

Pantheon Report

Generated at 2017-12-12 10:09:32 (UTC).

Data path: GCE Tokyo Ethernet (*remote*) → GCE Sydney 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.

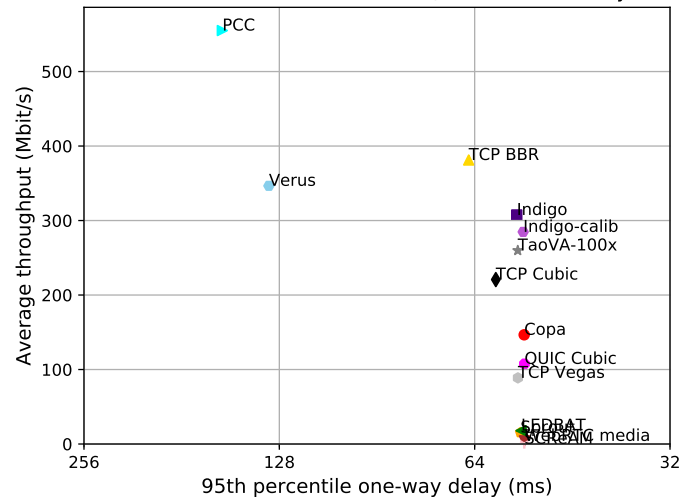
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

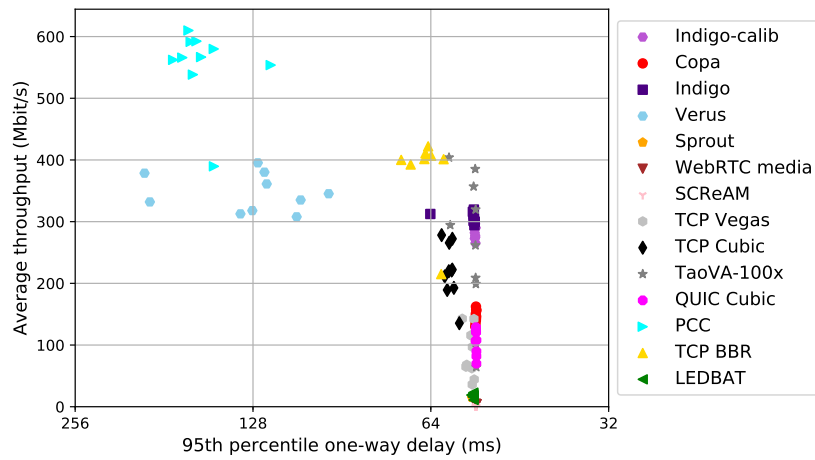
Git summary:

```
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 @ 03455460fd1a8ffbdad86fabb936fdca204b80db
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 @ f1a14bffe749737437f61b1eaeab30b267cde681
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 Tokyo Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Tokyo Ethernet to GCE Sydney 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	8	182.59	199.81	192.50	289.34	65.23	67.71	0.33	0.59	1.16
TCP Cubic	10	125.08	100.32	88.13	58.66	59.04	59.69	0.40	0.87	1.58
LEDBAT	10	9.71	8.57	7.80	54.32	54.22	54.24	0.84	0.95	1.99
PCC	10	467.79	115.14	33.34	156.78	155.89	125.23	1.16	1.18	1.80
QUIC Cubic	10	60.07	52.08	39.78	52.60	53.00	53.01	0.34	0.62	1.75
SCReAM	10	0.21	0.21	0.22	53.00	53.34	52.68	0.29	0.57	1.03
WebRTC media	10	2.23	1.41	0.58	52.36	52.04	53.66	0.45	0.69	1.63
Sprout	10	7.73	7.65	7.43	54.41	54.41	54.44	0.47	0.63	1.14
TaoVA-100x	10	173.97	93.12	155.13	54.50	54.72	55.17	0.23	0.65	1.48
TCP Vegas	10	44.19	40.96	52.89	54.31	54.48	55.41	0.38	0.58	1.33
Verus	10	213.34	143.44	118.38	119.67	140.04	134.32	0.64	1.39	1.39
Copa	10	81.12	75.51	61.03	53.69	53.68	53.77	0.34	0.57	1.57
Indigo	10	166.21	153.93	120.74	54.70	55.47	58.18	0.34	0.54	1.27
Indigo-calib	10	152.24	137.53	126.42	53.79	53.98	54.00	0.28	0.47	1.16

Run 1: Statistics of TCP BBR

Start at: 2017-12-12 04:57:39

End at: 2017-12-12 04:58:09

Below is generated by plot.py at 2017-12-12 09:04:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 214.97 Mbit/s

95th percentile per-packet one-way delay: 61.458 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 12.80 Mbit/s

95th percentile per-packet one-way delay: 1866.571 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 200.43 Mbit/s

95th percentile per-packet one-way delay: 60.870 ms

Loss rate: 0.57%

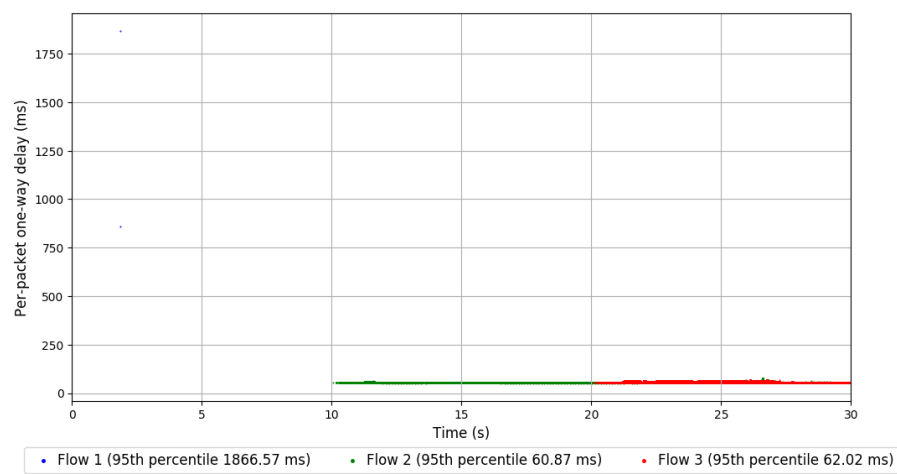
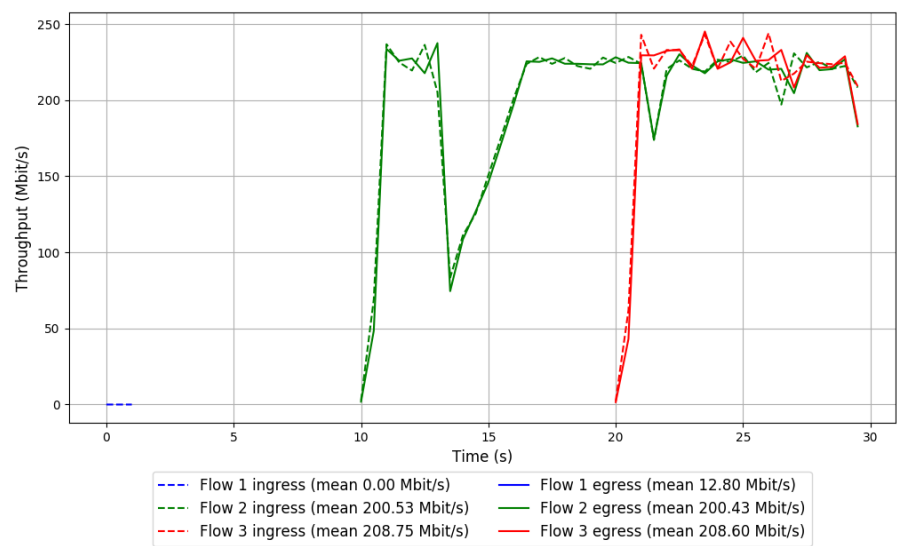
-- Flow 3:

Average throughput: 208.60 Mbit/s

95th percentile per-packet one-way delay: 62.019 ms

Loss rate: 1.13%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-12 05:10:00

End at: 2017-12-12 05:10:30

Below is generated by plot.py at 2017-12-12 09:08:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 410.76 Mbit/s

95th percentile per-packet one-way delay: 65.354 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 208.91 Mbit/s

95th percentile per-packet one-way delay: 64.776 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 207.72 Mbit/s

95th percentile per-packet one-way delay: 65.027 ms

Loss rate: 0.63%

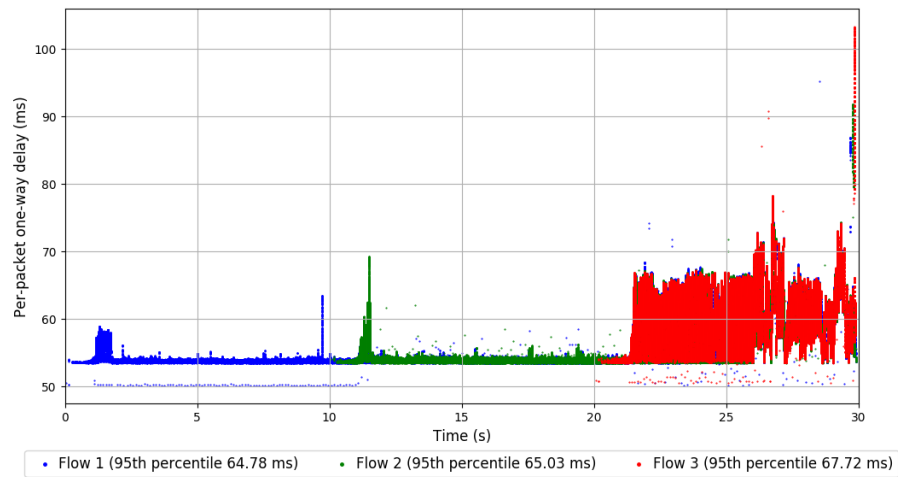
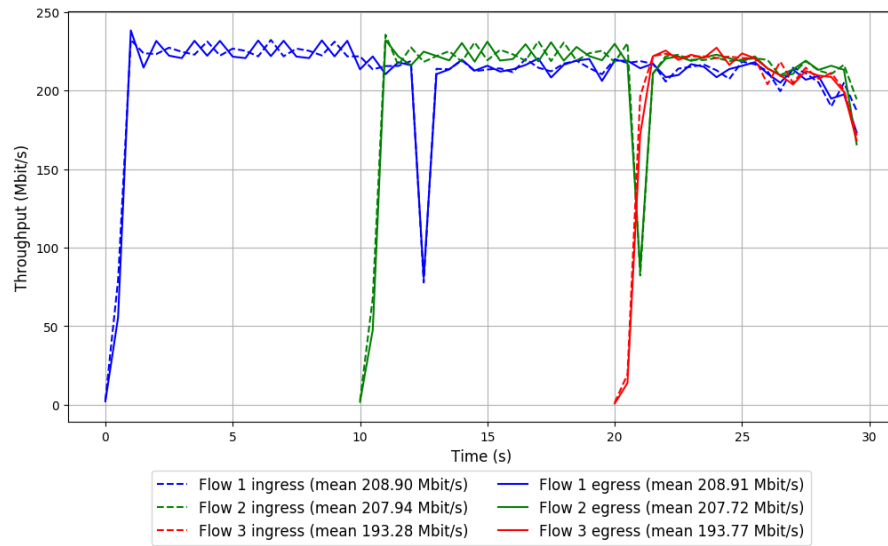
-- Flow 3:

Average throughput: 193.77 Mbit/s

95th percentile per-packet one-way delay: 67.722 ms

Loss rate: 0.86%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

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 09:08:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 401.50 Mbit/s

95th percentile per-packet one-way delay: 65.639 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 204.89 Mbit/s

95th percentile per-packet one-way delay: 63.044 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 202.12 Mbit/s

95th percentile per-packet one-way delay: 65.042 ms

Loss rate: 0.60%

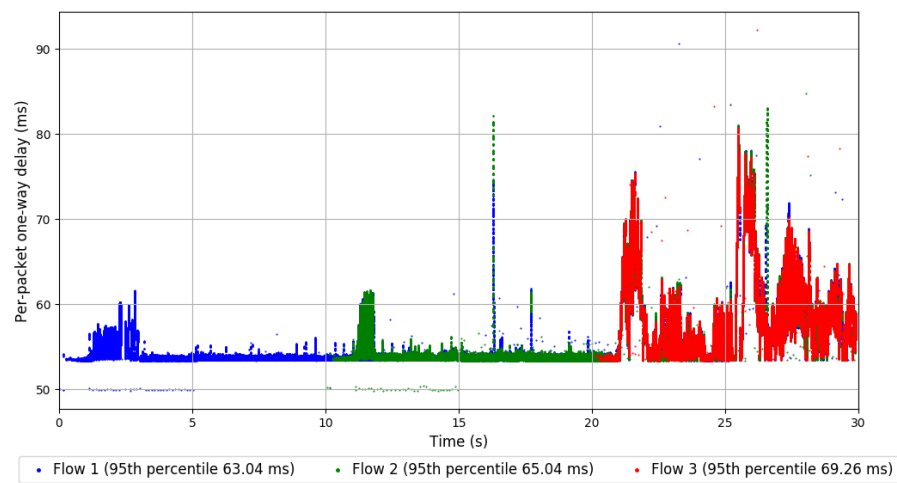
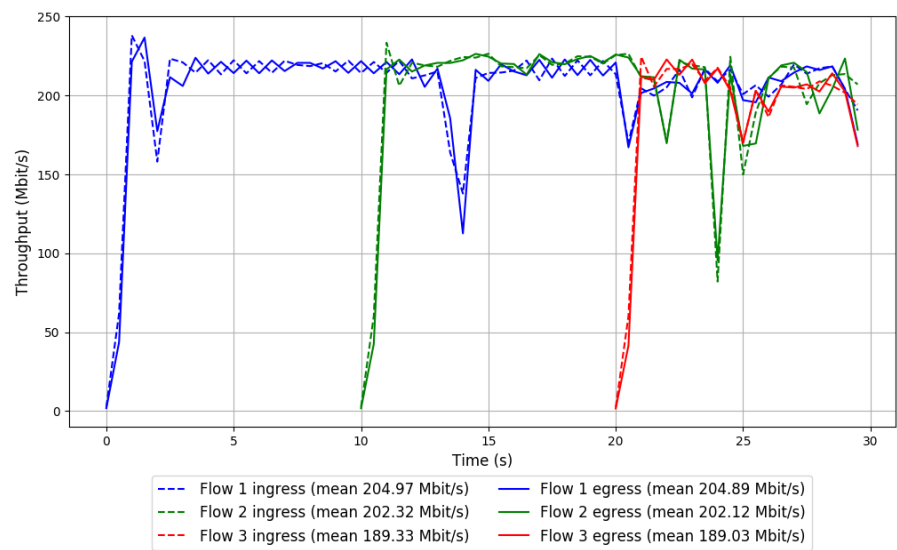
-- Flow 3:

Average throughput: 189.03 Mbit/s

95th percentile per-packet one-way delay: 69.261 ms

Loss rate: 1.22%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-12 05:34:17

End at: 2017-12-12 05:34:47

Below is generated by plot.py at 2017-12-12 09:08:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 401.28 Mbit/s

95th percentile per-packet one-way delay: 60.886 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 202.61 Mbit/s

95th percentile per-packet one-way delay: 60.106 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 202.49 Mbit/s

95th percentile per-packet one-way delay: 61.026 ms

Loss rate: 0.62%

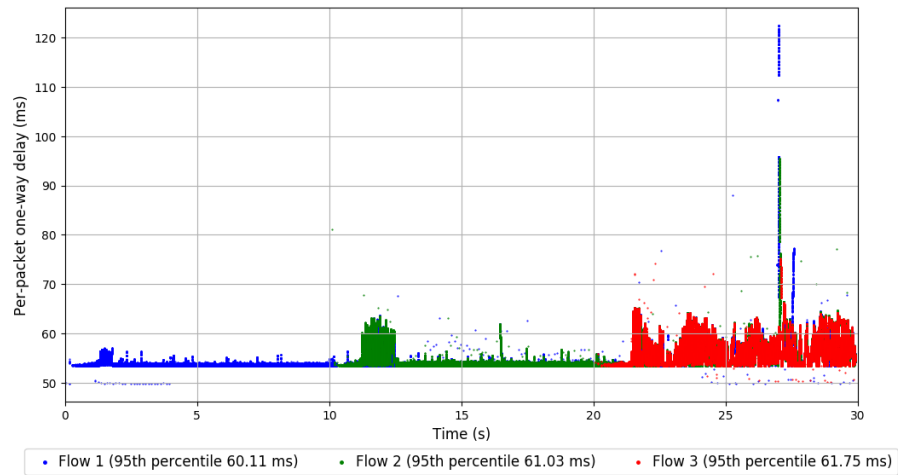
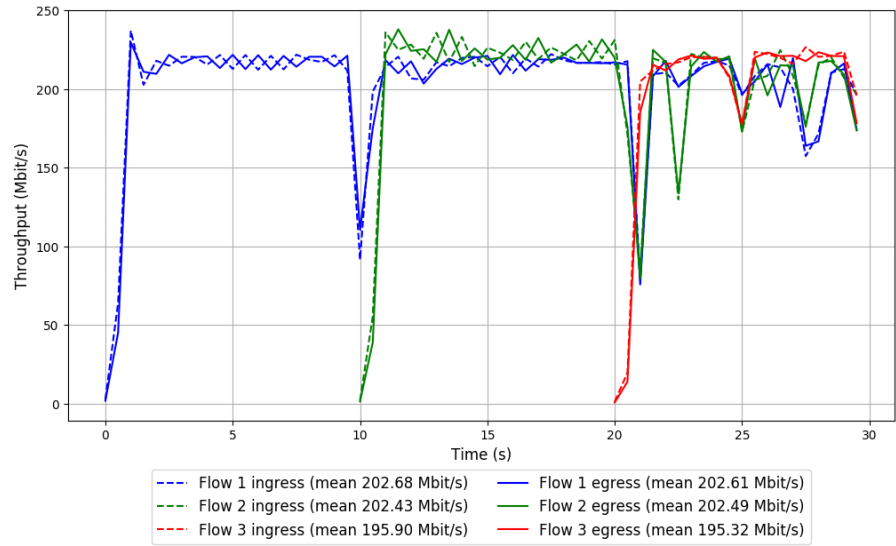
-- Flow 3:

Average throughput: 195.32 Mbit/s

95th percentile per-packet one-way delay: 61.752 ms

Loss rate: 1.19%

Run 4: Report of TCP BBR — Data Link

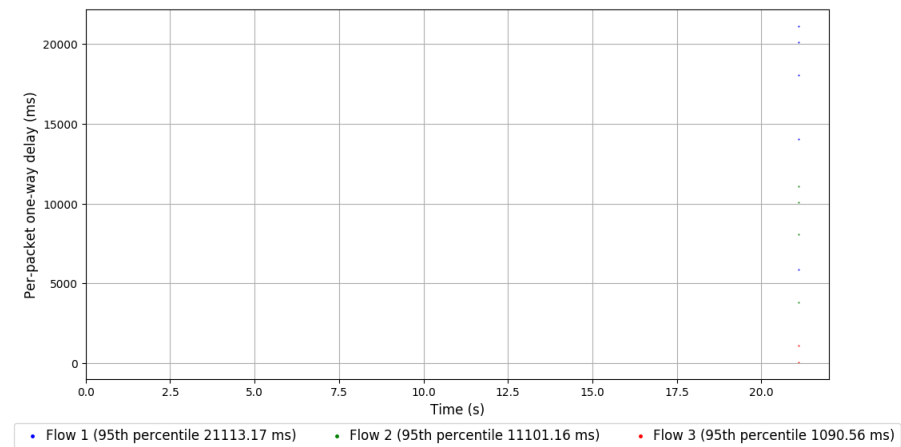
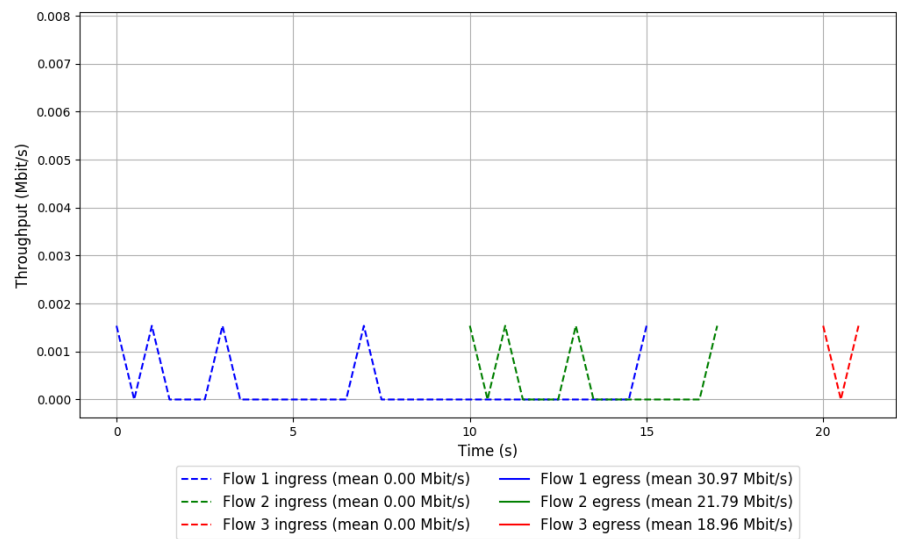


Run 5: Statistics of TCP BBR

Start at: 2017-12-12 05:46:21

End at: 2017-12-12 05:46:51

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-12 05:58:04

End at: 2017-12-12 05:58:34

Below is generated by plot.py at 2017-12-12 09:08:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 422.10 Mbit/s

95th percentile per-packet one-way delay: 64.669 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 205.66 Mbit/s

95th percentile per-packet one-way delay: 63.506 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 200.47 Mbit/s

95th percentile per-packet one-way delay: 64.409 ms

Loss rate: 0.57%

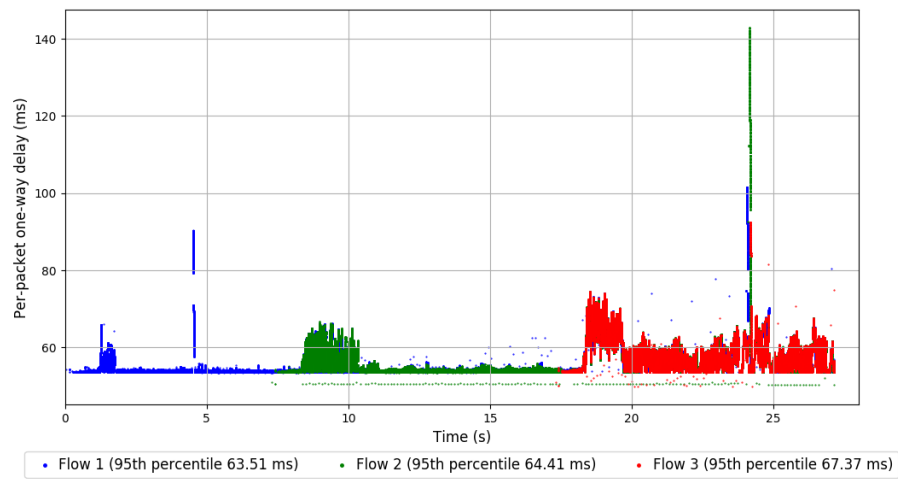
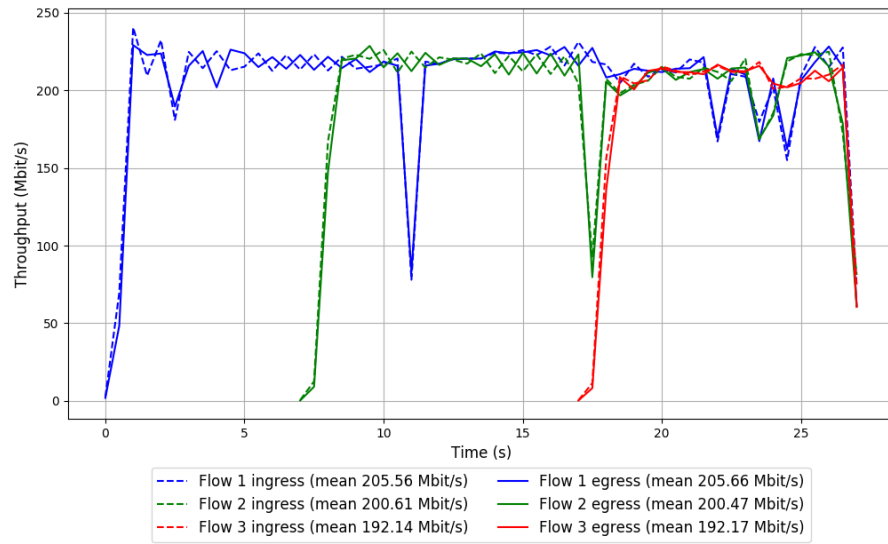
-- Flow 3:

Average throughput: 192.17 Mbit/s

95th percentile per-packet one-way delay: 67.366 ms

Loss rate: 1.02%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-12 06:10:04

End at: 2017-12-12 06:10:34

Below is generated by plot.py at 2017-12-12 09:08:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 406.82 Mbit/s

95th percentile per-packet one-way delay: 63.912 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 213.70 Mbit/s

95th percentile per-packet one-way delay: 62.245 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 197.29 Mbit/s

95th percentile per-packet one-way delay: 64.365 ms

Loss rate: 0.57%

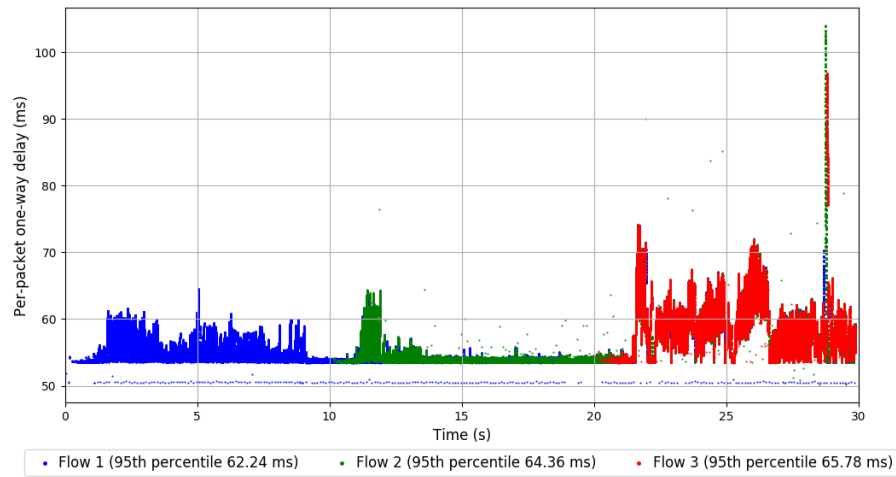
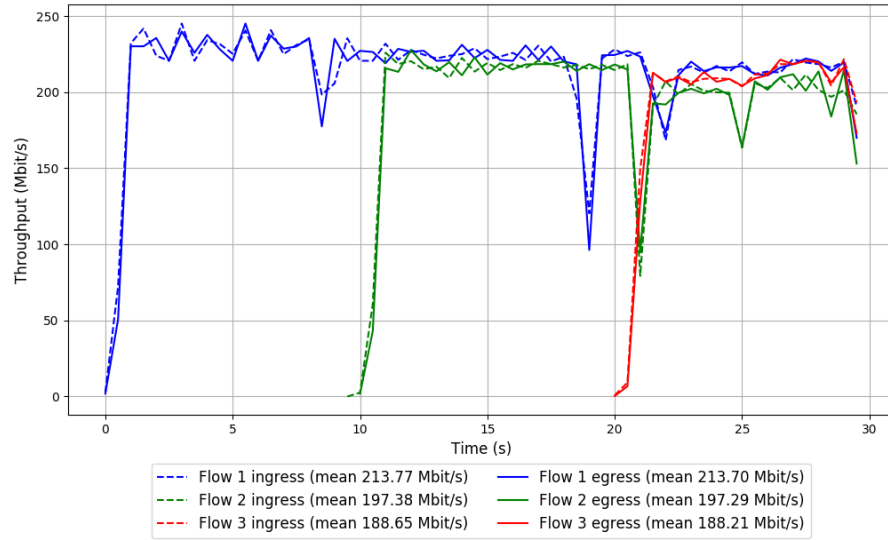
-- Flow 3:

Average throughput: 188.21 Mbit/s

95th percentile per-packet one-way delay: 65.785 ms

Loss rate: 1.29%

Run 7: Report of TCP BBR — Data Link

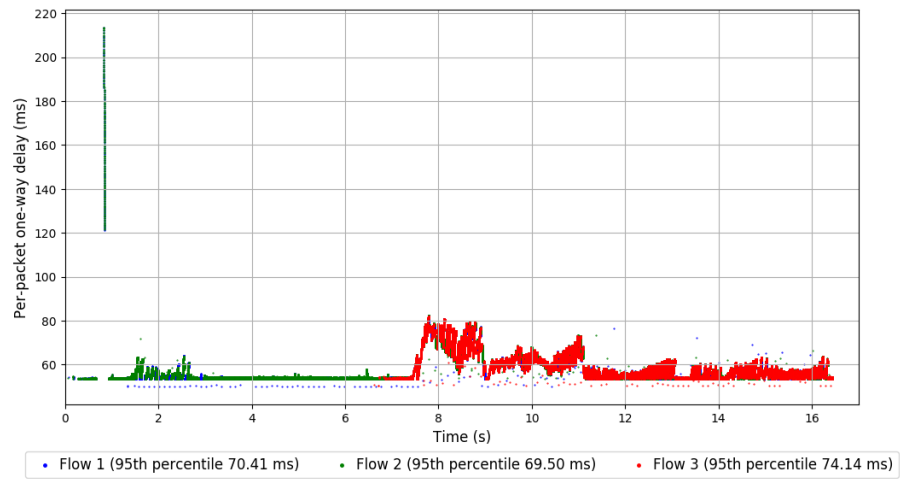
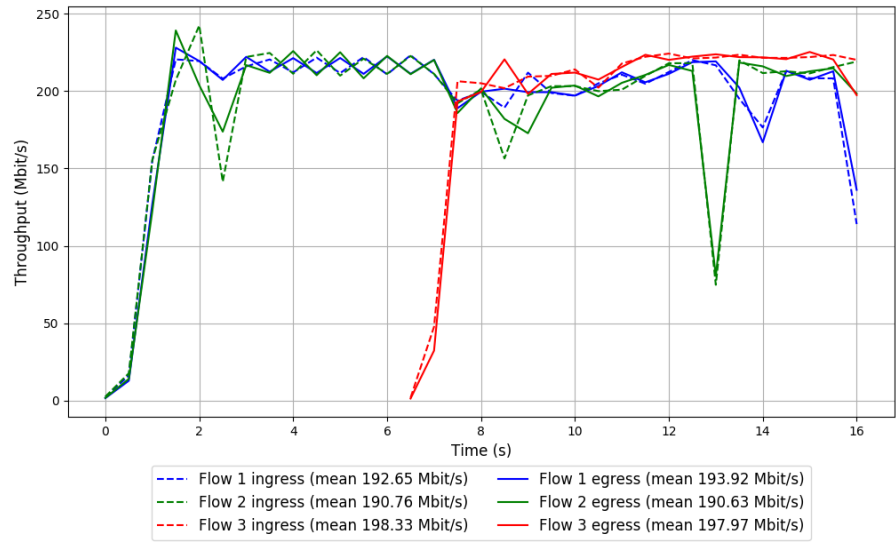


Run 8: Statistics of TCP BBR

Start at: 2017-12-12 06:21:57

End at: 2017-12-12 06:22:27

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-12 06:34:23

End at: 2017-12-12 06:34:53

Below is generated by plot.py at 2017-12-12 09:08:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 400.11 Mbit/s

95th percentile per-packet one-way delay: 71.829 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 208.75 Mbit/s

95th percentile per-packet one-way delay: 70.074 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 199.59 Mbit/s

95th percentile per-packet one-way delay: 71.284 ms

Loss rate: 0.54%

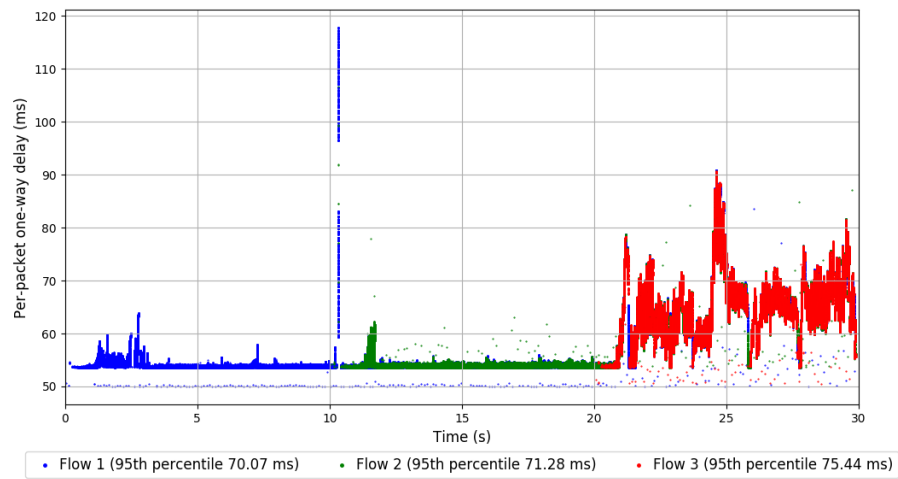
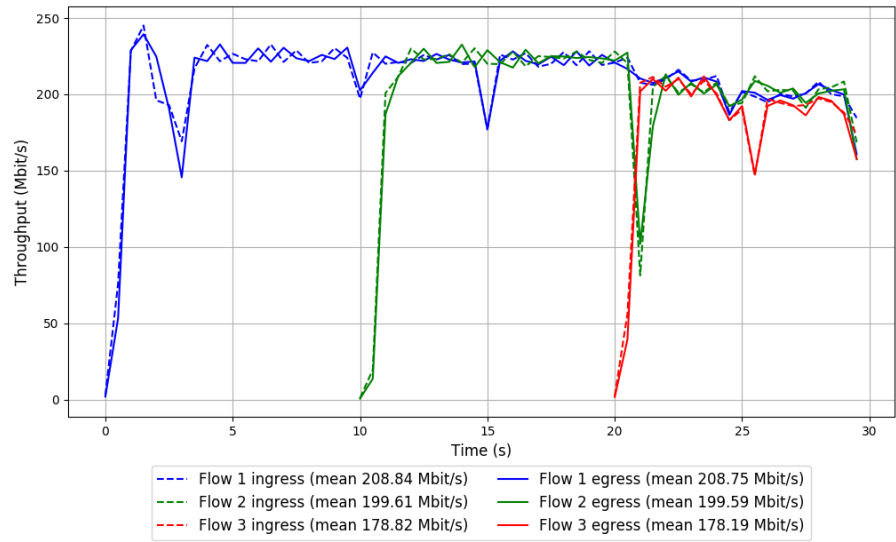
-- Flow 3:

Average throughput: 178.19 Mbit/s

95th percentile per-packet one-way delay: 75.442 ms

Loss rate: 1.34%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-12 06:46:49

End at: 2017-12-12 06:47:19

Below is generated by plot.py at 2017-12-12 09:12:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 392.64 Mbit/s

95th percentile per-packet one-way delay: 69.232 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 203.41 Mbit/s

95th percentile per-packet one-way delay: 64.424 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 188.34 Mbit/s

95th percentile per-packet one-way delay: 69.804 ms

Loss rate: 0.64%

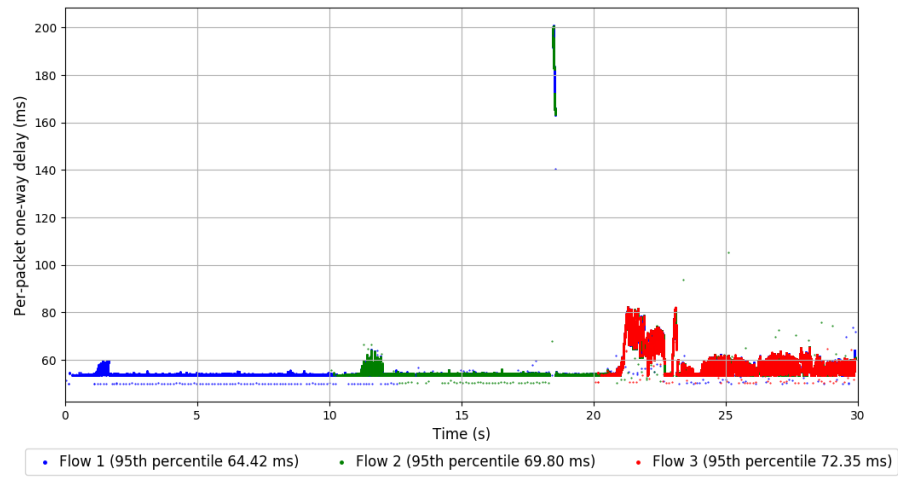
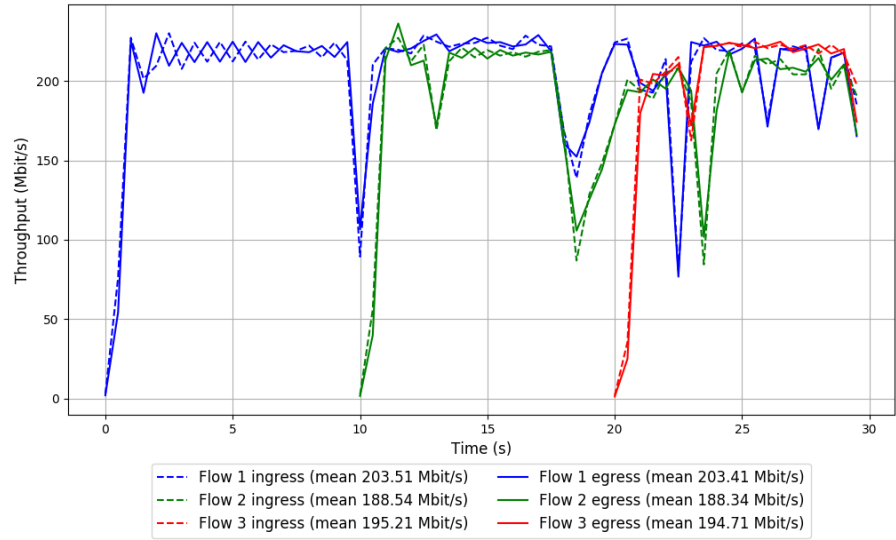
-- Flow 3:

Average throughput: 194.71 Mbit/s

95th percentile per-packet one-way delay: 72.353 ms

Loss rate: 1.24%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-12 04:53:43

End at: 2017-12-12 04:54:13

Below is generated by plot.py at 2017-12-12 09:12:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 265.68 Mbit/s

95th percentile per-packet one-way delay: 59.567 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 159.99 Mbit/s

95th percentile per-packet one-way delay: 59.542 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 106.44 Mbit/s

95th percentile per-packet one-way delay: 59.443 ms

Loss rate: 0.58%

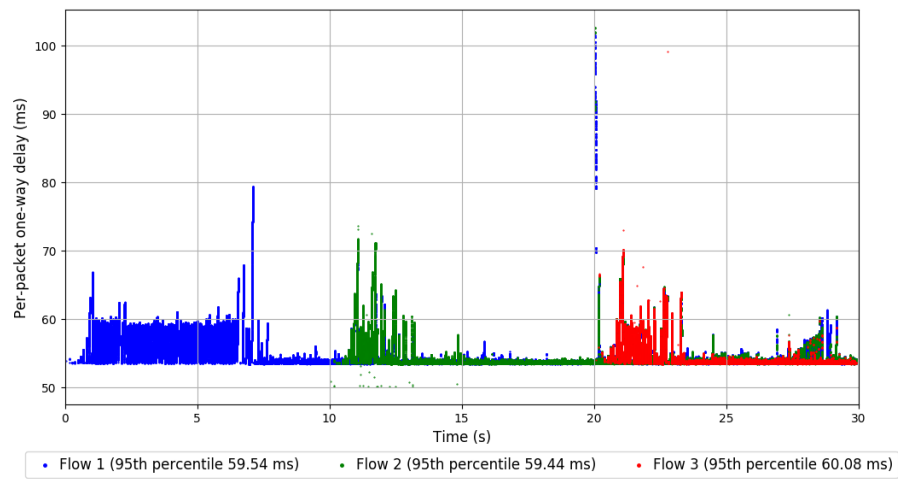
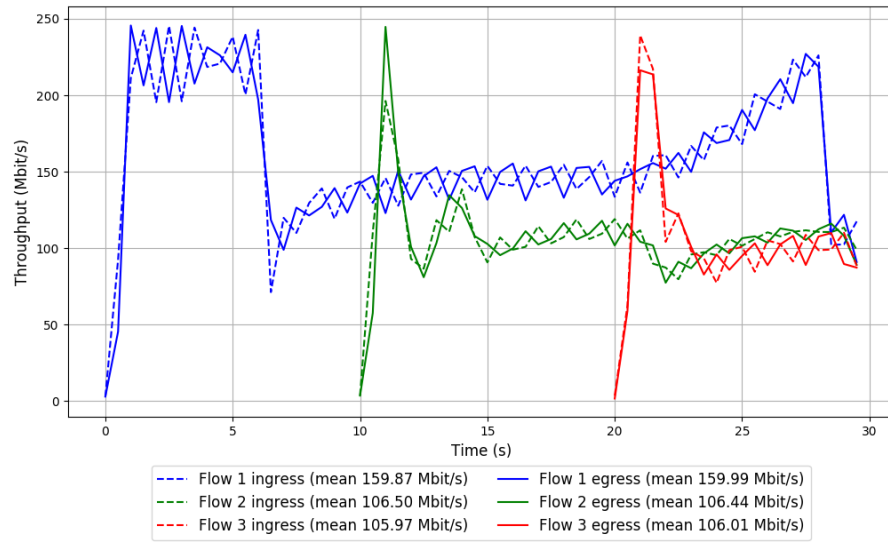
-- Flow 3:

Average throughput: 106.01 Mbit/s

95th percentile per-packet one-way delay: 60.080 ms

Loss rate: 1.05%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-12 05:06:04

End at: 2017-12-12 05:06:34

Below is generated by plot.py at 2017-12-12 09:12:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 211.31 Mbit/s

95th percentile per-packet one-way delay: 60.628 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 109.20 Mbit/s

95th percentile per-packet one-way delay: 59.778 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 106.10 Mbit/s

95th percentile per-packet one-way delay: 61.182 ms

Loss rate: 0.37%

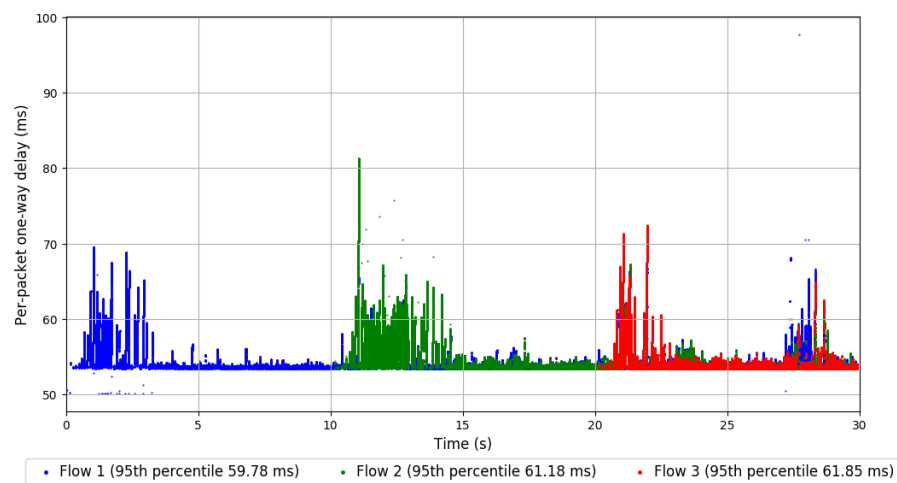
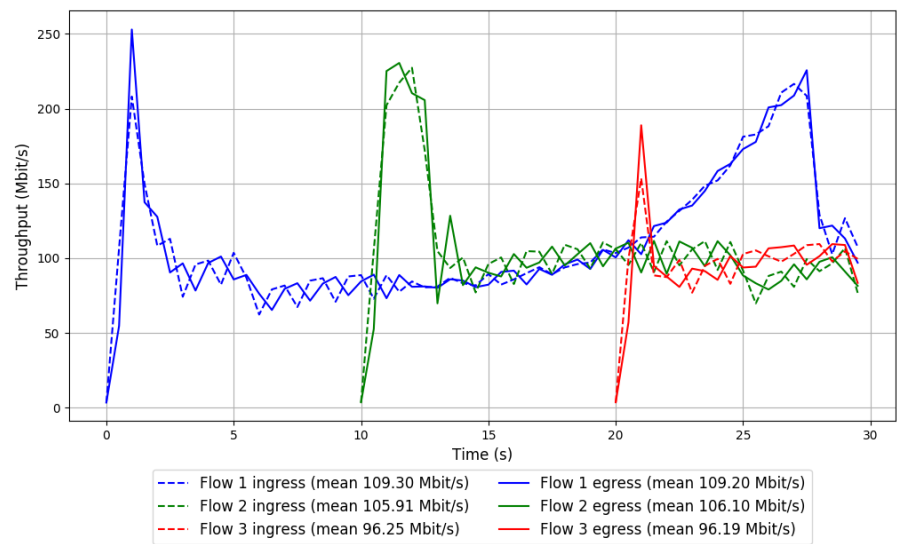
-- Flow 3:

Average throughput: 96.19 Mbit/s

95th percentile per-packet one-way delay: 61.855 ms

Loss rate: 1.14%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-12 05:18:31

End at: 2017-12-12 05:19:01

Below is generated by plot.py at 2017-12-12 09:12:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 219.71 Mbit/s

95th percentile per-packet one-way delay: 59.666 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 109.21 Mbit/s

95th percentile per-packet one-way delay: 58.142 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 112.19 Mbit/s

95th percentile per-packet one-way delay: 60.507 ms

Loss rate: 0.64%

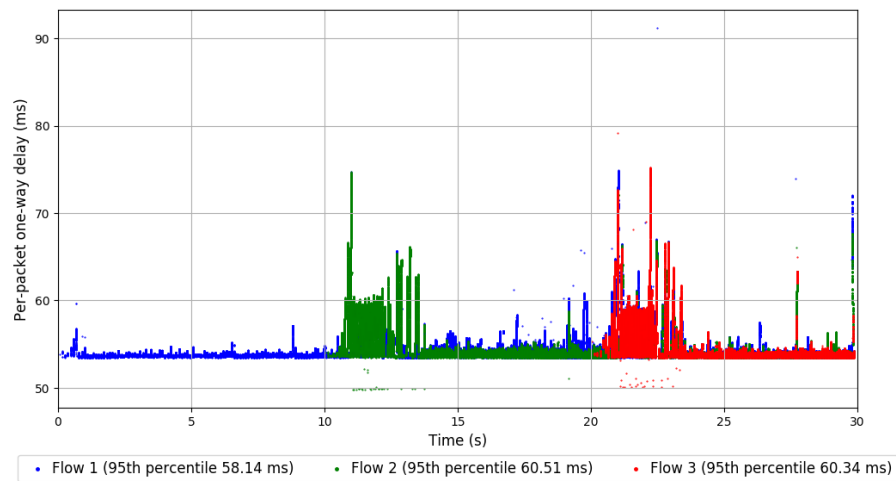
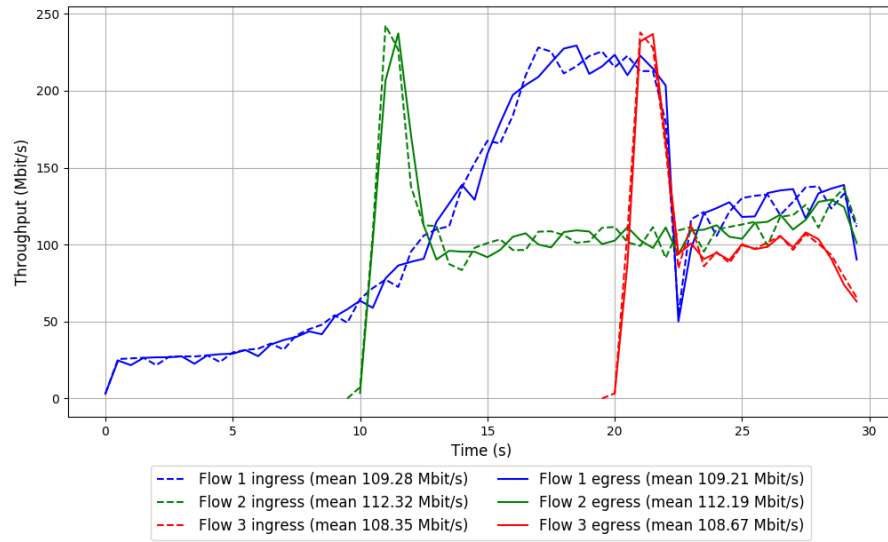
-- Flow 3:

Average throughput: 108.67 Mbit/s

95th percentile per-packet one-way delay: 60.341 ms

Loss rate: 0.77%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-12 05:30:53

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

Below is generated by plot.py at 2017-12-12 09:12:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.25 Mbit/s

95th percentile per-packet one-way delay: 60.039 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 106.31 Mbit/s

95th percentile per-packet one-way delay: 59.746 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 122.27 Mbit/s

95th percentile per-packet one-way delay: 60.275 ms

Loss rate: 0.50%

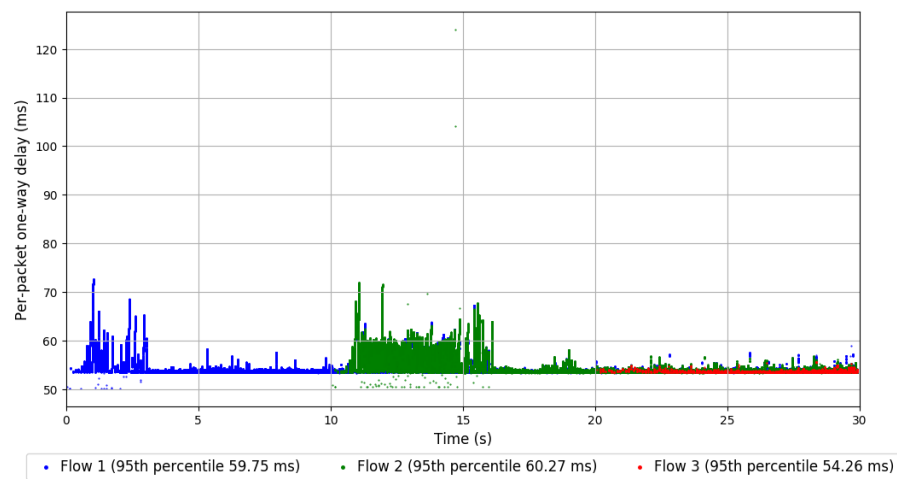
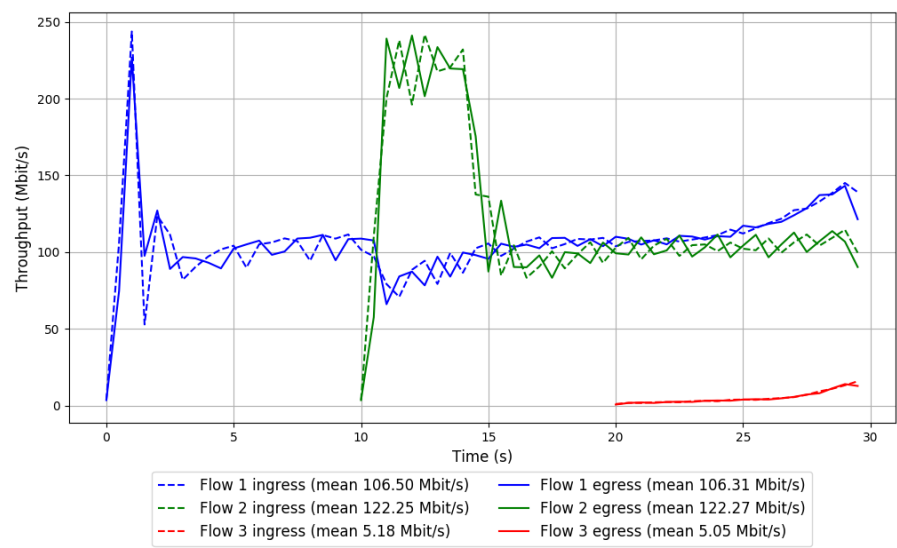
-- Flow 3:

Average throughput: 5.05 Mbit/s

95th percentile per-packet one-way delay: 54.255 ms

Loss rate: 3.73%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-12 05:42:52

End at: 2017-12-12 05:43:22

Below is generated by plot.py at 2017-12-12 09:12:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.38 Mbit/s

95th percentile per-packet one-way delay: 57.265 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 93.00 Mbit/s

95th percentile per-packet one-way delay: 55.571 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 13.87 Mbit/s

95th percentile per-packet one-way delay: 54.229 ms

Loss rate: 2.21%

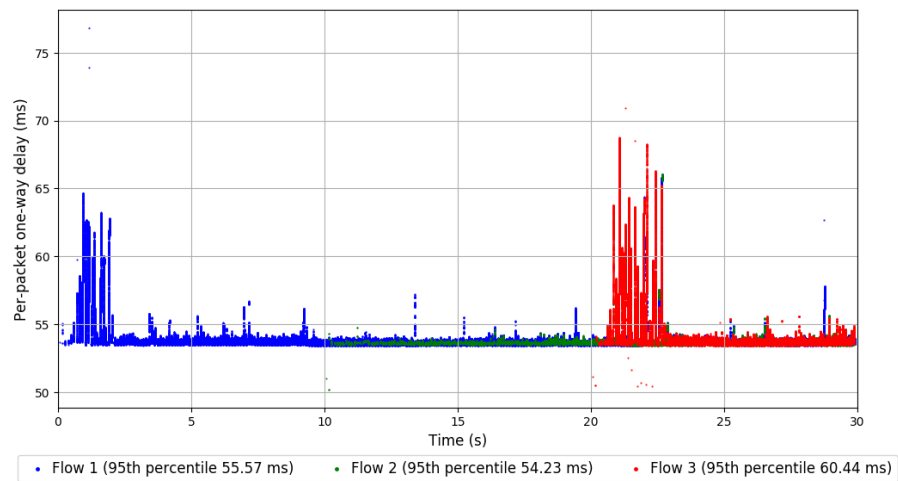
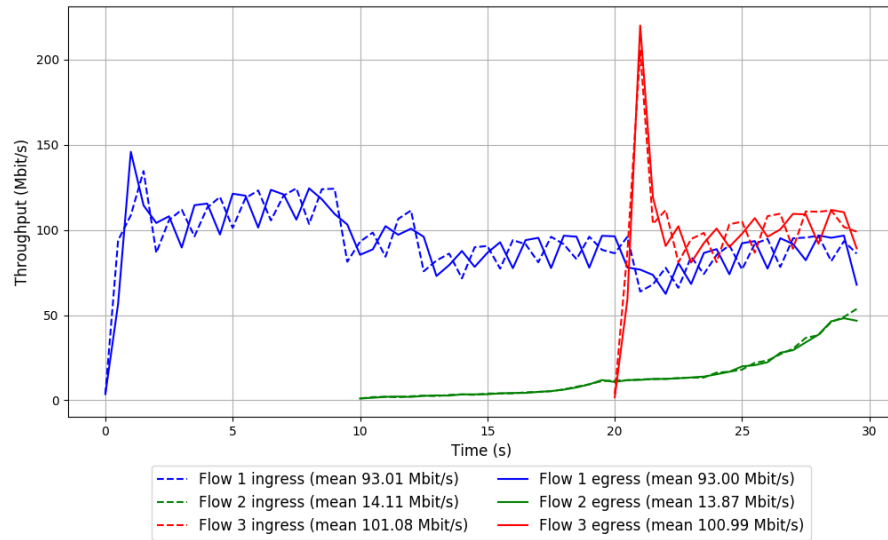
-- Flow 3:

Average throughput: 100.99 Mbit/s

95th percentile per-packet one-way delay: 60.441 ms

Loss rate: 1.11%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-12 05:54:26

End at: 2017-12-12 05:54:56

Below is generated by plot.py at 2017-12-12 09:13:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 220.83 Mbit/s

95th percentile per-packet one-way delay: 59.019 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 132.21 Mbit/s

95th percentile per-packet one-way delay: 58.453 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 130.90 Mbit/s

95th percentile per-packet one-way delay: 59.404 ms

Loss rate: 0.68%

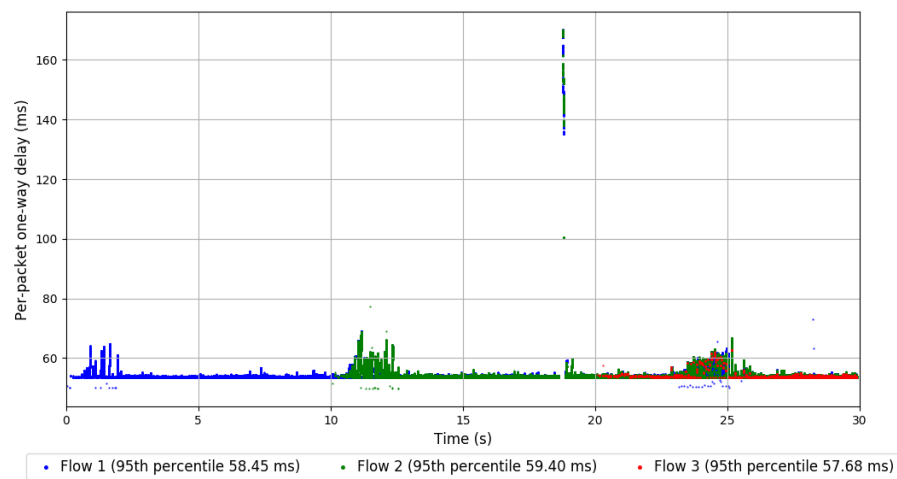
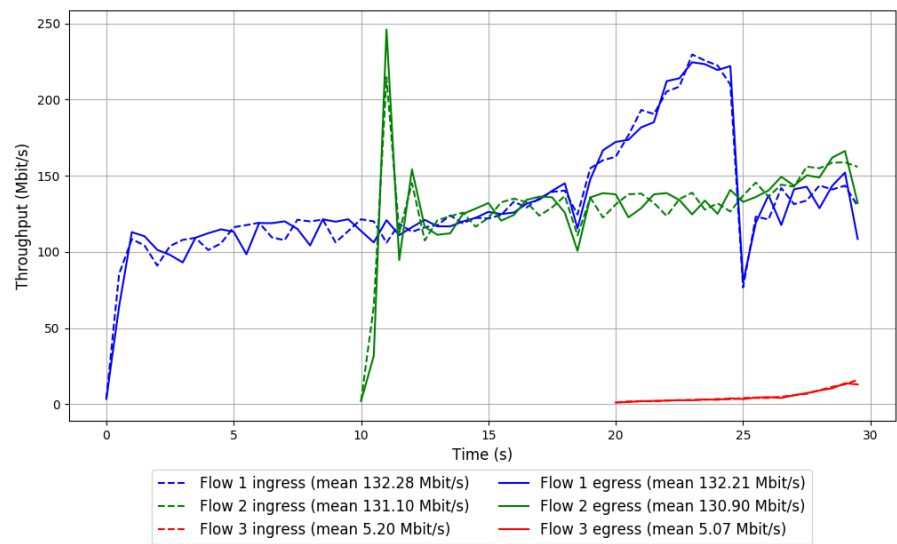
-- Flow 3:

Average throughput: 5.07 Mbit/s

95th percentile per-packet one-way delay: 57.677 ms

Loss rate: 3.72%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

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

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

Below is generated by plot.py at 2017-12-12 09:13:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.30 Mbit/s

95th percentile per-packet one-way delay: 58.856 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 123.20 Mbit/s

95th percentile per-packet one-way delay: 58.863 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 100.73 Mbit/s

95th percentile per-packet one-way delay: 57.382 ms

Loss rate: 0.77%

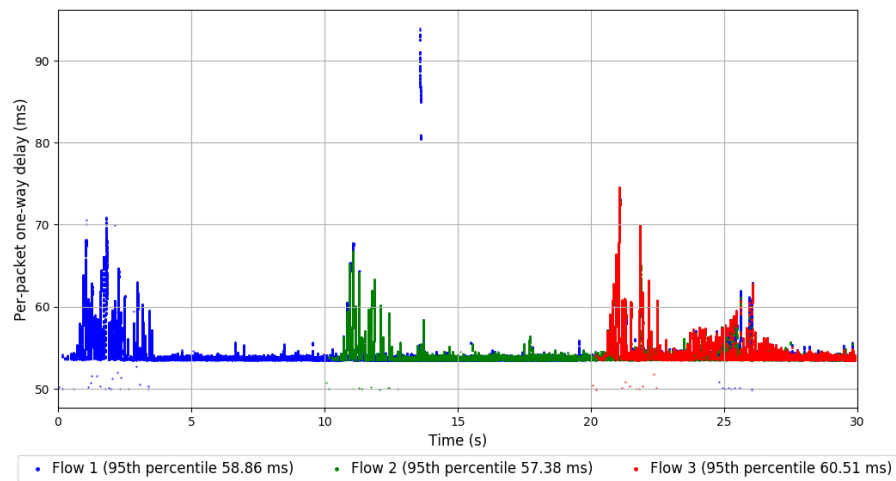
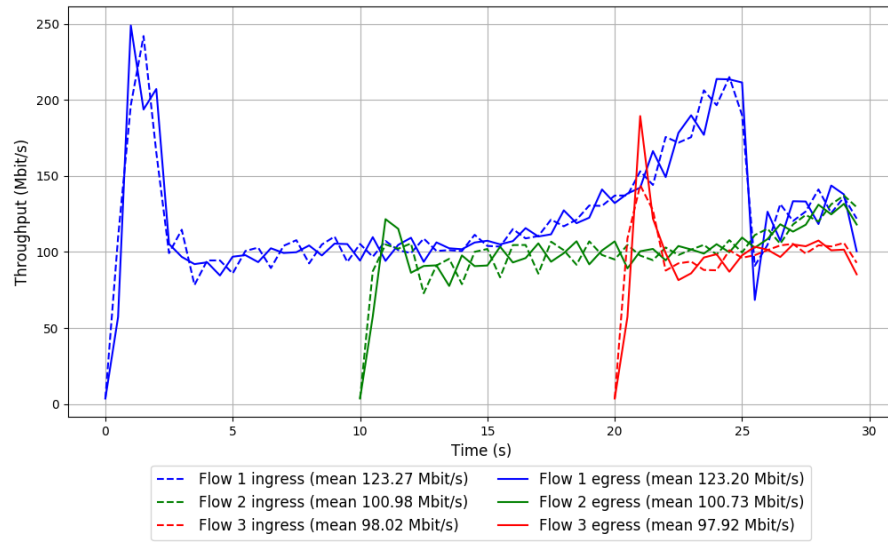
-- Flow 3:

Average throughput: 97.92 Mbit/s

95th percentile per-packet one-way delay: 60.506 ms

Loss rate: 1.11%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-12 06:18:31

End at: 2017-12-12 06:19:01

Below is generated by plot.py at 2017-12-12 09:15:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 192.67 Mbit/s

95th percentile per-packet one-way delay: 58.497 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 119.43 Mbit/s

95th percentile per-packet one-way delay: 56.368 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 58.97 Mbit/s

95th percentile per-packet one-way delay: 57.106 ms

Loss rate: 1.77%

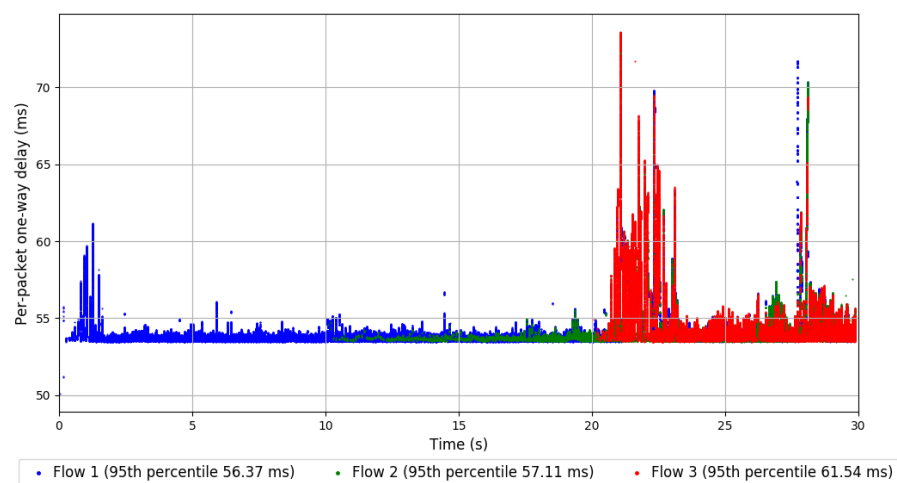
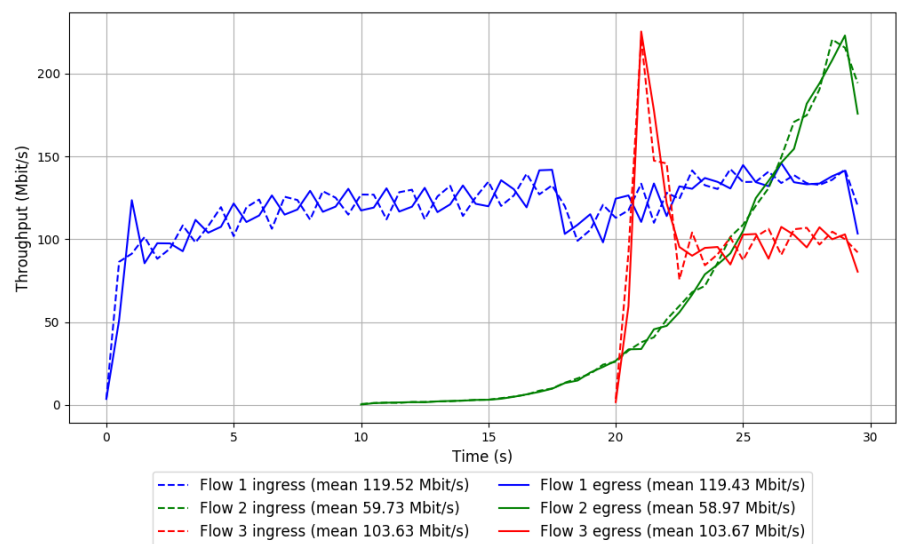
-- Flow 3:

Average throughput: 103.67 Mbit/s

95th percentile per-packet one-way delay: 61.538 ms

Loss rate: 1.07%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-12 06:30:22

End at: 2017-12-12 06:30:52

Below is generated by plot.py at 2017-12-12 09:16:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.16 Mbit/s

95th percentile per-packet one-way delay: 61.365 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 130.26 Mbit/s

95th percentile per-packet one-way delay: 61.562 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 144.30 Mbit/s

95th percentile per-packet one-way delay: 61.529 ms

Loss rate: 0.45%

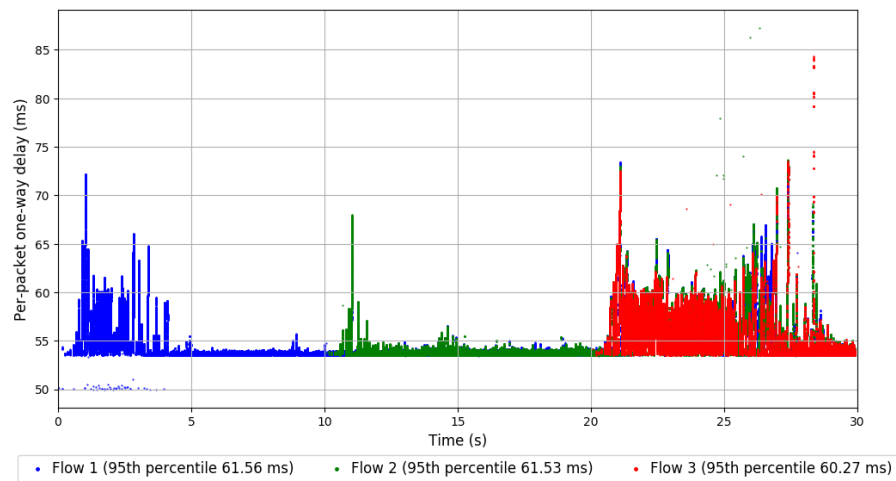
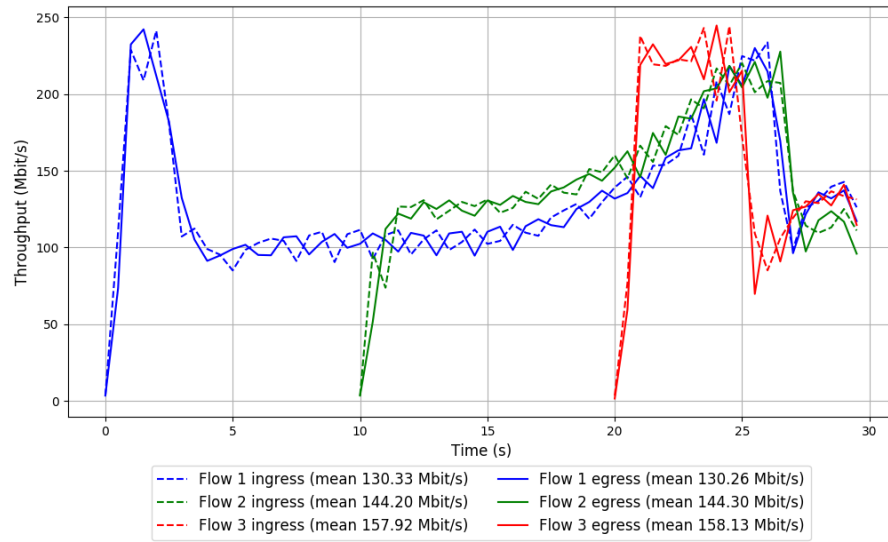
-- Flow 3:

Average throughput: 158.13 Mbit/s

95th percentile per-packet one-way delay: 60.265 ms

Loss rate: 0.96%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-12 06:42:54

End at: 2017-12-12 06:43:24

Below is generated by plot.py at 2017-12-12 09:16:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 272.26 Mbit/s

95th percentile per-packet one-way delay: 58.843 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 167.99 Mbit/s

95th percentile per-packet one-way delay: 58.562 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 107.42 Mbit/s

95th percentile per-packet one-way delay: 59.298 ms

Loss rate: 0.73%

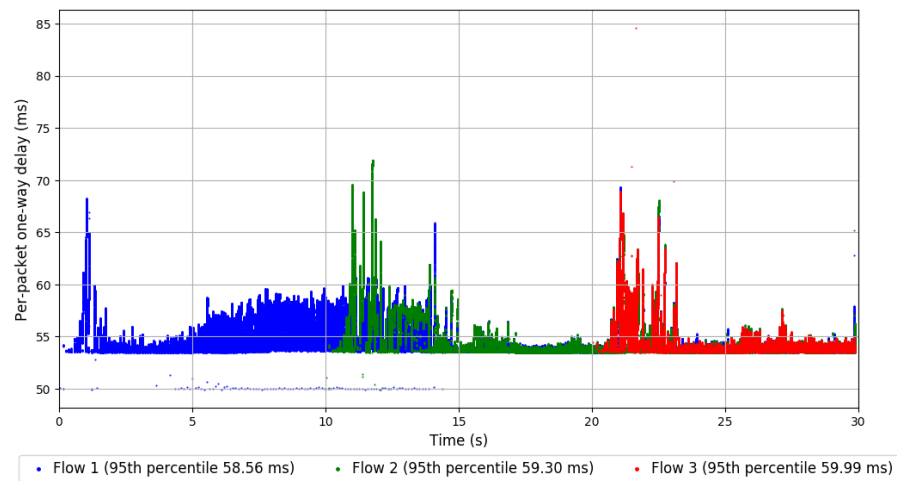
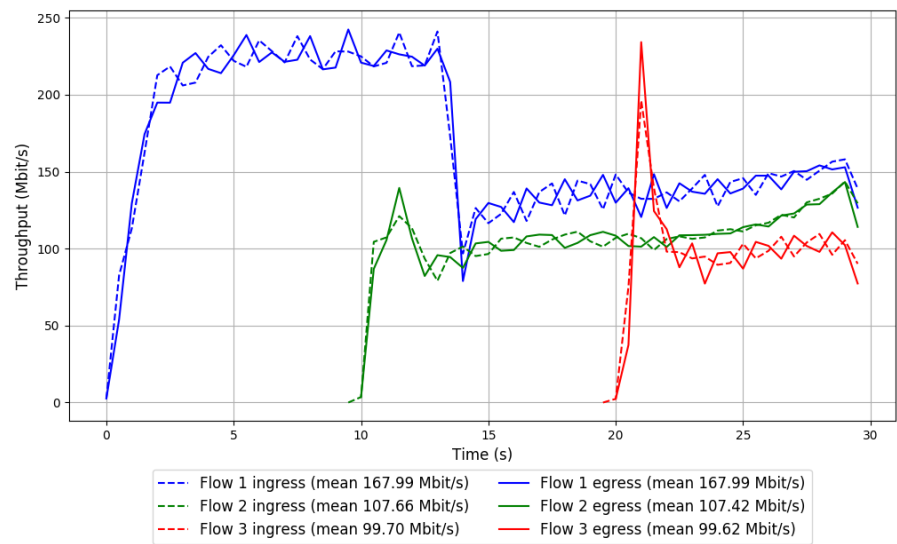
-- Flow 3:

Average throughput: 99.62 Mbit/s

95th percentile per-packet one-way delay: 59.989 ms

Loss rate: 1.11%

Run 10: Report of TCP Cubic — Data Link

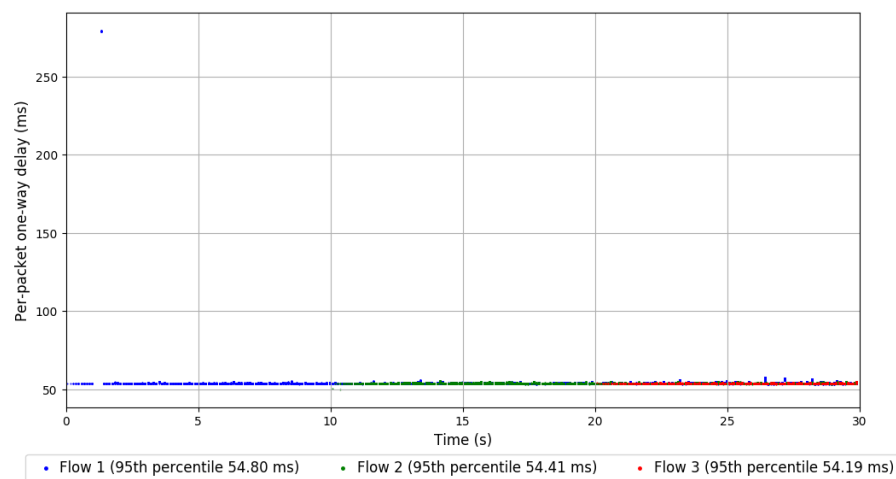
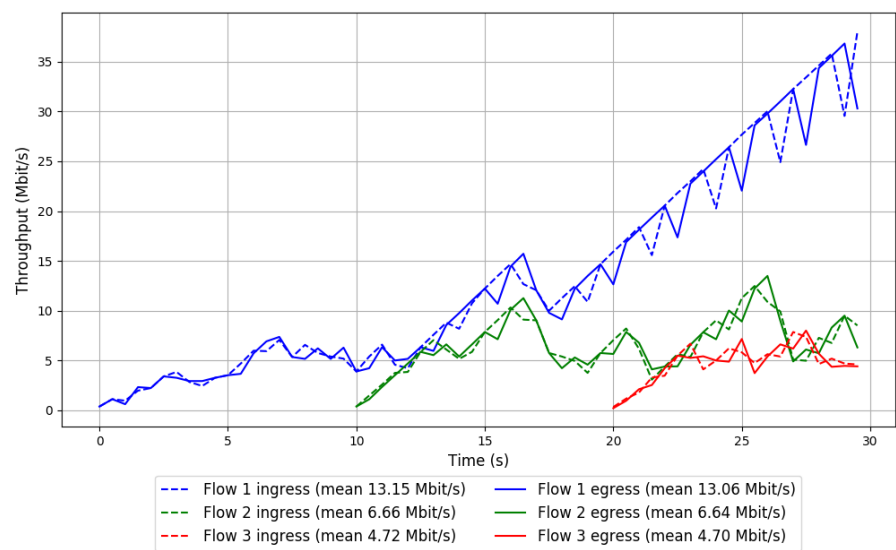


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-12 05:03:07
End at: 2017-12-12 05:03:38

# Below is generated by plot.py at 2017-12-12 09:16:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.00 Mbit/s
95th percentile per-packet one-way delay: 54.669 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 13.06 Mbit/s
95th percentile per-packet one-way delay: 54.804 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 6.64 Mbit/s
95th percentile per-packet one-way delay: 54.413 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 4.70 Mbit/s
95th percentile per-packet one-way delay: 54.186 ms
Loss rate: 1.48%
```


