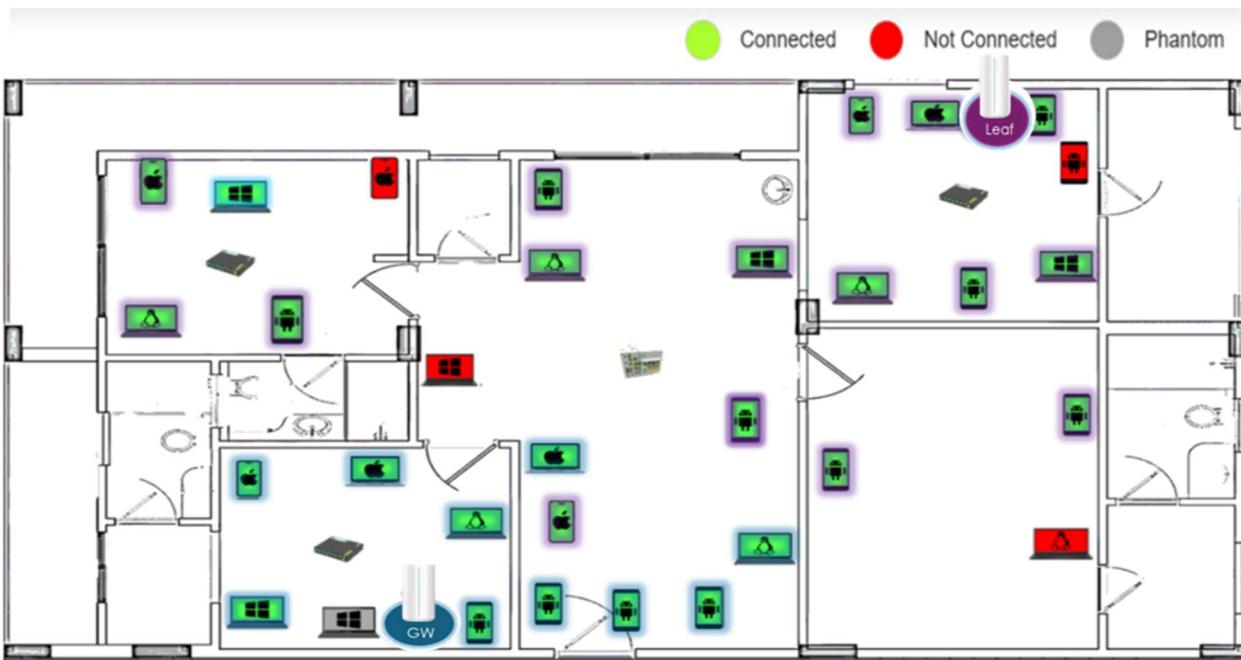


9. Mesh Reliability Stress Testing:

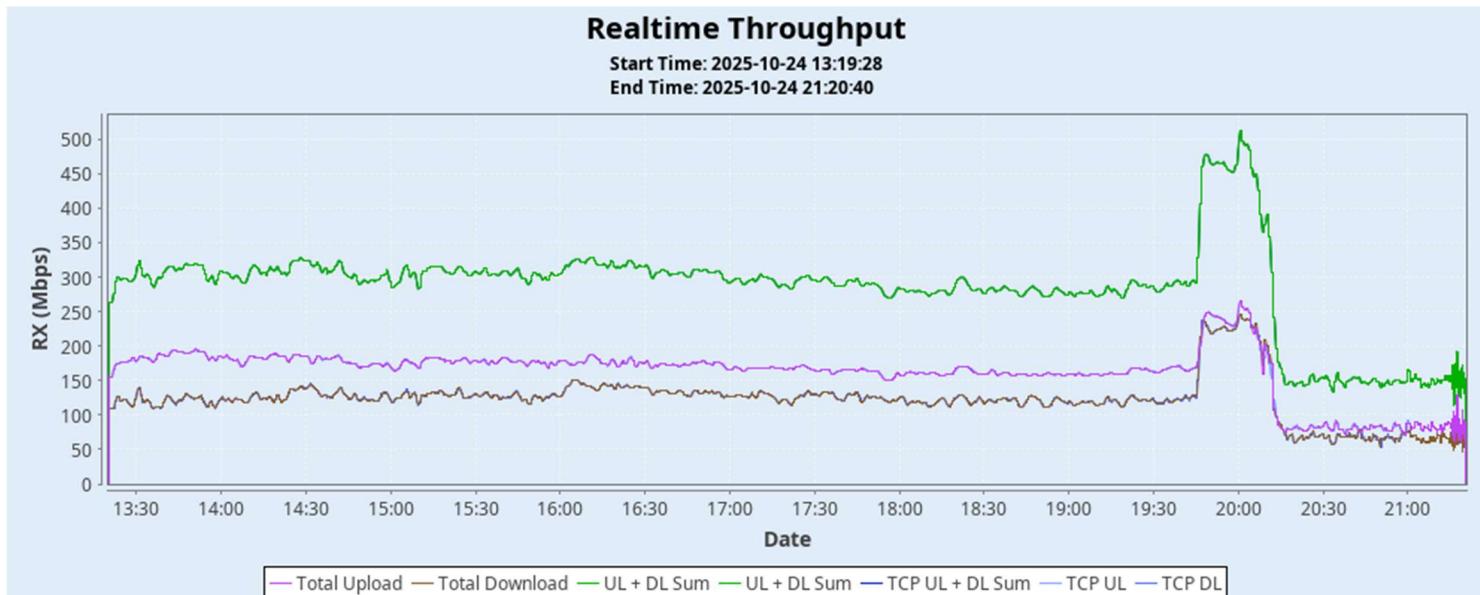
Test Description:

- Ensure the mesh network is set up with the GW and Leaf-1 operational.
- Connect a total of 50 clients, distributed between GW and Leaf-1
- Maintain the stress test for 8 continuous hours.
- Measure throughput on both uplink and downlink during the test at regular intervals.

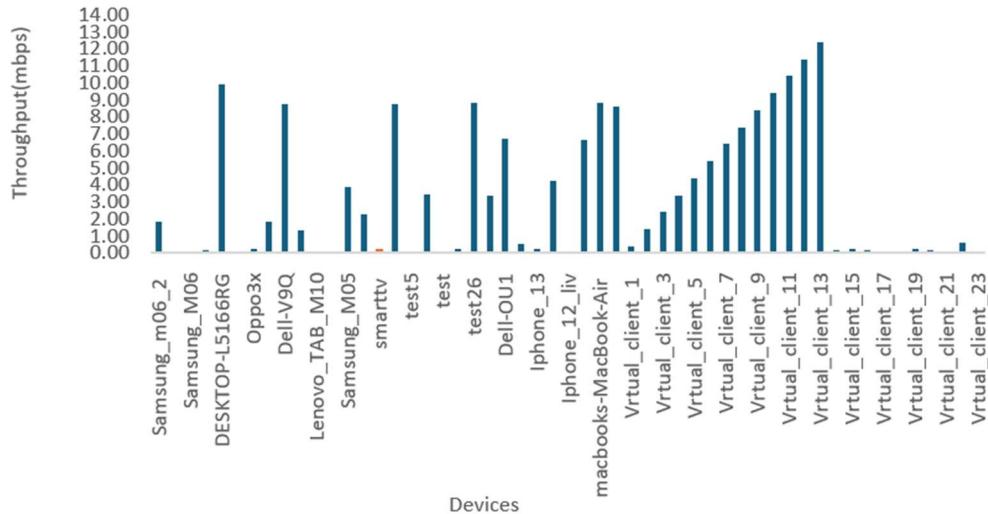
Connected Devices:



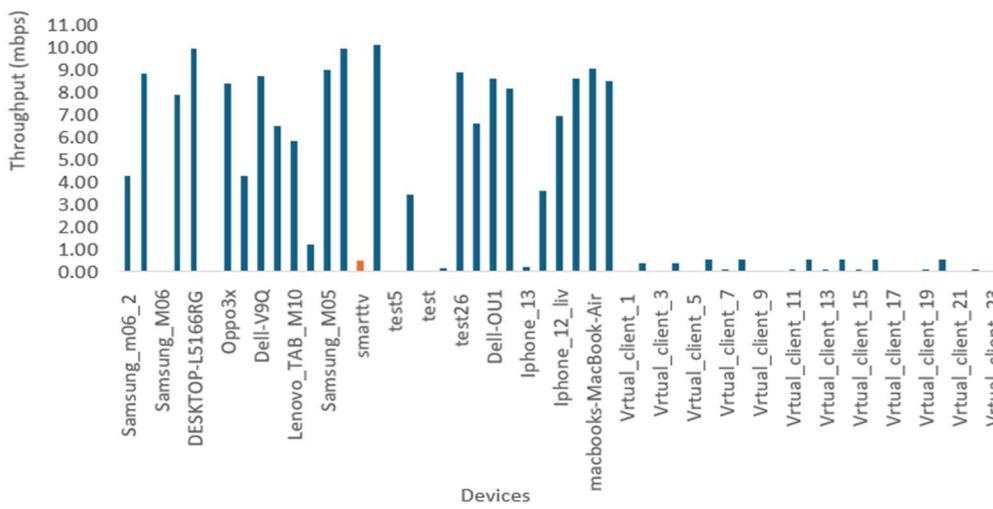
Test Results:



Per Client Throughput of TCP-Download (Mbps)



Per Client Throughput TCP-Upload (Mbps)



Device	RSSI (dBm)	Node	Band (GHz)	TCP-Download (Mbps)	TCP-Upload (Mbps)	Total Throughput (Mbps)
Samsung_m06_2	-69	GW	2.4GHz	1.88	4.28	6.16
Samsung_M14	-62	GW	2.4GHz	0.01	8.81	8.82
Samsung_M06						0
Honor_PAD_X8a	-75	GW	5GHz	0.18	7.89	8.07
DESKTOP-L5166RG	-57	GW	6GHz	9.92	9.95	19.87
Dell-V9S						0.00
Oppo3x	-67	GW	5GHz	0.24	8.40	8.65
Samsung_TAB_s9	-65		5GHz	1.88	4.28	6.16
Dell-V9Q	-81	GW	6GHz	8.74	8.69	17.43
iQOO_Z9_Lite_5G	-41	GW	2.4GHz	1.32	6.51	7.84
Lenovo_TAB_M10	-70	GW	2.4GHz	0.01	5.82	5.83
Oppo_A3X	-50	GW	2.4GHz	0.07	1.22	1.29

Samsung_M05	-43	GW	5GHz	3.90	8.98	12.89
itel_P55_5G	-65	GW	5GHz	2.32	9.96	12.28
smarttv	-51	Leaf	5GHz	0.29	0.50	0.78
linuxtest	-40	GW	5GHz	8.73	10.12	18.85
test5						0.00
thinkpad	-50	GW	5GHz	3.43	3.46	6.90
test						0.00
iot	-60	GW	2.4GHz	0.22	0.18	0.40
test26	-94	GW	5GHz	8.84	8.90	17.74
fedora	-56	GW	5GHz	3.41	6.62	10.03
Dell-OU1	-68	GW	2.4GHz	6.71	8.60	15.31
iphone_12	-67	GW	5GHz	0.51	8.15	8.66
Iphone_13	-68	GW	5GHz	0.23	0.20	0.43
iphone14	-40	GW	2.4GHz	4.27	3.58	7.85
Iphone_12_liv	-61	GW	5GHz	0.00	6.95	6.95
testhouses-MacBook-Air	-35	GW	5GHz	6.68	8.63	15.30
macbooks-MacBook-Air	-45	GW	2.4GHz	8.86	9.06	17.92
candela-lanforges-MacBook-Pro	-60	GW	5GHz	8.66	8.47	17.13
Vrtual_client_1	-61	GW	5GHz	0.42	0.08	0.50
Vrtual_client_2	-61	GW	5GHz	1.42	0.38	1.80
Vrtual_client_3	-62	GW	5GHz	2.42	0.06	2.48
Vrtual_client_4	-61	GW	5GHz	3.42	0.38	3.80
Vrtual_client_5	-61	GW	5GHz	4.42	0.00	4.42
Vrtual_client_6	-61	GW	5GHz	5.42	0.53	5.94
Vrtual_client_7	-61	GW	5GHz	6.42	0.10	6.52
Vrtual_client_8	-61	GW	5GHz	7.42	0.54	7.96
Vrtual_client_9	-60	GW	5GHz	8.42	0.05	8.47
Vrtual_client_10	-61	GW	5GHz	9.42	0.01	9.43
Vrtual_client_11	-62	GW	5GHz	10.42	0.12	10.53
Vrtual_client_12	-61	GW	5GHz	11.42	0.54	11.96
Vrtual_client_13	-61	GW	5GHz	12.42	0.09	12.51
Vrtual_client_14	-61	GW	5GHz	0.19	0.53	0.72
Vrtual_client_15	-61	GW	5GHz	0.27	0.11	0.38
Vrtual_client_16	-61	GW	5GHz	0.21	0.54	0.75
Vrtual_client_17	-61	GW	5GHz	0.01	0.00	0.01
Vrtual_client_18	-61	GW	5GHz	0.01	0.01	0.02
Vrtual_client_19	-61	GW	5GHz	0.28	0.10	0.38
Vrtual_client_20	-61	GW	5GHz	0.20	0.55	0.76
Vrtual_client_21	-60	GW	5GHz	0.08	0.04	0.12

Vrtual_client_22	-61	GW	5GHz	0.63	0.082	0.71
Vrtual_client_23	-61	GW	5GHz	0.10	0.00	0.10

Observations:

- During the start of the test, all the devices connected to the GW node except 2 clients.
- APs did not crash or reboot even under high stress.
- The throughput is stable during the 8-hour test, with no major drops. Both upload and download rates are consistent.