

Pantheon Report

Generated at 2017-12-01 15:08:10 (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.

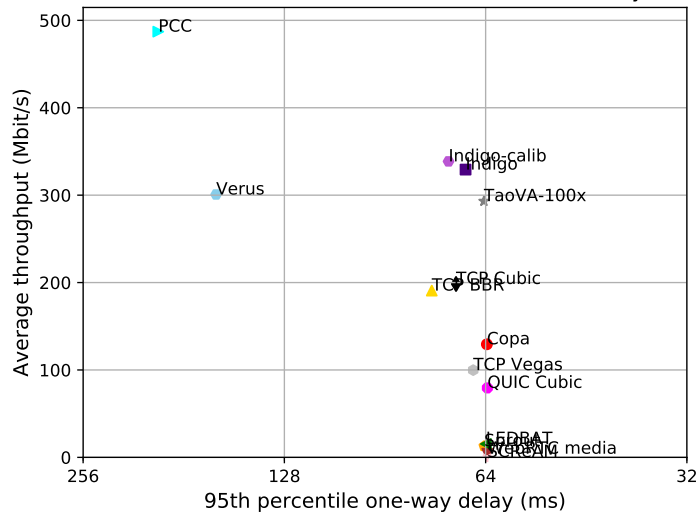
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

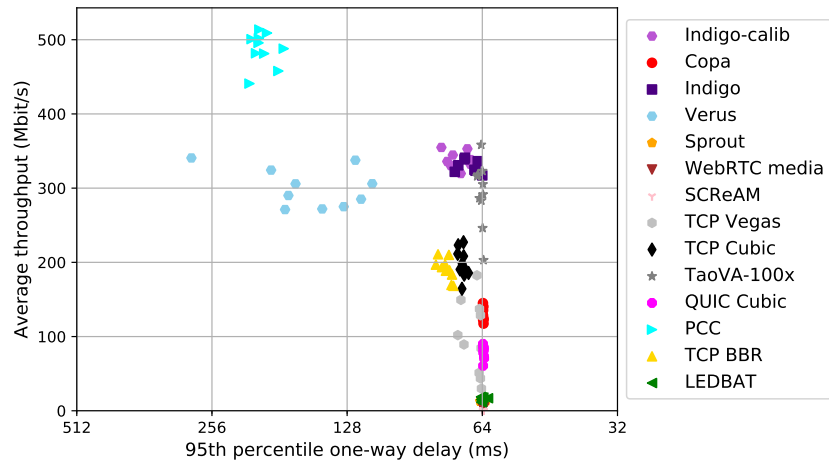
Git summary:

```
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-quic @ 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



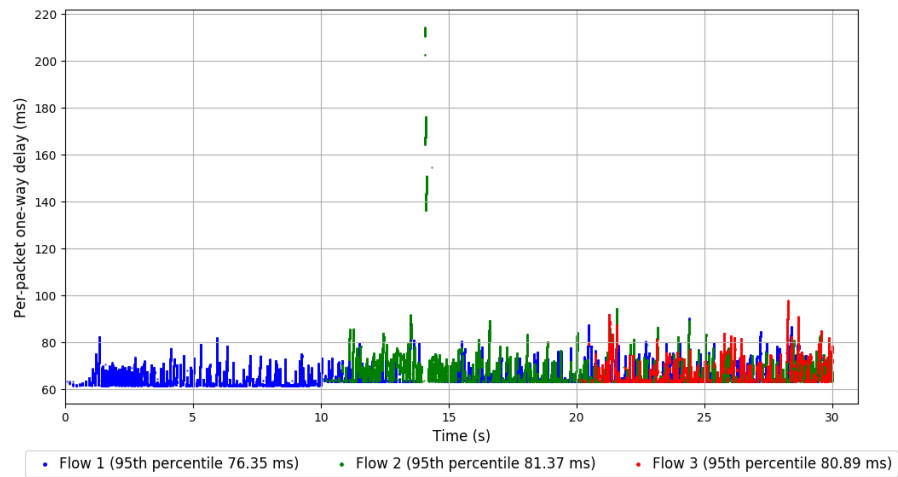
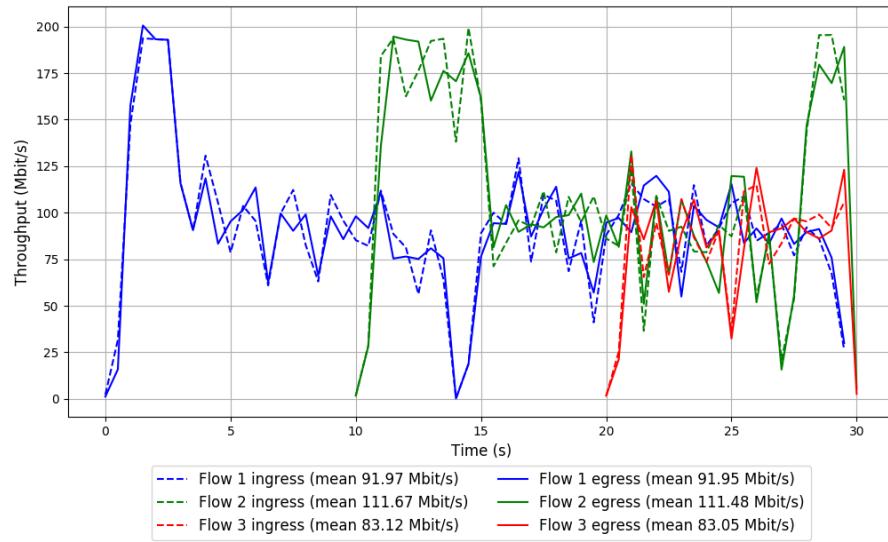
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	92.01	88.32	121.38	74.71	77.28	79.80	0.13	0.21	0.15
TCP Cubic	10	98.12	99.36	103.04	69.90	71.02	70.91	0.08	0.03	0.03
LEDBAT	9	8.62	7.76	4.68	63.97	63.91	63.50	0.39	0.77	0.44
PCC	10	460.99	30.06	18.55	197.53	171.41	163.92	1.18	0.76	1.16
QUIC Cubic	10	47.14	35.75	22.33	63.33	63.28	62.95	0.00	0.35	0.00
SCReAM	10	0.22	0.22	0.22	63.64	63.44	63.44	0.00	0.00	0.00
WebRTC media	10	2.20	1.43	0.56	63.20	63.27	63.69	0.00	0.30	0.01
Sprout	10	6.54	6.44	6.19	64.36	64.39	64.29	0.12	0.09	0.02
TaoVA-100x	10	169.75	137.05	129.28	64.20	64.09	65.79	0.01	0.01	0.01
TCP Vegas	10	46.24	57.14	46.89	66.03	66.23	65.87	0.13	0.11	0.13
Verus	10	192.75	123.32	81.30	157.38	150.52	150.27	1.00	0.86	0.76
Copa	10	72.56	65.28	52.94	63.68	63.74	63.64	0.00	0.00	0.01
Indigo	8	175.52	163.81	132.04	67.19	68.87	71.42	0.03	0.02	0.02
Indigo-calib	8	181.67	171.78	133.64	69.42	73.35	79.66	0.03	0.03	0.04

```
Run 1: Statistics of TCP BBR

Start at: 2017-12-01 10:56:51
End at: 2017-12-01 10:57:21

# Below is generated by plot.py at 2017-12-01 14:12:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 193.54 Mbit/s
95th percentile per-packet one-way delay: 78.713 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 91.95 Mbit/s
95th percentile per-packet one-way delay: 76.353 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 111.48 Mbit/s
95th percentile per-packet one-way delay: 81.370 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 83.05 Mbit/s
95th percentile per-packet one-way delay: 80.889 ms
Loss rate: 0.00%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-01 11:09:19

End at: 2017-12-01 11:09:49

Below is generated by plot.py at 2017-12-01 14:12:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 169.55 Mbit/s

95th percentile per-packet one-way delay: 74.971 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 87.29 Mbit/s

95th percentile per-packet one-way delay: 75.130 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 81.97 Mbit/s

95th percentile per-packet one-way delay: 74.753 ms

Loss rate: 0.00%

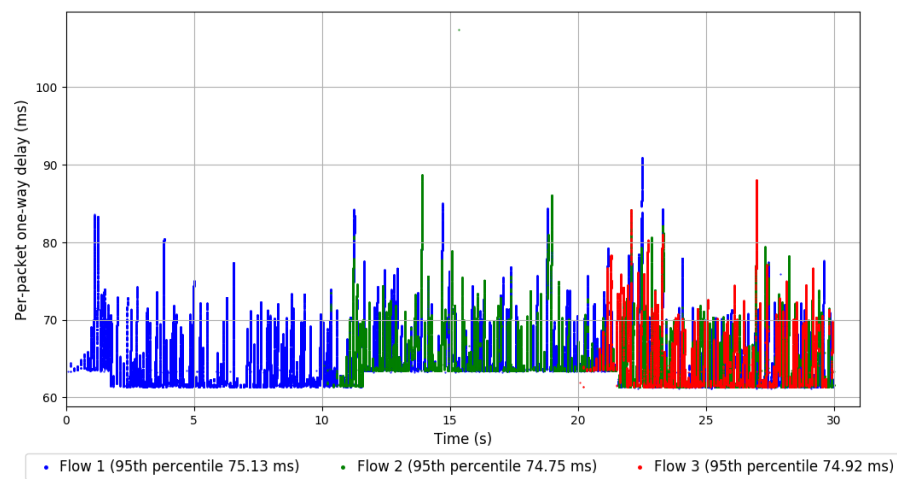
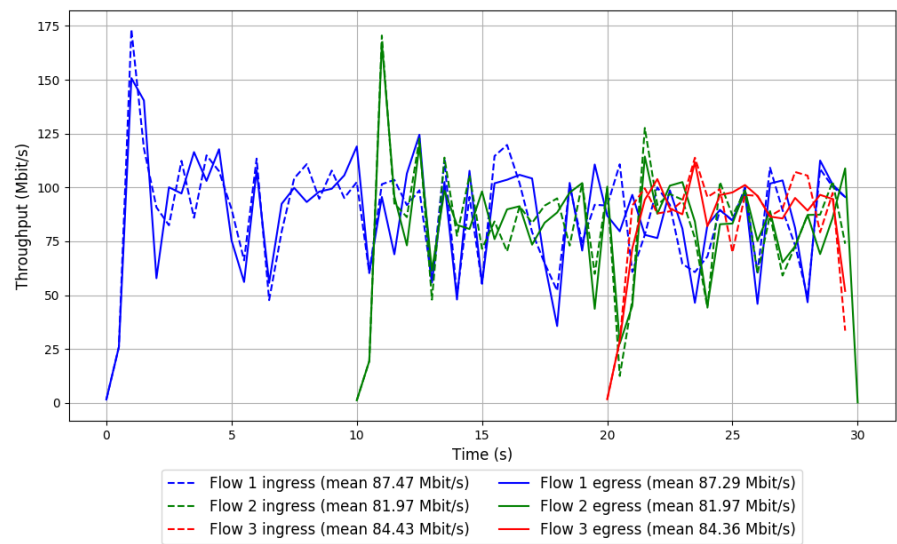
-- Flow 3:

Average throughput: 84.36 Mbit/s

95th percentile per-packet one-way delay: 74.915 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-01 11:21:37

End at: 2017-12-01 11:22:07

Below is generated by plot.py at 2017-12-01 14:12:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 168.34 Mbit/s

95th percentile per-packet one-way delay: 74.219 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 85.18 Mbit/s

95th percentile per-packet one-way delay: 73.735 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 84.38 Mbit/s

95th percentile per-packet one-way delay: 74.823 ms

Loss rate: 0.00%

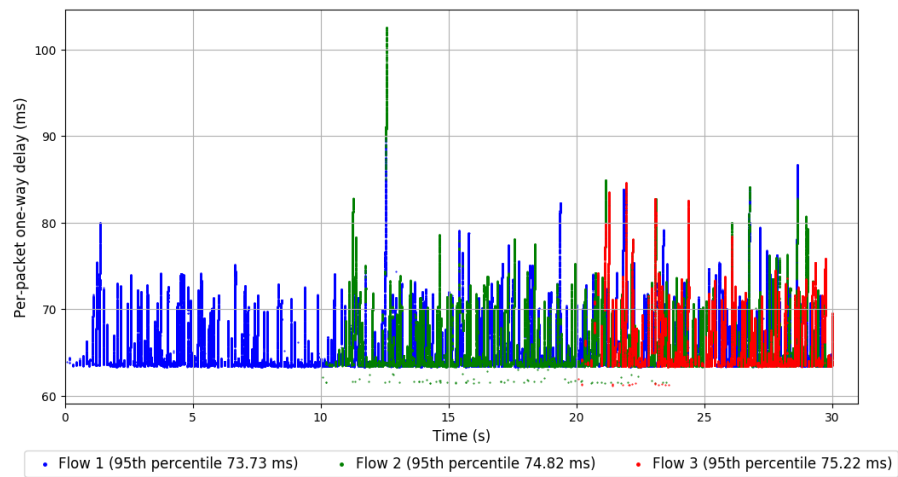
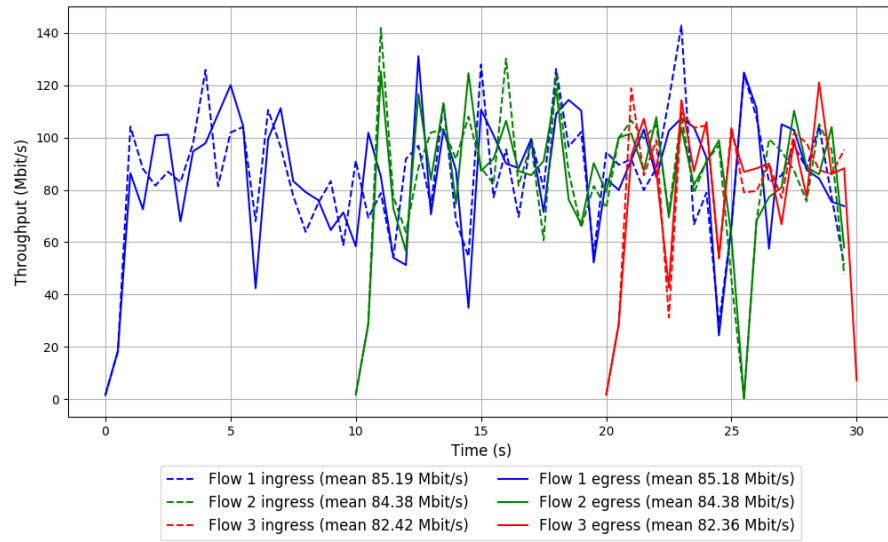
-- Flow 3:

Average throughput: 82.36 Mbit/s

95th percentile per-packet one-way delay: 75.217 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-01 11:33:51

End at: 2017-12-01 11:34:21

Below is generated by plot.py at 2017-12-01 14:12:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 197.35 Mbit/s

95th percentile per-packet one-way delay: 77.458 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 85.75 Mbit/s

95th percentile per-packet one-way delay: 76.083 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 84.90 Mbit/s

95th percentile per-packet one-way delay: 75.737 ms

Loss rate: 1.08%

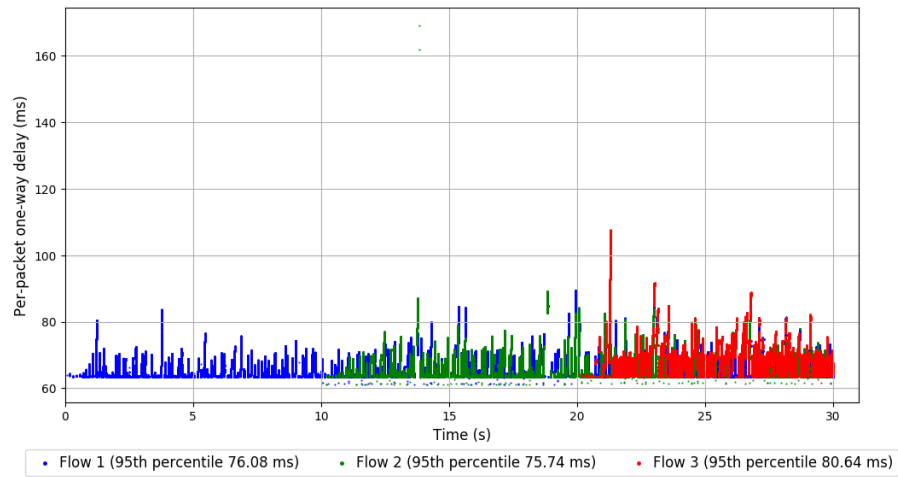
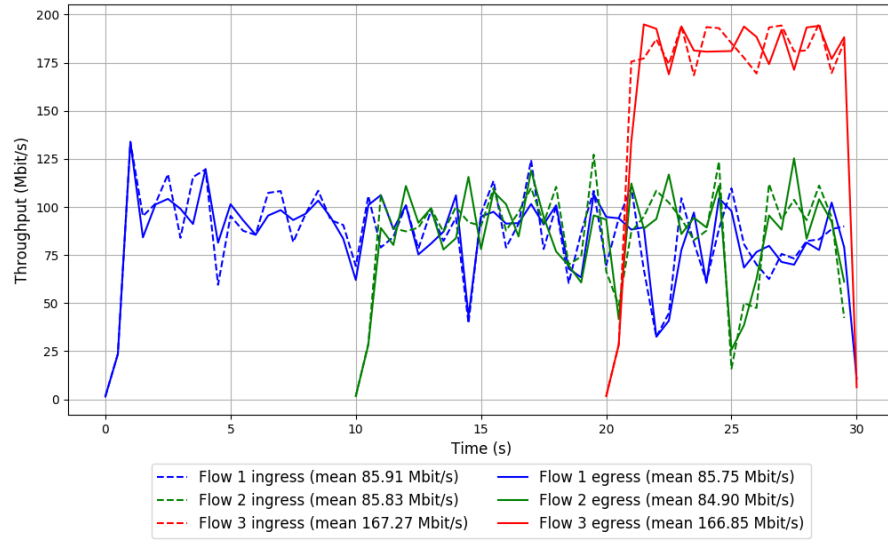
-- Flow 3:

Average throughput: 166.85 Mbit/s

95th percentile per-packet one-way delay: 80.644 ms

Loss rate: 0.27%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-01 11:46:14

End at: 2017-12-01 11:46:44

Below is generated by plot.py at 2017-12-01 14:12:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.69 Mbit/s

95th percentile per-packet one-way delay: 77.132 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 88.57 Mbit/s

95th percentile per-packet one-way delay: 73.864 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 91.78 Mbit/s

95th percentile per-packet one-way delay: 79.376 ms

Loss rate: 0.39%

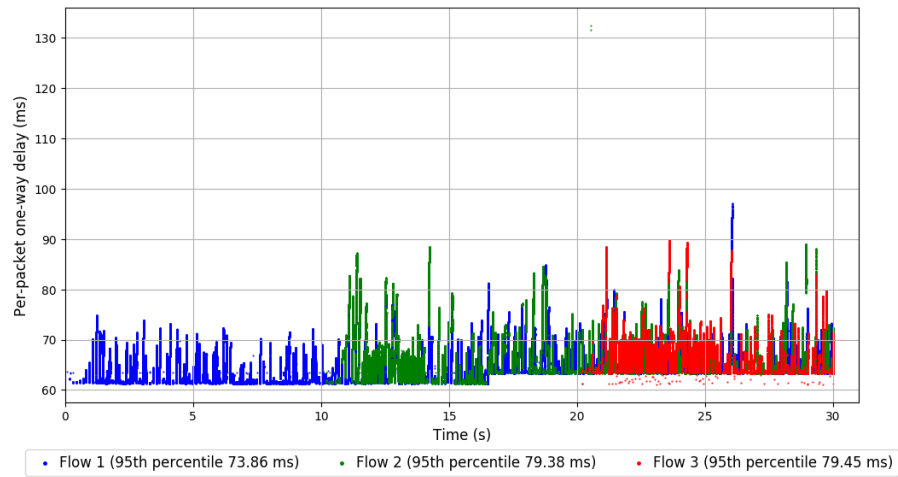
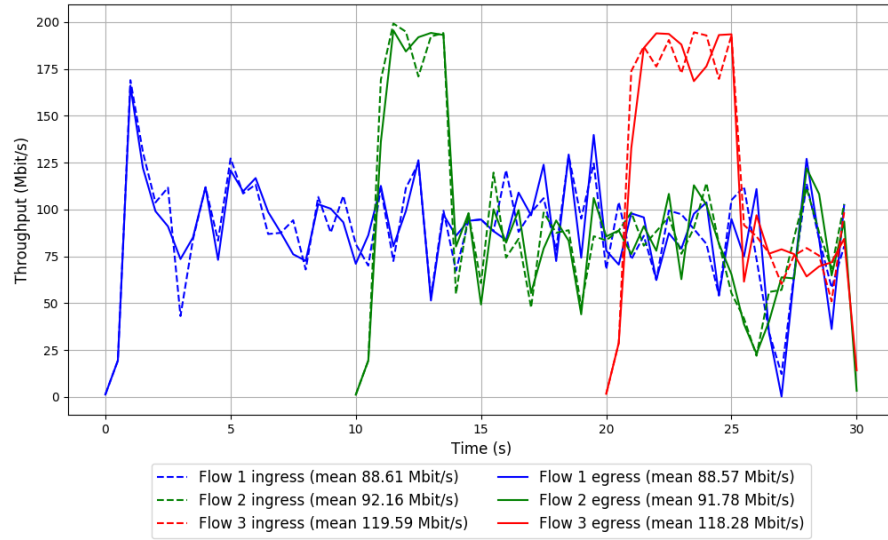
-- Flow 3:

Average throughput: 118.28 Mbit/s

95th percentile per-packet one-way delay: 79.450 ms

Loss rate: 1.01%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-01 11:58:29

End at: 2017-12-01 11:58:59

Below is generated by plot.py at 2017-12-01 14:12:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.55 Mbit/s

95th percentile per-packet one-way delay: 74.753 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 88.59 Mbit/s

95th percentile per-packet one-way delay: 73.800 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 84.53 Mbit/s

95th percentile per-packet one-way delay: 73.376 ms

Loss rate: 0.01%

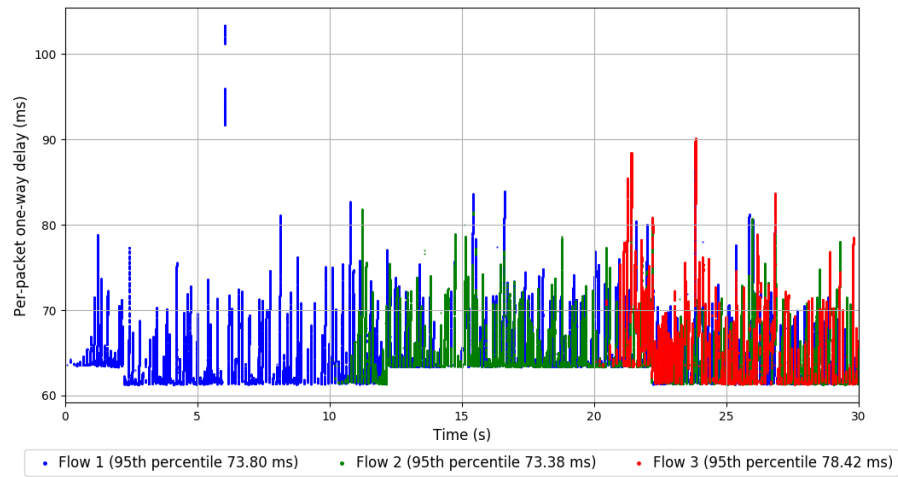
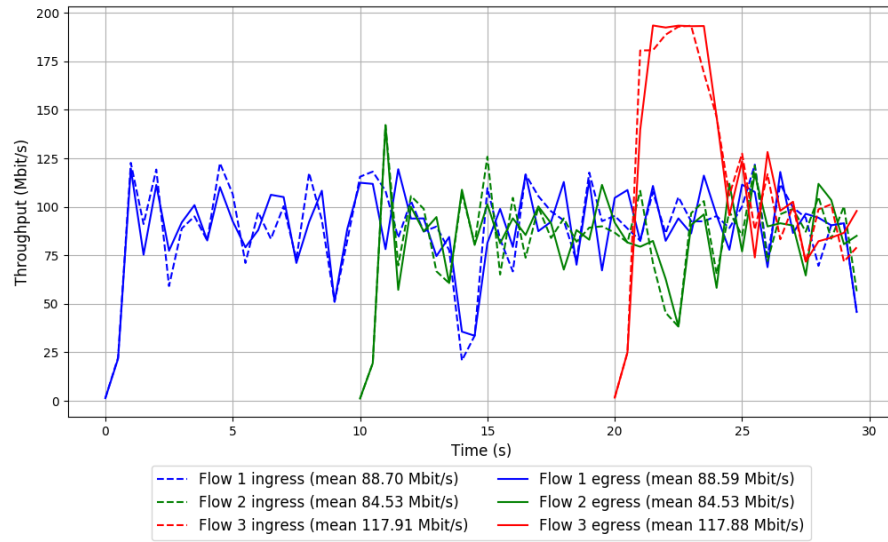
-- Flow 3:

Average throughput: 117.88 Mbit/s

95th percentile per-packet one-way delay: 78.420 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-01 12:10:40

End at: 2017-12-01 12:11:10

Below is generated by plot.py at 2017-12-01 14:12:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 196.90 Mbit/s

95th percentile per-packet one-way delay: 81.200 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 88.27 Mbit/s

95th percentile per-packet one-way delay: 76.126 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.23 Mbit/s

95th percentile per-packet one-way delay: 81.648 ms

Loss rate: 0.39%

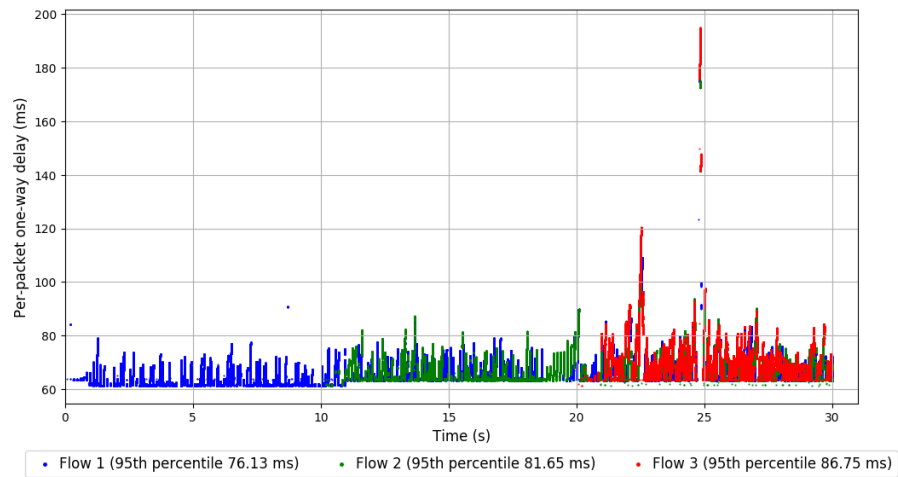
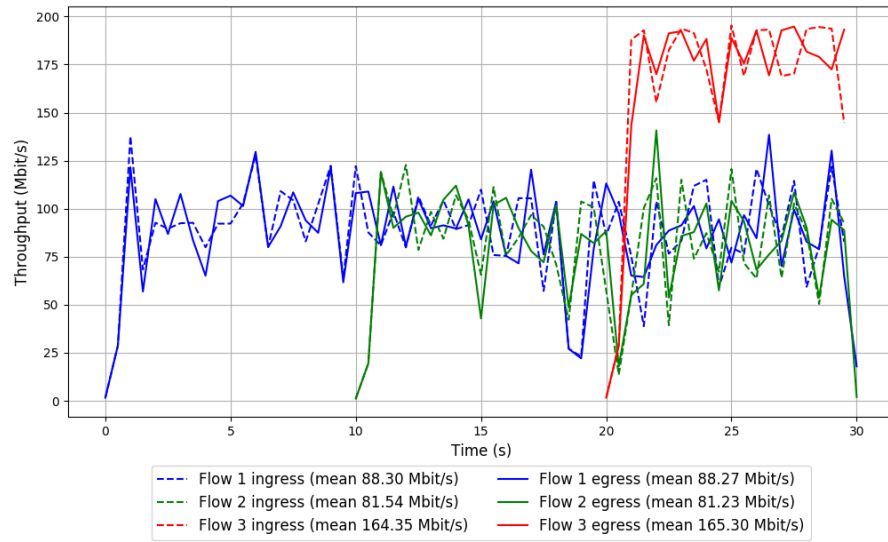
-- Flow 3:

Average throughput: 165.30 Mbit/s

95th percentile per-packet one-way delay: 86.755 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-01 12:22:47

End at: 2017-12-01 12:23:17

Below is generated by plot.py at 2017-12-01 14:12:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 210.86 Mbit/s

95th percentile per-packet one-way delay: 80.313 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 102.36 Mbit/s

95th percentile per-packet one-way delay: 75.406 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 82.00 Mbit/s

95th percentile per-packet one-way delay: 80.641 ms

Loss rate: 0.01%

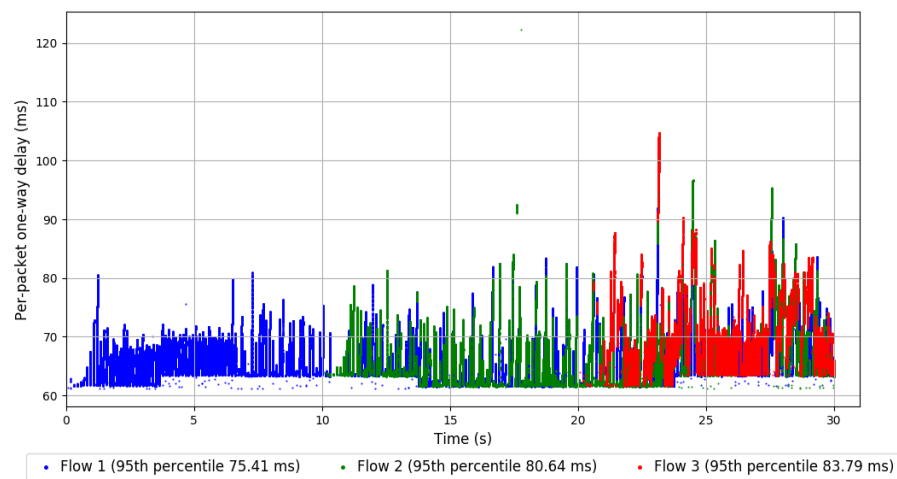
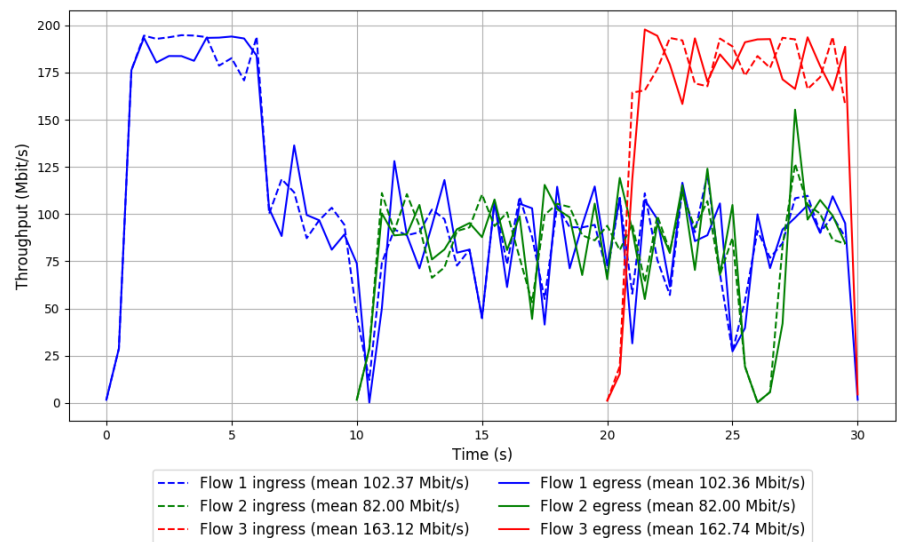
-- Flow 3:

Average throughput: 162.74 Mbit/s

95th percentile per-packet one-way delay: 83.792 ms

Loss rate: 0.25%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-01 12:35:06

End at: 2017-12-01 12:35:36

Below is generated by plot.py at 2017-12-01 14:15:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 210.05 Mbit/s

95th percentile per-packet one-way delay: 75.983 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 98.08 Mbit/s

95th percentile per-packet one-way delay: 74.364 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 89.71 Mbit/s

95th percentile per-packet one-way delay: 73.986 ms

Loss rate: 0.01%

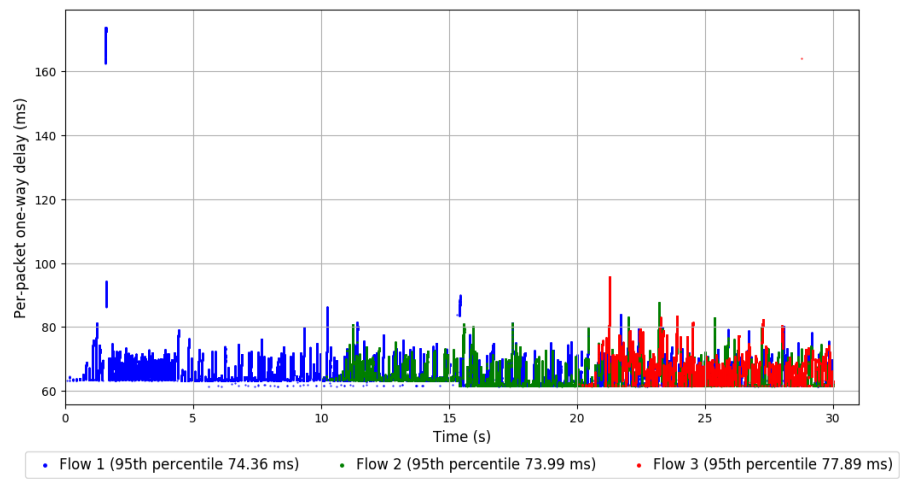
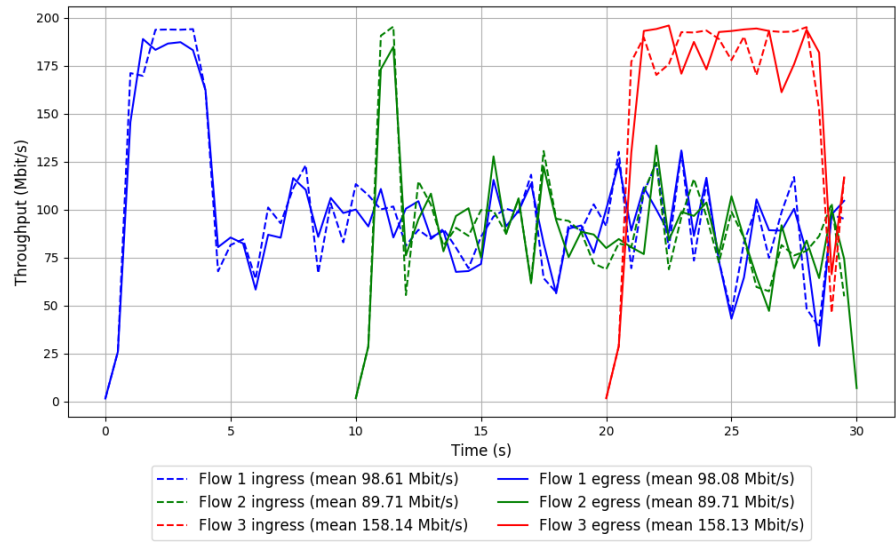
-- Flow 3:

Average throughput: 158.13 Mbit/s

95th percentile per-packet one-way delay: 77.891 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-01 12:47:20

End at: 2017-12-01 12:47:50

Below is generated by plot.py at 2017-12-01 14:15:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.33 Mbit/s

95th percentile per-packet one-way delay: 75.717 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 104.04 Mbit/s

95th percentile per-packet one-way delay: 72.281 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.25 Mbit/s

95th percentile per-packet one-way delay: 77.062 ms

Loss rate: 0.00%

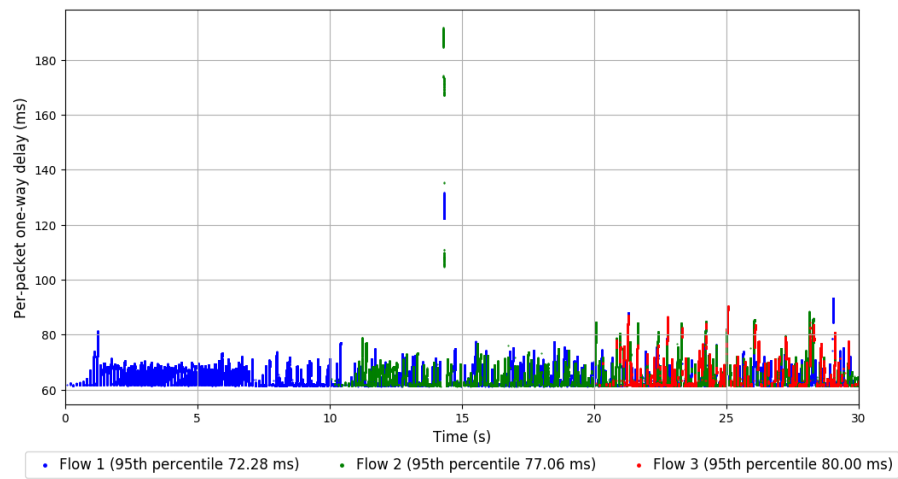
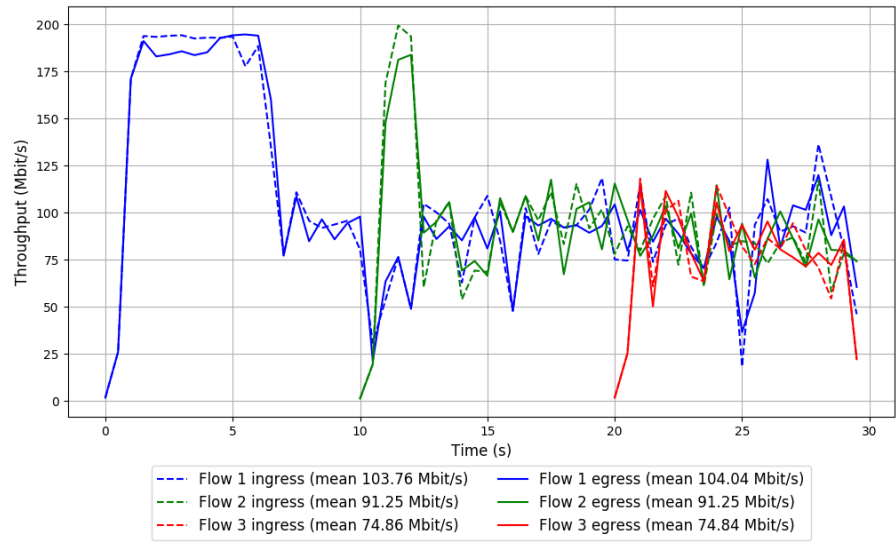
-- Flow 3:

Average throughput: 74.84 Mbit/s

95th percentile per-packet one-way delay: 80.001 ms

Loss rate: 0.02%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-01 10:57:45

End at: 2017-12-01 10:58:15

Below is generated by plot.py at 2017-12-01 14:16:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 227.17 Mbit/s

95th percentile per-packet one-way delay: 70.475 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 101.55 Mbit/s

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

Loss rate: 0.08%

-- Flow 2:

Average throughput: 103.84 Mbit/s

95th percentile per-packet one-way delay: 70.378 ms

Loss rate: 0.00%

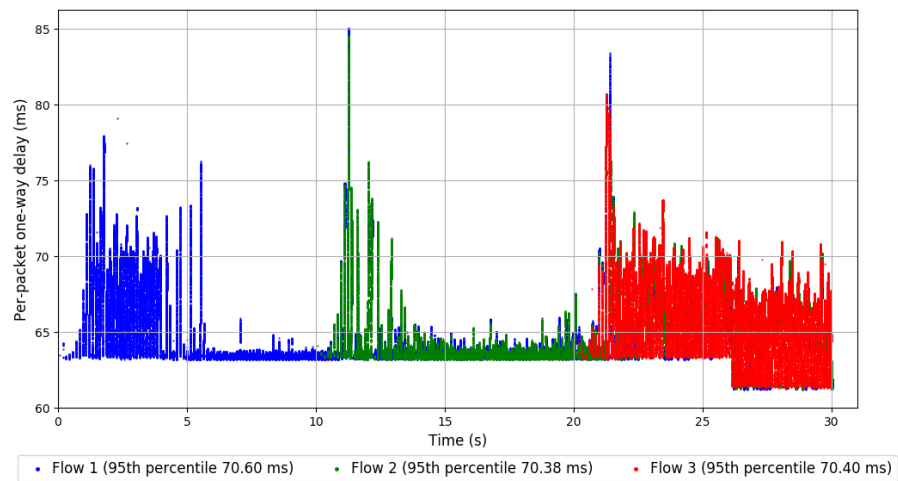
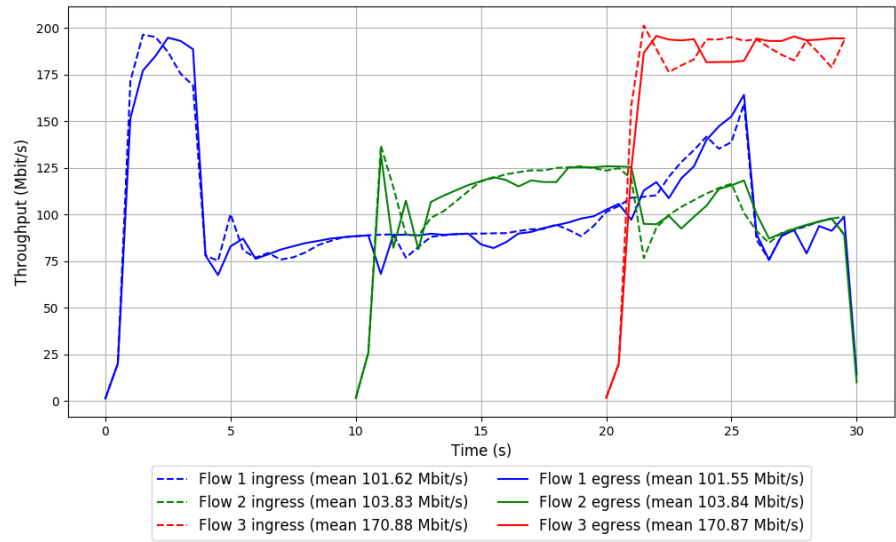
-- Flow 3:

Average throughput: 170.87 Mbit/s

95th percentile per-packet one-way delay: 70.401 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-01 11:10:12

End at: 2017-12-01 11:10:42

Below is generated by plot.py at 2017-12-01 14:16:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 164.40 Mbit/s

95th percentile per-packet one-way delay: 71.031 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 40.88 Mbit/s

95th percentile per-packet one-way delay: 69.156 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 100.64 Mbit/s

95th percentile per-packet one-way delay: 69.546 ms

Loss rate: 0.07%

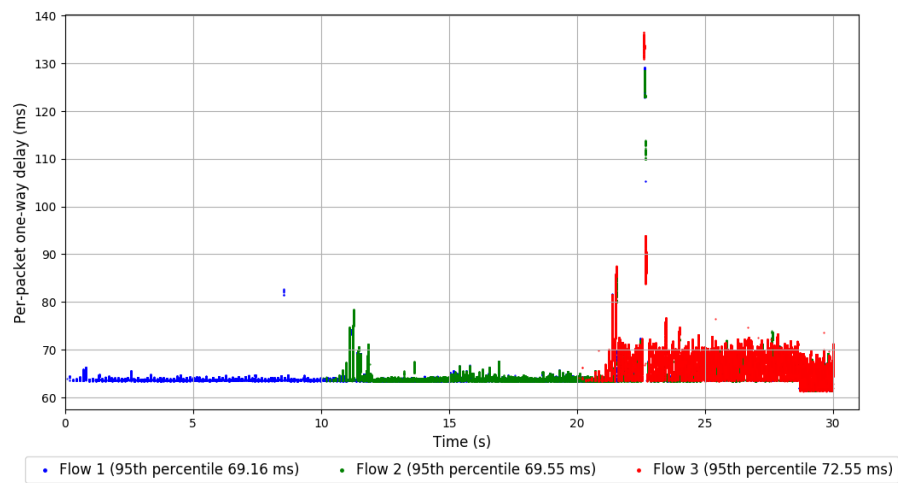
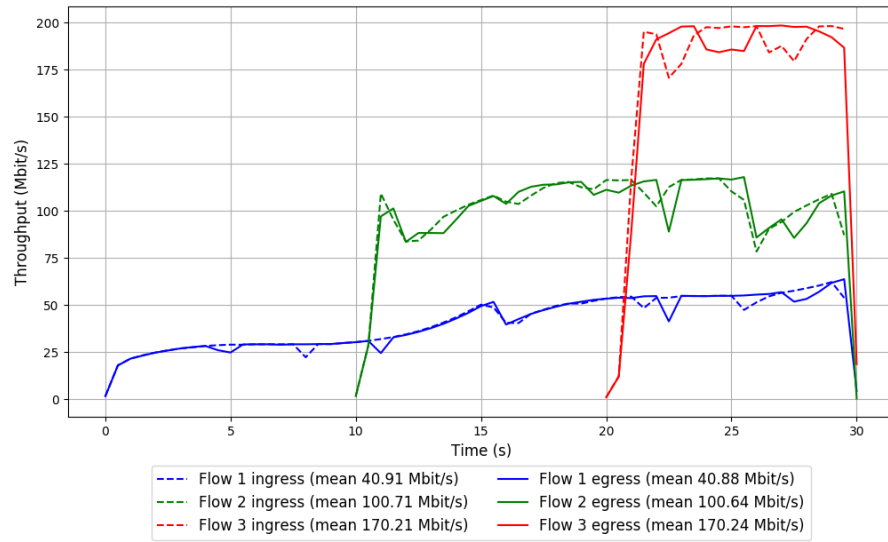
-- Flow 3:

Average throughput: 170.24 Mbit/s

95th percentile per-packet one-way delay: 72.545 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-01 11:22:30

End at: 2017-12-01 11:23:00

Below is generated by plot.py at 2017-12-01 14:16:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 223.09 Mbit/s

95th percentile per-packet one-way delay: 72.431 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 111.07 Mbit/s

95th percentile per-packet one-way delay: 72.257 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 115.39 Mbit/s

95th percentile per-packet one-way delay: 73.103 ms

Loss rate: 0.00%

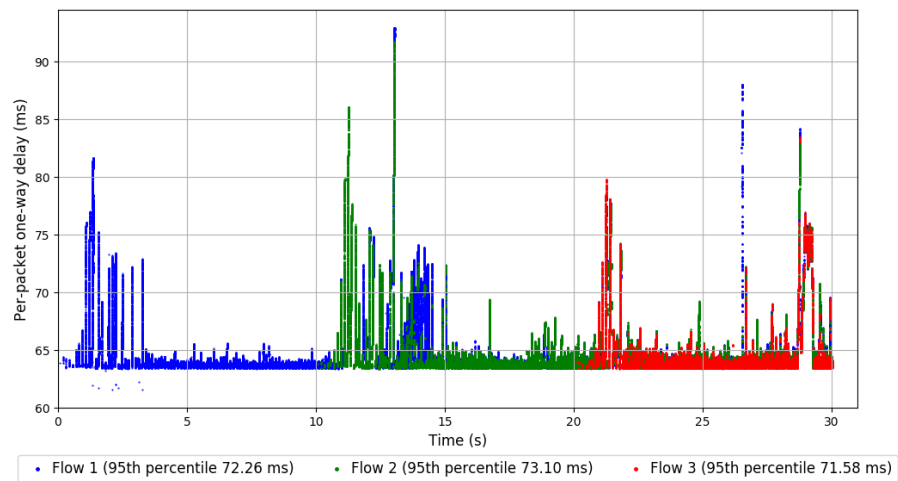
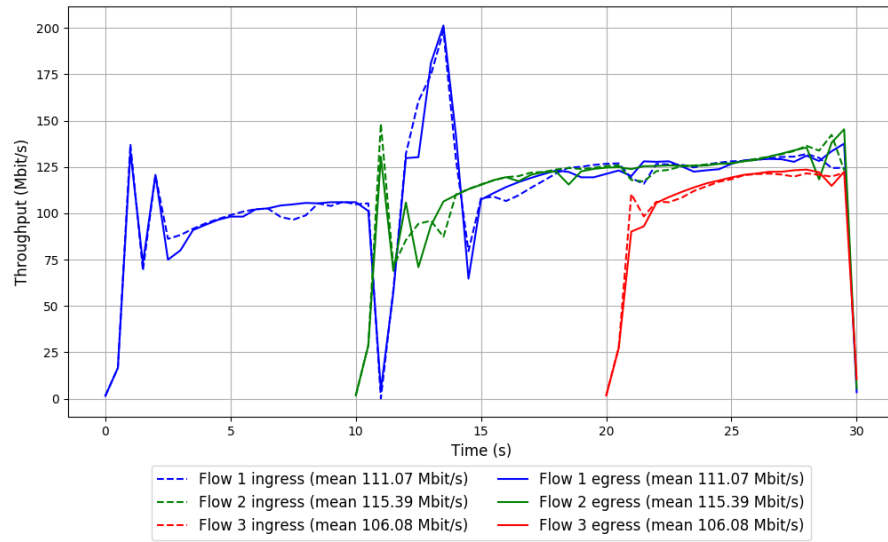
-- Flow 3:

Average throughput: 106.08 Mbit/s

95th percentile per-packet one-way delay: 71.579 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-01 11:34:46

End at: 2017-12-01 11:35:16

Below is generated by plot.py at 2017-12-01 14:16:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 198.19 Mbit/s

95th percentile per-packet one-way delay: 70.979 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 114.85 Mbit/s

95th percentile per-packet one-way delay: 71.104 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 123.22 Mbit/s

95th percentile per-packet one-way delay: 70.775 ms

Loss rate: 0.00%

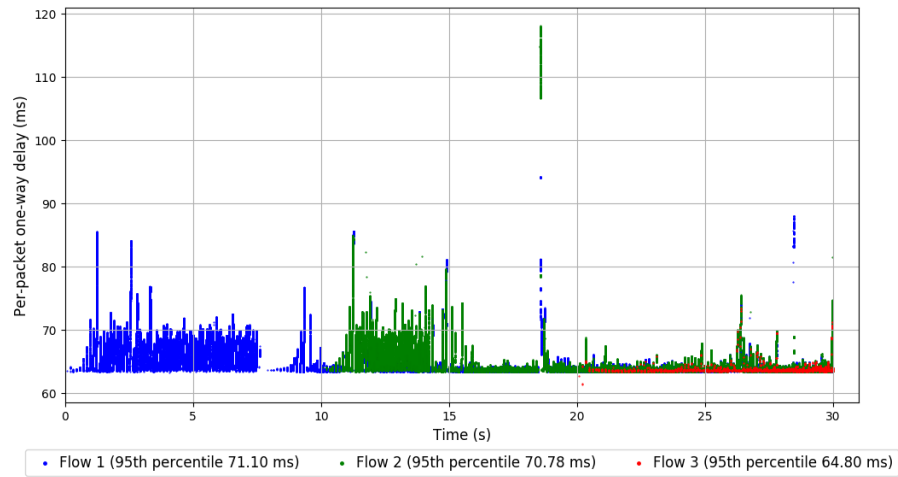
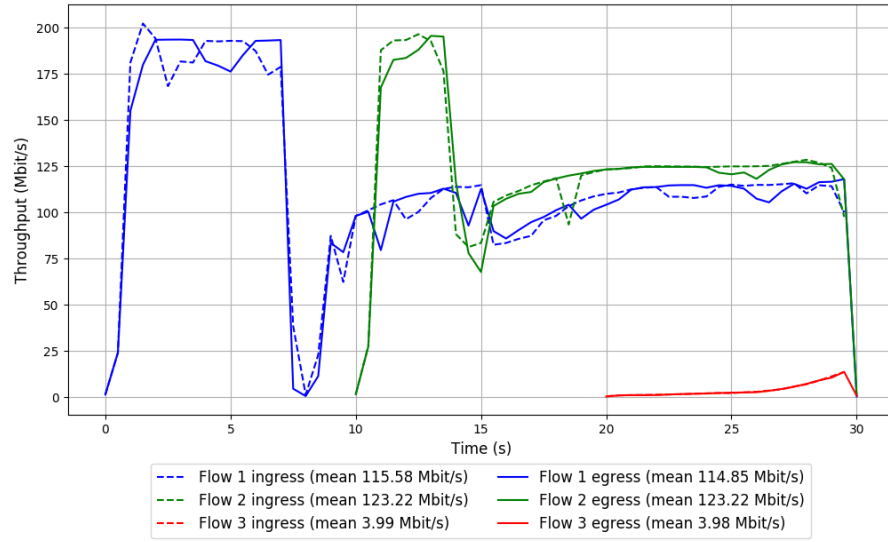
-- Flow 3:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 64.798 ms

Loss rate: 0.18%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-01 11:47:08

End at: 2017-12-01 11:47:38

Below is generated by plot.py at 2017-12-01 14:16:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.35 Mbit/s

95th percentile per-packet one-way delay: 70.223 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 105.18 Mbit/s

95th percentile per-packet one-way delay: 70.173 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 74.61 Mbit/s

95th percentile per-packet one-way delay: 70.328 ms

Loss rate: 0.01%

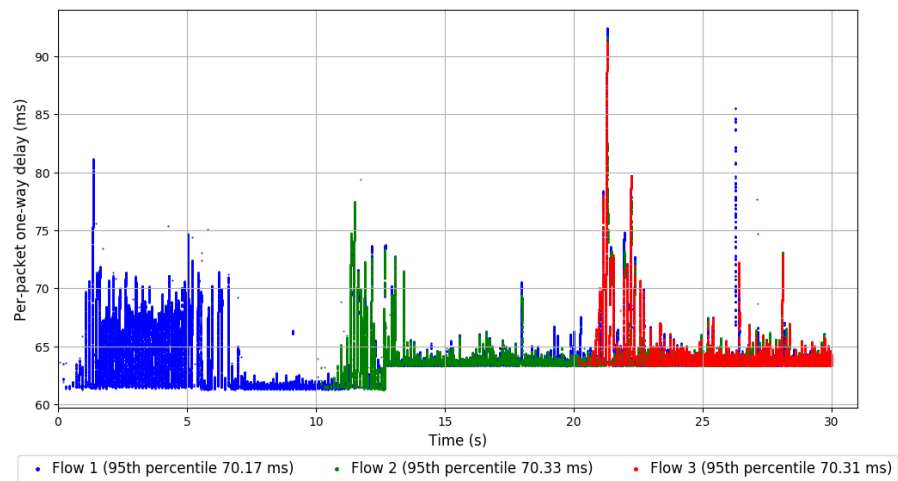
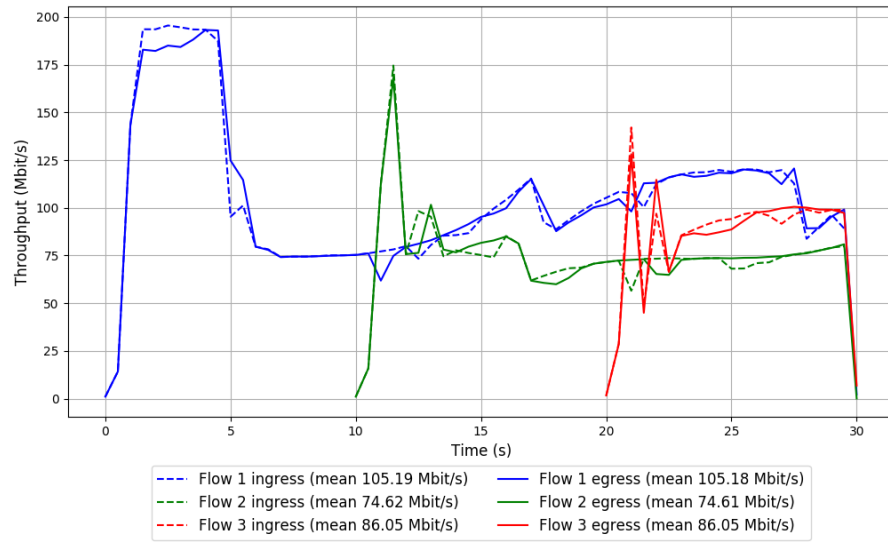
-- Flow 3:

Average throughput: 86.05 Mbit/s

95th percentile per-packet one-way delay: 70.310 ms

Loss rate: 0.03%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-01 11:59:23

End at: 2017-12-01 11:59:53

Below is generated by plot.py at 2017-12-01 14:16:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.70 Mbit/s

95th percentile per-packet one-way delay: 68.674 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 136.40 Mbit/s

95th percentile per-packet one-way delay: 67.432 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.40 Mbit/s

95th percentile per-packet one-way delay: 69.906 ms

Loss rate: 0.01%

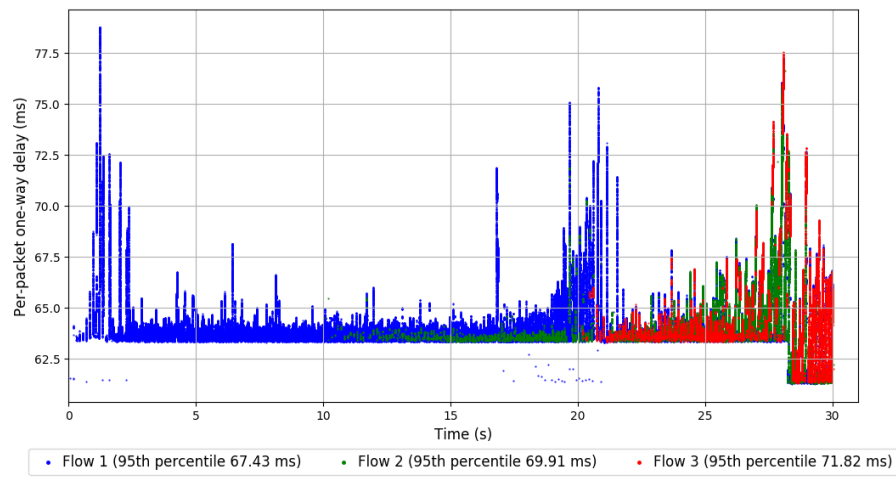
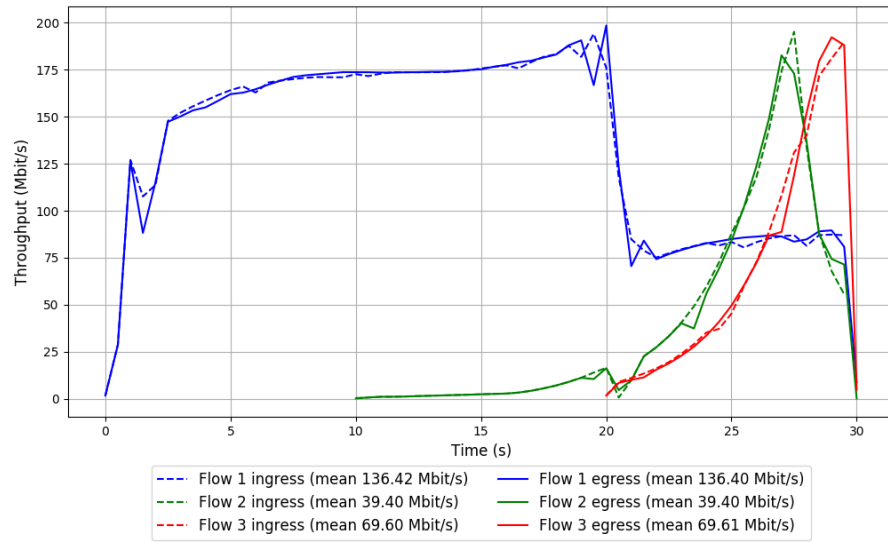
-- Flow 3:

Average throughput: 69.61 Mbit/s

95th percentile per-packet one-way delay: 71.820 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-01 12:11:34

End at: 2017-12-01 12:12:04

Below is generated by plot.py at 2017-12-01 14:18:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.48 Mbit/s

95th percentile per-packet one-way delay: 71.767 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 80.66 Mbit/s

95th percentile per-packet one-way delay: 69.906 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 109.91 Mbit/s

