

AP-Auto

AP Automated Test Plan



Mon Apr 06 14:06:17 PDT 2020

Test Setup Information	
Device Under Test	TR398-DUT NETGEAR68-5G TR398-DUT NETGEAR68
Operator	Ben Greear @ Candela Technologies
Estimated Run Time	7 m
Actual Run Time	10.407 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.

Add your notes below:

Chamber to Chamber test.

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	81	9.653 m	Station Resets: 10.0 Station Connections: 10.0 Auth Timeouts: 0.0 Association Rejected: 0.0 Bandwidth Check: 116.0/202.0 STA Connected Check: 64.0/64.0
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%: total-station-count / (total-sta-count + reconnects + connection errors)
- 33%: stations-with-ok-bandwidth / (ok-bw + bad-bw)
- 33%: connected-stations-count / all-stations-count

Station disconnect stats.

Stability Results

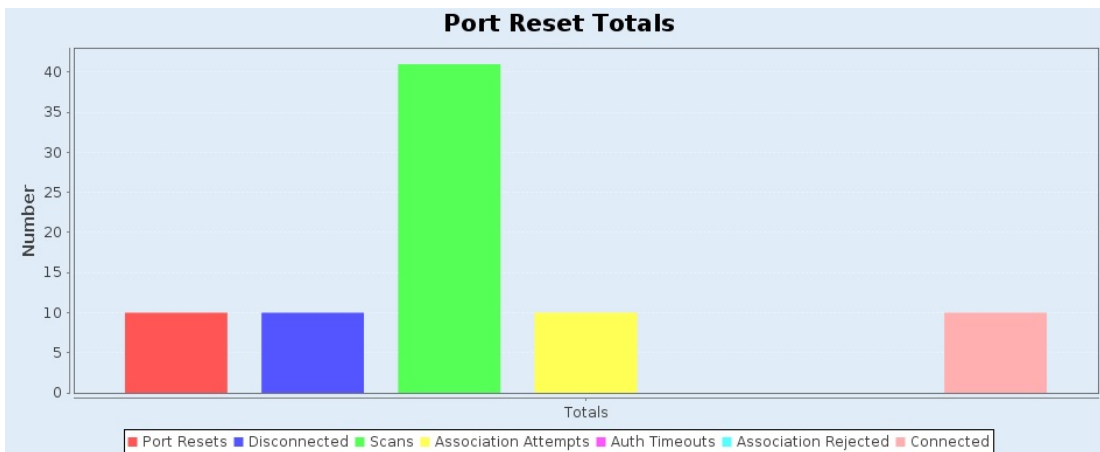
Type	Result	Notes
Configuration NOTE	INFO	Configured to skip 2.4Ghz band test.
Configuration NOTE	INFO	Configured to skip 5Ghz band test.
Configuration NOTE	INFO	Configured to skip 2.4Ghz band test.
Configuration NOTE	INFO	Configured to skip 5Ghz band test.
Configuration NOTE	INFO	Skipping DUT idx: 1: 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

