

AP-Auto

AP Automated Test Plan



Sat May 02 20:24:55 PDT 2020

Test Setup Information	
Device Under Test	mr8300 OpenWrt-5hi mr8300 OpenWrt-2
Estimated Run Time	1.083 h
Actual Run Time	15.323 m

Objective

The AP-Auto WiFi Performance test plan automates testing of one or more APs with flexibility to select which tests are to be run.

Summary Results

Test	Result	Candela Score	Elapsed	Info
Basic Client Connectivity	Skipped	0	0	
Throughput vs Pkt Size	Skipped	0	0	
Dual Band Performance	Skipped	0	0	
Capacity	Skipped	0	0	
Stability	Dual-Band FAIL	36	14.506 m	Station Resets: 1348.0 Station Connections: 904.0 Auth Timeouts: 0.0 Association Rejected: 0.0 Bandwidth Check: 12.0/703.0 STA Connected Check: 200.0/228.0
Stability Band: Dual-Band	Skipped	0	0	

Stability

Summary

The Mixed Stability test brings up many STAs, runs VOIP, emulated video, UDP, and TCP traffic connections to test that the link is continuously working. VOIP traffic will be station-to-station, preferring 2.4Ghz to 5Ghz station calls if the number of stations supports that, but it will use 2.4 to 2.4 stations or 5Ghz to 5Ghz stations too as needed VOIP calls used 'VO' QoS settings. You can configure the number of stations using the 'VOIP Call Count' field. Emulated Video traffic is created by downloading a binary file over and over at a user-configured speed (see the 'Video Emulation Rate' and 'Video Buffer Size')

The test is considered failed if any stations reconnect or if a connection has less than 5kbps over a 1 minute period.

The Candela Score for the Stability test is calculated as:

- 34%: $\text{total-station-count} / (\text{total-sta-count} + \text{reconnects} + \text{connection errors})$
- 33%: $\text{stations-with-ok-bandwidth} / (\text{ok-bw} + \text{bad-bw})$
- 33%: $\text{connected-stations-count} / \text{all-stations-count}$

Station disconnect stats.

Stability Results

Type	Result	Notes
Configuration NOTE	INFO	Configured to skip 2.4Ghz band test.
Configuration NOTE	INFO	Configured to skip 5Ghz band test.
Configuration NOTE	INFO	Configured to skip 2.4Ghz band test.
Configuration NOTE	INFO	Configured to skip 5Ghz band test.
Configuration NOTE	INFO	Skipping DUT idx: 1: No 5Ghz DUT configured.
Configuration NOTE	INFO	Configured to skip 2.4Ghz band test.
Configuration NOTE	INFO	Configured to skip 5Ghz band test.
Configuration NOTE	INFO	Skipping DUT idx: 2: No 5Ghz DUT configured.

