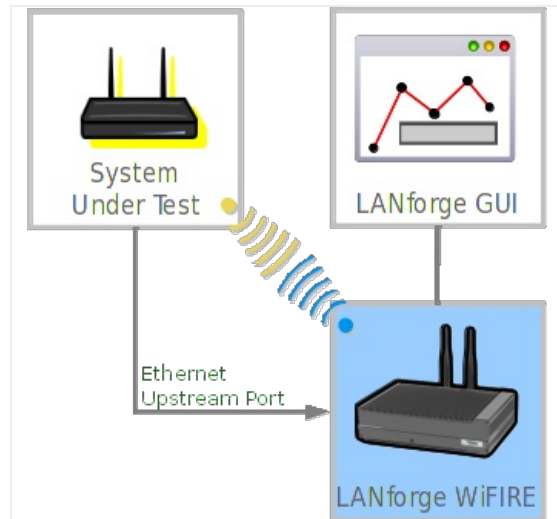


Testing Station Associate and Disassociate for a WiFi Device

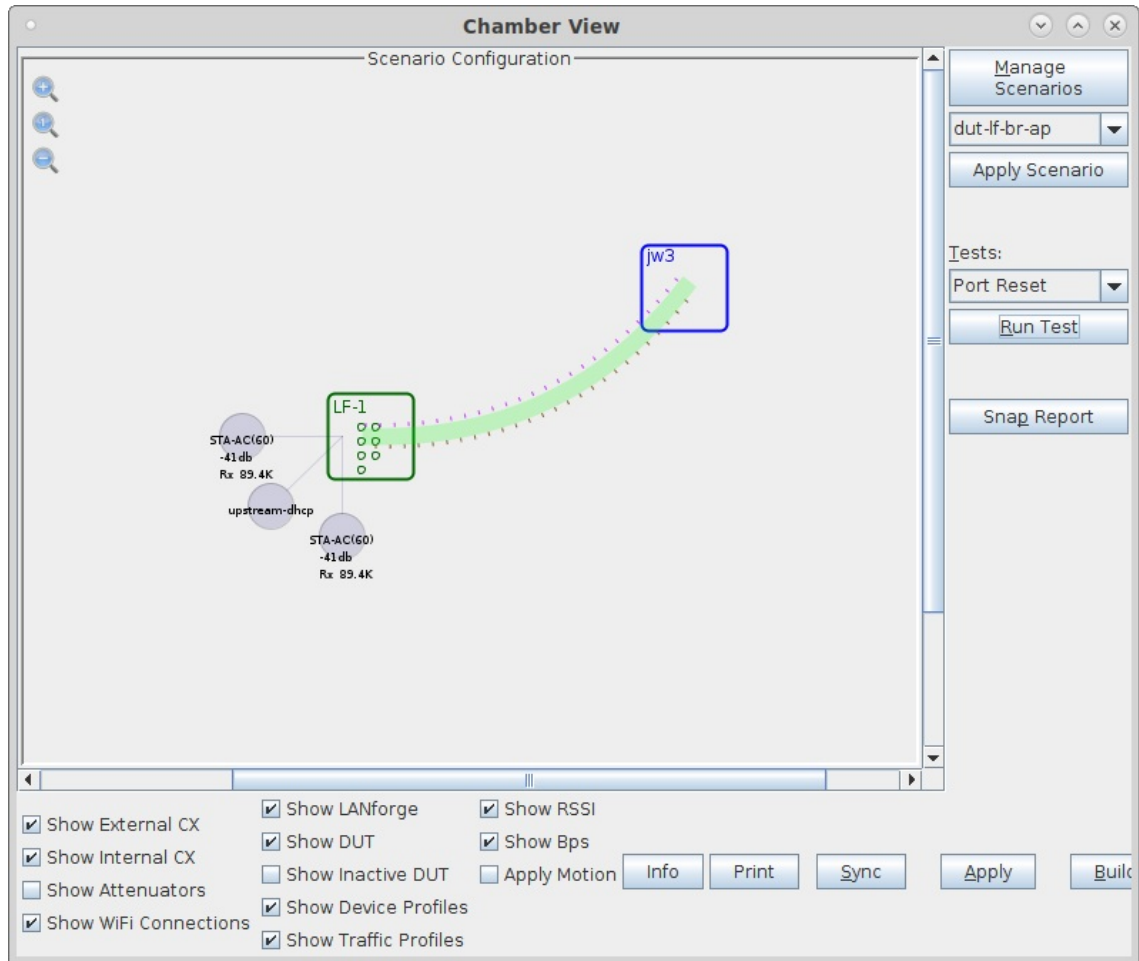
Goal: Setup and run a Port Reset test for an AP using the LANforge CT523c or similar system in order to test how well the AP can handle stations connecting and disconnecting many times. This is a good test of the AP's management plane stability.

