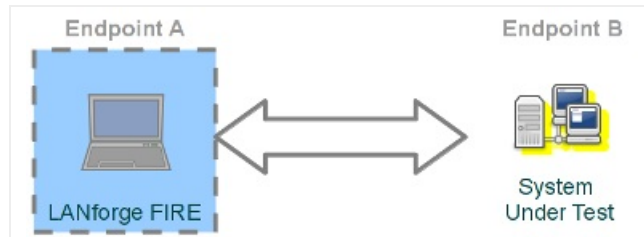


## Layer-3 UDP Traffic Generator

**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-IO 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

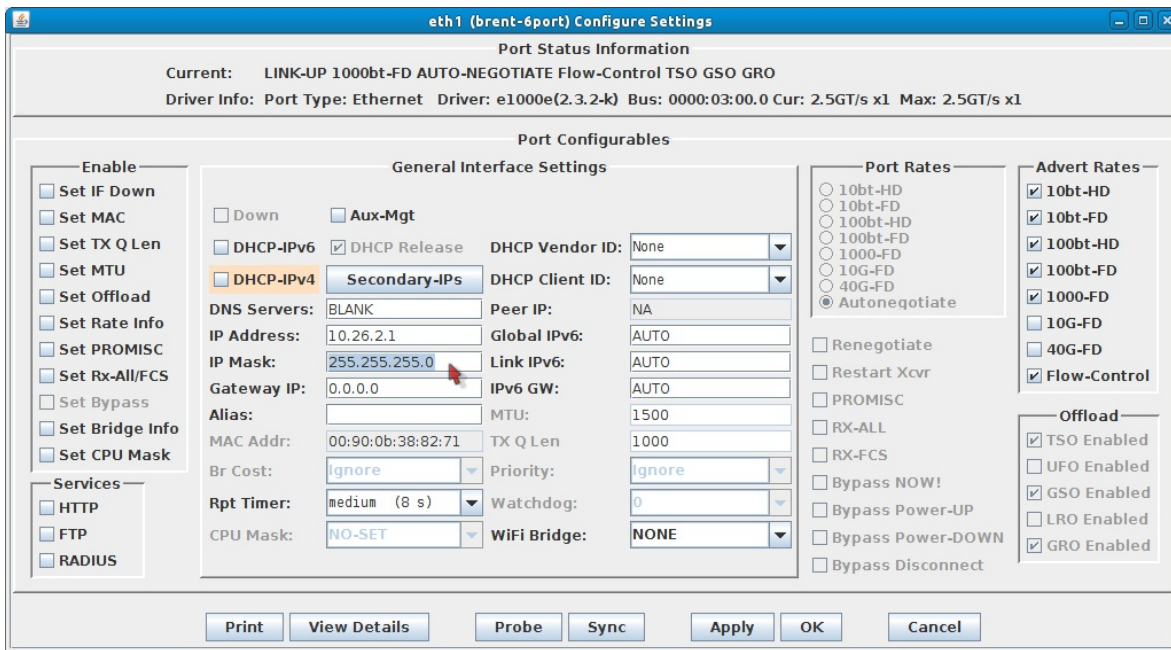
All Ethernet Interfaces (Ports) for all Resources.

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**.

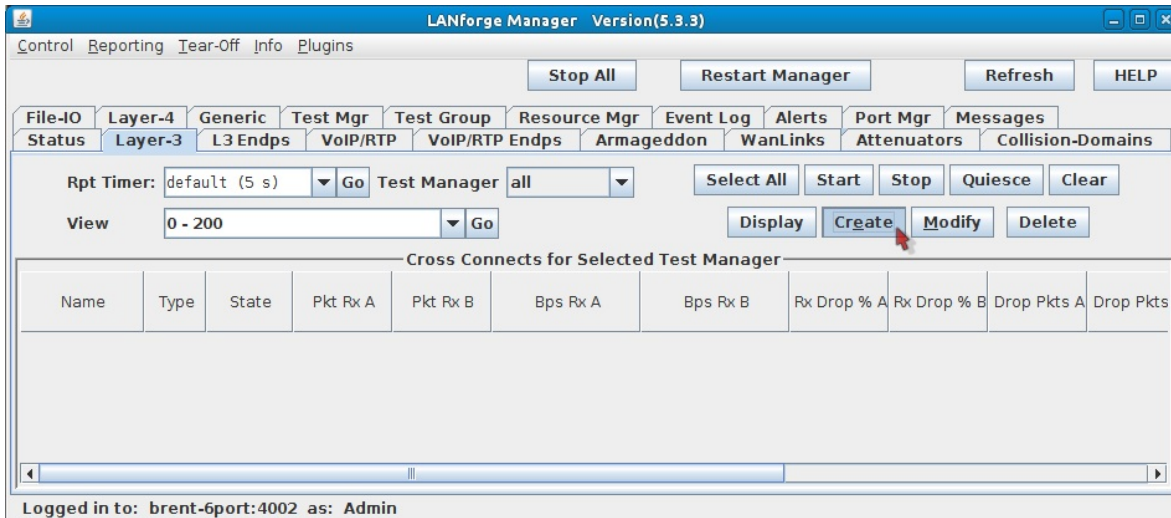
B. Assign an IP and Mask as necessary.



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 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.

