

Pantheon Report

Generated at 2017-12-06 16:18:07 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

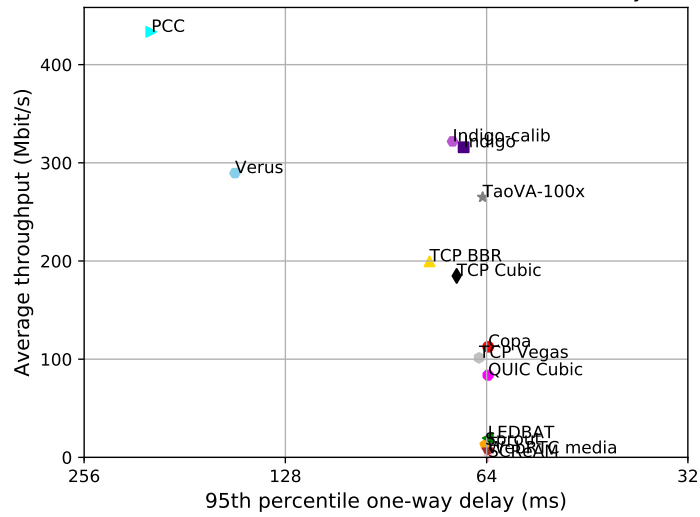
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

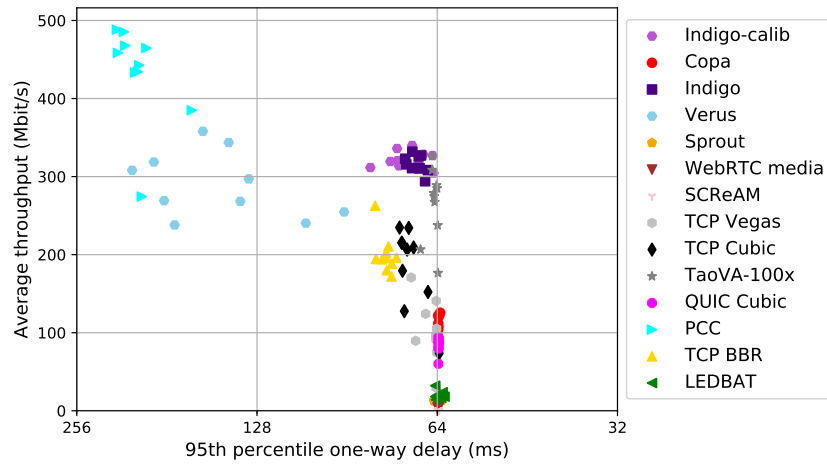
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eae30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE Iowa Ethernet to GCE Tokyo 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 Tokyo 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	92.28	102.30	119.16	75.65	78.04	80.90	0.05	0.03	0.16
TCP Cubic	10	91.25	86.85	107.24	119.15	70.86	72.34	0.05	0.02	0.02
LEDBAT	10	9.85	11.03	6.33	63.81	63.70	63.52	0.12	0.03	0.00
PCC	10	370.29	79.15	31.97	202.77	204.53	193.79	1.03	0.97	1.55
QUIC Cubic	10	47.07	44.23	22.46	63.67	63.04	63.12	0.01	0.00	0.01
SCReAM	10	0.22	0.22	0.22	63.51	62.87	63.03	0.00	0.00	0.00
WebRTC media	10	2.19	1.38	0.55	63.35	63.41	63.56	0.00	0.00	0.00
Sprout	10	6.55	6.42	6.27	64.31	64.42	64.32	0.14	0.02	0.00
TaoVA-100x	10	154.29	140.58	96.00	64.32	65.88	65.11	0.01	0.02	0.01
TCP Vegas	10	52.24	50.22	47.42	64.93	65.30	66.05	0.01	0.03	0.15
Verus	10	175.94	123.68	96.53	140.83	169.15	151.67	0.27	1.33	1.16
Copa	10	63.26	58.87	40.75	63.64	63.19	63.69	0.00	0.00	0.00
Indigo	10	167.92	159.58	130.57	67.49	69.85	72.80	0.02	0.03	0.08
Indigo-calib	10	176.81	163.09	114.98	69.42	73.09	77.12	0.00	0.01	0.01

Run 1: Statistics of TCP BBR

Start at: 2017-12-06 12:18:42

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

Below is generated by plot.py at 2017-12-06 15:24:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.29 Mbit/s

95th percentile per-packet one-way delay: 76.206 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 85.11 Mbit/s

95th percentile per-packet one-way delay: 73.286 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 87.93 Mbit/s

95th percentile per-packet one-way delay: 76.058 ms

Loss rate: 0.00%

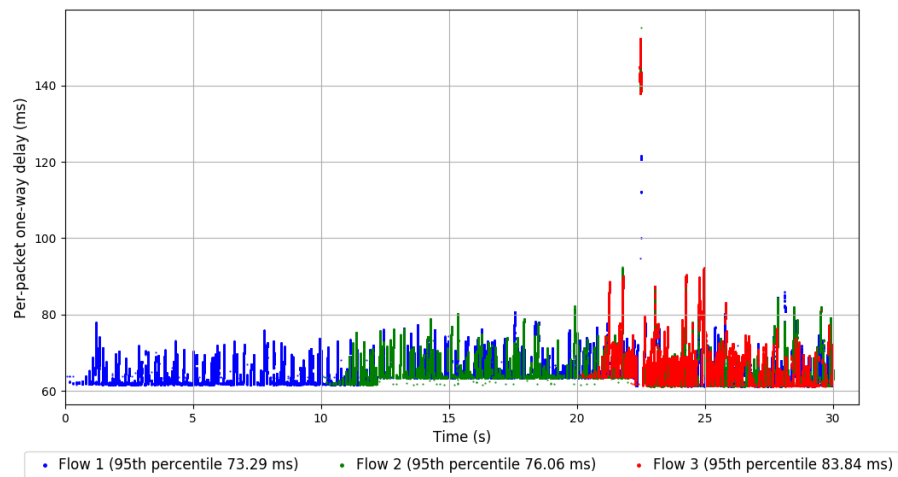
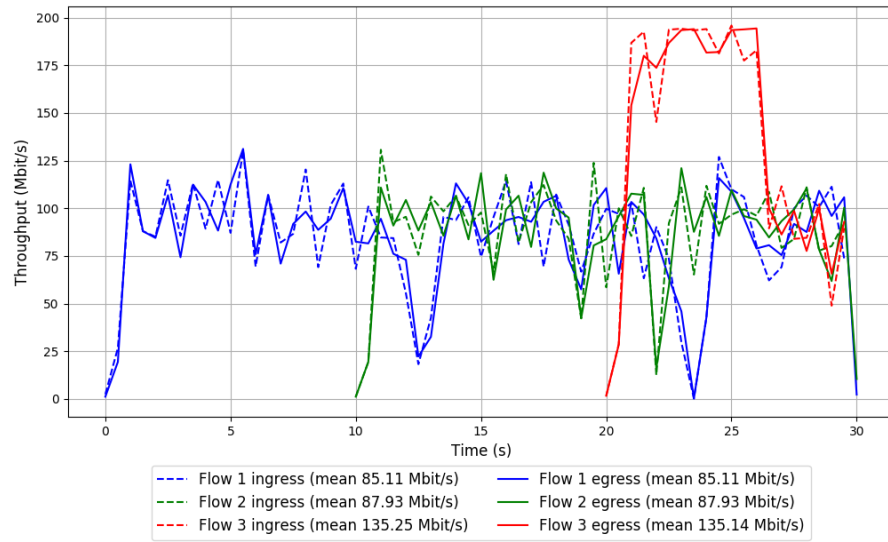
-- Flow 3:

Average throughput: 135.14 Mbit/s

95th percentile per-packet one-way delay: 83.838 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-06 12:30:48

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

Below is generated by plot.py at 2017-12-06 15:24:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 195.68 Mbit/s

95th percentile per-packet one-way delay: 77.691 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 93.74 Mbit/s

95th percentile per-packet one-way delay: 76.349 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 95.16 Mbit/s

95th percentile per-packet one-way delay: 76.693 ms

Loss rate: 0.00%

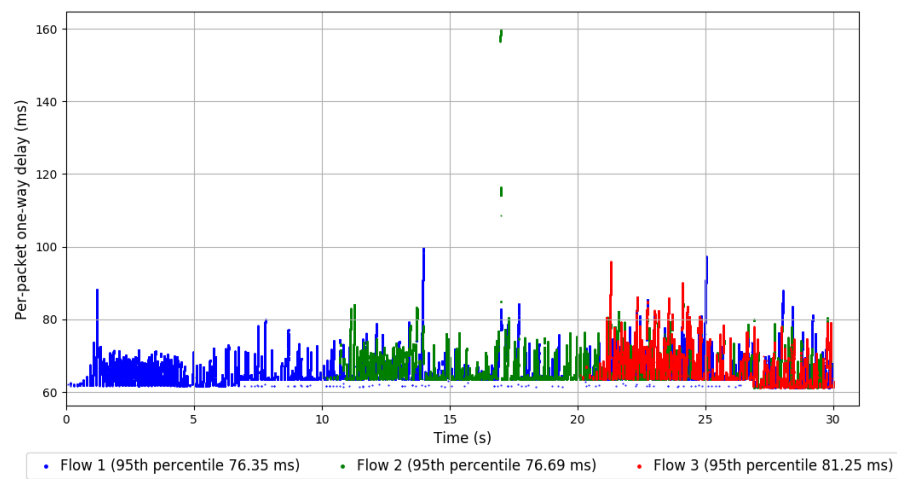
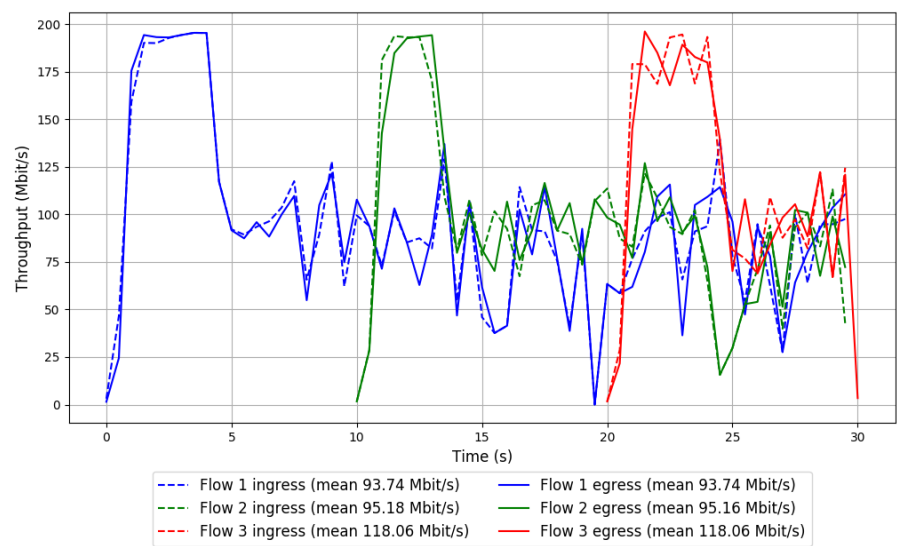
-- Flow 3:

Average throughput: 118.06 Mbit/s

95th percentile per-packet one-way delay: 81.254 ms

Loss rate: 0.02%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-06 12:42:51

End at: 2017-12-06 12:43:21

Below is generated by plot.py at 2017-12-06 15:24:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 210.46 Mbit/s

95th percentile per-packet one-way delay: 77.215 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 106.77 Mbit/s

95th percentile per-packet one-way delay: 73.388 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 85.90 Mbit/s

95th percentile per-packet one-way delay: 76.770 ms

Loss rate: 0.21%

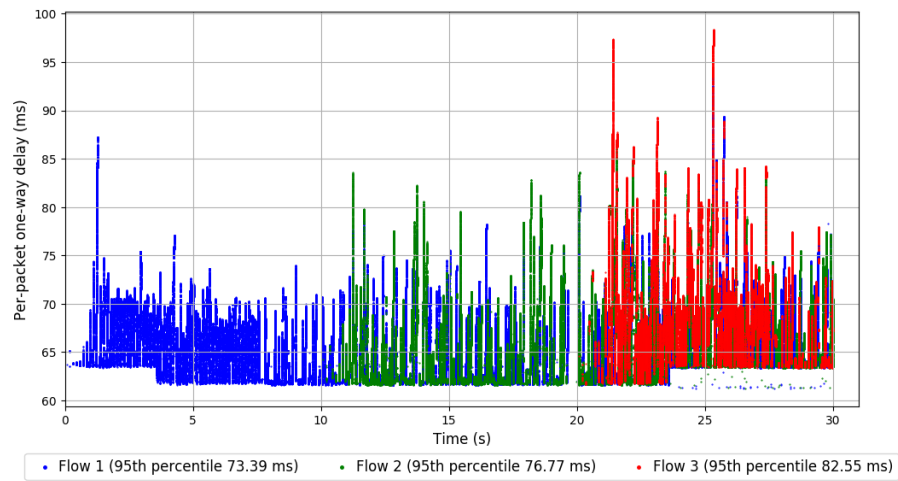
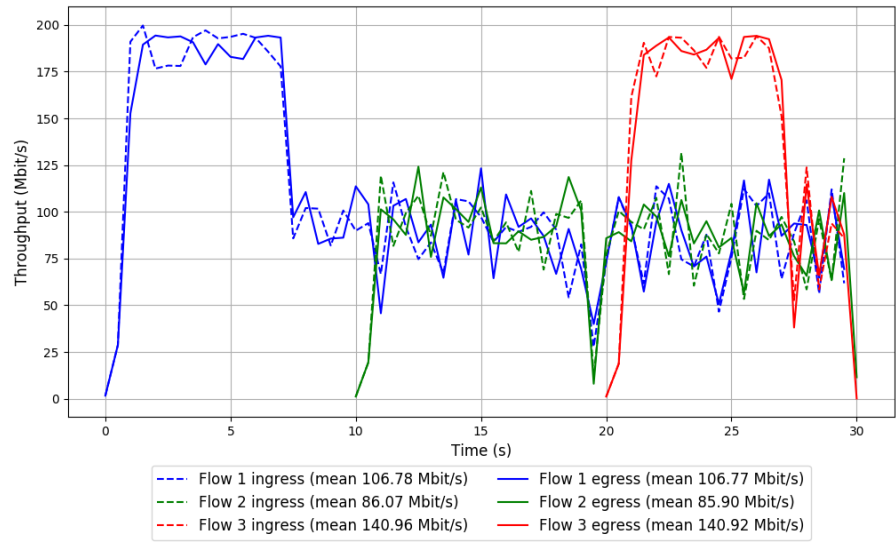
-- Flow 3:

Average throughput: 140.92 Mbit/s

95th percentile per-packet one-way delay: 82.548 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-06 12:55:29

End at: 2017-12-06 12:55:59

Below is generated by plot.py at 2017-12-06 15:24:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 180.00 Mbit/s

95th percentile per-packet one-way delay: 77.703 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 90.84 Mbit/s

95th percentile per-packet one-way delay: 77.122 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 93.65 Mbit/s

95th percentile per-packet one-way delay: 77.365 ms

Loss rate: 0.02%

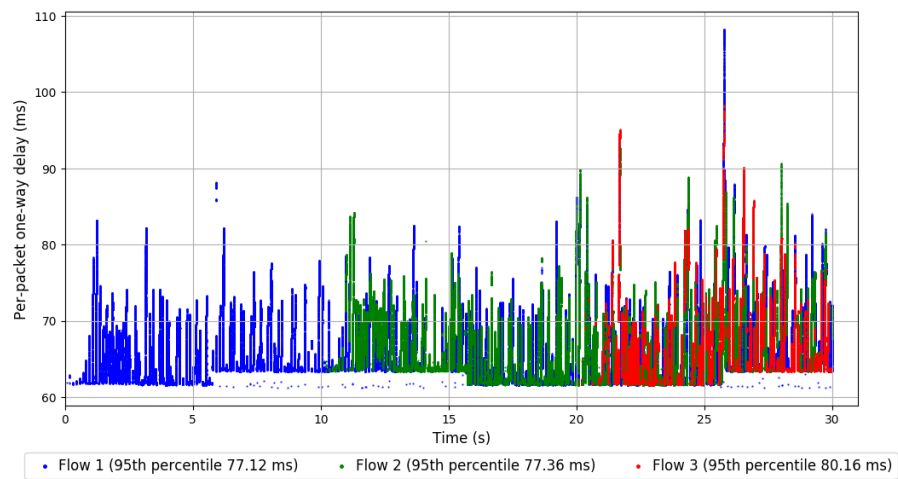
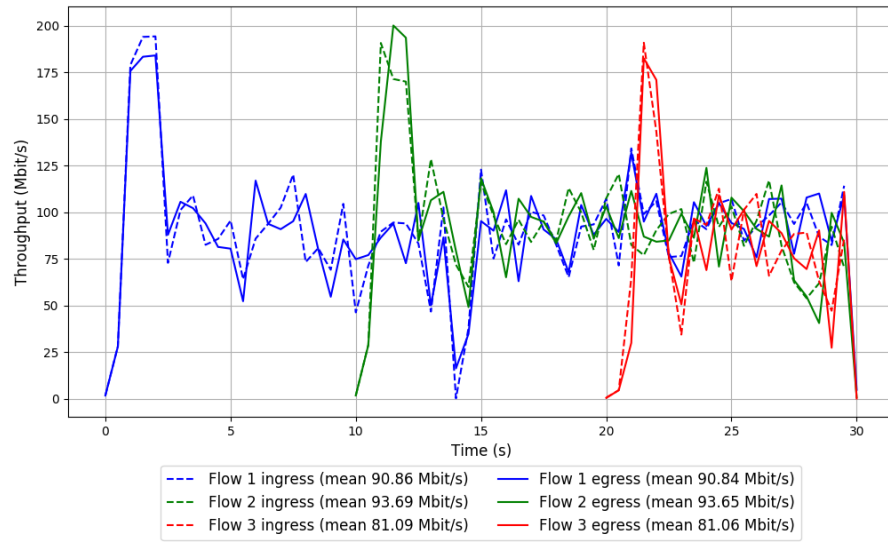
-- Flow 3:

Average throughput: 81.06 Mbit/s

95th percentile per-packet one-way delay: 80.157 ms

Loss rate: 0.02%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-06 13:07:38

End at: 2017-12-06 13:08:08

Below is generated by plot.py at 2017-12-06 15:24:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 171.98 Mbit/s

95th percentile per-packet one-way delay: 76.311 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 90.81 Mbit/s

95th percentile per-packet one-way delay: 75.646 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 80.46 Mbit/s

95th percentile per-packet one-way delay: 76.722 ms

Loss rate: 0.01%

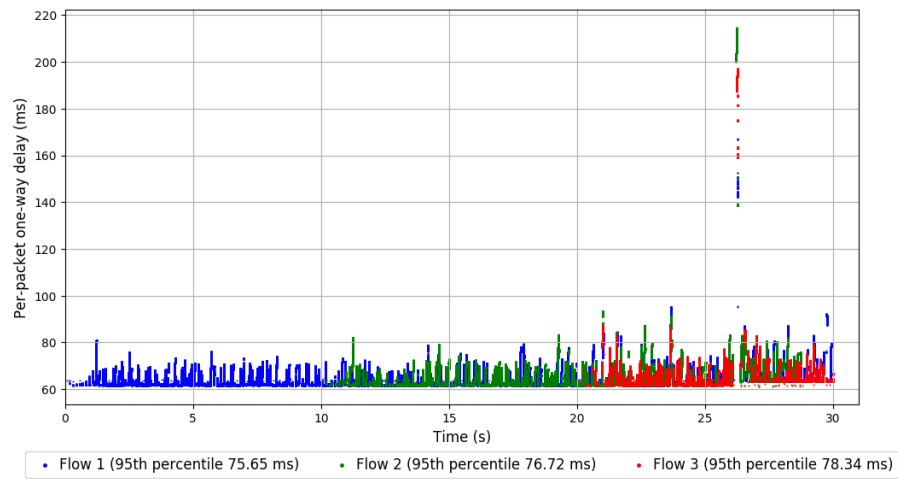
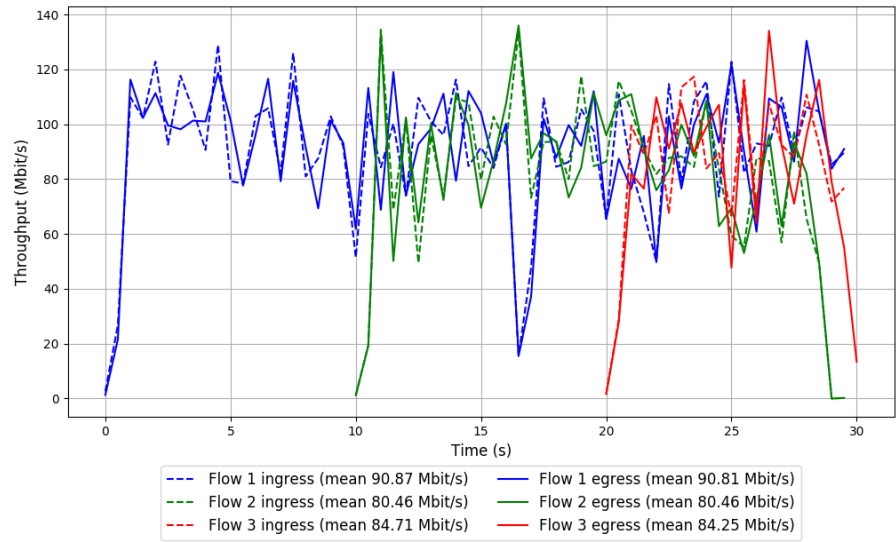
-- Flow 3:

Average throughput: 84.25 Mbit/s

95th percentile per-packet one-way delay: 78.342 ms

Loss rate: 0.56%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-06 13:19:56

End at: 2017-12-06 13:20:26

Below is generated by plot.py at 2017-12-06 15:24:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 194.50 Mbit/s

95th percentile per-packet one-way delay: 81.001 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 91.56 Mbit/s

95th percentile per-packet one-way delay: 75.200 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 87.88 Mbit/s

95th percentile per-packet one-way delay: 81.530 ms

Loss rate: 0.00%

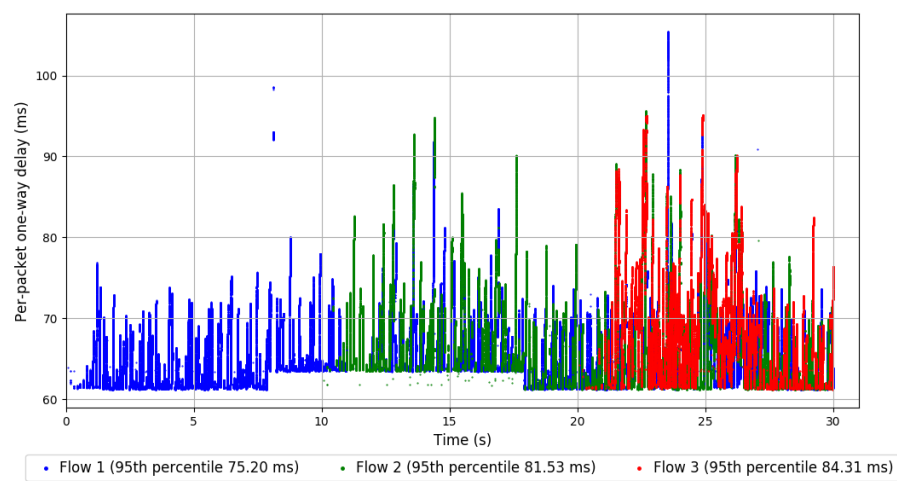
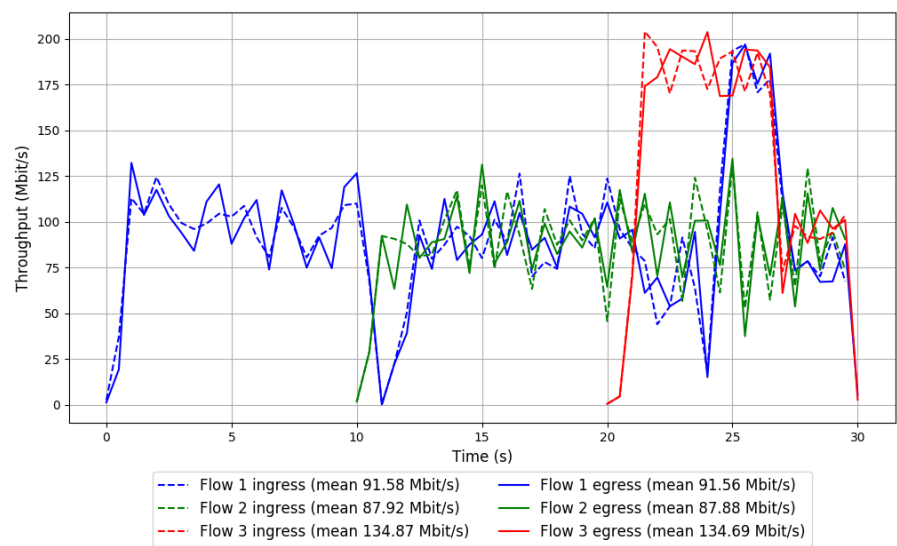
-- Flow 3:

Average throughput: 134.69 Mbit/s

95th percentile per-packet one-way delay: 84.308 ms

Loss rate: 0.01%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-06 13:32:26

End at: 2017-12-06 13:32:56

Below is generated by plot.py at 2017-12-06 15:24:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 196.03 Mbit/s

95th percentile per-packet one-way delay: 74.865 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 80.84 Mbit/s

95th percentile per-packet one-way delay: 75.322 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 103.96 Mbit/s

95th percentile per-packet one-way delay: 76.180 ms

Loss rate: 0.00%

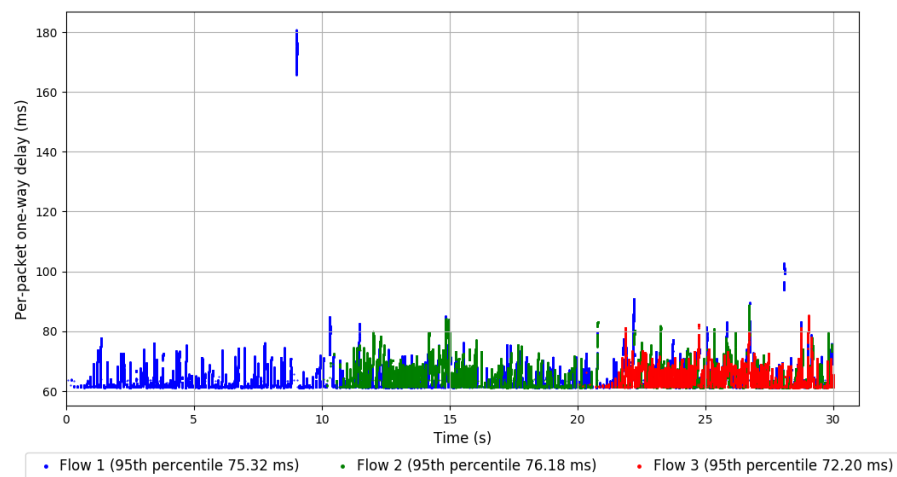
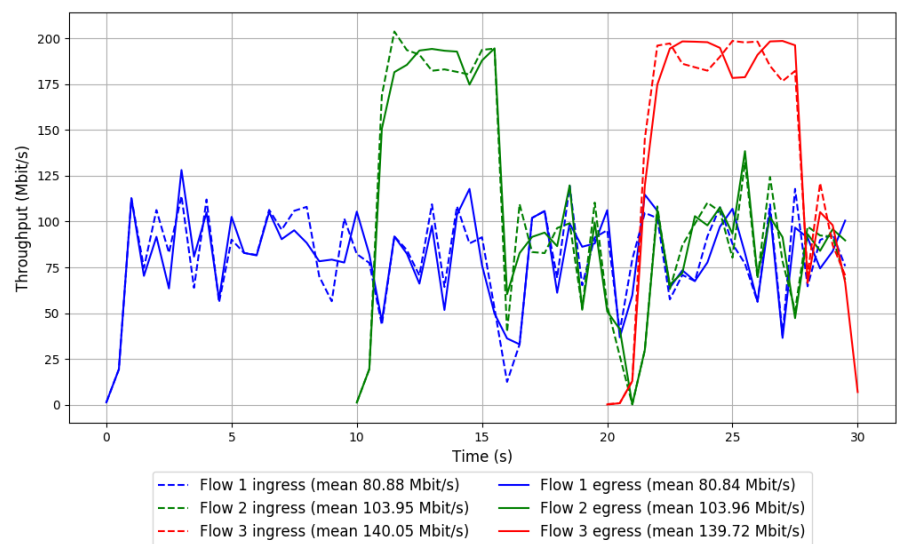
-- Flow 3:

Average throughput: 139.72 Mbit/s

95th percentile per-packet one-way delay: 72.200 ms

Loss rate: 0.24%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-06 13:44:44

End at: 2017-12-06 13:45:14

Below is generated by plot.py at 2017-12-06 15:24:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 202.69 Mbit/s

95th percentile per-packet one-way delay: 77.841 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 91.13 Mbit/s

95th percentile per-packet one-way delay: 76.408 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 127.15 Mbit/s

95th percentile per-packet one-way delay: 78.051 ms

Loss rate: 0.07%

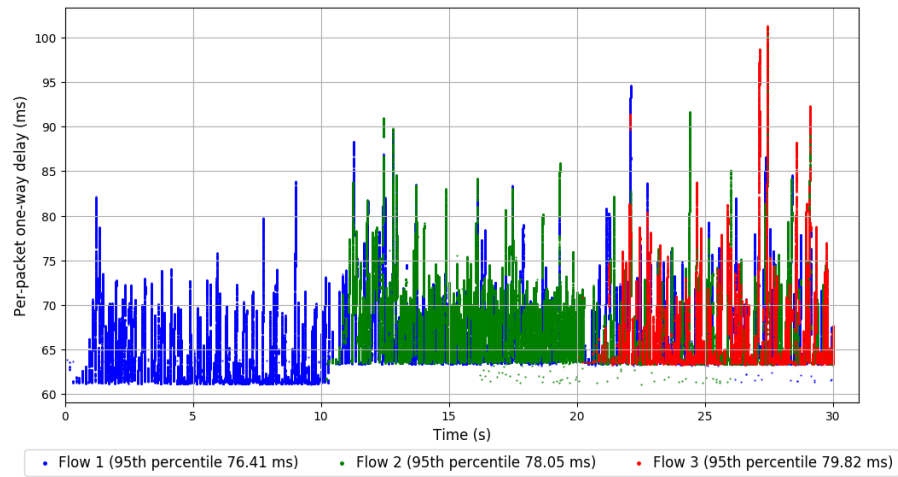
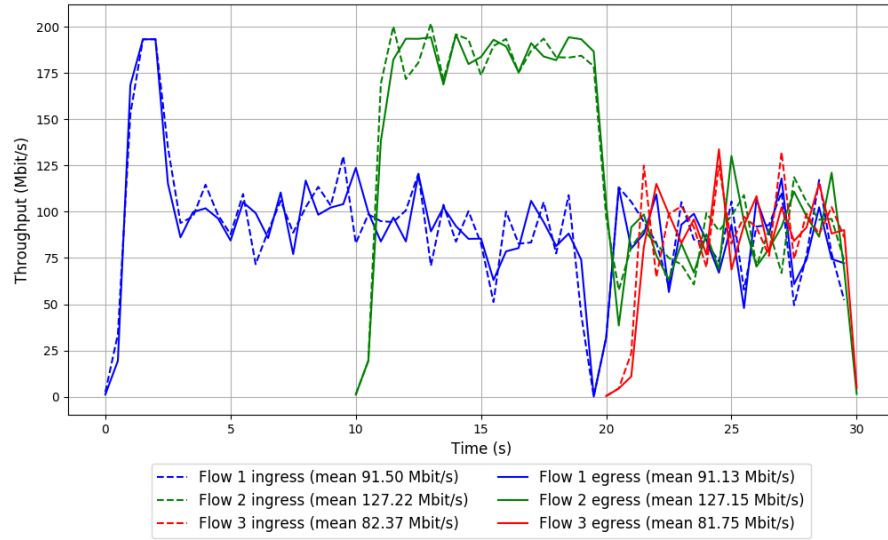
-- Flow 3:

Average throughput: 81.75 Mbit/s

95th percentile per-packet one-way delay: 79.821 ms

Loss rate: 0.75%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-06 13:57:05

End at: 2017-12-06 13:57:35

Below is generated by plot.py at 2017-12-06 15:27:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 194.07 Mbit/s

95th percentile per-packet one-way delay: 79.120 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 89.46 Mbit/s

95th percentile per-packet one-way delay: 77.848 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 103.80 Mbit/s

95th percentile per-packet one-way delay: 79.229 ms

Loss rate: 0.00%

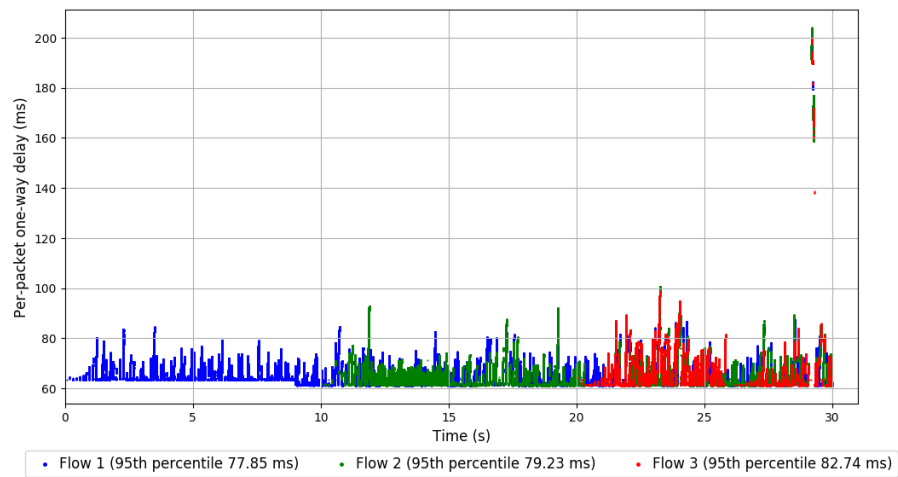
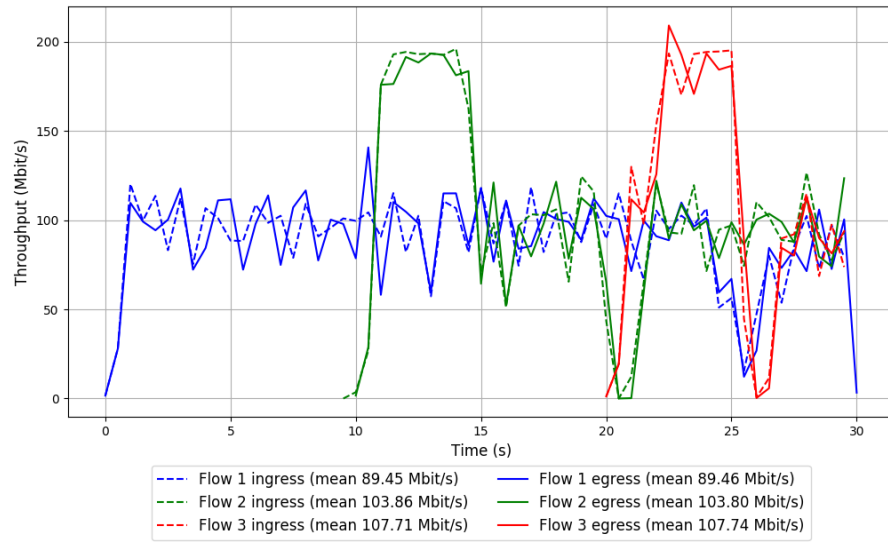
-- Flow 3:

Average throughput: 107.74 Mbit/s

95th percentile per-packet one-way delay: 82.743 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-06 14:09:31

End at: 2017-12-06 14:10:01

Below is generated by plot.py at 2017-12-06 15:28:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 262.79 Mbit/s

95th percentile per-packet one-way delay: 81.269 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.54 Mbit/s

95th percentile per-packet one-way delay: 75.939 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 157.10 Mbit/s

95th percentile per-packet one-way delay: 81.782 ms

Loss rate: 0.00%

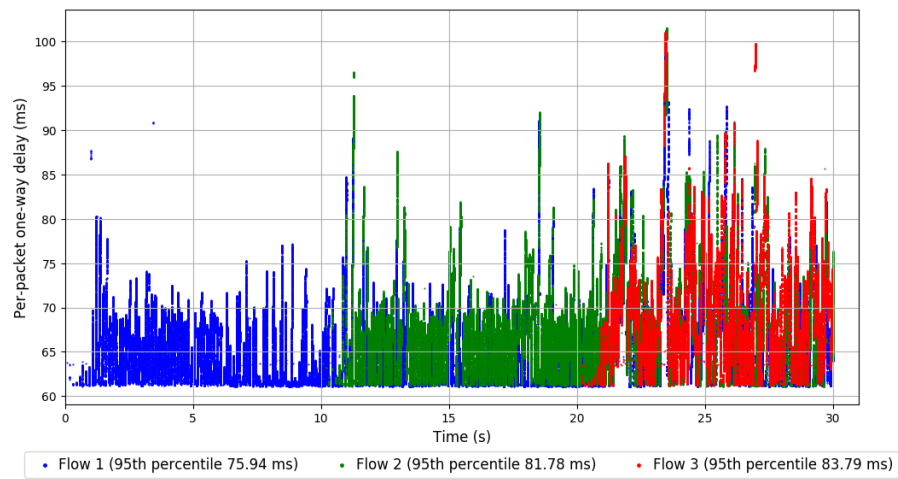
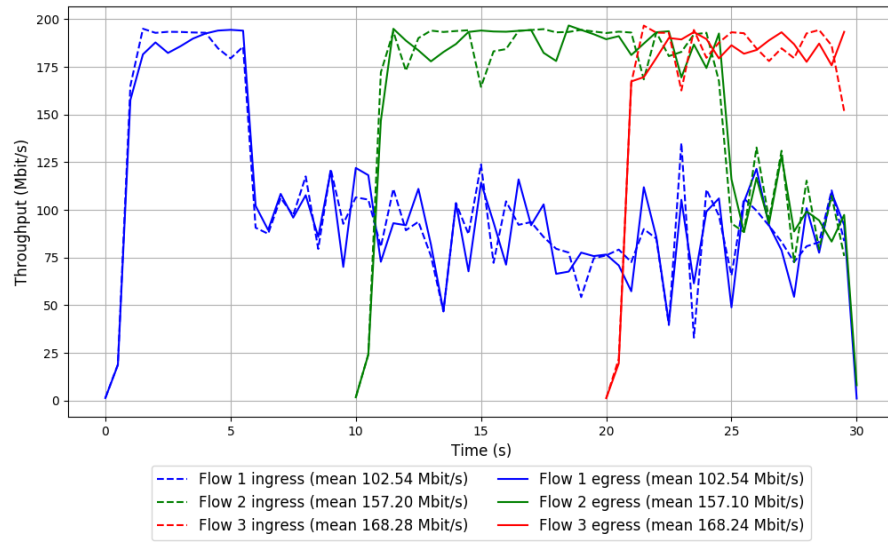
-- Flow 3:

Average throughput: 168.24 Mbit/s

95th percentile per-packet one-way delay: 83.790 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

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

End at: 2017-12-06 12:09:16

Below is generated by plot.py at 2017-12-06 15:28:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 215.26 Mbit/s

95th percentile per-packet one-way delay: 73.371 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 88.31 Mbit/s

95th percentile per-packet one-way delay: 72.099 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 136.19 Mbit/s

95th percentile per-packet one-way delay: 72.909 ms

Loss rate: 0.00%

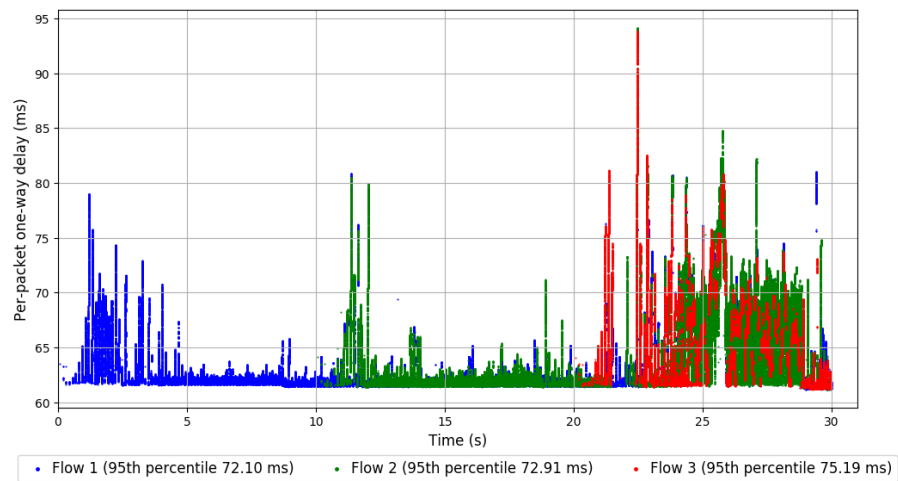
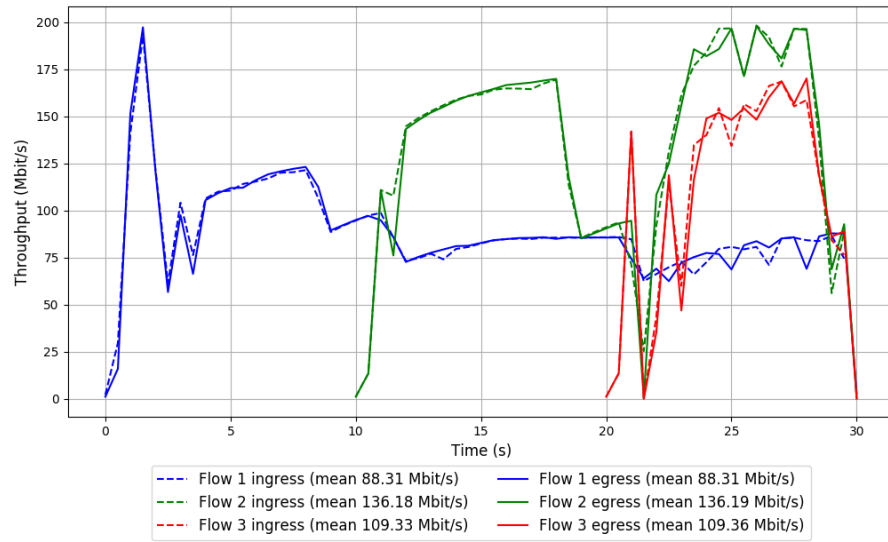
-- Flow 3:

Average throughput: 109.36 Mbit/s

95th percentile per-packet one-way delay: 75.187 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-06 12:20:58

End at: 2017-12-06 12:21:28

Below is generated by plot.py at 2017-12-06 15:28:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 215.18 Mbit/s

95th percentile per-packet one-way delay: 73.297 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 91.34 Mbit/s

95th percentile per-packet one-way delay: 72.068 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 137.18 Mbit/s

95th percentile per-packet one-way delay: 73.075 ms

Loss rate: 0.00%

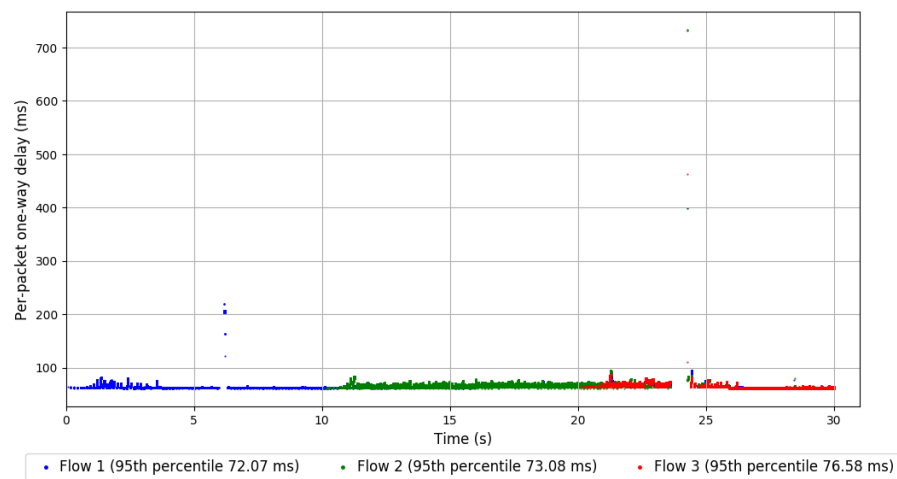
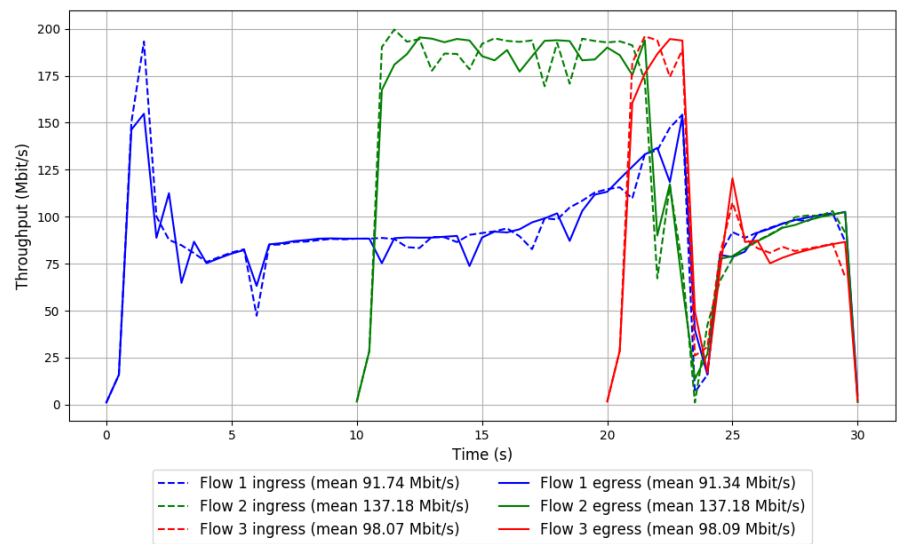
-- Flow 3:

Average throughput: 98.09 Mbit/s

95th percentile per-packet one-way delay: 76.578 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-06 12:33:04

End at: 2017-12-06 12:33:34

Below is generated by plot.py at 2017-12-06 15:28:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.57 Mbit/s

95th percentile per-packet one-way delay: 72.633 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 562.211 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 112.69 Mbit/s

95th percentile per-packet one-way delay: 72.248 ms

Loss rate: 0.02%

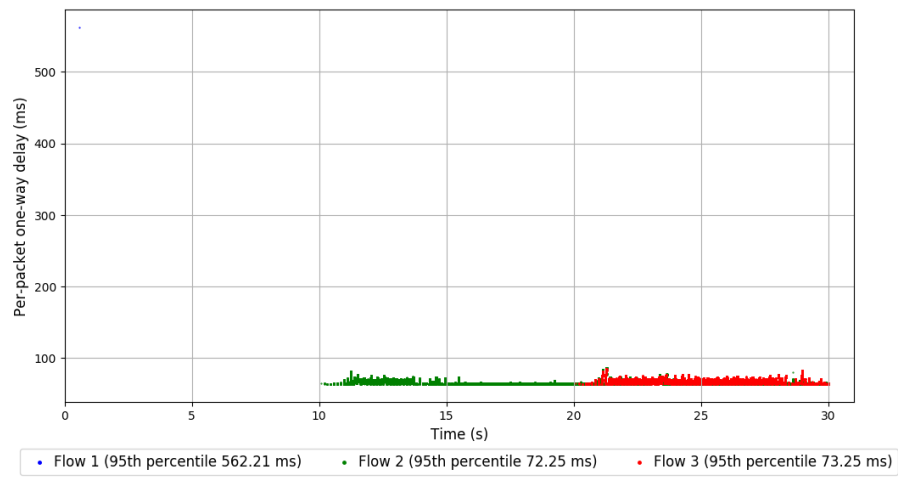
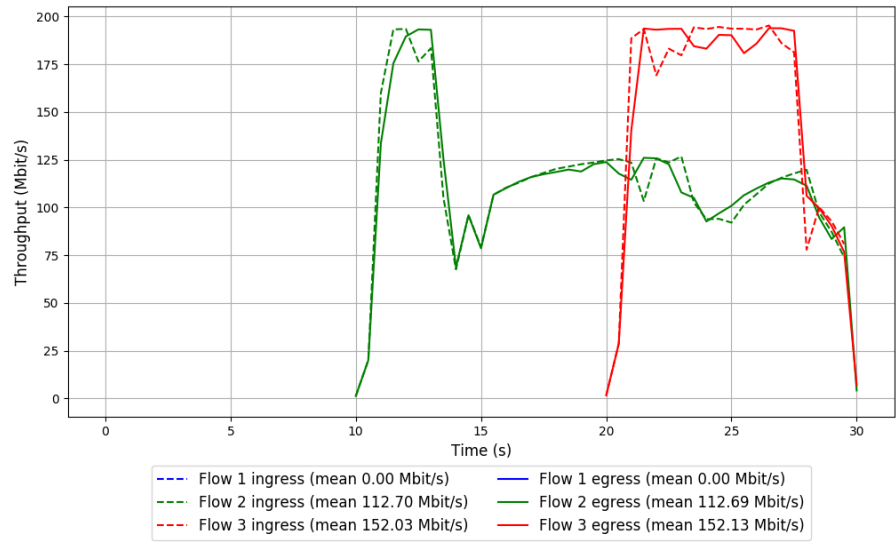
-- Flow 3:

Average throughput: 152.13 Mbit/s

95th percentile per-packet one-way delay: 73.248 ms

Loss rate: 0.07%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

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

End at: 2017-12-06 12:45:40

Below is generated by plot.py at 2017-12-06 15:28:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.22 Mbit/s

95th percentile per-packet one-way delay: 66.318 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 96.06 Mbit/s

95th percentile per-packet one-way delay: 66.059 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 39.22 Mbit/s

95th percentile per-packet one-way delay: 66.450 ms

Loss rate: 0.06%

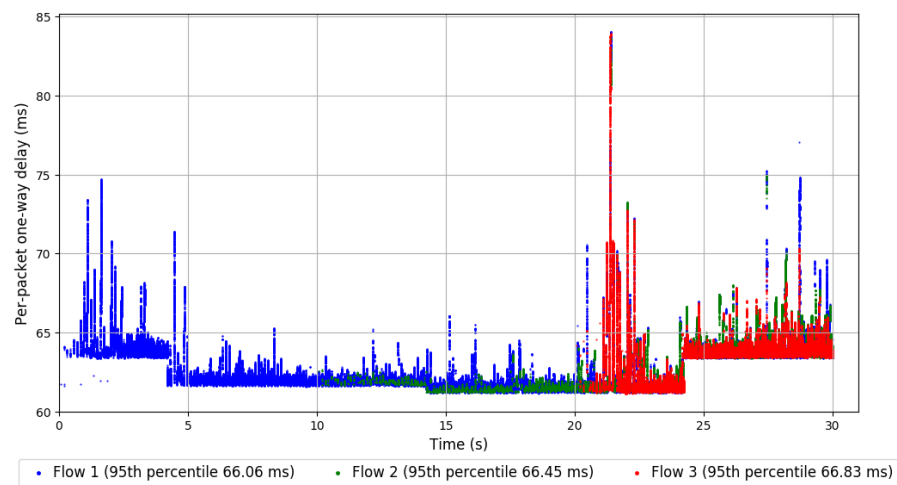
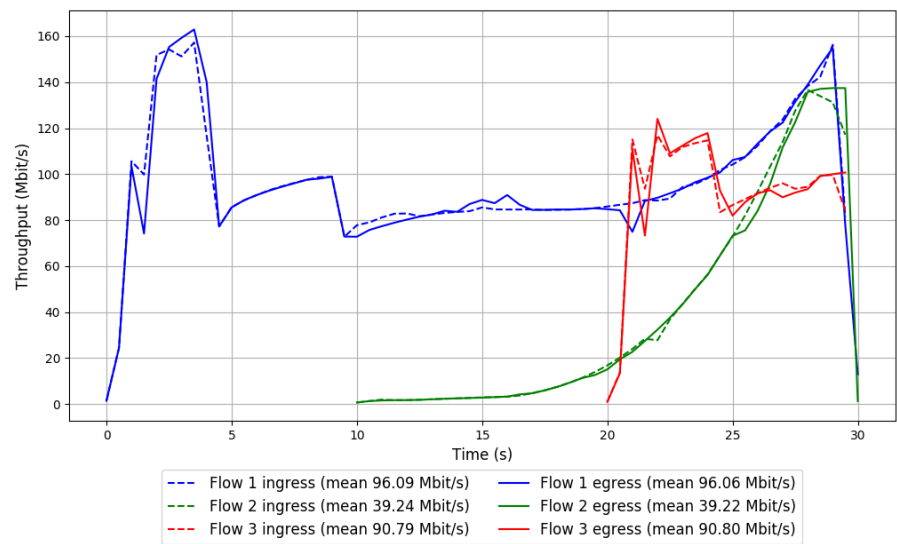
-- Flow 3:

Average throughput: 90.80 Mbit/s

95th percentile per-packet one-way delay: 66.831 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-06 12:57:46

End at: 2017-12-06 12:58:16

Below is generated by plot.py at 2017-12-06 15:28:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.73 Mbit/s

95th percentile per-packet one-way delay: 63.530 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 54.32 Mbit/s

95th percentile per-packet one-way delay: 63.827 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 27.17 Mbit/s

95th percentile per-packet one-way delay: 62.832 ms

Loss rate: 0.02%

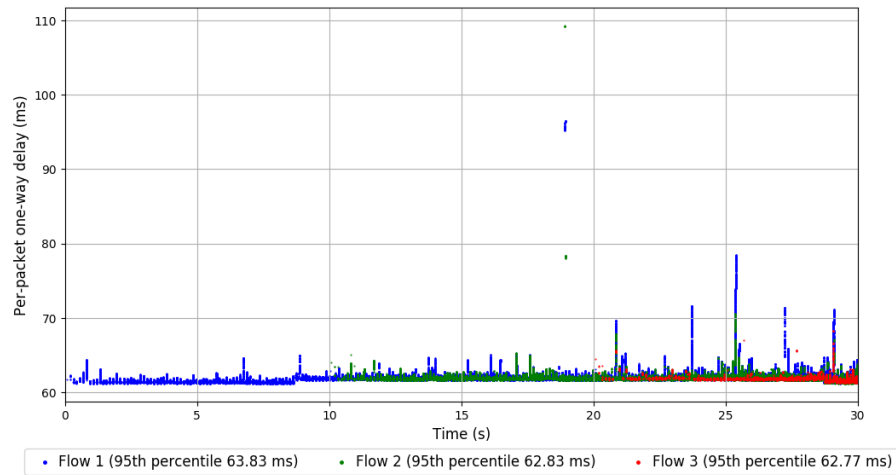
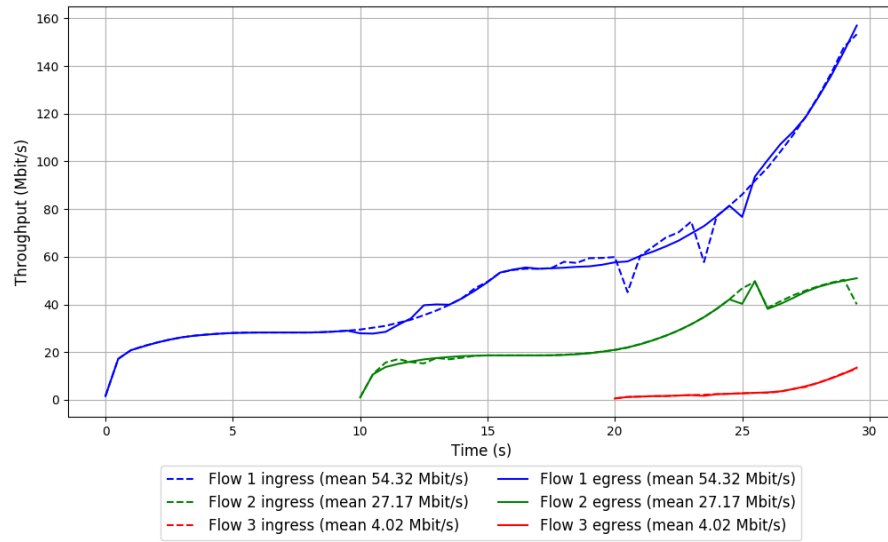
-- Flow 3:

Average throughput: 4.02 Mbit/s

95th percentile per-packet one-way delay: 62.765 ms

Loss rate: 0.12%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-06 13:09:54

End at: 2017-12-06 13:10:24

Below is generated by plot.py at 2017-12-06 15:28:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 209.14 Mbit/s

95th percentile per-packet one-way delay: 70.091 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 109.50 Mbit/s

95th percentile per-packet one-way delay: 69.496 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 65.22 Mbit/s

95th percentile per-packet one-way delay: 69.258 ms

Loss rate: 0.01%

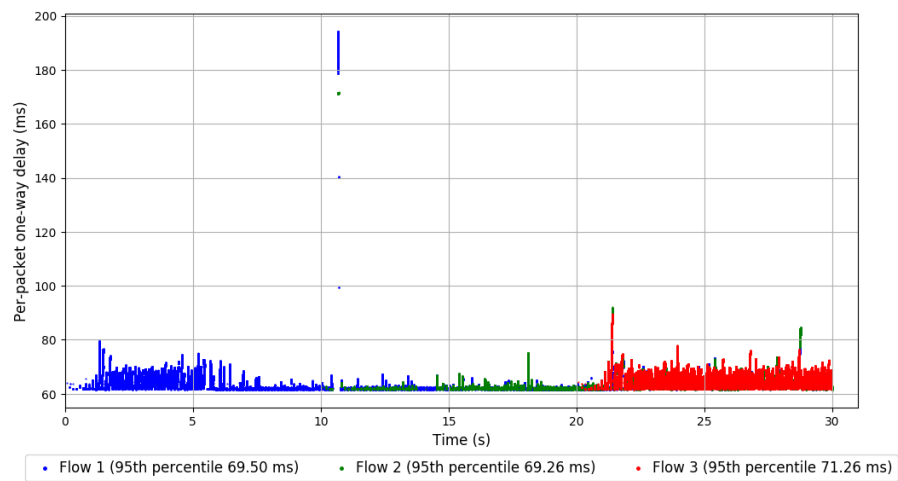
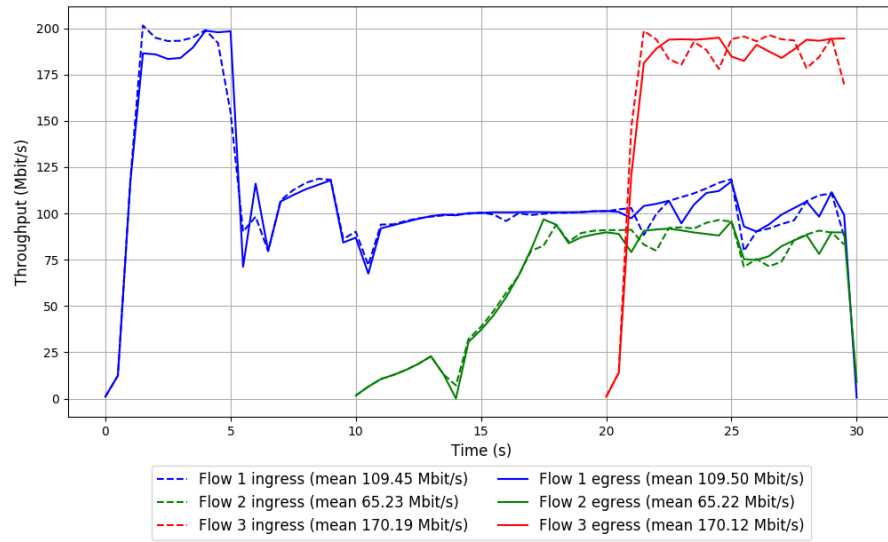
-- Flow 3:

Average throughput: 170.12 Mbit/s

95th percentile per-packet one-way delay: 71.257 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-06 13:22:13

End at: 2017-12-06 13:22:43

Below is generated by plot.py at 2017-12-06 15:29:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.70 Mbit/s

95th percentile per-packet one-way delay: 73.984 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 123.04 Mbit/s

95th percentile per-packet one-way delay: 72.080 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 112.18 Mbit/s

