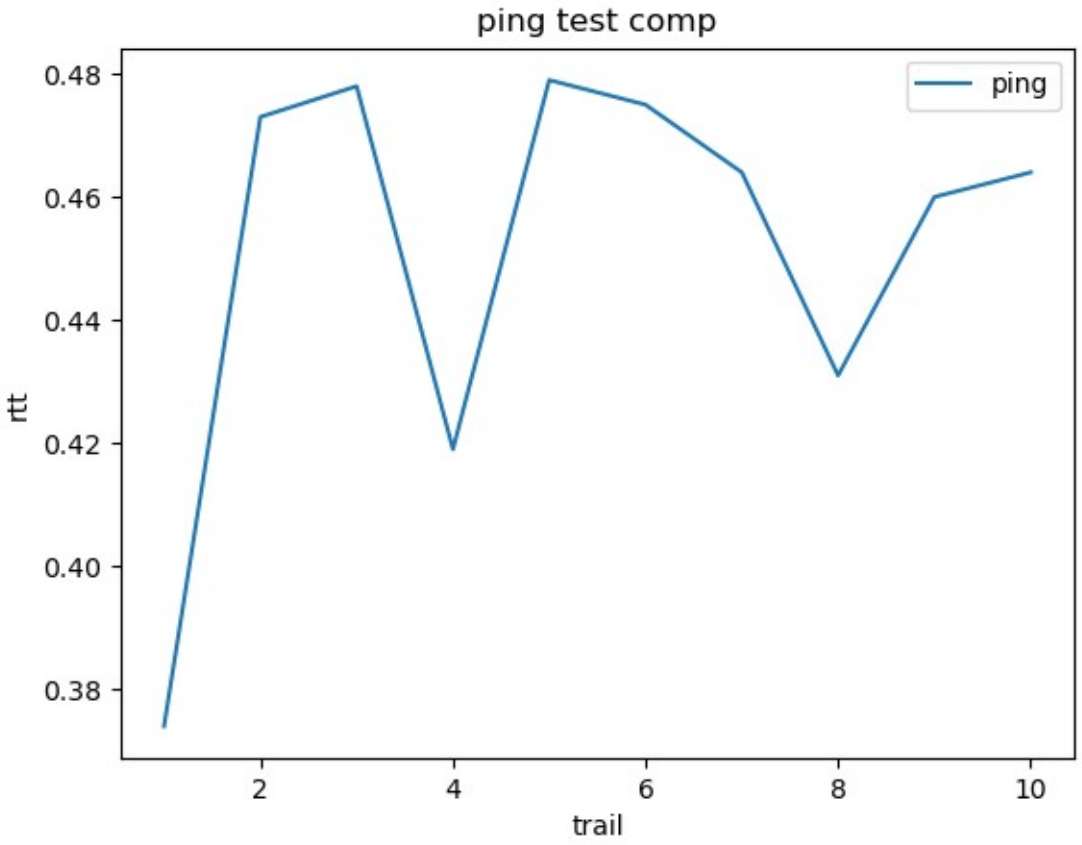
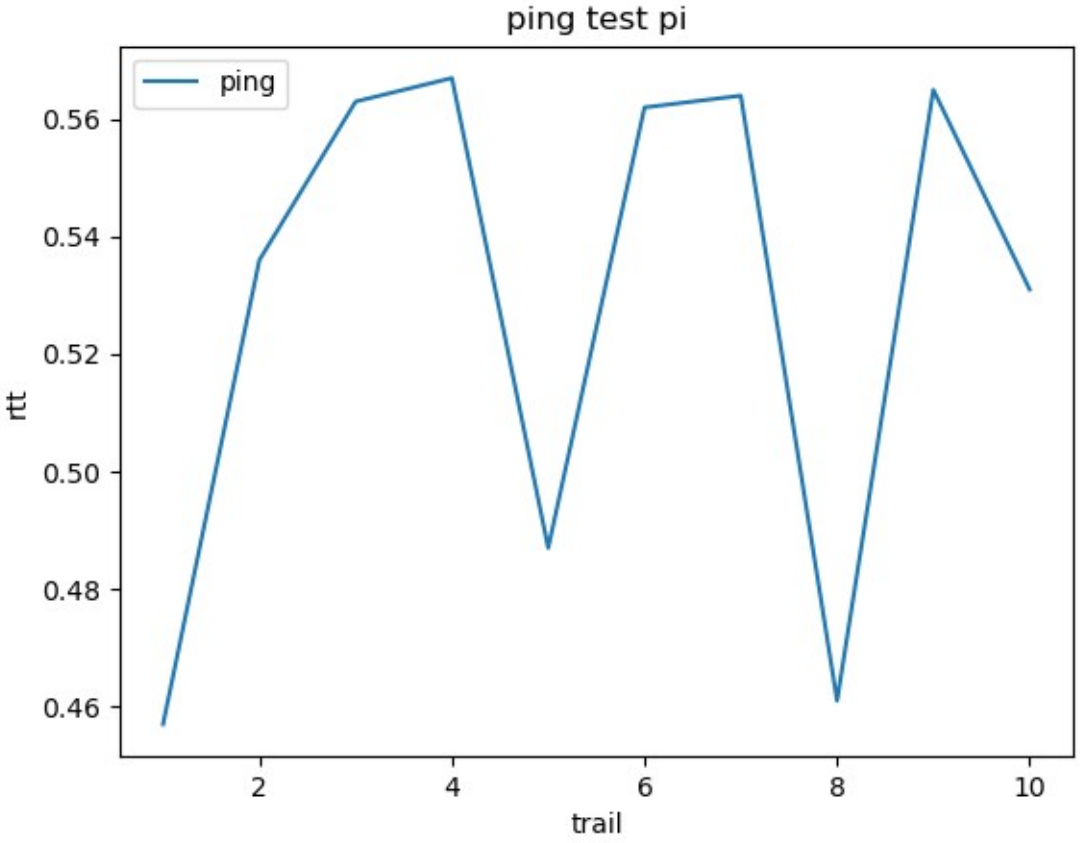
https://github.com/hANK522/CWM-ProgNets/tree/main/assignment2

