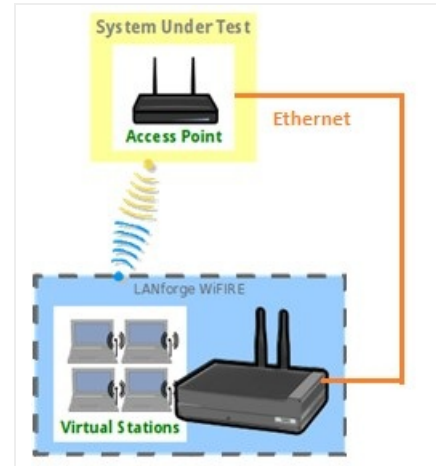


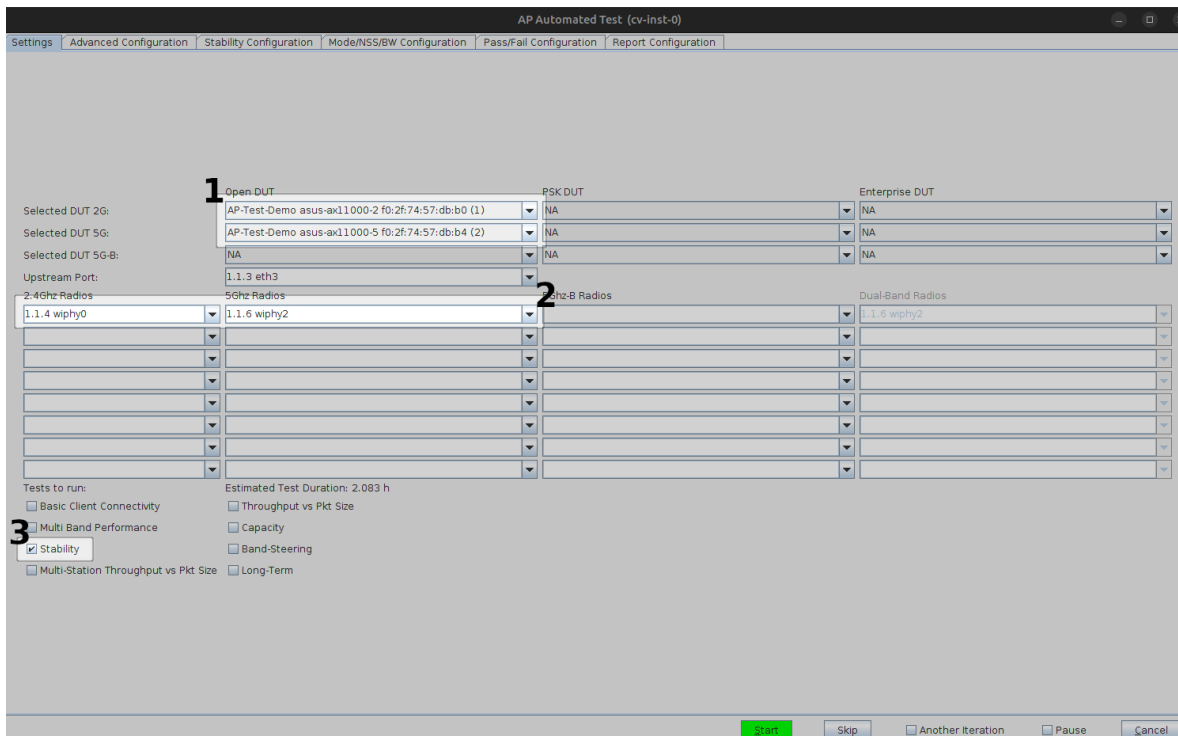
## Testing AP Stability with the AP-Auto Automated Test Suite

**Goal:** Run an AP-Auto test for an AP using the LANforge CT523c or similar system in order to test how well the AP can handle station stability. The AP-Auto test is similar to the TR-398 test, but is designed to be functional with a minimum amount of test equipment. A 2-radio LANforge system and DUT is all that is required to run these tests.

In this test scenario, the LANforge CT523 is used to create stations and run the Stability test. This example assumes you have some experience with Chamber View, and that you have a LANforge system and a DUT AP. The AP and LANforge may be in chambers, but that is not required. This feature requires LANforge version 5.4.2 or higher.



1. If you haven't setup or performed AP-Auto tests on your LANforge system, please refer to the [AP-Auto Test Suite Setup](#) guide for quick setup.
2. Running the AP-Auto Stability Test:
  - A. Open the *AP-Auto Test* window.



