

Pantheon Report

Generated at 2017-12-12 17:32:20 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

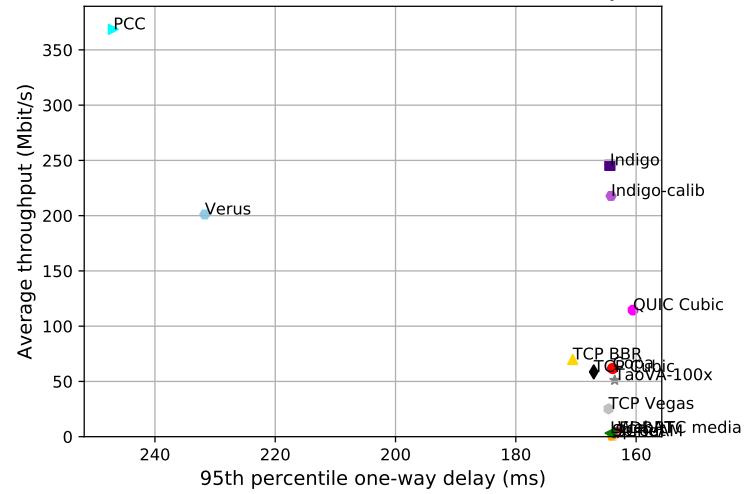
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

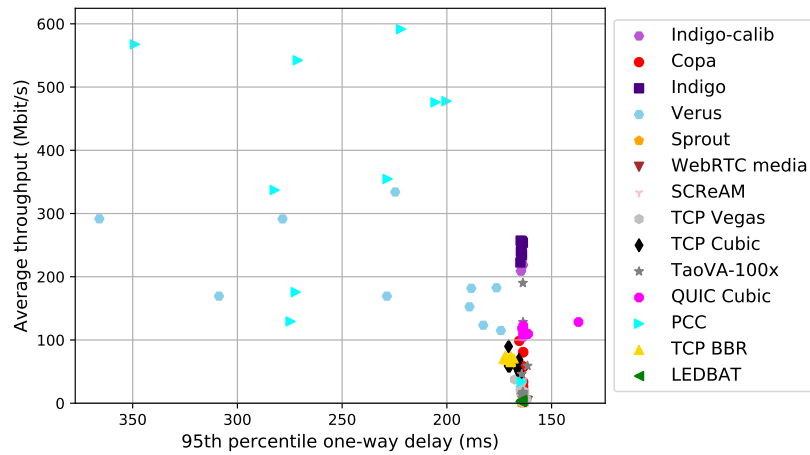
Git summary:

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

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



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



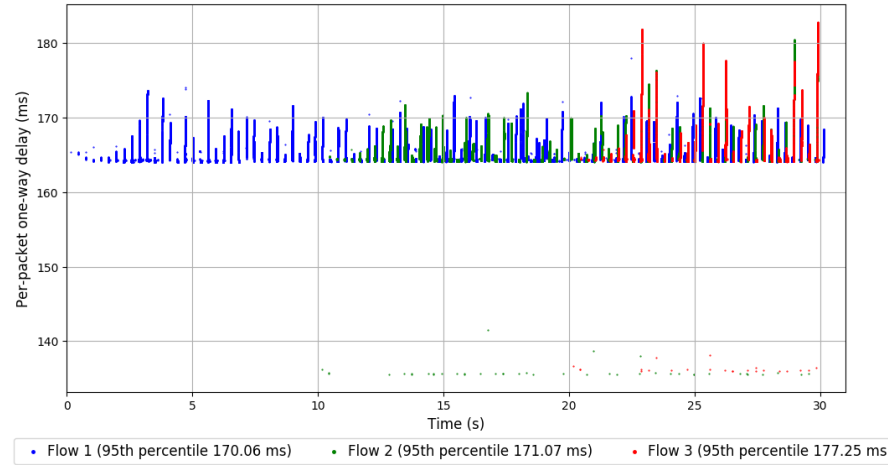
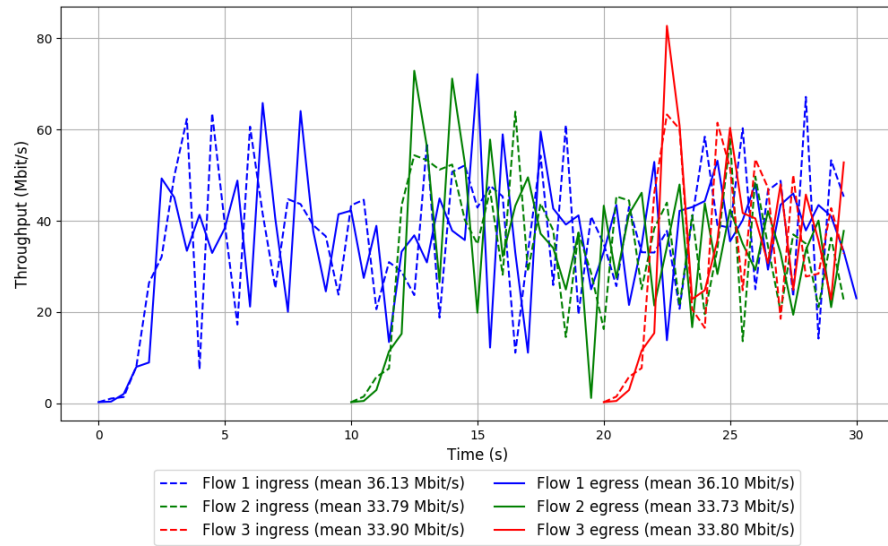
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	34.37	36.07	35.63	170.01	170.17	171.82	0.05	0.38	0.37
TCP Cubic	10	34.46	28.51	15.82	166.71	167.21	163.54	0.00	0.12	0.17
LEDBAT	10	1.79	1.68	1.01	164.35	164.32	164.66	0.31	0.02	0.17
PCC	10	245.15	138.56	95.51	217.29	211.44	220.60	1.48	1.26	1.92
QUIC Cubic	10	59.80	59.28	48.30	154.86	155.10	154.70	0.04	0.01	0.09
SCReAM	9	0.21	0.21	0.21	154.32	150.91	157.31	0.01	0.02	0.16
WebRTC media	10	1.95	1.17	0.36	157.63	154.87	160.91	0.03	0.06	0.17
Sprout	10	0.31	0.34	0.40	163.97	164.00	161.03	0.00	0.10	0.01
TaoVA-100x	10	24.93	32.95	26.86	163.33	163.56	163.33	0.03	0.04	0.04
TCP Vegas	10	13.04	13.52	9.32	162.33	163.88	164.75	0.09	0.20	0.30
Verus	10	132.94	84.92	38.97	219.78	251.95	213.11	1.16	3.21	1.74
Copa	8	46.38	17.39	15.00	163.75	163.20	163.69	0.14	0.06	5.89
Indigo	10	131.70	124.87	96.86	164.16	164.46	165.32	0.07	0.15	0.40
Indigo-calib	9	115.24	110.52	91.35	164.00	164.20	164.56	0.10	0.10	0.30

```
Run 1: Statistics of TCP BBR

Start at: 2017-12-12 13:59:13
End at: 2017-12-12 13:59:43

# Below is generated by plot.py at 2017-12-12 16:59:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.33 Mbit/s
95th percentile per-packet one-way delay: 171.578 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 36.10 Mbit/s
95th percentile per-packet one-way delay: 170.061 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 33.73 Mbit/s
95th percentile per-packet one-way delay: 171.070 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.80 Mbit/s
95th percentile per-packet one-way delay: 177.247 ms
Loss rate: 0.00%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

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

End at: 2017-12-12 14:13:16

Below is generated by plot.py at 2017-12-12 16:59:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.92 Mbit/s

95th percentile per-packet one-way delay: 172.894 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 35.08 Mbit/s

95th percentile per-packet one-way delay: 171.822 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.02 Mbit/s

95th percentile per-packet one-way delay: 174.604 ms

Loss rate: 0.00%

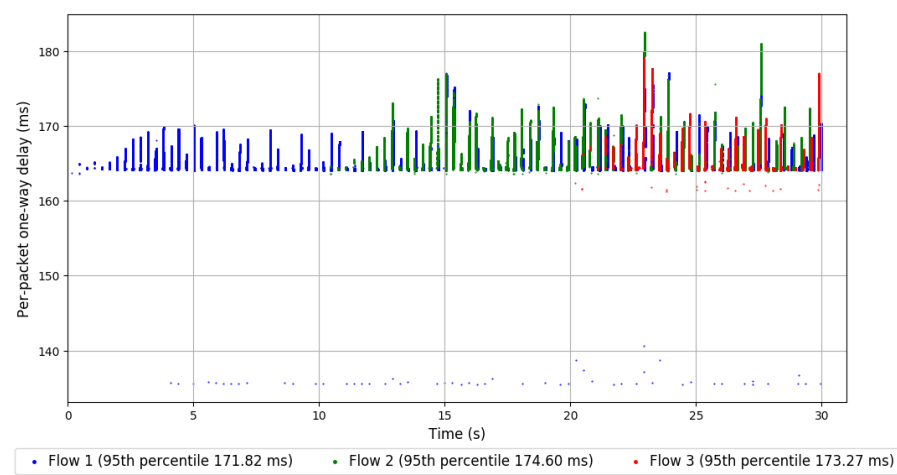
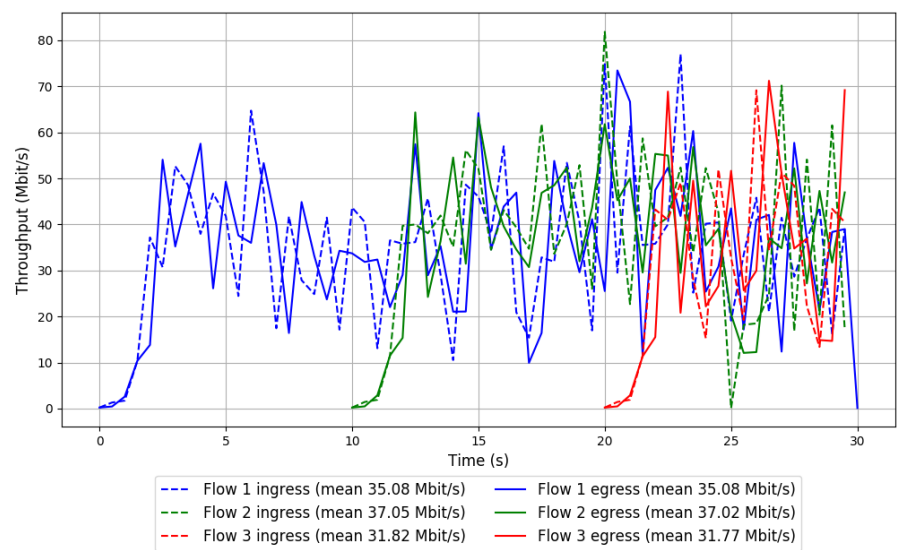
-- Flow 3:

Average throughput: 31.77 Mbit/s

95th percentile per-packet one-way delay: 173.270 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-12 14:26:07

End at: 2017-12-12 14:26:37

Below is generated by plot.py at 2017-12-12 16:59:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.04 Mbit/s

95th percentile per-packet one-way delay: 169.431 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 36.53 Mbit/s

95th percentile per-packet one-way delay: 169.052 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 39.58 Mbit/s

95th percentile per-packet one-way delay: 169.925 ms

Loss rate: 0.00%

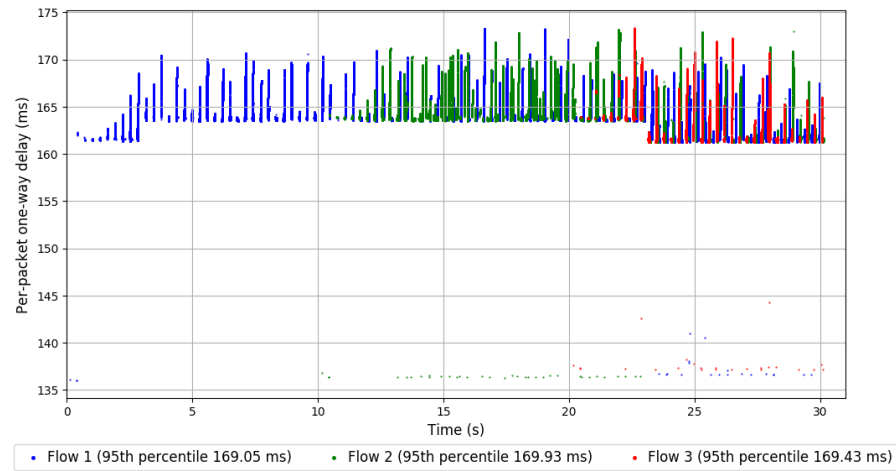
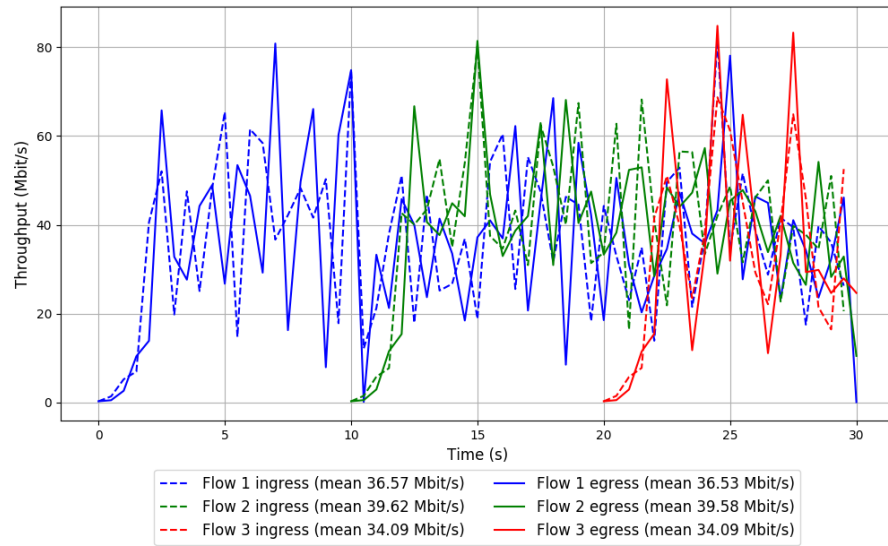
-- Flow 3:

Average throughput: 34.09 Mbit/s

95th percentile per-packet one-way delay: 169.425 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-12 14:39:06

End at: 2017-12-12 14:39:36

Below is generated by plot.py at 2017-12-12 16:59:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.45 Mbit/s

95th percentile per-packet one-way delay: 169.392 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 33.34 Mbit/s

95th percentile per-packet one-way delay: 169.507 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 35.00 Mbit/s

95th percentile per-packet one-way delay: 168.361 ms

Loss rate: 1.43%

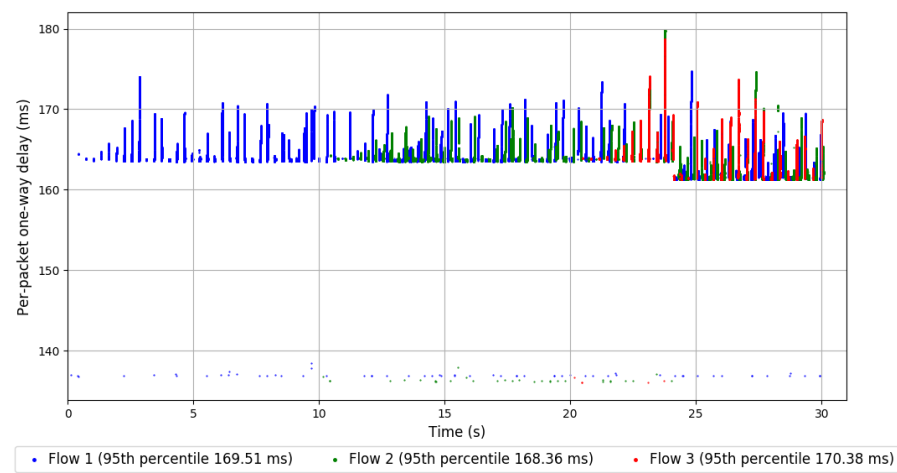
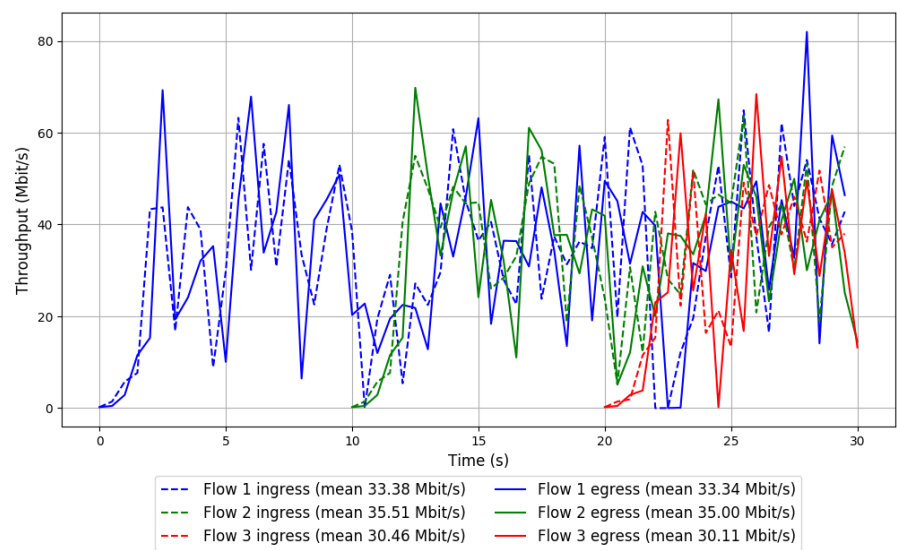
-- Flow 3:

Average throughput: 30.11 Mbit/s

95th percentile per-packet one-way delay: 170.377 ms

Loss rate: 0.83%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

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

End at: 2017-12-12 14:52:42

Below is generated by plot.py at 2017-12-12 16:59:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.90 Mbit/s

95th percentile per-packet one-way delay: 172.407 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 36.34 Mbit/s

95th percentile per-packet one-way delay: 170.553 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.95 Mbit/s

95th percentile per-packet one-way delay: 170.729 ms

Loss rate: 0.00%

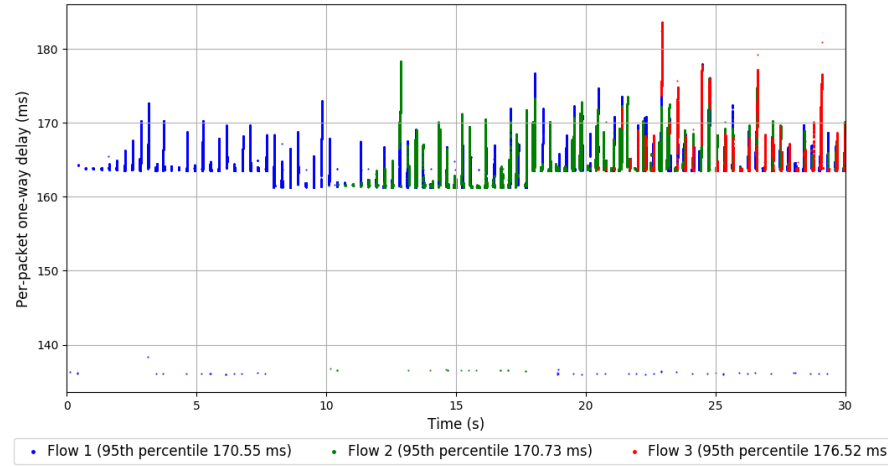
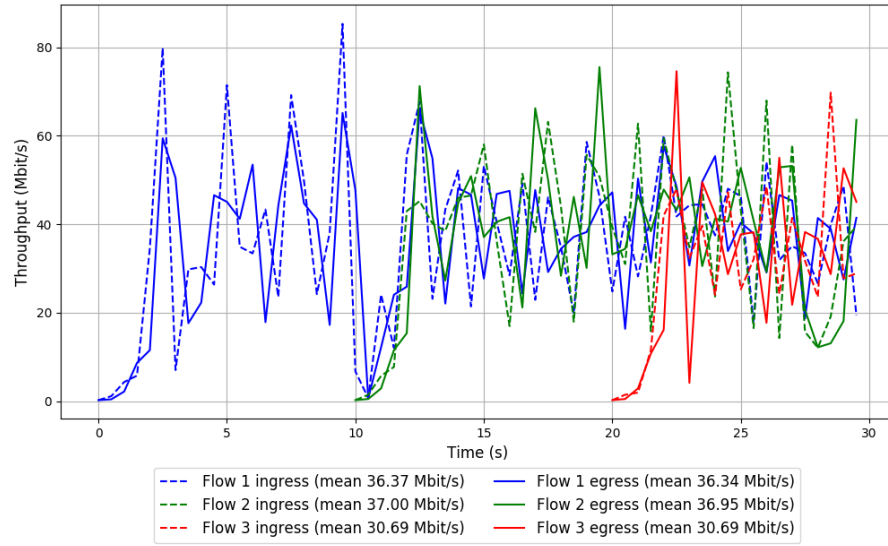
-- Flow 3:

Average throughput: 30.69 Mbit/s

95th percentile per-packet one-way delay: 176.517 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

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

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

Below is generated by plot.py at 2017-12-12 16:59:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.11 Mbit/s

95th percentile per-packet one-way delay: 169.539 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 33.89 Mbit/s

95th percentile per-packet one-way delay: 169.317 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.41 Mbit/s

95th percentile per-packet one-way delay: 169.289 ms

Loss rate: 0.31%

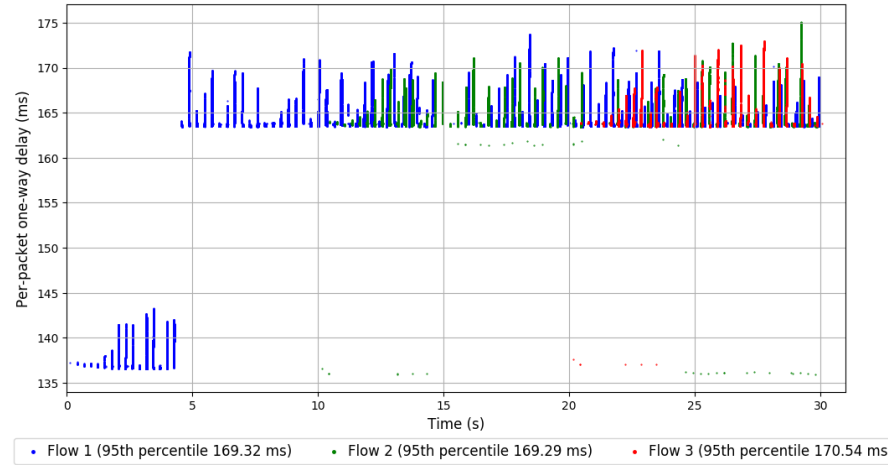
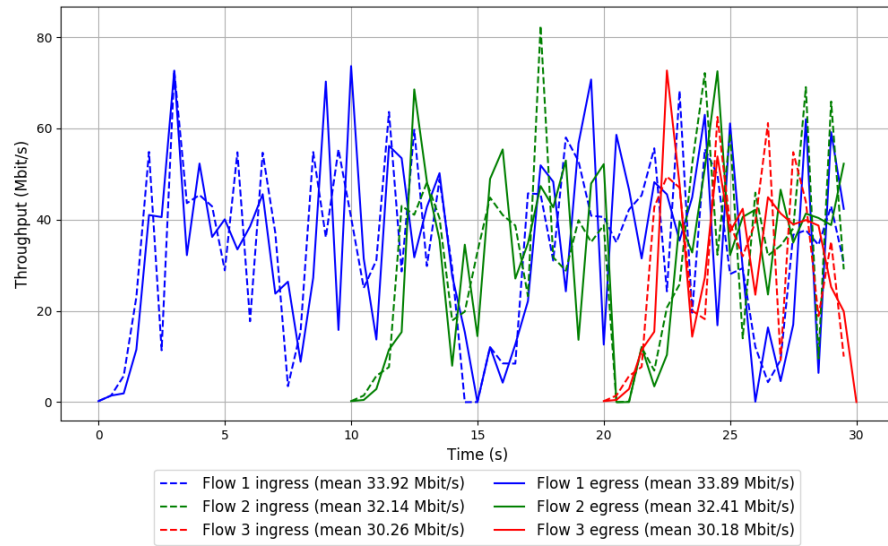
-- Flow 3:

Average throughput: 30.18 Mbit/s

95th percentile per-packet one-way delay: 170.541 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-12 15:19:19

End at: 2017-12-12 15:19:49

Below is generated by plot.py at 2017-12-12 16:59:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.17 Mbit/s

95th percentile per-packet one-way delay: 172.044 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 30.74 Mbit/s

95th percentile per-packet one-way delay: 172.313 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.68 Mbit/s

95th percentile per-packet one-way delay: 168.587 ms

Loss rate: 0.20%

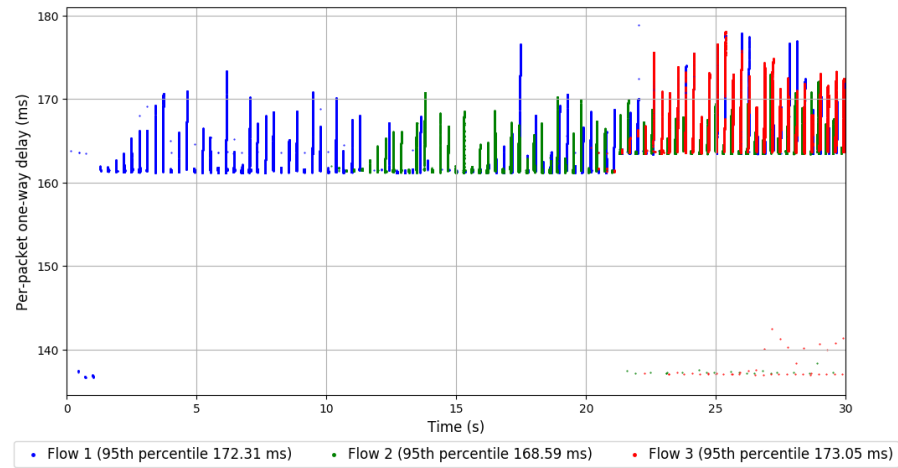
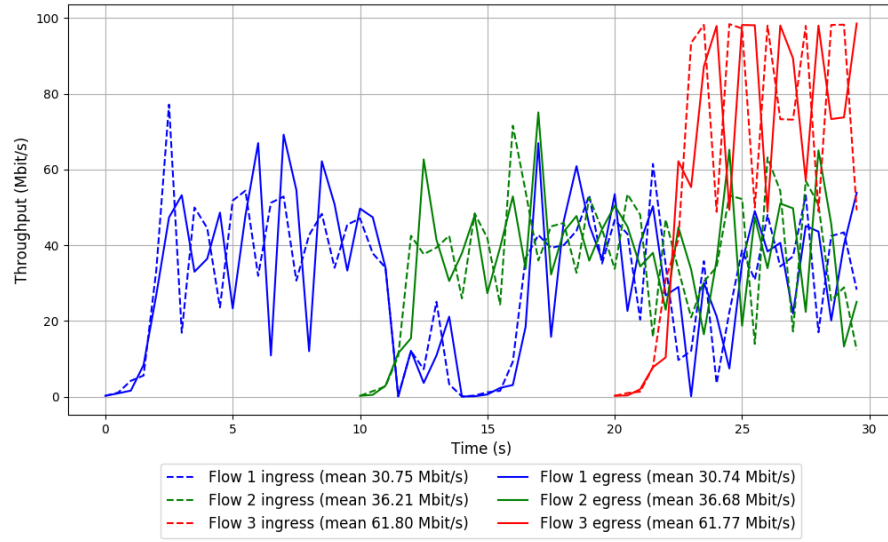
-- Flow 3:

Average throughput: 61.77 Mbit/s

95th percentile per-packet one-way delay: 173.050 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-12 15:33:17

End at: 2017-12-12 15:33:47

Below is generated by plot.py at 2017-12-12 16:59:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.72 Mbit/s

95th percentile per-packet one-way delay: 169.827 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 33.79 Mbit/s

95th percentile per-packet one-way delay: 169.326 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 35.29 Mbit/s

95th percentile per-packet one-way delay: 170.089 ms

Loss rate: 1.10%

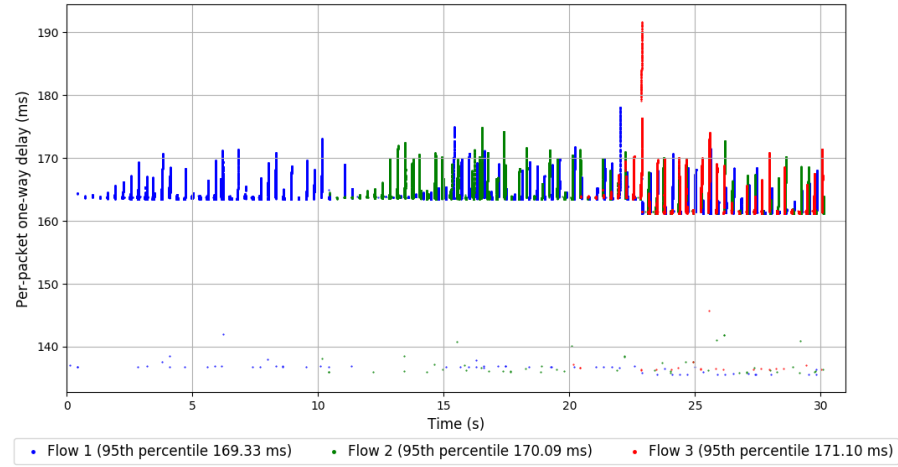
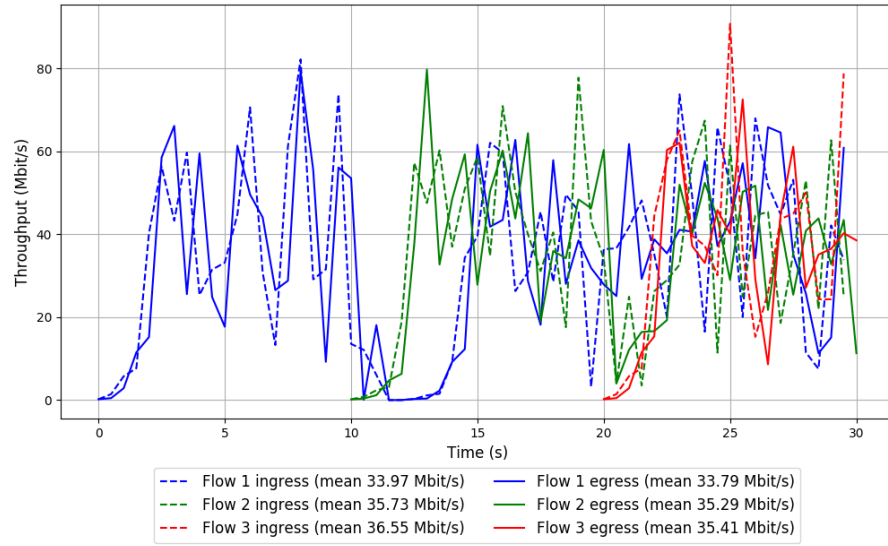
-- Flow 3:

Average throughput: 35.41 Mbit/s

95th percentile per-packet one-way delay: 171.098 ms

Loss rate: 2.84%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-12 15:47:02

End at: 2017-12-12 15:47:32

Below is generated by plot.py at 2017-12-12 17:00:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.84 Mbit/s

95th percentile per-packet one-way delay: 168.109 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 34.58 Mbit/s

95th percentile per-packet one-way delay: 168.467 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.35 Mbit/s

95th percentile per-packet one-way delay: 168.295 ms

Loss rate: 0.57%

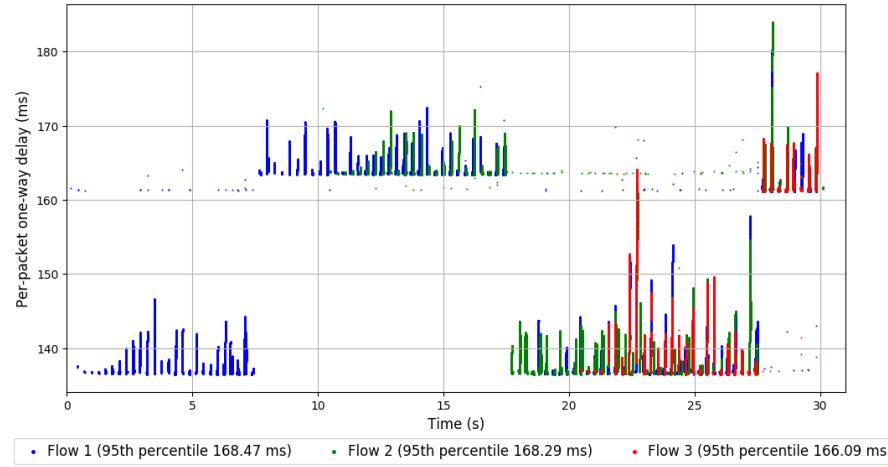
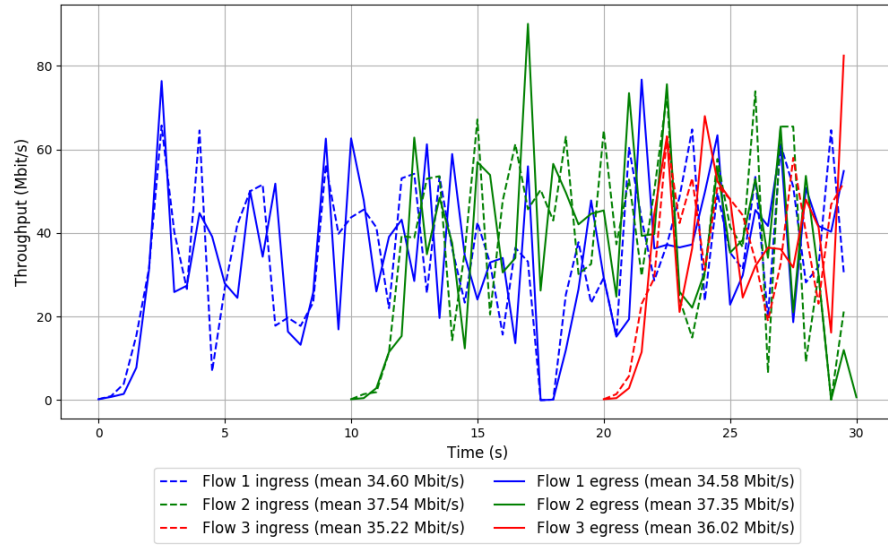
-- Flow 3:

Average throughput: 36.02 Mbit/s

95th percentile per-packet one-way delay: 166.085 ms

Loss rate: 0.03%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-12 16:00:33

End at: 2017-12-12 16:01:03

Below is generated by plot.py at 2017-12-12 17:00:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.31 Mbit/s

95th percentile per-packet one-way delay: 170.166 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 33.35 Mbit/s

95th percentile per-packet one-way delay: 169.714 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.69 Mbit/s

95th percentile per-packet one-way delay: 170.778 ms

Loss rate: 0.19%

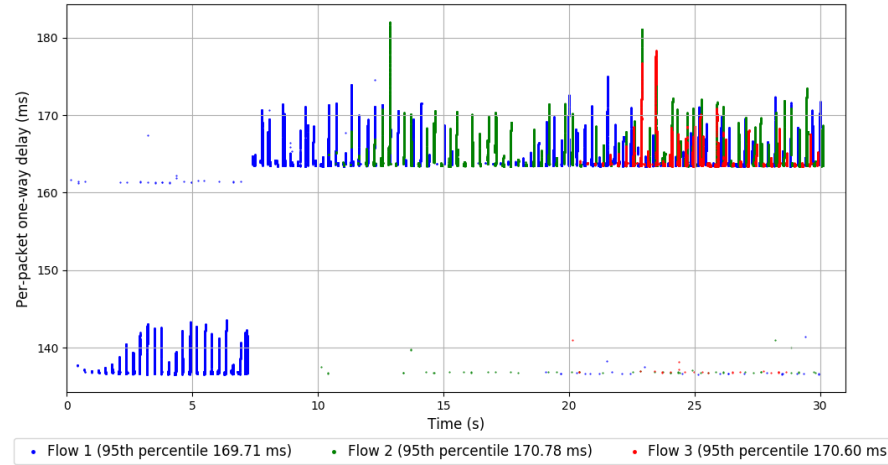
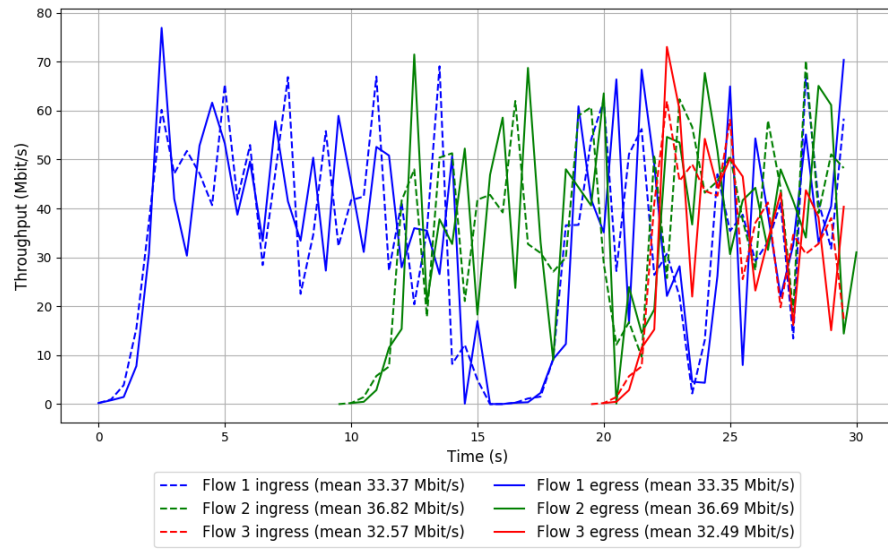
-- Flow 3:

Average throughput: 32.49 Mbit/s

95th percentile per-packet one-way delay: 170.601 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-12 13:55:26

End at: 2017-12-12 13:55:56

Below is generated by plot.py at 2017-12-12 17:00:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.15 Mbit/s

95th percentile per-packet one-way delay: 170.737 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 31.27 Mbit/s

95th percentile per-packet one-way delay: 170.308 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 26.65 Mbit/s

95th percentile per-packet one-way delay: 170.780 ms

Loss rate: 0.00%

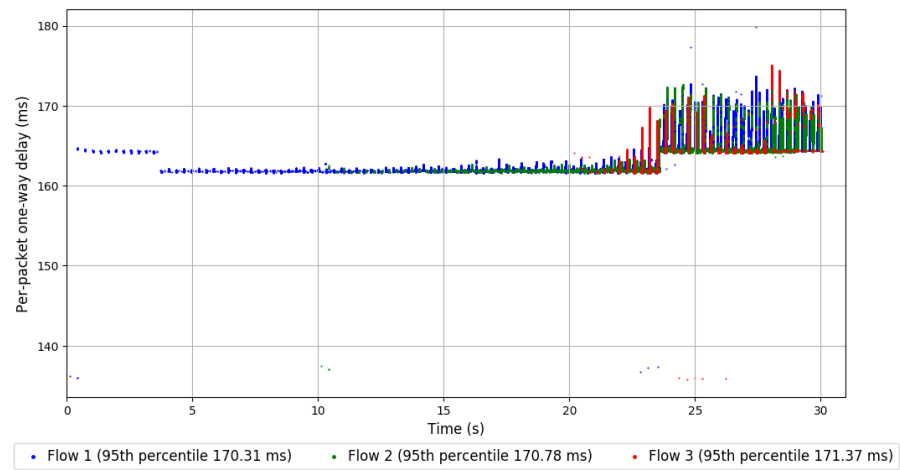
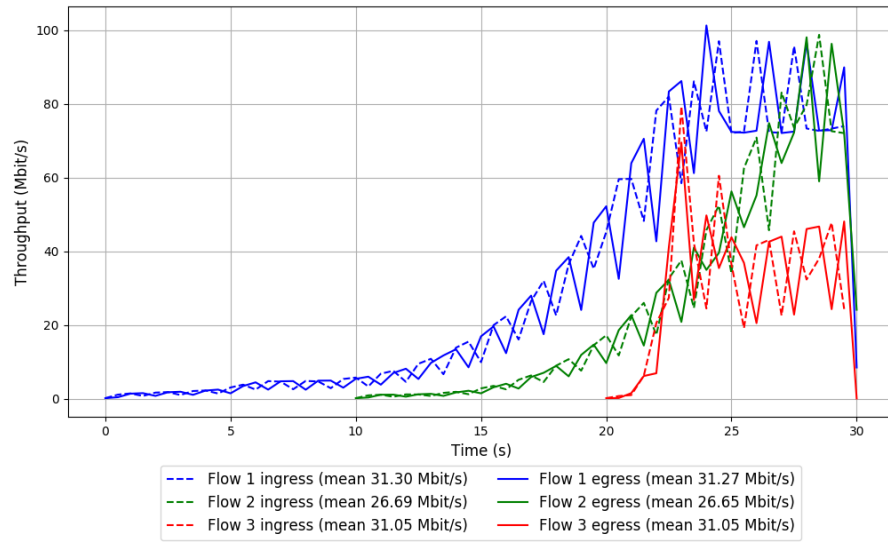
-- Flow 3:

Average throughput: 31.05 Mbit/s

95th percentile per-packet one-way delay: 171.366 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-12 14:08:55

End at: 2017-12-12 14:09:25

Below is generated by plot.py at 2017-12-12 17:01:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.78 Mbit/s

95th percentile per-packet one-way delay: 170.535 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 43.02 Mbit/s

95th percentile per-packet one-way delay: 169.611 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.89 Mbit/s

95th percentile per-packet one-way delay: 171.239 ms

Loss rate: 0.58%

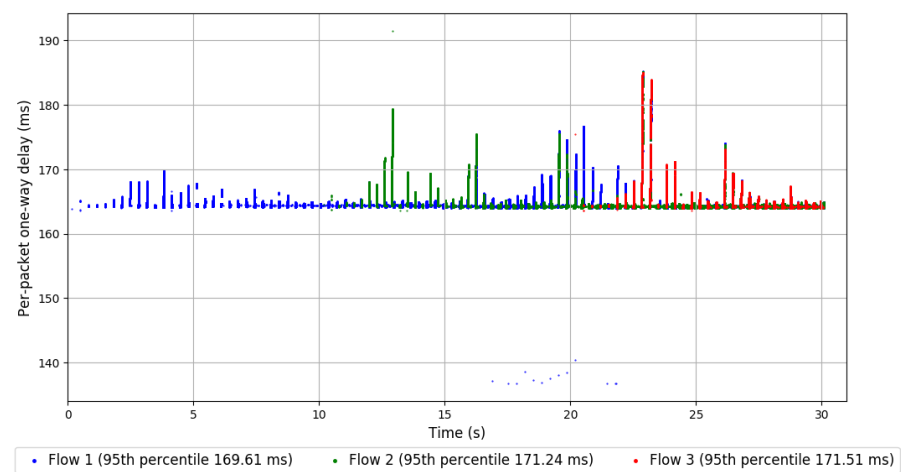
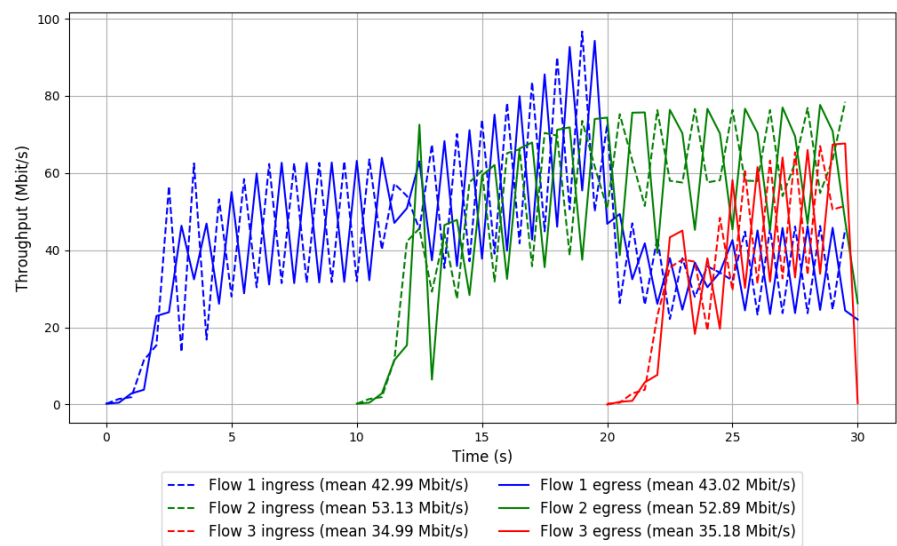
-- Flow 3:

Average throughput: 35.18 Mbit/s

95th percentile per-packet one-way delay: 171.512 ms

Loss rate: 0.01%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-12 14:22:23

End at: 2017-12-12 14:22:53

Below is generated by plot.py at 2017-12-12 17:01:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.60 Mbit/s

95th percentile per-packet one-way delay: 166.464 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 41.19 Mbit/s

95th percentile per-packet one-way delay: 166.666 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 17.94 Mbit/s

95th percentile per-packet one-way delay: 165.231 ms

Loss rate: 0.05%

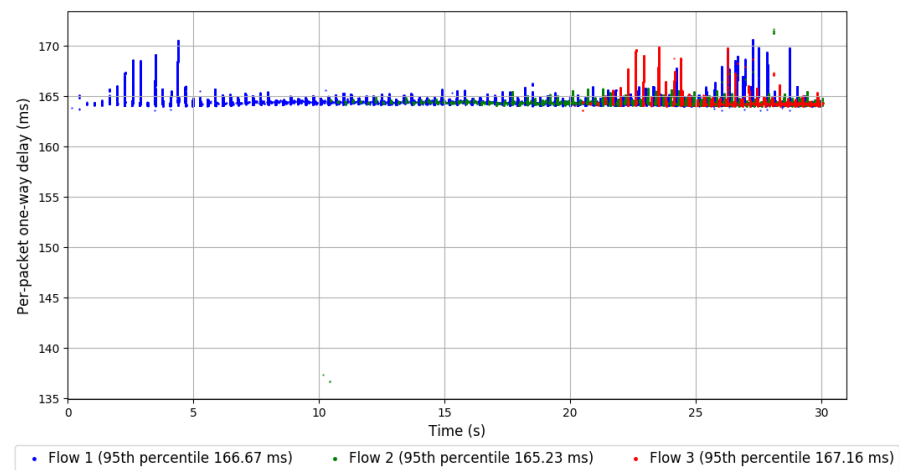
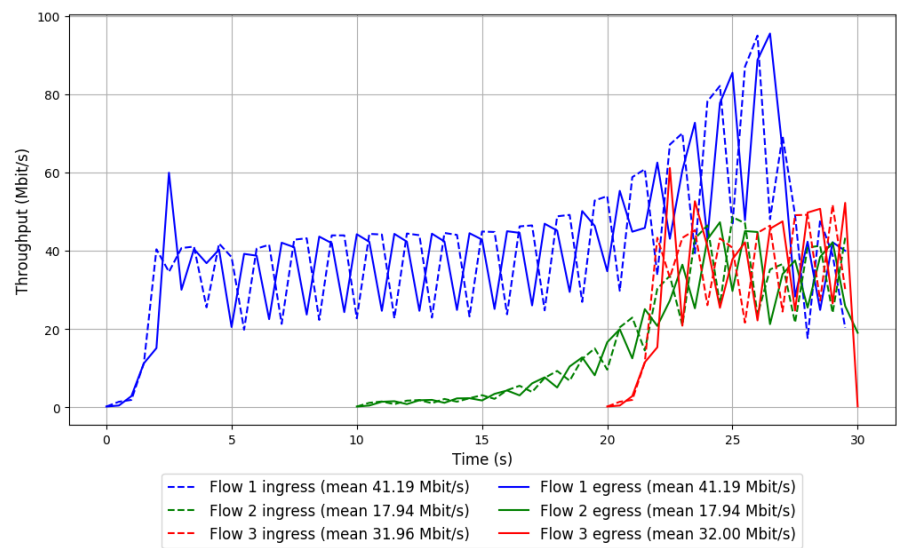
-- Flow 3:

Average throughput: 32.00 Mbit/s

95th percentile per-packet one-way delay: 167.161 ms

Loss rate: 0.56%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-12 14:35:18

End at: 2017-12-12 14:35:48

Below is generated by plot.py at 2017-12-12 17:01:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.34 Mbit/s

95th percentile per-packet one-way delay: 166.251 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 29.31 Mbit/s

95th percentile per-packet one-way delay: 165.404 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 23.27 Mbit/s

95th percentile per-packet one-way delay: 168.007 ms

Loss rate: 0.00%

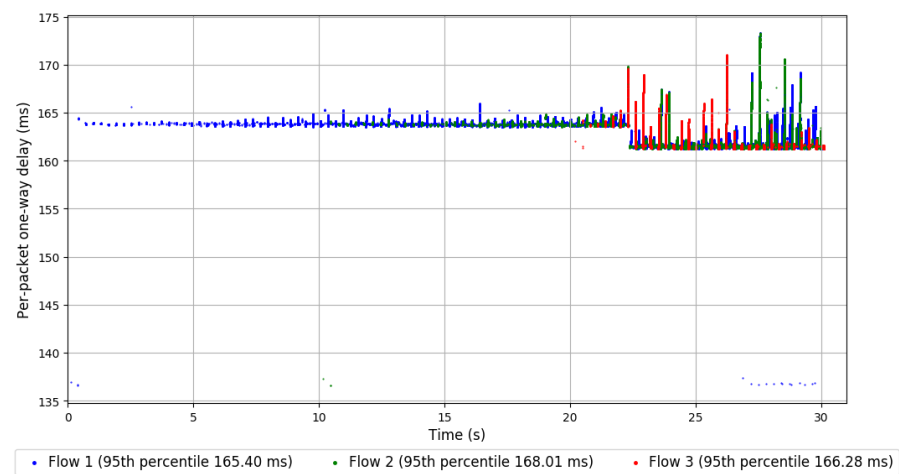
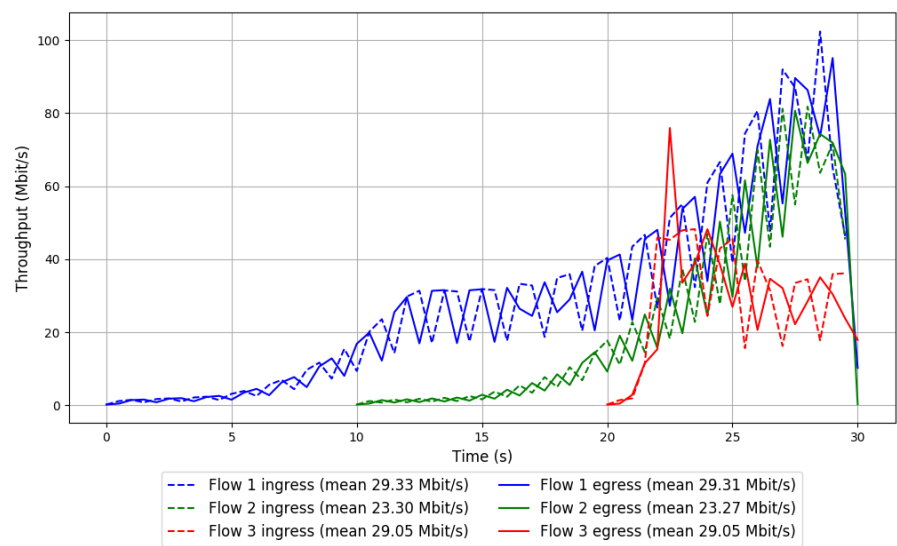
-- Flow 3:

Average throughput: 29.05 Mbit/s

95th percentile per-packet one-way delay: 166.282 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-12 14:48:25

End at: 2017-12-12 14:48:55

Below is generated by plot.py at 2017-12-12 17:01:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 49.87 Mbit/s

95th percentile per-packet one-way delay: 165.681 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 20.30 Mbit/s

95th percentile per-packet one-way delay: 164.646 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 42.41 Mbit/s

95th percentile per-packet one-way delay: 167.030 ms

Loss rate: 0.00%

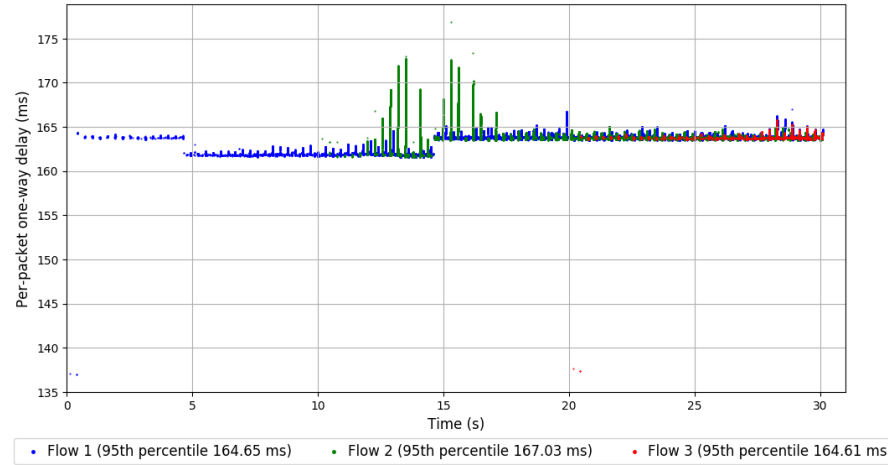
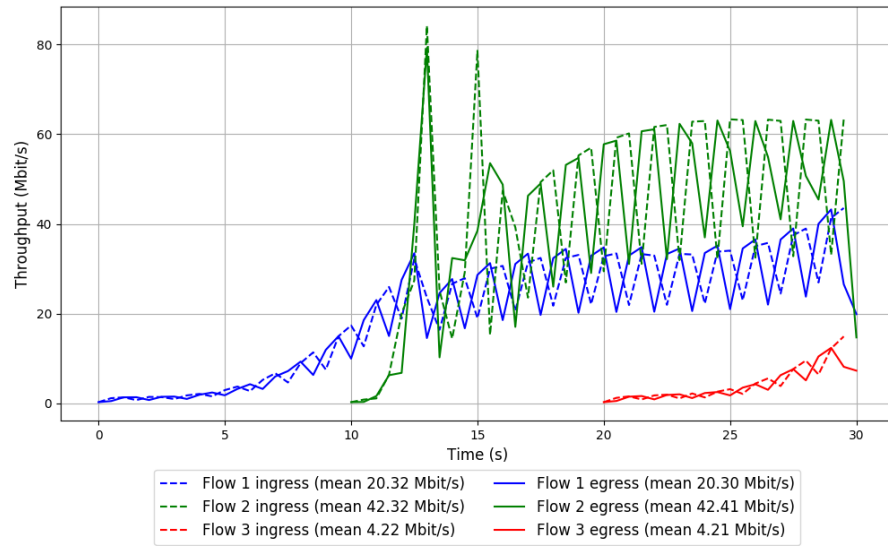
-- Flow 3:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 164.609 ms

Loss rate: 0.29%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-12 15:01:56

End at: 2017-12-12 15:02:26

Below is generated by plot.py at 2017-12-12 17:01:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 45.63 Mbit/s

95th percentile per-packet one-way delay: 164.937 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 26.63 Mbit/s

95th percentile per-packet one-way delay: 165.141 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 26.45 Mbit/s

95th percentile per-packet one-way delay: 164.601 ms

Loss rate: 0.00%

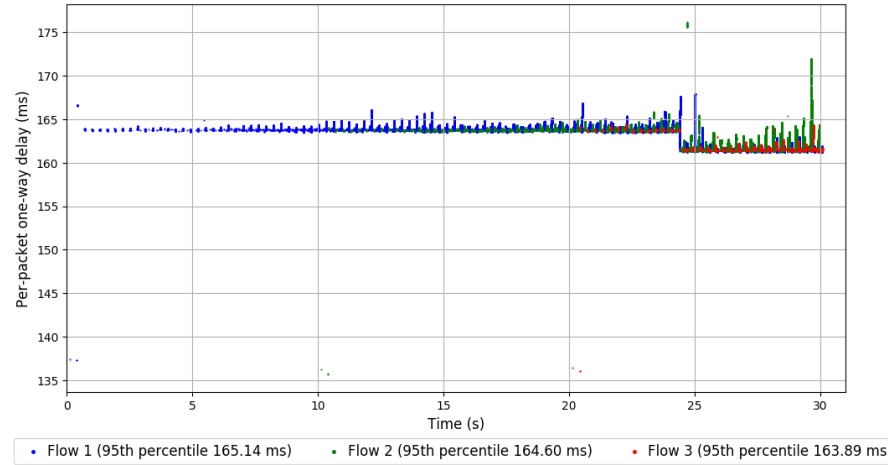
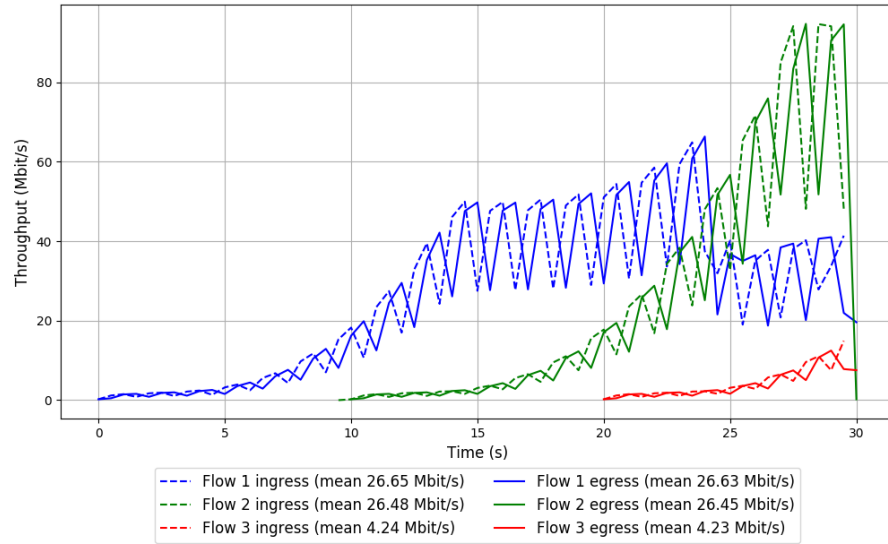
-- Flow 3:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 163.888 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-12 15:15:28

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

Below is generated by plot.py at 2017-12-12 17:01:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.08 Mbit/s

95th percentile per-packet one-way delay: 169.926 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 26.17 Mbit/s

95th percentile per-packet one-way delay: 168.987 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.70 Mbit/s

95th percentile per-packet one-way delay: 170.499 ms

Loss rate: 0.00%

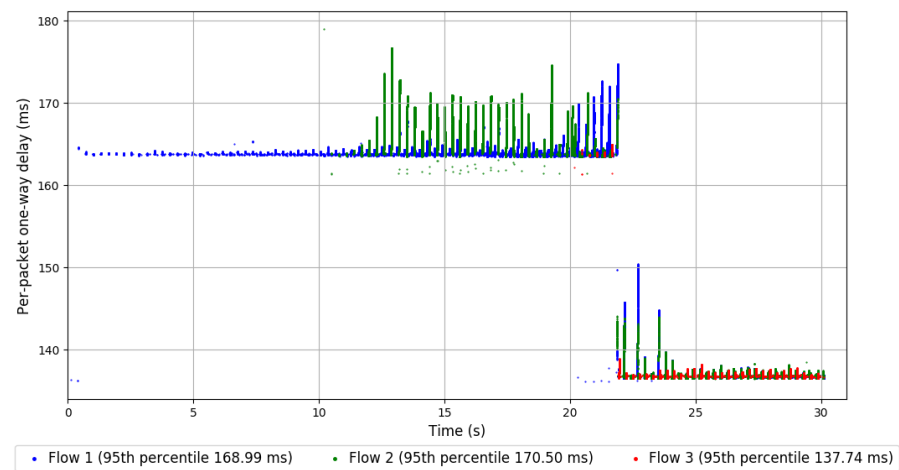
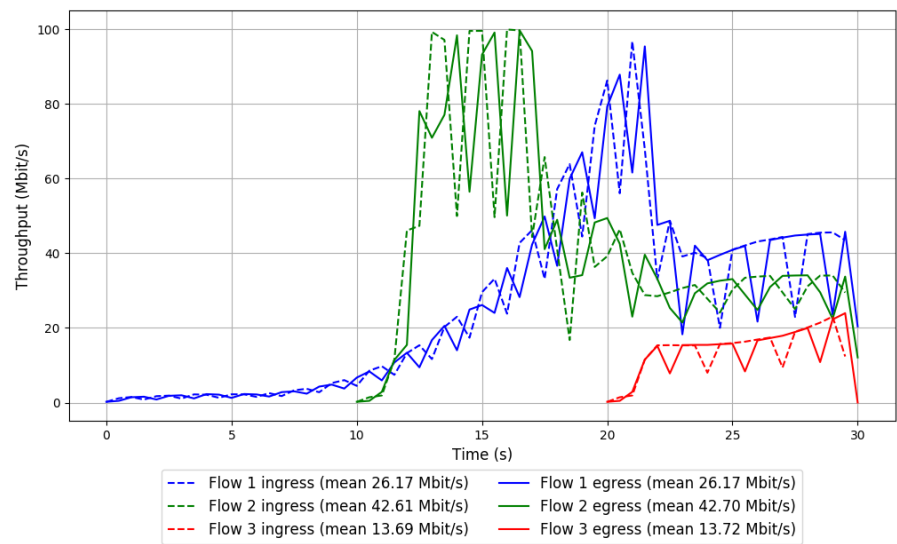
-- Flow 3:

Average throughput: 13.72 Mbit/s

95th percentile per-packet one-way delay: 137.736 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-12 15:29:25

End at: 2017-12-12 15:29:55

Below is generated by plot.py at 2017-12-12 17:01:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.45 Mbit/s

95th percentile per-packet one-way delay: 165.565 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 45.30 Mbit/s

95th percentile per-packet one-way delay: 165.583 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.72 Mbit/s

95th percentile per-packet one-way delay: 165.546 ms

Loss rate: 0.00%

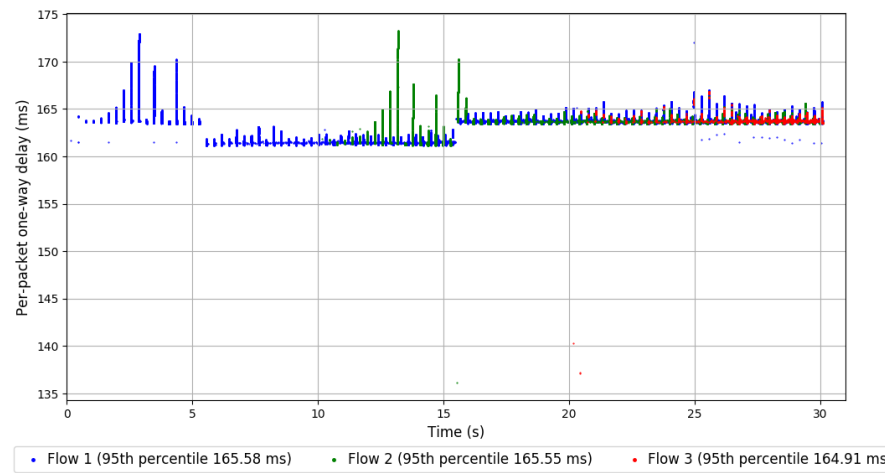
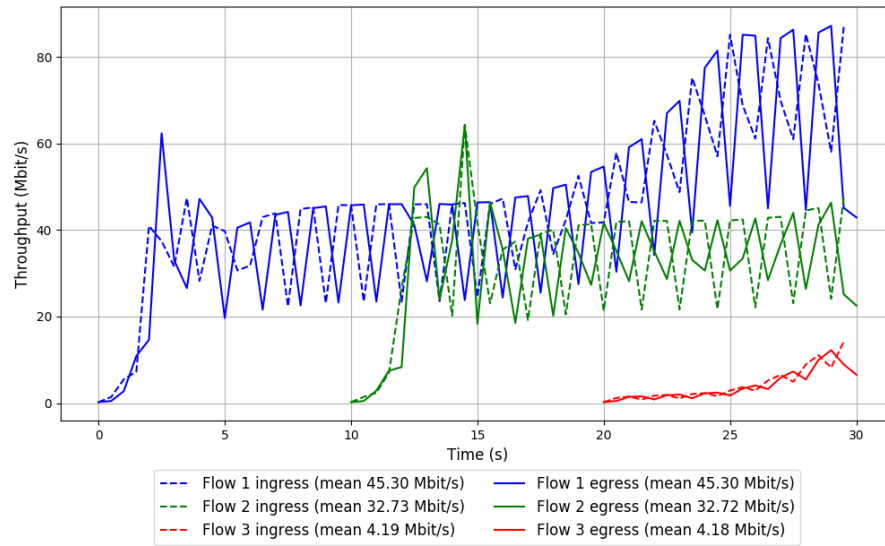
-- Flow 3:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 164.905 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-12 15:43:14

End at: 2017-12-12 15:43:44

Below is generated by plot.py at 2017-12-12 17:01:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 47.19 Mbit/s

95th percentile per-packet one-way delay: 165.062 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.32 Mbit/s

95th percentile per-packet one-way delay: 165.129 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.97 Mbit/s

95th percentile per-packet one-way delay: 164.400 ms

Loss rate: 0.05%

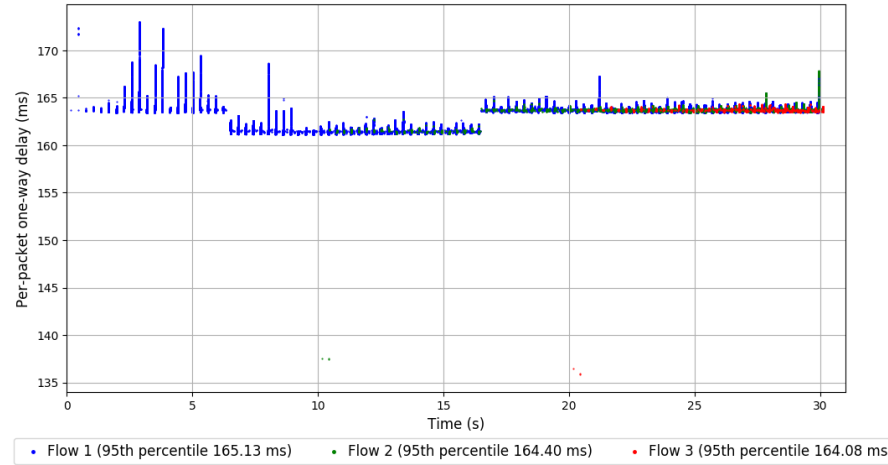
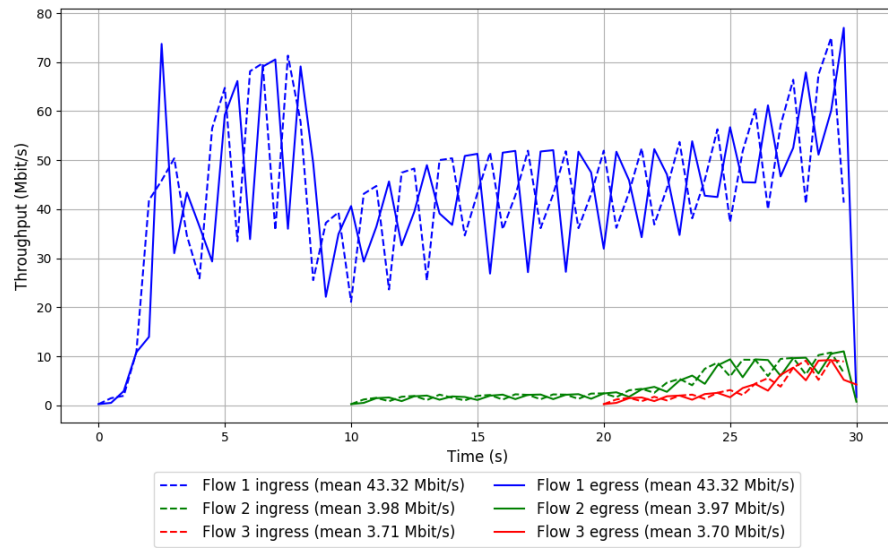
-- Flow 3:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 164.080 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-12 15:56:44

End at: 2017-12-12 15:57:14

Below is generated by plot.py at 2017-12-12 17:01:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 49.12 Mbit/s

95th percentile per-packet one-way delay: 165.294 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 38.11 Mbit/s

95th percentile per-packet one-way delay: 165.649 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.12 Mbit/s

95th percentile per-packet one-way delay: 164.725 ms

Loss rate: 0.51%

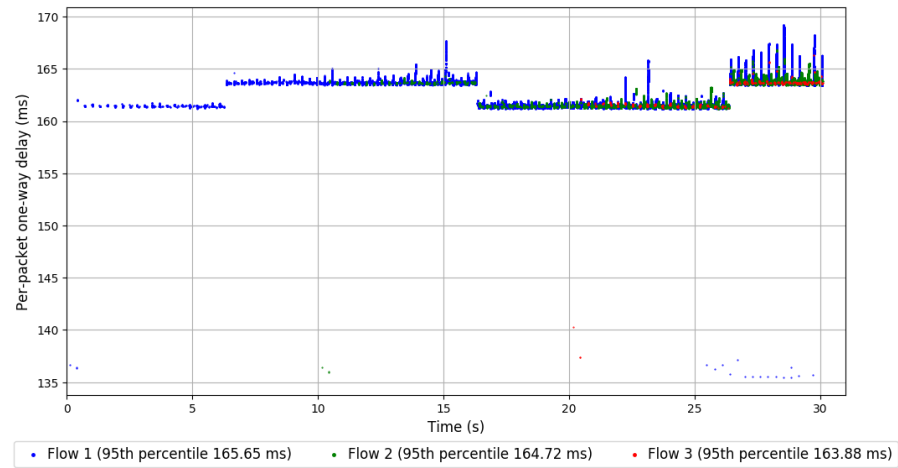
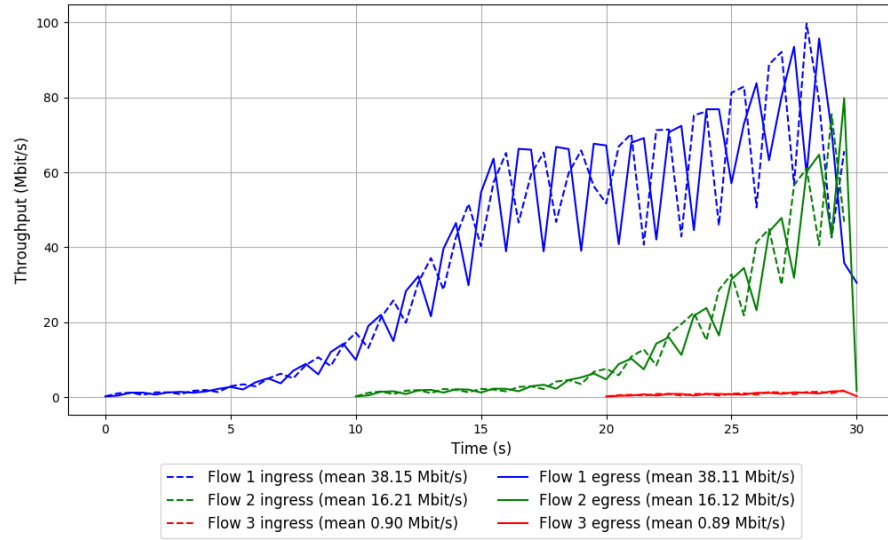
-- Flow 3:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 163.877 ms

Loss rate: 0.81%

Run 10: Report of TCP Cubic — Data Link

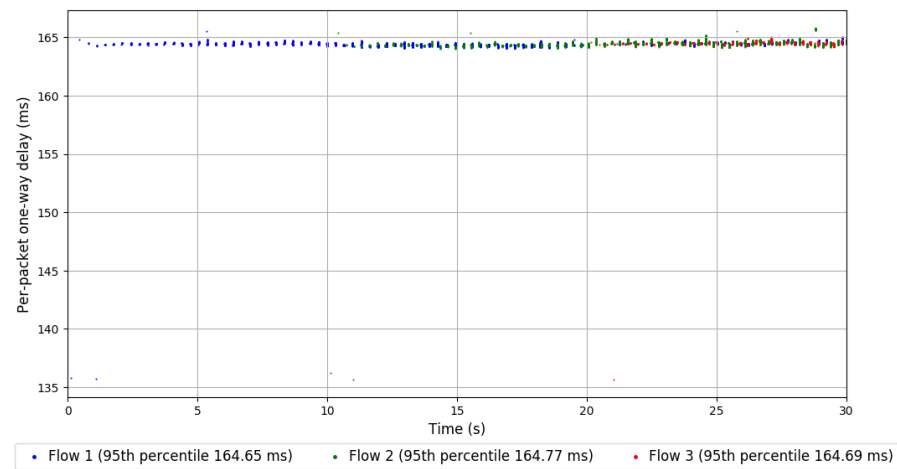
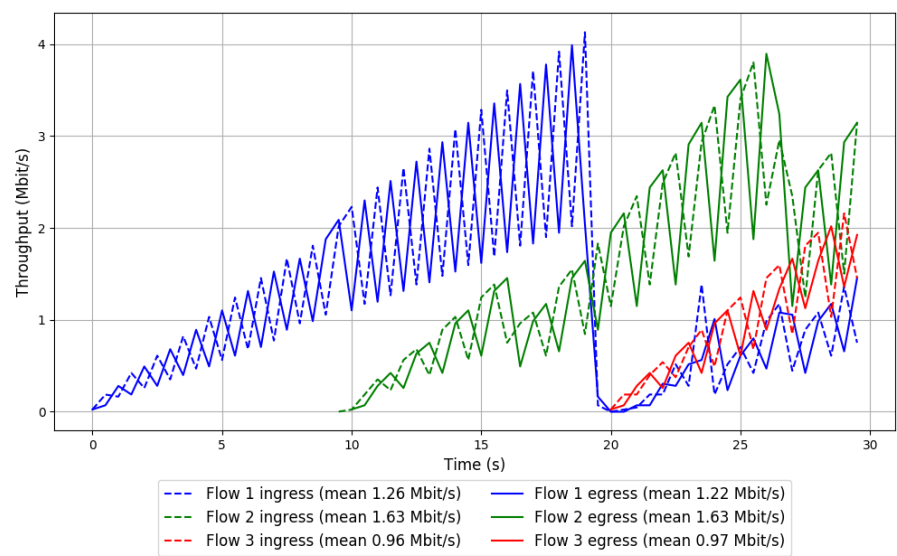


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-12 13:56:20
End at: 2017-12-12 13:56:50

# Below is generated by plot.py at 2017-12-12 17:01:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 164.709 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 164.646 ms
Loss rate: 2.68%
-- Flow 2:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 164.773 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 164.687 ms
Loss rate: 1.72%
```


