

Mesh

Mesh Test Plan



Sun Nov 07 08:38:43 PST 2021

Test Setup Information	
Device Under Test	Name
	Hardware Version
	Model Number
	SSIDs
	Passwords
	BSSIDs
	Notes
Actual Run Time	4.372 m

Objective

Automated testing for 3-node mesh systems. This test can report throughput, latency, MCS and other measurements at different mesh topologies. Pass/Fail thresholds and Scoring results are not currently implemented for this test. The Calibrate test will auto-calibrate the zero-attenuation RSSI for the Mobile Stations chamber. Calibration should be run after any changes are made to the Mesh attenuator configuration or wiring changes. The Throughput test moves the mobile station through a different set of fixed locations and runs a throughput test. The Roam test moves the mobile station along various paths and reports throughput, latency, and other values over time.

Summary Results

Test	Result	Score	Elapsed	Info
Roam Chamber Location: A-B--C STA Location: Current Position	2.4Ghz PASS 5Ghz PASS	0	4.293 m	STA:?-Orbit Current UDP DL Sum Throughput: 76.75 Mbps

Roam

Summary

Traffic on each AP in the test.

Roam

Chamber Location: A-B--C

STA Location: Current Position Results

Type	Result	Notes
AP Chamber Position	A-B--C	
Station Chamber Position	Current Position	

STA-Orbit Current UDP DL Mobile-Sta	Result	Node Throughput: 76.75 Mbps Avg-Rt-Lat: 659ms
STA-Orbit Current UDP DL Path: Orbit Current	Result	Sum Throughput: 76.75 Mbps Avg-Rt-Lat: 659ms

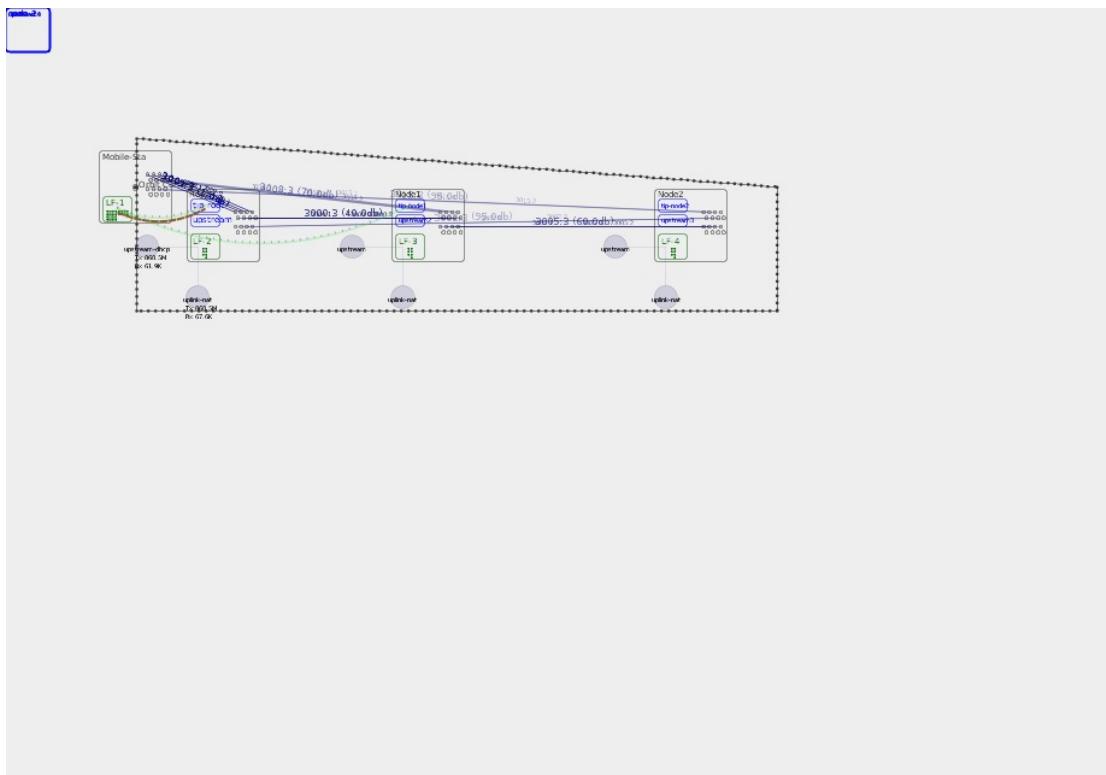
STA:Current Position-Orbit Current UDP DL Snapshot