Ping

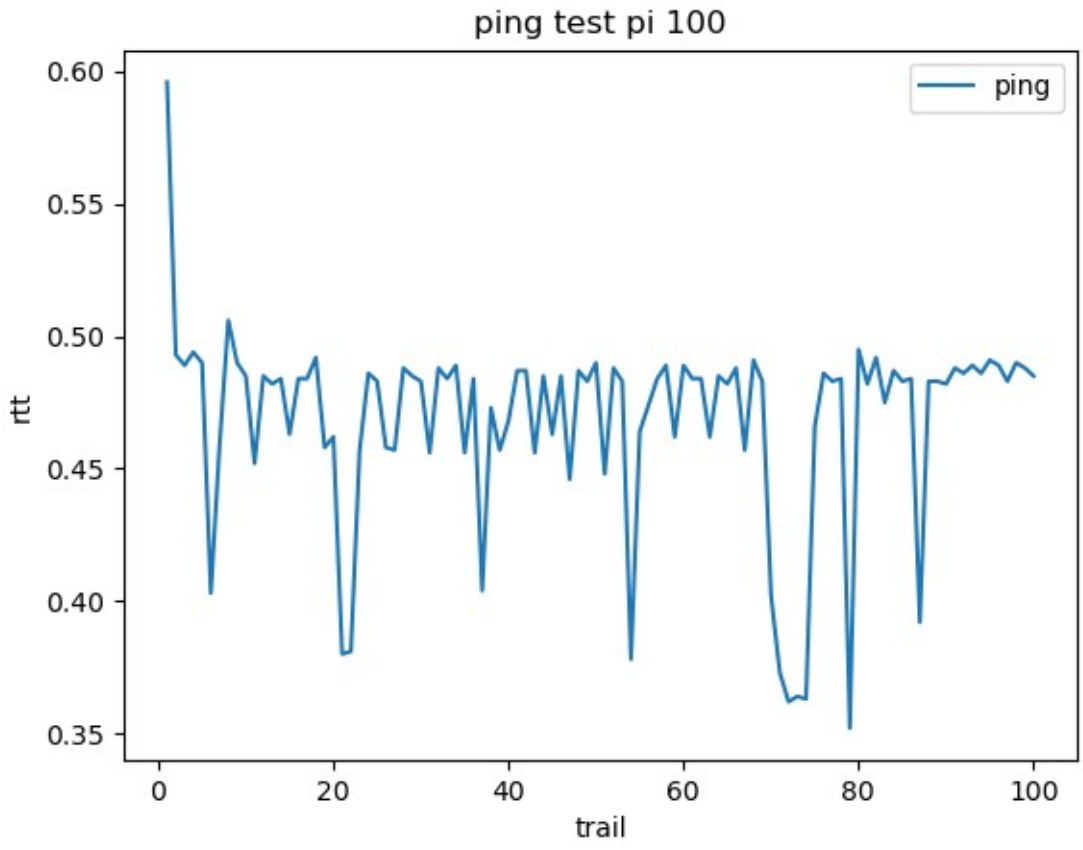
1. rtt min/avg/max/mdev = 0.374/0.451/0.479/0.032 ms