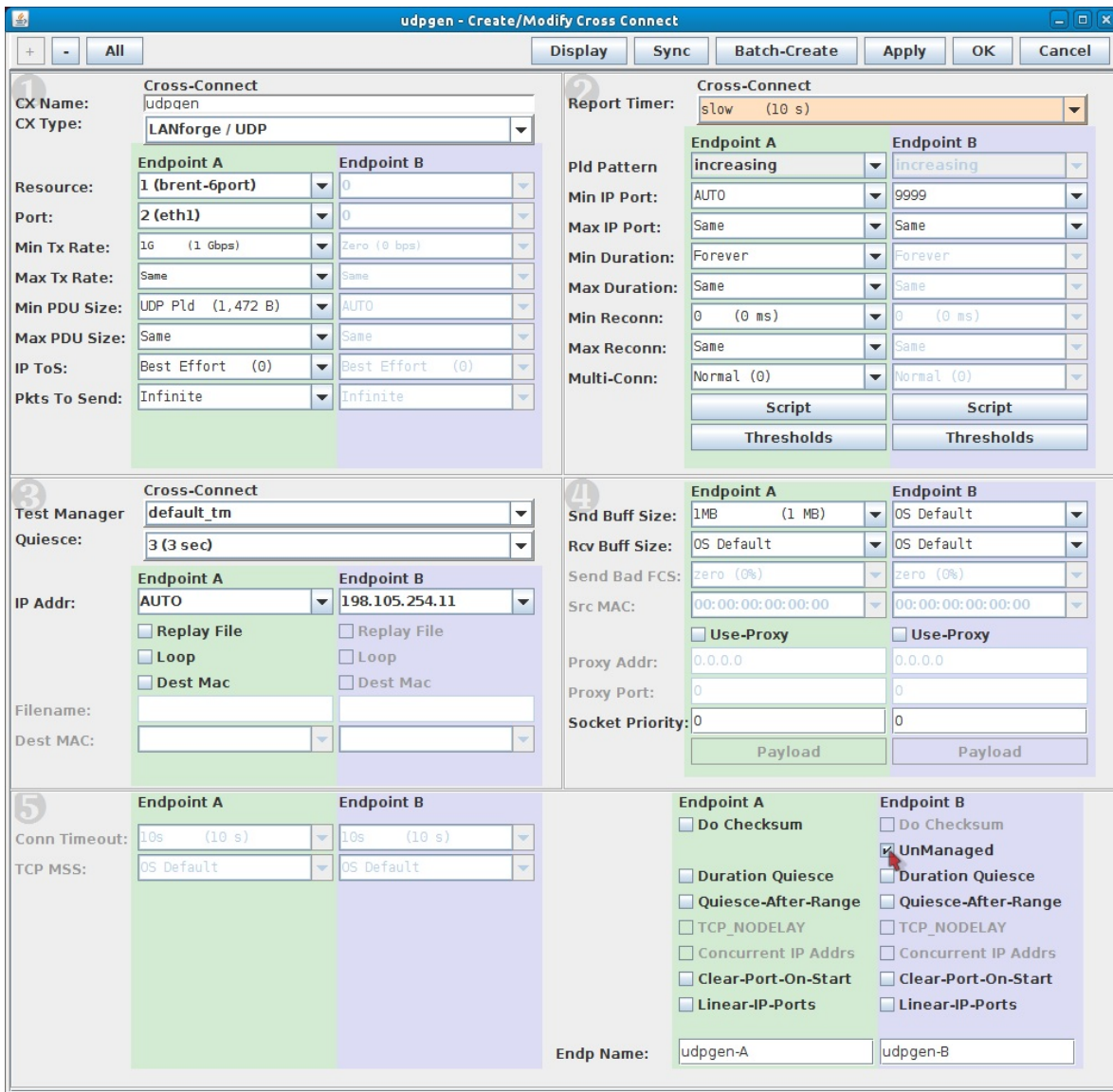
The screenshot shows the 'udpgen - Create/Modify Cross Connect' dialog box. At the top, there are buttons for '+', '-', 'All', 'Display', 'Sync', 'Batch-Create', 'Apply', 'OK', and 'Cancel'. The dialog is divided into four numbered sections:

- Section 1:** Cross-Connect. Fields include CX Name (udpqen), CX Type (LANforge / UDP), Resource (1 (brent-6port)), Port (2 (eth1)), Min Tx Rate (1G (1 Gbps)), Max Tx Rate (Same), Min PDU Size (UDP Pld (1,472 B)), Max PDU Size (Same), IP ToS (Best Effort (0)), and Pkts To Send (Infinite).
- Section 2:** Cross-Connect. Fields include Report Timer (default (5 s)), Pld Pattern (increasing), Min IP Port (AUTO), Max IP Port (Same), Min Duration (Forever), Max Duration (Same), Min Recon (0 (0 ms)), Max Recon (Same), and Multi-Conn (Normal (0)).
- Section 3:** Cross-Connect. Fields include Test Manager (default\_tm), Quiesce (3 (3 sec)), IP Addr (AUTO), and checkboxes for Replay File, Loop, and Dest Mac.
- Section 4:** Cross-Connect. Fields include Snd Buff Size (OS Default), Rcv Buff Size (OS Default), Send Bad FCS (zero (0%)), Src MAC (00:00:00:00:00:00), Proxy Addr (0.0.0.0), Proxy Port (0), and Socket Priority (0).

The bottom status bar shows 'Endpoint A' and 'Endpoint B' for each section.

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.

LANforge Manager Version(5.3.3)

Control Reporting Tear-Off Info Plugins

Stop All Restart Manager Refresh HELP

File-IO 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

Rpt Timer: default (5 s) Go Test Manager all Select All Start Stop Quiesce Clear  
View 0 - 200 Display Create Modify Delete

Cross Connects for Selected Test Manager

Name	Type	State	Pkt Rx A	Pkt Rx B	Bps Rx A	Bps Rx B	Rx Drop % A	Rx Drop % B	Drop Pkts A	Drop Pkts B
udpgen	LF/UDP	Stopped	0	0	0	0	0	0	0	0

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

- A. In the **Layer-3** tab, select the connection **udpgen**.
- B. Click **Start**.