95th percentile per-packet one-way delay: 72.901 ms

Loss rate: 0.02%

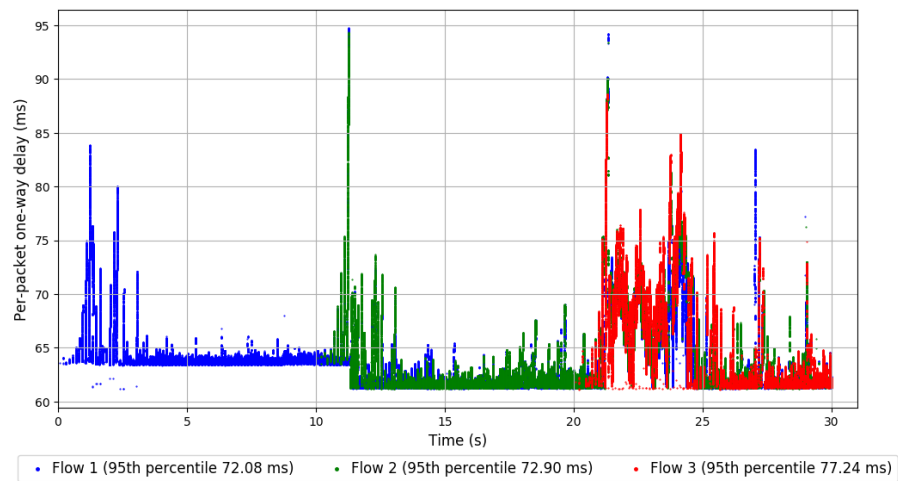
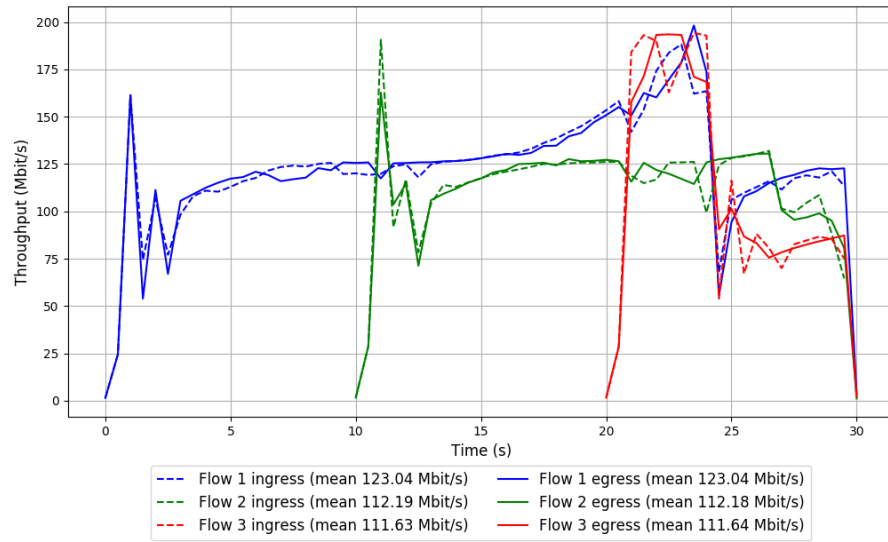
-- Flow 3:

Average throughput: 111.64 Mbit/s

95th percentile per-packet one-way delay: 77.243 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-06 13:34:42

End at: 2017-12-06 13:35:12

Below is generated by plot.py at 2017-12-06 15:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.29 Mbit/s

95th percentile per-packet one-way delay: 71.419 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 130.45 Mbit/s

95th percentile per-packet one-way delay: 70.761 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 113.35 Mbit/s

95th percentile per-packet one-way delay: 71.530 ms

Loss rate: 0.00%

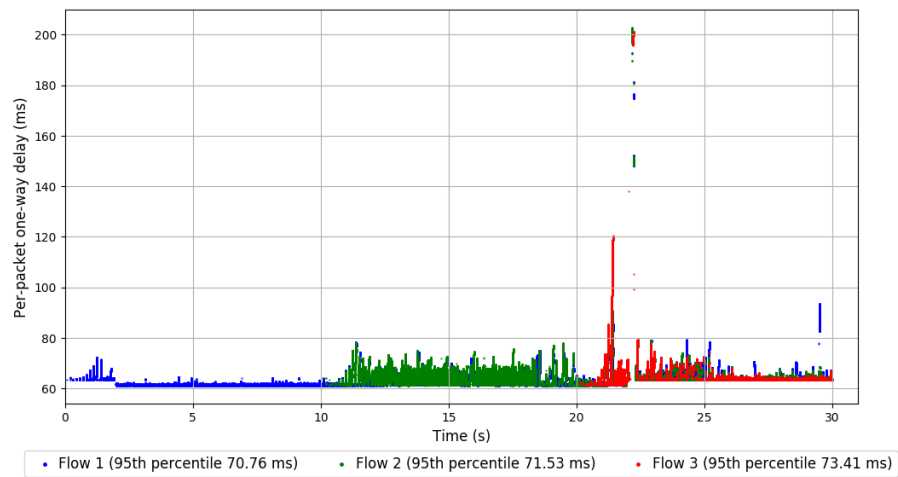
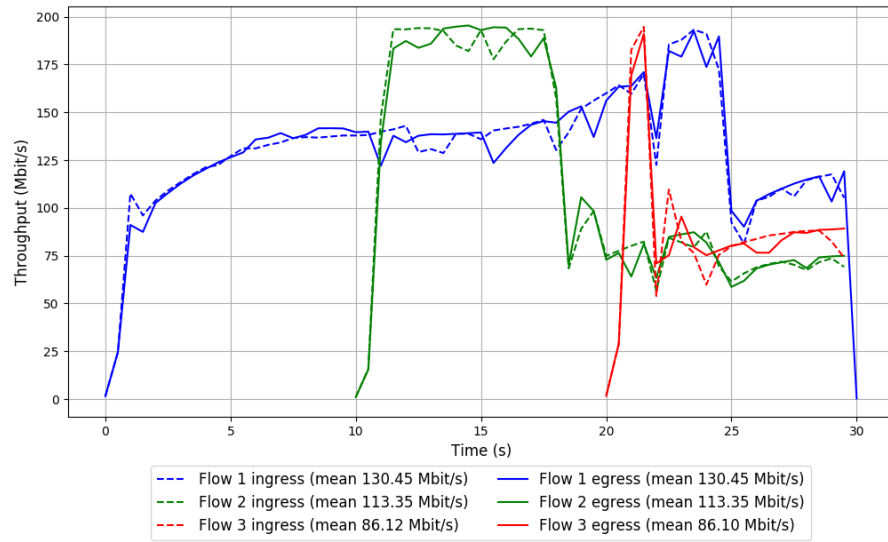
-- Flow 3:

Average throughput: 86.10 Mbit/s

95th percentile per-packet one-way delay: 73.407 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-06 13:47:01

End at: 2017-12-06 13:47:31

Below is generated by plot.py at 2017-12-06 15:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 206.45 Mbit/s

95th percentile per-packet one-way delay: 71.841 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 101.34 Mbit/s

95th percentile per-packet one-way delay: 70.675 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 85.88 Mbit/s

95th percentile per-packet one-way delay: 72.027 ms

Loss rate: 0.06%

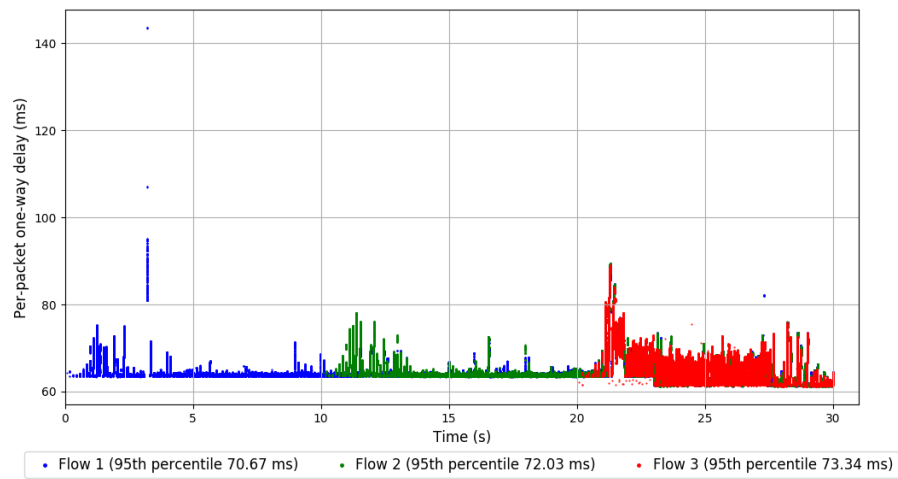
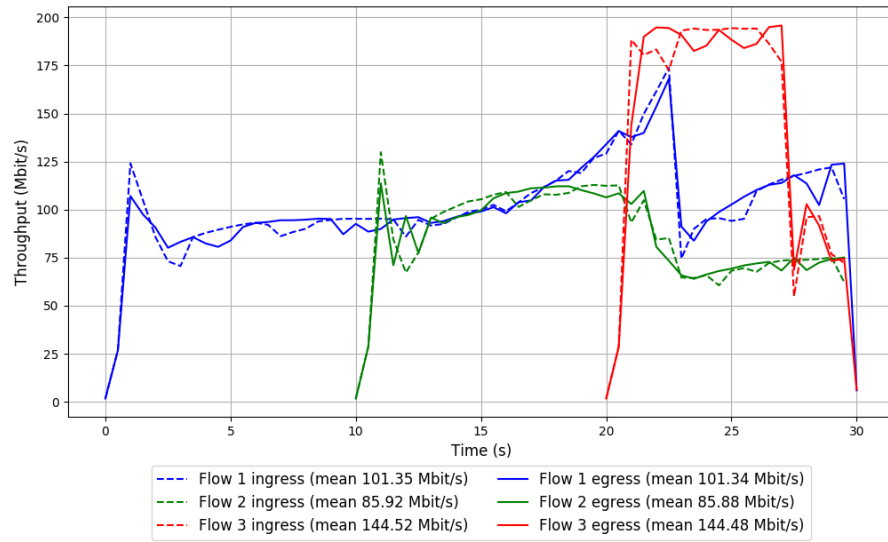
-- Flow 3:

Average throughput: 144.48 Mbit/s

95th percentile per-packet one-way delay: 73.341 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-06 13:59:23

End at: 2017-12-06 13:59:53

Below is generated by plot.py at 2017-12-06 15:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.34 Mbit/s

95th percentile per-packet one-way delay: 73.142 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 118.13 Mbit/s

95th percentile per-packet one-way delay: 72.200 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.39 Mbit/s

95th percentile per-packet one-way delay: 75.363 ms

Loss rate: 0.00%

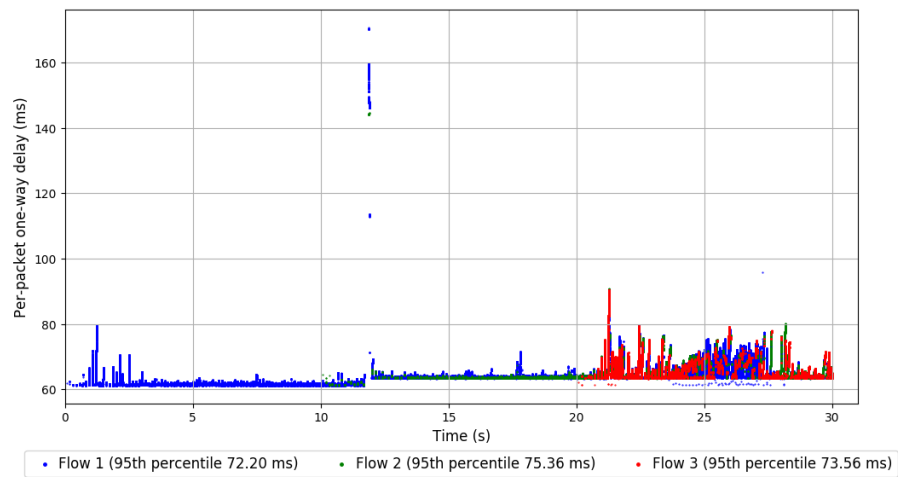
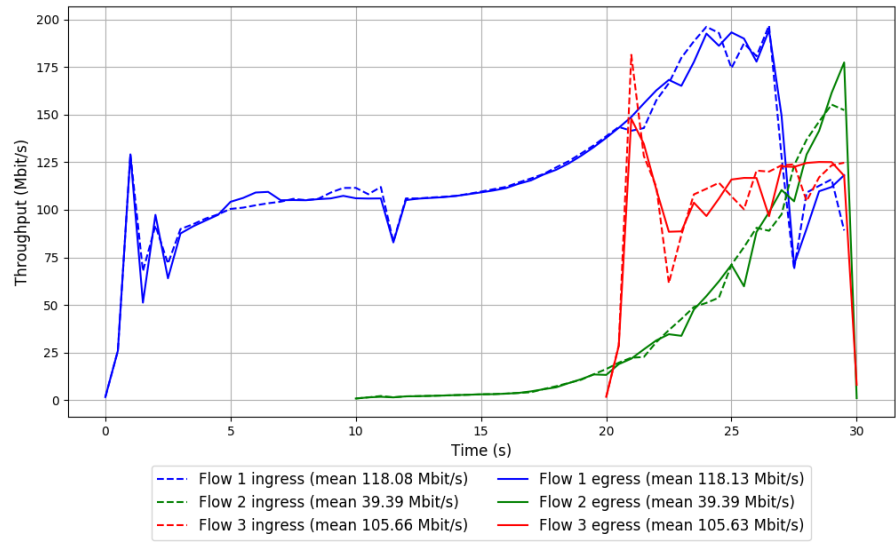
-- Flow 3:

Average throughput: 105.63 Mbit/s

95th percentile per-packet one-way delay: 73.556 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

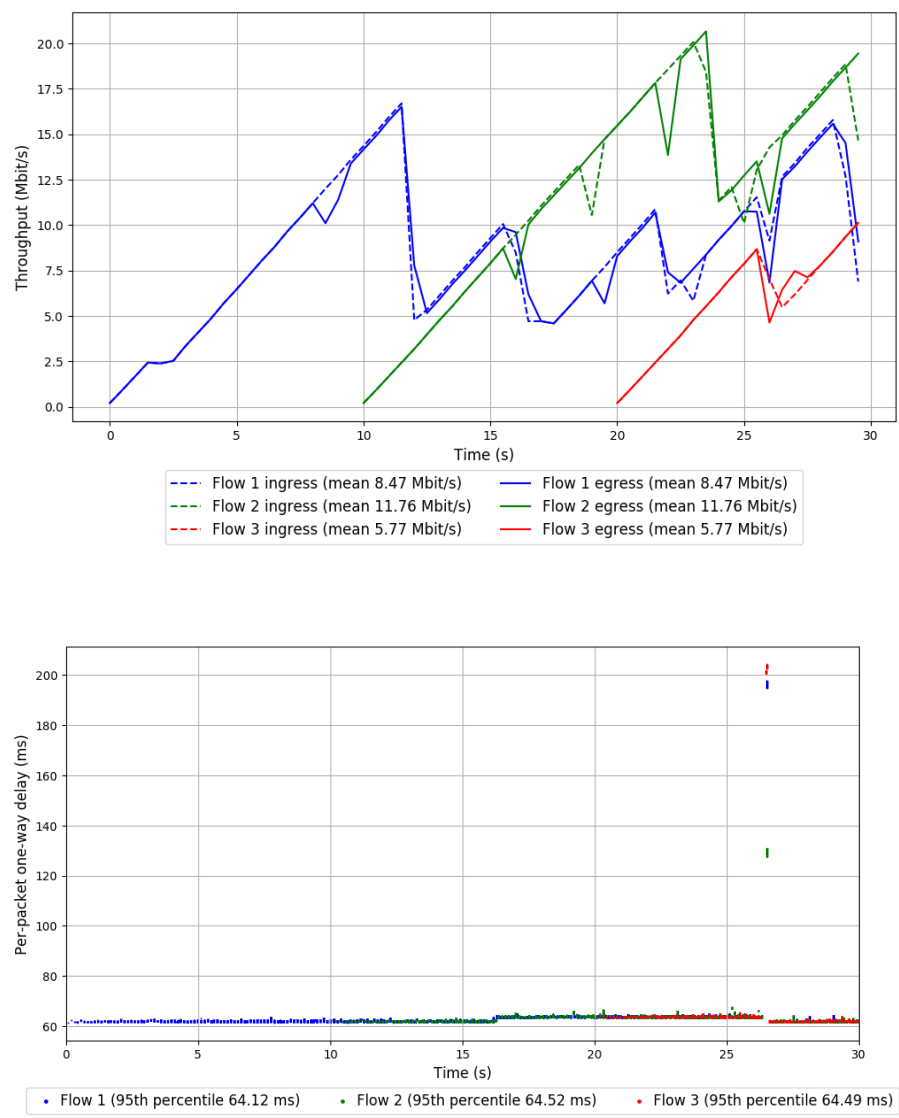


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-06 12:14:08
End at: 2017-12-06 12:14:38

# Below is generated by plot.py at 2017-12-06 15:30:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.16 Mbit/s
95th percentile per-packet one-way delay: 64.302 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 8.47 Mbit/s
95th percentile per-packet one-way delay: 64.123 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.76 Mbit/s
95th percentile per-packet one-way delay: 64.523 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.77 Mbit/s
95th percentile per-packet one-way delay: 64.494 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

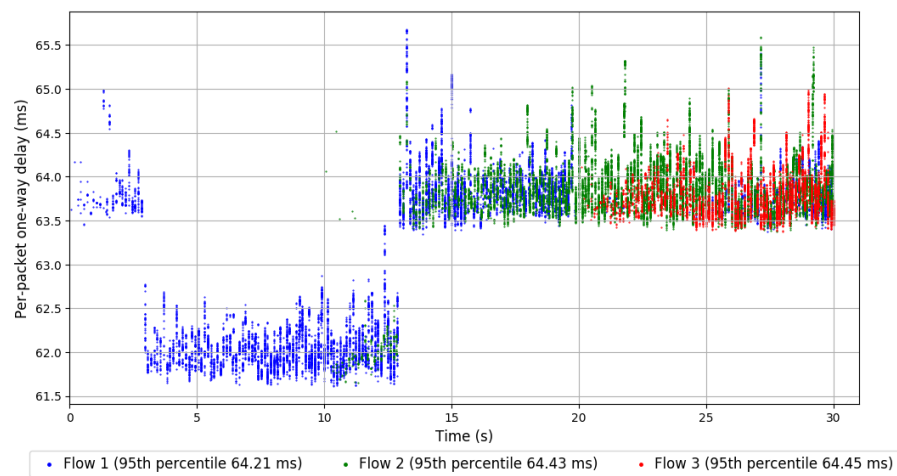
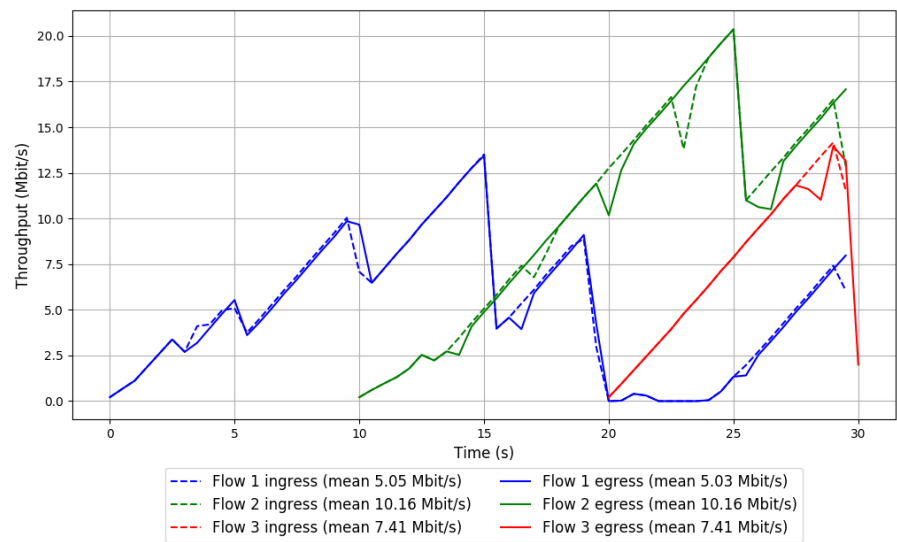


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-06 12:26:21
End at: 2017-12-06 12:26:51

# Below is generated by plot.py at 2017-12-06 15:30:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.21 Mbit/s
95th percentile per-packet one-way delay: 64.377 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 5.03 Mbit/s
95th percentile per-packet one-way delay: 64.207 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 10.16 Mbit/s
95th percentile per-packet one-way delay: 64.431 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.41 Mbit/s
95th percentile per-packet one-way delay: 64.447 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

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

End at: 2017-12-06 12:38:51

Below is generated by plot.py at 2017-12-06 15:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.09 Mbit/s

95th percentile per-packet one-way delay: 62.240 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 9.56 Mbit/s

95th percentile per-packet one-way delay: 62.239 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.54 Mbit/s

95th percentile per-packet one-way delay: 62.260 ms

Loss rate: 0.28%

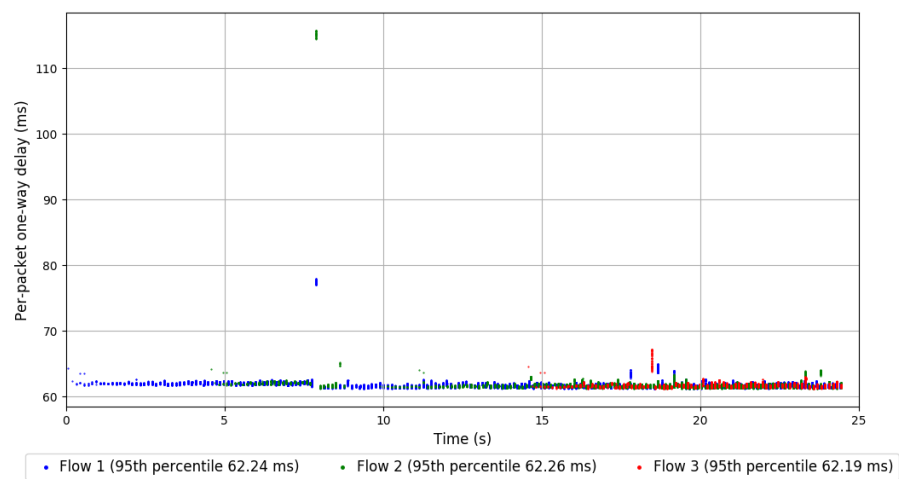
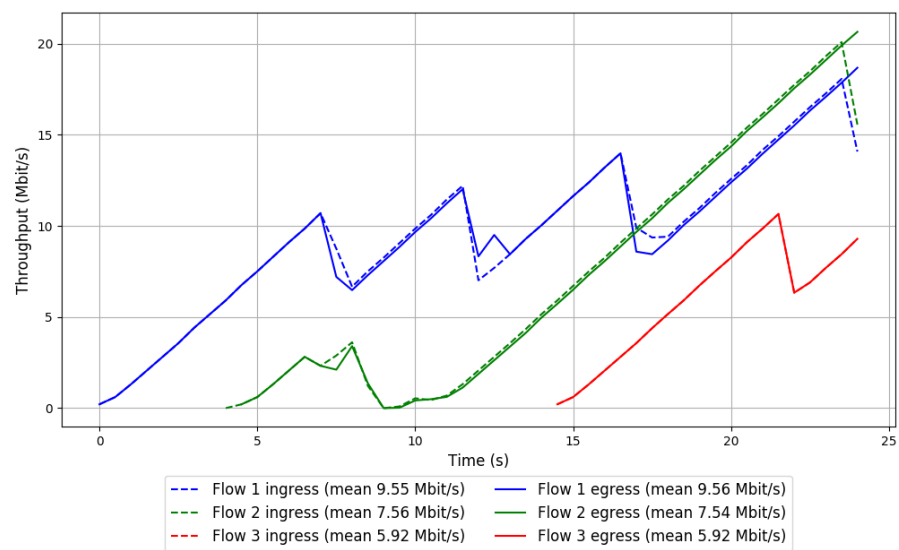
-- Flow 3:

Average throughput: 5.92 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-06 12:50:40

End at: 2017-12-06 12:51:10

Below is generated by plot.py at 2017-12-06 15:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.23 Mbit/s

95th percentile per-packet one-way delay: 63.920 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 12.60 Mbit/s

95th percentile per-packet one-way delay: 64.013 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 63.677 ms

Loss rate: 0.00%

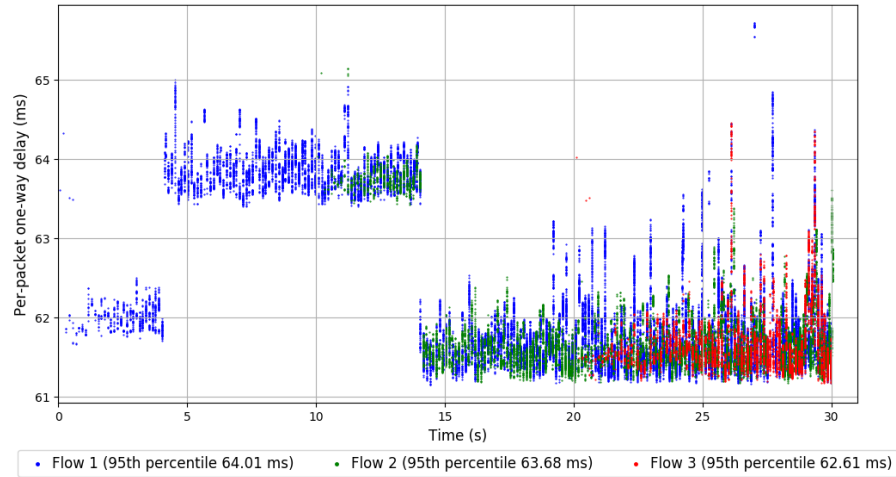
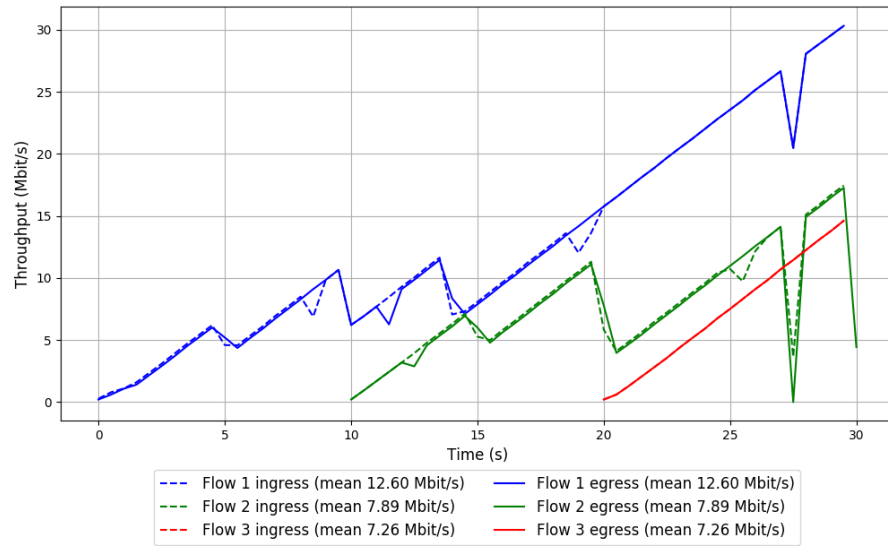
-- Flow 3:

Average throughput: 7.26 Mbit/s

95th percentile per-packet one-way delay: 62.607 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-06 13:03:03

End at: 2017-12-06 13:03:33

Below is generated by plot.py at 2017-12-06 15:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 23.80 Mbit/s

95th percentile per-packet one-way delay: 62.673 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.01 Mbit/s

95th percentile per-packet one-way delay: 62.463 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 15.55 Mbit/s

95th percentile per-packet one-way delay: 62.765 ms

Loss rate: 0.00%

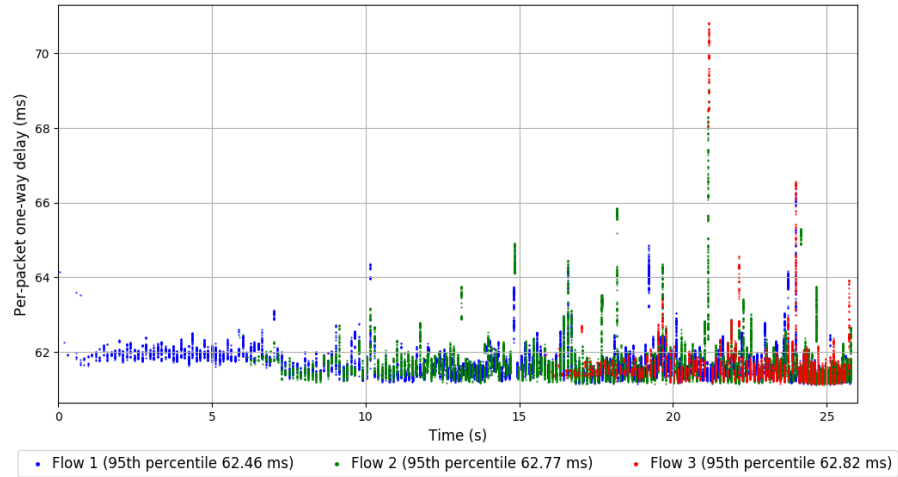
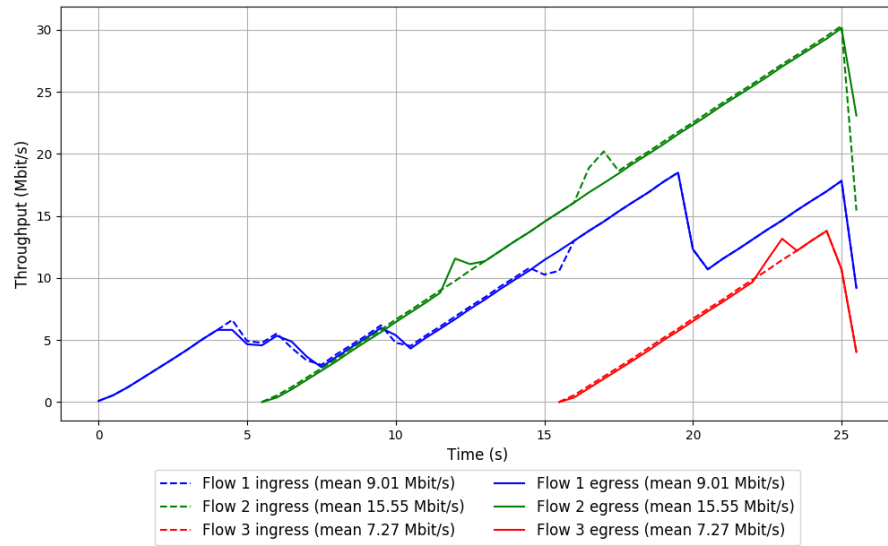
-- Flow 3:

Average throughput: 7.27 Mbit/s

95th percentile per-packet one-way delay: 62.824 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-06 13:15:17

End at: 2017-12-06 13:15:47

Below is generated by plot.py at 2017-12-06 15:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 32.20 Mbit/s

95th percentile per-packet one-way delay: 64.505 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.47 Mbit/s

95th percentile per-packet one-way delay: 64.568 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.07 Mbit/s

95th percentile per-packet one-way delay: 64.446 ms

Loss rate: 0.00%

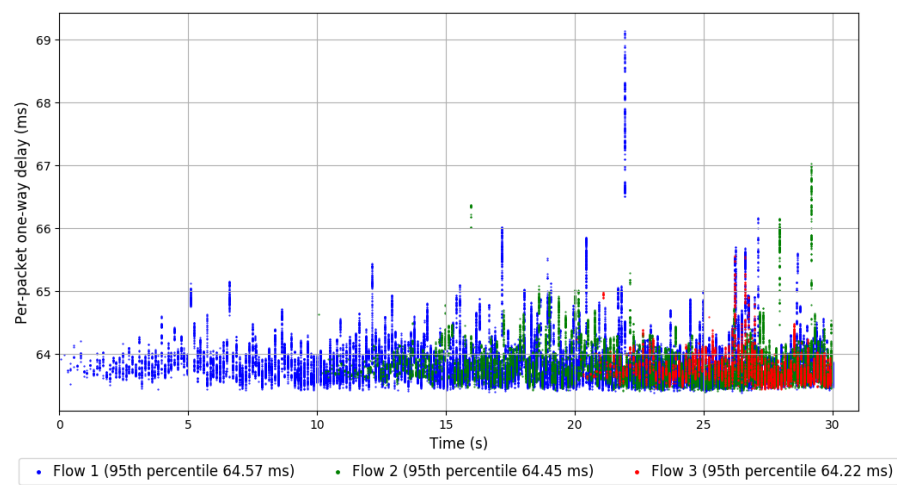
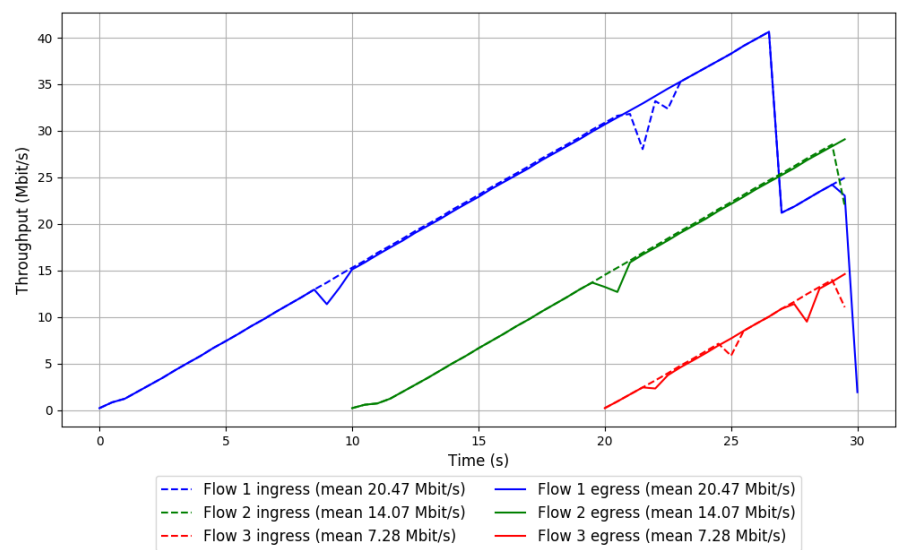
-- Flow 3:

Average throughput: 7.28 Mbit/s

95th percentile per-packet one-way delay: 64.220 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-06 13:27:38

End at: 2017-12-06 13:28:08

Below is generated by plot.py at 2017-12-06 15:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.22 Mbit/s

95th percentile per-packet one-way delay: 64.489 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.98 Mbit/s

95th percentile per-packet one-way delay: 64.503 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.89 Mbit/s

95th percentile per-packet one-way delay: 64.442 ms

Loss rate: 0.00%

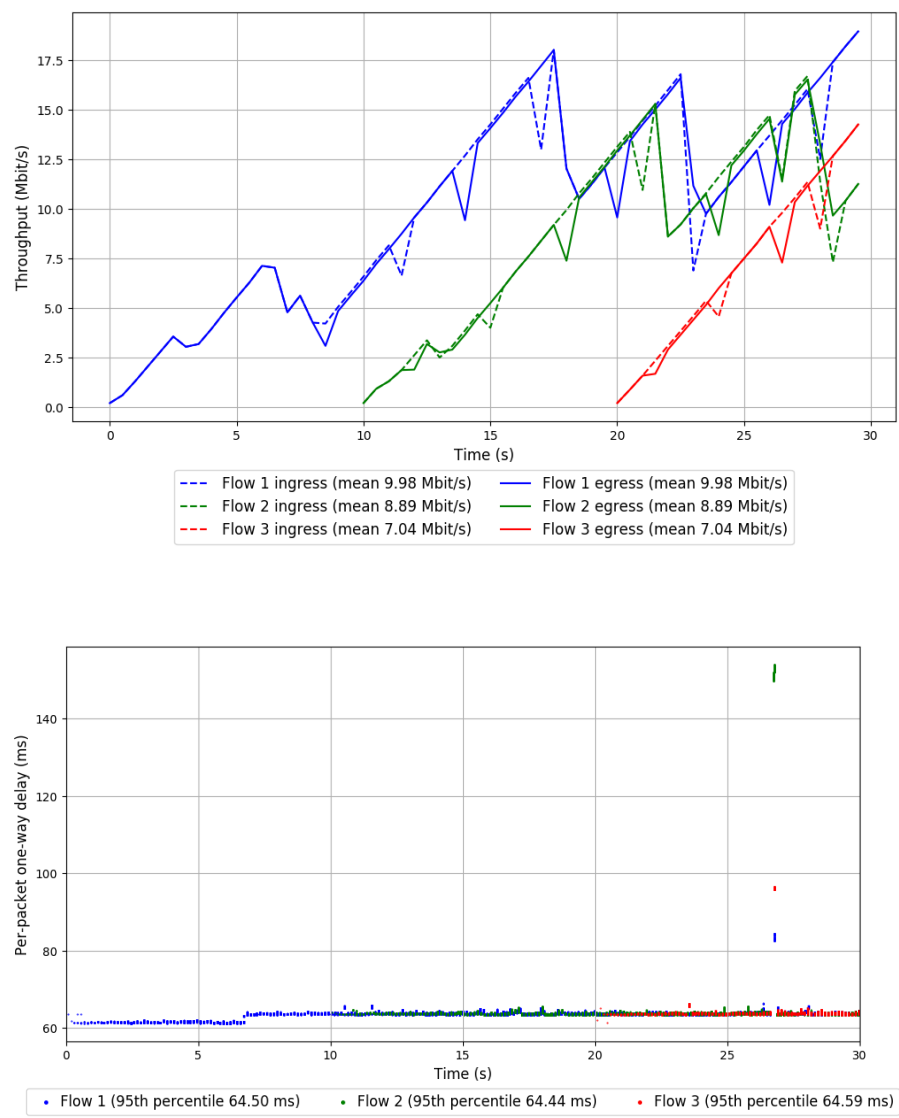
-- Flow 3:

Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay: 64.592 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-06 13:40:09

End at: 2017-12-06 13:40:39

Below is generated by plot.py at 2017-12-06 15:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.43 Mbit/s

95th percentile per-packet one-way delay: 63.028 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 8.35 Mbit/s

95th percentile per-packet one-way delay: 63.698 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 9.46 Mbit/s

95th percentile per-packet one-way delay: 62.244 ms

Loss rate: 0.00%

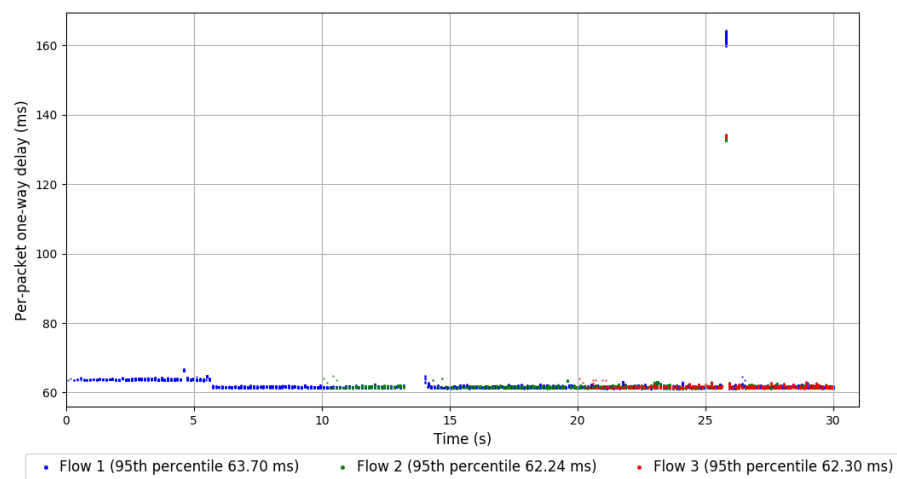
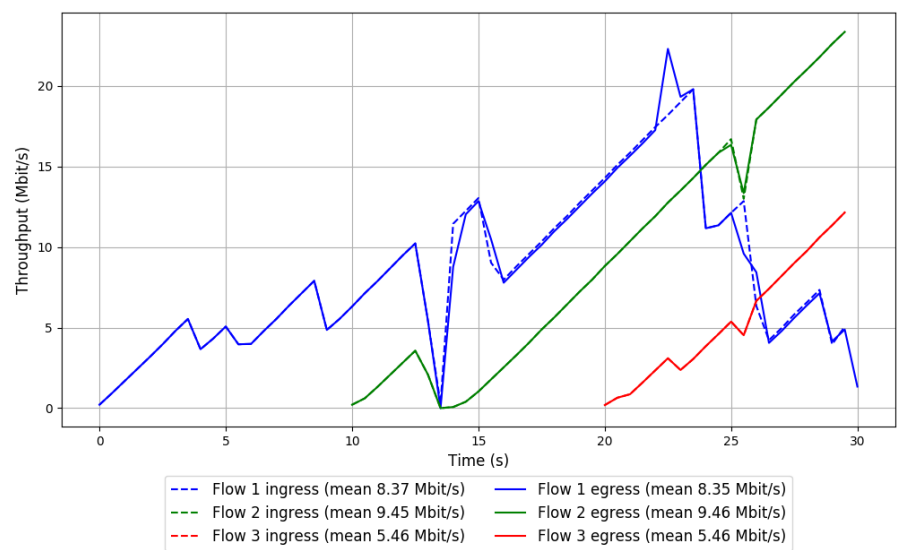
-- Flow 3:

Average throughput: 5.46 Mbit/s

95th percentile per-packet one-way delay: 62.300 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-06 13:52:34

End at: 2017-12-06 13:53:04

Below is generated by plot.py at 2017-12-06 15:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.87 Mbit/s

95th percentile per-packet one-way delay: 64.044 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 5.65 Mbit/s

95th percentile per-packet one-way delay: 64.091 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 14.64 Mbit/s

95th percentile per-packet one-way delay: 64.039 ms

Loss rate: 0.00%

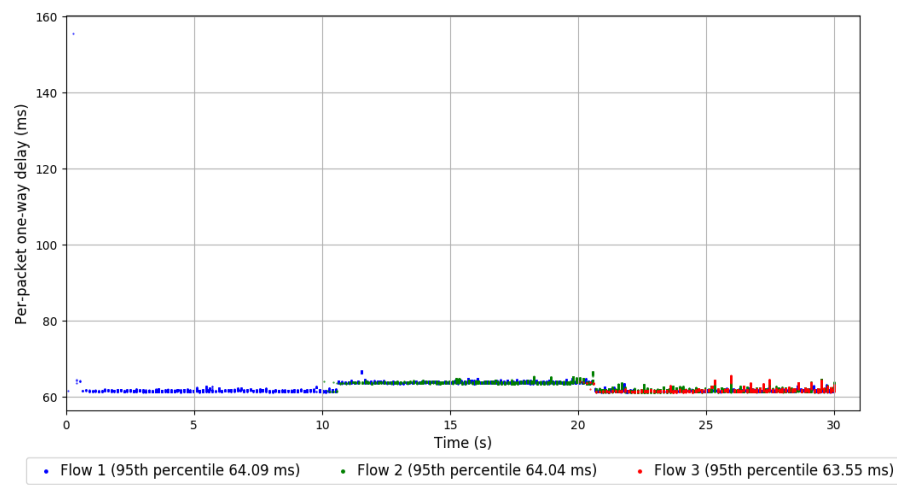
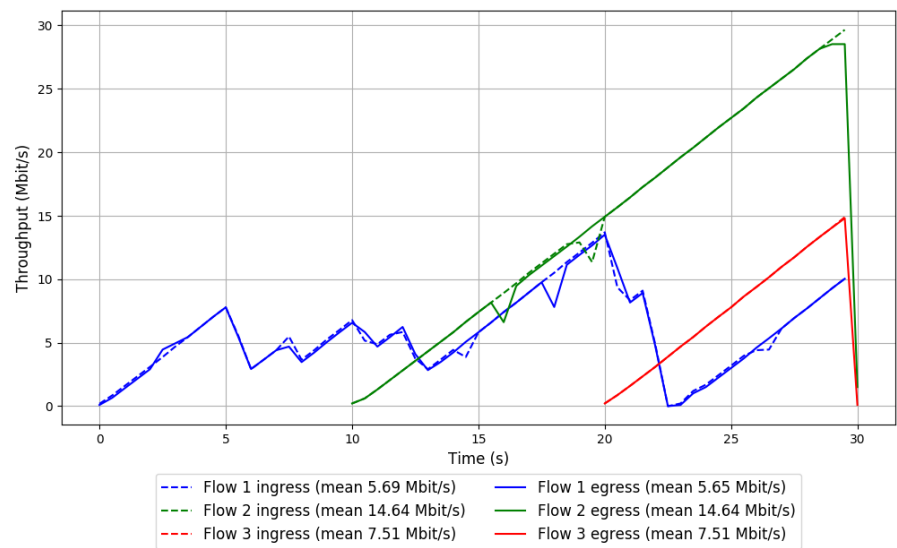
-- Flow 3:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 63.552 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-06 14:04:45

End at: 2017-12-06 14:05:15

Below is generated by plot.py at 2017-12-06 15:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.00 Mbit/s

95th percentile per-packet one-way delay: 64.137 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.37 Mbit/s

95th percentile per-packet one-way delay: 64.175 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 10.30 Mbit/s

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

Loss rate: 0.00%

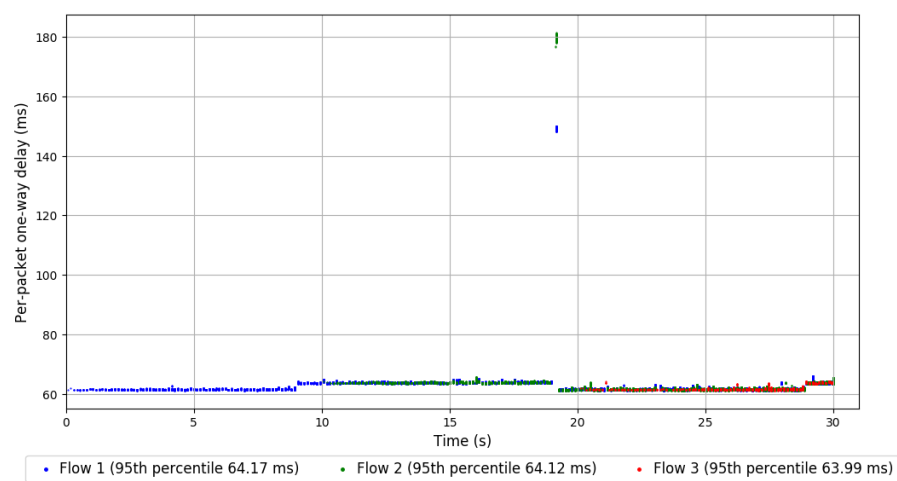
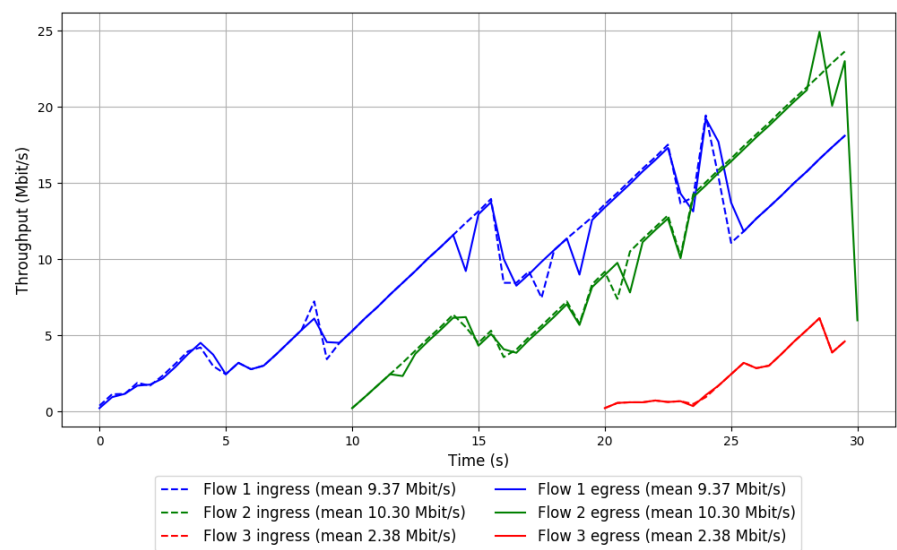
-- Flow 3:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 63.987 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

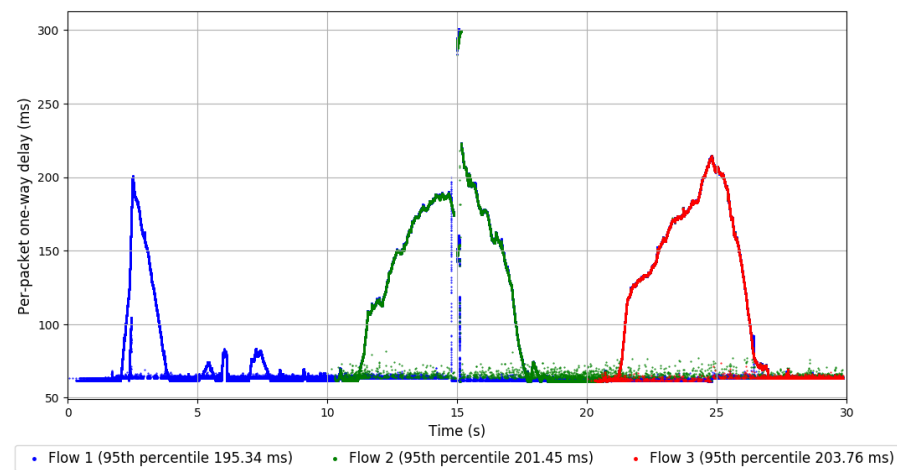
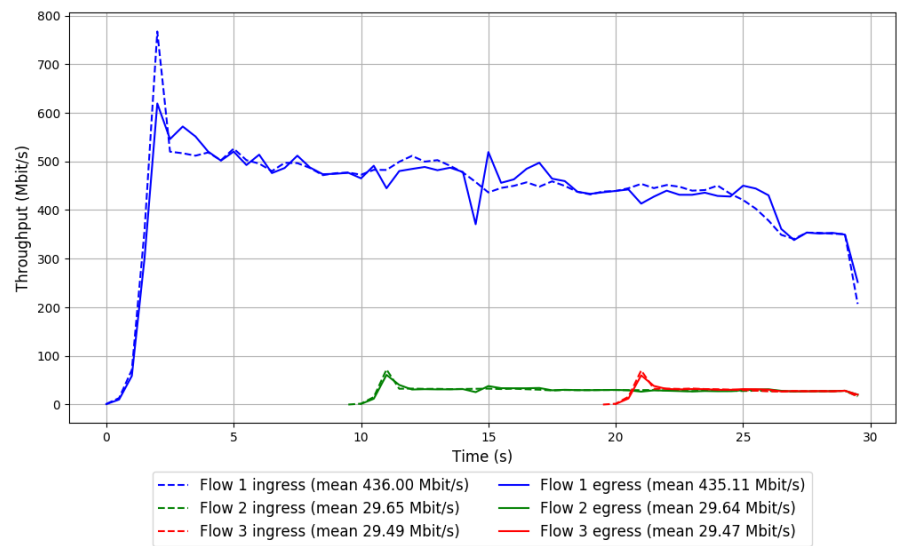


```
Run 1: Statistics of PCC

Start at: 2017-12-06 12:15:49
End at: 2017-12-06 12:16:19

# Below is generated by plot.py at 2017-12-06 15:37:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 464.57 Mbit/s
95th percentile per-packet one-way delay: 195.806 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 435.11 Mbit/s
95th percentile per-packet one-way delay: 195.343 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 29.64 Mbit/s
95th percentile per-packet one-way delay: 201.447 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 29.47 Mbit/s
95th percentile per-packet one-way delay: 203.757 ms
Loss rate: 0.07%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-06 12:28:02

End at: 2017-12-06 12:28:32

Below is generated by plot.py at 2017-12-06 15:37:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 433.36 Mbit/s

95th percentile per-packet one-way delay: 204.565 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 390.84 Mbit/s

95th percentile per-packet one-way delay: 204.455 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 62.82 Mbit/s

95th percentile per-packet one-way delay: 205.426 ms

Loss rate: 0.92%

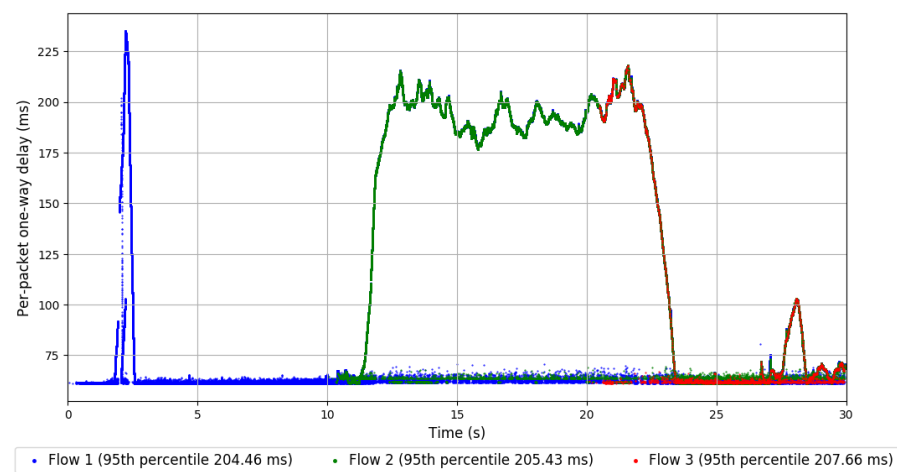
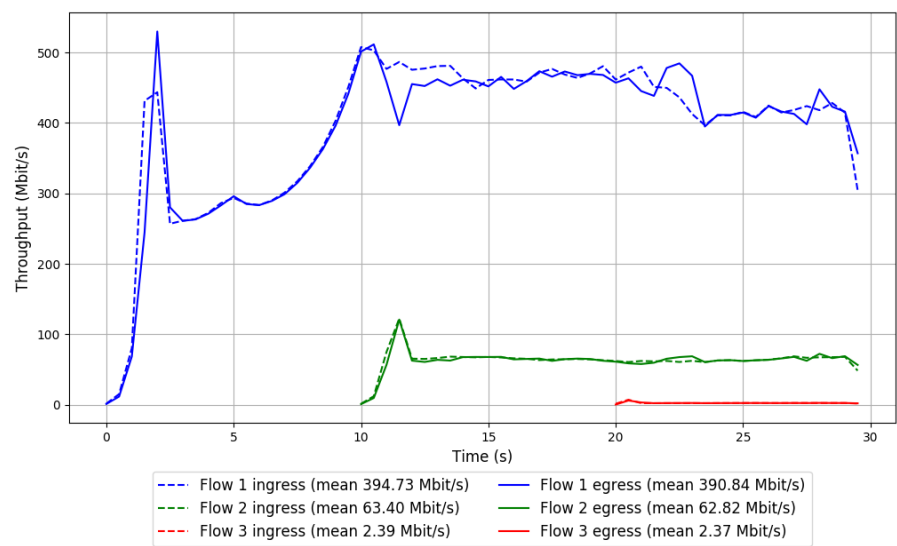
-- Flow 3:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 207.656 ms

Loss rate: 1.07%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-06 12:40:03

End at: 2017-12-06 12:40:33

Below is generated by plot.py at 2017-12-06 15:37:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 274.42 Mbit/s

95th percentile per-packet one-way delay: 199.284 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 48.53 Mbit/s

95th percentile per-packet one-way delay: 199.191 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 279.98 Mbit/s

95th percentile per-packet one-way delay: 198.912 ms

Loss rate: 1.19%

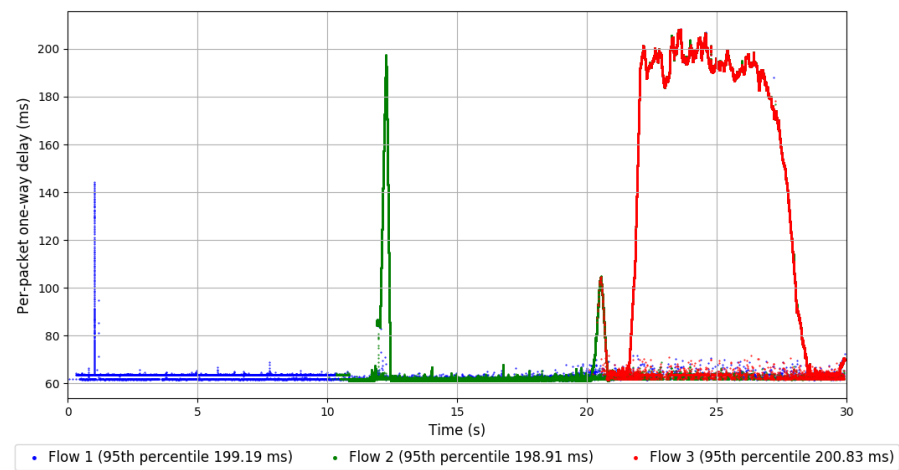
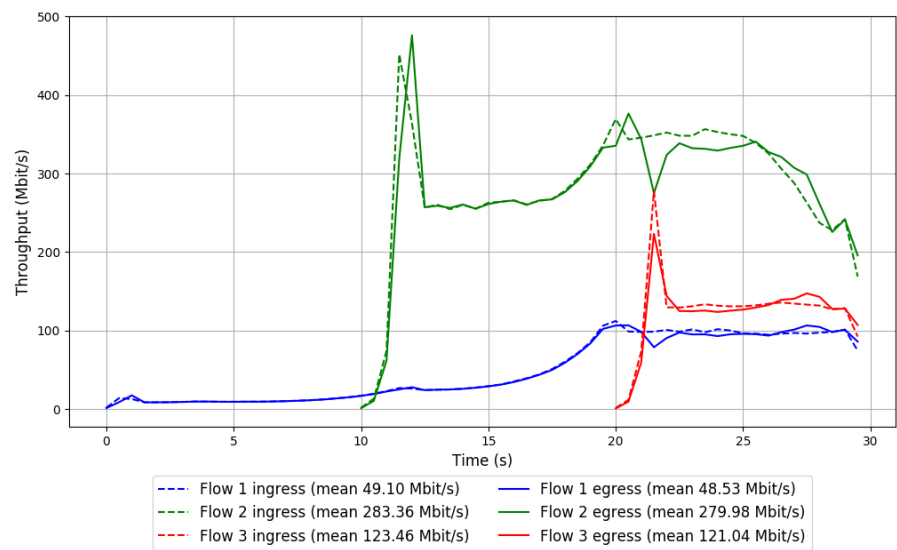
-- Flow 3:

Average throughput: 121.04 Mbit/s

95th percentile per-packet one-way delay: 200.829 ms

Loss rate: 1.99%

Run 3: Report of PCC — Data Link

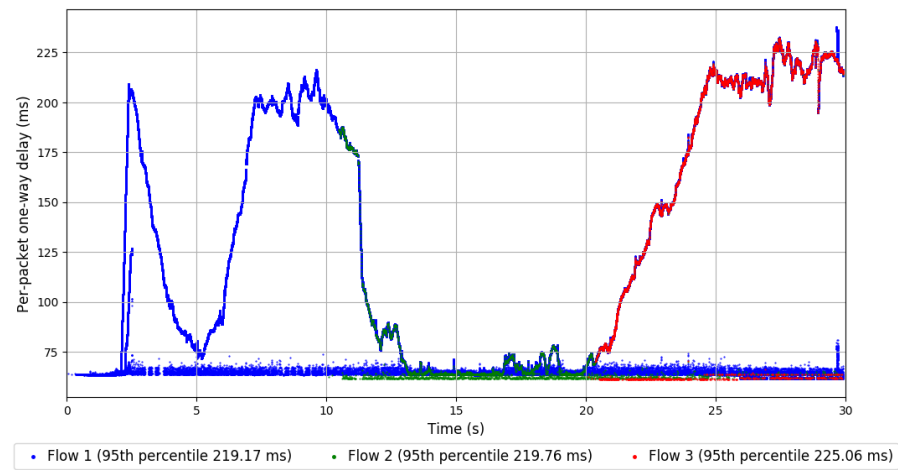
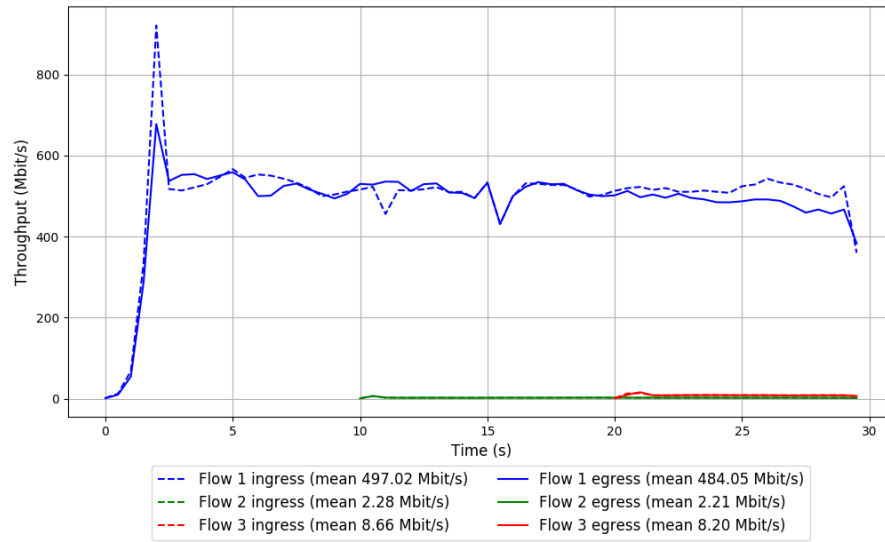