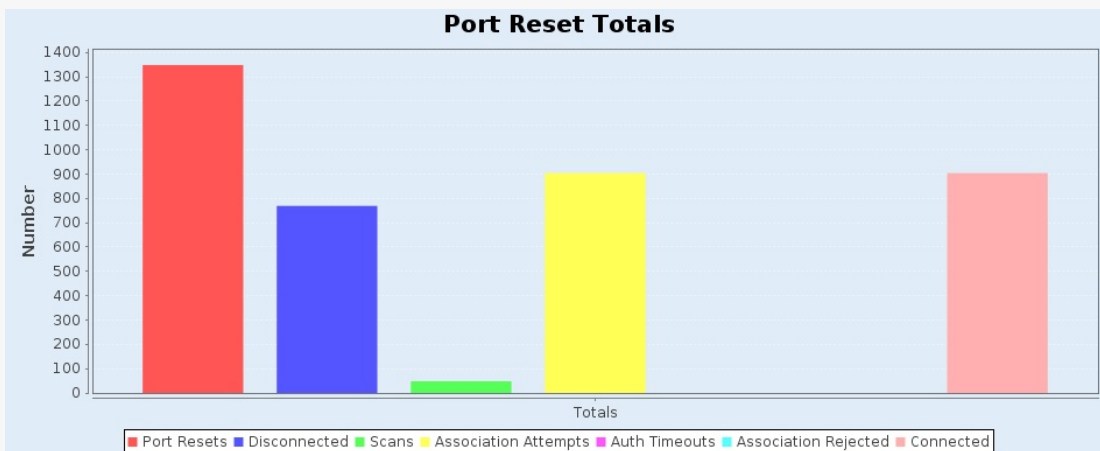
Stability Results for Dual-Band

Type	Result	Notes
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_tcp-1.1-1.sta00500--1.0.1-A rx-rate: 0.08 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_l4-1.1-1.sta00500--1.0.2 rx-rate: 0.07 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_tcp-1.1-1.sta00501--1.0.1-A rx-rate: 0.07 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_l4-1.1-1.sta00501--1.0.2 rx-rate: 0.06 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_tcp-1.1-1.sta00502--1.0.1-A rx-rate: 0.08 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_l4-1.1-1.sta00502--1.0.2 rx-rate: 0.07 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_tcp-1.1-1.sta00503--1.0.1-A rx-rate: 0.06 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_l4-1.1-1.sta00503--1.0.2 rx-rate: 0.05 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_tcp-1.1-1.sta00504--1.0.1-A rx-rate: 0.08 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_l4-1.1-1.sta00504--1.0.2 rx-rate: 0.06 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_tcp-1.1-1.sta00505--1.0.1-A rx-rate: 0.06 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_l4-1.1-1.sta00505--1.0.2 rx-rate: 0.06 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_tcp-1.1-1.sta00506--1.0.1-A rx-rate: 0.06 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_l4-1.1-1.sta00506--1.0.2 rx-rate: 0.10 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_tcp-1.1-1.sta00507--1.0.1-A rx-rate: 0.08 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:13:51 PDT 2020: cv_l4-1.1-1.sta00507--1.0.2 rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 197

