

Pantheon Report

Generated at 2018-01-18 01:42:46 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

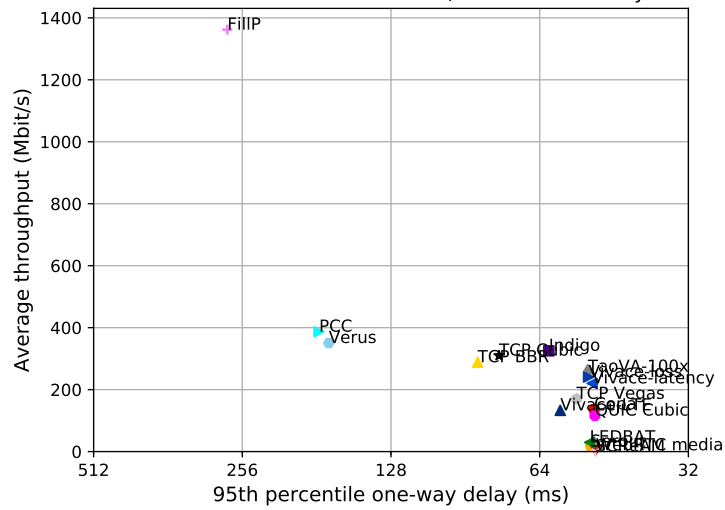
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

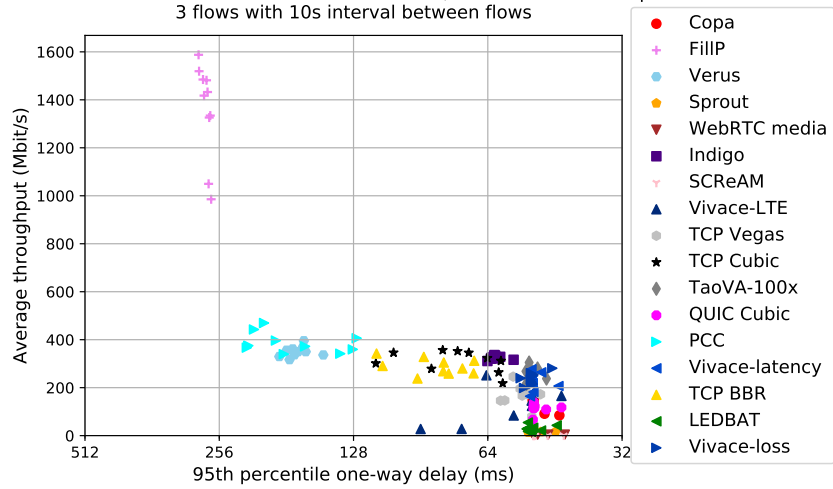
Git summary:

```
branch: master @ 54510ce29f849c716ac5c8199ca1604b6abdfbc3
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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 @ f1a14bffe749737437f61b1eaaeb30b267cde681
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/vivace @ 423cbca3e8ea1d599e7b5cf725835e8a2b6bfac6
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	138.55	132.09	187.44	79.99	83.97	91.80	0.08	0.11	0.10
TCP Cubic	10	182.19	167.28	49.21	76.42	77.35	75.58	0.07	0.12	0.10
LEDBAT	10	17.72	14.30	7.93	50.85	50.47	49.97	0.46	0.55	0.50
PCC	10	358.42	36.95	12.10	178.88	179.81	171.12	1.79	2.20	2.84
QUIC Cubic	10	62.48	58.68	45.34	49.18	49.06	49.02	0.00	0.00	0.00
SCReAM	10	0.22	0.22	0.22	49.07	48.93	49.21	0.00	0.00	0.00
WebRTC media	10	2.25	1.41	0.58	49.03	48.95	49.00	0.00	0.00	0.00
Sprout	9	7.94	7.88	7.54	50.52	50.54	50.46	0.10	0.00	0.00
TaoVA-100x	10	141.94	134.21	105.90	50.44	51.41	54.76	0.01	0.01	0.01
TCP Vegas	10	69.41	110.22	82.92	53.06	53.90	53.41	0.10	0.02	0.02
Verus	10	233.21	130.91	98.16	164.78	176.92	178.78	1.00	0.95	1.35
Copa	10	77.27	62.73	65.64	49.40	58.04	51.84	0.00	9.23	4.62
FillP	10	708.66	682.64	601.01	277.47	268.11	263.27	4.63	3.74	3.63
Indigo	10	183.23	178.13	74.04	60.11	62.01	67.45	0.02	0.03	0.04
Vivace-latency	10	129.37	99.08	75.35	49.85	50.53	54.23	0.00	0.00	0.02
Vivace-loss	10	143.46	110.85	70.45	50.77	51.95	51.47	0.00	0.00	0.01
Vivace-LTE	10	61.41	85.85	47.70	69.11	61.33	62.50	0.00	0.01	0.00

Run 1: Statistics of TCP BBR

Start at: 2018-01-17 18:27:57

End at: 2018-01-17 18:28:27

Below is generated by plot.py at 2018-01-17 23:50:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 259.71 Mbit/s

95th percentile per-packet one-way delay: 68.871 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 104.57 Mbit/s

95th percentile per-packet one-way delay: 66.536 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 139.71 Mbit/s

95th percentile per-packet one-way delay: 67.694 ms

Loss rate: 0.00%

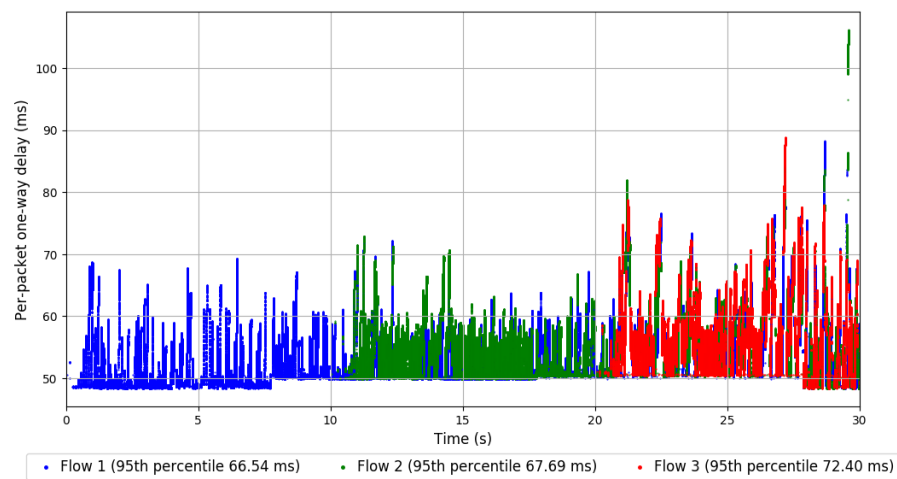
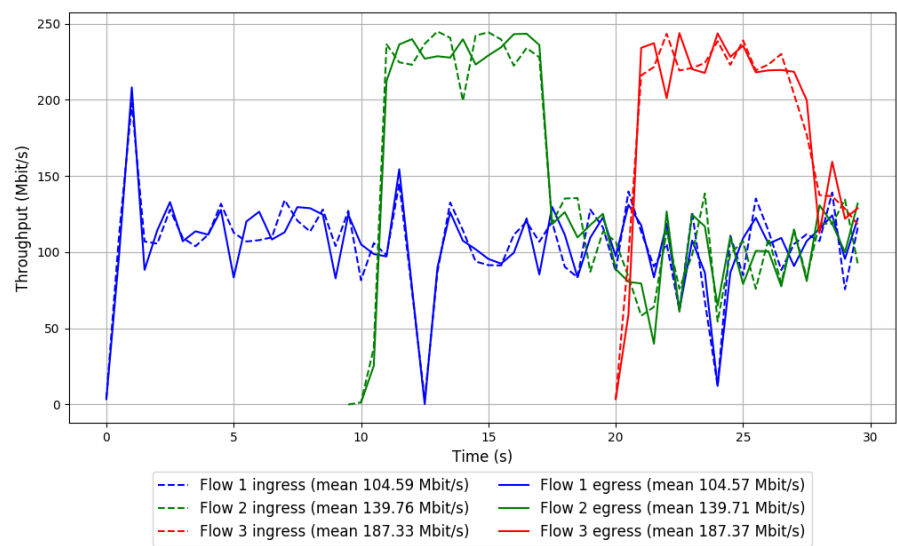
-- Flow 3:

Average throughput: 187.37 Mbit/s

95th percentile per-packet one-way delay: 72.397 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-17 18:44:55

End at: 2018-01-17 18:45:25

Below is generated by plot.py at 2018-01-17 23:51:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 268.53 Mbit/s

95th percentile per-packet one-way delay: 80.537 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 136.34 Mbit/s

95th percentile per-packet one-way delay: 77.388 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 101.48 Mbit/s

95th percentile per-packet one-way delay: 78.139 ms

Loss rate: 0.00%

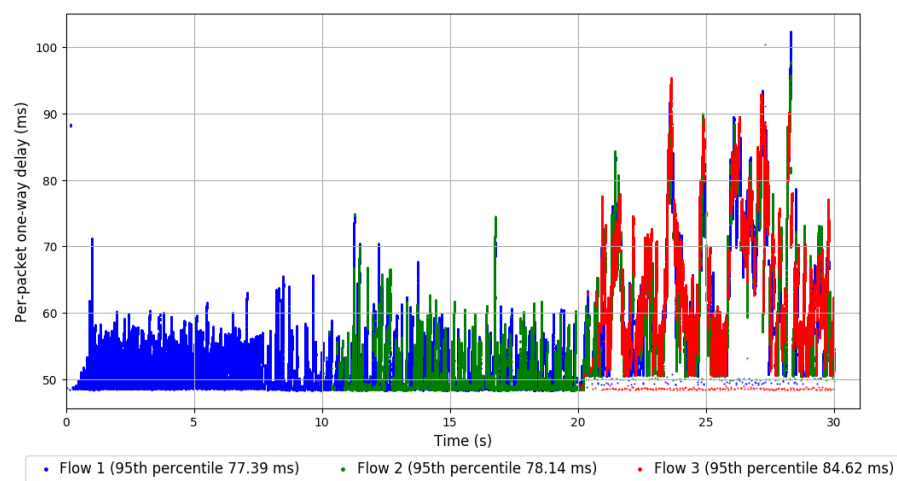
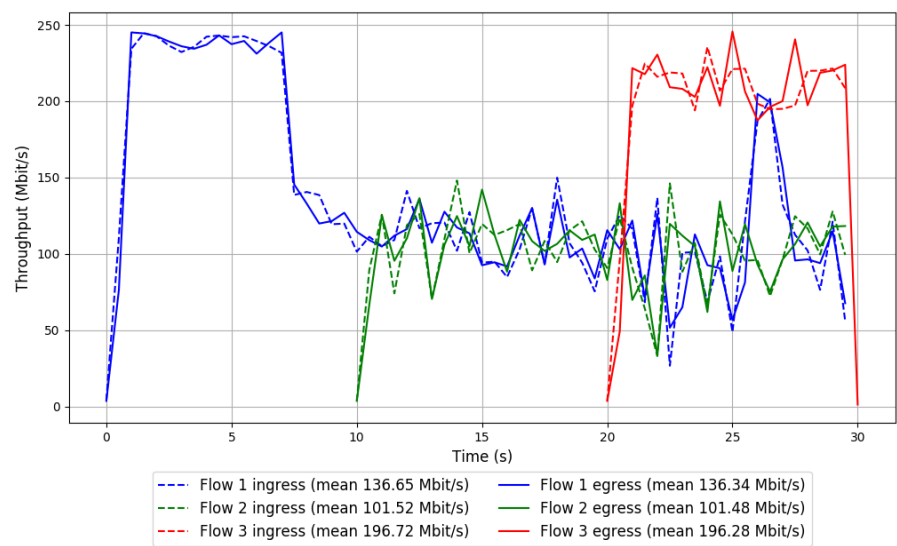
-- Flow 3:

Average throughput: 196.28 Mbit/s

95th percentile per-packet one-way delay: 84.616 ms

Loss rate: 0.22%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-17 19:01:35

End at: 2018-01-17 19:02:06

Below is generated by plot.py at 2018-01-17 23:51:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 238.21 Mbit/s

95th percentile per-packet one-way delay: 92.010 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 104.35 Mbit/s

95th percentile per-packet one-way delay: 84.668 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 109.97 Mbit/s

95th percentile per-packet one-way delay: 92.148 ms

Loss rate: 0.00%

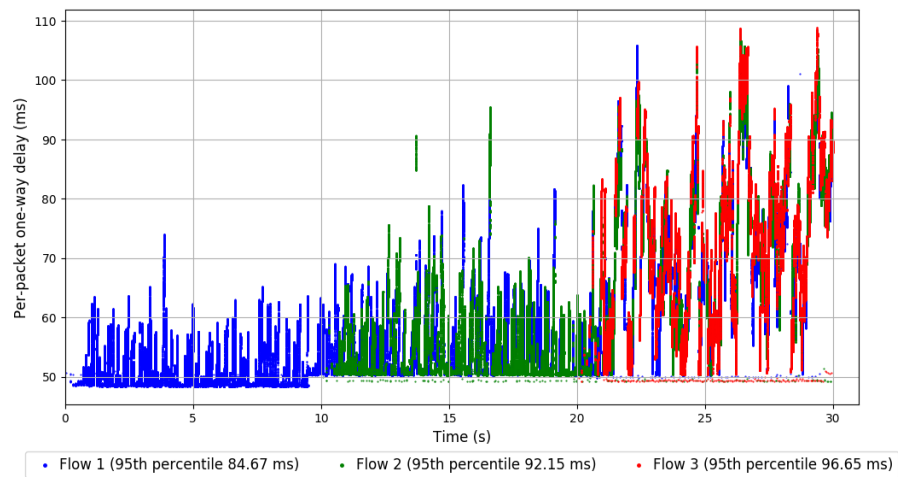
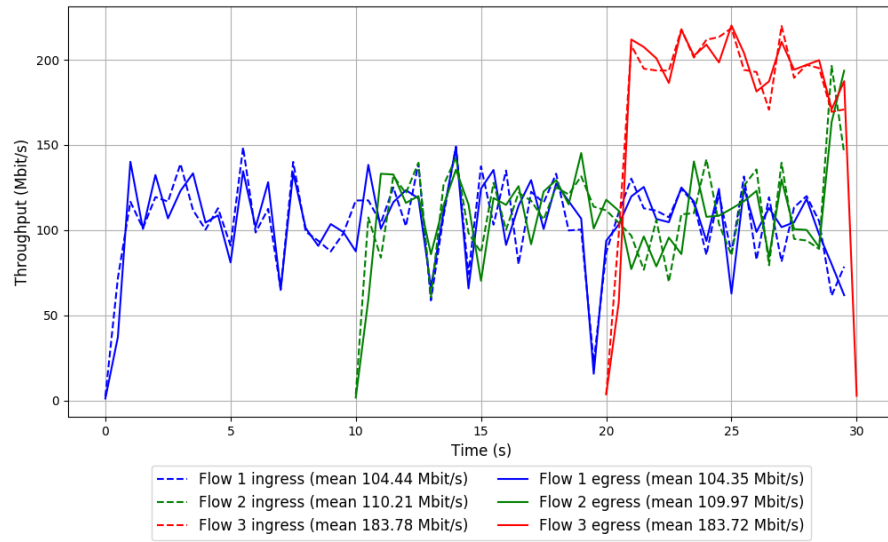
-- Flow 3:

Average throughput: 183.72 Mbit/s

95th percentile per-packet one-way delay: 96.652 ms

Loss rate: 0.10%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-17 19:18:26

End at: 2018-01-17 19:18:56

Below is generated by plot.py at 2018-01-17 23:52:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.33 Mbit/s

95th percentile per-packet one-way delay: 89.062 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 174.91 Mbit/s

95th percentile per-packet one-way delay: 84.579 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 139.91 Mbit/s

95th percentile per-packet one-way delay: 88.635 ms

Loss rate: 0.39%

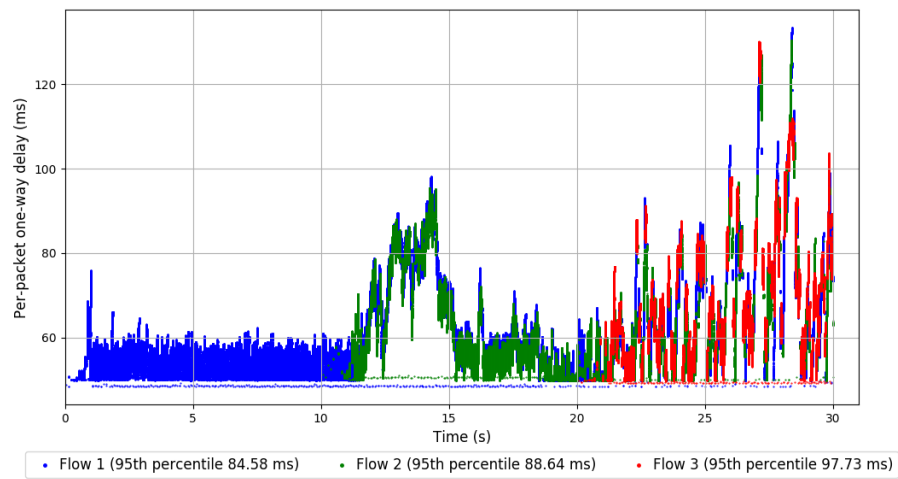
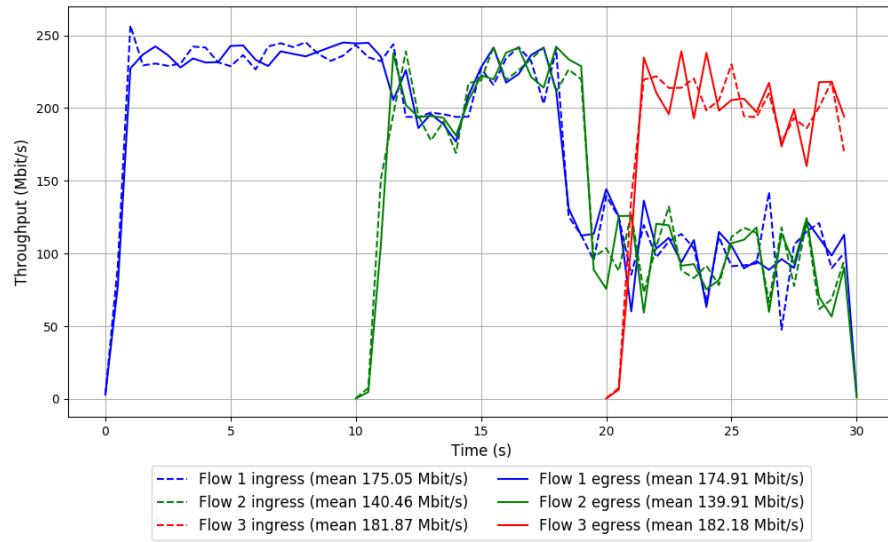
-- Flow 3:

Average throughput: 182.18 Mbit/s

95th percentile per-packet one-way delay: 97.728 ms

Loss rate: 0.01%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-17 19:35:21

End at: 2018-01-17 19:35:51

Below is generated by plot.py at 2018-01-17 23:52:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 342.34 Mbit/s

95th percentile per-packet one-way delay: 113.675 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 180.12 Mbit/s

95th percentile per-packet one-way delay: 104.693 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 155.44 Mbit/s

95th percentile per-packet one-way delay: 112.772 ms

Loss rate: 0.00%

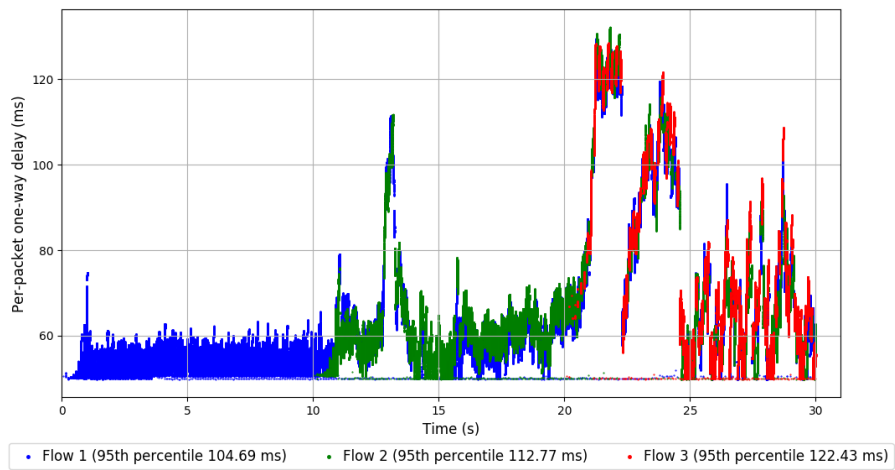
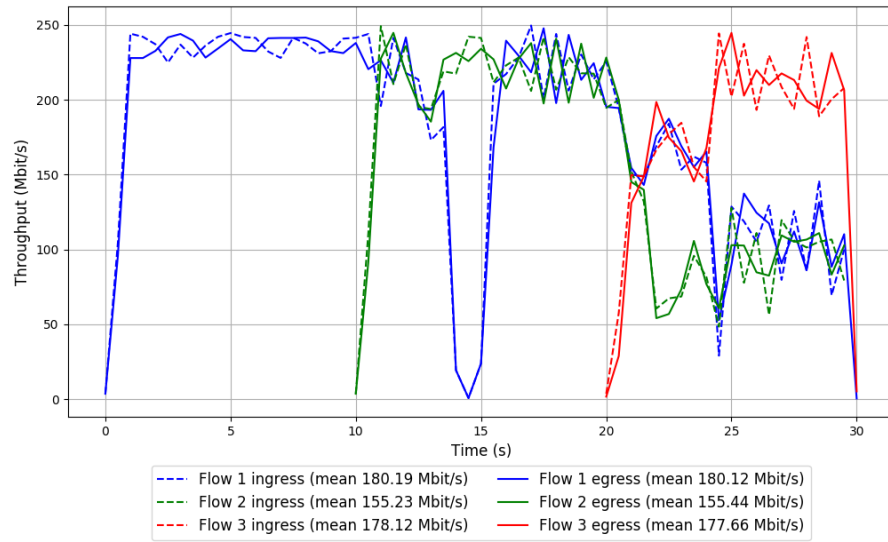
-- Flow 3:

Average throughput: 177.66 Mbit/s

95th percentile per-packet one-way delay: 122.430 ms

Loss rate: 0.25%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-17 19:52:03

End at: 2018-01-17 19:52:33

Below is generated by plot.py at 2018-01-17 23:52:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 290.58 Mbit/s

95th percentile per-packet one-way delay: 110.178 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 162.50 Mbit/s

95th percentile per-packet one-way delay: 103.939 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 105.02 Mbit/s

95th percentile per-packet one-way delay: 107.589 ms

Loss rate: 0.64%

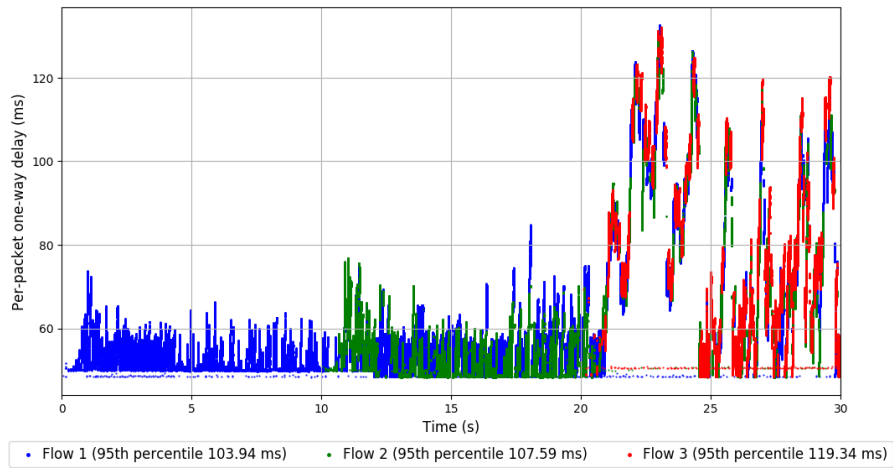
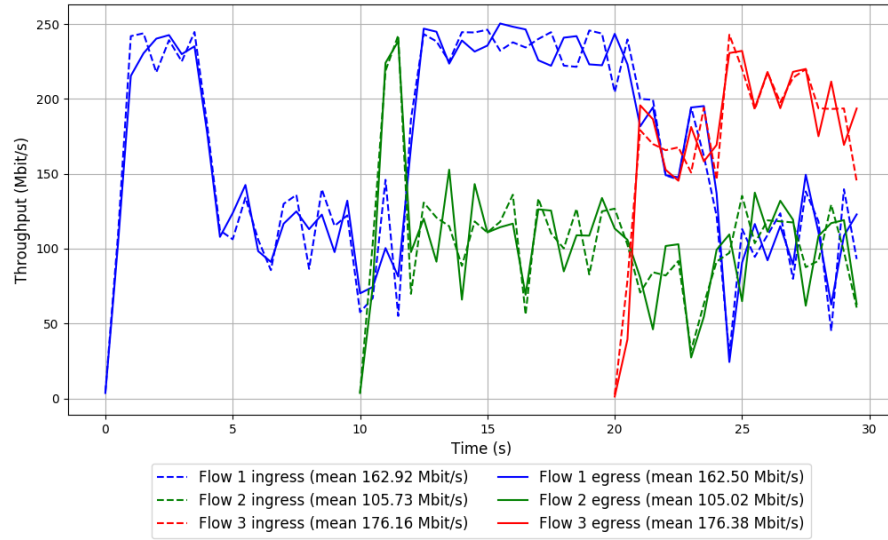
-- Flow 3:

Average throughput: 176.38 Mbit/s

95th percentile per-packet one-way delay: 119.340 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-17 20:08:41

End at: 2018-01-17 20:09:11

Below is generated by plot.py at 2018-01-17 23:52:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 304.98 Mbit/s

95th percentile per-packet one-way delay: 80.341 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 130.65 Mbit/s

95th percentile per-packet one-way delay: 75.764 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 163.17 Mbit/s

95th percentile per-packet one-way delay: 77.723 ms

Loss rate: 0.00%

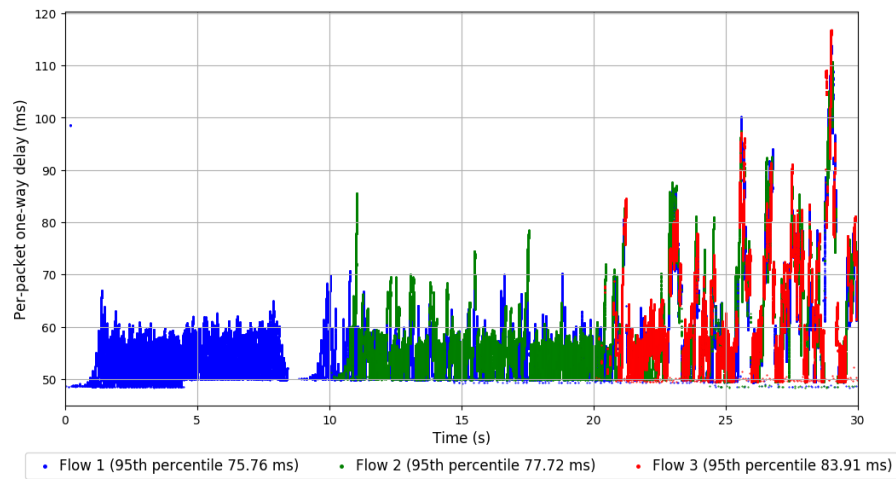
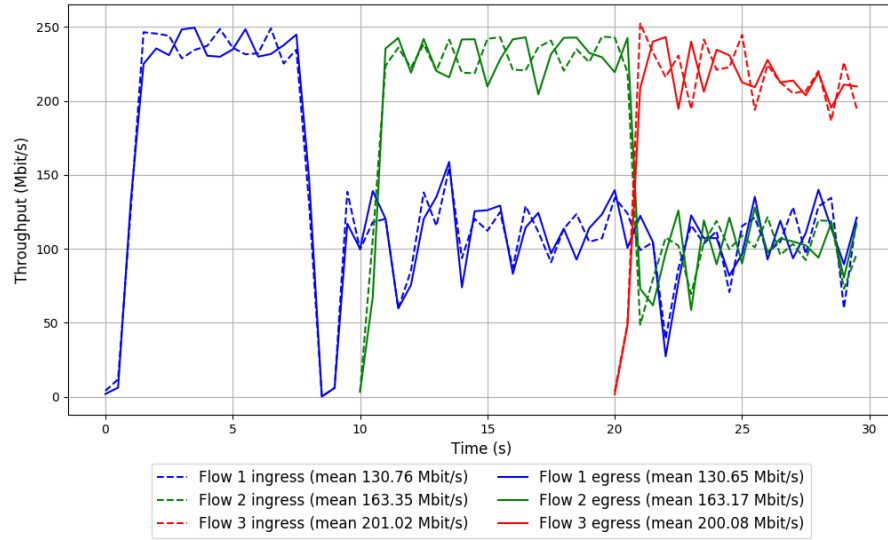
-- Flow 3:

Average throughput: 200.08 Mbit/s

95th percentile per-packet one-way delay: 83.910 ms

Loss rate: 0.42%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-17 20:25:07

End at: 2018-01-17 20:25:37

Below is generated by plot.py at 2018-01-17 23:52:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 258.78 Mbit/s

95th percentile per-packet one-way delay: 78.316 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 102.40 Mbit/s

95th percentile per-packet one-way delay: 72.834 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 147.62 Mbit/s

95th percentile per-packet one-way delay: 75.980 ms

Loss rate: 0.00%

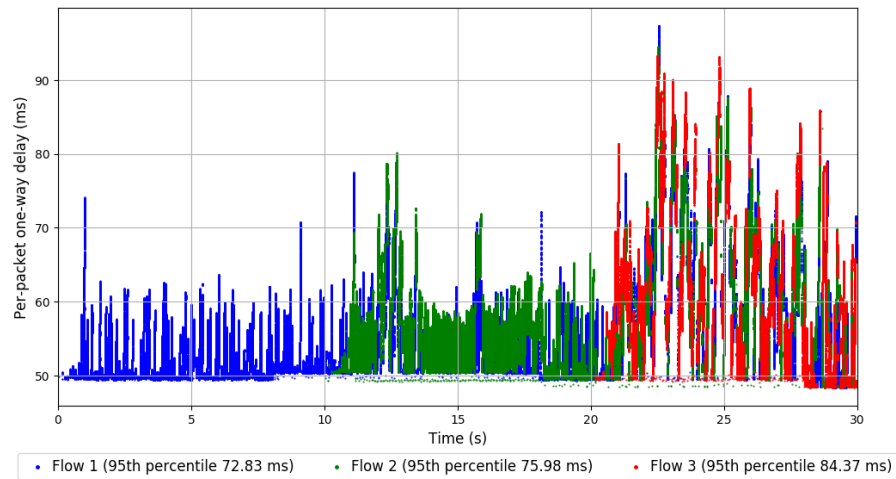
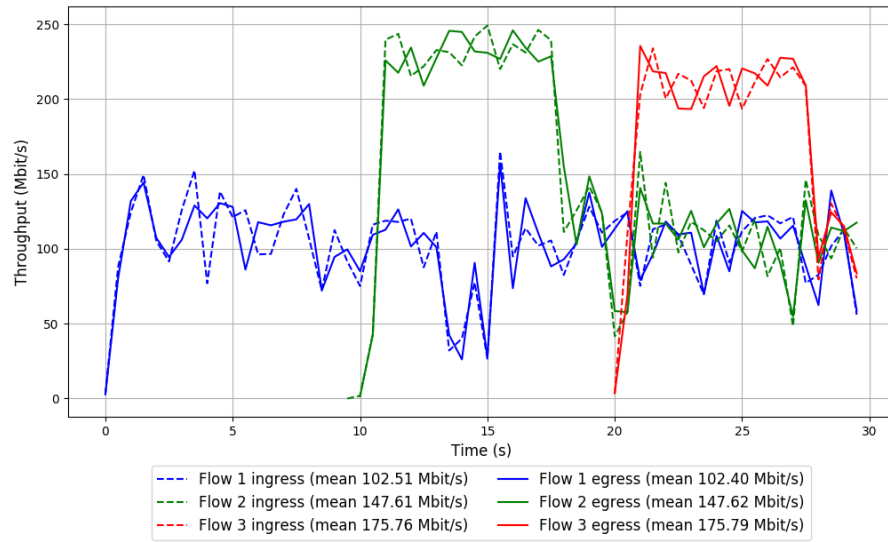
-- Flow 3:

Average throughput: 175.79 Mbit/s

95th percentile per-packet one-way delay: 84.368 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-17 20:41:42

End at: 2018-01-17 20:42:12

Below is generated by plot.py at 2018-01-17 23:55:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.26 Mbit/s

95th percentile per-packet one-way delay: 68.648 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 144.81 Mbit/s

95th percentile per-packet one-way delay: 64.381 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 154.12 Mbit/s

95th percentile per-packet one-way delay: 66.645 ms

Loss rate: 0.08%

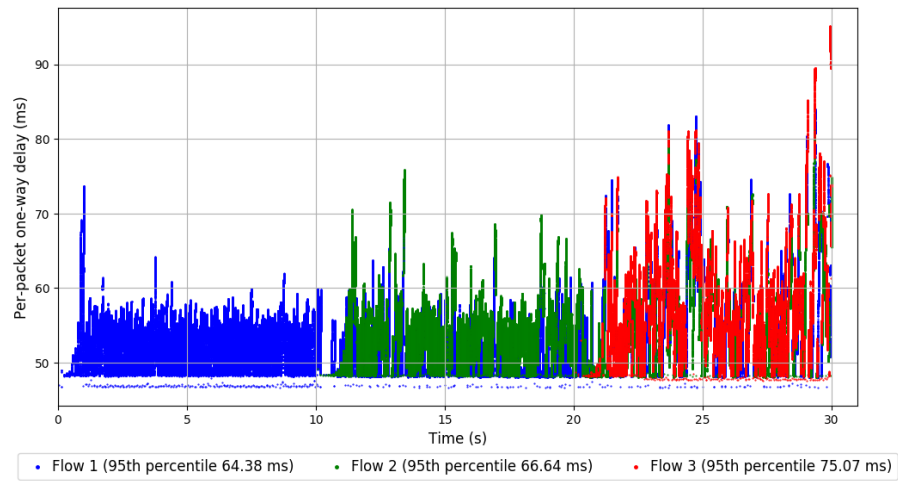
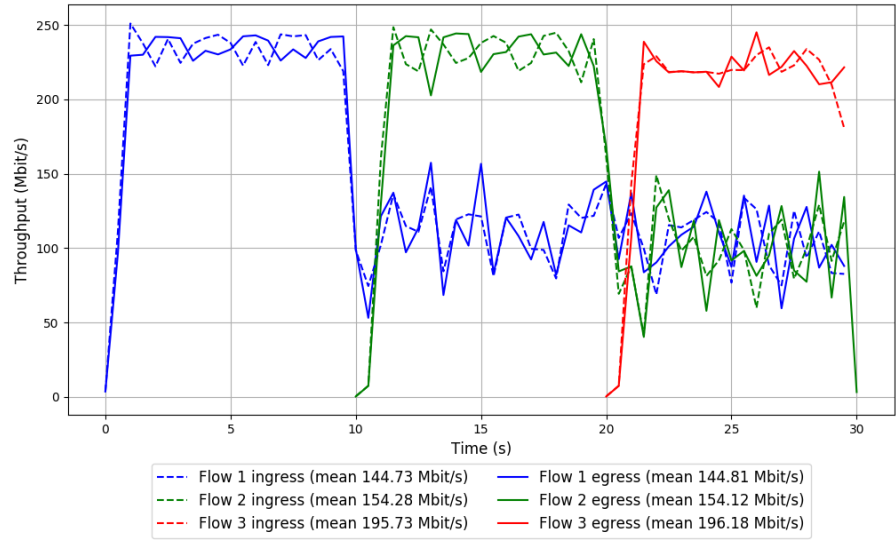
-- Flow 3:

Average throughput: 196.18 Mbit/s

95th percentile per-packet one-way delay: 75.074 ms

Loss rate: 0.01%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-17 20:58:23

End at: 2018-01-17 20:58:53

Below is generated by plot.py at 2018-01-17 23:55:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.11 Mbit/s

95th percentile per-packet one-way delay: 72.961 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 144.80 Mbit/s

95th percentile per-packet one-way delay: 65.125 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 104.43 Mbit/s

95th percentile per-packet one-way delay: 72.418 ms

Loss rate: 0.00%

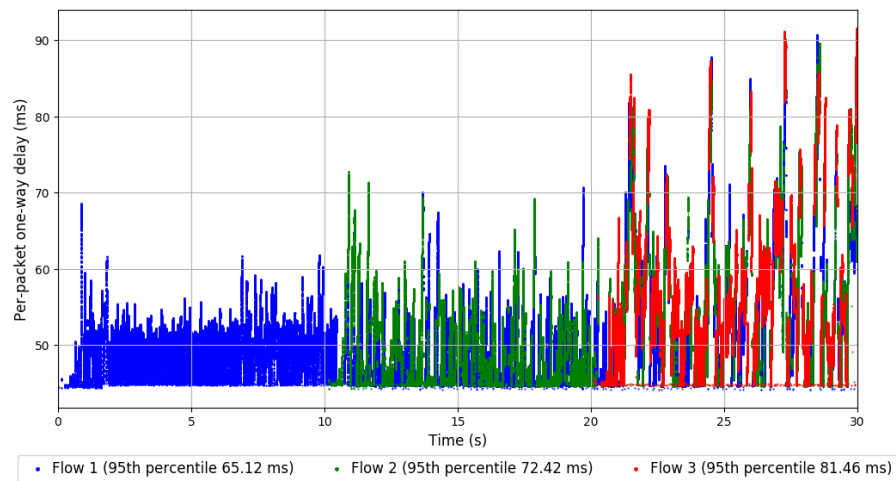
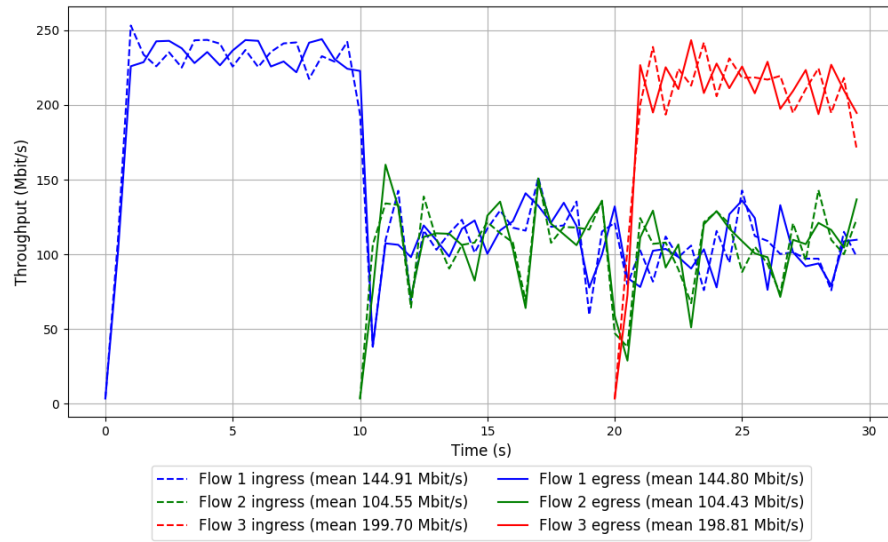
-- Flow 3:

Average throughput: 198.81 Mbit/s

95th percentile per-packet one-way delay: 81.460 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-17 18:26:58

End at: 2018-01-17 18:27:28

Below is generated by plot.py at 2018-01-17 23:56:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 345.62 Mbit/s

95th percentile per-packet one-way delay: 70.598 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 223.16 Mbit/s

95th percentile per-packet one-way delay: 70.610 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 181.65 Mbit/s

95th percentile per-packet one-way delay: 70.593 ms

Loss rate: 0.00%

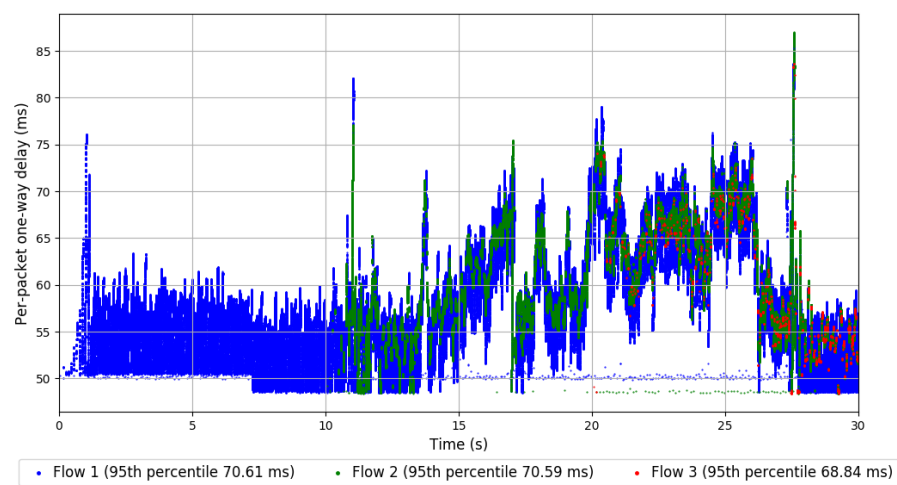
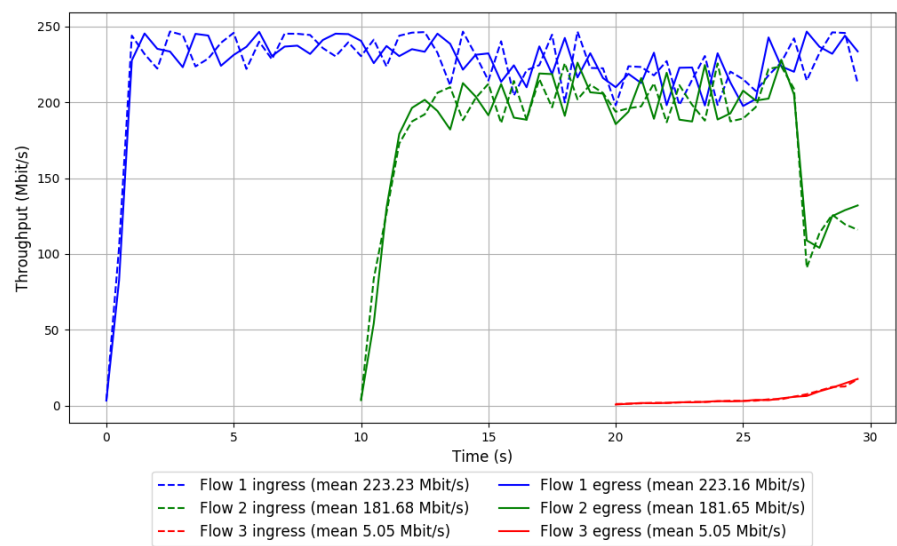
-- Flow 3:

Average throughput: 5.05 Mbit/s

95th percentile per-packet one-way delay: 68.838 ms

Loss rate: 0.10%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-17 18:44:00

End at: 2018-01-17 18:44:30

Below is generated by plot.py at 2018-01-17 23:56:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 263.79 Mbit/s

95th percentile per-packet one-way delay: 60.509 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 143.97 Mbit/s

95th percentile per-packet one-way delay: 59.369 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 177.74 Mbit/s

95th percentile per-packet one-way delay: 61.498 ms

Loss rate: 0.01%

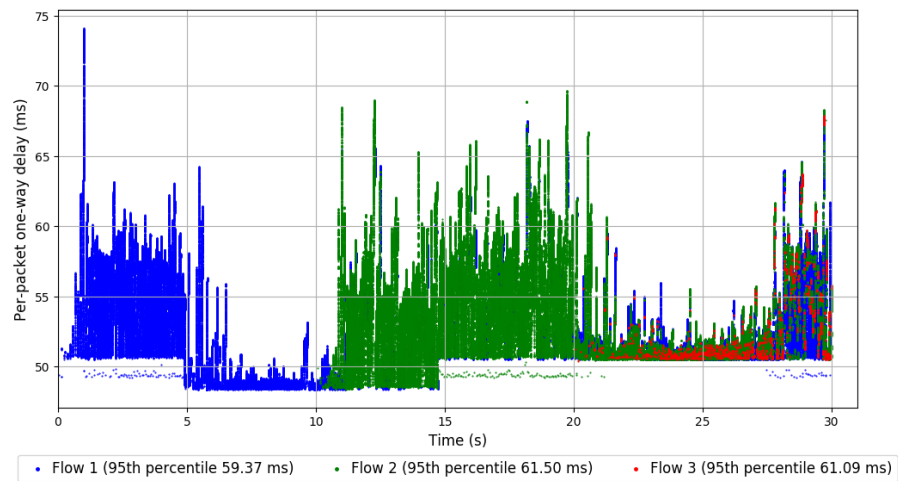
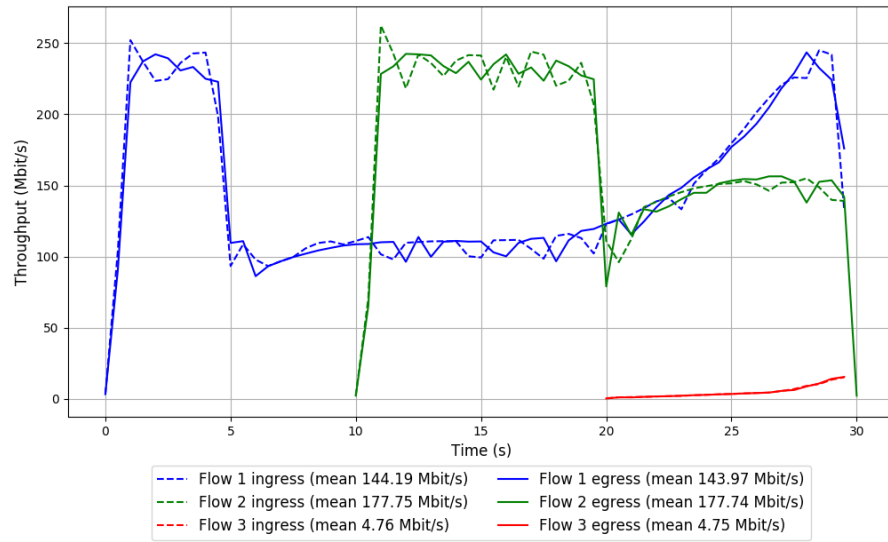
-- Flow 3:

Average throughput: 4.75 Mbit/s

95th percentile per-packet one-way delay: 61.085 ms

Loss rate: 0.23%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-17 19:00:40

End at: 2018-01-17 19:01:10

Below is generated by plot.py at 2018-01-17 23:56:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.74 Mbit/s

95th percentile per-packet one-way delay: 85.615 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 134.34 Mbit/s

95th percentile per-packet one-way delay: 84.842 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 156.50 Mbit/s

95th percentile per-packet one-way delay: 86.023 ms

Loss rate: 0.03%

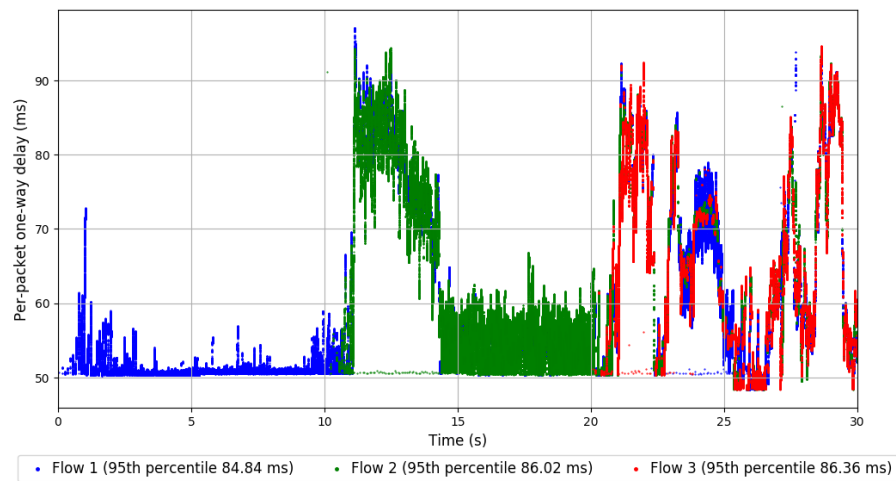
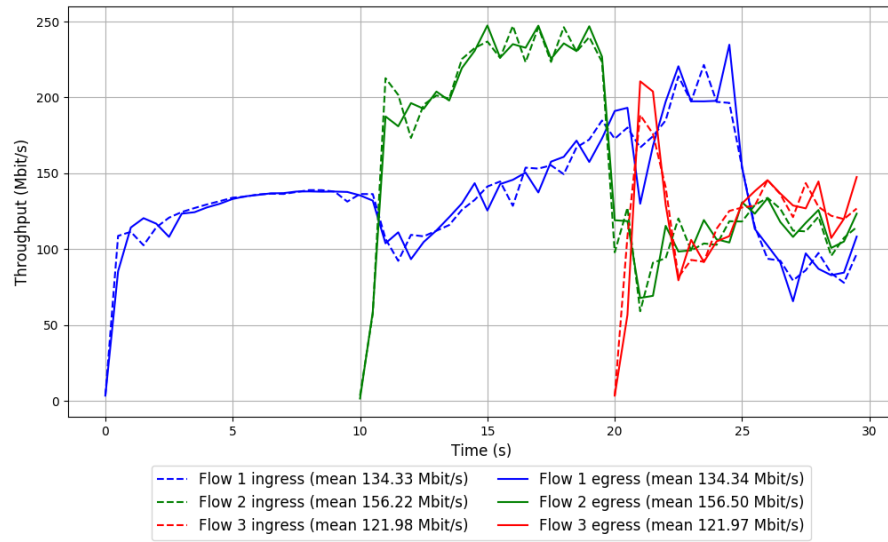
-- Flow 3:

Average throughput: 121.97 Mbit/s

95th percentile per-packet one-way delay: 86.364 ms

Loss rate: 0.02%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-17 19:17:26

End at: 2018-01-17 19:17:56

Below is generated by plot.py at 2018-01-17 23:57:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 352.32 Mbit/s

95th percentile per-packet one-way delay: 74.791 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 210.69 Mbit/s

95th percentile per-packet one-way delay: 74.588 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 195.57 Mbit/s

95th percentile per-packet one-way delay: 75.157 ms

Loss rate: 0.00%

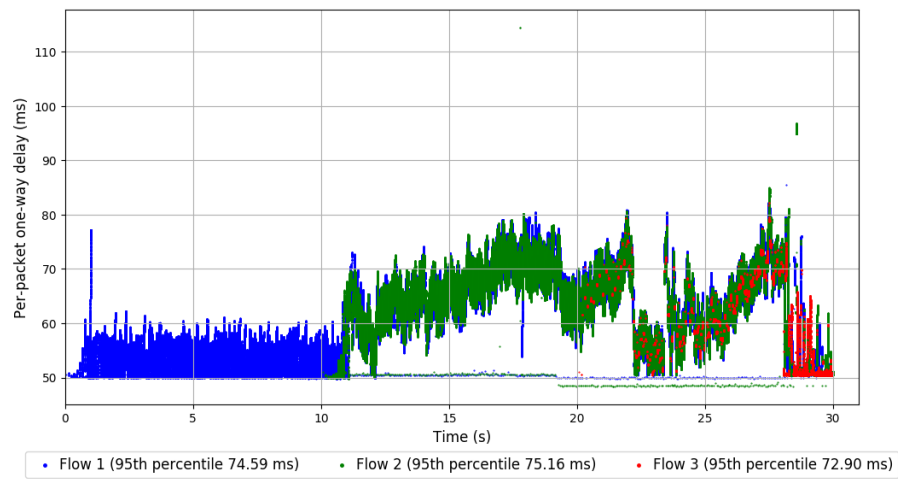
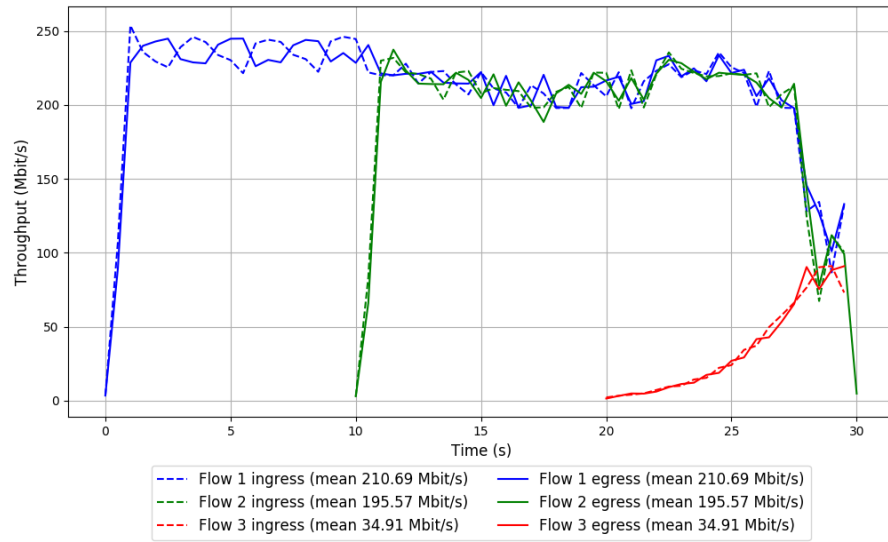
-- Flow 3:

Average throughput: 34.91 Mbit/s

95th percentile per-packet one-way delay: 72.900 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-17 19:34:21

End at: 2018-01-17 19:34:51

Below is generated by plot.py at 2018-01-17 23:58:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 356.57 Mbit/s

95th percentile per-packet one-way delay: 80.770 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 216.22 Mbit/s

95th percentile per-packet one-way delay: 79.555 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 208.55 Mbit/s

95th percentile per-packet one-way delay: 82.184 ms

Loss rate: 0.10%

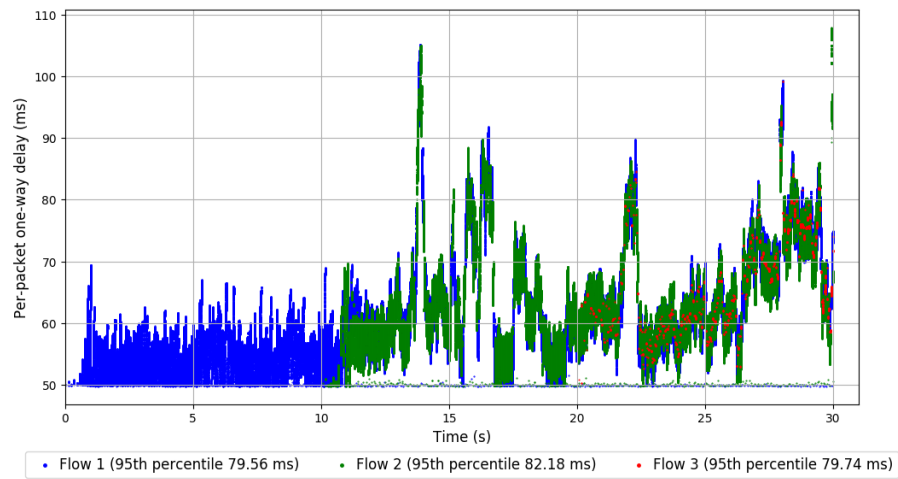
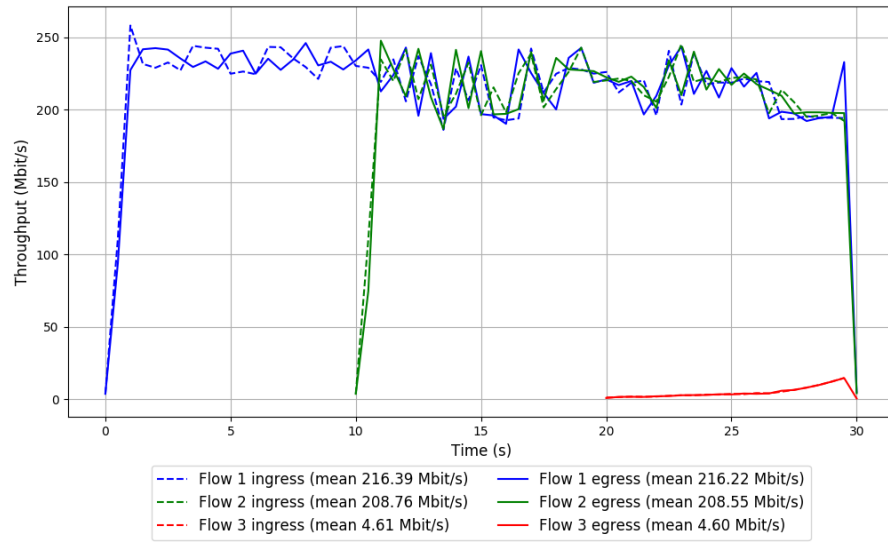
-- Flow 3:

Average throughput: 4.60 Mbit/s

95th percentile per-packet one-way delay: 79.737 ms

Loss rate: 0.10%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-17 19:51:02

End at: 2018-01-17 19:51:32

Below is generated by plot.py at 2018-01-17 23:58:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 345.92 Mbit/s

95th percentile per-packet one-way delay: 104.115 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 159.67 Mbit/s

95th percentile per-packet one-way delay: 98.193 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 199.35 Mbit/s

95th percentile per-packet one-way delay: 105.201 ms

Loss rate: 0.62%

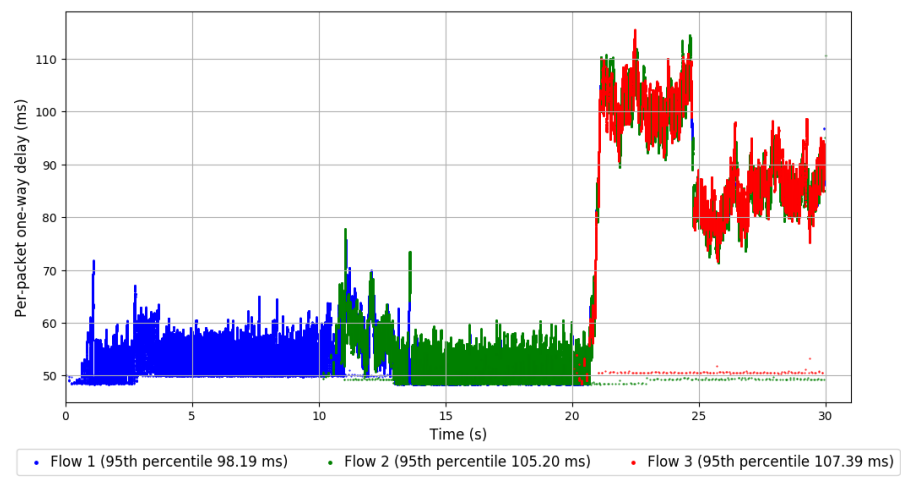
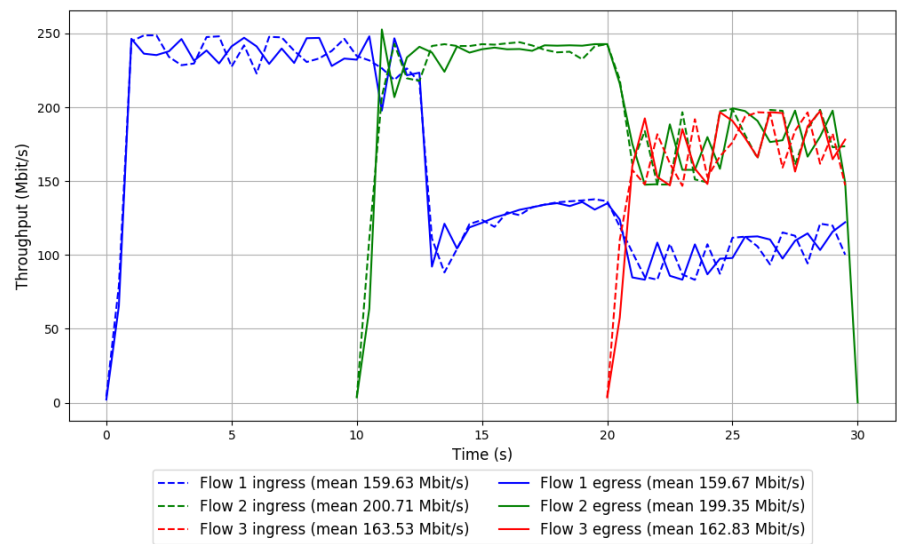
-- Flow 3:

Average throughput: 162.83 Mbit/s

95th percentile per-packet one-way delay: 107.387 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-17 20:07:43

End at: 2018-01-17 20:08:13

Below is generated by plot.py at 2018-01-18 00:00:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.22 Mbit/s

95th percentile per-packet one-way delay: 114.075 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 125.49 Mbit/s

95th percentile per-packet one-way delay: 113.279 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 193.23 Mbit/s

95th percentile per-packet one-way delay: 114.268 ms

Loss rate: 0.33%

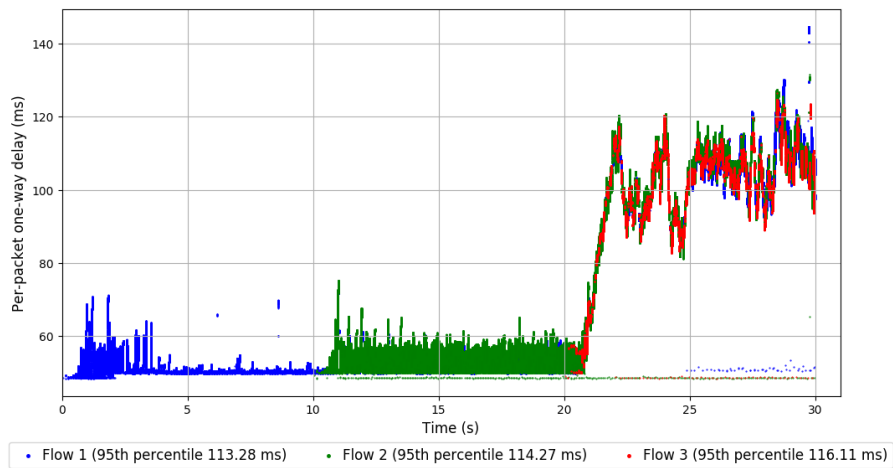
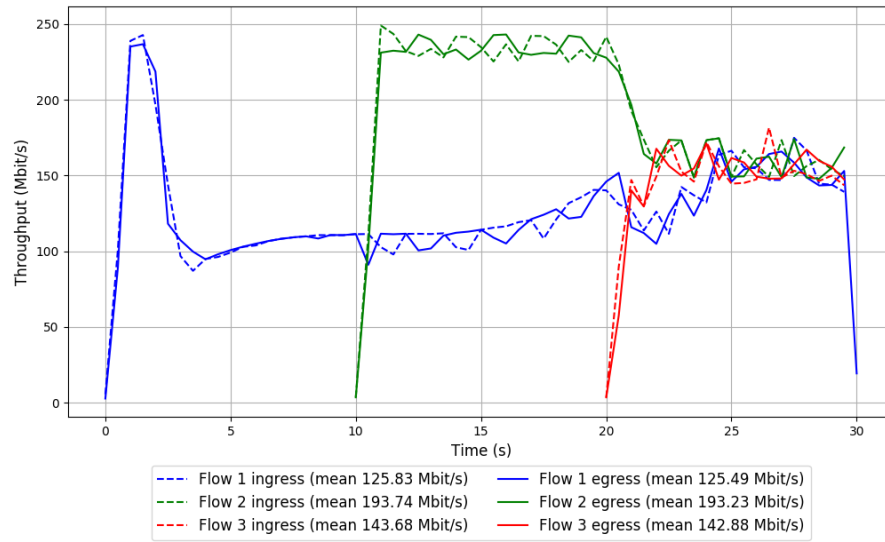
-- Flow 3:

Average throughput: 142.88 Mbit/s

95th percentile per-packet one-way delay: 116.115 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-17 20:24:09

End at: 2018-01-17 20:24:39

Below is generated by plot.py at 2018-01-18 00:00:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.76 Mbit/s

95th percentile per-packet one-way delay: 59.806 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 174.87 Mbit/s

95th percentile per-packet one-way delay: 60.607 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 202.91 Mbit/s

95th percentile per-packet one-way delay: 58.373 ms

Loss rate: 0.00%

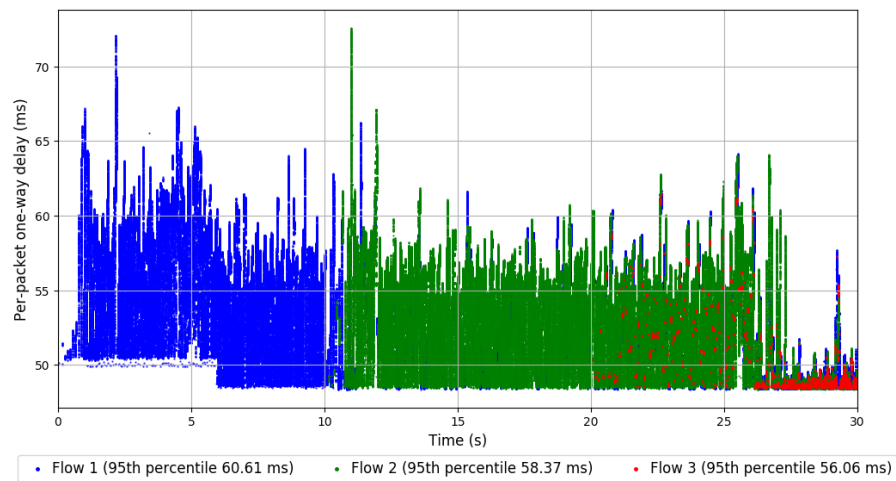
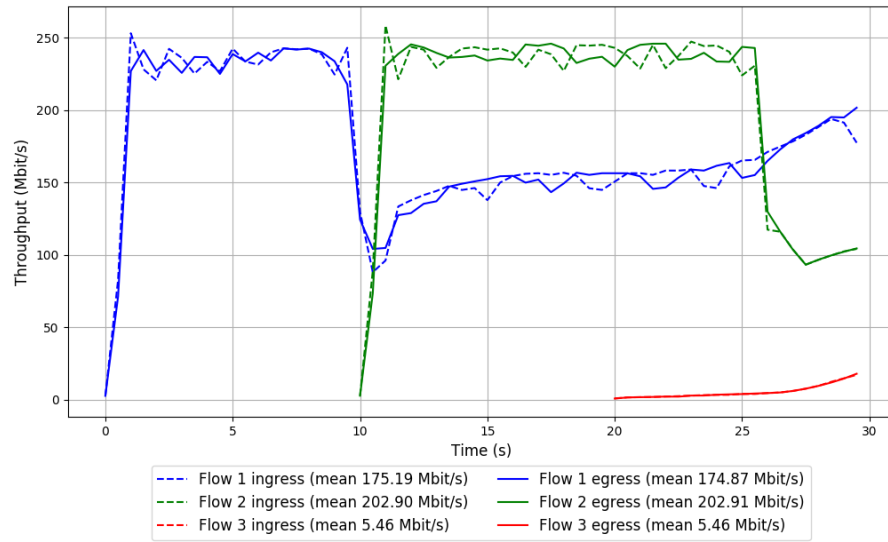
-- Flow 3:

Average throughput: 5.46 Mbit/s

95th percentile per-packet one-way delay: 56.056 ms

Loss rate: 0.09%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-17 20:40:51

End at: 2018-01-17 20:41:21

Below is generated by plot.py at 2018-01-18 00:00:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.08 Mbit/s

95th percentile per-packet one-way delay: 59.268 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 209.30 Mbit/s

95th percentile per-packet one-way delay: 59.373 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 10.74 Mbit/s

95th percentile per-packet one-way delay: 55.350 ms

Loss rate: 0.07%

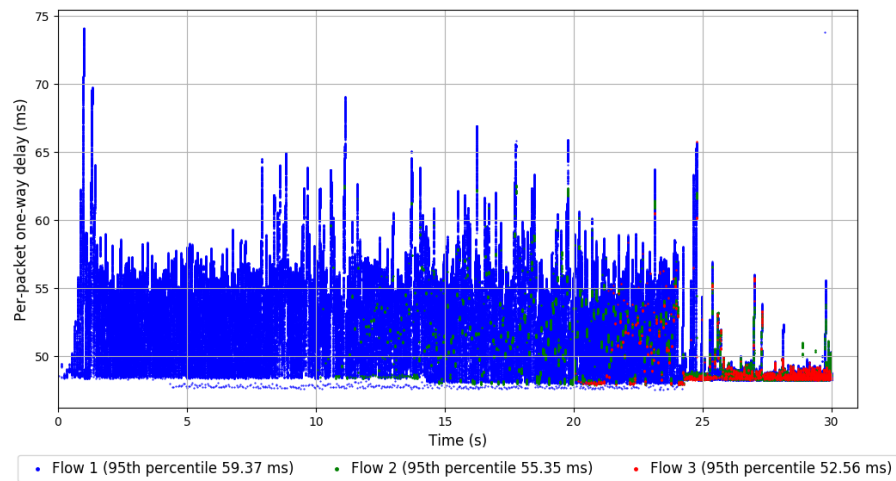
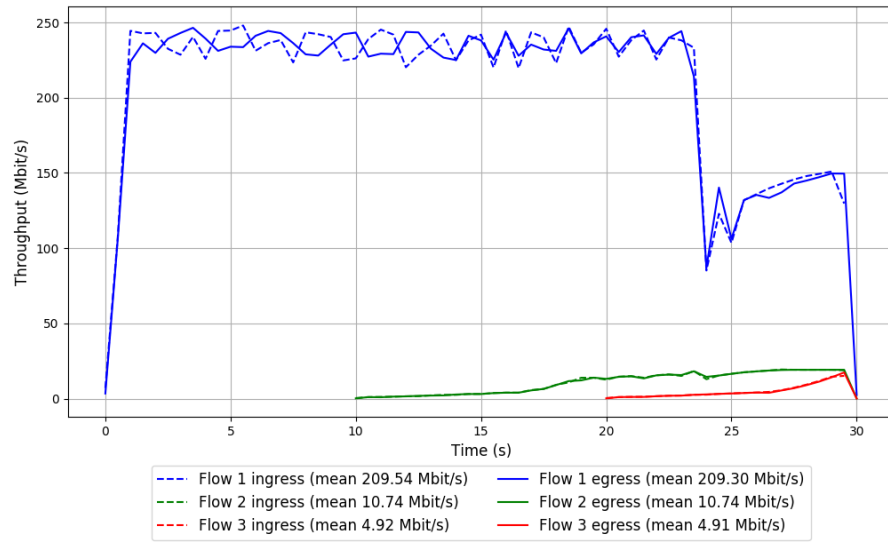
-- Flow 3:

Average throughput: 4.91 Mbit/s

95th percentile per-packet one-way delay: 52.560 ms

Loss rate: 0.22%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-17 20:57:25

End at: 2018-01-17 20:57:55

Below is generated by plot.py at 2018-01-18 00:01:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 323.34 Mbit/s

95th percentile per-packet one-way delay: 64.158 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 224.20 Mbit/s

95th percentile per-packet one-way delay: 63.812 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 146.55 Mbit/s

95th percentile per-packet one-way delay: 64.834 ms

Loss rate: 0.05%

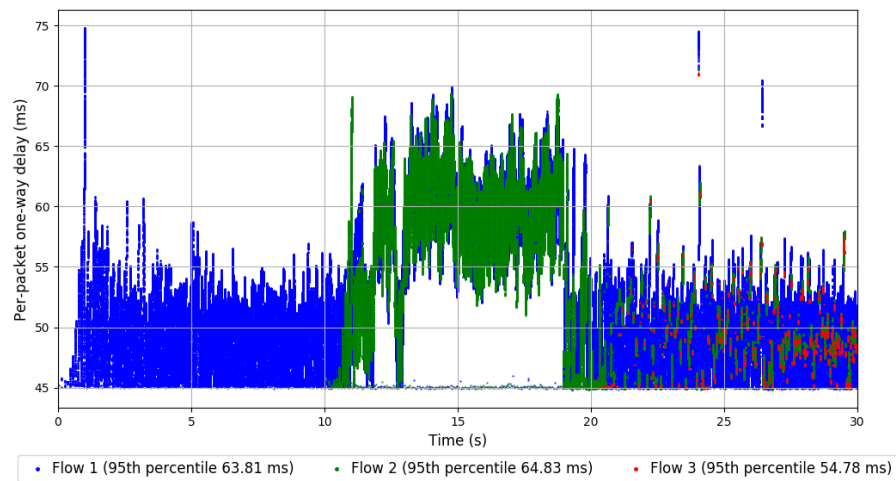
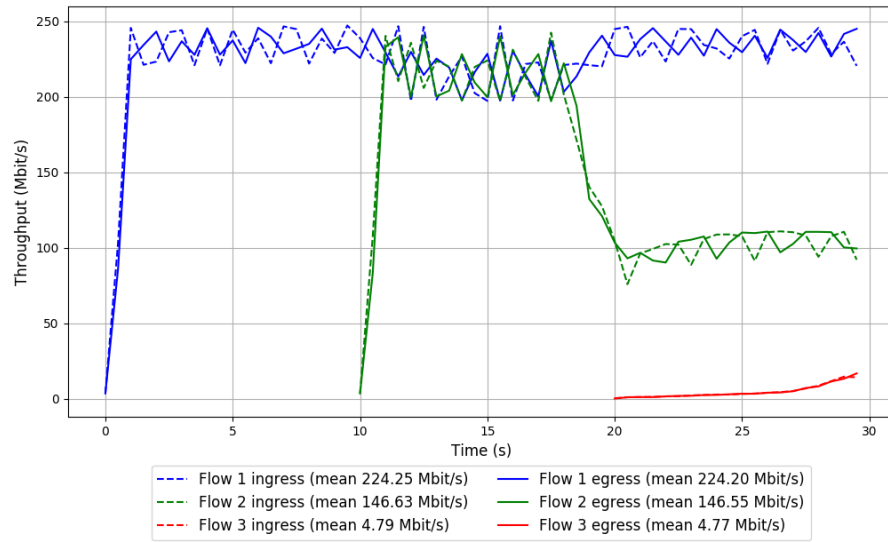
-- Flow 3:

Average throughput: 4.77 Mbit/s

95th percentile per-packet one-way delay: 54.785 ms

Loss rate: 0.23%

Run 10: Report of TCP Cubic — Data Link

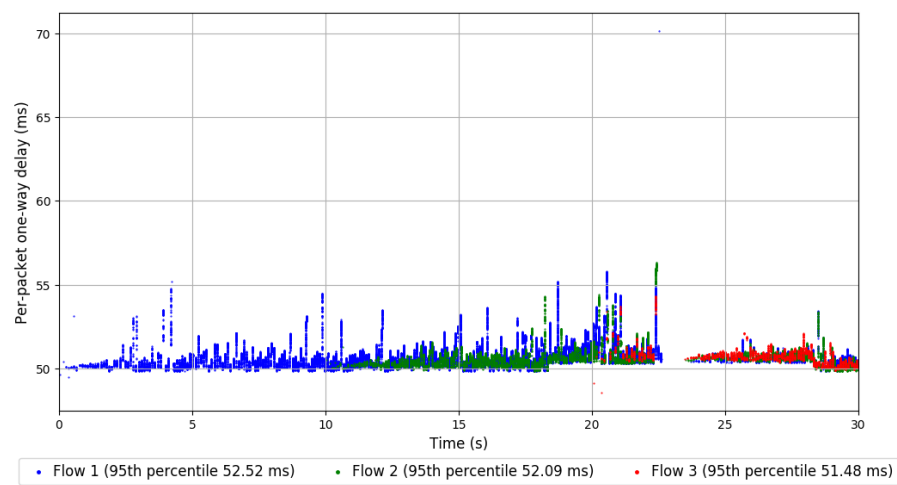
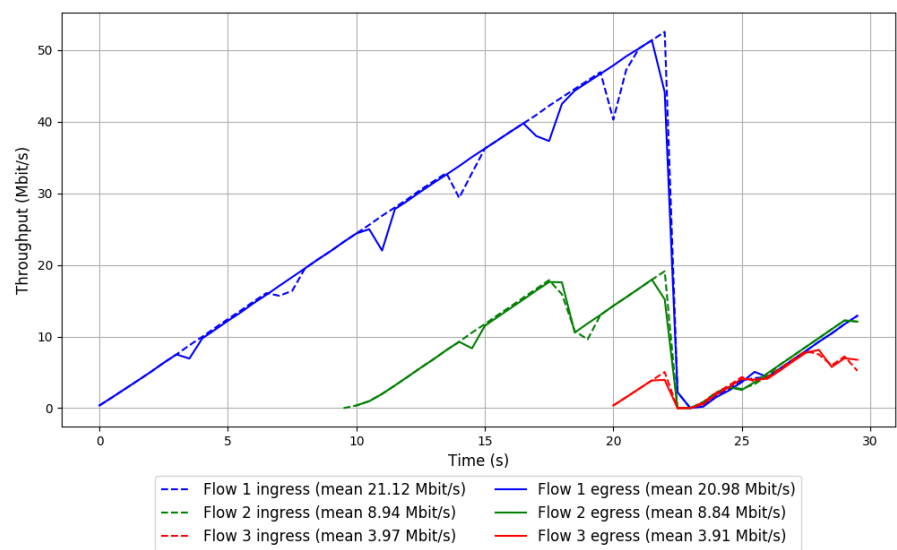


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-17 18:35:27
End at: 2018-01-17 18:35:57

# Below is generated by plot.py at 2018-01-18 00:01:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 28.15 Mbit/s
95th percentile per-packet one-way delay: 52.409 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 20.98 Mbit/s
95th percentile per-packet one-way delay: 52.515 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 8.84 Mbit/s
95th percentile per-packet one-way delay: 52.094 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 51.482 ms
Loss rate: 1.41%
```