Run 1: Report of LEDBAT — Data Link

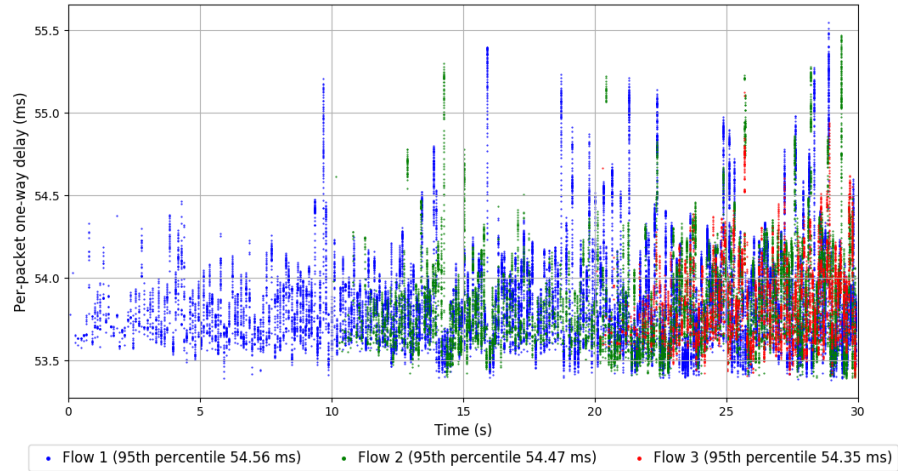
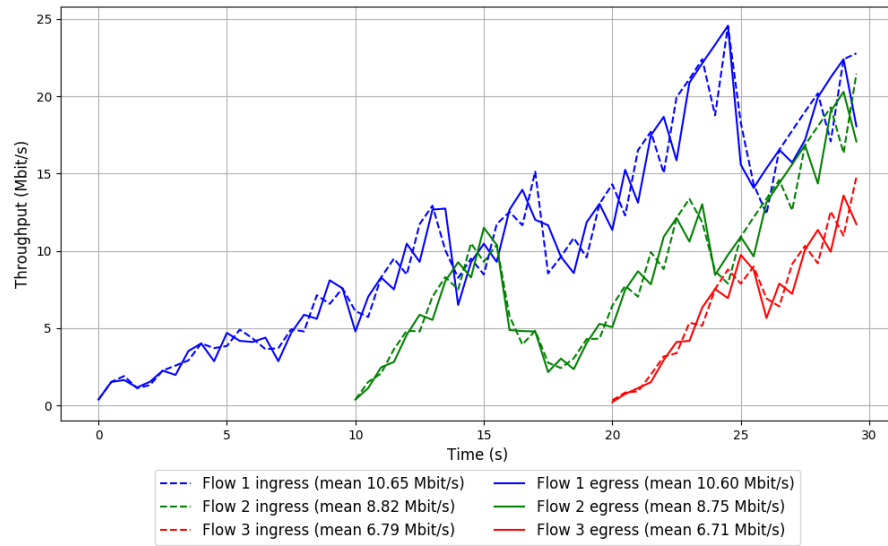


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-12 05:15:37
End at: 2017-12-12 05:16:07

# Below is generated by plot.py at 2017-12-12 09:16:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.61 Mbit/s
95th percentile per-packet one-way delay: 54.511 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 10.60 Mbit/s
95th percentile per-packet one-way delay: 54.561 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 8.75 Mbit/s
95th percentile per-packet one-way delay: 54.469 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 6.71 Mbit/s
95th percentile per-packet one-way delay: 54.347 ms
Loss rate: 2.27%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-12 05:27:57

End at: 2017-12-12 05:28:27

Below is generated by plot.py at 2017-12-12 09:16:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.93 Mbit/s

95th percentile per-packet one-way delay: 54.318 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 5.28 Mbit/s

95th percentile per-packet one-way delay: 54.242 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 11.13 Mbit/s

95th percentile per-packet one-way delay: 54.321 ms

Loss rate: 0.67%

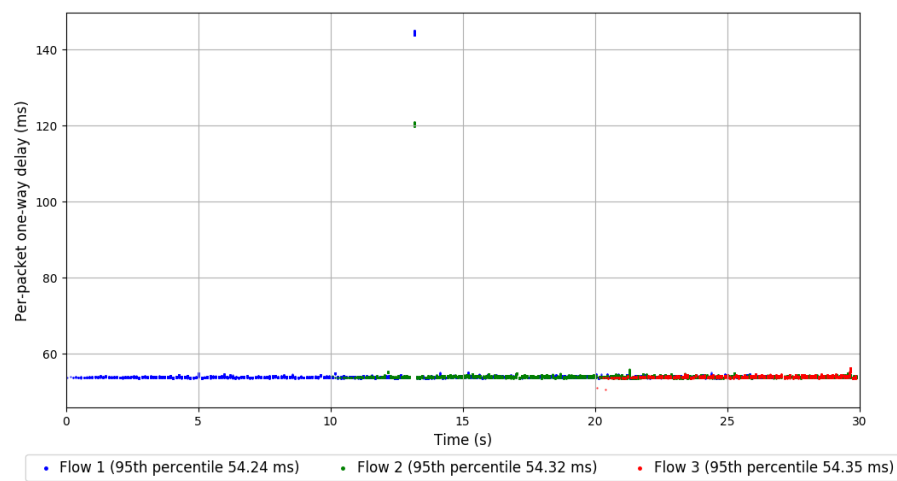
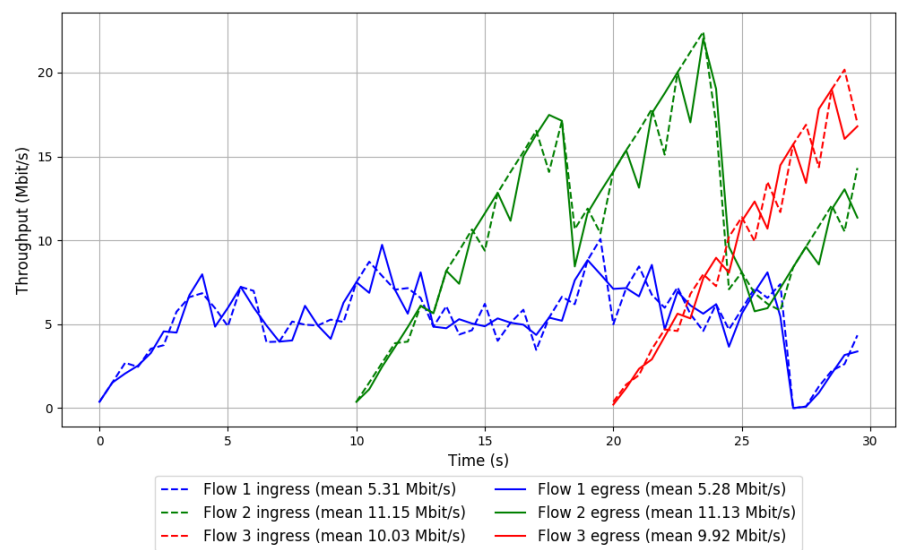
-- Flow 3:

Average throughput: 9.92 Mbit/s

95th percentile per-packet one-way delay: 54.351 ms

Loss rate: 2.18%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-12 05:39:58

End at: 2017-12-12 05:40:28

Below is generated by plot.py at 2017-12-12 09:16:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.98 Mbit/s

95th percentile per-packet one-way delay: 54.166 ms

Loss rate: 2.33%

-- Flow 1:

Average throughput: 5.16 Mbit/s

95th percentile per-packet one-way delay: 54.139 ms

Loss rate: 2.24%

-- Flow 2:

Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay: 54.188 ms

Loss rate: 2.14%

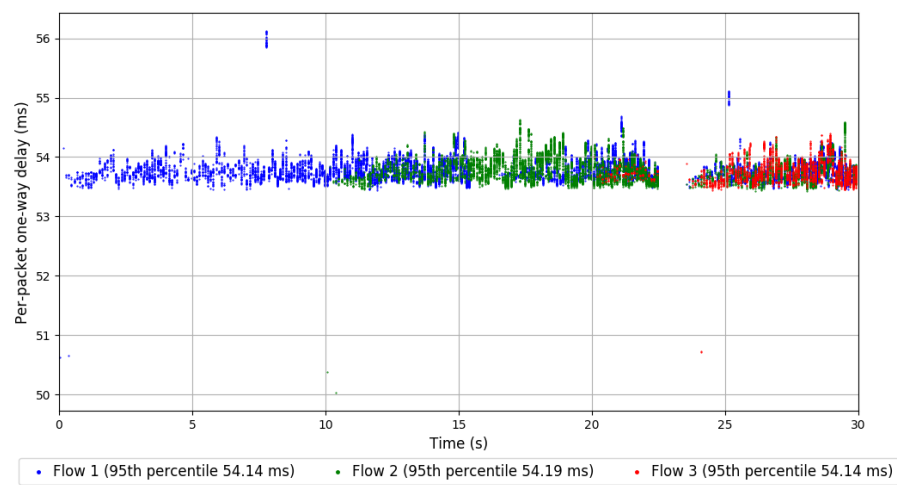
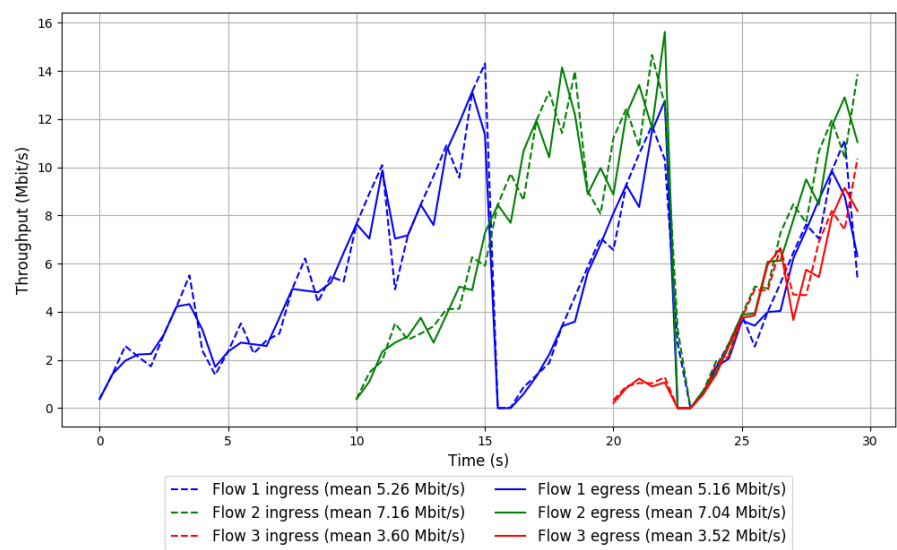
-- Flow 3:

Average throughput: 3.52 Mbit/s

95th percentile per-packet one-way delay: 54.139 ms

Loss rate: 3.54%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-12 05:51:33

End at: 2017-12-12 05:52:03

Below is generated by plot.py at 2017-12-12 09:16:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.08 Mbit/s

95th percentile per-packet one-way delay: 54.195 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 8.17 Mbit/s

95th percentile per-packet one-way delay: 54.153 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 10.42 Mbit/s

95th percentile per-packet one-way delay: 54.203 ms

Loss rate: 0.80%

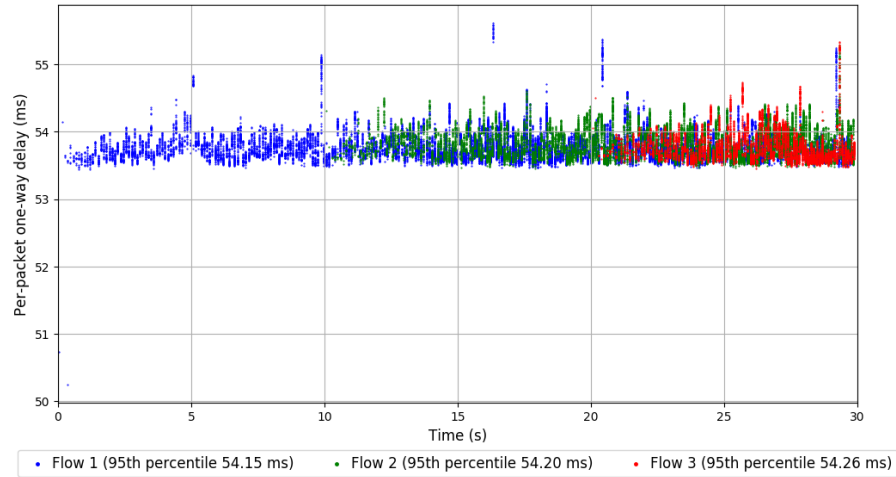
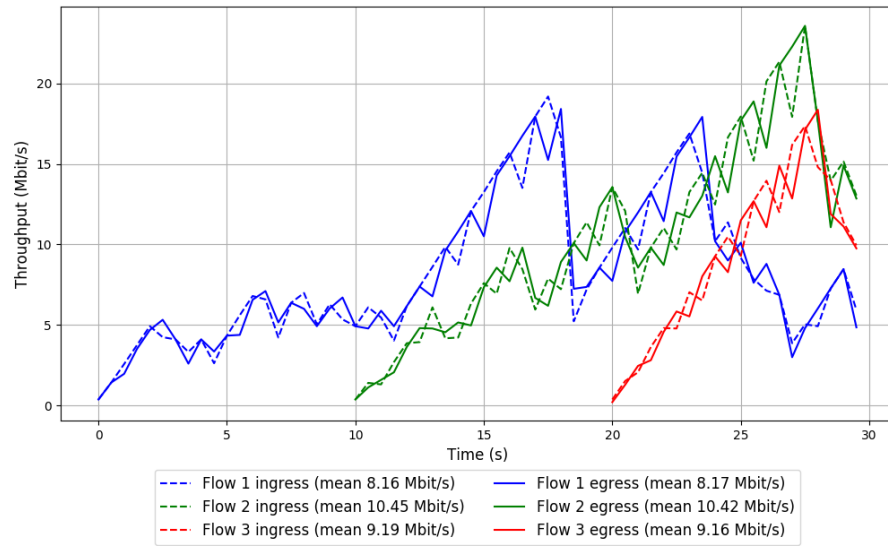
-- Flow 3:

Average throughput: 9.16 Mbit/s

95th percentile per-packet one-way delay: 54.255 ms

Loss rate: 1.40%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-12 06:03:28

End at: 2017-12-12 06:03:58

Below is generated by plot.py at 2017-12-12 09:16:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.85 Mbit/s

95th percentile per-packet one-way delay: 54.244 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 11.08 Mbit/s

95th percentile per-packet one-way delay: 54.293 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 54.088 ms

Loss rate: 0.97%

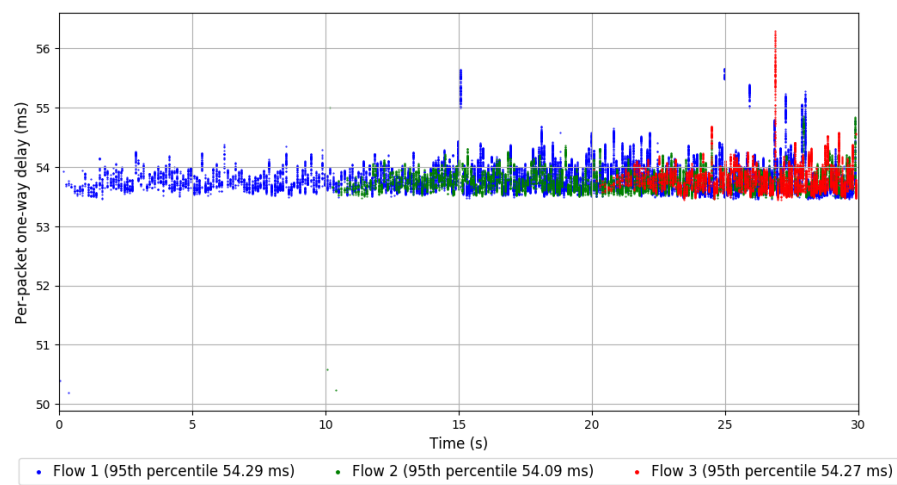
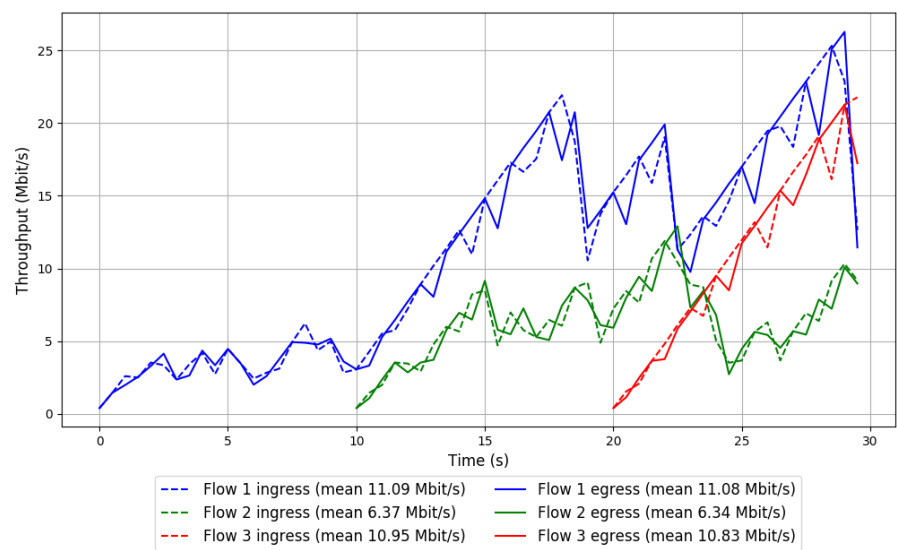
-- Flow 3:

Average throughput: 10.83 Mbit/s

95th percentile per-packet one-way delay: 54.266 ms

Loss rate: 2.09%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-12 06:15:37

End at: 2017-12-12 06:16:07

Below is generated by plot.py at 2017-12-12 09:16:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.02 Mbit/s

95th percentile per-packet one-way delay: 54.168 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 8.33 Mbit/s

95th percentile per-packet one-way delay: 54.168 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 54.141 ms

Loss rate: 0.65%

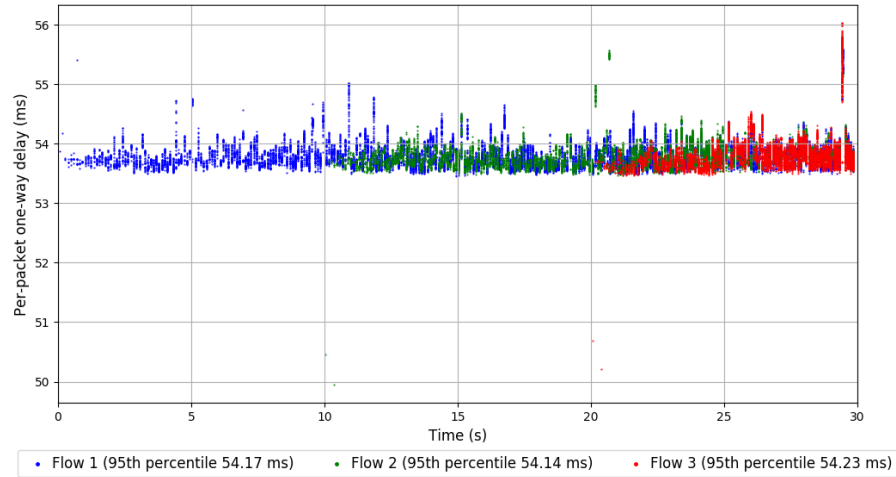
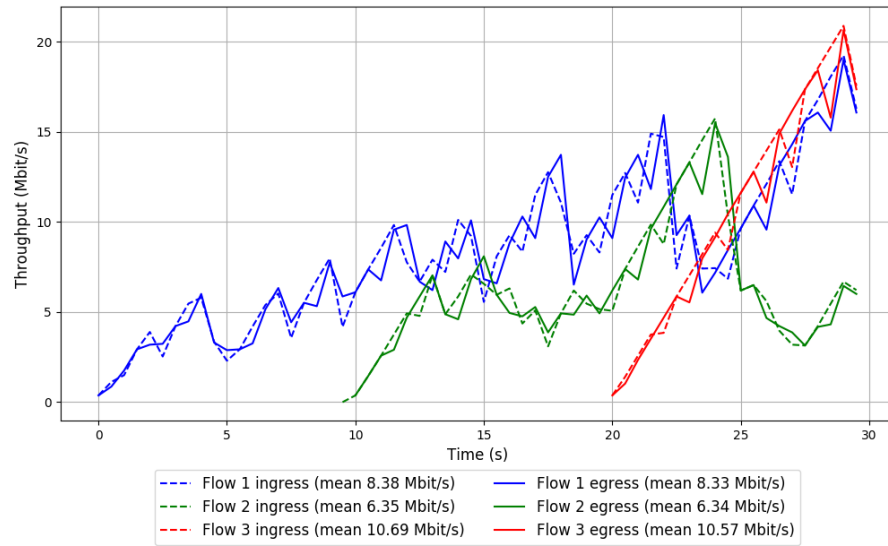
-- Flow 3:

Average throughput: 10.57 Mbit/s

95th percentile per-packet one-way delay: 54.225 ms

Loss rate: 2.11%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-12 06:27:28

End at: 2017-12-12 06:27:58

Below is generated by plot.py at 2017-12-12 09:16:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 21.67 Mbit/s

95th percentile per-packet one-way delay: 54.252 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 12.13 Mbit/s

95th percentile per-packet one-way delay: 54.307 ms

Loss rate: 0.95%

-- Flow 2:

Average throughput: 11.15 Mbit/s

95th percentile per-packet one-way delay: 54.173 ms

Loss rate: 0.80%

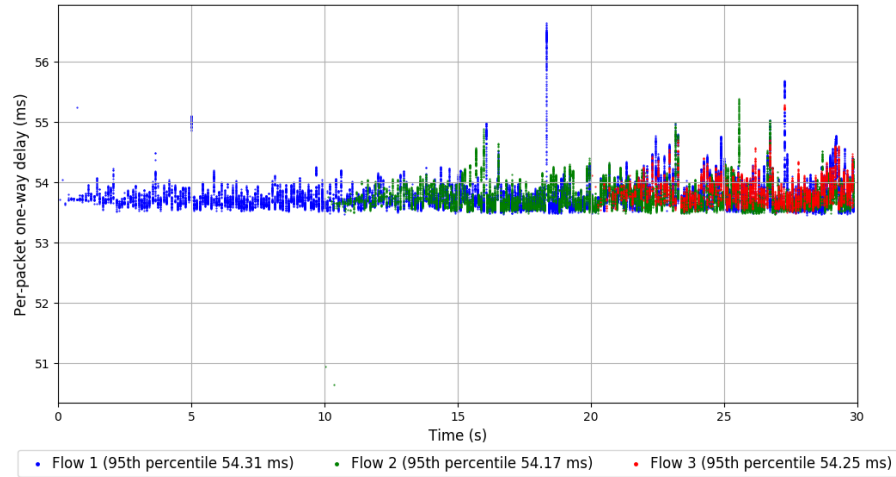
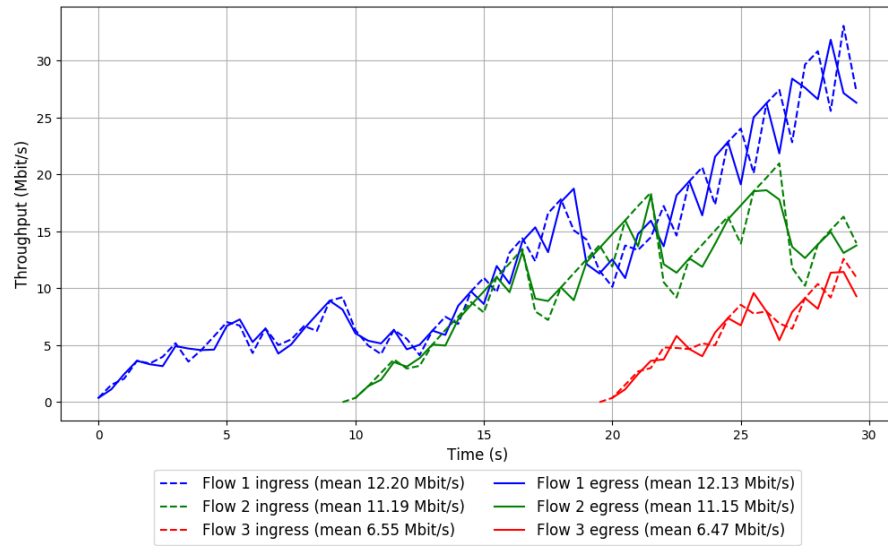
-- Flow 3:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 54.252 ms

Loss rate: 2.18%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-12 06:40:02

End at: 2017-12-12 06:40:32

Below is generated by plot.py at 2017-12-12 09:16:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 22.87 Mbit/s

95th percentile per-packet one-way delay: 54.239 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 13.09 Mbit/s

95th percentile per-packet one-way delay: 54.297 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 10.57 Mbit/s

95th percentile per-packet one-way delay: 54.145 ms

Loss rate: 0.69%

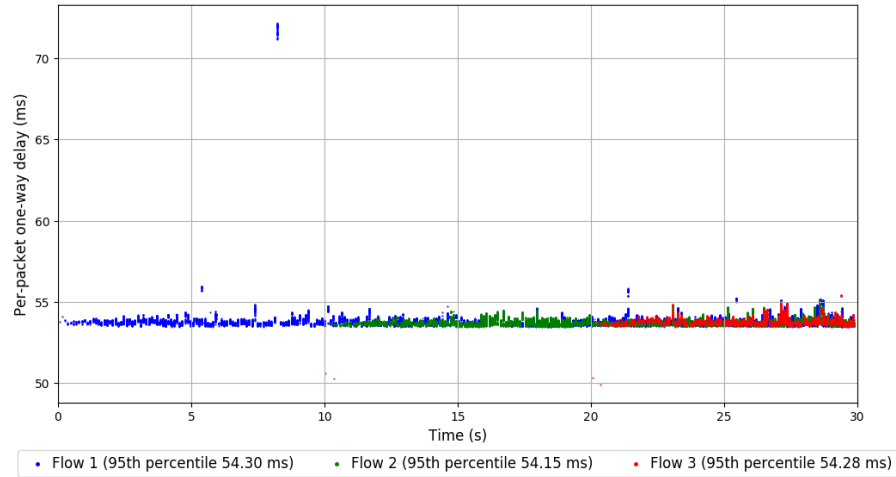
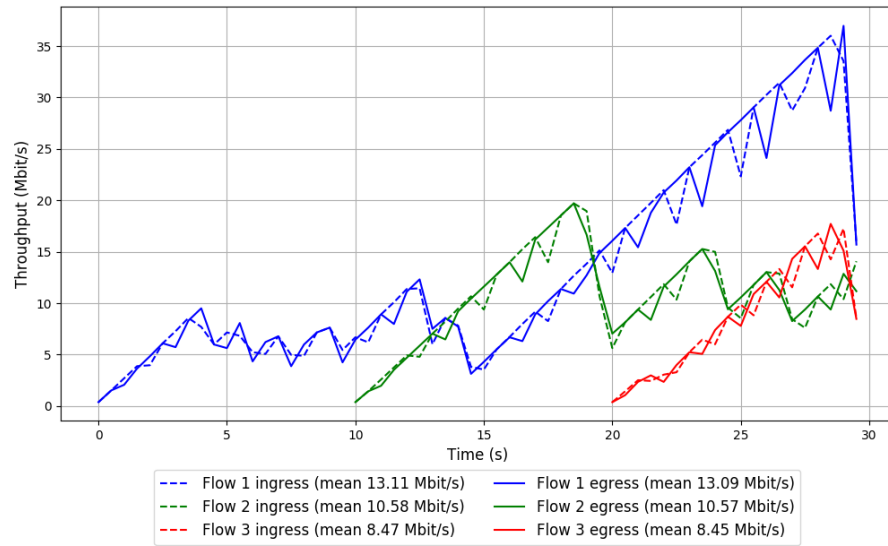
-- Flow 3:

Average throughput: 8.45 Mbit/s

95th percentile per-packet one-way delay: 54.276 ms

Loss rate: 1.32%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-12 06:52:23

End at: 2017-12-12 06:52:53

Below is generated by plot.py at 2017-12-12 09:16:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.60 Mbit/s

95th percentile per-packet one-way delay: 54.141 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 10.21 Mbit/s

95th percentile per-packet one-way delay: 54.193 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 7.34 Mbit/s

95th percentile per-packet one-way delay: 54.066 ms

Loss rate: 0.66%

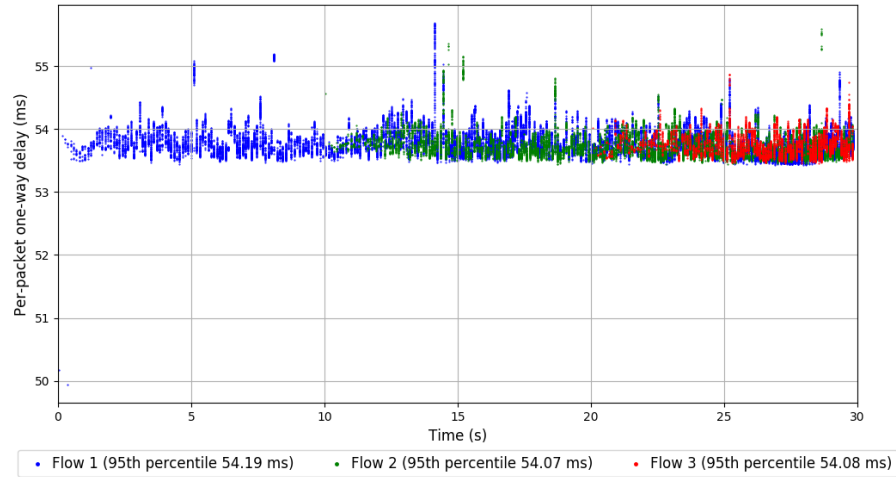
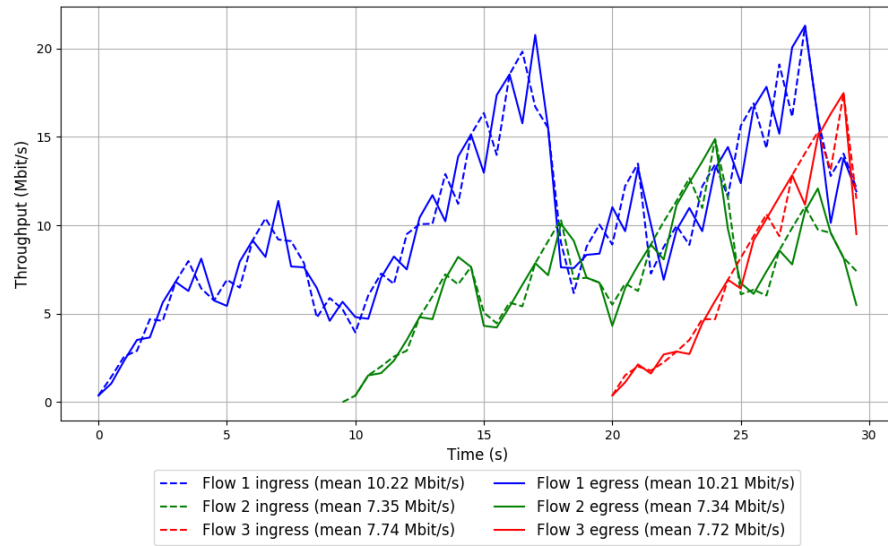
-- Flow 3:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 54.077 ms

Loss rate: 1.31%

Run 10: Report of LEDBAT — Data Link

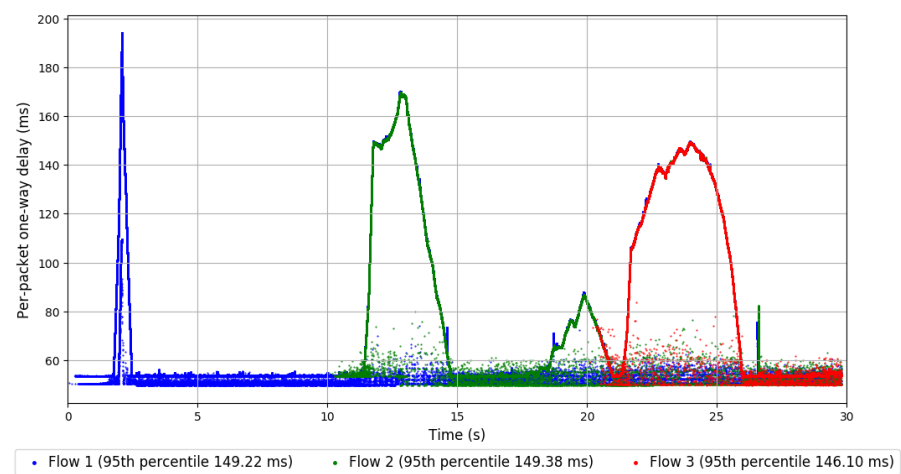
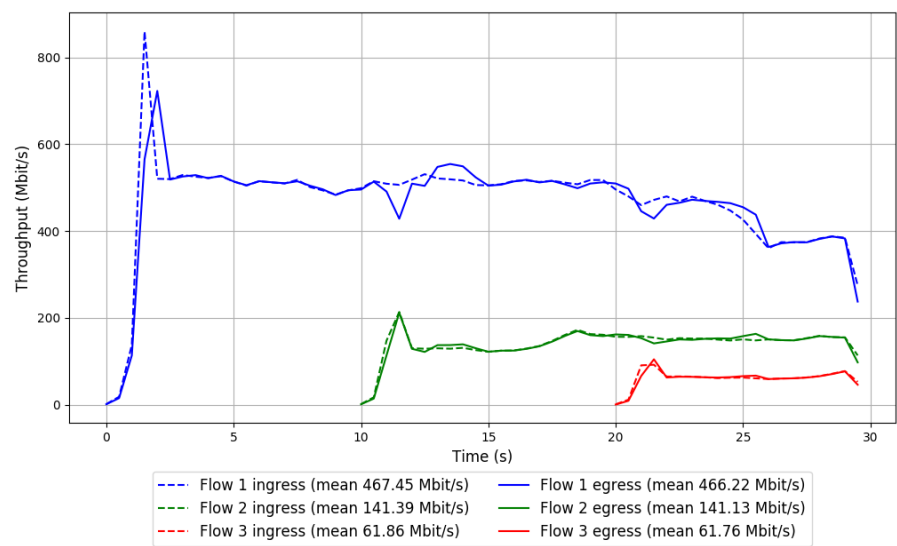


```
Run 1: Statistics of PCC

Start at: 2017-12-12 04:59:38
End at: 2017-12-12 05:00:08

# Below is generated by plot.py at 2017-12-12 09:23:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 579.93 Mbit/s
95th percentile per-packet one-way delay: 149.145 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 466.22 Mbit/s
95th percentile per-packet one-way delay: 149.220 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 141.13 Mbit/s
95th percentile per-packet one-way delay: 149.377 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 61.76 Mbit/s
95th percentile per-packet one-way delay: 146.098 ms
Loss rate: 1.26%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

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

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

Below is generated by plot.py at 2017-12-12 09:23:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 566.74 Mbit/s

95th percentile per-packet one-way delay: 156.704 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 480.85 Mbit/s

95th percentile per-packet one-way delay: 156.715 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 112.09 Mbit/s

95th percentile per-packet one-way delay: 157.177 ms

Loss rate: 0.60%

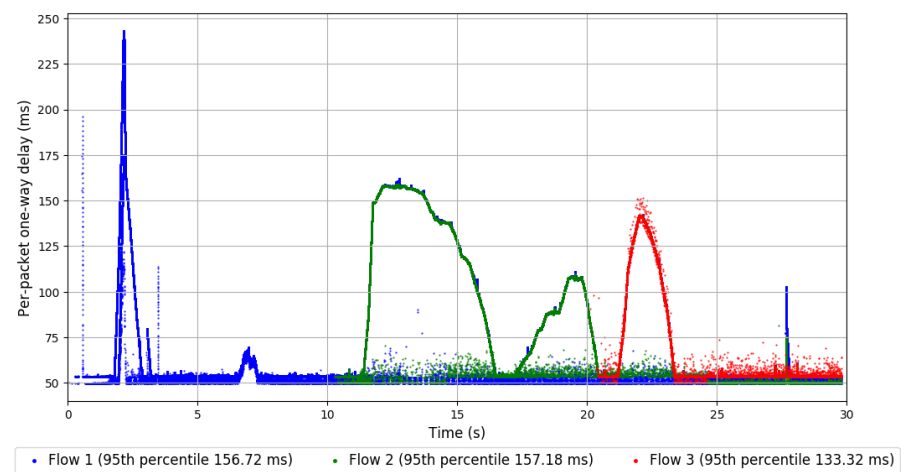
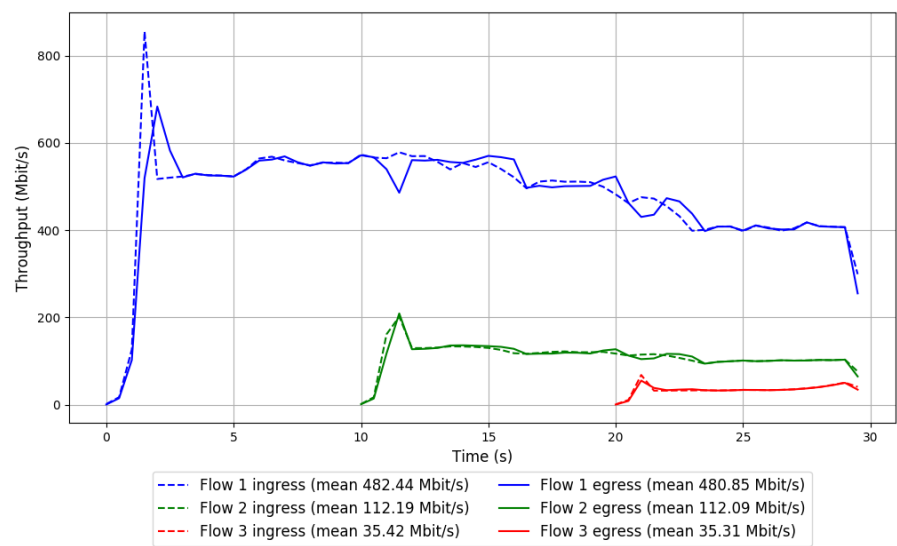
-- Flow 3:

Average throughput: 35.31 Mbit/s

95th percentile per-packet one-way delay: 133.316 ms

Loss rate: 1.73%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-12 05:24:26

End at: 2017-12-12 05:24:56

Below is generated by plot.py at 2017-12-12 09:24:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 592.45 Mbit/s

95th percentile per-packet one-way delay: 159.552 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 504.83 Mbit/s

95th percentile per-packet one-way delay: 159.628 ms

Loss rate: 1.52%

-- Flow 2:

Average throughput: 123.63 Mbit/s

95th percentile per-packet one-way delay: 159.356 ms

Loss rate: 1.32%

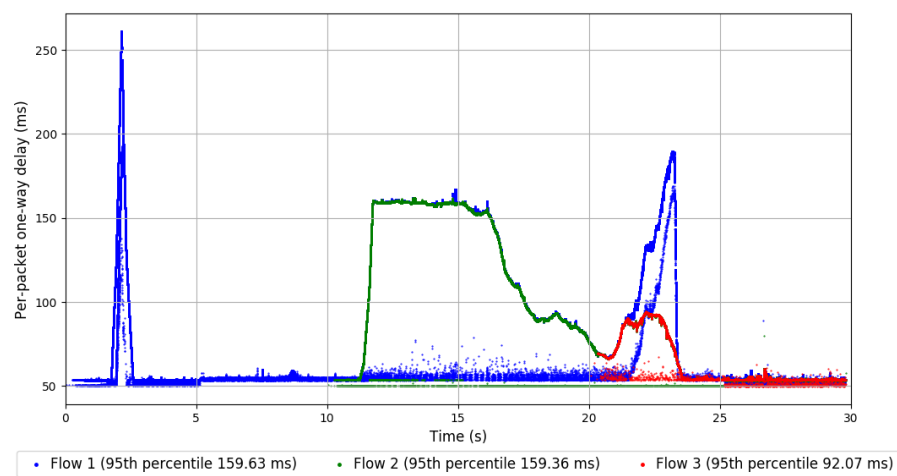
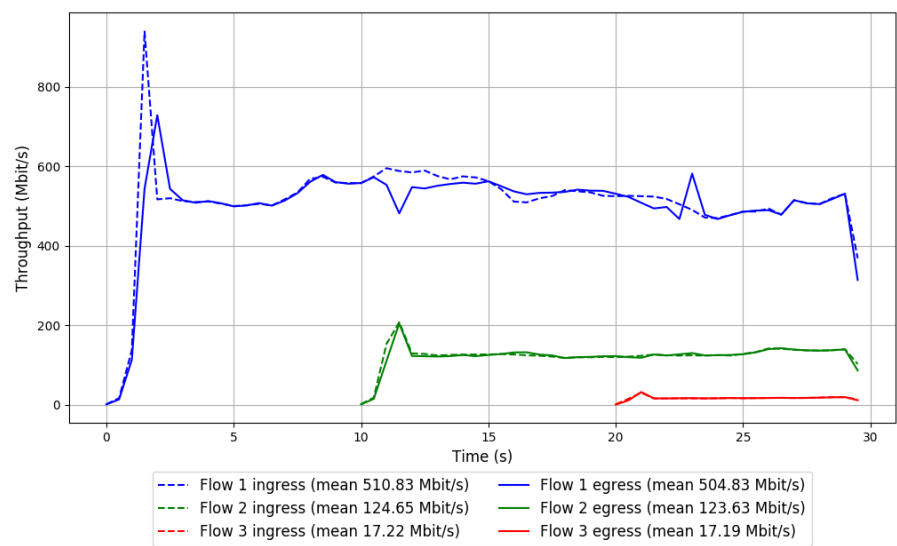
-- Flow 3:

Average throughput: 17.19 Mbit/s

95th percentile per-packet one-way delay: 92.070 ms

Loss rate: 1.23%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-12 05:36:25

End at: 2017-12-12 05:36:55

Below is generated by plot.py at 2017-12-12 09:24:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 609.87 Mbit/s

95th percentile per-packet one-way delay: 164.597 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 568.83 Mbit/s

95th percentile per-packet one-way delay: 164.586 ms

Loss rate: 1.45%

-- Flow 2:

Average throughput: 59.41 Mbit/s

95th percentile per-packet one-way delay: 164.699 ms

Loss rate: 1.43%

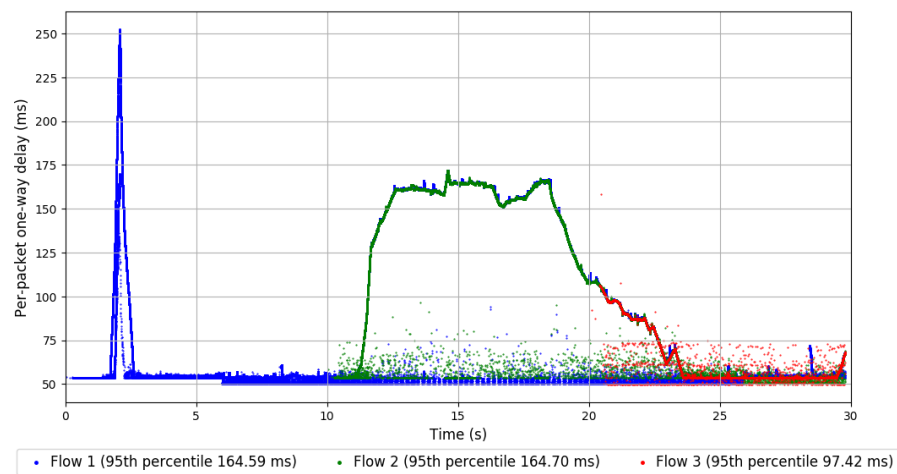
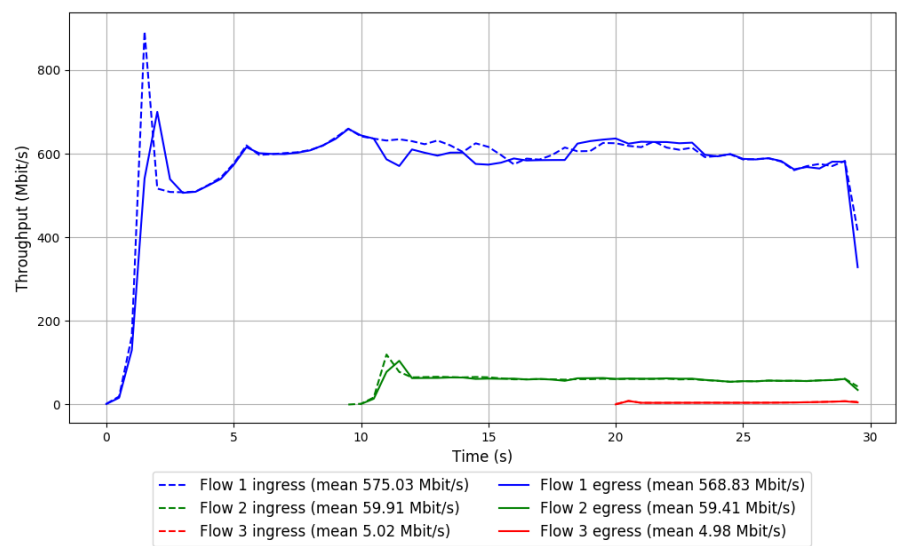
-- Flow 3:

Average throughput: 4.98 Mbit/s

95th percentile per-packet one-way delay: 97.415 ms

Loss rate: 2.26%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-12 05:48:04

End at: 2017-12-12 05:48:34

Below is generated by plot.py at 2017-12-12 09:24:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 553.78 Mbit/s

95th percentile per-packet one-way delay: 119.463 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 527.76 Mbit/s

95th percentile per-packet one-way delay: 120.008 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 37.26 Mbit/s

95th percentile per-packet one-way delay: 111.232 ms

Loss rate: 0.72%

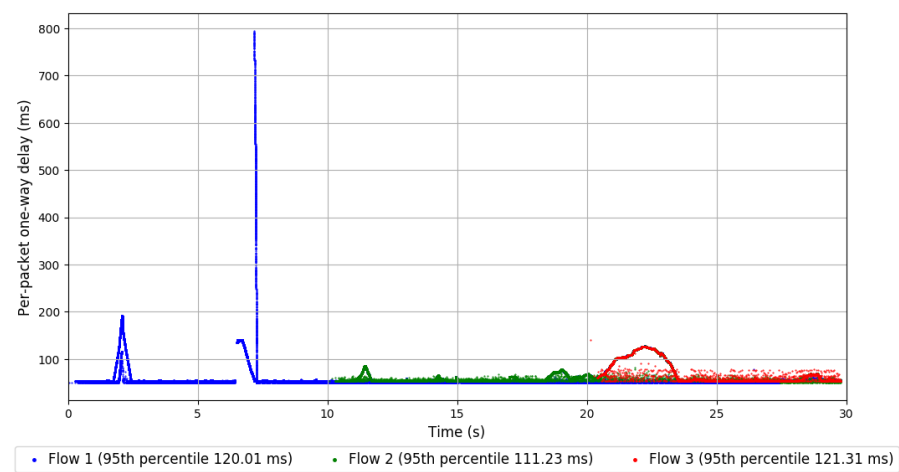
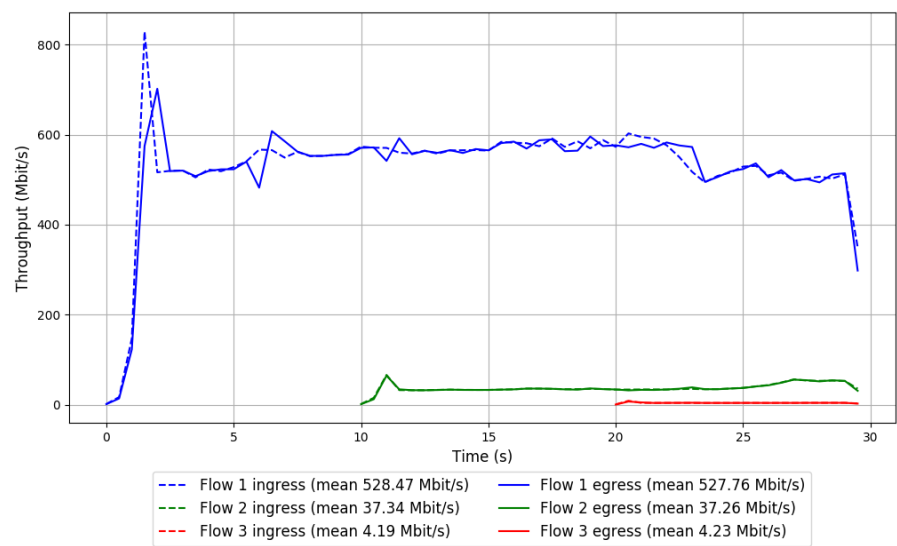
-- Flow 3:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 121.312 ms

Loss rate: 1.08%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-12 06:00:07

End at: 2017-12-12 06:00:37

Below is generated by plot.py at 2017-12-12 09:24:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 389.69 Mbit/s

95th percentile per-packet one-way delay: 149.054 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 60.47 Mbit/s

95th percentile per-packet one-way delay: 149.433 ms

Loss rate: 1.67%

-- Flow 2:

Average throughput: 493.99 Mbit/s

95th percentile per-packet one-way delay: 148.950 ms

Loss rate: 1.00%

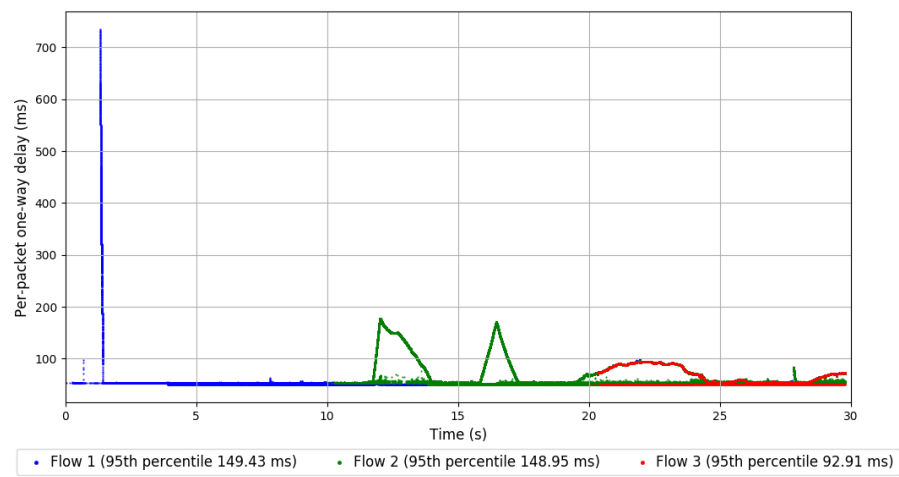
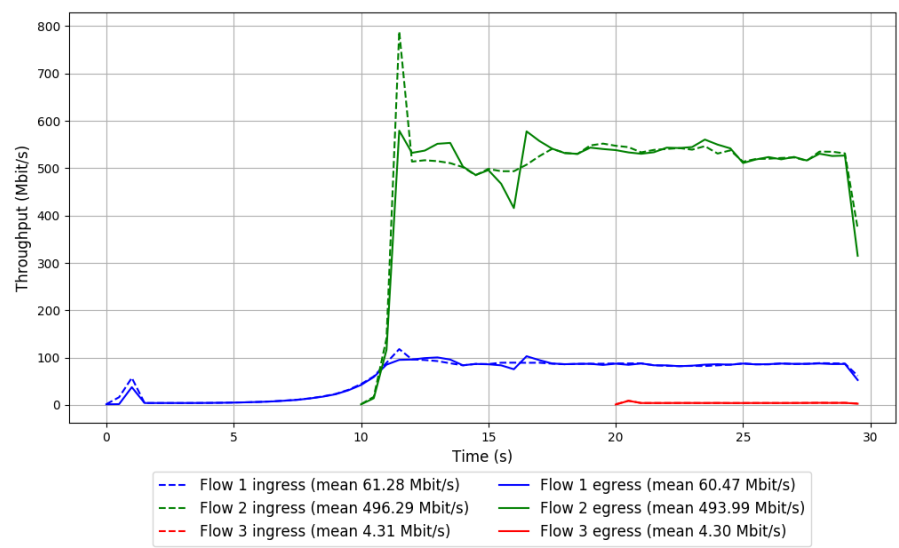
-- Flow 3:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 92.910 ms

Loss rate: 1.29%

Run 6: Report of PCC — Data Link

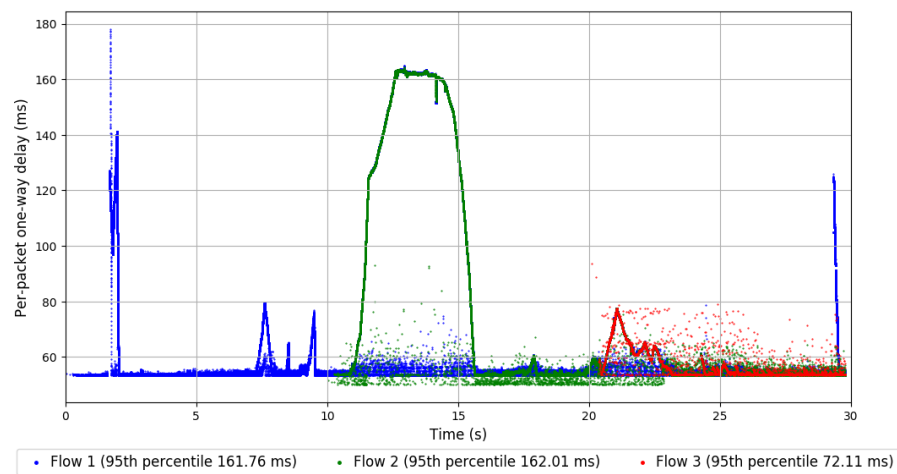
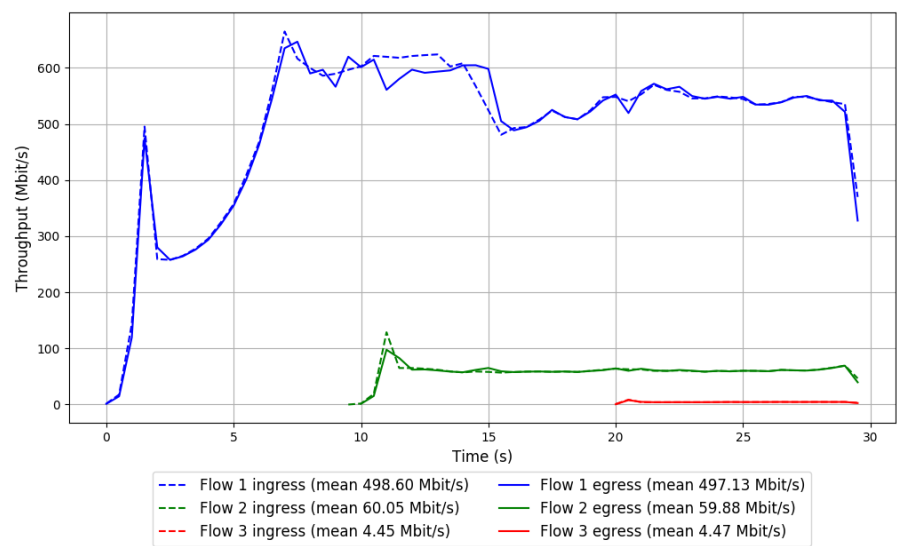