In this test scenario, the LANforge CT522 is used to create 120 stations and then have them connect and disconnect to the AP. The test will count the number of connections and related events. This example assumes you have some experience with Chamber View, and that you have a LANforge system. A programmable attenuator and two isolation chambers would add the ability to test station reconnects at different RF signal levels, but this test normally runs fine without chambers or attenuators. This feature is in LANforge version 5.3.9 and higher.

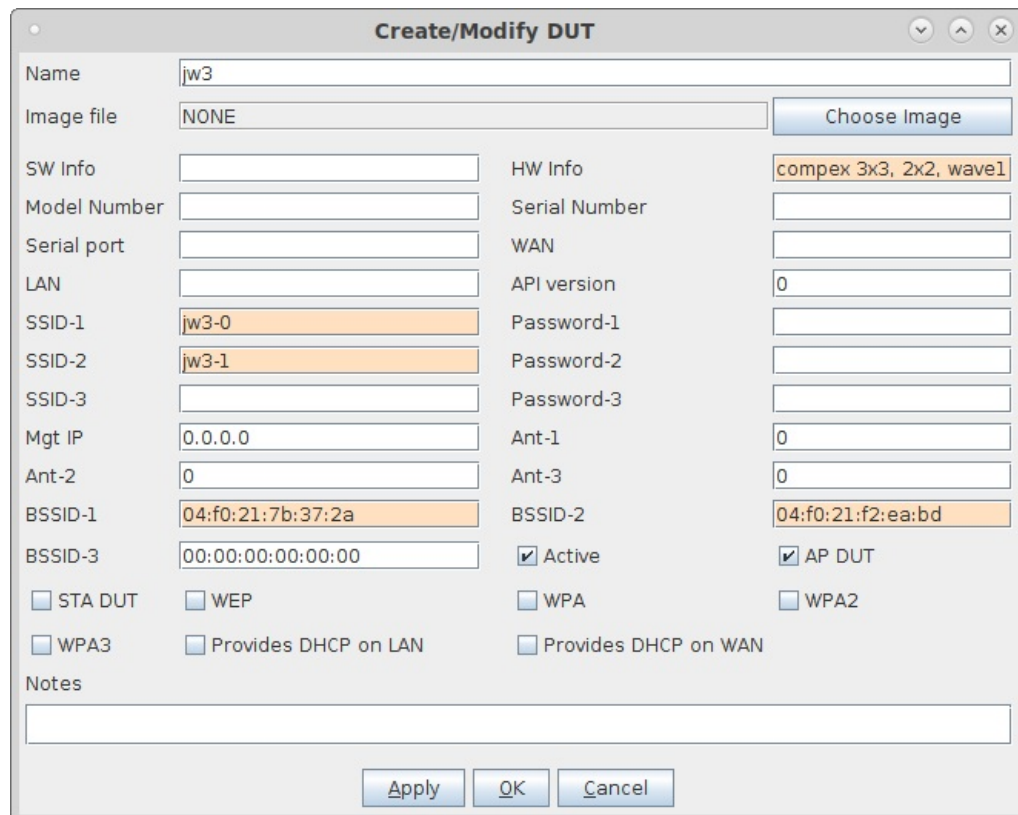


1. Configure Chamber View for Port Reset and Similar Tests.

- A. Open Chamber View by clicking on the 'Chamber View' button in the LANforge-GUI. If you have an appropriate scenario already created, then skip to the next section, otherwise you will need to build a scenario that matches your system. You can right-click in Chamber View to create various objects. If you do not have chambers or attenuators, just create the DUT object and skip the chamber setup.



- B. Create a Device Under Test (DUT) Profile that matches your AP. The BSSID is important to be configured so that LANforge knows when it is connected to the correct AP.