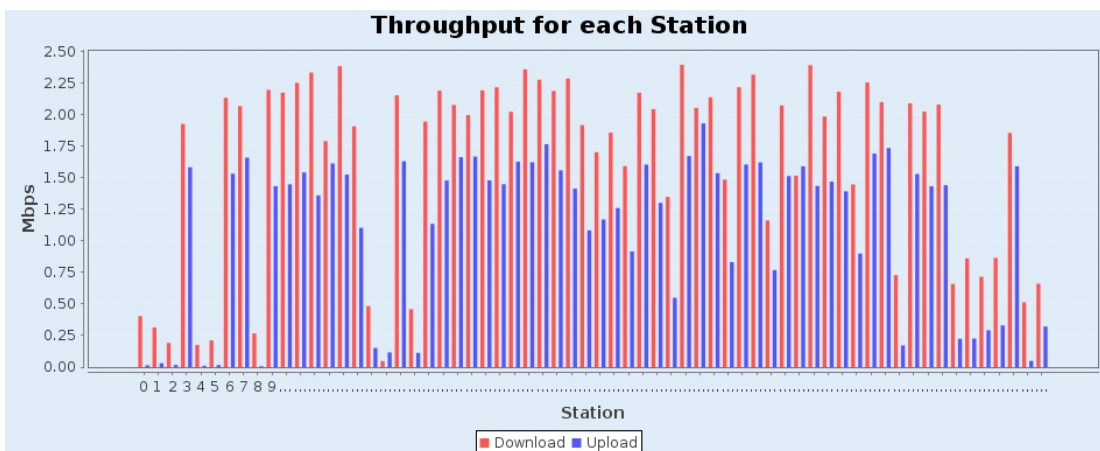
Type	Result	Notes
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:00:24 PDT 2020: cv_udp-1.1-1.sta01006--1.0.0-A rx-rate: 0.00 Mbps went below threshold: 0.10 Mbps Port A CX ago: 233
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:00:58 PDT 2020: cv_l4-1.1-1.sta02500--1.0.2 rx-rate: 0 Mbps went below threshold: 0.10 Mbps Port A CX ago: 249
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:01:01 PDT 2020: cv_tcp-1.1-1.sta02500--1.0.1-A rx-rate: 0.01 Mbps went below threshold: 0.10 Mbps Port A CX ago: 252
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:01:02 PDT 2020: cv_udp-1.1-1.sta02500--1.0.0-A rx-rate: 0.03 Mbps went below threshold: 0.10 Mbps Port A CX ago: 253
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:01:49 PDT 2020: cv_l4-1.1-1.sta02007--1.0.2 rx-rate: 0 Mbps went below threshold: 0.10 Mbps Port A CX ago: 301
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:02:07 PDT 2020: cv_tcp-1.1-1.sta02504--1.0.1-A rx-rate: 0 Mbps went below threshold: 0.10 Mbps Port A CX ago: 318
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:02:07 PDT 2020: cv_tcp-1.1-1.sta02506--1.0.1-A rx-rate: 0 Mbps went below threshold: 0.10 Mbps Port A CX ago: 318
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:02:19 PDT 2020: cv_tcp-1.1-1.sta00506--1.0.1-A rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 349
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:02:19 PDT 2020: cv_tcp-1.1-1.sta02502--1.0.1-A rx-rate: 0.08 Mbps went below threshold: 0.10 Mbps Port A CX ago: 330
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:02:19 PDT 2020: cv_tcp-1.1-1.sta02509--1.0.1-A rx-rate: 0.10 Mbps went below threshold: 0.10 Mbps Port A CX ago: 329
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:02:25 PDT 2020: cv_l4-1.1-1.sta03008--1.0.2 rx-rate: 0 Mbps went below threshold: 0.10 Mbps Port A CX ago: 317
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:02:28 PDT 2020: cv_tcp-1.1-1.sta02508--1.0.1-A rx-rate: 0.02 Mbps went below threshold: 0.10 Mbps Port A CX ago: 339
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:02:29 PDT 2020: cv_tcp-1.1-1.sta03008--1.0.1-A rx-rate: 0.02 Mbps went below threshold: 0.10 Mbps Port A CX ago: 321
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:02:36 PDT 2020: cv_udp-1.1-1.sta03008--1.0.0-A rx-rate: 0.06 Mbps went below threshold: 0.10 Mbps Port A CX ago: 327
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:02:38 PDT 2020: cv_tcp-1.1-1.sta01009--1.0.1-A rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 367
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:02:45 PDT 2020: cv_l4-1.1-1.sta00510--1.0.2 rx-rate: 0.07 Mbps went below threshold: 0.10 Mbps Port A CX ago: 375
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:02:51 PDT 2020: cv_l4-1.1-1.sta00500--1.0.2 rx-rate: 0 Mbps went below threshold: 0.10 Mbps Port A CX ago: 384
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:02:53 PDT 2020: cv_tcp-1.1-1.sta00503--1.0.1-A rx-rate: 0.07 Mbps went below threshold: 0.10 Mbps