Run 1: Report of LEDBAT — Data Link

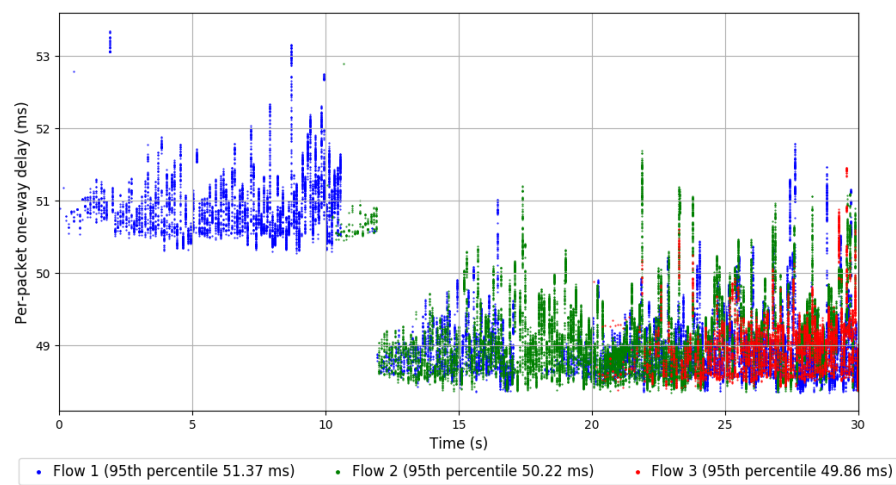
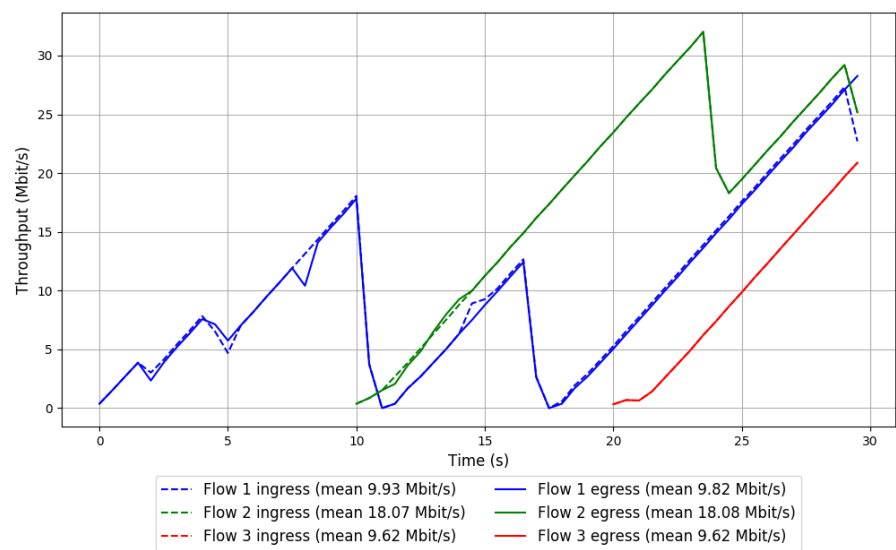


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-17 18:52:13
End at: 2018-01-17 18:52:43

# Below is generated by plot.py at 2018-01-18 00:01:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 25.01 Mbit/s
95th percentile per-packet one-way delay: 51.038 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 9.82 Mbit/s
95th percentile per-packet one-way delay: 51.370 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 18.08 Mbit/s
95th percentile per-packet one-way delay: 50.219 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.62 Mbit/s
95th percentile per-packet one-way delay: 49.862 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-17 19:08:51

End at: 2018-01-17 19:09:21

Below is generated by plot.py at 2018-01-18 00:01:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 30.35 Mbit/s

95th percentile per-packet one-way delay: 51.989 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 22.87 Mbit/s

95th percentile per-packet one-way delay: 52.012 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.62 Mbit/s

95th percentile per-packet one-way delay: 51.378 ms

Loss rate: 1.63%

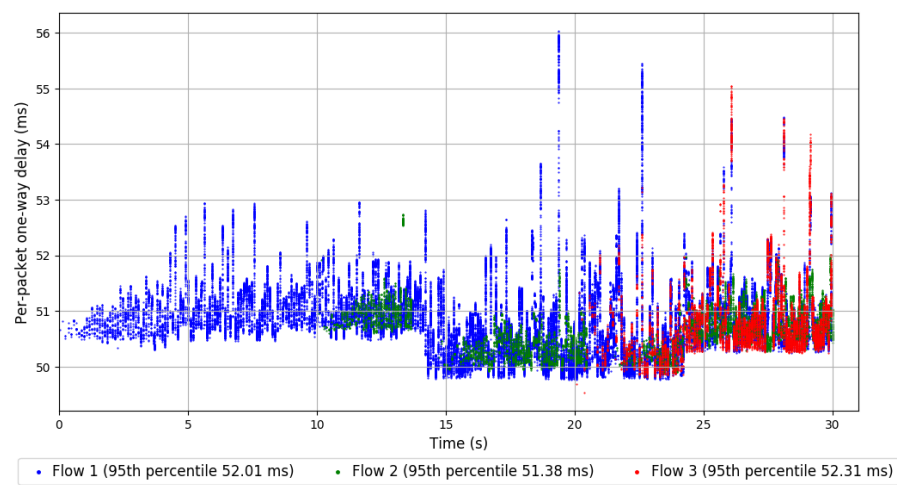
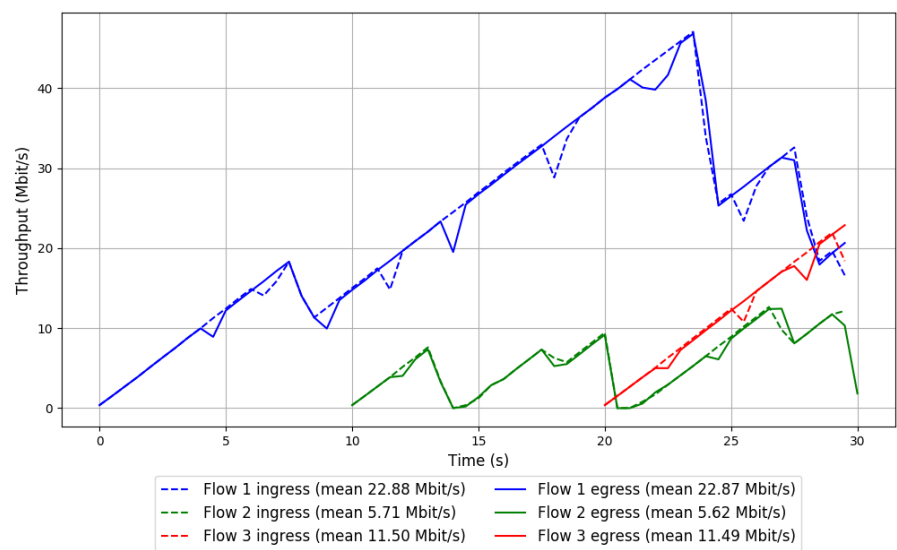
-- Flow 3:

Average throughput: 11.49 Mbit/s

95th percentile per-packet one-way delay: 52.314 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

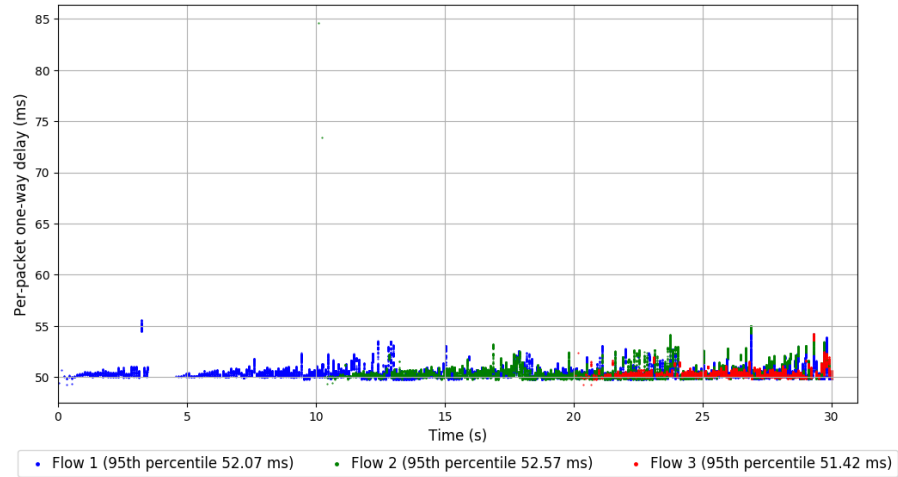
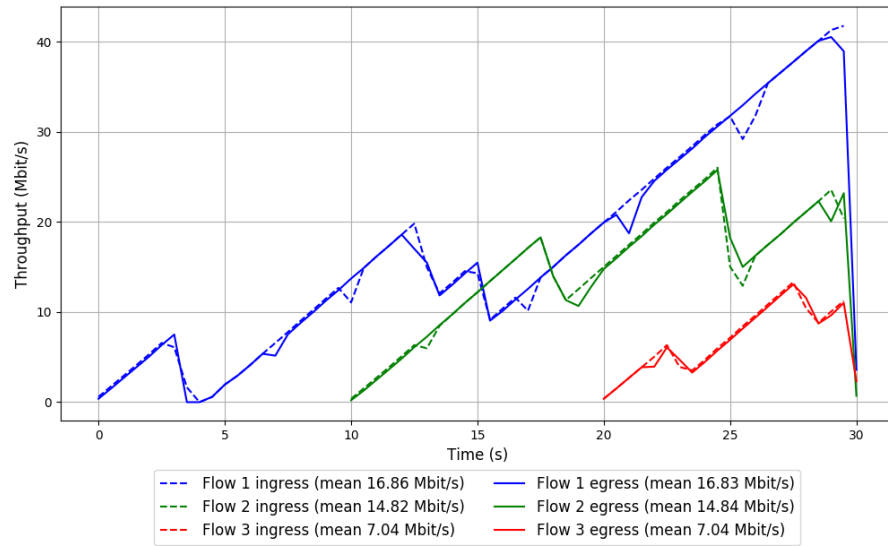


```
Run 4: Statistics of LEDBAT

Start at: 2018-01-17 19:25:42
End at: 2018-01-17 19:26:12

# Below is generated by plot.py at 2018-01-18 00:01:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.03 Mbit/s
95th percentile per-packet one-way delay: 52.221 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 16.83 Mbit/s
95th percentile per-packet one-way delay: 52.068 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 14.84 Mbit/s
95th percentile per-packet one-way delay: 52.570 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.04 Mbit/s
95th percentile per-packet one-way delay: 51.420 ms
Loss rate: 0.00%
```


Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-17 19:42:36

End at: 2018-01-17 19:43:06

Below is generated by plot.py at 2018-01-18 00:01:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.75 Mbit/s

95th percentile per-packet one-way delay: 51.199 ms

Loss rate: 1.42%

-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 51.361 ms

Loss rate: 1.58%

-- Flow 2:

Average throughput: 9.39 Mbit/s

95th percentile per-packet one-way delay: 51.182 ms

Loss rate: 0.98%

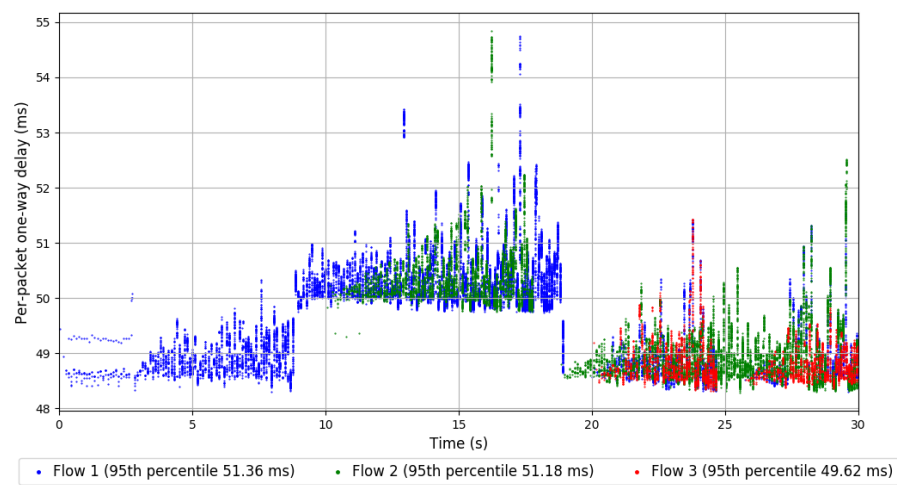
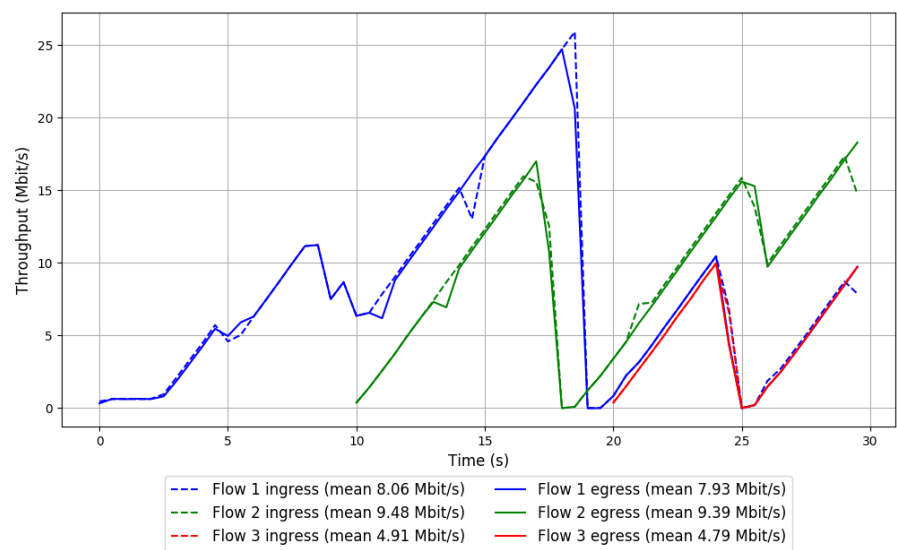
-- Flow 3:

Average throughput: 4.79 Mbit/s

95th percentile per-packet one-way delay: 49.618 ms

Loss rate: 2.32%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-17 19:59:12

End at: 2018-01-17 19:59:42

Below is generated by plot.py at 2018-01-18 00:01:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 33.07 Mbit/s

95th percentile per-packet one-way delay: 50.627 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 19.06 Mbit/s

95th percentile per-packet one-way delay: 50.709 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.99 Mbit/s

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

Loss rate: 0.00%

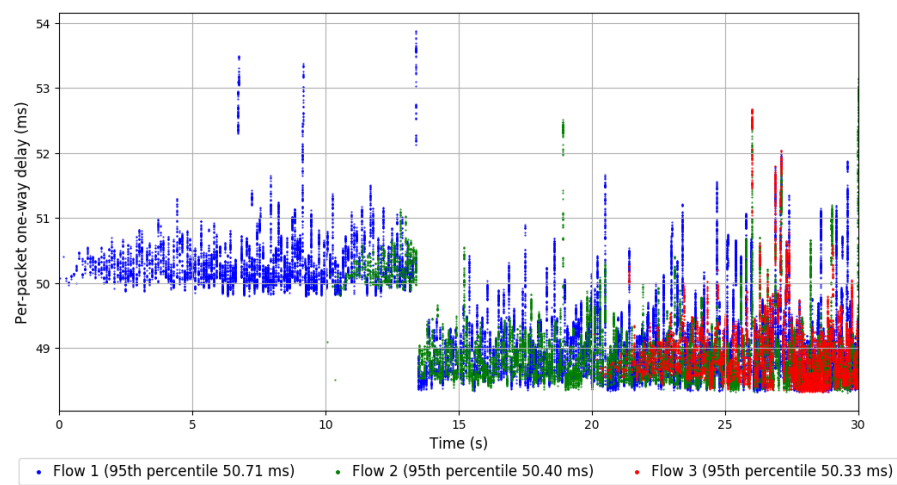
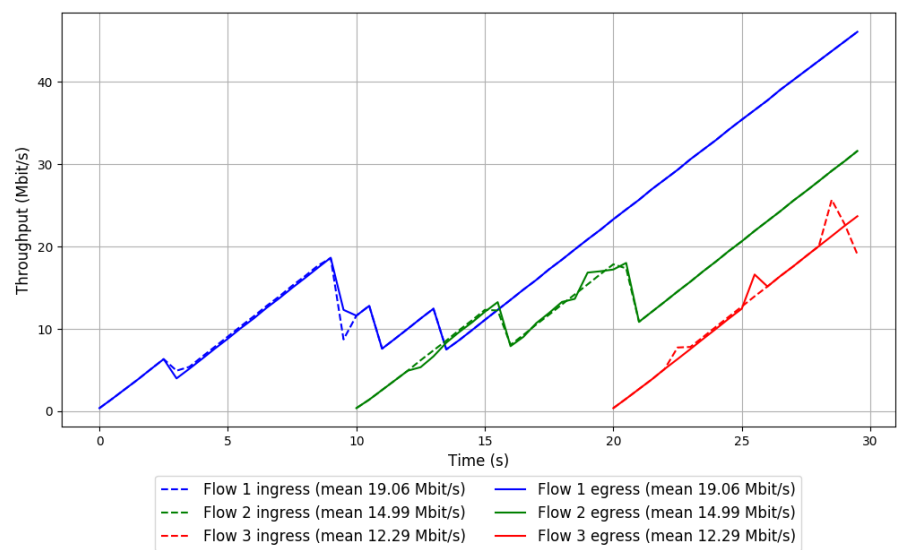
-- Flow 3:

Average throughput: 12.29 Mbit/s

95th percentile per-packet one-way delay: 50.332 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-17 20:15:46

End at: 2018-01-17 20:16:16

Below is generated by plot.py at 2018-01-18 00:01:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.71 Mbit/s

95th percentile per-packet one-way delay: 52.053 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 35.47 Mbit/s

95th percentile per-packet one-way delay: 52.000 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 23.68 Mbit/s

95th percentile per-packet one-way delay: 52.412 ms

Loss rate: 0.00%

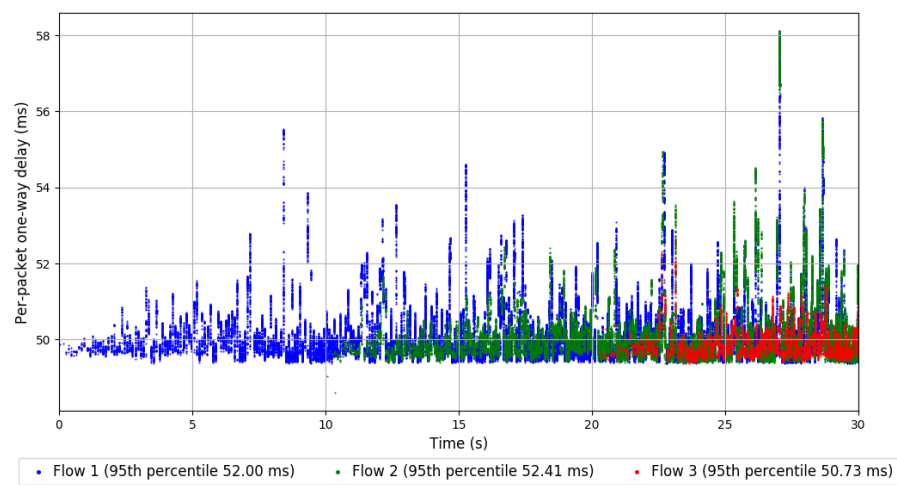
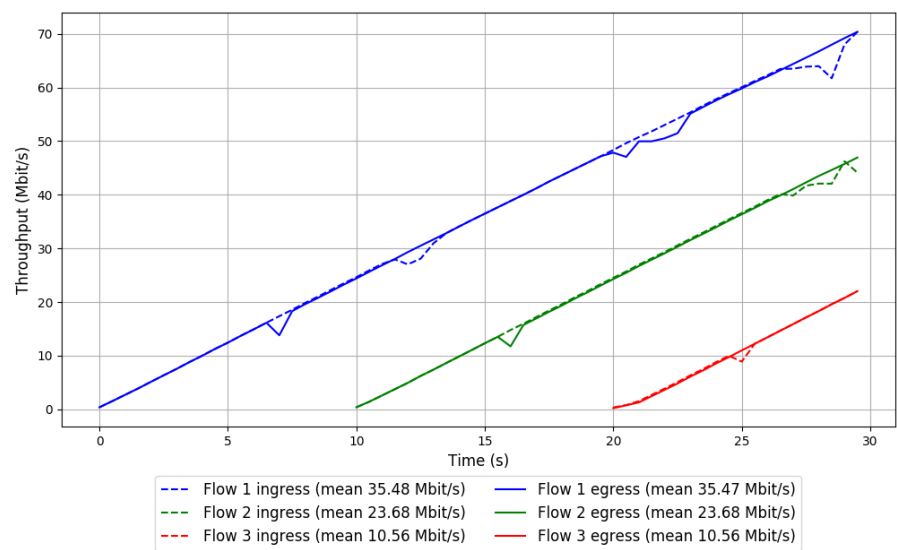
-- Flow 3:

Average throughput: 10.56 Mbit/s

95th percentile per-packet one-way delay: 50.726 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-17 20:32:20

End at: 2018-01-17 20:32:50

Below is generated by plot.py at 2018-01-18 00:01:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.83 Mbit/s

95th percentile per-packet one-way delay: 52.040 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 8.66 Mbit/s

95th percentile per-packet one-way delay: 52.478 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 11.96 Mbit/s

95th percentile per-packet one-way delay: 51.618 ms

Loss rate: 0.57%

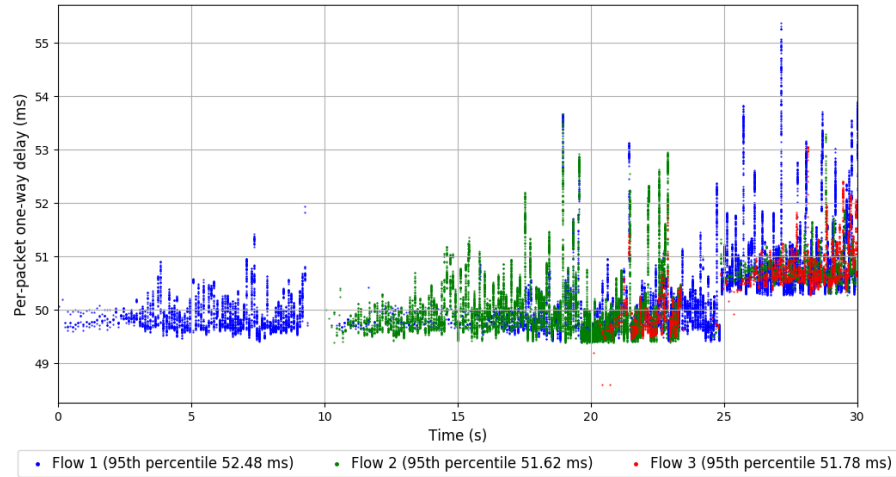
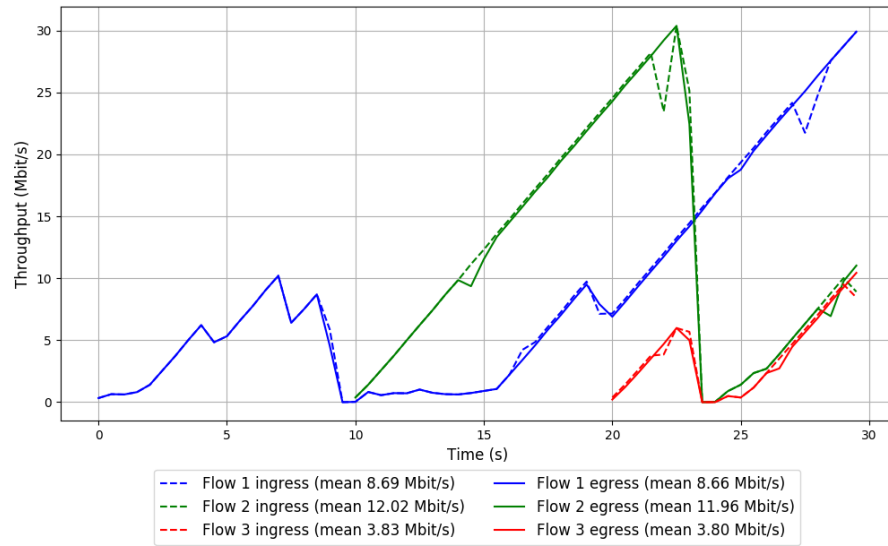
-- Flow 3:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 51.777 ms

Loss rate: 0.90%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-17 20:49:01

End at: 2018-01-17 20:49:31

Below is generated by plot.py at 2018-01-18 00:01:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 21.52 Mbit/s

95th percentile per-packet one-way delay: 48.623 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 12.23 Mbit/s

95th percentile per-packet one-way delay: 48.780 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 11.99 Mbit/s

95th percentile per-packet one-way delay: 48.252 ms

Loss rate: 1.27%

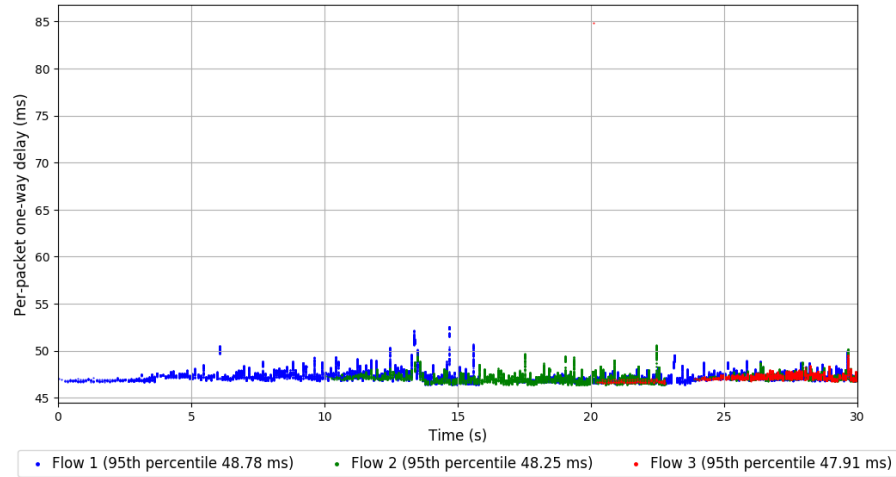
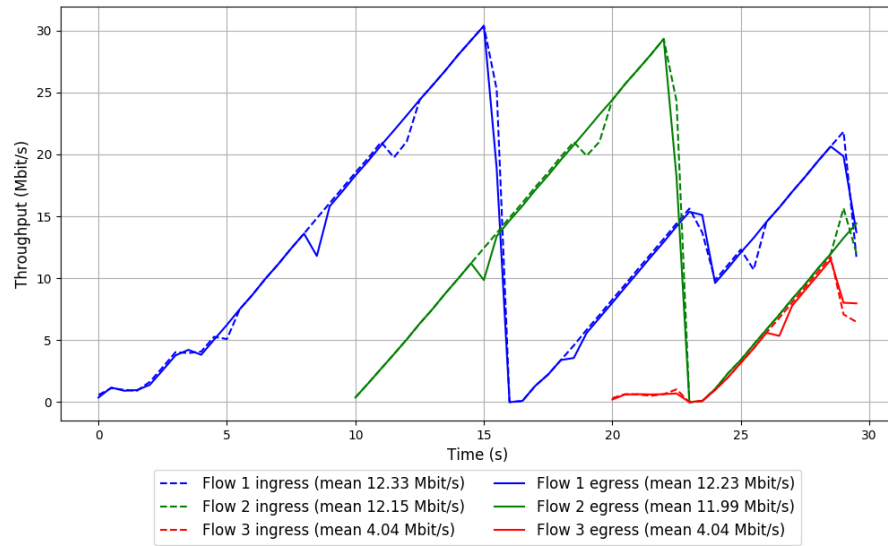
-- Flow 3:

Average throughput: 4.04 Mbit/s

95th percentile per-packet one-way delay: 47.910 ms

Loss rate: 0.41%

Run 9: Report of LEDBAT — Data Link

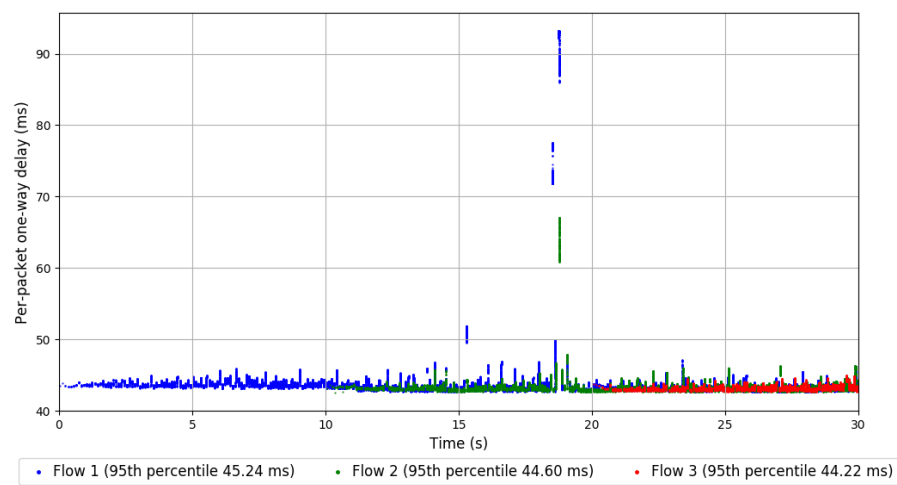
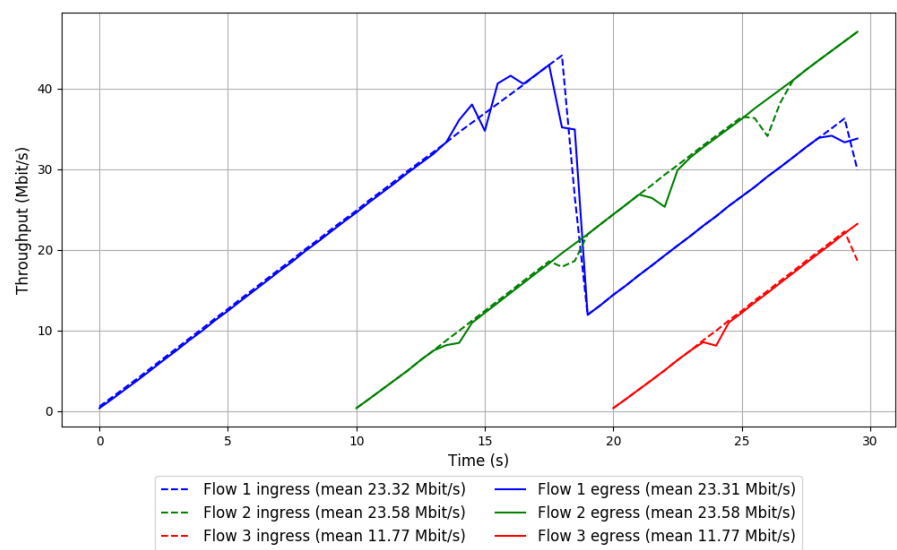


```
Run 10: Statistics of LEDBAT

Start at: 2018-01-17 21:05:34
End at: 2018-01-17 21:06:04

# Below is generated by plot.py at 2018-01-18 00:01:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.82 Mbit/s
95th percentile per-packet one-way delay: 44.862 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 23.31 Mbit/s
95th percentile per-packet one-way delay: 45.243 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 23.58 Mbit/s
95th percentile per-packet one-way delay: 44.598 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.77 Mbit/s
95th percentile per-packet one-way delay: 44.218 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

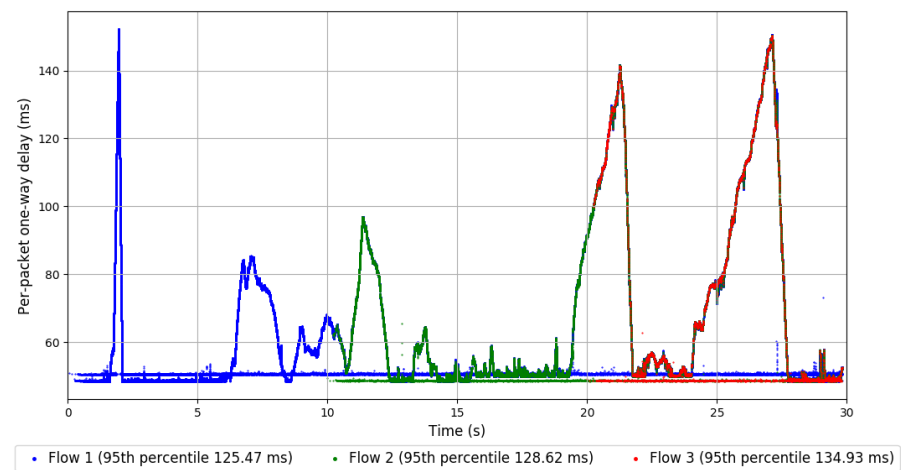
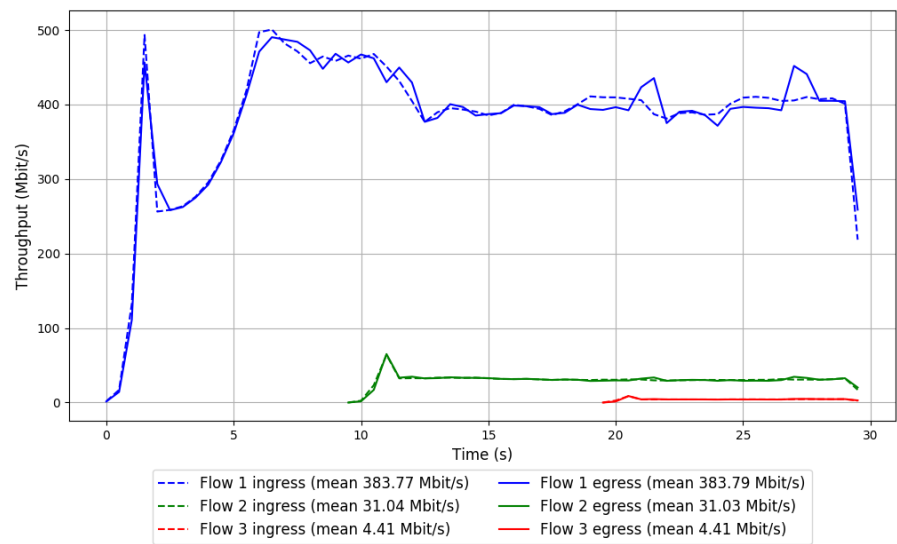


```
Run 1: Statistics of PCC

Start at: 2018-01-17 18:38:09
End at: 2018-01-17 18:38:39

# Below is generated by plot.py at 2018-01-18 00:06:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 405.91 Mbit/s
95th percentile per-packet one-way delay: 125.922 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 383.79 Mbit/s
95th percentile per-packet one-way delay: 125.473 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.03 Mbit/s
95th percentile per-packet one-way delay: 128.623 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.41 Mbit/s
95th percentile per-packet one-way delay: 134.932 ms
Loss rate: 0.00%
```

Run 1: Report of PCC — Data Link

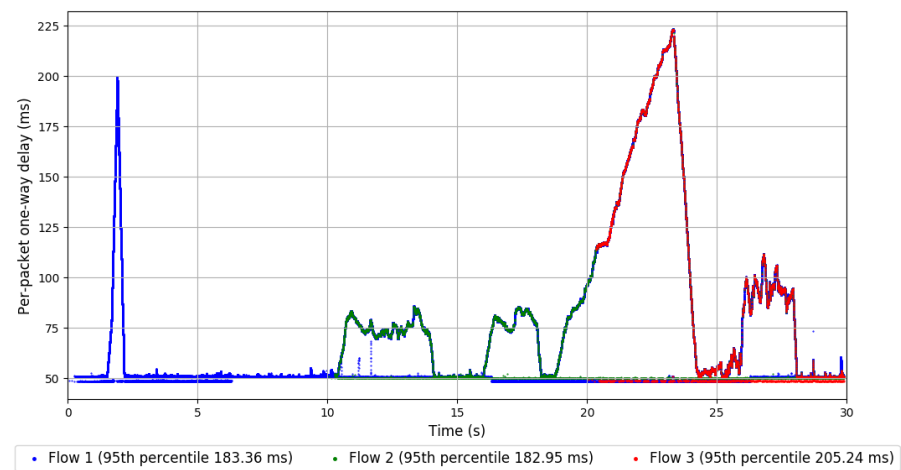
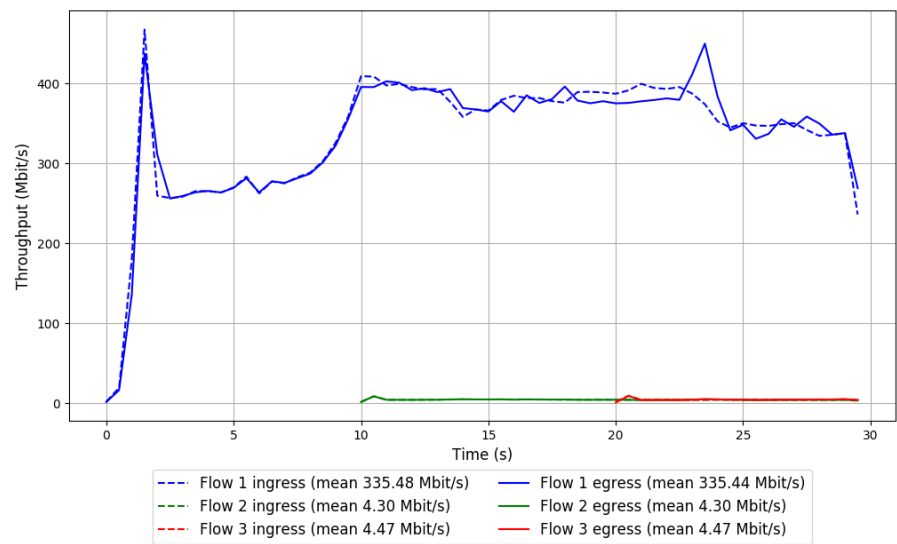


```
Run 2: Statistics of PCC

Start at: 2018-01-17 18:55:09
End at: 2018-01-17 18:55:39

# Below is generated by plot.py at 2018-01-18 00:06:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 339.77 Mbit/s
95th percentile per-packet one-way delay: 183.446 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 335.44 Mbit/s
95th percentile per-packet one-way delay: 183.358 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 182.950 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 205.244 ms
Loss rate: 0.00%
```


Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-17 19:11:46

End at: 2018-01-17 19:12:16

Below is generated by plot.py at 2018-01-18 00:06:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 396.40 Mbit/s

95th percentile per-packet one-way delay: 191.066 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 361.79 Mbit/s

95th percentile per-packet one-way delay: 190.733 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 36.82 Mbit/s

95th percentile per-packet one-way delay: 192.229 ms

Loss rate: 1.24%

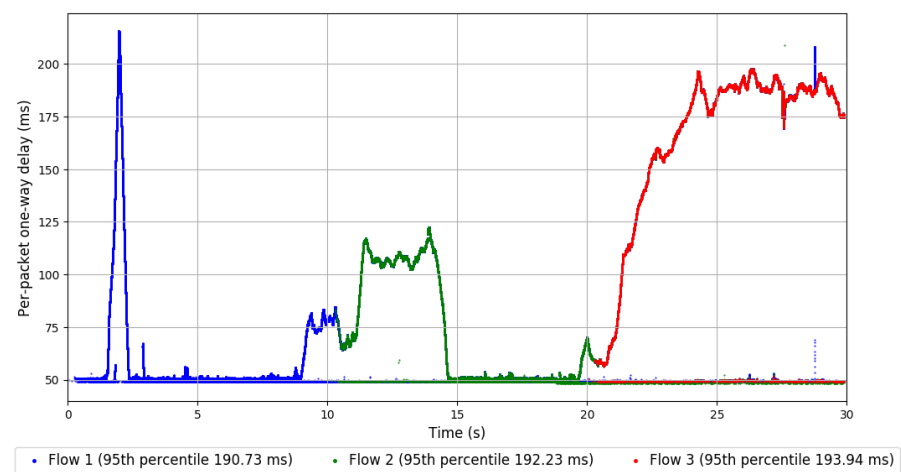
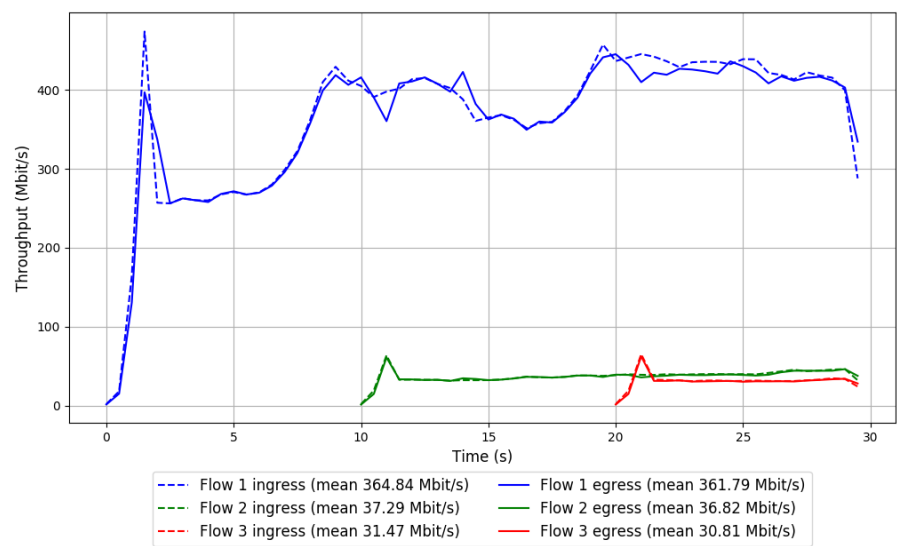
-- Flow 3:

Average throughput: 30.81 Mbit/s

95th percentile per-packet one-way delay: 193.938 ms

Loss rate: 2.09%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-17 19:28:31

End at: 2018-01-17 19:29:01

Below is generated by plot.py at 2018-01-18 00:06:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 341.73 Mbit/s

95th percentile per-packet one-way delay: 137.078 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 294.81 Mbit/s

95th percentile per-packet one-way delay: 136.747 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 68.48 Mbit/s

95th percentile per-packet one-way delay: 139.415 ms

Loss rate: 0.12%

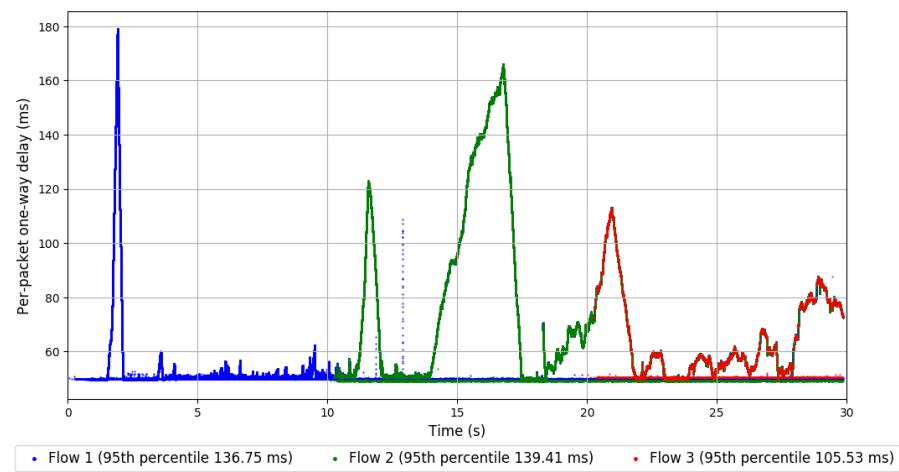
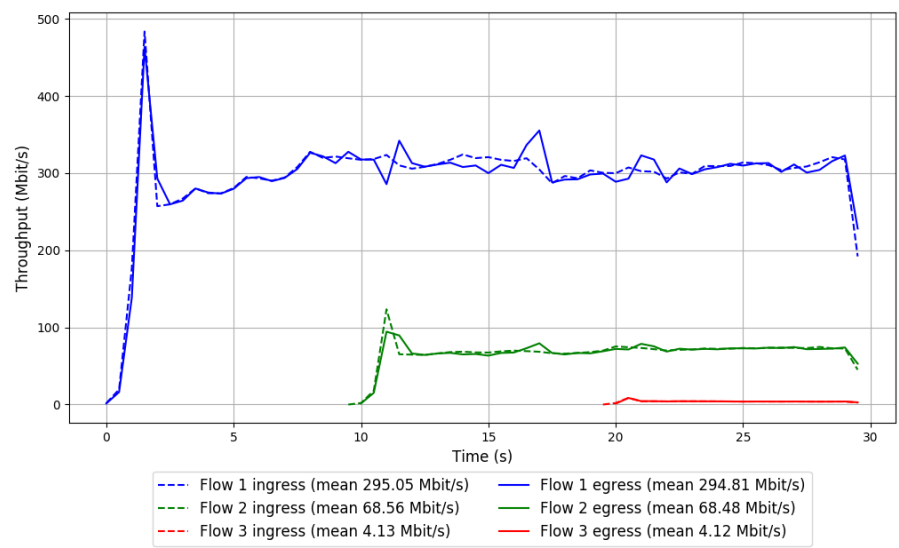
-- Flow 3:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 105.530 ms

Loss rate: 0.24%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-17 19:45:18

End at: 2018-01-17 19:45:48

Below is generated by plot.py at 2018-01-18 00:06:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 375.14 Mbit/s

95th percentile per-packet one-way delay: 220.280 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 327.93 Mbit/s

95th percentile per-packet one-way delay: 219.962 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 68.72 Mbit/s

95th percentile per-packet one-way delay: 222.622 ms

Loss rate: 1.33%

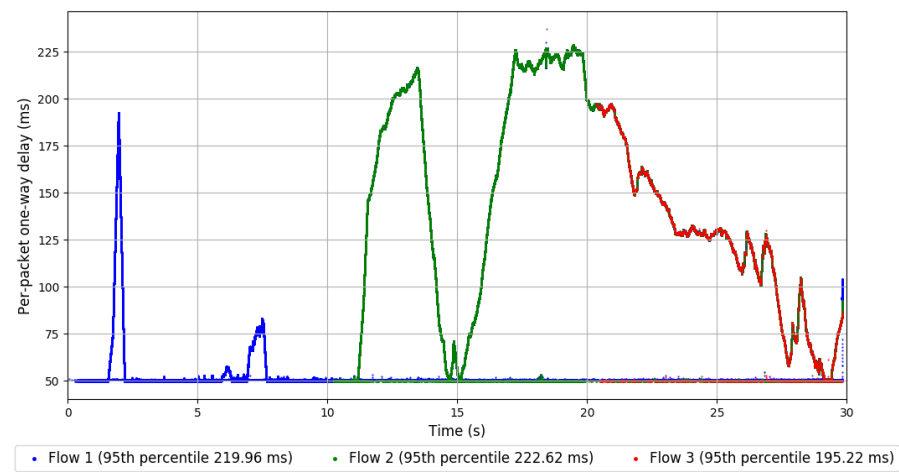
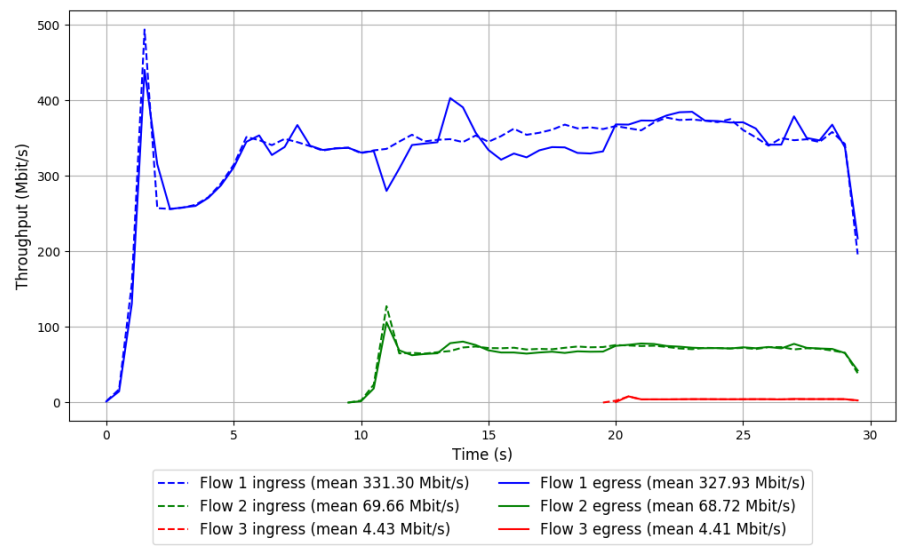
-- Flow 3:

Average throughput: 4.41 Mbit/s

95th percentile per-packet one-way delay: 195.225 ms

Loss rate: 0.30%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-17 20:02:04

End at: 2018-01-17 20:02:34

Below is generated by plot.py at 2018-01-18 00:07:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 359.55 Mbit/s

95th percentile per-packet one-way delay: 128.469 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 355.84 Mbit/s

95th percentile per-packet one-way delay: 128.538 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 124.989 ms

Loss rate: 0.00%

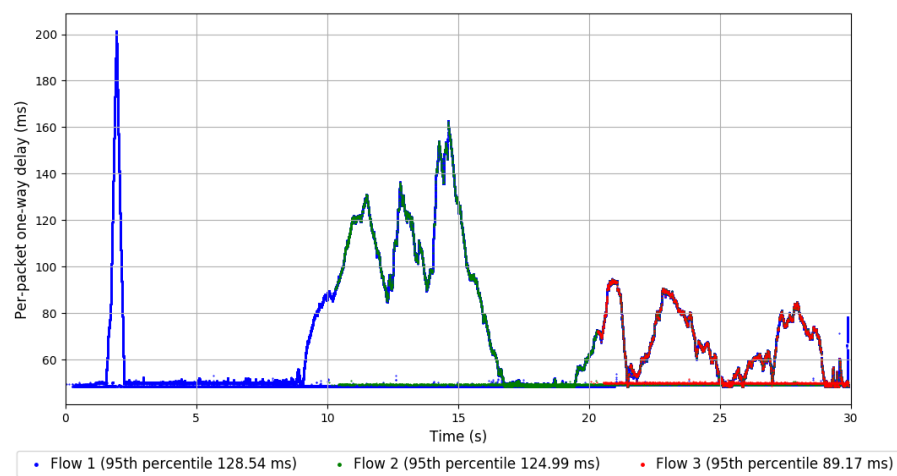
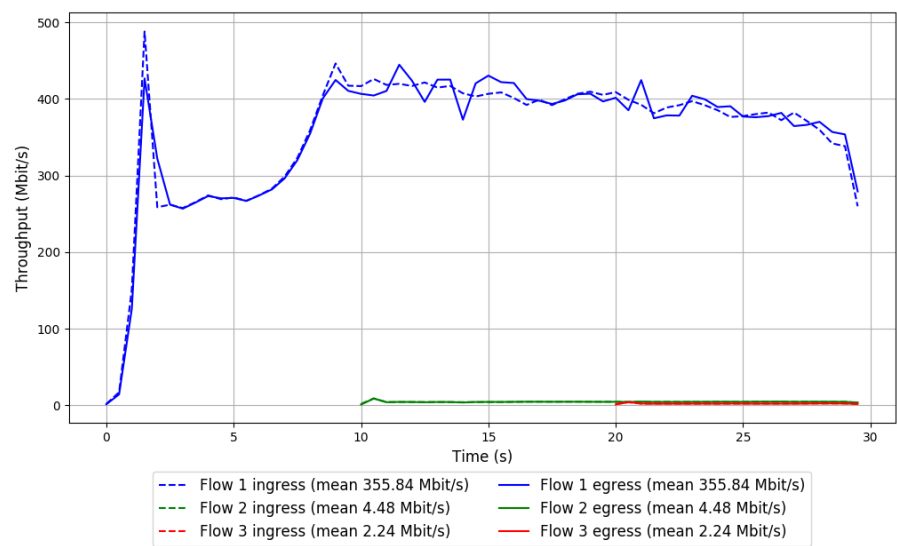
-- Flow 3:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 89.172 ms

Loss rate: 0.16%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-17 20:18:44

End at: 2018-01-17 20:19:14

Below is generated by plot.py at 2018-01-18 00:07:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 366.82 Mbit/s

95th percentile per-packet one-way delay: 222.034 ms

Loss rate: 2.55%

-- Flow 1:

Average throughput: 280.17 Mbit/s

95th percentile per-packet one-way delay: 221.787 ms

Loss rate: 2.40%

-- Flow 2:

Average throughput: 129.49 Mbit/s

95th percentile per-packet one-way delay: 222.575 ms

Loss rate: 3.02%

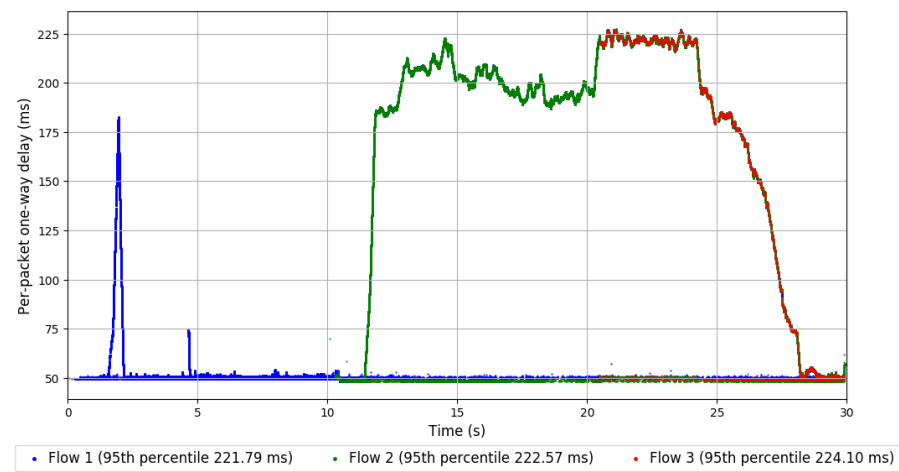
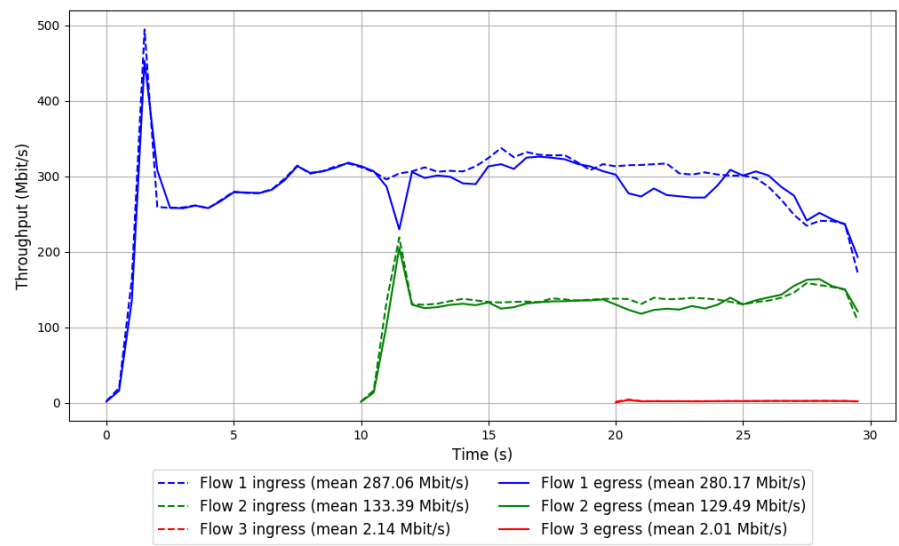
-- Flow 3:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 224.099 ms

Loss rate: 5.66%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-17 20:35:17

End at: 2018-01-17 20:35:47

Below is generated by plot.py at 2018-01-18 00:08:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 372.12 Mbit/s

95th percentile per-packet one-way delay: 164.330 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 340.12 Mbit/s

95th percentile per-packet one-way delay: 165.064 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 17.97 Mbit/s

95th percentile per-packet one-way delay: 165.603 ms

Loss rate: 0.01%

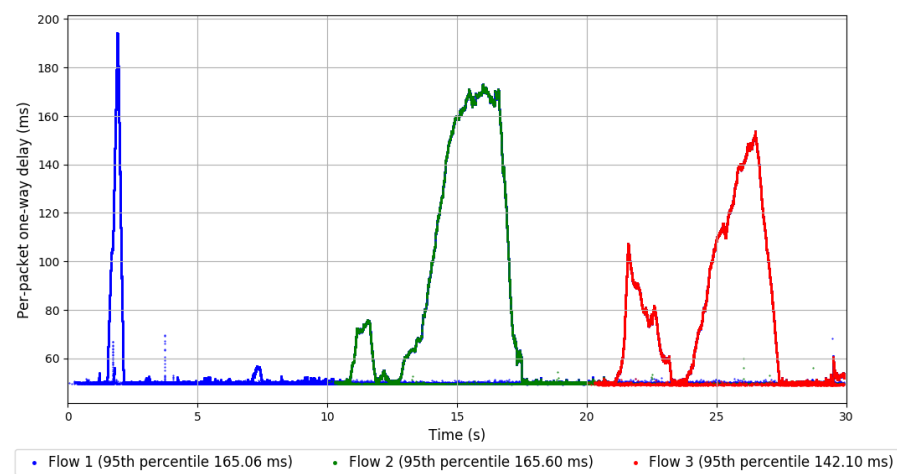
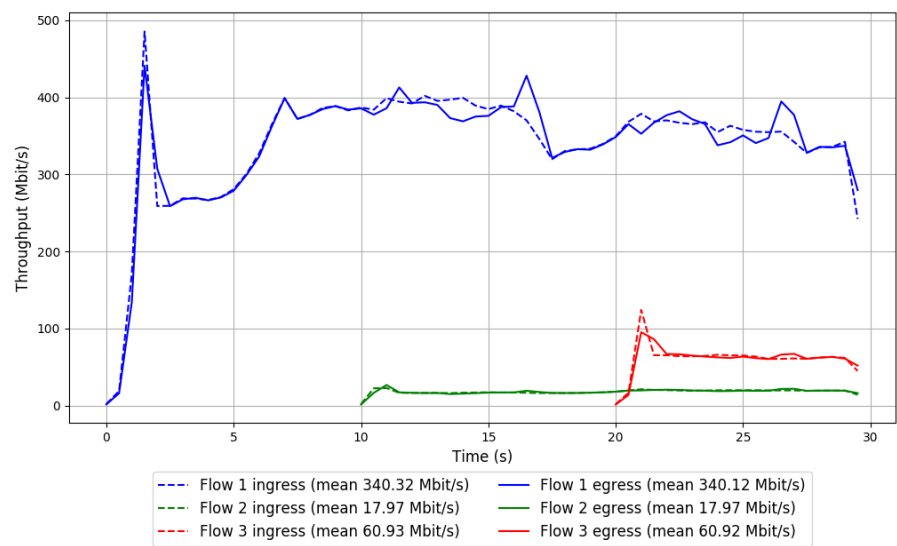
-- Flow 3:

Average throughput: 60.92 Mbit/s

95th percentile per-packet one-way delay: 142.097 ms

Loss rate: 0.02%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-17 20:52:05

End at: 2018-01-17 20:52:35

Below is generated by plot.py at 2018-01-18 00:13:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 442.63 Mbit/s

95th percentile per-packet one-way delay: 214.002 ms

Loss rate: 8.12%

-- Flow 1:

Average throughput: 438.67 Mbit/s

95th percentile per-packet one-way delay: 213.976 ms

Loss rate: 8.08%

-- Flow 2:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 214.864 ms

Loss rate: 10.48%

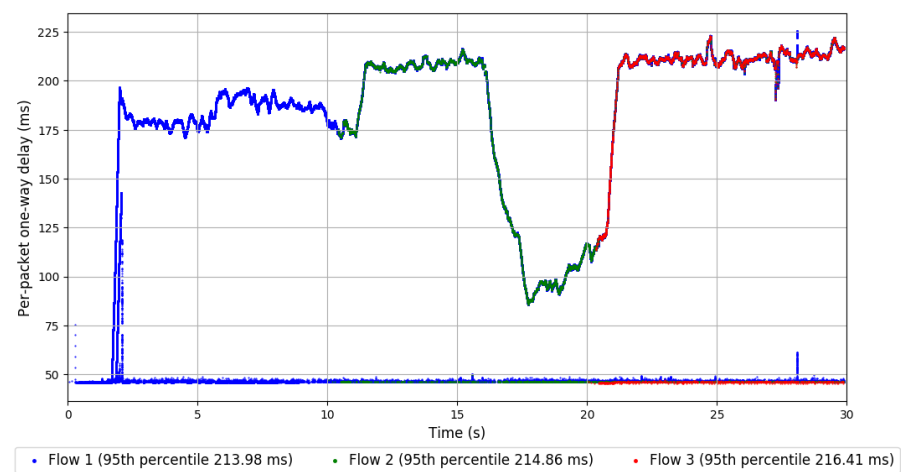
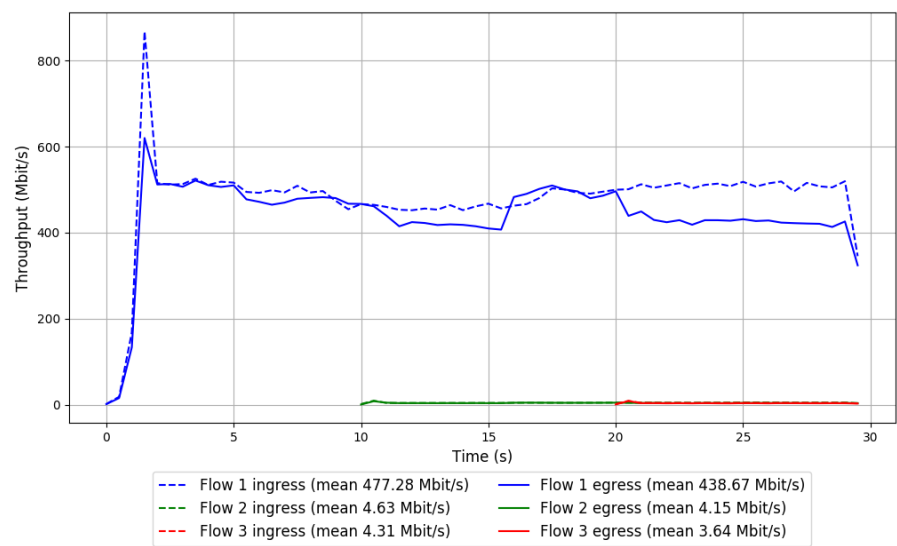
-- Flow 3:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 216.412 ms

Loss rate: 15.42%

Run 9: Report of PCC — Data Link

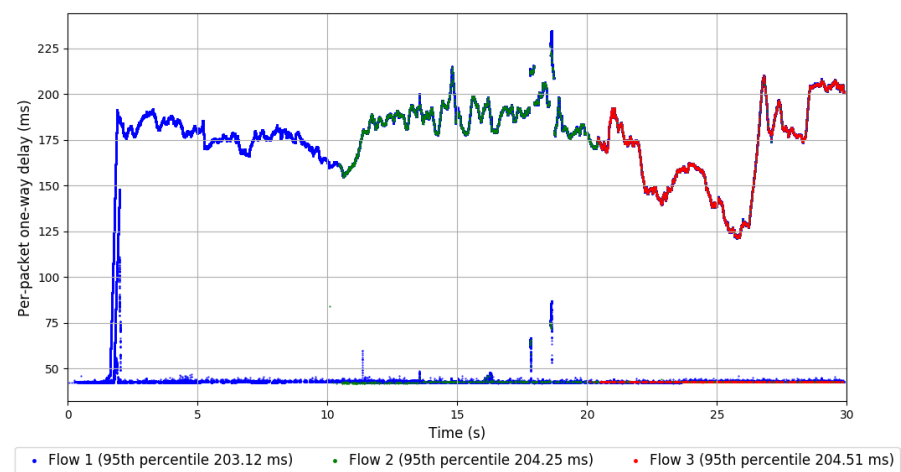
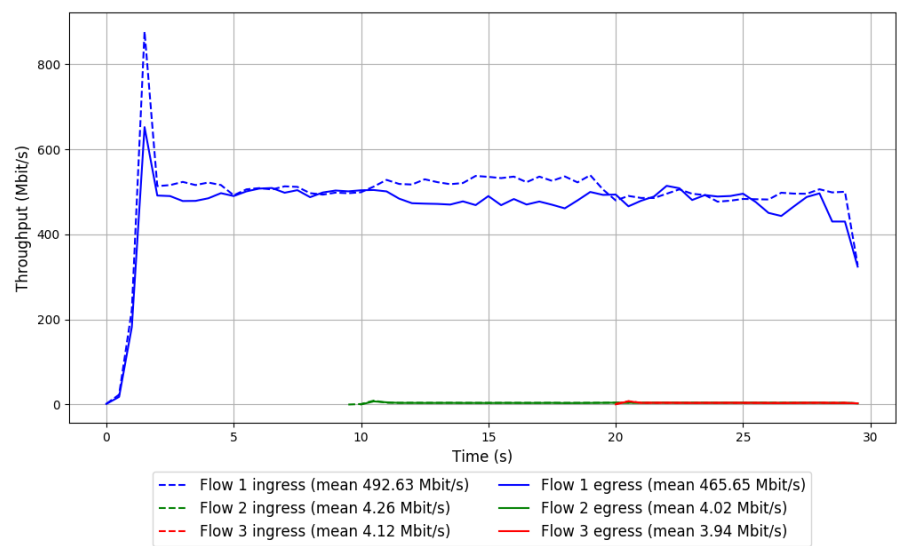


```
Run 10: Statistics of PCC

Start at: 2018-01-17 21:08:31
End at: 2018-01-17 21:09:01

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 469.62 Mbit/s
95th percentile per-packet one-way delay: 203.156 ms
Loss rate: 5.47%
-- Flow 1:
Average throughput: 465.65 Mbit/s
95th percentile per-packet one-way delay: 203.119 ms
Loss rate: 5.47%
-- Flow 2:
Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 204.251 ms
Loss rate: 5.76%
-- Flow 3:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 204.515 ms
Loss rate: 4.47%
```


Run 10: Report of PCC — Data Link

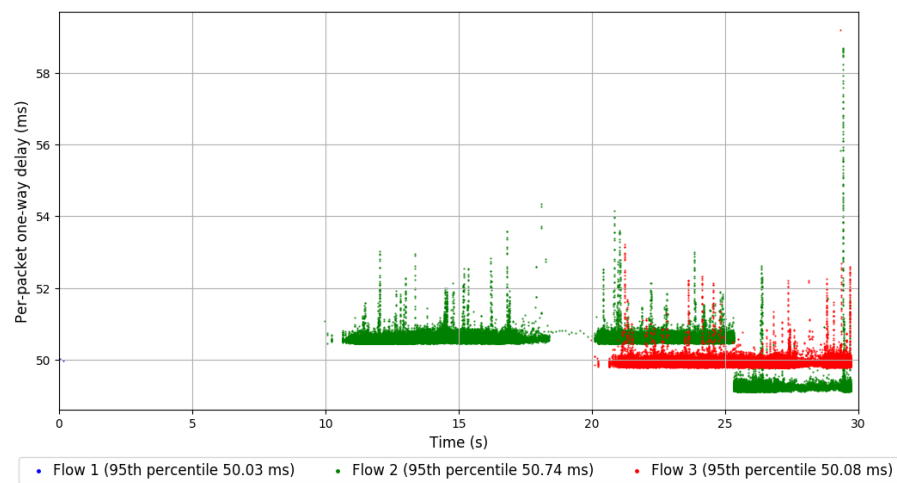
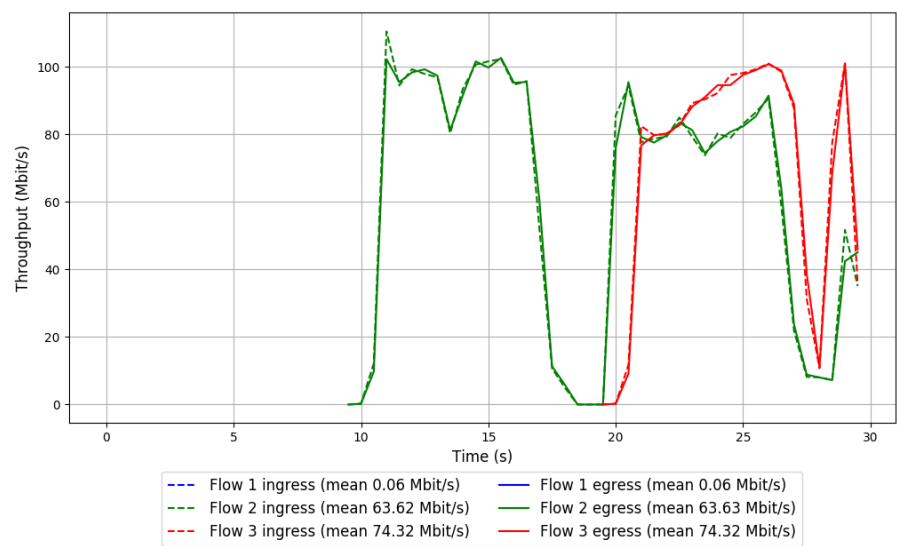


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-17 18:32:49
End at: 2018-01-17 18:33:19

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.77 Mbit/s
95th percentile per-packet one-way delay: 50.701 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 50.032 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 63.63 Mbit/s
95th percentile per-packet one-way delay: 50.737 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 74.32 Mbit/s
95th percentile per-packet one-way delay: 50.081 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link

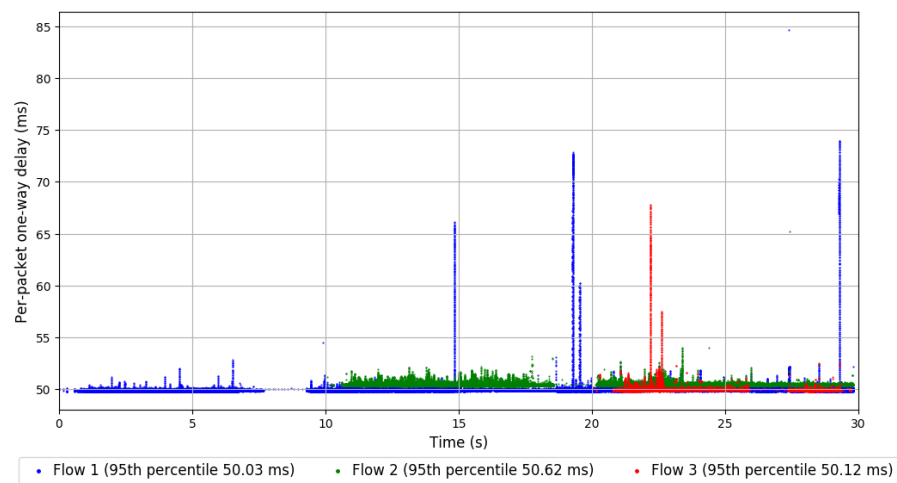
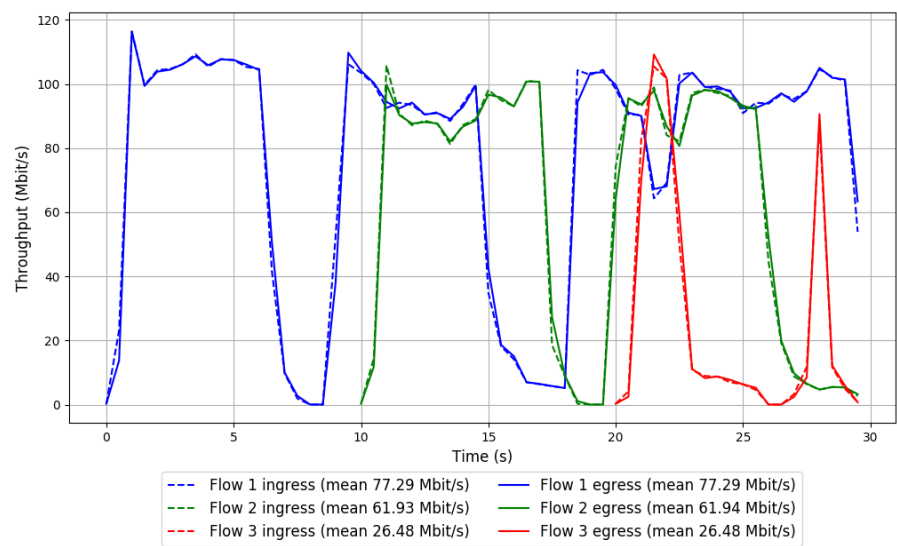


