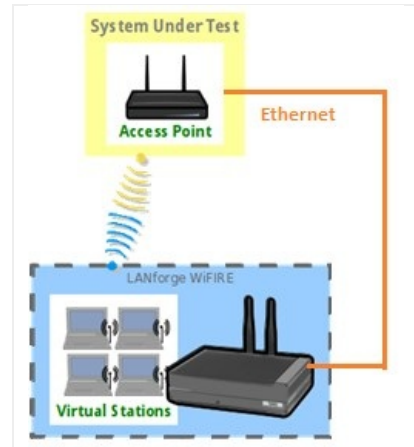


Testing AP Long-Term Performance with the AP-Auto Automated Test Suite

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 long-term traffic. 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 Long-Term 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 Long-Term 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 **Long-Term** 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 selected. The interface includes several tabs at the top: Settings, Advanced Configuration, Stability Configuration, Mode/NSS/BW Configuration, Pass/Fail Configuration, and Report Configuration. Below the tabs, there are buttons for 'Show Config', 'Import Config', 'Save', 'Load', and 'Delete'. The 'Save' button is highlighted. The 'Load' button is disabled. The 'Delete' button is disabled. The 'Import Config' dropdown menu is set to 'DEFAULT'. The 'IP ToS' is set to 'Best Effort (0)'. The 'Multi-Conn' is set to 'One (1)'. The 'Auto-Helper' checkbox is checked. The 'Skip 2.4Ghz Tests' checkbox is unchecked. The 'Skip 5Ghz Tests' checkbox is unchecked. The 'Skip Dual-Band Tests' checkbox is checked. The 'Skip 5Ghz-B Tests' checkbox is checked. The 'Skip Tri-Band Tests' checkbox is checked. The 'Use BSSID' checkbox is checked. The 'Set Radio TxPower to Default' checkbox is checked. The 'Loop Iterations' dropdown menu is set to 'Single (1)'. The '2.4Ghz Station Count' dropdown menu is set to '16'. The '5Ghz Station Count' dropdown menu is set to '16'. The 'Dual-Band Station Count' dropdown menu is set to '4'. The '5Ghz-B Station Count' dropdown menu is set to '16'. The 'Tri-Band Station Count' dropdown menu is set to 'Default (64)'. The 'Duration' dropdown menu is set to 'Default (20 sec)'. The 'Long-Term Download Rate' dropdown menu is set to '85%'. The 'Long-Term Upload Rate' dropdown menu is set to '85%'. The 'Long-Term Duration' dropdown menu is set to '6h'. The 'Long-Term Graph Interval' dropdown menu is set to '30 (30 sec)'. The 'Long-Term Station Count' dropdown menu is set to 'Small (32)'. The 'Hunt Retries' dropdown menu is set to 'Default (1)'. The 'Maximum Hunt Iterations' dropdown menu is set to '100'. The 'Packet Loss Threshold' dropdown menu is set to '1% (1%)'. The 'Frame Sizes' text field contains '64, 128, 256, 512, 1024, MTU'. The 'Capacity Amounts (stations)' text field contains '1, 5, 10, 20, 32'. The 'Multi-Station Throughput Options' section has checkboxes for 'UDP', 'TCP', 'Download', and 'Upload'. The 'TCP' checkbox is checked. The 'Download' checkbox is checked. The 'UDP' checkbox is unchecked. The 'Upload' checkbox is unchecked. At the bottom, there is a status bar that says 'Test is complete.' and buttons for 'Start', 'Skip', 'Another Iteration', 'Pause', and 'Cancel'. The 'Start' button is highlighted.

D Long-Term Download Rate: 85% Long-Term Upload Rate: 85%
Long-Term Duration: 6h Long-Term Graph Interval: 30 (30 sec)
Long-Term Station Count: Small (32)

D. Highlighted are the Long-Term test settings. Note, stations are brought up on multiple bands concurrently in this test and so the **Long-Term Station Count** value will determine the sum total of stations across all bands.

- E. 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.



- F. 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.
- G. 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 Long-Term Report](#).