2. rtt min/avg/max/mdev = 0.457/0.529/0.567/0.042 ms



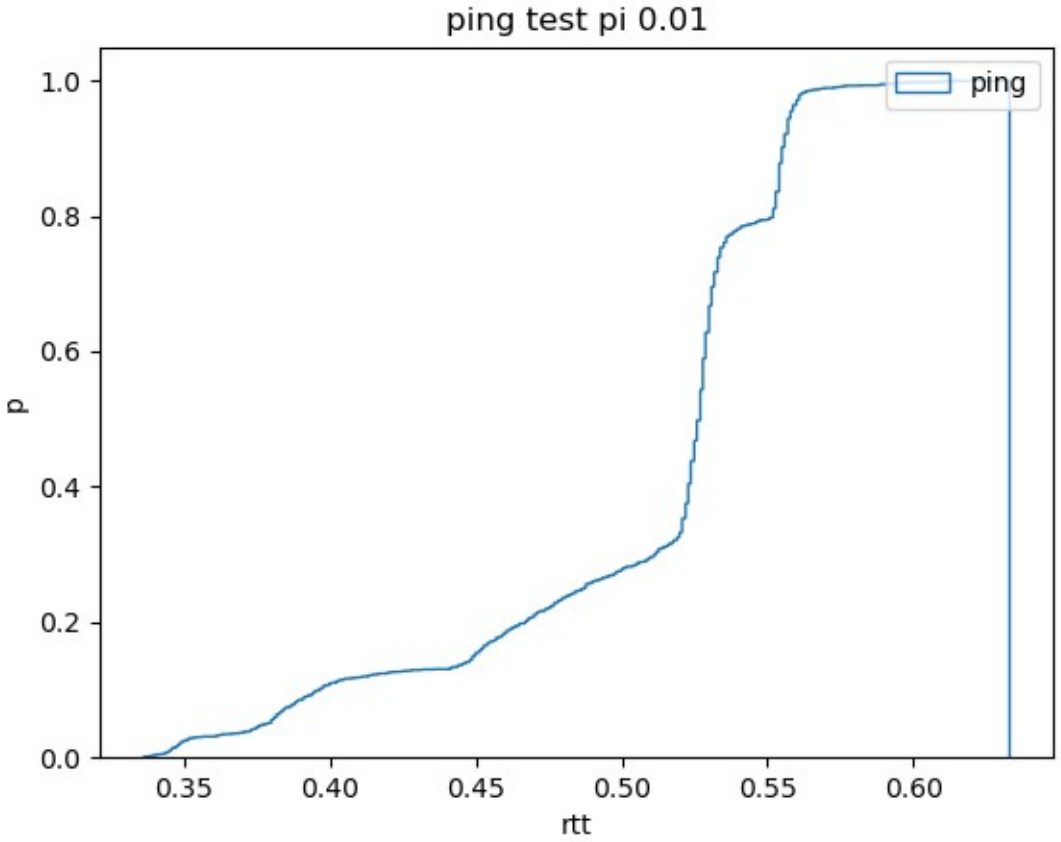
3. rtt min/avg/max/mdev = 0.352/0.468/0.596/0.037 ms