```
Run 2: Statistics of QUIC Cubic

Start at: 2018-01-17 18:49:40
End at: 2018-01-17 18:50:10

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.96 Mbit/s
95th percentile per-packet one-way delay: 50.524 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 77.29 Mbit/s
95th percentile per-packet one-way delay: 50.035 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.94 Mbit/s
95th percentile per-packet one-way delay: 50.620 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 26.48 Mbit/s
95th percentile per-packet one-way delay: 50.116 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-17 19:06:18

End at: 2018-01-17 19:06:48

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.10 Mbit/s

95th percentile per-packet one-way delay: 50.578 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 62.01 Mbit/s

95th percentile per-packet one-way delay: 50.616 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.27 Mbit/s

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

Loss rate: 0.00%

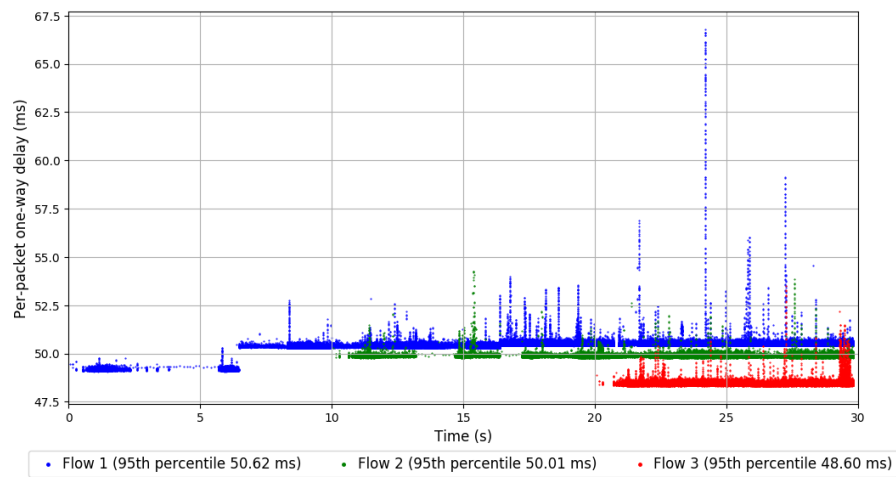
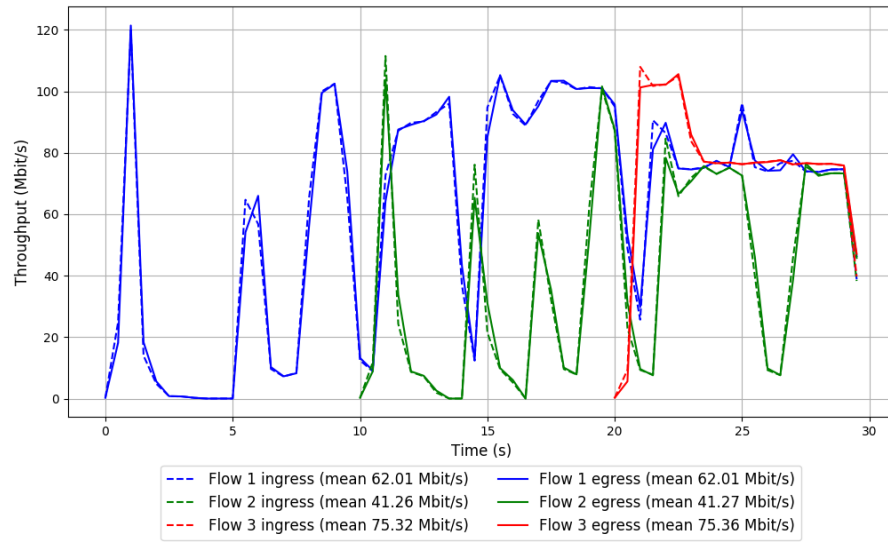
-- Flow 3:

Average throughput: 75.36 Mbit/s

95th percentile per-packet one-way delay: 48.599 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-17 19:23:12

End at: 2018-01-17 19:23:42

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.29 Mbit/s

95th percentile per-packet one-way delay: 50.459 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.71 Mbit/s

95th percentile per-packet one-way delay: 50.493 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 76.97 Mbit/s

95th percentile per-packet one-way delay: 49.277 ms

Loss rate: 0.00%

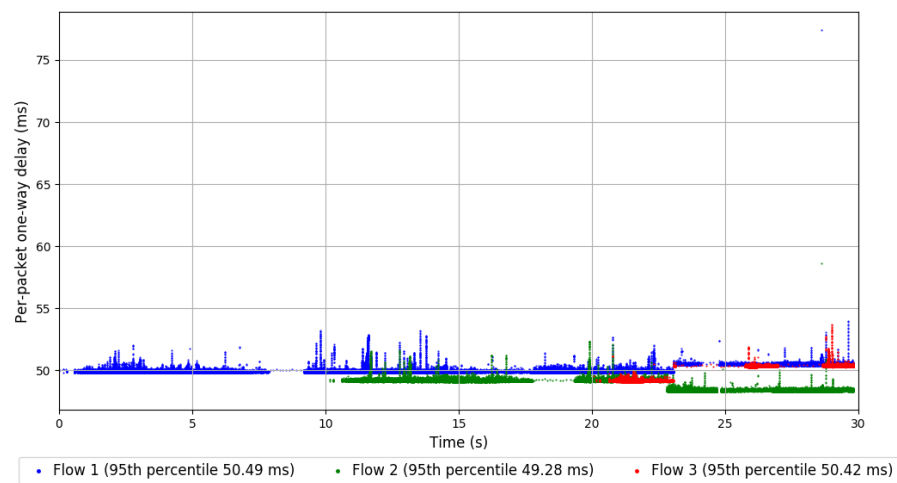
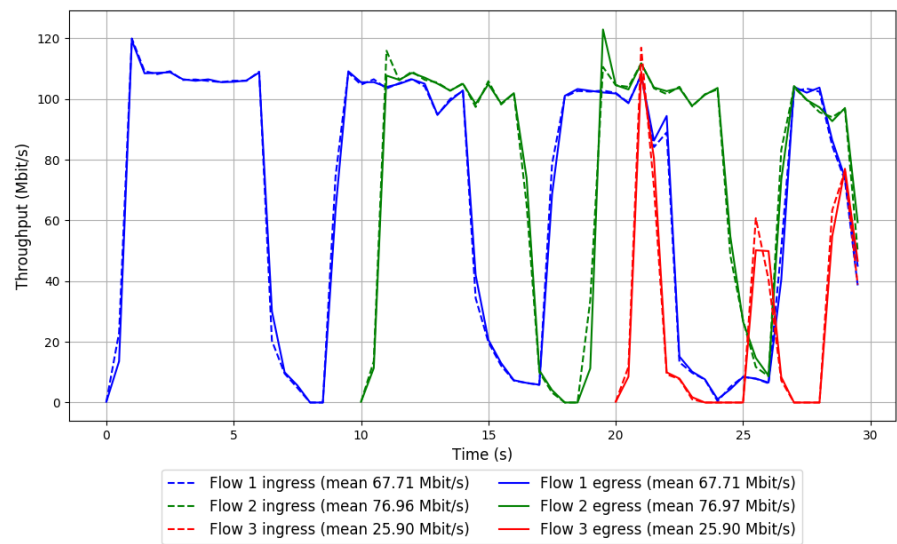
-- Flow 3:

Average throughput: 25.90 Mbit/s

95th percentile per-packet one-way delay: 50.418 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-17 19:40:07

End at: 2018-01-17 19:40:37

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.43 Mbit/s

95th percentile per-packet one-way delay: 50.368 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.53 Mbit/s

95th percentile per-packet one-way delay: 49.323 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.98 Mbit/s

95th percentile per-packet one-way delay: 50.427 ms

Loss rate: 0.00%

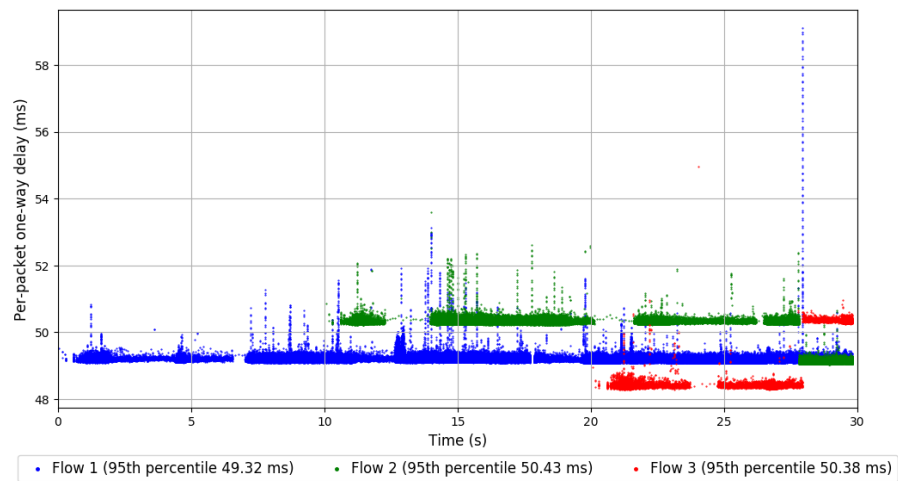
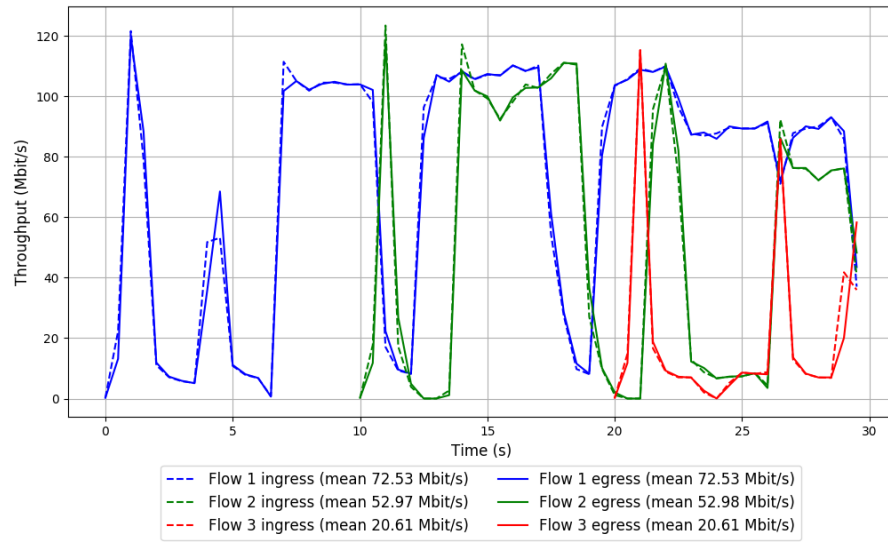
-- Flow 3:

Average throughput: 20.61 Mbit/s

95th percentile per-packet one-way delay: 50.385 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-17 19:56:42

End at: 2018-01-17 19:57:12

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.49 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 79.39 Mbit/s

95th percentile per-packet one-way delay: 49.913 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.10 Mbit/s

95th percentile per-packet one-way delay: 48.536 ms

Loss rate: 0.00%

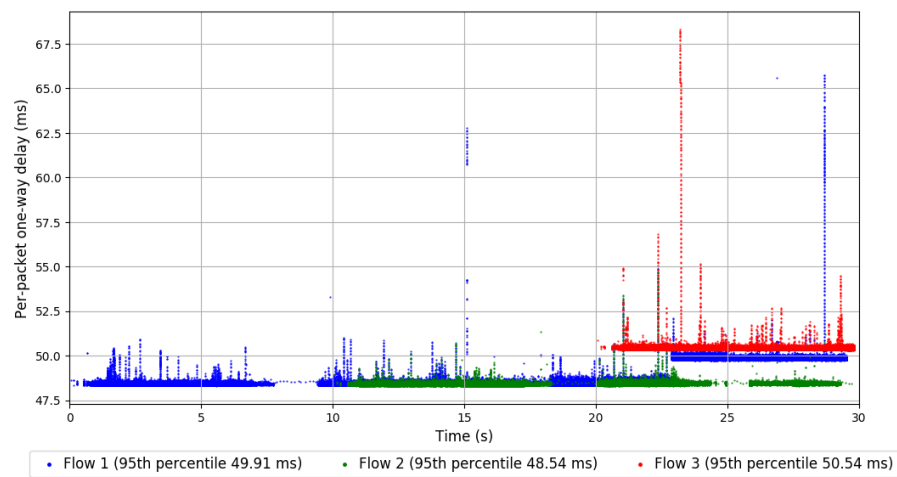
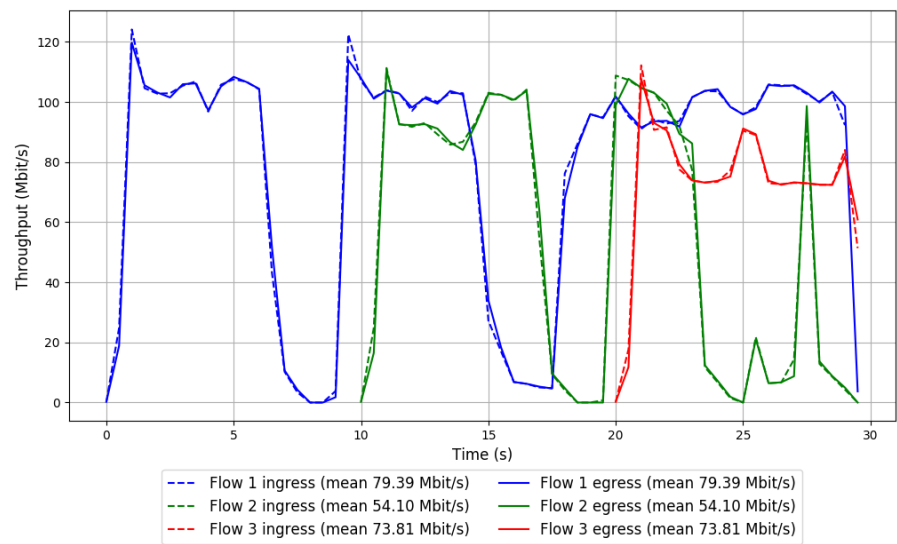
-- Flow 3:

Average throughput: 73.81 Mbit/s

95th percentile per-packet one-way delay: 50.540 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-17 20:13:15

End at: 2018-01-17 20:13:45

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.98 Mbit/s

95th percentile per-packet one-way delay: 50.292 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.80 Mbit/s

95th percentile per-packet one-way delay: 49.933 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.63 Mbit/s

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

Loss rate: 0.00%

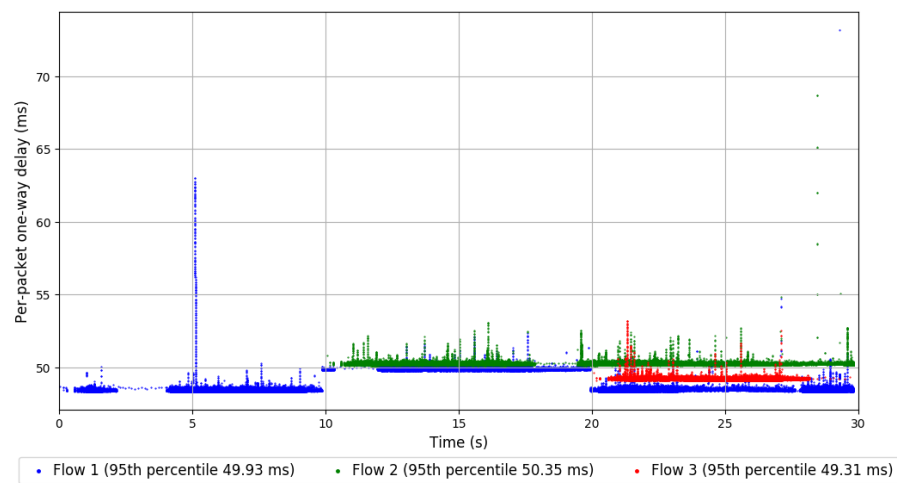
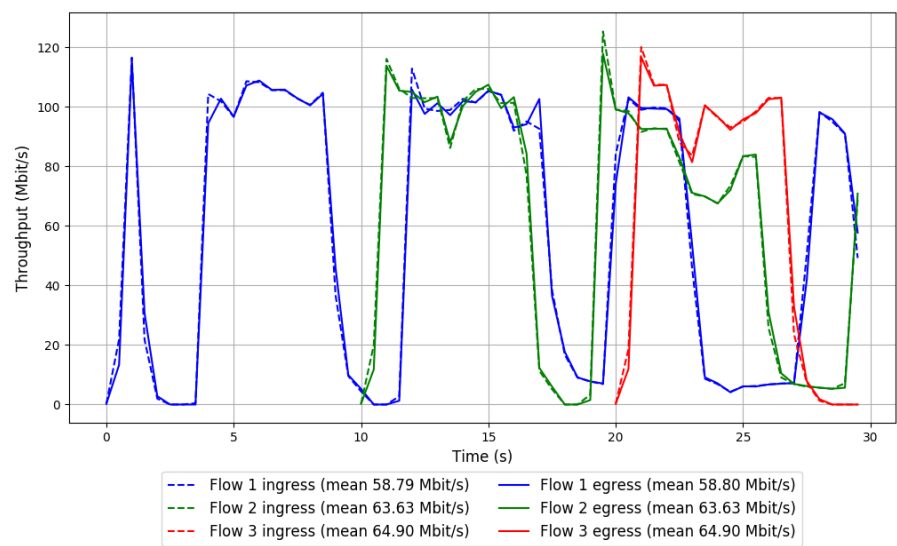
-- Flow 3:

Average throughput: 64.90 Mbit/s

95th percentile per-packet one-way delay: 49.312 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-17 20:29:52

End at: 2018-01-17 20:30:22

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.41 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 79.92 Mbit/s

95th percentile per-packet one-way delay: 50.359 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.70 Mbit/s

95th percentile per-packet one-way delay: 49.444 ms

Loss rate: 0.00%

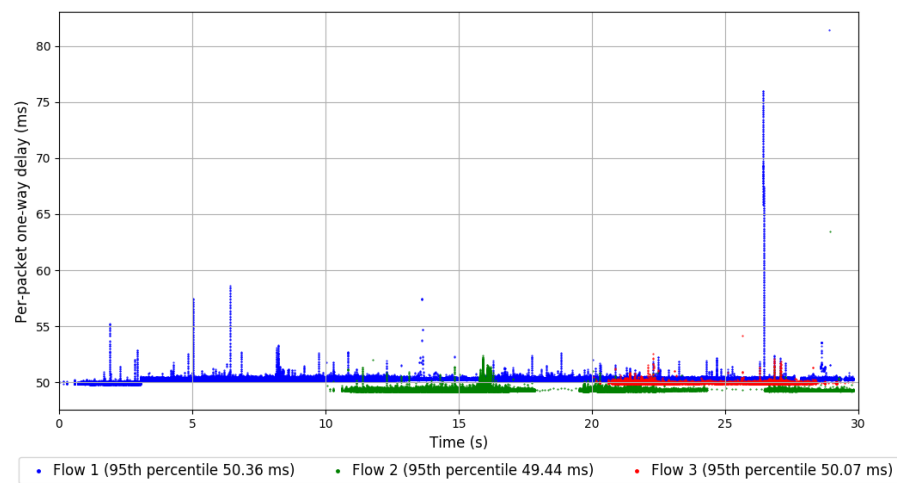
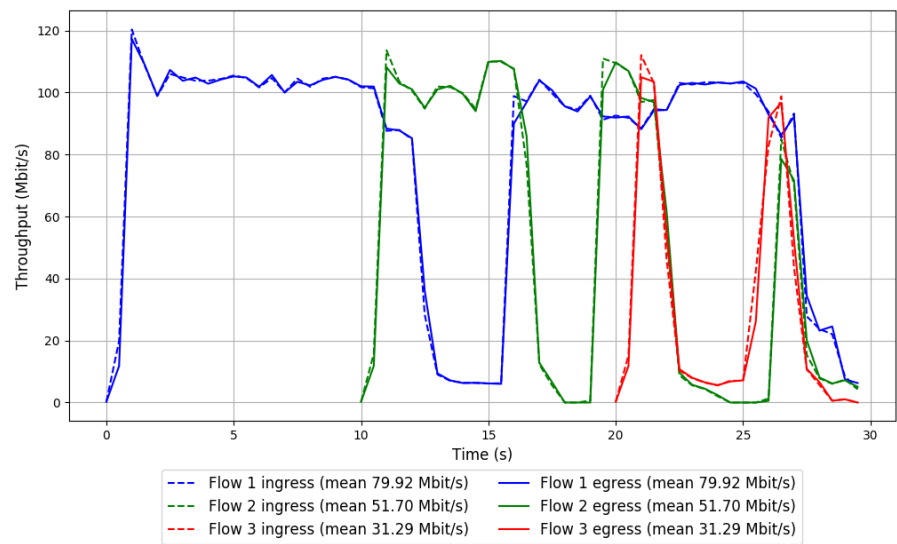
-- Flow 3:

Average throughput: 31.29 Mbit/s

95th percentile per-packet one-way delay: 50.072 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-17 20:46:33

End at: 2018-01-17 20:47:03

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.14 Mbit/s

95th percentile per-packet one-way delay: 47.350 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.94 Mbit/s

95th percentile per-packet one-way delay: 47.345 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.09 Mbit/s

95th percentile per-packet one-way delay: 47.362 ms

Loss rate: 0.00%

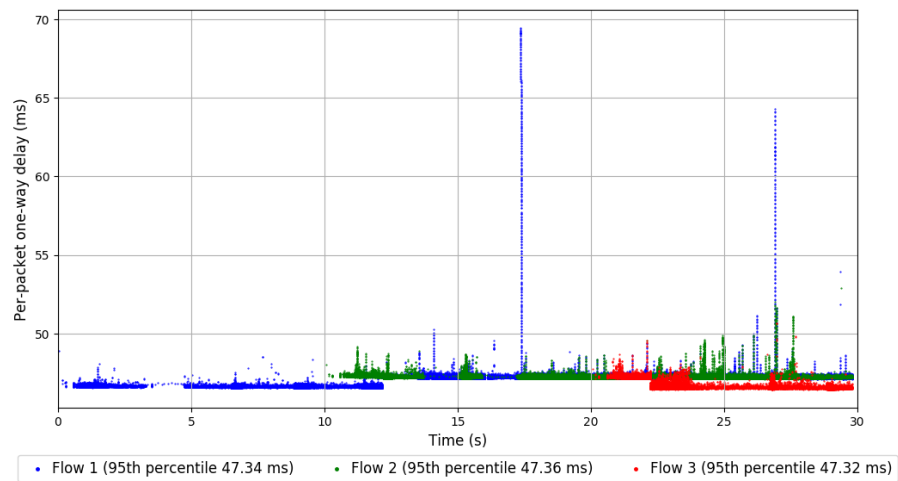
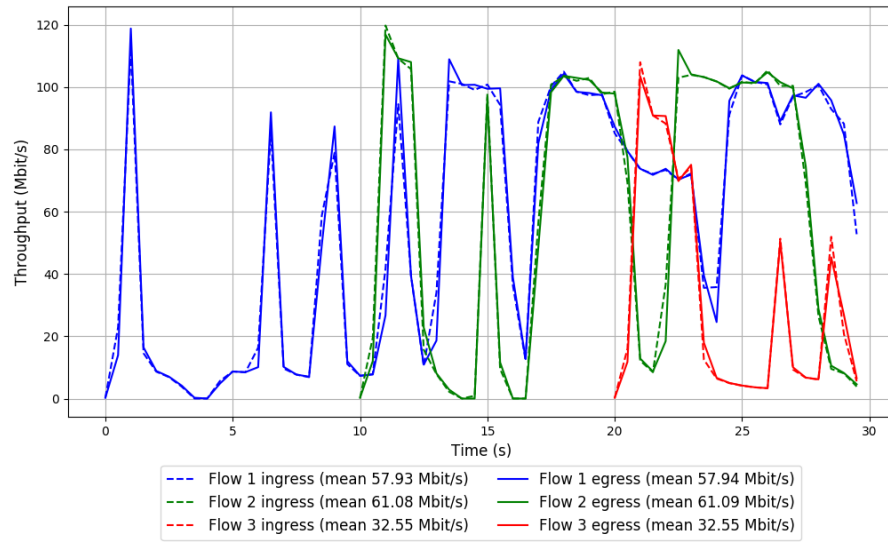
-- Flow 3:

Average throughput: 32.55 Mbit/s

95th percentile per-packet one-way delay: 47.317 ms

Loss rate: 0.01%

Run 9: Report of QUIC Cubic — Data Link

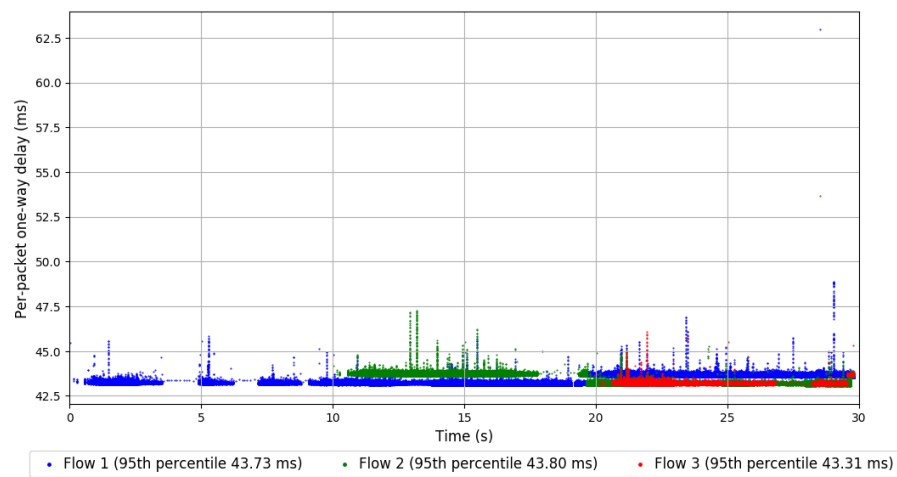
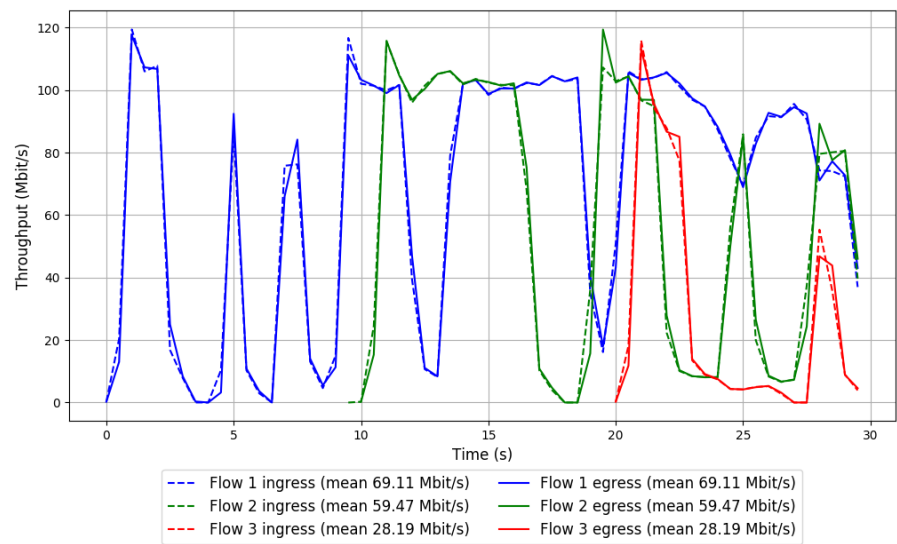


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-17 21:03:05
End at: 2018-01-17 21:03:35

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 117.80 Mbit/s
95th percentile per-packet one-way delay: 43.761 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.11 Mbit/s
95th percentile per-packet one-way delay: 43.729 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.47 Mbit/s
95th percentile per-packet one-way delay: 43.799 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.19 Mbit/s
95th percentile per-packet one-way delay: 43.315 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

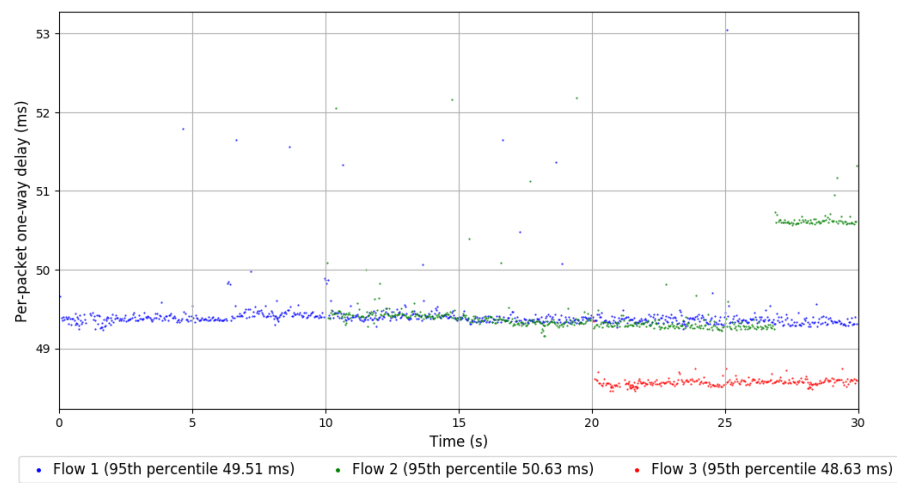
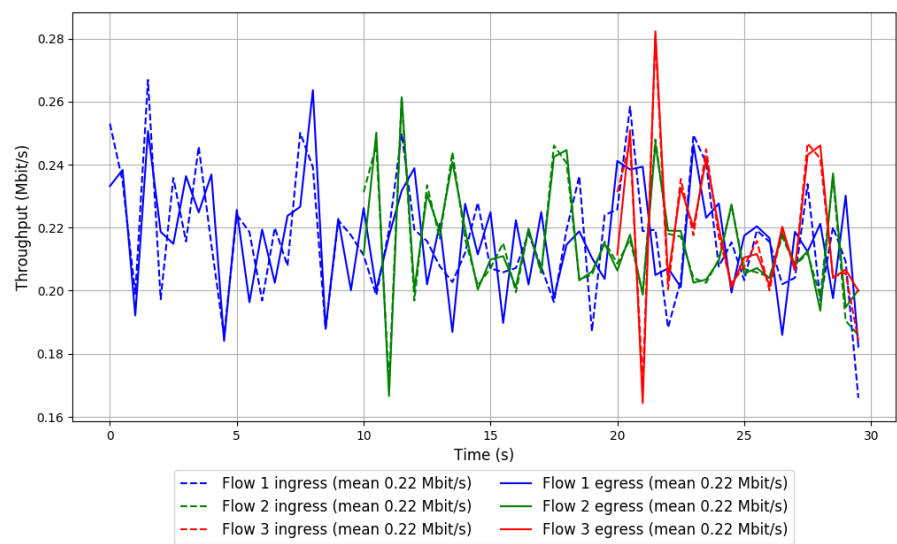


```
Run 1: Statistics of SCReAM

Start at: 2018-01-17 18:36:08
End at: 2018-01-17 18:36:38

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.589 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.508 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.628 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.634 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

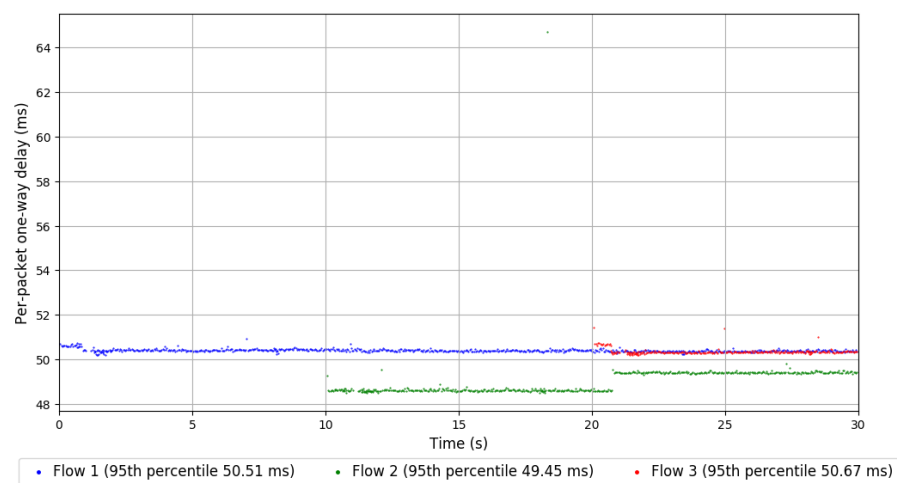
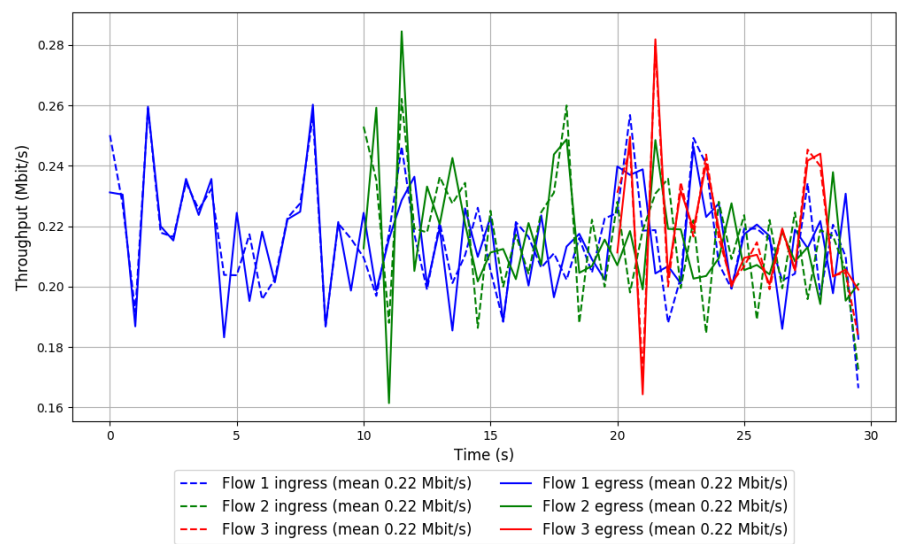


```
Run 2: Statistics of SCReAM

Start at: 2018-01-17 18:52:54
End at: 2018-01-17 18:53:24

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.482 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.511 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.451 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.671 ms
Loss rate: 0.00%
```


Run 2: Report of SReAM — Data Link

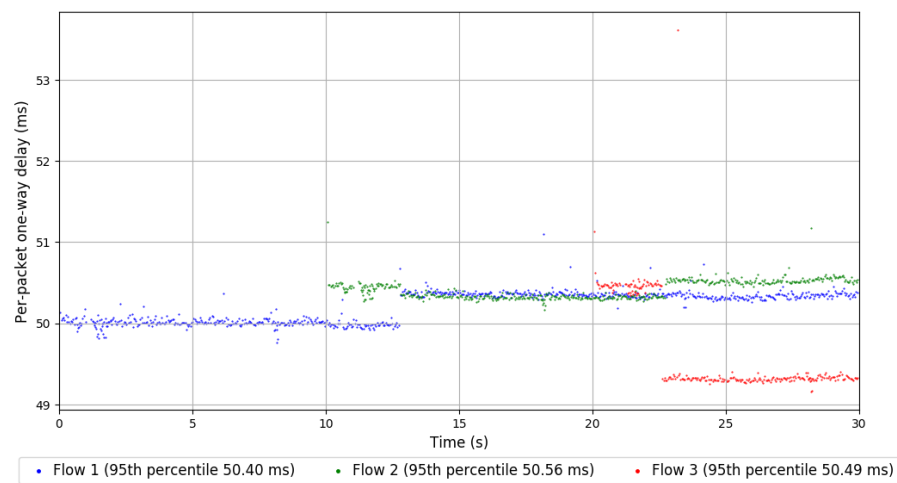
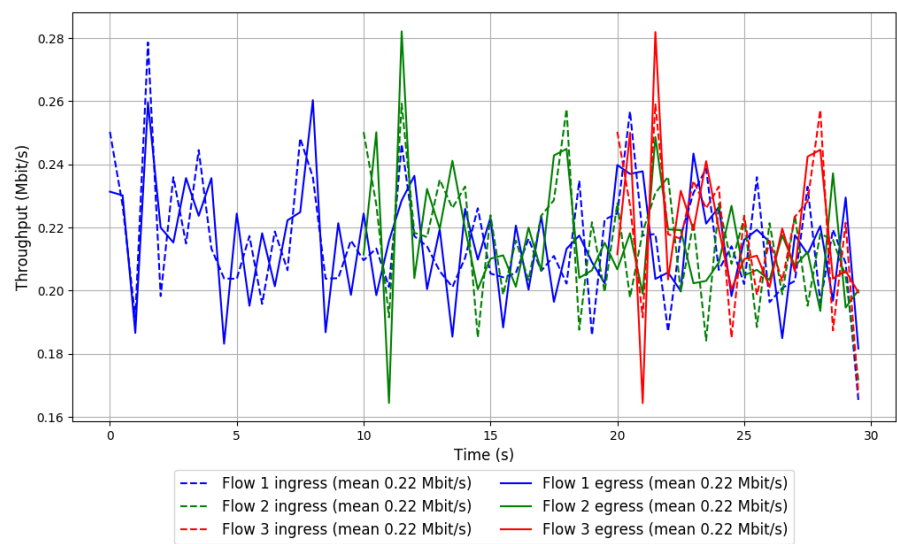


```
Run 3: Statistics of SCReAM

Start at: 2018-01-17 19:09:32
End at: 2018-01-17 19:10:02

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.532 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.395 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.563 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.495 ms
Loss rate: 0.00%
```

Run 3: Report of SReAM — Data Link

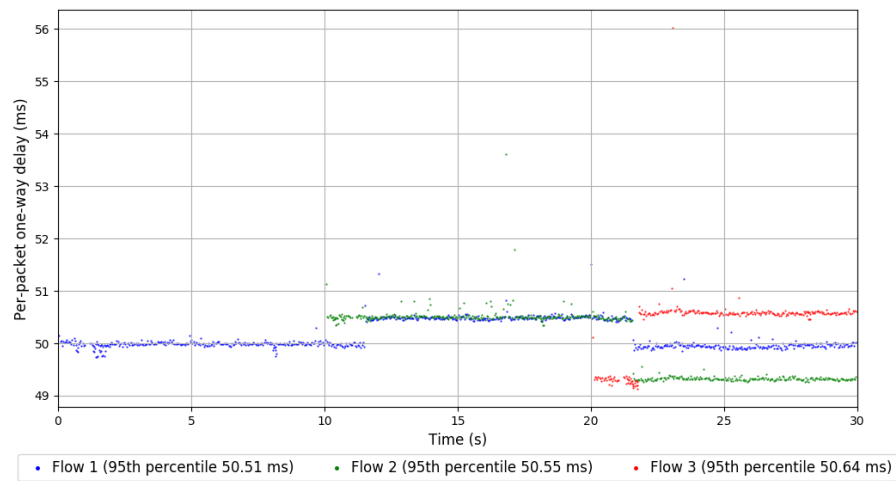
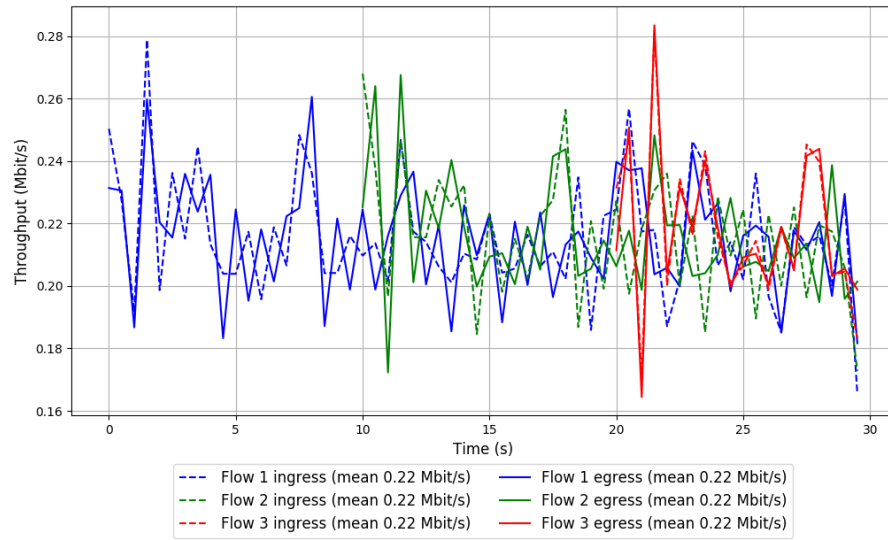


```
Run 4: Statistics of SCReAM

Start at: 2018-01-17 19:26:23
End at: 2018-01-17 19:26:53

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.598 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.512 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.549 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.637 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link

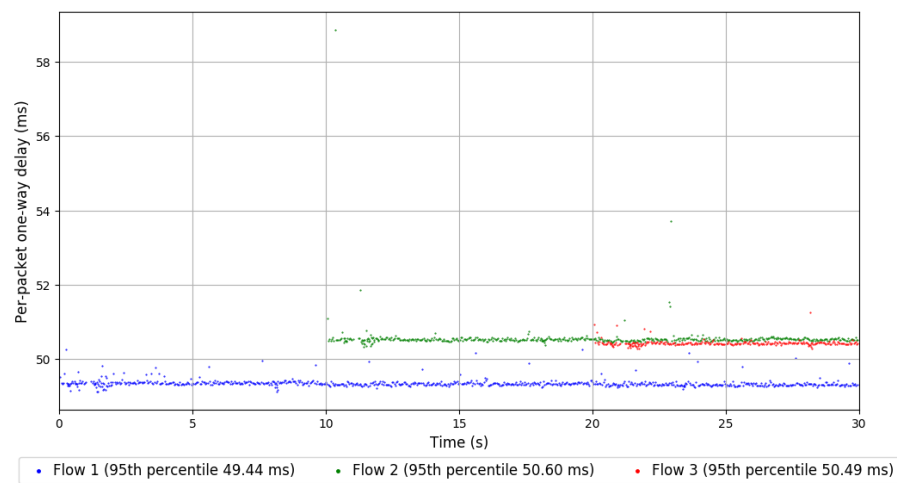
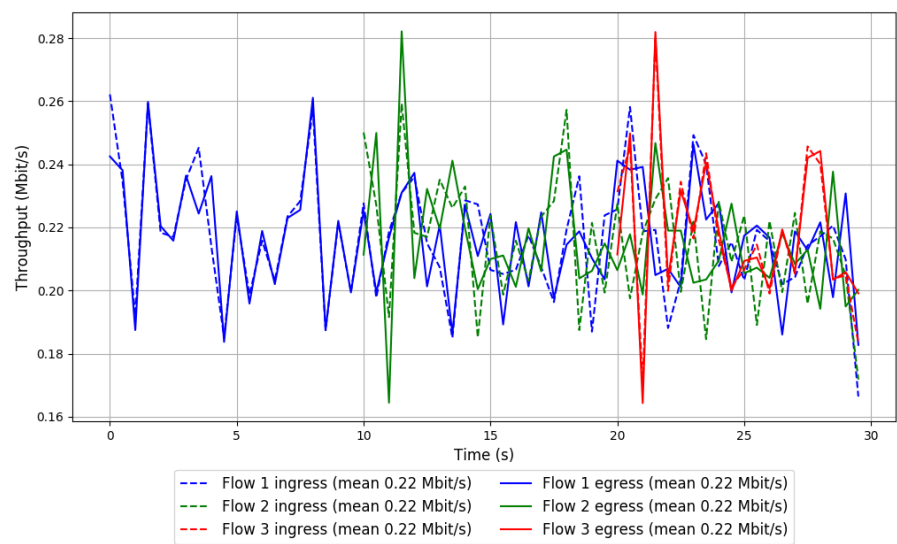


```
Run 5: Statistics of SCReAM

Start at: 2018-01-17 19:43:17
End at: 2018-01-17 19:43:47

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.572 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.442 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.598 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.490 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link

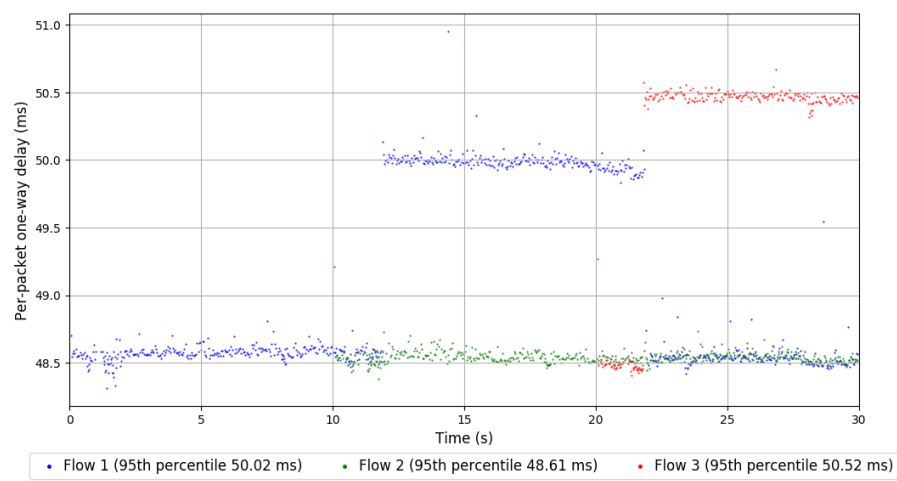
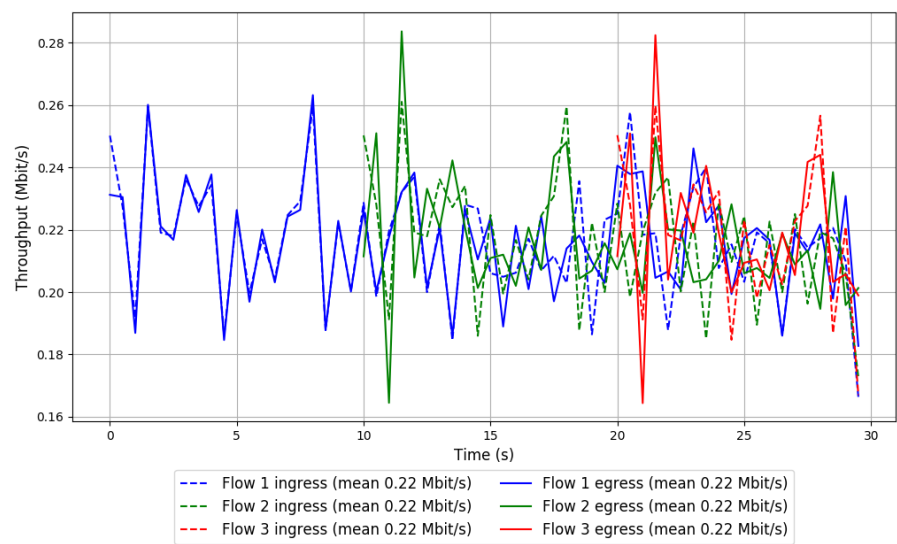


```
Run 6: Statistics of SReAM

Start at: 2018-01-17 19:59:53
End at: 2018-01-17 20:00:23

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.480 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.023 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.609 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.516 ms
Loss rate: 0.00%
```


Run 6: Report of SReAM — Data Link

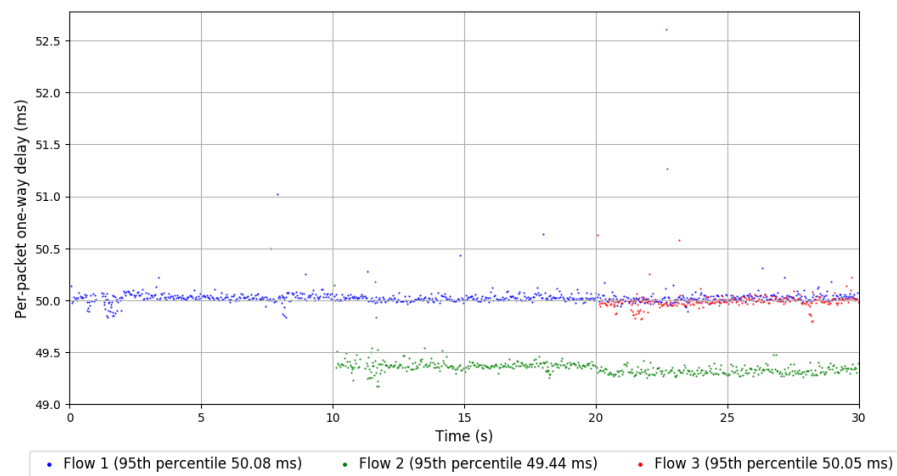
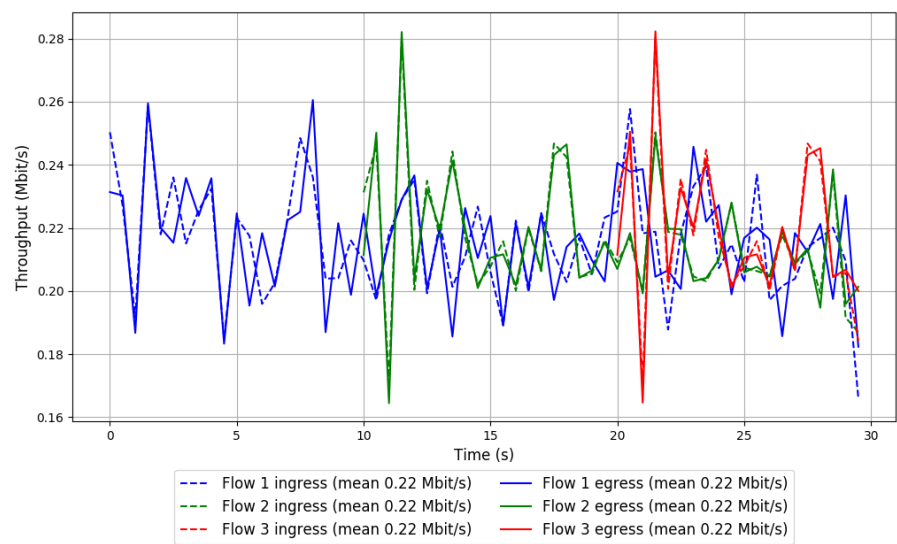


```
Run 7: Statistics of SReAM

Start at: 2018-01-17 20:16:29
End at: 2018-01-17 20:16:59

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.069 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.082 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.435 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.054 ms
Loss rate: 0.00%
```

Run 7: Report of SReAM — Data Link

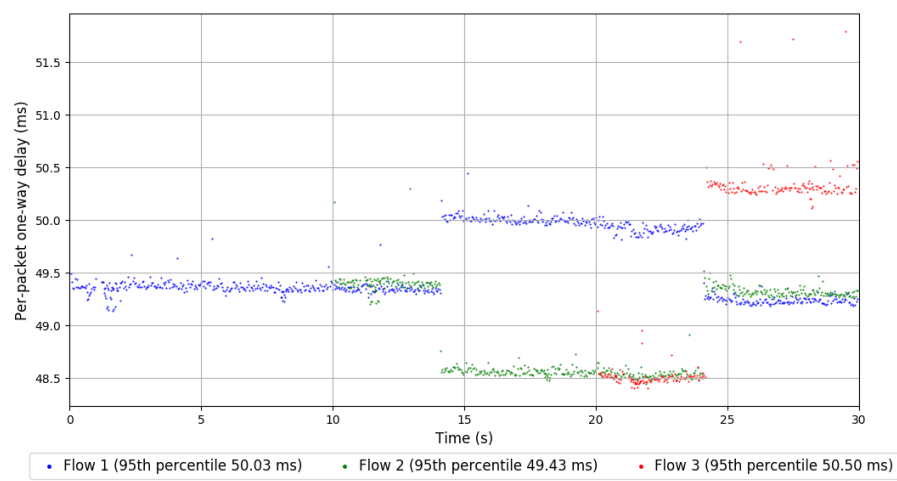
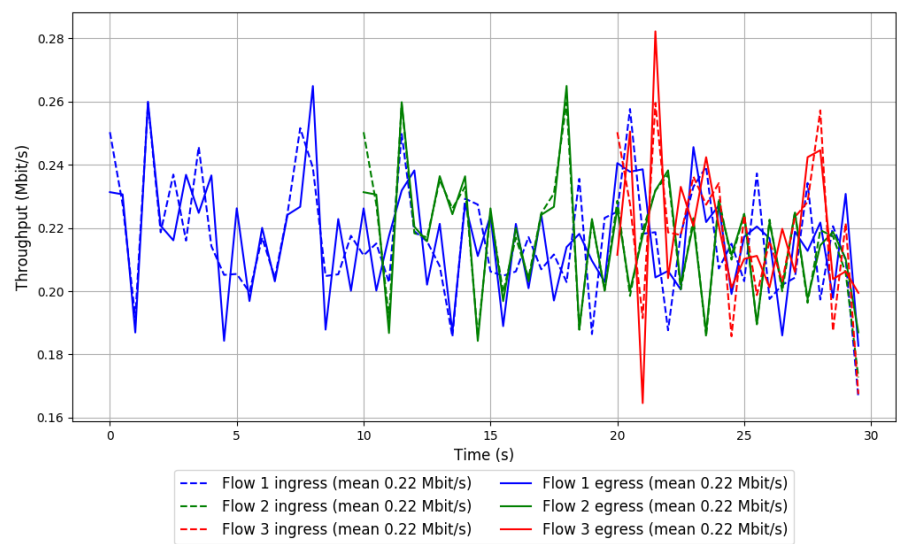


```
Run 8: Statistics of SCReAM

Start at: 2018-01-17 20:33:01
End at: 2018-01-17 20:33:31

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 50.304 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.027 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.434 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.501 ms
Loss rate: 0.00%
```

Run 8: Report of SReAM — Data Link

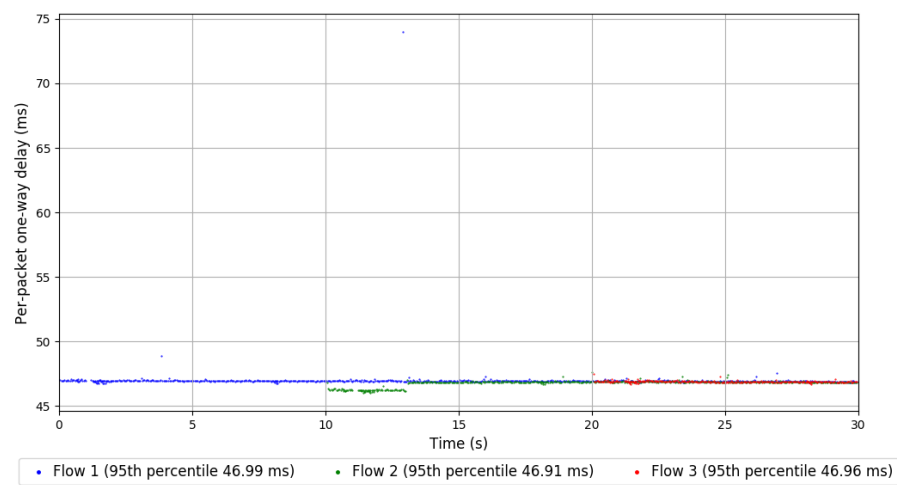
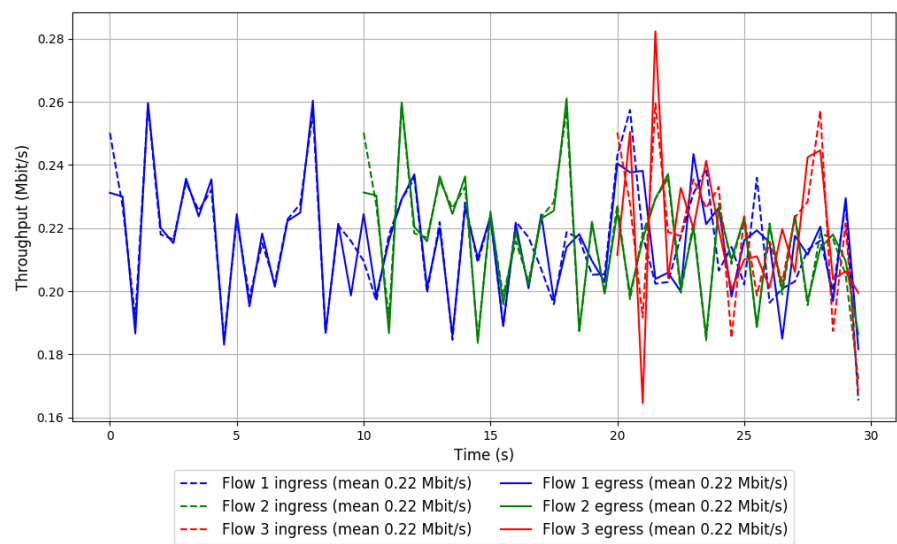


```
Run 9: Statistics of SCReAM

Start at: 2018-01-17 20:49:42
End at: 2018-01-17 20:50:12

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 46.976 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.991 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.908 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 46.962 ms
Loss rate: 0.00%
```

Run 9: Report of SReAM — Data Link

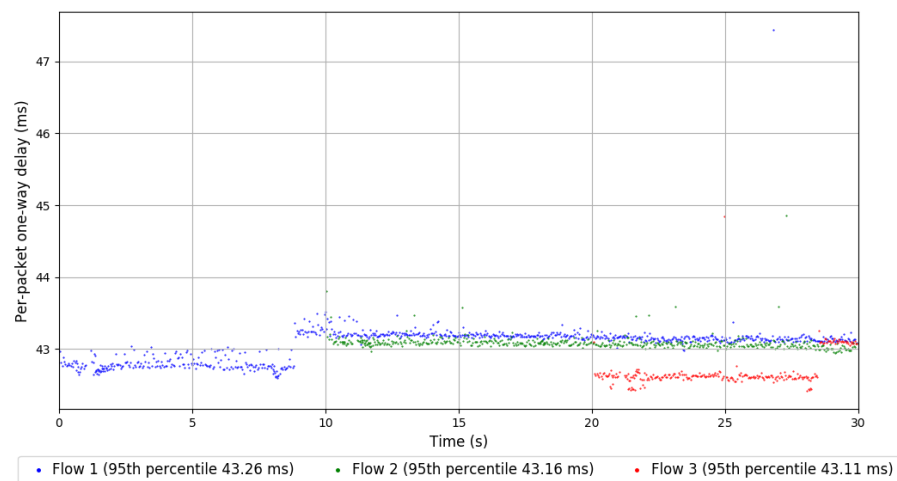
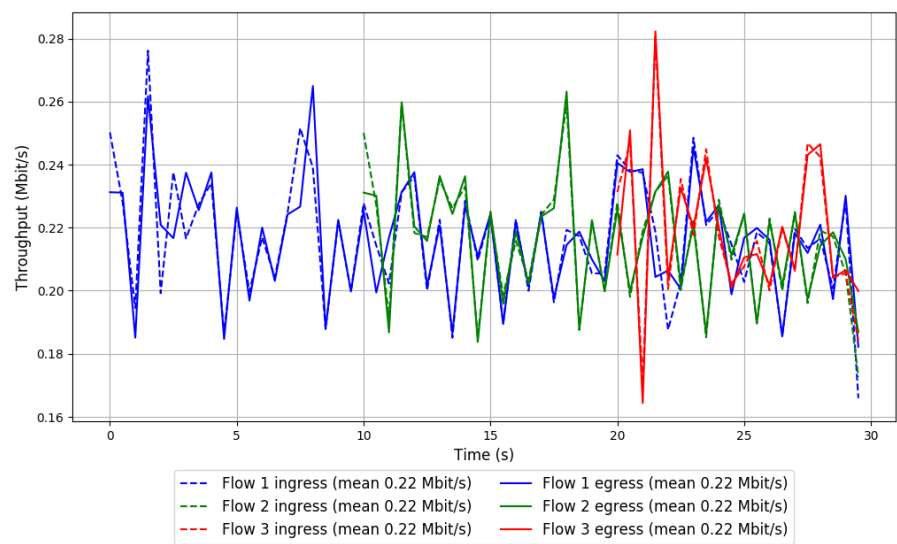


