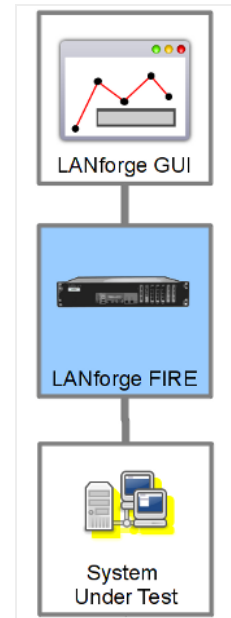
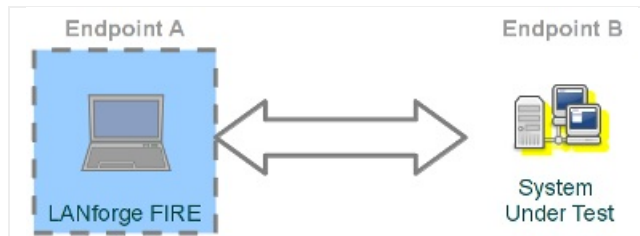
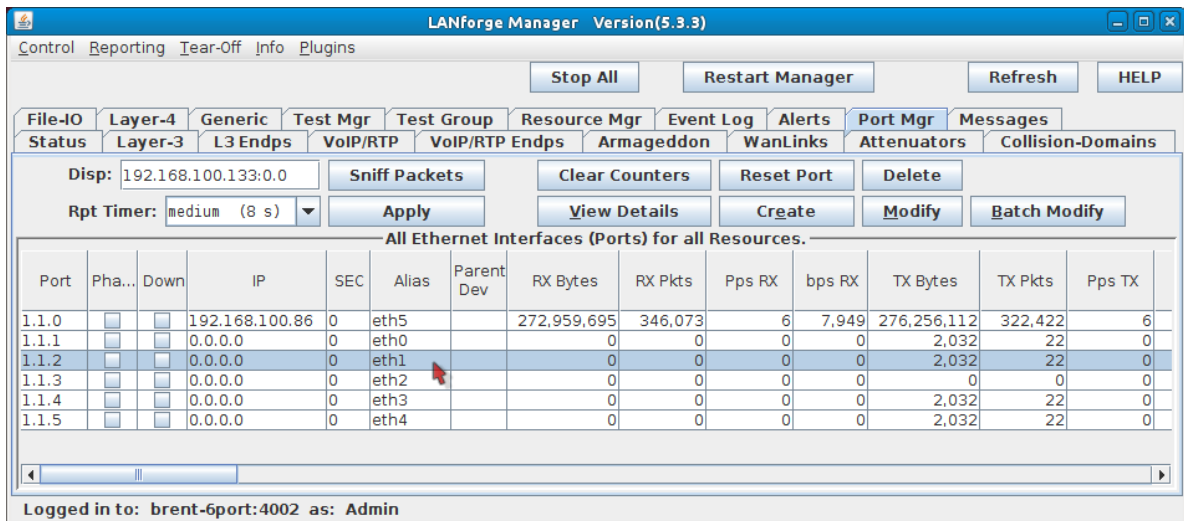


## Layer-3 UDP Traffic Generator

**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.



LANforge Manager Version(5.3.3)

Control Reporting Tear-Off Info Plugins

Stop All Restart Manager Refresh HELP

File-I/O Layer-4 Generic Test Mgr Test Group Resource Mgr Event Log Alerts Port Mgr Messages

Status Layer-3 L3 Endps VoIP/RTP VoIP/RTP Endps Armageddon WanLinks Attenuators Collision-Domains