Run 1: Report of LEDBAT — Data Link

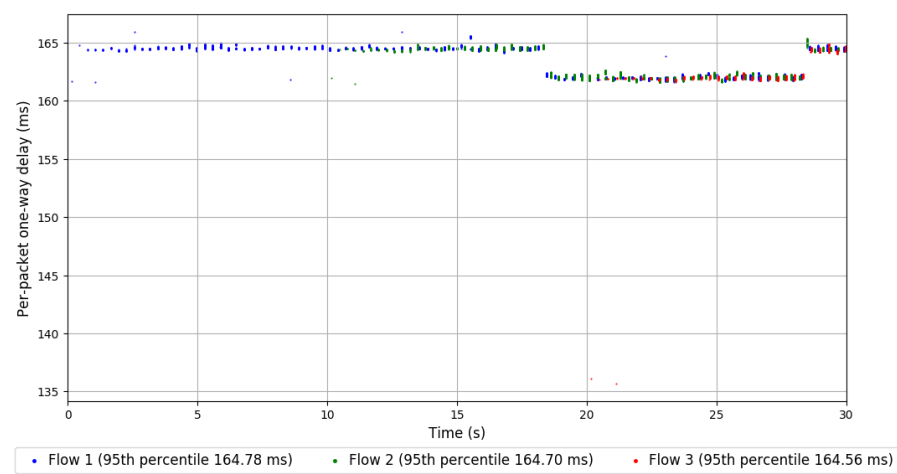
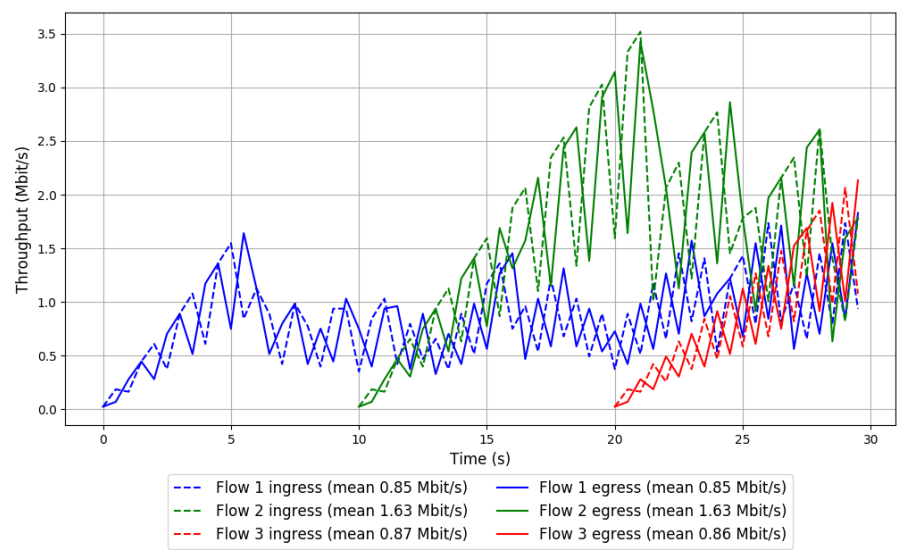


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-12 14:09:52
End at: 2017-12-12 14:10:22

# Below is generated by plot.py at 2017-12-12 17:01:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 164.735 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 164.779 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 164.703 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 164.563 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-12 14:23:17

End at: 2017-12-12 14:23:47

Below is generated by plot.py at 2017-12-12 17:01:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.00 Mbit/s

95th percentile per-packet one-way delay: 164.747 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 164.756 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 164.660 ms

Loss rate: 0.00%

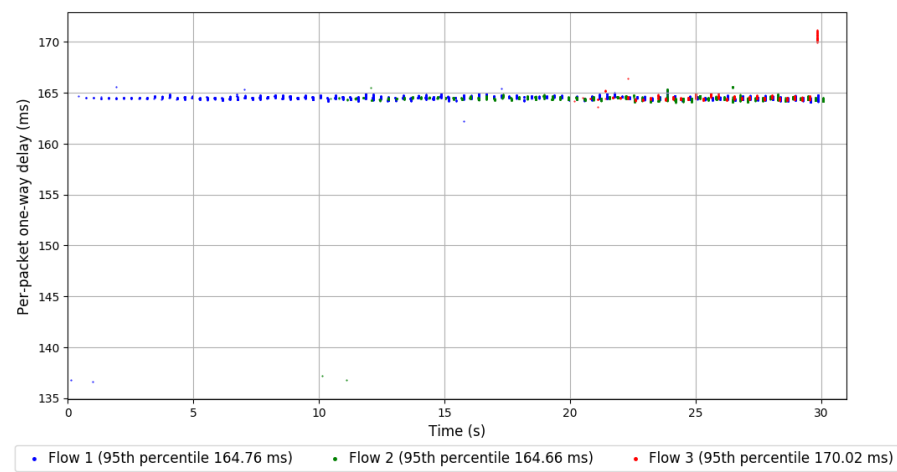
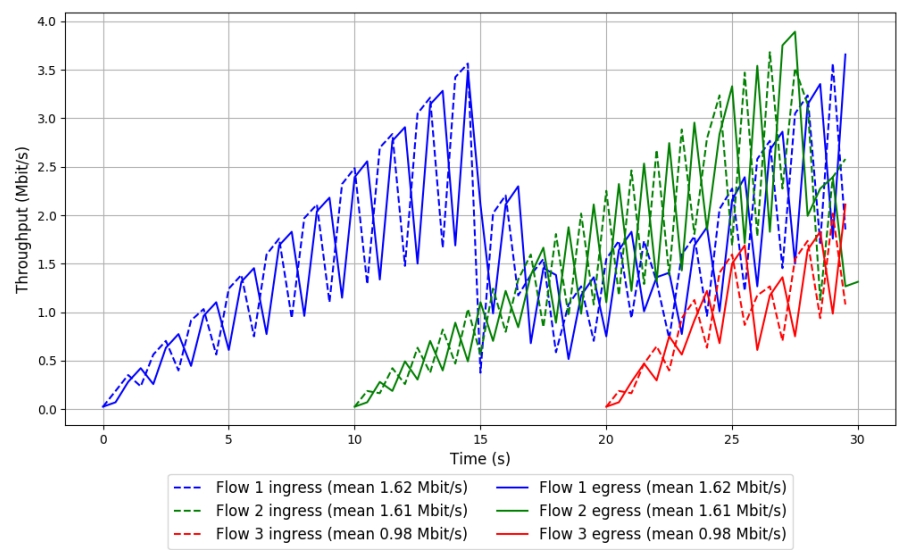
-- Flow 3:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 170.017 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-12 14:36:12

End at: 2017-12-12 14:36:42

Below is generated by plot.py at 2017-12-12 17:01:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.70 Mbit/s

95th percentile per-packet one-way delay: 164.253 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 164.525 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 164.106 ms

Loss rate: 0.00%

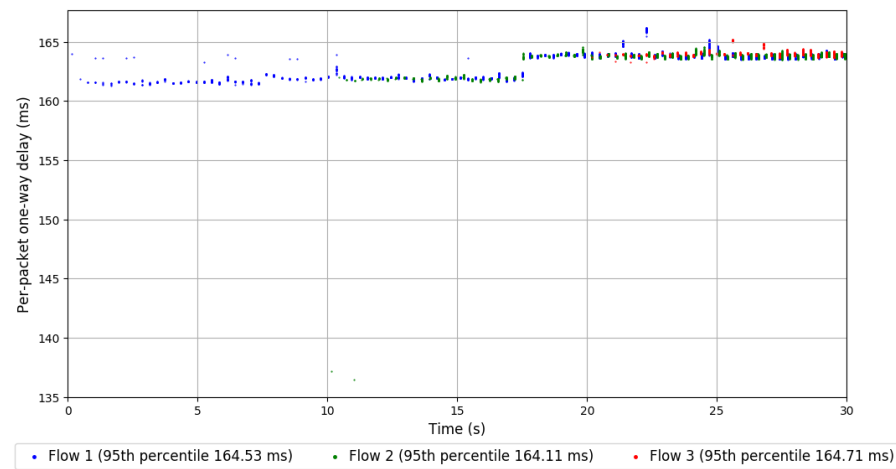
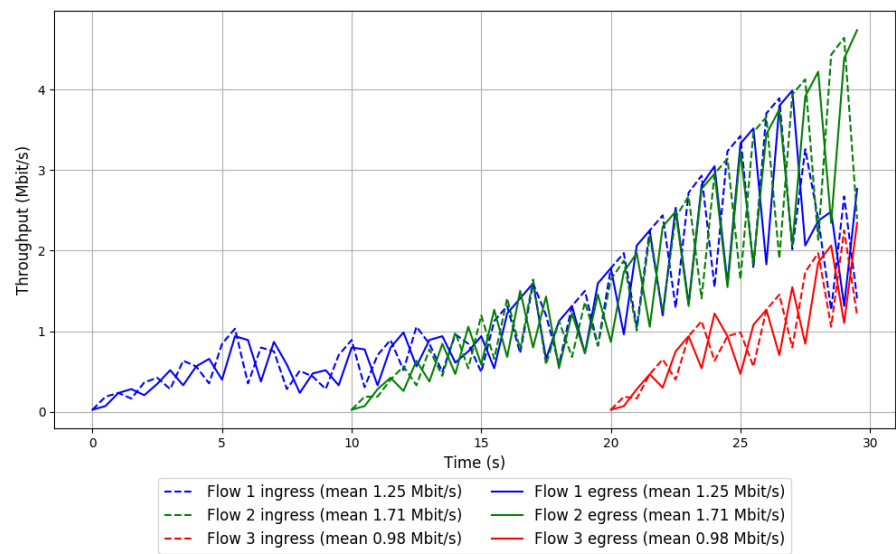
-- Flow 3:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 164.705 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-12 14:49:18

End at: 2017-12-12 14:49:48

Below is generated by plot.py at 2017-12-12 17:01:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.23 Mbit/s

95th percentile per-packet one-way delay: 164.285 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 164.294 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 164.278 ms

Loss rate: 0.00%

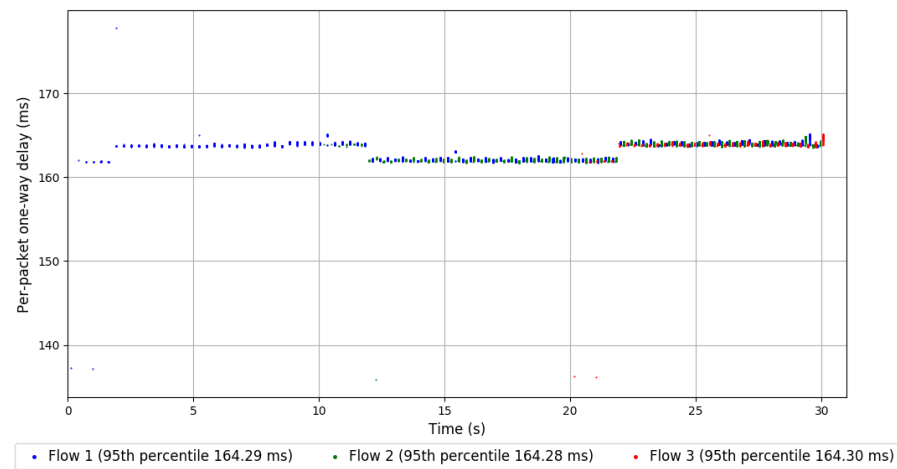
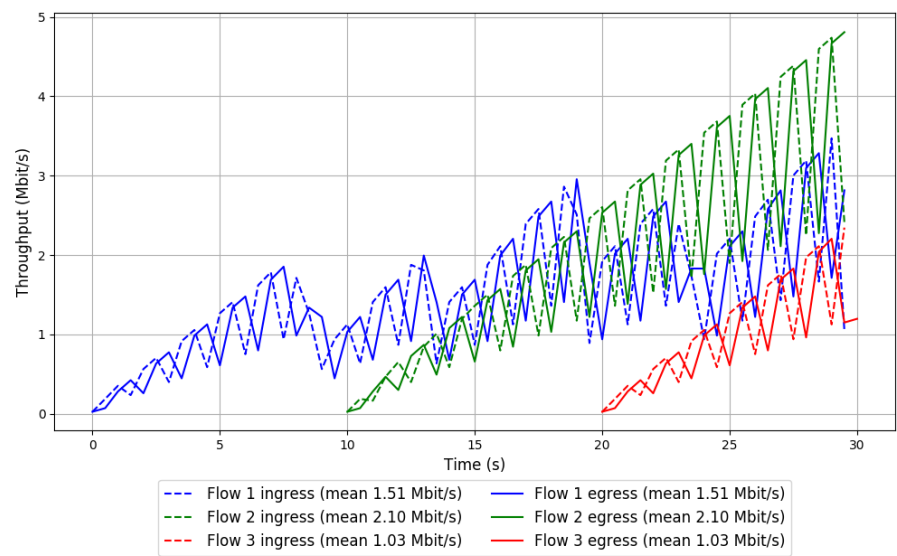
-- Flow 3:

Average throughput: 1.03 Mbit/s

95th percentile per-packet one-way delay: 164.299 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-12 15:02:49

End at: 2017-12-12 15:03:19

Below is generated by plot.py at 2017-12-12 17:01:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 164.199 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 164.202 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 164.188 ms

Loss rate: 0.18%

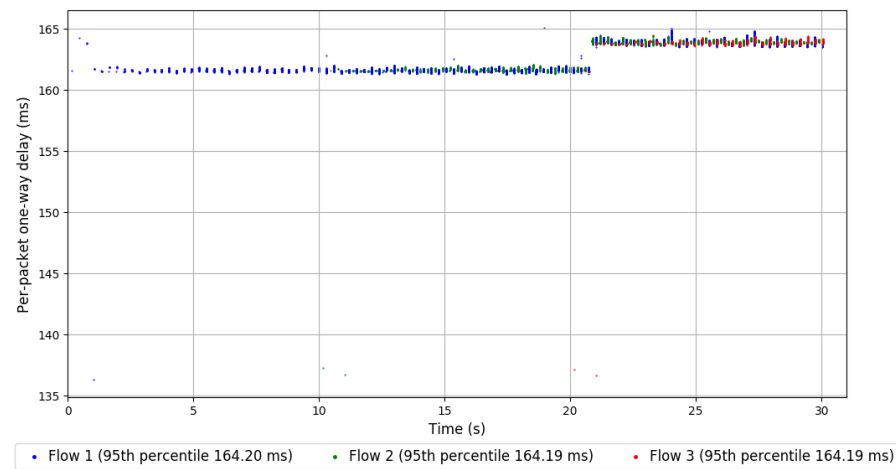
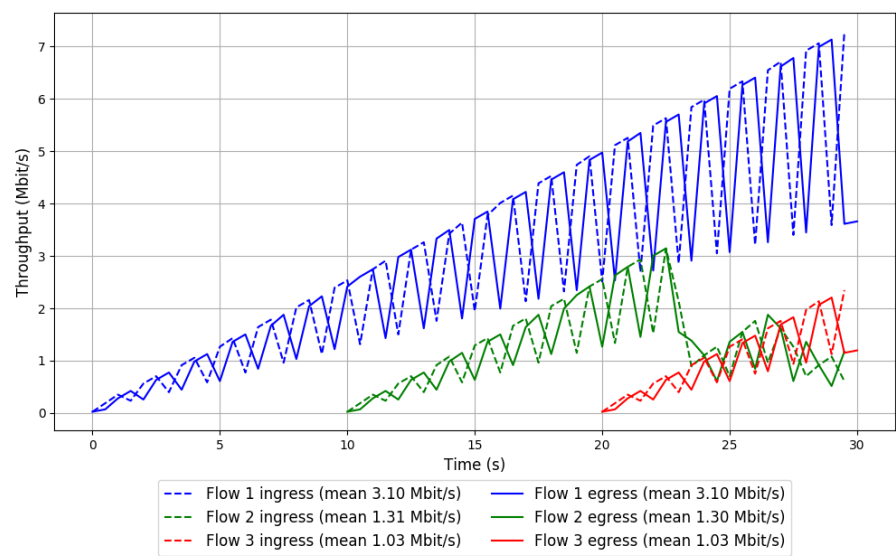
-- Flow 3:

Average throughput: 1.03 Mbit/s

95th percentile per-packet one-way delay: 164.194 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-12 15:16:22

End at: 2017-12-12 15:16:52

Below is generated by plot.py at 2017-12-12 17:01:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.84 Mbit/s

95th percentile per-packet one-way delay: 164.282 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 164.290 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 164.264 ms

Loss rate: 0.00%

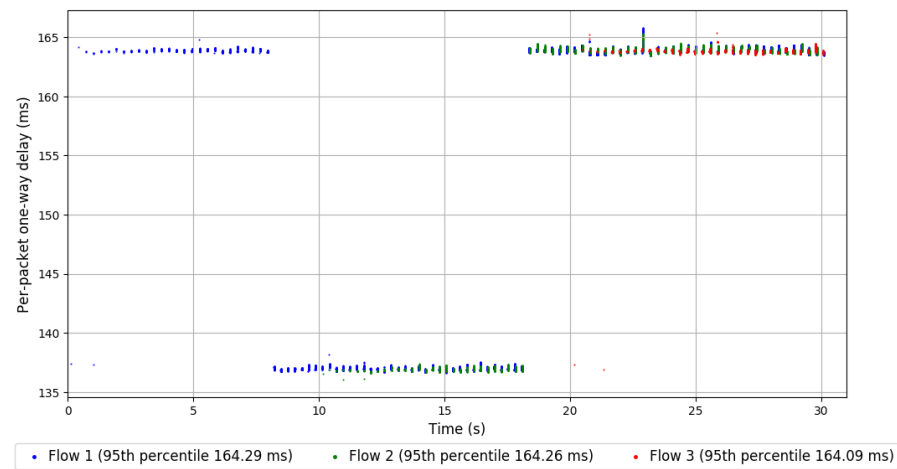
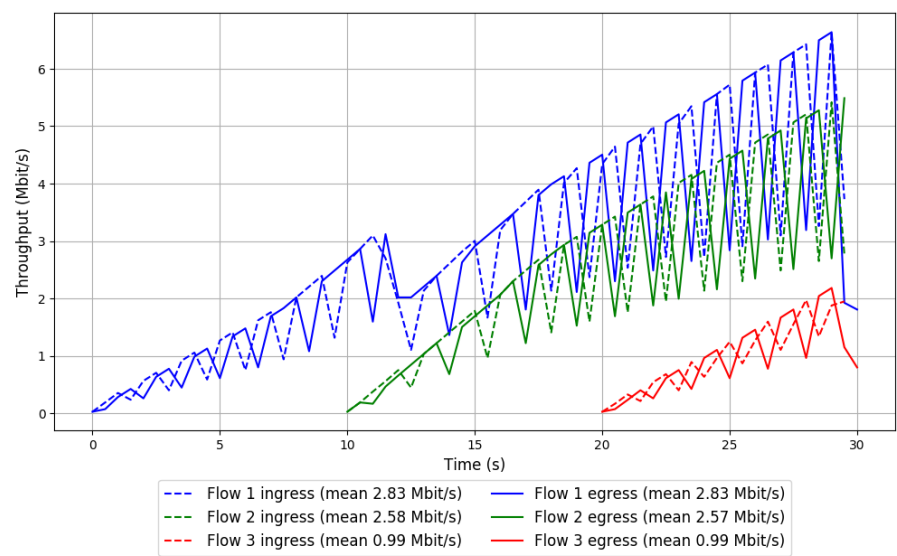
-- Flow 3:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 164.093 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-12 15:30:19

End at: 2017-12-12 15:30:49

Below is generated by plot.py at 2017-12-12 17:01:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.13 Mbit/s

95th percentile per-packet one-way delay: 164.004 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 163.982 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 164.050 ms

Loss rate: 0.00%

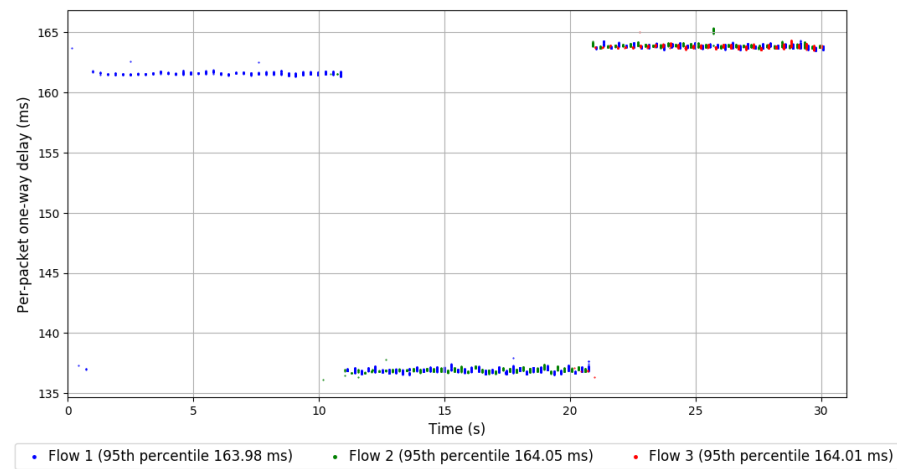
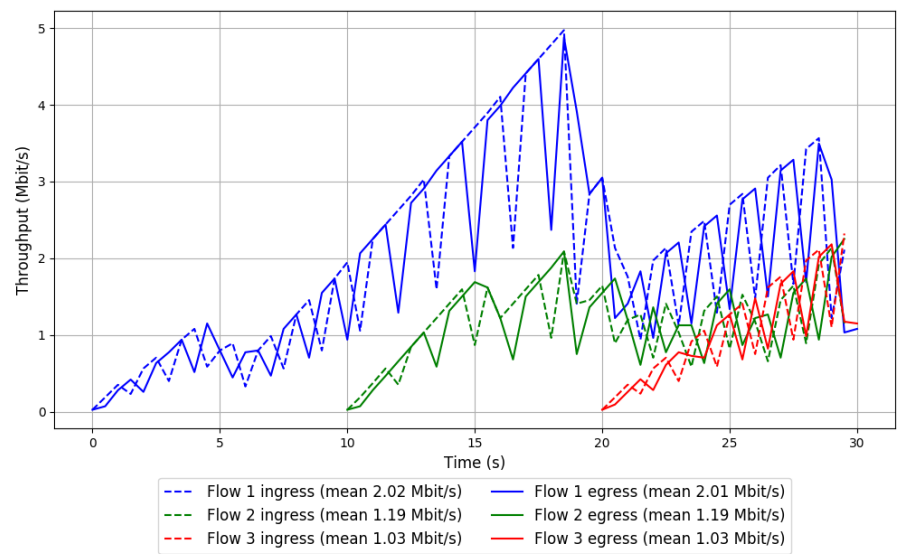
-- Flow 3:

Average throughput: 1.03 Mbit/s

95th percentile per-packet one-way delay: 164.013 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-12 15:44:07

End at: 2017-12-12 15:44:37

Below is generated by plot.py at 2017-12-12 17:01:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.68 Mbit/s

95th percentile per-packet one-way delay: 164.140 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 164.105 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 164.152 ms

Loss rate: 0.00%

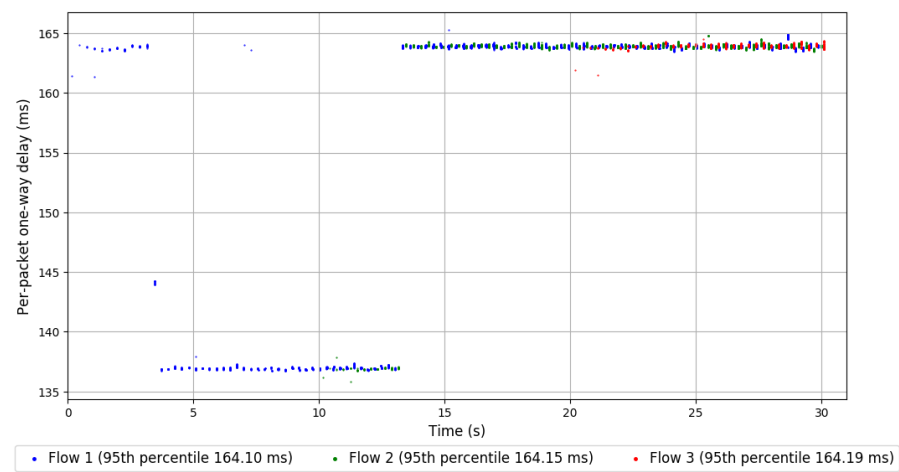
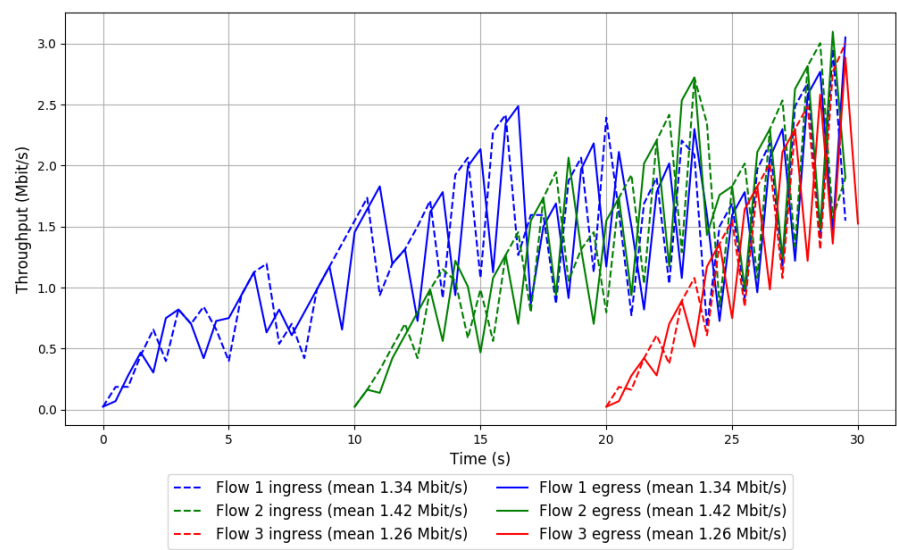
-- Flow 3:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 164.186 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-12 15:57:38

End at: 2017-12-12 15:58:08

Below is generated by plot.py at 2017-12-12 17:01:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 163.947 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 163.917 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 164.025 ms

Loss rate: 0.00%

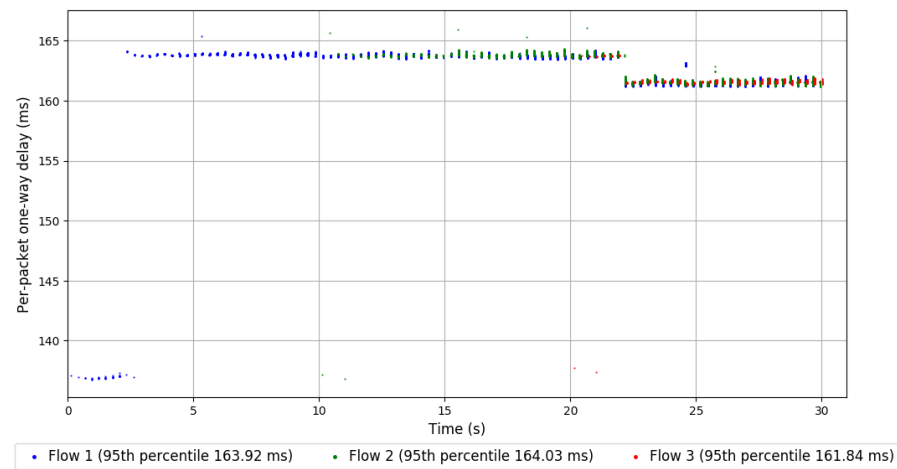
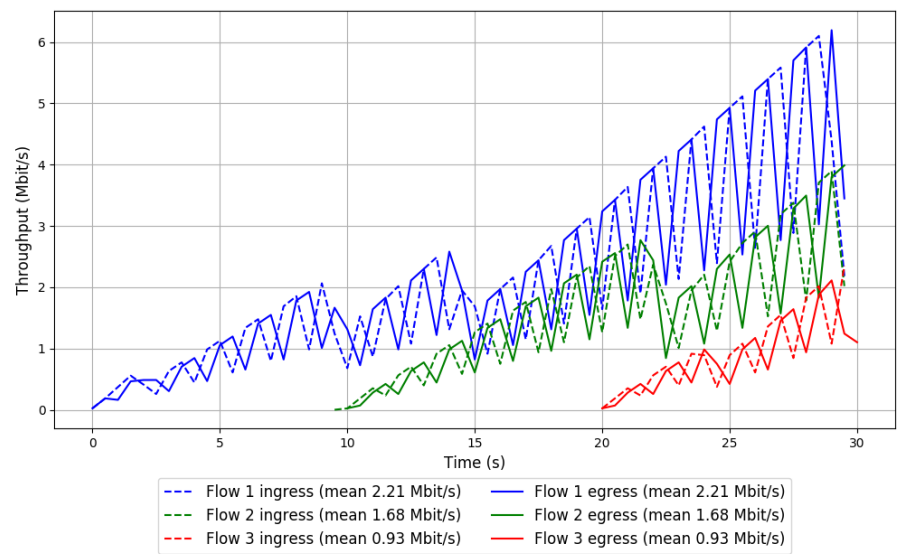
-- Flow 3:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 161.836 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