```
Run 10: Statistics of SCReAM

Start at: 2018-01-17 21:06:16
End at: 2018-01-17 21:06:46

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 43.230 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 43.256 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 43.163 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 43.107 ms
Loss rate: 0.00%
```


Run 10: Report of SReAM — Data Link

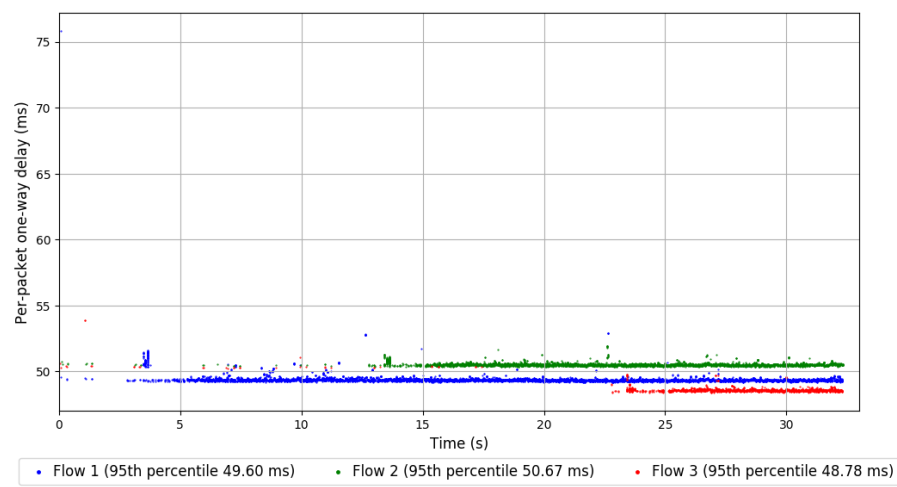
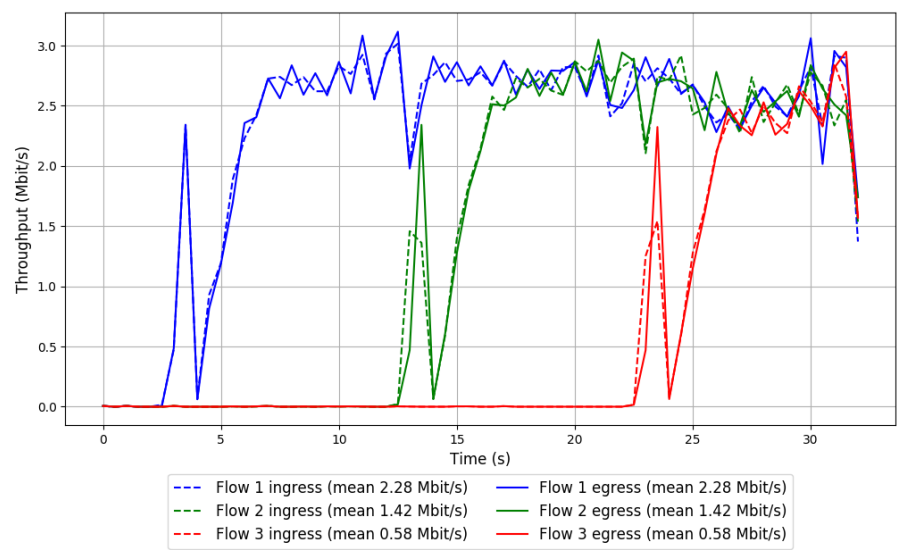


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-17 18:36:48
End at: 2018-01-17 18:37:18

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.27 Mbit/s
95th percentile per-packet one-way delay: 50.584 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 49.597 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 50.666 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 48.783 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-17 18:53:33

End at: 2018-01-17 18:54:03

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.389 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.814 ms

Loss rate: 0.00%

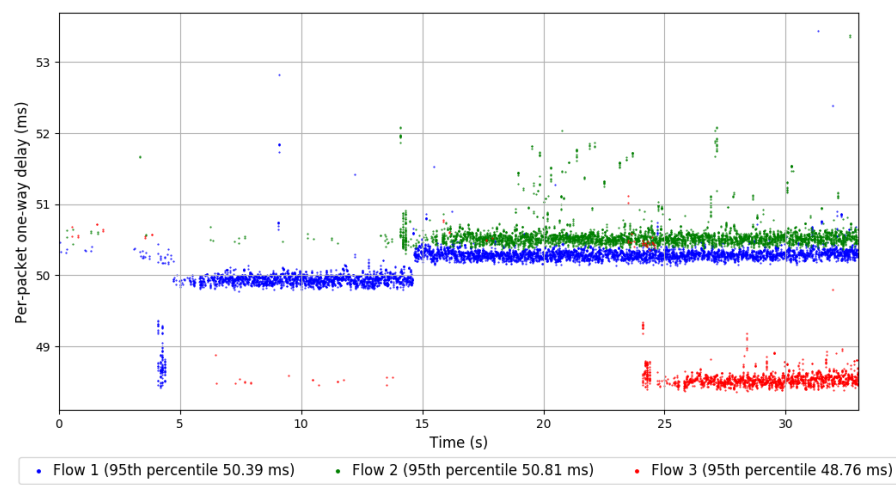
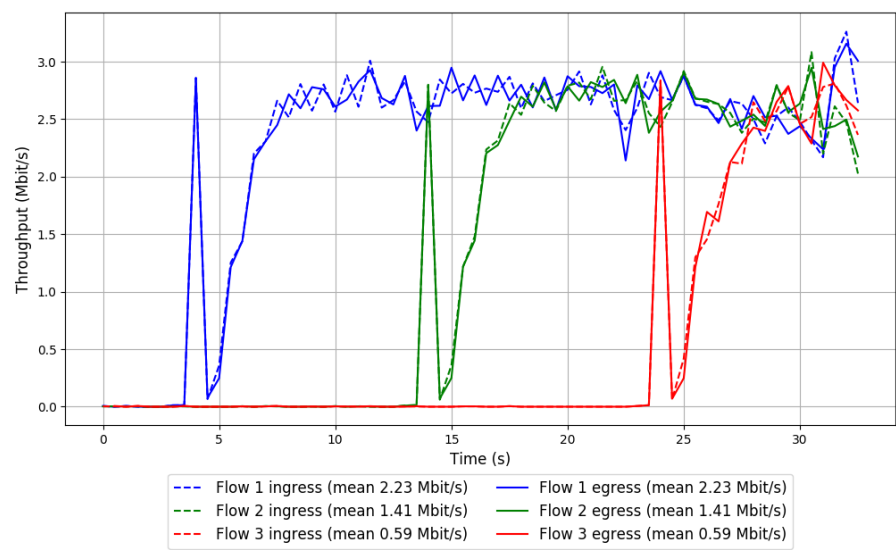
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 48.763 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-17 19:10:12

End at: 2018-01-17 19:10:42

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 49.485 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 49.472 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 49.470 ms

Loss rate: 0.00%

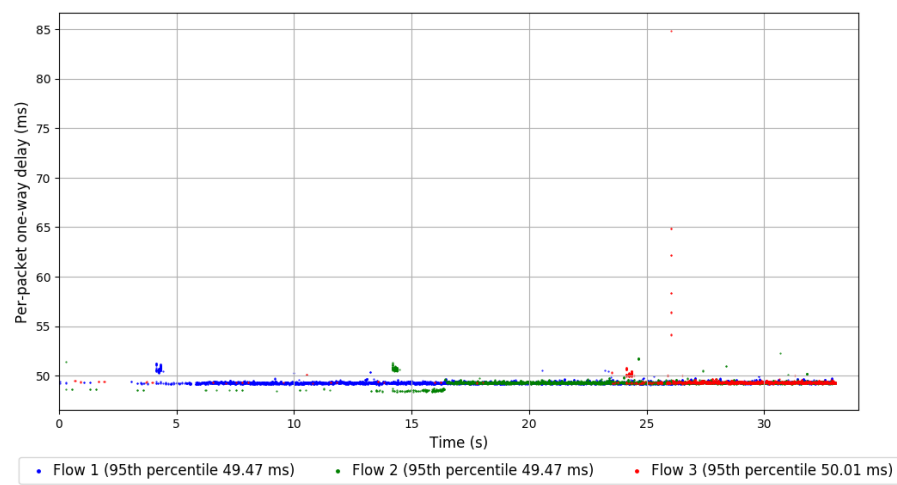
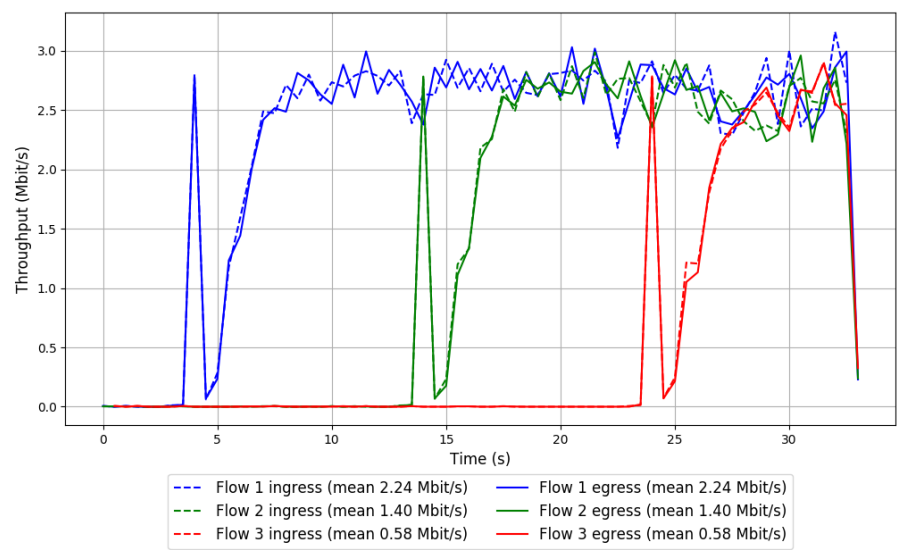
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 50.014 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-17 19:27:03

End at: 2018-01-17 19:27:33

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 50.588 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.570 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 49.466 ms

Loss rate: 0.00%

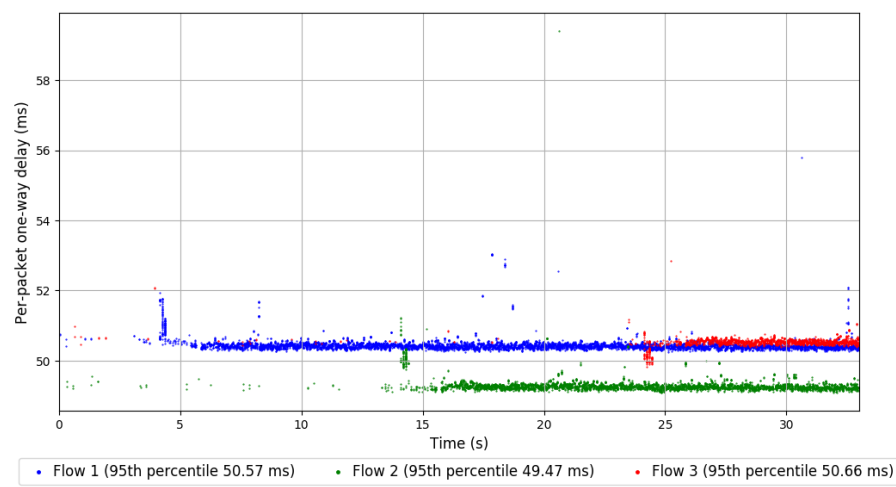
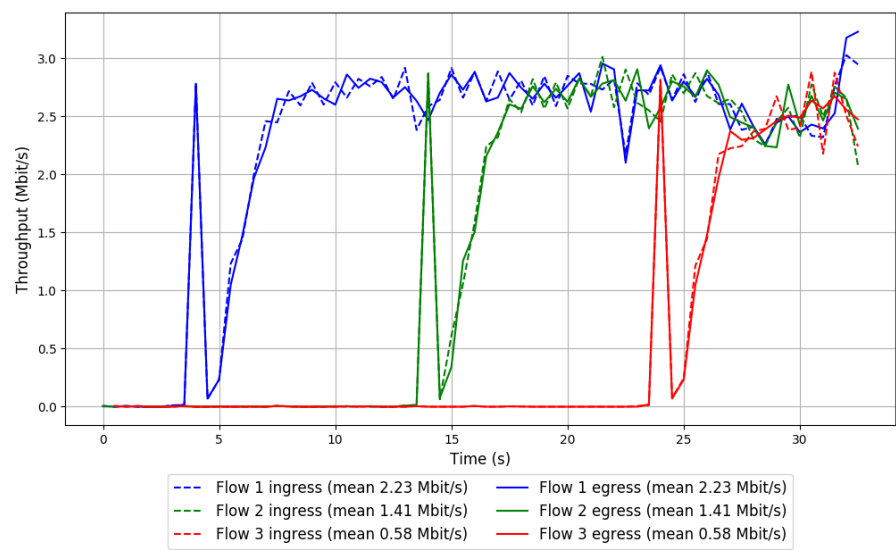
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 50.660 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-17 19:43:56

End at: 2018-01-17 19:44:26

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 50.469 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 50.509 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 49.386 ms

Loss rate: 0.00%

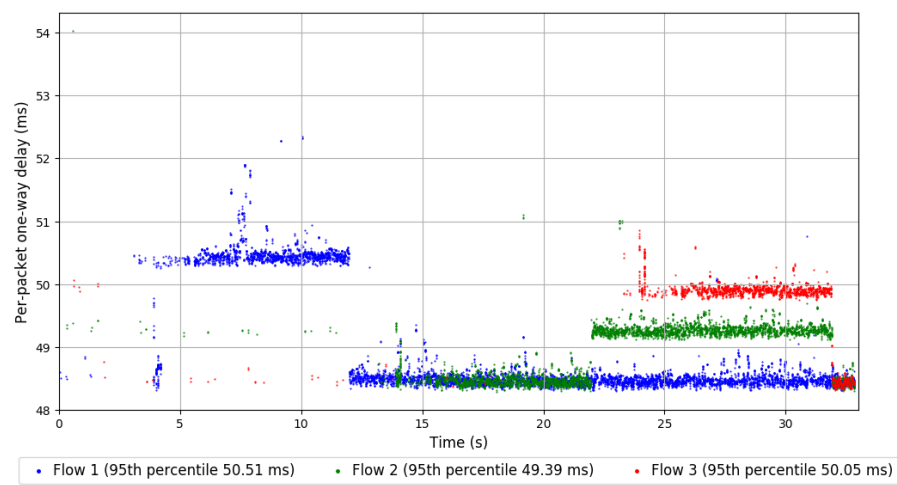
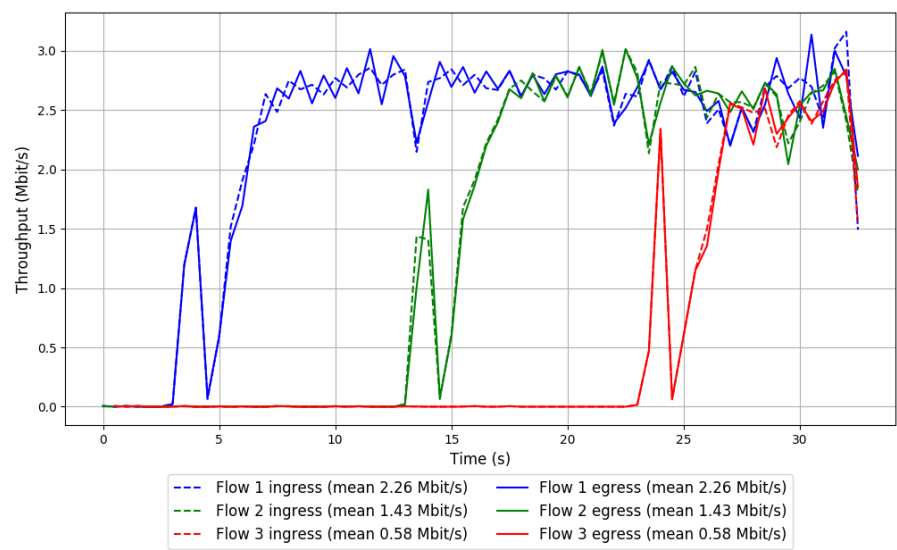
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 50.051 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-17 20:00:32

End at: 2018-01-17 20:01:02

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.19 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.622 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 49.563 ms

Loss rate: 0.00%

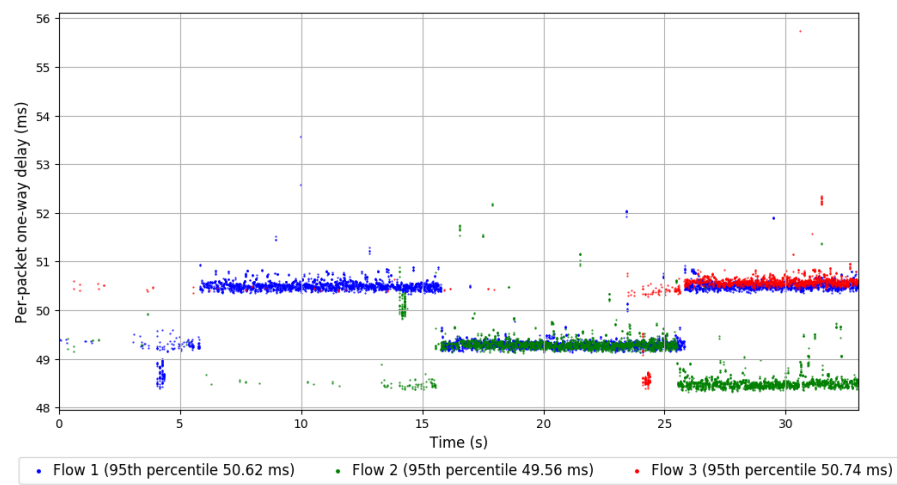
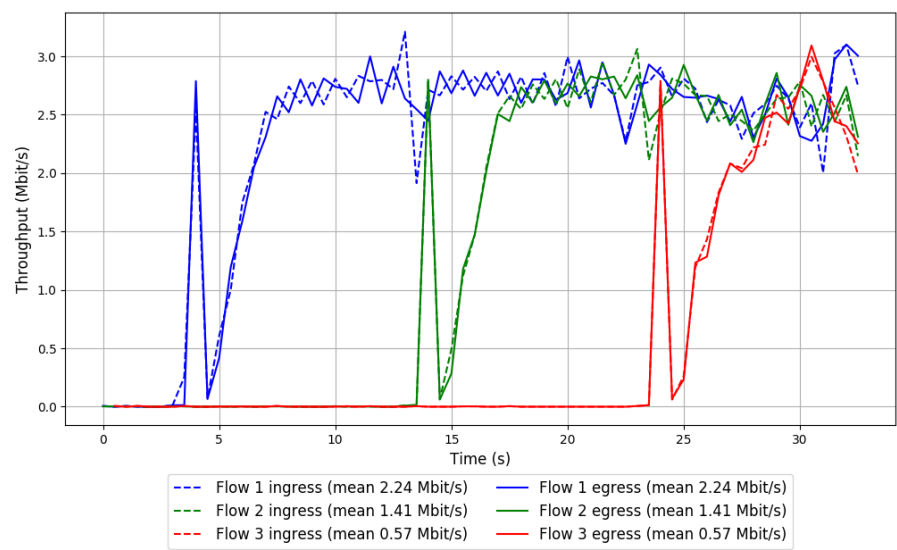
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 50.739 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-17 20:17:08

End at: 2018-01-17 20:17:38

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.24 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 49.430 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.40 Mbit/s

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

Loss rate: 0.00%

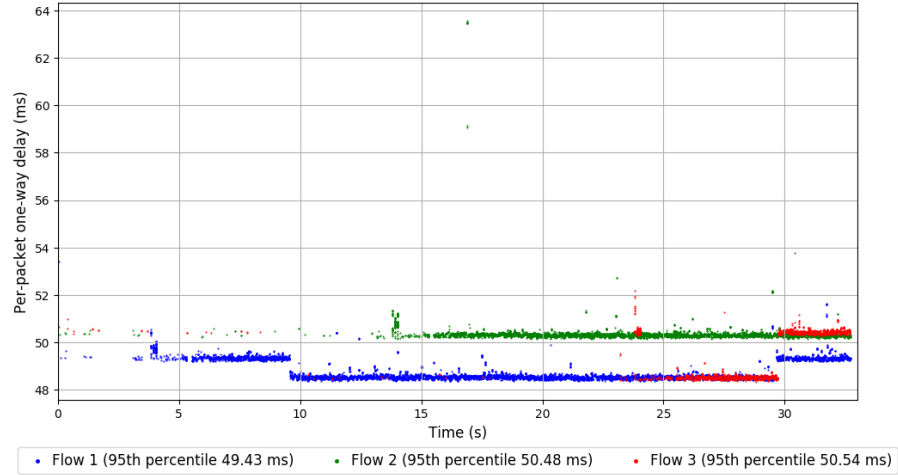
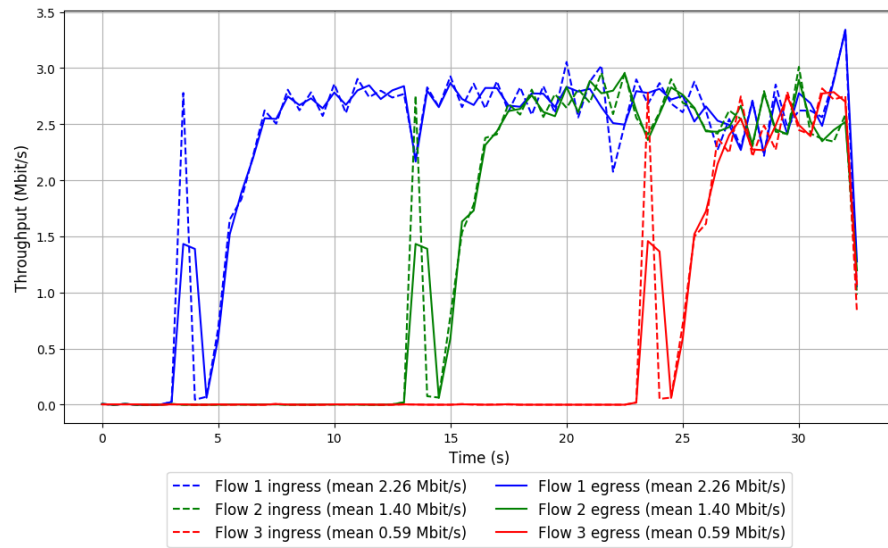
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 50.544 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-17 20:33:40

End at: 2018-01-17 20:34:10

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 50.343 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 49.862 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 50.387 ms

Loss rate: 0.02%

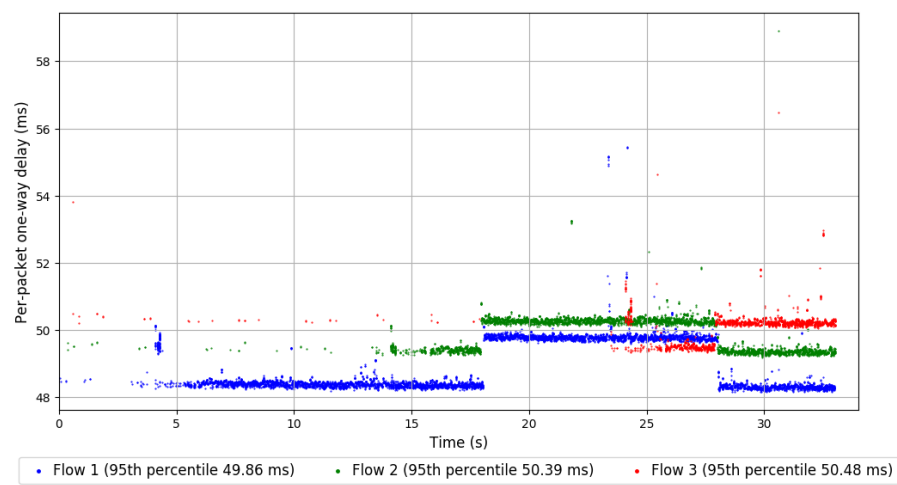
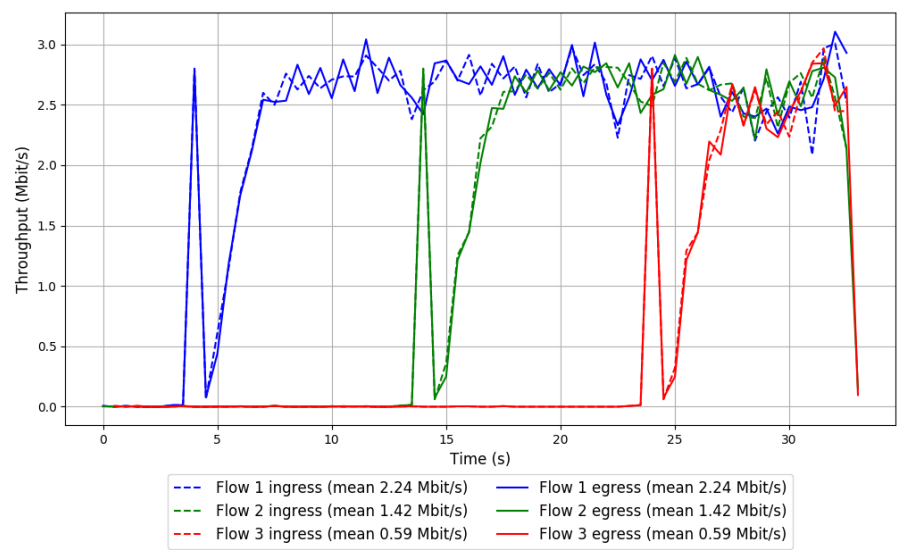
-- Flow 3:

Average throughput: 0.59 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-17 20:50:21

End at: 2018-01-17 20:50:51

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 46.853 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 46.872 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 46.232 ms

Loss rate: 0.00%

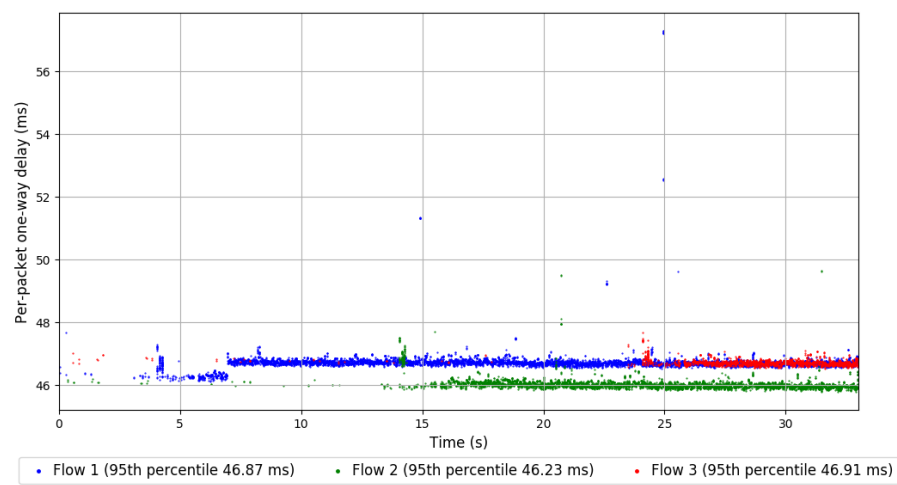
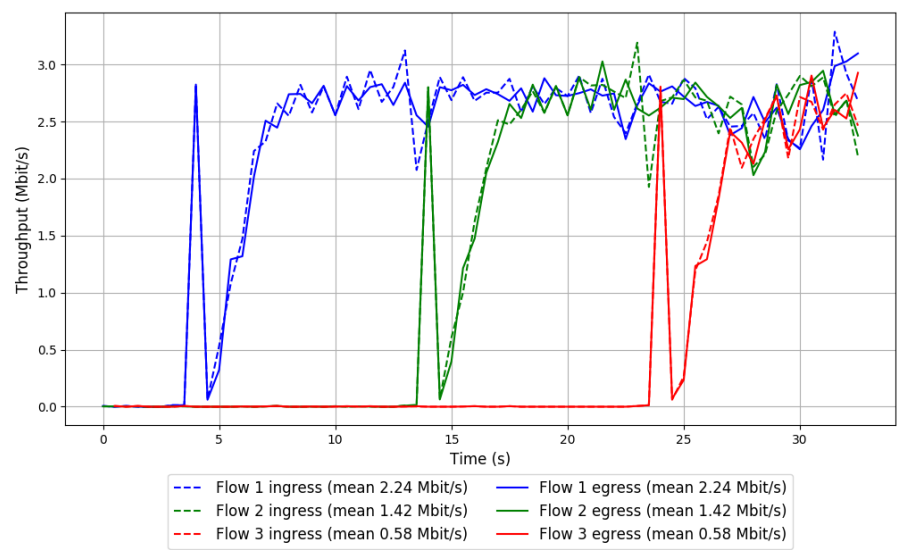
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 46.906 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-17 21:06:56

End at: 2018-01-17 21:07:26

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 43.019 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 42.967 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 43.079 ms

Loss rate: 0.00%

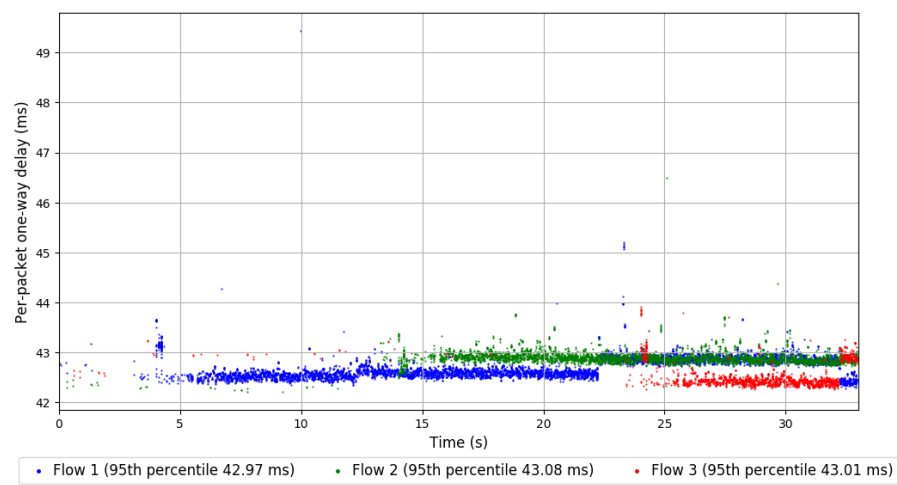
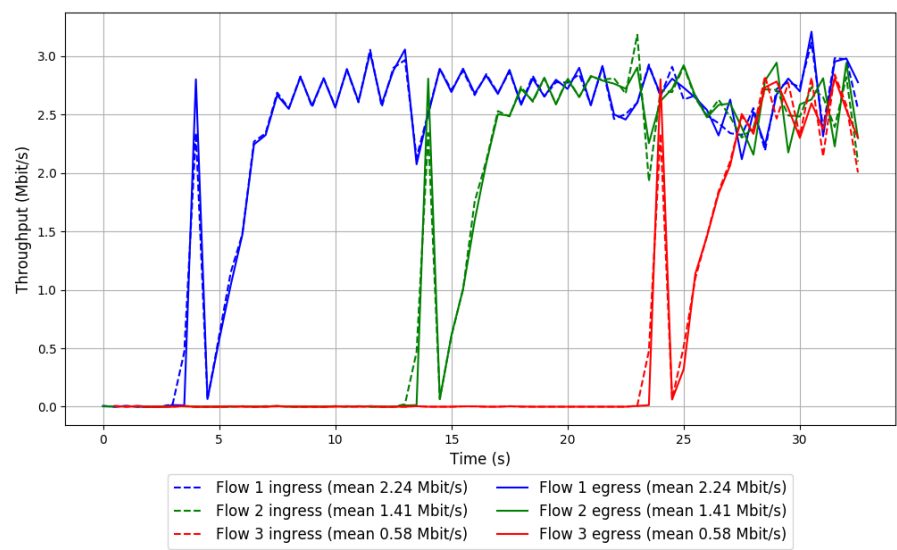
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 43.008 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

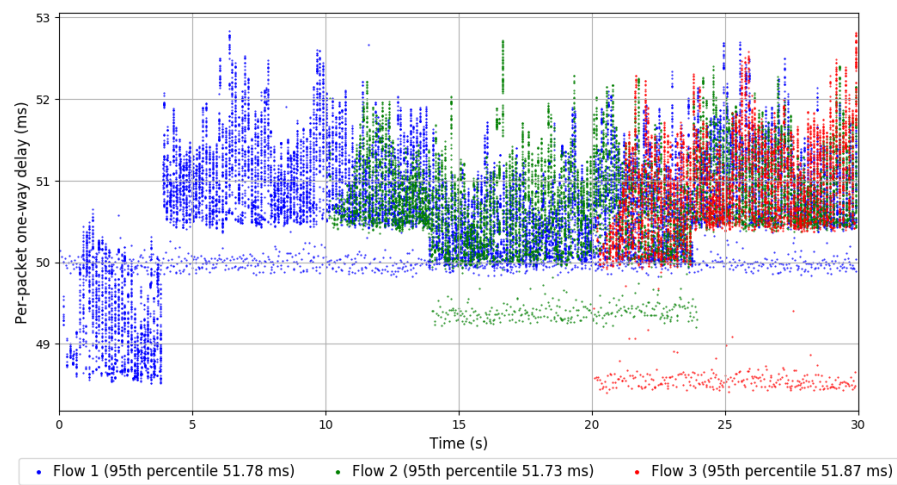
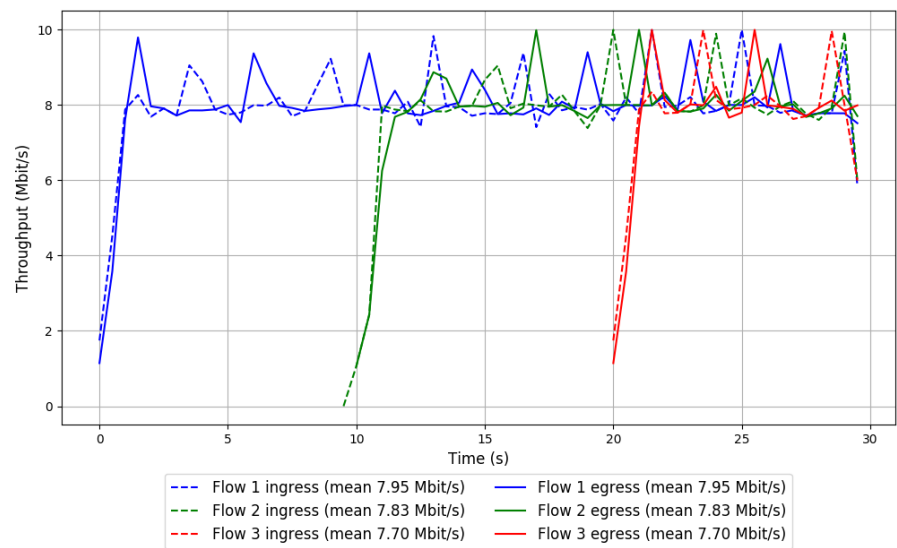


```
Run 1: Statistics of Sprout

Start at: 2018-01-17 18:33:41
End at: 2018-01-17 18:34:11

# Below is generated by plot.py at 2018-01-18 00:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.69 Mbit/s
95th percentile per-packet one-way delay: 51.774 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.95 Mbit/s
95th percentile per-packet one-way delay: 51.779 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 51.728 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 51.872 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-17 18:50:28

End at: 2018-01-17 18:50:58

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.62 Mbit/s

95th percentile per-packet one-way delay: 52.020 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 51.899 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 52.228 ms

Loss rate: 0.00%

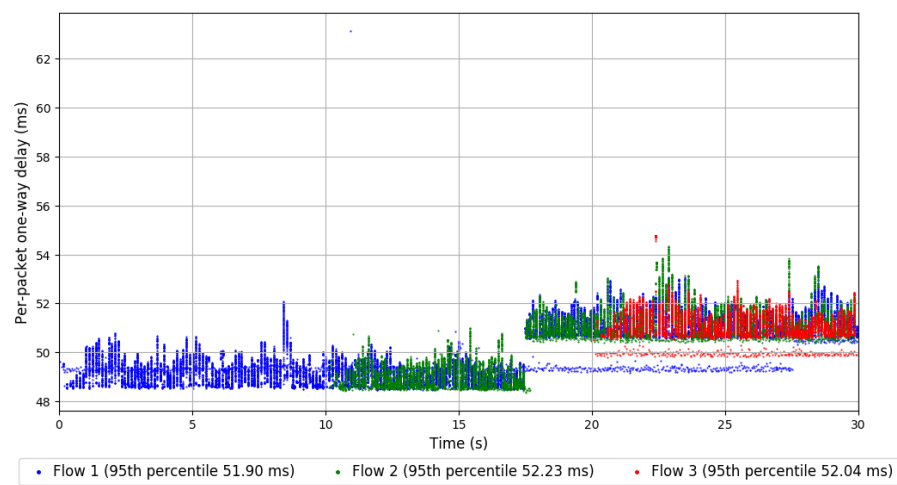
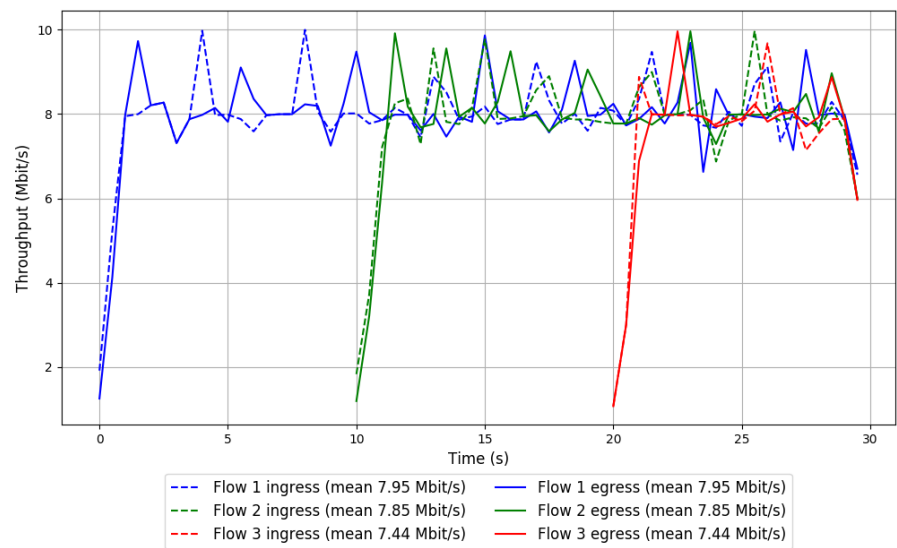
-- Flow 3:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 52.040 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-17 19:07:05

End at: 2018-01-17 19:07:35

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.47 Mbit/s

95th percentile per-packet one-way delay: 51.833 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 51.794 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 51.947 ms

Loss rate: 0.00%

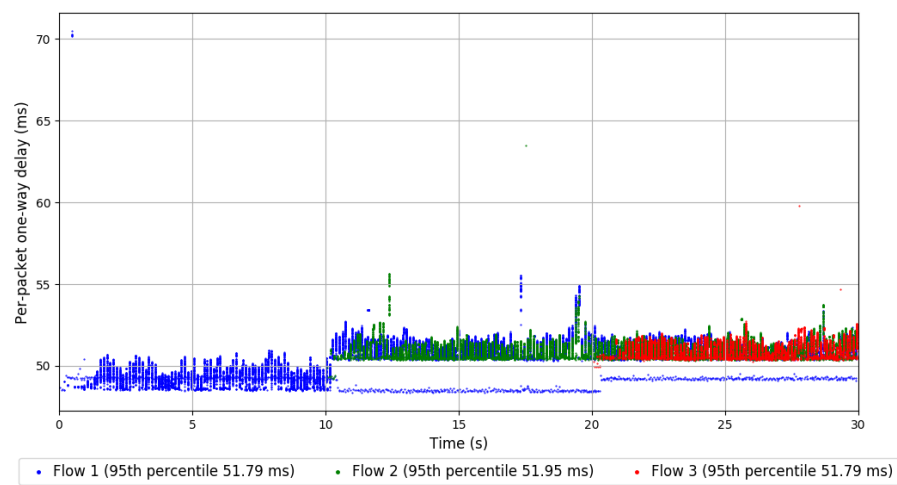
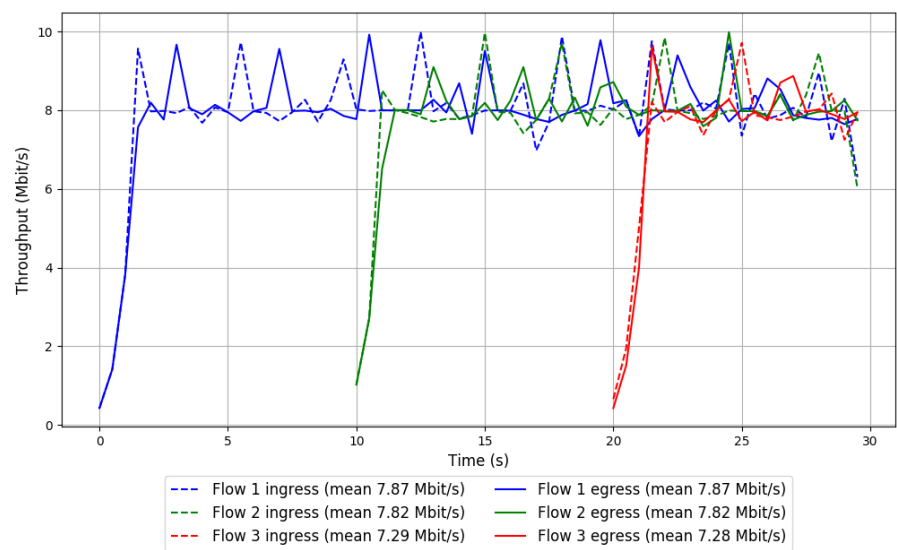
-- Flow 3:

Average throughput: 7.28 Mbit/s

95th percentile per-packet one-way delay: 51.792 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-17 19:23:59

End at: 2018-01-17 19:24:29

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.54 Mbit/s

95th percentile per-packet one-way delay: 51.821 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 51.920 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 51.785 ms

Loss rate: 0.00%

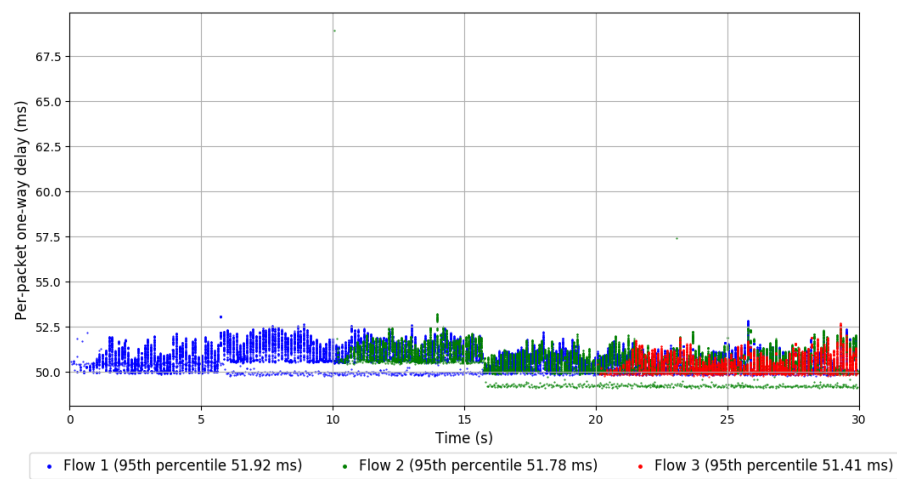
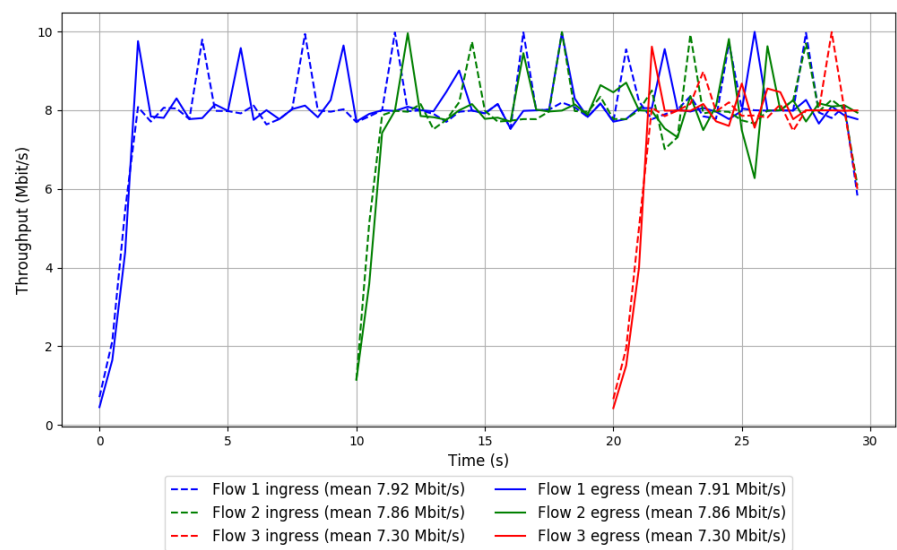
-- Flow 3:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 51.409 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-17 19:40:53

End at: 2018-01-17 19:41:23

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.75 Mbit/s

95th percentile per-packet one-way delay: 51.298 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 51.386 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 51.310 ms

Loss rate: 0.00%

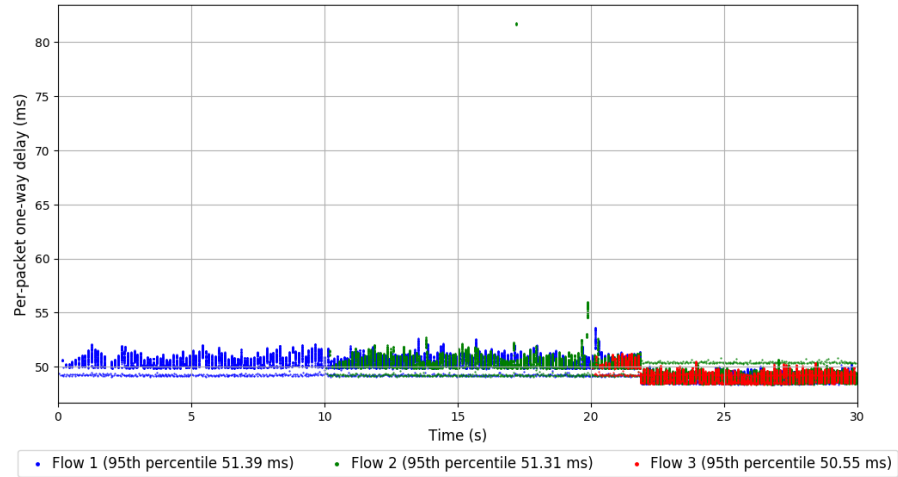
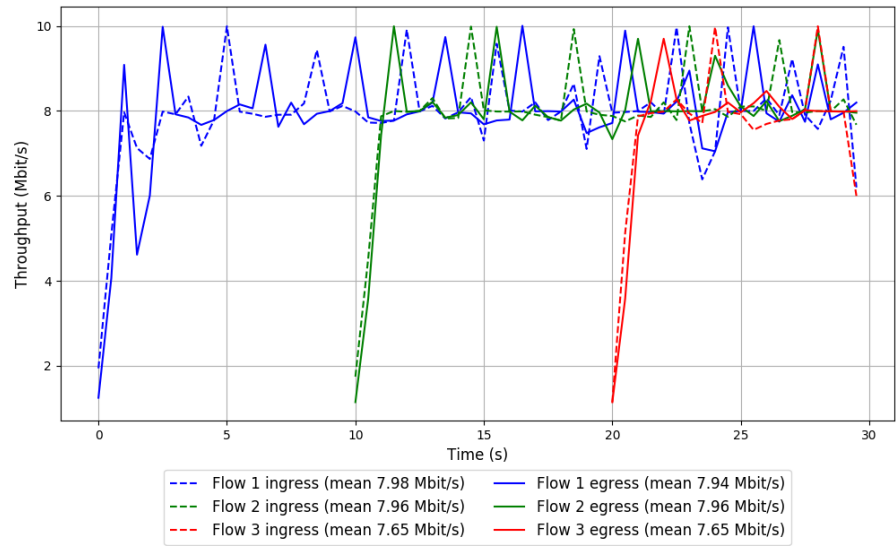
-- Flow 3:

Average throughput: 7.65 Mbit/s

95th percentile per-packet one-way delay: 50.552 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-17 19:57:30

End at: 2018-01-17 19:58:00

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.74 Mbit/s

95th percentile per-packet one-way delay: 50.428 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 50.265 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 50.522 ms

Loss rate: 0.00%

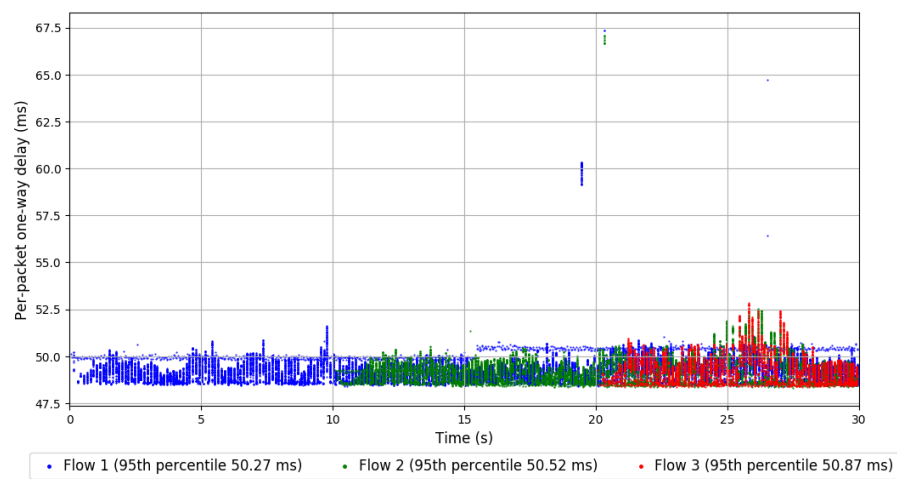
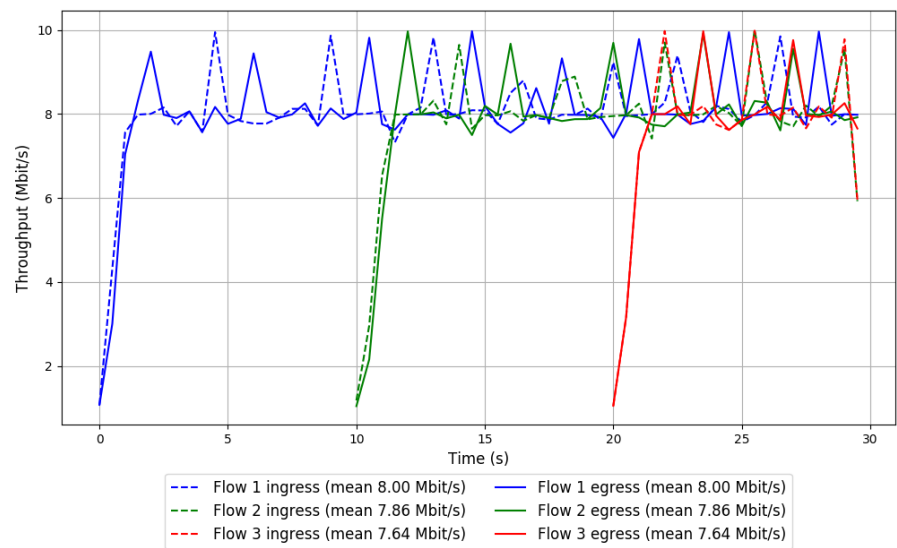
-- Flow 3:

Average throughput: 7.64 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link

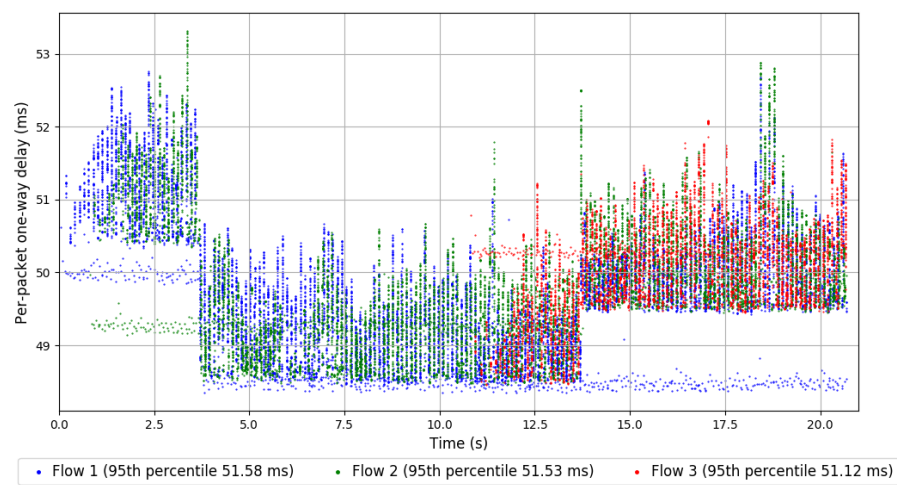
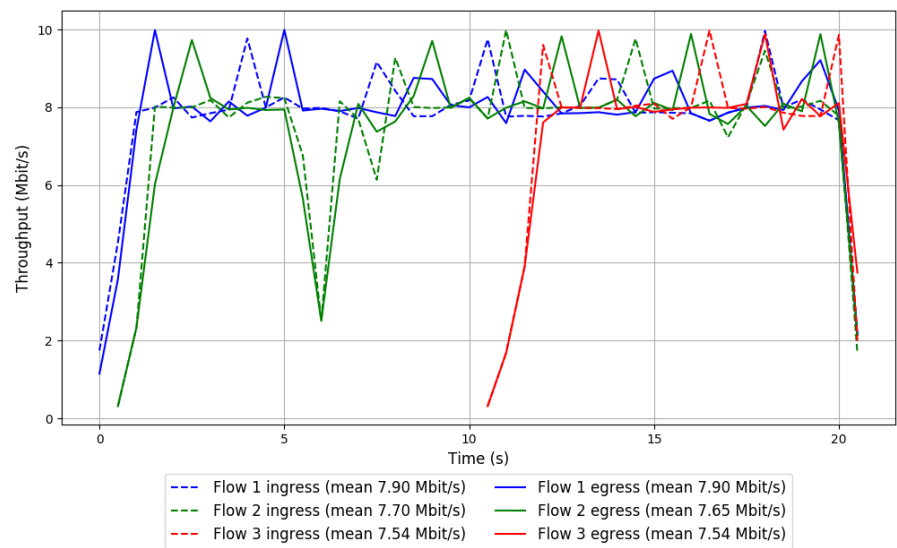


Run 7: Statistics of Sprout

Start at: 2018-01-17 20:14:02

End at: 2018-01-17 20:14:32

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-17 20:30:39

End at: 2018-01-17 20:31:09

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.79 Mbit/s

95th percentile per-packet one-way delay: 51.703 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 8.01 Mbit/s

95th percentile per-packet one-way delay: 51.768 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 51.675 ms

Loss rate: 0.00%

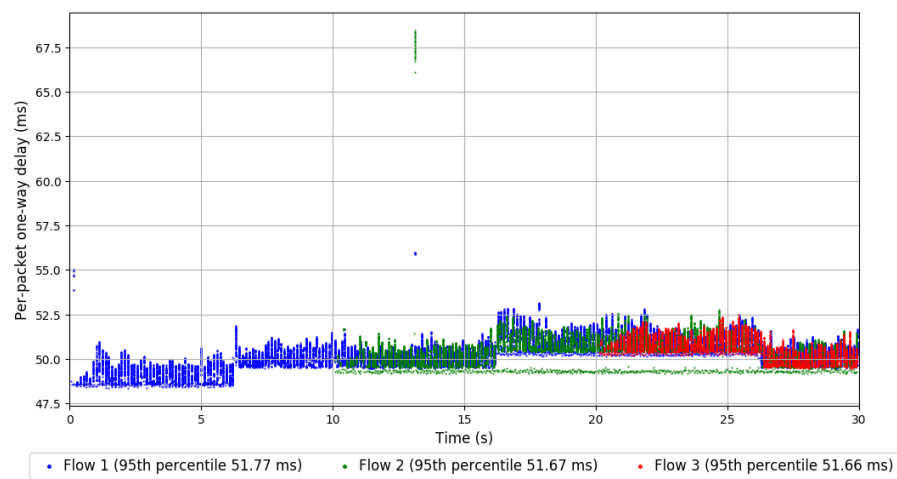
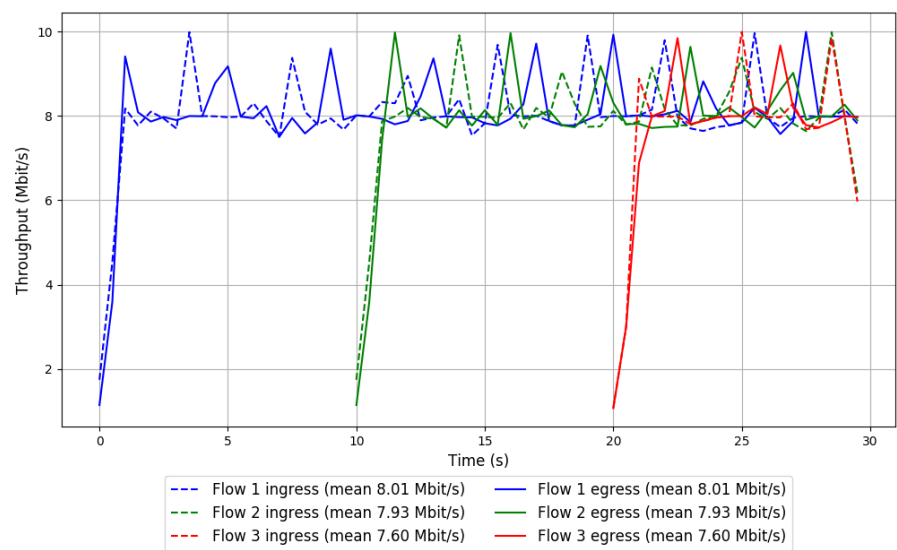
-- Flow 3:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 51.657 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-17 20:47:19

End at: 2018-01-17 20:47:49

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.62 Mbit/s

95th percentile per-packet one-way delay: 48.704 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 48.705 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 48.642 ms

Loss rate: 0.00%

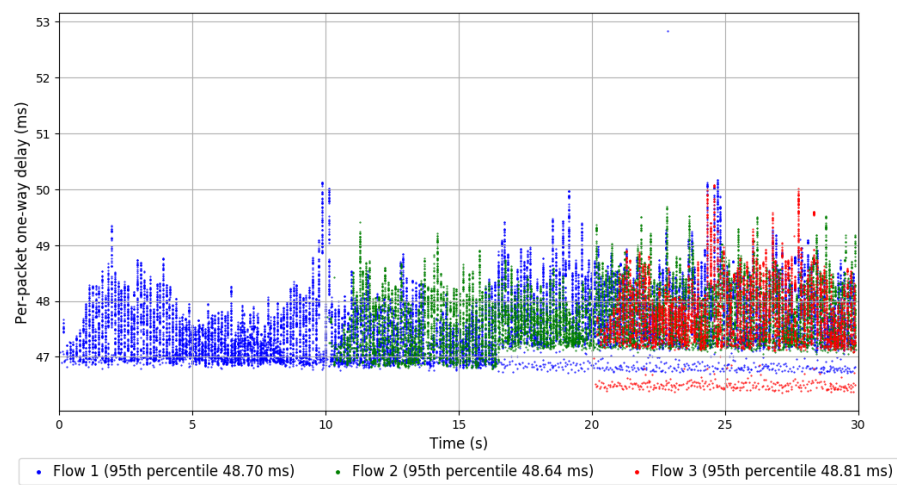
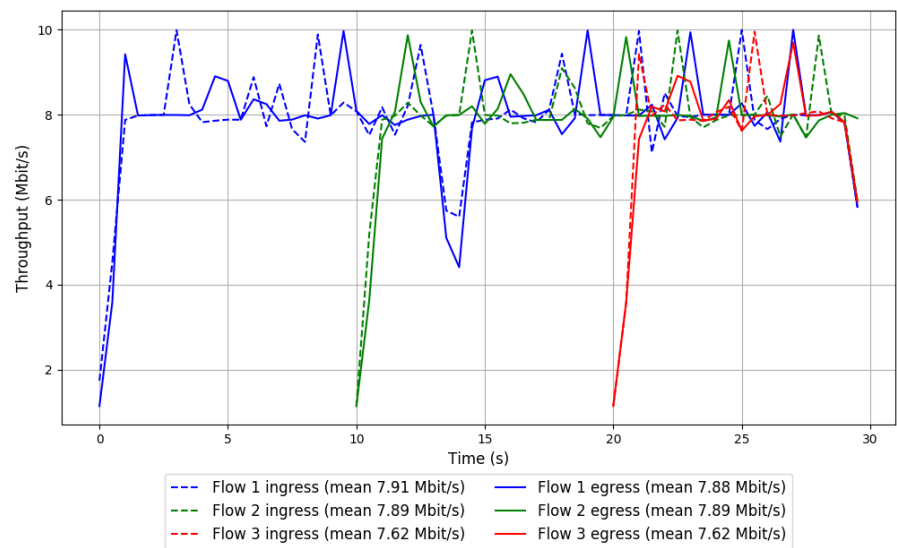
-- Flow 3:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 48.811 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-17 21:03:52

End at: 2018-01-17 21:04:22

Below is generated by plot.py at 2018-01-18 00:14:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.24 Mbit/s

95th percentile per-packet one-way delay: 45.096 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 45.141 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 45.008 ms

Loss rate: 0.00%

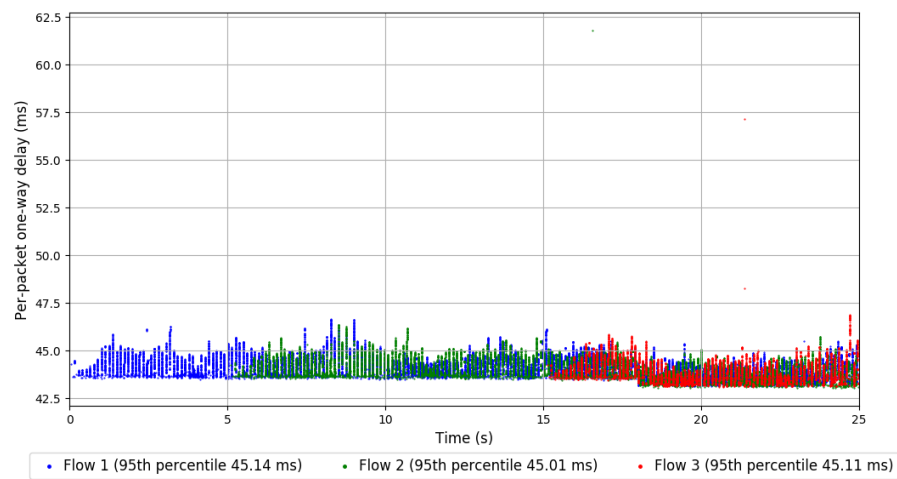
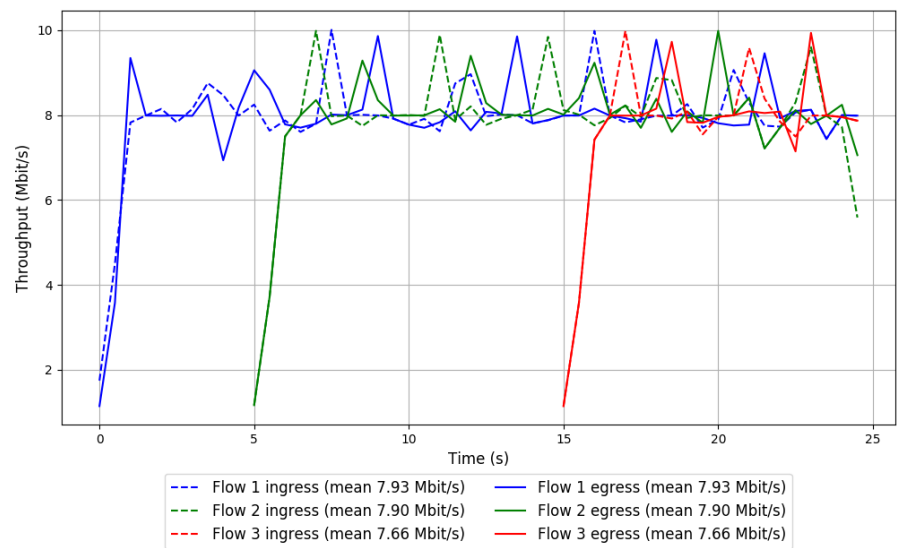
-- Flow 3:

Average throughput: 7.66 Mbit/s

95th percentile per-packet one-way delay: 45.109 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

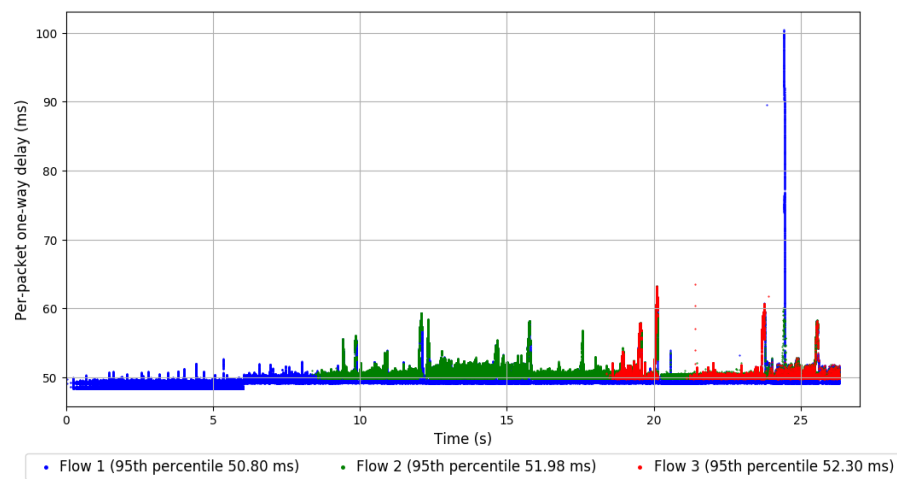
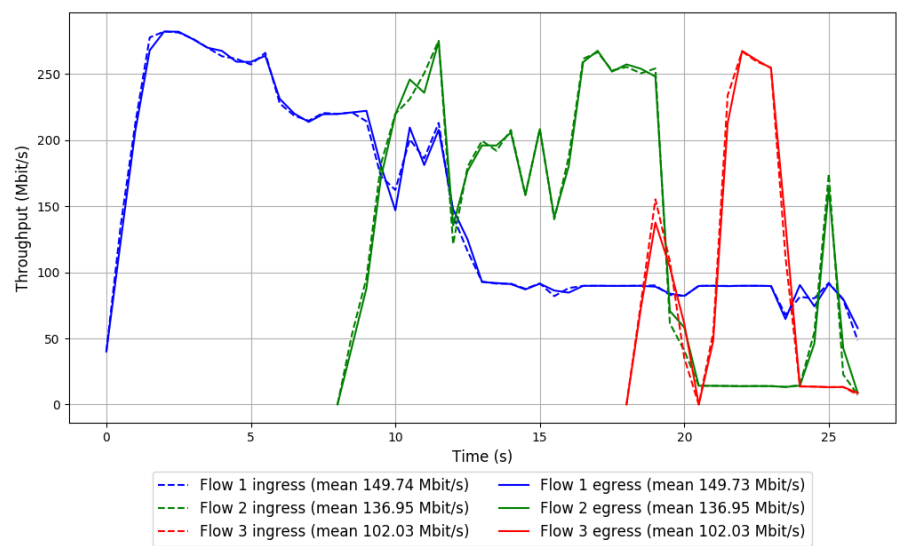


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-17 18:25:55
End at: 2018-01-17 18:26:25

# Below is generated by plot.py at 2018-01-18 00:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 274.06 Mbit/s
95th percentile per-packet one-way delay: 51.412 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 149.73 Mbit/s
95th percentile per-packet one-way delay: 50.795 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 136.95 Mbit/s
95th percentile per-packet one-way delay: 51.984 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 102.03 Mbit/s
95th percentile per-packet one-way delay: 52.303 ms
Loss rate: 0.00%
```

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

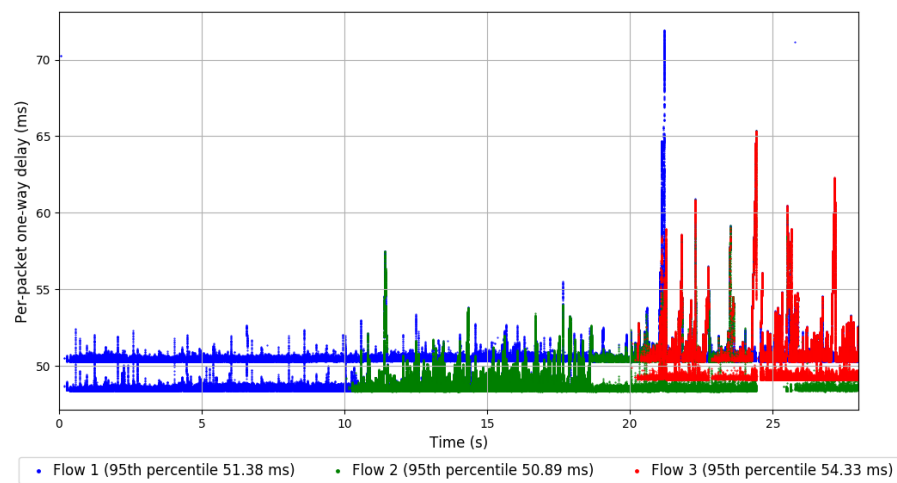
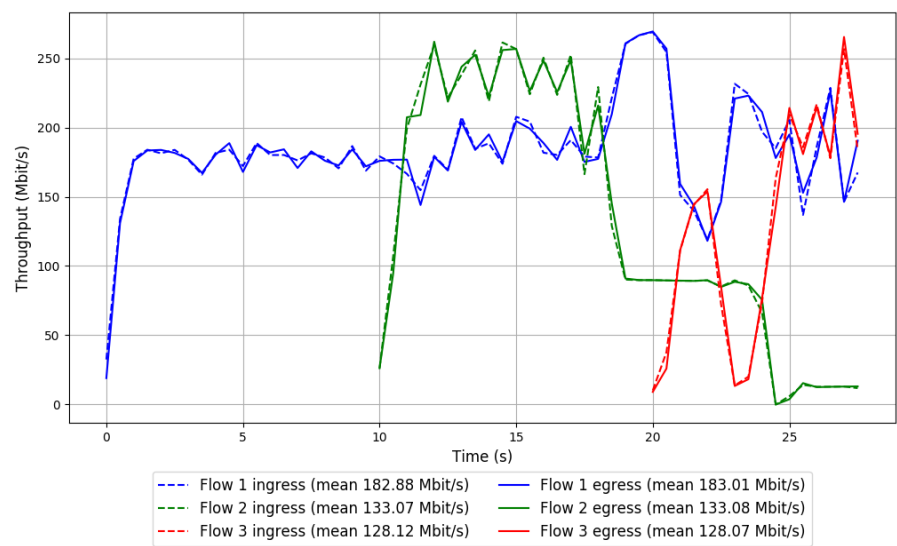


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-17 18:42:54
End at: 2018-01-17 18:43:24

# Below is generated by plot.py at 2018-01-18 00:20:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 304.86 Mbit/s
95th percentile per-packet one-way delay: 51.703 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 183.01 Mbit/s
95th percentile per-packet one-way delay: 51.375 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 133.08 Mbit/s
95th percentile per-packet one-way delay: 50.891 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 128.07 Mbit/s
95th percentile per-packet one-way delay: 54.328 ms
Loss rate: 0.05%
```

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

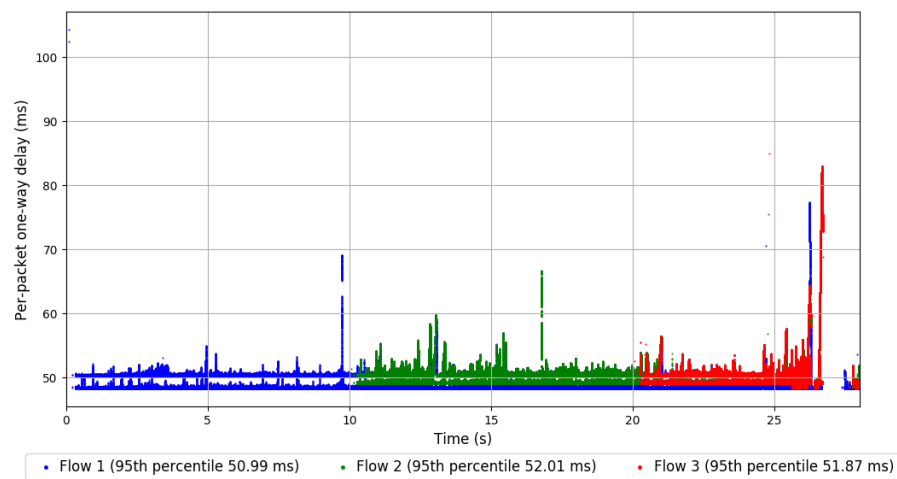
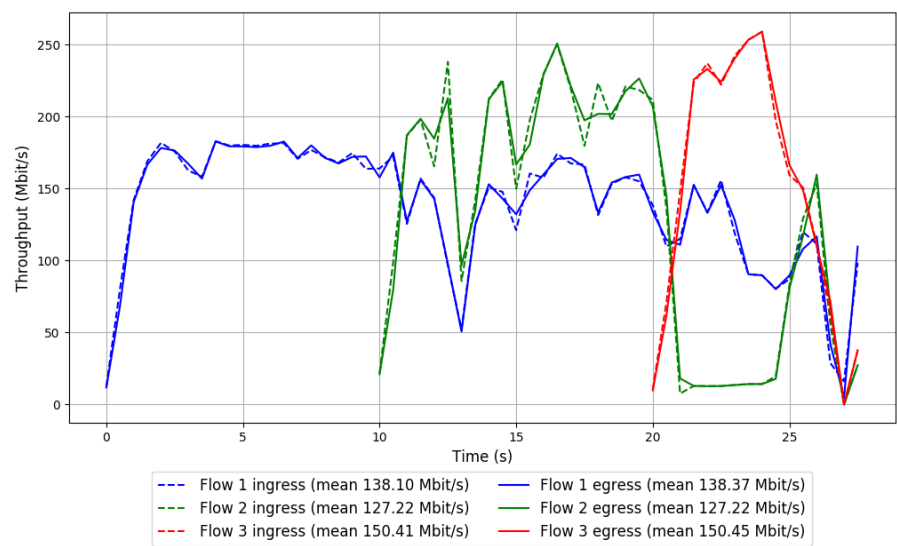


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-17 18:59:37
End at: 2018-01-17 19:00:07

# Below is generated by plot.py at 2018-01-18 00:20:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 262.93 Mbit/s
95th percentile per-packet one-way delay: 51.418 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 138.37 Mbit/s
95th percentile per-packet one-way delay: 50.994 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 127.22 Mbit/s
95th percentile per-packet one-way delay: 52.011 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 150.45 Mbit/s
95th percentile per-packet one-way delay: 51.866 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-17 19:16:23

End at: 2018-01-17 19:16:53

Below is generated by plot.py at 2018-01-18 00:20:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 268.12 Mbit/s

95th percentile per-packet one-way delay: 52.570 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 174.94 Mbit/s

95th percentile per-packet one-way delay: 52.042 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 103.23 Mbit/s

95th percentile per-packet one-way delay: 53.226 ms

Loss rate: 0.07%

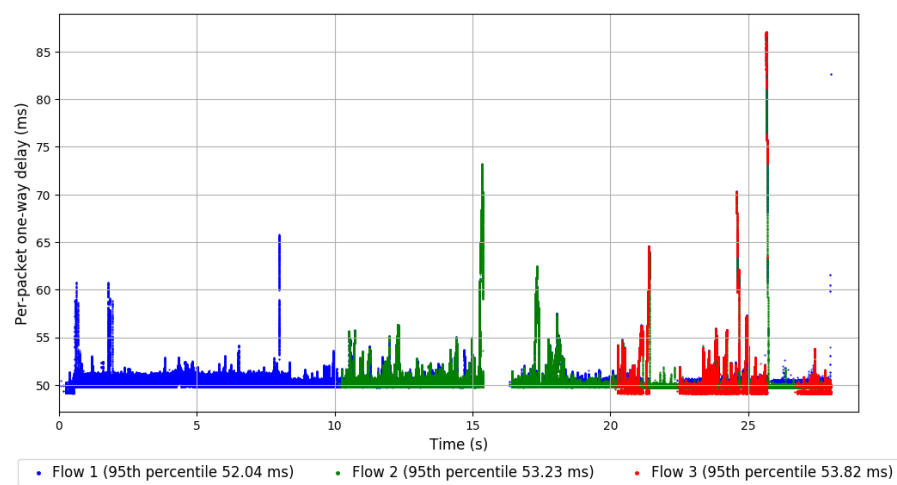
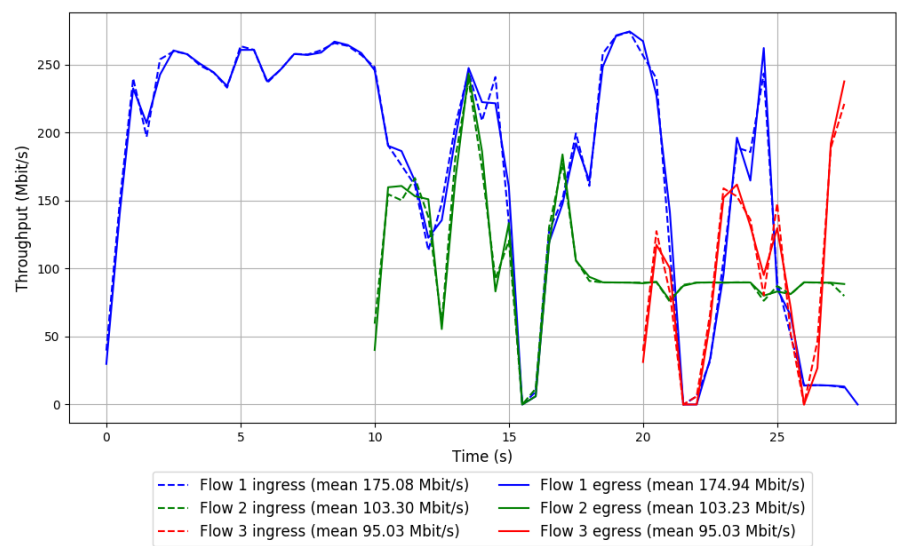
-- Flow 3:

Average throughput: 95.03 Mbit/s

95th percentile per-packet one-way delay: 53.819 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-17 19:33:17

End at: 2018-01-17 19:33:47

Below is generated by plot.py at 2018-01-18 00:20:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 281.28 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 146.22 Mbit/s

95th percentile per-packet one-way delay: 51.108 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 172.07 Mbit/s

95th percentile per-packet one-way delay: 51.191 ms

Loss rate: 0.01%

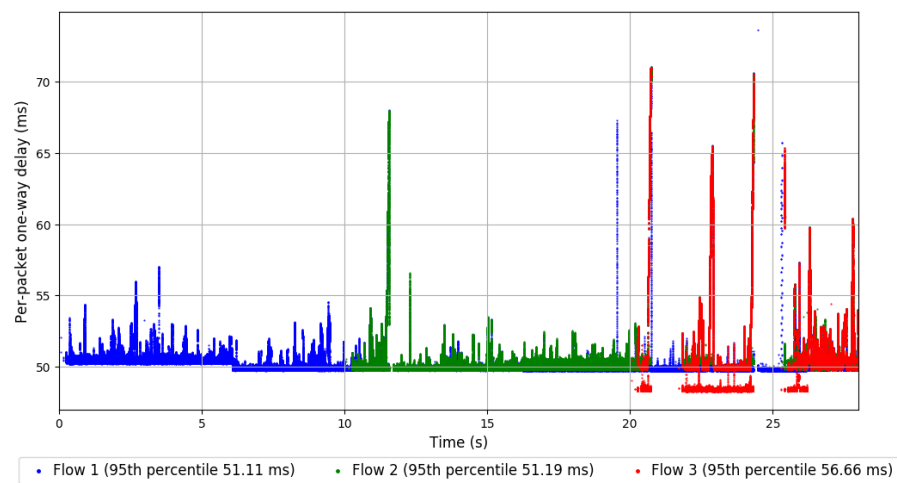
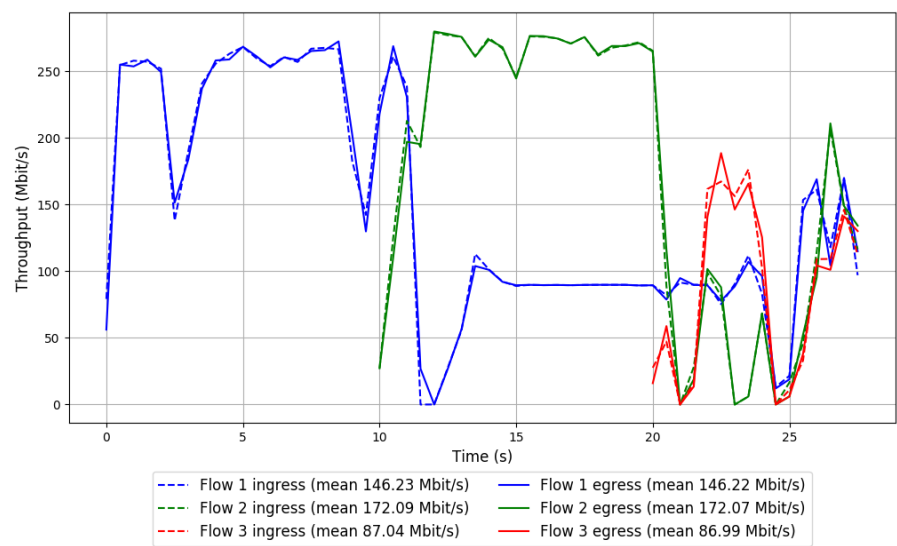
-- Flow 3:

Average throughput: 86.99 Mbit/s

95th percentile per-packet one-way delay: 56.664 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-17 19:50:03

End at: 2018-01-17 19:50:33

Below is generated by plot.py at 2018-01-18 00:20:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 216.47 Mbit/s

95th percentile per-packet one-way delay: 52.431 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 111.01 Mbit/s

95th percentile per-packet one-way delay: 51.377 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 126.39 Mbit/s

95th percentile per-packet one-way delay: 53.277 ms

Loss rate: 0.00%

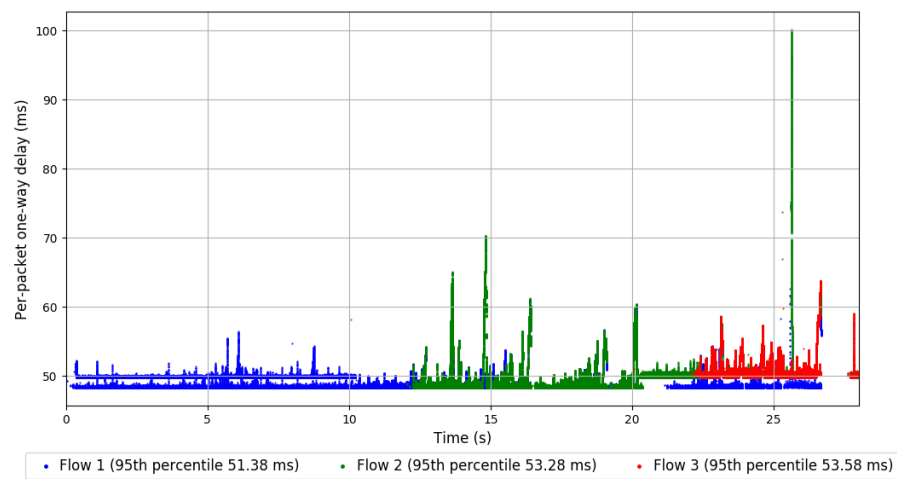
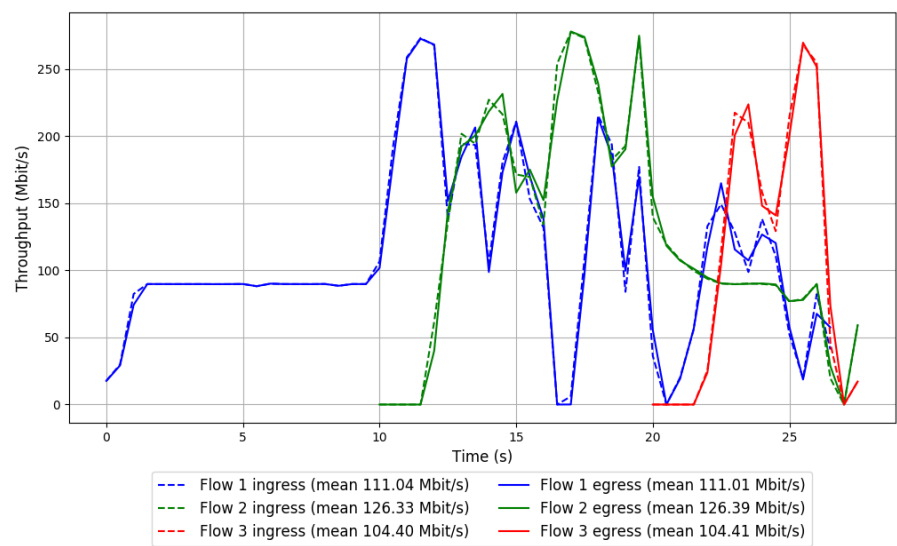
-- Flow 3:

Average throughput: 104.41 Mbit/s

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

Loss rate: 0.00%

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

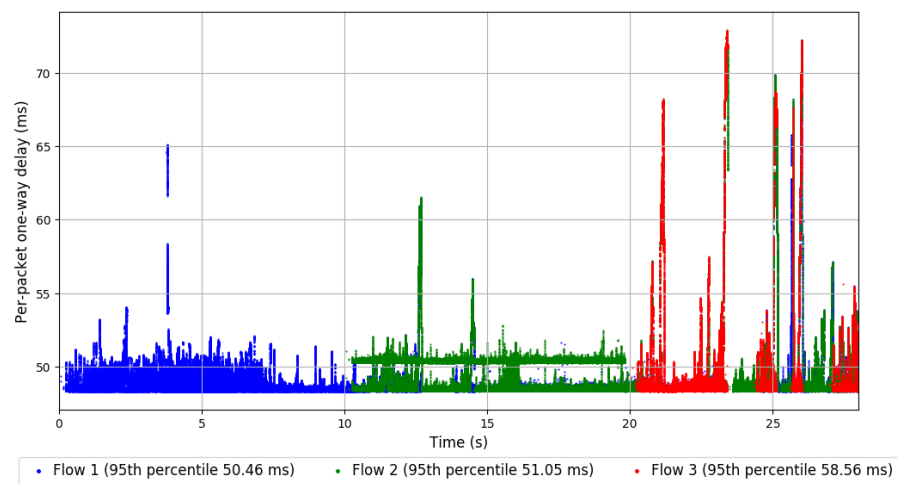
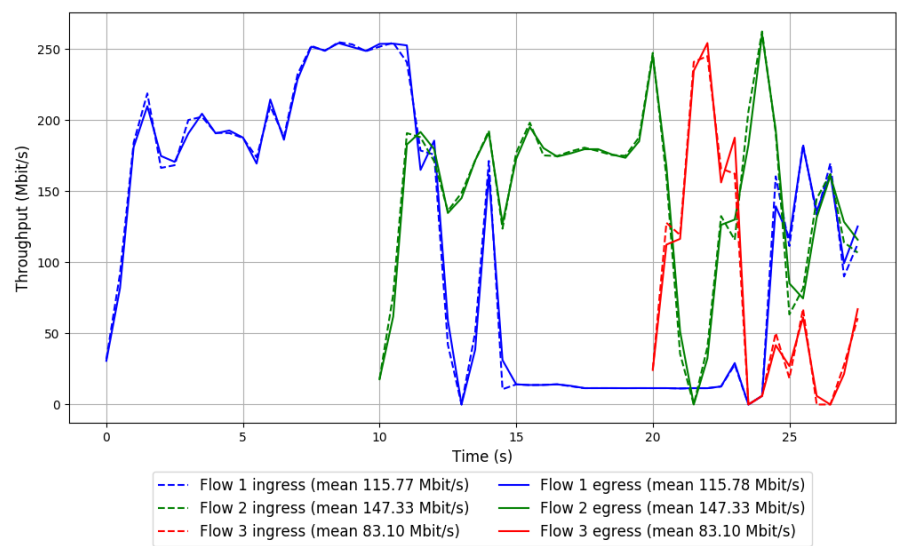


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-17 20:06:43
End at: 2018-01-17 20:07:13

# Below is generated by plot.py at 2018-01-18 00:20:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 233.83 Mbit/s
95th percentile per-packet one-way delay: 51.069 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 115.78 Mbit/s
95th percentile per-packet one-way delay: 50.461 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 147.33 Mbit/s
95th percentile per-packet one-way delay: 51.054 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 83.10 Mbit/s
95th percentile per-packet one-way delay: 58.563 ms
Loss rate: 0.00%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-17 20:23:09

End at: 2018-01-17 20:23:39

Below is generated by plot.py at 2018-01-18 00:21:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 217.07 Mbit/s

95th percentile per-packet one-way delay: 52.426 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 106.20 Mbit/s

95th percentile per-packet one-way delay: 51.194 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 160.06 Mbit/s

95th percentile per-packet one-way delay: 52.816 ms

Loss rate: 0.06%

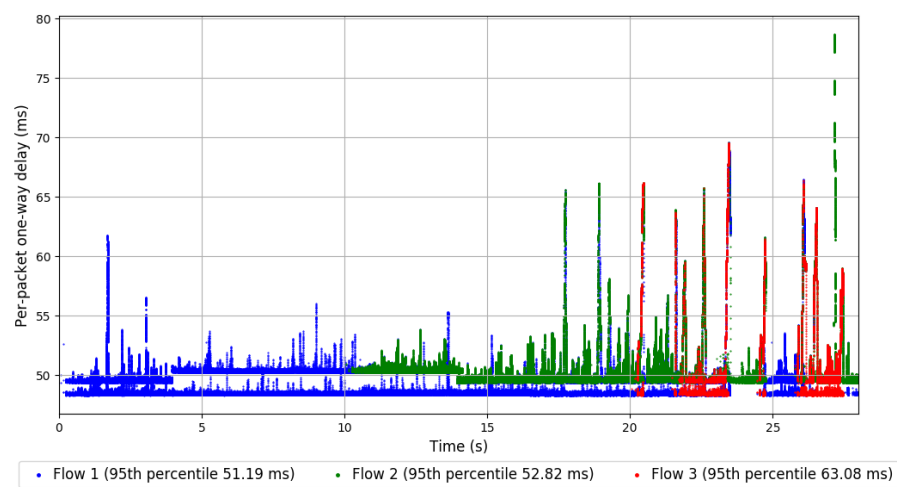
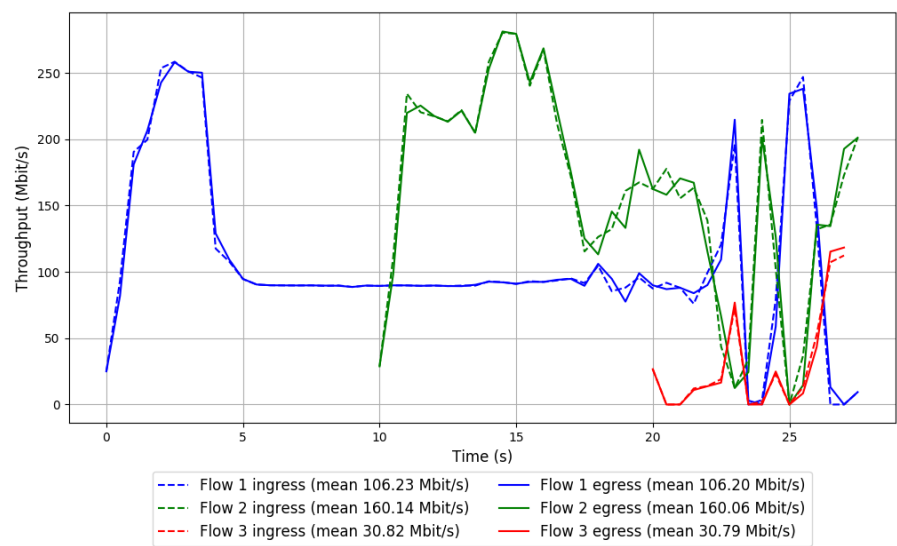
-- Flow 3:

Average throughput: 30.79 Mbit/s

95th percentile per-packet one-way delay: 63.083 ms

Loss rate: 0.00%

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

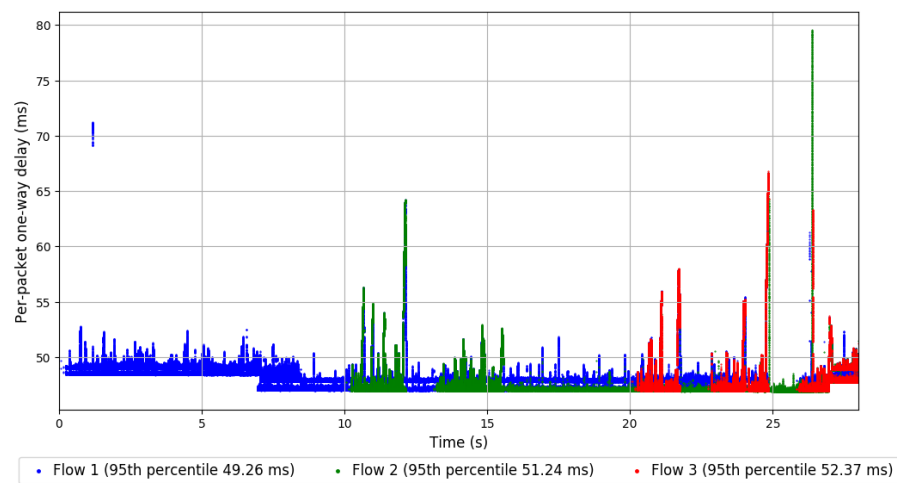
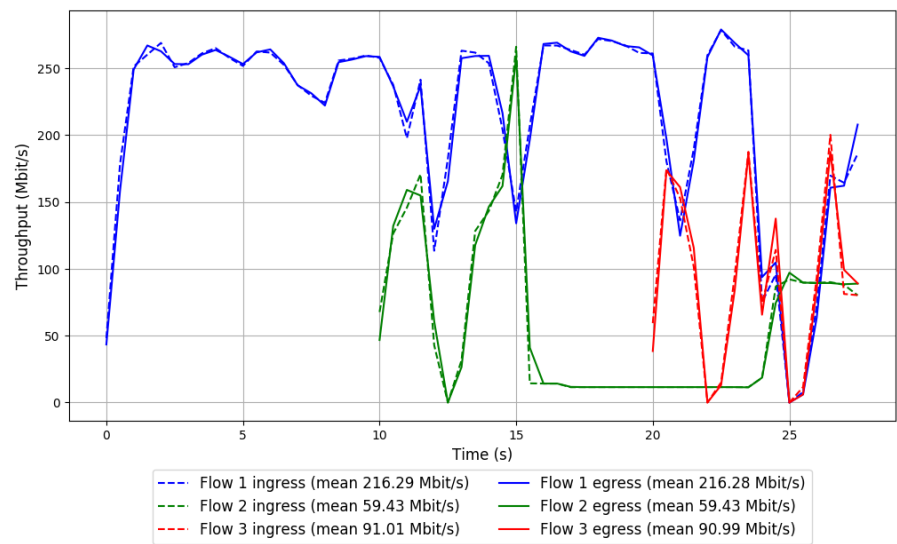


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-17 20:39:46
End at: 2018-01-17 20:40:16

# Below is generated by plot.py at 2018-01-18 00:26:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 280.24 Mbit/s
95th percentile per-packet one-way delay: 49.511 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 216.28 Mbit/s
95th percentile per-packet one-way delay: 49.264 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.43 Mbit/s
95th percentile per-packet one-way delay: 51.236 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 90.99 Mbit/s
95th percentile per-packet one-way delay: 52.373 ms
Loss rate: 0.00%
```

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

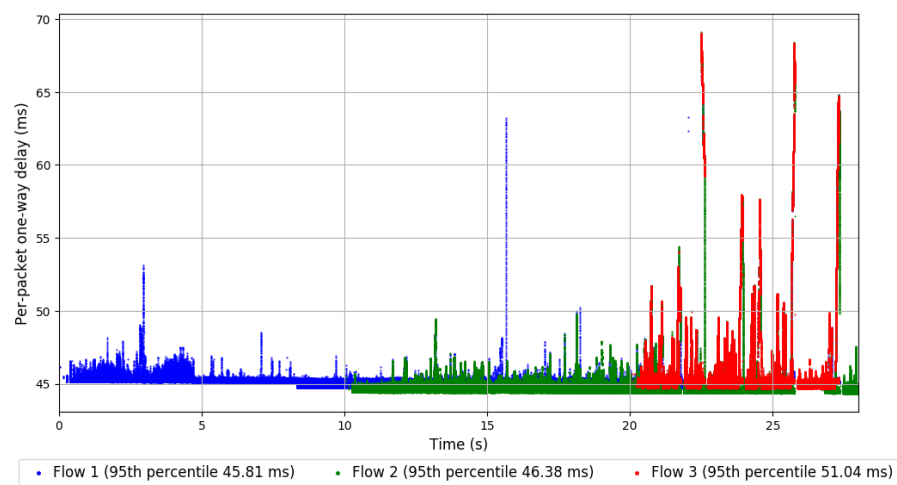
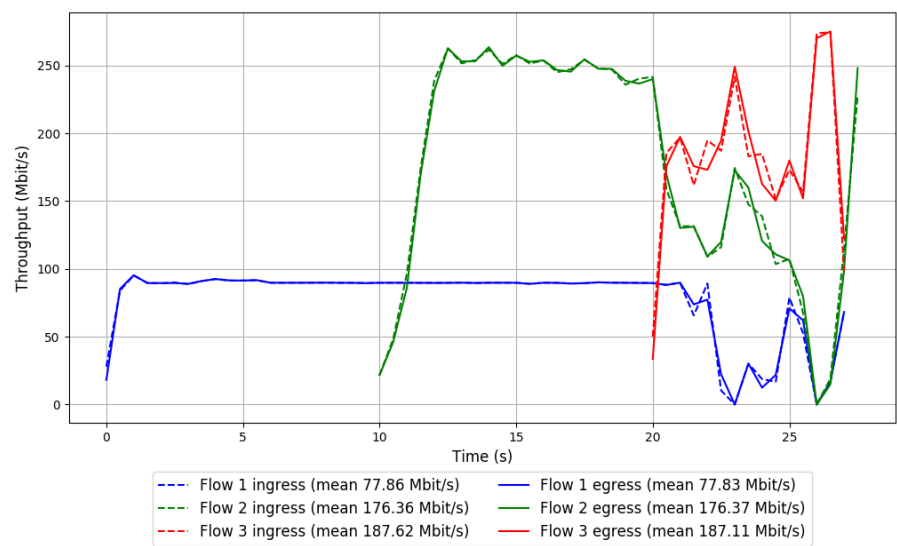


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-17 20:56:25
End at: 2018-01-17 20:56:55

# Below is generated by plot.py at 2018-01-18 00:26:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.77 Mbit/s
95th percentile per-packet one-way delay: 47.276 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 77.83 Mbit/s
95th percentile per-packet one-way delay: 45.807 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 176.37 Mbit/s
95th percentile per-packet one-way delay: 46.378 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 187.11 Mbit/s
95th percentile per-packet one-way delay: 51.040 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-17 18:29:58

End at: 2018-01-17 18:30:28

Below is generated by plot.py at 2018-01-18 00:26:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 172.94 Mbit/s

95th percentile per-packet one-way delay: 52.375 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 111.95 Mbit/s

95th percentile per-packet one-way delay: 52.190 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.85 Mbit/s

95th percentile per-packet one-way delay: 52.181 ms

Loss rate: 0.00%

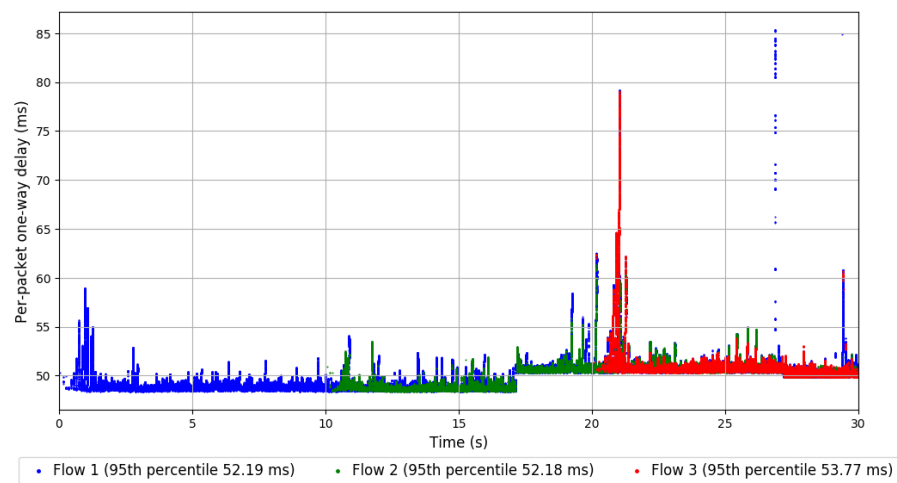
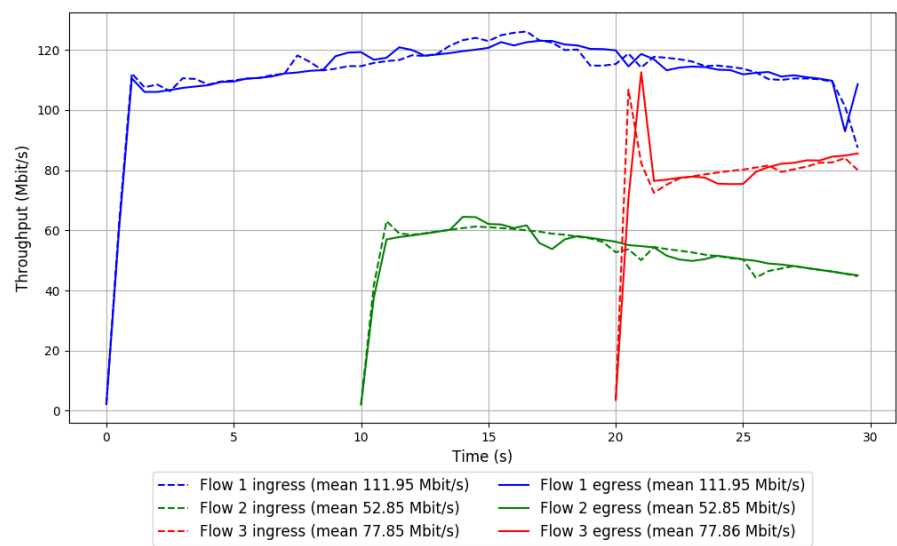
-- Flow 3:

Average throughput: 77.86 Mbit/s

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

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-17 18:46:53

End at: 2018-01-17 18:47:23

Below is generated by plot.py at 2018-01-18 00:26:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 195.74 Mbit/s

95th percentile per-packet one-way delay: 54.155 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 108.86 Mbit/s

95th percentile per-packet one-way delay: 55.089 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.46 Mbit/s

95th percentile per-packet one-way delay: 52.638 ms

Loss rate: 0.00%

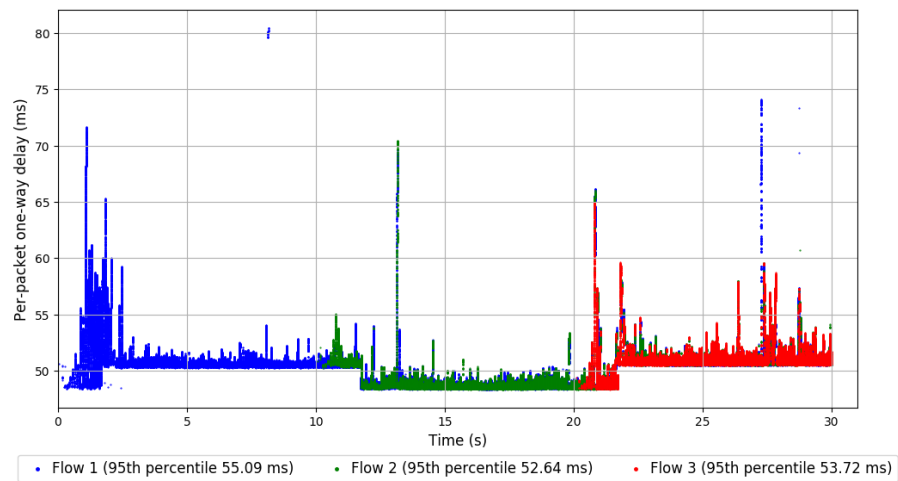
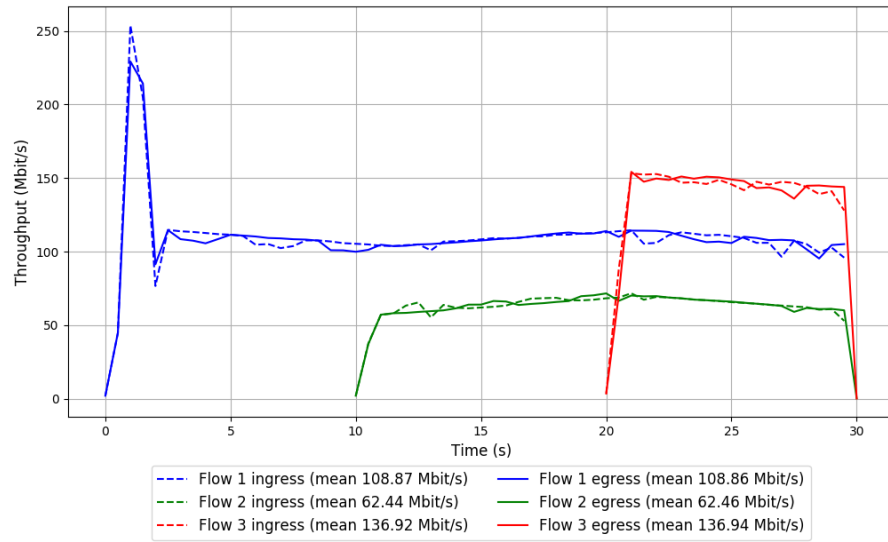
-- Flow 3:

Average throughput: 136.94 Mbit/s

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

Loss rate: 0.02%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-17 19:03:32

End at: 2018-01-17 19:04:02

Below is generated by plot.py at 2018-01-18 00:26:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 202.13 Mbit/s

95th percentile per-packet one-way delay: 52.685 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 101.85 Mbit/s

95th percentile per-packet one-way delay: 52.353 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.17 Mbit/s

95th percentile per-packet one-way delay: 52.442 ms

Loss rate: 0.00%

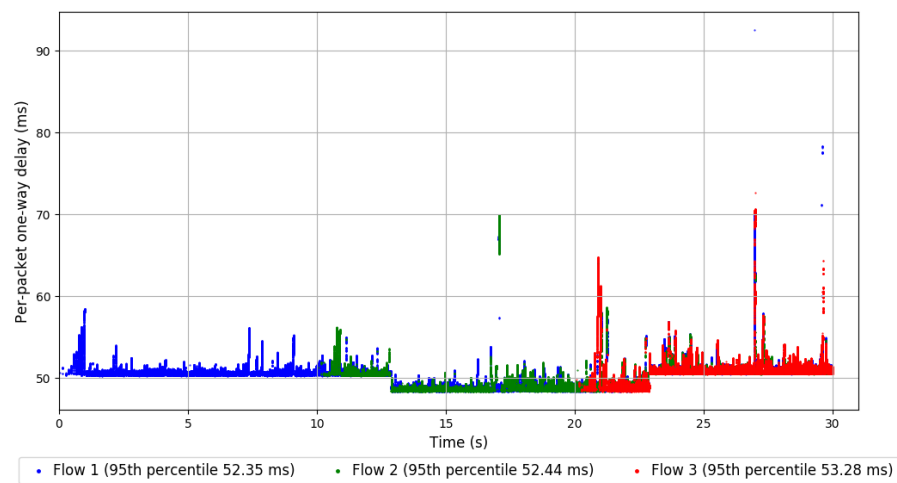
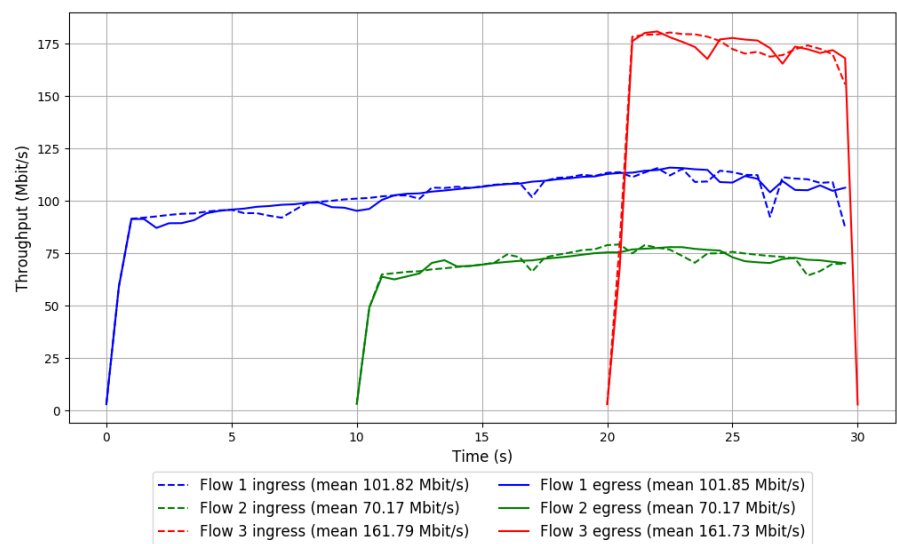
-- Flow 3:

Average throughput: 161.73 Mbit/s

95th percentile per-packet one-way delay: 53.276 ms

Loss rate: 0.04%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-17 19:20:28

End at: 2018-01-17 19:20:58

Below is generated by plot.py at 2018-01-18 00:26:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 166.60 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 24.95 Mbit/s

95th percentile per-packet one-way delay: 52.446 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 168.15 Mbit/s

95th percentile per-packet one-way delay: 53.984 ms

Loss rate: 0.00%

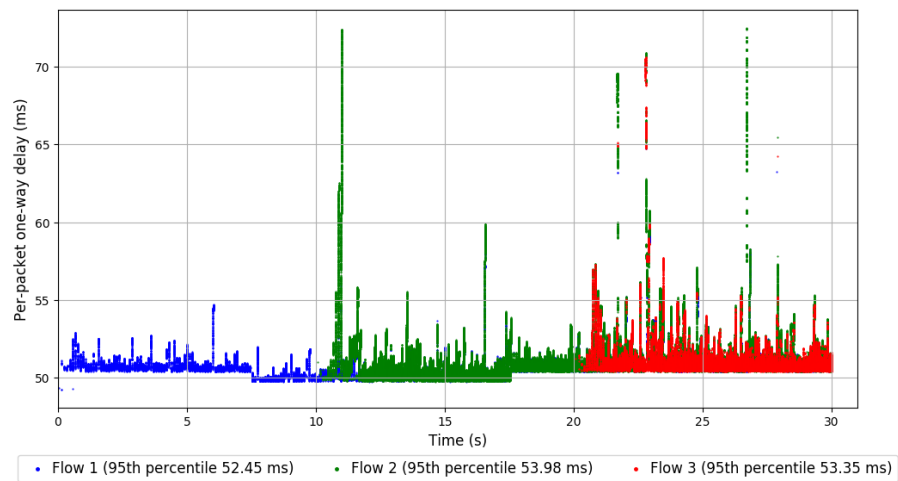
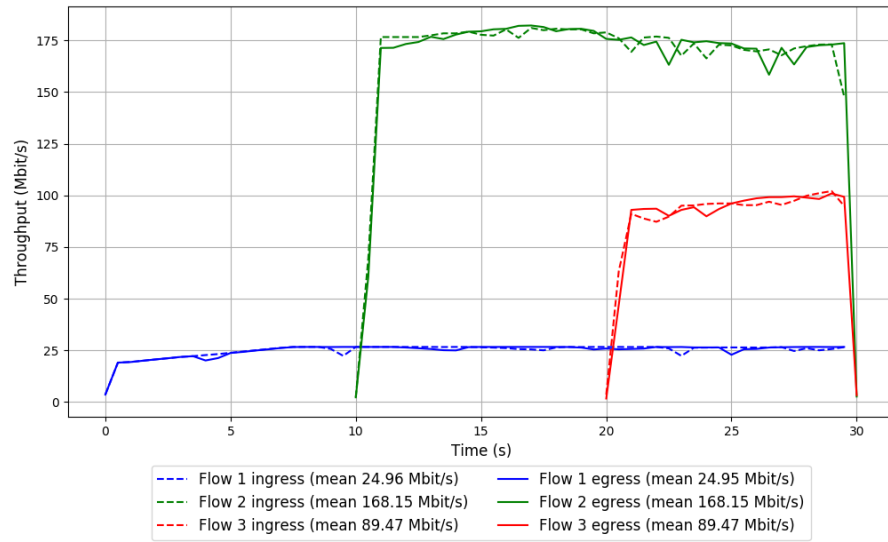
-- Flow 3:

Average throughput: 89.47 Mbit/s

95th percentile per-packet one-way delay: 53.353 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-17 19:37:24

End at: 2018-01-17 19:37:54

Below is generated by plot.py at 2018-01-18 00:26:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 145.88 Mbit/s

95th percentile per-packet one-way delay: 59.929 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 29.96 Mbit/s

95th percentile per-packet one-way delay: 57.172 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 151.60 Mbit/s

95th percentile per-packet one-way delay: 60.346 ms

Loss rate: 0.16%

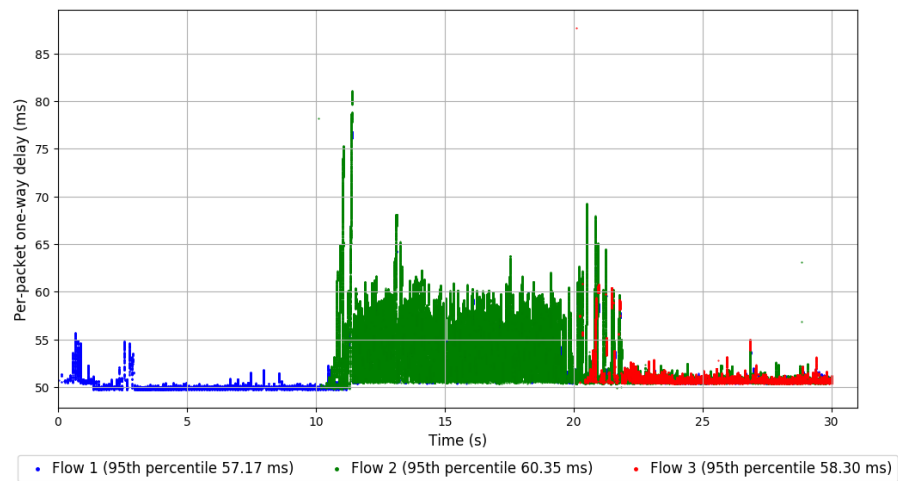
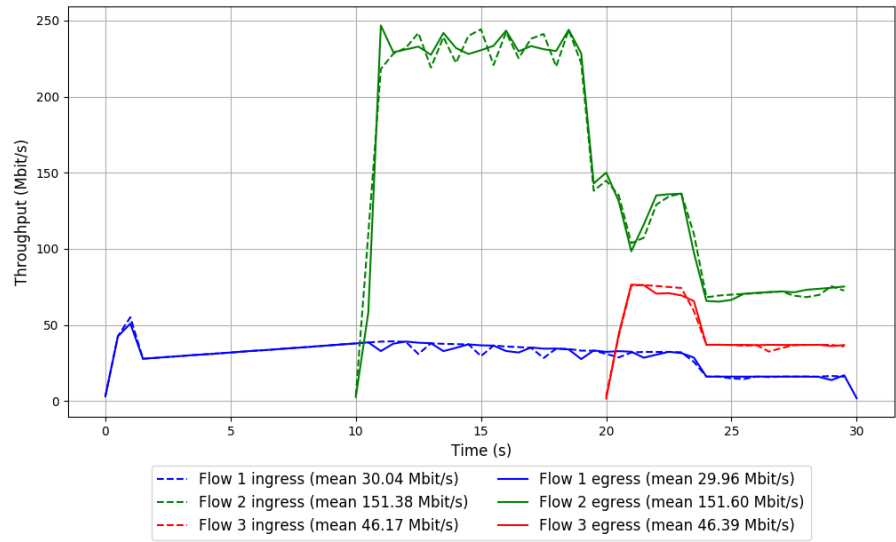
-- Flow 3:

Average throughput: 46.39 Mbit/s

95th percentile per-packet one-way delay: 58.305 ms

Loss rate: 0.03%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-17 19:54:00

End at: 2018-01-17 19:54:30

Below is generated by plot.py at 2018-01-18 00:26:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 174.70 Mbit/s

95th percentile per-packet one-way delay: 51.842 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.31 Mbit/s

95th percentile per-packet one-way delay: 51.362 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 123.69 Mbit/s

95th percentile per-packet one-way delay: 52.423 ms

Loss rate: 0.00%

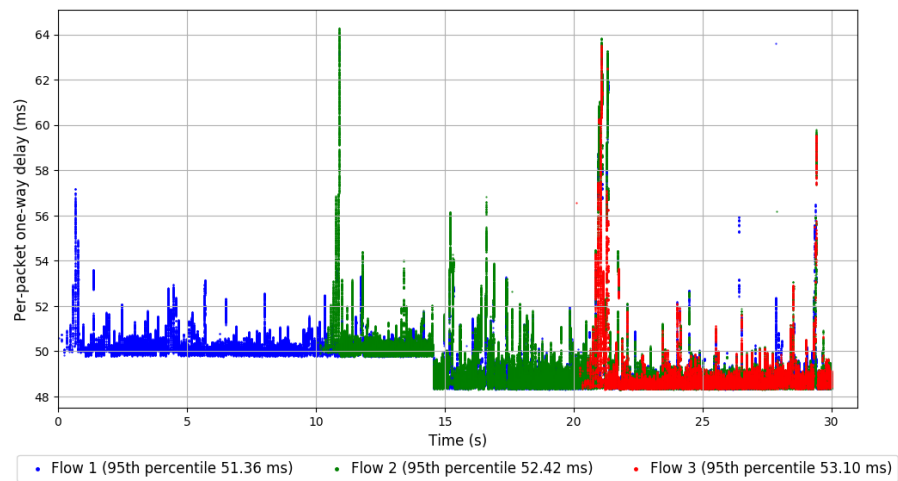
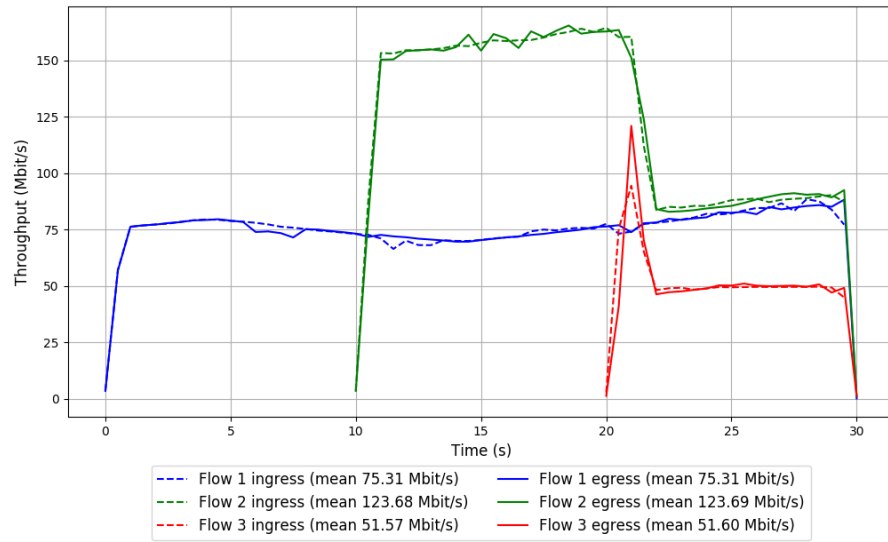
-- Flow 3:

Average throughput: 51.60 Mbit/s

95th percentile per-packet one-way delay: 53.097 ms

Loss rate: 0.02%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-17 20:10:44

End at: 2018-01-17 20:11:14

Below is generated by plot.py at 2018-01-18 00:26:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.07 Mbit/s

95th percentile per-packet one-way delay: 50.997 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 47.21 Mbit/s

95th percentile per-packet one-way delay: 51.040 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 44.82 Mbit/s

95th percentile per-packet one-way delay: 50.998 ms

Loss rate: 0.00%

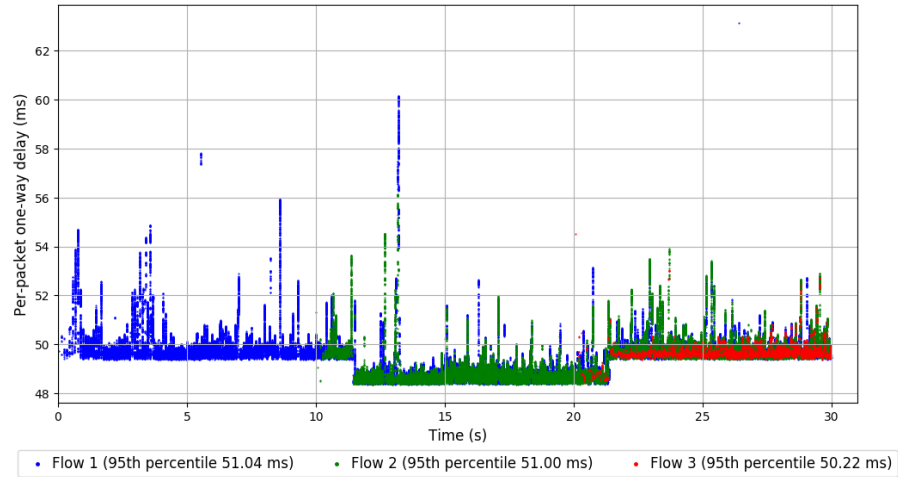
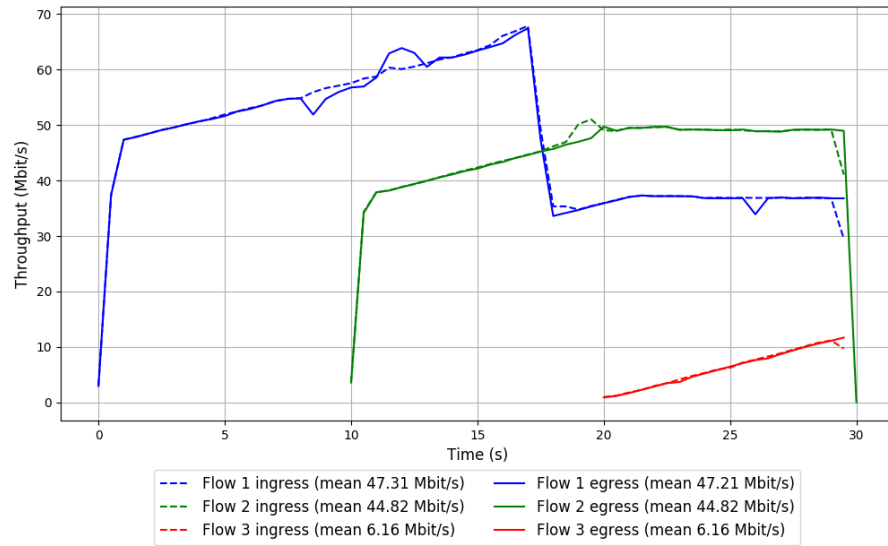
-- Flow 3:

Average throughput: 6.16 Mbit/s

95th percentile per-packet one-way delay: 50.216 ms

Loss rate: 0.06%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-17 20:27:09

End at: 2018-01-17 20:27:39

Below is generated by plot.py at 2018-01-18 00:26:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.80 Mbit/s

95th percentile per-packet one-way delay: 58.636 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 48.38 Mbit/s

95th percentile per-packet one-way delay: 57.272 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 119.53 Mbit/s

95th percentile per-packet one-way delay: 59.349 ms

Loss rate: 0.00%

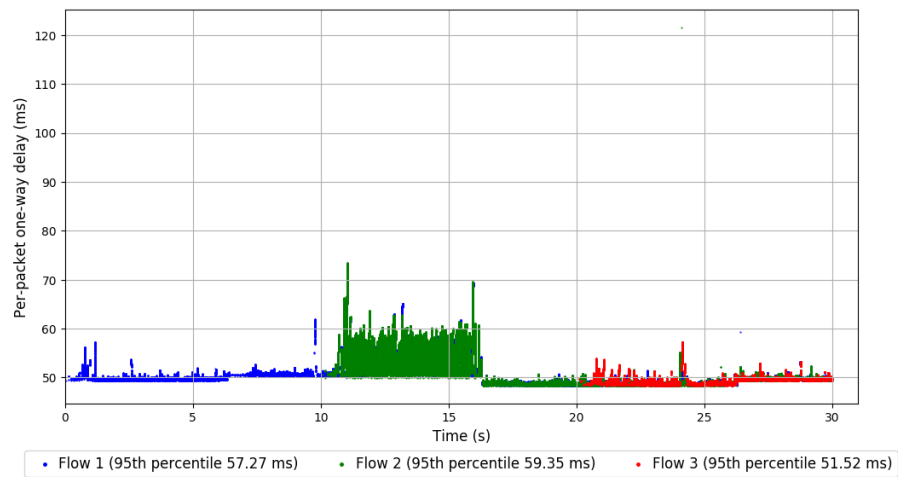
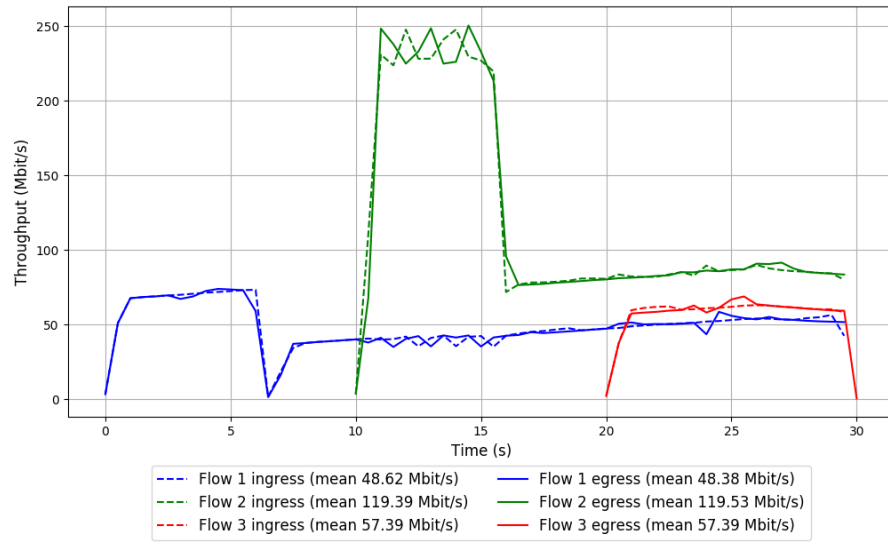
-- Flow 3:

Average throughput: 57.39 Mbit/s

95th percentile per-packet one-way delay: 51.524 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-17 20:43:46

End at: 2018-01-17 20:44:16

Below is generated by plot.py at 2018-01-18 00:27:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 245.85 Mbit/s

95th percentile per-packet one-way delay: 56.137 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.48 Mbit/s

95th percentile per-packet one-way delay: 54.494 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 226.57 Mbit/s

95th percentile per-packet one-way delay: 56.417 ms

Loss rate: 0.00%

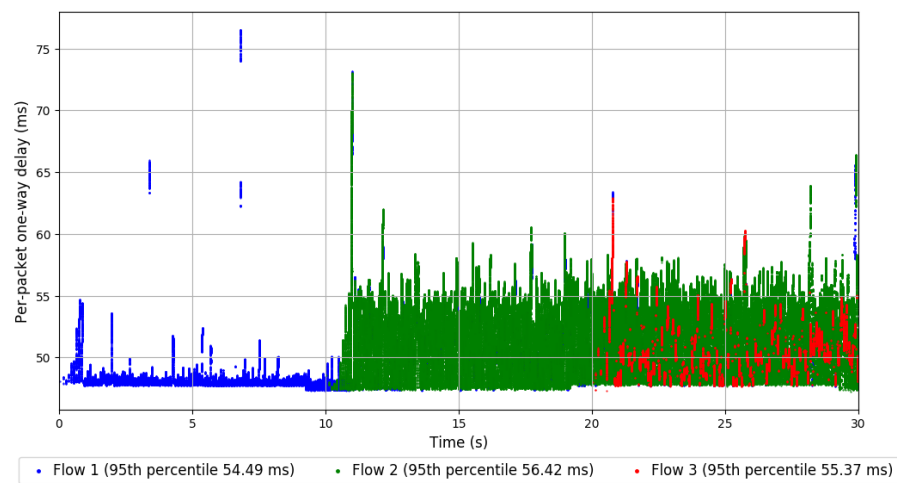
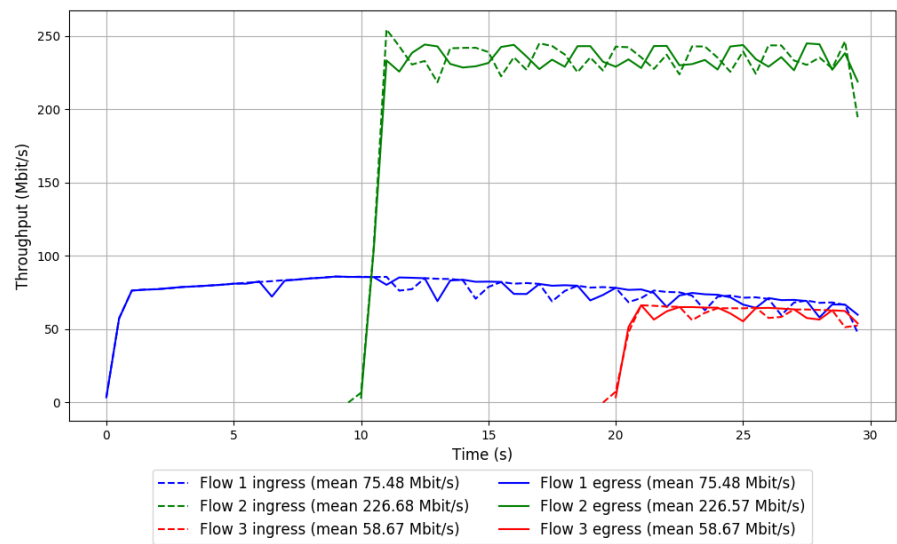
-- Flow 3:

Average throughput: 58.67 Mbit/s

95th percentile per-packet one-way delay: 55.366 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-17 21:00:28

End at: 2018-01-17 21:00:58

Below is generated by plot.py at 2018-01-18 00:27:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 172.34 Mbit/s

95th percentile per-packet one-way delay: 48.752 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 70.14 Mbit/s

95th percentile per-packet one-way delay: 47.212 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 82.34 Mbit/s

95th percentile per-packet one-way delay: 48.247 ms

Loss rate: 0.00%

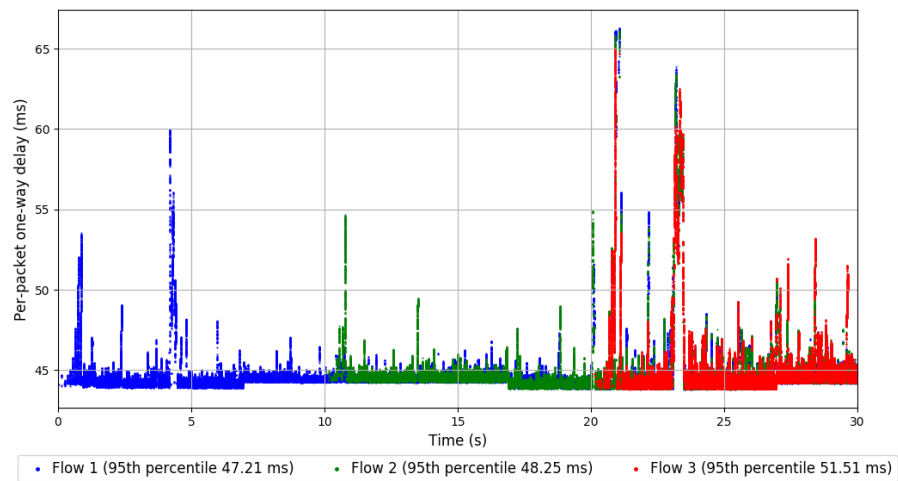
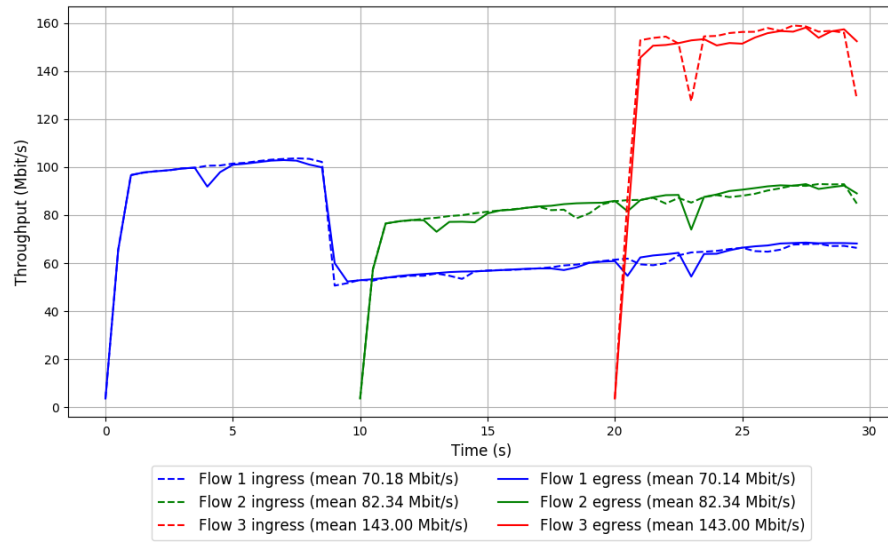
-- Flow 3:

Average throughput: 143.00 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

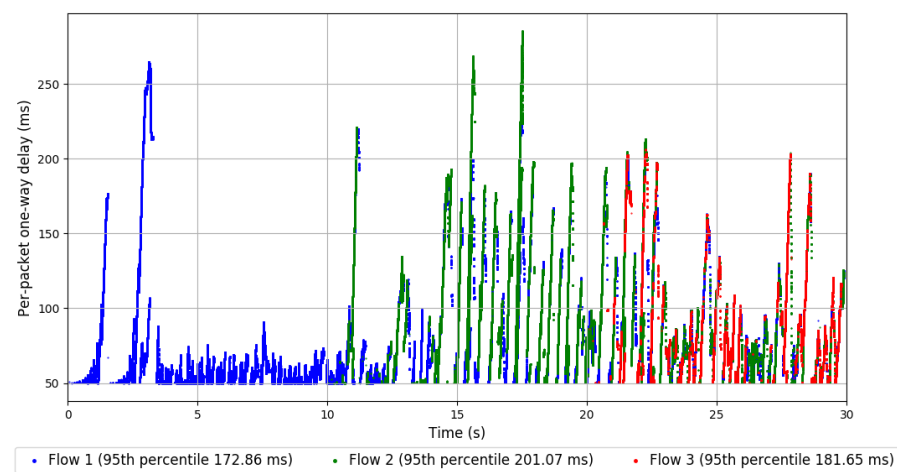
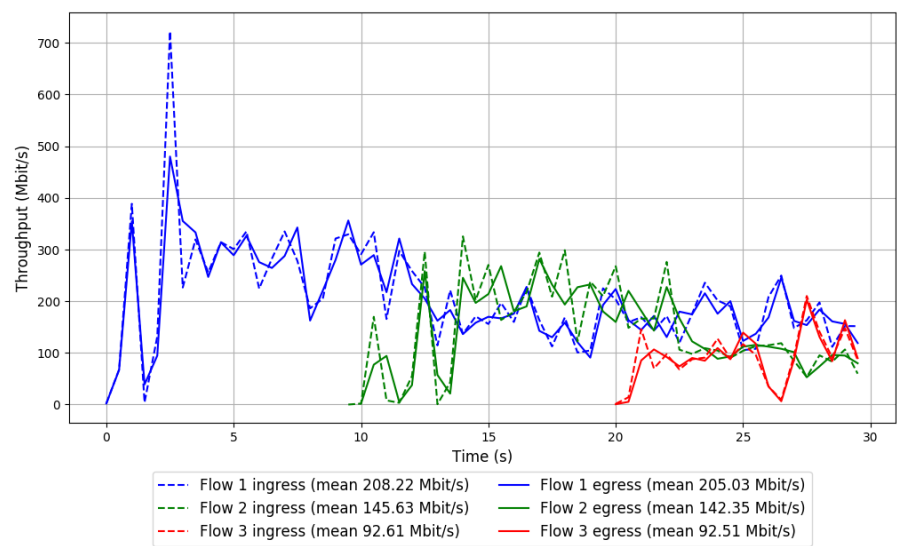


```
Run 1: Statistics of Verus

Start at: 2018-01-17 18:23:53
End at: 2018-01-17 18:24:23

# Below is generated by plot.py at 2018-01-18 00:29:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.75 Mbit/s
95th percentile per-packet one-way delay: 187.772 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 205.03 Mbit/s
95th percentile per-packet one-way delay: 172.864 ms
Loss rate: 1.53%
-- Flow 2:
Average throughput: 142.35 Mbit/s
95th percentile per-packet one-way delay: 201.066 ms
Loss rate: 2.14%
-- Flow 3:
Average throughput: 92.51 Mbit/s
95th percentile per-packet one-way delay: 181.647 ms
Loss rate: 1.51%
```

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-17 18:40:48

End at: 2018-01-17 18:41:18

Below is generated by plot.py at 2018-01-18 00:29:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 350.06 Mbit/s

95th percentile per-packet one-way delay: 163.809 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 222.70 Mbit/s

95th percentile per-packet one-way delay: 148.764 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 148.33 Mbit/s

95th percentile per-packet one-way delay: 180.554 ms

Loss rate: 0.76%

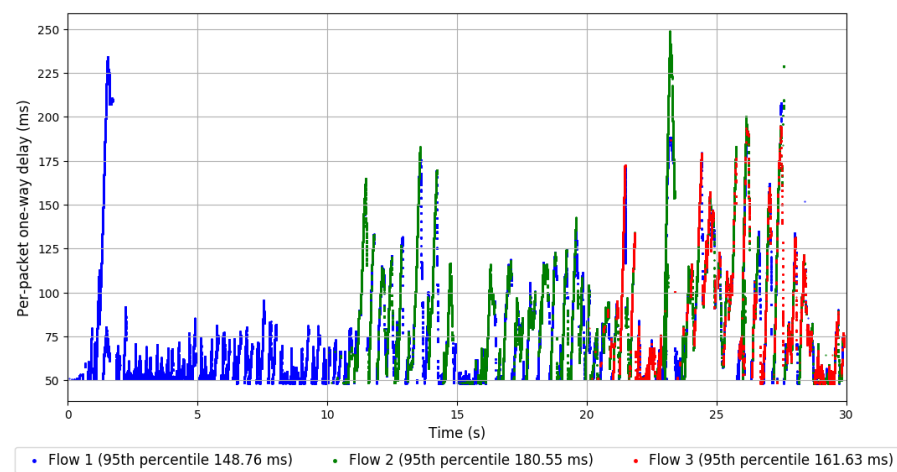
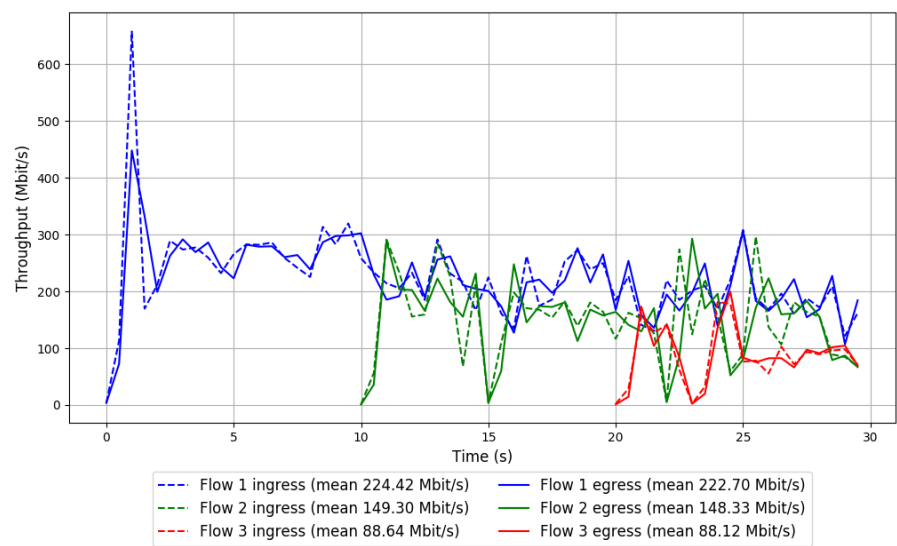
-- Flow 3:

Average throughput: 88.12 Mbit/s

95th percentile per-packet one-way delay: 161.627 ms

Loss rate: 0.87%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-17 18:57:27

End at: 2018-01-17 18:57:57

Below is generated by plot.py at 2018-01-18 00:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 370.74 Mbit/s

95th percentile per-packet one-way delay: 166.122 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 234.61 Mbit/s

95th percentile per-packet one-way delay: 162.618 ms

Loss rate: 1.70%

-- Flow 2:

Average throughput: 136.88 Mbit/s

95th percentile per-packet one-way delay: 159.063 ms

Loss rate: 0.61%

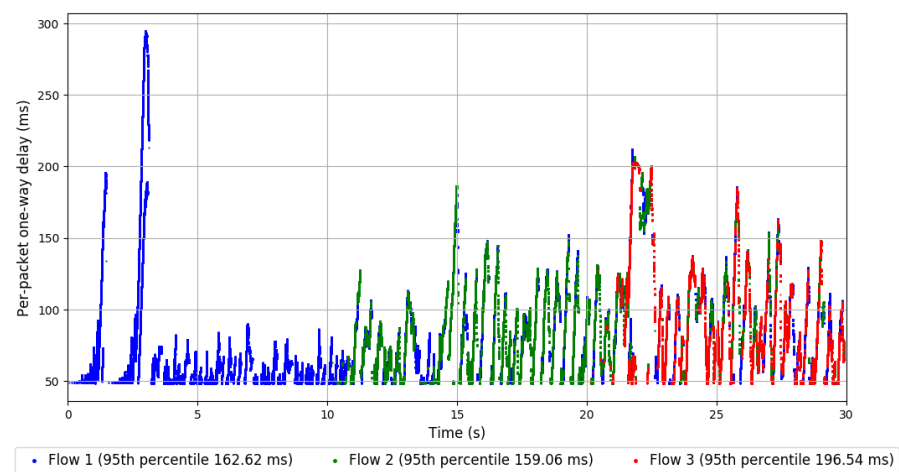
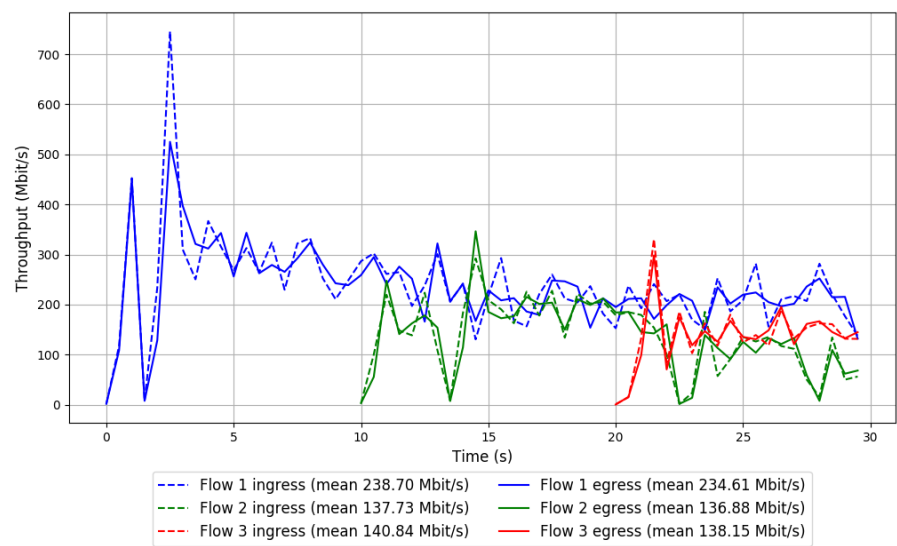
-- Flow 3:

Average throughput: 138.15 Mbit/s

95th percentile per-packet one-way delay: 196.538 ms

Loss rate: 2.16%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-17 19:14:26

End at: 2018-01-17 19:14:56

Below is generated by plot.py at 2018-01-18 00:32:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.63 Mbit/s

95th percentile per-packet one-way delay: 165.443 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 275.77 Mbit/s

95th percentile per-packet one-way delay: 156.030 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 131.69 Mbit/s

95th percentile per-packet one-way delay: 163.689 ms

Loss rate: 0.44%

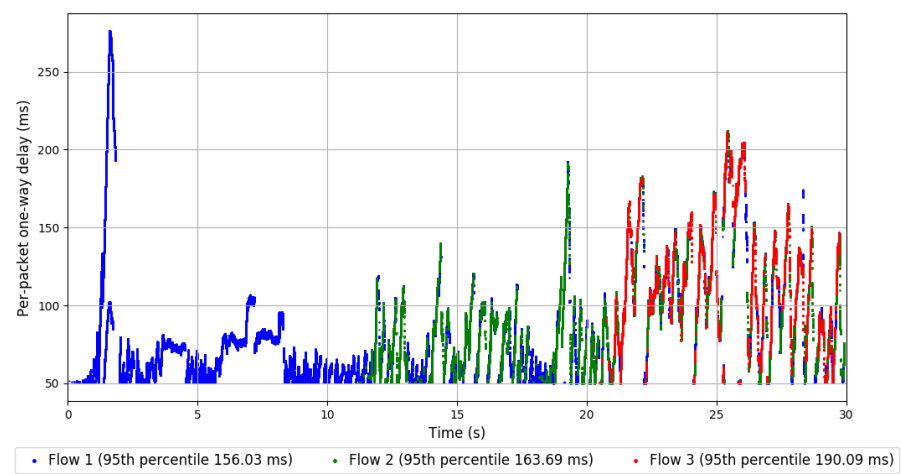
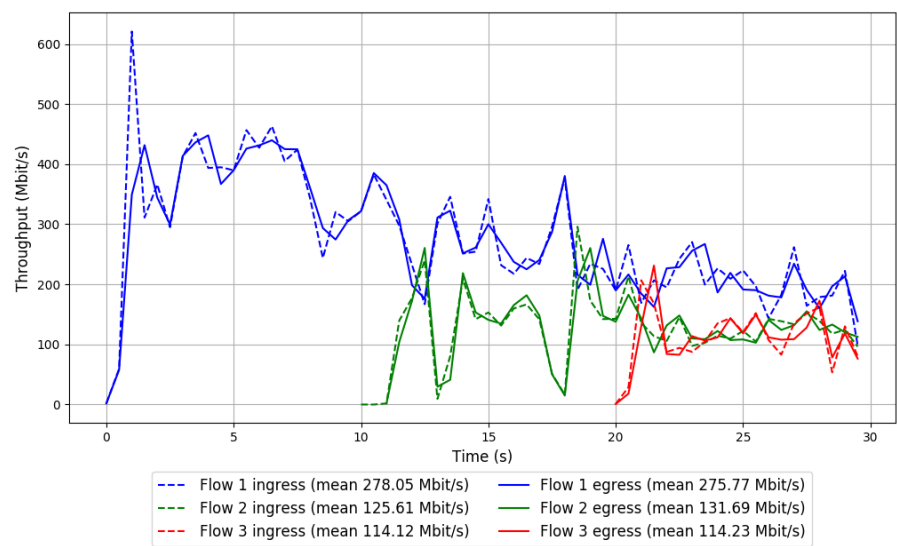
-- Flow 3:

Average throughput: 114.23 Mbit/s

95th percentile per-packet one-way delay: 190.092 ms

Loss rate: 1.82%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-17 19:31:14

End at: 2018-01-17 19:31:44

Below is generated by plot.py at 2018-01-18 00:32:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 350.15 Mbit/s

95th percentile per-packet one-way delay: 170.383 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 286.86 Mbit/s

95th percentile per-packet one-way delay: 169.641 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 59.04 Mbit/s

95th percentile per-packet one-way delay: 166.383 ms

Loss rate: 0.47%

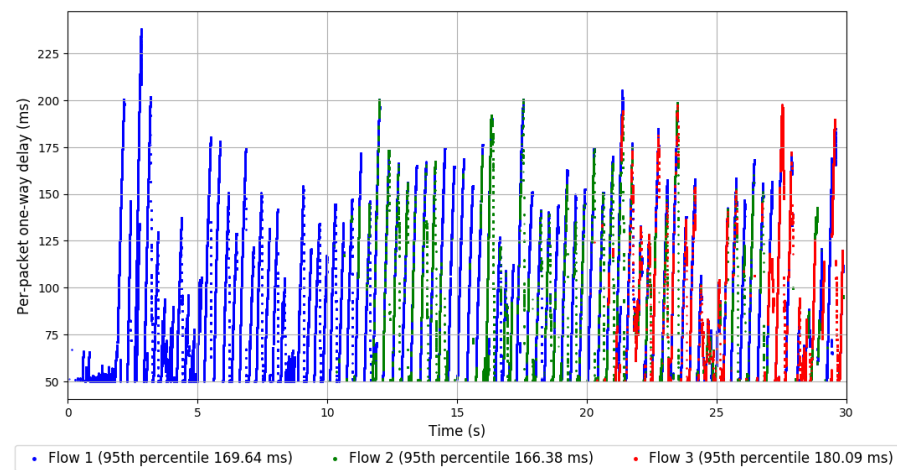
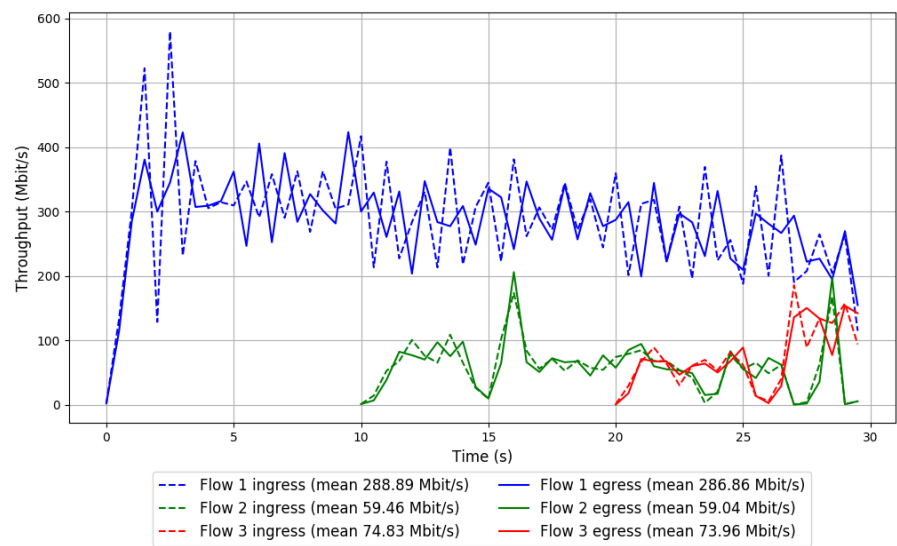
-- Flow 3:

Average throughput: 73.96 Mbit/s

95th percentile per-packet one-way delay: 180.087 ms

Loss rate: 0.92%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-17 19:47:55

End at: 2018-01-17 19:48:25

Below is generated by plot.py at 2018-01-18 00:32:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 361.46 Mbit/s

95th percentile per-packet one-way delay: 175.203 ms

Loss rate: 1.64%

-- Flow 1:

Average throughput: 219.20 Mbit/s

95th percentile per-packet one-way delay: 169.149 ms

Loss rate: 1.86%

-- Flow 2:

Average throughput: 170.17 Mbit/s

95th percentile per-packet one-way delay: 180.545 ms

Loss rate: 0.97%

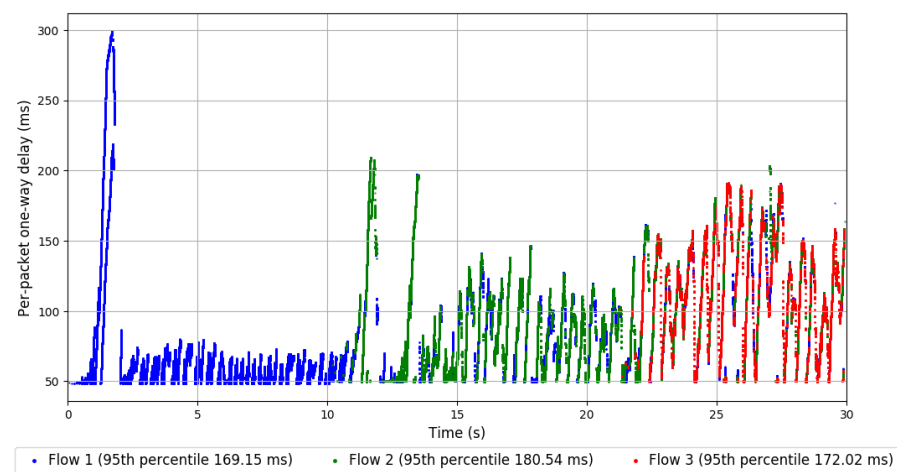
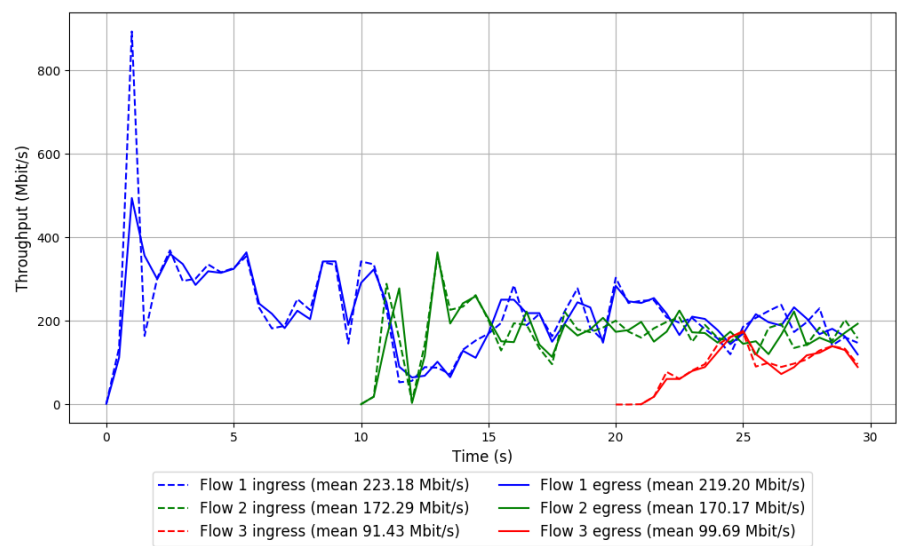
-- Flow 3:

Average throughput: 99.69 Mbit/s

95th percentile per-packet one-way delay: 172.023 ms

Loss rate: 2.46%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-17 20:04:38

End at: 2018-01-17 20:05:08

Below is generated by plot.py at 2018-01-18 00:33:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 356.15 Mbit/s

95th percentile per-packet one-way delay: 180.789 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 232.19 Mbit/s

95th percentile per-packet one-way delay: 177.550 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 162.41 Mbit/s

95th percentile per-packet one-way delay: 181.365 ms

Loss rate: 0.91%

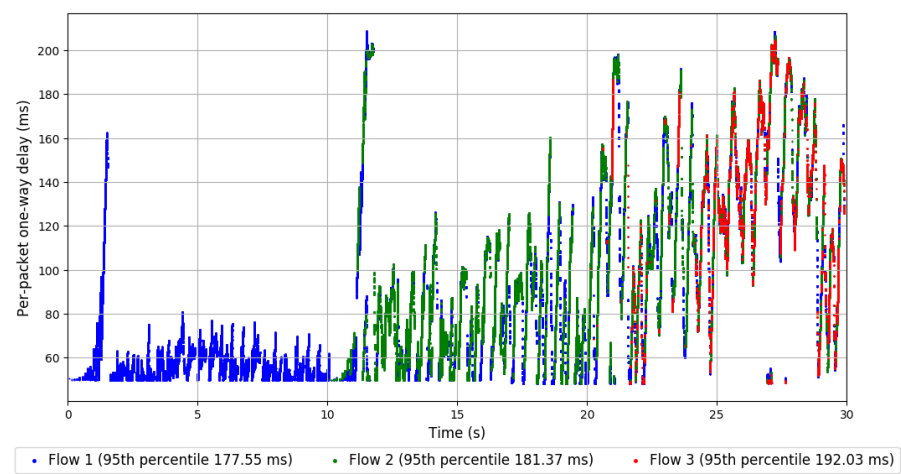
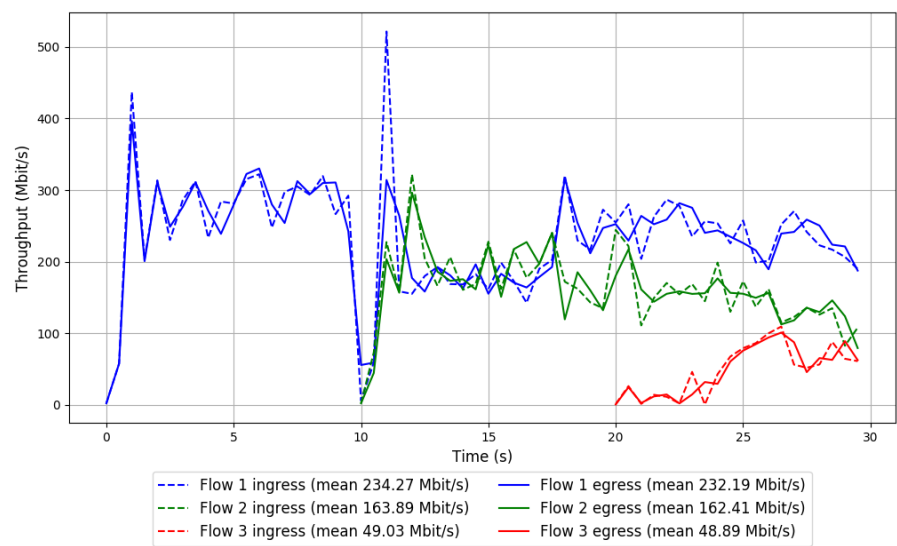
-- Flow 3:

Average throughput: 48.89 Mbit/s

95th percentile per-packet one-way delay: 192.029 ms

Loss rate: 0.49%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-17 20:21:05

End at: 2018-01-17 20:21:35

Below is generated by plot.py at 2018-01-18 00:33:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.90 Mbit/s

95th percentile per-packet one-way delay: 178.097 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 173.90 Mbit/s

95th percentile per-packet one-way delay: 179.879 ms

Loss rate: 1.32%

-- Flow 2:

Average throughput: 160.29 Mbit/s

95th percentile per-packet one-way delay: 192.273 ms

Loss rate: 1.99%

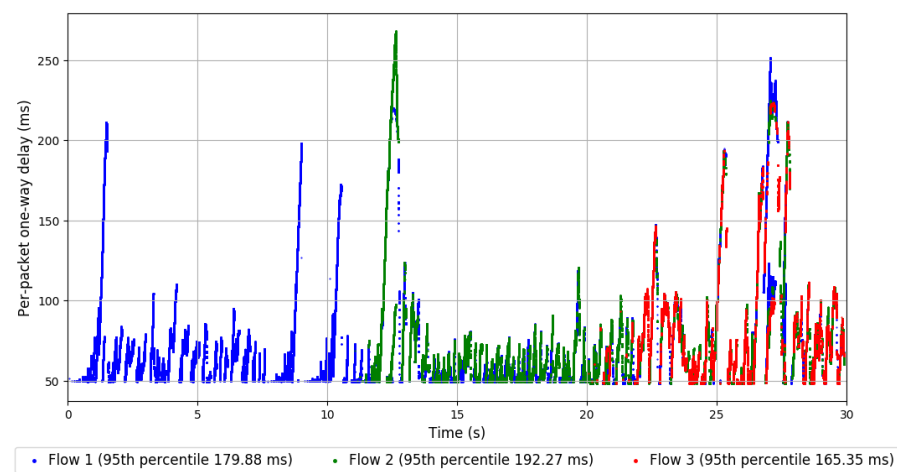
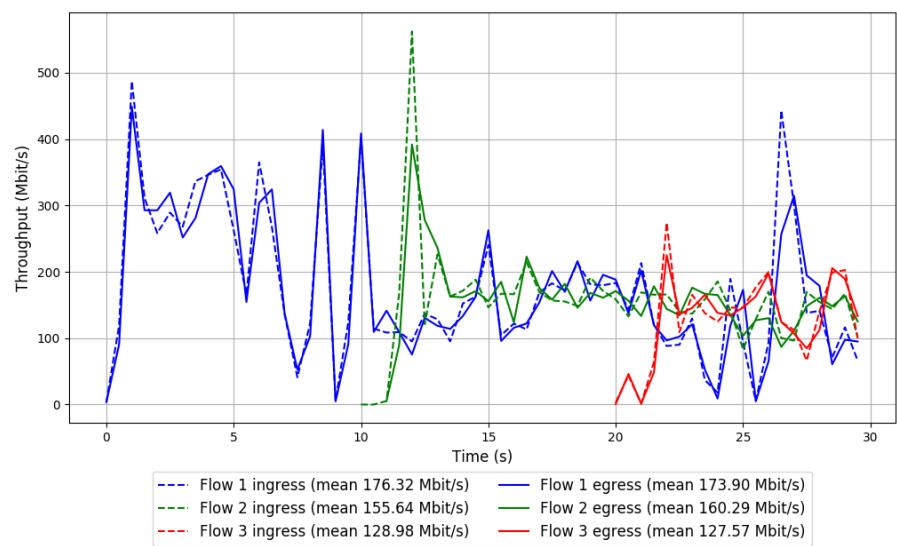
-- Flow 3:

Average throughput: 127.57 Mbit/s

95th percentile per-packet one-way delay: 165.354 ms

Loss rate: 1.28%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-17 20:38:00

End at: 2018-01-17 20:38:30

Below is generated by plot.py at 2018-01-18 00:35:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.43 Mbit/s

95th percentile per-packet one-way delay: 149.591 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 225.26 Mbit/s

95th percentile per-packet one-way delay: 139.440 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 112.96 Mbit/s

95th percentile per-packet one-way delay: 168.628 ms

Loss rate: 0.66%

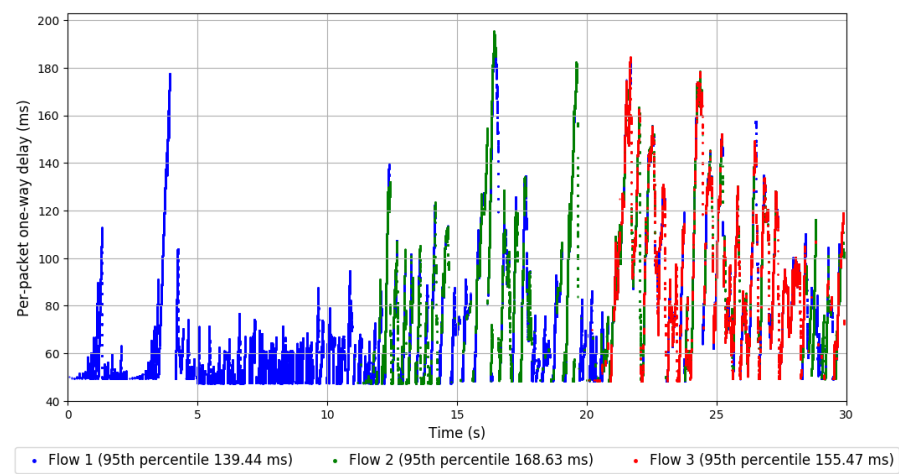
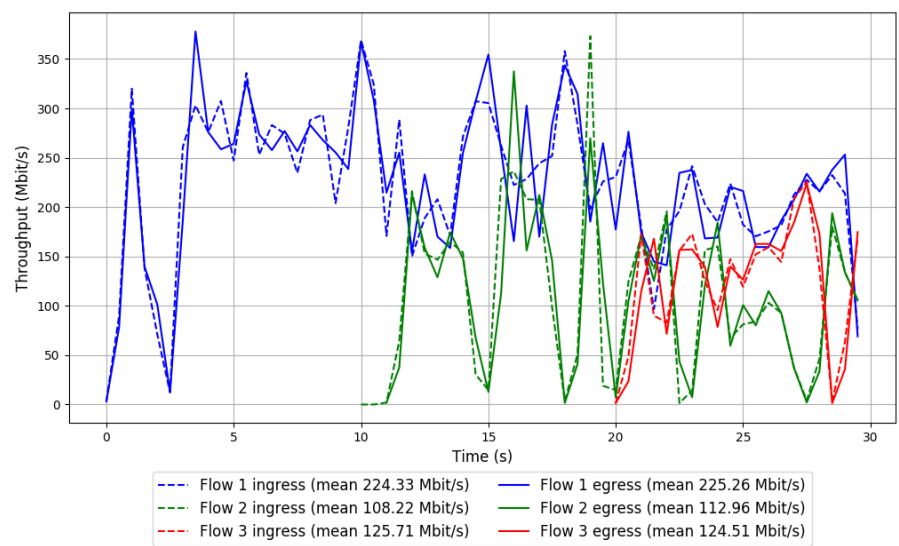
-- Flow 3:

Average throughput: 124.51 Mbit/s

95th percentile per-packet one-way delay: 155.473 ms

Loss rate: 0.94%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-17 20:54:39

End at: 2018-01-17 20:55:09

Below is generated by plot.py at 2018-01-18 00:36:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.21 Mbit/s

95th percentile per-packet one-way delay: 173.563 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 256.56 Mbit/s

95th percentile per-packet one-way delay: 171.848 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 84.97 Mbit/s

95th percentile per-packet one-way delay: 175.601 ms

Loss rate: 0.52%

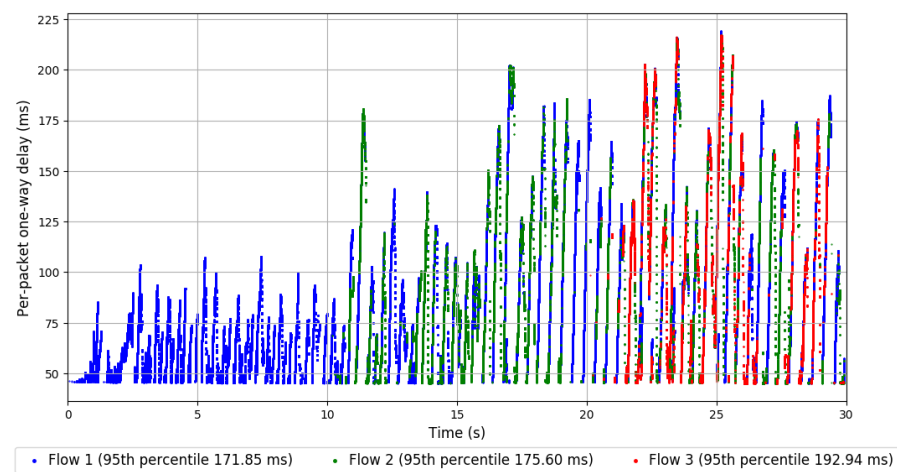
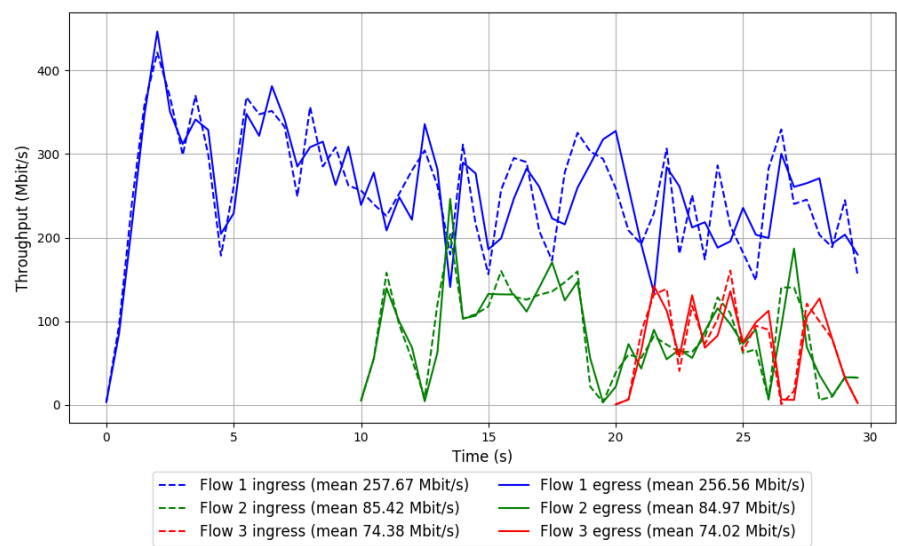
-- Flow 3:

Average throughput: 74.02 Mbit/s

95th percentile per-packet one-way delay: 192.939 ms

Loss rate: 1.02%

Run 10: Report of Verus — Data Link

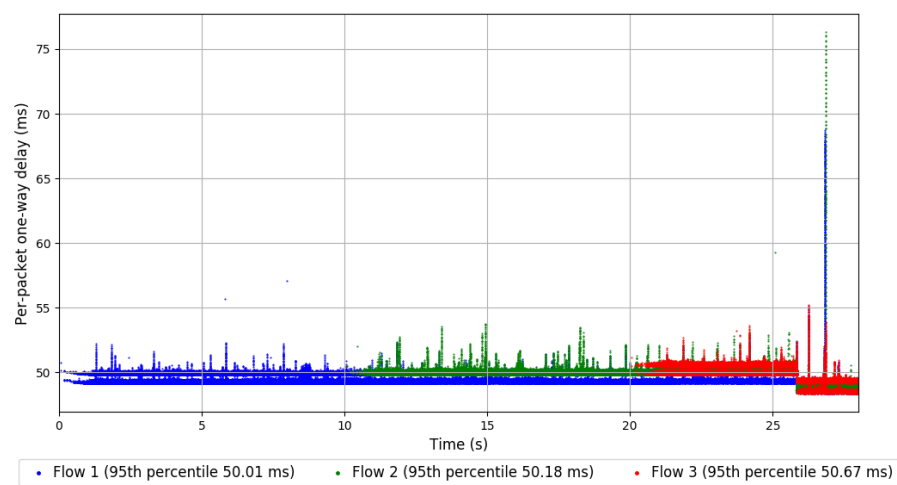
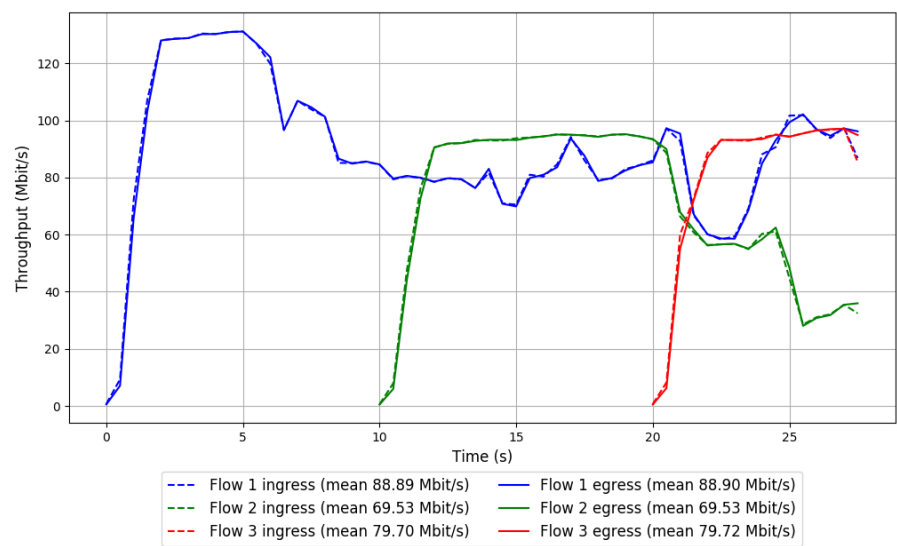


