

Pantheon Report

Generated at 2017-12-12 10:23:33 (UTC).

Data path: GCE London Ethernet (*remote*) → GCE Iowa Ethernet (*local*).

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

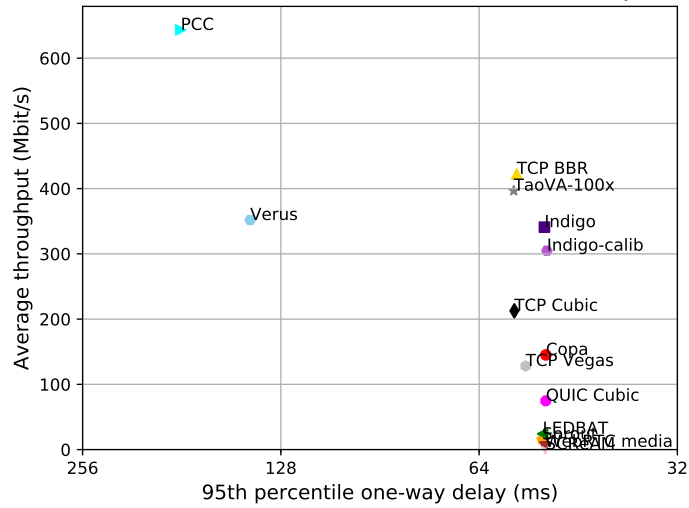
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

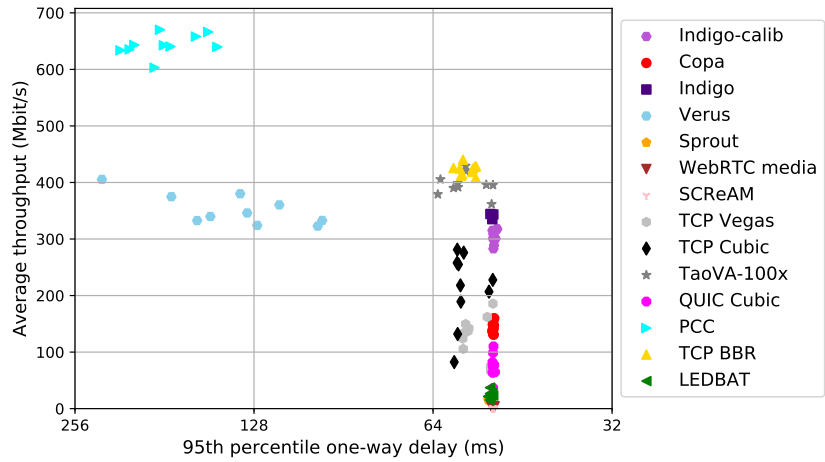
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eae30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE London Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE London Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows



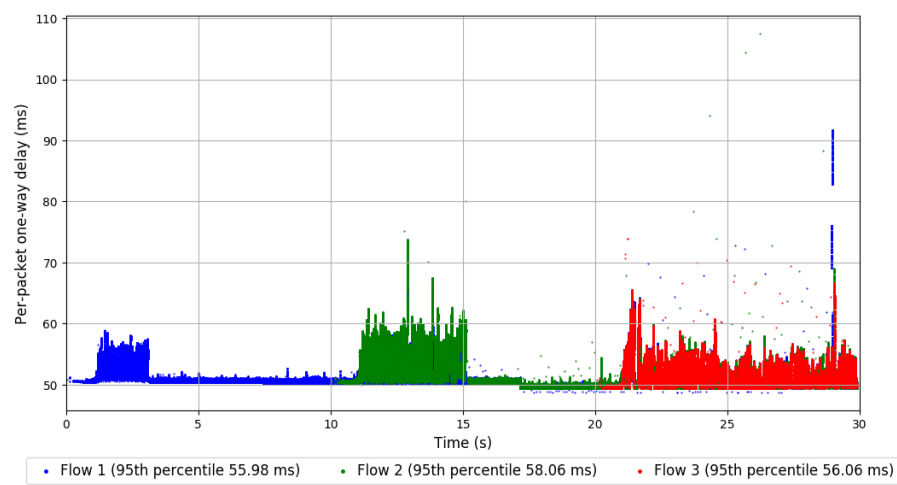
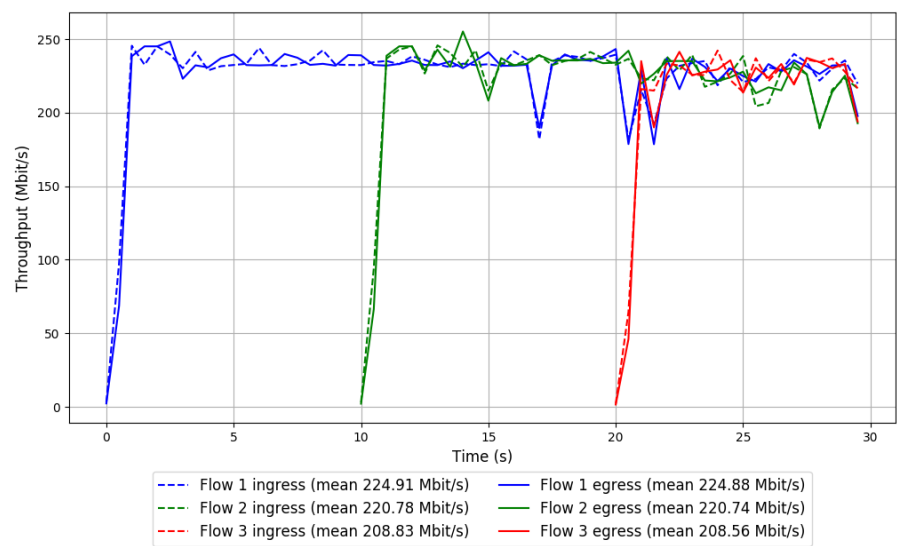
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	215.60	211.22	202.05	55.18	56.39	57.32	0.34	0.55	1.18
TCP Cubic	10	103.49	111.05	107.50	822.07	56.48	55.53	0.33	0.57	1.53
LEDBAT	9	13.77	11.34	8.92	51.26	51.28	51.22	0.71	0.96	2.01
PCC	10	546.95	133.85	23.40	188.48	156.25	157.02	3.11	3.00	5.36
QUIC Cubic	10	46.67	30.39	24.34	50.46	50.50	50.43	0.49	0.81	0.90
SCReAM	10	0.22	0.22	0.22	50.67	50.62	50.25	0.34	0.44	0.81
WebRTC media	10	2.24	1.43	0.60	50.72	50.52	50.61	0.39	0.56	1.39
Sprout	10	7.91	7.79	7.44	51.36	51.34	51.21	0.51	0.62	1.45
TaoVA-100x	10	205.87	210.38	200.54	52.81	58.44	61.65	0.23	0.39	1.28
TCP Vegas	10	49.75	67.18	102.43	52.11	53.50	54.14	0.40	0.61	0.96
Verus	10	204.77	153.15	139.48	146.63	129.29	145.81	2.80	1.06	1.45
Copa	10	79.96	76.38	57.77	50.62	50.51	50.62	0.26	0.47	1.67
Indigo	3	173.56	167.97	147.45	50.85	51.14	50.20	0.37	0.45	1.03
Indigo-calib	10	159.89	149.46	142.21	50.39	50.58	50.48	0.23	0.36	0.94

```
Run 1: Statistics of TCP BBR

Start at: 2017-12-12 04:53:16
End at: 2017-12-12 04:53:46

# Below is generated by plot.py at 2017-12-12 09:12:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 440.41 Mbit/s
95th percentile per-packet one-way delay: 56.997 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 224.88 Mbit/s
95th percentile per-packet one-way delay: 55.978 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 220.74 Mbit/s
95th percentile per-packet one-way delay: 58.057 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 208.56 Mbit/s
95th percentile per-packet one-way delay: 56.060 ms
Loss rate: 1.15%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-12 05:05:53

End at: 2017-12-12 05:06:23

Below is generated by plot.py at 2017-12-12 09:12:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 425.62 Mbit/s

95th percentile per-packet one-way delay: 59.126 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 219.71 Mbit/s

95th percentile per-packet one-way delay: 57.774 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 210.93 Mbit/s

95th percentile per-packet one-way delay: 59.375 ms

Loss rate: 0.53%

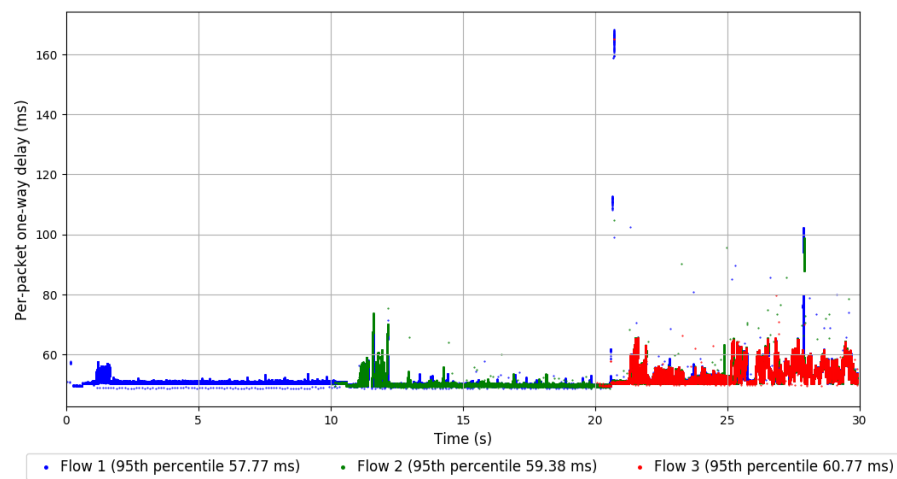
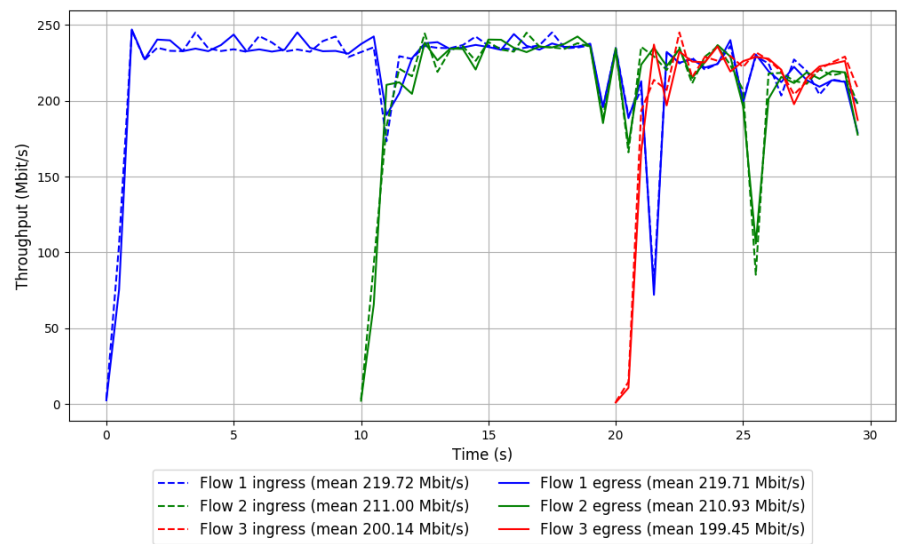
-- Flow 3:

Average throughput: 199.45 Mbit/s

95th percentile per-packet one-way delay: 60.771 ms

Loss rate: 1.23%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-12 05:18:03

End at: 2017-12-12 05:18:33

Below is generated by plot.py at 2017-12-12 09:12:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 428.39 Mbit/s

95th percentile per-packet one-way delay: 54.184 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 217.71 Mbit/s

95th percentile per-packet one-way delay: 53.623 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 214.16 Mbit/s

95th percentile per-packet one-way delay: 54.379 ms

Loss rate: 0.59%

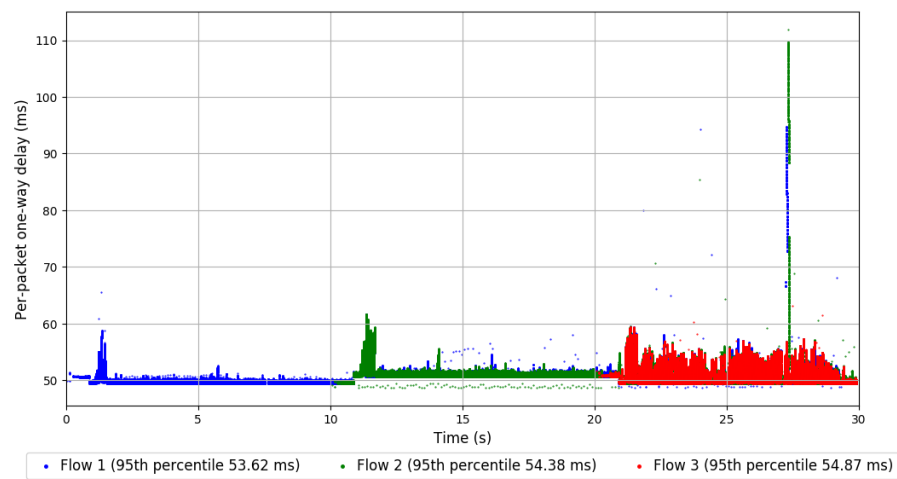
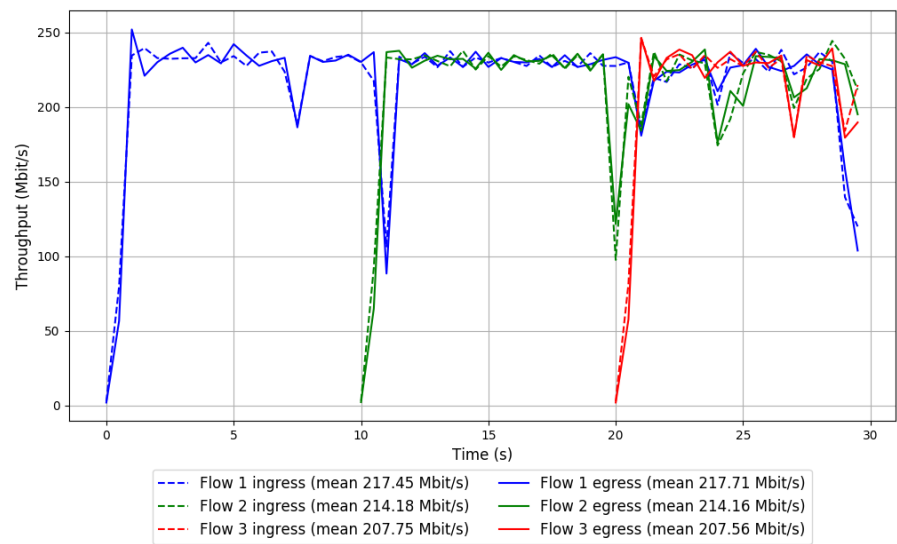
-- Flow 3:

Average throughput: 207.56 Mbit/s

95th percentile per-packet one-way delay: 54.868 ms

Loss rate: 1.11%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-12 05:30:33

End at: 2017-12-12 05:31:03

Below is generated by plot.py at 2017-12-12 09:12:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 424.66 Mbit/s

95th percentile per-packet one-way delay: 57.702 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 215.52 Mbit/s

95th percentile per-packet one-way delay: 56.563 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 211.73 Mbit/s

95th percentile per-packet one-way delay: 57.565 ms

Loss rate: 0.56%

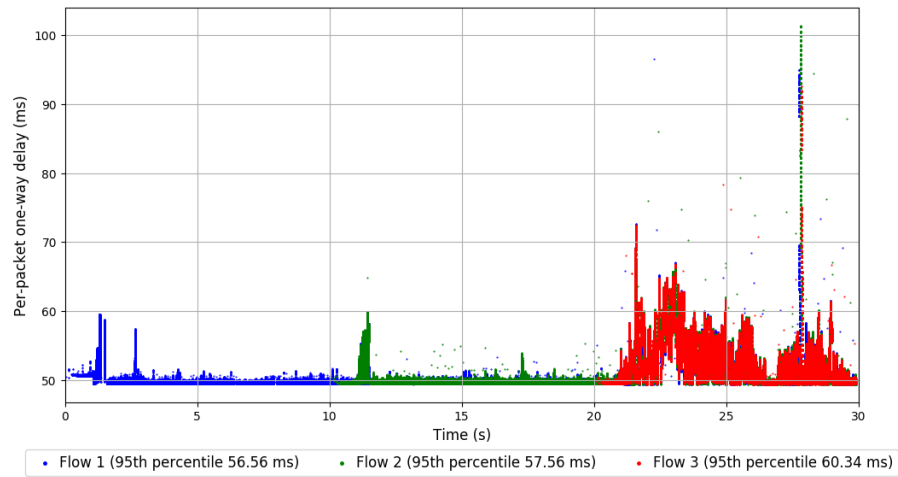
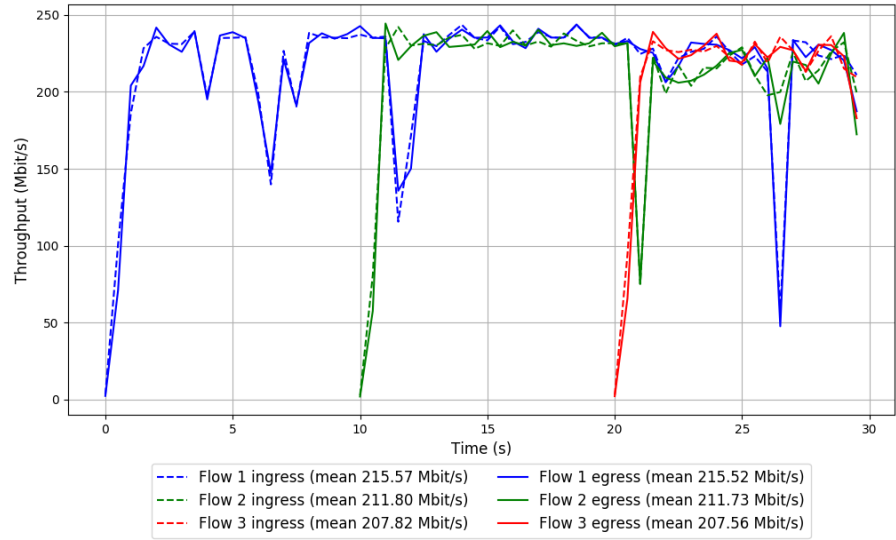
-- Flow 3:

Average throughput: 207.56 Mbit/s

95th percentile per-packet one-way delay: 60.344 ms

Loss rate: 1.14%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-12 05:43:04

End at: 2017-12-12 05:43:34

Below is generated by plot.py at 2017-12-12 09:12:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 427.83 Mbit/s

95th percentile per-packet one-way delay: 54.443 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 216.35 Mbit/s

95th percentile per-packet one-way delay: 54.006 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 218.10 Mbit/s

95th percentile per-packet one-way delay: 54.519 ms

Loss rate: 0.56%

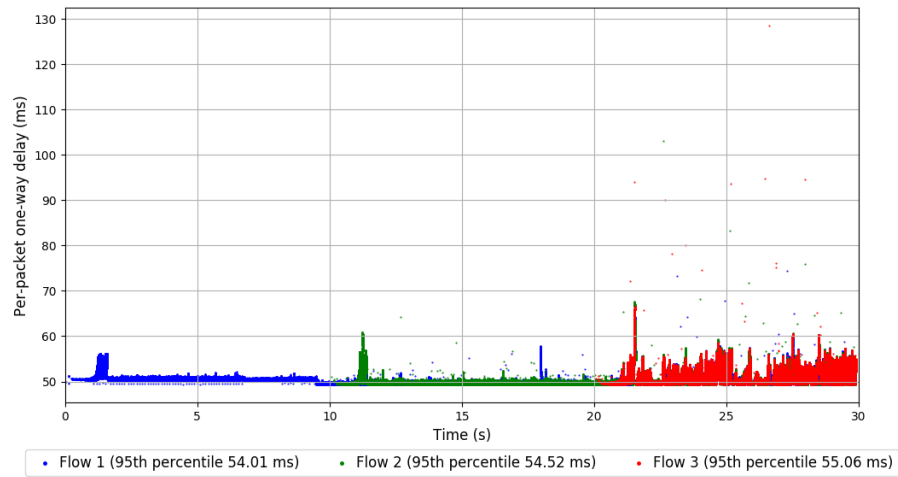
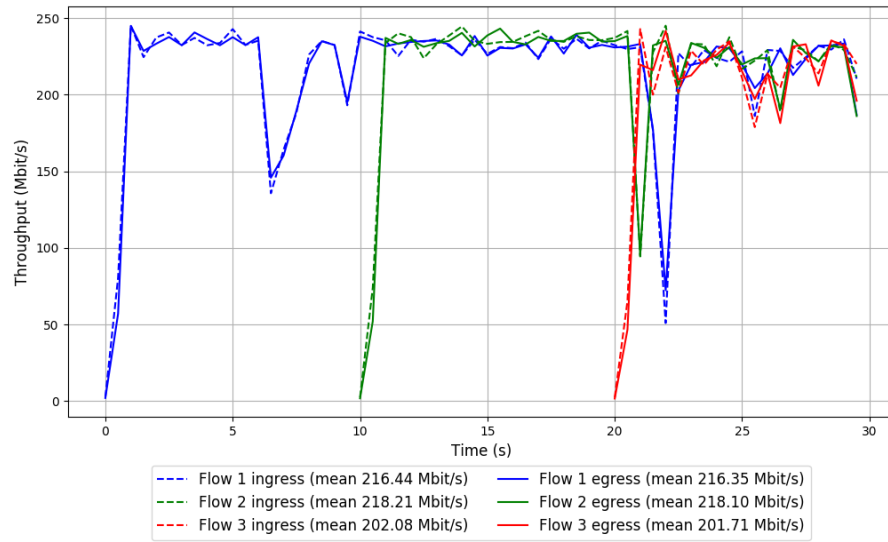
-- Flow 3:

Average throughput: 201.71 Mbit/s

95th percentile per-packet one-way delay: 55.063 ms

Loss rate: 1.21%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-12 05:55:24

End at: 2017-12-12 05:55:54

Below is generated by plot.py at 2017-12-12 09:12:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 419.15 Mbit/s

95th percentile per-packet one-way delay: 54.975 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 210.97 Mbit/s

95th percentile per-packet one-way delay: 54.028 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 211.34 Mbit/s

95th percentile per-packet one-way delay: 55.394 ms

Loss rate: 0.49%

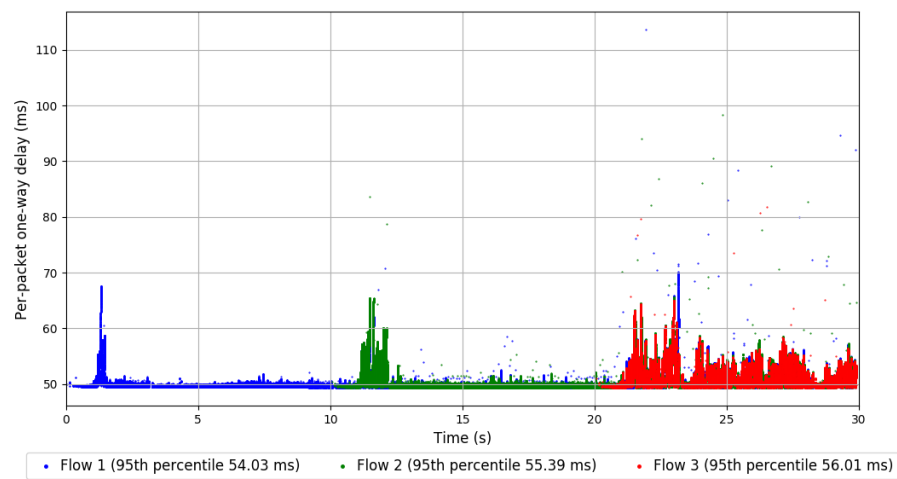
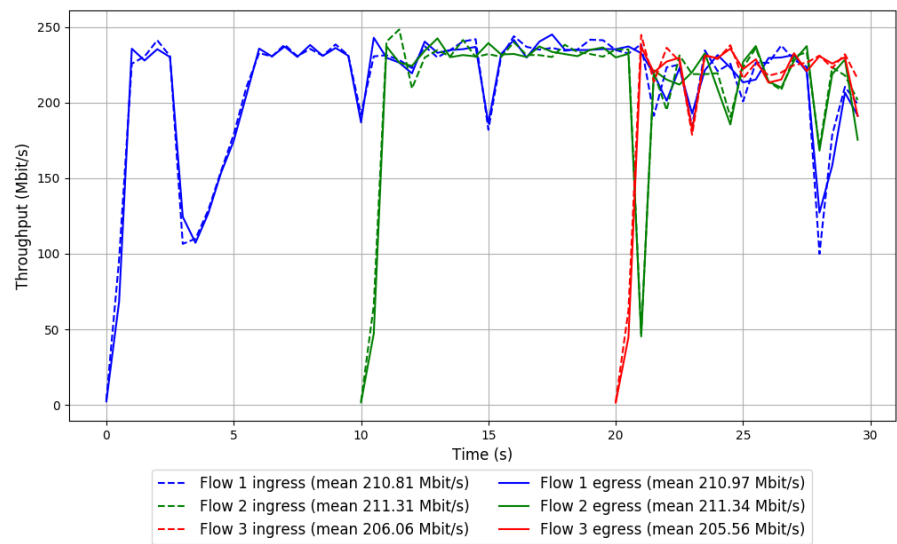
-- Flow 3:

Average throughput: 205.56 Mbit/s

95th percentile per-packet one-way delay: 56.005 ms

Loss rate: 1.19%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-12 06:07:52

End at: 2017-12-12 06:08:22

Below is generated by plot.py at 2017-12-12 09:12:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 424.50 Mbit/s

95th percentile per-packet one-way delay: 54.844 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 218.14 Mbit/s

95th percentile per-packet one-way delay: 53.991 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 210.39 Mbit/s

95th percentile per-packet one-way delay: 55.017 ms

Loss rate: 0.55%

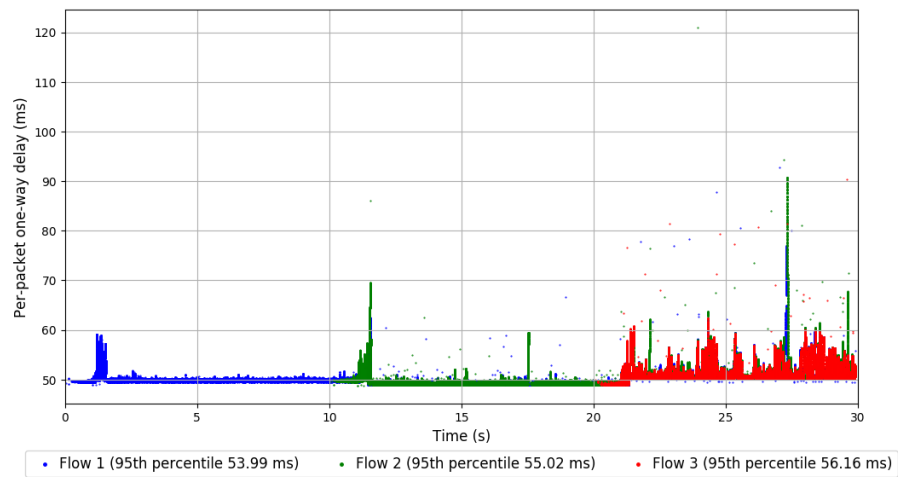
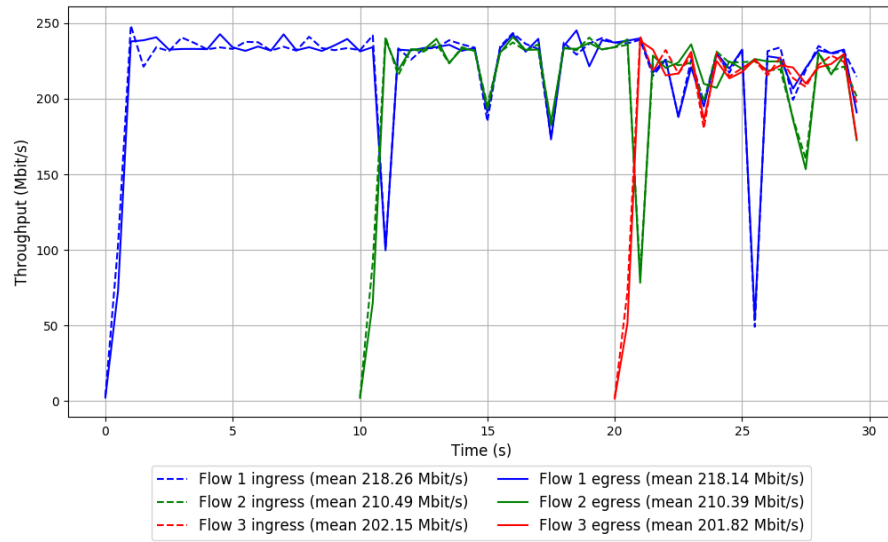
-- Flow 3:

Average throughput: 201.82 Mbit/s

95th percentile per-packet one-way delay: 56.164 ms

Loss rate: 1.17%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-12 06:20:11

End at: 2017-12-12 06:20:41

Below is generated by plot.py at 2017-12-12 09:12:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 412.16 Mbit/s

95th percentile per-packet one-way delay: 57.412 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 207.72 Mbit/s

95th percentile per-packet one-way delay: 55.849 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 210.44 Mbit/s

95th percentile per-packet one-way delay: 57.667 ms

Loss rate: 0.56%

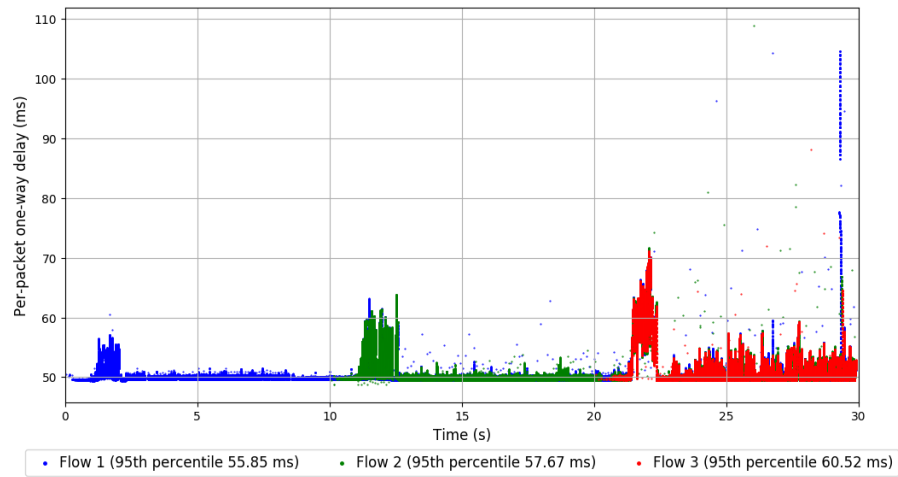
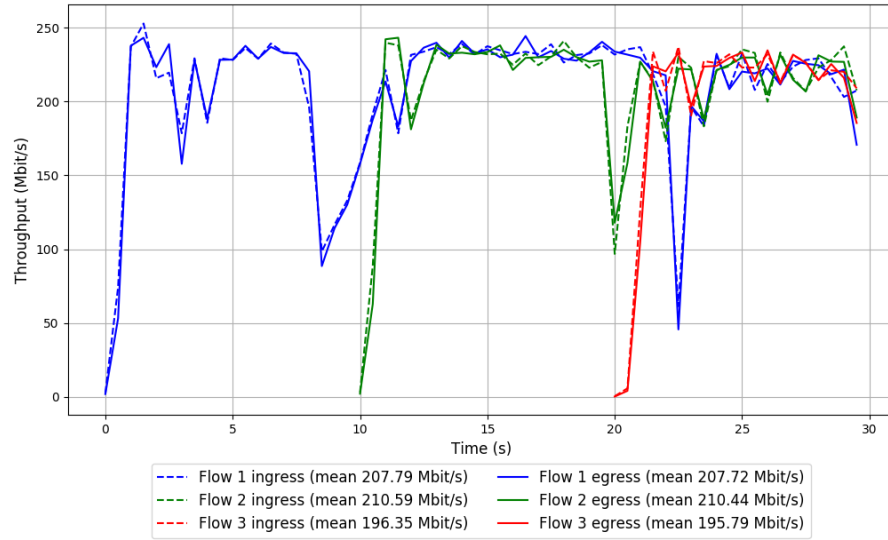
-- Flow 3:

Average throughput: 195.79 Mbit/s

95th percentile per-packet one-way delay: 60.522 ms

Loss rate: 1.23%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-12 06:32:35

End at: 2017-12-12 06:33:05

Below is generated by plot.py at 2017-12-12 09:19:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 408.17 Mbit/s

95th percentile per-packet one-way delay: 54.256 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 215.06 Mbit/s

95th percentile per-packet one-way delay: 53.672 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 193.61 Mbit/s

95th percentile per-packet one-way delay: 54.472 ms

Loss rate: 0.61%

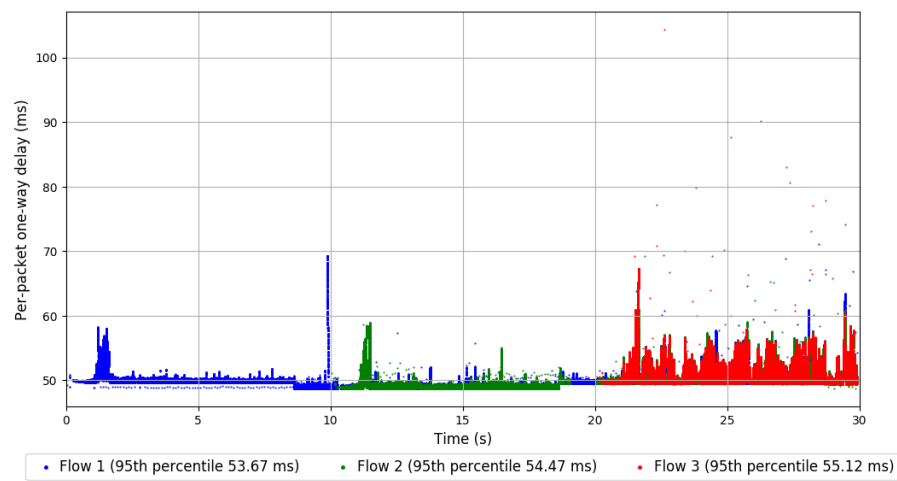
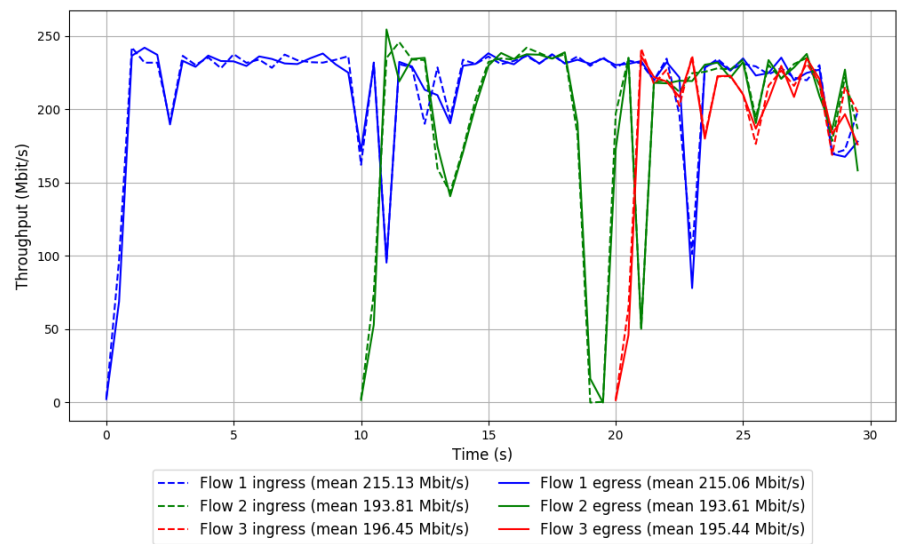
-- Flow 3:

Average throughput: 195.44 Mbit/s

95th percentile per-packet one-way delay: 55.115 ms

Loss rate: 1.25%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-12 06:45:06

End at: 2017-12-12 06:45:36

Below is generated by plot.py at 2017-12-12 09:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 414.69 Mbit/s

95th percentile per-packet one-way delay: 57.204 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 209.96 Mbit/s

95th percentile per-packet one-way delay: 56.306 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 210.78 Mbit/s

95th percentile per-packet one-way delay: 57.442 ms

Loss rate: 0.53%

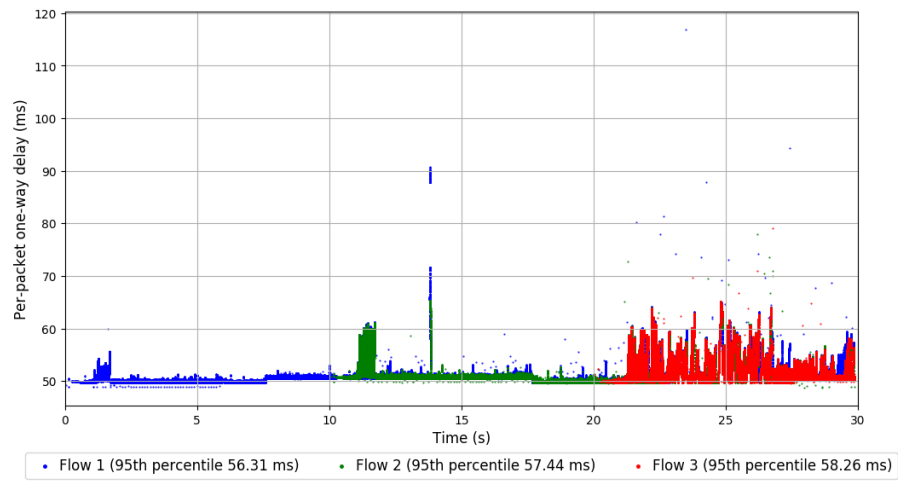
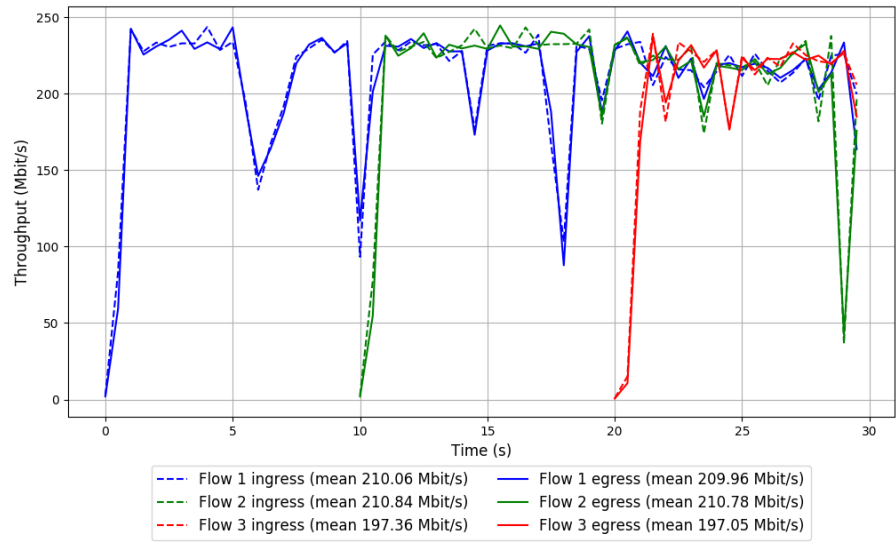
-- Flow 3:

Average throughput: 197.05 Mbit/s

95th percentile per-packet one-way delay: 58.257 ms

Loss rate: 1.16%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-12 04:56:44

End at: 2017-12-12 04:57:14

Below is generated by plot.py at 2017-12-12 09:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 255.10 Mbit/s

95th percentile per-packet one-way delay: 57.991 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 118.42 Mbit/s

95th percentile per-packet one-way delay: 54.891 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 134.49 Mbit/s

95th percentile per-packet one-way delay: 59.616 ms

Loss rate: 0.38%

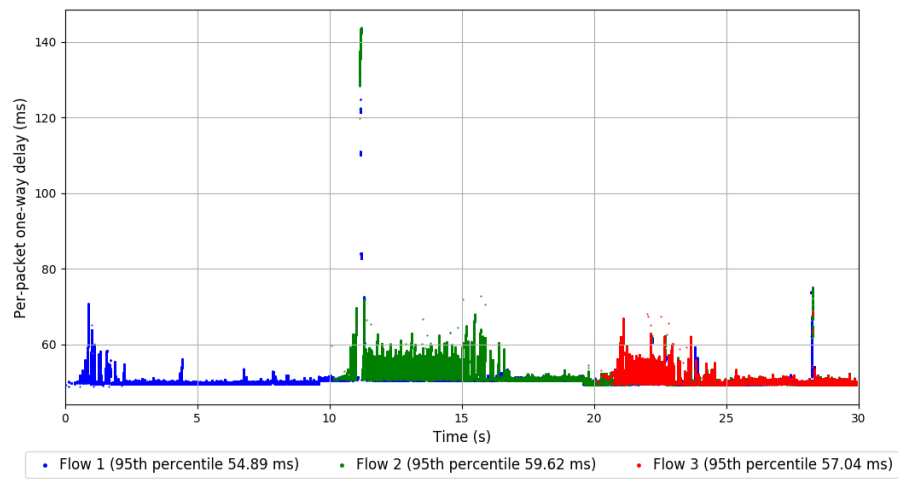
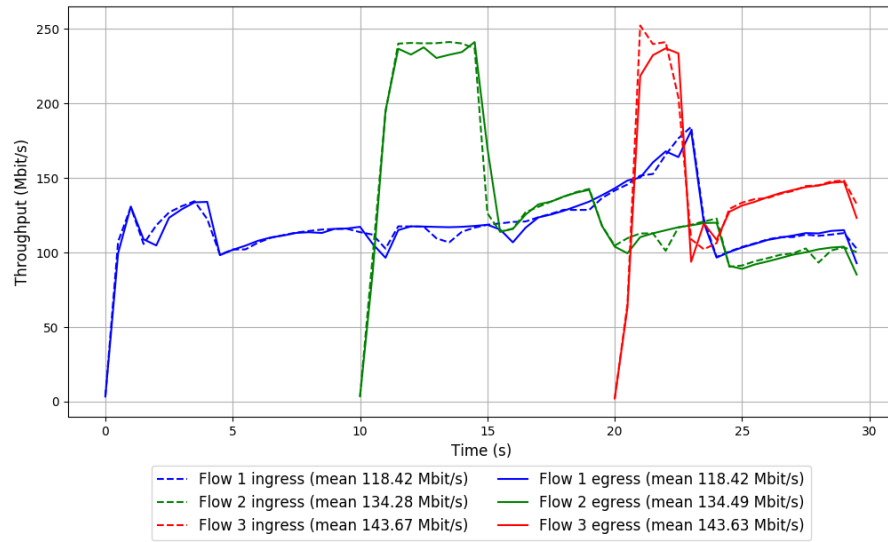
-- Flow 3:

Average throughput: 143.63 Mbit/s

95th percentile per-packet one-way delay: 57.039 ms

Loss rate: 1.04%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-12 05:09:19

End at: 2017-12-12 05:09:49

Below is generated by plot.py at 2017-12-12 09:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.39 Mbit/s

95th percentile per-packet one-way delay: 58.959 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 14.31 Mbit/s

95th percentile per-packet one-way delay: 5365.713 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 19.64 Mbit/s

95th percentile per-packet one-way delay: 53.724 ms

Loss rate: 1.45%

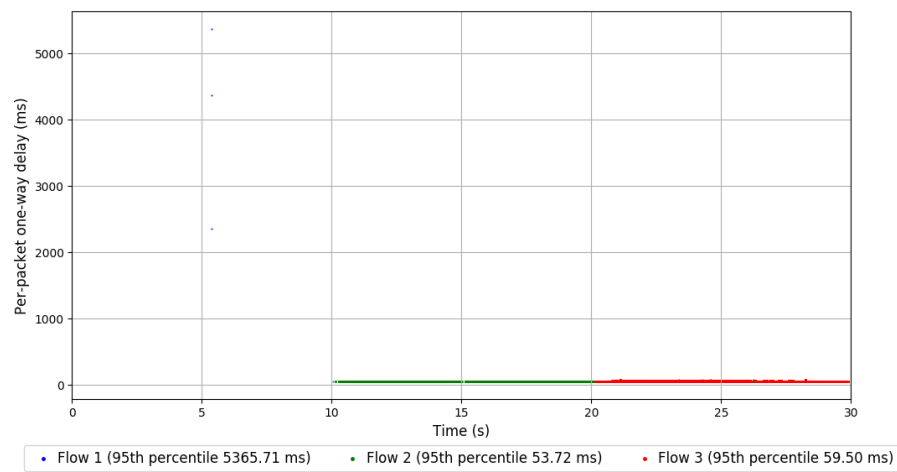
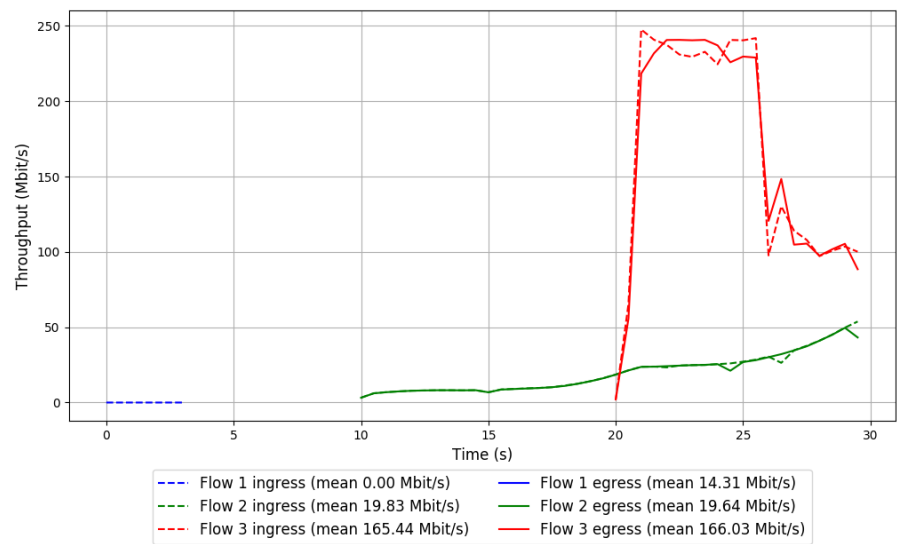
-- Flow 3:

Average throughput: 166.03 Mbit/s

95th percentile per-packet one-way delay: 59.498 ms

Loss rate: 0.65%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-12 05:21:29

End at: 2017-12-12 05:21:59

Below is generated by plot.py at 2017-12-12 09:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.96 Mbit/s

95th percentile per-packet one-way delay: 58.185 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 10.89 Mbit/s

95th percentile per-packet one-way delay: 2411.517 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 112.31 Mbit/s

95th percentile per-packet one-way delay: 58.230 ms

Loss rate: 0.49%

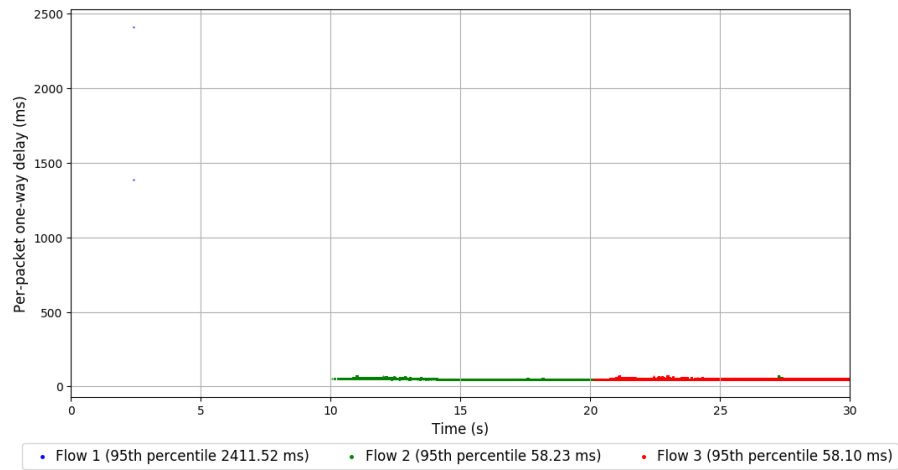
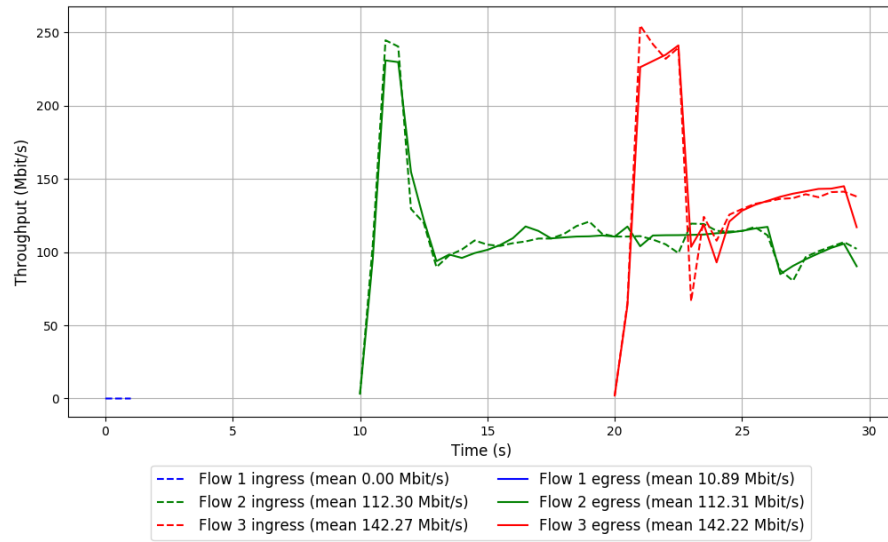
-- Flow 3:

Average throughput: 142.22 Mbit/s

95th percentile per-packet one-way delay: 58.098 ms

Loss rate: 1.03%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-12 05:34:00

End at: 2017-12-12 05:34:30

Below is generated by plot.py at 2017-12-12 09:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 257.74 Mbit/s

95th percentile per-packet one-way delay: 58.309 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 114.76 Mbit/s

95th percentile per-packet one-way delay: 57.965 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 141.84 Mbit/s

95th percentile per-packet one-way delay: 58.712 ms

Loss rate: 0.32%

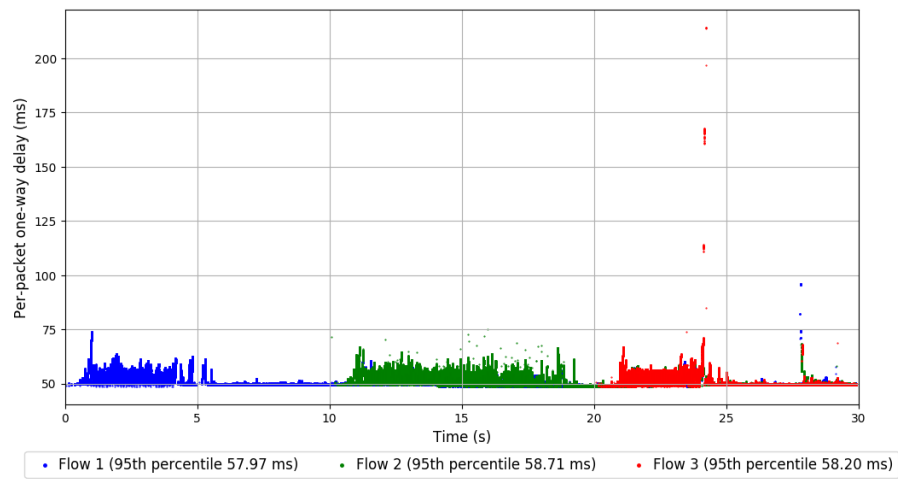
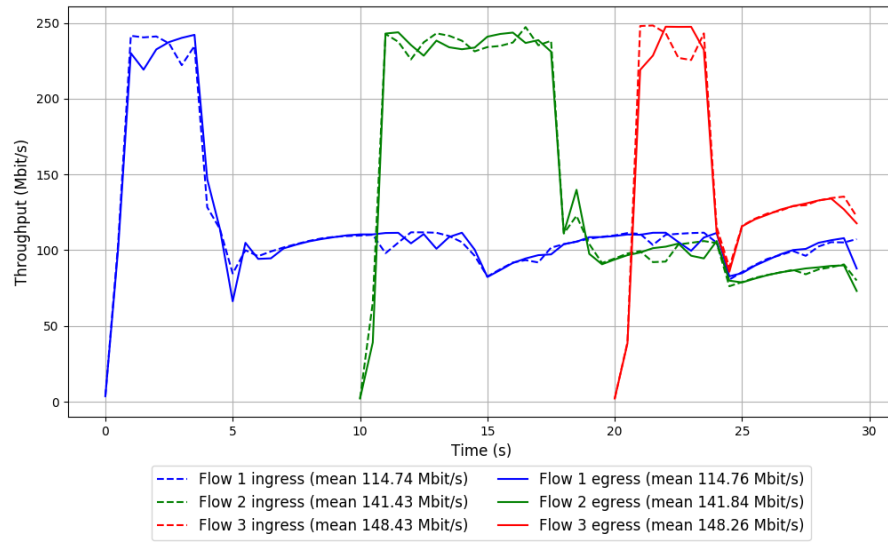
-- Flow 3:

Average throughput: 148.26 Mbit/s

95th percentile per-packet one-way delay: 58.198 ms

Loss rate: 1.13%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-12 05:46:29

End at: 2017-12-12 05:46:59

Below is generated by plot.py at 2017-12-12 09:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 281.20 Mbit/s

95th percentile per-packet one-way delay: 58.257 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 167.35 Mbit/s

95th percentile per-packet one-way delay: 58.376 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 121.84 Mbit/s

95th percentile per-packet one-way delay: 57.951 ms

Loss rate: 0.61%

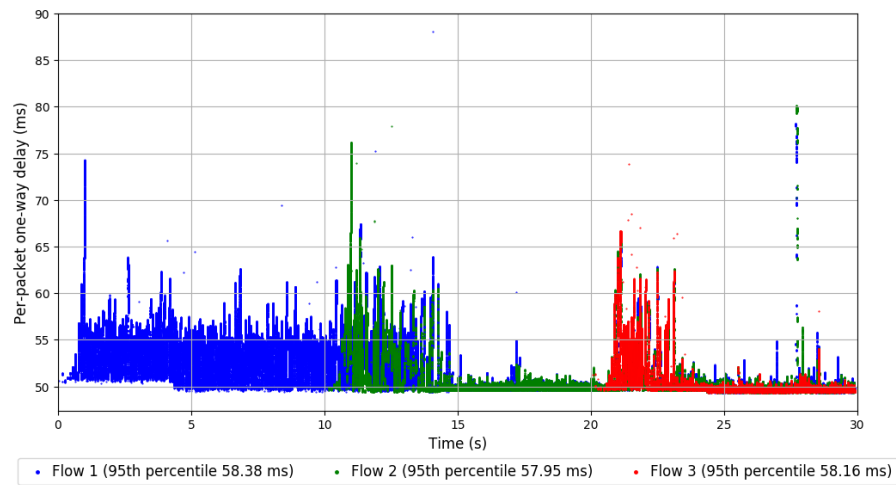
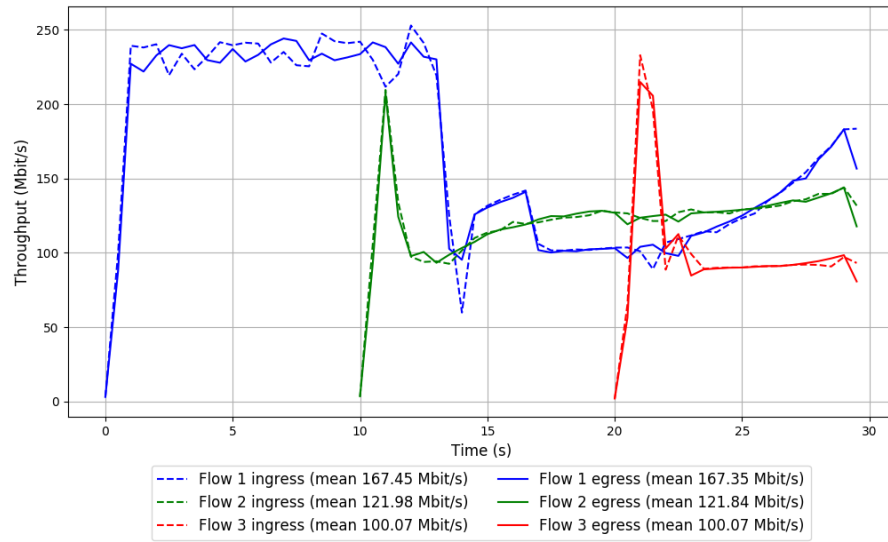
-- Flow 3:

Average throughput: 100.07 Mbit/s

95th percentile per-packet one-way delay: 58.164 ms

Loss rate: 1.02%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-12 05:58:51

End at: 2017-12-12 05:59:21

Below is generated by plot.py at 2017-12-12 09:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 275.92 Mbit/s

95th percentile per-packet one-way delay: 56.837 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 133.69 Mbit/s

95th percentile per-packet one-way delay: 56.252 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 150.40 Mbit/s

95th percentile per-packet one-way delay: 57.652 ms

Loss rate: 0.40%

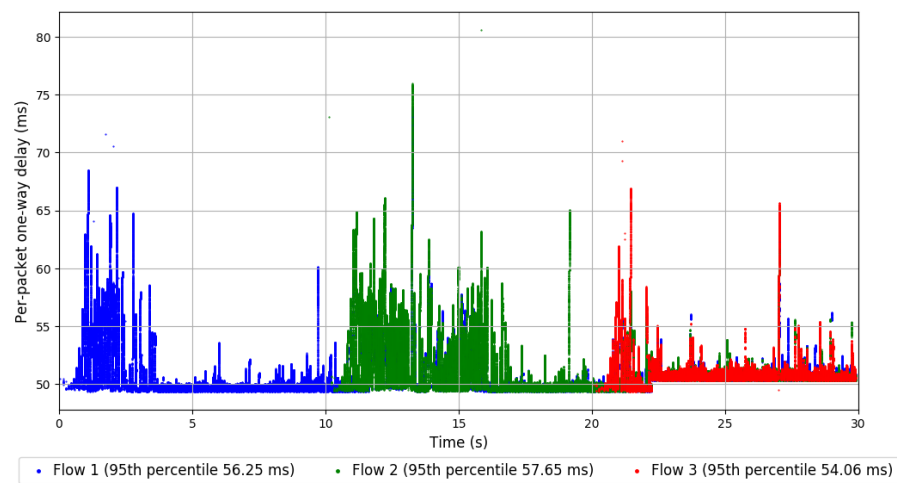
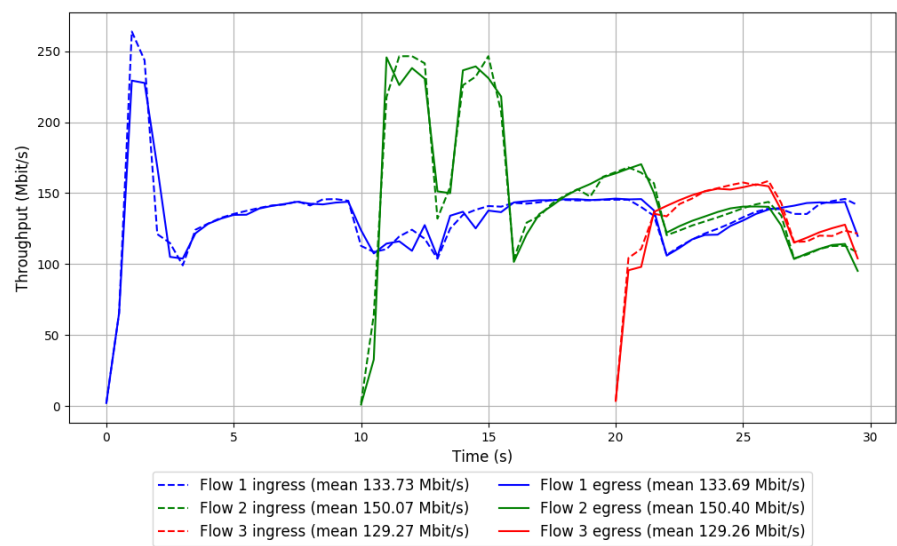
-- Flow 3:

Average throughput: 129.26 Mbit/s

95th percentile per-packet one-way delay: 54.060 ms

Loss rate: 1.02%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-12 06:11:21

End at: 2017-12-12 06:11:51

Below is generated by plot.py at 2017-12-12 09:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.22 Mbit/s

95th percentile per-packet one-way delay: 57.468 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 125.73 Mbit/s

95th percentile per-packet one-way delay: 57.194 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 92.75 Mbit/s

95th percentile per-packet one-way delay: 57.884 ms

Loss rate: 0.42%

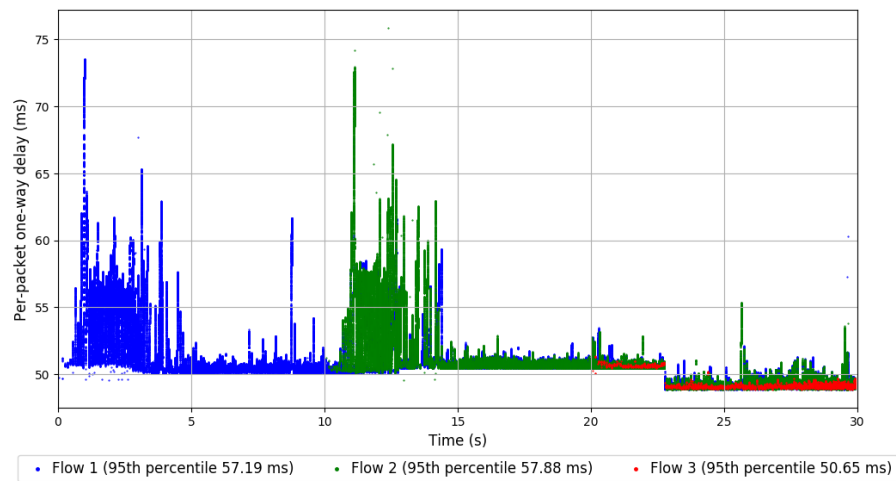
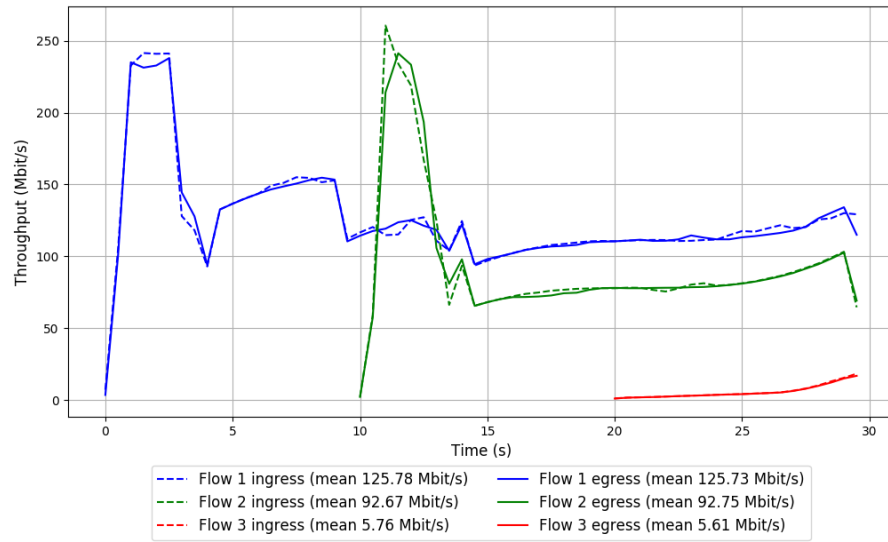
-- Flow 3:

Average throughput: 5.61 Mbit/s

95th percentile per-packet one-way delay: 50.648 ms

Loss rate: 3.61%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-12 06:23:37

End at: 2017-12-12 06:24:07

Below is generated by plot.py at 2017-12-12 09:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.02 Mbit/s

95th percentile per-packet one-way delay: 57.559 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 96.00 Mbit/s

95th percentile per-packet one-way delay: 56.319 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 119.25 Mbit/s

95th percentile per-packet one-way delay: 58.047 ms

Loss rate: 0.39%

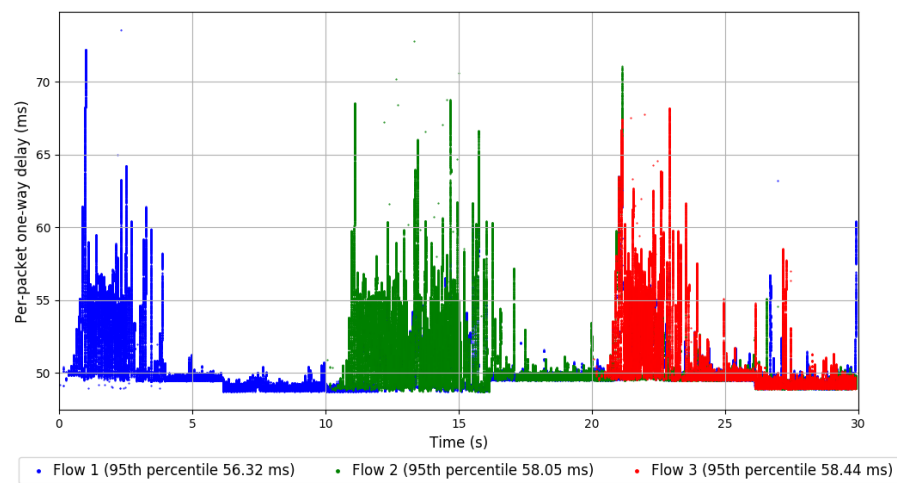
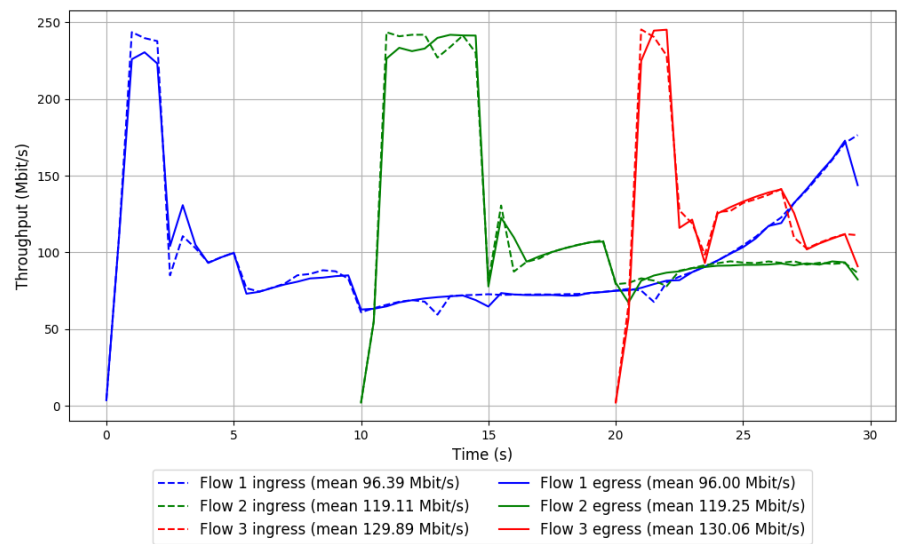
-- Flow 3:

Average throughput: 130.06 Mbit/s

95th percentile per-packet one-way delay: 58.438 ms

Loss rate: 0.89%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-12 06:36:03

End at: 2017-12-12 06:36:33

Below is generated by plot.py at 2017-12-12 09:20:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 227.69 Mbit/s

95th percentile per-packet one-way delay: 50.782 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 147.58 Mbit/s

95th percentile per-packet one-way delay: 50.953 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 118.03 Mbit/s

95th percentile per-packet one-way delay: 50.477 ms

Loss rate: 0.60%

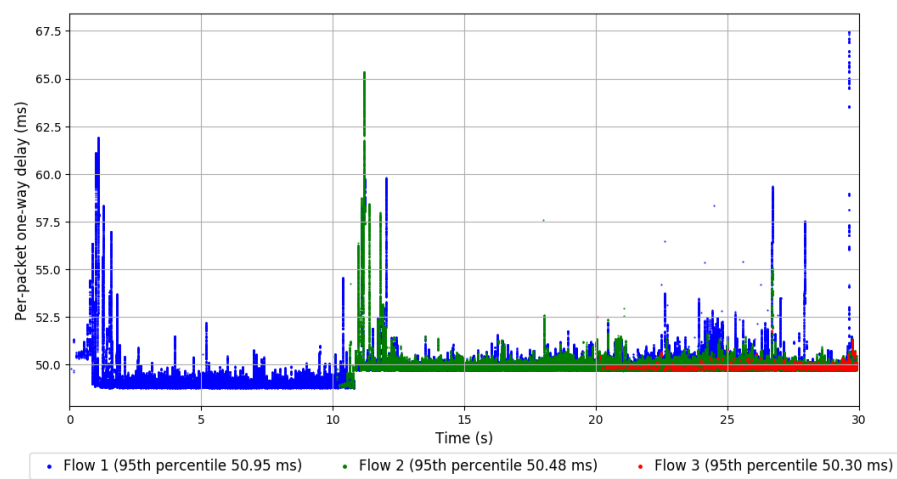
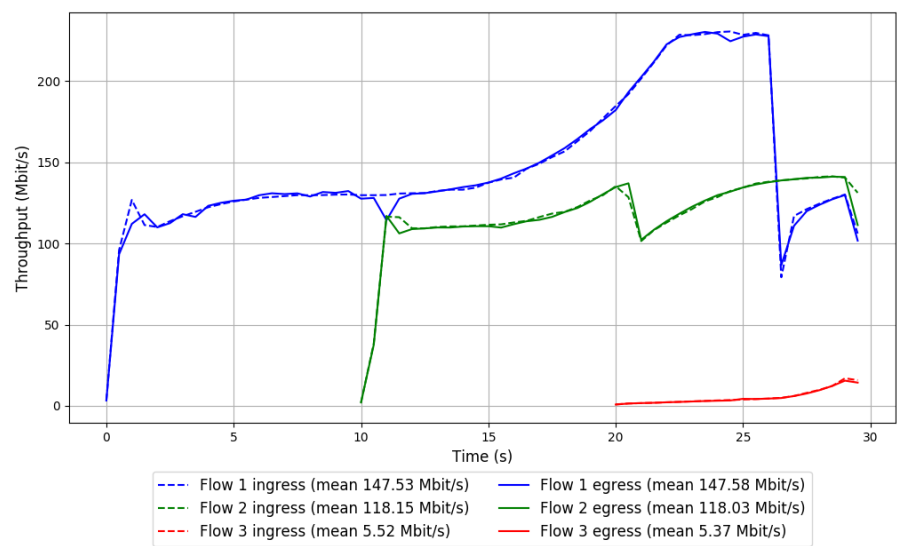
-- Flow 3:

Average throughput: 5.37 Mbit/s

95th percentile per-packet one-way delay: 50.298 ms

Loss rate: 3.68%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-12 06:48:32

End at: 2017-12-12 06:49:02

Below is generated by plot.py at 2017-12-12 09:20:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 206.89 Mbit/s

95th percentile per-packet one-way delay: 51.533 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 106.21 Mbit/s

95th percentile per-packet one-way delay: 51.480 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 99.91 Mbit/s

95th percentile per-packet one-way delay: 52.542 ms

Loss rate: 0.63%

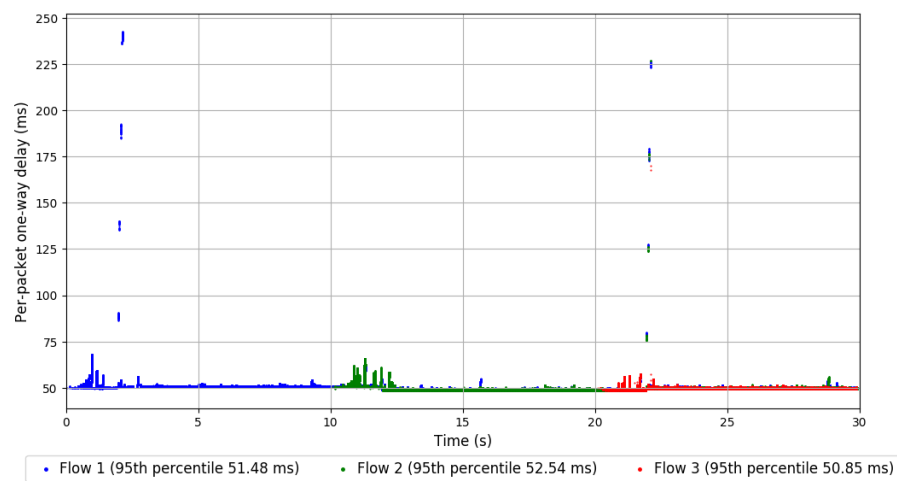
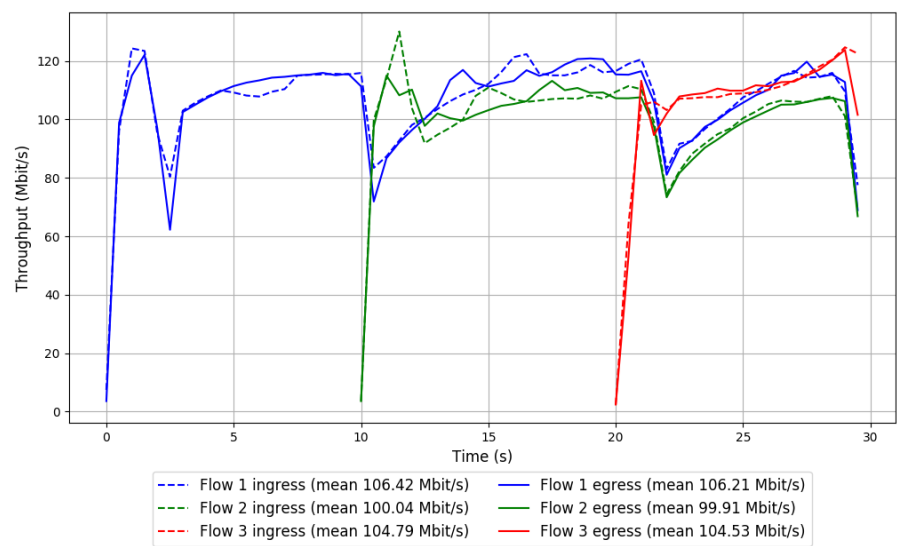
-- Flow 3:

Average throughput: 104.53 Mbit/s

95th percentile per-packet one-way delay: 50.850 ms

Loss rate: 1.25%

Run 10: Report of TCP Cubic — Data Link

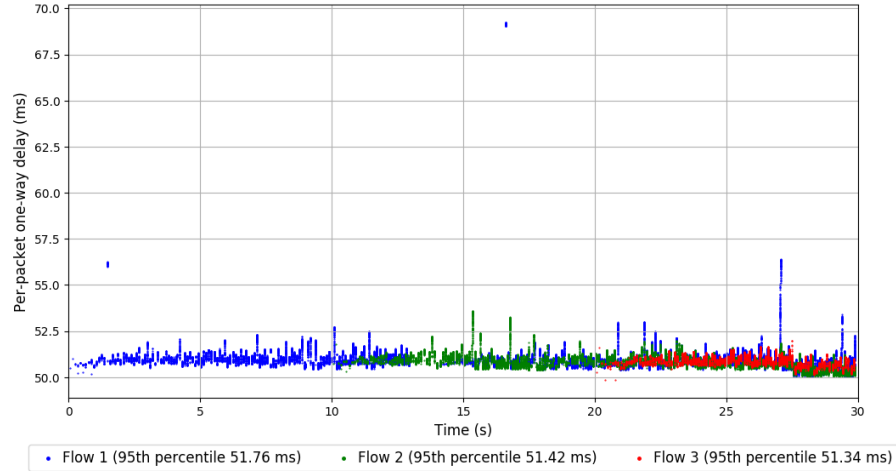
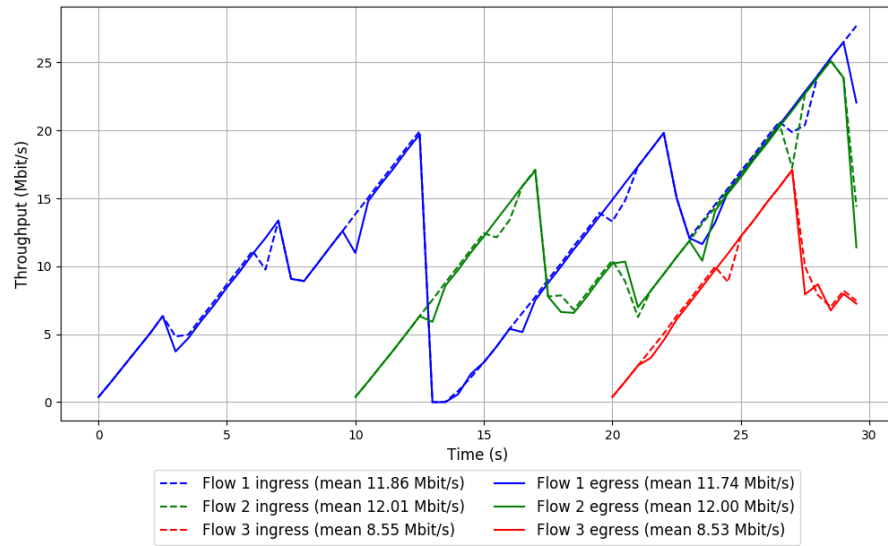


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-12 05:02:16
End at: 2017-12-12 05:02:46

# Below is generated by plot.py at 2017-12-12 09:20:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.50 Mbit/s
95th percentile per-packet one-way delay: 51.576 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 51.762 ms
Loss rate: 1.41%
-- Flow 2:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 51.424 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 8.53 Mbit/s
95th percentile per-packet one-way delay: 51.337 ms
Loss rate: 1.15%
```