95th percentile per-packet one-way delay: 71.947 ms

Loss rate: 0.19%

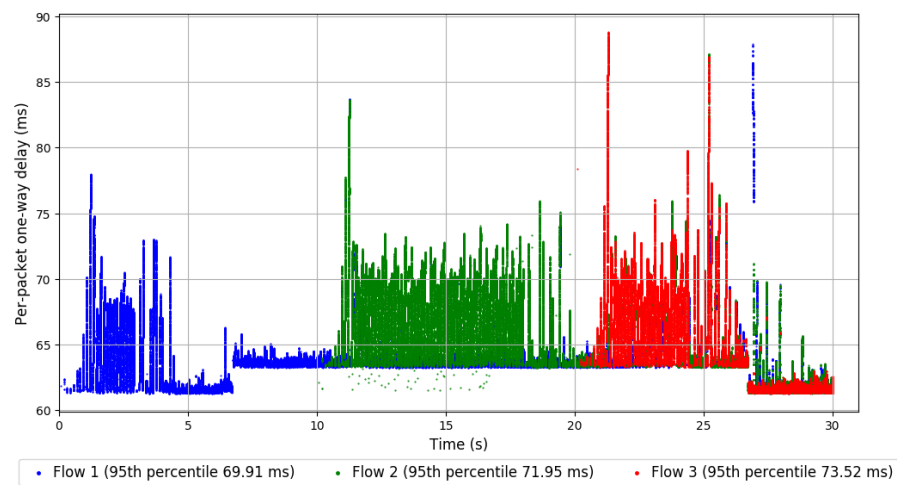
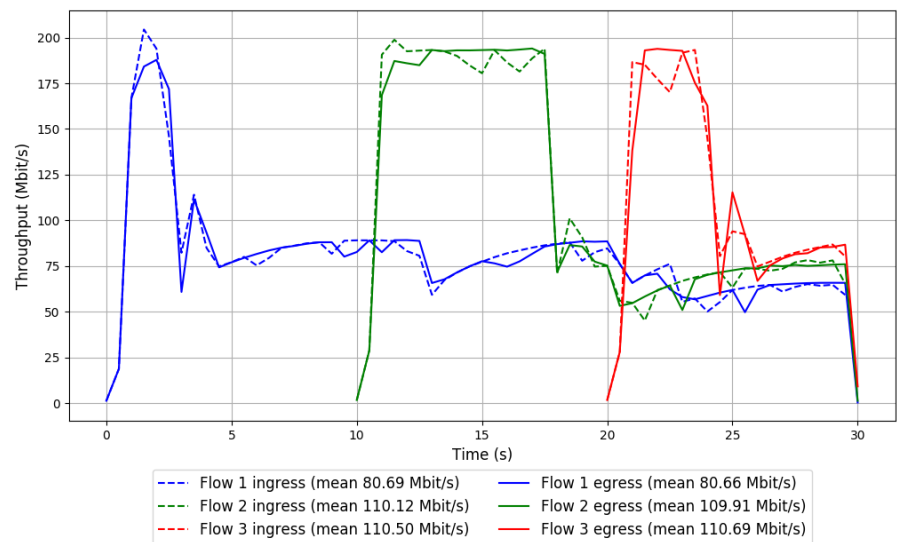
-- Flow 3:

Average throughput: 110.69 Mbit/s

95th percentile per-packet one-way delay: 73.522 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-01 12:23:42

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

Below is generated by plot.py at 2017-12-01 14:18:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 211.41 Mbit/s

95th percentile per-packet one-way delay: 72.613 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 106.37 Mbit/s

95th percentile per-packet one-way delay: 72.375 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 115.37 Mbit/s

95th percentile per-packet one-way delay: 71.773 ms

Loss rate: 0.01%

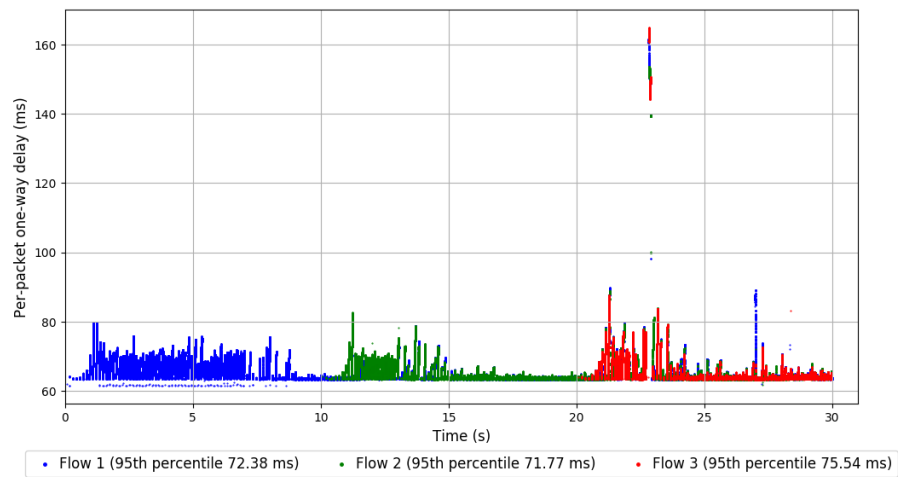
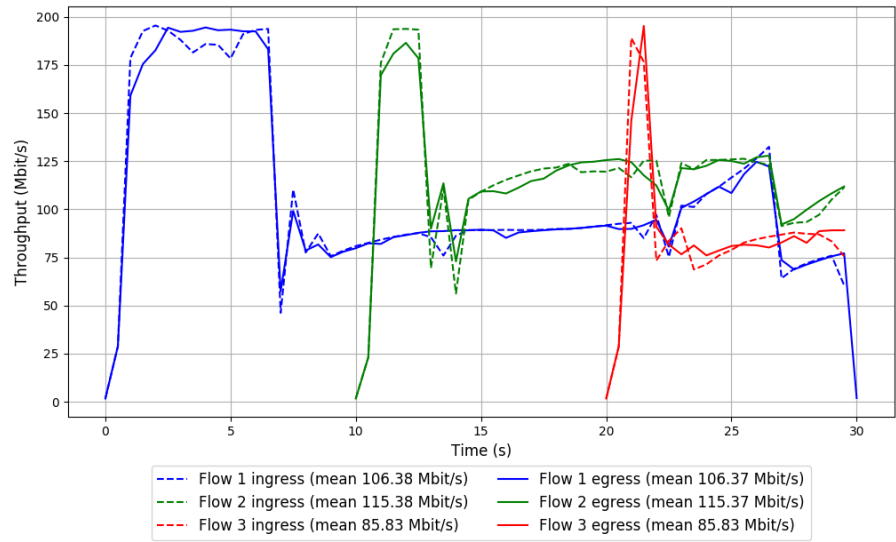
-- Flow 3:

Average throughput: 85.83 Mbit/s

95th percentile per-packet one-way delay: 75.539 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-01 12:36:01

End at: 2017-12-01 12:36:31

Below is generated by plot.py at 2017-12-01 14:18:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 208.32 Mbit/s

95th percentile per-packet one-way delay: 70.423 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 93.35 Mbit/s

95th percentile per-packet one-way delay: 68.560 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 122.74 Mbit/s

95th percentile per-packet one-way delay: 71.188 ms

Loss rate: 0.00%

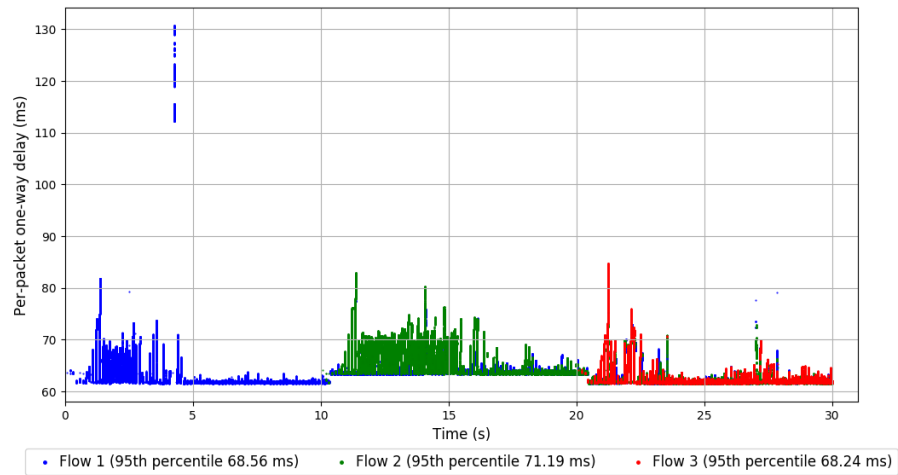
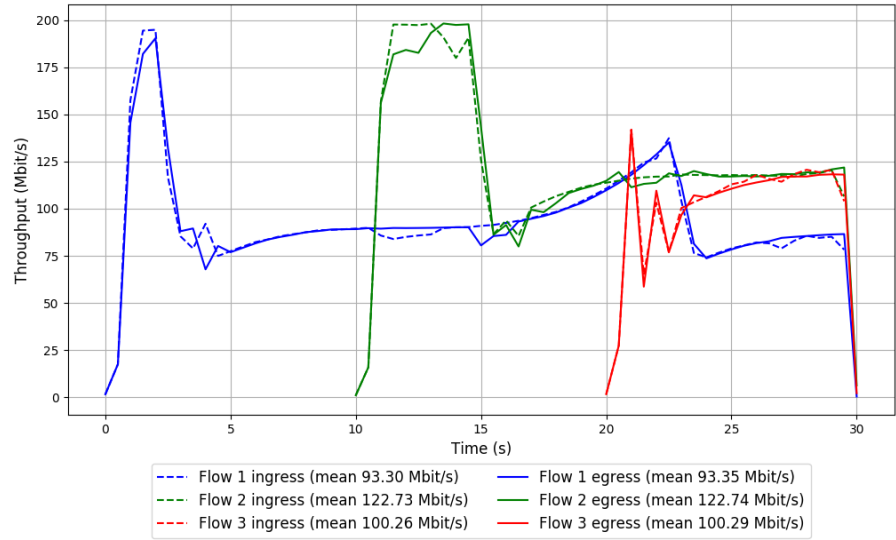
-- Flow 3:

Average throughput: 100.29 Mbit/s

95th percentile per-packet one-way delay: 68.240 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-01 12:48:14

End at: 2017-12-01 12:48:44

Below is generated by plot.py at 2017-12-01 14:18:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 191.65 Mbit/s

95th percentile per-packet one-way delay: 70.111 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 90.85 Mbit/s

95th percentile per-packet one-way delay: 67.468 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 88.49 Mbit/s

95th percentile per-packet one-way delay: 71.305 ms

Loss rate: 0.00%

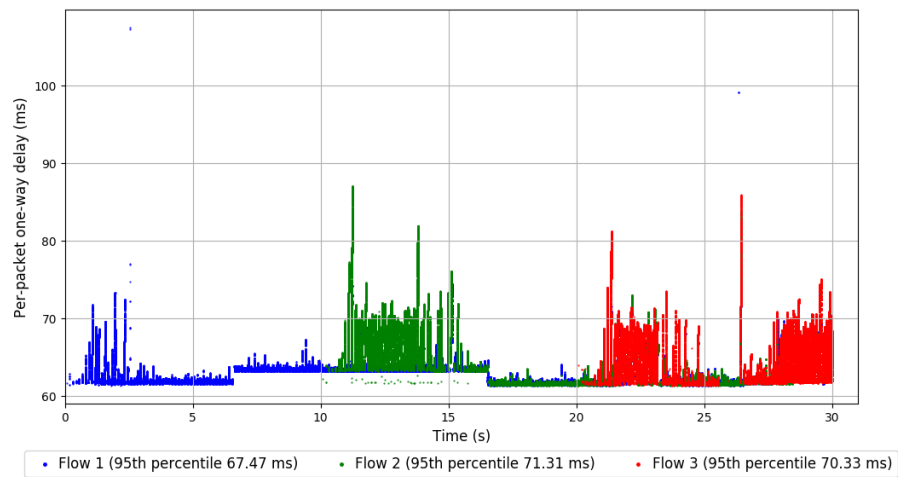
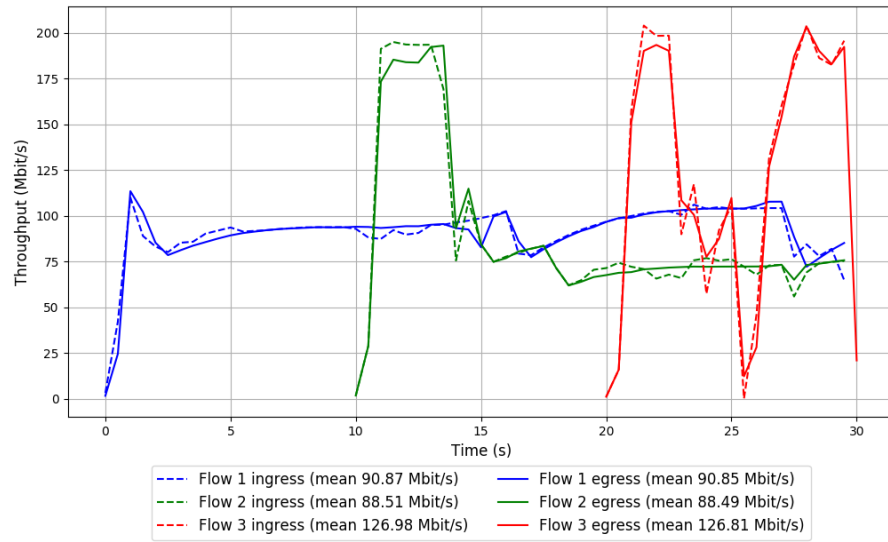
-- Flow 3:

Average throughput: 126.81 Mbit/s

95th percentile per-packet one-way delay: 70.328 ms

Loss rate: 0.13%

Run 10: Report of TCP Cubic — Data Link

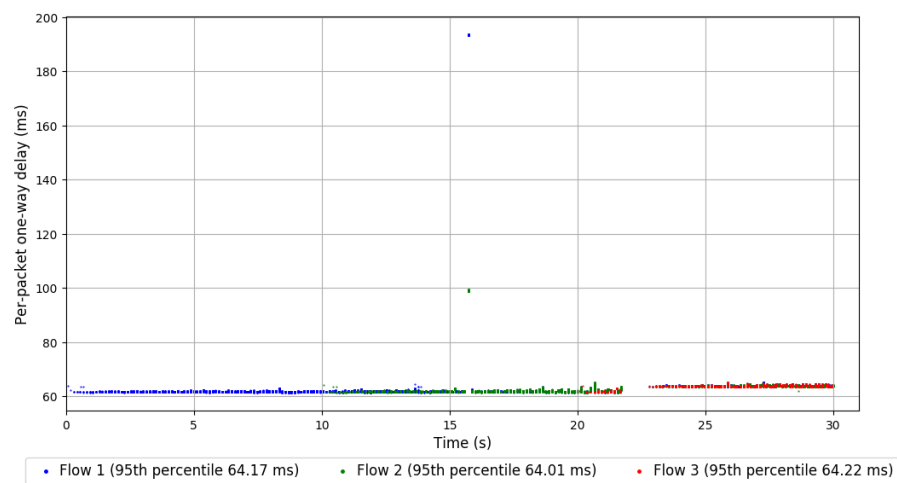
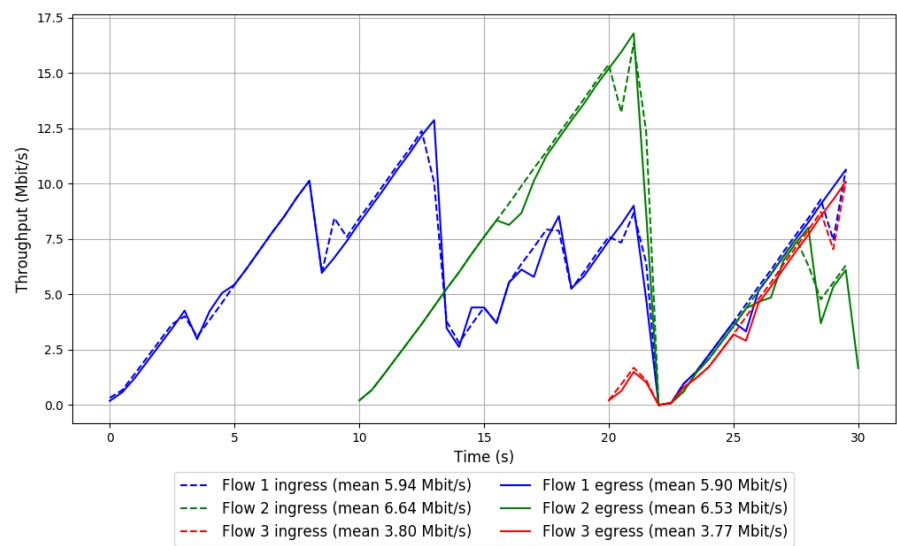


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-01 11:06:19
End at: 2017-12-01 11:06:49

# Below is generated by plot.py at 2017-12-01 14:18:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.47 Mbit/s
95th percentile per-packet one-way delay: 64.140 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 5.90 Mbit/s
95th percentile per-packet one-way delay: 64.171 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: 64.008 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 64.220 ms
Loss rate: 0.78%
```


Run 1: Report of LEDBAT — Data Link

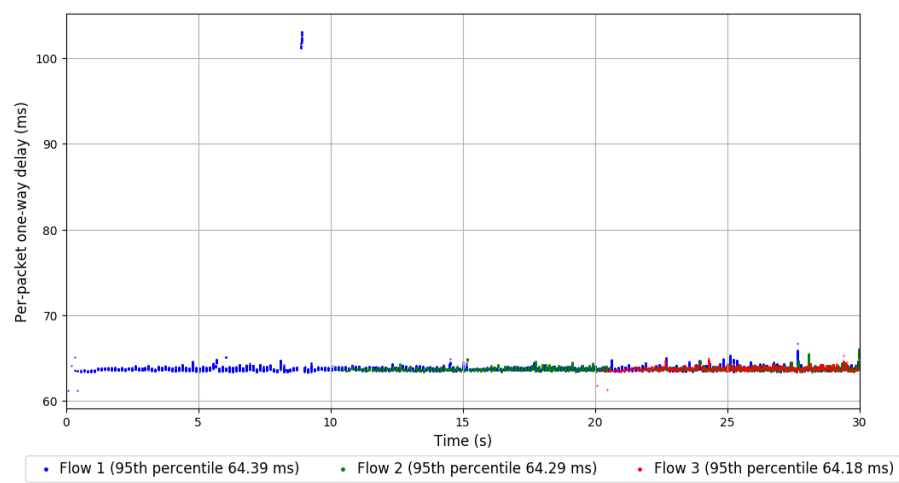
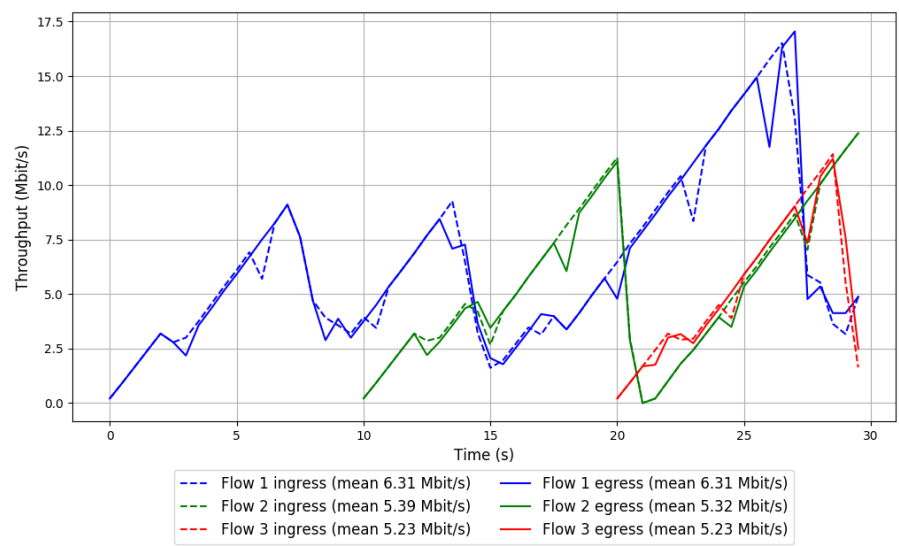


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-01 11:18:42
End at: 2017-12-01 11:19:12

# Below is generated by plot.py at 2017-12-01 14:18:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.56 Mbit/s
95th percentile per-packet one-way delay: 64.321 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 6.31 Mbit/s
95th percentile per-packet one-way delay: 64.394 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 5.32 Mbit/s
95th percentile per-packet one-way delay: 64.294 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 5.23 Mbit/s
95th percentile per-packet one-way delay: 64.183 ms
Loss rate: 0.02%
```

Run 2: Report of LEDBAT — Data Link

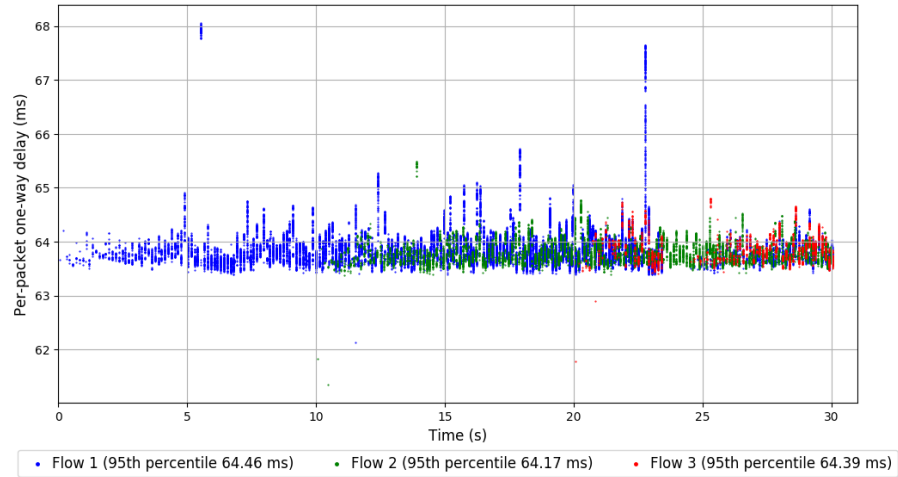
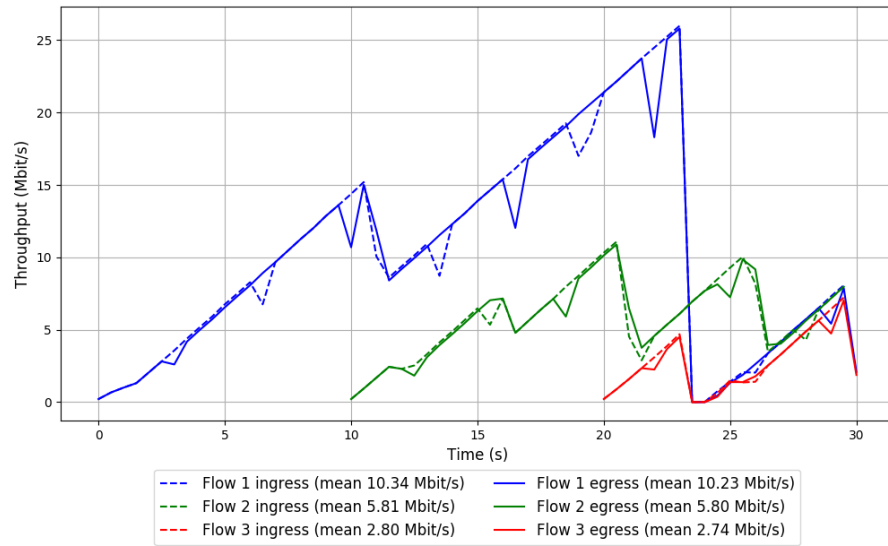


```
Run 3: Statistics of LEDBAT

Start at: 2017-12-01 11:31:00
End at: 2017-12-01 11:31:30

# Below is generated by plot.py at 2017-12-01 14:18:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.99 Mbit/s
95th percentile per-packet one-way delay: 64.378 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 10.23 Mbit/s
95th percentile per-packet one-way delay: 64.459 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 5.80 Mbit/s
95th percentile per-packet one-way delay: 64.166 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 2.74 Mbit/s
95th percentile per-packet one-way delay: 64.390 ms
Loss rate: 2.23%
```

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-01 11:43:19

End at: 2017-12-01 11:43:49

Below is generated by plot.py at 2017-12-01 14:18:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.24 Mbit/s

95th percentile per-packet one-way delay: 64.139 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 5.05 Mbit/s

95th percentile per-packet one-way delay: 64.087 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 8.03 Mbit/s

95th percentile per-packet one-way delay: 64.299 ms

Loss rate: 0.89%

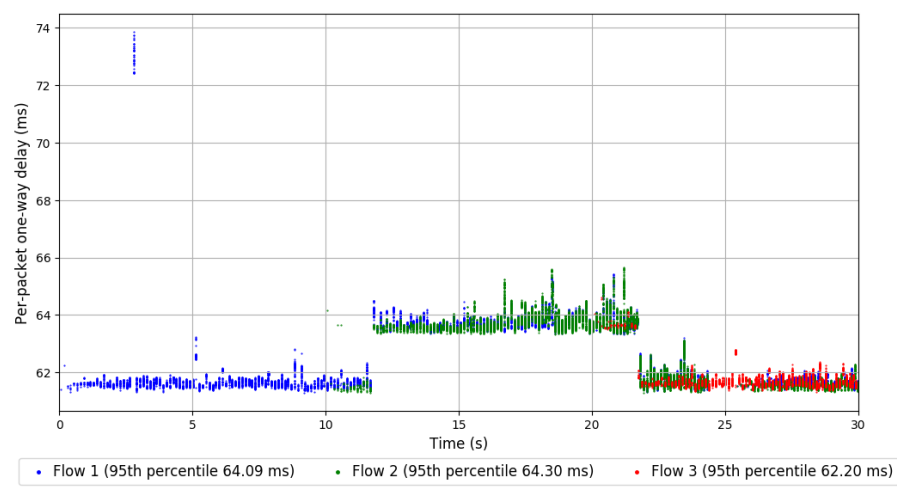
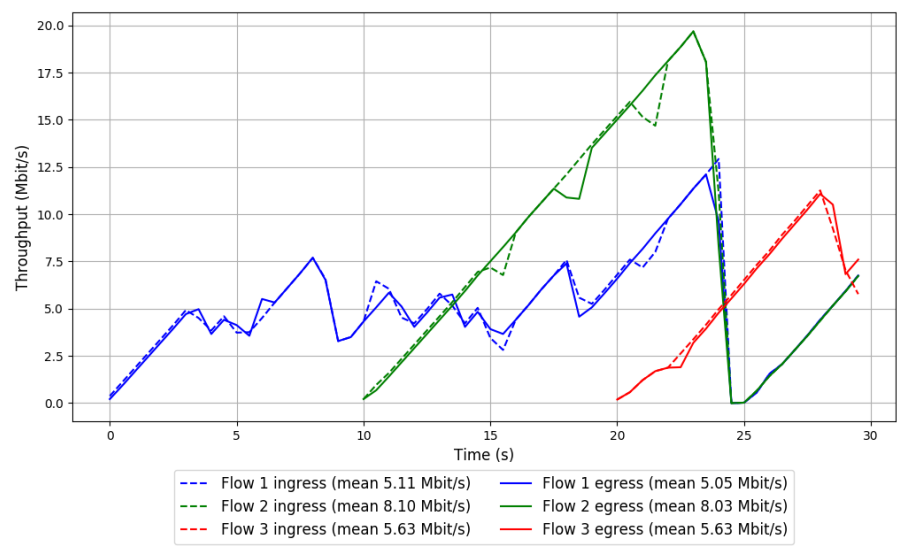
-- Flow 3:

Average throughput: 5.63 Mbit/s

95th percentile per-packet one-way delay: 62.202 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-01 11:55:34

End at: 2017-12-01 11:56:04

Below is generated by plot.py at 2017-12-01 14:18:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.94 Mbit/s

95th percentile per-packet one-way delay: 64.115 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 64.024 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 9.39 Mbit/s

95th percentile per-packet one-way delay: 64.184 ms

Loss rate: 1.33%

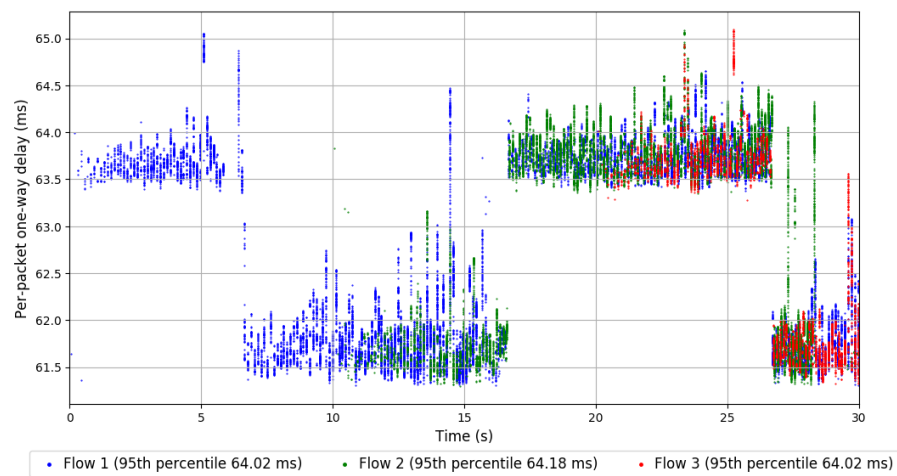
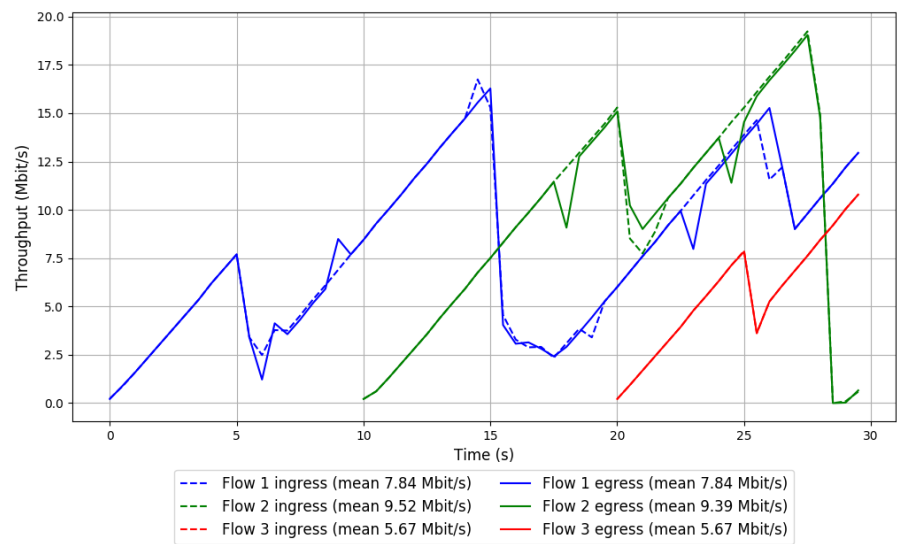
-- Flow 3:

Average throughput: 5.67 Mbit/s

95th percentile per-packet one-way delay: 64.024 ms

Loss rate: 0.04%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-01 12:07:50

End at: 2017-12-01 12:08:20

Below is generated by plot.py at 2017-12-01 14:18:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.87 Mbit/s

95th percentile per-packet one-way delay: 62.148 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 7.02 Mbit/s

95th percentile per-packet one-way delay: 62.054 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 12.47 Mbit/s

95th percentile per-packet one-way delay: 62.248 ms

Loss rate: 0.03%

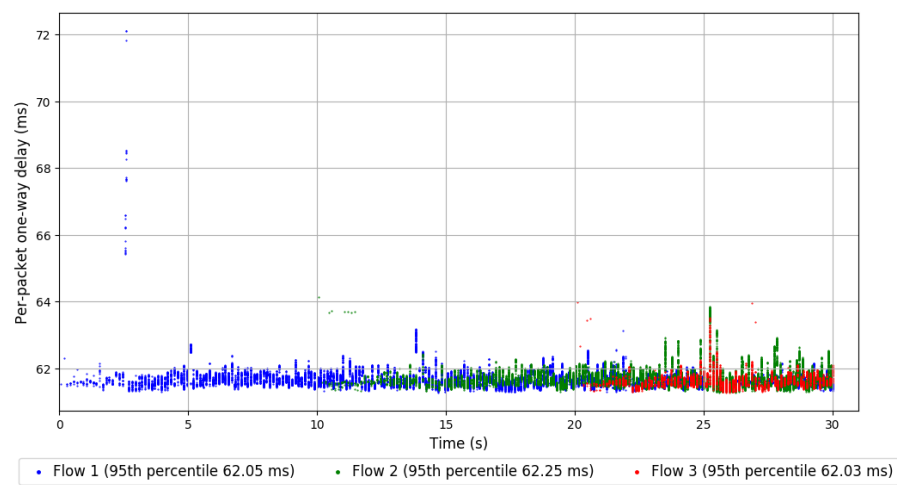
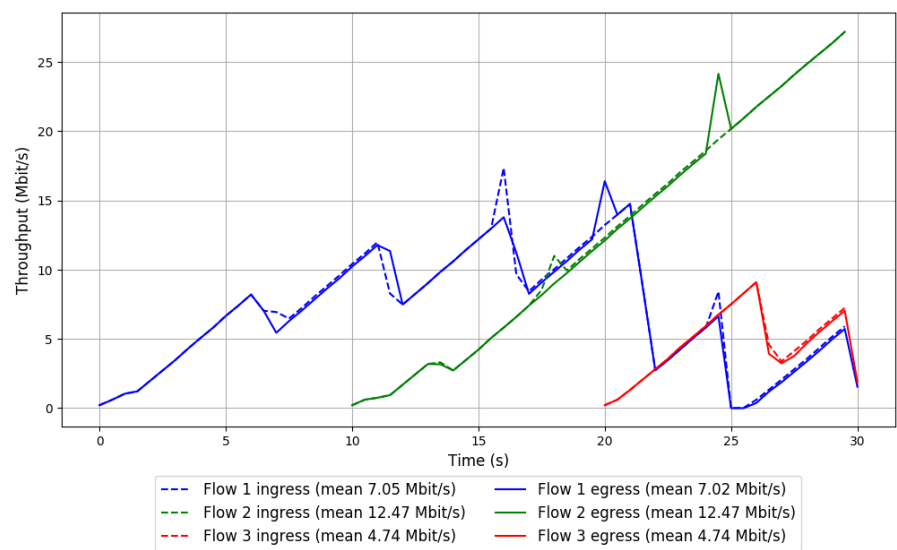
-- Flow 3:

Average throughput: 4.74 Mbit/s

95th percentile per-packet one-way delay: 62.031 ms

Loss rate: 0.05%

Run 6: Report of LEDBAT — Data Link

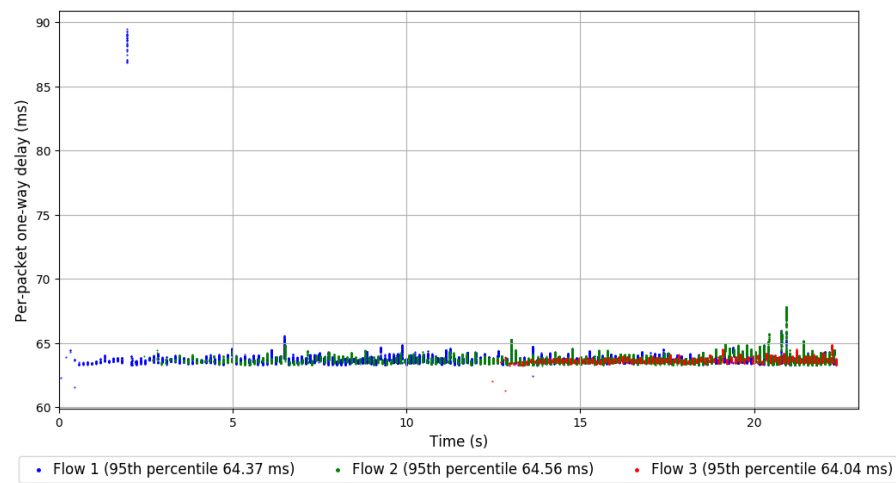
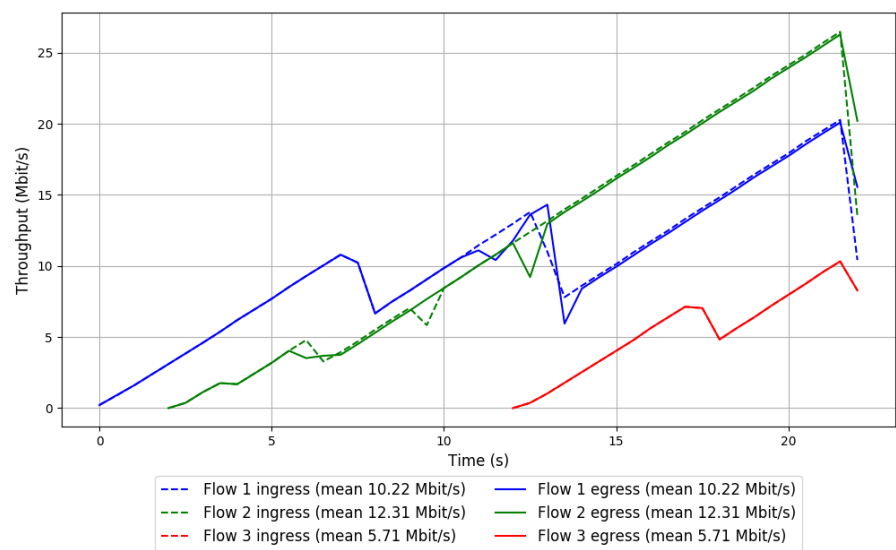


Run 7: Statistics of LEDBAT

Start at: 2017-12-01 12:20:03

End at: 2017-12-01 12:20:33

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-01 12:32:12

End at: 2017-12-01 12:32:42

Below is generated by plot.py at 2017-12-01 14:18:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.73 Mbit/s

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

Loss rate: 0.35%

-- Flow 1:

Average throughput: 14.16 Mbit/s

95th percentile per-packet one-way delay: 64.514 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 4.80 Mbit/s

95th percentile per-packet one-way delay: 64.229 ms

Loss rate: 1.54%

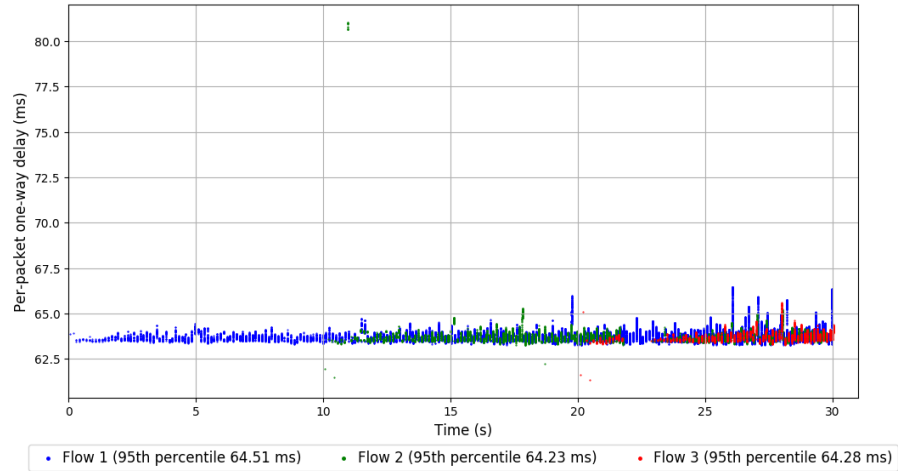
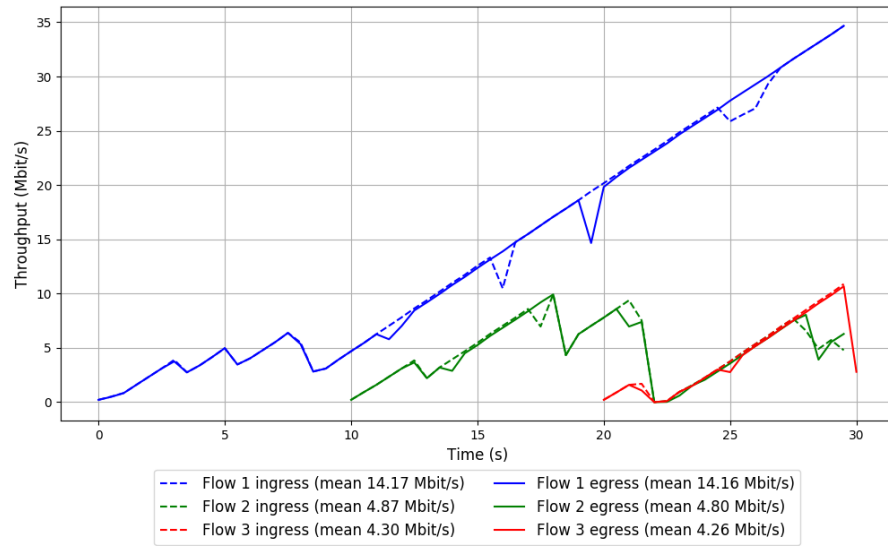
-- Flow 3:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 64.277 ms

Loss rate: 0.71%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-01 12:44:29

End at: 2017-12-01 12:44:59

Below is generated by plot.py at 2017-12-01 14:18:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.20 Mbit/s

95th percentile per-packet one-way delay: 64.229 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.49 Mbit/s

95th percentile per-packet one-way delay: 64.297 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.63 Mbit/s

95th percentile per-packet one-way delay: 64.194 ms

Loss rate: 0.00%

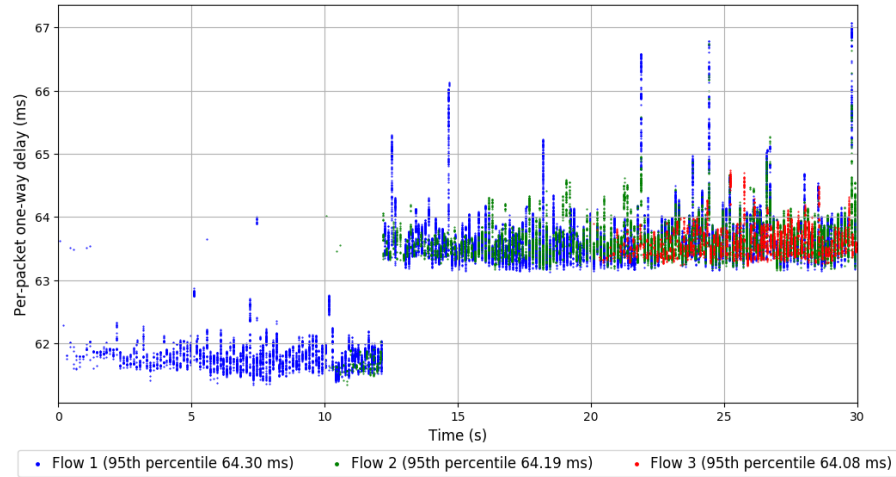
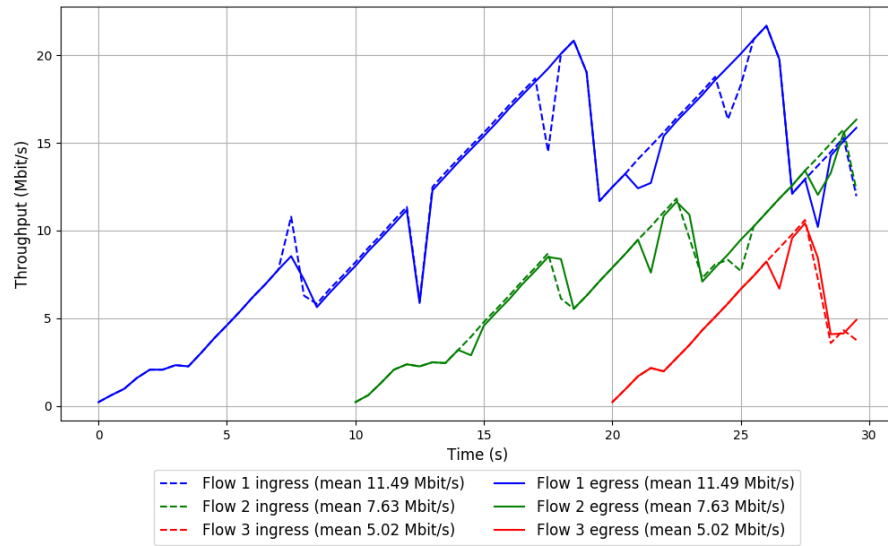
-- Flow 3:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 64.084 ms

Loss rate: 0.05%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-01 12:56:45

End at: 2017-12-01 12:57:15

Below is generated by plot.py at 2017-12-01 14:18:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.83 Mbit/s

95th percentile per-packet one-way delay: 63.672 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 9.58 Mbit/s

95th percentile per-packet one-way delay: 63.767 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 9.90 Mbit/s

95th percentile per-packet one-way delay: 63.564 ms

Loss rate: 0.01%

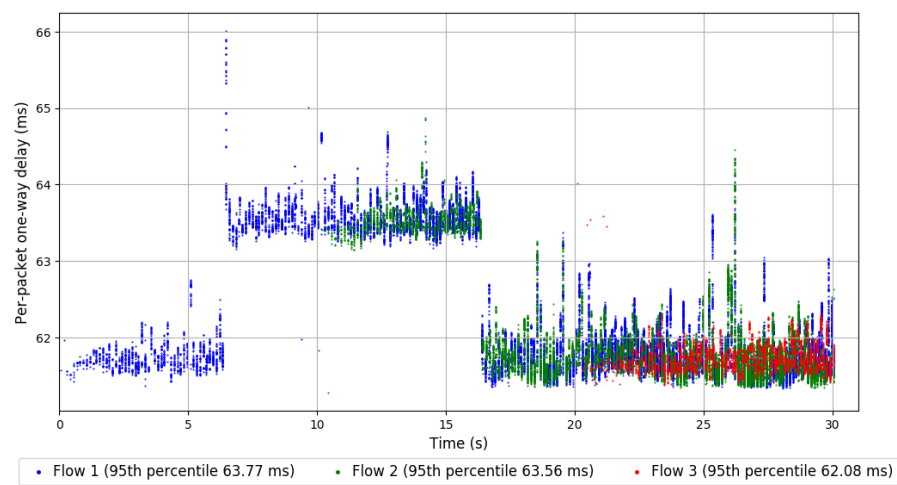
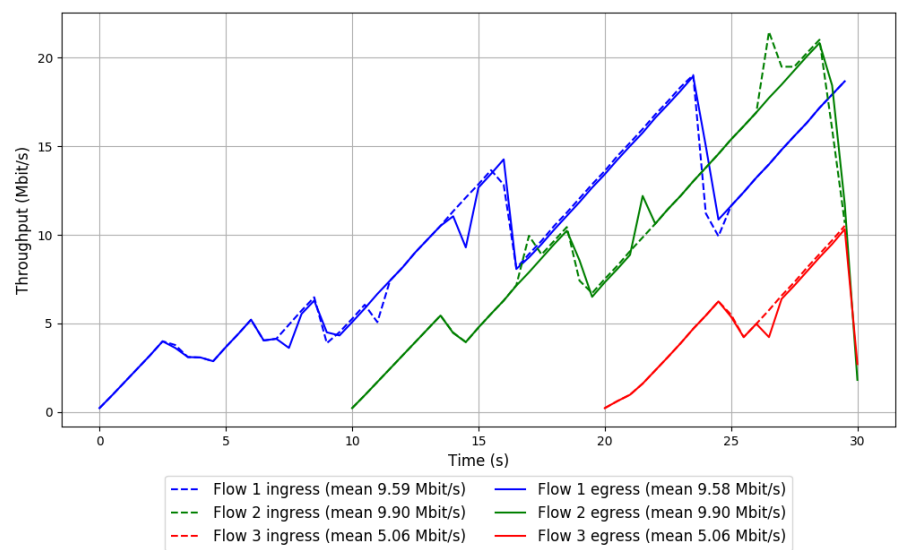
-- Flow 3:

Average throughput: 5.06 Mbit/s

95th percentile per-packet one-way delay: 62.076 ms

Loss rate: 0.12%

Run 10: Report of LEDBAT — Data Link

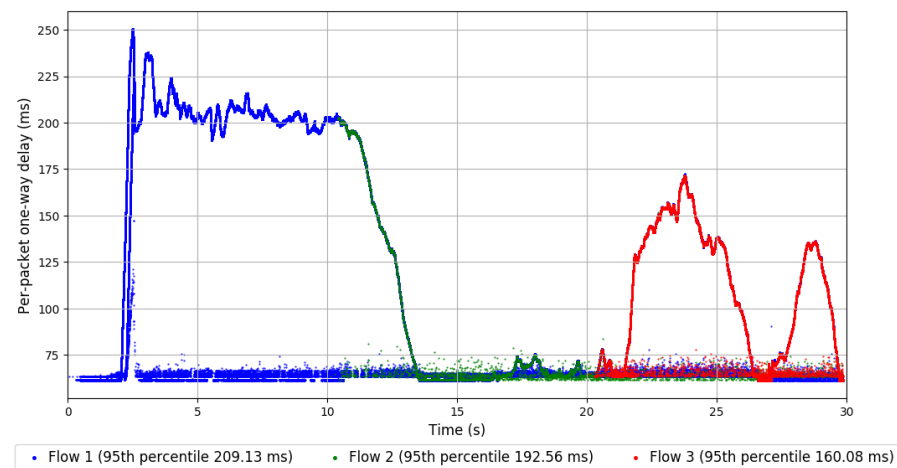
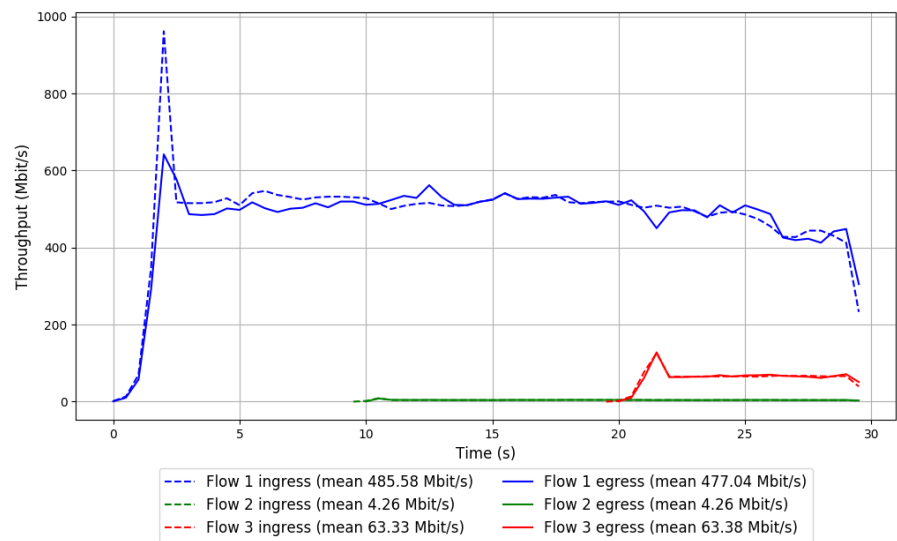


```
Run 1: Statistics of PCC

Start at: 2017-12-01 11:04:14
End at: 2017-12-01 11:04:44

# Below is generated by plot.py at 2017-12-01 14:25:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 500.75 Mbit/s
95th percentile per-packet one-way delay: 208.941 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 477.04 Mbit/s
95th percentile per-packet one-way delay: 209.129 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 192.559 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 63.38 Mbit/s
95th percentile per-packet one-way delay: 160.077 ms
Loss rate: 0.00%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-01 11:16:36

End at: 2017-12-01 11:17:06

Below is generated by plot.py at 2017-12-01 14:25:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 457.82 Mbit/s

95th percentile per-packet one-way delay: 182.102 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 441.22 Mbit/s

95th percentile per-packet one-way delay: 181.192 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 9.25 Mbit/s

95th percentile per-packet one-way delay: 185.601 ms

Loss rate: 0.77%

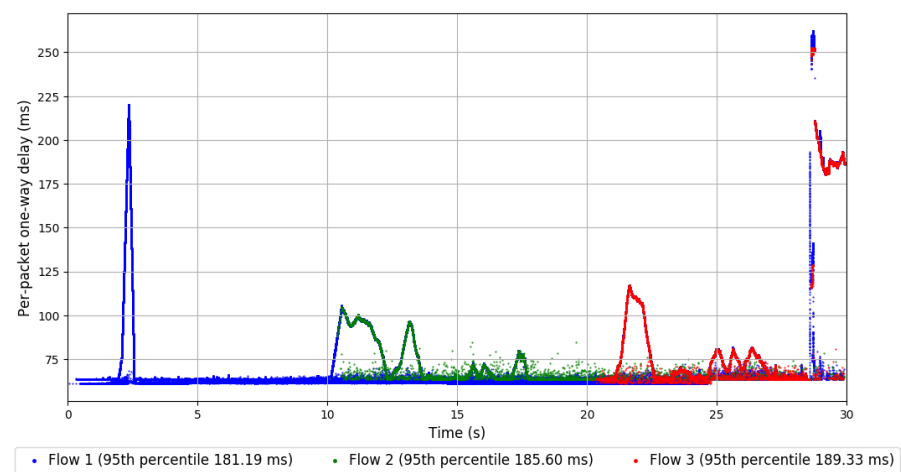
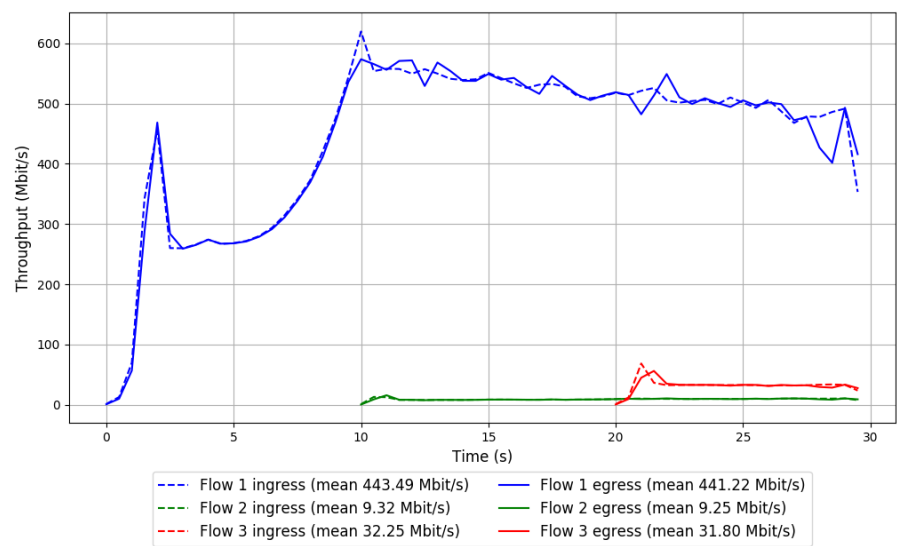
-- Flow 3:

Average throughput: 31.80 Mbit/s

95th percentile per-packet one-way delay: 189.331 ms

Loss rate: 1.40%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-01 11:28:55

End at: 2017-12-01 11:29:25

Below is generated by plot.py at 2017-12-01 14:25:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 487.95 Mbit/s

95th percentile per-packet one-way delay: 177.170 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 473.70 Mbit/s

95th percentile per-packet one-way delay: 176.702 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 5.55 Mbit/s

95th percentile per-packet one-way delay: 176.098 ms

Loss rate: 0.02%

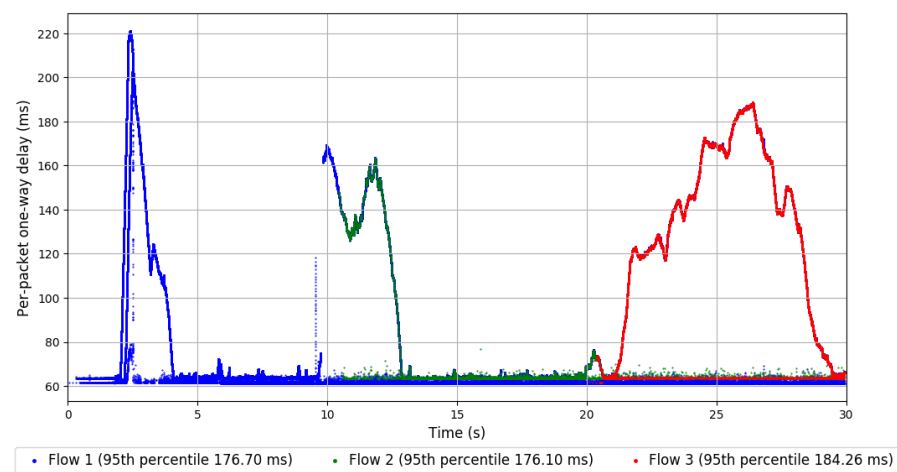
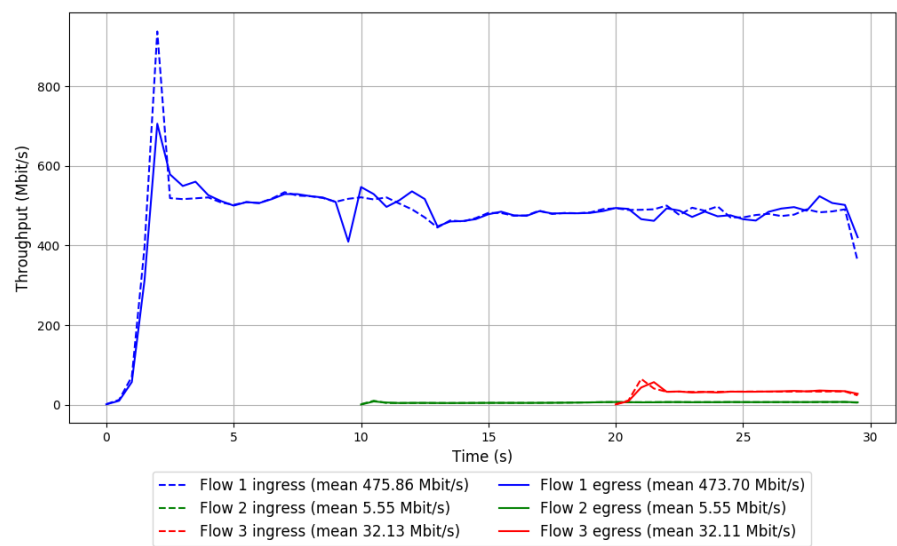
-- Flow 3:

Average throughput: 32.11 Mbit/s

95th percentile per-packet one-way delay: 184.262 ms

Loss rate: 0.05%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-01 11:41:12

End at: 2017-12-01 11:41:42

Below is generated by plot.py at 2017-12-01 14:25:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 513.69 Mbit/s

95th percentile per-packet one-way delay: 200.748 ms

Loss rate: 3.19%

-- Flow 1:

Average throughput: 434.57 Mbit/s

95th percentile per-packet one-way delay: 200.605 ms

Loss rate: 3.10%

-- Flow 2:

Average throughput: 117.96 Mbit/s

95th percentile per-packet one-way delay: 201.368 ms

Loss rate: 3.65%

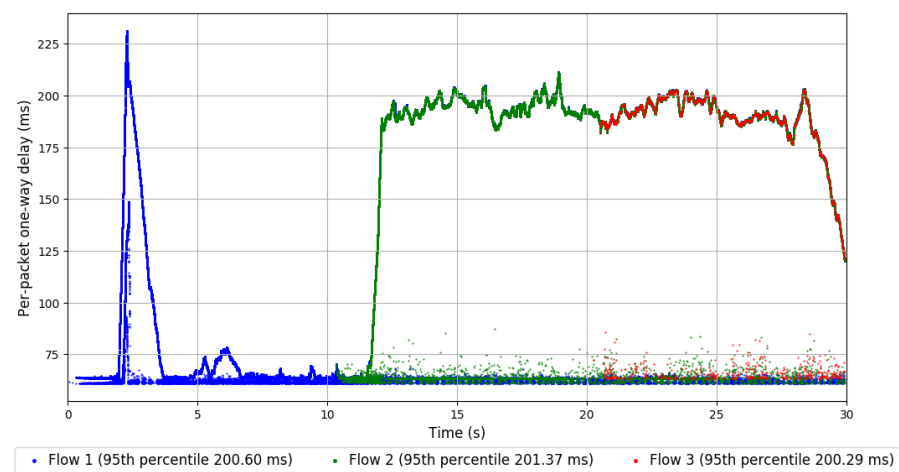
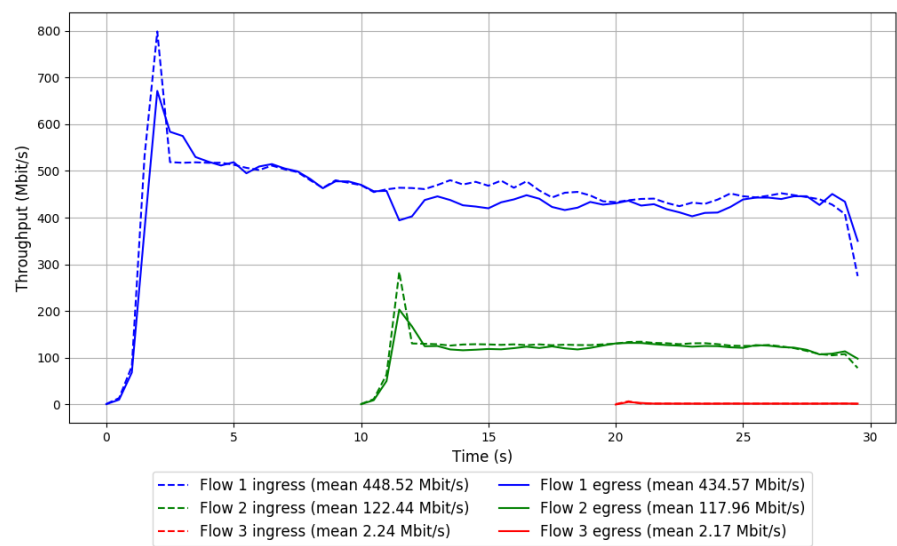
-- Flow 3:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 200.287 ms

Loss rate: 3.16%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-01 11:53:27

End at: 2017-12-01 11:53:57

Below is generated by plot.py at 2017-12-01 14:27:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 509.02 Mbit/s

95th percentile per-packet one-way delay: 193.007 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 497.08 Mbit/s

95th percentile per-packet one-way delay: 193.028 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 16.83 Mbit/s

95th percentile per-packet one-way delay: 191.494 ms

Loss rate: 0.11%

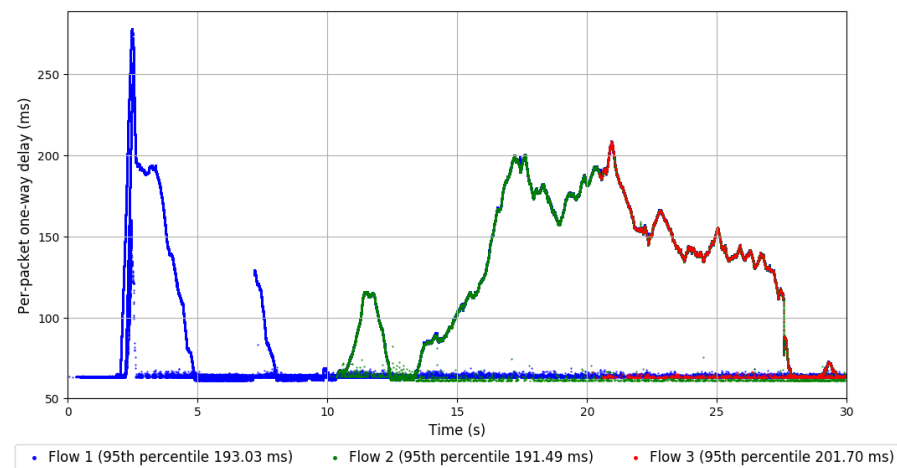
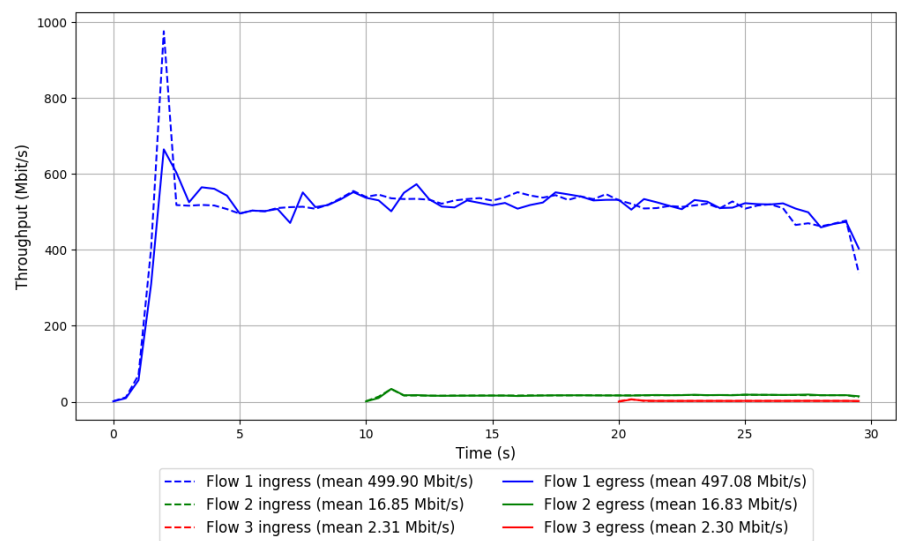
-- Flow 3:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 201.696 ms

Loss rate: 0.26%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

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

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

Below is generated by plot.py at 2017-12-01 14:27:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 481.31 Mbit/s

95th percentile per-packet one-way delay: 195.840 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 478.24 Mbit/s

95th percentile per-packet one-way delay: 195.893 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 190.073 ms

Loss rate: 0.34%

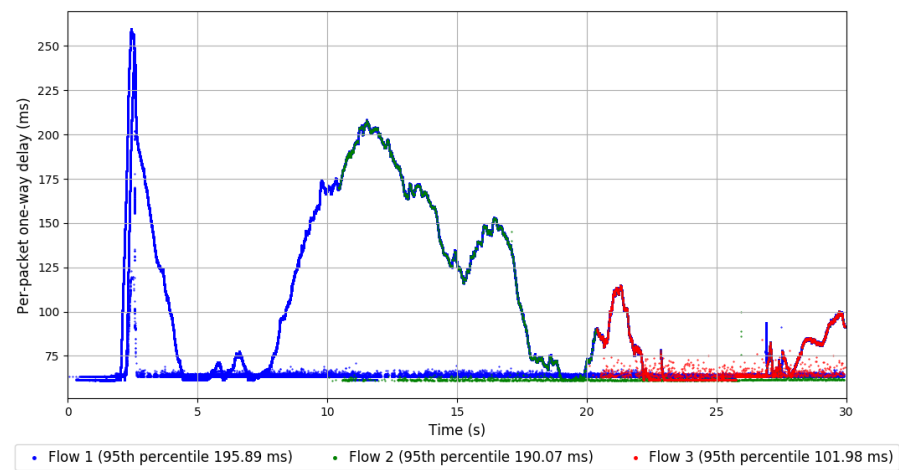
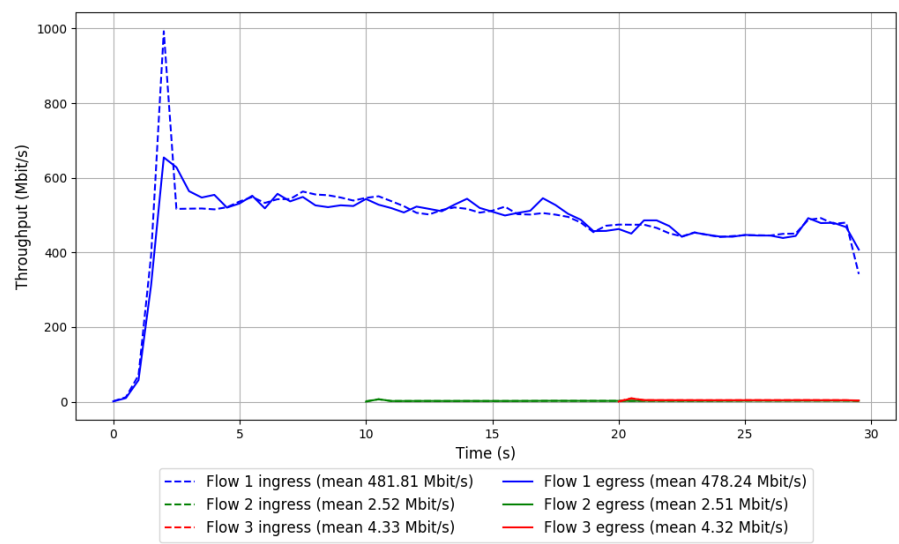
-- Flow 3:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 101.981 ms

Loss rate: 0.28%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-01 12:18:02

End at: 2017-12-01 12:18:32

Below is generated by plot.py at 2017-12-01 14:27:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 440.87 Mbit/s

95th percentile per-packet one-way delay: 211.177 ms

Loss rate: 2.22%

-- Flow 1:

Average throughput: 396.01 Mbit/s

95th percentile per-packet one-way delay: 211.037 ms

Loss rate: 2.20%

-- Flow 2:

Average throughput: 66.58 Mbit/s

95th percentile per-packet one-way delay: 212.515 ms

Loss rate: 2.41%

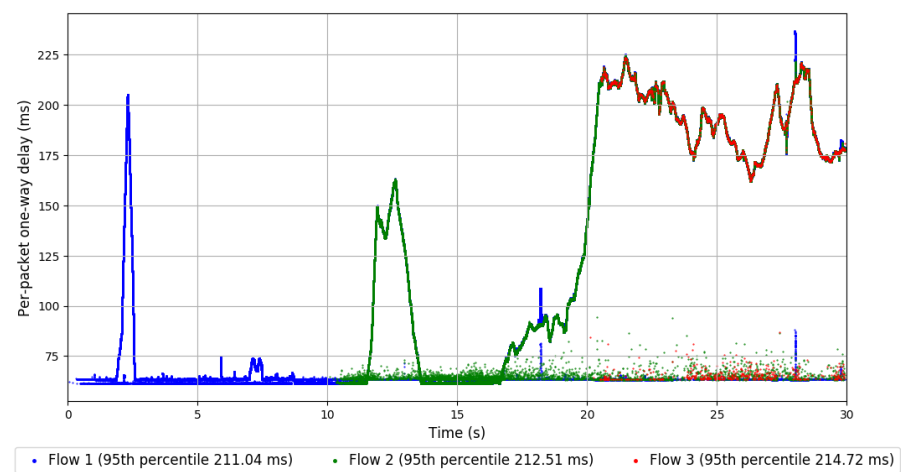
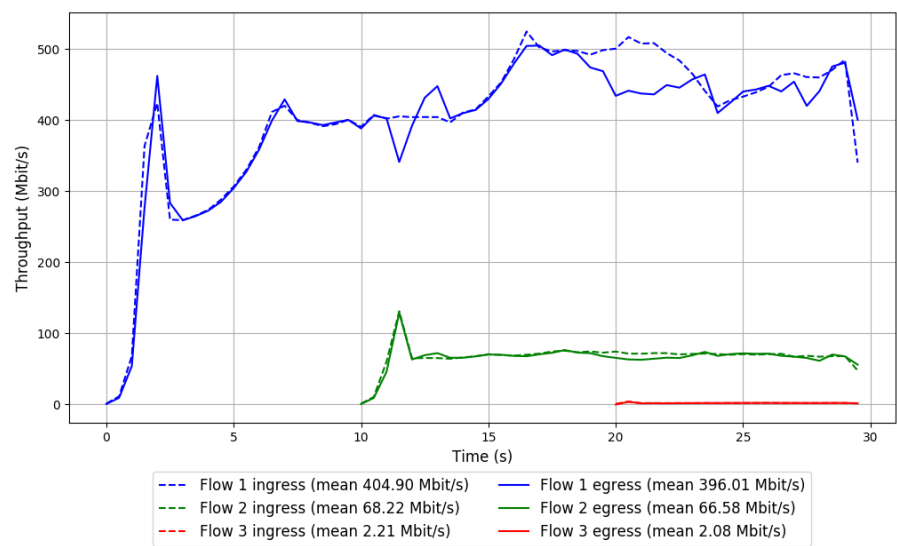
-- Flow 3:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 214.721 ms

Loss rate: 6.02%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-01 12:30:07

End at: 2017-12-01 12:30:37

Below is generated by plot.py at 2017-12-01 14:27:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 481.71 Mbit/s

95th percentile per-packet one-way delay: 204.247 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 433.73 Mbit/s

95th percentile per-packet one-way delay: 204.754 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 67.63 Mbit/s

95th percentile per-packet one-way delay: 123.759 ms

Loss rate: 0.00%

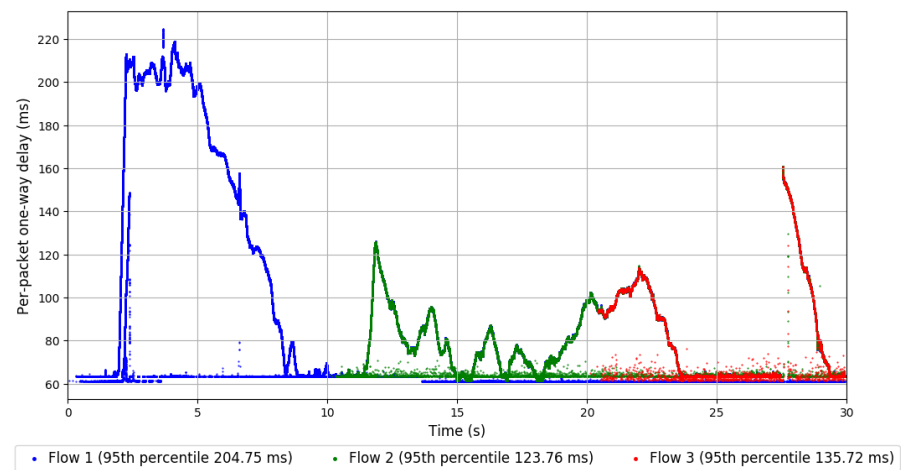
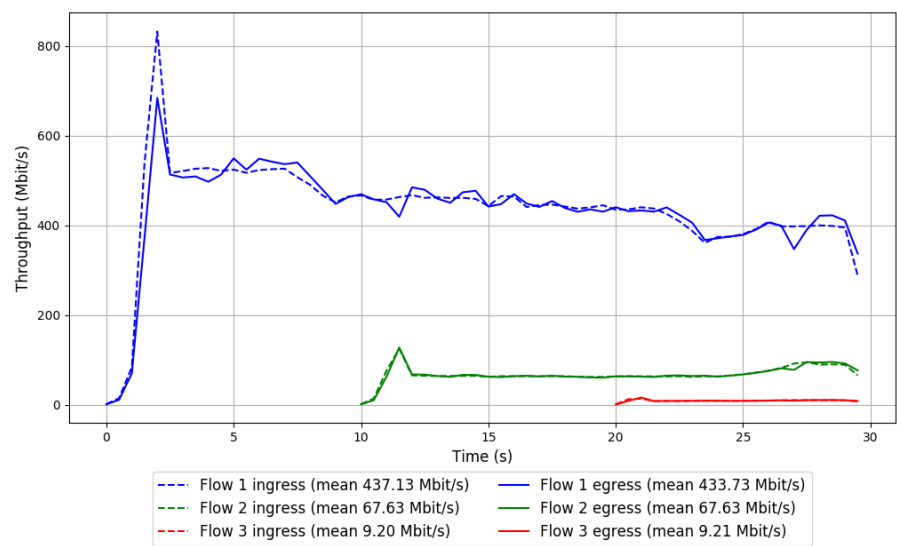
-- Flow 3:

Average throughput: 9.21 Mbit/s

95th percentile per-packet one-way delay: 135.722 ms

Loss rate: 0.00%

Run 8: Report of PCC — Data Link

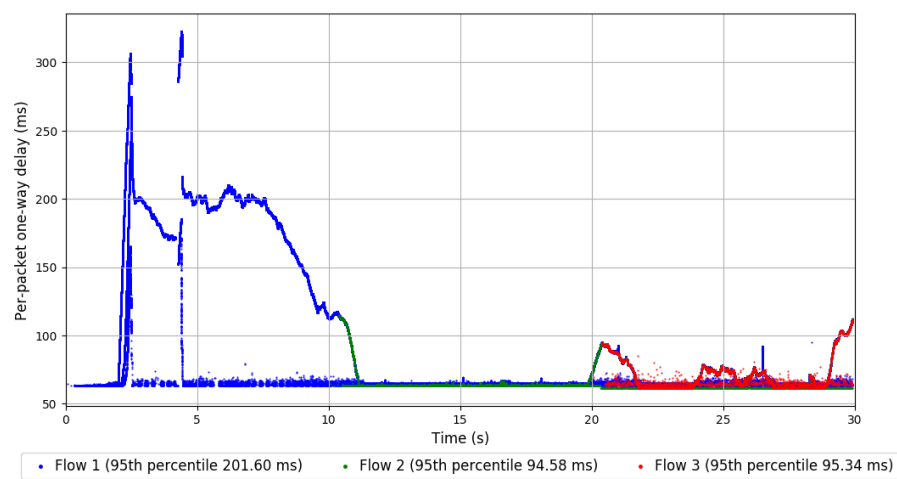
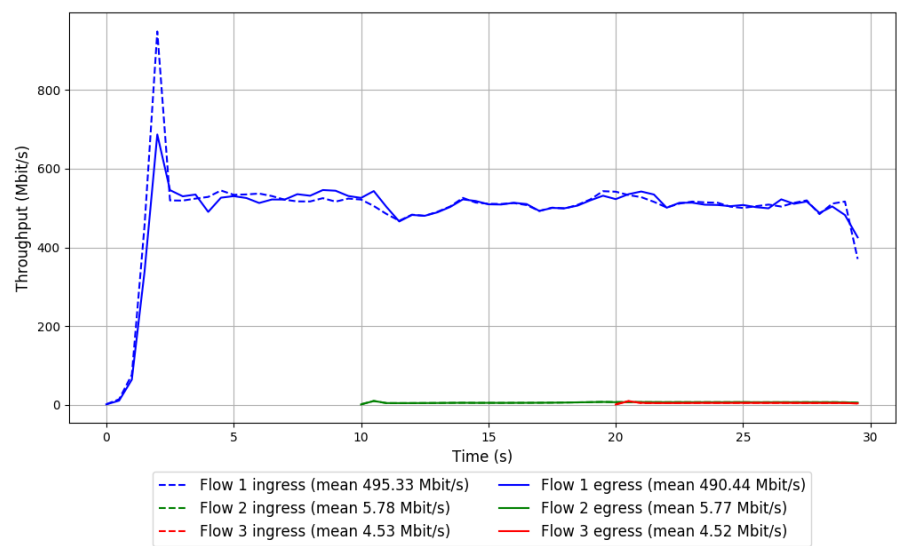


```
Run 9: Statistics of PCC

Start at: 2017-12-01 12:42:30
End at: 2017-12-01 12:43:00

# Below is generated by plot.py at 2017-12-01 14:33:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 495.76 Mbit/s
95th percentile per-packet one-way delay: 201.554 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 490.44 Mbit/s
95th percentile per-packet one-way delay: 201.604 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 5.77 Mbit/s
95th percentile per-packet one-way delay: 94.583 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 95.341 ms
Loss rate: 0.46%
```

Run 9: Report of PCC — Data Link

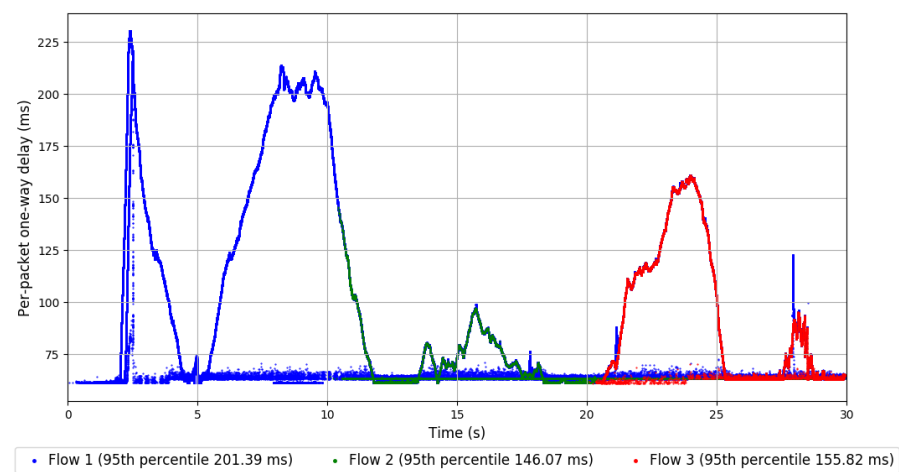
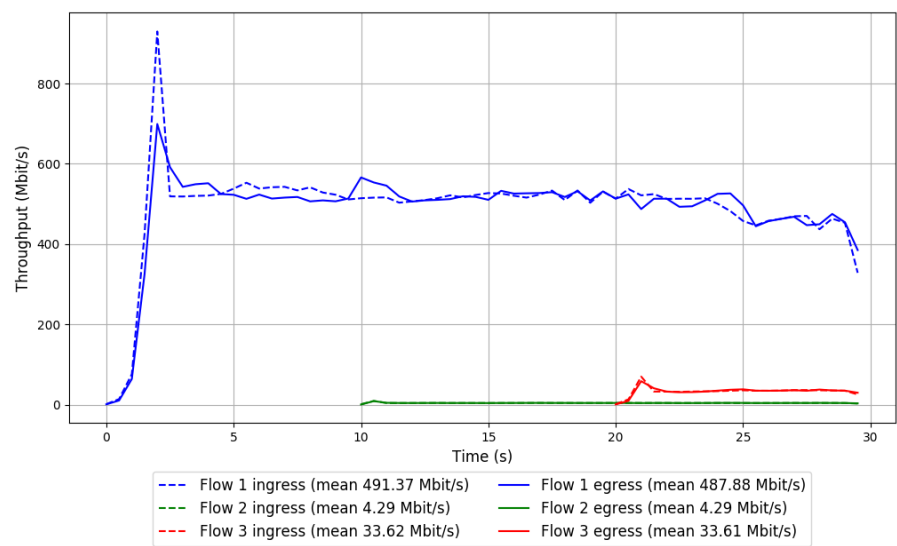


```
Run 10: Statistics of PCC

Start at: 2017-12-01 12:54:37
End at: 2017-12-01 12:55:07

# Below is generated by plot.py at 2017-12-01 14:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 501.81 Mbit/s
95th percentile per-packet one-way delay: 201.256 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 487.88 Mbit/s
95th percentile per-packet one-way delay: 201.393 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 4.29 Mbit/s
95th percentile per-packet one-way delay: 146.075 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.61 Mbit/s
95th percentile per-packet one-way delay: 155.823 ms
Loss rate: 0.02%
```

Run 10: Report of PCC — Data Link

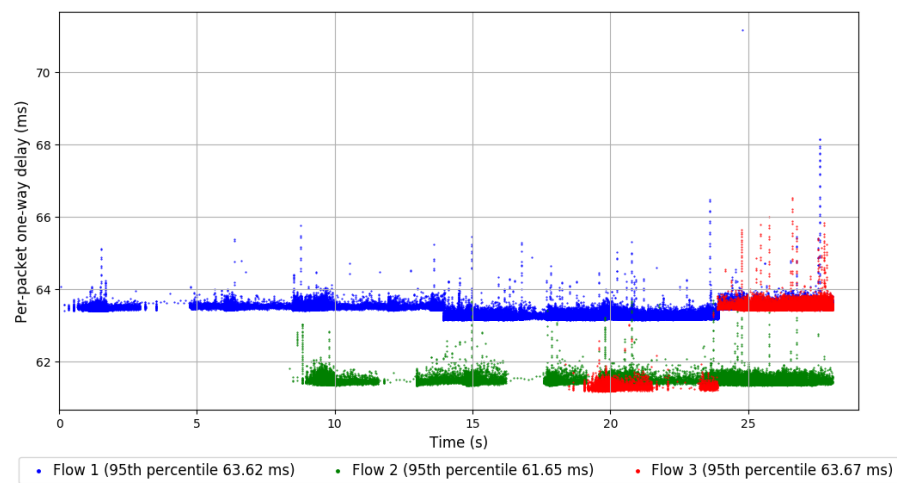
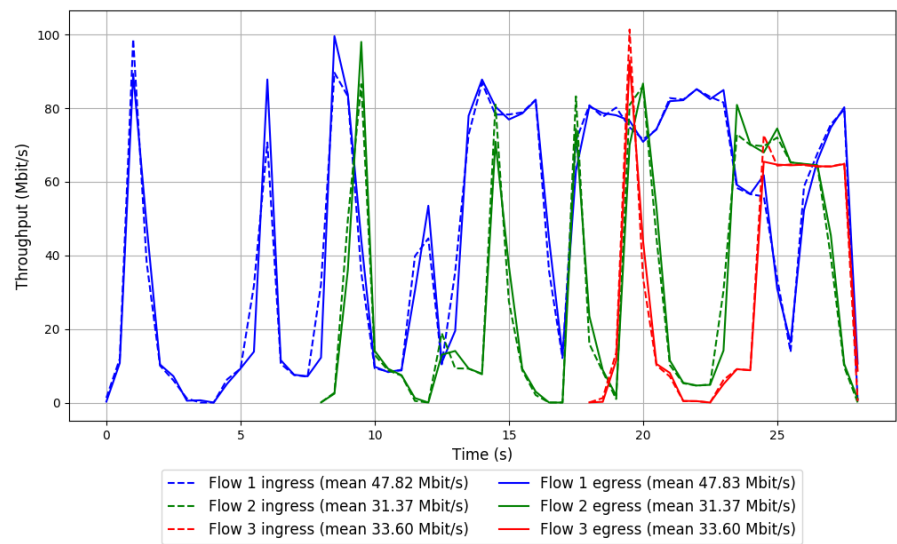


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-01 11:01:45
End at: 2017-12-01 11:02:15

# Below is generated by plot.py at 2017-12-01 14:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.55 Mbit/s
95th percentile per-packet one-way delay: 63.607 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 47.83 Mbit/s
95th percentile per-packet one-way delay: 63.621 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.37 Mbit/s
95th percentile per-packet one-way delay: 61.647 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.60 Mbit/s
95th percentile per-packet one-way delay: 63.672 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-01 11:14:06

End at: 2017-12-01 11:14:36

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.59 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 14.62 Mbit/s

95th percentile per-packet one-way delay: 63.686 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.04 Mbit/s

95th percentile per-packet one-way delay: 63.777 ms

Loss rate: 0.00%

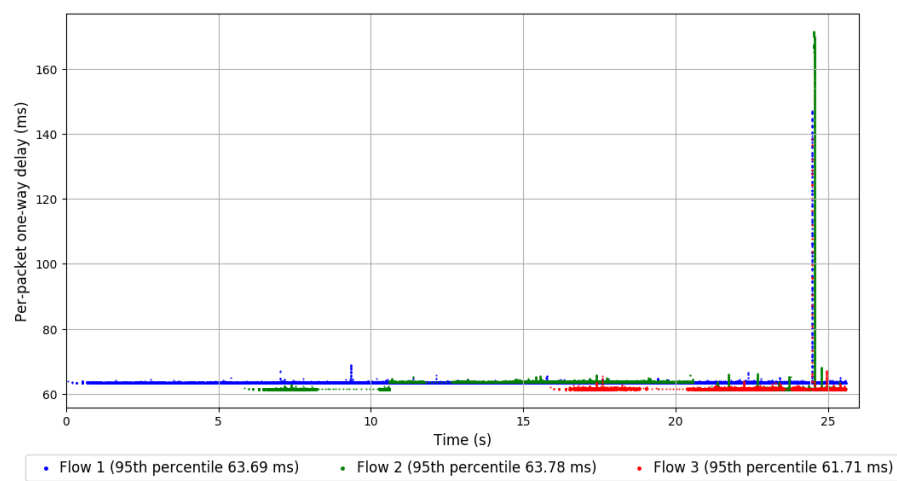
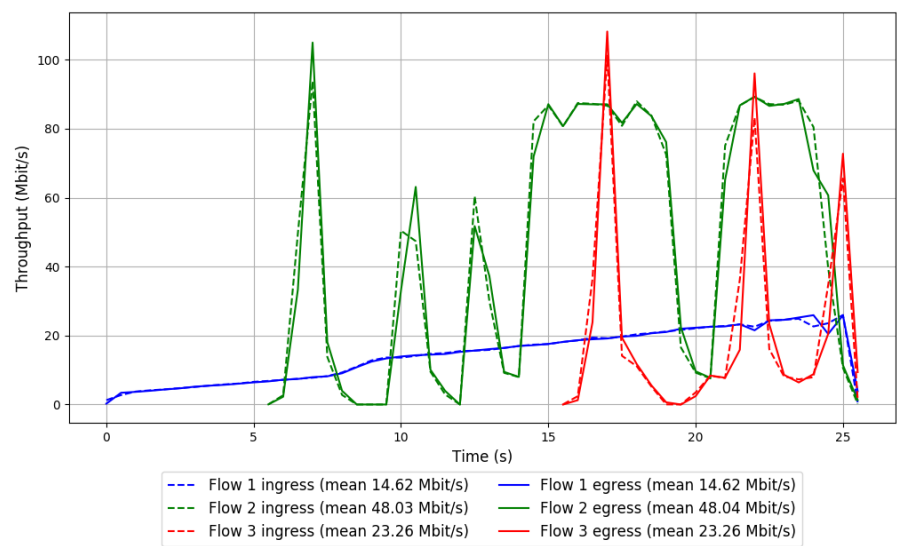
-- Flow 3:

Average throughput: 23.26 Mbit/s

95th percentile per-packet one-way delay: 61.709 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-01 11:26:22

End at: 2017-12-01 11:26:52

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.13 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.07 Mbit/s

95th percentile per-packet one-way delay: 61.401 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.40 Mbit/s

95th percentile per-packet one-way delay: 63.842 ms

Loss rate: 0.00%

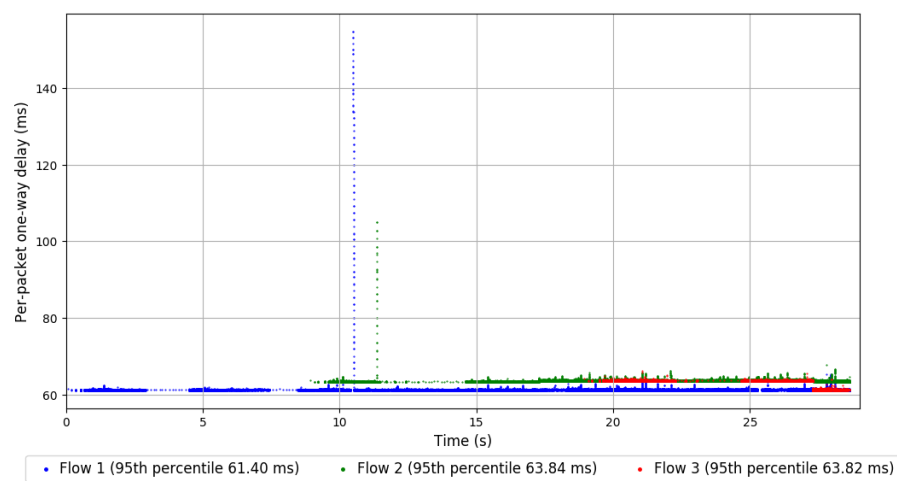
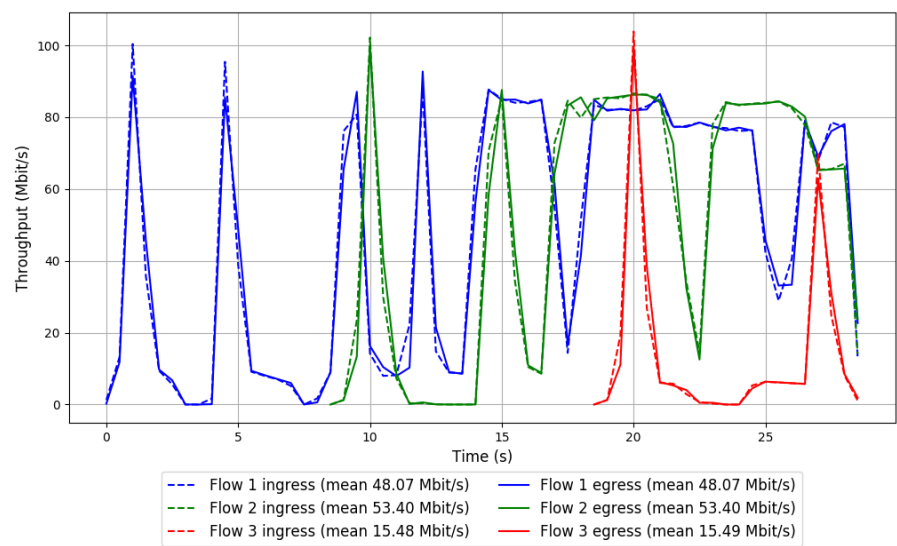
-- Flow 3:

Average throughput: 15.49 Mbit/s

95th percentile per-packet one-way delay: 63.821 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-01 11:38:40

End at: 2017-12-01 11:39:10

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.56 Mbit/s

95th percentile per-packet one-way delay: 63.702 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.62 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.73 Mbit/s

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

Loss rate: 0.00%

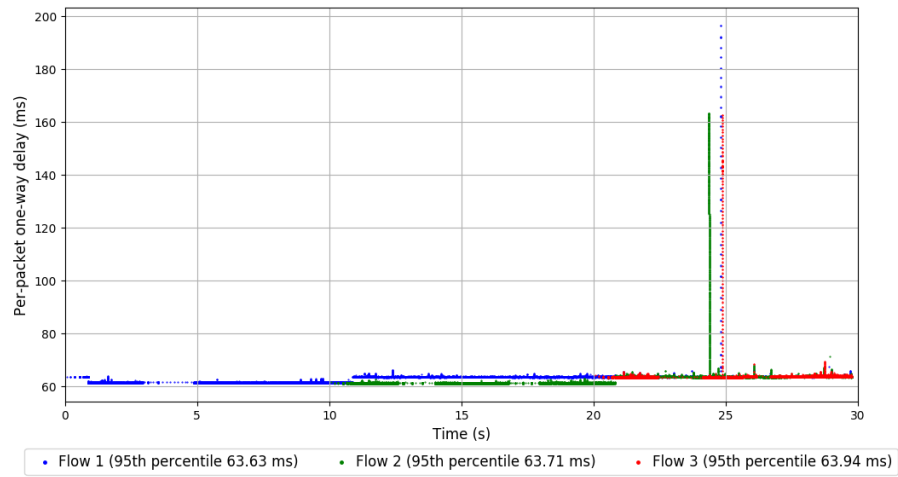
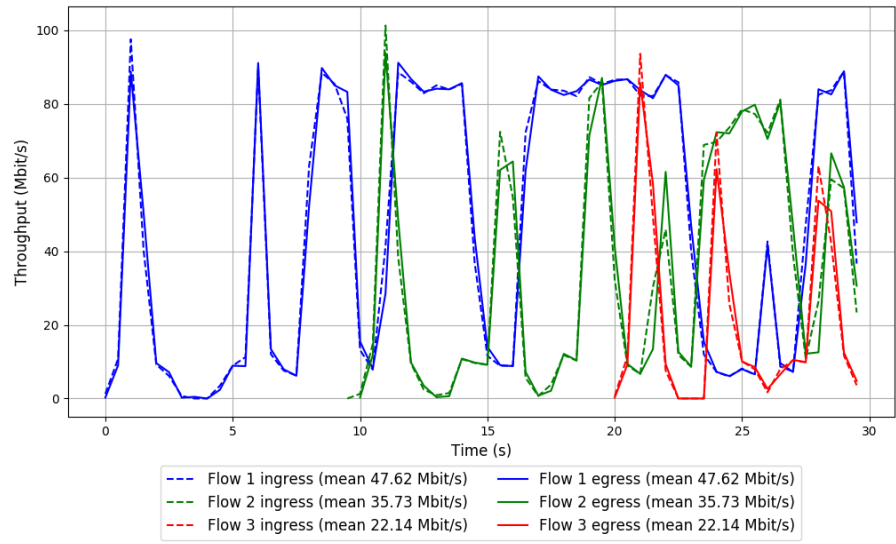
-- Flow 3:

Average throughput: 22.14 Mbit/s

95th percentile per-packet one-way delay: 63.942 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-01 11:50:59

End at: 2017-12-01 11:51:29

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.60 Mbit/s

95th percentile per-packet one-way delay: 63.409 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 61.74 Mbit/s

95th percentile per-packet one-way delay: 63.294 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 63.682 ms

Loss rate: 3.43%

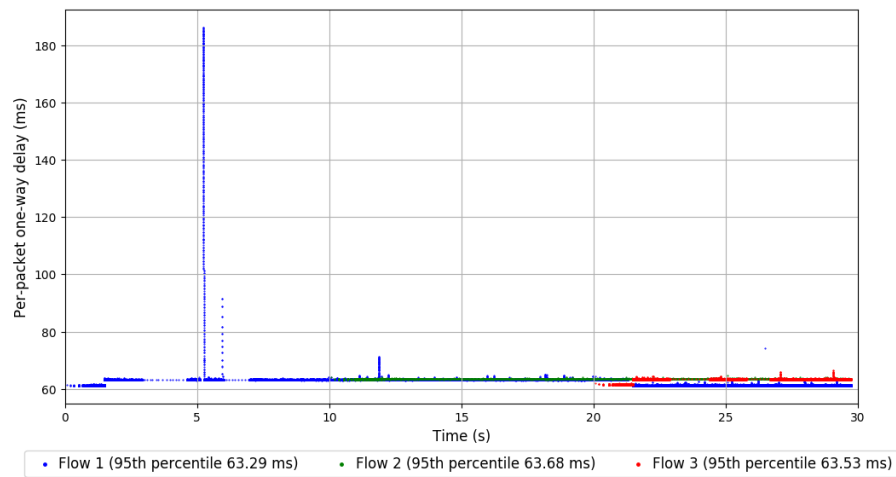
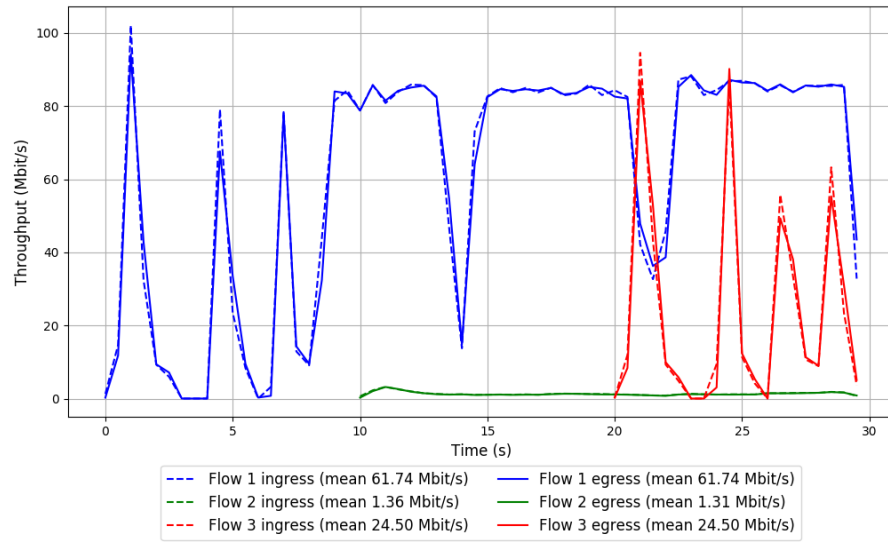
-- Flow 3:

Average throughput: 24.50 Mbit/s

95th percentile per-packet one-way delay: 63.534 ms

Loss rate: 0.01%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-01 12:03:14

End at: 2017-12-01 12:03:44

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.72 Mbit/s

95th percentile per-packet one-way delay: 63.652 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.03 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.37 Mbit/s

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

Loss rate: 0.00%

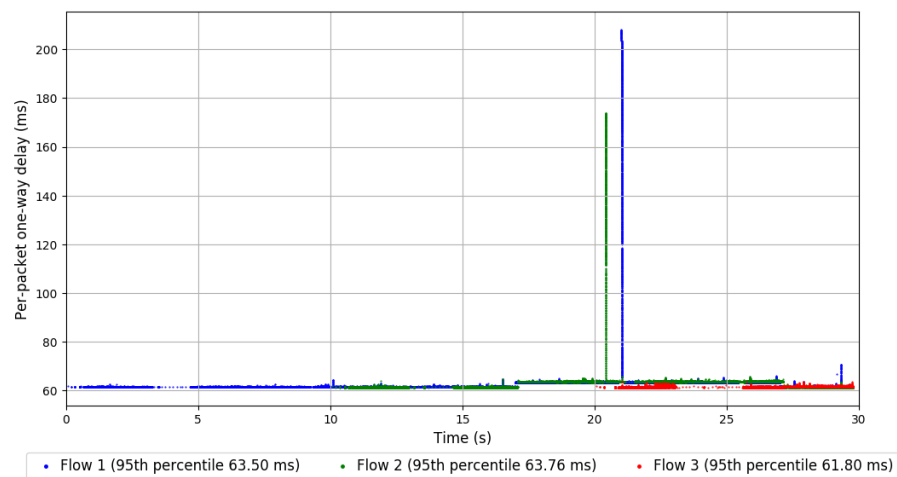
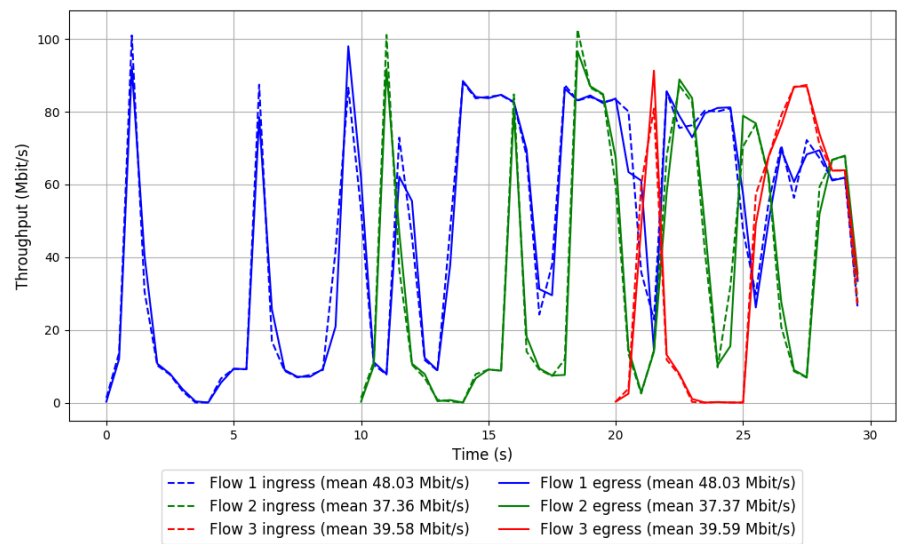
-- Flow 3:

Average throughput: 39.59 Mbit/s

95th percentile per-packet one-way delay: 61.803 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-01 12:15:30

End at: 2017-12-01 12:16:00

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.37 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 54.53 Mbit/s

95th percentile per-packet one-way delay: 63.648 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.98 Mbit/s

95th percentile per-packet one-way delay: 63.795 ms

Loss rate: 0.01%

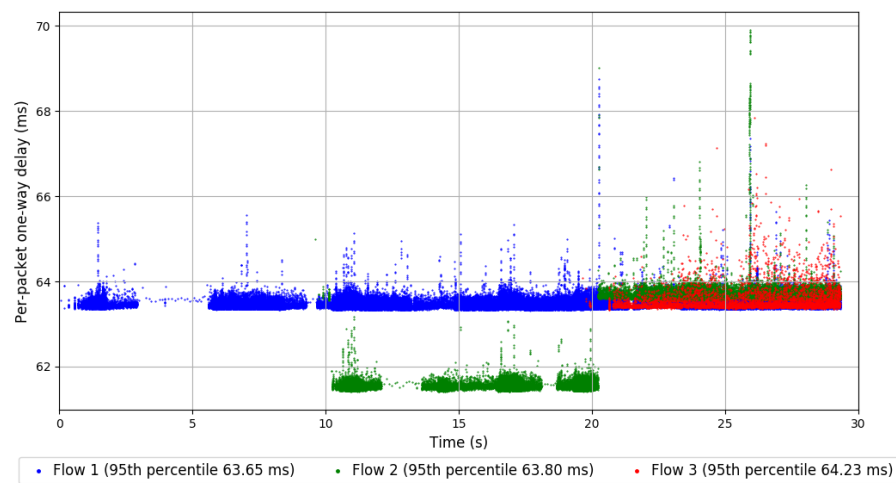
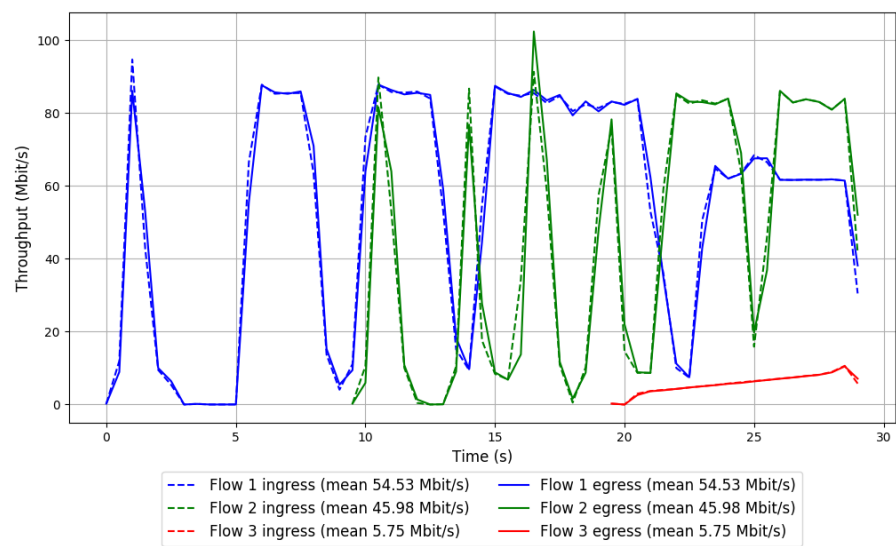
-- Flow 3:

Average throughput: 5.75 Mbit/s

95th percentile per-packet one-way delay: 64.230 ms

Loss rate: 0.02%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-01 12:27:36

End at: 2017-12-01 12:28:06

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.50 Mbit/s

95th percentile per-packet one-way delay: 63.591 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 54.13 Mbit/s

95th percentile per-packet one-way delay: 63.612 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 31.83 Mbit/s

95th percentile per-packet one-way delay: 63.566 ms

Loss rate: 0.00%

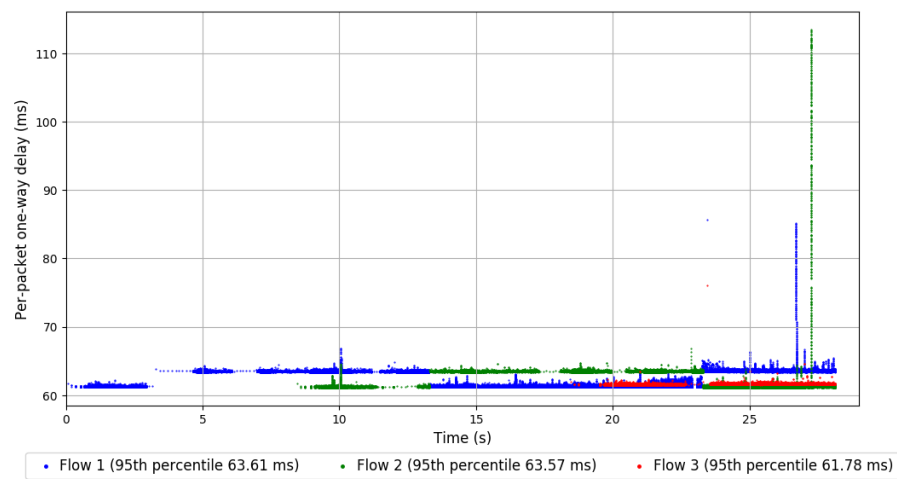
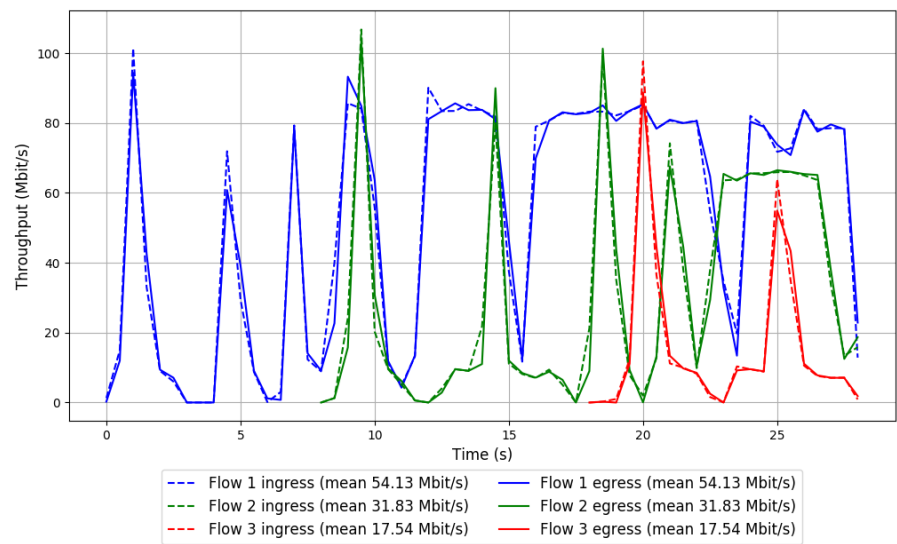
-- Flow 3:

Average throughput: 17.54 Mbit/s

95th percentile per-packet one-way delay: 61.779 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-01 12:40:00

End at: 2017-12-01 12:40:30

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.48 Mbit/s

95th percentile per-packet one-way delay: 63.503 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.34 Mbit/s

95th percentile per-packet one-way delay: 63.546 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.71 Mbit/s

95th percentile per-packet one-way delay: 61.493 ms

Loss rate: 0.00%

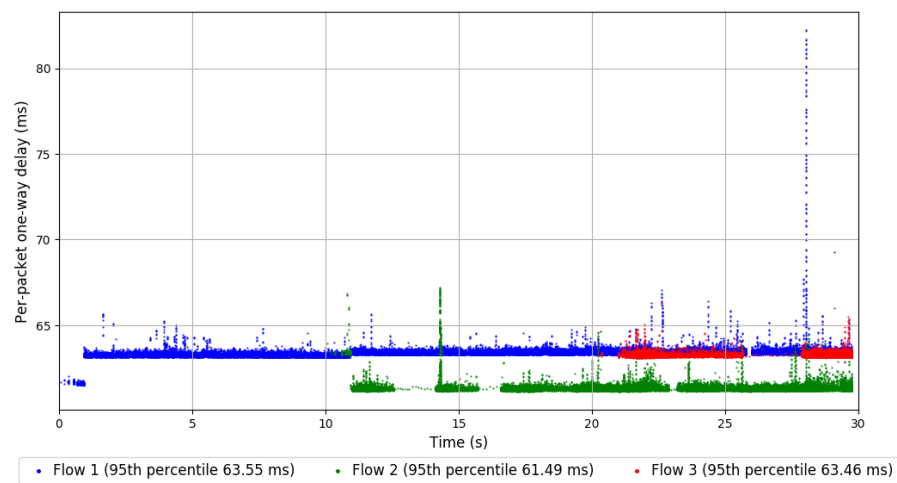
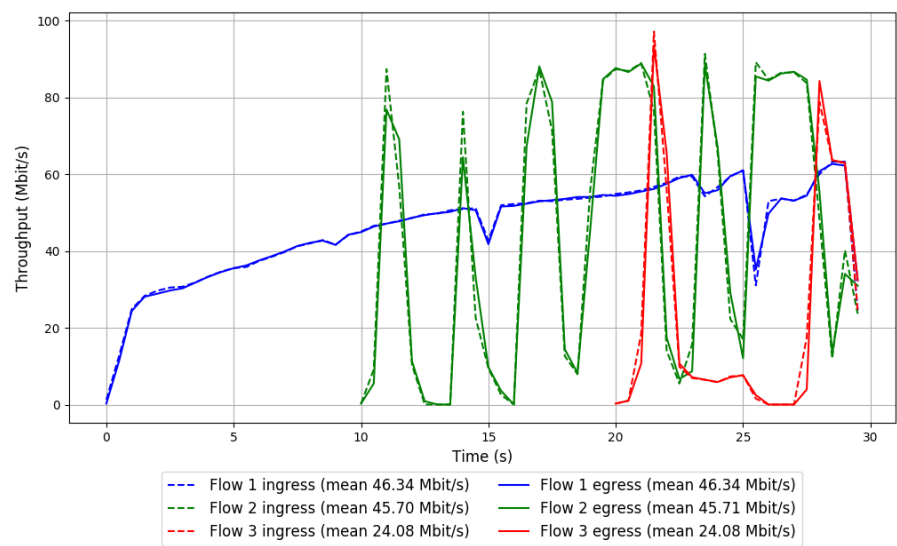
-- Flow 3:

Average throughput: 24.08 Mbit/s

95th percentile per-packet one-way delay: 63.463 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

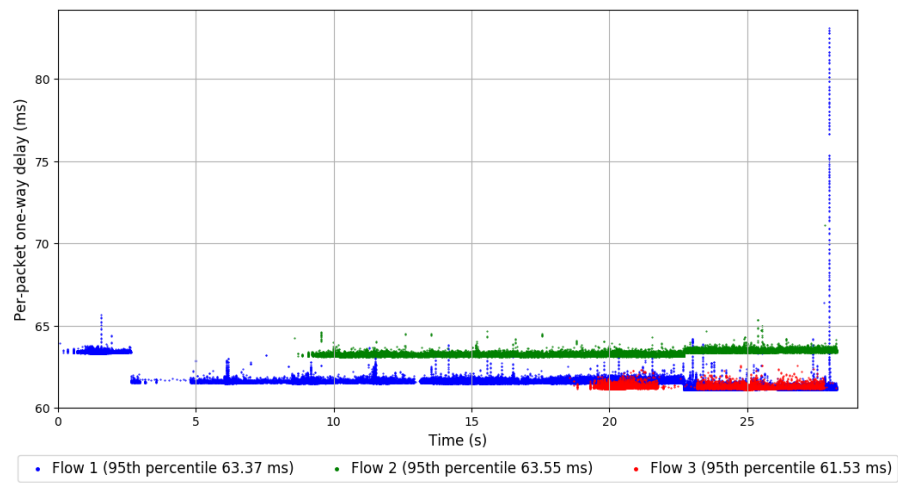
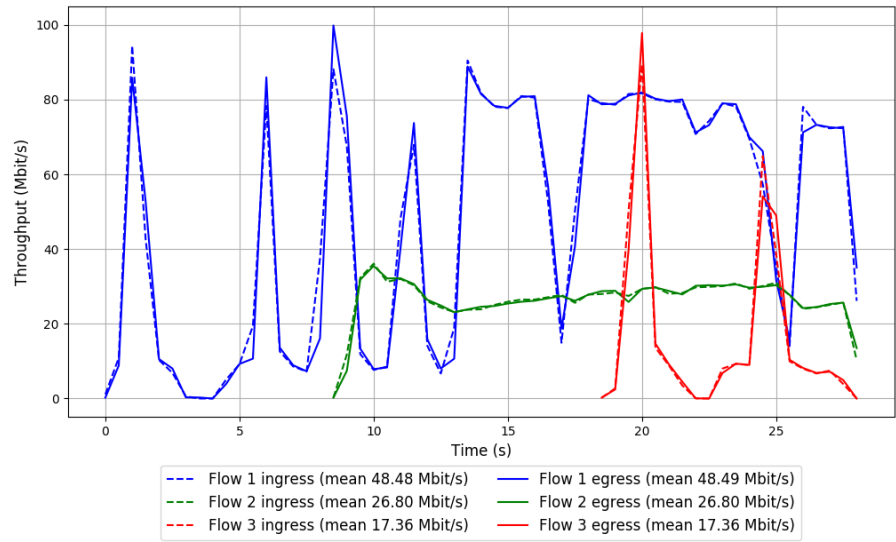


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-01 12:52:06
End at: 2017-12-01 12:52:36

# Below is generated by plot.py at 2017-12-01 14:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.14 Mbit/s
95th percentile per-packet one-way delay: 63.465 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 48.49 Mbit/s
95th percentile per-packet one-way delay: 63.370 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 26.80 Mbit/s
95th percentile per-packet one-way delay: 63.553 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 17.36 Mbit/s
95th percentile per-packet one-way delay: 61.529 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

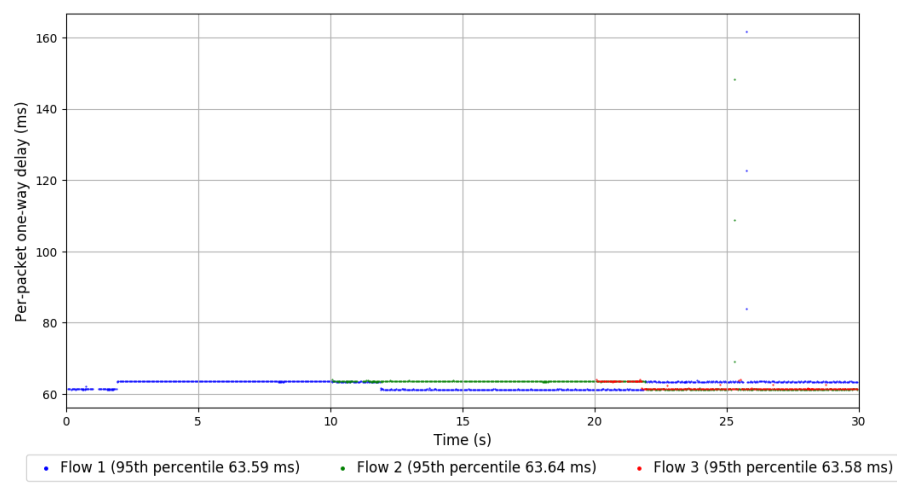
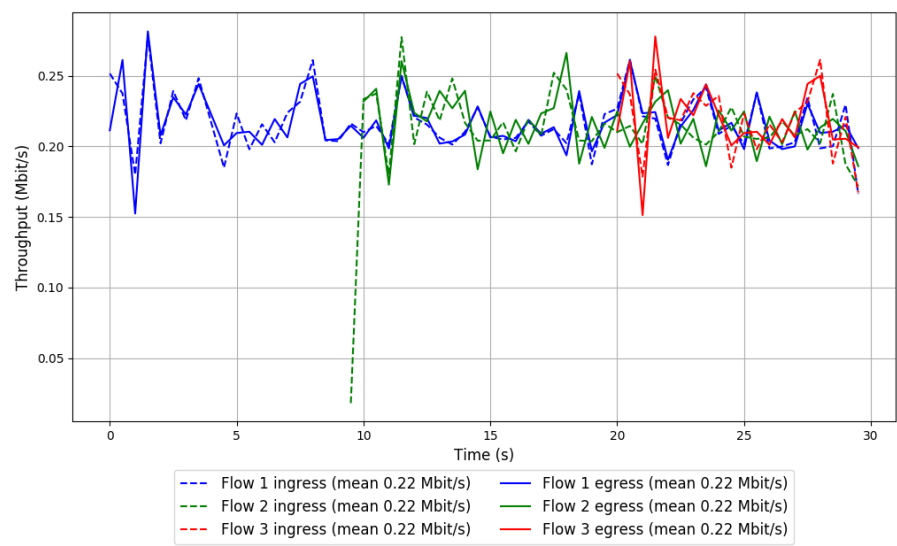


```
Run 1: Statistics of SReAM

Start at: 2017-12-01 10:58:39
End at: 2017-12-01 10:59:09

# Below is generated by plot.py at 2017-12-01 14:33:54
# 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: 63.585 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.637 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.582 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