B. In the AP-Auto *Settings* Tab:

- A. Select the **DUT 2G** and **DUT 5G** SSIDs. This test requires that Open or PSK SSIDs are filled out.
- B. Select the LANforge radios to be used in this test. You need at least one 2.4Ghz radio and one 5Ghz radio for full functionality.
- C. At the bottom, select the **Stability** test checkbox.

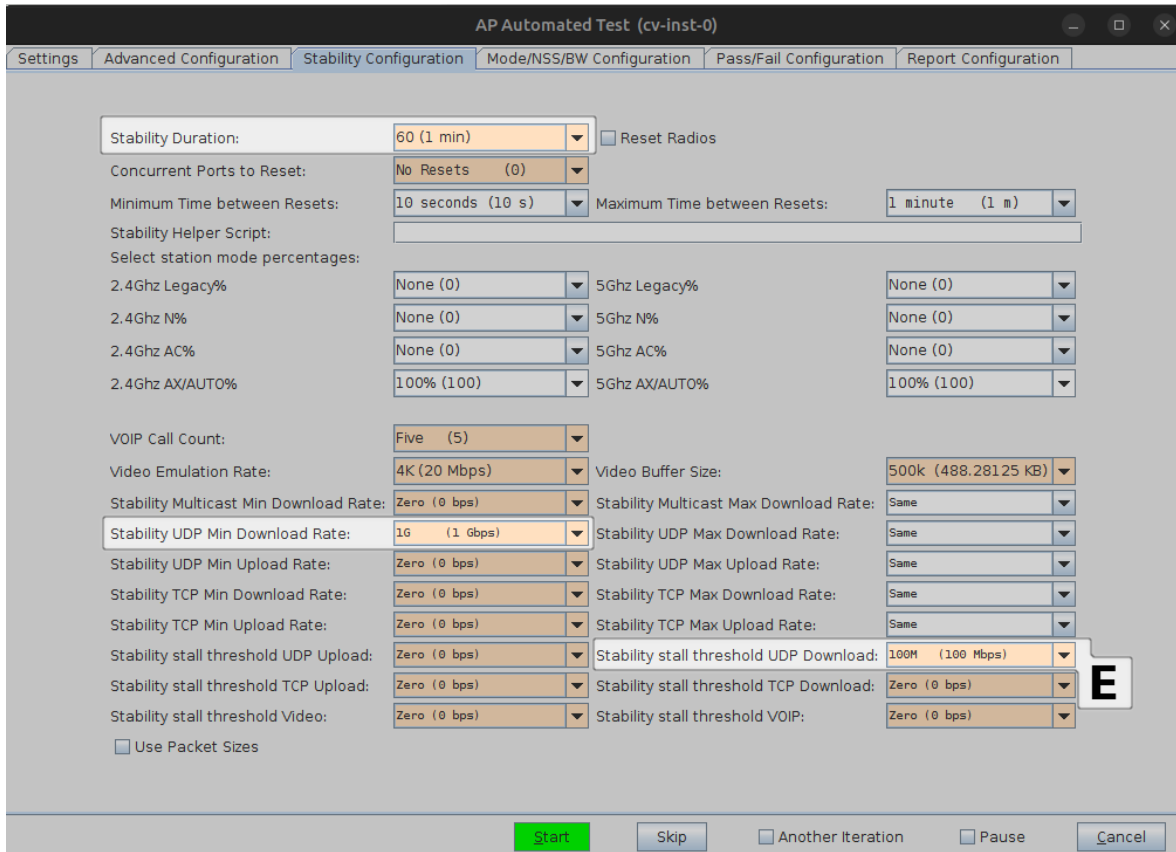
C. Your *Advanced Configuration* tab should look similar to the following:

The screenshot shows the 'AP Automated Test (cv-inst-0)' window with the 'Advanced Configuration' tab active. The interface includes several configuration sections:

- Buttons:** Show Config, Import Config, Save, Load, Delete.
- Configuration Fields:** DEFAULT, DEFAULT, DEFAULT, DEFAULT, Best Effort (0), Multi-Conn: One (1), Auto-Helper (checked), One (1), Skip 2.4Ghz Tests, Skip 5Ghz Tests, Skip Dual-Band Tests (checked), Skip 5Ghz-B Tests, Skip Tri-Band Tests, Use BSSID (checked), Set Radio TxPower to Default (checked).
- Station Counts:** Loop Iterations: Single (1), 2.4Ghz Station Count: 5 (5), 5Ghz Station Count: 10 (10), Dual-Band Station Count: 10 (10), 5Ghz-B Station Count: Default (64), Tri-Band Station Count: Default (64).
- Duration and Rates:** Duration: Default (20 sec), Long-Term Download Rate: 85%, Long-Term Upload Rate: 85%, Long-Term Duration: 3600 (1 hr), Long-Term Graph Interval: 30 (30 sec), Long-Term Station Count: Two (Default) (2).
- Other Settings:** Hunt Retries: Default (1), Maximum Hunt Iterations: 100, Packet Loss Threshold: 1% (1%), Frame Sizes: MTU, Capacity Amounts (stations): 5, 15.
- Multi-Station Throughput Options:** UDP (unchecked), TCP (checked), Download (checked), Upload (unchecked).

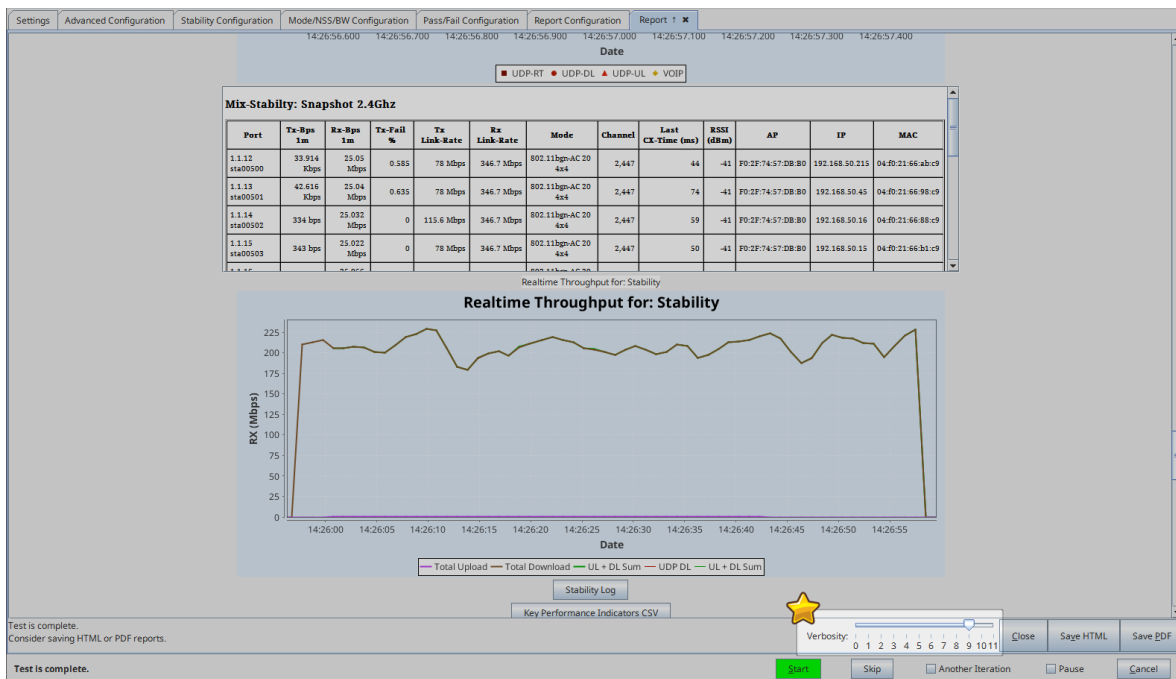
At the bottom, there are buttons for Start (highlighted in green), Skip, Another Iteration, Pause, and Cancel.

- D. Most of the settings for the Stability test are located in the *Stability Configuration* tab. Below is an example configuration for running a UDP Download Stability test for 60 seconds.



- E. Note that the value chosen in the *Stability stall threshold UDP Download* field will directly impact the Pass/Fail outcome of the test. Decreasing this threshold will increase the likelihood of a PASS result, and increasing it will have the inverse effect.

- F. 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 tab will be created and will be updated as the test runs.



- G. You can change the test result verbosity level by adjusting the **Verbosity** slider. Maximizing it will show all generated figures and data. The verbosity level also affects the length of the saved report.

H. At the end of the test, 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 AP-Auto Mix Stability Report](#).

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