
# WEBPAGE DOWNLOAD TEST

**PREPARED FOR**

Netgear

**PREPARED BY**

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# EXECUTIVE SUMMARY

The Webpage Download Test is designed to check the performance of the wireless Access Point. This test basically reports and verifies that the webpage loading time meets the expectation when 40 Clients connected on 5GHZ , 40 Clients connected on 2.4 GHZ  and 40 Clients distributed on 2.4GHZ and 5 GHZ simultaneously.

# 1. Project Overview

This test basically reports and verifies that the webpage loading time meets the expectation when 40 Clients connected on 5GHZ , 40 Clients connected on 2.4 GHZ  and 40 Clients distributed on 2.4GHZ and 5 GHZ simultaneously.

pass / fail criteria - states that average time taken by

5Ghz < 60 sec -- PASS

2.4Ghz < 90 secs -- PASS

Both < 50 secs -- PASS

**Note:**

Here we are running the script using LANforge local web server called nginix for downloading the webpage when AP does not have internet.

# 2. How to use Script ?

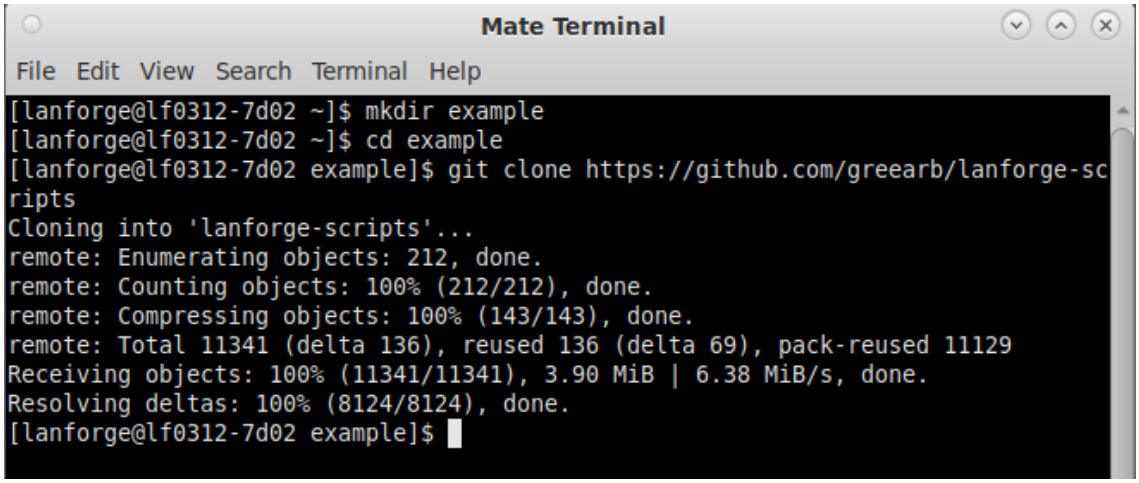
1. Create a directory to your LANforge

   Eg - mkdir example

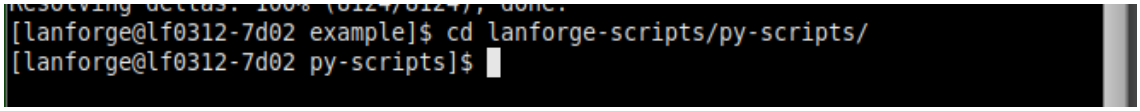
2. Change the directory

   ~ cd example

3. Git clone the LANforge scripts from - [https://github.com/greearb/lanforge-scripts](https://github.com/greearb/lanforge-scripts)



4. Go to the directory where you need to execute your lf_webpage.py




5. If lf_webpage.py is not present in py-scripts you need to copy the file to the

   Directory - vim lf_webpage.py

   ~paste the code

   ~ then save and exit

6. If webpage_report.py not present in py-scripts you need to copy webpage_report.py there for report generation - follow same as above
7. Configure ethernet port to nginx
8. **Cli to run** :-

   Eg - sudo python3 **lf_webpage.py** **--mgr** localhost **--upstream_port** eth1 **--num_stations** 40 **--security** open **--ssid** TestAP **--passwd** [BLANK] **--target_per_ten** 1 **--url** 192.168.209.45/webpage.html **--file_size** 20Mb **--bands** 5G

   Here

   **--mgr** - means LANforge ip if you are running inside LANforge just give localhost

   **--upstream_port** - the ethernet port i am using eth1

   **--num_stations -** number of stations you want to connect default 40

   **--security -** security type (open/wpa/wpa2..etc)

   **--ssid -** ssid to connect to AP

   **--passwd -** keyphrase for security

   **--target_per_ten -** number of url you want to fetch per ten min (LANforge specific)

   Provide 1

   **--url -** This is specific to ethernet ip and the file name as we are downloading from nginx web server. Eg - my eth1 port has ip 192.168.209.45 and file name as webpage.html so url will be 192.168.209.45/webpage.html