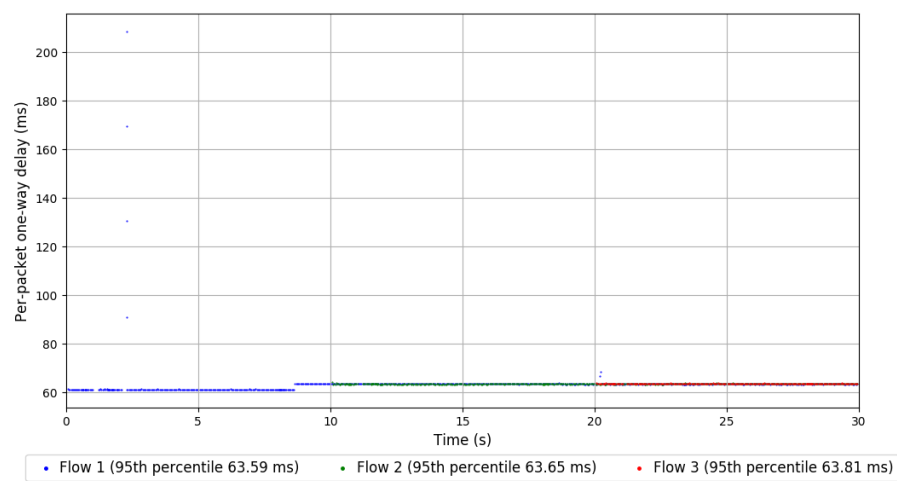
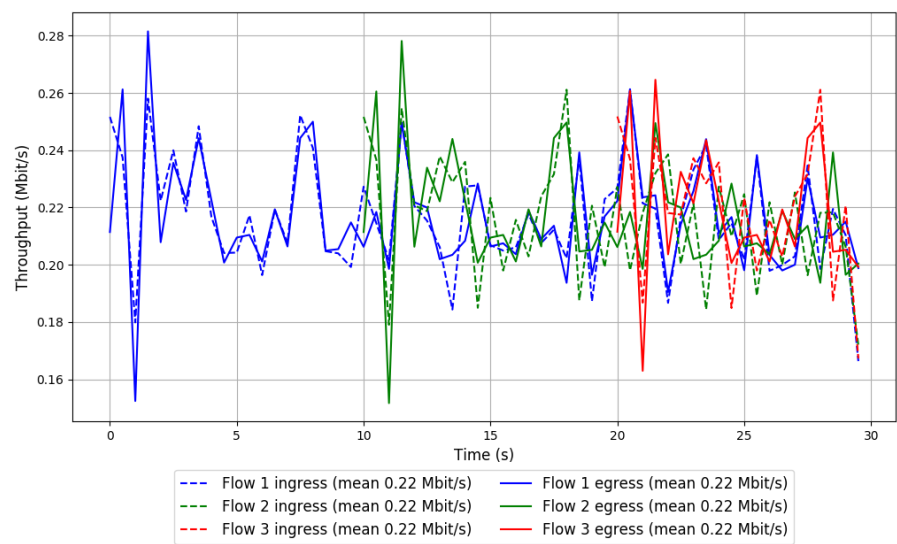


```
Run 2: Statistics of SReAM

Start at: 2017-12-01 11:11:02
End at: 2017-12-01 11:11:32

# Below is generated by plot.py at 2017-12-01 14:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.771 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: 63.654 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.812 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

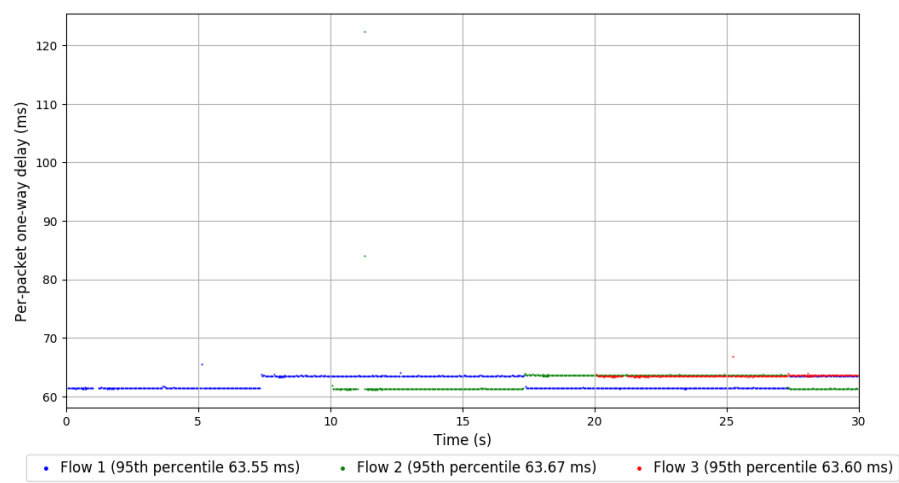
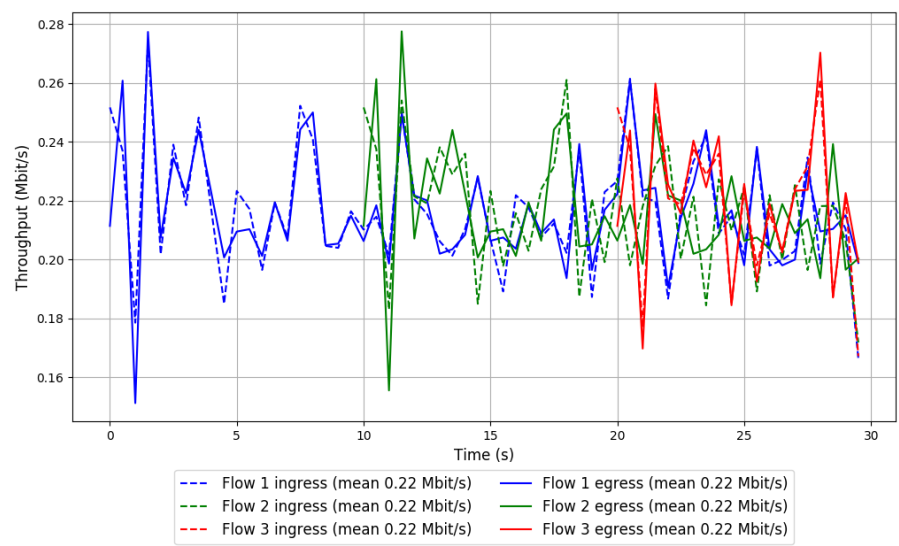


```
Run 3: Statistics of SCReAM

Start at: 2017-12-01 11:23:23
End at: 2017-12-01 11:23:54

# Below is generated by plot.py at 2017-12-01 14:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.634 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.545 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.666 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.603 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

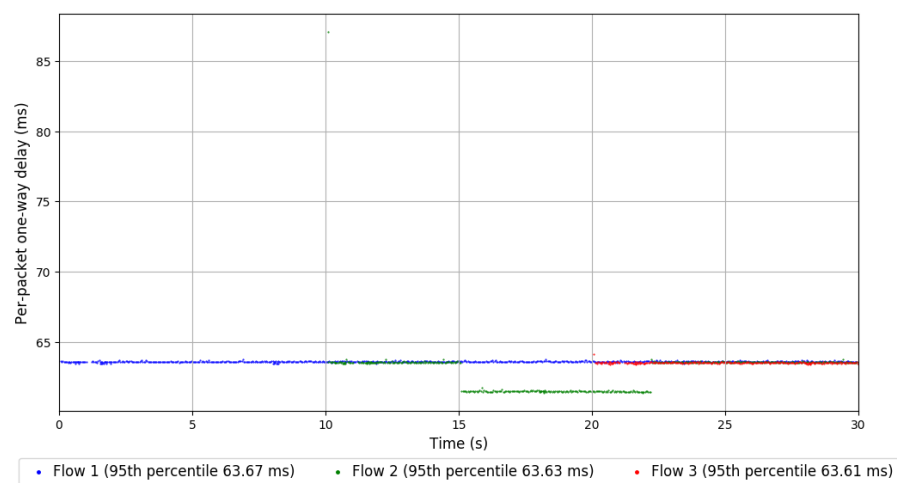
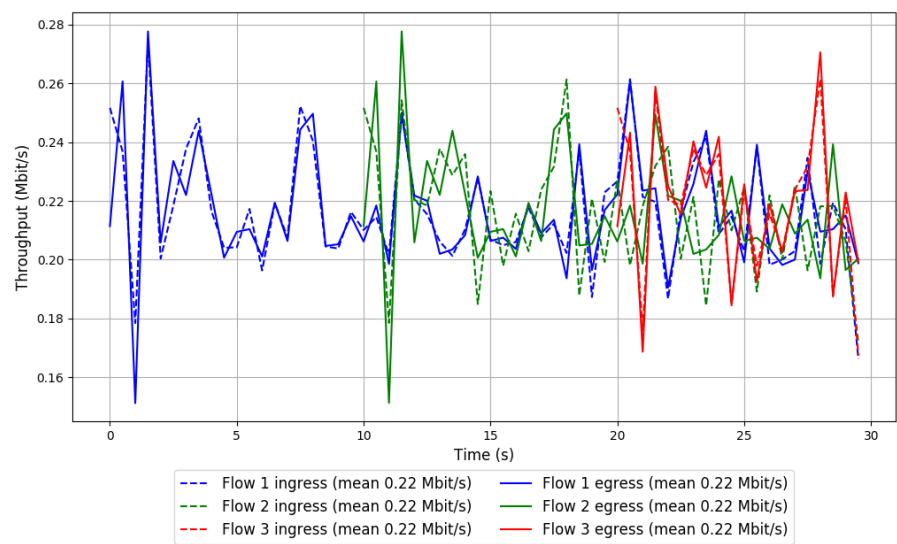


```
Run 4: Statistics of SReAM

Start at: 2017-12-01 11:35:39
End at: 2017-12-01 11:36:09

# Below is generated by plot.py at 2017-12-01 14:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.665 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.675 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.627 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.606 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2017-12-01 11:48:00

End at: 2017-12-01 11:48:30

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.794 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.808 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.604 ms

Loss rate: 0.00%

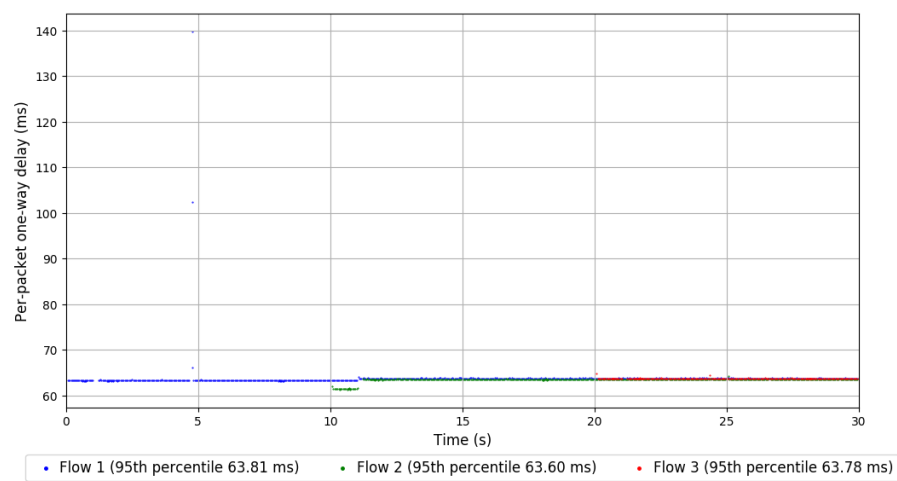
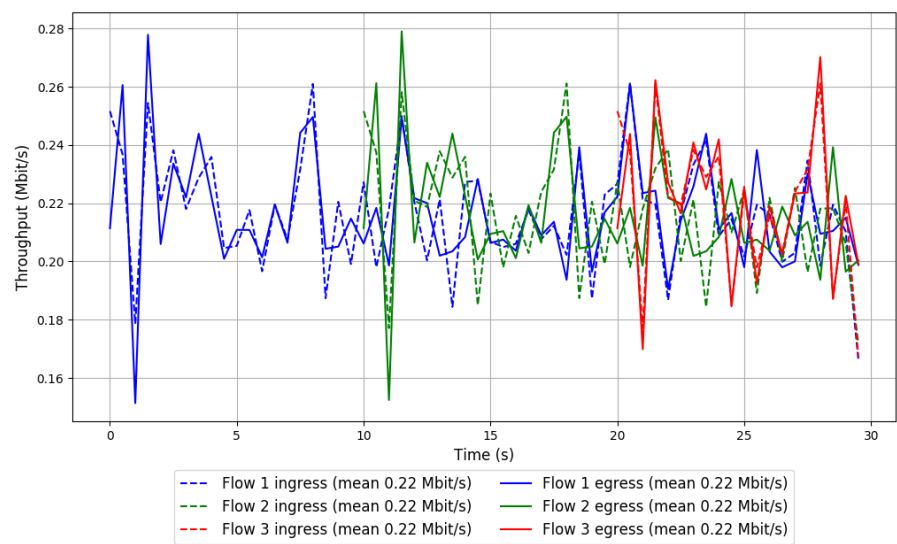
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.777 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-01 12:00:14

End at: 2017-12-01 12:00:44

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.795 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.646 ms

Loss rate: 0.00%

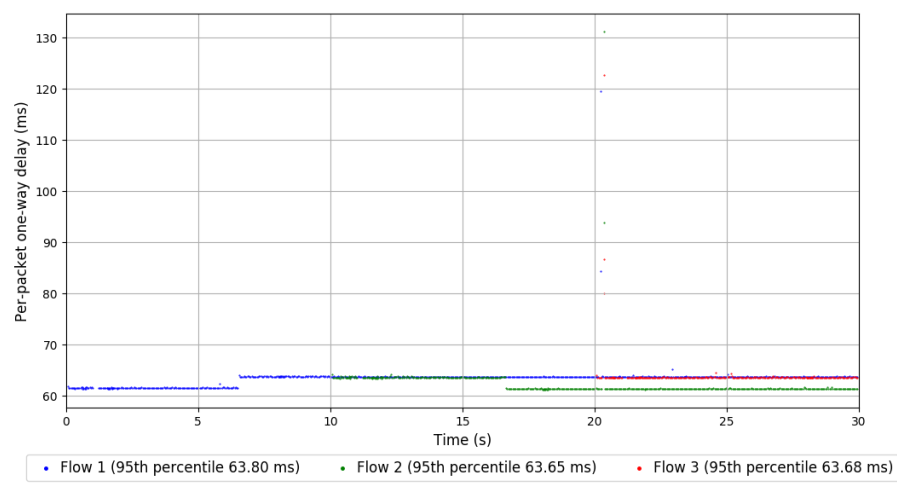
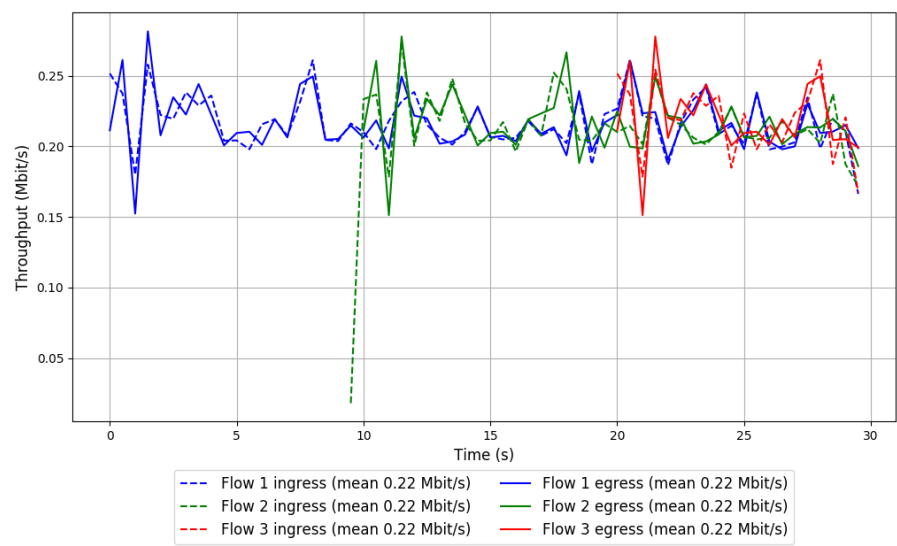
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.682 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

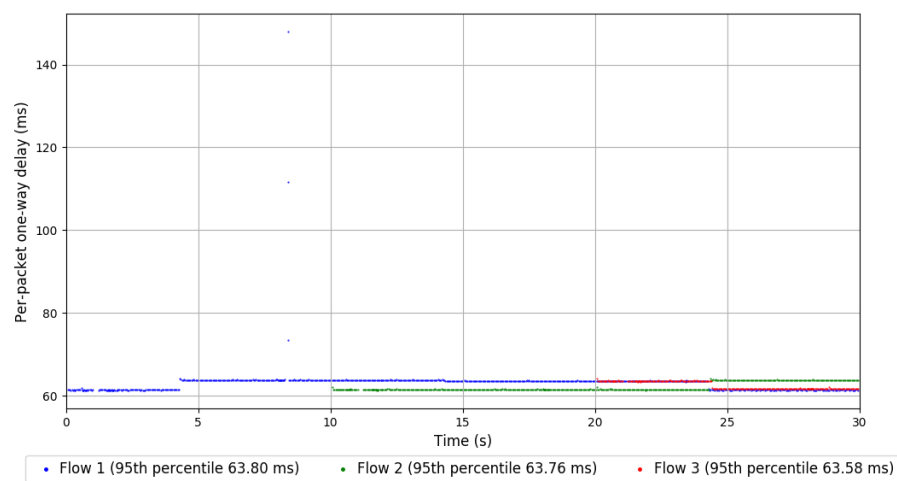
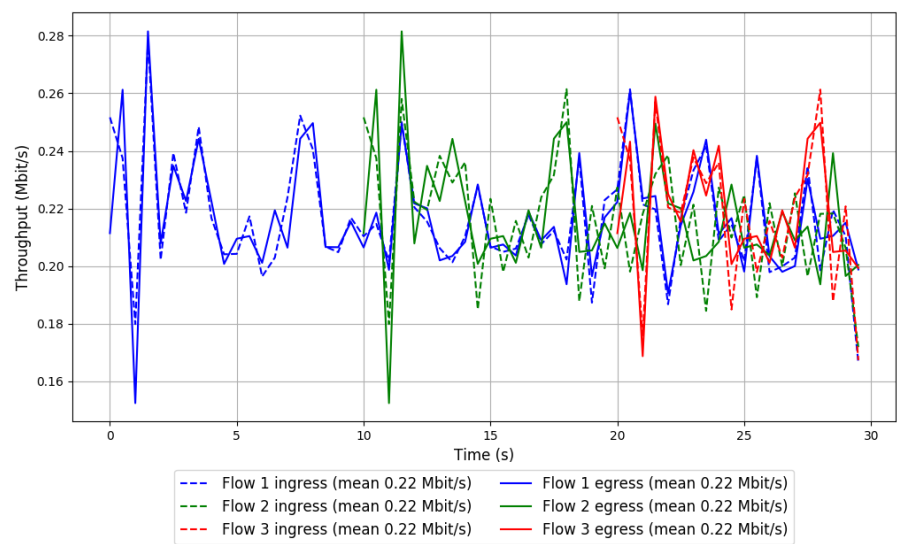


```
Run 7: Statistics of SCReAM

Start at: 2017-12-01 12:12:27
End at: 2017-12-01 12:12:57

# Below is generated by plot.py at 2017-12-01 14:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.789 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.803 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.759 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.580 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-01 12:24:36

End at: 2017-12-01 12:25:06

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.532 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.559 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.773 ms

Loss rate: 0.00%

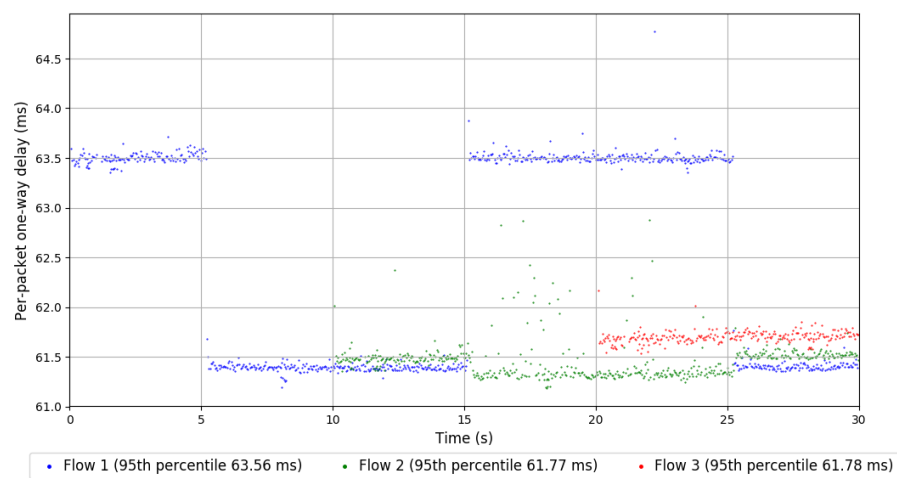
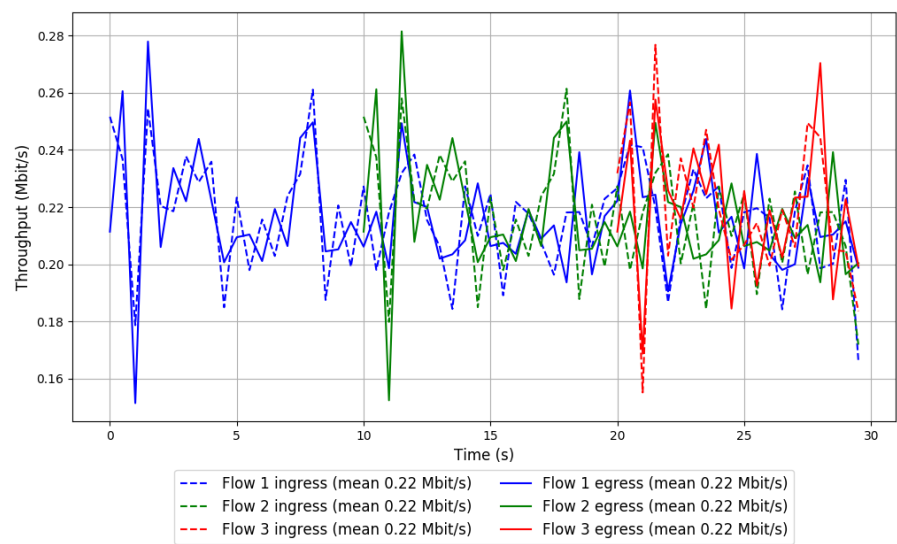
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.785 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-01 12:36:54

End at: 2017-12-01 12:37:24

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.585 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.514 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.601 ms

Loss rate: 0.00%

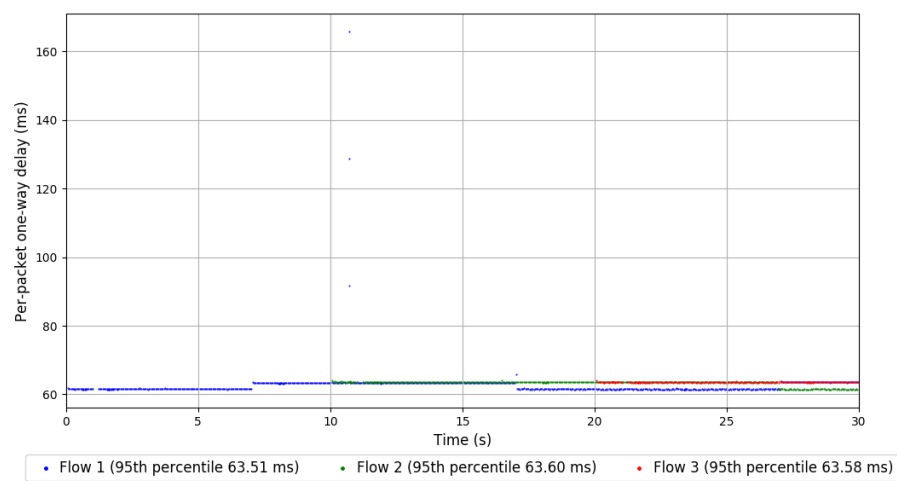
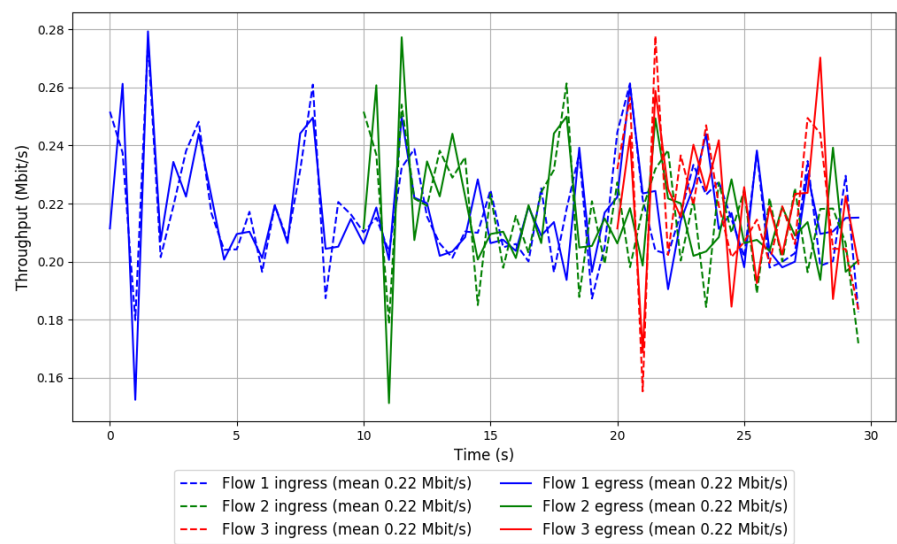
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.582 ms

Loss rate: 0.00%

Run 9: Report of SCRaM — Data Link

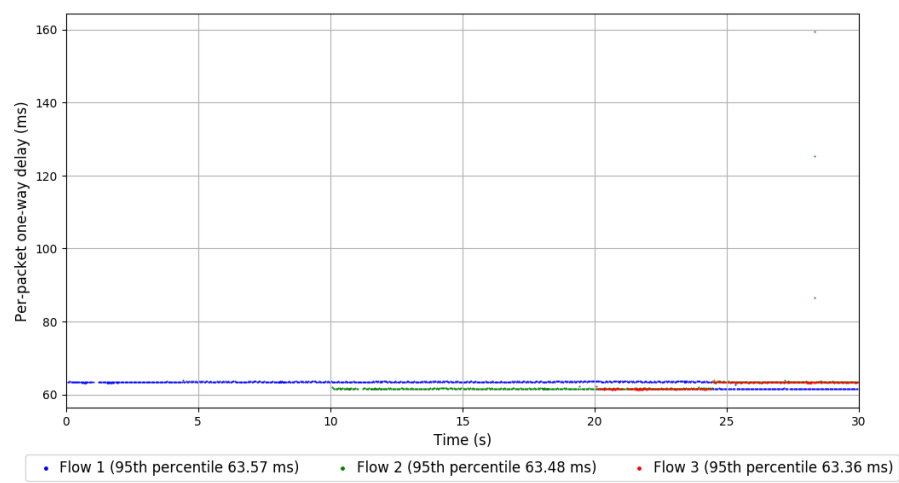
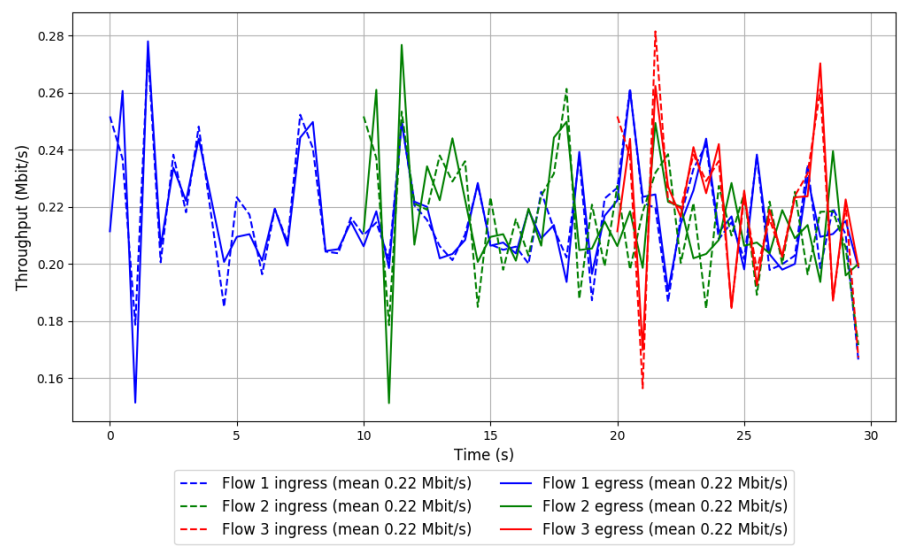


```
Run 10: Statistics of SReAM

Start at: 2017-12-01 12:49:06
End at: 2017-12-01 12:49:36

# Below is generated by plot.py at 2017-12-01 14:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.552 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.569 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.481 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.360 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link

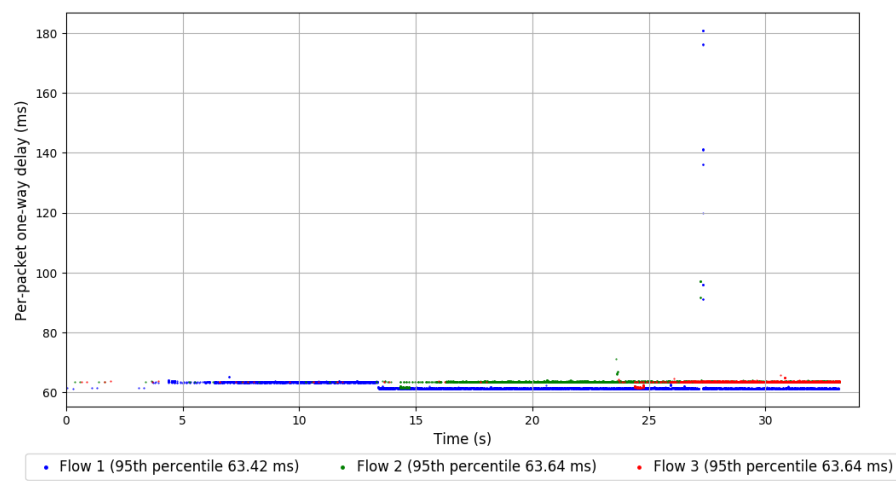
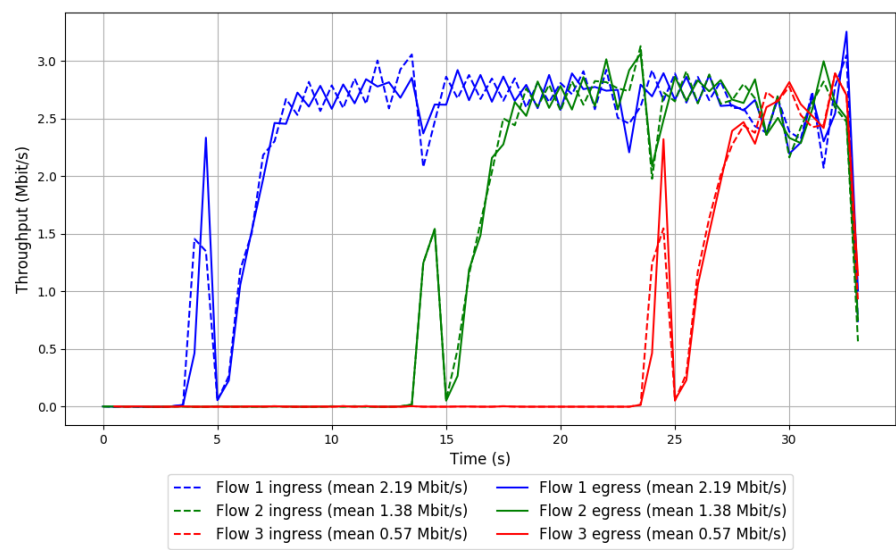


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-01 11:00:11
End at: 2017-12-01 11:00:41

# Below is generated by plot.py at 2017-12-01 14:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 63.607 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 63.424 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 63.643 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 63.643 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-01 11:12:31

End at: 2017-12-01 11:13:01

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 63.617 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.594 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 61.815 ms

Loss rate: 0.00%

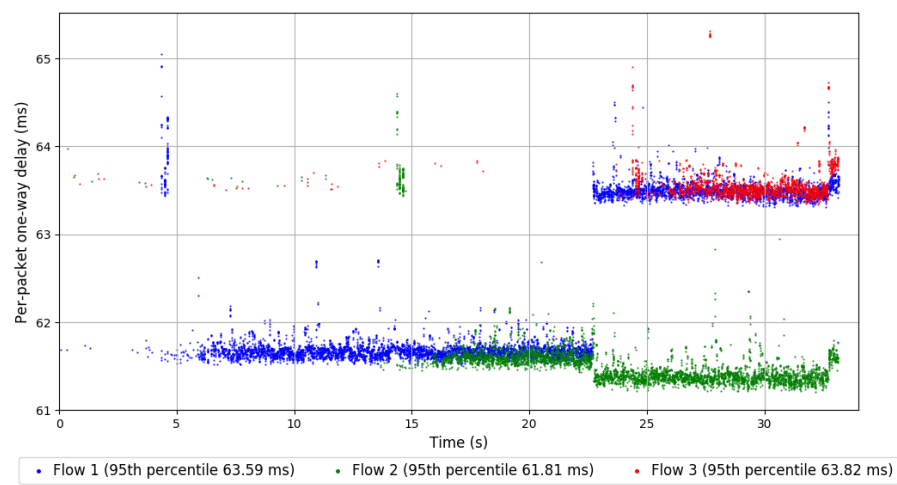
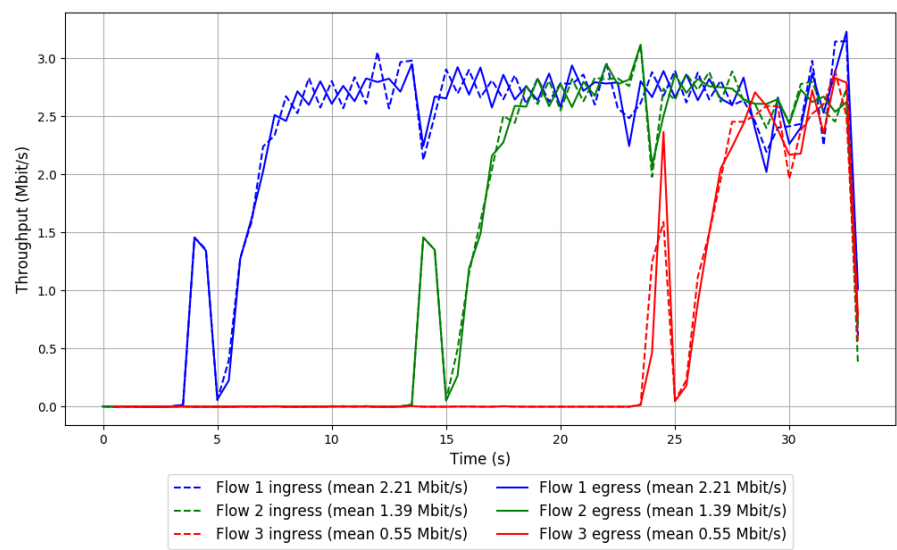
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.819 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-01 11:24:48

End at: 2017-12-01 11:25:18

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 63.634 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.636 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 63.621 ms

Loss rate: 0.00%

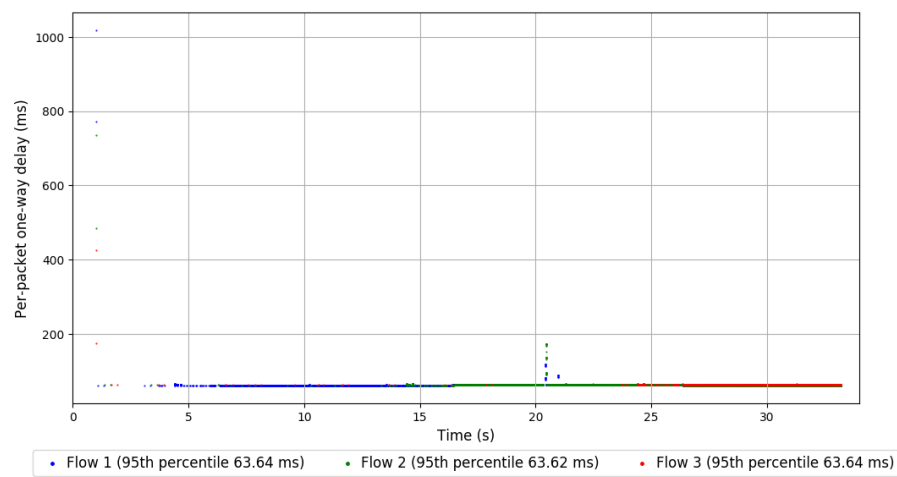
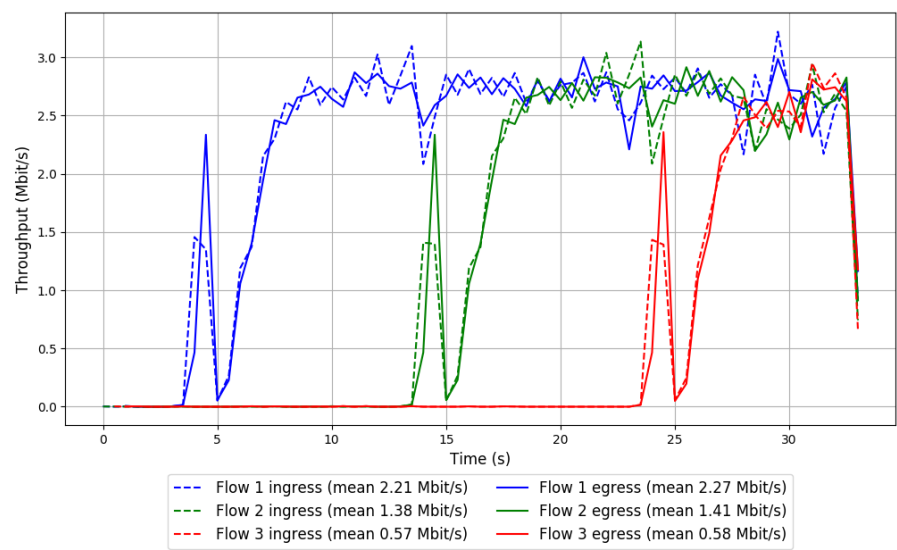
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 63.642 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-01 11:37:06

End at: 2017-12-01 11:37:36

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.15 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.565 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 63.679 ms

Loss rate: 0.00%

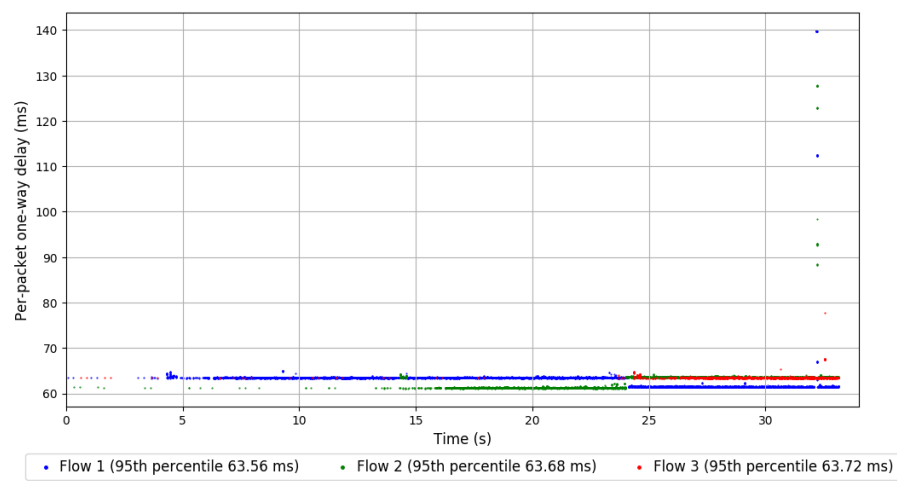
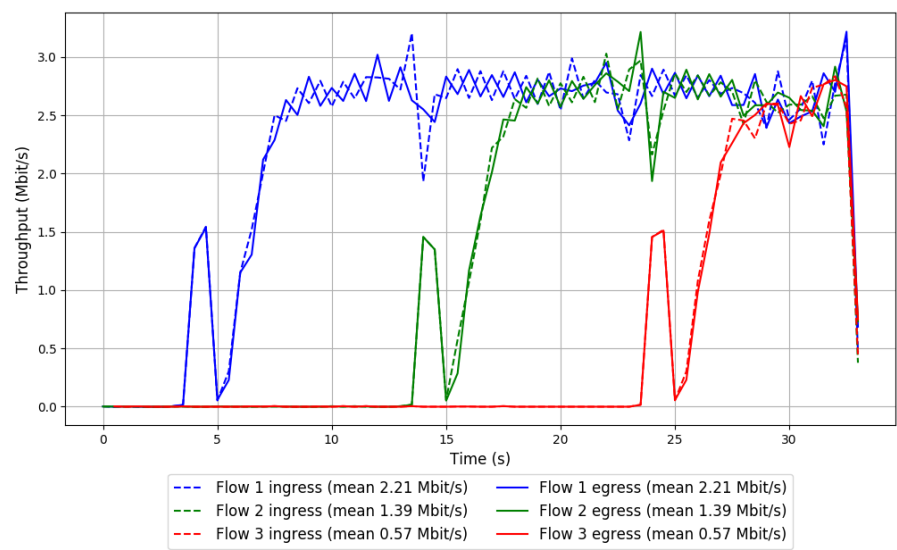
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 63.721 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-01 11:49:23

End at: 2017-12-01 11:49:53

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.14 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.649 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.39 Mbit/s

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

Loss rate: 0.00%

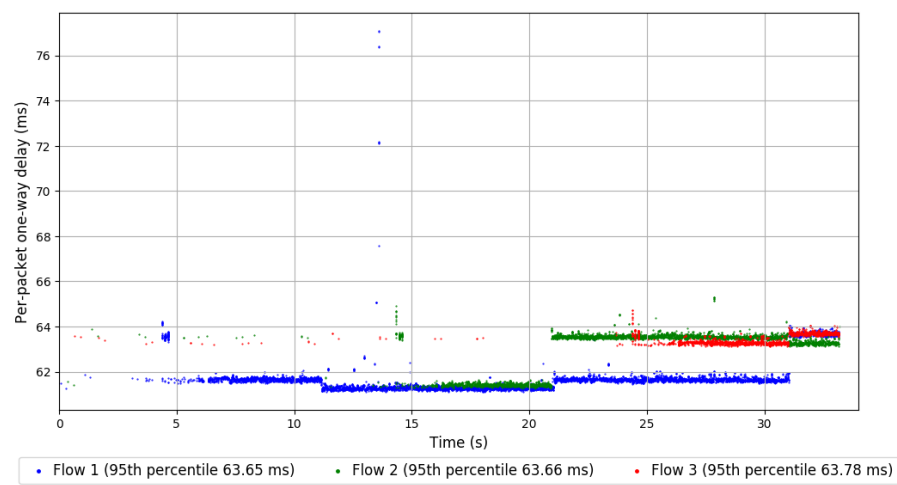
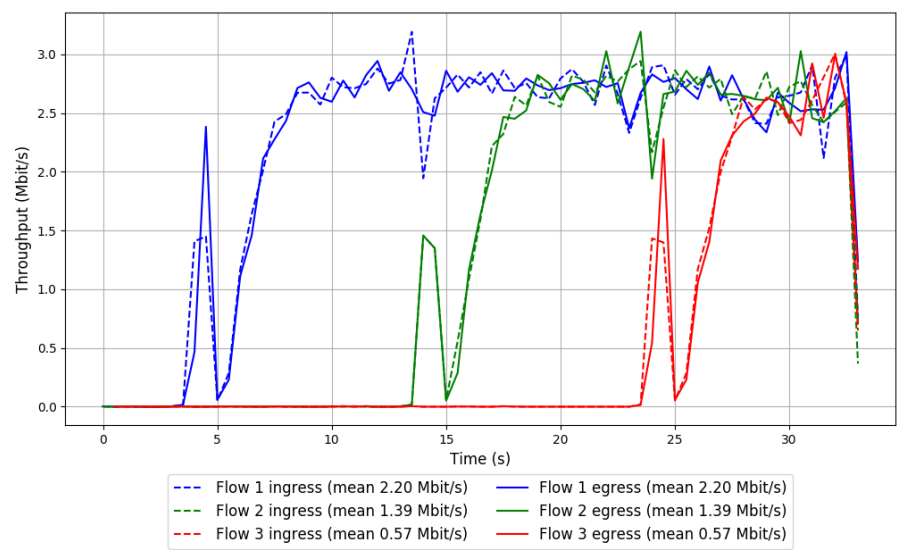
-- Flow 3:

Average throughput: 0.57 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-01 12:01:38

End at: 2017-12-01 12:02:08

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 63.763 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 61.625 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 61.701 ms

Loss rate: 0.00%

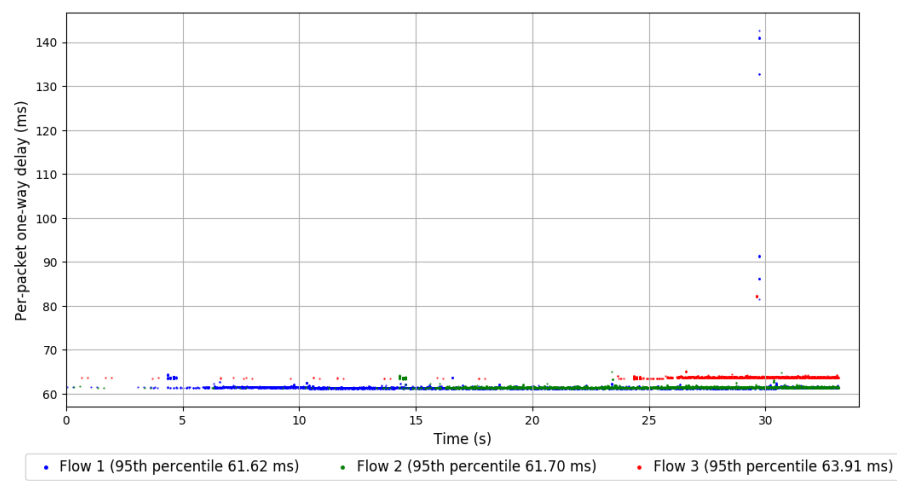
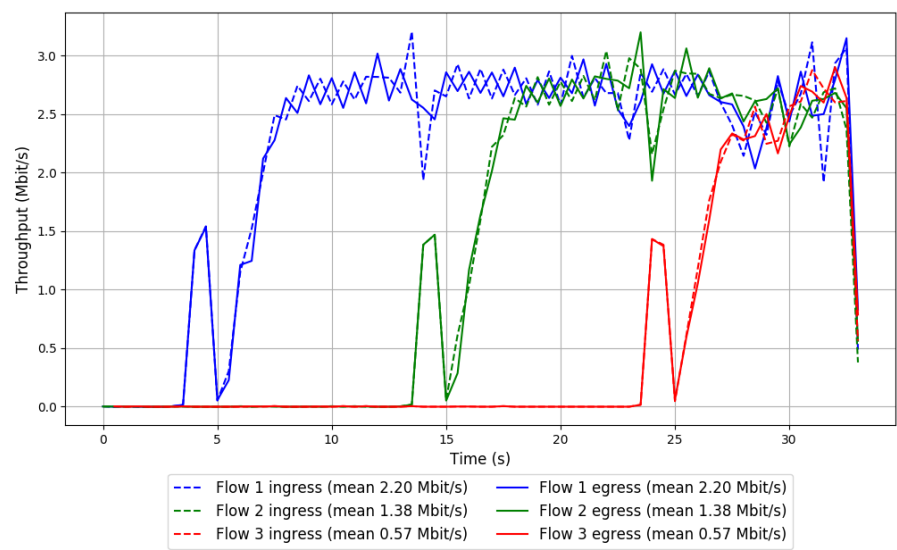
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 63.911 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-01 12:13:56

End at: 2017-12-01 12:14:26

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 63.561 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 61.696 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.606 ms

Loss rate: 0.19%

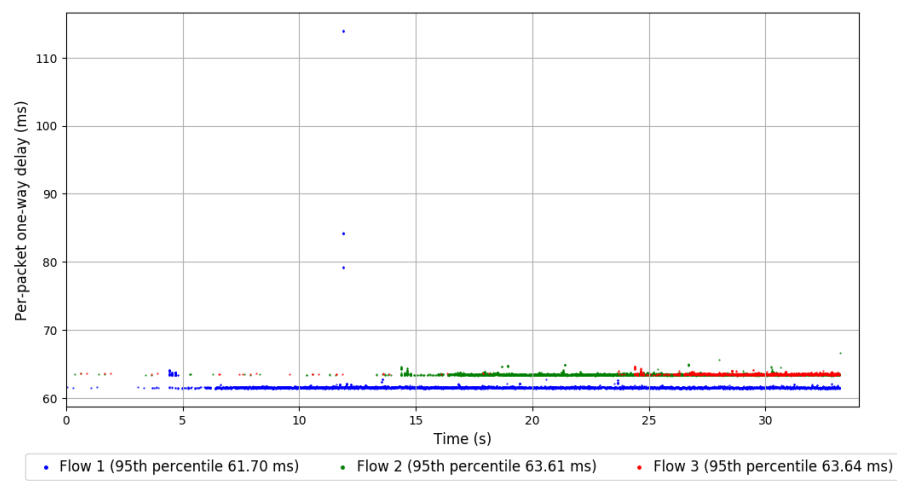
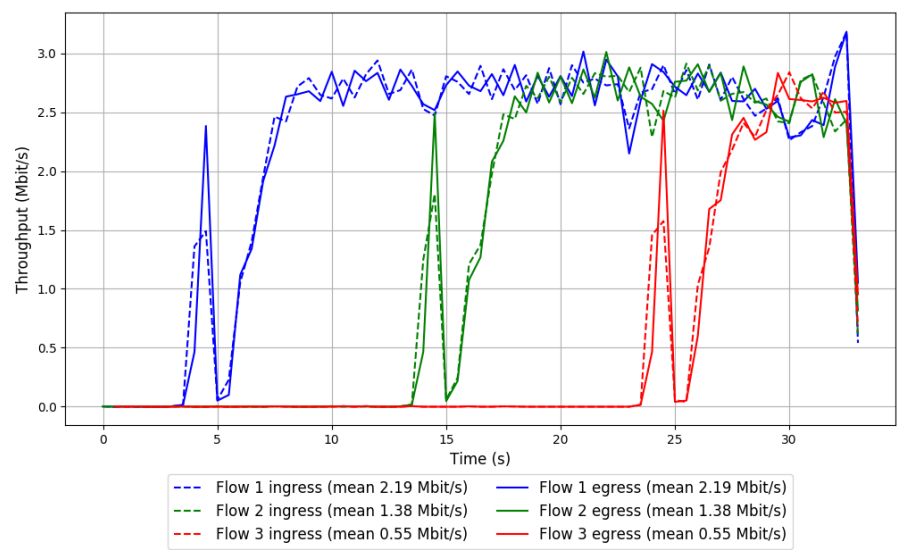
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.642 ms

Loss rate: 0.13%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-01 12:26:02

End at: 2017-12-01 12:26:32

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.58 Mbit/s

95th percentile per-packet one-way delay: 63.620 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 63.553 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.86 Mbit/s

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

Loss rate: 2.82%

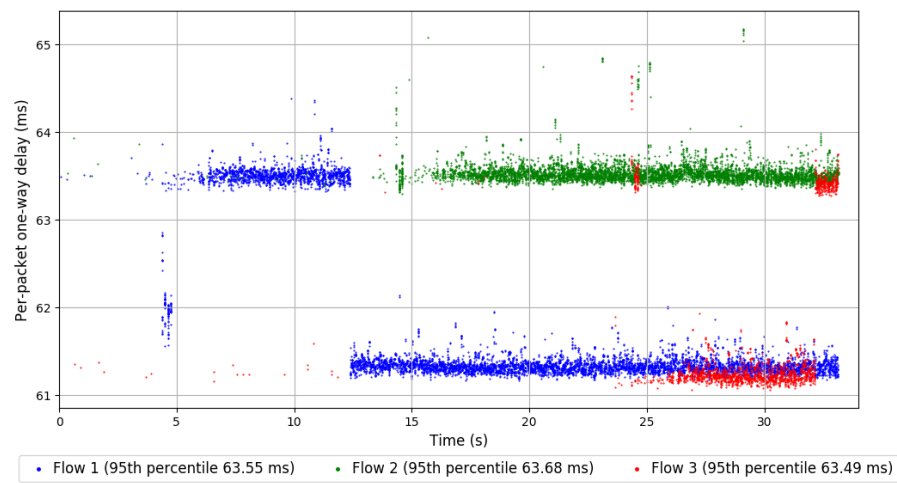
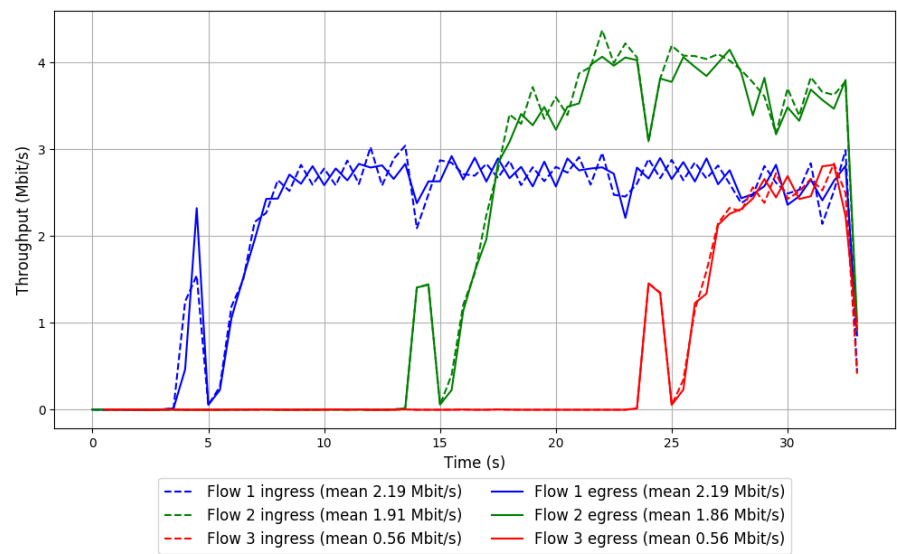
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 63.486 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-01 12:38:24

End at: 2017-12-01 12:38:54

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 63.609 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.19 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.635 ms

Loss rate: 0.00%

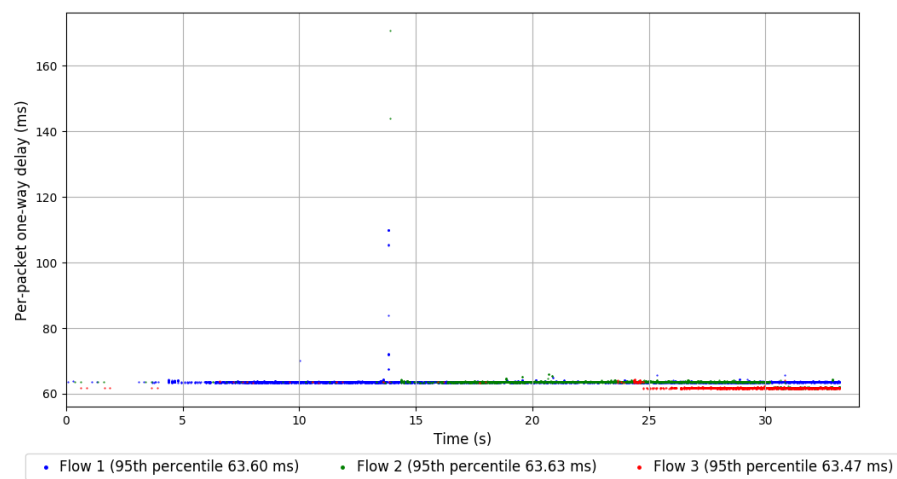
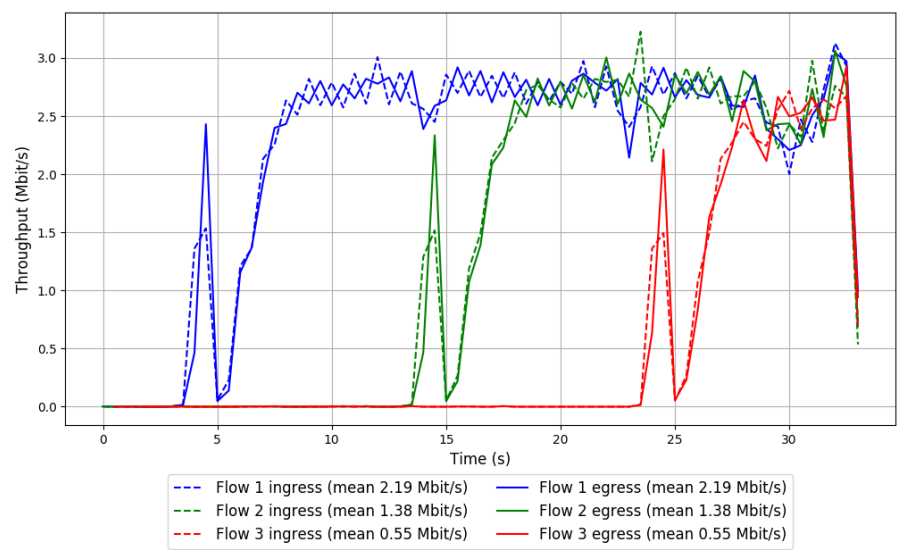
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.466 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-01 12:50:33

End at: 2017-12-01 12:51:03

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.12 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 63.665 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

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

Loss rate: 0.00%

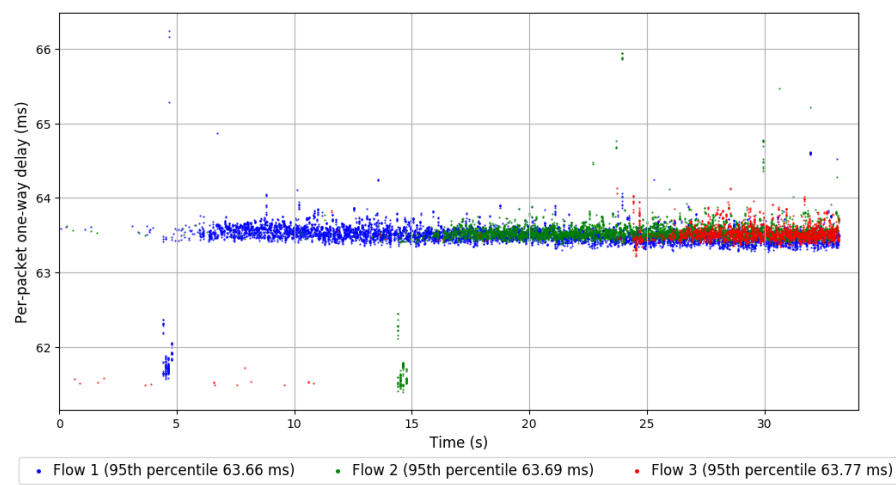
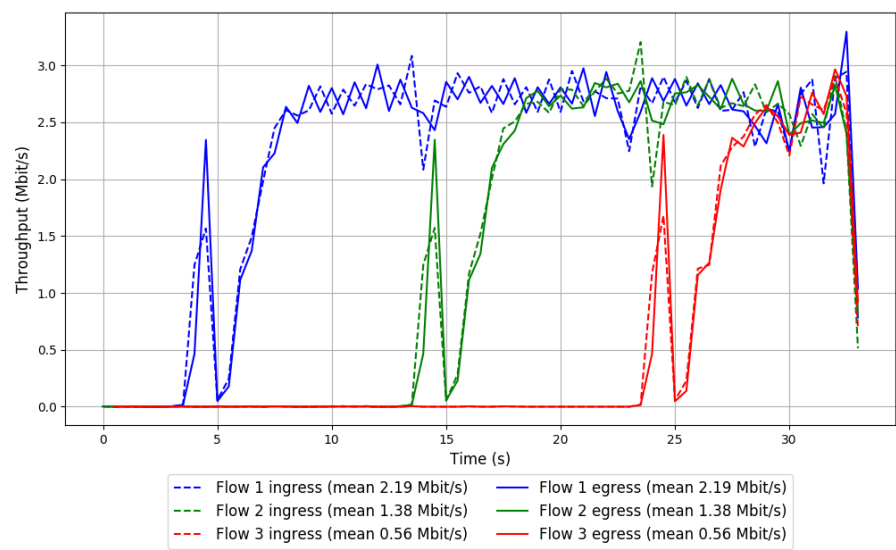
-- Flow 3:

Average throughput: 0.56 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

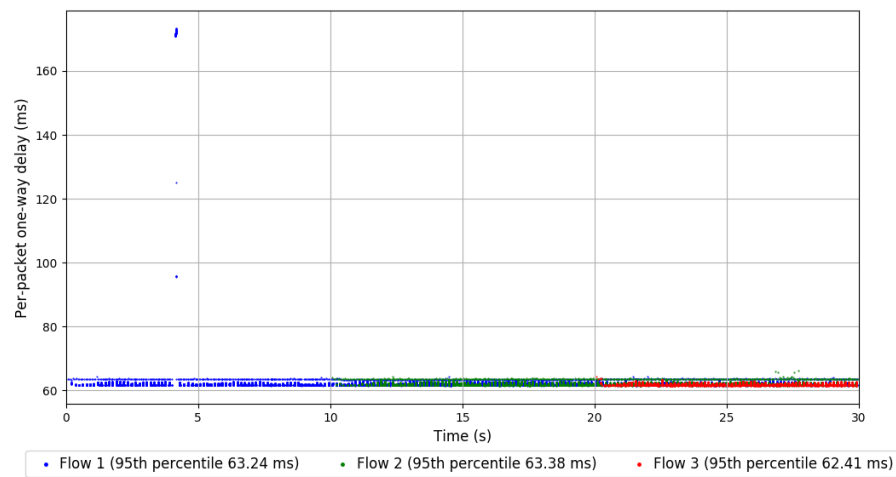
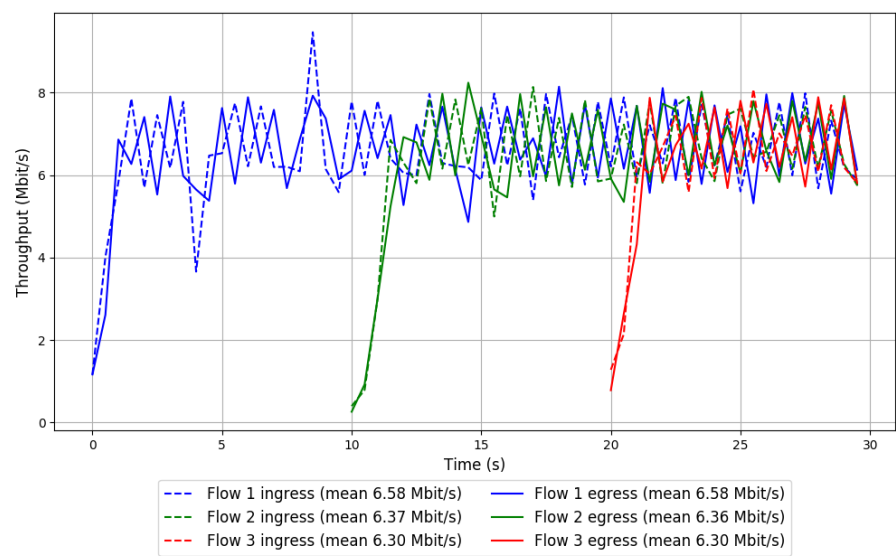