Port	Tx-Bps 1m	RxBps 1m	Tx-Fail %	Tx-Link-Rate	Rx-Link-Rate	Mode	Channel	Last CX-Time(ms)	RSSI (dBm)	AP	IP	MAC
1.1.12 sta02000	528 bps	133 bps	7.943	48 Mbps	1 Mbps	802.11bgn	11	13	-80	34:EF:B6:AF:49:0D	172.16.223.251	04:f0:21:85:6a:a9
1.1.13 sta03500	32.802 Kbps	72.203 Mbps	7.55	866.7 Mbps	195.1 Mbps	802.11an-AC	149	50	-31	34:EF:B6:AF:4A:7D	172.16.223.178	04:f0:21:55:6a:ca

Port	Tx-Bps 1m	RxBps 1m	Link-Rate	IP	MAC
1.2.2 eth2	527.361 Mbps	23.12 Kbps	1 Gbps	172.16.0.1	00:30:18:03:74:77

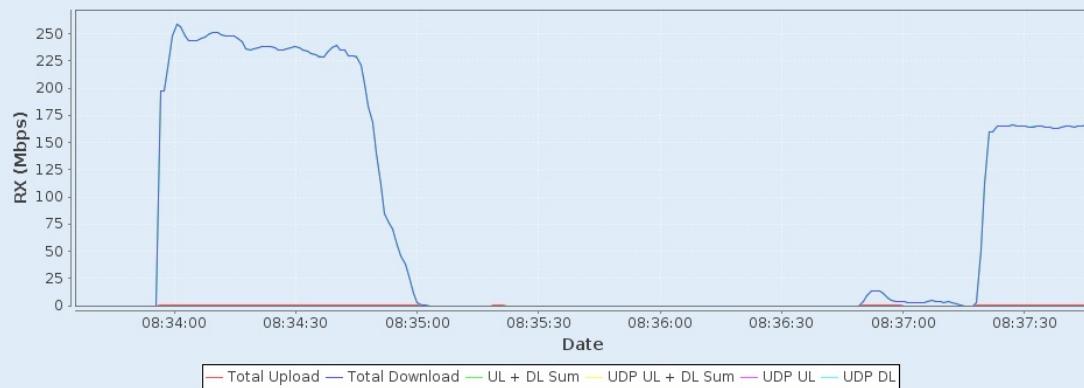
Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency(ms)	Round-Trip Latency(ms)	Jitter	Rx Packet Loss %
cv_udp-2.2-1.sta02000--1.0.0-A	56.026 Kbps	0 bps	1098	379240	1,267	1,285	31	86.221
cv_udp-2.2-1.sta02000--1.0.0-B	140.792 Mbps	0 bps	2752364	289	18	1,285	23	73.042
cv_udp-2.2-1.sta03500--1.0.0-A	56.002 Kbps	81.026 Mbps	1098	1126395	20	34	0	93.191
cv_udp-2.2-1.sta03500--1.0.0-B	844.935 Mbps	35.226 Kbps	16542044	394	14	34	11	63.661

Mesh



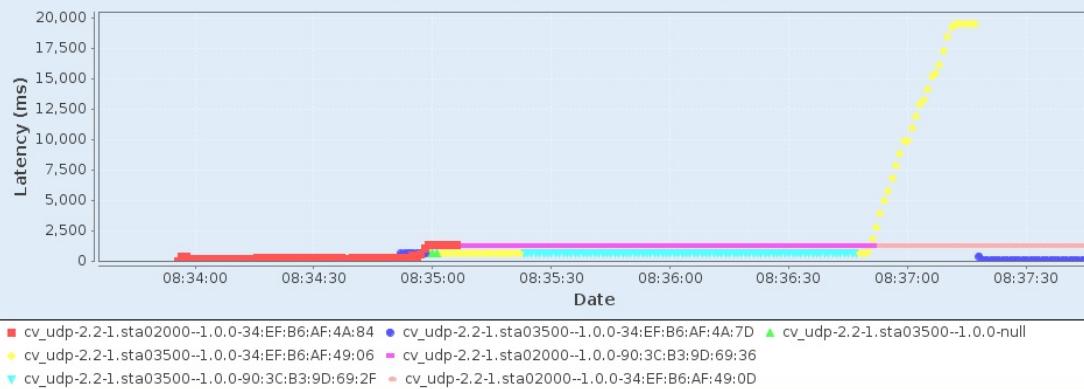
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Realtime Throughput: Roam, Chamber Location: A-B--C, STA Location: Current Position, STA-Orbit Current



