

Pantheon Report

Generated at 2017-12-12 11:12:52 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

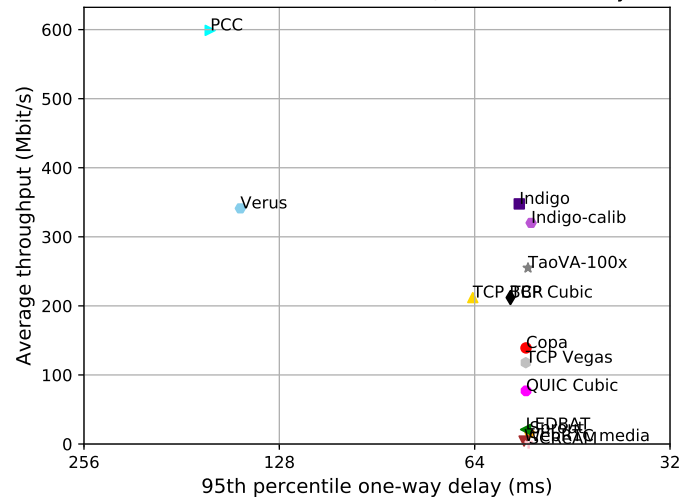
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

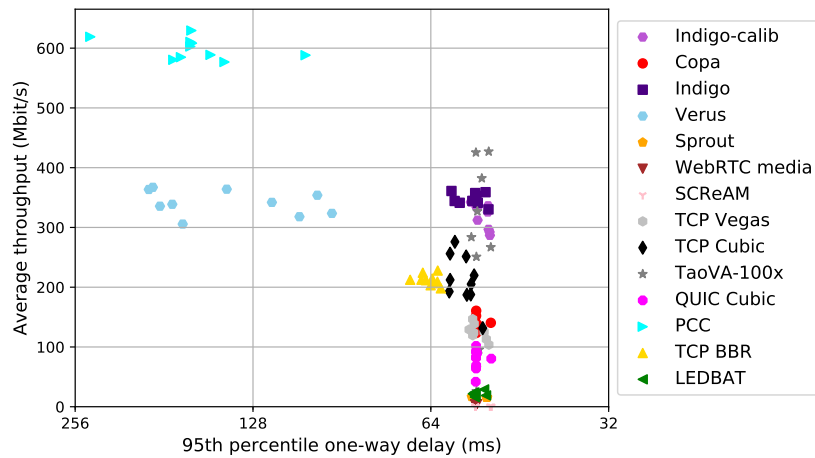
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeab30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



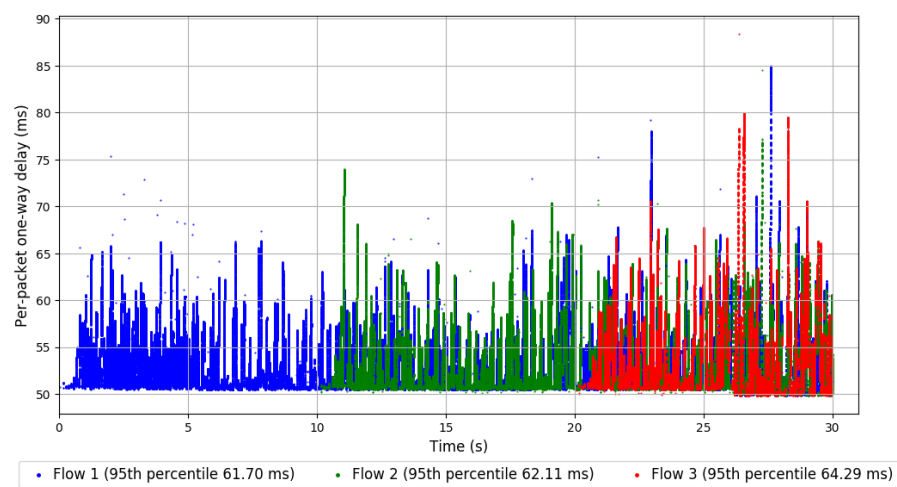
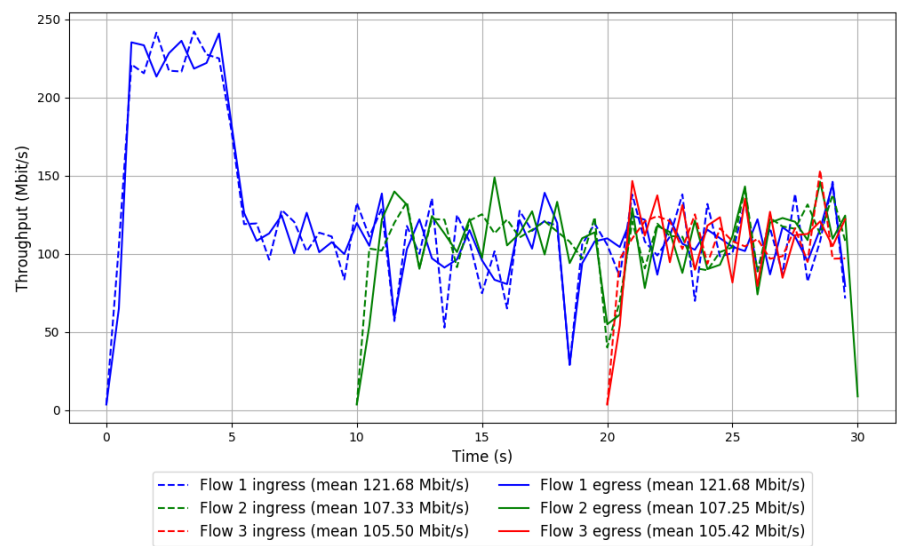
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	105.82	107.03	106.07	63.17	64.22	67.64	0.02	0.04	0.02
TCP Cubic	10	105.64	102.61	114.83	55.44	56.17	57.69	0.01	0.01	0.01
LEDBAT	8	9.77	11.20	7.78	53.70	53.08	52.15	0.14	0.11	0.09
PCC	10	546.75	60.59	36.23	164.98	145.70	130.59	1.33	0.99	0.80
QUIC Cubic	10	43.66	39.46	21.87	52.90	52.96	52.05	0.00	0.00	0.00
SCReAM	10	0.21	0.21	0.22	52.14	51.73	52.74	0.00	0.00	0.00
WebRTC media	10	2.25	1.42	0.58	52.89	52.43	52.78	0.00	0.00	0.00
Sprout	9	7.88	7.75	7.50	52.65	52.69	52.34	0.11	0.08	0.01
TaoVA-100x	10	128.66	132.35	145.85	52.86	52.99	54.29	0.01	0.00	0.01
TCP Vegas	10	52.05	68.69	60.24	53.03	52.93	53.35	0.05	0.01	0.02
Verus	10	200.60	157.42	102.34	141.00	141.96	117.87	0.57	0.70	0.39
Copa	10	78.02	67.22	63.33	52.98	53.05	51.88	0.00	0.01	0.01
Indigo	10	184.30	175.20	146.20	53.66	54.49	55.99	0.00	0.01	0.00
Indigo-calib	10	169.80	162.76	131.38	52.25	52.18	52.24	0.02	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2017-12-12 06:55:34
End at: 2017-12-12 06:56:04

# Below is generated by plot.py at 2017-12-12 10:13:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 227.86 Mbit/s
95th percentile per-packet one-way delay: 62.308 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 121.68 Mbit/s
95th percentile per-packet one-way delay: 61.701 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 107.25 Mbit/s
95th percentile per-packet one-way delay: 62.113 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 105.42 Mbit/s
95th percentile per-packet one-way delay: 64.290 ms
Loss rate: 0.00%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-12 07:07:28

End at: 2017-12-12 07:07:58

Below is generated by plot.py at 2017-12-12 10:13:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 224.30 Mbit/s

95th percentile per-packet one-way delay: 66.039 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 110.93 Mbit/s

95th percentile per-packet one-way delay: 66.437 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 117.89 Mbit/s

95th percentile per-packet one-way delay: 65.922 ms

Loss rate: 0.01%

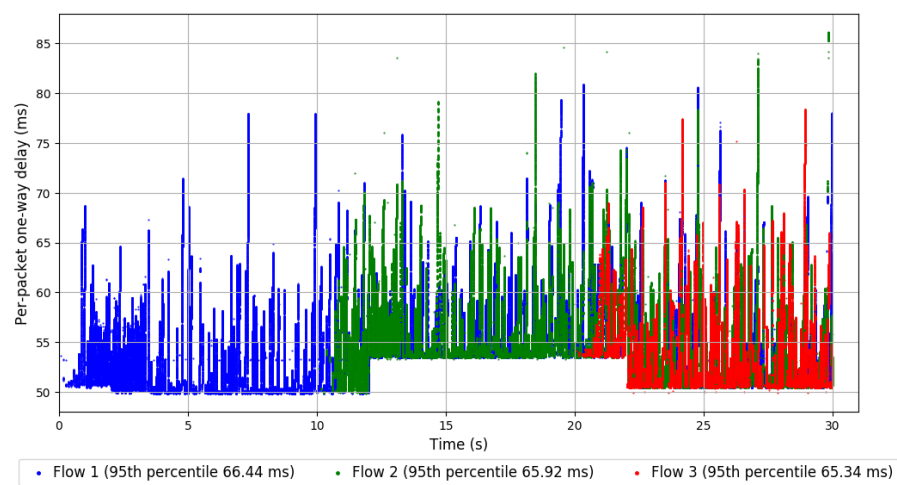
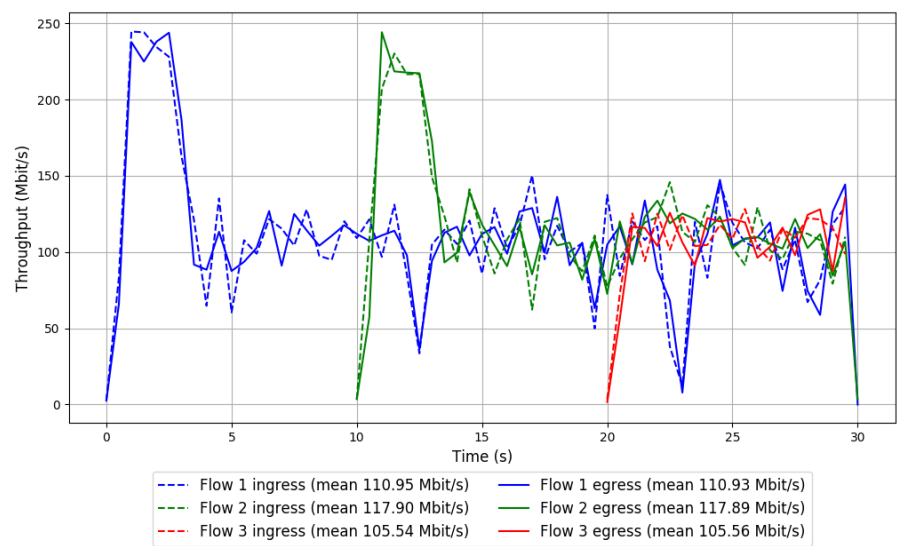
-- Flow 3:

Average throughput: 105.56 Mbit/s

95th percentile per-packet one-way delay: 65.338 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-12 07:19:48

End at: 2017-12-12 07:20:18

Below is generated by plot.py at 2017-12-12 10:13:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 203.25 Mbit/s

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

Loss rate: 0.05%

-- Flow 1:

Average throughput: 94.75 Mbit/s

95th percentile per-packet one-way delay: 63.683 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 104.47 Mbit/s

95th percentile per-packet one-way delay: 63.524 ms

Loss rate: 0.03%

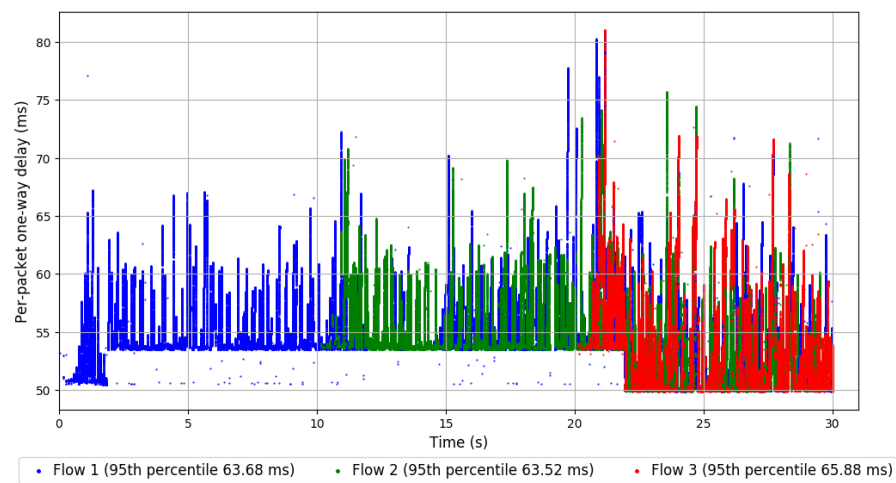
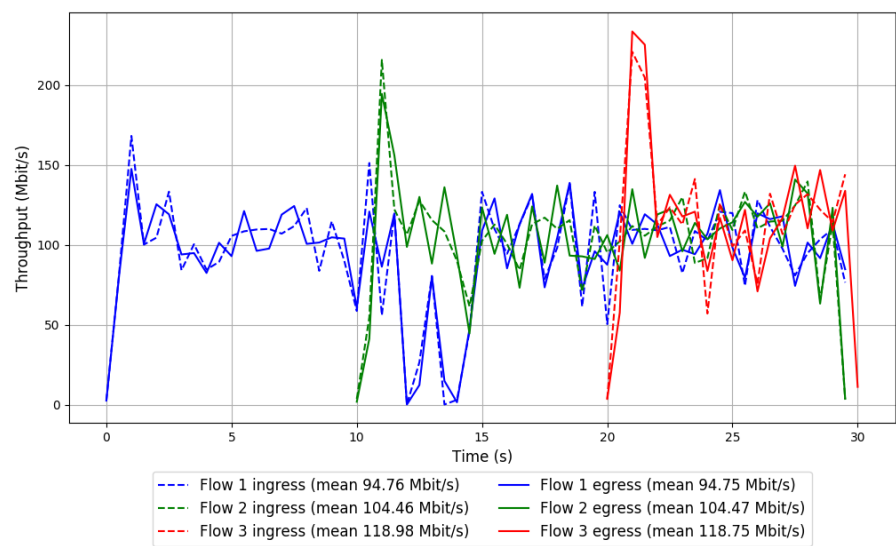
-- Flow 3:

Average throughput: 118.75 Mbit/s

95th percentile per-packet one-way delay: 65.881 ms

Loss rate: 0.21%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-12 07:31:42

End at: 2017-12-12 07:32:12

Below is generated by plot.py at 2017-12-12 10:13:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 198.07 Mbit/s

95th percentile per-packet one-way delay: 61.552 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 99.75 Mbit/s

95th percentile per-packet one-way delay: 61.109 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 103.32 Mbit/s

95th percentile per-packet one-way delay: 60.684 ms

Loss rate: 0.02%

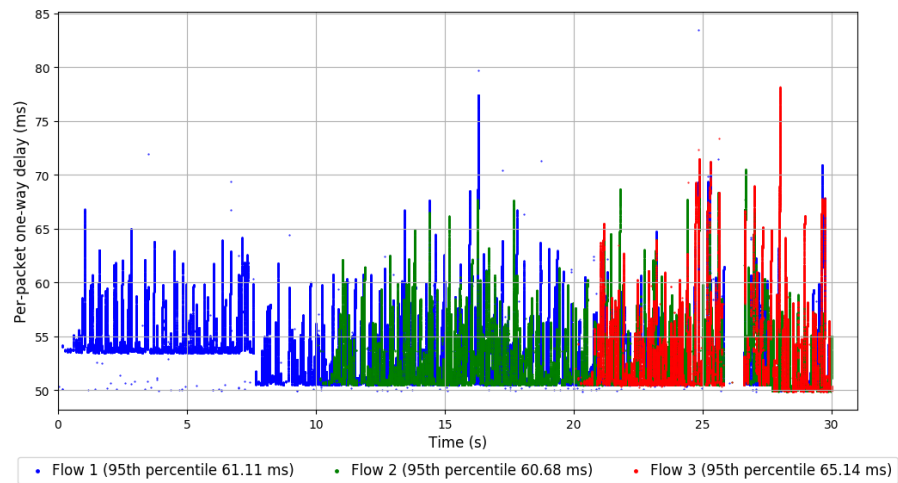
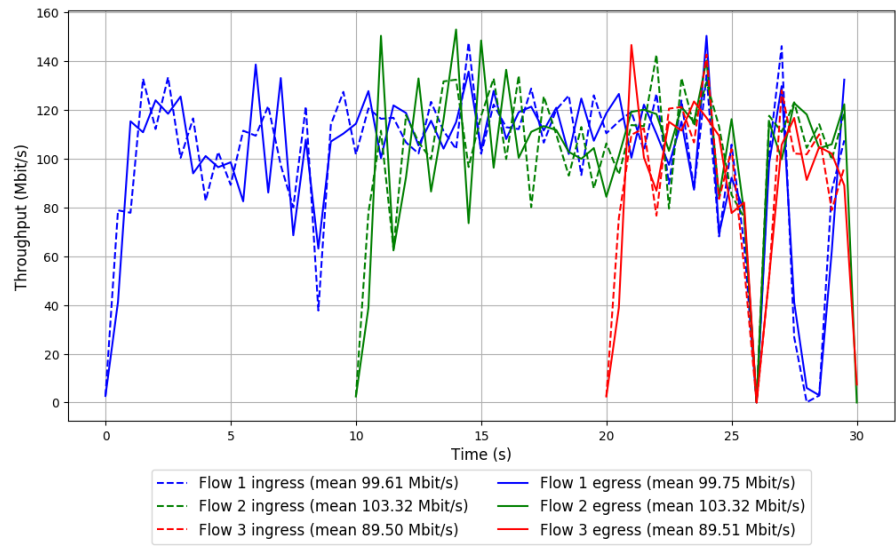
-- Flow 3:

Average throughput: 89.51 Mbit/s

95th percentile per-packet one-way delay: 65.142 ms

Loss rate: 0.01%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-12 07:43:55

End at: 2017-12-12 07:44:25

Below is generated by plot.py at 2017-12-12 10:13:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 206.70 Mbit/s

95th percentile per-packet one-way delay: 63.356 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 102.20 Mbit/s

95th percentile per-packet one-way delay: 61.833 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 106.24 Mbit/s

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

Loss rate: 0.07%

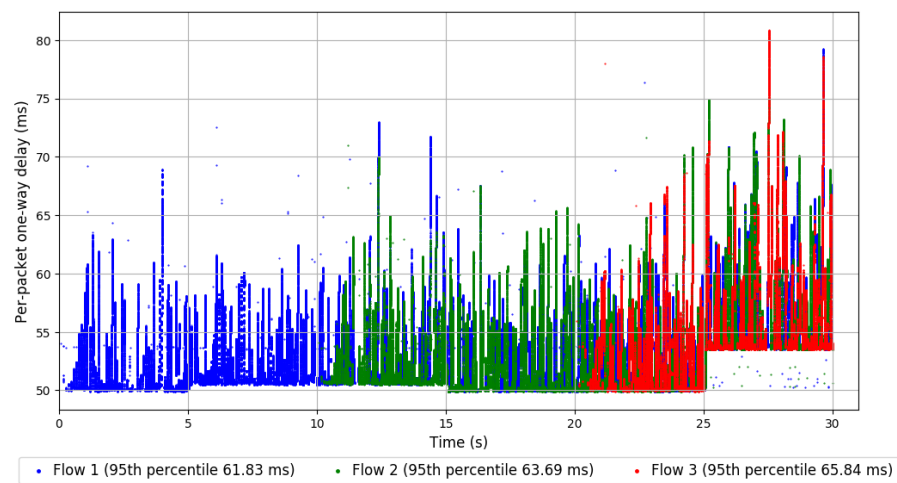
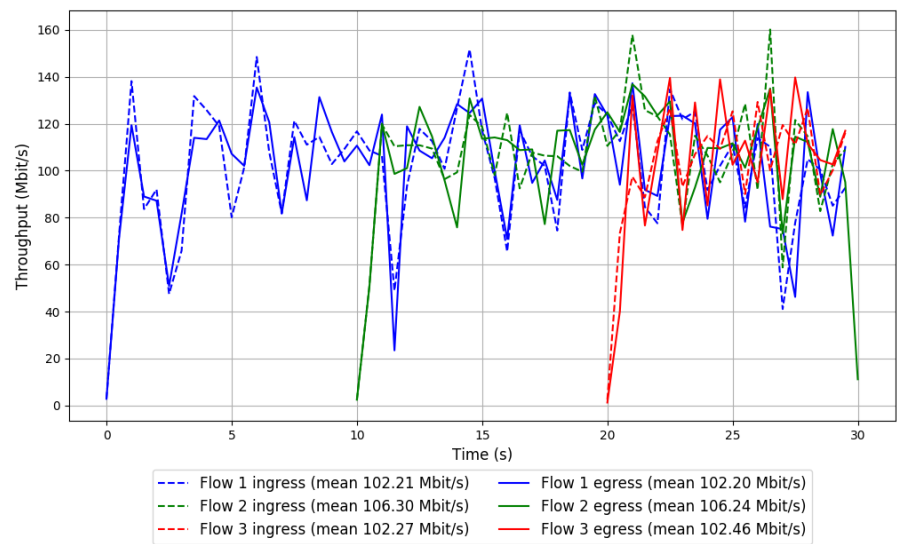
-- Flow 3:

Average throughput: 102.46 Mbit/s

95th percentile per-packet one-way delay: 65.842 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-12 07:56:13

End at: 2017-12-12 07:56:43

Below is generated by plot.py at 2017-12-12 10:13:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 212.41 Mbit/s

95th percentile per-packet one-way delay: 69.363 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 106.11 Mbit/s

95th percentile per-packet one-way delay: 65.486 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 94.94 Mbit/s

95th percentile per-packet one-way delay: 67.027 ms

Loss rate: 0.01%

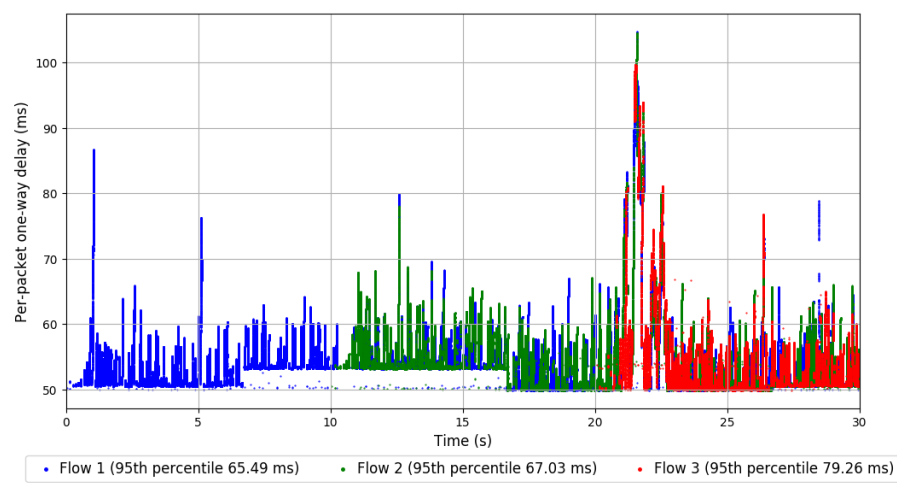
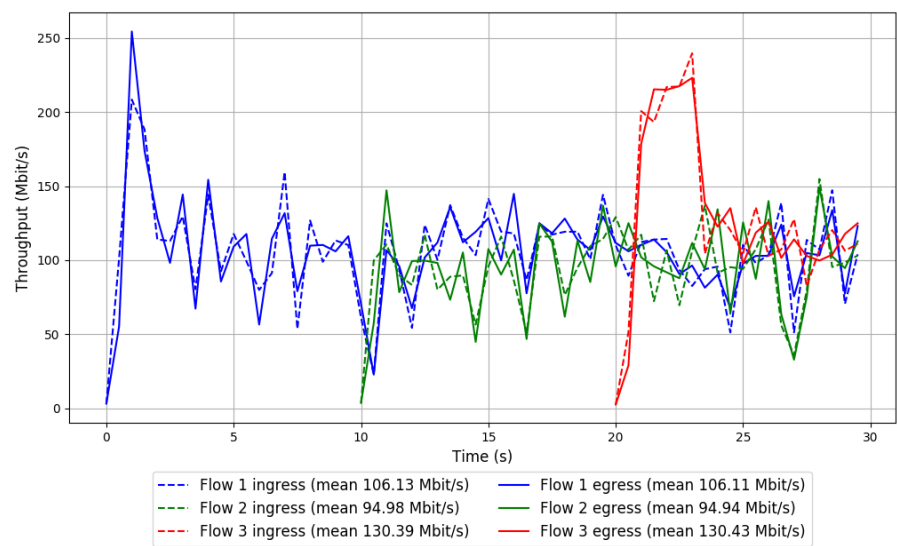
-- Flow 3:

Average throughput: 130.43 Mbit/s

95th percentile per-packet one-way delay: 79.264 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-12 08:08:23

End at: 2017-12-12 08:08:53

Below is generated by plot.py at 2017-12-12 10:13:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 209.25 Mbit/s

95th percentile per-packet one-way delay: 62.373 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 99.75 Mbit/s

95th percentile per-packet one-way delay: 60.723 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 113.38 Mbit/s

95th percentile per-packet one-way delay: 62.522 ms

Loss rate: 0.00%

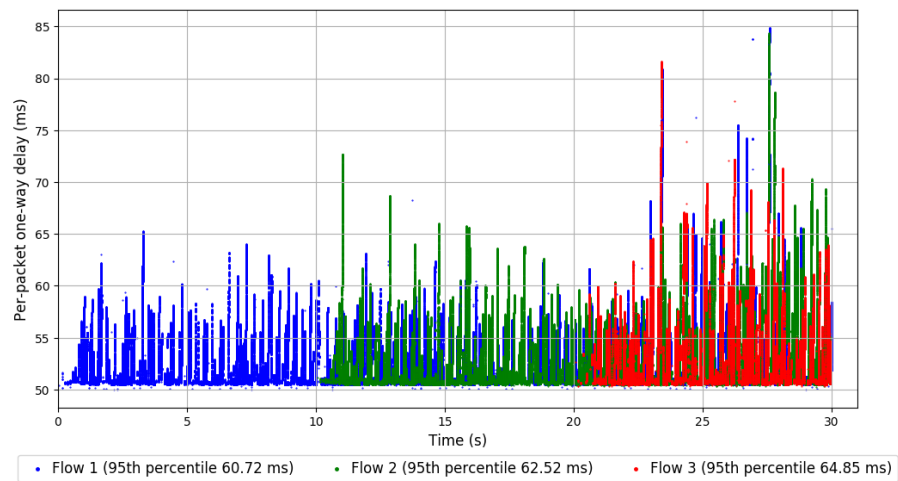
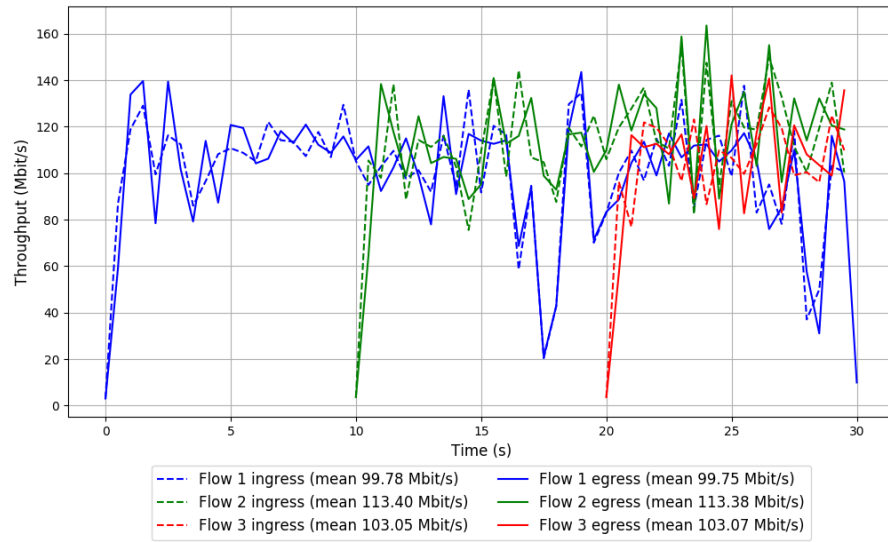
-- Flow 3:

Average throughput: 103.07 Mbit/s

95th percentile per-packet one-way delay: 64.848 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-12 08:20:49

End at: 2017-12-12 08:21:19

Below is generated by plot.py at 2017-12-12 10:13:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 214.45 Mbit/s

95th percentile per-packet one-way delay: 63.658 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 108.81 Mbit/s

95th percentile per-packet one-way delay: 61.483 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 108.61 Mbit/s

95th percentile per-packet one-way delay: 63.527 ms

Loss rate: 0.01%

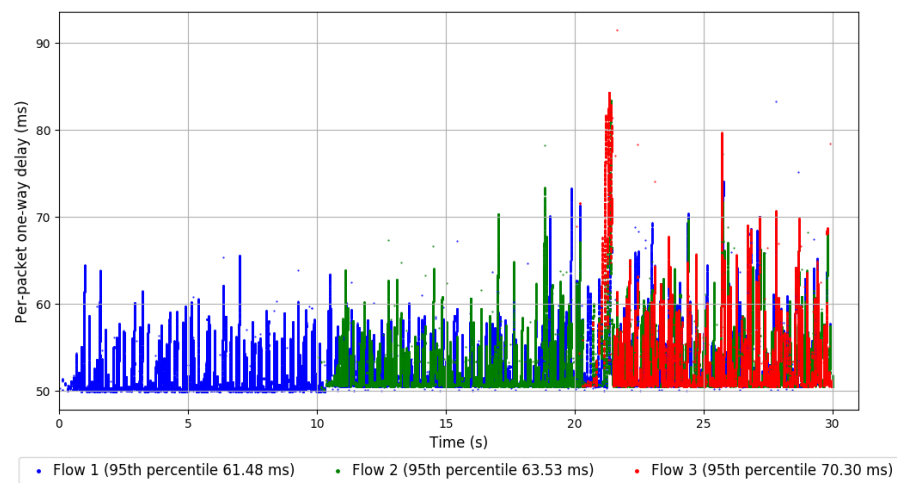
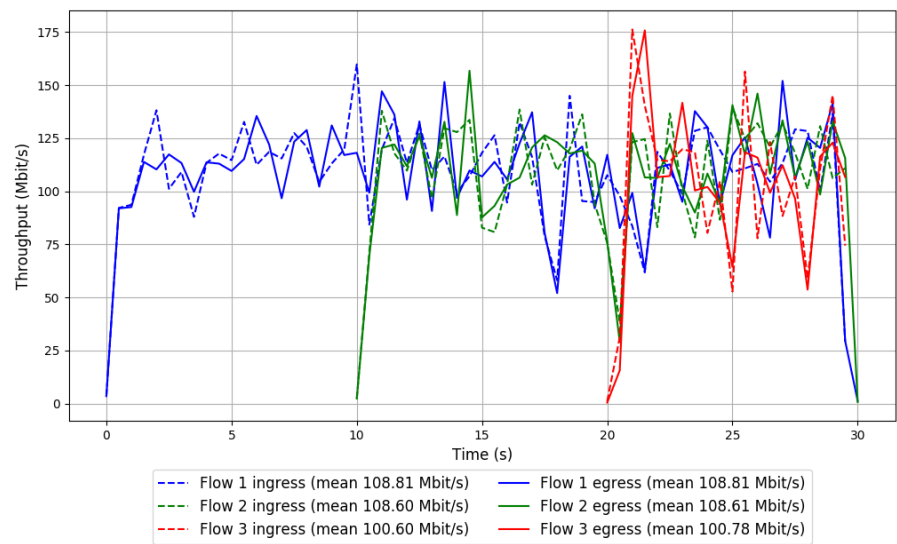
-- Flow 3:

Average throughput: 100.78 Mbit/s

95th percentile per-packet one-way delay: 70.301 ms

Loss rate: 0.01%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-12 08:33:06

End at: 2017-12-12 08:33:36

Below is generated by plot.py at 2017-12-12 10:16:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 212.54 Mbit/s

95th percentile per-packet one-way delay: 66.387 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 107.79 Mbit/s

95th percentile per-packet one-way delay: 65.544 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 105.15 Mbit/s

95th percentile per-packet one-way delay: 66.948 ms

Loss rate: 0.16%

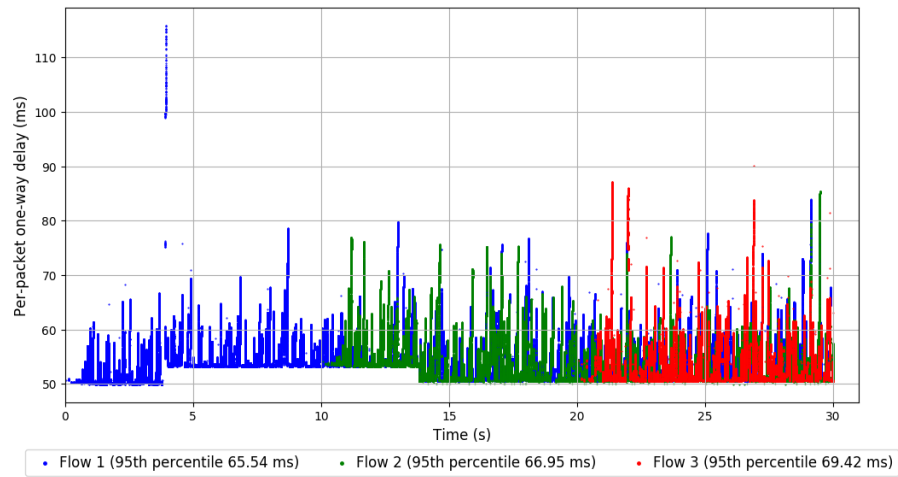
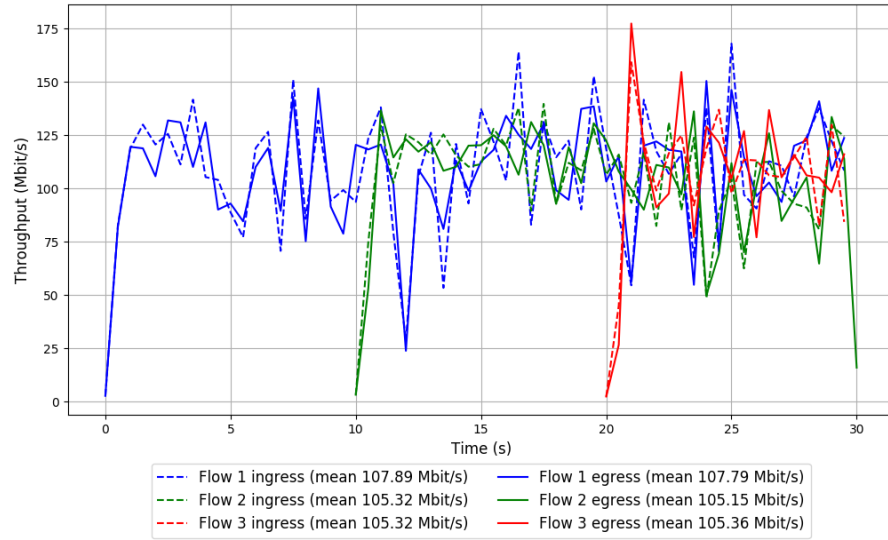
-- Flow 3:

Average throughput: 105.36 Mbit/s

95th percentile per-packet one-way delay: 69.424 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-12 08:44:53

End at: 2017-12-12 08:45:23

Below is generated by plot.py at 2017-12-12 10:17:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 211.66 Mbit/s

95th percentile per-packet one-way delay: 65.226 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 106.39 Mbit/s

95th percentile per-packet one-way delay: 63.740 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 109.06 Mbit/s

95th percentile per-packet one-way delay: 66.246 ms

Loss rate: 0.01%

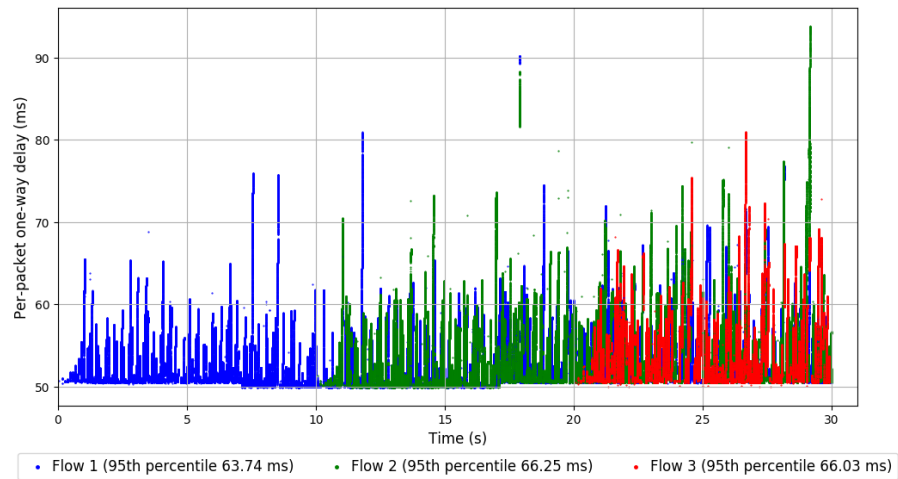
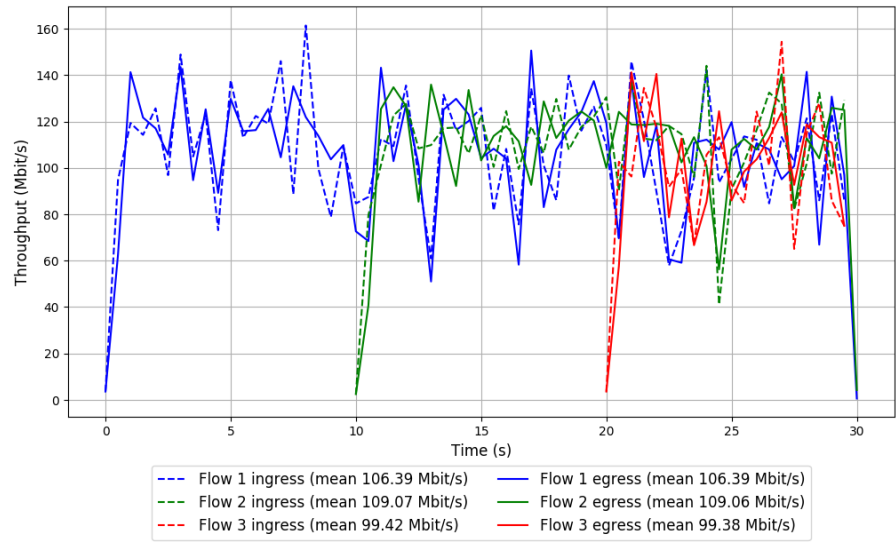
-- Flow 3:

Average throughput: 99.38 Mbit/s

95th percentile per-packet one-way delay: 66.030 ms

Loss rate: 0.01%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-12 06:56:29

End at: 2017-12-12 06:56:59

Below is generated by plot.py at 2017-12-12 10:17:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 219.82 Mbit/s

95th percentile per-packet one-way delay: 54.059 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 109.29 Mbit/s

95th percentile per-packet one-way delay: 53.849 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 111.13 Mbit/s

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

Loss rate: 0.01%

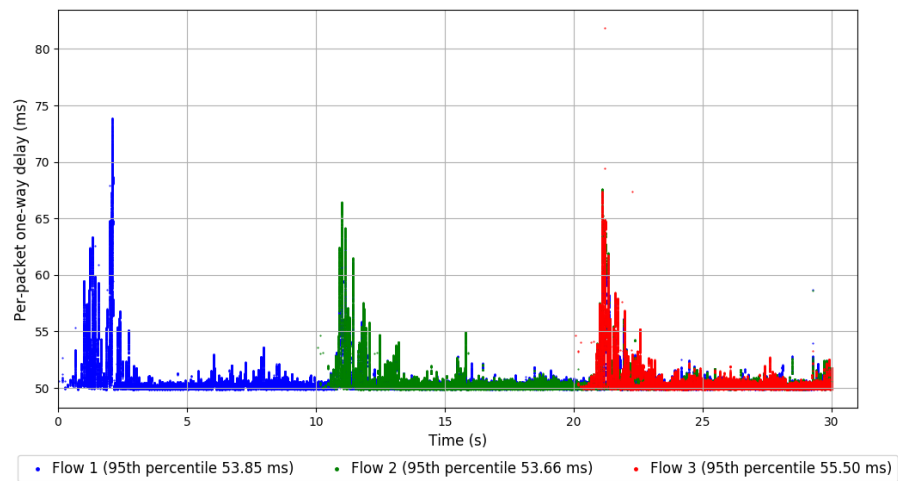
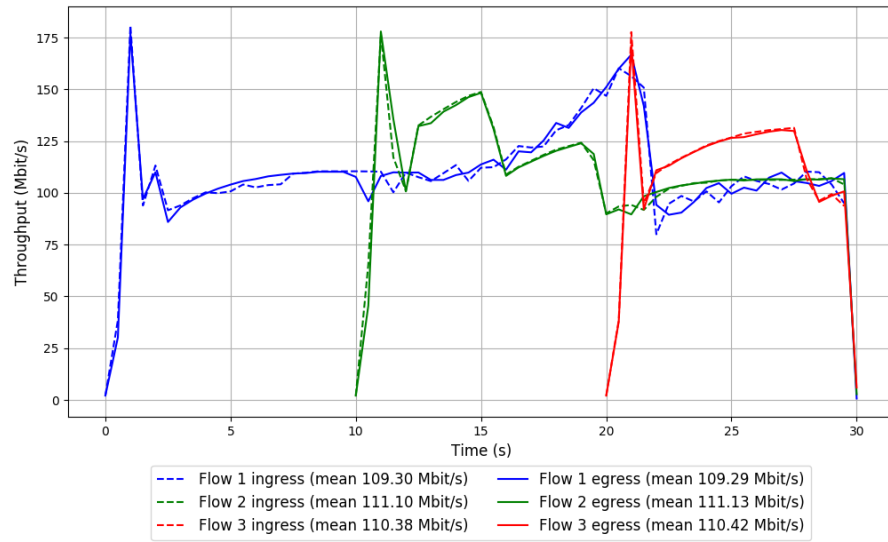
-- Flow 3:

Average throughput: 110.42 Mbit/s

95th percentile per-packet one-way delay: 55.496 ms

Loss rate: 0.01%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-12 07:08:23