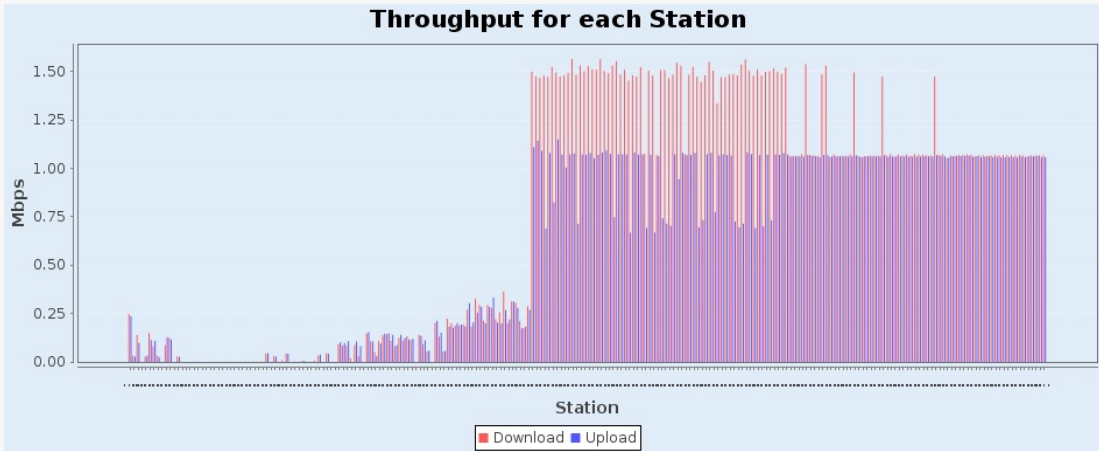
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	rx-rate: 0.10 Mbps went below threshold: 0.10 Mbps Port A CX ago: 201
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:12 PDT 2020: cv_l4-1.1-1.sta01550--1.0.2 rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 198
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:13 PDT 2020: cv_l4-1.1-1.sta01552--1.0.2 rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 199
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:13 PDT 2020: cv_l4-1.1-1.sta01560--1.0.2 rx-rate: 0.10 Mbps went below threshold: 0.10 Mbps Port A CX ago: 194
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:14 PDT 2020: cv_tcp-1.1-1.sta01021--1.0.1-A rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 211
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:14 PDT 2020: cv_tcp-1.1-1.sta01029--1.0.1-A rx-rate: 0.10 Mbps went below threshold: 0.10 Mbps Port A CX ago: 211
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:14 PDT 2020: cv_tcp-1.1-1.sta01034--1.0.1-A rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 205
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:14 PDT 2020: cv_l4-1.1-1.sta01540--1.0.2 rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 205
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:14 PDT 2020: cv_l4-1.1-1.sta01548--1.0.2 rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 200
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:14 PDT 2020: cv_l4-1.1-1.sta01551--1.0.2 rx-rate: 0.08 Mbps went below threshold: 0.10 Mbps Port A CX ago: 200
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:15 PDT 2020: cv_l4-1.1-1.sta01007--1.0.2 rx-rate: 0.10 Mbps went below threshold: 0.10 Mbps Port A CX ago: 217
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:15 PDT 2020: cv_l4-1.1-1.sta01527--1.0.2 rx-rate: 0.10 Mbps went below threshold: 0.10 Mbps Port A CX ago: 178
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:15 PDT 2020: cv_l4-1.1-1.sta01562--1.0.2 rx-rate: 0.10 Mbps went below threshold: 0.10 Mbps Port A CX ago: 196
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:16 PDT 2020: cv_l4-1.1-1.sta01549--1.0.2 rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 202
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:26 PDT 2020: cv_tcp-1.1-1.sta01012--1.0.1-A rx-rate: 0.08 Mbps went below threshold: 0.10 Mbps Port A CX ago: 228
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:26 PDT 2020: cv_l4-1.1-1.sta01016--1.0.2 rx-rate: 0.08 Mbps went below threshold: 0.10 Mbps Port A CX ago: 228
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:26 PDT 2020: cv_tcp-1.1-1.sta01017--1.0.1-A rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 228
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:26 PDT 2020: cv_tcp-1.1-1.sta01052--1.0.1-A rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 212
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:26 PDT 2020: cv_l4-1.1-1.sta01557--1.0.2 rx-rate: 0.08 Mbps went below threshold: 0.10 Mbps Port A CX ago: 211
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:27 PDT 2020: cv_l4-1.1-1.sta01035--1.0.2 rx-rate: 0.10 Mbps went below threshold: 0.10 Mbps Port A CX ago: 218
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:27 PDT 2020: cv_tcp-1.1-1.sta01503--1.0.1-A rx-rate: 0.10 Mbps went below threshold: 0.10 Mbps Port A CX ago: 225
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:27 PDT 2020: cv_l4-1.1-1.sta01543--1.0.2 rx-rate: 0.10 Mbps went below threshold: 0.10 Mbps Port A CX ago: 218
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:35 PDT 2020: cv_tcp-1.1-1.sta01520--1.0.1-A rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 199
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:14:35 PDT 2020: cv_tcp-1.1-1.sta01546--1.0.1-A rx-rate: 0.08 Mbps went below threshold: 0.10 Mbps

DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:18:42 PDT 2020: cv_udp-1.1-1.sta01031--1.0.0-A rx-rate: 0.04 Mbps went below threshold: 0.10 Mbps Port A CX ago: 20
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:18:42 PDT 2020: cv_udp-1.1-1.sta01038--1.0.0-A rx-rate: 0.04 Mbps went below threshold: 0.10 Mbps Port A CX ago: 20
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:18:51 PDT 2020: cv_udp-1.1-1.sta01005--1.0.0-A rx-rate: 0.07 Mbps went below threshold: 0.10 Mbps Port A CX ago: 20
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi	FAIL	Sat May 02 20:18:51 PDT 2020: cv_tcp-1.1-1.sta01005--1.0.1-A rx-rate: 0.03 Mbps went below threshold: 0.10 Mbps Port A CX ago: 20
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.9 sta00503	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.14 sta00508	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.17 sta00511	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.19 sta00513	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.20 sta00514	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.21 sta00515	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.22 sta00516	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.24 sta00518	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.25 sta00519	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.26 sta00520	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.27 sta00521	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.28 sta00522	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.29 sta00523	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.30 sta00524	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.32 sta00526	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.33 sta00527	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.34 sta00528	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.35 sta00529	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.36 sta00530	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.37 sta00531	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.38 sta00532	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.39 sta00533	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.43 sta00537	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.46 sta00540	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.54 sta00548	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.56 sta00550	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.77 sta00571	FAIL	NOT CONNECTED
DUT: mr8300 OpenWrt-2 mr8300 OpenWrt-5hi 2.4Ghz 1.1.81 sta00575	FAIL	NOT CONNECTED

