

# Mesh

## Mesh Test Plan



Sun Nov 07 08:33:14 PST 2021

Test Setup Information	
Device Under Test	Name
	Hardware Version
	Model Number
	SSIDs
	Passwords
	BSSIDs
	Notes
Actual Run Time	1.516 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
Throughput Chamber Location: A-B--C STA Location: Current Position	2.4Ghz PASS 5Ghz PASS	0	1.438 m	STA:? UDP DL Sum Throughput: 253.60 Mbps

## Throughput

### Summary

Traffic on each AP in the test.

## Throughput

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 UDP DL Mobile-Sta	Result	Node Throughput: 253.60 Mbps Avg-Rt-Lat: 111ms
STA UDP DL Path: Orbit Current	Result	Sum Throughput: 253.60 Mbps Avg-Rt-Lat: 111ms

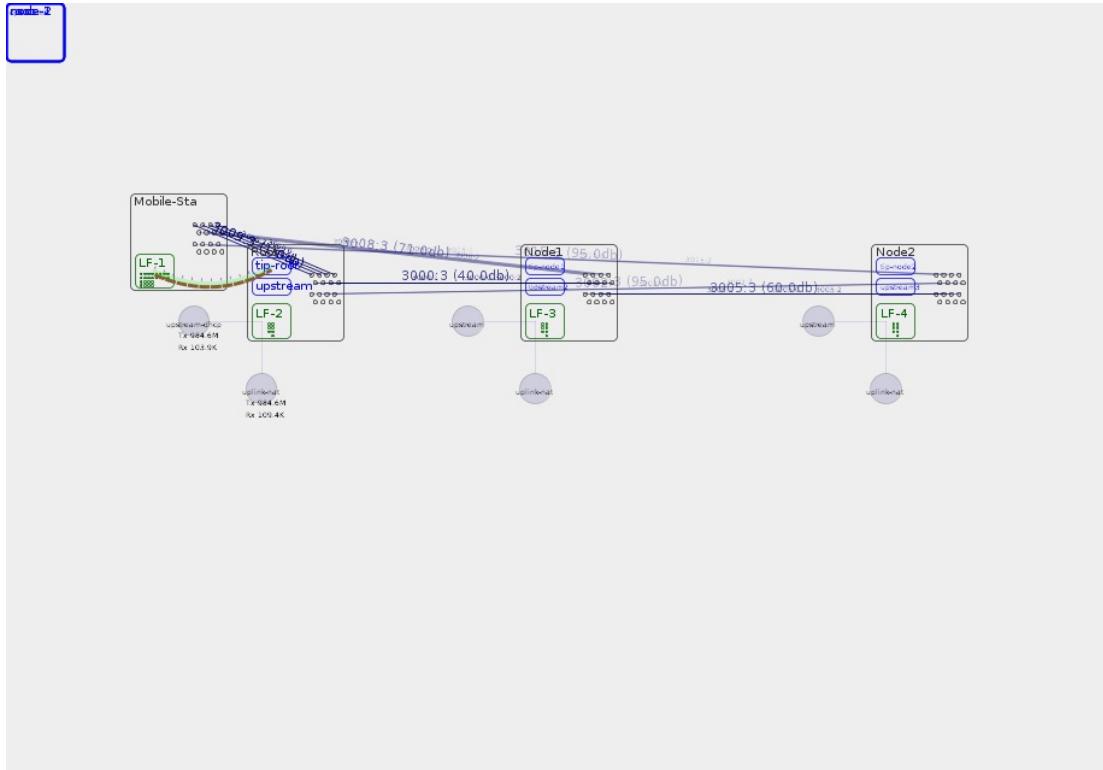
### STA:Current Position UDP DL Snapshot

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	44.773 Kbps	69.36 Mbps	0	144.4 Mbps	104 Mbps	802.11bgn	11	57	-16	34:EF:B6:AF:4A:84	172.16.223.112	04:f0:21:85:65:a9
1.1.13 sta03500	26.089 Kbps	130.119 Mbps	0.476	526.6 Mbps	195.1 Mbps	802.11an-AC	149	55	-32	34:EF:B6:AF:4A:7D	172.16.224.33	04:f0:21:55:4b:ca

Port	Tx-Bps 1m	RxBps 1m	Link-Rate	IP	MAC
1.2.2 eth2	495.212 Mbps	45.91 Kbps	1 Gbps	172.16.0.1	00:30:18:03:74:77