End at: 2017-12-12 07:08:53

Below is generated by plot.py at 2017-12-12 10:18:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 256.14 Mbit/s

95th percentile per-packet one-way delay: 59.370 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 110.28 Mbit/s

95th percentile per-packet one-way delay: 58.289 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 126.94 Mbit/s

95th percentile per-packet one-way delay: 58.701 ms

Loss rate: 0.00%

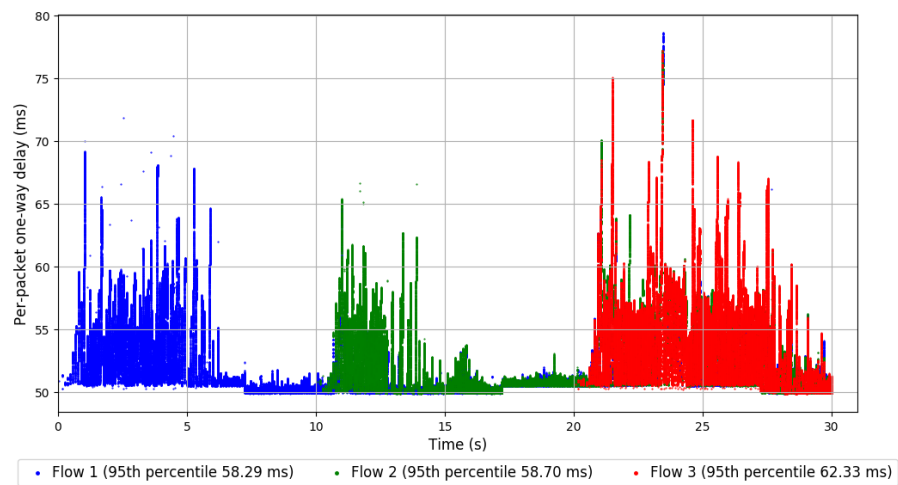
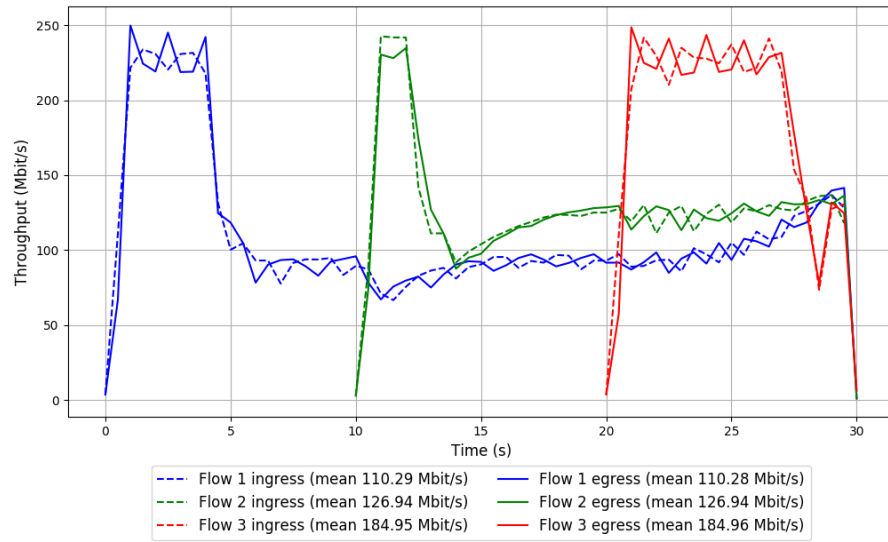
-- Flow 3:

Average throughput: 184.96 Mbit/s

95th percentile per-packet one-way delay: 62.331 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-12 07:20:42

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

Below is generated by plot.py at 2017-12-12 10:18:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 205.12 Mbit/s

95th percentile per-packet one-way delay: 54.693 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 89.54 Mbit/s

95th percentile per-packet one-way delay: 54.538 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 110.07 Mbit/s

95th percentile per-packet one-way delay: 52.945 ms

Loss rate: 0.00%

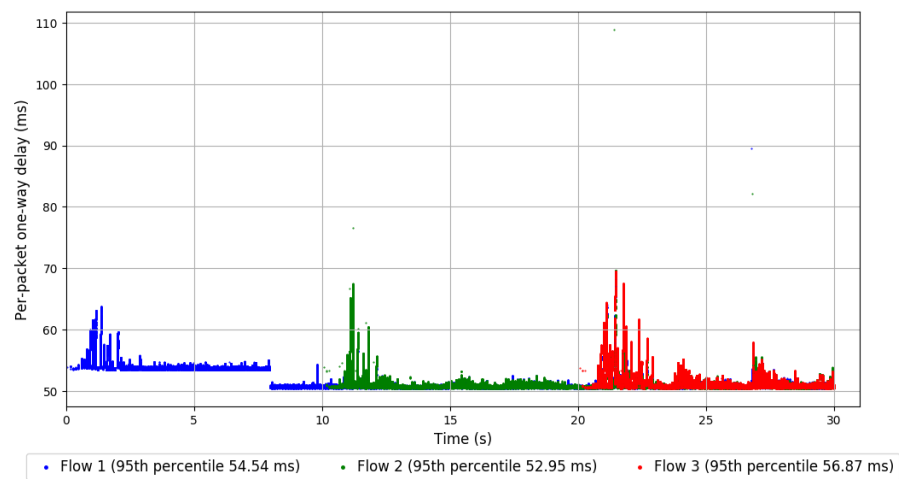
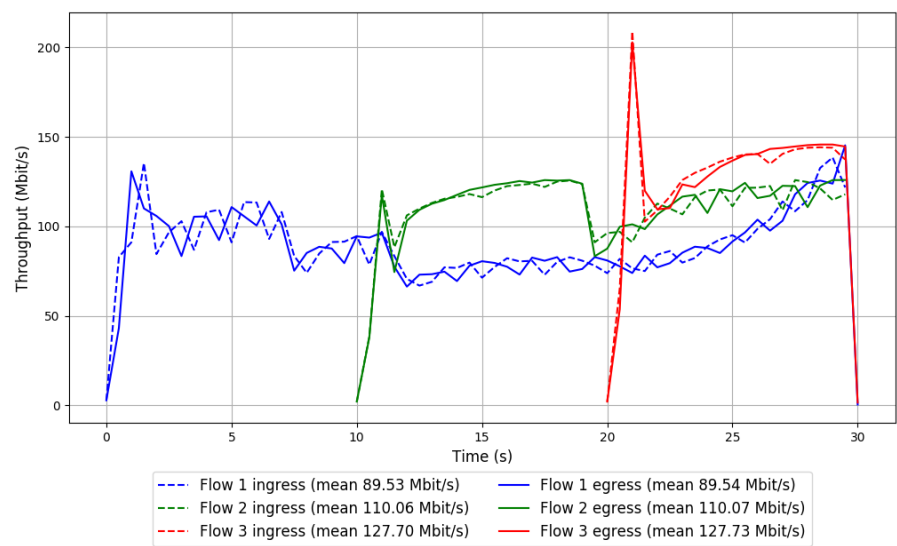
-- Flow 3:

Average throughput: 127.73 Mbit/s

95th percentile per-packet one-way delay: 56.873 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-12 07:32:36

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

Below is generated by plot.py at 2017-12-12 10:18:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 212.26 Mbit/s

95th percentile per-packet one-way delay: 59.361 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 108.50 Mbit/s

95th percentile per-packet one-way delay: 57.687 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 112.05 Mbit/s

95th percentile per-packet one-way delay: 58.762 ms

Loss rate: 0.00%

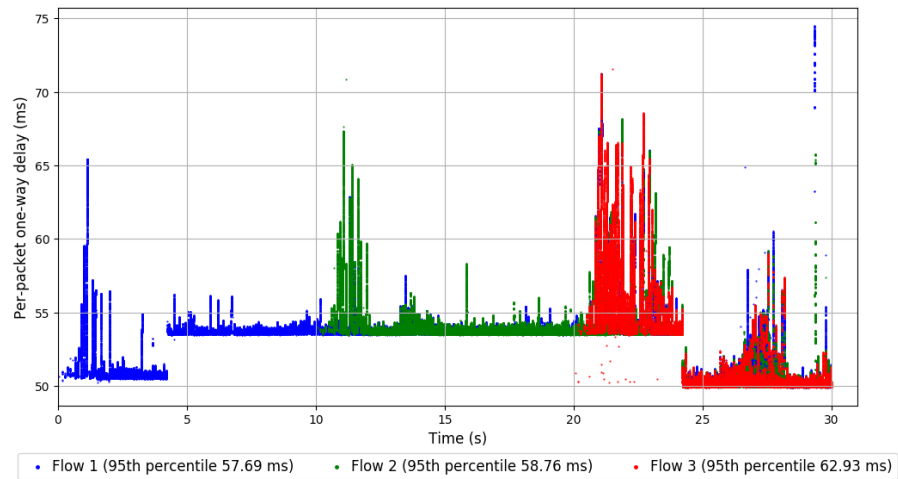
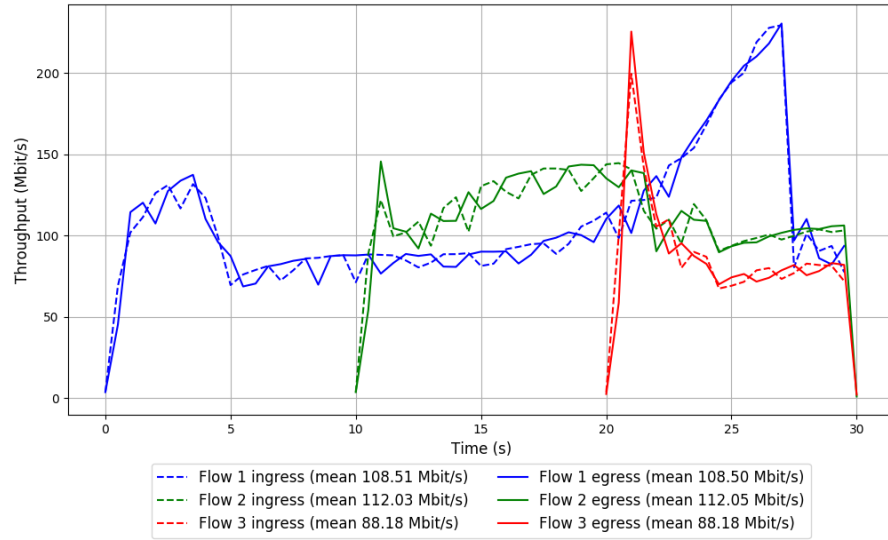
-- Flow 3:

Average throughput: 88.18 Mbit/s

95th percentile per-packet one-way delay: 62.926 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-12 07:44:48

End at: 2017-12-12 07:45:18

Below is generated by plot.py at 2017-12-12 10:18:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.21 Mbit/s

95th percentile per-packet one-way delay: 55.612 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 86.12 Mbit/s

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

Loss rate: 0.02%

-- Flow 2:

Average throughput: 99.42 Mbit/s

95th percentile per-packet one-way delay: 55.789 ms

Loss rate: 0.00%

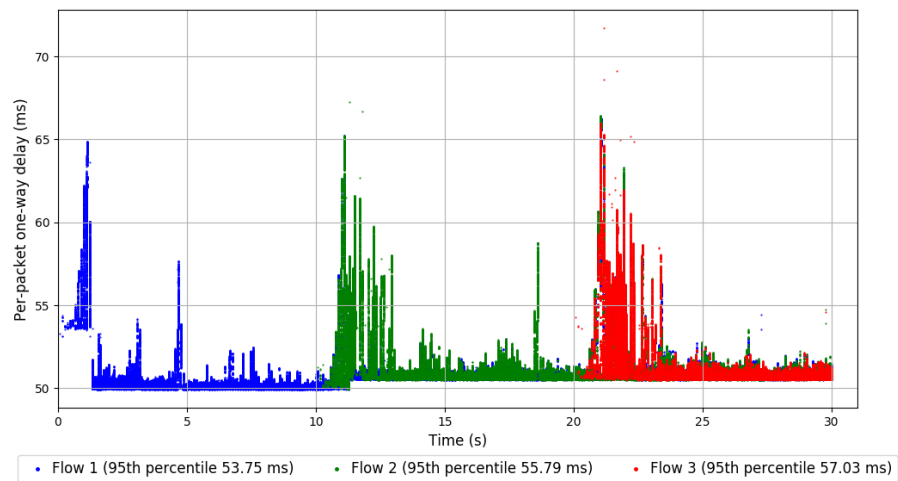
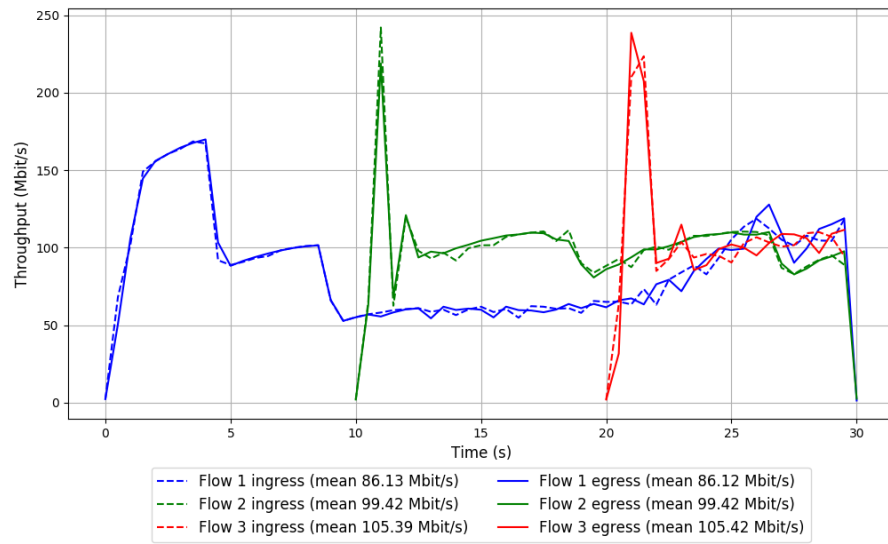
-- Flow 3:

Average throughput: 105.42 Mbit/s

95th percentile per-packet one-way delay: 57.032 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-12 07:57:07

End at: 2017-12-12 07:57:37

Below is generated by plot.py at 2017-12-12 10:18:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.77 Mbit/s

95th percentile per-packet one-way delay: 54.776 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 77.37 Mbit/s

95th percentile per-packet one-way delay: 54.647 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 101.96 Mbit/s

95th percentile per-packet one-way delay: 54.241 ms

Loss rate: 0.03%

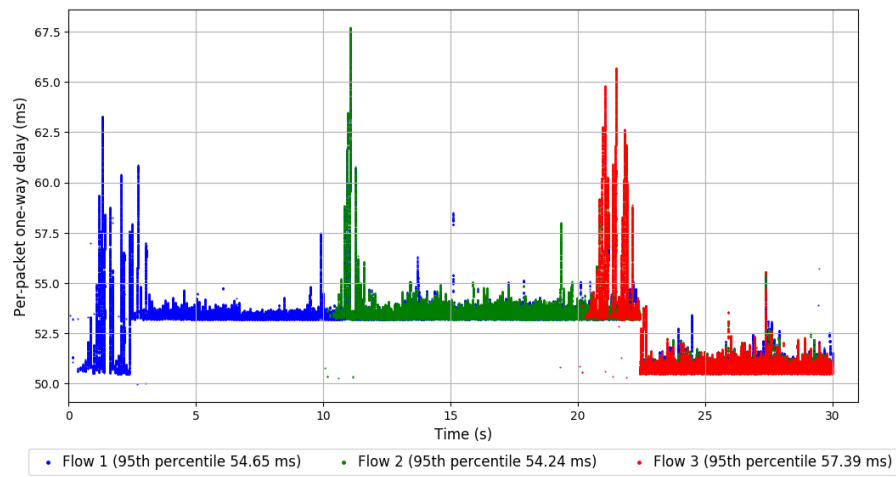
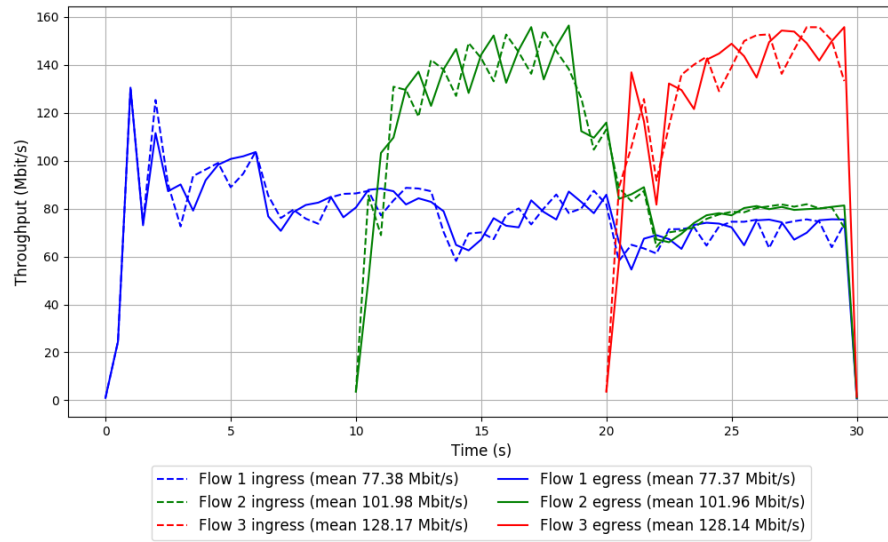
-- Flow 3:

Average throughput: 128.14 Mbit/s

95th percentile per-packet one-way delay: 57.393 ms

Loss rate: 0.03%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-12 08:09:17

End at: 2017-12-12 08:09:47

Below is generated by plot.py at 2017-12-12 10:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 275.96 Mbit/s

95th percentile per-packet one-way delay: 58.269 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 174.92 Mbit/s

95th percentile per-packet one-way delay: 58.261 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 110.55 Mbit/s

95th percentile per-packet one-way delay: 59.066 ms

Loss rate: 0.00%

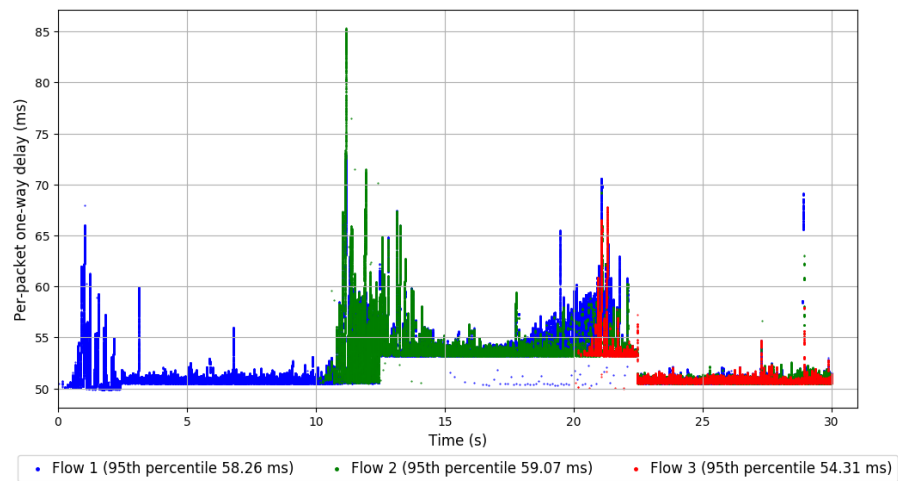
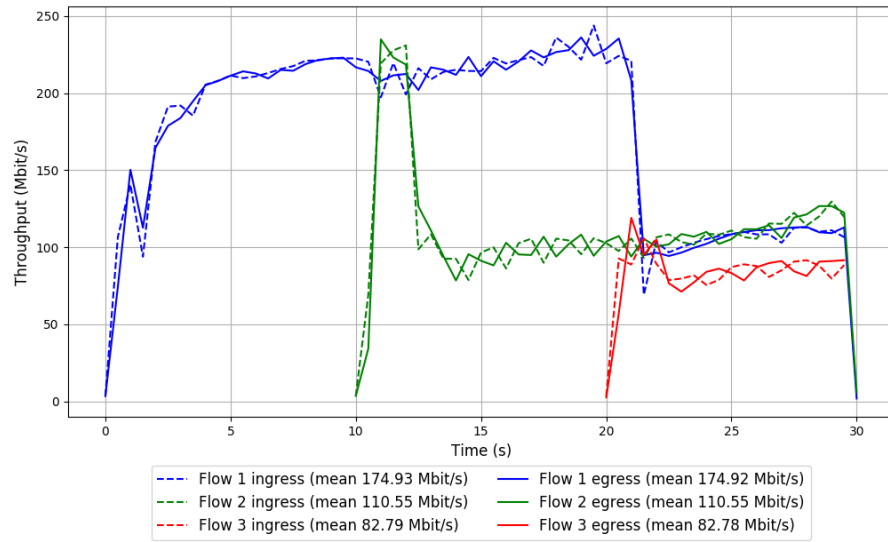
-- Flow 3:

Average throughput: 82.78 Mbit/s

95th percentile per-packet one-way delay: 54.311 ms

Loss rate: 0.01%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-12 08:21:44

End at: 2017-12-12 08:22:14

Below is generated by plot.py at 2017-12-12 10:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.56 Mbit/s

95th percentile per-packet one-way delay: 52.269 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 80.03 Mbit/s

95th percentile per-packet one-way delay: 51.852 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 15.84 Mbit/s

