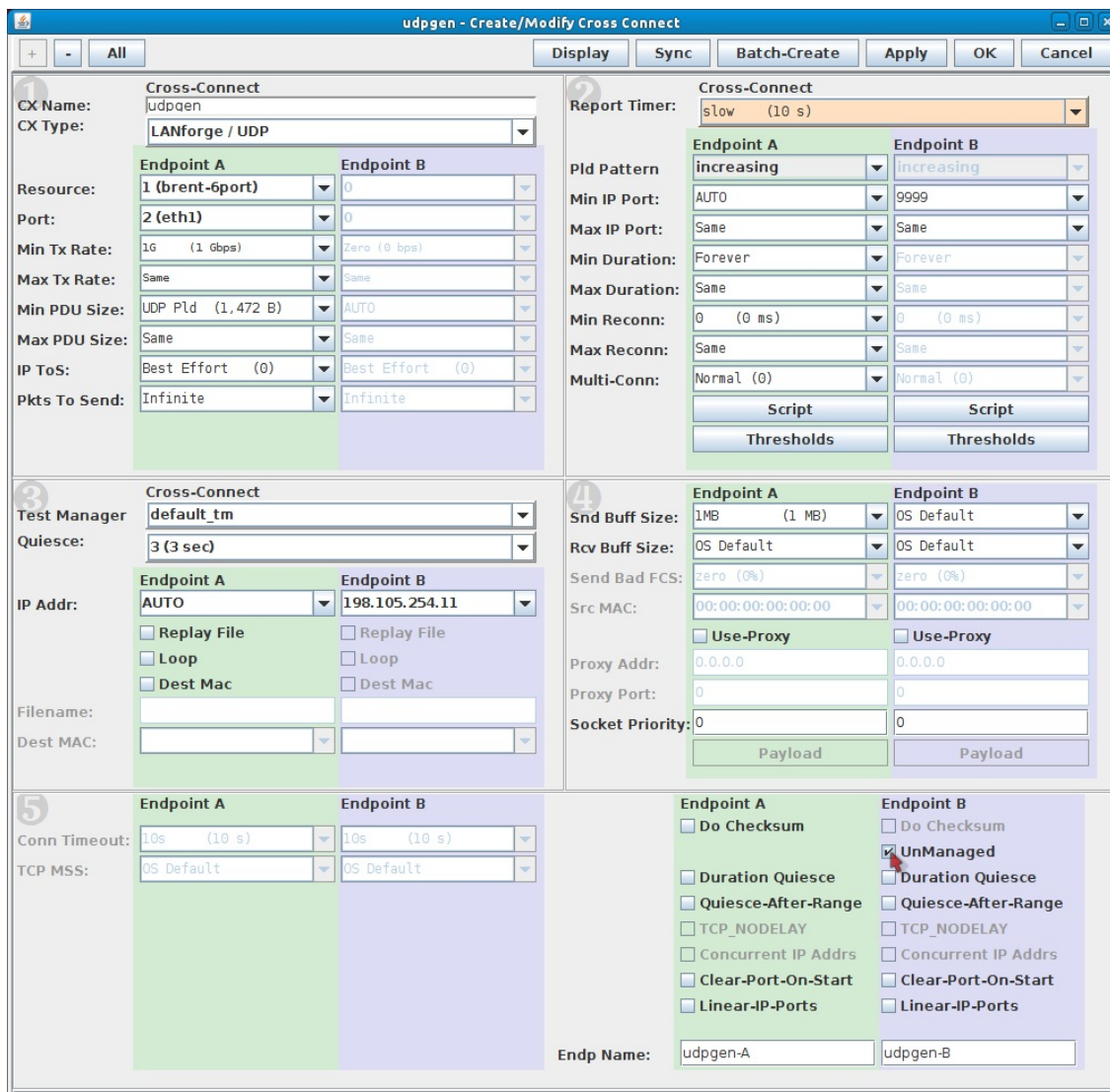
	Endpoint A	Endpoint B
IP Addr:	AUTO	AUTO
<input type="checkbox"/> Replay File		
<input type="checkbox"/> Loop		
<input type="checkbox"/> Dest Mac		
Filename:		
Dest MAC:		

**4 Cross-Connect**

	Endpoint A	Endpoint B
Snd Buff Size:	OS Default	OS Default
Rcv Buff Size:	OS Default	OS Default
Send Bad FCS:	zero (0%)	zero (0%)
Src MAC:	00:00:00:00:00:00	00:00:00:00:00:00
<input type="checkbox"/> Use-Proxy		
Proxy Addr:	0.0.0.0	0.0.0.0
Proxy Port:	0	0
Socket Priority:	0	0

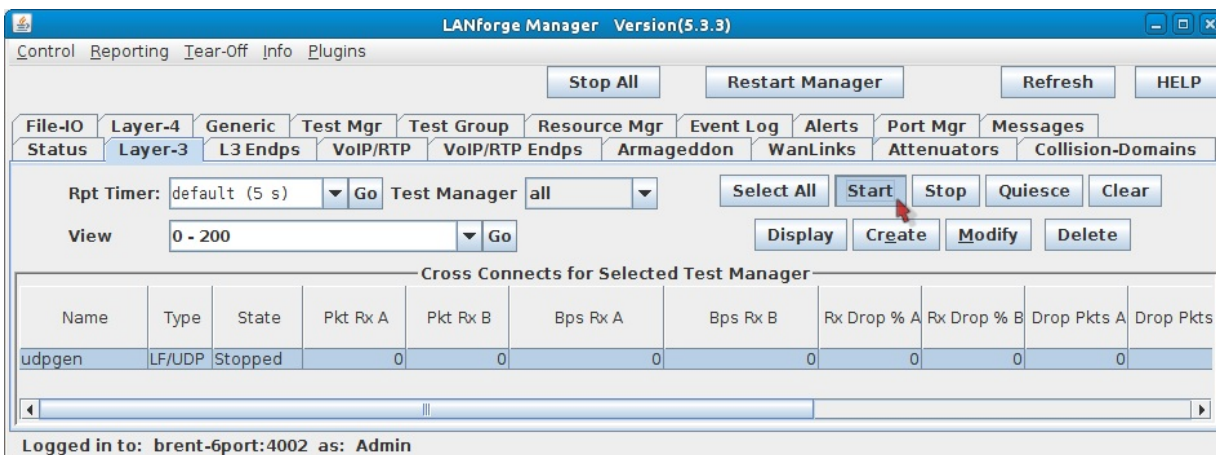
Buttons: Payload

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 to **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**.