   **--file_size -** specify the size of your webpage eg - 20Mb

**--bands -** specify which band you want to test on like 5G/2.4G/Both by default it has

['5G', '2.4G', 'Both']

For example you want to use two bands then the order is always like

5G 2.4G

5G Both

2.4G Both

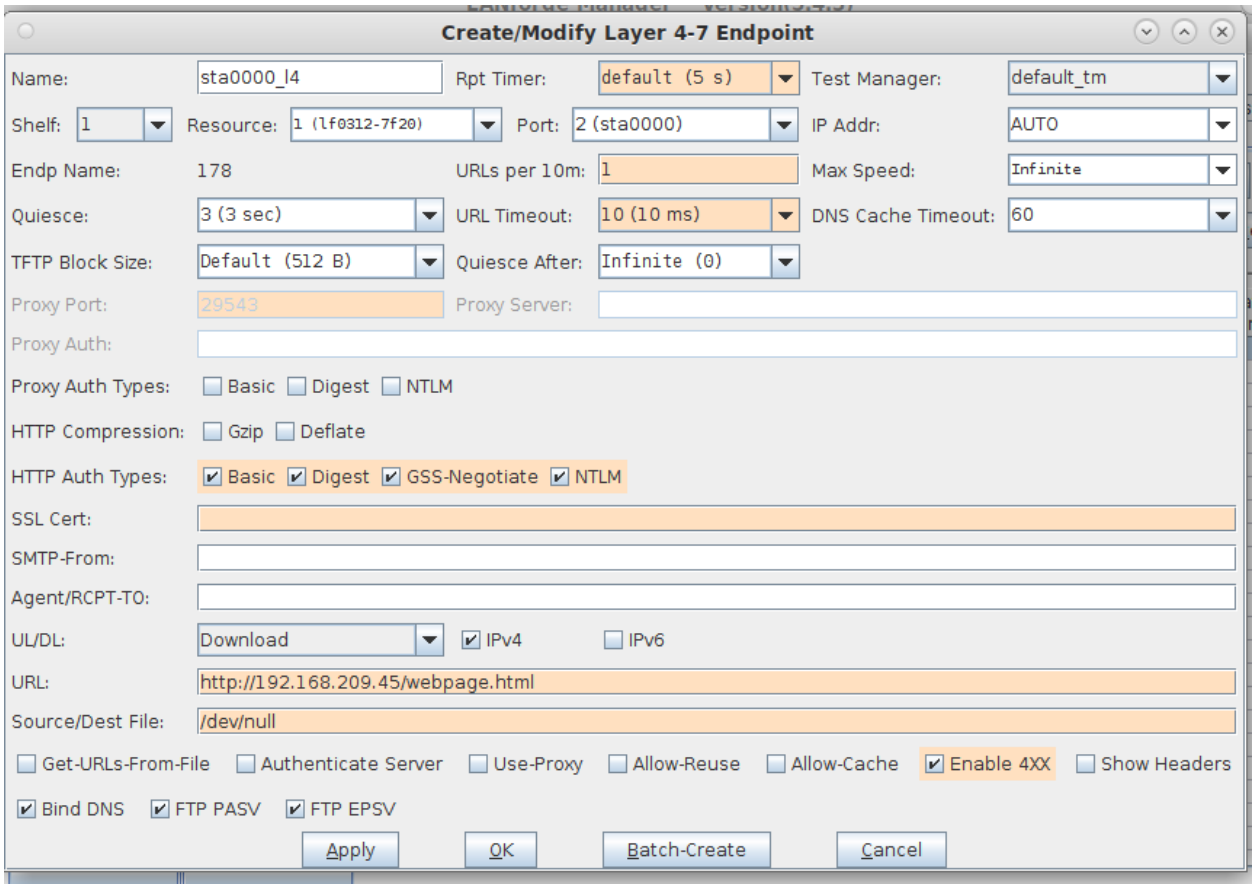
If you will give 2.4G 5G it will give error please avoid this sequence.