```
Run 1: Statistics of Copa

Start at: 2018-01-17 18:30:47
End at: 2018-01-17 18:31:17

# Below is generated by plot.py at 2018-01-18 00:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 156.08 Mbit/s
95th percentile per-packet one-way delay: 50.472 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 88.90 Mbit/s
95th percentile per-packet one-way delay: 50.012 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 69.53 Mbit/s
95th percentile per-packet one-way delay: 50.176 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 79.72 Mbit/s
95th percentile per-packet one-way delay: 50.669 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-17 18:47:44

End at: 2018-01-17 18:48:14

Below is generated by plot.py at 2018-01-18 00:37:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.37 Mbit/s

95th percentile per-packet one-way delay: 50.777 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 80.50 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 73.62 Mbit/s

95th percentile per-packet one-way delay: 50.763 ms

Loss rate: 0.00%

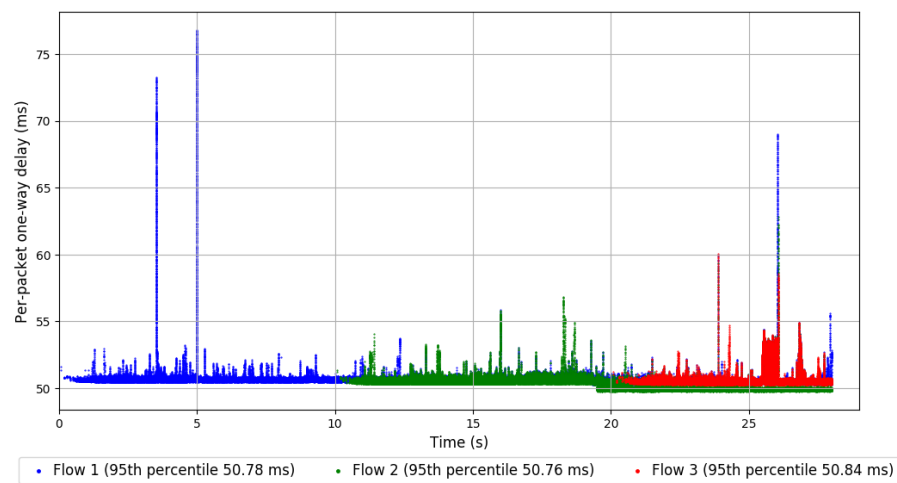
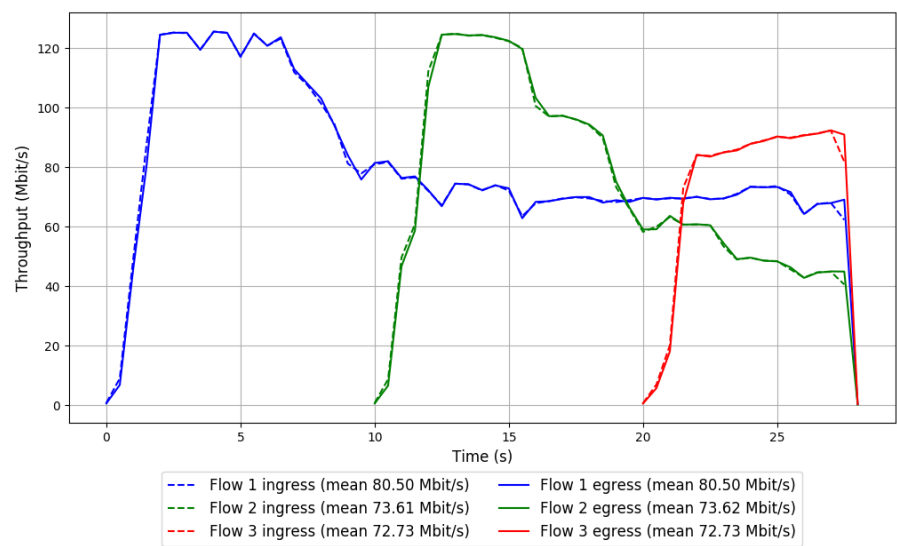
-- Flow 3:

Average throughput: 72.73 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-17 19:04:23

End at: 2018-01-17 19:04:53

Below is generated by plot.py at 2018-01-18 00:37:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.37 Mbit/s

95th percentile per-packet one-way delay: 50.676 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.69 Mbit/s

95th percentile per-packet one-way delay: 50.654 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 77.50 Mbit/s

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

Loss rate: 0.00%

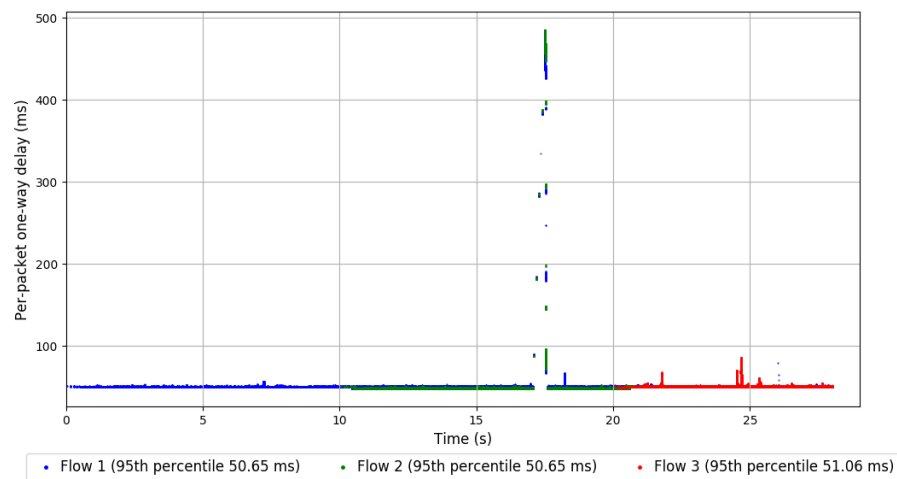
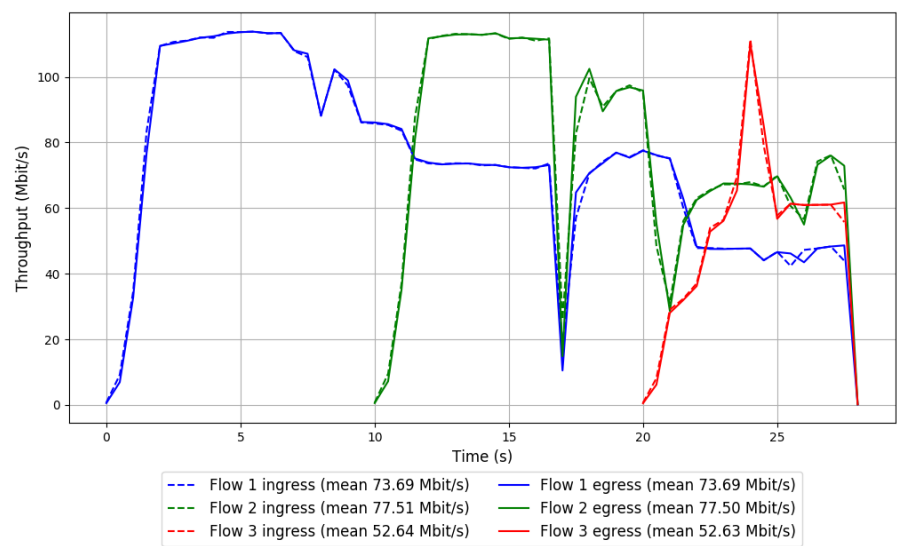
-- Flow 3:

Average throughput: 52.63 Mbit/s

95th percentile per-packet one-way delay: 51.057 ms

Loss rate: 0.01%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-17 19:21:16

End at: 2018-01-17 19:21:46

Below is generated by plot.py at 2018-01-18 00:37:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 162.77 Mbit/s

95th percentile per-packet one-way delay: 50.587 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 82.33 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 79.75 Mbit/s

95th percentile per-packet one-way delay: 50.587 ms

Loss rate: 0.00%

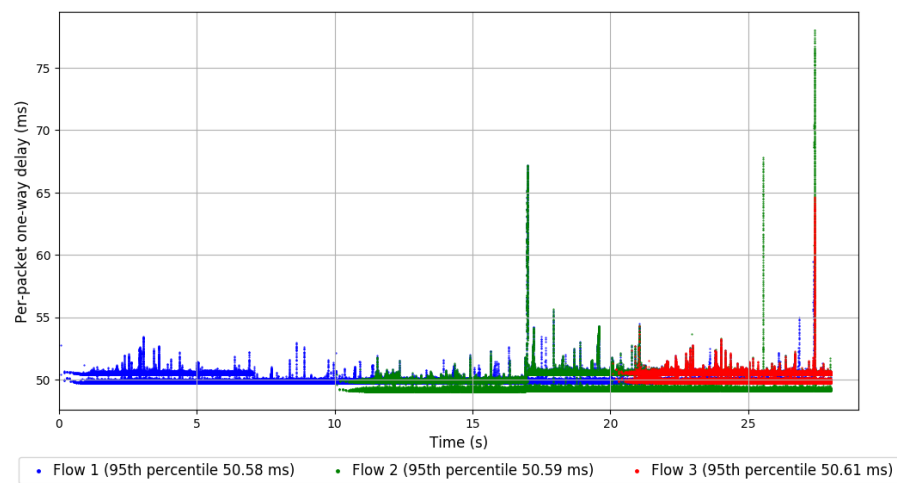
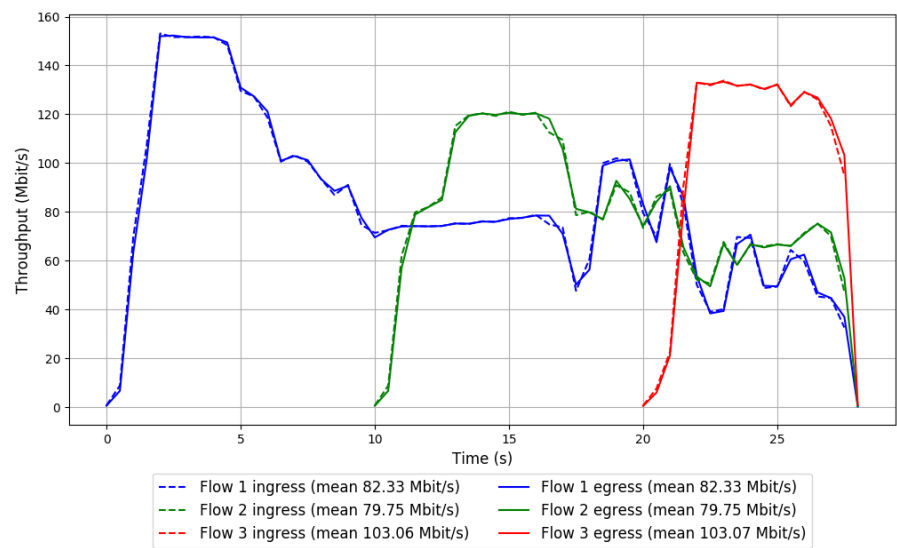
-- Flow 3:

Average throughput: 103.07 Mbit/s

95th percentile per-packet one-way delay: 50.613 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-17 19:38:12

End at: 2018-01-17 19:38:42

Below is generated by plot.py at 2018-01-18 00:38:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 153.86 Mbit/s

95th percentile per-packet one-way delay: 50.534 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.45 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 85.38 Mbit/s

95th percentile per-packet one-way delay: 50.007 ms

Loss rate: 0.00%

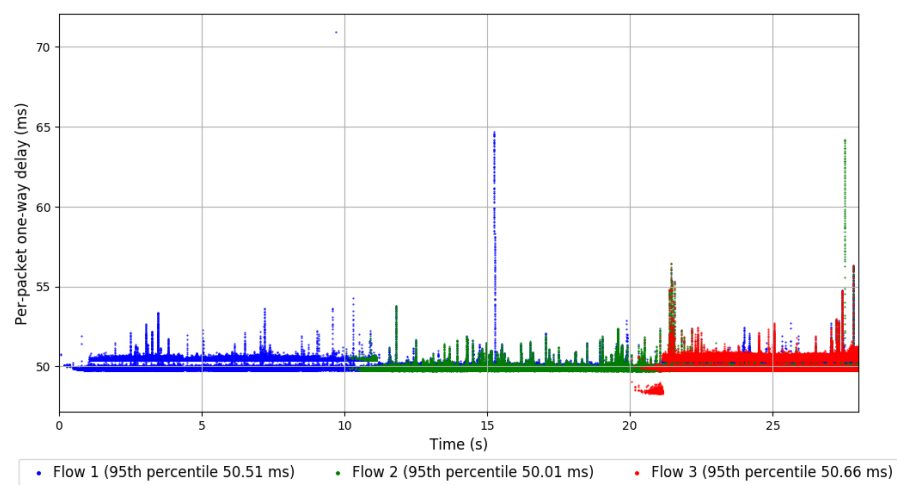
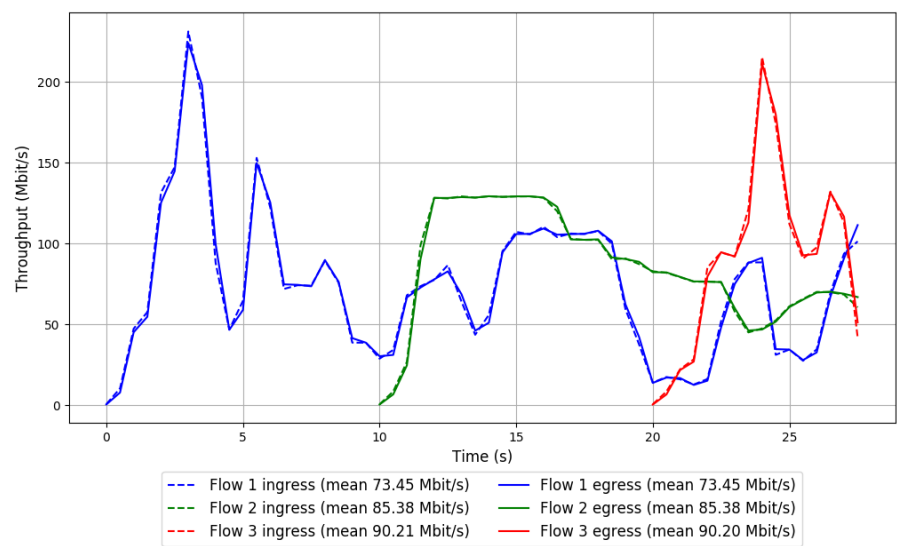
-- Flow 3:

Average throughput: 90.20 Mbit/s

95th percentile per-packet one-way delay: 50.664 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-17 19:54:50

End at: 2018-01-17 19:55:20

Below is generated by plot.py at 2018-01-18 00:38:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.36 Mbit/s

95th percentile per-packet one-way delay: 50.499 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 81.30 Mbit/s

95th percentile per-packet one-way delay: 49.364 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 80.08 Mbit/s

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

Loss rate: 0.00%

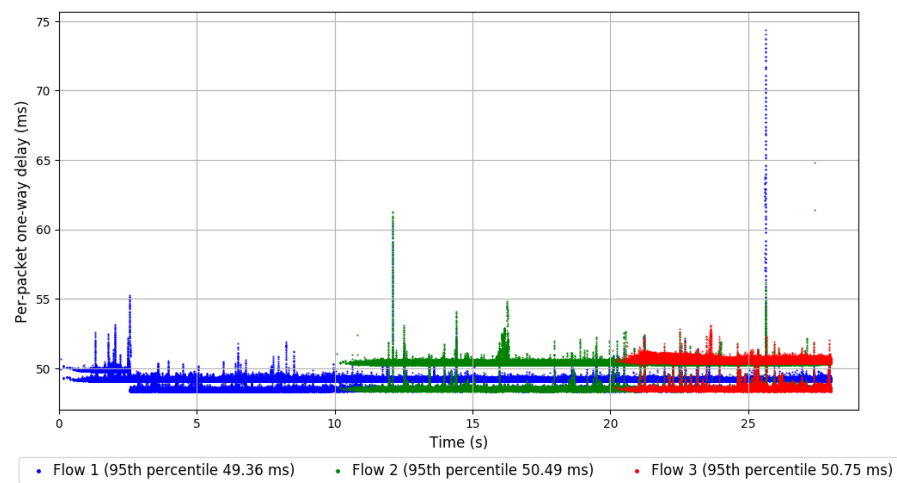
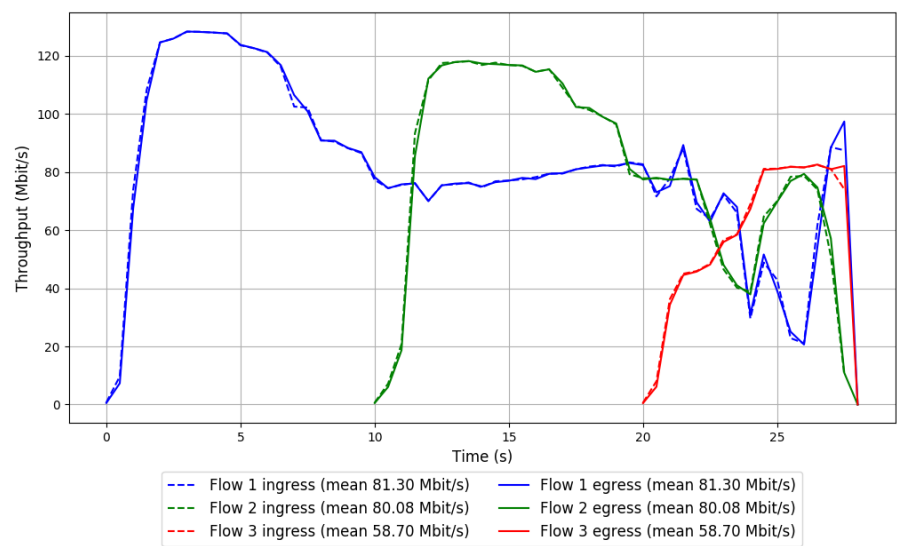
-- Flow 3:

Average throughput: 58.70 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-17 20:11:27

End at: 2018-01-17 20:11:57

Below is generated by plot.py at 2018-01-18 00:39:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.70 Mbit/s

95th percentile per-packet one-way delay: 50.454 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.35 Mbit/s

95th percentile per-packet one-way delay: 49.628 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 77.33 Mbit/s

95th percentile per-packet one-way delay: 50.428 ms

Loss rate: 0.00%

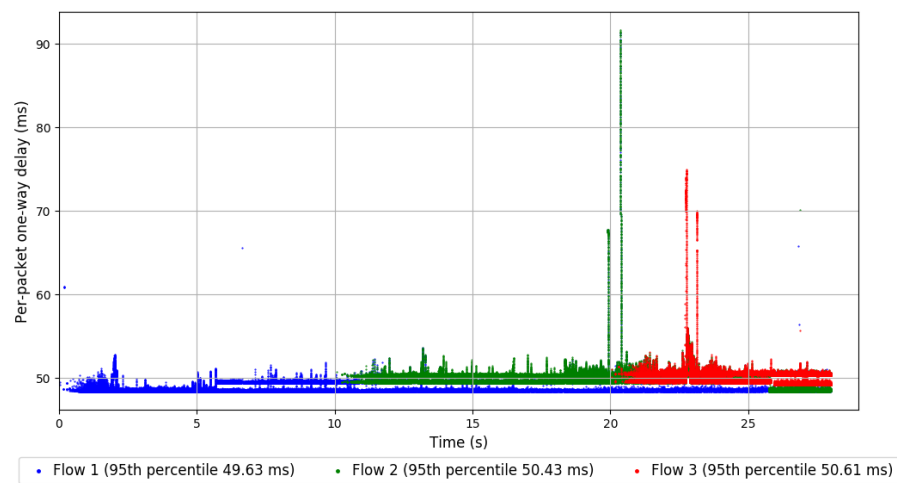
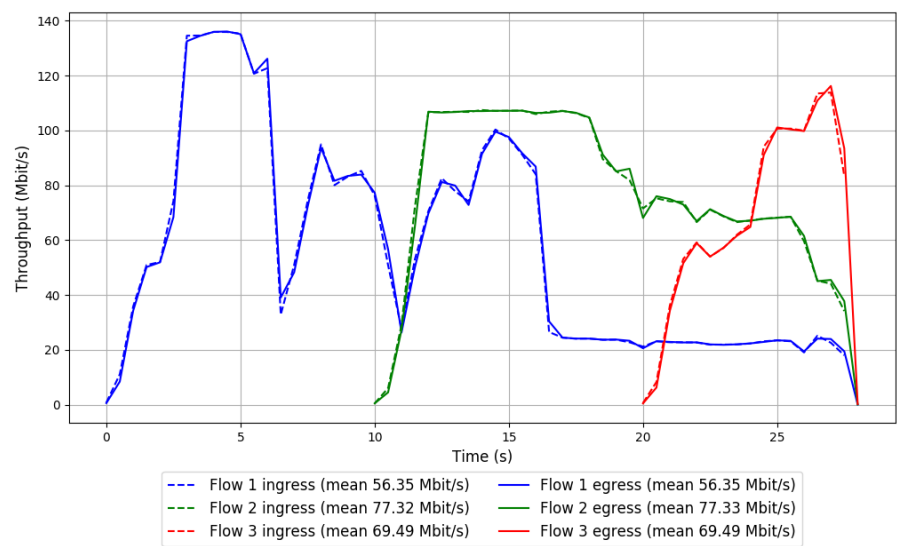
-- Flow 3:

Average throughput: 69.49 Mbit/s

95th percentile per-packet one-way delay: 50.607 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-17 20:27:57

End at: 2018-01-17 20:28:27

Below is generated by plot.py at 2018-01-18 00:40:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.13 Mbit/s

95th percentile per-packet one-way delay: 50.459 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 85.36 Mbit/s

95th percentile per-packet one-way delay: 50.470 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 84.06 Mbit/s

95th percentile per-packet one-way delay: 50.454 ms

Loss rate: 0.00%

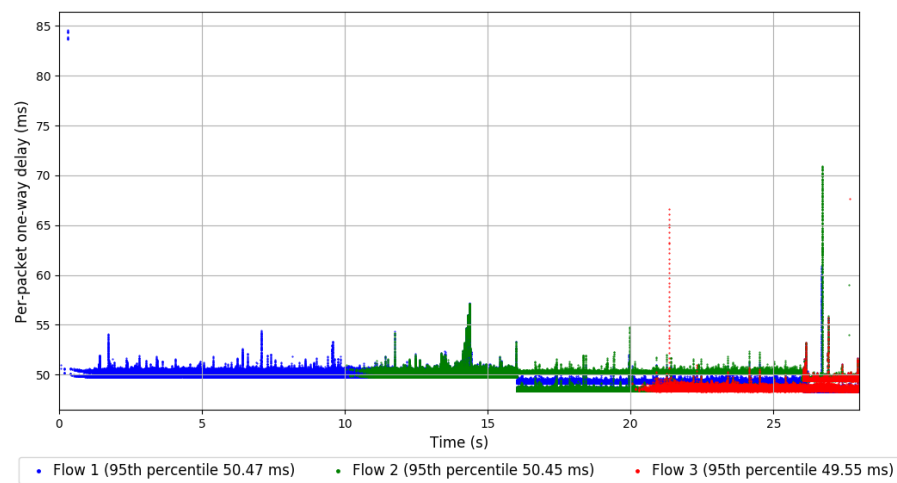
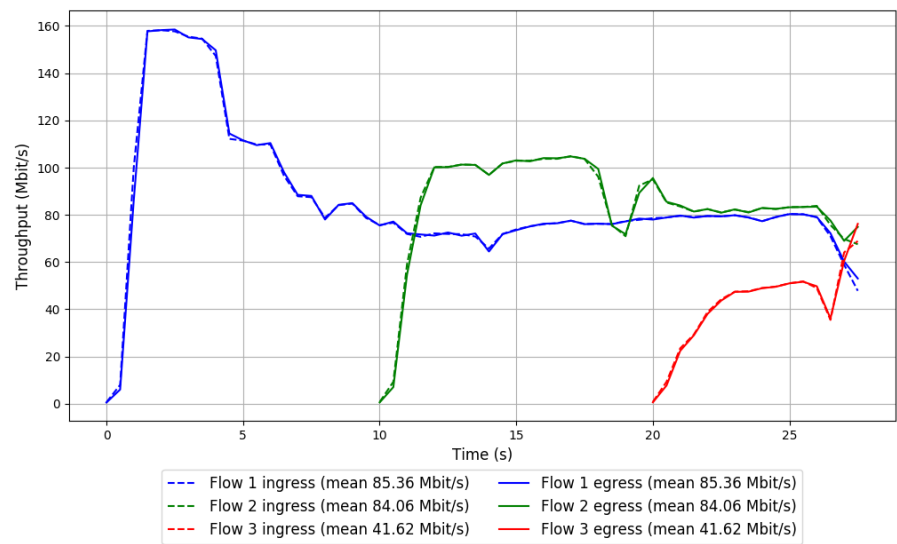
-- Flow 3:

Average throughput: 41.62 Mbit/s

95th percentile per-packet one-way delay: 49.546 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-17 20:44:39

End at: 2018-01-17 20:45:09

Below is generated by plot.py at 2018-01-18 00:40:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.31 Mbit/s

95th percentile per-packet one-way delay: 47.764 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.23 Mbit/s

95th percentile per-packet one-way delay: 47.768 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 106.556 ms

Loss rate: 46.17%

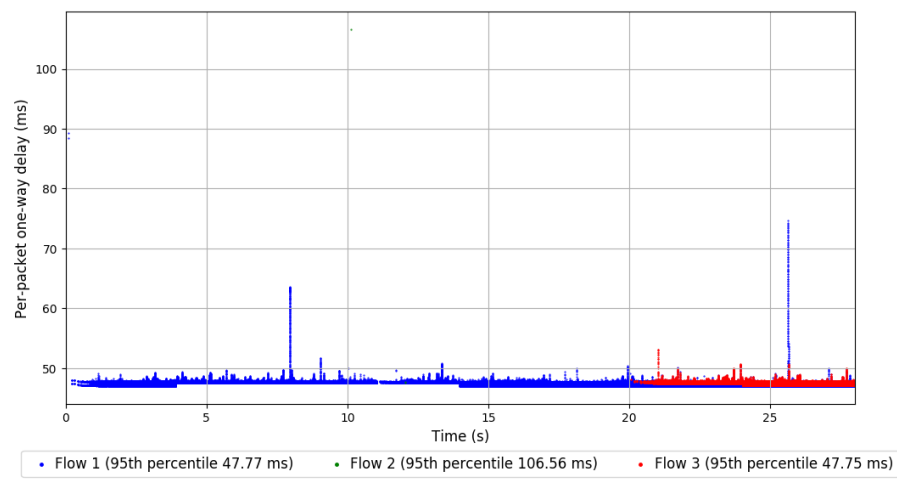
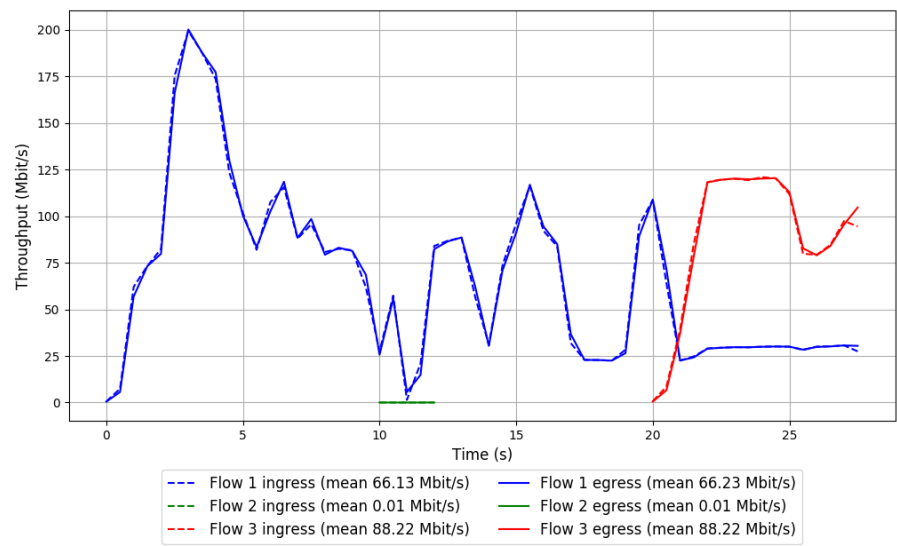
-- Flow 3:

Average throughput: 88.22 Mbit/s

95th percentile per-packet one-way delay: 47.748 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-17 21:01:17

End at: 2018-01-17 21:01:47

Below is generated by plot.py at 2018-01-18 00:40:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.55 Mbit/s

95th percentile per-packet one-way delay: 44.231 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 84.55 Mbit/s

95th percentile per-packet one-way delay: 44.231 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 70.265 ms

Loss rate: 46.17%

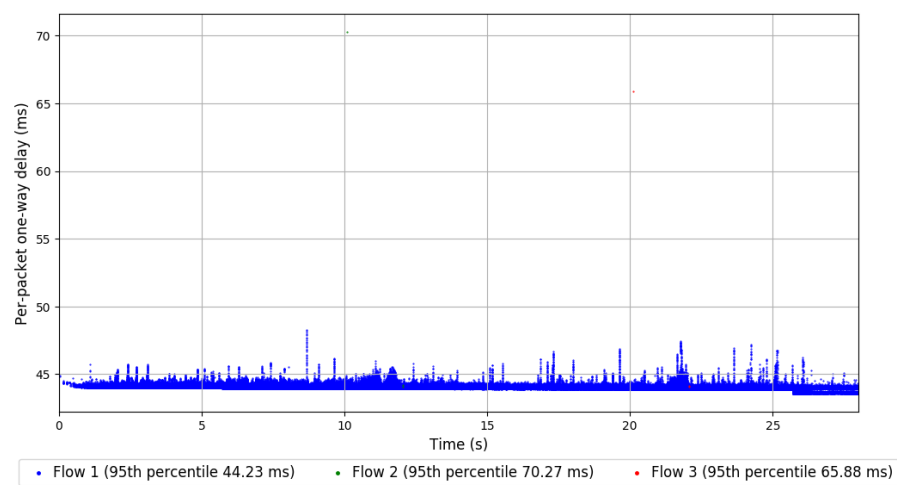
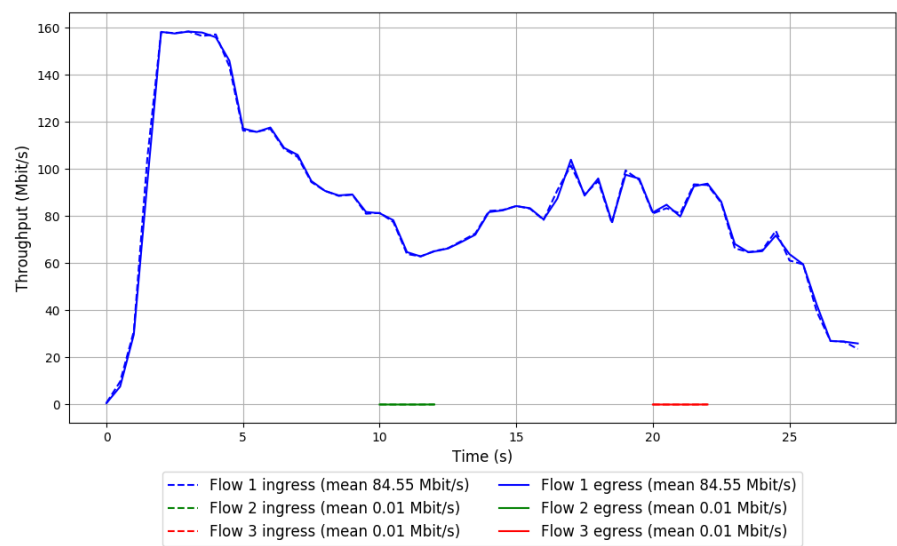
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 65.876 ms

Loss rate: 46.17%

Run 10: Report of Copa — Data Link

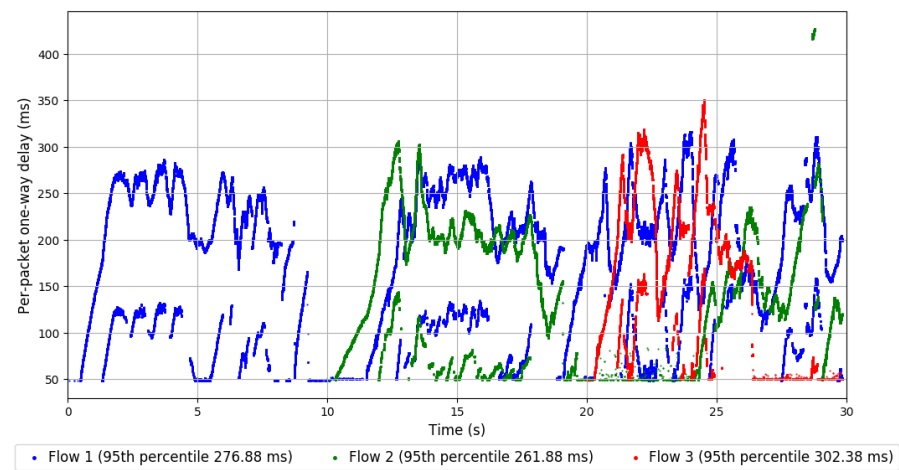
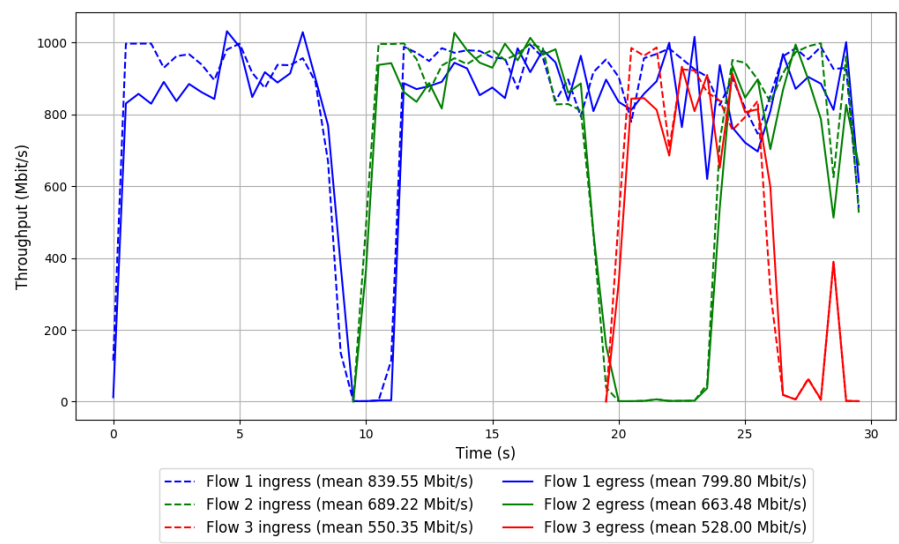


```
Run 1: Statistics of FillP

Start at: 2018-01-17 18:39:05
End at: 2018-01-17 18:39:35

# Below is generated by plot.py at 2018-01-18 01:03:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1417.59 Mbit/s
95th percentile per-packet one-way delay: 276.907 ms
Loss rate: 4.34%
-- Flow 1:
Average throughput: 799.80 Mbit/s
95th percentile per-packet one-way delay: 276.875 ms
Loss rate: 4.73%
-- Flow 2:
Average throughput: 663.48 Mbit/s
95th percentile per-packet one-way delay: 261.881 ms
Loss rate: 3.74%
-- Flow 3:
Average throughput: 528.00 Mbit/s
95th percentile per-packet one-way delay: 302.381 ms
Loss rate: 4.05%
```

Run 1: Report of FillP — Data Link

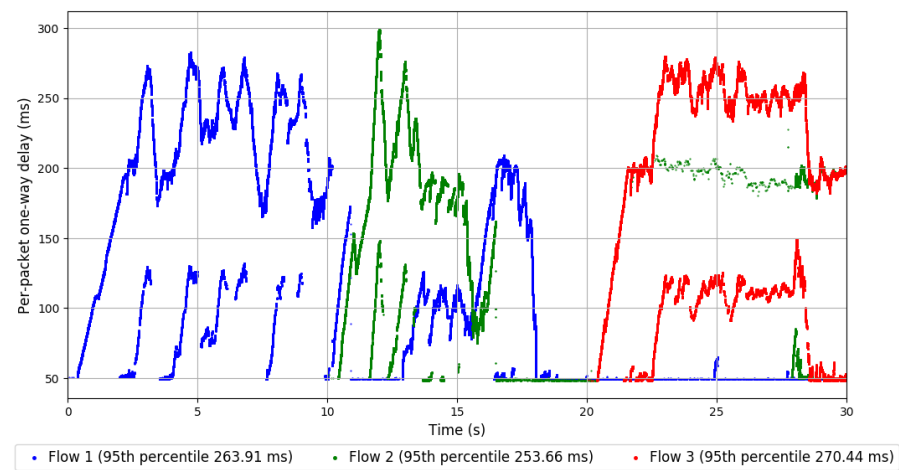
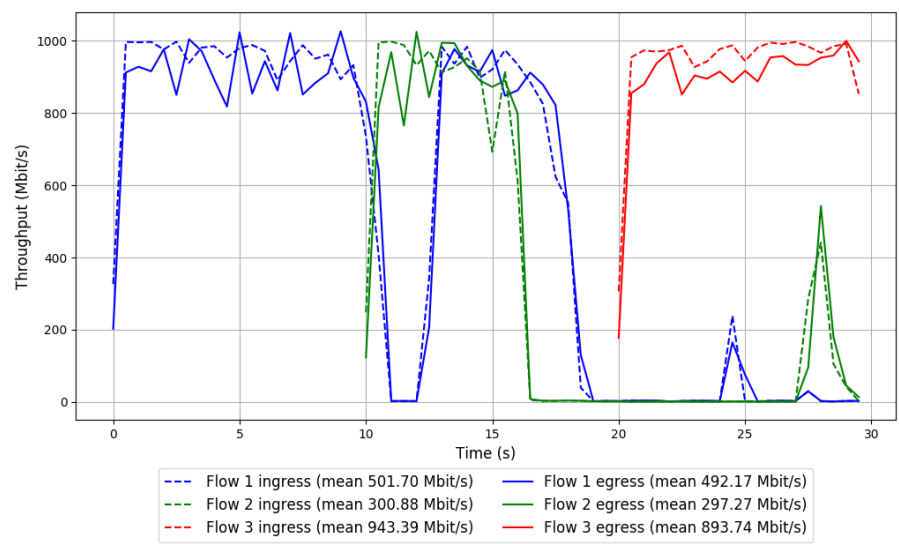


```
Run 2: Statistics of FillP

Start at: 2018-01-17 18:56:02
End at: 2018-01-17 18:56:32

# Below is generated by plot.py at 2018-01-18 01:03:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 985.48 Mbit/s
95th percentile per-packet one-way delay: 266.935 ms
Loss rate: 2.81%
-- Flow 1:
Average throughput: 492.17 Mbit/s
95th percentile per-packet one-way delay: 263.913 ms
Loss rate: 1.90%
-- Flow 2:
Average throughput: 297.27 Mbit/s
95th percentile per-packet one-way delay: 253.655 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 893.74 Mbit/s
95th percentile per-packet one-way delay: 270.436 ms
Loss rate: 5.26%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-17 19:12:41

End at: 2018-01-17 19:13:11

Below is generated by plot.py at 2018-01-18 01:05:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 1484.64 Mbit/s

95th percentile per-packet one-way delay: 278.393 ms

Loss rate: 4.31%

-- Flow 1:

Average throughput: 808.63 Mbit/s

95th percentile per-packet one-way delay: 277.710 ms

Loss rate: 5.99%

-- Flow 2:

Average throughput: 771.44 Mbit/s

95th percentile per-packet one-way delay: 281.186 ms

Loss rate: 2.55%

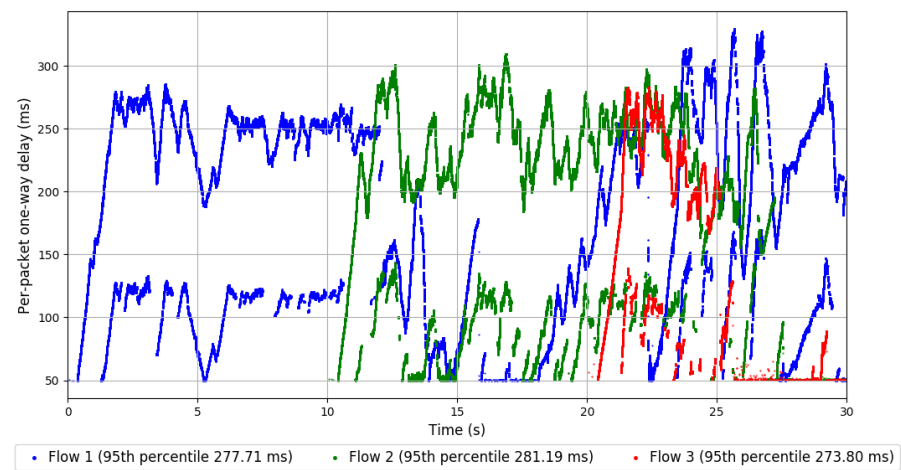
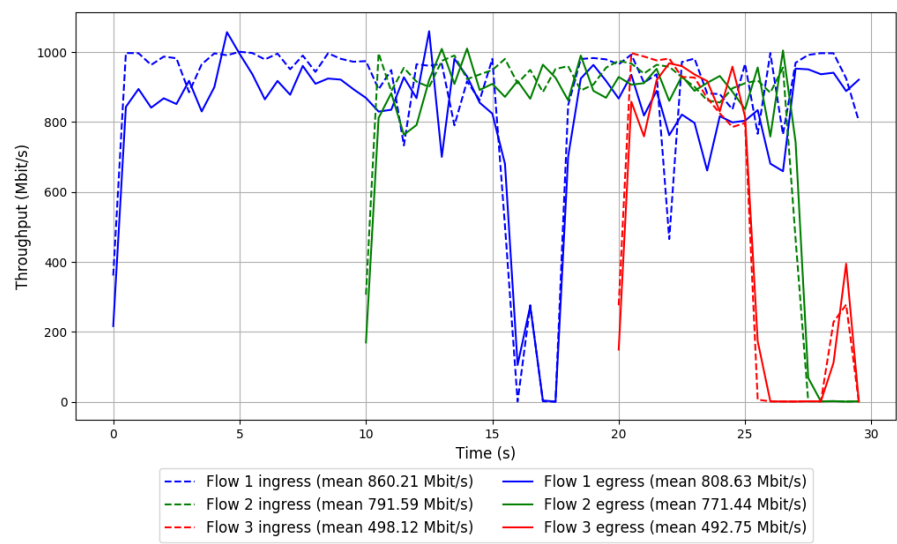
-- Flow 3:

Average throughput: 492.75 Mbit/s

95th percentile per-packet one-way delay: 273.796 ms

Loss rate: 1.14%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-17 19:29:24

End at: 2018-01-17 19:29:54

Below is generated by plot.py at 2018-01-18 01:08:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 1587.68 Mbit/s

95th percentile per-packet one-way delay: 284.852 ms

Loss rate: 6.39%

-- Flow 1:

Average throughput: 881.61 Mbit/s

95th percentile per-packet one-way delay: 284.655 ms

Loss rate: 5.07%

-- Flow 2:

Average throughput: 658.64 Mbit/s

95th percentile per-packet one-way delay: 284.595 ms

Loss rate: 7.00%

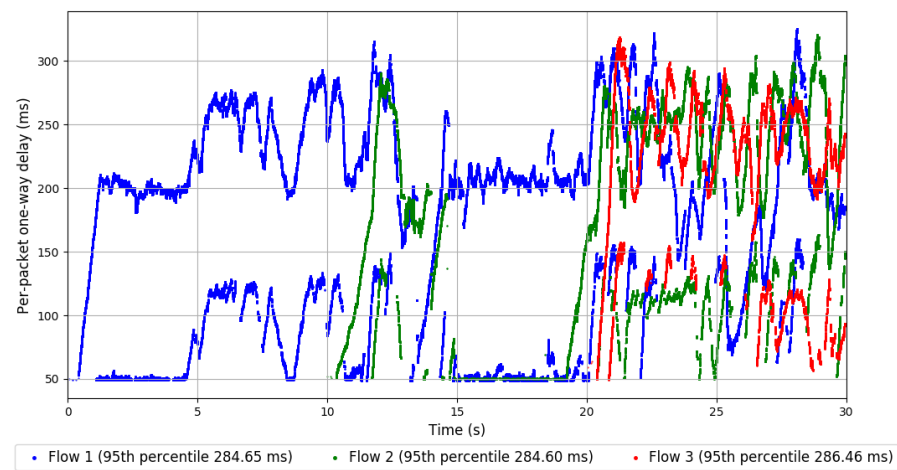
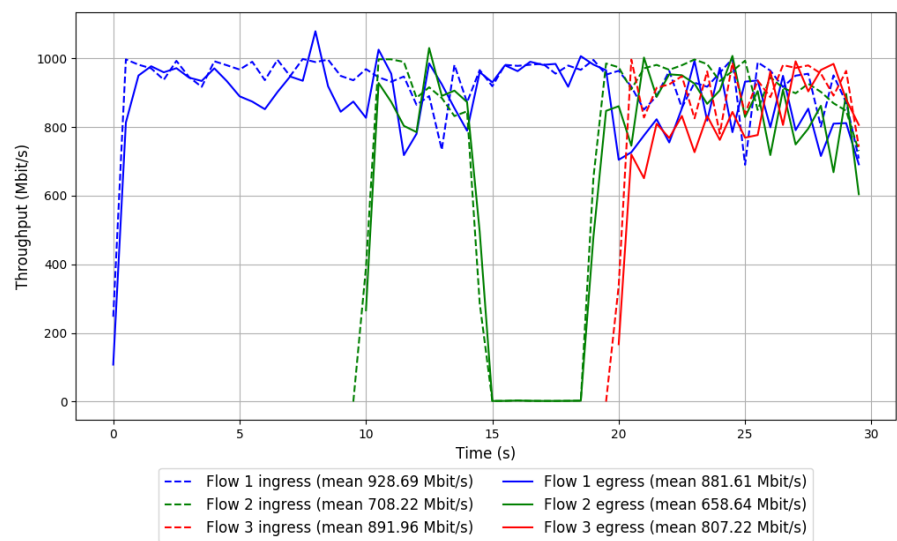
-- Flow 3:

Average throughput: 807.22 Mbit/s

95th percentile per-packet one-way delay: 286.462 ms

Loss rate: 9.58%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-17 19:46:12

End at: 2018-01-17 19:46:42

Below is generated by plot.py at 2018-01-18 01:08:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 1432.46 Mbit/s

95th percentile per-packet one-way delay: 271.984 ms

Loss rate: 3.73%

-- Flow 1:

Average throughput: 614.98 Mbit/s

95th percentile per-packet one-way delay: 299.356 ms

Loss rate: 5.40%

-- Flow 2:

Average throughput: 914.10 Mbit/s

95th percentile per-packet one-way delay: 242.492 ms

Loss rate: 2.22%

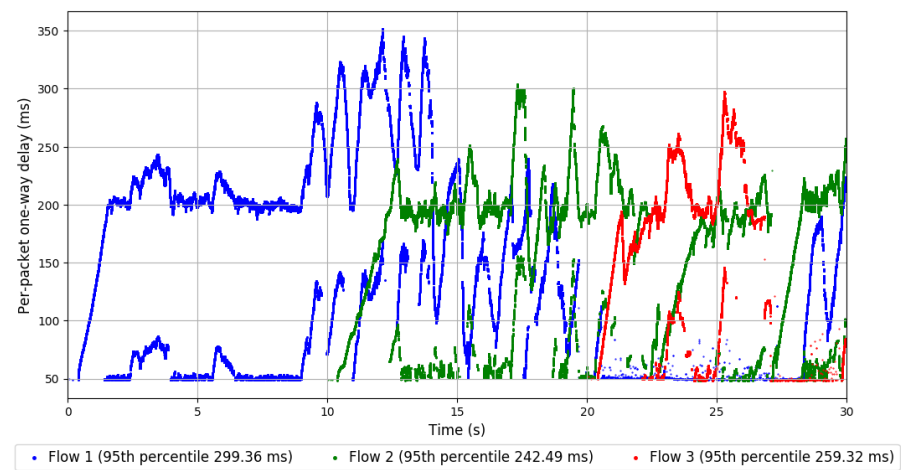
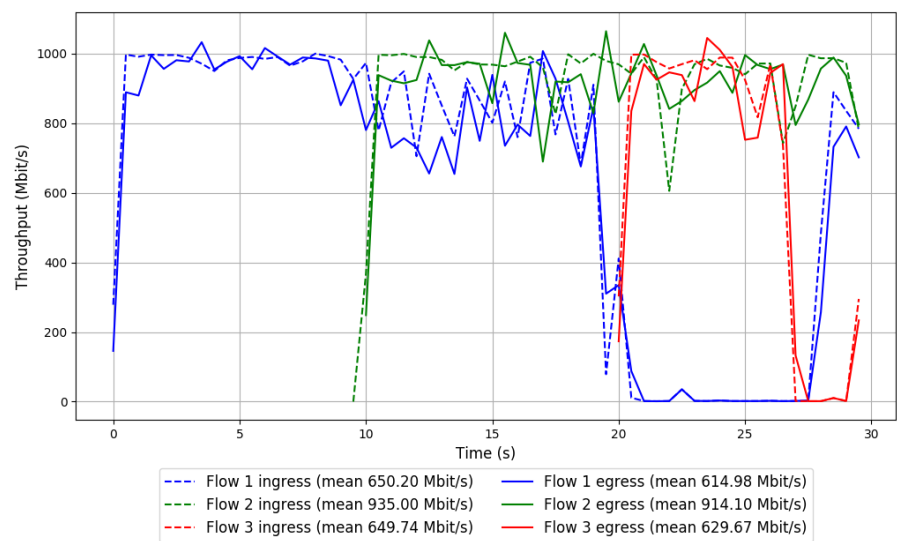
-- Flow 3:

Average throughput: 629.67 Mbit/s

95th percentile per-packet one-way delay: 259.318 ms

Loss rate: 3.07%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-17 20:02:58

End at: 2018-01-17 20:03:28

Below is generated by plot.py at 2018-01-18 01:08:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 1334.27 Mbit/s

95th percentile per-packet one-way delay: 268.157 ms

Loss rate: 3.66%

-- Flow 1:

Average throughput: 640.85 Mbit/s

95th percentile per-packet one-way delay: 270.825 ms

Loss rate: 2.32%

-- Flow 2:

Average throughput: 610.33 Mbit/s

95th percentile per-packet one-way delay: 267.942 ms

Loss rate: 4.46%

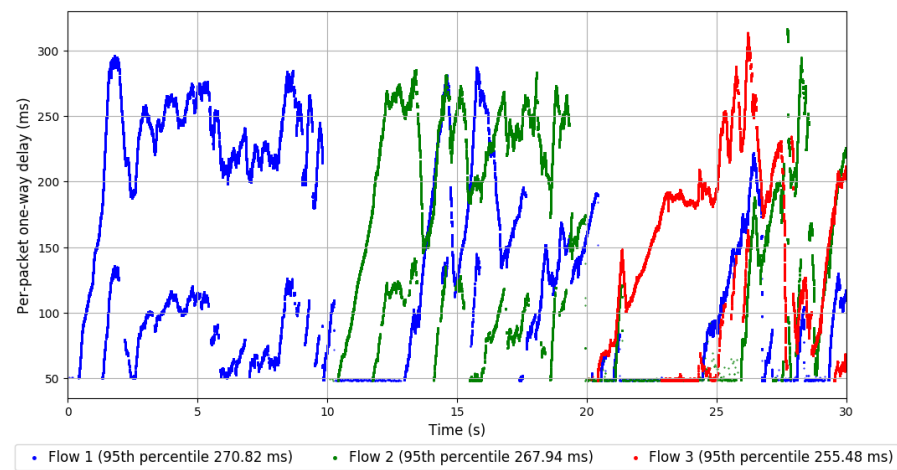
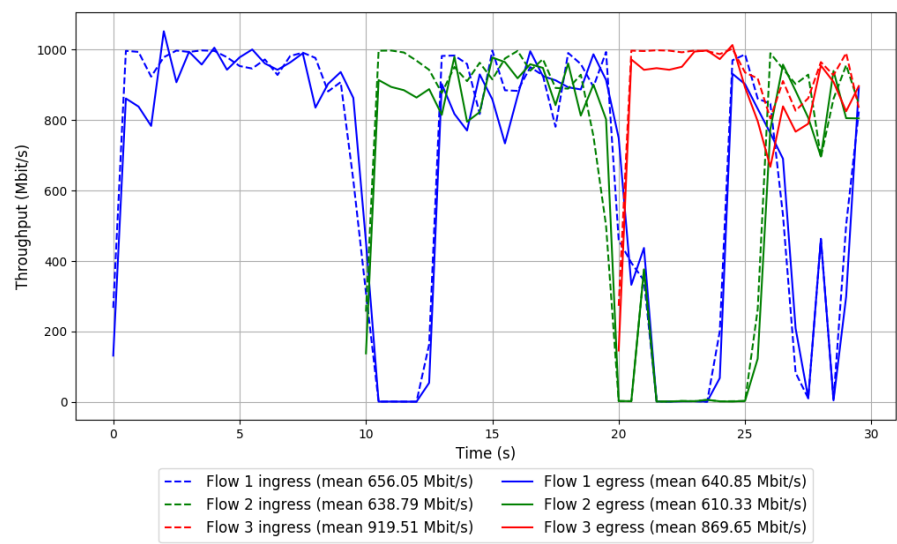
-- Flow 3:

Average throughput: 869.65 Mbit/s

95th percentile per-packet one-way delay: 255.483 ms

Loss rate: 5.45%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-17 20:19:38

End at: 2018-01-17 20:20:08

Below is generated by plot.py at 2018-01-18 01:08:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 1049.67 Mbit/s

95th percentile per-packet one-way delay: 270.479 ms

Loss rate: 3.23%

-- Flow 1:

Average throughput: 538.69 Mbit/s

95th percentile per-packet one-way delay: 269.059 ms

Loss rate: 2.03%

-- Flow 2:

Average throughput: 423.38 Mbit/s

95th percentile per-packet one-way delay: 281.372 ms

Loss rate: 3.53%

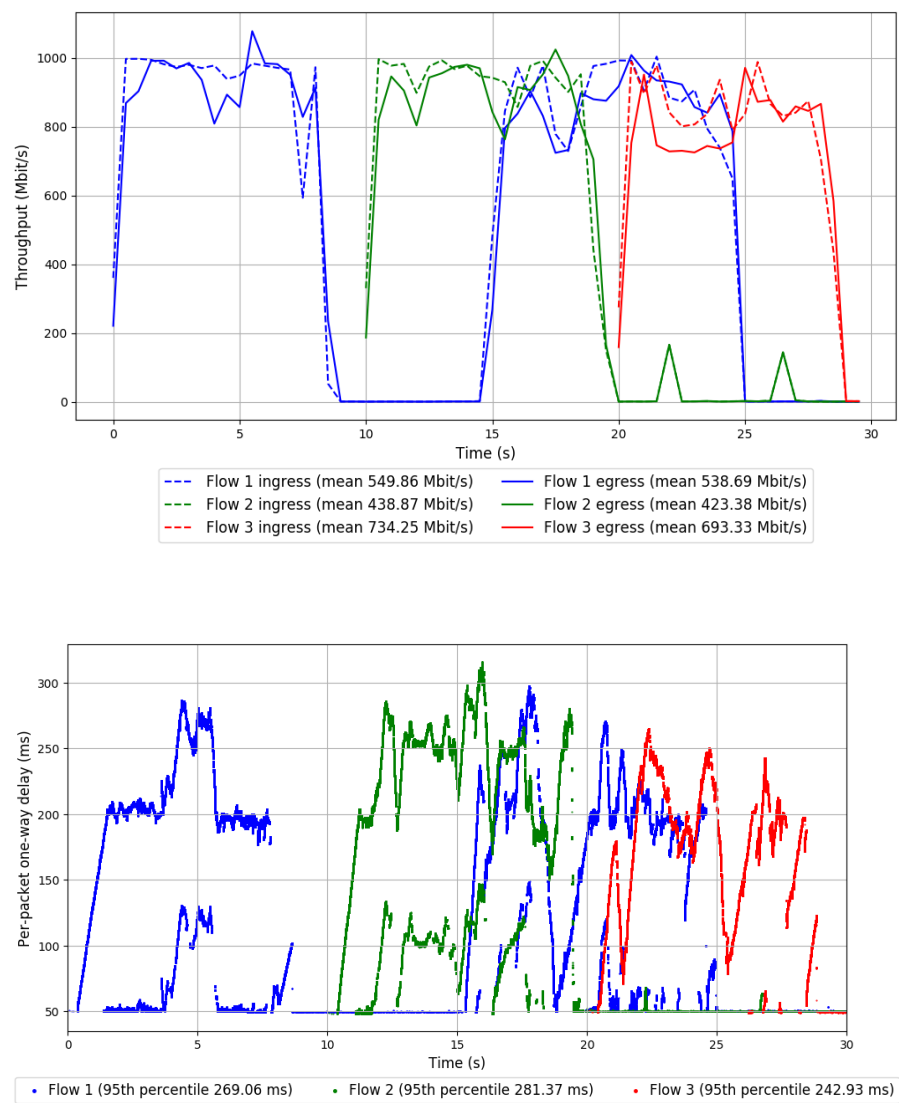
-- Flow 3:

Average throughput: 693.33 Mbit/s

95th percentile per-packet one-way delay: 242.927 ms

Loss rate: 5.58%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-17 20:36:10

End at: 2018-01-17 20:36:40

Below is generated by plot.py at 2018-01-18 01:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 1519.29 Mbit/s

95th percentile per-packet one-way delay: 284.129 ms

Loss rate: 5.73%

-- Flow 1:

Average throughput: 887.03 Mbit/s

95th percentile per-packet one-way delay: 280.703 ms

Loss rate: 5.57%

-- Flow 2:

Average throughput: 857.16 Mbit/s

95th percentile per-packet one-way delay: 292.370 ms

Loss rate: 6.56%

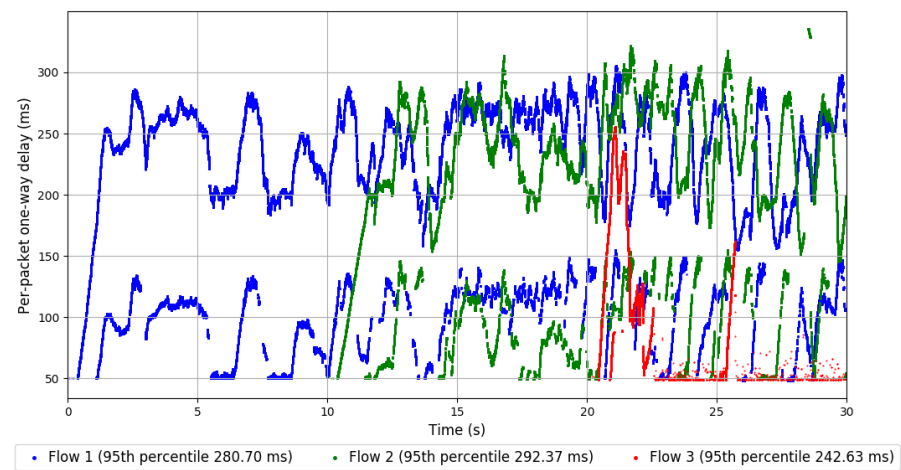
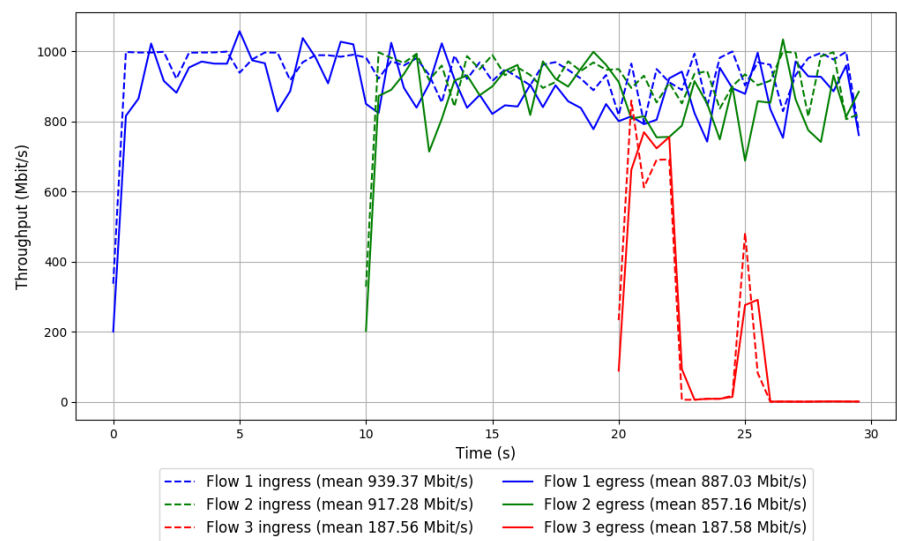
-- Flow 3:

Average throughput: 187.58 Mbit/s

95th percentile per-packet one-way delay: 242.629 ms

Loss rate: 0.00%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-17 20:53:02

End at: 2018-01-17 20:53:32

Below is generated by plot.py at 2018-01-18 01:23:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 1326.15 Mbit/s

95th percentile per-packet one-way delay: 269.604 ms

Loss rate: 4.49%

-- Flow 1:

Average throughput: 570.80 Mbit/s

95th percentile per-packet one-way delay: 271.068 ms

Loss rate: 6.75%

-- Flow 2:

Average throughput: 893.02 Mbit/s

95th percentile per-packet one-way delay: 257.000 ms

Loss rate: 3.01%

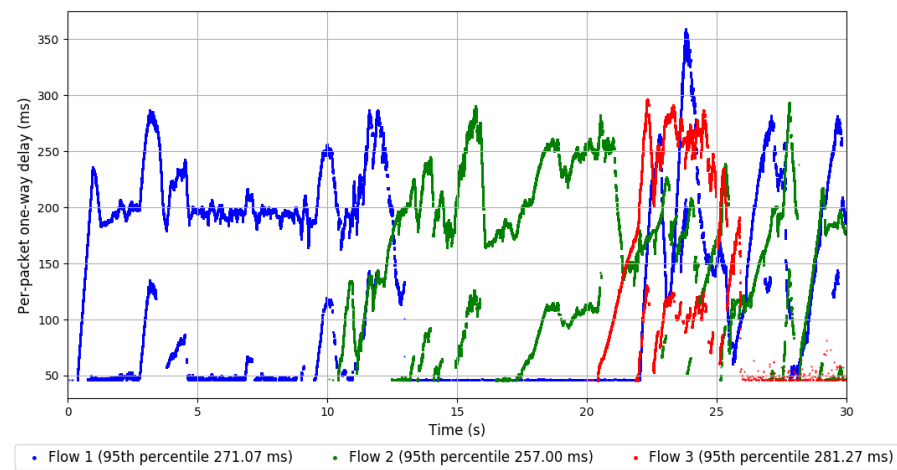
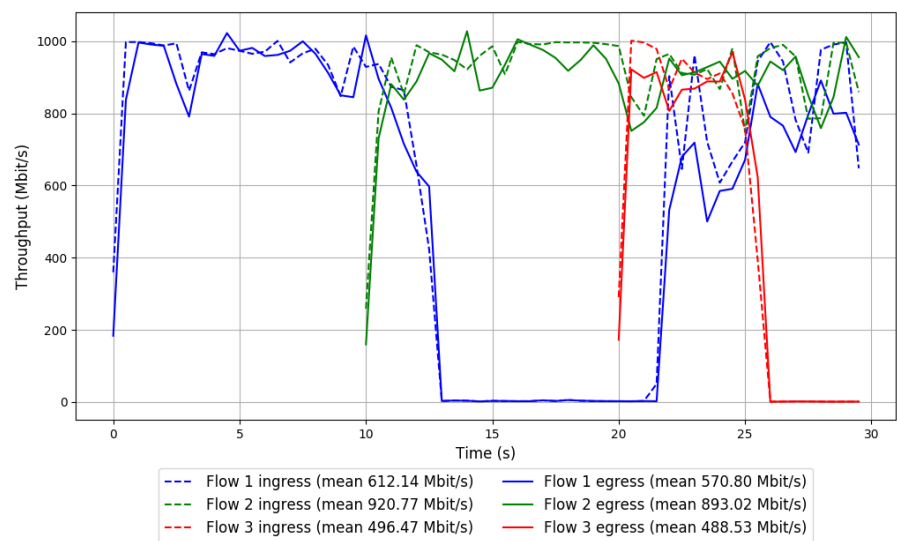
-- Flow 3:

Average throughput: 488.53 Mbit/s

95th percentile per-packet one-way delay: 281.267 ms

Loss rate: 1.58%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-17 21:09:29

End at: 2018-01-17 21:09:59

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 1481.47 Mbit/s

95th percentile per-packet one-way delay: 273.412 ms

Loss rate: 4.89%

-- Flow 1:

Average throughput: 852.00 Mbit/s

95th percentile per-packet one-way delay: 280.552 ms

Loss rate: 6.54%

-- Flow 2:

Average throughput: 737.54 Mbit/s

95th percentile per-packet one-way delay: 258.596 ms

Loss rate: 3.08%

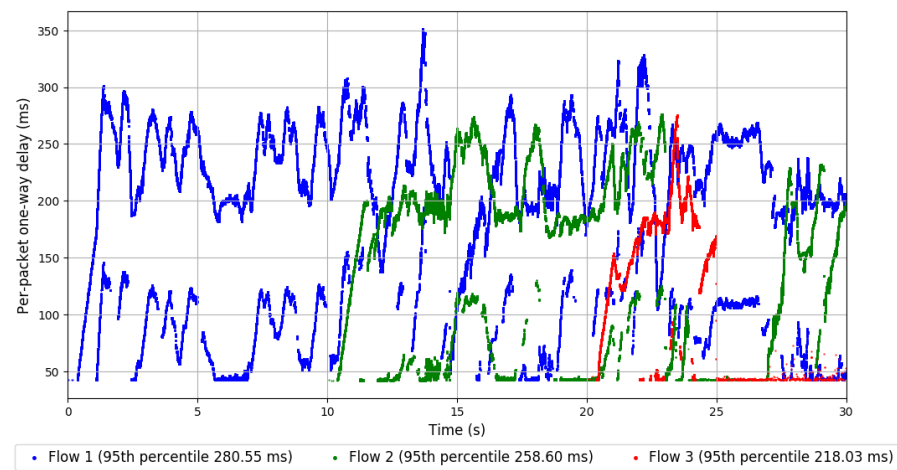
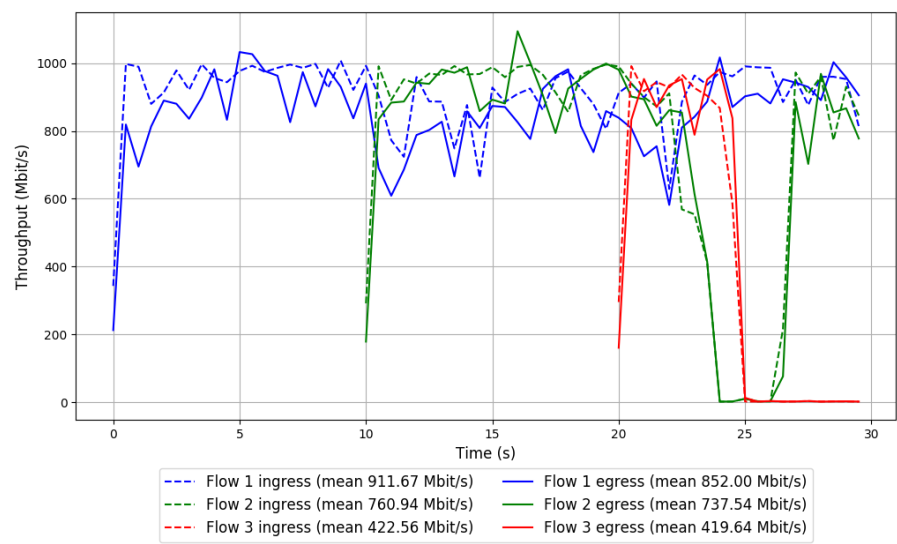
-- Flow 3:

Average throughput: 419.64 Mbit/s

95th percentile per-packet one-way delay: 218.030 ms

Loss rate: 0.60%

Run 10: Report of FillP — Data Link

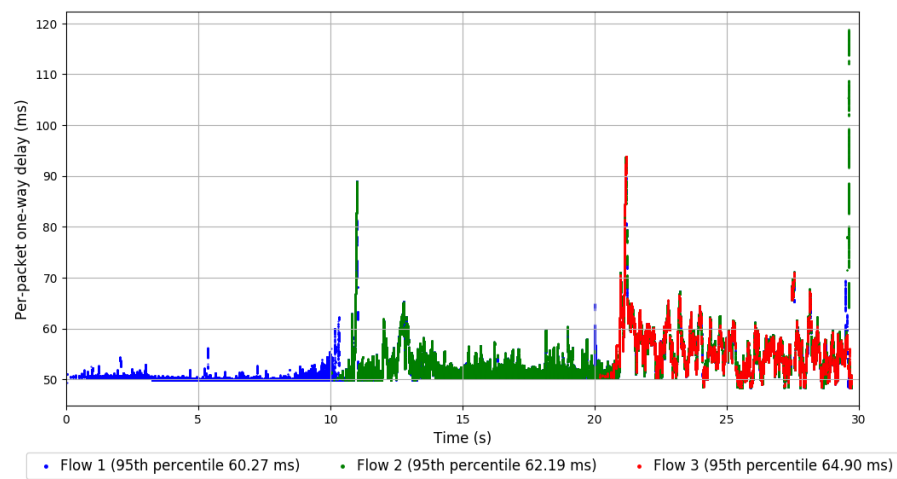
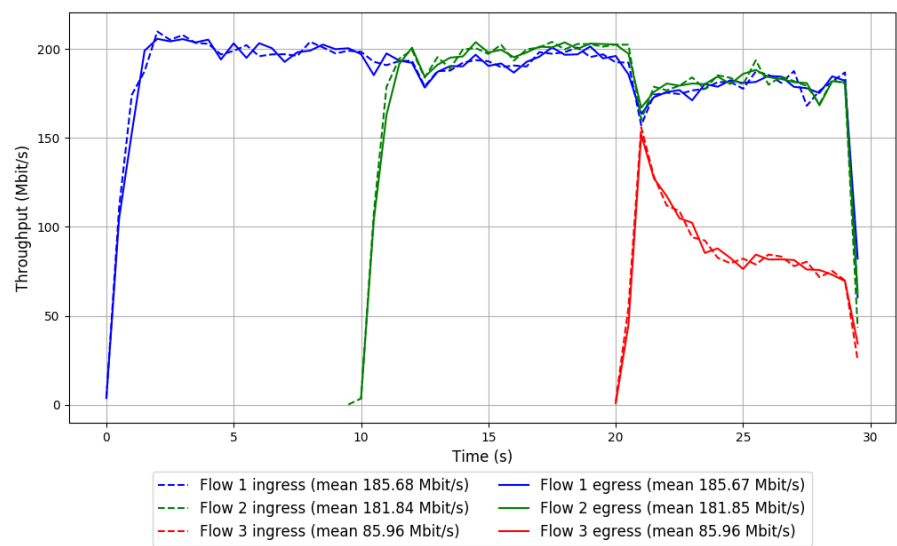