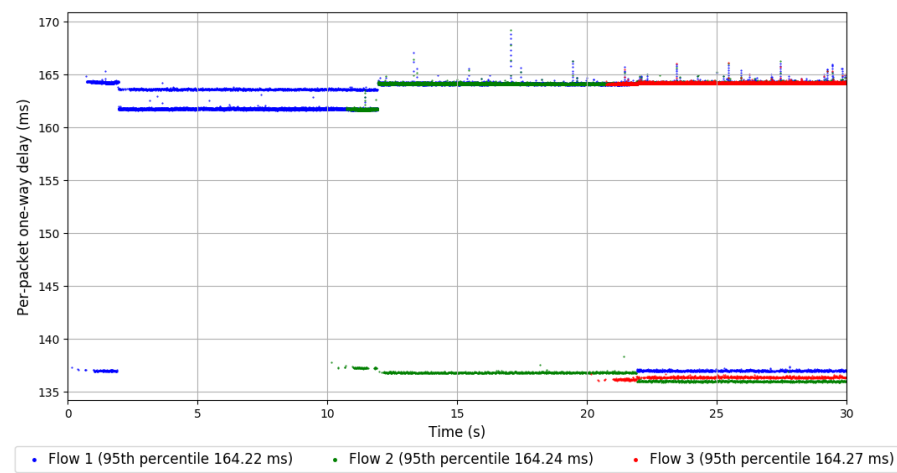
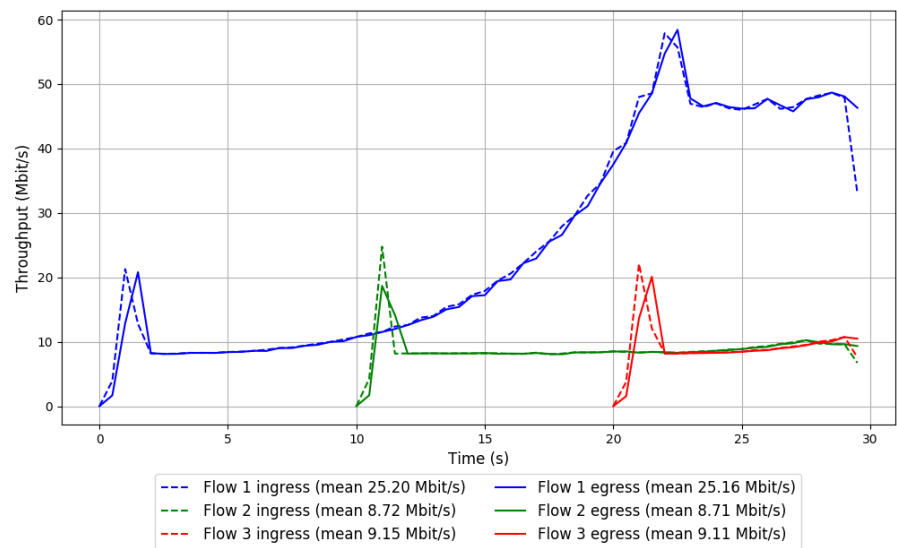


```
Run 1: Statistics of PCC

Start at: 2017-12-12 14:01:28
End at: 2017-12-12 14:01:58

# Below is generated by plot.py at 2017-12-12 17:01:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.95 Mbit/s
95th percentile per-packet one-way delay: 164.230 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 25.16 Mbit/s
95th percentile per-packet one-way delay: 164.217 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 8.71 Mbit/s
95th percentile per-packet one-way delay: 164.242 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 9.11 Mbit/s
95th percentile per-packet one-way delay: 164.268 ms
Loss rate: 0.33%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

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

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

Below is generated by plot.py at 2017-12-12 17:09:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 477.72 Mbit/s

95th percentile per-packet one-way delay: 200.187 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 471.82 Mbit/s

95th percentile per-packet one-way delay: 200.996 ms

Loss rate: 1.45%

-- Flow 2:

Average throughput: 4.71 Mbit/s

95th percentile per-packet one-way delay: 164.498 ms

Loss rate: 0.17%

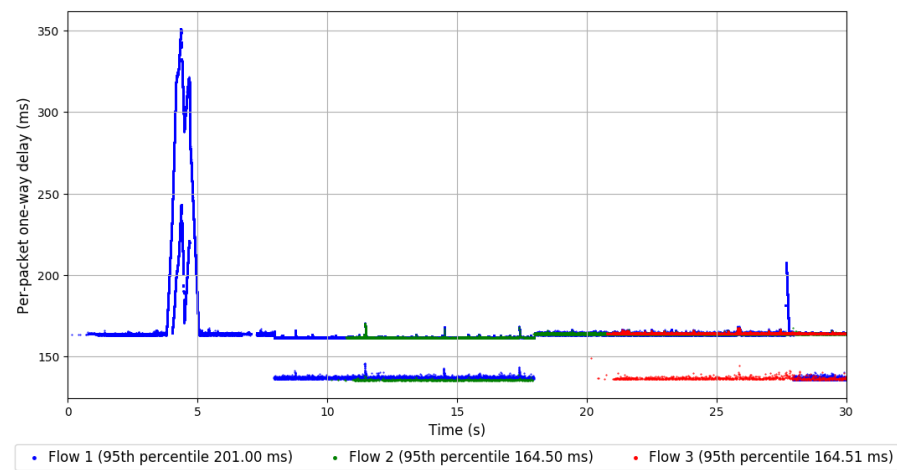
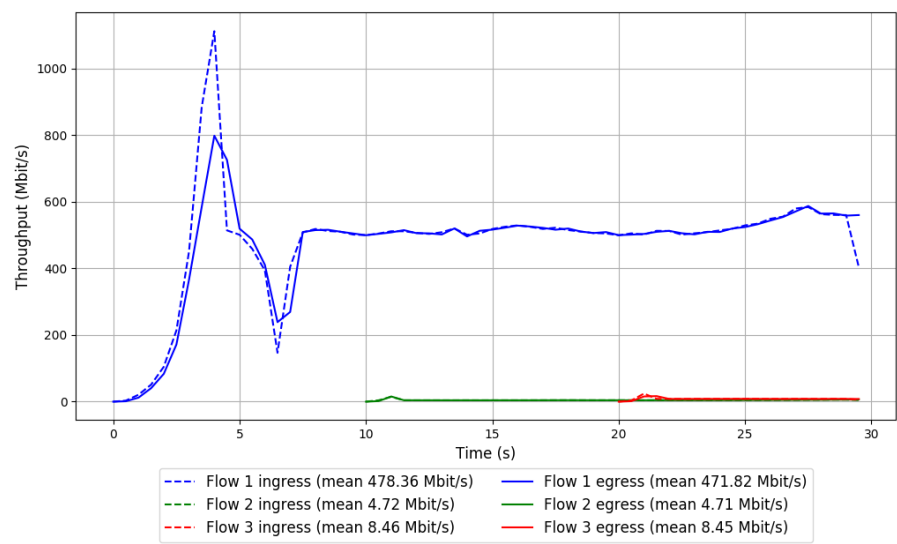
-- Flow 3:

Average throughput: 8.45 Mbit/s

95th percentile per-packet one-way delay: 164.515 ms

Loss rate: 0.23%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-12 14:28:10

End at: 2017-12-12 14:28:40

Below is generated by plot.py at 2017-12-12 17:09:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.30 Mbit/s

95th percentile per-packet one-way delay: 274.626 ms

Loss rate: 2.93%

-- Flow 1:

Average throughput: 10.14 Mbit/s

95th percentile per-packet one-way delay: 174.105 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 9.26 Mbit/s

95th percentile per-packet one-way delay: 168.794 ms

Loss rate: 0.58%

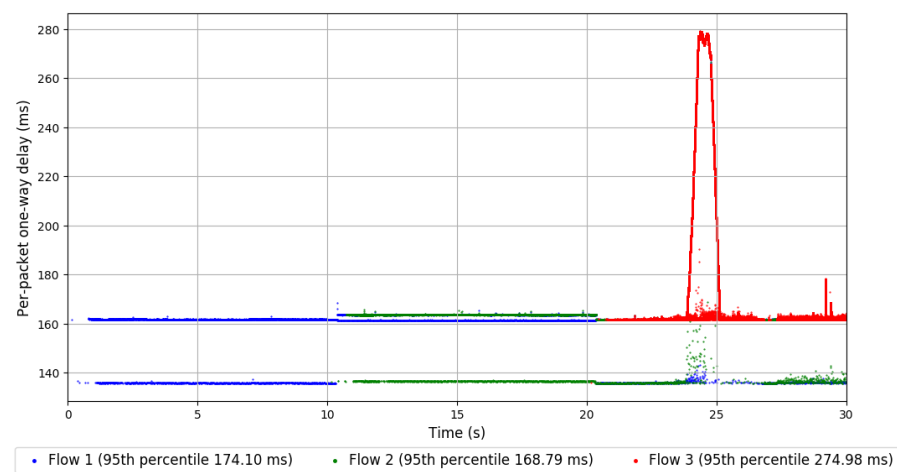
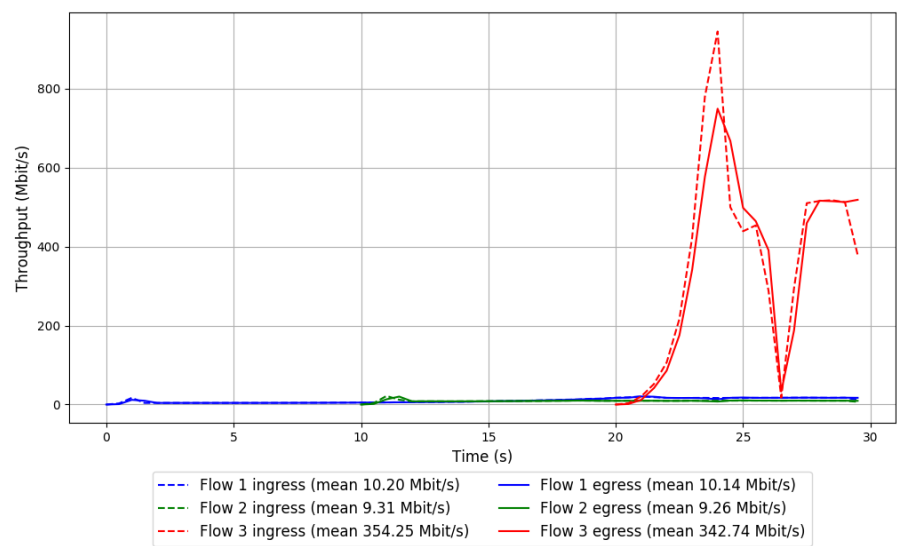
-- Flow 3:

Average throughput: 342.74 Mbit/s

95th percentile per-packet one-way delay: 274.983 ms

Loss rate: 3.25%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-12 14:41:05

End at: 2017-12-12 14:41:35

Below is generated by plot.py at 2017-12-12 17:09:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 175.66 Mbit/s

95th percentile per-packet one-way delay: 272.171 ms

Loss rate: 3.16%

-- Flow 1:

Average throughput: 39.22 Mbit/s

95th percentile per-packet one-way delay: 163.862 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 9.17 Mbit/s

95th percentile per-packet one-way delay: 183.230 ms

Loss rate: 0.92%

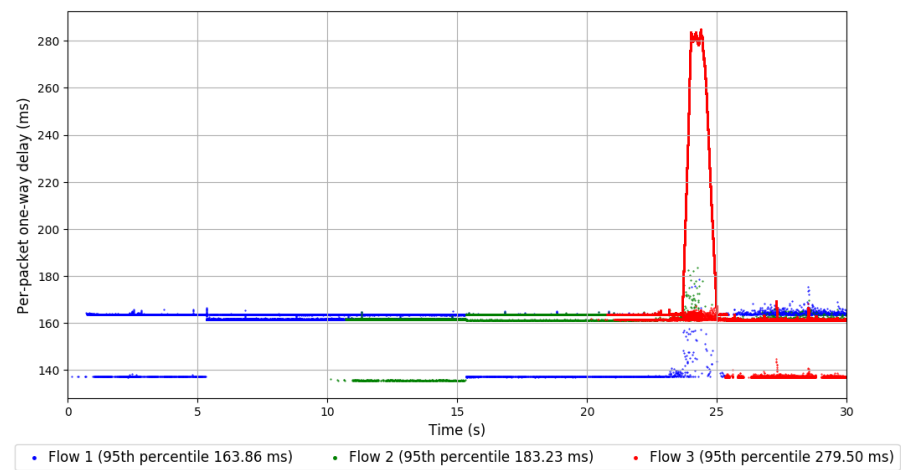
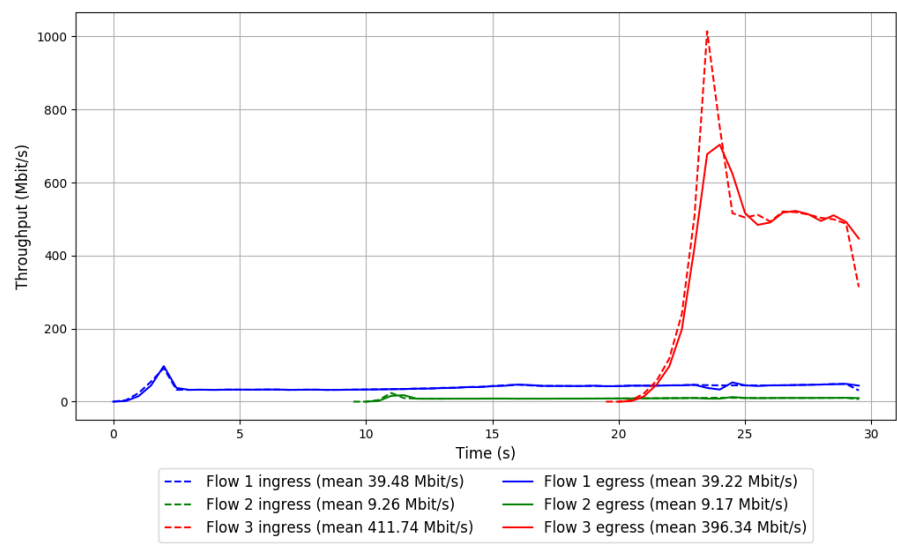
-- Flow 3:

Average throughput: 396.34 Mbit/s

95th percentile per-packet one-way delay: 279.496 ms

Loss rate: 3.99%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-12 14:54:24

End at: 2017-12-12 14:54:54

Below is generated by plot.py at 2017-12-12 17:09:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 354.66 Mbit/s

95th percentile per-packet one-way delay: 228.304 ms

Loss rate: 2.09%

-- Flow 1:

Average throughput: 5.90 Mbit/s

95th percentile per-packet one-way delay: 169.887 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 523.05 Mbit/s

95th percentile per-packet one-way delay: 229.989 ms

Loss rate: 2.12%

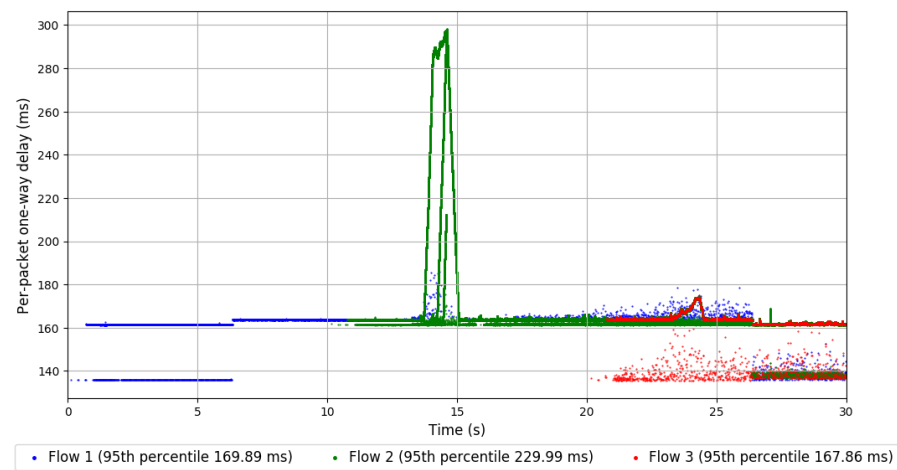
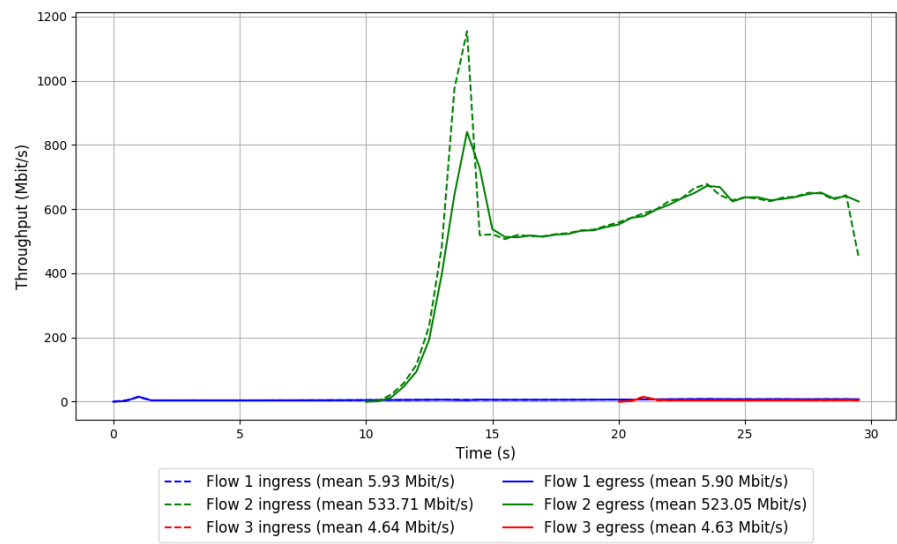
-- Flow 3:

Average throughput: 4.63 Mbit/s

95th percentile per-packet one-way delay: 167.863 ms

Loss rate: 0.26%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-12 15:07:46

End at: 2017-12-12 15:08:16

Below is generated by plot.py at 2017-12-12 17:11:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 567.60 Mbit/s

95th percentile per-packet one-way delay: 348.967 ms

Loss rate: 3.47%

-- Flow 1:

Average throughput: 458.93 Mbit/s

95th percentile per-packet one-way delay: 349.856 ms

Loss rate: 3.89%

-- Flow 2:

Average throughput: 132.02 Mbit/s

95th percentile per-packet one-way delay: 266.258 ms

Loss rate: 1.57%

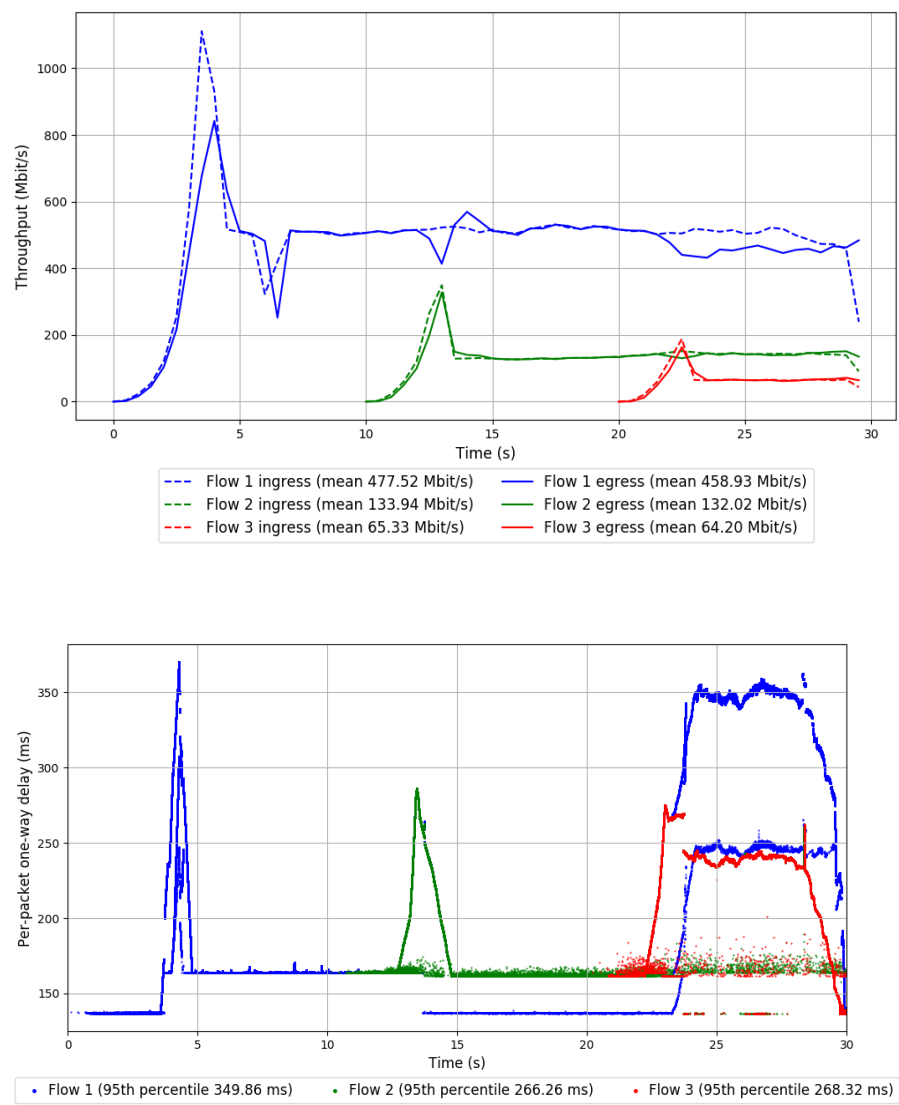
-- Flow 3:

Average throughput: 64.20 Mbit/s

95th percentile per-packet one-way delay: 268.325 ms

Loss rate: 1.99%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-12 15:21:21

End at: 2017-12-12 15:21:51

Below is generated by plot.py at 2017-12-12 17:12:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 591.63 Mbit/s

95th percentile per-packet one-way delay: 221.890 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 505.04 Mbit/s

95th percentile per-packet one-way delay: 222.275 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 128.08 Mbit/s

95th percentile per-packet one-way delay: 220.107 ms

Loss rate: 1.36%

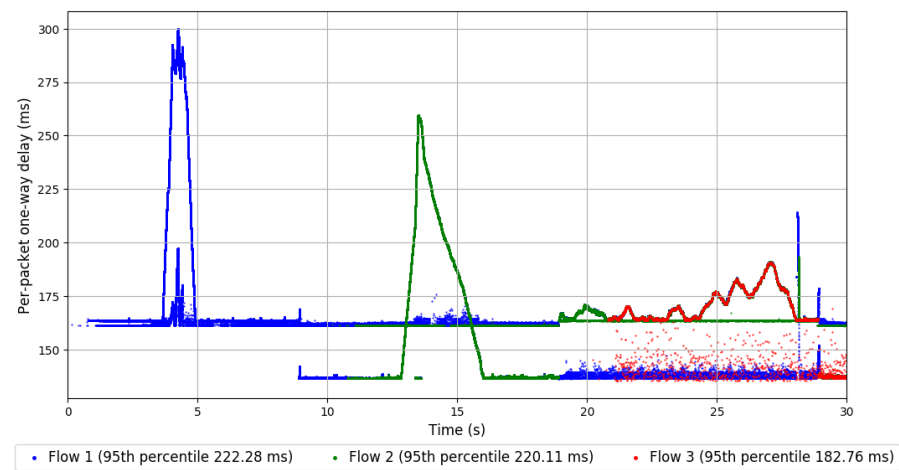
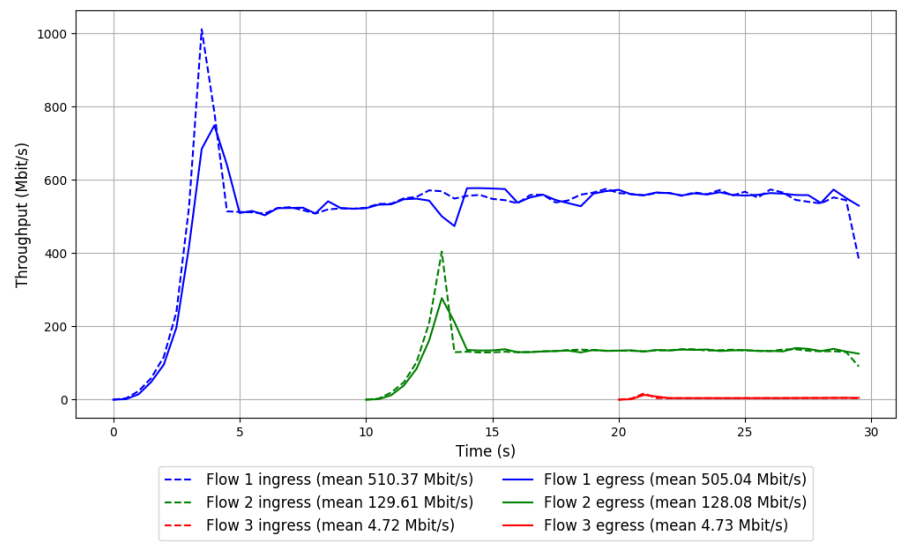
-- Flow 3:

Average throughput: 4.73 Mbit/s

95th percentile per-packet one-way delay: 182.757 ms

Loss rate: 0.00%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-12 15:35:30

End at: 2017-12-12 15:36:00

Below is generated by plot.py at 2017-12-12 17:12:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 475.88 Mbit/s

95th percentile per-packet one-way delay: 205.431 ms

Loss rate: 1.93%

-- Flow 1:

Average throughput: 463.41 Mbit/s

95th percentile per-packet one-way delay: 208.758 ms

Loss rate: 1.97%

-- Flow 2:

Average throughput: 14.56 Mbit/s

95th percentile per-packet one-way delay: 164.095 ms

Loss rate: 0.37%

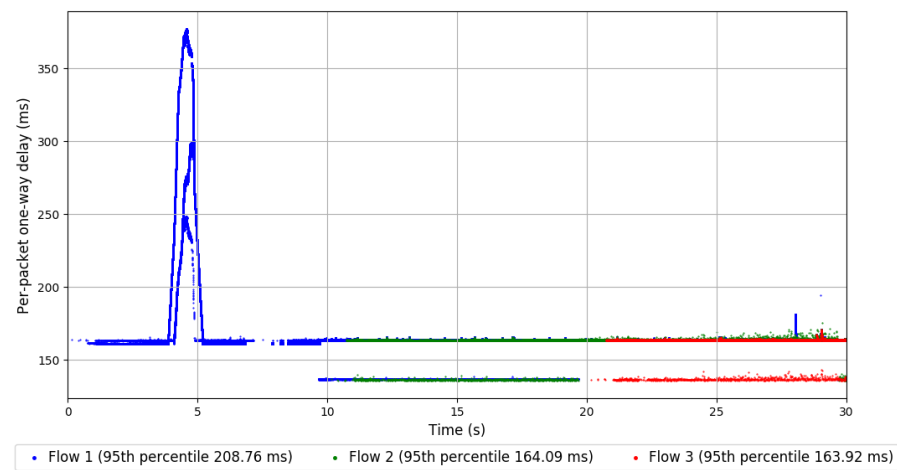
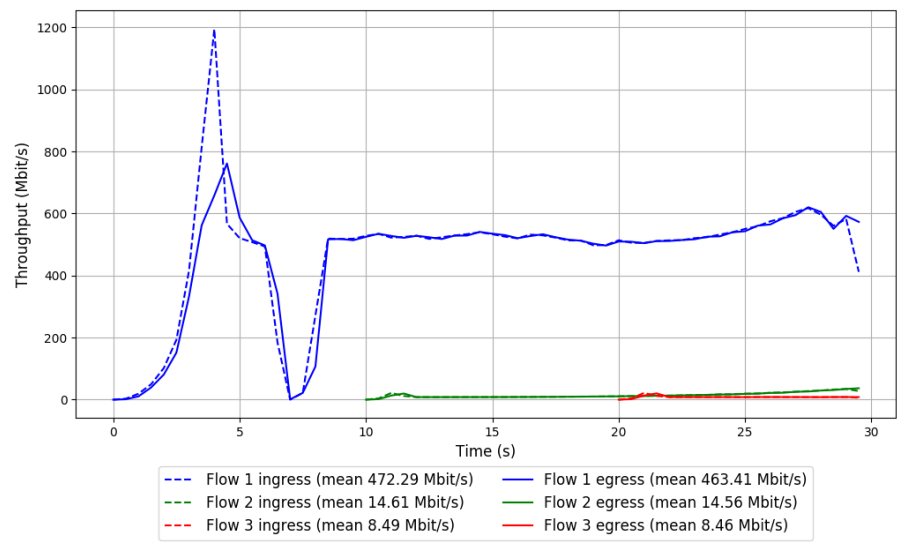
-- Flow 3:

Average throughput: 8.46 Mbit/s

95th percentile per-packet one-way delay: 163.916 ms

Loss rate: 0.27%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-12 15:49:04

End at: 2017-12-12 15:49:34

Below is generated by plot.py at 2017-12-12 17:12:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.07 Mbit/s

95th percentile per-packet one-way delay: 282.197 ms

Loss rate: 2.27%

-- Flow 1:

Average throughput: 17.20 Mbit/s

95th percentile per-packet one-way delay: 247.725 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 479.61 Mbit/s

95th percentile per-packet one-way delay: 282.416 ms

Loss rate: 2.37%

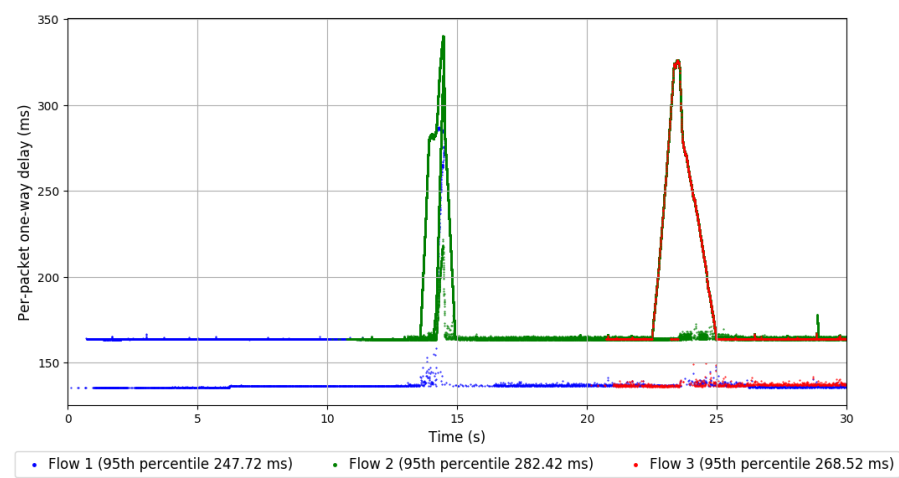
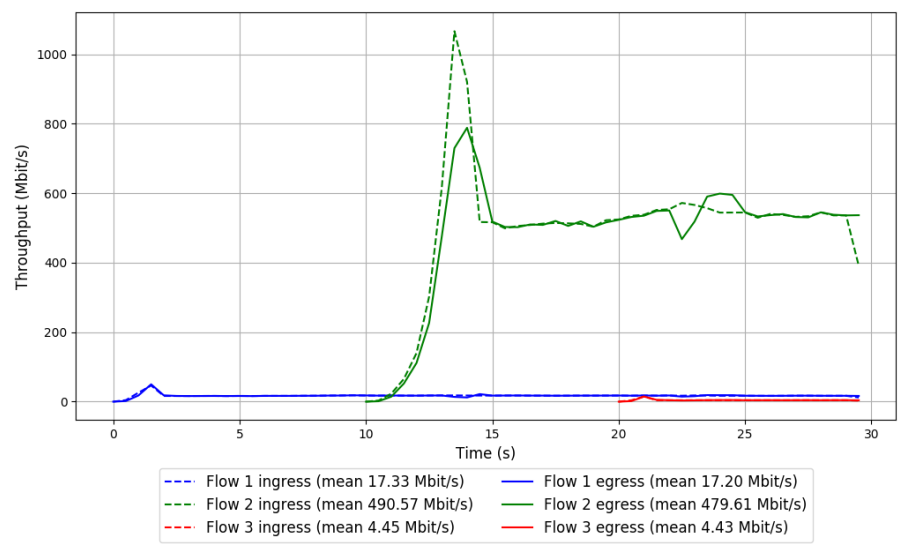
-- Flow 3:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 268.523 ms

Loss rate: 0.44%

Run 9: Report of PCC — Data Link

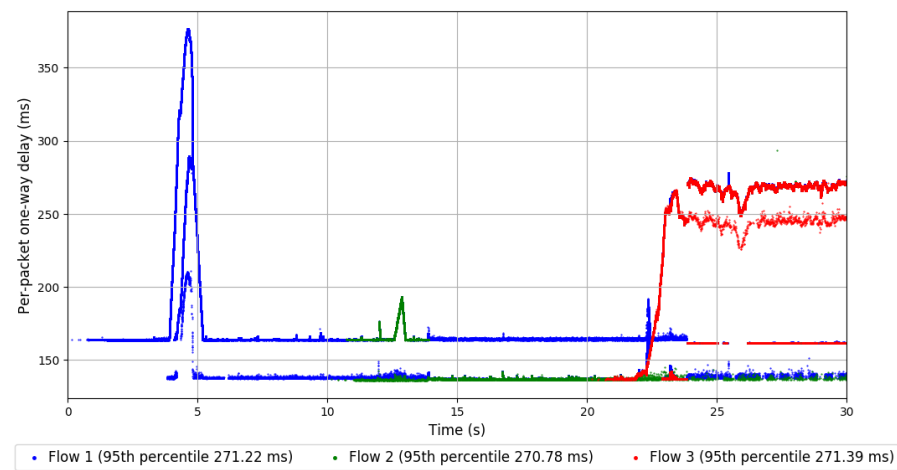
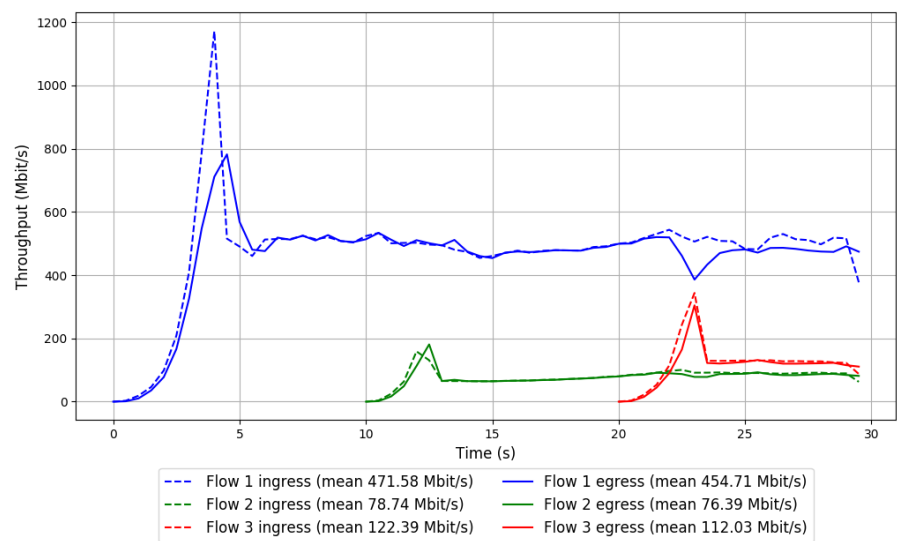


```
Run 10: Statistics of PCC

Start at: 2017-12-12 16:02:36
End at: 2017-12-12 16:03:06

# Below is generated by plot.py at 2017-12-12 17:14:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 542.36 Mbit/s
95th percentile per-packet one-way delay: 271.189 ms
Loss rate: 3.94%
-- Flow 1:
Average throughput: 454.71 Mbit/s
95th percentile per-packet one-way delay: 271.217 ms
Loss rate: 3.66%
-- Flow 2:
Average throughput: 76.39 Mbit/s
95th percentile per-packet one-way delay: 270.776 ms
Loss rate: 2.96%
-- Flow 3:
Average throughput: 112.03 Mbit/s
95th percentile per-packet one-way delay: 271.390 ms
Loss rate: 8.46%
```

Run 10: Report of PCC — Data Link

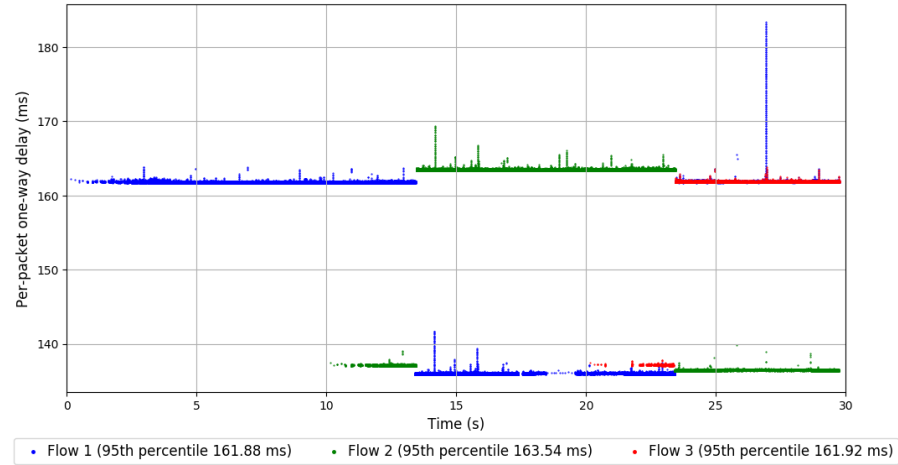
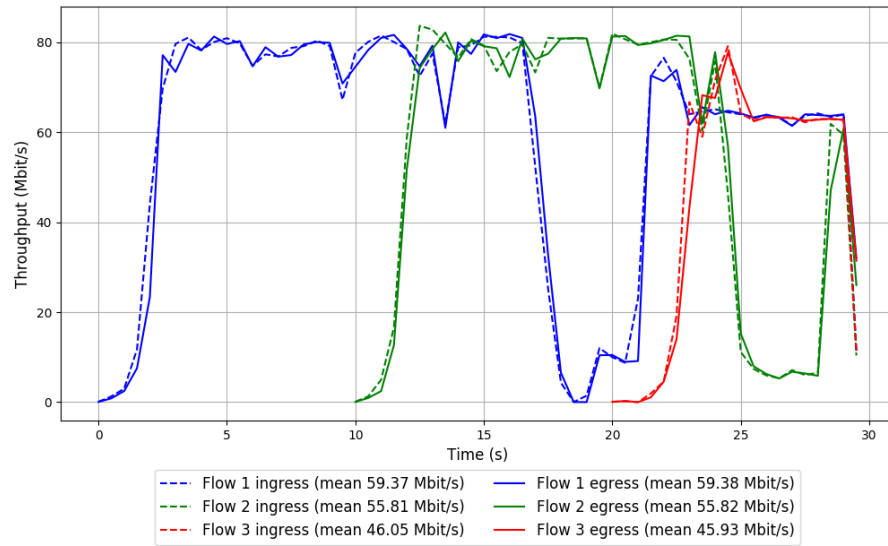


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-12 14:06:46
End at: 2017-12-12 14:07:16

# Below is generated by plot.py at 2017-12-12 17:14:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 111.21 Mbit/s
95th percentile per-packet one-way delay: 163.488 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.38 Mbit/s
95th percentile per-packet one-way delay: 161.878 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 55.82 Mbit/s
95th percentile per-packet one-way delay: 163.541 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.93 Mbit/s
95th percentile per-packet one-way delay: 161.918 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

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

End at: 2017-12-12 14:20:44

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.50 Mbit/s

95th percentile per-packet one-way delay: 164.105 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 59.46 Mbit/s

95th percentile per-packet one-way delay: 164.062 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 63.26 Mbit/s

95th percentile per-packet one-way delay: 164.158 ms

Loss rate: 0.00%

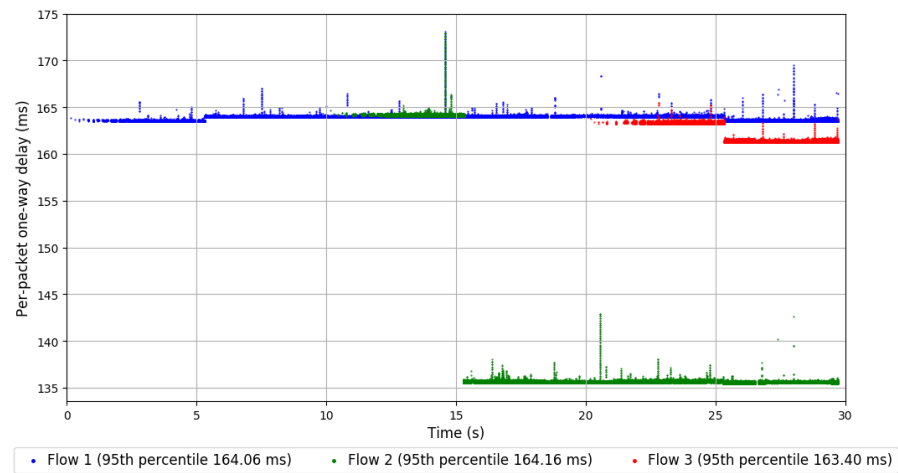
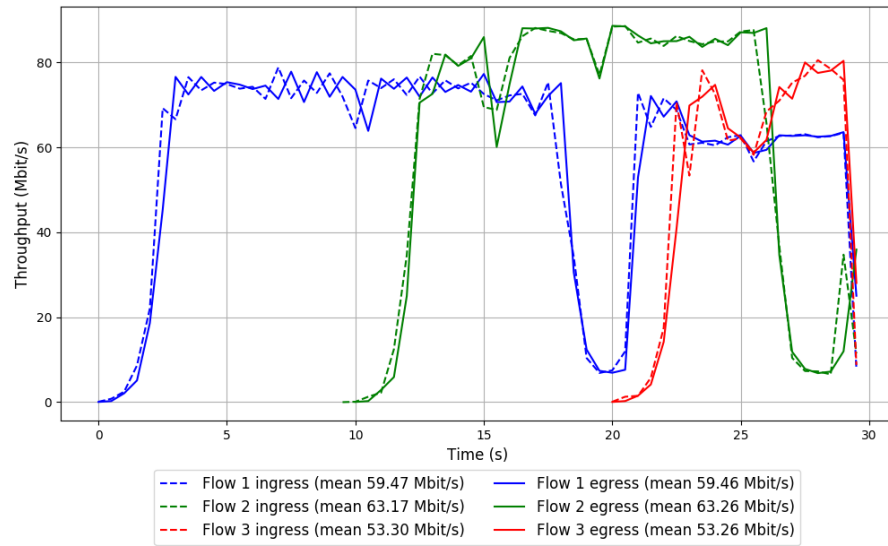
-- Flow 3:

Average throughput: 53.26 Mbit/s

95th percentile per-packet one-way delay: 163.402 ms

Loss rate: 0.32%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-12 14:33:22

End at: 2017-12-12 14:33:52

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.87 Mbit/s

95th percentile per-packet one-way delay: 163.602 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.71 Mbit/s

95th percentile per-packet one-way delay: 161.316 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 59.87 Mbit/s

95th percentile per-packet one-way delay: 163.634 ms

Loss rate: 0.00%

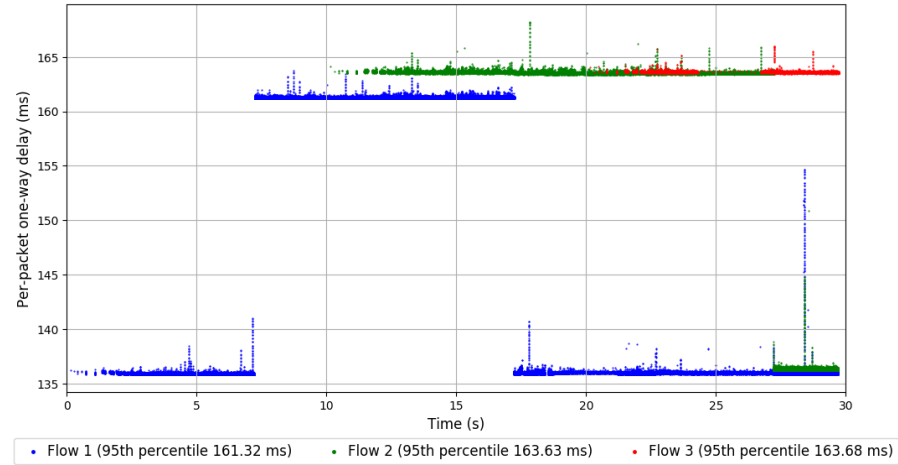
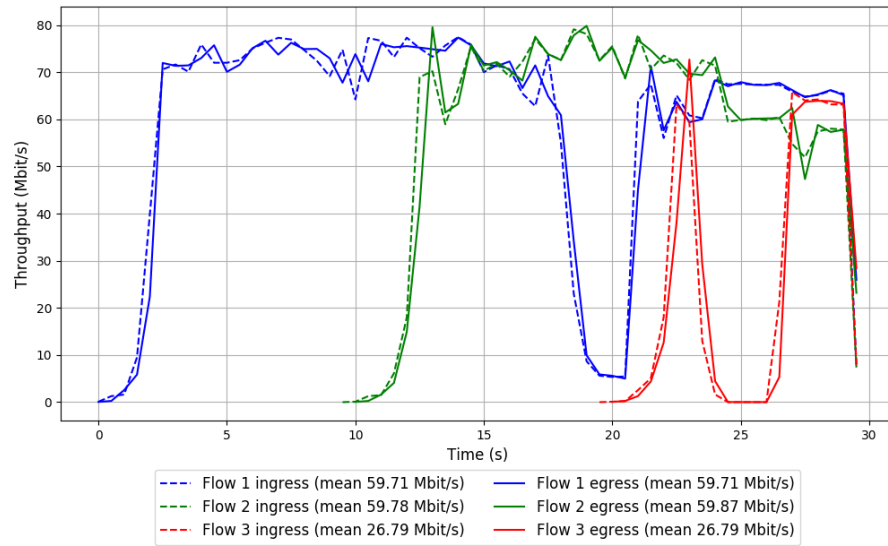
-- Flow 3:

Average throughput: 26.79 Mbit/s

95th percentile per-packet one-way delay: 163.678 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

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

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

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 128.41 Mbit/s

95th percentile per-packet one-way delay: 137.175 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.36 Mbit/s

95th percentile per-packet one-way delay: 135.608 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.87 Mbit/s

95th percentile per-packet one-way delay: 136.320 ms

Loss rate: 0.00%

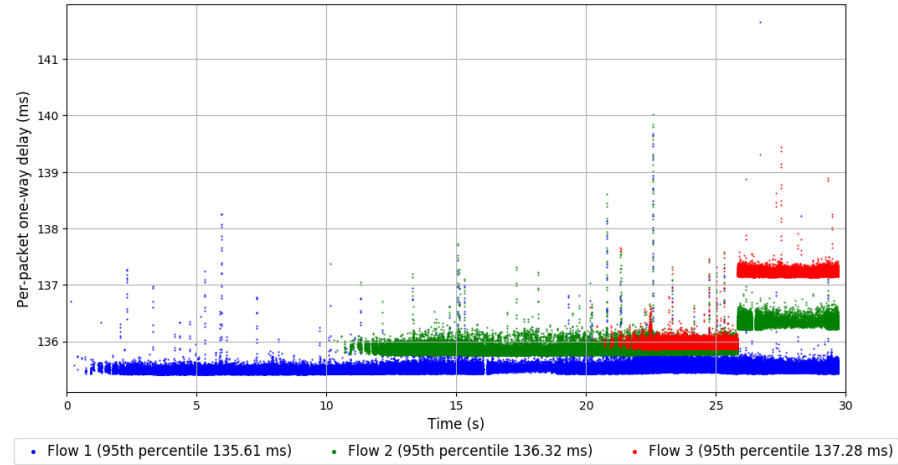
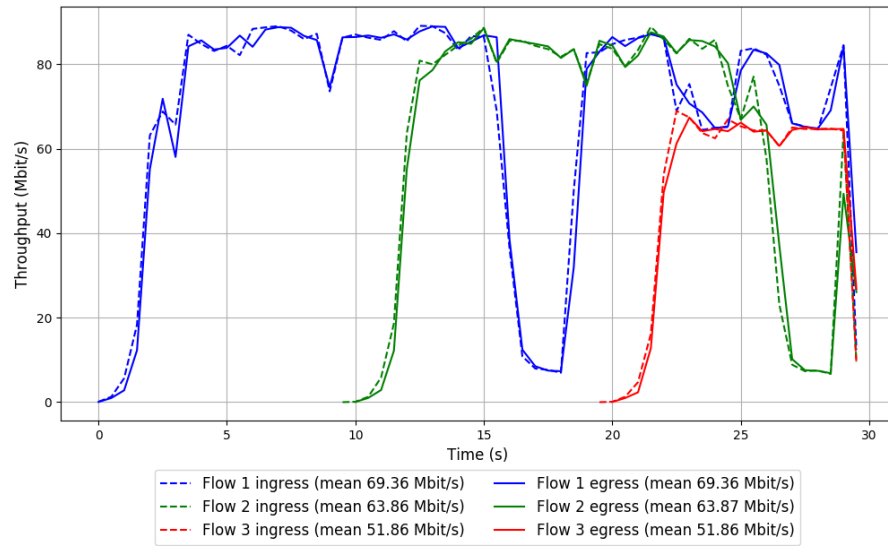
-- Flow 3:

Average throughput: 51.86 Mbit/s

95th percentile per-packet one-way delay: 137.275 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-12 14:59:47

End at: 2017-12-12 15:00:17

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.90 Mbit/s

95th percentile per-packet one-way delay: 161.396 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 51.05 Mbit/s

95th percentile per-packet one-way delay: 161.402 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 62.09 Mbit/s

95th percentile per-packet one-way delay: 161.412 ms

Loss rate: 0.06%

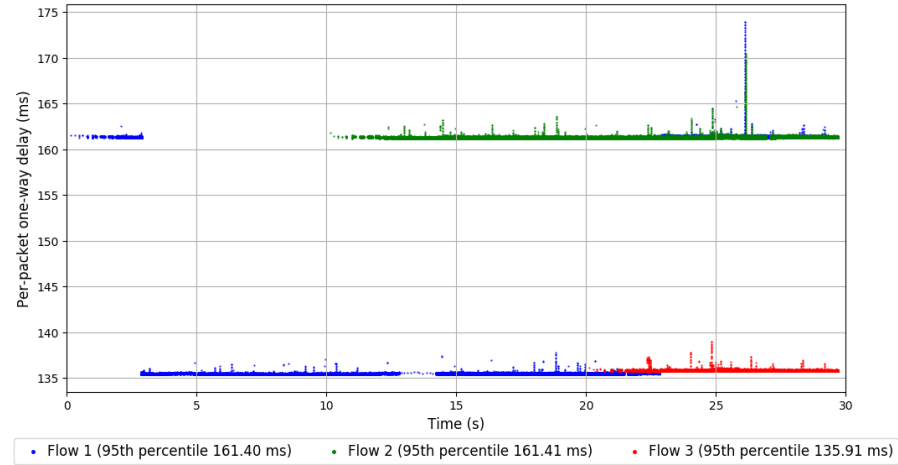
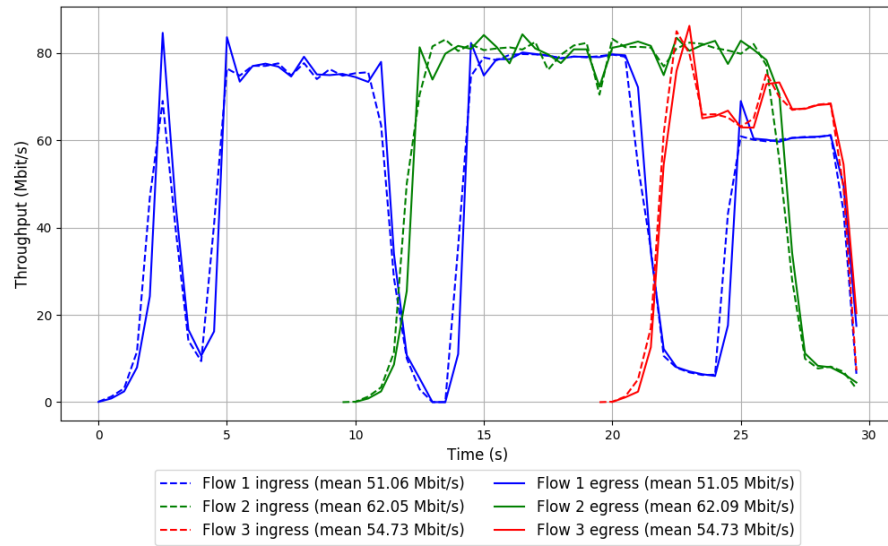
-- Flow 3:

Average throughput: 54.73 Mbit/s

95th percentile per-packet one-way delay: 135.910 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-12 15:13:20

End at: 2017-12-12 15:13:50

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.40 Mbit/s

95th percentile per-packet one-way delay: 161.296 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.50 Mbit/s

95th percentile per-packet one-way delay: 136.993 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.31 Mbit/s

95th percentile per-packet one-way delay: 136.501 ms

Loss rate: 0.00%

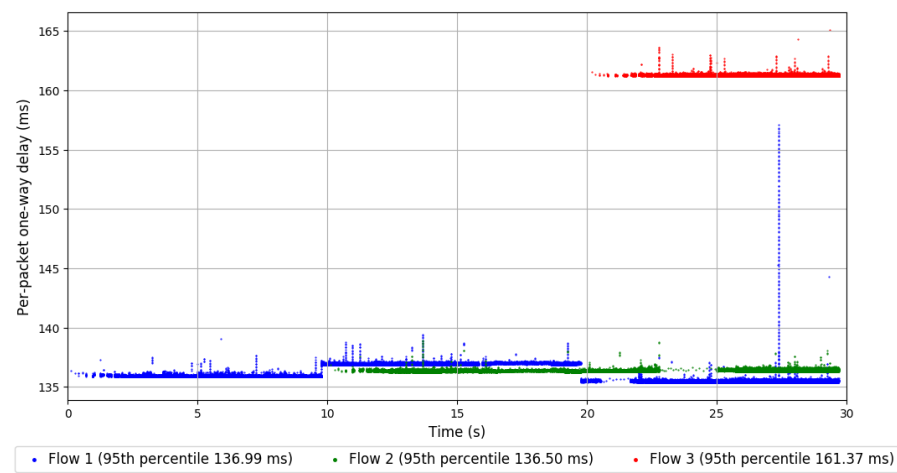
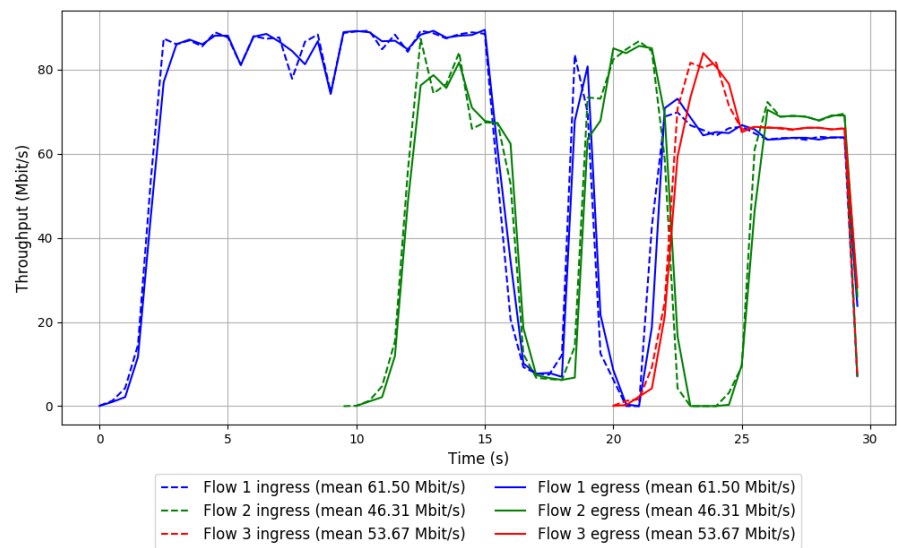
-- Flow 3:

Average throughput: 53.67 Mbit/s

95th percentile per-packet one-way delay: 161.372 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-12 15:27:16

End at: 2017-12-12 15:27:46

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.63 Mbit/s

95th percentile per-packet one-way delay: 163.537 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.24 Mbit/s

95th percentile per-packet one-way delay: 163.569 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.70 Mbit/s

95th percentile per-packet one-way delay: 137.088 ms

Loss rate: 0.00%

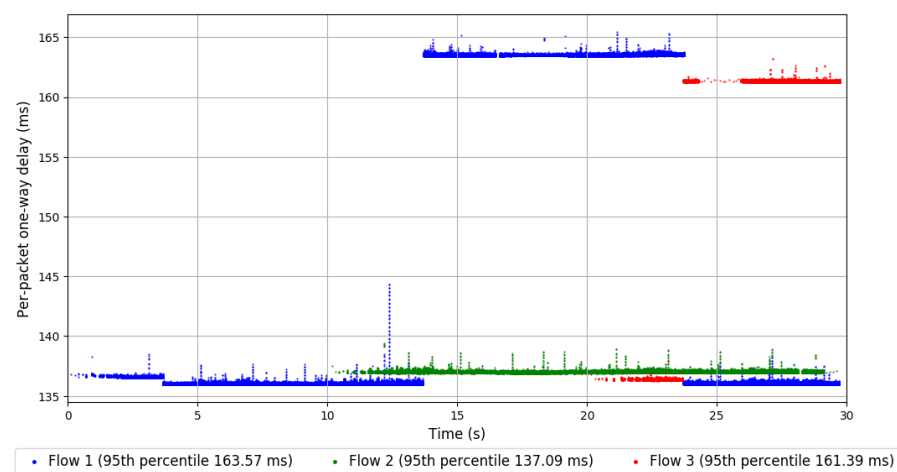
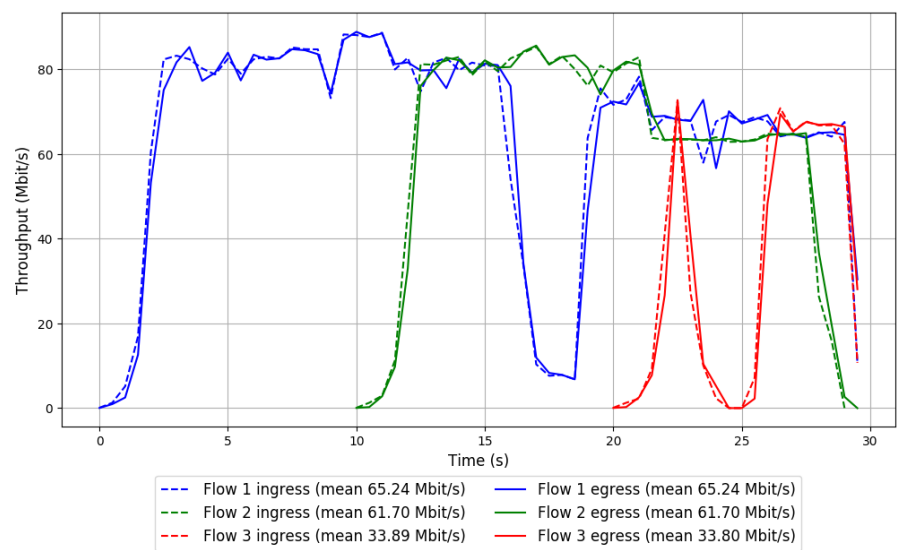
-- Flow 3:

Average throughput: 33.80 Mbit/s

95th percentile per-packet one-way delay: 161.394 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-12 15:41:03

End at: 2017-12-12 15:41:33

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.82 Mbit/s

95th percentile per-packet one-way delay: 163.543 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 65.55 Mbit/s

95th percentile per-packet one-way delay: 163.567 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 61.39 Mbit/s

95th percentile per-packet one-way delay: 161.383 ms

Loss rate: 0.00%

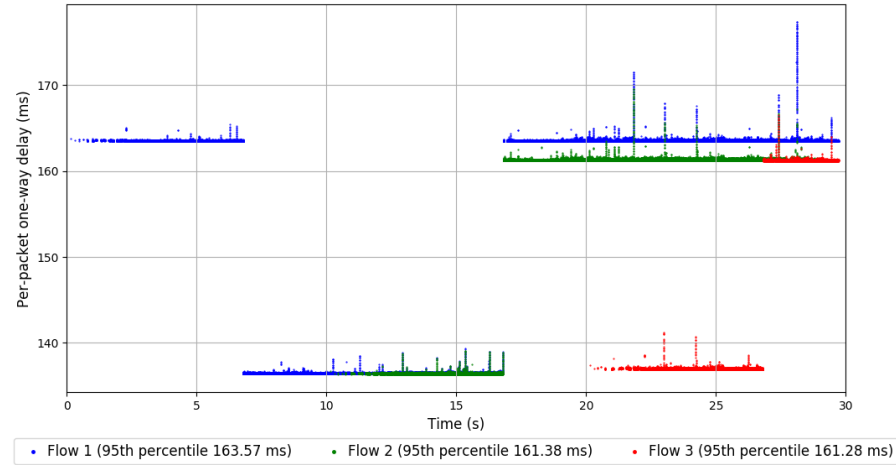
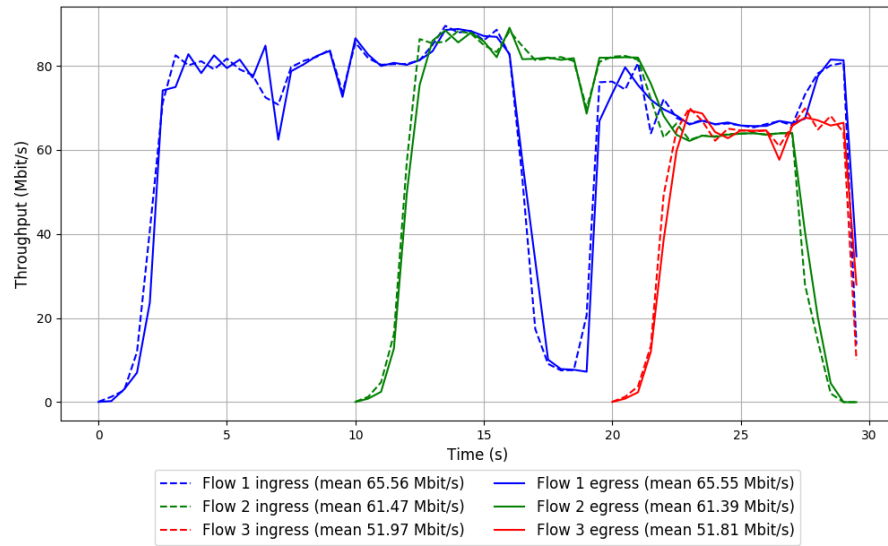
-- Flow 3:

Average throughput: 51.81 Mbit/s

95th percentile per-packet one-way delay: 161.276 ms

Loss rate: 0.30%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-12 15:54:35

End at: 2017-12-12 15:55:05

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.89 Mbit/s

95th percentile per-packet one-way delay: 163.532 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 56.25 Mbit/s

95th percentile per-packet one-way delay: 136.642 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.47 Mbit/s

95th percentile per-packet one-way delay: 163.538 ms

Loss rate: 0.00%

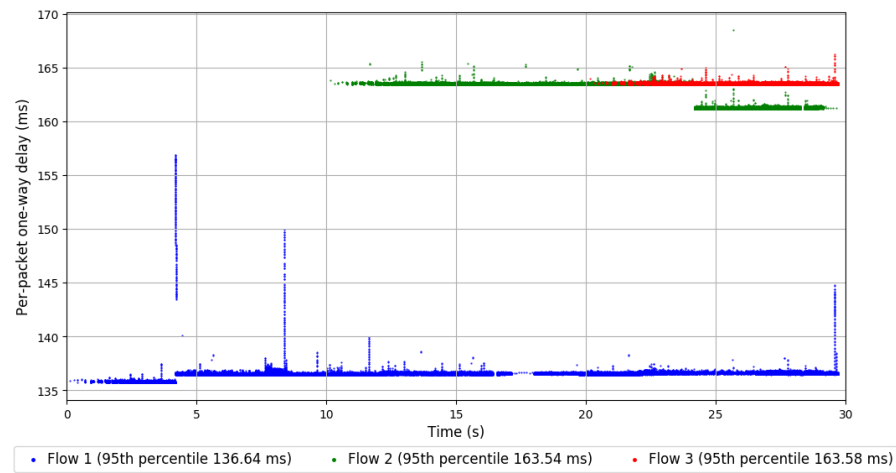
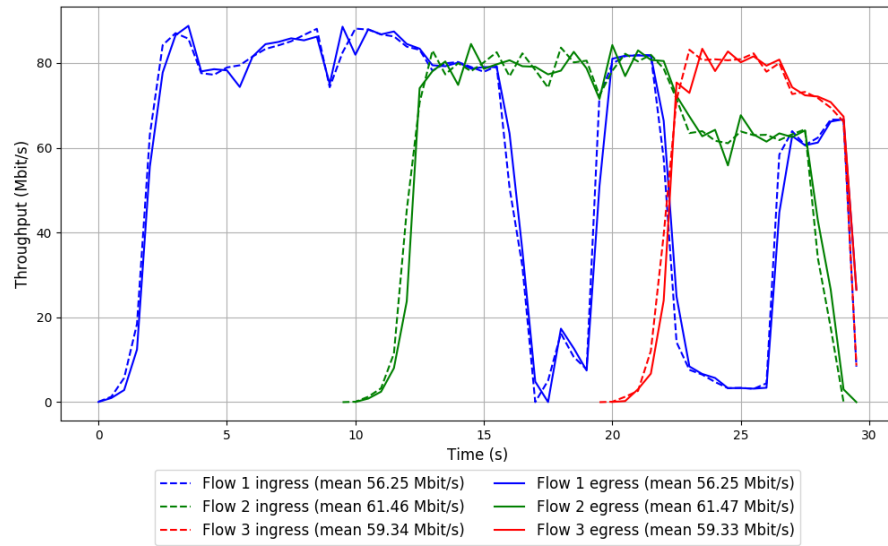
-- Flow 3:

Average throughput: 59.33 Mbit/s

95th percentile per-packet one-way delay: 163.580 ms

Loss rate: 0.30%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-12 16:08:15

End at: 2017-12-12 16:08:45

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.88 Mbit/s

95th percentile per-packet one-way delay: 163.548 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 50.55 Mbit/s

95th percentile per-packet one-way delay: 163.583 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 56.99 Mbit/s

95th percentile per-packet one-way delay: 163.469 ms

Loss rate: 0.00%

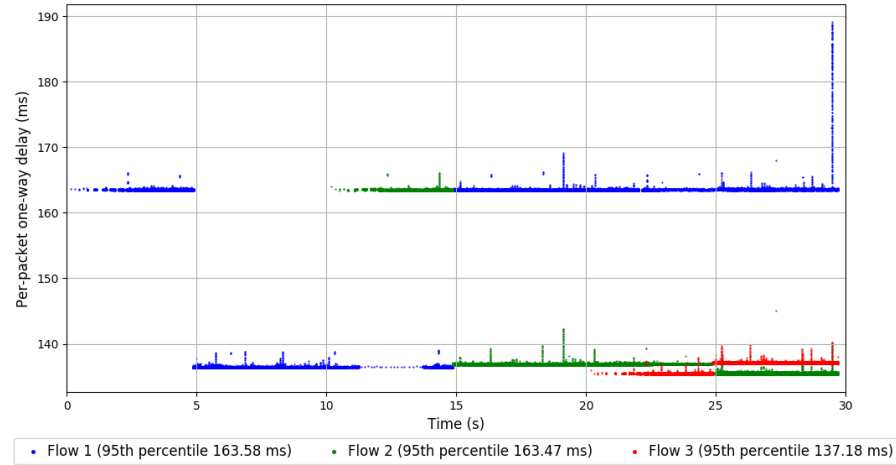
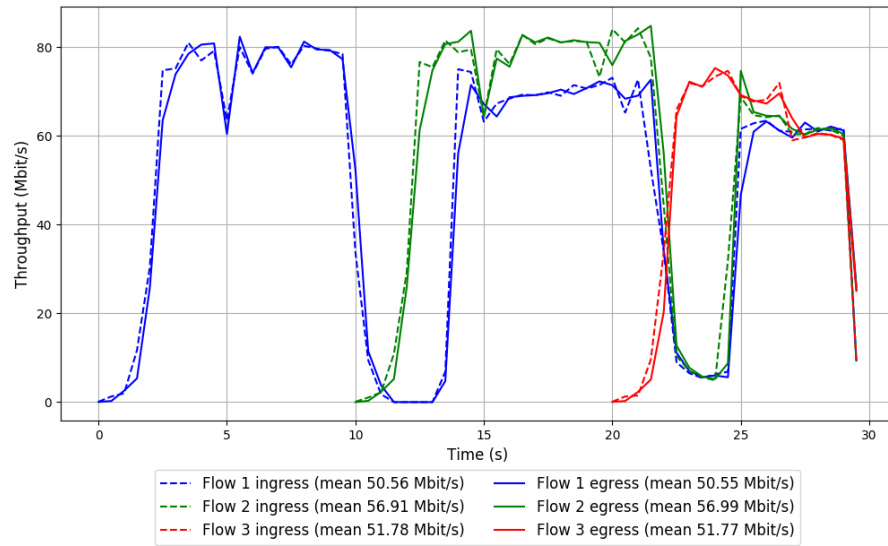
-- Flow 3:

Average throughput: 51.77 Mbit/s

95th percentile per-packet one-way delay: 137.182 ms

Loss rate: 0.01%

Run 10: Report of QUIC Cubic — Data Link

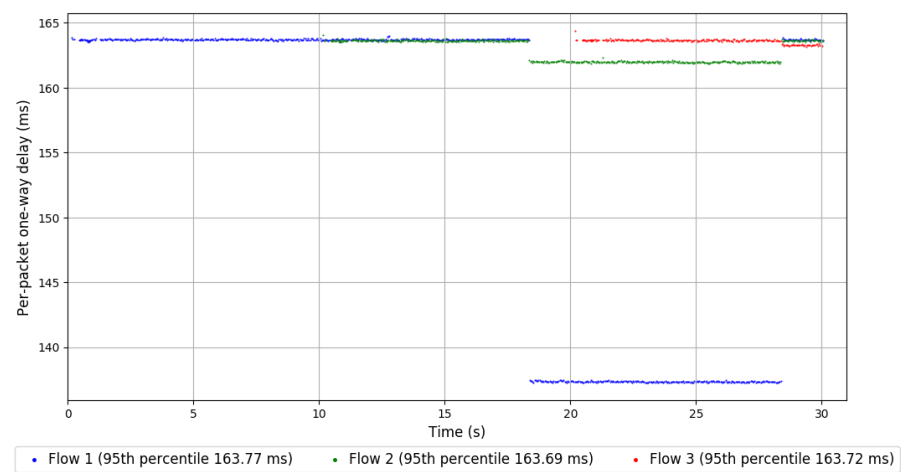
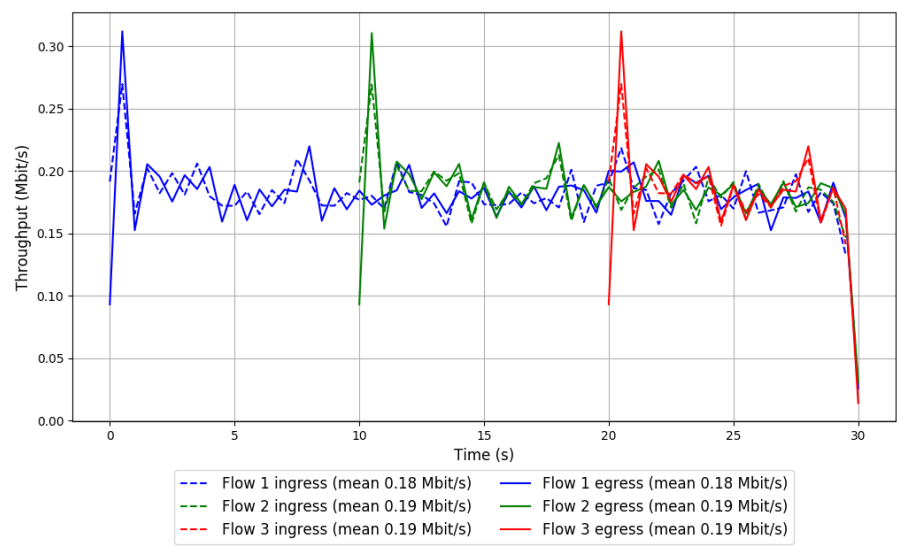