Disp: 192.168.100.133:0.0 Sniff Packets Clear Counters Reset Port Delete

Rpt Timer: medium (8 s) Apply View Details Create Modify Batch Modify

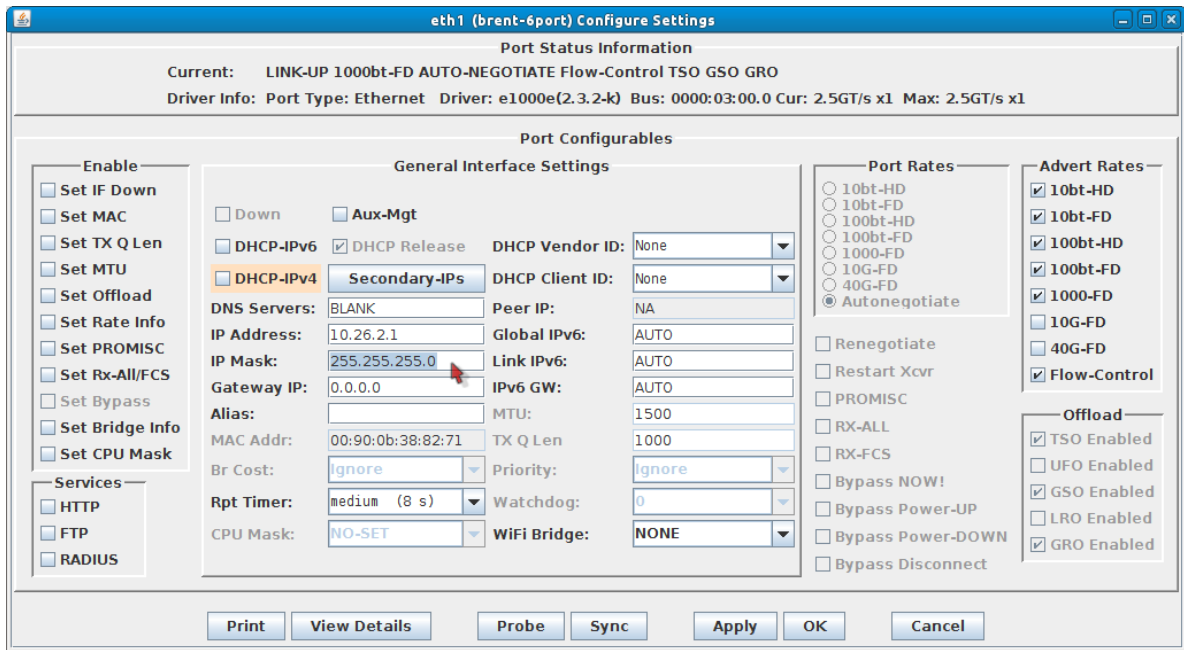
All Ethernet Interfaces (Ports) for all Resources.

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	<input type="checkbox"/>	<input type="checkbox"/>	192.168.100.86	0	eth5		272,959,695	346,073	6	7,949	276,256,112	322,422	6
1.1.1	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	eth0		0	0	0	0	2,032	22	0
1.1.2	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	eth1		0	0	0	0	2,032	22	0
1.1.3	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	eth2		0	0	0	0	0	0	0
1.1.4	<input type="checkbox"/>	<input type="checkbox"/>	0.0.0.0	0	eth3		0	0	0	0	2,032	22	0
1.1.5	<input type="checkbox"/>	<input type="checkbox"/>	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.

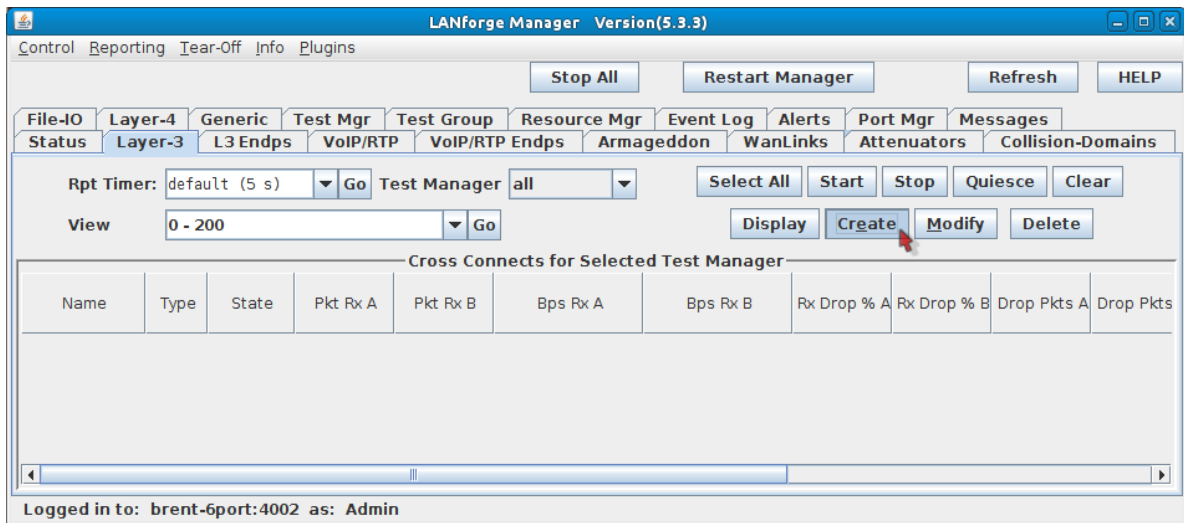
B. Assign an IP and Mask as necessary.



