

Youtube Streaming Test

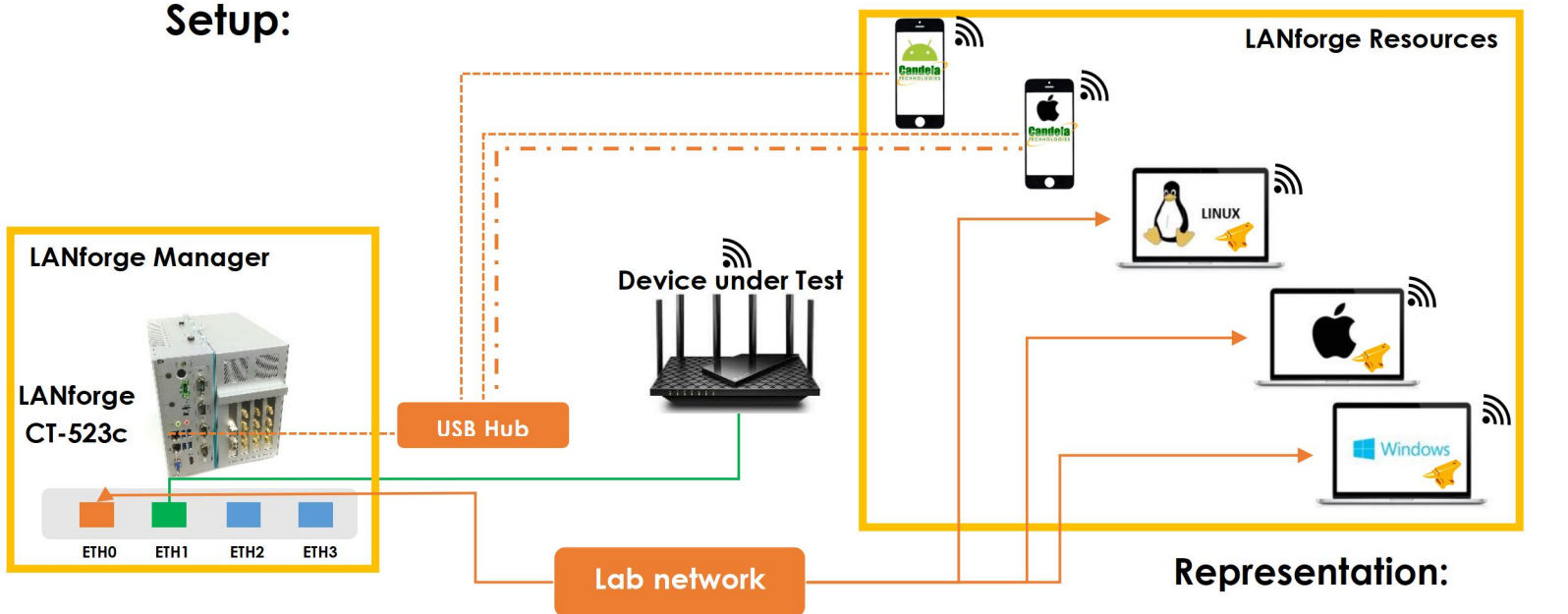
Goal:

Setup and run a Youtube test for an Access Point using [LANforge CT523c](#) or similar system and real devices clustered to Candela Box, in order to test how well the AP can handle different OS Platforms.

Purpose:

In this test scenario, the LANforge CT523c uses the traffic port to run the YouTube test over Wi-Fi on all associated real clients. It successfully collects statistics from the devices and generates graphs, csv files, and reports. LANforge executes the test across all real clients and continues running it until the specified test duration is completed. Chambers and attenuators are not required for this test; however, running it inside isolation chambers typically provides more stable and reliable results. This feature is supported in LANforge version 5.4.9 and later.