```
Run 4: Statistics of PCC

Start at: 2017-12-06 12:52:28
End at: 2017-12-06 12:52:58

# Below is generated by plot.py at 2017-12-06 15:37:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 488.21 Mbit/s
95th percentile per-packet one-way delay: 219.315 ms
Loss rate: 2.63%
-- Flow 1:
Average throughput: 484.05 Mbit/s
95th percentile per-packet one-way delay: 219.169 ms
Loss rate: 2.61%
-- Flow 2:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 219.760 ms
Loss rate: 2.69%
-- Flow 3:
Average throughput: 8.20 Mbit/s
95th percentile per-packet one-way delay: 225.060 ms
Loss rate: 5.35%
```

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-06 13:04:47

End at: 2017-12-06 13:05:17

Below is generated by plot.py at 2017-12-06 15:37:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 442.53 Mbit/s

95th percentile per-packet one-way delay: 201.347 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 399.21 Mbit/s

95th percentile per-packet one-way delay: 201.196 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 64.08 Mbit/s

95th percentile per-packet one-way delay: 202.526 ms

Loss rate: 0.27%

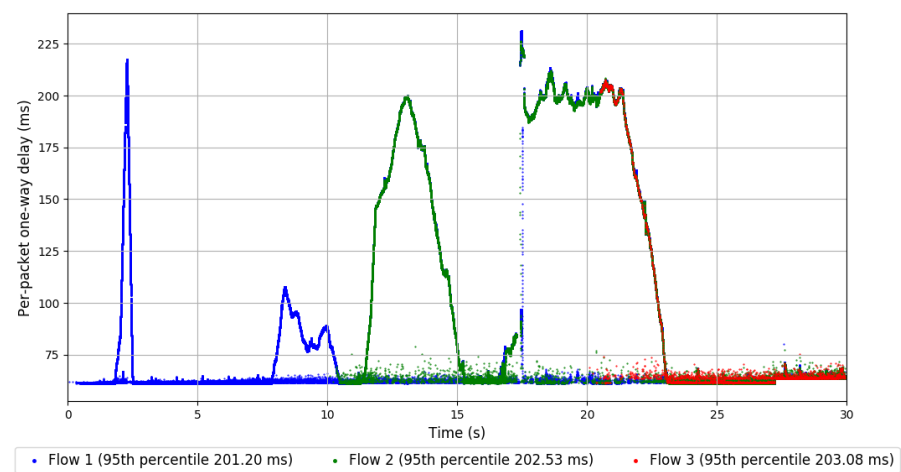
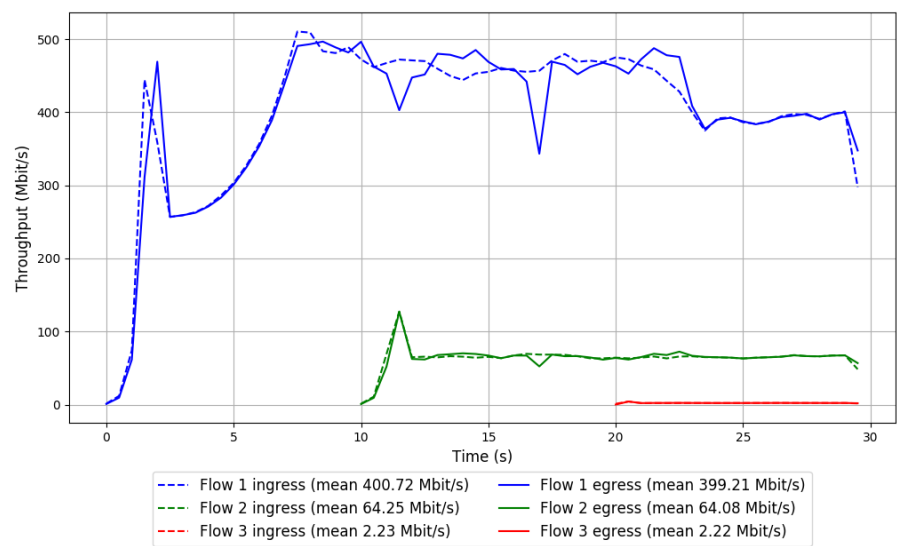
-- Flow 3:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 203.078 ms

Loss rate: 0.77%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-06 13:17:03

End at: 2017-12-06 13:17:33

Below is generated by plot.py at 2017-12-06 15:38:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 458.51 Mbit/s

95th percentile per-packet one-way delay: 218.529 ms

Loss rate: 1.59%

-- Flow 1:

Average throughput: 415.02 Mbit/s

95th percentile per-packet one-way delay: 217.765 ms

Loss rate: 1.50%

-- Flow 2:

Average throughput: 8.53 Mbit/s

95th percentile per-packet one-way delay: 219.145 ms

Loss rate: 1.16%

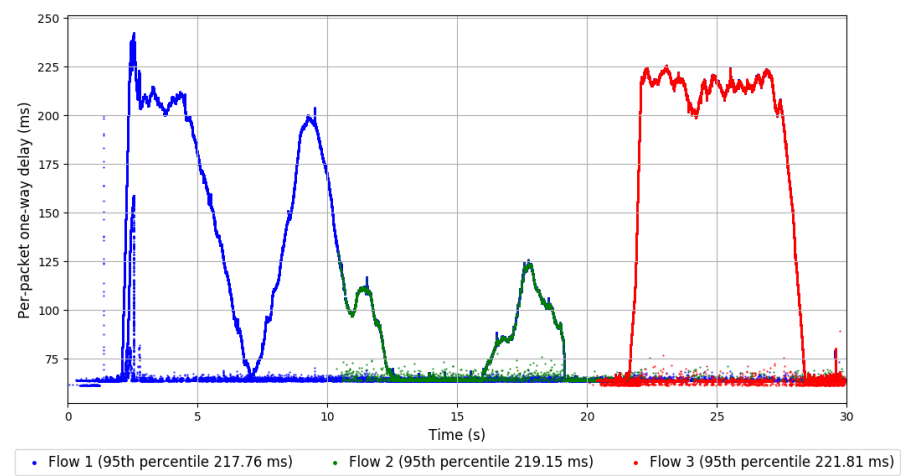
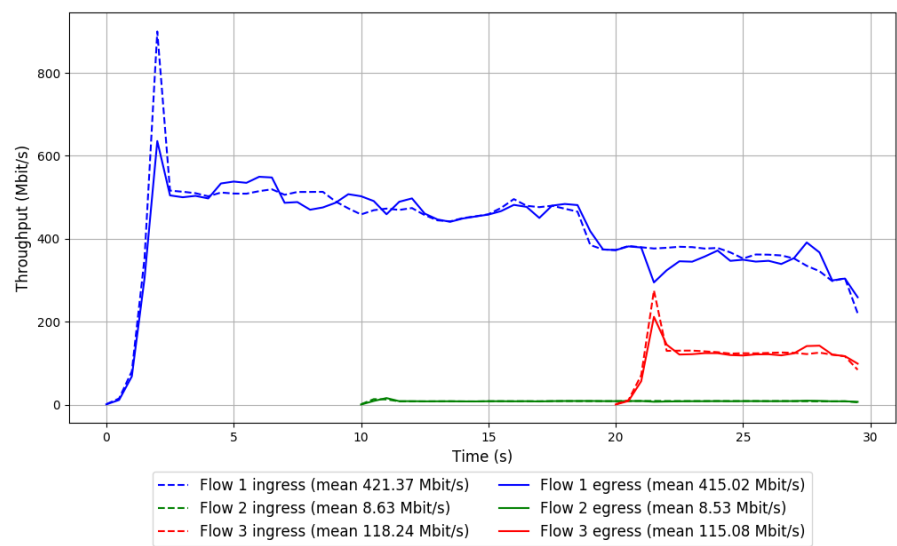
-- Flow 3:

Average throughput: 115.08 Mbit/s

95th percentile per-packet one-way delay: 221.815 ms

Loss rate: 2.64%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-06 13:29:29

End at: 2017-12-06 13:29:59

Below is generated by plot.py at 2017-12-06 15:38:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 434.31 Mbit/s

95th percentile per-packet one-way delay: 202.385 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 331.50 Mbit/s

95th percentile per-packet one-way delay: 201.207 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 139.70 Mbit/s

95th percentile per-packet one-way delay: 203.520 ms

Loss rate: 1.40%

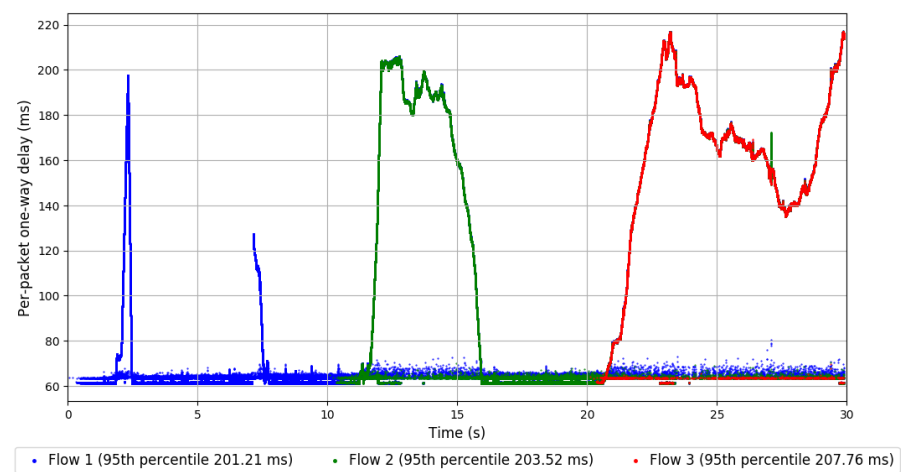
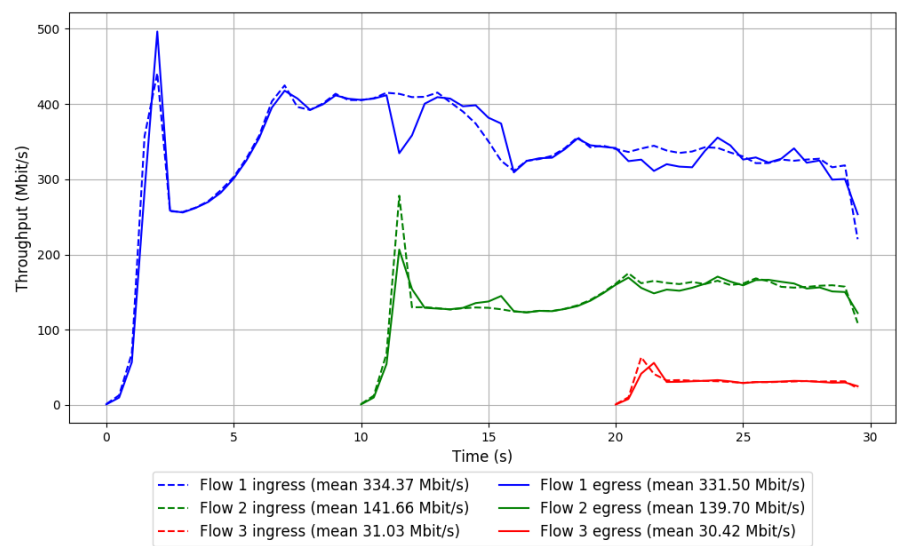
-- Flow 3:

Average throughput: 30.42 Mbit/s

95th percentile per-packet one-way delay: 207.756 ms

Loss rate: 2.01%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-06 13:41:59

End at: 2017-12-06 13:42:29

Below is generated by plot.py at 2017-12-06 15:39:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 485.37 Mbit/s

95th percentile per-packet one-way delay: 213.520 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 440.36 Mbit/s

95th percentile per-packet one-way delay: 212.612 ms

Loss rate: 1.20%

-- Flow 2:

Average throughput: 66.64 Mbit/s

95th percentile per-packet one-way delay: 217.089 ms

Loss rate: 1.18%

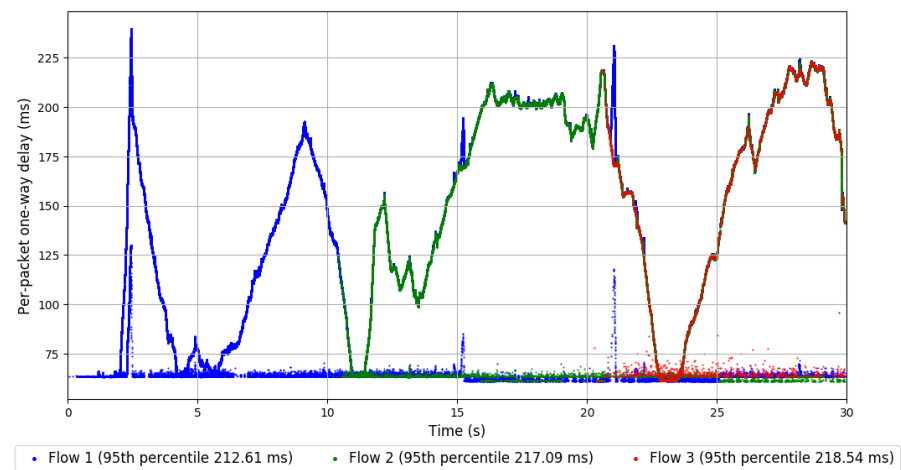
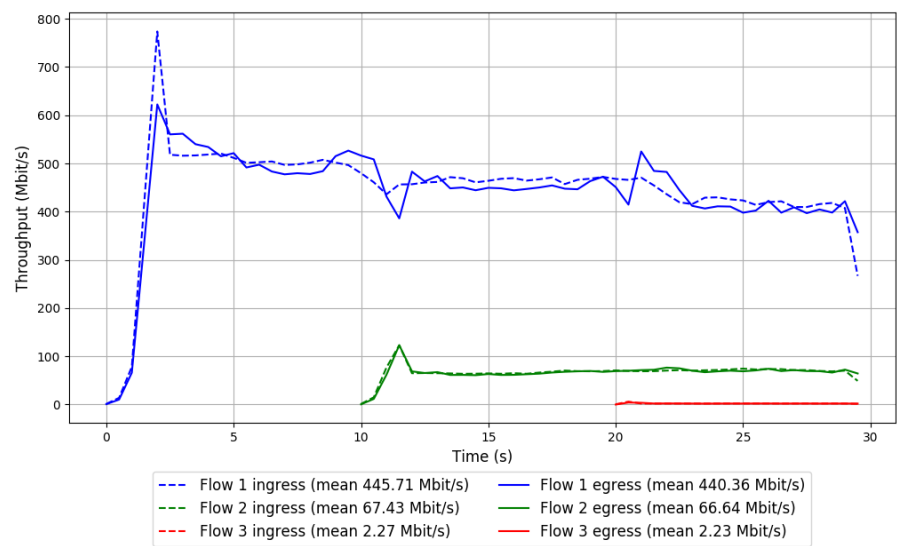
-- Flow 3:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 218.540 ms

Loss rate: 1.52%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-06 13:54:18

End at: 2017-12-06 13:54:48

Below is generated by plot.py at 2017-12-06 15:41:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 384.90 Mbit/s

95th percentile per-packet one-way delay: 164.471 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 332.03 Mbit/s

95th percentile per-packet one-way delay: 164.475 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 77.46 Mbit/s

95th percentile per-packet one-way delay: 164.582 ms

Loss rate: 0.02%

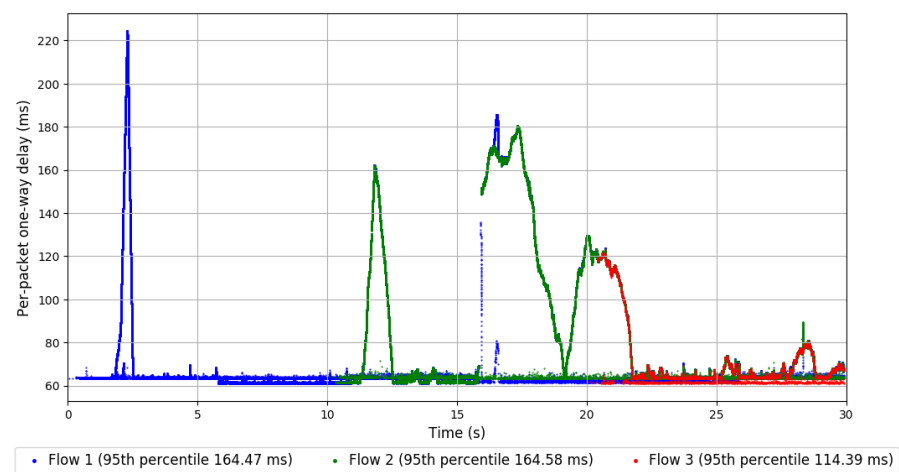
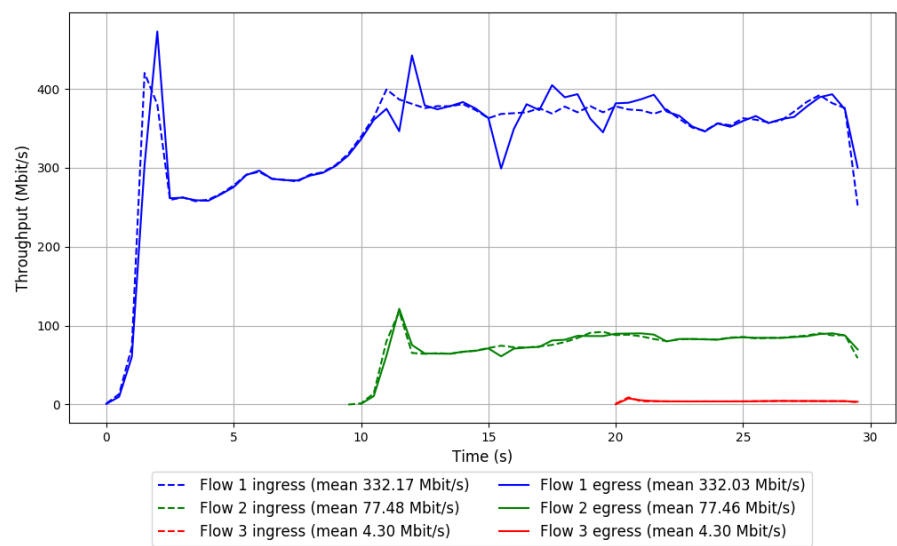
-- Flow 3:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 114.390 ms

Loss rate: 0.00%

Run 9: Report of PCC — Data Link

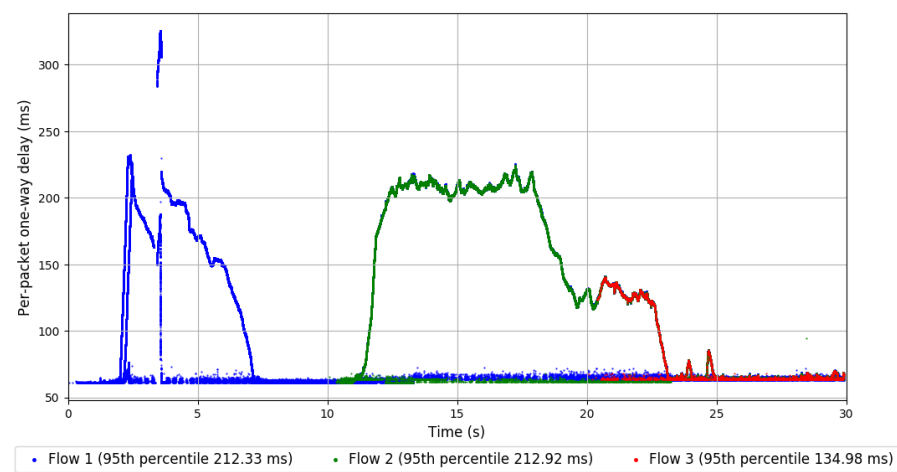
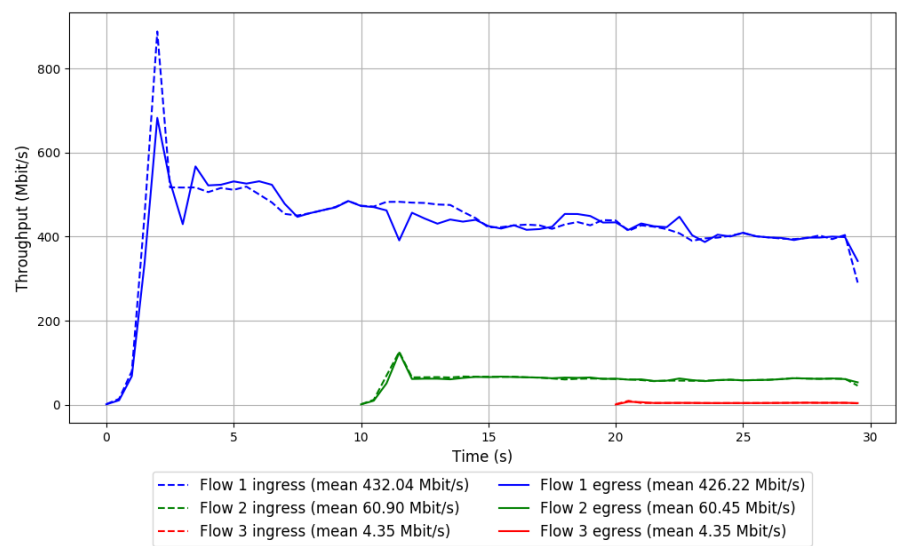


```
Run 10: Statistics of PCC

Start at: 2017-12-06 14:06:31
End at: 2017-12-06 14:07:01

# Below is generated by plot.py at 2017-12-06 15:45:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 467.80 Mbit/s
95th percentile per-packet one-way delay: 212.383 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 426.22 Mbit/s
95th percentile per-packet one-way delay: 212.334 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 60.45 Mbit/s
95th percentile per-packet one-way delay: 212.924 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 134.976 ms
Loss rate: 0.06%
```

Run 10: Report of PCC — Data Link

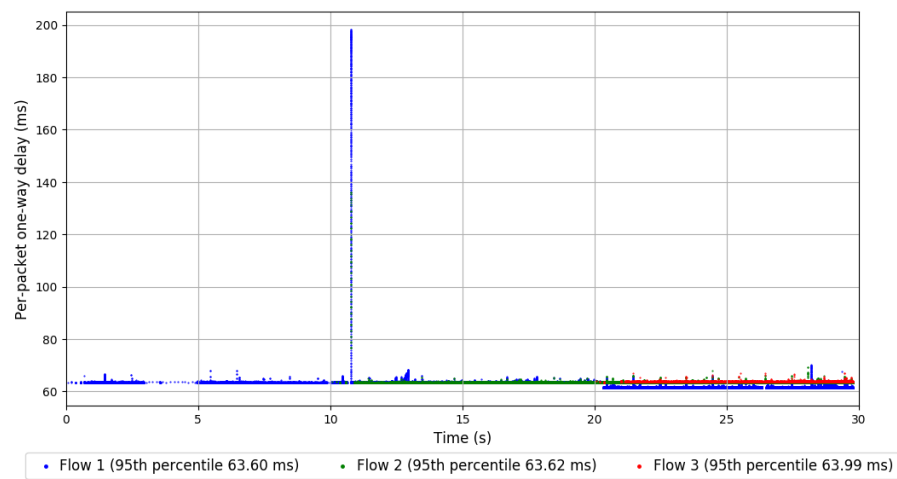
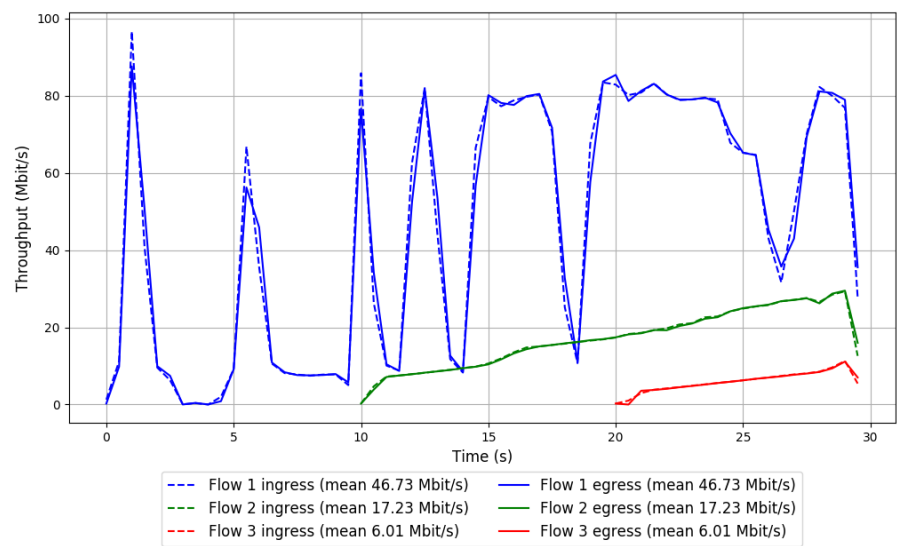


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-06 12:13:24
End at: 2017-12-06 12:13:54

# Below is generated by plot.py at 2017-12-06 15:45:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.11 Mbit/s
95th percentile per-packet one-way delay: 63.727 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.73 Mbit/s
95th percentile per-packet one-way delay: 63.598 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 17.23 Mbit/s
95th percentile per-packet one-way delay: 63.621 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.01 Mbit/s
95th percentile per-packet one-way delay: 63.992 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-06 12:25:36

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

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.50 Mbit/s

95th percentile per-packet one-way delay: 63.663 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.25 Mbit/s

95th percentile per-packet one-way delay: 63.725 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.20 Mbit/s

95th percentile per-packet one-way delay: 61.874 ms

Loss rate: 0.00%

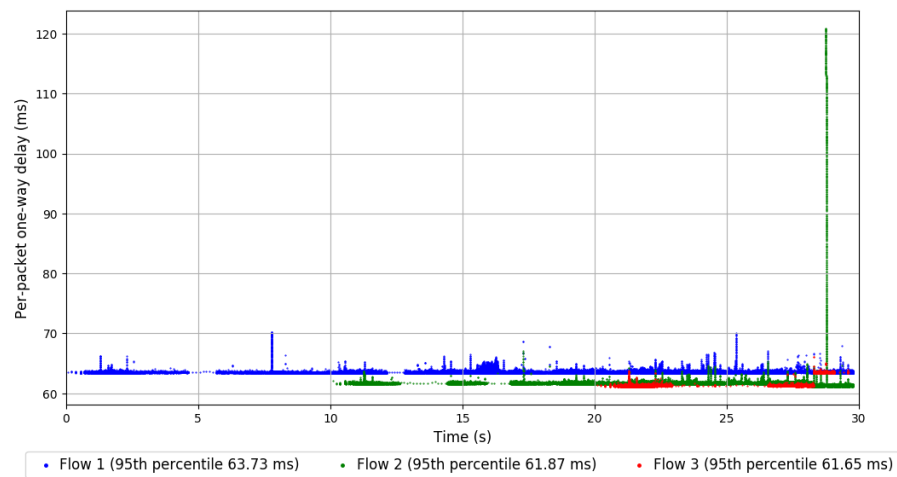
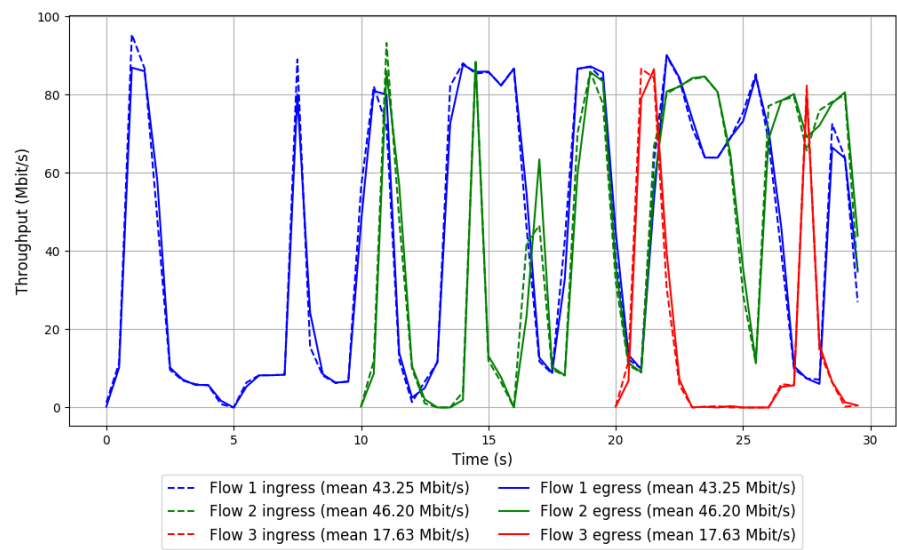
-- Flow 3:

Average throughput: 17.63 Mbit/s

95th percentile per-packet one-way delay: 61.652 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-06 12:37:35

End at: 2017-12-06 12:38:05

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.52 Mbit/s

95th percentile per-packet one-way delay: 63.732 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 53.13 Mbit/s

95th percentile per-packet one-way delay: 63.687 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.12 Mbit/s

95th percentile per-packet one-way delay: 63.588 ms

Loss rate: 0.00%

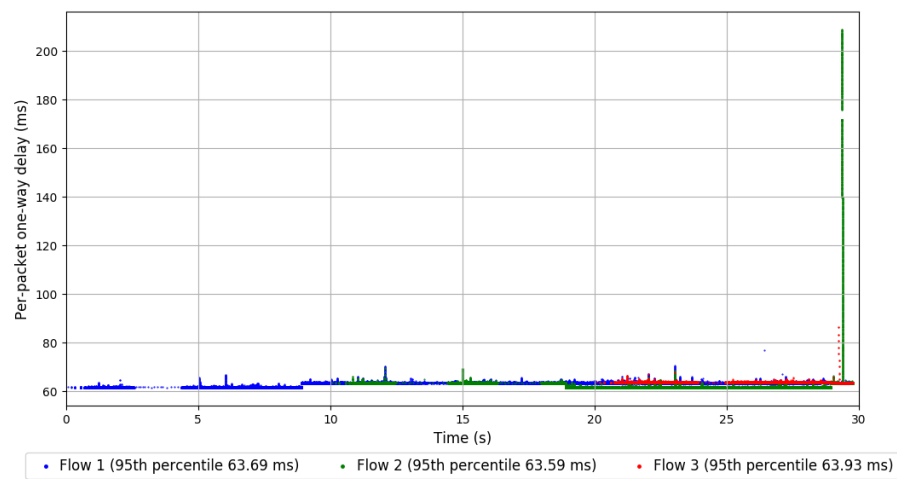
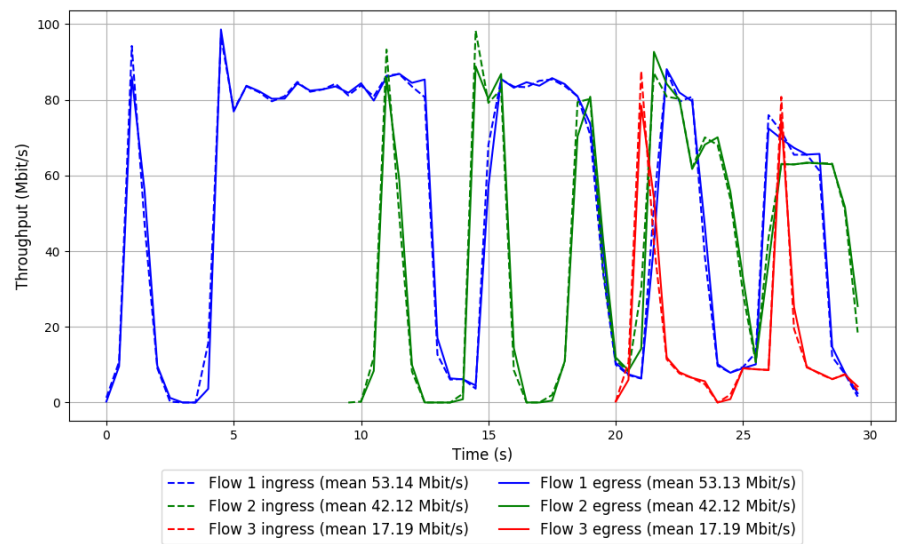
-- Flow 3:

Average throughput: 17.19 Mbit/s

95th percentile per-packet one-way delay: 63.928 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-06 12:49:54

End at: 2017-12-06 12:50:24

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.22 Mbit/s

95th percentile per-packet one-way delay: 63.698 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 45.75 Mbit/s

95th percentile per-packet one-way delay: 63.733 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 49.77 Mbit/s

95th percentile per-packet one-way delay: 61.490 ms

Loss rate: 0.00%

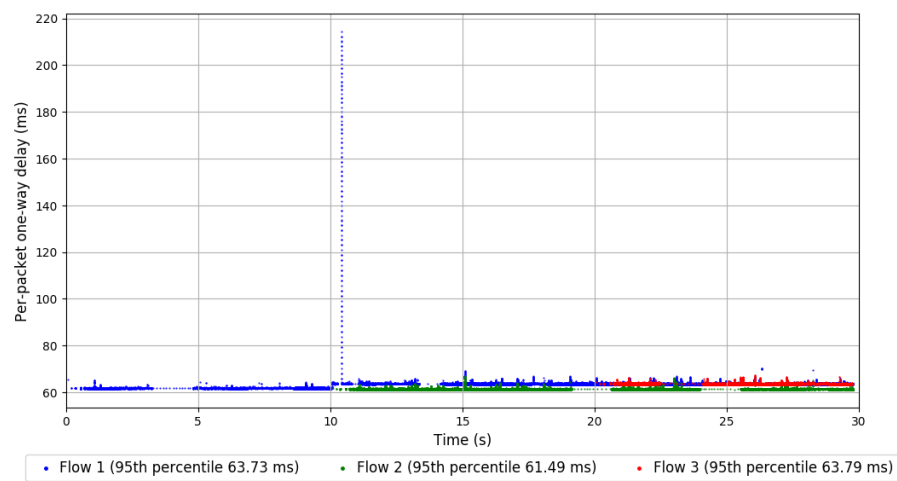
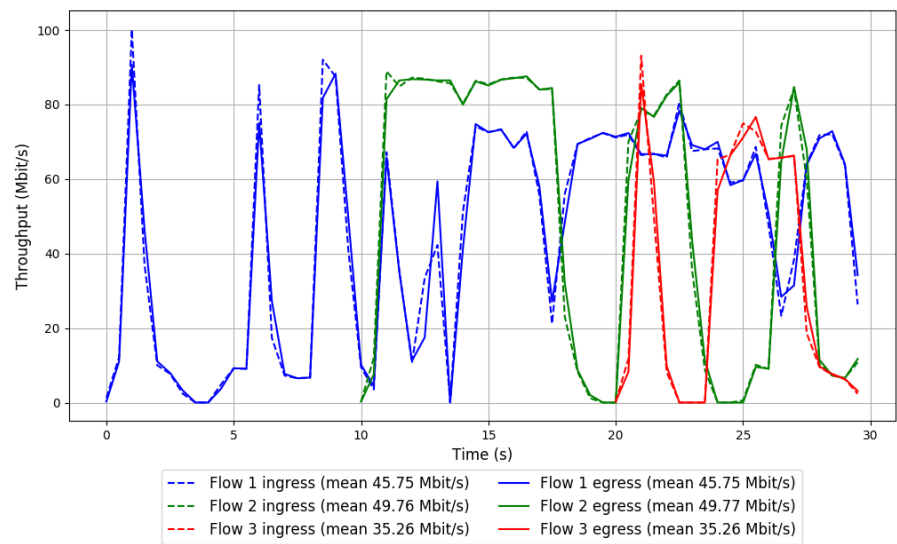
-- Flow 3:

Average throughput: 35.26 Mbit/s

95th percentile per-packet one-way delay: 63.789 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-06 13:02:17

End at: 2017-12-06 13:02:47

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.10 Mbit/s

95th percentile per-packet one-way delay: 63.734 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 53.12 Mbit/s

95th percentile per-packet one-way delay: 63.752 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 45.80 Mbit/s

95th percentile per-packet one-way delay: 63.723 ms

Loss rate: 0.02%

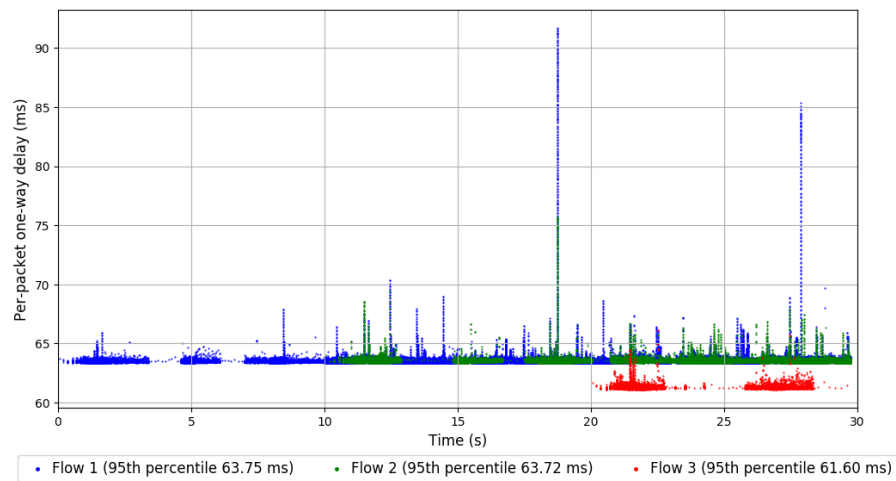
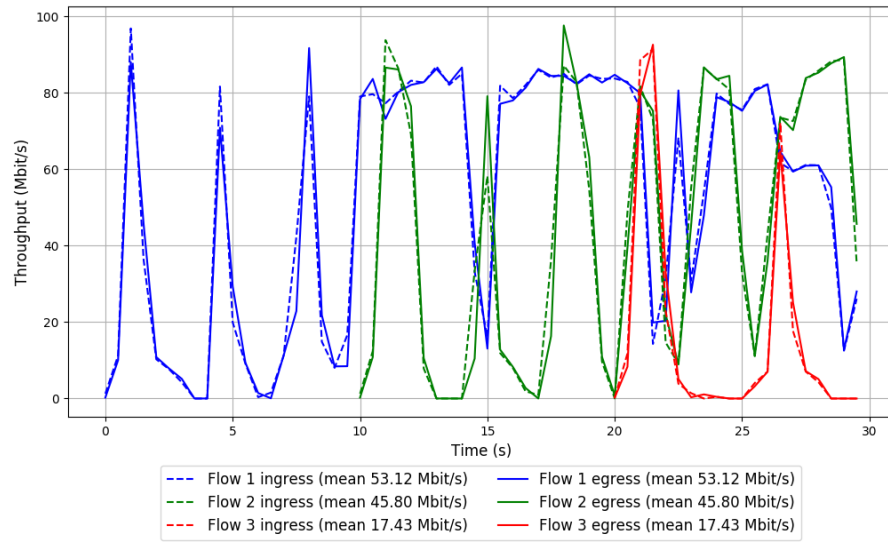
-- Flow 3:

Average throughput: 17.43 Mbit/s

95th percentile per-packet one-way delay: 61.599 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-06 13:14:31

End at: 2017-12-06 13:15:01

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.38 Mbit/s

95th percentile per-packet one-way delay: 63.703 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 35.23 Mbit/s

95th percentile per-packet one-way delay: 63.770 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 53.61 Mbit/s

95th percentile per-packet one-way delay: 61.502 ms

Loss rate: 0.00%

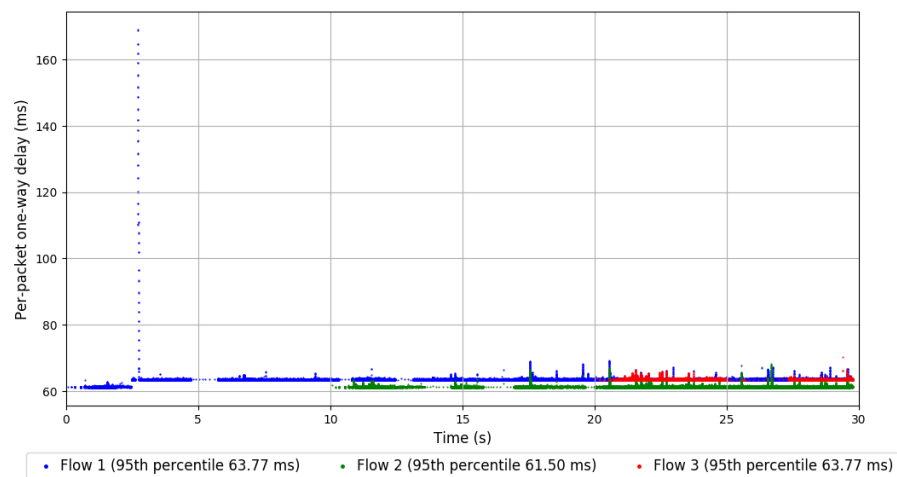
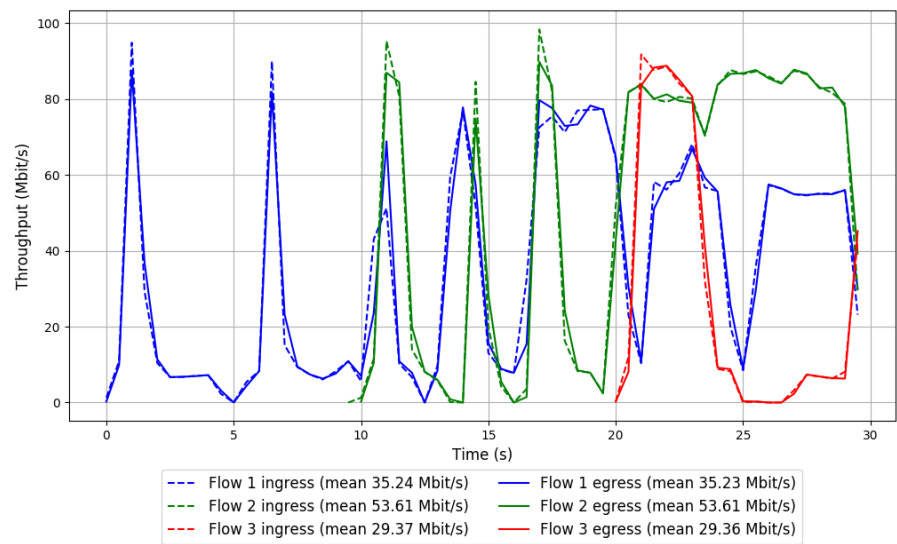
-- Flow 3:

Average throughput: 29.36 Mbit/s

95th percentile per-packet one-way delay: 63.775 ms

Loss rate: 0.03%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-06 13:26:51

End at: 2017-12-06 13:27:21

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.27 Mbit/s

95th percentile per-packet one-way delay: 63.613 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 53.43 Mbit/s

95th percentile per-packet one-way delay: 63.605 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 41.89 Mbit/s

95th percentile per-packet one-way delay: 63.627 ms

Loss rate: 0.00%

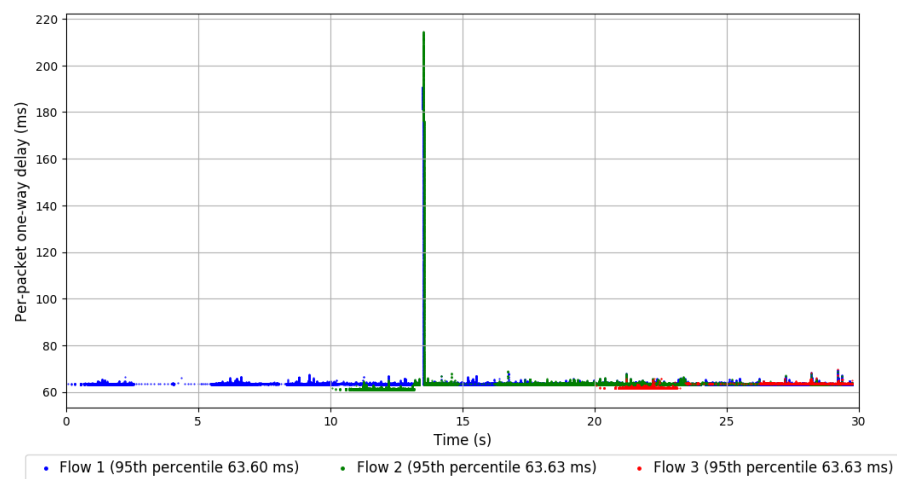
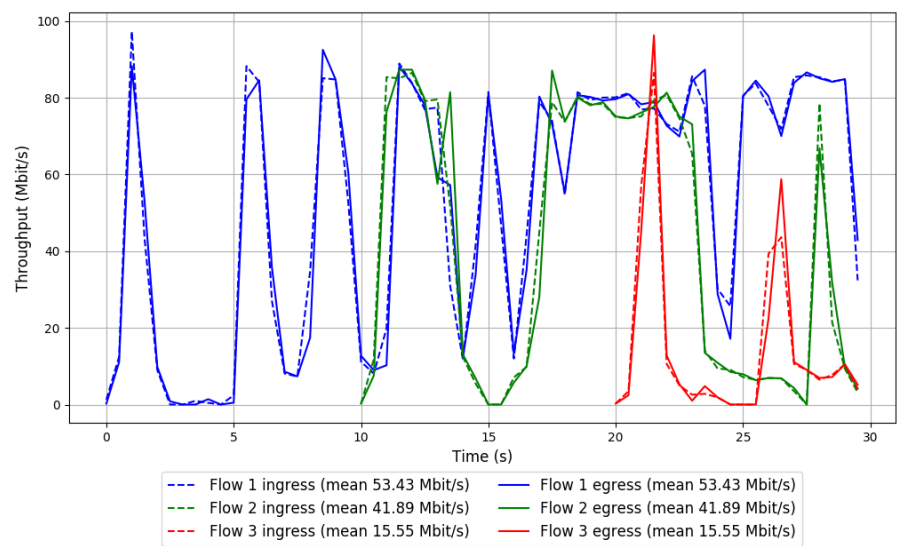
-- Flow 3:

Average throughput: 15.55 Mbit/s

95th percentile per-packet one-way delay: 63.628 ms

Loss rate: 0.02%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-06 13:39:22

End at: 2017-12-06 13:39:52

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.37 Mbit/s

95th percentile per-packet one-way delay: 63.675 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.12 Mbit/s

95th percentile per-packet one-way delay: 63.712 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 47.12 Mbit/s

95th percentile per-packet one-way delay: 63.659 ms

Loss rate: 0.00%

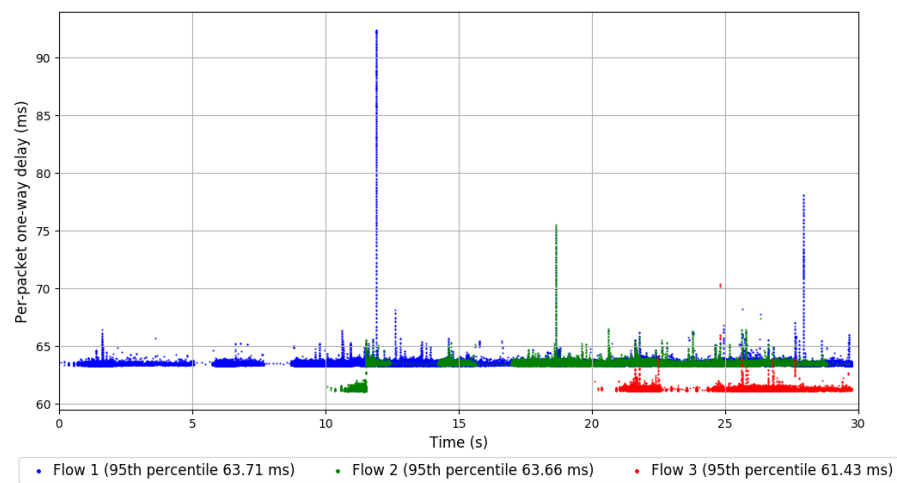
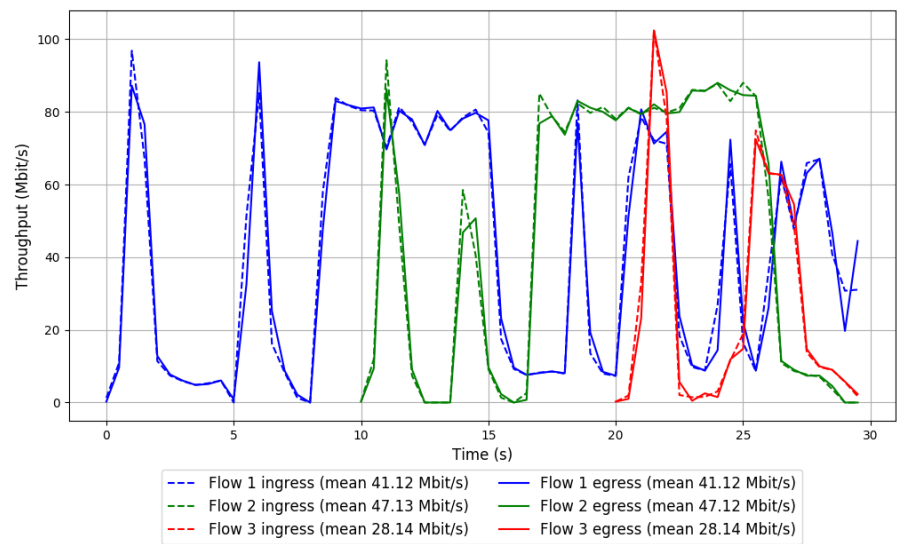
-- Flow 3:

Average throughput: 28.14 Mbit/s

95th percentile per-packet one-way delay: 61.433 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-06 13:51:45

End at: 2017-12-06 13:52:15

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.23 Mbit/s

95th percentile per-packet one-way delay: 63.744 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.73 Mbit/s

95th percentile per-packet one-way delay: 63.598 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.80 Mbit/s

95th percentile per-packet one-way delay: 63.751 ms

Loss rate: 0.00%

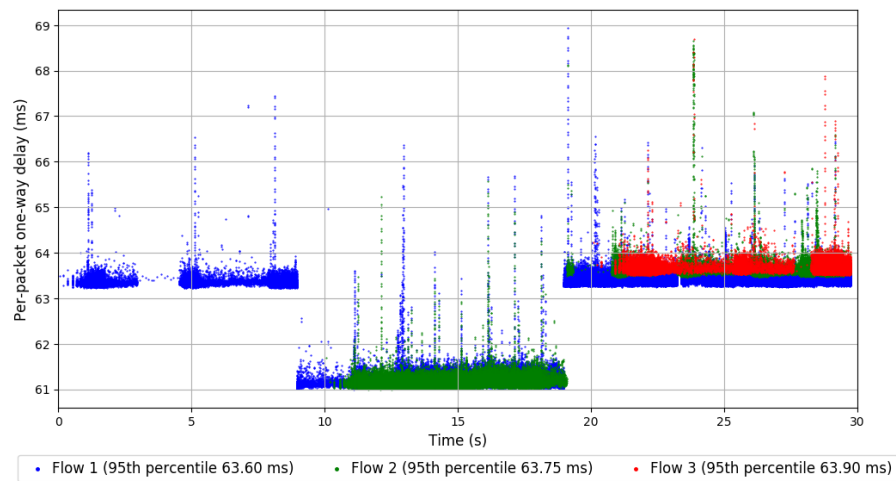
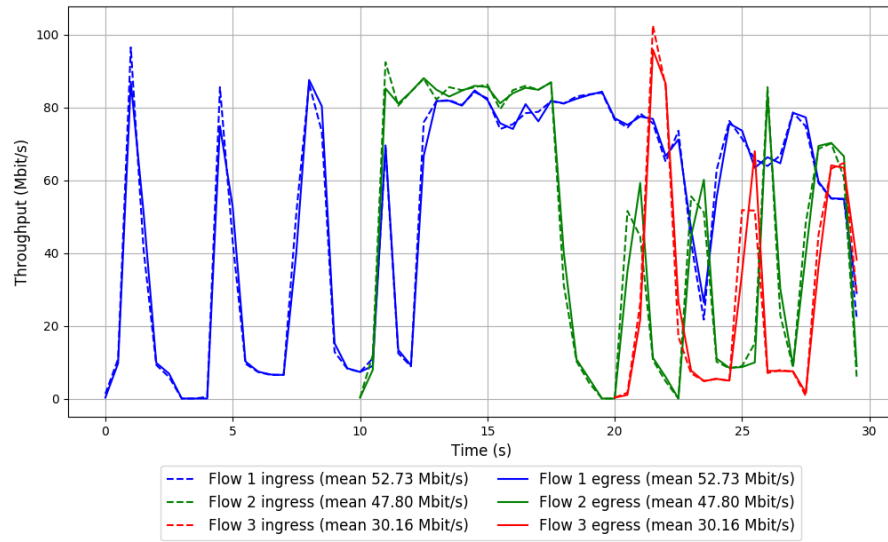
-- Flow 3:

Average throughput: 30.16 Mbit/s

95th percentile per-packet one-way delay: 63.896 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

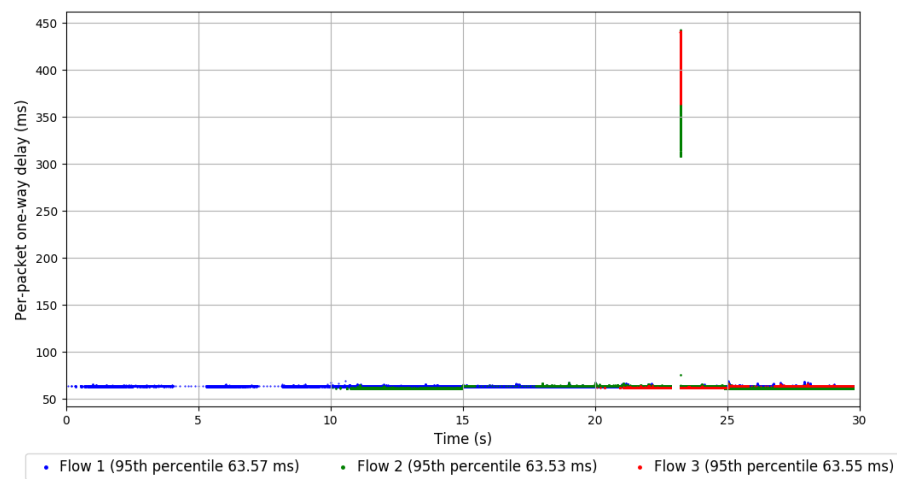
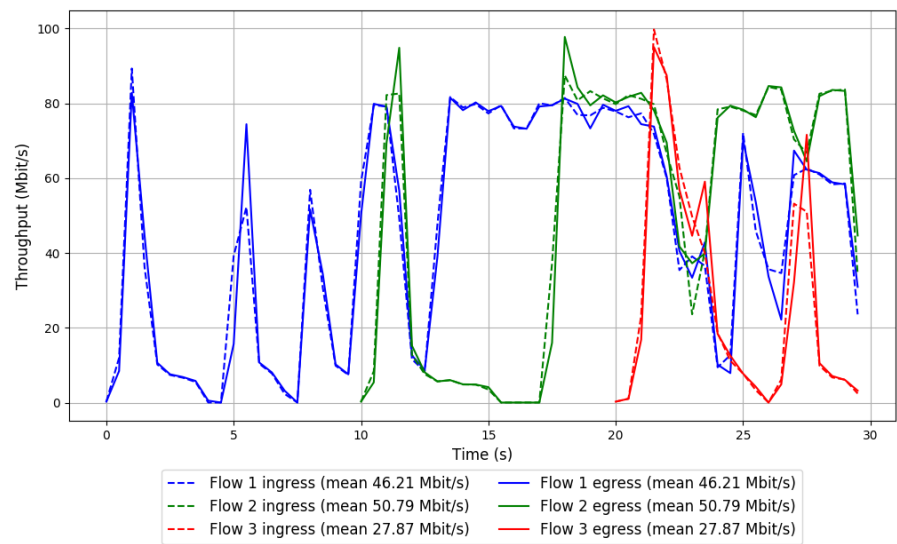


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-06 14:03:59
End at: 2017-12-06 14:04:29

# Below is generated by plot.py at 2017-12-06 15:45:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.95 Mbit/s
95th percentile per-packet one-way delay: 63.552 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.21 Mbit/s
95th percentile per-packet one-way delay: 63.568 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.79 Mbit/s
95th percentile per-packet one-way delay: 63.529 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.87 Mbit/s
95th percentile per-packet one-way delay: 63.550 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

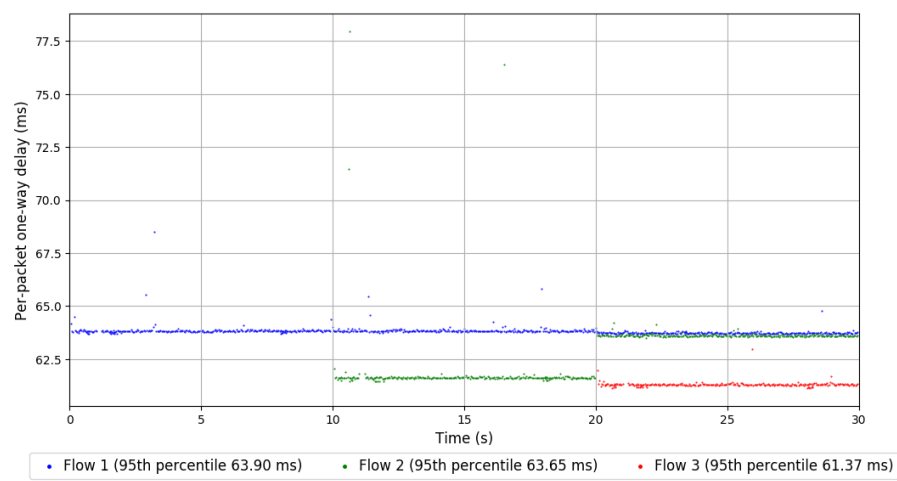
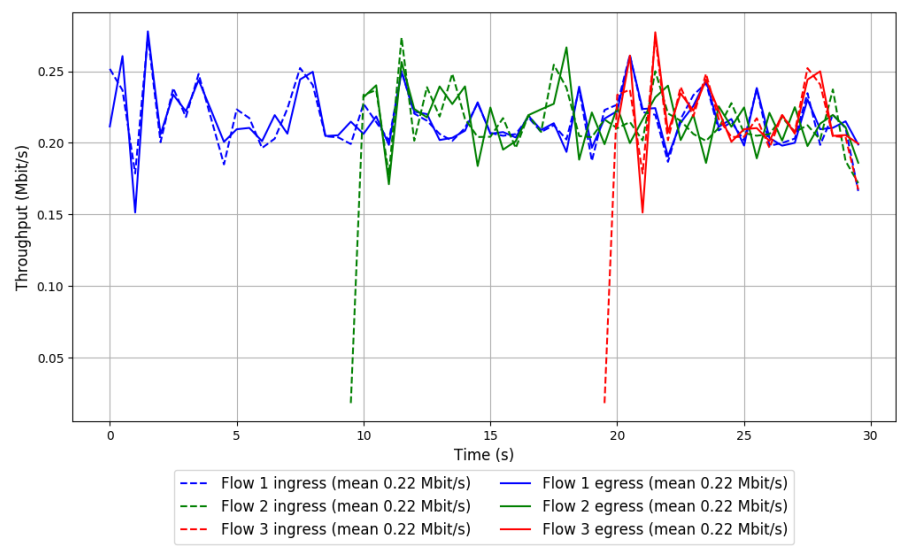


```
Run 1: Statistics of SCReAM

Start at: 2017-12-06 12:07:24
End at: 2017-12-06 12:07:54

# Below is generated by plot.py at 2017-12-06 15:45:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.865 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.896 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.652 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.368 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