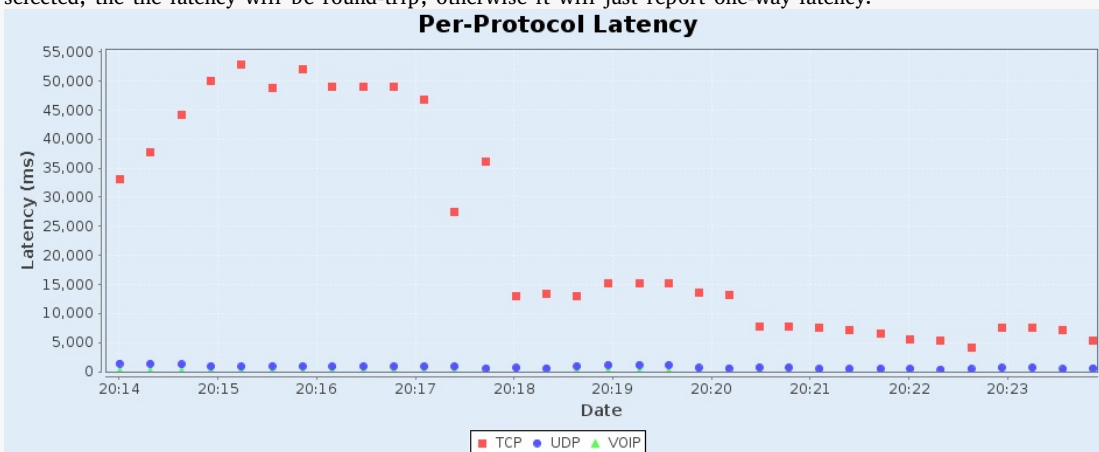
Port Reset Totals



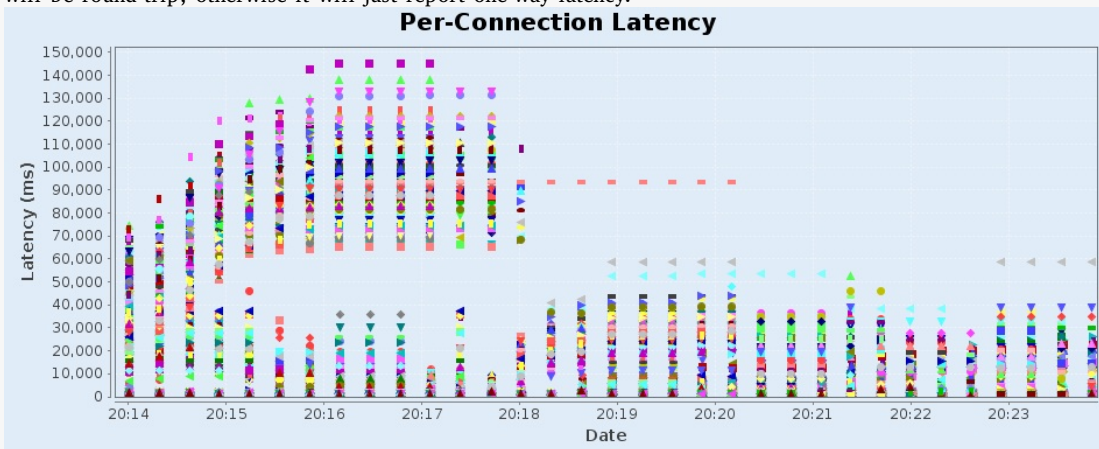
Throughput for each Station



Per-Protocol Latency Graph shows the average latency for the different protocol types created by this test. If opposite-direction traffic is selected, the the latency will be round-trip, otherwise it will just report one-way latency.