Setup:



Representation:

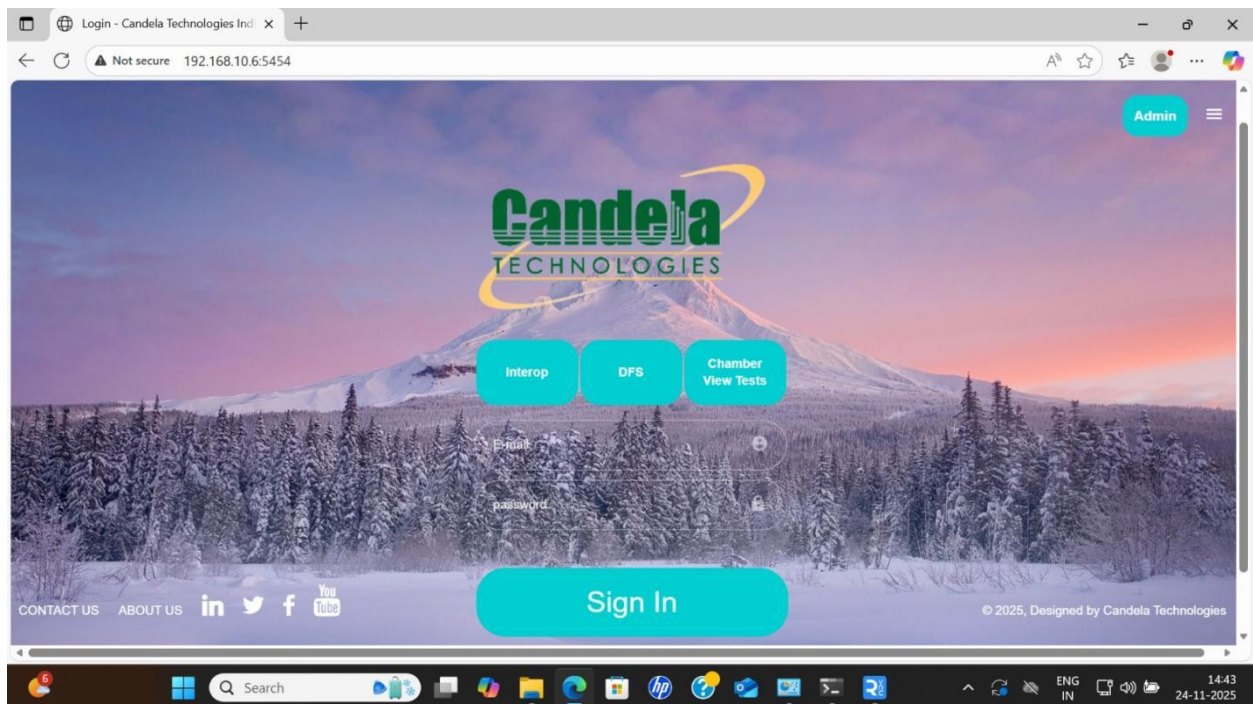
- Ethernet cable
- USB cable
- Bluetooth connection
- Wi-Fi Connection
- LANforge Interop
- LANforge

Pre-requisites:

1. Interop and Web GUI license.
2. Web GUI software installation.

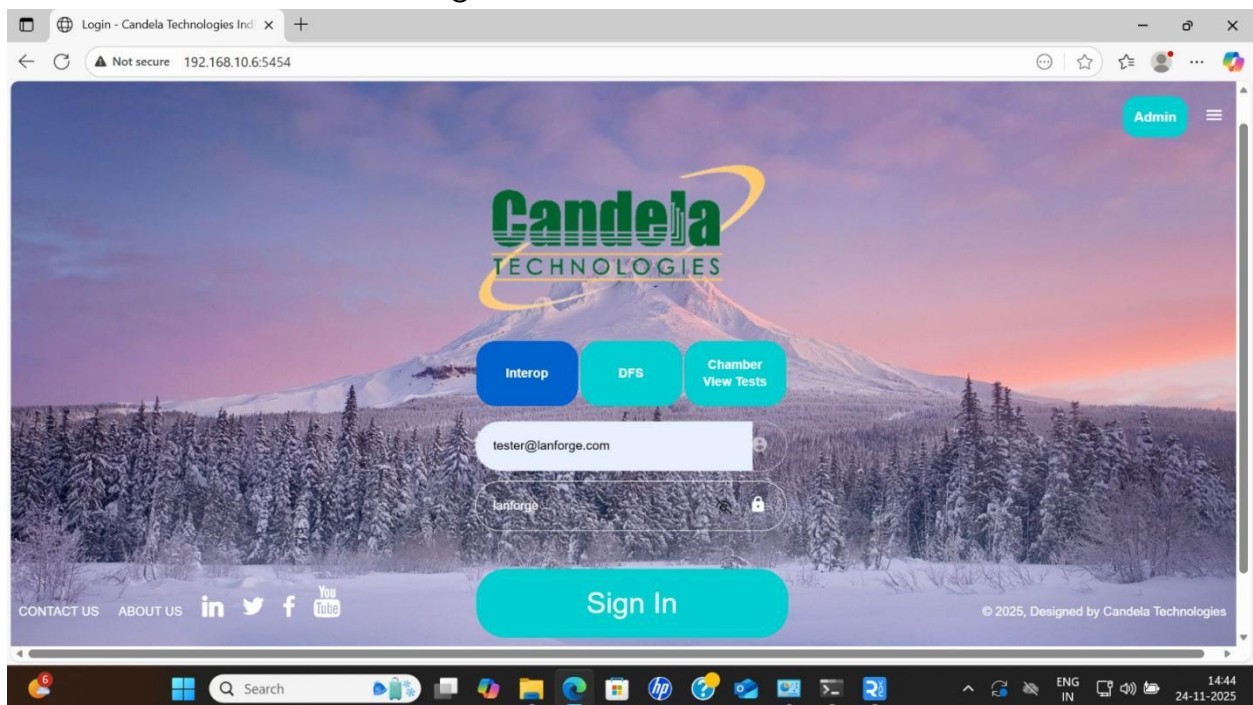
Testcase:


Step 1: Open Chrome and enter the LANforge Manager's IP address followed by port 5454 in the address bar. This will open the Web GUI Login Page as shown below.



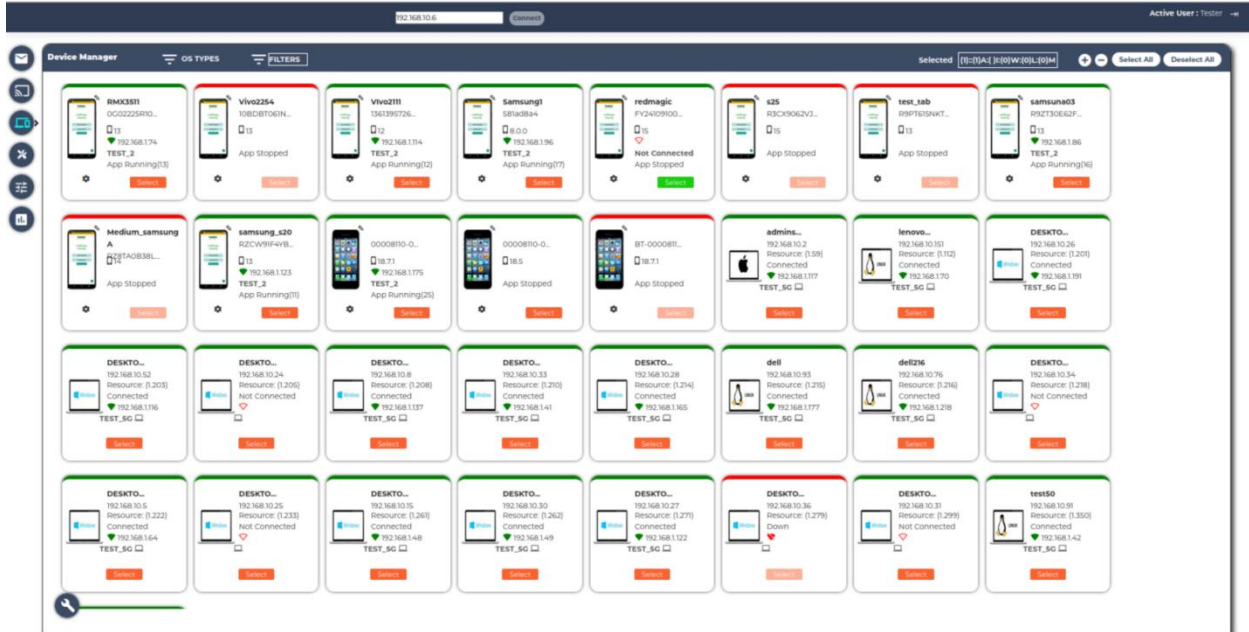
Step 2: Select Interop and enter login credentials to sign in.