95th percentile per-packet one-way delay: 51.264 ms

Loss rate: 0.02%

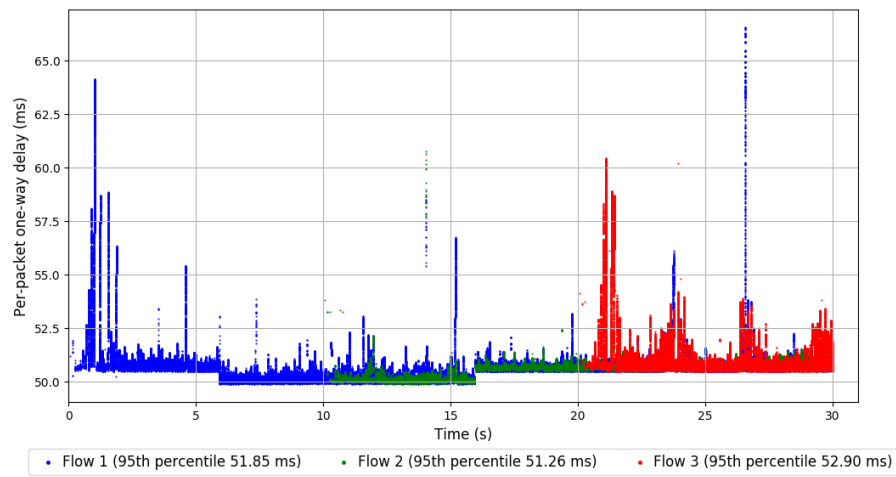
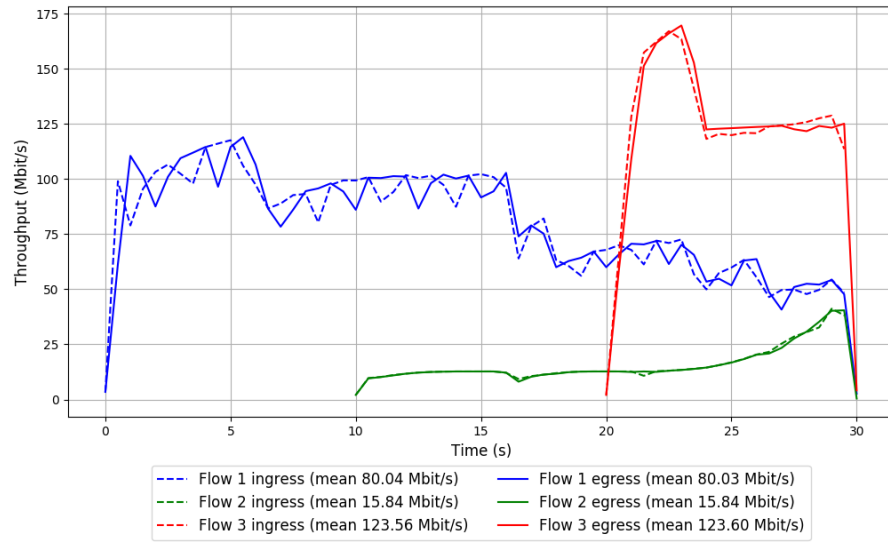
-- Flow 3:

Average throughput: 123.60 Mbit/s

95th percentile per-packet one-way delay: 52.900 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-12 08:34:01

End at: 2017-12-12 08:34:31

Below is generated by plot.py at 2017-12-12 10:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 192.72 Mbit/s

95th percentile per-packet one-way delay: 59.561 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 104.76 Mbit/s

95th percentile per-packet one-way delay: 58.568 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 88.83 Mbit/s

95th percentile per-packet one-way delay: 61.522 ms

Loss rate: 0.03%

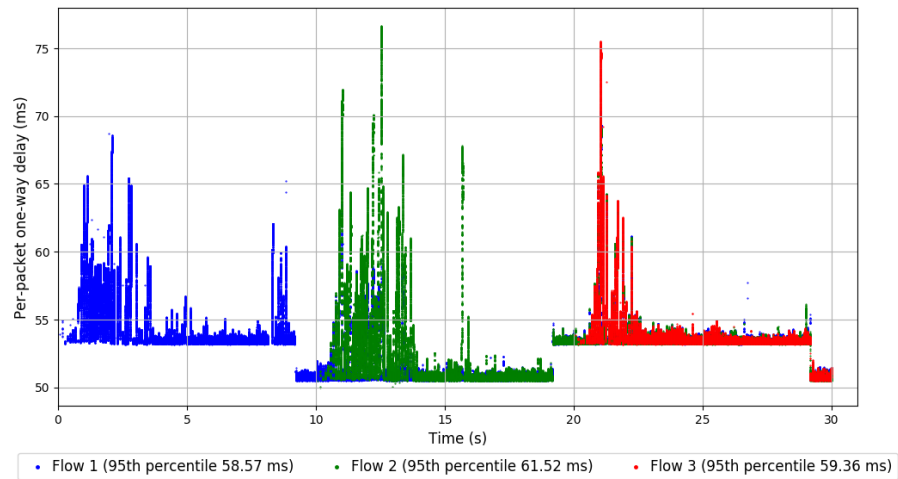
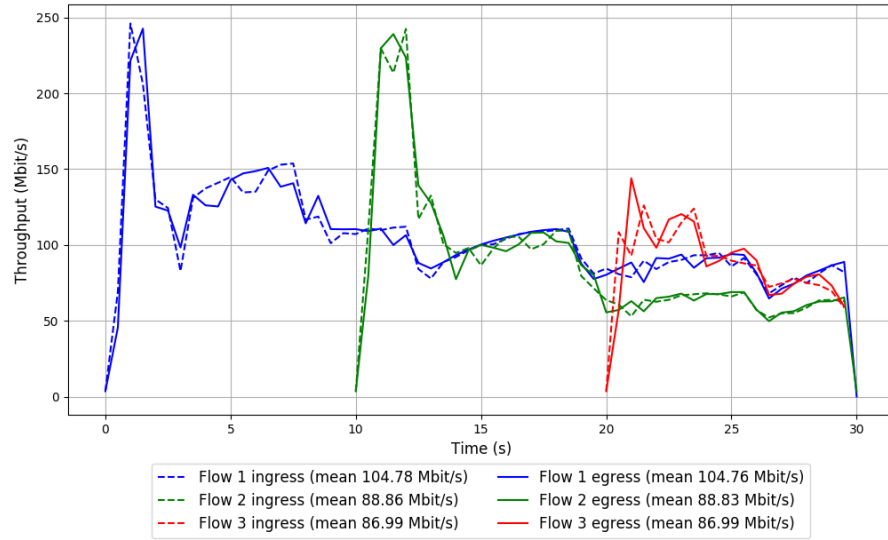
-- Flow 3:

Average throughput: 86.99 Mbit/s

95th percentile per-packet one-way delay: 59.364 ms

Loss rate: 0.02%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-12 08:45:48

End at: 2017-12-12 08:46:18

Below is generated by plot.py at 2017-12-12 10:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 251.42 Mbit/s

95th percentile per-packet one-way delay: 55.762 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 115.56 Mbit/s

95th percentile per-packet one-way delay: 52.932 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 149.26 Mbit/s

95th percentile per-packet one-way delay: 55.787 ms

Loss rate: 0.00%

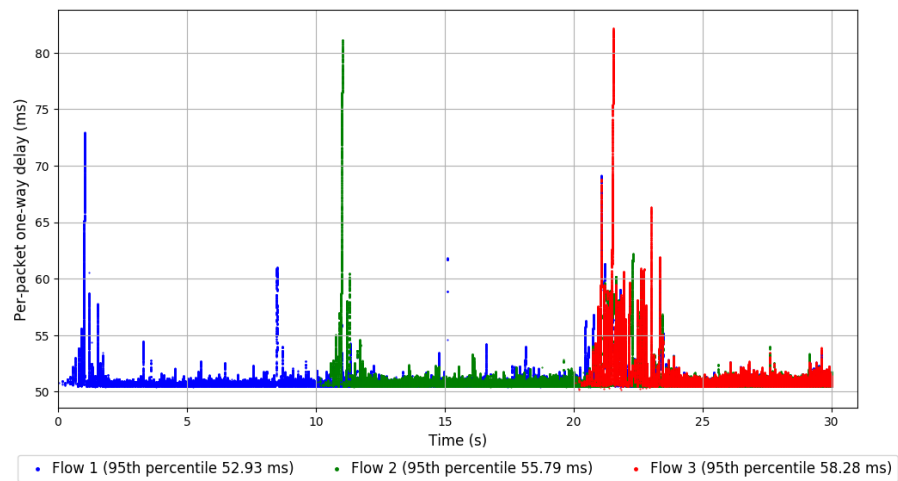
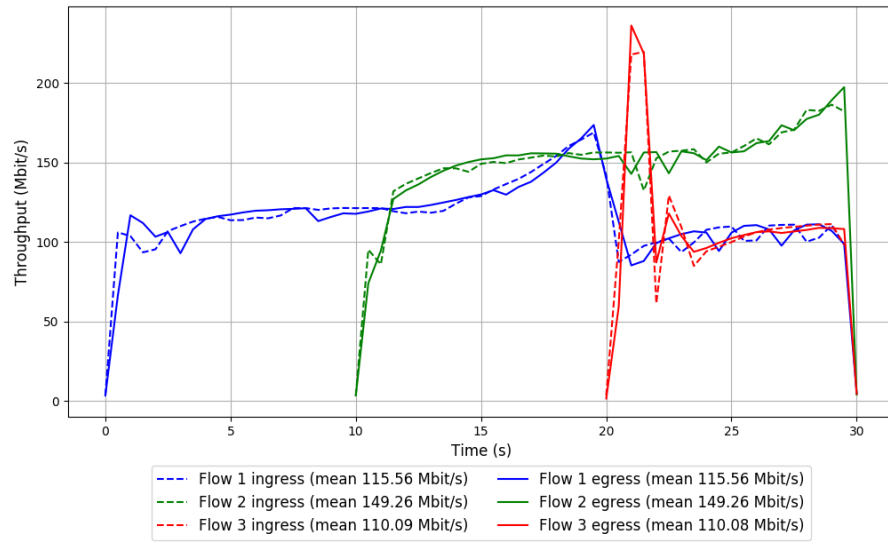
-- Flow 3:

Average throughput: 110.08 Mbit/s

95th percentile per-packet one-way delay: 58.276 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

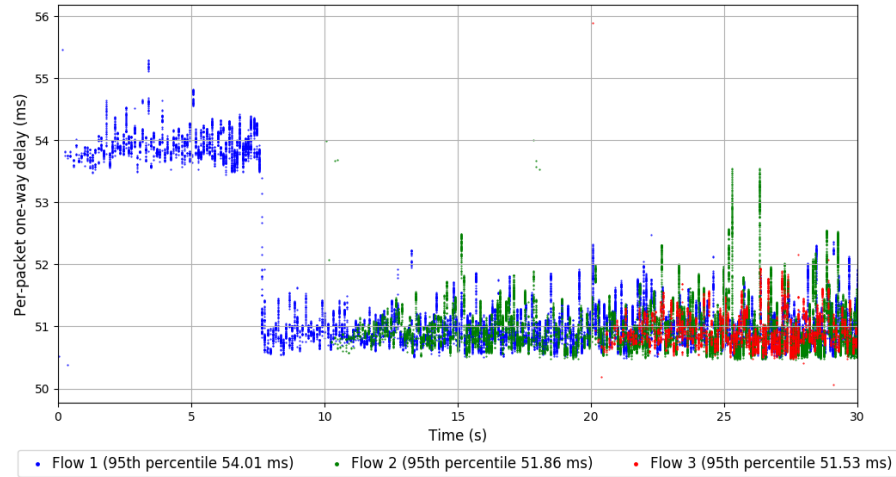
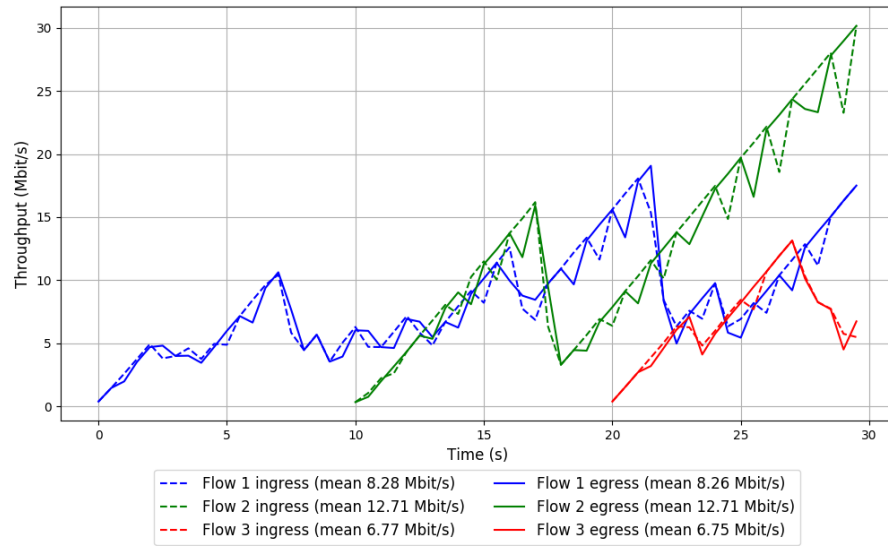


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-12 06:54:52
End at: 2017-12-12 06:55:22

