FTP Test

PREPARED FOR Netgear

PREPARED BY

Candela India Pvt Ltd

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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.

Netgear Scripting Project:

[22-07-2021]]

1. Project Overview

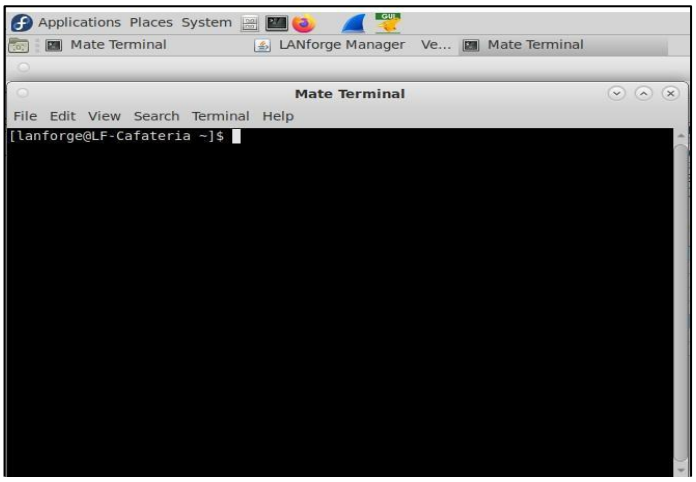
The FTP Test is designed to test the Performance of the Netgear Access Point. The goal of this test is verify Download/Upload time of number of clients when clients are connected to specified band and Downloading/Uploading some amount of file from FTP server.

2. Test Procedure

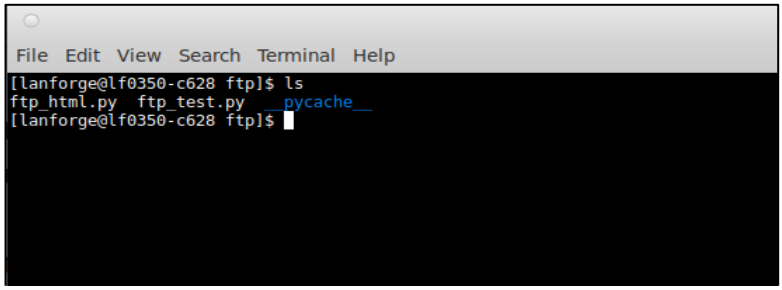
1. Based on the user inputs script will create stations on port manager and run the traffic on l4-7
2. Script will calculate the traffic duration of each station and plot on the graph
3. Script also calculates the individual throughput of each station.

3. How to use Script?

1) Open the Mate terminal in your lanforge.



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



3) Cli to execute the python test eg –

For 5G band :-

For Download

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

For Upload

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

For 2.4G band :-

For Download

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

For Upload

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

For Both band :-

For Download

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

For Upload

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

For all combinations with multiple file sizes :-

~ python3 ftp_test.py --mgr localhost --mgr_port 8080 --ssid ftp_test --passwd [BLANK] --security open --ap_name WAC505 --ap_ip 192.168.212.1 --twog_radio wiphy1 --fiveg_radio wiphy0 --bands 5G 2.4G Both --directions Download Upload --file_sizes 2MB 500MB 1000MB --num_stations 40