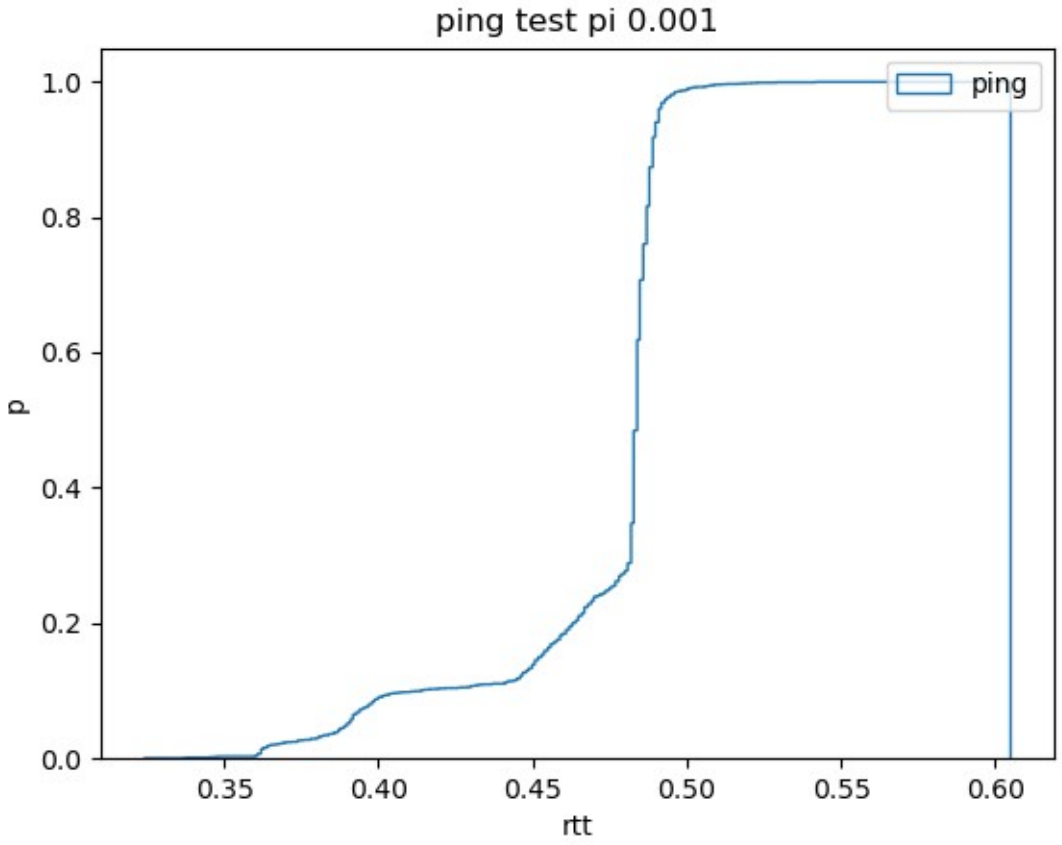
ping 10 times from computer has lower rtt min/avg/max than from pi
ping 100 times with 0.001s interval from pi has a high rtt at the start but decrease to have lower rtt than 10 times 0.2s interval after several trails

4. rtt min/avg/max/mdev = 0.262/0.437/0.640/0.041 ms, ipg/ewma 0.468/0.393 ms

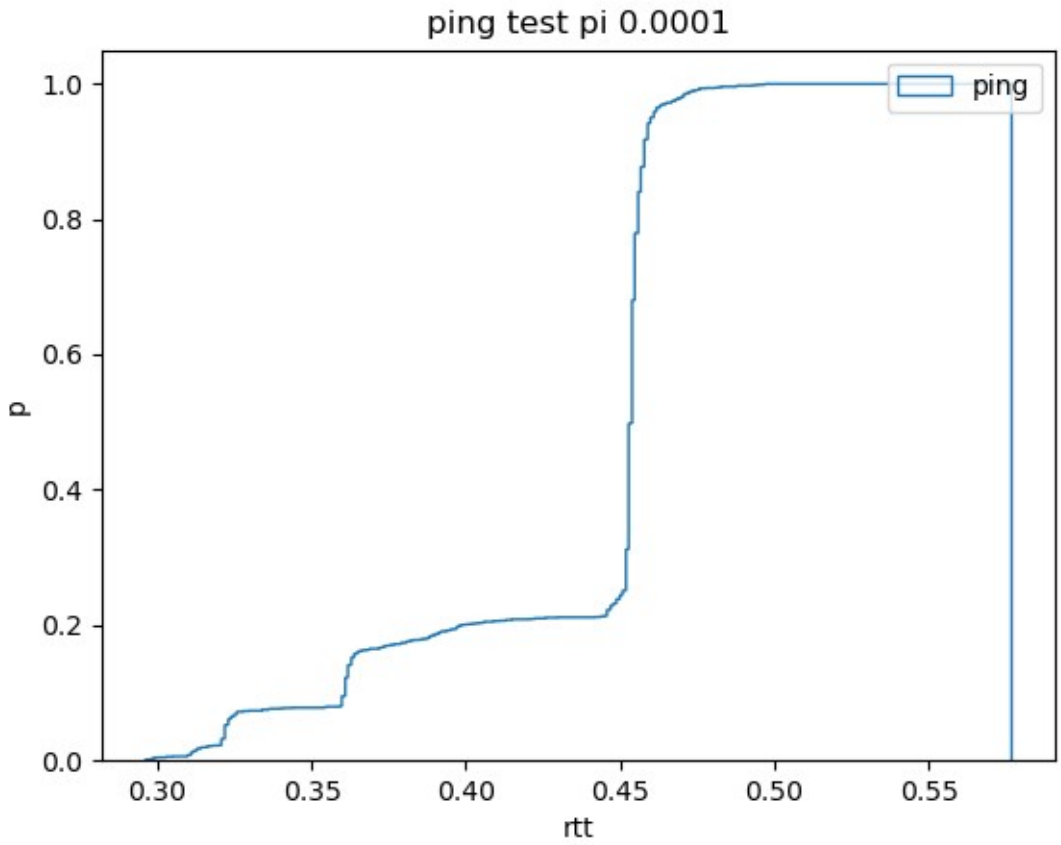
5. rtt min/avg/max/mdev = 0.336/0.505/0.633/0.056 ms