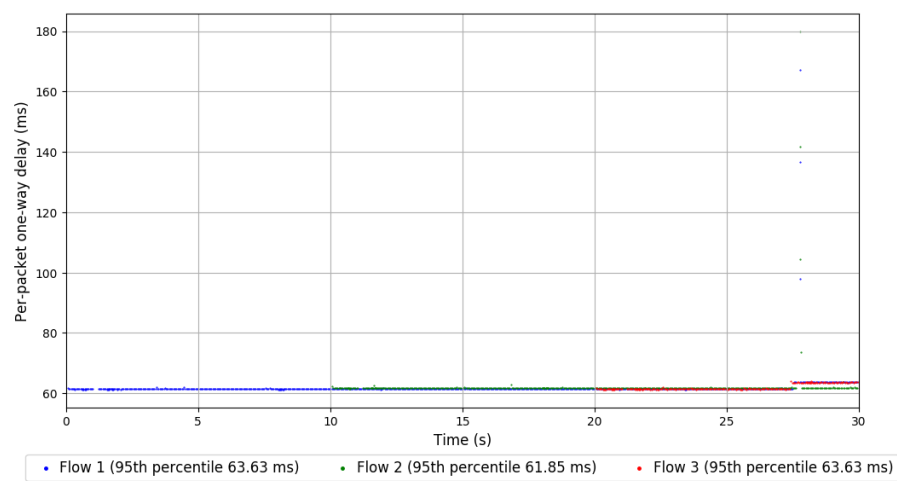
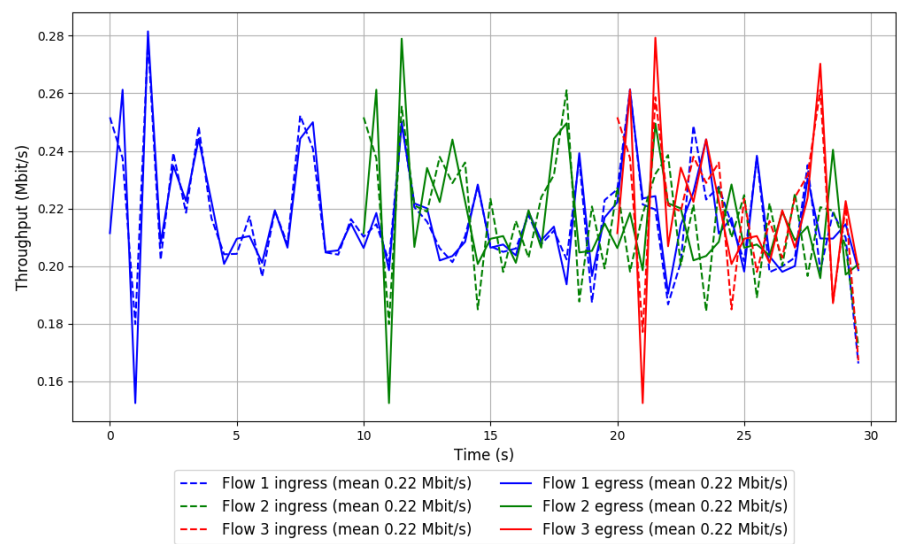


```
Run 2: Statistics of SCReAM

Start at: 2017-12-06 12:19:37
End at: 2017-12-06 12:20:07

# Below is generated by plot.py at 2017-12-06 15:45:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.609 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.628 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.853 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.628 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

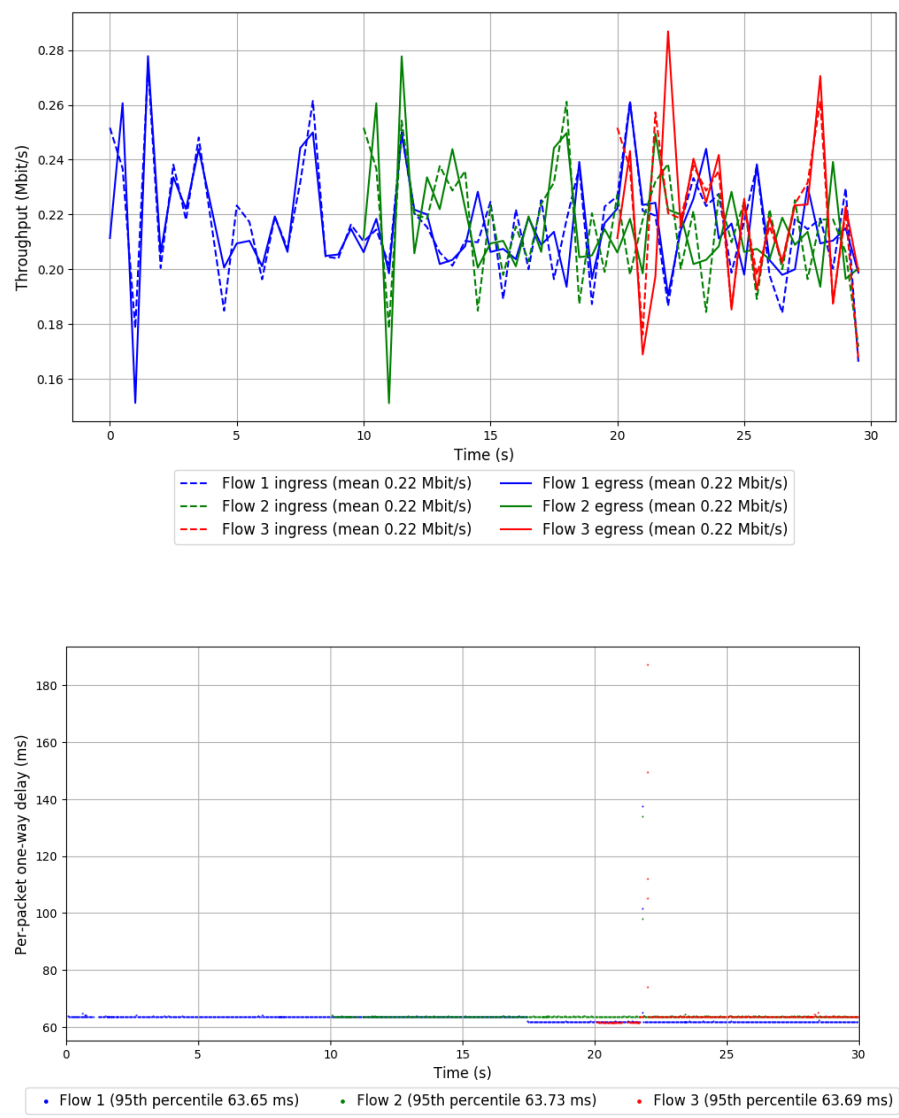


```
Run 3: Statistics of SCReAM

Start at: 2017-12-06 12:31:43
End at: 2017-12-06 12:32:13

# Below is generated by plot.py at 2017-12-06 15:45:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.707 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.648 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.729 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.688 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

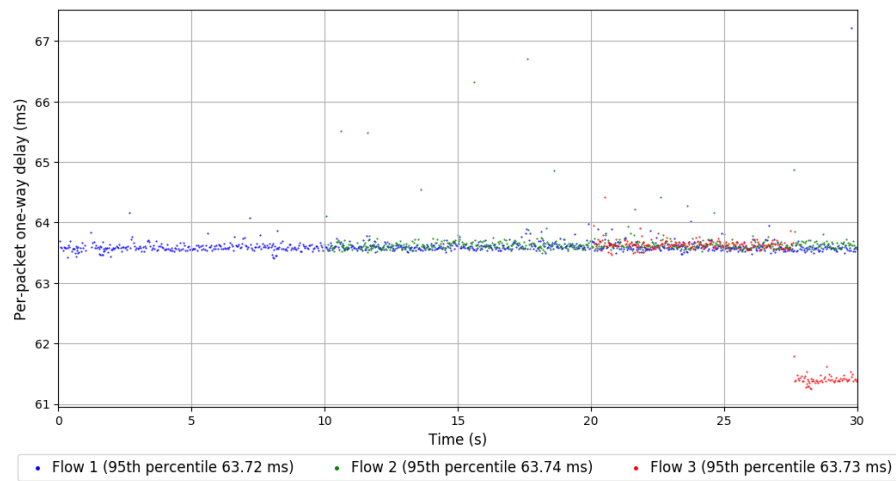
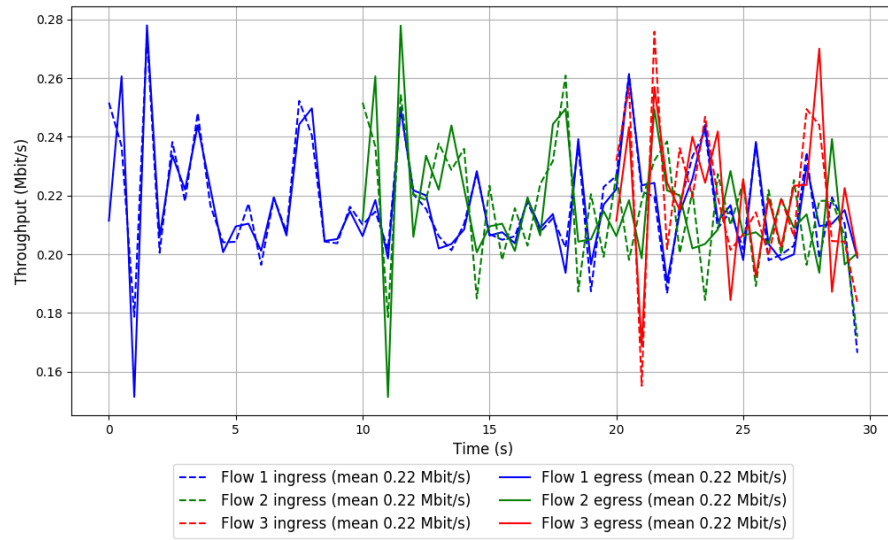


```
Run 4: Statistics of SCReAM

Start at: 2017-12-06 12:43:47
End at: 2017-12-06 12:44:17

# Below is generated by plot.py at 2017-12-06 15:45:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.731 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.717 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.745 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.725 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2017-12-06 12:56:24

End at: 2017-12-06 12:56:54

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.850 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.889 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.413 ms

Loss rate: 0.00%

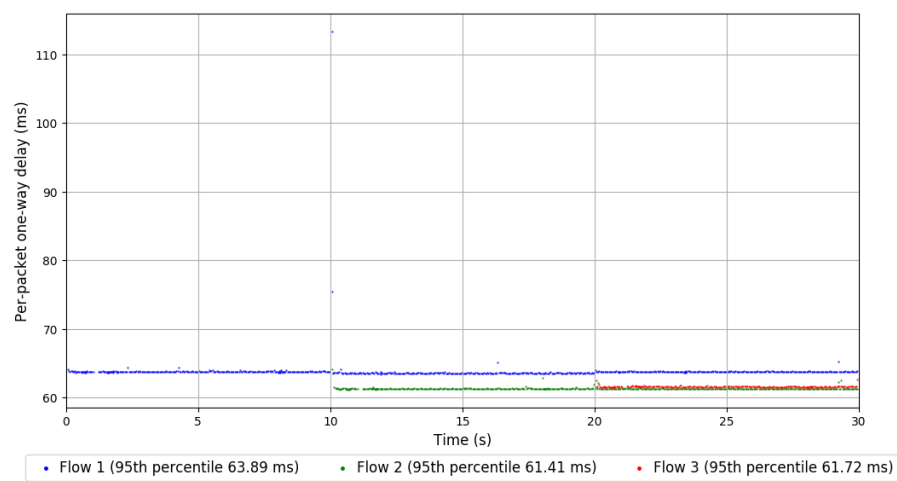
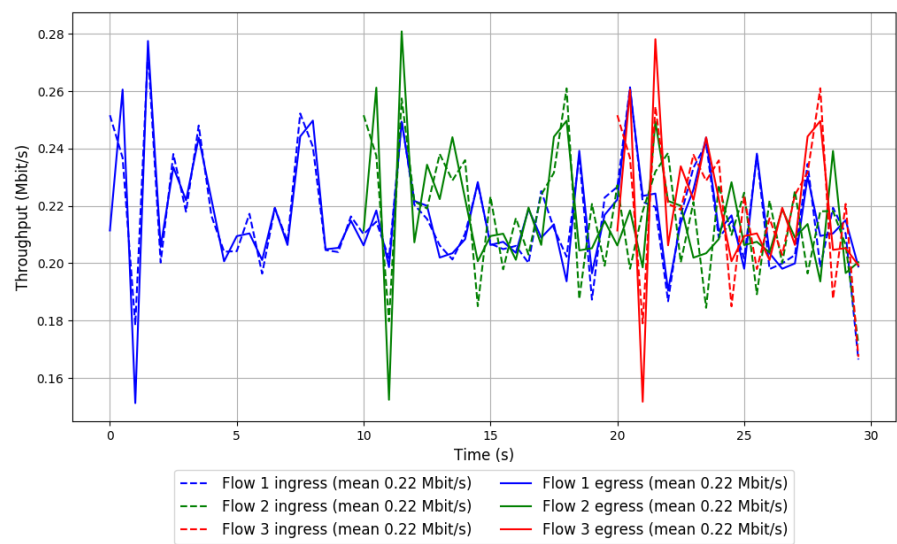
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.716 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-06 13:08:32

End at: 2017-12-06 13:09:02

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.673 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.692 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.626 ms

Loss rate: 0.00%

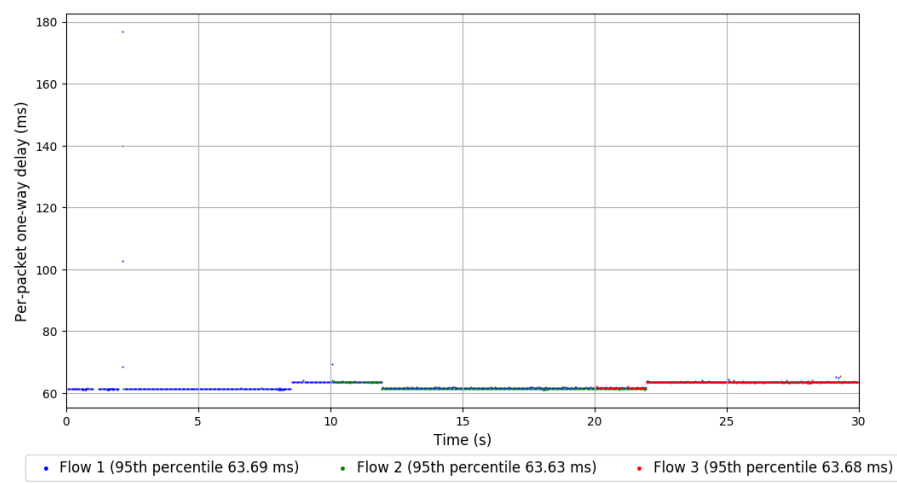
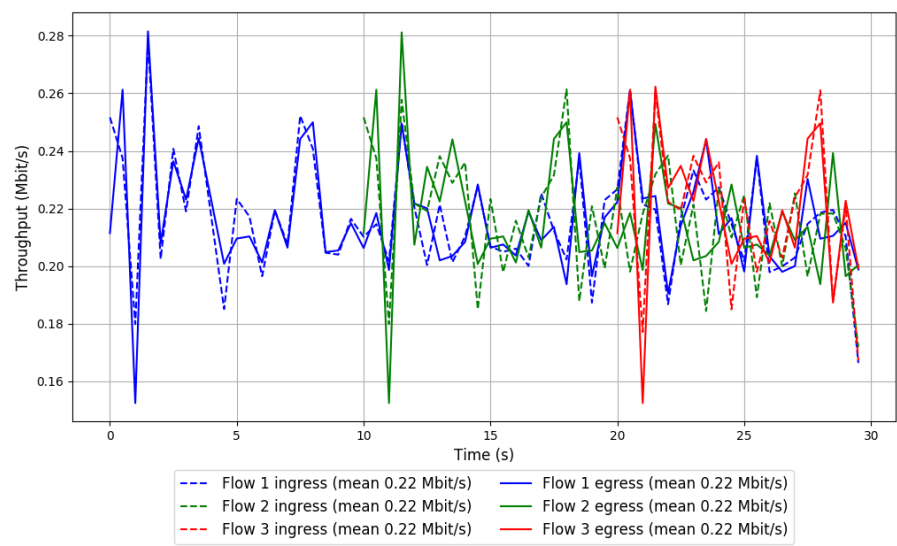
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.681 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

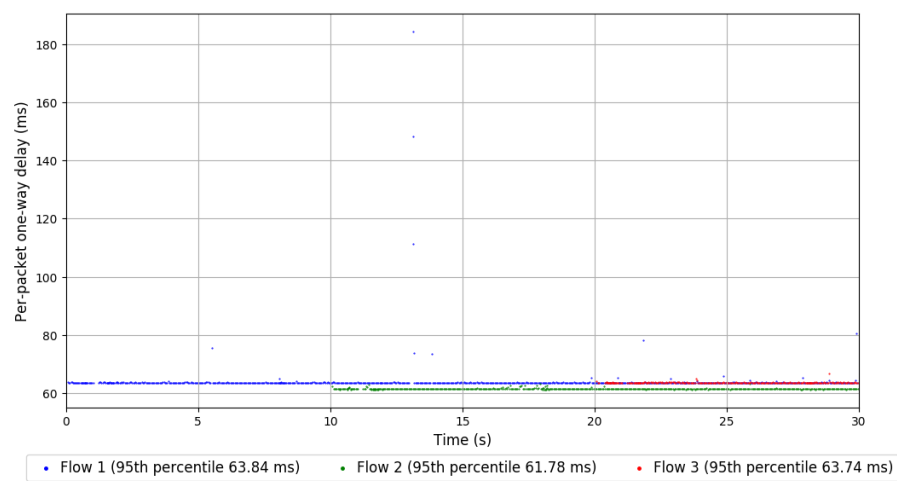
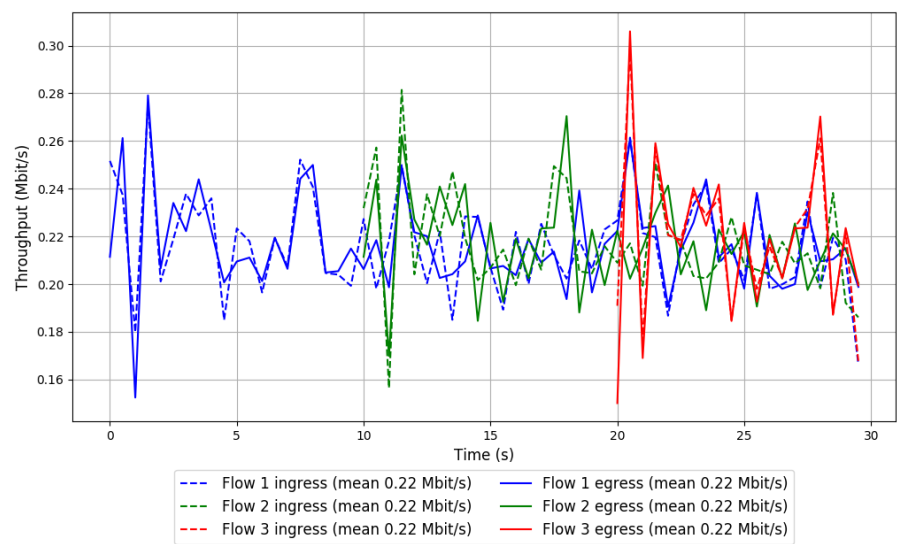


```
Run 7: Statistics of SCReAM

Start at: 2017-12-06 13:20:51
End at: 2017-12-06 13:21:21

# Below is generated by plot.py at 2017-12-06 15:45:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.724 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.835 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.784 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.738 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-06 13:33:21

End at: 2017-12-06 13:33:51

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.633 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.587 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.684 ms

Loss rate: 0.00%

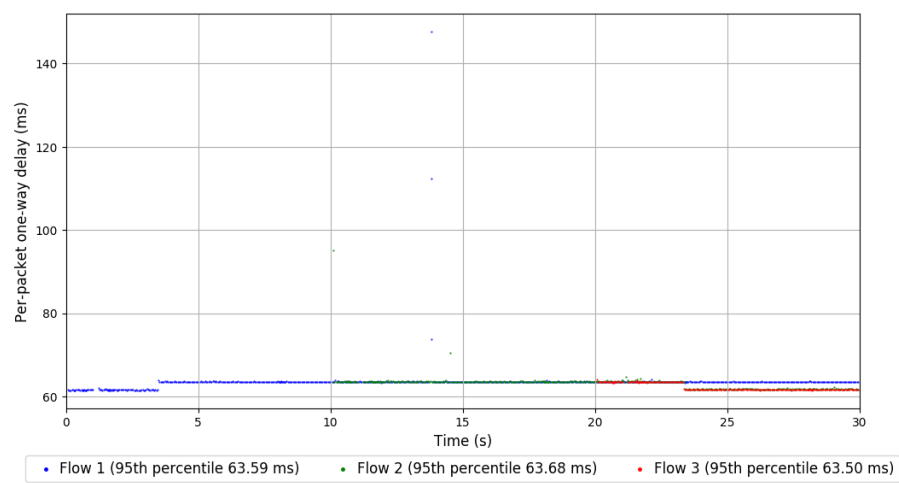
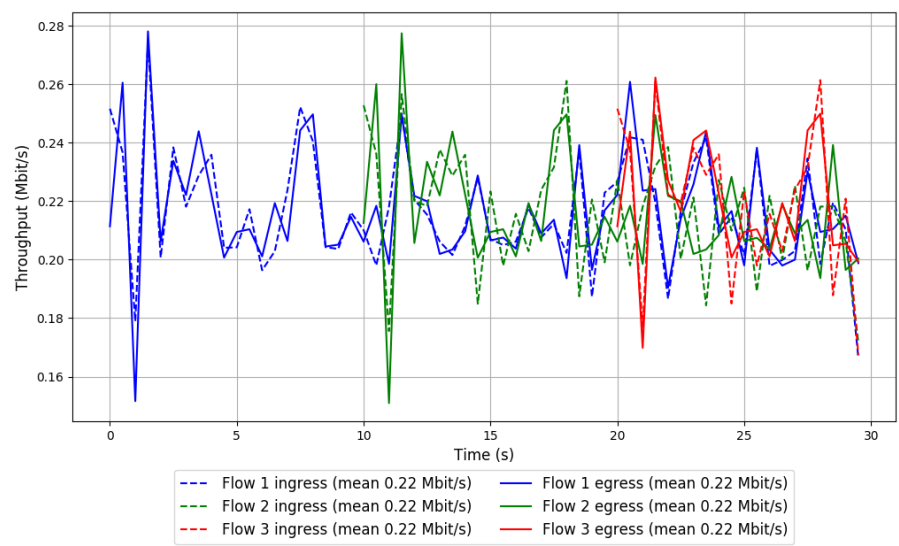
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.499 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2017-12-06 13:45:40

End at: 2017-12-06 13:46:10

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.616 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.594 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.667 ms

Loss rate: 0.00%

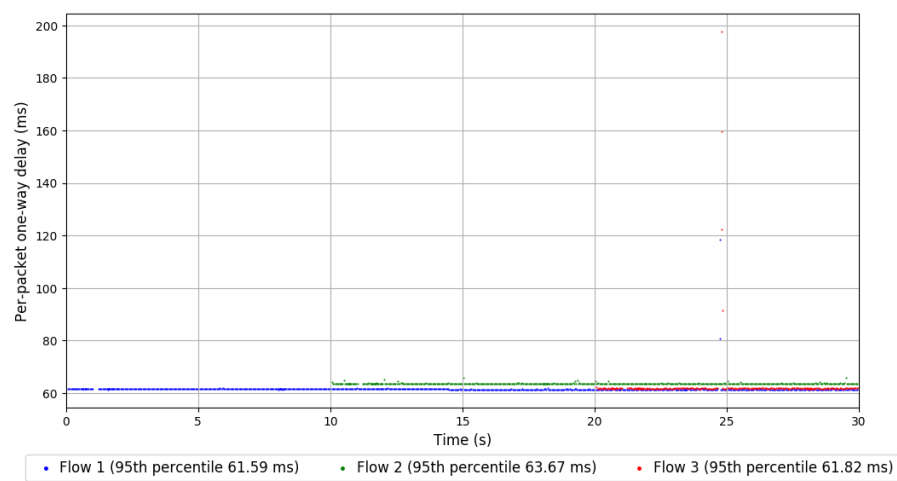
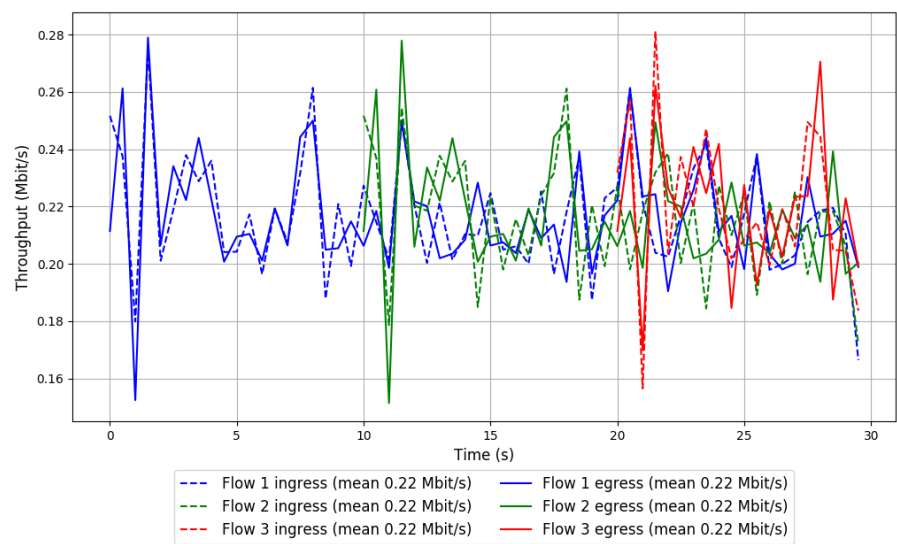
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.819 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

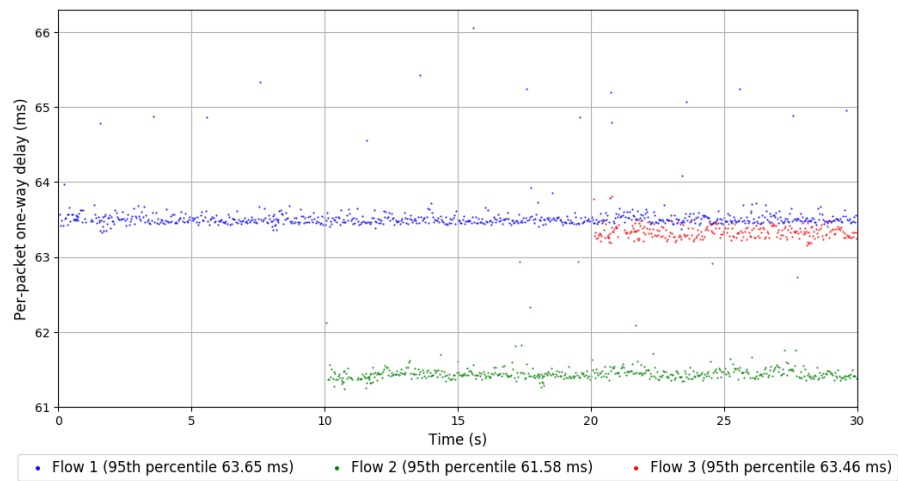
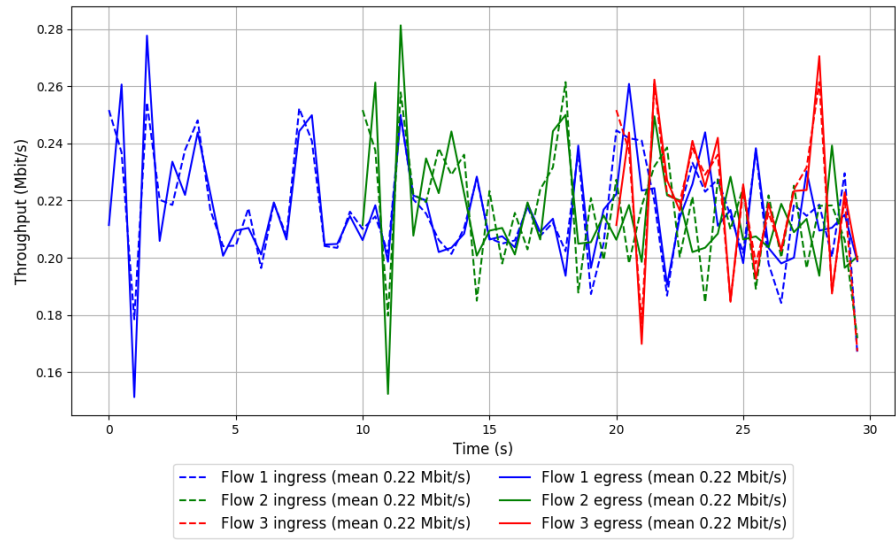


```
Run 10: Statistics of SCReAM

Start at: 2017-12-06 13:58:01
End at: 2017-12-06 13:58:31

# Below is generated by plot.py at 2017-12-06 15:45:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.597 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.648 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.575 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.456 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

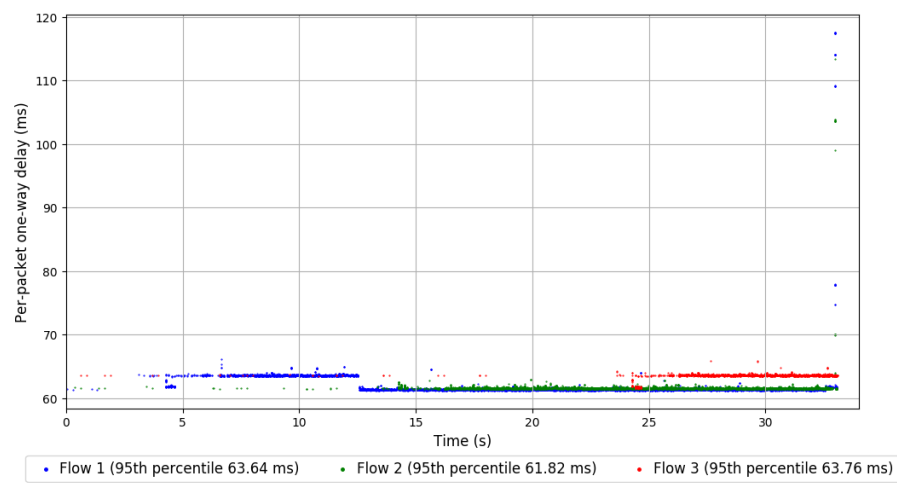
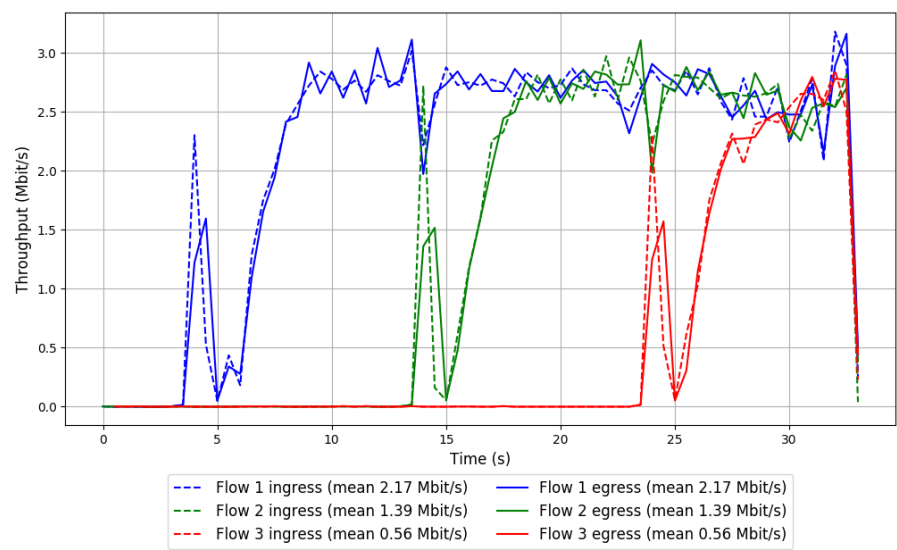


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-06 12:08:05
End at: 2017-12-06 12:08:35

# Below is generated by plot.py at 2017-12-06 15:45:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 63.663 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 63.641 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 61.821 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 63.755 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

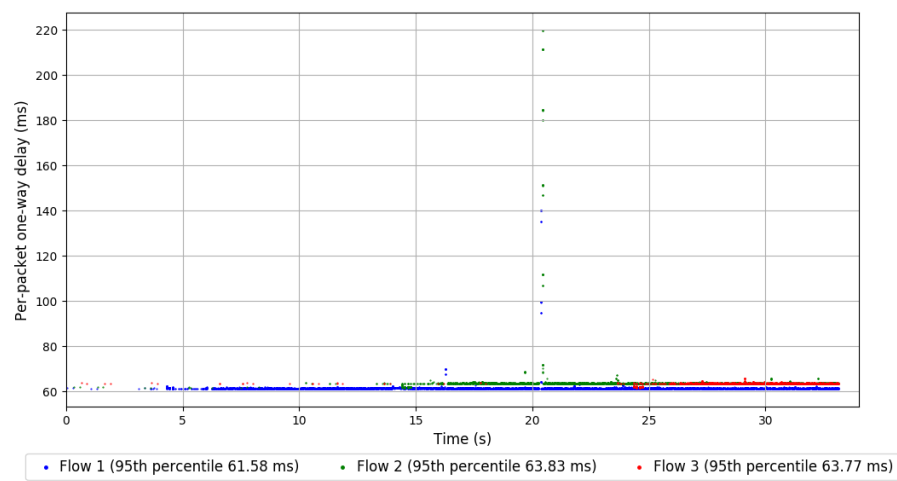
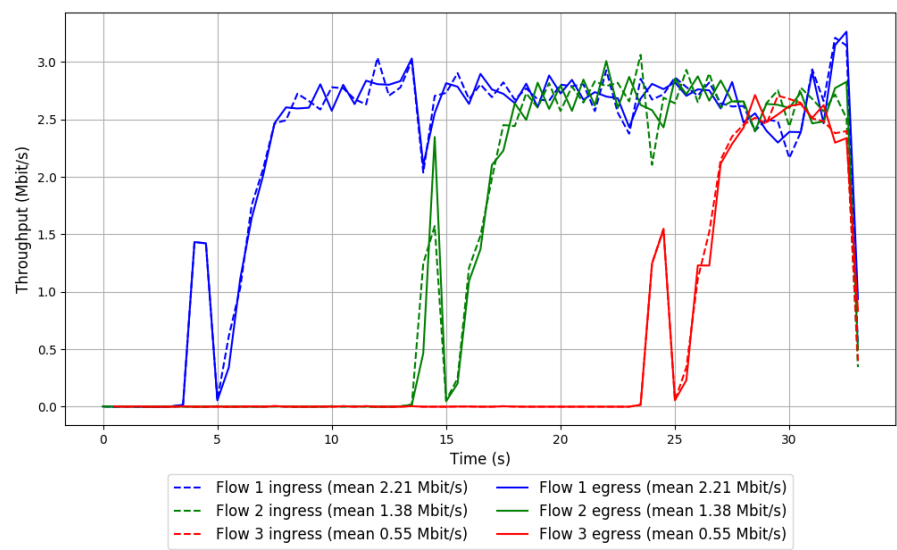


```
Run 2: Statistics of WebRTC media

Start at: 2017-12-06 12:20:17
End at: 2017-12-06 12:20:47

# Below is generated by plot.py at 2017-12-06 15:45:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 63.729 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 61.583 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 63.831 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 63.767 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

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

End at: 2017-12-06 12:32:53

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 63.879 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.905 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 63.728 ms

Loss rate: 0.00%

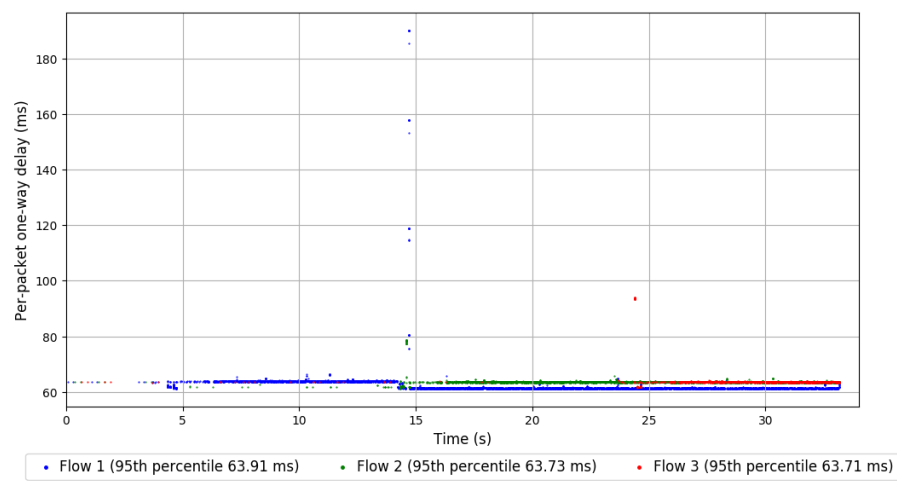
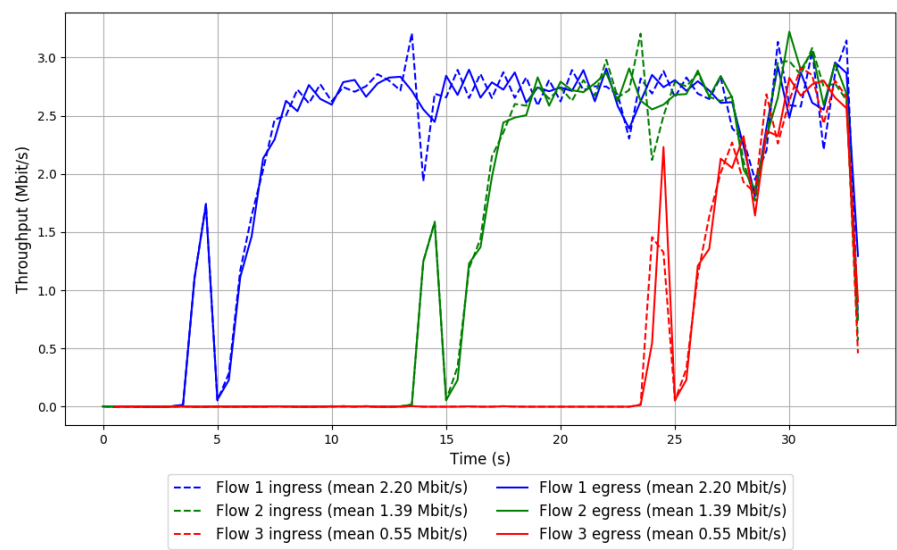
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.709 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-06 12:44:28

End at: 2017-12-06 12:44:58

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.07 Mbit/s

95th percentile per-packet one-way delay: 63.703 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 63.772 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 61.758 ms

Loss rate: 0.00%

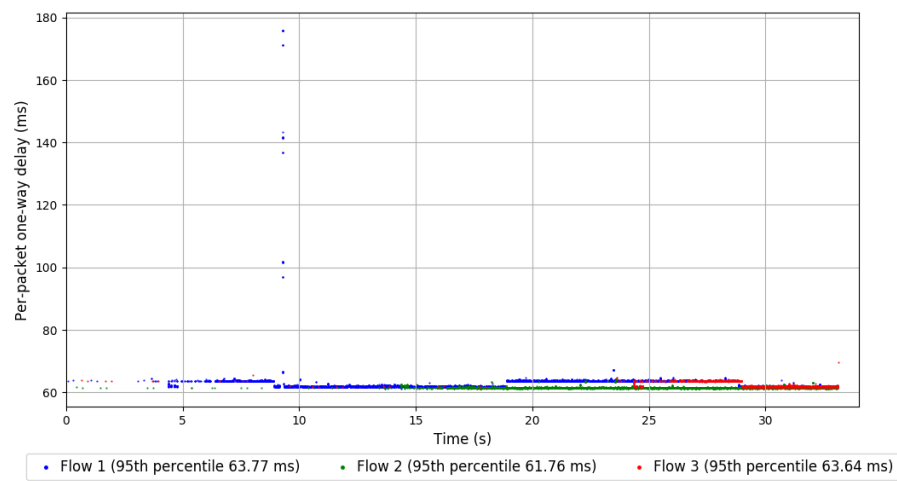
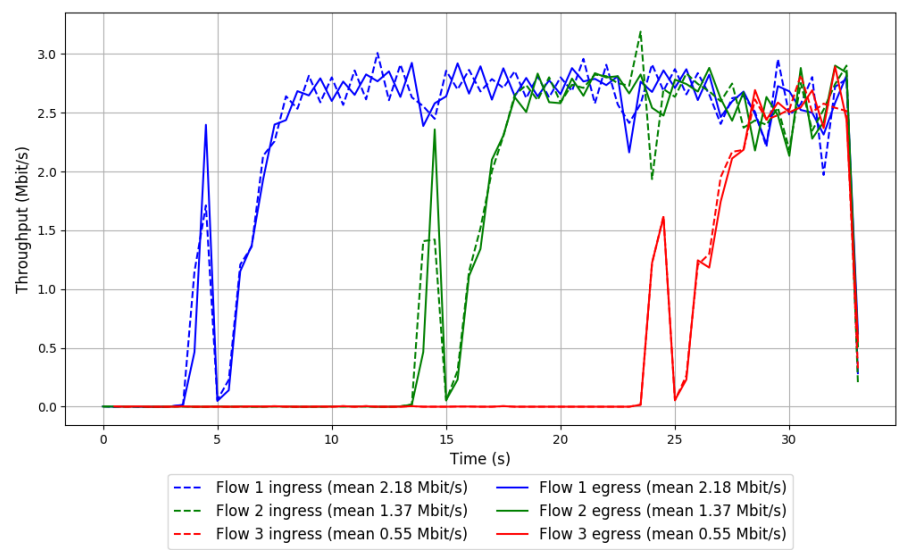
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.637 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

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

End at: 2017-12-06 12:57:35

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 63.782 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.768 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.804 ms

Loss rate: 0.00%

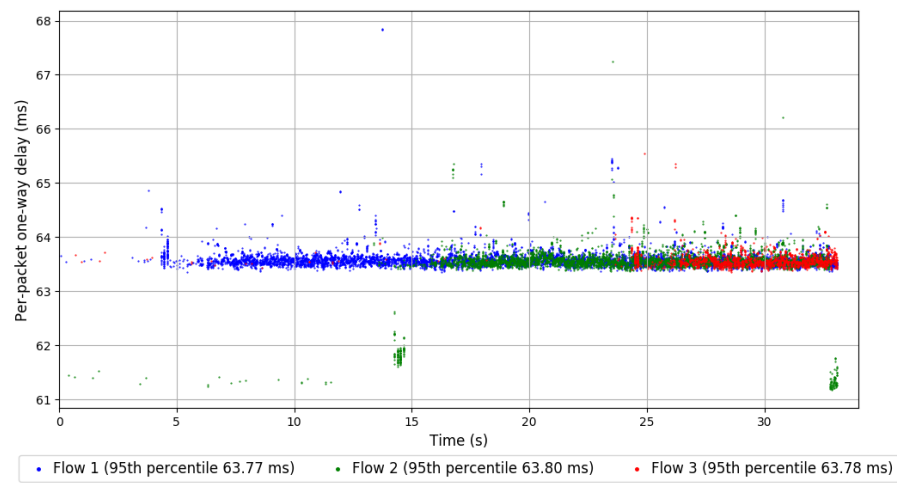
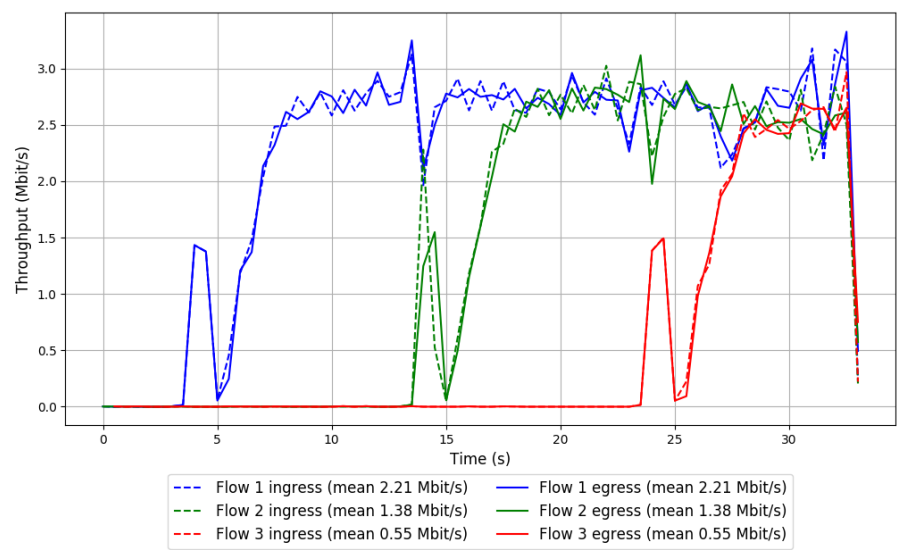
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.780 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

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

End at: 2017-12-06 13:09:43

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.09 Mbit/s

95th percentile per-packet one-way delay: 63.748 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.744 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.806 ms

Loss rate: 0.00%

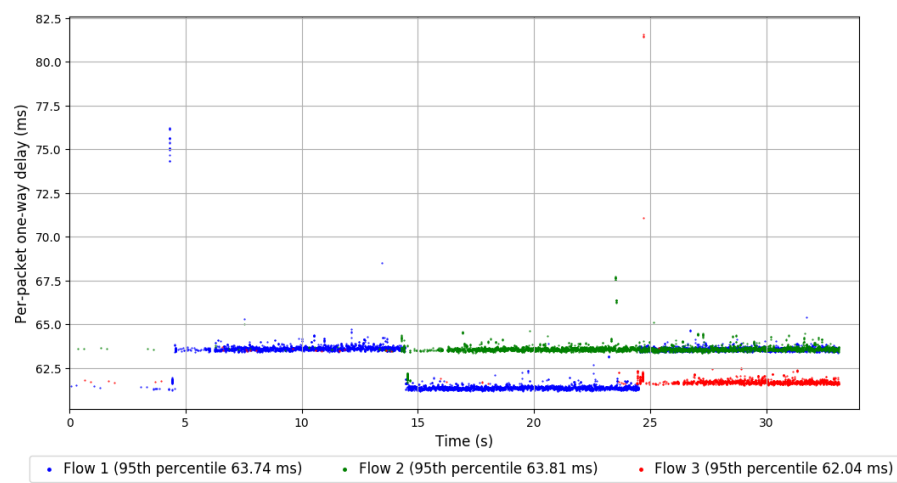
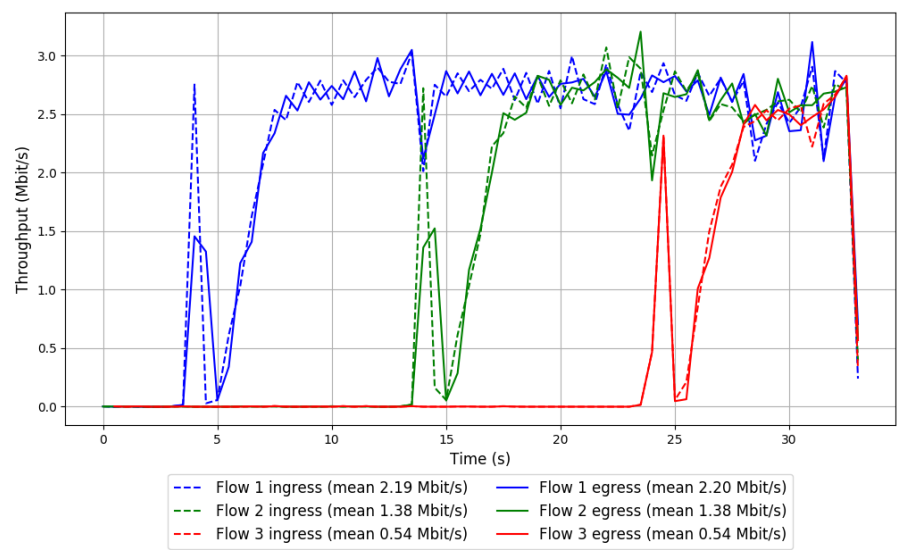
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 62.037 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-06 13:21:32

End at: 2017-12-06 13:22:02

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 63.801 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 61.881 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 64.162 ms

Loss rate: 0.00%

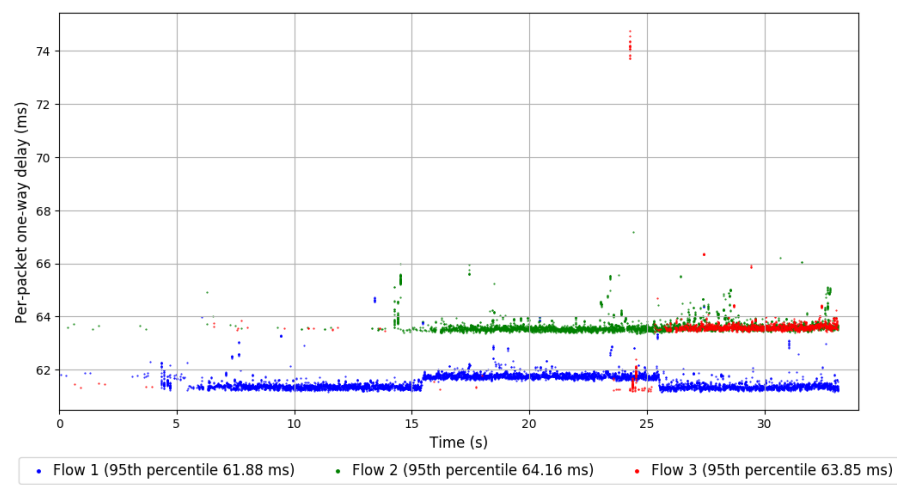
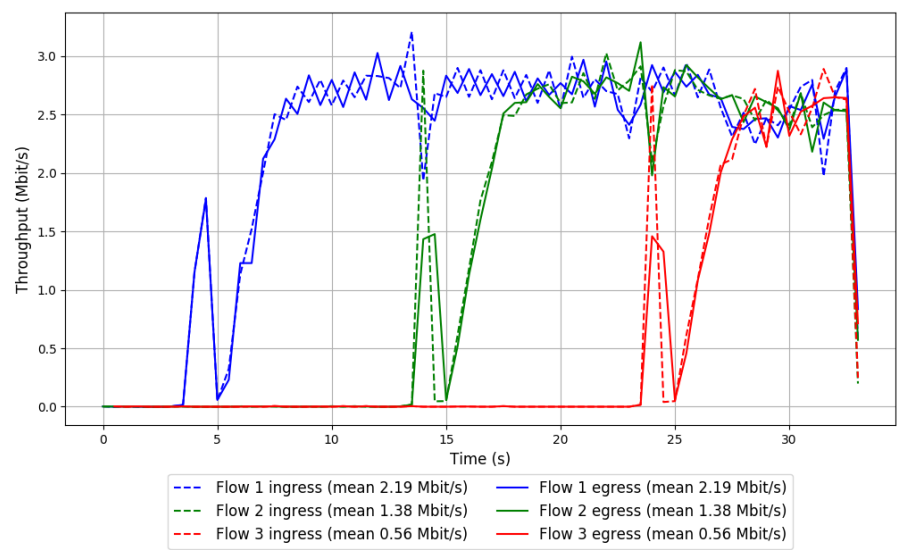
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 63.847 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-06 13:34:01

End at: 2017-12-06 13:34:31

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 63.704 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.657 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.750 ms

Loss rate: 0.00%

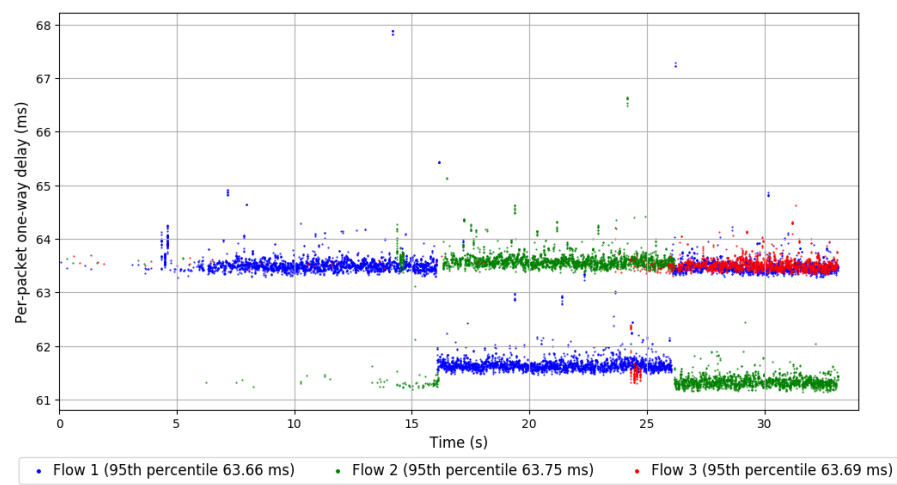
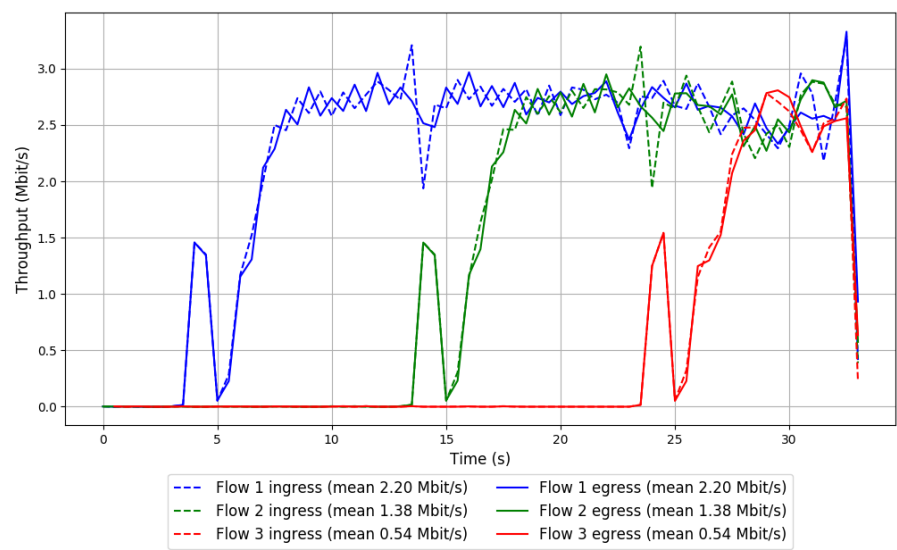
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 63.692 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-06 13:46:20

End at: 2017-12-06 13:46:50

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.08 Mbit/s

95th percentile per-packet one-way delay: 63.889 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 63.956 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.678 ms

Loss rate: 0.00%

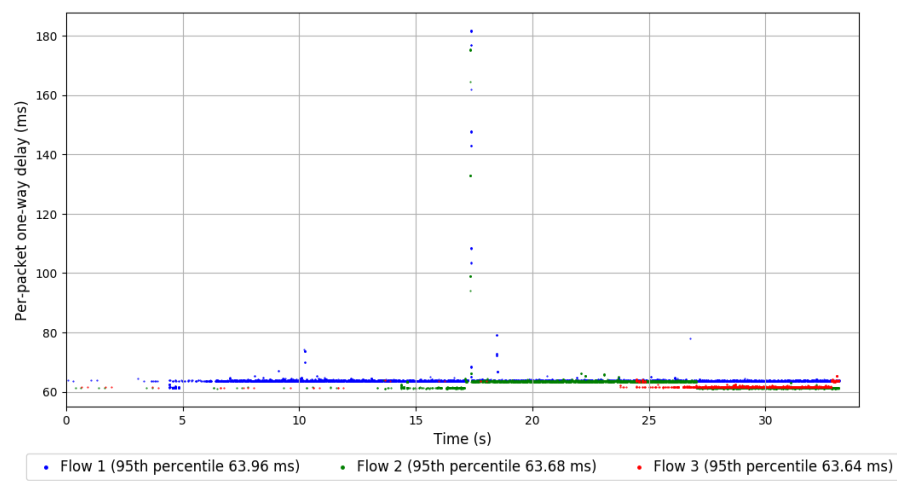
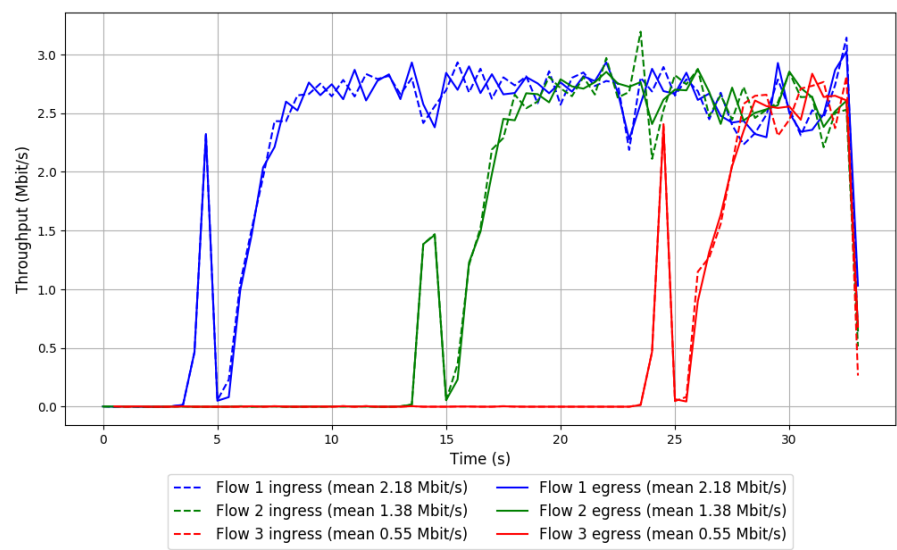
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.640 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-06 13:58:42

End at: 2017-12-06 13:59:12

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 63.711 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.623 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 63.792 ms

Loss rate: 0.00%

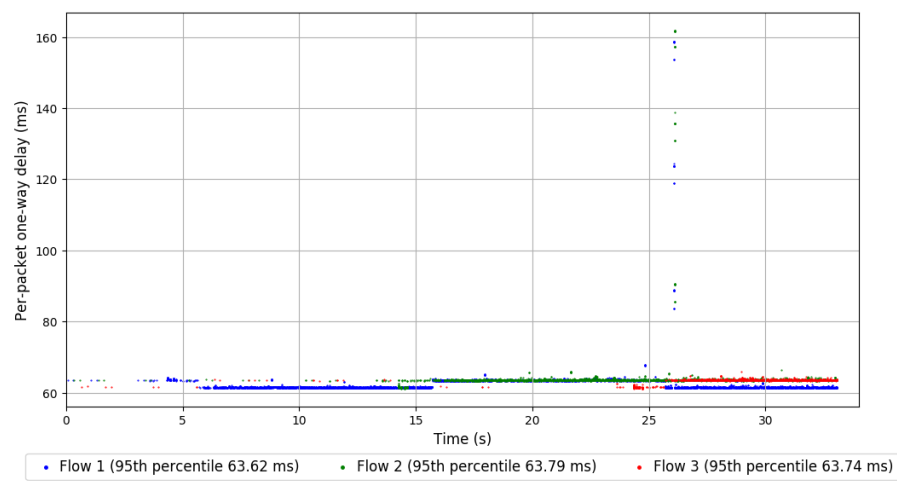
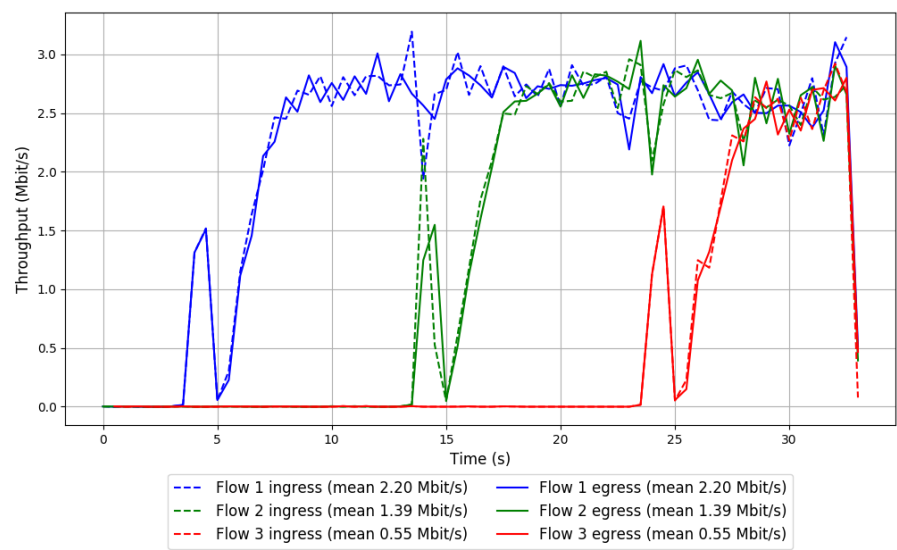
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.738 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