```
Run 1: Statistics of Indigo

Start at: 2018-01-17 18:34:21
End at: 2018-01-17 18:34:51

# Below is generated by plot.py at 2018-01-18 01:29:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.91 Mbit/s
95th percentile per-packet one-way delay: 61.637 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.67 Mbit/s
95th percentile per-packet one-way delay: 60.275 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 181.85 Mbit/s
95th percentile per-packet one-way delay: 62.186 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 85.96 Mbit/s
95th percentile per-packet one-way delay: 64.900 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

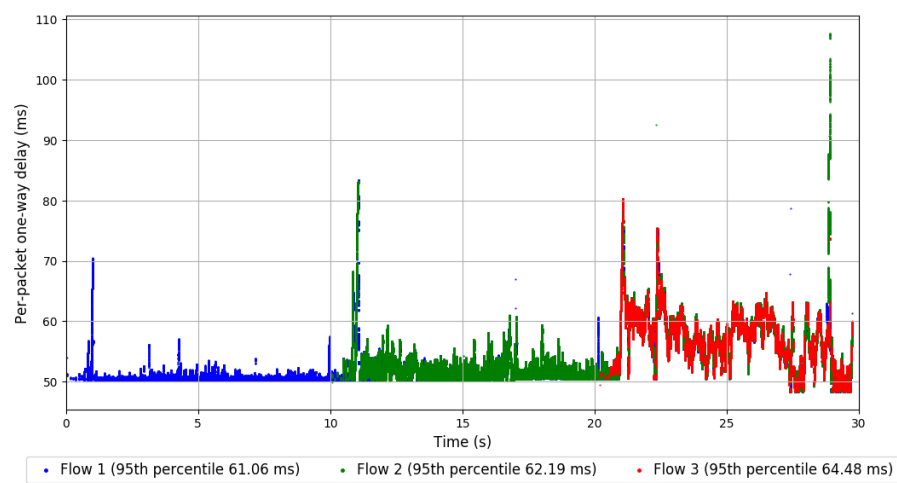
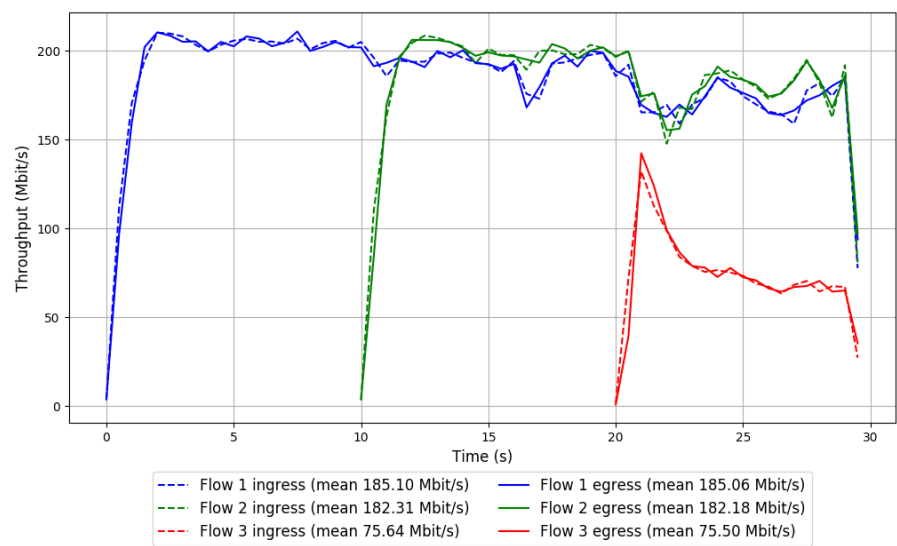


```
Run 2: Statistics of Indigo

Start at: 2018-01-17 18:51:08
End at: 2018-01-17 18:51:38

# Below is generated by plot.py at 2018-01-18 01:29:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.18 Mbit/s
95th percentile per-packet one-way delay: 61.939 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 185.06 Mbit/s
95th percentile per-packet one-way delay: 61.058 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 182.18 Mbit/s
95th percentile per-packet one-way delay: 62.191 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 75.50 Mbit/s
95th percentile per-packet one-way delay: 64.482 ms
Loss rate: 0.13%
```


Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-17 19:07:45

End at: 2018-01-17 19:08:15

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.99 Mbit/s

95th percentile per-packet one-way delay: 61.856 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 184.56 Mbit/s

95th percentile per-packet one-way delay: 60.158 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 185.38 Mbit/s

95th percentile per-packet one-way delay: 62.483 ms

Loss rate: 0.06%

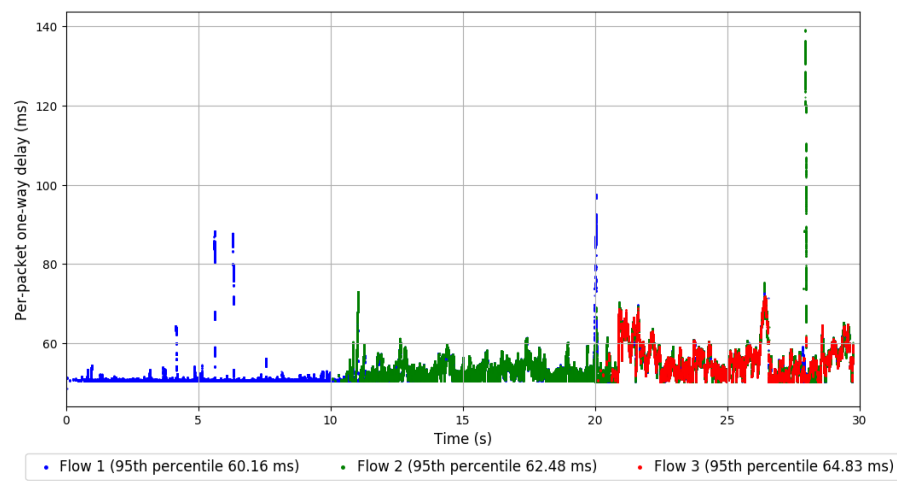
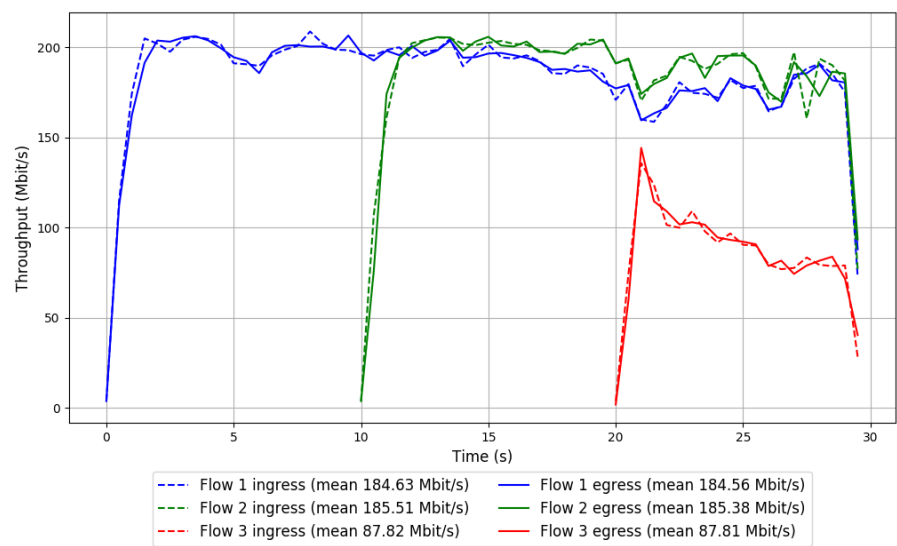
-- Flow 3:

Average throughput: 87.81 Mbit/s

95th percentile per-packet one-way delay: 64.835 ms

Loss rate: 0.02%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-17 19:24:39

End at: 2018-01-17 19:25:09

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 326.37 Mbit/s

95th percentile per-packet one-way delay: 62.653 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 177.41 Mbit/s

95th percentile per-packet one-way delay: 60.986 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 183.20 Mbit/s

95th percentile per-packet one-way delay: 62.835 ms

Loss rate: 0.00%

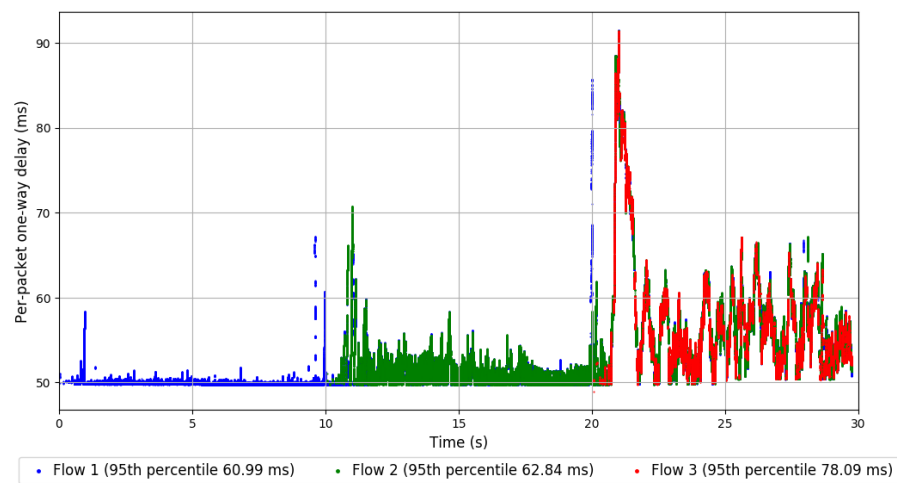
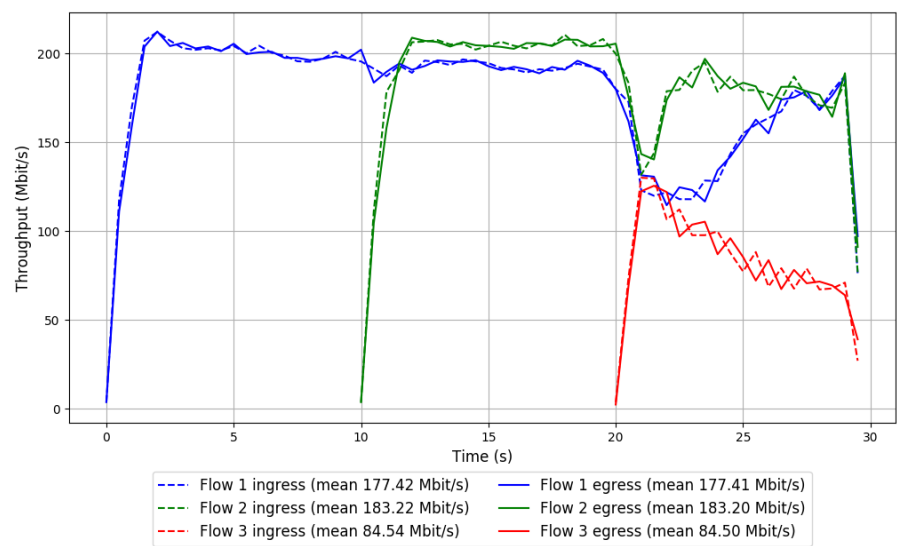
-- Flow 3:

Average throughput: 84.50 Mbit/s

95th percentile per-packet one-way delay: 78.094 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-17 19:41:33

End at: 2018-01-17 19:42:03

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.54 Mbit/s

95th percentile per-packet one-way delay: 60.028 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 183.22 Mbit/s

95th percentile per-packet one-way delay: 58.913 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 185.15 Mbit/s

95th percentile per-packet one-way delay: 61.853 ms

Loss rate: 0.00%

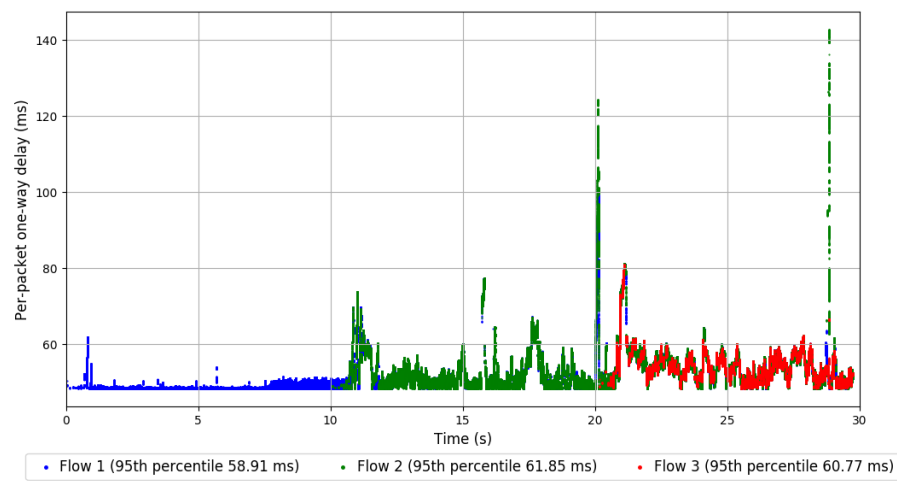
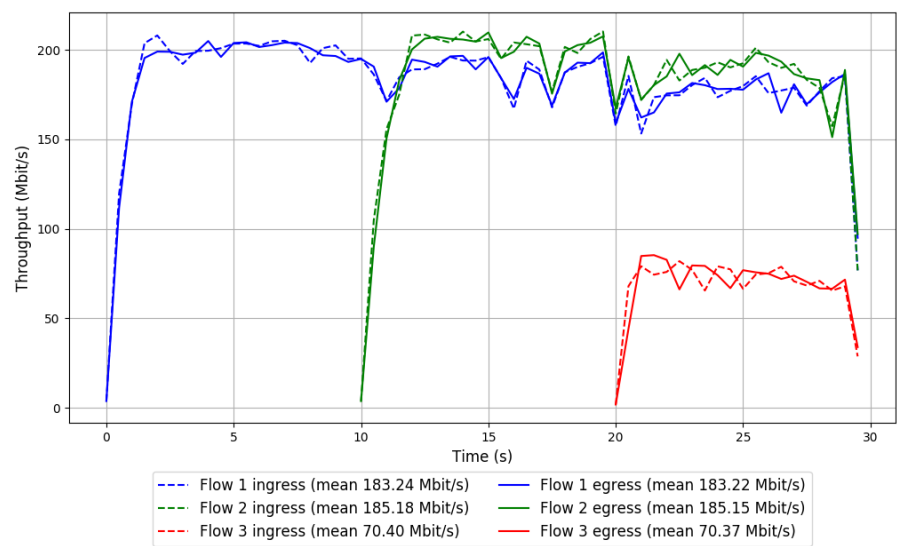
-- Flow 3:

Average throughput: 70.37 Mbit/s

95th percentile per-packet one-way delay: 60.774 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-17 19:58:10

End at: 2018-01-17 19:58:40

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 321.55 Mbit/s

95th percentile per-packet one-way delay: 60.612 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 183.94 Mbit/s

95th percentile per-packet one-way delay: 59.992 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 176.50 Mbit/s

95th percentile per-packet one-way delay: 61.638 ms

Loss rate: 0.07%

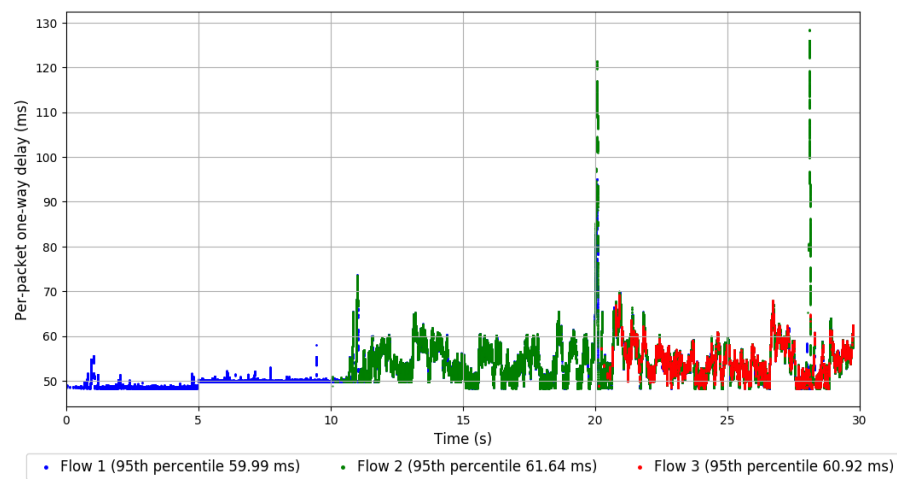
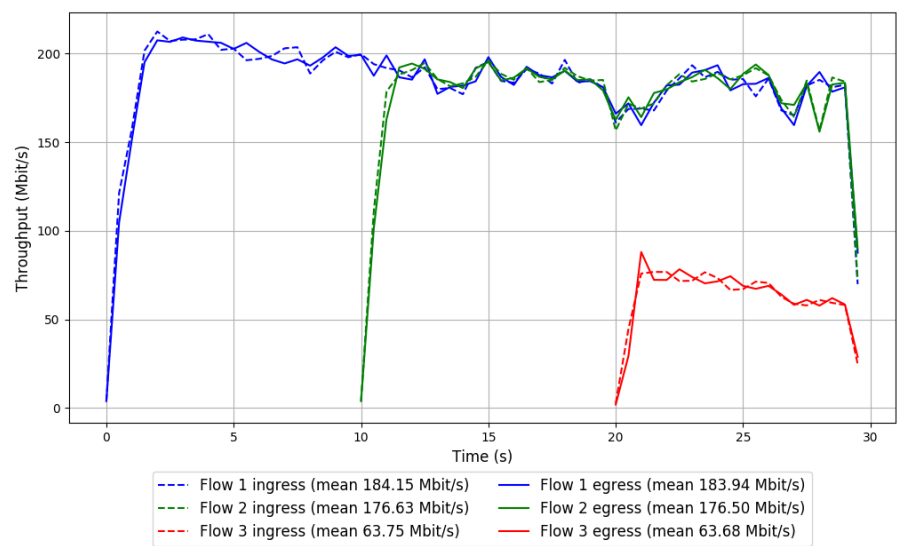
-- Flow 3:

Average throughput: 63.68 Mbit/s

95th percentile per-packet one-way delay: 60.920 ms

Loss rate: 0.05%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-17 20:14:42

End at: 2018-01-17 20:15:12

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 320.91 Mbit/s

95th percentile per-packet one-way delay: 62.997 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 180.35 Mbit/s

95th percentile per-packet one-way delay: 61.091 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 168.02 Mbit/s

95th percentile per-packet one-way delay: 63.126 ms

Loss rate: 0.05%

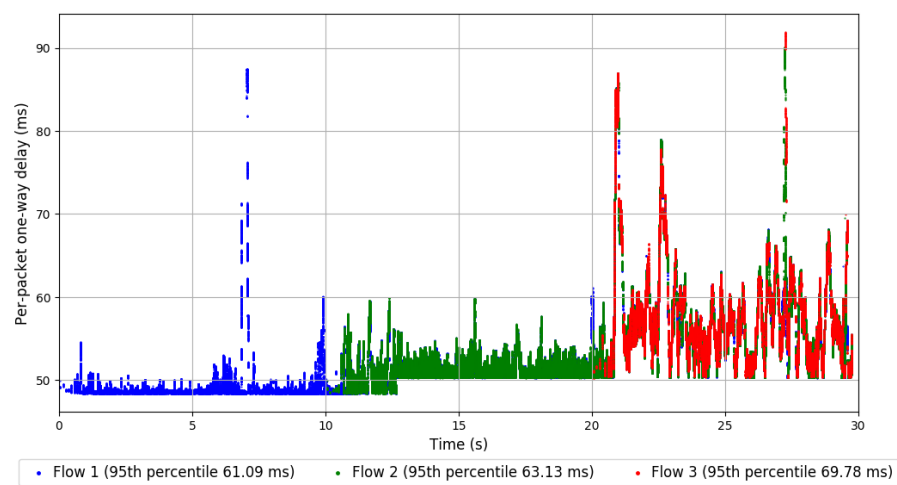
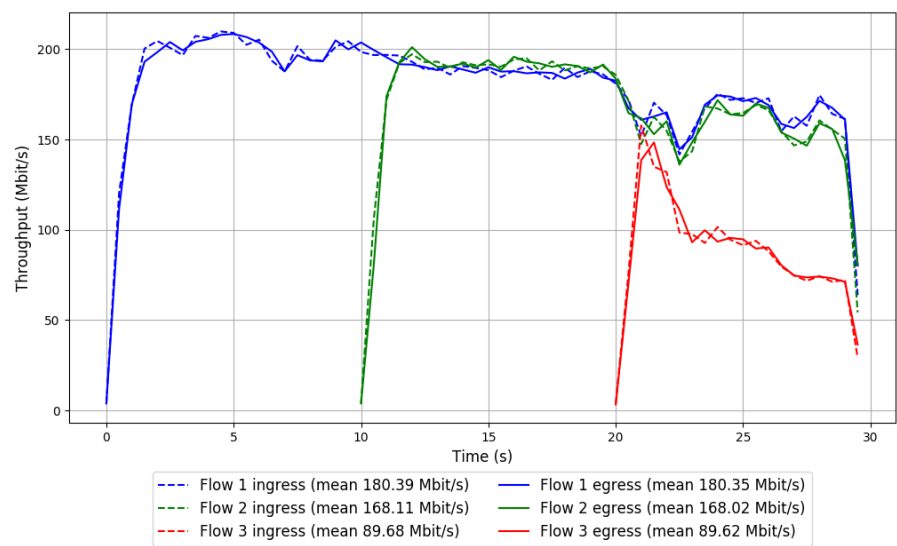
-- Flow 3:

Average throughput: 89.62 Mbit/s

95th percentile per-packet one-way delay: 69.784 ms

Loss rate: 0.04%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-17 20:31:19

End at: 2018-01-17 20:31:49

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.09 Mbit/s

95th percentile per-packet one-way delay: 64.127 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 182.24 Mbit/s

95th percentile per-packet one-way delay: 63.167 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 177.89 Mbit/s

95th percentile per-packet one-way delay: 64.930 ms

Loss rate: 0.00%

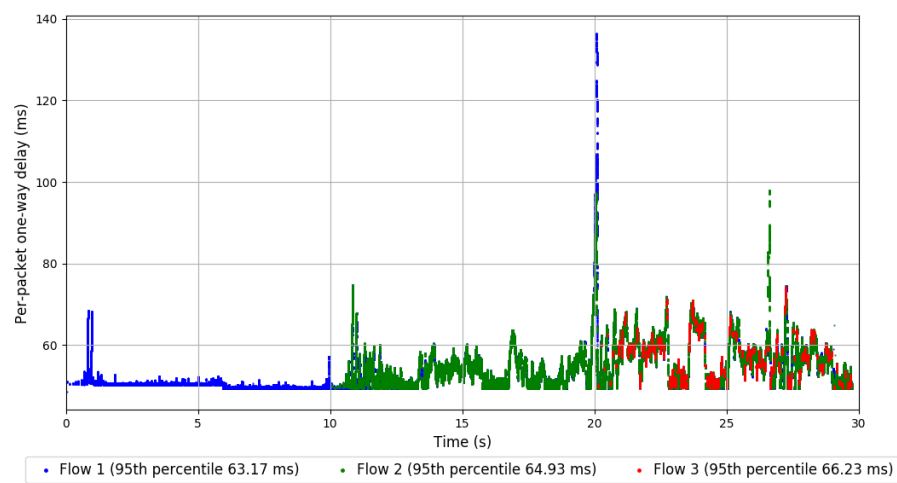
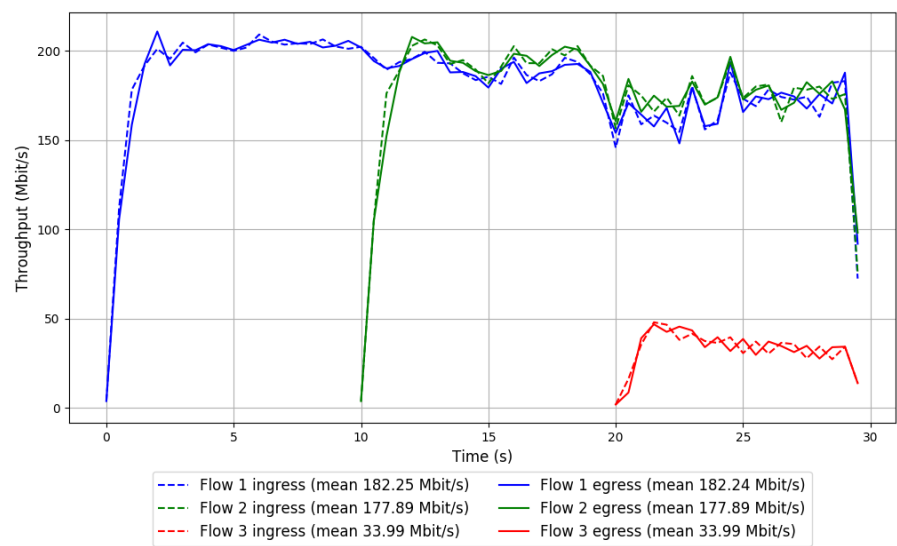
-- Flow 3:

Average throughput: 33.99 Mbit/s

95th percentile per-packet one-way delay: 66.229 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-17 20:47:59

End at: 2018-01-17 20:48:29

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.02 Mbit/s

95th percentile per-packet one-way delay: 61.483 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 184.65 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 175.91 Mbit/s

95th percentile per-packet one-way delay: 62.050 ms

Loss rate: 0.01%

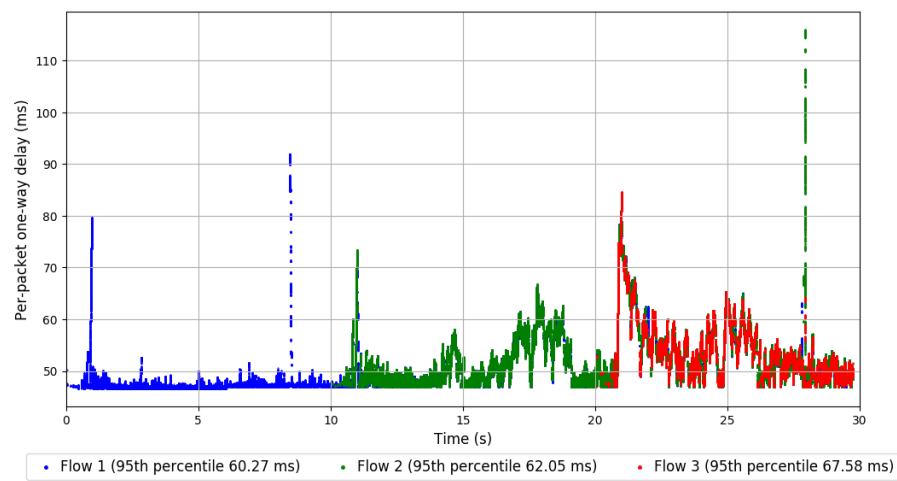
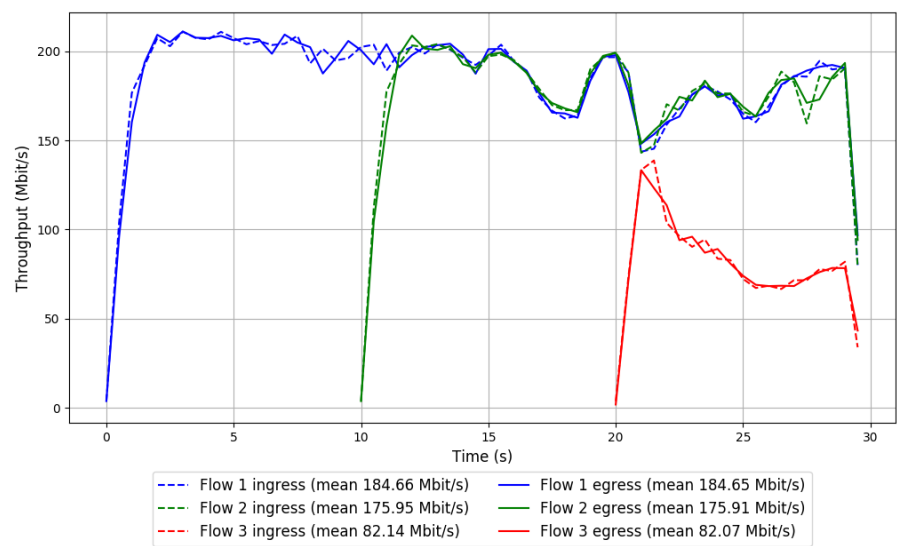
-- Flow 3:

Average throughput: 82.07 Mbit/s

95th percentile per-packet one-way delay: 67.585 ms

Loss rate: 0.07%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-17 21:04:32

End at: 2018-01-17 21:05:02

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.35 Mbit/s

95th percentile per-packet one-way delay: 56.022 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 185.15 Mbit/s

95th percentile per-packet one-way delay: 55.172 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 165.27 Mbit/s

95th percentile per-packet one-way delay: 56.838 ms

Loss rate: 0.01%

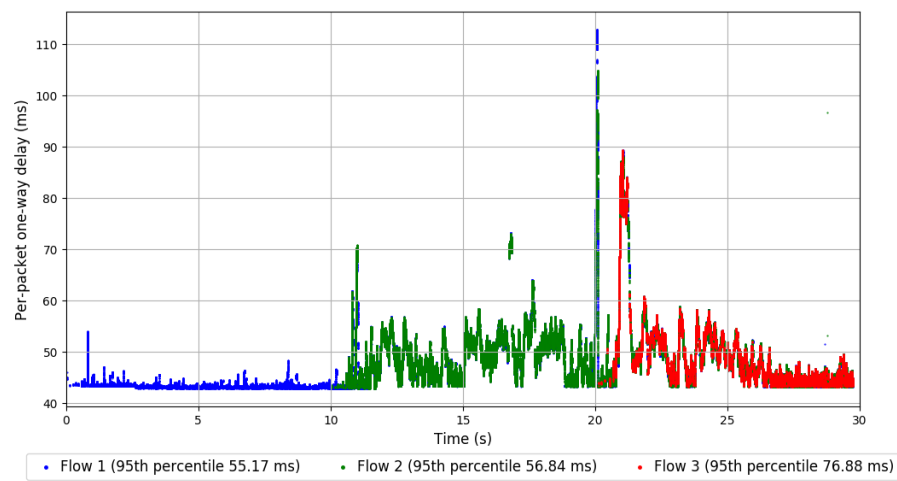
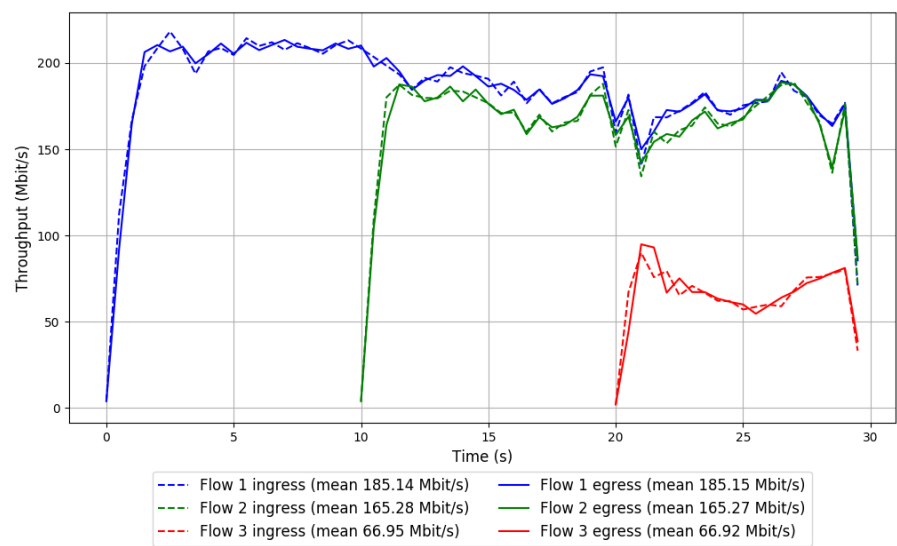
-- Flow 3:

Average throughput: 66.92 Mbit/s

95th percentile per-packet one-way delay: 76.881 ms

Loss rate: 0.05%

Run 10: Report of Indigo — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-01-17 18:31:41

End at: 2018-01-17 18:32:11

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 276.62 Mbit/s

95th percentile per-packet one-way delay: 51.090 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 182.80 Mbit/s

95th percentile per-packet one-way delay: 51.146 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 114.92 Mbit/s

95th percentile per-packet one-way delay: 50.950 ms

Loss rate: 0.00%

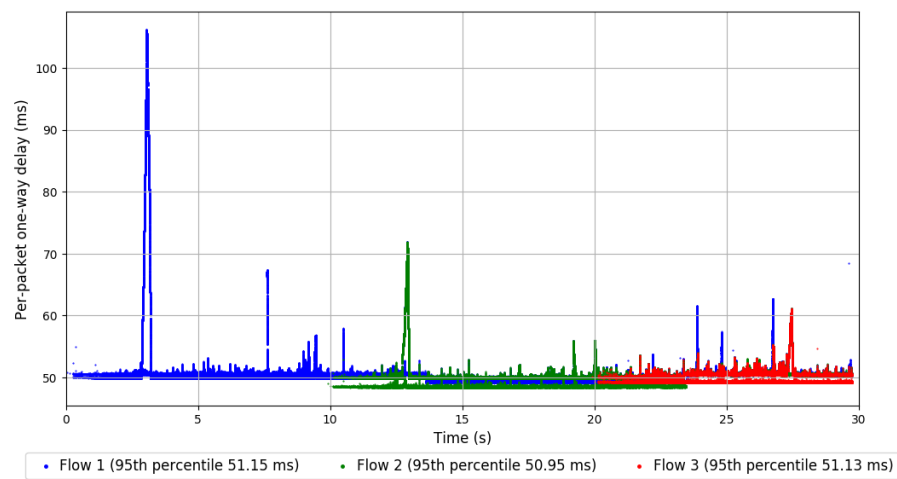
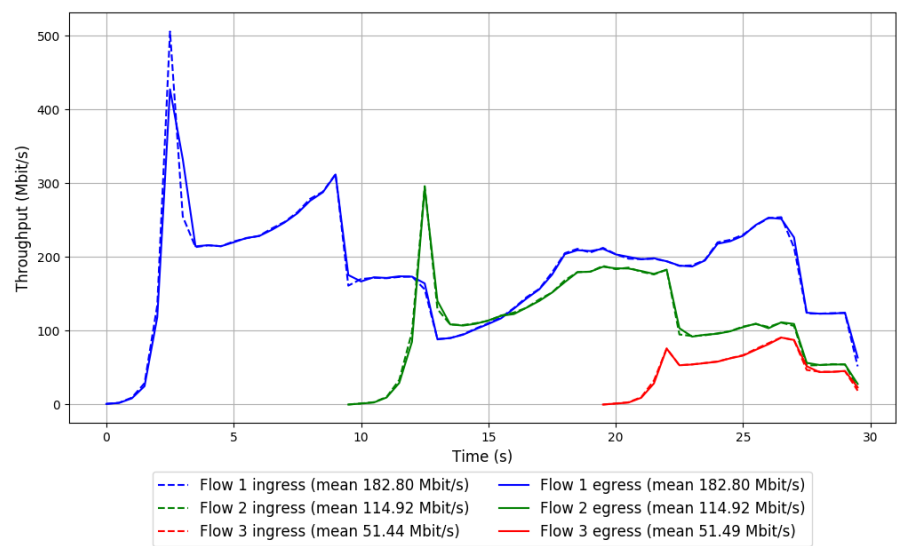
-- Flow 3:

Average throughput: 51.49 Mbit/s

95th percentile per-packet one-way delay: 51.133 ms

Loss rate: 0.00%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-01-17 18:48:38

End at: 2018-01-17 18:49:08

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 223.29 Mbit/s

95th percentile per-packet one-way delay: 51.186 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 131.75 Mbit/s

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

Loss rate: 0.02%

-- Flow 2:

Average throughput: 107.00 Mbit/s

95th percentile per-packet one-way delay: 51.387 ms

Loss rate: 0.02%

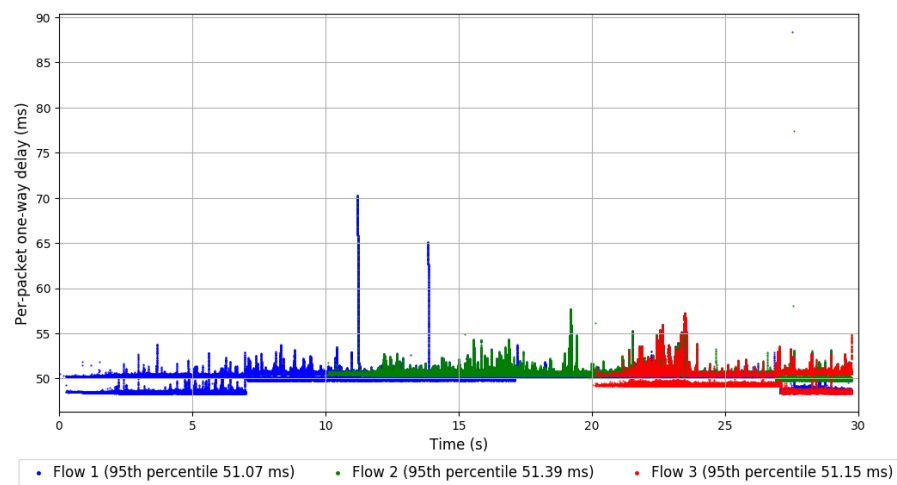
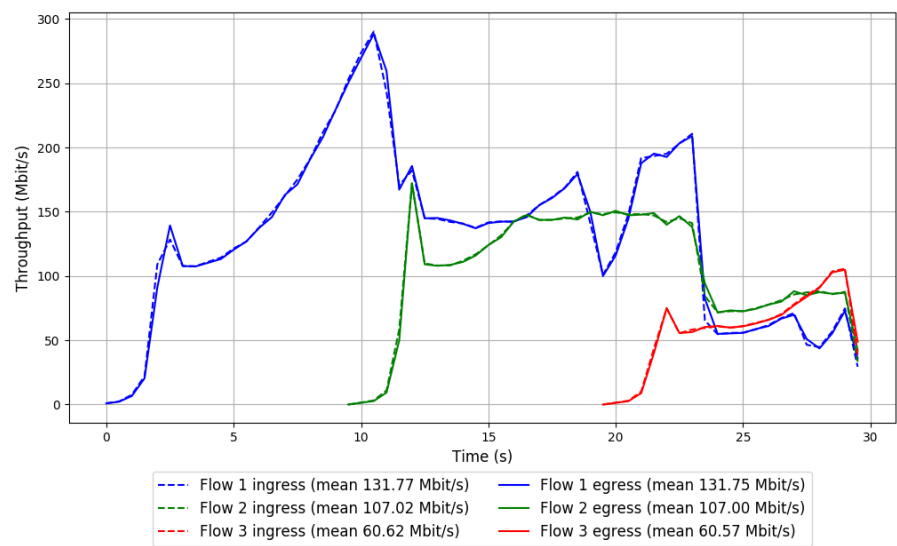
-- Flow 3:

Average throughput: 60.57 Mbit/s

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

Loss rate: 0.09%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-01-17 19:05:15

End at: 2018-01-17 19:05:45

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 225.77 Mbit/s

95th percentile per-packet one-way delay: 51.030 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 118.99 Mbit/s

95th percentile per-packet one-way delay: 50.644 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.73 Mbit/s

95th percentile per-packet one-way delay: 50.851 ms

Loss rate: 0.00%

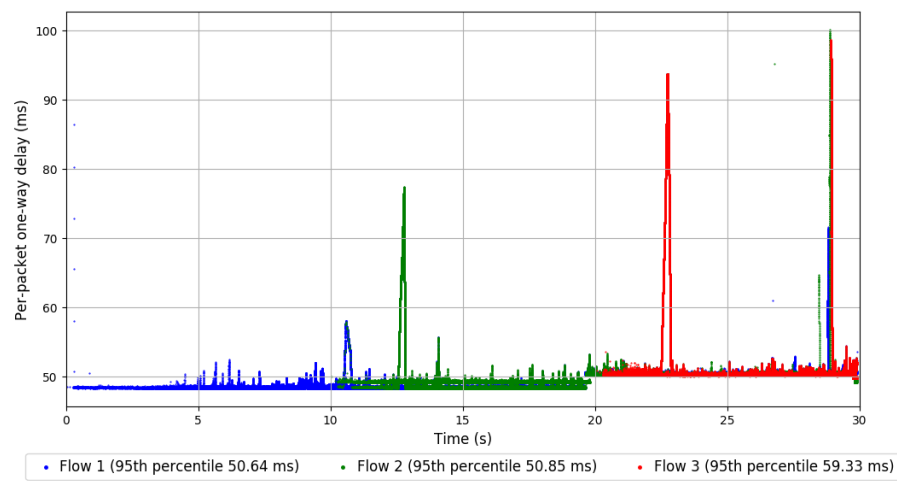
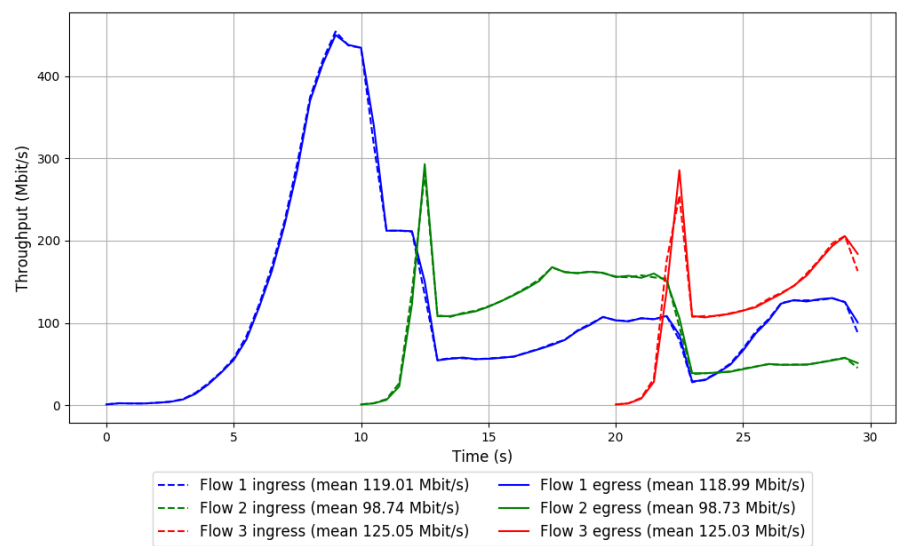
-- Flow 3:

Average throughput: 125.03 Mbit/s

95th percentile per-packet one-way delay: 59.328 ms

Loss rate: 0.03%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-01-17 19:22:11

End at: 2018-01-17 19:22:41

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 221.98 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 112.88 Mbit/s

95th percentile per-packet one-way delay: 50.632 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 128.84 Mbit/s

95th percentile per-packet one-way delay: 51.664 ms

Loss rate: 0.00%

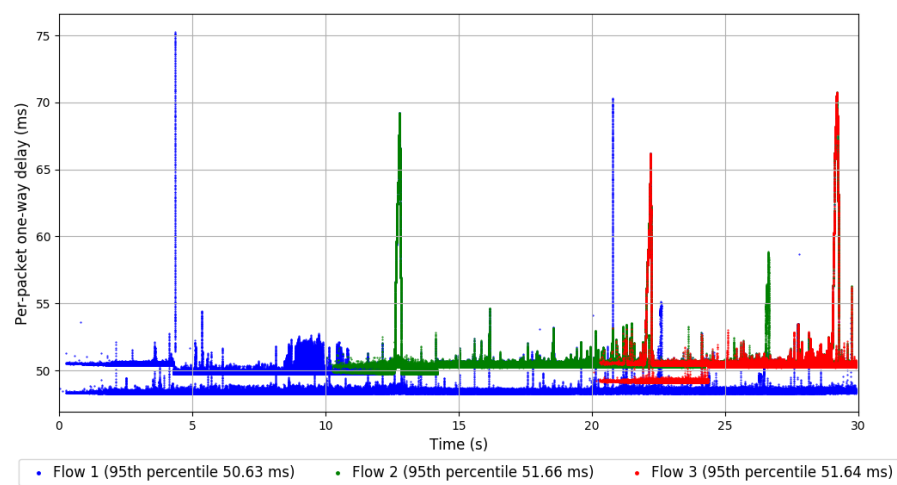
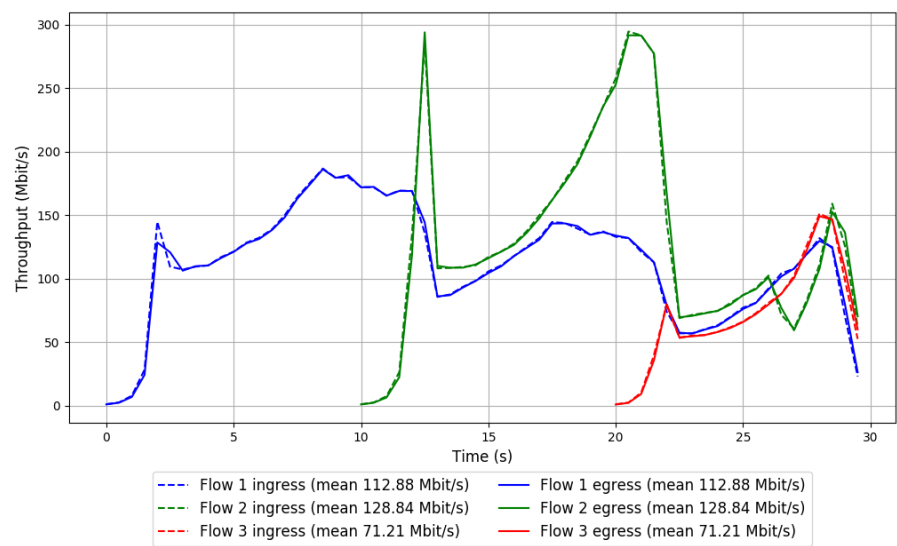
-- Flow 3:

Average throughput: 71.21 Mbit/s

95th percentile per-packet one-way delay: 51.637 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-01-17 19:39:06

End at: 2018-01-17 19:39:36

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.06 Mbit/s

95th percentile per-packet one-way delay: 51.238 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 109.31 Mbit/s

95th percentile per-packet one-way delay: 50.721 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 101.88 Mbit/s

95th percentile per-packet one-way delay: 51.672 ms

Loss rate: 0.00%

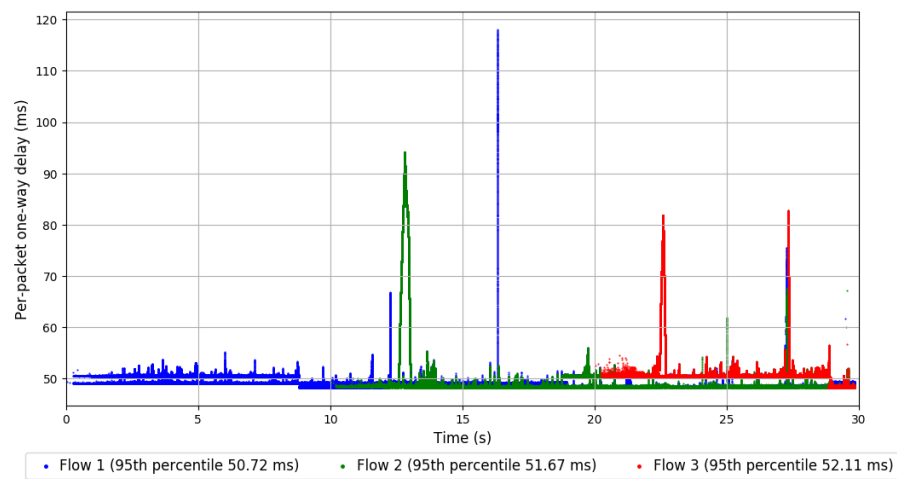
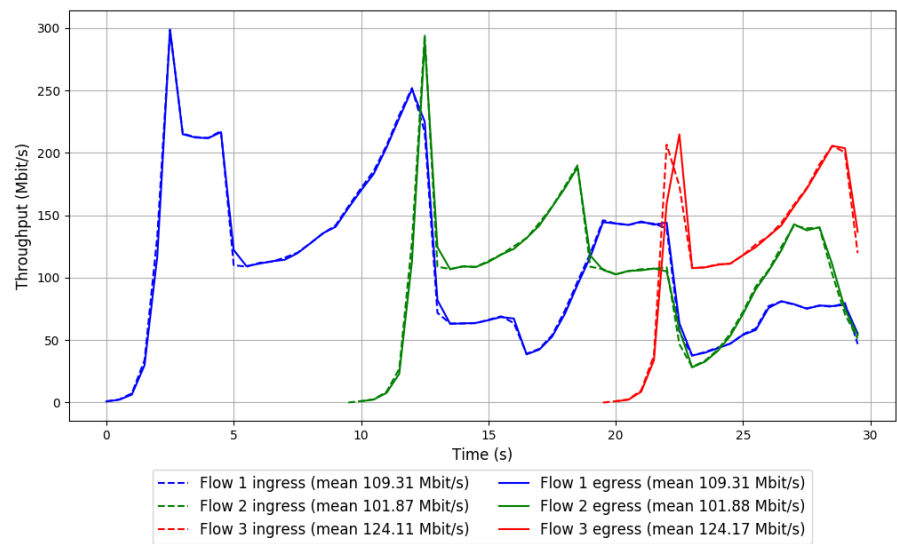
-- Flow 3:

Average throughput: 124.17 Mbit/s

95th percentile per-packet one-way delay: 52.112 ms

Loss rate: 0.02%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-01-17 19:55:44

End at: 2018-01-17 19:56:14

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.17 Mbit/s

95th percentile per-packet one-way delay: 50.577 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.04 Mbit/s

95th percentile per-packet one-way delay: 50.478 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 79.14 Mbit/s

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

Loss rate: 0.00%

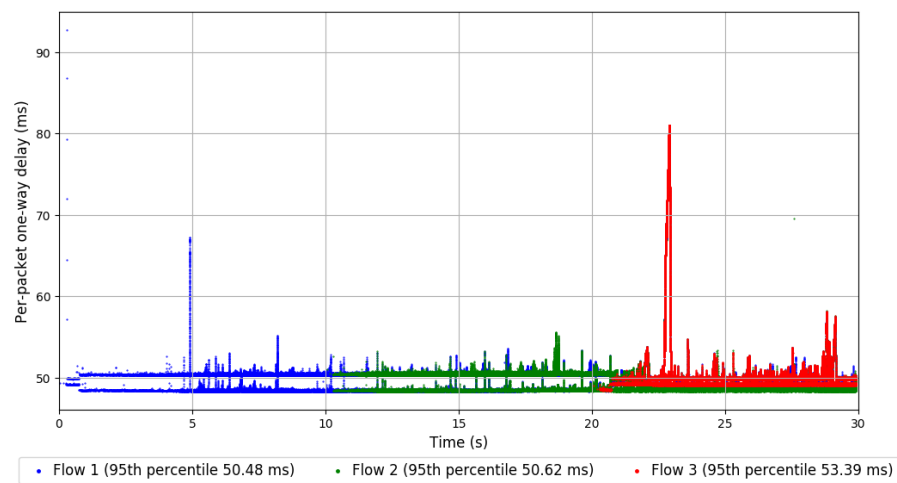
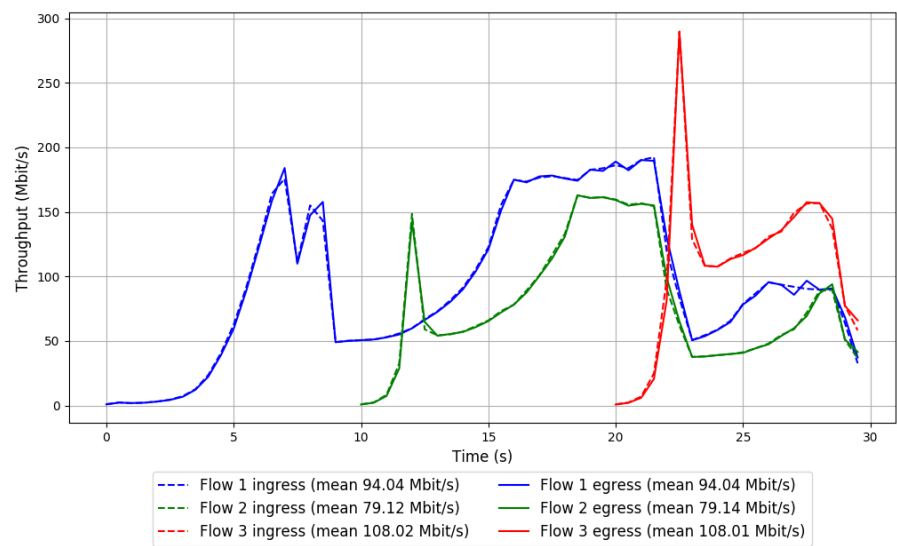
-- Flow 3:

Average throughput: 108.01 Mbit/s

95th percentile per-packet one-way delay: 53.388 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-01-17 20:12:19

End at: 2018-01-17 20:12:49

Below is generated by plot.py at 2018-01-18 01:29:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 164.16 Mbit/s

95th percentile per-packet one-way delay: 51.461 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 103.55 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 86.14 Mbit/s

95th percentile per-packet one-way delay: 53.029 ms

Loss rate: 0.00%

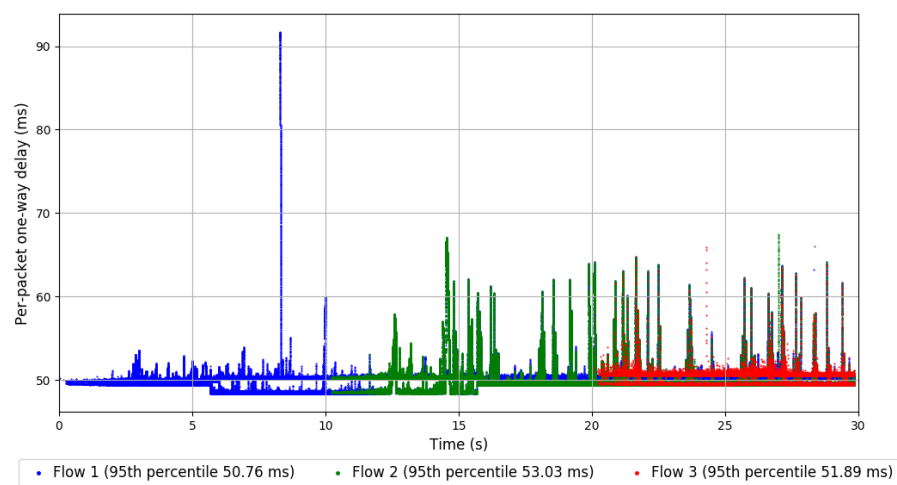
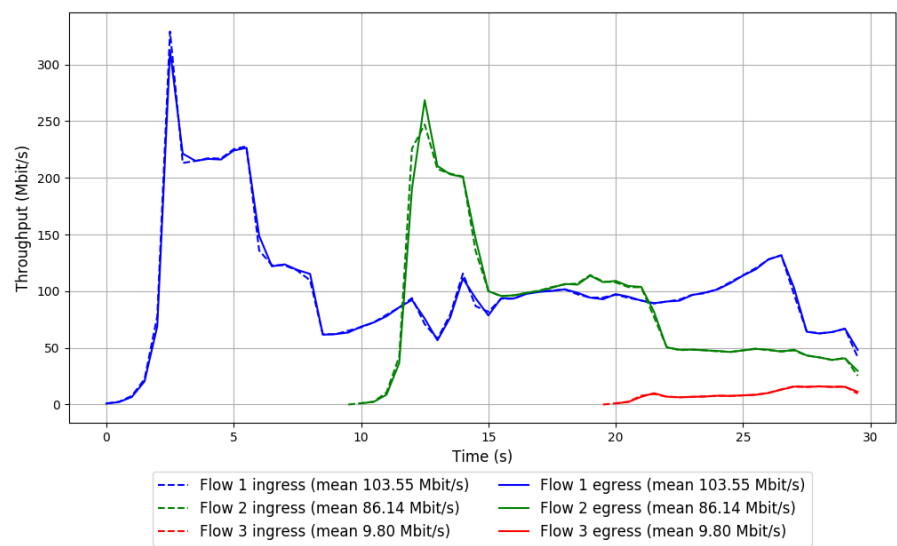
-- Flow 3:

Average throughput: 9.80 Mbit/s

95th percentile per-packet one-way delay: 51.889 ms

Loss rate: 0.03%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-01-17 20:28:51

End at: 2018-01-17 20:29:21

Below is generated by plot.py at 2018-01-18 01:30:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.76 Mbit/s

95th percentile per-packet one-way delay: 50.763 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 123.89 Mbit/s

95th percentile per-packet one-way delay: 50.533 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 114.07 Mbit/s

95th percentile per-packet one-way delay: 51.632 ms

Loss rate: 0.00%

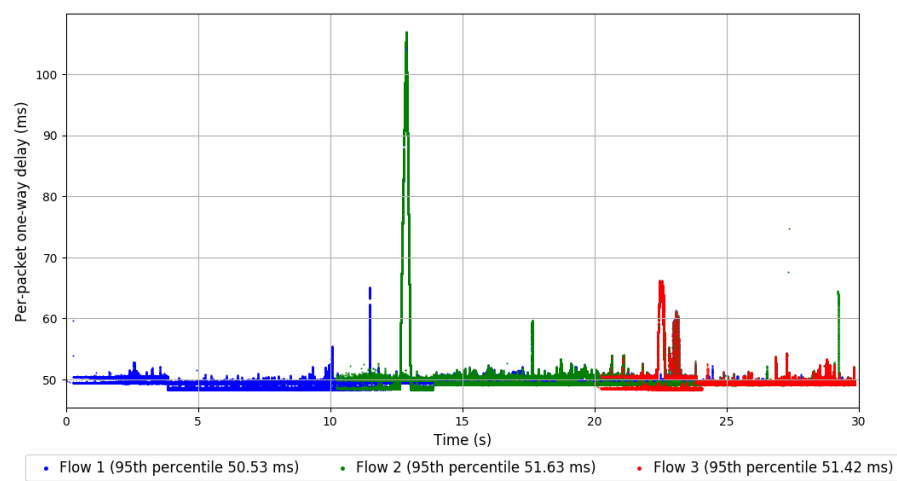
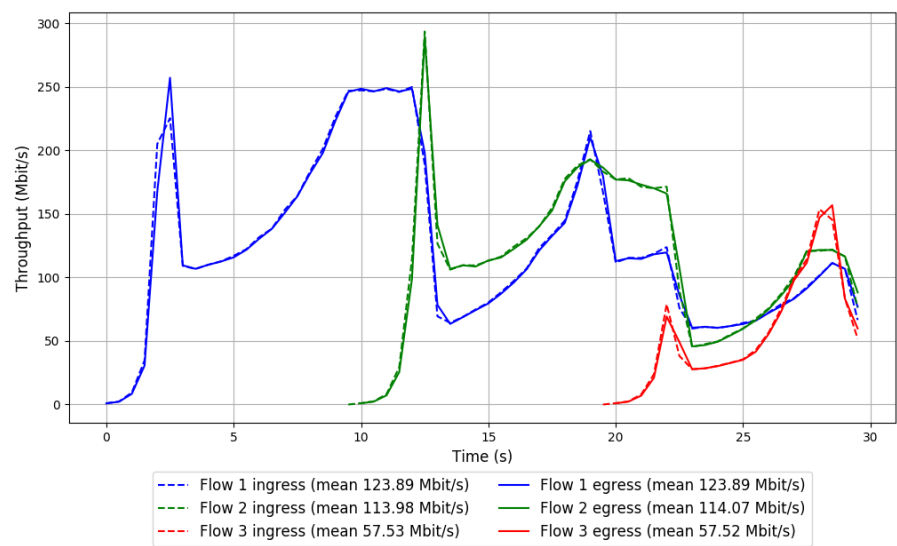
-- Flow 3:

Average throughput: 57.52 Mbit/s

95th percentile per-packet one-way delay: 51.421 ms

Loss rate: 0.02%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-01-17 20:45:27

End at: 2018-01-17 20:45:57

Below is generated by plot.py at 2018-01-18 01:31:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 263.89 Mbit/s

95th percentile per-packet one-way delay: 48.582 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 198.85 Mbit/s

95th percentile per-packet one-way delay: 48.285 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 53.25 Mbit/s