Run 1: Report of LEDBAT — Data Link

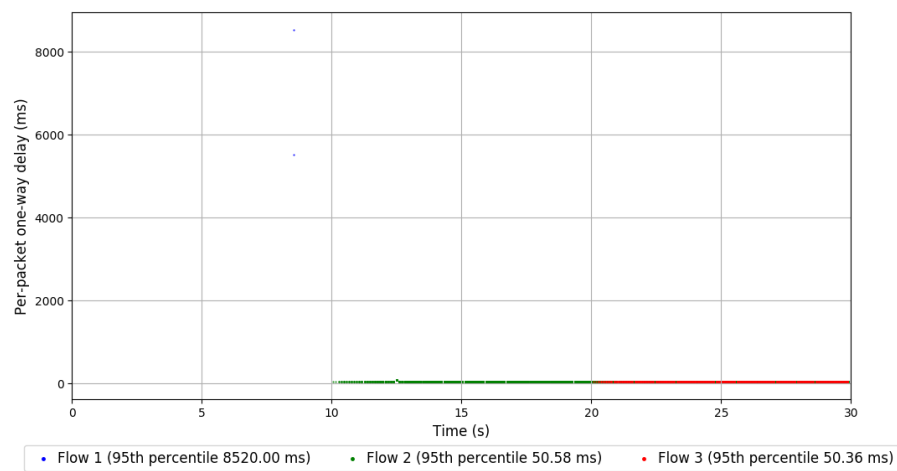
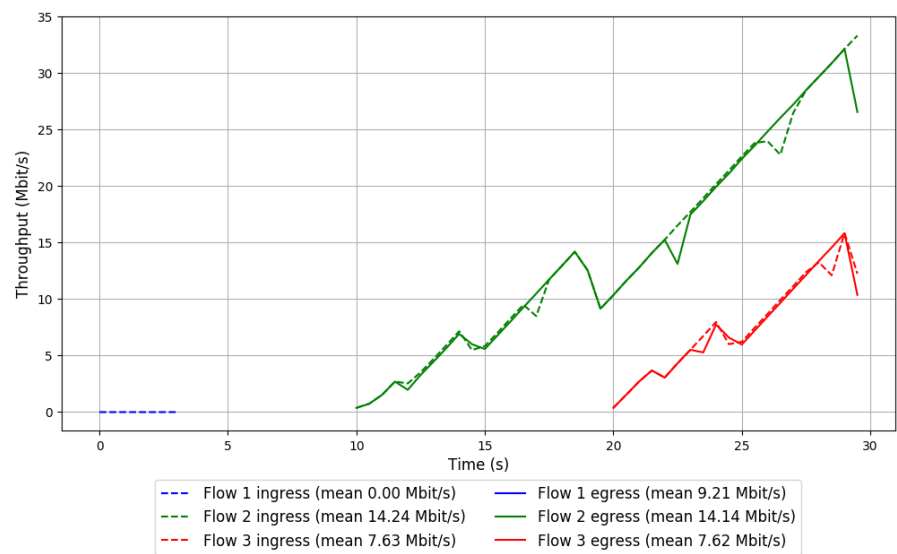


Run 2: Statistics of LEDBAT

Start at: 2017-12-12 05:14:42

End at: 2017-12-12 05:15:12

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-12 05:26:56

End at: 2017-12-12 05:27:26

Below is generated by plot.py at 2017-12-12 09:20:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.16 Mbit/s

95th percentile per-packet one-way delay: 51.352 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 25.76 Mbit/s

95th percentile per-packet one-way delay: 51.435 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 12.53 Mbit/s

95th percentile per-packet one-way delay: 51.139 ms

Loss rate: 1.27%

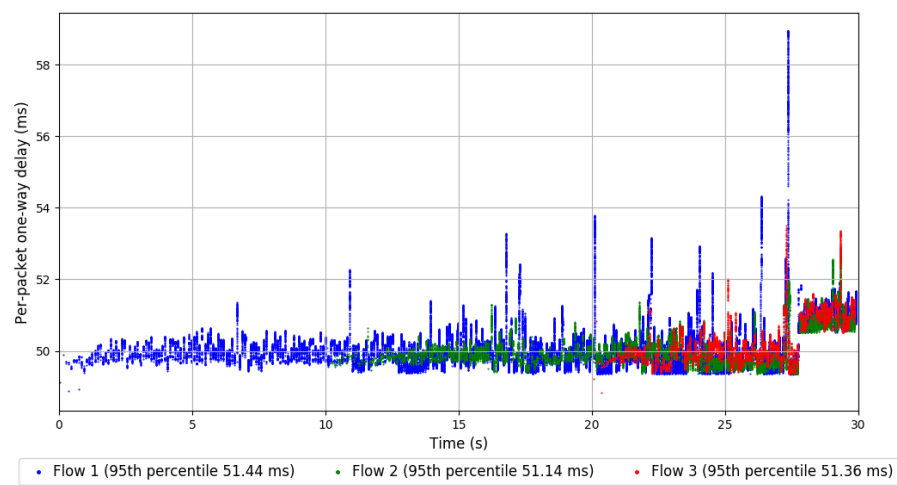
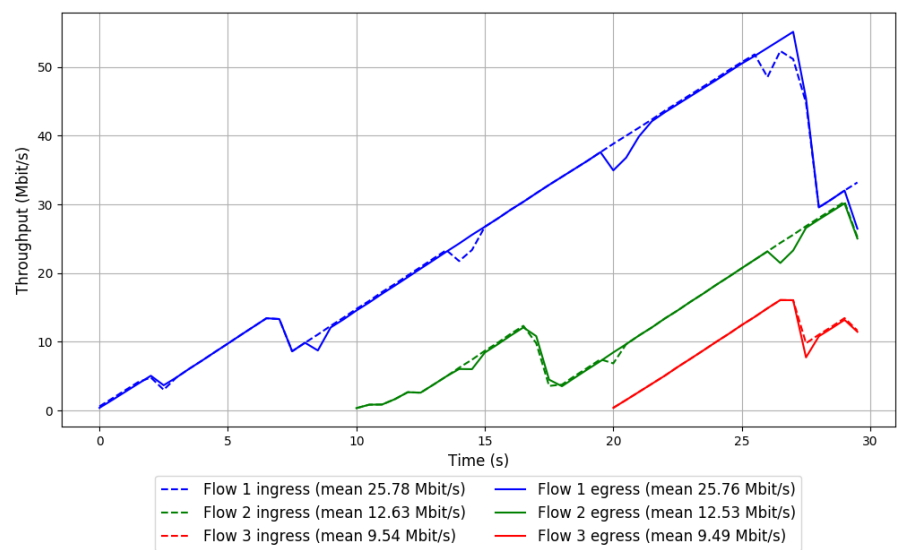
-- Flow 3:

Average throughput: 9.49 Mbit/s

95th percentile per-packet one-way delay: 51.359 ms

Loss rate: 1.58%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-12 05:39:33

End at: 2017-12-12 05:40:03

Below is generated by plot.py at 2017-12-12 09:20:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 28.07 Mbit/s

95th percentile per-packet one-way delay: 51.020 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 13.34 Mbit/s

95th percentile per-packet one-way delay: 50.931 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 16.34 Mbit/s

95th percentile per-packet one-way delay: 51.056 ms

Loss rate: 0.63%

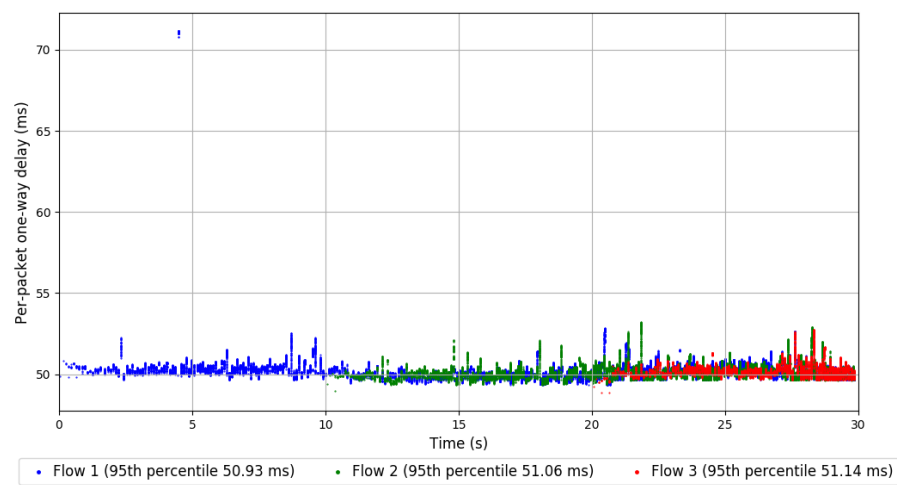
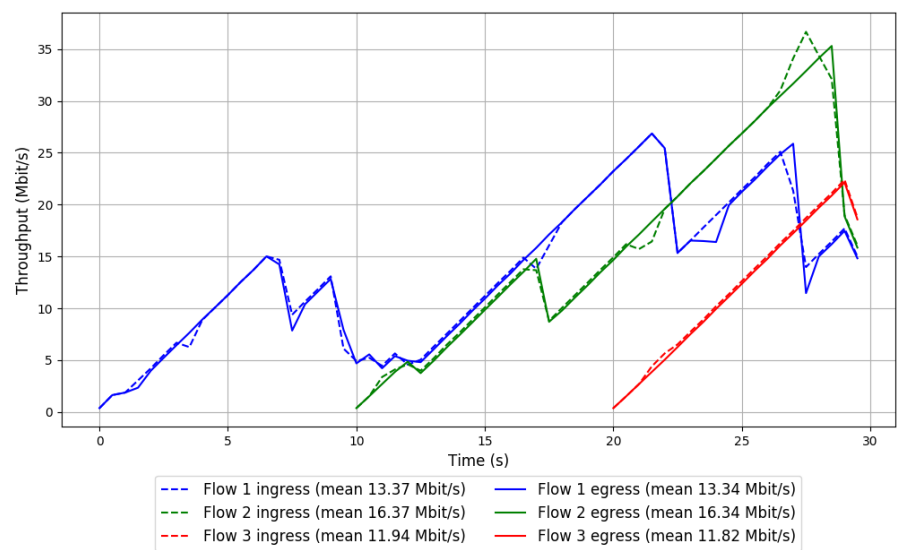
-- Flow 3:

Average throughput: 11.82 Mbit/s

95th percentile per-packet one-way delay: 51.137 ms

Loss rate: 2.02%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-12 05:52:04

End at: 2017-12-12 05:52:34

Below is generated by plot.py at 2017-12-12 09:20:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 26.72 Mbit/s

95th percentile per-packet one-way delay: 51.356 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 13.19 Mbit/s

95th percentile per-packet one-way delay: 51.213 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 14.53 Mbit/s

95th percentile per-packet one-way delay: 51.507 ms

Loss rate: 0.36%

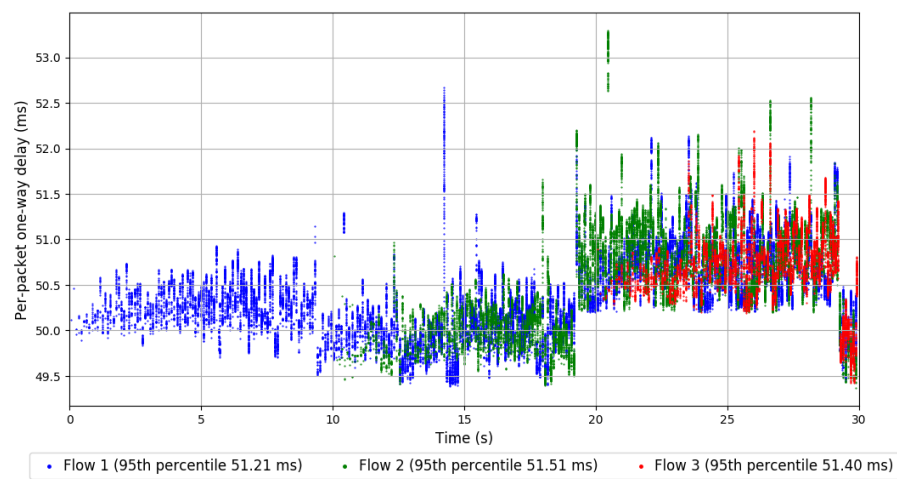
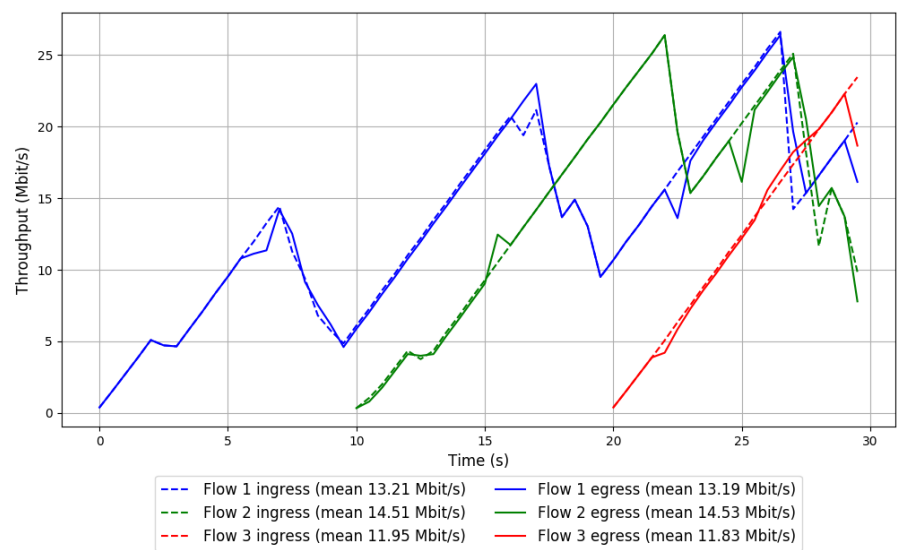
-- Flow 3:

Average throughput: 11.83 Mbit/s

95th percentile per-packet one-way delay: 51.403 ms

Loss rate: 2.02%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-12 06:04:18

End at: 2017-12-12 06:04:48

Below is generated by plot.py at 2017-12-12 09:20:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 21.47 Mbit/s

95th percentile per-packet one-way delay: 51.734 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 10.78 Mbit/s

95th percentile per-packet one-way delay: 51.722 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 13.86 Mbit/s

95th percentile per-packet one-way delay: 51.825 ms

Loss rate: 0.93%

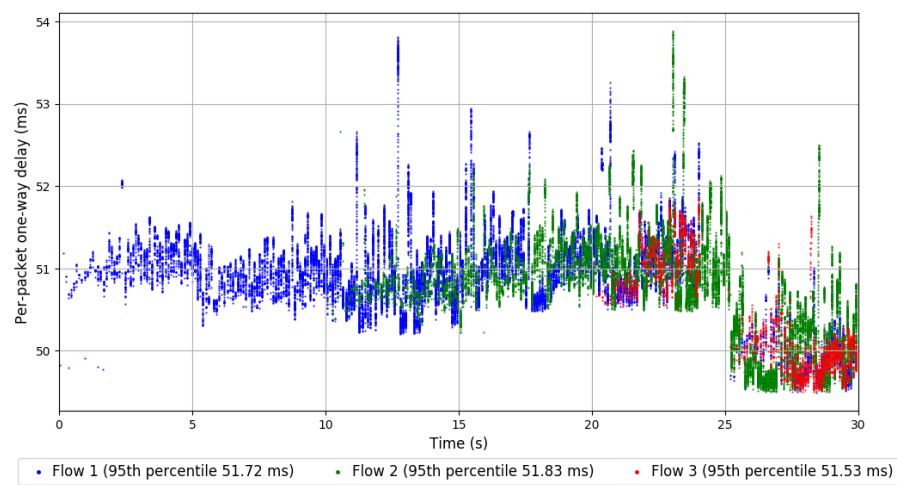
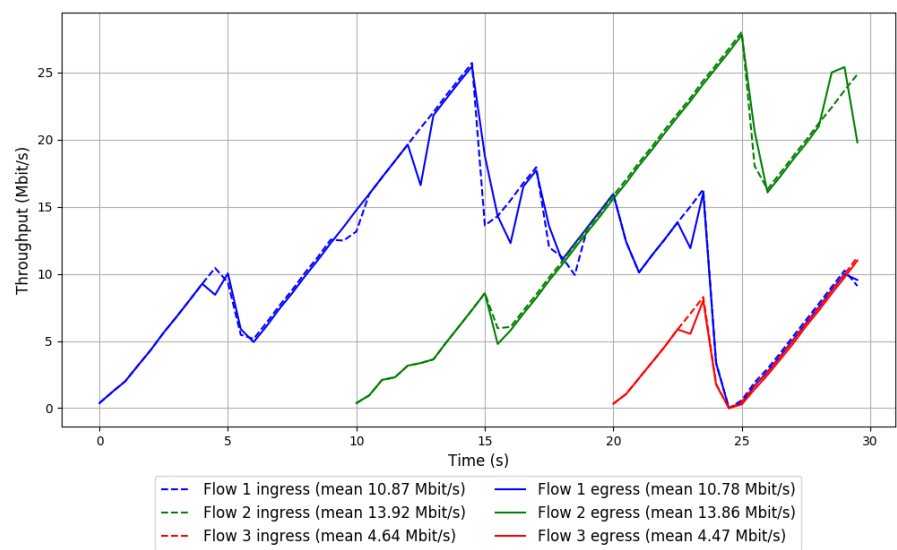
-- Flow 3:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 51.532 ms

Loss rate: 4.50%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-12 06:16:50

End at: 2017-12-12 06:17:20

Below is generated by plot.py at 2017-12-12 09:20:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 23.80 Mbit/s

95th percentile per-packet one-way delay: 51.017 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 13.64 Mbit/s

95th percentile per-packet one-way delay: 50.956 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 10.83 Mbit/s

95th percentile per-packet one-way delay: 51.069 ms

Loss rate: 1.46%

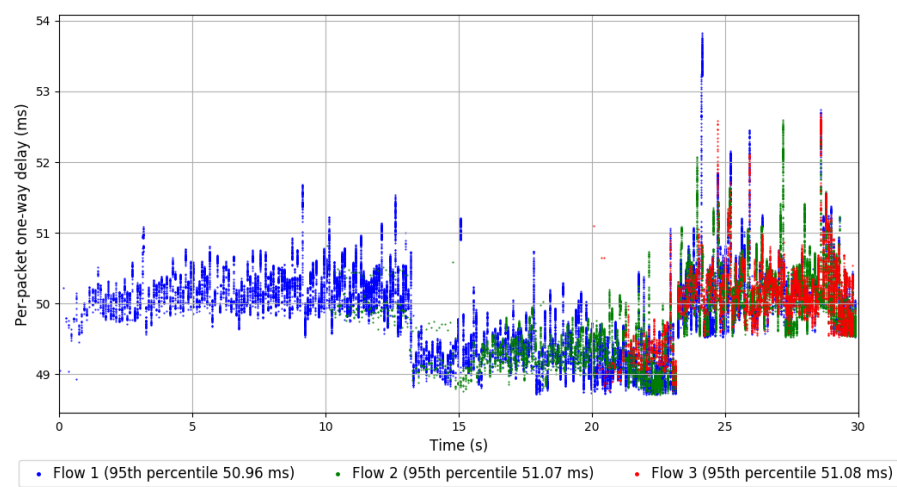
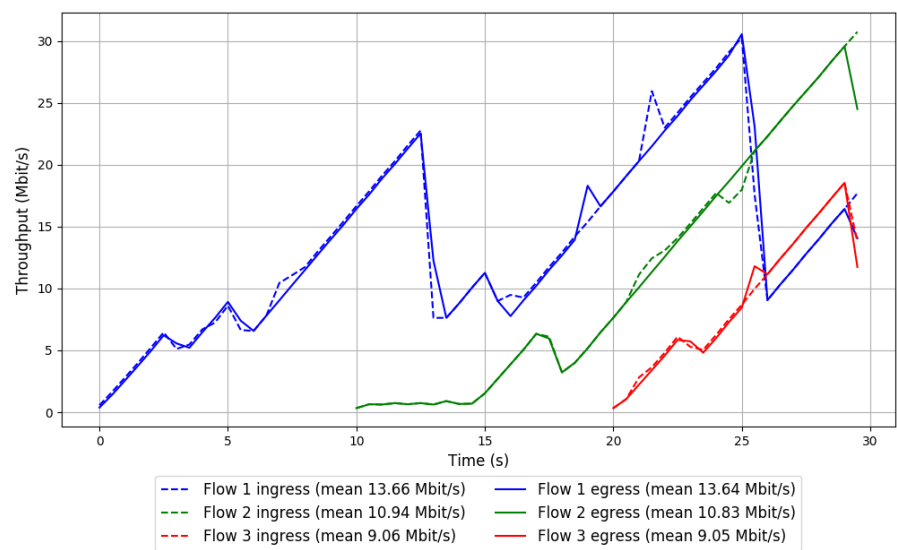
-- Flow 3:

Average throughput: 9.05 Mbit/s

95th percentile per-packet one-way delay: 51.084 ms

Loss rate: 1.14%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-12 06:29:08

End at: 2017-12-12 06:29:38

Below is generated by plot.py at 2017-12-12 09:20:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 23.09 Mbit/s

95th percentile per-packet one-way delay: 50.699 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 15.20 Mbit/s

95th percentile per-packet one-way delay: 50.730 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 8.30 Mbit/s

95th percentile per-packet one-way delay: 50.722 ms

Loss rate: 1.37%

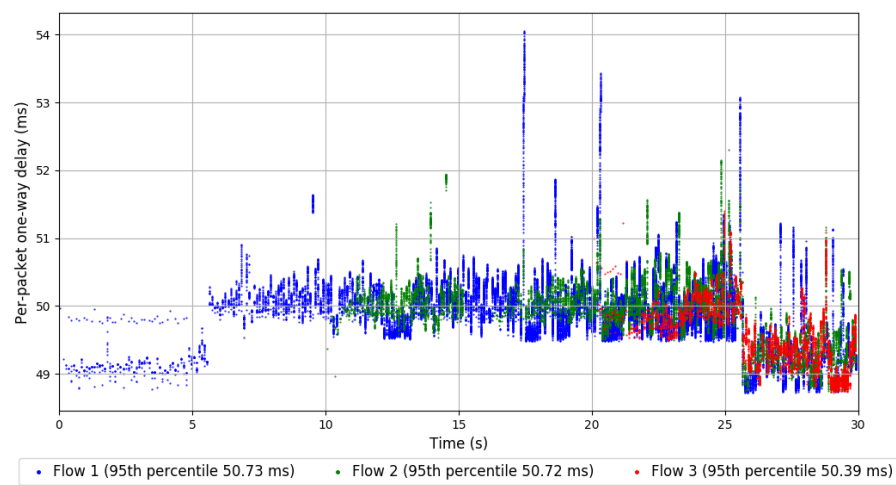
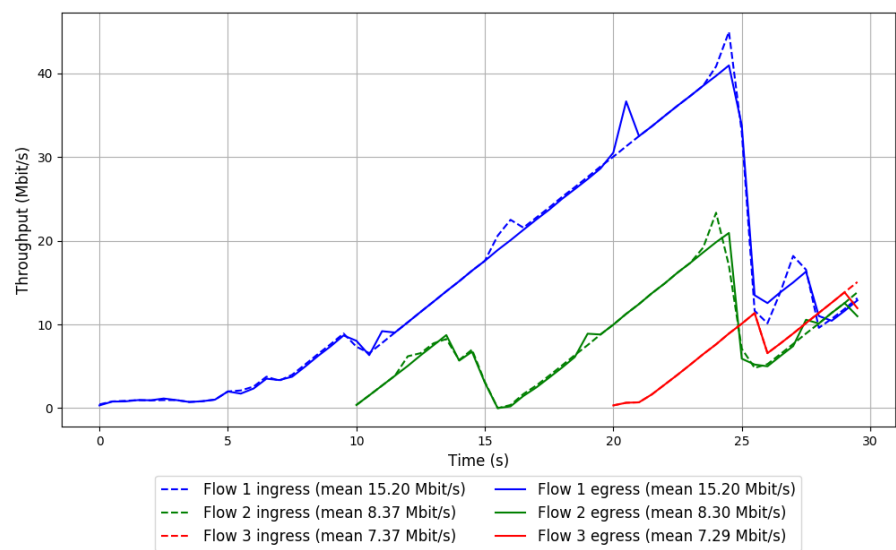
-- Flow 3:

Average throughput: 7.29 Mbit/s

95th percentile per-packet one-way delay: 50.393 ms

Loss rate: 2.14%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-12 06:41:35

End at: 2017-12-12 06:42:05

Below is generated by plot.py at 2017-12-12 09:20:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.18 Mbit/s

95th percentile per-packet one-way delay: 51.435 ms

Loss rate: 1.33%

-- Flow 1:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 51.368 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 6.16 Mbit/s

95th percentile per-packet one-way delay: 51.469 ms

Loss rate: 0.99%

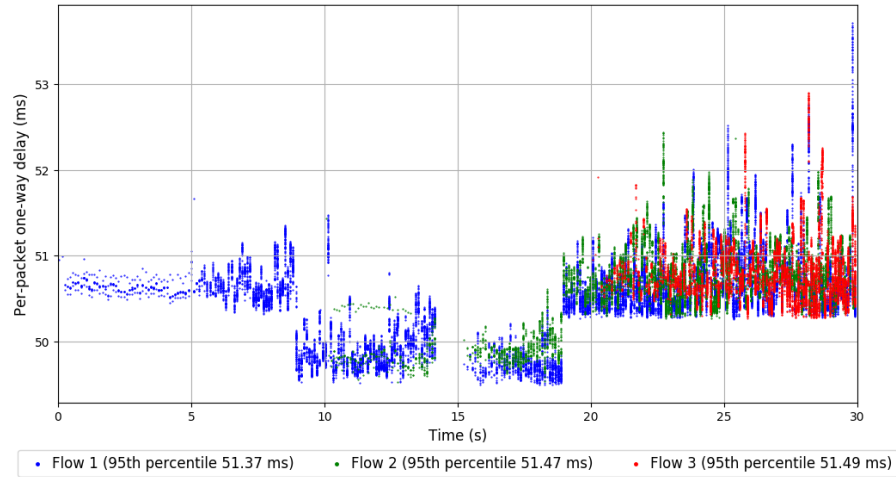
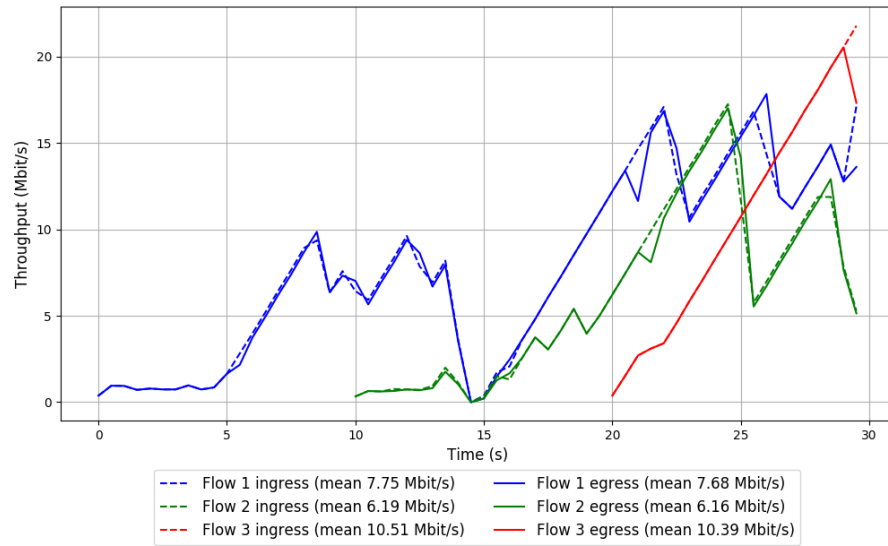
-- Flow 3:

Average throughput: 10.39 Mbit/s

95th percentile per-packet one-way delay: 51.490 ms

Loss rate: 2.13%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-12 06:53:56

End at: 2017-12-12 06:54:26

Below is generated by plot.py at 2017-12-12 09:20:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.96 Mbit/s

95th percentile per-packet one-way delay: 51.271 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 12.57 Mbit/s

95th percentile per-packet one-way delay: 51.250 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 7.50 Mbit/s

95th percentile per-packet one-way delay: 51.309 ms

Loss rate: 0.97%

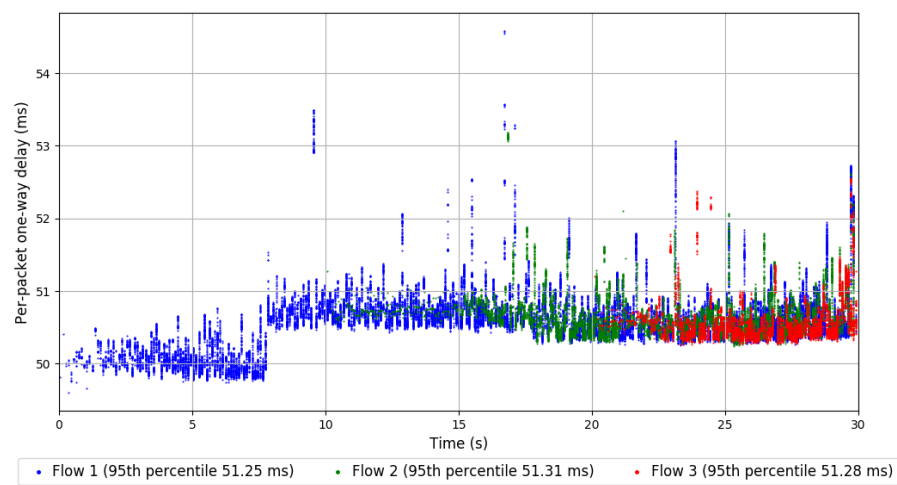
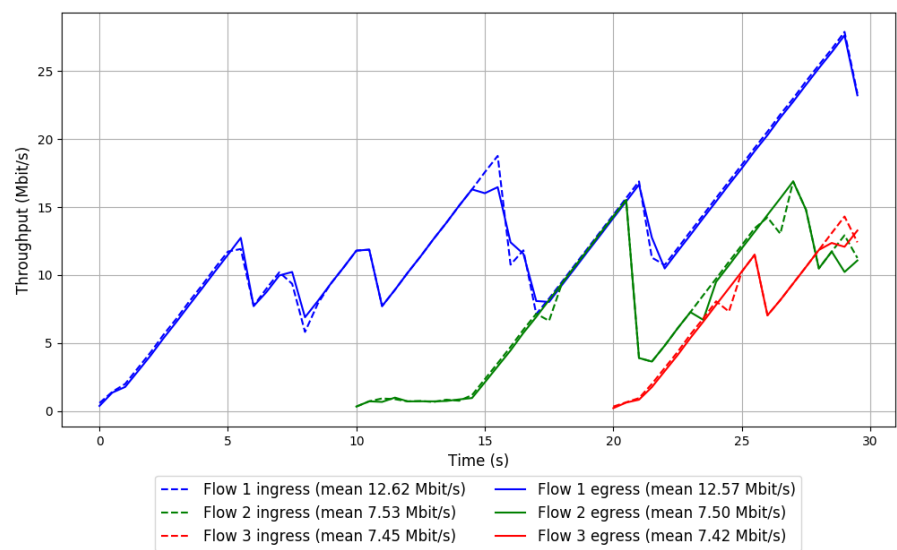
-- Flow 3:

Average throughput: 7.42 Mbit/s

95th percentile per-packet one-way delay: 51.285 ms

Loss rate: 1.41%

Run 10: Report of LEDBAT — Data Link

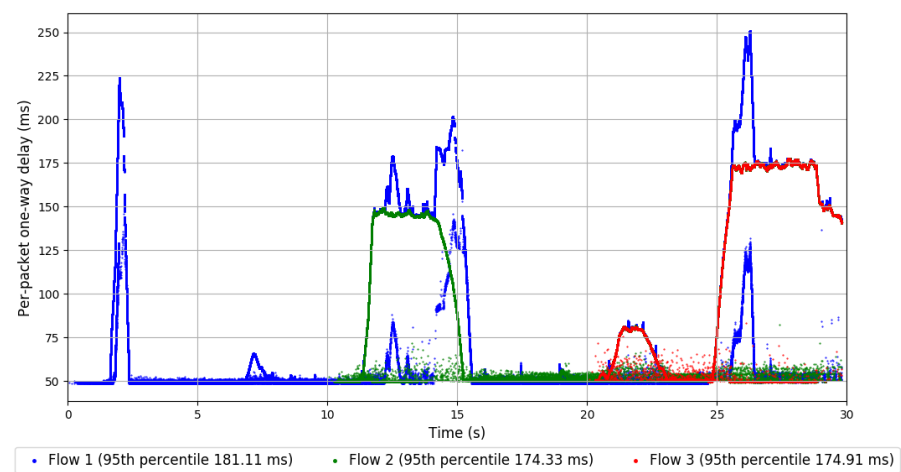
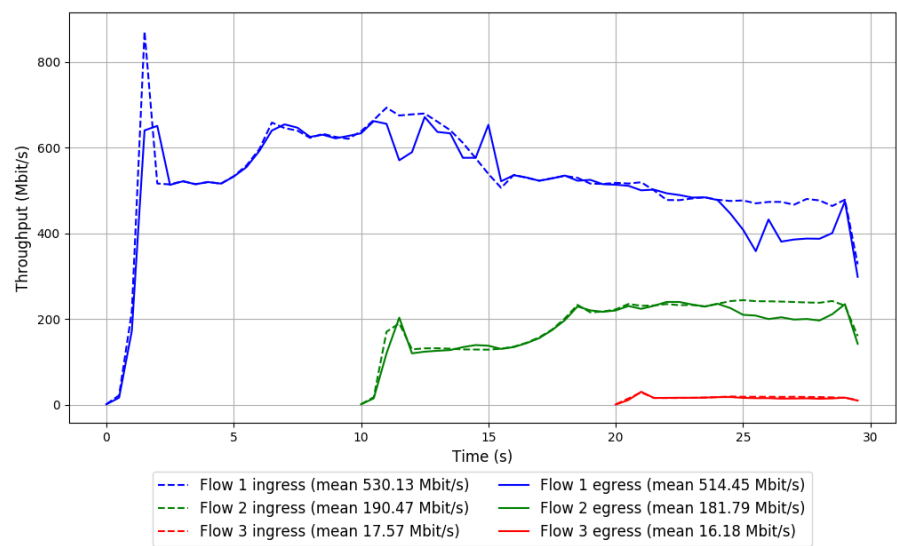


```
Run 1: Statistics of PCC

Start at: 2017-12-12 04:55:39
End at: 2017-12-12 04:56:09

# Below is generated by plot.py at 2017-12-12 09:30:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 640.40 Mbit/s
95th percentile per-packet one-way delay: 176.841 ms
Loss rate: 3.66%
-- Flow 1:
Average throughput: 514.45 Mbit/s
95th percentile per-packet one-way delay: 181.113 ms
Loss rate: 3.28%
-- Flow 2:
Average throughput: 181.79 Mbit/s
95th percentile per-packet one-way delay: 174.329 ms
Loss rate: 5.04%
-- Flow 3:
Average throughput: 16.18 Mbit/s
95th percentile per-packet one-way delay: 174.911 ms
Loss rate: 8.83%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-12 05:08:14

End at: 2017-12-12 05:08:44

Below is generated by plot.py at 2017-12-12 09:30:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 635.42 Mbit/s

95th percentile per-packet one-way delay: 207.195 ms

Loss rate: 4.80%

-- Flow 1:

Average throughput: 502.50 Mbit/s

95th percentile per-packet one-way delay: 232.371 ms

Loss rate: 5.01%

-- Flow 2:

Average throughput: 192.92 Mbit/s

95th percentile per-packet one-way delay: 153.487 ms

Loss rate: 3.95%

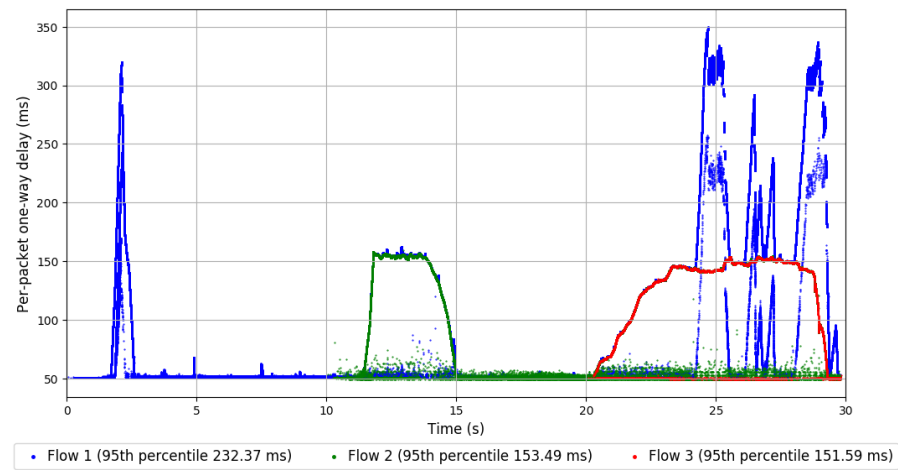
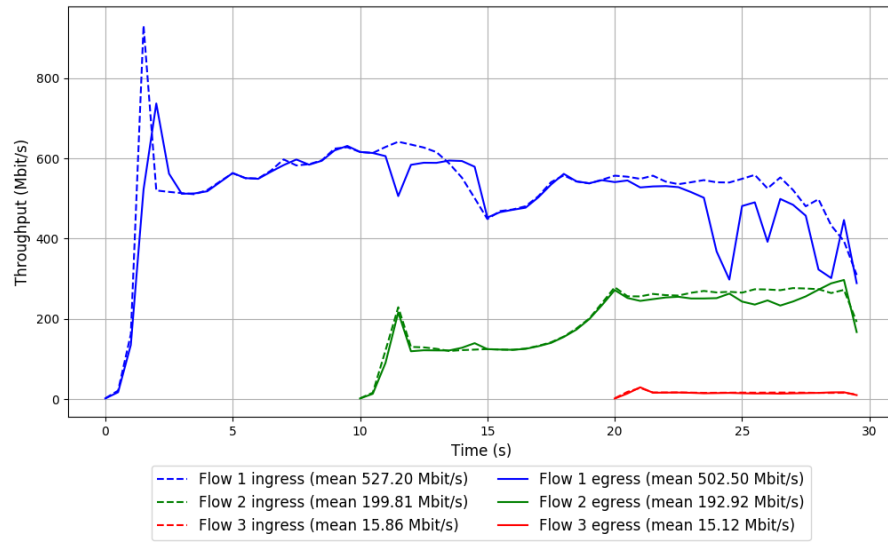
-- Flow 3:

Average throughput: 15.12 Mbit/s

95th percentile per-packet one-way delay: 151.590 ms

Loss rate: 5.65%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-12 05:20:24

End at: 2017-12-12 05:20:54

Below is generated by plot.py at 2017-12-12 09:31:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 658.11 Mbit/s

95th percentile per-packet one-way delay: 160.281 ms

Loss rate: 2.12%

-- Flow 1:

Average throughput: 598.64 Mbit/s

95th percentile per-packet one-way delay: 161.298 ms

Loss rate: 2.12%

-- Flow 2:

Average throughput: 87.72 Mbit/s

95th percentile per-packet one-way delay: 151.620 ms

Loss rate: 2.05%

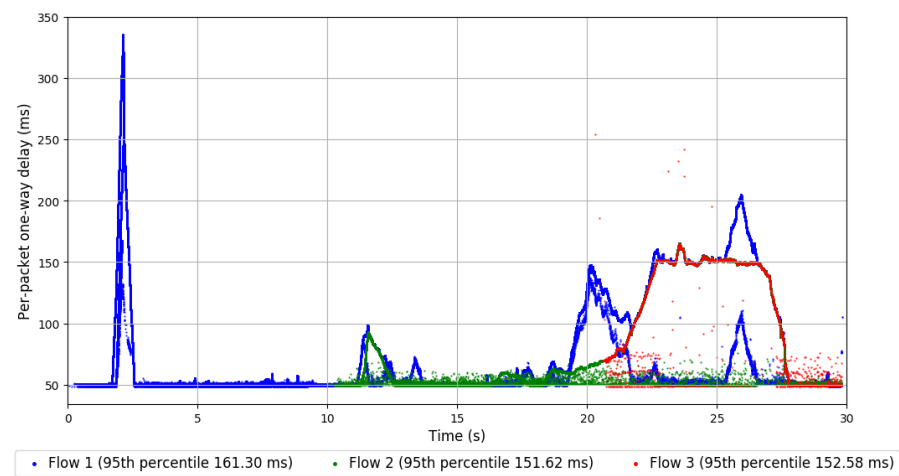
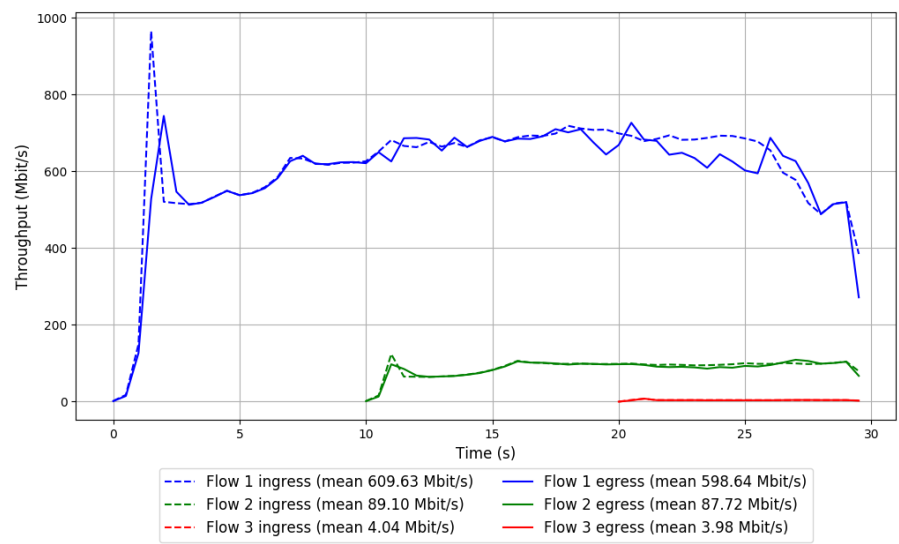
-- Flow 3:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 152.584 ms

Loss rate: 4.57%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-12 05:32:54

End at: 2017-12-12 05:33:24

Below is generated by plot.py at 2017-12-12 09:31:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 633.74 Mbit/s

95th percentile per-packet one-way delay: 214.662 ms

Loss rate: 3.28%

-- Flow 1:

Average throughput: 507.55 Mbit/s

95th percentile per-packet one-way delay: 221.525 ms

Loss rate: 3.42%

-- Flow 2:

Average throughput: 163.27 Mbit/s

95th percentile per-packet one-way delay: 149.494 ms

Loss rate: 2.38%

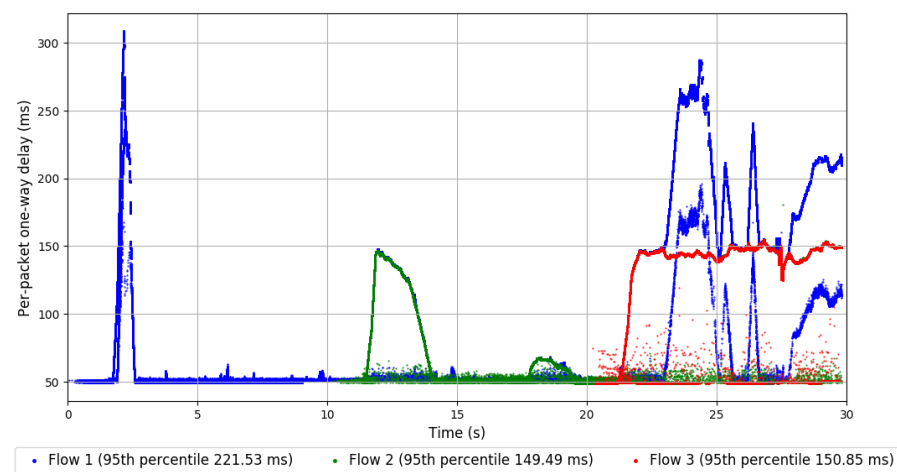
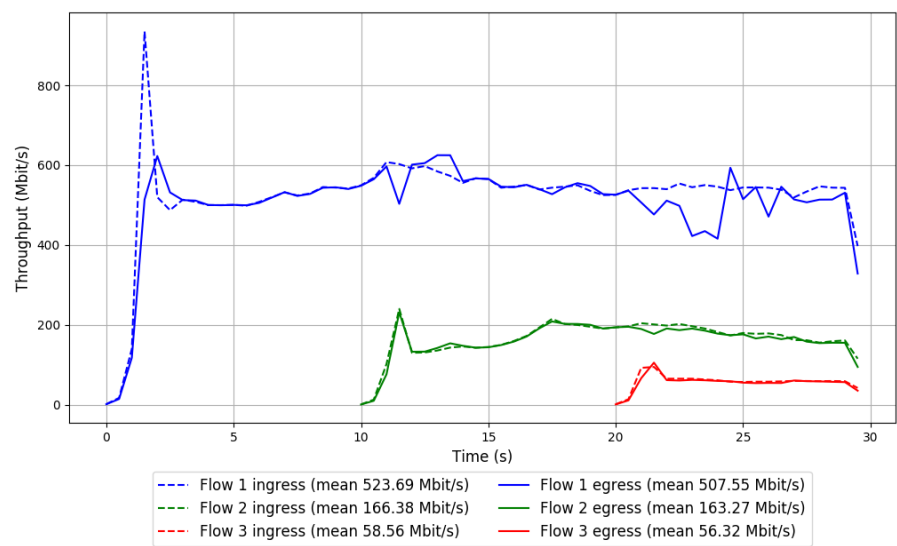
-- Flow 3:

Average throughput: 56.32 Mbit/s

95th percentile per-packet one-way delay: 150.848 ms

Loss rate: 4.82%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-12 05:45:26

End at: 2017-12-12 05:45:56

Below is generated by plot.py at 2017-12-12 09:31:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 603.02 Mbit/s

95th percentile per-packet one-way delay: 188.116 ms

Loss rate: 4.67%

-- Flow 1:

Average throughput: 525.33 Mbit/s

95th percentile per-packet one-way delay: 187.926 ms

Loss rate: 4.49%

-- Flow 2:

Average throughput: 116.18 Mbit/s

95th percentile per-packet one-way delay: 189.281 ms

Loss rate: 5.79%

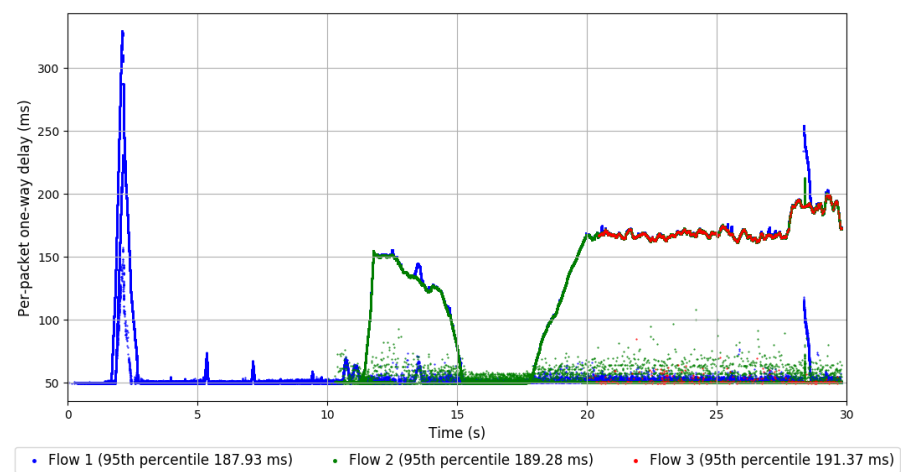
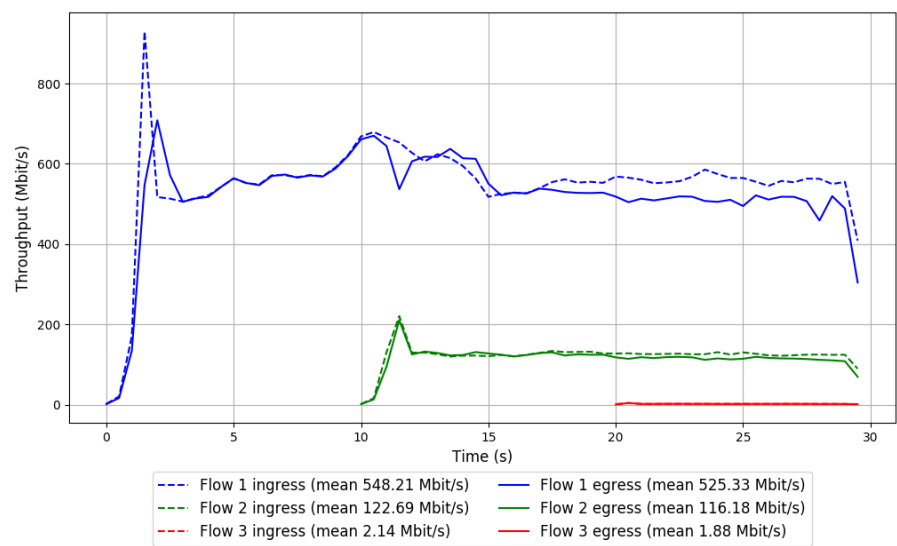
-- Flow 3:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 191.367 ms

Loss rate: 12.98%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-12 05:57:46

End at: 2017-12-12 05:58:16

Below is generated by plot.py at 2017-12-12 09:32:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 666.17 Mbit/s

95th percentile per-packet one-way delay: 152.856 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 588.56 Mbit/s

95th percentile per-packet one-way delay: 152.875 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 113.23 Mbit/s

95th percentile per-packet one-way delay: 152.763 ms

Loss rate: 1.50%

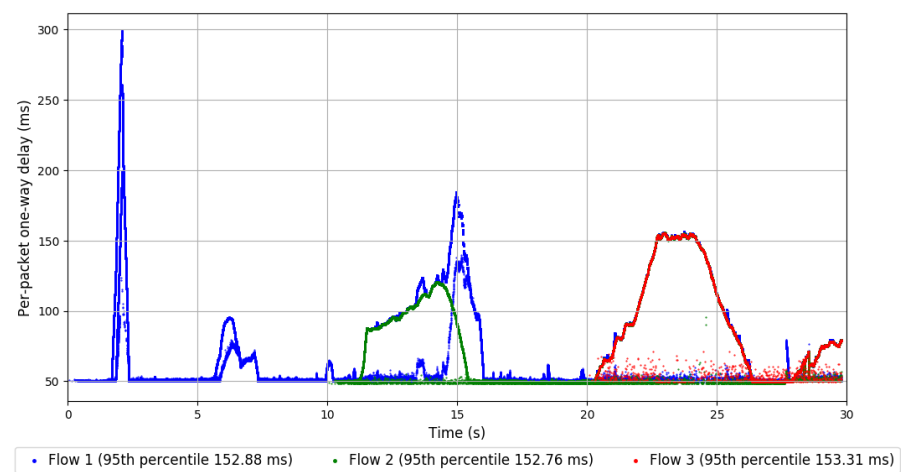
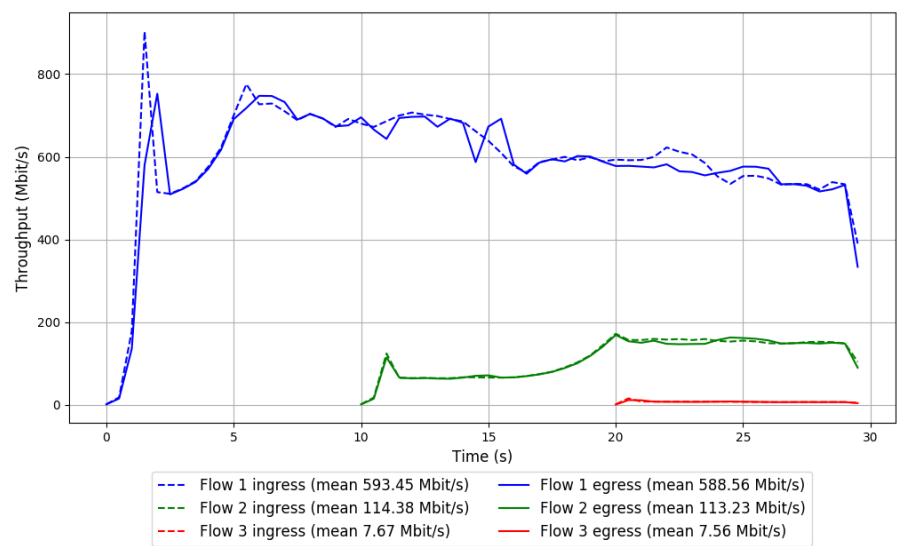
-- Flow 3:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 153.313 ms

Loss rate: 2.40%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-12 06:10:15

End at: 2017-12-12 06:10:45

Below is generated by plot.py at 2017-12-12 09:32:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 643.32 Mbit/s

95th percentile per-packet one-way delay: 203.537 ms

Loss rate: 4.66%

-- Flow 1:

Average throughput: 520.05 Mbit/s

95th percentile per-packet one-way delay: 230.173 ms

Loss rate: 4.84%

-- Flow 2:

Average throughput: 157.67 Mbit/s

95th percentile per-packet one-way delay: 152.790 ms

Loss rate: 3.49%

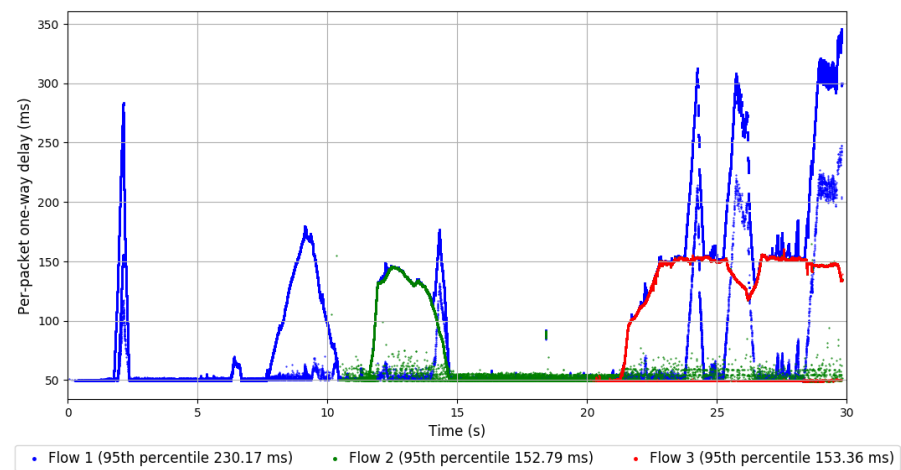
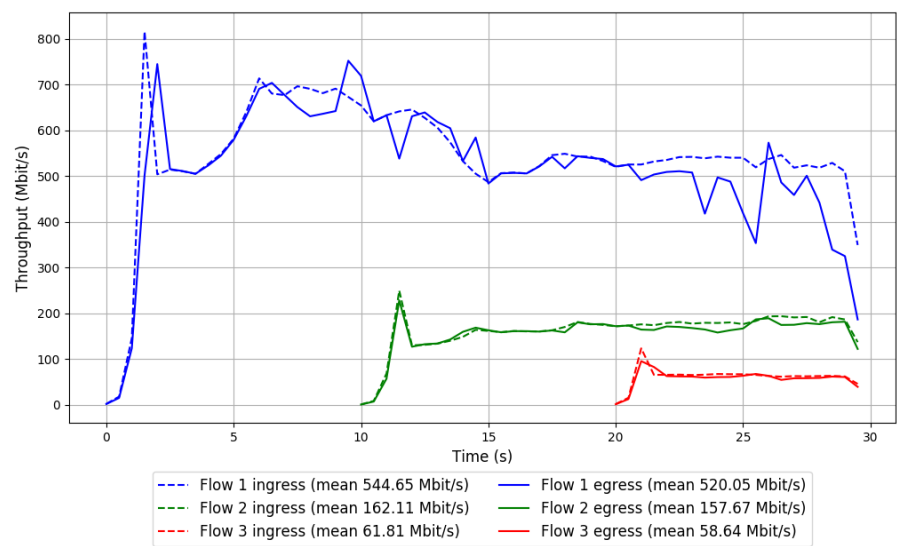
-- Flow 3:

Average throughput: 58.64 Mbit/s

95th percentile per-packet one-way delay: 153.363 ms

Loss rate: 6.06%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-12 06:22:33

End at: 2017-12-12 06:23:03

Below is generated by plot.py at 2017-12-12 09:33:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 642.63 Mbit/s

95th percentile per-packet one-way delay: 181.465 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 609.39 Mbit/s

95th percentile per-packet one-way delay: 182.143 ms

Loss rate: 1.71%

-- Flow 2:

Average throughput: 16.69 Mbit/s

95th percentile per-packet one-way delay: 138.093 ms

Loss rate: 0.68%

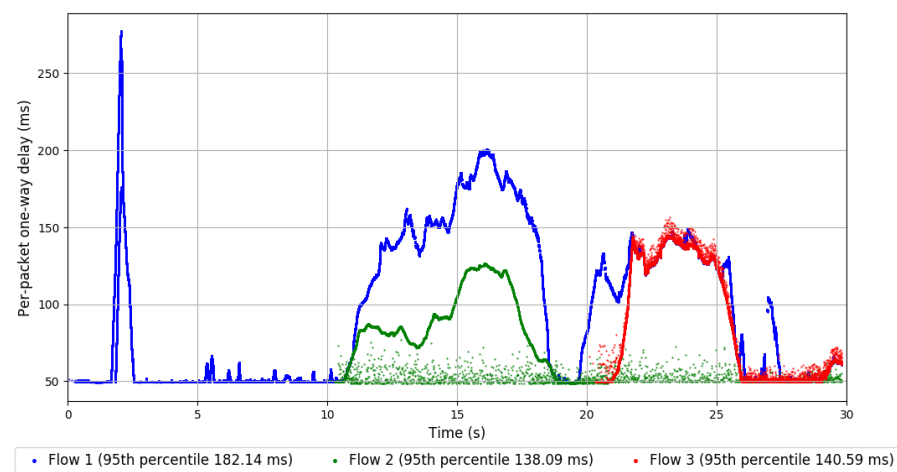
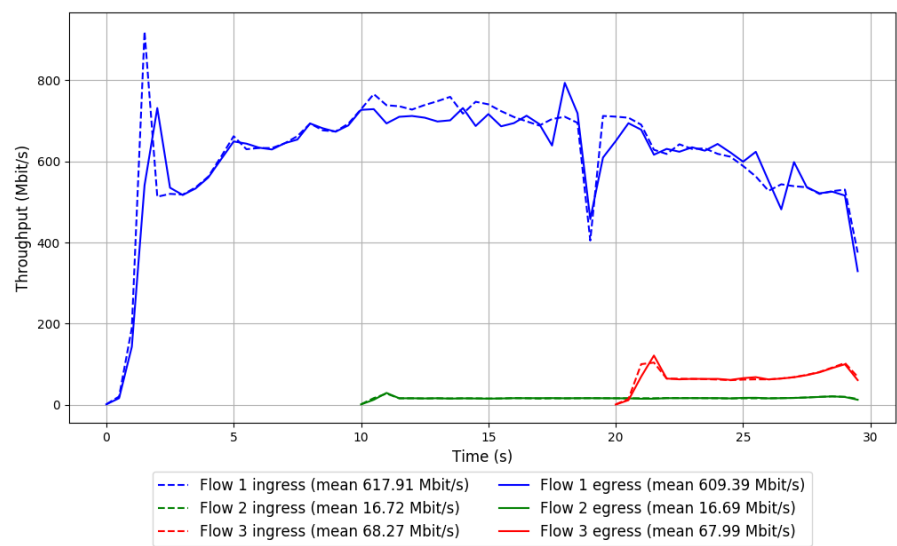
-- Flow 3:

Average throughput: 67.99 Mbit/s

95th percentile per-packet one-way delay: 140.586 ms

Loss rate: 1.57%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-12 06:34:57

End at: 2017-12-12 06:35:27

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 670.08 Mbit/s

95th percentile per-packet one-way delay: 184.187 ms

Loss rate: 3.97%

-- Flow 1:

Average throughput: 592.30 Mbit/s

95th percentile per-packet one-way delay: 187.279 ms

Loss rate: 3.93%

-- Flow 2:

Average throughput: 116.42 Mbit/s

95th percentile per-packet one-way delay: 155.222 ms

Loss rate: 4.32%

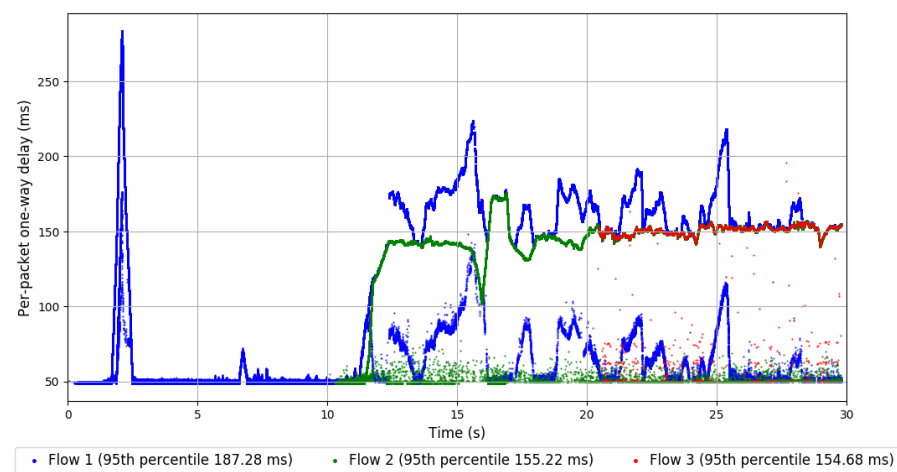
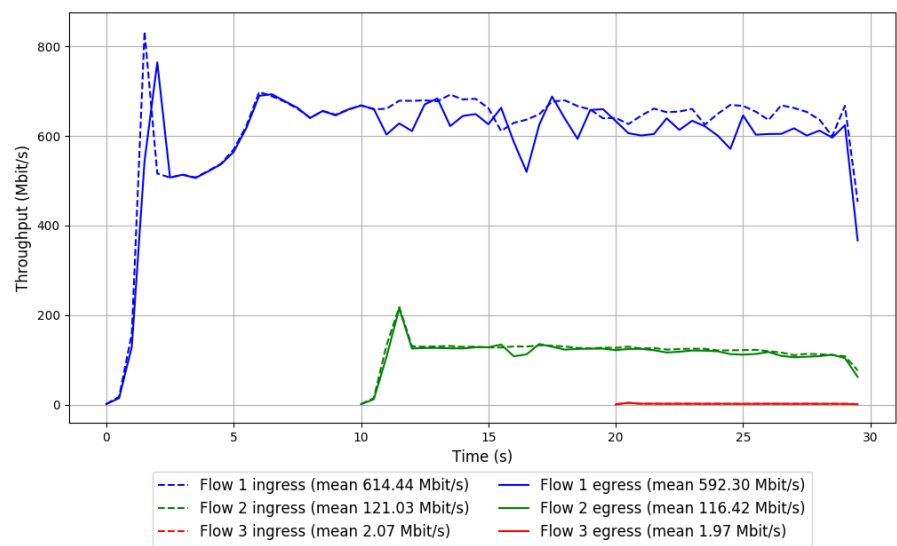
-- Flow 3:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 154.676 ms

Loss rate: 5.62%

Run 9: Report of PCC — Data Link

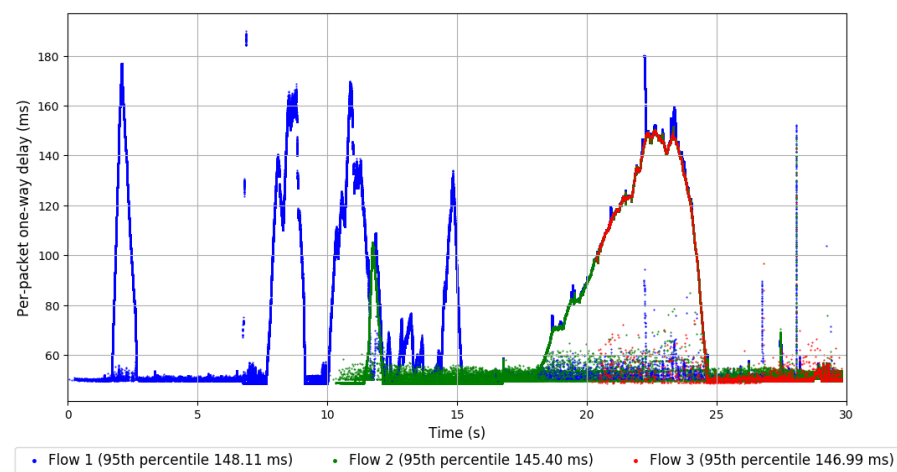
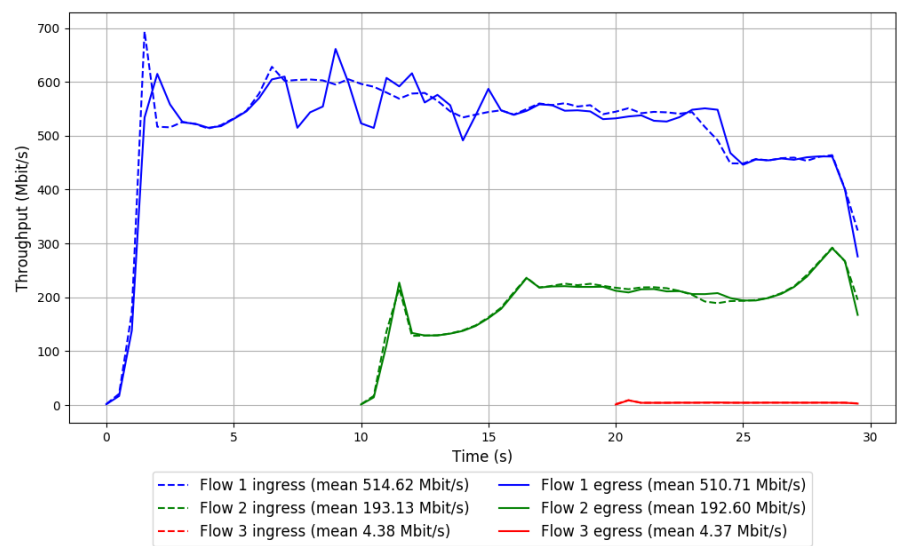


```
Run 10: Statistics of PCC

Start at: 2017-12-12 06:47:27
End at: 2017-12-12 06:47:57

# Below is generated by plot.py at 2017-12-12 09:43:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 639.71 Mbit/s
95th percentile per-packet one-way delay: 147.503 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 510.71 Mbit/s
95th percentile per-packet one-way delay: 148.114 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 192.60 Mbit/s
95th percentile per-packet one-way delay: 145.396 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 146.994 ms
Loss rate: 1.13%
```

Run 10: Report of PCC — Data Link

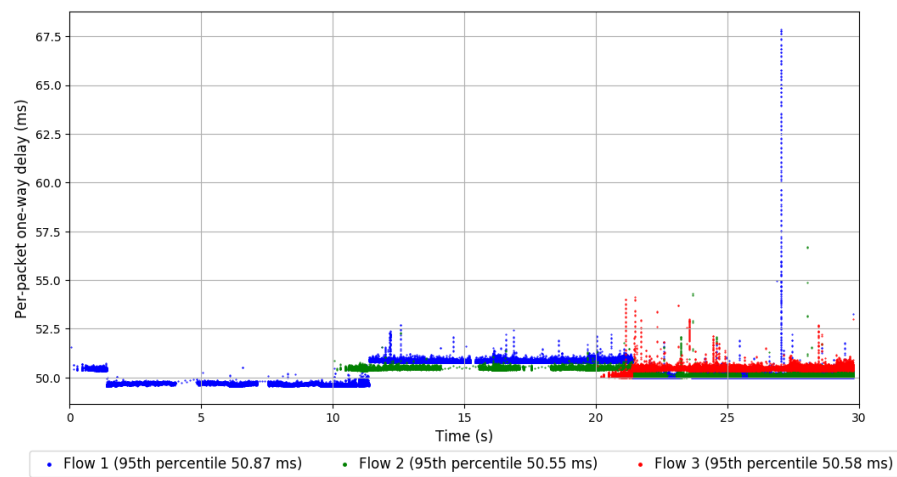
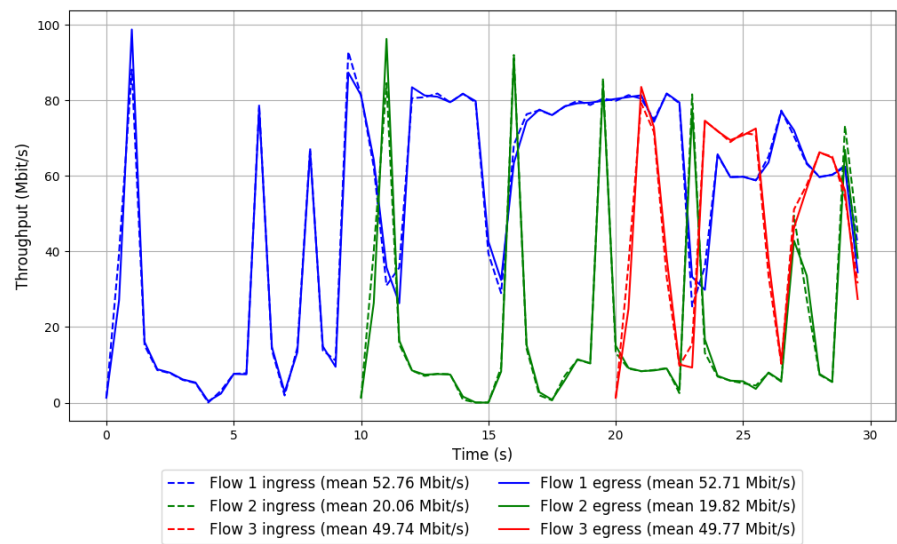


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-12 04:52:32
End at: 2017-12-12 04:53:02

# Below is generated by plot.py at 2017-12-12 09:43:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.09 Mbit/s
95th percentile per-packet one-way delay: 50.852 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 52.71 Mbit/s
95th percentile per-packet one-way delay: 50.874 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 19.82 Mbit/s
95th percentile per-packet one-way delay: 50.548 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 49.77 Mbit/s
95th percentile per-packet one-way delay: 50.581 ms
Loss rate: 0.94%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-12 05:05:10

End at: 2017-12-12 05:05:40

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.41 Mbit/s

95th percentile per-packet one-way delay: 50.779 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 40.48 Mbit/s

95th percentile per-packet one-way delay: 50.629 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 26.06 Mbit/s

95th percentile per-packet one-way delay: 50.867 ms

Loss rate: 1.28%

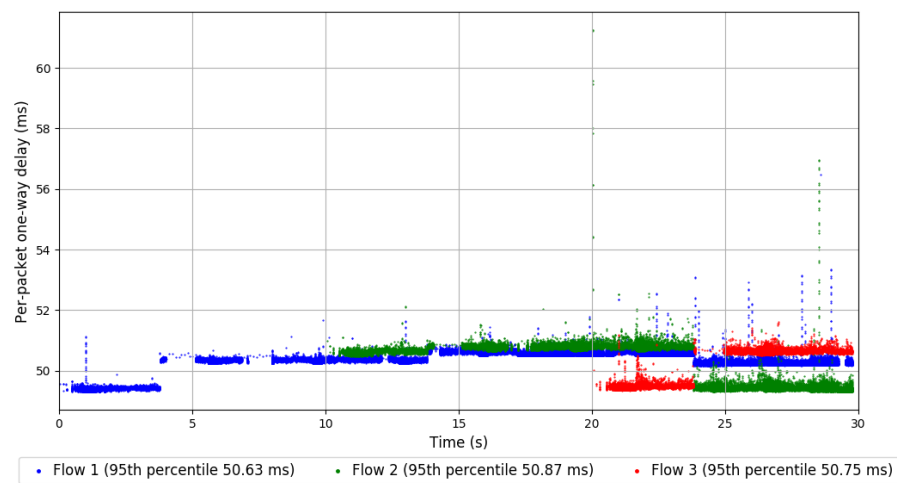
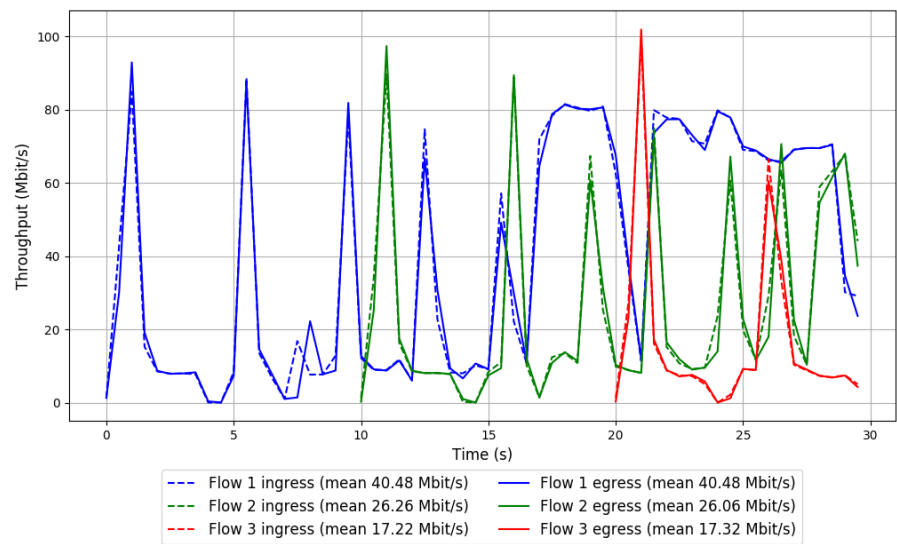
-- Flow 3:

Average throughput: 17.32 Mbit/s

95th percentile per-packet one-way delay: 50.753 ms

Loss rate: 0.46%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-12 05:17:19

End at: 2017-12-12 05:17:49

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.56 Mbit/s

95th percentile per-packet one-way delay: 50.738 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 45.71 Mbit/s

95th percentile per-packet one-way delay: 50.779 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 35.81 Mbit/s

95th percentile per-packet one-way delay: 50.599 ms

Loss rate: 1.11%

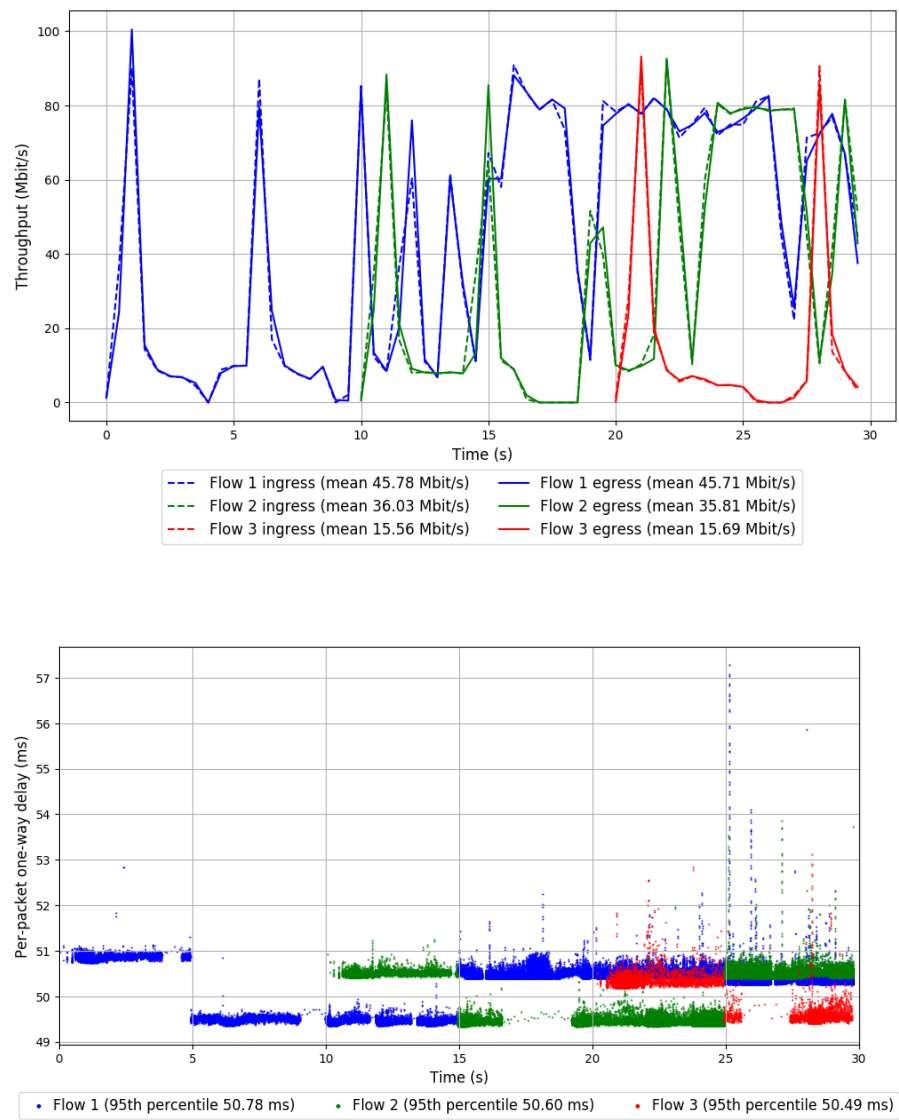
-- Flow 3:

Average throughput: 15.69 Mbit/s

95th percentile per-packet one-way delay: 50.486 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-12 05:29:48

End at: 2017-12-12 05:30:18

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.25 Mbit/s

95th percentile per-packet one-way delay: 50.793 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 45.70 Mbit/s

95th percentile per-packet one-way delay: 50.526 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 28.81 Mbit/s

95th percentile per-packet one-way delay: 50.864 ms

Loss rate: 0.11%

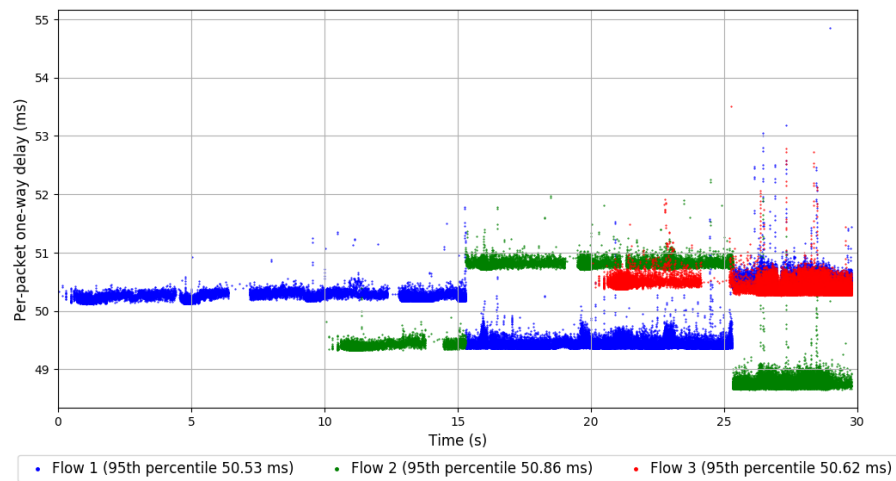
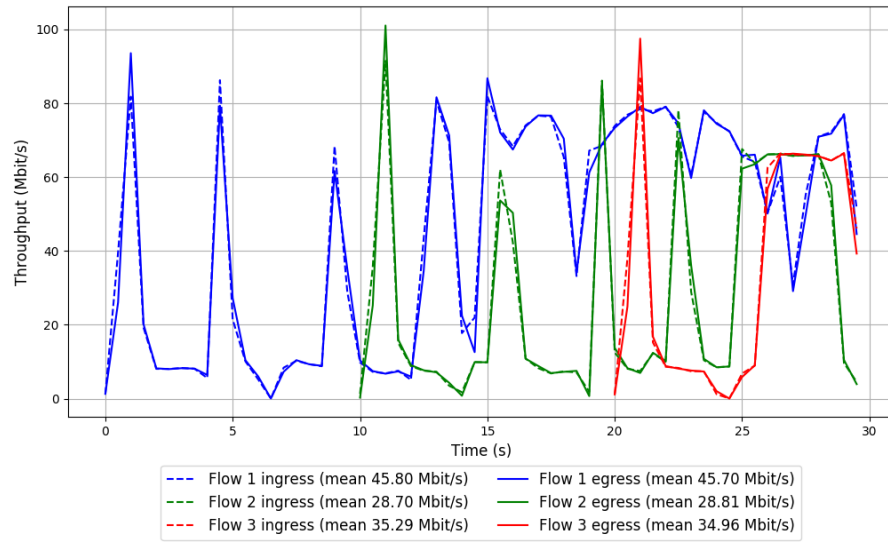
-- Flow 3:

Average throughput: 34.96 Mbit/s

95th percentile per-packet one-way delay: 50.624 ms

Loss rate: 1.97%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-12 05:42:20

End at: 2017-12-12 05:42:50

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.32 Mbit/s

95th percentile per-packet one-way delay: 50.505 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 49.00 Mbit/s

95th percentile per-packet one-way delay: 49.801 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 34.25 Mbit/s

95th percentile per-packet one-way delay: 50.398 ms

Loss rate: 0.96%

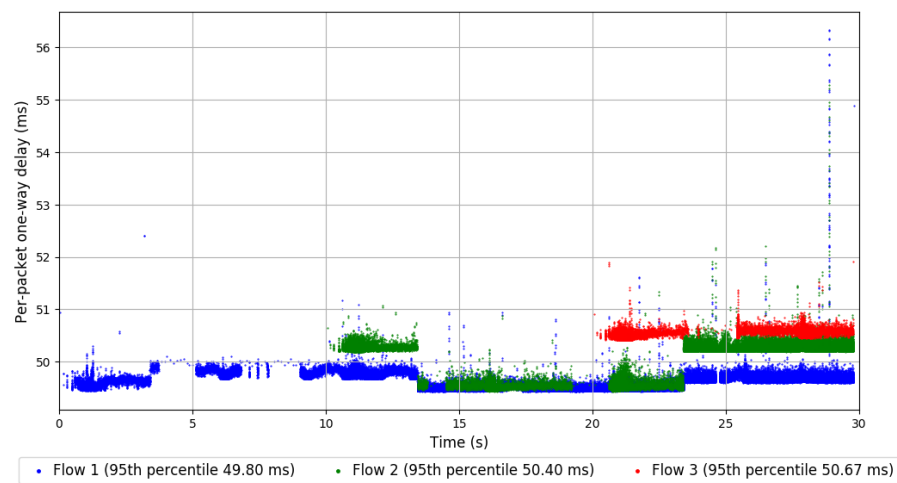
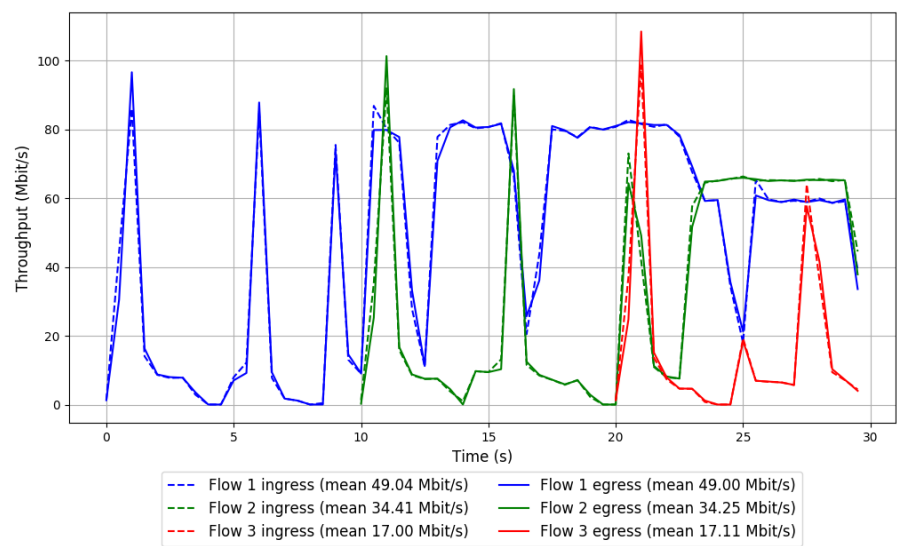
-- Flow 3:

Average throughput: 17.11 Mbit/s

95th percentile per-packet one-way delay: 50.669 ms

Loss rate: 0.29%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-12 05:54:41

End at: 2017-12-12 05:55:11

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.60 Mbit/s

95th percentile per-packet one-way delay: 50.356 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 38.36 Mbit/s

95th percentile per-packet one-way delay: 50.447 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 31.24 Mbit/s

95th percentile per-packet one-way delay: 49.649 ms

Loss rate: 0.19%

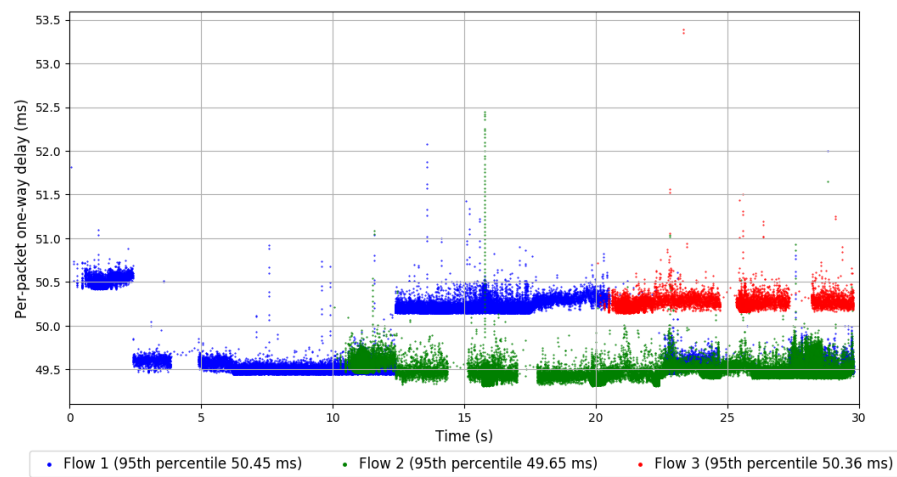
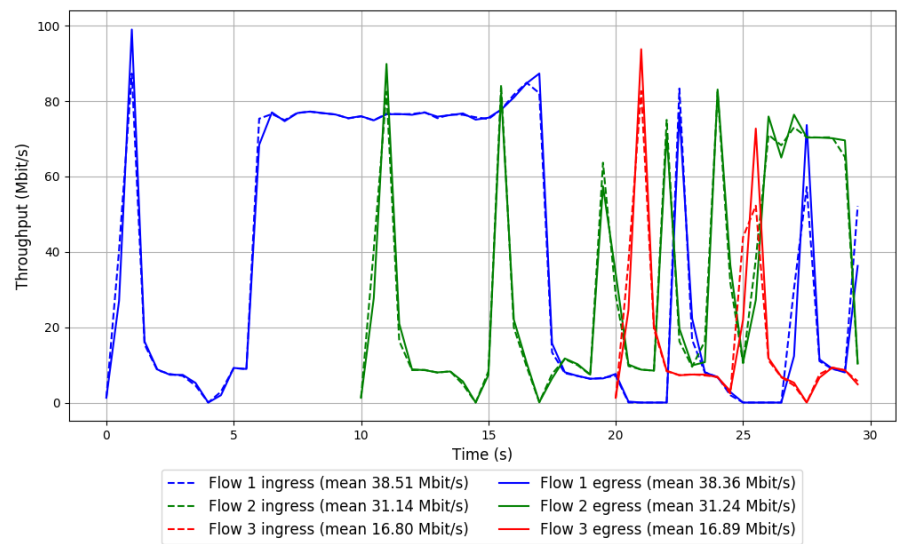
-- Flow 3:

Average throughput: 16.89 Mbit/s

95th percentile per-packet one-way delay: 50.362 ms

Loss rate: 0.50%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-12 06:07:07

End at: 2017-12-12 06:07:37

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.73 Mbit/s

95th percentile per-packet one-way delay: 50.732 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 67.31 Mbit/s

95th percentile per-packet one-way delay: 50.461 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 40.43 Mbit/s

95th percentile per-packet one-way delay: 50.829 ms

Loss rate: 0.92%

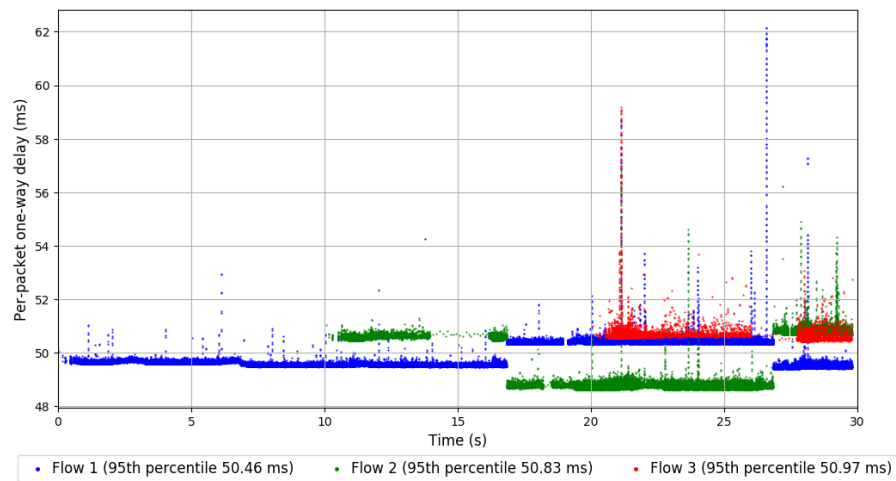
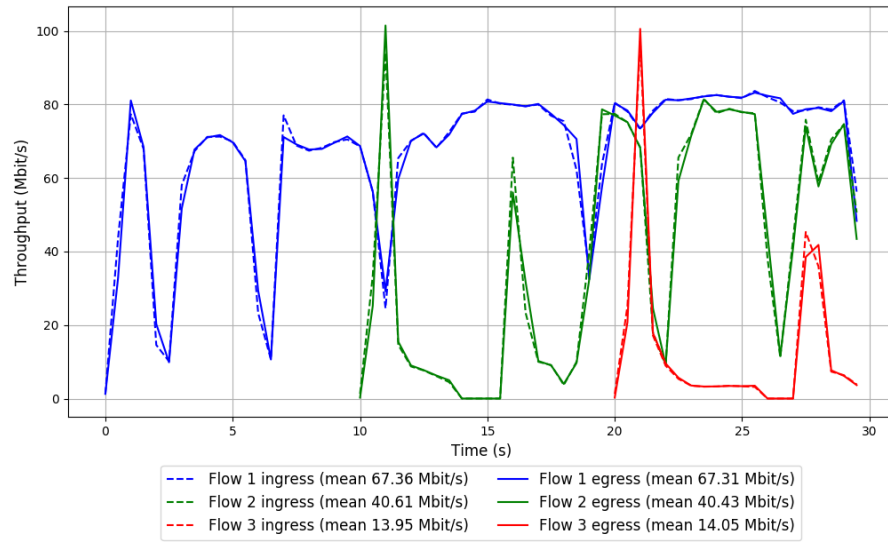
-- Flow 3:

Average throughput: 14.05 Mbit/s

95th percentile per-packet one-way delay: 50.974 ms

Loss rate: 0.36%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-12 06:19:28

End at: 2017-12-12 06:19:58

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.23 Mbit/s

95th percentile per-packet one-way delay: 50.808 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 45.80 Mbit/s

95th percentile per-packet one-way delay: 50.835 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 17.47 Mbit/s

95th percentile per-packet one-way delay: 49.758 ms

Loss rate: 0.18%

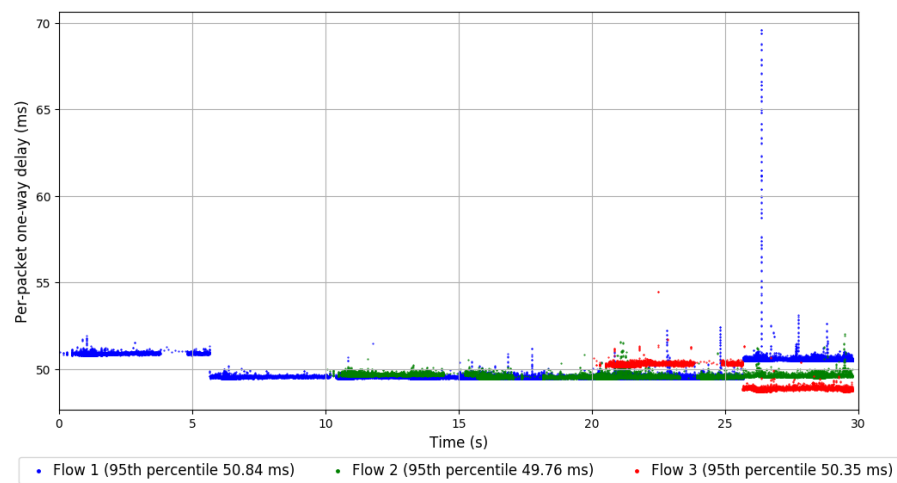
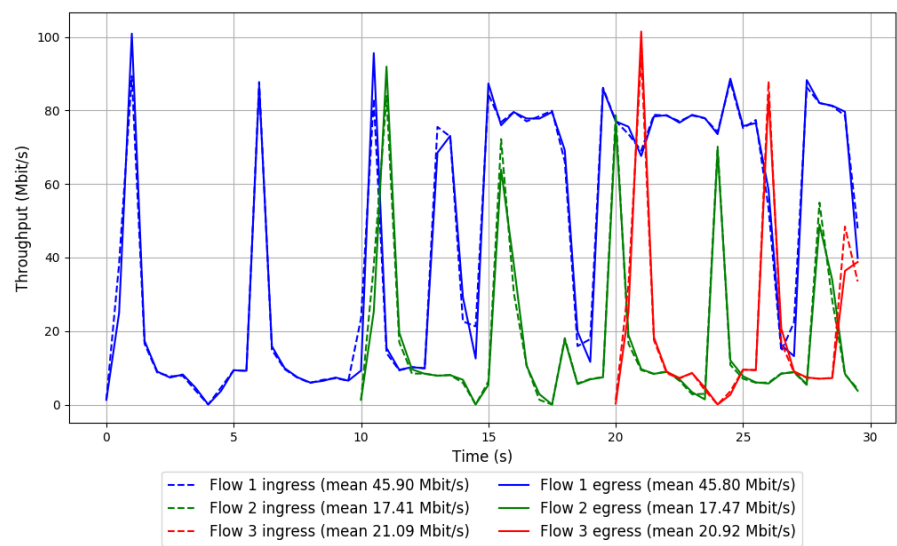
-- Flow 3:

Average throughput: 20.92 Mbit/s

95th percentile per-packet one-way delay: 50.349 ms

Loss rate: 1.81%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-12 06:31:53

End at: 2017-12-12 06:32:23

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.48 Mbit/s

95th percentile per-packet one-way delay: 50.699 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 23.25 Mbit/s

95th percentile per-packet one-way delay: 49.717 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 15.43 Mbit/s

95th percentile per-packet one-way delay: 50.762 ms

Loss rate: 0.91%

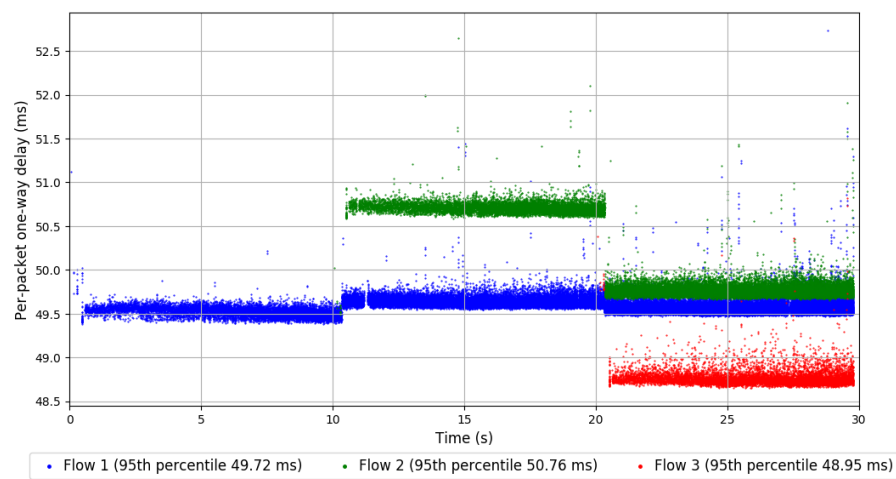
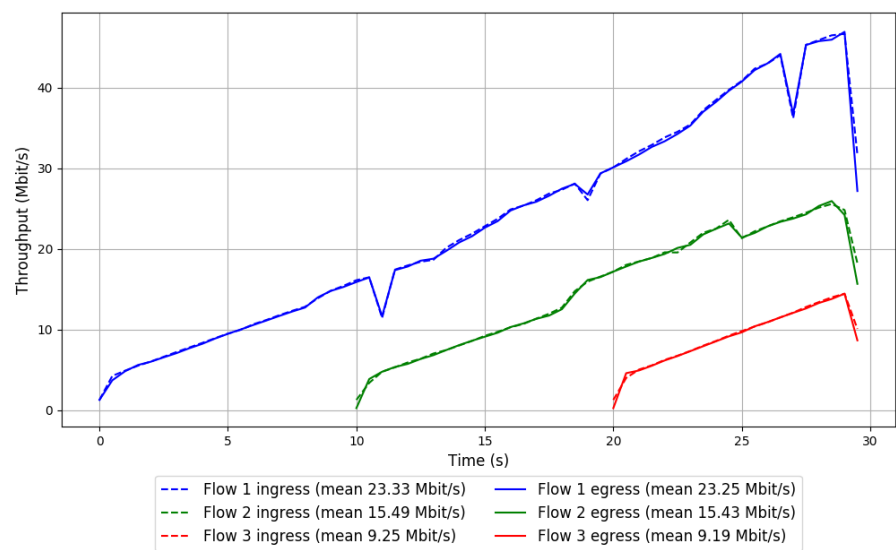
-- Flow 3:

Average throughput: 9.19 Mbit/s

95th percentile per-packet one-way delay: 48.948 ms

Loss rate: 1.64%

Run 9: Report of QUIC Cubic — Data Link

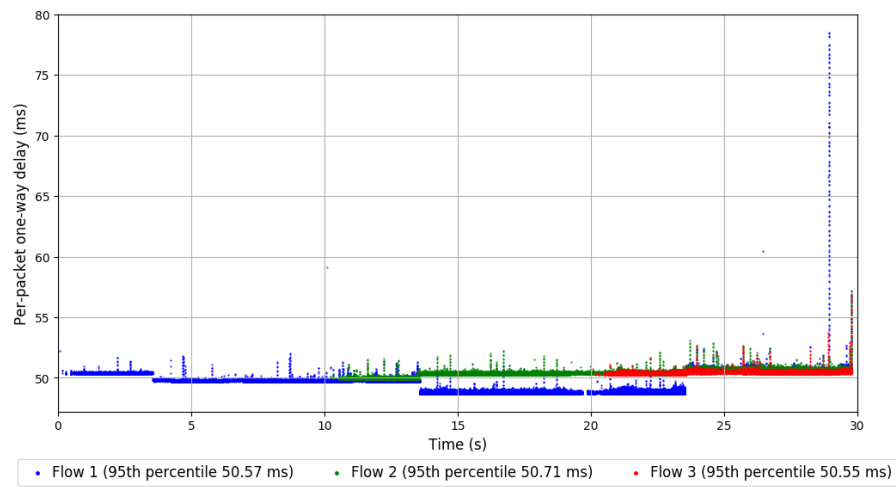
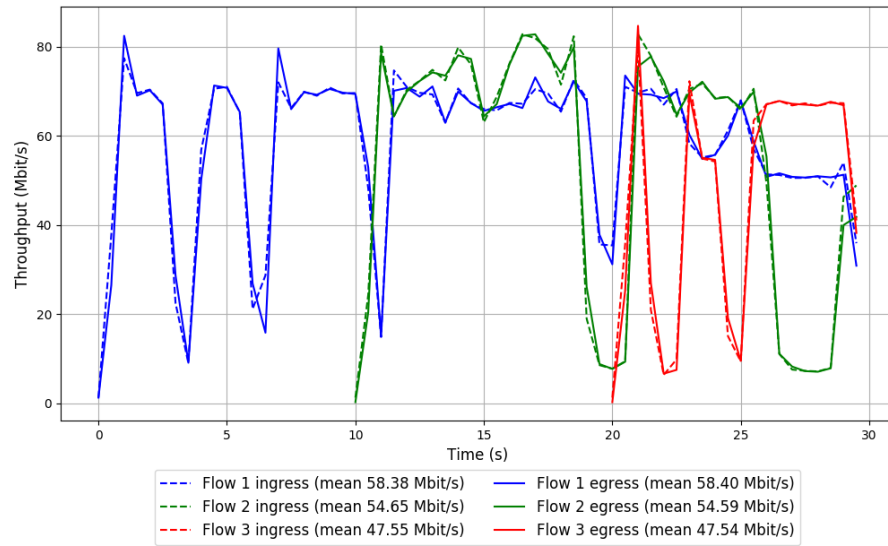


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-12 06:44:20
End at: 2017-12-12 06:44:50

# Below is generated by plot.py at 2017-12-12 09:43:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 110.09 Mbit/s
95th percentile per-packet one-way delay: 50.644 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 58.40 Mbit/s
95th percentile per-packet one-way delay: 50.568 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 54.59 Mbit/s
95th percentile per-packet one-way delay: 50.706 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 47.54 Mbit/s
95th percentile per-packet one-way delay: 50.552 ms
Loss rate: 1.05%
```

Run 10: Report of QUIC Cubic — Data Link

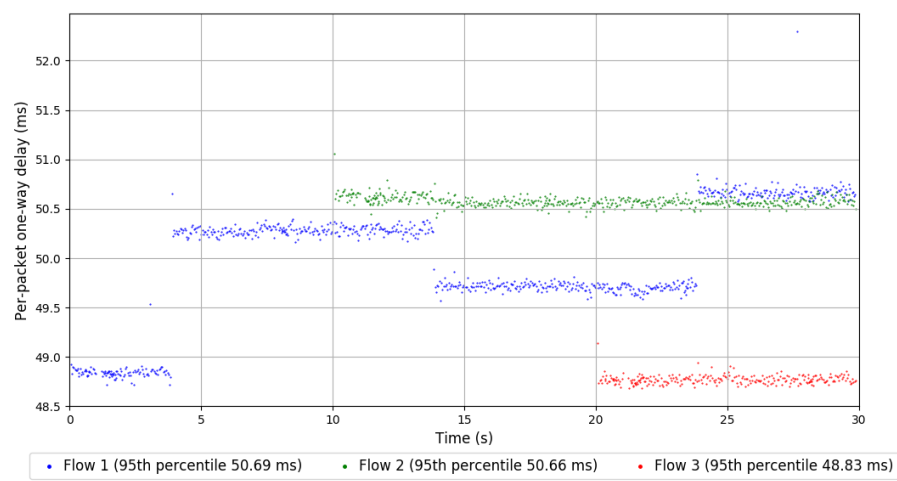
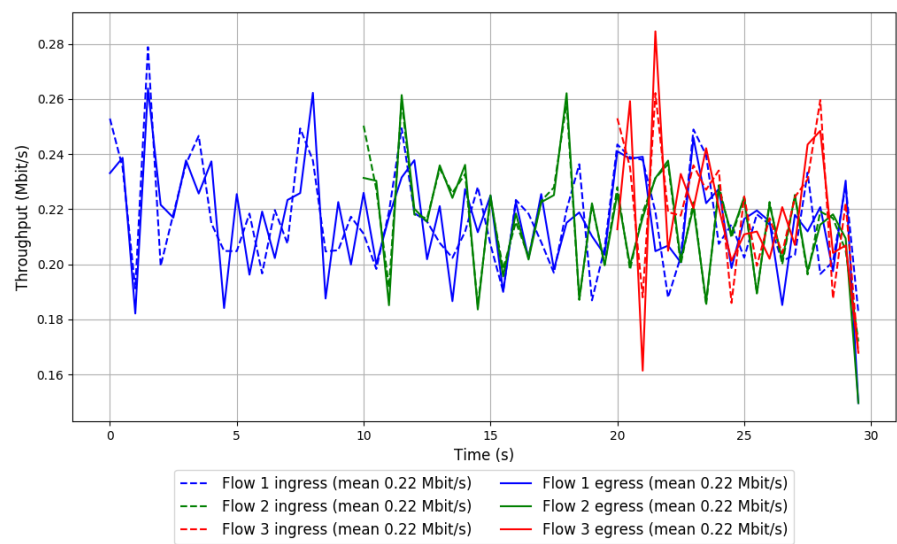


```
Run 1: Statistics of SCReAM

Start at: 2017-12-12 04:55:00
End at: 2017-12-12 04:55:30

# Below is generated by plot.py at 2017-12-12 09:43:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.672 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.691 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.660 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.826 ms
Loss rate: 0.73%
```