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Round-Trip Latency: Roam, Chamber Location: A-B--C, STA Location: Current Position, STA-Orbit Current



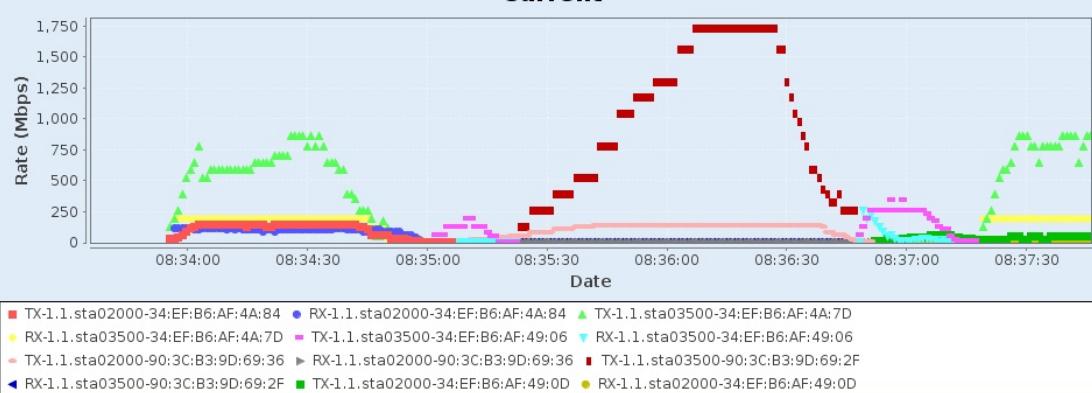
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Round-Trip Latency Distribution: Roam, Chamber Location: A-B--C, STA Location: Current Position, STA-Orbit Current



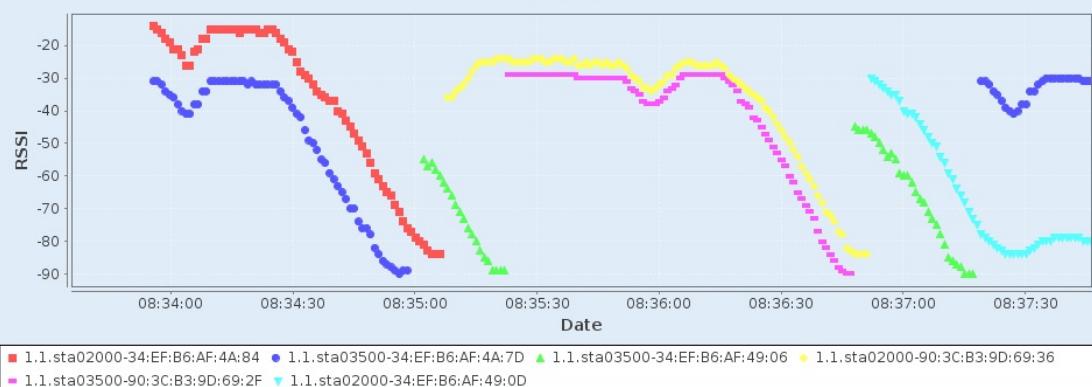
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MCS: Roam, Chamber Location: A-B--C, STA Location: Current Position, STA-Orbit Current