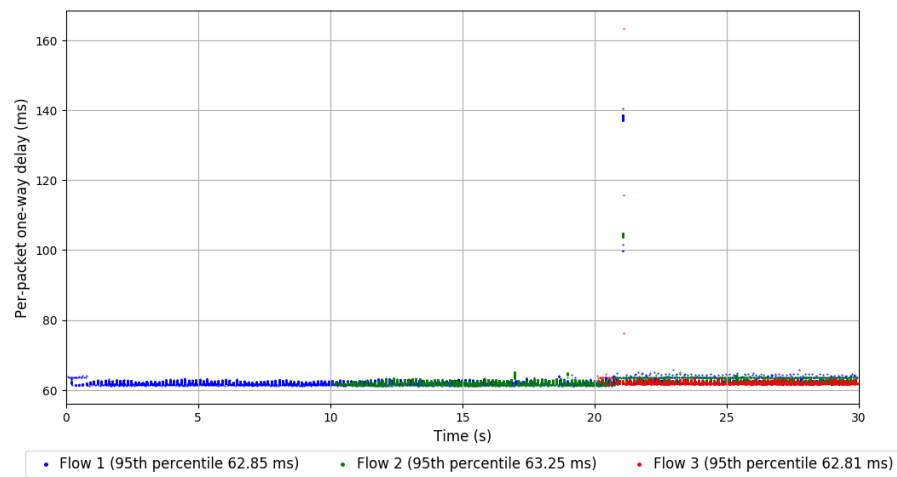
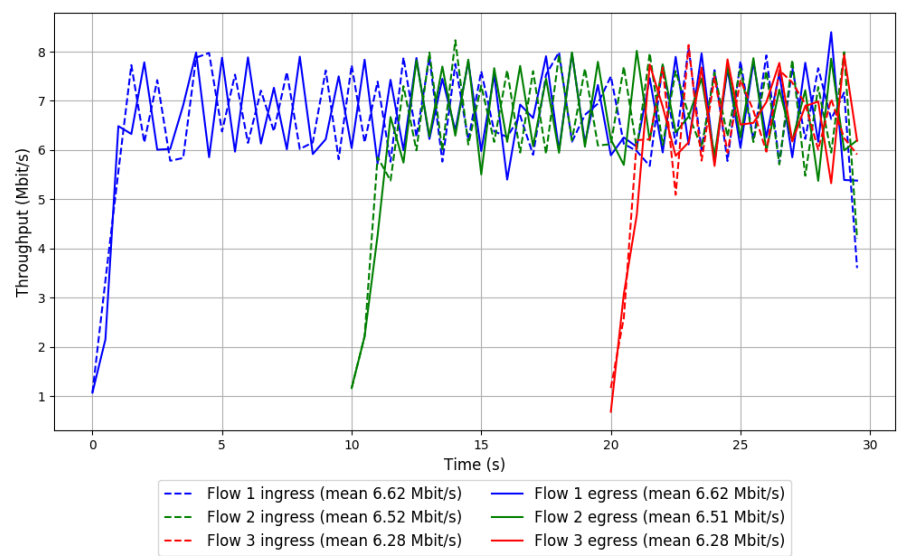


```
Run 1: Statistics of Sprout

Start at: 2017-12-06 12:10:43
End at: 2017-12-06 12:11:13

# Below is generated by plot.py at 2017-12-06 15:45:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.01 Mbit/s
95th percentile per-packet one-way delay: 62.931 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 62.853 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 6.51 Mbit/s
95th percentile per-packet one-way delay: 63.246 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 6.28 Mbit/s
95th percentile per-packet one-way delay: 62.811 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-06 12:22:57

End at: 2017-12-06 12:23:27

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.65 Mbit/s

95th percentile per-packet one-way delay: 64.497 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 64.533 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.21 Mbit/s

95th percentile per-packet one-way delay: 64.446 ms

Loss rate: 0.00%

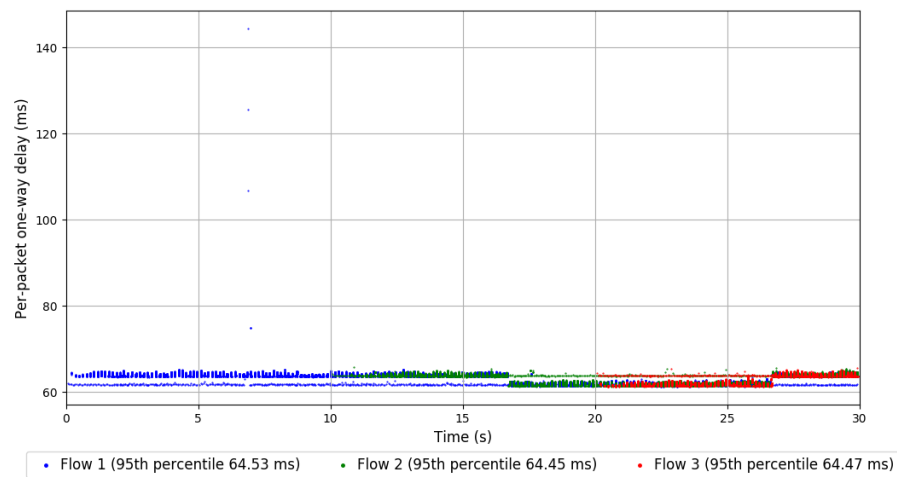
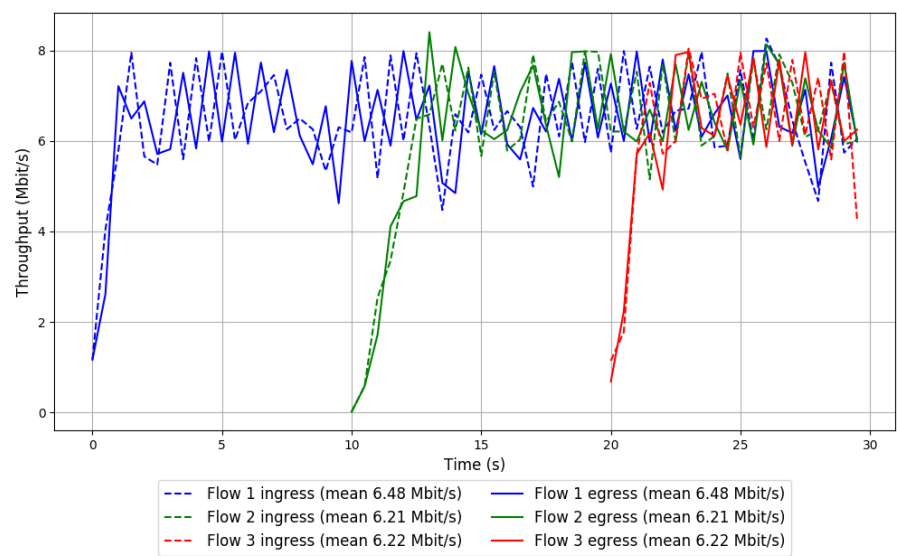
-- Flow 3:

Average throughput: 6.22 Mbit/s

95th percentile per-packet one-way delay: 64.471 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

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

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

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.83 Mbit/s

95th percentile per-packet one-way delay: 64.686 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 6.58 Mbit/s

95th percentile per-packet one-way delay: 64.685 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 6.27 Mbit/s

95th percentile per-packet one-way delay: 64.734 ms

Loss rate: 0.04%

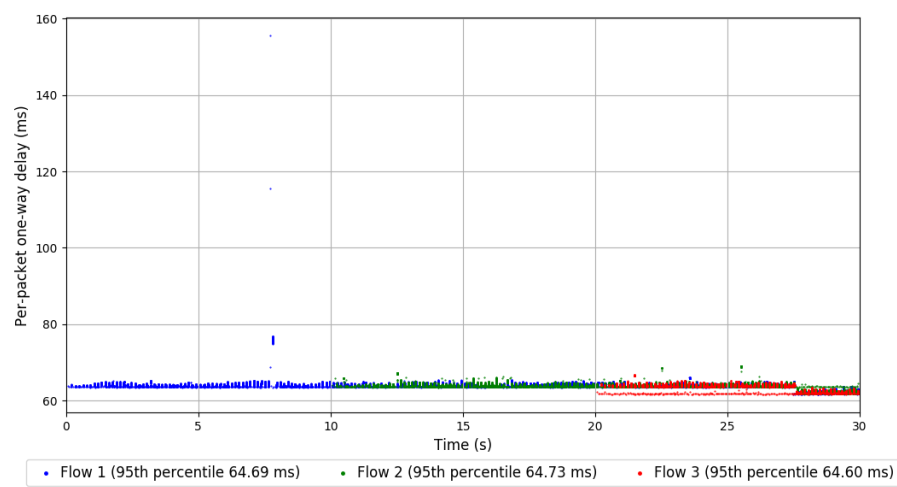
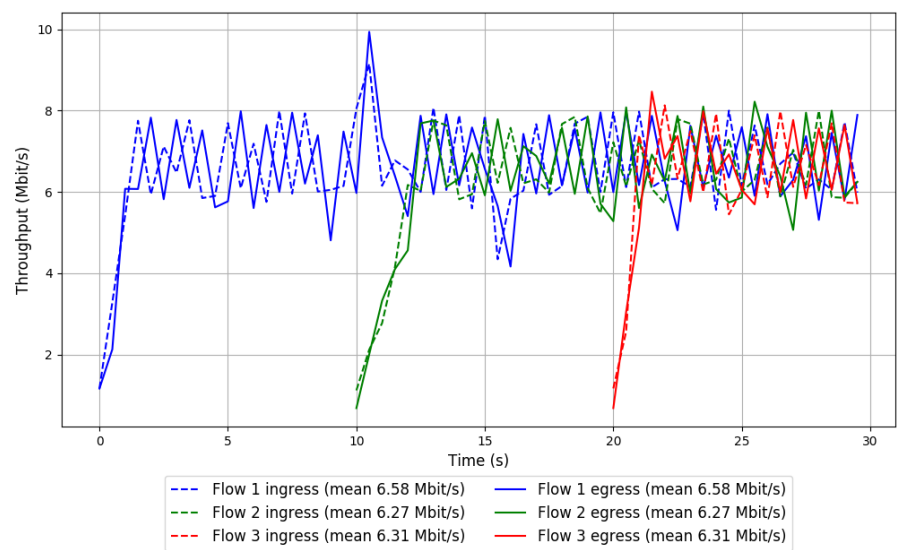
-- Flow 3:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 64.596 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-06 12:47:16

End at: 2017-12-06 12:47:46

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.16 Mbit/s

95th percentile per-packet one-way delay: 64.713 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 64.588 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.59 Mbit/s

95th percentile per-packet one-way delay: 64.803 ms

Loss rate: 0.00%

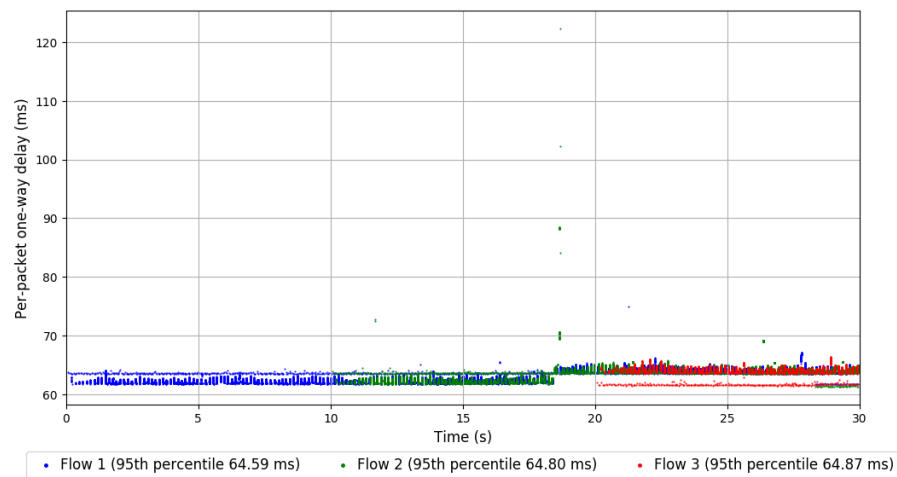
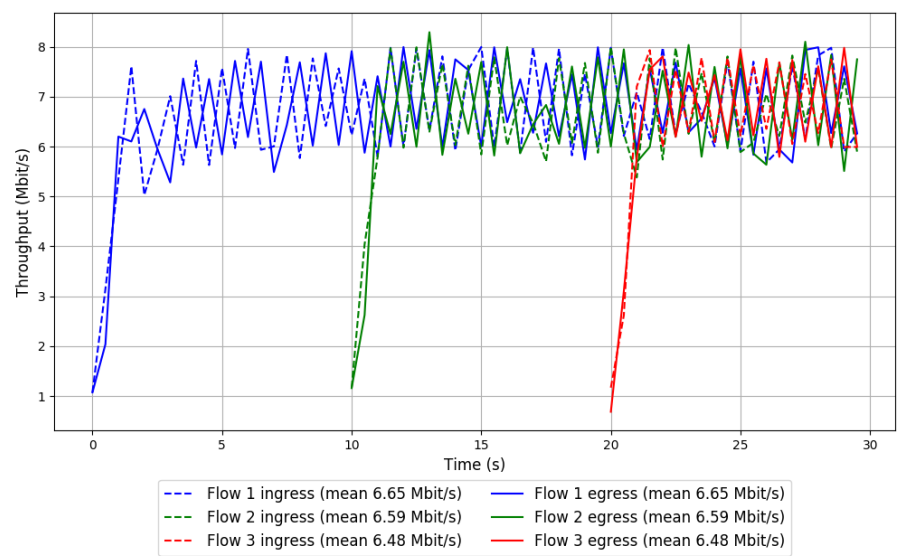
-- Flow 3:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 64.868 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-06 12:59:36

End at: 2017-12-06 13:00:06

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.03 Mbit/s

95th percentile per-packet one-way delay: 64.451 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 64.432 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 64.394 ms

Loss rate: 0.01%

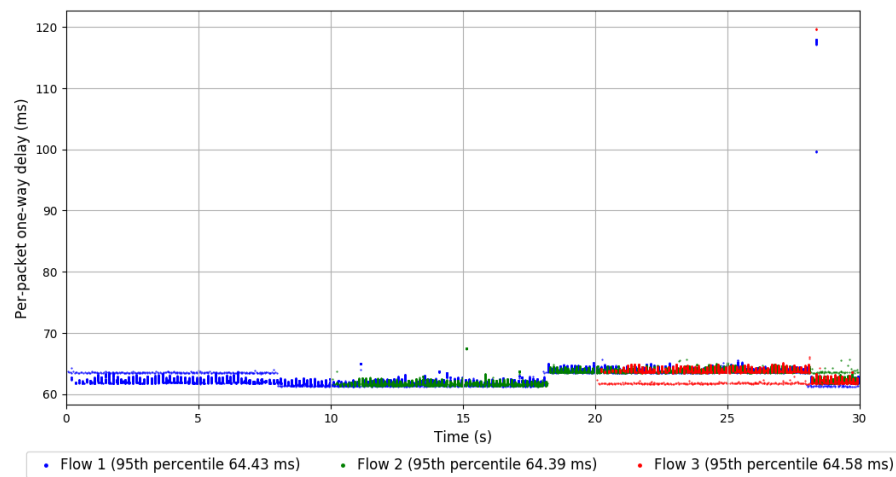
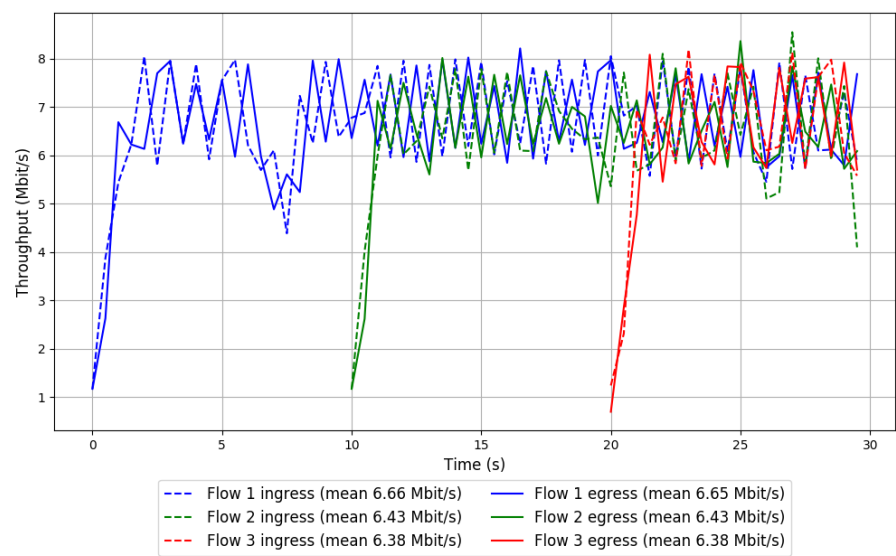
-- Flow 3:

Average throughput: 6.38 Mbit/s

95th percentile per-packet one-way delay: 64.580 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-06 13:11:52

End at: 2017-12-06 13:12:22

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.94 Mbit/s

95th percentile per-packet one-way delay: 64.809 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 64.864 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 64.763 ms

Loss rate: 0.00%

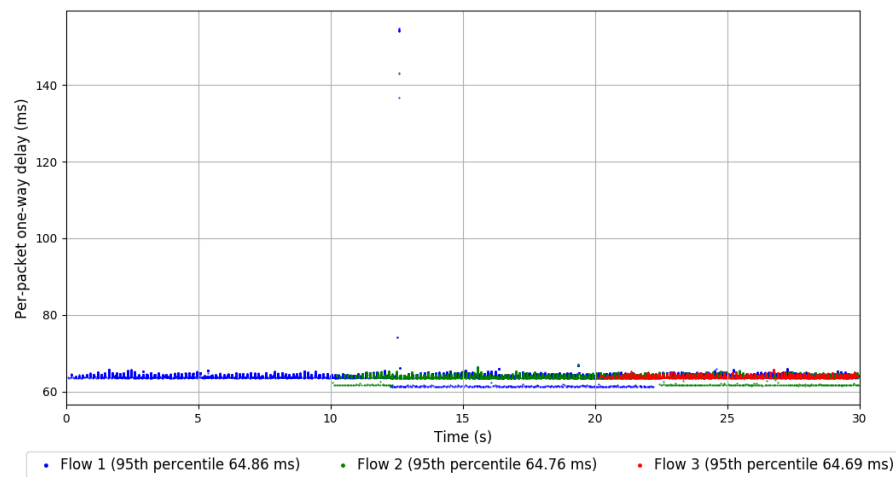
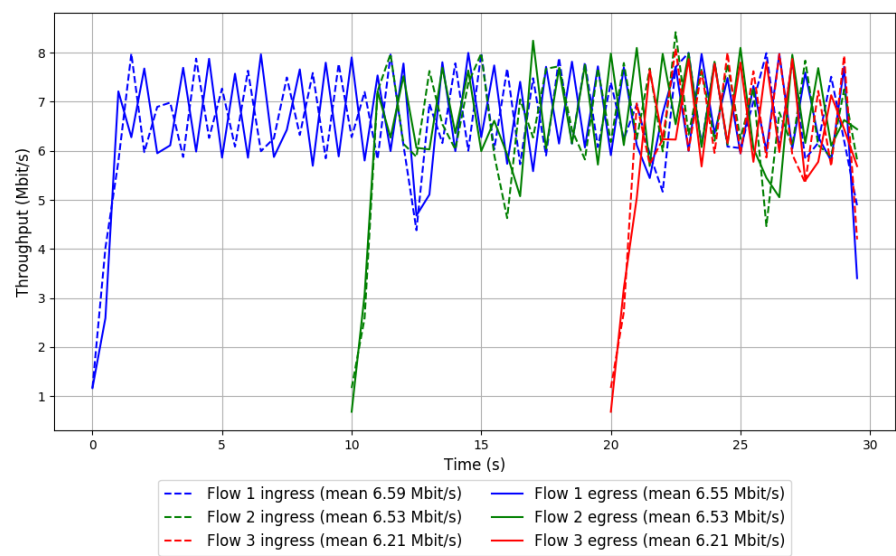
-- Flow 3:

Average throughput: 6.21 Mbit/s

95th percentile per-packet one-way delay: 64.690 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-06 13:24:13

End at: 2017-12-06 13:24:43

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.93 Mbit/s

95th percentile per-packet one-way delay: 63.440 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.59 Mbit/s

95th percentile per-packet one-way delay: 63.410 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 63.434 ms

Loss rate: 0.00%

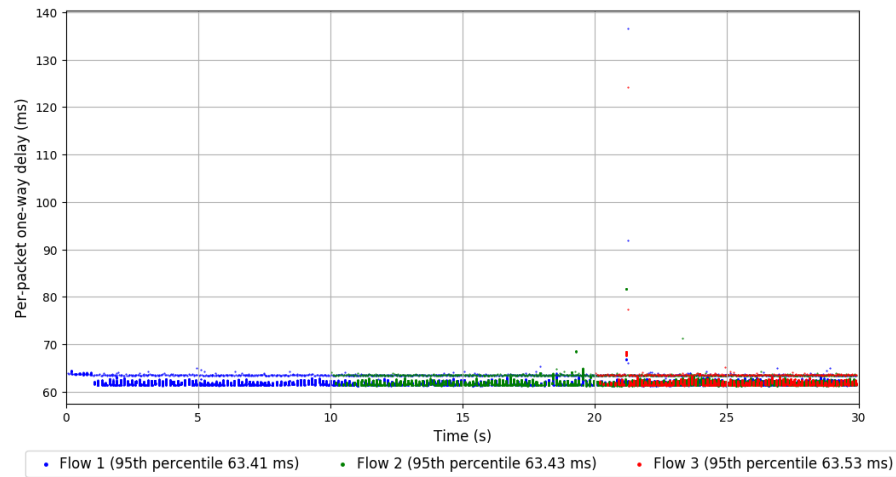
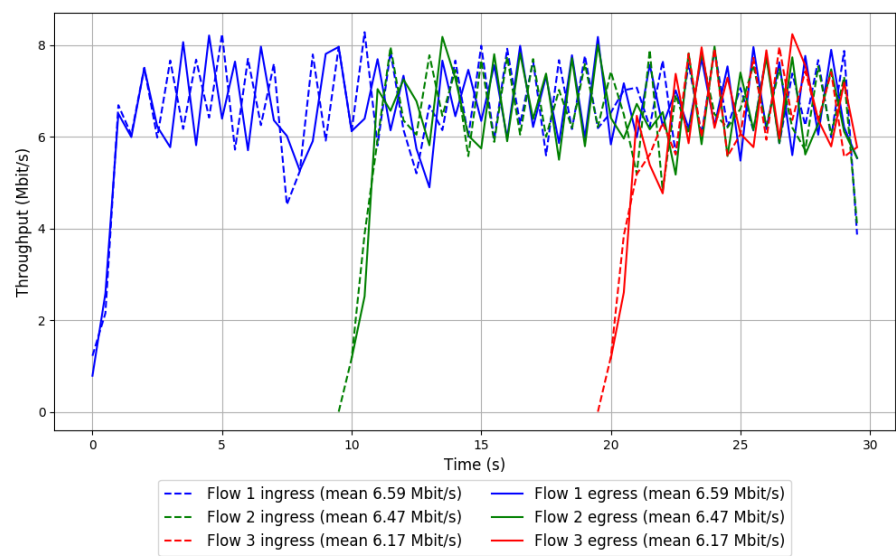
-- Flow 3:

Average throughput: 6.17 Mbit/s

95th percentile per-packet one-way delay: 63.533 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-06 13:36:42

End at: 2017-12-06 13:37:12

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.90 Mbit/s

95th percentile per-packet one-way delay: 64.437 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 64.376 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 64.627 ms

Loss rate: 0.01%

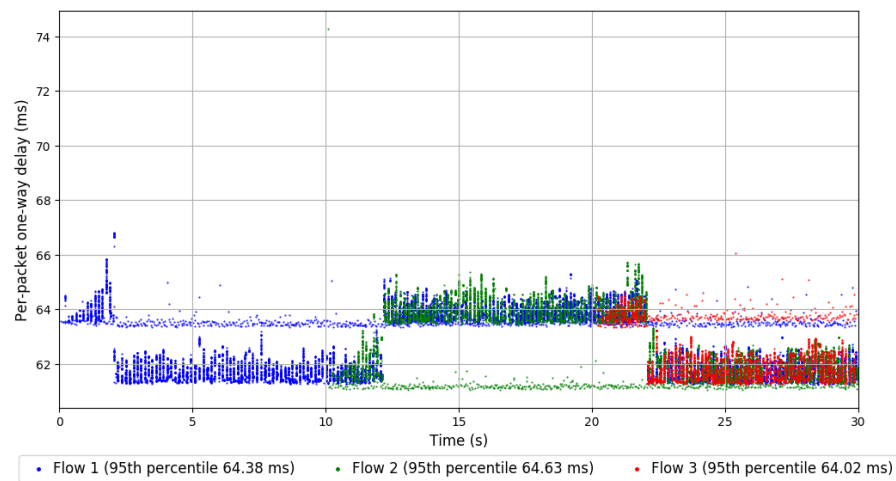
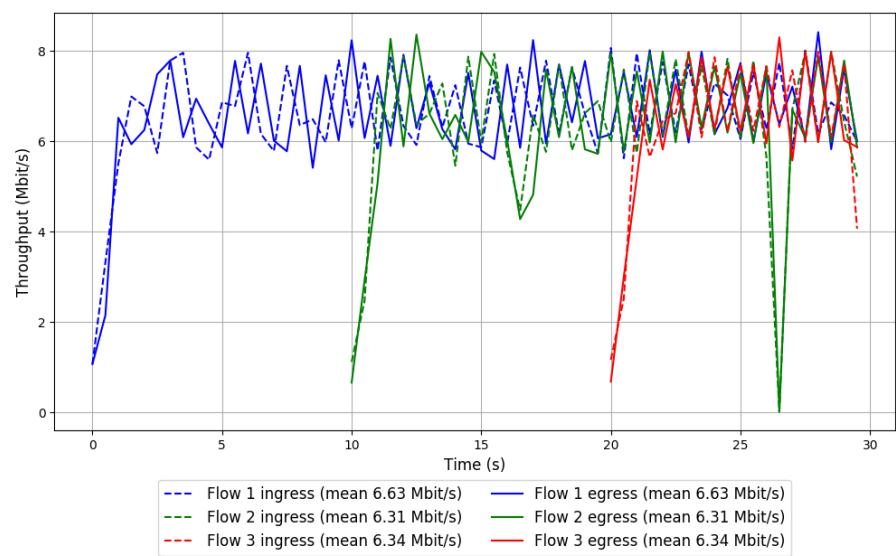
-- Flow 3:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 64.015 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-06 13:48:59

End at: 2017-12-06 13:49:29

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.81 Mbit/s

95th percentile per-packet one-way delay: 64.817 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 6.49 Mbit/s

95th percentile per-packet one-way delay: 64.736 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 64.824 ms

Loss rate: 0.00%

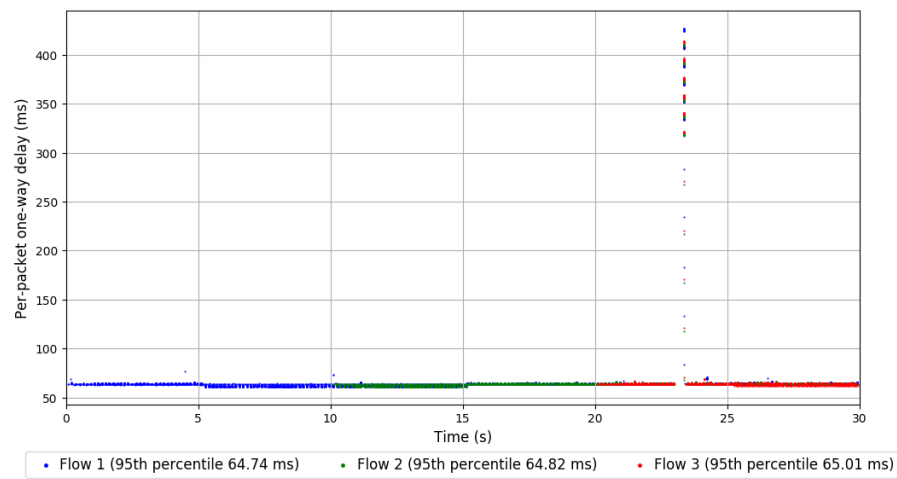
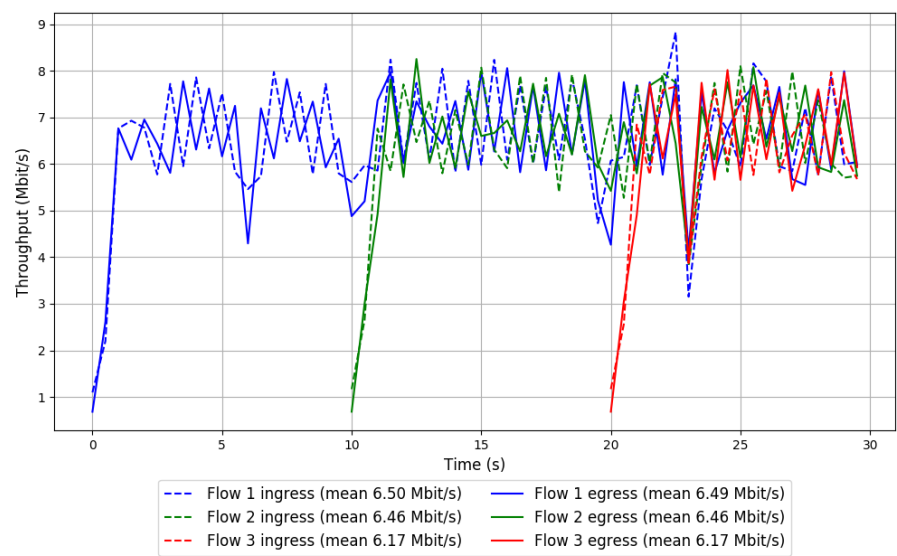
-- Flow 3:

Average throughput: 6.17 Mbit/s

95th percentile per-packet one-way delay: 65.014 ms

Loss rate: 0.04%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-06 14:01:20

End at: 2017-12-06 14:01:50

Below is generated by plot.py at 2017-12-06 15:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.54 Mbit/s

95th percentile per-packet one-way delay: 64.718 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 6.23 Mbit/s

95th percentile per-packet one-way delay: 64.614 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 64.911 ms

Loss rate: 0.06%

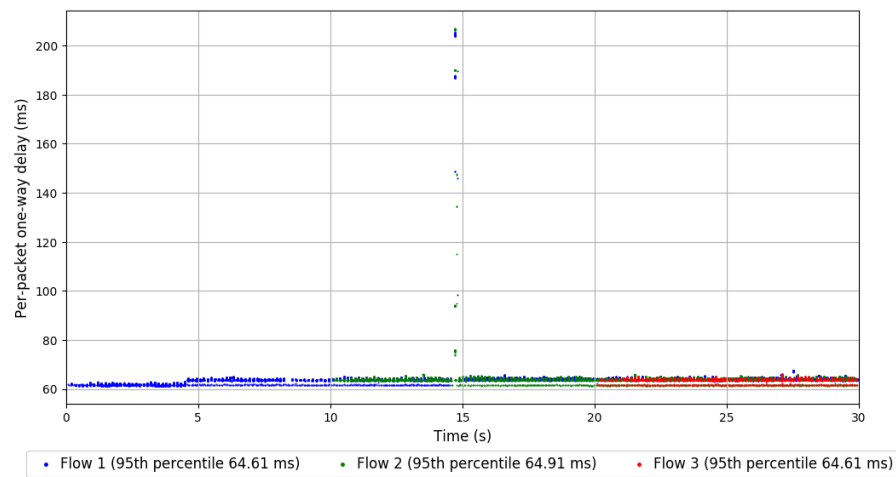
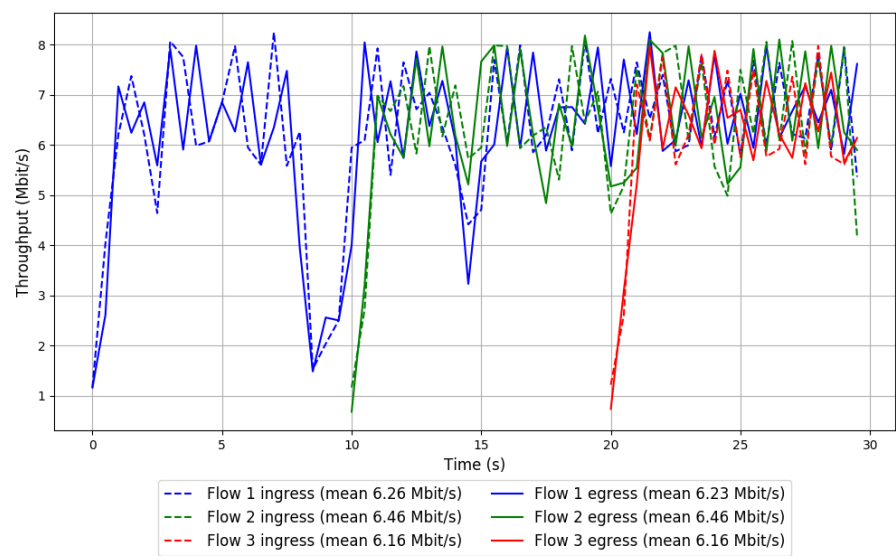
-- Flow 3:

Average throughput: 6.16 Mbit/s

95th percentile per-packet one-way delay: 64.606 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

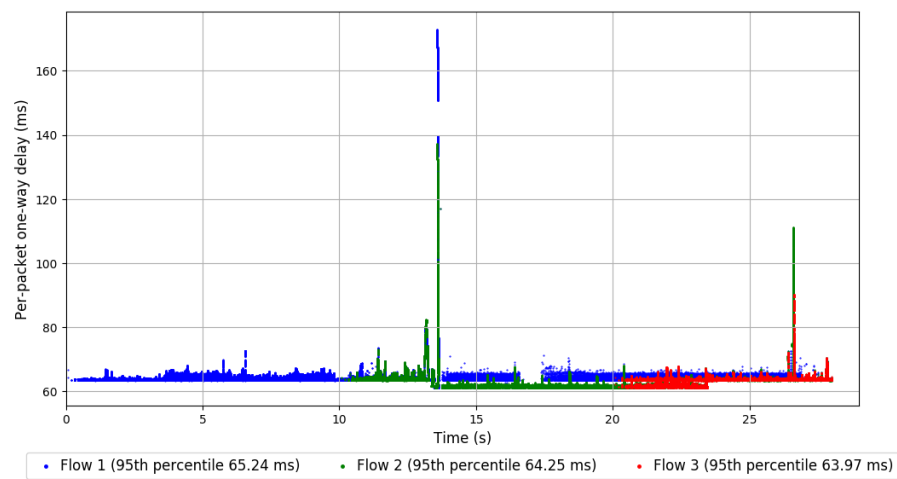
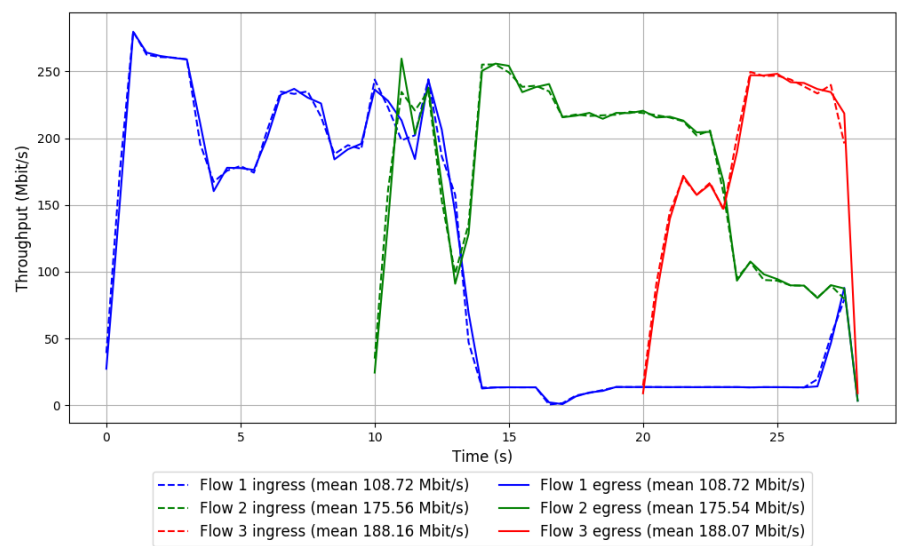


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-06 12:16:49
End at: 2017-12-06 12:17:19

# Below is generated by plot.py at 2017-12-06 15:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 274.80 Mbit/s
95th percentile per-packet one-way delay: 64.768 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 108.72 Mbit/s
95th percentile per-packet one-way delay: 65.236 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 175.54 Mbit/s
95th percentile per-packet one-way delay: 64.249 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 188.07 Mbit/s
95th percentile per-packet one-way delay: 63.972 ms
Loss rate: 0.04%
```


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

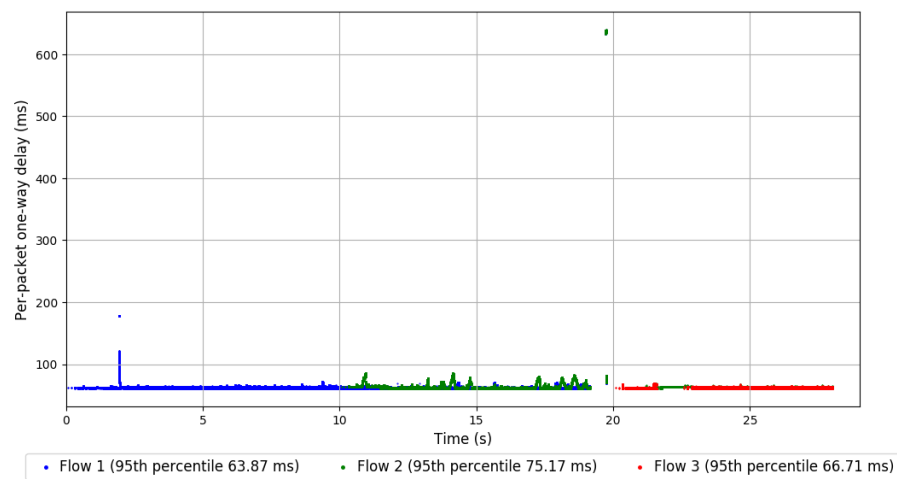
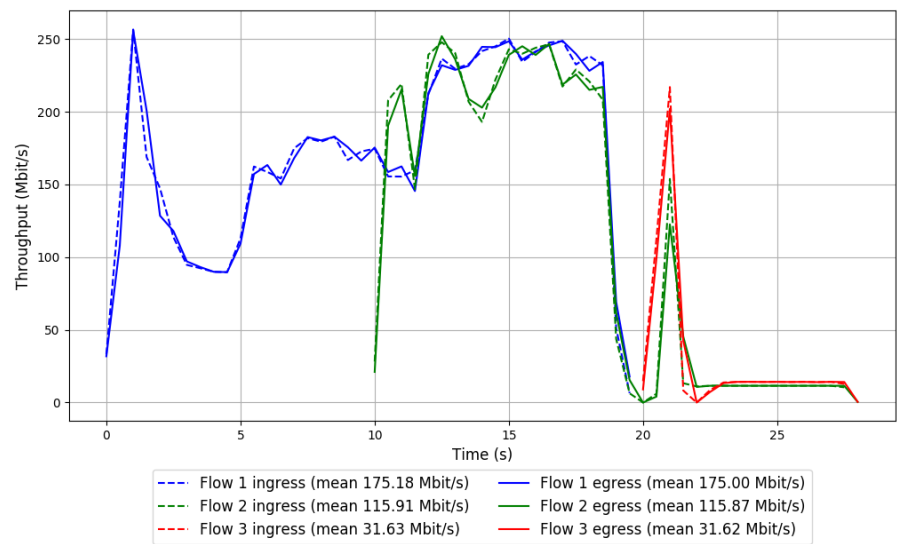


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-06 12:29:01
End at: 2017-12-06 12:29:31

# Below is generated by plot.py at 2017-12-06 15:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 206.64 Mbit/s
95th percentile per-packet one-way delay: 68.247 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 175.00 Mbit/s
95th percentile per-packet one-way delay: 63.869 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 115.87 Mbit/s
95th percentile per-packet one-way delay: 75.170 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 31.62 Mbit/s
95th percentile per-packet one-way delay: 66.709 ms
Loss rate: 0.00%
```

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

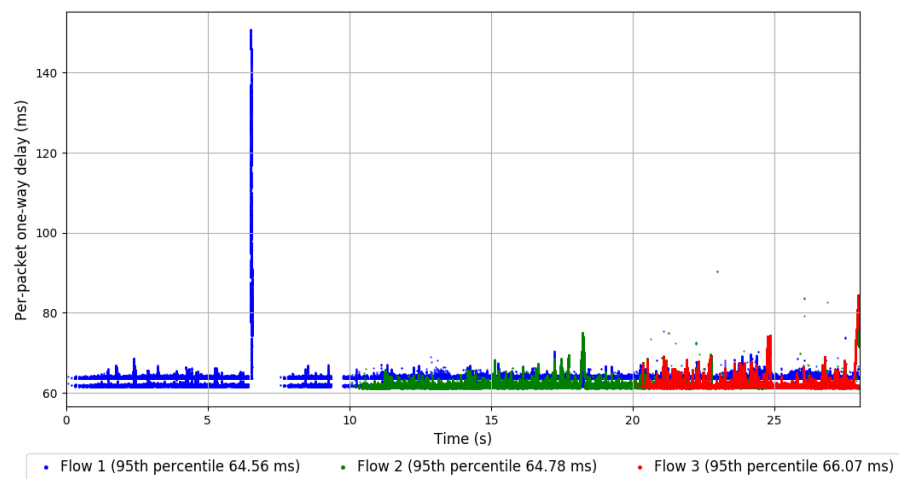
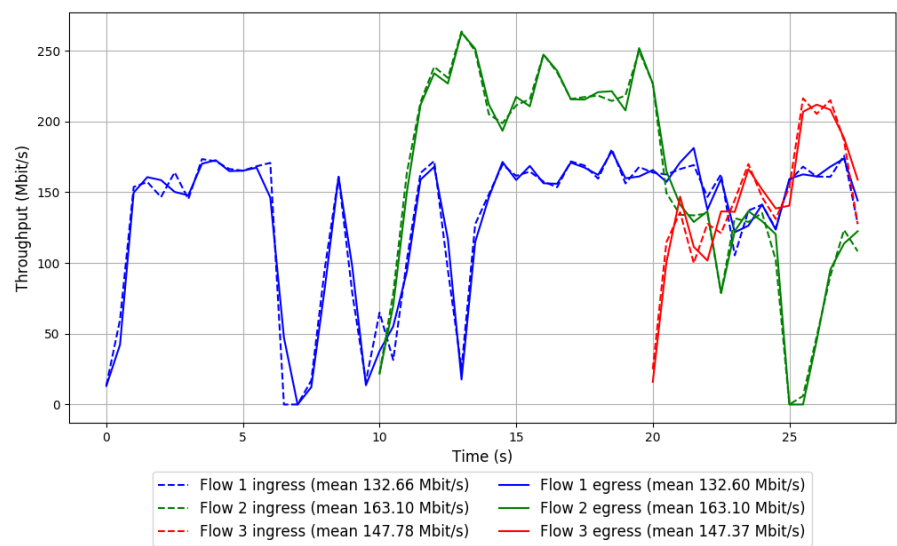


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-06 12:40:56
End at: 2017-12-06 12:41:26

# Below is generated by plot.py at 2017-12-06 15:49:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 278.73 Mbit/s
95th percentile per-packet one-way delay: 64.858 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 132.60 Mbit/s
95th percentile per-packet one-way delay: 64.559 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 163.10 Mbit/s
95th percentile per-packet one-way delay: 64.780 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 147.37 Mbit/s
95th percentile per-packet one-way delay: 66.067 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-06 12:53:29

End at: 2017-12-06 12:53:59

Below is generated by plot.py at 2017-12-06 15:51:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 326.45 Mbit/s

95th percentile per-packet one-way delay: 65.263 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 165.29 Mbit/s

95th percentile per-packet one-way delay: 64.950 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 181.30 Mbit/s

95th percentile per-packet one-way delay: 65.140 ms

Loss rate: 0.02%

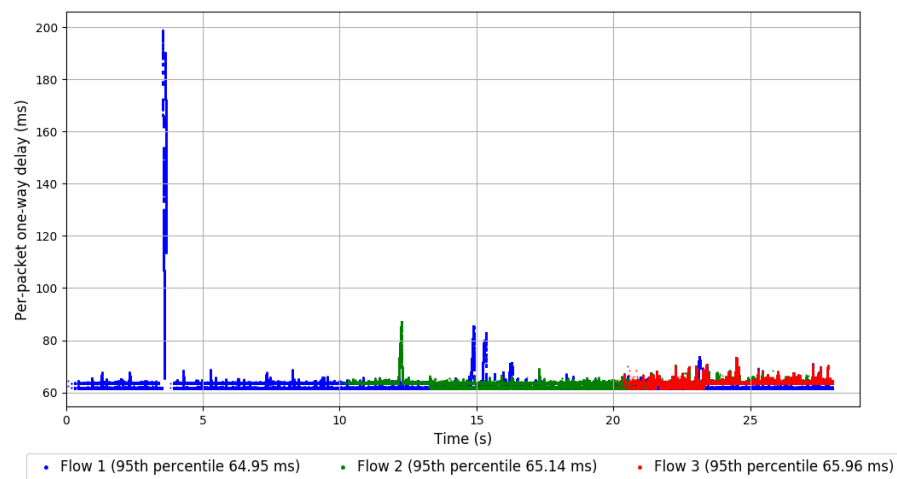
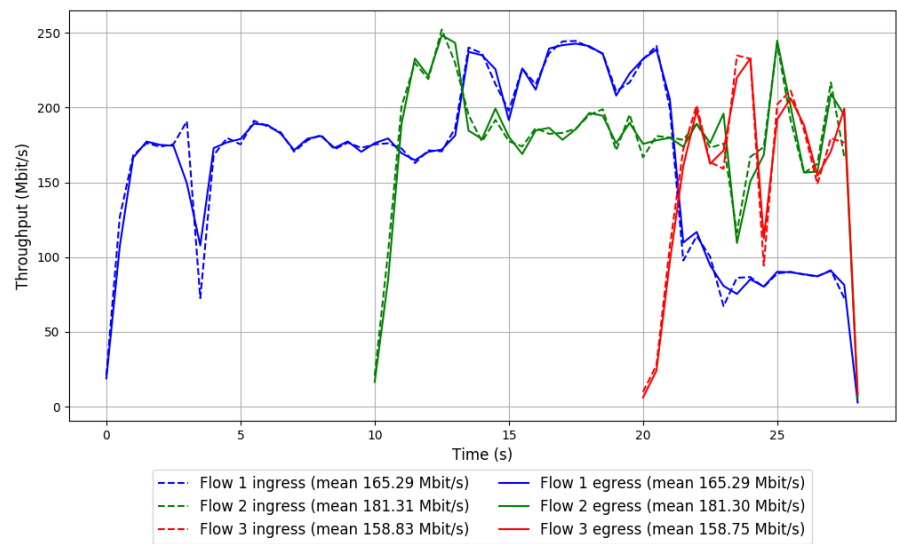
-- Flow 3:

Average throughput: 158.75 Mbit/s

95th percentile per-packet one-way delay: 65.957 ms

Loss rate: 0.08%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-06 13:05:46

End at: 2017-12-06 13:06:16

Below is generated by plot.py at 2017-12-06 15:51:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 267.33 Mbit/s

95th percentile per-packet one-way delay: 64.627 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 170.69 Mbit/s

95th percentile per-packet one-way delay: 63.986 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 96.93 Mbit/s

95th percentile per-packet one-way delay: 65.861 ms

Loss rate: 0.00%

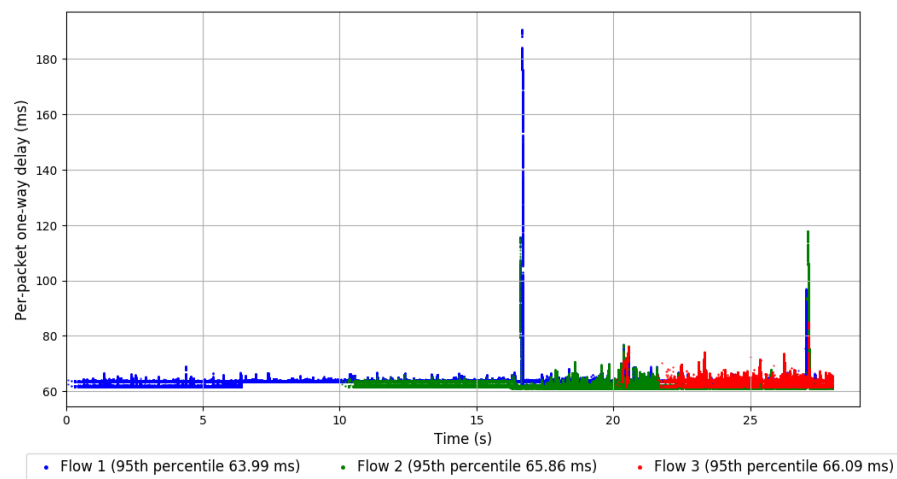
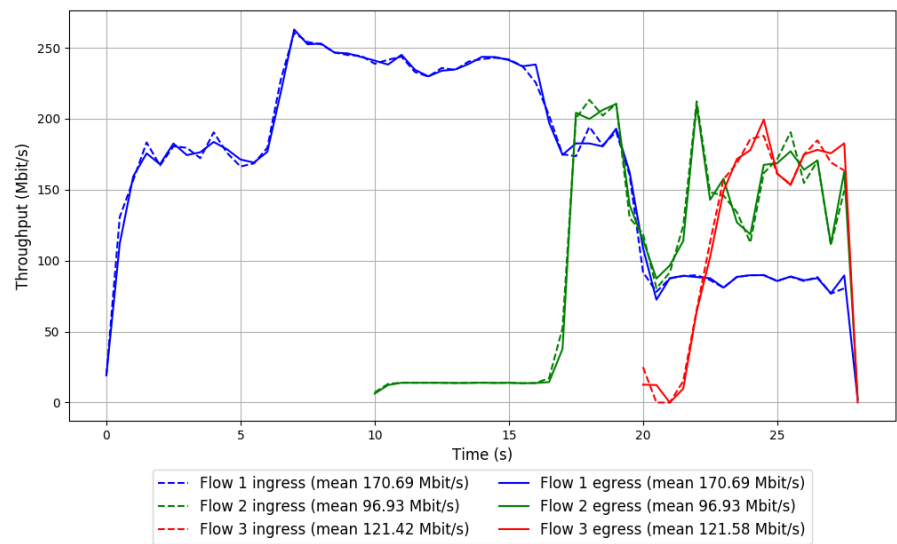
-- Flow 3:

Average throughput: 121.58 Mbit/s

95th percentile per-packet one-way delay: 66.088 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-06 13:18:03

End at: 2017-12-06 13:18:33

Below is generated by plot.py at 2017-12-06 15:51:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 308.50 Mbit/s

95th percentile per-packet one-way delay: 65.248 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 196.02 Mbit/s

95th percentile per-packet one-way delay: 65.143 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 172.66 Mbit/s

95th percentile per-packet one-way delay: 65.364 ms

Loss rate: 0.00%

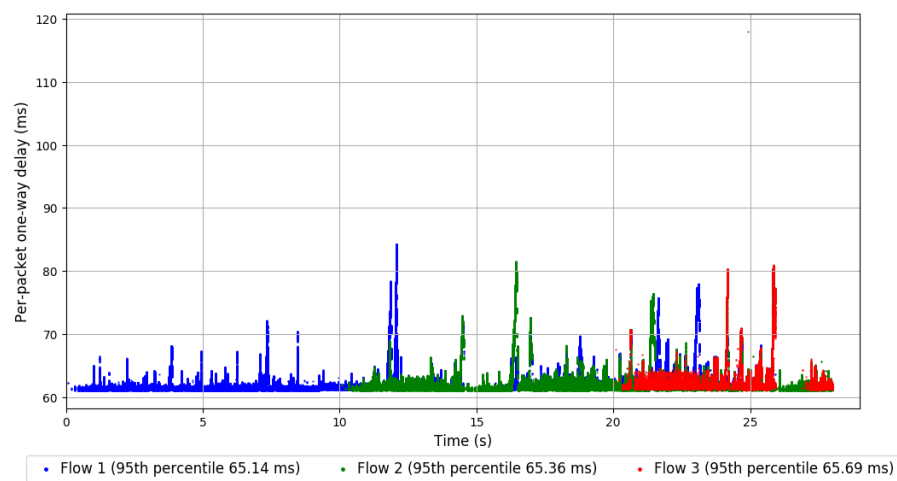
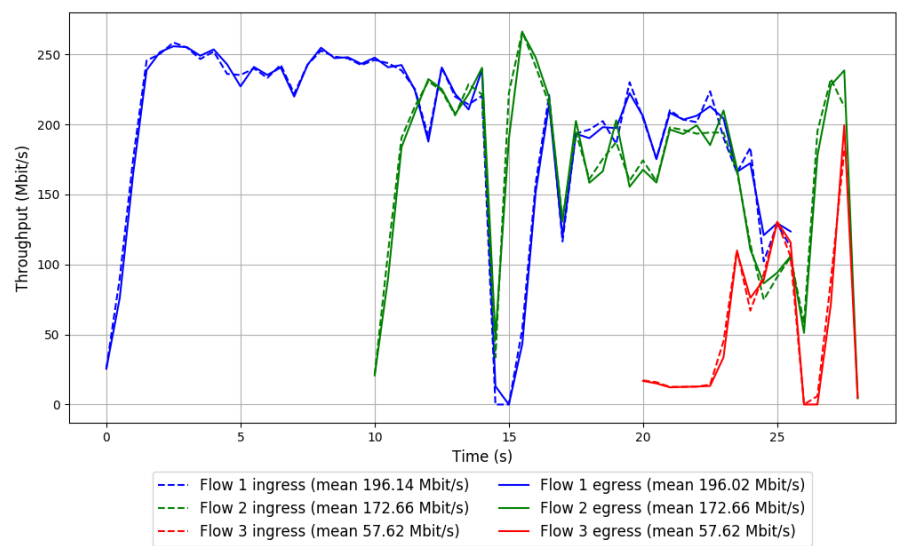
-- Flow 3:

Average throughput: 57.62 Mbit/s

95th percentile per-packet one-way delay: 65.691 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-06 13:30:29

End at: 2017-12-06 13:30:59

Below is generated by plot.py at 2017-12-06 15:51:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.80 Mbit/s

95th percentile per-packet one-way delay: 64.173 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 170.76 Mbit/s

95th percentile per-packet one-way delay: 64.047 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 120.17 Mbit/s

95th percentile per-packet one-way delay: 65.821 ms

Loss rate: 0.07%

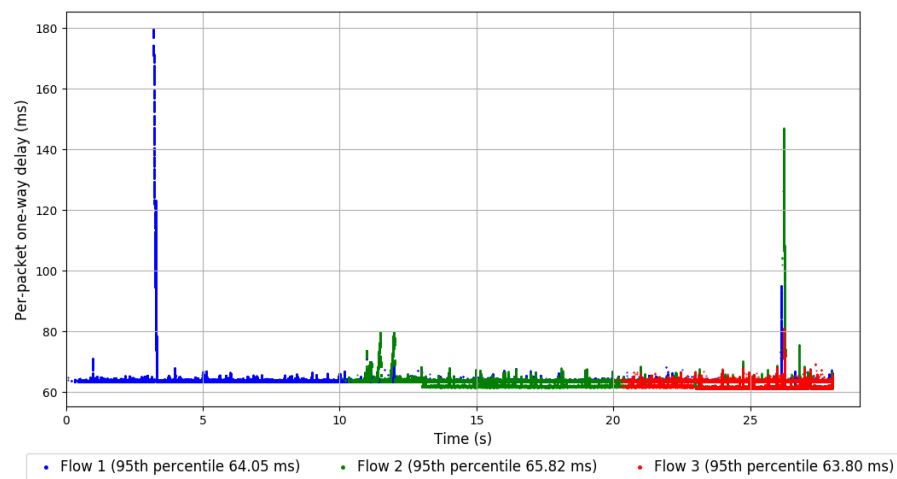
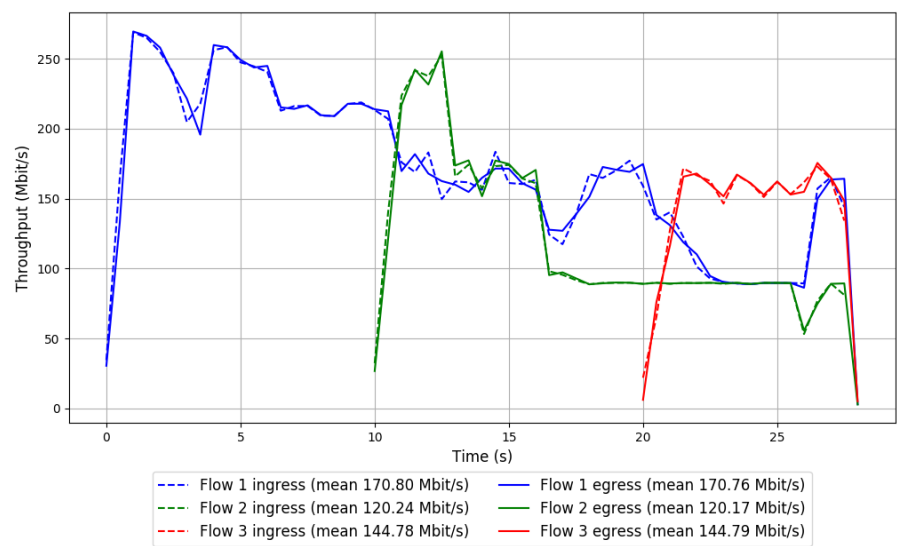
-- Flow 3:

Average throughput: 144.79 Mbit/s

95th percentile per-packet one-way delay: 63.802 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-06 13:43:01

End at: 2017-12-06 13:43:31

Below is generated by plot.py at 2017-12-06 15:51:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 176.51 Mbit/s

95th percentile per-packet one-way delay: 63.816 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 53.37 Mbit/s

95th percentile per-packet one-way delay: 63.882 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 186.00 Mbit/s

95th percentile per-packet one-way delay: 63.761 ms

Loss rate: 0.00%

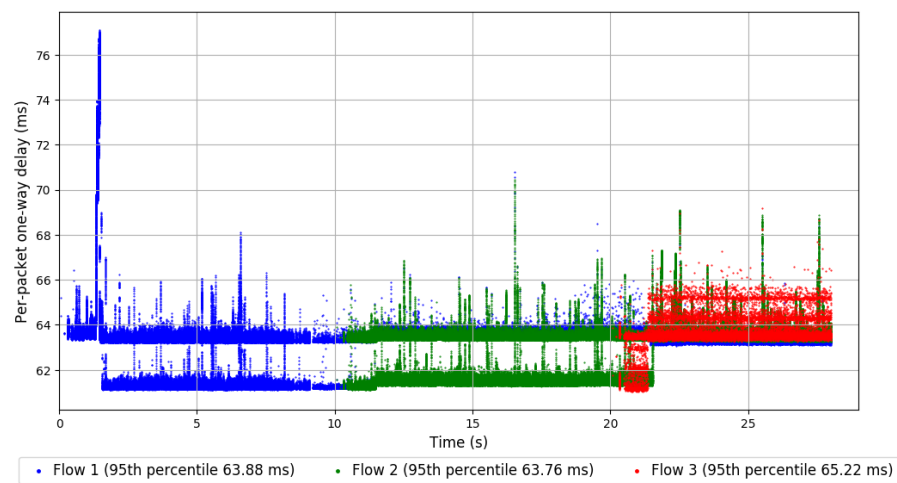
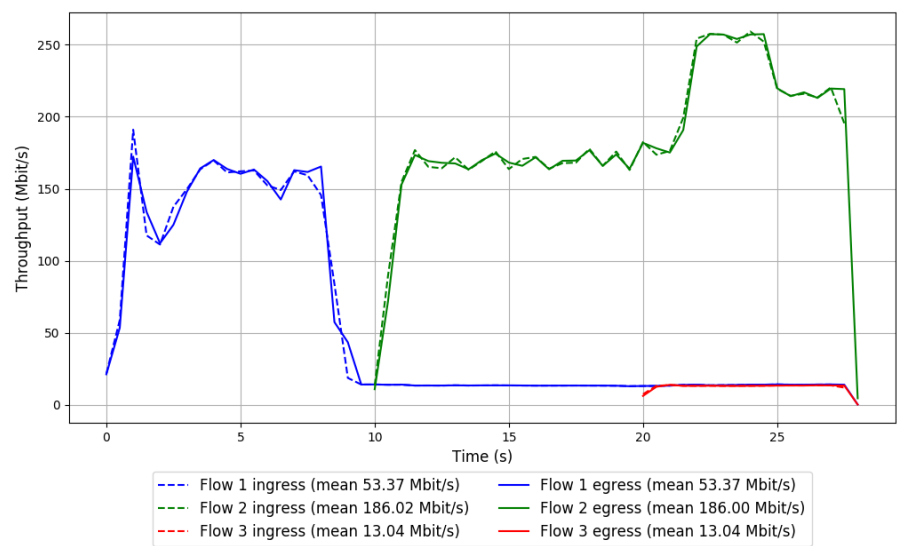
-- Flow 3:

Average throughput: 13.04 Mbit/s

95th percentile per-packet one-way delay: 65.219 ms

Loss rate: 0.00%

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

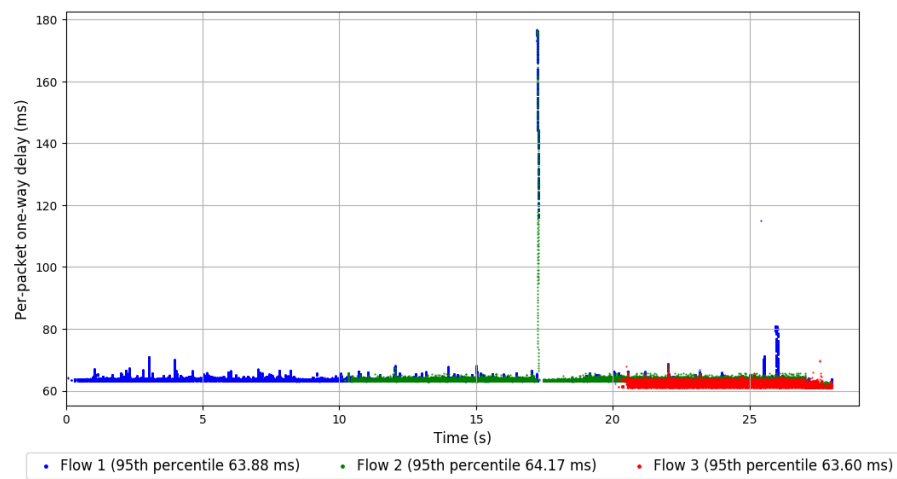
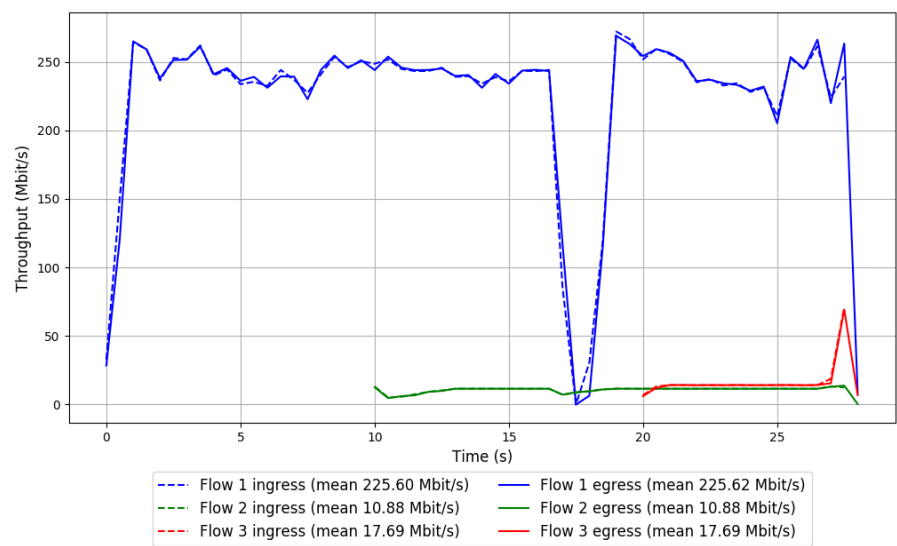