C. Configure an Upstream profile using eth1 on the LANforge system.

Create/Modify Profile

Name: Type:

Mode: Antennas:

Instances: Frequency:

SSID:

Pattern:

WPA WPA2 DHCP Server WEP

802.1x EAP-TTLS Restart DHCP on Connect WPA3 802.11r

Notes:

D. Configure an STA profile on the LANforge system.

Create/Modify Profile

Name: Type:

Mode: Antennas:

Instances: Frequency:

SSID:

Pattern:

WPA WPA2 DHCP Server WEP

802.1x EAP-TTLS Restart DHCP on Connect WPA3 802.11r

Notes:

E. Configure a Chamber View Scenario and add the STA profile (mapped to desired wiphyX radio and DUT). Add an upstream profile mapped to DUT LAN side (or possibly WAN side if that is more appropriate for your DUT).

Create/Modify Scenario

Scenario Name:

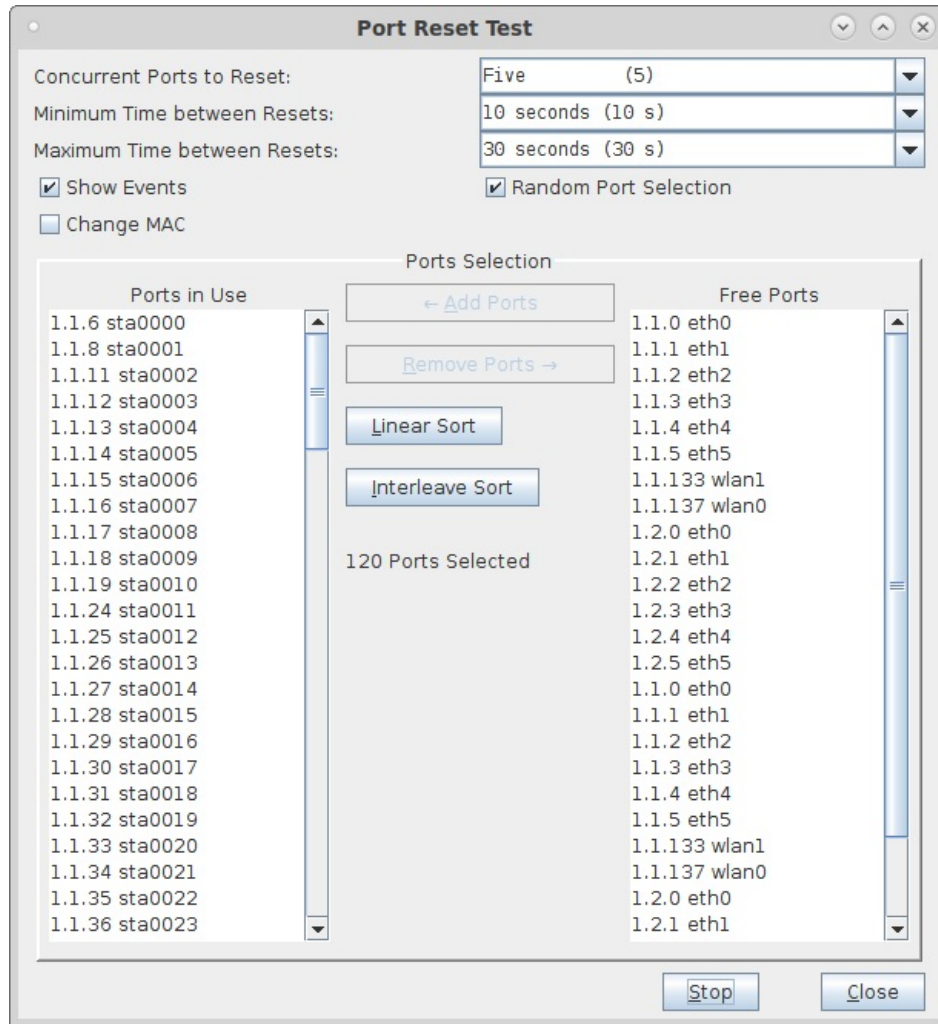
Del	Resource Profile	Mod Amount	Uses-1	Uses-2	Frequency	Maps To
<input checked="" type="checkbox"/>	1.1 STA: STA-AC	60 (60)	wiphy1	AUTO	AUTO (-1 Mhz)	DUT: jw3 Radio-1
<input checked="" type="checkbox"/>	1.1 Upstream: upstream-dhcp	1 (1)	eth1	AUTO	AUTO (-1 Mhz)	DUT: jw3 LAN
<input checked="" type="checkbox"/>	1.1 STA: STA-AC	60 (60)	wiphy0	AUTO	AUTO (-1 Mhz)	DUT: jw3 Radio-2