```
Run 1: Statistics of SCReAM

Start at: 2017-12-12 14:03:22
End at: 2017-12-12 14:03:52

# Below is generated by plot.py at 2017-12-12 17:14:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 163.754 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 163.769 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 163.690 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 163.725 ms
Loss rate: 0.35%
```

Run 1: Report of SReAM — Data Link

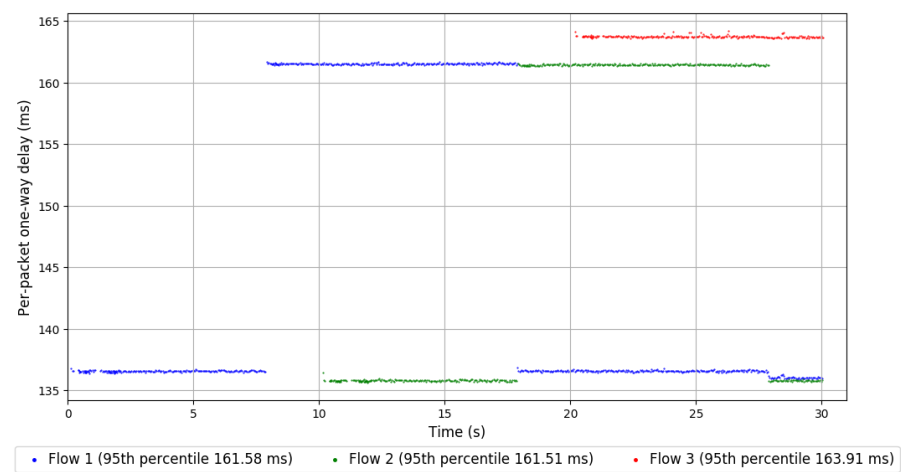
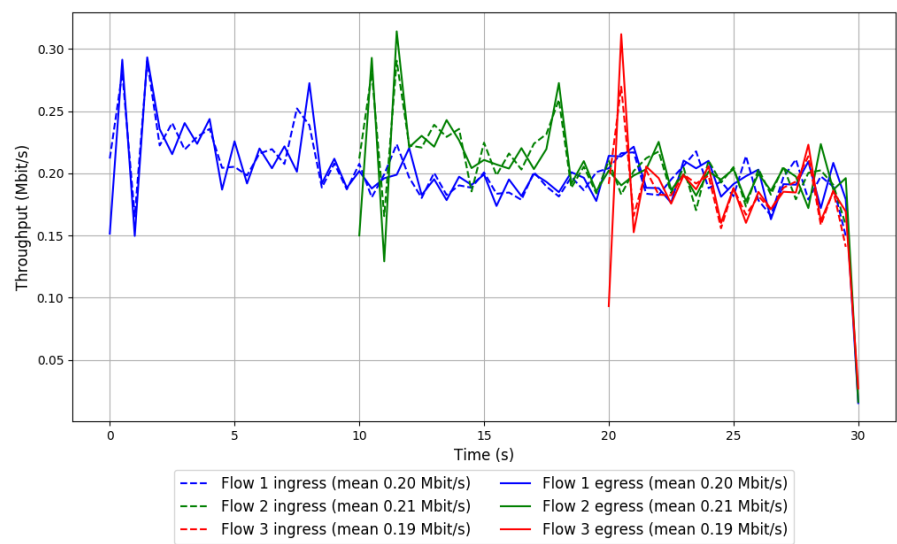


```
Run 2: Statistics of SReAM

Start at: 2017-12-12 14:16:52
End at: 2017-12-12 14:17:22

# Below is generated by plot.py at 2017-12-12 17:14:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 163.752 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 161.582 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 161.515 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 163.912 ms
Loss rate: 0.00%
```

Run 2: Report of SCRaM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-12 14:30:00

End at: 2017-12-12 14:30:30

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 163.860 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 161.641 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 163.439 ms

Loss rate: 0.00%

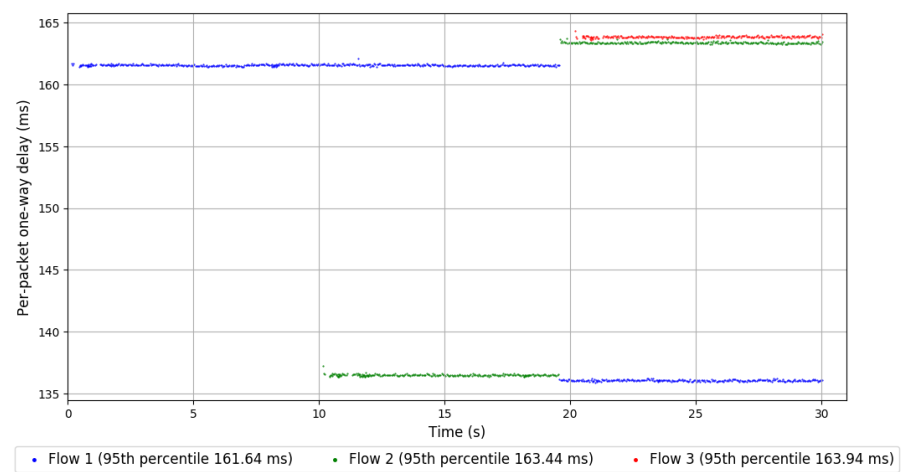
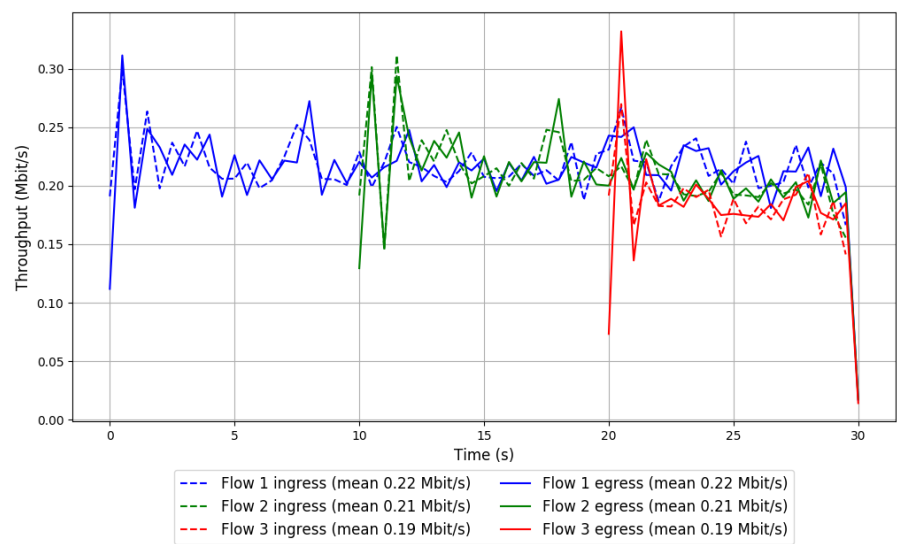
-- Flow 3:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 163.936 ms

Loss rate: 0.35%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2017-12-12 14:42:54

End at: 2017-12-12 14:43:24

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 163.499 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 163.514 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 161.542 ms

Loss rate: 0.20%

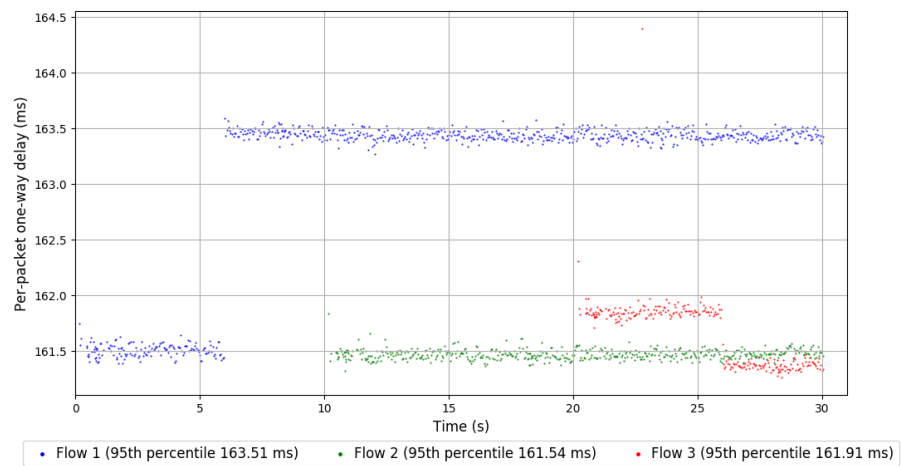
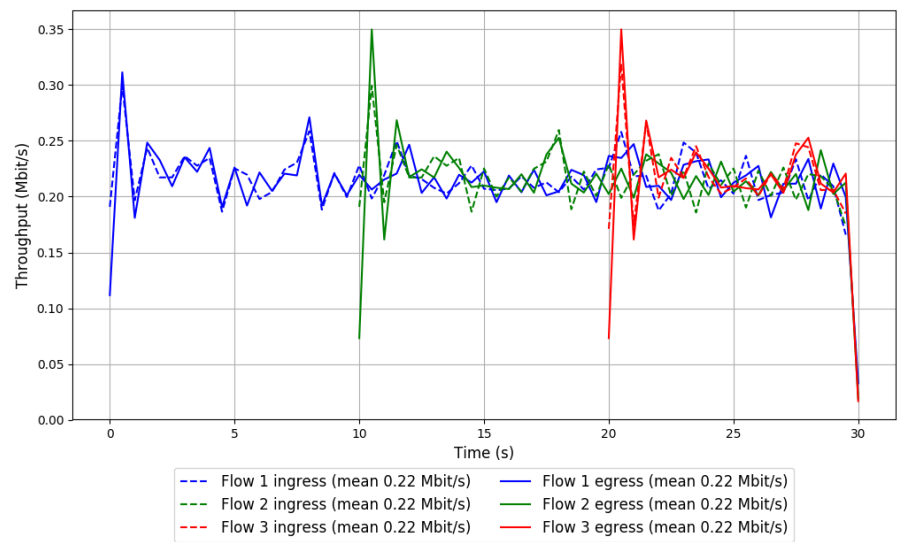
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 161.914 ms

Loss rate: 0.35%

Run 4: Report of SReAM — Data Link

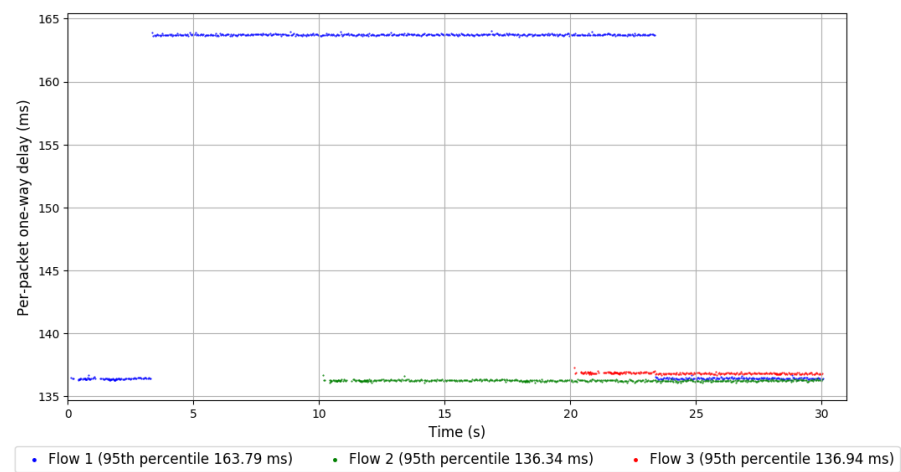
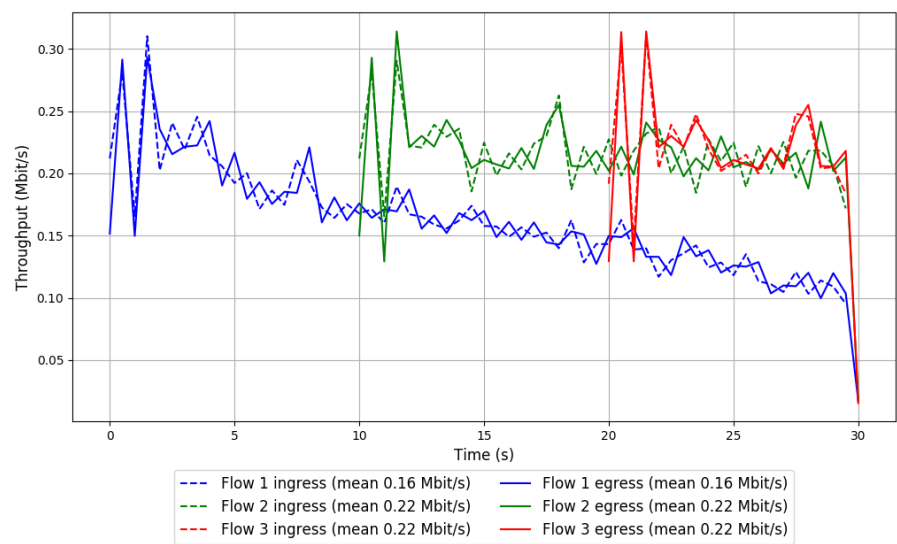


```
Run 5: Statistics of SReAM

Start at: 2017-12-12 14:56:27
End at: 2017-12-12 14:56:57

# Below is generated by plot.py at 2017-12-12 17:14:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 163.764 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 163.791 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.338 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.940 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2017-12-12 15:09:57

End at: 2017-12-12 15:10:27

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 163.692 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.935 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 161.522 ms

Loss rate: 0.00%

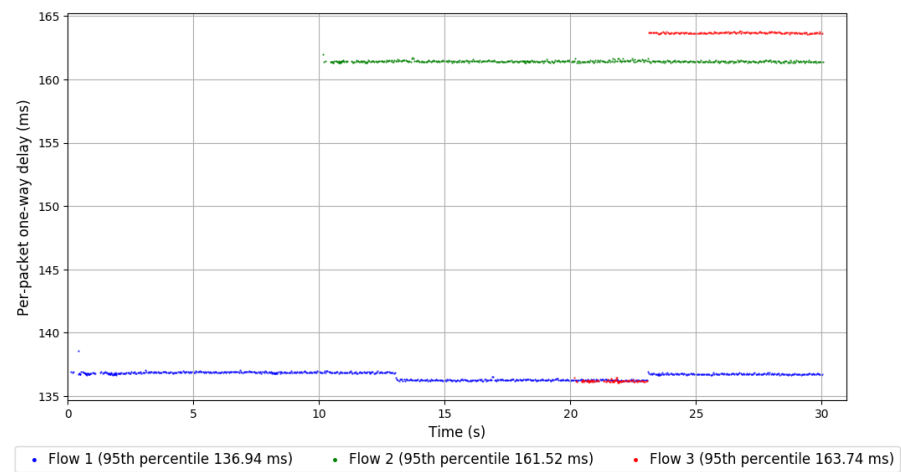
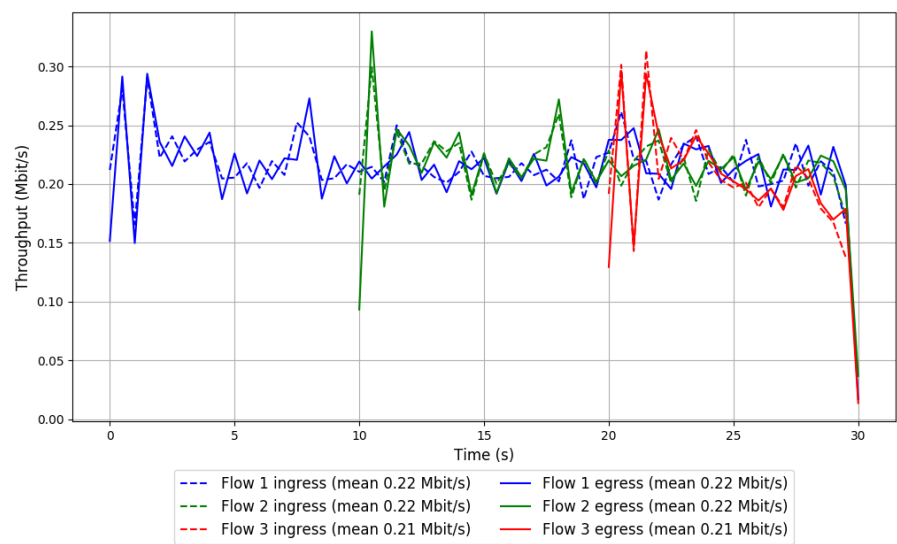
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 163.739 ms

Loss rate: 0.00%

Run 6: Report of SCRaM — Data Link

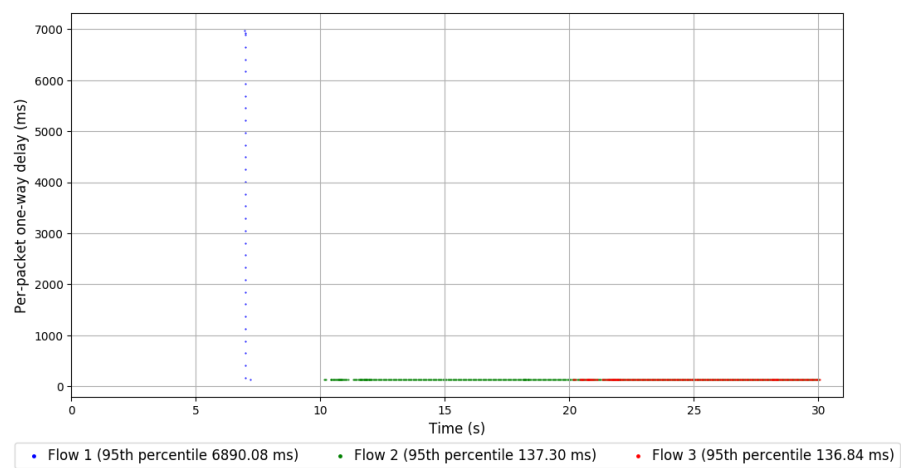
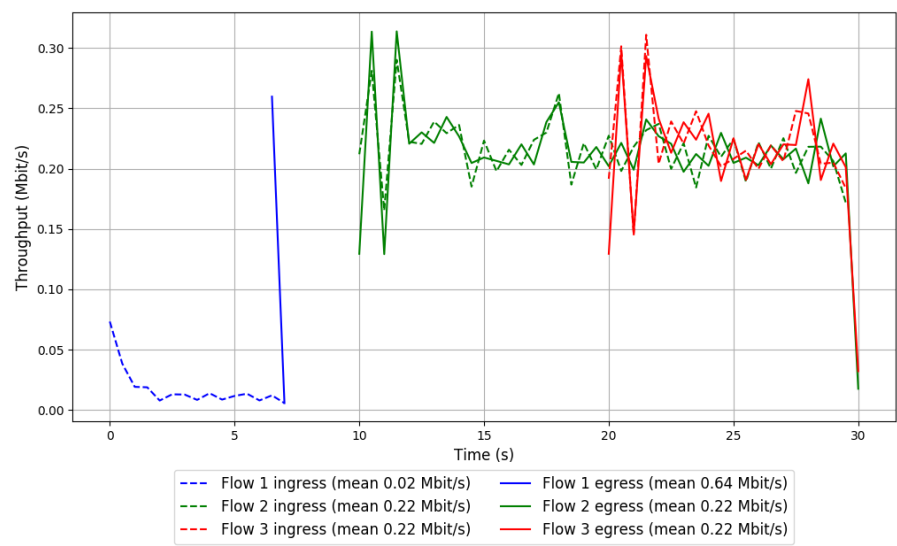


Run 7: Statistics of SReAM

Start at: 2017-12-12 15:23:37

End at: 2017-12-12 15:24:07

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-12 15:37:39

End at: 2017-12-12 15:38:09

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 163.627 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 163.648 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.800 ms

Loss rate: 0.00%

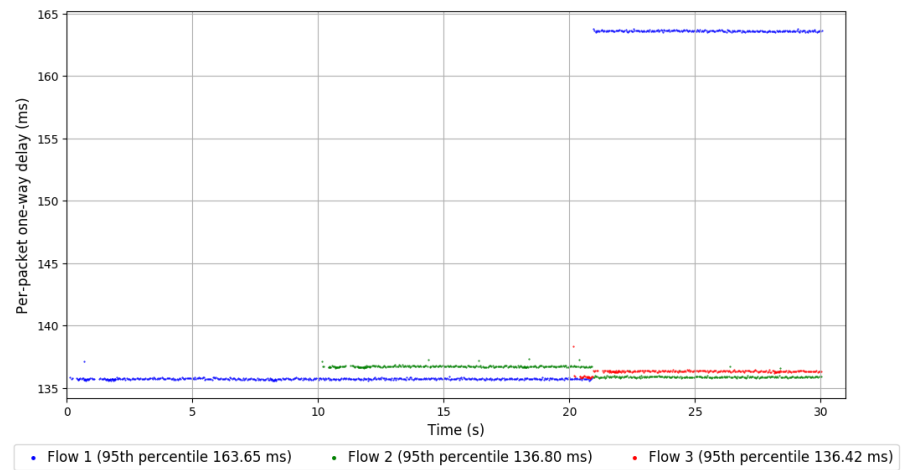
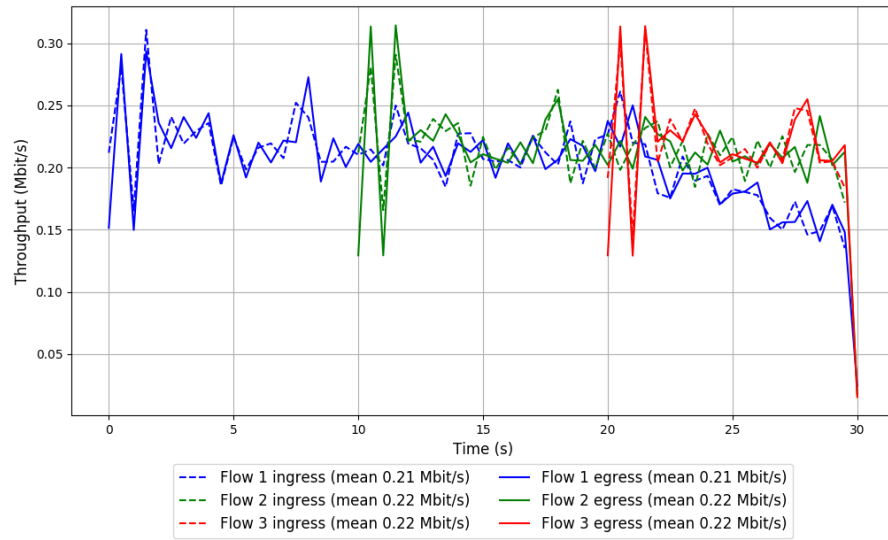
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.423 ms

Loss rate: 0.00%

Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2017-12-12 15:51:03

End at: 2017-12-12 15:51:33

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 163.538 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.288 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.821 ms

Loss rate: 0.00%

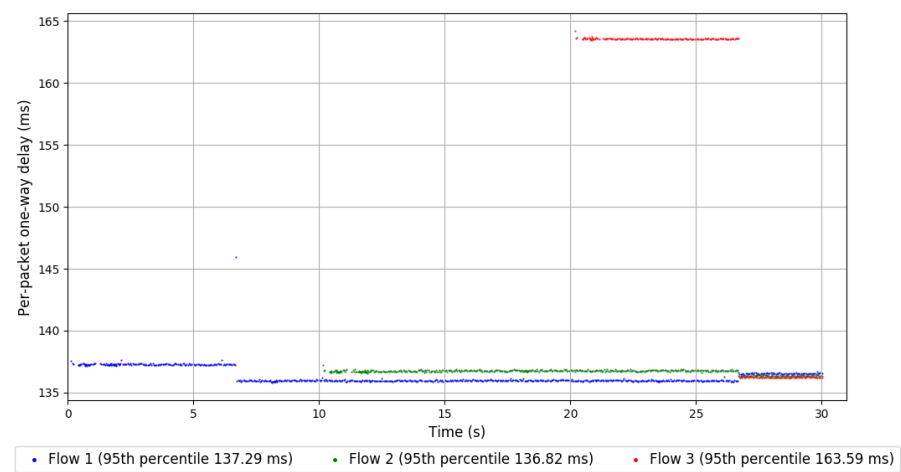
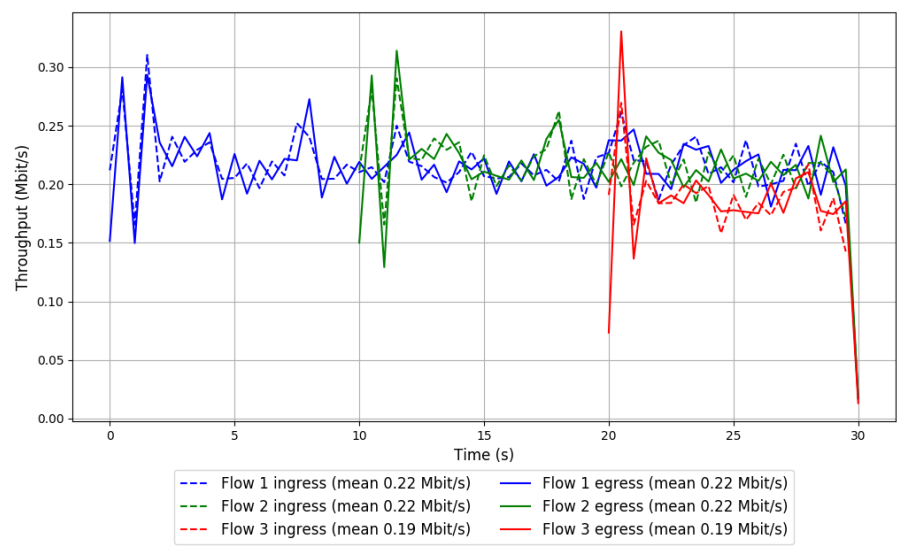
-- Flow 3:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 163.593 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

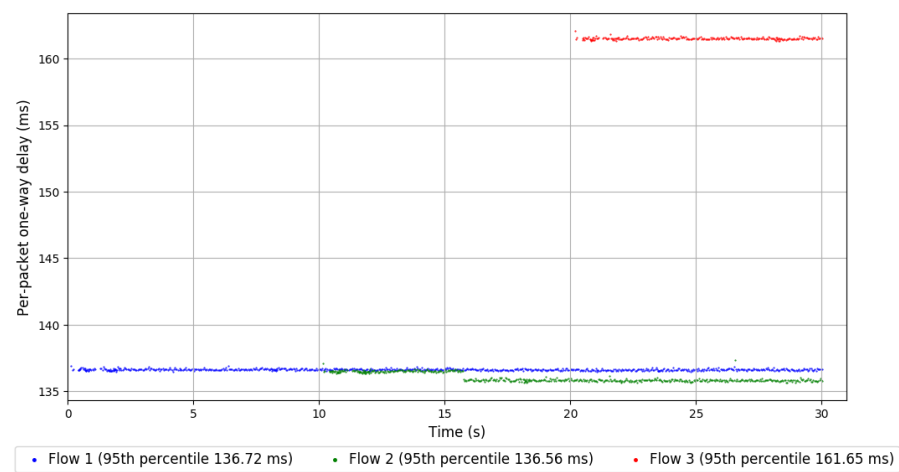
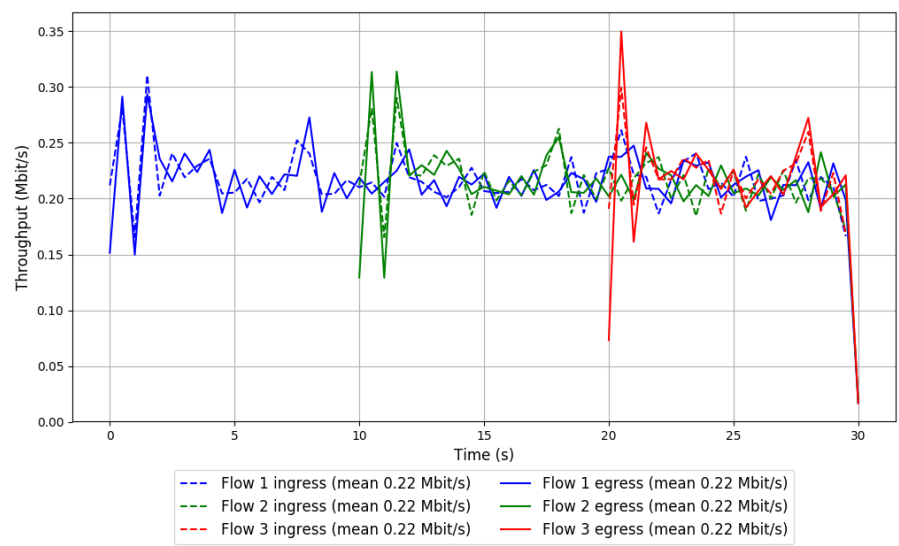


```
Run 10: Statistics of SReAM

Start at: 2017-12-12 16:04:54
End at: 2017-12-12 16:05:24

# Below is generated by plot.py at 2017-12-12 17:14:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 161.550 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.724 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.557 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 161.650 ms
Loss rate: 0.35%
```

Run 10: Report of SReAM — Data Link

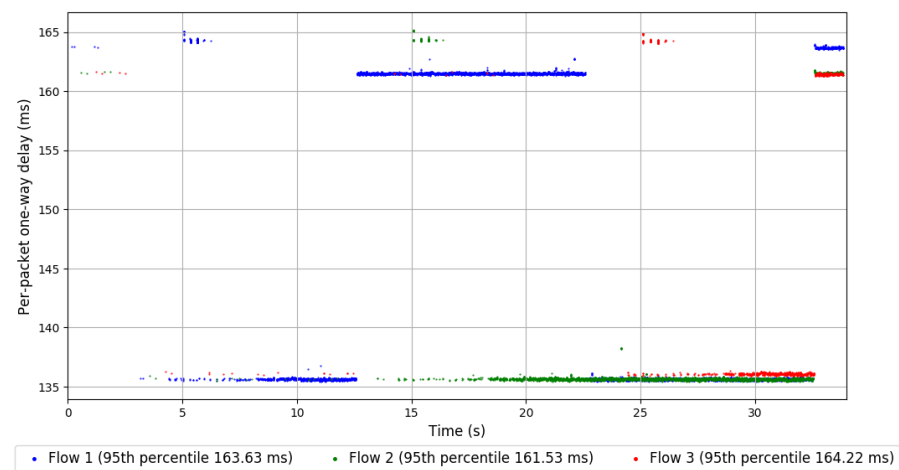
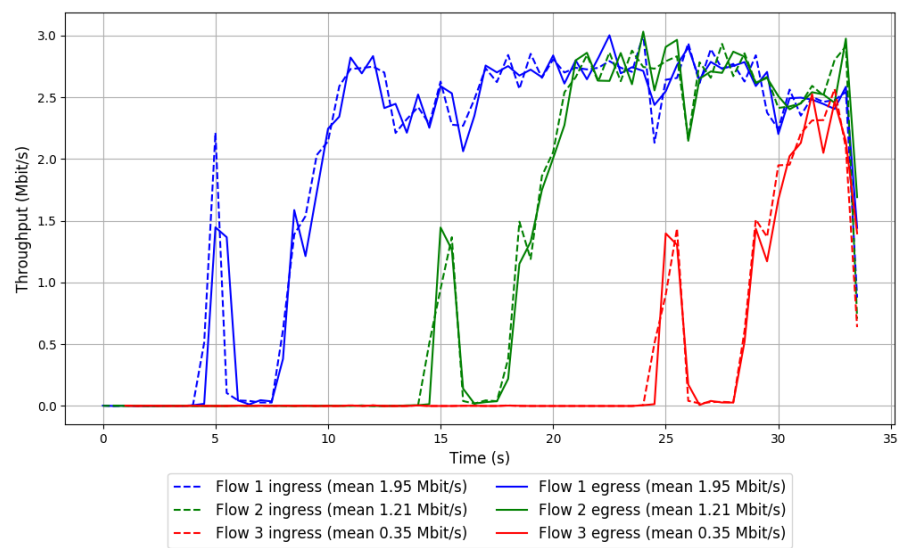


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-12 14:04:11
End at: 2017-12-12 14:04:41

# Below is generated by plot.py at 2017-12-12 17:14:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 163.603 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 163.627 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 161.528 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 164.215 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-12 14:17:42

End at: 2017-12-12 14:18:12

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.52 Mbit/s

95th percentile per-packet one-way delay: 161.779 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 161.560 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 136.179 ms

Loss rate: 0.00%

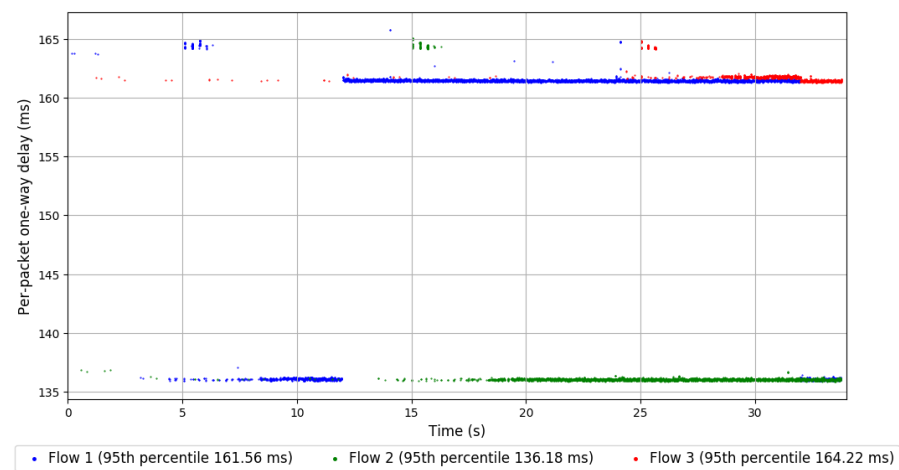
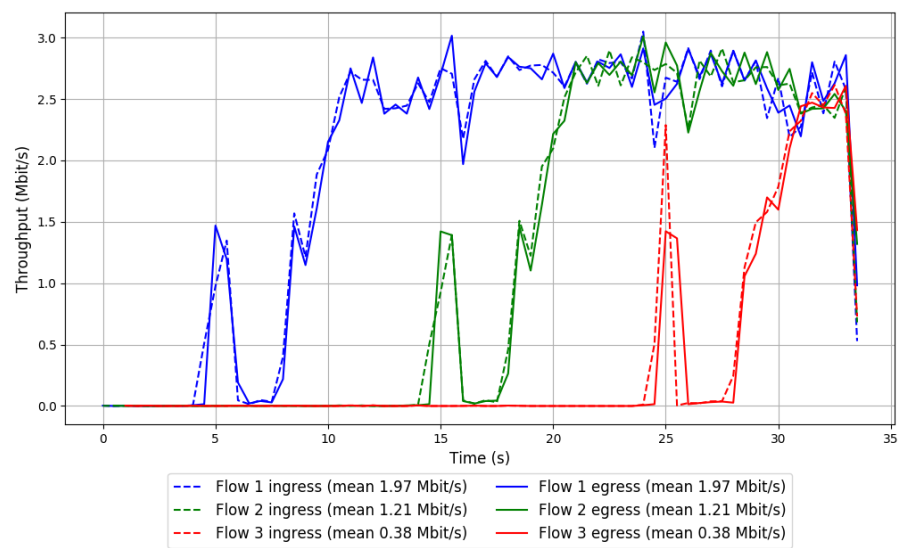
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 164.222 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-12 14:30:50

End at: 2017-12-12 14:31:20

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.30 Mbit/s

95th percentile per-packet one-way delay: 163.739 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 1.92 Mbit/s

95th percentile per-packet one-way delay: 163.759 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 163.444 ms

Loss rate: 0.00%

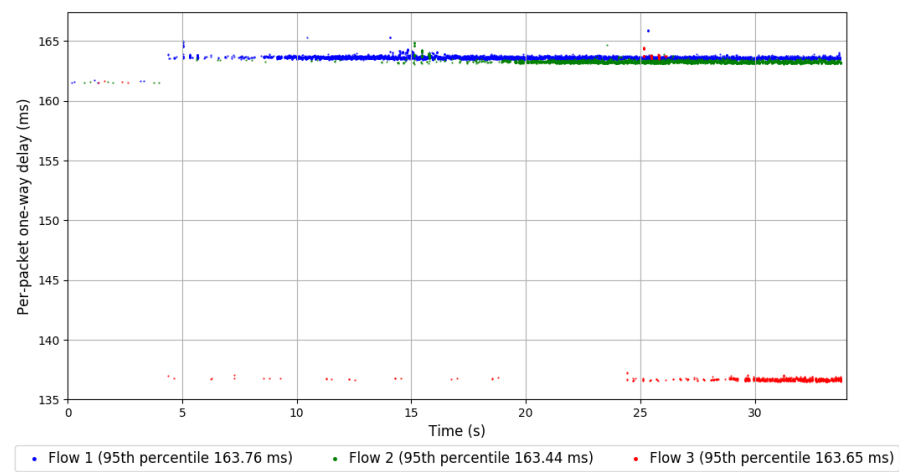
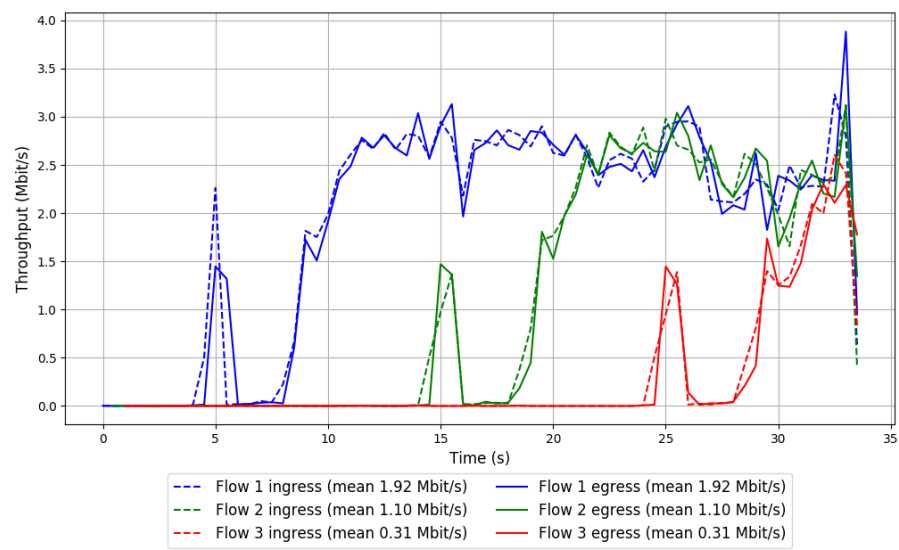
-- Flow 3:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 163.649 ms

Loss rate: 0.01%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-12 14:43:43

End at: 2017-12-12 14:44:13

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.46 Mbit/s

95th percentile per-packet one-way delay: 163.736 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 161.571 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 163.732 ms

Loss rate: 0.19%

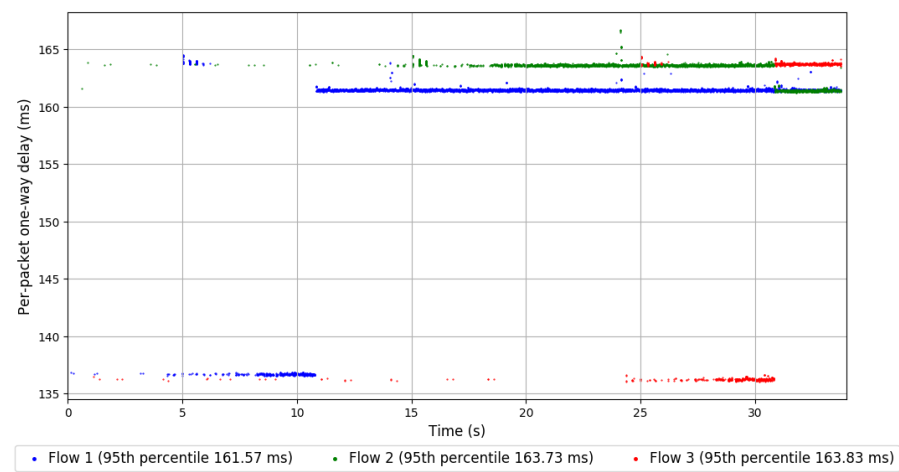
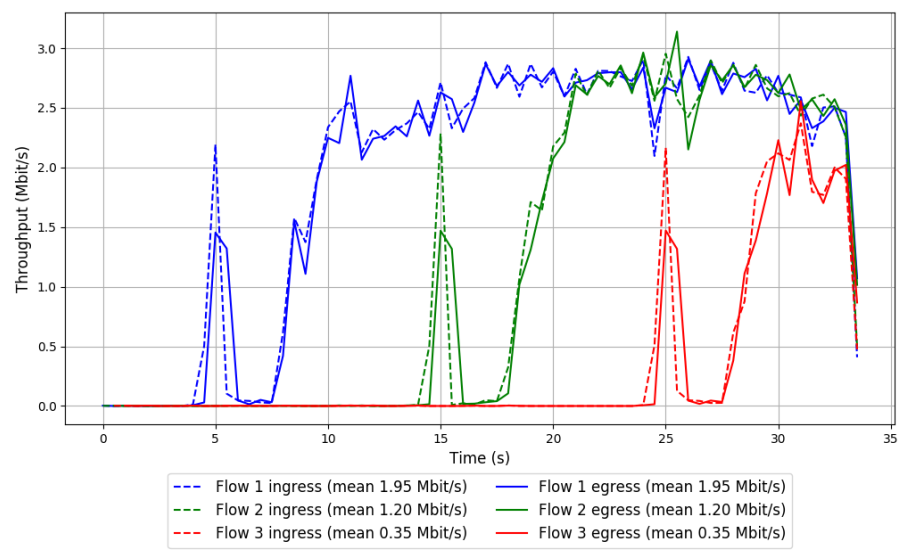
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 163.833 ms

Loss rate: 0.64%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-12 14:57:15

End at: 2017-12-12 14:57:45

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.60 Mbit/s

95th percentile per-packet one-way delay: 161.580 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 161.607 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 136.817 ms

Loss rate: 0.00%

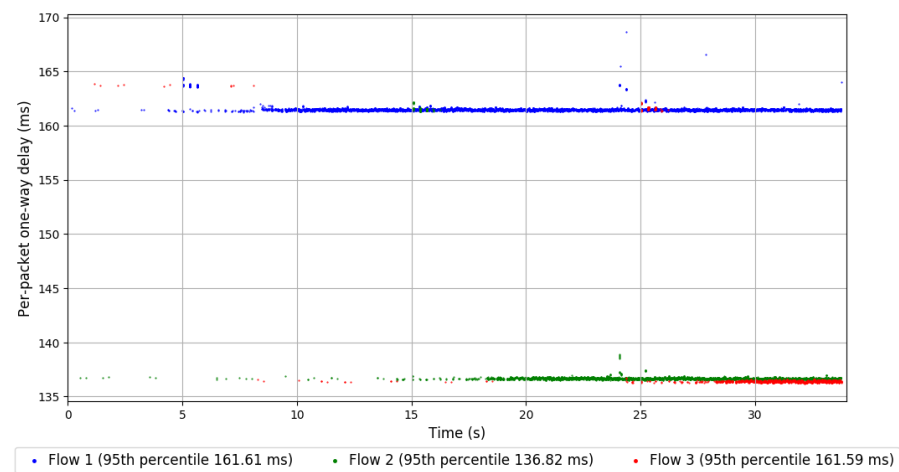
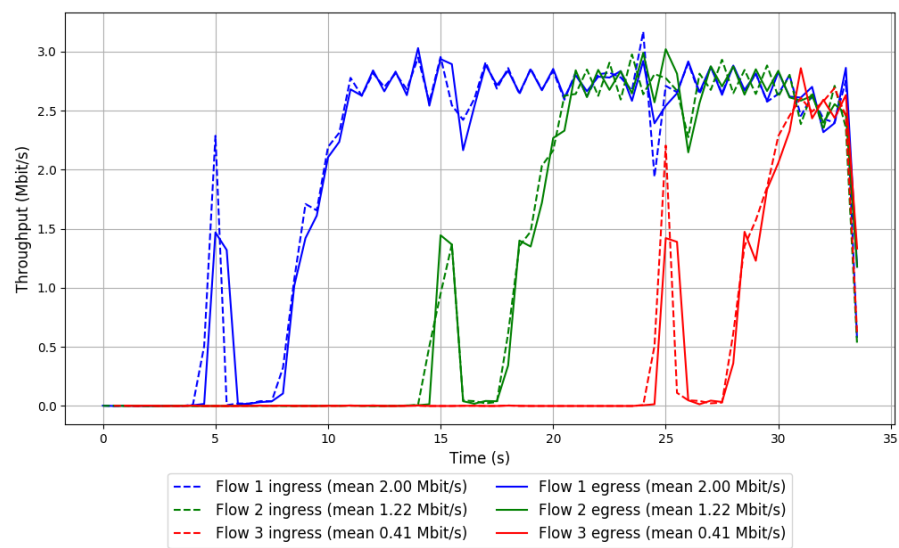
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 161.591 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-12 15:10:47

End at: 2017-12-12 15:11:17

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.47 Mbit/s

95th percentile per-packet one-way delay: 161.538 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 136.097 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 161.558 ms

Loss rate: 0.37%

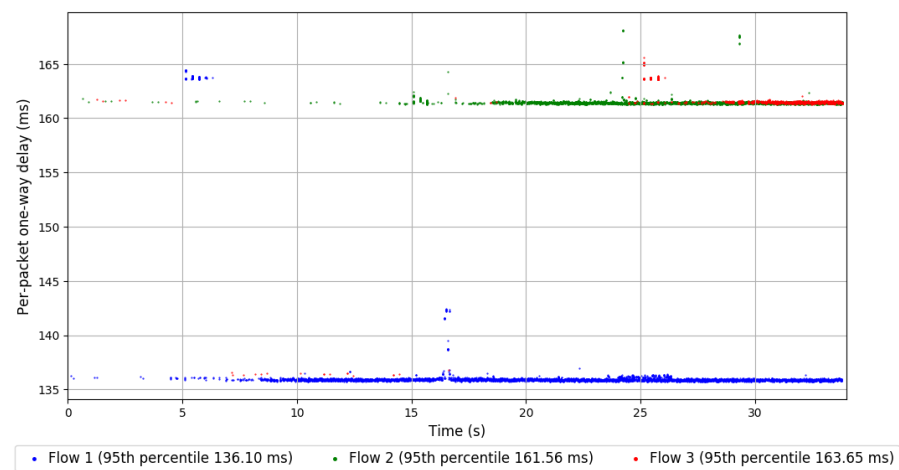
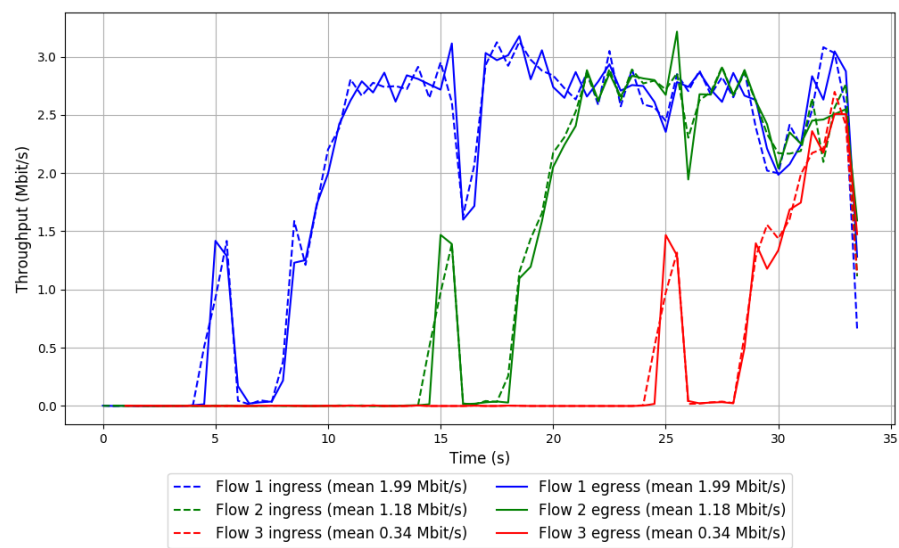
-- Flow 3:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 163.649 ms

Loss rate: 1.09%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-12 15:24:26

End at: 2017-12-12 15:24:56

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.52 Mbit/s

95th percentile per-packet one-way delay: 163.601 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 137.122 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 136.507 ms

Loss rate: 0.00%

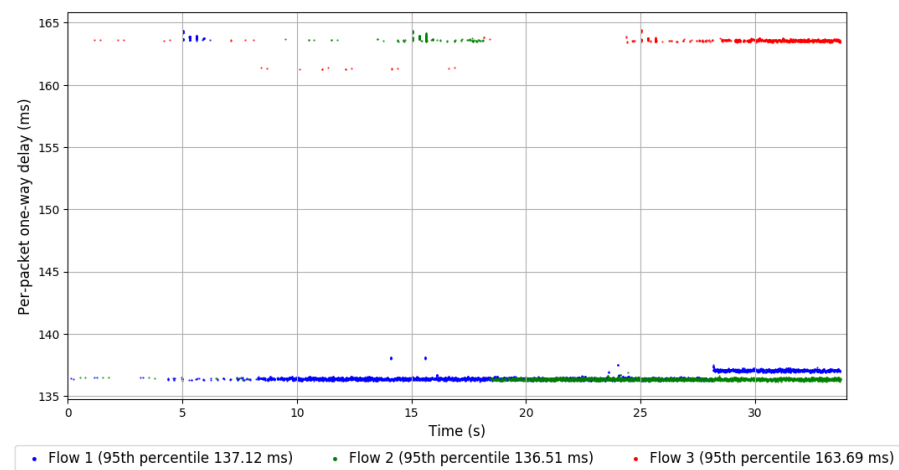
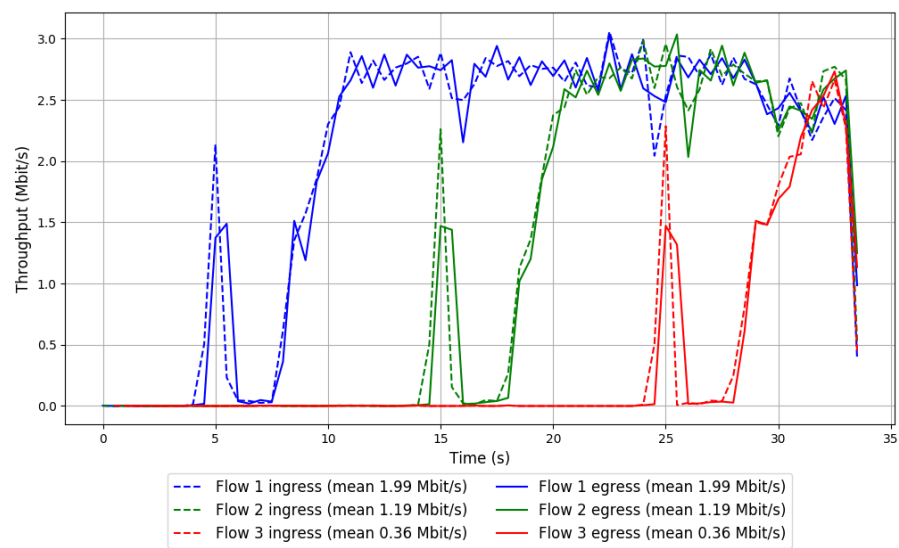
-- Flow 3:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 163.687 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-12 15:38:28

End at: 2017-12-12 15:38:58

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 163.693 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 163.643 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 163.731 ms

Loss rate: 0.00%

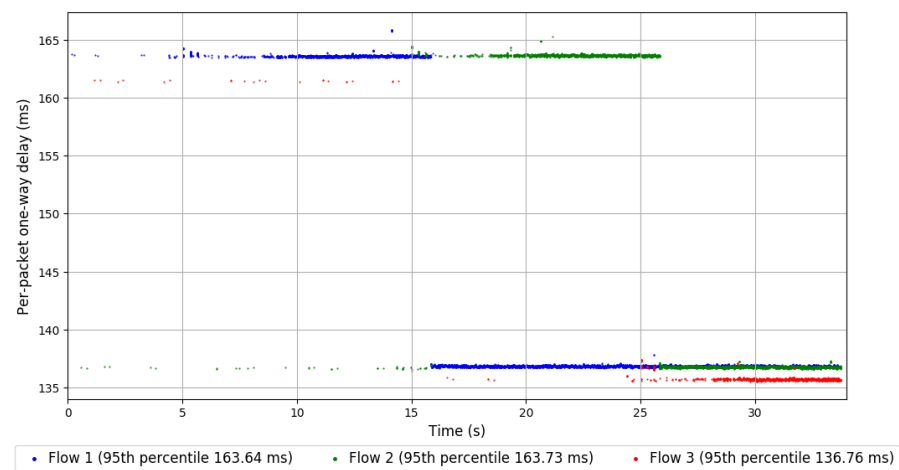
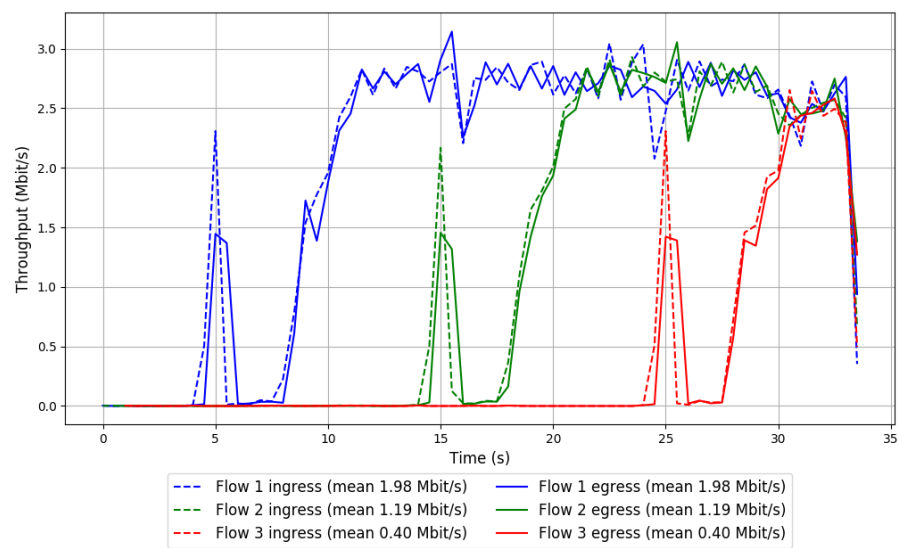
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.761 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-12 15:51:52

End at: 2017-12-12 15:52:22

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 163.642 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 163.626 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 161.449 ms

Loss rate: 0.00%

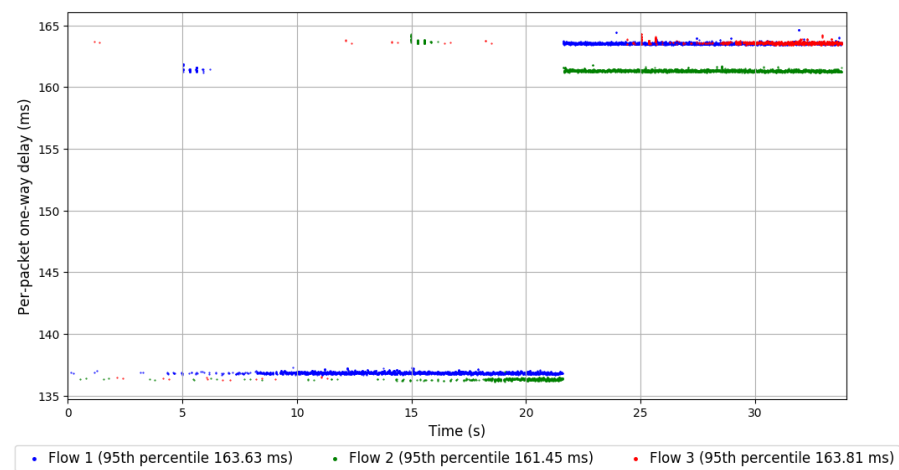
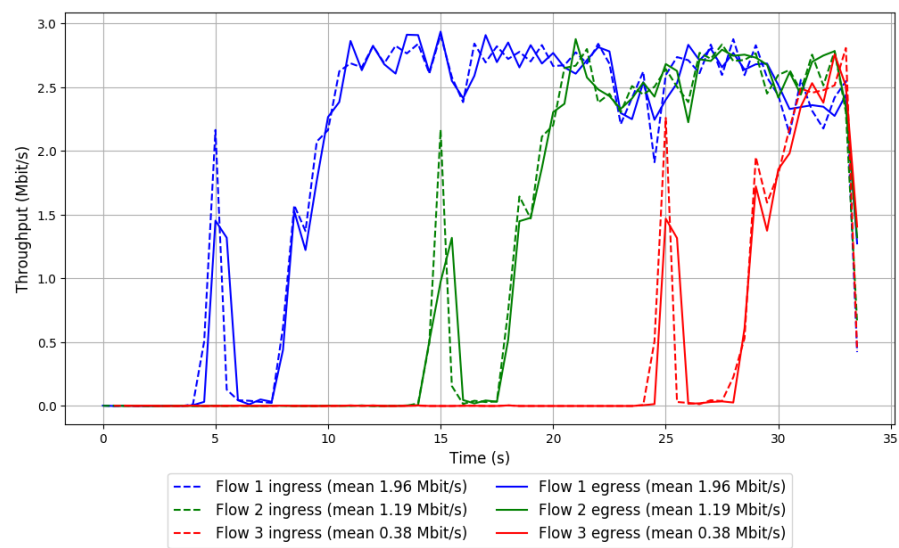
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 163.805 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-12 16:05:43

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

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.13 Mbit/s

95th percentile per-packet one-way delay: 163.712 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 163.706 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 1.00 Mbit/s

95th percentile per-packet one-way delay: 163.733 ms

Loss rate: 0.00%

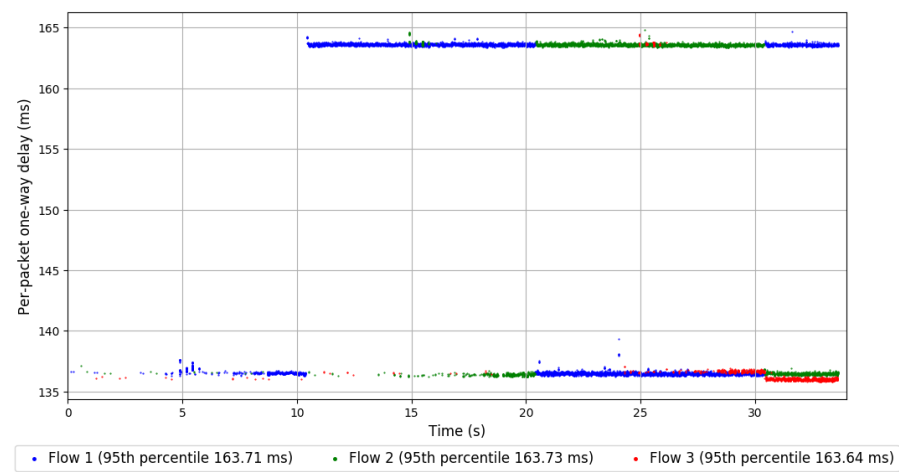
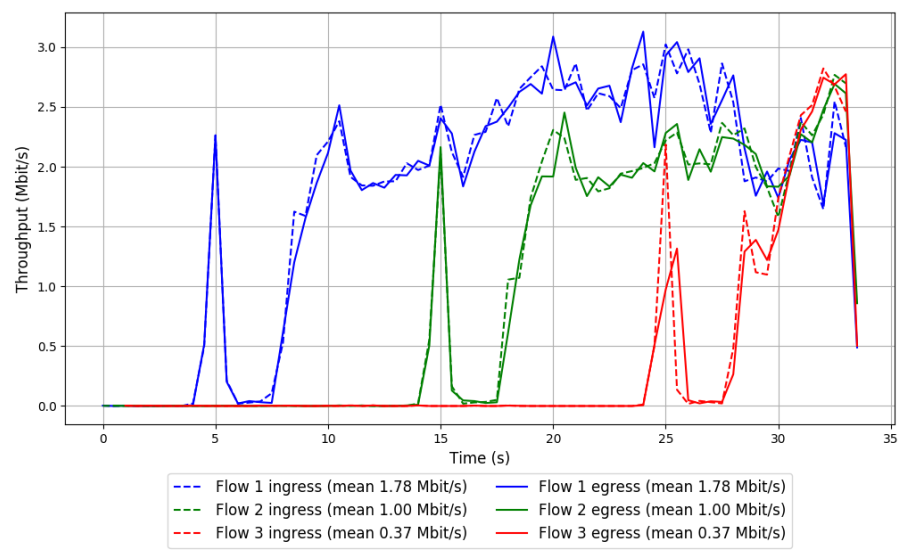
-- Flow 3:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 163.644 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