Run 1: Report of SReAM — Data Link

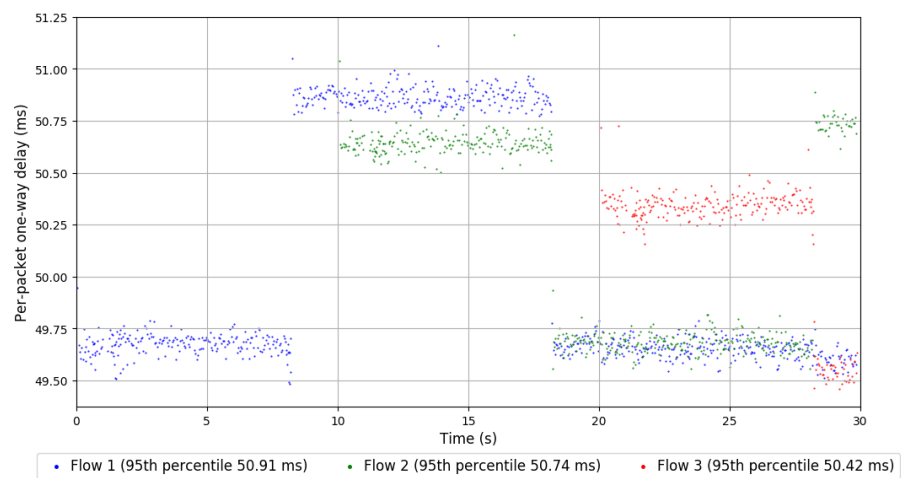
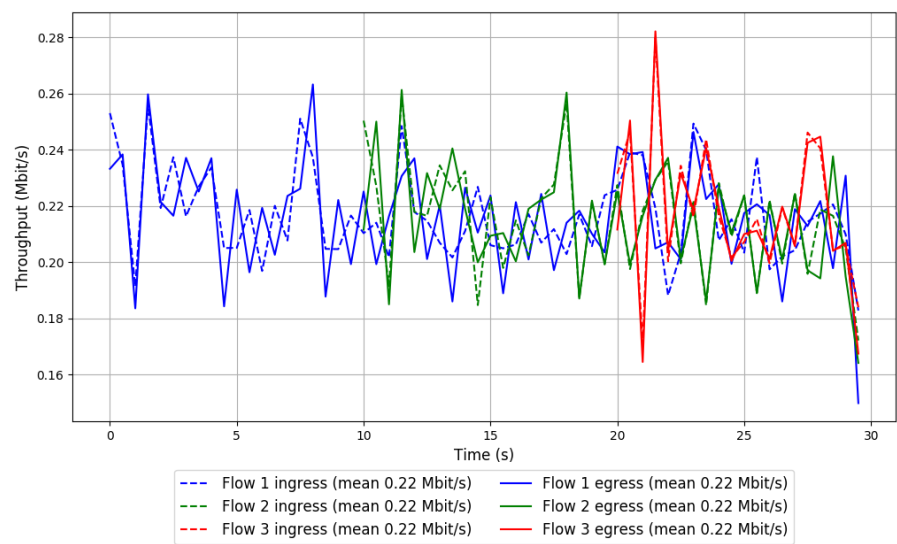


```
Run 2: Statistics of SCReAM

Start at: 2017-12-12 05:07:35
End at: 2017-12-12 05:08:05

# Below is generated by plot.py at 2017-12-12 09:43:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.889 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.908 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.738 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.425 ms
Loss rate: 0.74%
```

Run 2: Report of SReAM — Data Link

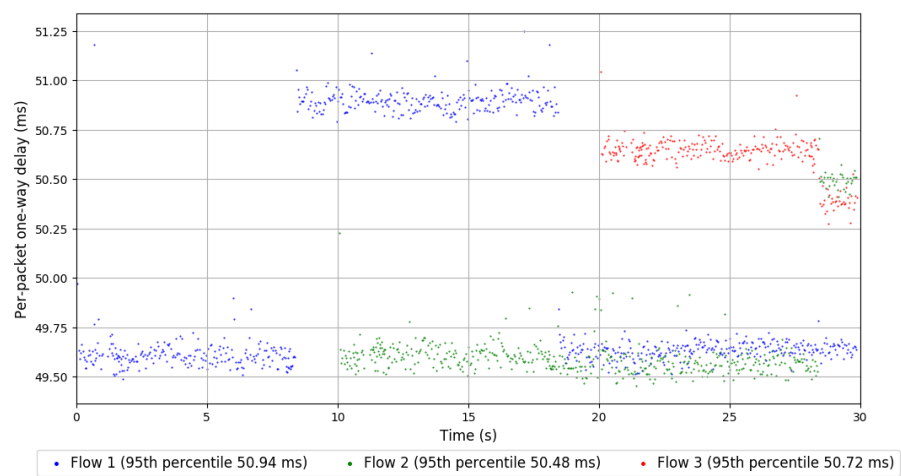
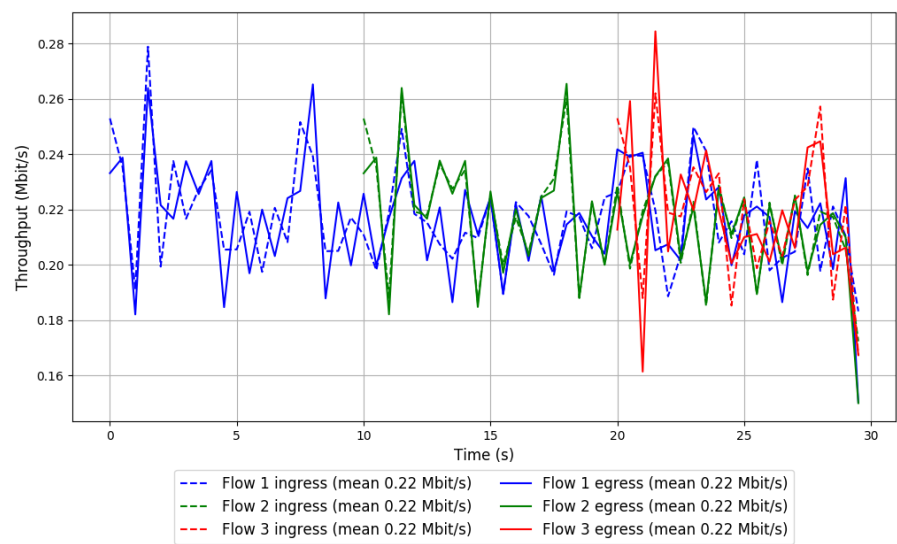


```
Run 3: Statistics of SCReAM

Start at: 2017-12-12 05:19:45
End at: 2017-12-12 05:20:15

# Below is generated by plot.py at 2017-12-12 09:43:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 50.916 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.941 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.480 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.717 ms
Loss rate: 0.73%
```


Run 3: Report of SReAM — Data Link

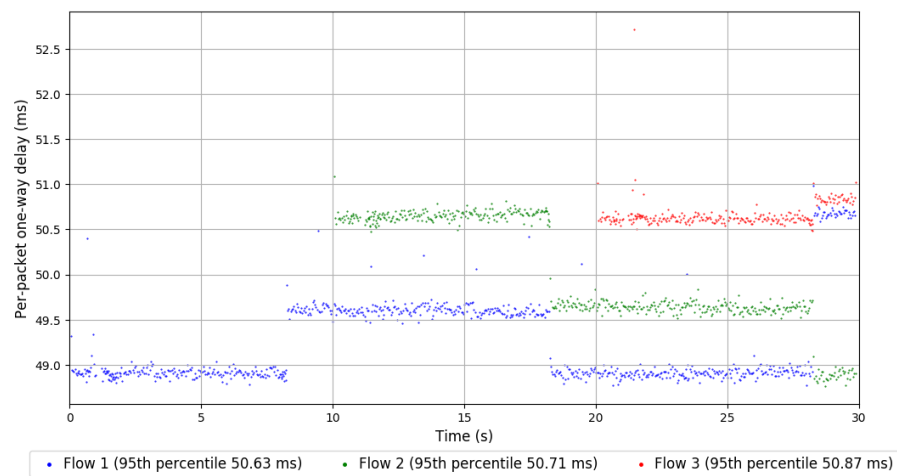
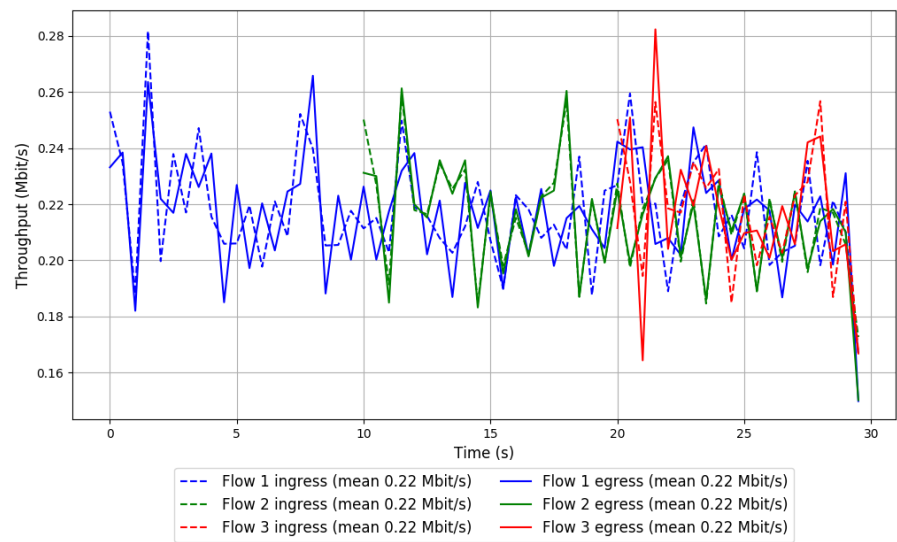


```
Run 4: Statistics of SCReAM

Start at: 2017-12-12 05:32:15
End at: 2017-12-12 05:32:45

# Below is generated by plot.py at 2017-12-12 09:43:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.714 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.628 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.710 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.868 ms
Loss rate: 0.73%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-12 05:44:47

End at: 2017-12-12 05:45:17

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.673 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.698 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.485 ms

Loss rate: 0.42%

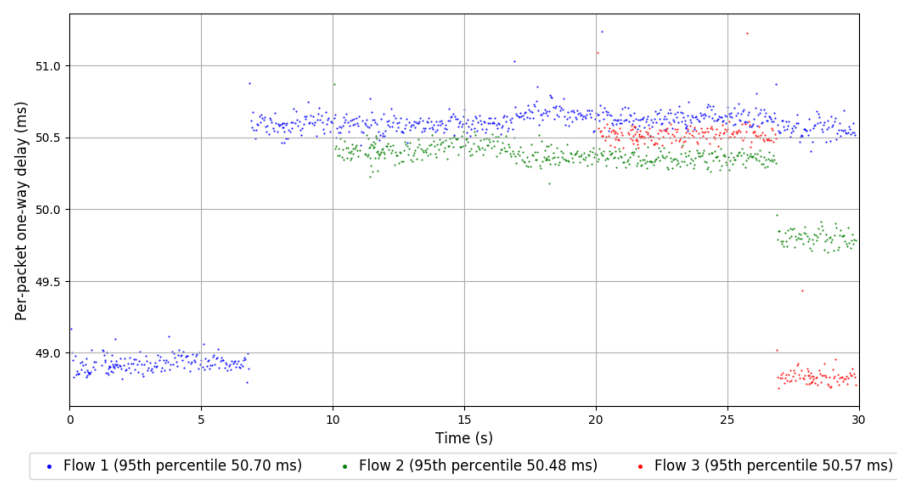
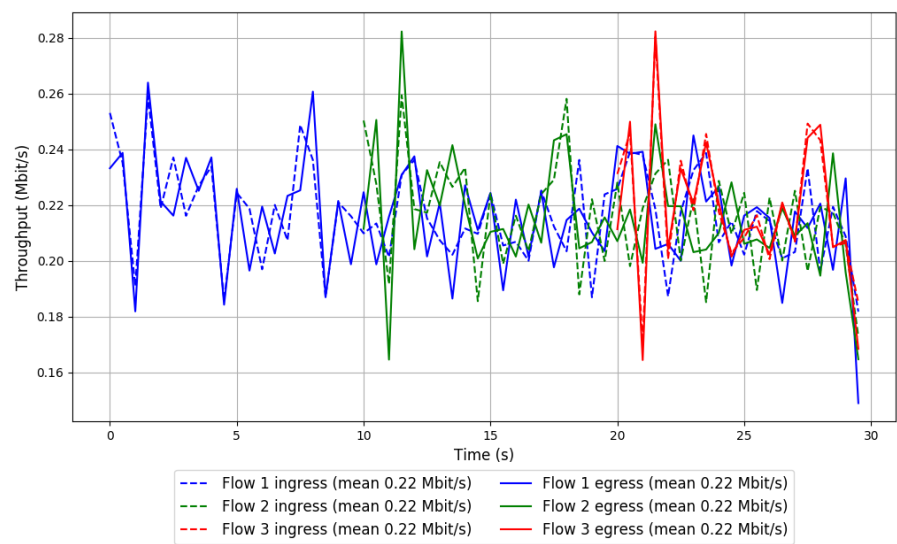
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.574 ms

Loss rate: 0.74%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2017-12-12 05:57:07

End at: 2017-12-12 05:57:37

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 50.905 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.931 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.554 ms

Loss rate: 0.42%

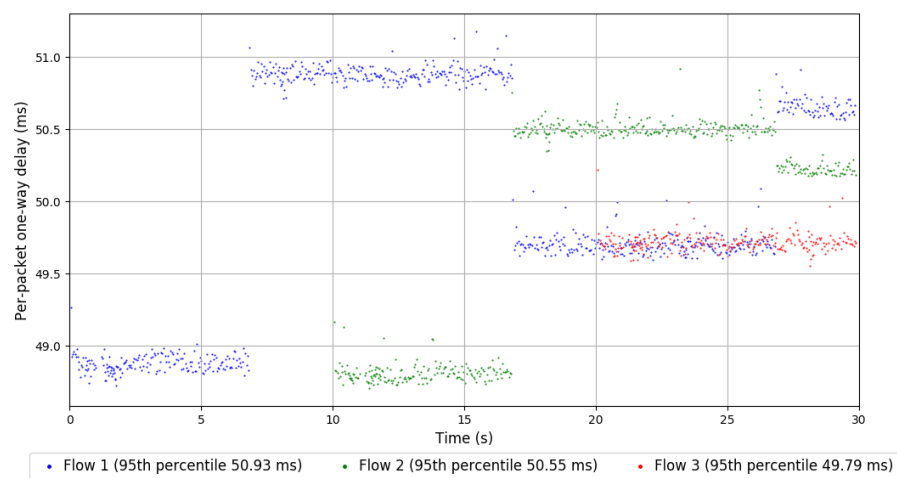
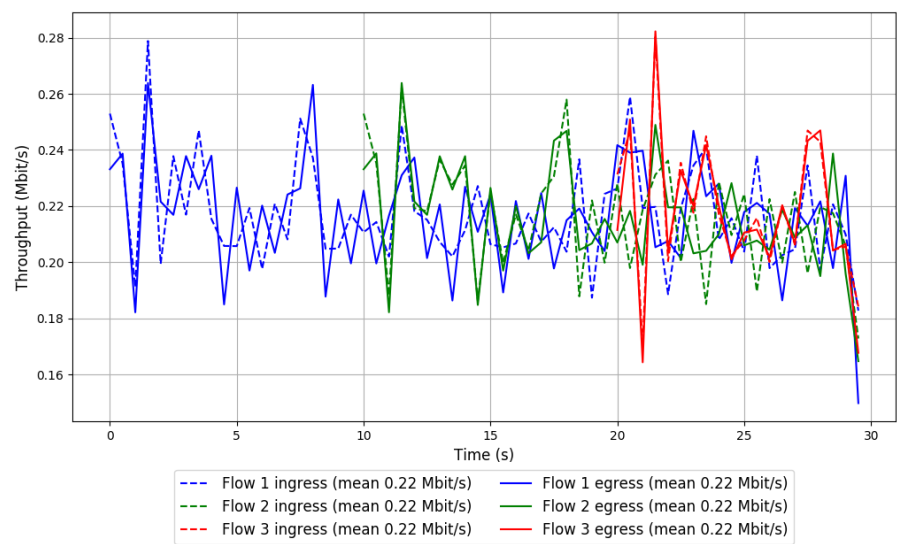
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.790 ms

Loss rate: 0.74%

Run 6: Report of SReAM — Data Link

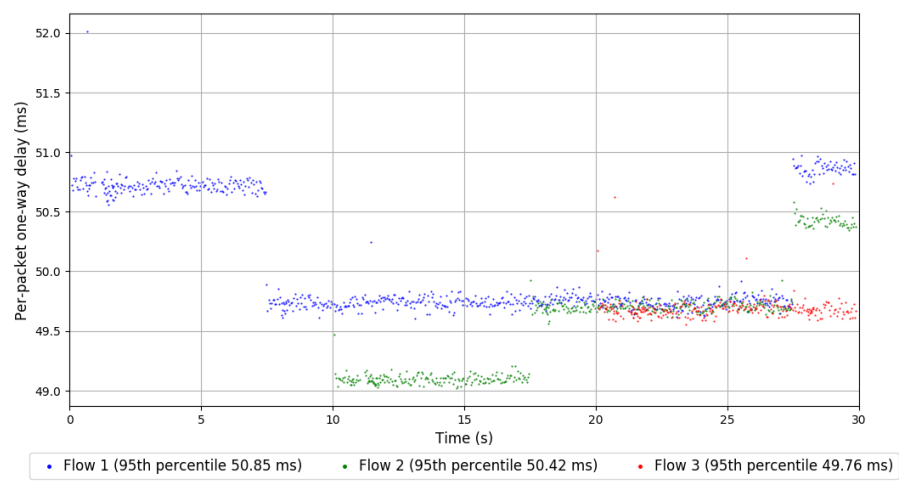
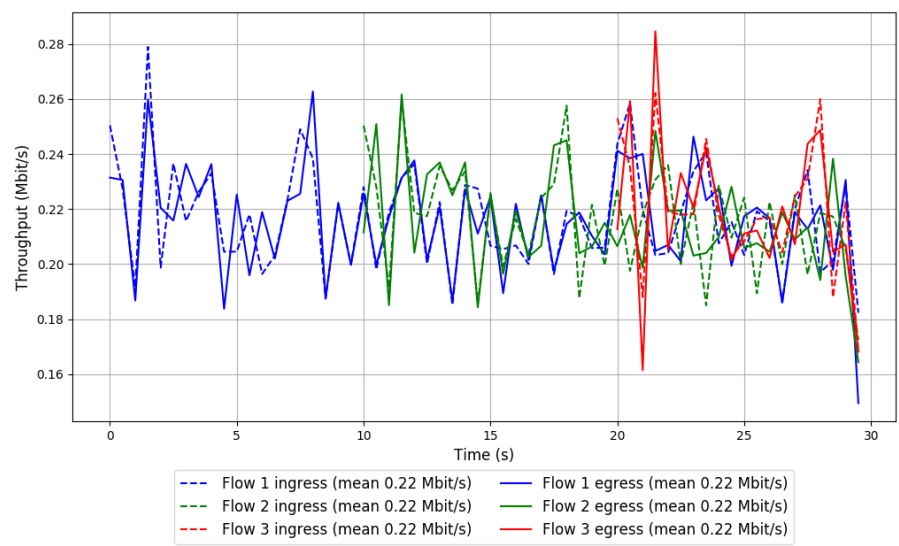


```
Run 7: Statistics of SReAM

Start at: 2017-12-12 06:09:36
End at: 2017-12-12 06:10:06

# Below is generated by plot.py at 2017-12-12 09:43:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.781 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.850 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.424 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.756 ms
Loss rate: 0.73%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-12 06:21:54

End at: 2017-12-12 06:22:24

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.835 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.844 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.866 ms

Loss rate: 0.42%

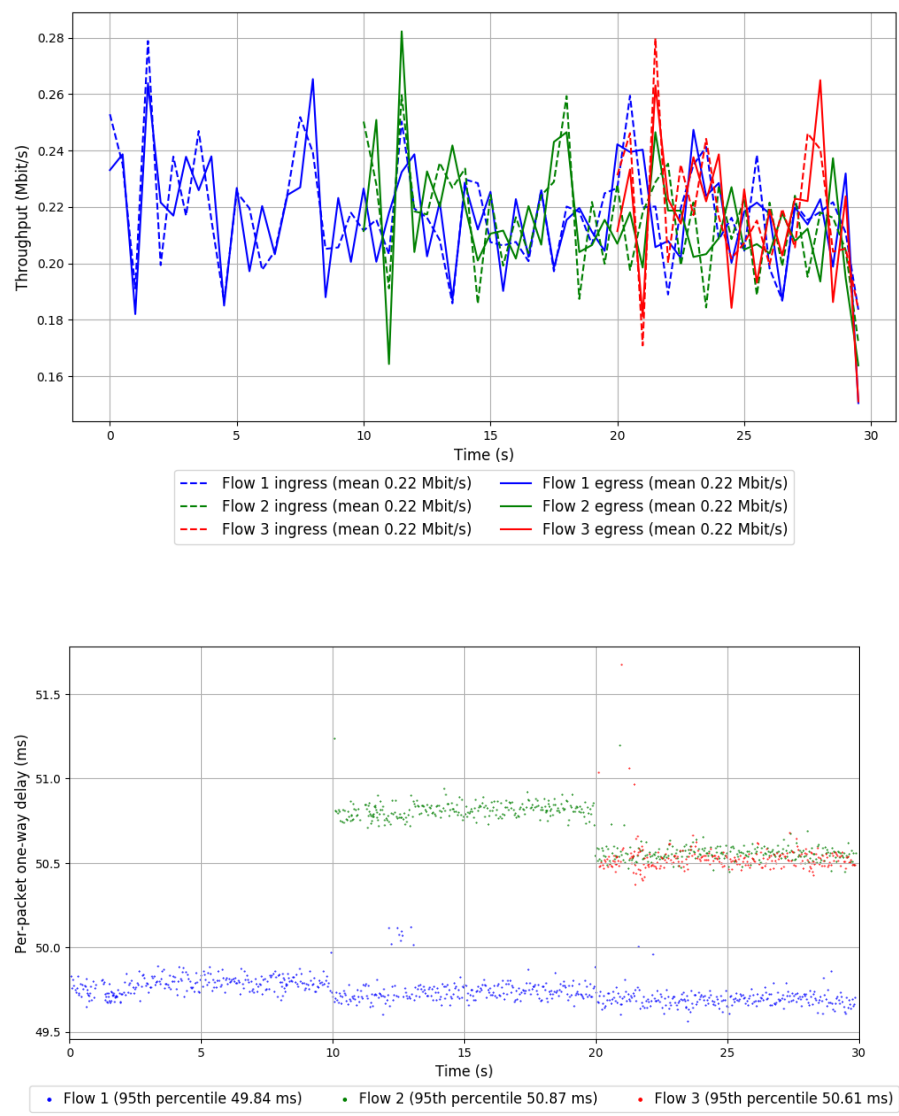
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.612 ms

Loss rate: 1.11%

Run 8: Report of SReAM — Data Link

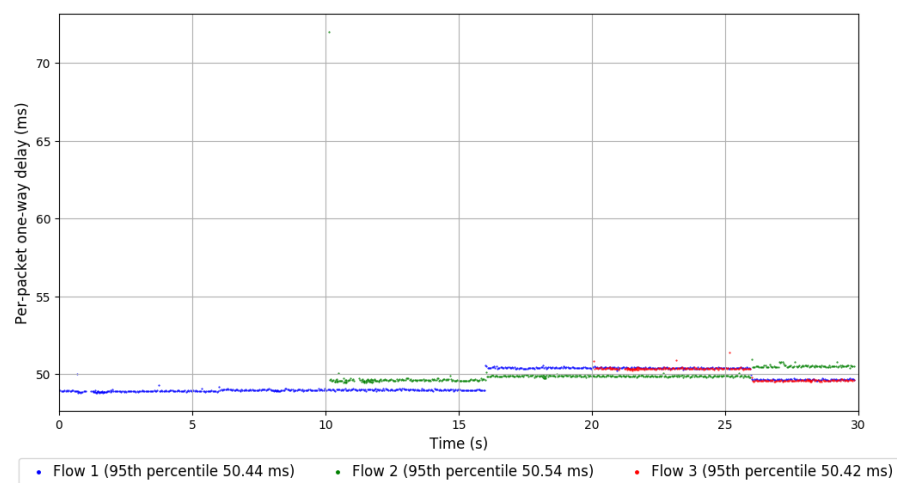
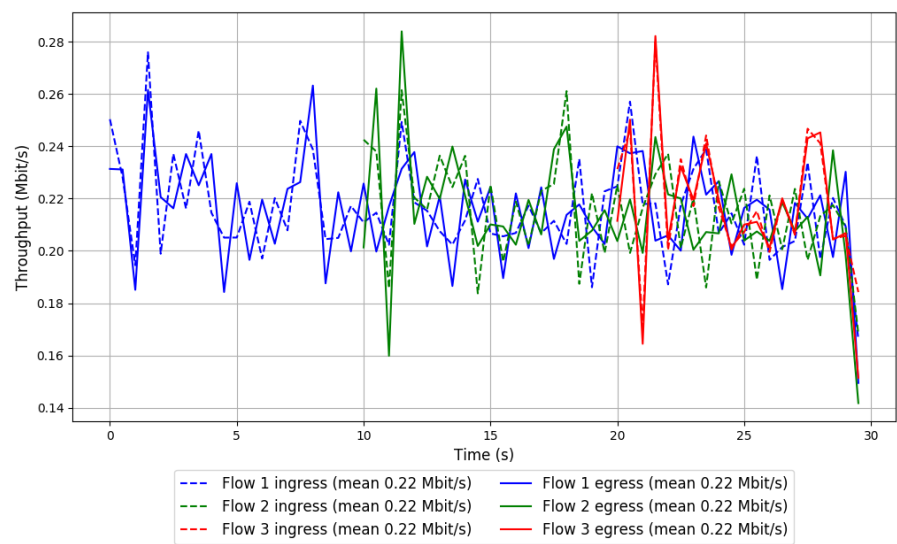


```
Run 9: Statistics of SReAM

Start at: 2017-12-12 06:34:18
End at: 2017-12-12 06:34:48

# Below is generated by plot.py at 2017-12-12 09:43:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.479 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.439 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.538 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.420 ms
Loss rate: 1.11%
```

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-12 06:46:48

End at: 2017-12-12 06:47:18

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.767 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.771 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.772 ms

Loss rate: 0.42%

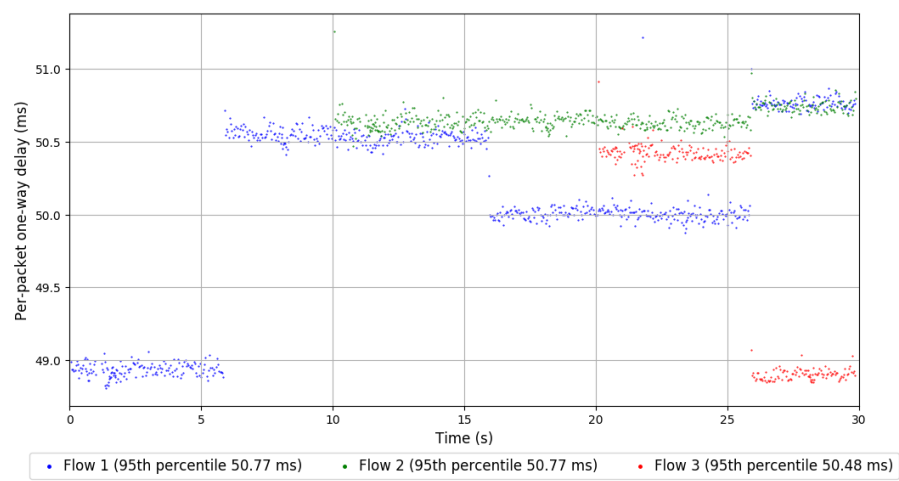
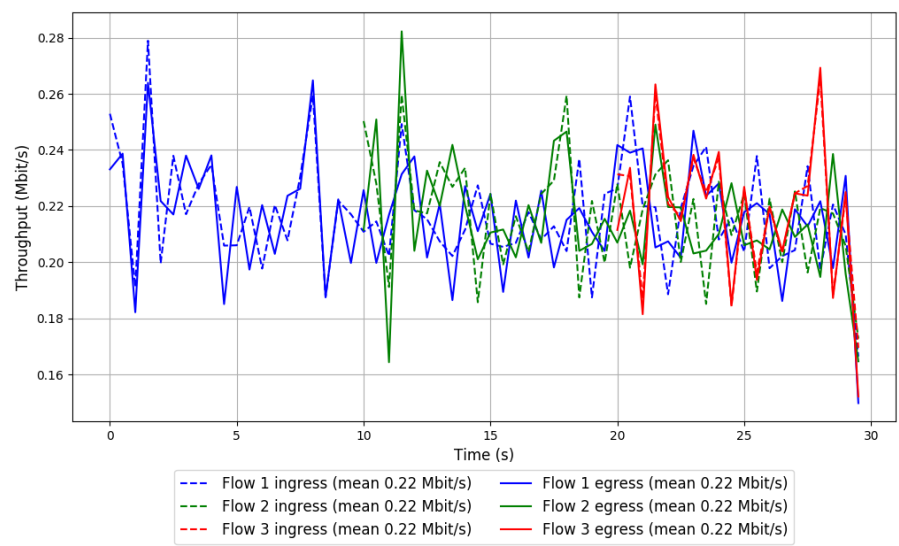
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.479 ms

Loss rate: 0.76%

Run 10: Report of SCReAM — Data Link

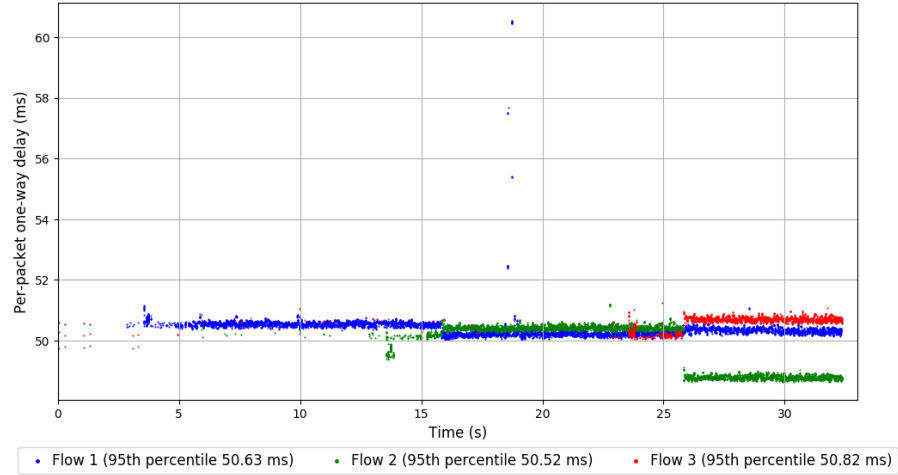
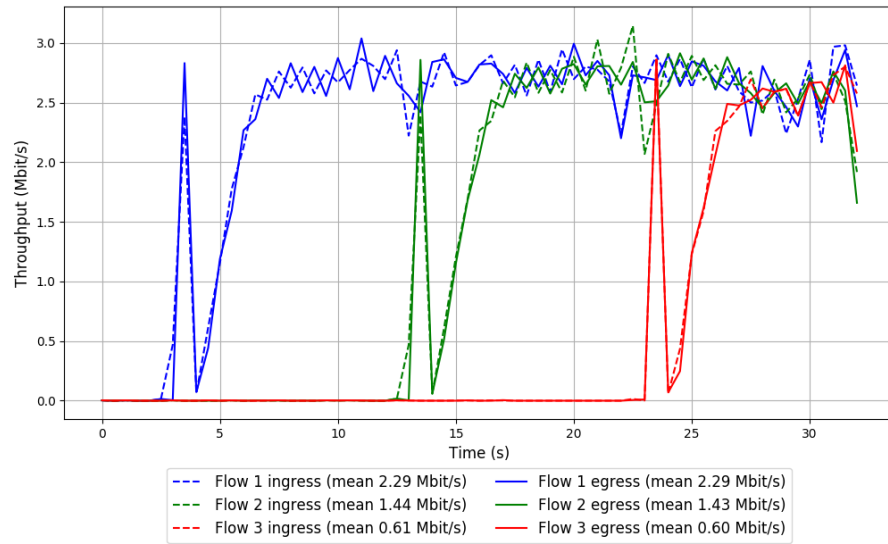


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-12 04:54:20
End at: 2017-12-12 04:54:50

# Below is generated by plot.py at 2017-12-12 09:43:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 50.729 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.634 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 50.523 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 50.822 ms
Loss rate: 1.79%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-12 05:06:56

End at: 2017-12-12 05:07:26

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 50.975 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 50.715 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 50.883 ms

Loss rate: 0.51%

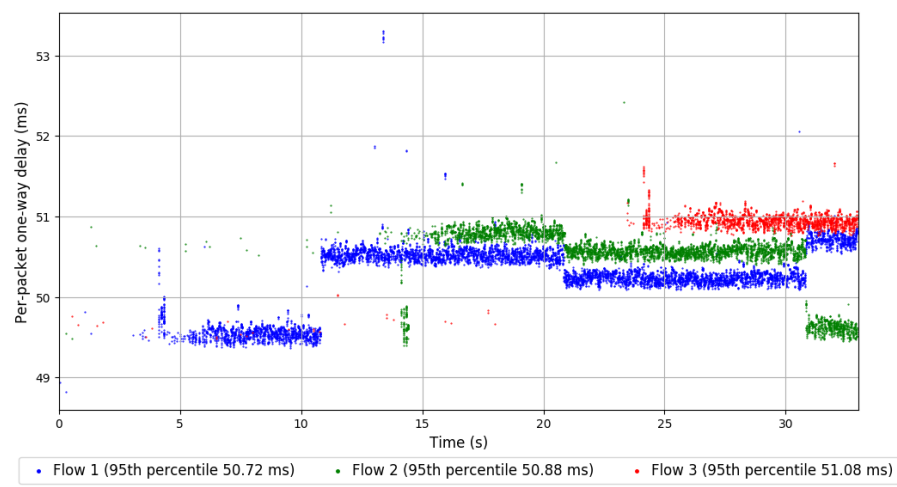
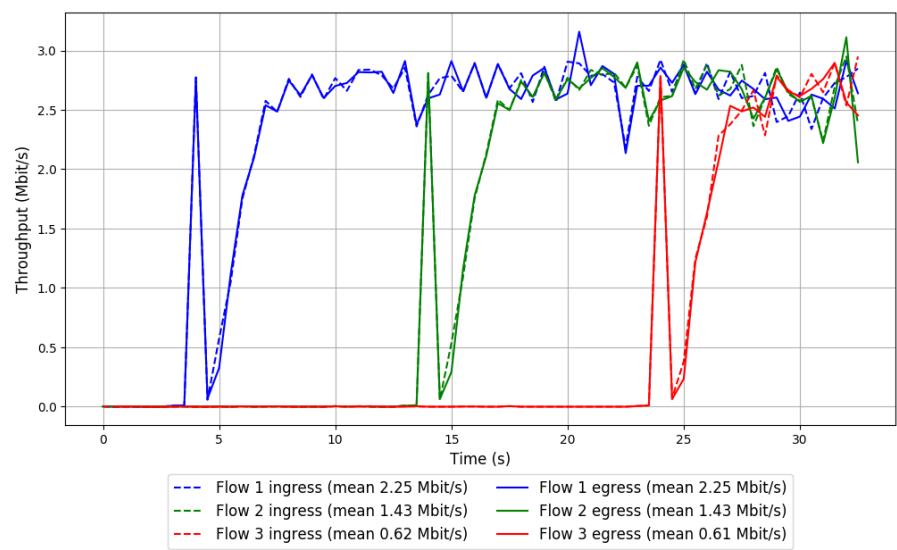
-- Flow 3:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 51.081 ms

Loss rate: 1.75%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-12 05:19:06

End at: 2017-12-12 05:19:36

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 50.961 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 50.992 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 50.704 ms

Loss rate: 0.65%

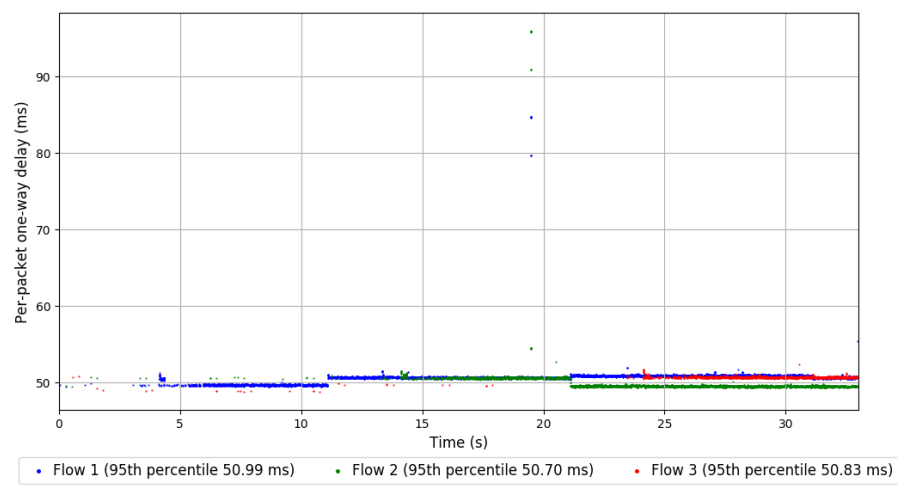
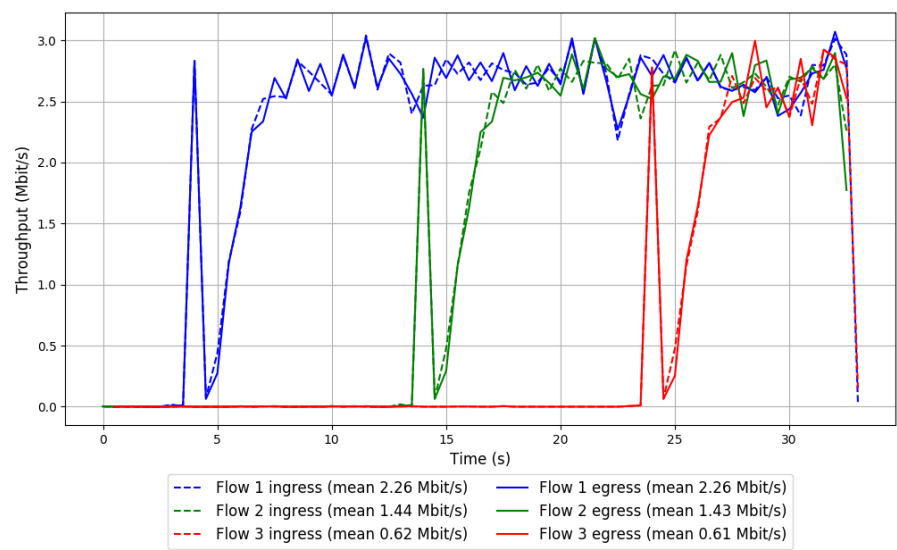
-- Flow 3:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 50.828 ms

Loss rate: 1.60%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-12 05:31:36

End at: 2017-12-12 05:32:06

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 51.064 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 51.094 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 49.716 ms

Loss rate: 0.70%

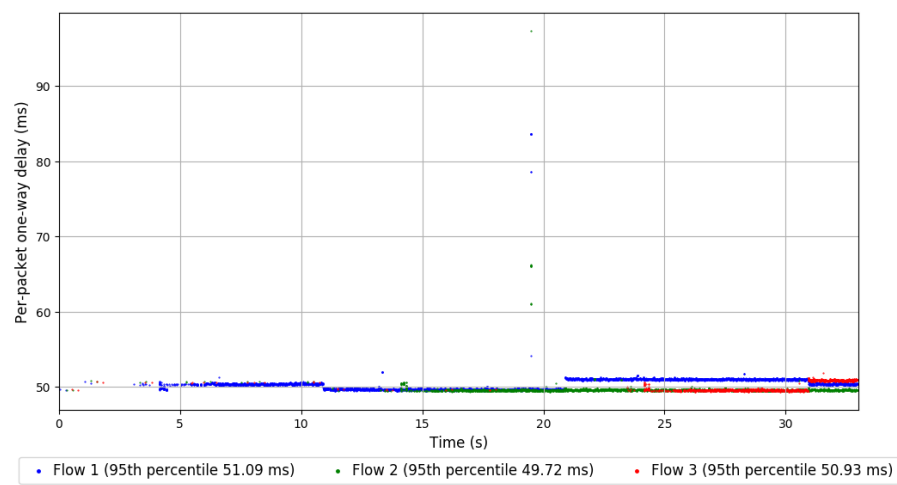
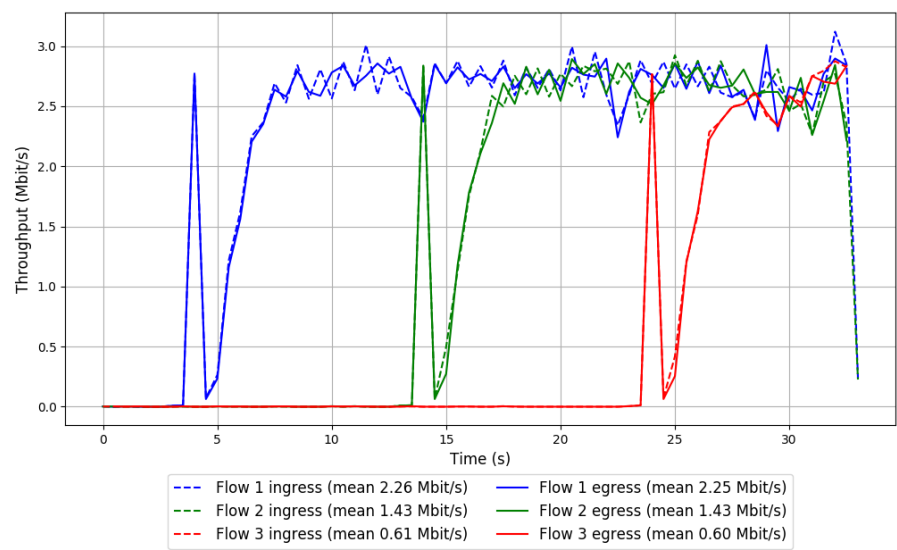
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 50.933 ms

Loss rate: 1.29%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-12 05:44:07

End at: 2017-12-12 05:44:37

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 50.890 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 50.798 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 50.817 ms

Loss rate: 0.51%

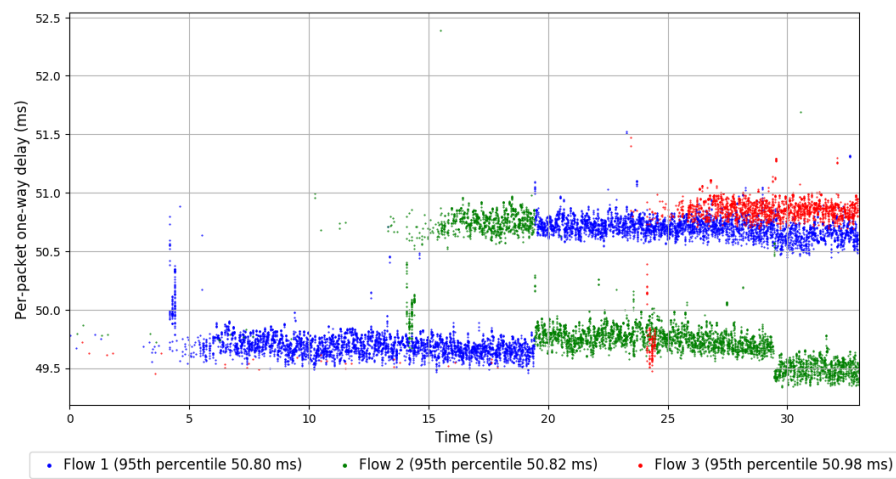
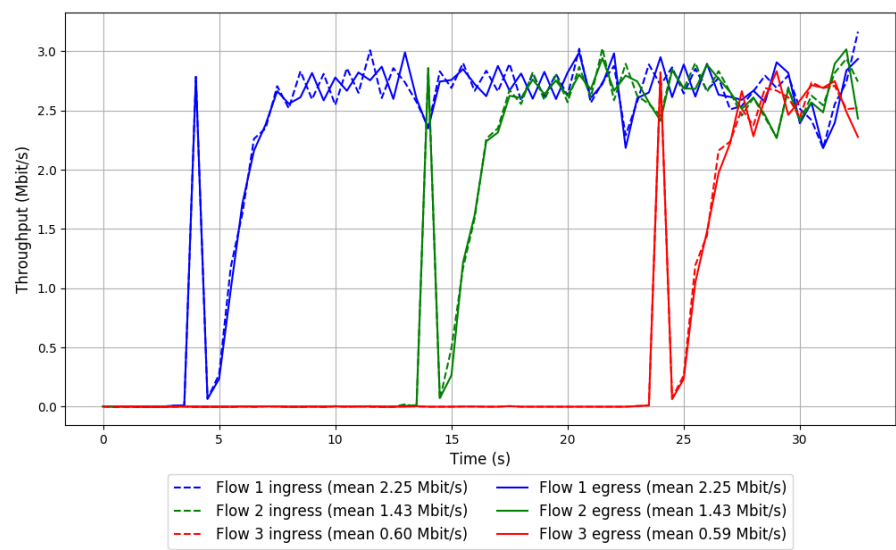
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 50.977 ms

Loss rate: 1.19%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-12 05:56:27

End at: 2017-12-12 05:56:57

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 50.824 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.736 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 50.878 ms

Loss rate: 0.48%

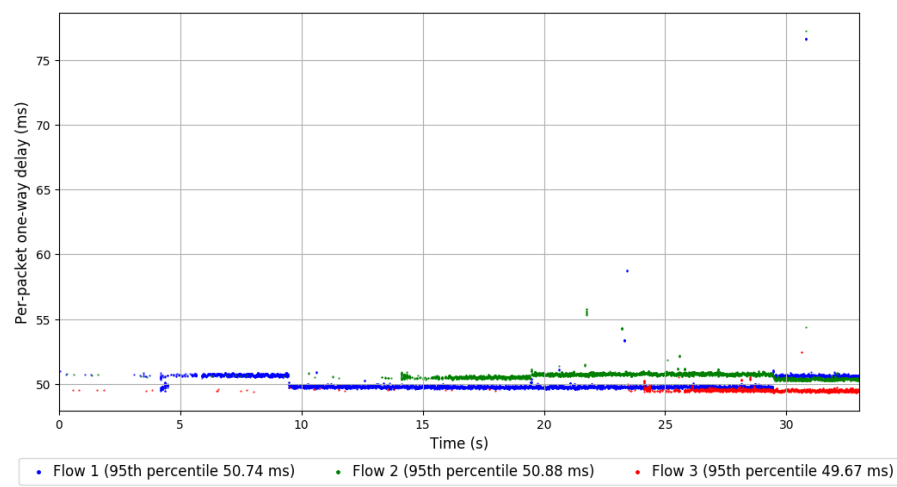
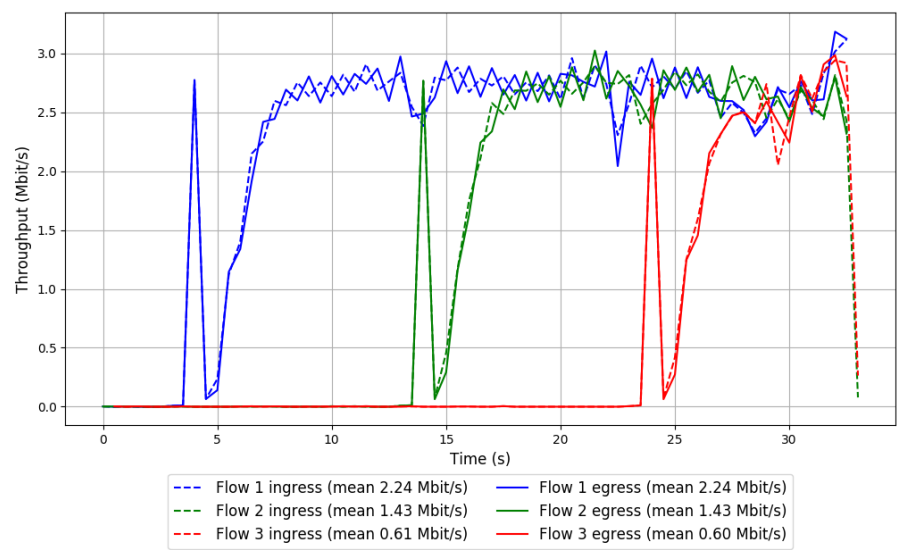
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 49.673 ms

Loss rate: 1.95%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-12 06:08:57

End at: 2017-12-12 06:09:27

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 51.013 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 51.042 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 50.737 ms

Loss rate: 0.51%

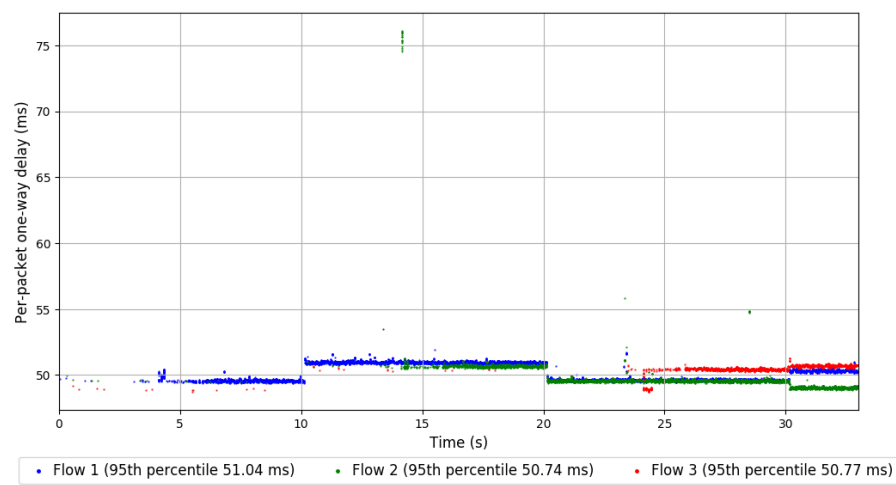
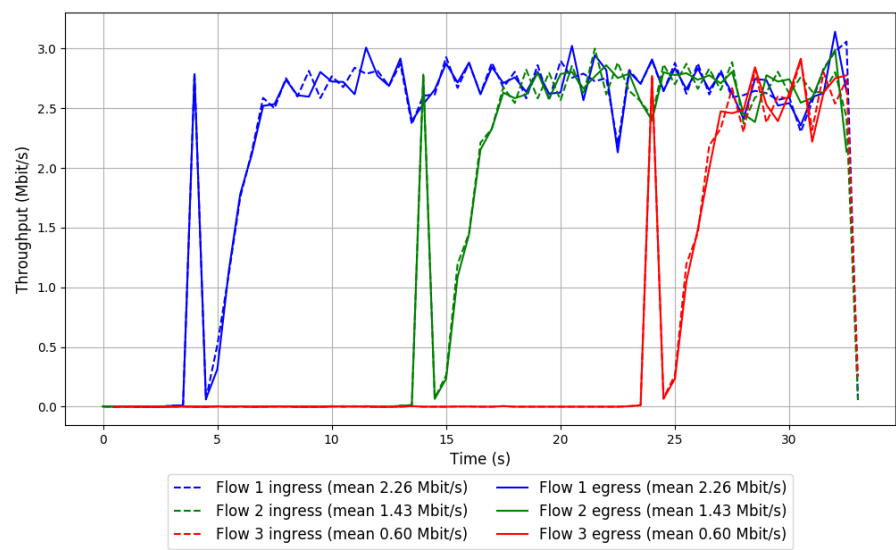
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 50.768 ms

Loss rate: 1.21%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-12 06:21:14

End at: 2017-12-12 06:21:44

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 50.421 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 50.450 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 49.744 ms

Loss rate: 0.46%

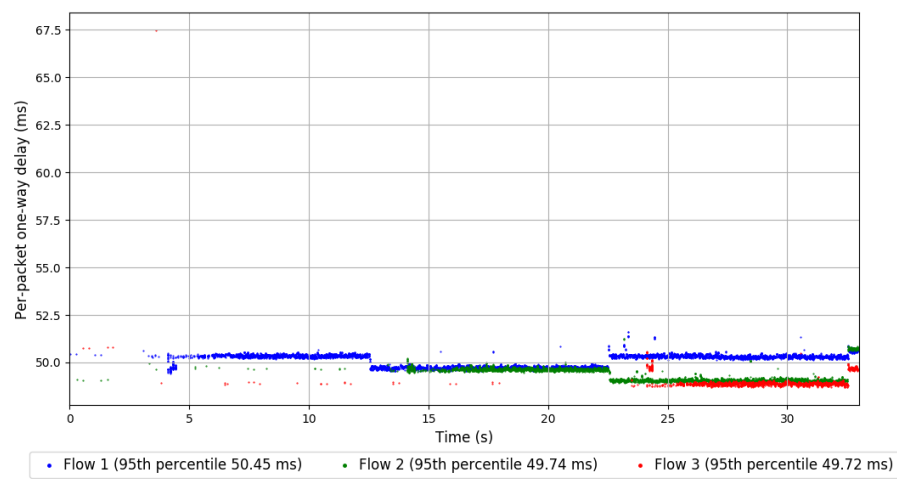
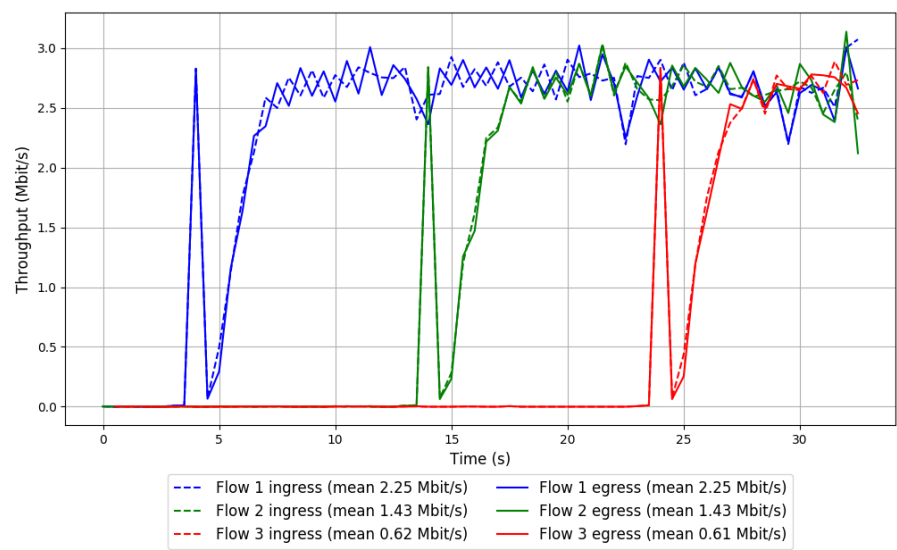
-- Flow 3:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 49.719 ms

Loss rate: 1.21%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-12 06:33:38

End at: 2017-12-12 06:34:08

Below is generated by plot.py at 2017-12-12 09:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 50.638 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 49.991 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 50.531 ms

Loss rate: 0.74%

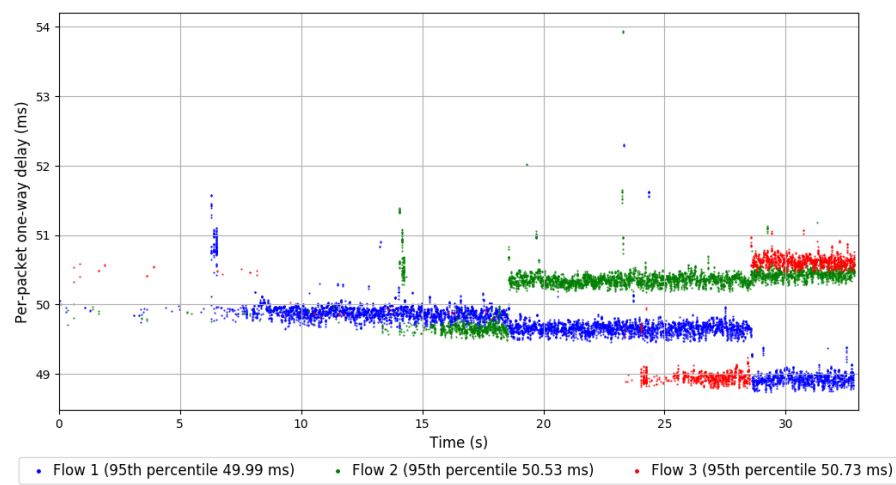
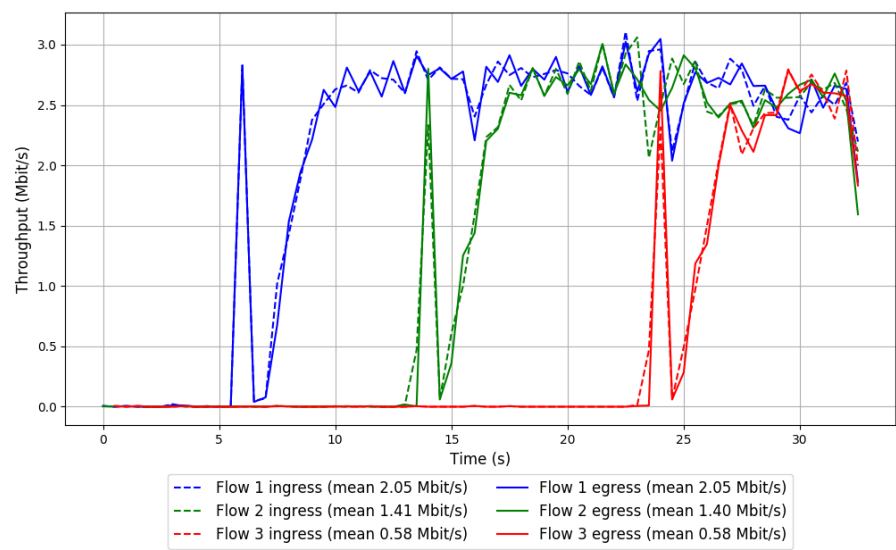
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 50.735 ms

Loss rate: 1.25%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-12 06:46:08

End at: 2017-12-12 06:46:38

Below is generated by plot.py at 2017-12-12 09:43:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 50.705 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 50.738 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 50.667 ms

Loss rate: 0.62%

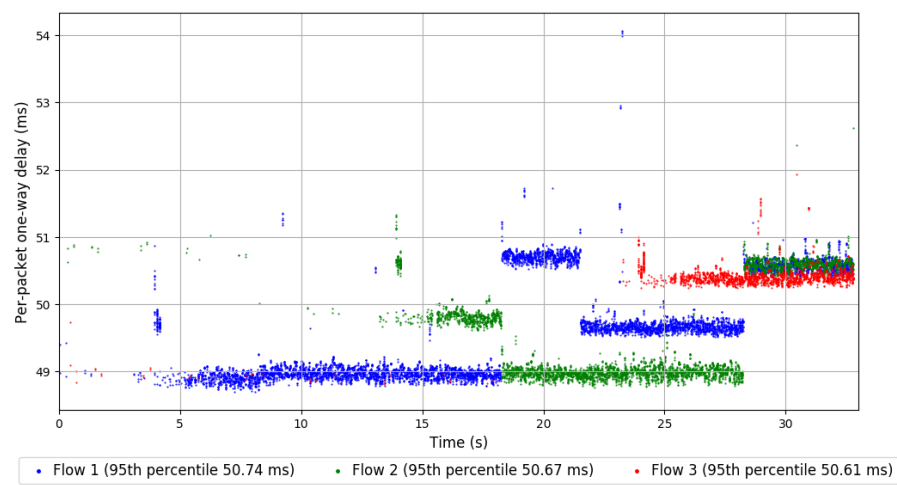
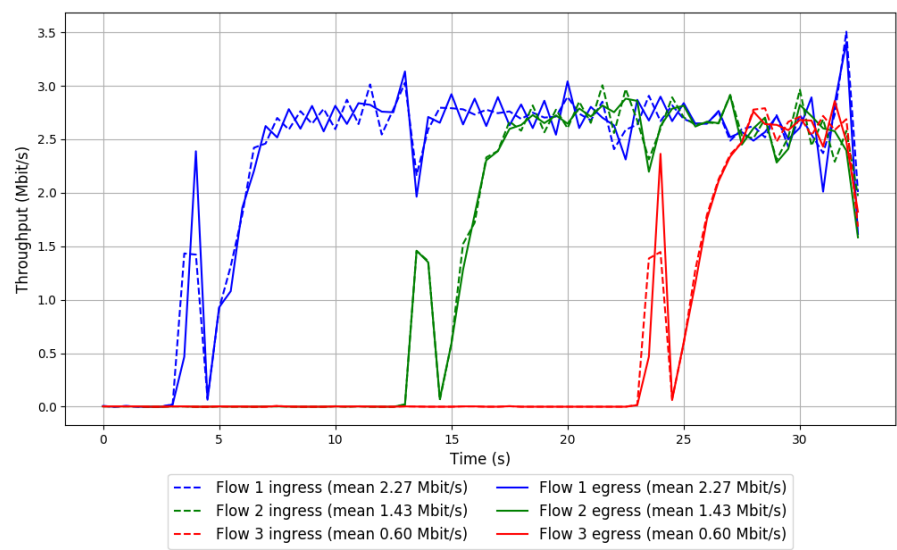
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 50.606 ms