- Username: tester@lanforge.com
- Password: lanforge

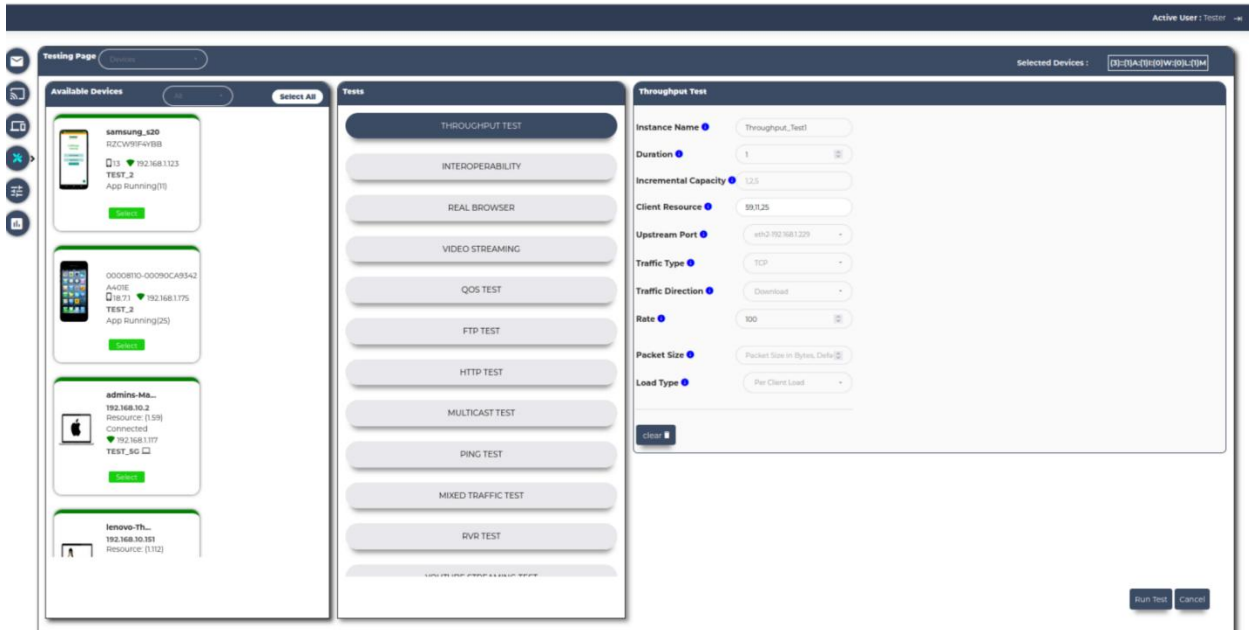


Step 3: After logging into the WebGUI, the user should enter the LANforge Device Manager's IP address and select *Connect*. The  Device Manager page will then be displayed, showing all real devices connected to the Candela Box. This view includes devices across multiple operating systems, such as Android, iOS, Windows, Linux and MacOS

Note: Real Devices must be clustered using [Interop Cookbooks](#) and have a unique hostname to appear in Device Manager.



Step 4: After reviewing the connected devices, the user should navigate to the  Testing page. In Testing Page, select the required devices in the *Available Devices* pane, choose *Youtube Streaming Test* from the *Tests* pane, enter the necessary test parameters, and then click *Run Test* to begin the Youtube Test.