		Port A CX ago: 484
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:05:04 PDT 2020: cv_udp-1.1-1.sta00502--1.0.0-A rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 521
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:05:04 PDT 2020: cv_udp-1.1-1.sta00508--1.0.0-A rx-rate: 0.08 Mbps went below threshold: 0.10 Mbps Port A CX ago: 514
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:05:04 PDT 2020: cv_tcp-1.1-1.sta03004--1.0.1-A rx-rate: 0 Mbps went below threshold: 0.10 Mbps Port A CX ago: 492
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:05:04 PDT 2020: cv_tcp-1.1-1.sta03005--1.0.1-A rx-rate: 0.09 Mbps went below threshold: 0.10 Mbps Port A CX ago: 492
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:05:24 PDT 2020: cv_udp-1.1-1.sta00500--1.0.0-A rx-rate: 0 Mbps went below threshold: 0.10 Mbps Port A CX ago: 160
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:05:24 PDT 2020: cv_udp-1.1-1.sta00501--1.0.0-A rx-rate: 0 Mbps went below threshold: 0.10 Mbps Port A CX ago: 534
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:05:24 PDT 2020: cv_udp-1.1-1.sta00504--1.0.0-A rx-rate: 0 Mbps went below threshold: 0.10 Mbps Port A CX ago: 534
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G	FAIL	Mon Apr 06 14:05:24 PDT 2020: cv_udp-1.1-1.sta00505--1.0.0-A rx-rate: 0 Mbps went below threshold: 0.10 Mbps Port A CX ago: 534