Loss rate: 0.68%

Run 10: Report of WebRTC media — Data Link

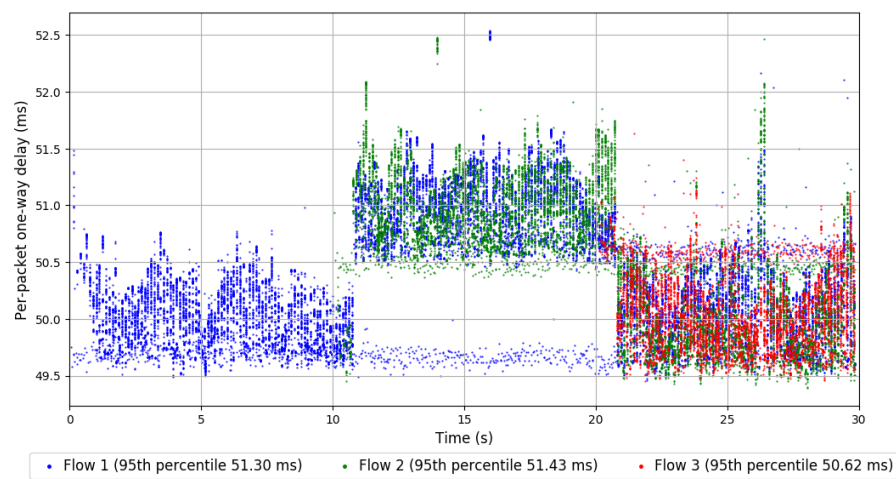
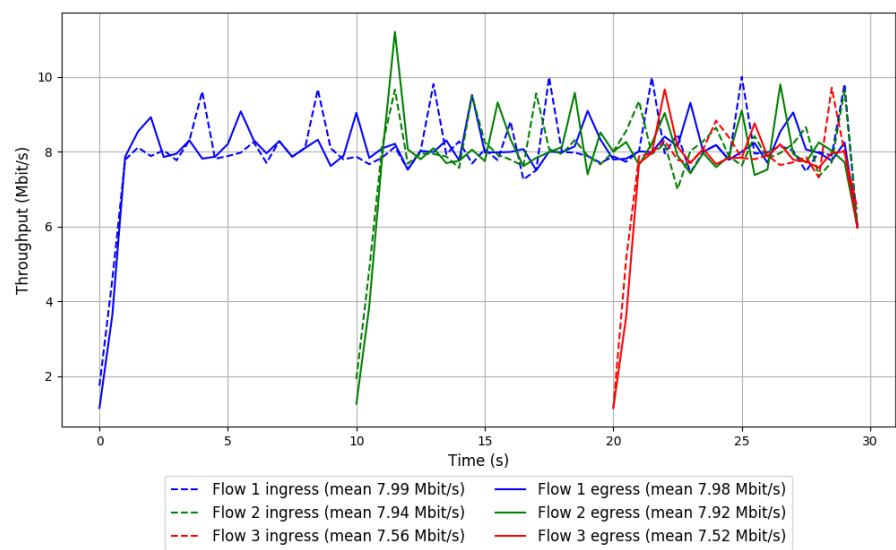


```
Run 1: Statistics of Sprout

Start at: 2017-12-12 04:58:53
End at: 2017-12-12 04:59:23

# Below is generated by plot.py at 2017-12-12 09:43:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.70 Mbit/s
95th percentile per-packet one-way delay: 51.325 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 7.98 Mbit/s
95th percentile per-packet one-way delay: 51.295 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 7.92 Mbit/s
95th percentile per-packet one-way delay: 51.434 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 50.624 ms
Loss rate: 1.49%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-12 05:11:19

End at: 2017-12-12 05:11:49

Below is generated by plot.py at 2017-12-12 09:43:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.51 Mbit/s

95th percentile per-packet one-way delay: 51.423 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.349 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 7.71 Mbit/s

95th percentile per-packet one-way delay: 51.407 ms

Loss rate: 1.29%

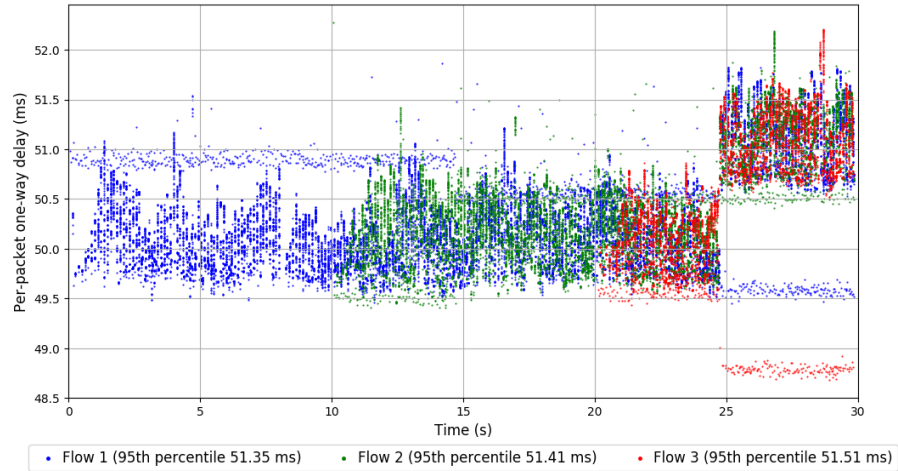
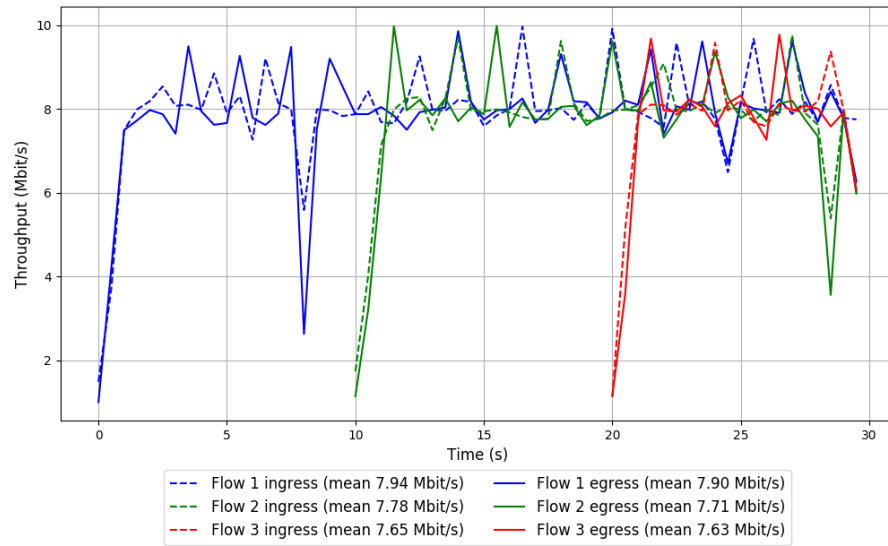
-- Flow 3:

Average throughput: 7.63 Mbit/s

95th percentile per-packet one-way delay: 51.513 ms

Loss rate: 1.46%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-12 05:23:31

End at: 2017-12-12 05:24:01

Below is generated by plot.py at 2017-12-12 09:43:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.64 Mbit/s

95th percentile per-packet one-way delay: 51.375 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 51.393 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 51.384 ms

Loss rate: 0.00%

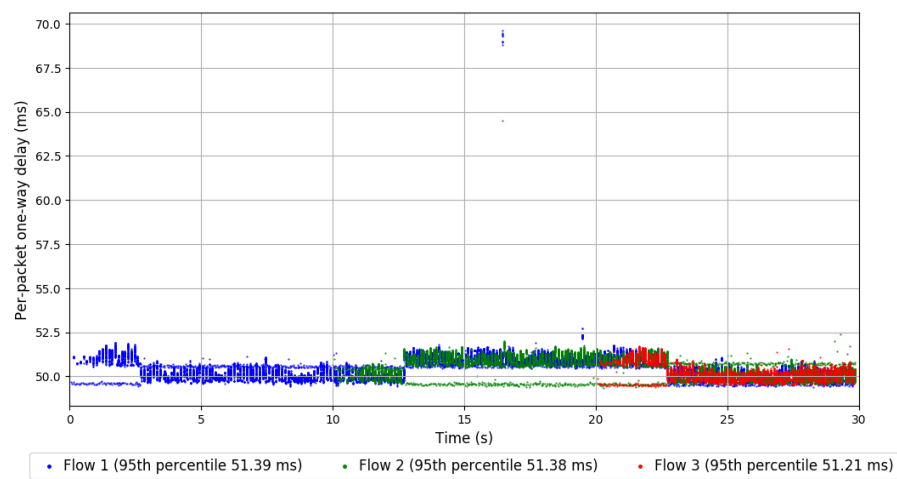
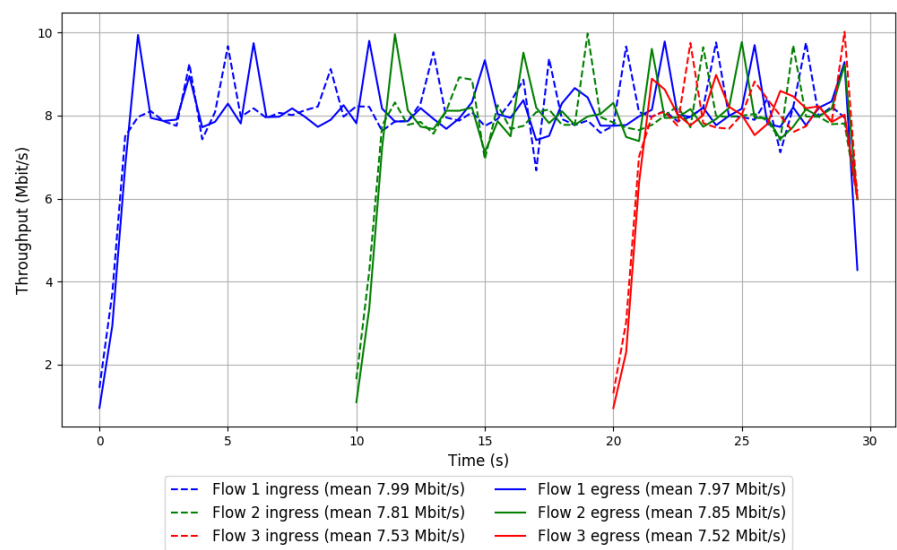
-- Flow 3:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 51.214 ms

Loss rate: 1.34%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-12 05:36:08

End at: 2017-12-12 05:36:38

Below is generated by plot.py at 2017-12-12 09:43:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.60 Mbit/s

95th percentile per-packet one-way delay: 51.684 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 51.644 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 51.628 ms

Loss rate: 0.40%

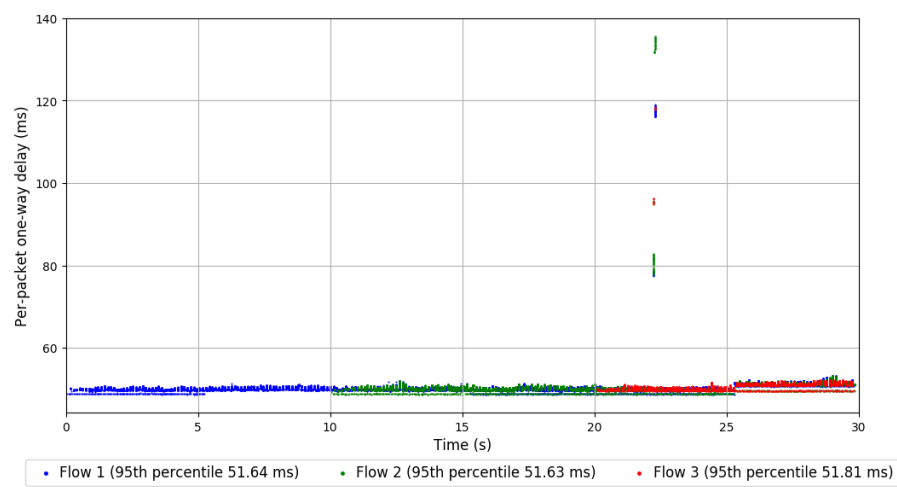
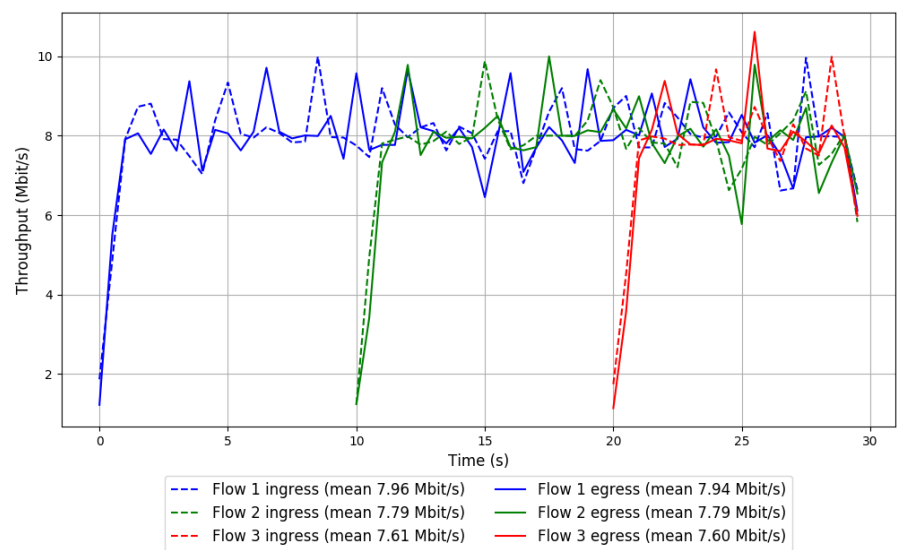
-- Flow 3:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 51.808 ms

Loss rate: 1.39%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-12 05:48:41

End at: 2017-12-12 05:49:11

Below is generated by plot.py at 2017-12-12 09:43:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.37 Mbit/s

95th percentile per-packet one-way delay: 51.253 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 51.187 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 51.349 ms

Loss rate: 0.64%

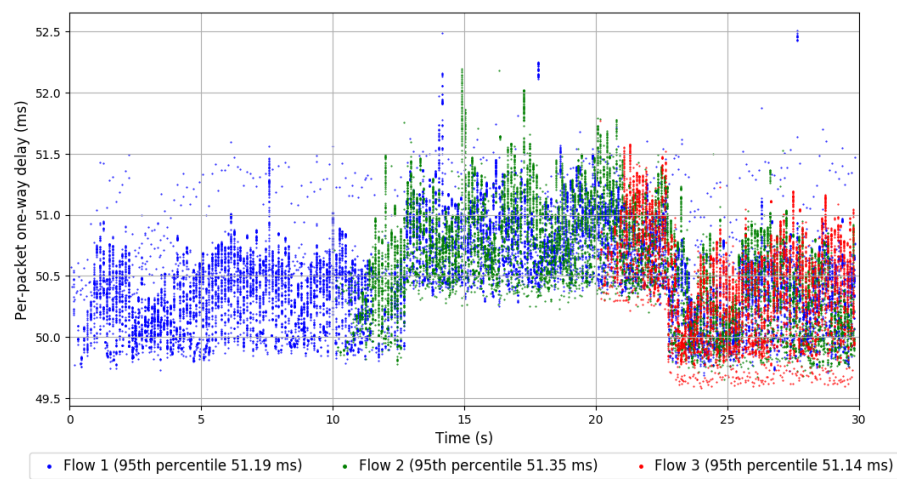
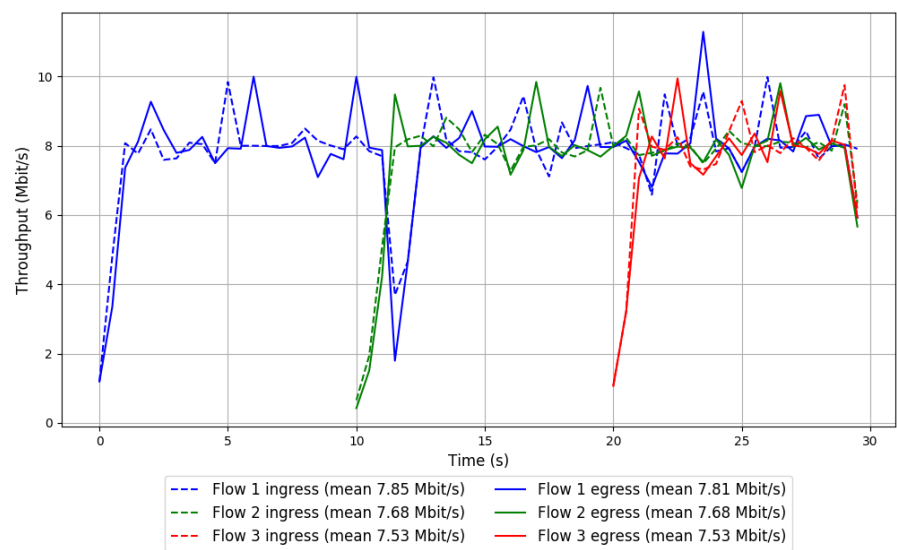
-- Flow 3:

Average throughput: 7.53 Mbit/s

95th percentile per-packet one-way delay: 51.138 ms

Loss rate: 1.29%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-12 06:01:00

End at: 2017-12-12 06:01:30

Below is generated by plot.py at 2017-12-12 09:43:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.62 Mbit/s

95th percentile per-packet one-way delay: 51.400 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 51.381 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 51.491 ms

Loss rate: 0.60%

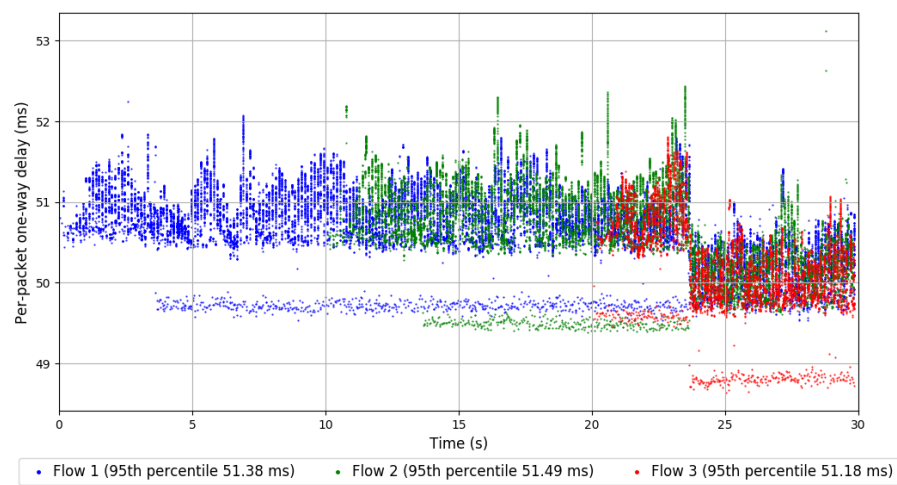
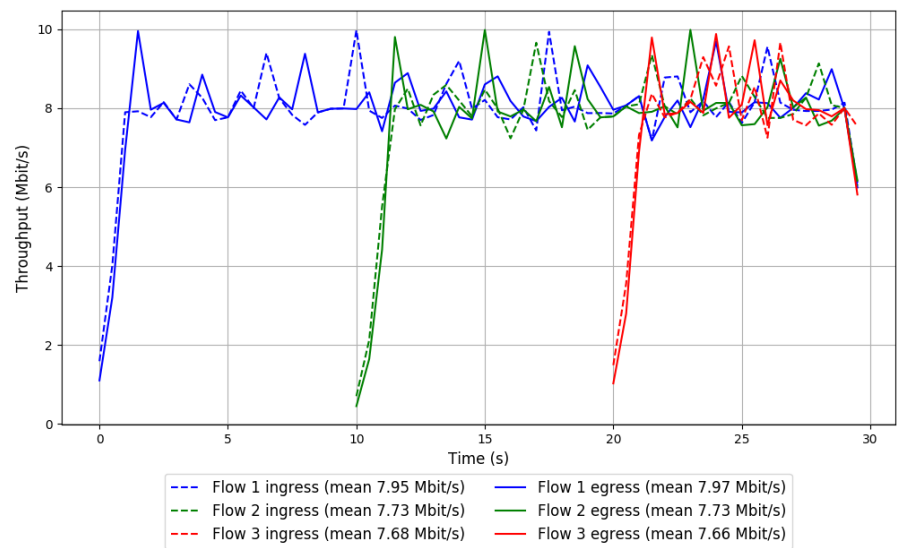
-- Flow 3:

Average throughput: 7.66 Mbit/s

95th percentile per-packet one-way delay: 51.183 ms

Loss rate: 1.14%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-12 06:13:30

End at: 2017-12-12 06:14:00

Below is generated by plot.py at 2017-12-12 09:43:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.76 Mbit/s

95th percentile per-packet one-way delay: 51.539 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 8.02 Mbit/s

95th percentile per-packet one-way delay: 51.619 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 51.465 ms

Loss rate: 0.63%

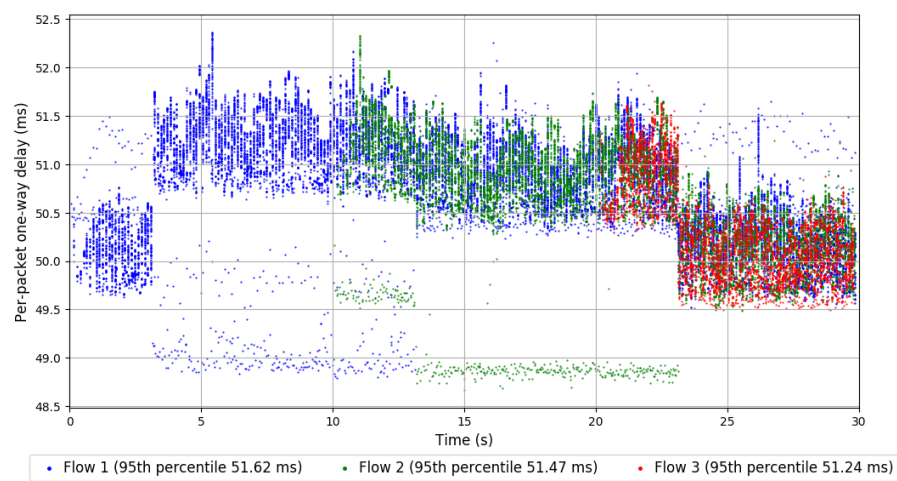
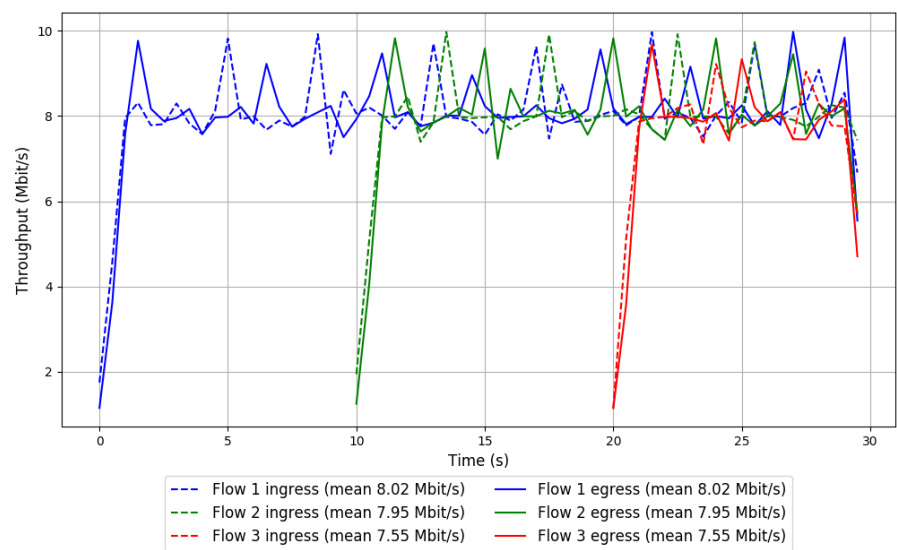
-- Flow 3:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 51.242 ms

Loss rate: 1.32%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-12 06:25:46

End at: 2017-12-12 06:26:16

Below is generated by plot.py at 2017-12-12 09:43:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.52 Mbit/s

95th percentile per-packet one-way delay: 51.028 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 50.986 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 51.024 ms

Loss rate: 0.66%

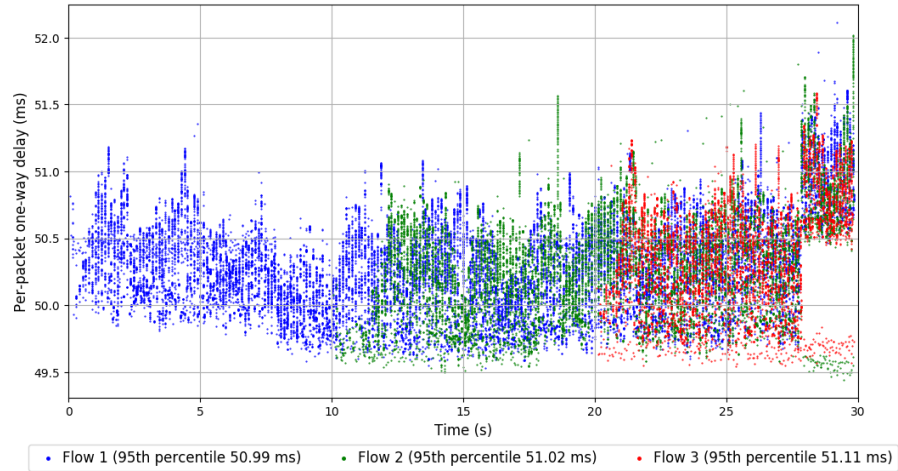
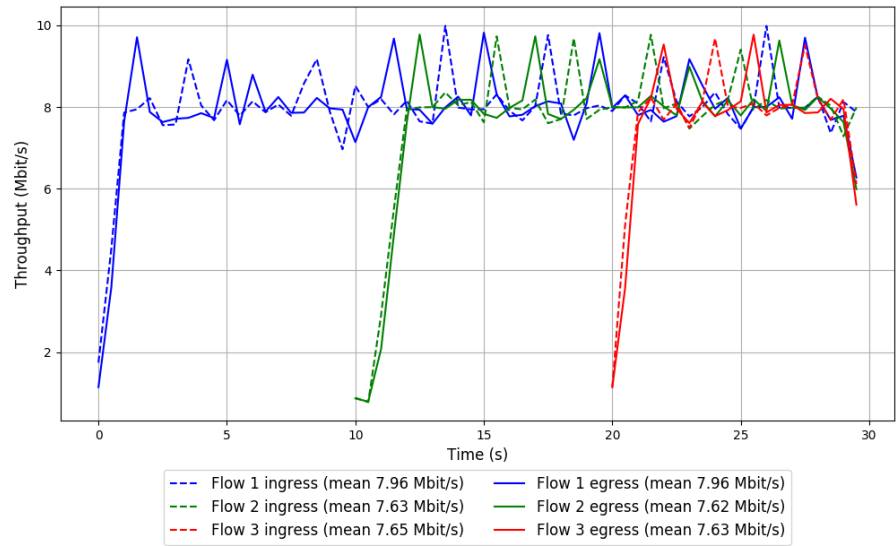
-- Flow 3:

Average throughput: 7.63 Mbit/s

95th percentile per-packet one-way delay: 51.106 ms

Loss rate: 1.48%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-12 06:38:13

End at: 2017-12-12 06:38:43

Below is generated by plot.py at 2017-12-12 09:43:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.08 Mbit/s

95th percentile per-packet one-way delay: 51.149 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 51.305 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 50.780 ms

Loss rate: 0.63%

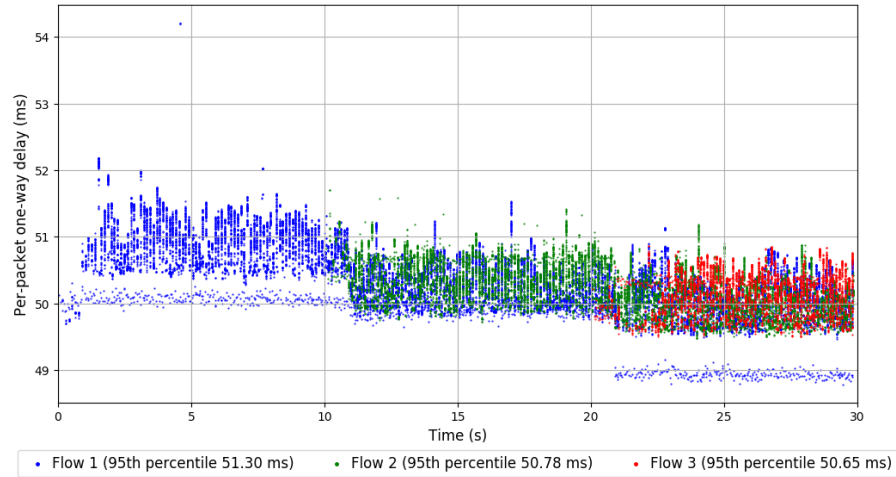
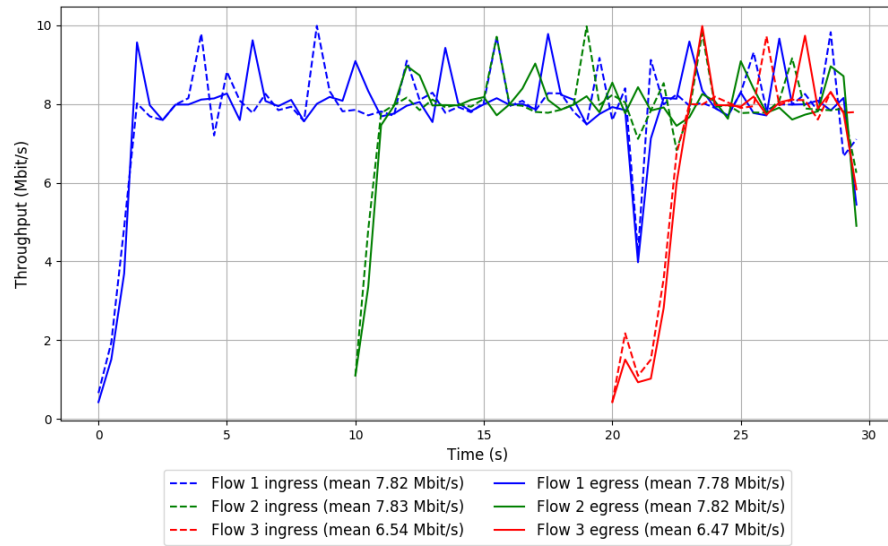
-- Flow 3:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 50.648 ms

Loss rate: 2.17%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-12 06:50:39

End at: 2017-12-12 06:51:09

Below is generated by plot.py at 2017-12-12 09:43:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.40 Mbit/s

95th percentile per-packet one-way delay: 51.504 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 51.469 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 51.485 ms

Loss rate: 0.76%

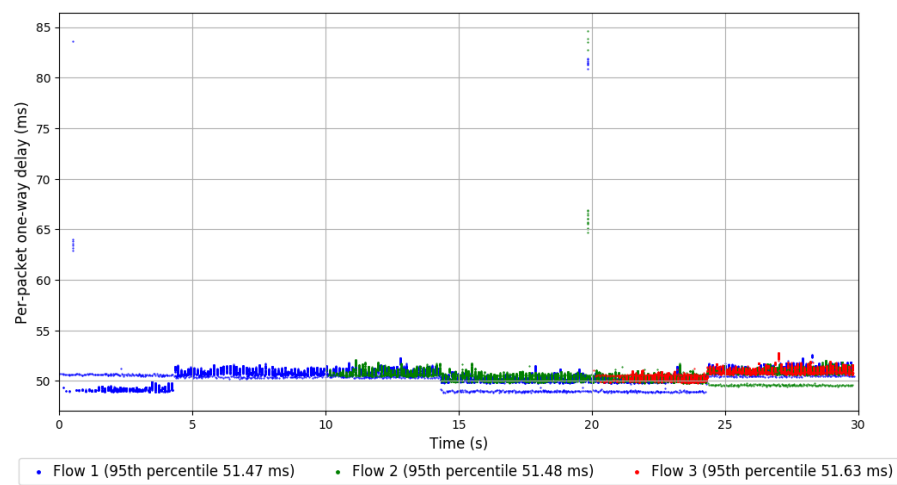
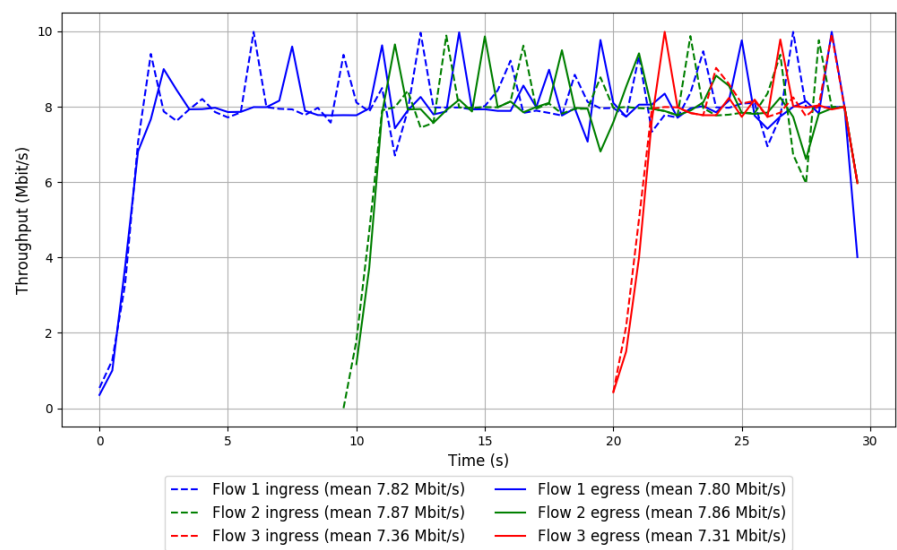
-- Flow 3:

Average throughput: 7.31 Mbit/s

95th percentile per-packet one-way delay: 51.630 ms

Loss rate: 1.38%

Run 10: Report of Sprout — Data Link

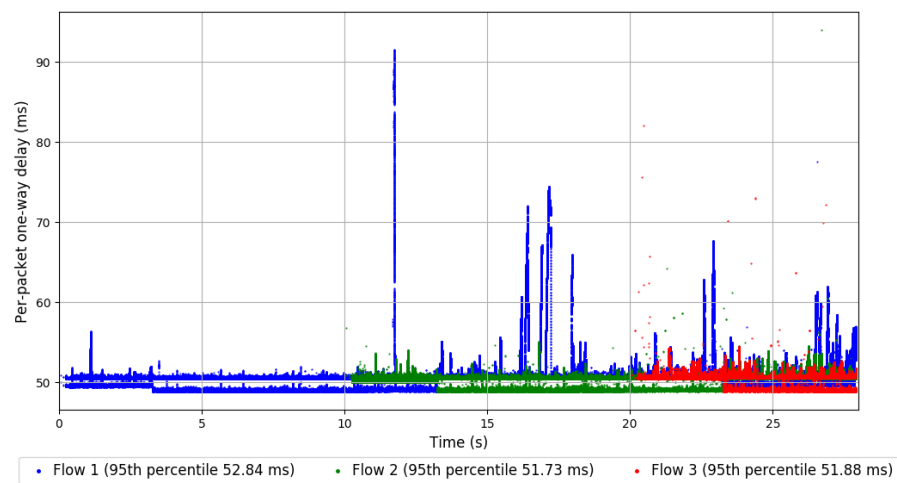
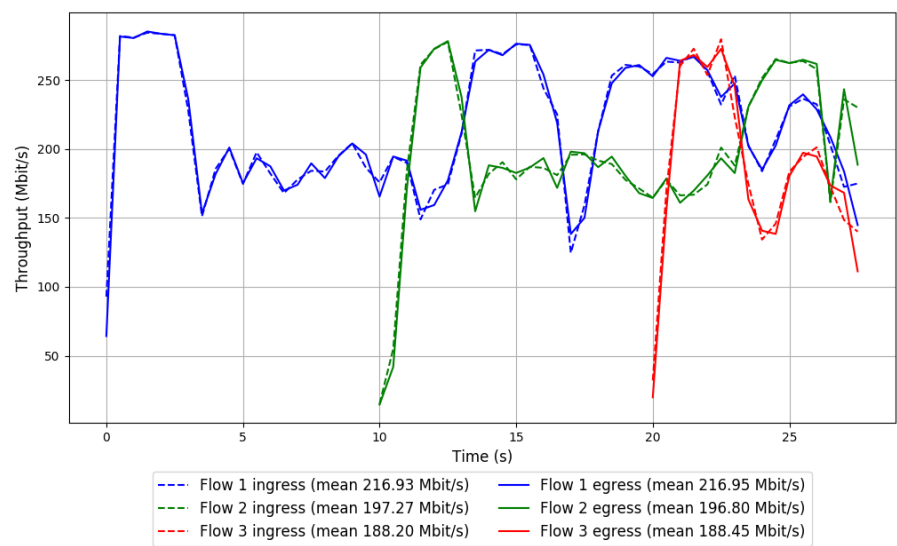


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-12 04:57:38
End at: 2017-12-12 04:58:08

# Below is generated by plot.py at 2017-12-12 09:47:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 396.06 Mbit/s
95th percentile per-packet one-way delay: 52.075 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 216.95 Mbit/s
95th percentile per-packet one-way delay: 52.837 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 196.80 Mbit/s
95th percentile per-packet one-way delay: 51.728 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 188.45 Mbit/s
95th percentile per-packet one-way delay: 51.876 ms
Loss rate: 1.12%
```


Run 1: Report of TaoVA-100x — Data Link

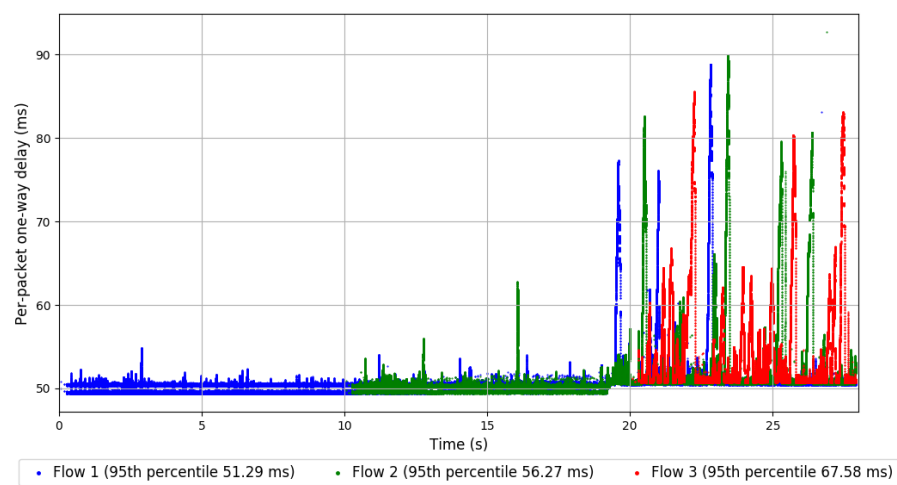
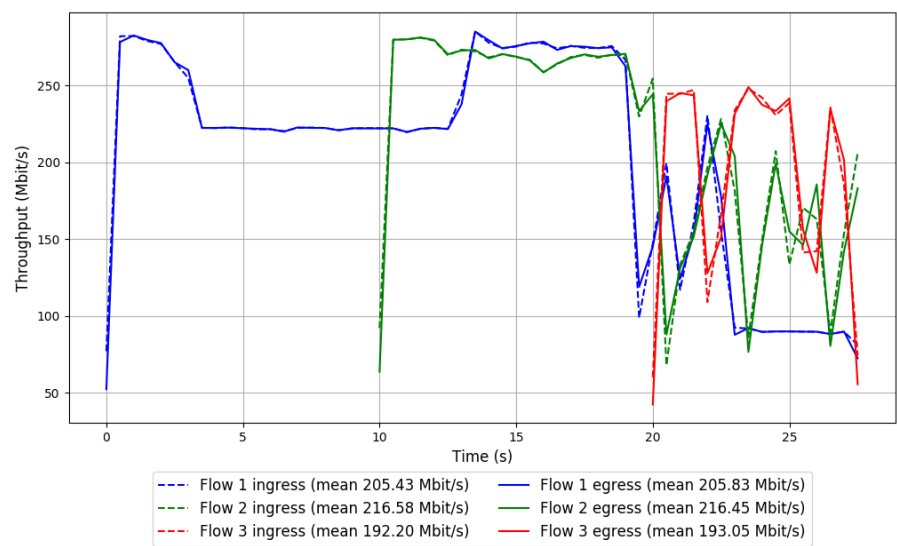


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-12 05:10:02
End at: 2017-12-12 05:10:32

# Below is generated by plot.py at 2017-12-12 09:47:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.69 Mbit/s
95th percentile per-packet one-way delay: 58.147 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 205.83 Mbit/s
95th percentile per-packet one-way delay: 51.293 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 216.45 Mbit/s
95th percentile per-packet one-way delay: 56.265 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 193.05 Mbit/s
95th percentile per-packet one-way delay: 67.583 ms
Loss rate: 0.84%
```

Run 2: Report of TaoVA-100x — Data Link

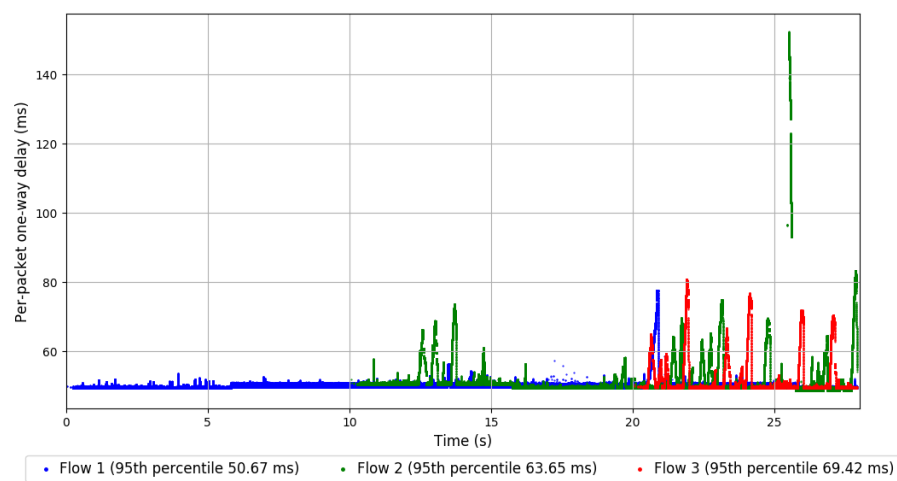
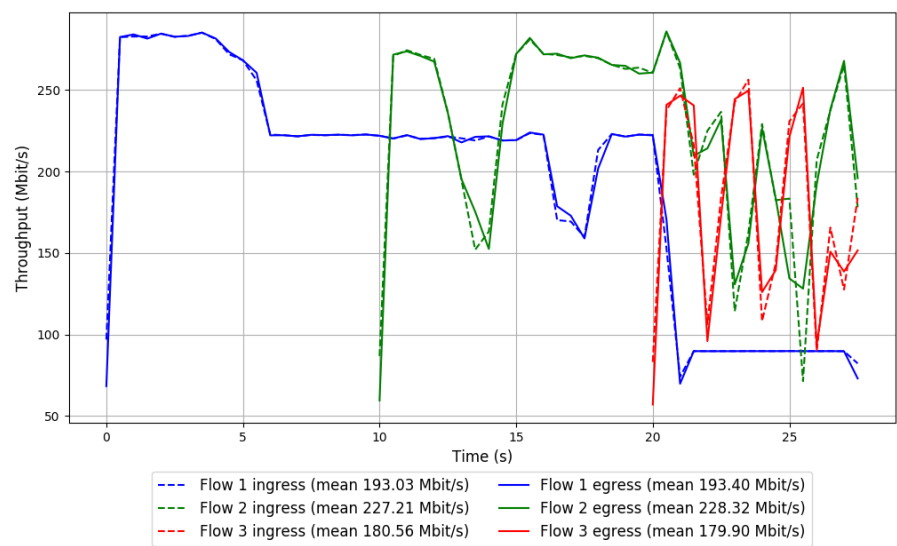


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-12 05:22:16
End at: 2017-12-12 05:22:46

# Below is generated by plot.py at 2017-12-12 09:47:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 390.29 Mbit/s
95th percentile per-packet one-way delay: 59.122 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 193.40 Mbit/s
95th percentile per-packet one-way delay: 50.672 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 228.32 Mbit/s
95th percentile per-packet one-way delay: 63.651 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 179.90 Mbit/s
95th percentile per-packet one-way delay: 69.425 ms
Loss rate: 1.67%
```

Run 3: Report of TaoVA-100x — Data Link



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-12 05:34:54

End at: 2017-12-12 05:35:24

Below is generated by plot.py at 2017-12-12 09:47:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 379.12 Mbit/s

95th percentile per-packet one-way delay: 62.829 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 196.93 Mbit/s

95th percentile per-packet one-way delay: 61.308 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 217.34 Mbit/s

95th percentile per-packet one-way delay: 61.870 ms

Loss rate: 0.12%

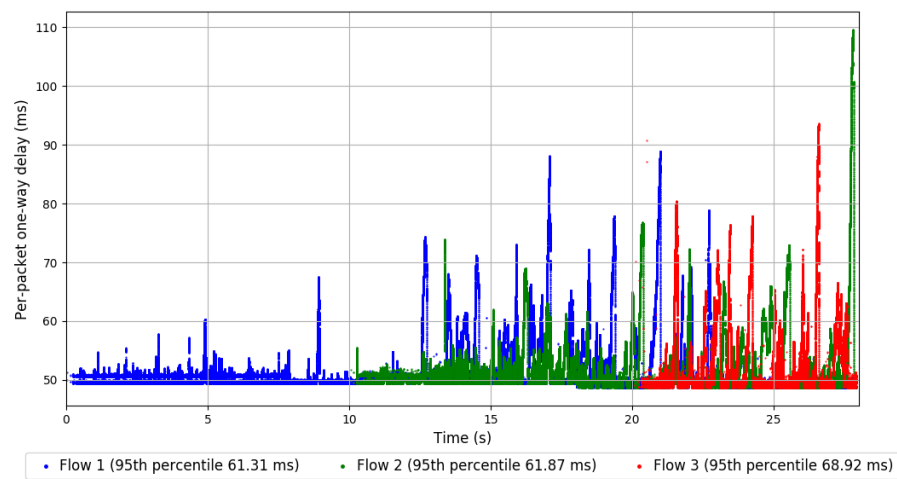
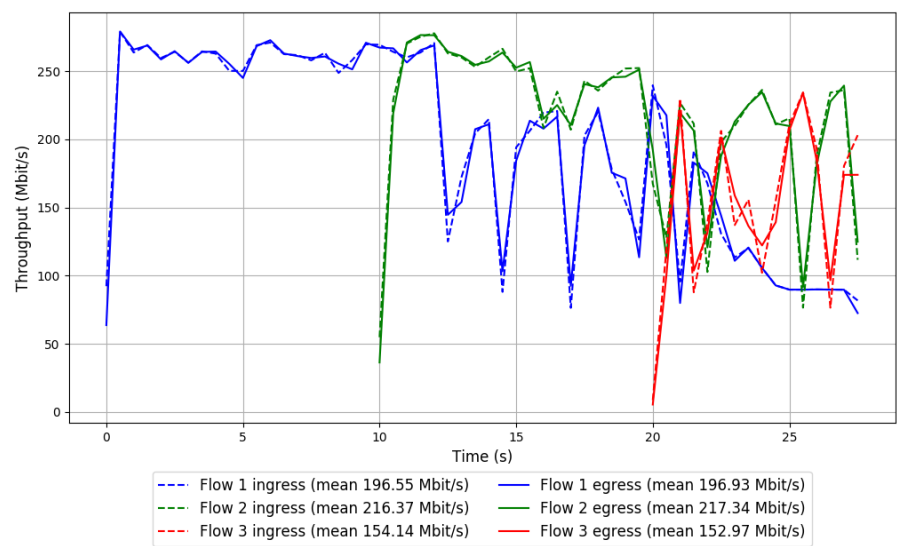
-- Flow 3:

Average throughput: 152.97 Mbit/s

95th percentile per-packet one-way delay: 68.922 ms

Loss rate: 2.02%

Run 4: Report of TaoVA-100x — Data Link



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-12 05:47:24

End at: 2017-12-12 05:47:54

Below is generated by plot.py at 2017-12-12 09:48:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 405.49 Mbit/s

95th percentile per-packet one-way delay: 62.191 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 224.99 Mbit/s

95th percentile per-packet one-way delay: 53.011 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 213.22 Mbit/s

95th percentile per-packet one-way delay: 65.509 ms

Loss rate: 0.09%

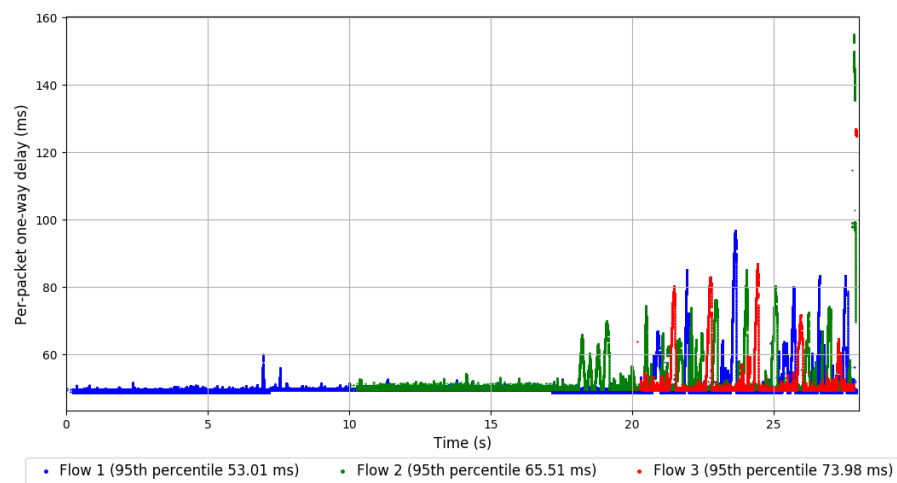
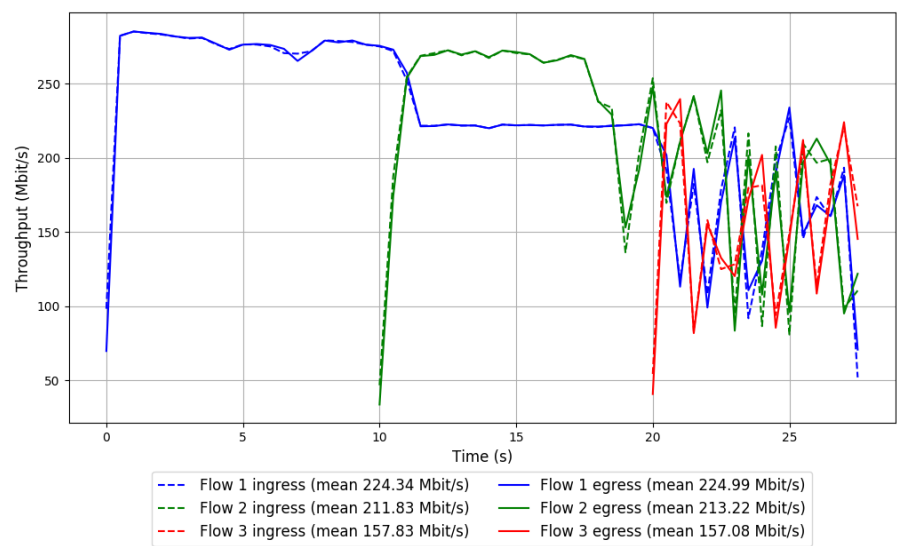
-- Flow 3:

Average throughput: 157.08 Mbit/s

95th percentile per-packet one-way delay: 73.981 ms

Loss rate: 1.72%

Run 5: Report of TaoVA-100x — Data Link



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-12 05:59:47

End at: 2017-12-12 06:00:17

Below is generated by plot.py at 2017-12-12 09:48:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 361.69 Mbit/s

95th percentile per-packet one-way delay: 51.020 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 153.81 Mbit/s

95th percentile per-packet one-way delay: 50.446 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 214.12 Mbit/s

95th percentile per-packet one-way delay: 50.884 ms

Loss rate: 0.47%

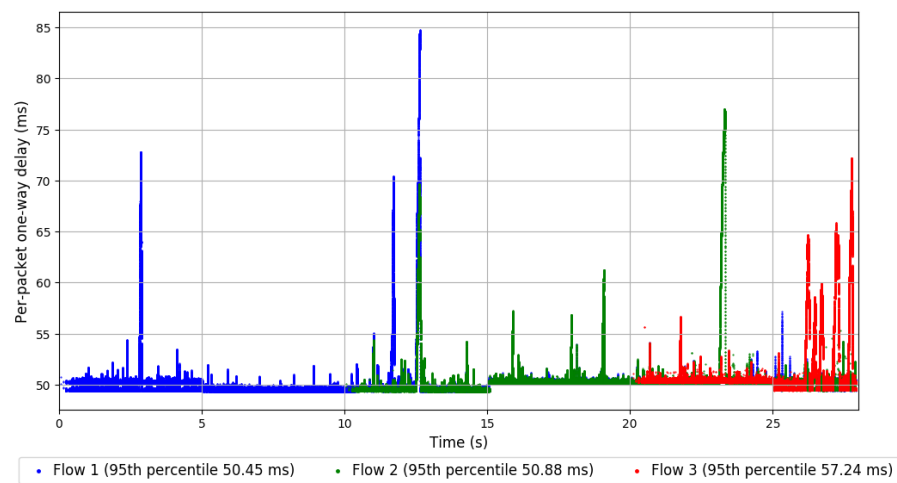
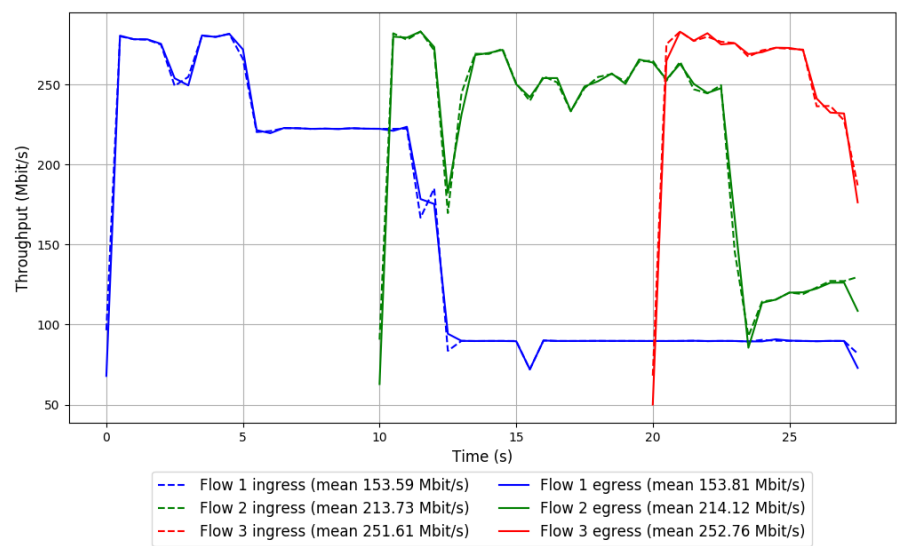
-- Flow 3:

Average throughput: 252.76 Mbit/s

95th percentile per-packet one-way delay: 57.244 ms

Loss rate: 0.82%

Run 6: Report of TaoVA-100x — Data Link



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-12 06:12:11

End at: 2017-12-12 06:12:41

Below is generated by plot.py at 2017-12-12 09:57:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 429.49 Mbit/s

95th percentile per-packet one-way delay: 56.419 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 236.83 Mbit/s

95th percentile per-packet one-way delay: 53.413 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 201.59 Mbit/s

95th percentile per-packet one-way delay: 59.482 ms

Loss rate: 0.25%

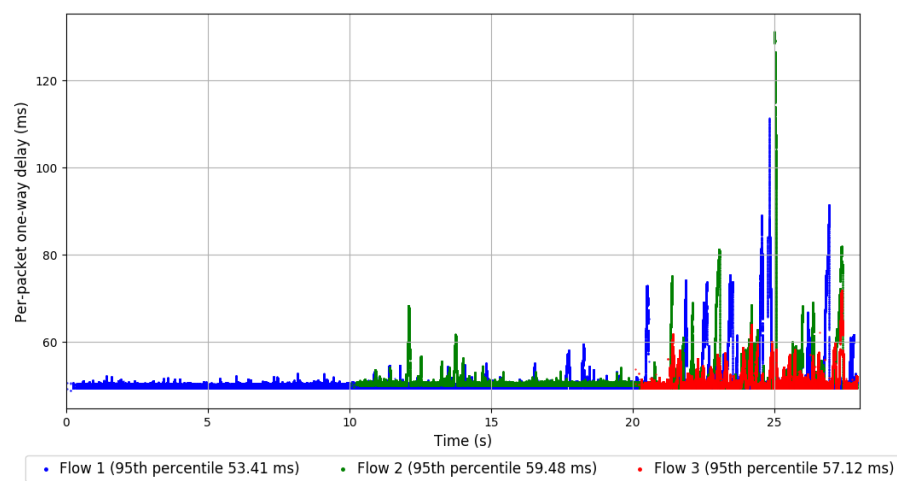
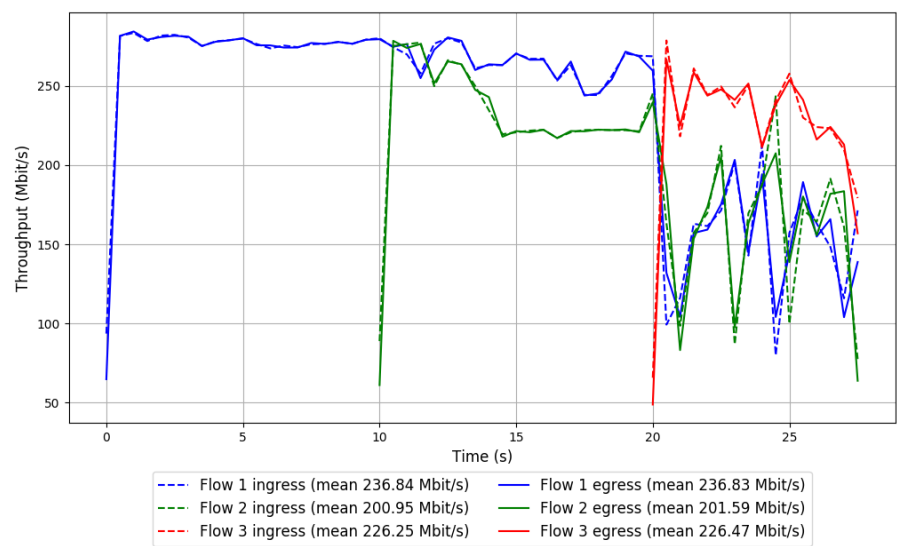
-- Flow 3:

Average throughput: 226.47 Mbit/s

95th percentile per-packet one-way delay: 57.118 ms

Loss rate: 1.20%

Run 7: Report of TaoVA-100x — Data Link



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-12 06:24:30

End at: 2017-12-12 06:25:00

Below is generated by plot.py at 2017-12-12 09:57:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.55 Mbit/s

95th percentile per-packet one-way delay: 50.747 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 203.16 Mbit/s

95th percentile per-packet one-way delay: 50.650 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 193.55 Mbit/s