rtt min/avg/max/mdev = 0.324/0.471/0.605/0.031 ms



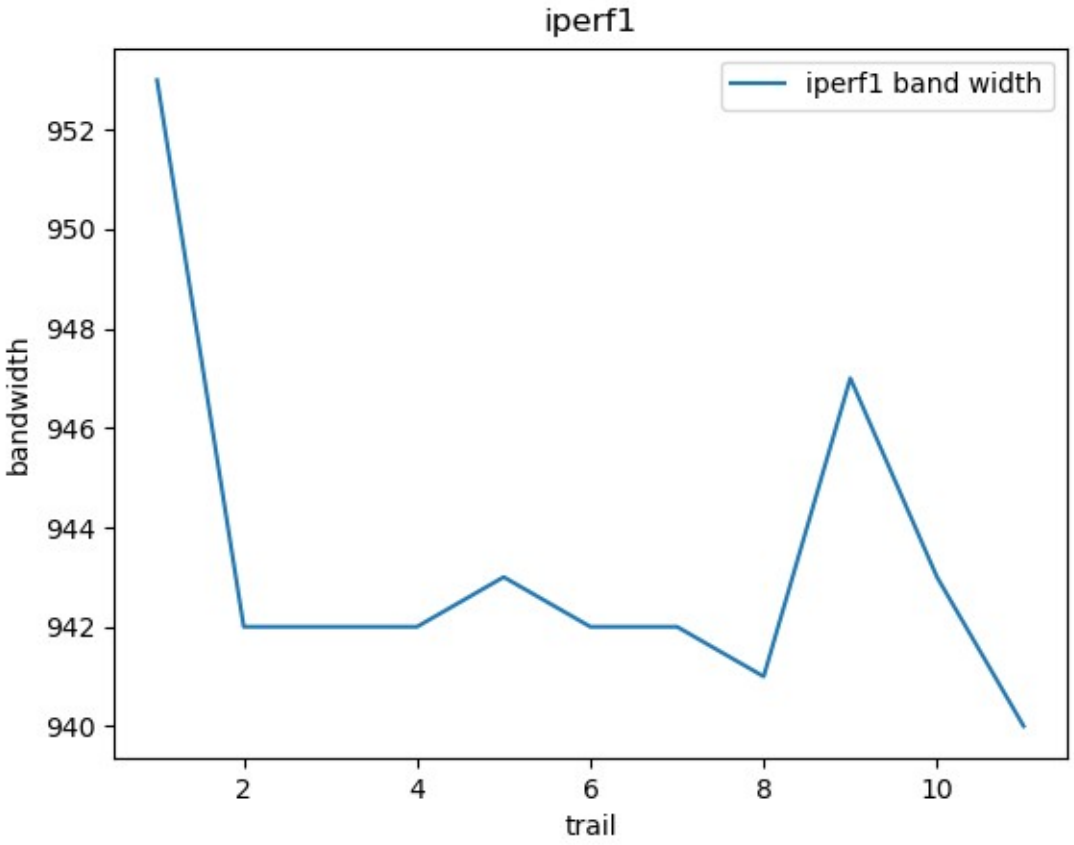
rtt min/avg/max/mdev = 0.296/0.433/0.577/0.044 ms, ipg/ewma 0.465/0.454 ms