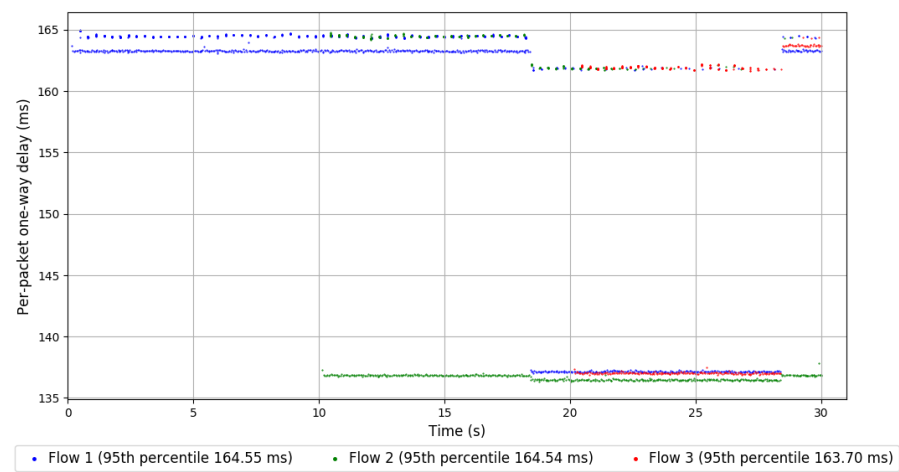
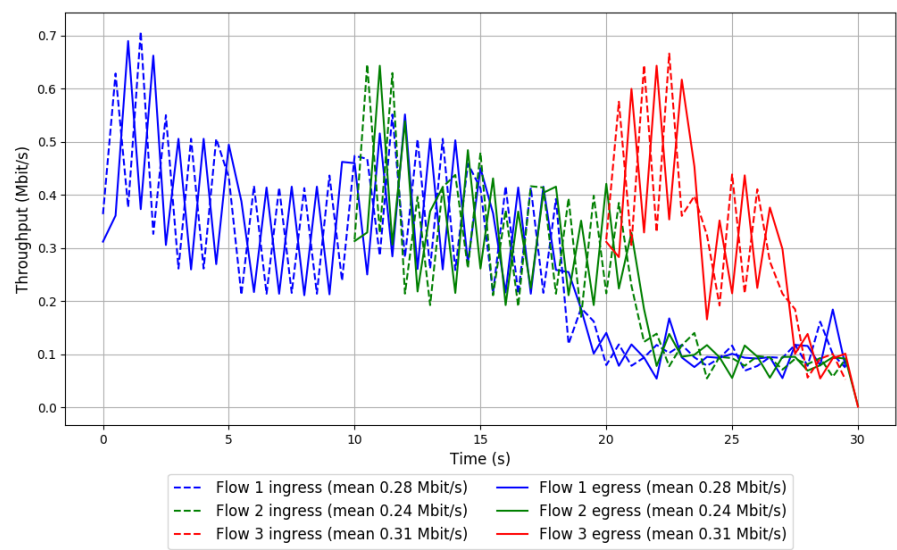


```
Run 1: Statistics of Sprout

Start at: 2017-12-12 14:05:01
End at: 2017-12-12 14:05:32

# Below is generated by plot.py at 2017-12-12 17:14:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 164.536 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 164.547 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 164.536 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 163.700 ms
Loss rate: 0.03%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-12 14:18:32

End at: 2017-12-12 14:19:02

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 164.554 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.40 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 164.558 ms

Loss rate: 0.00%

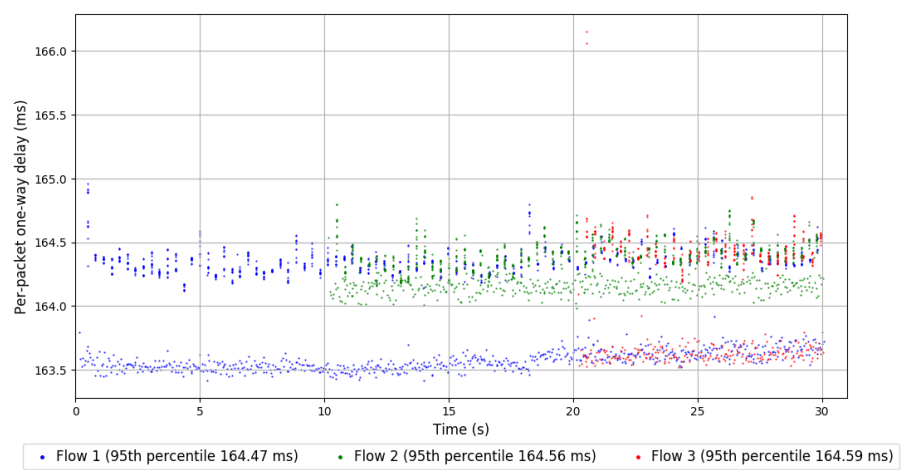
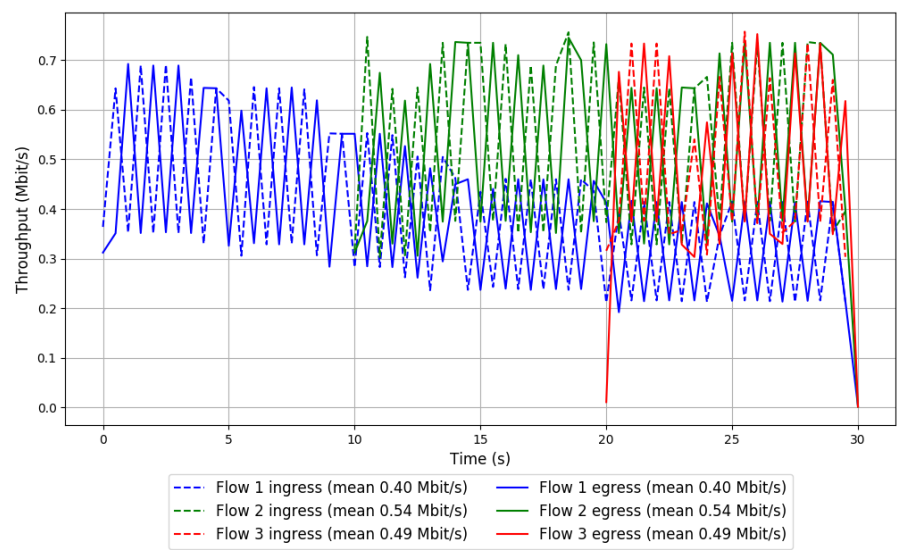
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 164.591 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-12 14:31:39

End at: 2017-12-12 14:32:09

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.85 Mbit/s

95th percentile per-packet one-way delay: 163.995 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 164.010 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 163.987 ms

Loss rate: 0.01%

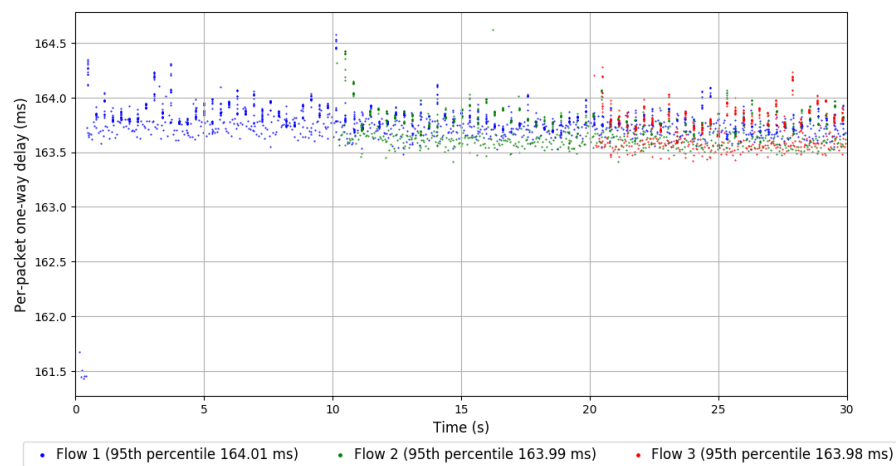
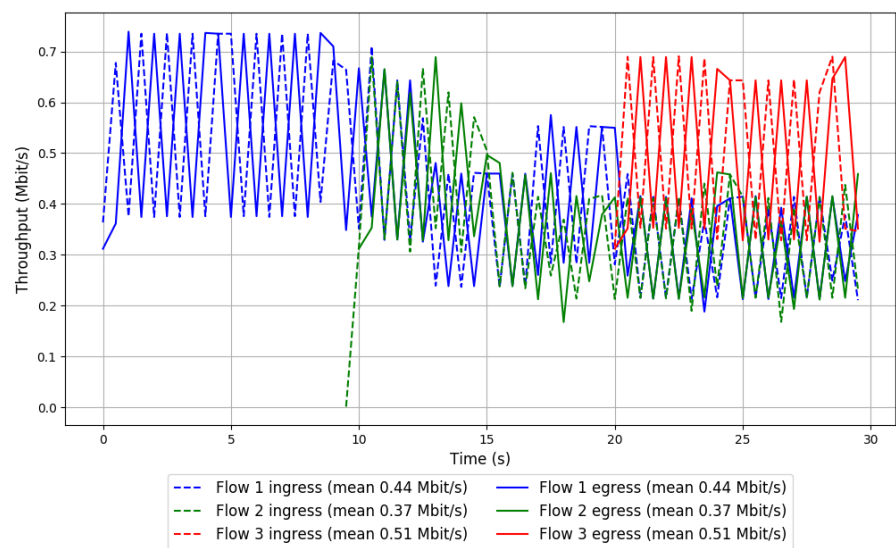
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 163.977 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-12 14:44:32

End at: 2017-12-12 14:45:02

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 163.918 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 163.974 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 163.881 ms

Loss rate: 0.96%

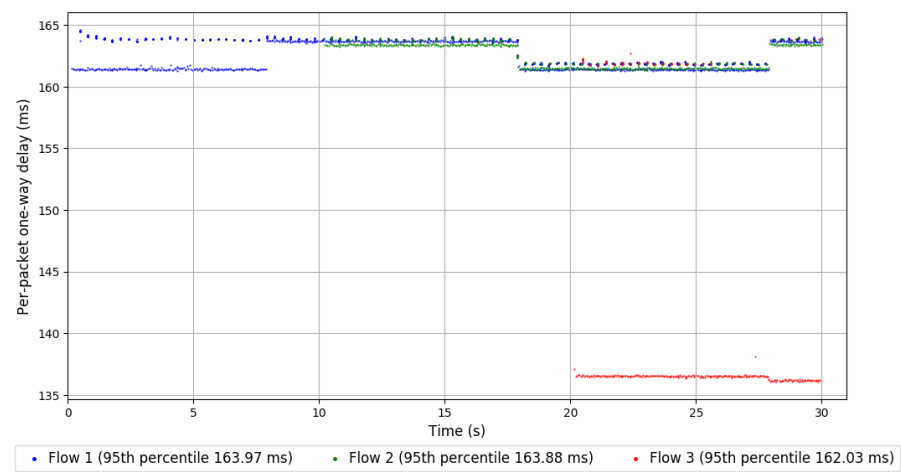
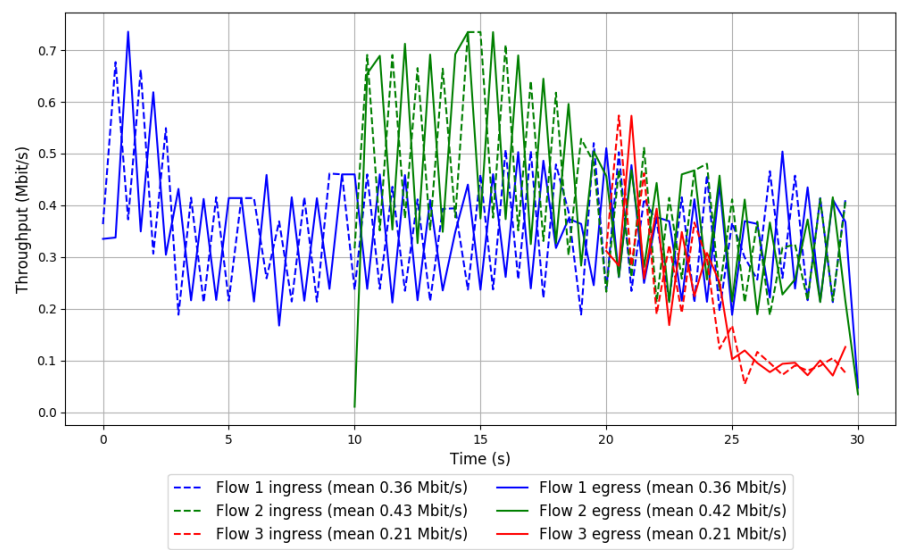
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 162.033 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-12 14:58:05

End at: 2017-12-12 14:58:35

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.86 Mbit/s

95th percentile per-packet one-way delay: 163.913 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 163.958 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 163.838 ms

Loss rate: 0.00%

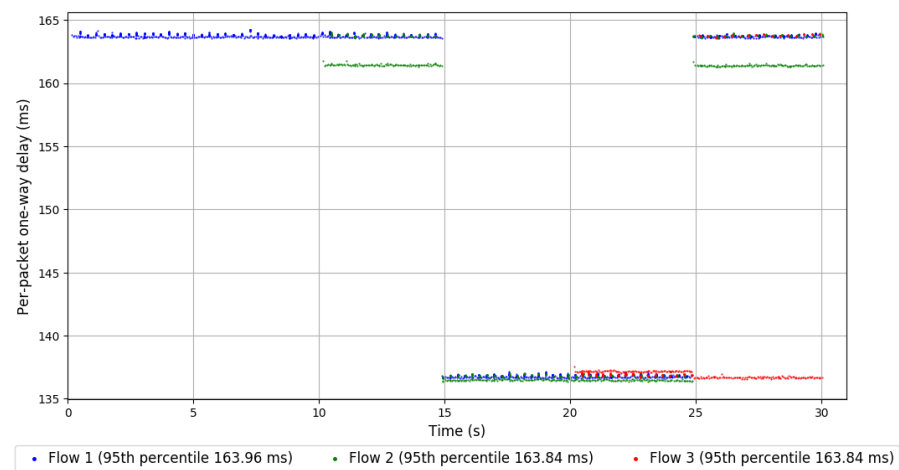
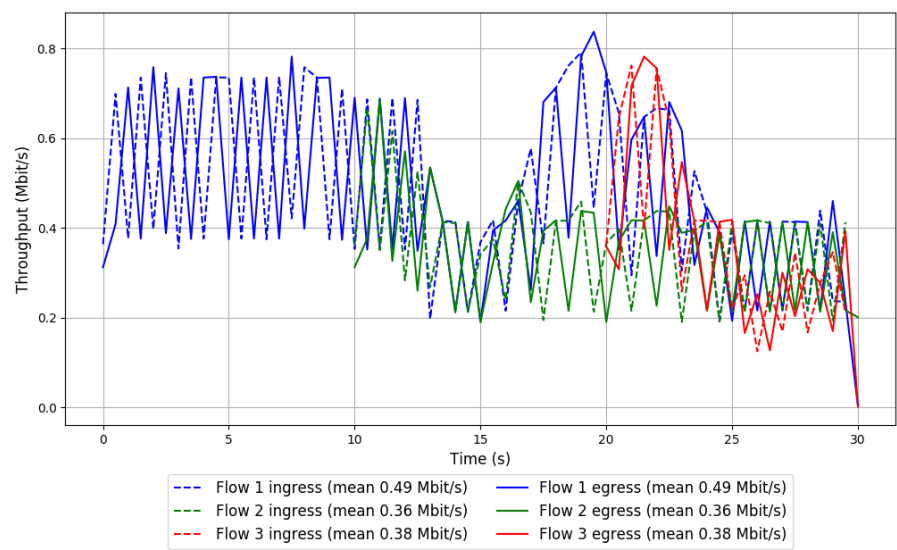
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 163.836 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-12 15:11:37

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

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 163.890 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 163.860 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 163.903 ms

Loss rate: 0.00%

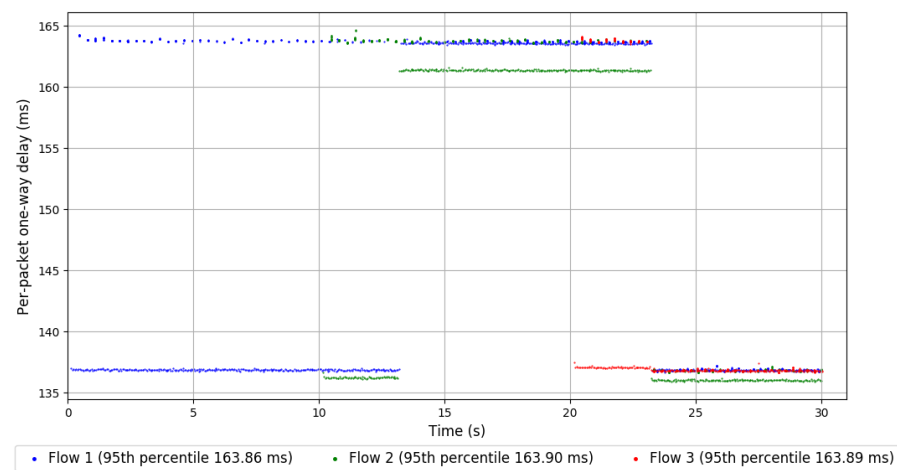
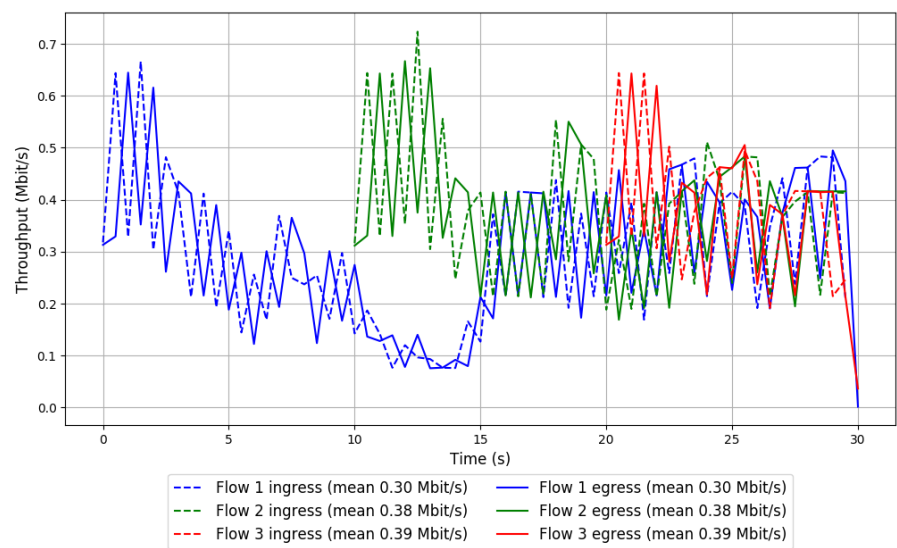
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 163.891 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-12 15:25:16

End at: 2017-12-12 15:25:46

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 163.764 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 163.568 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 163.806 ms

Loss rate: 0.02%

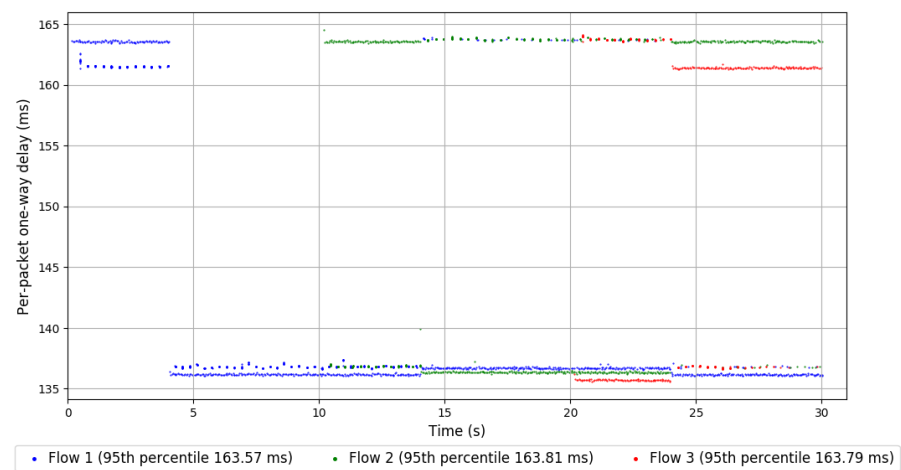
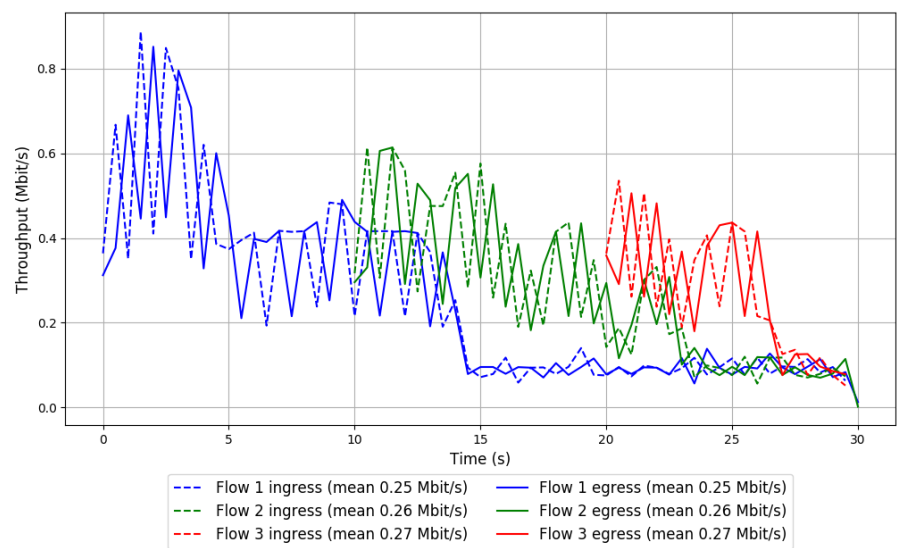
-- Flow 3:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 163.786 ms

Loss rate: 0.03%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-12 15:39:17

End at: 2017-12-12 15:39:47

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 163.785 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 163.837 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 163.777 ms

Loss rate: 0.02%

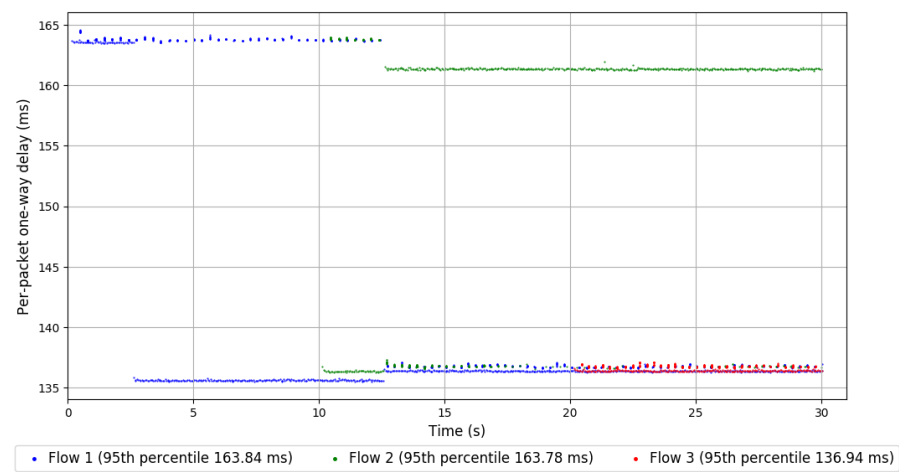
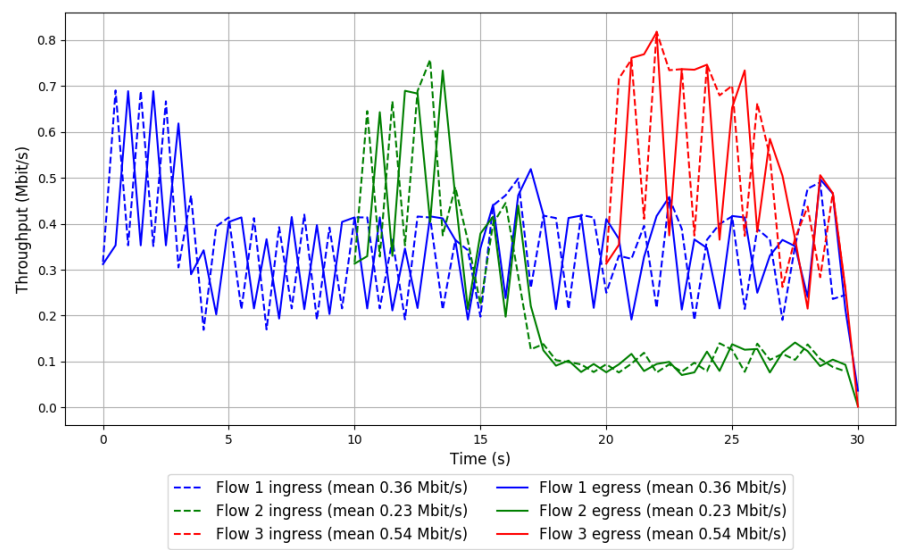
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 136.944 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-12 15:52:42

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

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 163.884 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 163.784 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 163.992 ms

Loss rate: 0.00%

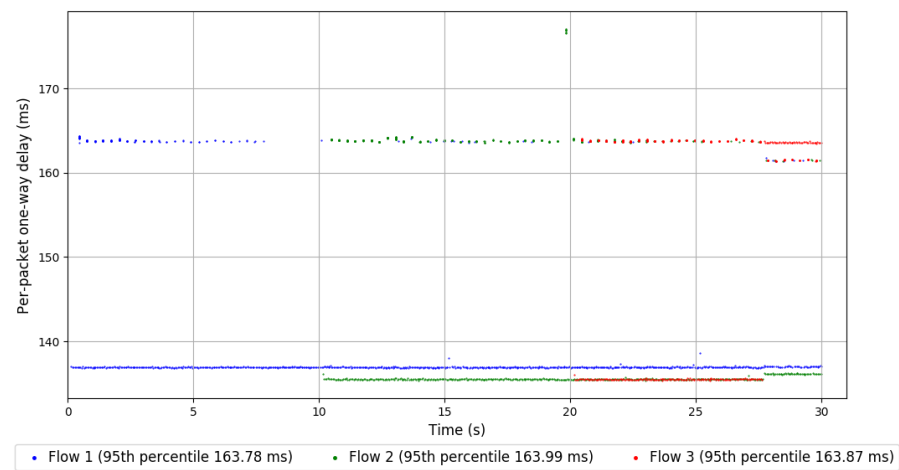
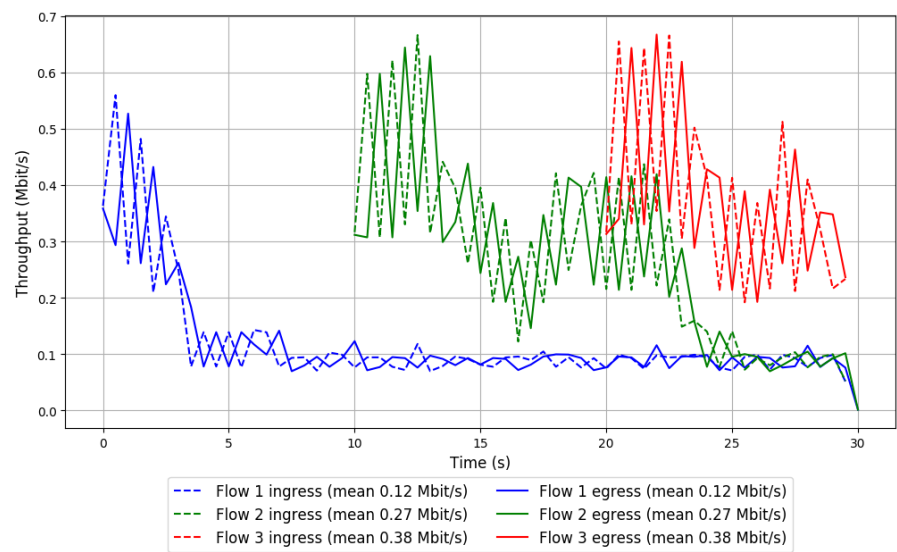
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 163.870 ms

Loss rate: 0.02%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-12 16:06:32

End at: 2017-12-12 16:07:02

Below is generated by plot.py at 2017-12-12 17:14:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 163.711 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 163.718 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 163.688 ms

Loss rate: 0.00%

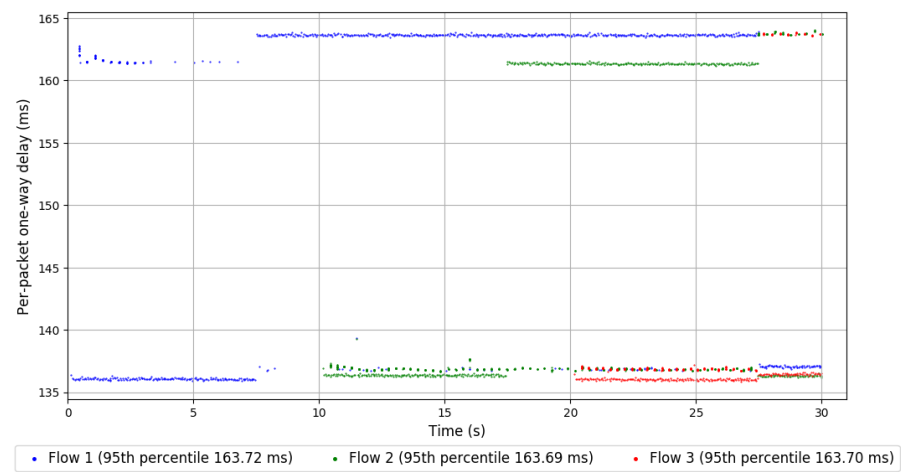
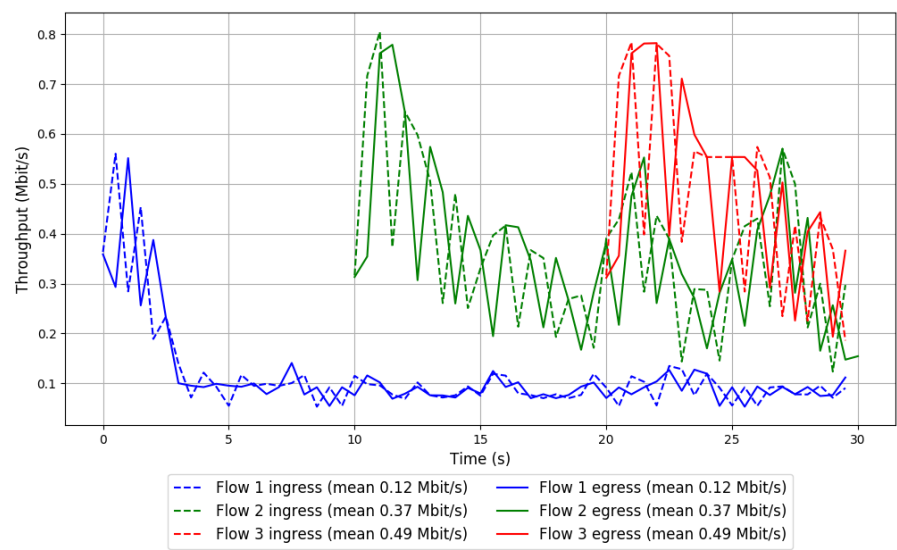
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 163.697 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

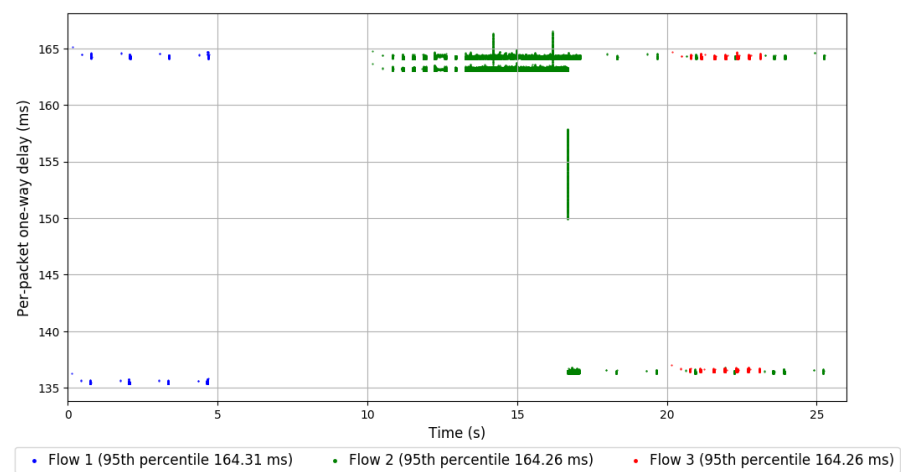
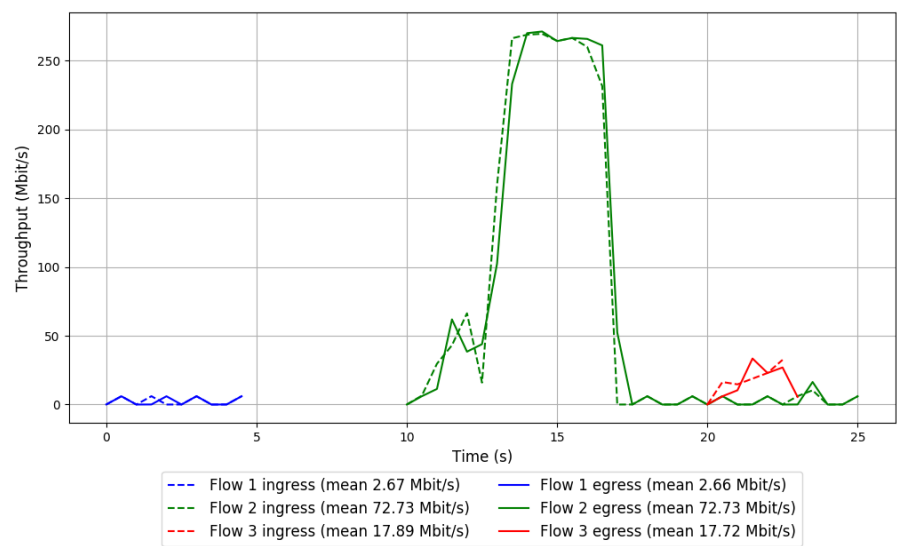


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-12 14:05:51
End at: 2017-12-12 14:06:21

# Below is generated by plot.py at 2017-12-12 17:14:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.25 Mbit/s
95th percentile per-packet one-way delay: 164.257 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 164.315 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 72.73 Mbit/s
95th percentile per-packet one-way delay: 164.257 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.72 Mbit/s
95th percentile per-packet one-way delay: 164.258 ms
Loss rate: 0.00%
```


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

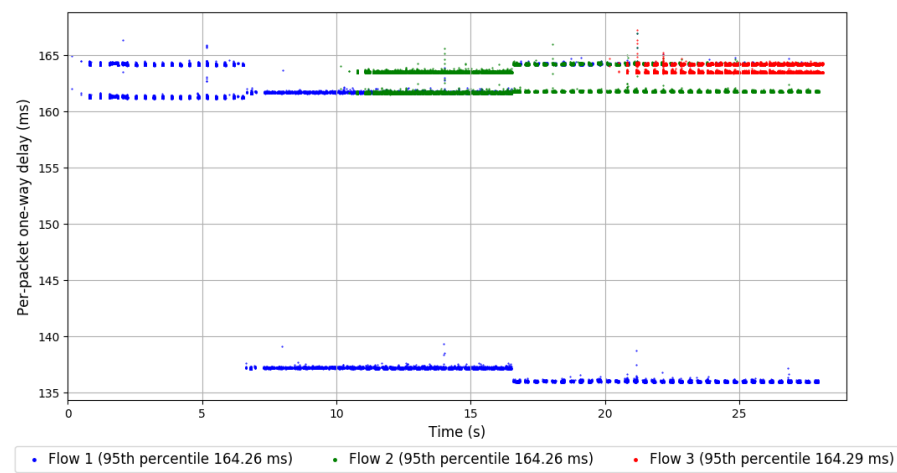
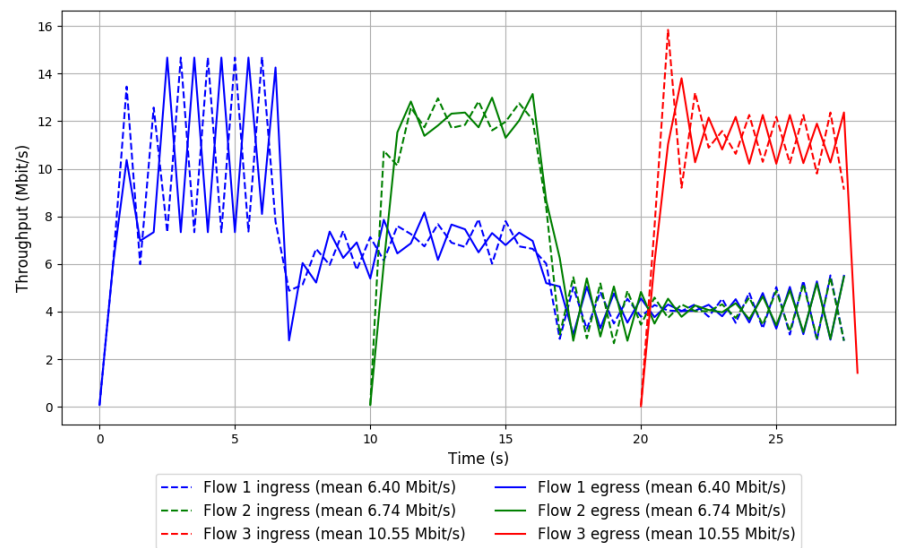


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-12 14:19:21
End at: 2017-12-12 14:19:51

# Below is generated by plot.py at 2017-12-12 17:14:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.65 Mbit/s
95th percentile per-packet one-way delay: 164.270 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.40 Mbit/s
95th percentile per-packet one-way delay: 164.262 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.74 Mbit/s
95th percentile per-packet one-way delay: 164.258 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.55 Mbit/s
95th percentile per-packet one-way delay: 164.290 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-12 14:32:29

End at: 2017-12-12 14:32:59

Below is generated by plot.py at 2017-12-12 17:14:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.39 Mbit/s

95th percentile per-packet one-way delay: 163.709 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 11.98 Mbit/s

95th percentile per-packet one-way delay: 163.702 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 6.83 Mbit/s

95th percentile per-packet one-way delay: 163.726 ms

Loss rate: 0.24%

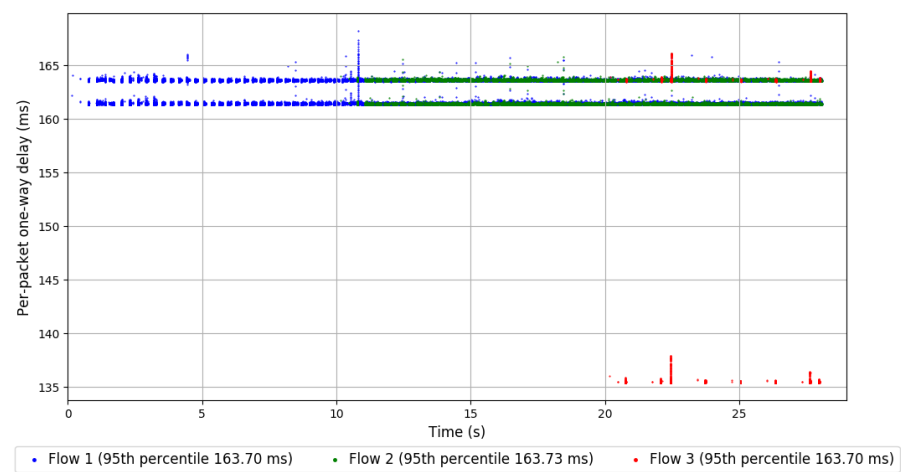
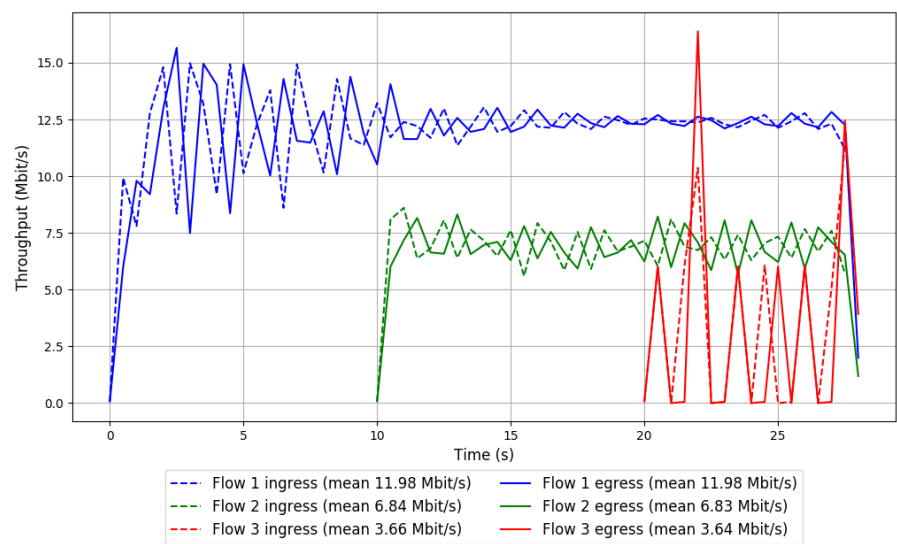
-- Flow 3:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 163.699 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-12 14:45:22

End at: 2017-12-12 14:45:52

Below is generated by plot.py at 2017-12-12 17:14:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.14 Mbit/s

95th percentile per-packet one-way delay: 163.687 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 7.02 Mbit/s

95th percentile per-packet one-way delay: 163.647 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 12.00 Mbit/s

95th percentile per-packet one-way delay: 163.702 ms

Loss rate: 0.17%

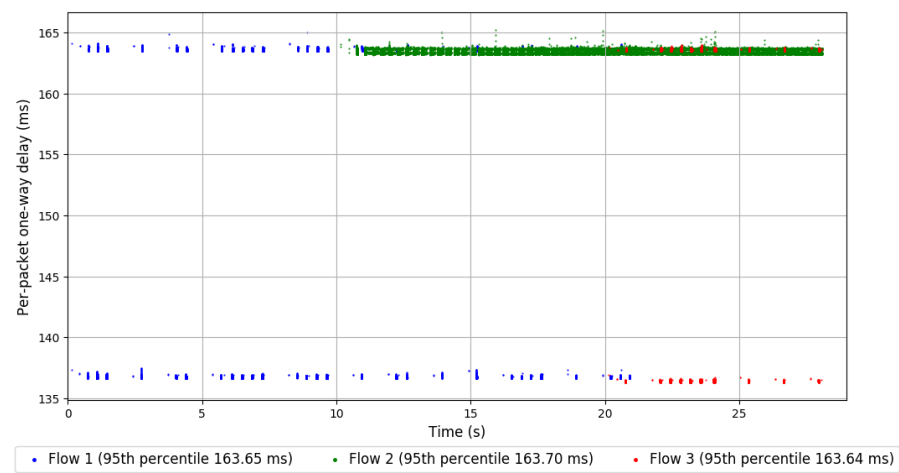
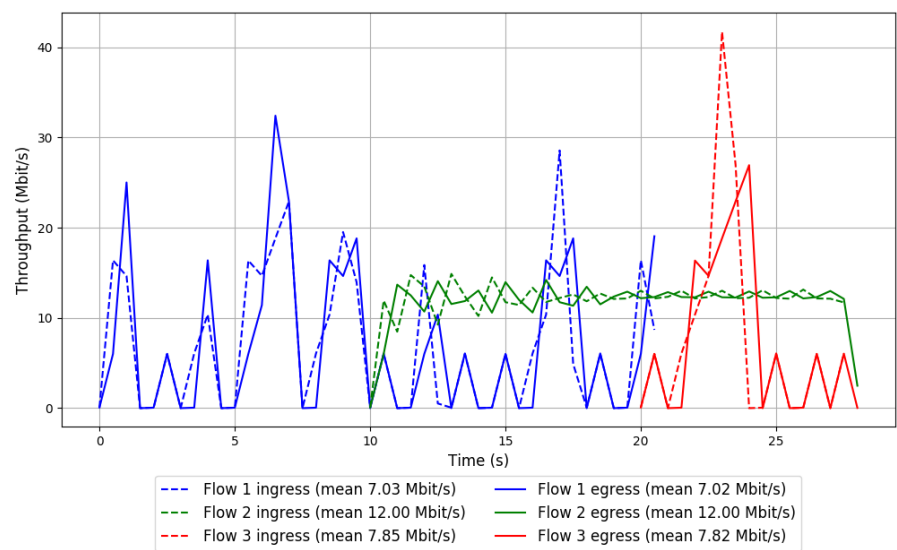
-- Flow 3:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 163.640 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-12 14:58:55

End at: 2017-12-12 14:59:25

Below is generated by plot.py at 2017-12-12 17:14:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.38 Mbit/s

95th percentile per-packet one-way delay: 163.680 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.96 Mbit/s

95th percentile per-packet one-way delay: 163.685 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.88 Mbit/s

95th percentile per-packet one-way delay: 163.683 ms

Loss rate: 0.01%

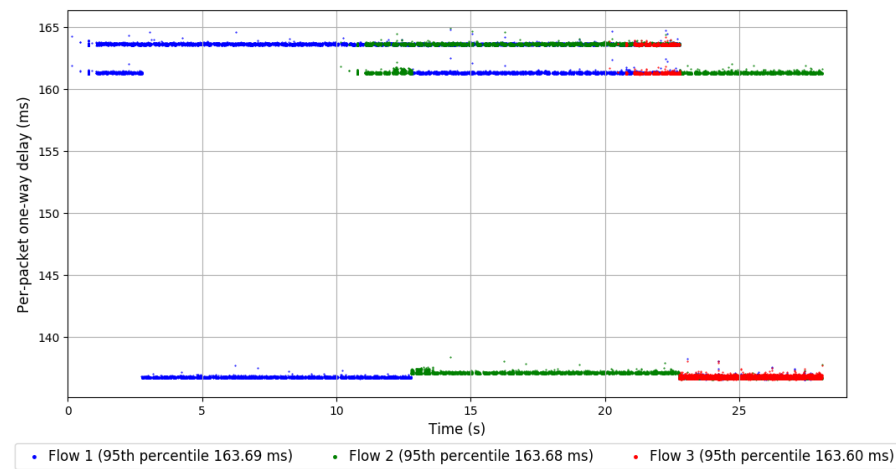
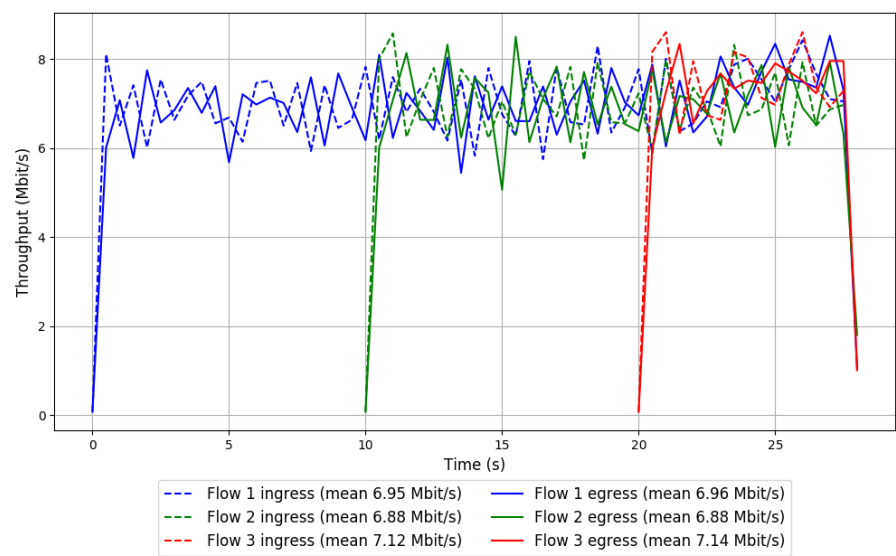
-- Flow 3:

Average throughput: 7.14 Mbit/s

95th percentile per-packet one-way delay: 163.605 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-12 15:12:27

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

Below is generated by plot.py at 2017-12-12 17:14:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.27 Mbit/s

95th percentile per-packet one-way delay: 163.666 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 163.678 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.32 Mbit/s

95th percentile per-packet one-way delay: 163.675 ms

Loss rate: 0.00%

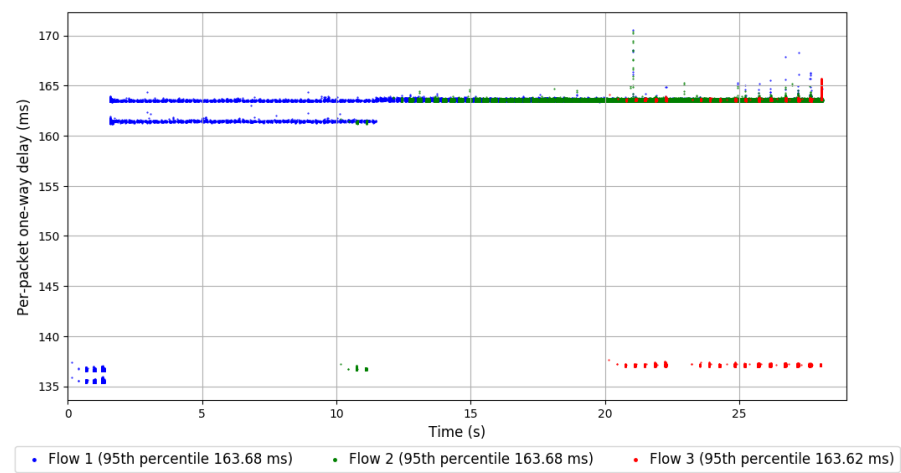
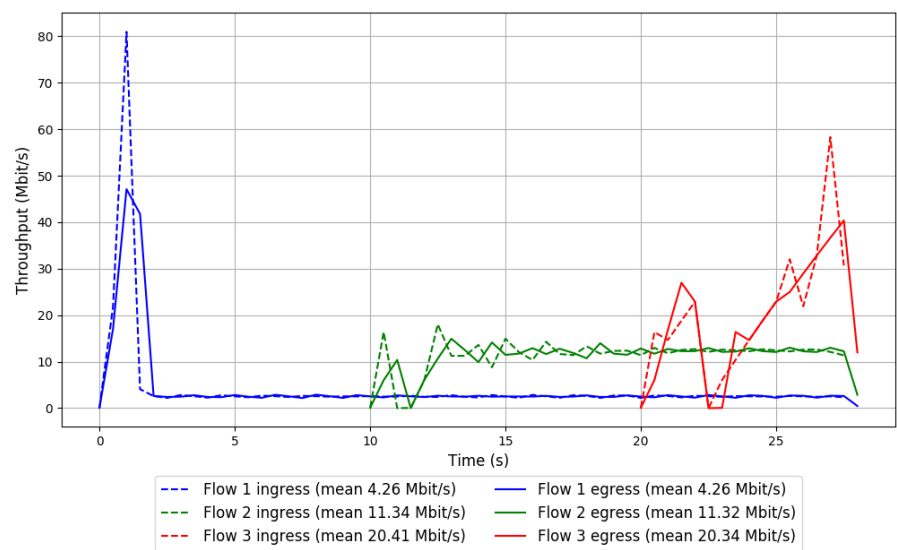
-- Flow 3:

Average throughput: 20.34 Mbit/s

95th percentile per-packet one-way delay: 163.621 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-12 15:26:05

End at: 2017-12-12 15:26:35

Below is generated by plot.py at 2017-12-12 17:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.22 Mbit/s

95th percentile per-packet one-way delay: 163.708 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 187.29 Mbit/s

95th percentile per-packet one-way delay: 163.707 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 4.79 Mbit/s

95th percentile per-packet one-way delay: 163.807 ms

Loss rate: 0.00%

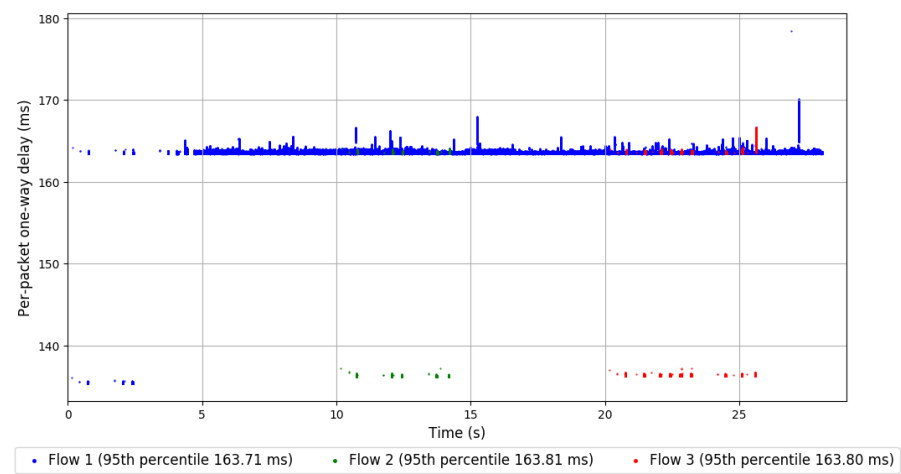
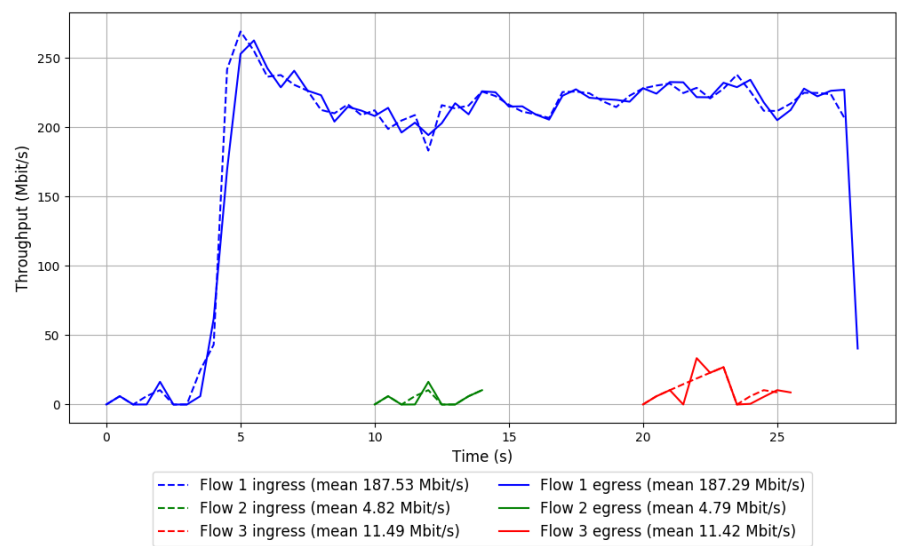
-- Flow 3:

Average throughput: 11.42 Mbit/s

95th percentile per-packet one-way delay: 163.798 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-12 15:40:07

End at: 2017-12-12 15:40:37

Below is generated by plot.py at 2017-12-12 17:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.13 Mbit/s

95th percentile per-packet one-way delay: 161.523 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 4.73 Mbit/s

95th percentile per-packet one-way delay: 161.305 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 12.98 Mbit/s

95th percentile per-packet one-way delay: 161.373 ms

Loss rate: 0.00%

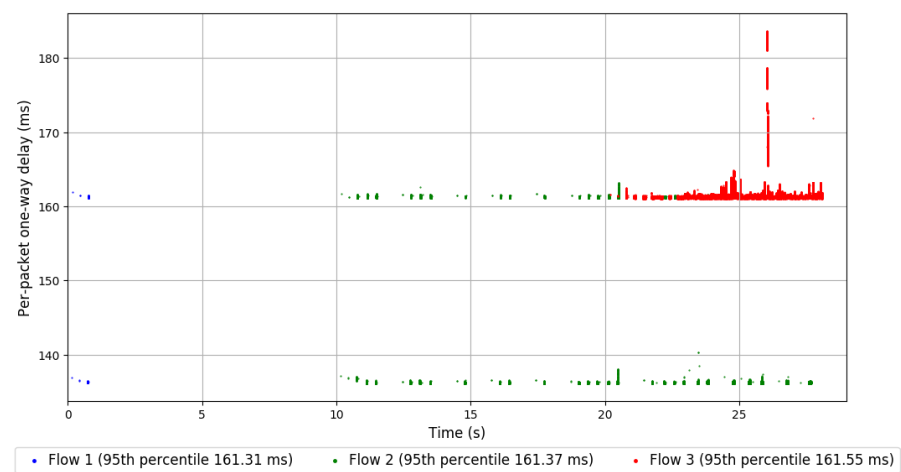
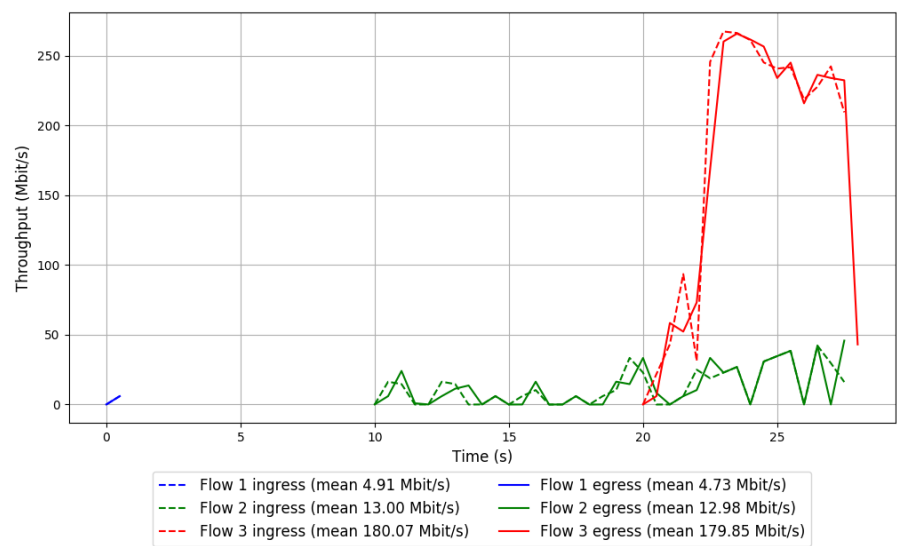
-- Flow 3:

Average throughput: 179.85 Mbit/s

95th percentile per-packet one-way delay: 161.553 ms

Loss rate: 0.45%

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

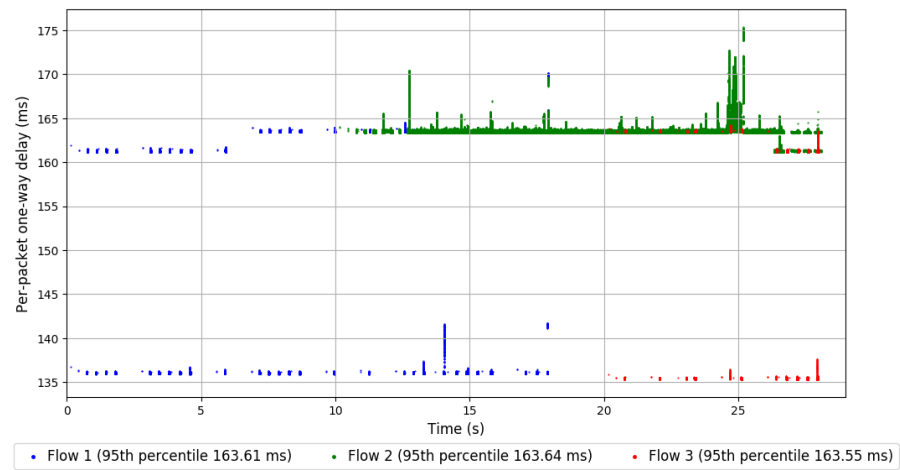
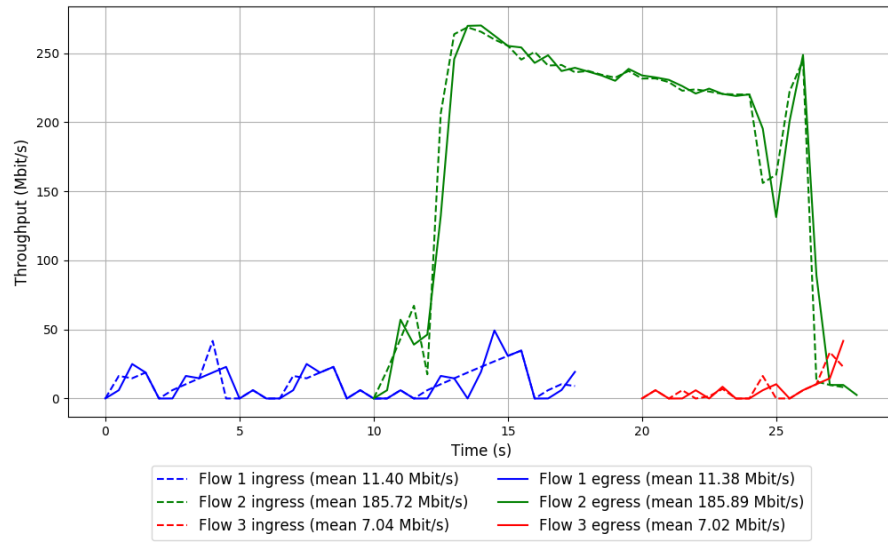


```
Run 9: Statistics of TaoVA-100x

Start at: 2017-12-12 15:53:32
End at: 2017-12-12 15:54:02

# Below is generated by plot.py at 2017-12-12 17:19:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.35 Mbit/s
95th percentile per-packet one-way delay: 163.635 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 11.38 Mbit/s
95th percentile per-packet one-way delay: 163.610 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 185.89 Mbit/s
95th percentile per-packet one-way delay: 163.638 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 7.02 Mbit/s
95th percentile per-packet one-way delay: 163.551 ms
Loss rate: 0.00%
```


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

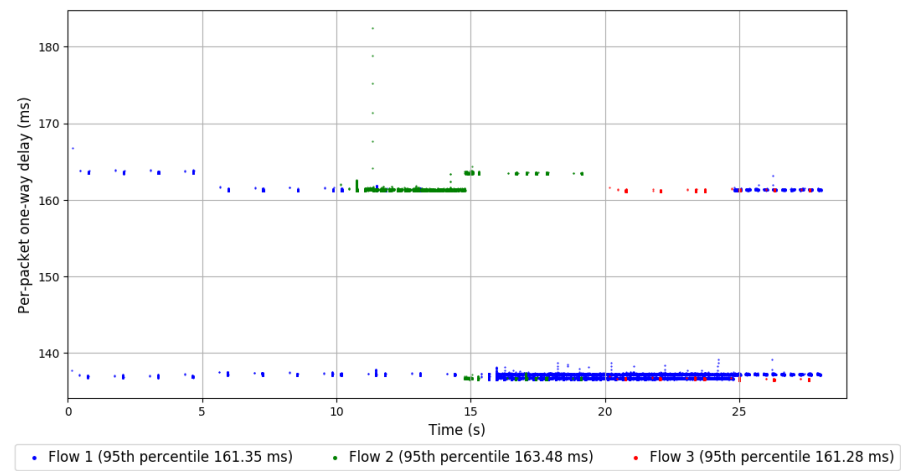
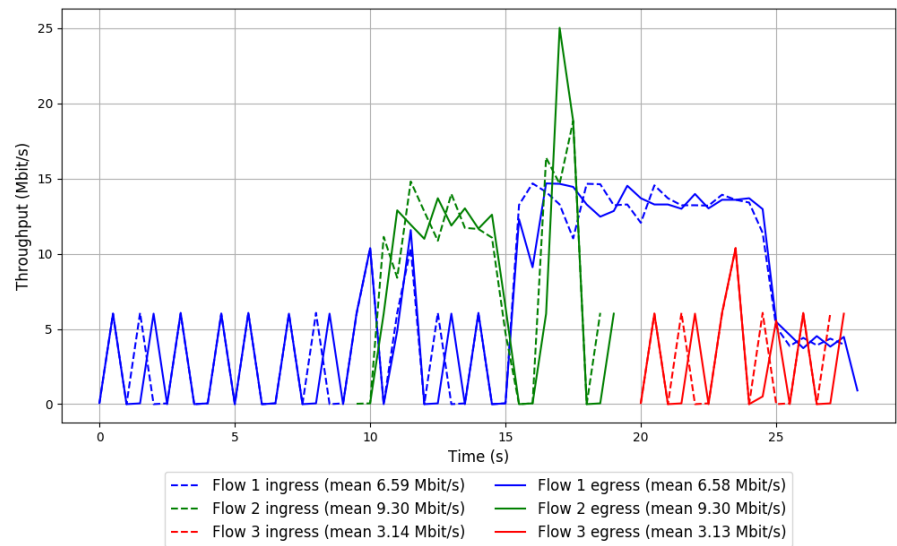


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-12 16:07:23
End at: 2017-12-12 16:07:53

# Below is generated by plot.py at 2017-12-12 17:19:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.41 Mbit/s
95th percentile per-packet one-way delay: 163.447 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 6.58 Mbit/s
95th percentile per-packet one-way delay: 161.350 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 9.30 Mbit/s
95th percentile per-packet one-way delay: 163.478 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.13 Mbit/s
95th percentile per-packet one-way delay: 161.281 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-12 13:57:09

End at: 2017-12-12 13:57:39

Below is generated by plot.py at 2017-12-12 17:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.99 Mbit/s

95th percentile per-packet one-way delay: 164.840 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 0.84 Mbit/s

95th percentile per-packet one-way delay: 164.575 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 24.00 Mbit/s

95th percentile per-packet one-way delay: 164.853 ms

Loss rate: 0.00%

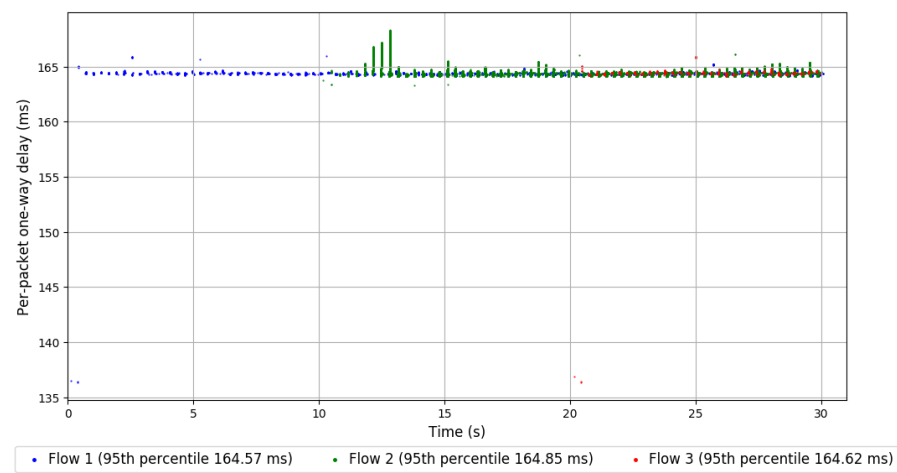
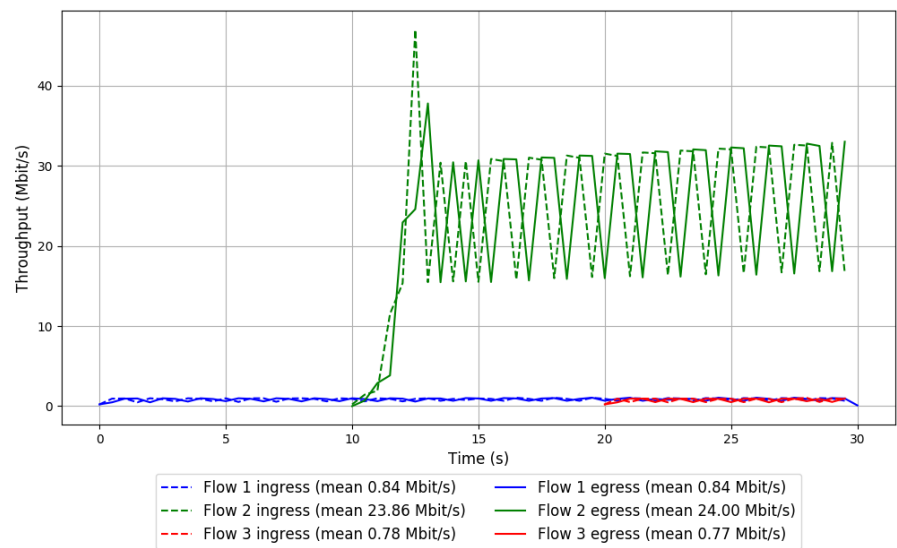
-- Flow 3:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 164.616 ms

Loss rate: 2.79%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-12 14:10:41

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

Below is generated by plot.py at 2017-12-12 17:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.59 Mbit/s

95th percentile per-packet one-way delay: 165.441 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 35.92 Mbit/s

95th percentile per-packet one-way delay: 165.461 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 164.493 ms

Loss rate: 1.24%

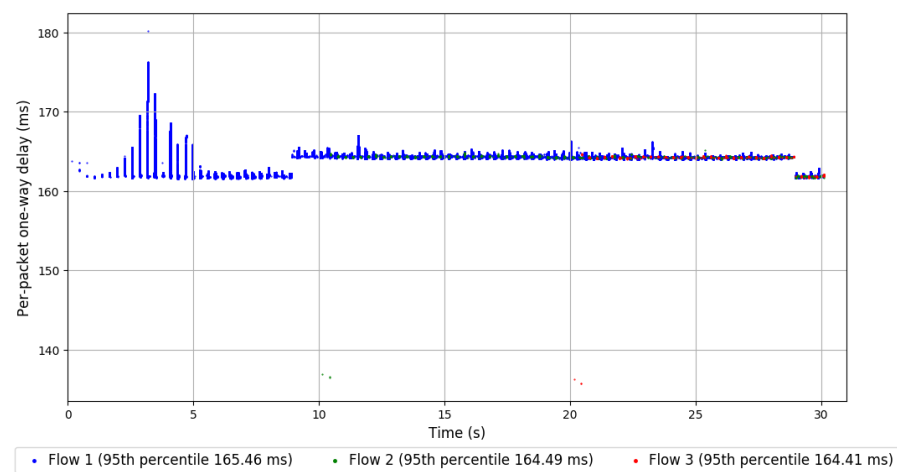
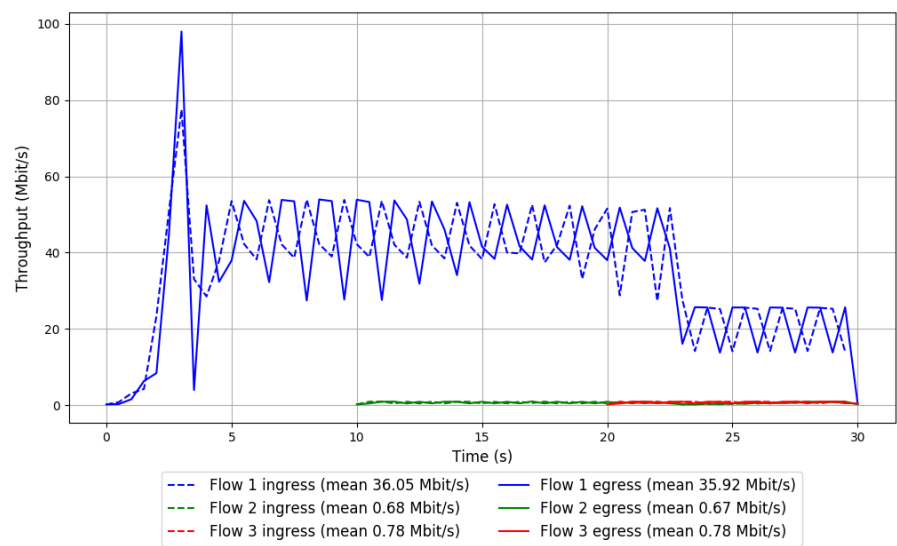
-- Flow 3:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 164.412 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-12 14:24:07

End at: 2017-12-12 14:24:37

Below is generated by plot.py at 2017-12-12 17:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 164.555 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 0.96 Mbit/s

95th percentile per-packet one-way delay: 164.495 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 164.603 ms

Loss rate: 0.26%

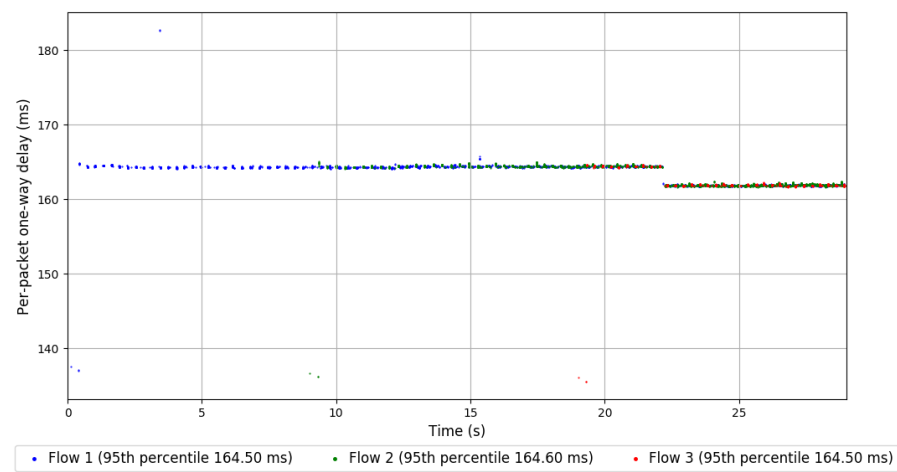
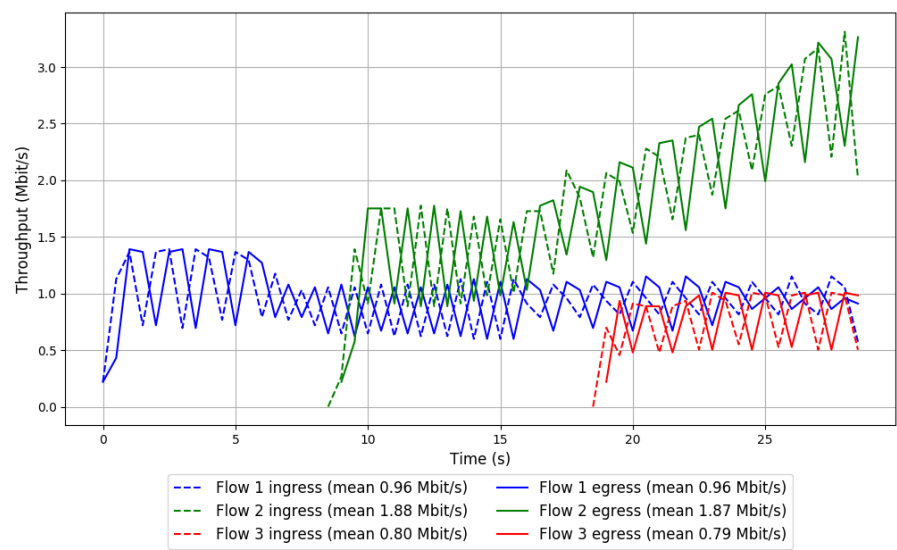
-- Flow 3:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 164.499 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-12 14:37:03

End at: 2017-12-12 14:37:33

Below is generated by plot.py at 2017-12-12 17:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.16 Mbit/s

95th percentile per-packet one-way delay: 162.790 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 163.874 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.18 Mbit/s

95th percentile per-packet one-way delay: 162.633 ms

Loss rate: 0.01%

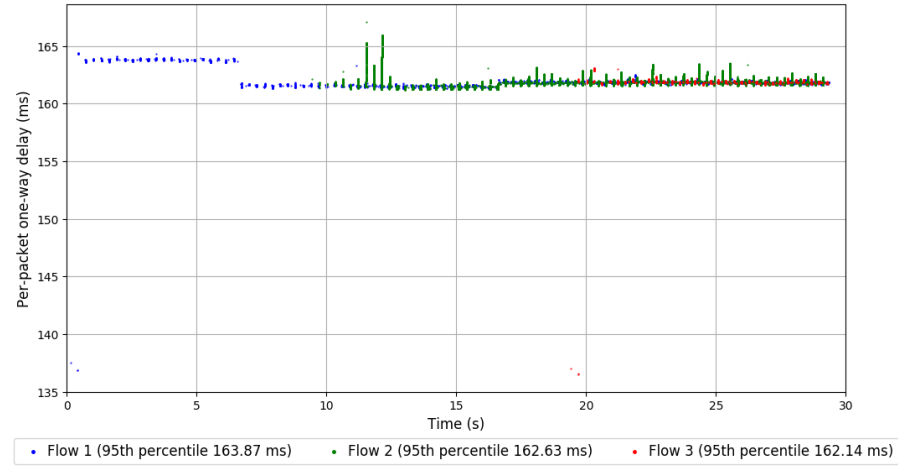
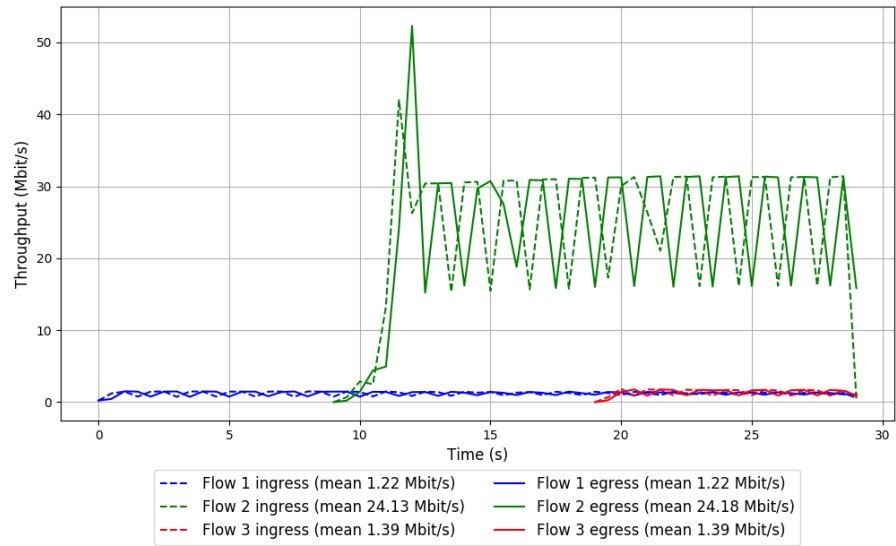
-- Flow 3:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 162.144 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-12 14:50:08

End at: 2017-12-12 14:50:38

Below is generated by plot.py at 2017-12-12 17:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 31.77 Mbit/s

95th percentile per-packet one-way delay: 164.549 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 24.90 Mbit/s

95th percentile per-packet one-way delay: 164.578 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 163.824 ms

Loss rate: 0.17%

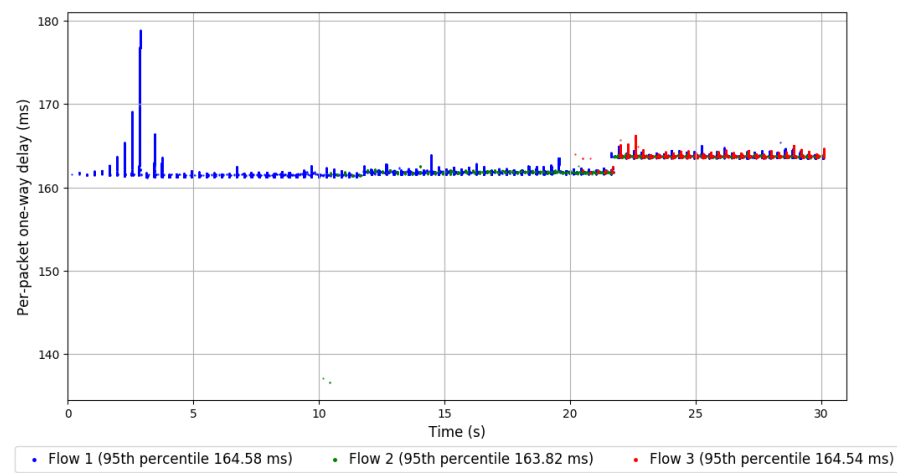
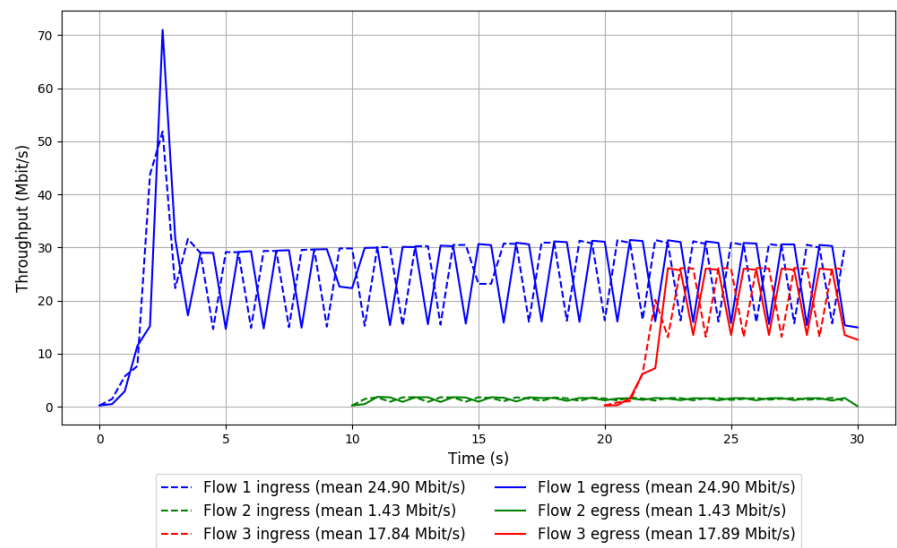
-- Flow 3:

Average throughput: 17.89 Mbit/s

95th percentile per-packet one-way delay: 164.545 ms

Loss rate: 0.05%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-12 15:03:39

End at: 2017-12-12 15:04:09

Below is generated by plot.py at 2017-12-12 17:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 35.50 Mbit/s

95th percentile per-packet one-way delay: 164.055 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 6.99 Mbit/s

95th percentile per-packet one-way delay: 164.169 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 42.09 Mbit/s

95th percentile per-packet one-way delay: 164.026 ms

Loss rate: 0.02%

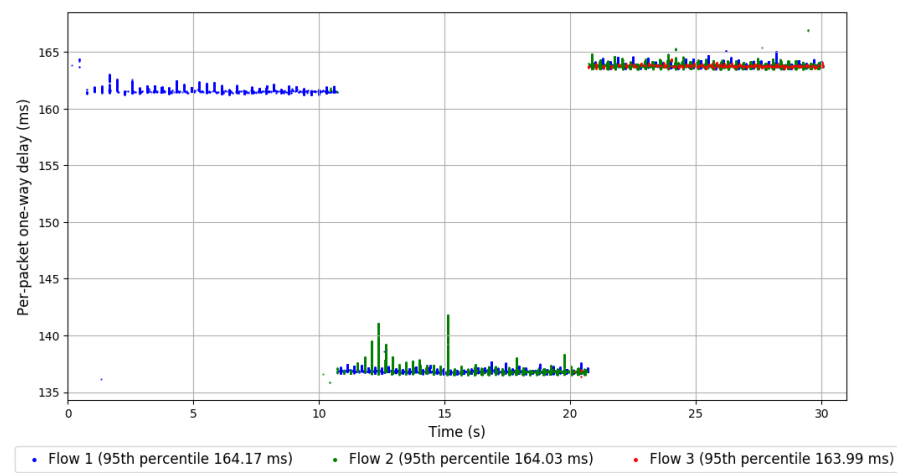
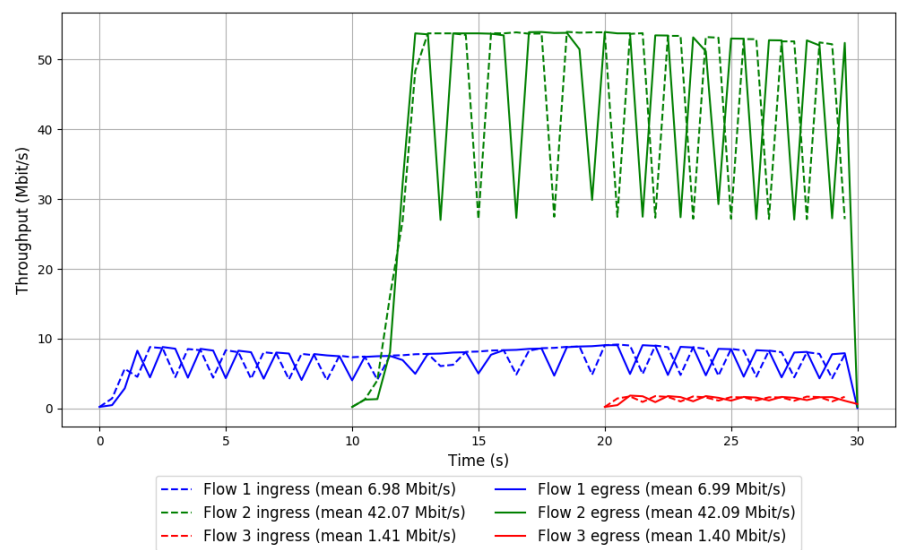
-- Flow 3:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 163.990 ms

Loss rate: 0.17%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

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

End at: 2017-12-12 15:17:42

Below is generated by plot.py at 2017-12-12 17:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 22.66 Mbit/s

95th percentile per-packet one-way delay: 164.957 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 18.42 Mbit/s

95th percentile per-packet one-way delay: 165.056 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 164.107 ms

Loss rate: 0.00%

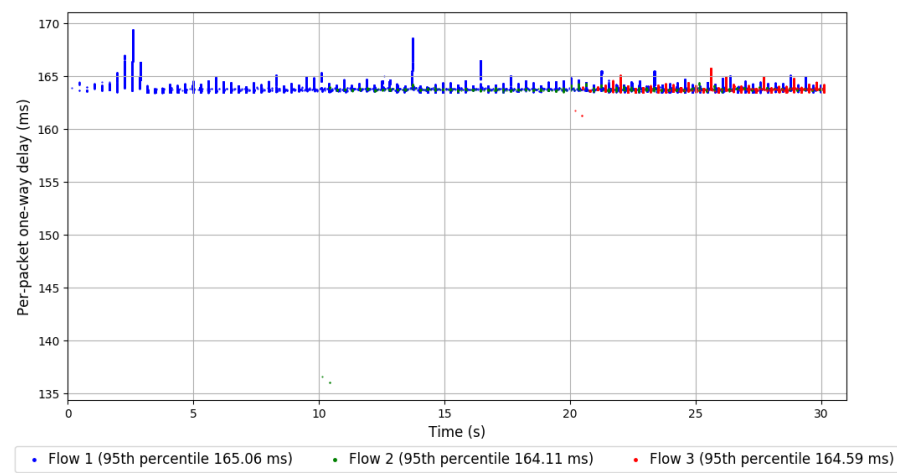
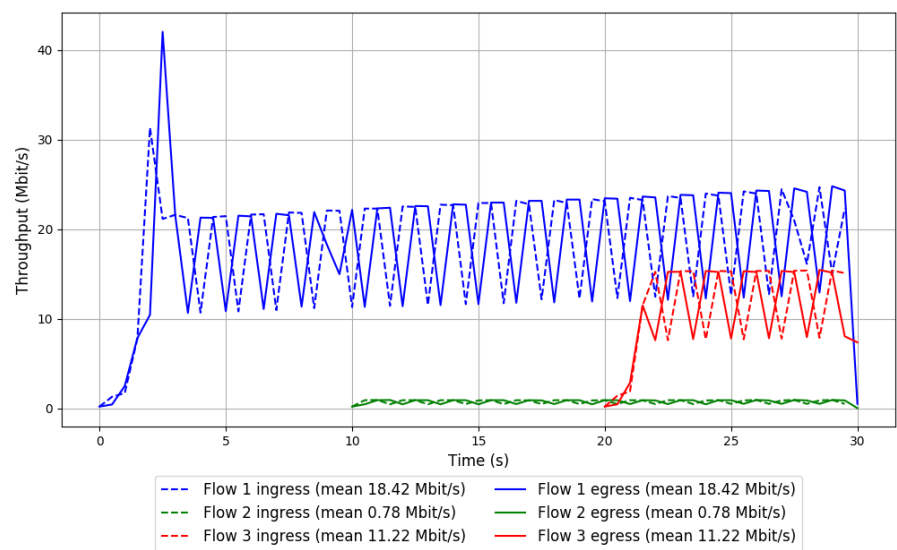
-- Flow 3:

Average throughput: 11.22 Mbit/s

95th percentile per-packet one-way delay: 164.590 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-12 15:31:10

End at: 2017-12-12 15:31:40

Below is generated by plot.py at 2017-12-12 17:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.51 Mbit/s

95th percentile per-packet one-way delay: 167.688 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 17.12 Mbit/s

95th percentile per-packet one-way delay: 167.844 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 19.88 Mbit/s

95th percentile per-packet one-way delay: 166.544 ms

Loss rate: 0.00%

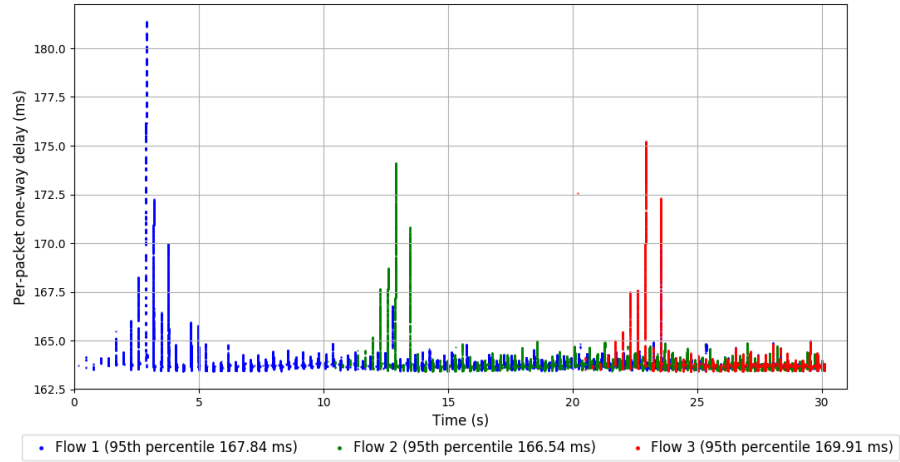
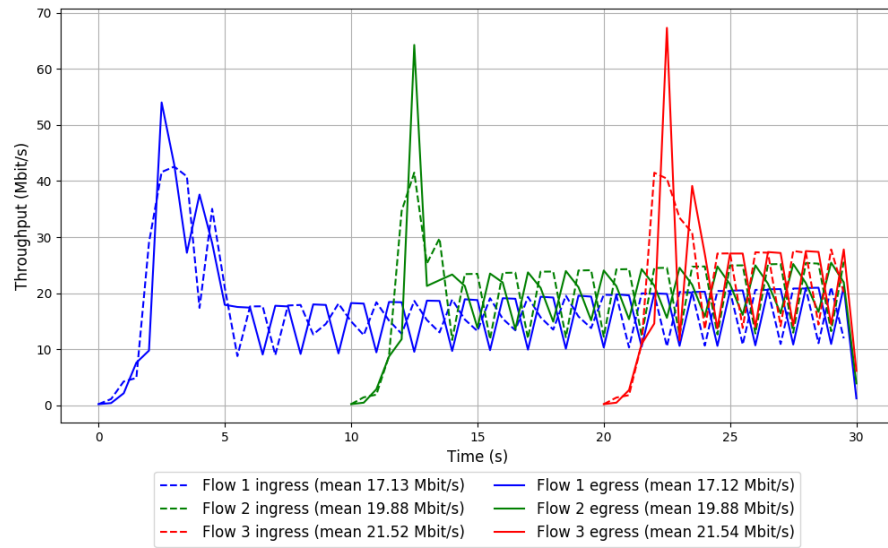
-- Flow 3:

Average throughput: 21.54 Mbit/s

95th percentile per-packet one-way delay: 169.913 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-12 15:44:56

End at: 2017-12-12 15:45:26

Below is generated by plot.py at 2017-12-12 17:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 43.90 Mbit/s

95th percentile per-packet one-way delay: 165.141 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 24.00 Mbit/s

95th percentile per-packet one-way delay: 166.364 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 18.45 Mbit/s

95th percentile per-packet one-way delay: 162.055 ms

Loss rate: 0.01%

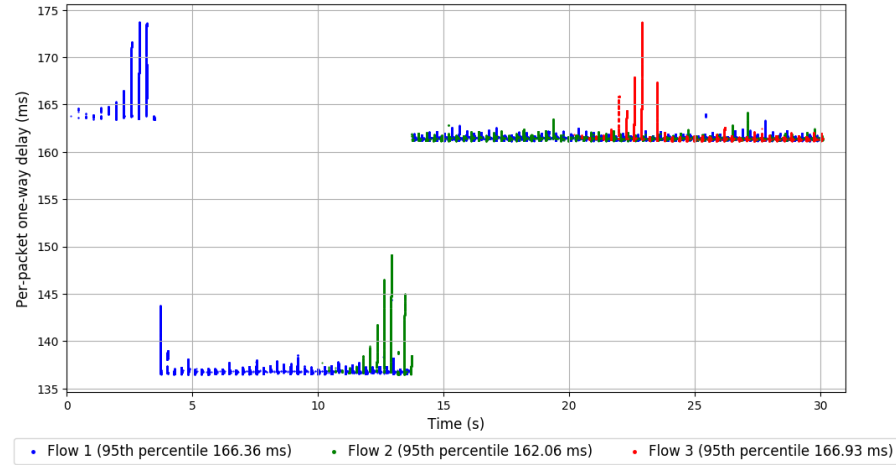
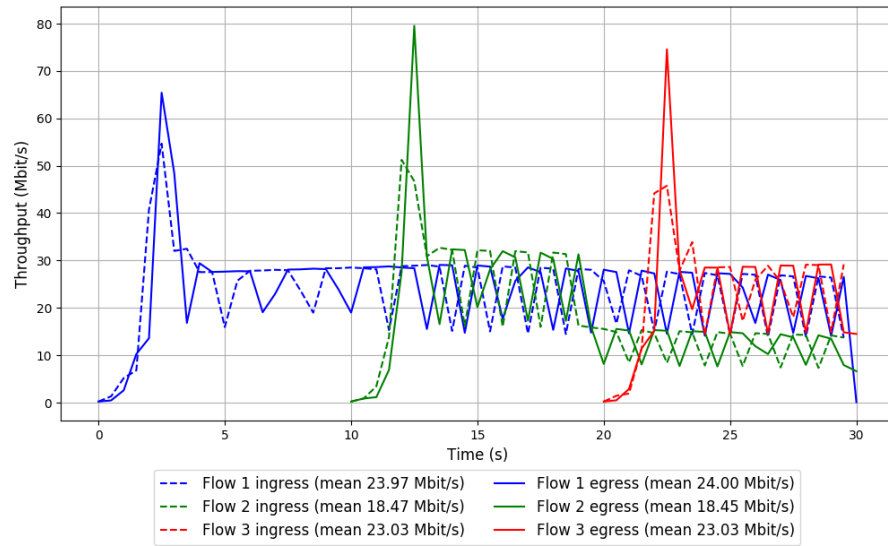
-- Flow 3:

Average throughput: 23.03 Mbit/s

95th percentile per-packet one-way delay: 166.931 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-12 15:58:28

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

Below is generated by plot.py at 2017-12-12 17:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.94 Mbit/s

95th percentile per-packet one-way delay: 161.799 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 136.895 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 161.623 ms

Loss rate: 0.27%

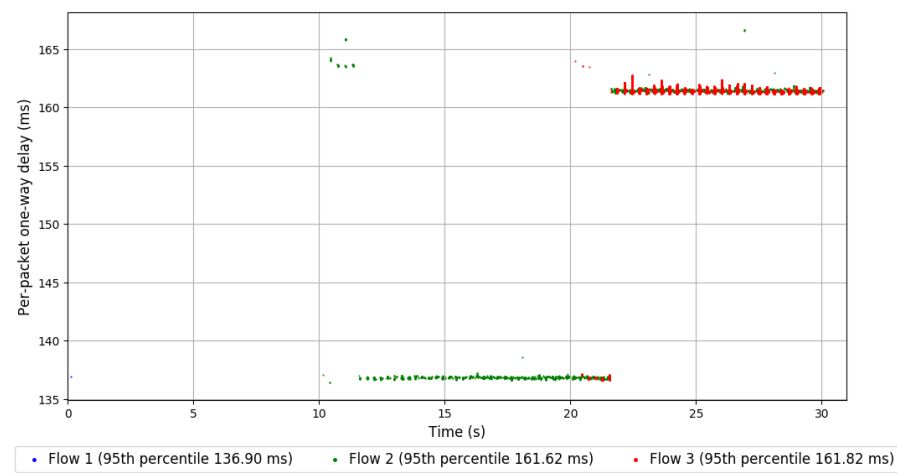
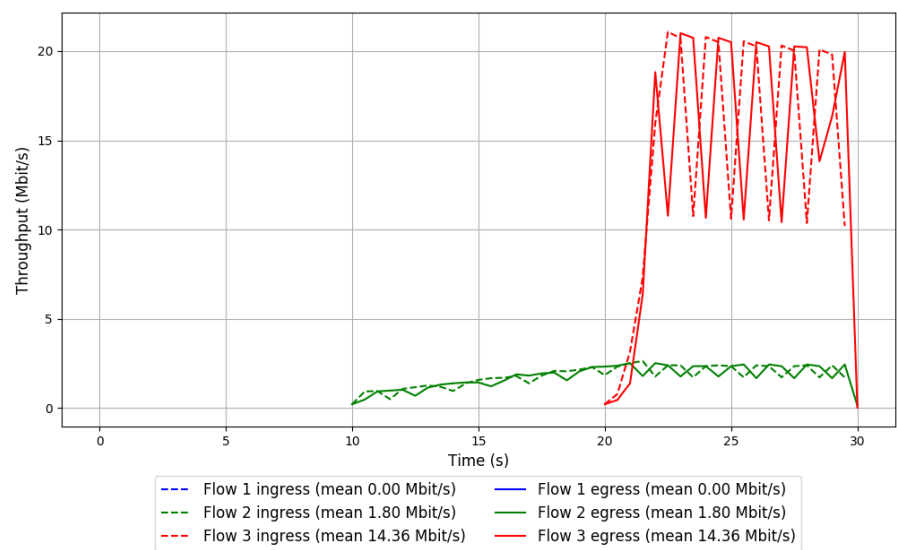
-- Flow 3:

Average throughput: 14.36 Mbit/s

95th percentile per-packet one-way delay: 161.816 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