# Below is generated by plot.py at 2017-12-12 10:21:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.93 Mbit/s
95th percentile per-packet one-way delay: 53.778 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 54.010 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 12.71 Mbit/s
95th percentile per-packet one-way delay: 51.862 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 51.534 ms
Loss rate: 0.32%
```


Run 1: Report of LEDBAT — Data Link

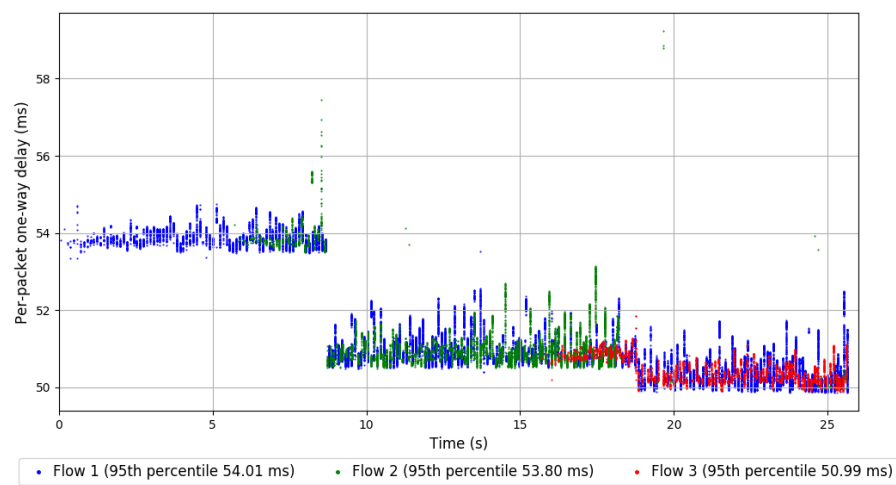
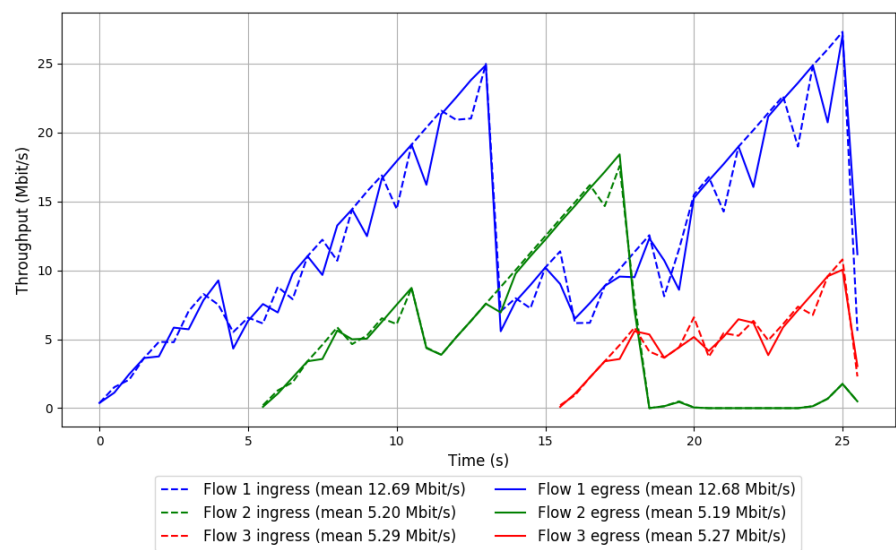


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-12 07:06:47
End at: 2017-12-12 07:07:17

# Below is generated by plot.py at 2017-12-12 10:21:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.75 Mbit/s
95th percentile per-packet one-way delay: 53.946 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 54.008 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 5.19 Mbit/s
95th percentile per-packet one-way delay: 53.802 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 5.27 Mbit/s
95th percentile per-packet one-way delay: 50.988 ms
Loss rate: 0.22%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-12 07:19:07

End at: 2017-12-12 07:19:37

Below is generated by plot.py at 2017-12-12 10:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 21.80 Mbit/s

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

Loss rate: 0.05%

-- Flow 1:

Average throughput: 10.63 Mbit/s

95th percentile per-packet one-way delay: 54.327 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 9.12 Mbit/s

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

Loss rate: 0.09%

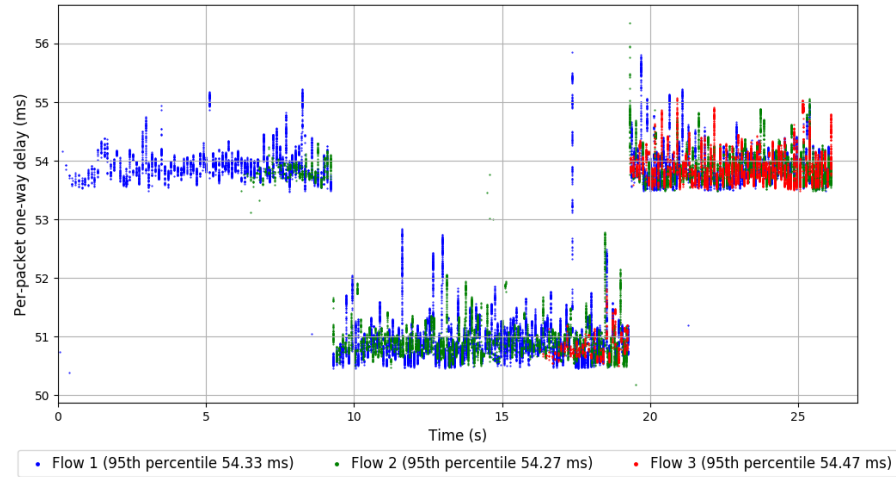
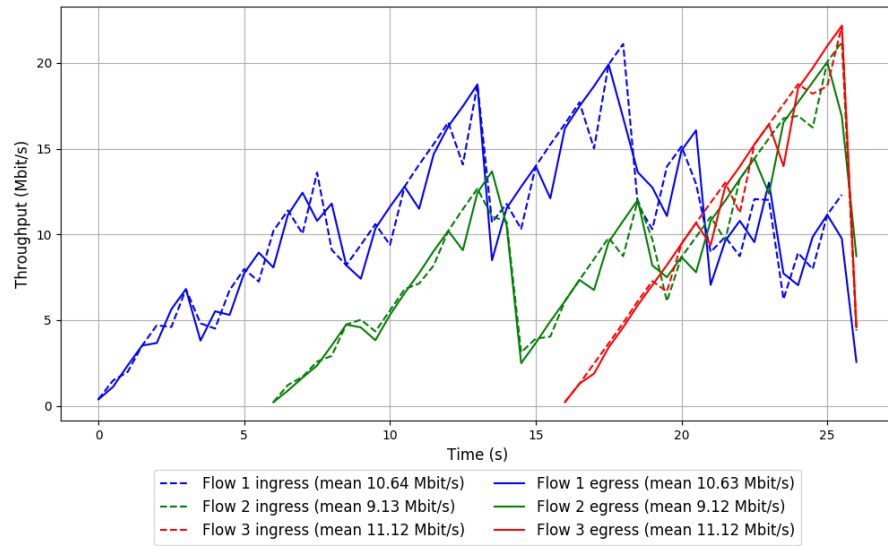
-- Flow 3:

Average throughput: 11.12 Mbit/s

95th percentile per-packet one-way delay: 54.469 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-12 07:31:00

End at: 2017-12-12 07:31:30

Below is generated by plot.py at 2017-12-12 10:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.02 Mbit/s

95th percentile per-packet one-way delay: 51.993 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 7.76 Mbit/s

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

Loss rate: 0.09%

-- Flow 2:

Average throughput: 23.13 Mbit/s

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

Loss rate: 0.00%

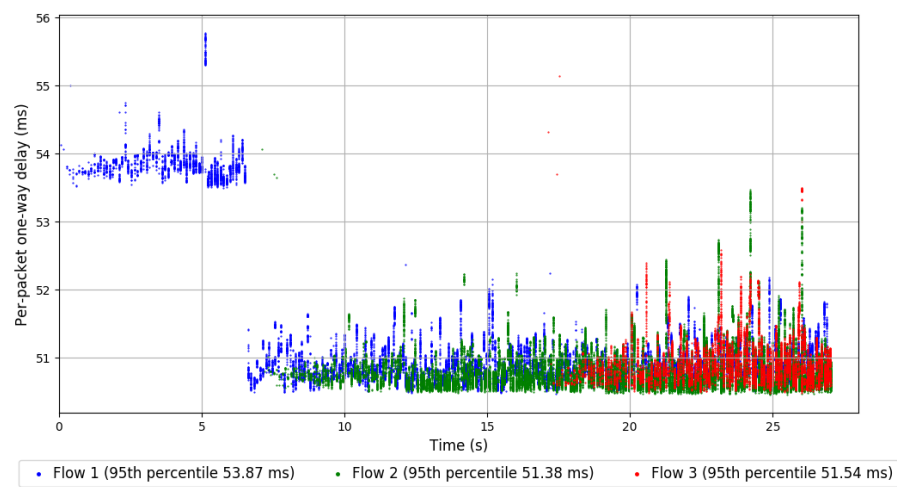
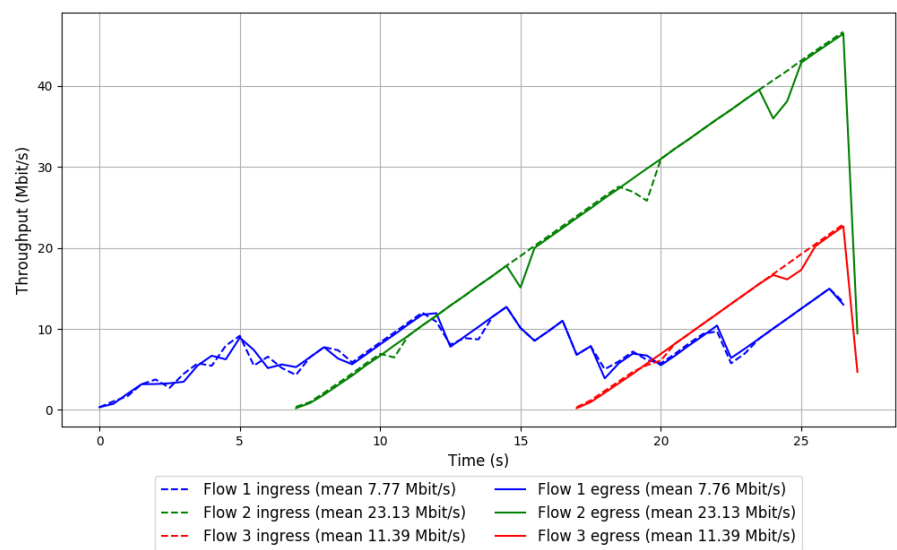
-- Flow 3:

Average throughput: 11.39 Mbit/s

95th percentile per-packet one-way delay: 51.538 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-12 07:43:14

End at: 2017-12-12 07:43:44

Below is generated by plot.py at 2017-12-12 10:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.93 Mbit/s

95th percentile per-packet one-way delay: 51.607 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 8.69 Mbit/s

95th percentile per-packet one-way delay: 51.513 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 9.18 Mbit/s

95th percentile per-packet one-way delay: 51.779 ms

Loss rate: 0.02%

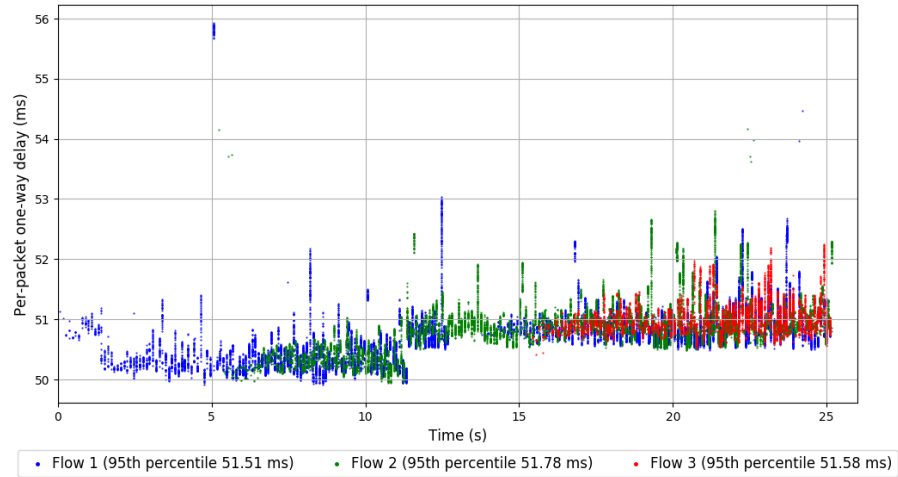
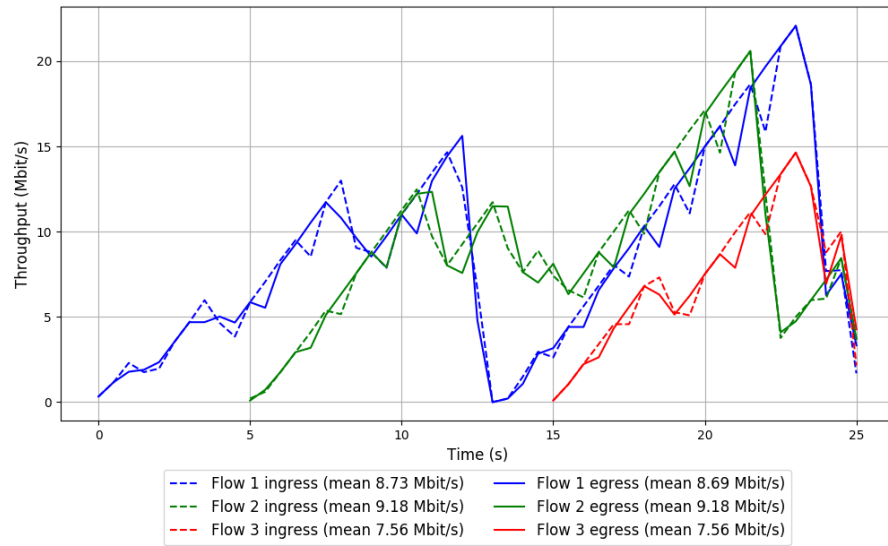
-- Flow 3:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 51.583 ms

Loss rate: 0.02%

Run 5: Report of LEDBAT — Data Link

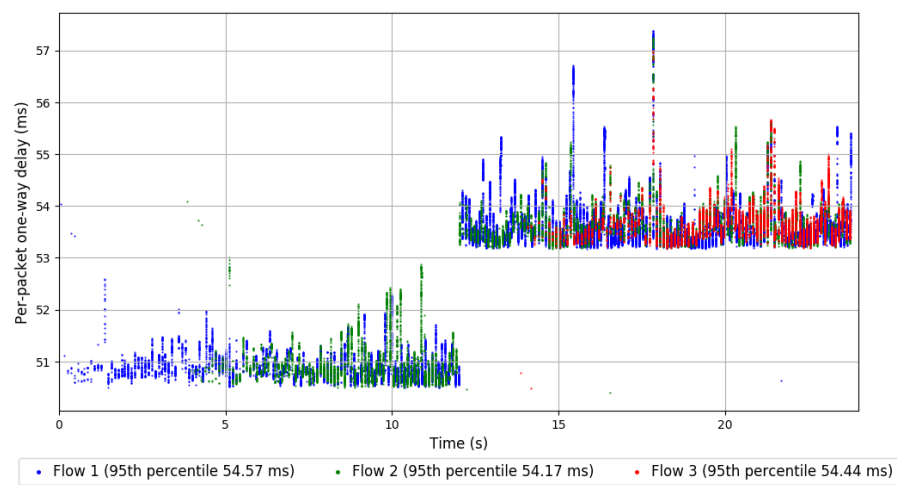
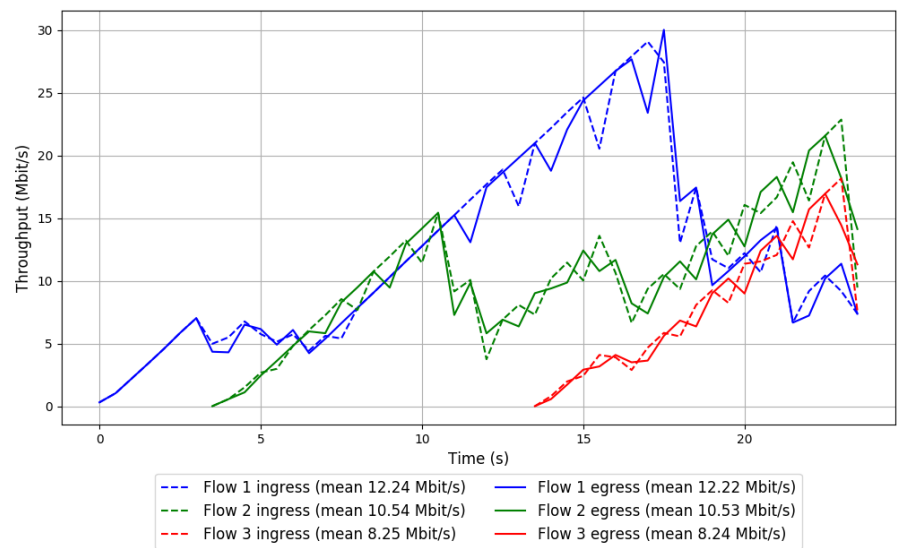


Run 6: Statistics of LEDBAT

Start at: 2017-12-12 07:55:32

End at: 2017-12-12 07:56:02

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-12 08:07:42

End at: 2017-12-12 08:08:12

Below is generated by plot.py at 2017-12-12 10:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 23.93 Mbit/s

95th percentile per-packet one-way delay: 54.005 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 12.11 Mbit/s

95th percentile per-packet one-way delay: 54.004 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 11.18 Mbit/s

95th percentile per-packet one-way delay: 54.046 ms

Loss rate: 0.01%

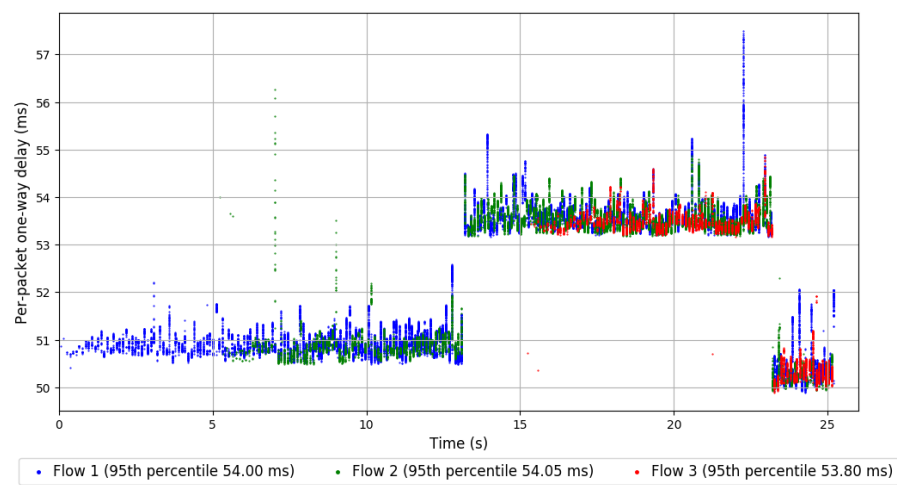
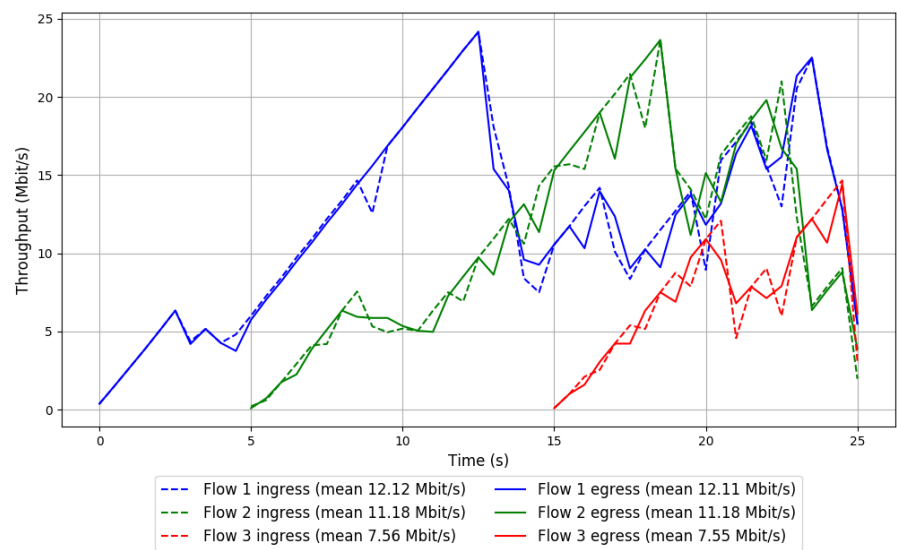
-- Flow 3:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 53.803 ms

Loss rate: 0.19%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-12 08:20:08

End at: 2017-12-12 08:20:38

Below is generated by plot.py at 2017-12-12 10:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.47 Mbit/s

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

Loss rate: 0.05%

-- Flow 1:

Average throughput: 9.07 Mbit/s

95th percentile per-packet one-way delay: 53.837 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 10.10 Mbit/s

95th percentile per-packet one-way delay: 53.885 ms

Loss rate: 0.05%

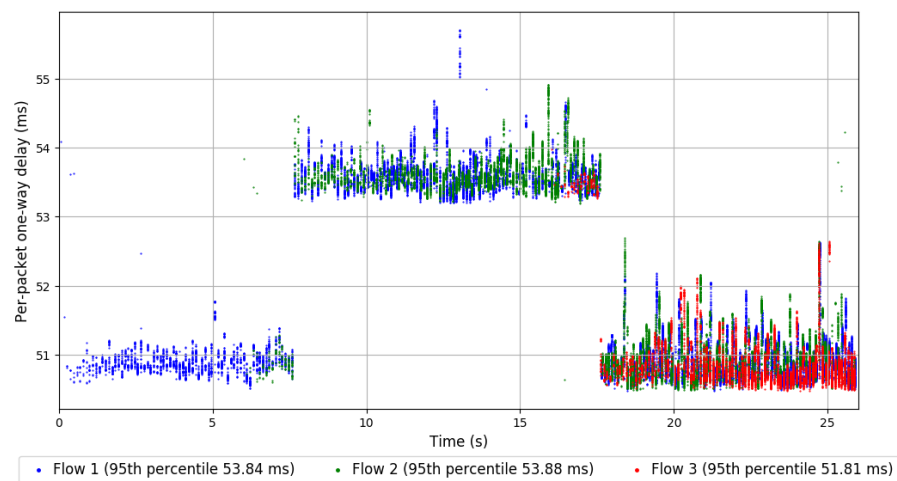
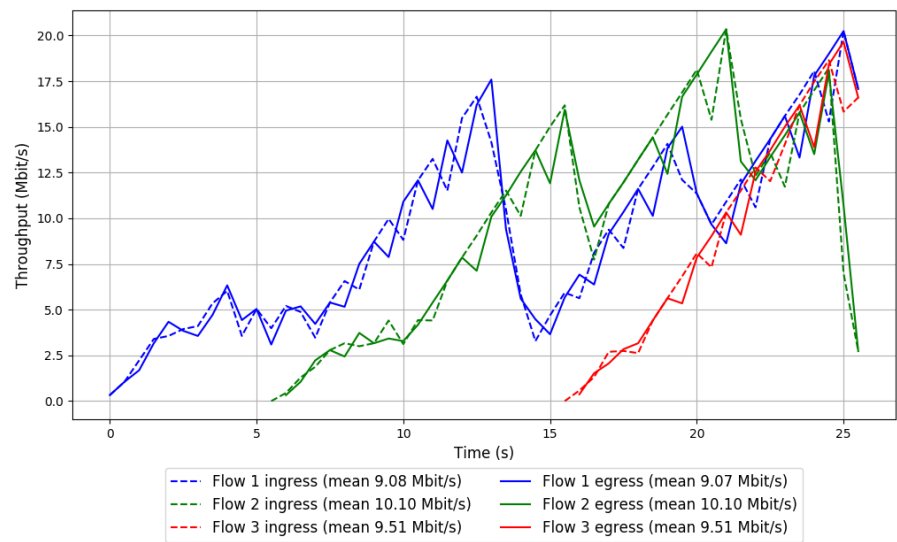
-- Flow 3:

Average throughput: 9.51 Mbit/s

95th percentile per-packet one-way delay: 51.812 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-12 08:32:25

End at: 2017-12-12 08:32:55

Below is generated by plot.py at 2017-12-12 10:21:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.13 Mbit/s

95th percentile per-packet one-way delay: 53.913 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 8.98 Mbit/s

95th percentile per-packet one-way delay: 54.062 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 8.96 Mbit/s

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

Loss rate: 0.29%

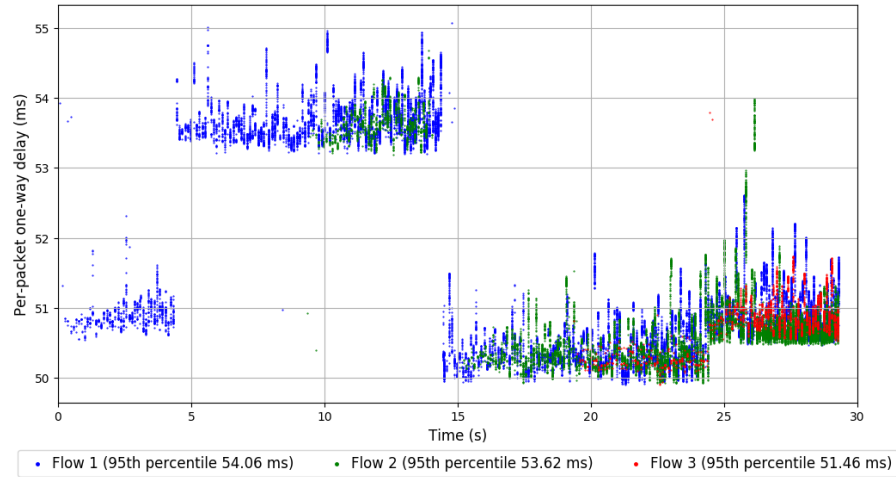
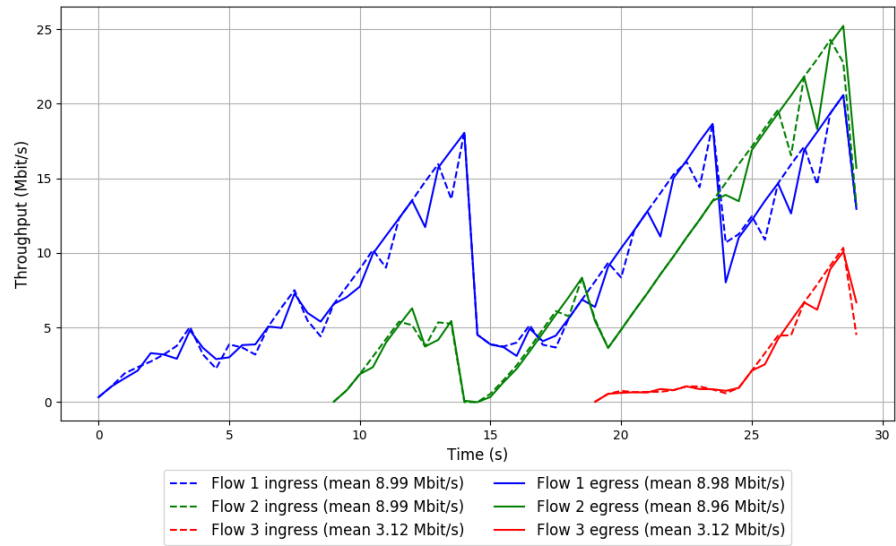
-- Flow 3:

Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 51.461 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

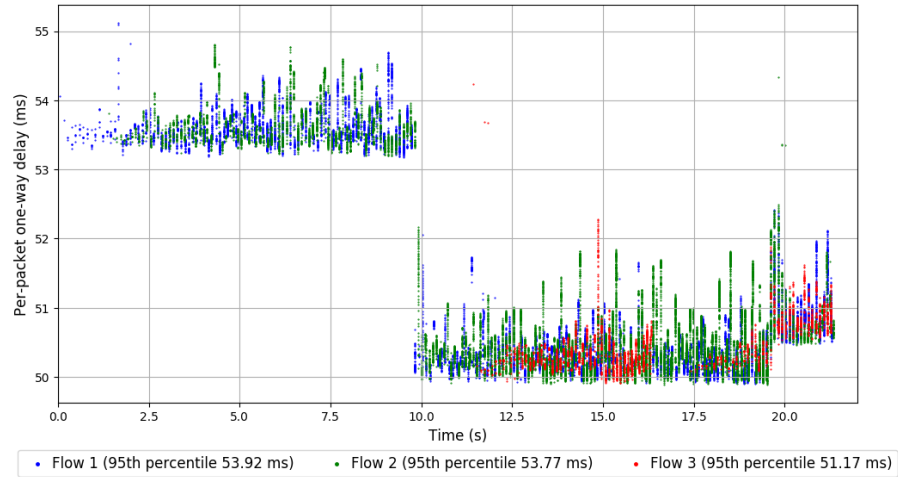
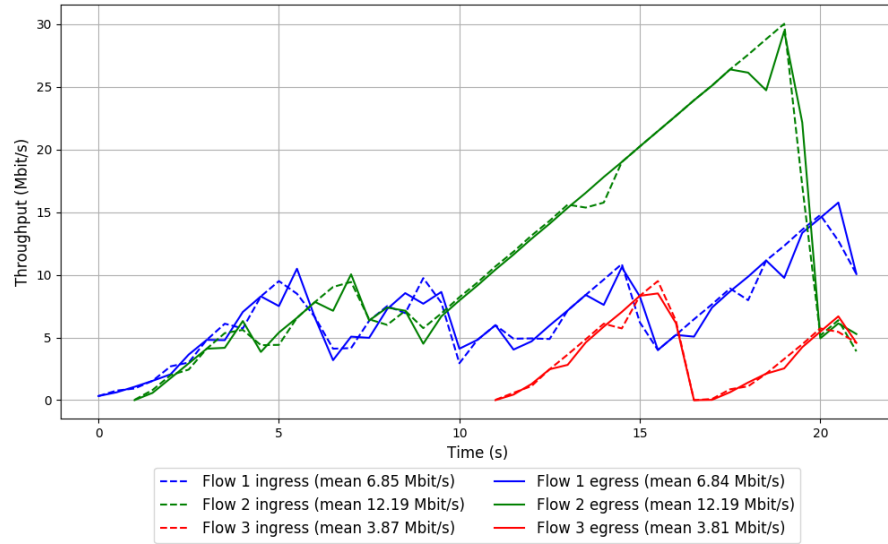


Run 10: Statistics of LEDBAT

Start at: 2017-12-12 08:44:11

End at: 2017-12-12 08:44:42

Run 10: Report of LEDBAT — Data Link

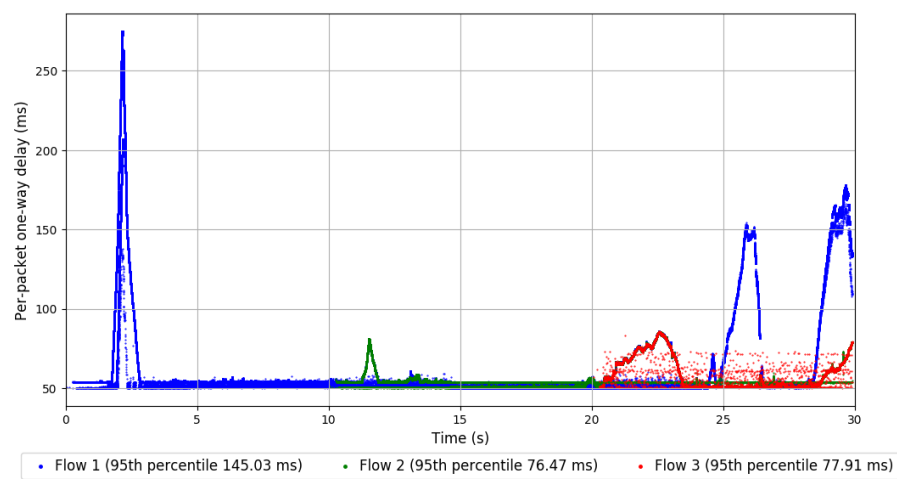
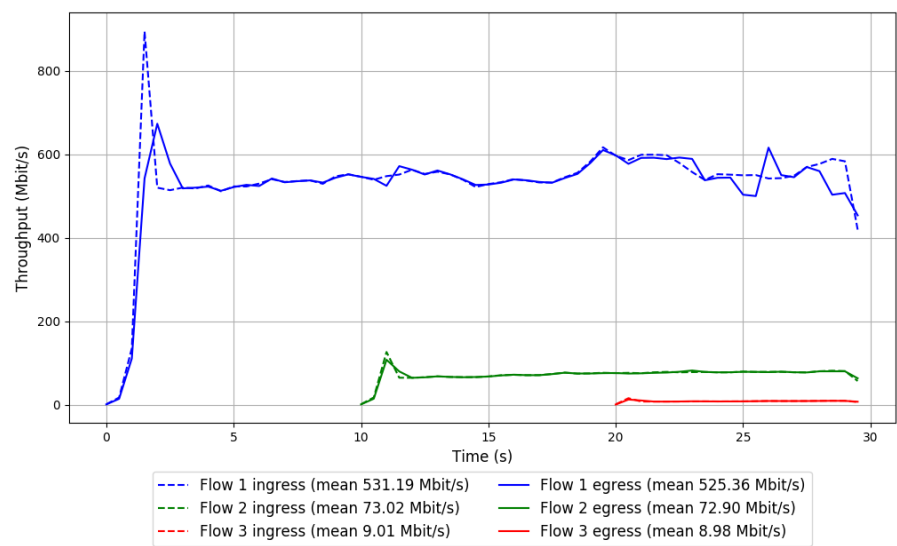