```
Run 7: Statistics of PCC

Start at: 2017-12-12 06:12:08
End at: 2017-12-12 06:12:38

# Below is generated by plot.py at 2017-12-12 09:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 538.34 Mbit/s
95th percentile per-packet one-way delay: 161.791 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 497.13 Mbit/s
95th percentile per-packet one-way delay: 161.764 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 59.88 Mbit/s
95th percentile per-packet one-way delay: 162.008 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 72.107 ms
Loss rate: 1.15%
```


Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-12 06:23:56

End at: 2017-12-12 06:24:26

Below is generated by plot.py at 2017-12-12 09:28:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 591.50 Mbit/s

95th percentile per-packet one-way delay: 163.194 ms

Loss rate: 2.37%

-- Flow 1:

Average throughput: 568.47 Mbit/s

95th percentile per-packet one-way delay: 163.194 ms

Loss rate: 2.33%

-- Flow 2:

Average throughput: 5.85 Mbit/s

95th percentile per-packet one-way delay: 163.188 ms

Loss rate: 2.62%

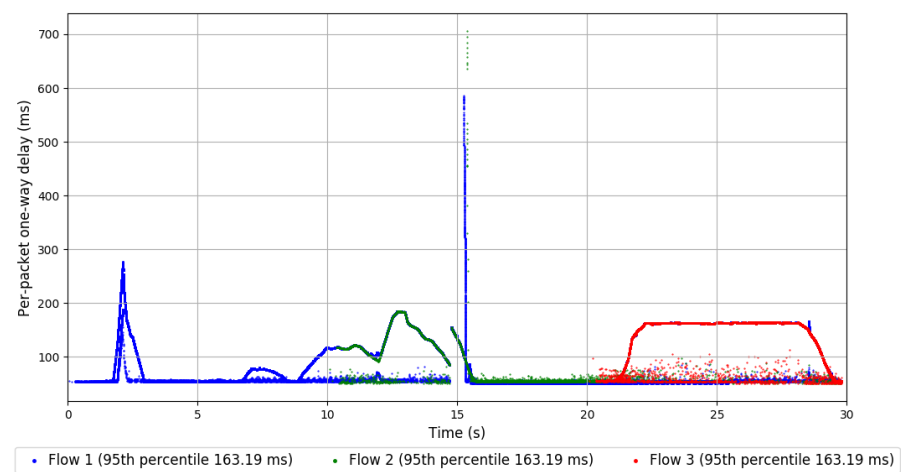
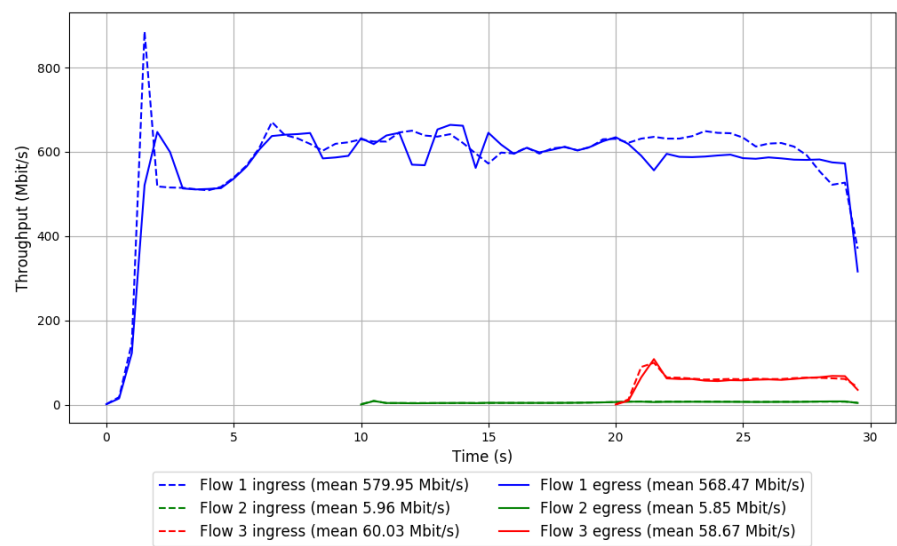
-- Flow 3:

Average throughput: 58.67 Mbit/s

95th percentile per-packet one-way delay: 163.192 ms

Loss rate: 3.34%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

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

End at: 2017-12-12 06:37:03

Below is generated by plot.py at 2017-12-12 09:32:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 565.89 Mbit/s

95th percentile per-packet one-way delay: 168.615 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 510.72 Mbit/s

95th percentile per-packet one-way delay: 168.254 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 67.70 Mbit/s

95th percentile per-packet one-way delay: 169.404 ms

Loss rate: 0.77%

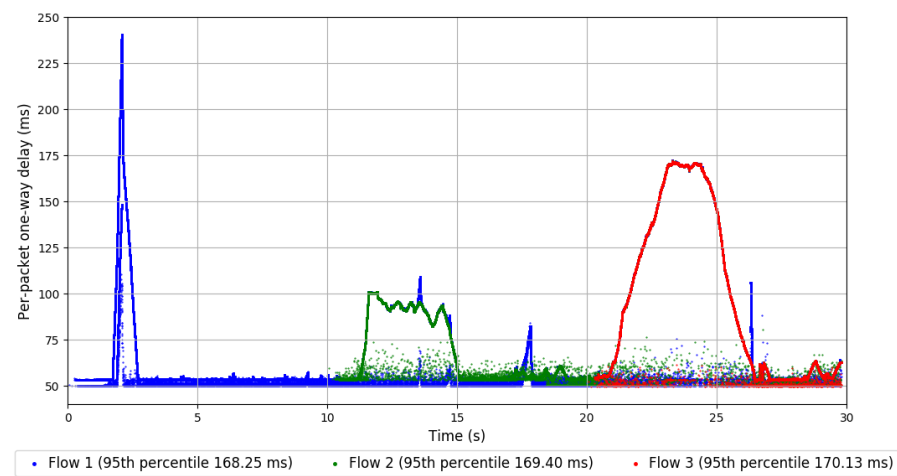
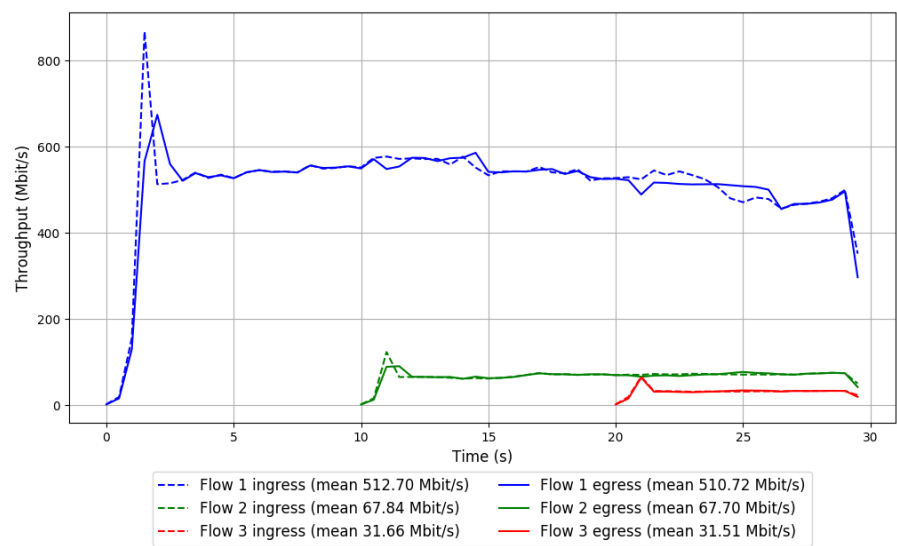
-- Flow 3:

Average throughput: 31.51 Mbit/s

95th percentile per-packet one-way delay: 170.131 ms

Loss rate: 1.52%

Run 9: Report of PCC — Data Link

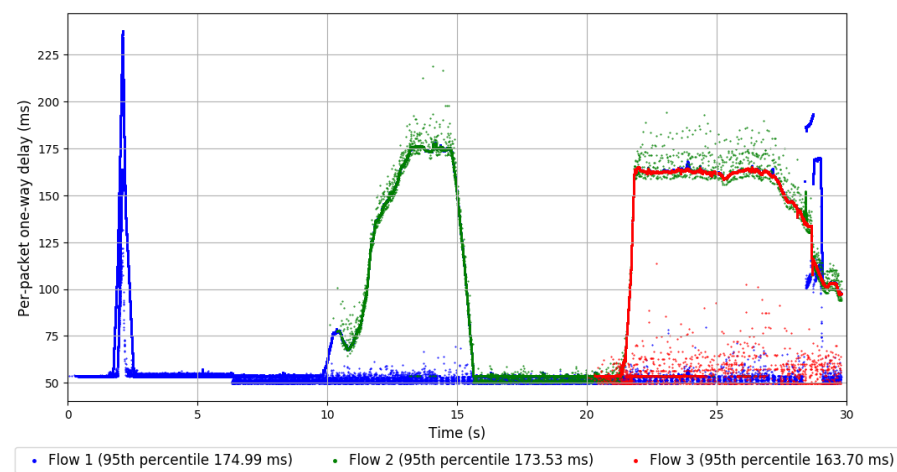
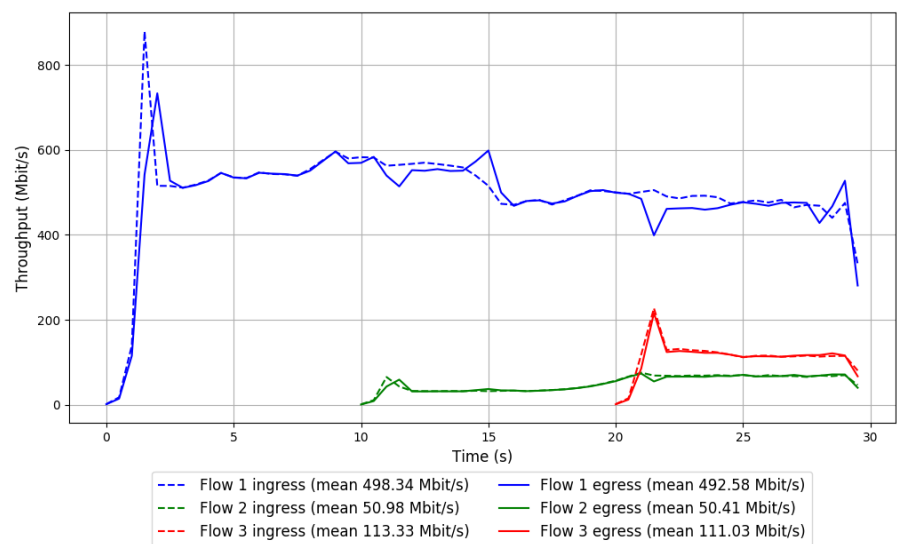


```
Run 10: Statistics of PCC

Start at: 2017-12-12 06:48:55
End at: 2017-12-12 06:49:25

# Below is generated by plot.py at 2017-12-12 09:34:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 562.26 Mbit/s
95th percentile per-packet one-way delay: 174.747 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 492.58 Mbit/s
95th percentile per-packet one-way delay: 174.991 ms
Loss rate: 1.52%
-- Flow 2:
Average throughput: 50.41 Mbit/s
95th percentile per-packet one-way delay: 173.526 ms
Loss rate: 1.78%
-- Flow 3:
Average throughput: 111.03 Mbit/s
95th percentile per-packet one-way delay: 163.704 ms
Loss rate: 3.11%
```

Run 10: Report of PCC — Data Link

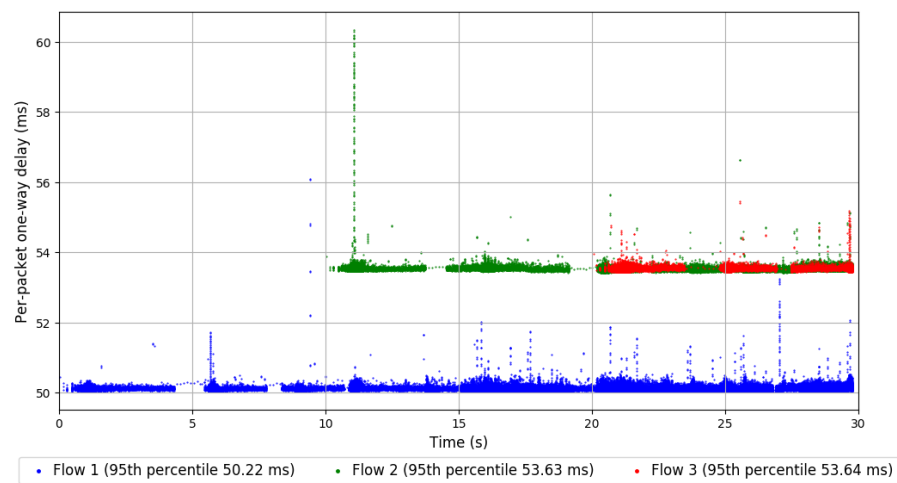
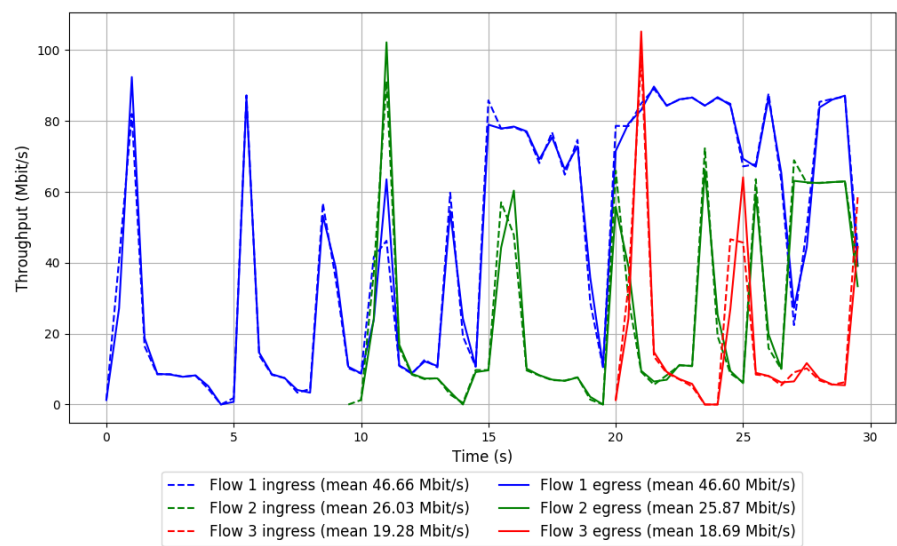


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-12 05:02:23
End at: 2017-12-12 05:02:53

# Below is generated by plot.py at 2017-12-12 09:34:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.87 Mbit/s
95th percentile per-packet one-way delay: 53.585 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 46.60 Mbit/s
95th percentile per-packet one-way delay: 50.220 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 25.87 Mbit/s
95th percentile per-packet one-way delay: 53.631 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 18.69 Mbit/s
95th percentile per-packet one-way delay: 53.636 ms
Loss rate: 4.07%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-12 05:14:52

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

Below is generated by plot.py at 2017-12-12 09:34:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.84 Mbit/s

95th percentile per-packet one-way delay: 53.586 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 47.52 Mbit/s

95th percentile per-packet one-way delay: 53.578 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 39.27 Mbit/s

95th percentile per-packet one-way delay: 53.598 ms

Loss rate: 1.07%

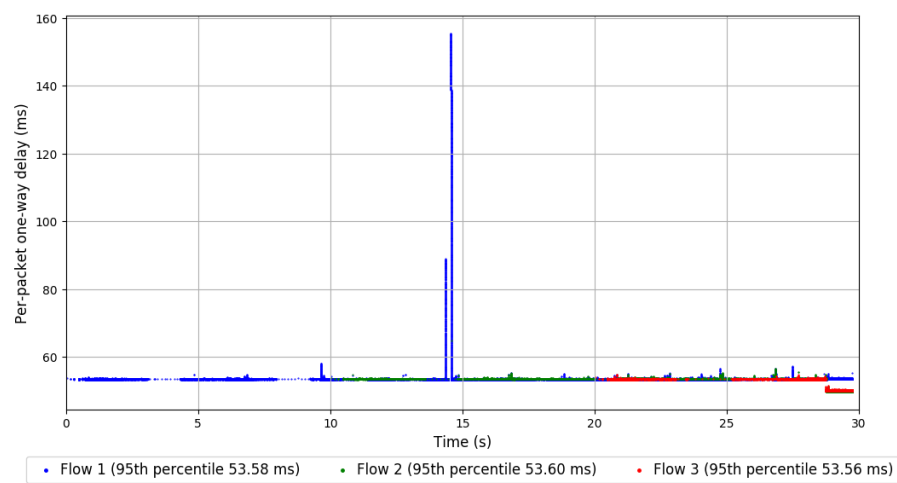
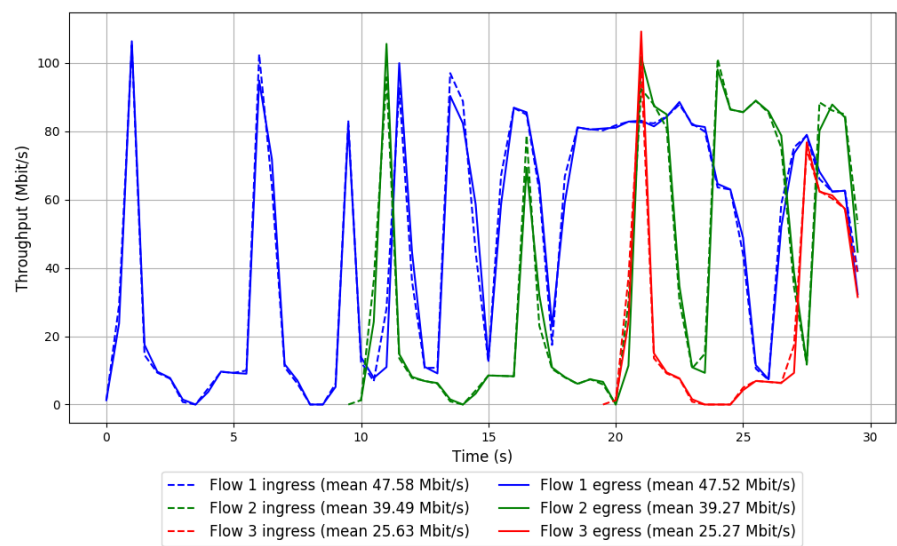
-- Flow 3:

Average throughput: 25.27 Mbit/s

95th percentile per-packet one-way delay: 53.563 ms

Loss rate: 2.47%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

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

End at: 2017-12-12 05:27:42

Below is generated by plot.py at 2017-12-12 09:34:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.90 Mbit/s

95th percentile per-packet one-way delay: 53.580 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 51.77 Mbit/s

95th percentile per-packet one-way delay: 53.609 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 36.29 Mbit/s

95th percentile per-packet one-way delay: 53.524 ms

Loss rate: 0.91%

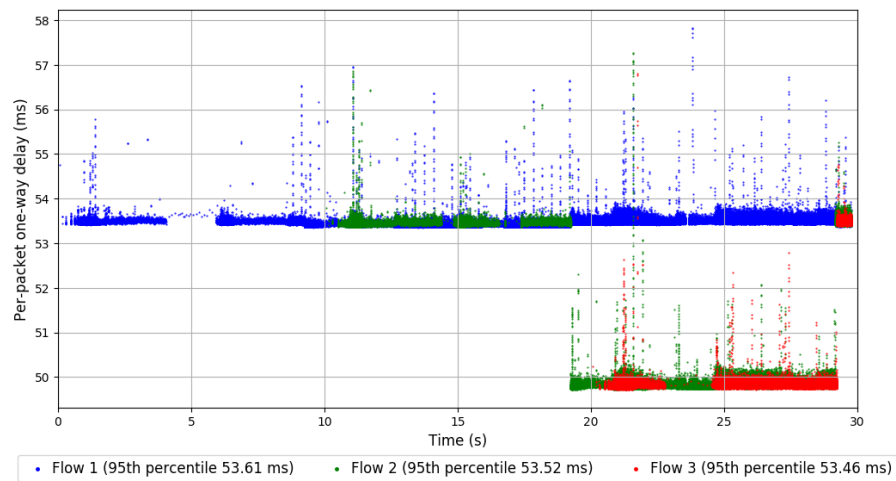
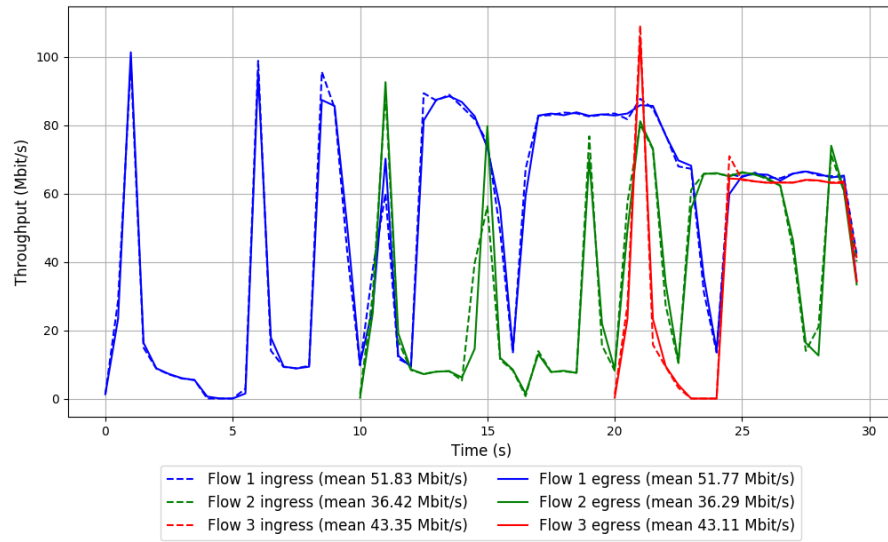
-- Flow 3:

Average throughput: 43.11 Mbit/s

95th percentile per-packet one-way delay: 53.457 ms

Loss rate: 1.61%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-12 05:39:10

End at: 2017-12-12 05:39:40

Below is generated by plot.py at 2017-12-12 09:34:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 128.91 Mbit/s

95th percentile per-packet one-way delay: 53.670 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 72.23 Mbit/s

95th percentile per-packet one-way delay: 53.620 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 62.78 Mbit/s

95th percentile per-packet one-way delay: 53.716 ms

Loss rate: 0.56%

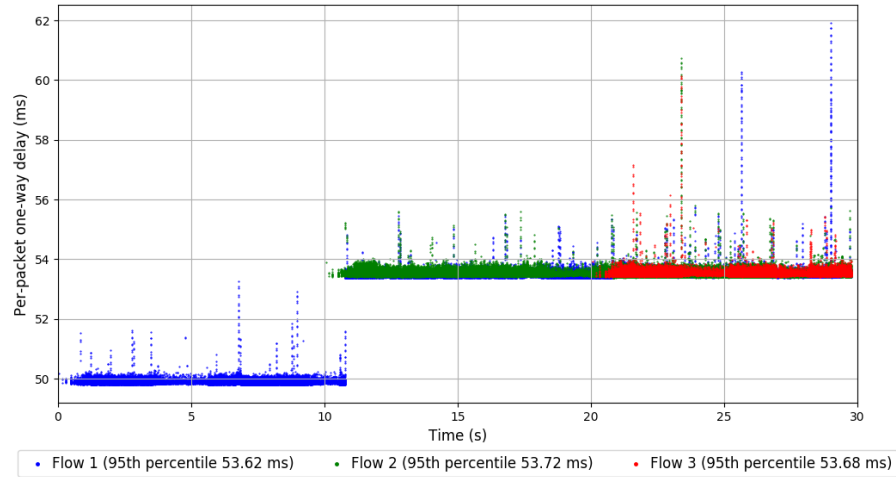
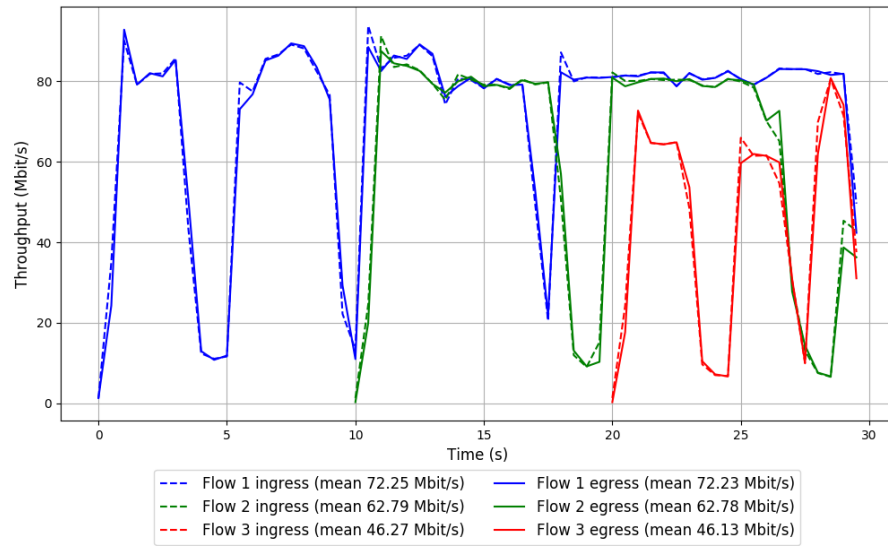
-- Flow 3:

Average throughput: 46.13 Mbit/s

95th percentile per-packet one-way delay: 53.677 ms

Loss rate: 1.38%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-12 05:50:47

End at: 2017-12-12 05:51:17

Below is generated by plot.py at 2017-12-12 09:34:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.93 Mbit/s

95th percentile per-packet one-way delay: 53.574 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 76.42 Mbit/s

95th percentile per-packet one-way delay: 53.592 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 42.23 Mbit/s

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

Loss rate: 0.12%

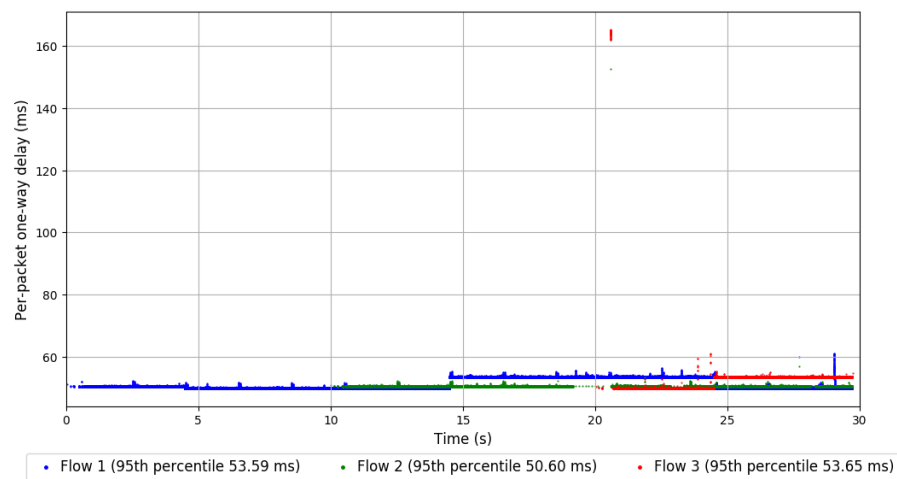
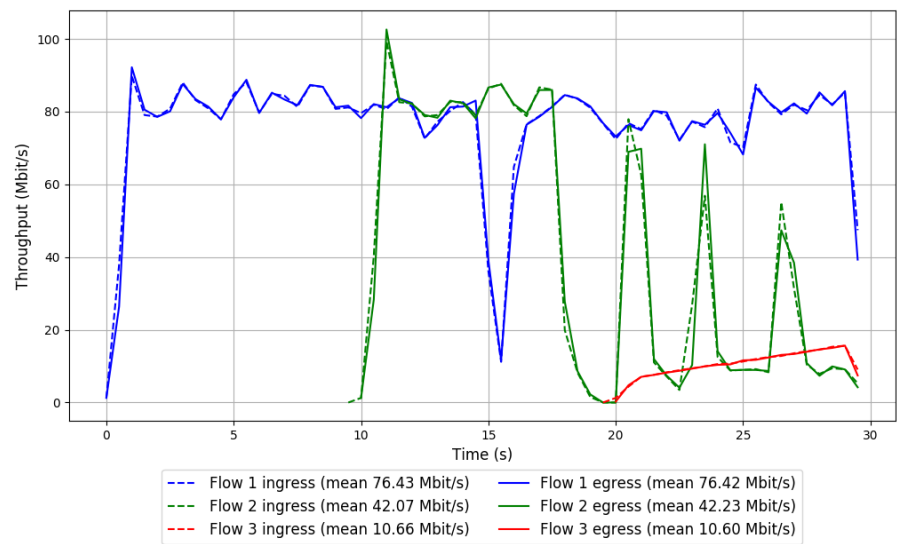
-- Flow 3:

Average throughput: 10.60 Mbit/s

95th percentile per-packet one-way delay: 53.652 ms

Loss rate: 1.60%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-12 06:02:41

End at: 2017-12-12 06:03:11

Below is generated by plot.py at 2017-12-12 09:34:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.11 Mbit/s

95th percentile per-packet one-way delay: 53.645 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 58.69 Mbit/s

95th percentile per-packet one-way delay: 50.312 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 69.42 Mbit/s

95th percentile per-packet one-way delay: 53.707 ms

Loss rate: 0.53%

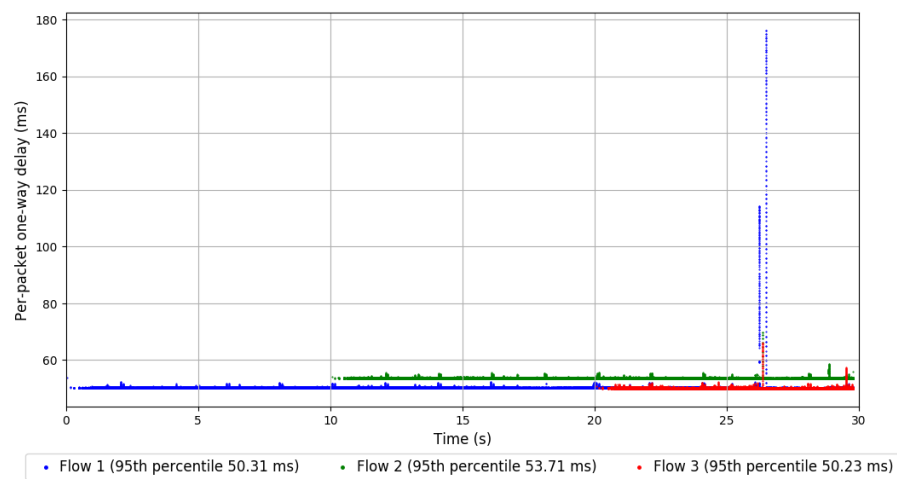
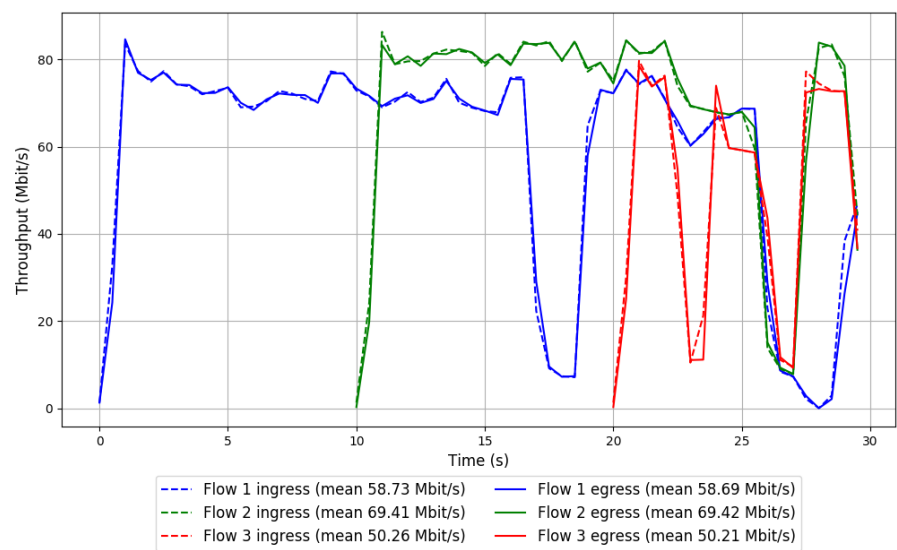
-- Flow 3:

Average throughput: 50.21 Mbit/s

95th percentile per-packet one-way delay: 50.234 ms

Loss rate: 1.14%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-12 06:14:50

End at: 2017-12-12 06:15:20

Below is generated by plot.py at 2017-12-12 09:34:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.89 Mbit/s

95th percentile per-packet one-way delay: 53.633 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 60.97 Mbit/s

95th percentile per-packet one-way delay: 50.006 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 58.82 Mbit/s

95th percentile per-packet one-way delay: 53.714 ms

Loss rate: 0.53%

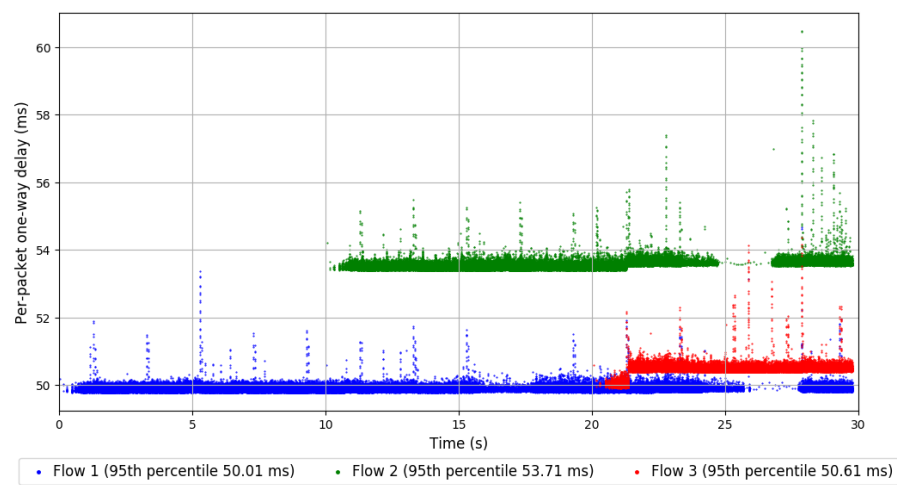
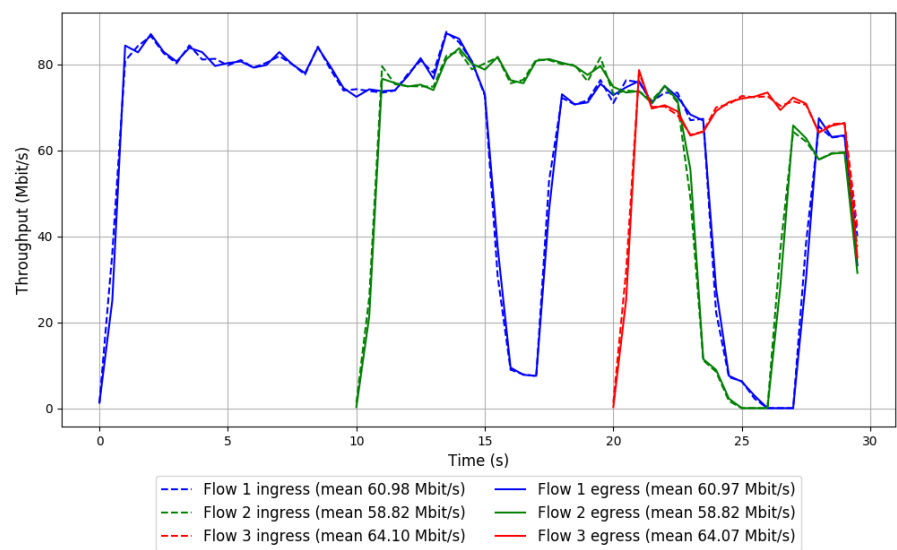
-- Flow 3:

Average throughput: 64.07 Mbit/s

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

Loss rate: 1.08%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-12 06:26:40

End at: 2017-12-12 06:27:10

Below is generated by plot.py at 2017-12-12 09:34:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.94 Mbit/s

95th percentile per-packet one-way delay: 53.702 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 71.19 Mbit/s

95th percentile per-packet one-way delay: 53.602 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 59.70 Mbit/s

95th percentile per-packet one-way delay: 53.743 ms

Loss rate: 0.32%

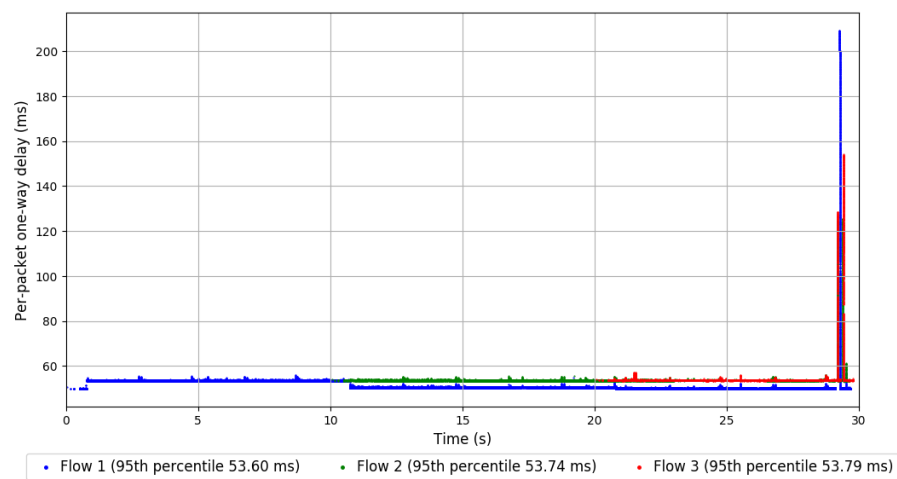
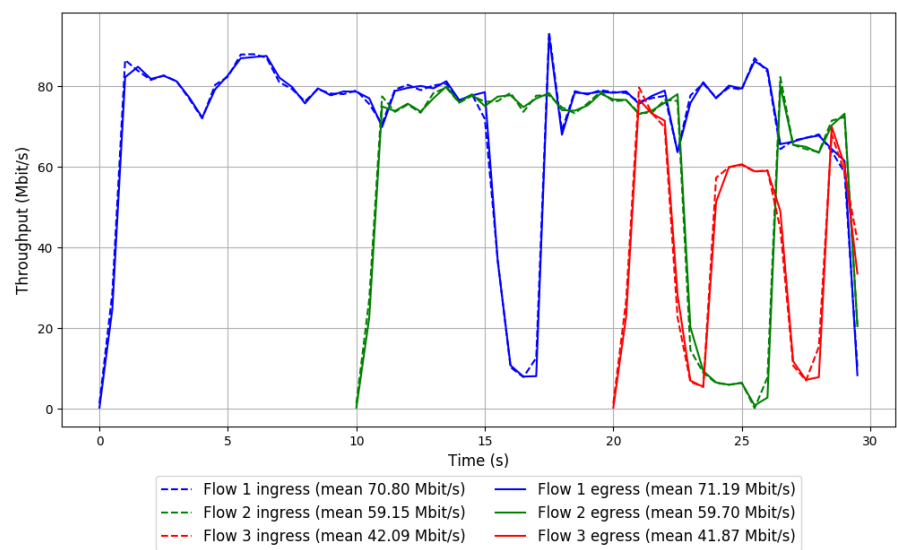
-- Flow 3:

Average throughput: 41.87 Mbit/s

95th percentile per-packet one-way delay: 53.791 ms

Loss rate: 1.54%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-12 06:39:15

End at: 2017-12-12 06:39:45

Below is generated by plot.py at 2017-12-12 09:34:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.56 Mbit/s

95th percentile per-packet one-way delay: 53.681 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 69.80 Mbit/s

95th percentile per-packet one-way delay: 53.676 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 58.14 Mbit/s

95th percentile per-packet one-way delay: 50.054 ms

Loss rate: 0.53%

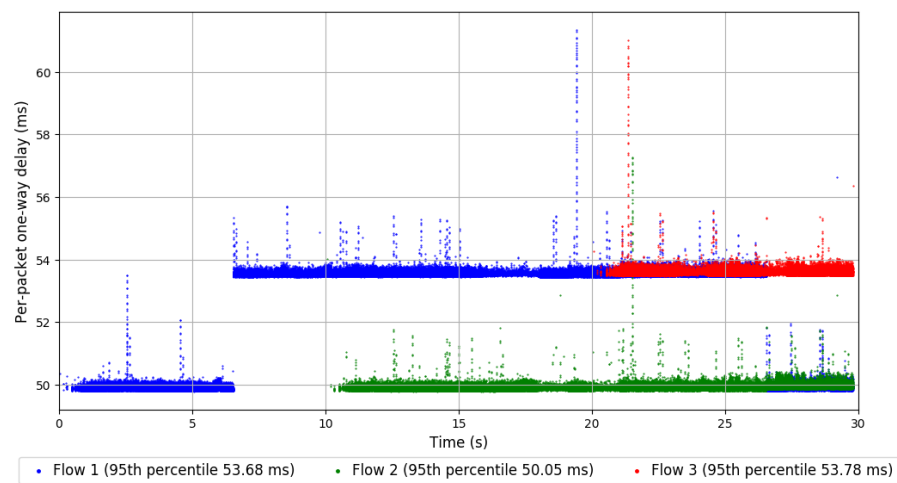
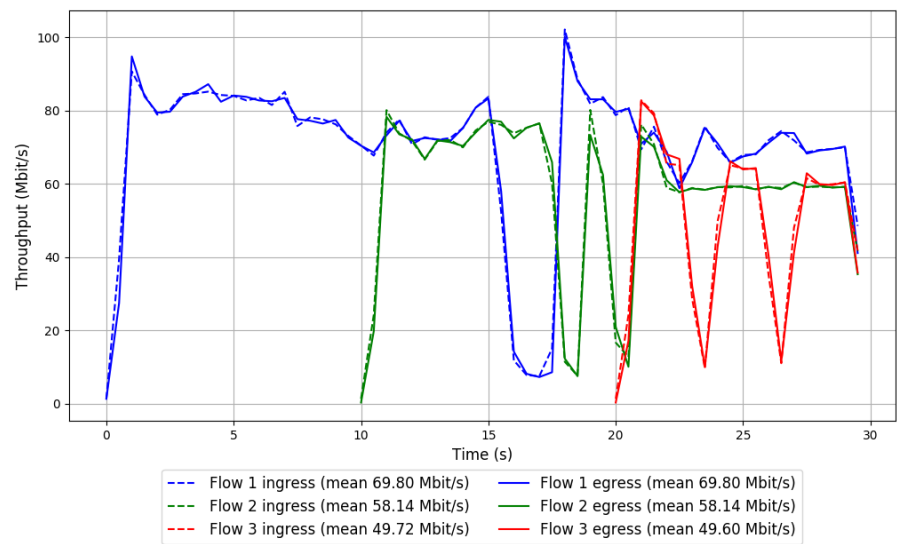
-- Flow 3:

Average throughput: 49.60 Mbit/s

95th percentile per-packet one-way delay: 53.777 ms

Loss rate: 1.28%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-12 06:51:36

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

Below is generated by plot.py at 2017-12-12 09:34:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.58 Mbit/s

95th percentile per-packet one-way delay: 53.746 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 45.54 Mbit/s

95th percentile per-packet one-way delay: 53.782 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 68.24 Mbit/s

95th percentile per-packet one-way delay: 53.716 ms

Loss rate: 0.49%

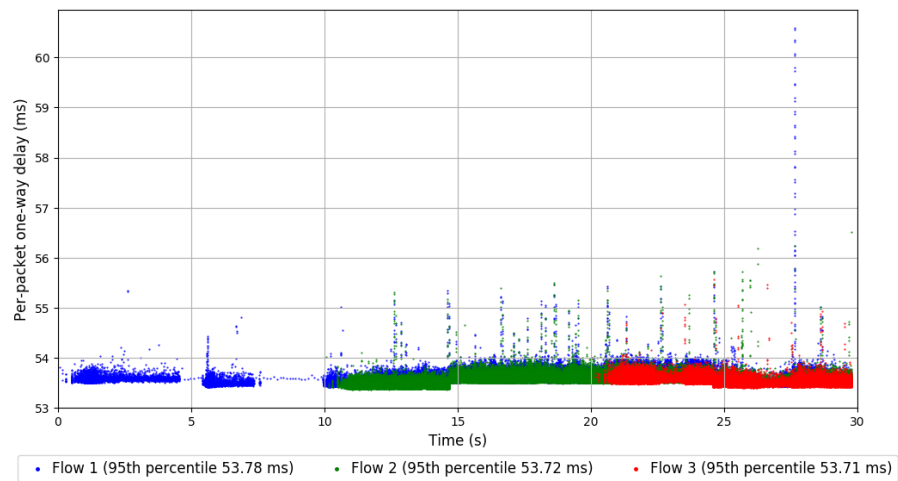
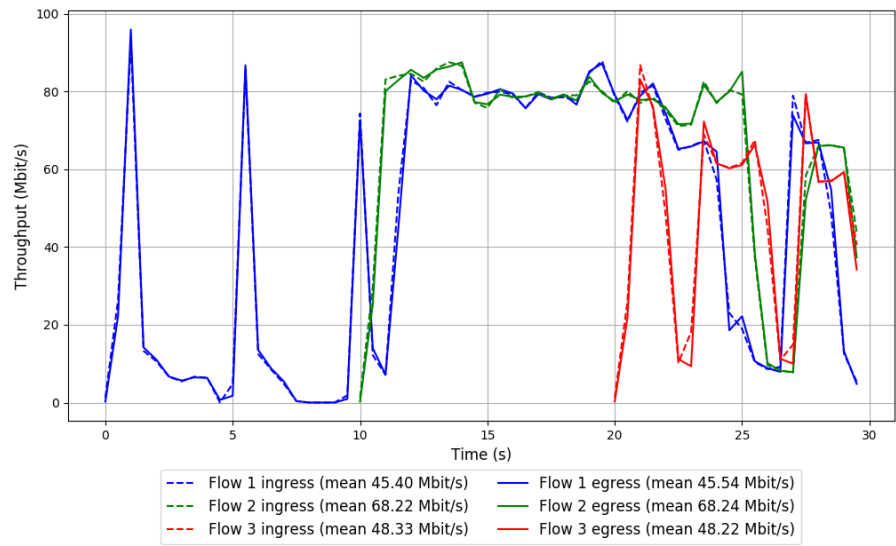
-- Flow 3:

Average throughput: 48.22 Mbit/s

95th percentile per-packet one-way delay: 53.713 ms

Loss rate: 1.30%

Run 10: Report of QUIC Cubic — Data Link

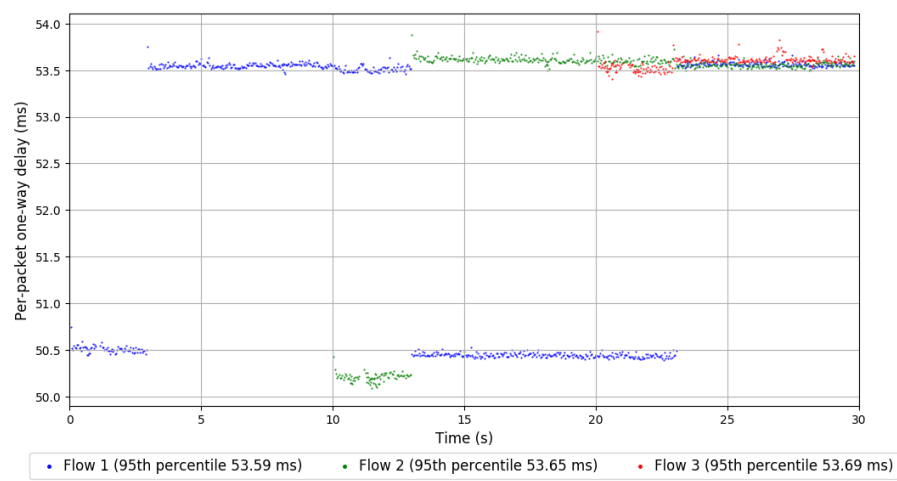
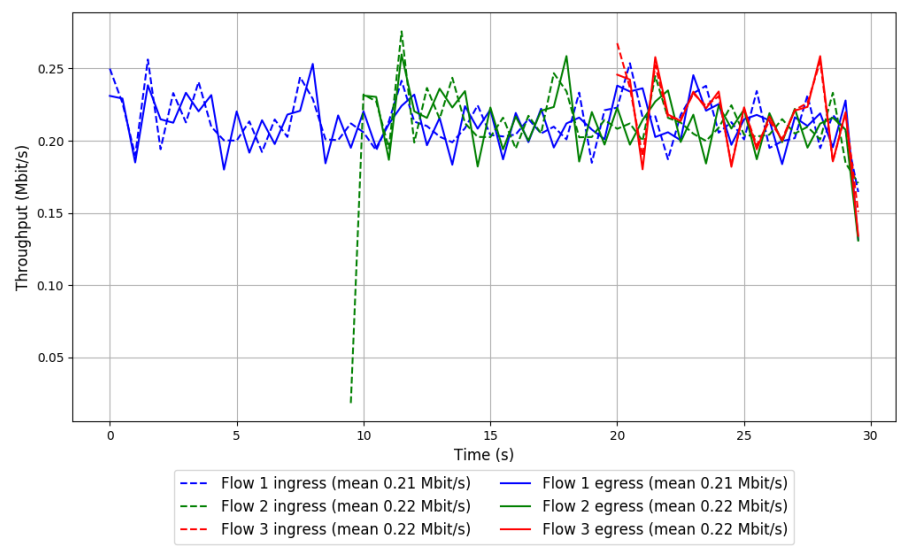