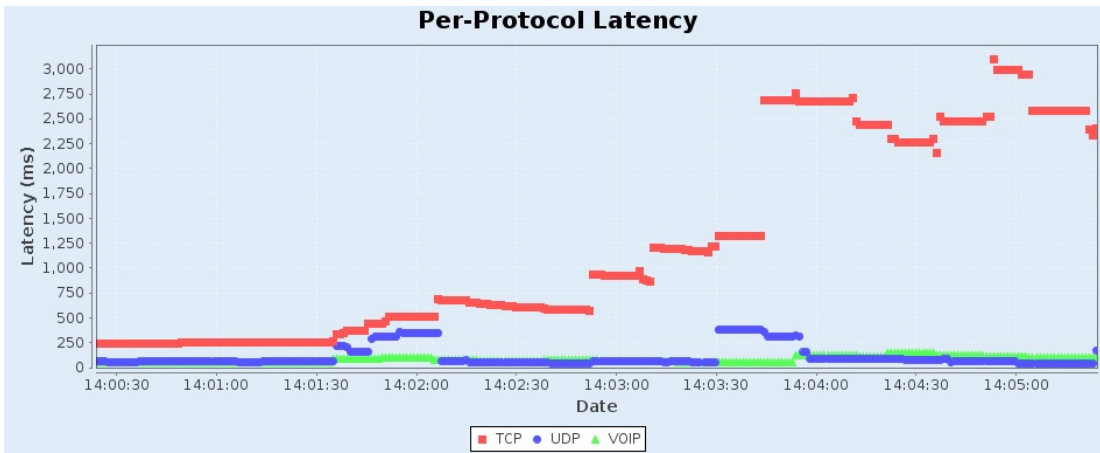
Port Reset Totals



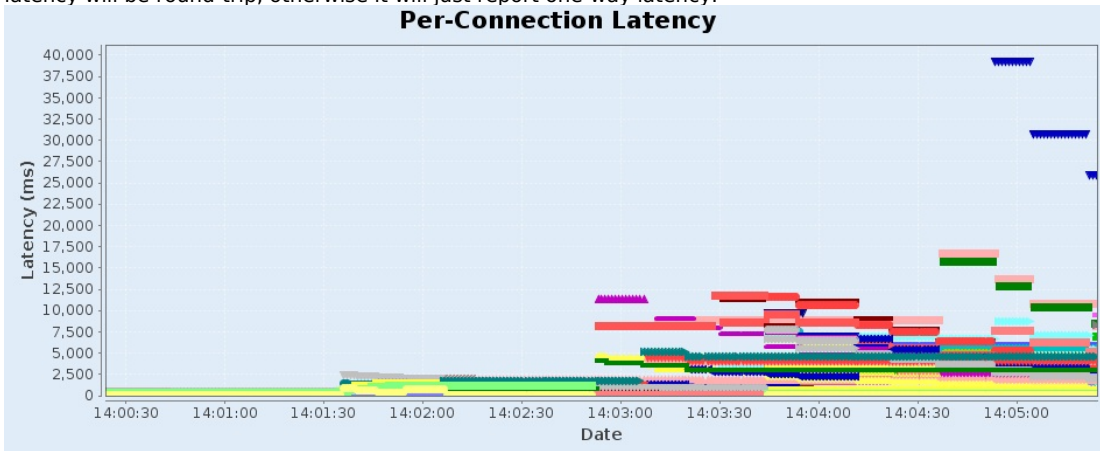
Throughput for each Station



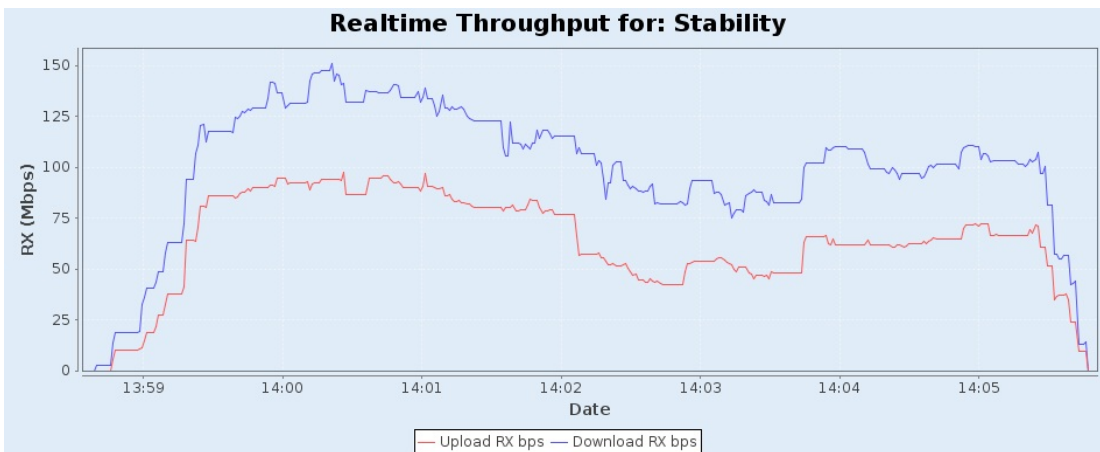
Per-Protocol Latency Graph shows the average latency for the different protocol types created by this test. If opposite-direction traffic is selected, the the latency will be round-trip, otherwise it will just report one-way latency.



Per-Connection 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



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:	32
5Ghz Station Count:	64
Dual-Band Station Count:	64
Duration-20	20
Hunt Retries:	1
Multi-Conn	1

ToS	0
Upstream Port	1.1.1 eth1 Firmware: 0. 6-1 Resource: TR-398
Stability Duration:	5 m
Concurrent Ports to Reset:	1
Minimum Time between Resets:	20000
Maximum Time between Resets:	30000
Long-Term Station Count:	2
VOIP Call Count:	10
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:	0
Stability UDP Min Download Rate:	500000
Stability UDP Max Download Rate:	1544000
Stability UDP Min Upload Rate:	500000
Stability UDP Max Upload Rate:	1544000
Stability TCP Min Download Rate:	500000
Stability TCP Max Download Rate:	1544000
Stability TCP Min Upload Rate:	500000
Stability TCP Max Upload Rate:	1544000
Long-Term Duration:	2 m
Long-Term Graph Interval:	30
Long-Term Download Rate:	85%
Video Emulation Rate:	700000
Video Buffer Size:	500000
Long-Term Upload Rate:	85%
Use Packet Sizes	false
Reset Radios	false
Spatial Streams	AUTO
Bandwidth	AUTO
Modes	Auto
WiFi Radio 0	1.1.8 wiphy1 Firmware: 10.4b-ct-9984-xtH-013-b63cea875 Resource: TR-398
WiFi Radio 1	1.1.9 wiphy3 Firmware: 10.4b-ct-9984-xtH-013-b63cea875 Resource: TR-398
WiFi Radio 2	1.1.10 wiphy5 Firmware: 10.4b-ct-9984-xtH-013-b63cea875 Resource: TR-398
WiFi Radio 3	
WiFi Radio 4	
WiFi Radio 5	
WiFi Radio 6	
WiFi Radio 7	
WiFi Radio 0	1.1.3 wiphy0 Firmware: 10.4b-ct-9984-xtH-013-b63cea875 Resource: TR-398
WiFi Radio 1	1.1.5 wiphy2 Firmware: 10.4b-ct-9984-xtH-013-b63cea875 Resource: TR-398
WiFi Radio 2	1.1.7 wiphy4 Firmware: 10.4b-ct-9984-xtH-013-b63cea875 Resource: TR-398
WiFi Radio 3	
WiFi Radio 4	
WiFi Radio 5	
WiFi Radio 6	
WiFi Radio 7	
Show Events	true
Build Date	Mon Apr 6 13:48:46 PDT 2020
Build Version	5.4.2

Git Version	599bb49e786a309e051277ace95e1376a6f94342
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