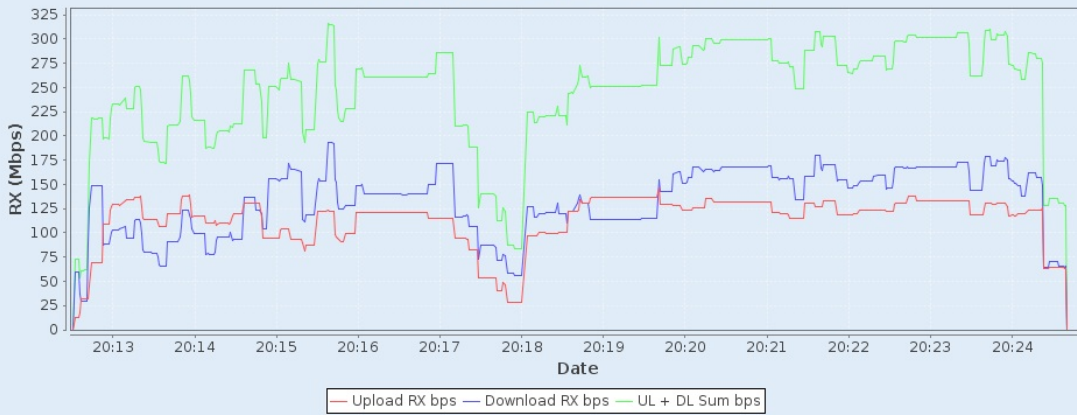


Per-Connectioin Latency Graph shows latency for the connections created by this test. If opposite-direction traffic is selected, the the latency will be round-trip, otherwise it will just report one-way latency.



Realtime Throughput for: Stability

Realtime Throughput for: Stability



[Key Performance Indicators CSV](#)

Test configuration and LANforge software version	
Auto-Helper	true
Skip 2.4Ghz Tests	true
Skip 5Ghz Tests	true
Loop Iterations:	1
2.4Ghz Station Count:	100
5Ghz Station Count:	128
Dual-Band Station Count:	228
Duration-20	20
Hunt Retries:	1
Multi-Conn	1
ToS	0
Upstream Port	1.1.1 eth0 Firmware: 0.3-0 Resource: ben-ota-2
Stability Duration:	10 m
Concurrent Ports to Reset:	1
Minimum Time between Resets:	10000
Maximum Time between Resets:	60000
Long-Term Station Count:	2
VOIP Call Count:	20
Stability stall threshold UDP Upload:	100000
Stability stall threshold UDP Download:	100000
Stability stall threshold TCP Upload:	100000
Stability stall threshold TCP Download:	100000
Stability stall threshold Video:	100000
Stability stall threshold VOIP:	20000
Stability UDP Min Download Rate:	500000
Stability UDP Max Download Rate:	0
Stability UDP Min Upload Rate:	500000
Stability UDP Max Upload Rate:	0
Stability TCP Min Download Rate:	500000
Stability TCP Max Download Rate:	0
Stability TCP Min Upload Rate:	500000
Stability TCP Max Upload Rate:	0
Long-Term Duration:	1 h
Long-Term Graph Interval:	30
Long-Term Download Rate:	85%
Video Emulation Rate:	700000
Video Buffer Size:	1000000

Long-Term Upload Rate:	85%
Use Packet Sizes	false
Reset Radios	true
Spatial Streams	AUTO
Bandwidth	AUTO
Modes	Auto
WiFi Radio 0	1.1.4 wiphy1 Resource: ben-ota-2
WiFi Radio 1	
WiFi Radio 2	
WiFi Radio 3	
WiFi Radio 4	
WiFi Radio 5	
WiFi Radio 6	
WiFi Radio 7	
WiFi Radio 0	1.1.3 wiphy0 Firmware: 10.1-ct-8x-__xtH-022-db8cfc6c Resource: ben-ota-2
WiFi Radio 1	1.1.5 wiphy2 Firmware: 10.1-ct-8x-__xtH-022-db8cfc6c Resource: ben-ota-2
WiFi Radio 2	
WiFi Radio 3	
WiFi Radio 4	
WiFi Radio 5	
WiFi Radio 6	
WiFi Radio 7	
Show Events	true
Build Date	Sat May 2 10:22:39 PDT 2020
Build Version	5.4.2
Git Version	1c7aa80894052fe3b618e8f17ba7de8b47bafc45