```
Run 1: Statistics of SCReAM

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 09:34:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.641 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.588 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.654 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.693 ms
Loss rate: 0.75%
```

Run 1: Report of SReAM — Data Link

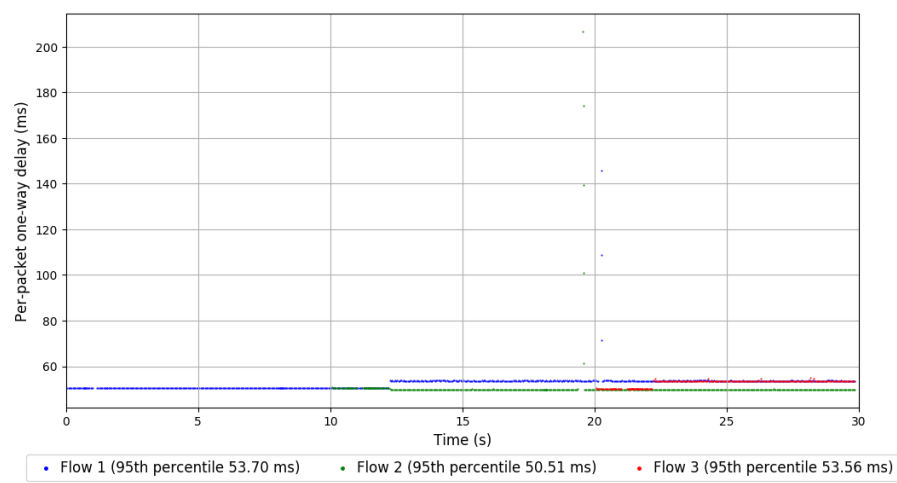
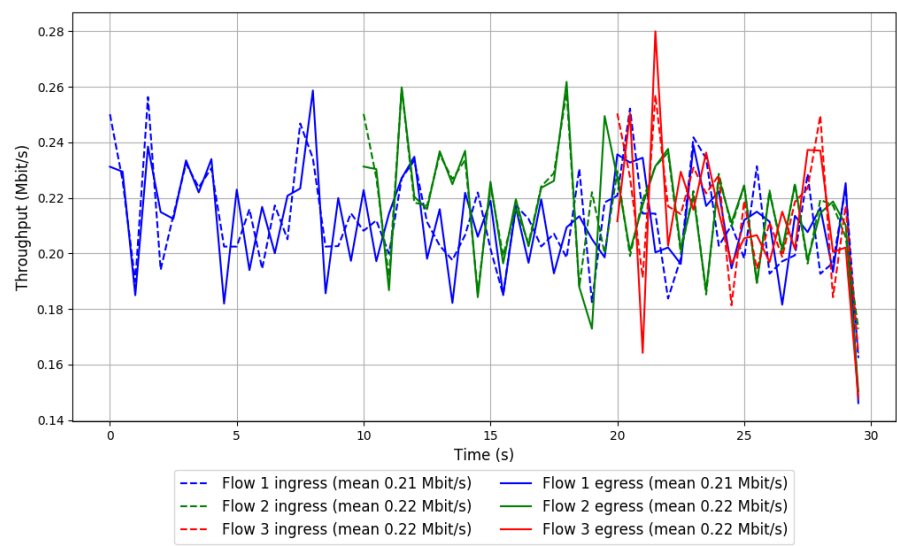


```
Run 2: Statistics of SCReAM

Start at: 2017-12-12 05:03:49
End at: 2017-12-12 05:04:19

# Below is generated by plot.py at 2017-12-12 09:34:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.681 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.695 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.510 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.561 ms
Loss rate: 1.10%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2017-12-12 05:16:18

End at: 2017-12-12 05:16:48

Below is generated by plot.py at 2017-12-12 09:34:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.676 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.690 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.631 ms

Loss rate: 0.42%

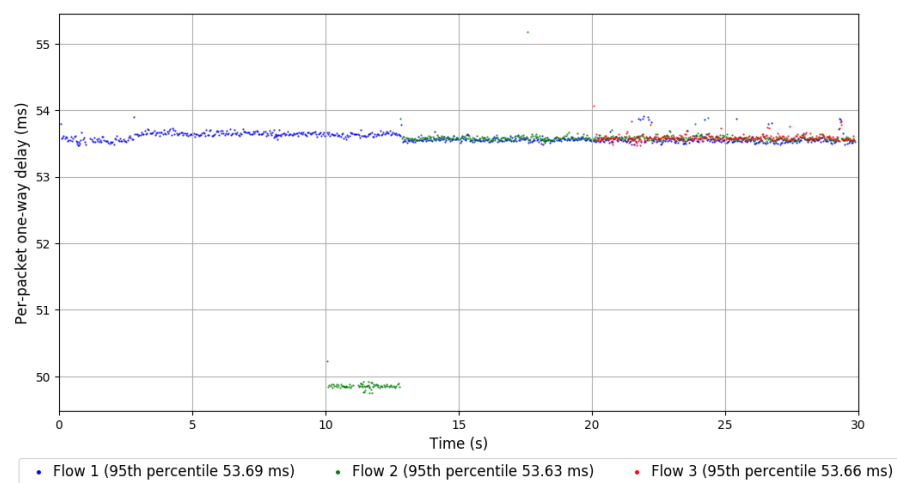
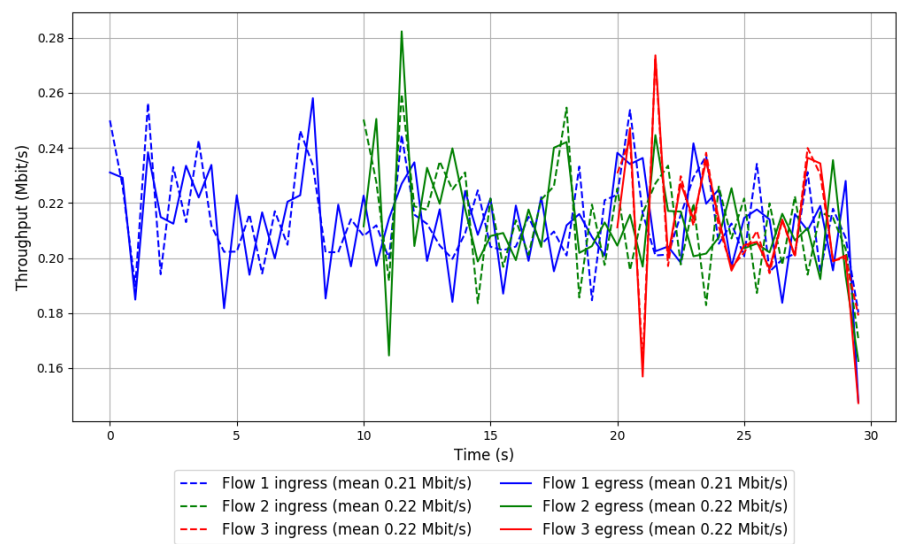
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.657 ms

Loss rate: 1.11%

Run 3: Report of SReAM — Data Link

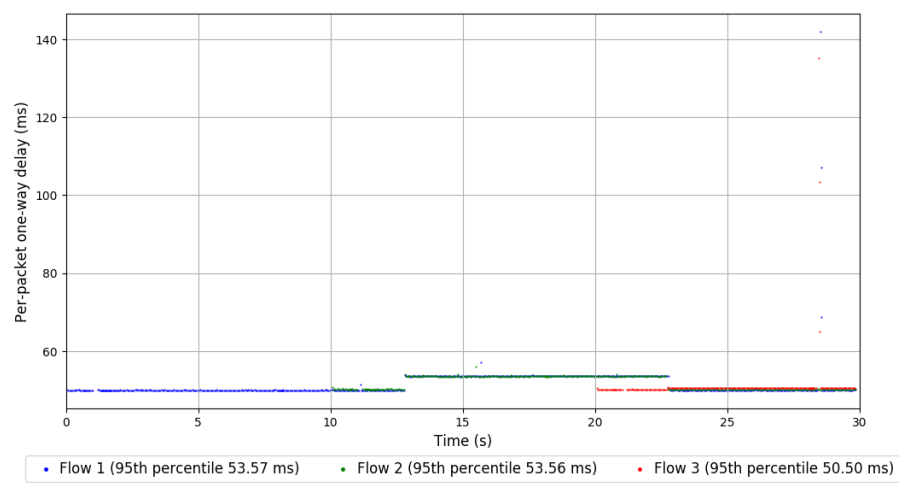
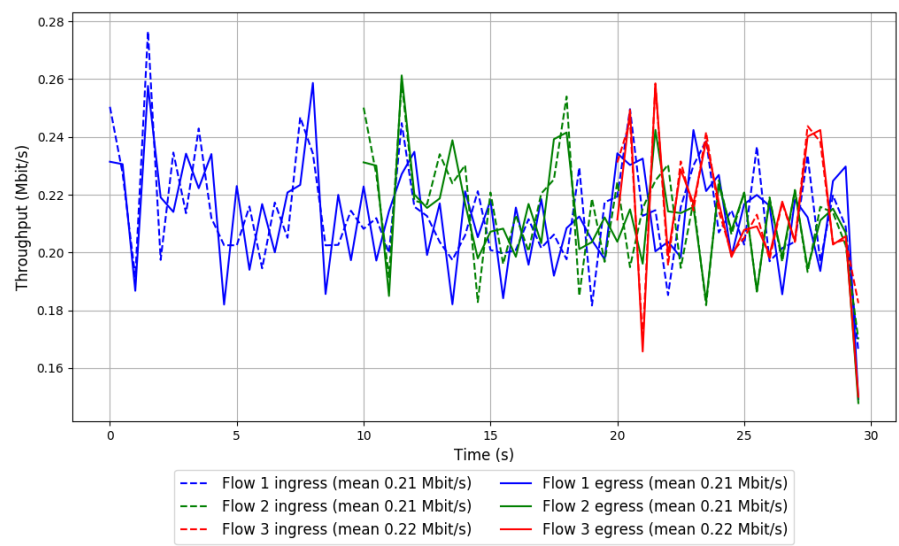


```
Run 4: Statistics of SCReAM

Start at: 2017-12-12 05:28:38
End at: 2017-12-12 05:29:08

# Below is generated by plot.py at 2017-12-12 09:34:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.568 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.571 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.563 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.503 ms
Loss rate: 1.11%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-12 05:40:39

End at: 2017-12-12 05:41:09

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 53.697 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.711 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.605 ms

Loss rate: 0.63%

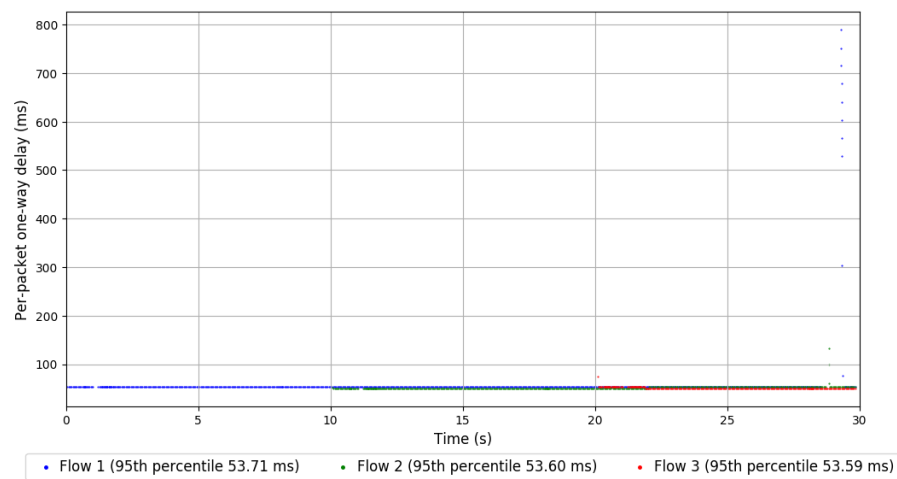
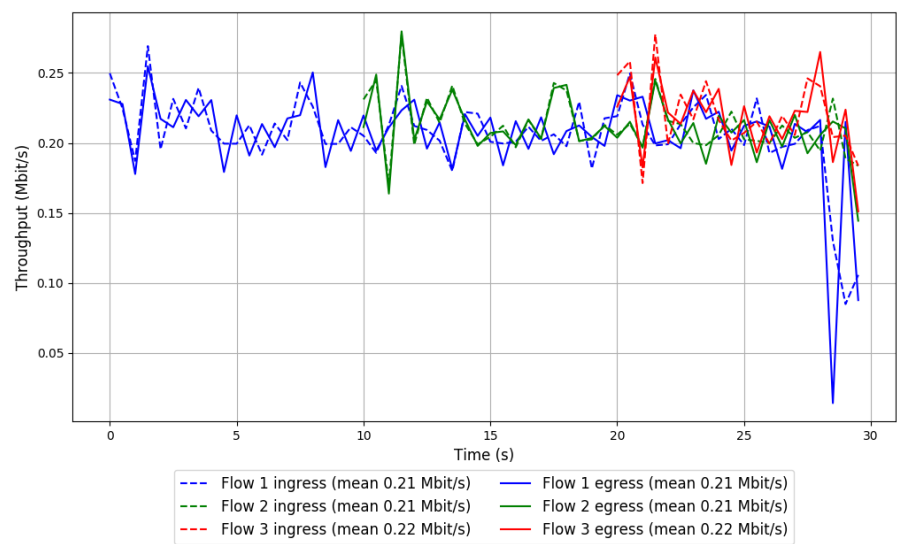
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.590 ms

Loss rate: 1.10%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-12 05:52:14

End at: 2017-12-12 05:52:44

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.594 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.990 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.615 ms

Loss rate: 0.63%

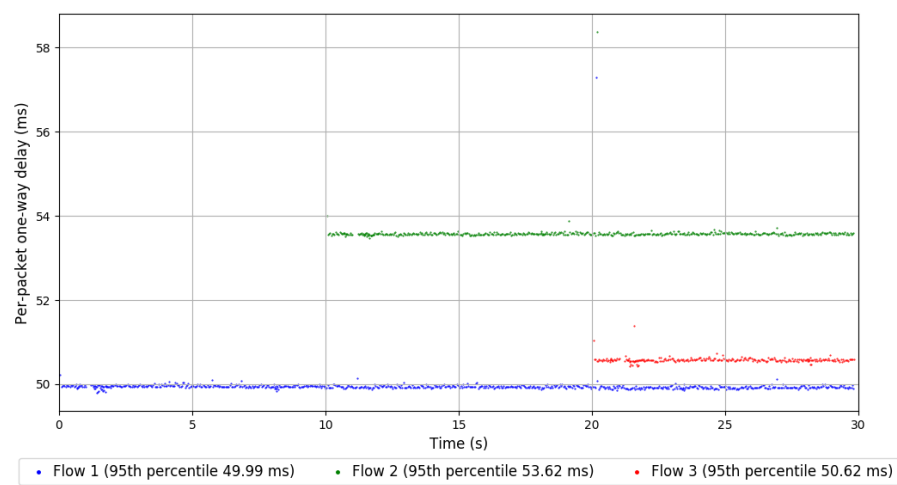
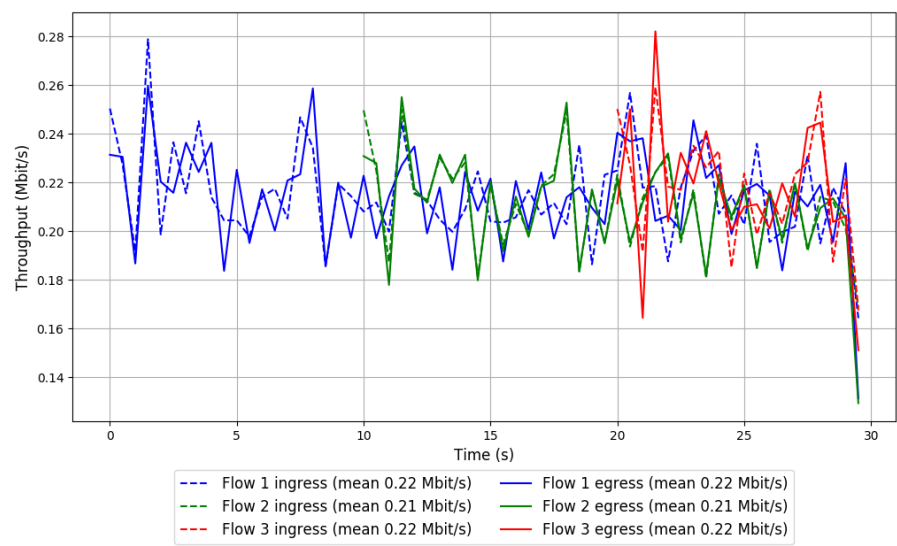
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 1.11%

Run 6: Report of SReAM — Data Link

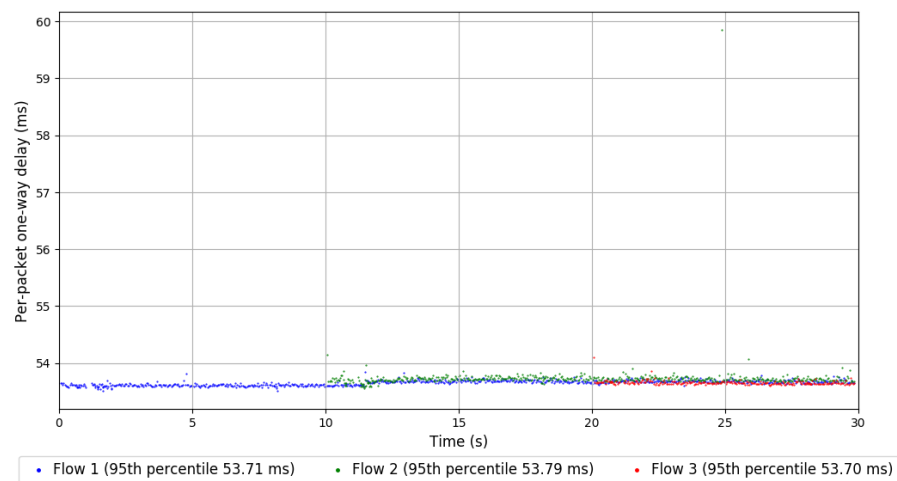
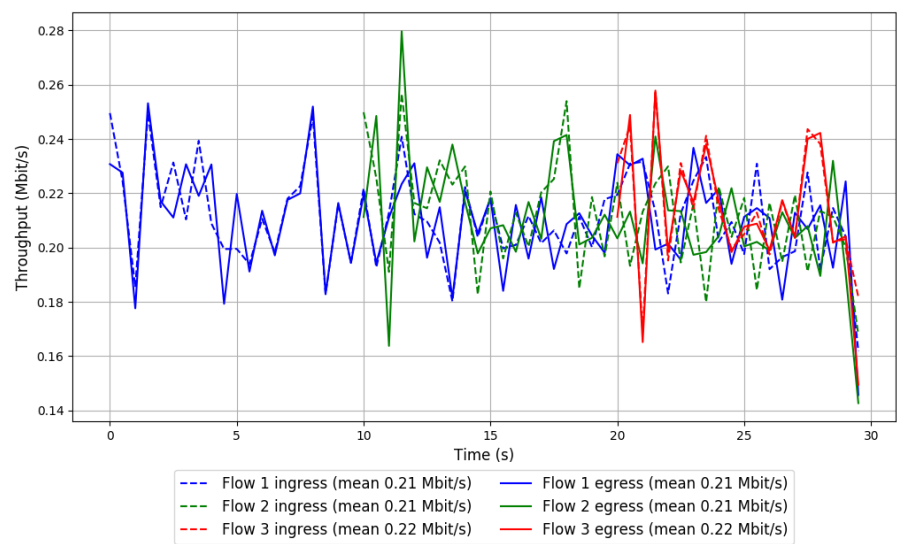


```
Run 7: Statistics of SCReAM

Start at: 2017-12-12 06:04:10
End at: 2017-12-12 06:04:40

# Below is generated by plot.py at 2017-12-12 09:34:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 53.760 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.713 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.787 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.697 ms
Loss rate: 1.11%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-12-12 06:16:18

End at: 2017-12-12 06:16:48

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.697 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.725 ms

Loss rate: 0.64%

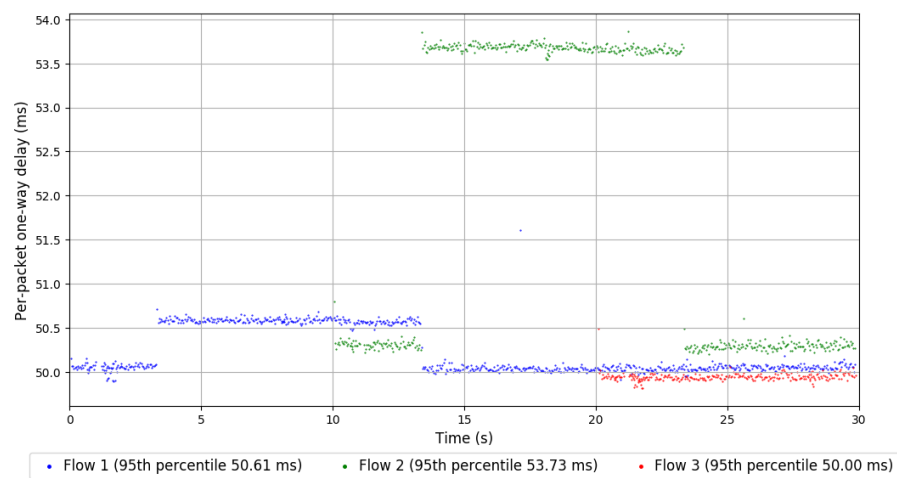
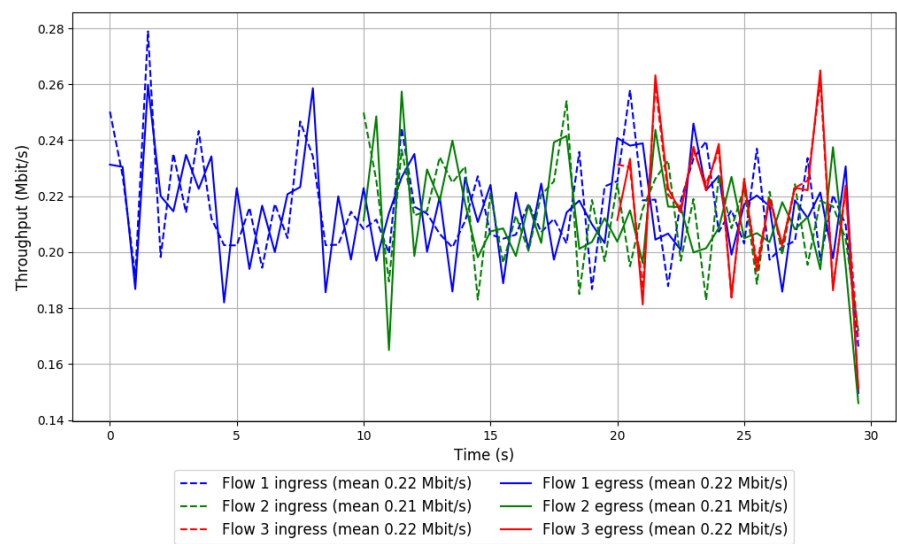
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.001 ms

Loss rate: 0.76%

Run 8: Report of SReAM — Data Link

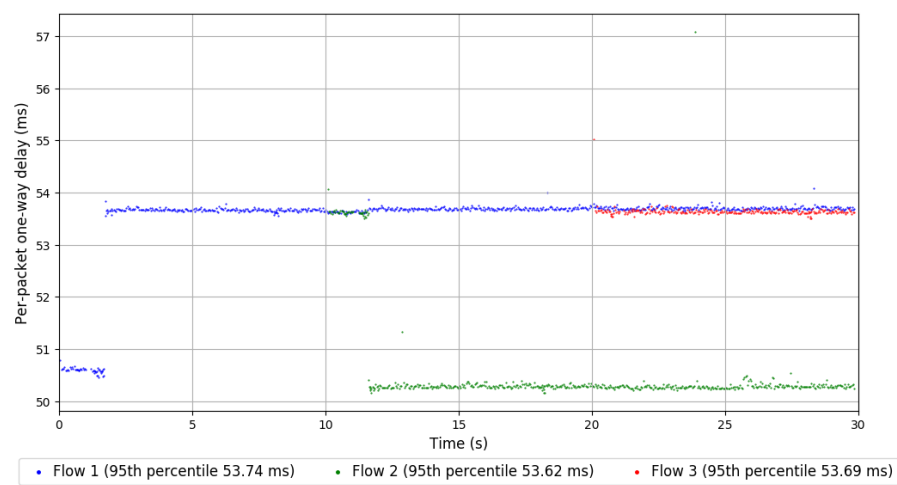
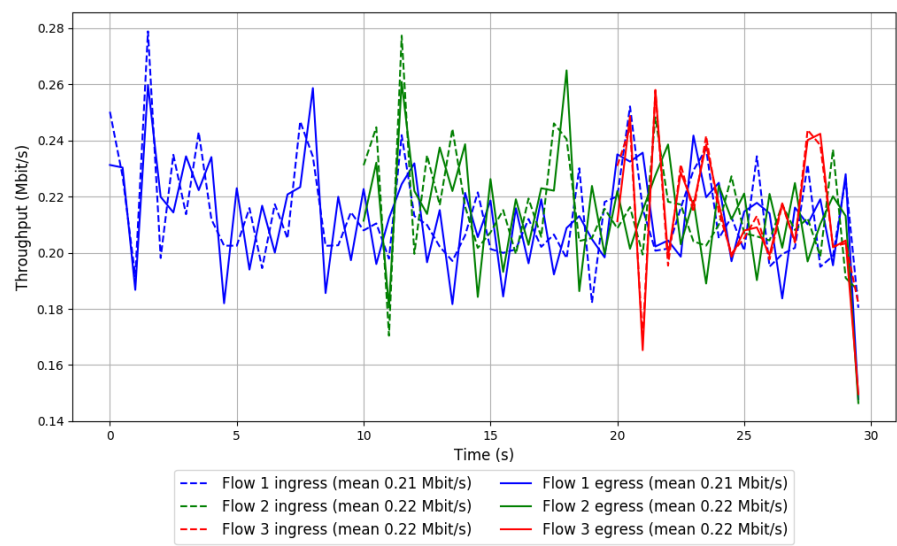


```
Run 9: Statistics of SReAM

Start at: 2017-12-12 06:28:10
End at: 2017-12-12 06:28:40

# Below is generated by plot.py at 2017-12-12 09:34:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.724 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.737 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.615 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.692 ms
Loss rate: 1.11%
```

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-12 06:40:44

End at: 2017-12-12 06:41:14

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.697 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.683 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.649 ms

Loss rate: 0.63%

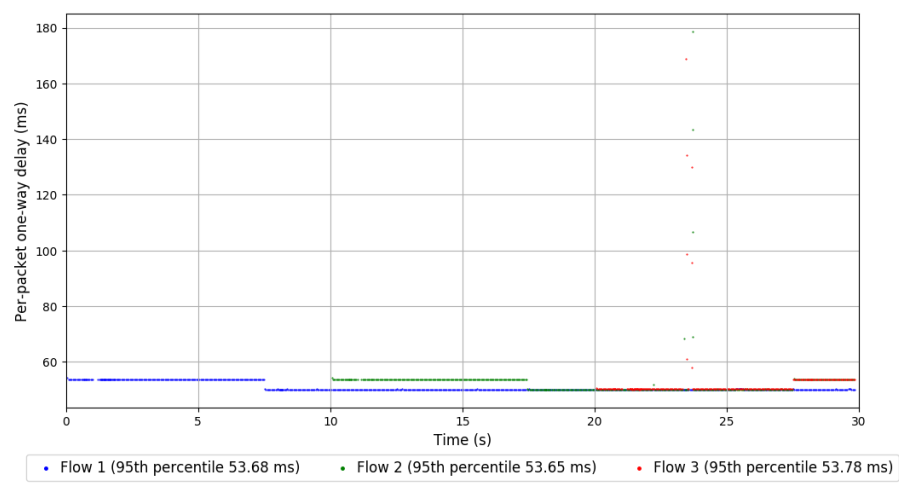
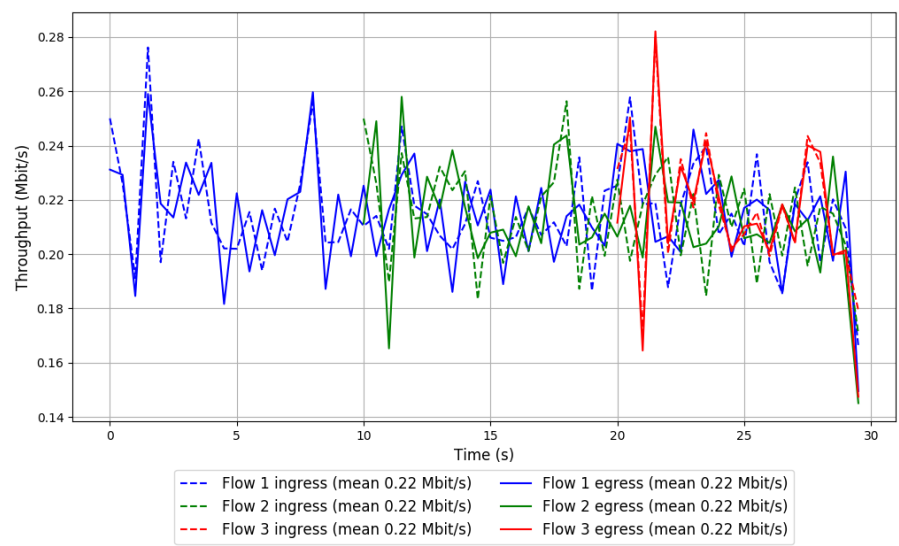
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.776 ms

Loss rate: 1.09%

Run 10: Report of SReAM — Data Link

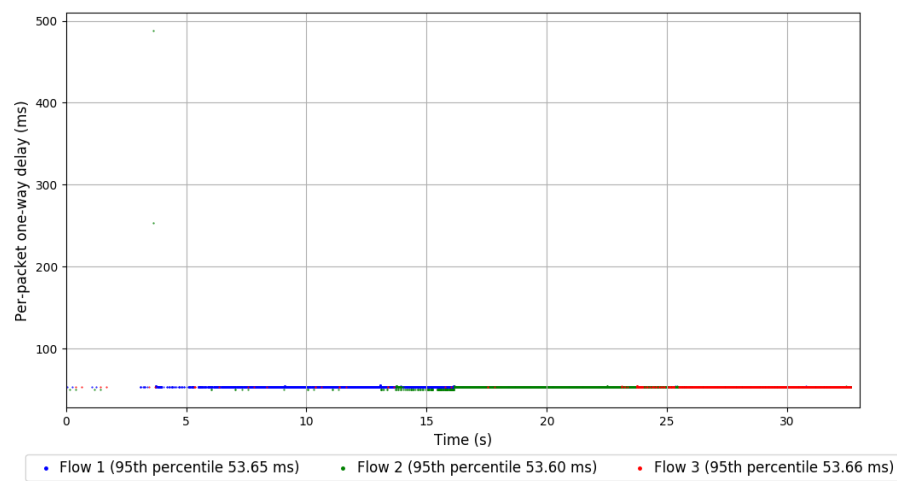
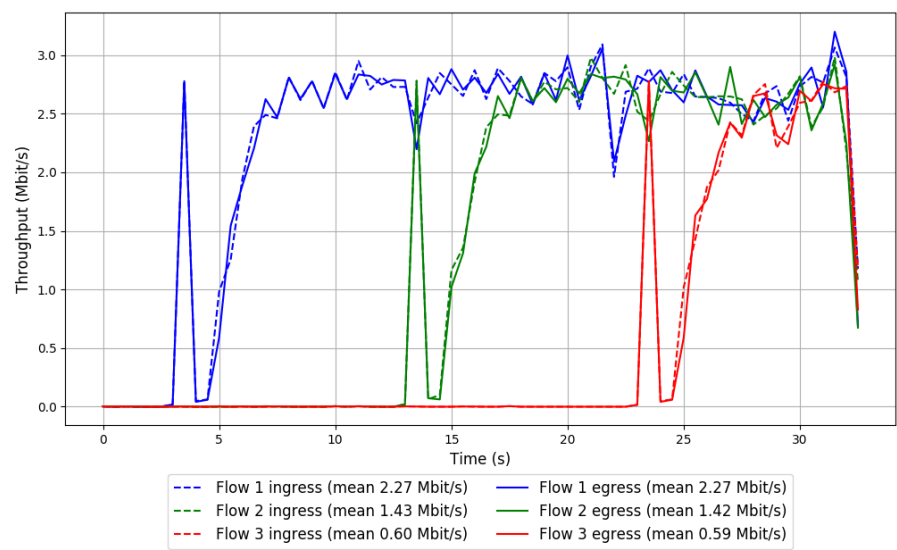


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-12 04:52:08
End at: 2017-12-12 04:52:38

# Below is generated by plot.py at 2017-12-12 09:34:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.27 Mbit/s
95th percentile per-packet one-way delay: 53.644 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 53.650 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 53.604 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 53.664 ms
Loss rate: 1.57%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-12 05:04:29

End at: 2017-12-12 05:04:59

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 53.583 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 53.597 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.652 ms

Loss rate: 0.65%

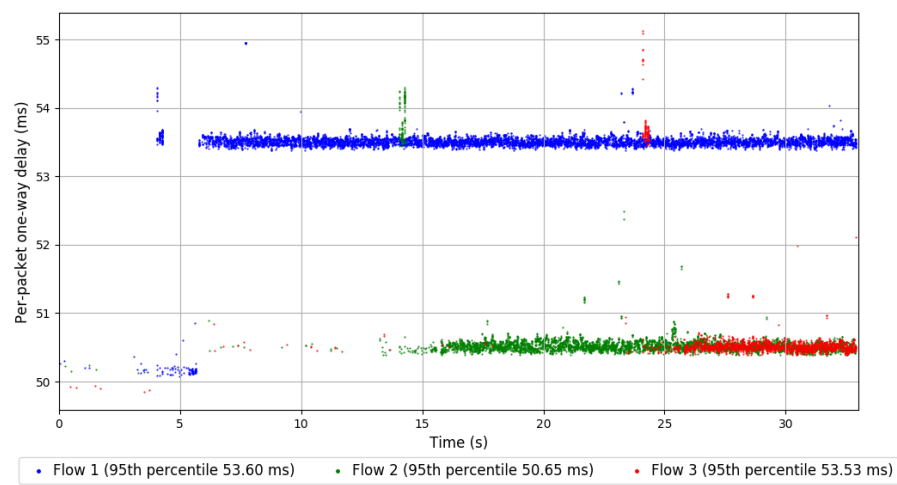
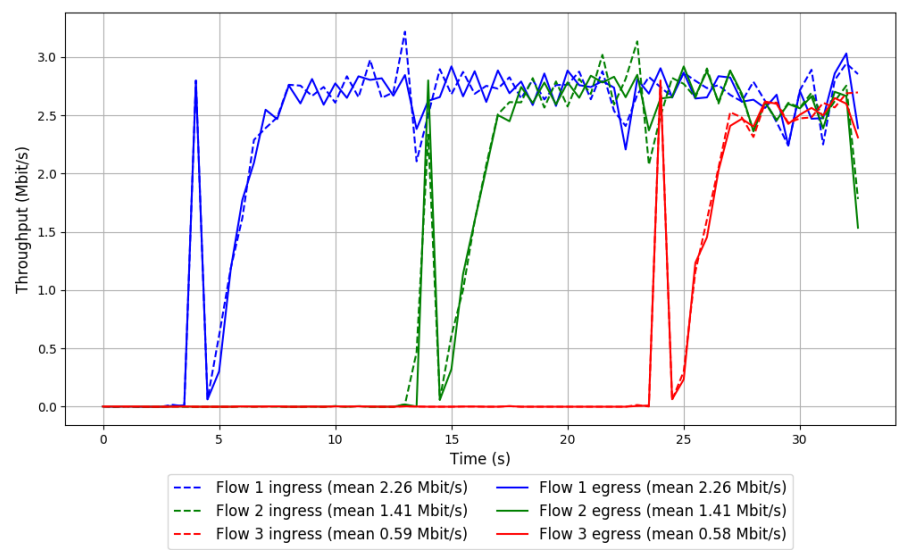
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 53.531 ms

Loss rate: 1.58%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

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

End at: 2017-12-12 05:17:28

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 53.640 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 50.575 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 53.688 ms

Loss rate: 0.67%

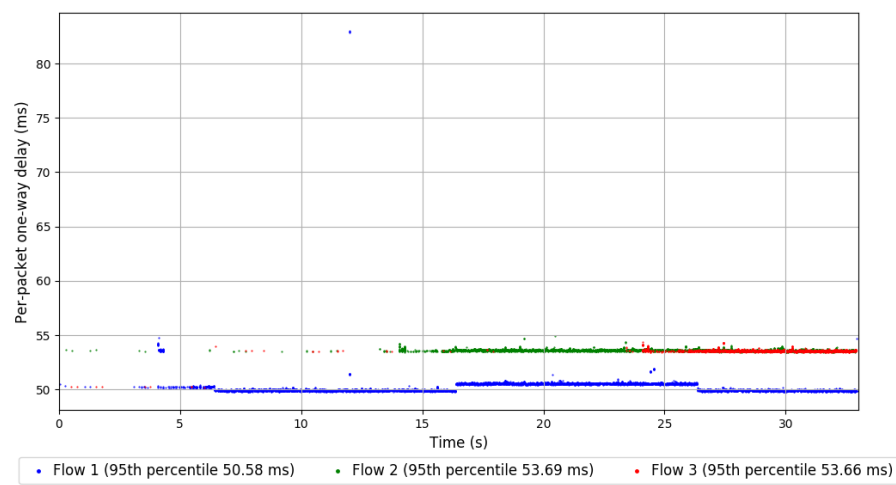
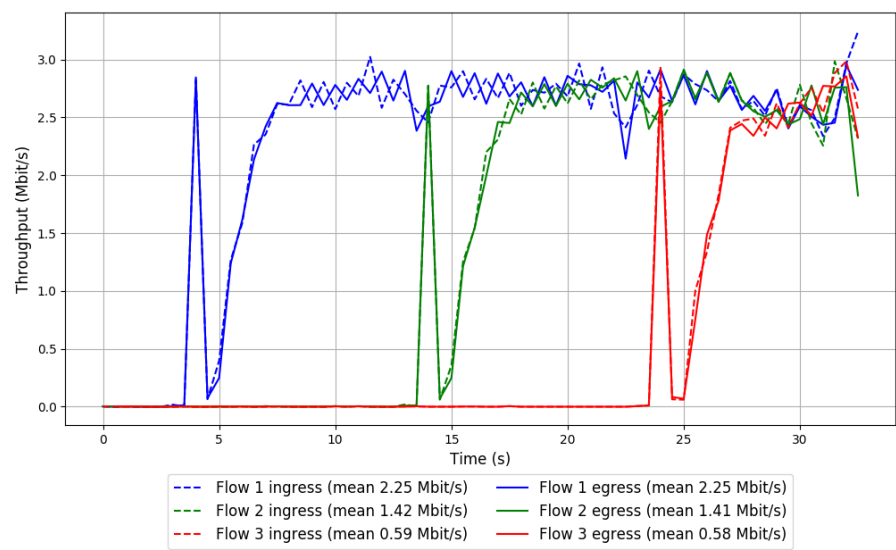
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 53.656 ms

Loss rate: 2.19%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-12 05:29:18

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

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

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

Loss rate: 0.66%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 53.647 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.333 ms

Loss rate: 0.71%

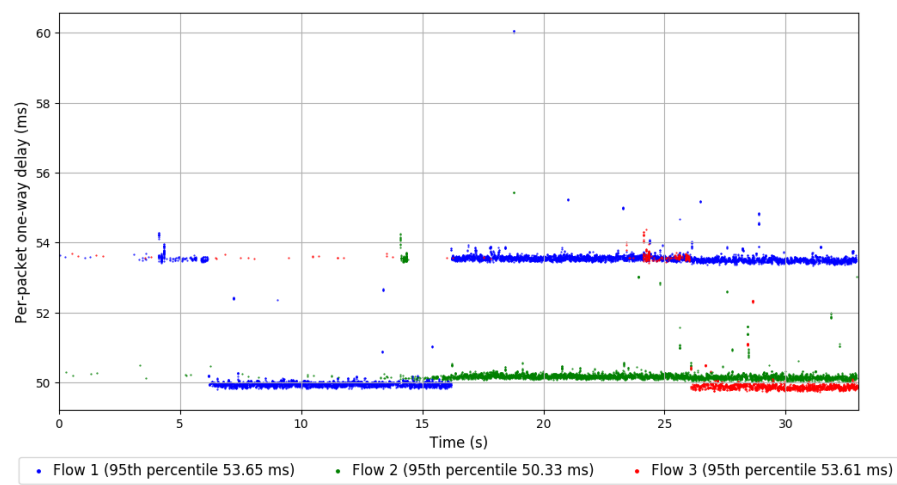
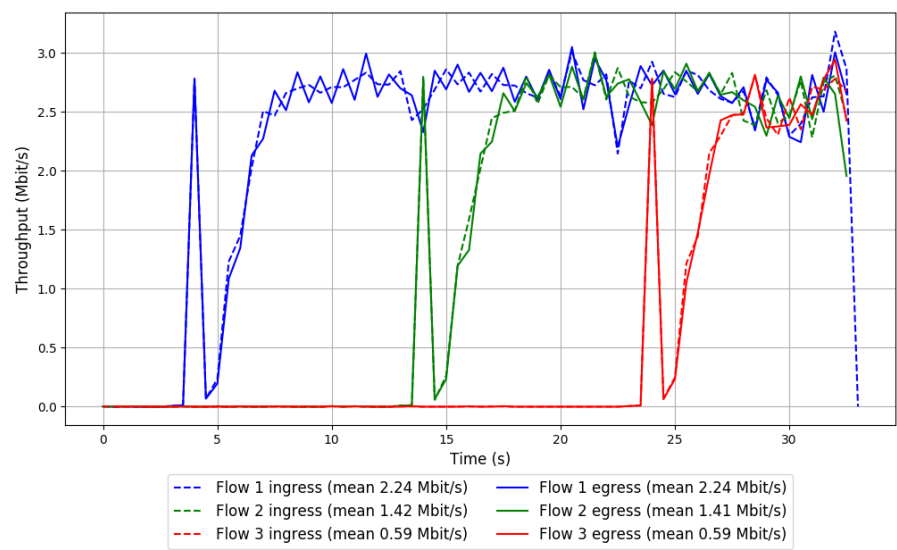
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 53.607 ms

Loss rate: 1.23%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-12 05:41:19

End at: 2017-12-12 05:41:49

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 53.629 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 53.643 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.313 ms

Loss rate: 0.66%

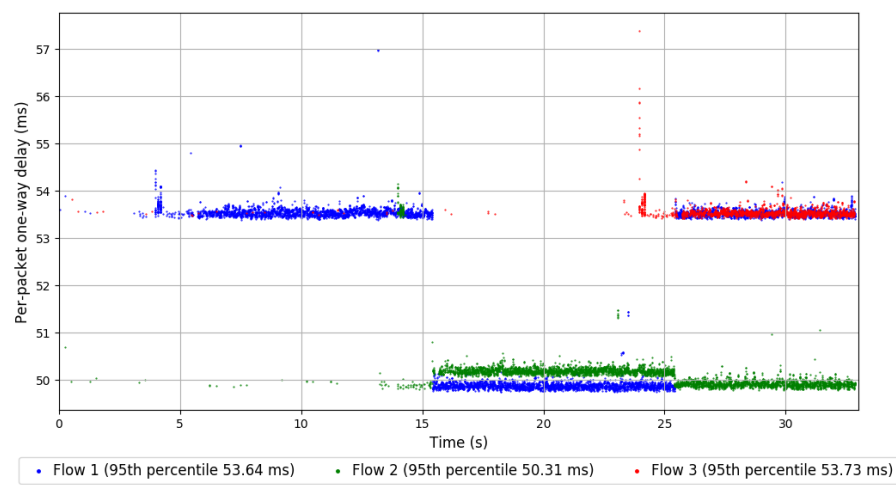
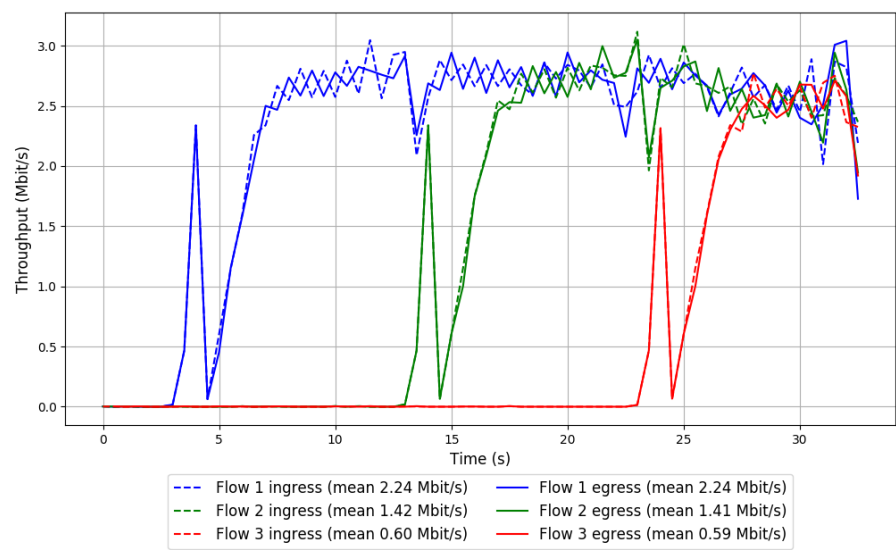
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 53.727 ms

Loss rate: 1.64%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-12 05:52:54

End at: 2017-12-12 05:53:24

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 53.683 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.375 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 53.750 ms

Loss rate: 0.76%

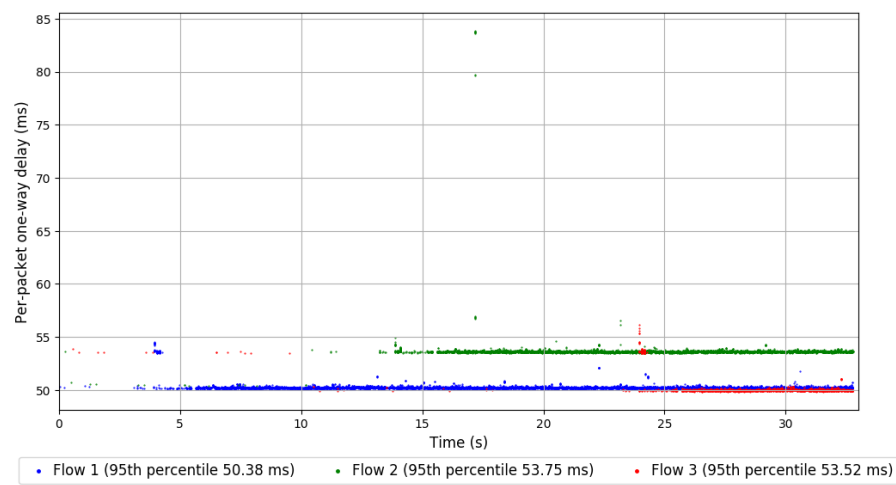
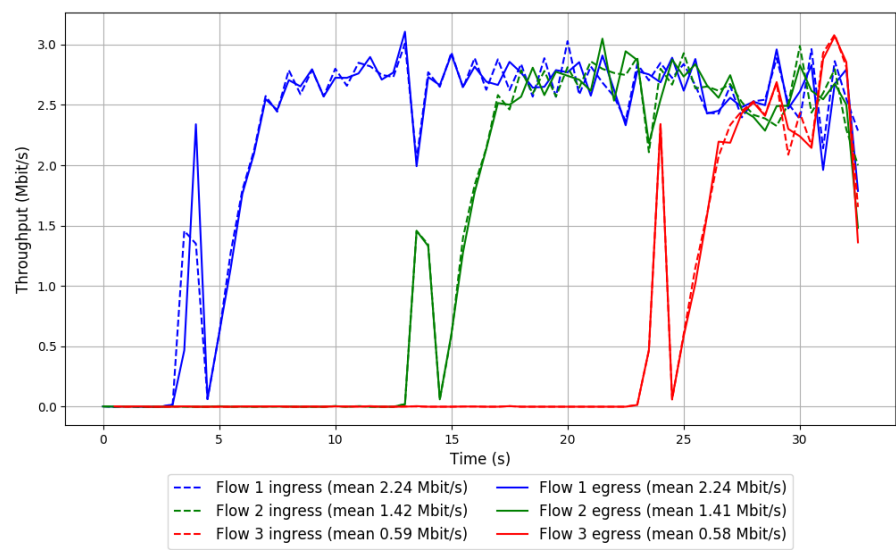
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 53.520 ms

Loss rate: 1.40%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-12 06:04:49

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

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 53.646 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 53.640 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.455 ms

Loss rate: 0.72%

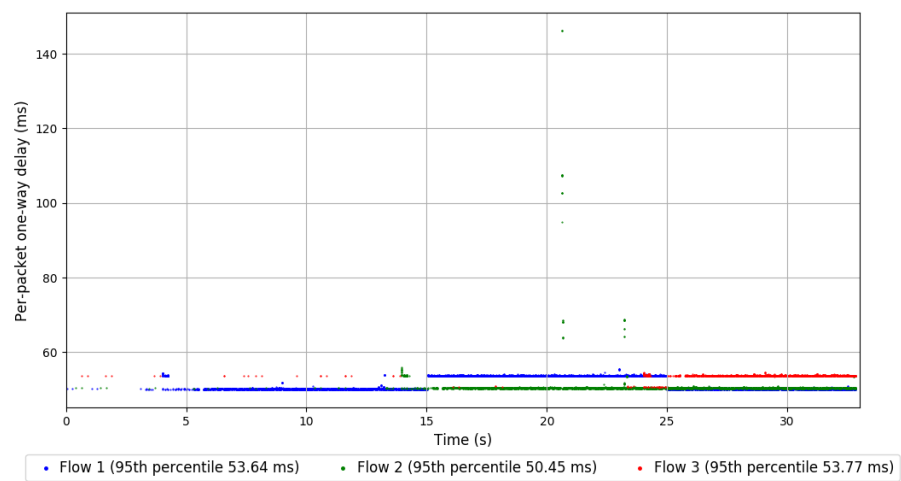
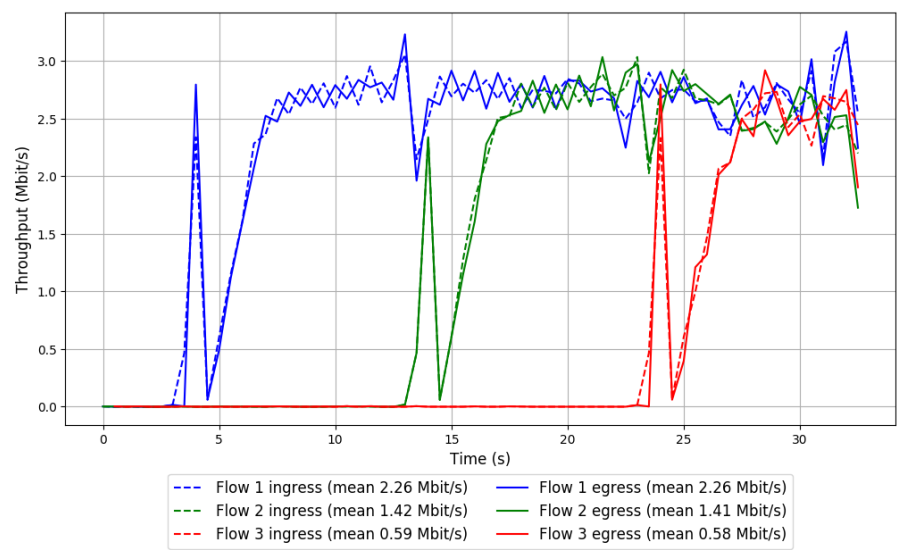
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 53.772 ms

Loss rate: 2.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-12 06:16:57

End at: 2017-12-12 06:17:27

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 53.698 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 50.696 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 53.747 ms

Loss rate: 0.78%

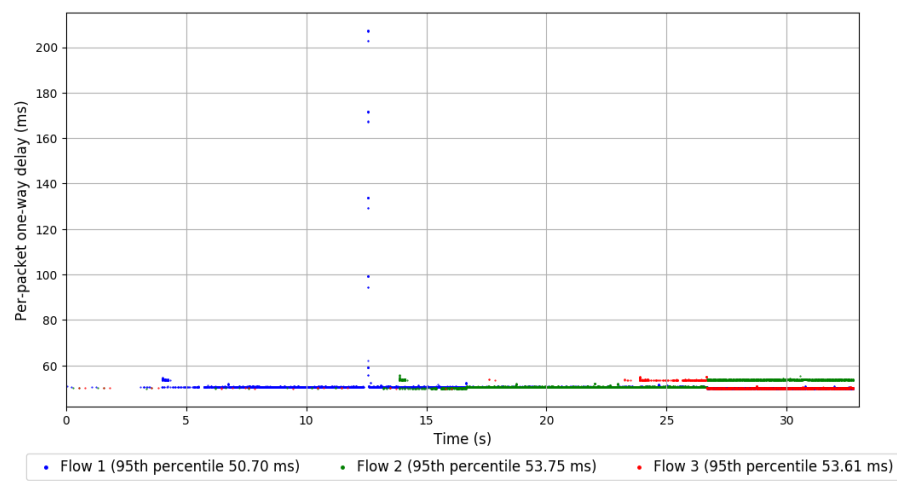
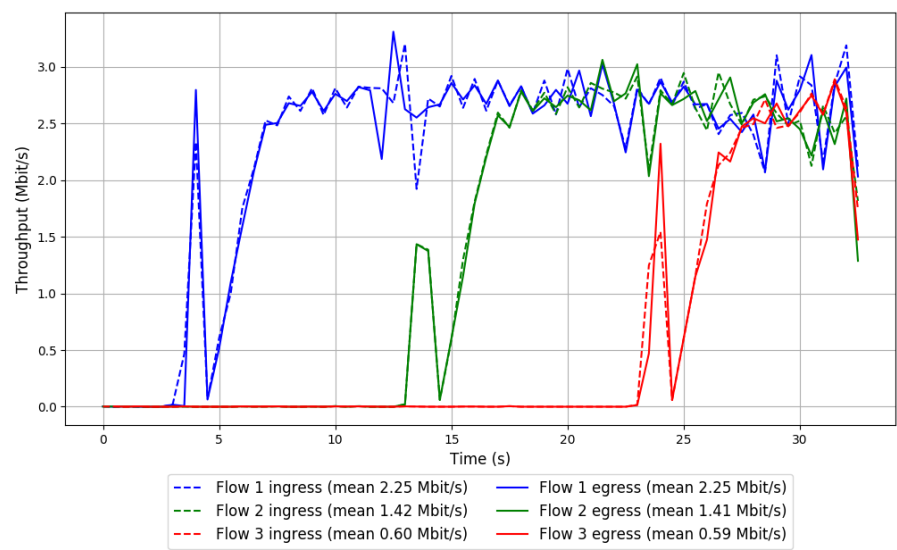
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 53.613 ms

Loss rate: 1.44%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-12 06:28:49

End at: 2017-12-12 06:29:19

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 53.727 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 53.677 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 53.751 ms

Loss rate: 0.84%

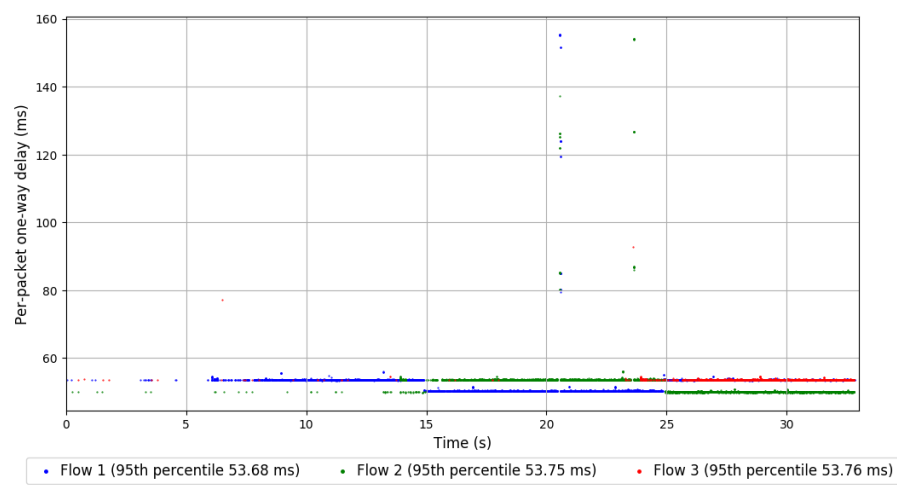
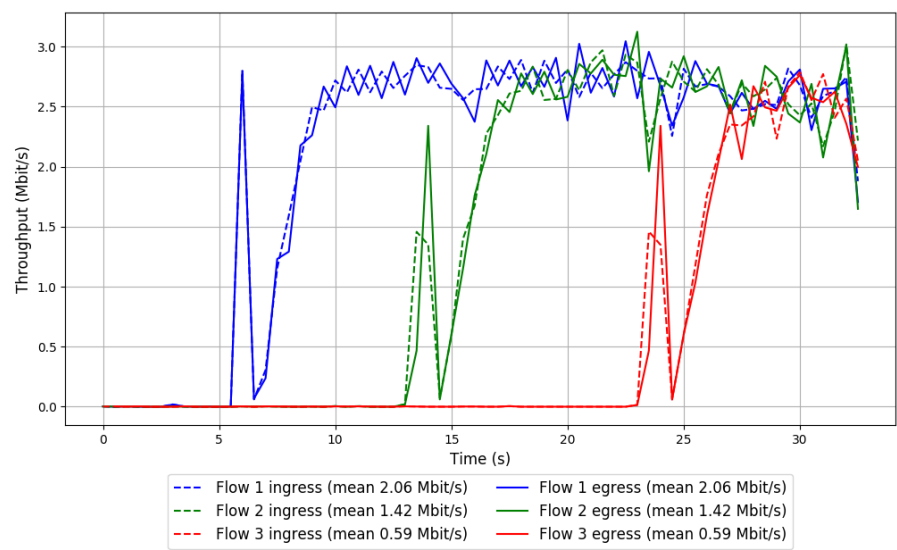
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 53.764 ms

Loss rate: 1.32%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-12 06:41:23

End at: 2017-12-12 06:41:53

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 53.602 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.122 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.122 ms

Loss rate: 0.48%

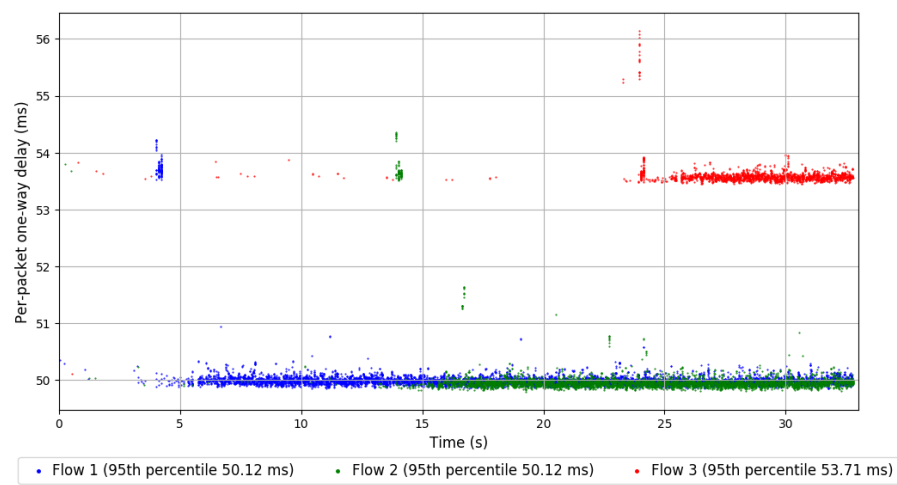
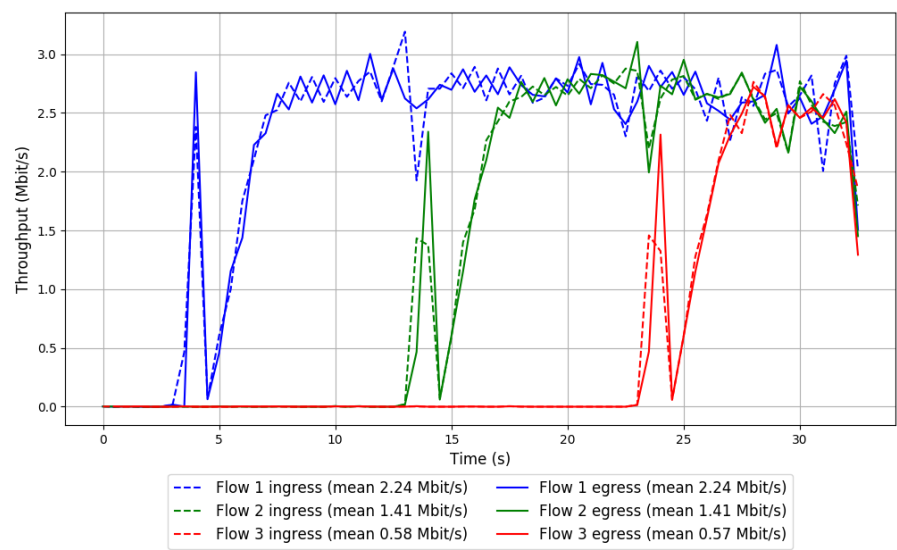
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 53.711 ms