C. Click **OK**.

2. Configure the Layer-3 connection.

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



B. Assign port eth1 to Endpoint-A.

1

Cross-Connect

CX Name: udpqen

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:

1

Cross-Connect

CX Name: udpqen

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 P1d (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 P1d (1,472 B)

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

**udpgen - Create/Modify Cross Connect**

**1** Cross-Connect  
CX Name: udpaen  
CX Type: LANforge / UDP

Resource:	Endpoint A	Endpoint B
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** Report Timer: Cross-Connect  
default (5 s)

Parameter	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)

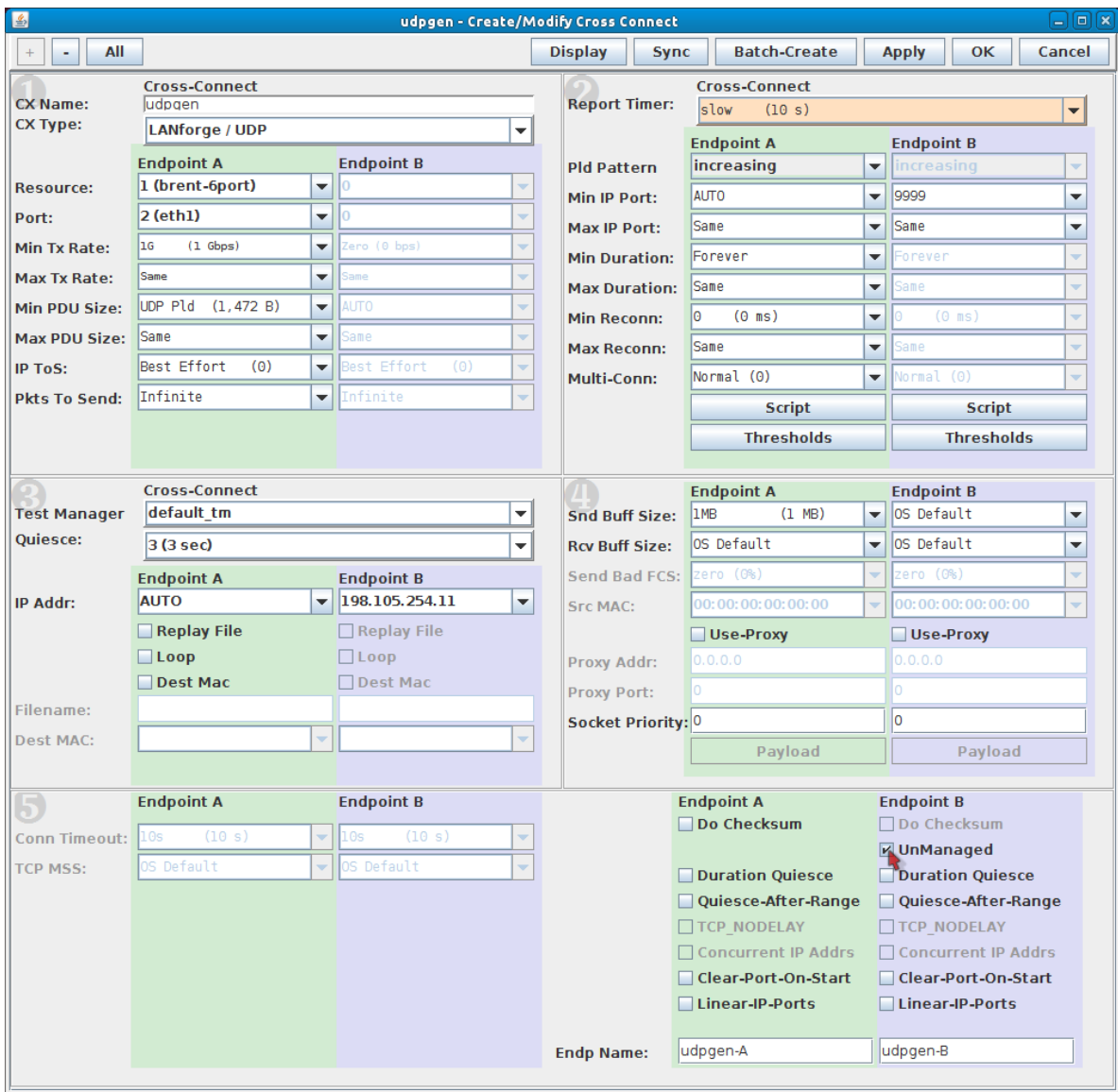
**3** Cross-Connect  
Test Manager: default\_tm  
Quiesce: 3 (3 sec)

