Generating Traffic for WLAN Testing

**Goal:** Setup and run Wireless LAN traffic using the LANforge CT523 or similar system.

In this test scenario, the LANforge CT523 is used to simulate 4 virtual wireless stations that associate with a third party access point. Three traffic tests will be configured and run to demonstrate possible wireless access point tests. **NOTE:** This cookbook assumes that you have already created a VAP, and have an interface that is handing out DHCP addresses.

1. Create the virtual wireless stations.  
   **Note:** All of its virtual stations will use the same wireless AP in this example, but each station may be configured for a different AP as long as all stations on the same radio use APs on the same channel.
A. Go to the Port Manager

B. Select port wiphy0 and click Create
C. Select the **WiFi STA** button, then enter **MAC**, **Quantity**, **STA ID**, and **SSID**. Select the **DHCP-IPv4** checkbox:

D. Verify that the virtual wireless stations are created.
E. Scroll to the right to view each station's link quality and other interface details

For more information see LANforge User's Guide: Ports (Interfaces)
2. Create Layer-3 connections between the station interfaces.

   A. Go to the **Layer-3** tab and click **Create**

   ![Layer-3 connection creation interface](image1)

   B. Create a station-to-station UDP speed test:

   ![UDP speed test configuration interface](image2)

   A. **Test 1** STA STA UDP 30Mbps
C. Create a station-to-station TCP speed test:

A. Test 1: sta0-sta1, TCP, 1.54Mbps bi-directional traffic

For more information see LANforge User's Guide: Layer-3 Cross-Connects (FIRE)

3. Run traffic tests concurrently, and view results.

A. This example shows little packet loss, however being that this is traffic sent wirelessly via stations, their may be interruptions due to busy channel frequencies. If needed, adjust your Tx rate accordingly.
B. The Layer-3 Endpoints tab has more detail.

C. Select the cross-connects or endpoints and Right-Click → Dynamic Report on the L3 Endp or Layer-3 table to view a live report of the connections.

For more information see LANforge User's Guide: Layer-3 Endpoints (FIRE)
For more information see LANforge User's Guide: Reporting