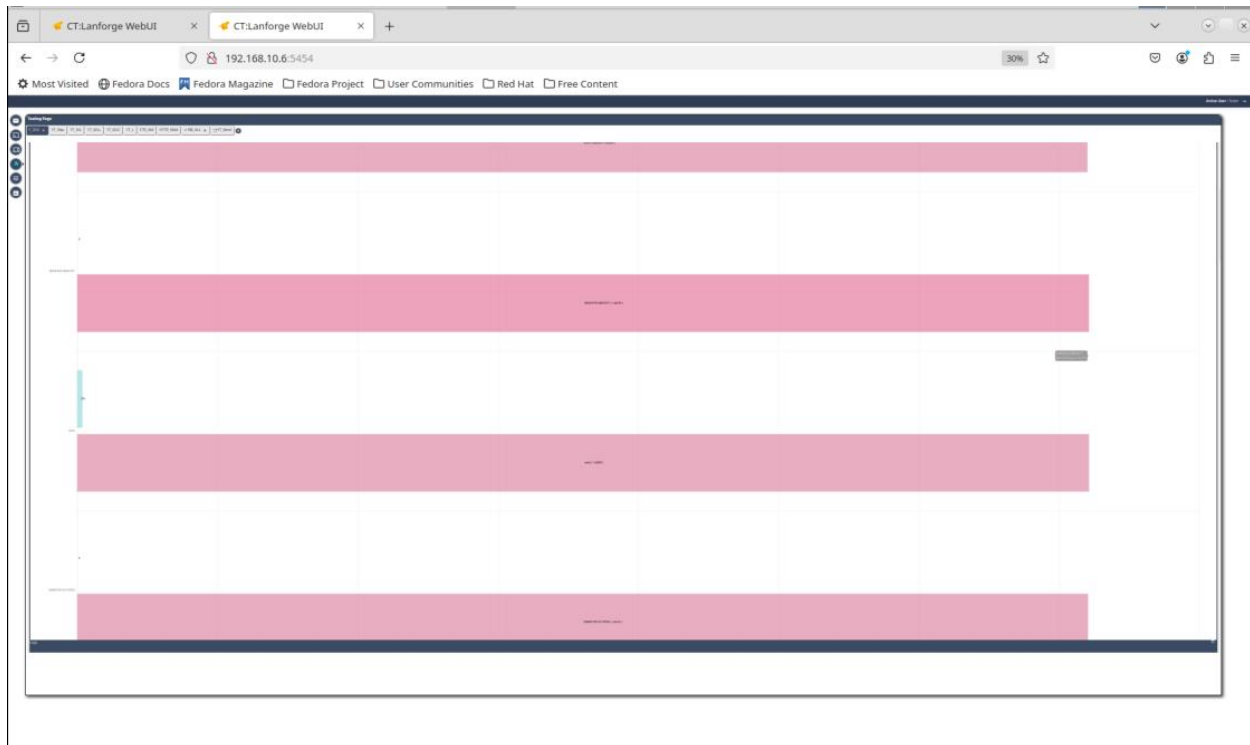
Youtube Video Streaming Test Parameters

- a. **Instance name*** - Specifies the custom name for the test. The instance name must begin with an alphabet.
Example: YT_Test
Special characters and numbers cannot be used at the beginning of the instance name. Each test must have a unique instance name.
- b. **Duration*** - Defines the total time for which the youtube test will run.
Ex: 5 [in min]
Time is measured in minutes.
Resources# - Automatically populated with the Resource IDs of the selected devices.
Ex: 203,208
- c. **Upstream port*** - Indicates the AP's wired connection to the LANforge Ethernet interface used to generate and run traffic.
Ex: eth2-192.168.1.229
- d. **Resolution*** - The video quality level selected for playback, which determines the clarity of the video.
Ex: 720p
- e. **URL*** - YouTube video's link used for streaming video throughout the test.
Ex: <https://youtu.be/JxzYR2scuqE?si=iOFFtYc0kSSyCfOe>

* - Compulsory, # - Automatically filled

Step 5: After clicking *Run Test*, an instance will be created using the specified test name. During the test execution, the user can monitor the real-time throughput graph, review logs in the Log Viewer, and observe the configured test parameters. Once the test has completed, the user should generate the PDF report from the *Testing* page and save it to the desired directory.

Note: When the test is initiated, the Generic endpoints are created in LANforge Manager. After the Test completion detailed PDF report, along with CSV data captured at each timestamp, is saved in the *webgui_reports* folder located under the *home/lanforge/* directory on the LANforge Manager.



Sample PDF Report:

https://www.candelatech.com/examples/interop/youtube_streaming.pdf