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

**4** Cross-Connect

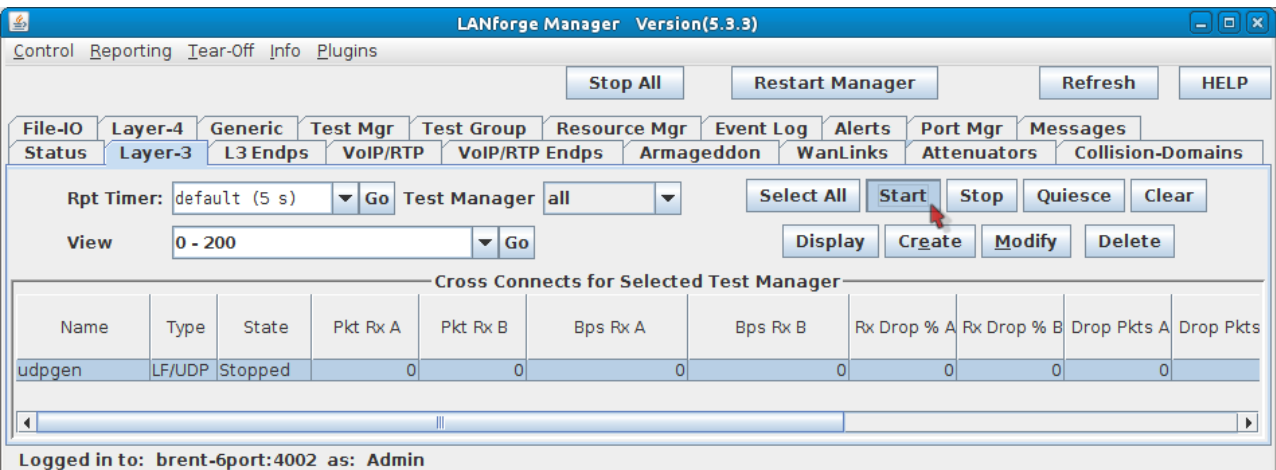
Parameter	Endpoint A	Endpoint B
Snd Buff Size:	OS Default	OS Default
Rcv Buff Size:	OS Default	OS Default
Send Bad FCS:	zero (0%)	zero (0%)
Src MAC:	00:00:00:00:00:00	00:00:00:00:00:00
Use-Proxy	<input type="checkbox"/>	<input type="checkbox"/>
Proxy Addr:	0.0.0.0	0.0.0.0
Proxy Port:	0	0
Socket Priority: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

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**.

*Candela Technologies, Inc., 2417 Main Street, Suite 201, Ferndale, WA 98248, USA  
www.candelatech.com | sales@candelatech.com | +1.360.380.1618*