```
Run 9: Statistics of TaoVA-100x

Start at: 2017-12-06 13:55:15
End at: 2017-12-06 13:55:45

# Below is generated by plot.py at 2017-12-06 15:55:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.61 Mbit/s
95th percentile per-packet one-way delay: 63.877 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 225.62 Mbit/s
95th percentile per-packet one-way delay: 63.876 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 10.88 Mbit/s
95th percentile per-packet one-way delay: 64.172 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.69 Mbit/s
95th percentile per-packet one-way delay: 63.597 ms
Loss rate: 0.00%
```


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

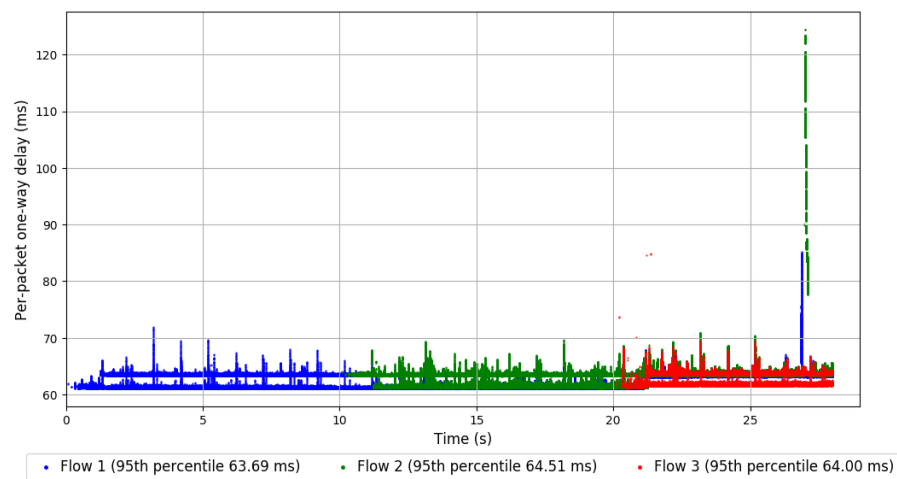
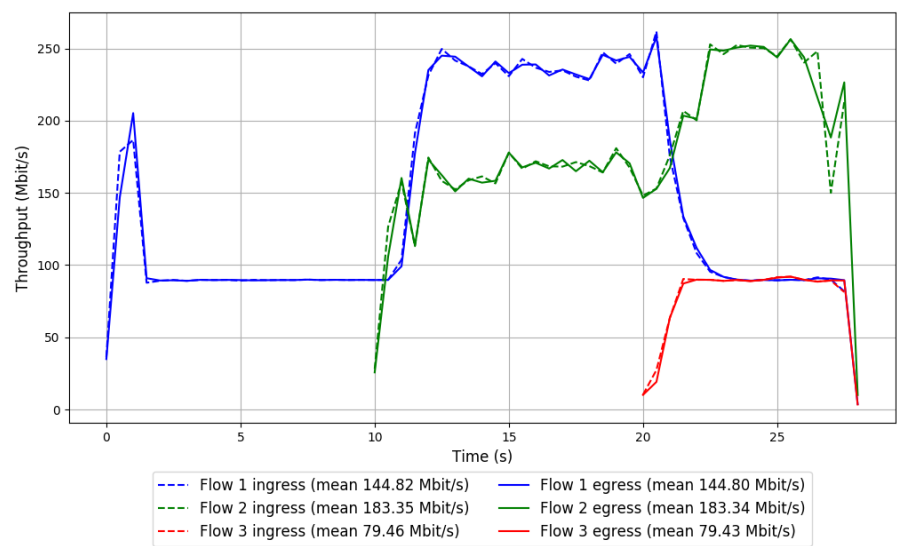


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-06 14:07:31
End at: 2017-12-06 14:08:01

# Below is generated by plot.py at 2017-12-06 15:57:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 285.07 Mbit/s
95th percentile per-packet one-way delay: 64.043 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 144.80 Mbit/s
95th percentile per-packet one-way delay: 63.691 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 183.34 Mbit/s
95th percentile per-packet one-way delay: 64.511 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 79.43 Mbit/s
95th percentile per-packet one-way delay: 64.002 ms
Loss rate: 0.02%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-06 12:17:56

End at: 2017-12-06 12:18:26

Below is generated by plot.py at 2017-12-06 15:57:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.98 Mbit/s

95th percentile per-packet one-way delay: 64.262 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 18.81 Mbit/s

95th percentile per-packet one-way delay: 64.027 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.48 Mbit/s

95th percentile per-packet one-way delay: 64.359 ms

Loss rate: 0.00%

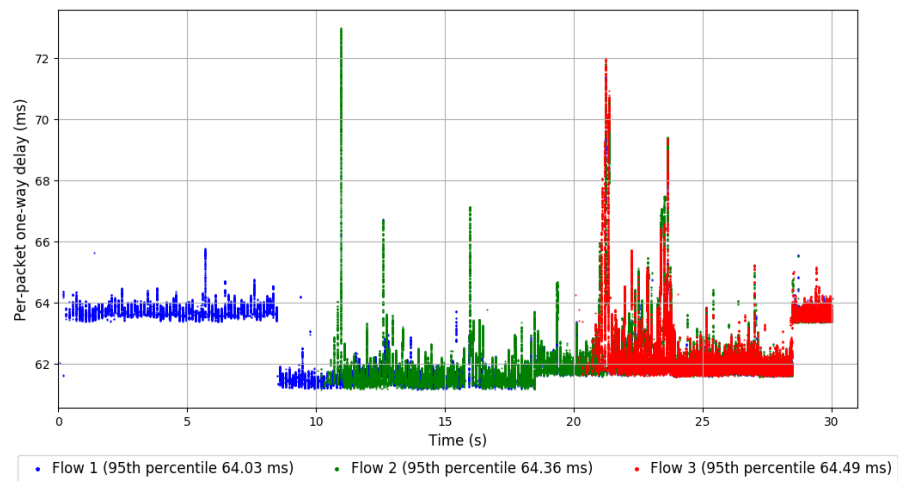
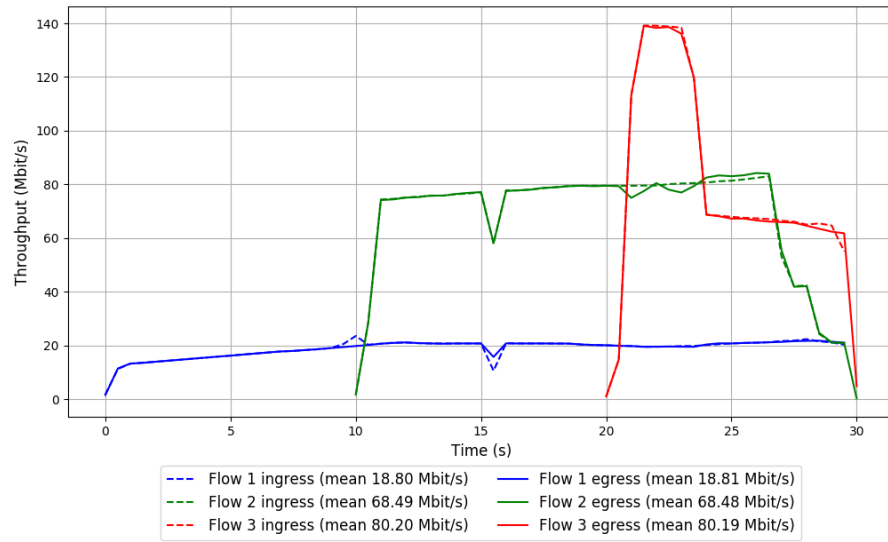
-- Flow 3:

Average throughput: 80.19 Mbit/s

95th percentile per-packet one-way delay: 64.494 ms

Loss rate: 0.03%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

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

End at: 2017-12-06 12:30:31

Below is generated by plot.py at 2017-12-06 15:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.78 Mbit/s

95th percentile per-packet one-way delay: 64.389 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 63.08 Mbit/s

95th percentile per-packet one-way delay: 64.695 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.55 Mbit/s

95th percentile per-packet one-way delay: 63.783 ms

Loss rate: 0.00%

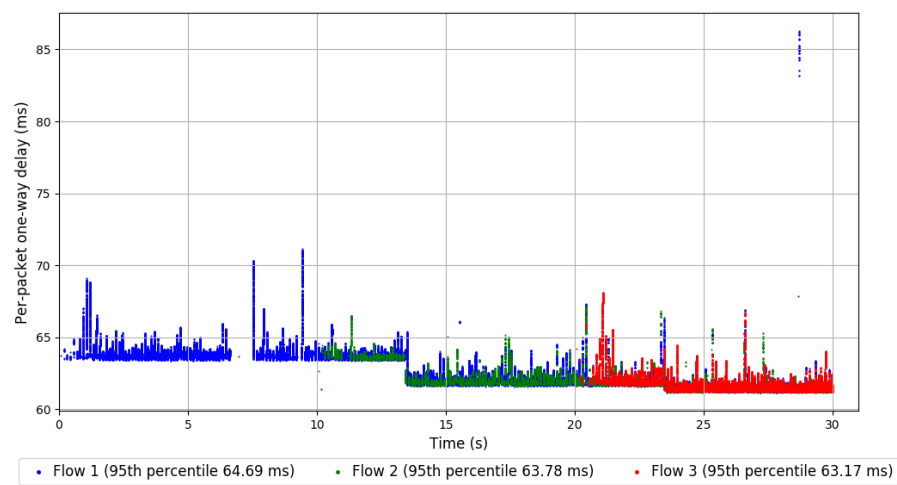
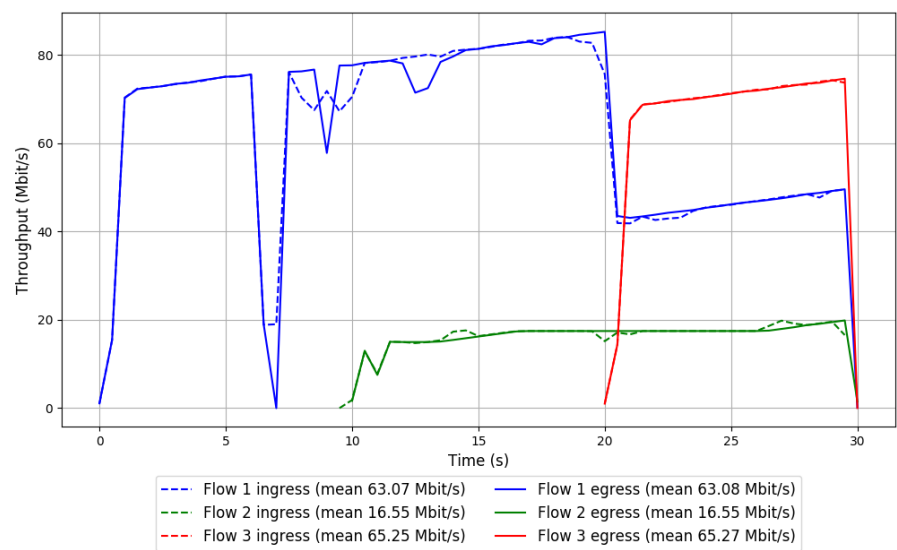
-- Flow 3:

Average throughput: 65.27 Mbit/s

95th percentile per-packet one-way delay: 63.167 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-06 12:42:02

End at: 2017-12-06 12:42:32

Below is generated by plot.py at 2017-12-06 15:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.18 Mbit/s

95th percentile per-packet one-way delay: 66.915 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 55.61 Mbit/s

95th percentile per-packet one-way delay: 64.461 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 67.33 Mbit/s

95th percentile per-packet one-way delay: 64.495 ms

Loss rate: 0.00%

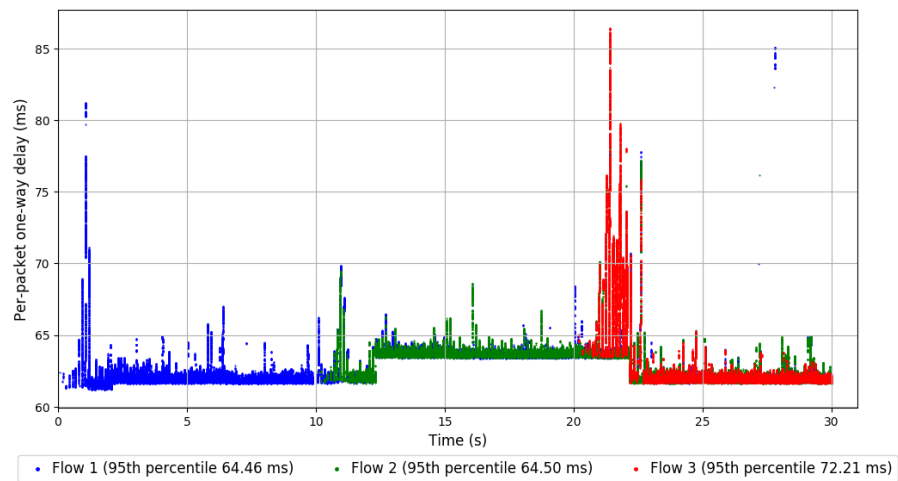
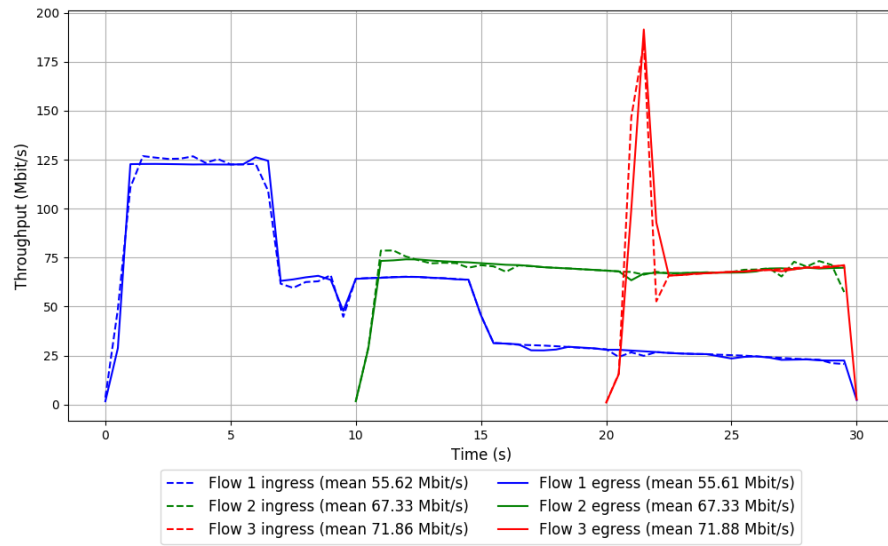
-- Flow 3:

Average throughput: 71.88 Mbit/s

95th percentile per-packet one-way delay: 72.210 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-06 12:54:39

End at: 2017-12-06 12:55:09

Below is generated by plot.py at 2017-12-06 15:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.84 Mbit/s

95th percentile per-packet one-way delay: 64.247 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 60.89 Mbit/s

95th percentile per-packet one-way delay: 63.836 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.64 Mbit/s

95th percentile per-packet one-way delay: 63.698 ms

Loss rate: 0.00%

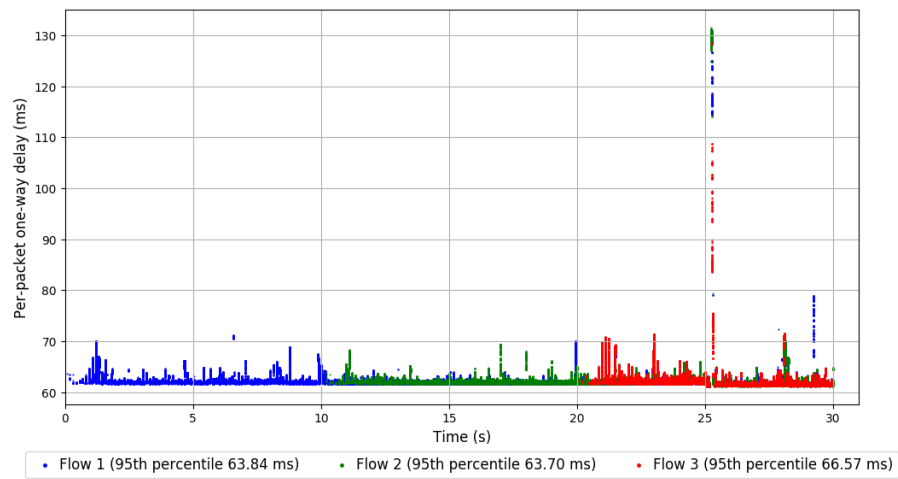
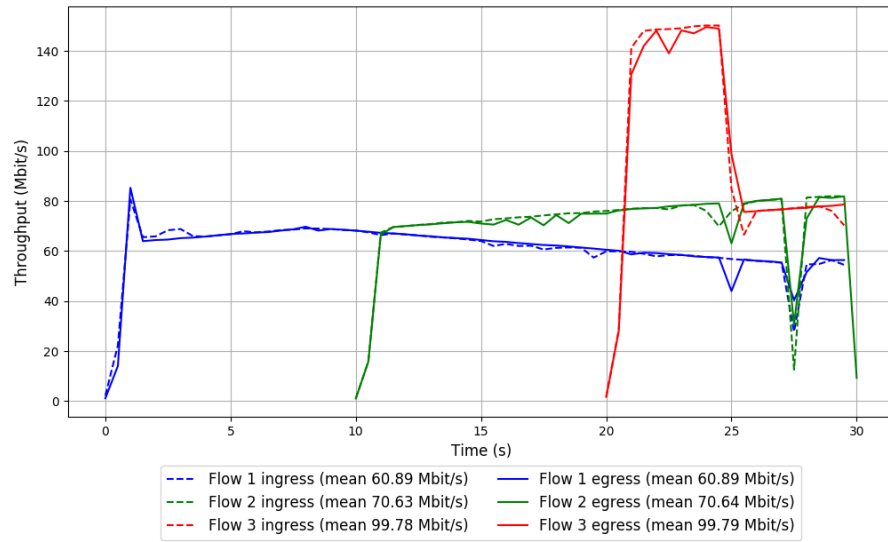
-- Flow 3:

Average throughput: 99.79 Mbit/s

95th percentile per-packet one-way delay: 66.571 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-06 13:06:51

End at: 2017-12-06 13:07:21

Below is generated by plot.py at 2017-12-06 15:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.73 Mbit/s

95th percentile per-packet one-way delay: 64.271 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 56.44 Mbit/s

95th percentile per-packet one-way delay: 64.046 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.13 Mbit/s

95th percentile per-packet one-way delay: 65.297 ms

Loss rate: 0.01%

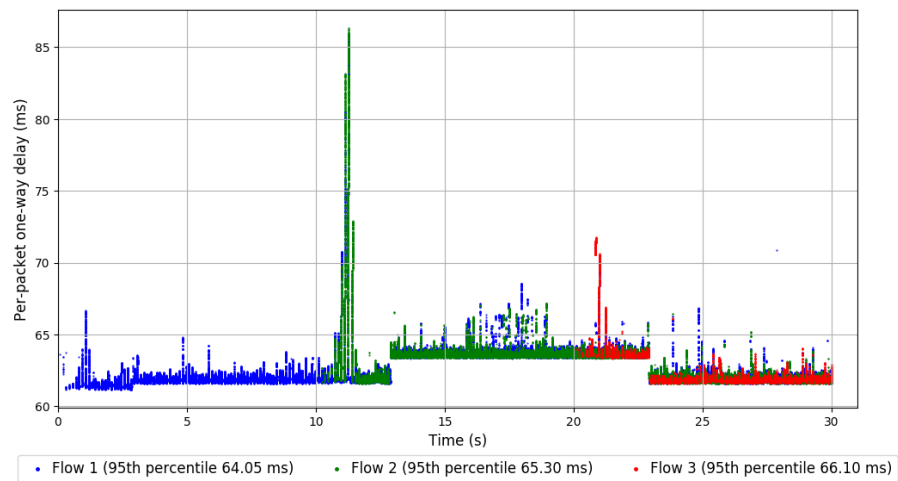
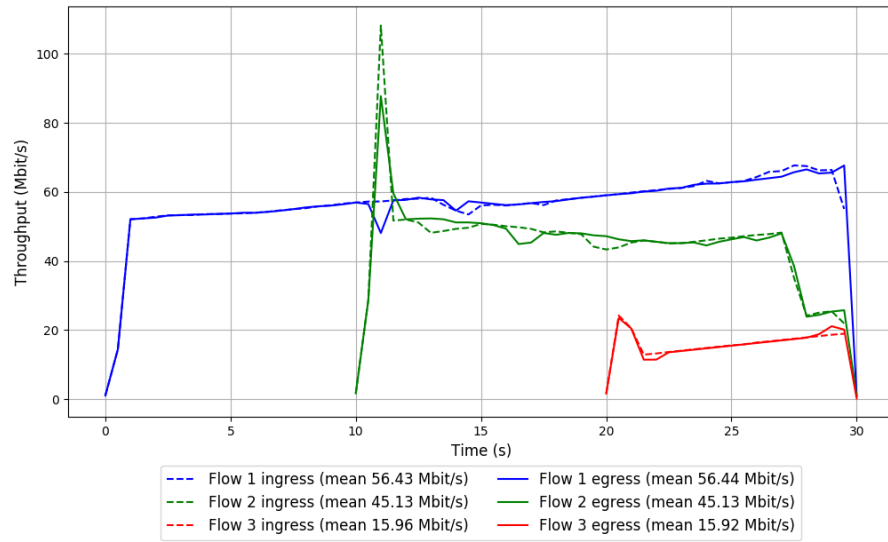
-- Flow 3:

Average throughput: 15.92 Mbit/s

95th percentile per-packet one-way delay: 66.097 ms

Loss rate: 0.23%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-06 13:19:13

End at: 2017-12-06 13:19:43

Below is generated by plot.py at 2017-12-06 15:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.69 Mbit/s

95th percentile per-packet one-way delay: 64.300 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 14.80 Mbit/s

95th percentile per-packet one-way delay: 64.234 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 15.34 Mbit/s

95th percentile per-packet one-way delay: 64.444 ms

Loss rate: 0.02%

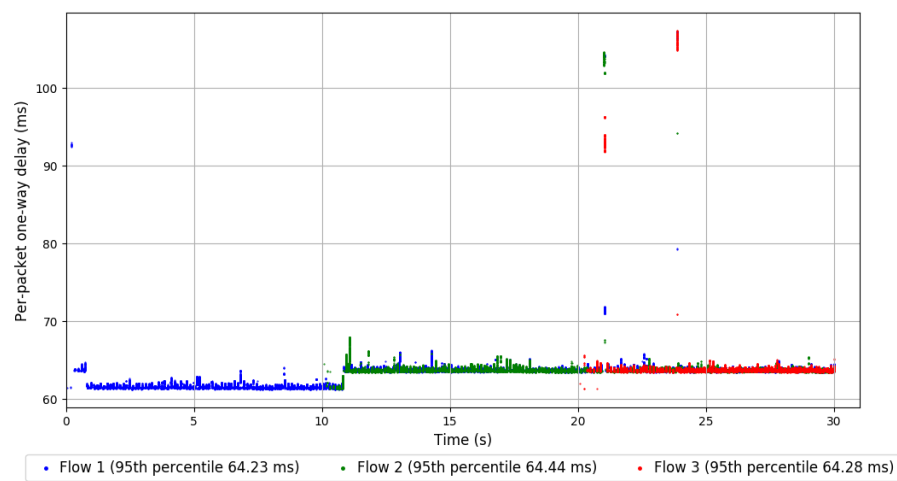
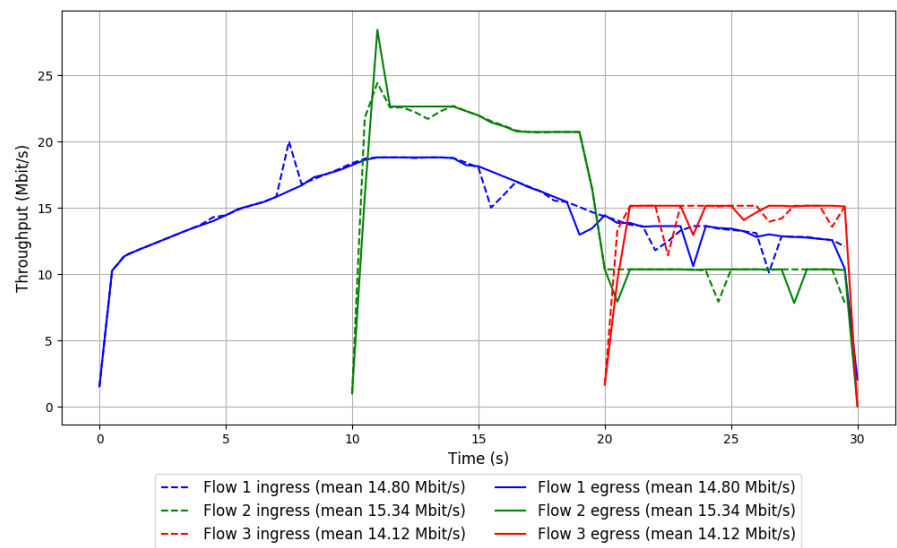
-- Flow 3:

Average throughput: 14.12 Mbit/s

95th percentile per-packet one-way delay: 64.276 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-06 13:31:38

End at: 2017-12-06 13:32:08

Below is generated by plot.py at 2017-12-06 15:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.19 Mbit/s

95th percentile per-packet one-way delay: 64.166 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 80.04 Mbit/s

95th percentile per-packet one-way delay: 64.160 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 30.90 Mbit/s

95th percentile per-packet one-way delay: 64.176 ms

Loss rate: 0.05%

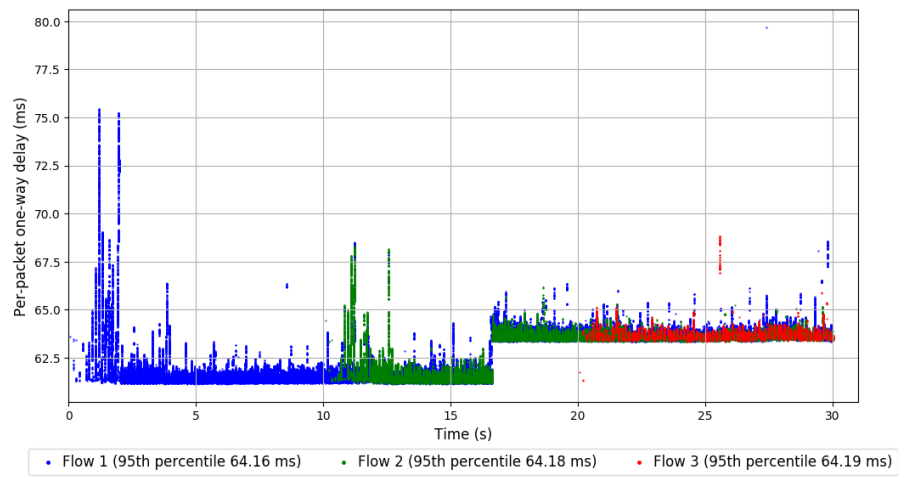
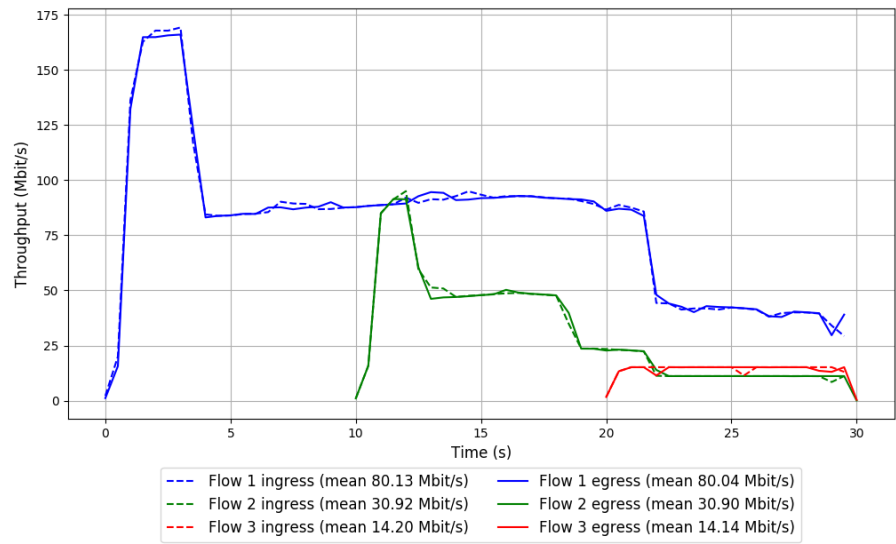
-- Flow 3:

Average throughput: 14.14 Mbit/s

95th percentile per-packet one-way delay: 64.185 ms

Loss rate: 0.45%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-06 13:43:58

End at: 2017-12-06 13:44:28

Below is generated by plot.py at 2017-12-06 15:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.57 Mbit/s

95th percentile per-packet one-way delay: 64.102 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 68.16 Mbit/s

95th percentile per-packet one-way delay: 64.119 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.61 Mbit/s

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

Loss rate: 0.06%

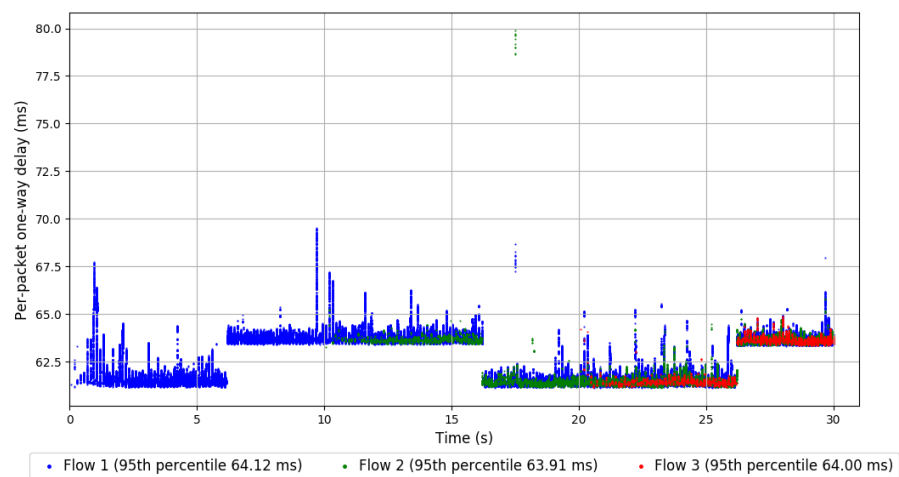
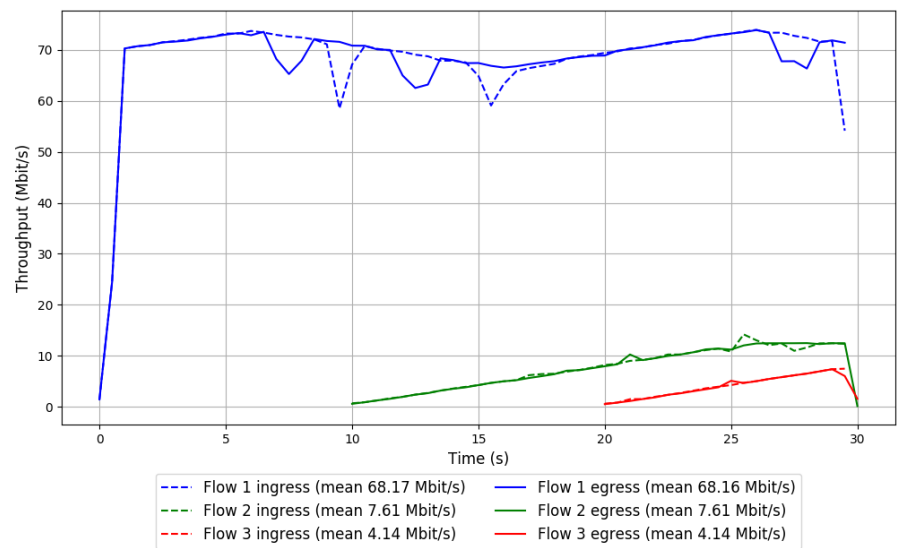
-- Flow 3:

Average throughput: 4.14 Mbit/s

95th percentile per-packet one-way delay: 64.004 ms

Loss rate: 0.12%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-06 13:56:19

End at: 2017-12-06 13:56:49

Below is generated by plot.py at 2017-12-06 15:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.67 Mbit/s

95th percentile per-packet one-way delay: 69.541 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 15.56 Mbit/s

95th percentile per-packet one-way delay: 67.874 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 59.21 Mbit/s

95th percentile per-packet one-way delay: 67.199 ms

Loss rate: 0.10%

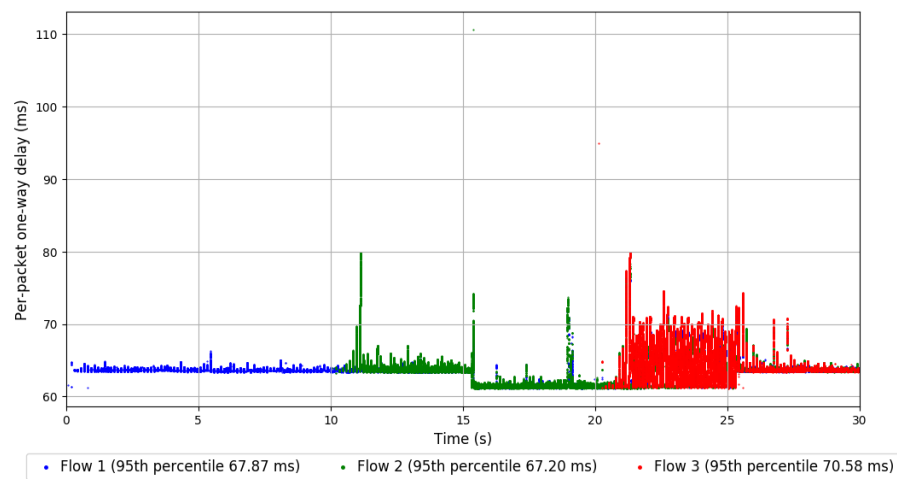
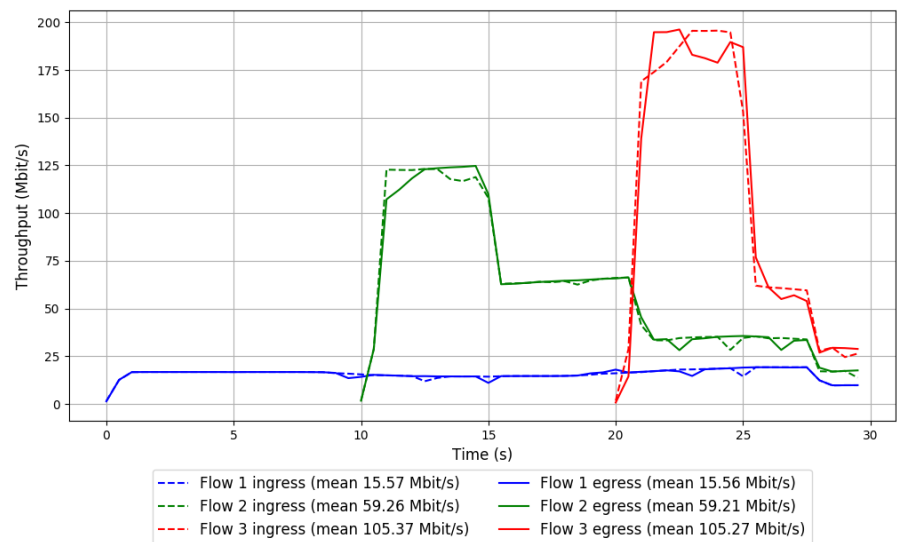
-- Flow 3:

Average throughput: 105.27 Mbit/s

95th percentile per-packet one-way delay: 70.580 ms

Loss rate: 0.41%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-06 14:08:40

End at: 2017-12-06 14:09:10

Below is generated by plot.py at 2017-12-06 15:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 170.71 Mbit/s

95th percentile per-packet one-way delay: 70.744 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 89.01 Mbit/s

95th percentile per-packet one-way delay: 67.851 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 120.97 Mbit/s

95th percentile per-packet one-way delay: 71.680 ms

Loss rate: 0.06%

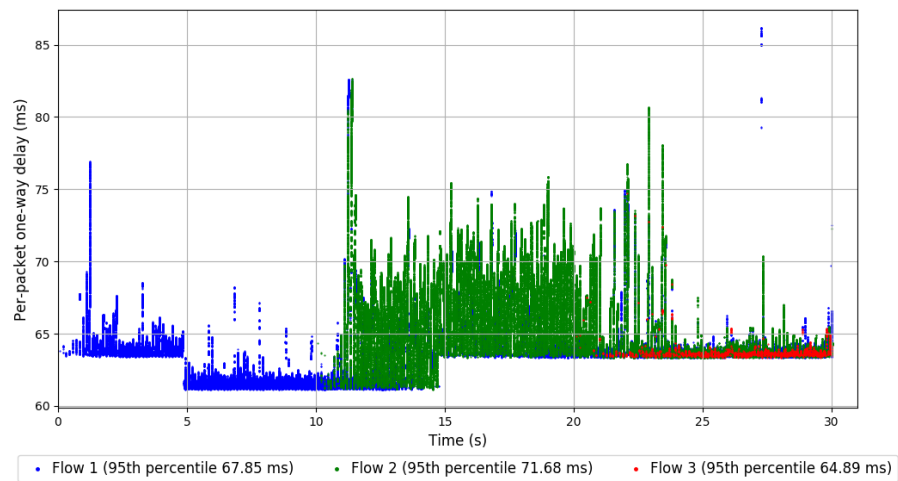
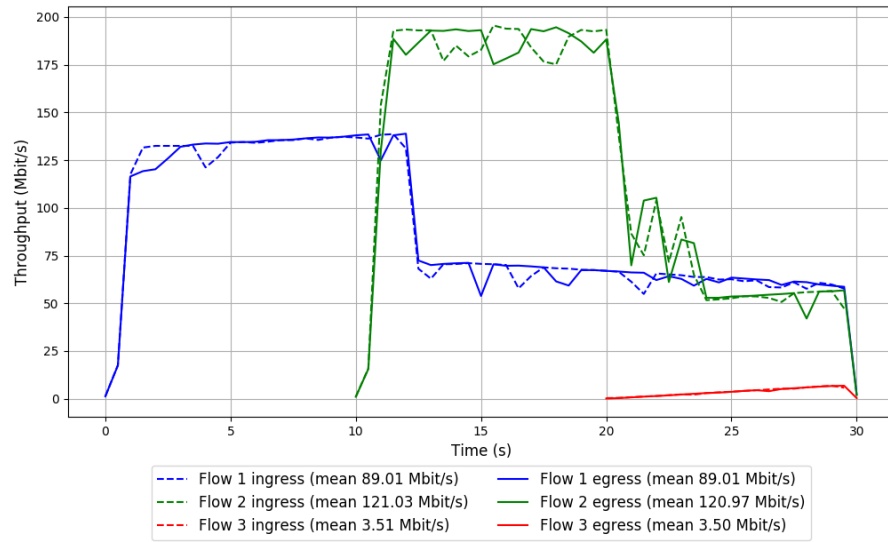
-- Flow 3:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 64.886 ms

Loss rate: 0.31%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

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

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

Below is generated by plot.py at 2017-12-06 15:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 240.34 Mbit/s

95th percentile per-packet one-way delay: 106.092 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 102.22 Mbit/s

95th percentile per-packet one-way delay: 105.209 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 149.40 Mbit/s

95th percentile per-packet one-way delay: 105.755 ms

Loss rate: 0.00%

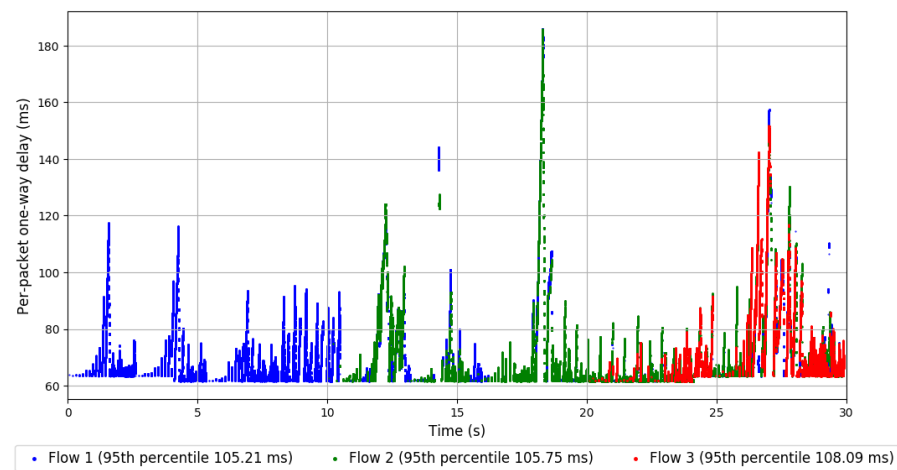
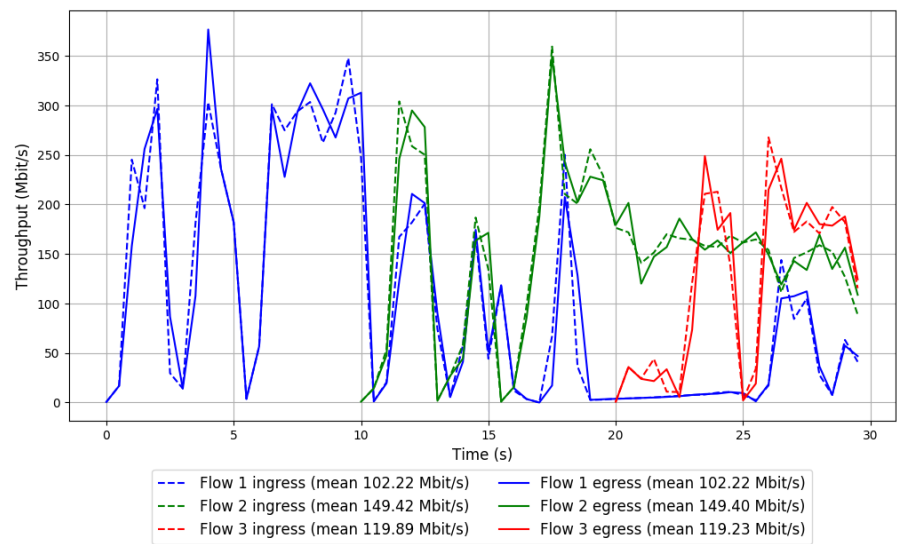
-- Flow 3:

Average throughput: 119.23 Mbit/s

95th percentile per-packet one-way delay: 108.093 ms

Loss rate: 0.52%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-06 12:27:03

End at: 2017-12-06 12:27:33

Below is generated by plot.py at 2017-12-06 15:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 238.00 Mbit/s

95th percentile per-packet one-way delay: 175.701 ms

Loss rate: 2.76%

-- Flow 1:

Average throughput: 140.82 Mbit/s

95th percentile per-packet one-way delay: 162.866 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 85.55 Mbit/s

95th percentile per-packet one-way delay: 316.481 ms

Loss rate: 9.64%

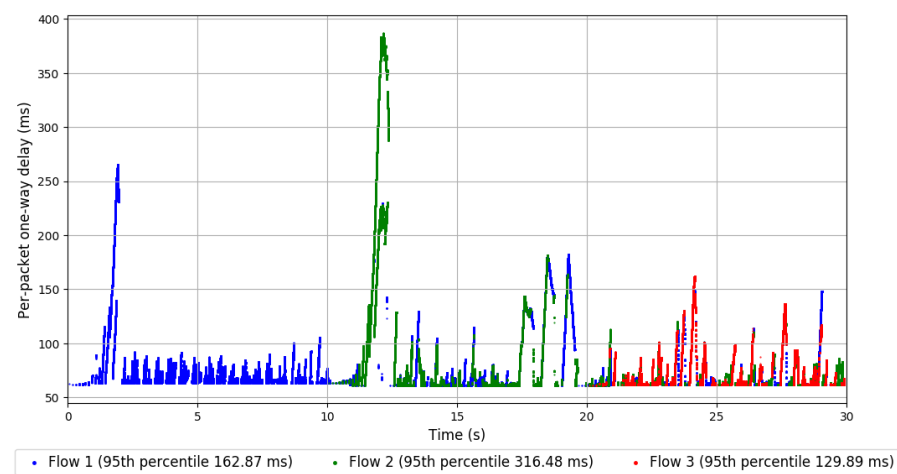
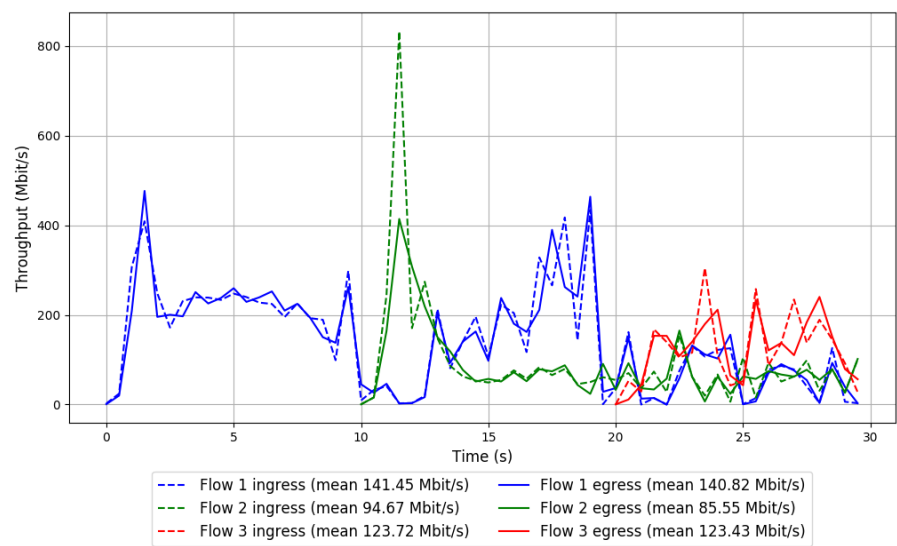
-- Flow 3:

Average throughput: 123.43 Mbit/s

95th percentile per-packet one-way delay: 129.894 ms

Loss rate: 0.21%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-06 12:39:03

End at: 2017-12-06 12:39:33

Below is generated by plot.py at 2017-12-06 15:57:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 254.68 Mbit/s

95th percentile per-packet one-way delay: 91.572 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 153.53 Mbit/s

95th percentile per-packet one-way delay: 90.363 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 109.63 Mbit/s

95th percentile per-packet one-way delay: 107.799 ms

Loss rate: 0.00%

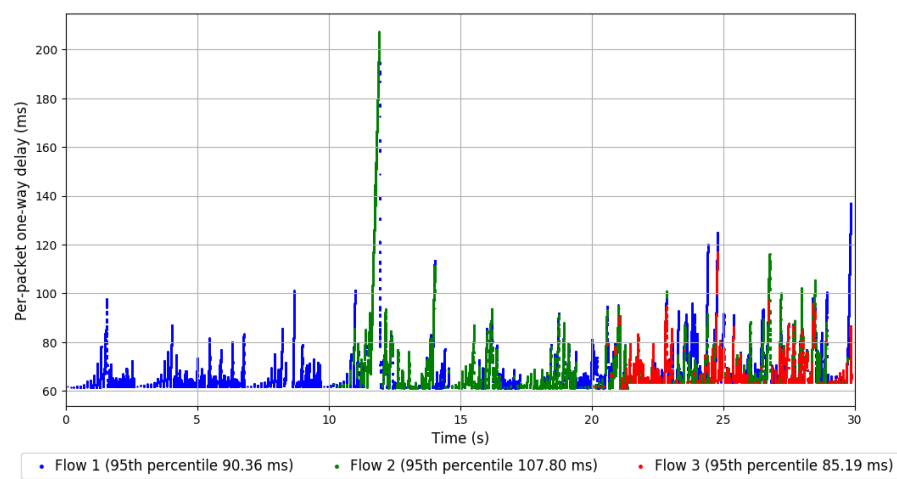
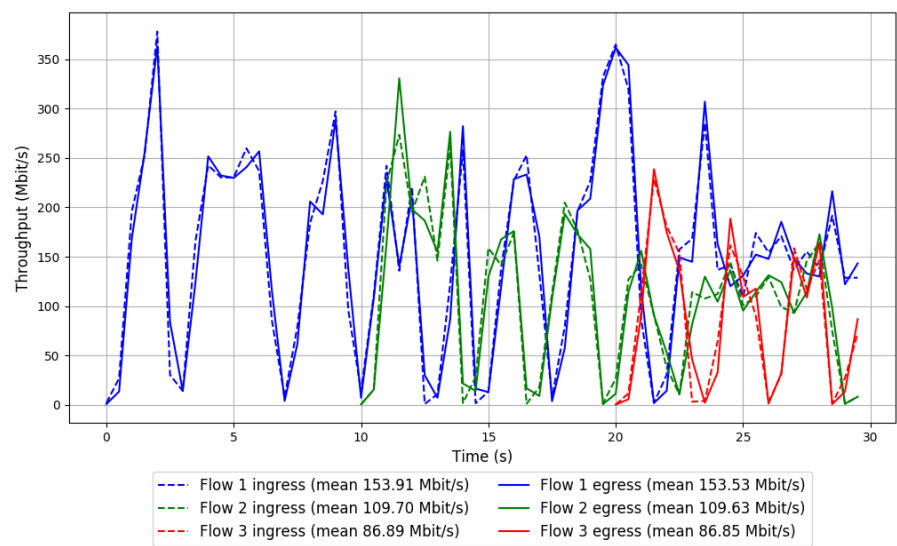
-- Flow 3:

Average throughput: 86.85 Mbit/s

95th percentile per-packet one-way delay: 85.193 ms

Loss rate: 0.00%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-06 12:51:23

End at: 2017-12-06 12:51:53

Below is generated by plot.py at 2017-12-06 15:58:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 318.62 Mbit/s

95th percentile per-packet one-way delay: 190.369 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 205.14 Mbit/s

95th percentile per-packet one-way delay: 169.060 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 139.37 Mbit/s

95th percentile per-packet one-way delay: 230.645 ms

Loss rate: 1.60%

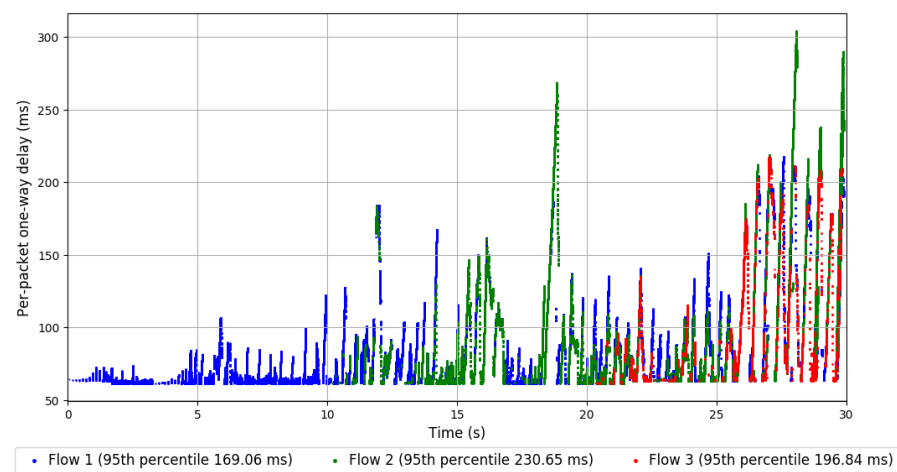
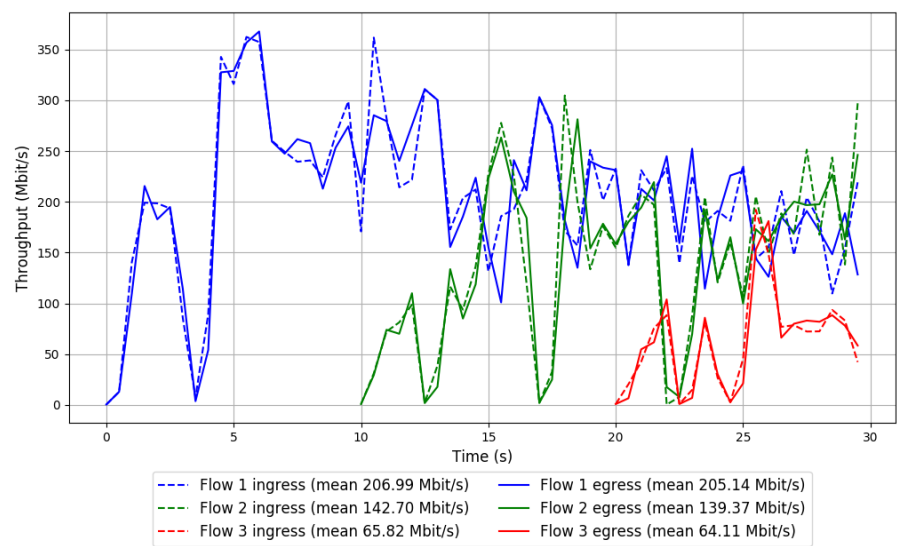
-- Flow 3:

Average throughput: 64.11 Mbit/s

95th percentile per-packet one-way delay: 196.836 ms

Loss rate: 1.11%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-06 13:03:45

End at: 2017-12-06 13:04:15

Below is generated by plot.py at 2017-12-06 15:58:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 308.06 Mbit/s

95th percentile per-packet one-way delay: 206.899 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 197.37 Mbit/s

95th percentile per-packet one-way delay: 179.770 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 79.35 Mbit/s

95th percentile per-packet one-way delay: 133.095 ms

Loss rate: 0.19%

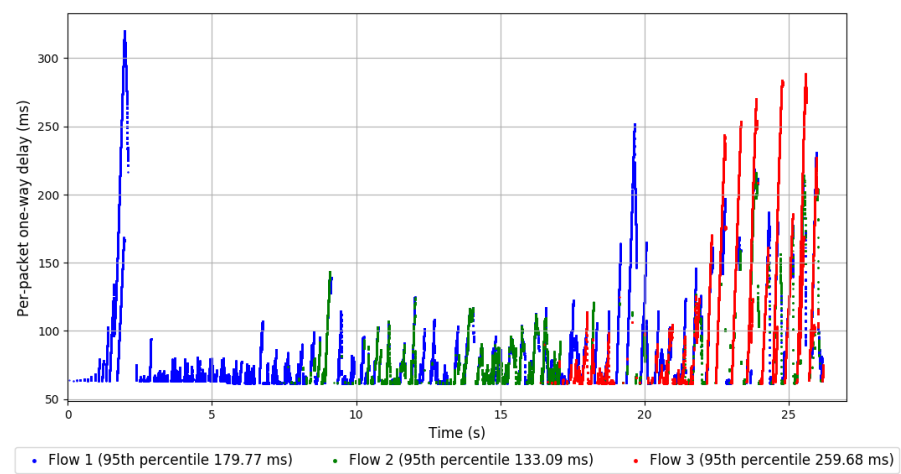
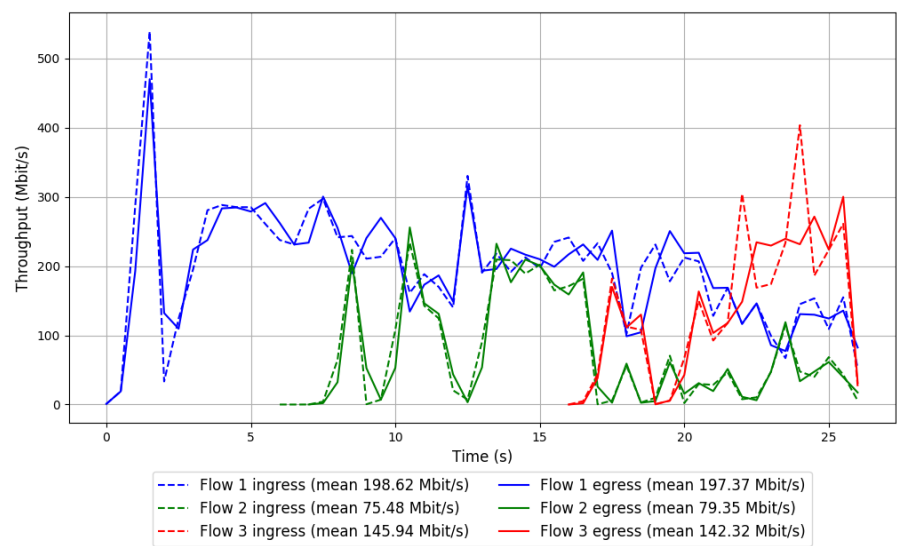
-- Flow 3:

Average throughput: 142.32 Mbit/s

95th percentile per-packet one-way delay: 259.682 ms

Loss rate: 2.50%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-06 13:16:01

End at: 2017-12-06 13:16:31

Below is generated by plot.py at 2017-12-06 15:59:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 268.28 Mbit/s

95th percentile per-packet one-way delay: 136.517 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 168.86 Mbit/s

95th percentile per-packet one-way delay: 132.691 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 120.00 Mbit/s

95th percentile per-packet one-way delay: 155.419 ms

Loss rate: 1.04%

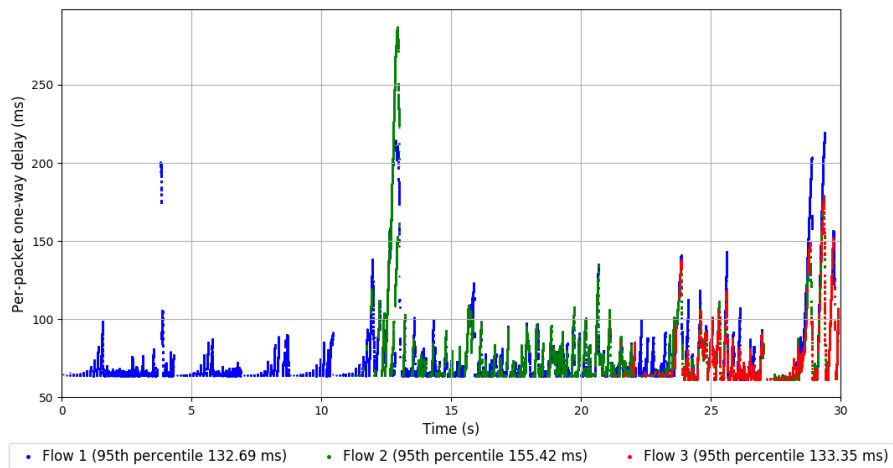
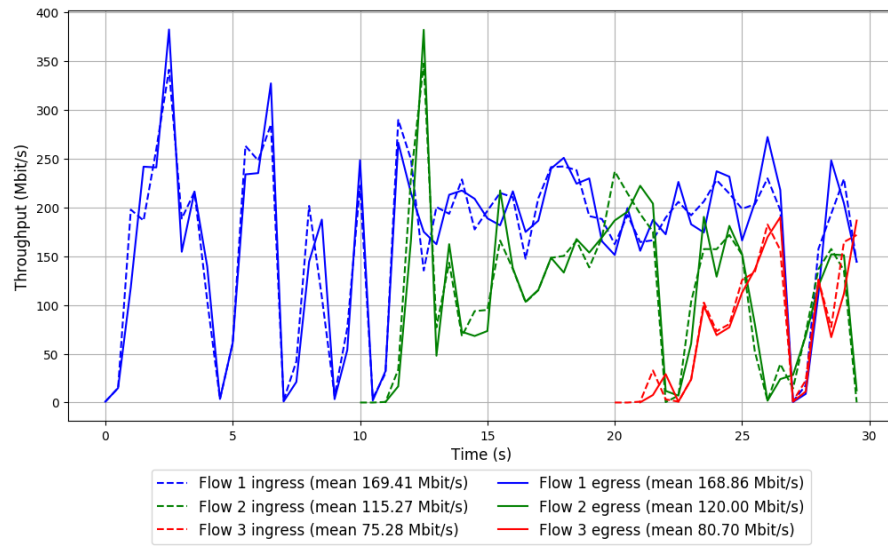
-- Flow 3:

Average throughput: 80.70 Mbit/s

95th percentile per-packet one-way delay: 133.351 ms

Loss rate: 4.04%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-06 13:28:21

End at: 2017-12-06 13:28:51

Below is generated by plot.py at 2017-12-06 16:01:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 343.56 Mbit/s

95th percentile per-packet one-way delay: 142.722 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 221.84 Mbit/s

95th percentile per-packet one-way delay: 143.274 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 131.11 Mbit/s

95th percentile per-packet one-way delay: 141.904 ms

Loss rate: 0.23%

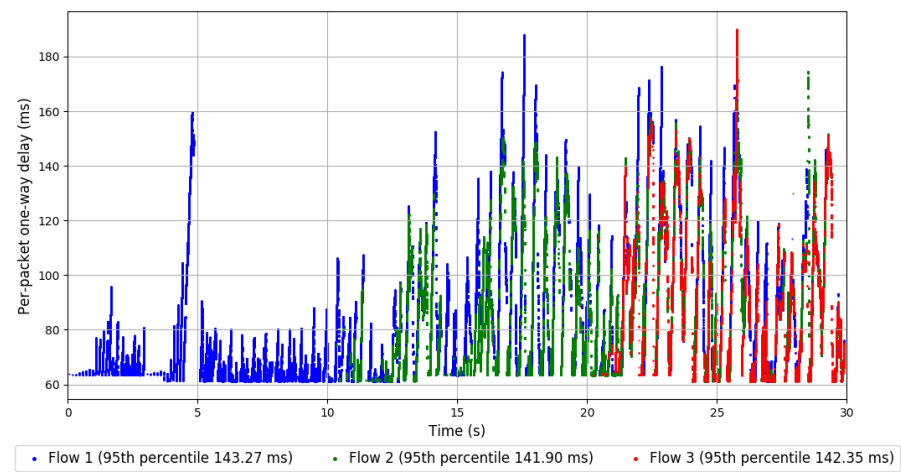
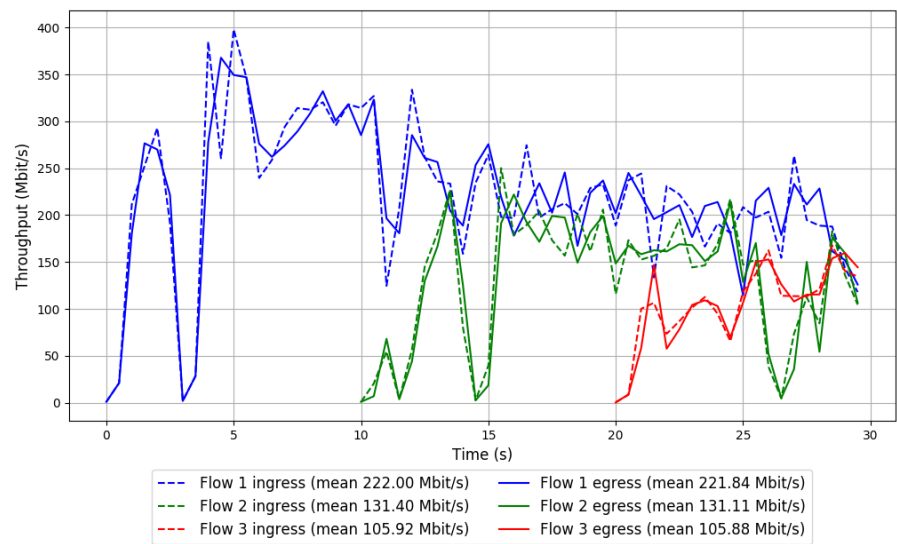
-- Flow 3:

Average throughput: 105.88 Mbit/s

95th percentile per-packet one-way delay: 142.354 ms

Loss rate: 0.26%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-06 13:40:51

End at: 2017-12-06 13:41:21

Below is generated by plot.py at 2017-12-06 16:02:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.98 Mbit/s

95th percentile per-packet one-way delay: 157.640 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 240.11 Mbit/s

95th percentile per-packet one-way delay: 158.531 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 124.87 Mbit/s

95th percentile per-packet one-way delay: 154.519 ms

Loss rate: 0.11%

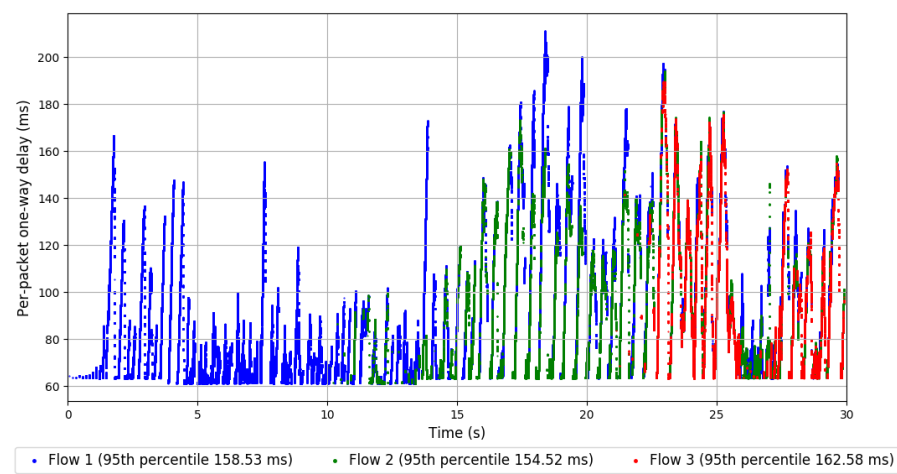
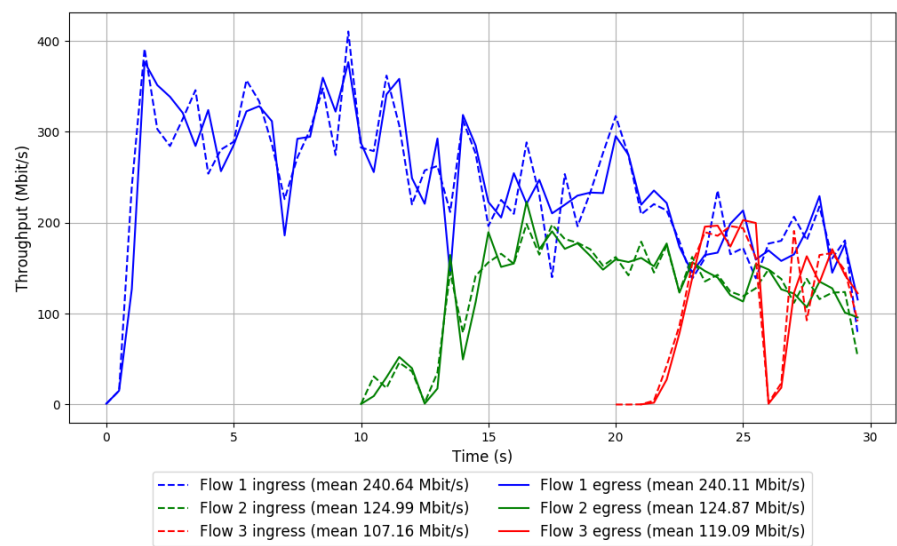
-- Flow 3:

Average throughput: 119.09 Mbit/s

95th percentile per-packet one-way delay: 162.578 ms

Loss rate: 0.18%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-06 13:53:16

End at: 2017-12-06 13:53:46

Below is generated by plot.py at 2017-12-06 16:02:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 269.10 Mbit/s

95th percentile per-packet one-way delay: 182.971 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 174.34 Mbit/s

95th percentile per-packet one-way delay: 142.648 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 122.02 Mbit/s

95th percentile per-packet one-way delay: 206.904 ms

Loss rate: 0.19%

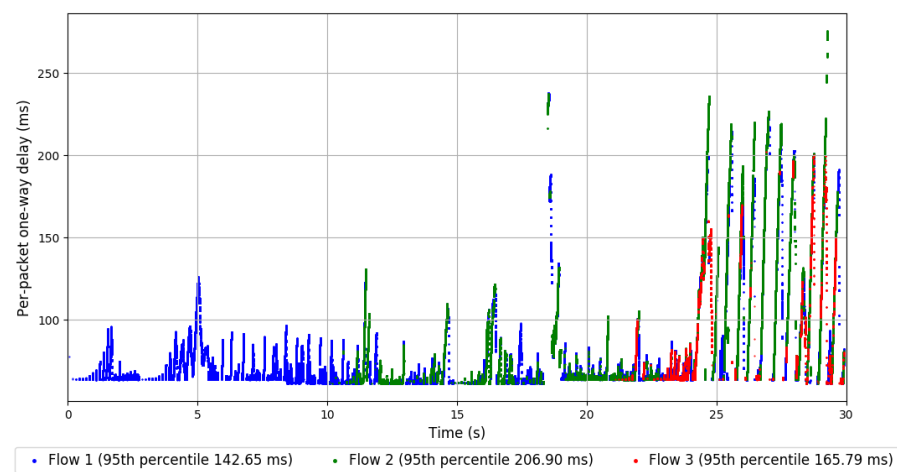
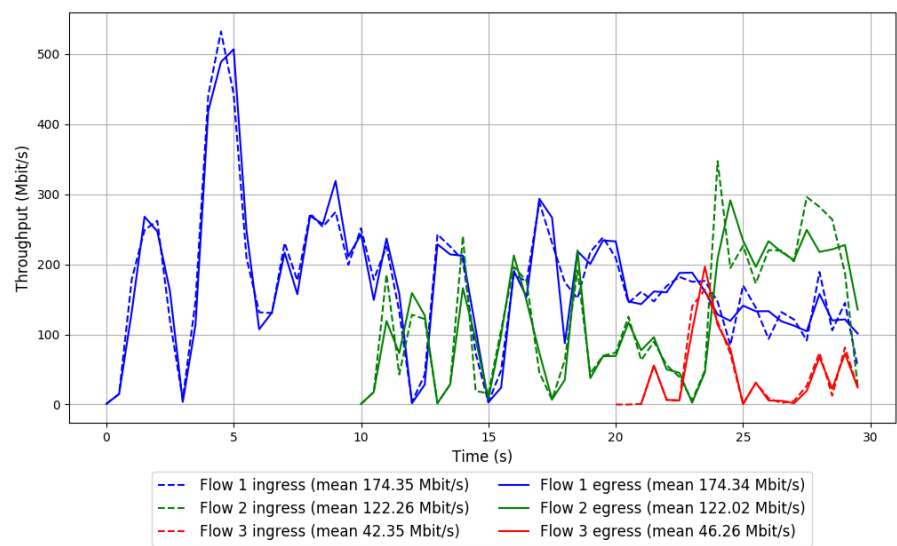
-- Flow 3:

Average throughput: 46.26 Mbit/s

95th percentile per-packet one-way delay: 165.786 ms

Loss rate: 1.92%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-06 14:05:27

End at: 2017-12-06 14:05:57

Below is generated by plot.py at 2017-12-06 16:02:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 297.09 Mbit/s

95th percentile per-packet one-way delay: 132.118 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 155.18 Mbit/s

95th percentile per-packet one-way delay: 123.841 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 175.49 Mbit/s

95th percentile per-packet one-way delay: 138.990 ms

Loss rate: 0.26%

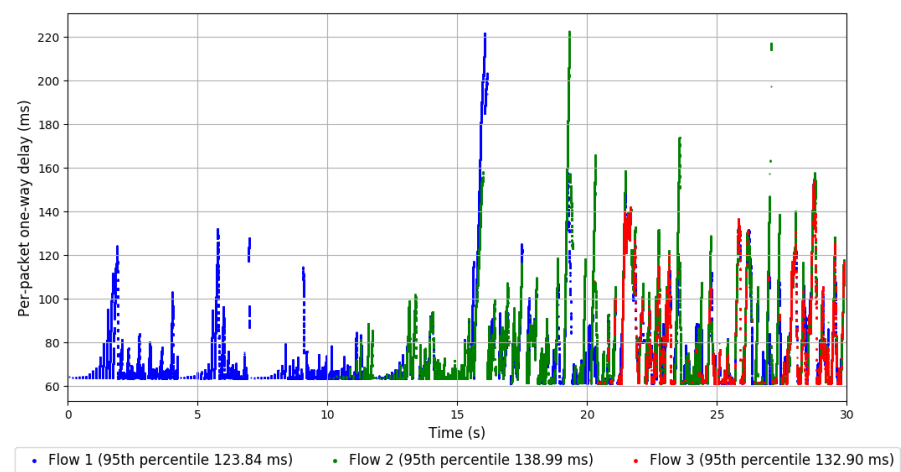
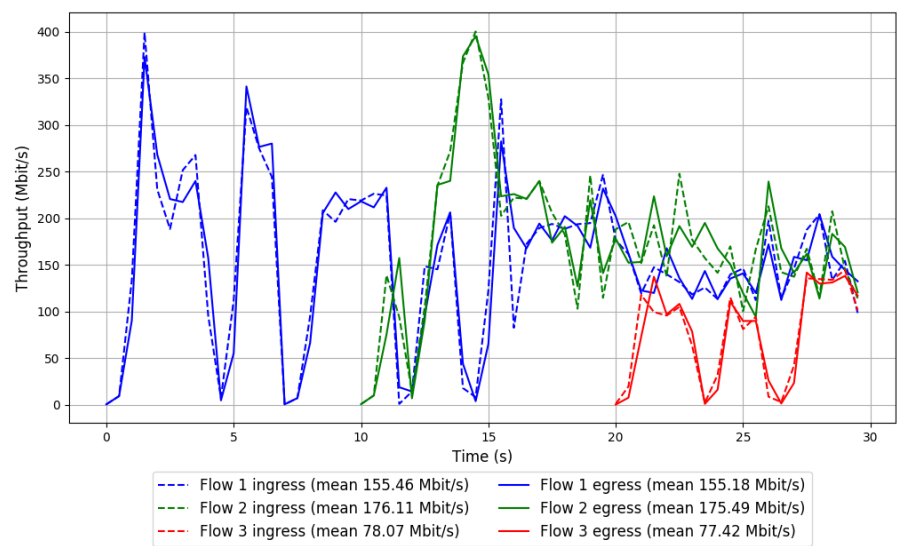
-- Flow 3:

Average throughput: 77.42 Mbit/s

95th percentile per-packet one-way delay: 132.900 ms

Loss rate: 0.82%

Run 10: Report of Verus — Data Link

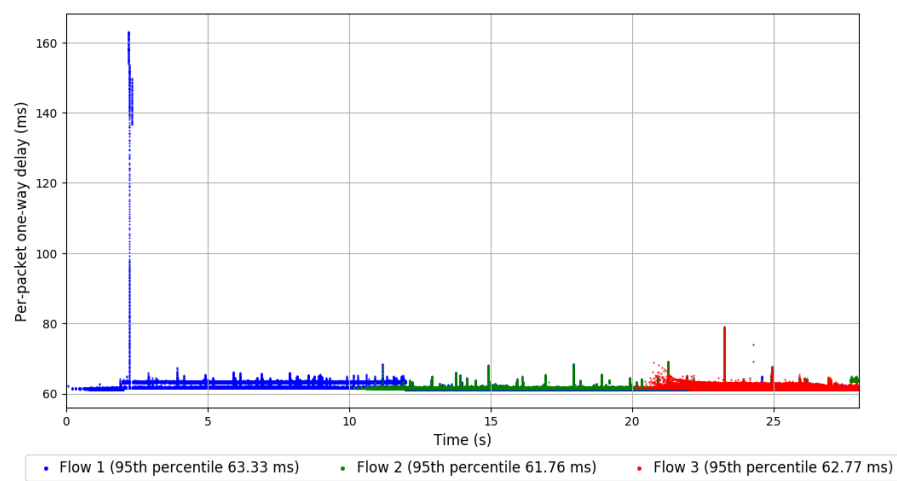
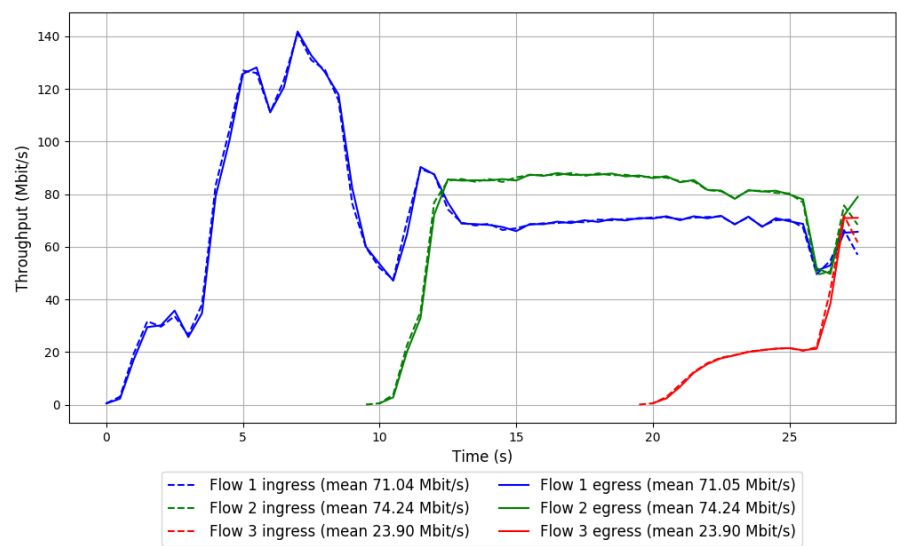