```
Run 1: Statistics of PCC

Start at: 2017-12-12 06:53:05
End at: 2017-12-12 06:53:35

# Below is generated by plot.py at 2017-12-12 10:28:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 576.79 Mbit/s
95th percentile per-packet one-way delay: 143.041 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 525.36 Mbit/s
95th percentile per-packet one-way delay: 145.034 ms
Loss rate: 1.09%
-- Flow 2:
Average throughput: 72.90 Mbit/s
95th percentile per-packet one-way delay: 76.468 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 8.98 Mbit/s
95th percentile per-packet one-way delay: 77.905 ms
Loss rate: 0.28%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-12 07:05:00

End at: 2017-12-12 07:05:30

Below is generated by plot.py at 2017-12-12 10:28:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 584.87 Mbit/s

95th percentile per-packet one-way delay: 169.509 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 534.73 Mbit/s

95th percentile per-packet one-way delay: 170.003 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 73.72 Mbit/s

95th percentile per-packet one-way delay: 167.493 ms

Loss rate: 1.43%

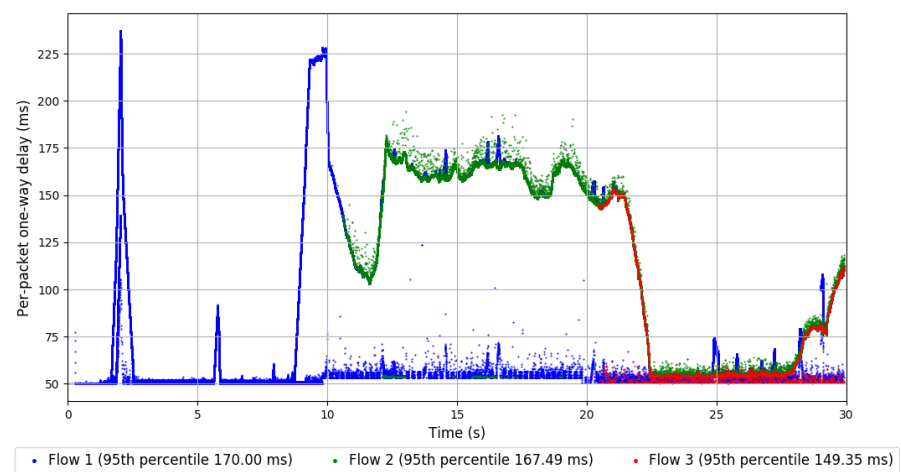
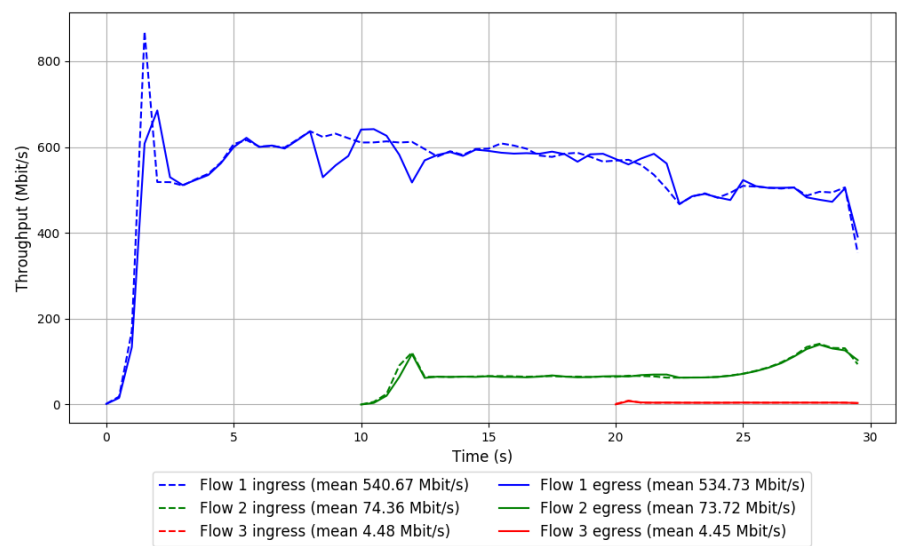
-- Flow 3:

Average throughput: 4.45 Mbit/s

95th percentile per-packet one-way delay: 149.347 ms

Loss rate: 0.63%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-12 07:17:18

End at: 2017-12-12 07:17:48

Below is generated by plot.py at 2017-12-12 10:28:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 602.72 Mbit/s

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

Loss rate: 1.28%

-- Flow 1:

Average throughput: 563.08 Mbit/s

95th percentile per-packet one-way delay: 163.424 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 30.66 Mbit/s

95th percentile per-packet one-way delay: 163.496 ms

Loss rate: 1.31%

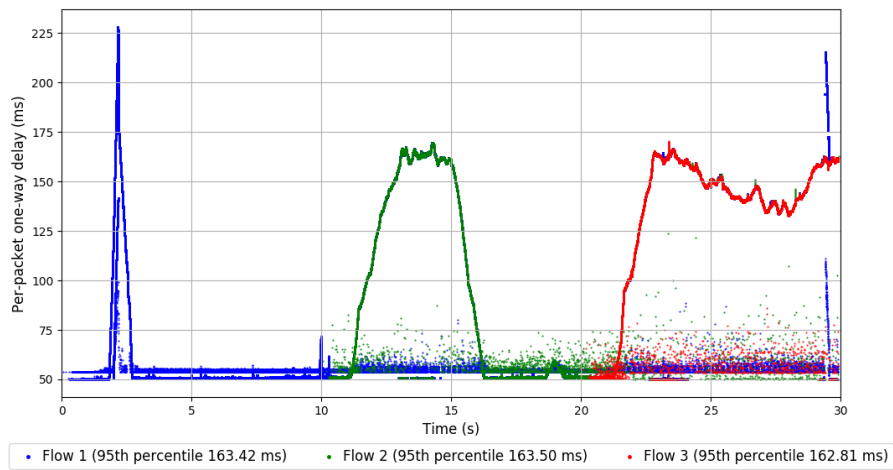
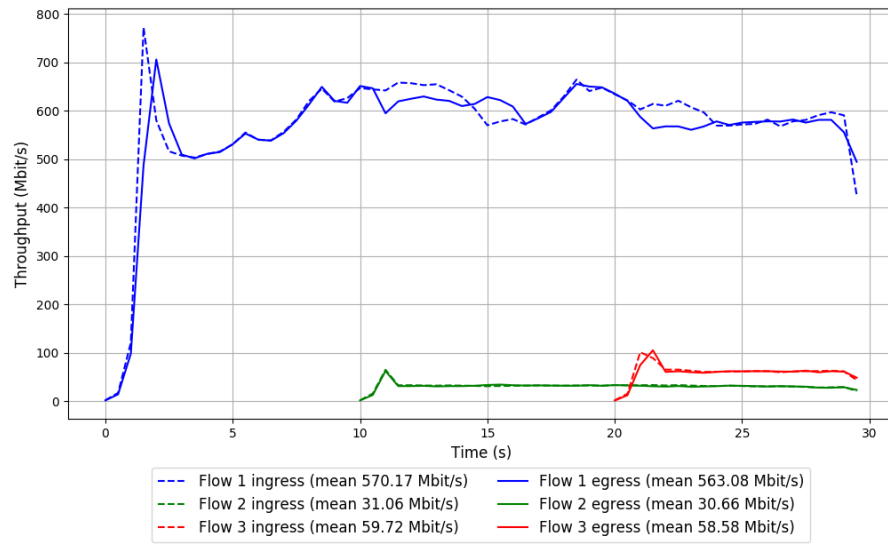
-- Flow 3:

Average throughput: 58.58 Mbit/s

95th percentile per-packet one-way delay: 162.808 ms

Loss rate: 1.97%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-12 07:29:11

End at: 2017-12-12 07:29:41

Below is generated by plot.py at 2017-12-12 10:29:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 629.49 Mbit/s

95th percentile per-packet one-way delay: 162.744 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 579.47 Mbit/s

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

Loss rate: 1.47%

-- Flow 2:

Average throughput: 59.29 Mbit/s

95th percentile per-packet one-way delay: 158.159 ms

Loss rate: 1.55%

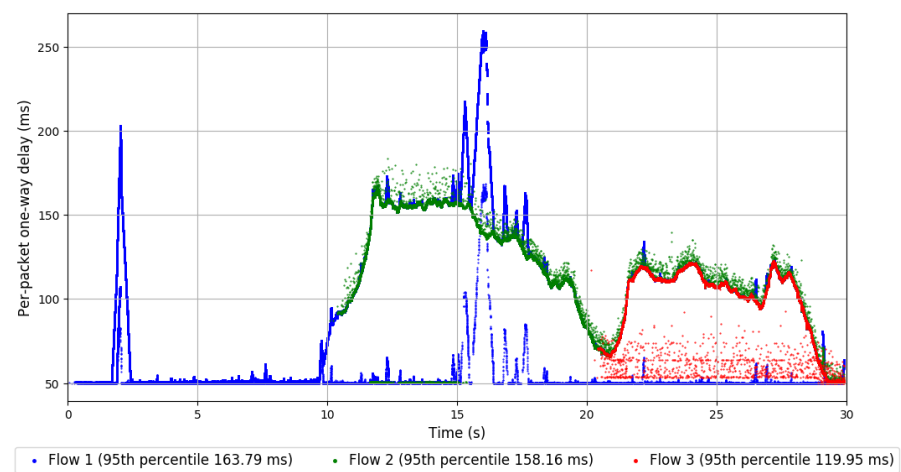
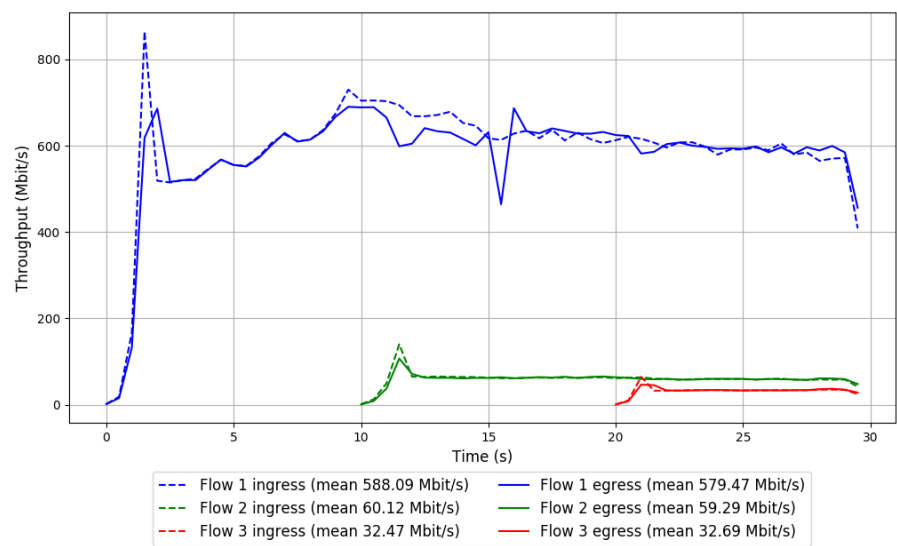
-- Flow 3:

Average throughput: 32.69 Mbit/s

95th percentile per-packet one-way delay: 119.949 ms

Loss rate: 0.01%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-12 07:41:25

End at: 2017-12-12 07:41:55

Below is generated by plot.py at 2017-12-12 10:30:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 619.00 Mbit/s

95th percentile per-packet one-way delay: 241.334 ms

Loss rate: 2.67%

-- Flow 1:

Average throughput: 556.58 Mbit/s

95th percentile per-packet one-way delay: 245.020 ms

Loss rate: 2.88%

-- Flow 2:

Average throughput: 63.34 Mbit/s

95th percentile per-packet one-way delay: 159.755 ms

Loss rate: 1.16%

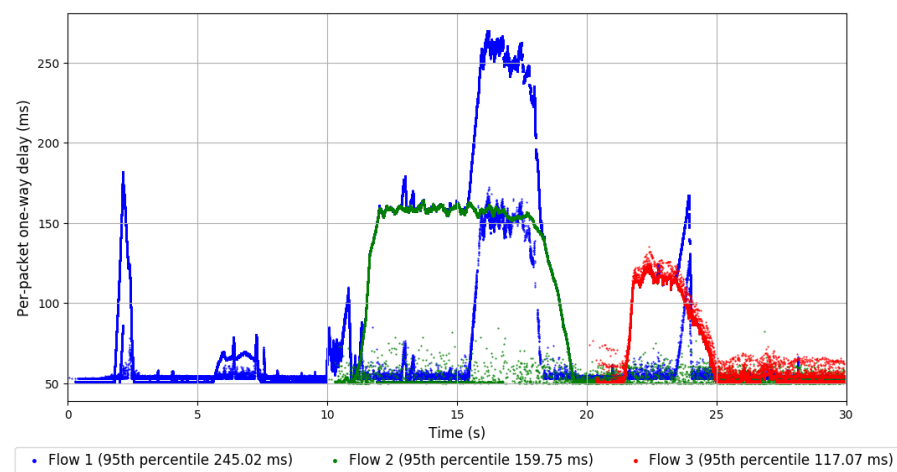
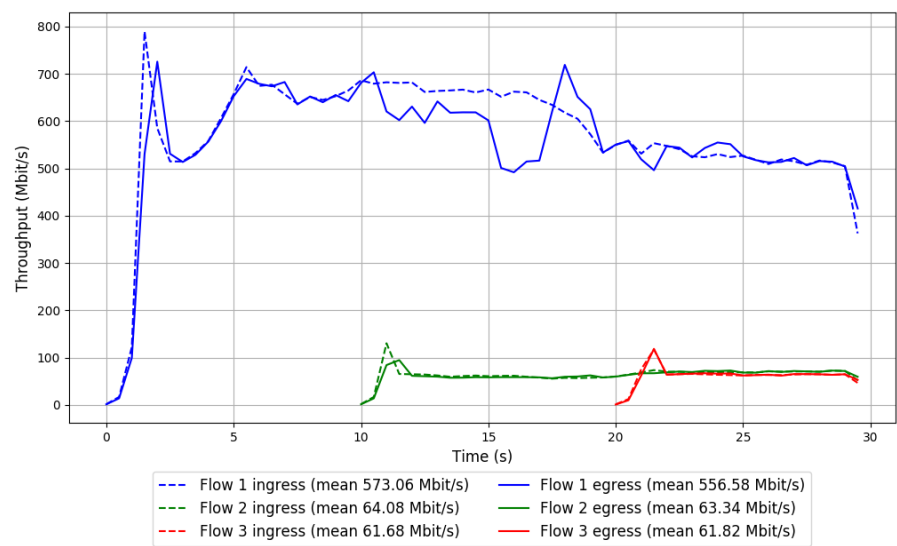
-- Flow 3:

Average throughput: 61.82 Mbit/s

95th percentile per-packet one-way delay: 117.071 ms

Loss rate: 0.00%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-12 07:53:45

End at: 2017-12-12 07:54:15

Below is generated by plot.py at 2017-12-12 10:30:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 610.44 Mbit/s

95th percentile per-packet one-way delay: 163.332 ms

Loss rate: 1.83%

-- Flow 1:

Average throughput: 526.61 Mbit/s

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

Loss rate: 1.87%

-- Flow 2:

Average throughput: 123.93 Mbit/s

95th percentile per-packet one-way delay: 162.622 ms

Loss rate: 1.62%

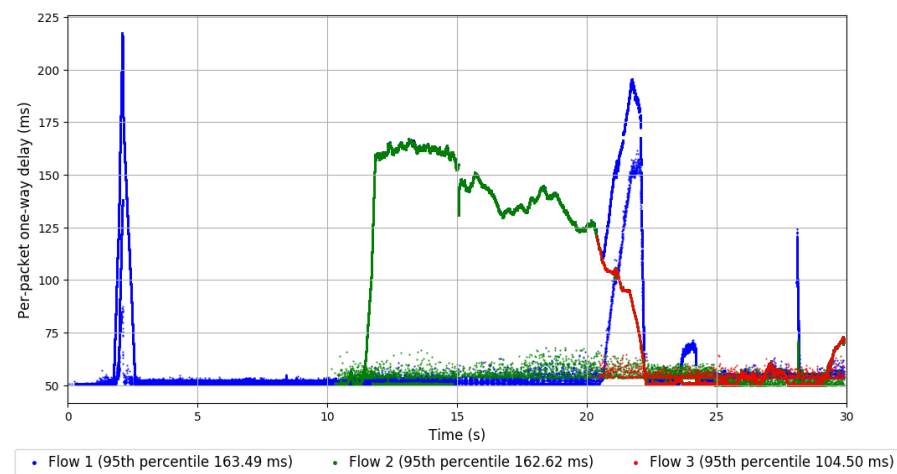
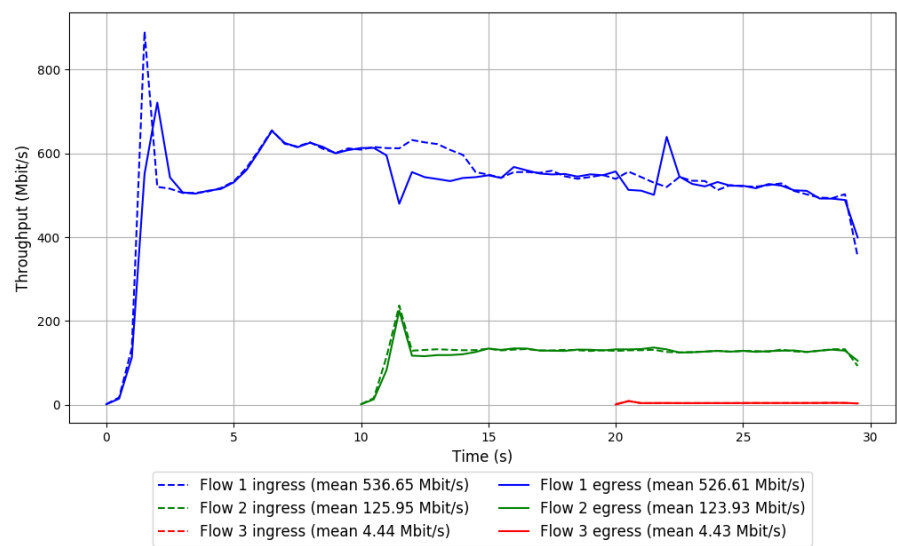
-- Flow 3:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 104.501 ms