95th percentile per-packet one-way delay: 53.235 ms

Loss rate: 0.30%

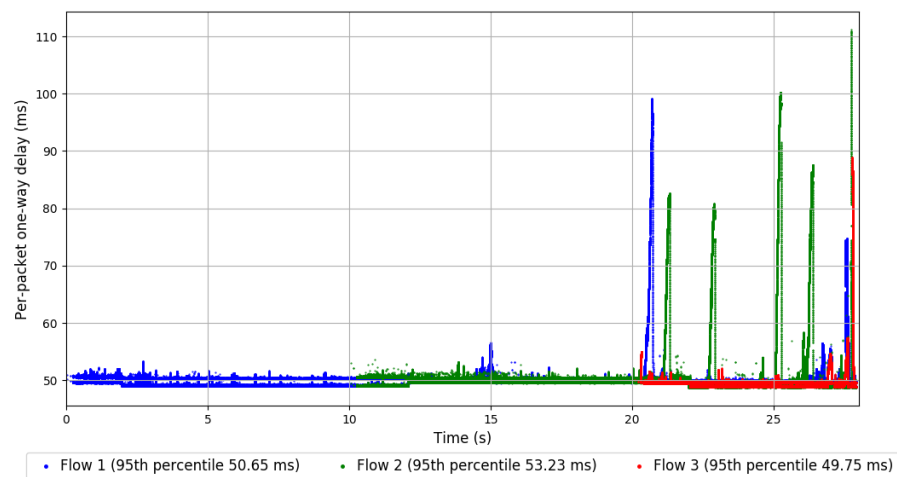
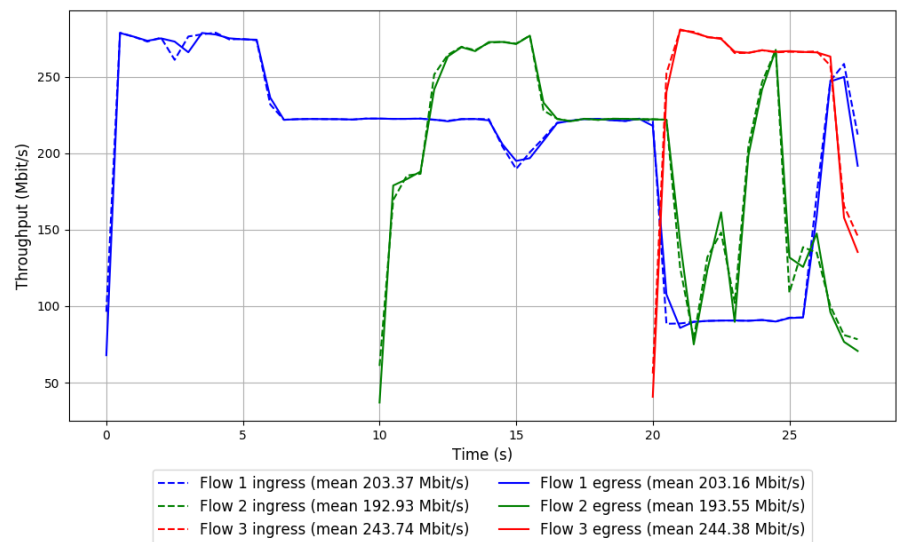
-- Flow 3:

Average throughput: 244.38 Mbit/s

95th percentile per-packet one-way delay: 49.748 ms

Loss rate: 1.01%

Run 8: Report of TaoVA-100x — Data Link

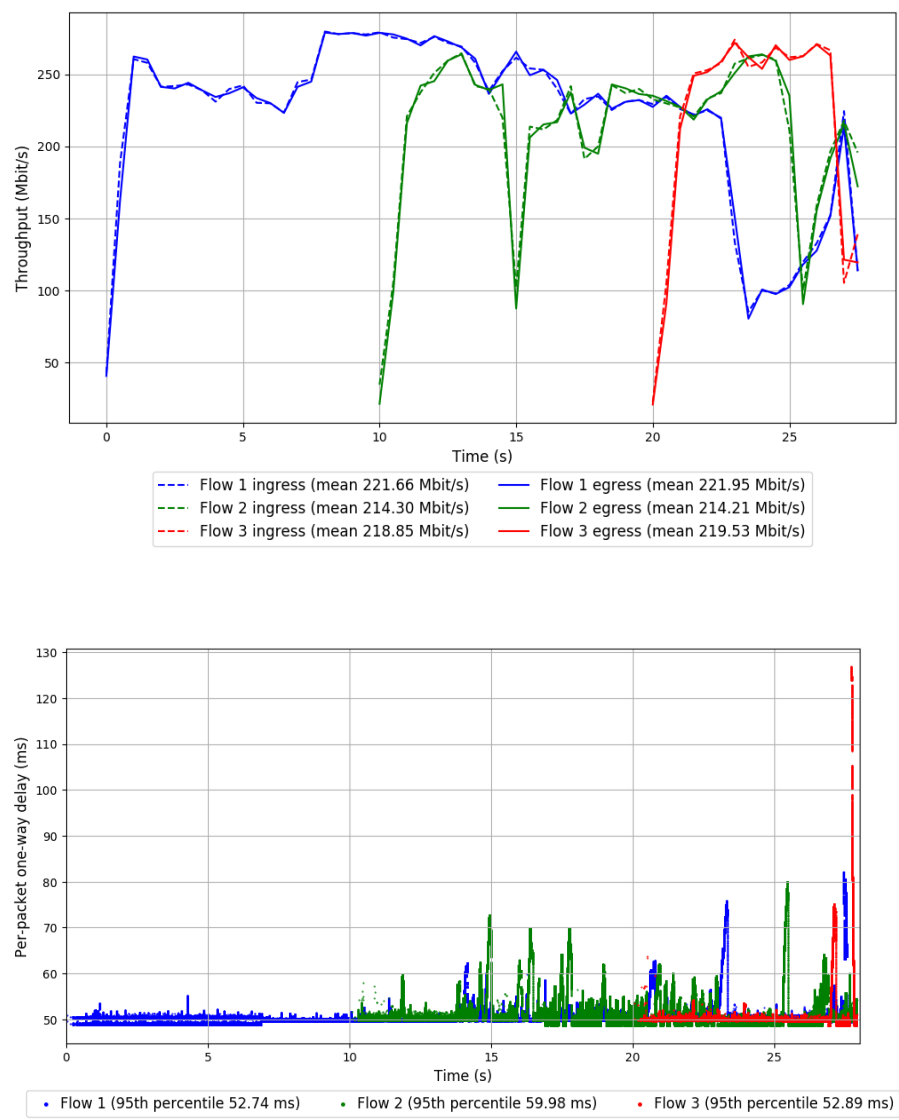


```
Run 9: Statistics of TaoVA-100x

Start at: 2017-12-12 06:36:55
End at: 2017-12-12 06:37:25

# Below is generated by plot.py at 2017-12-12 10:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 420.69 Mbit/s
95th percentile per-packet one-way delay: 56.404 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 221.95 Mbit/s
95th percentile per-packet one-way delay: 52.738 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 214.21 Mbit/s
95th percentile per-packet one-way delay: 59.980 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 219.53 Mbit/s
95th percentile per-packet one-way delay: 52.887 ms
Loss rate: 0.97%
```


Run 9: Report of TaoVA-100x — Data Link

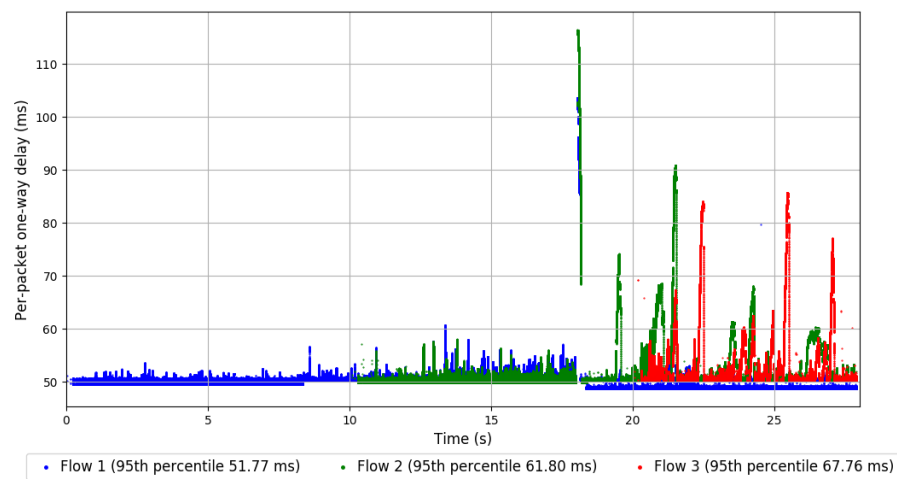
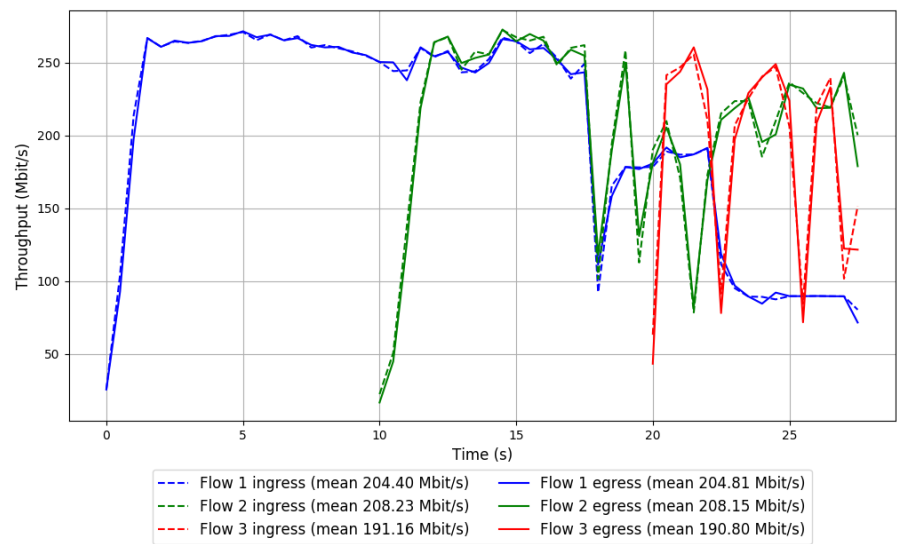


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-12 06:49:23
End at: 2017-12-12 06:49:53

# Below is generated by plot.py at 2017-12-12 10:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 391.61 Mbit/s
95th percentile per-packet one-way delay: 58.084 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 204.81 Mbit/s
95th percentile per-packet one-way delay: 51.769 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 208.15 Mbit/s
95th percentile per-packet one-way delay: 61.803 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 190.80 Mbit/s
95th percentile per-packet one-way delay: 67.760 ms
Loss rate: 1.45%
```

Run 10: Report of TaoVA-100x — Data Link



Run 1: Statistics of TCP Vegas

Start at: 2017-12-12 05:00:27

End at: 2017-12-12 05:00:57

Below is generated by plot.py at 2017-12-12 10:01:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 162.11 Mbit/s

95th percentile per-packet one-way delay: 51.888 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 72.38 Mbit/s

95th percentile per-packet one-way delay: 51.541 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 57.12 Mbit/s

95th percentile per-packet one-way delay: 51.807 ms

Loss rate: 0.49%

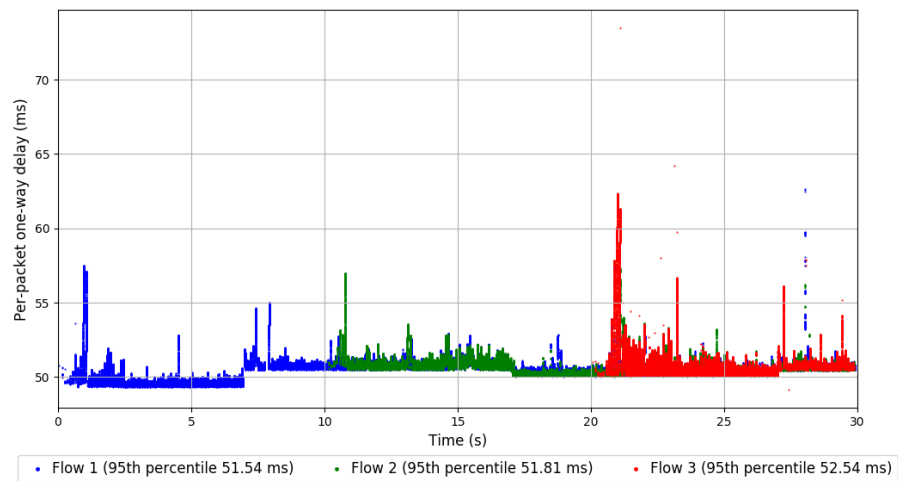
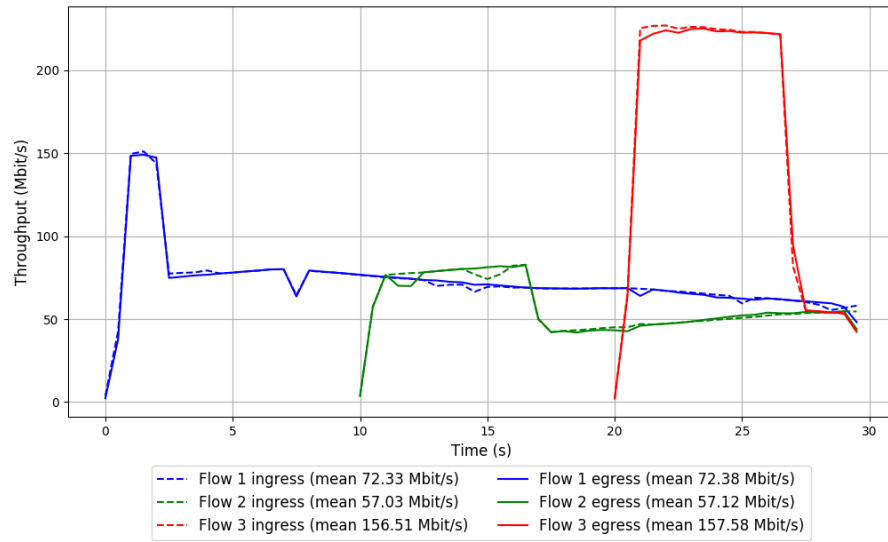
-- Flow 3:

Average throughput: 157.58 Mbit/s

95th percentile per-packet one-way delay: 52.539 ms

Loss rate: 0.34%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-12 05:12:52

End at: 2017-12-12 05:13:22

Below is generated by plot.py at 2017-12-12 10:01:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.62 Mbit/s

95th percentile per-packet one-way delay: 56.430 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 23.78 Mbit/s

95th percentile per-packet one-way delay: 52.001 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 88.38 Mbit/s

95th percentile per-packet one-way delay: 58.122 ms

Loss rate: 0.44%

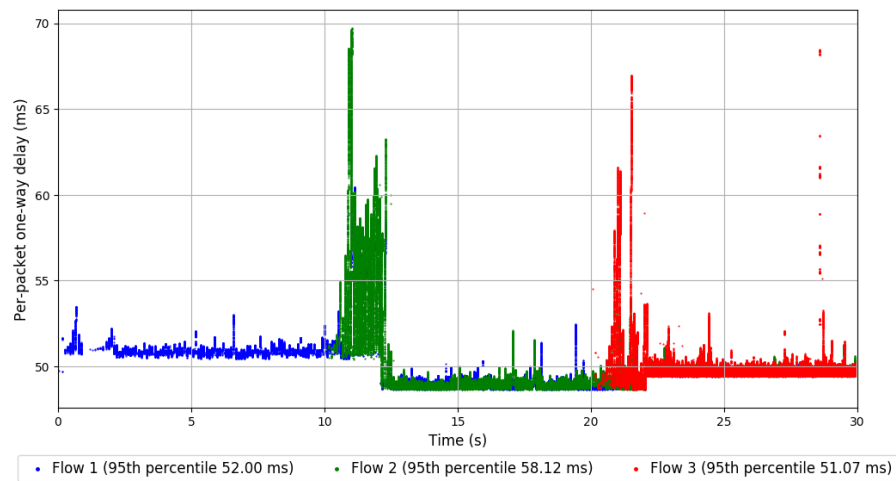
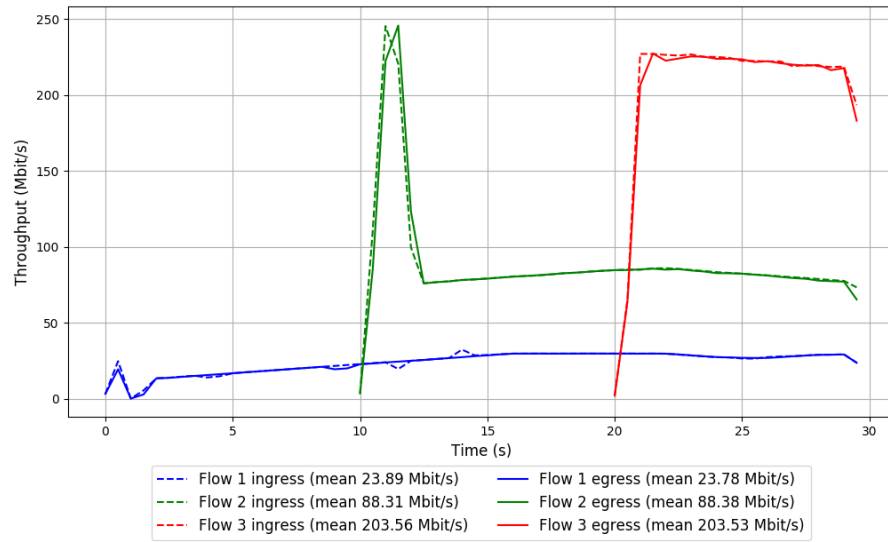
-- Flow 3:

Average throughput: 203.53 Mbit/s

95th percentile per-packet one-way delay: 51.074 ms

Loss rate: 1.07%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-12 05:25:04

End at: 2017-12-12 05:25:34

Below is generated by plot.py at 2017-12-12 10:01:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.61 Mbit/s

95th percentile per-packet one-way delay: 50.757 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 59.30 Mbit/s

95th percentile per-packet one-way delay: 50.650 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 156.73 Mbit/s

95th percentile per-packet one-way delay: 50.841 ms

Loss rate: 0.55%

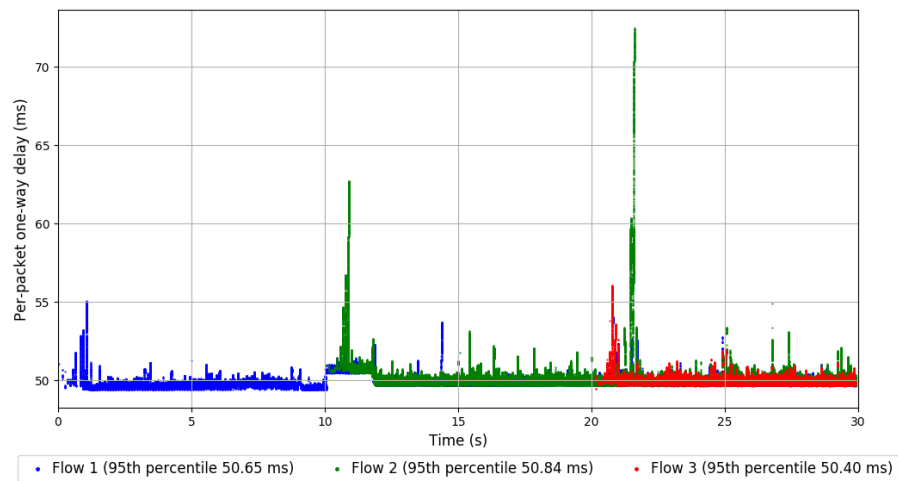
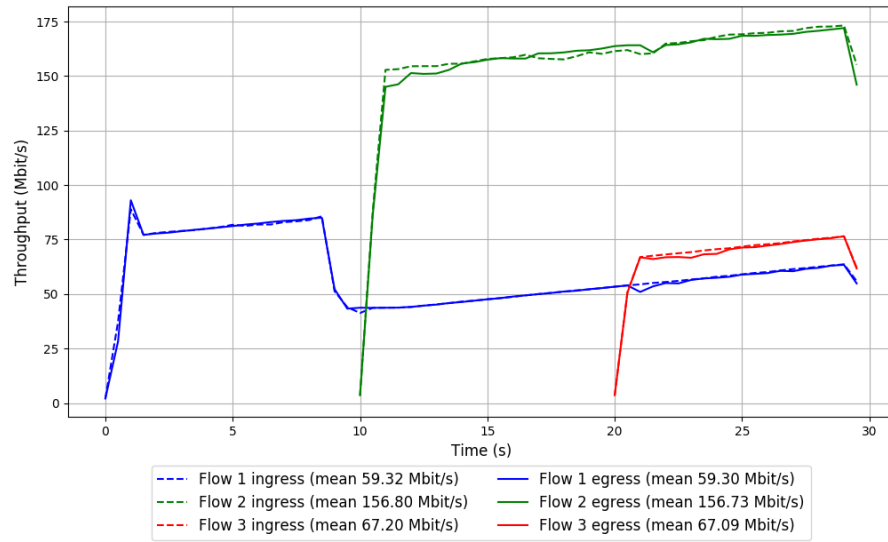
-- Flow 3:

Average throughput: 67.09 Mbit/s

95th percentile per-packet one-way delay: 50.395 ms

Loss rate: 1.16%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-12 05:37:44

End at: 2017-12-12 05:38:14

Below is generated by plot.py at 2017-12-12 10:01:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.10 Mbit/s

95th percentile per-packet one-way delay: 56.799 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 60.32 Mbit/s

95th percentile per-packet one-way delay: 57.483 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 90.95 Mbit/s

95th percentile per-packet one-way delay: 56.890 ms

Loss rate: 0.59%

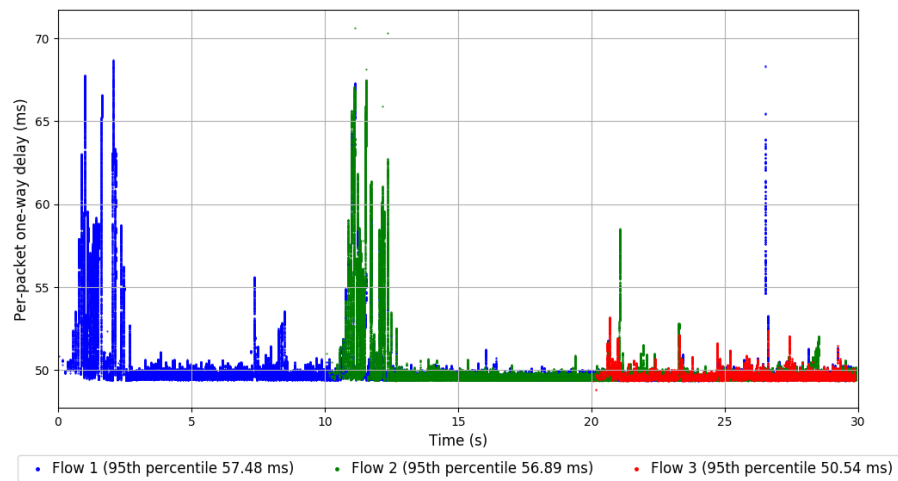
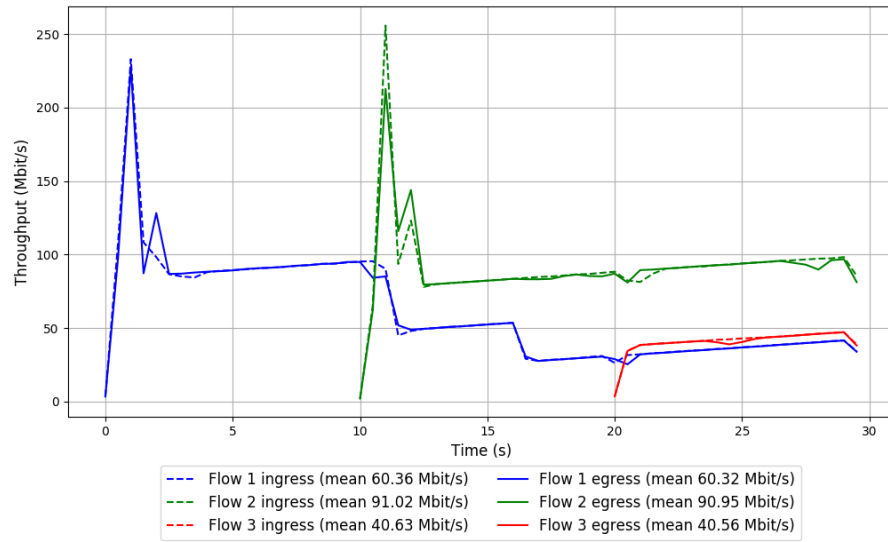
-- Flow 3:

Average throughput: 40.56 Mbit/s

95th percentile per-packet one-way delay: 50.537 ms

Loss rate: 1.19%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-12 05:50:16

End at: 2017-12-12 05:50:46

Below is generated by plot.py at 2017-12-12 10:01:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.97 Mbit/s

95th percentile per-packet one-way delay: 55.924 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 87.53 Mbit/s

95th percentile per-packet one-way delay: 51.744 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 33.27 Mbit/s

95th percentile per-packet one-way delay: 52.110 ms

Loss rate: 0.63%

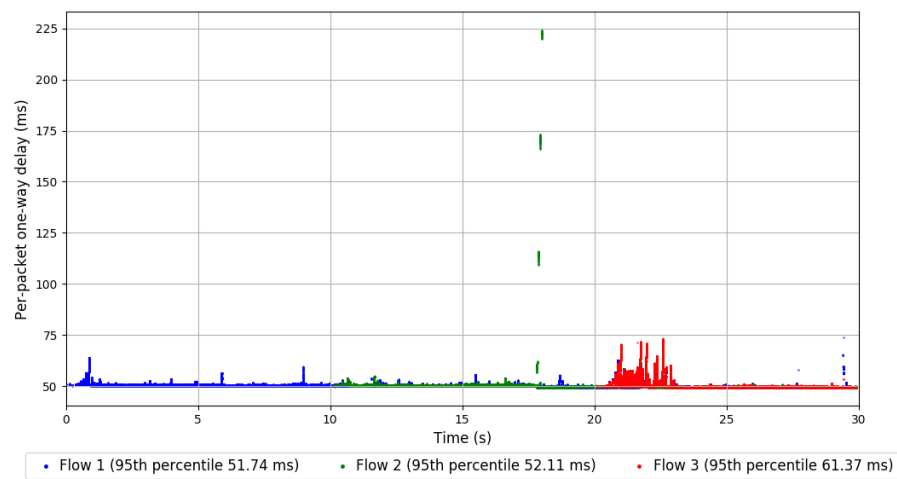
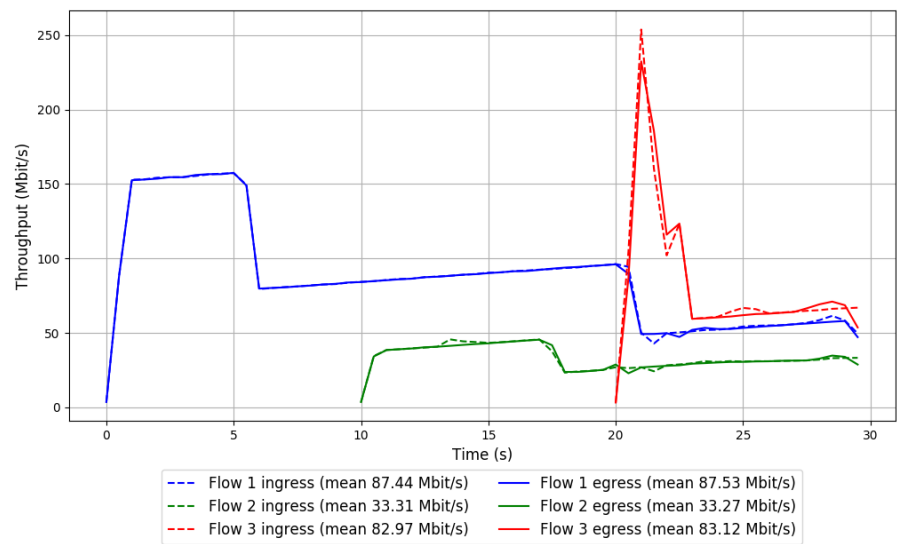
-- Flow 3:

Average throughput: 83.12 Mbit/s

95th percentile per-packet one-way delay: 61.372 ms

Loss rate: 0.82%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-12 06:02:33

End at: 2017-12-12 06:03:03

Below is generated by plot.py at 2017-12-12 10:01:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.01 Mbit/s

95th percentile per-packet one-way delay: 51.248 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 18.11 Mbit/s

95th percentile per-packet one-way delay: 51.236 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 69.18 Mbit/s

95th percentile per-packet one-way delay: 51.217 ms

Loss rate: 0.35%

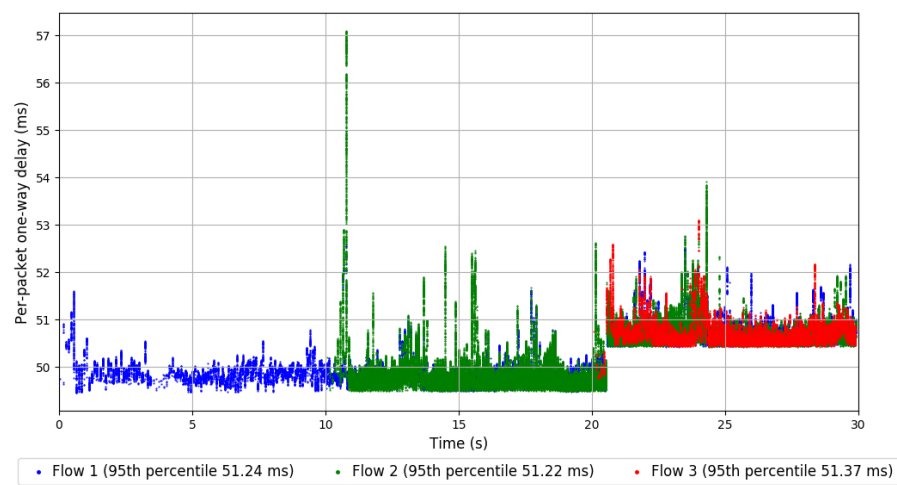
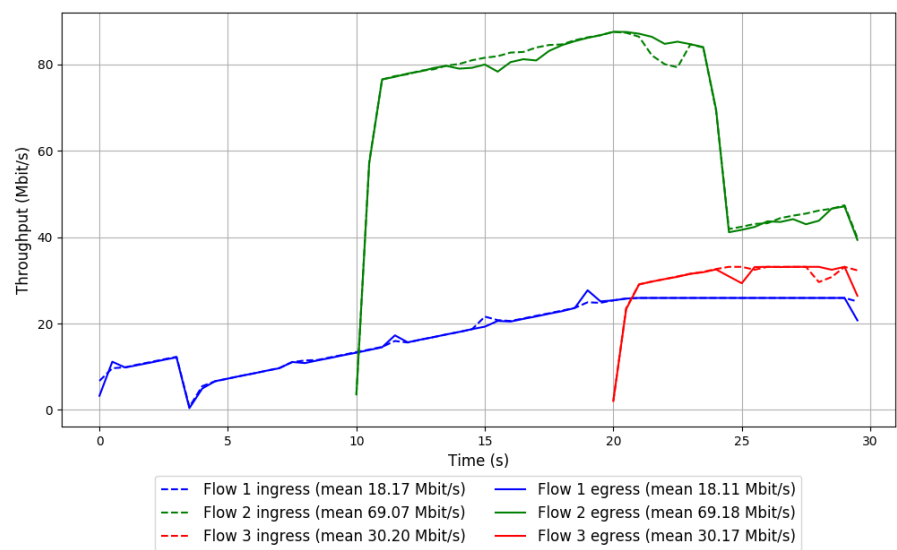
-- Flow 3:

Average throughput: 30.17 Mbit/s

95th percentile per-packet one-way delay: 51.368 ms

Loss rate: 1.11%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-12 06:15:03

End at: 2017-12-12 06:15:33

Below is generated by plot.py at 2017-12-12 10:01:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.01 Mbit/s

95th percentile per-packet one-way delay: 57.035 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 55.53 Mbit/s

95th percentile per-packet one-way delay: 51.924 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 47.70 Mbit/s

95th percentile per-packet one-way delay: 52.901 ms

Loss rate: 0.59%

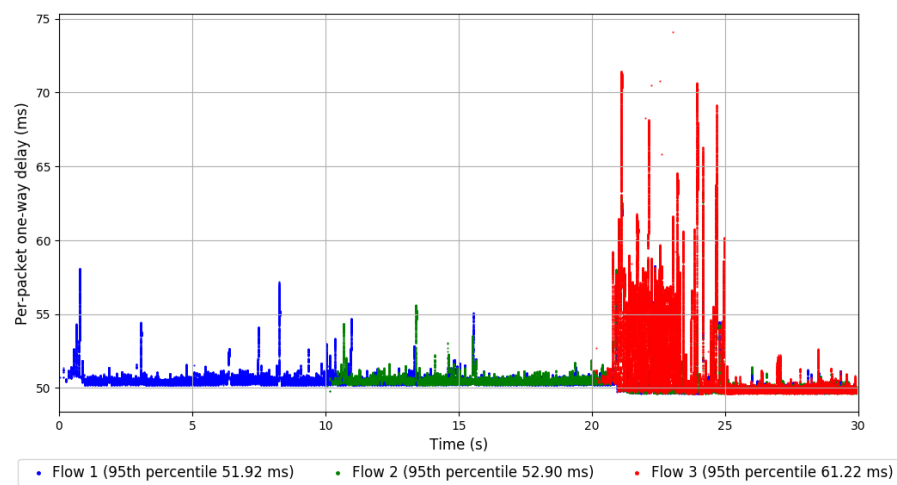
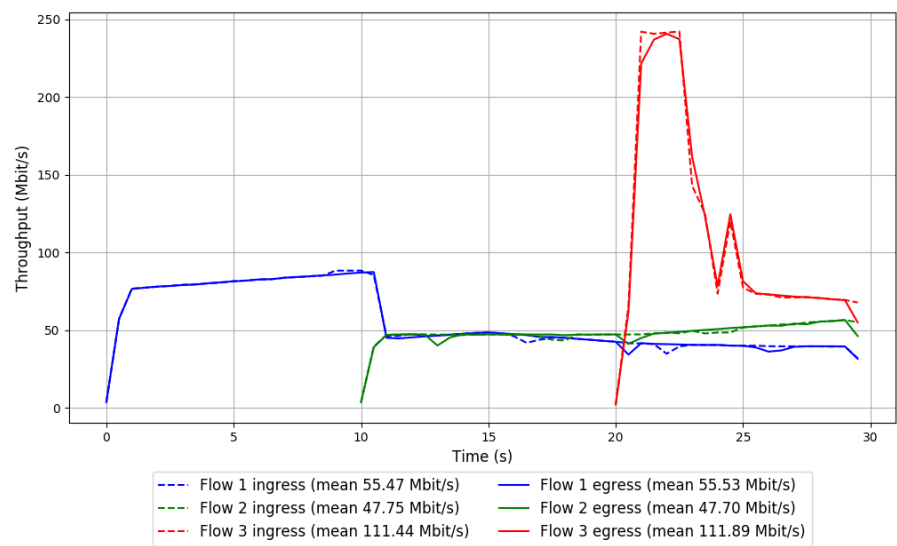
-- Flow 3:

Average throughput: 111.89 Mbit/s

95th percentile per-packet one-way delay: 61.223 ms

Loss rate: 0.62%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-12 06:27:21

End at: 2017-12-12 06:27:51

Below is generated by plot.py at 2017-12-12 10:01:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.60 Mbit/s

95th percentile per-packet one-way delay: 56.936 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 39.24 Mbit/s

95th percentile per-packet one-way delay: 52.083 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 20.97 Mbit/s

95th percentile per-packet one-way delay: 52.284 ms

Loss rate: 0.68%

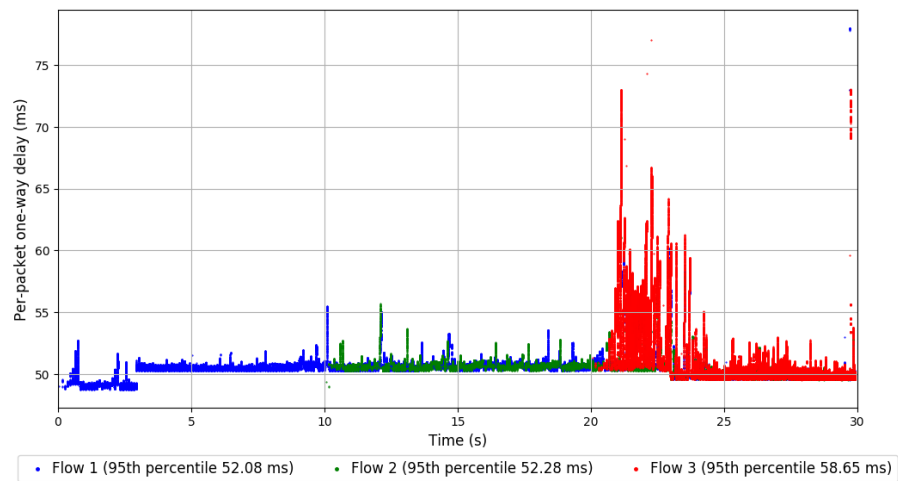
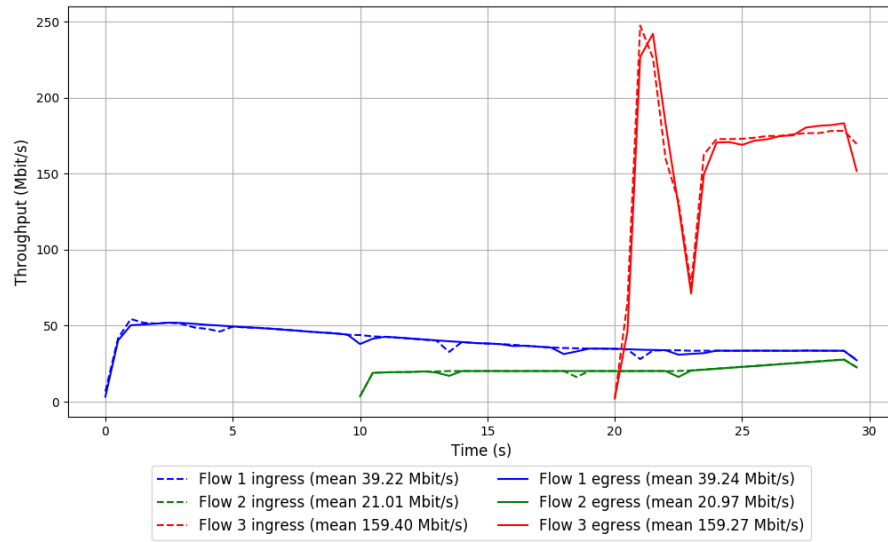
-- Flow 3:

Average throughput: 159.27 Mbit/s

95th percentile per-packet one-way delay: 58.649 ms

Loss rate: 1.13%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-12 06:39:47

End at: 2017-12-12 06:40:17

Below is generated by plot.py at 2017-12-12 10:01:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 141.98 Mbit/s

95th percentile per-packet one-way delay: 55.716 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 44.24 Mbit/s

95th percentile per-packet one-way delay: 51.390 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 94.37 Mbit/s

95th percentile per-packet one-way delay: 58.070 ms

Loss rate: 0.43%

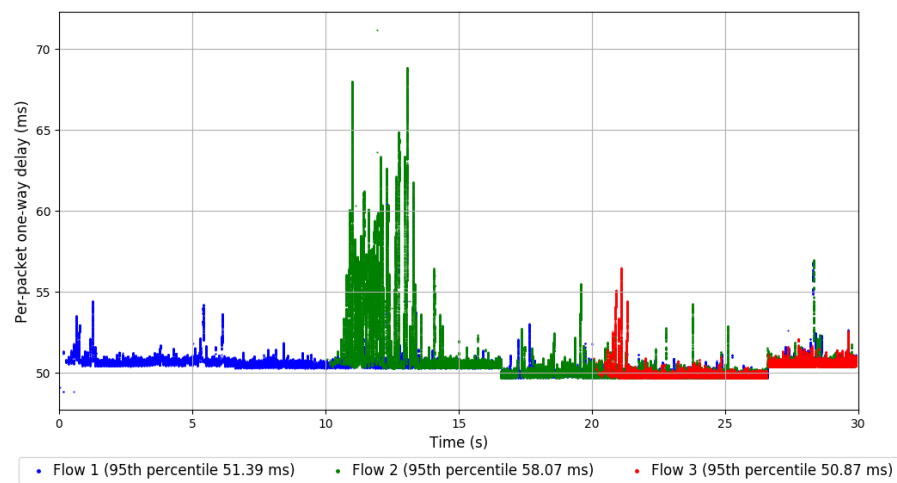
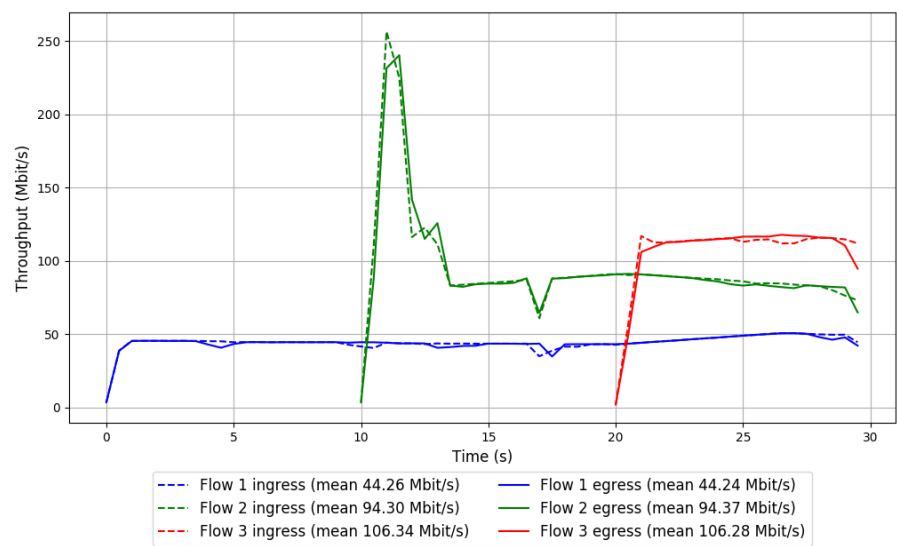
-- Flow 3:

Average throughput: 106.28 Mbit/s

95th percentile per-packet one-way delay: 50.868 ms

Loss rate: 1.08%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-12 06:52:12

End at: 2017-12-12 06:52:42

Below is generated by plot.py at 2017-12-12 10:01:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.08 Mbit/s

95th percentile per-packet one-way delay: 51.203 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 37.02 Mbit/s

95th percentile per-packet one-way delay: 51.025 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 13.15 Mbit/s

95th percentile per-packet one-way delay: 50.803 ms

Loss rate: 1.38%

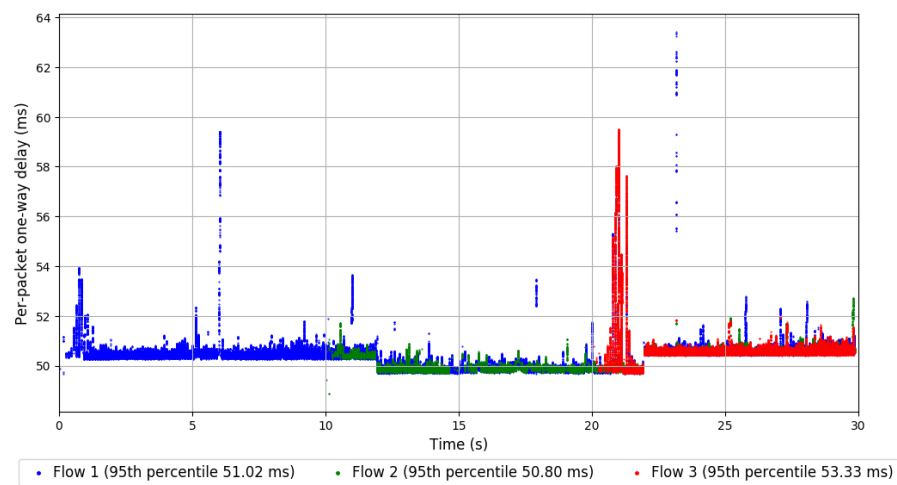
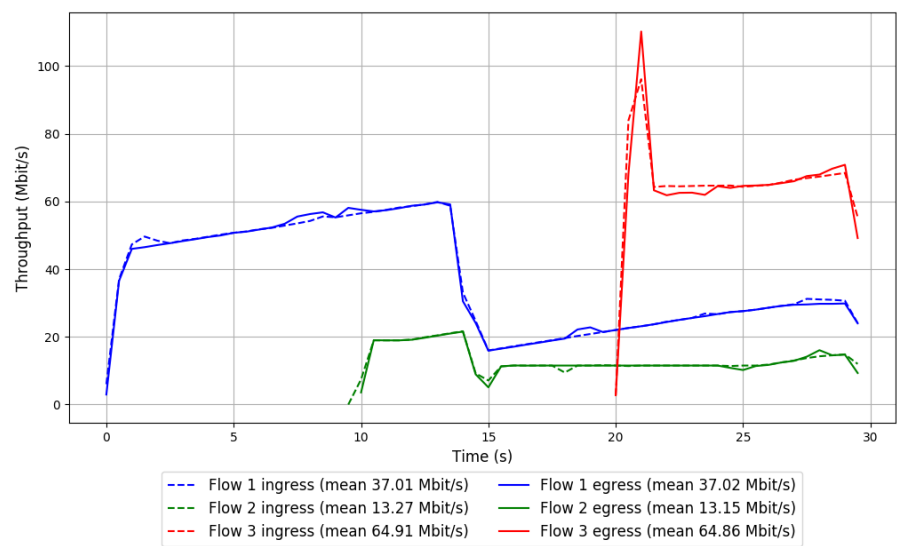
-- Flow 3:

Average throughput: 64.86 Mbit/s

95th percentile per-packet one-way delay: 53.333 ms

Loss rate: 1.07%

Run 10: Report of TCP Vegas — Data Link

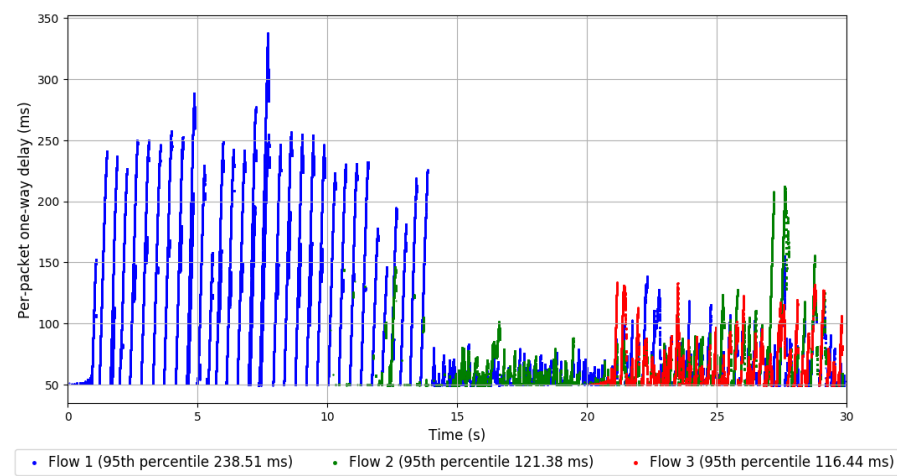
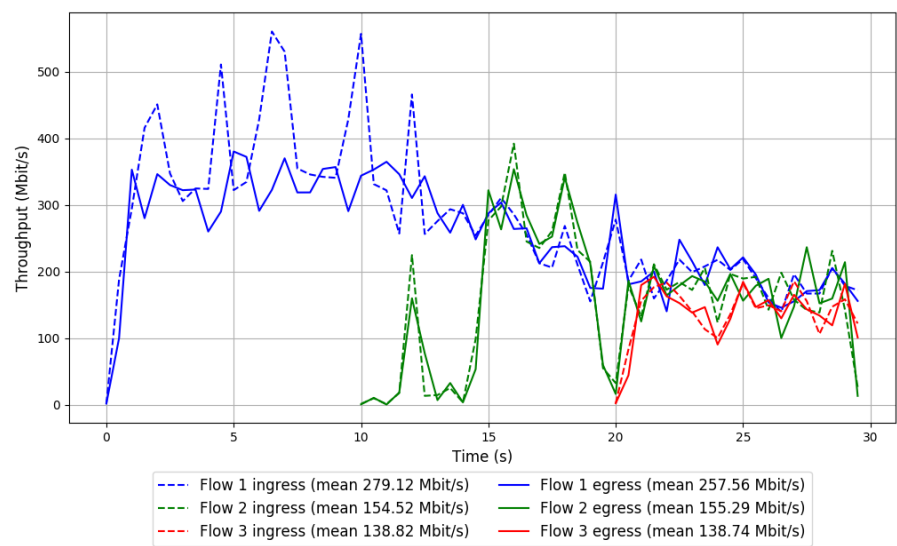


```
Run 1: Statistics of Verus

Start at: 2017-12-12 05:02:57
End at: 2017-12-12 05:03:27

# Below is generated by plot.py at 2017-12-12 10:01:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 405.41 Mbit/s
95th percentile per-packet one-way delay: 230.699 ms
Loss rate: 5.48%
-- Flow 1:
Average throughput: 257.56 Mbit/s
95th percentile per-packet one-way delay: 238.509 ms
Loss rate: 8.03%
-- Flow 2:
Average throughput: 155.29 Mbit/s
95th percentile per-packet one-way delay: 121.380 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 138.74 Mbit/s
95th percentile per-packet one-way delay: 116.436 ms
Loss rate: 1.68%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-12 05:15:22

End at: 2017-12-12 05:15:52

Below is generated by plot.py at 2017-12-12 10:01:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 332.81 Mbit/s

95th percentile per-packet one-way delay: 98.298 ms

Loss rate: 1.89%

-- Flow 1:

Average throughput: 193.28 Mbit/s

95th percentile per-packet one-way delay: 119.836 ms

Loss rate: 2.59%

-- Flow 2:

Average throughput: 143.76 Mbit/s

95th percentile per-packet one-way delay: 87.526 ms

Loss rate: 0.52%

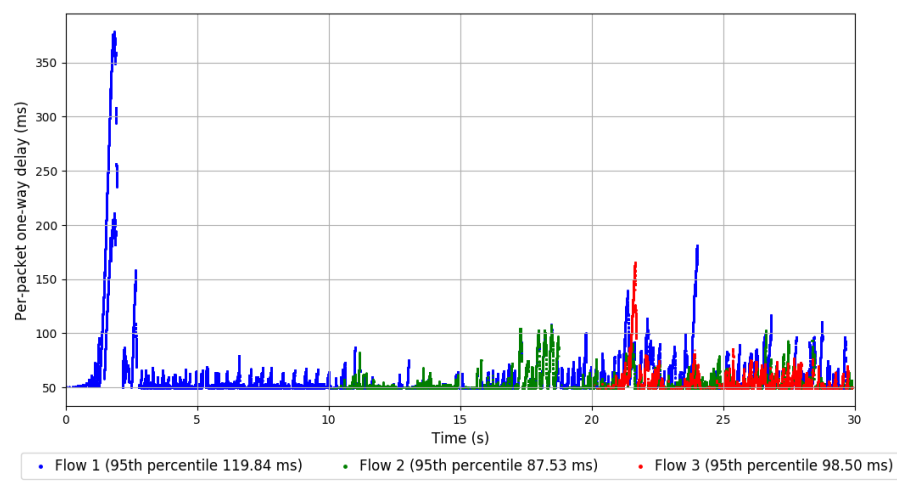
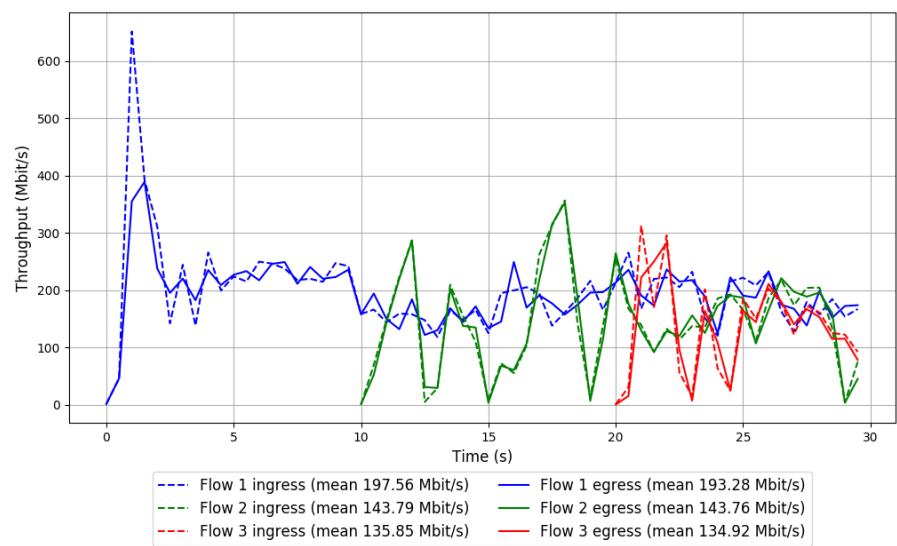
-- Flow 3:

Average throughput: 134.92 Mbit/s

95th percentile per-packet one-way delay: 98.503 ms

Loss rate: 1.69%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-12 05:27:38

End at: 2017-12-12 05:28:08

Below is generated by plot.py at 2017-12-12 10:01:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 374.84 Mbit/s

95th percentile per-packet one-way delay: 176.253 ms

Loss rate: 2.77%

-- Flow 1:

Average throughput: 199.48 Mbit/s

95th percentile per-packet one-way delay: 170.531 ms

Loss rate: 3.69%

-- Flow 2:

Average throughput: 163.91 Mbit/s

95th percentile per-packet one-way delay: 118.619 ms

Loss rate: 0.45%

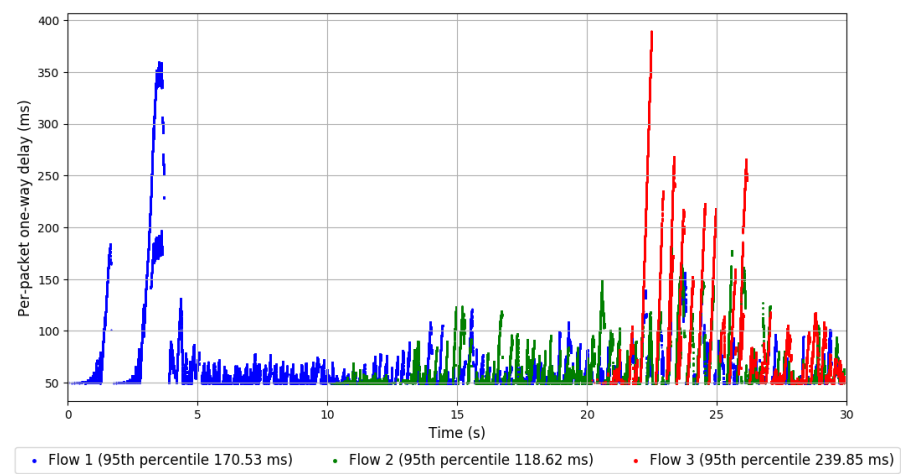
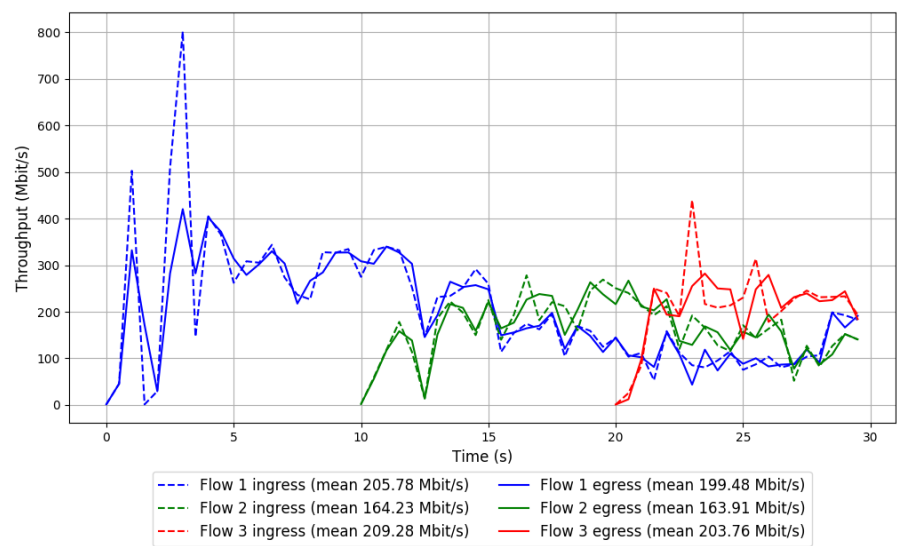
-- Flow 3:

Average throughput: 203.76 Mbit/s

95th percentile per-packet one-way delay: 239.854 ms

Loss rate: 3.69%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-12 05:40:14

End at: 2017-12-12 05:40:44

Below is generated by plot.py at 2017-12-12 10:01:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 346.04 Mbit/s

95th percentile per-packet one-way delay: 131.418 ms

Loss rate: 3.14%

-- Flow 1:

Average throughput: 197.22 Mbit/s

95th percentile per-packet one-way delay: 153.697 ms

Loss rate: 4.32%

-- Flow 2:

Average throughput: 160.45 Mbit/s

95th percentile per-packet one-way delay: 104.683 ms

Loss rate: 1.13%

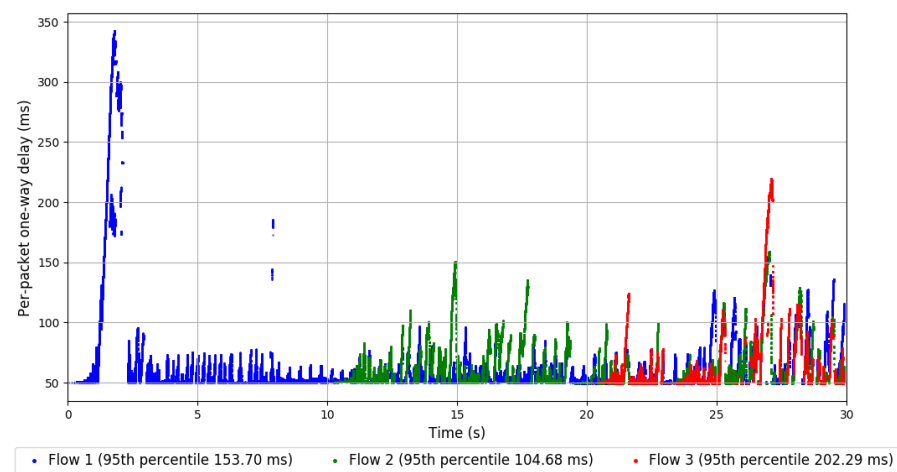
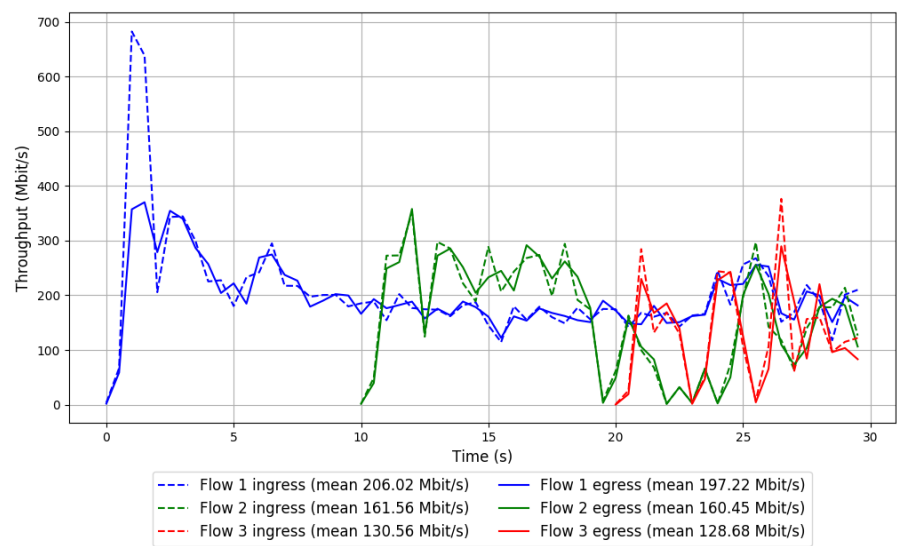
-- Flow 3:

Average throughput: 128.68 Mbit/s

95th percentile per-packet one-way delay: 202.293 ms

Loss rate: 2.49%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-12 05:52:45

End at: 2017-12-12 05:53:15

Below is generated by plot.py at 2017-12-12 10:02:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 324.15 Mbit/s

95th percentile per-packet one-way delay: 126.402 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 171.33 Mbit/s

95th percentile per-packet one-way delay: 156.835 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 183.01 Mbit/s

