

AP-Auto

AP Automated Test Plan



Wed Apr 01 14:27:07 PDT 2020

Test Setup Information	
Device Under Test	TR398-DUT NETGEAR68-5G TR398-DUT NETGEAR68
Operator	Ben Greear @ Candela Technologies
Estimated Run Time	10 m
Actual Run Time	14.738 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	
Mix Stability	Dual-Band FAIL	99	14.1 m	Station Connections: 0.0 Auth Timeouts: 0.0 Association Rejected: 0.0 Bandwidth Check: 198.0/202.0 STA Connected Check: 64.0/64.0
Mix Stability Band: Dual-Band	Skipped	0	0	
Mix Stability Band: Dual-Band	Skipped	0	0	

Mix 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 Mix 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.

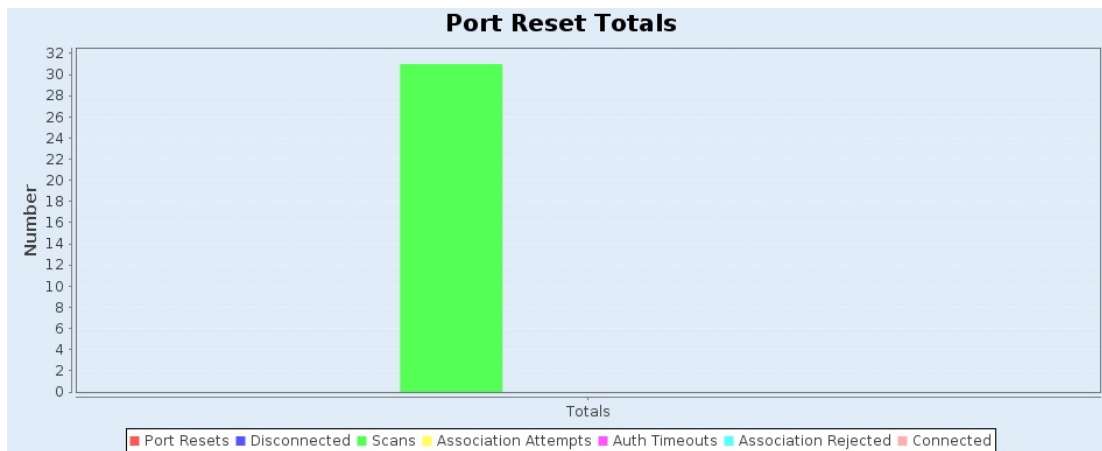
Mix Stability Results

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.

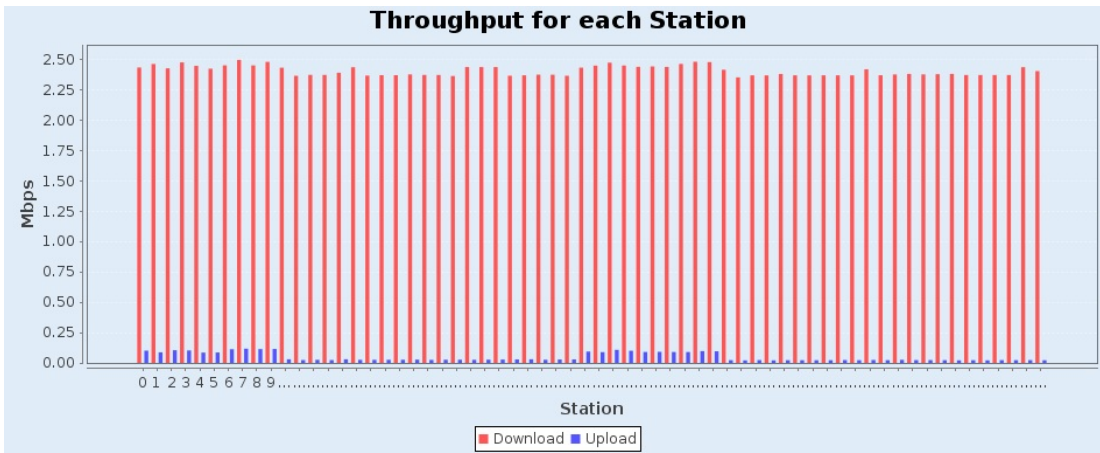
Mix Stability Results for Dual-Band

Type	Result	Notes
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G 2.4Ghz cv_l4-1.1-1.sta01003--1.0.2	FAIL	Minimum 1m Rx-Bps below 5Kbps cutoff: 2189
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G 2.4Ghz cv_tcp-1.1-1.sta01003--1.0.1-A	FAIL	Minimum 1m Rx-Bps below 5Kbps cutoff: 0
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G 2.4Ghz cv_V-1.81-1.sta00508--1.0.0-A	FAIL	Minimum 1m Rx-Bps below 5Kbps cutoff: 0
DUT: TR398-DUT NETGEAR68 TR398-DUT NETGEAR68-5G 2.4Ghz cv_V-1.82-1.sta00509--1.0.0-A	FAIL	Minimum 1m Rx-Bps below 5Kbps cutoff: 0

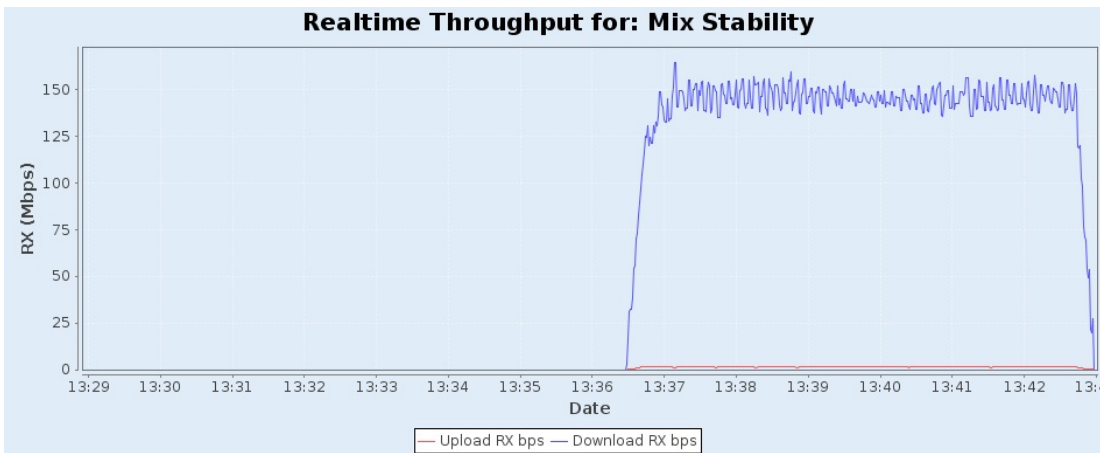
Port Reset Totals



Throughput for each Station



Realtime Throughput for: Mix 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
Reset Stability Duration:	5 m
Long-Term Station Count:	2
VOIP Call Count:	10
Stability UDP Download Rate:	40000
Stability UDP Upload Rate:	15000
Stability TCP Download Rate:	1544000
Stability TCP Upload Rate:	0
Long-Term Duration:	5 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	true
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	Wed Apr 1 13:26:15 PDT 2020
Build Version	5.4.2
Git Version	8dff991732ce47273699454973cd23b0f9800a70