FTP Test

PREPARED FOR Netgear

PREPARED BY

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EXECUTIVE SUMMARY

This FTP test is used *"*Verify that Number of connected clients on Specified band and can simultaneously download/upload some amount of file from FTP server and measuring the time taken by client to download/upload the file.*"*

User will give pass/fail time for this test. If all clients are able to Download/ Upload within threshold time then test will pass otherwise fail. FTP test will give individual client (Download/Upload) time in seconds.
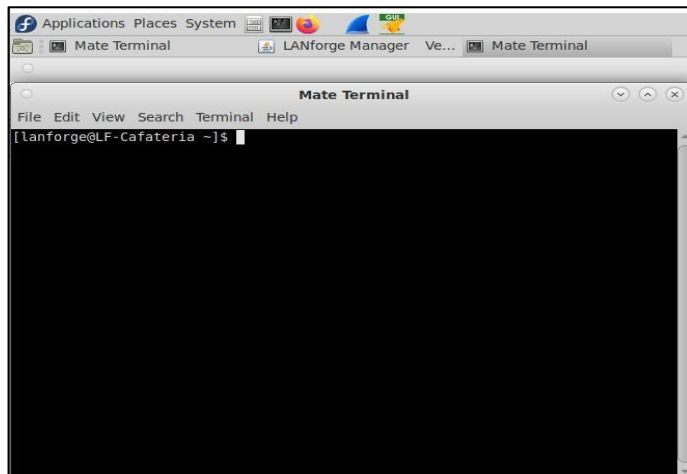
1. Project Overview

The FTP Test is designed to test the Performance of the Netgear Access Point. The goal of this test is verify Download/Upload time of number of clients when clients are connected to specified band and Downloading/Uploading some amount of file from FTP server.
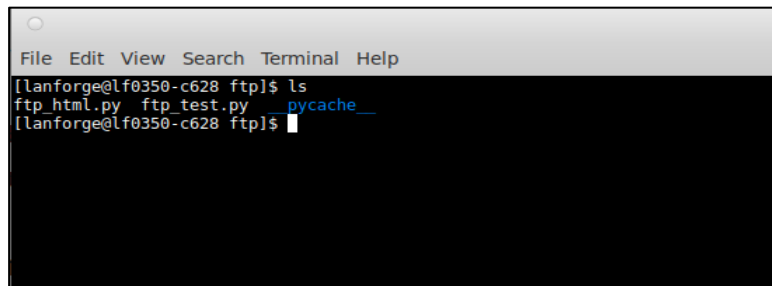
2. Test Procedure

1. Based on the user inputs script will create stations on port manager and run the traffic on l4-7
2. Script will calculate the traffic duration of each station and plot on the graph
3. Script also calculates the individual throughput of each station.

3. How to use Script?

1) Open the Mate terminal in your lanforge.

2) Change the directory to "cd home/lanforge/CandelaAutomationScripts/ftp"

```
File  Edit  View  Search  Terminal  Help
[lanforge@lf0350-c628 ftp]$ ls
ftp_html.py  ftp_test.py  __pycache__
[lanforge@lf0350-c628 ftp]$
```

3) Cli to execute the python test eg –

For 5G band :-

For Download
~ python3 ftp_test_second_version.py **--mgr** localhost **--mgr_port** 8080 **--ssid** ftp_test **--passwd** [BLANK] **--security** open **--upstream_port** eth1 **--ap_name** WAC505 **--ap_ip** 192.168.212.1 **-- fiveg_radio** wiphy0 **--fiveg_duration** 1 **--bands** 5G **--directions** Download **--file_sizes** 2MB **--num_stations** 40 **--fiveg_traffic_duration** 2

For Upload
~ python3 ftp_test_second_version.py **--mgr** localhost **--mgr_port** 8080 **--ssid** ftp_test **--passwd** [BLANK] **--security** open **--upstream_port** eth1 **--ap_name** WAC505 **--ap_ip** 192.168.212.1 **-- fiveg_radio** wiphy0 **--fiveg_duration** 1 **--bands** 5G **--directions** Upload **--file_sizes** 2MB **--num_stations** 40 **--fiveg_traffic_duration** 2