Loss rate: 1.89%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-12 05:00:42

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

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.34 Mbit/s

95th percentile per-packet one-way delay: 54.326 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 54.380 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 54.240 ms

Loss rate: 0.62%

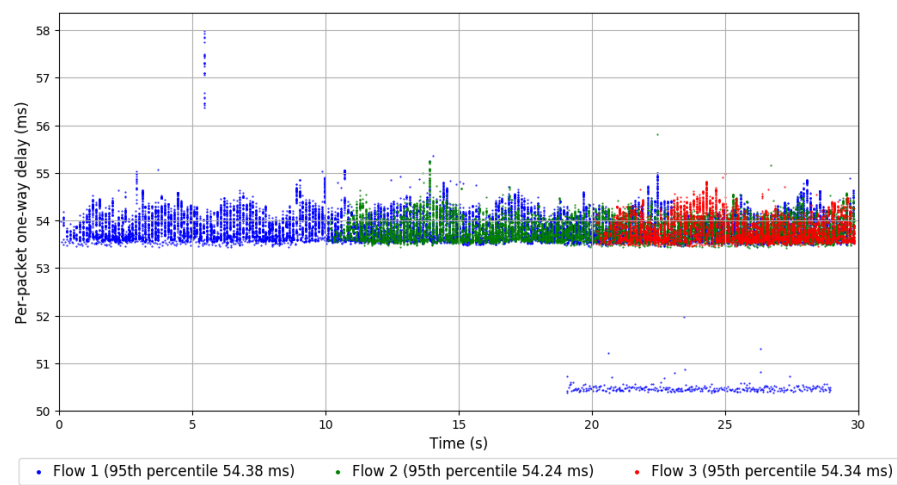
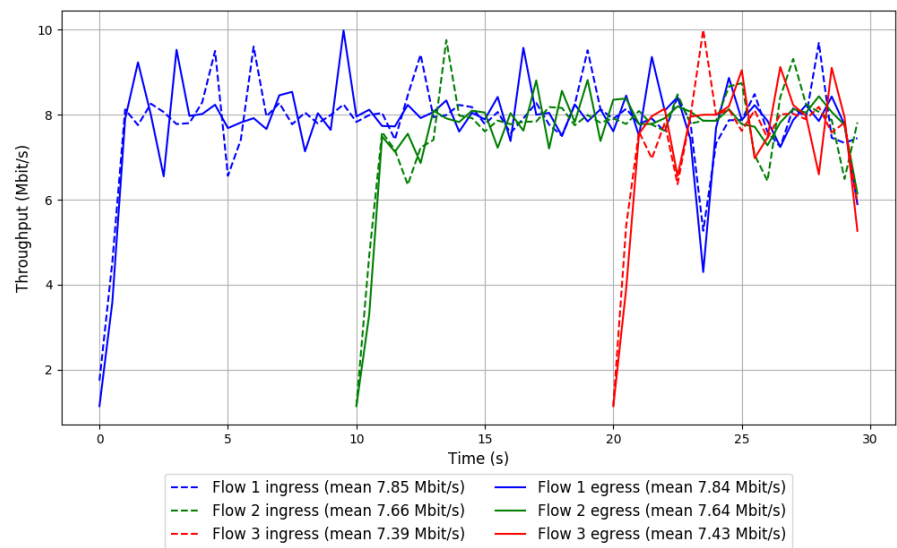
-- Flow 3:

Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 54.345 ms

Loss rate: 0.54%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-12 05:13:10

End at: 2017-12-12 05:13:40

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.38 Mbit/s

95th percentile per-packet one-way delay: 54.529 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 54.340 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 54.546 ms

Loss rate: 0.90%

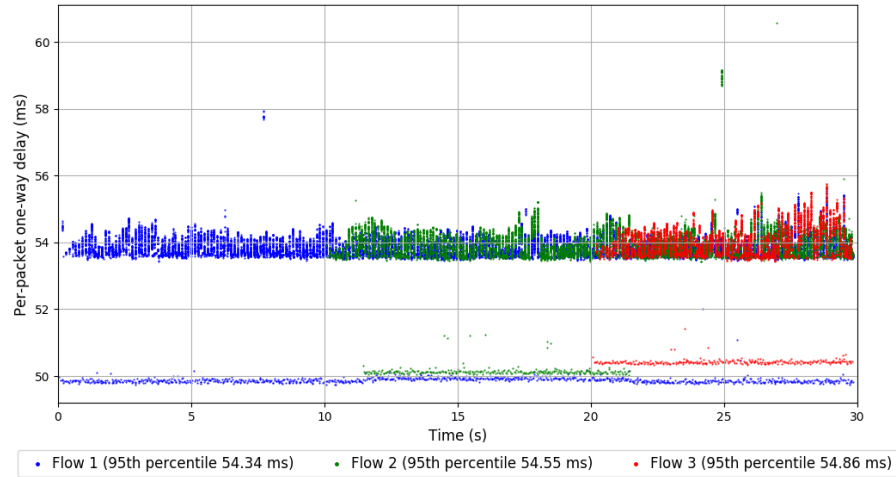
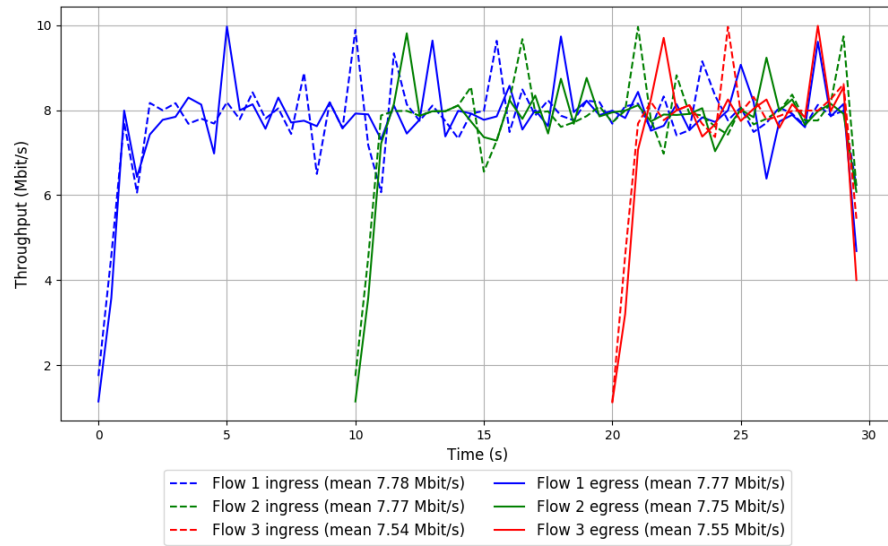
-- Flow 3:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 54.863 ms

Loss rate: 1.21%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-12 05:25:30

End at: 2017-12-12 05:26:00

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.06 Mbit/s

95th percentile per-packet one-way delay: 54.383 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 54.313 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 7.45 Mbit/s

95th percentile per-packet one-way delay: 54.401 ms

Loss rate: 0.66%

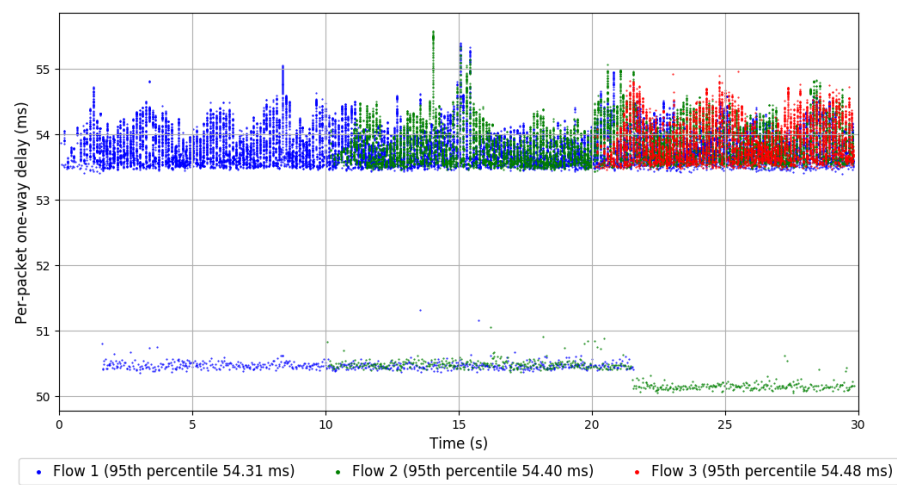
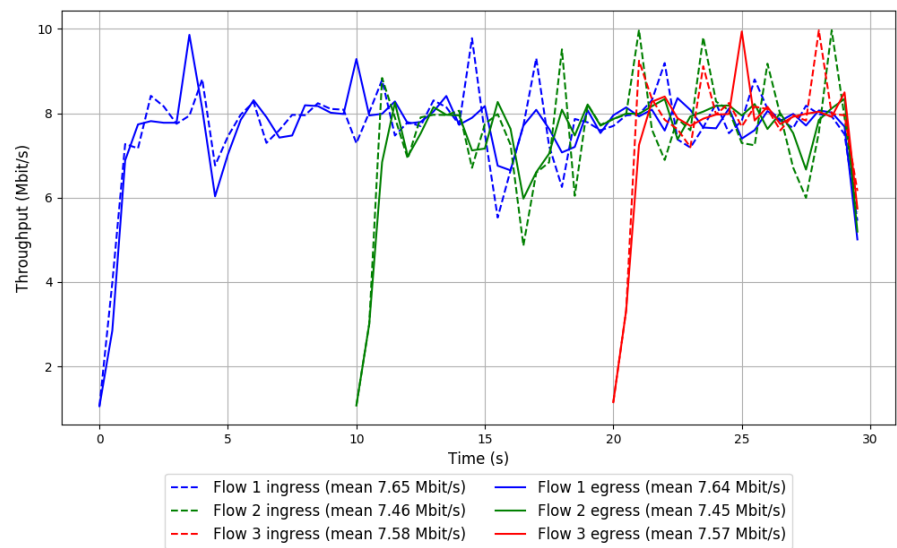
-- Flow 3:

Average throughput: 7.57 Mbit/s

95th percentile per-packet one-way delay: 54.480 ms

Loss rate: 1.25%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-12 05:37:29

End at: 2017-12-12 05:37:59

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.23 Mbit/s

95th percentile per-packet one-way delay: 54.413 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 7.66 Mbit/s

95th percentile per-packet one-way delay: 54.429 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 54.423 ms

Loss rate: 0.64%

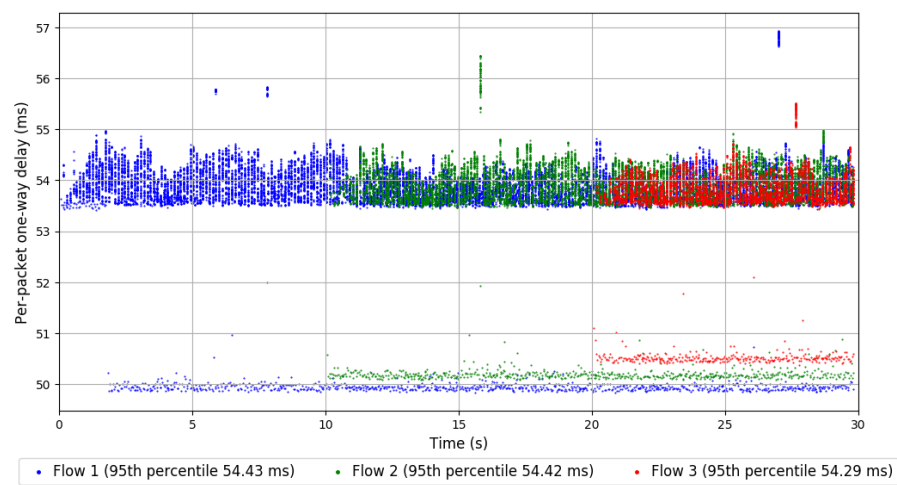
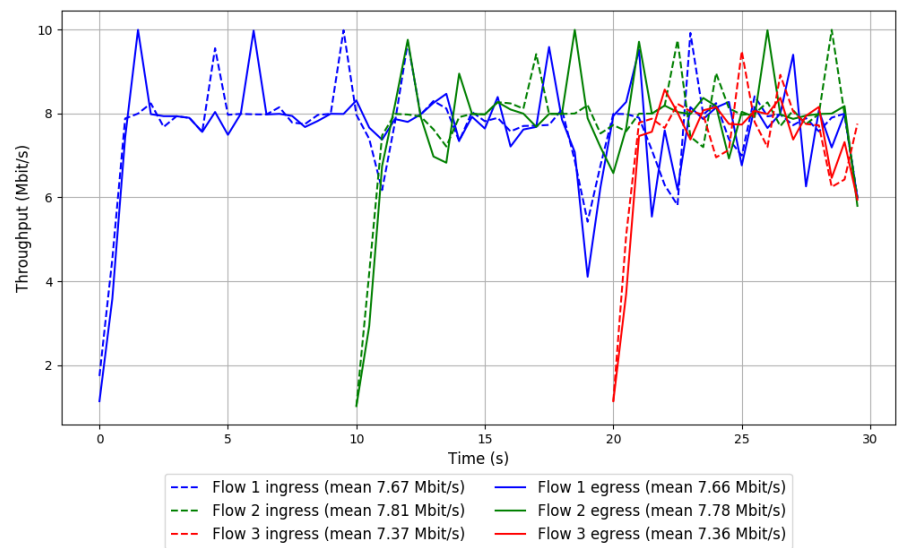
-- Flow 3:

Average throughput: 7.36 Mbit/s

95th percentile per-packet one-way delay: 54.288 ms

Loss rate: 1.42%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

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

End at: 2017-12-12 05:49:35

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.14 Mbit/s

95th percentile per-packet one-way delay: 54.410 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 54.430 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 7.63 Mbit/s

95th percentile per-packet one-way delay: 54.380 ms

Loss rate: 0.34%

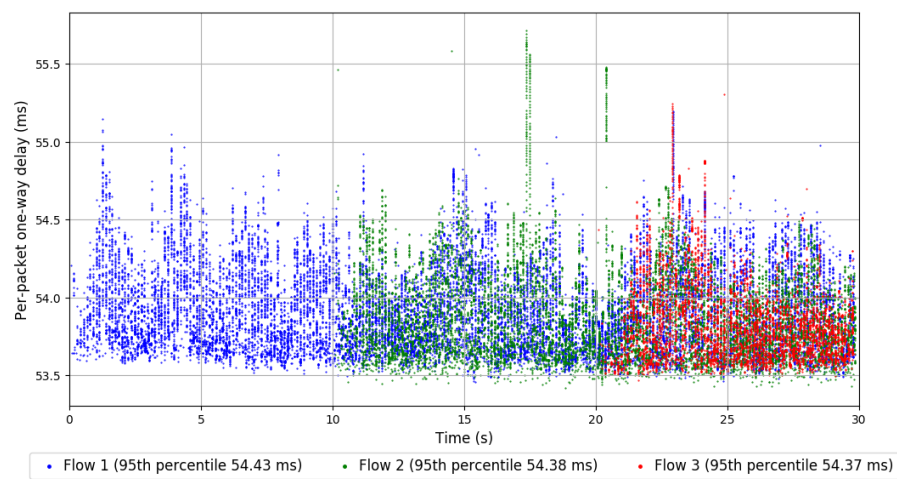
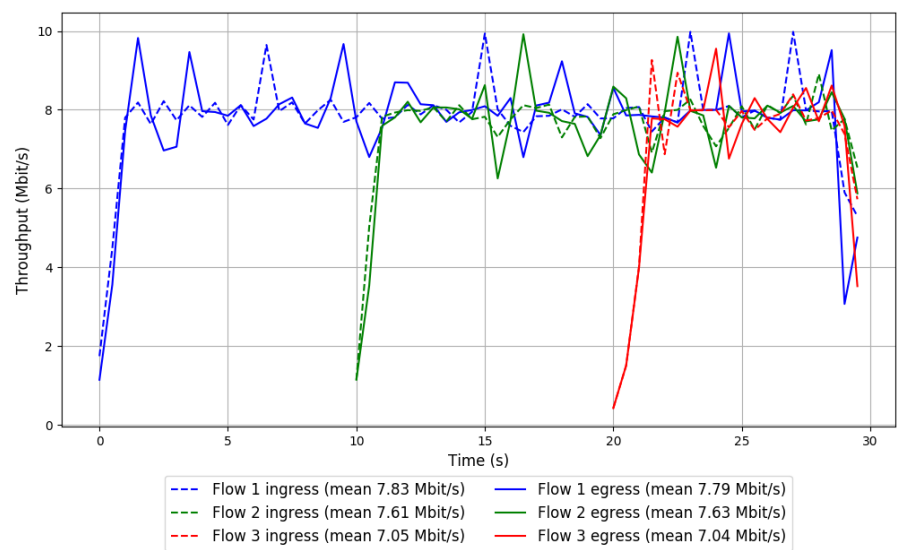
-- Flow 3:

Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay: 54.374 ms

Loss rate: 1.59%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-12 06:01:02

End at: 2017-12-12 06:01:32

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.55 Mbit/s

95th percentile per-packet one-way delay: 54.366 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 54.380 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 7.69 Mbit/s

95th percentile per-packet one-way delay: 54.362 ms

Loss rate: 0.65%

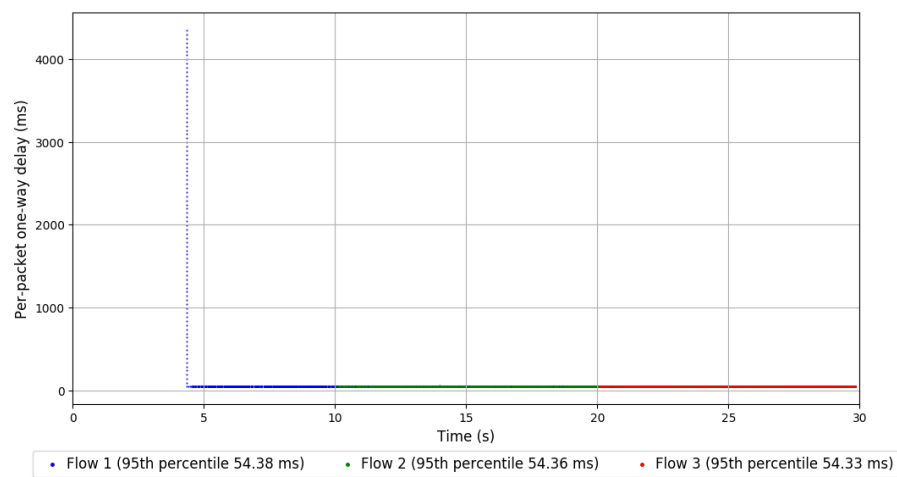
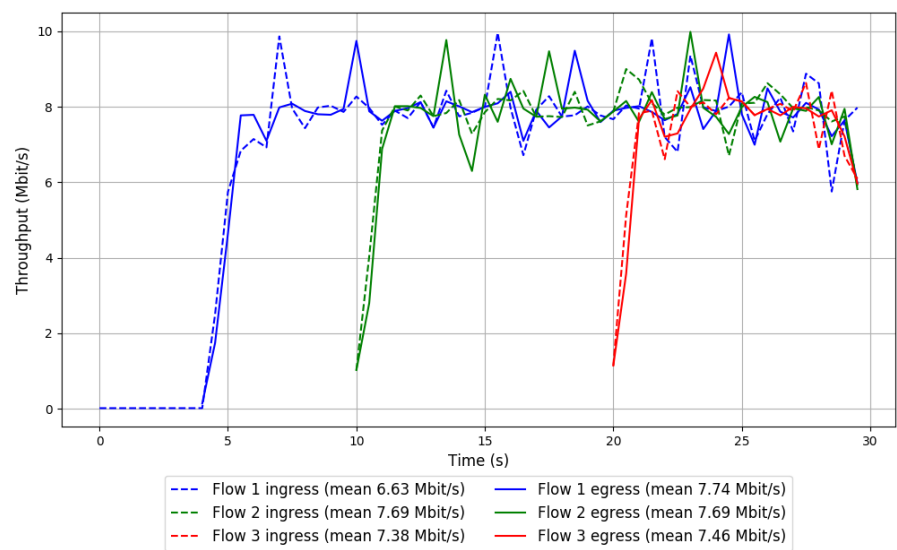
-- Flow 3:

Average throughput: 7.46 Mbit/s

95th percentile per-packet one-way delay: 54.328 ms

Loss rate: 0.09%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-12 06:13:09

End at: 2017-12-12 06:13:39

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.23 Mbit/s

95th percentile per-packet one-way delay: 54.412 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 54.434 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 7.53 Mbit/s

95th percentile per-packet one-way delay: 54.389 ms

Loss rate: 0.67%

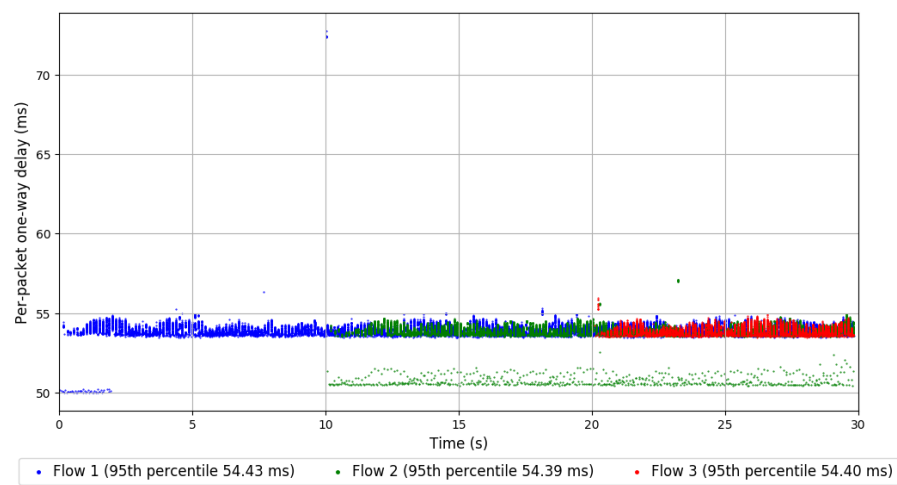
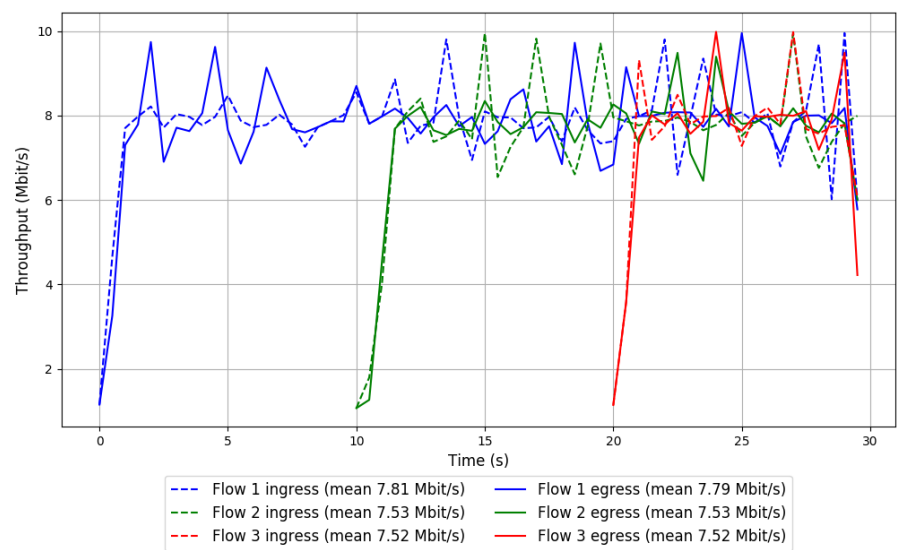
-- Flow 3:

Average throughput: 7.52 Mbit/s

95th percentile per-packet one-way delay: 54.396 ms

Loss rate: 1.28%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-12 06:24:59

End at: 2017-12-12 06:25:29

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.14 Mbit/s

95th percentile per-packet one-way delay: 54.421 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 54.401 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 54.398 ms

Loss rate: 0.66%

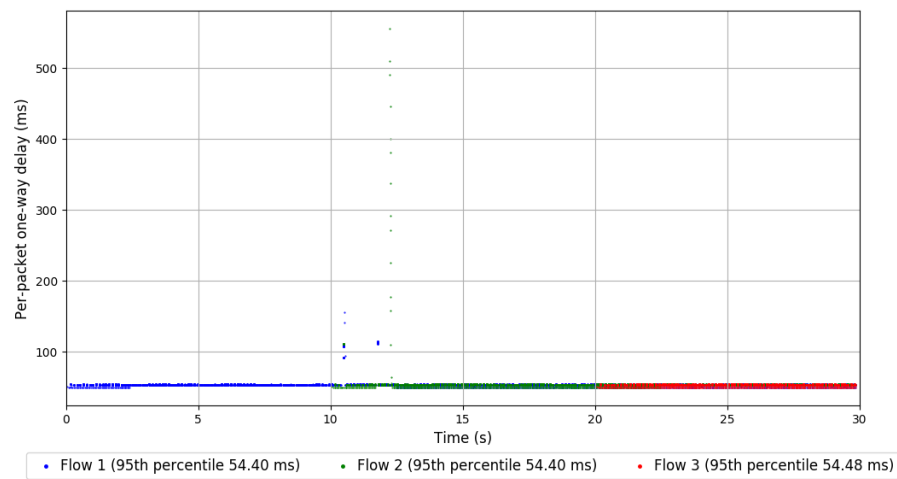
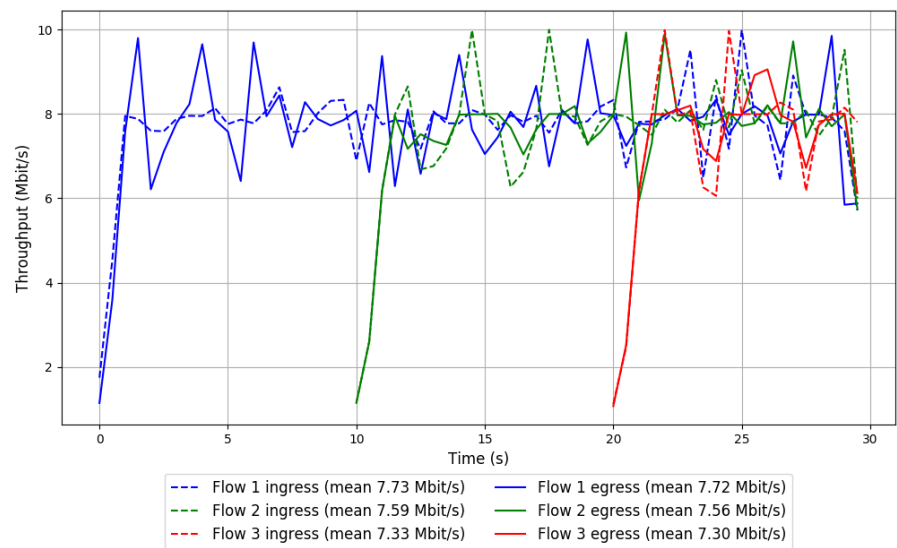
-- Flow 3:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 54.480 ms

Loss rate: 1.27%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-12 06:37:34

End at: 2017-12-12 06:38:04

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.28 Mbit/s

95th percentile per-packet one-way delay: 54.480 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 7.66 Mbit/s

95th percentile per-packet one-way delay: 54.495 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 54.466 ms

Loss rate: 0.61%

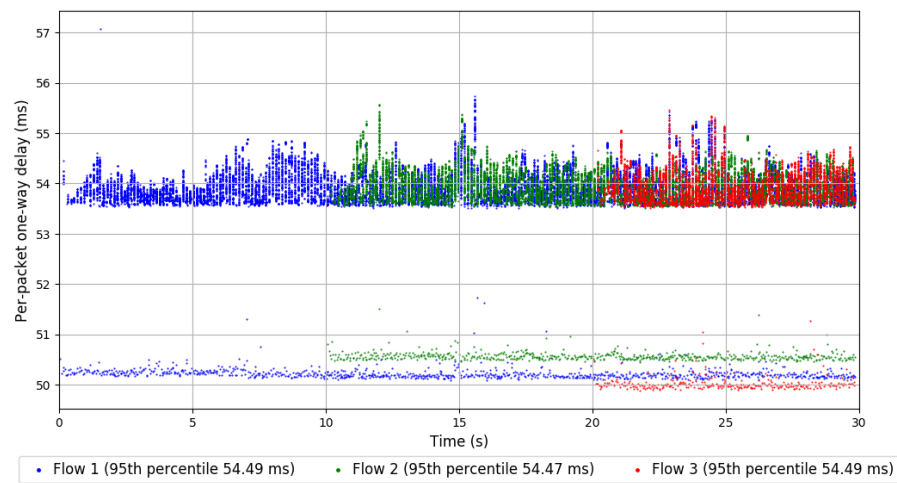
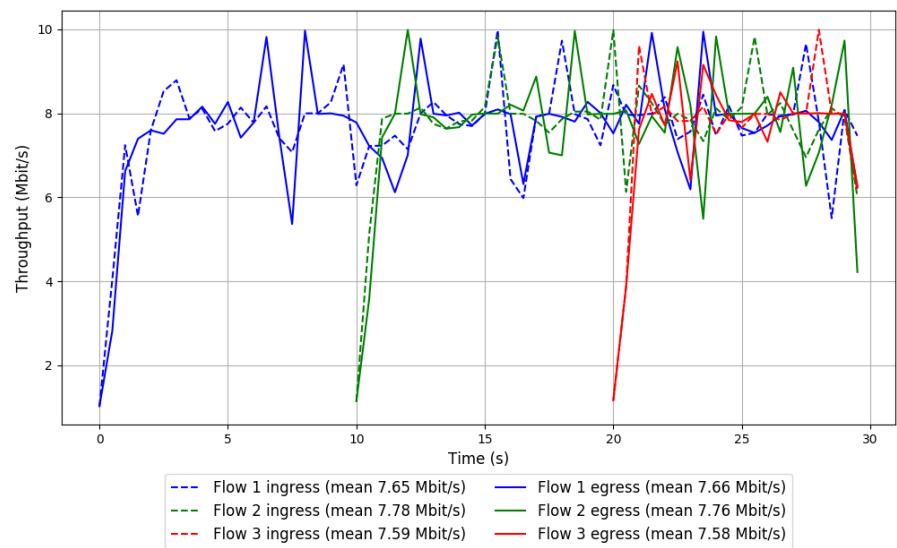
-- Flow 3:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 54.487 ms

Loss rate: 1.24%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-12 06:49:56

End at: 2017-12-12 06:50:26

Below is generated by plot.py at 2017-12-12 09:34:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.29 Mbit/s

95th percentile per-packet one-way delay: 54.450 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 54.457 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 7.69 Mbit/s

95th percentile per-packet one-way delay: 54.449 ms

Loss rate: 0.54%

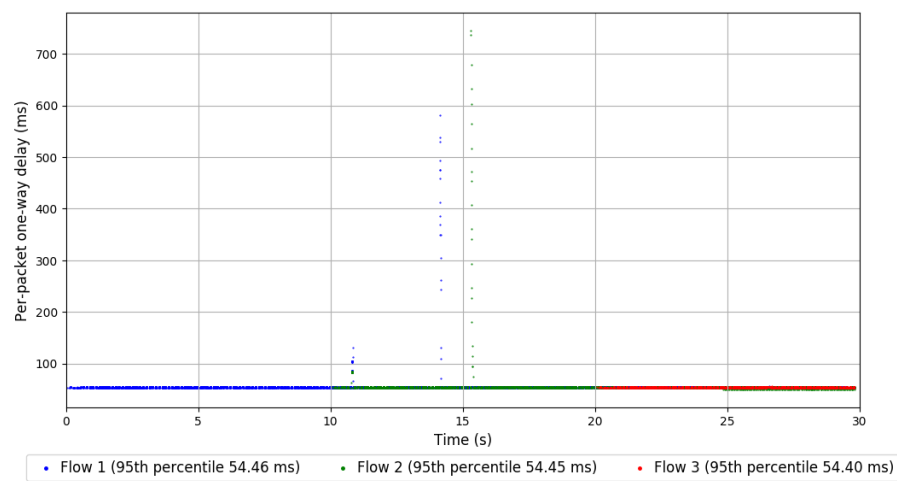
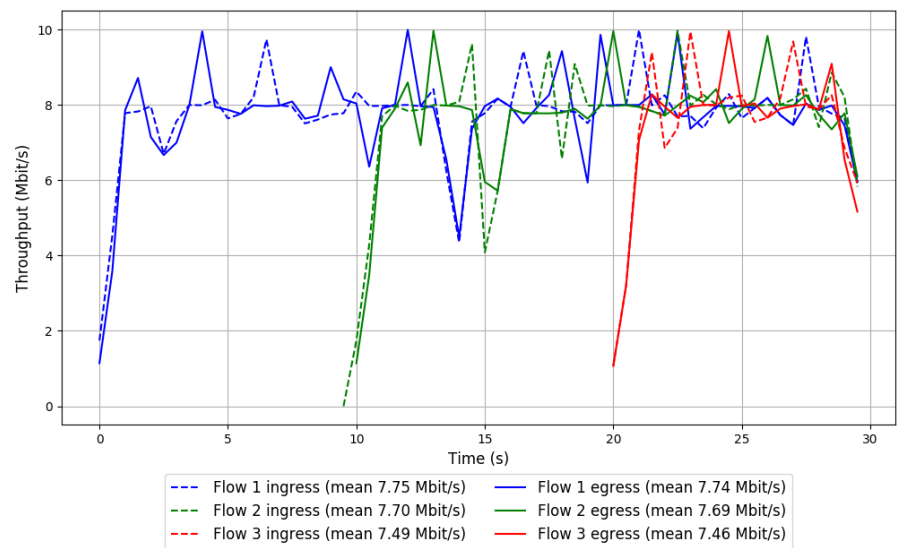
-- Flow 3:

Average throughput: 7.46 Mbit/s

95th percentile per-packet one-way delay: 54.403 ms

Loss rate: 1.48%

Run 10: Report of Sprout — Data Link

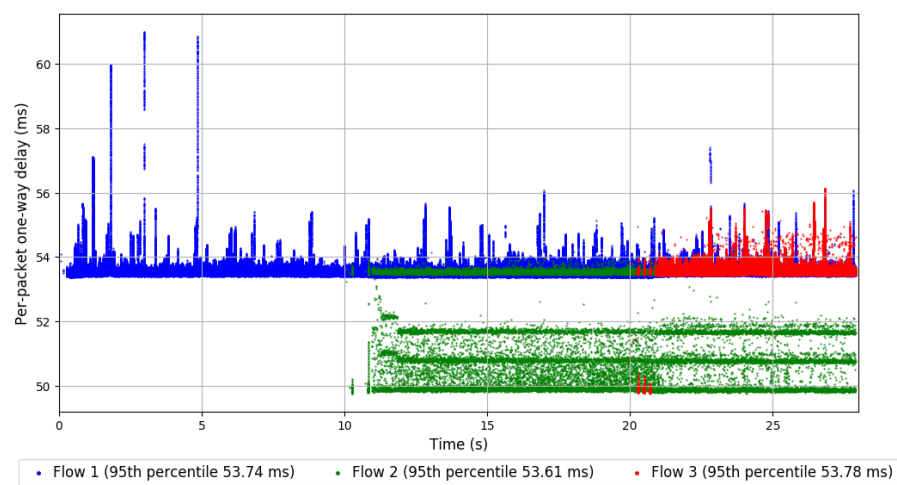
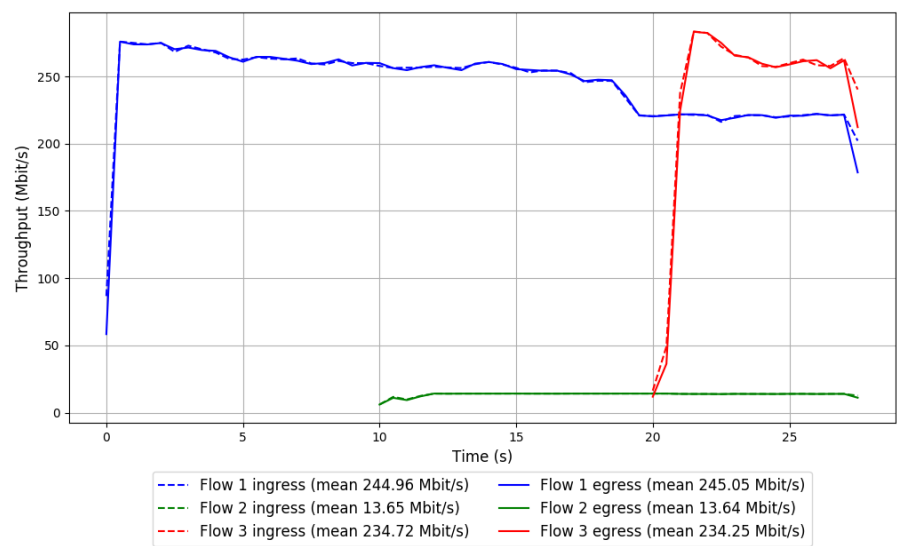


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-12 04:56:28
End at: 2017-12-12 04:56:58

# Below is generated by plot.py at 2017-12-12 09:39:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 319.69 Mbit/s
95th percentile per-packet one-way delay: 53.744 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 245.05 Mbit/s
95th percentile per-packet one-way delay: 53.739 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 13.64 Mbit/s
95th percentile per-packet one-way delay: 53.607 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 234.25 Mbit/s
95th percentile per-packet one-way delay: 53.778 ms
Loss rate: 1.52%
```


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

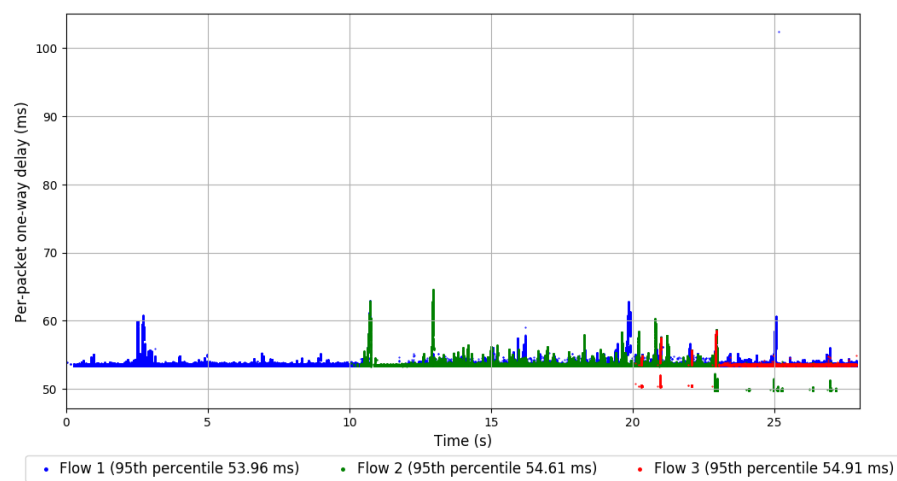
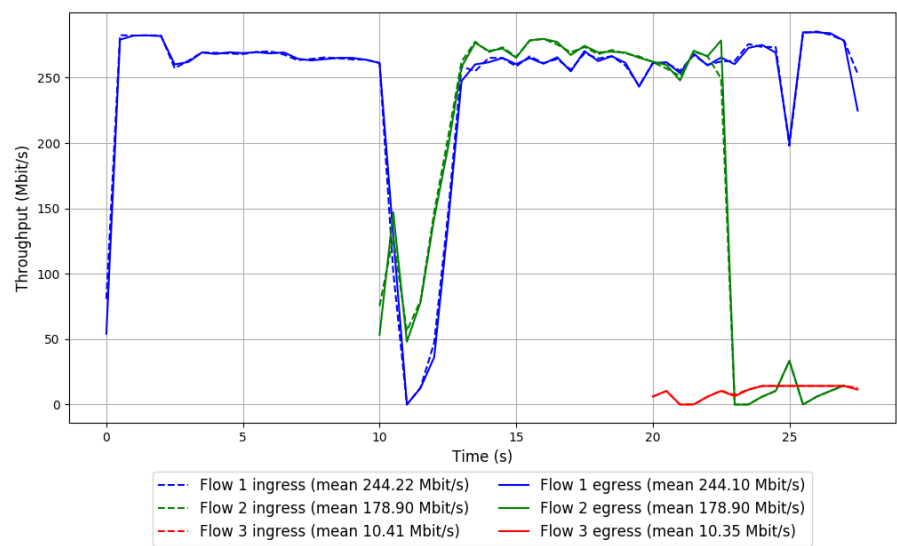


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-12 05:08:46
End at: 2017-12-12 05:09:16

# Below is generated by plot.py at 2017-12-12 09:40:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 356.96 Mbit/s
95th percentile per-packet one-way delay: 54.174 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 244.10 Mbit/s
95th percentile per-packet one-way delay: 53.961 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 178.90 Mbit/s
95th percentile per-packet one-way delay: 54.611 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.35 Mbit/s
95th percentile per-packet one-way delay: 54.905 ms
Loss rate: 1.80%
```

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

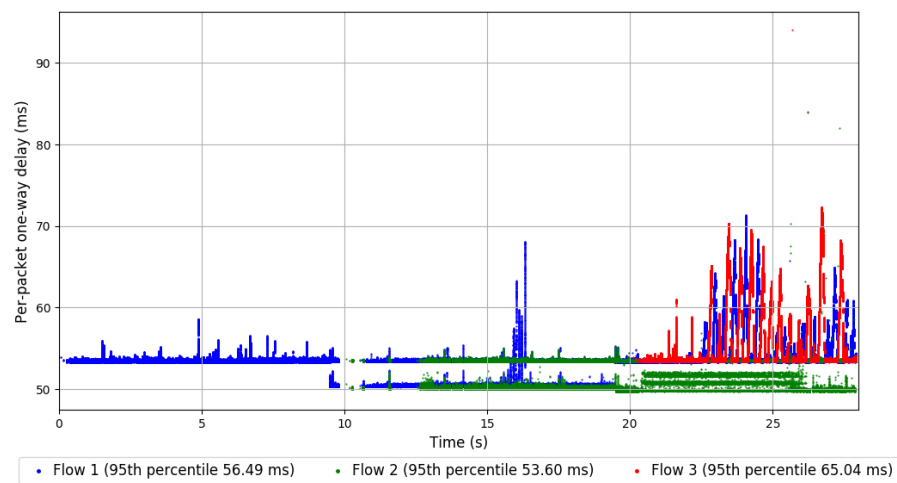
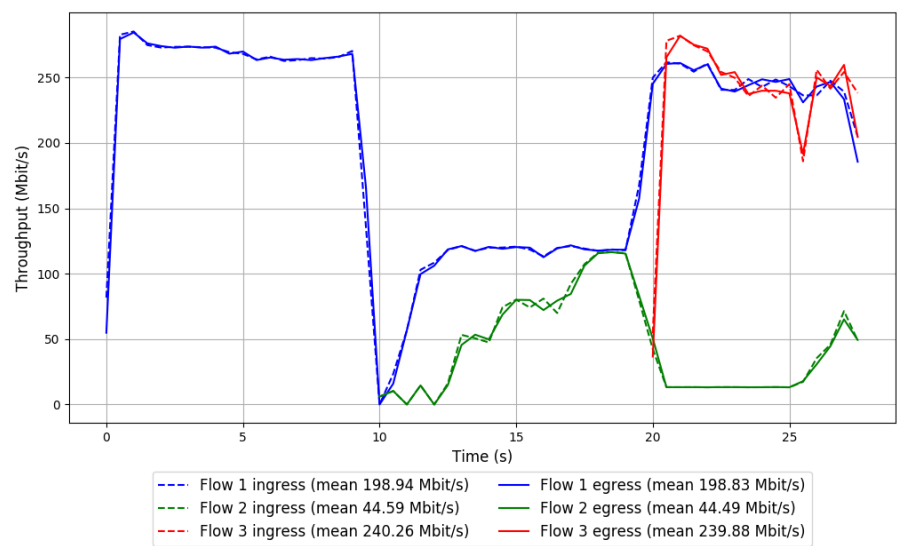


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-12 05:21:10
End at: 2017-12-12 05:21:40