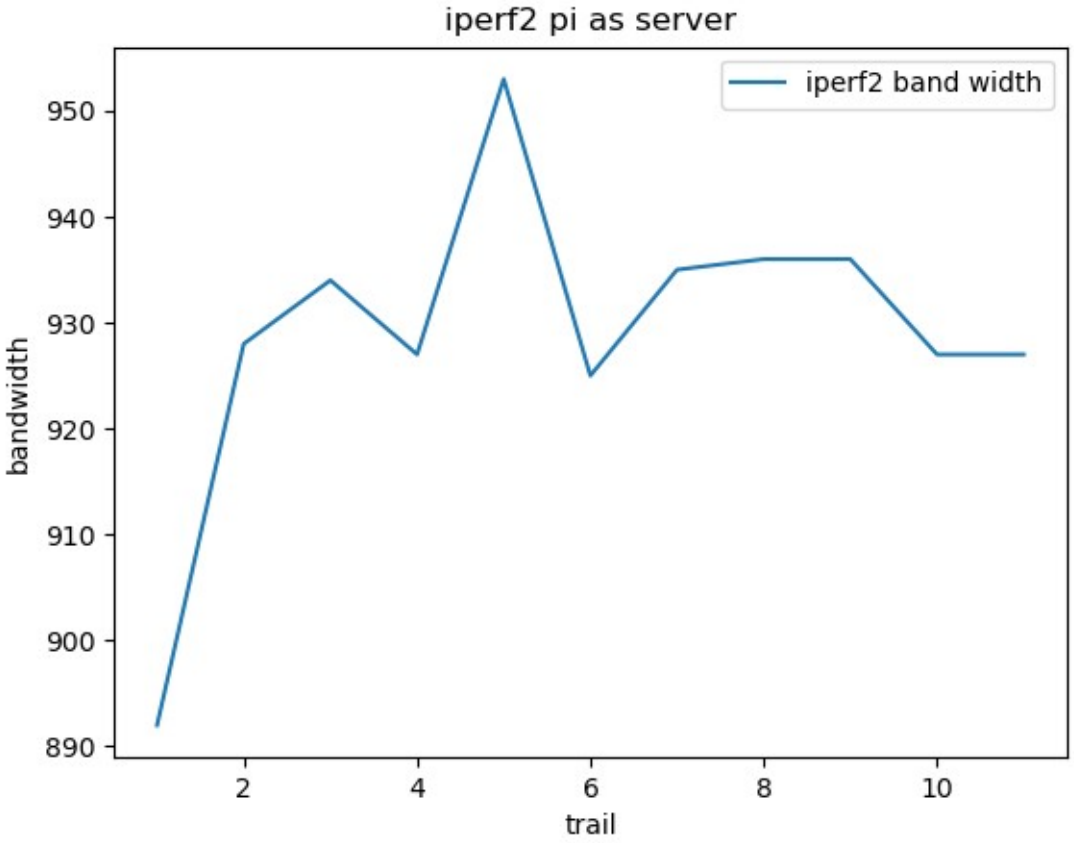
Looks like avg value is the most accurate measure of propagation delay, average value can balance the effect of extreme cases.