**--ap_ip -** specify the ip of AP

**--user-** specify user for AP as root

**--pswd-** credential password

9- Screenshot of layer4 after run



10- After execution of script results can be seen on the html-reports directory

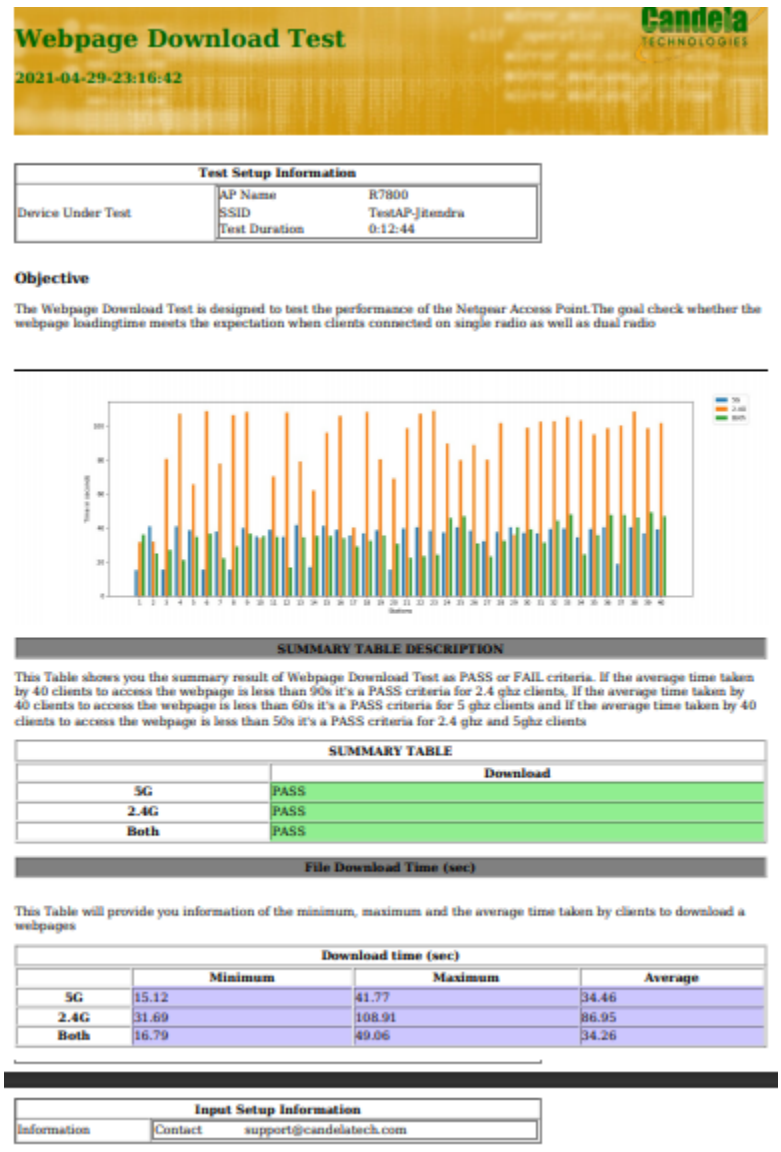
`~ /home/lanforge/html-reports

Log files can be seen in webpage_log folder

Pdf report and html reports can be found inside webpage folder as per execution date

# 3. Results

Sample report screenshot is as follows:-



**Webpage Download Test**

2021-04-29-23:16:42

Candela TECHNOLOGIES

| Test Setup Information | | |
|---|---|---|
| Device Under Test | AP Name | R7800 |
| | SSID | TestAP-Jitendra |
| | Test Duration | 0:12:44 |

**Objective**

The Webpage Download Test is designed to test the performance of the Netgear Access Point.The goal check whether the webpage loadingtime meets the expectation when clients connected on single radio as well as dual radio

**SUMMARY TABLE DESCRIPTION**

This Table shows you the summary result of Webpage Download Test as PASS or FAIL criteria. If the average time taken by 40 clients to access the webpage is less than 90s it's a PASS criteria for 2.4 ghz clients, If the average time taken by 40 clients to access the webpage is less than 60s it's a PASS criteria for 5 ghz clients and If the average time taken by 40 clients to access the webpage is less than 50s it's a PASS criteria for 2.4 ghz and 5ghz clients

| SUMMARY TABLE | |
|---|---|
| | Download |
| 5G | PASS |
| 2.4G | PASS |
| Both | PASS |

**File Download Time (sec)**

This Table will provide you information of the minimum, maximum and the average time taken by clients to download a webpages

| Download time (sec) | | | |
|---|---|---|---|
| | Minimum | Maximum | Average |
| 5G | 15.12 | 41.77 | 34.46 |
| 2.4G | 31.69 | 108.91 | 86.95 |
| Both | 16.79 | 49.06 | 34.26 |

| Input Setup Information | | |
|---|---|---|
| Information | Contact | support@candelatech.com |

# 4. Contact

Visit - https://www.candelatech.com/

For any support related help contact - support@candelatech.com