# Below is generated by plot.py at 2017-12-12 09:40:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 294.50 Mbit/s
95th percentile per-packet one-way delay: 59.336 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 198.83 Mbit/s
95th percentile per-packet one-way delay: 56.491 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 44.49 Mbit/s
95th percentile per-packet one-way delay: 53.596 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 239.88 Mbit/s
95th percentile per-packet one-way delay: 65.036 ms
Loss rate: 1.48%
```

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



Run 4: Statistics of TaoVA-100x

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

End at: 2017-12-12 05:34:03

Below is generated by plot.py at 2017-12-12 09:40:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.28 Mbit/s

95th percentile per-packet one-way delay: 53.614 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 99.07 Mbit/s

95th percentile per-packet one-way delay: 53.643 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 83.84 Mbit/s

95th percentile per-packet one-way delay: 53.606 ms

Loss rate: 0.00%

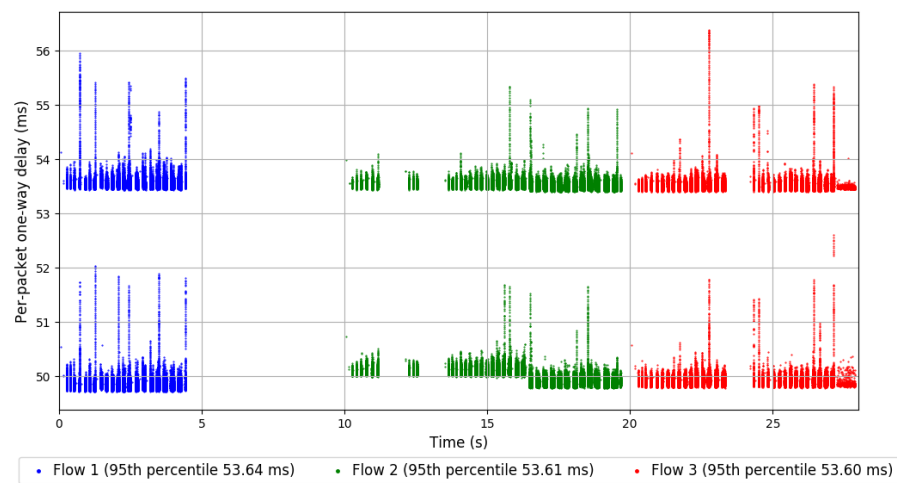
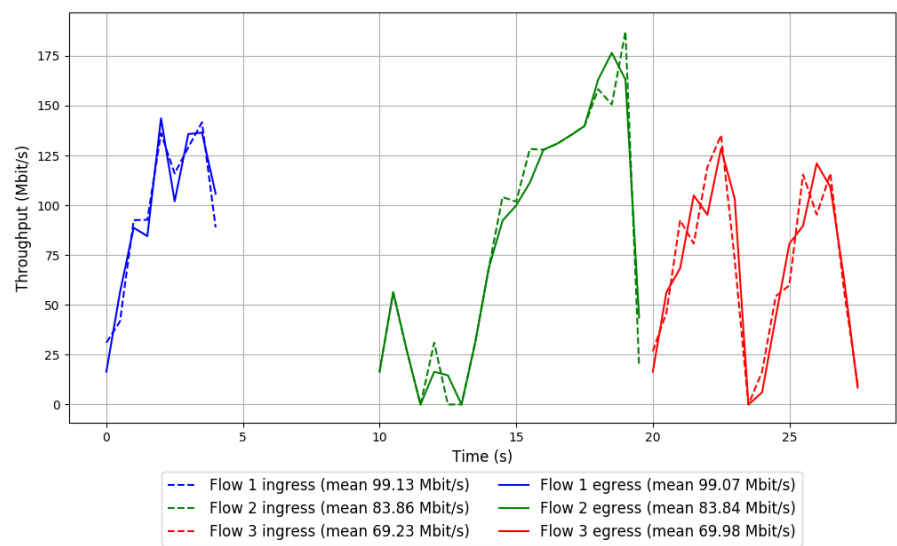
-- Flow 3:

Average throughput: 69.98 Mbit/s

95th percentile per-packet one-way delay: 53.596 ms

Loss rate: 0.21%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-12 05:45:24

End at: 2017-12-12 05:45:54

Below is generated by plot.py at 2017-12-12 09:40:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 198.98 Mbit/s

95th percentile per-packet one-way delay: 53.689 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 133.28 Mbit/s

95th percentile per-packet one-way delay: 53.683 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 12.57 Mbit/s

95th percentile per-packet one-way delay: 53.923 ms

Loss rate: 0.68%

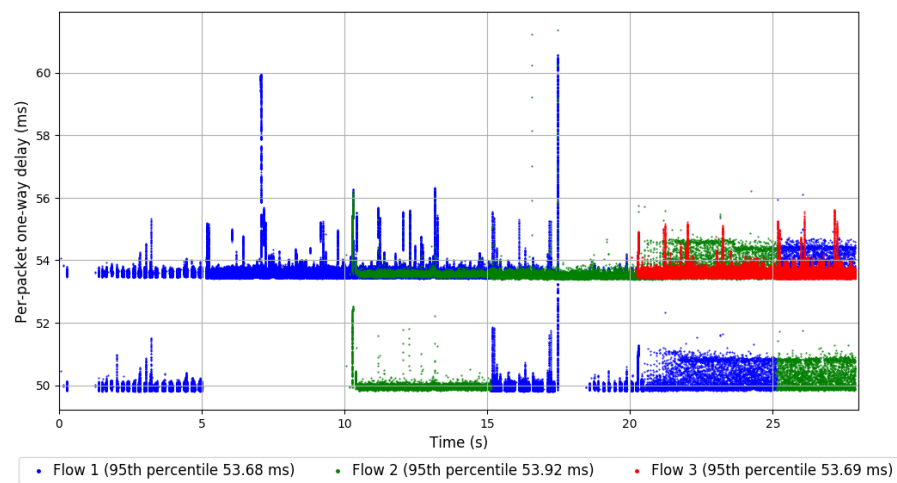
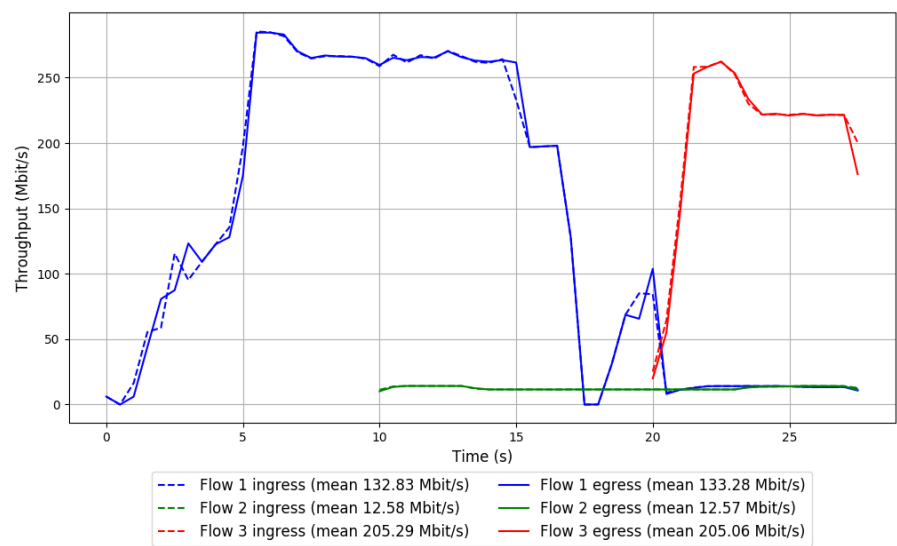
-- Flow 3:

Average throughput: 205.06 Mbit/s

95th percentile per-packet one-way delay: 53.694 ms

Loss rate: 1.47%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-12 05:57:06

End at: 2017-12-12 05:57:36

Below is generated by plot.py at 2017-12-12 09:40:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 209.01 Mbit/s

95th percentile per-packet one-way delay: 53.749 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 89.86 Mbit/s

95th percentile per-packet one-way delay: 53.629 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 187.30 Mbit/s

95th percentile per-packet one-way delay: 53.740 ms

Loss rate: 0.09%

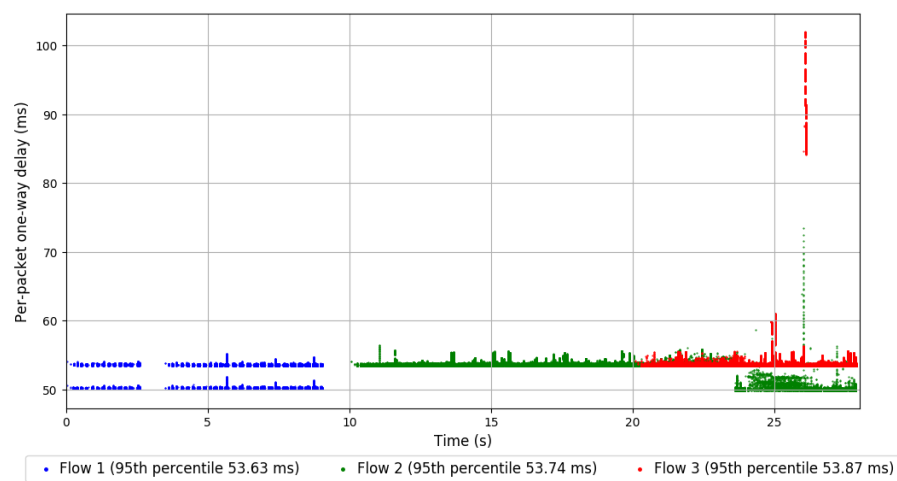
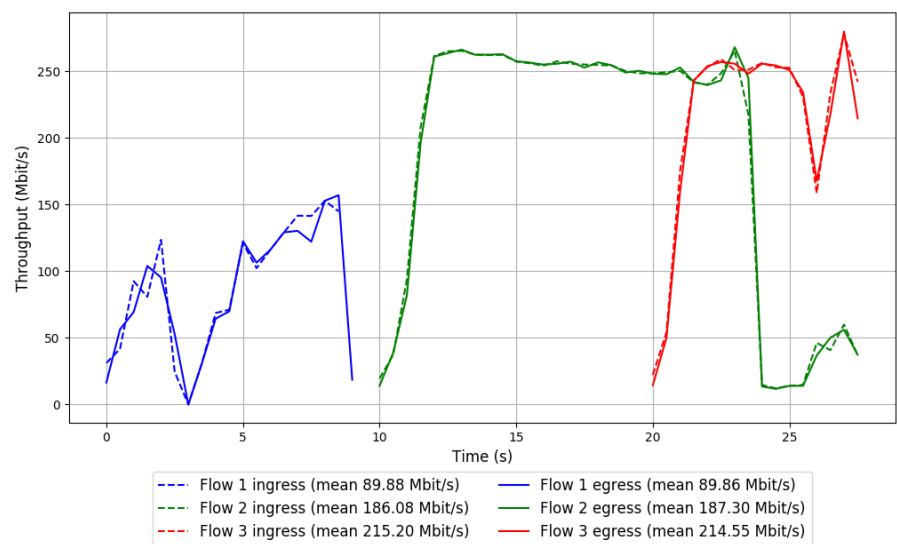
-- Flow 3:

Average throughput: 214.55 Mbit/s

95th percentile per-packet one-way delay: 53.870 ms

Loss rate: 1.66%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-12 06:09:00

End at: 2017-12-12 06:09:30

Below is generated by plot.py at 2017-12-12 09:40:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 261.59 Mbit/s

95th percentile per-packet one-way delay: 53.777 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 249.03 Mbit/s

95th percentile per-packet one-way delay: 53.767 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 13.62 Mbit/s

95th percentile per-packet one-way delay: 54.468 ms

Loss rate: 0.54%

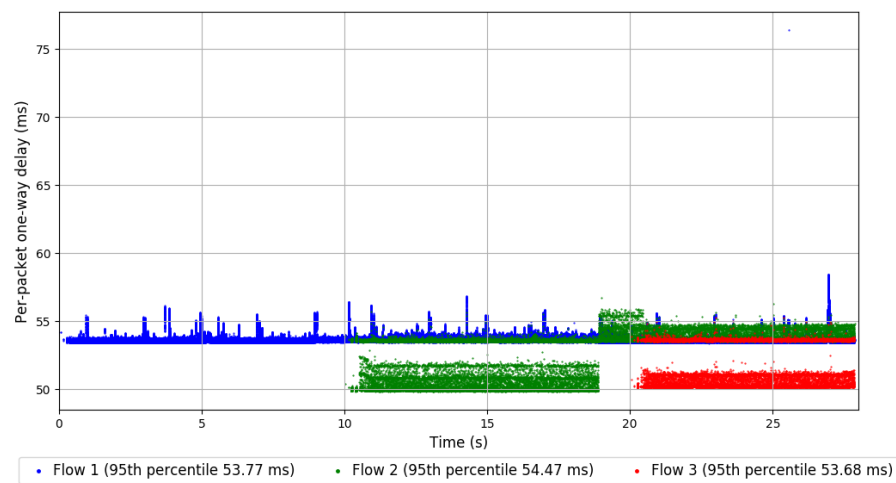
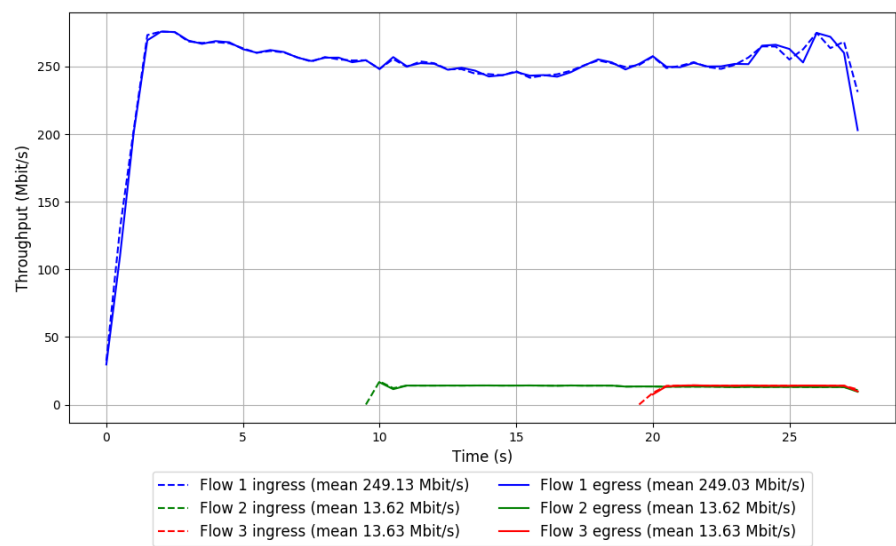
-- Flow 3:

Average throughput: 13.63 Mbit/s

95th percentile per-packet one-way delay: 53.682 ms

Loss rate: 1.30%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-12 06:21:08

End at: 2017-12-12 06:21:38

Below is generated by plot.py at 2017-12-12 09:40:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.61 Mbit/s

95th percentile per-packet one-way delay: 53.747 ms

Loss rate: 1.46%

-- Flow 1:

Average throughput: 30.31 Mbit/s

95th percentile per-packet one-way delay: 53.650 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 21.01 Mbit/s

95th percentile per-packet one-way delay: 53.651 ms

Loss rate: 3.34%

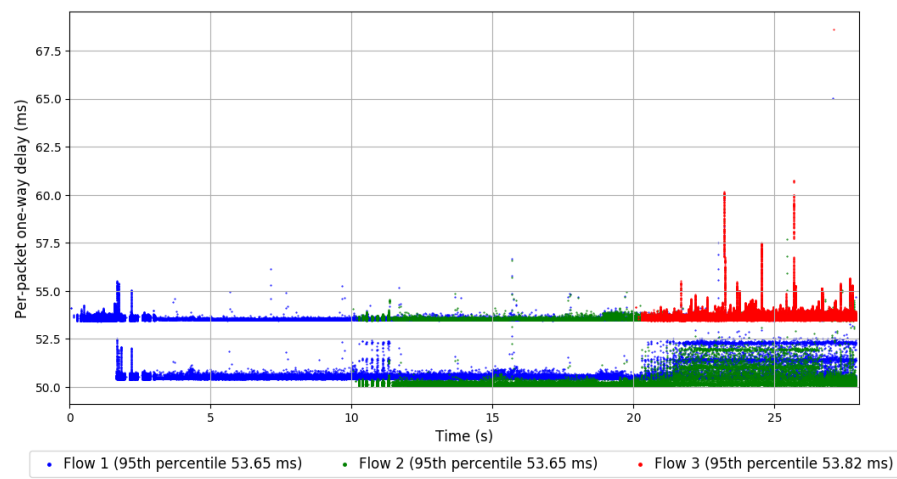
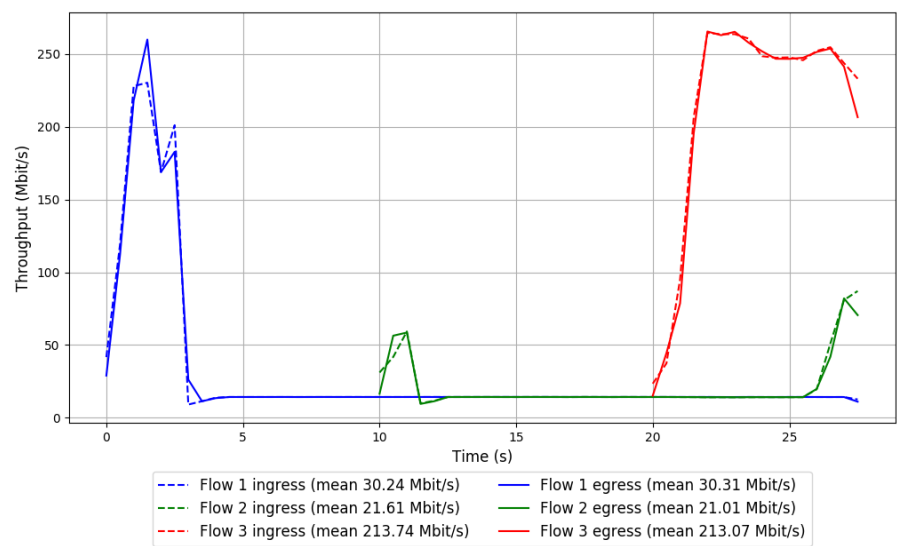
-- Flow 3:

Average throughput: 213.07 Mbit/s

95th percentile per-packet one-way delay: 53.817 ms

Loss rate: 1.67%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-12 06:33:07

End at: 2017-12-12 06:33:37

Below is generated by plot.py at 2017-12-12 09:47:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 403.99 Mbit/s

95th percentile per-packet one-way delay: 59.618 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 227.80 Mbit/s

95th percentile per-packet one-way delay: 58.692 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 195.33 Mbit/s

95th percentile per-packet one-way delay: 62.064 ms

Loss rate: 0.30%

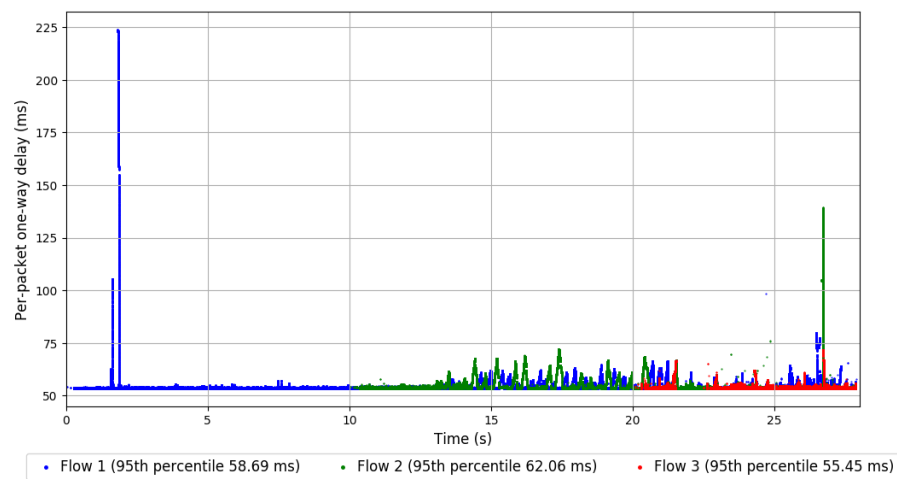
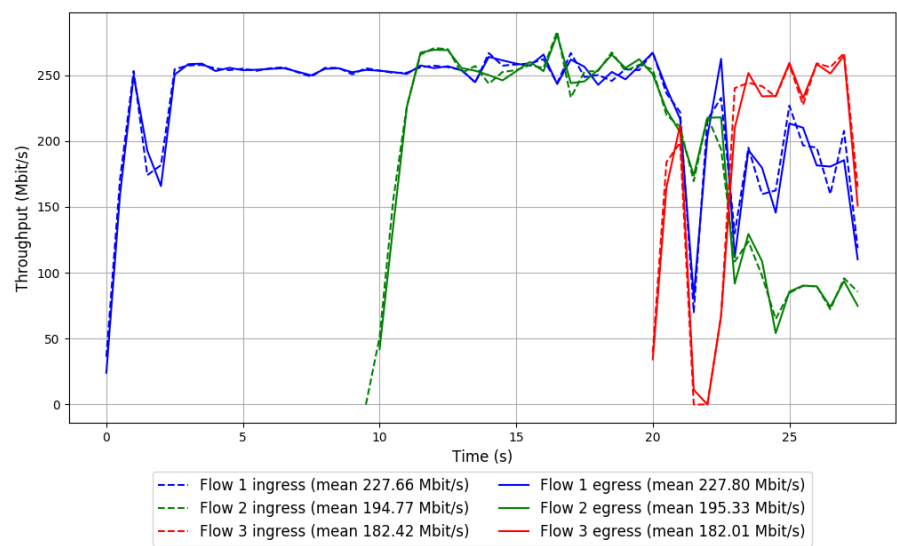
-- Flow 3:

Average throughput: 182.01 Mbit/s

95th percentile per-packet one-way delay: 55.452 ms

Loss rate: 1.56%

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

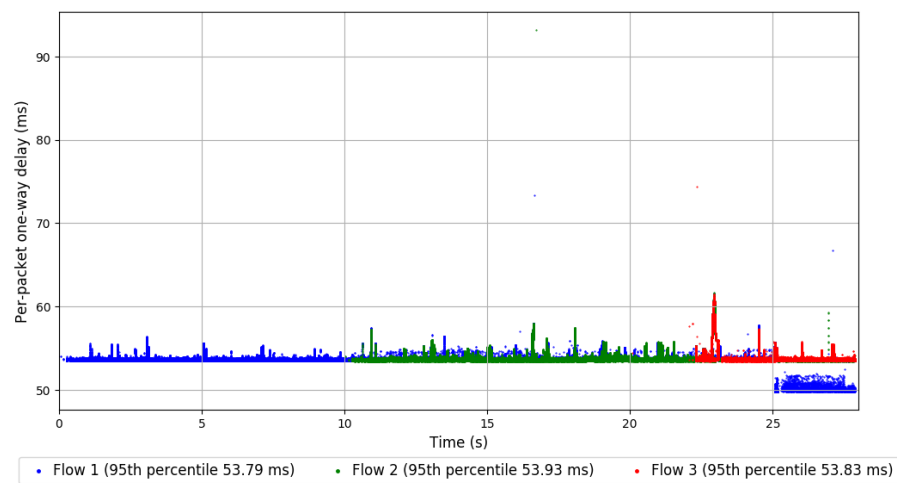
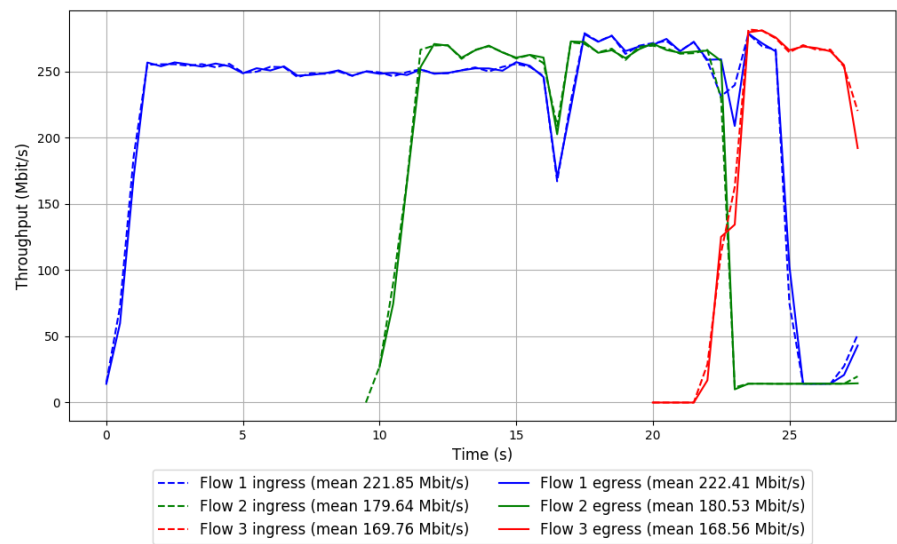


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-12 06:45:34
End at: 2017-12-12 06:46:04

# Below is generated by plot.py at 2017-12-12 09:48:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 385.37 Mbit/s
95th percentile per-packet one-way delay: 53.830 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 222.41 Mbit/s
95th percentile per-packet one-way delay: 53.794 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 180.53 Mbit/s
95th percentile per-packet one-way delay: 53.928 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 168.56 Mbit/s
95th percentile per-packet one-way delay: 53.825 ms
Loss rate: 2.08%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-12 04:54:37

End at: 2017-12-12 04:55:08

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.04 Mbit/s

95th percentile per-packet one-way delay: 55.641 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 30.46 Mbit/s

95th percentile per-packet one-way delay: 54.528 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 8.60 Mbit/s

95th percentile per-packet one-way delay: 55.070 ms

Loss rate: 0.55%

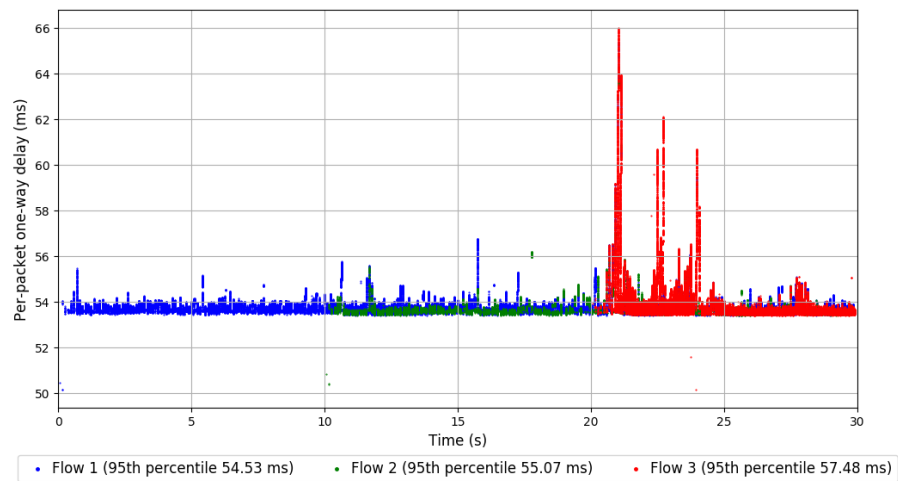
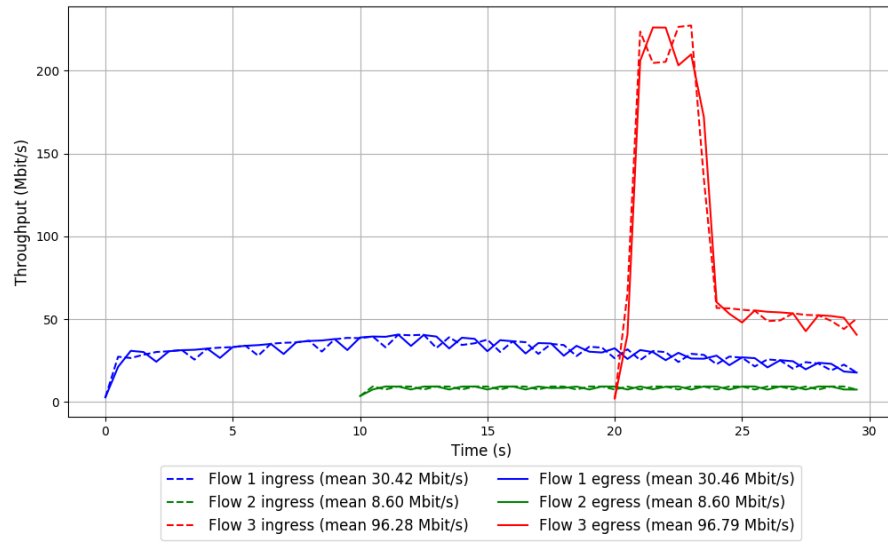
-- Flow 3:

Average throughput: 96.79 Mbit/s

95th percentile per-packet one-way delay: 57.475 ms

Loss rate: 0.53%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

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 09:48:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.69 Mbit/s

95th percentile per-packet one-way delay: 56.618 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 9.41 Mbit/s

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

Loss rate: 0.59%

-- Flow 2:

Average throughput: 147.07 Mbit/s

95th percentile per-packet one-way delay: 55.706 ms

Loss rate: 0.59%

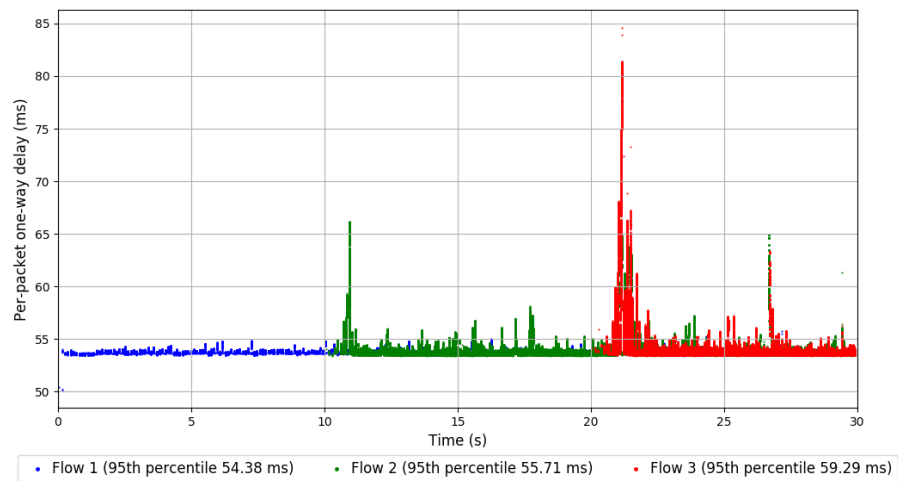
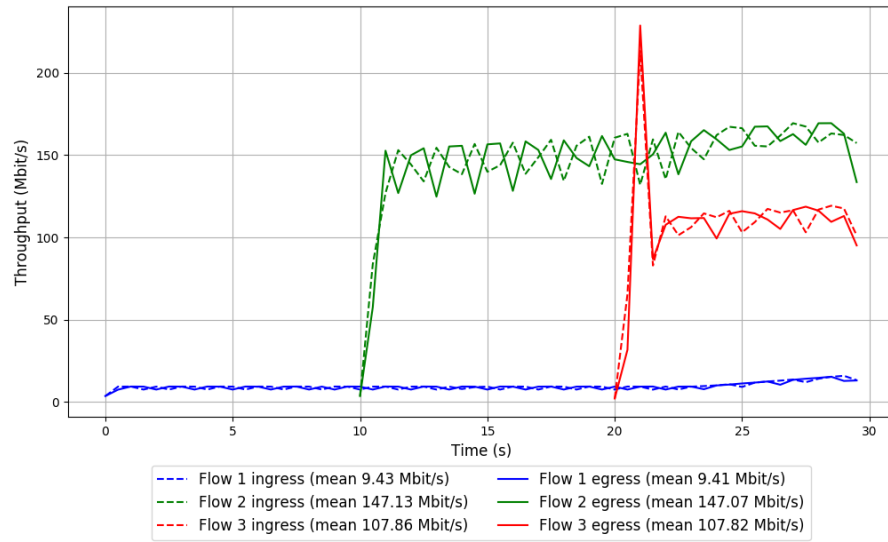
-- Flow 3:

Average throughput: 107.82 Mbit/s

95th percentile per-packet one-way delay: 59.291 ms

Loss rate: 1.13%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-12 05:19:23

End at: 2017-12-12 05:19:53

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.81 Mbit/s

95th percentile per-packet one-way delay: 55.818 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 8.43 Mbit/s

95th percentile per-packet one-way delay: 54.214 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 8.86 Mbit/s

95th percentile per-packet one-way delay: 54.317 ms

Loss rate: 0.53%

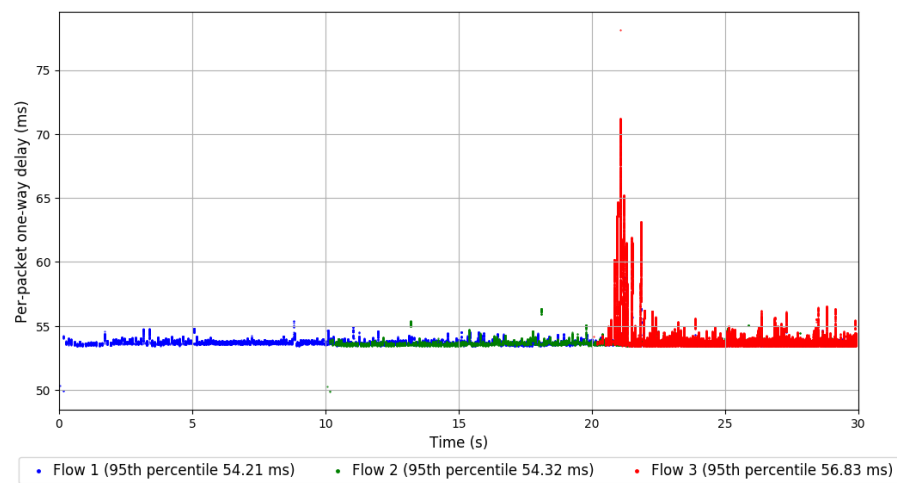
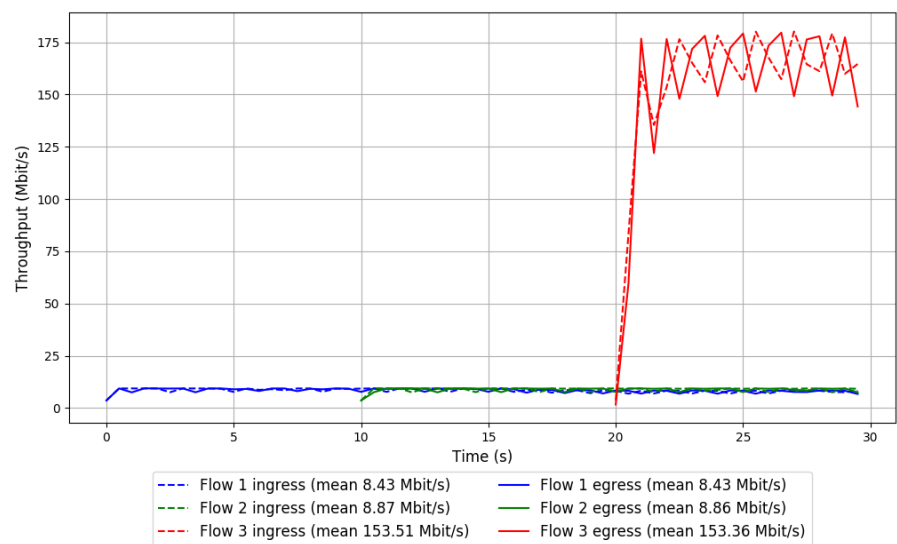
-- Flow 3:

Average throughput: 153.36 Mbit/s

95th percentile per-packet one-way delay: 56.831 ms

Loss rate: 1.18%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-12 05:31:44

End at: 2017-12-12 05:32:14

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.88 Mbit/s

95th percentile per-packet one-way delay: 54.753 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 109.03 Mbit/s

95th percentile per-packet one-way delay: 54.796 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 6.19 Mbit/s

95th percentile per-packet one-way delay: 54.070 ms

Loss rate: 1.07%

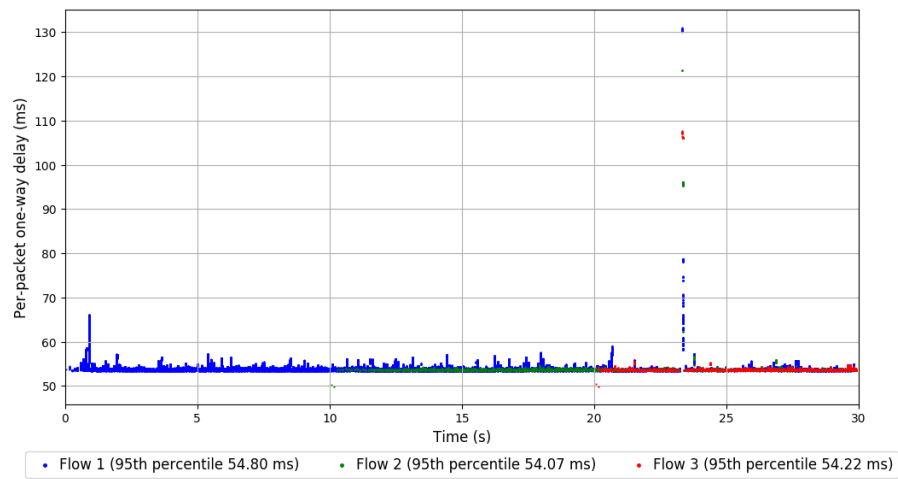
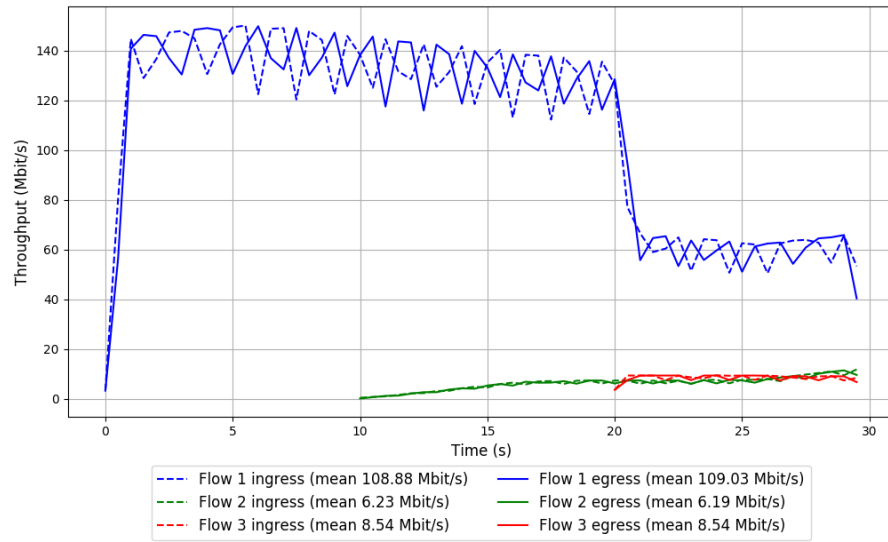
-- Flow 3:

Average throughput: 8.54 Mbit/s

95th percentile per-packet one-way delay: 54.223 ms

Loss rate: 1.05%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-12 05:43:40

End at: 2017-12-12 05:44:10

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.06 Mbit/s

95th percentile per-packet one-way delay: 54.462 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 8.92 Mbit/s

95th percentile per-packet one-way delay: 53.936 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 8.75 Mbit/s

95th percentile per-packet one-way delay: 53.995 ms

Loss rate: 0.54%

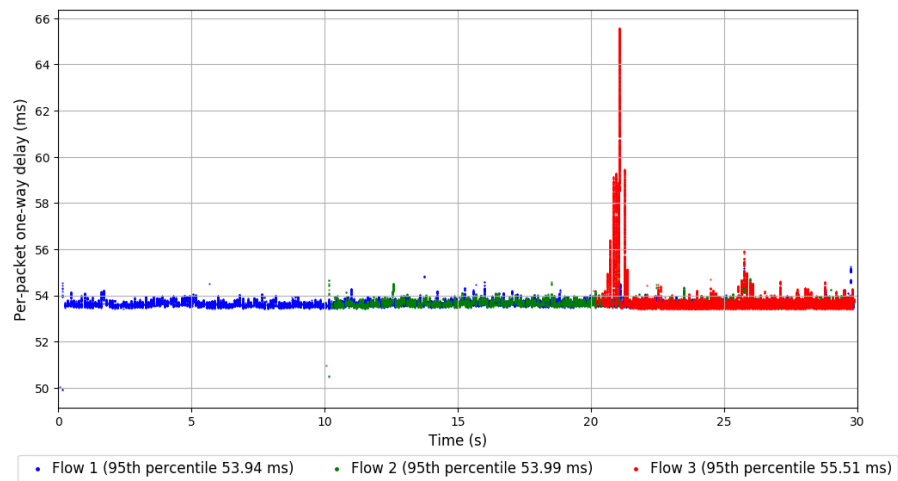
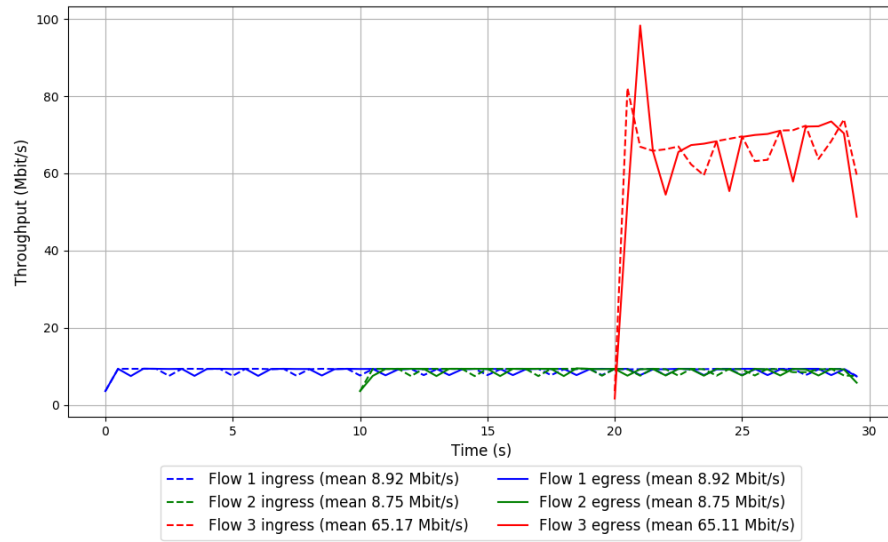
-- Flow 3:

Average throughput: 65.11 Mbit/s

95th percentile per-packet one-way delay: 55.507 ms

Loss rate: 1.16%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-12 05:55:19

End at: 2017-12-12 05:55:49

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.72 Mbit/s

95th percentile per-packet one-way delay: 54.543 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 68.70 Mbit/s

95th percentile per-packet one-way delay: 54.470 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 67.25 Mbit/s

95th percentile per-packet one-way delay: 54.643 ms

Loss rate: 0.43%

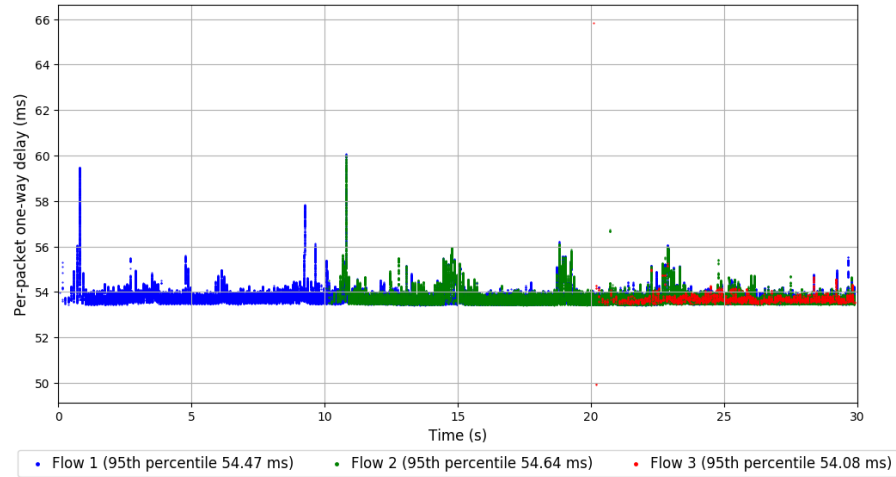
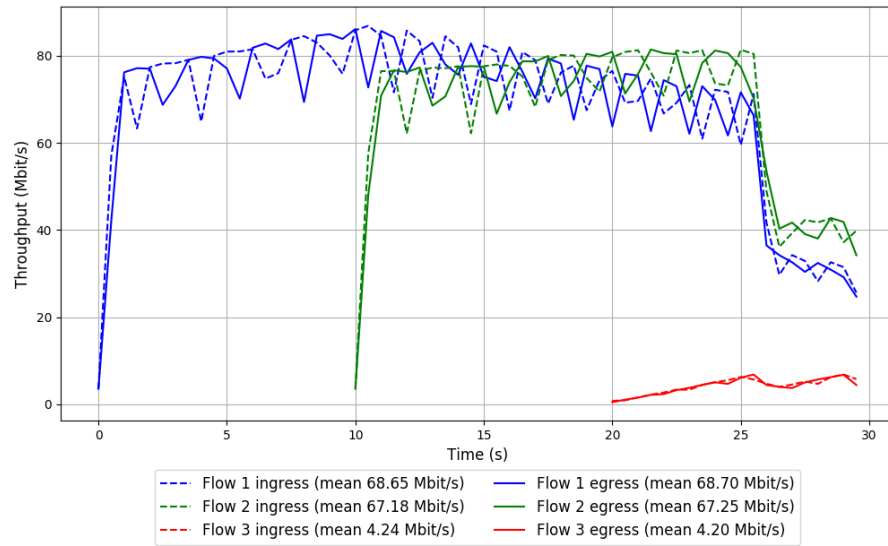
-- Flow 3:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 54.083 ms

Loss rate: 2.22%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-12 06:07:14

End at: 2017-12-12 06:07:44

Below is generated by plot.py at 2017-12-12 09:48:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.92 Mbit/s

95th percentile per-packet one-way delay: 54.426 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 89.56 Mbit/s

95th percentile per-packet one-way delay: 54.491 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 8.60 Mbit/s

95th percentile per-packet one-way delay: 54.118 ms

Loss rate: 0.55%

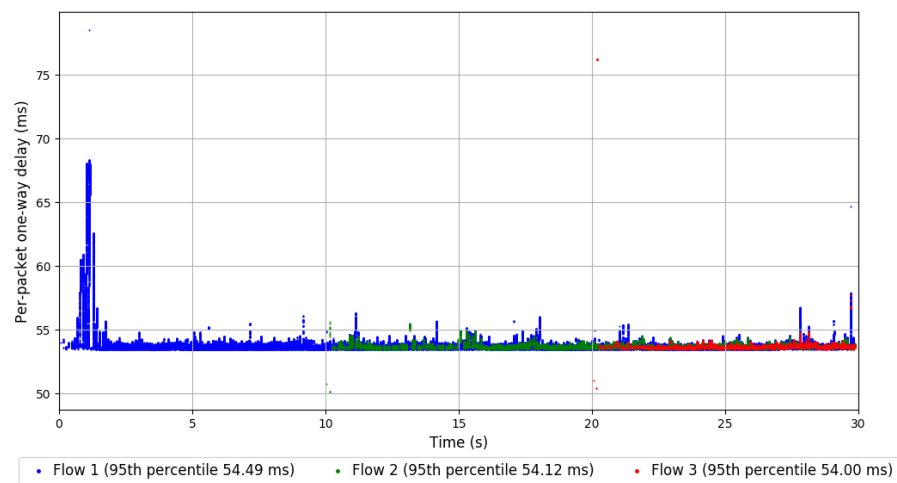
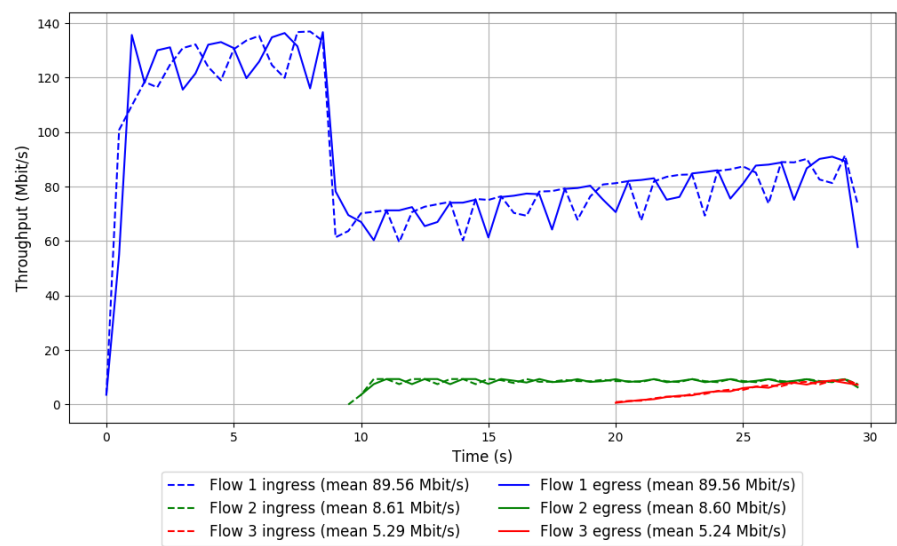
-- Flow 3:

Average throughput: 5.24 Mbit/s

95th percentile per-packet one-way delay: 54.002 ms

Loss rate: 1.65%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-12 06:19:23

End at: 2017-12-12 06:19:53

Below is generated by plot.py at 2017-12-12 09:48:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.20 Mbit/s

95th percentile per-packet one-way delay: 54.043 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 14.16 Mbit/s

95th percentile per-packet one-way delay: 53.960 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 8.88 Mbit/s

95th percentile per-packet one-way delay: 53.922 ms

Loss rate: 0.53%

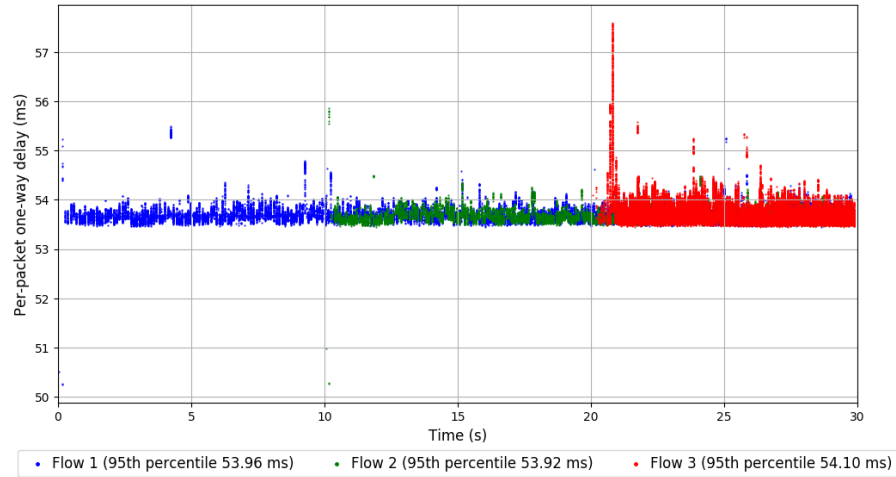
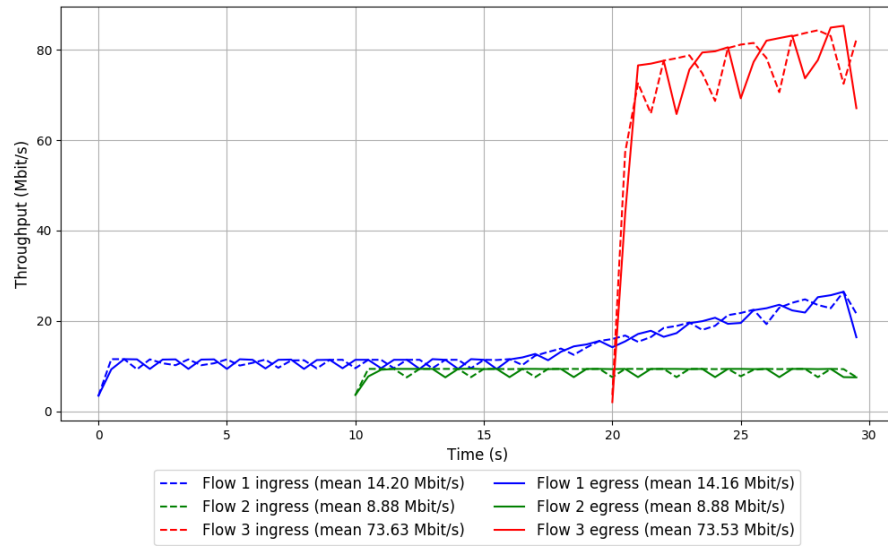
-- Flow 3:

Average throughput: 73.53 Mbit/s

95th percentile per-packet one-way delay: 54.100 ms

Loss rate: 1.19%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-12 06:31:18

End at: 2017-12-12 06:31:48

Below is generated by plot.py at 2017-12-12 09:48:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.27 Mbit/s

95th percentile per-packet one-way delay: 54.103 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 86.76 Mbit/s

95th percentile per-packet one-way delay: 53.985 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 80.77 Mbit/s

95th percentile per-packet one-way delay: 54.224 ms

Loss rate: 0.60%

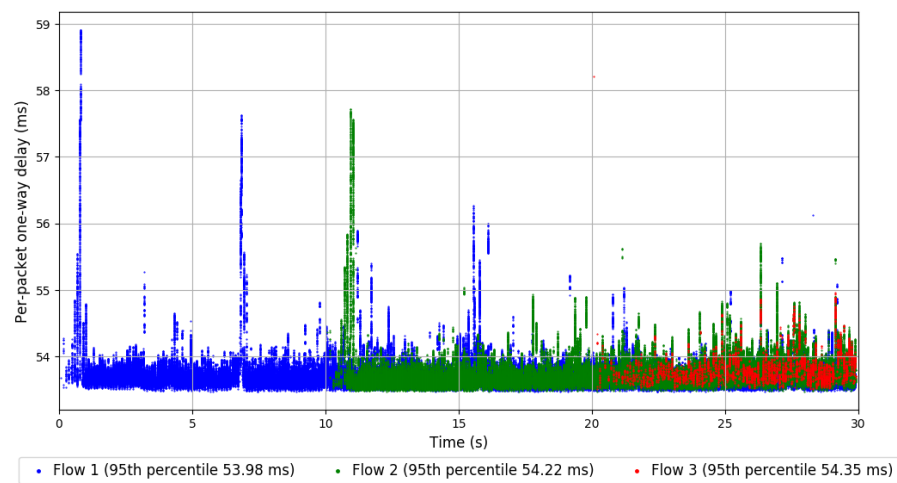
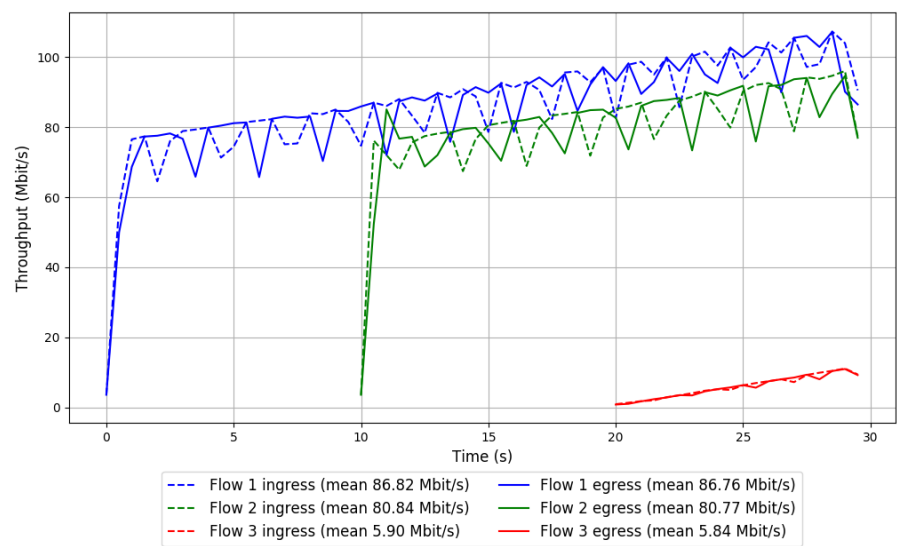
-- Flow 3:

Average throughput: 5.84 Mbit/s

95th percentile per-packet one-way delay: 54.355 ms

Loss rate: 2.09%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-12 06:43:49

End at: 2017-12-12 06:44:19

Below is generated by plot.py at 2017-12-12 09:48:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.31 Mbit/s

95th percentile per-packet one-way delay: 54.557 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 16.51 Mbit/s

95th percentile per-packet one-way delay: 54.330 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 64.68 Mbit/s

95th percentile per-packet one-way delay: 54.736 ms

Loss rate: 0.46%

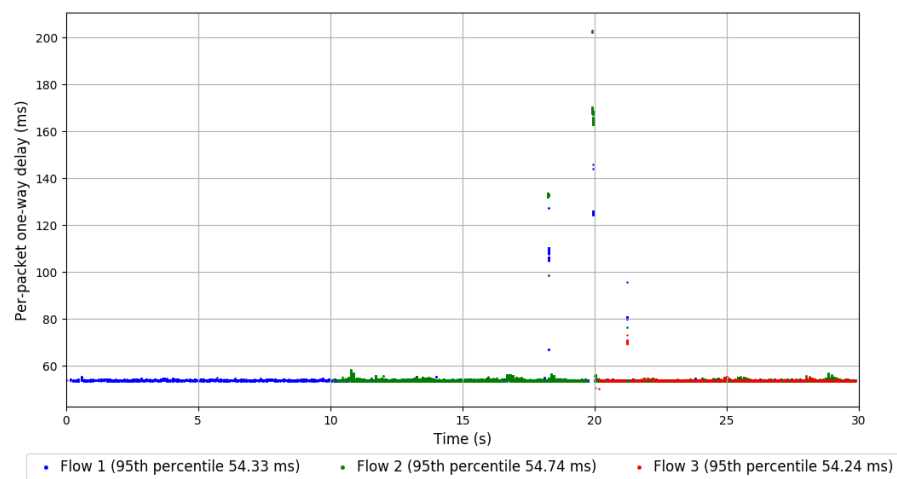
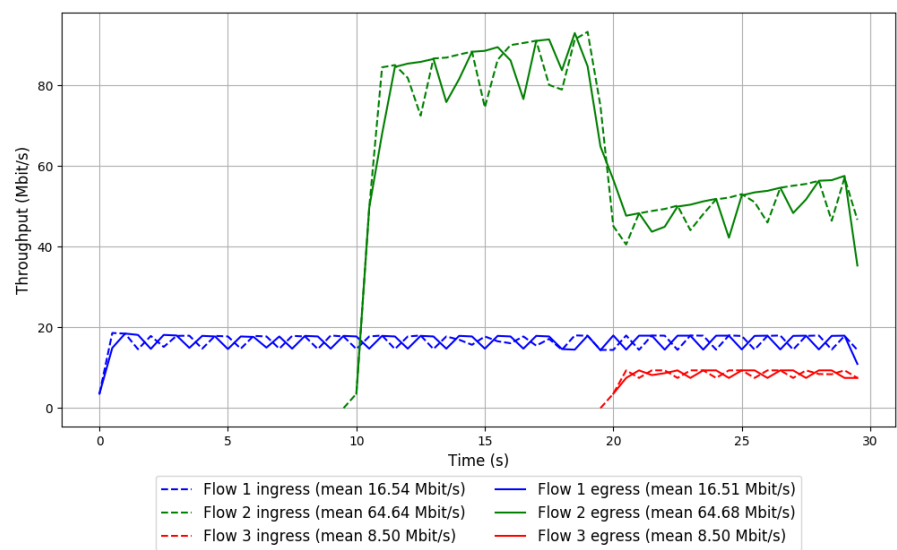
-- Flow 3:

Average throughput: 8.50 Mbit/s

95th percentile per-packet one-way delay: 54.237 ms

Loss rate: 1.11%

Run 10: Report of TCP Vegas — Data Link

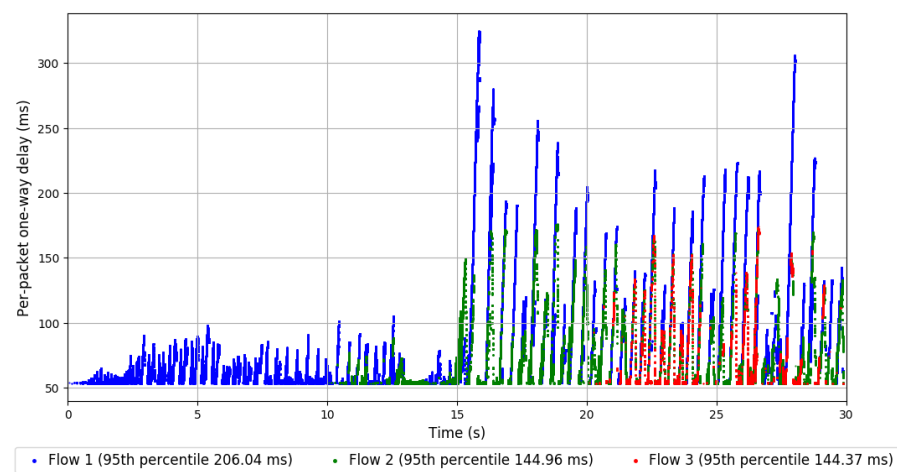
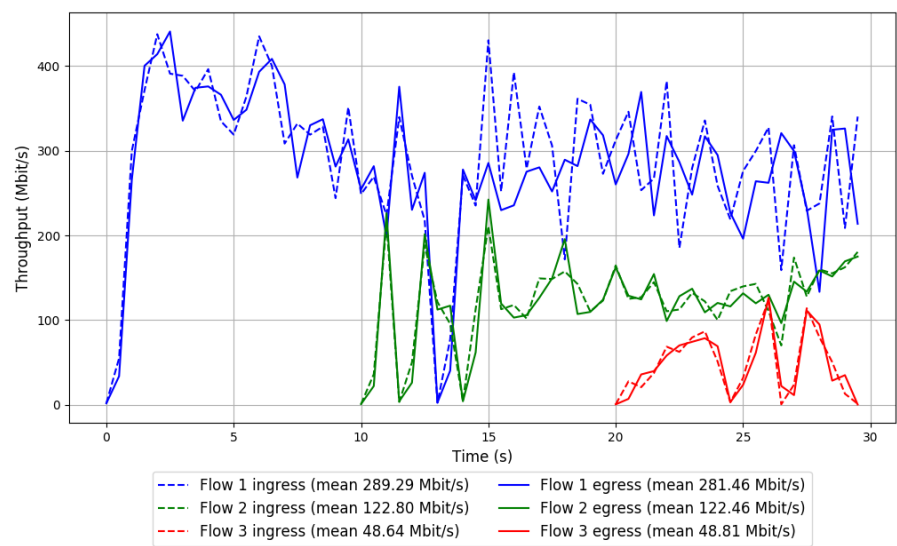


```
Run 1: Statistics of Verus

Start at: 2017-12-12 04:58:30
End at: 2017-12-12 04:59:00

# Below is generated by plot.py at 2017-12-12 09:48:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 378.57 Mbit/s
95th percentile per-packet one-way delay: 195.356 ms
Loss rate: 2.66%
-- Flow 1:
Average throughput: 281.46 Mbit/s
95th percentile per-packet one-way delay: 206.037 ms
Loss rate: 3.24%
-- Flow 2:
Average throughput: 122.46 Mbit/s
95th percentile per-packet one-way delay: 144.962 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 48.81 Mbit/s
95th percentile per-packet one-way delay: 144.367 ms
Loss rate: 0.76%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-12 05:11:03

End at: 2017-12-12 05:11:33

Below is generated by plot.py at 2017-12-12 09:48:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.90 Mbit/s

95th percentile per-packet one-way delay: 128.333 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 224.96 Mbit/s

95th percentile per-packet one-way delay: 114.582 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 102.53 Mbit/s

95th percentile per-packet one-way delay: 150.035 ms

Loss rate: 0.54%

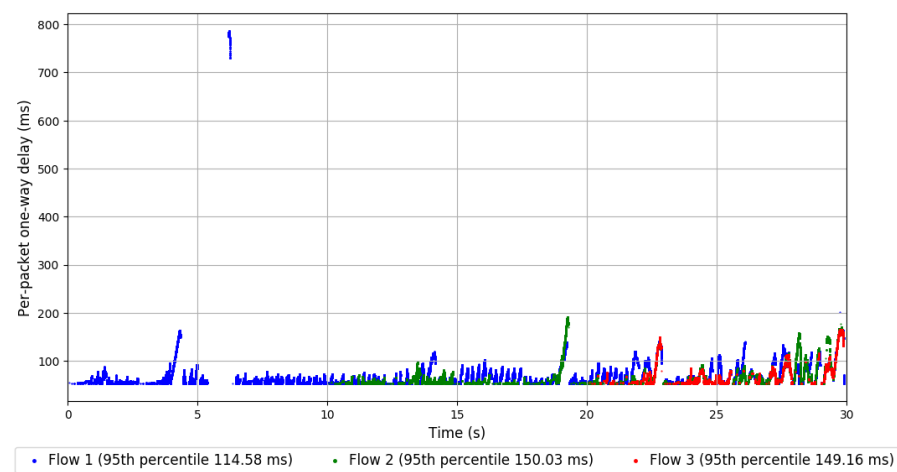
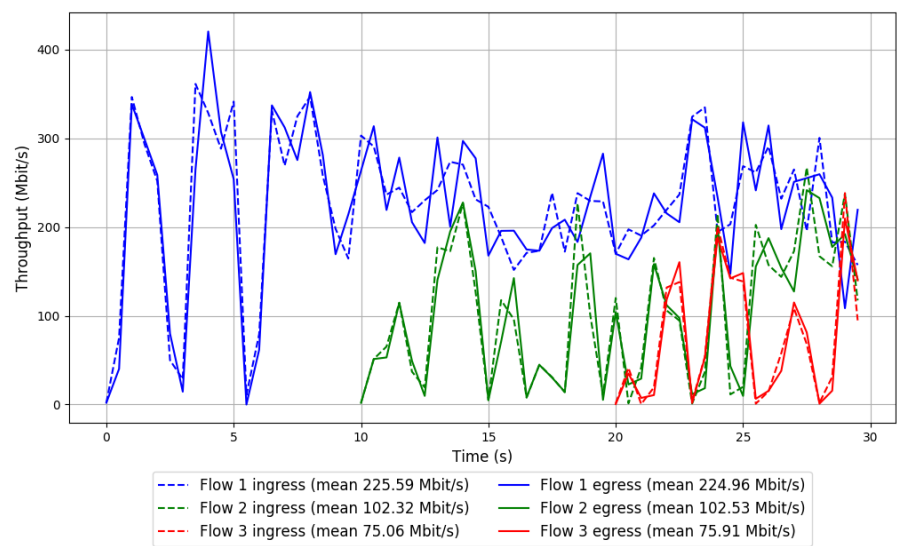
-- Flow 3:

Average throughput: 75.91 Mbit/s

95th percentile per-packet one-way delay: 149.161 ms

Loss rate: 0.03%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-12 05:23:18

End at: 2017-12-12 05:23:48

Below is generated by plot.py at 2017-12-12 09:48:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.20 Mbit/s

95th percentile per-packet one-way delay: 122.423 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 269.61 Mbit/s

95th percentile per-packet one-way delay: 125.516 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 116.25 Mbit/s

95th percentile per-packet one-way delay: 104.616 ms

Loss rate: 1.34%

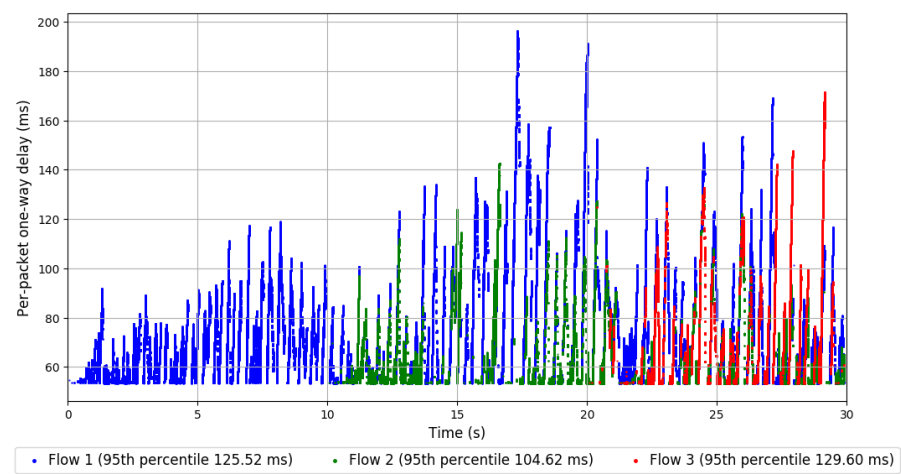
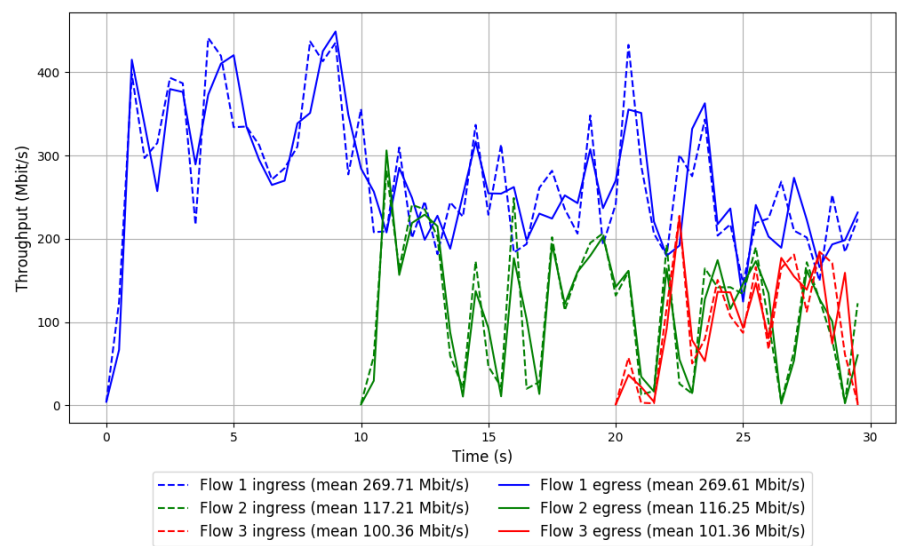
-- Flow 3:

Average throughput: 101.36 Mbit/s

95th percentile per-packet one-way delay: 129.598 ms

Loss rate: 0.07%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-12 05:35:20

End at: 2017-12-12 05:35:50

Below is generated by plot.py at 2017-12-12 09:48:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 345.26 Mbit/s

95th percentile per-packet one-way delay: 95.295 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 238.00 Mbit/s

95th percentile per-packet one-way delay: 98.432 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 122.12 Mbit/s

95th percentile per-packet one-way delay: 89.461 ms

Loss rate: 0.90%

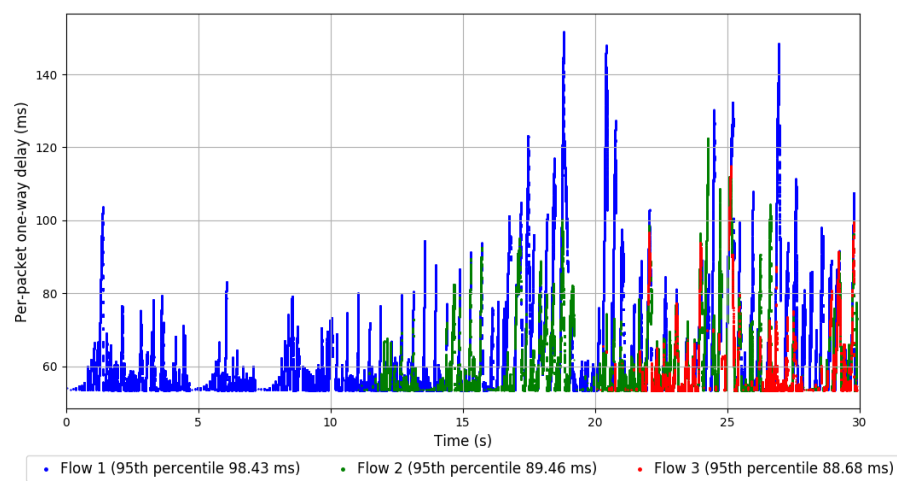
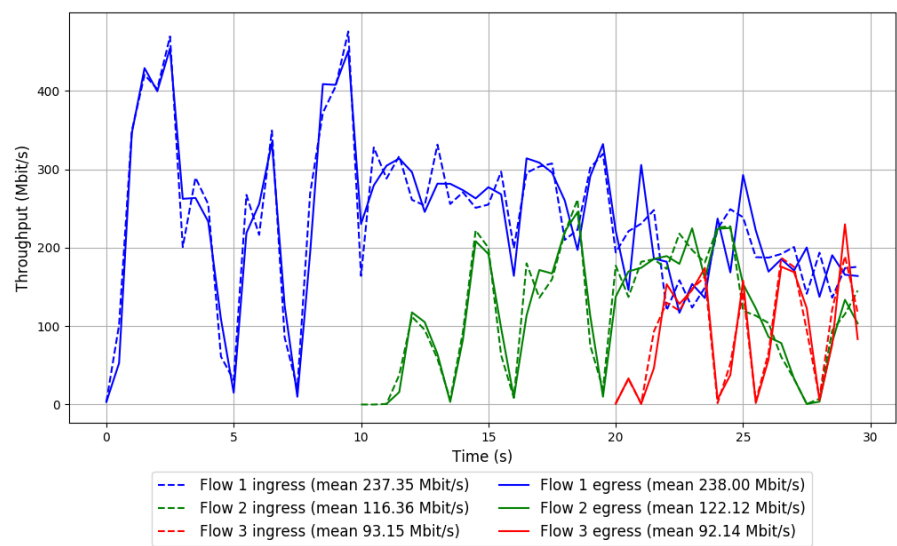
-- Flow 3:

Average throughput: 92.14 Mbit/s

95th percentile per-packet one-way delay: 88.677 ms

Loss rate: 2.21%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-12 05:47:01

End at: 2017-12-12 05:47:31

Below is generated by plot.py at 2017-12-12 09:48:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.12 Mbit/s

95th percentile per-packet one-way delay: 106.294 ms

Loss rate: 1.74%

-- Flow 1:

Average throughput: 190.62 Mbit/s

95th percentile per-packet one-way delay: 103.231 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 139.69 Mbit/s

95th percentile per-packet one-way delay: 196.450 ms

Loss rate: 5.64%

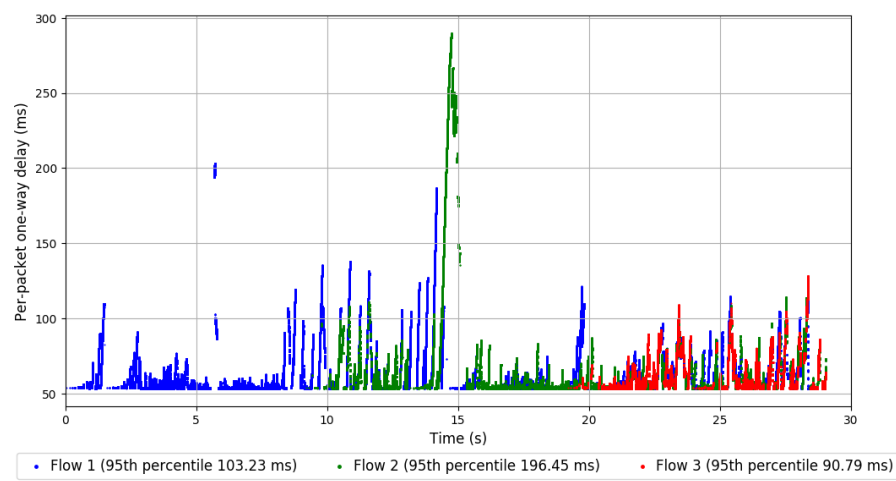
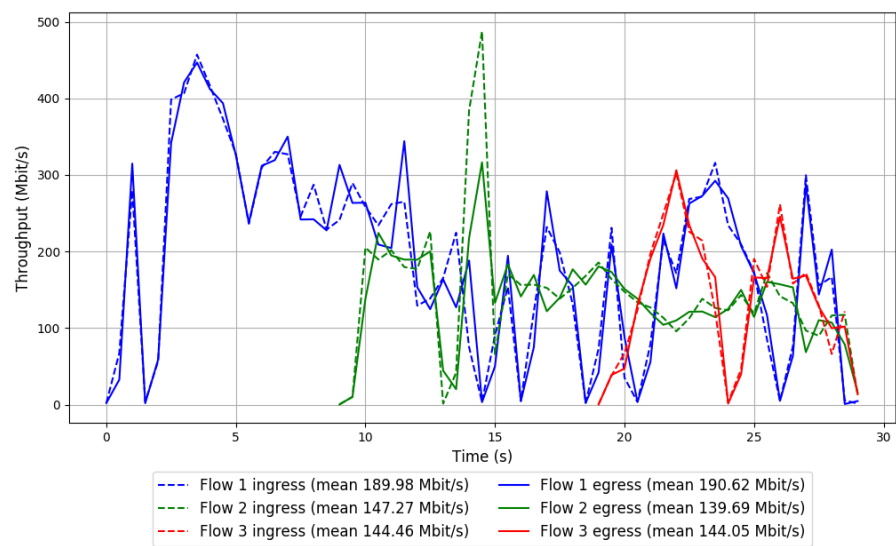
-- Flow 3:

Average throughput: 144.05 Mbit/s

95th percentile per-packet one-way delay: 90.787 ms

Loss rate: 0.31%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-12 05:59:04

End at: 2017-12-12 05:59:34

Below is generated by plot.py at 2017-12-12 09:48:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.65 Mbit/s

95th percentile per-packet one-way delay: 134.417 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 164.39 Mbit/s

95th percentile per-packet one-way delay: 111.264 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 155.53 Mbit/s

95th percentile per-packet one-way delay: 151.260 ms

Loss rate: 1.00%

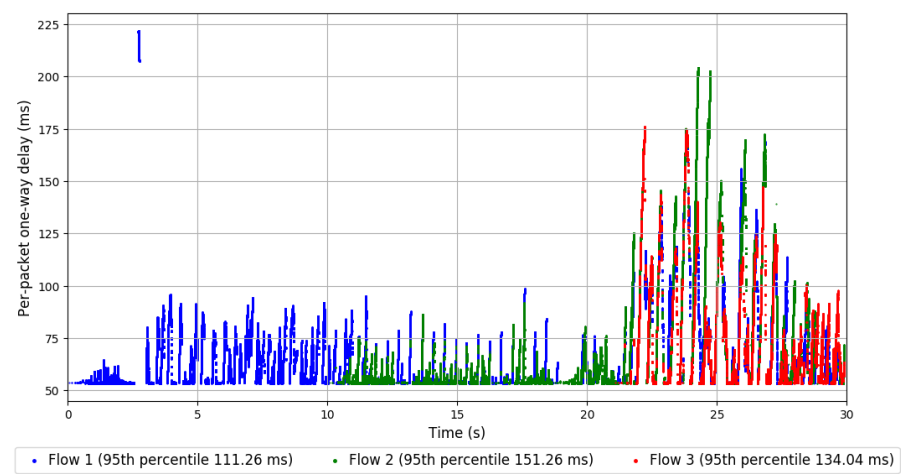
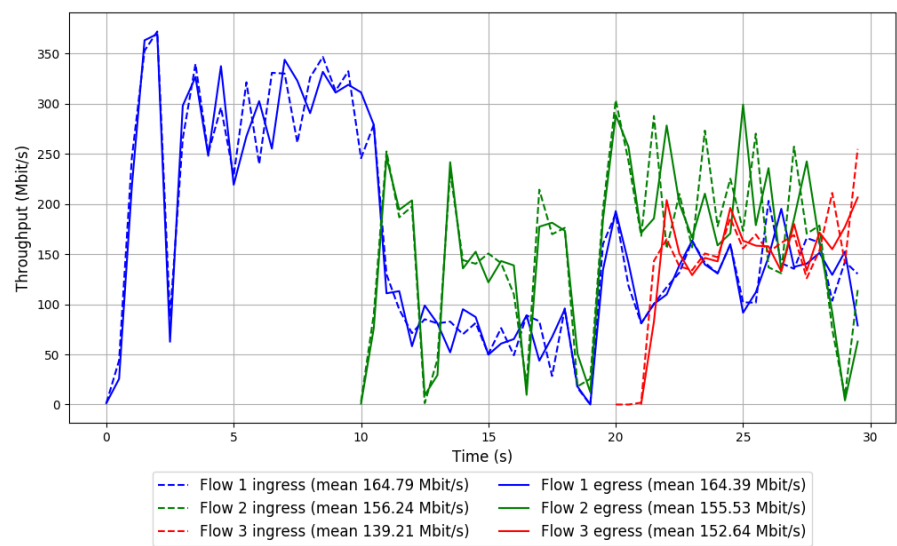
-- Flow 3:

Average throughput: 152.64 Mbit/s

95th percentile per-packet one-way delay: 134.041 ms

Loss rate: 2.59%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

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

End at: 2017-12-12 06:11:36

Below is generated by plot.py at 2017-12-12 09:52:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 307.85 Mbit/s

95th percentile per-packet one-way delay: 107.960 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 135.73 Mbit/s

95th percentile per-packet one-way delay: 87.233 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 173.79 Mbit/s

95th percentile per-packet one-way delay: 121.786 ms

Loss rate: 1.56%

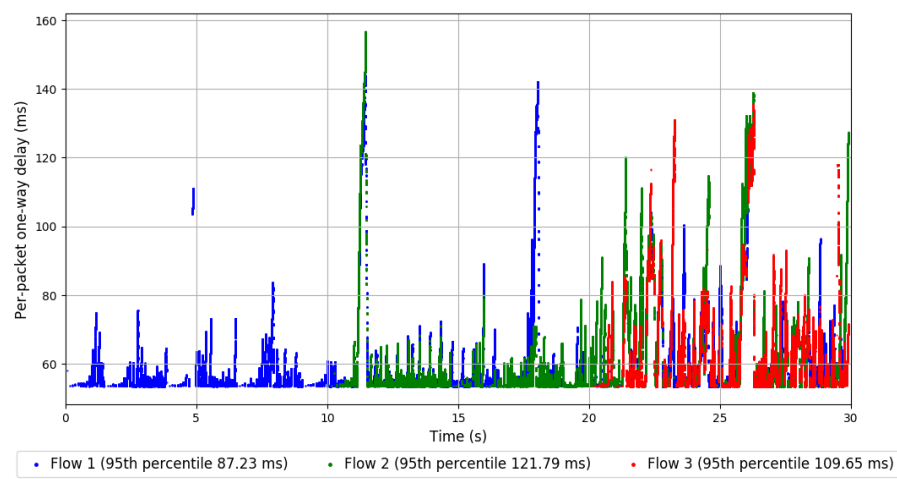
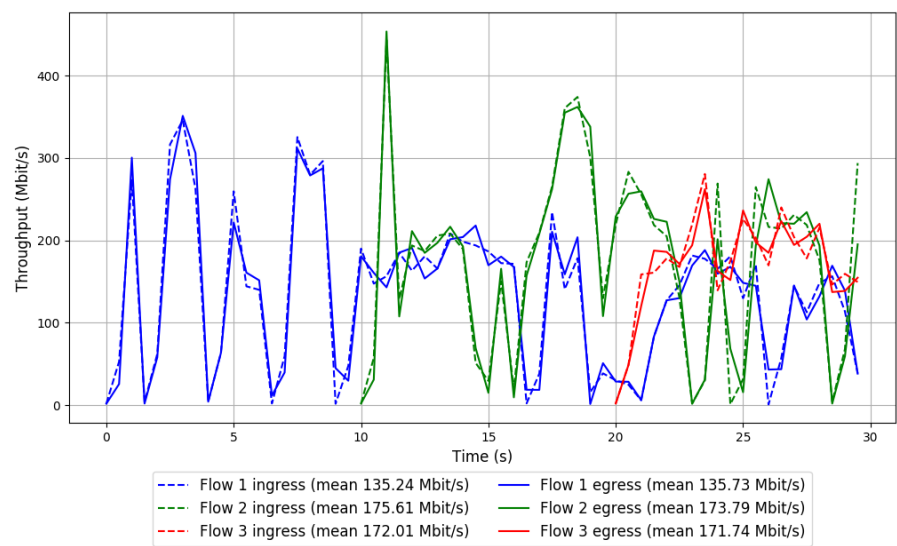
-- Flow 3:

Average throughput: 171.74 Mbit/s

95th percentile per-packet one-way delay: 109.651 ms

Loss rate: 1.26%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-12 06:22:52

End at: 2017-12-12 06:23:22

Below is generated by plot.py at 2017-12-12 09:53:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 331.97 Mbit/s

95th percentile per-packet one-way delay: 191.337 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 169.16 Mbit/s

95th percentile per-packet one-way delay: 102.470 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 175.63 Mbit/s

95th percentile per-packet one-way delay: 200.035 ms

Loss rate: 1.20%

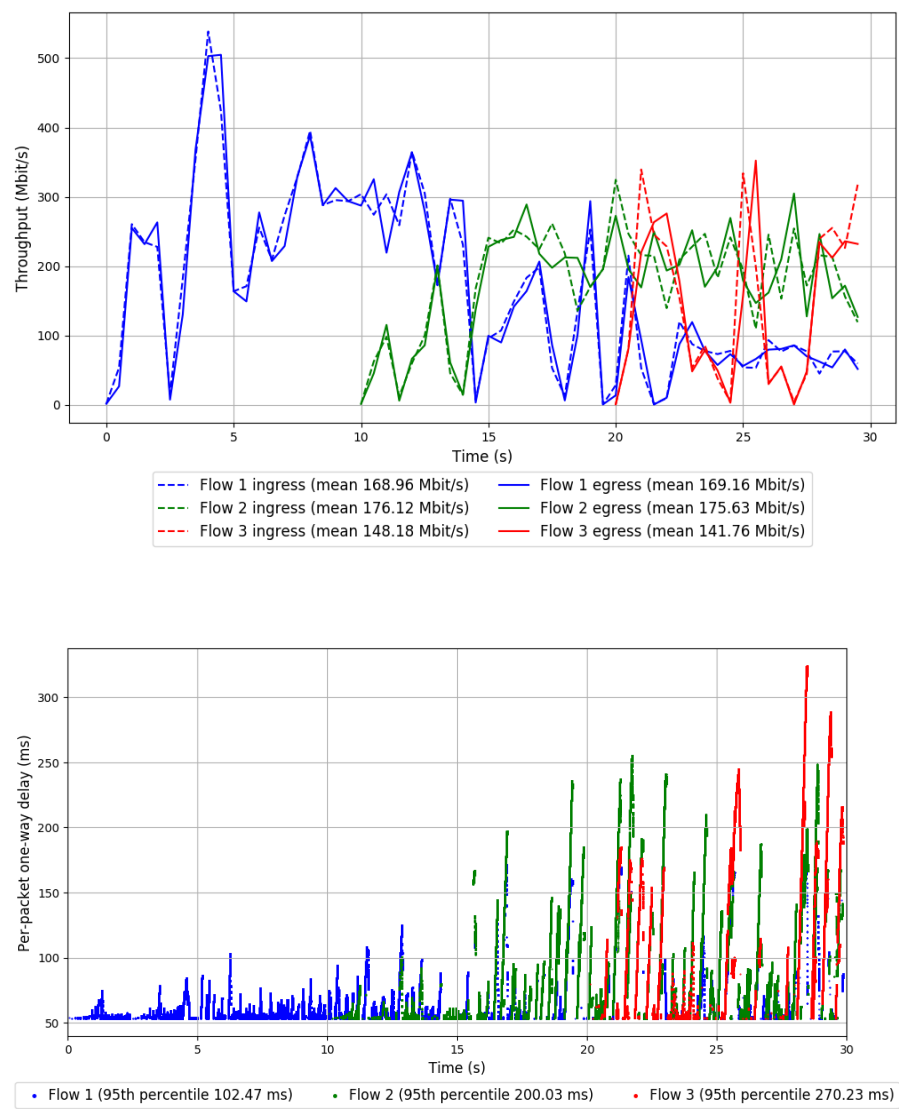
-- Flow 3:

Average throughput: 141.76 Mbit/s

95th percentile per-packet one-way delay: 270.226 ms

Loss rate: 6.11%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-12 06:35:25

End at: 2017-12-12 06:35:55

Below is generated by plot.py at 2017-12-12 09:54:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.36 Mbit/s

95th percentile per-packet one-way delay: 125.618 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 246.47 Mbit/s

95th percentile per-packet one-way delay: 124.871 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 147.25 Mbit/s

95th percentile per-packet one-way delay: 121.987 ms

Loss rate: 0.28%

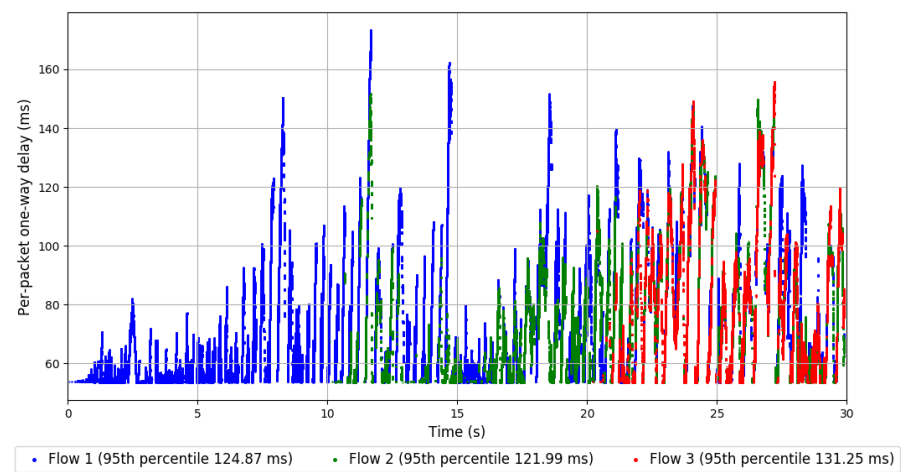
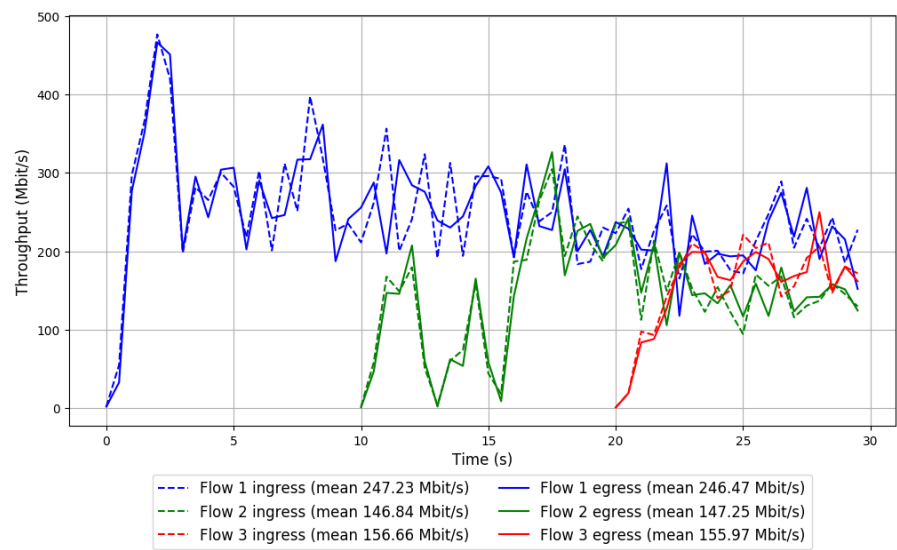
-- Flow 3:

Average throughput: 155.97 Mbit/s

95th percentile per-packet one-way delay: 131.247 ms

Loss rate: 0.33%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-12 06:47:49

End at: 2017-12-12 06:48:19

Below is generated by plot.py at 2017-12-12 09:54:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 361.12 Mbit/s

95th percentile per-packet one-way delay: 121.328 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 212.96 Mbit/s

95th percentile per-packet one-way delay: 123.046 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 179.11 Mbit/s

95th percentile per-packet one-way delay: 119.805 ms

Loss rate: 0.47%

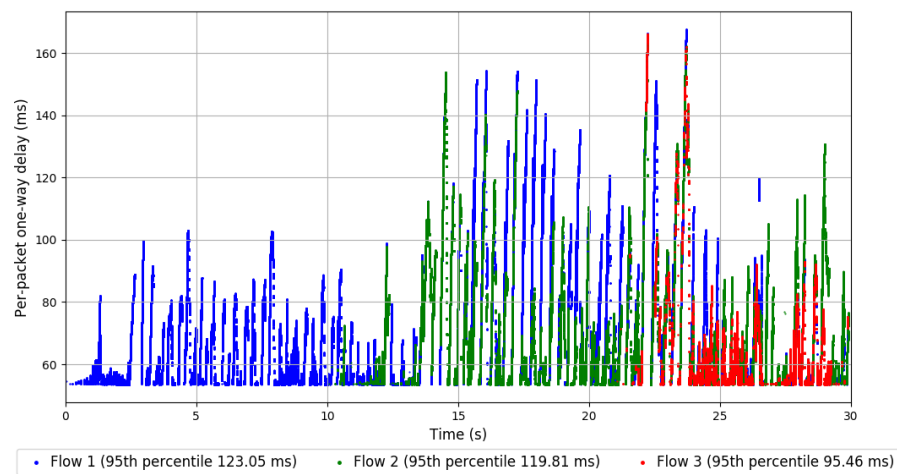
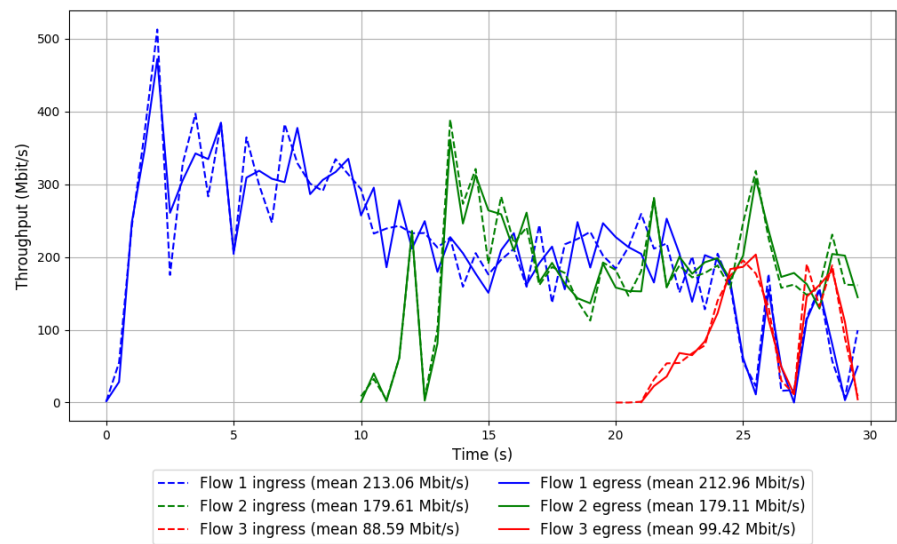
-- Flow 3:

Average throughput: 99.42 Mbit/s

95th percentile per-packet one-way delay: 95.457 ms

Loss rate: 0.26%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-12 04:52:48

End at: 2017-12-12 04:53:18

Below is generated by plot.py at 2017-12-12 09:54:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 162.34 Mbit/s

95th percentile per-packet one-way delay: 53.674 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 88.65 Mbit/s

95th percentile per-packet one-way delay: 53.715 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 78.57 Mbit/s

95th percentile per-packet one-way delay: 53.617 ms

Loss rate: 0.49%

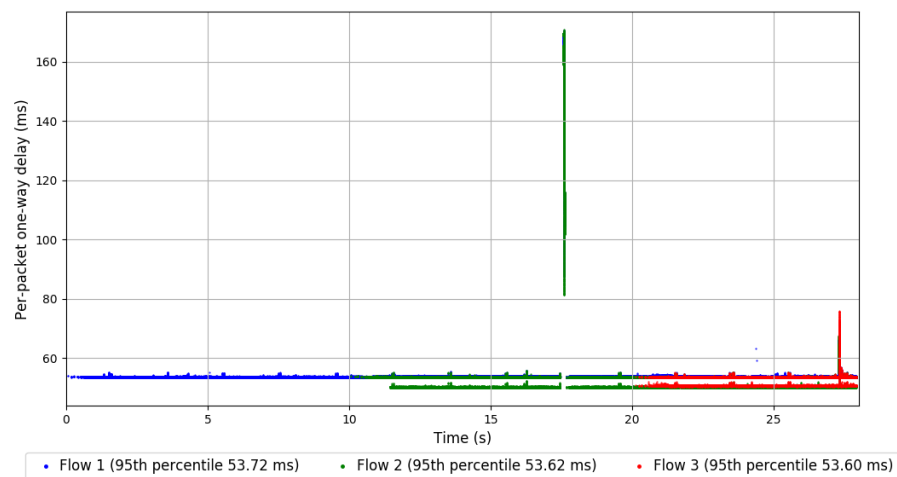
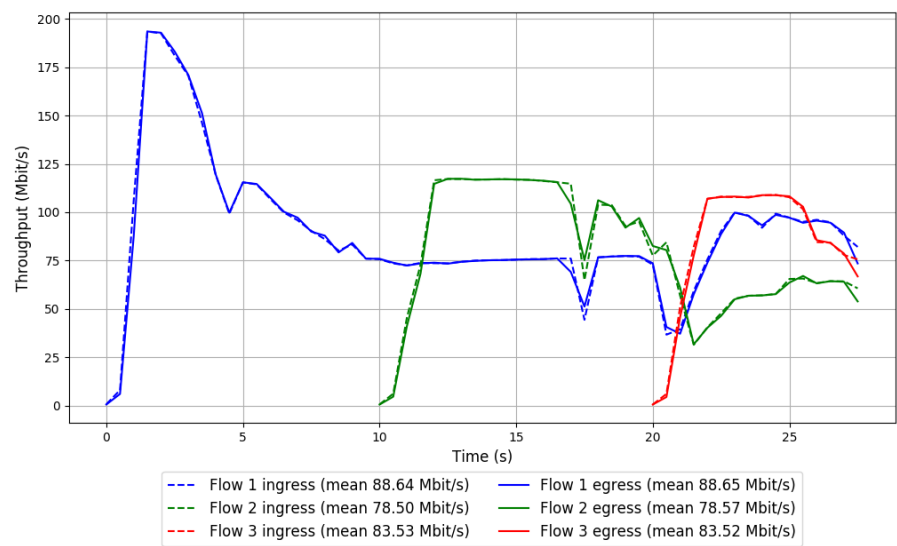
-- Flow 3:

Average throughput: 83.52 Mbit/s

95th percentile per-packet one-way delay: 53.604 ms

Loss rate: 1.30%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

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

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

Below is generated by plot.py at 2017-12-12 09:54:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 157.45 Mbit/s

95th percentile per-packet one-way delay: 53.631 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 88.56 Mbit/s

95th percentile per-packet one-way delay: 53.586 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 72.54 Mbit/s

95th percentile per-packet one-way delay: 53.708 ms

Loss rate: 0.54%

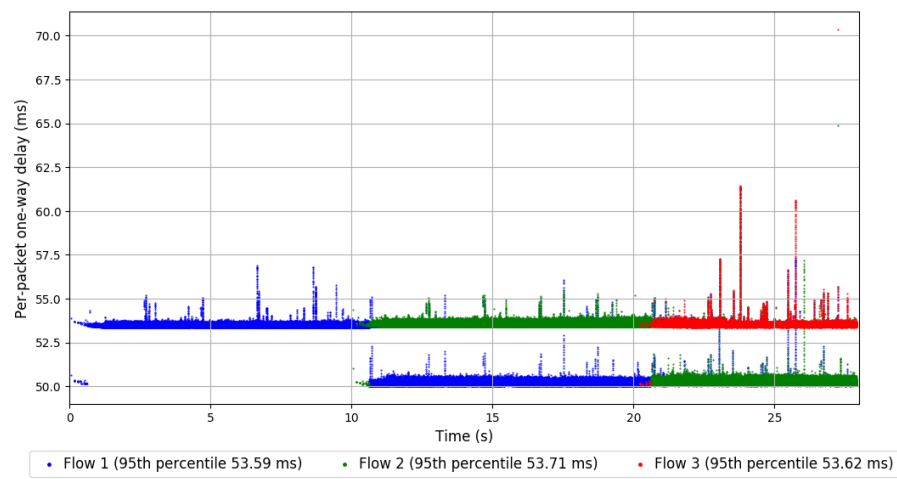
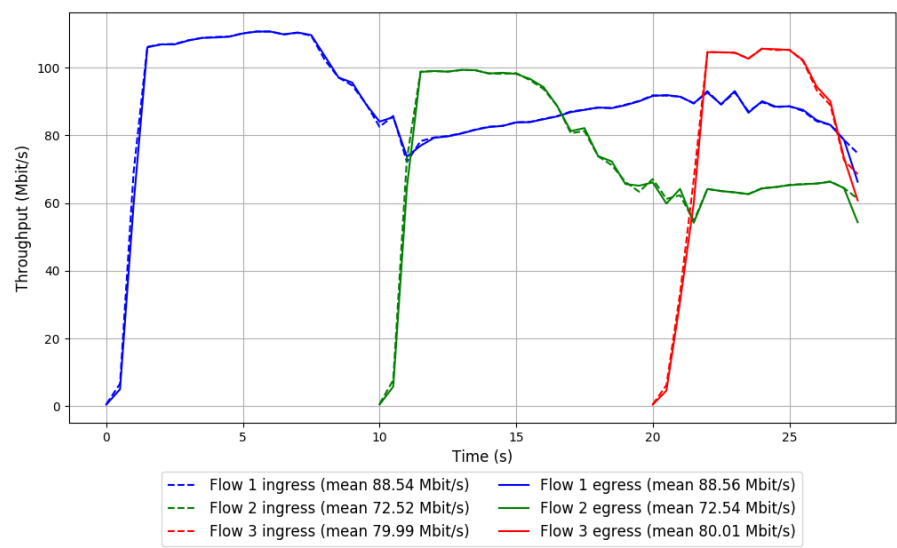
-- Flow 3:

Average throughput: 80.01 Mbit/s

95th percentile per-packet one-way delay: 53.625 ms

Loss rate: 1.25%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-12 05:17:38

End at: 2017-12-12 05:18:08

Below is generated by plot.py at 2017-12-12 09:54:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 155.97 Mbit/s

95th percentile per-packet one-way delay: 53.586 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 86.74 Mbit/s

95th percentile per-packet one-way delay: 53.560 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 83.14 Mbit/s

95th percentile per-packet one-way delay: 53.630 ms

Loss rate: 0.51%

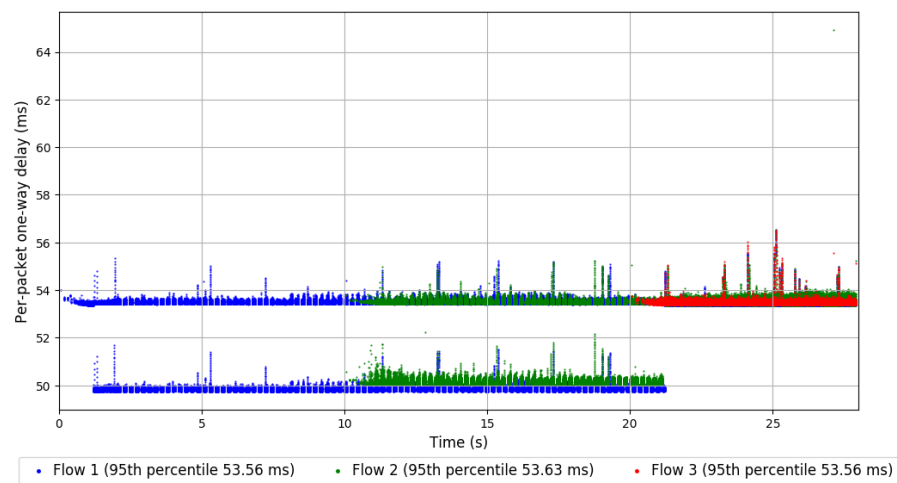
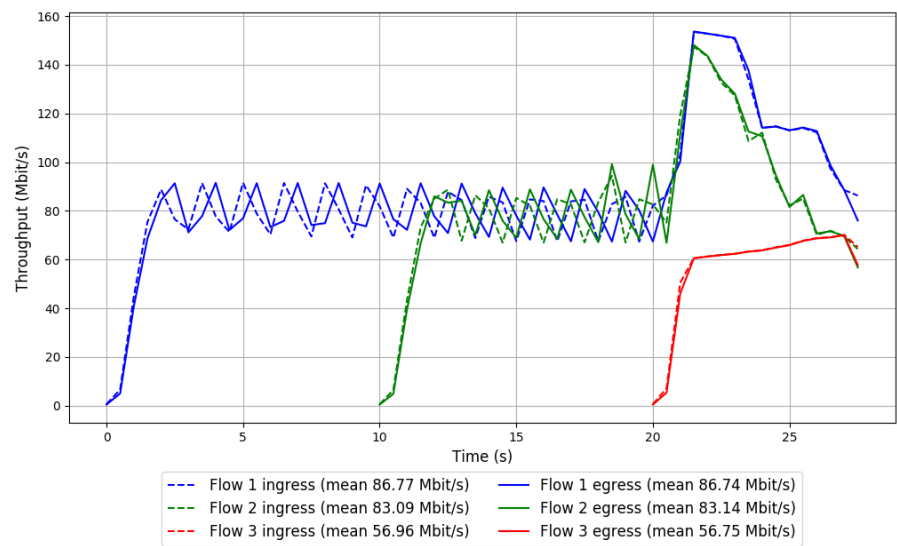
-- Flow 3:

Average throughput: 56.75 Mbit/s

95th percentile per-packet one-way delay: 53.564 ms

Loss rate: 1.67%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-12 05:29:58

End at: 2017-12-12 05:30:28

Below is generated by plot.py at 2017-12-12 09:54:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.51 Mbit/s

95th percentile per-packet one-way delay: 53.708 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 77.17 Mbit/s

95th percentile per-packet one-way delay: 53.722 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 76.85 Mbit/s

95th percentile per-packet one-way delay: 53.737 ms

Loss rate: 0.51%

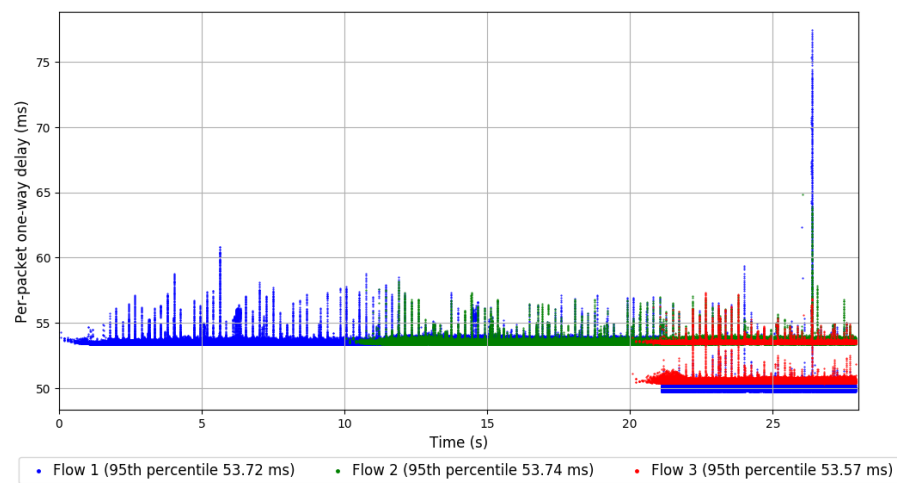
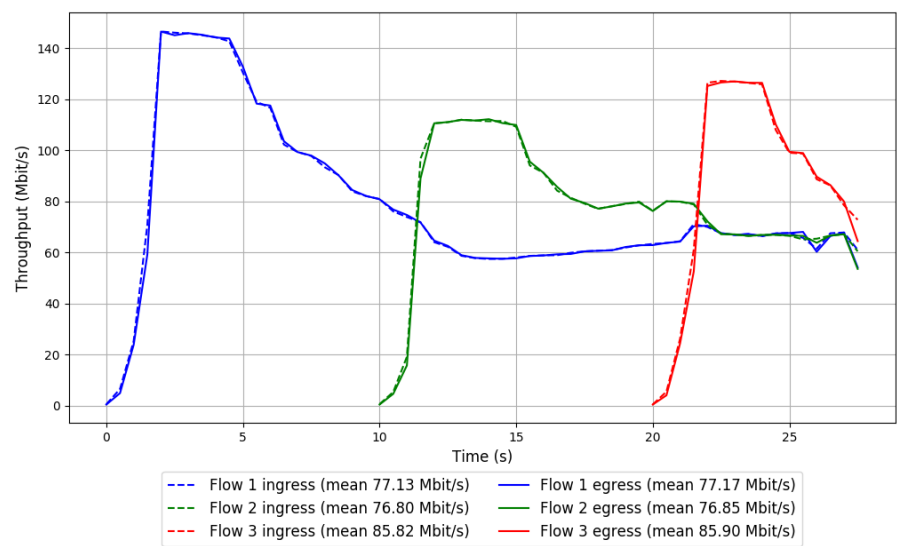
-- Flow 3:

Average throughput: 85.90 Mbit/s

95th percentile per-packet one-way delay: 53.574 ms

Loss rate: 1.17%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-12 05:41:59

End at: 2017-12-12 05:42:29

Below is generated by plot.py at 2017-12-12 09:57:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.92 Mbit/s

95th percentile per-packet one-way delay: 53.668 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 81.55 Mbit/s

95th percentile per-packet one-way delay: 53.652 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 82.04 Mbit/s

95th percentile per-packet one-way delay: 53.621 ms

Loss rate: 0.49%

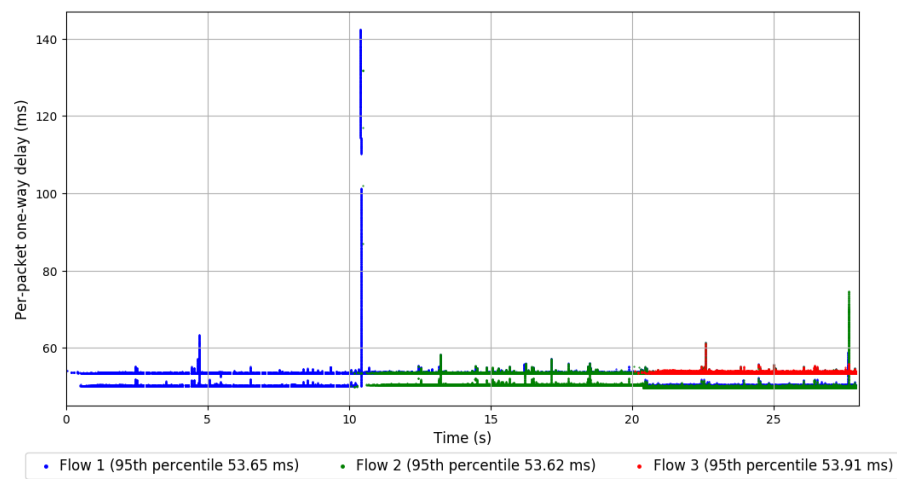
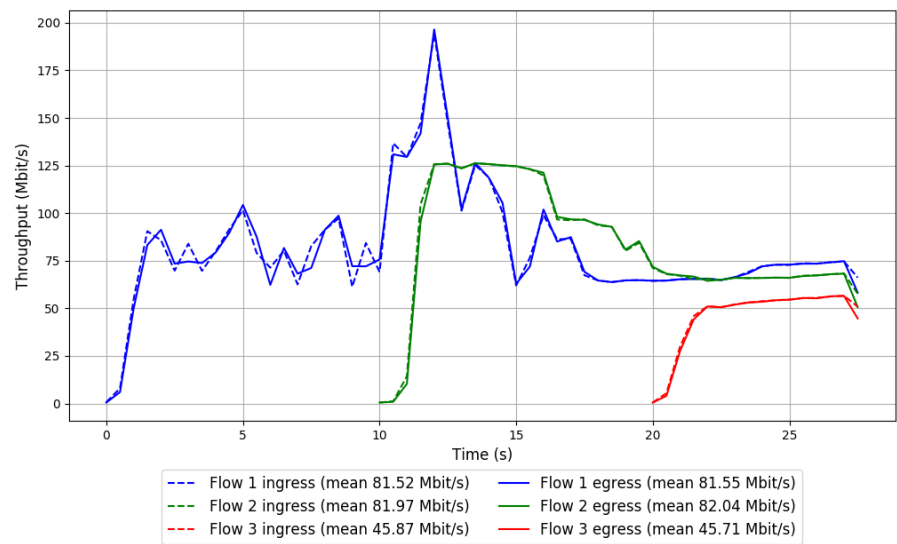
-- Flow 3:

Average throughput: 45.71 Mbit/s

95th percentile per-packet one-way delay: 53.909 ms

Loss rate: 1.70%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-12 05:53:34

End at: 2017-12-12 05:54:04

Below is generated by plot.py at 2017-12-12 09:57:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.89 Mbit/s

95th percentile per-packet one-way delay: 53.674 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 75.76 Mbit/s

95th percentile per-packet one-way delay: 53.720 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 75.59 Mbit/s

95th percentile per-packet one-way delay: 53.622 ms

Loss rate: 0.72%

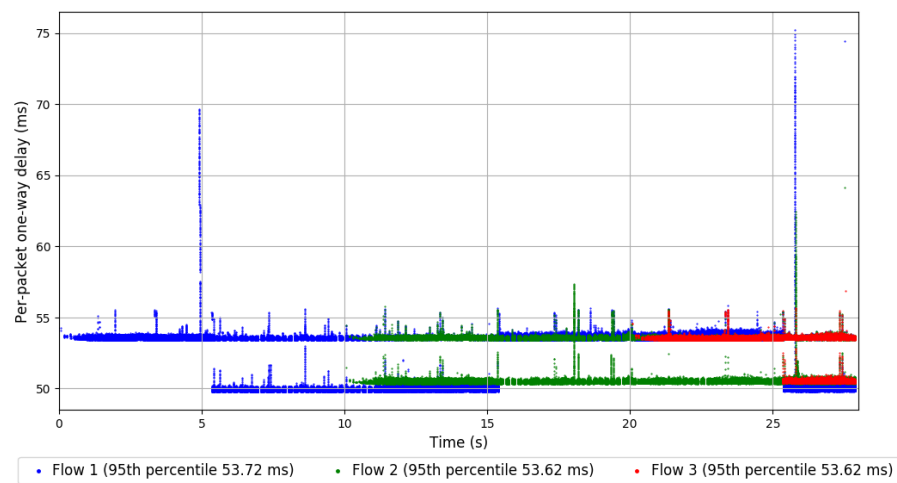
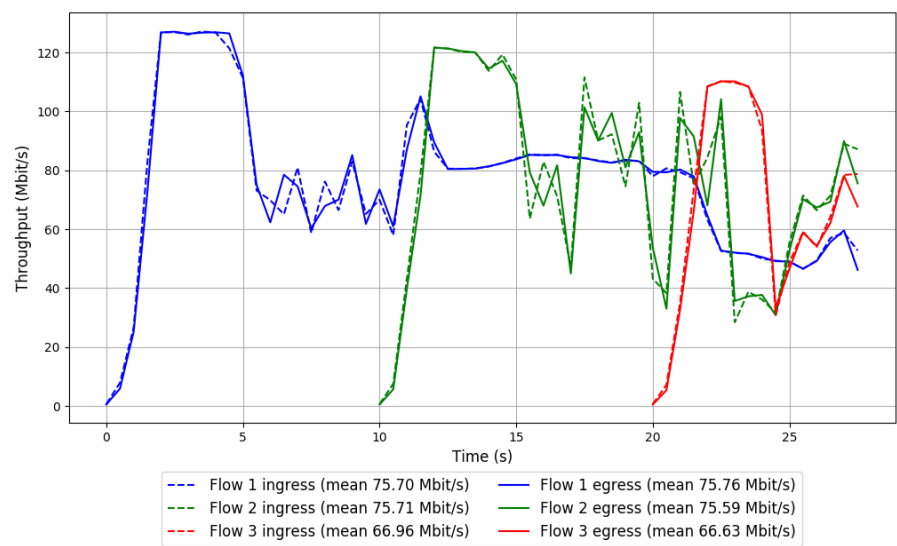
-- Flow 3:

Average throughput: 66.63 Mbit/s

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

Loss rate: 1.82%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

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

End at: 2017-12-12 06:05:59

Below is generated by plot.py at 2017-12-12 09:57:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.88 Mbit/s

95th percentile per-packet one-way delay: 53.813 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 74.08 Mbit/s

95th percentile per-packet one-way delay: 53.793 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 66.34 Mbit/s

95th percentile per-packet one-way delay: 53.809 ms

Loss rate: 0.57%

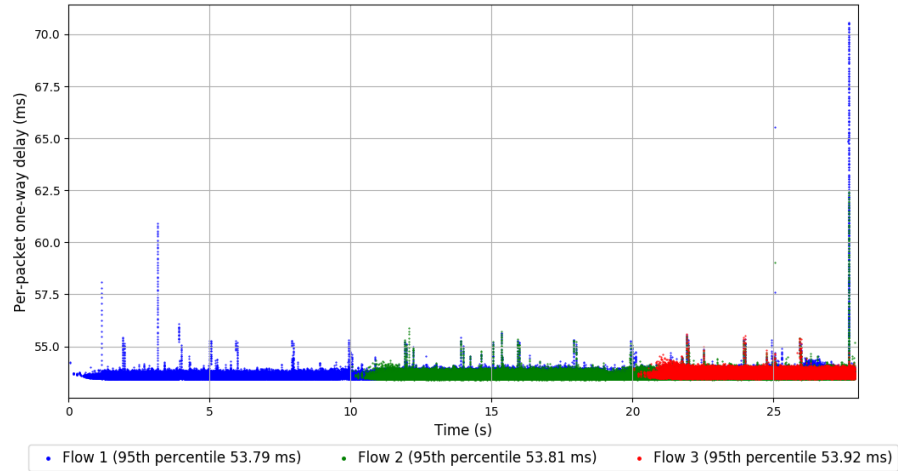
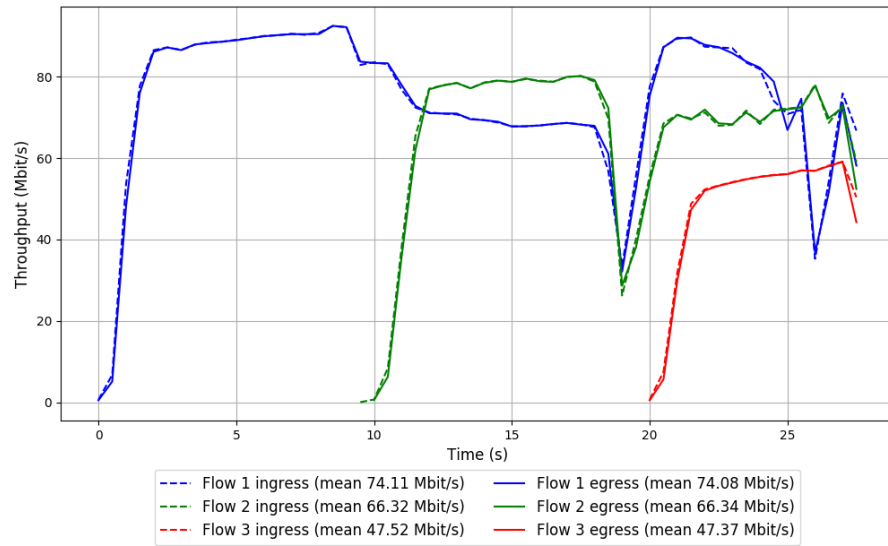
-- Flow 3:

Average throughput: 47.37 Mbit/s

95th percentile per-packet one-way delay: 53.924 ms

Loss rate: 1.66%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-12 06:17:37

End at: 2017-12-12 06:18:07

Below is generated by plot.py at 2017-12-12 09:57:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.59 Mbit/s

95th percentile per-packet one-way delay: 53.697 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 71.14 Mbit/s

95th percentile per-packet one-way delay: 53.688 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 76.51 Mbit/s

95th percentile per-packet one-way delay: 53.718 ms

Loss rate: 0.56%

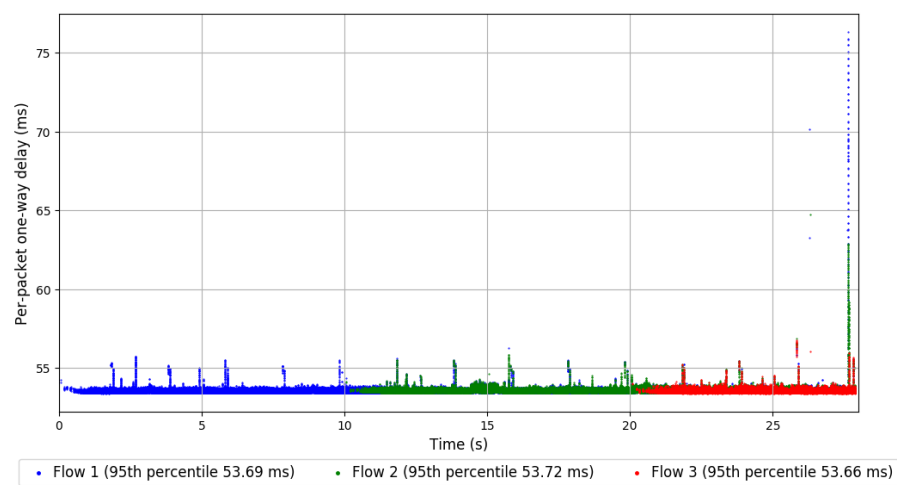
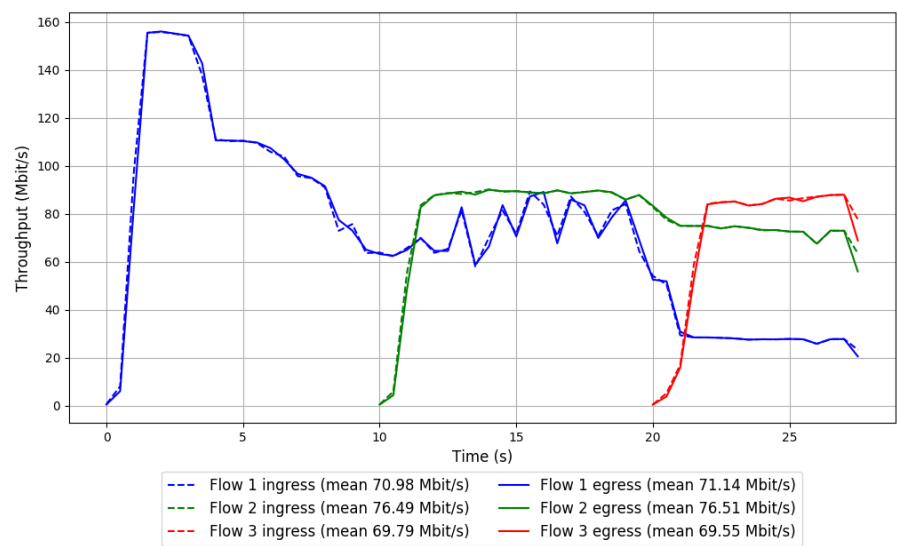
-- Flow 3:

Average throughput: 69.55 Mbit/s

95th percentile per-packet one-way delay: 53.665 ms

Loss rate: 1.65%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

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

End at: 2017-12-12 06:29:59

Below is generated by plot.py at 2017-12-12 09:57:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.54 Mbit/s

95th percentile per-packet one-way delay: 53.775 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 76.37 Mbit/s

95th percentile per-packet one-way delay: 53.788 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 72.06 Mbit/s

95th percentile per-packet one-way delay: 53.693 ms

Loss rate: 0.47%

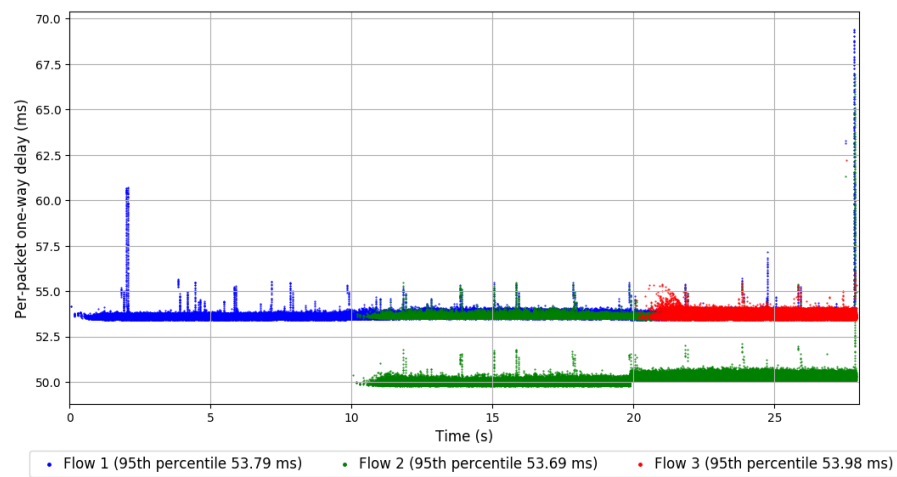
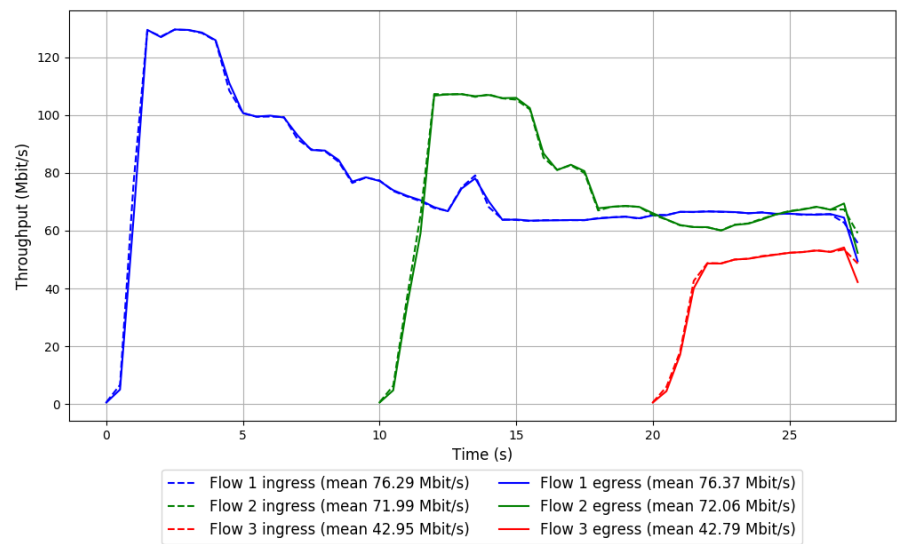
-- Flow 3:

Average throughput: 42.79 Mbit/s

95th percentile per-packet one-way delay: 53.978 ms

Loss rate: 1.69%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-12 06:42:03

End at: 2017-12-12 06:42:33

Below is generated by plot.py at 2017-12-12 09:57:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 145.82 Mbit/s

95th percentile per-packet one-way delay: 53.665 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 91.22 Mbit/s

95th percentile per-packet one-way delay: 53.642 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 71.50 Mbit/s

95th percentile per-packet one-way delay: 53.640 ms

Loss rate: 0.80%

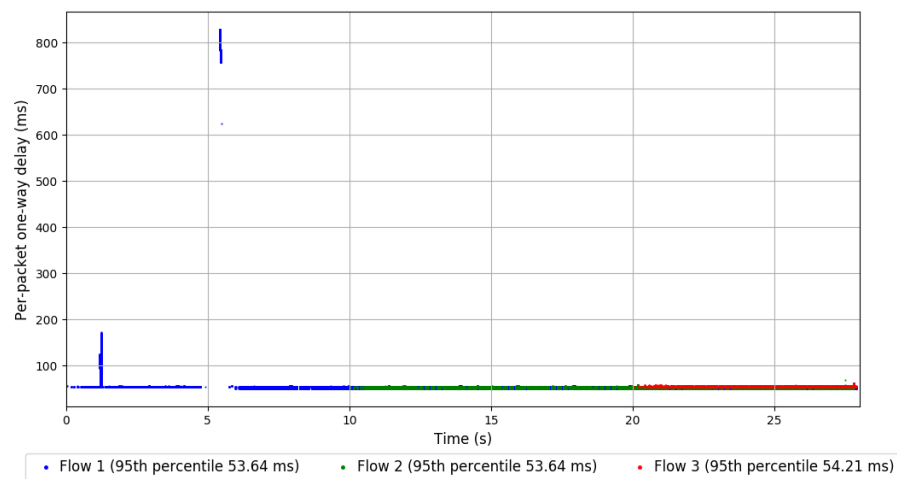
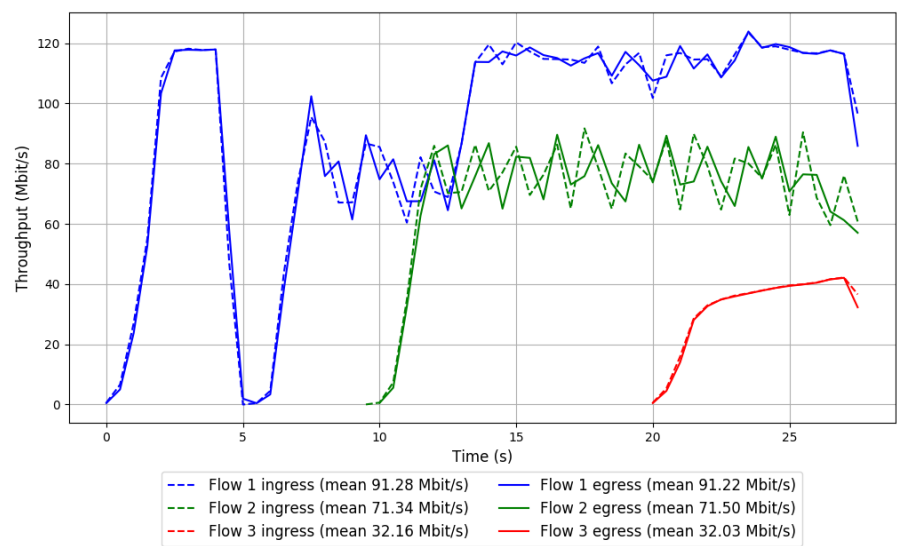
-- Flow 3:

Average throughput: 32.03 Mbit/s

95th percentile per-packet one-way delay: 54.210 ms

Loss rate: 1.75%

Run 10: Report of Copa — Data Link

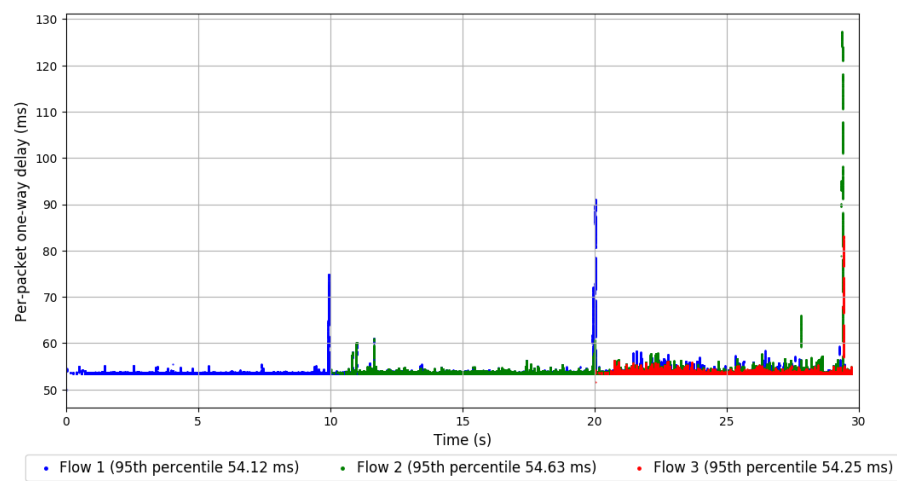
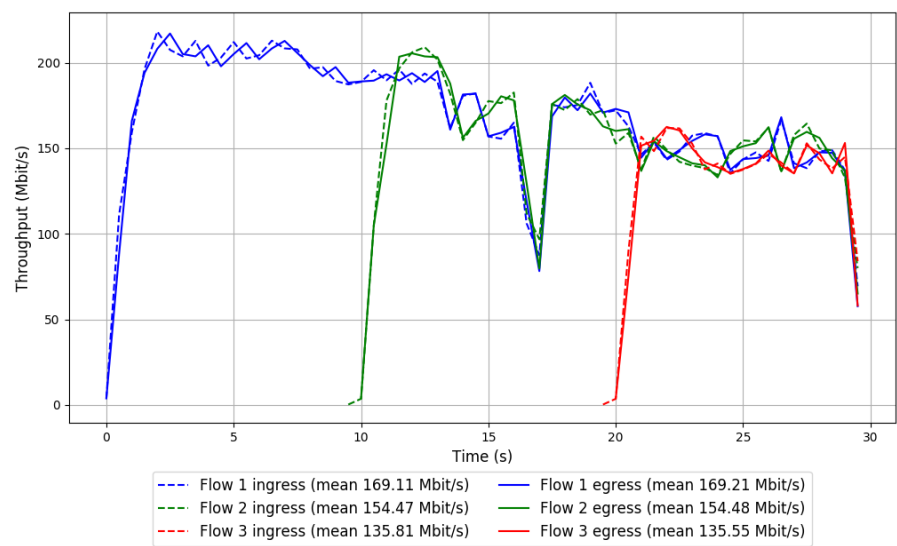


```
Run 1: Statistics of Indigo

Start at: 2017-12-12 04:55:22
End at: 2017-12-12 04:55:52

# Below is generated by plot.py at 2017-12-12 09:59:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 315.86 Mbit/s
95th percentile per-packet one-way delay: 54.311 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 169.21 Mbit/s
95th percentile per-packet one-way delay: 54.120 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 154.48 Mbit/s
95th percentile per-packet one-way delay: 54.627 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 135.55 Mbit/s
95th percentile per-packet one-way delay: 54.254 ms
Loss rate: 1.23%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

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

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

Below is generated by plot.py at 2017-12-12 10:00:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.34 Mbit/s

95th percentile per-packet one-way delay: 54.178 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 168.49 Mbit/s

95th percentile per-packet one-way delay: 53.872 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 156.27 Mbit/s

95th percentile per-packet one-way delay: 54.545 ms

Loss rate: 0.88%

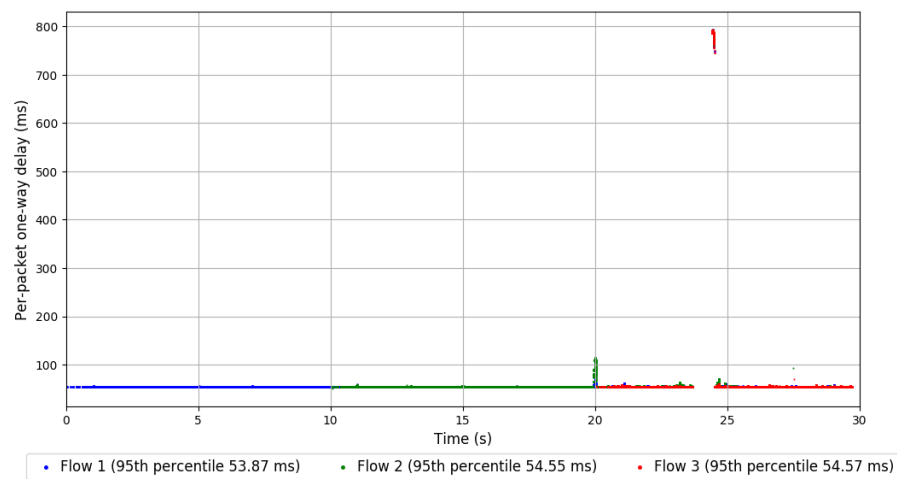
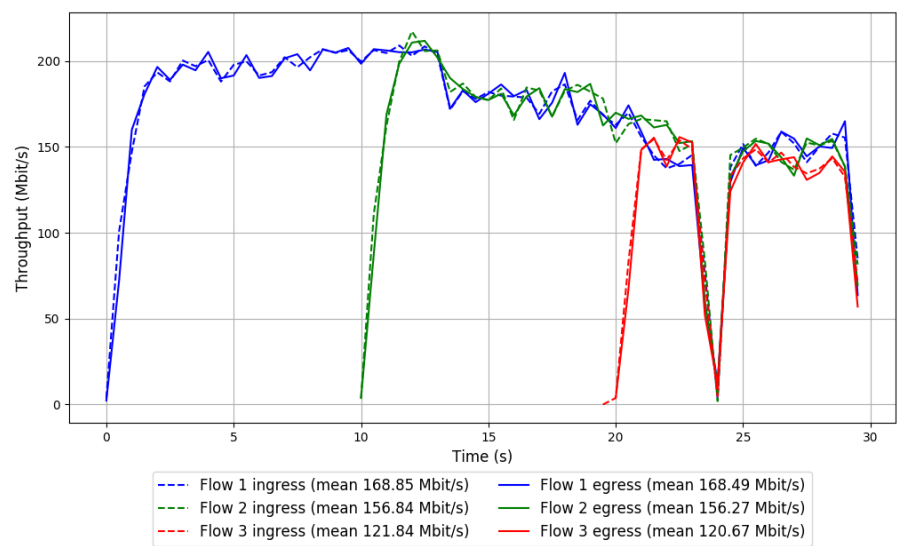
-- Flow 3:

Average throughput: 120.67 Mbit/s

95th percentile per-packet one-way delay: 54.573 ms

Loss rate: 2.02%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-12 05:20:07

End at: 2017-12-12 05:20:37

Below is generated by plot.py at 2017-12-12 10:02:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 319.60 Mbit/s

95th percentile per-packet one-way delay: 54.109 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 171.07 Mbit/s

95th percentile per-packet one-way delay: 53.883 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 160.52 Mbit/s

95th percentile per-packet one-way delay: 54.477 ms

Loss rate: 0.51%

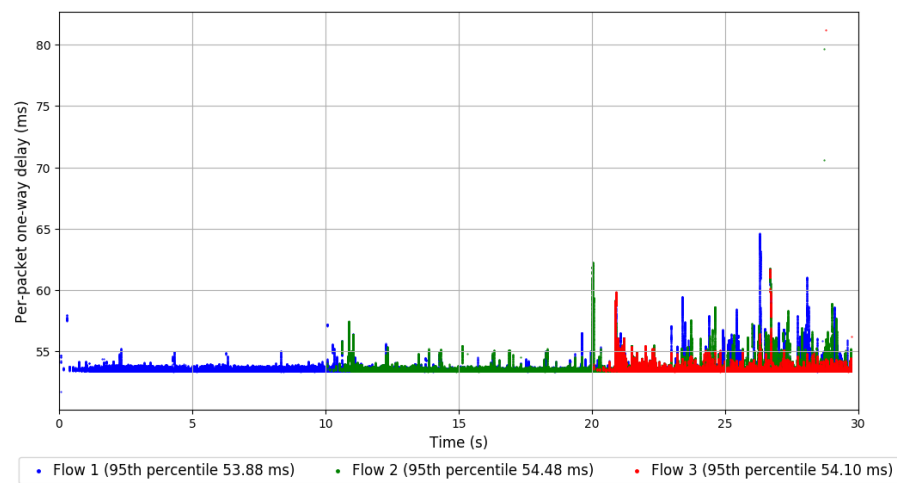
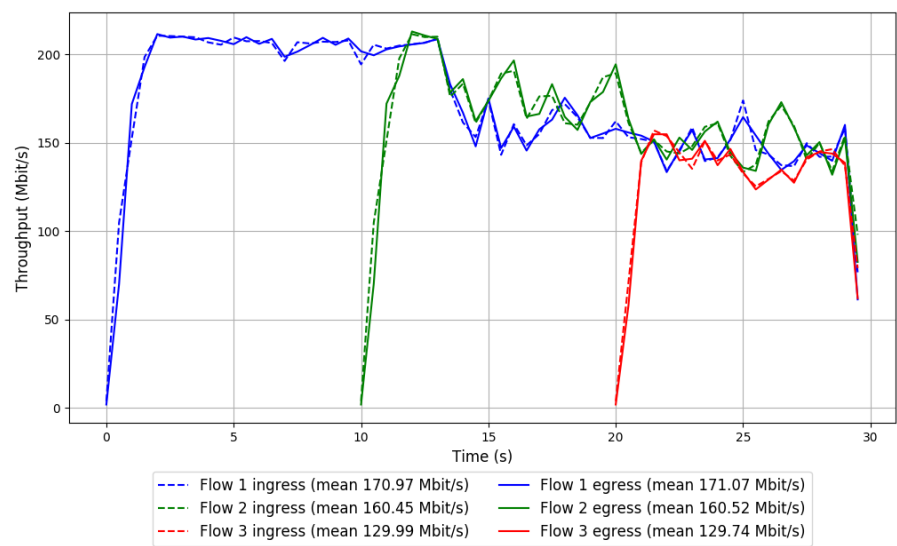
-- Flow 3:

Average throughput: 129.74 Mbit/s

95th percentile per-packet one-way delay: 54.103 ms

Loss rate: 1.26%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-12 05:32:30

End at: 2017-12-12 05:33:00

Below is generated by plot.py at 2017-12-12 10:02:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.44 Mbit/s

95th percentile per-packet one-way delay: 64.125 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 173.33 Mbit/s

95th percentile per-packet one-way delay: 61.063 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 163.10 Mbit/s

95th percentile per-packet one-way delay: 66.133 ms

Loss rate: 0.45%

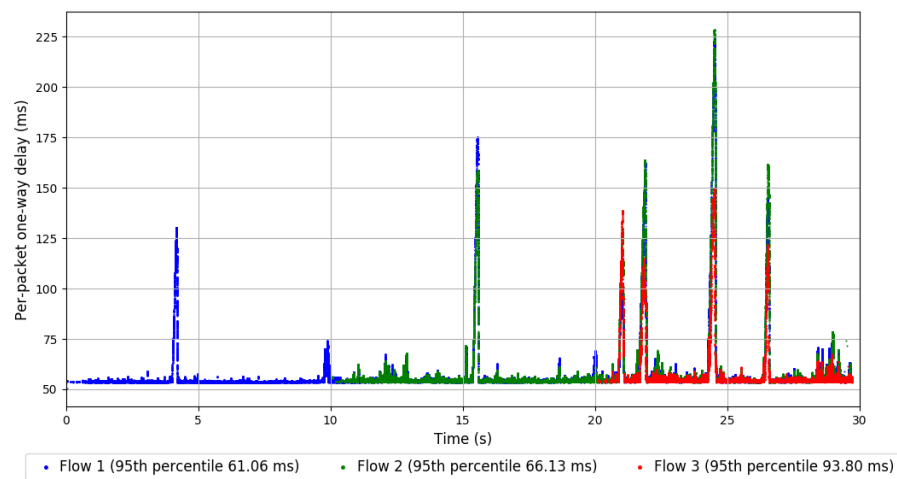
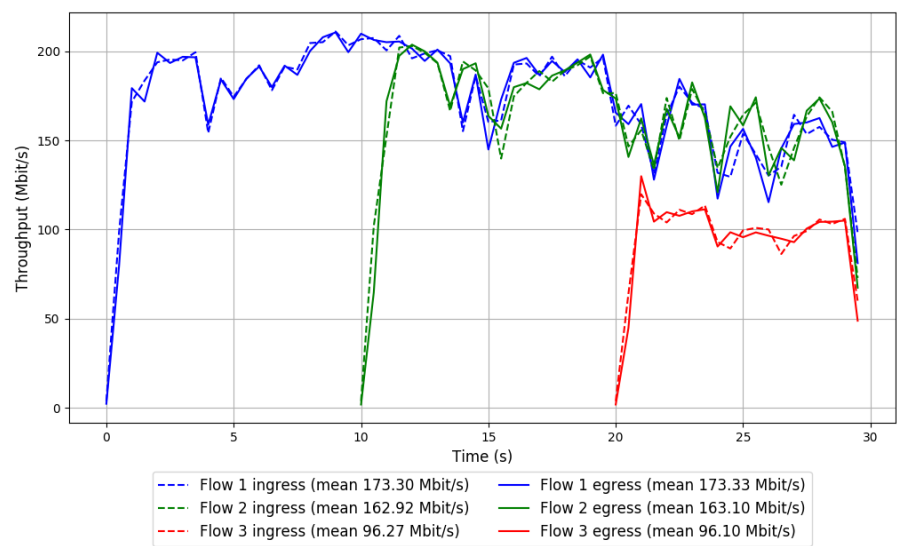
-- Flow 3:

Average throughput: 96.10 Mbit/s

95th percentile per-packet one-way delay: 93.803 ms

Loss rate: 1.21%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-12 05:44:21

End at: 2017-12-12 05:44:51

Below is generated by plot.py at 2017-12-12 10:02:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.71 Mbit/s

95th percentile per-packet one-way delay: 54.274 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 168.66 Mbit/s

95th percentile per-packet one-way delay: 54.179 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 155.92 Mbit/s

95th percentile per-packet one-way delay: 54.340 ms

Loss rate: 0.45%

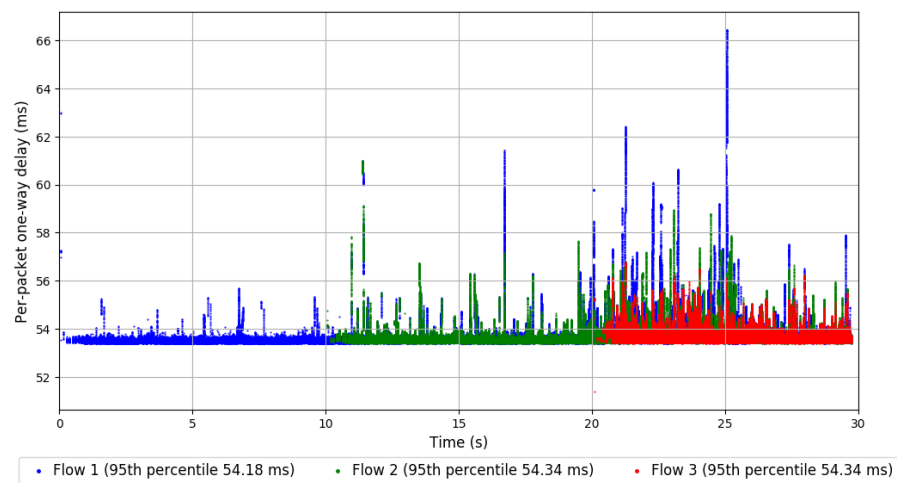
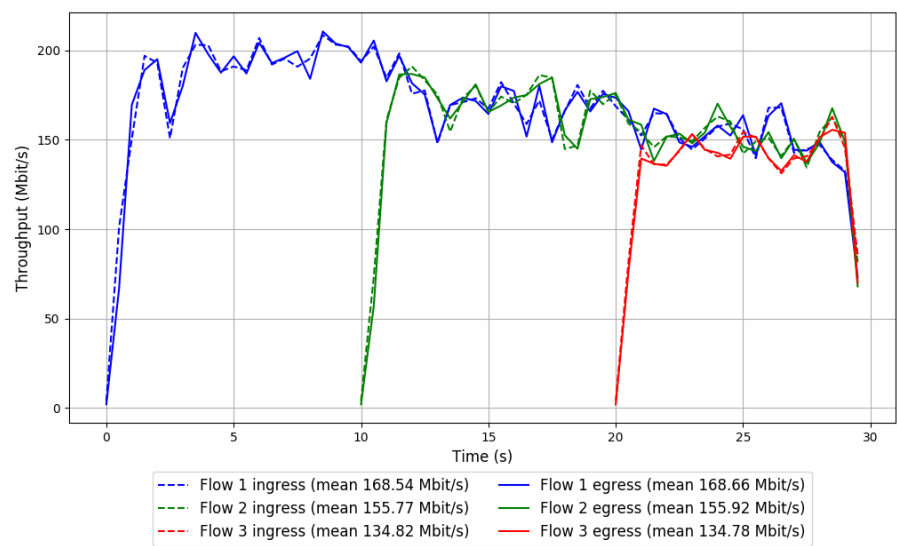
-- Flow 3:

Average throughput: 134.78 Mbit/s

95th percentile per-packet one-way delay: 54.340 ms

Loss rate: 1.12%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

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

End at: 2017-12-12 05:56:35

Below is generated by plot.py at 2017-12-12 10:02:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 299.44 Mbit/s

95th percentile per-packet one-way delay: 54.034 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 163.69 Mbit/s

95th percentile per-packet one-way delay: 53.972 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 153.90 Mbit/s

95th percentile per-packet one-way delay: 54.074 ms

Loss rate: 0.47%

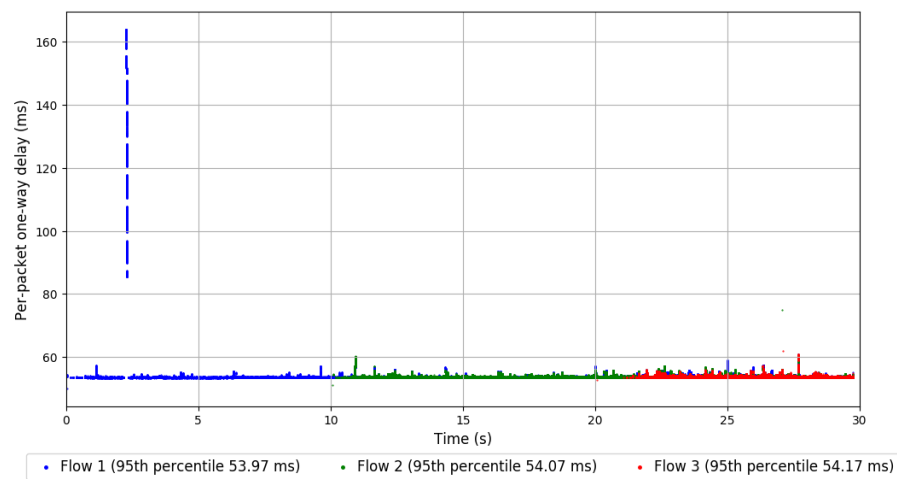
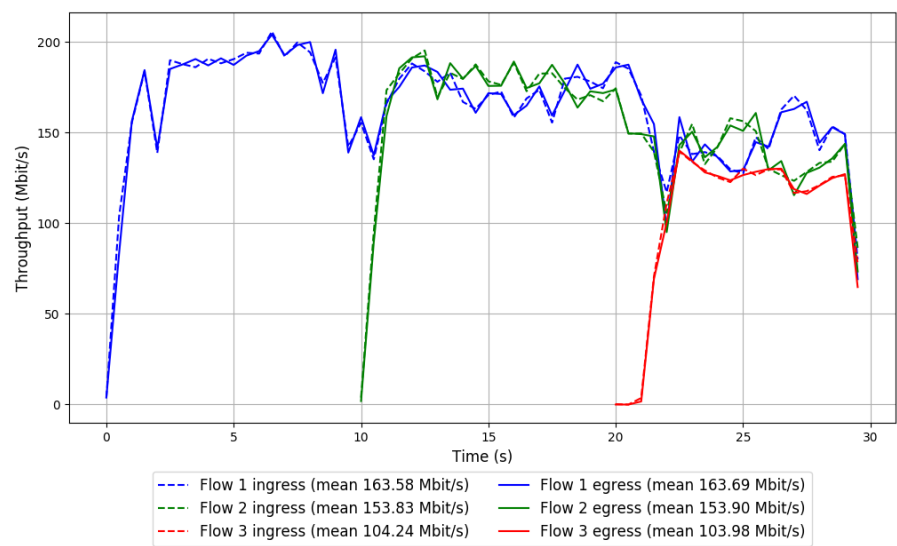
-- Flow 3:

Average throughput: 103.98 Mbit/s

95th percentile per-packet one-way delay: 54.167 ms

Loss rate: 1.30%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-12 06:07:59

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

Below is generated by plot.py at 2017-12-12 10:02:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 294.30 Mbit/s

95th percentile per-packet one-way delay: 54.003 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 159.07 Mbit/s

95th percentile per-packet one-way delay: 53.989 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 149.10 Mbit/s

95th percentile per-packet one-way delay: 54.029 ms

Loss rate: 0.54%

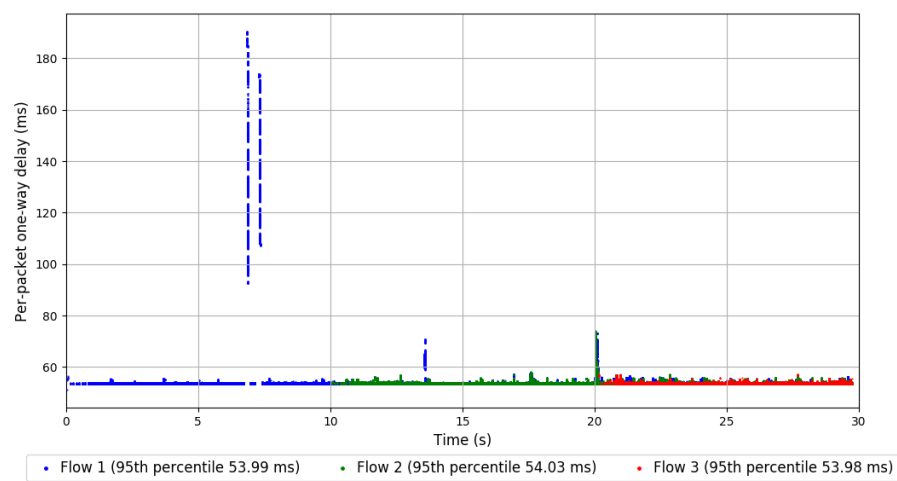
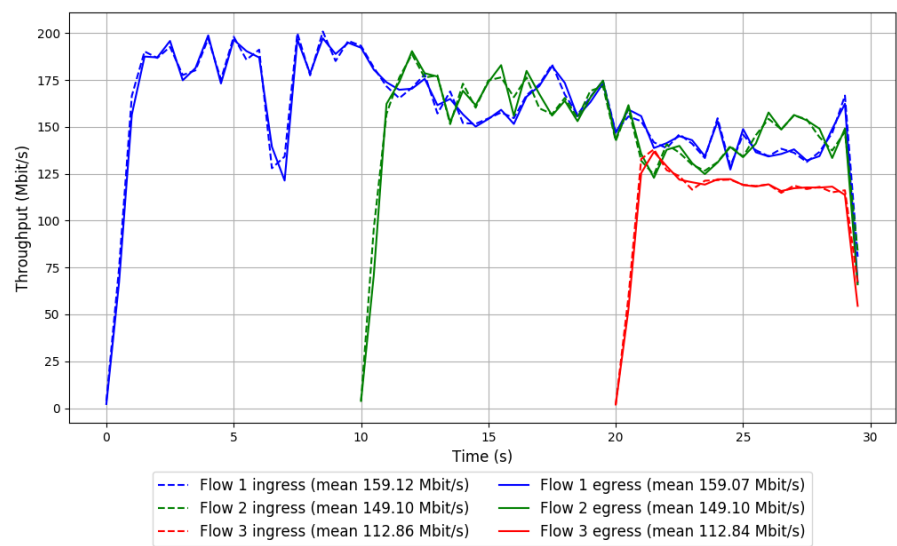
-- Flow 3:

Average throughput: 112.84 Mbit/s

95th percentile per-packet one-way delay: 53.980 ms

Loss rate: 1.14%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

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

End at: 2017-12-12 06:20:36

Below is generated by plot.py at 2017-12-12 10:03:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 304.51 Mbit/s

95th percentile per-packet one-way delay: 54.075 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 165.10 Mbit/s

95th percentile per-packet one-way delay: 54.016 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 146.16 Mbit/s

95th percentile per-packet one-way delay: 54.072 ms

Loss rate: 0.50%

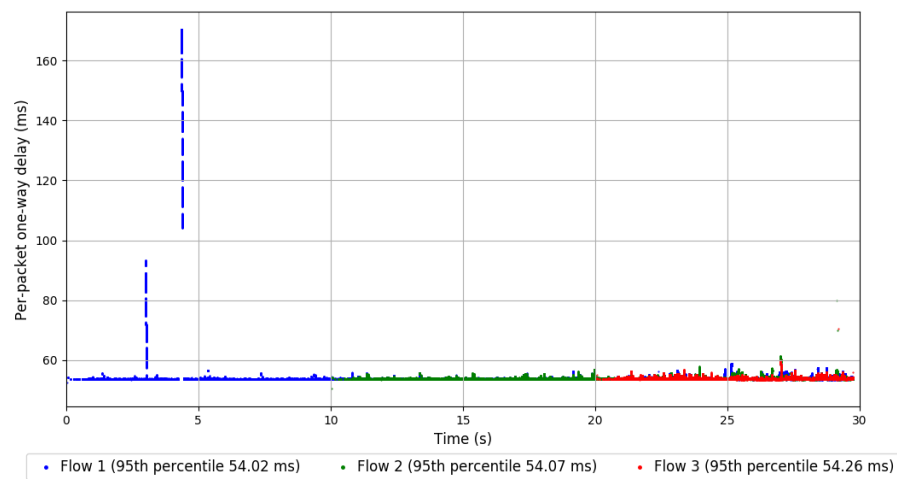
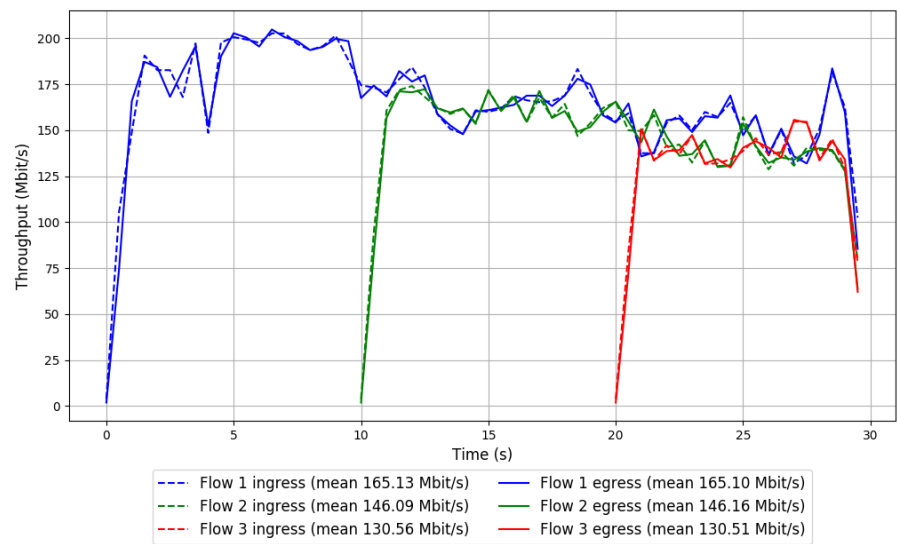
-- Flow 3:

Average throughput: 130.51 Mbit/s

95th percentile per-packet one-way delay: 54.259 ms

Loss rate: 1.09%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

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

End at: 2017-12-12 06:32:36

Below is generated by plot.py at 2017-12-12 10:05:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 299.97 Mbit/s

95th percentile per-packet one-way delay: 53.929 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 162.19 Mbit/s

95th percentile per-packet one-way delay: 53.812 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 148.16 Mbit/s

95th percentile per-packet one-way delay: 54.075 ms

Loss rate: 0.51%

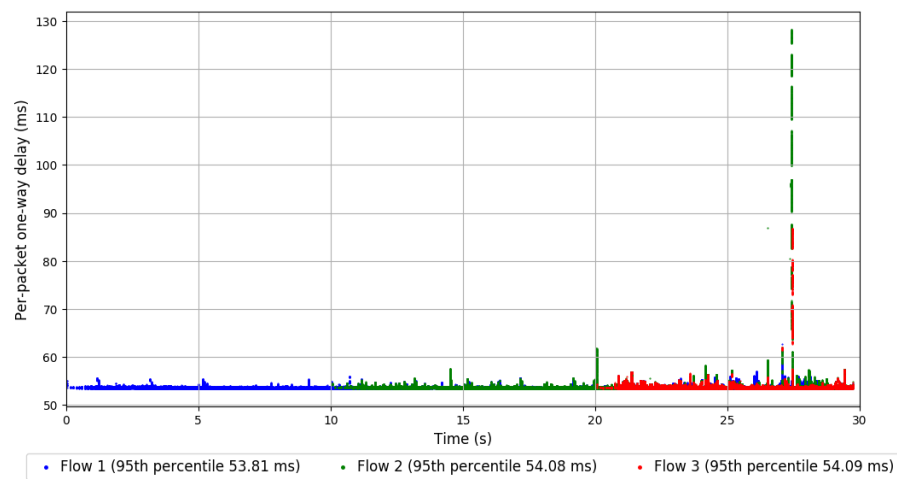
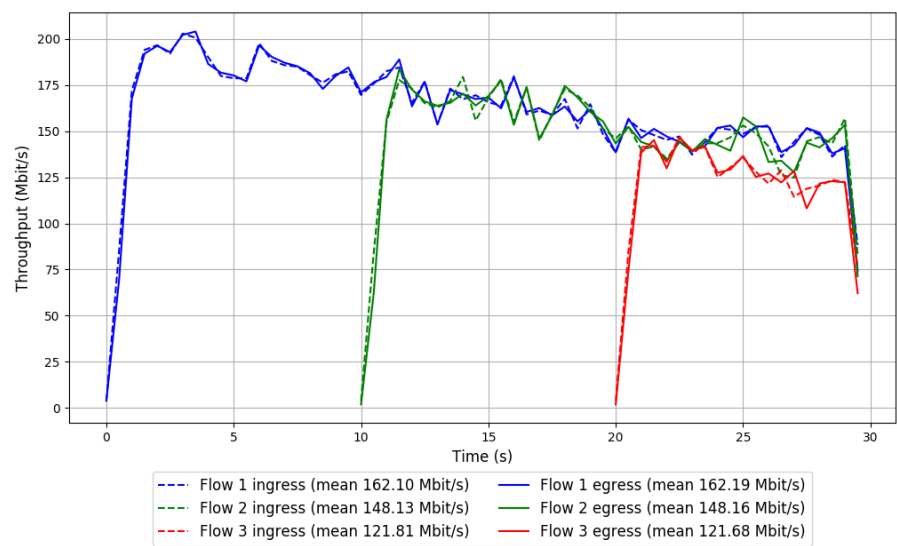
-- Flow 3:

Average throughput: 121.68 Mbit/s

95th percentile per-packet one-way delay: 54.095 ms

Loss rate: 1.16%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-12 06:44:32

End at: 2017-12-12 06:45:03

Below is generated by plot.py at 2017-12-12 10:06:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.41 Mbit/s

95th percentile per-packet one-way delay: 54.194 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 161.32 Mbit/s

95th percentile per-packet one-way delay: 54.092 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 151.71 Mbit/s

95th percentile per-packet one-way delay: 54.345 ms

Loss rate: 0.55%

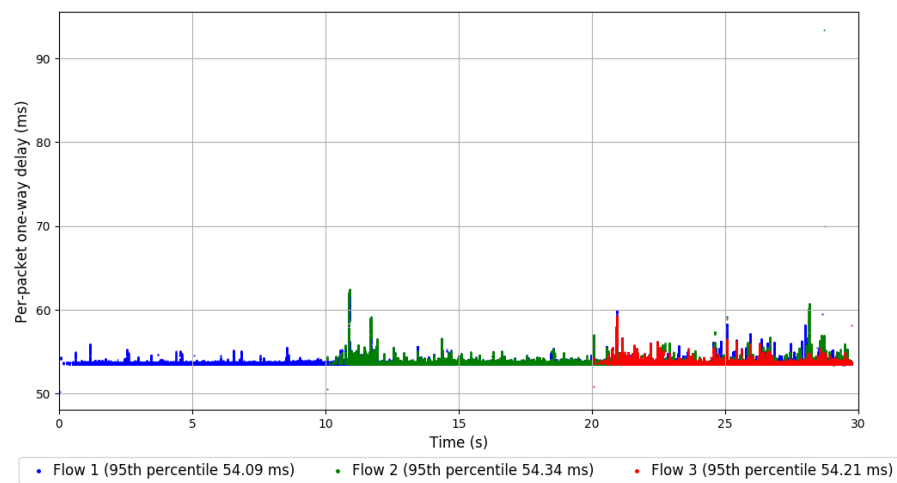
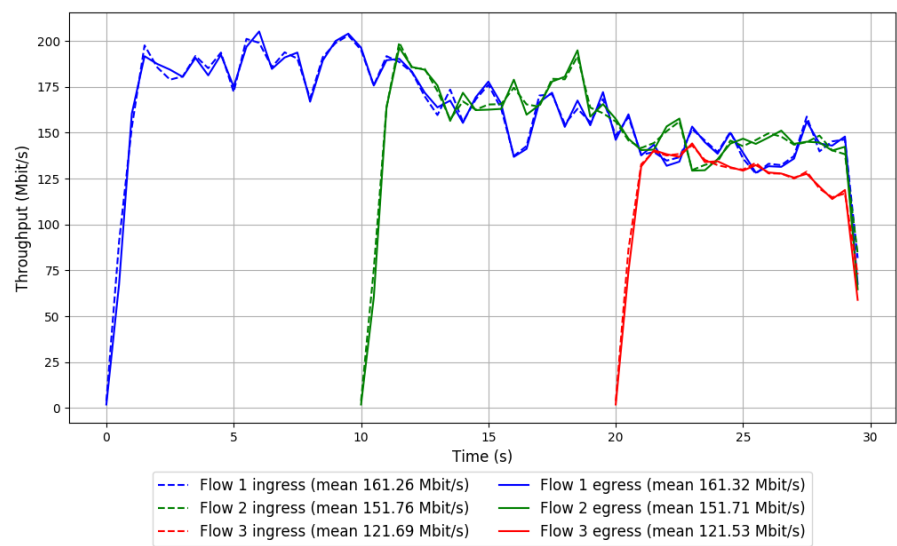
-- Flow 3:

Average throughput: 121.53 Mbit/s

95th percentile per-packet one-way delay: 54.207 ms

Loss rate: 1.12%

Run 10: Report of Indigo — Data Link

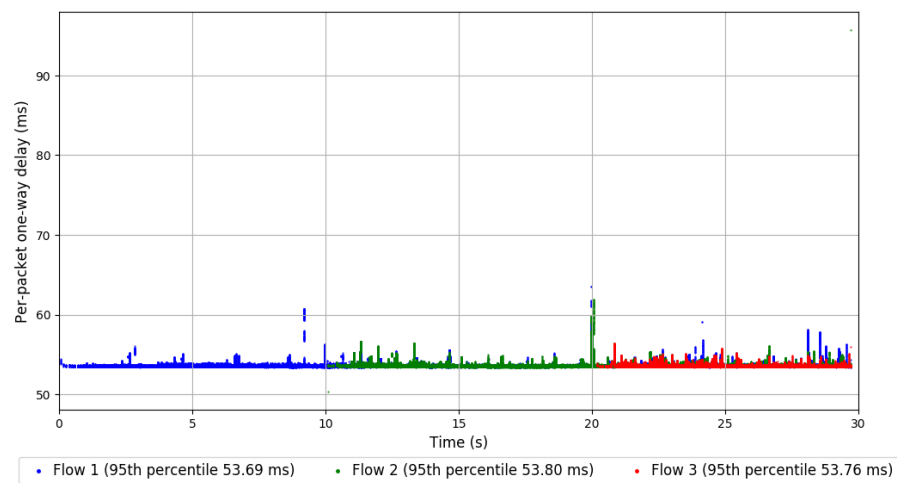
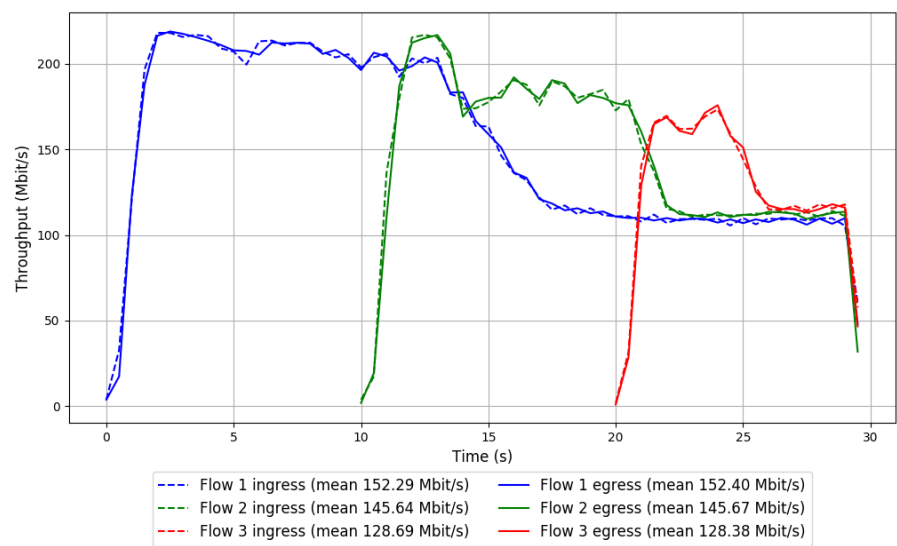


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-12 05:01:22
End at: 2017-12-12 05:01:52

# Below is generated by plot.py at 2017-12-12 10:07:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 290.08 Mbit/s
95th percentile per-packet one-way delay: 53.733 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 152.40 Mbit/s
95th percentile per-packet one-way delay: 53.694 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 145.67 Mbit/s
95th percentile per-packet one-way delay: 53.796 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 128.38 Mbit/s
95th percentile per-packet one-way delay: 53.764 ms
Loss rate: 1.12%
```

Run 1: Report of Indigo-calib — Data Link

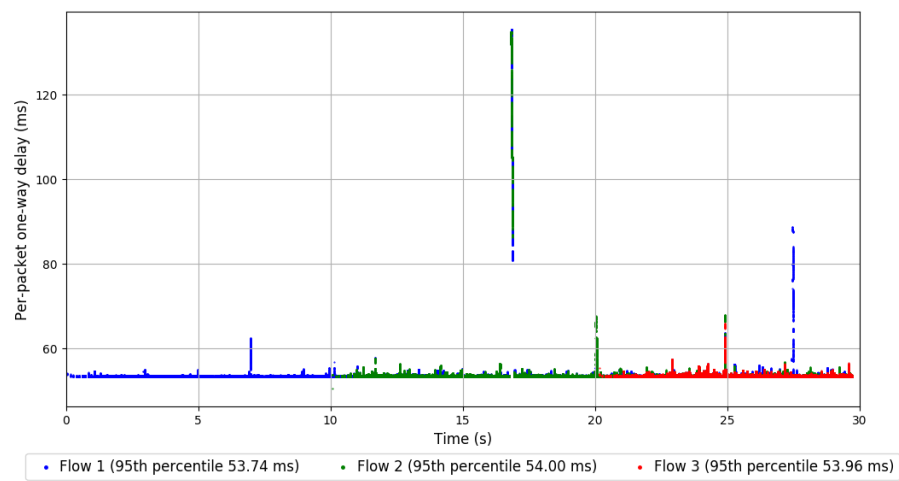
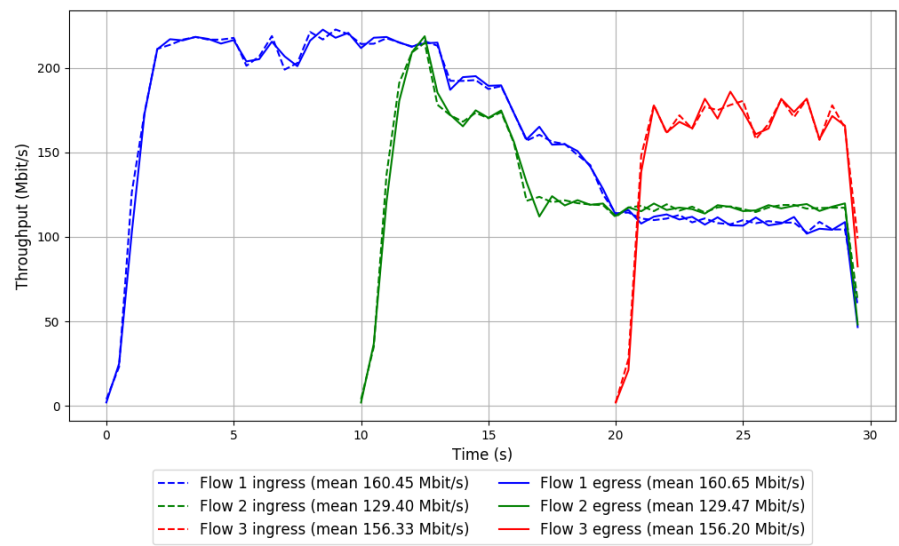


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-12 05:13:50
End at: 2017-12-12 05:14:20

# Below is generated by plot.py at 2017-12-12 10:07:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 296.60 Mbit/s
95th percentile per-packet one-way delay: 53.859 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 160.65 Mbit/s
95th percentile per-packet one-way delay: 53.742 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 129.47 Mbit/s
95th percentile per-packet one-way delay: 53.998 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 156.20 Mbit/s
95th percentile per-packet one-way delay: 53.960 ms
Loss rate: 1.18%
```

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-12-12 05:26:10

End at: 2017-12-12 05:26:40

Below is generated by plot.py at 2017-12-12 10:07:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 305.82 Mbit/s

95th percentile per-packet one-way delay: 53.986 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 153.38 Mbit/s

95th percentile per-packet one-way delay: 53.851 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 154.94 Mbit/s

95th percentile per-packet one-way delay: 54.134 ms

Loss rate: 0.39%

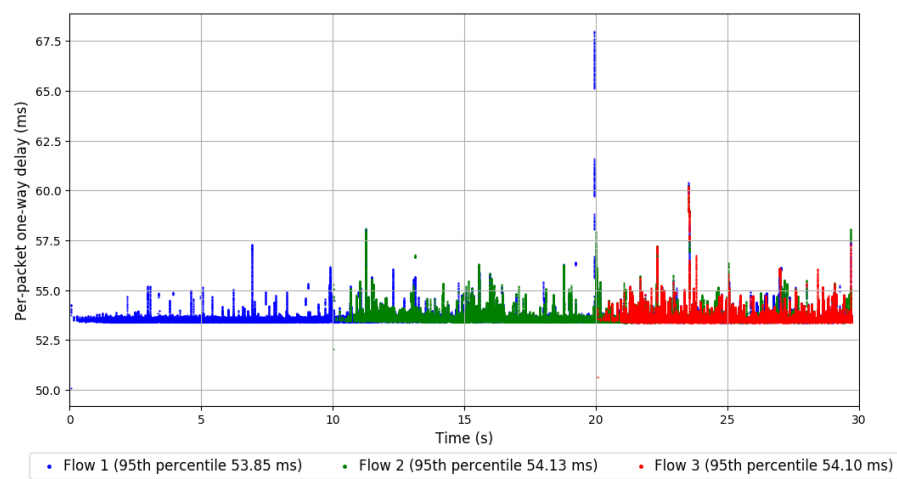
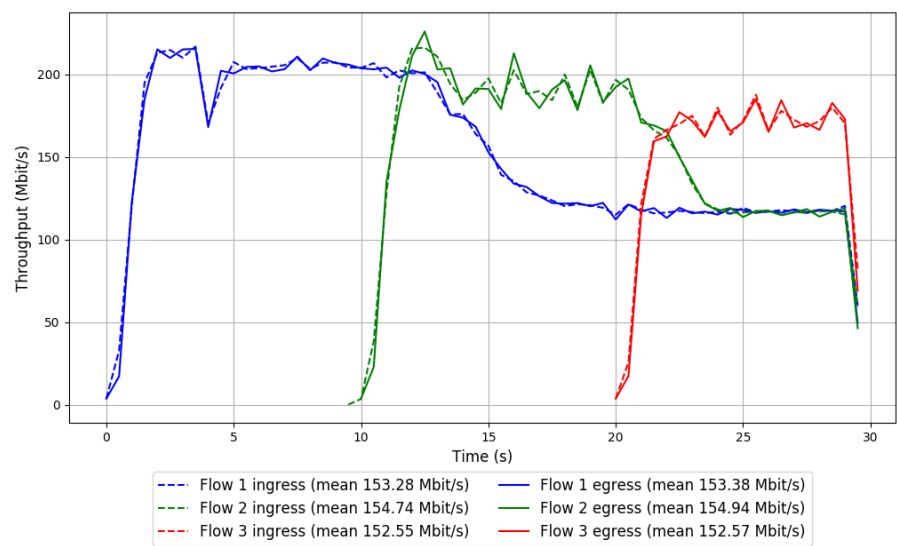
-- Flow 3:

Average throughput: 152.57 Mbit/s

95th percentile per-packet one-way delay: 54.098 ms

Loss rate: 1.02%

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-12 05:38:10

End at: 2017-12-12 05:38:40

Below is generated by plot.py at 2017-12-12 10:07:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 287.53 Mbit/s

95th percentile per-packet one-way delay: 53.955 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 157.48 Mbit/s

95th percentile per-packet one-way delay: 53.855 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 139.21 Mbit/s

95th percentile per-packet one-way delay: 54.145 ms

Loss rate: 0.46%

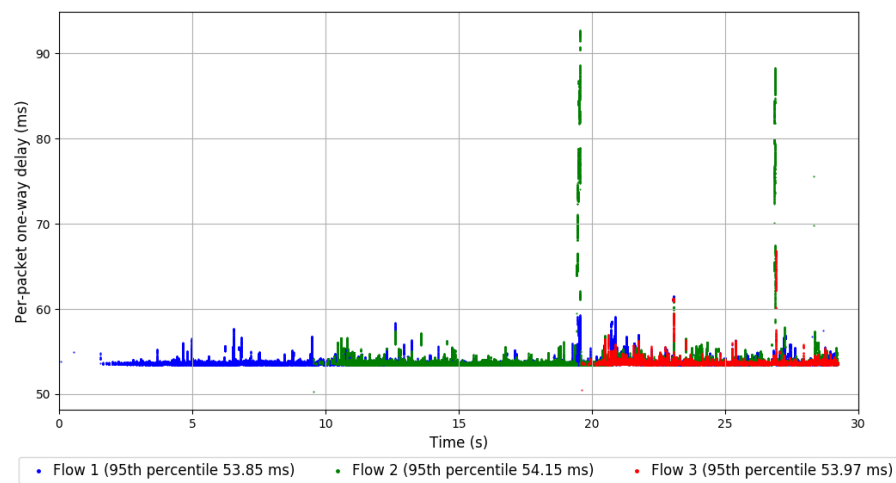
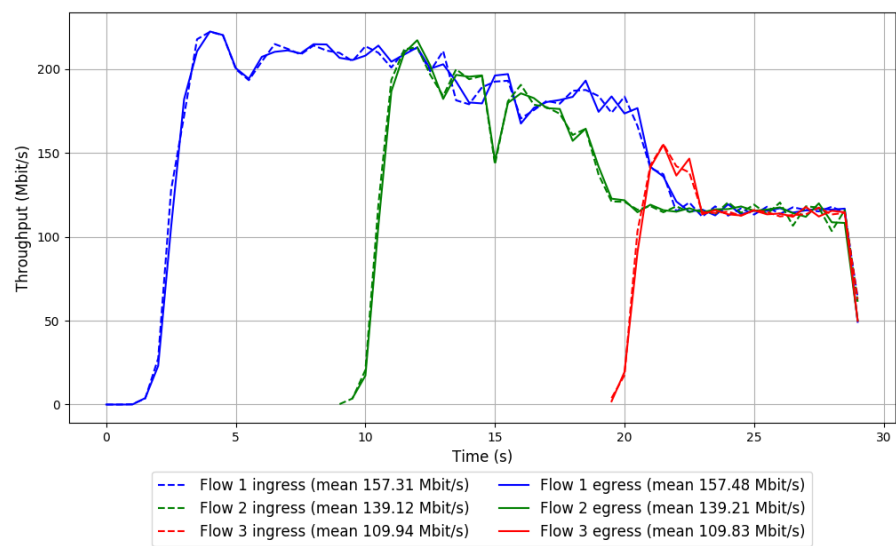
-- Flow 3:

Average throughput: 109.83 Mbit/s

95th percentile per-packet one-way delay: 53.970 ms

Loss rate: 1.15%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-12 05:49:45

End at: 2017-12-12 05:50:15

Below is generated by plot.py at 2017-12-12 10:07:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 295.03 Mbit/s

95th percentile per-packet one-way delay: 53.944 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 159.20 Mbit/s

95th percentile per-packet one-way delay: 53.812 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 147.94 Mbit/s

95th percentile per-packet one-way delay: 54.119 ms

Loss rate: 0.40%

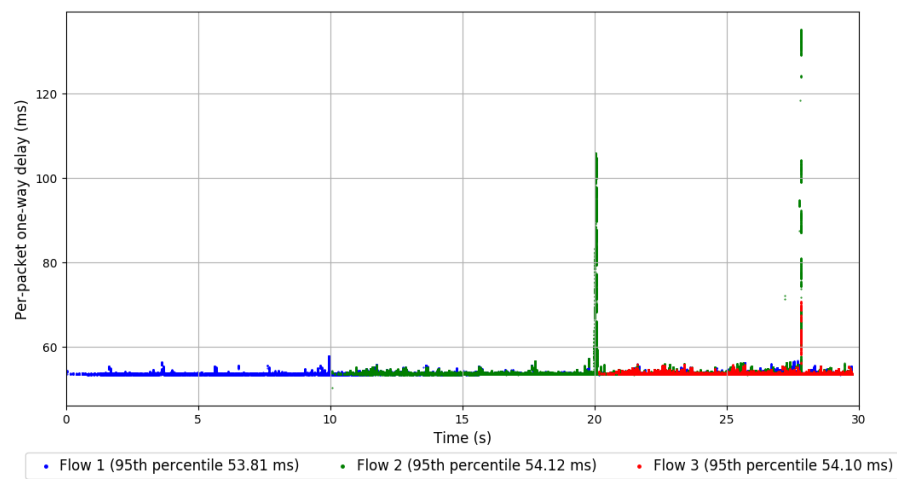
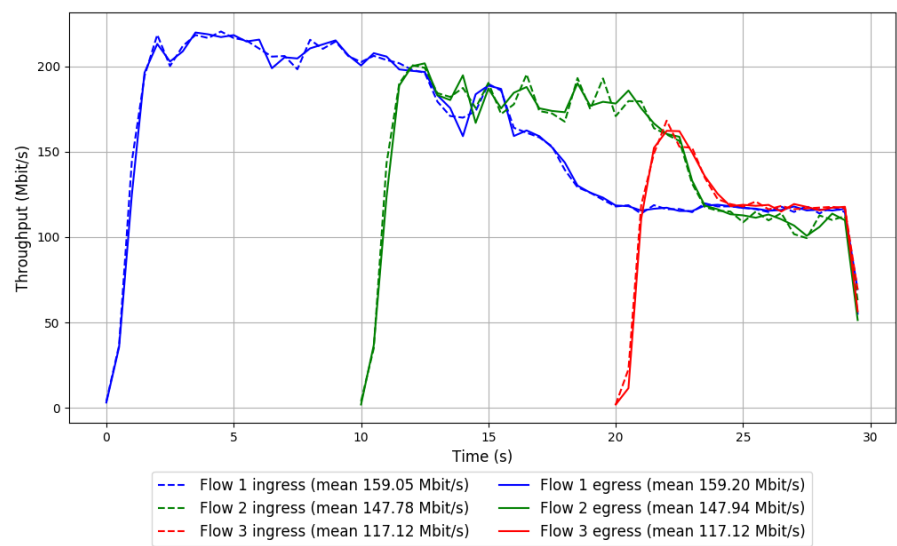
-- Flow 3:

Average throughput: 117.12 Mbit/s

95th percentile per-packet one-way delay: 54.102 ms

Loss rate: 1.09%

Run 5: Report of Indigo-calib — Data Link

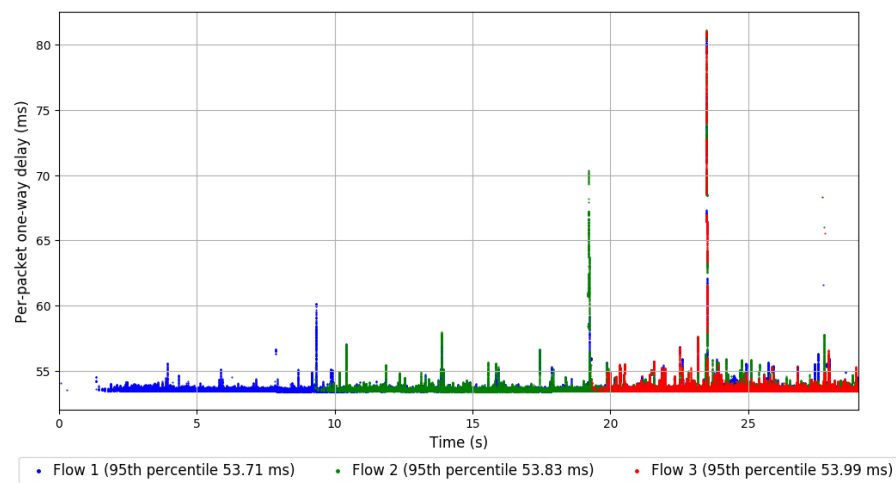
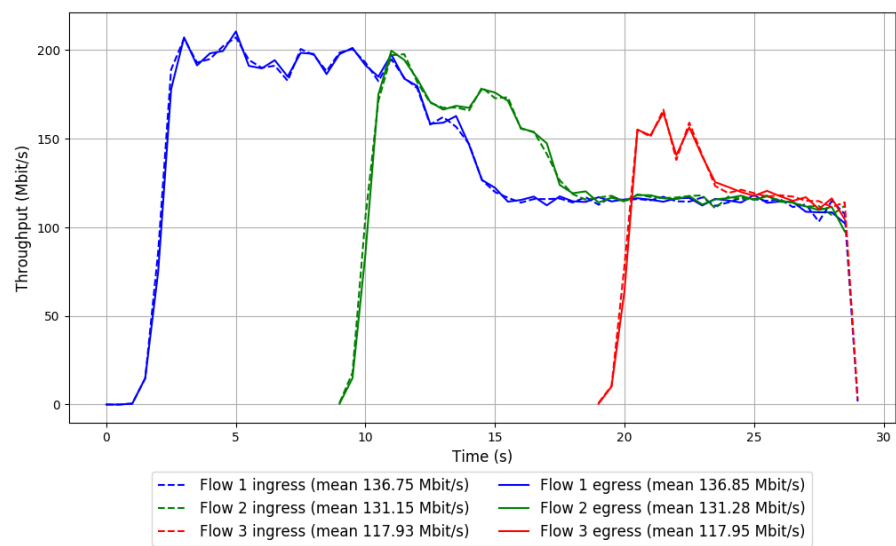


```
Run 6: Statistics of Indigo-calib

Start at: 2017-12-12 06:01:42
End at: 2017-12-12 06:02:12

# Below is generated by plot.py at 2017-12-12 10:08:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 265.42 Mbit/s
95th percentile per-packet one-way delay: 53.777 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 136.85 Mbit/s
95th percentile per-packet one-way delay: 53.713 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 131.28 Mbit/s
95th percentile per-packet one-way delay: 53.825 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 117.95 Mbit/s
95th percentile per-packet one-way delay: 53.992 ms
Loss rate: 1.05%
```

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-12 06:13:50

End at: 2017-12-12 06:14:20

Below is generated by plot.py at 2017-12-12 10:09:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 274.87 Mbit/s

95th percentile per-packet one-way delay: 53.820 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 145.43 Mbit/s

95th percentile per-packet one-way delay: 53.757 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 131.22 Mbit/s

95th percentile per-packet one-way delay: 53.883 ms

Loss rate: 0.45%

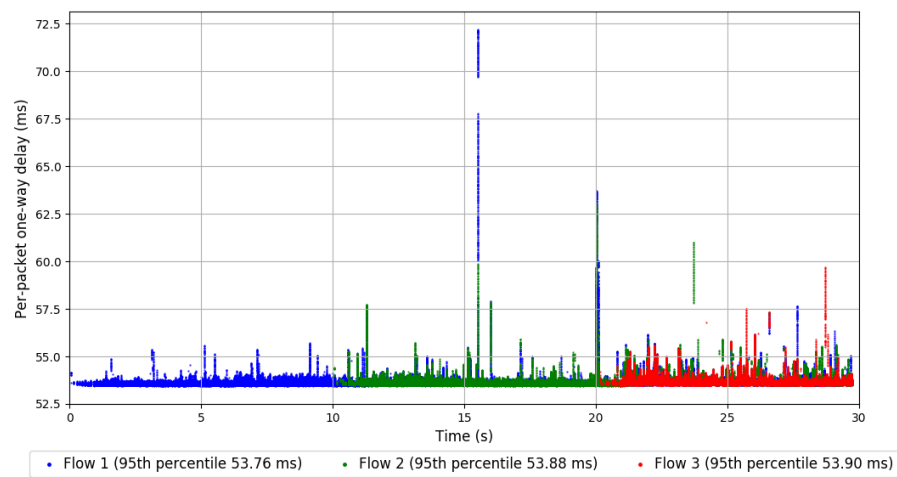
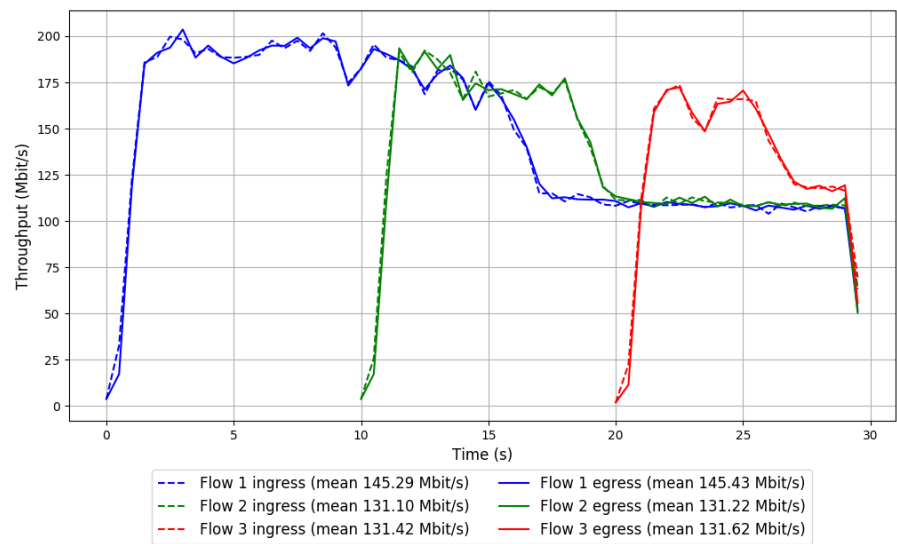
-- Flow 3:

Average throughput: 131.62 Mbit/s

95th percentile per-packet one-way delay: 53.904 ms

Loss rate: 0.98%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-12 06:25:39

End at: 2017-12-12 06:26:09

Below is generated by plot.py at 2017-12-12 10:09:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 272.59 Mbit/s

95th percentile per-packet one-way delay: 53.922 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 145.64 Mbit/s

95th percentile per-packet one-way delay: 53.829 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 136.50 Mbit/s

95th percentile per-packet one-way delay: 53.960 ms

Loss rate: 0.65%

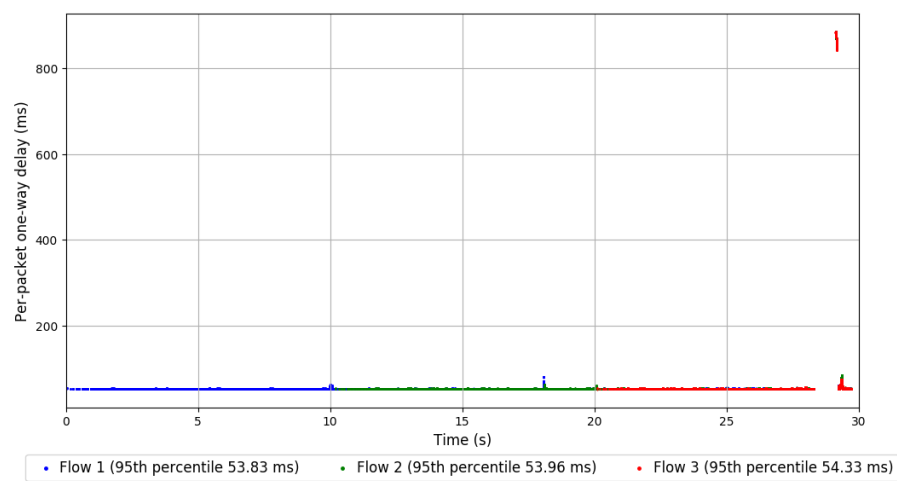
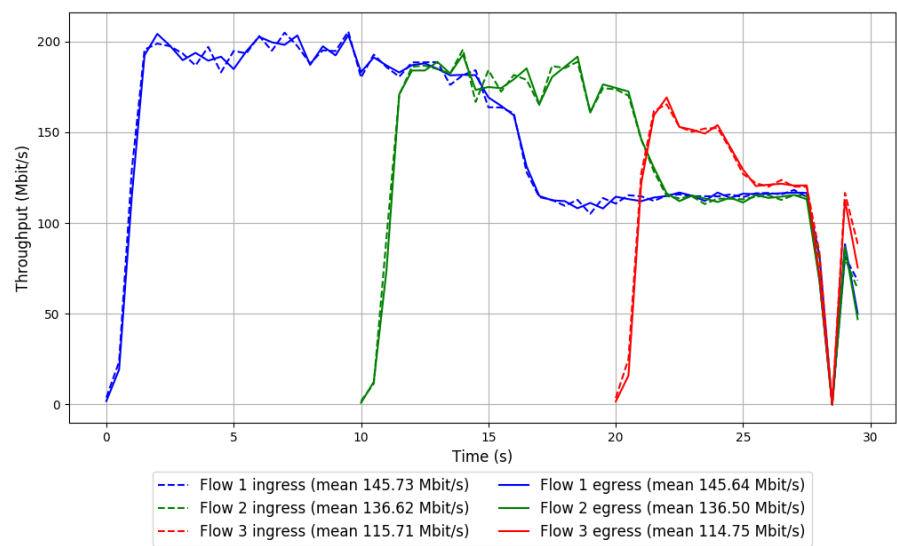
-- Flow 3:

Average throughput: 114.75 Mbit/s

95th percentile per-packet one-way delay: 54.330 ms

Loss rate: 1.91%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-12 06:38:15

End at: 2017-12-12 06:38:45

Below is generated by plot.py at 2017-12-12 10:09:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 281.98 Mbit/s

95th percentile per-packet one-way delay: 53.933 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 161.38 Mbit/s

95th percentile per-packet one-way delay: 53.886 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 124.98 Mbit/s

95th percentile per-packet one-way delay: 53.995 ms

Loss rate: 0.48%

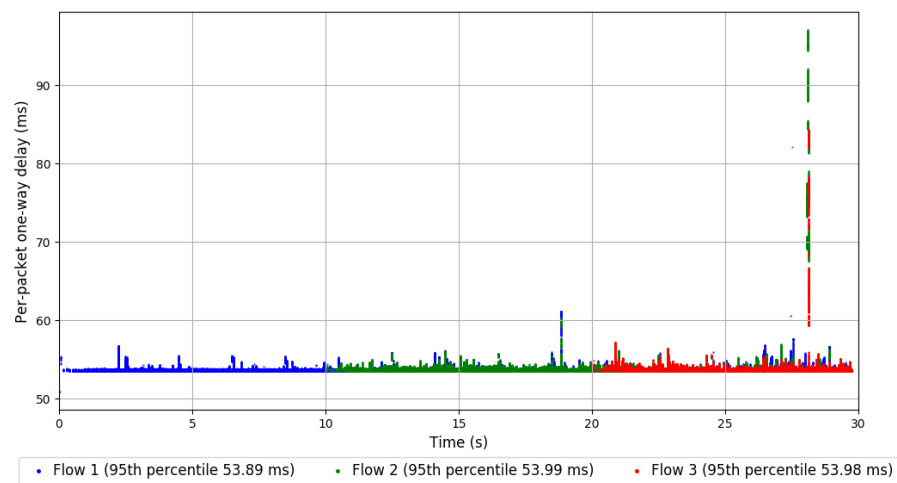
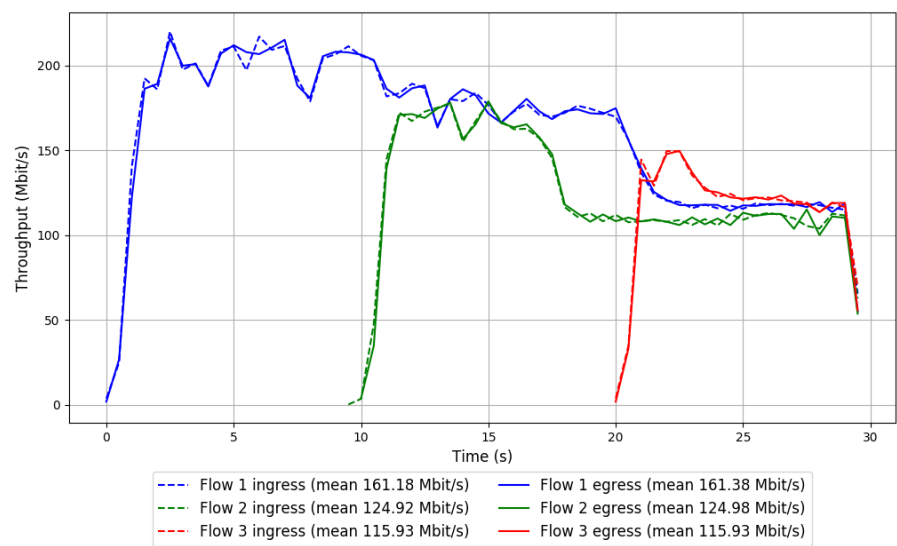
-- Flow 3:

Average throughput: 115.93 Mbit/s

95th percentile per-packet one-way delay: 53.977 ms

Loss rate: 1.11%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-12 06:50:37

End at: 2017-12-12 06:51:07

Below is generated by plot.py at 2017-12-12 10:09:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 277.70 Mbit/s

95th percentile per-packet one-way delay: 53.842 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 149.98 Mbit/s

95th percentile per-packet one-way delay: 53.755 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 134.13 Mbit/s

95th percentile per-packet one-way delay: 53.956 ms

Loss rate: 0.46%

-- Flow 3:

Average throughput: 119.87 Mbit/s

95th percentile per-packet one-way delay: 53.953 ms

Loss rate: 1.04%

Run 10: Report of Indigo-calib — Data Link