Iperf

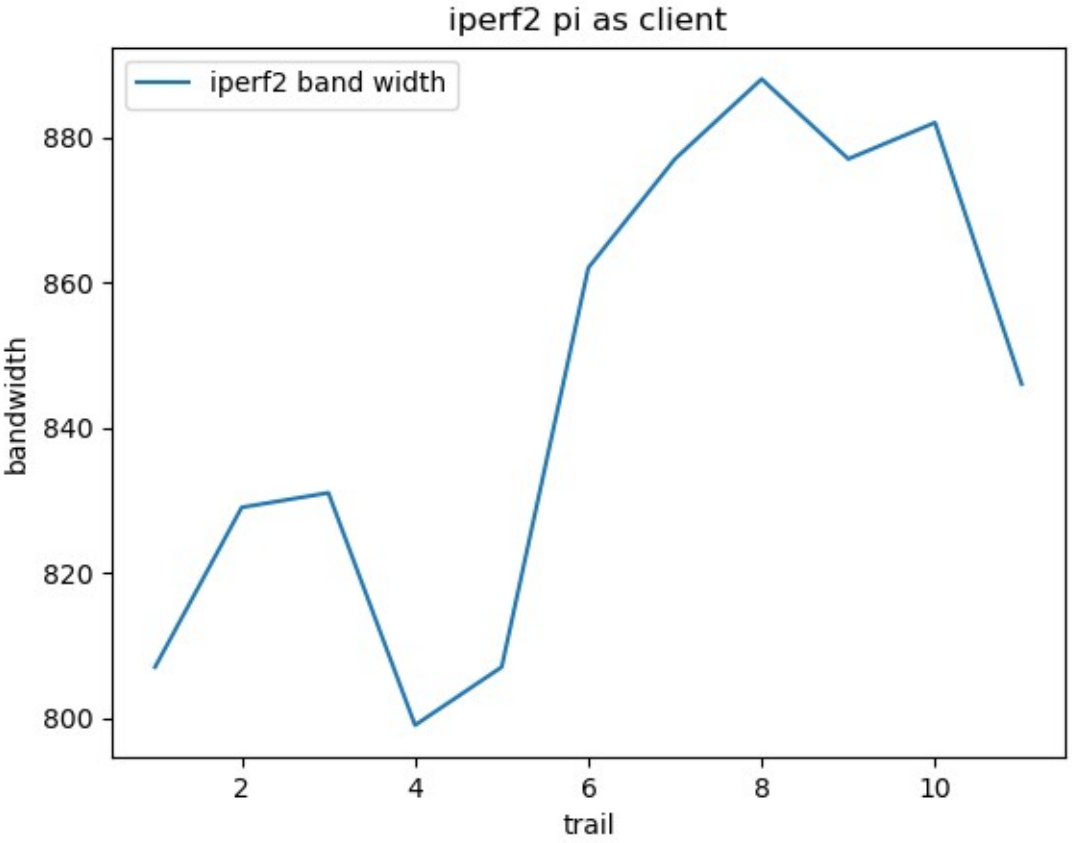
1. effective band width : 940Mbits/sec
2. 0.0000-10.0338 sec 1.10 GBytes 940 Mbits/sec