```
Run 1: Statistics of Sprout

Start at: 2017-12-01 11:02:31
End at: 2017-12-01 11:03:01

# Below is generated by plot.py at 2017-12-01 14:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.88 Mbit/s
95th percentile per-packet one-way delay: 62.828 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 6.58 Mbit/s
95th percentile per-packet one-way delay: 63.239 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 6.36 Mbit/s
95th percentile per-packet one-way delay: 63.377 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 6.30 Mbit/s
95th percentile per-packet one-way delay: 62.410 ms
Loss rate: 0.04%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-01 11:14:50

End at: 2017-12-01 11:15:20

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.81 Mbit/s

95th percentile per-packet one-way delay: 64.609 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 64.535 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 64.679 ms

Loss rate: 0.04%

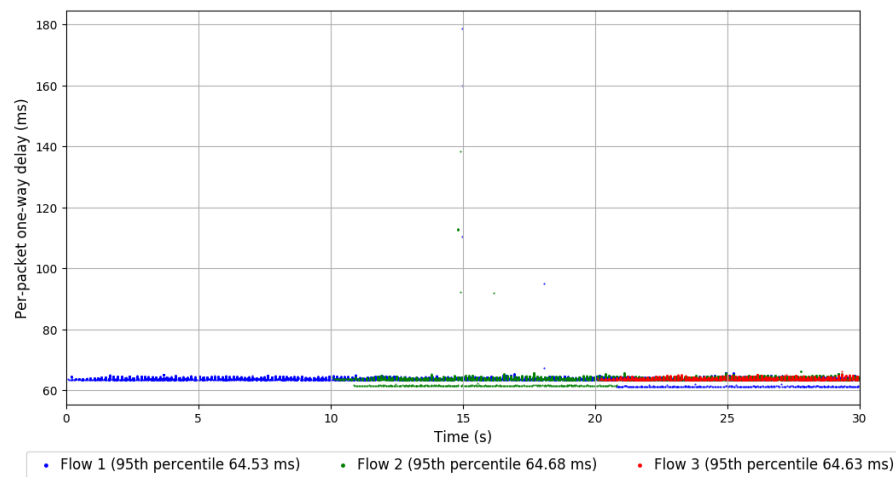
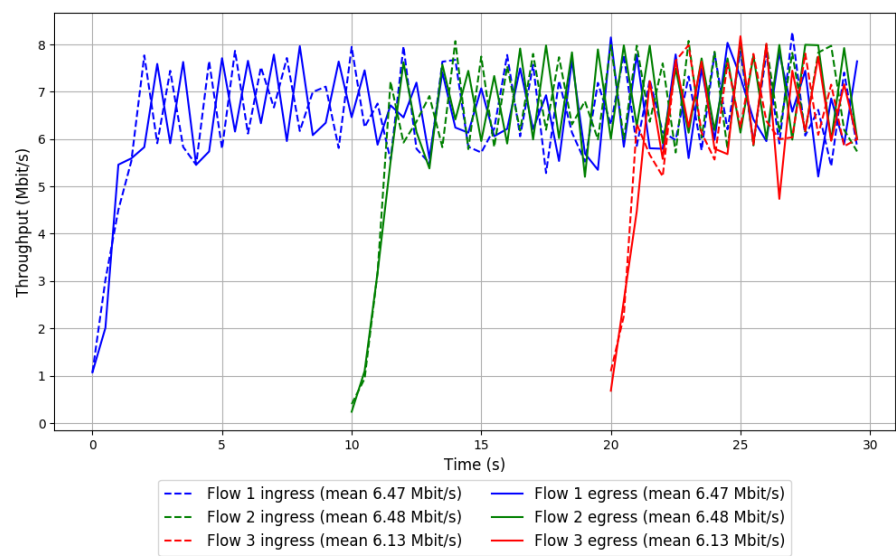
-- Flow 3:

Average throughput: 6.13 Mbit/s

95th percentile per-packet one-way delay: 64.626 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-01 11:27:08

End at: 2017-12-01 11:27:38

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.98 Mbit/s

95th percentile per-packet one-way delay: 64.622 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.59 Mbit/s

95th percentile per-packet one-way delay: 64.616 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 64.631 ms

Loss rate: 0.00%

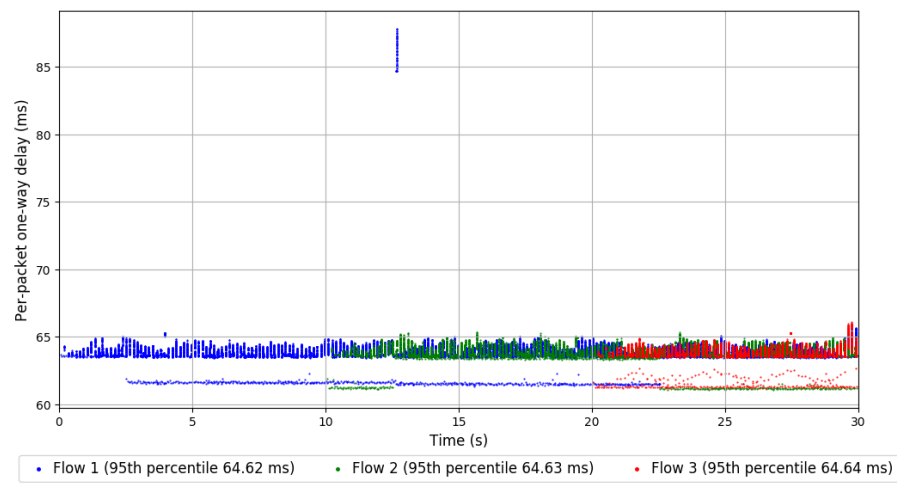
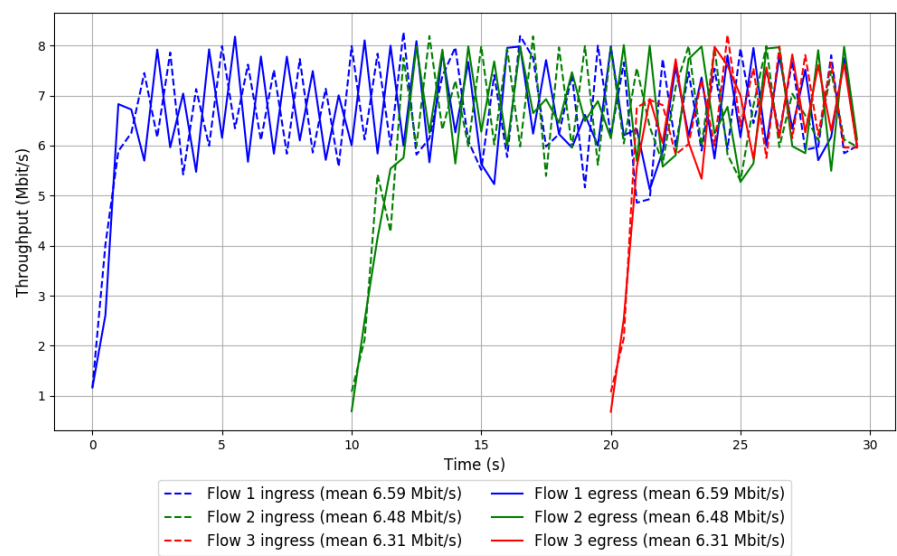
-- Flow 3:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 64.637 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-01 11:39:25

End at: 2017-12-01 11:39:55

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.06 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 64.610 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 64.607 ms

Loss rate: 0.00%

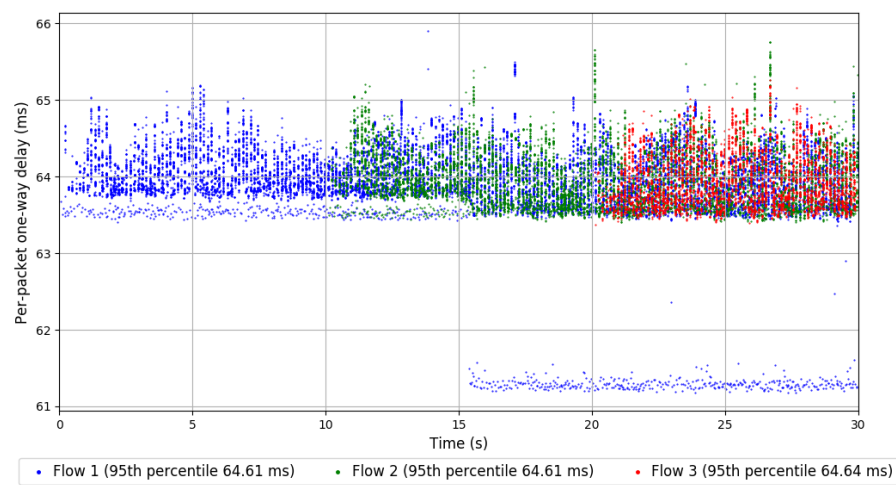
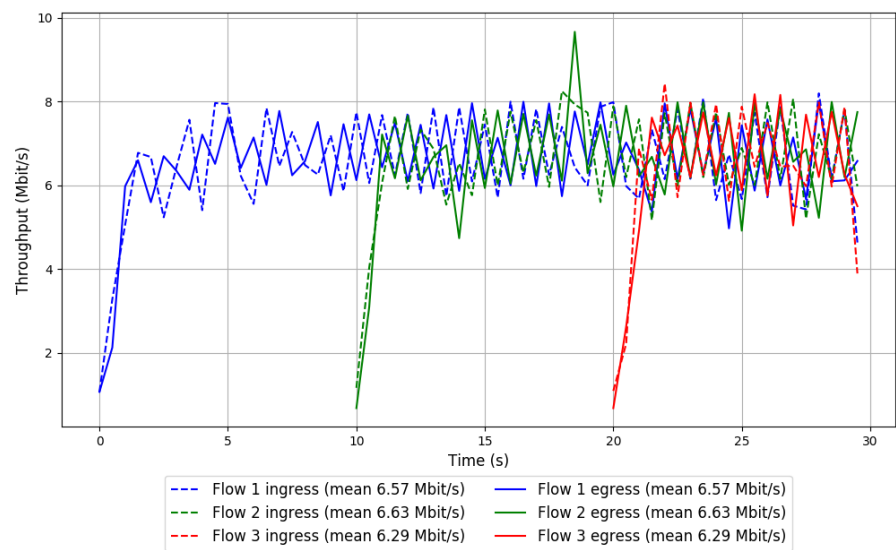
-- Flow 3:

Average throughput: 6.29 Mbit/s

95th percentile per-packet one-way delay: 64.641 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-01 11:51:44

End at: 2017-12-01 11:52:14

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.48 Mbit/s

95th percentile per-packet one-way delay: 64.670 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 64.653 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 64.748 ms

Loss rate: 0.00%

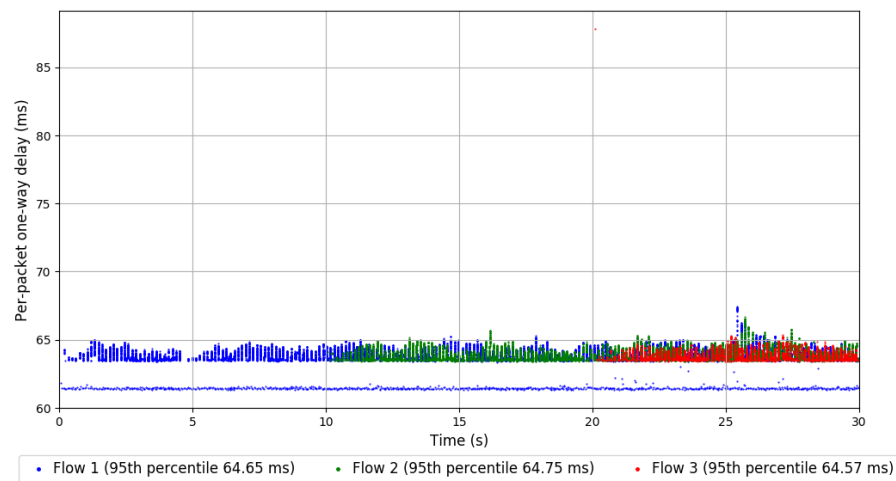
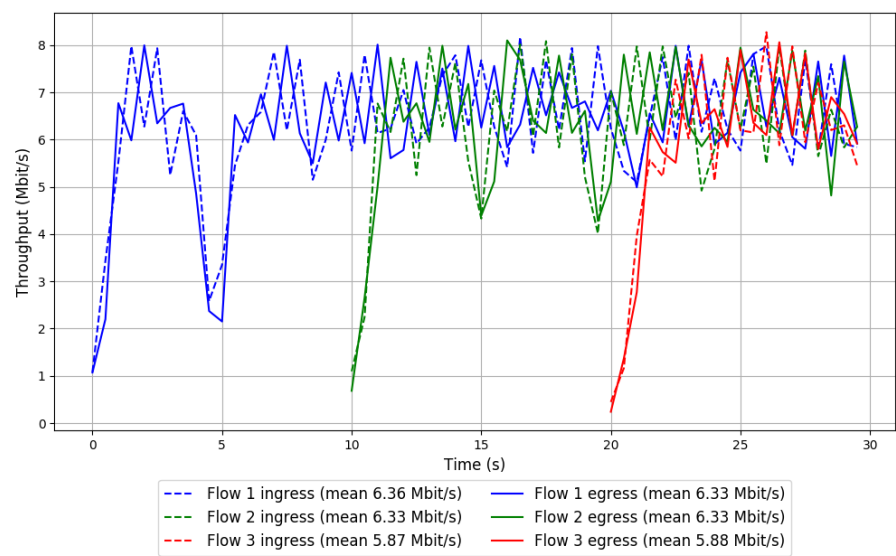
-- Flow 3:

Average throughput: 5.88 Mbit/s

95th percentile per-packet one-way delay: 64.569 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-01 12:03:59

End at: 2017-12-01 12:04:29

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.84 Mbit/s

95th percentile per-packet one-way delay: 64.474 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 64.522 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 64.373 ms

Loss rate: 0.01%

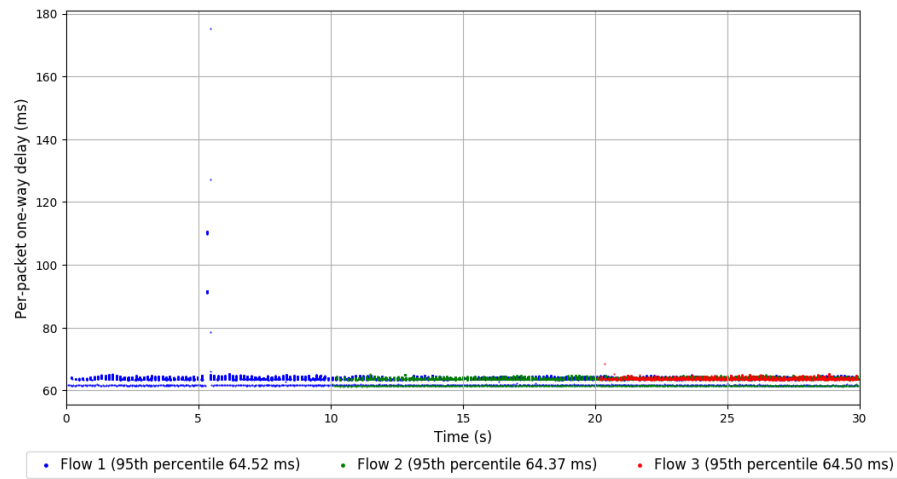
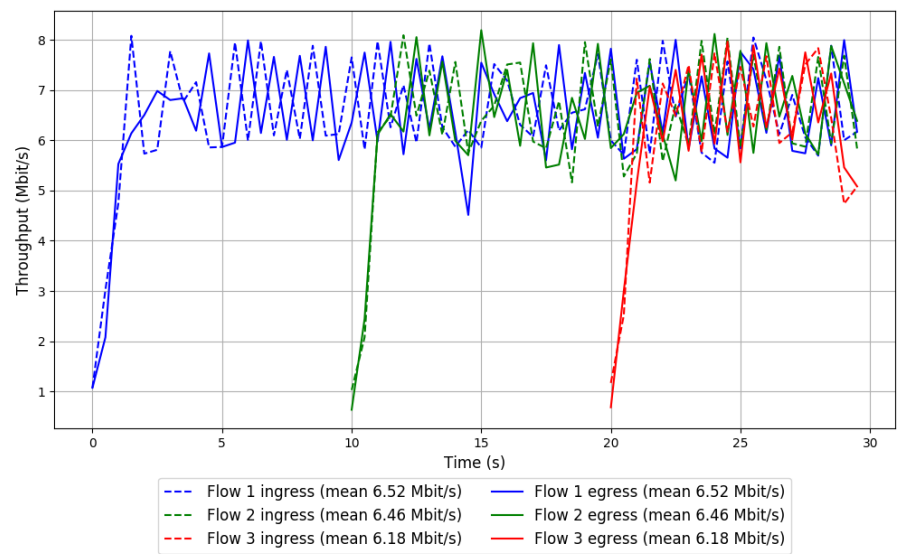
-- Flow 3:

Average throughput: 6.18 Mbit/s

95th percentile per-packet one-way delay: 64.500 ms

Loss rate: 0.14%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

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

End at: 2017-12-01 12:16:46

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.84 Mbit/s

95th percentile per-packet one-way delay: 64.361 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 64.395 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 6.27 Mbit/s

95th percentile per-packet one-way delay: 64.371 ms

Loss rate: 0.67%

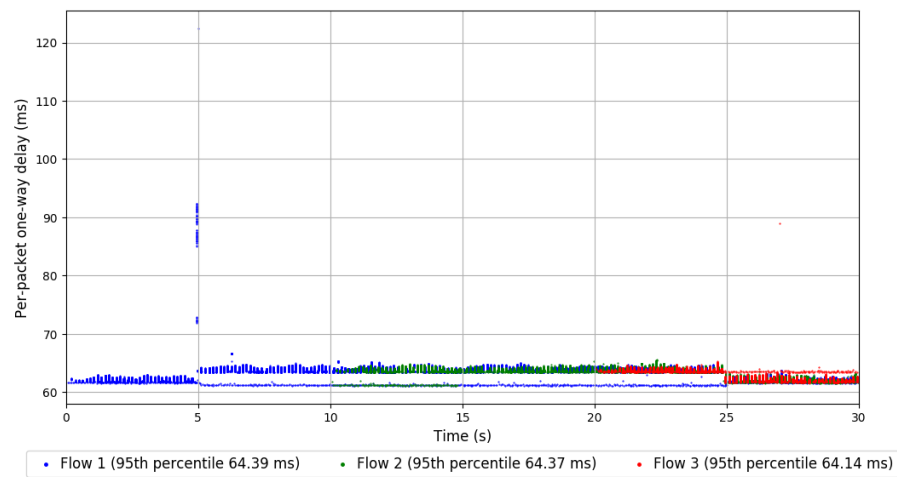
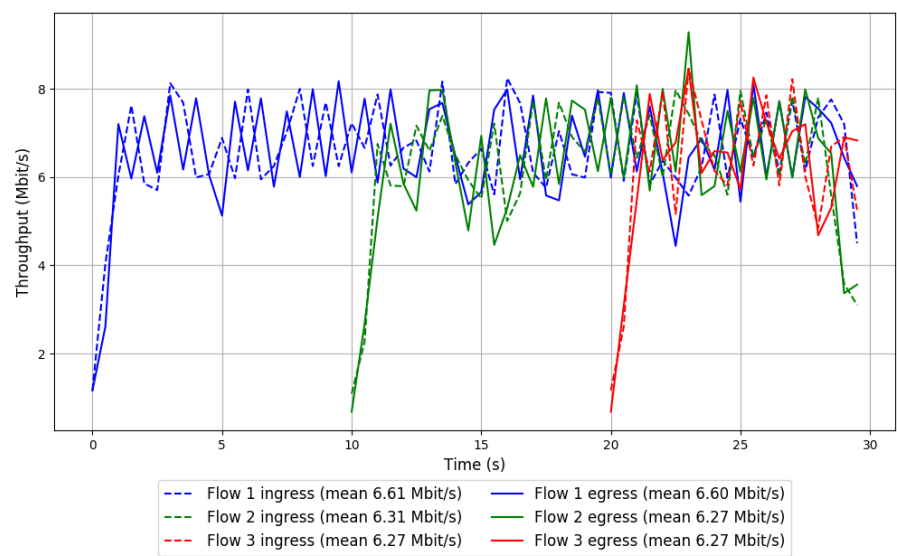
-- Flow 3:

Average throughput: 6.27 Mbit/s

95th percentile per-packet one-way delay: 64.142 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-01 12:28:21

End at: 2017-12-01 12:28:51

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.79 Mbit/s

95th percentile per-packet one-way delay: 64.499 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 64.528 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 64.452 ms

Loss rate: 0.00%

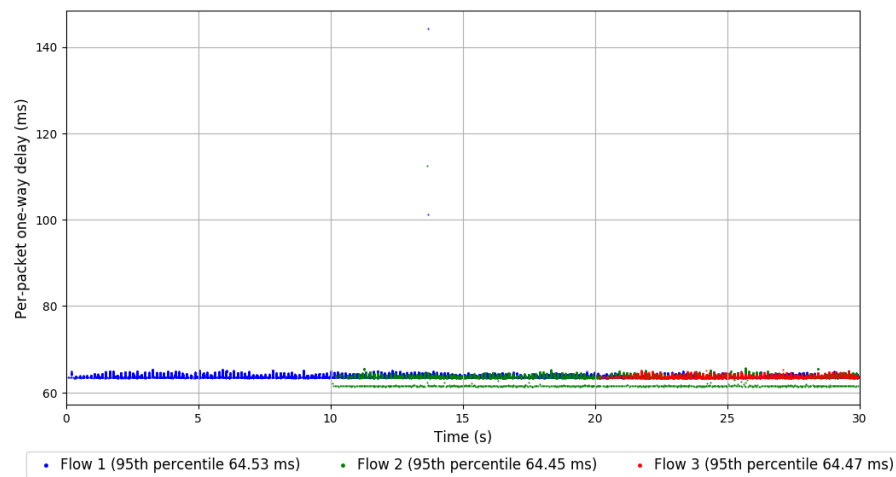
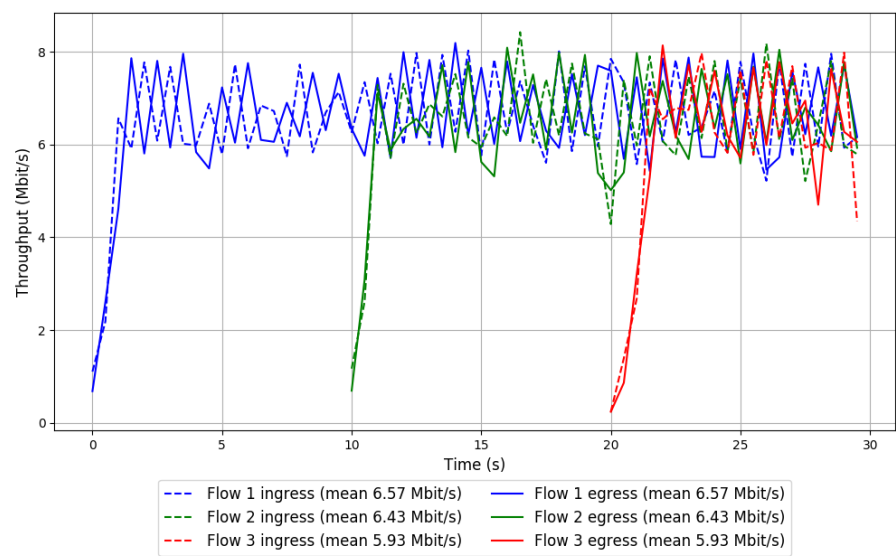
-- Flow 3:

Average throughput: 5.93 Mbit/s

95th percentile per-packet one-way delay: 64.470 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-01 12:40:46

End at: 2017-12-01 12:41:16

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.94 Mbit/s

95th percentile per-packet one-way delay: 64.292 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 64.253 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 6.58 Mbit/s

95th percentile per-packet one-way delay: 64.332 ms

Loss rate: 0.00%

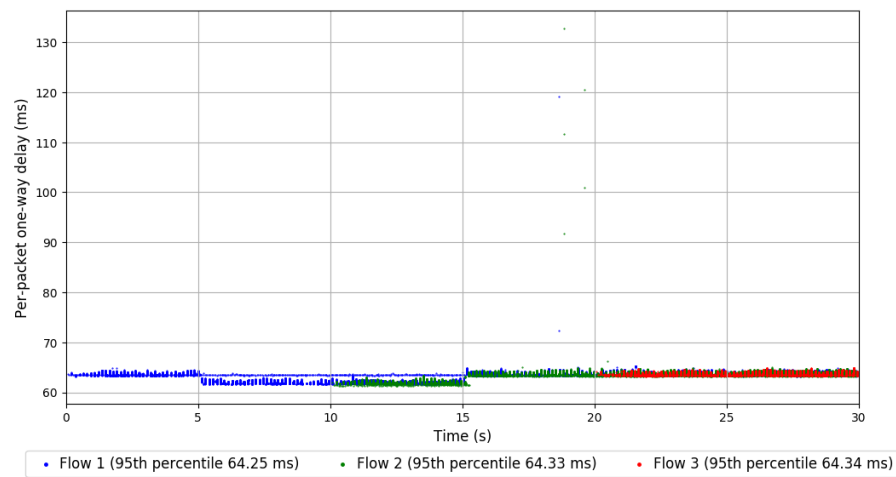
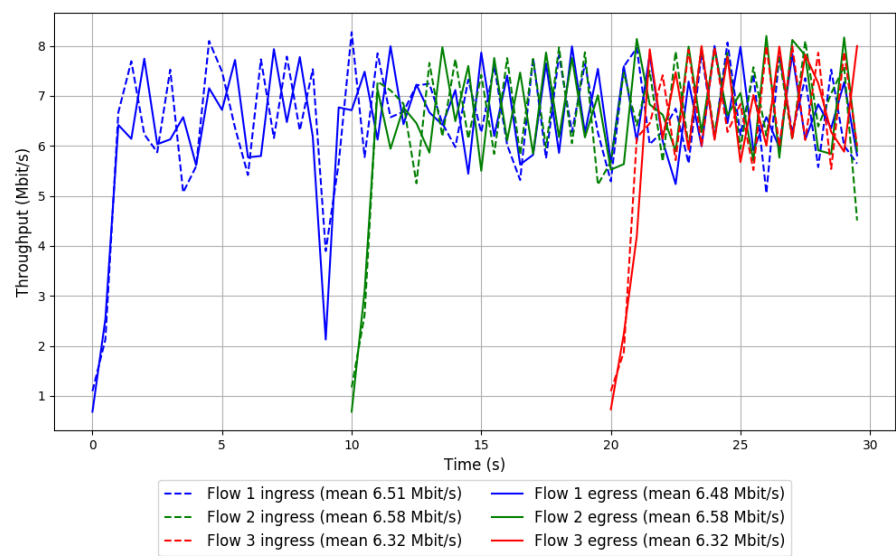
-- Flow 3:

Average throughput: 6.32 Mbit/s

95th percentile per-packet one-way delay: 64.339 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-01 12:52:52

End at: 2017-12-01 12:53:22

Below is generated by plot.py at 2017-12-01 14:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.00 Mbit/s

95th percentile per-packet one-way delay: 64.313 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 64.237 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 64.288 ms

Loss rate: 0.00%

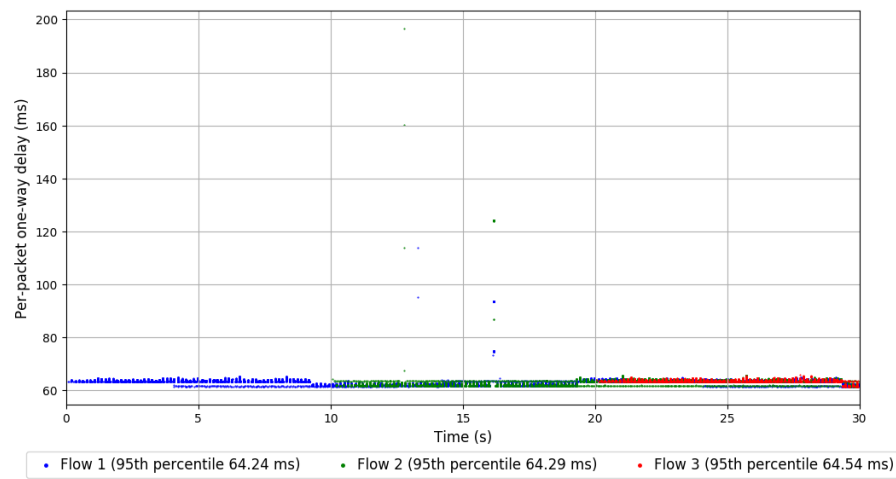
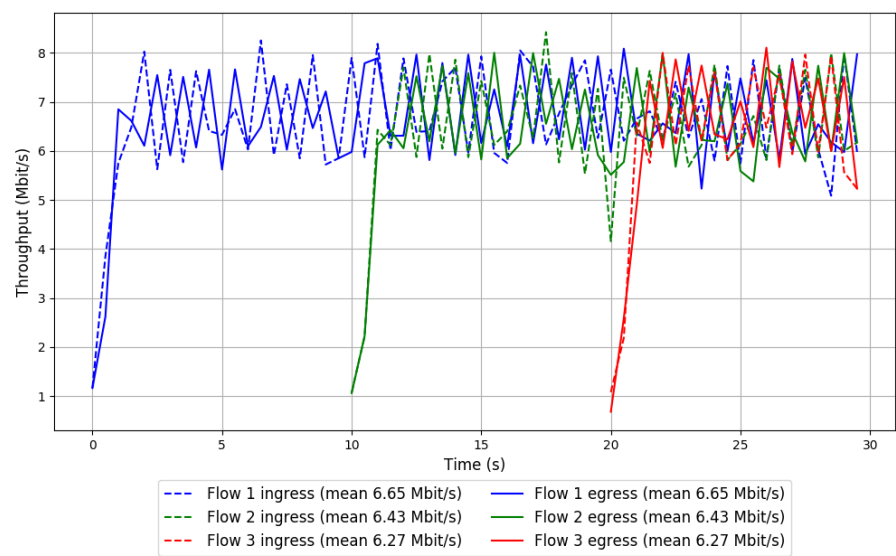
-- Flow 3:

Average throughput: 6.27 Mbit/s

95th percentile per-packet one-way delay: 64.537 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

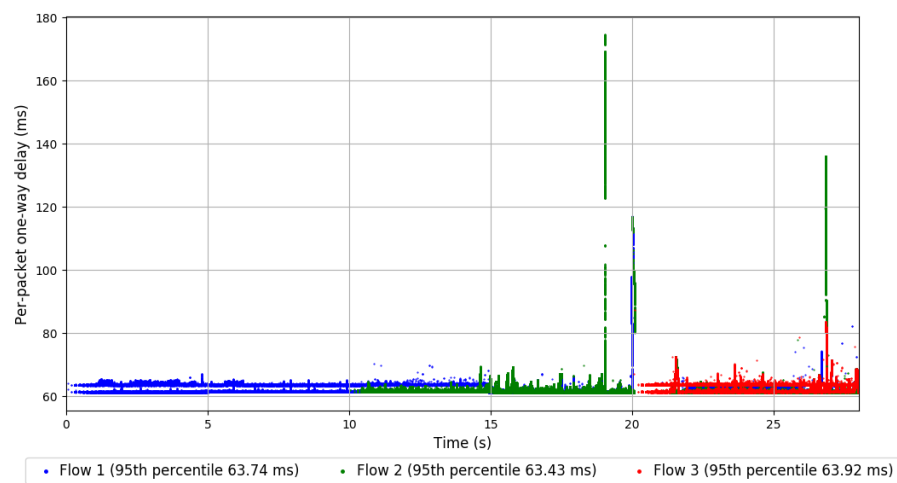
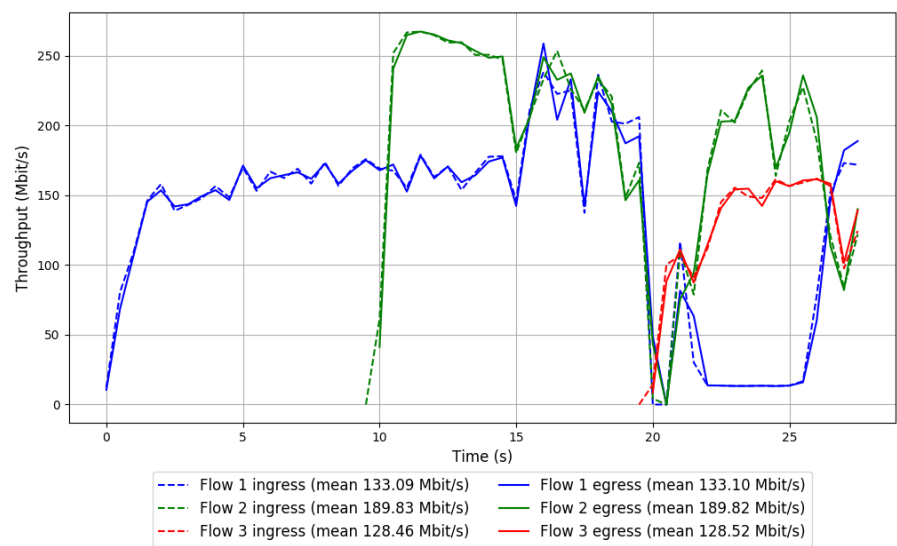


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-01 10:55:44
End at: 2017-12-01 10:56:14

# Below is generated by plot.py at 2017-12-01 14:37:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 291.53 Mbit/s
95th percentile per-packet one-way delay: 63.758 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 133.10 Mbit/s
95th percentile per-packet one-way delay: 63.736 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 189.82 Mbit/s
95th percentile per-packet one-way delay: 63.433 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 128.52 Mbit/s
95th percentile per-packet one-way delay: 63.925 ms
Loss rate: 0.00%
```


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

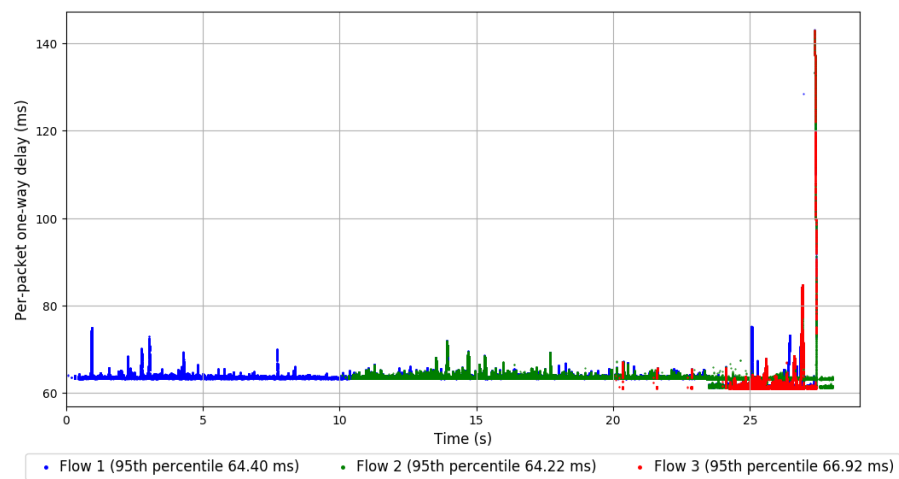
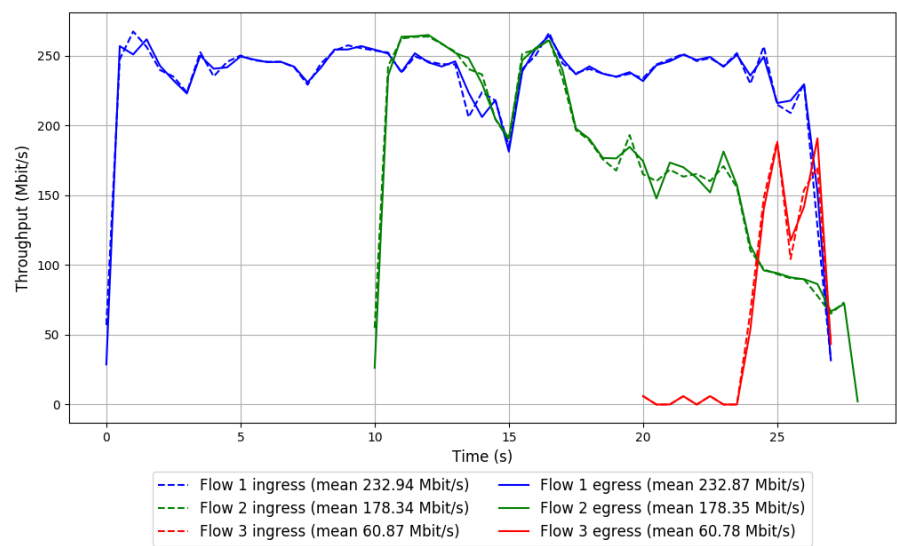


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-01 11:08:05
End at: 2017-12-01 11:08:35

# Below is generated by plot.py at 2017-12-01 14:40:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 358.43 Mbit/s
95th percentile per-packet one-way delay: 64.363 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 232.87 Mbit/s
95th percentile per-packet one-way delay: 64.403 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 178.35 Mbit/s
95th percentile per-packet one-way delay: 64.217 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 60.78 Mbit/s
95th percentile per-packet one-way delay: 66.919 ms
Loss rate: 0.00%
```

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

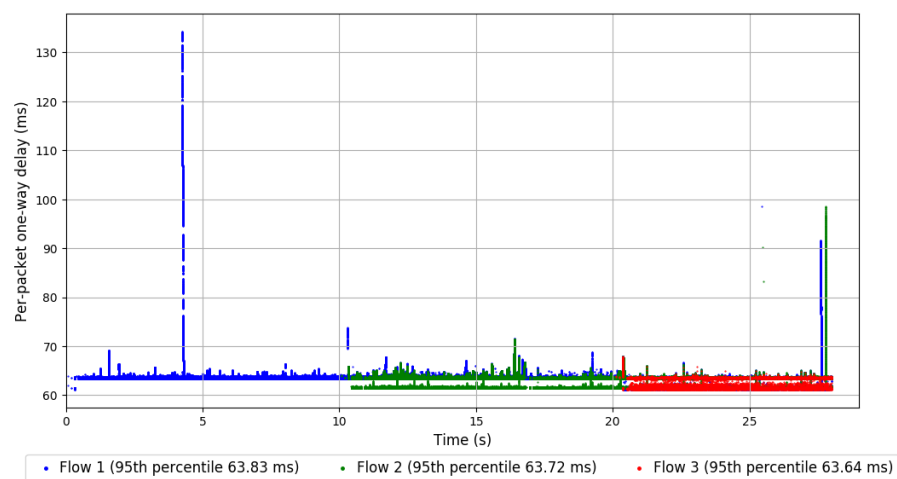
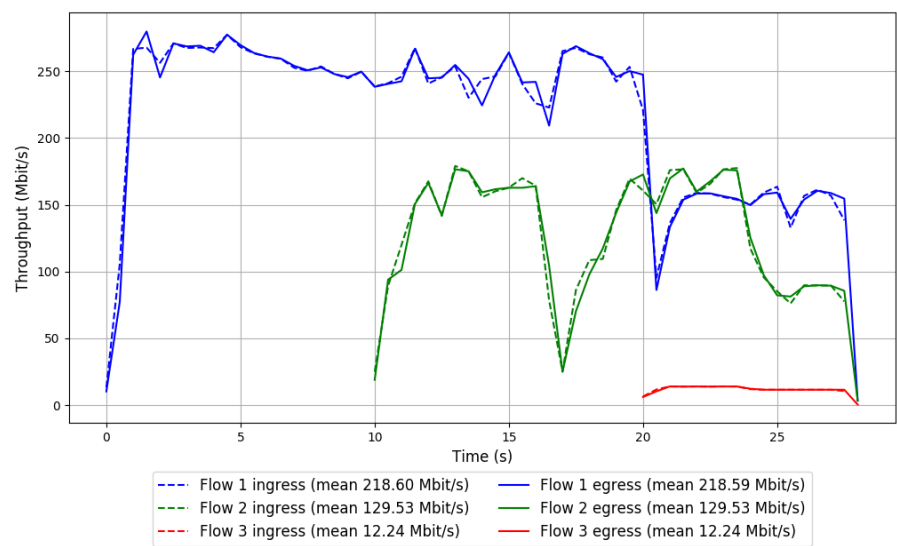


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-01 11:20:29
End at: 2017-12-01 11:20:59

# Below is generated by plot.py at 2017-12-01 14:40:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.18 Mbit/s
95th percentile per-packet one-way delay: 63.800 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 218.59 Mbit/s
95th percentile per-packet one-way delay: 63.825 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 129.53 Mbit/s
95th percentile per-packet one-way delay: 63.717 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 63.640 ms
Loss rate: 0.02%
```

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

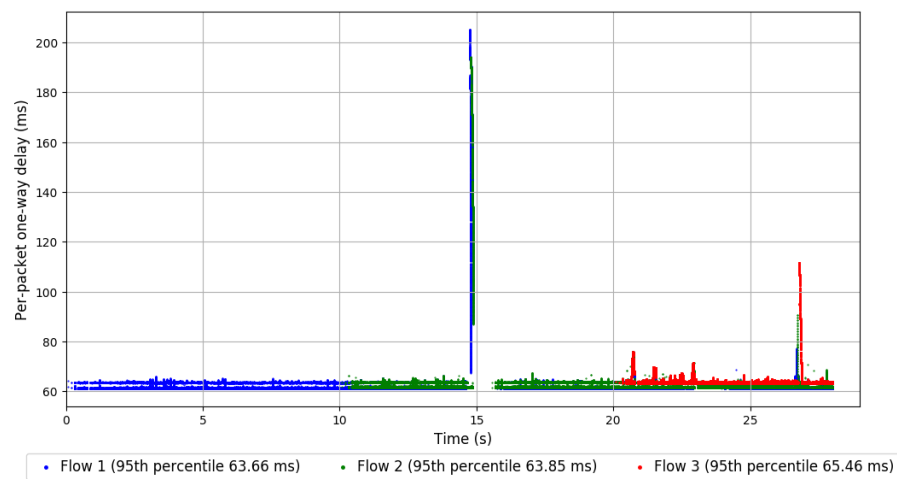
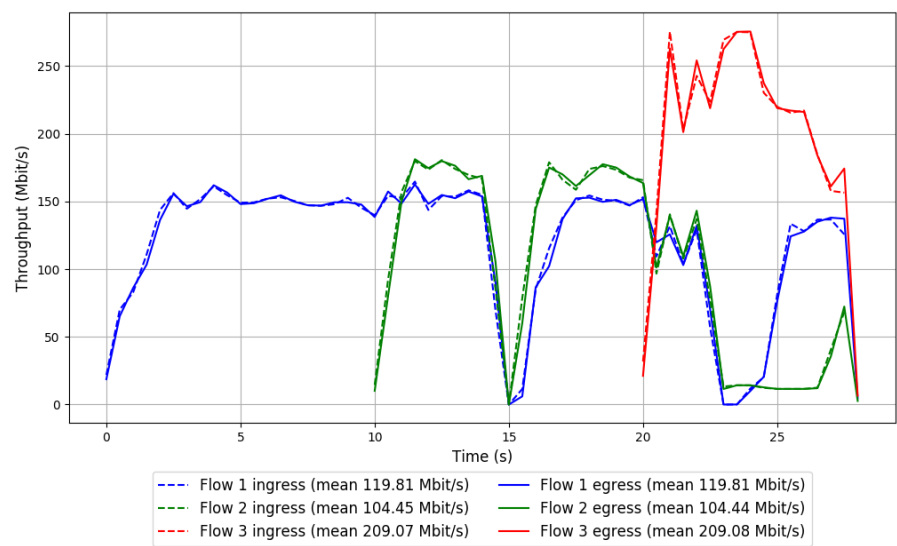


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-12-01 11:32:48
End at: 2017-12-01 11:33:18

# Below is generated by plot.py at 2017-12-01 14:40:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 246.21 Mbit/s
95th percentile per-packet one-way delay: 63.901 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 119.81 Mbit/s
95th percentile per-packet one-way delay: 63.660 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 104.44 Mbit/s
95th percentile per-packet one-way delay: 63.847 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 209.08 Mbit/s
95th percentile per-packet one-way delay: 65.463 ms
Loss rate: 0.02%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-01 11:45:05

End at: 2017-12-01 11:45:35

Below is generated by plot.py at 2017-12-01 14:40:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 323.12 Mbit/s

95th percentile per-packet one-way delay: 63.952 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 184.91 Mbit/s

95th percentile per-packet one-way delay: 63.820 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 149.66 Mbit/s

95th percentile per-packet one-way delay: 64.017 ms

Loss rate: 0.00%

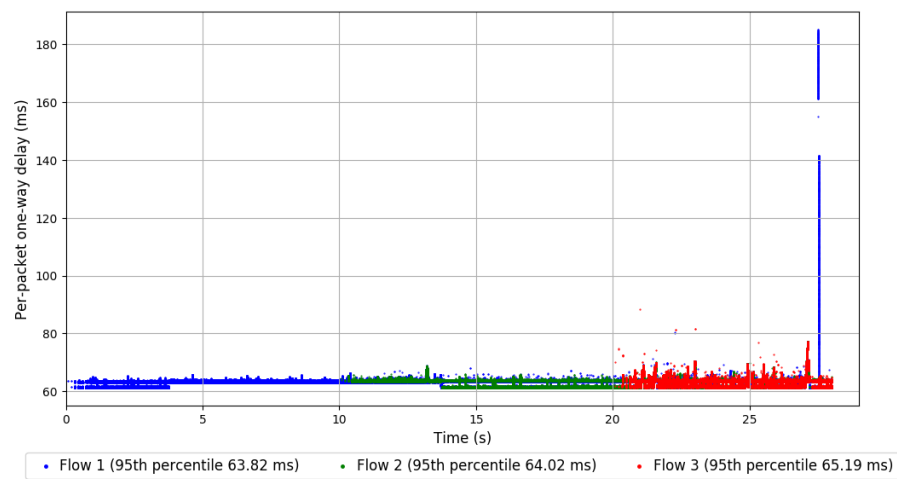
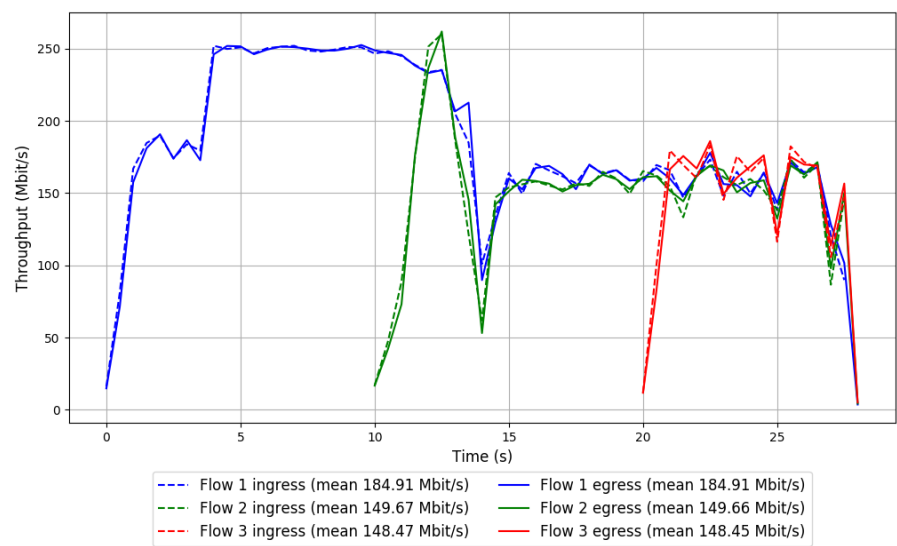
-- Flow 3:

Average throughput: 148.45 Mbit/s

95th percentile per-packet one-way delay: 65.186 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-01 11:57:19

End at: 2017-12-01 11:57:49

Below is generated by plot.py at 2017-12-01 14:40:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.94 Mbit/s

95th percentile per-packet one-way delay: 65.710 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 186.23 Mbit/s

95th percentile per-packet one-way delay: 65.158 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 186.39 Mbit/s

95th percentile per-packet one-way delay: 66.251 ms

Loss rate: 0.00%

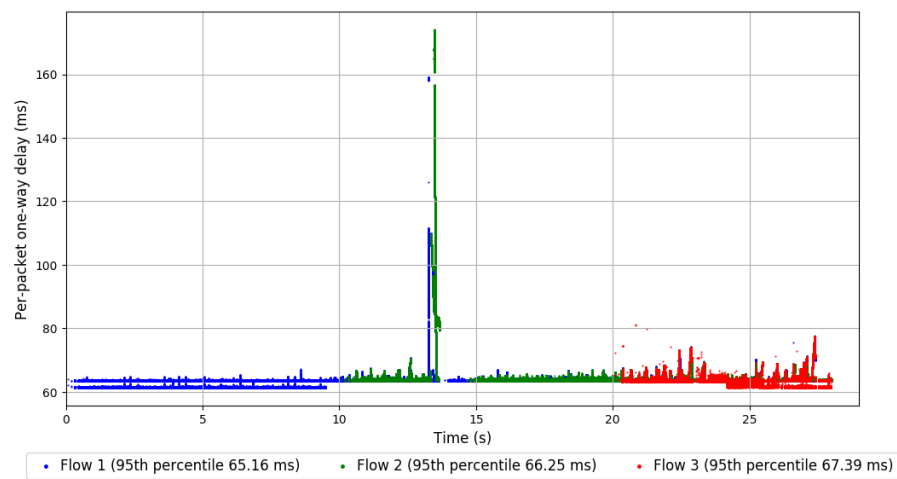
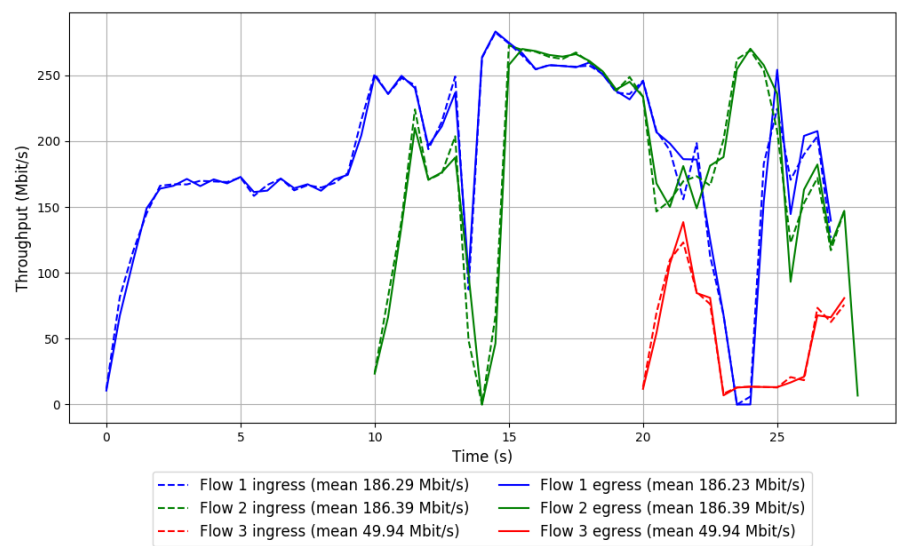
-- Flow 3:

Average throughput: 49.94 Mbit/s

95th percentile per-packet one-way delay: 67.389 ms

Loss rate: 0.02%

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

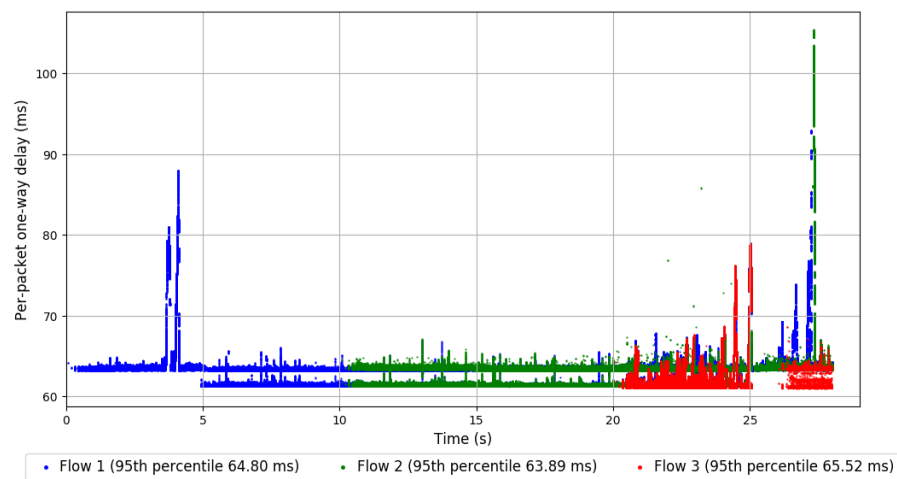
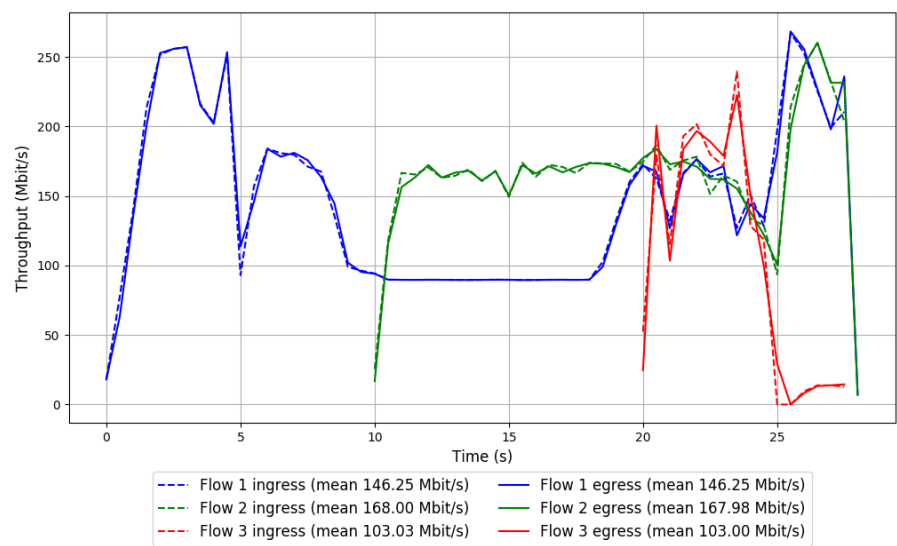


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-12-01 12:09:34
End at: 2017-12-01 12:10:04

# Below is generated by plot.py at 2017-12-01 14:42:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 283.25 Mbit/s
95th percentile per-packet one-way delay: 64.326 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 146.25 Mbit/s
95th percentile per-packet one-way delay: 64.798 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 167.98 Mbit/s
95th percentile per-packet one-way delay: 63.887 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 103.00 Mbit/s
95th percentile per-packet one-way delay: 65.520 ms
Loss rate: 0.00%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-01 12:21:47

End at: 2017-12-01 12:22:17

Below is generated by plot.py at 2017-12-01 14:42:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 203.03 Mbit/s

95th percentile per-packet one-way delay: 63.596 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 96.76 Mbit/s

95th percentile per-packet one-way delay: 63.590 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 72.73 Mbit/s

95th percentile per-packet one-way delay: 63.697 ms

Loss rate: 0.04%

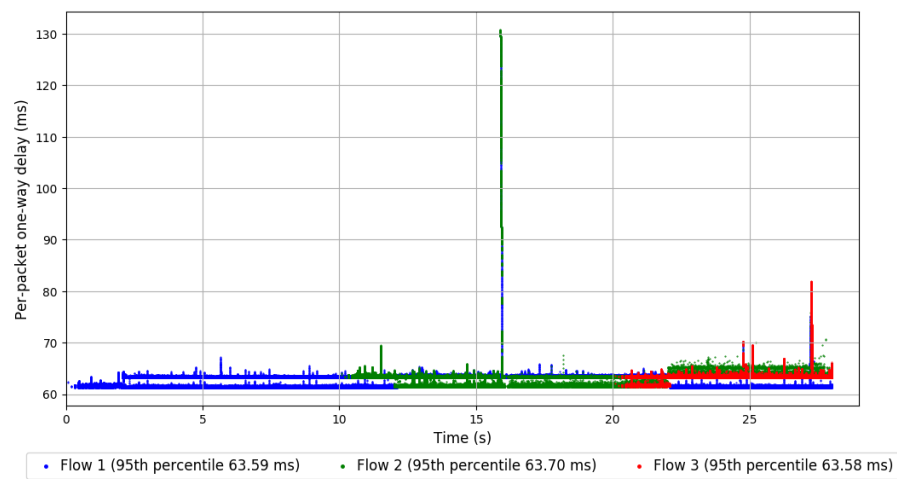
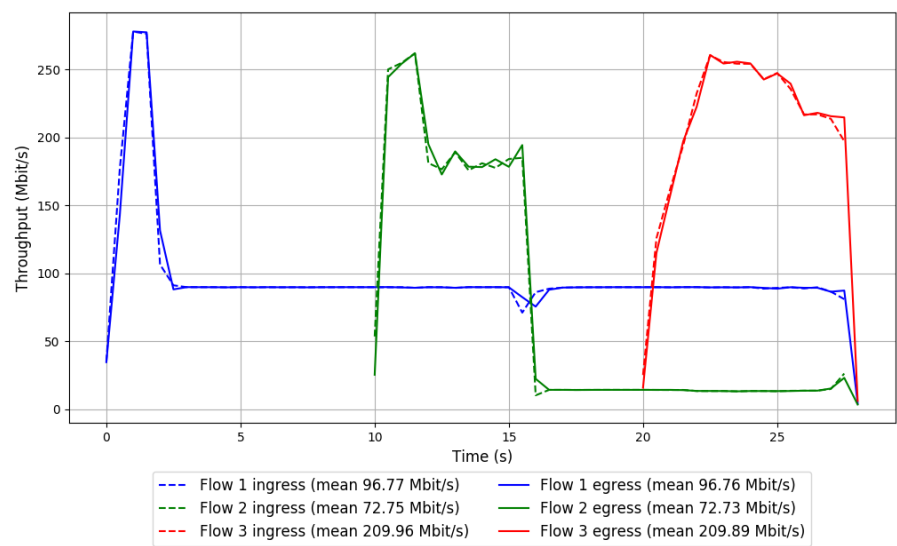
-- Flow 3:

Average throughput: 209.89 Mbit/s

95th percentile per-packet one-way delay: 63.576 ms

Loss rate: 0.04%

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

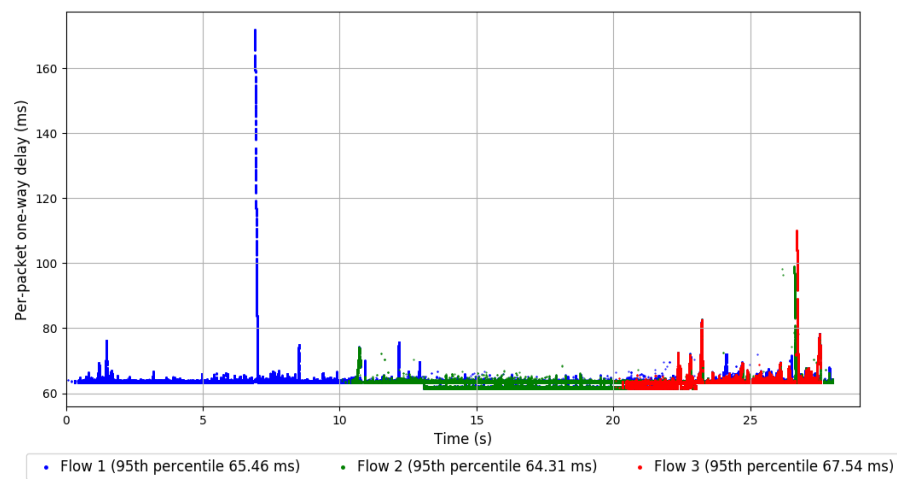
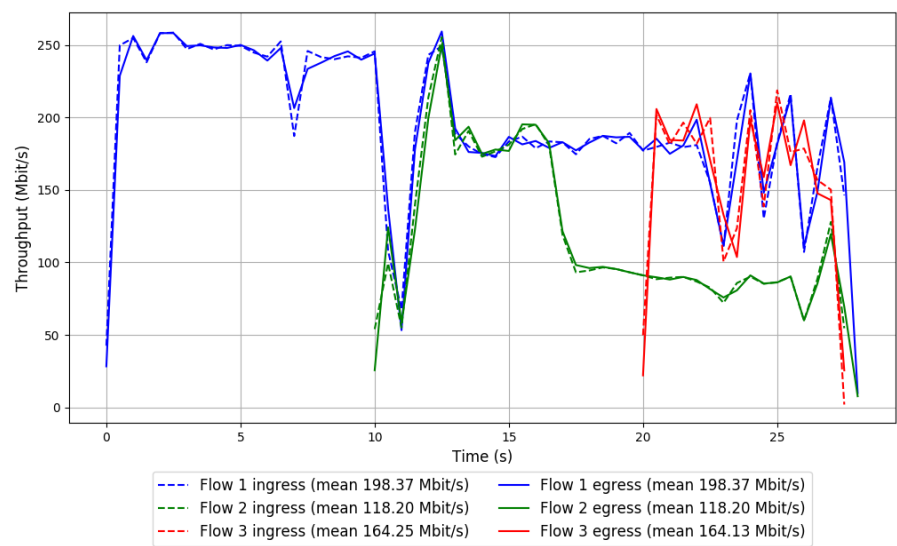