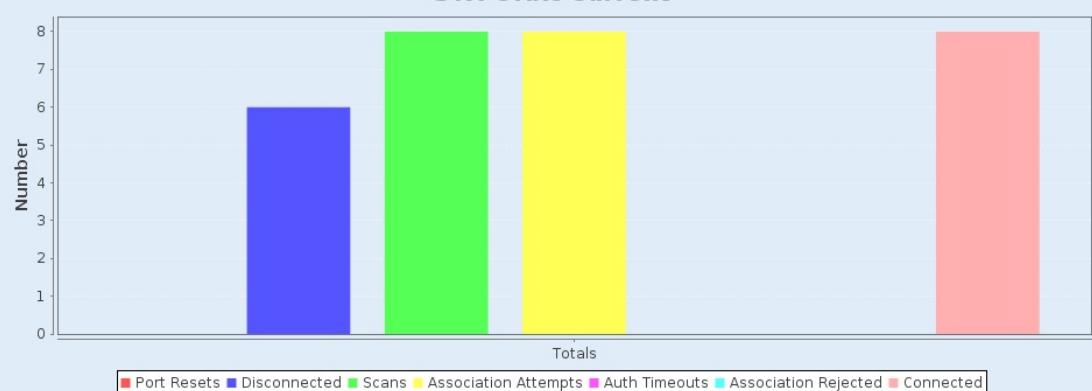
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RSSI: Roam, Chamber Location: A-B--C, STA Location: Current Position, STA-Orbit Current



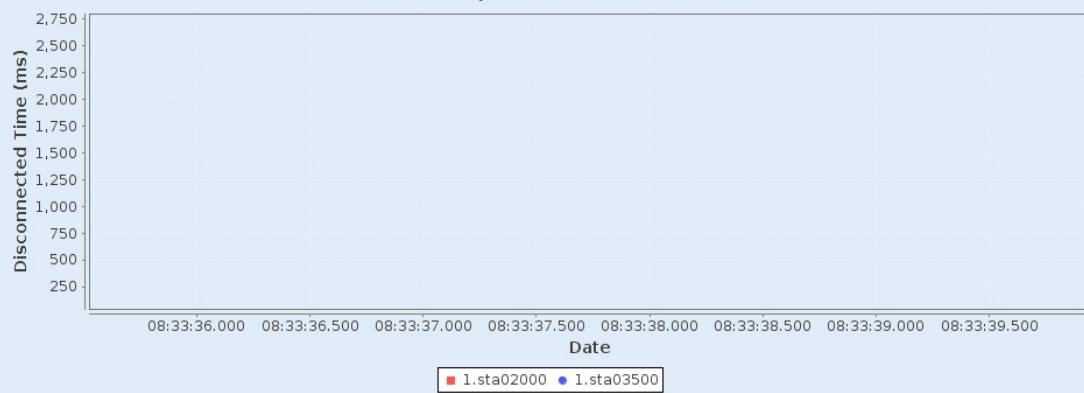
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WiFi Events: Roam, Chamber Location: A-B--C, STA Location: Current Position, STA-Orbit Current



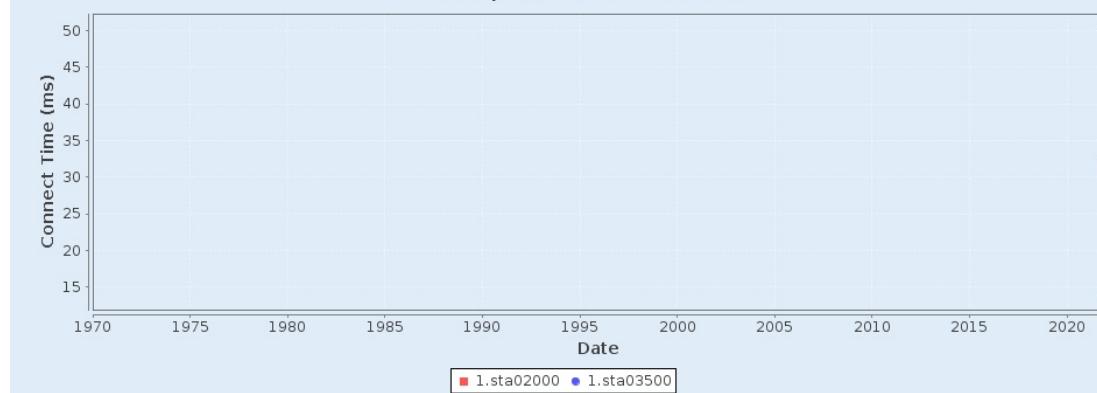
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Disconnected time: Roam, Chamber Location: A-B--C, STA Location: Current Position, STA-Orbit Current