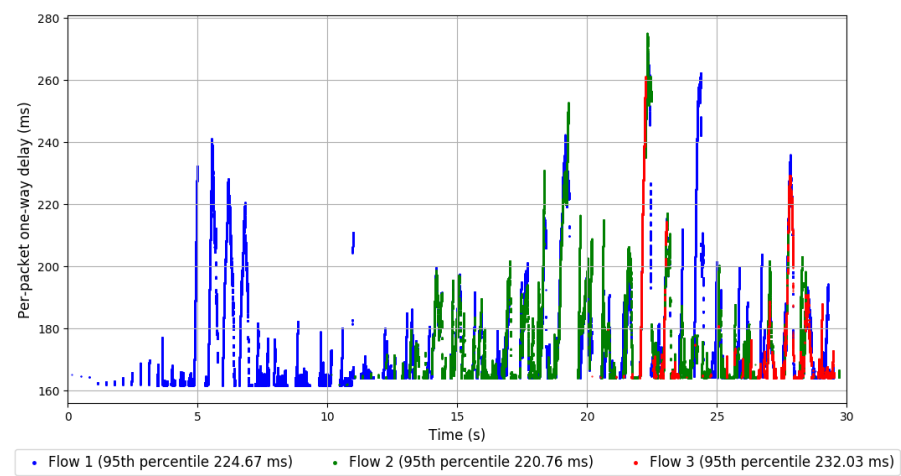
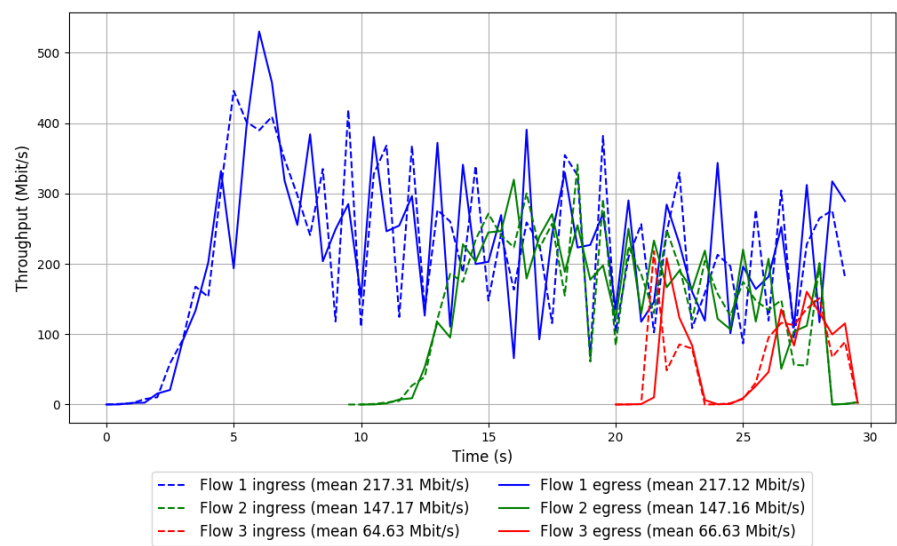


```
Run 1: Statistics of Verus

Start at: 2017-12-12 14:00:09
End at: 2017-12-12 14:00:39

# Below is generated by plot.py at 2017-12-12 17:20:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.00 Mbit/s
95th percentile per-packet one-way delay: 224.650 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 217.12 Mbit/s
95th percentile per-packet one-way delay: 224.666 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 147.16 Mbit/s
95th percentile per-packet one-way delay: 220.763 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 66.63 Mbit/s
95th percentile per-packet one-way delay: 232.034 ms
Loss rate: 0.17%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-12 14:13:42

End at: 2017-12-12 14:14:12

Below is generated by plot.py at 2017-12-12 17:20:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.03 Mbit/s

95th percentile per-packet one-way delay: 174.217 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.42 Mbit/s

95th percentile per-packet one-way delay: 172.178 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.88 Mbit/s

95th percentile per-packet one-way delay: 170.960 ms

Loss rate: 0.00%

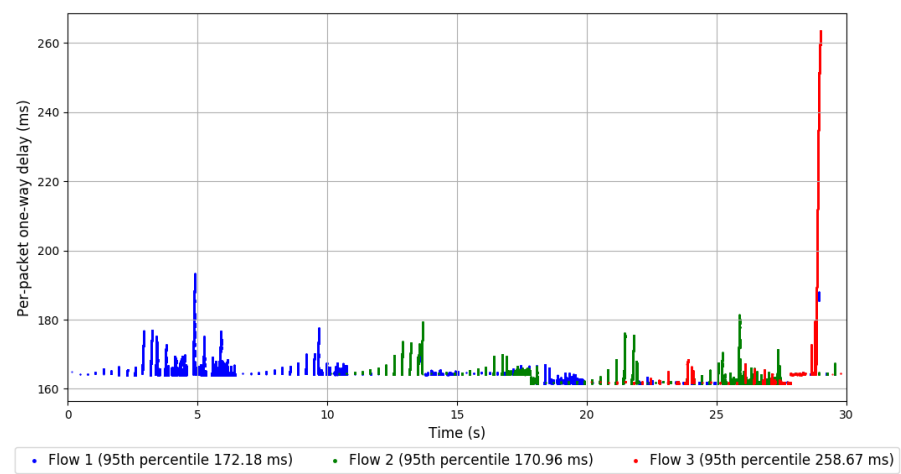
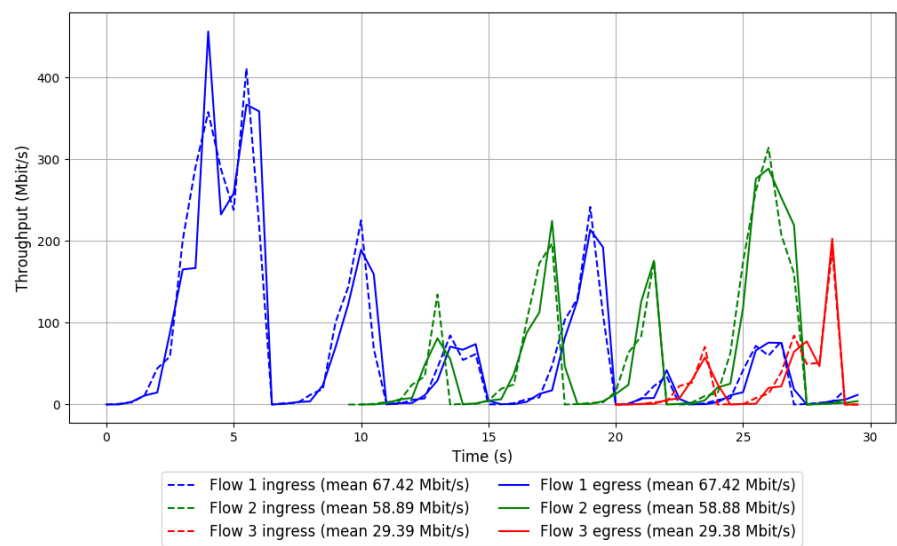
-- Flow 3:

Average throughput: 29.38 Mbit/s

95th percentile per-packet one-way delay: 258.669 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-12 14:27:03

End at: 2017-12-12 14:27:33

Below is generated by plot.py at 2017-12-12 17:20:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 169.32 Mbit/s

95th percentile per-packet one-way delay: 308.798 ms

Loss rate: 6.09%

-- Flow 1:

Average throughput: 64.52 Mbit/s

95th percentile per-packet one-way delay: 187.079 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 153.10 Mbit/s

95th percentile per-packet one-way delay: 318.655 ms

Loss rate: 9.76%

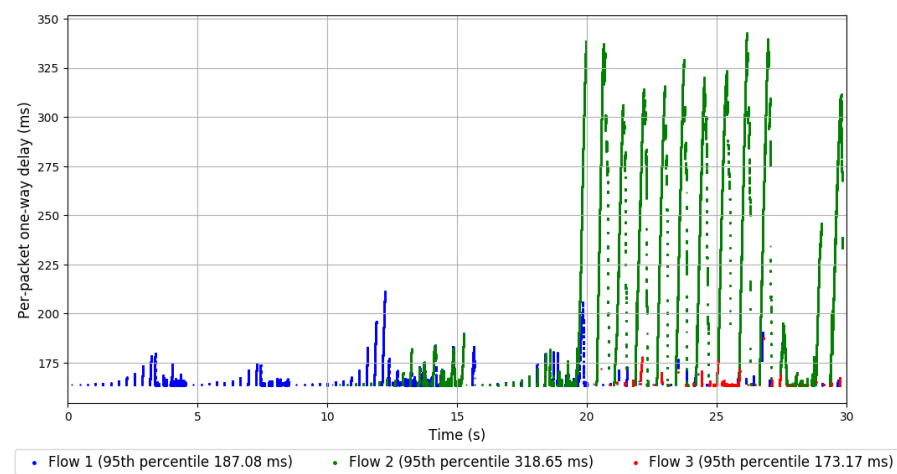
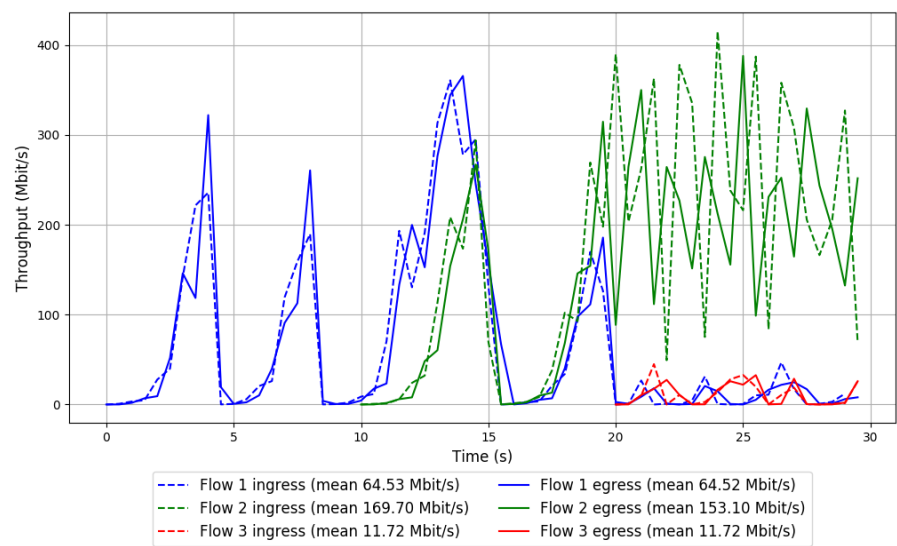
-- Flow 3:

Average throughput: 11.72 Mbit/s

95th percentile per-packet one-way delay: 173.167 ms

Loss rate: 0.00%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-12 14:40:02

End at: 2017-12-12 14:40:32

Below is generated by plot.py at 2017-12-12 17:20:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.35 Mbit/s

95th percentile per-packet one-way delay: 182.602 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 56.17 Mbit/s

95th percentile per-packet one-way delay: 251.735 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 92.57 Mbit/s

95th percentile per-packet one-way delay: 170.952 ms

Loss rate: 0.00%

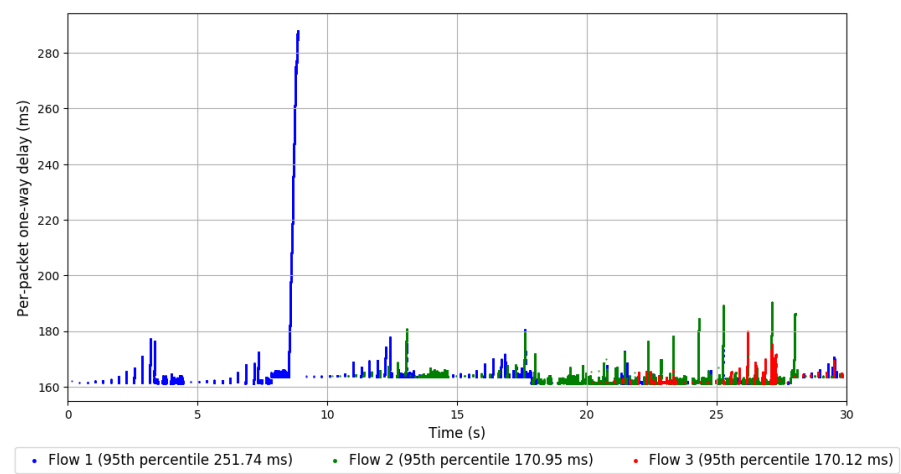
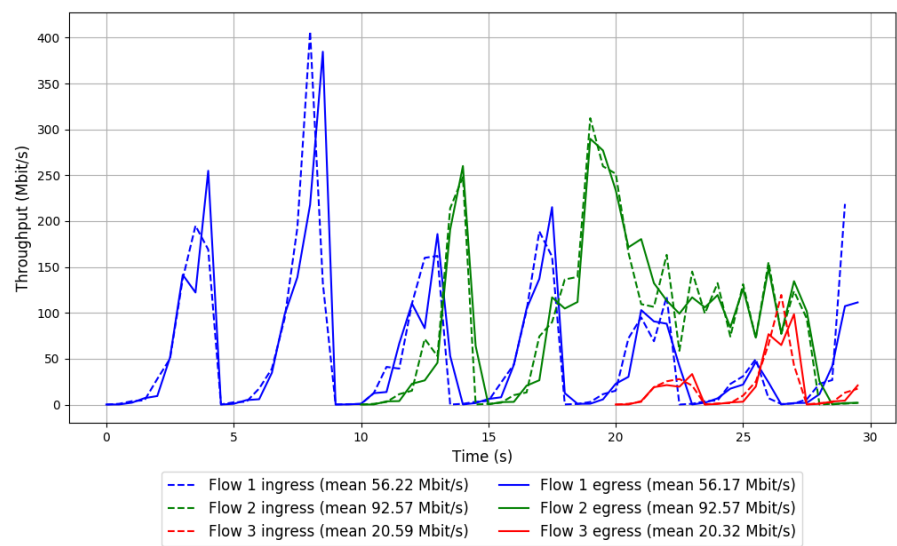
-- Flow 3:

Average throughput: 20.32 Mbit/s

95th percentile per-packet one-way delay: 170.116 ms

Loss rate: 1.28%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-12 14:53:08

End at: 2017-12-12 14:53:38

Below is generated by plot.py at 2017-12-12 17:20:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 291.63 Mbit/s

95th percentile per-packet one-way delay: 365.906 ms

Loss rate: 9.16%

-- Flow 1:

Average throughput: 233.55 Mbit/s

95th percentile per-packet one-way delay: 371.708 ms

Loss rate: 10.56%

-- Flow 2:

Average throughput: 24.33 Mbit/s

95th percentile per-packet one-way delay: 239.147 ms

Loss rate: 0.20%

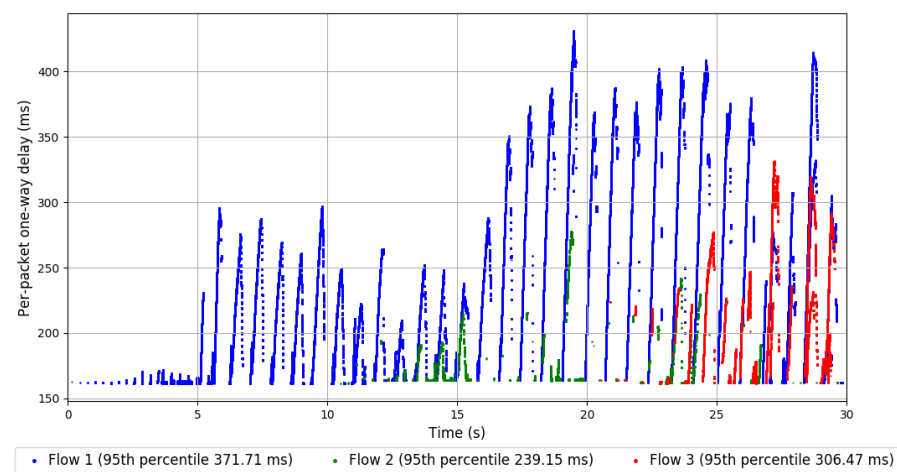
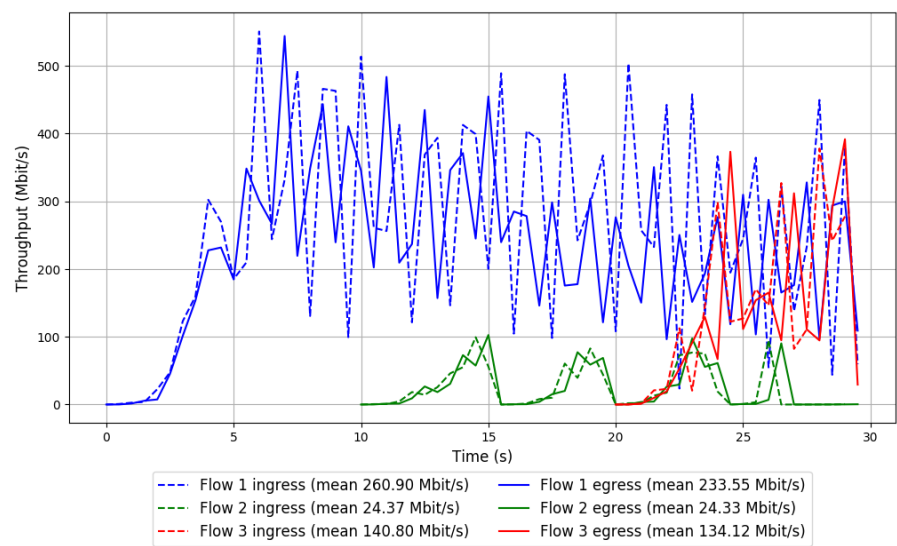
-- Flow 3:

Average throughput: 134.12 Mbit/s

95th percentile per-packet one-way delay: 306.474 ms

Loss rate: 4.13%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-12 15:06:40

End at: 2017-12-12 15:07:10

Below is generated by plot.py at 2017-12-12 17:20:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 169.33 Mbit/s

95th percentile per-packet one-way delay: 228.640 ms

Loss rate: 2.53%

-- Flow 1:

Average throughput: 118.66 Mbit/s

95th percentile per-packet one-way delay: 204.376 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 62.18 Mbit/s

95th percentile per-packet one-way delay: 378.162 ms

Loss rate: 8.47%

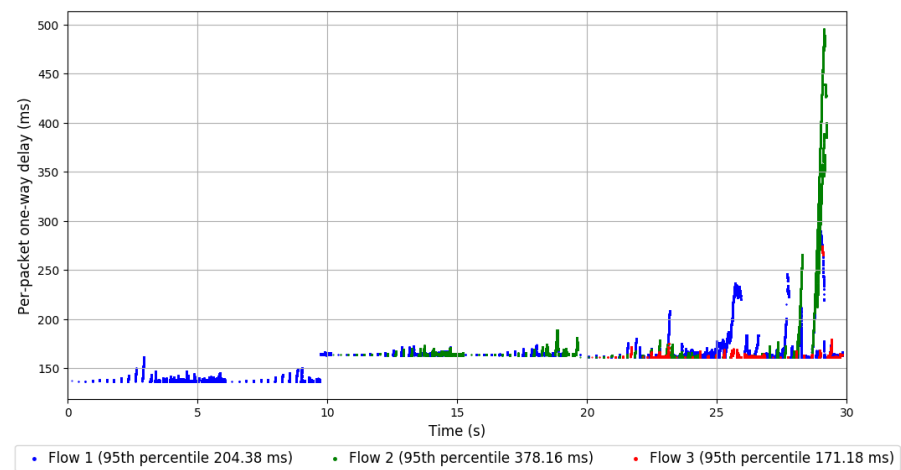
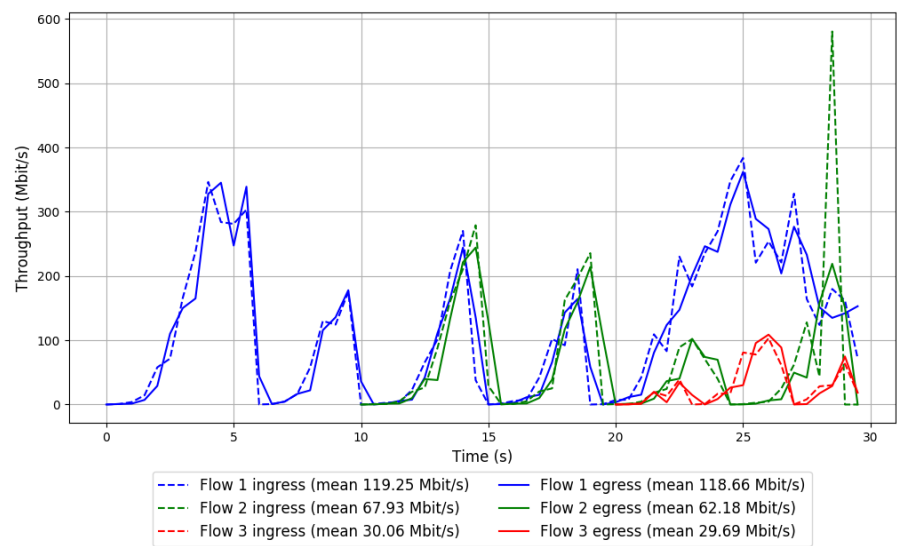
-- Flow 3:

Average throughput: 29.69 Mbit/s

95th percentile per-packet one-way delay: 171.181 ms

Loss rate: 1.23%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-12 15:20:14

End at: 2017-12-12 15:20:44

Below is generated by plot.py at 2017-12-12 17:20:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.69 Mbit/s

95th percentile per-packet one-way delay: 188.342 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 136.80 Mbit/s

95th percentile per-packet one-way delay: 186.793 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 55.57 Mbit/s

95th percentile per-packet one-way delay: 281.438 ms

Loss rate: 5.21%

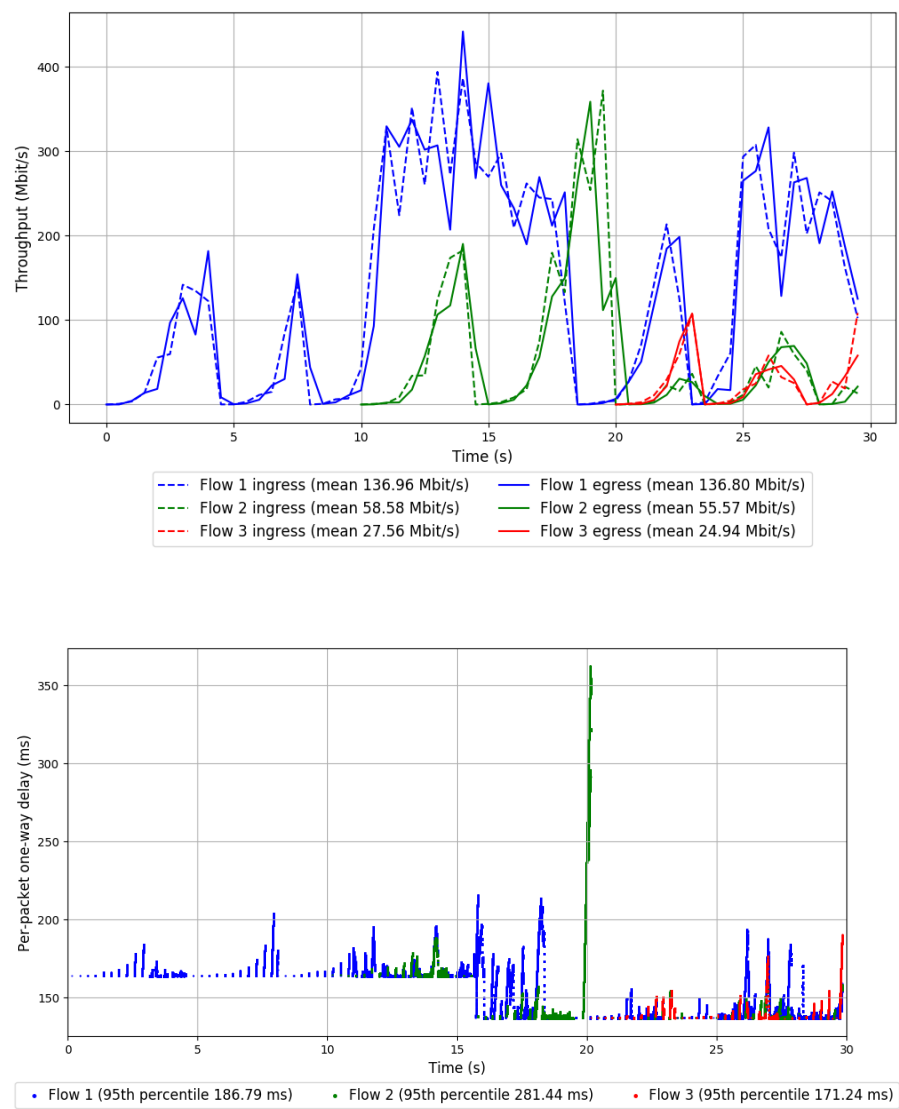
-- Flow 3:

Average throughput: 24.94 Mbit/s

95th percentile per-packet one-way delay: 171.244 ms

Loss rate: 9.48%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-12 15:34:13

End at: 2017-12-12 15:34:43

Below is generated by plot.py at 2017-12-12 17:22:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 291.42 Mbit/s

95th percentile per-packet one-way delay: 278.447 ms

Loss rate: 1.95%

-- Flow 1:

Average throughput: 212.25 Mbit/s

95th percentile per-packet one-way delay: 257.659 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 112.90 Mbit/s

95th percentile per-packet one-way delay: 337.270 ms

Loss rate: 6.41%

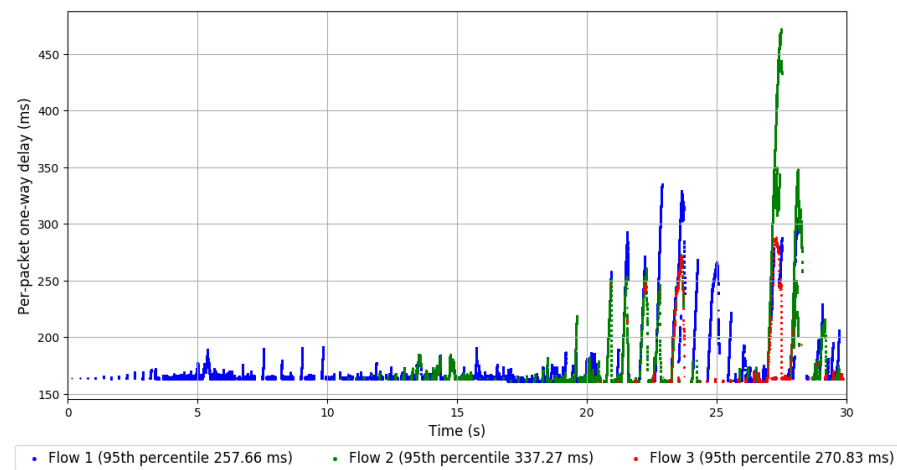
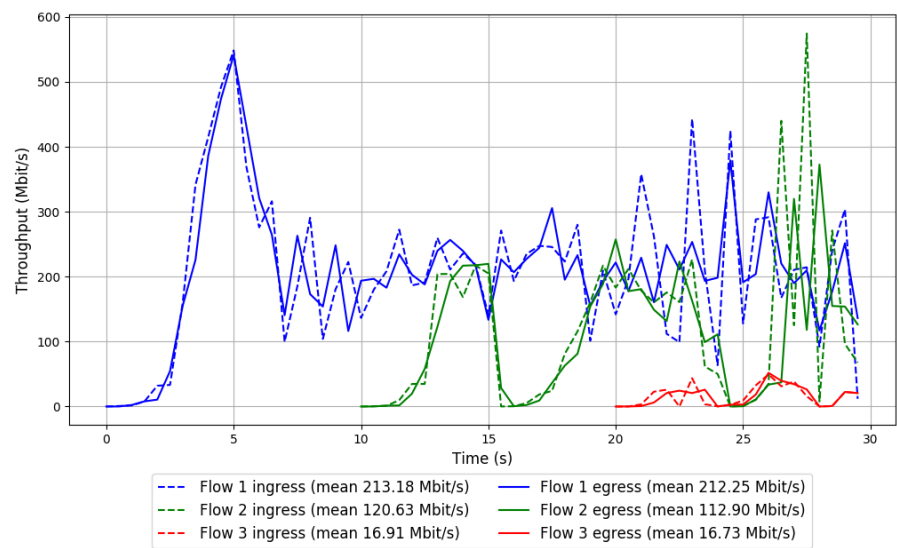
-- Flow 3:

Average throughput: 16.73 Mbit/s

95th percentile per-packet one-way delay: 270.826 ms

Loss rate: 1.06%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-12 15:47:58

End at: 2017-12-12 15:48:28

Below is generated by plot.py at 2017-12-12 17:22:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.47 Mbit/s

95th percentile per-packet one-way delay: 189.188 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 73.56 Mbit/s

95th percentile per-packet one-way delay: 169.768 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 104.44 Mbit/s

95th percentile per-packet one-way delay: 214.817 ms

Loss rate: 0.02%

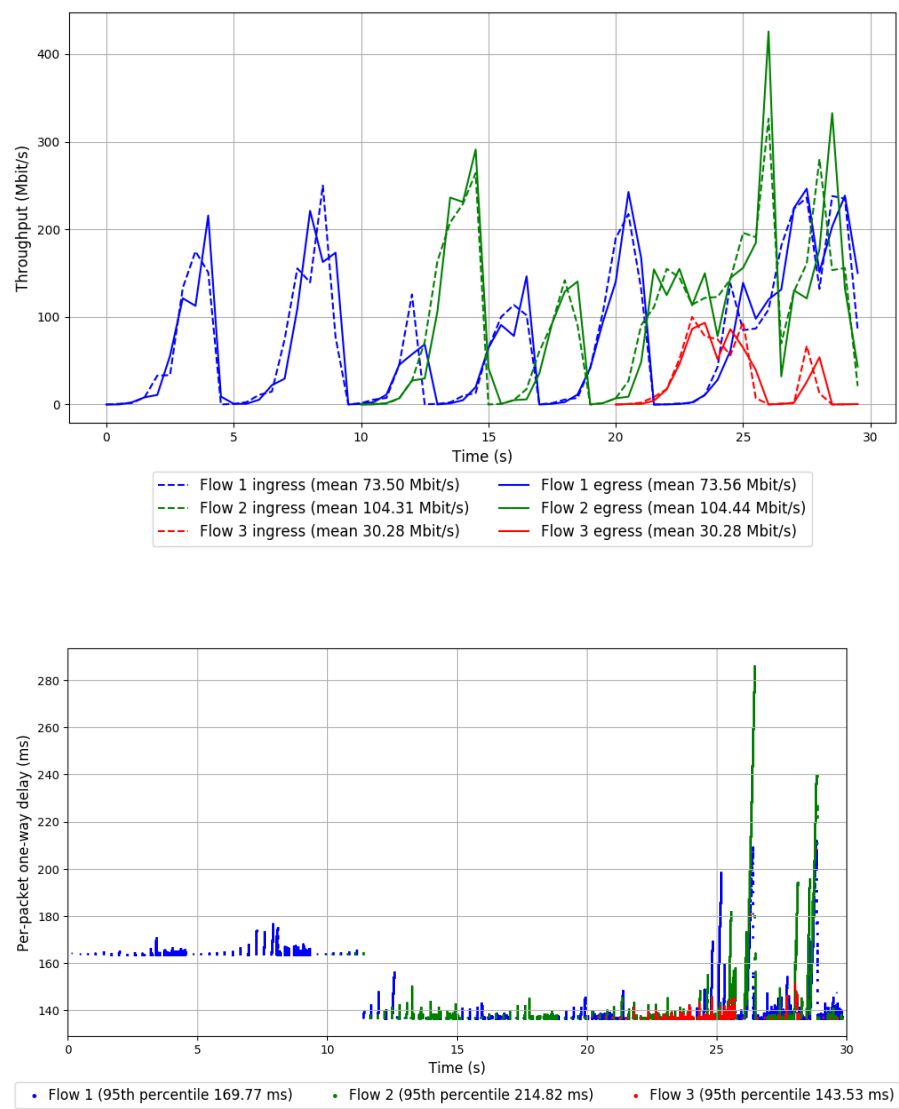
-- Flow 3:

Average throughput: 30.28 Mbit/s

95th percentile per-packet one-way delay: 143.528 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-12 16:01:29

End at: 2017-12-12 16:01:59

Below is generated by plot.py at 2017-12-12 17:22:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.56 Mbit/s

95th percentile per-packet one-way delay: 176.307 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 149.34 Mbit/s

95th percentile per-packet one-way delay: 171.812 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.10 Mbit/s

95th percentile per-packet one-way delay: 187.379 ms

Loss rate: 2.01%

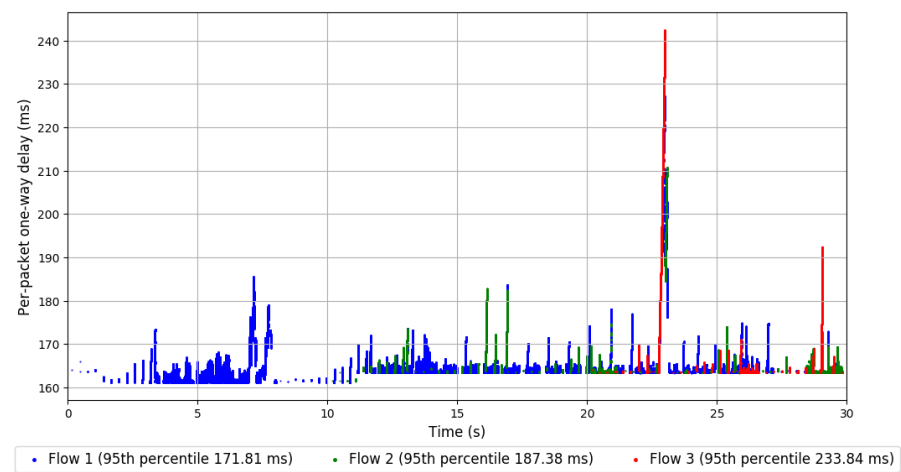
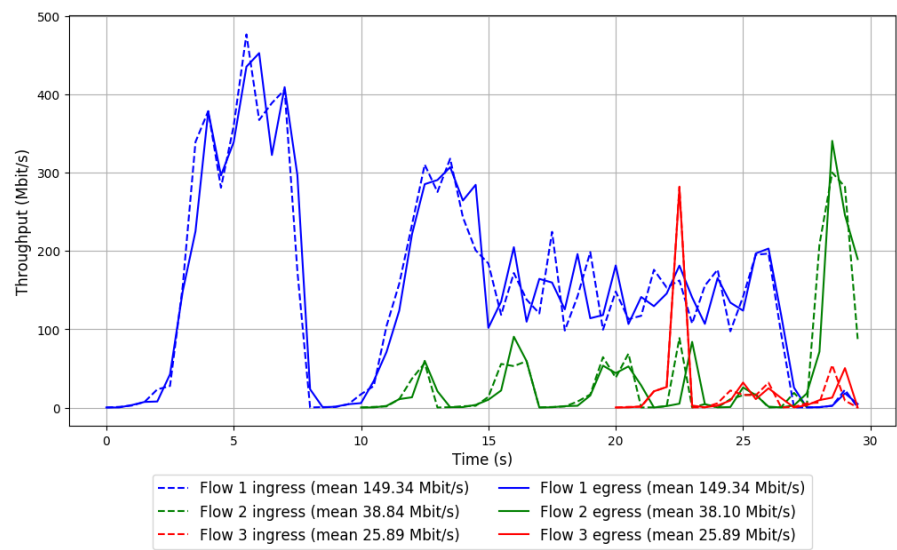
-- Flow 3:

Average throughput: 25.89 Mbit/s

95th percentile per-packet one-way delay: 233.839 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-12 14:02:20

End at: 2017-12-12 14:02:50

Below is generated by plot.py at 2017-12-12 17:22:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.60 Mbit/s

95th percentile per-packet one-way delay: 165.441 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 81.30 Mbit/s

95th percentile per-packet one-way delay: 164.211 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 9.98 Mbit/s

95th percentile per-packet one-way delay: 164.248 ms

Loss rate: 0.00%

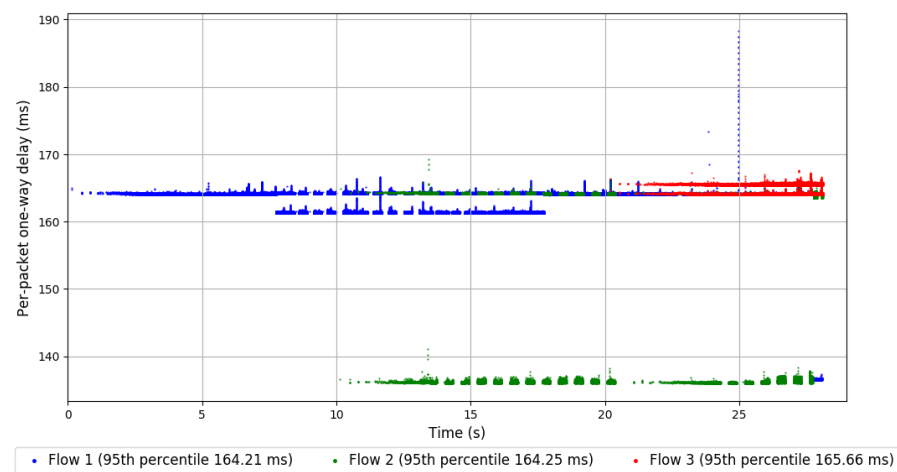
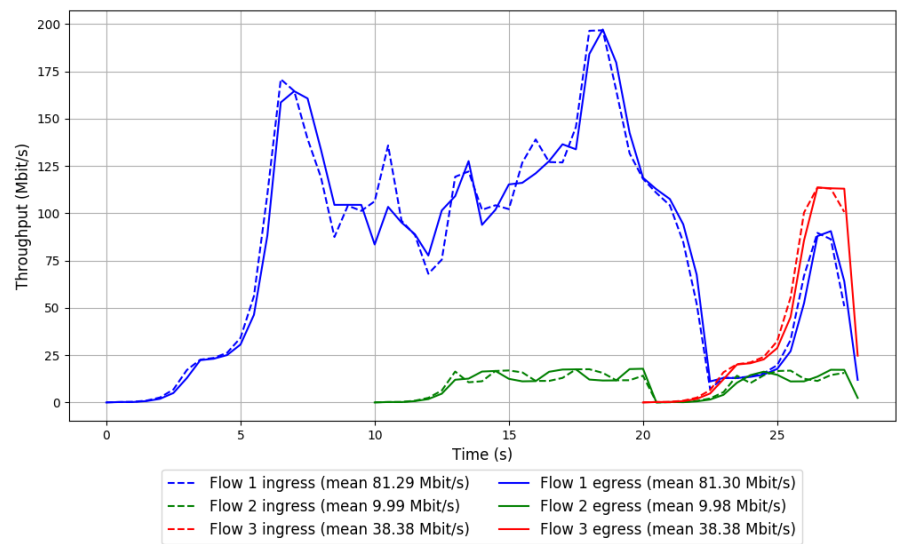
-- Flow 3:

Average throughput: 38.38 Mbit/s

95th percentile per-packet one-way delay: 165.662 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-12 14:15:56

End at: 2017-12-12 14:16:26

Below is generated by plot.py at 2017-12-12 17:22:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.51 Mbit/s

95th percentile per-packet one-way delay: 164.247 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 28.11 Mbit/s

95th percentile per-packet one-way delay: 164.219 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 49.02 Mbit/s

95th percentile per-packet one-way delay: 164.263 ms

Loss rate: 0.00%

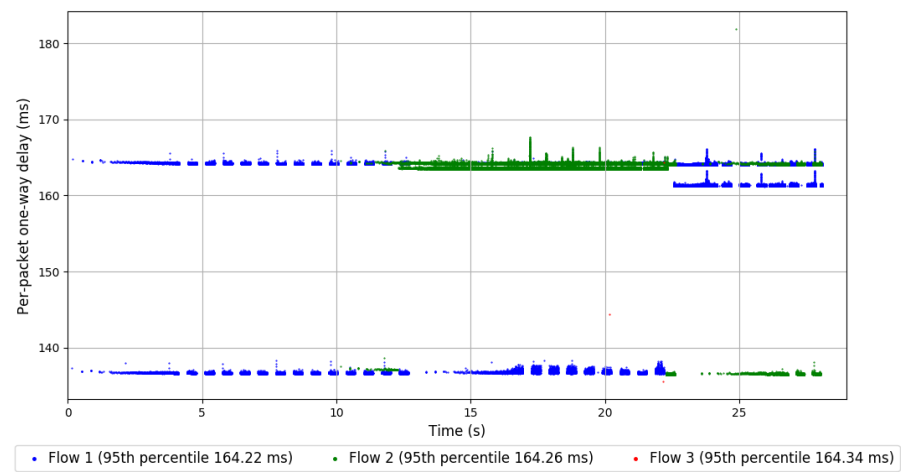
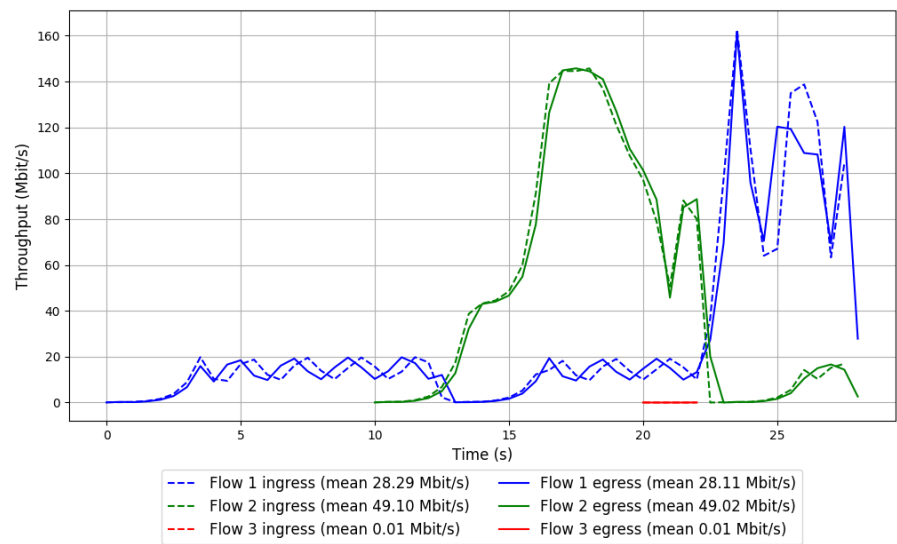
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 164.335 ms

Loss rate: 46.17%

Run 2: Report of Copa — Data Link

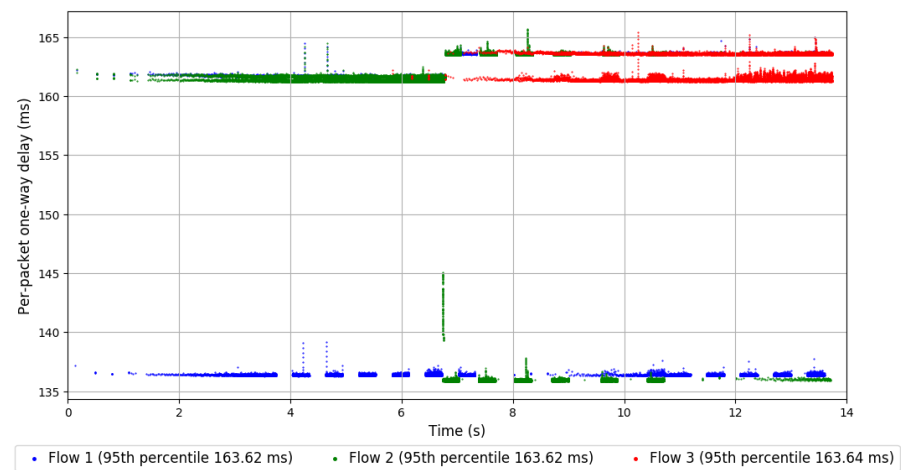
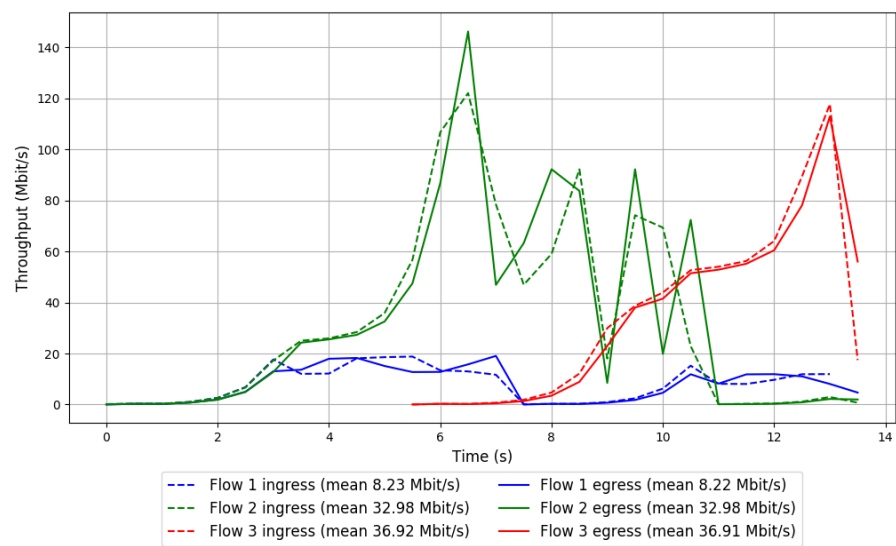


Run 3: Statistics of Copa

Start at: 2017-12-12 14:29:07

End at: 2017-12-12 14:29:37

Run 3: Report of Copa — Data Link

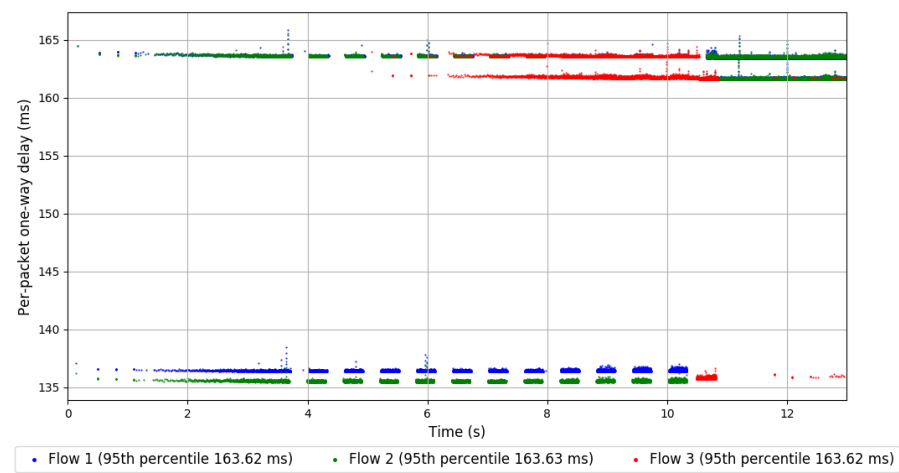
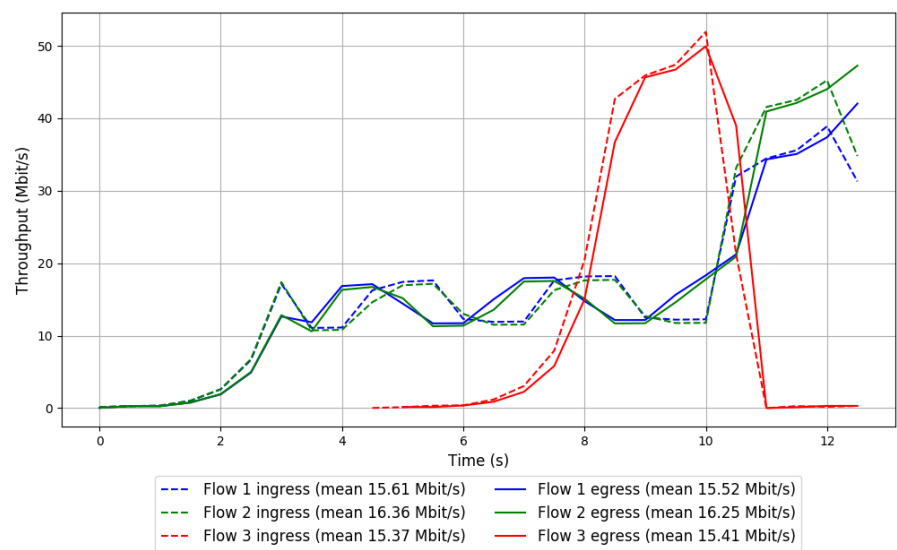


Run 4: Statistics of Copa

Start at: 2017-12-12 14:42:02

End at: 2017-12-12 14:42:32

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-12 14:55:30

End at: 2017-12-12 14:56:00

Below is generated by plot.py at 2017-12-12 17:22:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.08 Mbit/s

95th percentile per-packet one-way delay: 163.640 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 42.30 Mbit/s

95th percentile per-packet one-way delay: 163.653 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 161.448 ms

Loss rate: 0.00%

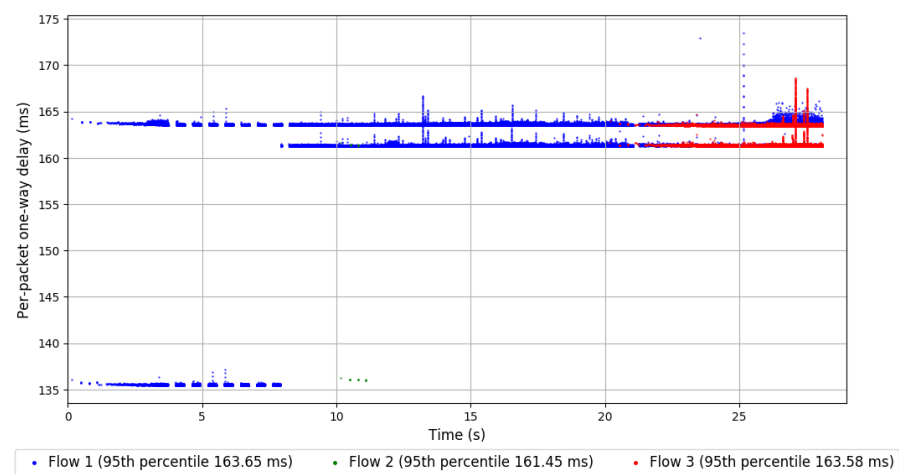
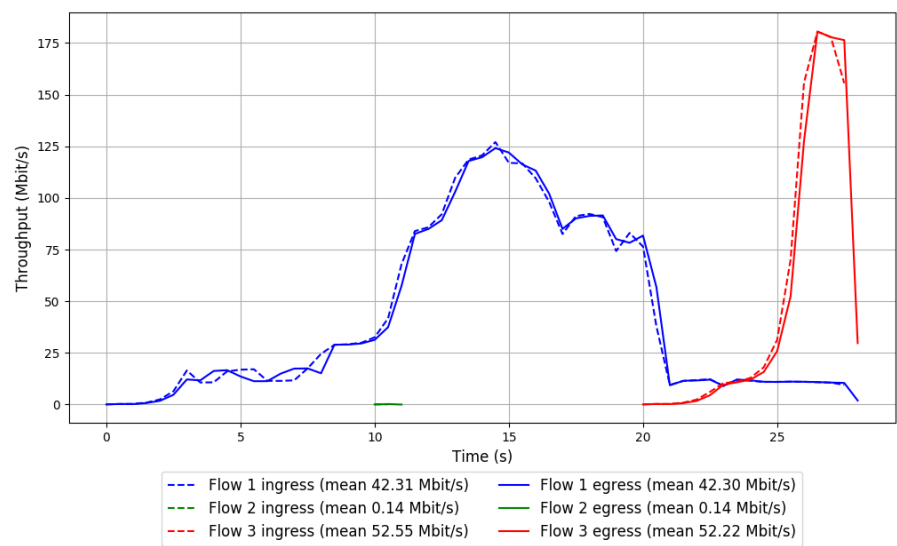
-- Flow 3:

Average throughput: 52.22 Mbit/s

95th percentile per-packet one-way delay: 163.581 ms

Loss rate: 0.93%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-12 15:09:04

End at: 2017-12-12 15:09:34

Below is generated by plot.py at 2017-12-12 17:22:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 26.05 Mbit/s

95th percentile per-packet one-way delay: 163.566 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 15.22 Mbit/s

95th percentile per-packet one-way delay: 163.612 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 12.23 Mbit/s

95th percentile per-packet one-way delay: 163.493 ms

Loss rate: 0.10%

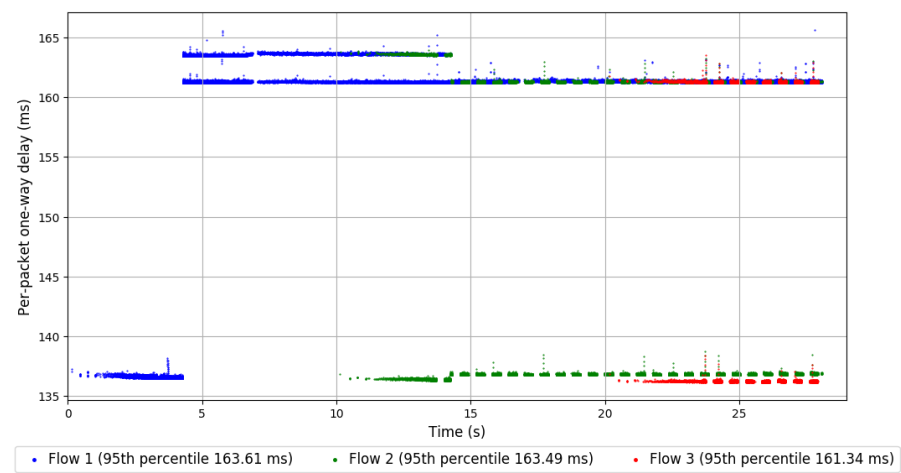
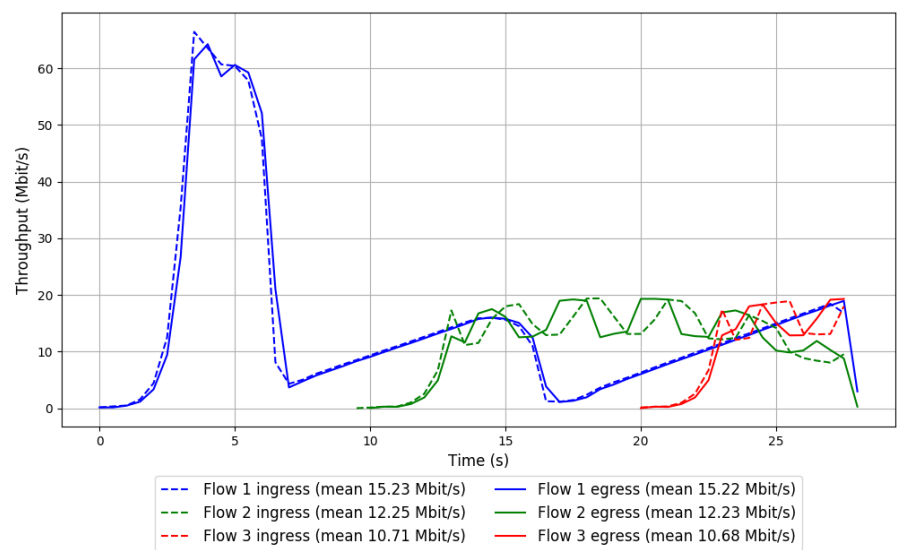
-- Flow 3:

Average throughput: 10.68 Mbit/s

95th percentile per-packet one-way delay: 161.337 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-12 15:22:38

End at: 2017-12-12 15:23:08

Below is generated by plot.py at 2017-12-12 17:23:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.30 Mbit/s

95th percentile per-packet one-way delay: 163.614 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 50.07 Mbit/s

95th percentile per-packet one-way delay: 163.591 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 47.34 Mbit/s

95th percentile per-packet one-way delay: 163.640 ms

Loss rate: 0.00%

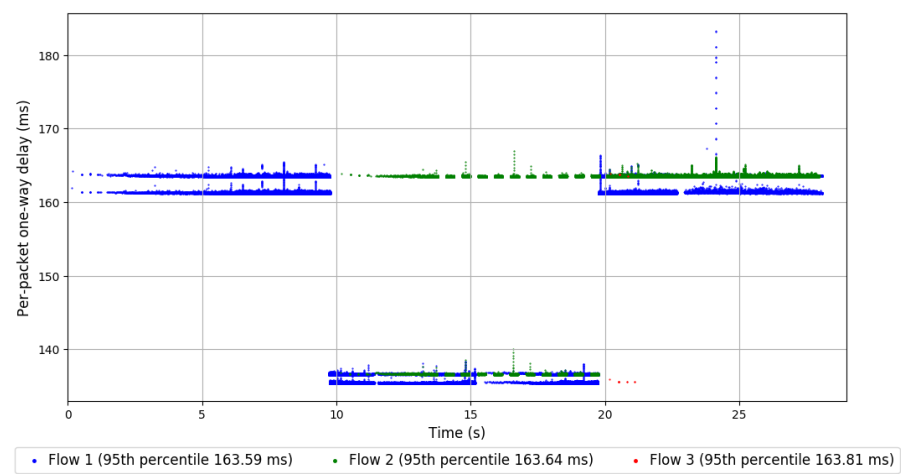
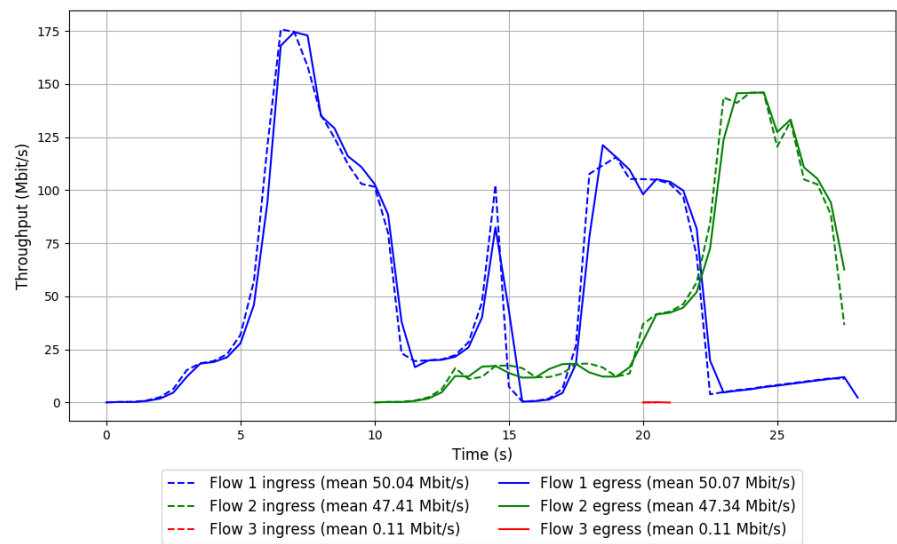
-- Flow 3:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 163.811 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-12 15:36:43

End at: 2017-12-12 15:37:13

Below is generated by plot.py at 2017-12-12 17:23:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.65 Mbit/s

95th percentile per-packet one-way delay: 163.587 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 54.91 Mbit/s

95th percentile per-packet one-way delay: 163.586 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 161.361 ms

Loss rate: 0.00%

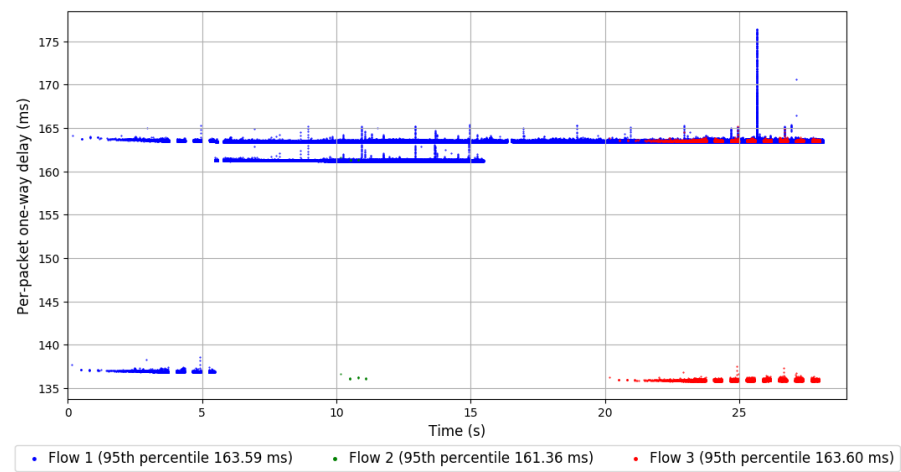
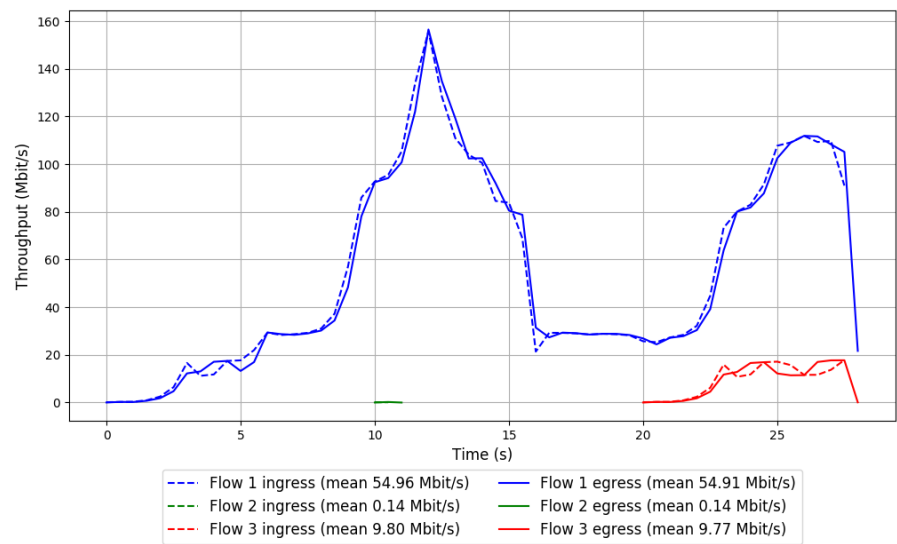
-- Flow 3:

Average throughput: 9.77 Mbit/s

95th percentile per-packet one-way delay: 163.604 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-12 15:50:09

End at: 2017-12-12 15:50:39

Below is generated by plot.py at 2017-12-12 17:23:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 33.62 Mbit/s

95th percentile per-packet one-way delay: 163.562 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 26.88 Mbit/s

95th percentile per-packet one-way delay: 163.563 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 10.56 Mbit/s

95th percentile per-packet one-way delay: 163.559 ms

Loss rate: 0.00%

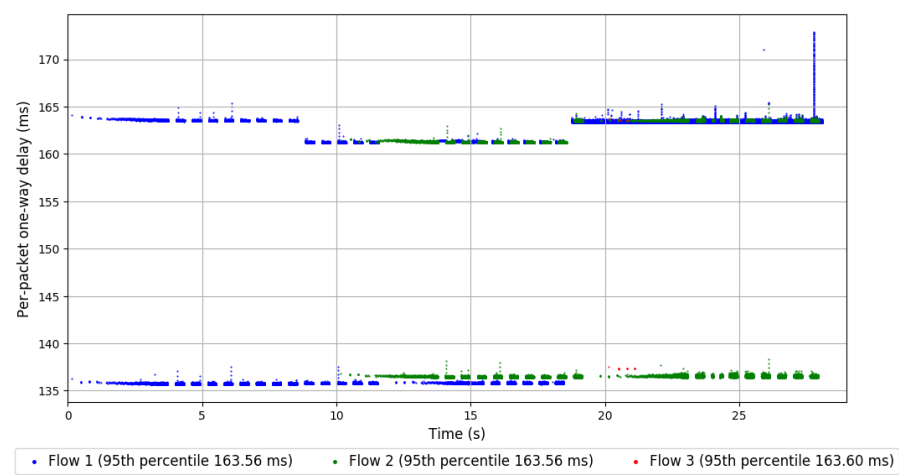
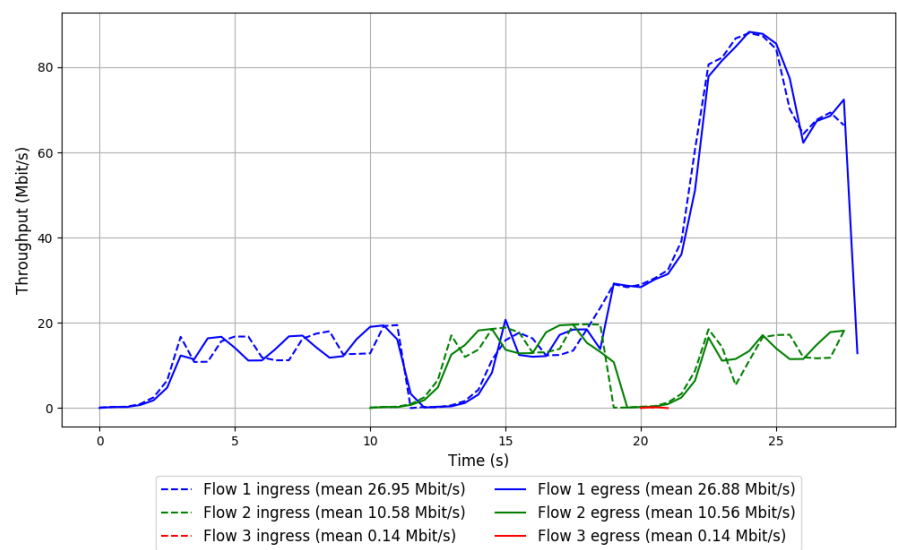
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 163.599 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-12 16:03:54

End at: 2017-12-12 16:04:24

Below is generated by plot.py at 2017-12-12 17:24:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.93 Mbit/s

95th percentile per-packet one-way delay: 163.573 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 72.24 Mbit/s

95th percentile per-packet one-way delay: 163.567 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 9.74 Mbit/s

95th percentile per-packet one-way delay: 163.603 ms

Loss rate: 0.36%

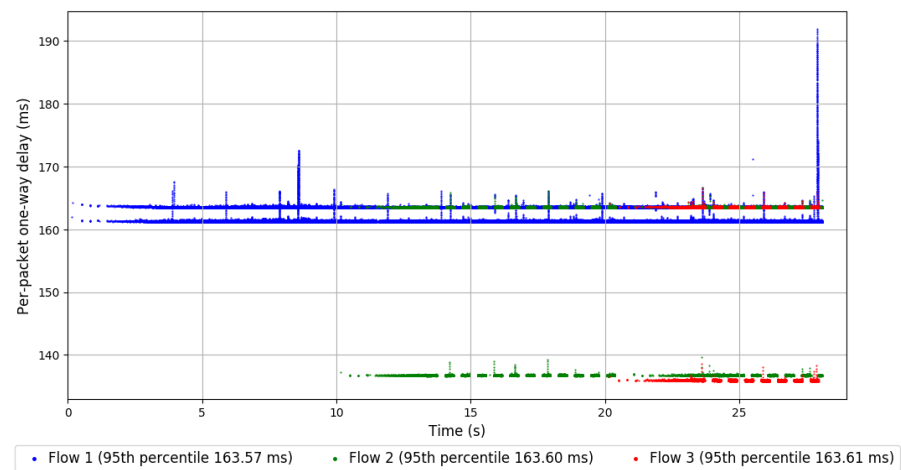
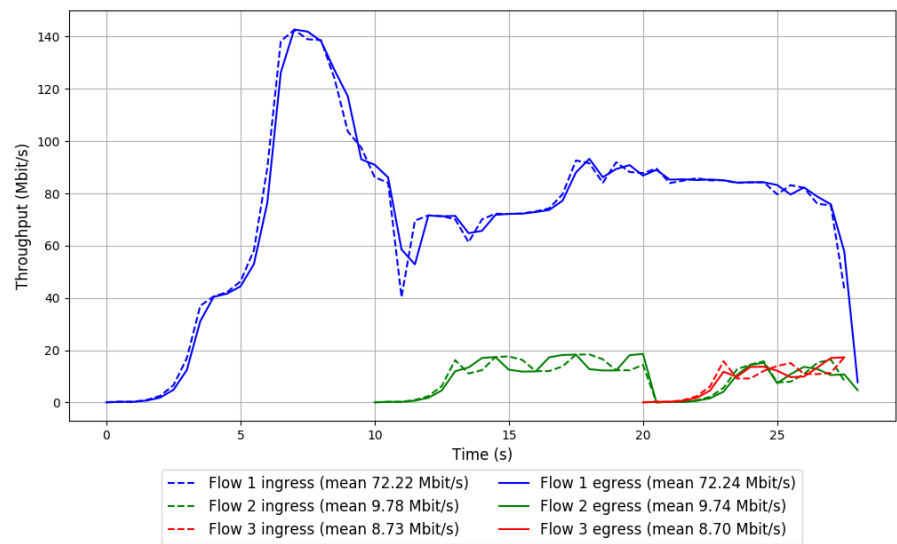
-- Flow 3:

Average throughput: 8.70 Mbit/s

95th percentile per-packet one-way delay: 163.607 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

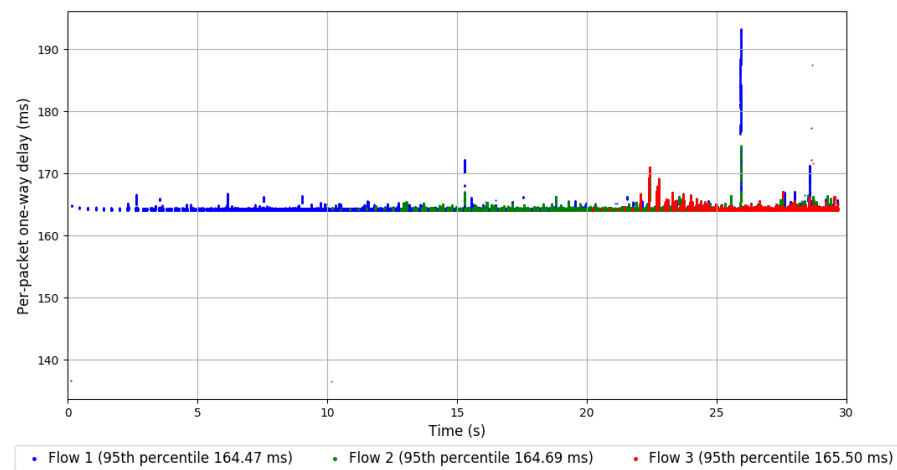
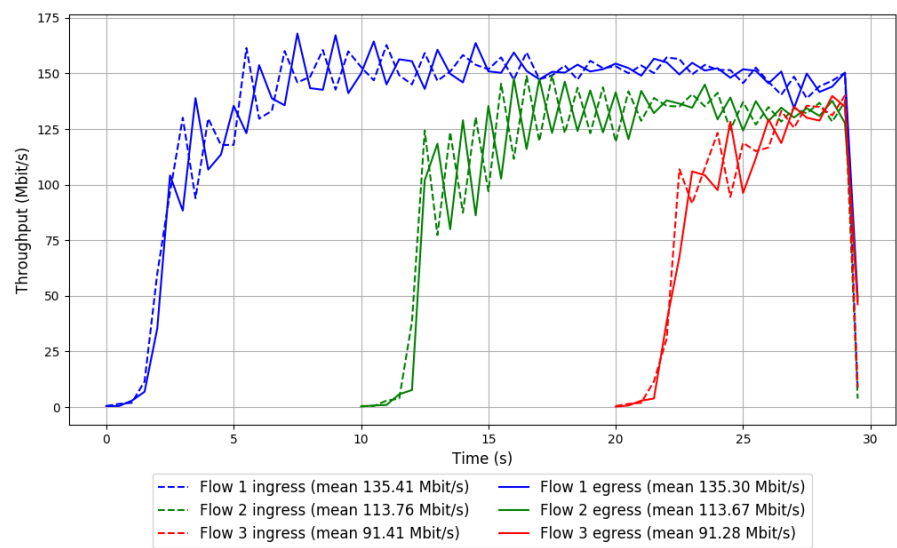


```
Run 1: Statistics of Indigo

Start at: 2017-12-12 13:58:00
End at: 2017-12-12 13:58:30

# Below is generated by plot.py at 2017-12-12 17:25:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 239.45 Mbit/s
95th percentile per-packet one-way delay: 164.654 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 135.30 Mbit/s
95th percentile per-packet one-way delay: 164.465 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 113.67 Mbit/s
95th percentile per-packet one-way delay: 164.691 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 91.28 Mbit/s
95th percentile per-packet one-way delay: 165.495 ms
Loss rate: 0.51%
```


Run 1: Report of Indigo — Data Link

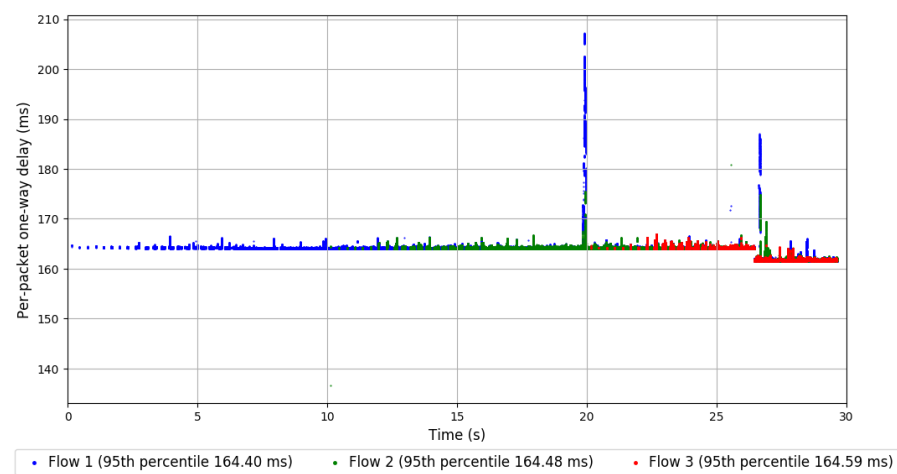
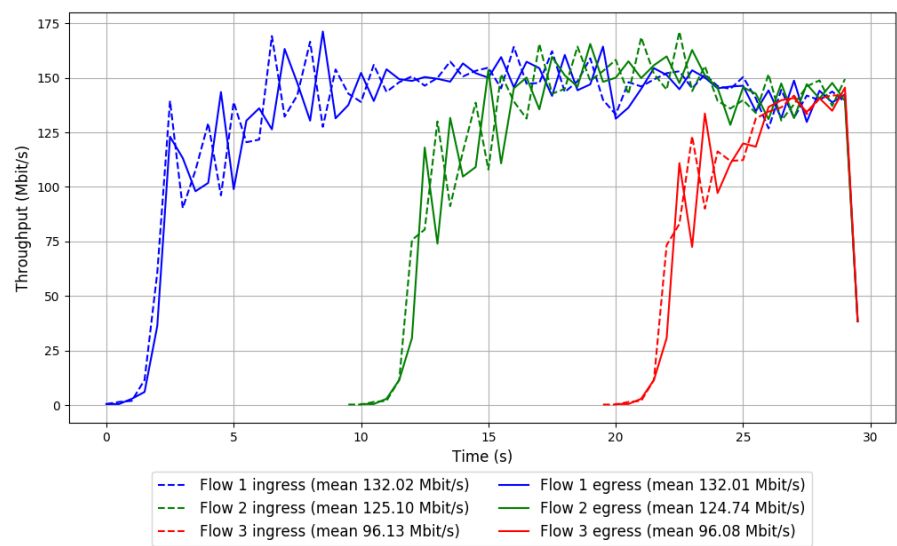


```
Run 2: Statistics of Indigo

Start at: 2017-12-12 14:11:33
End at: 2017-12-12 14:12:03

# Below is generated by plot.py at 2017-12-12 17:26:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 245.51 Mbit/s
95th percentile per-packet one-way delay: 164.446 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 132.01 Mbit/s
95th percentile per-packet one-way delay: 164.400 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 124.74 Mbit/s
95th percentile per-packet one-way delay: 164.482 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 96.08 Mbit/s
95th percentile per-packet one-way delay: 164.588 ms
Loss rate: 0.38%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-12 14:24:56

End at: 2017-12-12 14:25:26

Below is generated by plot.py at 2017-12-12 17:26:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.60 Mbit/s

95th percentile per-packet one-way delay: 164.895 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 105.31 Mbit/s

95th percentile per-packet one-way delay: 164.638 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 124.16 Mbit/s