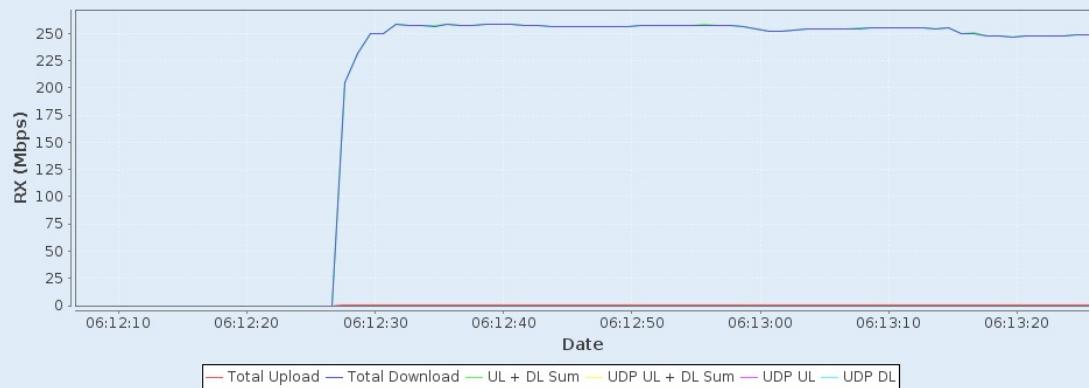
Endpoint	Tx-Bps 1m	Rx-Bps 1m	TxPkts	RxPkts	RX Latency(ms)	Round-Trip Latency(ms)	Jitter	Rx Packet Loss %
cv_udp-2.2-1.sta02000--1.0.0-A	55.971 Kbps	88.317 Mbps	285	450093	160	169	0	37.072
cv_udp-2.2-1.sta02000--1.0.0-B	140.913 Mbps	55.951 Kbps	715251	284	9	169	12	0
cv_udp-2.2-1.sta03500--1.0.0-A	55.901 Kbps	166.18 Mbps	285	843938	45	54	0	80.084
cv_udp-2.2-1.sta03500--1.0.0-B	835.196 Mbps	32.126 Kbps	4237559	163	9	54	12	41.754

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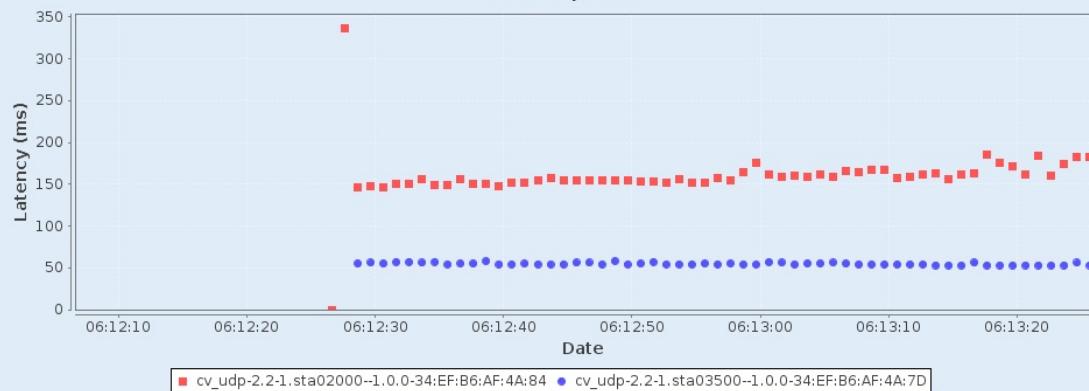
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### Realtime Throughput: Throughput, Chamber Location: A-B--C, STA Location: Current Position, STA



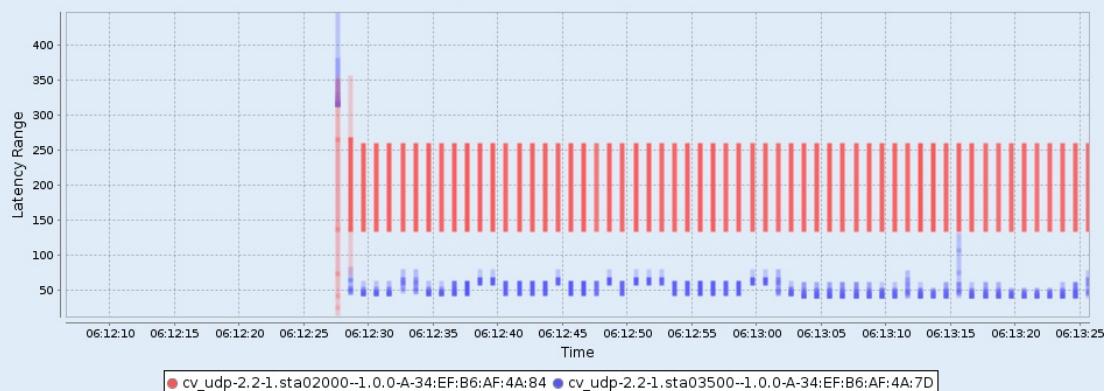
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### Round-Trip Latency: Throughput, Chamber Location: A-B--C, STA Location: Current Position, STA