3. pi as server: 0.0000-10.0338 sec 1.10 GBytes 940 Mbits/sec

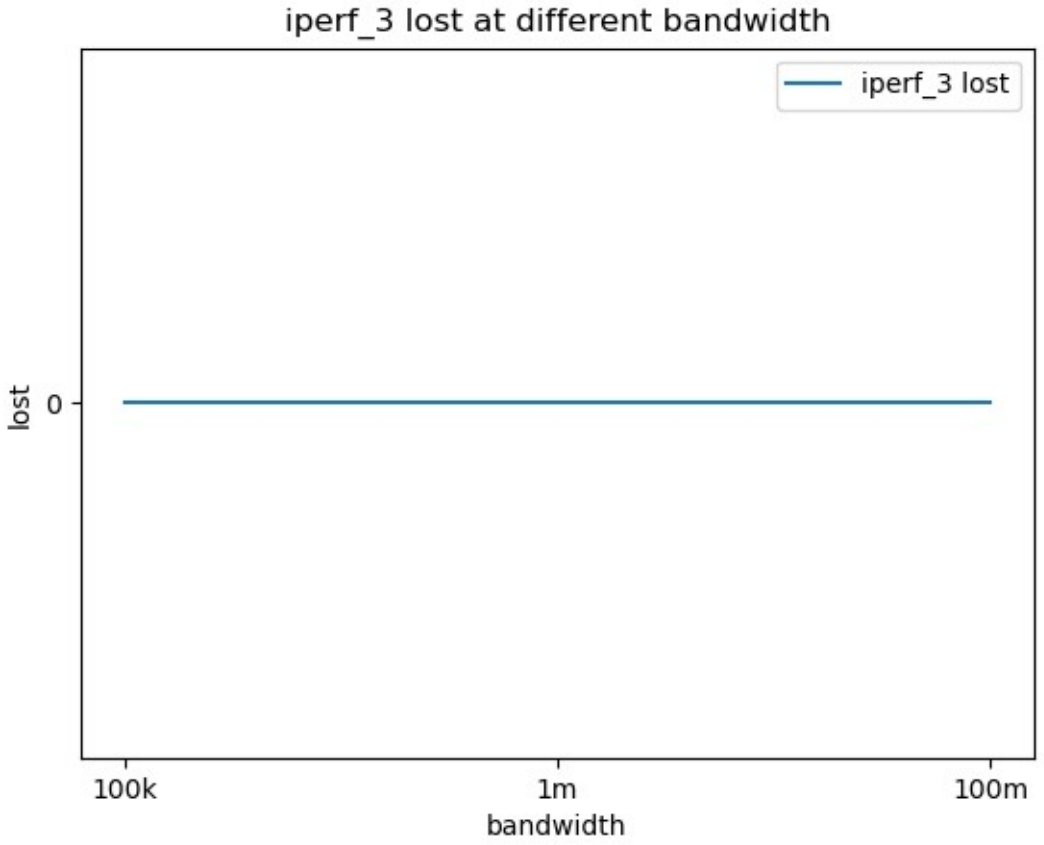


pi as client: 0.0000-10.0338 sec 1.10 GBytes 940 Mbits/sec

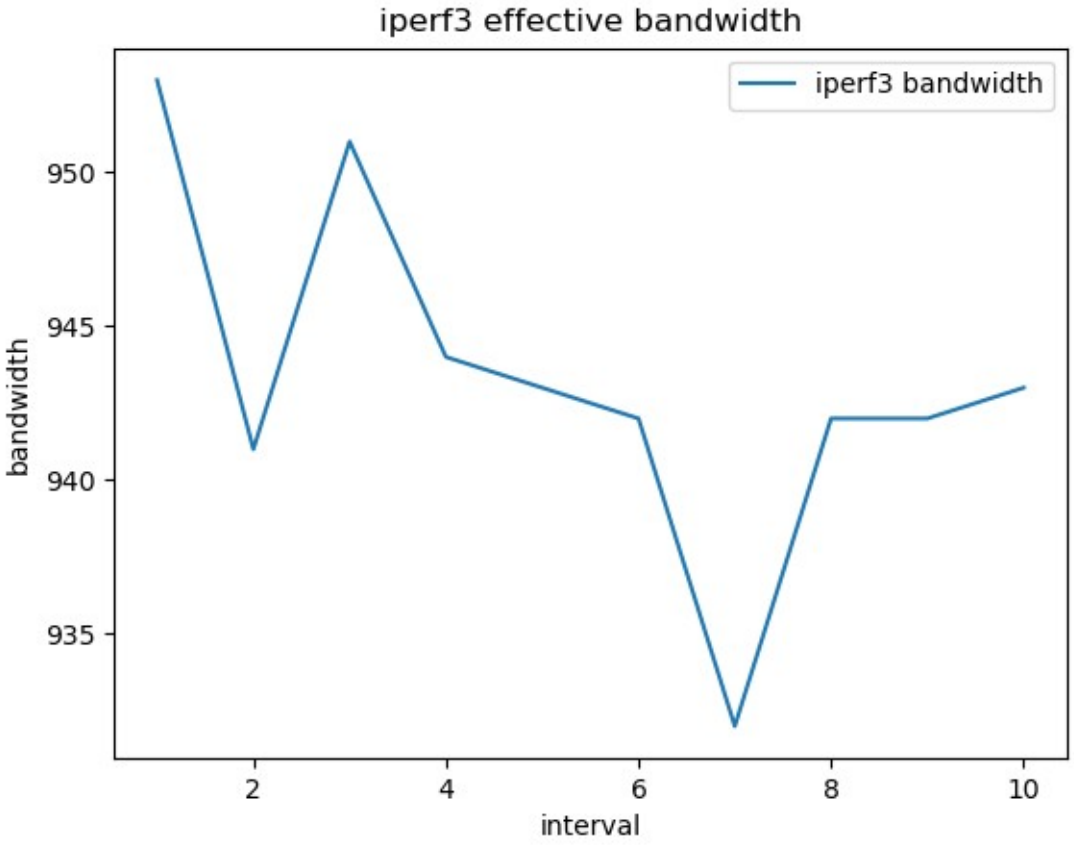


4.

Set_Bandwidth	Interval	Transfer	Bandwidth	Jitter	Lost/Total Datagrams
100k	0.0000-5.1743 sec	66.0 KBytes	105 Kbits/sec	0.003 ms	0/46 (0%)
1m	0.0000-5.0213 sec	616 KBytes	1.00 Mbits/sec	0.002 ms	0/429 (0%)
100m	0.0000-4.9998 sec	59.6 MBytes	100 Mbits/sec	0.006 ms	0/42521 (0%)



Iperf3:
1. Effective bandwidth:



2. For the bandwidth selected, the result of iperf and iperf3 has no significant difference