```
Run 1: Statistics of Copa

Start at: 2017-12-06 12:12:30
End at: 2017-12-06 12:13:00

# Below is generated by plot.py at 2017-12-06 16:02:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 125.58 Mbit/s
95th percentile per-packet one-way delay: 63.283 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 71.05 Mbit/s
95th percentile per-packet one-way delay: 63.325 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 74.24 Mbit/s
95th percentile per-packet one-way delay: 61.761 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.90 Mbit/s
95th percentile per-packet one-way delay: 62.766 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-06 12:24:45

End at: 2017-12-06 12:25:15

Below is generated by plot.py at 2017-12-06 16:02:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.03 Mbit/s

95th percentile per-packet one-way delay: 63.871 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.80 Mbit/s

95th percentile per-packet one-way delay: 63.676 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.46 Mbit/s

95th percentile per-packet one-way delay: 63.987 ms

Loss rate: 0.00%

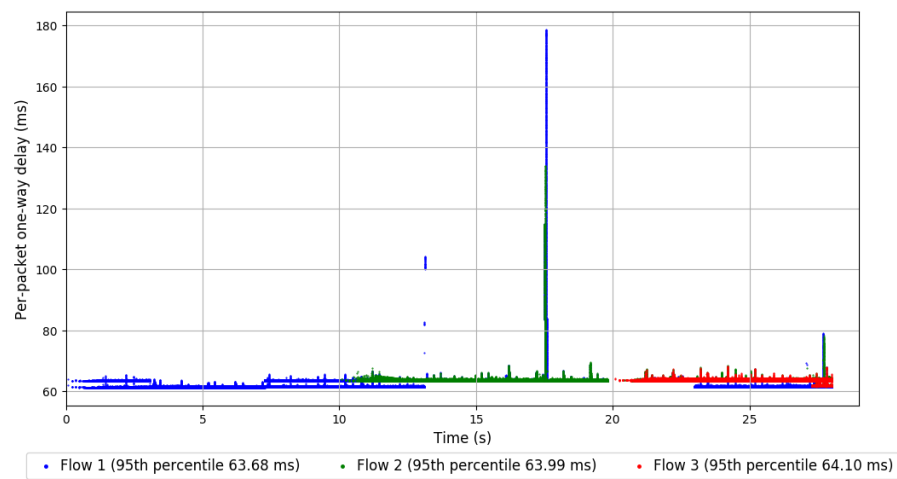
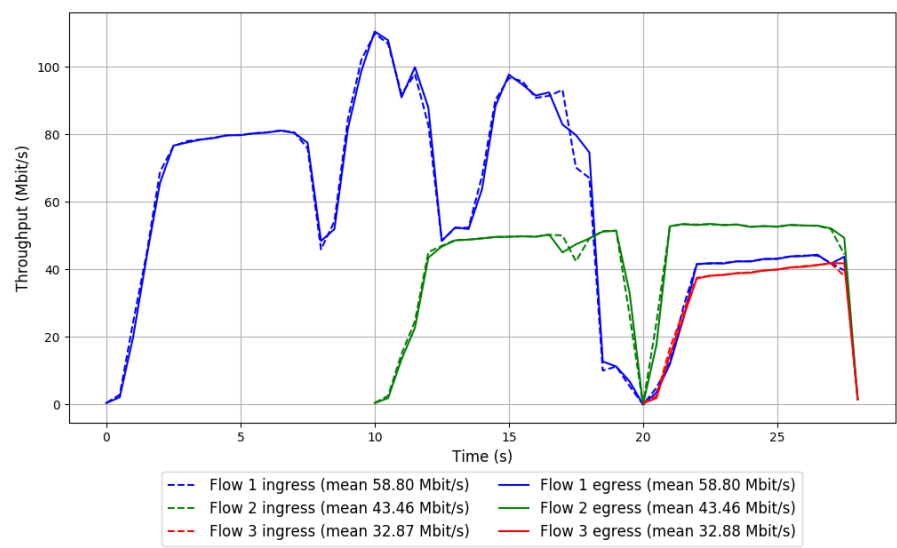
-- Flow 3:

Average throughput: 32.88 Mbit/s

95th percentile per-packet one-way delay: 64.102 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-06 12:36:42

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

Below is generated by plot.py at 2017-12-06 16:02:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.77 Mbit/s

95th percentile per-packet one-way delay: 63.765 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.84 Mbit/s

95th percentile per-packet one-way delay: 63.715 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.99 Mbit/s

95th percentile per-packet one-way delay: 63.843 ms

Loss rate: 0.00%

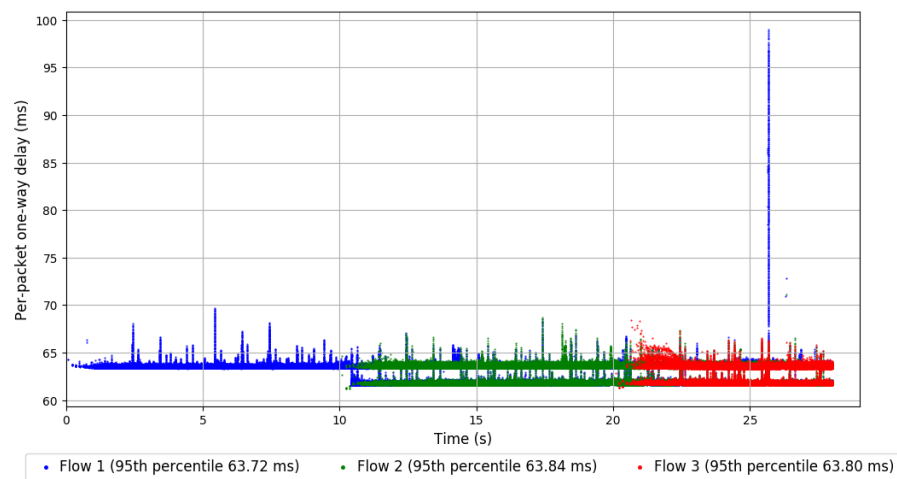
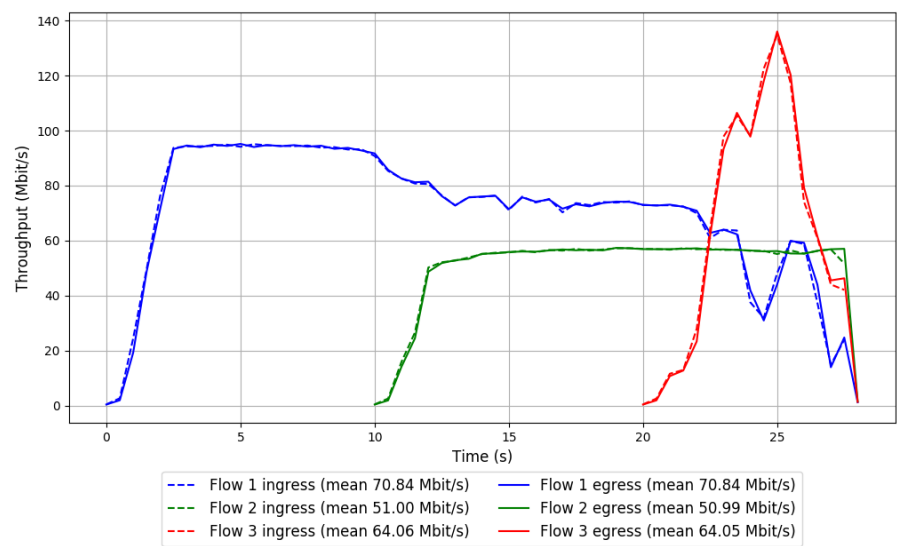
-- Flow 3:

Average throughput: 64.05 Mbit/s

95th percentile per-packet one-way delay: 63.799 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-06 12:49:01

End at: 2017-12-06 12:49:31

Below is generated by plot.py at 2017-12-06 16:03:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.93 Mbit/s

95th percentile per-packet one-way delay: 63.747 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 62.78 Mbit/s

95th percentile per-packet one-way delay: 63.760 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.64 Mbit/s

95th percentile per-packet one-way delay: 63.745 ms

Loss rate: 0.00%

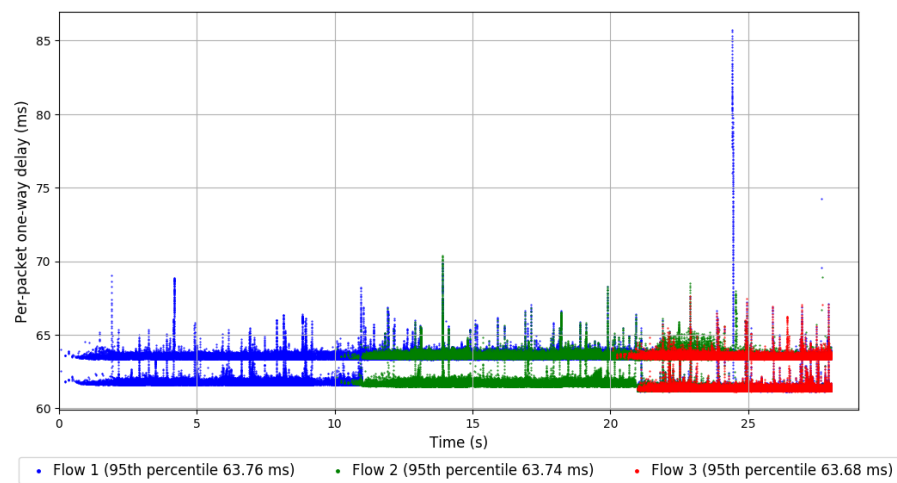
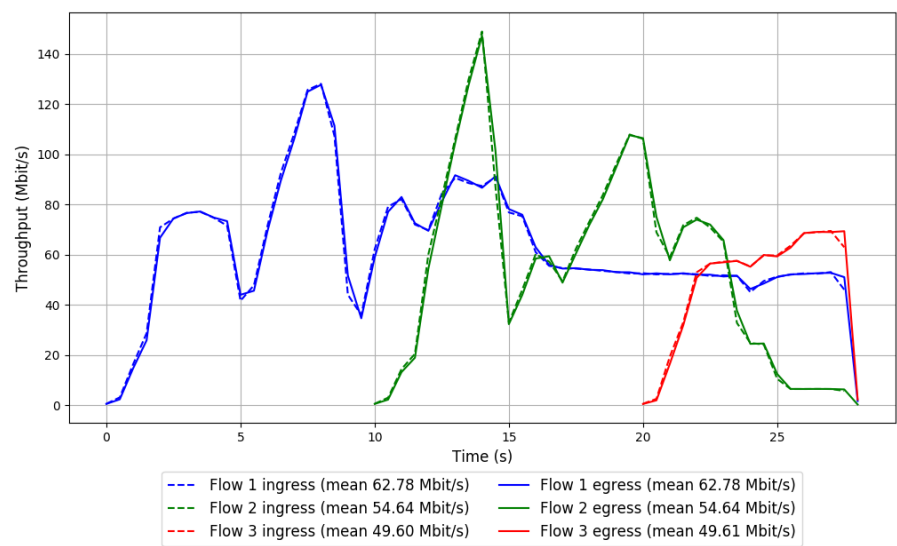
-- Flow 3:

Average throughput: 49.61 Mbit/s

95th percentile per-packet one-way delay: 63.684 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-06 13:01:23

End at: 2017-12-06 13:01:53

Below is generated by plot.py at 2017-12-06 16:04:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.94 Mbit/s

95th percentile per-packet one-way delay: 63.705 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.42 Mbit/s

95th percentile per-packet one-way delay: 63.699 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.81 Mbit/s

95th percentile per-packet one-way delay: 63.722 ms

Loss rate: 0.00%

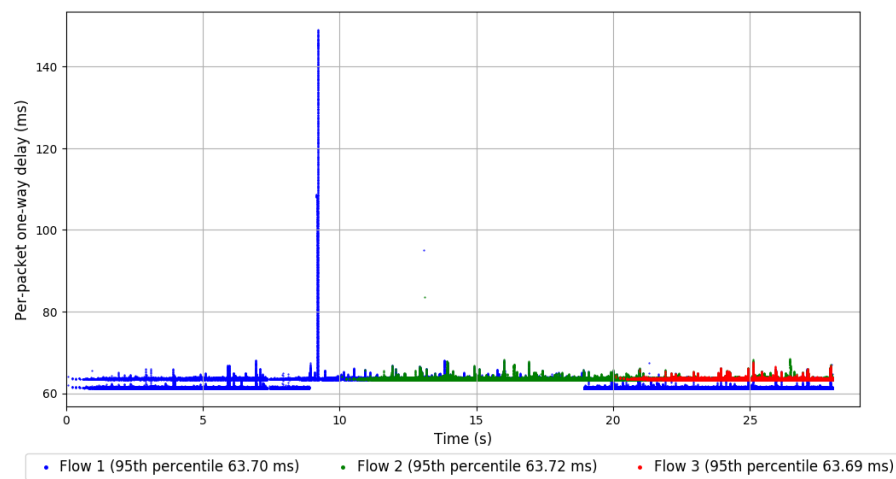
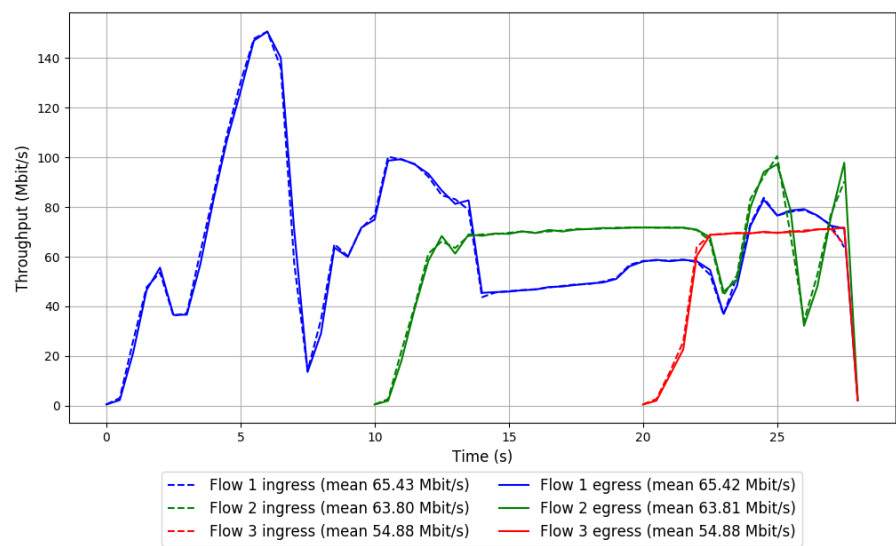
-- Flow 3:

Average throughput: 54.88 Mbit/s

95th percentile per-packet one-way delay: 63.690 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

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

End at: 2017-12-06 13:14:09

Below is generated by plot.py at 2017-12-06 16:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.48 Mbit/s

95th percentile per-packet one-way delay: 63.705 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 63.27 Mbit/s

95th percentile per-packet one-way delay: 63.675 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.63 Mbit/s

95th percentile per-packet one-way delay: 63.673 ms

Loss rate: 0.00%

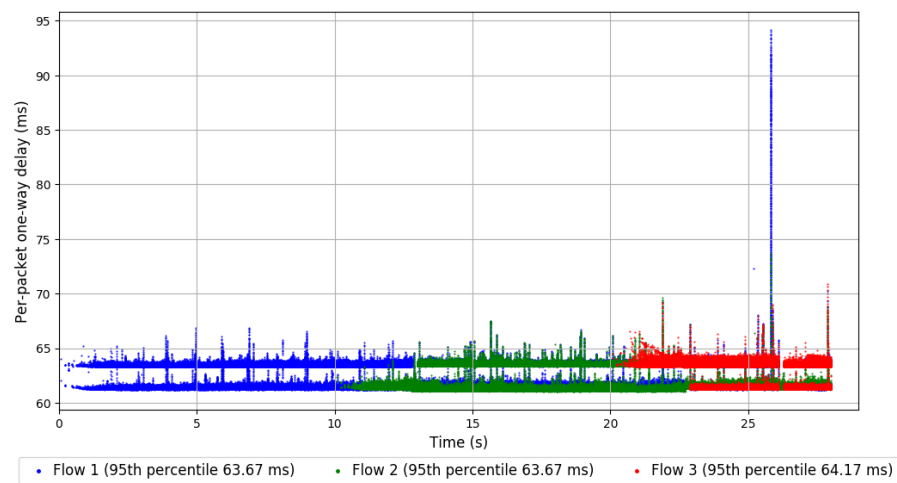
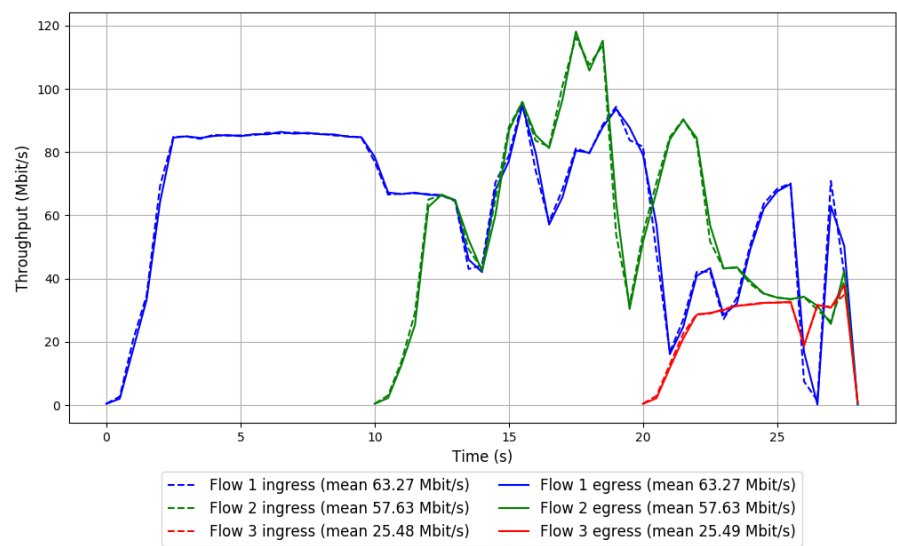
-- Flow 3:

Average throughput: 25.49 Mbit/s

95th percentile per-packet one-way delay: 64.173 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-06 13:26:00

End at: 2017-12-06 13:26:30

Below is generated by plot.py at 2017-12-06 16:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.49 Mbit/s

95th percentile per-packet one-way delay: 63.708 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 39.19 Mbit/s

95th percentile per-packet one-way delay: 63.701 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 65.69 Mbit/s

95th percentile per-packet one-way delay: 63.719 ms

Loss rate: 0.00%

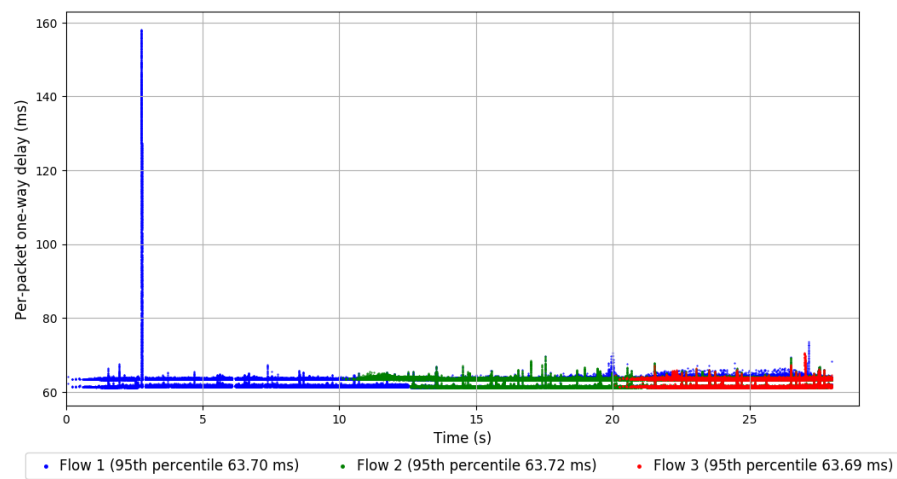
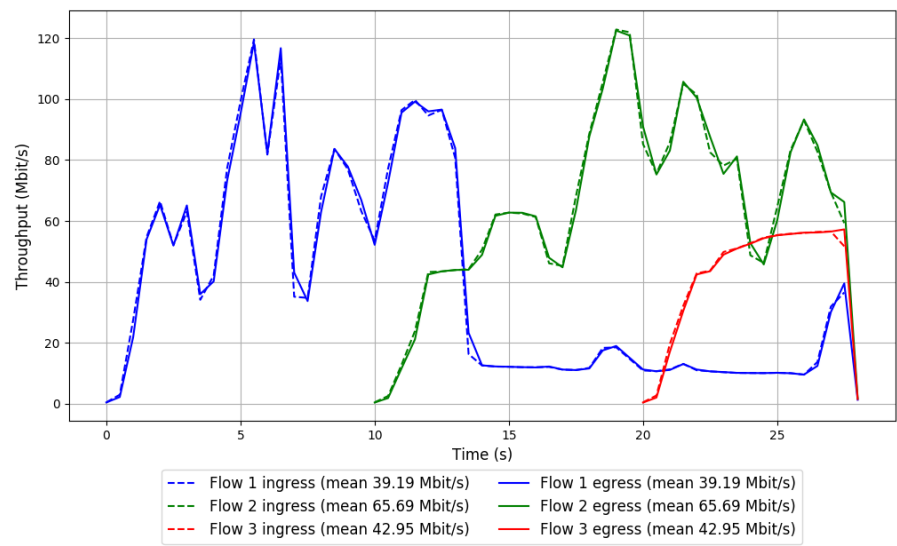
-- Flow 3:

Average throughput: 42.95 Mbit/s

95th percentile per-packet one-way delay: 63.685 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-06 13:38:29

End at: 2017-12-06 13:38:59

Below is generated by plot.py at 2017-12-06 16:05:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.74 Mbit/s

95th percentile per-packet one-way delay: 63.607 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.81 Mbit/s

95th percentile per-packet one-way delay: 63.645 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.56 Mbit/s

95th percentile per-packet one-way delay: 61.961 ms

Loss rate: 0.00%

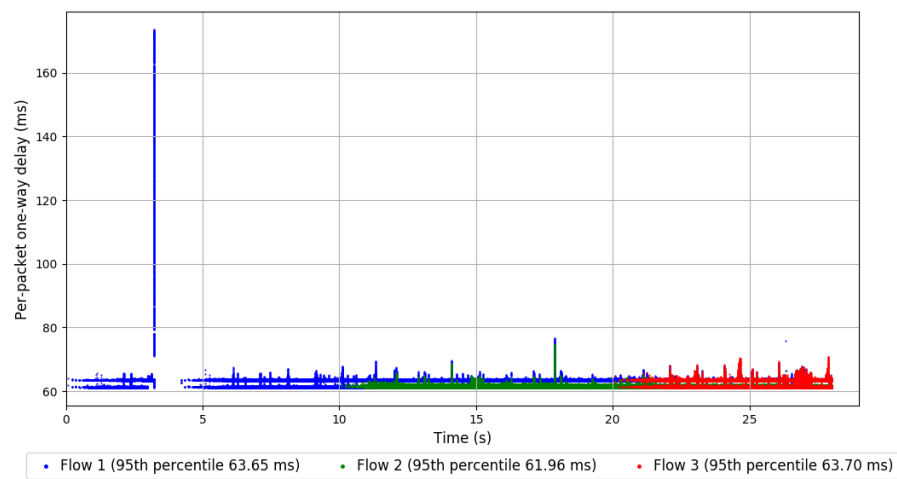
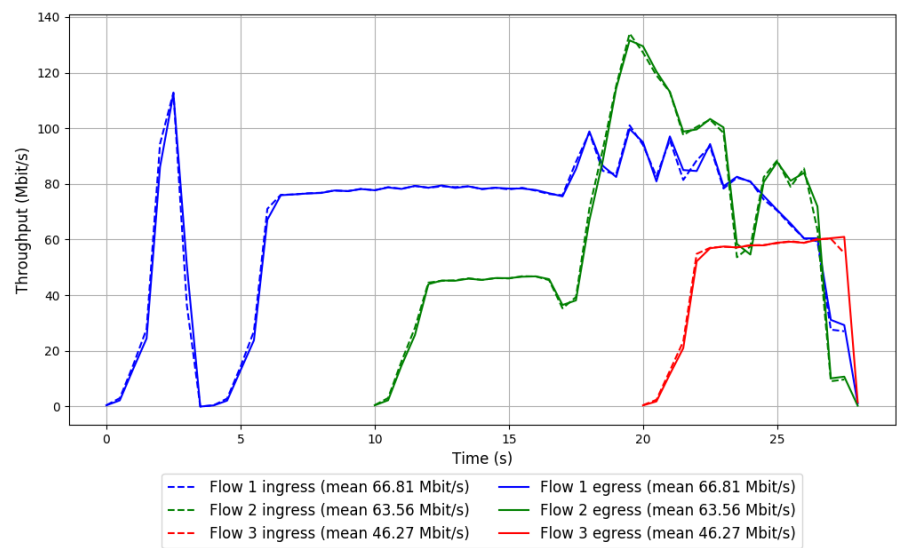
-- Flow 3:

Average throughput: 46.27 Mbit/s

95th percentile per-packet one-way delay: 63.698 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-06 13:50:45

End at: 2017-12-06 13:51:15

Below is generated by plot.py at 2017-12-06 16:06:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.35 Mbit/s

95th percentile per-packet one-way delay: 63.457 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.18 Mbit/s

95th percentile per-packet one-way delay: 63.475 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.73 Mbit/s

95th percentile per-packet one-way delay: 61.621 ms

Loss rate: 0.00%

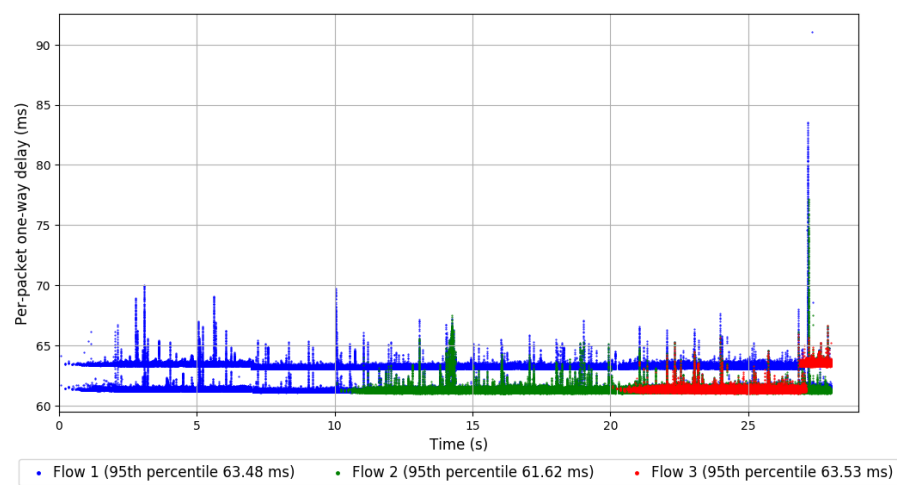
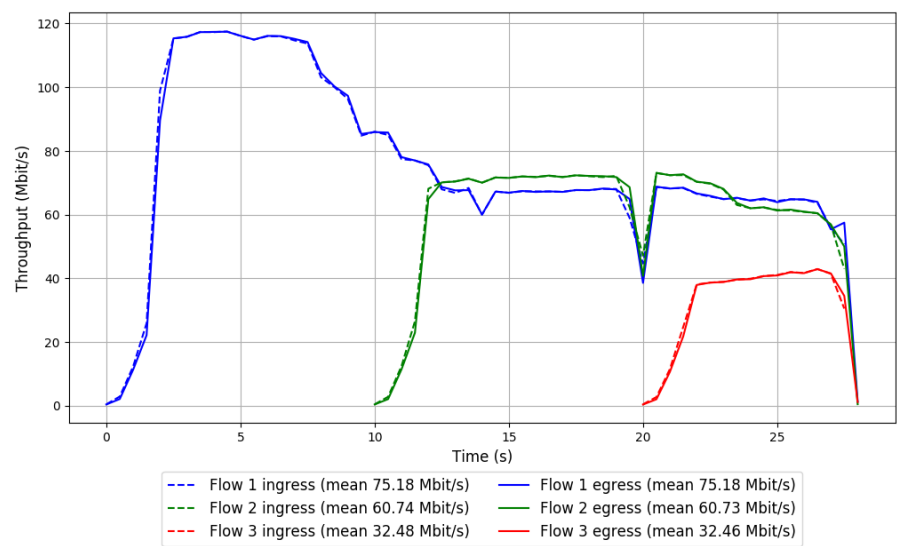
-- Flow 3:

Average throughput: 32.46 Mbit/s

95th percentile per-packet one-way delay: 63.528 ms

Loss rate: 0.01%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-06 14:03:07

End at: 2017-12-06 14:03:37

Below is generated by plot.py at 2017-12-06 16:06:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.83 Mbit/s

95th percentile per-packet one-way delay: 63.762 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.30 Mbit/s

95th percentile per-packet one-way delay: 63.684 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.91 Mbit/s

95th percentile per-packet one-way delay: 63.844 ms

Loss rate: 0.00%

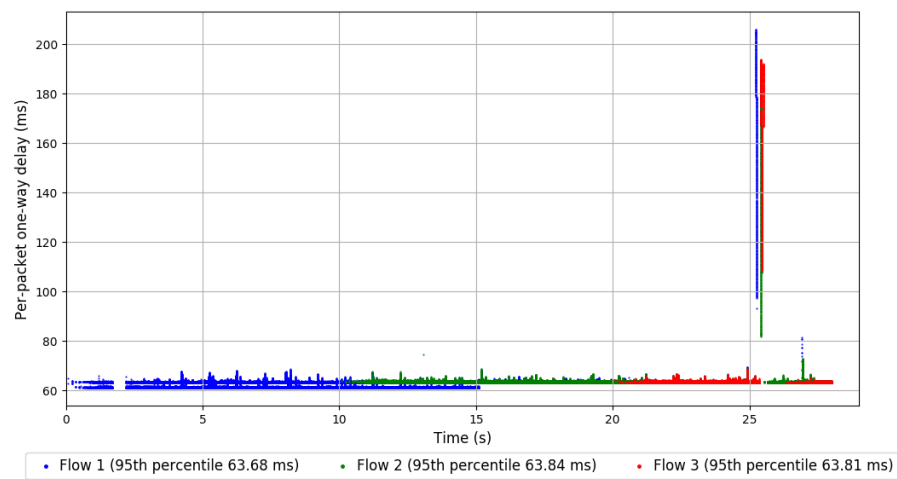
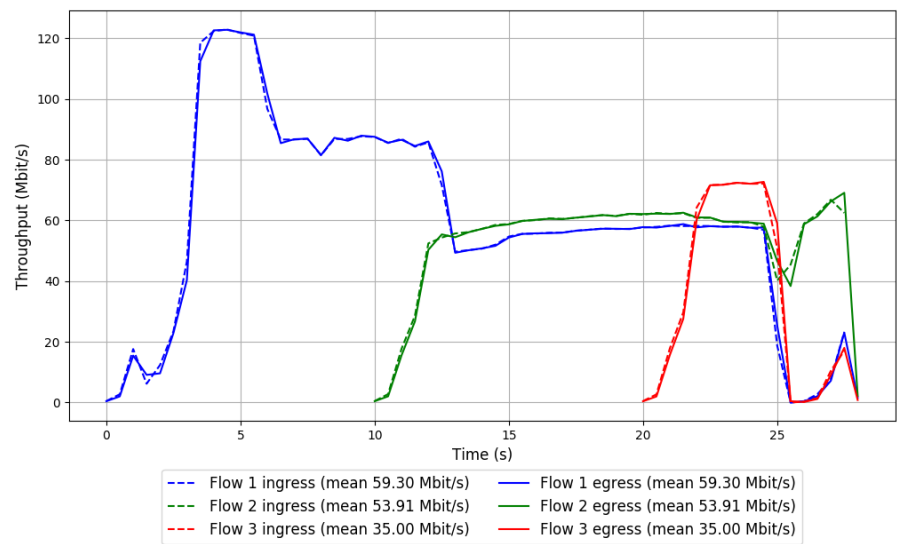
-- Flow 3:

Average throughput: 35.00 Mbit/s

95th percentile per-packet one-way delay: 63.810 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

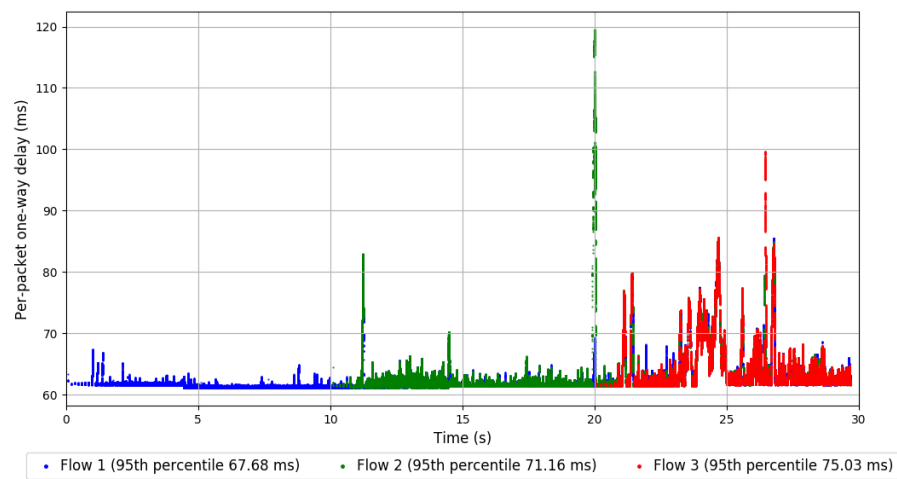
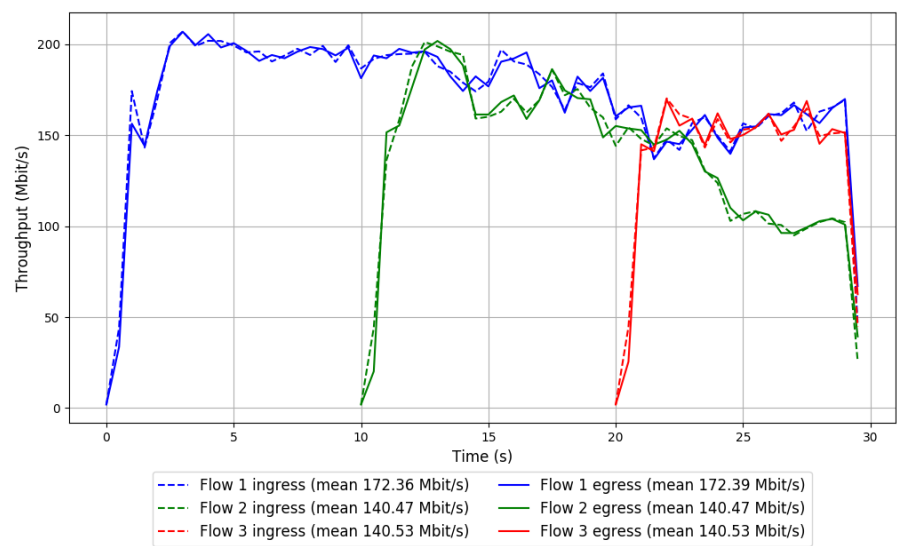


```
Run 1: Statistics of Indigo

Start at: 2017-12-06 12:09:39
End at: 2017-12-06 12:10:09

# Below is generated by plot.py at 2017-12-06 16:08:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 310.85 Mbit/s
95th percentile per-packet one-way delay: 70.518 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 172.39 Mbit/s
95th percentile per-packet one-way delay: 67.678 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 140.47 Mbit/s
95th percentile per-packet one-way delay: 71.162 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 140.53 Mbit/s
95th percentile per-packet one-way delay: 75.034 ms
Loss rate: 0.01%
```