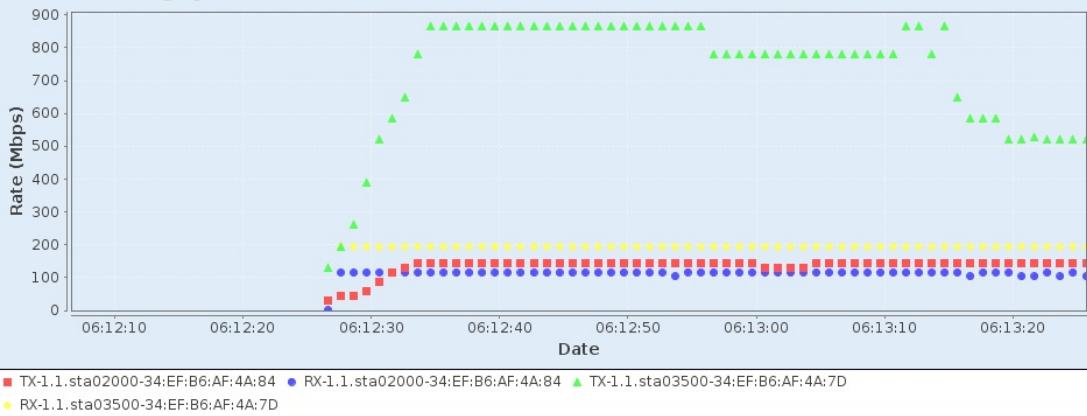
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### Round-Trip Latency Distribution: Throughput, Chamber Location: A-B--C, STA Location: Current Position, STA



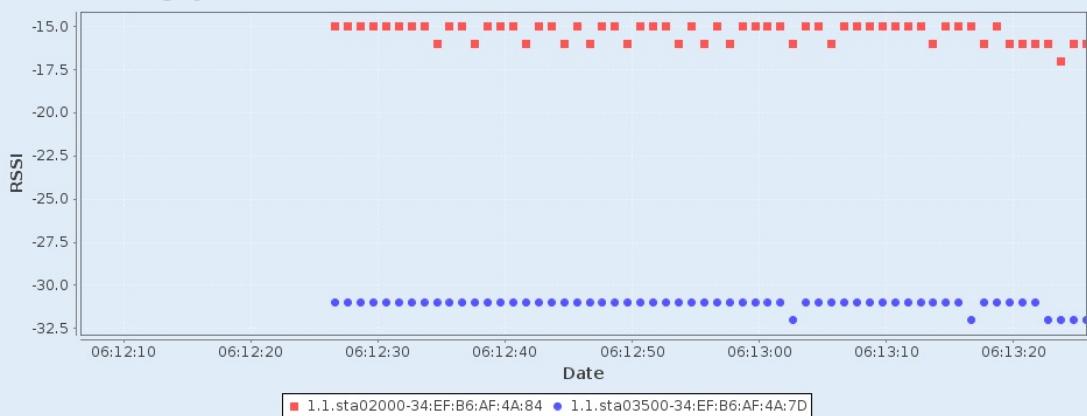
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### MCS: Throughput, Chamber Location: A-B--C, STA Location: Current Position, STA



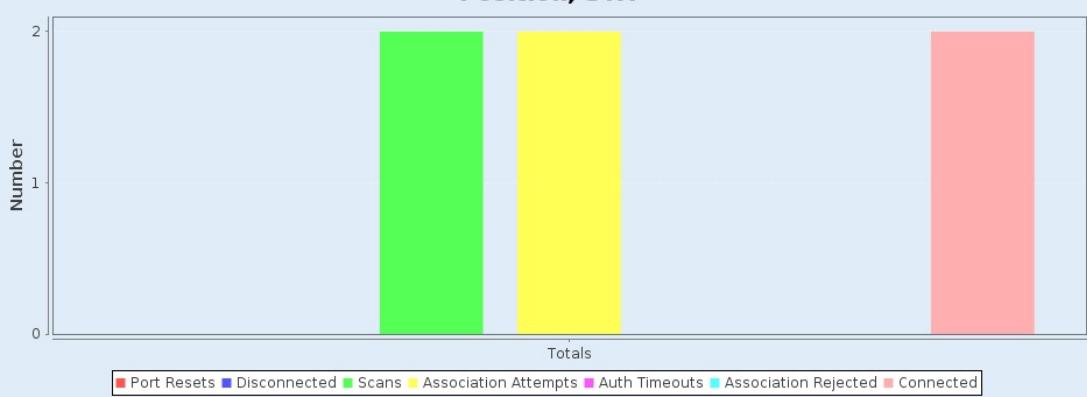
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### RSSI: Throughput, Chamber Location: A-B--C, STA Location: Current Position, STA