95th percentile per-packet one-way delay: 49.014 ms

Loss rate: 0.01%

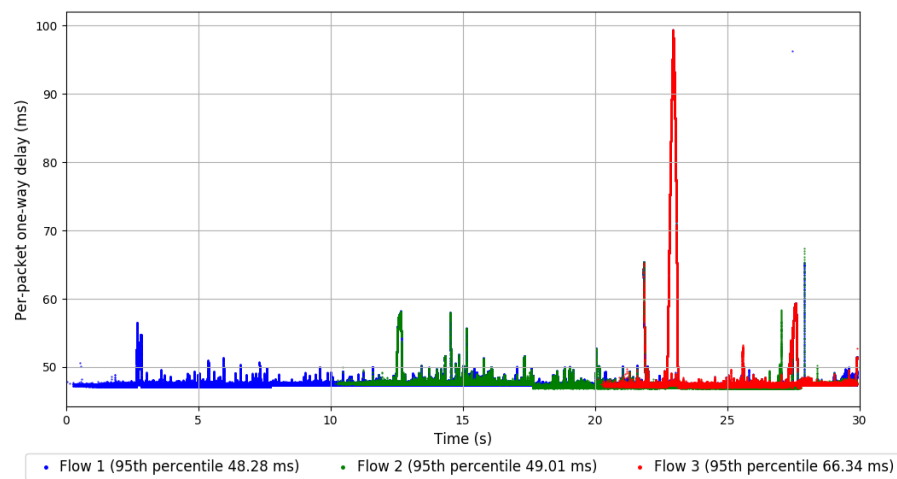
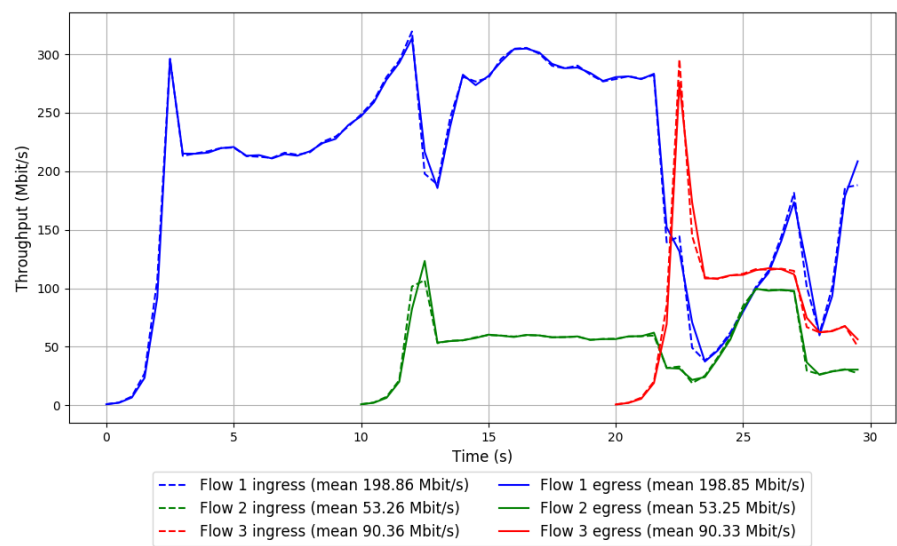
-- Flow 3:

Average throughput: 90.33 Mbit/s

95th percentile per-packet one-way delay: 66.337 ms

Loss rate: 0.01%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-01-17 21:02:05

End at: 2018-01-17 21:02:35

Below is generated by plot.py at 2018-01-18 01:31:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 206.77 Mbit/s

95th percentile per-packet one-way delay: 44.447 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 117.61 Mbit/s

95th percentile per-packet one-way delay: 44.257 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 106.82 Mbit/s

95th percentile per-packet one-way delay: 44.493 ms

Loss rate: 0.00%

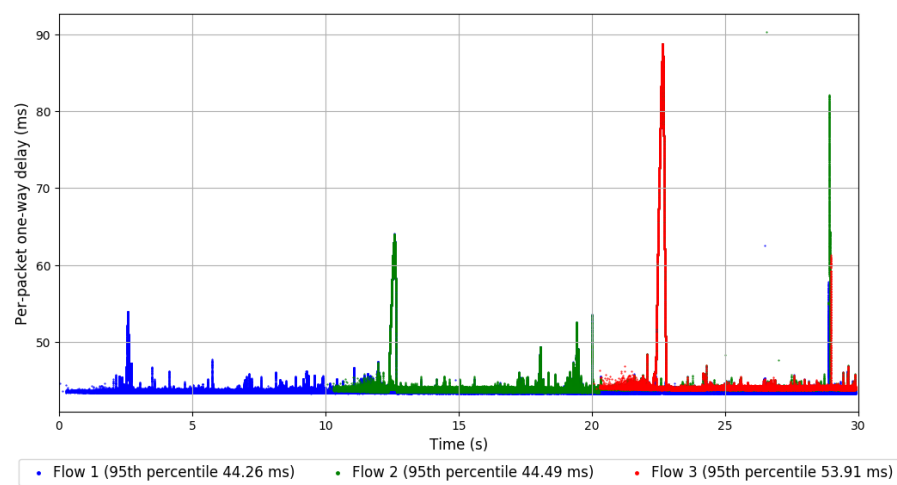
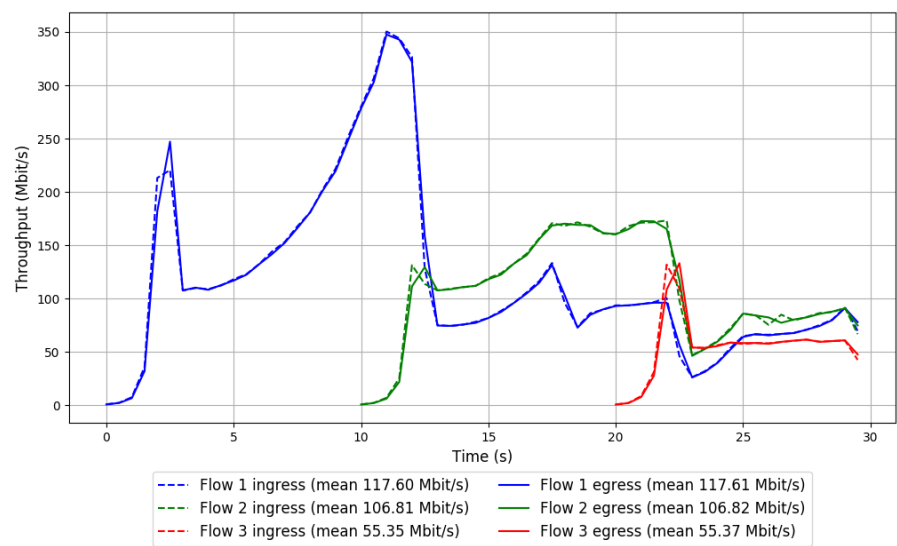
-- Flow 3:

Average throughput: 55.37 Mbit/s

95th percentile per-packet one-way delay: 53.911 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

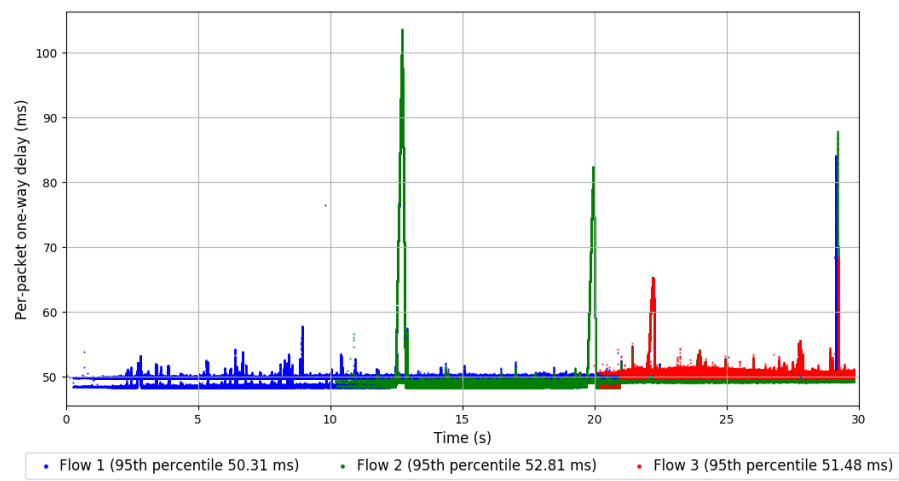
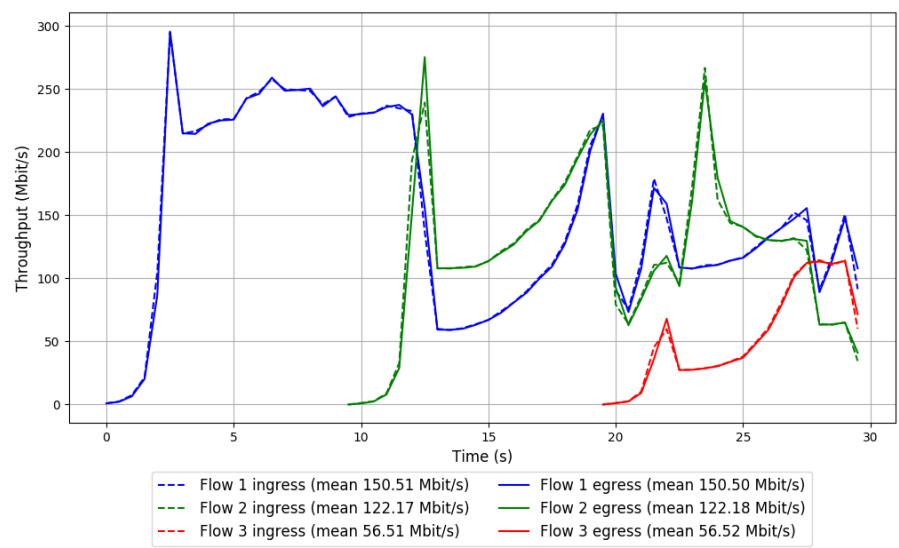


```
Run 1: Statistics of Vivace-loss

Start at: 2018-01-17 18:28:54
End at: 2018-01-17 18:29:24

# Below is generated by plot.py at 2018-01-18 01:31:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 250.57 Mbit/s
95th percentile per-packet one-way delay: 50.943 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 150.50 Mbit/s
95th percentile per-packet one-way delay: 50.310 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 122.18 Mbit/s
95th percentile per-packet one-way delay: 52.810 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 56.52 Mbit/s
95th percentile per-packet one-way delay: 51.481 ms
Loss rate: 0.01%
```

Run 1: Report of Vivace-loss — Data Link

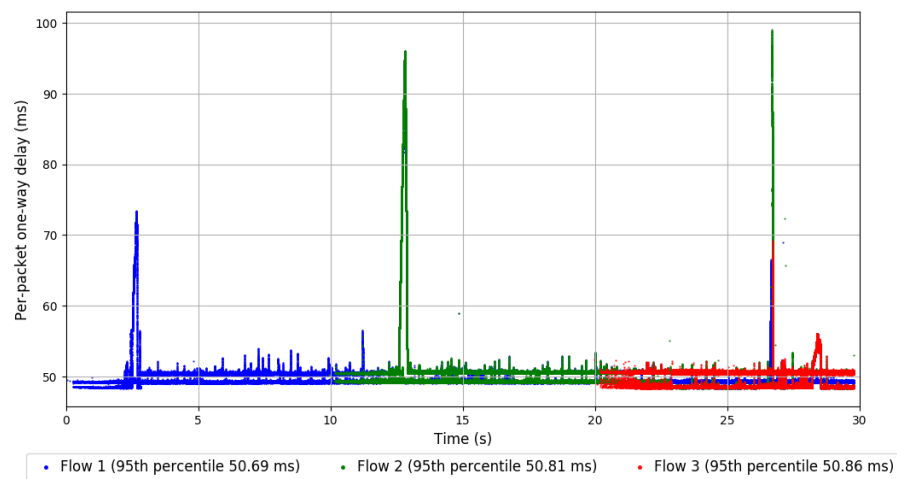
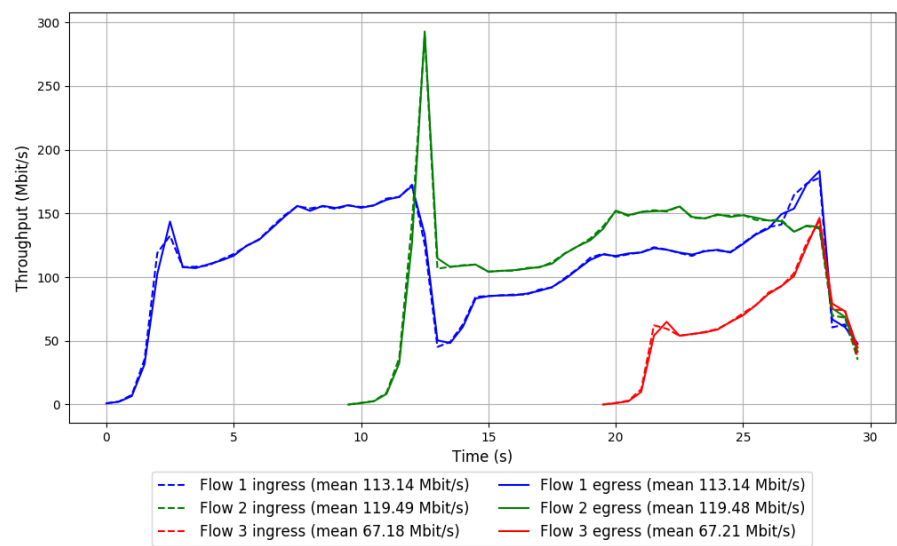


```
Run 2: Statistics of Vivace-loss

Start at: 2018-01-17 18:45:52
End at: 2018-01-17 18:46:22

# Below is generated by plot.py at 2018-01-18 01:31:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 214.99 Mbit/s
95th percentile per-packet one-way delay: 50.752 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 113.14 Mbit/s
95th percentile per-packet one-way delay: 50.690 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 119.48 Mbit/s
95th percentile per-packet one-way delay: 50.809 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 67.21 Mbit/s
95th percentile per-packet one-way delay: 50.862 ms
Loss rate: 0.02%
```


Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-01-17 19:02:31

End at: 2018-01-17 19:03:01

Below is generated by plot.py at 2018-01-18 01:32:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.54 Mbit/s

95th percentile per-packet one-way delay: 51.108 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 90.45 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 140.03 Mbit/s

95th percentile per-packet one-way delay: 51.527 ms

Loss rate: 0.00%

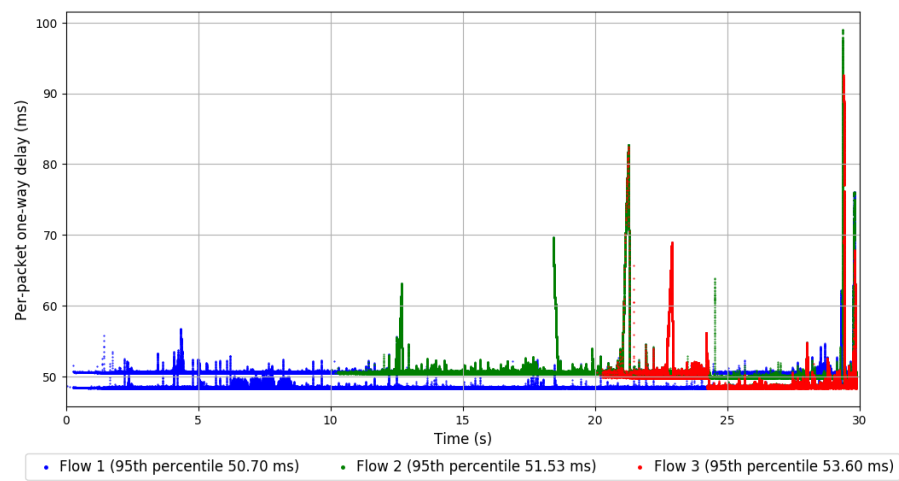
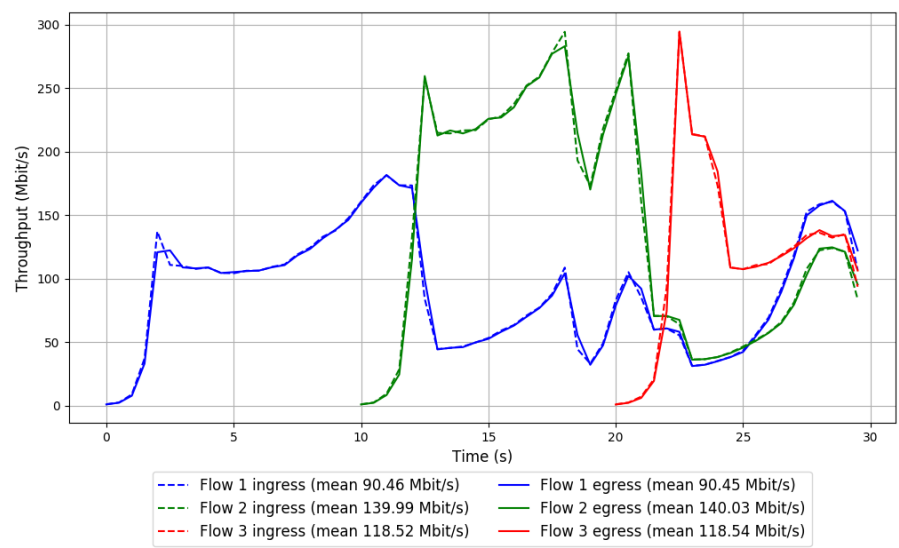
-- Flow 3:

Average throughput: 118.54 Mbit/s

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

Loss rate: 0.01%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-01-17 19:19:25

End at: 2018-01-17 19:19:55

Below is generated by plot.py at 2018-01-18 01:35:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 233.40 Mbit/s

95th percentile per-packet one-way delay: 51.262 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 151.82 Mbit/s

95th percentile per-packet one-way delay: 50.957 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 94.30 Mbit/s

95th percentile per-packet one-way delay: 52.915 ms

Loss rate: 0.00%

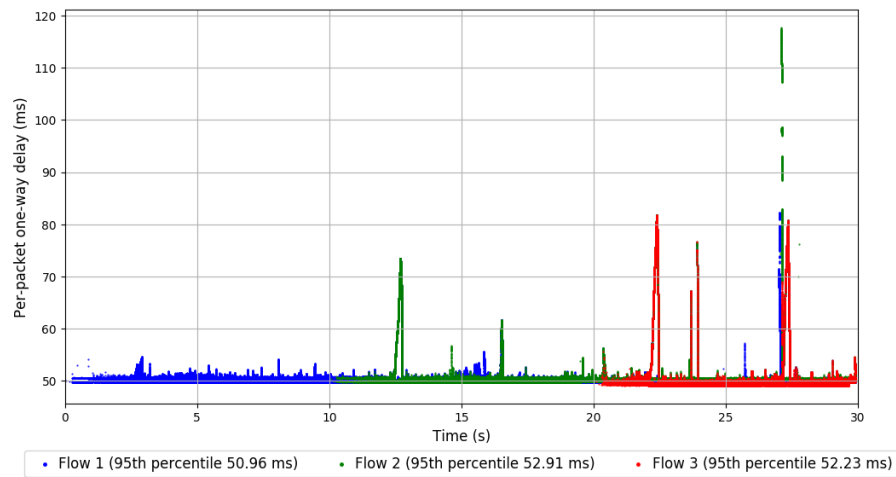
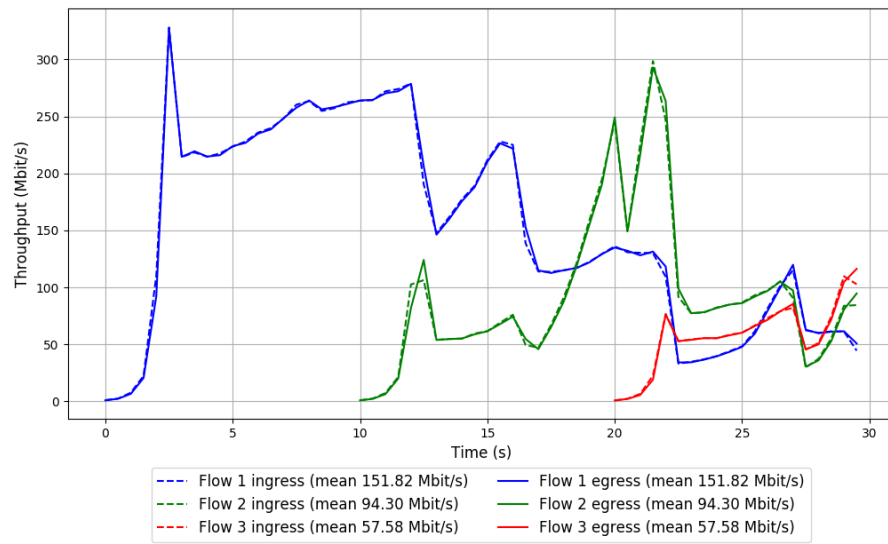
-- Flow 3:

Average throughput: 57.58 Mbit/s

95th percentile per-packet one-way delay: 52.232 ms

Loss rate: 0.00%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-01-17 19:36:21

End at: 2018-01-17 19:36:51

Below is generated by plot.py at 2018-01-18 01:36:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 239.41 Mbit/s

95th percentile per-packet one-way delay: 54.017 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 146.11 Mbit/s

95th percentile per-packet one-way delay: 55.087 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 111.99 Mbit/s

95th percentile per-packet one-way delay: 54.138 ms

Loss rate: 0.00%

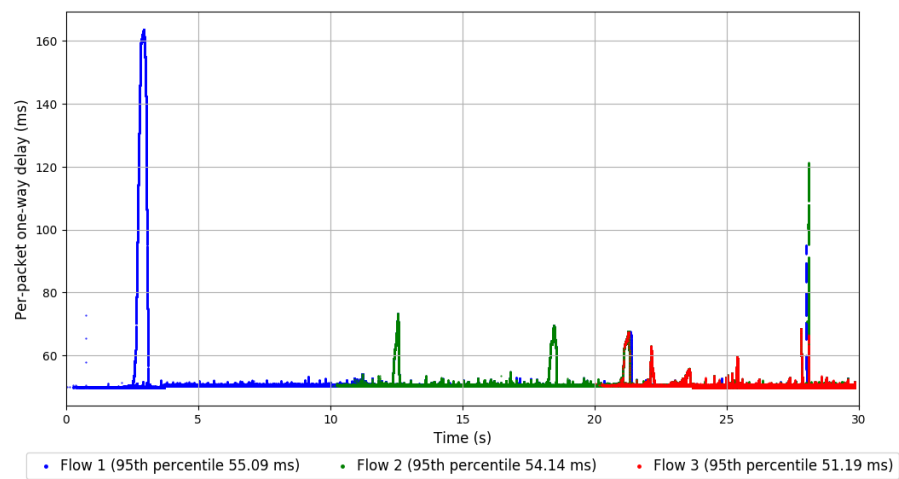
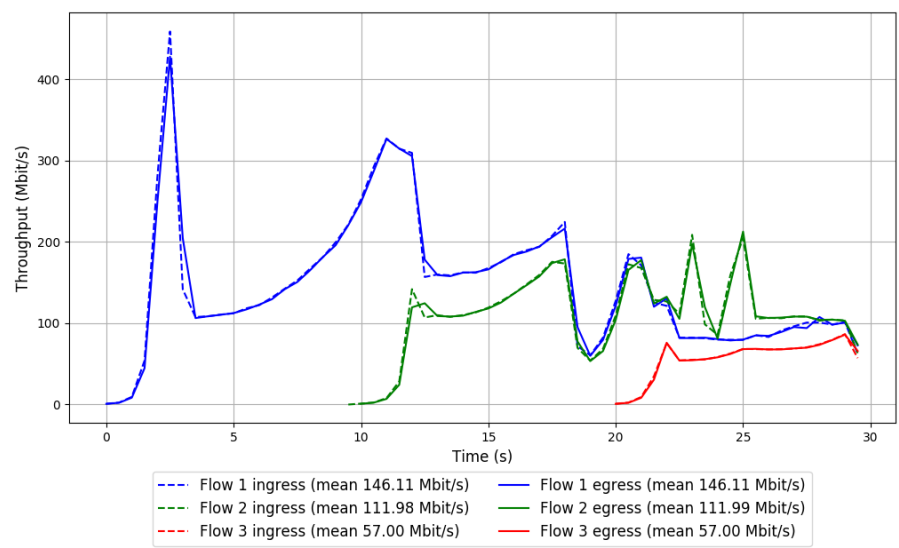
-- Flow 3:

Average throughput: 57.00 Mbit/s

95th percentile per-packet one-way delay: 51.188 ms

Loss rate: 0.00%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-01-17 19:53:01

End at: 2018-01-17 19:53:31

Below is generated by plot.py at 2018-01-18 01:36:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 198.82 Mbit/s

95th percentile per-packet one-way delay: 53.081 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 133.24 Mbit/s

95th percentile per-packet one-way delay: 52.652 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.42 Mbit/s

95th percentile per-packet one-way delay: 53.965 ms

Loss rate: 0.00%

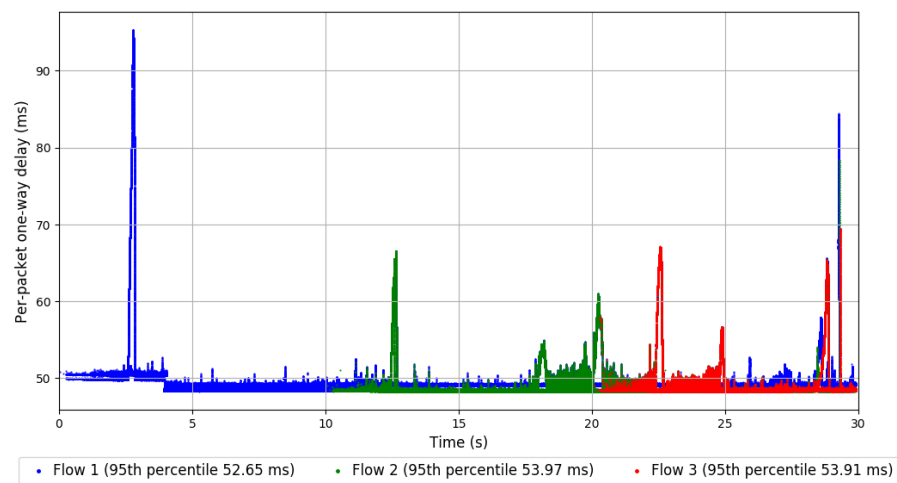
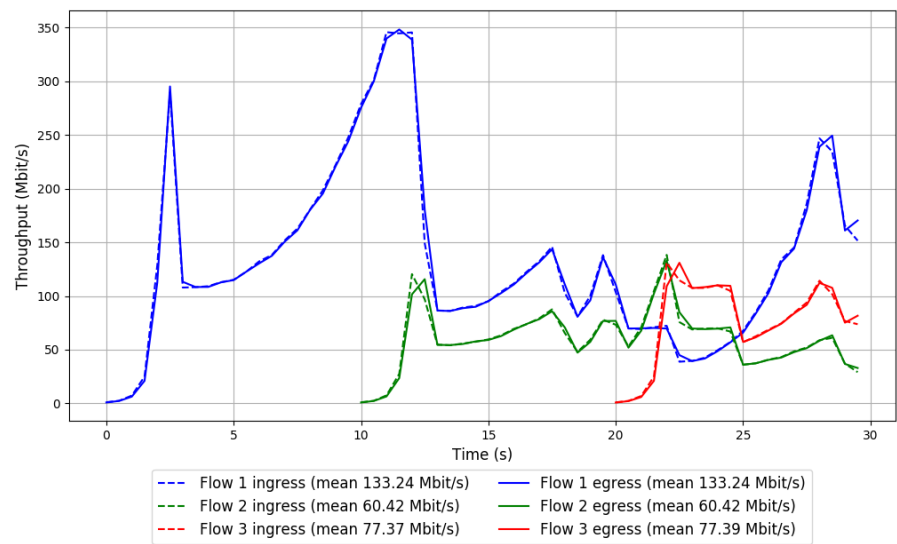
-- Flow 3:

Average throughput: 77.39 Mbit/s

95th percentile per-packet one-way delay: 53.915 ms

Loss rate: 0.00%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-01-17 20:09:39

End at: 2018-01-17 20:10:09

Below is generated by plot.py at 2018-01-18 01:38:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.62 Mbit/s

95th percentile per-packet one-way delay: 50.598 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 143.01 Mbit/s

95th percentile per-packet one-way delay: 50.303 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 118.64 Mbit/s

95th percentile per-packet one-way delay: 50.242 ms

Loss rate: 0.00%

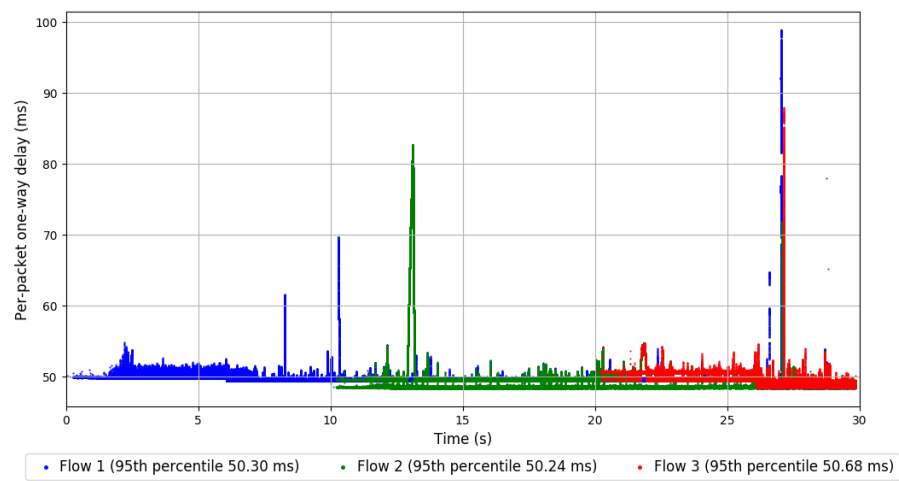
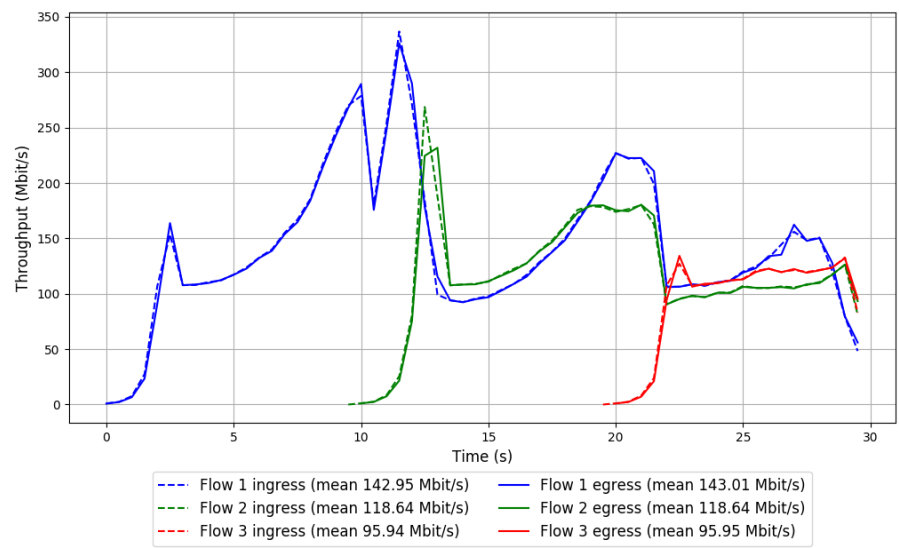
-- Flow 3:

Average throughput: 95.95 Mbit/s

95th percentile per-packet one-way delay: 50.677 ms

Loss rate: 0.01%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-01-17 20:26:04

End at: 2018-01-17 20:26:34

Below is generated by plot.py at 2018-01-18 01:38:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 249.60 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 143.92 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 121.25 Mbit/s

95th percentile per-packet one-way delay: 50.587 ms

Loss rate: 0.00%

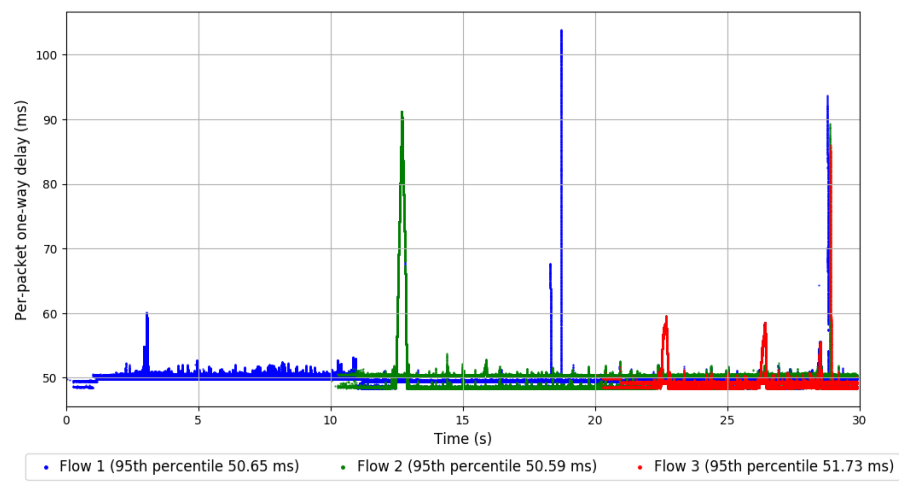
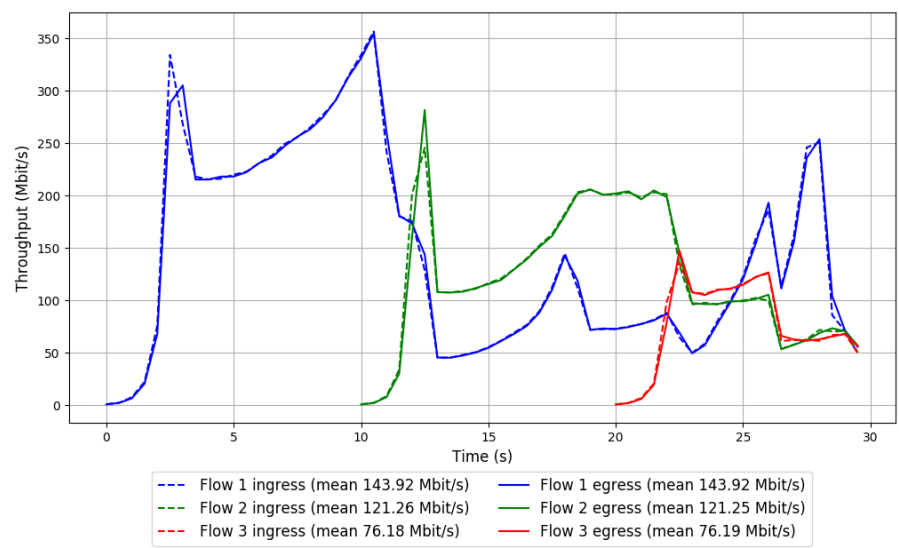
-- Flow 3:

Average throughput: 76.19 Mbit/s

95th percentile per-packet one-way delay: 51.726 ms

Loss rate: 0.00%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-01-17 20:42:41

End at: 2018-01-17 20:43:11

Below is generated by plot.py at 2018-01-18 01:40:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.14 Mbit/s

95th percentile per-packet one-way delay: 51.243 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 183.90 Mbit/s

95th percentile per-packet one-way delay: 51.031 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 86.70 Mbit/s

95th percentile per-packet one-way delay: 55.390 ms

Loss rate: 0.00%

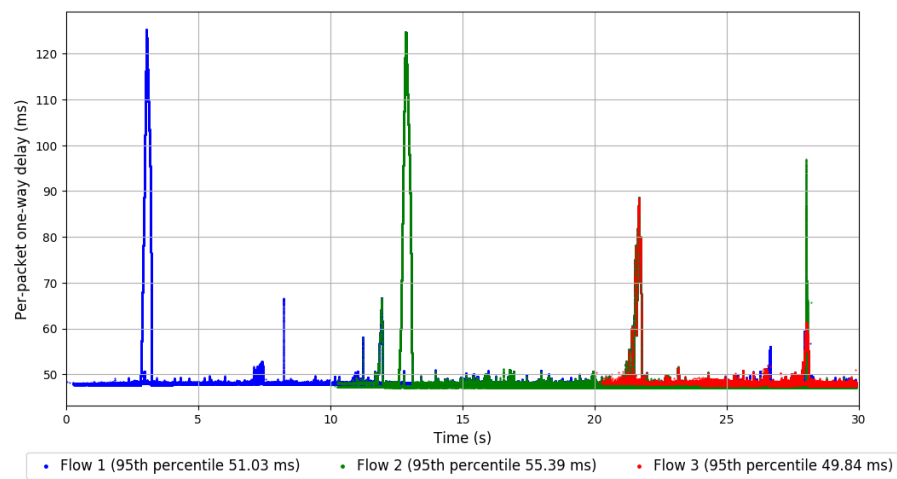
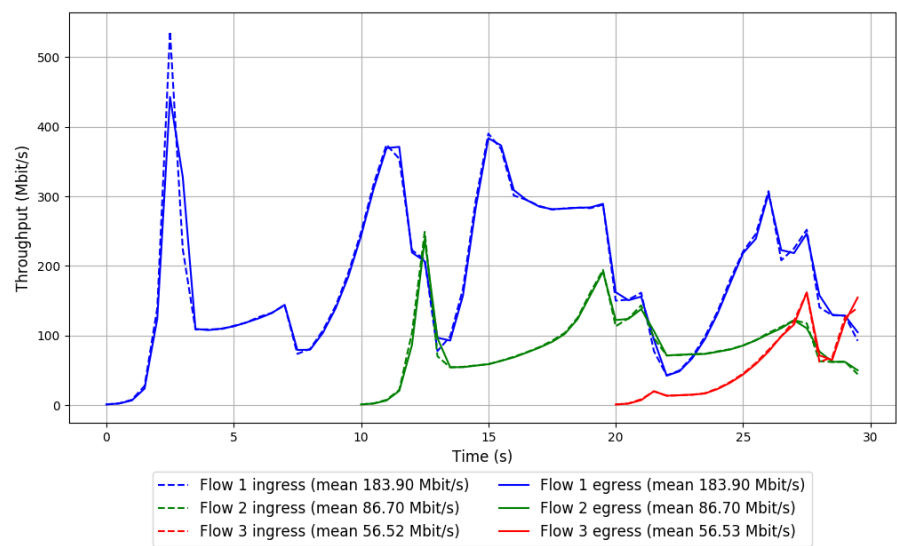
-- Flow 3:

Average throughput: 56.53 Mbit/s

95th percentile per-packet one-way delay: 49.836 ms

Loss rate: 0.00%

Run 9: Report of Vivace-loss — Data Link

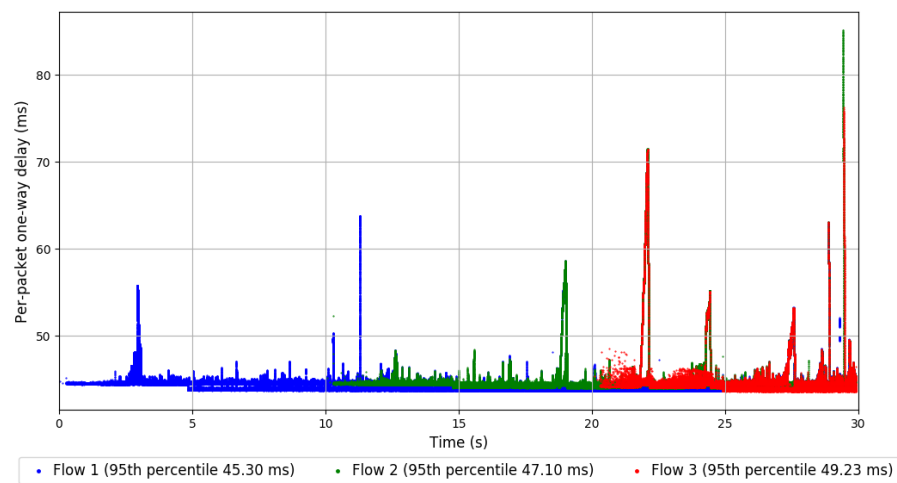
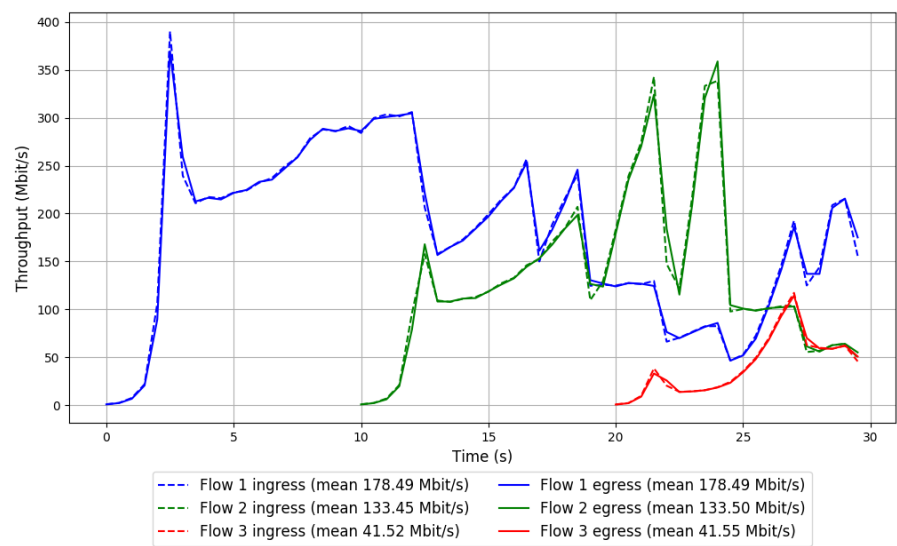


```
Run 10: Statistics of Vivace-loss

Start at: 2018-01-17 20:59:20
End at: 2018-01-17 20:59:50

# Below is generated by plot.py at 2018-01-18 01:40:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 280.84 Mbit/s
95th percentile per-packet one-way delay: 45.870 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 178.49 Mbit/s
95th percentile per-packet one-way delay: 45.300 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 133.50 Mbit/s
95th percentile per-packet one-way delay: 47.099 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 41.55 Mbit/s
95th percentile per-packet one-way delay: 49.234 ms
Loss rate: 0.02%
```


Run 10: Report of Vivace-loss — Data Link

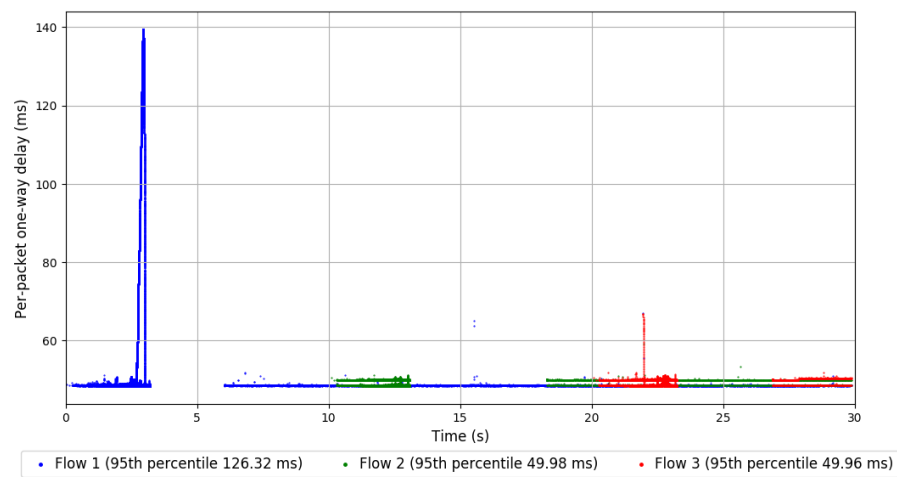
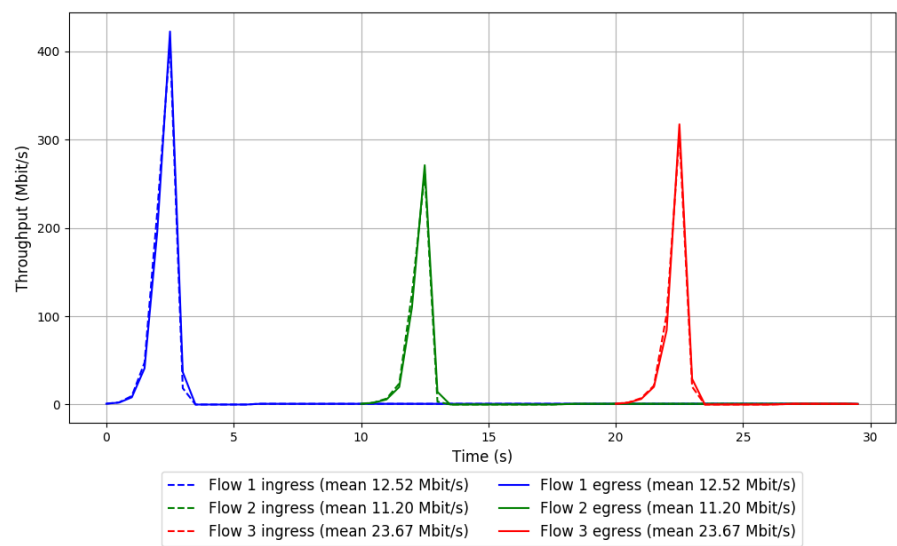


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-01-17 18:37:27
End at: 2018-01-17 18:37:57

# Below is generated by plot.py at 2018-01-18 01:40:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.73 Mbit/s
95th percentile per-packet one-way delay: 90.527 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 126.319 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.20 Mbit/s
95th percentile per-packet one-way delay: 49.975 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.67 Mbit/s
95th percentile per-packet one-way delay: 49.959 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-01-17 18:54:13

End at: 2018-01-17 18:54:43

Below is generated by plot.py at 2018-01-18 01:40:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.95 Mbit/s

95th percentile per-packet one-way delay: 50.660 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.40 Mbit/s

95th percentile per-packet one-way delay: 52.792 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 180.28 Mbit/s

95th percentile per-packet one-way delay: 50.521 ms

Loss rate: 0.00%

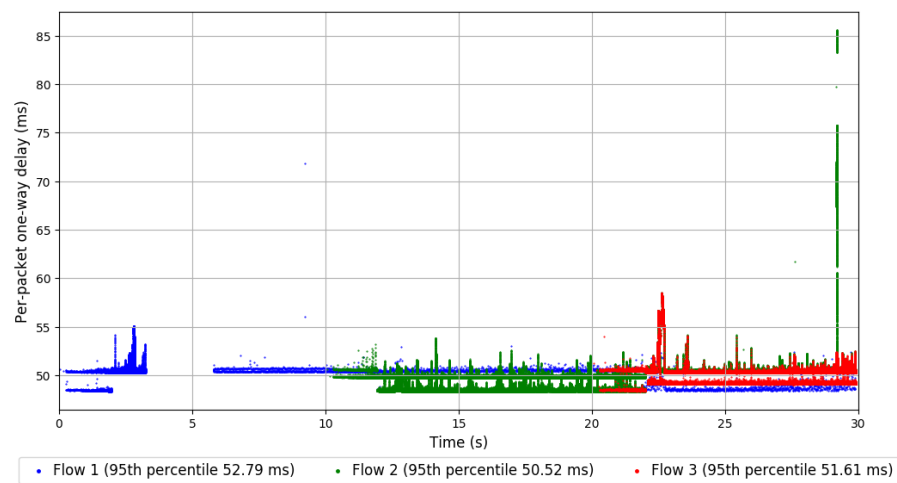
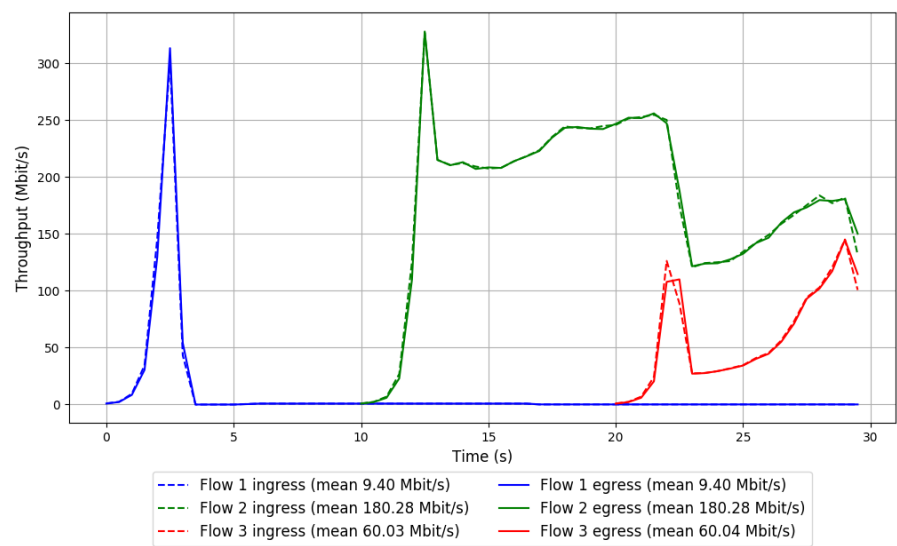
-- Flow 3:

Average throughput: 60.04 Mbit/s

95th percentile per-packet one-way delay: 51.612 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-01-17 19:10:51

End at: 2018-01-17 19:11:21

Below is generated by plot.py at 2018-01-18 01:40:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.16 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 12.78 Mbit/s

95th percentile per-packet one-way delay: 126.355 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 166.03 Mbit/s

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

Loss rate: 0.00%

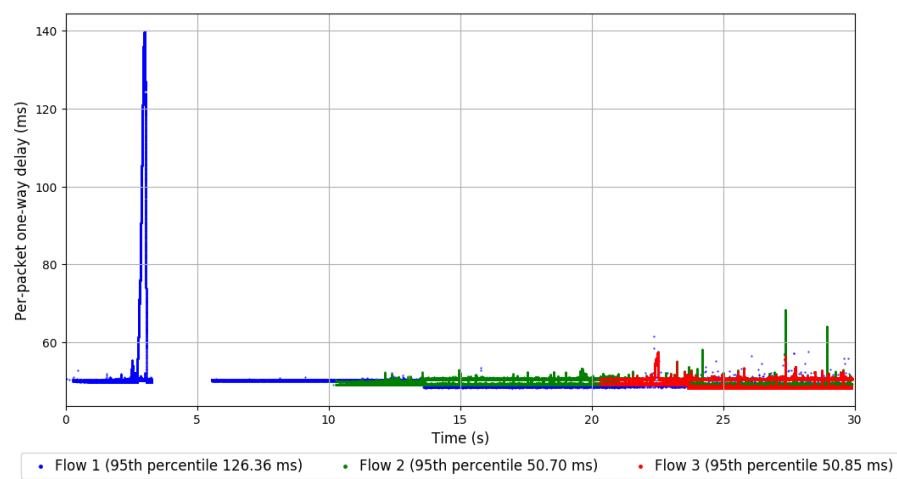
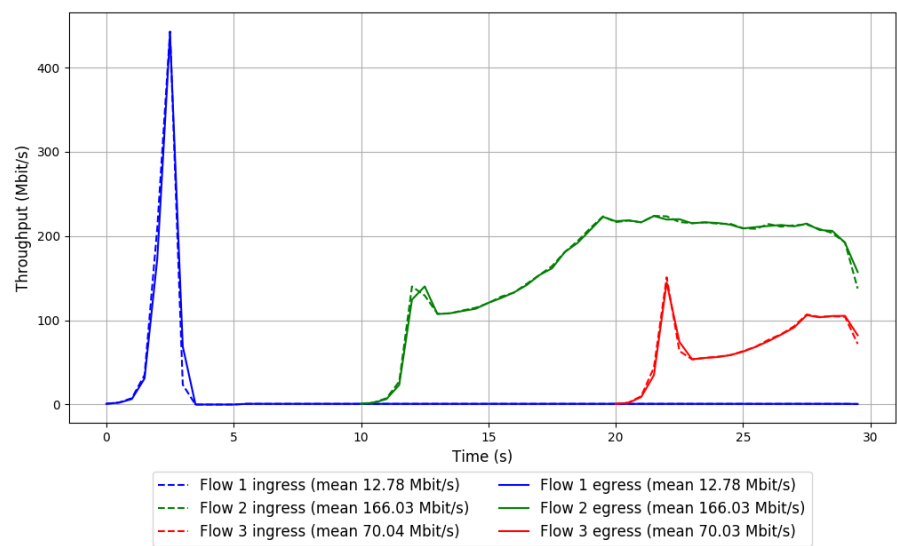
-- Flow 3:

Average throughput: 70.03 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-01-17 19:27:42

End at: 2018-01-17 19:28:12

Below is generated by plot.py at 2018-01-18 01:40:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.02 Mbit/s

95th percentile per-packet one-way delay: 55.991 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.21 Mbit/s

95th percentile per-packet one-way delay: 54.650 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 106.31 Mbit/s

95th percentile per-packet one-way delay: 52.737 ms

Loss rate: 0.00%

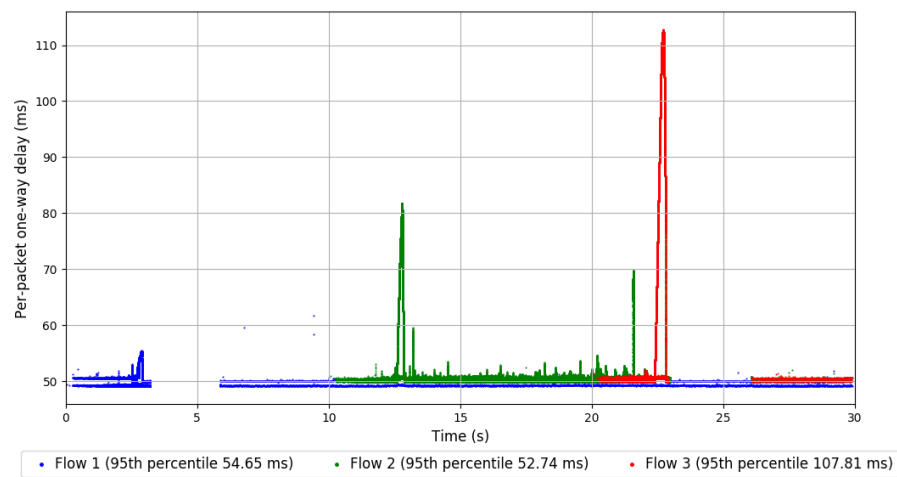
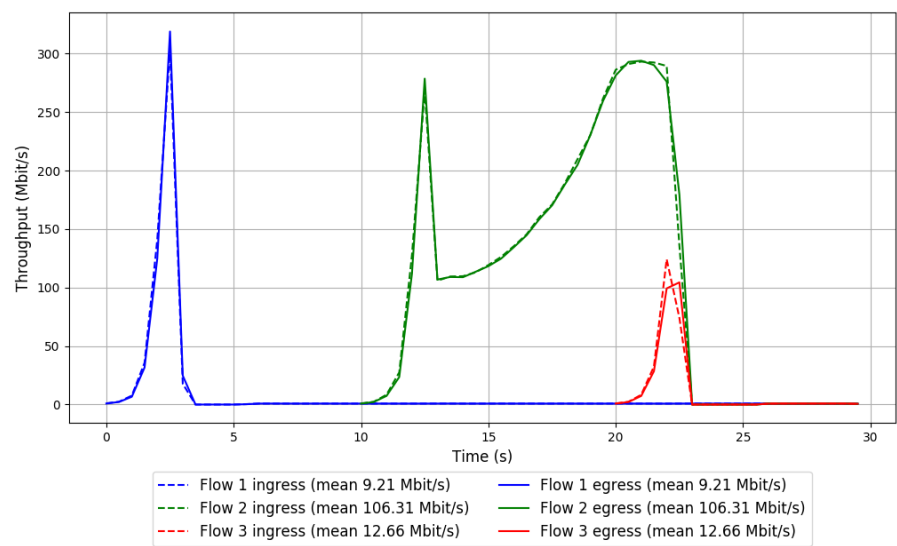
-- Flow 3:

Average throughput: 12.66 Mbit/s

95th percentile per-packet one-way delay: 107.806 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-01-17 19:44:36

End at: 2018-01-17 19:45:06

Below is generated by plot.py at 2018-01-18 01:40:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 28.04 Mbit/s

95th percentile per-packet one-way delay: 73.258 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 8.41 Mbit/s

95th percentile per-packet one-way delay: 54.338 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 12.13 Mbit/s

95th percentile per-packet one-way delay: 77.392 ms

Loss rate: 0.00%

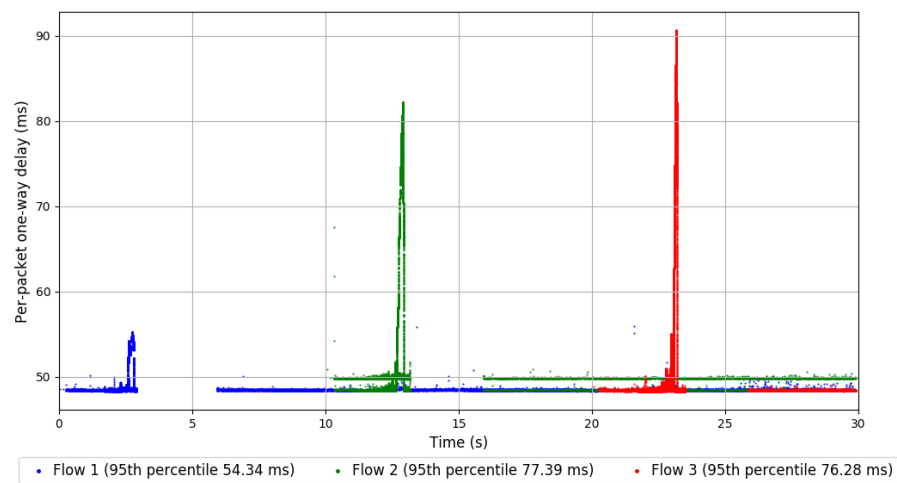
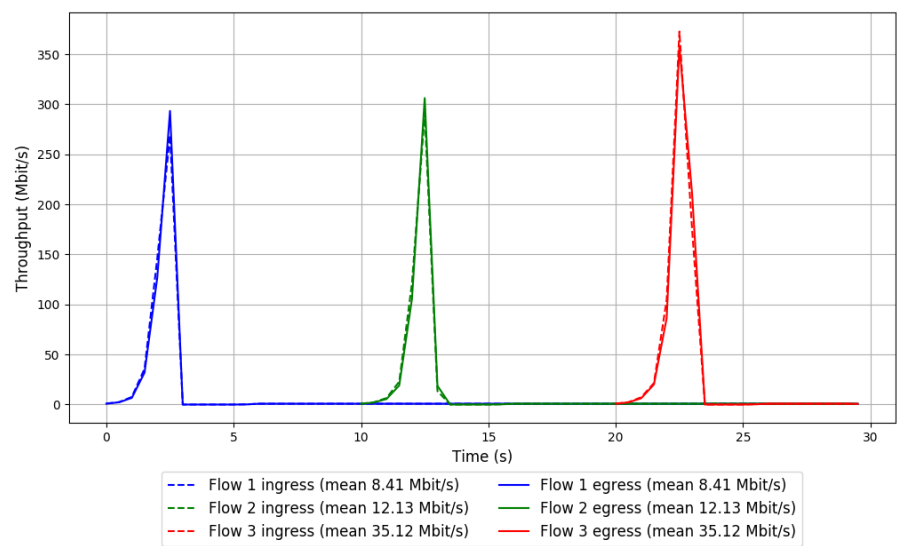
-- Flow 3:

Average throughput: 35.12 Mbit/s

95th percentile per-packet one-way delay: 76.283 ms

Loss rate: 0.00%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-01-17 20:01:12

End at: 2018-01-17 20:01:42

Below is generated by plot.py at 2018-01-18 01:41:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.90 Mbit/s

95th percentile per-packet one-way delay: 50.955 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 114.07 Mbit/s

95th percentile per-packet one-way delay: 50.310 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.74 Mbit/s

95th percentile per-packet one-way delay: 71.701 ms

Loss rate: 0.00%

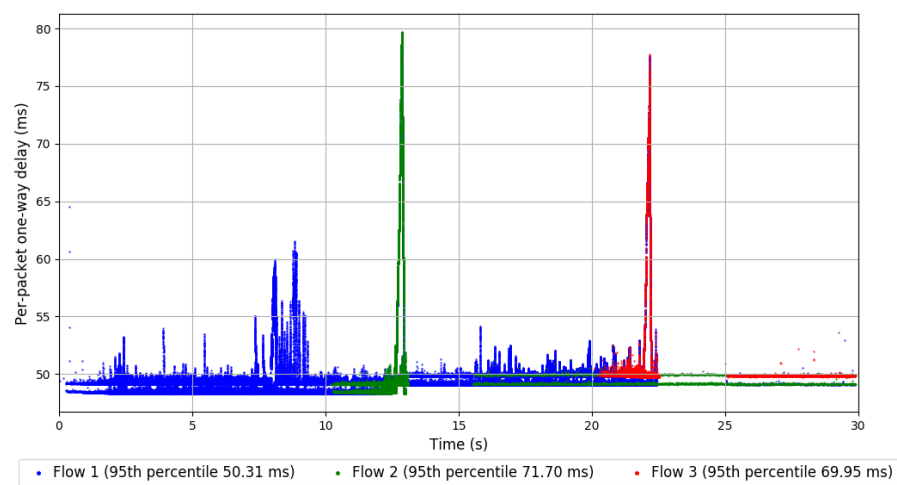
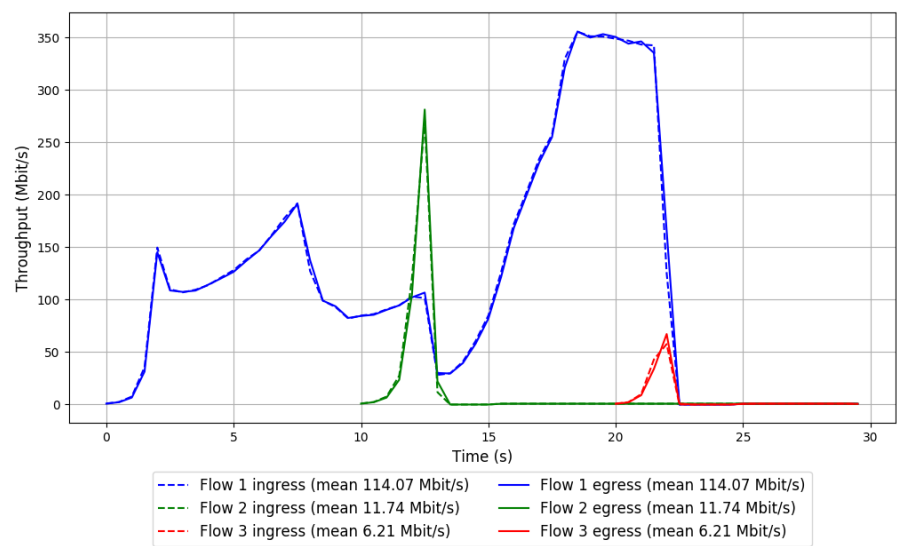
-- Flow 3:

Average throughput: 6.21 Mbit/s

95th percentile per-packet one-way delay: 69.950 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-01-17 20:17:48

End at: 2018-01-17 20:18:18

Below is generated by plot.py at 2018-01-18 01:42:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 176.03 Mbit/s

95th percentile per-packet one-way delay: 50.604 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 68.363 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 204.28 Mbit/s

95th percentile per-packet one-way delay: 50.530 ms

Loss rate: 0.00%

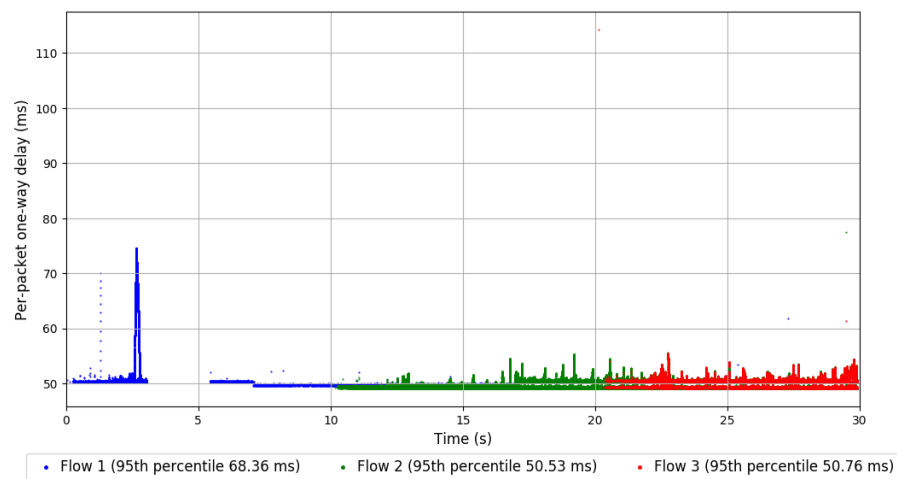
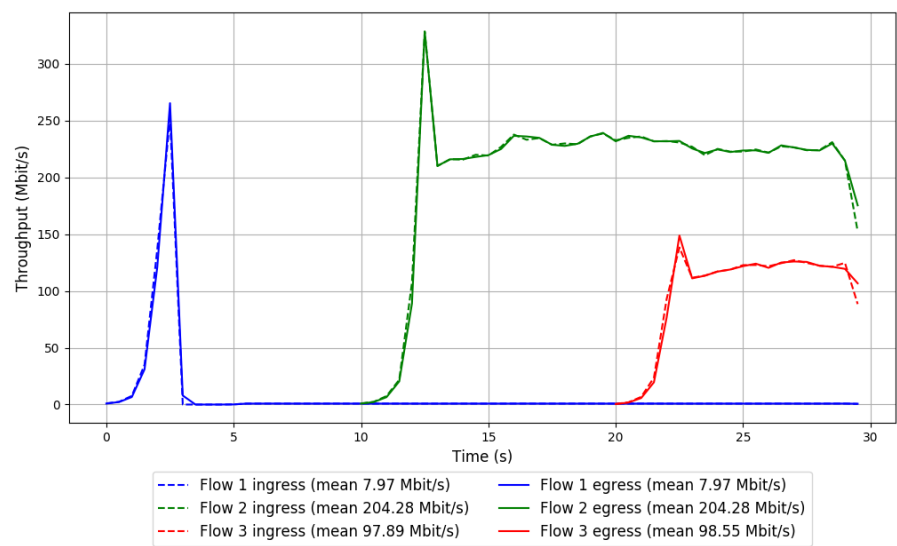
-- Flow 3:

Average throughput: 98.55 Mbit/s

95th percentile per-packet one-way delay: 50.755 ms

Loss rate: 0.00%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-01-17 20:34:20

End at: 2018-01-17 20:34:50

Below is generated by plot.py at 2018-01-18 01:42:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.30 Mbit/s

95th percentile per-packet one-way delay: 50.245 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.28 Mbit/s

95th percentile per-packet one-way delay: 50.330 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 151.32 Mbit/s

95th percentile per-packet one-way delay: 50.159 ms

Loss rate: 0.00%

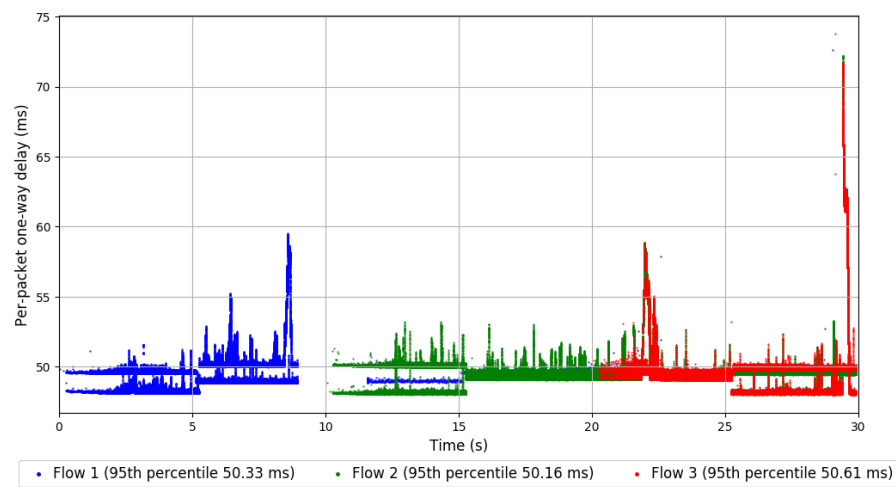
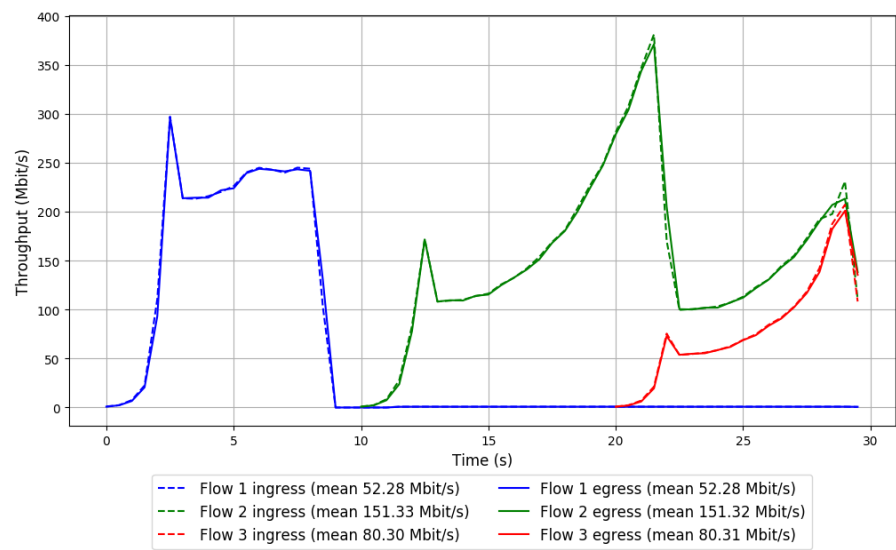
-- Flow 3:

Average throughput: 80.31 Mbit/s

95th percentile per-packet one-way delay: 50.613 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-01-17 20:51:01

End at: 2018-01-17 20:51:31

Below is generated by plot.py at 2018-01-18 01:42:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 251.53 Mbit/s

95th percentile per-packet one-way delay: 64.463 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 247.86 Mbit/s

95th percentile per-packet one-way delay: 64.292 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 69.772 ms

Loss rate: 0.05%

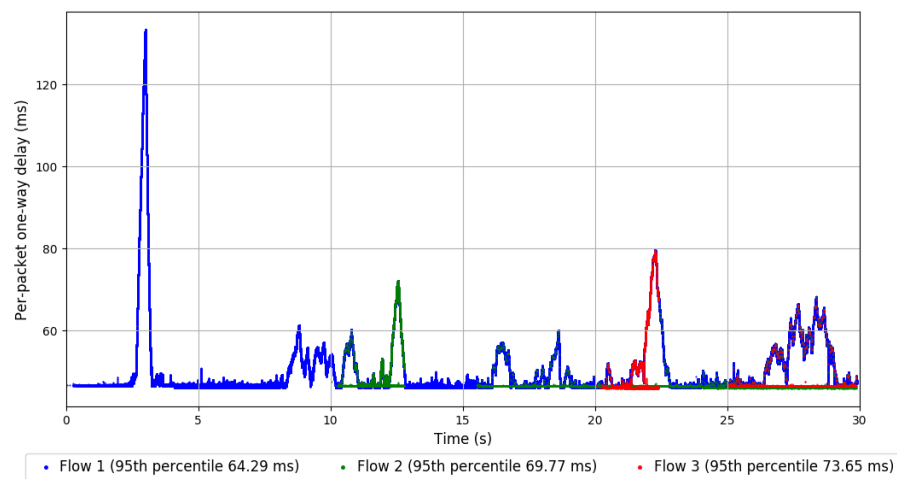
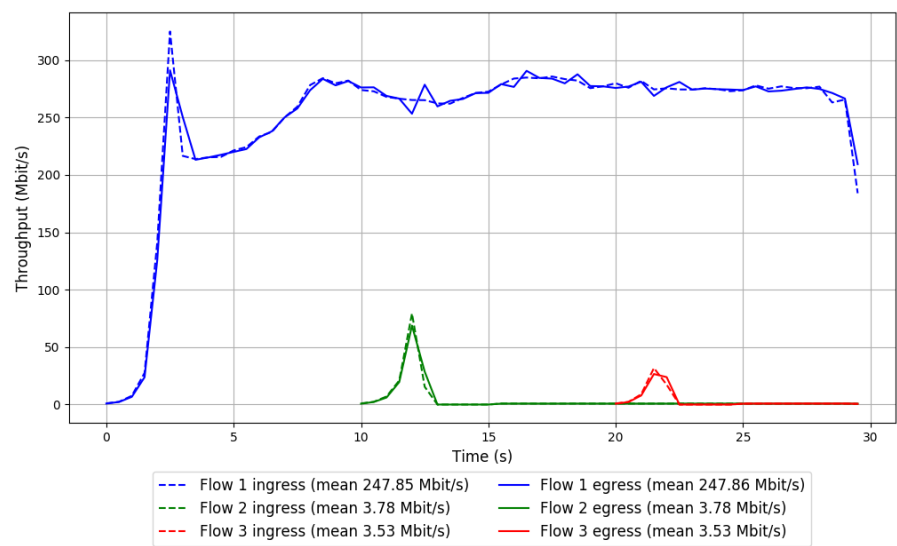
-- Flow 3:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 73.654 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-01-17 21:07:35
End at: 2018-01-17 21:08:05

# Below is generated by plot.py at 2018-01-18 01:42:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 165.58 Mbit/s
95th percentile per-packet one-way delay: 43.762 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 139.57 Mbit/s
95th percentile per-packet one-way delay: 43.341 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.43 Mbit/s
95th percentile per-packet one-way delay: 89.820 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 86.85 Mbit/s
95th percentile per-packet one-way delay: 43.536 ms
Loss rate: 0.00%
```

Run 10: Report of Vivace-LTE — Data Link

