Generating Traffic Using Armageddon

Goal: Set up and run near line-speed 1Gbps traffic using the LANforge Armageddon feature.
- For more information, see the LANforge User’s Guide: Armageddon (Accelerated UDP)

In this test scenario, LANforge Armageddon is set up to run at about 80,000 packets/second full-duplex to achieve near line-speed 1Gbps traffic generation.

Note: In order to use the LANforge Armageddon feature, your system must have the LANforge kernel patch applied and your system must be properly licensed. Please feel free to contact us at support@candelatech.com if you would like to obtain a demo license for the Armageddon feature.

1. Configure the physical interfaces.
   A. Go to the Port Manager and select ports eth2 and eth3
B. Modify ports eth2 and eth3:

A. In this example, eth2 and eth3 are physically connected with a patch cable

C. Configure each port with a valid IP address, then click OK

For more information see LANforge User's Guide: Ports (Interfaces)
2. Create the Armageddon cross-connect.
   A. On the Armageddon tab, click the Create button

   ![LANforge Manager Interface]

   B. Enter a CX Name, select ports eth2 and eth3, then enter the speed and packet size for both endpoints

   ![Create/Modify Armageddon Endpoint]

   A. For this example, 10000pps at 1514 byte packet size should generate about 121 Mbps

   B. Click OK when finished
C. Verify that the Armageddon connection is created

For more information see LANforge User's Guide: Armageddon (Accelerated UDP)

3. Run the Armageddon cross-connect and view results.
   A. Select the Armageddon connection then click Start
B. It will take a moment for the Armageddon traffic to stabilize. Depending on the hardware, LANforge will settle on an actual rate which may differ from the requested rate.

C. In this example, this system (1.8GHz intel Atom D525, 6 onboard 10/100/1000 ports) is capable of reaching 81,000pps with 1514 byte packets or, an equivalent speed of about 990-1000Mbps bi-directional.

A. NOTE: Delay for Armageddon connections is measured in microseconds (us) and in this example, the system experiences about 39us of delay when sending to itself.

For more information see **LANforge User's Guide: Armageddon (Accelerated UDP)**

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