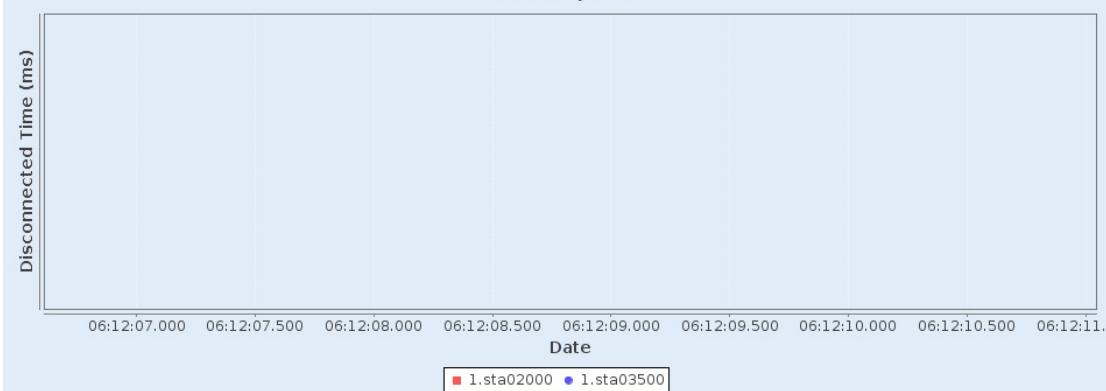
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### WiFi Events: Throughput, Chamber Location: A-B--C, STA Location: Current Position, STA



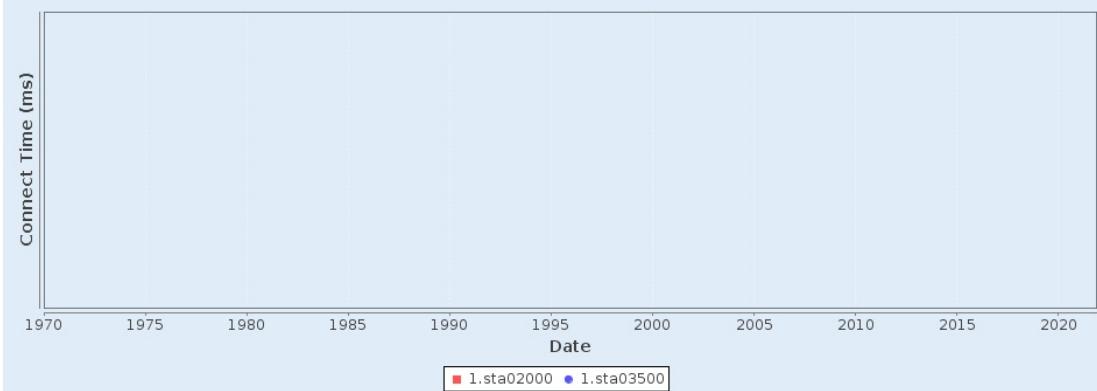
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**Disconnected time: Throughput, Chamber Location: A-B--C, STA Location: Current Position, STA**



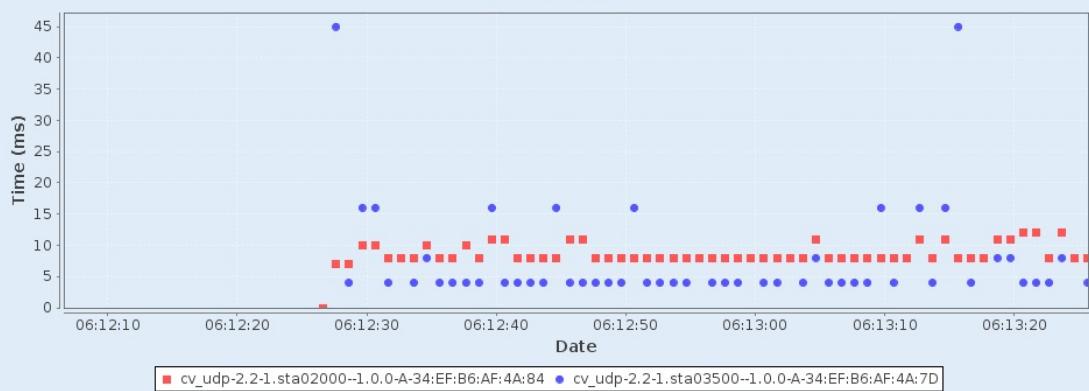
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**Station connect time: Throughput, Chamber Location: A-B--C, STA Location: Current Position, STA**



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**Max Packet Gap: Throughput, Chamber Location: A-B--C, STA Location: Current Position, STA**



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	Throughput
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](#)