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

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

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

--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

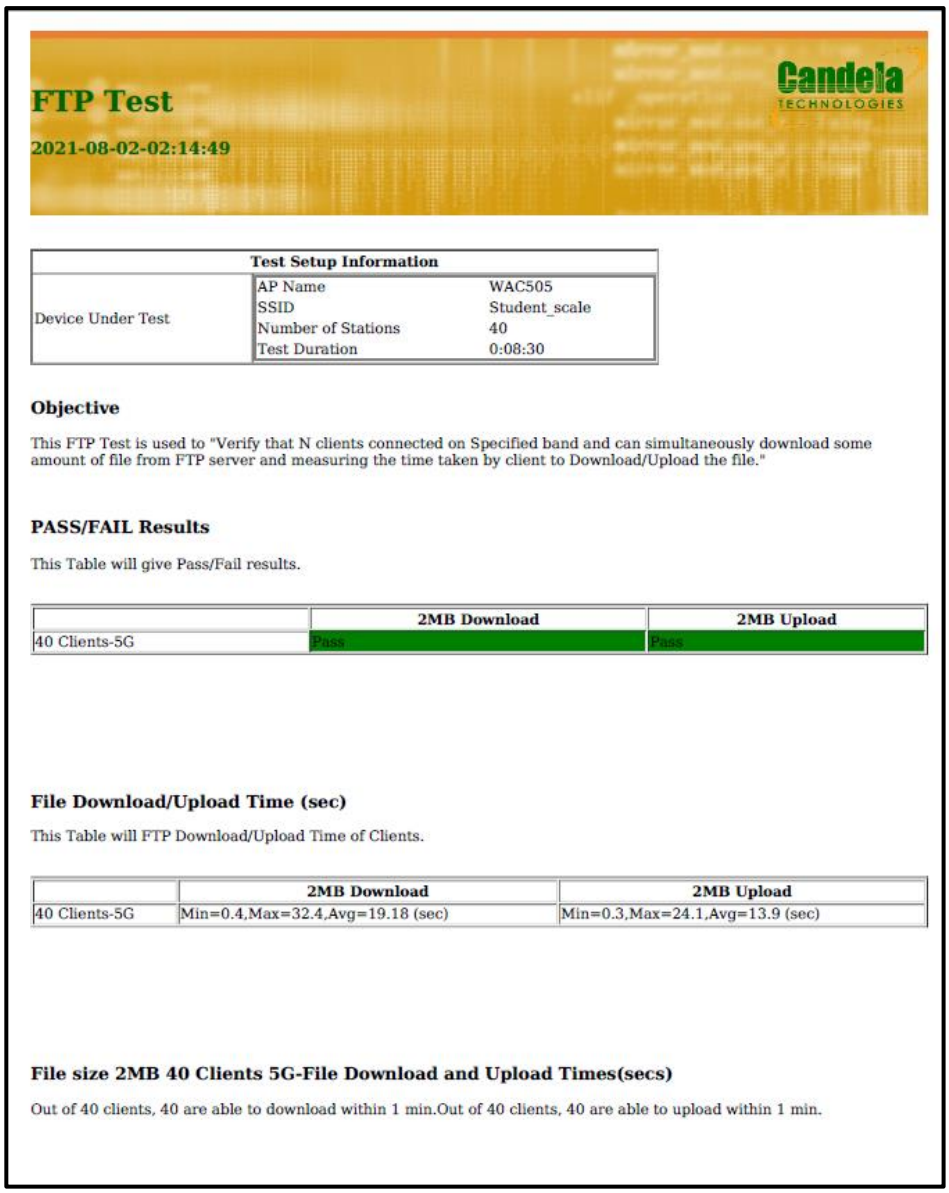
4) After execution of script results can be seen on the html-reports directory

   `~ /home/lanforge/html-reports/FTP-Test

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

4. Results

Screenshot of pdf report generation is shown below



FTP Test

2021-08-02-02:14:49

Candela TECHNOLOGIES

Test Setup Information		
Device Under Test	AP Name	WAC505
	SSID	Student_scale
	Number of Stations	40
	Test Duration	0:08:30

Objective

This FTP Test is used to "Verify that N clients connected on Specified band and can simultaneously download some amount of file from FTP server and measuring the time taken by client to Download/Upload the file."

PASS/FAIL Results

This Table will give Pass/Fail results.

	2MB Download	2MB Upload
40 Clients-5G	Pass	Pass

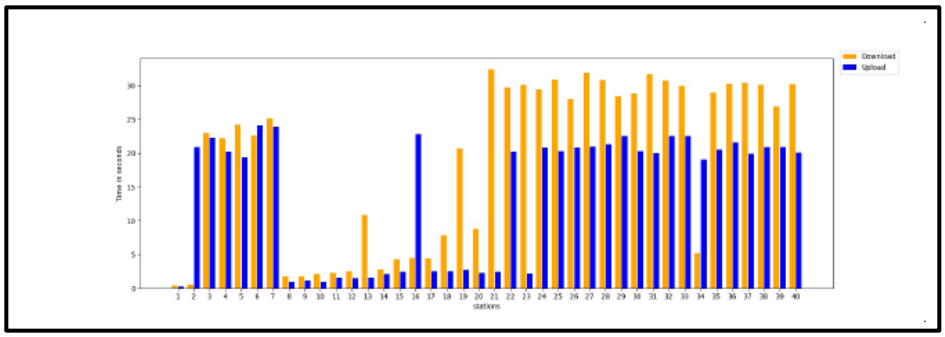
File Download/Upload Time (sec)

This Table will FTP Download/Upload Time of Clients.

	2MB Download	2MB Upload
40 Clients-5G	Min=0.4,Max=32.4,Avg=19.18 (sec)	Min=0.3,Max=24.1,Avg=13.9 (sec)

File size 2MB 40 Clients 5G-File Download and Upload Times(secs)

Out of 40 clients, 40 are able to download within 1 min.Out of 40 clients, 40 are able to upload within 1 min.



5. Contact

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

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