For 2.4G band :-

For Download
~ python3 ftp_test_second_version.py **--mgr** localhost **--mgr_port** 8080 **--ssid** ftp_test **--passwd** [BLANK] **--security** open **--upstream_port** eth1 **--ap_name** WAC505 **--ap_ip** 192.168.212.1 **-- twog_radio** wiphy1 **--twog_duration** 1 **--bands** 2.4G **--directions** Download **--file_sizes** 2MB **--num_stations** 40 **--twog_traffic_duration** 2

For Upload
~ python3 ftp_test_second_version.py **--mgr** localhost **--mgr_port** 8080 **--ssid** ftp_test **--passwd** [BLANK] **--security** open **--upstream_port** eth1 **--ap_name** WAC505 **--ap_ip** 192.168.212.1 **--twog_radio** wiphy1 **--twog_duration** 1 **--bands** 2.4G **--directions** Upload **--file_sizes** 2MB **--num_stations** 40 **--twog_traffic_duration** 2

For Both band :-

For Download
~ python3 ftp_test_second_version.py **--mgr** localhost **--mgr_port** 8080 **--ssid** ftp_test **--passwd** [BLANK] **--security** open **--upstream_port** eth1 **--ap_name** WAC505 **--ap_ip** 192.168.212.1 **--twog_radio** wiphy1 **--fiveg_radio** wiphy0 **--Both_duration** 1 **--bands** Both **--directions** Download **--file_sizes** 2MB **--num_stations** 40 **--Both_traffic_duration** 2

For Upload
~ **python3 ftp_test_second_version.py** **--mgr** localhost **--mgr_port** 8080 **--ssid** ftp_test **--passwd** [BLANK] **--security** open **--upstream_port** eth1 **--ap_name** WAC505 **--ap_ip** 192.168.212.1 **--twog_radio** wiphy1 **--fiveg_radio** wiphy0 **--Both_duration** 1 **--bands** Both **--directions** Upload **--file_sizes** 2MB **--num_stations** 40 **--Both_traffic_duration** 2

For all combinations with multiple file sizes :-
~ **python3 ftp_test_second_version.py** **--mgr** localhost **--mgr_port** 8080 **--ssid** ftp_test **--passwd** [BLANK] **--security** open **--upstream_port** eth1 **--ap_name** WAC505 **--ap_ip** 192.168.212.1 **--twog_radio** wiphy1 **--fiveg_radio** wiphy0 **--fiveg_duration** 1 30 50 **--twog_duration** 1 40 60 **--Both_duration** 1 30 60 **--bands** 5G 2.4G Both **--directions** Download Upload **--file_sizes** 2MB 500MB 1000MB **--num_stations** 40 **--fiveg_traffic_duration** 2 35 55 **--twog_traffic_duration** 2 45 65 **--Both_traffic_duration** 2 35 65

Here

--ap_ip - AP ip

--ap_name - AP Name

--mgr - LANforge ip address but if you are running script inside lanforge use "localhost"

--mgr_port - port Lanforge GUI HTTP service is running on

--ssid - ssid for clients

--passwd - password to connect to ssid if open security use [BLANK]

--security - security type used by ssid

--upstream - provide upstream name like eth1/eth2 by default eth1 is used

--twog_radio - radio at which 2.4G clients will be connected

--fiveg_radio - radio at which 5G clients will be connected

--twog_duration – pass and fail duration for 2.4G band in minutes (If all stations are able to download/upload the file within pass and fail duration then test will pass)

--fiveg_duration – pass and fail duration for 5G band in minutes

--Both_duration – pass and fail duration for Both band in minutes

--bands – bands by default ["5G","2.4G","Both"]

--directions – directions by default ["Download","Upload"]

--file_sizes – Download/Upload file size by default ["2MB","500MB","1000MB"]

--num_stations – number of stations to create by default 40 (In Both band 20 stations will

connect to 2.4G and 20 stations will connect to 5G that means stations will divide equally for Both band)

--fiveg_traffic_duration – duration for layer 4 traffic running in minutes for 5G band

--twog_traffic_duration – duration for layer 4 traffic running in minutes for 2.4G band