```
Run 9: Statistics of TaoVA-100x

Start at: 2017-12-01 12:33:56
End at: 2017-12-01 12:34:26

# Below is generated by plot.py at 2017-12-01 14:46:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 318.25 Mbit/s
95th percentile per-packet one-way delay: 65.480 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 198.37 Mbit/s
95th percentile per-packet one-way delay: 65.464 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 118.20 Mbit/s
95th percentile per-packet one-way delay: 64.308 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 164.13 Mbit/s
95th percentile per-packet one-way delay: 67.537 ms
Loss rate: 0.00%
```


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

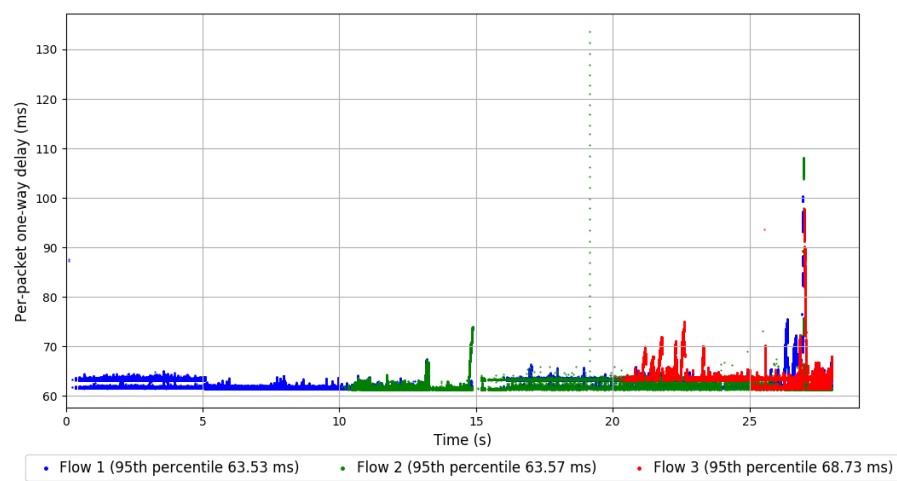
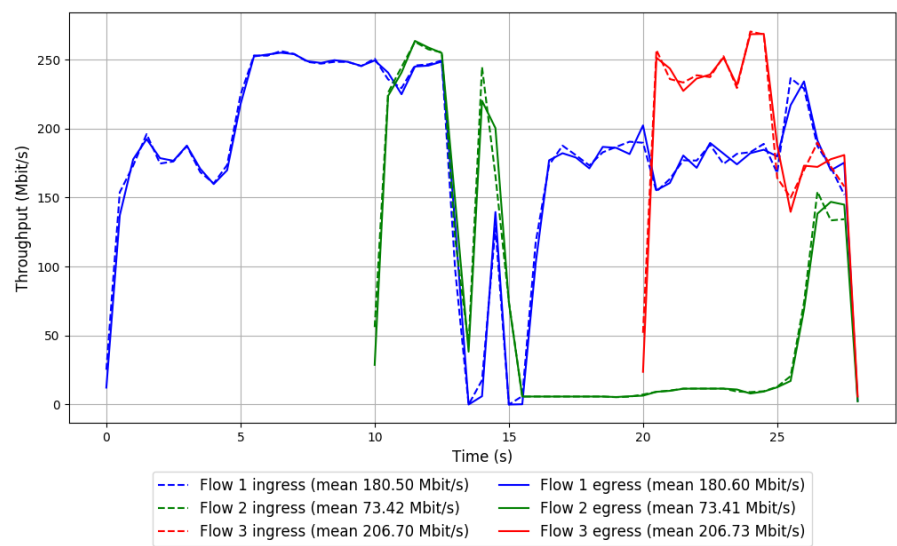


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-01 12:46:14
End at: 2017-12-01 12:46:44

# Below is generated by plot.py at 2017-12-01 14:46:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 286.45 Mbit/s
95th percentile per-packet one-way delay: 64.938 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 180.60 Mbit/s
95th percentile per-packet one-way delay: 63.526 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 73.41 Mbit/s
95th percentile per-packet one-way delay: 63.571 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 206.73 Mbit/s
95th percentile per-packet one-way delay: 68.732 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-01 10:59:20

End at: 2017-12-01 10:59:50

Below is generated by plot.py at 2017-12-01 14:46:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.53 Mbit/s

95th percentile per-packet one-way delay: 65.773 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 54.48 Mbit/s

95th percentile per-packet one-way delay: 64.231 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 113.43 Mbit/s

95th percentile per-packet one-way delay: 65.411 ms

Loss rate: 0.00%

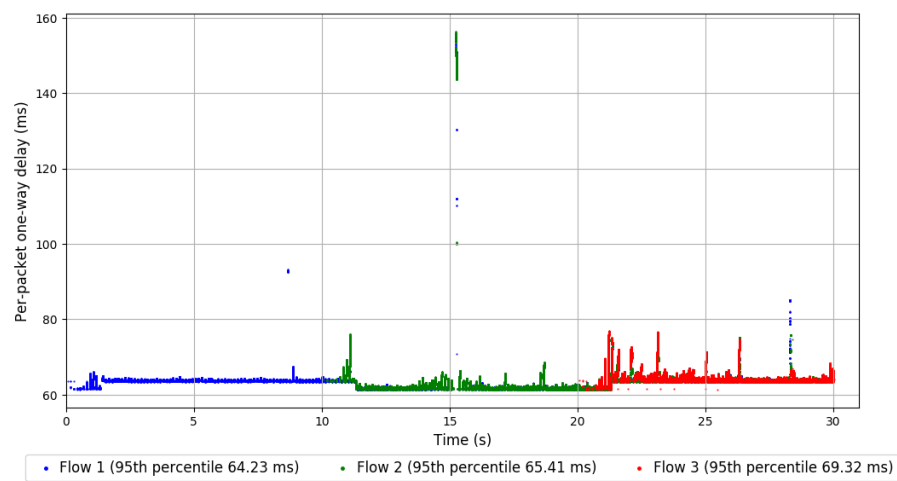
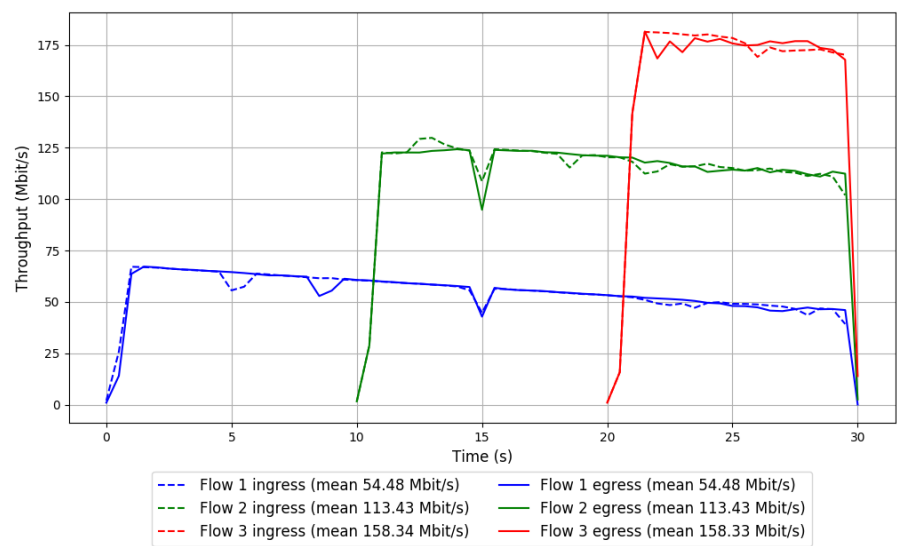
-- Flow 3:

Average throughput: 158.33 Mbit/s

95th percentile per-packet one-way delay: 69.320 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-01 11:11:43

End at: 2017-12-01 11:12:13

Below is generated by plot.py at 2017-12-01 14:46:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 128.65 Mbit/s

95th percentile per-packet one-way delay: 64.600 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 74.83 Mbit/s

95th percentile per-packet one-way delay: 64.455 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 73.73 Mbit/s

95th percentile per-packet one-way delay: 64.813 ms

Loss rate: 0.00%

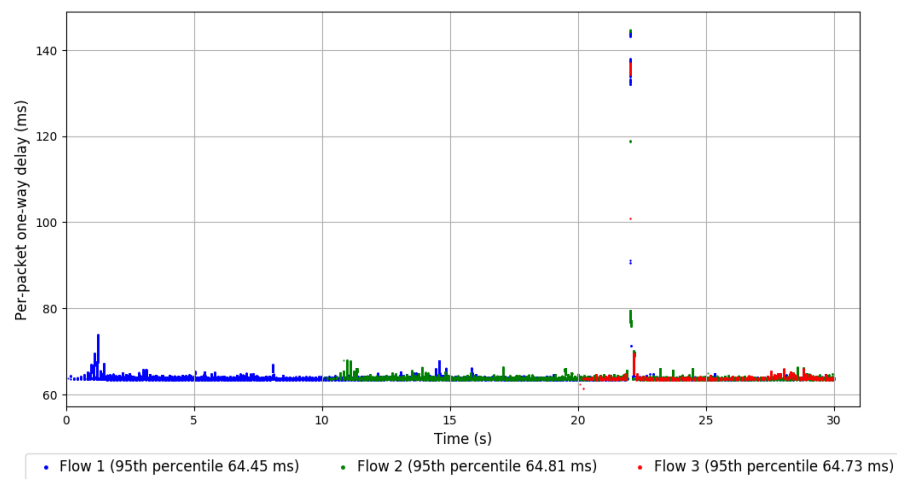
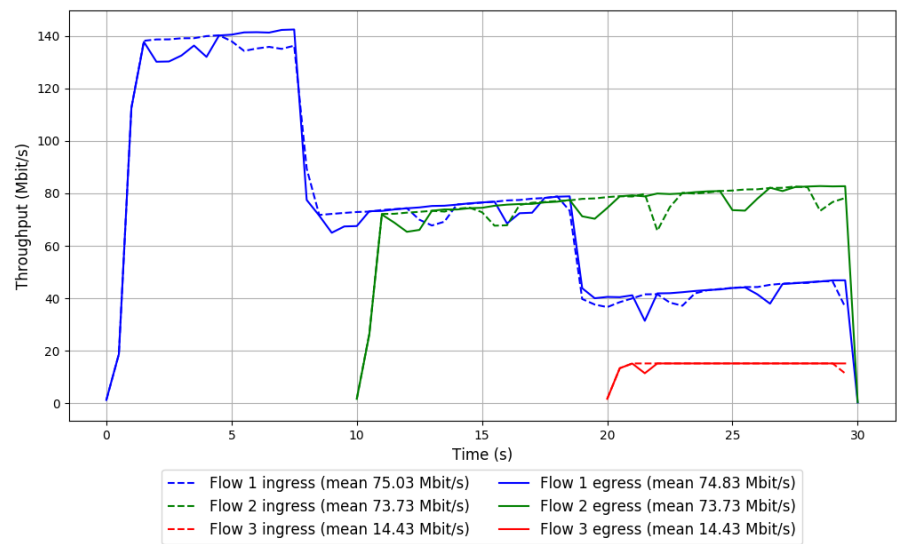
-- Flow 3:

Average throughput: 14.43 Mbit/s

95th percentile per-packet one-way delay: 64.731 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-01 11:24:04

End at: 2017-12-01 11:24:34

Below is generated by plot.py at 2017-12-01 14:46:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.15 Mbit/s

95th percentile per-packet one-way delay: 65.049 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 24.25 Mbit/s

95th percentile per-packet one-way delay: 64.631 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 33.31 Mbit/s

95th percentile per-packet one-way delay: 67.401 ms

Loss rate: 0.46%

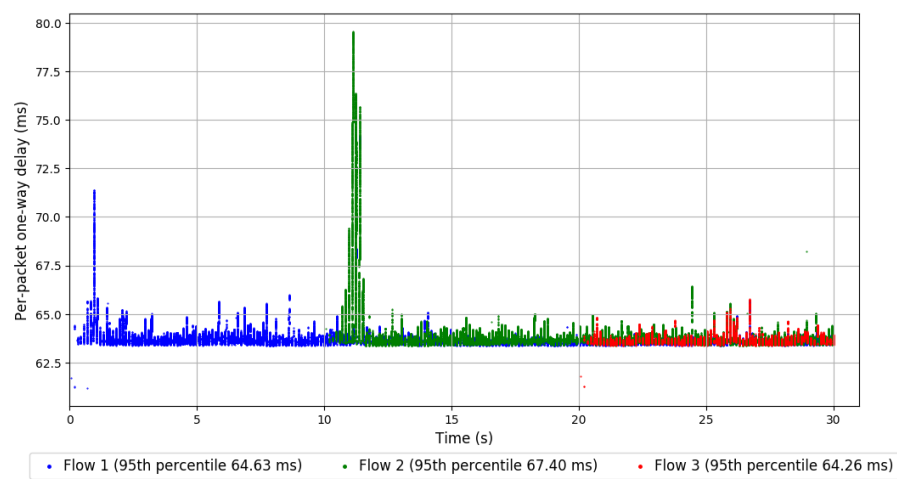
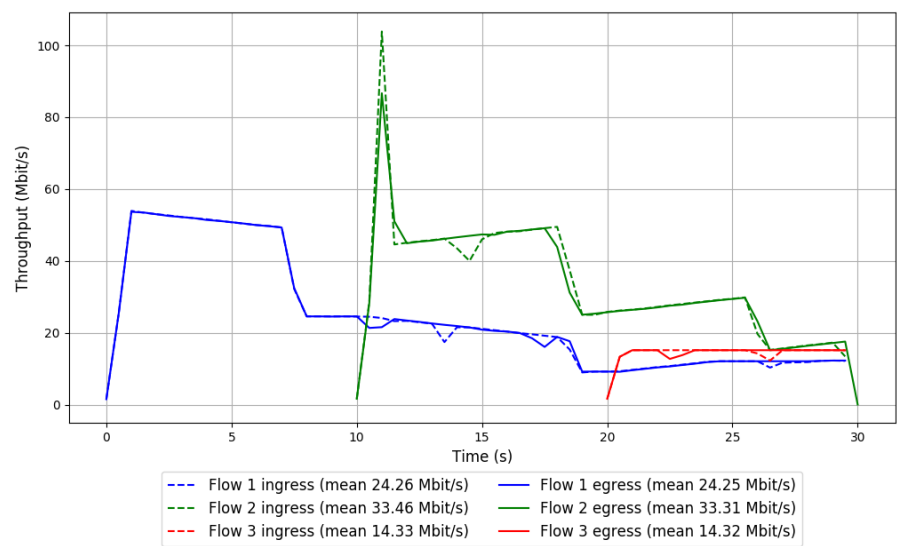
-- Flow 3:

Average throughput: 14.32 Mbit/s

95th percentile per-packet one-way delay: 64.256 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-01 11:36:19

End at: 2017-12-01 11:36:49

Below is generated by plot.py at 2017-12-01 14:46:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.90 Mbit/s

95th percentile per-packet one-way delay: 72.563 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 27.01 Mbit/s

95th percentile per-packet one-way delay: 70.252 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 43.29 Mbit/s

95th percentile per-packet one-way delay: 70.014 ms

Loss rate: 0.01%

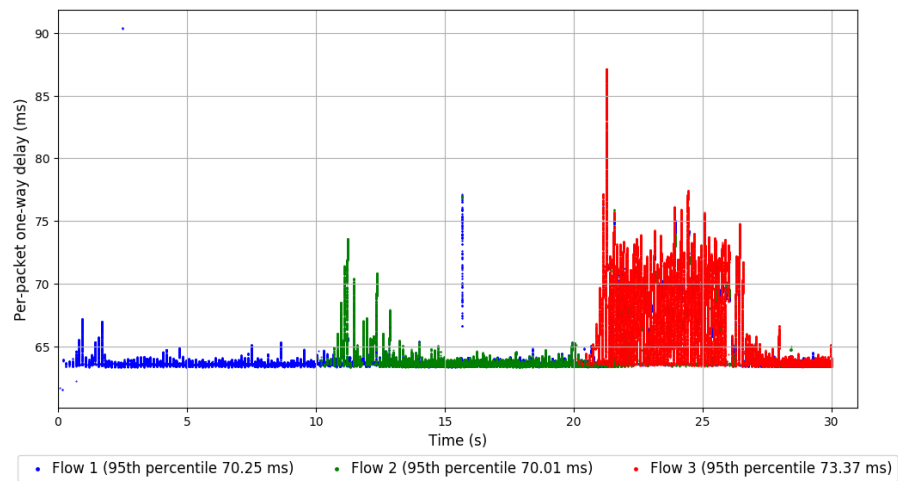
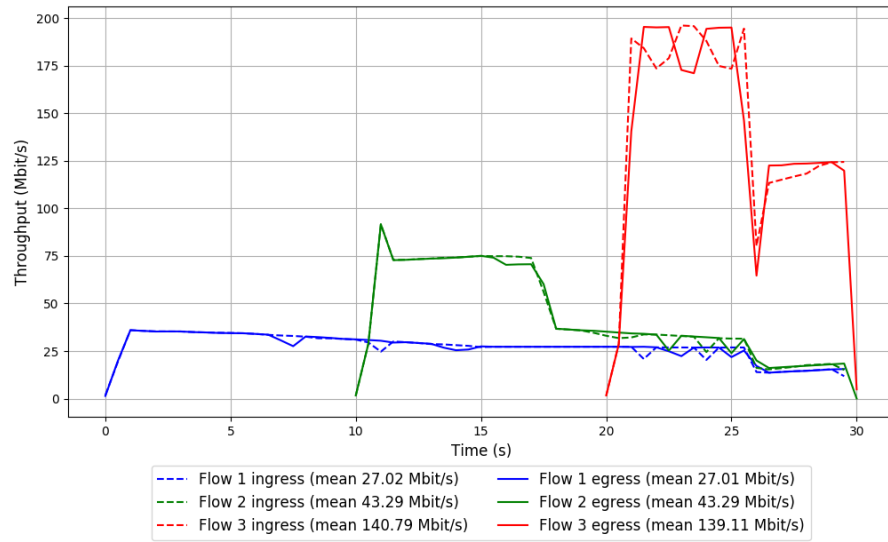
-- Flow 3:

Average throughput: 139.11 Mbit/s

95th percentile per-packet one-way delay: 73.368 ms

Loss rate: 1.20%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-01 11:48:40

End at: 2017-12-01 11:49:11

Below is generated by plot.py at 2017-12-01 14:46:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.89 Mbit/s

95th percentile per-packet one-way delay: 64.286 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 13.08 Mbit/s

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

Loss rate: 0.02%

-- Flow 2:

Average throughput: 17.51 Mbit/s

95th percentile per-packet one-way delay: 64.377 ms

Loss rate: 0.00%

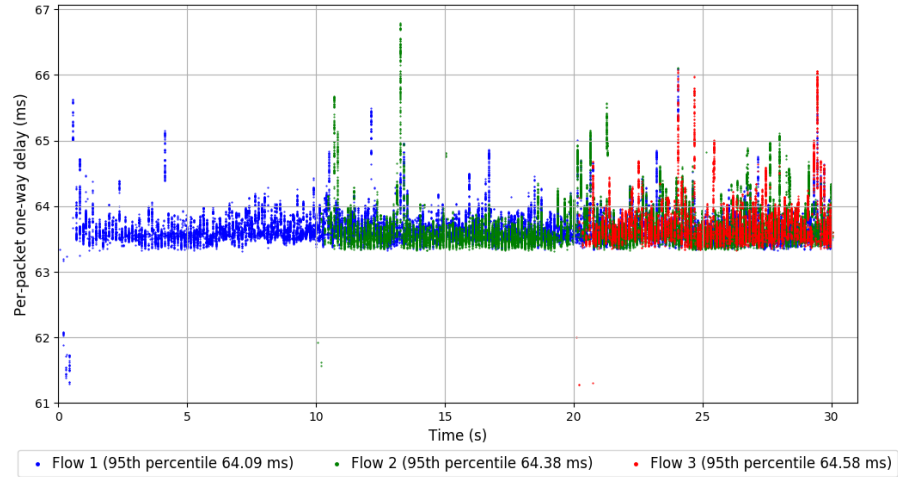
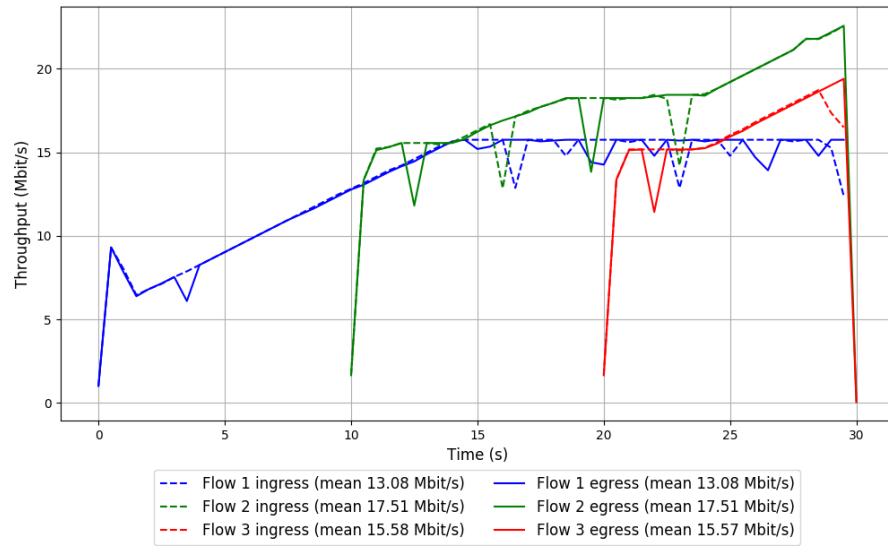
-- Flow 3:

Average throughput: 15.57 Mbit/s

95th percentile per-packet one-way delay: 64.584 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-01 12:00:55

End at: 2017-12-01 12:01:25

Below is generated by plot.py at 2017-12-01 14:46:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 43.66 Mbit/s

95th percentile per-packet one-way delay: 64.621 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 26.81 Mbit/s

95th percentile per-packet one-way delay: 64.794 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 18.19 Mbit/s

95th percentile per-packet one-way delay: 64.386 ms

Loss rate: 0.01%

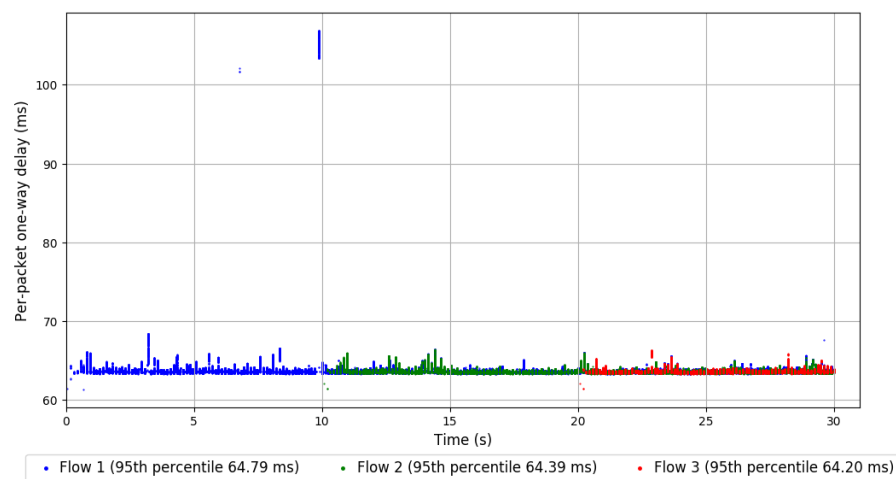
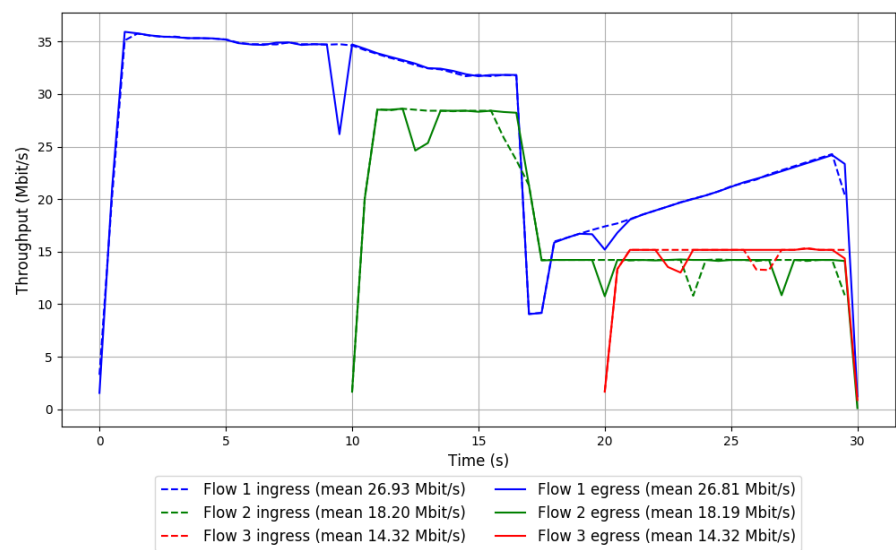
-- Flow 3:

Average throughput: 14.32 Mbit/s

95th percentile per-packet one-way delay: 64.204 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-01 12:13:07

End at: 2017-12-01 12:13:37

Below is generated by plot.py at 2017-12-01 14:46:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.18 Mbit/s

95th percentile per-packet one-way delay: 64.931 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 106.98 Mbit/s

95th percentile per-packet one-way delay: 64.814 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 13.99 Mbit/s

95th percentile per-packet one-way delay: 64.885 ms

Loss rate: 0.65%

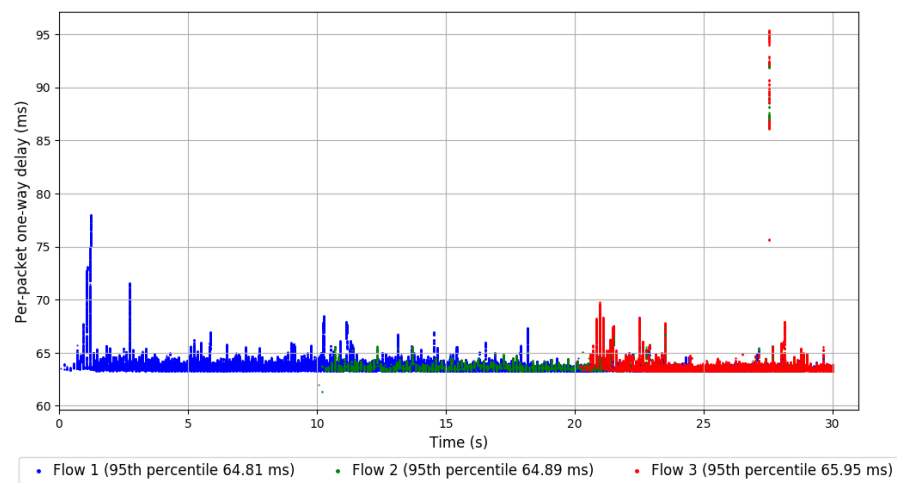
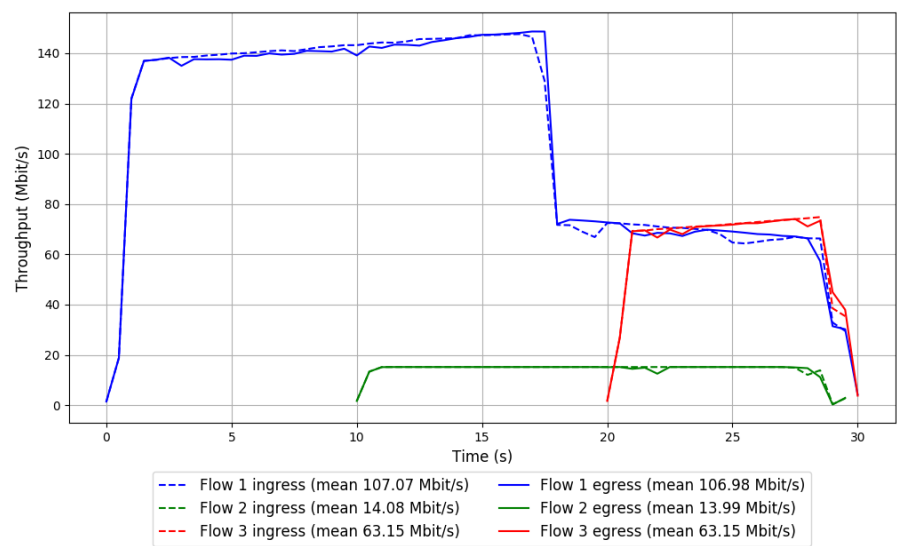
-- Flow 3:

Average throughput: 63.15 Mbit/s

95th percentile per-packet one-way delay: 65.952 ms

Loss rate: 0.01%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-01 12:25:16

End at: 2017-12-01 12:25:46

Below is generated by plot.py at 2017-12-01 14:46:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.38 Mbit/s

95th percentile per-packet one-way delay: 64.408 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 15.80 Mbit/s

95th percentile per-packet one-way delay: 64.464 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 96.37 Mbit/s

95th percentile per-packet one-way delay: 64.411 ms

Loss rate: 0.00%

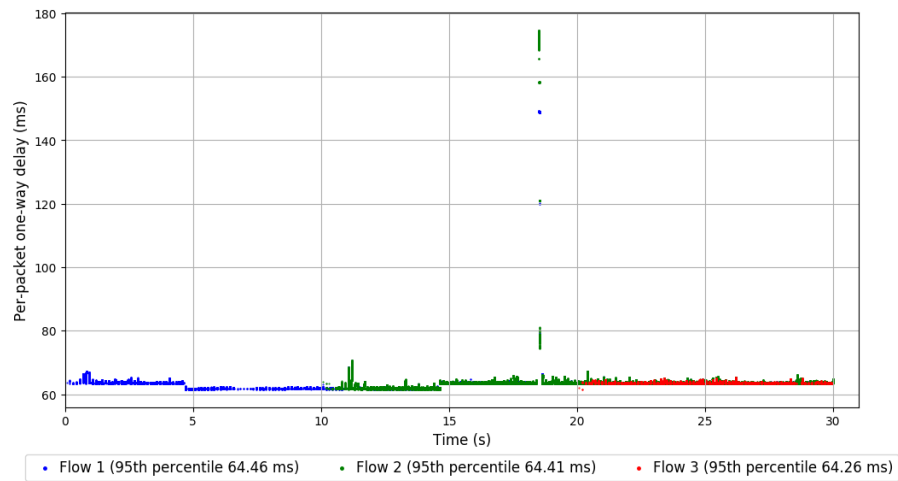
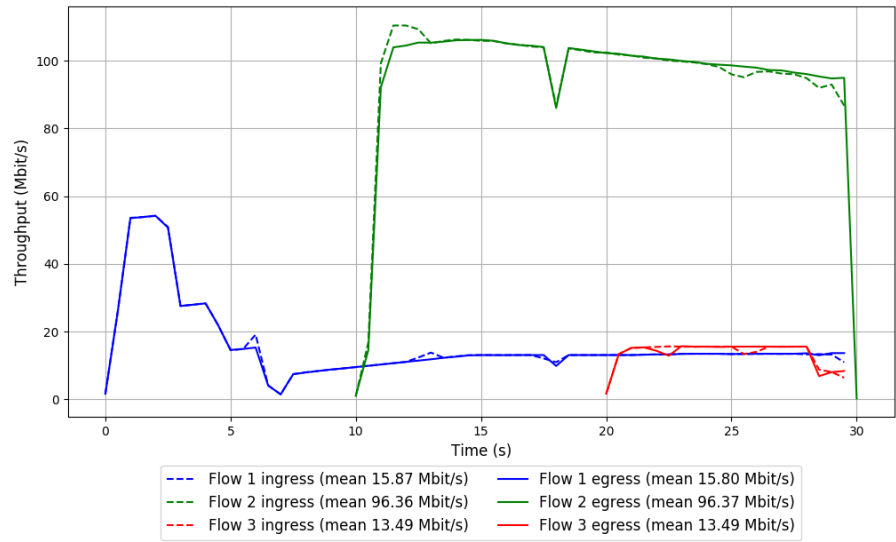
-- Flow 3:

Average throughput: 13.49 Mbit/s

95th percentile per-packet one-way delay: 64.259 ms

Loss rate: 0.04%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-01 12:37:34

End at: 2017-12-01 12:38:04

Below is generated by plot.py at 2017-12-01 14:46:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.44 Mbit/s

95th percentile per-packet one-way delay: 71.422 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 88.56 Mbit/s

95th percentile per-packet one-way delay: 72.081 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 80.55 Mbit/s

95th percentile per-packet one-way delay: 65.213 ms

Loss rate: 0.00%

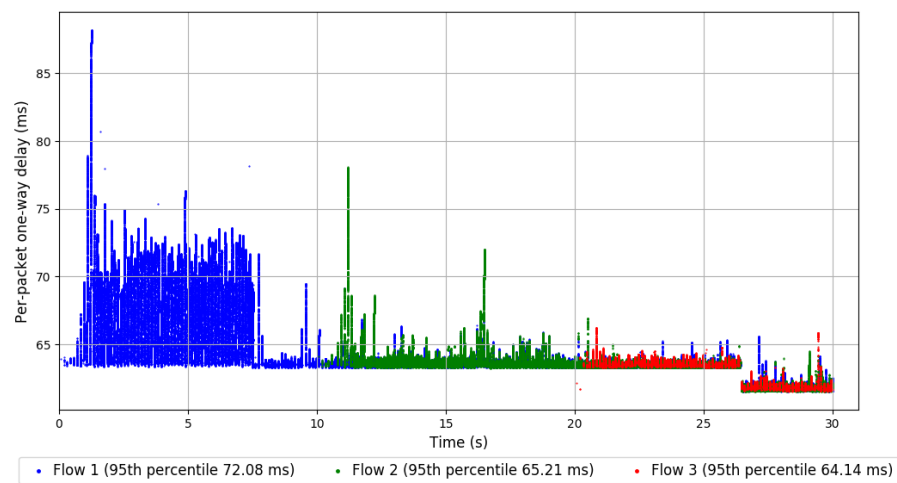
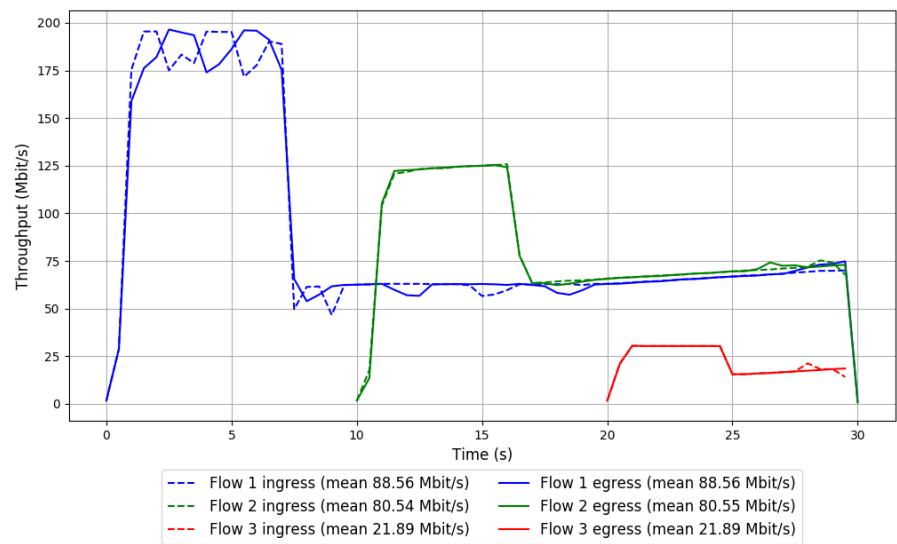
-- Flow 3:

Average throughput: 21.89 Mbit/s

95th percentile per-packet one-way delay: 64.136 ms

Loss rate: 0.02%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-01 12:49:47

End at: 2017-12-01 12:50:17

Below is generated by plot.py at 2017-12-01 14:46:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.28 Mbit/s

95th percentile per-packet one-way delay: 70.315 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 30.61 Mbit/s

95th percentile per-packet one-way delay: 66.532 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.01 Mbit/s

95th percentile per-packet one-way delay: 71.368 ms

Loss rate: 0.00%

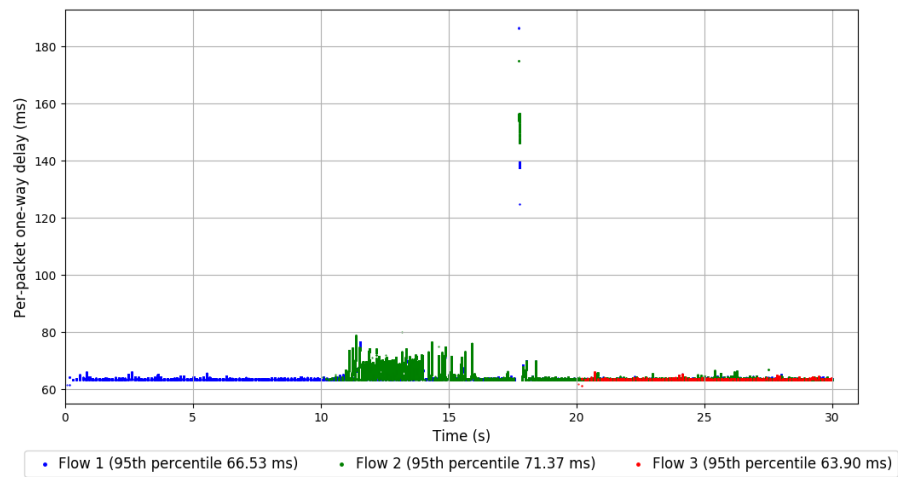
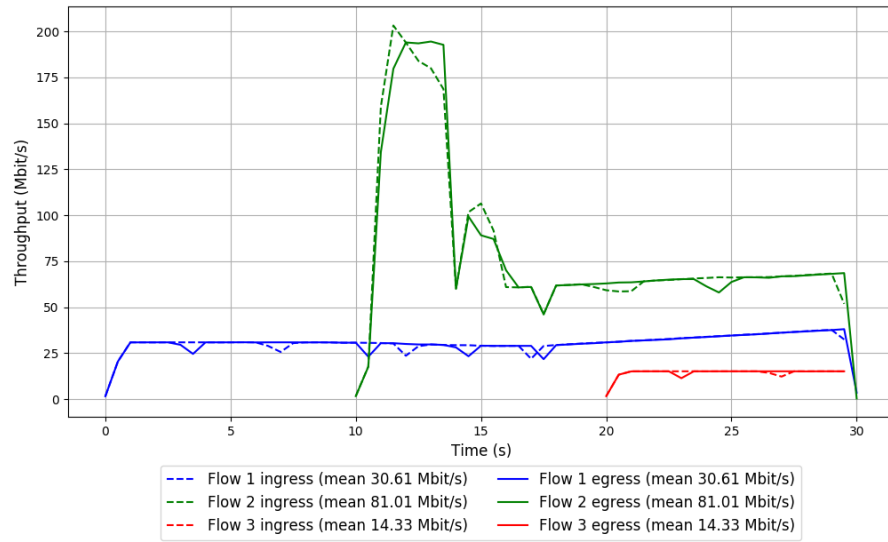
-- Flow 3:

Average throughput: 14.33 Mbit/s

95th percentile per-packet one-way delay: 63.902 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

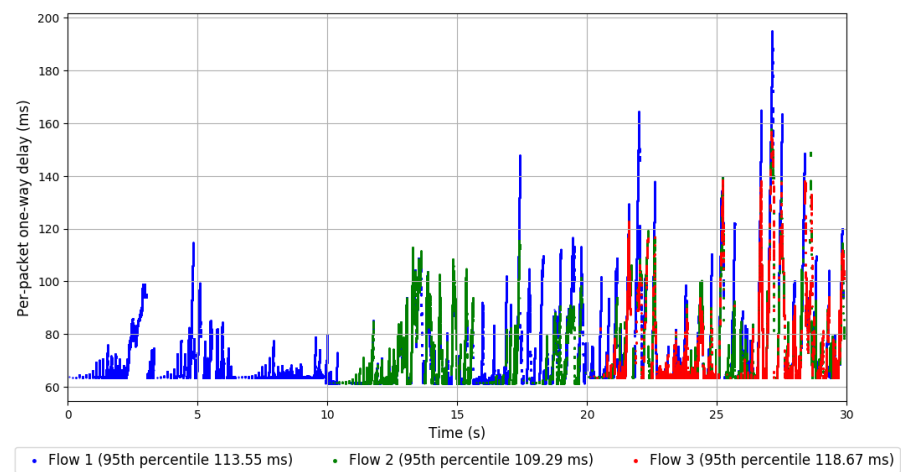
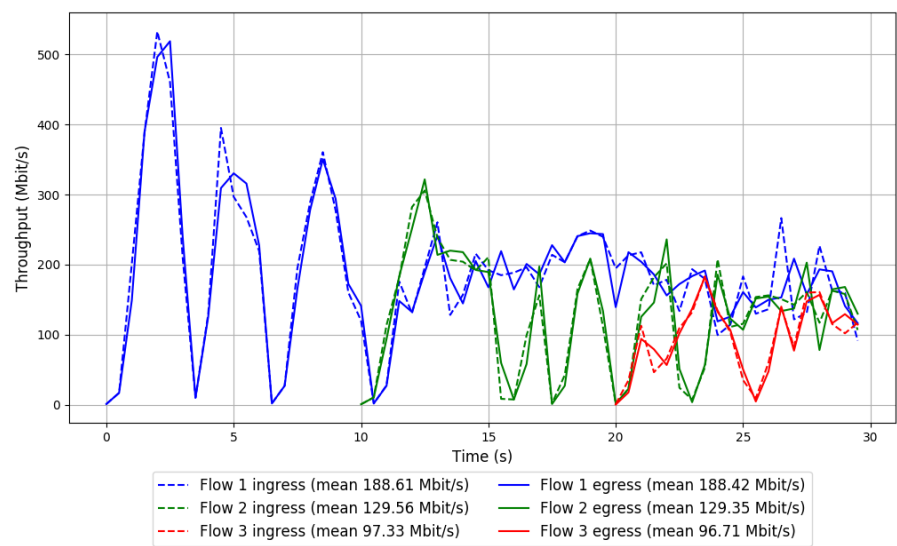


```
Run 1: Statistics of Verus

Start at: 2017-12-01 11:07:01
End at: 2017-12-01 11:07:31

# Below is generated by plot.py at 2017-12-01 14:47:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.93 Mbit/s
95th percentile per-packet one-way delay: 112.527 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 188.42 Mbit/s
95th percentile per-packet one-way delay: 113.548 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 129.35 Mbit/s
95th percentile per-packet one-way delay: 109.291 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 96.71 Mbit/s
95th percentile per-packet one-way delay: 118.671 ms
Loss rate: 0.64%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-01 11:19:23

End at: 2017-12-01 11:19:53

Below is generated by plot.py at 2017-12-01 14:48:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 324.29 Mbit/s

95th percentile per-packet one-way delay: 189.017 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 238.06 Mbit/s

95th percentile per-packet one-way delay: 197.211 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 88.78 Mbit/s

95th percentile per-packet one-way delay: 169.575 ms

Loss rate: 0.32%

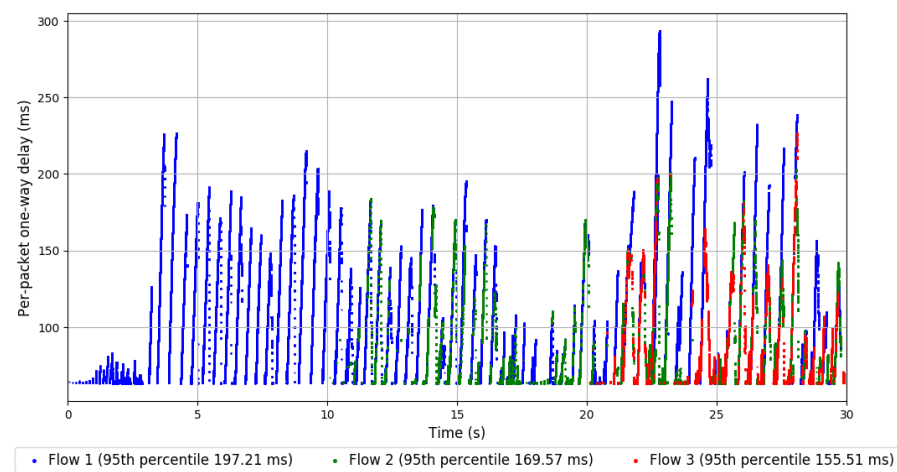
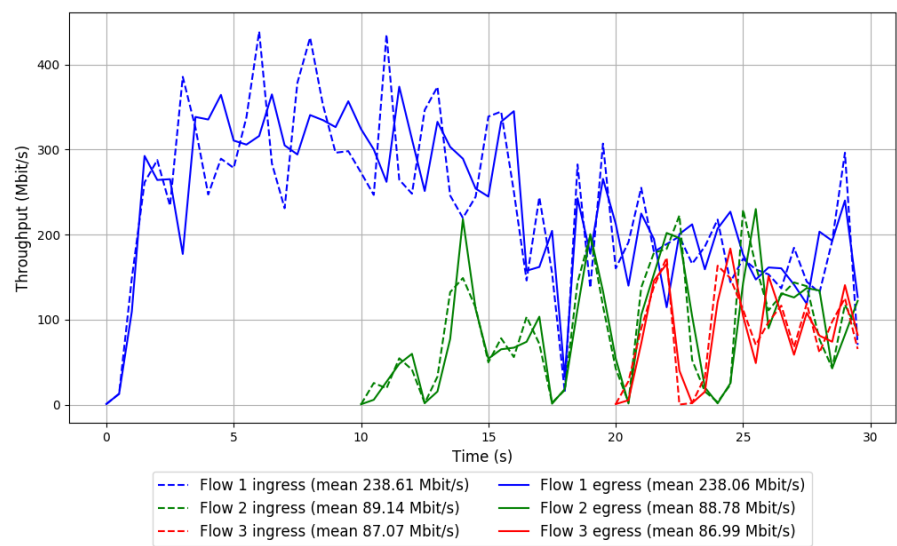
-- Flow 3:

Average throughput: 86.99 Mbit/s

95th percentile per-packet one-way delay: 155.513 ms

Loss rate: 0.11%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-01 11:31:42

End at: 2017-12-01 11:32:12

Below is generated by plot.py at 2017-12-01 14:48:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.67 Mbit/s

95th percentile per-packet one-way delay: 284.439 ms

Loss rate: 4.22%

-- Flow 1:

Average throughput: 290.33 Mbit/s

95th percentile per-packet one-way delay: 290.837 ms

Loss rate: 4.53%

-- Flow 2:

Average throughput: 52.59 Mbit/s

95th percentile per-packet one-way delay: 183.933 ms

Loss rate: 2.05%

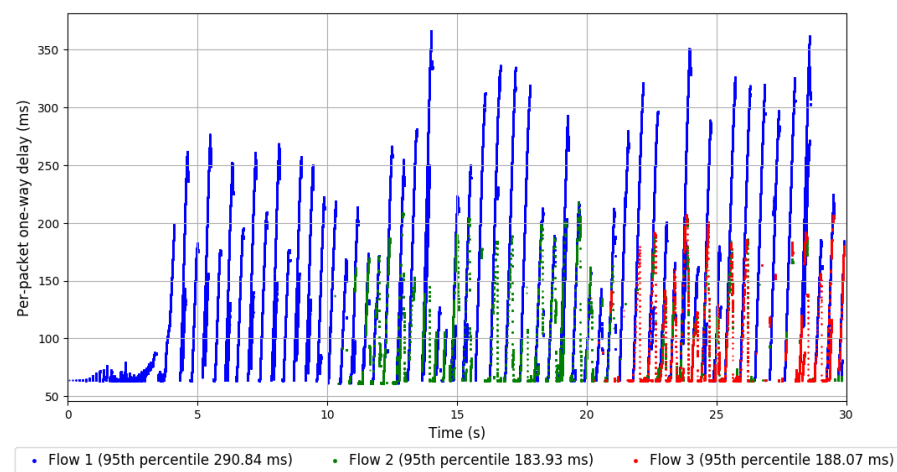
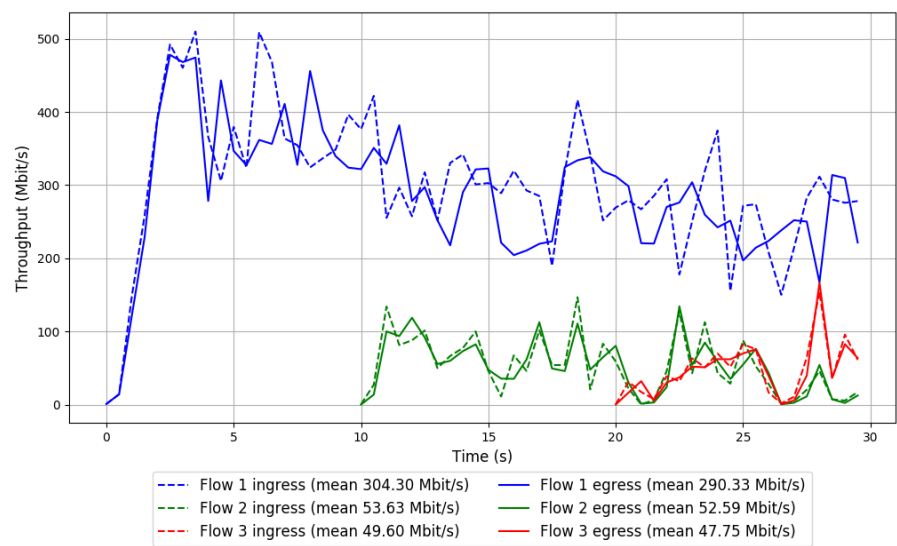
-- Flow 3:

Average throughput: 47.75 Mbit/s

95th percentile per-packet one-way delay: 188.072 ms

Loss rate: 3.28%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-01 11:44:01

End at: 2017-12-01 11:44:31

Below is generated by plot.py at 2017-12-01 14:48:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 305.77 Mbit/s

95th percentile per-packet one-way delay: 166.768 ms

Loss rate: 1.95%

-- Flow 1:

Average throughput: 197.75 Mbit/s

95th percentile per-packet one-way delay: 180.485 ms

Loss rate: 2.17%

-- Flow 2:

Average throughput: 119.95 Mbit/s

95th percentile per-packet one-way delay: 164.189 ms

Loss rate: 1.95%

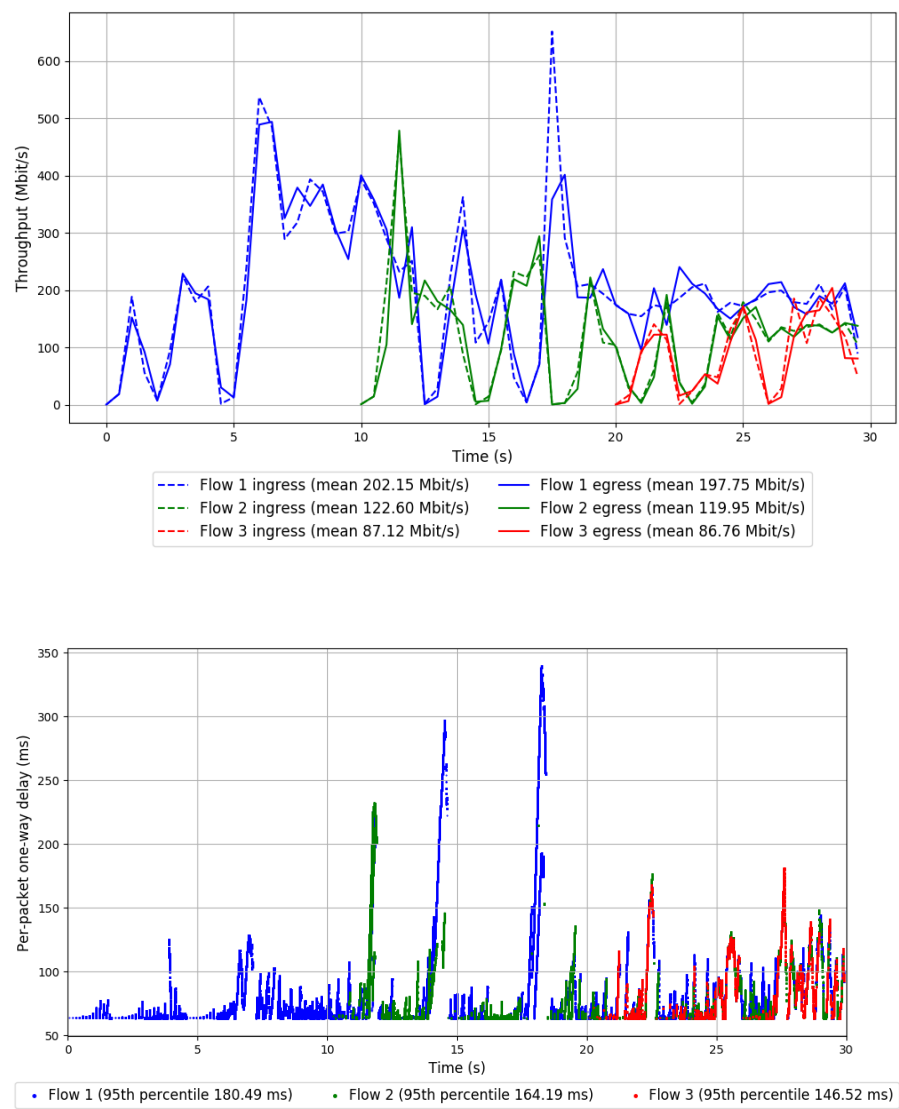
-- Flow 3:

Average throughput: 86.76 Mbit/s

95th percentile per-packet one-way delay: 146.519 ms

Loss rate: 0.41%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-01 11:56:16

End at: 2017-12-01 11:56:46

Below is generated by plot.py at 2017-12-01 14:48:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 290.09 Mbit/s

95th percentile per-packet one-way delay: 172.972 ms

Loss rate: 1.61%

-- Flow 1:

Average throughput: 150.84 Mbit/s

95th percentile per-packet one-way delay: 121.276 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 169.56 Mbit/s

95th percentile per-packet one-way delay: 210.420 ms

Loss rate: 2.11%

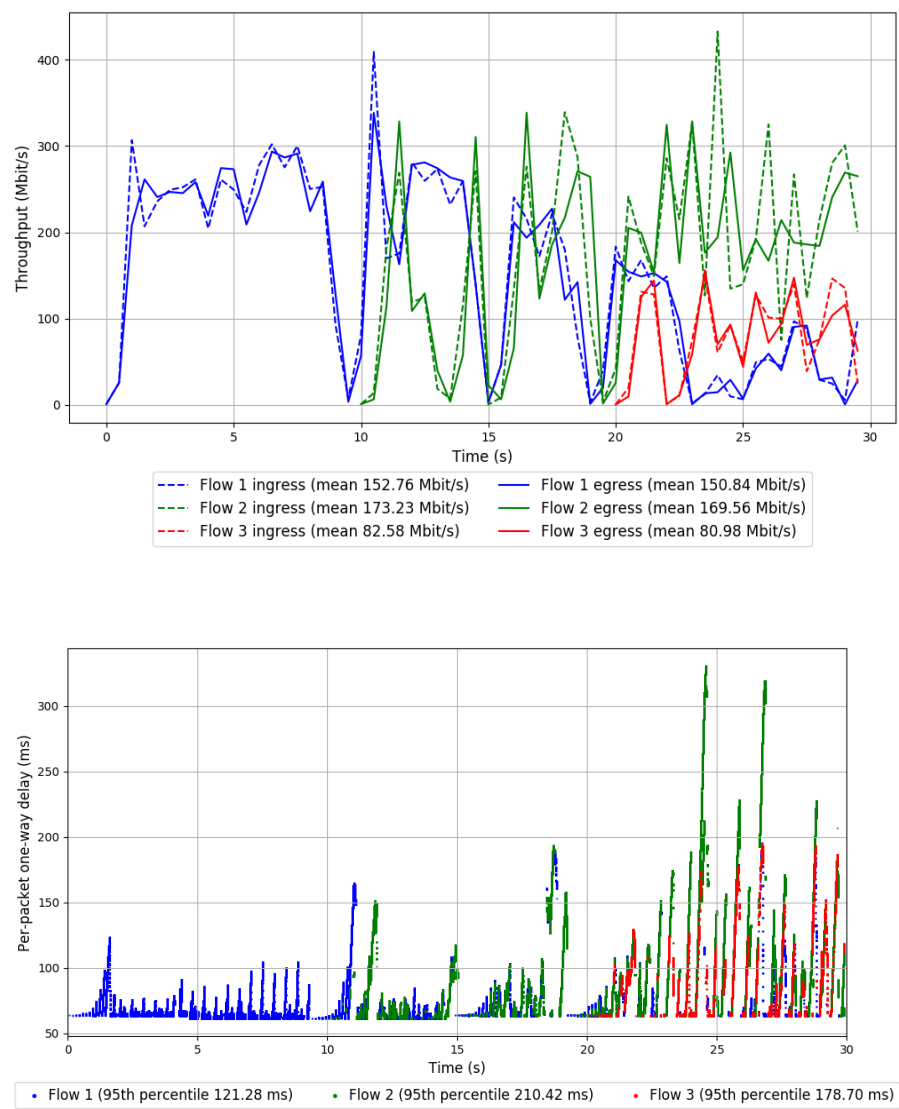
-- Flow 3:

Average throughput: 80.98 Mbit/s

95th percentile per-packet one-way delay: 178.704 ms

Loss rate: 1.54%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-01 12:08:32

End at: 2017-12-01 12:09:02

Below is generated by plot.py at 2017-12-01 14:48:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 275.02 Mbit/s

95th percentile per-packet one-way delay: 130.232 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 115.81 Mbit/s

95th percentile per-packet one-way delay: 111.345 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 173.52 Mbit/s

95th percentile per-packet one-way delay: 132.361 ms

Loss rate: 0.60%

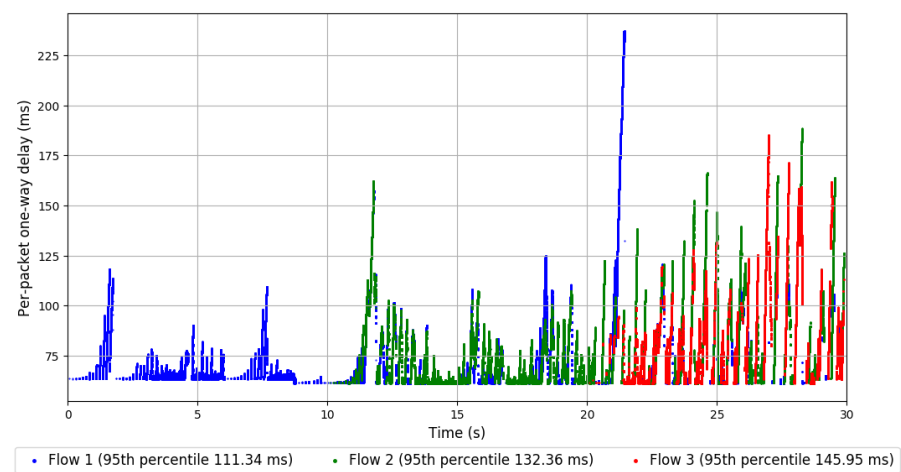
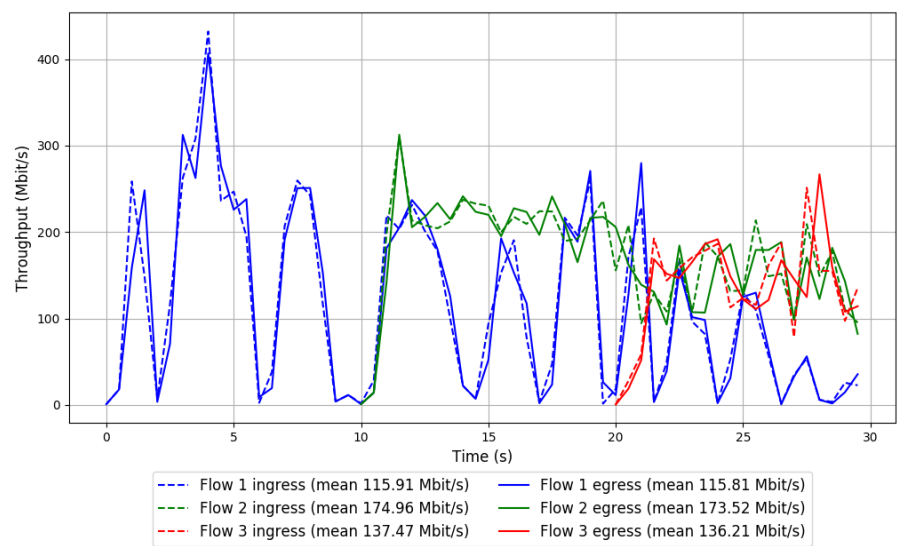
-- Flow 3:

Average throughput: 136.21 Mbit/s

95th percentile per-packet one-way delay: 145.954 ms

Loss rate: 0.79%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-01 12:20:45

End at: 2017-12-01 12:21:15

Below is generated by plot.py at 2017-12-01 14:51:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 271.13 Mbit/s

95th percentile per-packet one-way delay: 175.968 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 170.24 Mbit/s

95th percentile per-packet one-way delay: 191.802 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 128.83 Mbit/s

95th percentile per-packet one-way delay: 124.718 ms

Loss rate: 0.93%

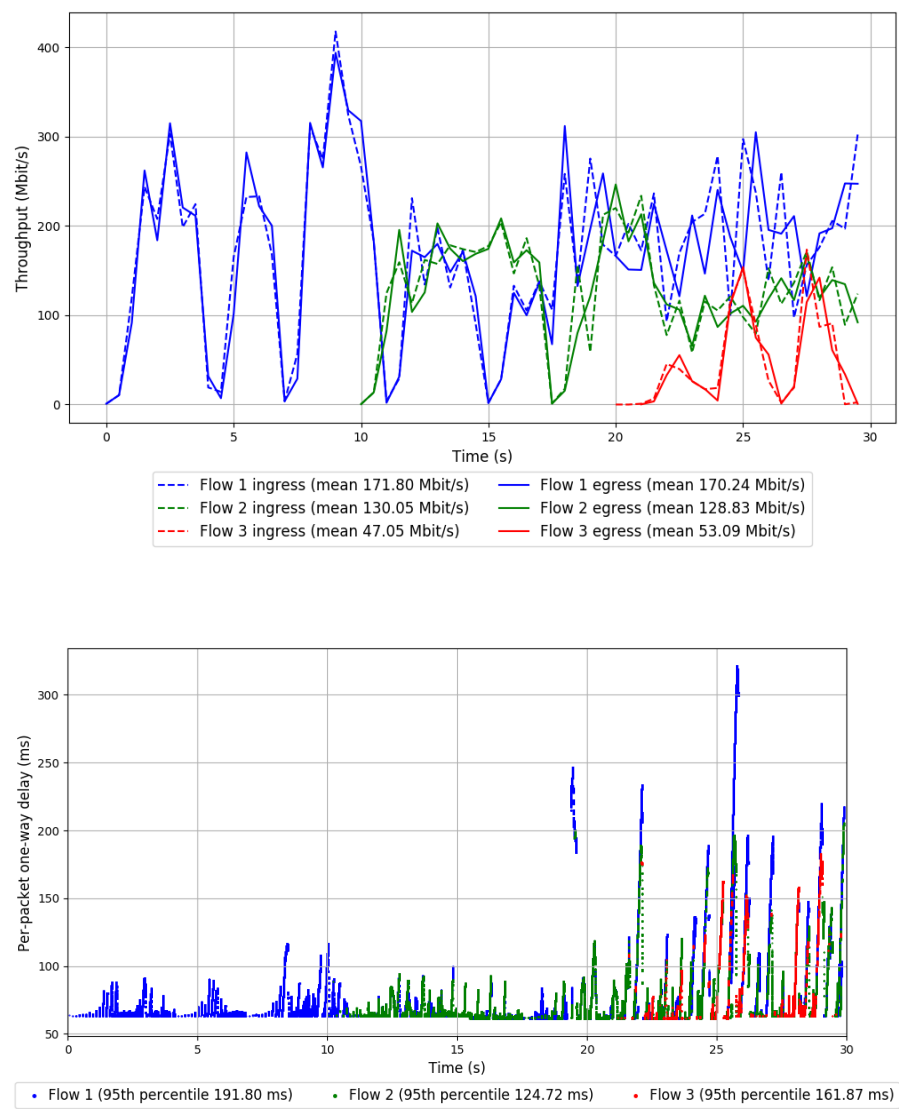
-- Flow 3:

Average throughput: 53.09 Mbit/s

95th percentile per-packet one-way delay: 161.871 ms

Loss rate: 0.18%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-01 12:32:54

End at: 2017-12-01 12:33:24

Below is generated by plot.py at 2017-12-01 14:51:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 271.98 Mbit/s

95th percentile per-packet one-way delay: 145.442 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 188.06 Mbit/s

95th percentile per-packet one-way delay: 138.362 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 89.05 Mbit/s

95th percentile per-packet one-way delay: 153.954 ms

Loss rate: 0.17%

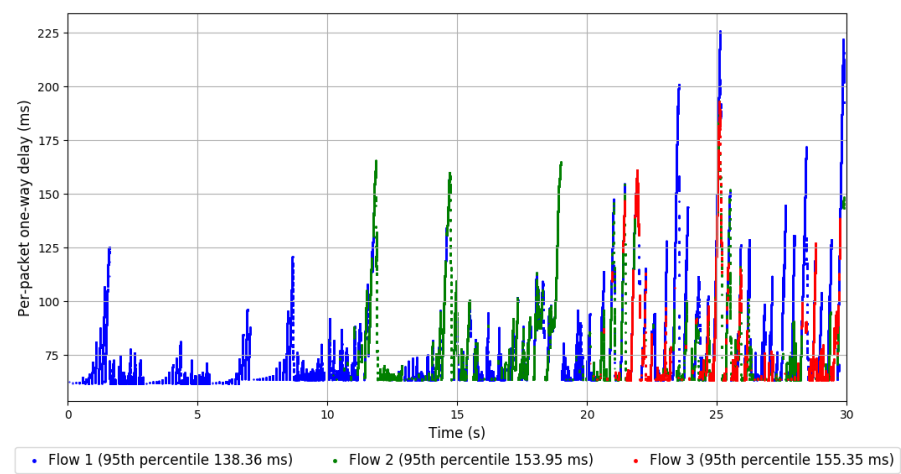
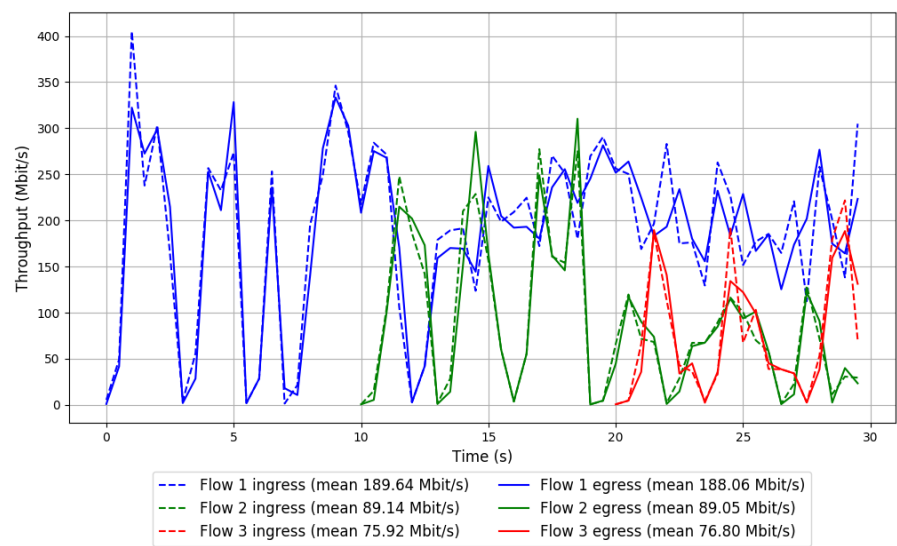
-- Flow 3:

Average throughput: 76.80 Mbit/s

95th percentile per-packet one-way delay: 155.351 ms

Loss rate: 0.48%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-01 12:45:11

End at: 2017-12-01 12:45:41

Below is generated by plot.py at 2017-12-01 14:52:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 285.12 Mbit/s

95th percentile per-packet one-way delay: 119.158 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 156.27 Mbit/s

95th percentile per-packet one-way delay: 108.218 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 151.73 Mbit/s

95th percentile per-packet one-way delay: 130.391 ms

Loss rate: 0.00%

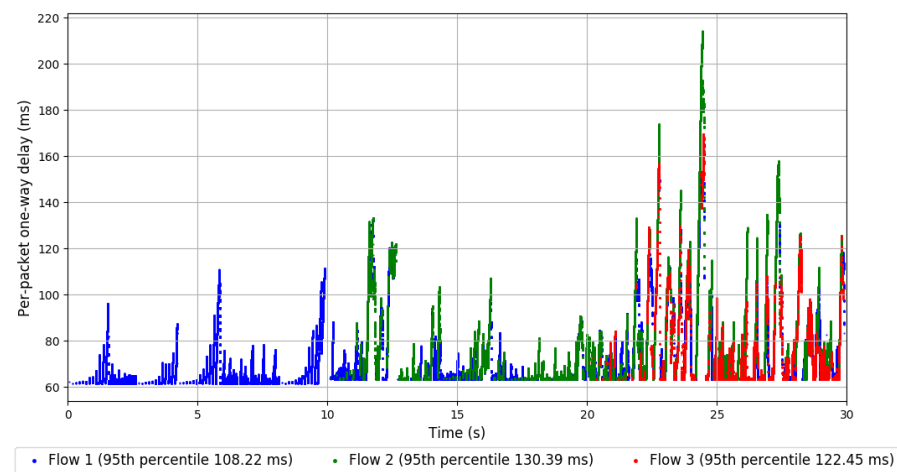
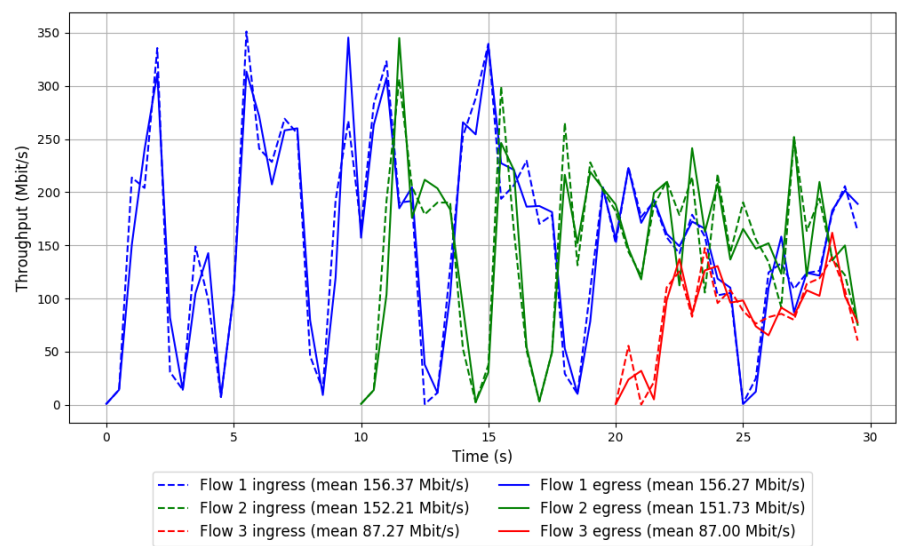
-- Flow 3:

Average throughput: 87.00 Mbit/s

95th percentile per-packet one-way delay: 122.453 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-01 12:57:27

End at: 2017-12-01 12:57:57

Below is generated by plot.py at 2017-12-01 14:54:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.64 Mbit/s

95th percentile per-packet one-way delay: 122.715 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 231.72 Mbit/s

95th percentile per-packet one-way delay: 120.699 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 129.84 Mbit/s

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

Loss rate: 0.30%

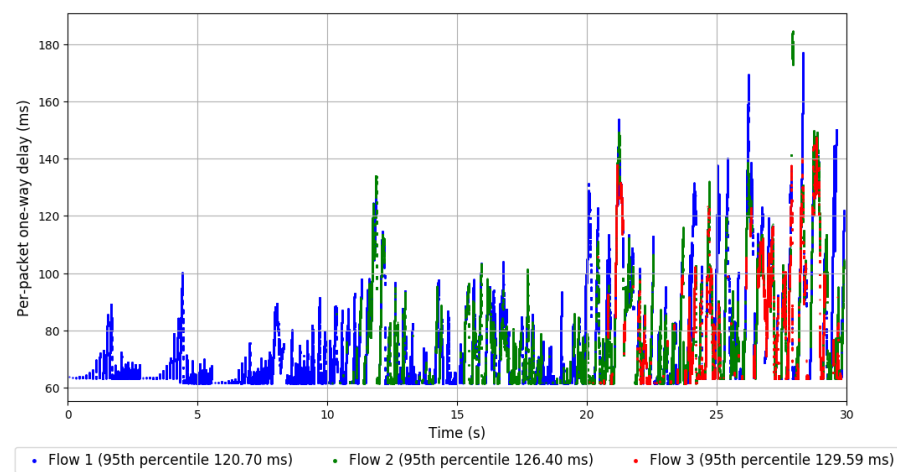
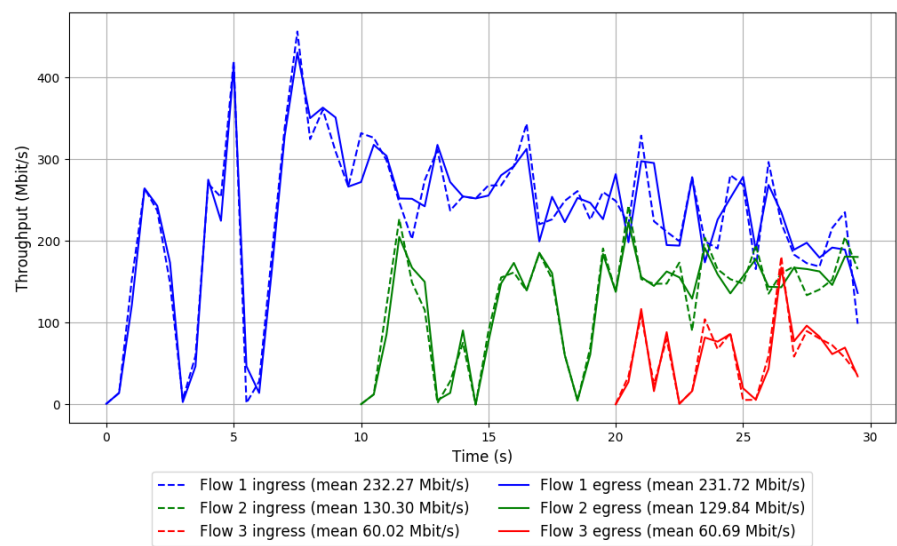
-- Flow 3:

Average throughput: 60.69 Mbit/s

95th percentile per-packet one-way delay: 129.588 ms

Loss rate: 0.21%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-01 11:00:52

End at: 2017-12-01 11:01:22

Below is generated by plot.py at 2017-12-01 14:54:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.89 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.21 Mbit/s

95th percentile per-packet one-way delay: 63.682 ms

Loss rate: 0.00%

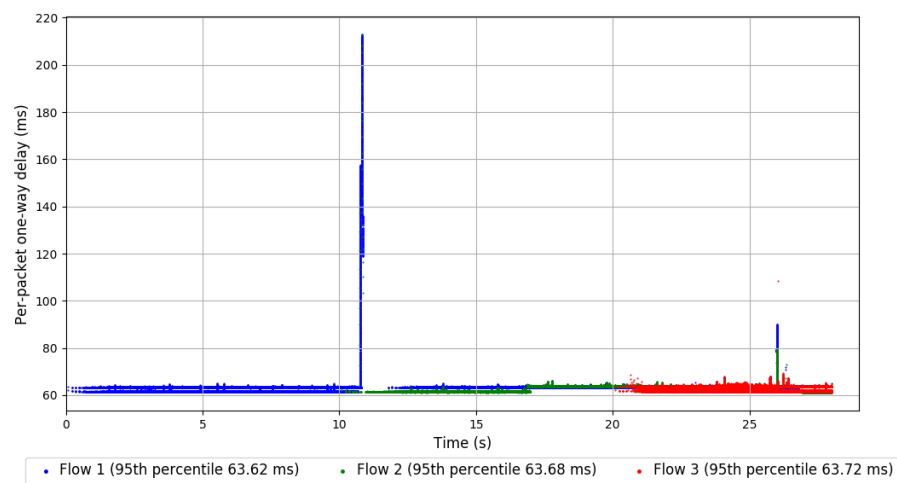
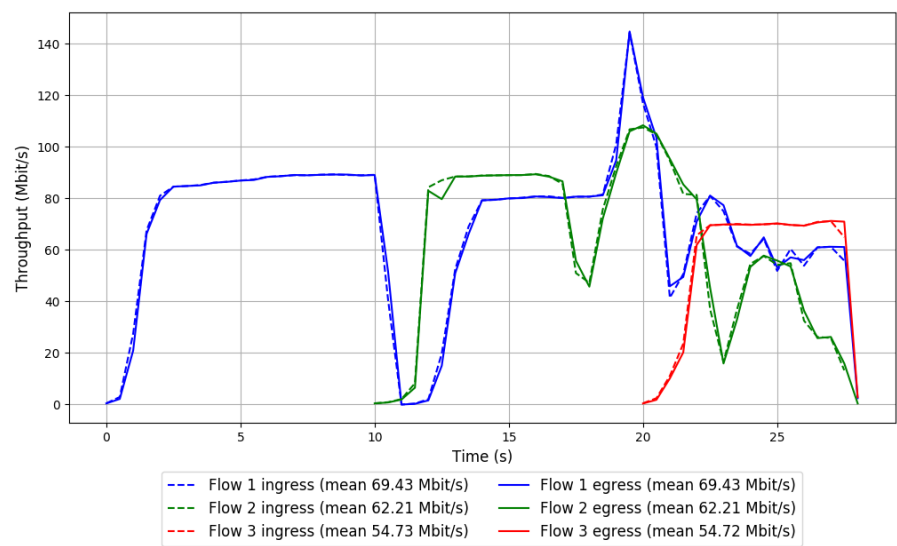
-- Flow 3:

Average throughput: 54.72 Mbit/s

95th percentile per-packet one-way delay: 63.716 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-01 11:13:12

End at: 2017-12-01 11:13:42

Below is generated by plot.py at 2017-12-01 14:54:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 128.94 Mbit/s

95th percentile per-packet one-way delay: 63.825 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.95 Mbit/s

95th percentile per-packet one-way delay: 63.841 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.07 Mbit/s

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

Loss rate: 0.00%

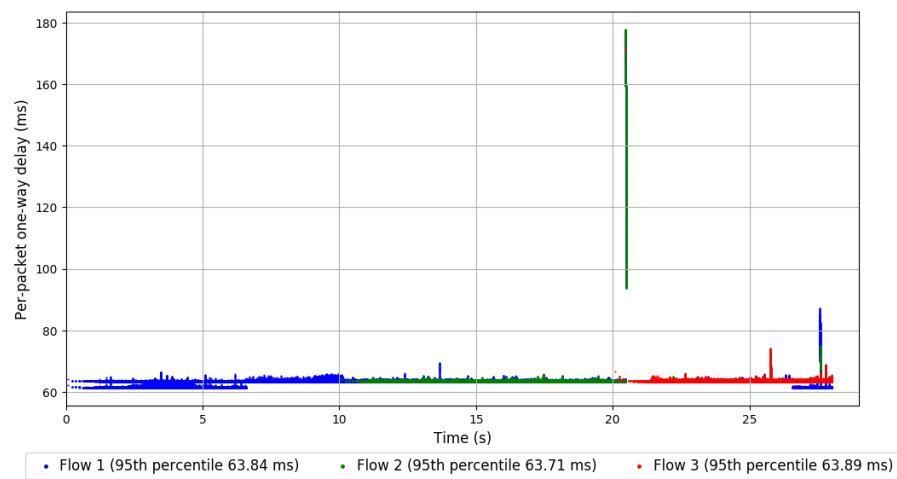
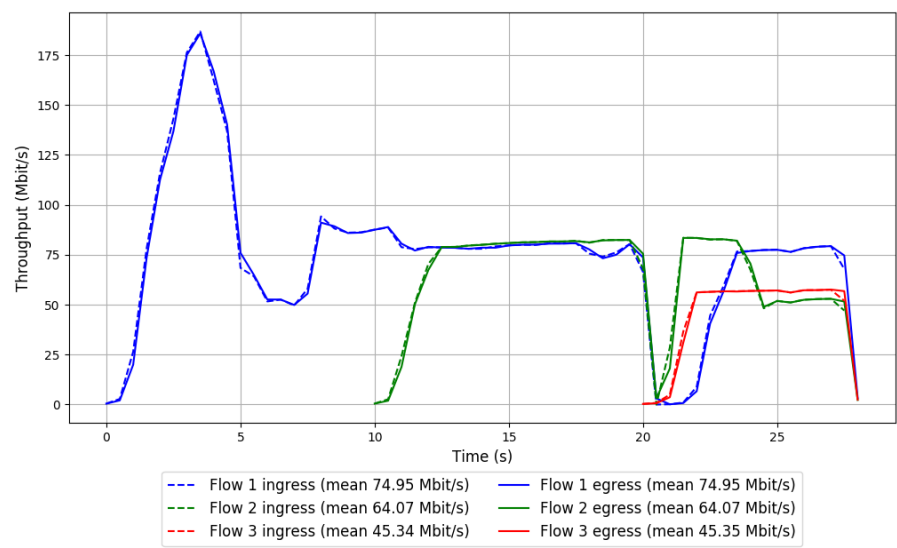
-- Flow 3:

Average throughput: 45.35 Mbit/s

95th percentile per-packet one-way delay: 63.891 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-01 11:25:29

End at: 2017-12-01 11:25:59

Below is generated by plot.py at 2017-12-01 14:54:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 128.72 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 76.86 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.79 Mbit/s

95th percentile per-packet one-way delay: 63.856 ms

Loss rate: 0.00%

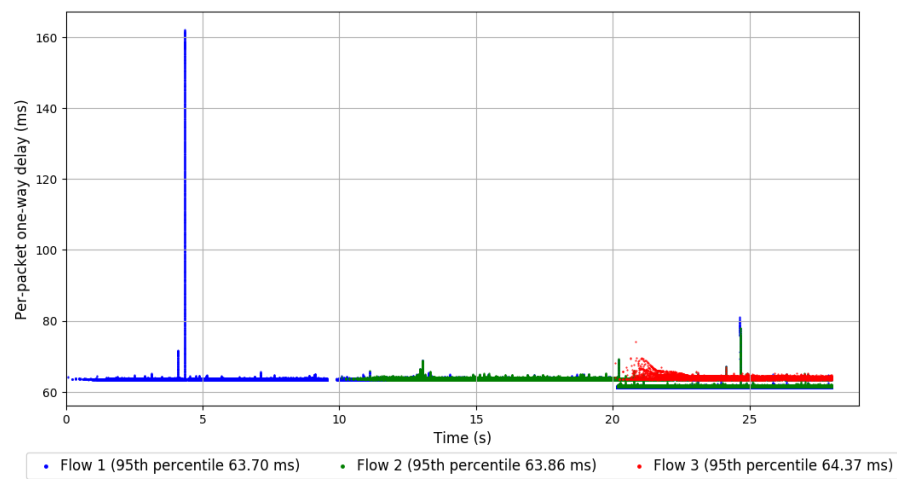
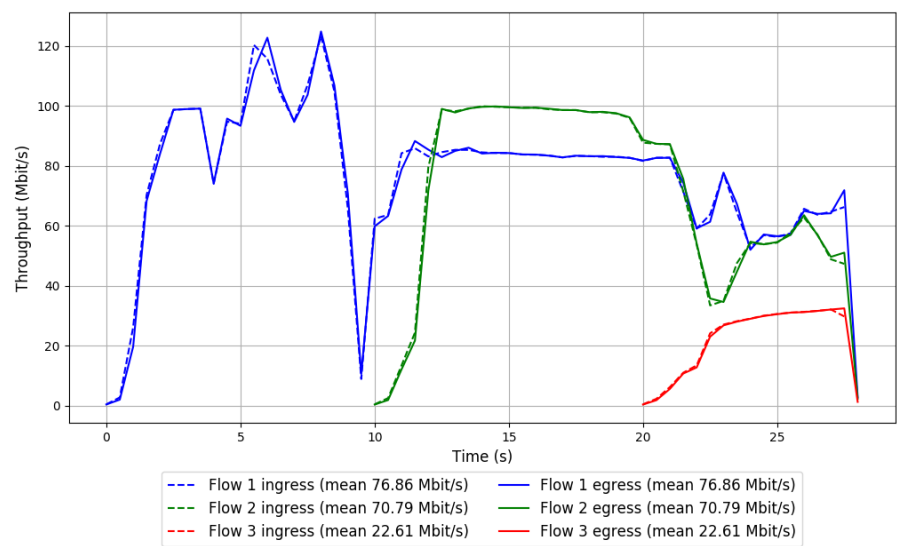
-- Flow 3:

Average throughput: 22.61 Mbit/s

95th percentile per-packet one-way delay: 64.372 ms

Loss rate: 0.02%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-01 11:37:47

End at: 2017-12-01 11:38:17

Below is generated by plot.py at 2017-12-01 14:54:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.52 Mbit/s

95th percentile per-packet one-way delay: 63.853 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 80.07 Mbit/s

95th percentile per-packet one-way delay: 63.717 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.85 Mbit/s

95th percentile per-packet one-way delay: 63.931 ms

Loss rate: 0.01%

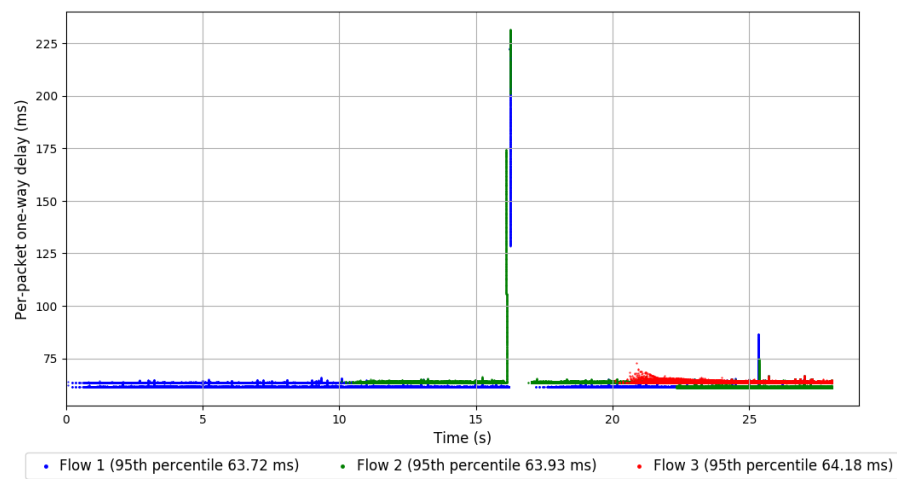
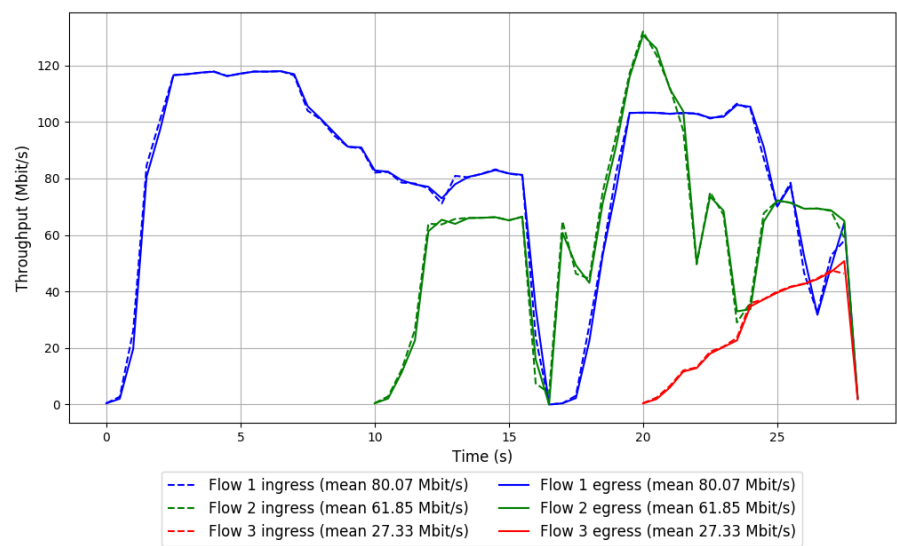
-- Flow 3:

Average throughput: 27.33 Mbit/s

95th percentile per-packet one-way delay: 64.183 ms

Loss rate: 0.03%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-01 11:50:04

End at: 2017-12-01 11:50:34

Below is generated by plot.py at 2017-12-01 14:55:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 145.05 Mbit/s

95th percentile per-packet one-way delay: 63.793 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 76.30 Mbit/s

95th percentile per-packet one-way delay: 63.861 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 77.80 Mbit/s

95th percentile per-packet one-way delay: 63.540 ms

Loss rate: 0.01%

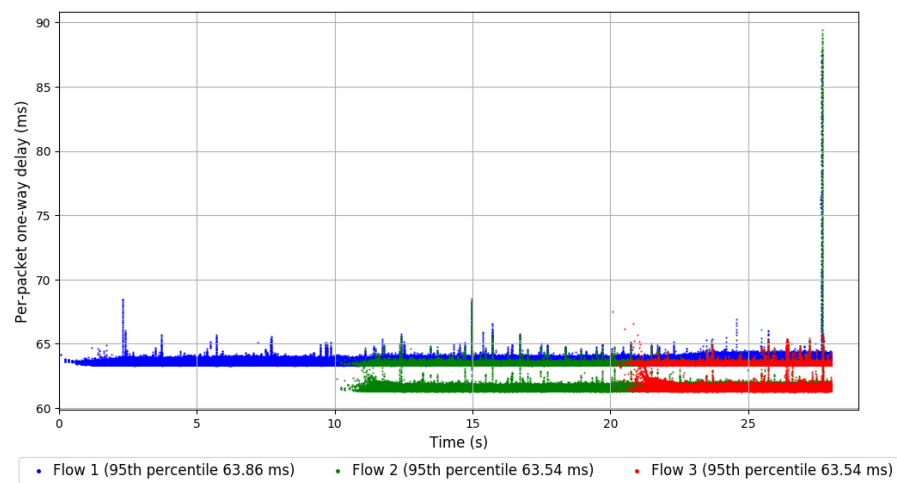
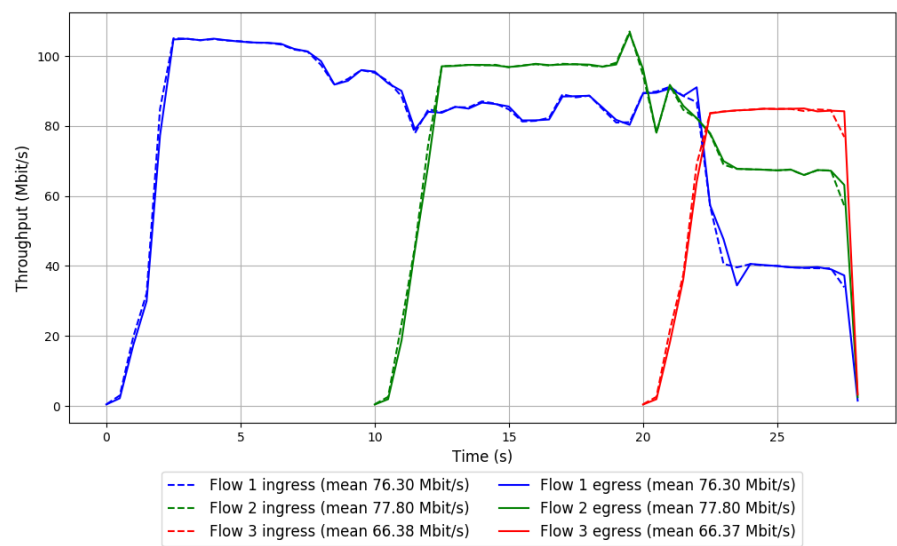
-- Flow 3:

Average throughput: 66.37 Mbit/s

95th percentile per-packet one-way delay: 63.544 ms

Loss rate: 0.02%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-01 12:02:19

End at: 2017-12-01 12:02:49

Below is generated by plot.py at 2017-12-01 14:55:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.46 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.96 Mbit/s

95th percentile per-packet one-way delay: 63.720 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.89 Mbit/s

95th percentile per-packet one-way delay: 63.803 ms

Loss rate: 0.00%

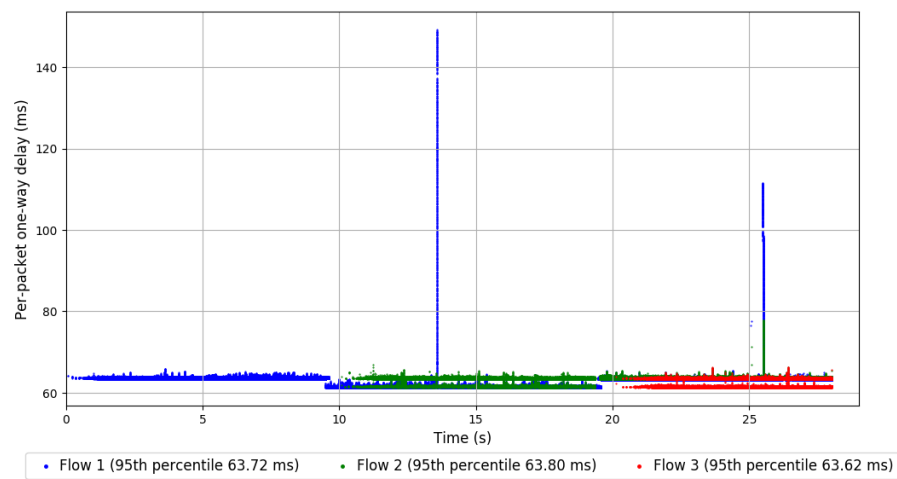
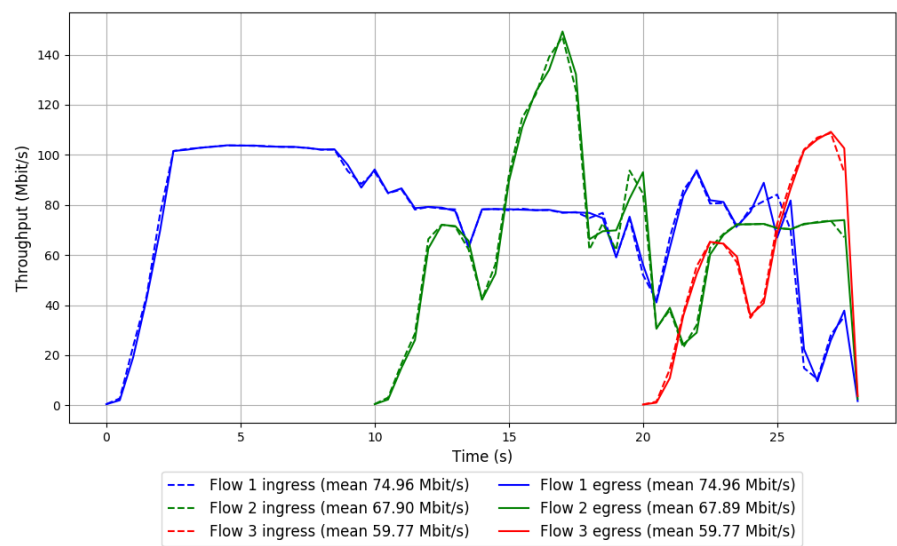
-- Flow 3:

Average throughput: 59.77 Mbit/s

95th percentile per-packet one-way delay: 63.618 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-01 12:14:37

End at: 2017-12-01 12:15:07

Below is generated by plot.py at 2017-12-01 14:55:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.67 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.15 Mbit/s

95th percentile per-packet one-way delay: 63.572 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.71 Mbit/s

95th percentile per-packet one-way delay: 63.910 ms

Loss rate: 0.00%

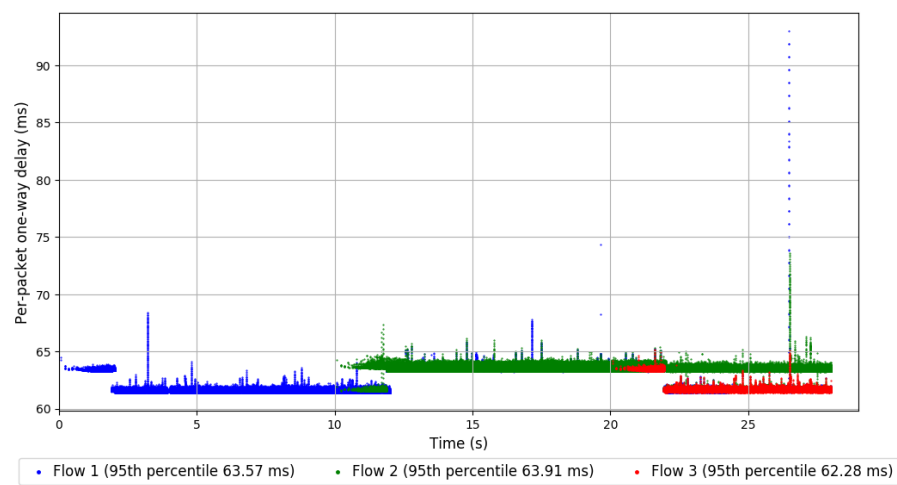
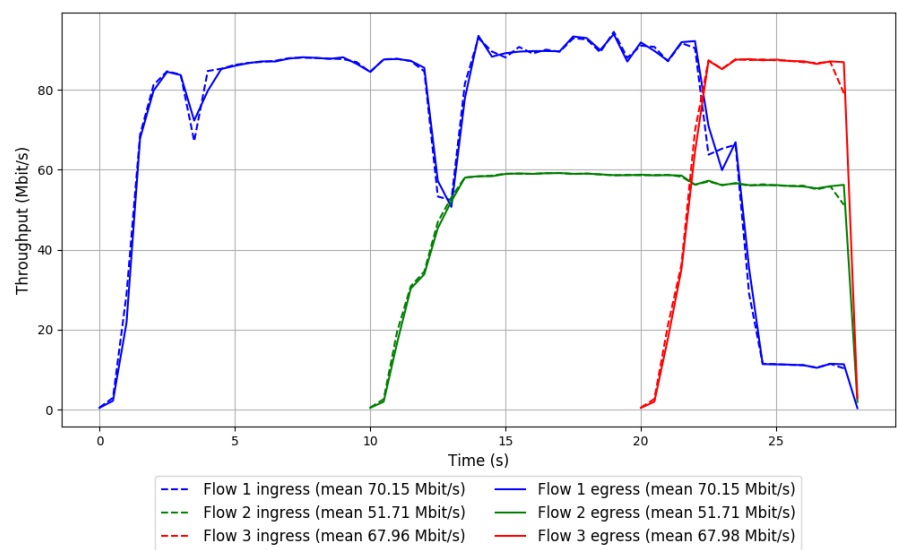
-- Flow 3:

Average throughput: 67.98 Mbit/s

95th percentile per-packet one-way delay: 62.284 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-01 12:26:43

End at: 2017-12-01 12:27:13

Below is generated by plot.py at 2017-12-01 14:55:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.85 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 68.99 Mbit/s

95th percentile per-packet one-way delay: 63.576 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.60 Mbit/s

95th percentile per-packet one-way delay: 63.610 ms

Loss rate: 0.00%

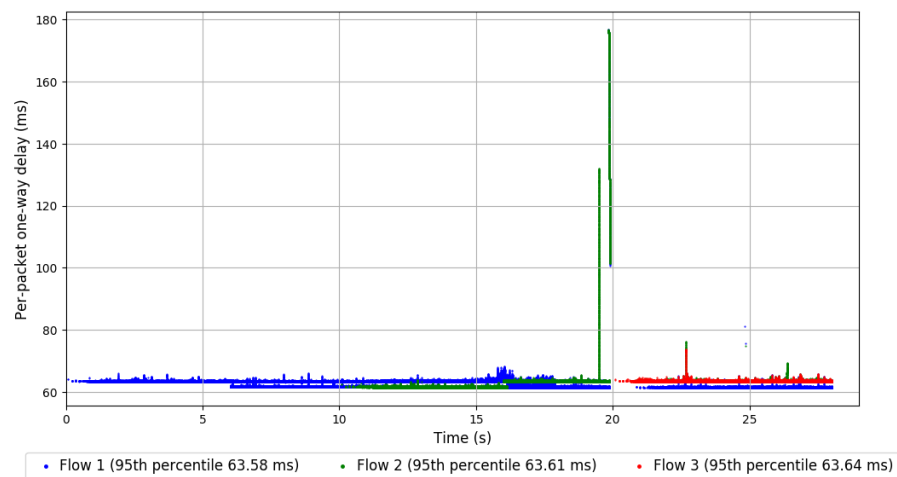
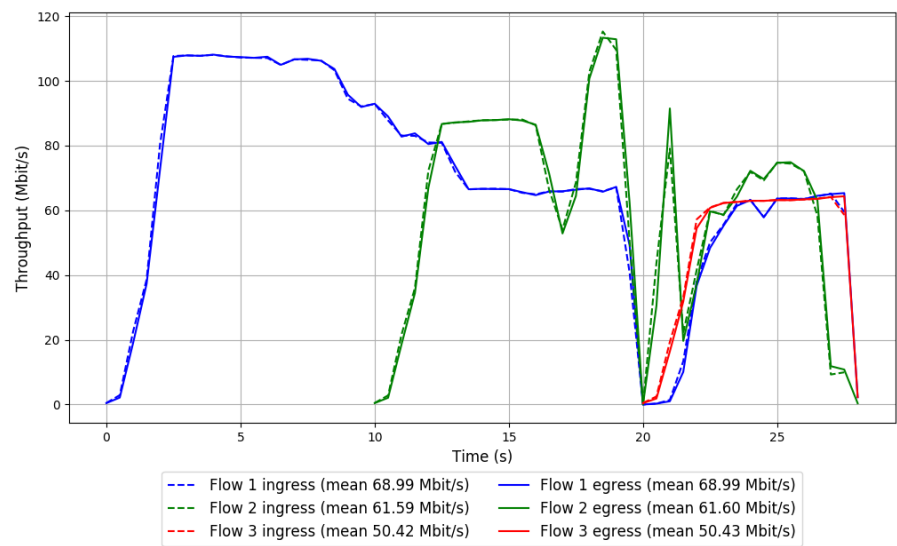
-- Flow 3:

Average throughput: 50.43 Mbit/s

95th percentile per-packet one-way delay: 63.644 ms

Loss rate: 0.02%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

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

End at: 2017-12-01 12:39:35

Below is generated by plot.py at 2017-12-01 14:56:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.38 Mbit/s

95th percentile per-packet one-way delay: 63.655 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.34 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 73.26 Mbit/s

95th percentile per-packet one-way delay: 63.648 ms

Loss rate: 0.00%

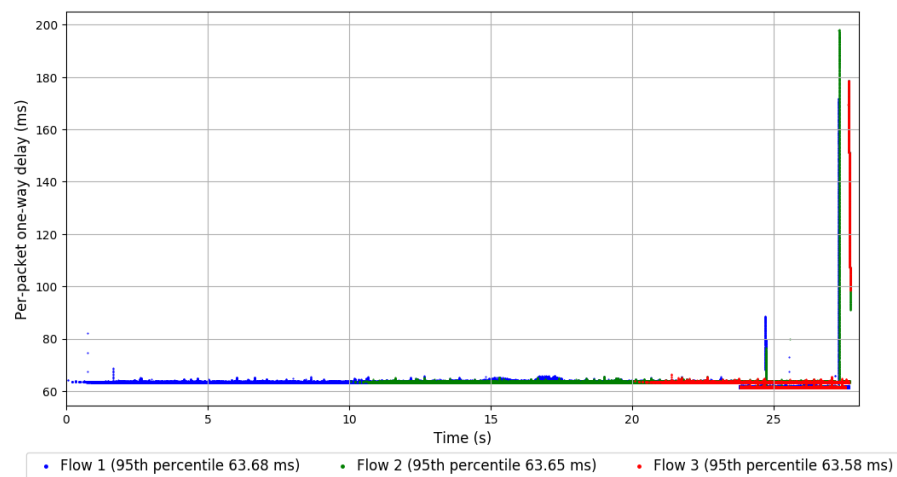
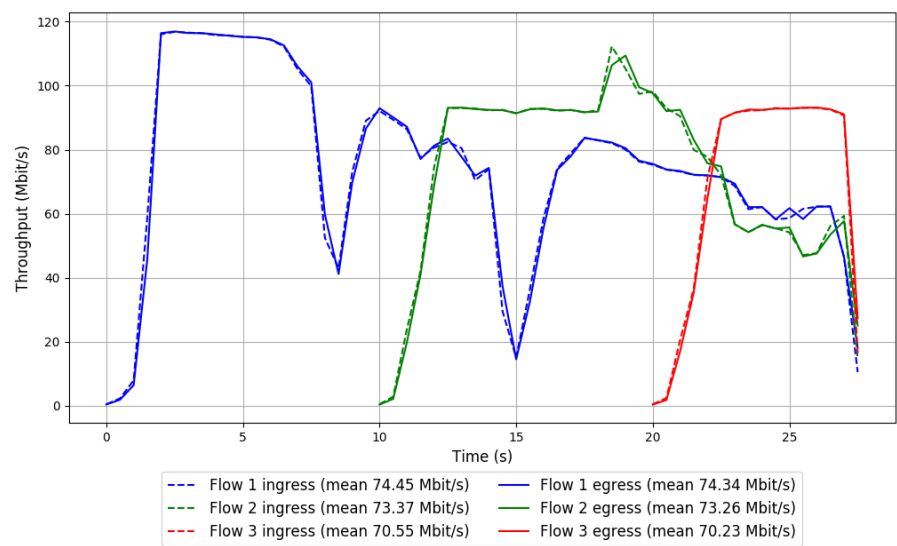
-- Flow 3:

Average throughput: 70.23 Mbit/s

95th percentile per-packet one-way delay: 63.578 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-01 12:51:14

End at: 2017-12-01 12:51:44

Below is generated by plot.py at 2017-12-01 14:56:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.45 Mbit/s

95th percentile per-packet one-way delay: 63.608 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.56 Mbit/s

95th percentile per-packet one-way delay: 63.554 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.66 Mbit/s

95th percentile per-packet one-way delay: 63.697 ms

Loss rate: 0.00%

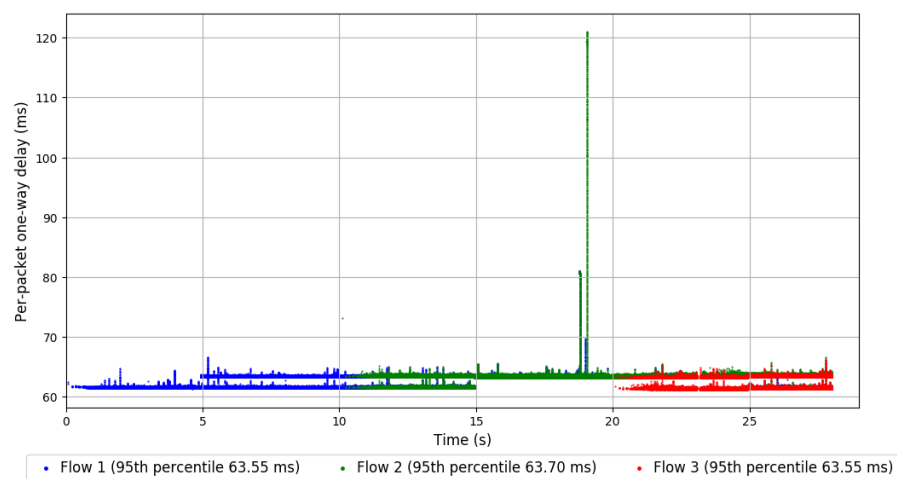
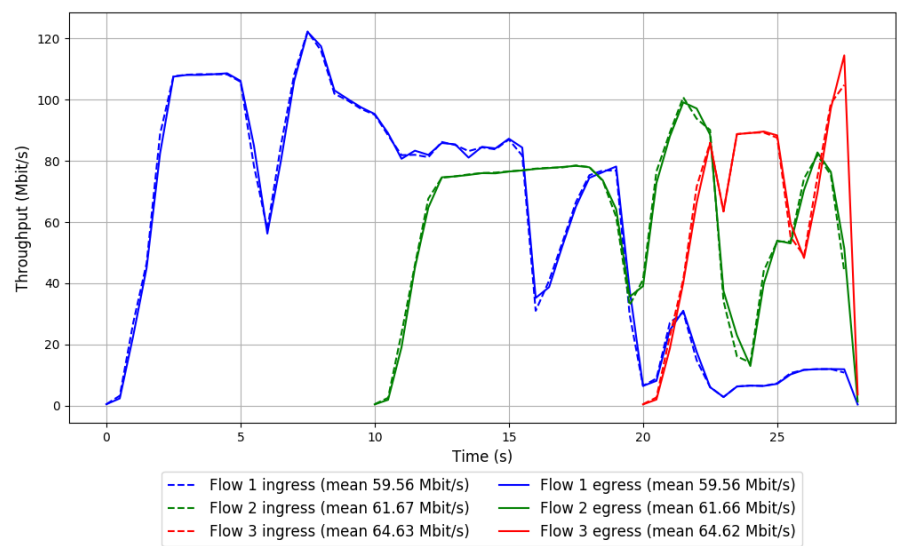
-- Flow 3:

Average throughput: 64.62 Mbit/s

95th percentile per-packet one-way delay: 63.554 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

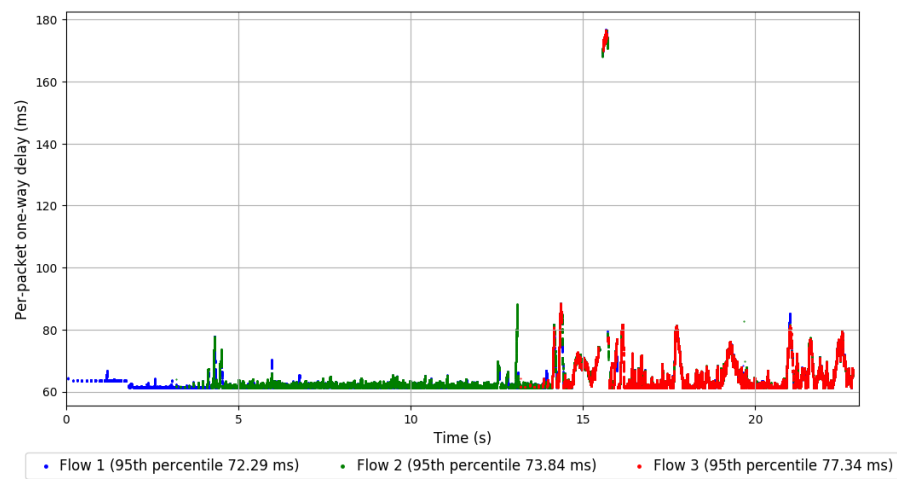
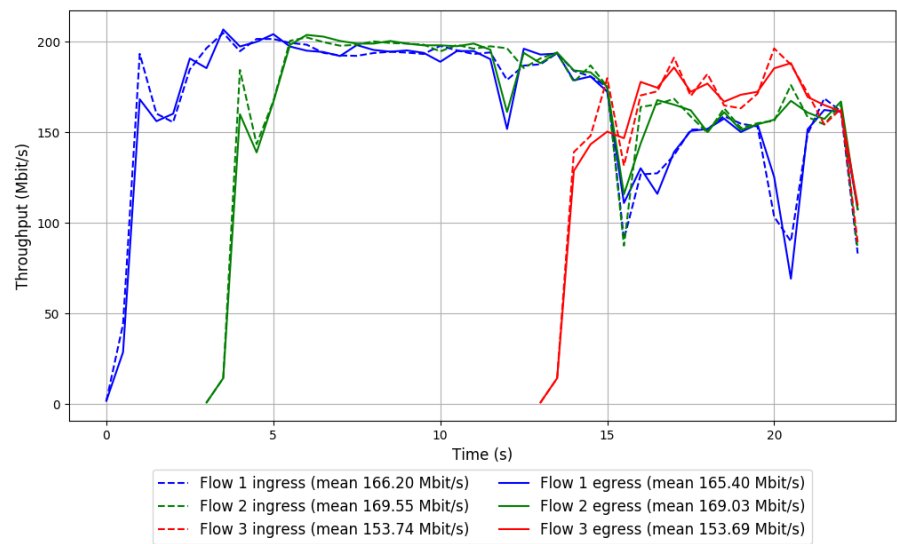


Run 1: Statistics of Indigo

Start at: 2017-12-01 11:03:12

End at: 2017-12-01 11:03:42

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-01 11:15:31

End at: 2017-12-01 11:16:01

Below is generated by plot.py at 2017-12-01 14:59:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 330.79 Mbit/s

95th percentile per-packet one-way delay: 72.390 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 178.93 Mbit/s

95th percentile per-packet one-way delay: 69.934 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 160.24 Mbit/s

95th percentile per-packet one-way delay: 72.815 ms

Loss rate: 0.00%

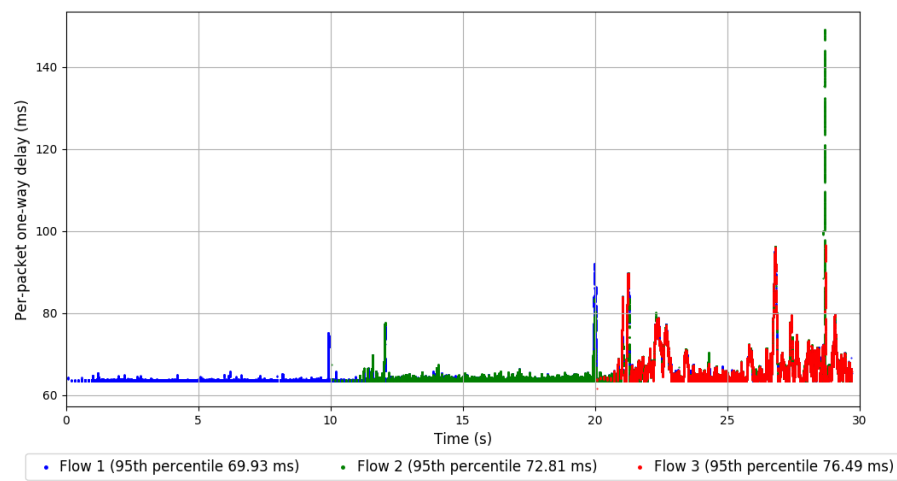
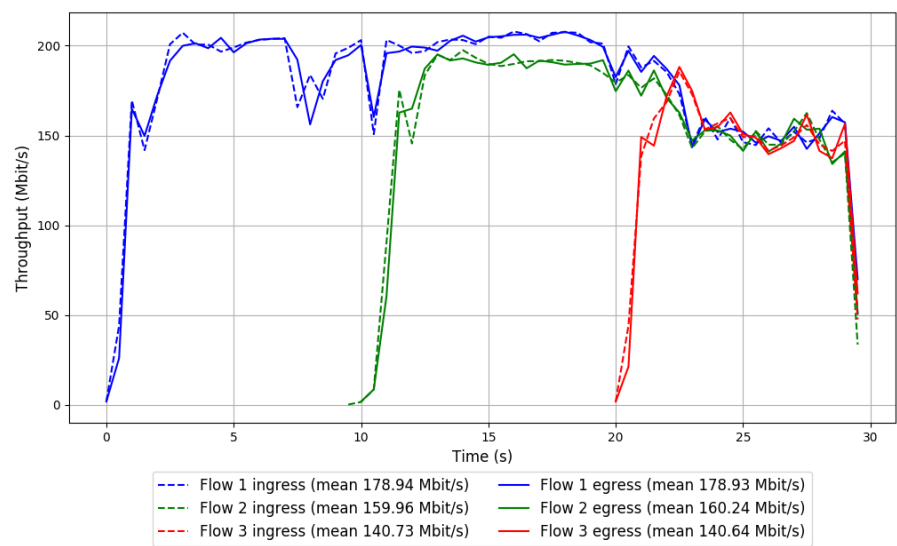
-- Flow 3:

Average throughput: 140.64 Mbit/s

95th percentile per-packet one-way delay: 76.490 ms

Loss rate: 0.05%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-01 11:27:50

End at: 2017-12-01 11:28:20

Below is generated by plot.py at 2017-12-01 15:00:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 338.79 Mbit/s

95th percentile per-packet one-way delay: 70.138 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 183.03 Mbit/s

95th percentile per-packet one-way delay: 68.021 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 165.63 Mbit/s

95th percentile per-packet one-way delay: 71.065 ms

Loss rate: 0.00%

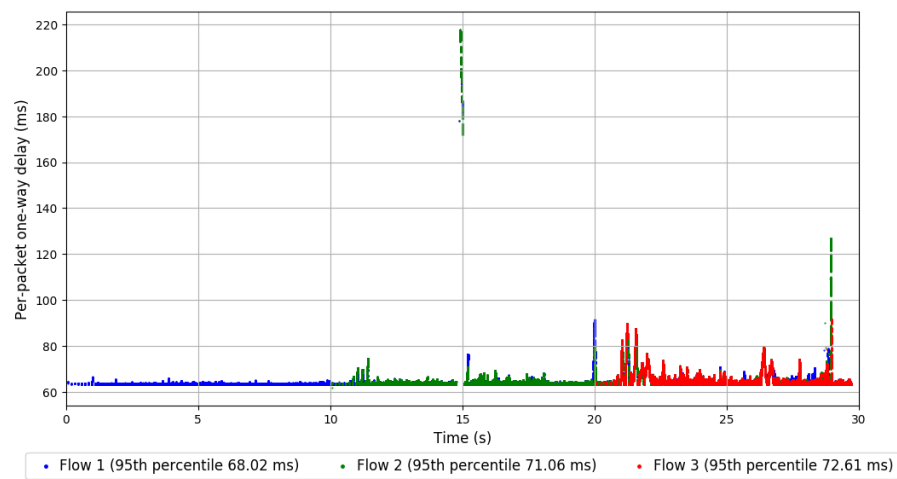
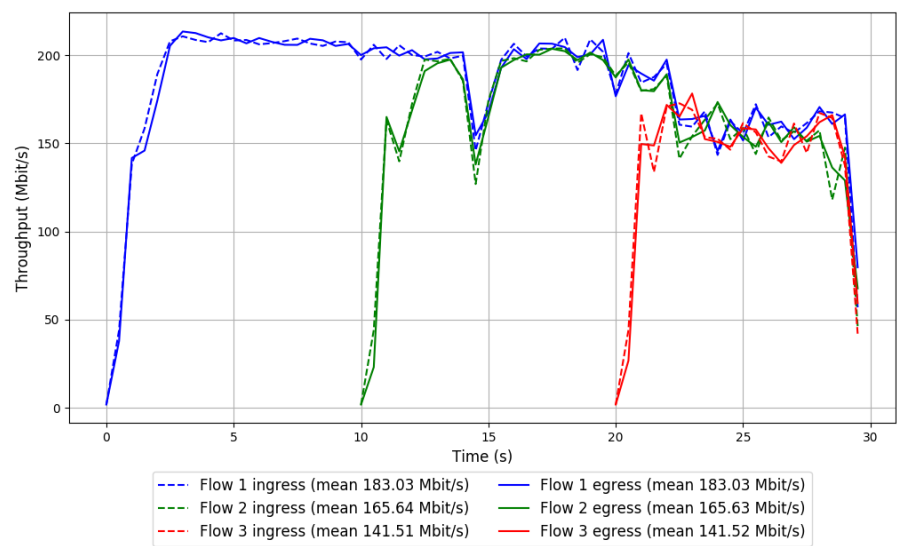
-- Flow 3:

Average throughput: 141.52 Mbit/s

95th percentile per-packet one-way delay: 72.614 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-01 11:40:07

End at: 2017-12-01 11:40:37

Below is generated by plot.py at 2017-12-01 15:00:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.93 Mbit/s

95th percentile per-packet one-way delay: 69.938 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 178.00 Mbit/s

95th percentile per-packet one-way delay: 68.027 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 174.60 Mbit/s

95th percentile per-packet one-way delay: 70.206 ms

Loss rate: 0.00%

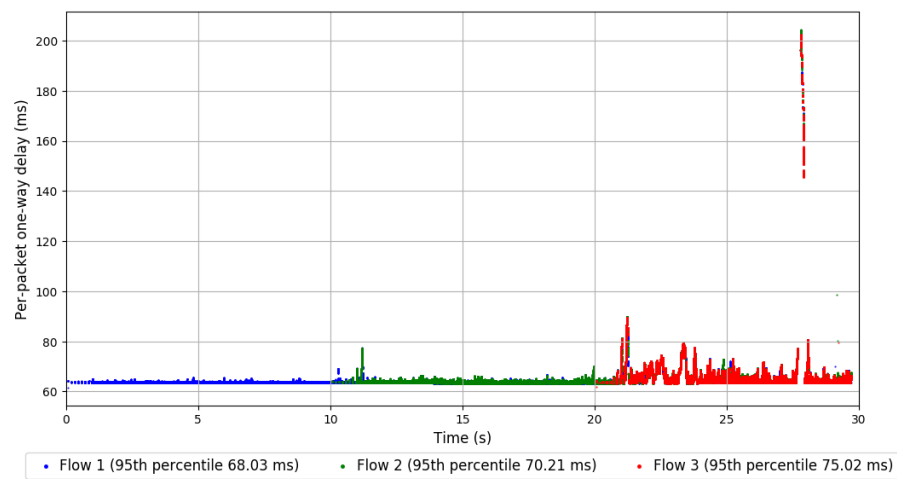
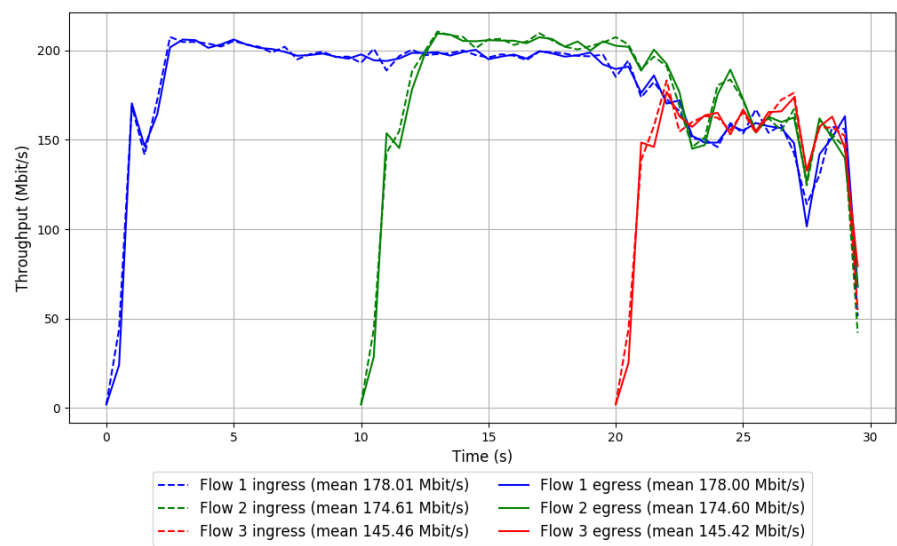
-- Flow 3:

Average throughput: 145.42 Mbit/s

95th percentile per-packet one-way delay: 75.018 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link

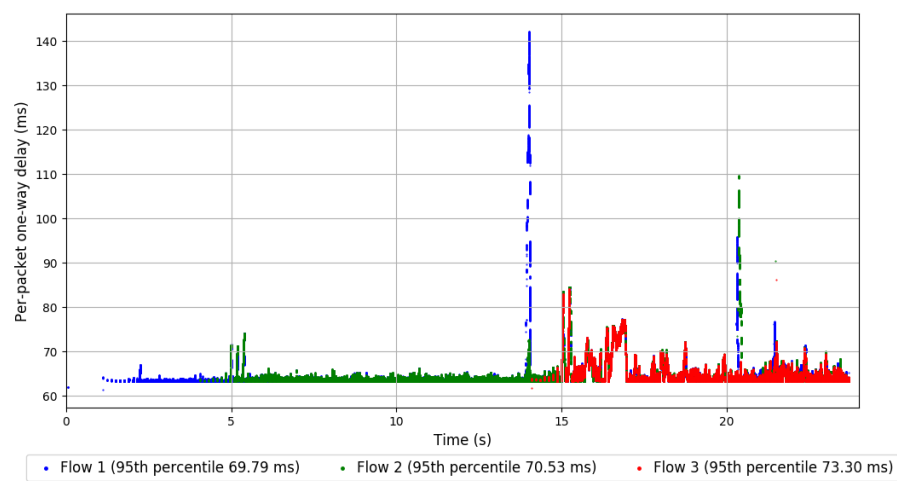
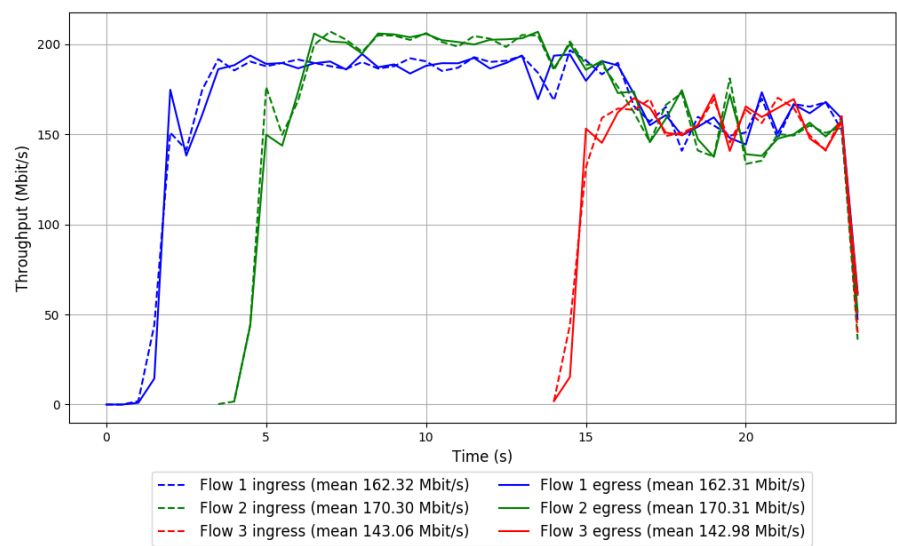


Run 5: Statistics of Indigo

Start at: 2017-12-01 11:52:25

End at: 2017-12-01 11:52:55

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-01 12:04:41

End at: 2017-12-01 12:05:11

Below is generated by plot.py at 2017-12-01 15:00:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 321.98 Mbit/s

95th percentile per-packet one-way delay: 73.712 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 177.62 Mbit/s

95th percentile per-packet one-way delay: 71.397 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 165.52 Mbit/s

95th percentile per-packet one-way delay: 74.304 ms

Loss rate: 0.12%

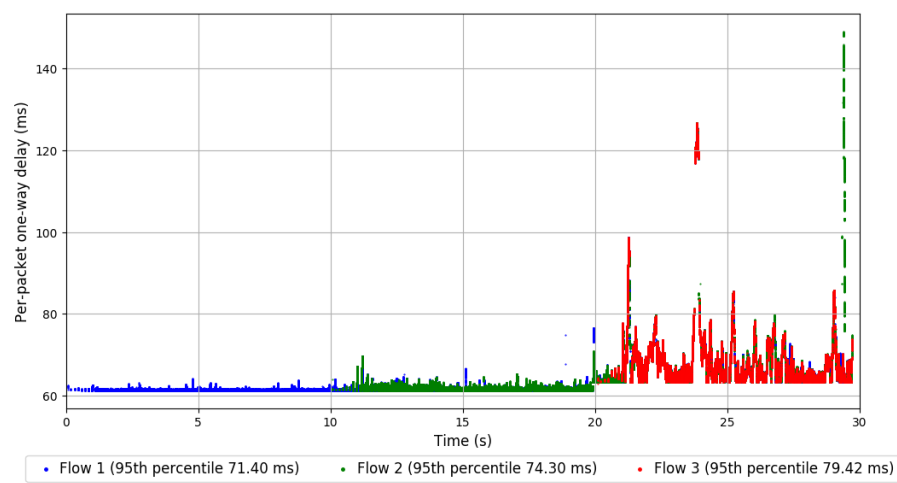
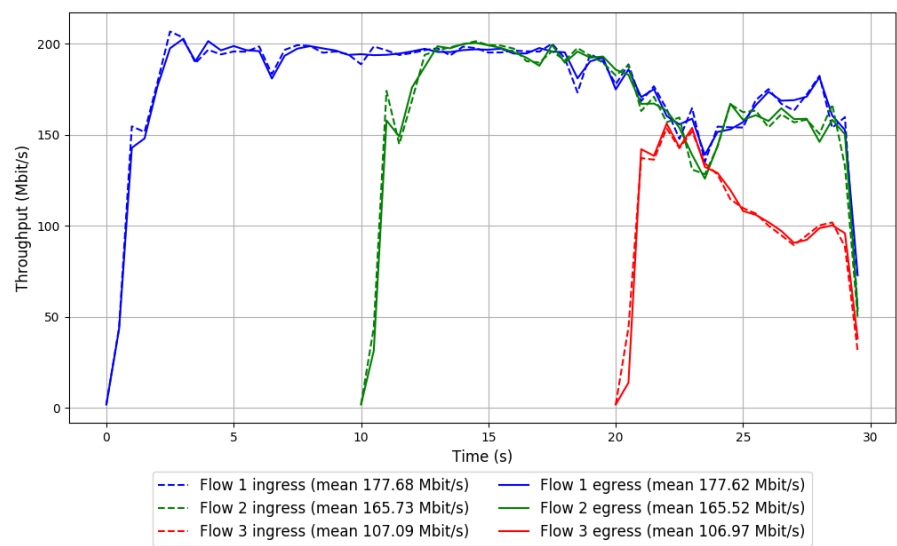
-- Flow 3:

Average throughput: 106.97 Mbit/s

95th percentile per-packet one-way delay: 79.418 ms

Loss rate: 0.11%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-01 12:16:57

End at: 2017-12-01 12:17:27

Below is generated by plot.py at 2017-12-01 15:01:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 323.46 Mbit/s

95th percentile per-packet one-way delay: 66.284 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 172.96 Mbit/s

95th percentile per-packet one-way delay: 65.221 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 158.31 Mbit/s

95th percentile per-packet one-way delay: 66.130 ms

Loss rate: 0.01%

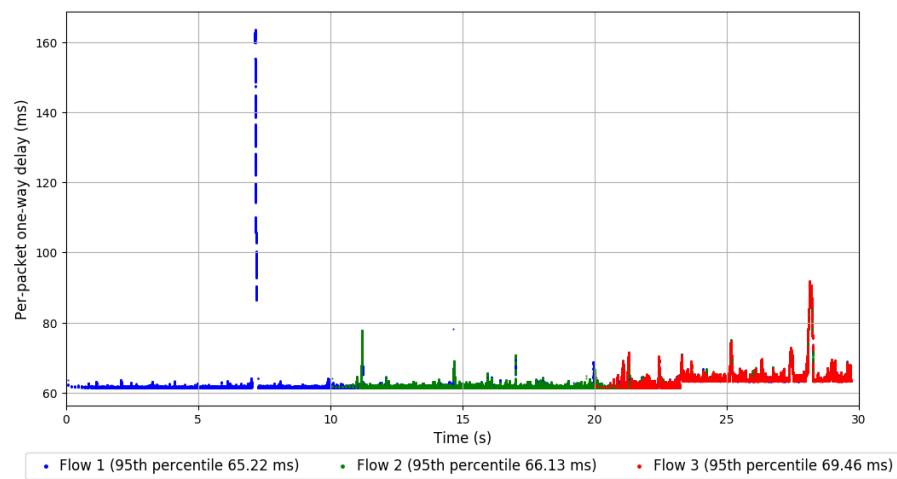
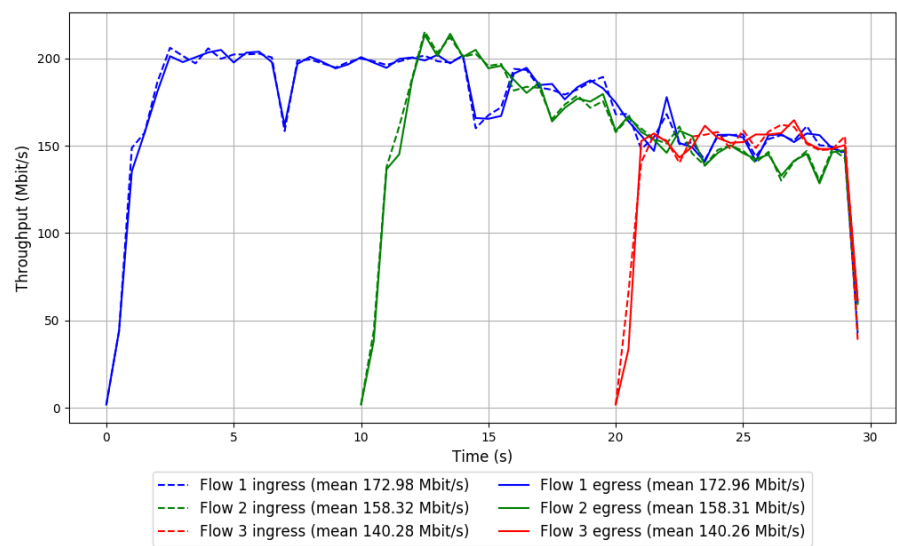
-- Flow 3:

Average throughput: 140.26 Mbit/s

95th percentile per-packet one-way delay: 69.462 ms

Loss rate: 0.02%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-01 12:29:03

End at: 2017-12-01 12:29:33

Below is generated by plot.py at 2017-12-01 15:01:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 324.70 Mbit/s

95th percentile per-packet one-way delay: 66.638 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 170.44 Mbit/s

95th percentile per-packet one-way delay: 65.997 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 163.90 Mbit/s

95th percentile per-packet one-way delay: 66.744 ms

Loss rate: 0.00%

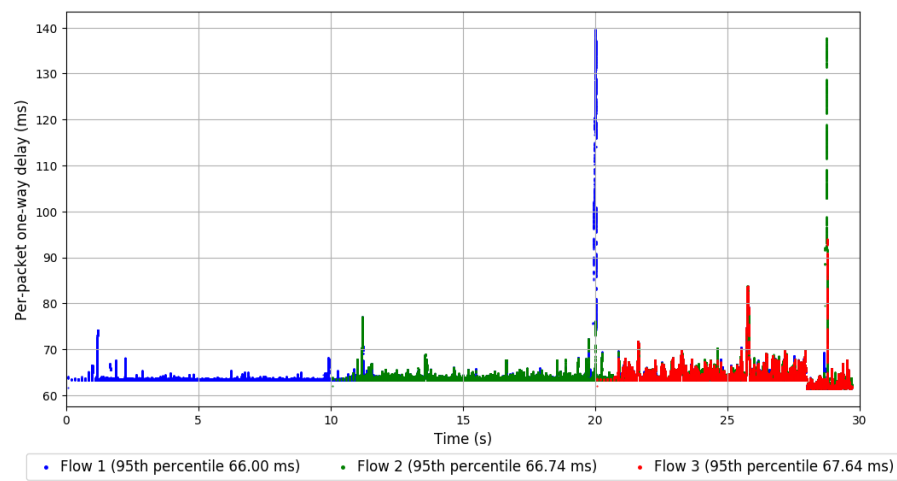
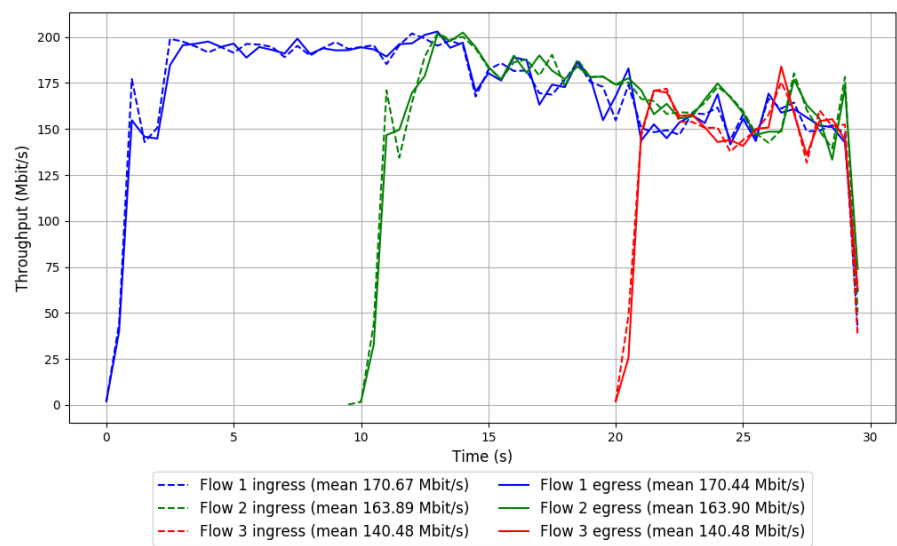
-- Flow 3:

Average throughput: 140.48 Mbit/s

95th percentile per-packet one-way delay: 67.644 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-01 12:41:27

End at: 2017-12-01 12:41:57

Below is generated by plot.py at 2017-12-01 15:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.28 Mbit/s

95th percentile per-packet one-way delay: 65.524 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 167.11 Mbit/s

95th percentile per-packet one-way delay: 65.108 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 158.07 Mbit/s

95th percentile per-packet one-way delay: 65.614 ms

Loss rate: 0.01%

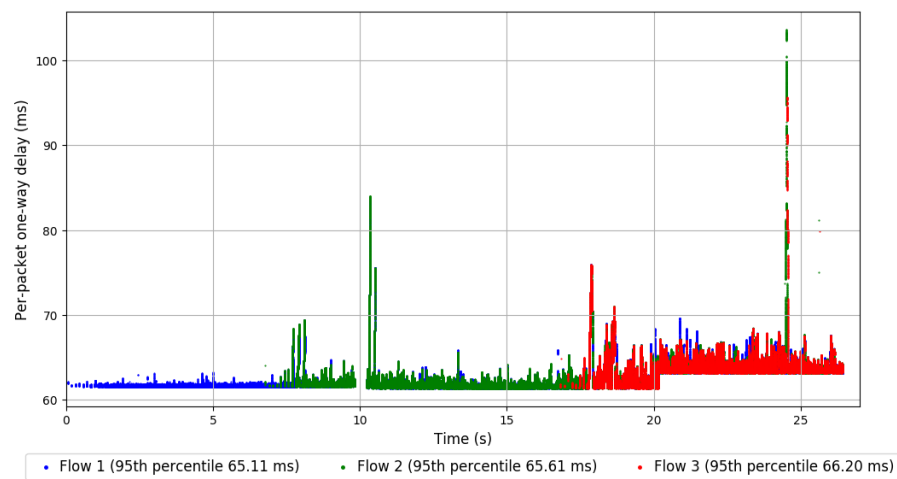
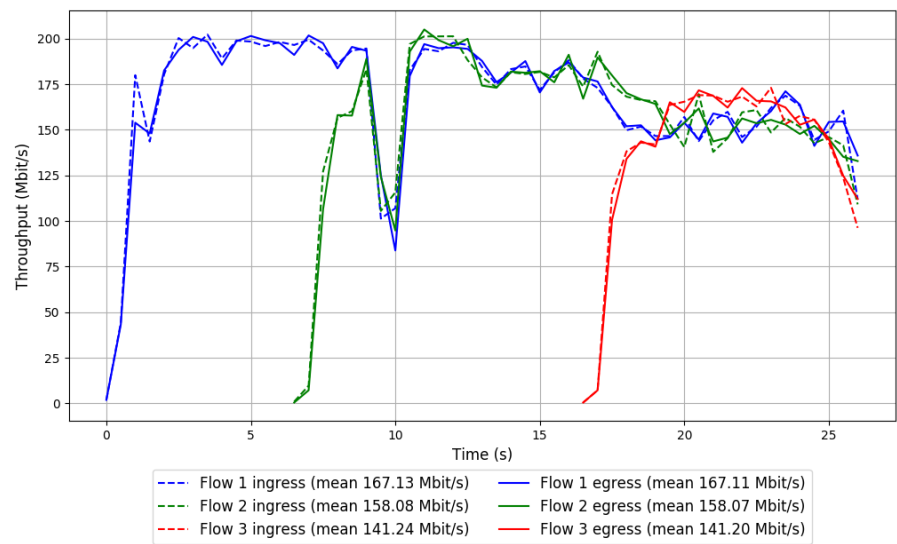
-- Flow 3:

Average throughput: 141.20 Mbit/s

95th percentile per-packet one-way delay: 66.198 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link

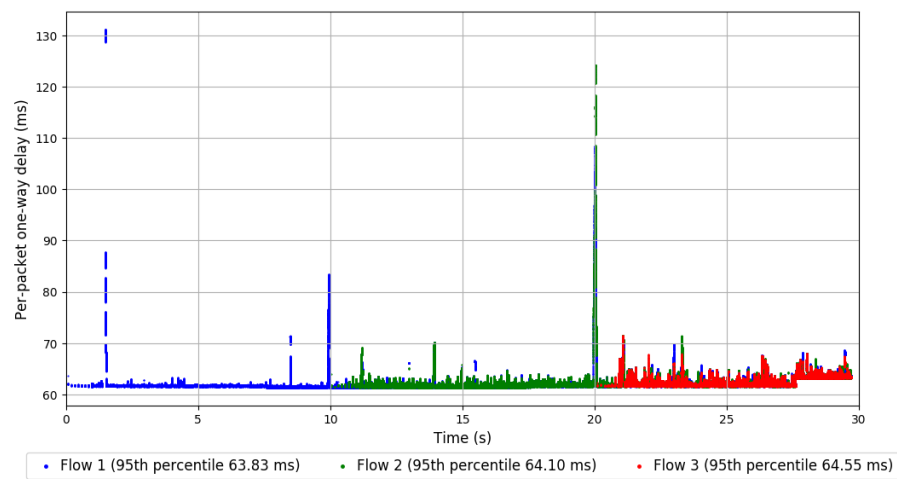
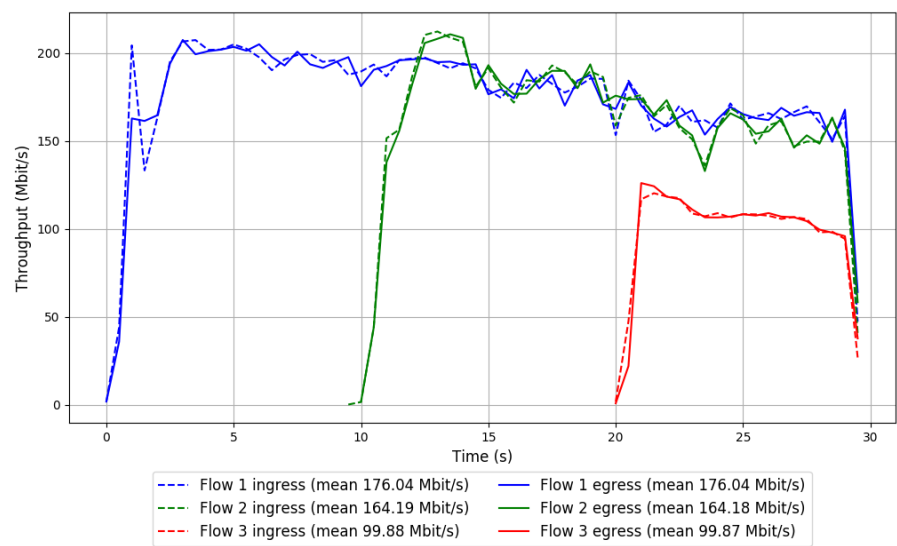


```
Run 10: Statistics of Indigo

Start at: 2017-12-01 12:53:33
End at: 2017-12-01 12:54:03

# Below is generated by plot.py at 2017-12-01 15:05:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.18 Mbit/s
95th percentile per-packet one-way delay: 64.017 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 176.04 Mbit/s
95th percentile per-packet one-way delay: 63.828 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 164.18 Mbit/s
95th percentile per-packet one-way delay: 64.102 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 99.87 Mbit/s
95th percentile per-packet one-way delay: 64.548 ms
Loss rate: 0.00%
```

Run 10: Report of Indigo — Data Link

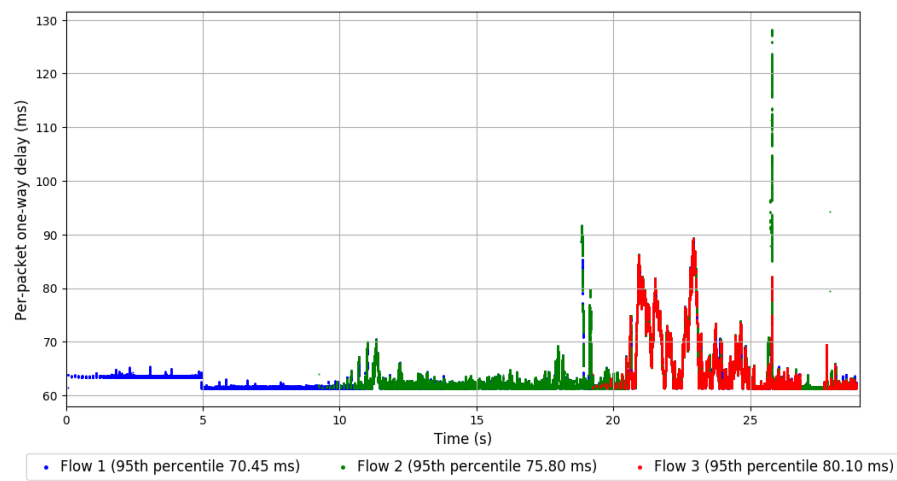
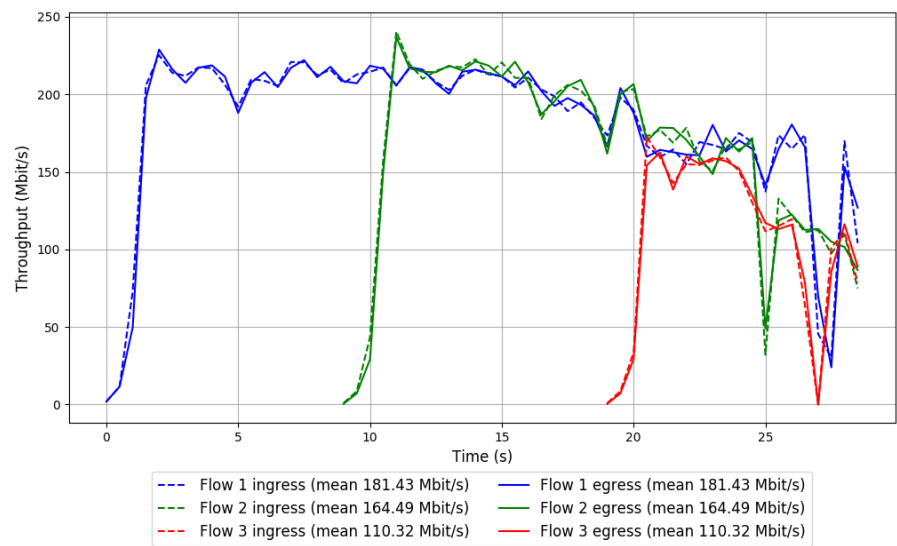


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-01 11:05:15
End at: 2017-12-01 11:05:45

# Below is generated by plot.py at 2017-12-01 15:05:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.38 Mbit/s
95th percentile per-packet one-way delay: 75.237 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 181.43 Mbit/s
95th percentile per-packet one-way delay: 70.452 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 164.49 Mbit/s
95th percentile per-packet one-way delay: 75.800 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 110.32 Mbit/s
95th percentile per-packet one-way delay: 80.104 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-calib — Data Link

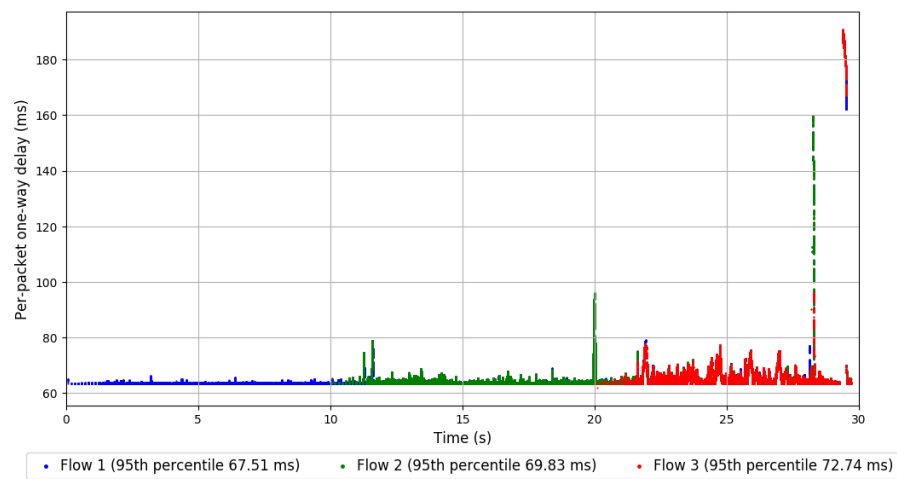
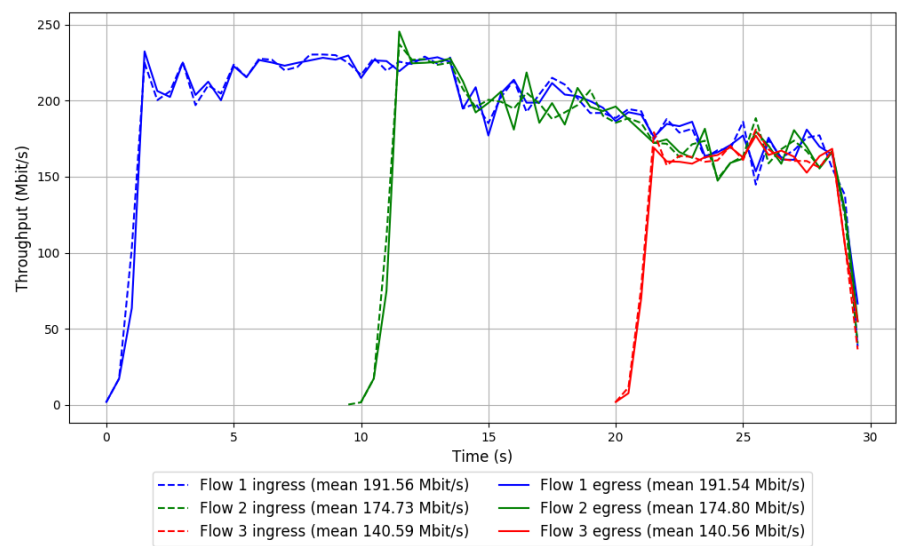


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-01 11:17:35
End at: 2017-12-01 11:18:05

# Below is generated by plot.py at 2017-12-01 15:06:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 352.98 Mbit/s
95th percentile per-packet one-way delay: 69.091 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 191.54 Mbit/s
95th percentile per-packet one-way delay: 67.510 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 174.80 Mbit/s
95th percentile per-packet one-way delay: 69.833 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 140.56 Mbit/s
95th percentile per-packet one-way delay: 72.744 ms
Loss rate: 0.02%
```

Run 2: Report of Indigo-calib — Data Link

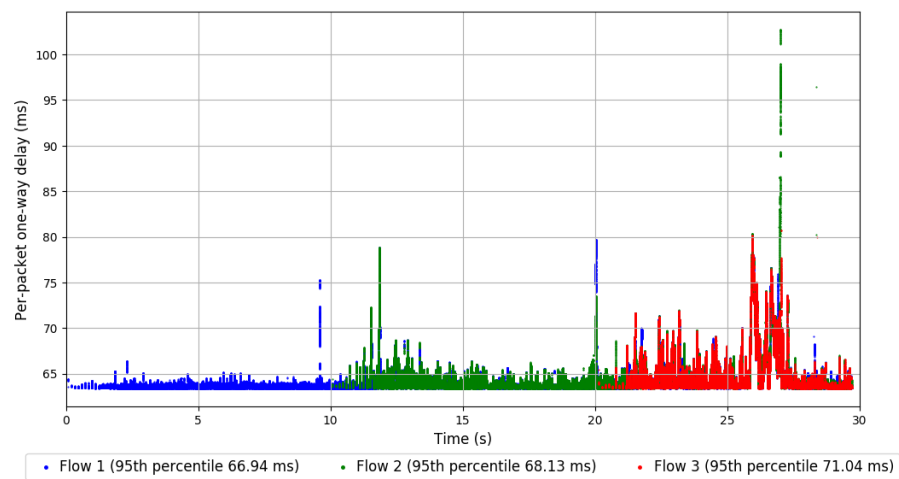
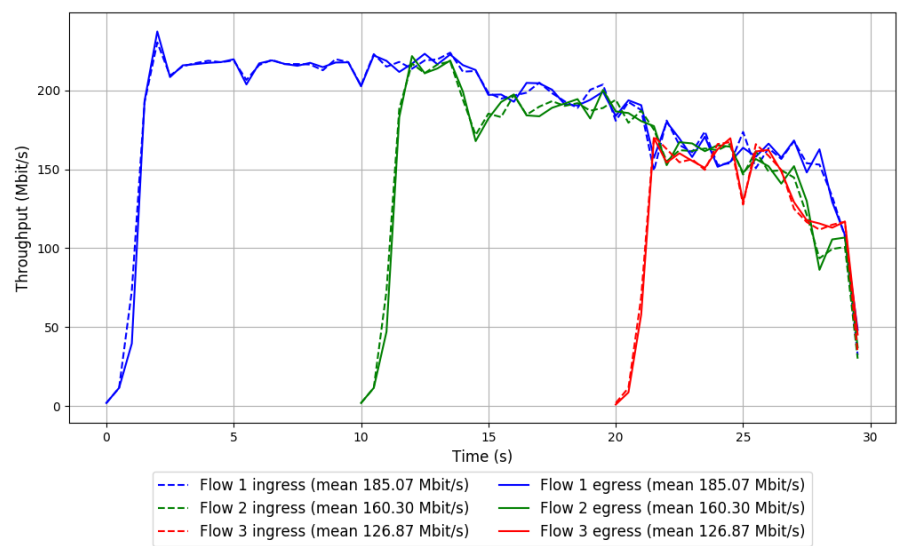


```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-01 11:29:55
End at: 2017-12-01 11:30:25

# Below is generated by plot.py at 2017-12-01 15:06:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.22 Mbit/s
95th percentile per-packet one-way delay: 68.034 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.07 Mbit/s
95th percentile per-packet one-way delay: 66.943 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 160.30 Mbit/s
95th percentile per-packet one-way delay: 68.131 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 126.87 Mbit/s
95th percentile per-packet one-way delay: 71.043 ms
Loss rate: 0.02%
```


Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-01 11:42:13

End at: 2017-12-01 11:42:43

Below is generated by plot.py at 2017-12-01 15:06:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 344.59 Mbit/s

95th percentile per-packet one-way delay: 74.441 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 186.53 Mbit/s

95th percentile per-packet one-way delay: 71.096 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 178.95 Mbit/s

95th percentile per-packet one-way delay: 75.532 ms

Loss rate: 0.01%

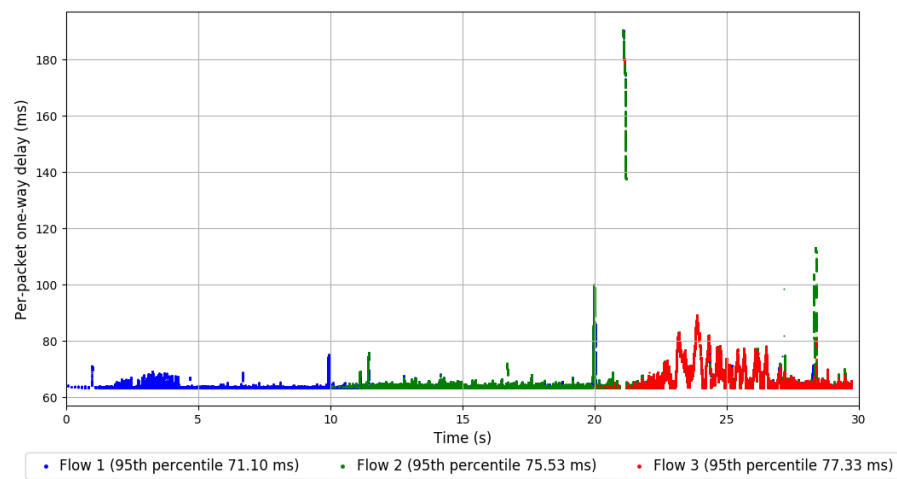
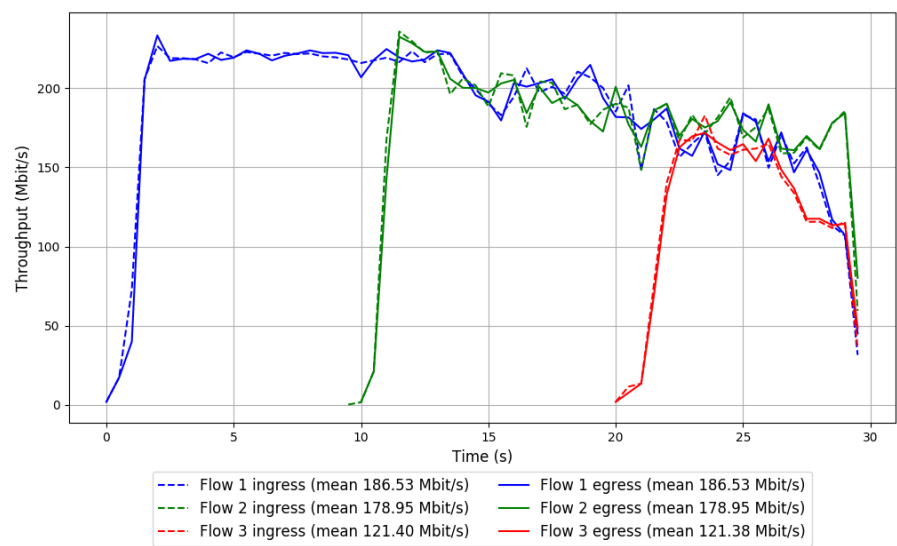
-- Flow 3:

Average throughput: 121.38 Mbit/s

95th percentile per-packet one-way delay: 77.332 ms

Loss rate: 0.02%

Run 4: Report of Indigo-calib — Data Link

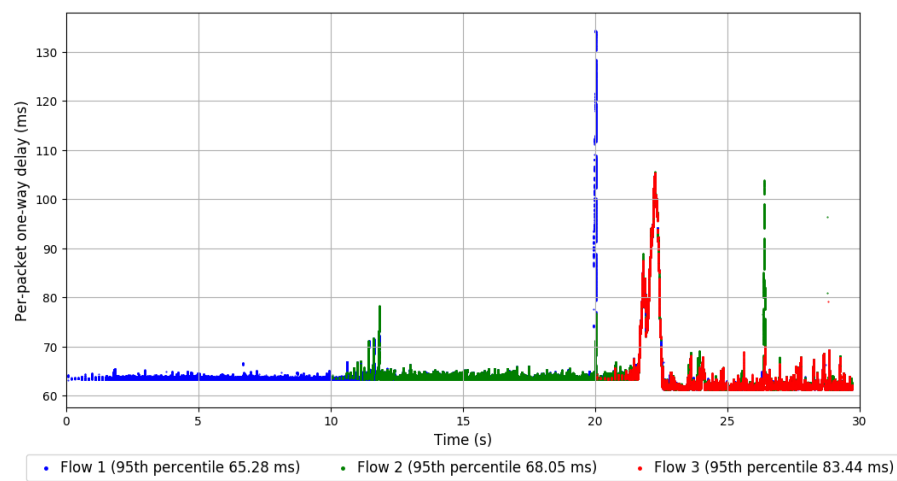
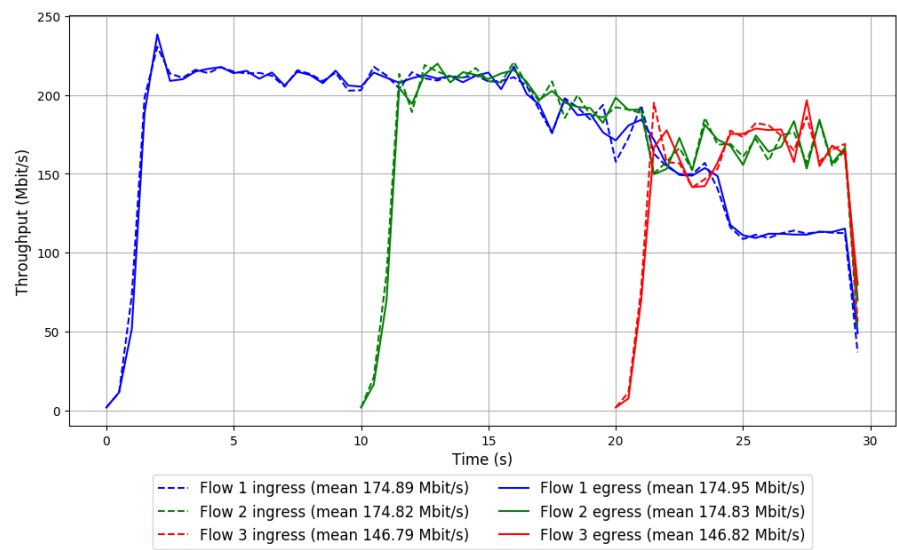


```
Run 5: Statistics of Indigo-calib

Start at: 2017-12-01 11:54:29
End at: 2017-12-01 11:54:59

# Below is generated by plot.py at 2017-12-01 15:06:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.45 Mbit/s
95th percentile per-packet one-way delay: 67.985 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 174.95 Mbit/s
95th percentile per-packet one-way delay: 65.275 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 174.83 Mbit/s
95th percentile per-packet one-way delay: 68.049 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 146.82 Mbit/s
95th percentile per-packet one-way delay: 83.438 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-calib — Data Link

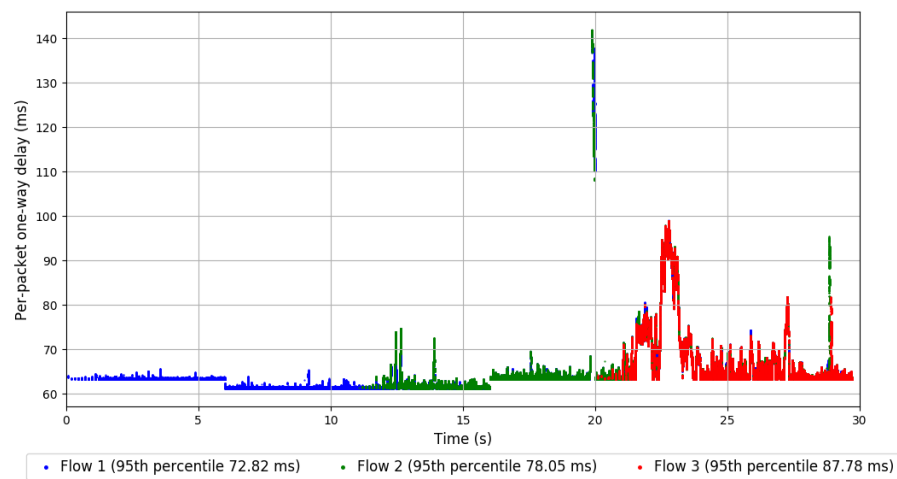
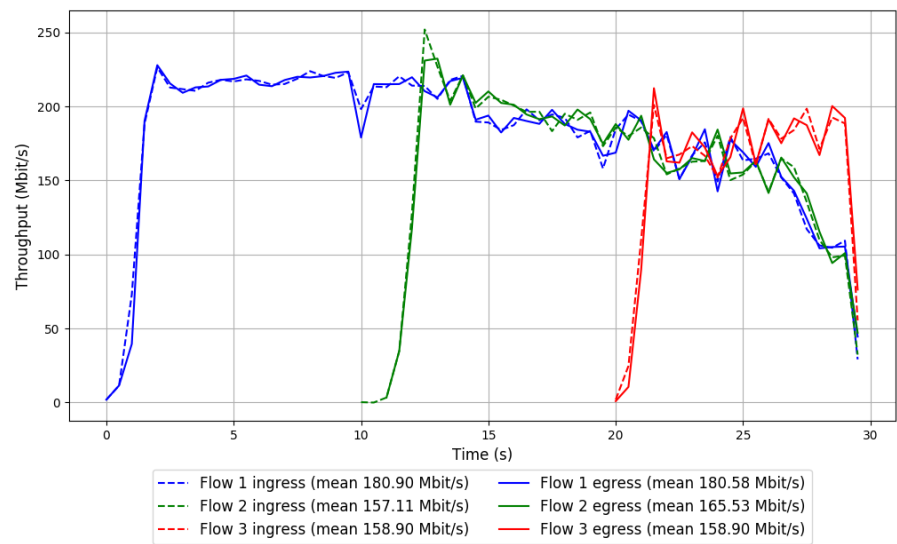


```
Run 6: Statistics of Indigo-calib

Start at: 2017-12-01 12:06:45
End at: 2017-12-01 12:07:15

# Below is generated by plot.py at 2017-12-01 15:06:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 335.97 Mbit/s
95th percentile per-packet one-way delay: 76.600 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 180.58 Mbit/s
95th percentile per-packet one-way delay: 72.819 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 165.53 Mbit/s
95th percentile per-packet one-way delay: 78.047 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 158.90 Mbit/s
95th percentile per-packet one-way delay: 87.783 ms
Loss rate: 0.01%
```

Run 6: Report of Indigo-calib — Data Link

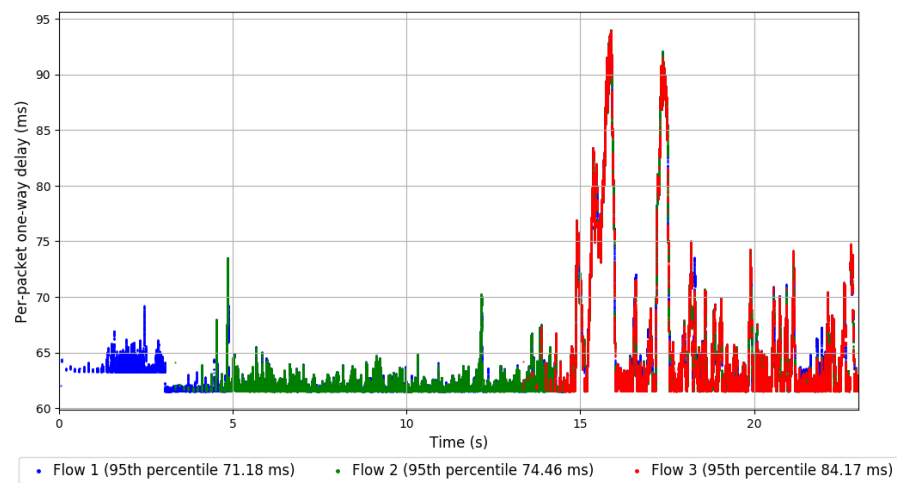
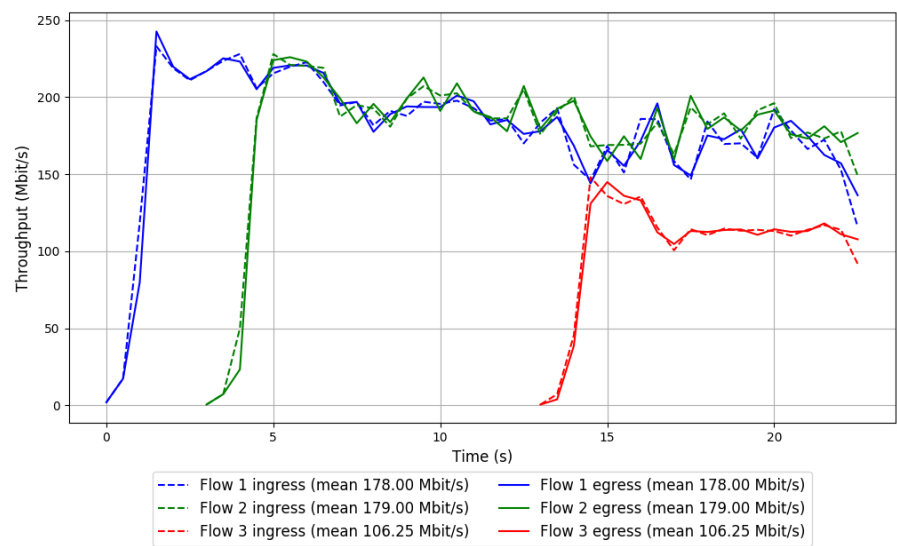


Run 7: Statistics of Indigo-calib

Start at: 2017-12-01 12:19:01

End at: 2017-12-01 12:19:31

Run 7: Report of Indigo-calib — Data Link

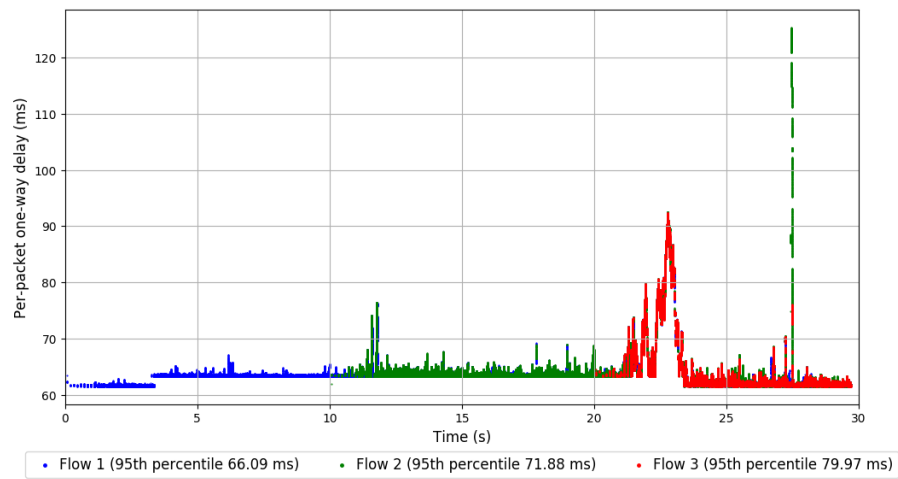
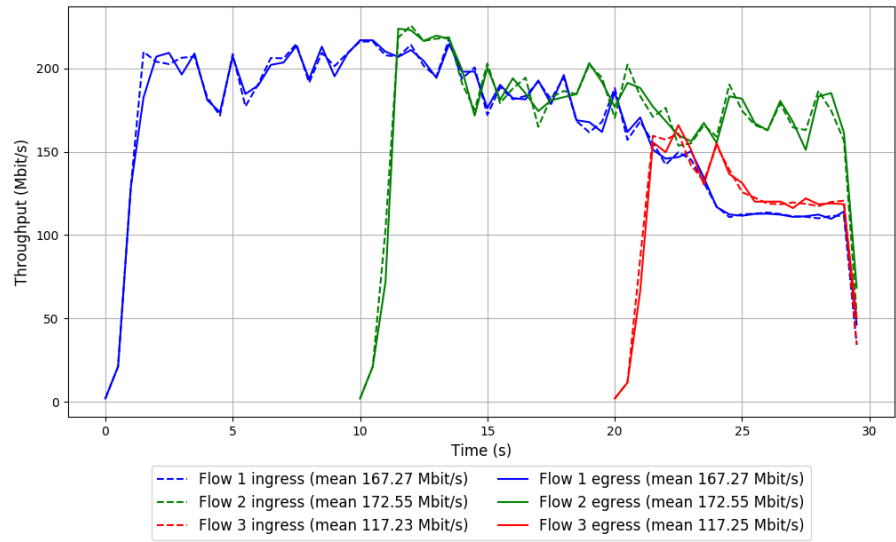


```
Run 8: Statistics of Indigo-calib

Start at: 2017-12-01 12:31:07
End at: 2017-12-01 12:31:37

# Below is generated by plot.py at 2017-12-01 15:07:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 319.69 Mbit/s
95th percentile per-packet one-way delay: 71.469 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 167.27 Mbit/s
95th percentile per-packet one-way delay: 66.090 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 172.55 Mbit/s
95th percentile per-packet one-way delay: 71.883 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 117.25 Mbit/s
95th percentile per-packet one-way delay: 79.968 ms
Loss rate: 0.00%
```

Run 8: Report of Indigo-calib — Data Link

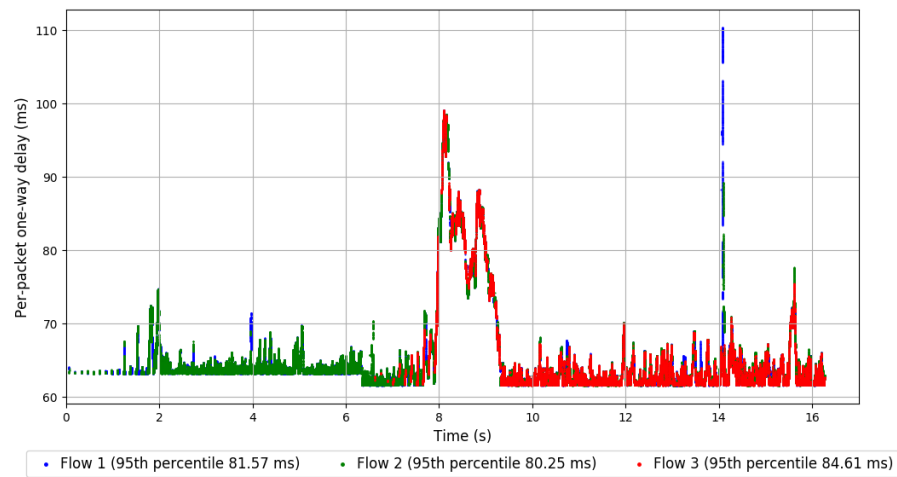
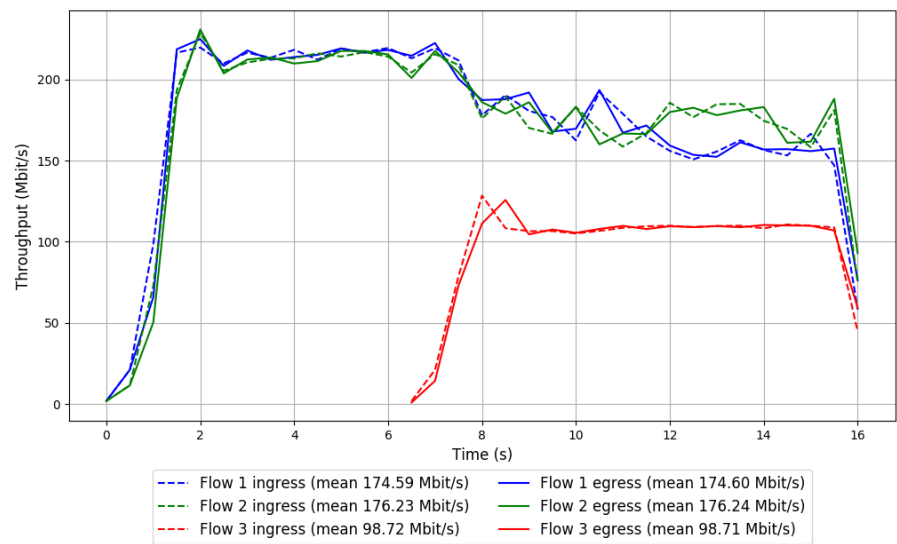


Run 9: Statistics of Indigo-calib

Start at: 2017-12-01 12:43:31

End at: 2017-12-01 12:44:01

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-01 12:55:37

End at: 2017-12-01 12:56:07

Below is generated by plot.py at 2017-12-01 15:08:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 354.85 Mbit/s

95th percentile per-packet one-way delay: 78.943 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 185.95 Mbit/s

95th percentile per-packet one-way delay: 75.172 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 182.81 Mbit/s

95th percentile per-packet one-way delay: 79.488 ms

Loss rate: 0.19%

-- Flow 3:

Average throughput: 147.00 Mbit/s

95th percentile per-packet one-way delay: 84.852 ms

Loss rate: 0.28%

Run 10: Report of Indigo-calib — Data Link