95th percentile per-packet one-way delay: 105.454 ms

Loss rate: 0.11%

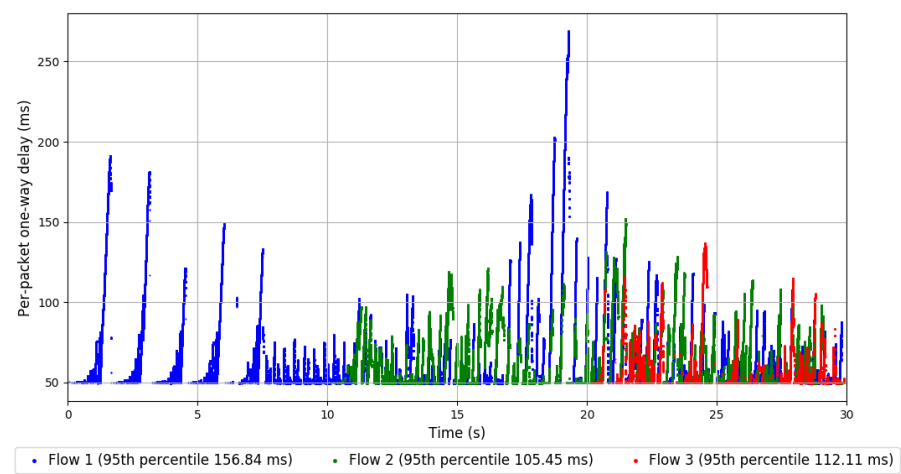
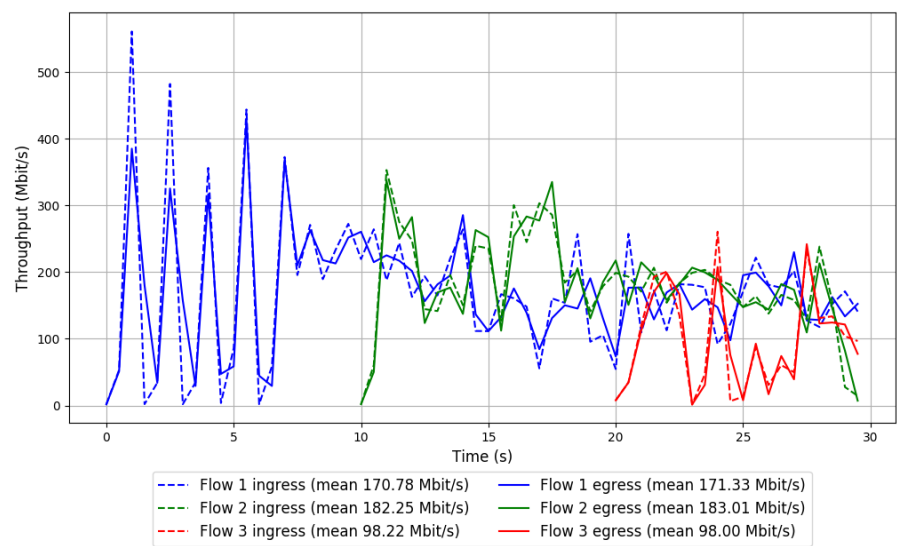
-- Flow 3:

Average throughput: 98.00 Mbit/s

95th percentile per-packet one-way delay: 112.108 ms

Loss rate: 1.16%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-12 06:04:59

End at: 2017-12-12 06:05:29

Below is generated by plot.py at 2017-12-12 10:04:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.10 Mbit/s

95th percentile per-packet one-way delay: 135.036 ms

Loss rate: 3.42%

-- Flow 1:

Average throughput: 214.95 Mbit/s

95th percentile per-packet one-way delay: 121.021 ms

Loss rate: 3.44%

-- Flow 2:

Average throughput: 167.90 Mbit/s

95th percentile per-packet one-way delay: 217.210 ms

Loss rate: 4.39%

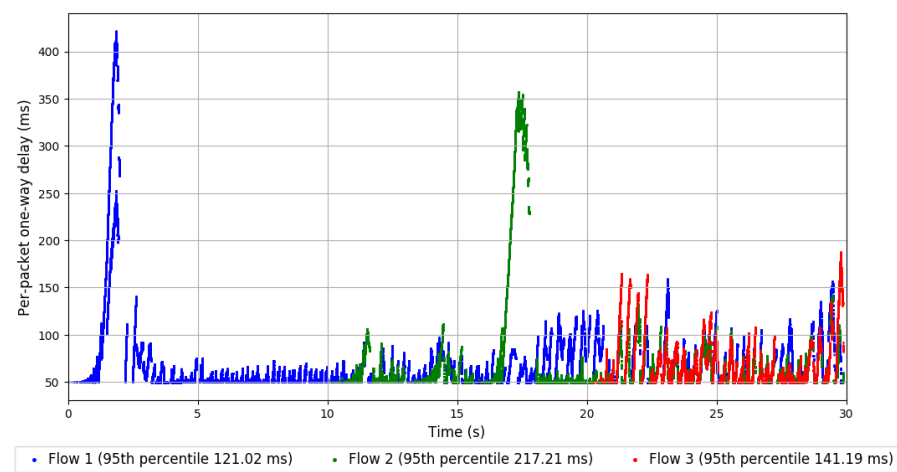
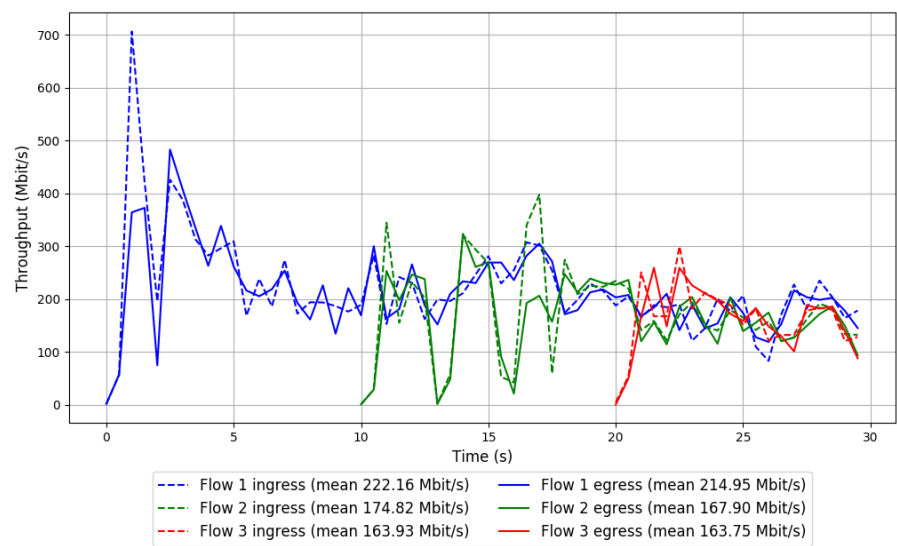
-- Flow 3:

Average throughput: 163.75 Mbit/s

95th percentile per-packet one-way delay: 141.188 ms

Loss rate: 1.25%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-12 06:17:31

End at: 2017-12-12 06:18:01

Below is generated by plot.py at 2017-12-12 10:05:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 332.60 Mbit/s

95th percentile per-packet one-way delay: 159.528 ms

Loss rate: 1.89%

-- Flow 1:

Average throughput: 199.36 Mbit/s

95th percentile per-packet one-way delay: 134.109 ms

Loss rate: 2.20%

-- Flow 2:

Average throughput: 133.60 Mbit/s

95th percentile per-packet one-way delay: 157.823 ms

Loss rate: 1.15%

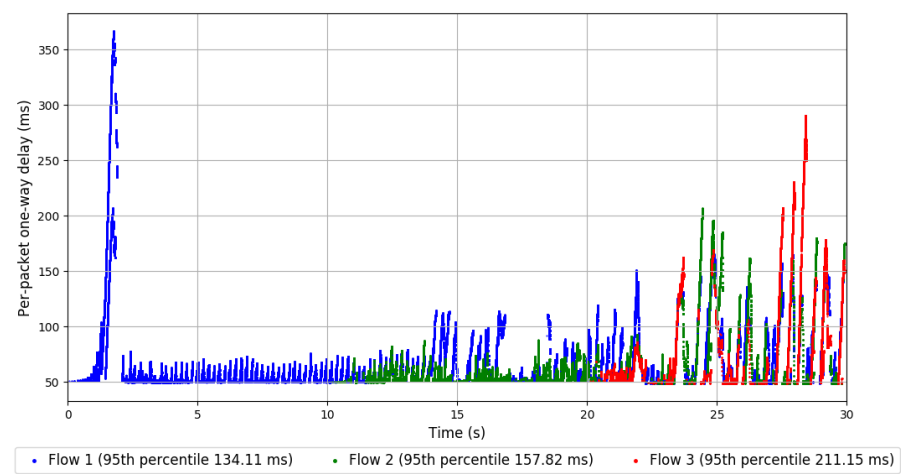
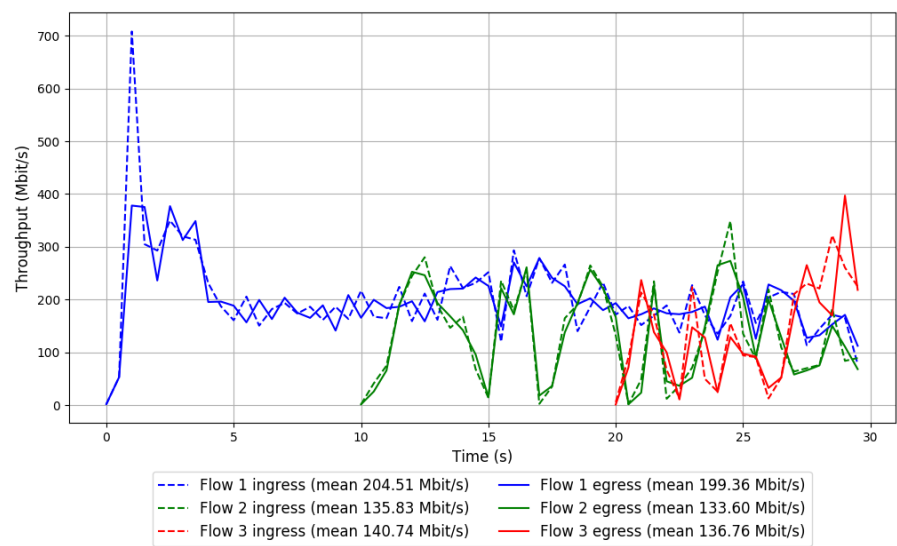
-- Flow 3:

Average throughput: 136.76 Mbit/s

95th percentile per-packet one-way delay: 211.147 ms

Loss rate: 1.93%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-12 06:29:49

End at: 2017-12-12 06:30:19

Below is generated by plot.py at 2017-12-12 10:06:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 339.87 Mbit/s

95th percentile per-packet one-way delay: 151.551 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 206.15 Mbit/s

95th percentile per-packet one-way delay: 147.979 ms

Loss rate: 1.44%

-- Flow 2:

Average throughput: 137.16 Mbit/s

95th percentile per-packet one-way delay: 174.477 ms

Loss rate: 1.20%

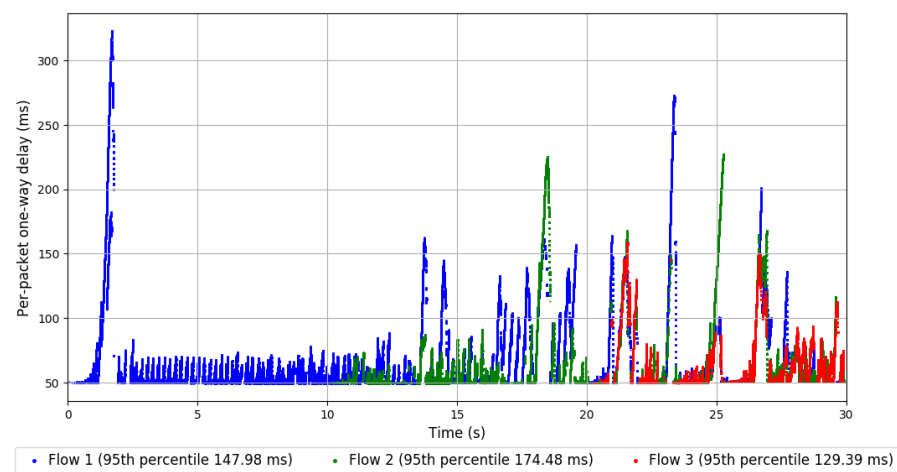
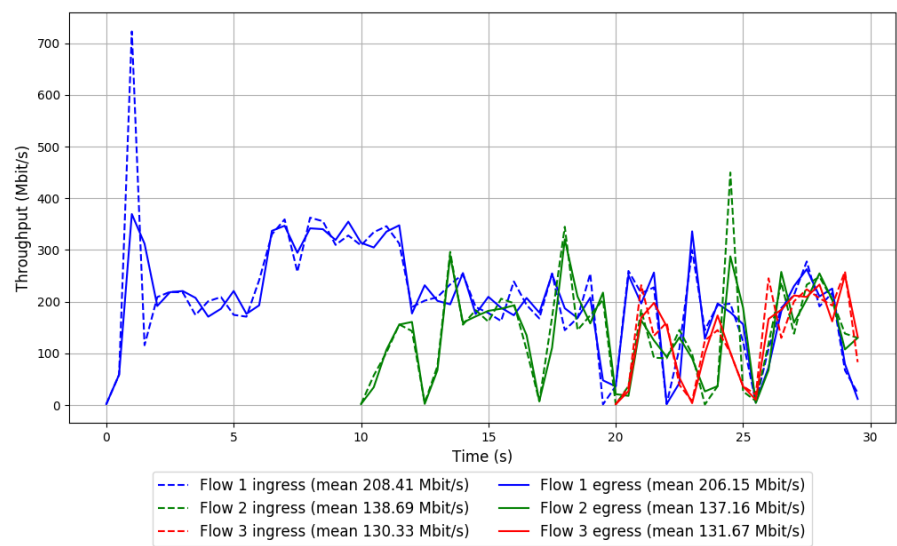
-- Flow 3:

Average throughput: 131.67 Mbit/s

95th percentile per-packet one-way delay: 129.390 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-12 06:42:15

End at: 2017-12-12 06:42:45

Below is generated by plot.py at 2017-12-12 10:07:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 360.37 Mbit/s

95th percentile per-packet one-way delay: 116.047 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 207.17 Mbit/s

95th percentile per-packet one-way delay: 115.035 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 154.16 Mbit/s

95th percentile per-packet one-way delay: 120.527 ms

Loss rate: 0.59%

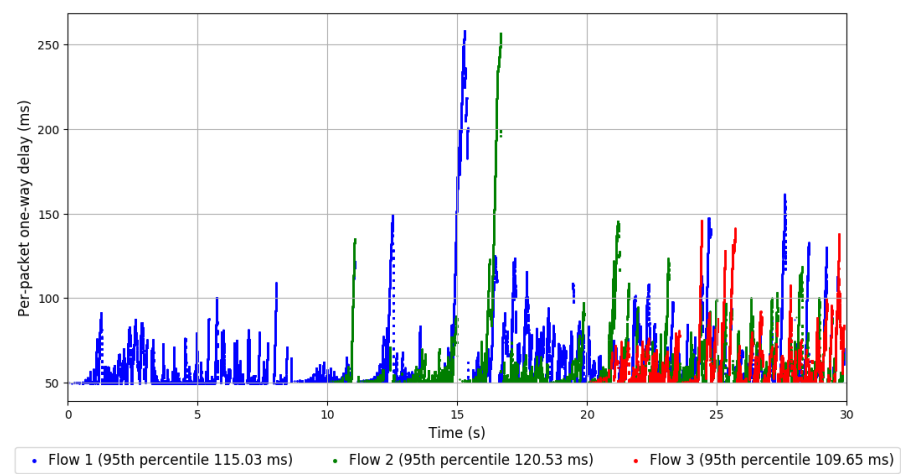
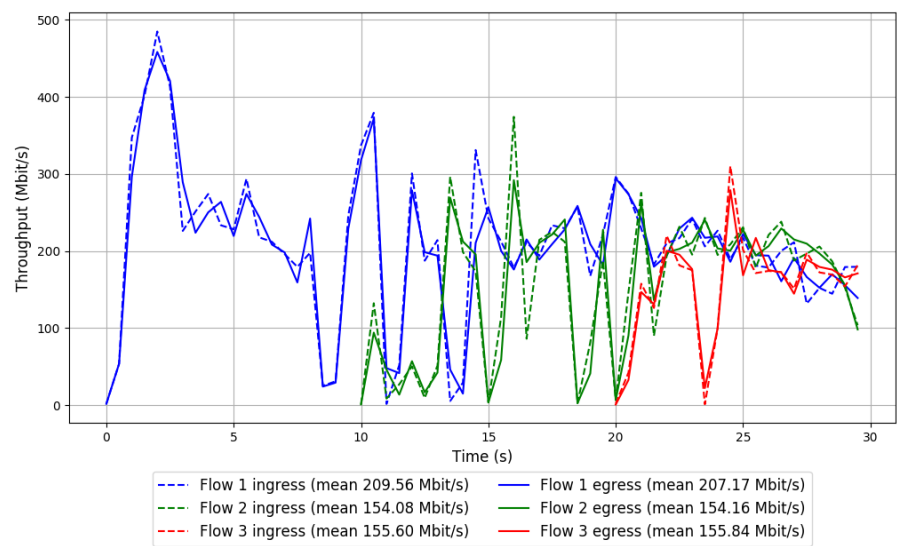
-- Flow 3:

Average throughput: 155.84 Mbit/s

95th percentile per-packet one-way delay: 109.653 ms

Loss rate: 0.60%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-12 06:54:36

End at: 2017-12-12 06:55:06

Below is generated by plot.py at 2017-12-12 10:07:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.81 Mbit/s

95th percentile per-packet one-way delay: 100.025 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 201.24 Mbit/s

95th percentile per-packet one-way delay: 108.744 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 132.29 Mbit/s

95th percentile per-packet one-way delay: 85.234 ms

Loss rate: 0.86%

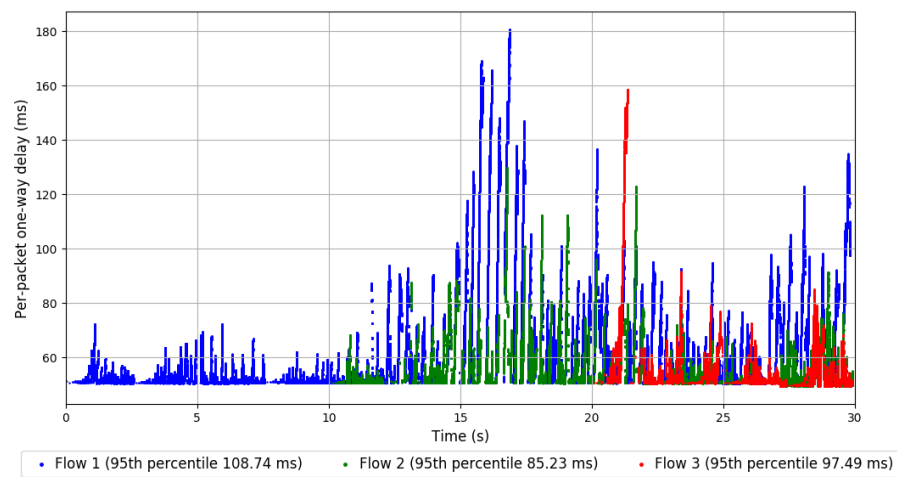
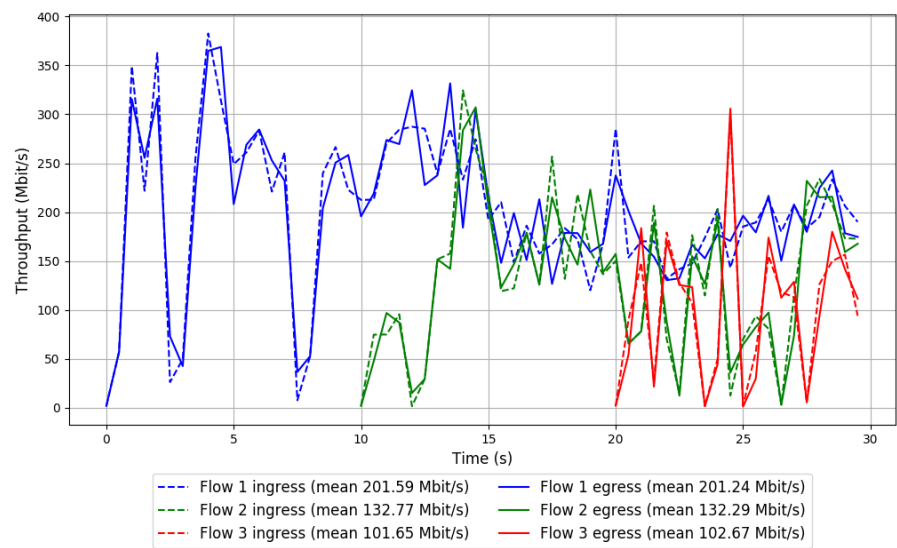
-- Flow 3:

Average throughput: 102.67 Mbit/s

95th percentile per-packet one-way delay: 97.489 ms

Loss rate: 0.02%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-12 04:59:33

End at: 2017-12-12 05:00:03

Below is generated by plot.py at 2017-12-12 10:07:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.73 Mbit/s

95th percentile per-packet one-way delay: 50.778 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 76.30 Mbit/s

95th percentile per-packet one-way delay: 50.722 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 82.37 Mbit/s

95th percentile per-packet one-way delay: 50.830 ms

Loss rate: 0.56%

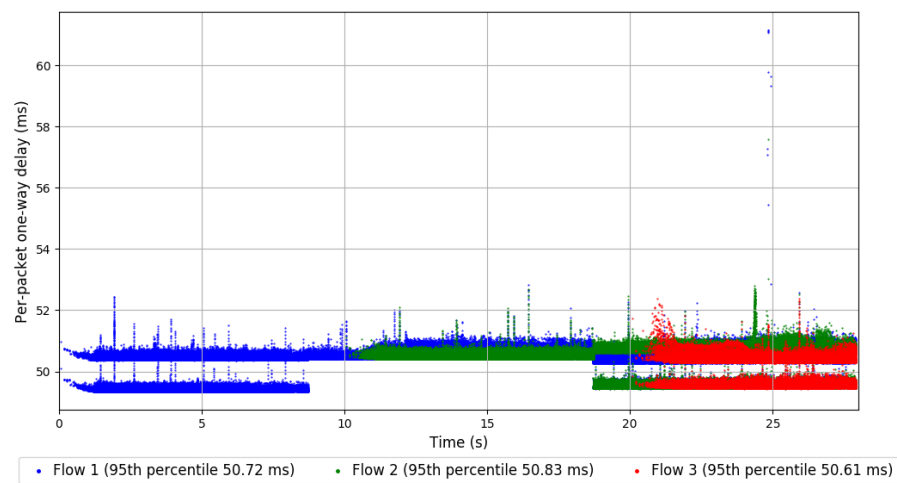
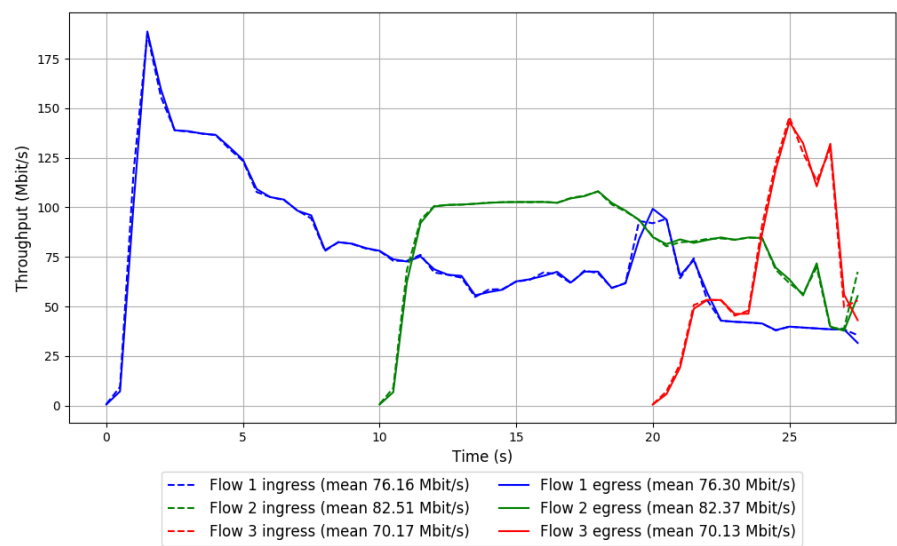
-- Flow 3:

Average throughput: 70.13 Mbit/s

95th percentile per-packet one-way delay: 50.608 ms

Loss rate: 1.32%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-12 05:11:59

End at: 2017-12-12 05:12:29

Below is generated by plot.py at 2017-12-12 10:07:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.75 Mbit/s

95th percentile per-packet one-way delay: 50.828 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 75.61 Mbit/s

95th percentile per-packet one-way delay: 50.913 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 81.38 Mbit/s

95th percentile per-packet one-way delay: 50.352 ms

Loss rate: 0.03%

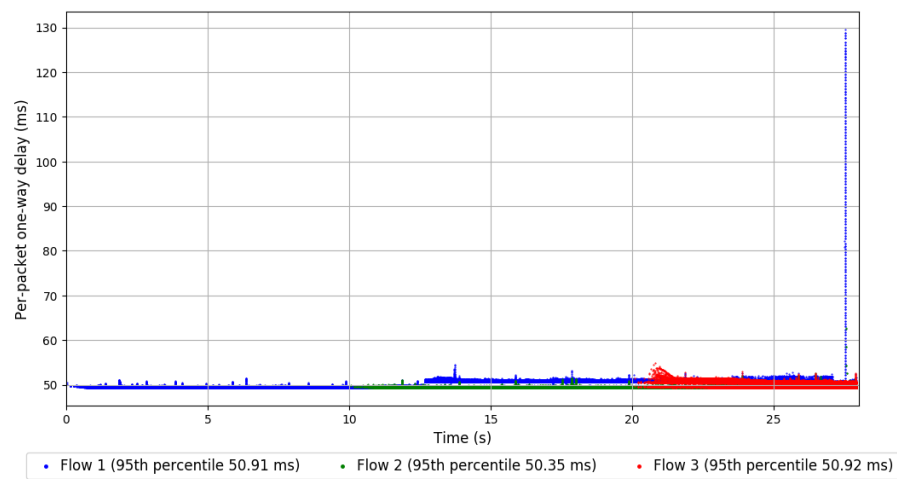
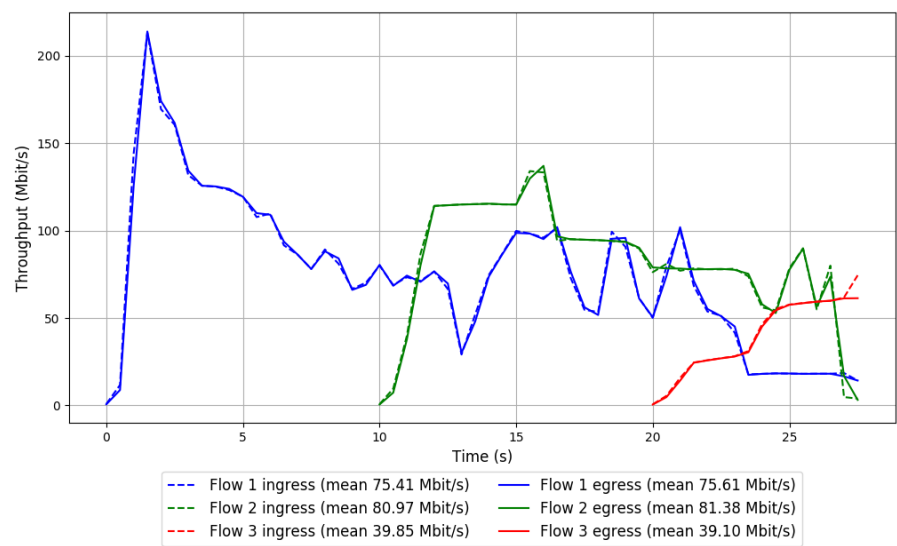
-- Flow 3:

Average throughput: 39.10 Mbit/s

95th percentile per-packet one-way delay: 50.916 ms

Loss rate: 3.08%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-12 05:24:11

End at: 2017-12-12 05:24:41

Below is generated by plot.py at 2017-12-12 10:07:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.45 Mbit/s

95th percentile per-packet one-way delay: 50.855 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 82.61 Mbit/s

95th percentile per-packet one-way delay: 50.882 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 73.19 Mbit/s

95th percentile per-packet one-way delay: 50.619 ms

Loss rate: 0.56%

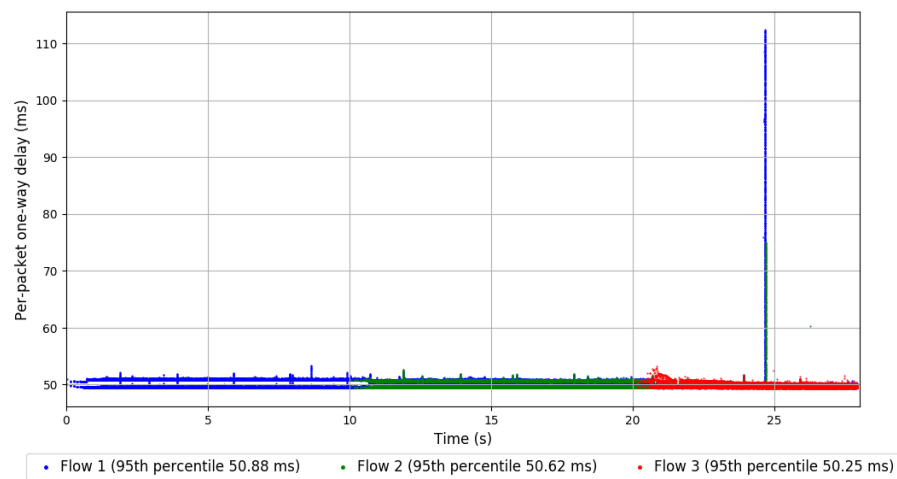
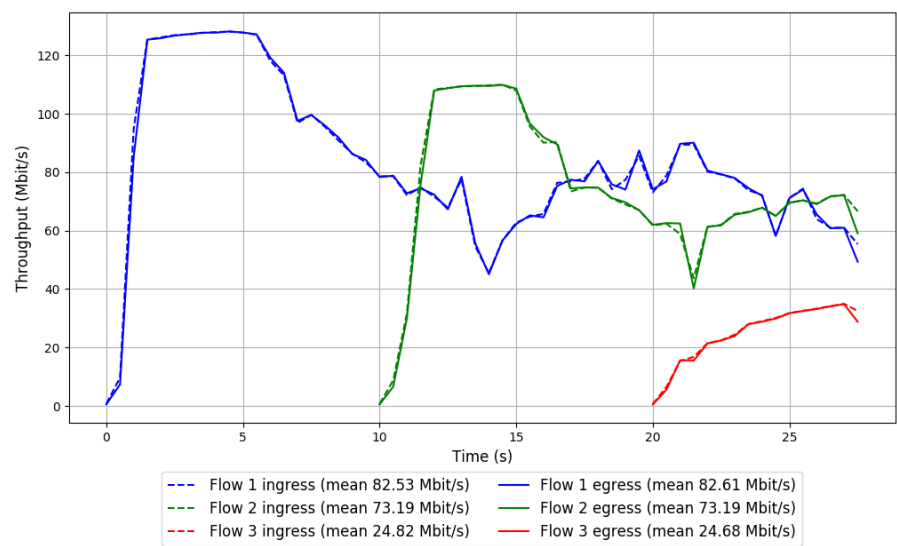
-- Flow 3:

Average throughput: 24.68 Mbit/s

95th percentile per-packet one-way delay: 50.250 ms

Loss rate: 1.84%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-12 05:36:48

End at: 2017-12-12 05:37:18

Below is generated by plot.py at 2017-12-12 10:10:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 159.13 Mbit/s

95th percentile per-packet one-way delay: 50.614 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 83.94 Mbit/s

95th percentile per-packet one-way delay: 50.545 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 78.98 Mbit/s

95th percentile per-packet one-way delay: 50.653 ms

Loss rate: 0.73%

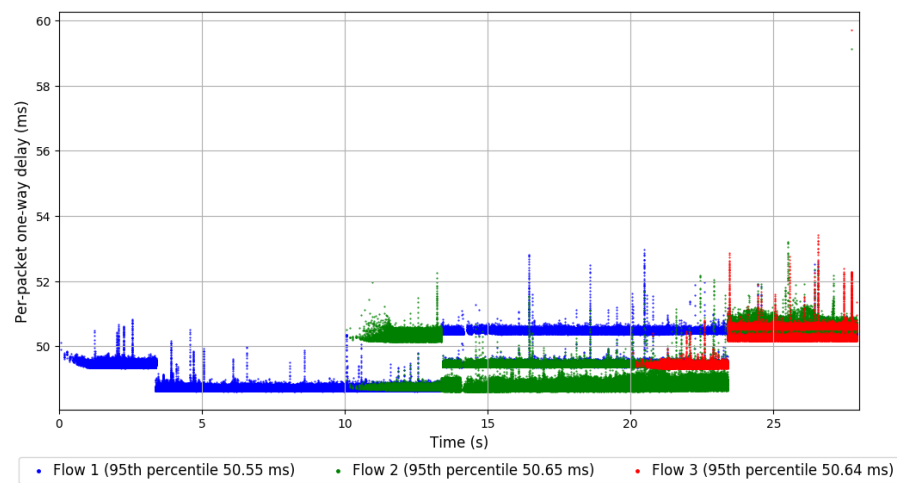
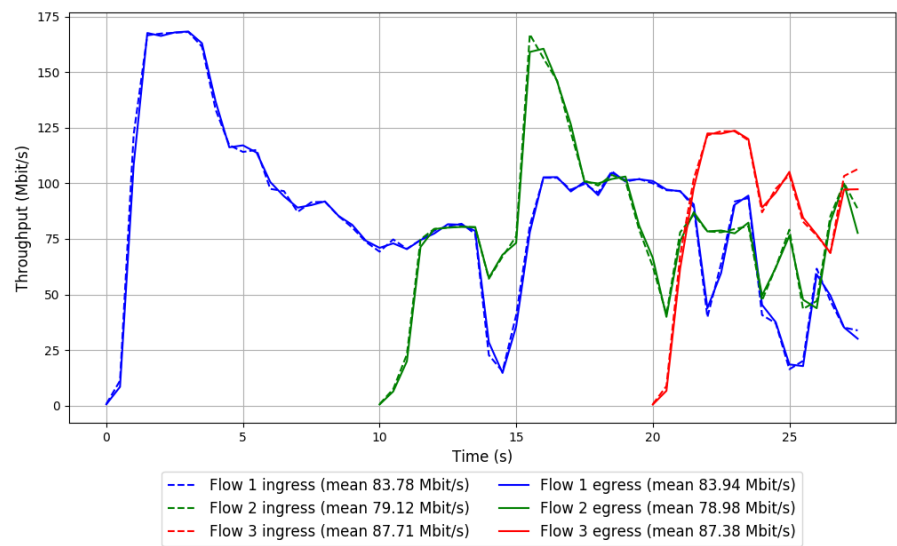
-- Flow 3:

Average throughput: 87.38 Mbit/s

95th percentile per-packet one-way delay: 50.639 ms

Loss rate: 1.62%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-12 05:49:21

End at: 2017-12-12 05:49:51

Below is generated by plot.py at 2017-12-12 10:10:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 159.80 Mbit/s

95th percentile per-packet one-way delay: 50.508 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 79.64 Mbit/s

95th percentile per-packet one-way delay: 50.520 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 87.68 Mbit/s

95th percentile per-packet one-way delay: 49.733 ms

Loss rate: 0.52%

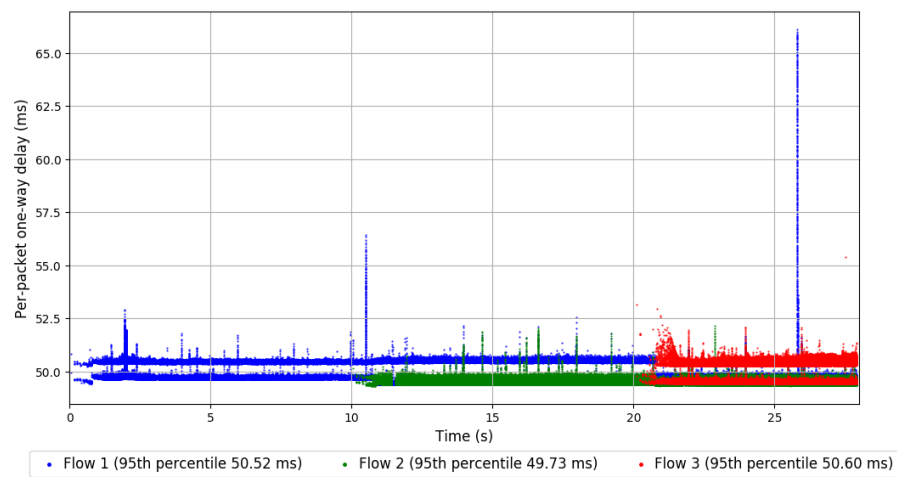
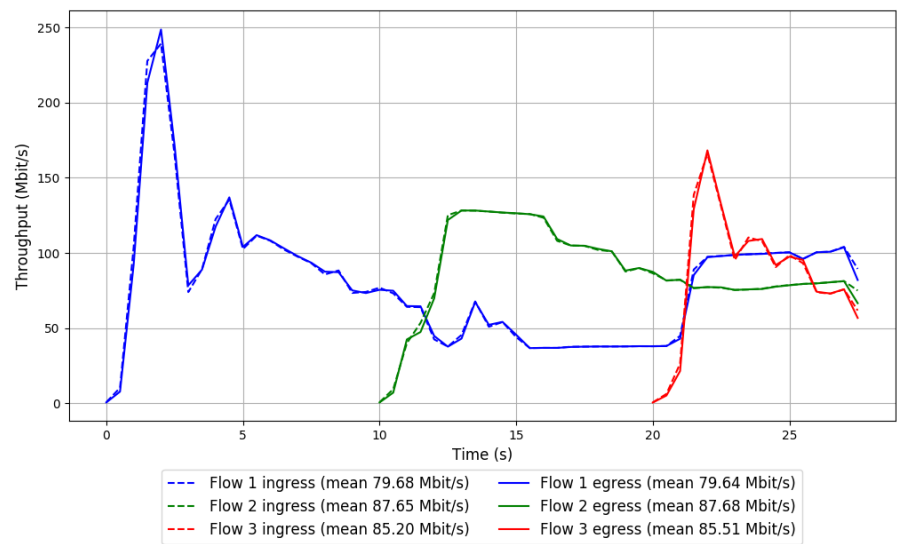
-- Flow 3:

Average throughput: 85.51 Mbit/s

95th percentile per-packet one-way delay: 50.605 ms

Loss rate: 0.92%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-12 06:01:40

End at: 2017-12-12 06:02:10

Below is generated by plot.py at 2017-12-12 10:10:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 141.36 Mbit/s

95th percentile per-packet one-way delay: 50.629 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 86.34 Mbit/s

95th percentile per-packet one-way delay: 50.376 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 66.50 Mbit/s

95th percentile per-packet one-way delay: 50.674 ms

Loss rate: 0.35%

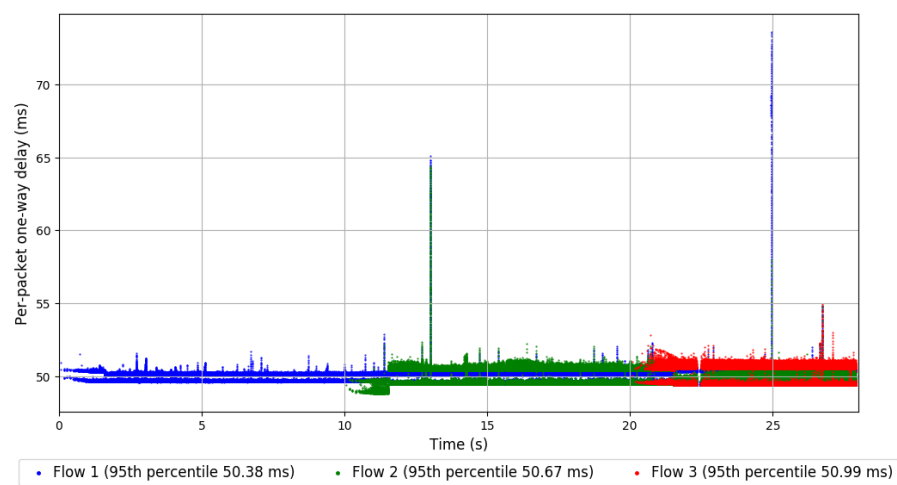
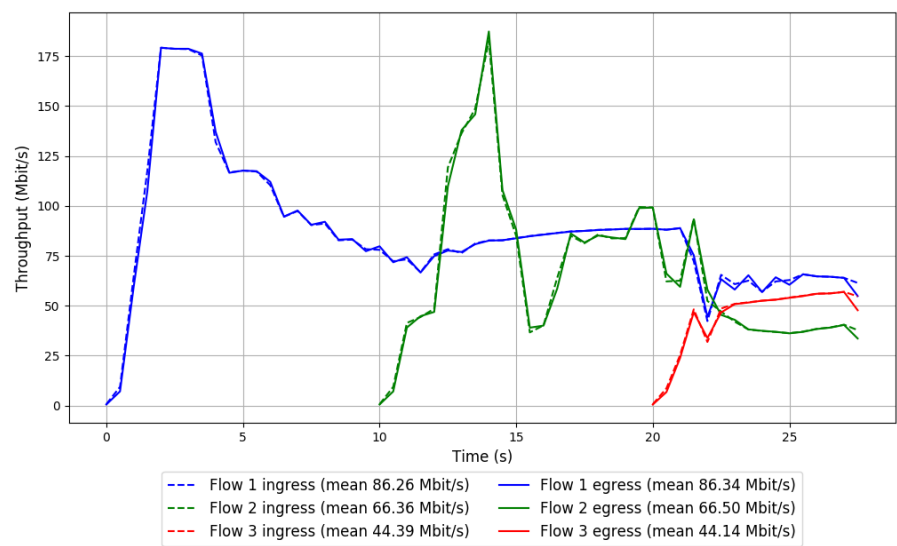
-- Flow 3:

Average throughput: 44.14 Mbit/s

95th percentile per-packet one-way delay: 50.992 ms

Loss rate: 1.79%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-12 06:14:10

End at: 2017-12-12 06:14:40

Below is generated by plot.py at 2017-12-12 10:10:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.70 Mbit/s

95th percentile per-packet one-way delay: 50.690 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 72.02 Mbit/s

95th percentile per-packet one-way delay: 50.341 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 74.28 Mbit/s

95th percentile per-packet one-way delay: 50.756 ms

Loss rate: 0.46%

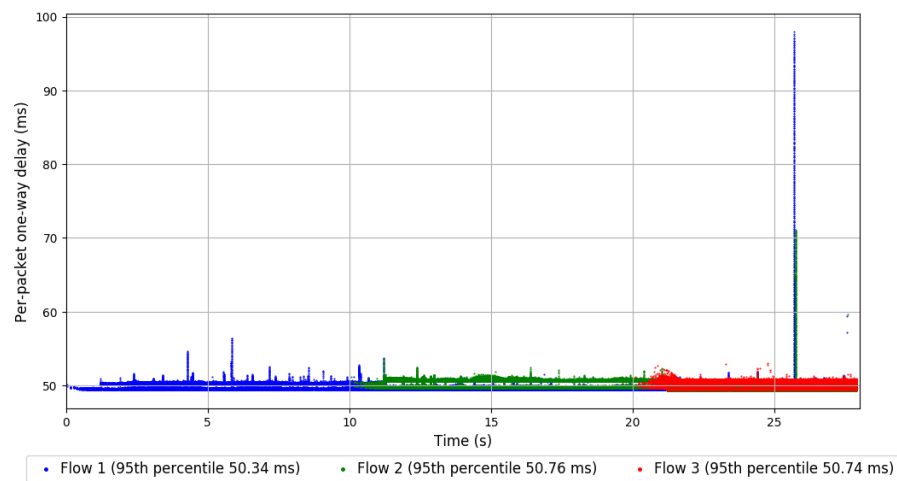
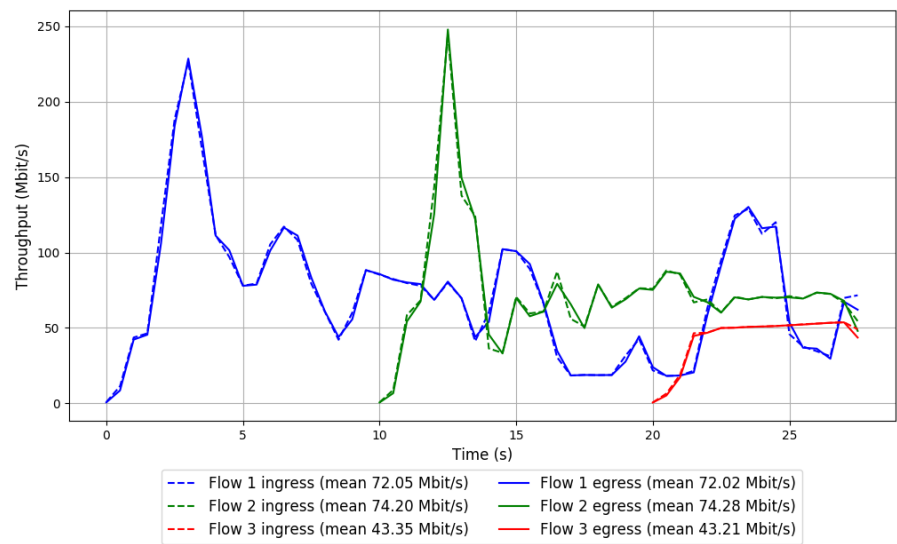
-- Flow 3:

Average throughput: 43.21 Mbit/s

95th percentile per-packet one-way delay: 50.740 ms

Loss rate: 1.58%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-12 06:26:26

End at: 2017-12-12 06:26:56

Below is generated by plot.py at 2017-12-12 10:11:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 157.13 Mbit/s

95th percentile per-packet one-way delay: 50.679 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 90.03 Mbit/s

95th percentile per-packet one-way delay: 50.679 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 78.15 Mbit/s

95th percentile per-packet one-way delay: 50.398 ms

Loss rate: 0.47%

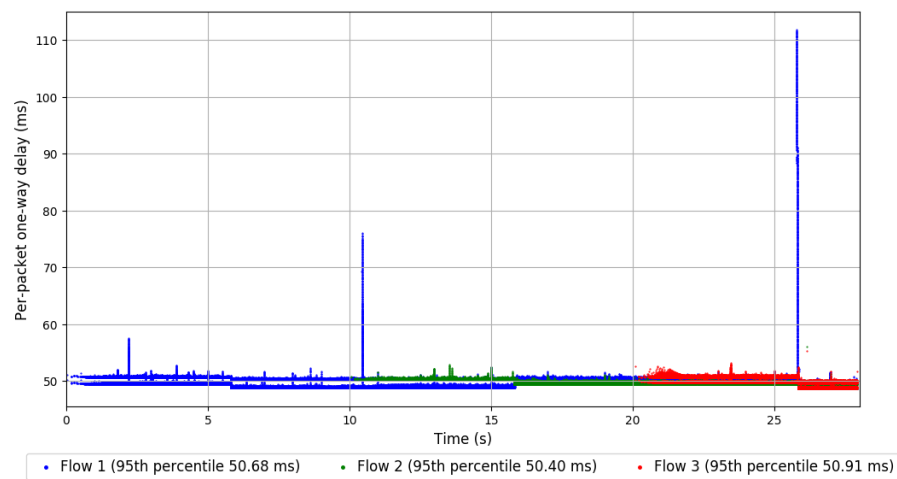
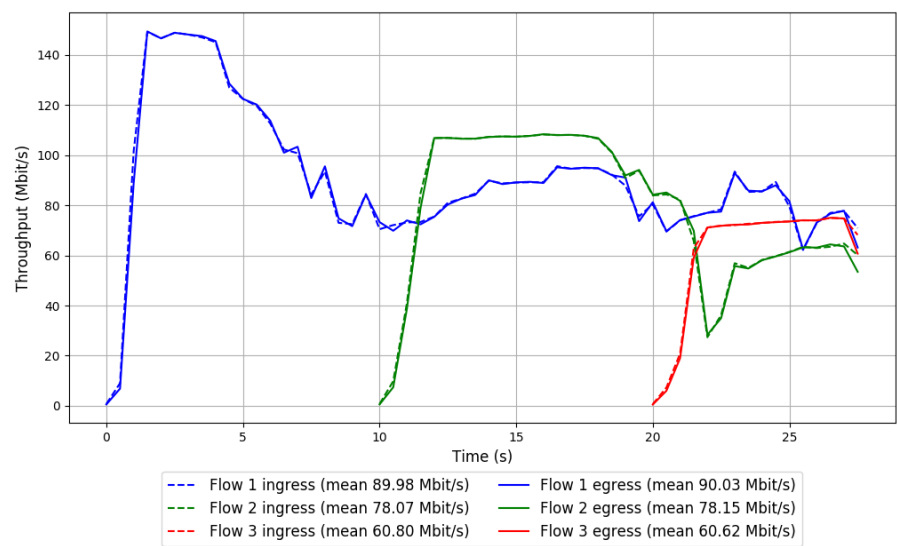
-- Flow 3:

Average throughput: 60.62 Mbit/s

95th percentile per-packet one-way delay: 50.911 ms

Loss rate: 1.53%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-12 06:38:53

End at: 2017-12-12 06:39:23

Below is generated by plot.py at 2017-12-12 10:11:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.48 Mbit/s

95th percentile per-packet one-way delay: 50.561 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 78.50 Mbit/s

95th percentile per-packet one-way delay: 50.554 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 73.01 Mbit/s

95th percentile per-packet one-way delay: 50.611 ms

Loss rate: 0.42%

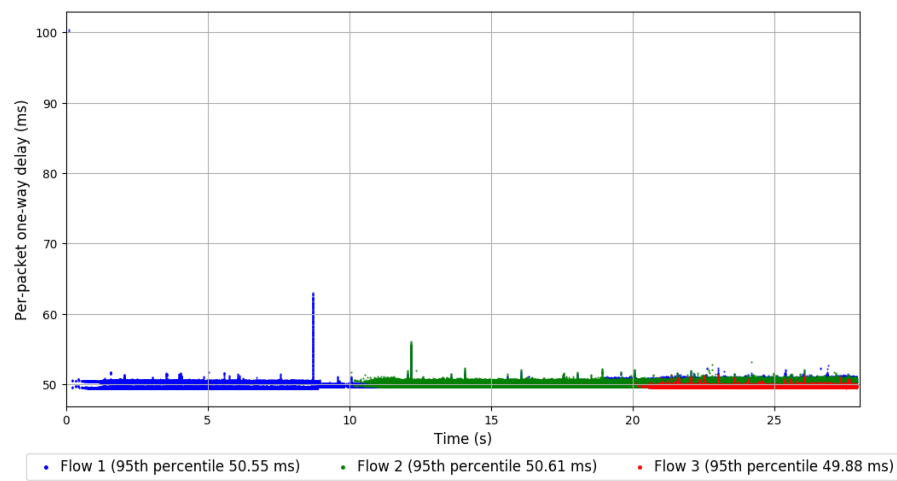
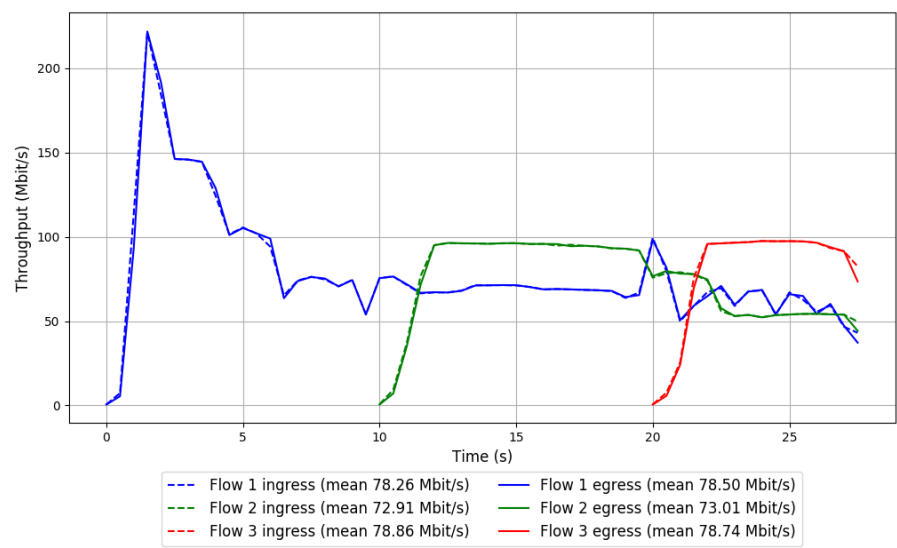
-- Flow 3:

Average throughput: 78.74 Mbit/s

95th percentile per-packet one-way delay: 49.879 ms

Loss rate: 1.44%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-12 06:51:19

End at: 2017-12-12 06:51:49

Below is generated by plot.py at 2017-12-12 10:11:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.69 Mbit/s

95th percentile per-packet one-way delay: 50.614 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 74.61 Mbit/s

95th percentile per-packet one-way delay: 50.637 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 68.31 Mbit/s

95th percentile per-packet one-way delay: 50.477 ms

Loss rate: 0.60%

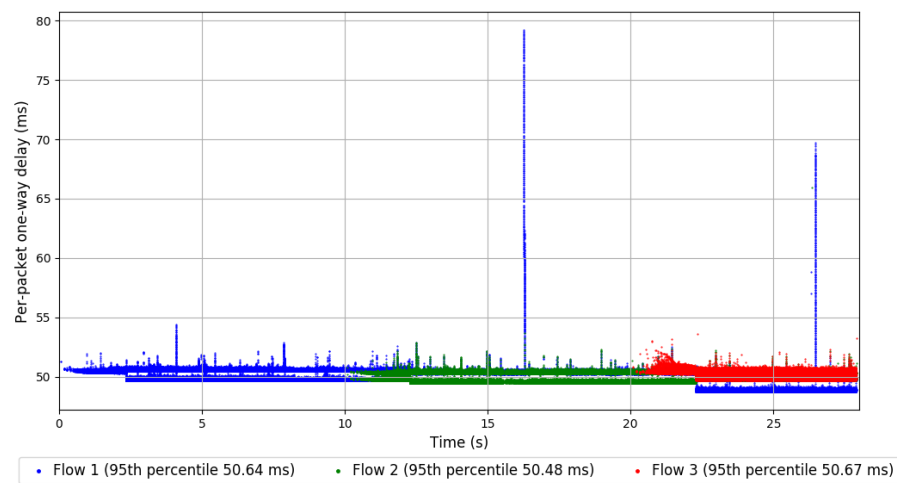
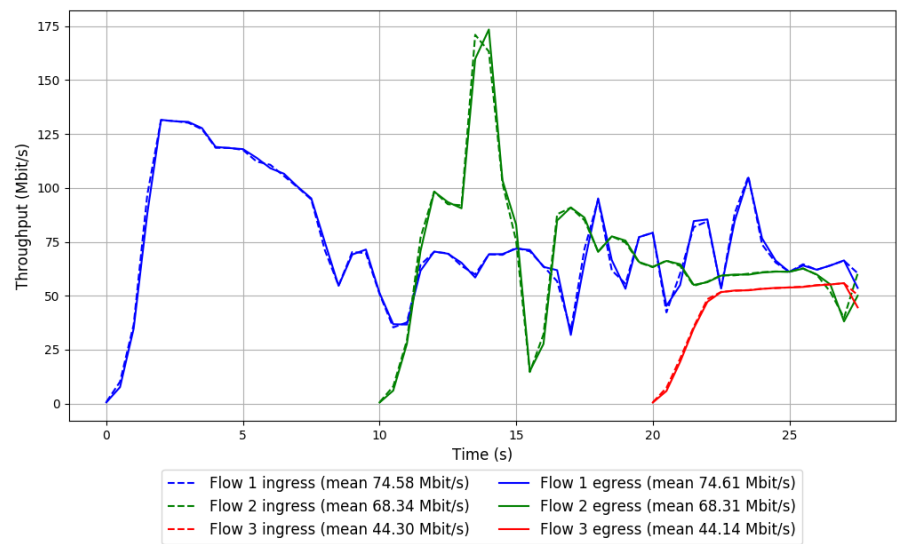
-- Flow 3:

Average throughput: 44.14 Mbit/s

95th percentile per-packet one-way delay: 50.670 ms

Loss rate: 1.60%

Run 10: Report of Copa — Data Link

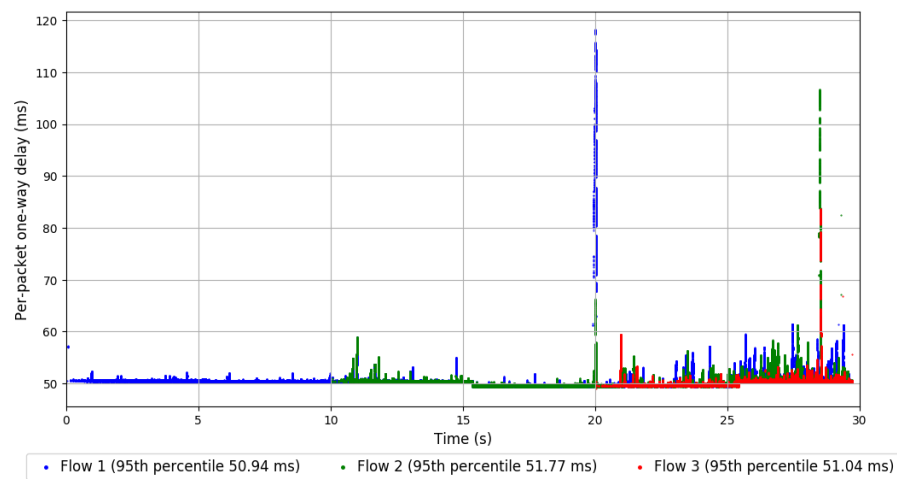
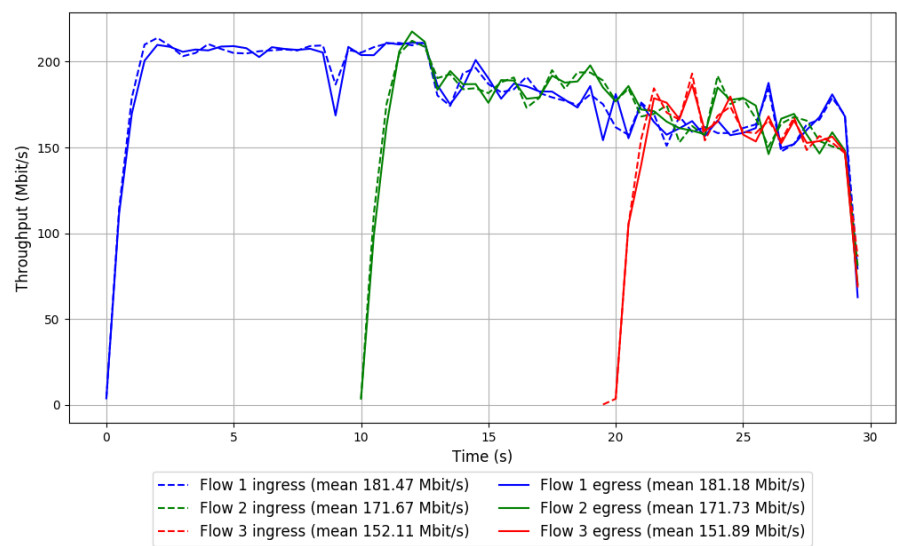


```
Run 1: Statistics of Indigo

Start at: 2017-12-12 04:51:28
End at: 2017-12-12 04:51:58

# Below is generated by plot.py at 2017-12-12 10:14:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 344.29 Mbit/s
95th percentile per-packet one-way delay: 51.253 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 181.18 Mbit/s
95th percentile per-packet one-way delay: 50.939 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 171.73 Mbit/s
95th percentile per-packet one-way delay: 51.765 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 151.89 Mbit/s
95th percentile per-packet one-way delay: 51.039 ms
Loss rate: 1.10%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-12 05:04:07

End at: 2017-12-12 05:04:37

Below is generated by plot.py at 2017-12-12 10:16:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 343.39 Mbit/s

95th percentile per-packet one-way delay: 50.679 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 168.33 Mbit/s

95th percentile per-packet one-way delay: 50.694 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 165.78 Mbit/s

95th percentile per-packet one-way delay: 50.745 ms

Loss rate: 0.41%

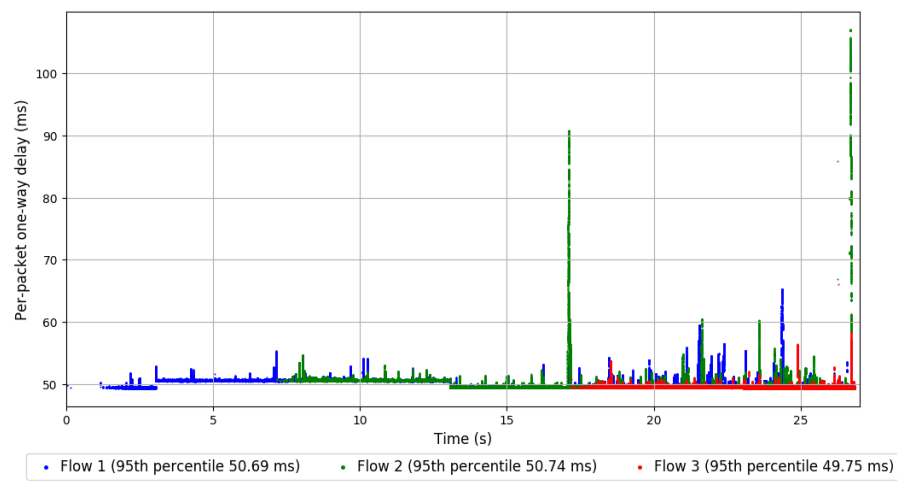
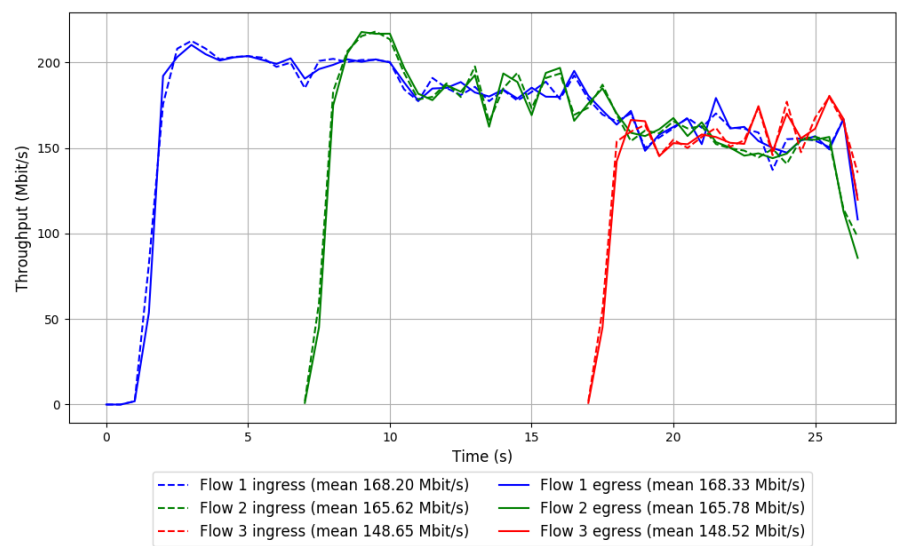
-- Flow 3:

Average throughput: 148.52 Mbit/s

95th percentile per-packet one-way delay: 49.749 ms

Loss rate: 1.12%

Run 2: Report of Indigo — Data Link

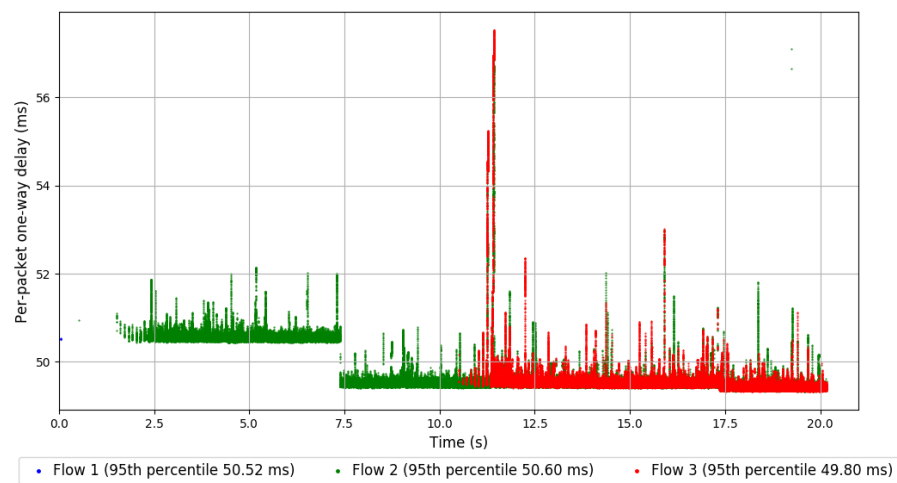
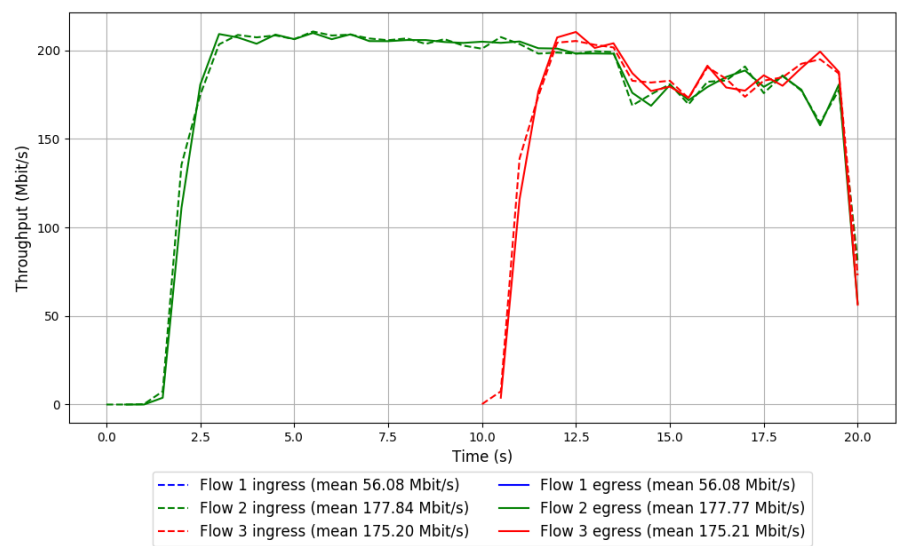


Run 3: Statistics of Indigo

Start at: 2017-12-12 05:16:27

End at: 2017-12-12 05:16:57

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-12 05:28:46

End at: 2017-12-12 05:29:16

Below is generated by plot.py at 2017-12-12 10:16:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.15 Mbit/s

95th percentile per-packet one-way delay: 50.880 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 171.18 Mbit/s

95th percentile per-packet one-way delay: 50.922 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 166.40 Mbit/s

95th percentile per-packet one-way delay: 50.896 ms

Loss rate: 0.46%

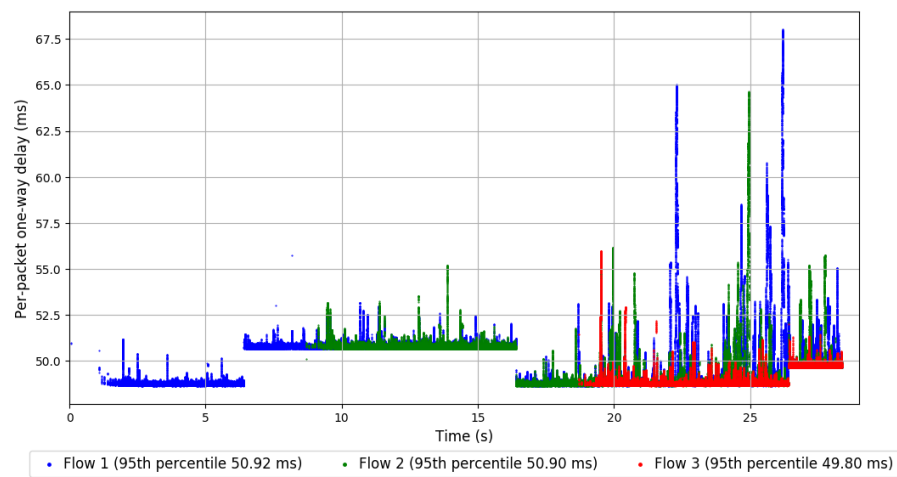
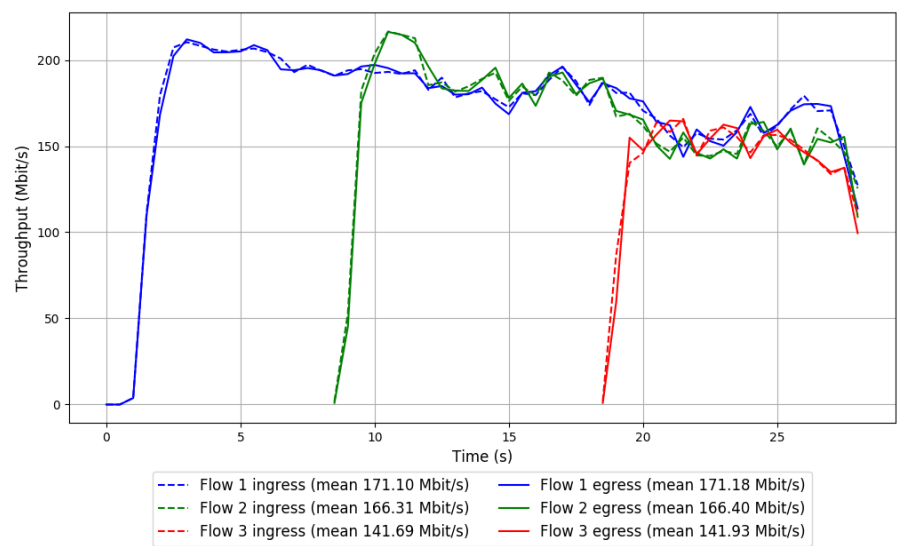
-- Flow 3:

Average throughput: 141.93 Mbit/s

95th percentile per-packet one-way delay: 49.804 ms

Loss rate: 0.87%

Run 4: Report of Indigo — Data Link

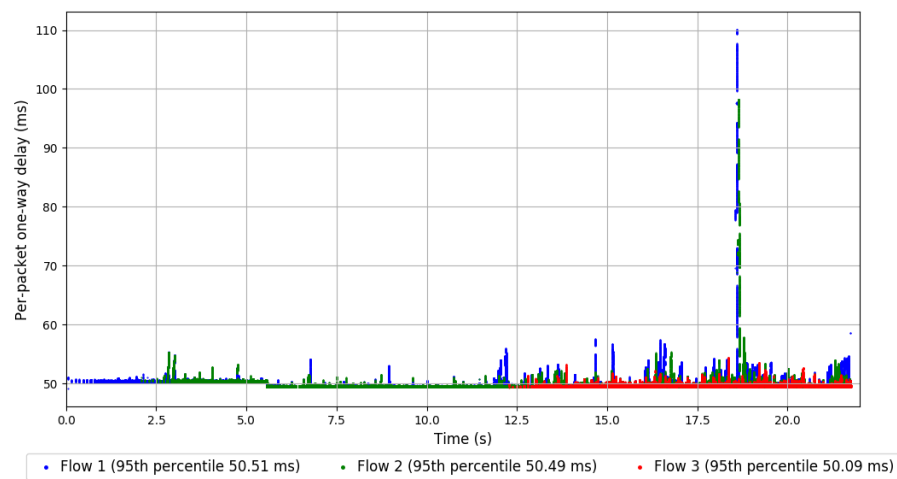
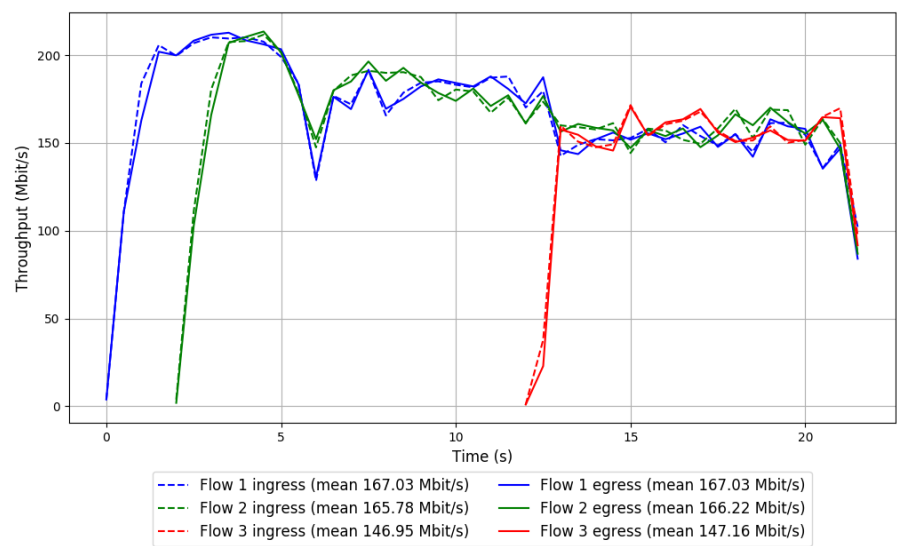


Run 5: Statistics of Indigo

Start at: 2017-12-12 05:41:20

End at: 2017-12-12 05:41:50

Run 5: Report of Indigo — Data Link

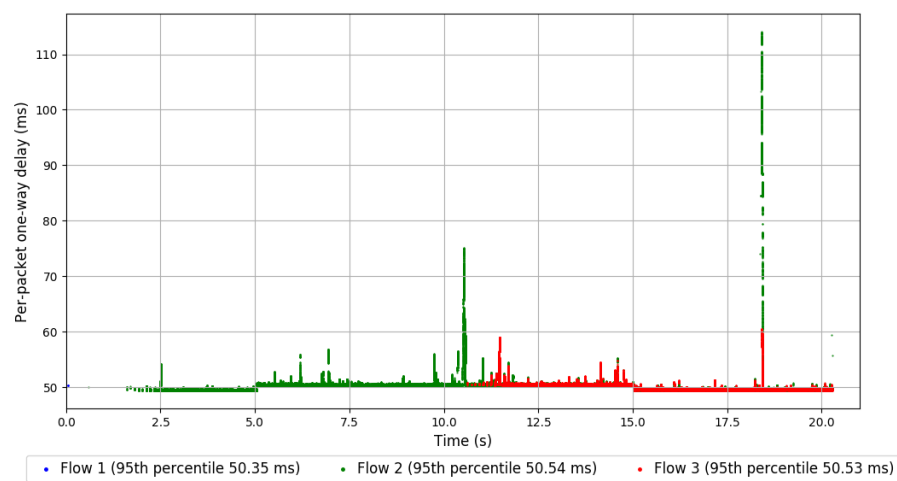
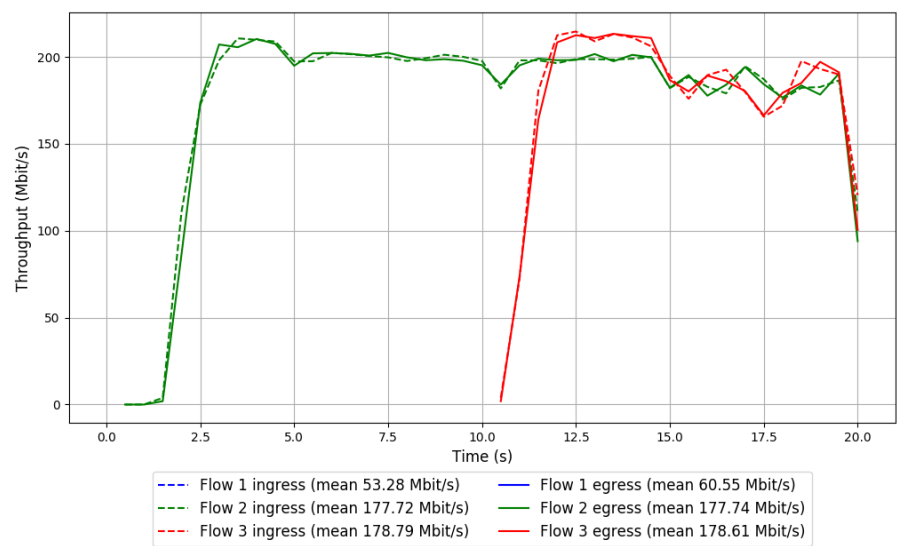


Run 6: Statistics of Indigo

Start at: 2017-12-12 05:53:49

End at: 2017-12-12 05:54:19

Run 6: Report of Indigo — Data Link

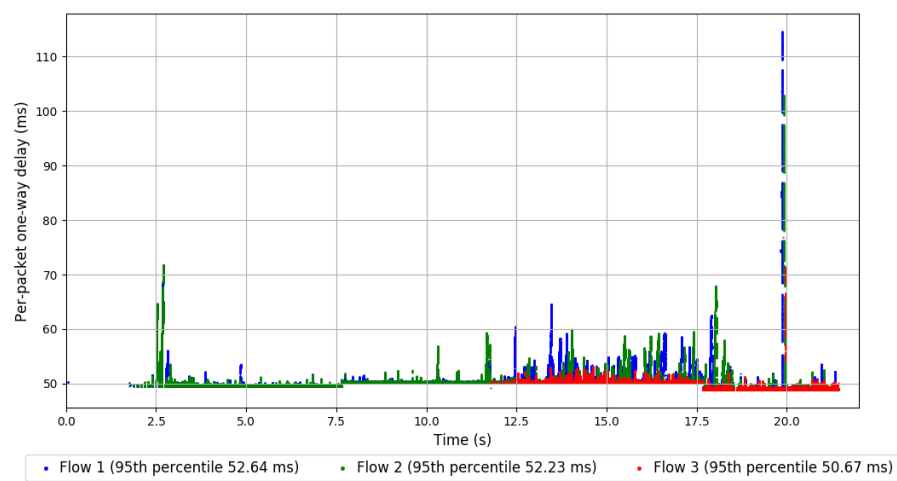
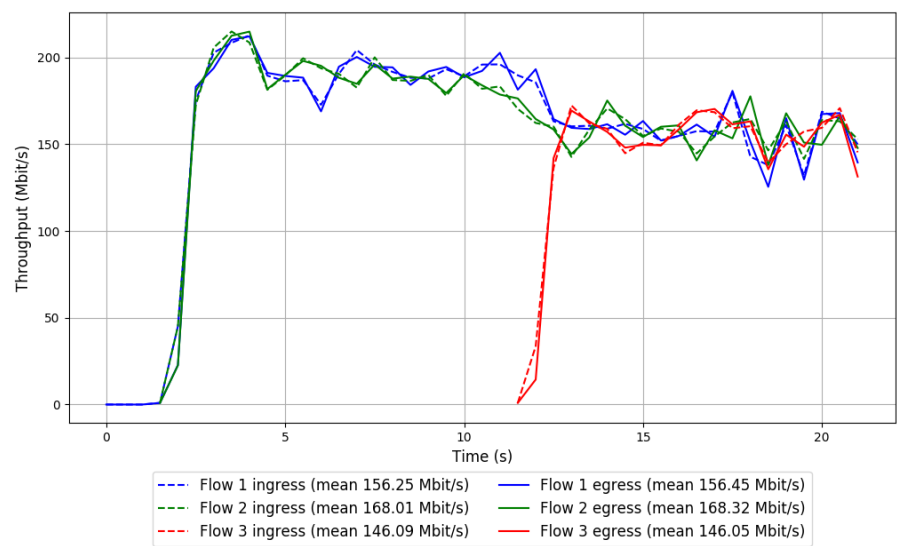


Run 7: Statistics of Indigo

Start at: 2017-12-12 06:06:07

End at: 2017-12-12 06:06:37

Run 7: Report of Indigo — Data Link

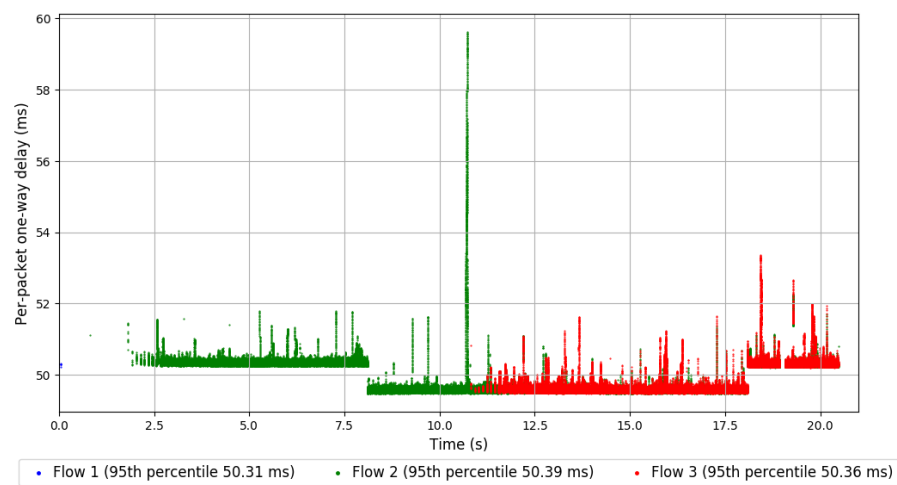
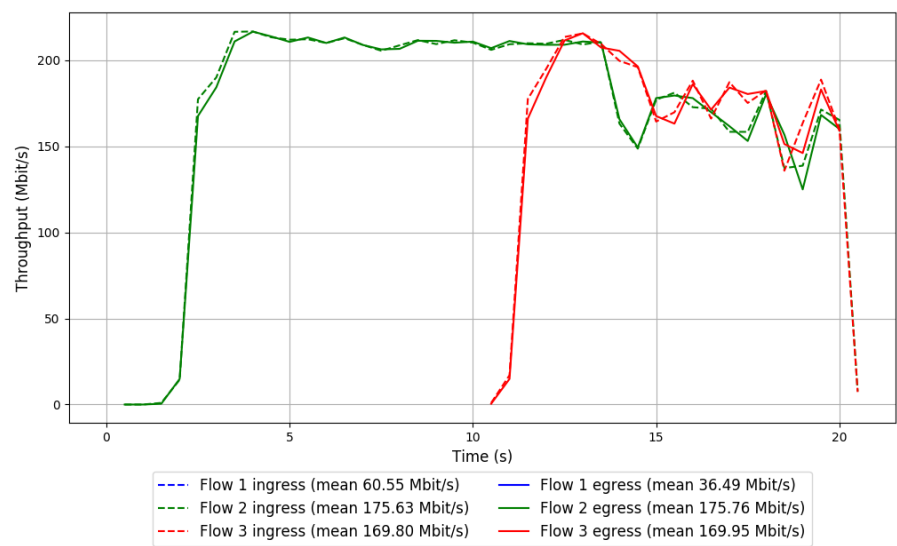


Run 8: Statistics of Indigo

Start at: 2017-12-12 06:18:36

End at: 2017-12-12 06:19:06

Run 8: Report of Indigo — Data Link

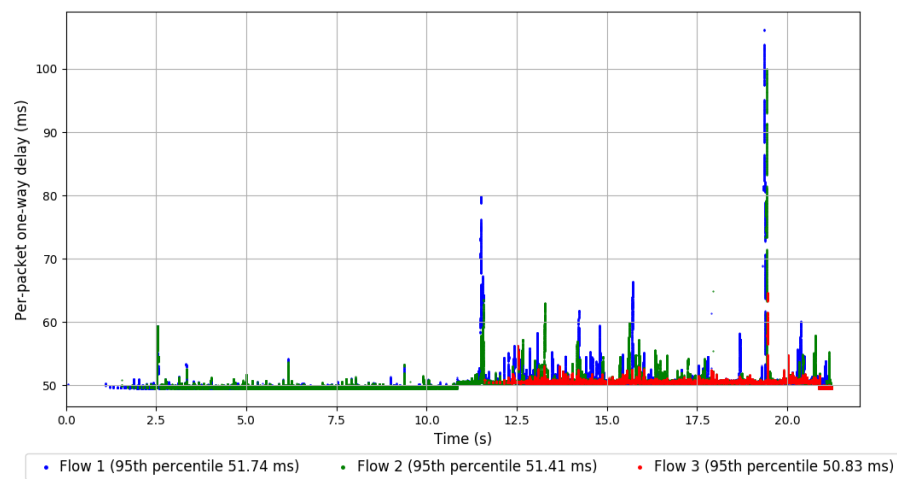
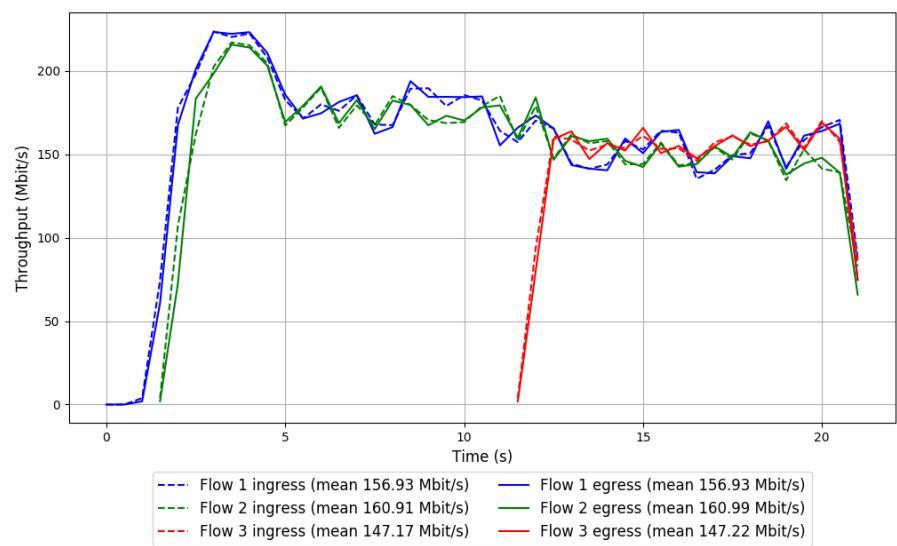


Run 9: Statistics of Indigo

Start at: 2017-12-12 06:30:54

End at: 2017-12-12 06:31:24

Run 9: Report of Indigo — Data Link

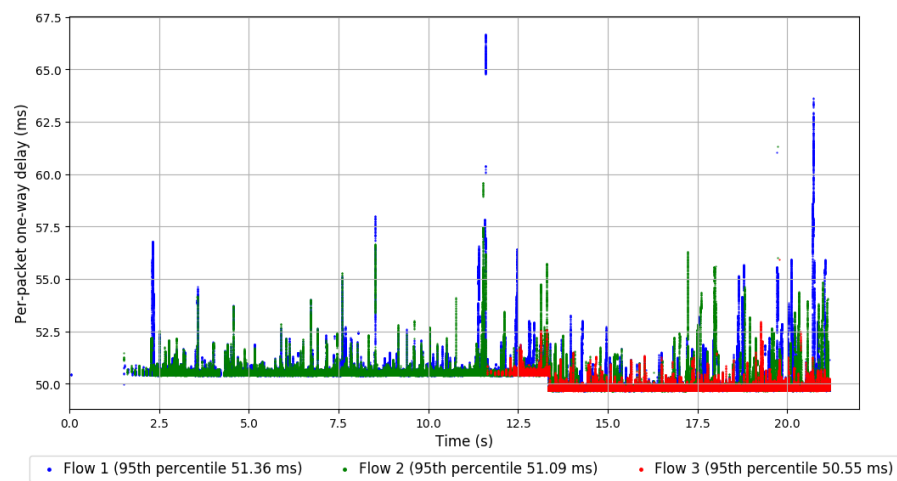
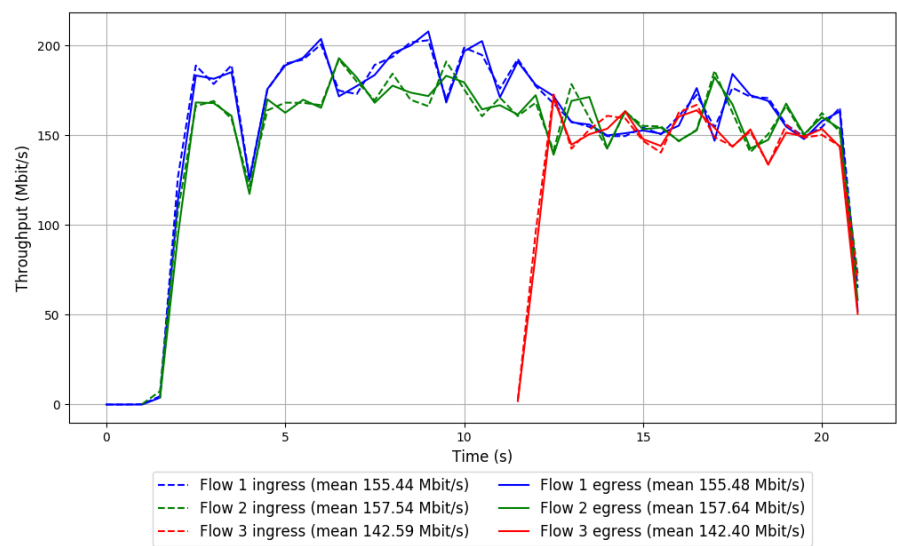


Run 10: Statistics of Indigo

Start at: 2017-12-12 06:43:22

End at: 2017-12-12 06:43:52

Run 10: Report of Indigo — Data Link

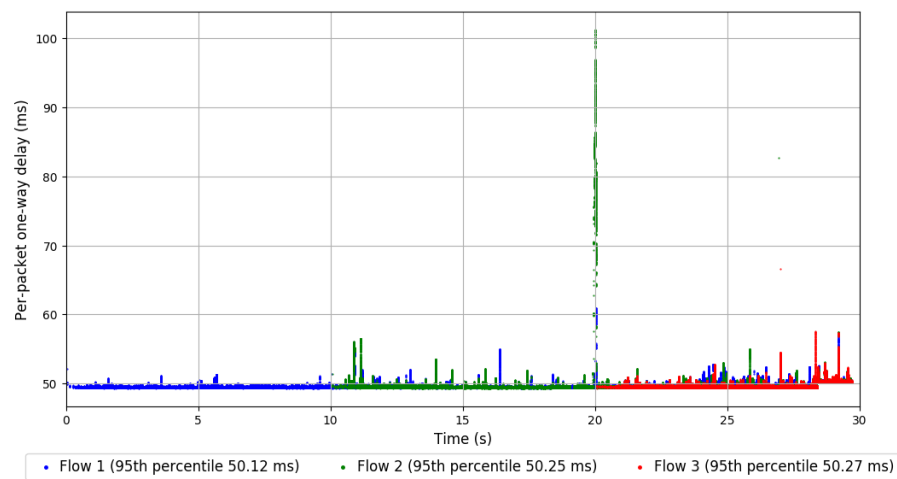
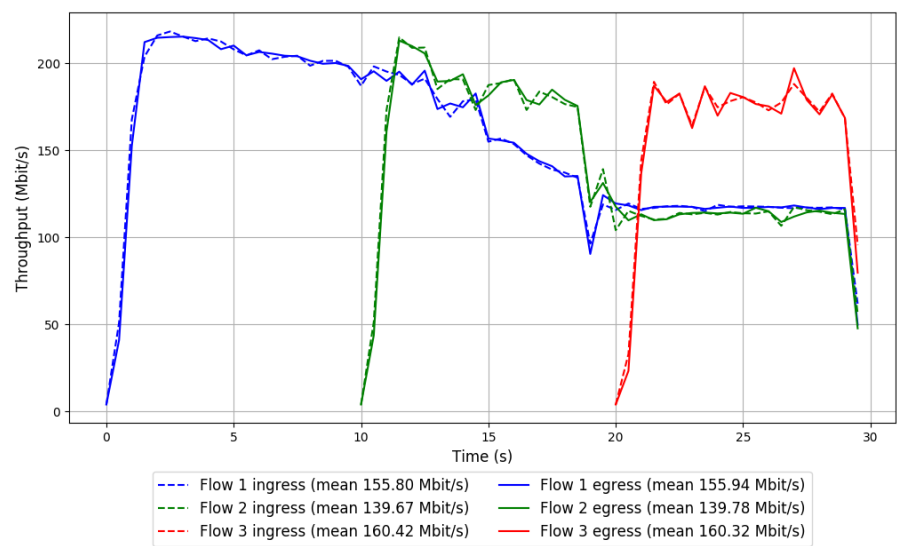


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-12 05:01:15
End at: 2017-12-12 05:01:45

# Below is generated by plot.py at 2017-12-12 10:20:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 300.70 Mbit/s
95th percentile per-packet one-way delay: 50.235 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 155.94 Mbit/s
95th percentile per-packet one-way delay: 50.122 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 139.78 Mbit/s
95th percentile per-packet one-way delay: 50.247 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 160.32 Mbit/s
95th percentile per-packet one-way delay: 50.273 ms
Loss rate: 1.07%
```

Run 1: Report of Indigo-calib — Data Link

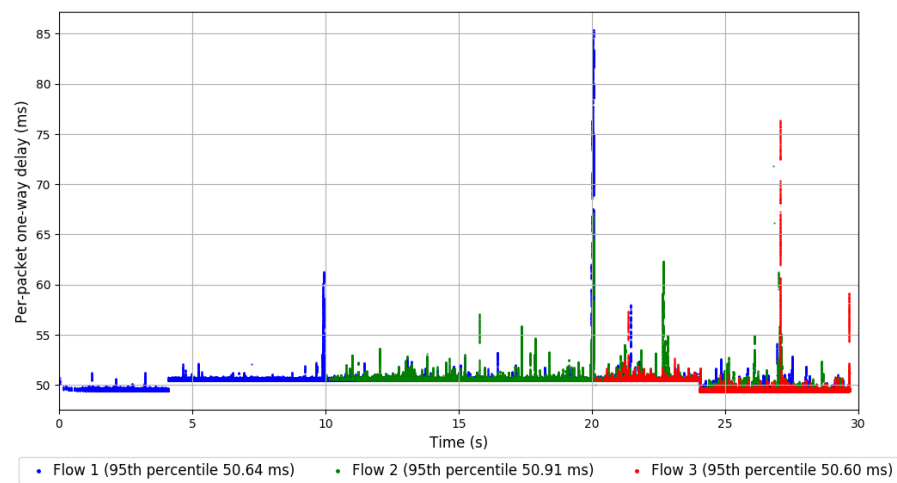
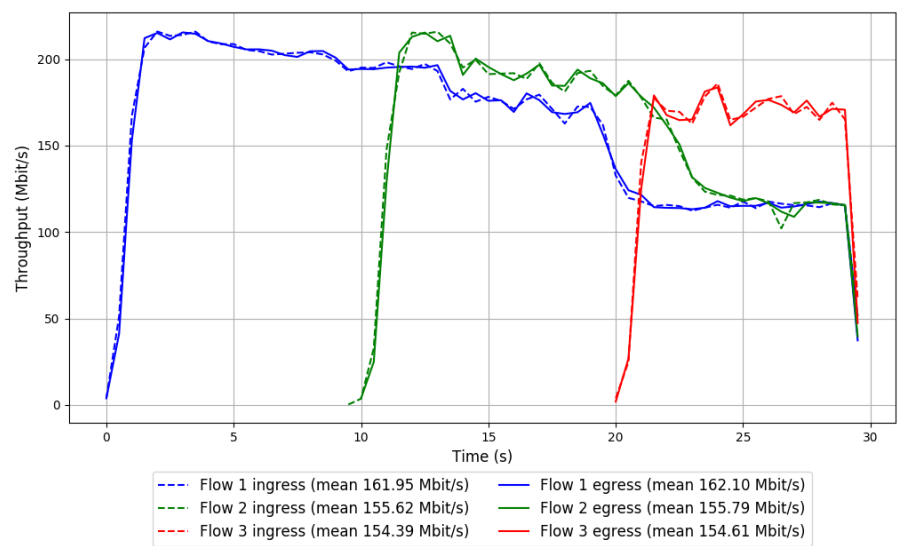


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-12 05:13:39
End at: 2017-12-12 05:14:09

# Below is generated by plot.py at 2017-12-12 10:20:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 315.12 Mbit/s
95th percentile per-packet one-way delay: 50.690 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 162.10 Mbit/s
95th percentile per-packet one-way delay: 50.642 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 155.79 Mbit/s
95th percentile per-packet one-way delay: 50.913 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 154.61 Mbit/s
95th percentile per-packet one-way delay: 50.600 ms
Loss rate: 0.91%
```

Run 2: Report of Indigo-calib — Data Link

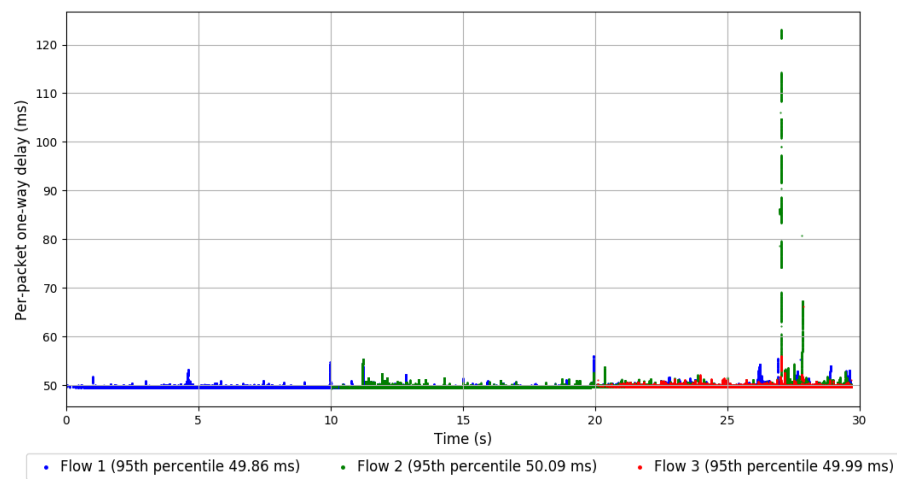
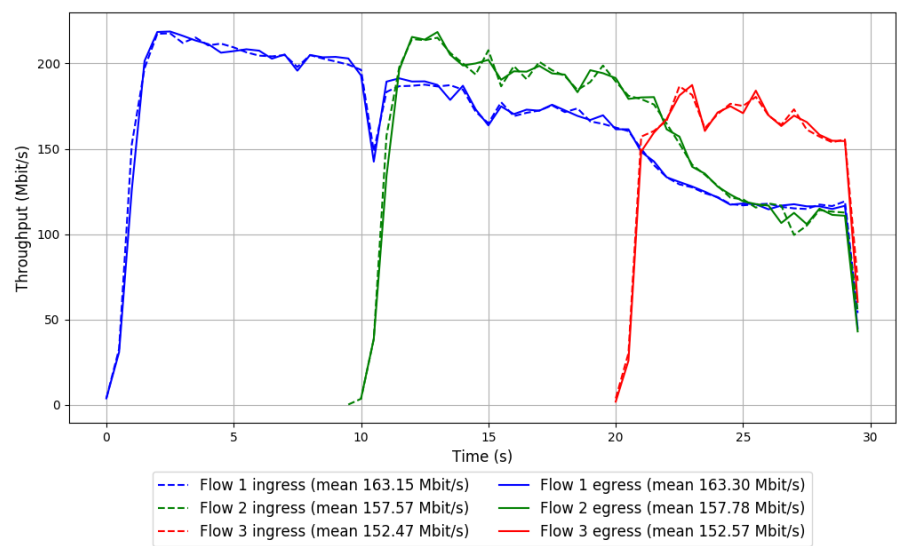


```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-12 05:25:54
End at: 2017-12-12 05:26:24

# Below is generated by plot.py at 2017-12-12 10:21:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.30 Mbit/s
95th percentile per-packet one-way delay: 49.948 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 163.30 Mbit/s
95th percentile per-packet one-way delay: 49.859 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 157.78 Mbit/s
95th percentile per-packet one-way delay: 50.090 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 152.57 Mbit/s
95th percentile per-packet one-way delay: 49.991 ms
Loss rate: 0.96%
```


Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-12 05:38:31

End at: 2017-12-12 05:39:01

Below is generated by plot.py at 2017-12-12 10:21:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.16 Mbit/s

95th percentile per-packet one-way delay: 50.847 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 163.36 Mbit/s

95th percentile per-packet one-way delay: 50.846 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 152.10 Mbit/s

95th percentile per-packet one-way delay: 50.846 ms

Loss rate: 0.37%

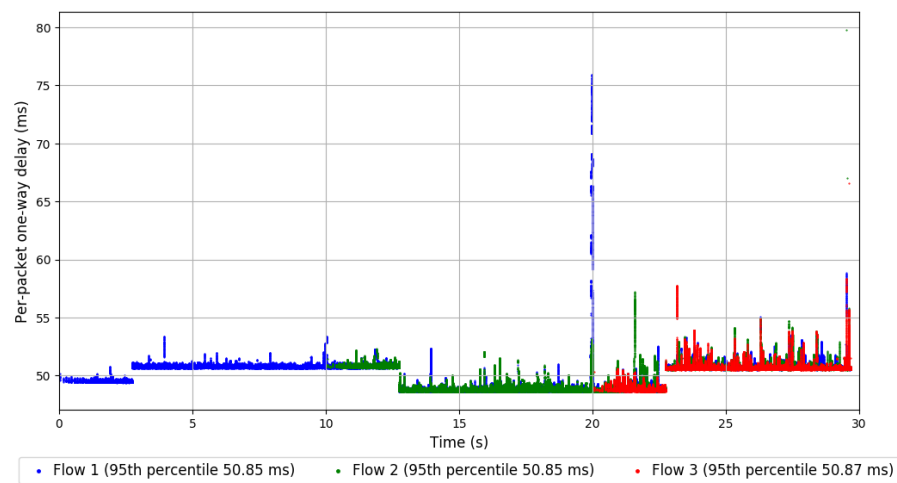
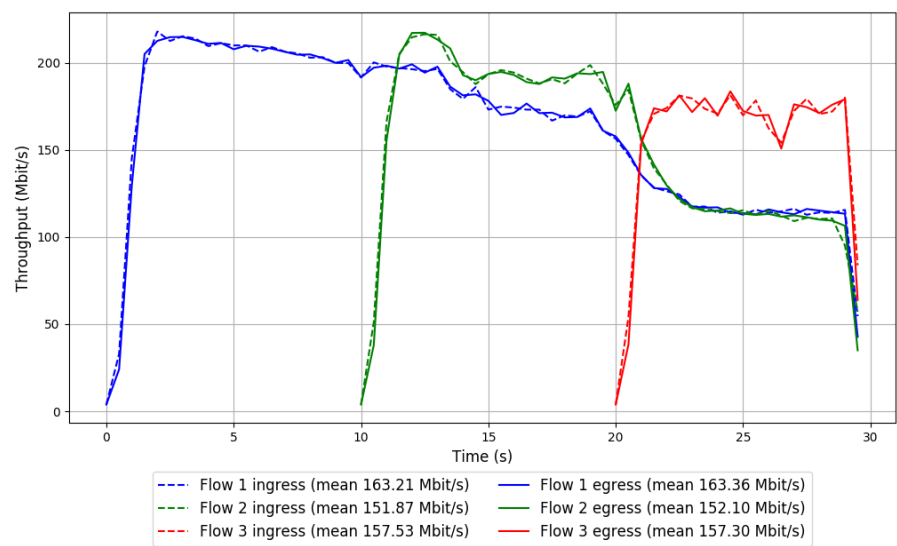
-- Flow 3:

Average throughput: 157.30 Mbit/s

95th percentile per-packet one-way delay: 50.874 ms

Loss rate: 1.18%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-12 05:51:03

End at: 2017-12-12 05:51:33

Below is generated by plot.py at 2017-12-12 10:21:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 300.13 Mbit/s

95th percentile per-packet one-way delay: 50.727 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 162.72 Mbit/s

95th percentile per-packet one-way delay: 50.686 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 145.96 Mbit/s

95th percentile per-packet one-way delay: 50.836 ms

Loss rate: 0.41%

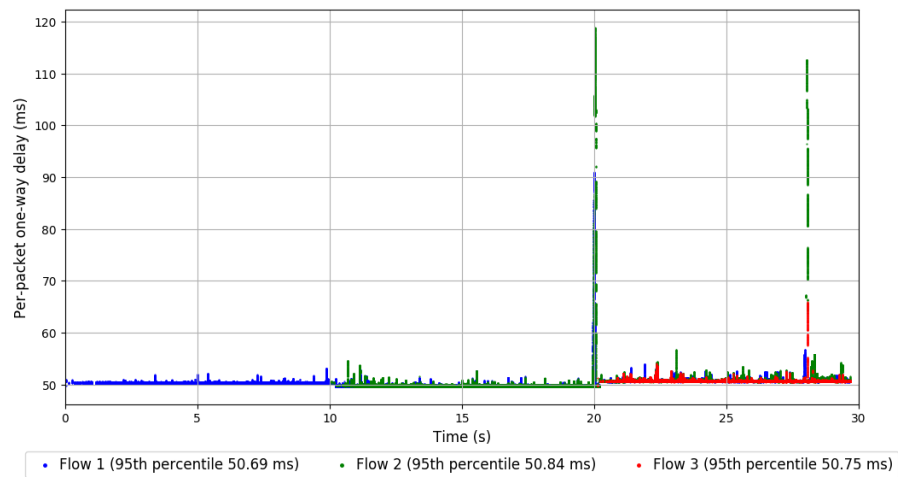
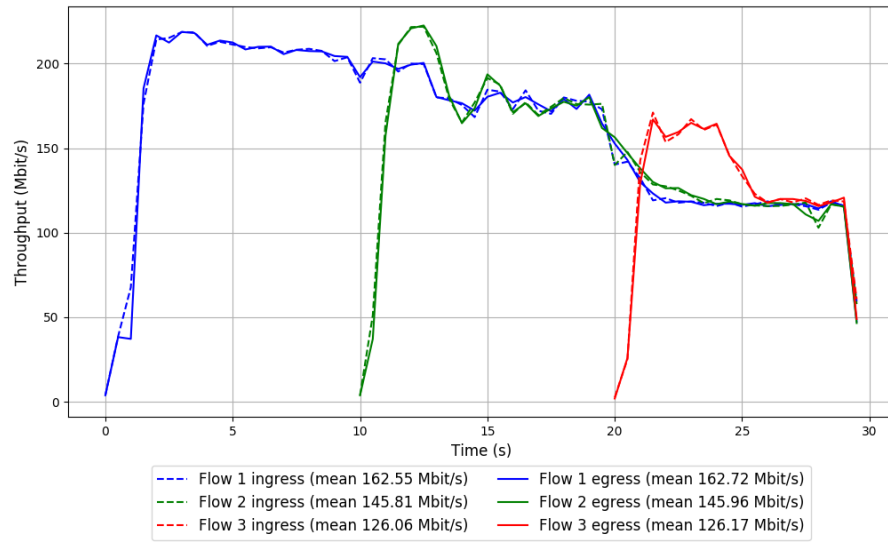
-- Flow 3:

Average throughput: 126.17 Mbit/s

95th percentile per-packet one-way delay: 50.752 ms

Loss rate: 0.96%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-12 06:03:17

End at: 2017-12-12 06:03:47

Below is generated by plot.py at 2017-12-12 10:22:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 308.54 Mbit/s

95th percentile per-packet one-way delay: 50.687 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 161.65 Mbit/s

95th percentile per-packet one-way delay: 50.643 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 150.60 Mbit/s

95th percentile per-packet one-way delay: 50.875 ms

Loss rate: 0.40%

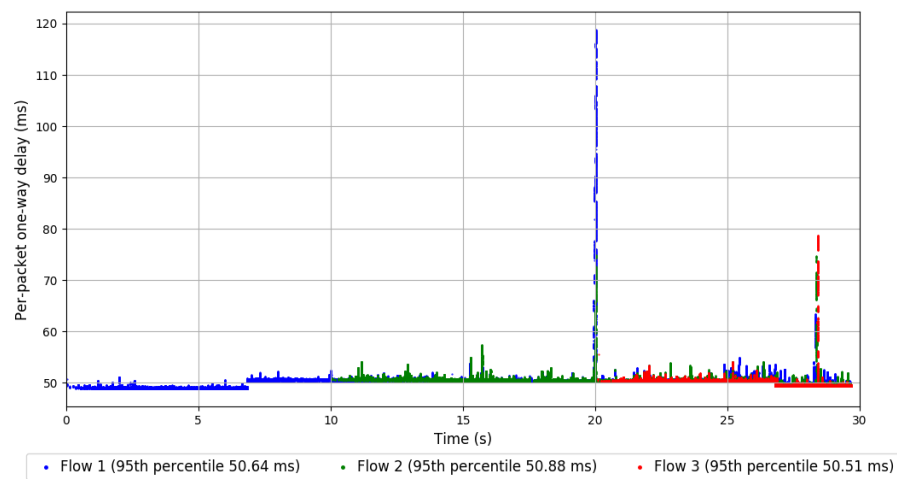
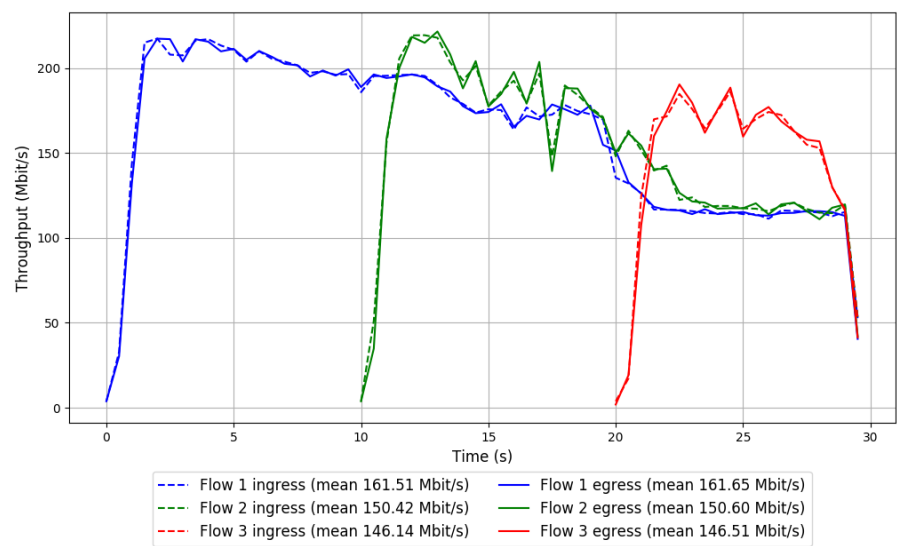
-- Flow 3:

Average throughput: 146.51 Mbit/s

95th percentile per-packet one-way delay: 50.507 ms

Loss rate: 0.79%

Run 6: Report of Indigo-calib — Data Link

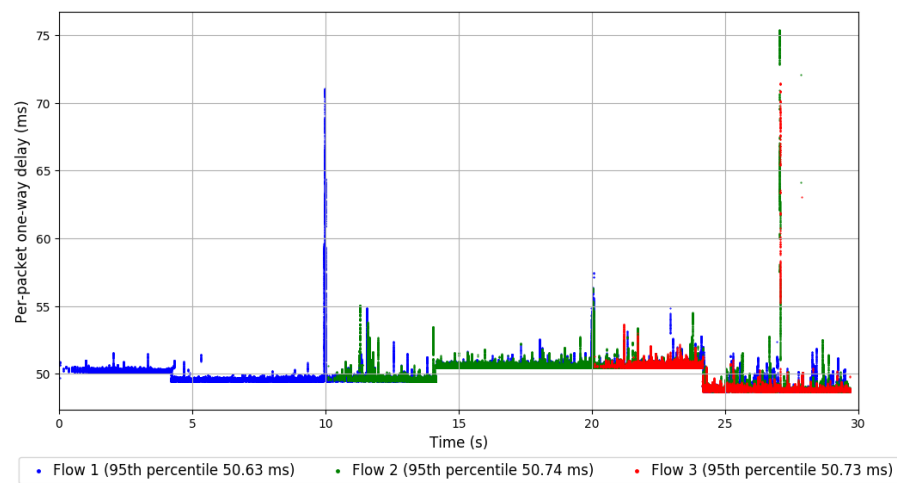
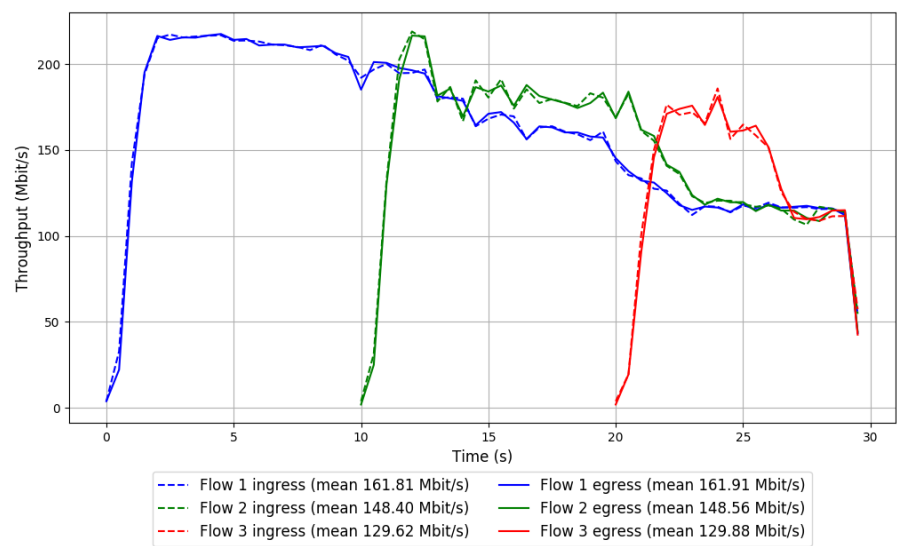


```
Run 7: Statistics of Indigo-calib

Start at: 2017-12-12 06:15:49
End at: 2017-12-12 06:16:19

# Below is generated by plot.py at 2017-12-12 10:22:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 302.11 Mbit/s
95th percentile per-packet one-way delay: 50.670 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 161.91 Mbit/s
95th percentile per-packet one-way delay: 50.626 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 148.56 Mbit/s
95th percentile per-packet one-way delay: 50.738 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 129.88 Mbit/s
95th percentile per-packet one-way delay: 50.727 ms
Loss rate: 0.85%
```


Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-12 06:28:06

End at: 2017-12-12 06:28:36

Below is generated by plot.py at 2017-12-12 10:23:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 318.12 Mbit/s

95th percentile per-packet one-way delay: 49.951 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 172.29 Mbit/s

95th percentile per-packet one-way delay: 49.915 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 152.50 Mbit/s

95th percentile per-packet one-way delay: 50.040 ms

Loss rate: 0.37%

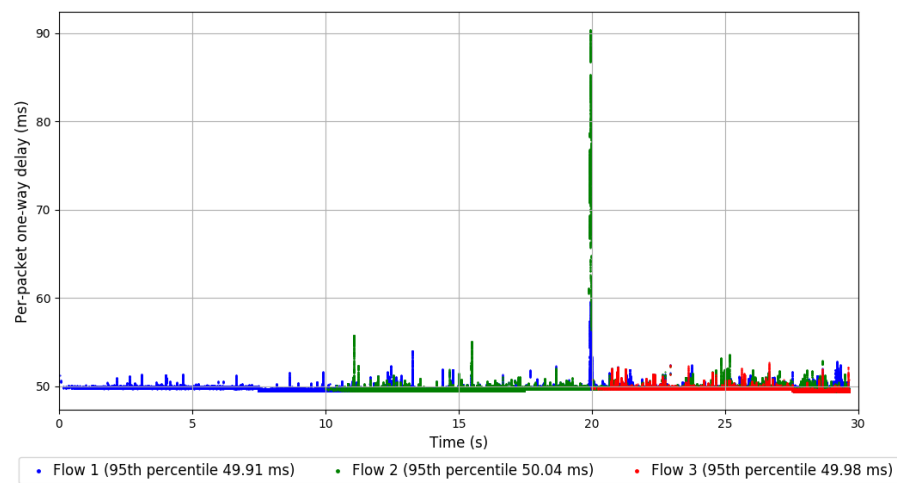
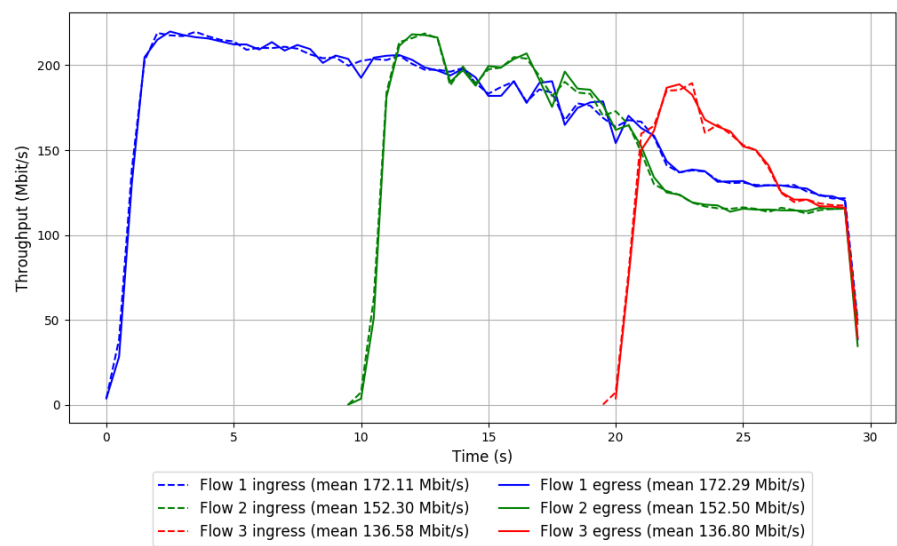
-- Flow 3:

Average throughput: 136.80 Mbit/s

95th percentile per-packet one-way delay: 49.977 ms

Loss rate: 0.86%

Run 8: Report of Indigo-calib — Data Link

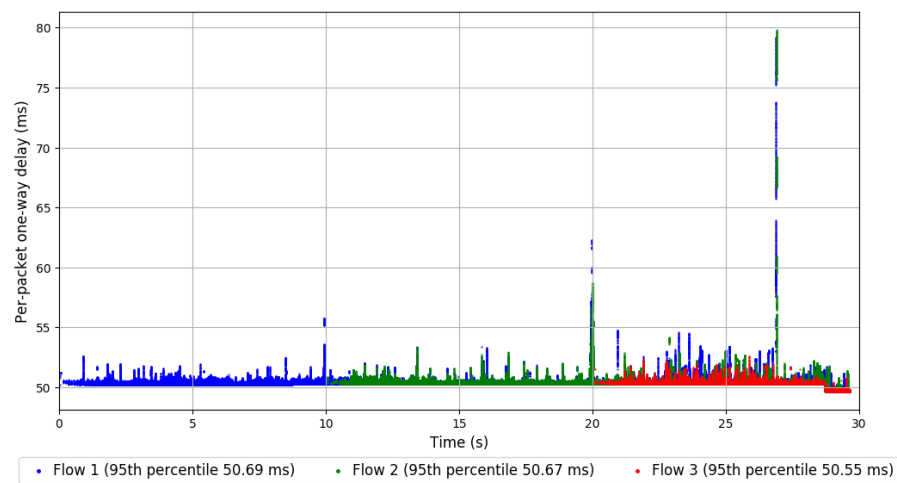
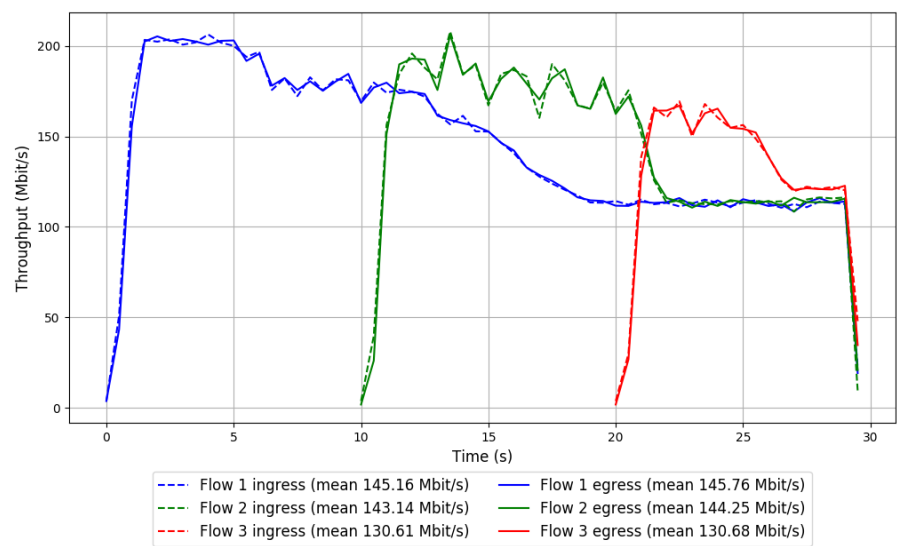


```
Run 9: Statistics of Indigo-calib

Start at: 2017-12-12 06:40:35
End at: 2017-12-12 06:41:05

# Below is generated by plot.py at 2017-12-12 10:23:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.75 Mbit/s
95th percentile per-packet one-way delay: 50.662 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 145.76 Mbit/s
95th percentile per-packet one-way delay: 50.685 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 144.25 Mbit/s
95th percentile per-packet one-way delay: 50.674 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 130.68 Mbit/s
95th percentile per-packet one-way delay: 50.547 ms
Loss rate: 0.97%
```

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-12 06:52:55

End at: 2017-12-12 06:53:25

Below is generated by plot.py at 2017-12-12 10:23:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.90 Mbit/s

95th percentile per-packet one-way delay: 50.540 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 149.89 Mbit/s

95th percentile per-packet one-way delay: 49.863 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 147.27 Mbit/s

95th percentile per-packet one-way delay: 50.563 ms

Loss rate: 0.39%

-- Flow 3:

Average throughput: 127.31 Mbit/s

95th percentile per-packet one-way delay: 50.600 ms

Loss rate: 0.90%

Run 10: Report of Indigo-calib — Data Link