Run 1: Report of Indigo — Data Link

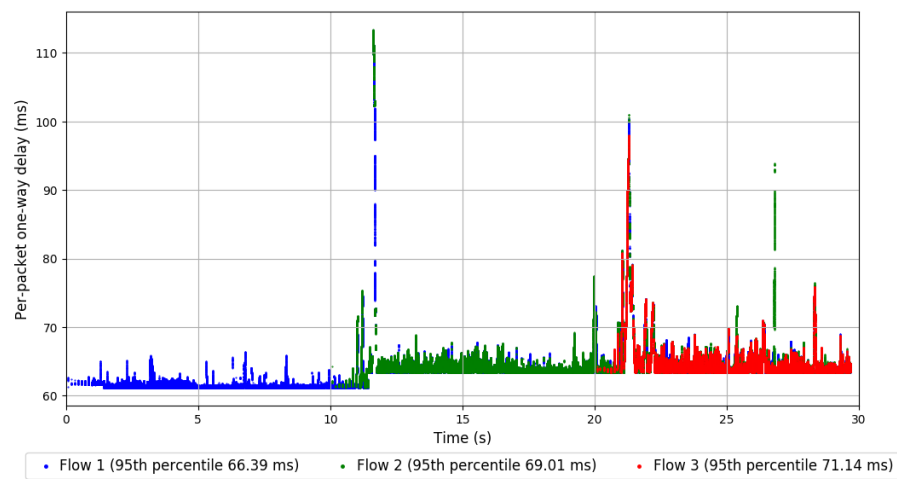
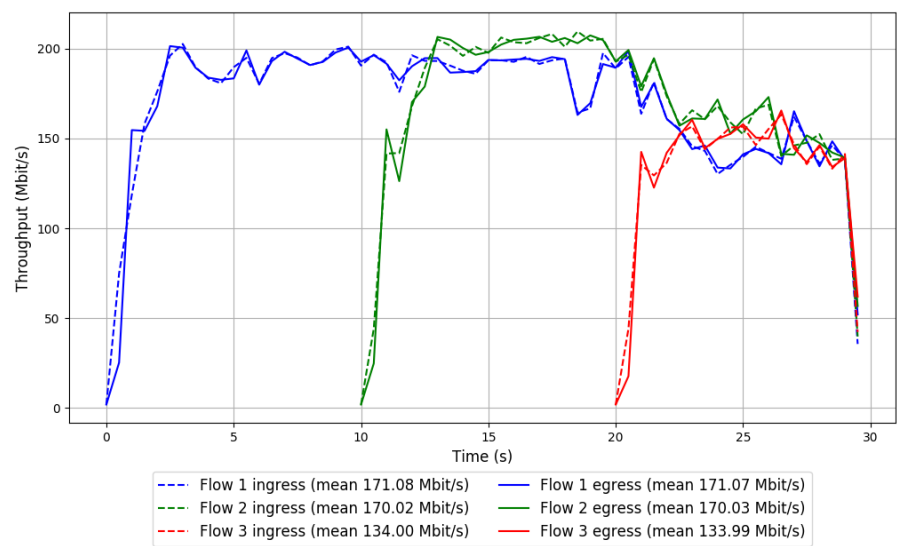


```
Run 2: Statistics of Indigo

Start at: 2017-12-06 12:21:53
End at: 2017-12-06 12:22:23

# Below is generated by plot.py at 2017-12-06 16:09:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.06 Mbit/s
95th percentile per-packet one-way delay: 68.099 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 171.07 Mbit/s
95th percentile per-packet one-way delay: 66.388 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 170.03 Mbit/s
95th percentile per-packet one-way delay: 69.010 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 133.99 Mbit/s
95th percentile per-packet one-way delay: 71.137 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-06 12:33:52

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

Below is generated by plot.py at 2017-12-06 16:09:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.71 Mbit/s

95th percentile per-packet one-way delay: 72.088 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 166.33 Mbit/s

95th percentile per-packet one-way delay: 70.208 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 162.36 Mbit/s

95th percentile per-packet one-way delay: 72.367 ms

Loss rate: 0.20%

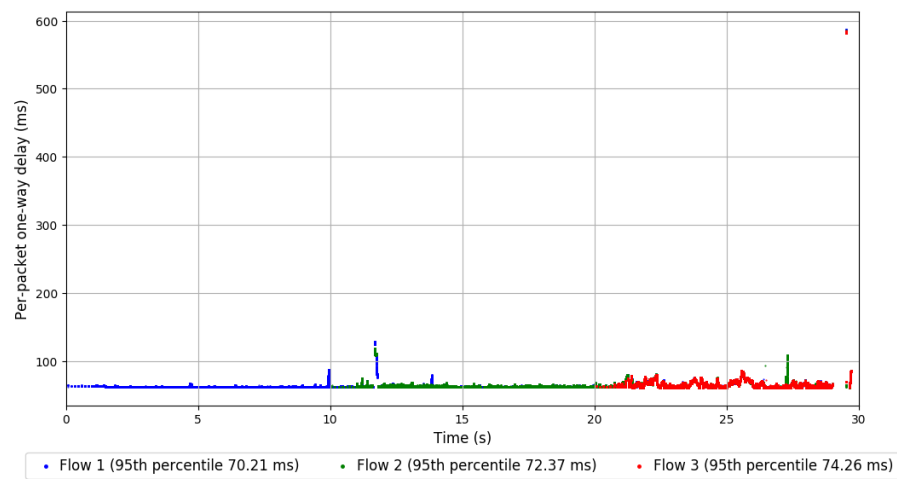
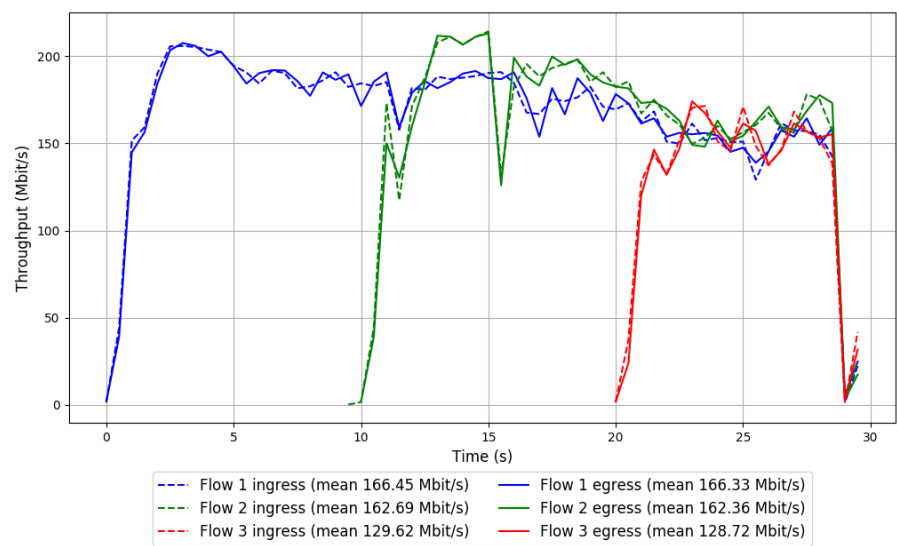
-- Flow 3:

Average throughput: 128.72 Mbit/s

95th percentile per-packet one-way delay: 74.257 ms

Loss rate: 0.62%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-06 12:46:09

End at: 2017-12-06 12:46:39

Below is generated by plot.py at 2017-12-06 16:10:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 331.90 Mbit/s

95th percentile per-packet one-way delay: 70.433 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 175.58 Mbit/s

95th percentile per-packet one-way delay: 68.499 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 167.66 Mbit/s

95th percentile per-packet one-way delay: 71.296 ms

Loss rate: 0.00%

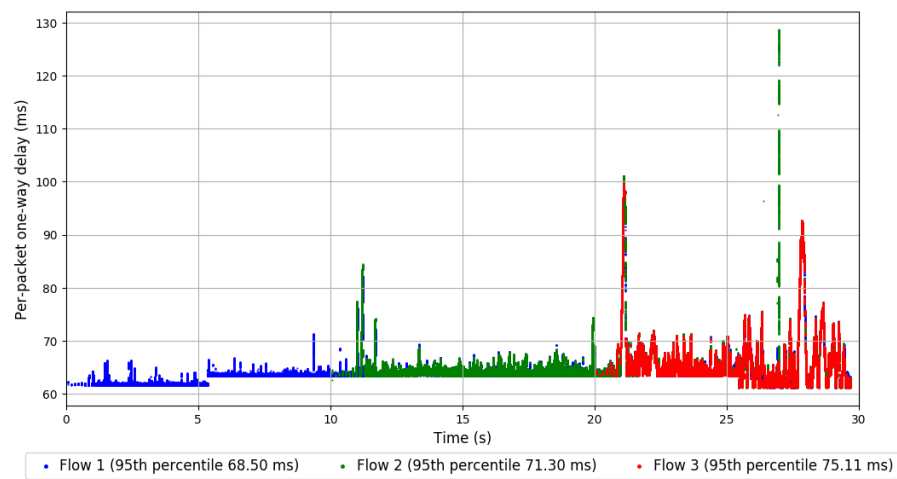
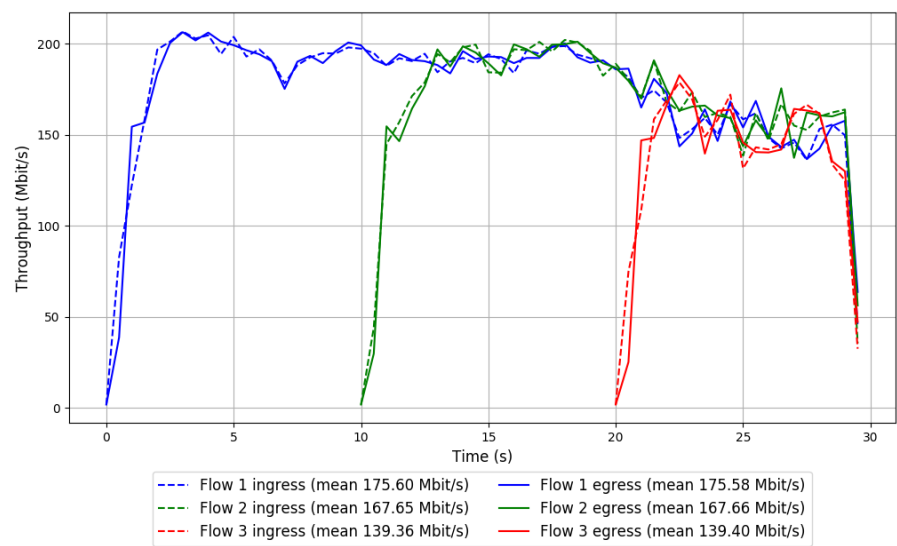
-- Flow 3:

Average throughput: 139.40 Mbit/s

95th percentile per-packet one-way delay: 75.110 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-06 12:58:31

End at: 2017-12-06 12:59:01

Below is generated by plot.py at 2017-12-06 16:10:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 325.87 Mbit/s

95th percentile per-packet one-way delay: 68.736 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 172.25 Mbit/s

95th percentile per-packet one-way delay: 66.136 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 165.77 Mbit/s

95th percentile per-packet one-way delay: 70.213 ms

Loss rate: 0.02%

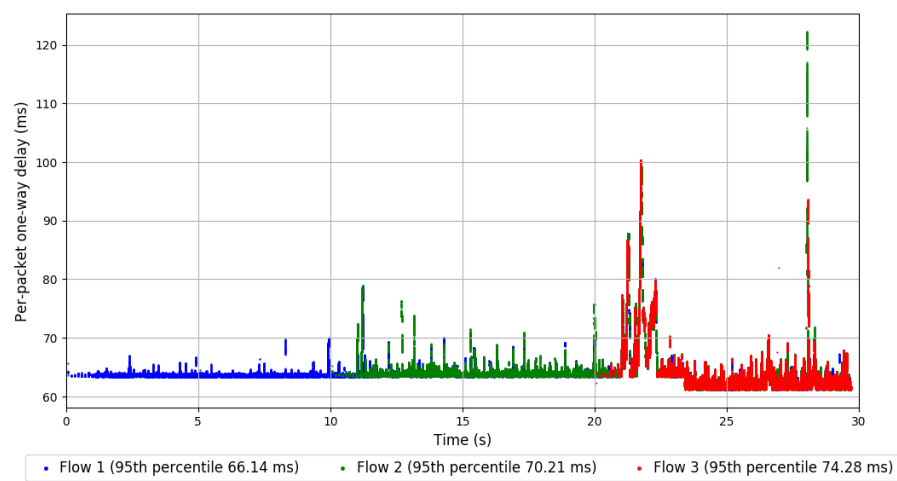
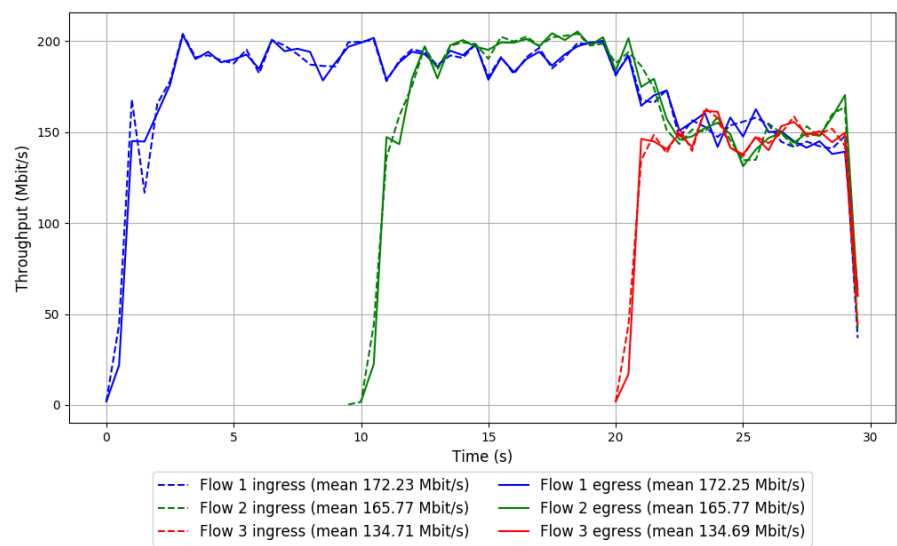
-- Flow 3:

Average throughput: 134.69 Mbit/s

95th percentile per-packet one-way delay: 74.285 ms

Loss rate: 0.02%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-06 13:10:47

End at: 2017-12-06 13:11:17

Below is generated by plot.py at 2017-12-06 16:10:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 310.48 Mbit/s

95th percentile per-packet one-way delay: 68.525 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 169.17 Mbit/s

95th percentile per-packet one-way delay: 67.569 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 147.23 Mbit/s

95th percentile per-packet one-way delay: 68.763 ms

Loss rate: 0.01%

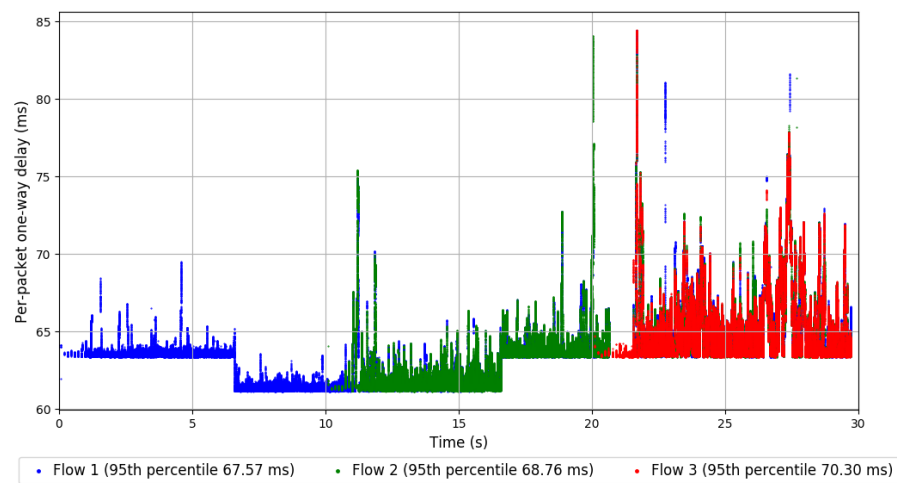
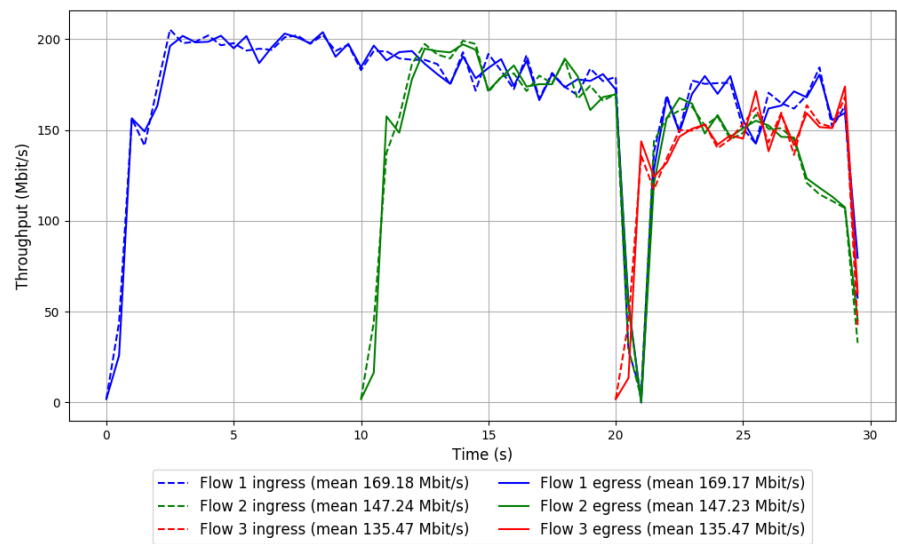
-- Flow 3:

Average throughput: 135.47 Mbit/s

95th percentile per-packet one-way delay: 70.297 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-06 13:23:09

End at: 2017-12-06 13:23:39

Below is generated by plot.py at 2017-12-06 16:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 294.05 Mbit/s

95th percentile per-packet one-way delay: 67.063 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 148.16 Mbit/s

95th percentile per-packet one-way delay: 65.601 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 149.05 Mbit/s

95th percentile per-packet one-way delay: 67.357 ms

Loss rate: 0.01%

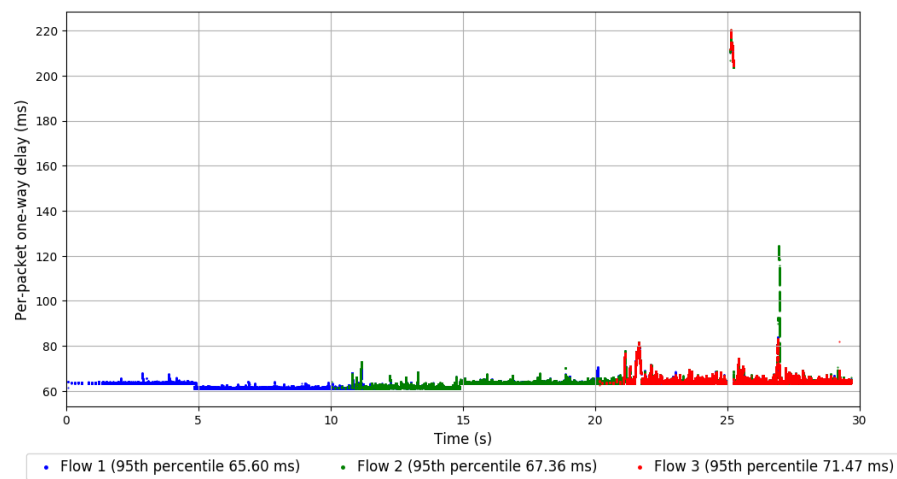
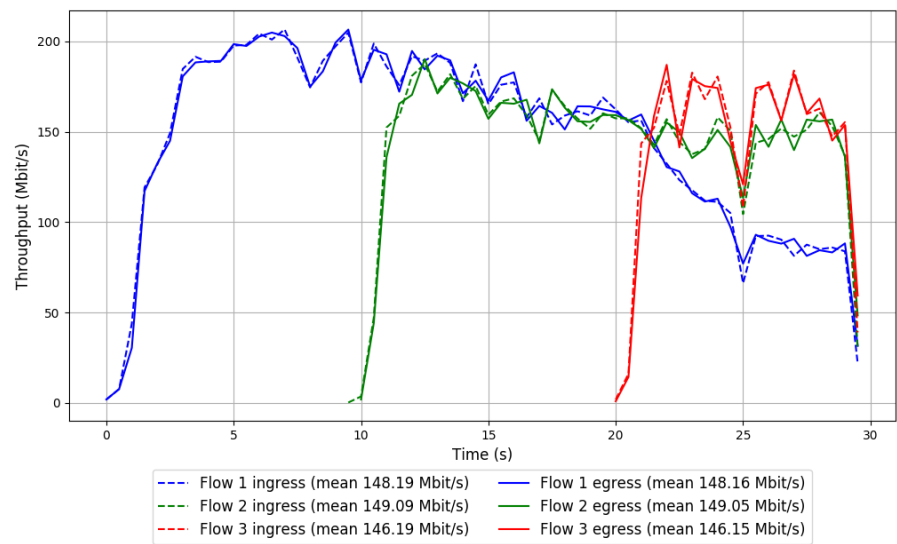
-- Flow 3:

Average throughput: 146.15 Mbit/s

95th percentile per-packet one-way delay: 71.467 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-06 13:35:38

End at: 2017-12-06 13:36:08

Below is generated by plot.py at 2017-12-06 16:11:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 308.30 Mbit/s

95th percentile per-packet one-way delay: 66.353 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 168.18 Mbit/s

95th percentile per-packet one-way delay: 65.855 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 161.40 Mbit/s

95th percentile per-packet one-way delay: 66.434 ms

Loss rate: 0.00%

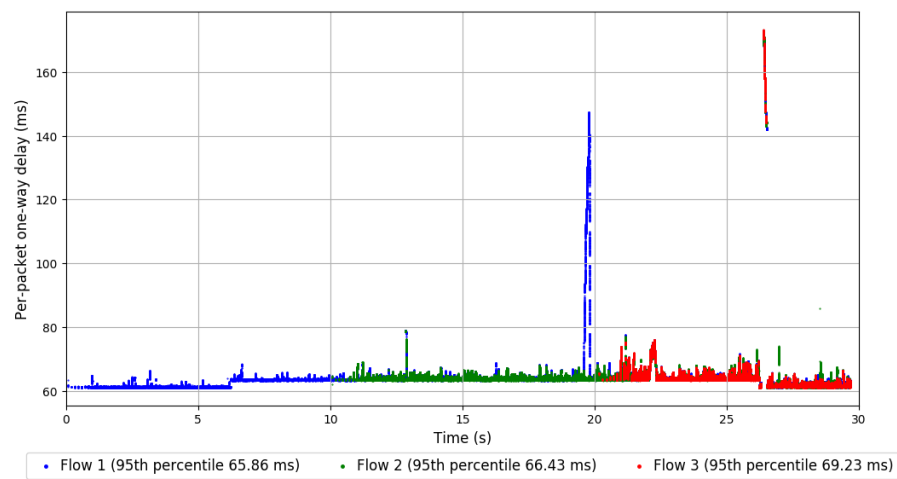
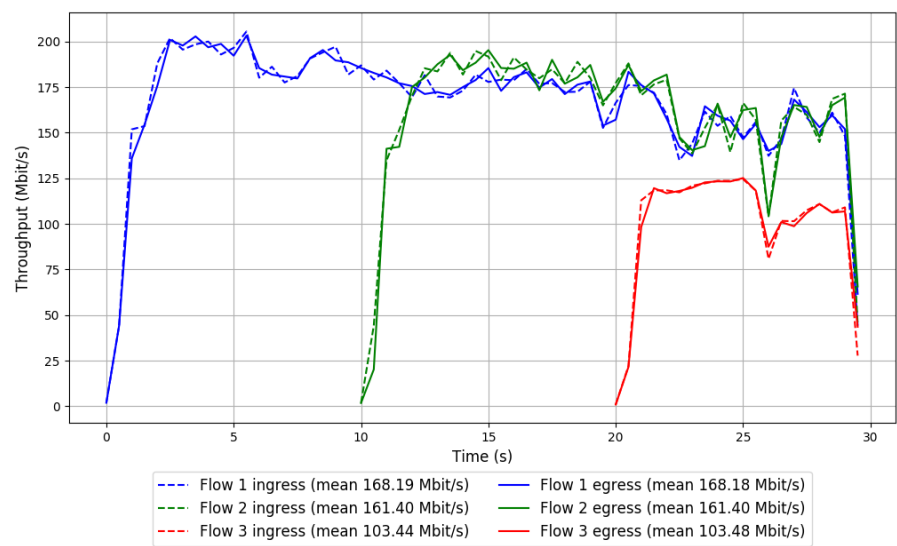
-- Flow 3:

Average throughput: 103.48 Mbit/s

95th percentile per-packet one-way delay: 69.230 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-06 13:47:55

End at: 2017-12-06 13:48:25

Below is generated by plot.py at 2017-12-06 16:13:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.09 Mbit/s

95th percentile per-packet one-way delay: 68.557 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 166.51 Mbit/s

95th percentile per-packet one-way delay: 67.752 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 167.45 Mbit/s

95th percentile per-packet one-way delay: 68.812 ms

Loss rate: 0.01%

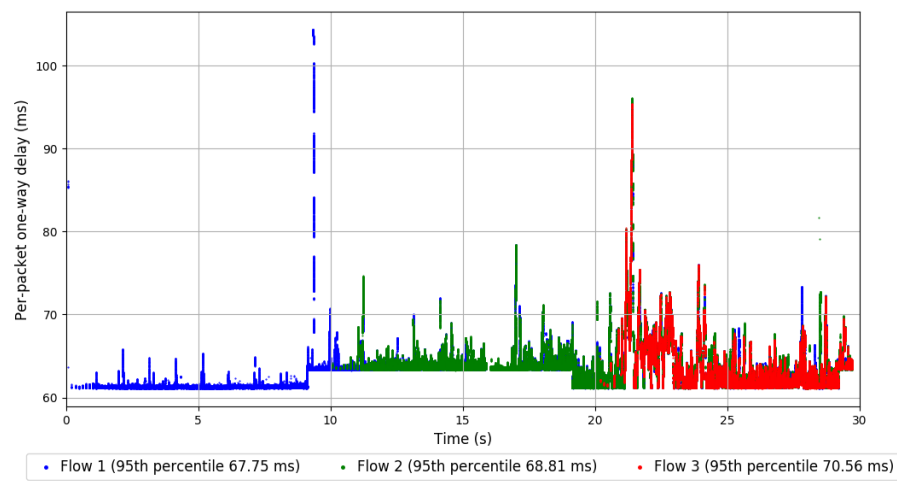
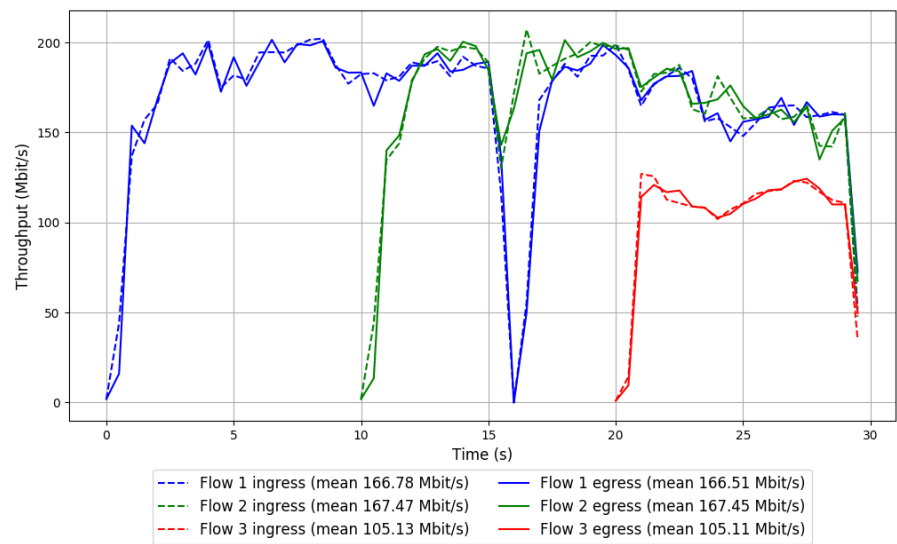
-- Flow 3:

Average throughput: 105.11 Mbit/s

95th percentile per-packet one-way delay: 70.562 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

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

End at: 2017-12-06 14:00:44

Below is generated by plot.py at 2017-12-06 16:14:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.88 Mbit/s

95th percentile per-packet one-way delay: 72.395 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 169.56 Mbit/s

95th percentile per-packet one-way delay: 69.235 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 164.35 Mbit/s

95th percentile per-packet one-way delay: 73.111 ms

Loss rate: 0.03%

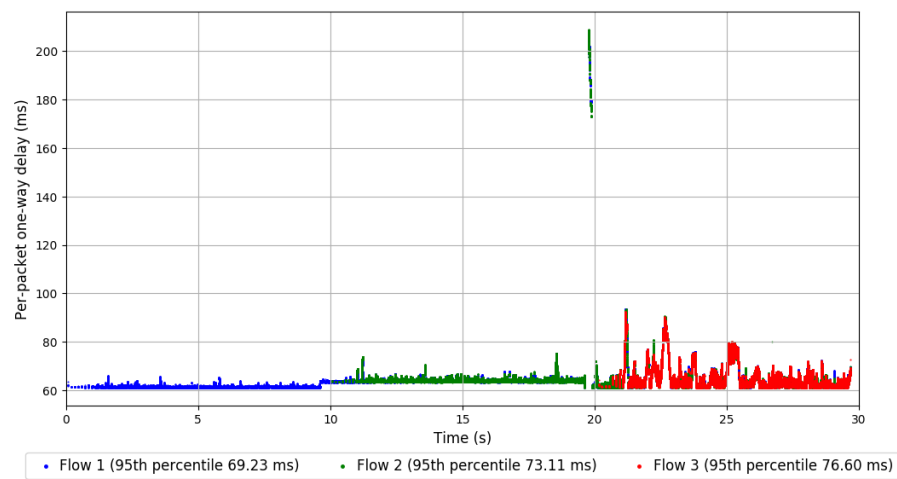
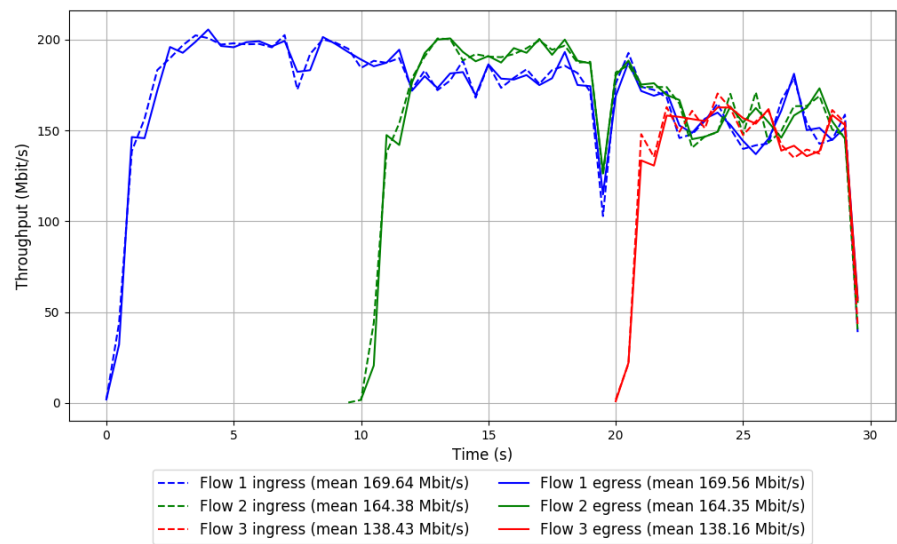
-- Flow 3:

Average throughput: 138.16 Mbit/s

95th percentile per-packet one-way delay: 76.597 ms

Loss rate: 0.17%

Run 10: Report of Indigo — Data Link

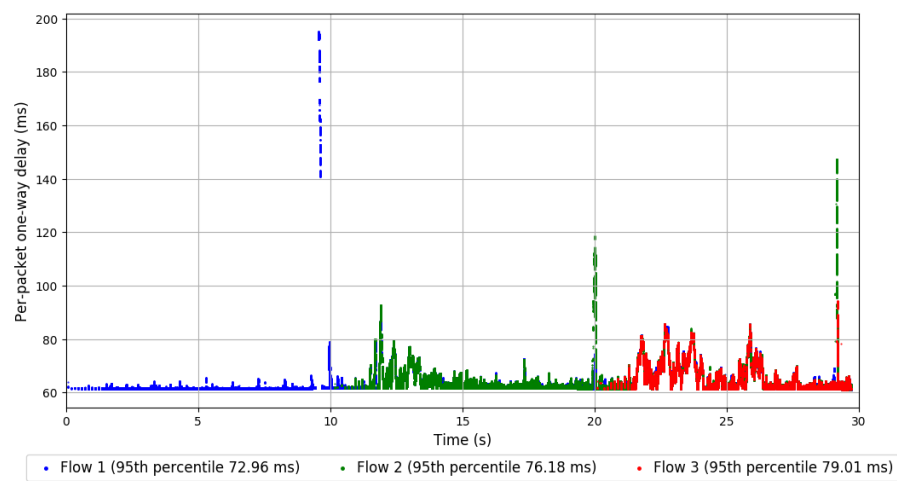
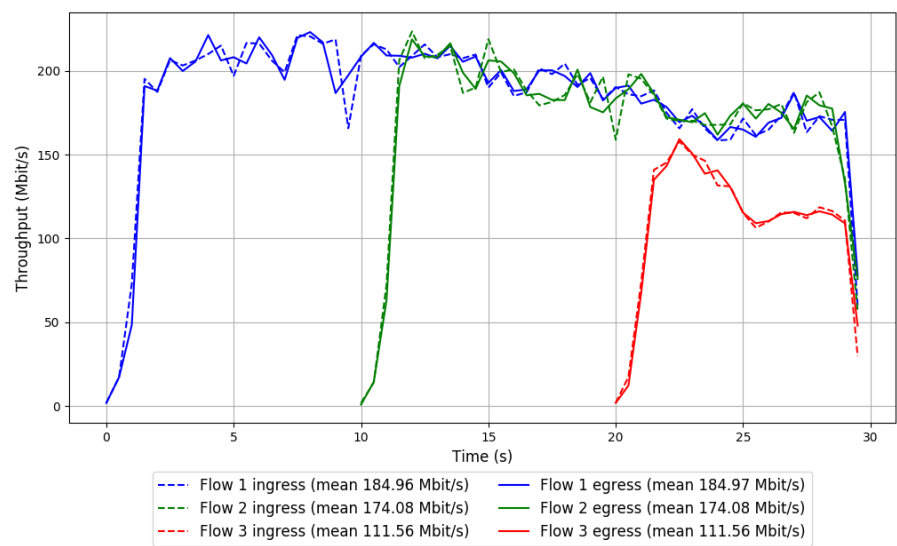


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-06 12:11:25
End at: 2017-12-06 12:11:55

# Below is generated by plot.py at 2017-12-06 16:15:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 335.99 Mbit/s
95th percentile per-packet one-way delay: 74.683 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.97 Mbit/s
95th percentile per-packet one-way delay: 72.961 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 174.08 Mbit/s
95th percentile per-packet one-way delay: 76.180 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 111.56 Mbit/s
95th percentile per-packet one-way delay: 79.006 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-calib — Data Link

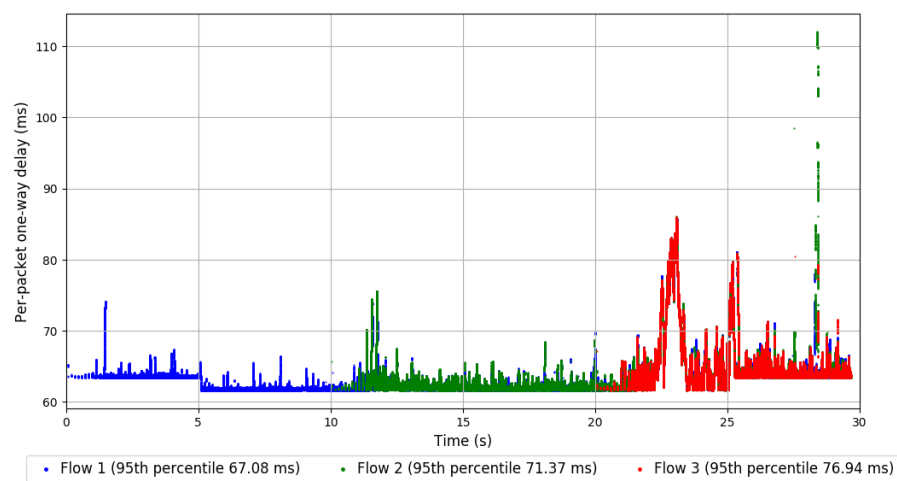
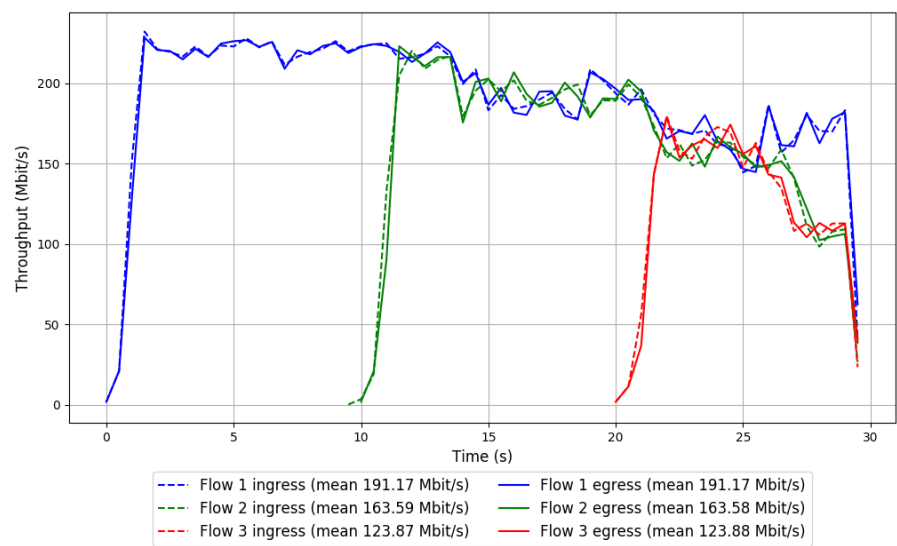


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-06 12:23:39
End at: 2017-12-06 12:24:09

# Below is generated by plot.py at 2017-12-06 16:15:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 339.87 Mbit/s
95th percentile per-packet one-way delay: 70.488 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 191.17 Mbit/s
95th percentile per-packet one-way delay: 67.080 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 163.58 Mbit/s
95th percentile per-packet one-way delay: 71.368 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 123.88 Mbit/s
95th percentile per-packet one-way delay: 76.935 ms
Loss rate: 0.02%
```

Run 2: Report of Indigo-calib — Data Link

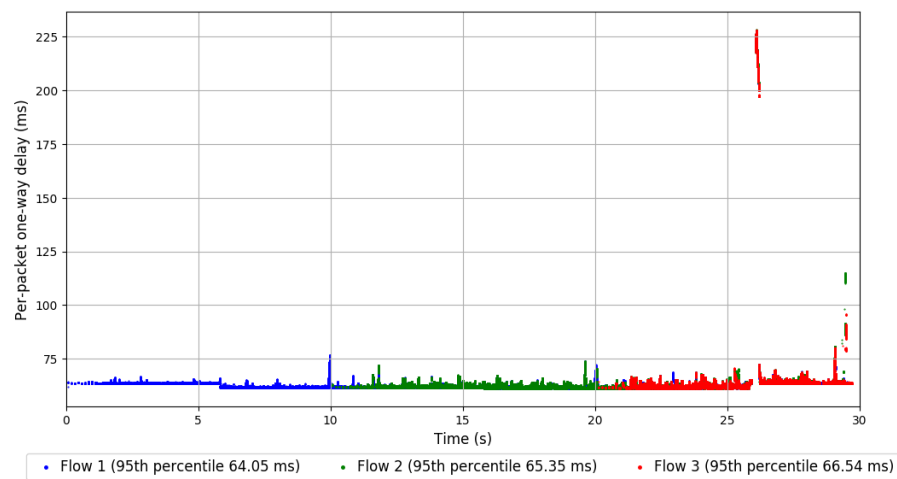
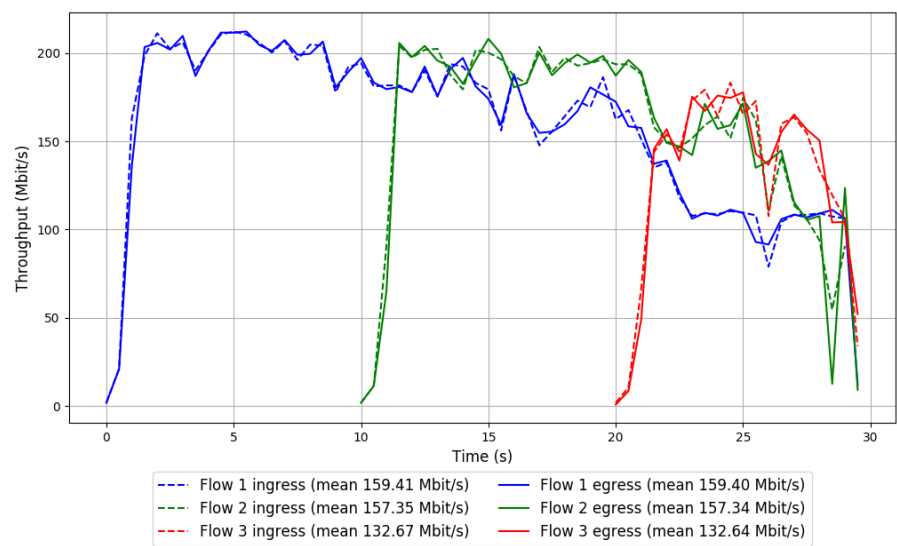


```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-06 12:35:38
End at: 2017-12-06 12:36:08

# Below is generated by plot.py at 2017-12-06 16:15:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 304.56 Mbit/s
95th percentile per-packet one-way delay: 64.898 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 159.40 Mbit/s
95th percentile per-packet one-way delay: 64.045 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 157.34 Mbit/s
95th percentile per-packet one-way delay: 65.346 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 132.64 Mbit/s
95th percentile per-packet one-way delay: 66.544 ms
Loss rate: 0.00%
```


Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

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

End at: 2017-12-06 12:48:27

Below is generated by plot.py at 2017-12-06 16:15:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.58 Mbit/s

95th percentile per-packet one-way delay: 82.770 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 170.58 Mbit/s

95th percentile per-packet one-way delay: 76.853 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 160.38 Mbit/s

95th percentile per-packet one-way delay: 82.245 ms

Loss rate: 0.01%

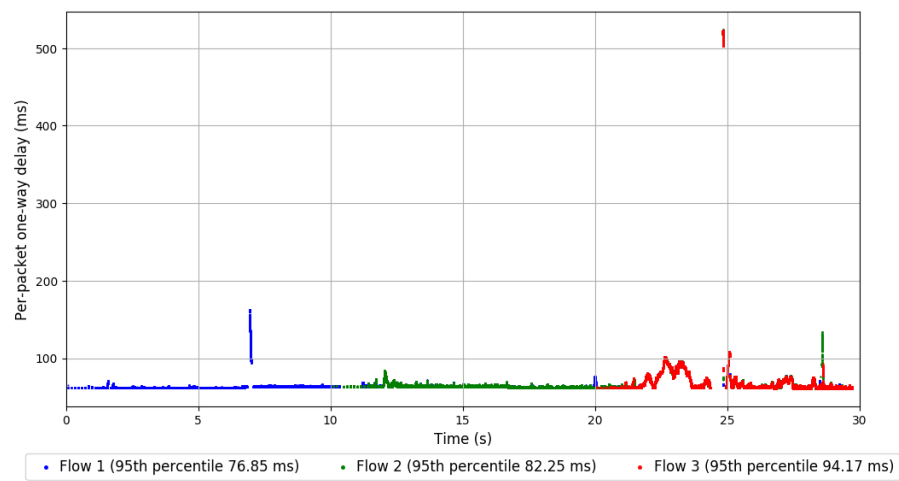
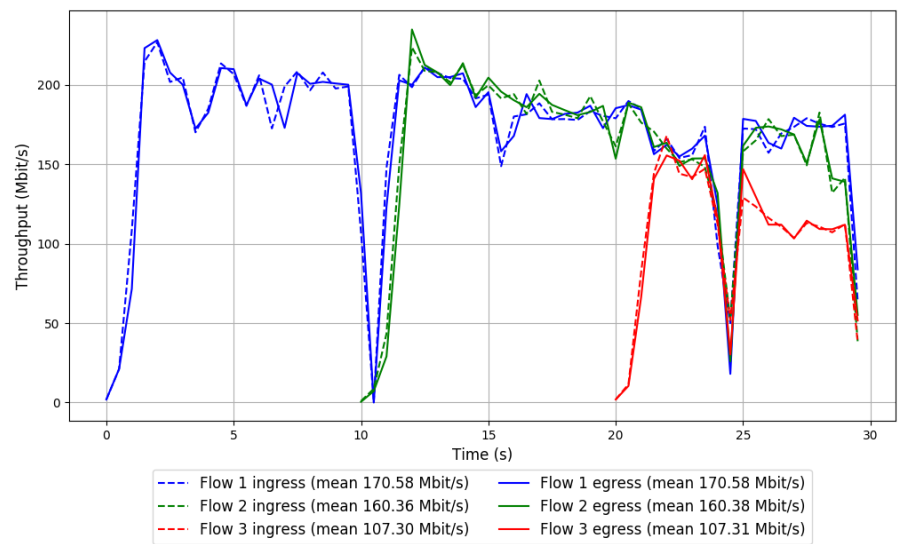
-- Flow 3:

Average throughput: 107.31 Mbit/s

95th percentile per-packet one-way delay: 94.166 ms

Loss rate: 0.00%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-06 13:00:18

End at: 2017-12-06 13:00:48

Below is generated by plot.py at 2017-12-06 16:16:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.53 Mbit/s

95th percentile per-packet one-way delay: 67.542 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 180.94 Mbit/s

95th percentile per-packet one-way delay: 66.092 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 165.43 Mbit/s

95th percentile per-packet one-way delay: 68.380 ms

Loss rate: 0.01%

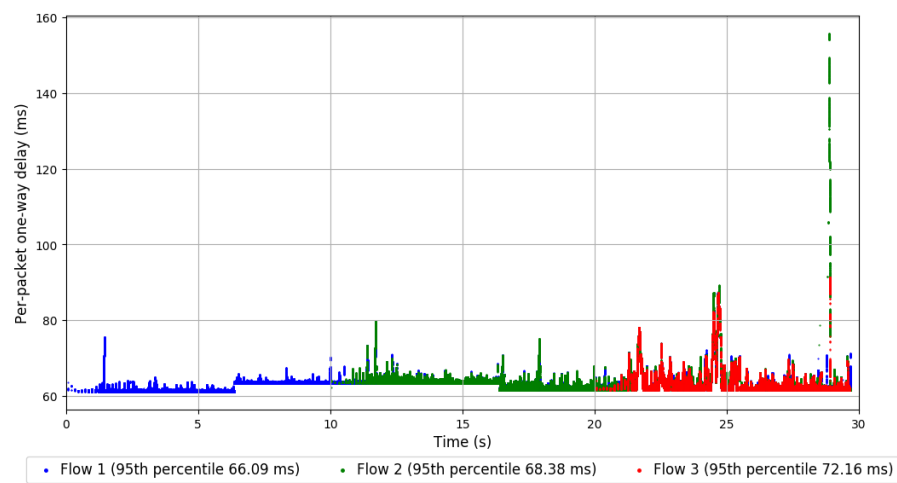
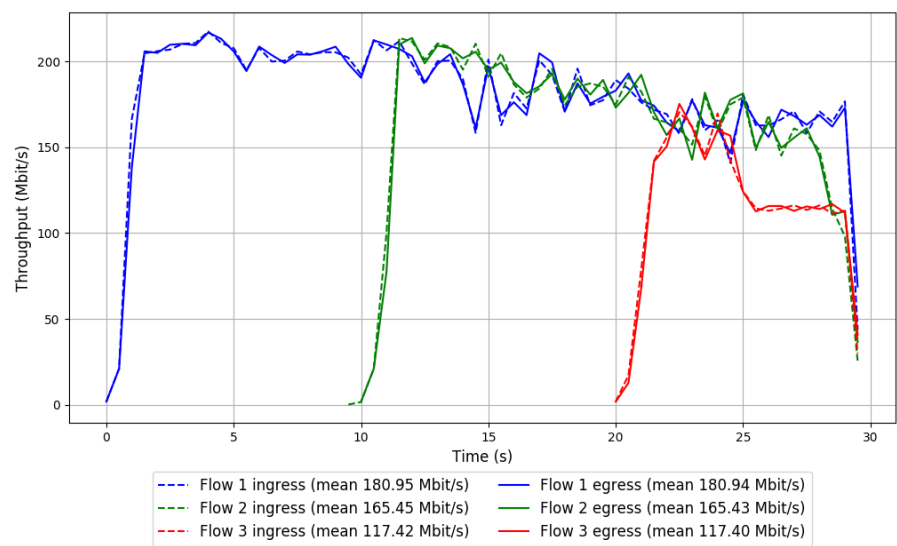
-- Flow 3:

Average throughput: 117.40 Mbit/s

95th percentile per-packet one-way delay: 72.155 ms

Loss rate: 0.02%

Run 5: Report of Indigo-calib — Data Link

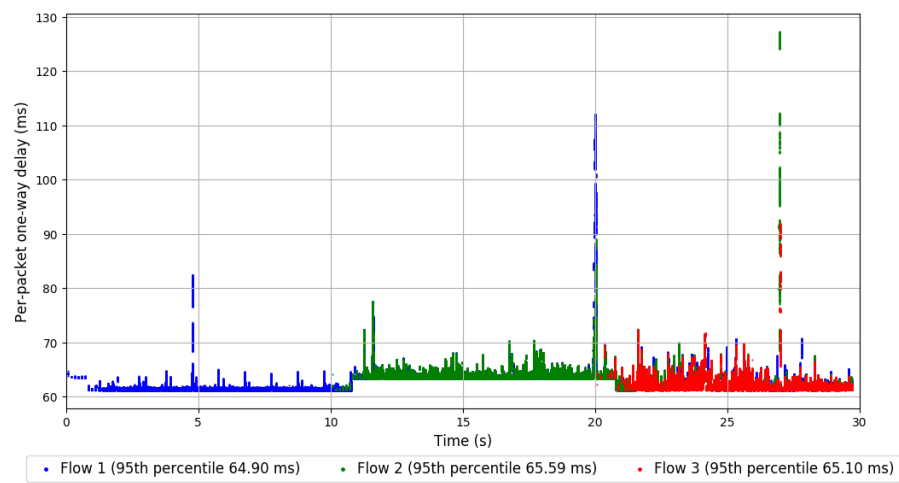
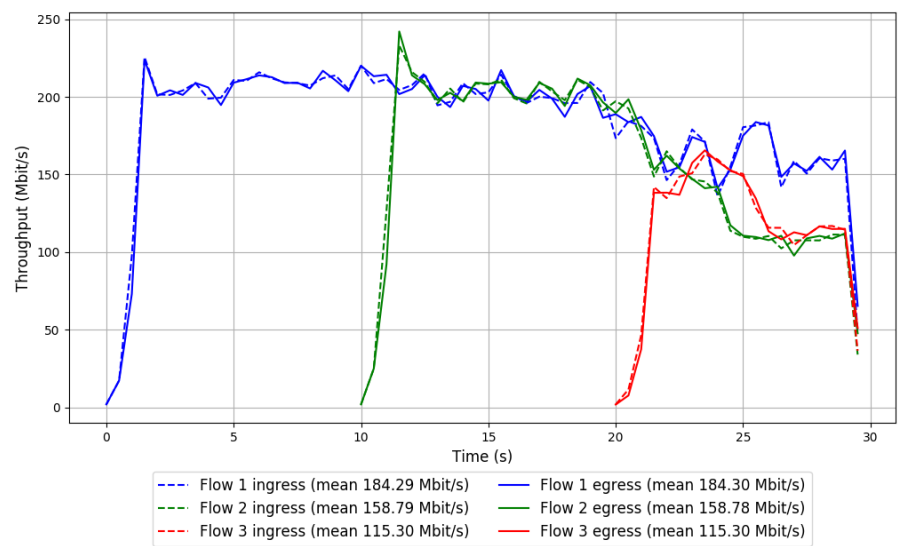


```
Run 6: Statistics of Indigo-calib

Start at: 2017-12-06 13:12:33
End at: 2017-12-06 13:13:03

# Below is generated by plot.py at 2017-12-06 16:16:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.95 Mbit/s
95th percentile per-packet one-way delay: 65.167 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.30 Mbit/s
95th percentile per-packet one-way delay: 64.896 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 158.78 Mbit/s
95th percentile per-packet one-way delay: 65.593 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 115.30 Mbit/s
95th percentile per-packet one-way delay: 65.098 ms
Loss rate: 0.01%
```

Run 6: Report of Indigo-calib — Data Link

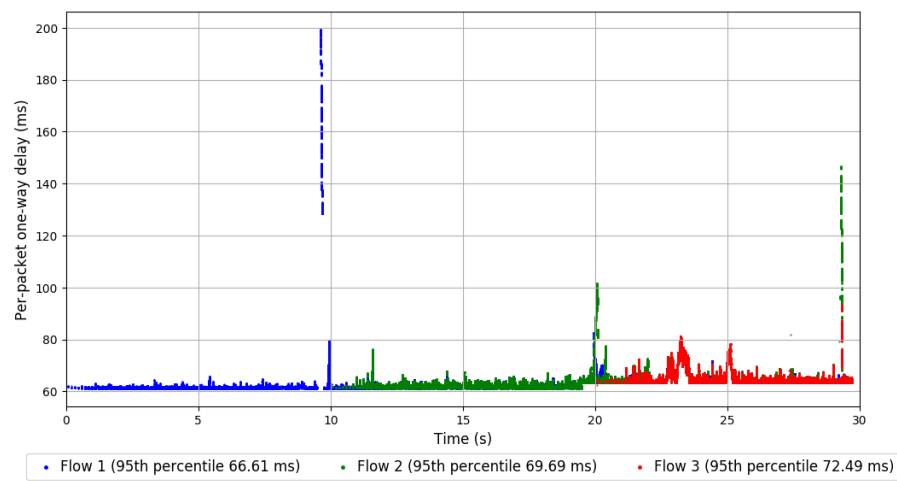
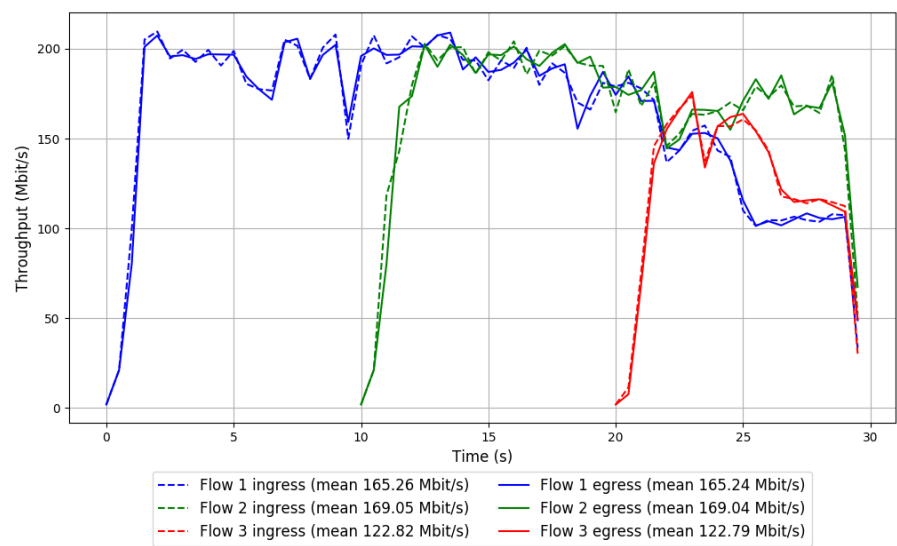


```
Run 7: Statistics of Indigo-calib

Start at: 2017-12-06 13:24:55
End at: 2017-12-06 13:25:25

# Below is generated by plot.py at 2017-12-06 16:17:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.10 Mbit/s
95th percentile per-packet one-way delay: 68.855 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 165.24 Mbit/s
95th percentile per-packet one-way delay: 66.614 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 169.04 Mbit/s
95th percentile per-packet one-way delay: 69.686 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 122.79 Mbit/s
95th percentile per-packet one-way delay: 72.486 ms
Loss rate: 0.00%
```


Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-06 13:37:24

End at: 2017-12-06 13:37:54

Below is generated by plot.py at 2017-12-06 16:17:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 313.77 Mbit/s

95th percentile per-packet one-way delay: 74.144 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 175.78 Mbit/s

95th percentile per-packet one-way delay: 70.946 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 150.96 Mbit/s

95th percentile per-packet one-way delay: 76.733 ms

Loss rate: 0.00%

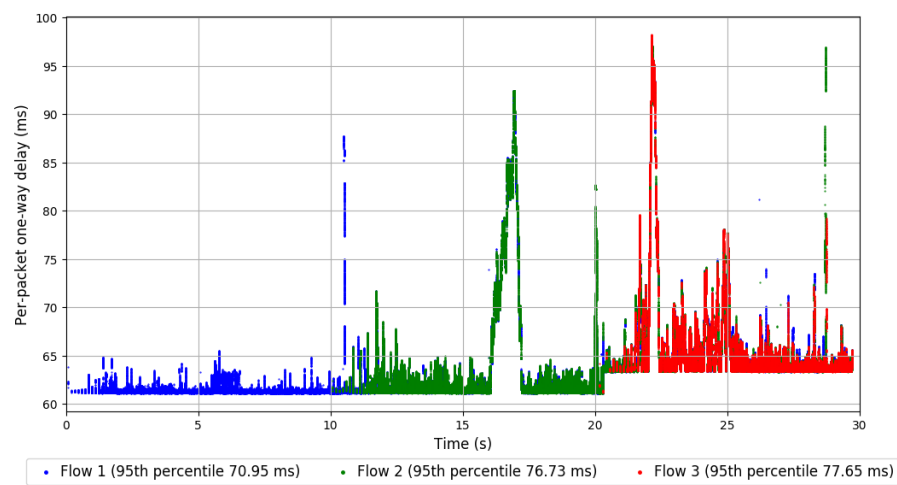
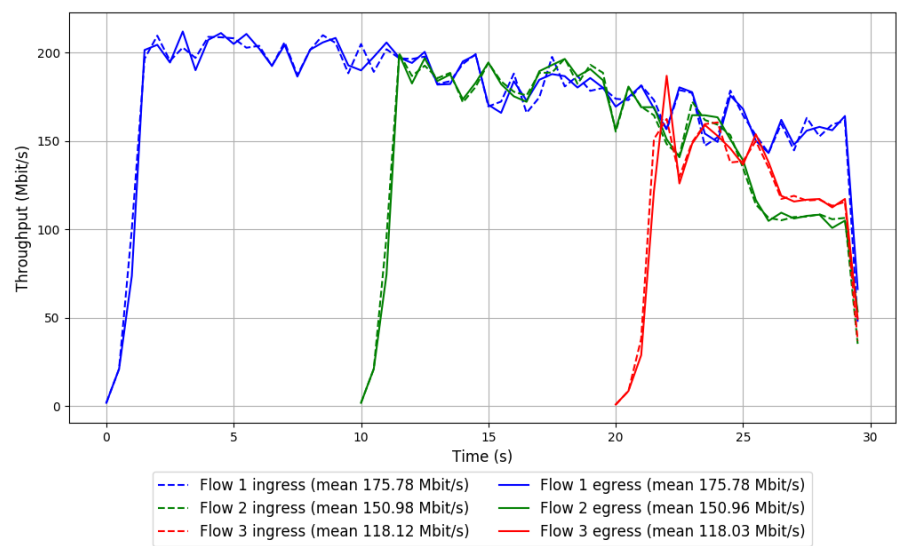
-- Flow 3:

Average throughput: 118.03 Mbit/s

95th percentile per-packet one-way delay: 77.653 ms

Loss rate: 0.07%

Run 8: Report of Indigo-calib — Data Link

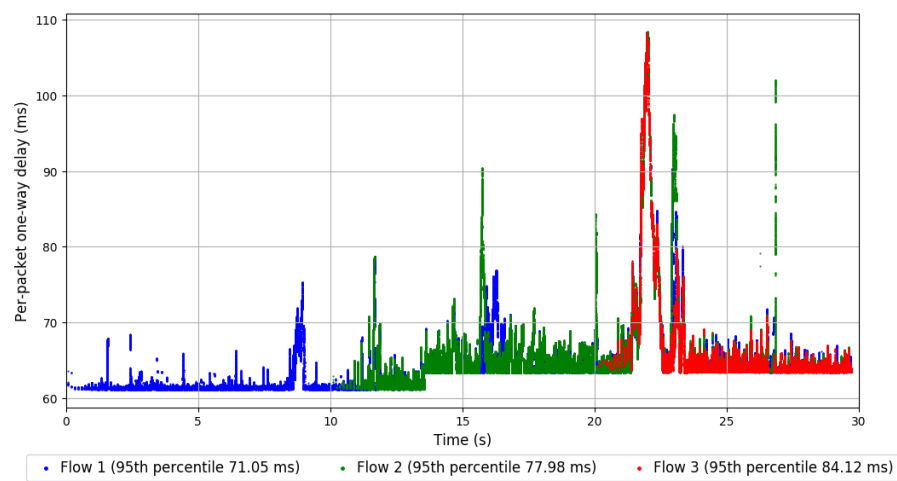
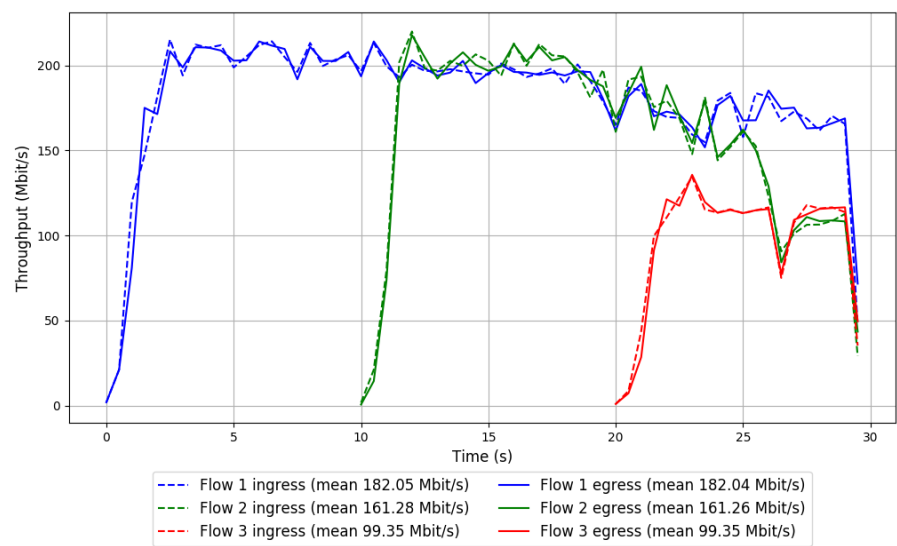


```
Run 9: Statistics of Indigo-calib

Start at: 2017-12-06 13:49:41
End at: 2017-12-06 13:50:11

# Below is generated by plot.py at 2017-12-06 16:18:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.52 Mbit/s
95th percentile per-packet one-way delay: 74.518 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 182.04 Mbit/s
95th percentile per-packet one-way delay: 71.047 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 161.26 Mbit/s
95th percentile per-packet one-way delay: 77.978 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 99.35 Mbit/s
95th percentile per-packet one-way delay: 84.118 ms
Loss rate: 0.00%
```

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-06 14:02:01

End at: 2017-12-06 14:02:31

Below is generated by plot.py at 2017-12-06 16:18:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 319.36 Mbit/s

95th percentile per-packet one-way delay: 76.644 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 173.70 Mbit/s

95th percentile per-packet one-way delay: 73.687 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 170.05 Mbit/s

95th percentile per-packet one-way delay: 77.427 ms

Loss rate: 0.01%

-- Flow 3:

Average throughput: 101.52 Mbit/s

95th percentile per-packet one-way delay: 83.032 ms

Loss rate: 0.02%

Run 10: Report of Indigo-calib — Data Link