95th percentile per-packet one-way delay: 165.221 ms

Loss rate: 0.18%

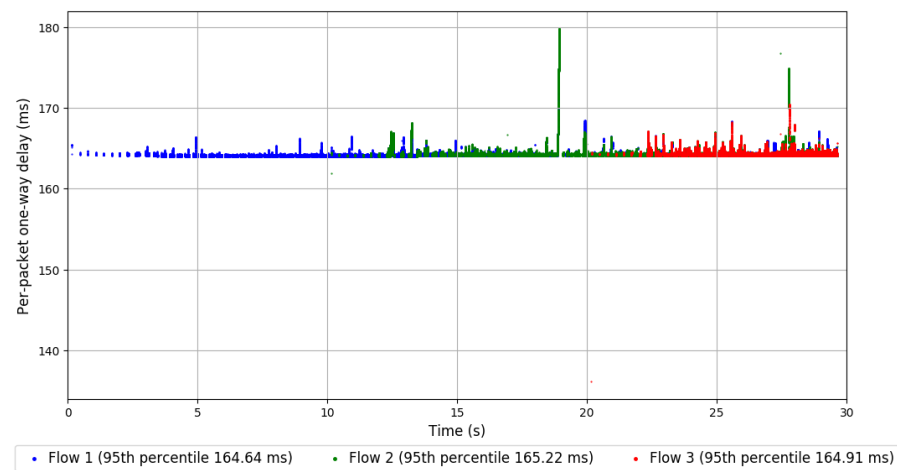
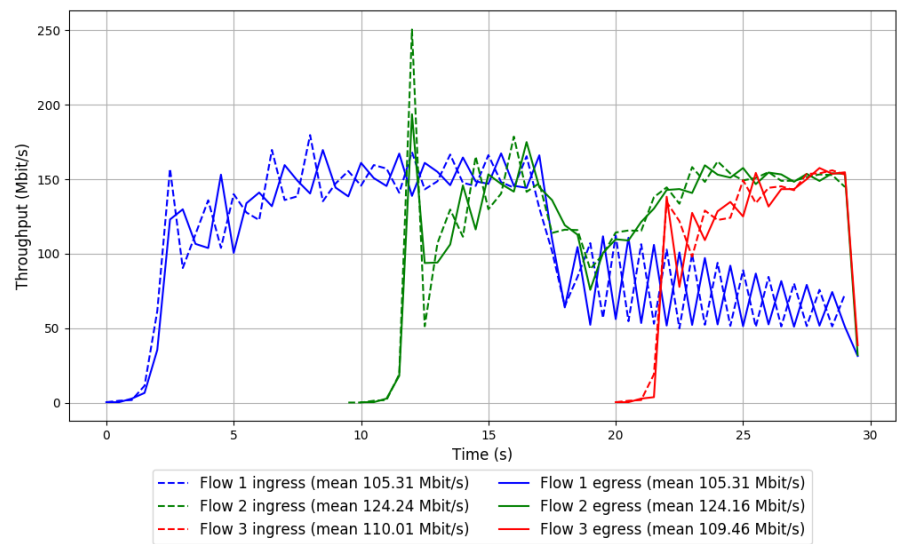
-- Flow 3:

Average throughput: 109.46 Mbit/s

95th percentile per-packet one-way delay: 164.913 ms

Loss rate: 0.46%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-12 14:37:53

End at: 2017-12-12 14:38:23

Below is generated by plot.py at 2017-12-12 17:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.57 Mbit/s

95th percentile per-packet one-way delay: 164.139 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 129.22 Mbit/s

95th percentile per-packet one-way delay: 163.897 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 122.13 Mbit/s

95th percentile per-packet one-way delay: 164.134 ms

Loss rate: 0.11%

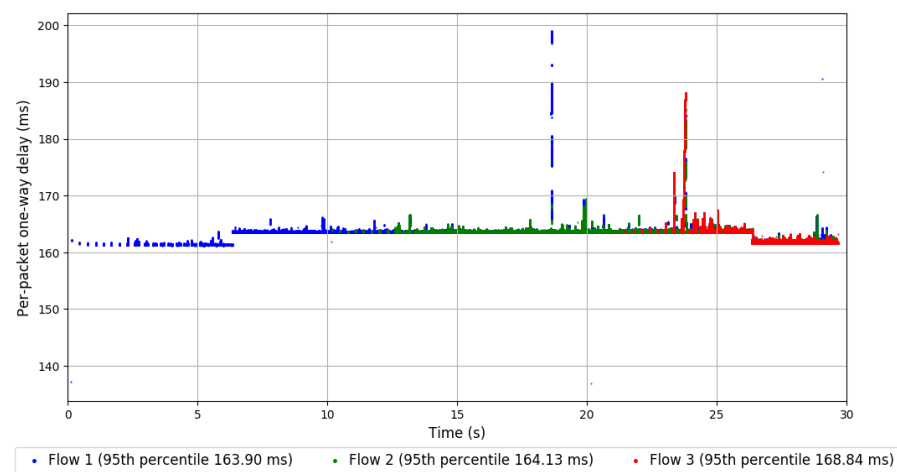
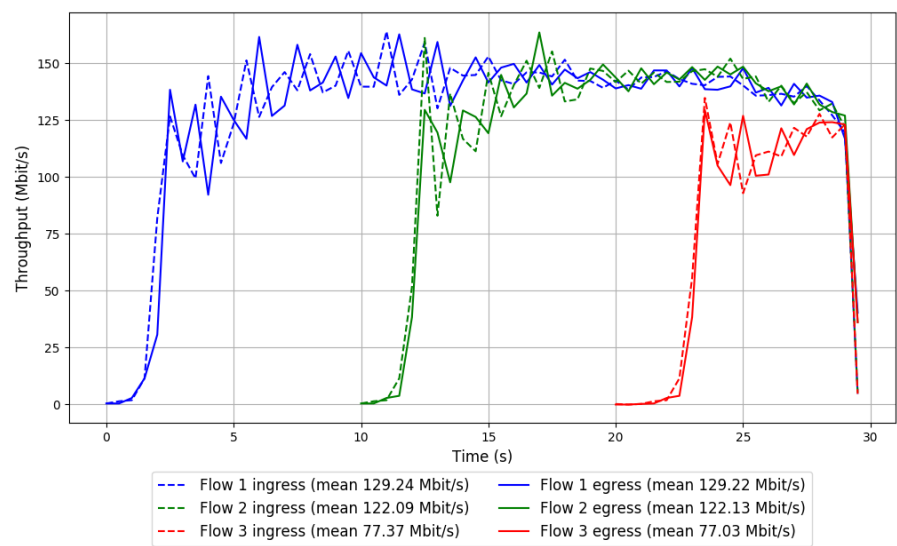
-- Flow 3:

Average throughput: 77.03 Mbit/s

95th percentile per-packet one-way delay: 168.845 ms

Loss rate: 0.41%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-12 14:51:00

End at: 2017-12-12 14:51:30

Below is generated by plot.py at 2017-12-12 17:27:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 254.83 Mbit/s

95th percentile per-packet one-way delay: 164.181 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 136.73 Mbit/s

95th percentile per-packet one-way delay: 163.959 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 129.34 Mbit/s

95th percentile per-packet one-way delay: 164.334 ms

Loss rate: 0.13%

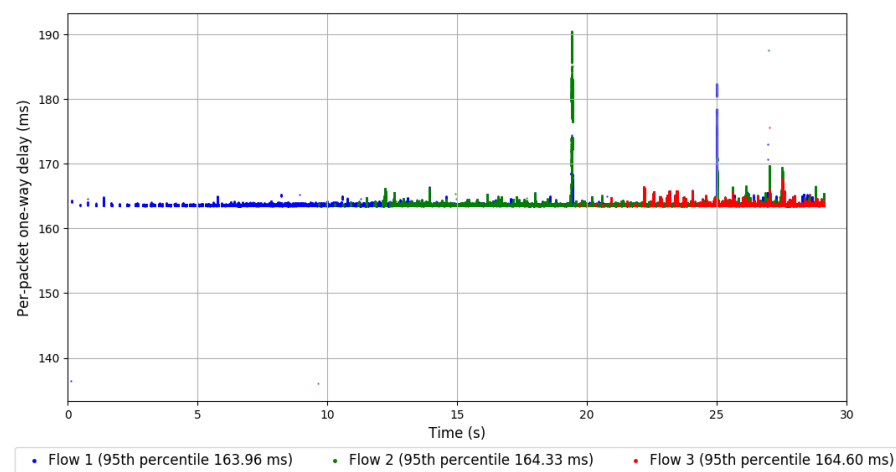
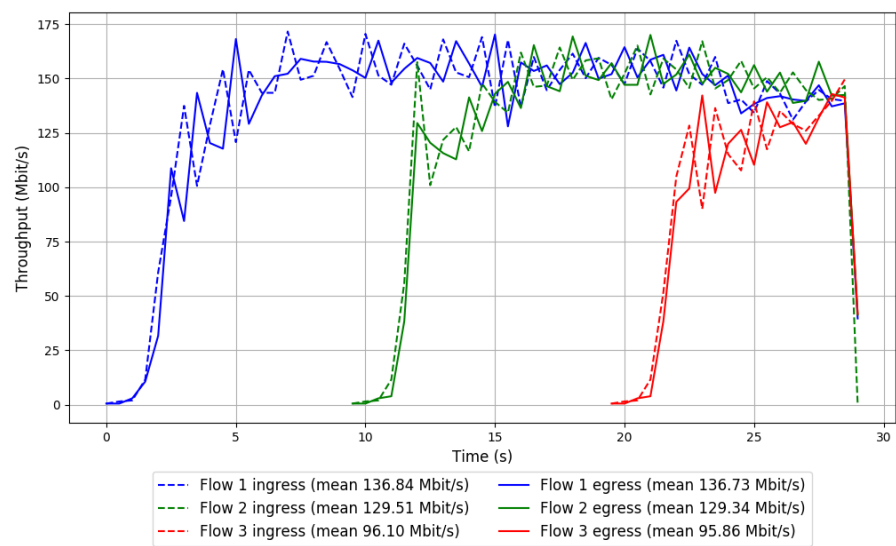
-- Flow 3:

Average throughput: 95.86 Mbit/s

95th percentile per-packet one-way delay: 164.603 ms

Loss rate: 0.52%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-12 15:04:31

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

Below is generated by plot.py at 2017-12-12 17:27:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 257.21 Mbit/s

95th percentile per-packet one-way delay: 164.756 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 136.78 Mbit/s

95th percentile per-packet one-way delay: 164.451 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 131.64 Mbit/s

95th percentile per-packet one-way delay: 164.848 ms

Loss rate: 0.00%

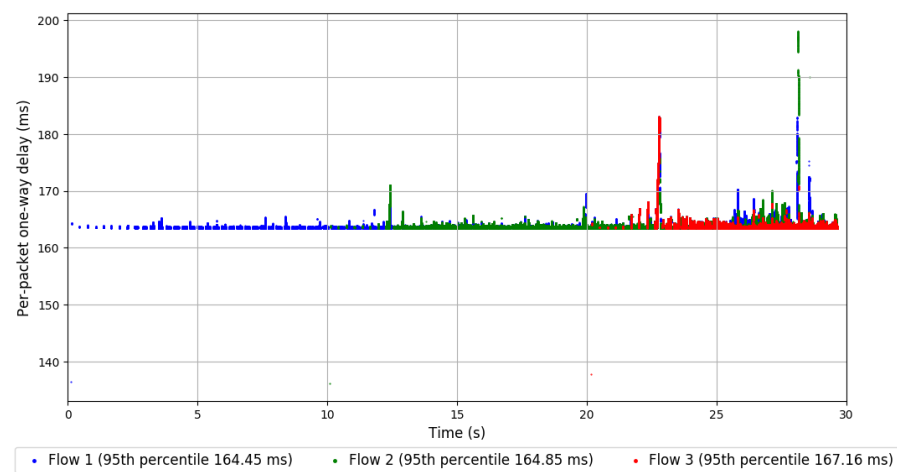
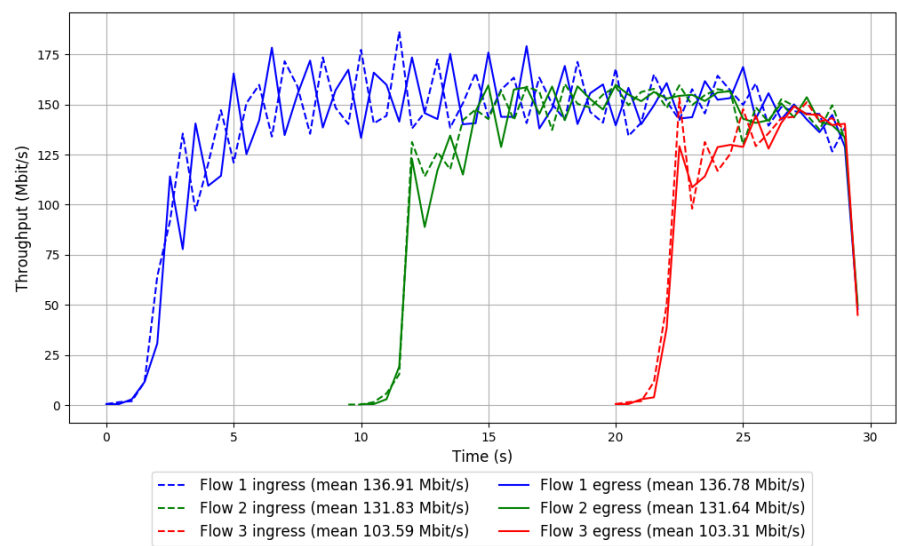
-- Flow 3:

Average throughput: 103.31 Mbit/s

95th percentile per-packet one-way delay: 167.159 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-12 15:18:05

End at: 2017-12-12 15:18:35

Below is generated by plot.py at 2017-12-12 17:28:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 254.24 Mbit/s

95th percentile per-packet one-way delay: 164.551 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 137.04 Mbit/s

95th percentile per-packet one-way delay: 164.264 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 128.08 Mbit/s

95th percentile per-packet one-way delay: 164.579 ms

Loss rate: 0.25%

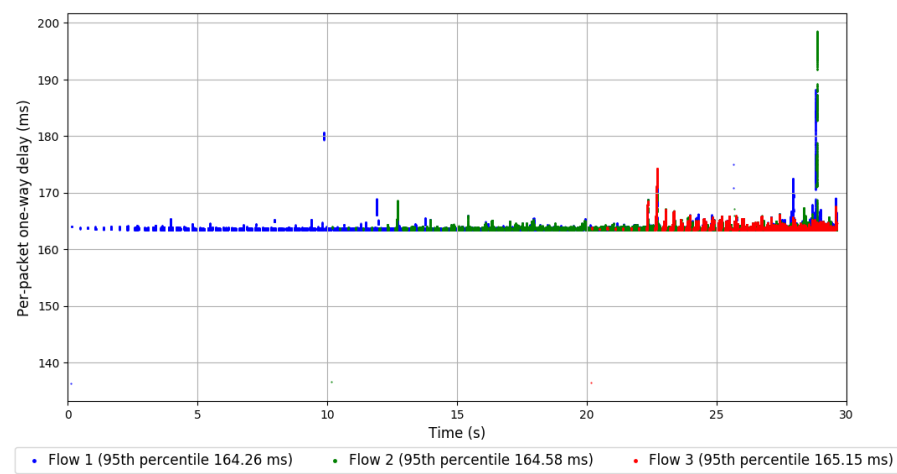
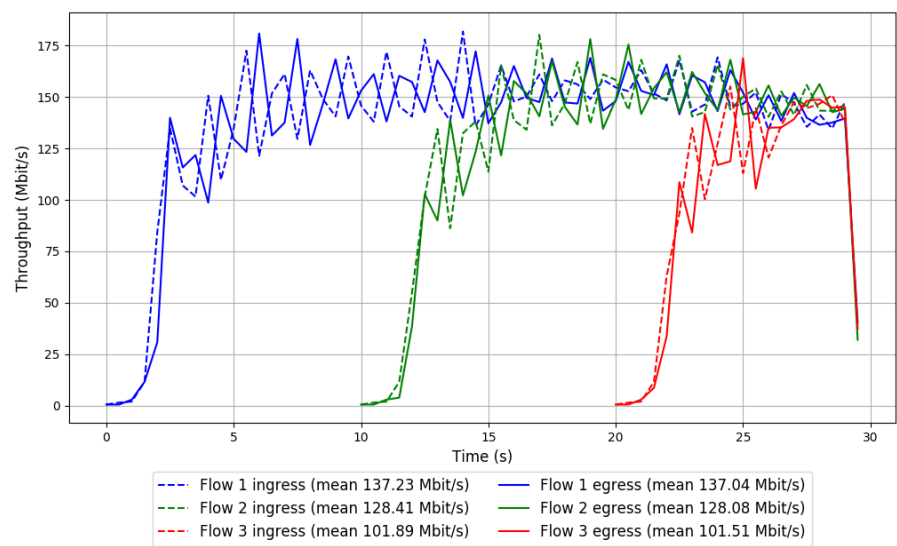
-- Flow 3:

Average throughput: 101.51 Mbit/s

95th percentile per-packet one-way delay: 165.146 ms

Loss rate: 0.35%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-12 15:32:04

End at: 2017-12-12 15:32:34

Below is generated by plot.py at 2017-12-12 17:28:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 256.01 Mbit/s

95th percentile per-packet one-way delay: 164.105 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 138.99 Mbit/s

95th percentile per-packet one-way delay: 163.898 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 127.57 Mbit/s

95th percentile per-packet one-way delay: 164.166 ms

Loss rate: 0.16%

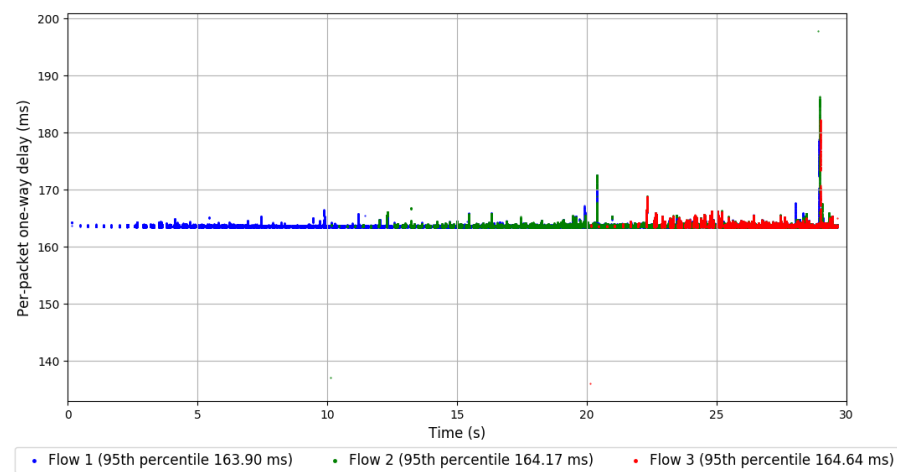
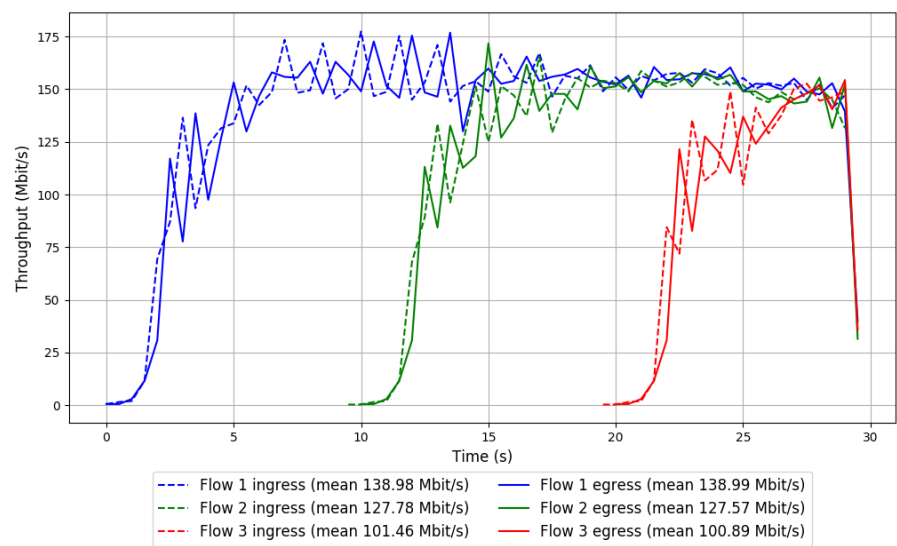
-- Flow 3:

Average throughput: 100.89 Mbit/s

95th percentile per-packet one-way delay: 164.639 ms

Loss rate: 0.54%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-12 15:45:49

End at: 2017-12-12 15:46:19

Below is generated by plot.py at 2017-12-12 17:30:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.78 Mbit/s

95th percentile per-packet one-way delay: 163.709 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 136.75 Mbit/s

95th percentile per-packet one-way delay: 163.667 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 128.76 Mbit/s

95th percentile per-packet one-way delay: 163.827 ms

Loss rate: 0.13%

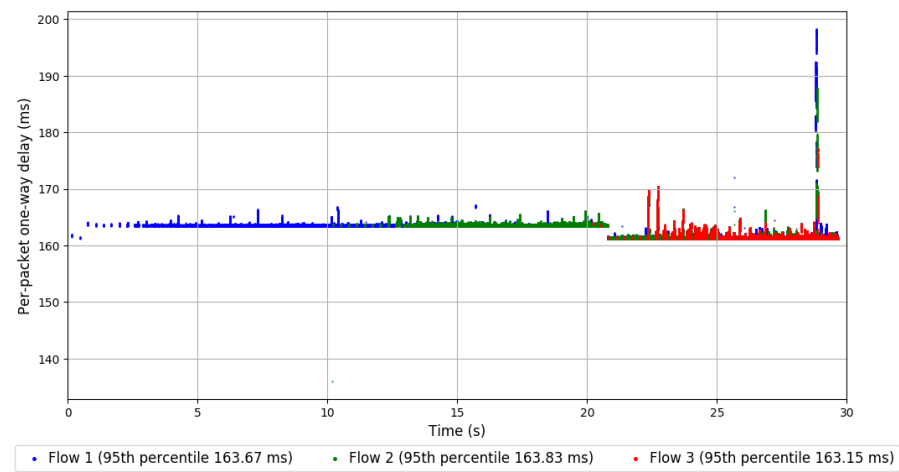
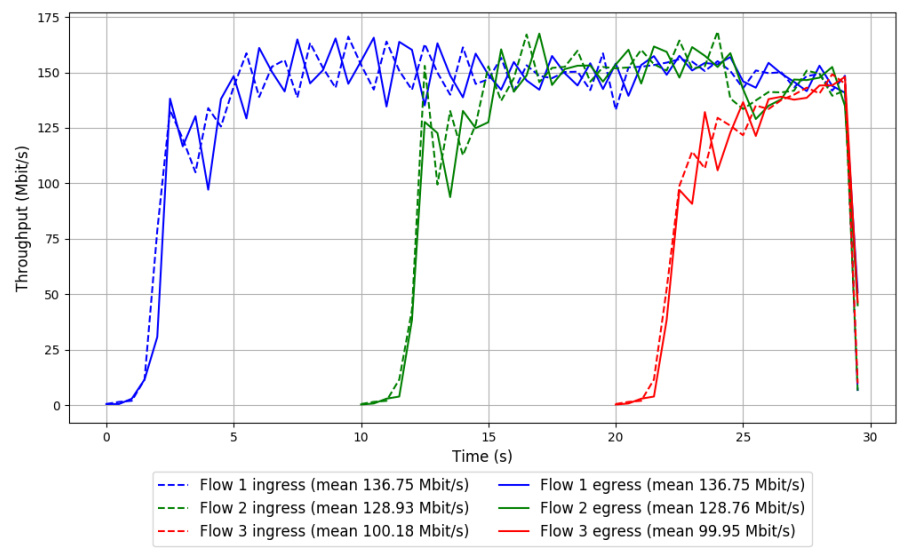
-- Flow 3:

Average throughput: 99.95 Mbit/s

95th percentile per-packet one-way delay: 163.153 ms

Loss rate: 0.52%

Run 9: Report of Indigo — Data Link

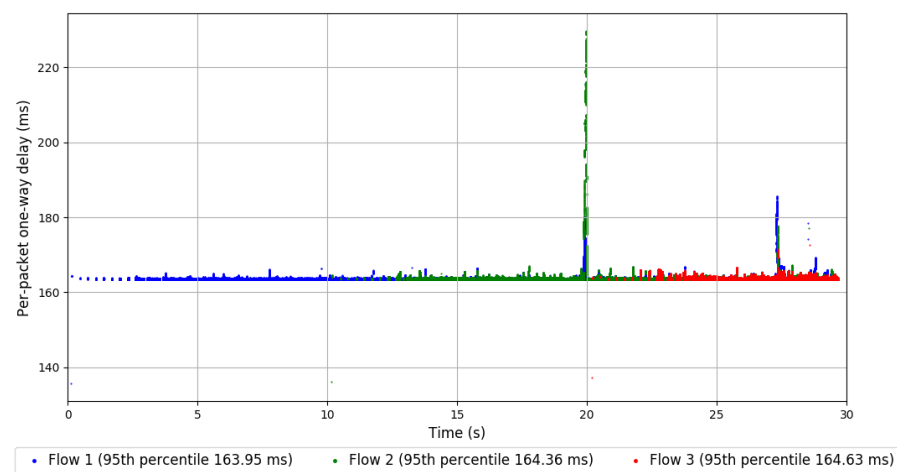
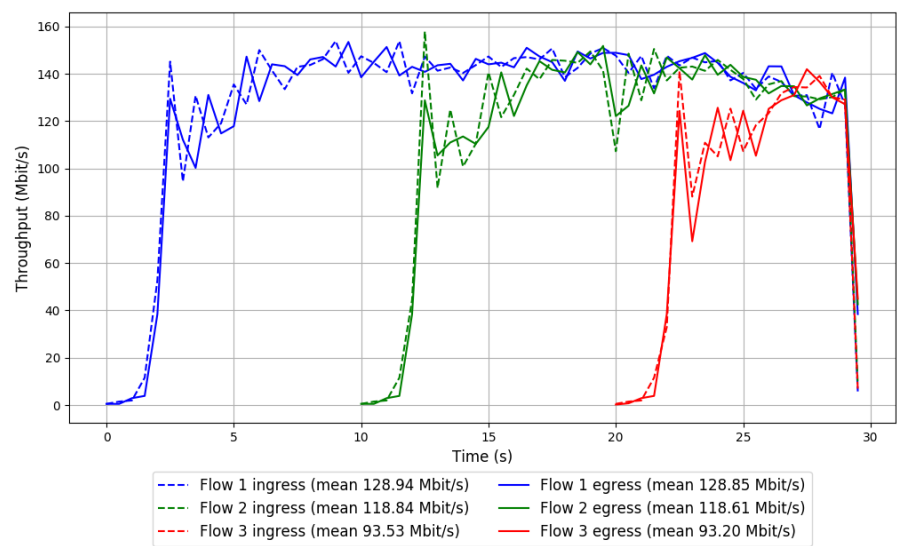


```
Run 10: Statistics of Indigo

Start at: 2017-12-12 15:59:19
End at: 2017-12-12 15:59:49

# Below is generated by plot.py at 2017-12-12 17:30:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.09 Mbit/s
95th percentile per-packet one-way delay: 164.206 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 128.85 Mbit/s
95th percentile per-packet one-way delay: 163.946 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 118.61 Mbit/s
95th percentile per-packet one-way delay: 164.363 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 93.20 Mbit/s
95th percentile per-packet one-way delay: 164.628 ms
Loss rate: 0.35%
```

Run 10: Report of Indigo — Data Link

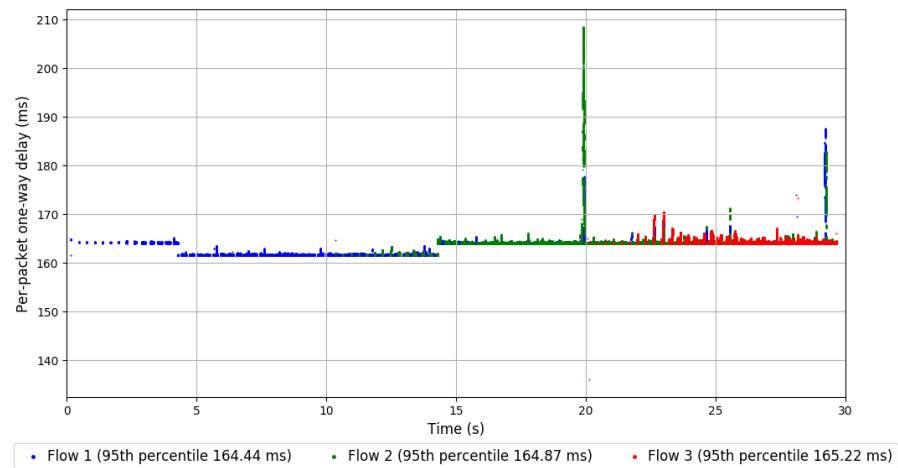
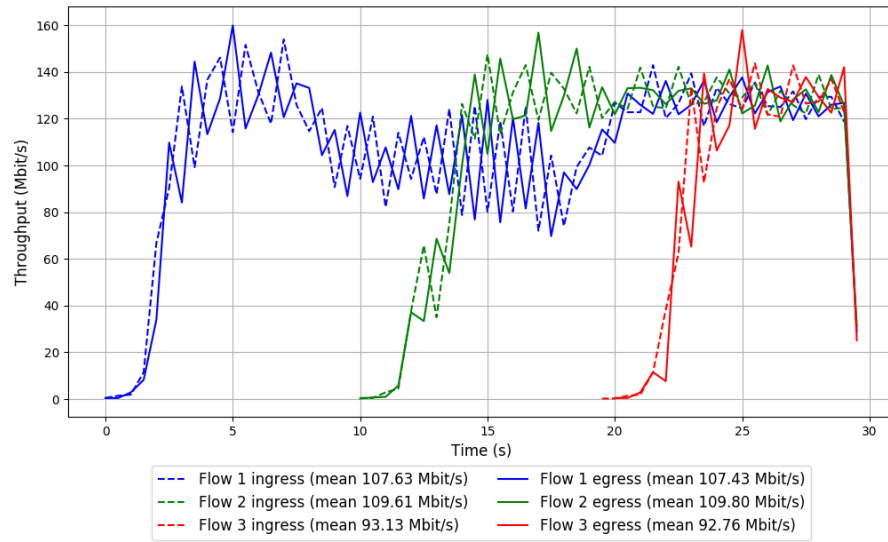


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-12 14:07:45
End at: 2017-12-12 14:08:15

# Below is generated by plot.py at 2017-12-12 17:30:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.11 Mbit/s
95th percentile per-packet one-way delay: 164.735 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 107.43 Mbit/s
95th percentile per-packet one-way delay: 164.439 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 109.80 Mbit/s
95th percentile per-packet one-way delay: 164.867 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 92.76 Mbit/s
95th percentile per-packet one-way delay: 165.219 ms
Loss rate: 0.38%
```

Run 1: Report of Indigo-calib — Data Link

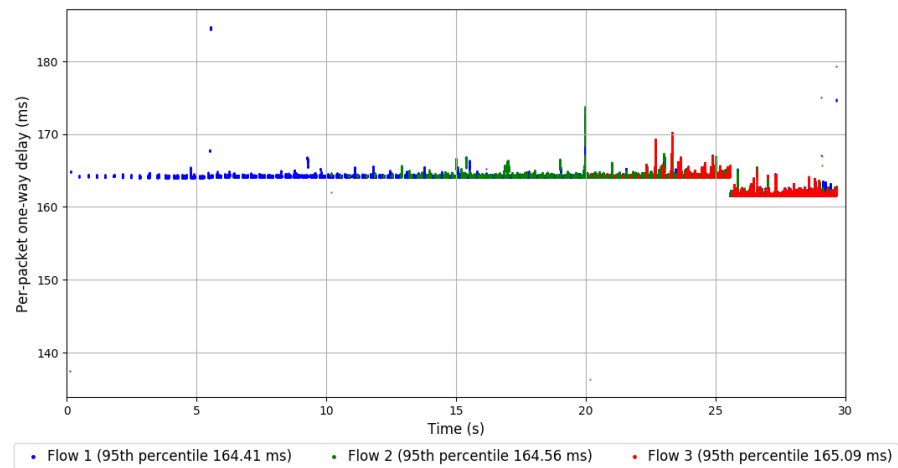
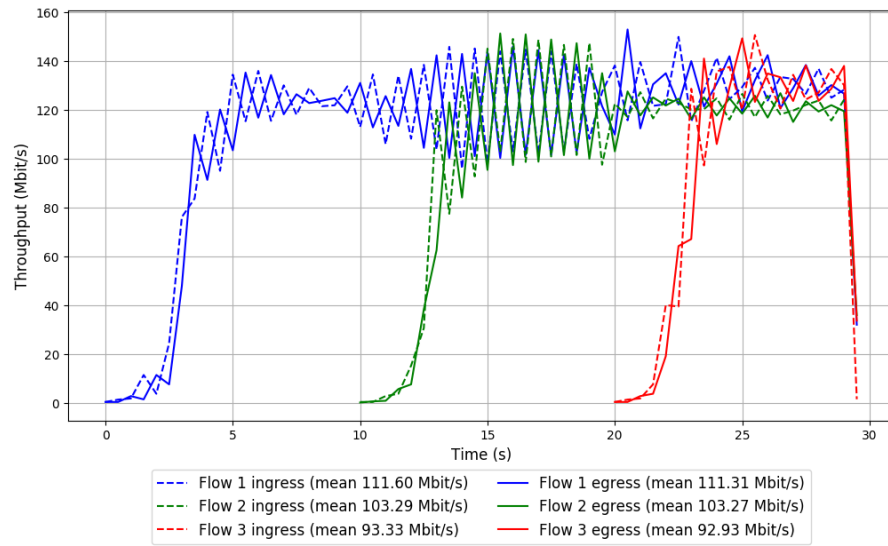


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-12 14:21:14
End at: 2017-12-12 14:21:44

# Below is generated by plot.py at 2017-12-12 17:30:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.21 Mbit/s
95th percentile per-packet one-way delay: 164.527 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 111.31 Mbit/s
95th percentile per-packet one-way delay: 164.407 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 103.27 Mbit/s
95th percentile per-packet one-way delay: 164.564 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 92.93 Mbit/s
95th percentile per-packet one-way delay: 165.092 ms
Loss rate: 0.39%
```

Run 2: Report of Indigo-calib — Data Link

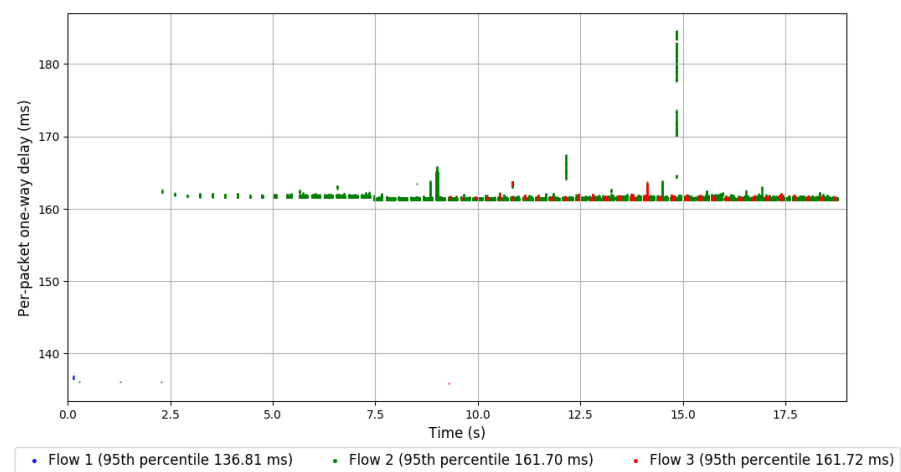
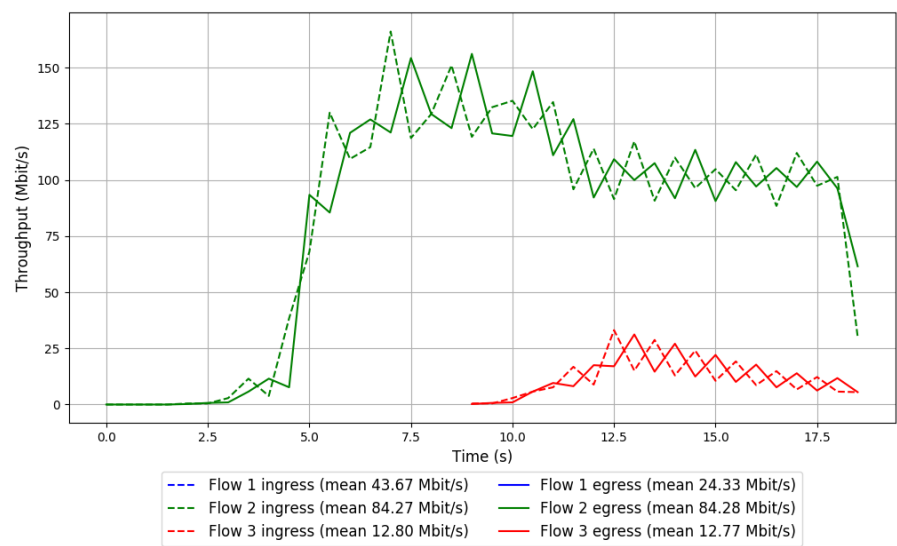


Run 3: Statistics of Indigo-calib

Start at: 2017-12-12 14:34:21

End at: 2017-12-12 14:34:51

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-12 14:47:14

End at: 2017-12-12 14:47:44

Below is generated by plot.py at 2017-12-12 17:31:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 225.17 Mbit/s

95th percentile per-packet one-way delay: 164.294 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 116.35 Mbit/s

95th percentile per-packet one-way delay: 164.147 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 114.61 Mbit/s

95th percentile per-packet one-way delay: 164.181 ms

Loss rate: 0.13%

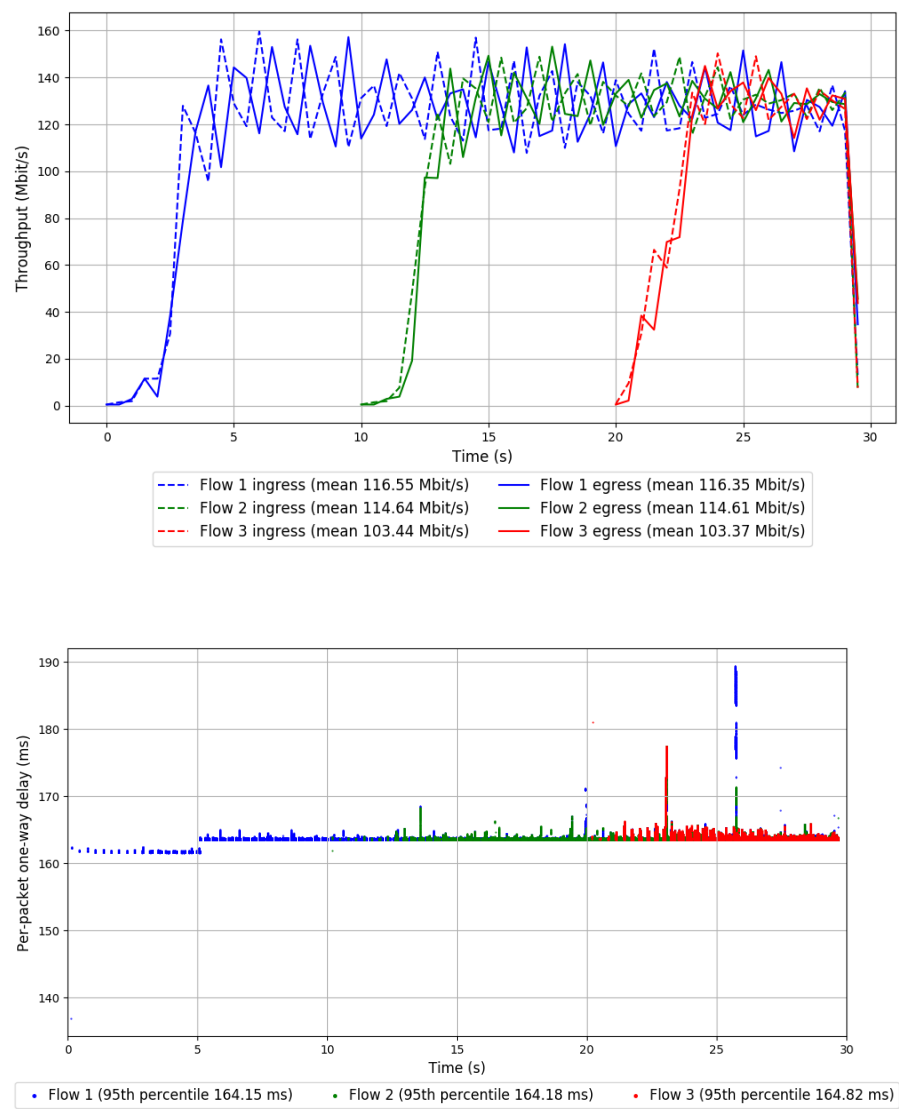
-- Flow 3:

Average throughput: 103.37 Mbit/s

95th percentile per-packet one-way delay: 164.824 ms

Loss rate: 0.33%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-12 15:00:45

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

Below is generated by plot.py at 2017-12-12 17:31:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.91 Mbit/s

95th percentile per-packet one-way delay: 163.616 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 118.45 Mbit/s

95th percentile per-packet one-way delay: 163.628 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 113.73 Mbit/s

95th percentile per-packet one-way delay: 163.611 ms

Loss rate: 0.00%

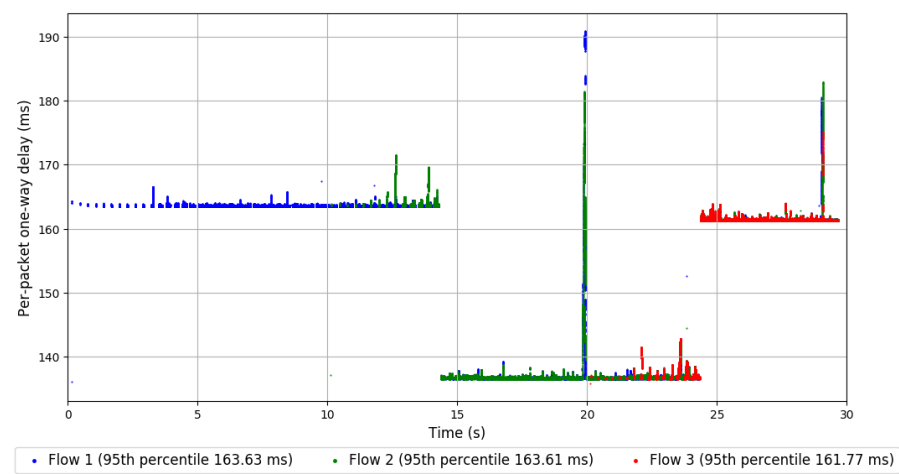
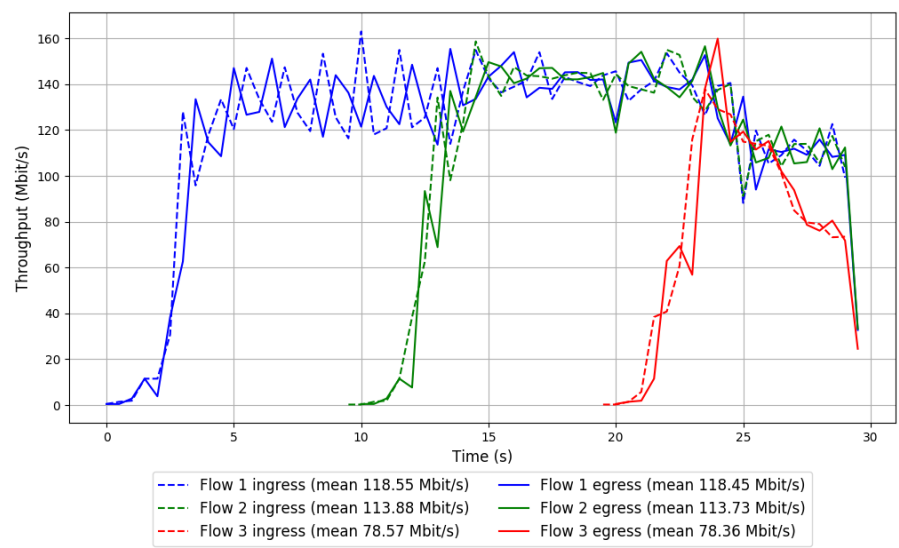
-- Flow 3:

Average throughput: 78.36 Mbit/s

95th percentile per-packet one-way delay: 161.766 ms

Loss rate: 0.00%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-12 15:14:18

End at: 2017-12-12 15:14:48

Below is generated by plot.py at 2017-12-12 17:31:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.80 Mbit/s

95th percentile per-packet one-way delay: 164.096 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 117.91 Mbit/s

95th percentile per-packet one-way delay: 163.926 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 109.14 Mbit/s

95th percentile per-packet one-way delay: 164.155 ms

Loss rate: 0.14%

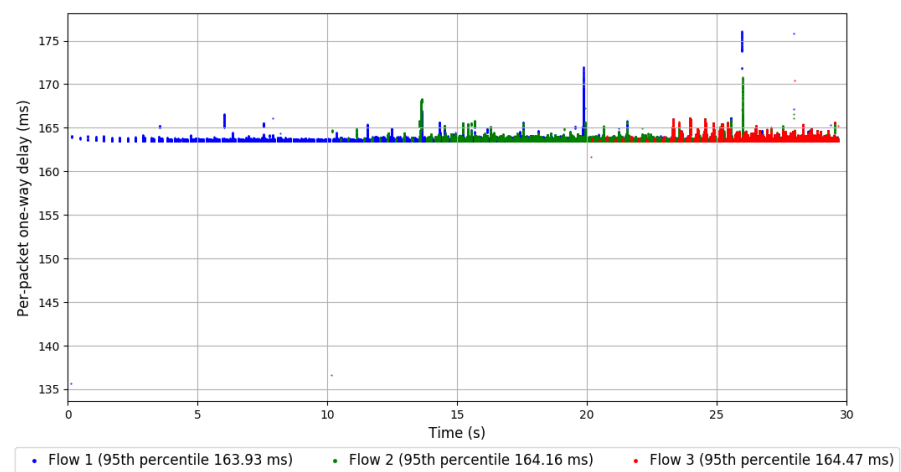
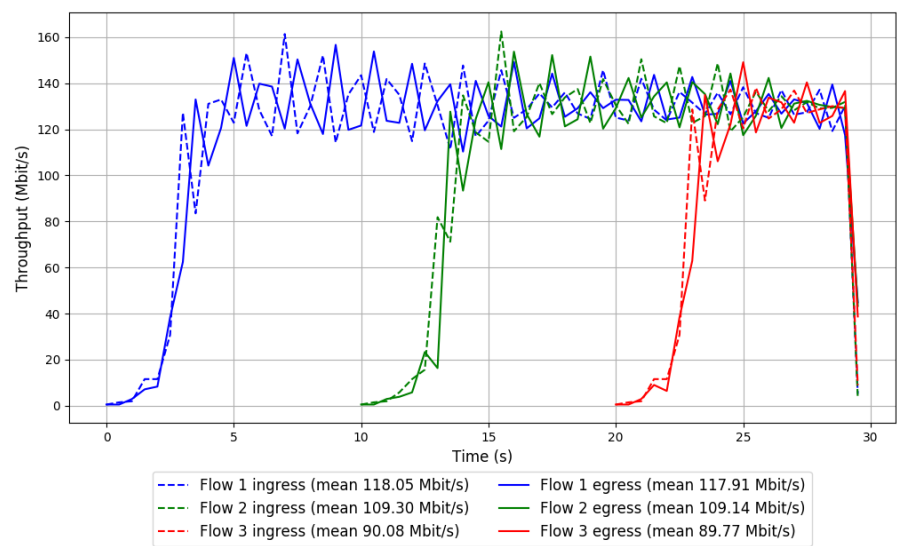
-- Flow 3:

Average throughput: 89.77 Mbit/s

95th percentile per-packet one-way delay: 164.470 ms

Loss rate: 0.58%

Run 6: Report of Indigo-calib — Data Link

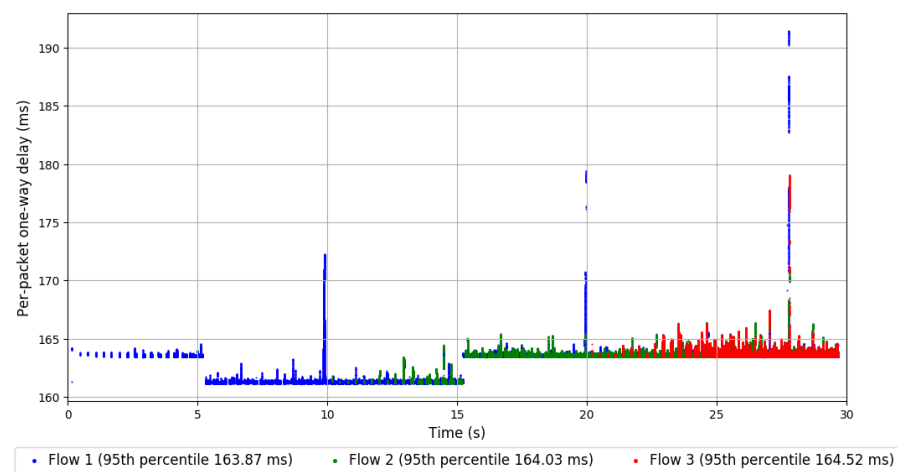
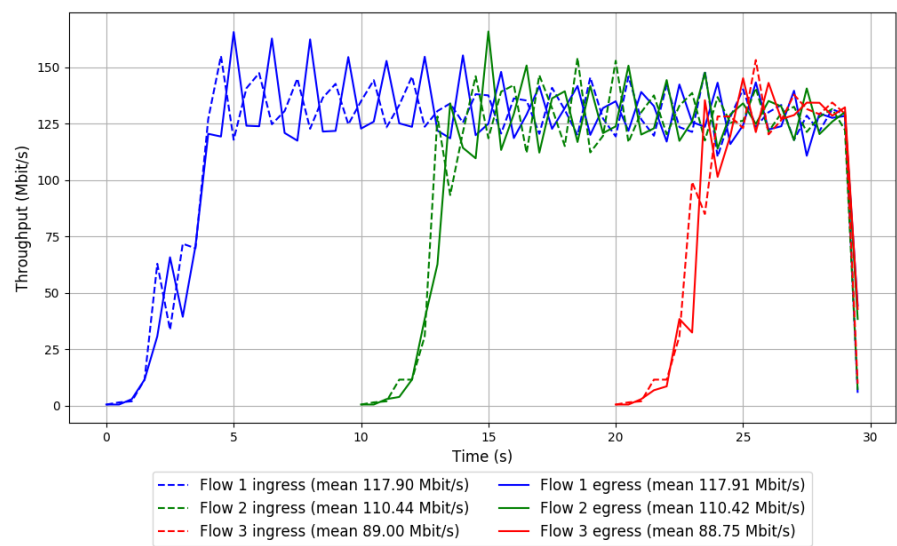


```
Run 7: Statistics of Indigo-calib

Start at: 2017-12-12 15:28:14
End at: 2017-12-12 15:28:44

# Below is generated by plot.py at 2017-12-12 17:31:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 219.30 Mbit/s
95th percentile per-packet one-way delay: 164.022 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 117.91 Mbit/s
95th percentile per-packet one-way delay: 163.867 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 110.42 Mbit/s
95th percentile per-packet one-way delay: 164.031 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 88.75 Mbit/s
95th percentile per-packet one-way delay: 164.522 ms
Loss rate: 0.55%
```


Run 7: Report of Indigo-calib — Data Link

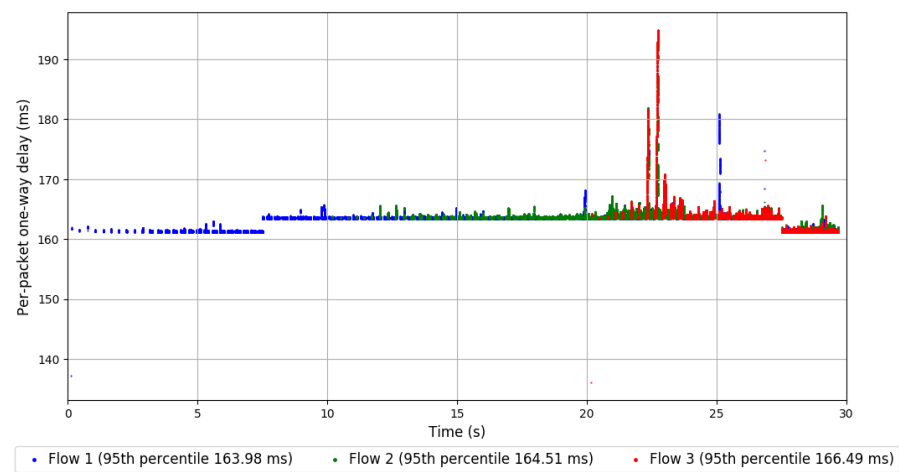
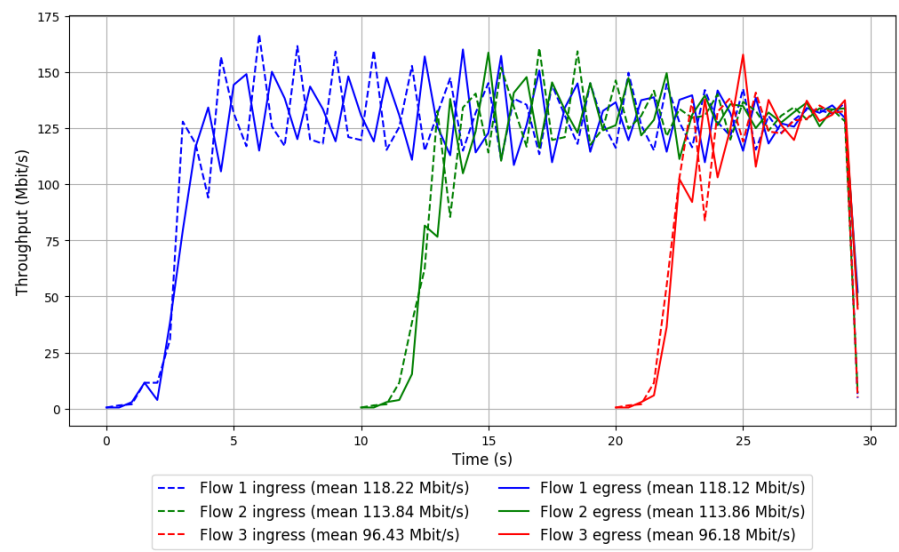


```
Run 8: Statistics of Indigo-calib

Start at: 2017-12-12 15:42:02
End at: 2017-12-12 15:42:32

# Below is generated by plot.py at 2017-12-12 17:32:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 224.23 Mbit/s
95th percentile per-packet one-way delay: 164.439 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 118.12 Mbit/s
95th percentile per-packet one-way delay: 163.983 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 113.86 Mbit/s
95th percentile per-packet one-way delay: 164.509 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 96.18 Mbit/s
95th percentile per-packet one-way delay: 166.489 ms
Loss rate: 0.00%
```

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-12 15:55:33

End at: 2017-12-12 15:56:03

Below is generated by plot.py at 2017-12-12 17:32:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.88 Mbit/s

95th percentile per-packet one-way delay: 163.862 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 113.11 Mbit/s

95th percentile per-packet one-way delay: 163.743 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 110.70 Mbit/s

95th percentile per-packet one-way delay: 163.854 ms

Loss rate: 0.23%

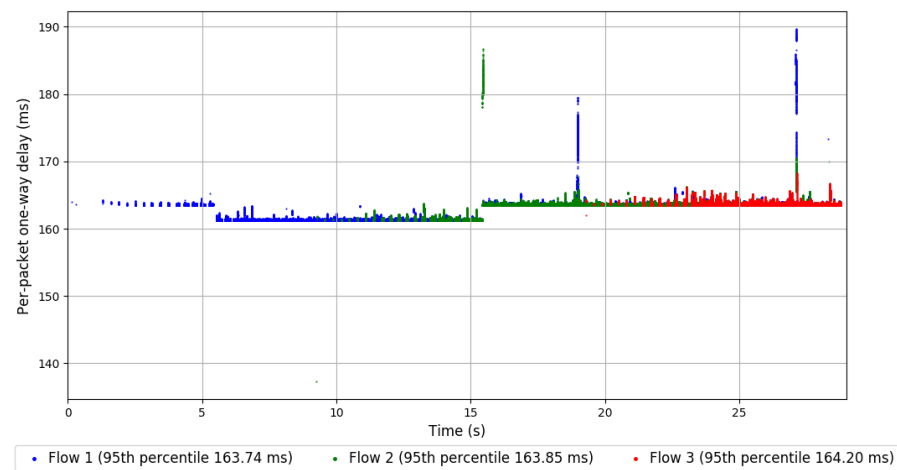
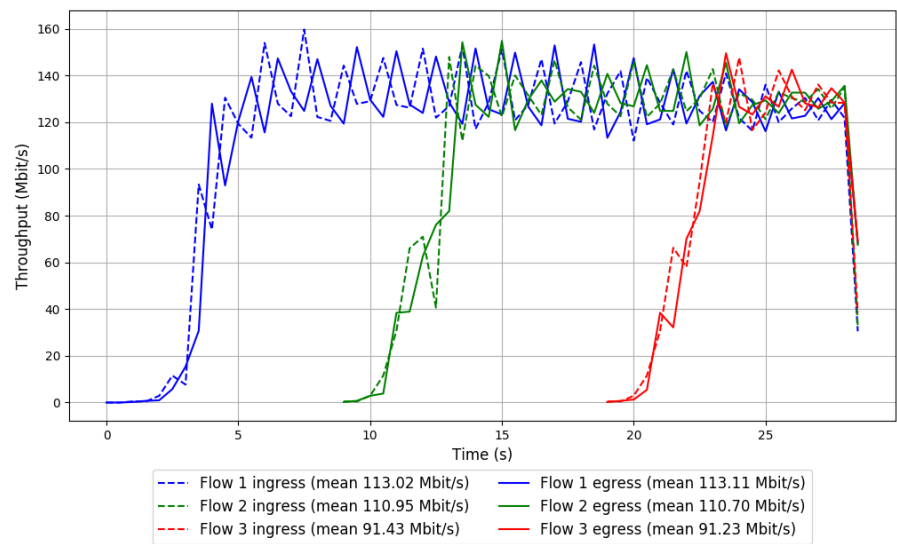
-- Flow 3:

Average throughput: 91.23 Mbit/s

95th percentile per-packet one-way delay: 164.203 ms

Loss rate: 0.48%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-12 16:09:12

End at: 2017-12-12 16:09:42

Below is generated by plot.py at 2017-12-12 17:32:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 217.13 Mbit/s

95th percentile per-packet one-way delay: 163.952 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 116.56 Mbit/s

95th percentile per-packet one-way delay: 163.822 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 109.18 Mbit/s

95th percentile per-packet one-way delay: 164.011 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 88.78 Mbit/s

95th percentile per-packet one-way delay: 164.416 ms

Loss rate: 0.01%

Run 10: Report of Indigo-calib — Data Link