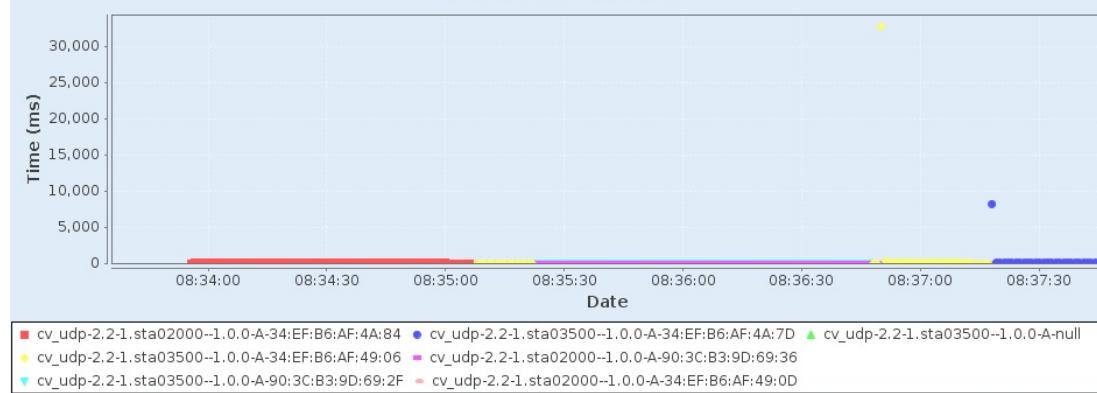
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Station connect time: Roam, Chamber Location: A-B--C, STA Location: Current Position, STA-Orbit Current



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Max Packet Gap: Roam, Chamber Location: A-B--C, STA Location: Current Position, STA-Orbit Current



Test configuration and LANforge software version	
Auto-Helper	true
Show TX MCS Graph	true
Show RX MCS Graph	true
Skip 2.4Ghz Tests	false
Skip 5Ghz Tests	false
Skip DHCP on Reconnect	true
Duration	60

Multi-Conn	5
ToS	0
Chamber [0]	Root
Chamber [1]	Node1
Chamber [2]	Node2
Chamber [3]	
Chamber [4]	Mobile-Sta
STA Count [0]	1
STA Count [1]	1
STA Count [2]	1
STA Count [3]	
STA Count [4]	1
AP Arrangements	A-B--C
STA Positions	Current Position
Traffic Types	UDP
Traffic Directions	Download
Tests	Roam
Node Combinations	STA
Requested Speed	65%
Requested Opposite Speed	56Kbps
Requested Velocity	100
Requested Path Loops	1
Background Scan Module	Disabled
Background Short Interval	30
Background Long Interval	300
Background RSSI Threshold	-60
WiFi Radio [0][0]	1.2.6 wiphy0 Firmware: 10.1-ct-8x-__xtH-022-bcdb24ff Resource: ct522-7475
WiFi Radio [0][3]	1.2.7 wiphy1 Firmware: 10.4b-ct-9984-xtH-13-774502ee5 Resource: ct522-7475
WiFi Radio [1][0]	1.3.6 wiphy0 Firmware: 10.1-ct-8x-__xtH-022-bcdb24ff Resource: ct522-74ab
WiFi Radio [1][3]	1.3.7 wiphy1 Firmware: 10.4b-ct-9984-xtH-13-774502ee5 Resource: ct522-74ab
WiFi Radio [2][0]	1.4.6 wiphy0 Firmware: 10.1-ct-8x-__xtH-022-bcdb24ff Resource: ct522-7481
WiFi Radio [2][3]	1.4.7 wiphy1 Firmware: 10.4b-ct-9984-xtH-13-774502ee5 Resource: ct522-7481
WiFi Radio [4][0]	1.1.6 wiphy2 Firmware: 10.4b-ct-9984-xtH-13-774502ee5 Resource: ct523c-ab1a
WiFi Radio [4][3]	1.1.7 wiphy3 Firmware: 10.4b-ct-9984-xtH-13-774502ee5 Resource: ct523c-ab1a
Add STA Traffic	false
Show Events	true
Build Date	Fri 01 Oct 2021 02:19:58 PM PDT
Build Version	5.4.4
Git Version	19e3b237002e1fac187bdad69aa9b27cbd34161b

[CSV Data](#)

[META Information for Mesh](#)