--Both_traffic_duration – duration for layer 4 traffic running in minutes for Both band
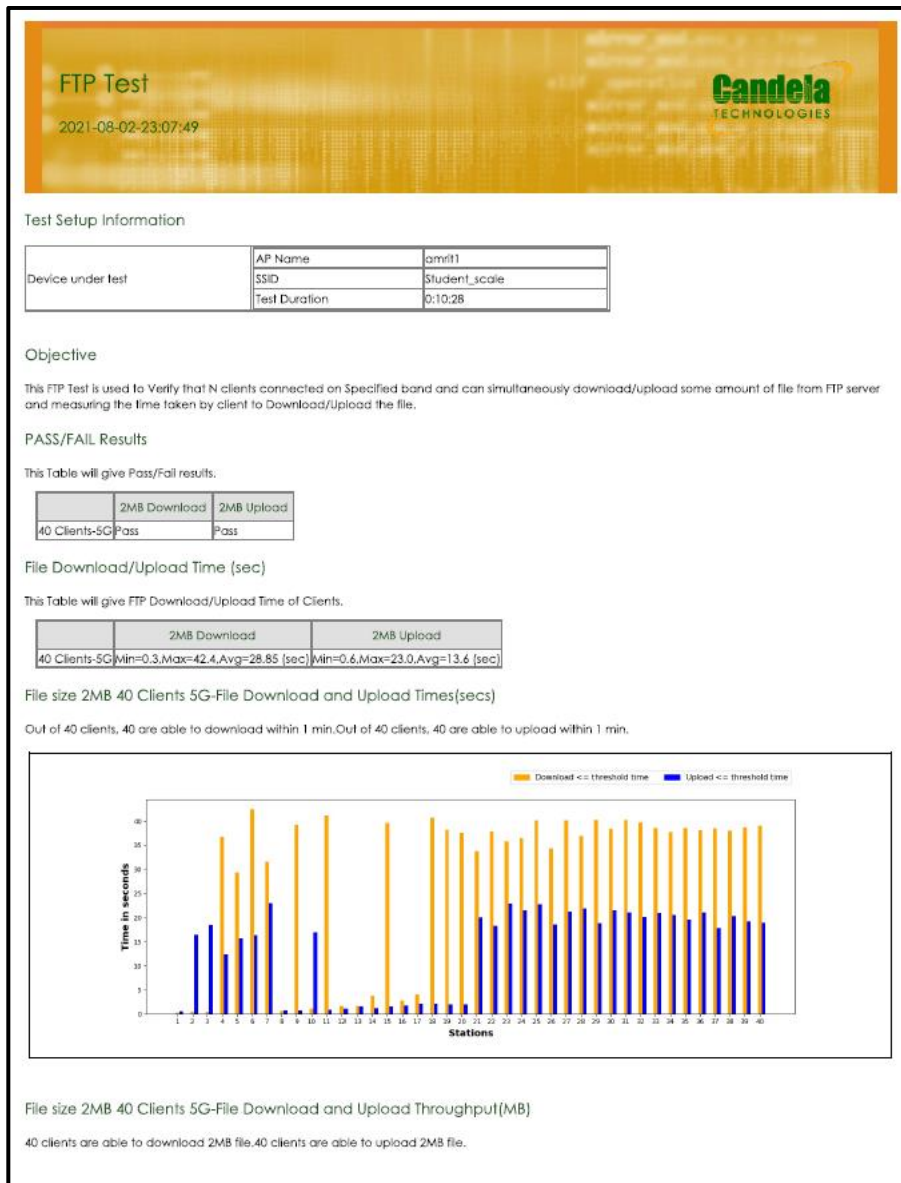
4) After execution of script results can be seen on the html-reports directory
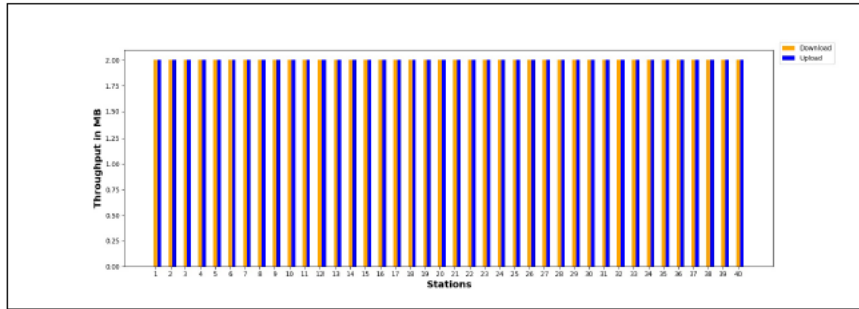
`~ /home/lanforge/html-reports

Pdf report (ftp_test.pdf) and html reports (ftp_test.html) can be found inside ftp_test folder as per execution date

4. Results

Screenshot of pdf report generation is shown below

5. Contact

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

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