2. Use Chamber View to run a Port Reset test.

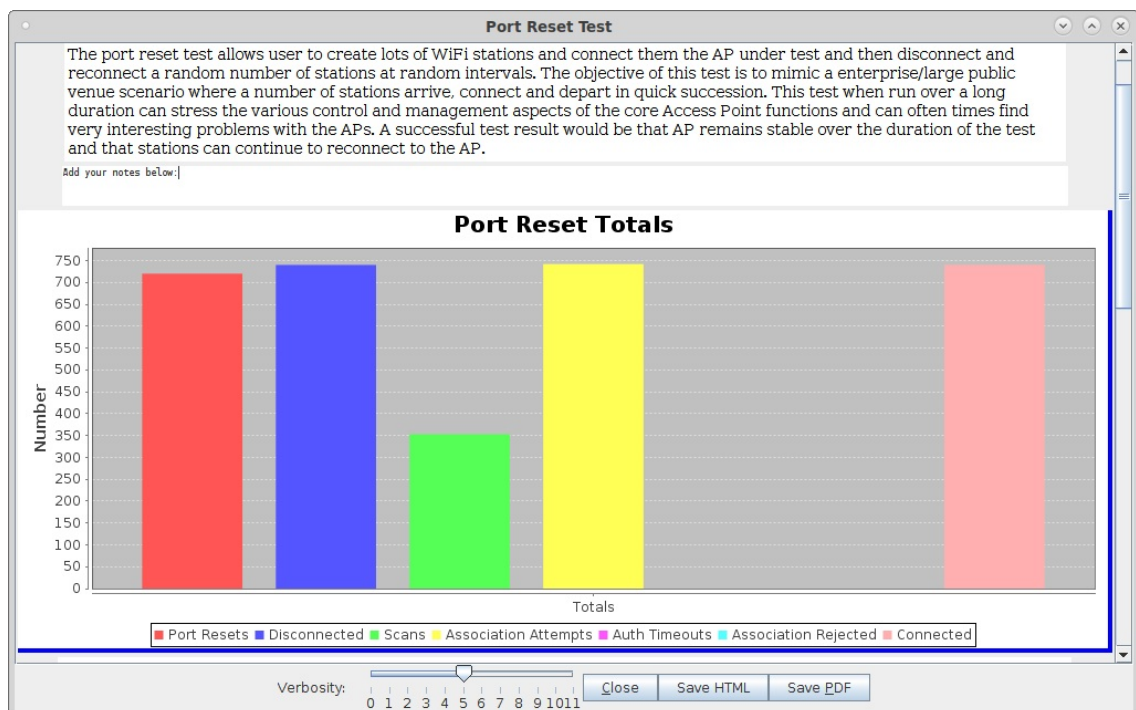
- A. Open Chamber View by clicking on the 'Chamber View' button in the LANforge-GUI. Load appropriate scenario or create a new scenario as needed. Apply the Scenario, then Build the scenario.

The screenshot displays the 'Chamber View' window in LANforge-GUI. The main area shows a network diagram with a central 'LF-1' device (a green box with four small circles) connected to two 'STA-AC(60)' devices (purple circles) via an 'upstream-dhcp' node. A green curved line with small purple dots connects 'LF-1' to a 'jw3' device (a blue box). The diagram is titled 'Scenario Configuration'. On the right side, there is a control panel with buttons for 'Manage Scenarios', 'Apply Scenario', 'Run Test', and 'Snap Report'. Below these are dropdown menus for 'dut-lf-br-ap' and 'Tests: Port Reset'. At the bottom, there is a settings section with checkboxes for 'Show External CX', 'Show Internal CX', 'Show Attenuators', 'Show WiFi Connections', 'Show LANforge', 'Show DUT', 'Show Inactive DUT', 'Show Device Profiles', 'Show Traffic Profiles', 'Show RSSI', 'Show Bps', and 'Apply Motion'. There are also buttons for 'Info', 'Print', 'Sync', 'Apply', and 'Build'.

- B. Select the **Port Reset** test and click **Run Test**. You will see the Port Reset Test configuration window pop up. By default, all of the stations will be selected to use in the reset test. You may adjust the selection at this time. If you want each station to act like a new device when it resets, select the 'Change MAC' checkbox. Make any other configuration changes:



- C. When the configuration is complete, click the **Start** button (which will change to 'Stop' once start is clicked) to start the test. An interactive report window will be created and will be updated as the test runs.



- D. When the test is complete, click the **Save HTML** button to save an HTML report and generate the PDF. The PDF file will be linked from the HTML page. You can also click 'Save PDF' and the browser will be directed to open the pdf file directly. Please see this [example Rate vs Range Report](#)

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