Loss rate: 0.22%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-12 08:05:55

End at: 2017-12-12 08:06:25

Below is generated by plot.py at 2017-12-12 10:31:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 588.16 Mbit/s

95th percentile per-packet one-way delay: 104.281 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 552.47 Mbit/s

95th percentile per-packet one-way delay: 104.348 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 49.20 Mbit/s

95th percentile per-packet one-way delay: 103.250 ms

Loss rate: 0.00%

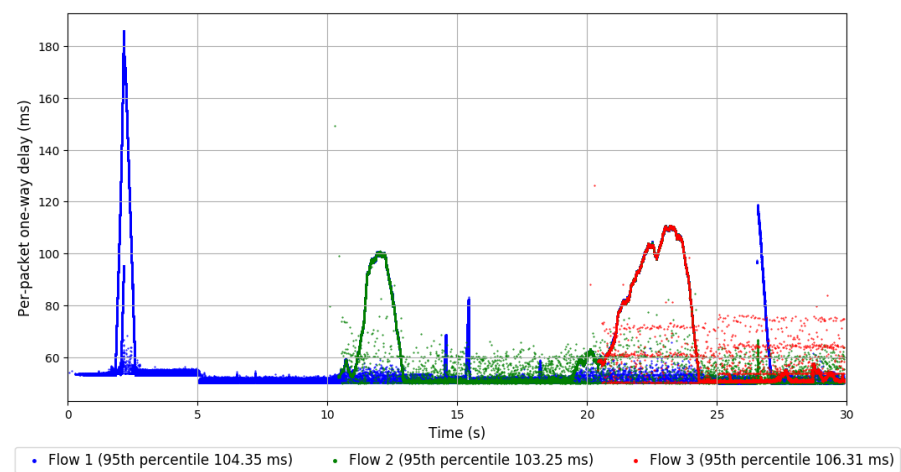
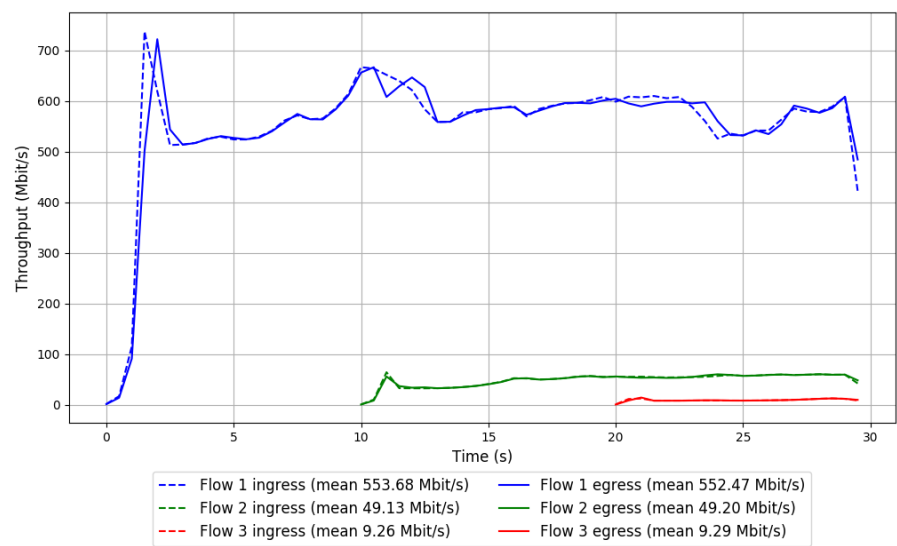
-- Flow 3:

Average throughput: 9.29 Mbit/s

95th percentile per-packet one-way delay: 106.313 ms

Loss rate: 0.00%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-12 08:18:20

End at: 2017-12-12 08:18:50

Below is generated by plot.py at 2017-12-12 10:32:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 608.30 Mbit/s

95th percentile per-packet one-way delay: 162.331 ms

Loss rate: 1.60%

-- Flow 1:

Average throughput: 579.14 Mbit/s

95th percentile per-packet one-way delay: 162.397 ms

Loss rate: 1.60%

-- Flow 2:

Average throughput: 29.19 Mbit/s

95th percentile per-packet one-way delay: 161.712 ms

Loss rate: 1.21%

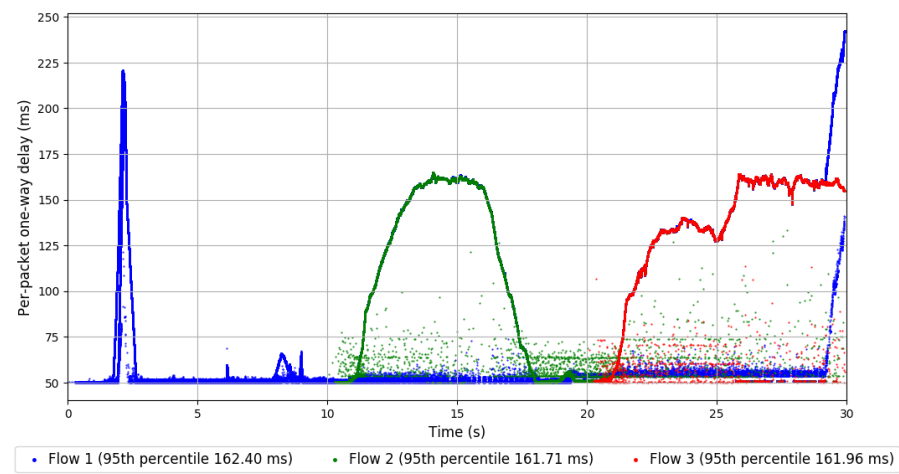
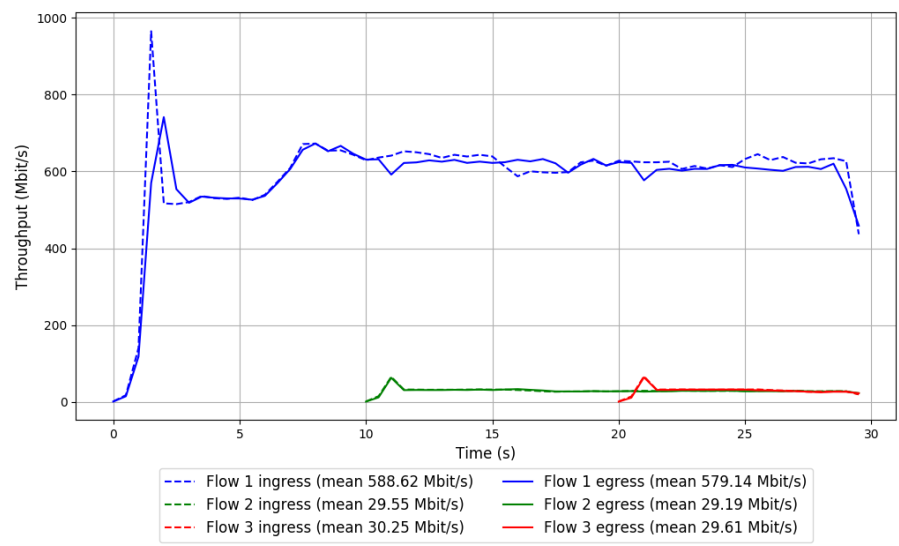
-- Flow 3:

Average throughput: 29.61 Mbit/s

95th percentile per-packet one-way delay: 161.957 ms

Loss rate: 2.27%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-12 08:30:39

End at: 2017-12-12 08:31:09

Below is generated by plot.py at 2017-12-12 10:37:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 580.50 Mbit/s

95th percentile per-packet one-way delay: 174.624 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 492.58 Mbit/s

95th percentile per-packet one-way delay: 179.994 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 71.82 Mbit/s

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

Loss rate: 0.94%

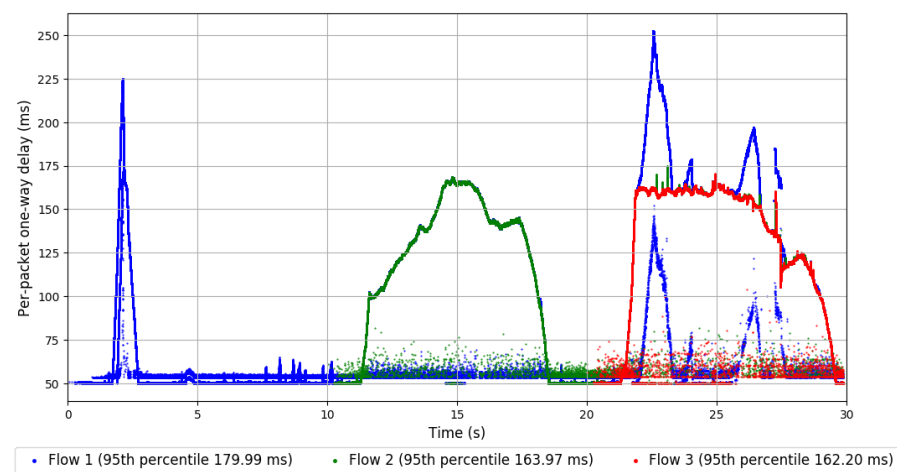
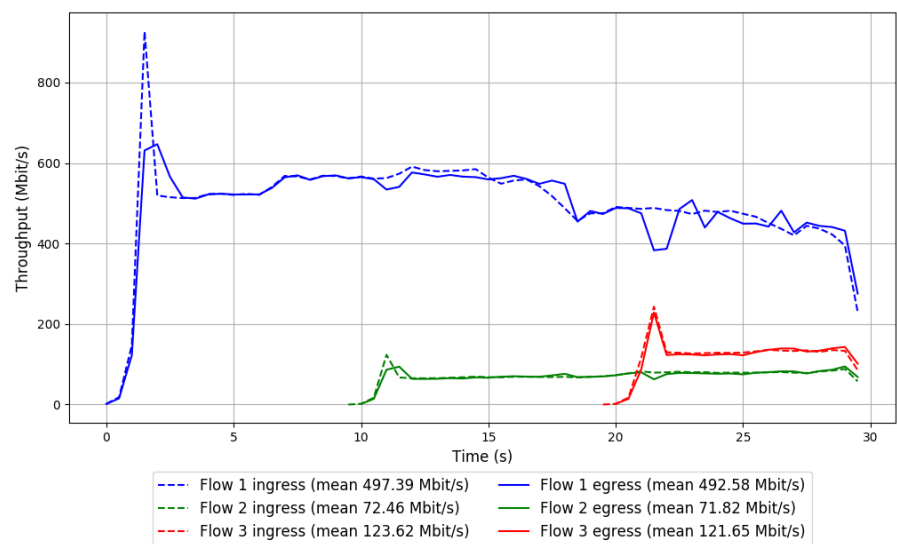
-- Flow 3:

Average throughput: 121.65 Mbit/s

95th percentile per-packet one-way delay: 162.196 ms

Loss rate: 1.65%

Run 9: Report of PCC — Data Link

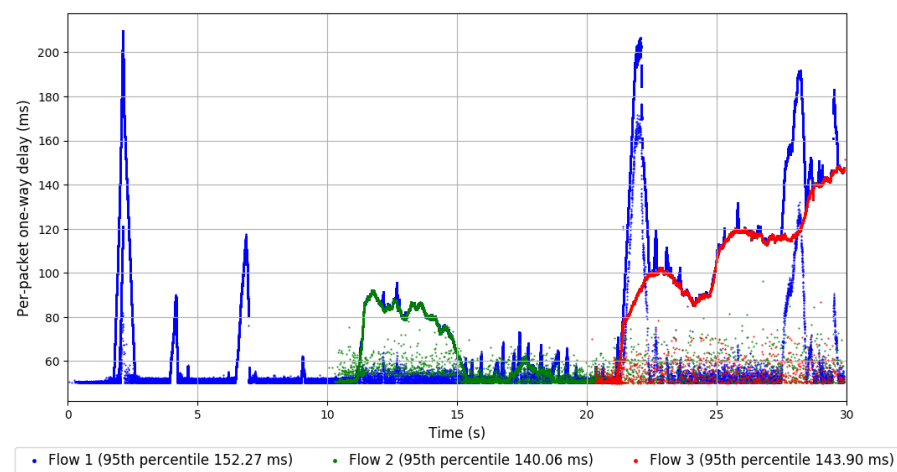
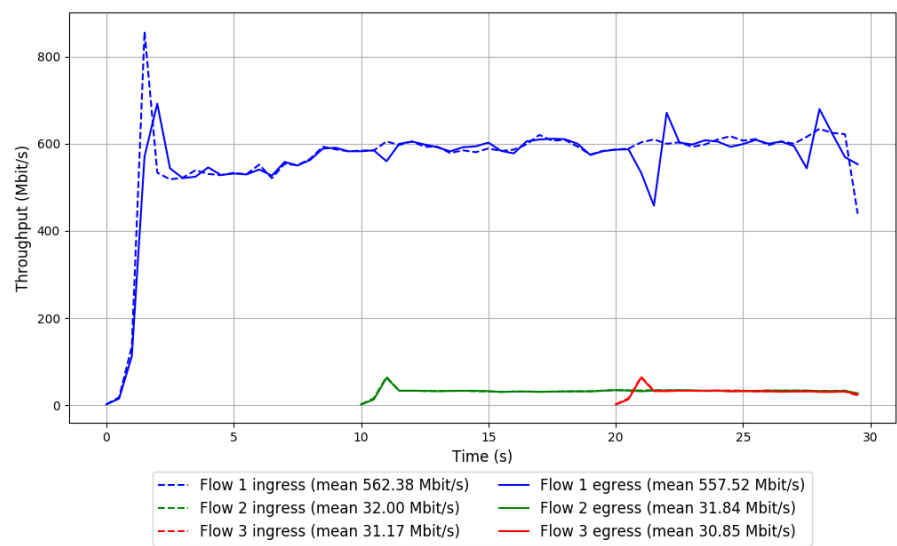


```
Run 10: Statistics of PCC

Start at: 2017-12-12 08:42:25
End at: 2017-12-12 08:42:55

# Below is generated by plot.py at 2017-12-12 10:38:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 588.77 Mbit/s
95th percentile per-packet one-way delay: 151.057 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 557.52 Mbit/s
95th percentile per-packet one-way delay: 152.274 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 31.84 Mbit/s
95th percentile per-packet one-way delay: 140.059 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 30.85 Mbit/s
95th percentile per-packet one-way delay: 143.899 ms
Loss rate: 0.96%
```

Run 10: Report of PCC — Data Link

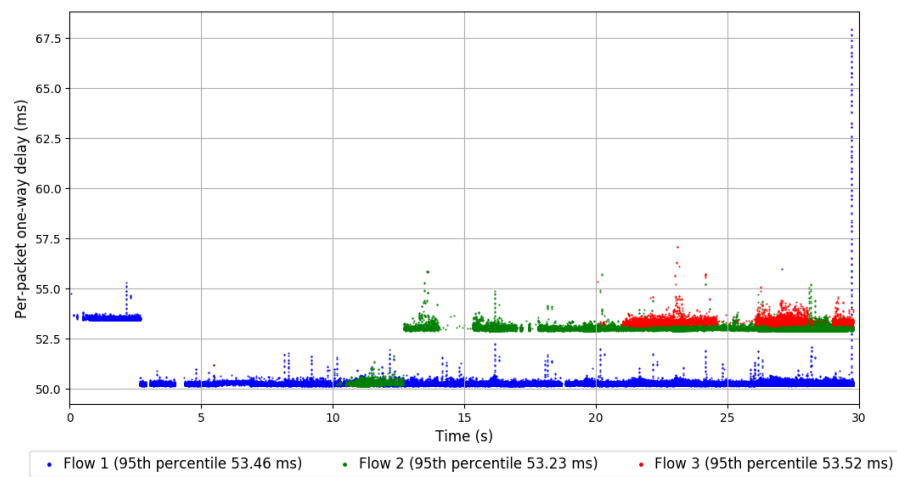
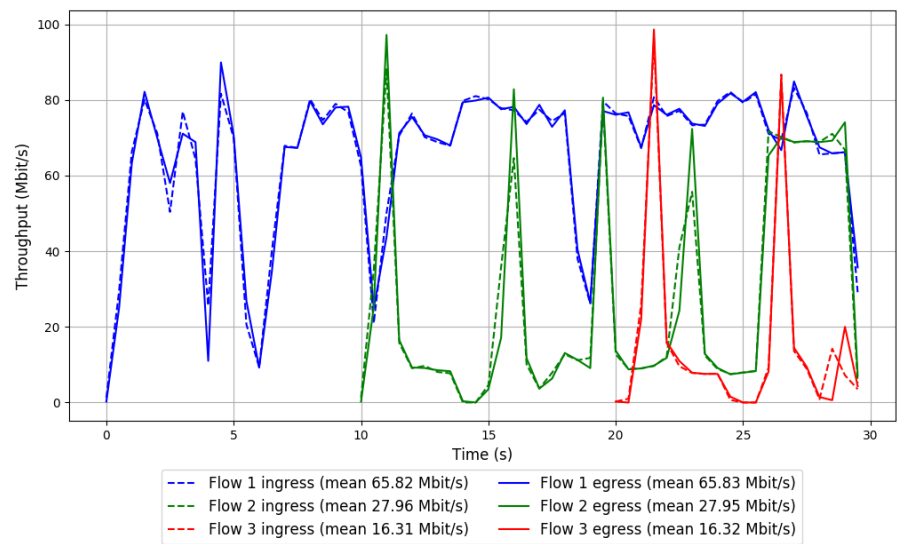


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-12 06:54:07
End at: 2017-12-12 06:54:37

# Below is generated by plot.py at 2017-12-12 10:38:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.69 Mbit/s
95th percentile per-packet one-way delay: 53.454 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.83 Mbit/s
95th percentile per-packet one-way delay: 53.464 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.95 Mbit/s
95th percentile per-packet one-way delay: 53.235 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.32 Mbit/s
95th percentile per-packet one-way delay: 53.525 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

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

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

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.15 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 40.31 Mbit/s

95th percentile per-packet one-way delay: 53.261 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.88 Mbit/s

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

Loss rate: 0.00%

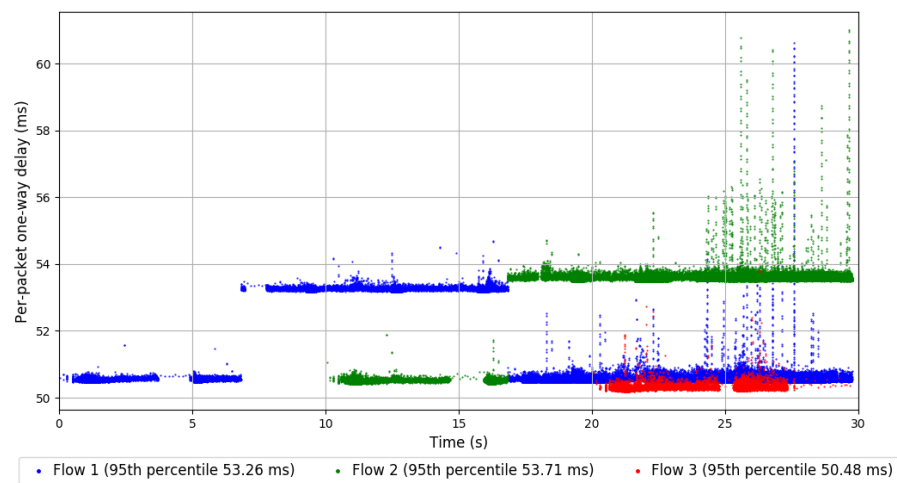
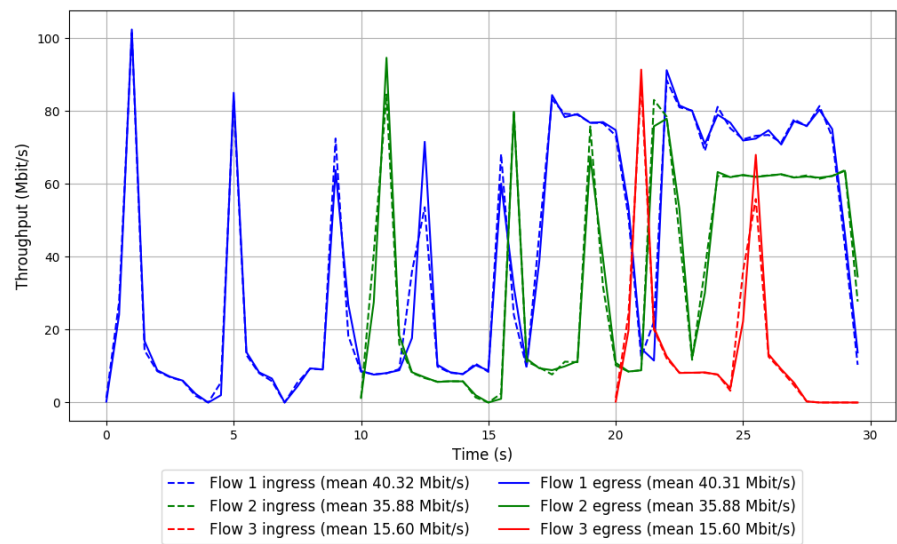
-- Flow 3:

Average throughput: 15.60 Mbit/s

95th percentile per-packet one-way delay: 50.478 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-12 07:18:21

End at: 2017-12-12 07:18:51

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.73 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.22 Mbit/s

95th percentile per-packet one-way delay: 53.700 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.26 Mbit/s

95th percentile per-packet one-way delay: 53.425 ms

Loss rate: 0.00%

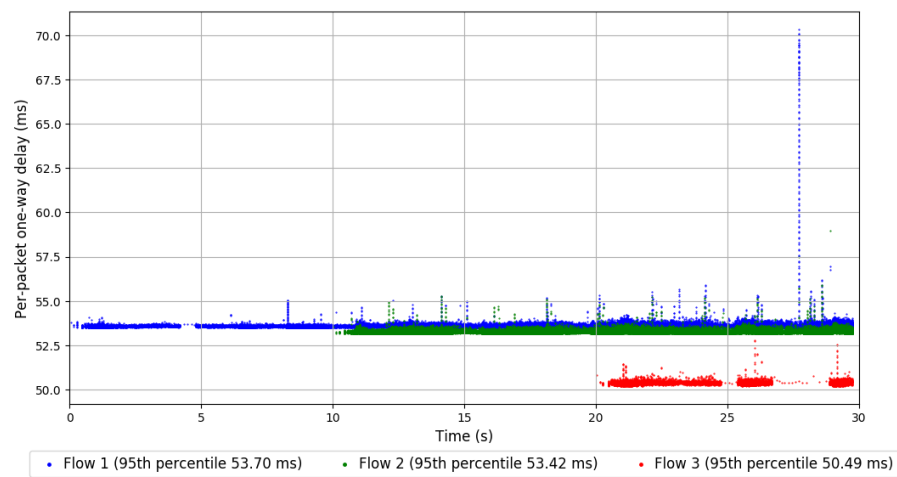
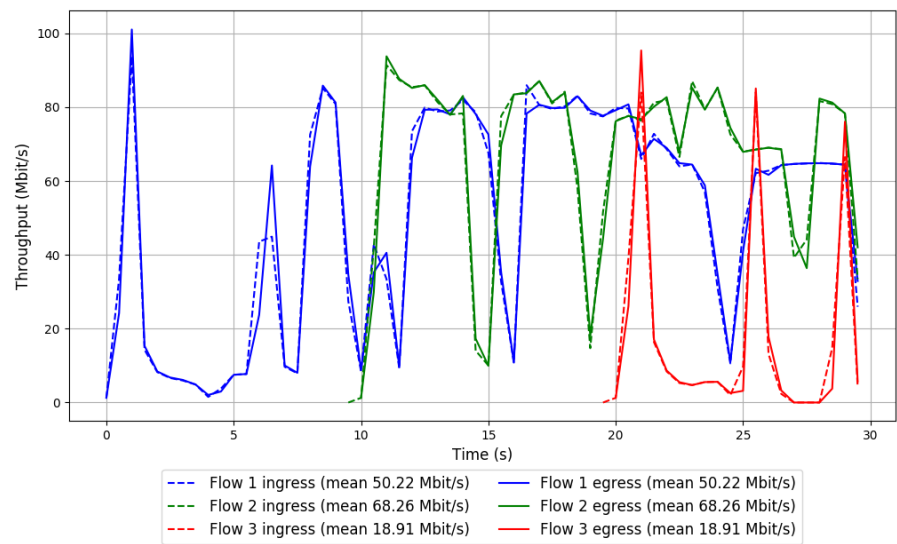
-- Flow 3:

Average throughput: 18.91 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-12 07:30:15

End at: 2017-12-12 07:30:45

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.16 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 53.18 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.92 Mbit/s

95th percentile per-packet one-way delay: 53.669 ms

Loss rate: 0.01%

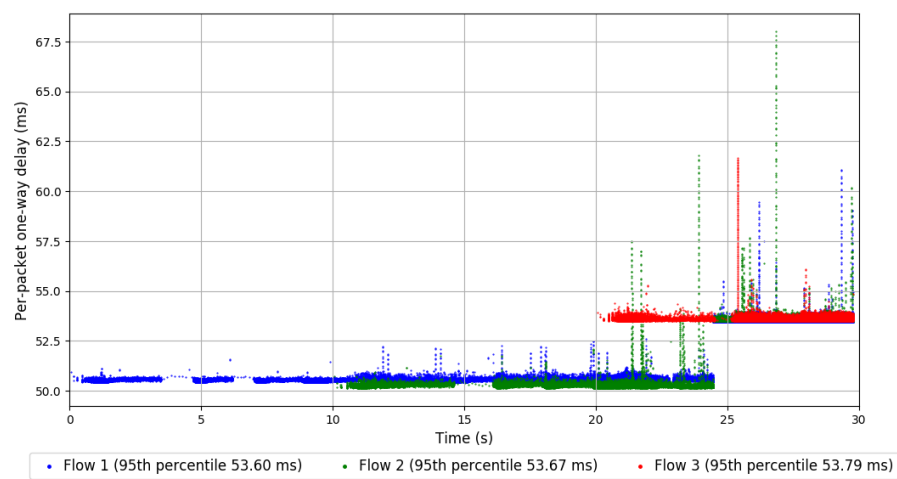
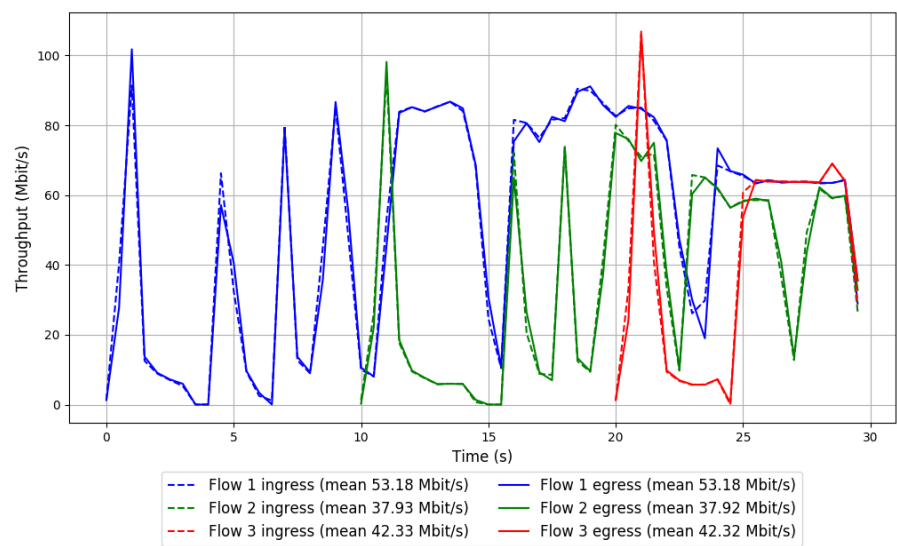
-- Flow 3:

Average throughput: 42.32 Mbit/s

95th percentile per-packet one-way delay: 53.789 ms

Loss rate: 0.01%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-12 07:42:29

End at: 2017-12-12 07:42:59

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.48 Mbit/s

95th percentile per-packet one-way delay: 50.573 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 35.59 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.91 Mbit/s

95th percentile per-packet one-way delay: 50.378 ms

Loss rate: 0.00%

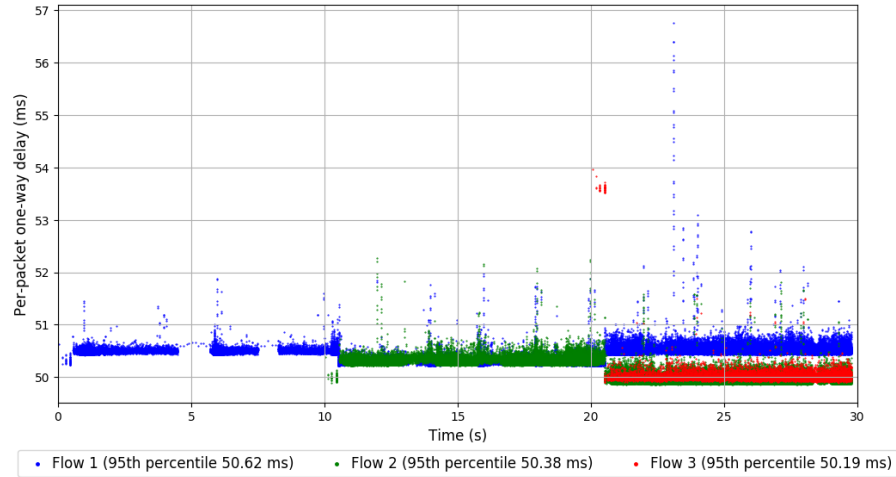
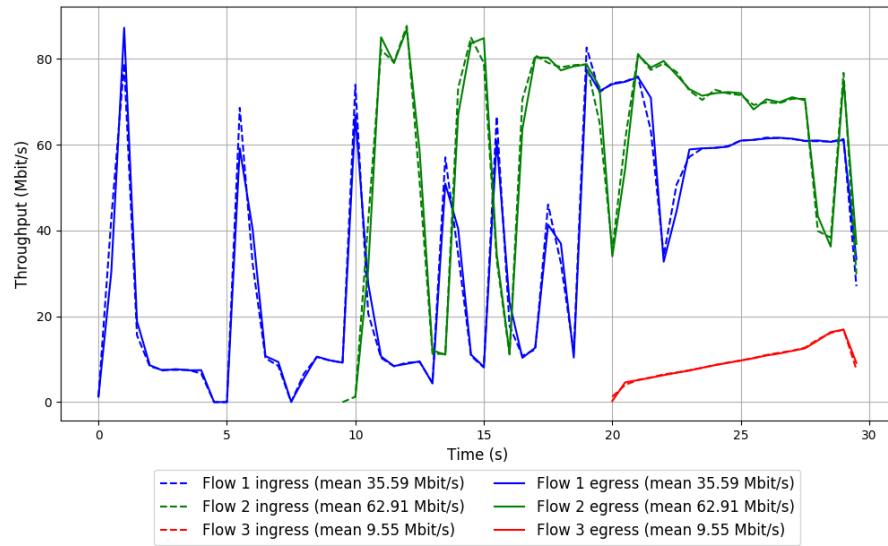
-- Flow 3:

Average throughput: 9.55 Mbit/s

95th percentile per-packet one-way delay: 50.188 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-12 07:54:49

End at: 2017-12-12 07:55:19

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 41.79 Mbit/s

95th percentile per-packet one-way delay: 53.726 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 19.57 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 29.37 Mbit/s

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

Loss rate: 0.00%

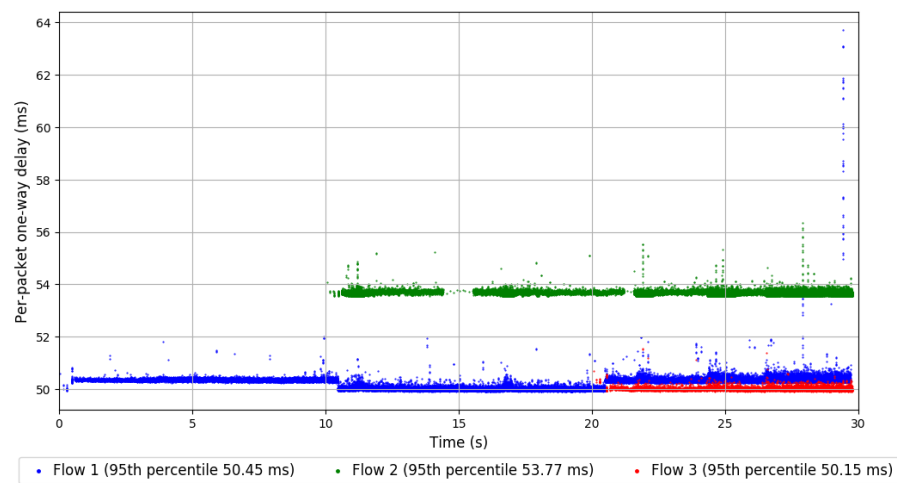
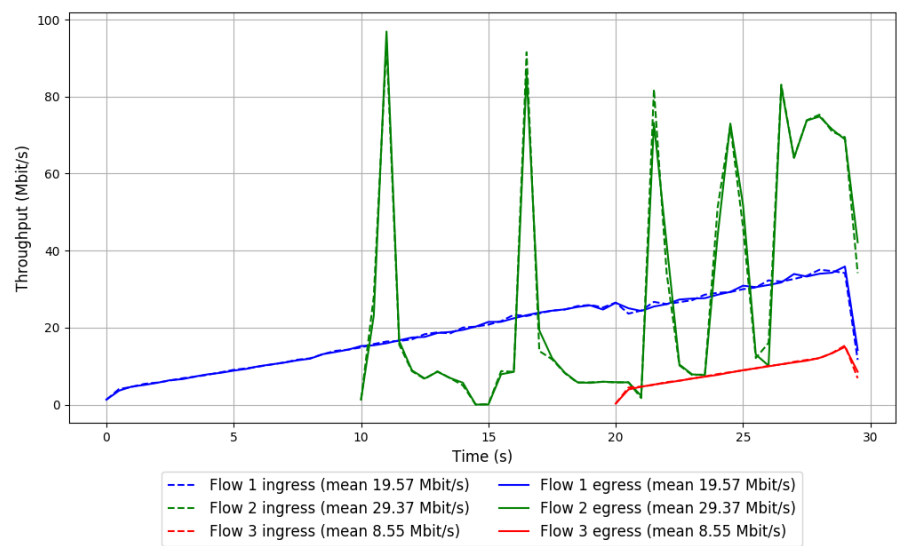
-- Flow 3:

Average throughput: 8.55 Mbit/s

95th percentile per-packet one-way delay: 50.146 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-12 08:06:57

End at: 2017-12-12 08:07:27

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.72 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.28 Mbit/s

95th percentile per-packet one-way delay: 53.348 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.48 Mbit/s

95th percentile per-packet one-way delay: 53.680 ms

Loss rate: 0.00%

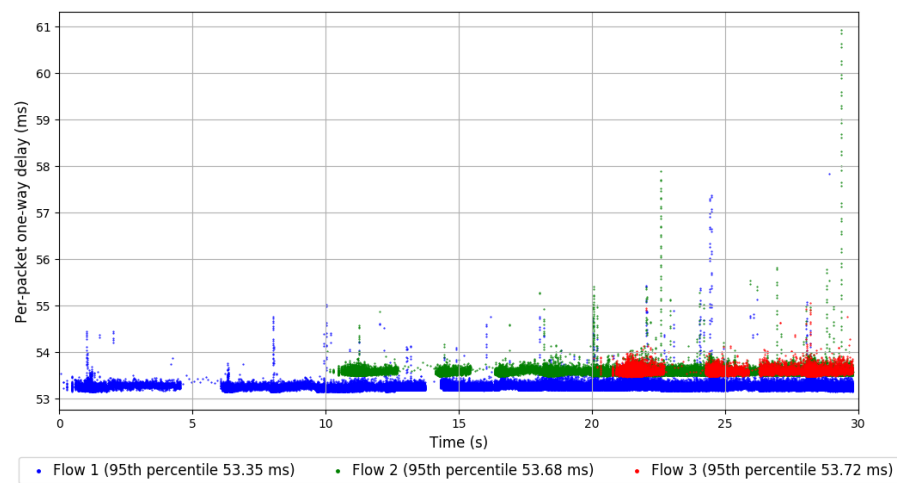
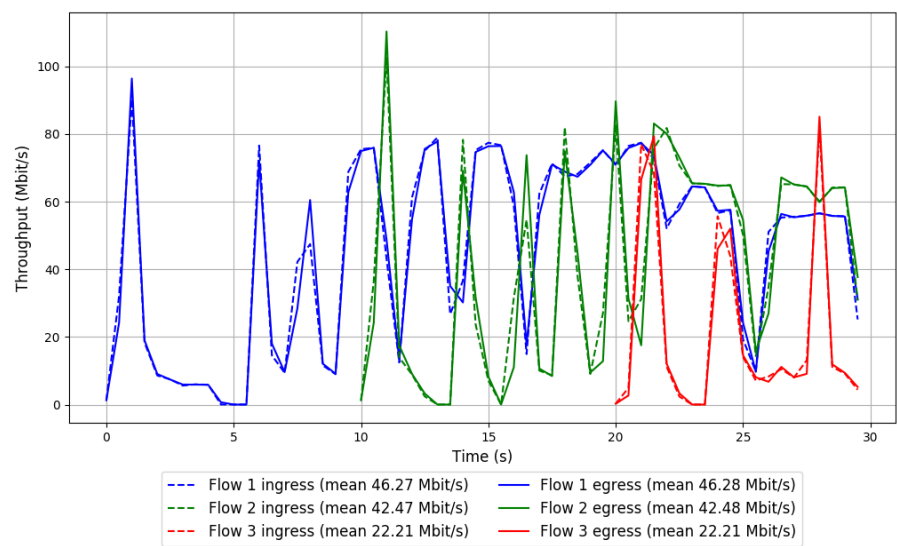
-- Flow 3:

Average throughput: 22.21 Mbit/s

95th percentile per-packet one-way delay: 53.721 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-12 08:19:23

End at: 2017-12-12 08:19:53

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.79 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 40.15 Mbit/s

95th percentile per-packet one-way delay: 53.249 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.50 Mbit/s

95th percentile per-packet one-way delay: 50.577 ms

Loss rate: 0.00%

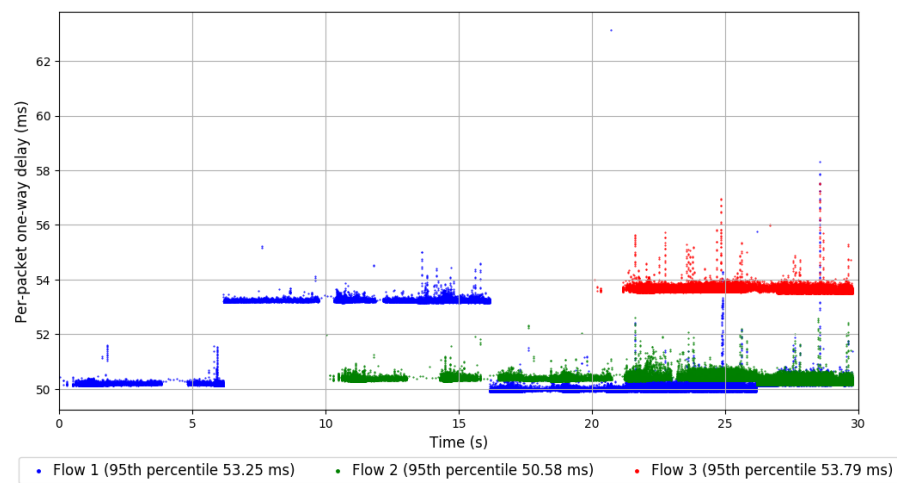
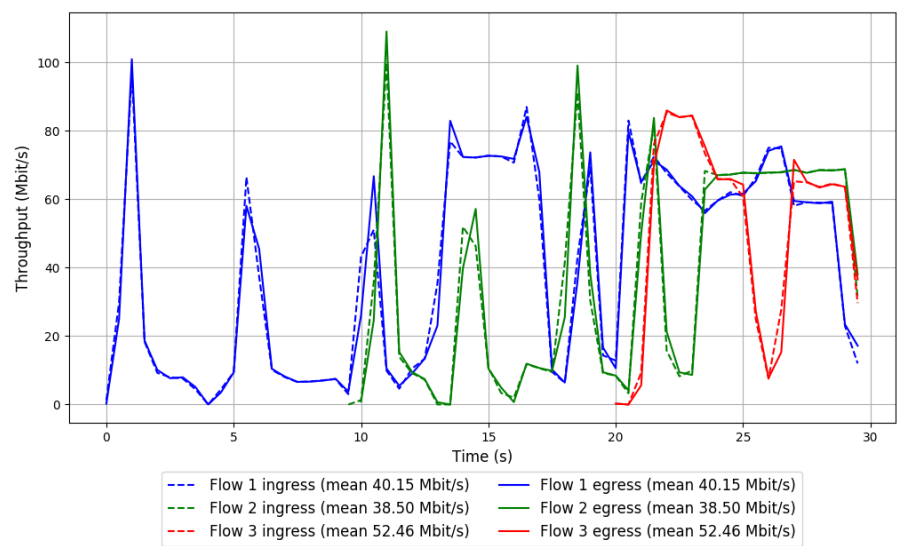
-- Flow 3:

Average throughput: 52.46 Mbit/s

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

Loss rate: 0.01%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-12 08:31:41

End at: 2017-12-12 08:32:11

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.18 Mbit/s

95th percentile per-packet one-way delay: 53.667 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 38.89 Mbit/s

95th percentile per-packet one-way delay: 53.644 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.62 Mbit/s

95th percentile per-packet one-way delay: 53.426 ms

Loss rate: 0.00%

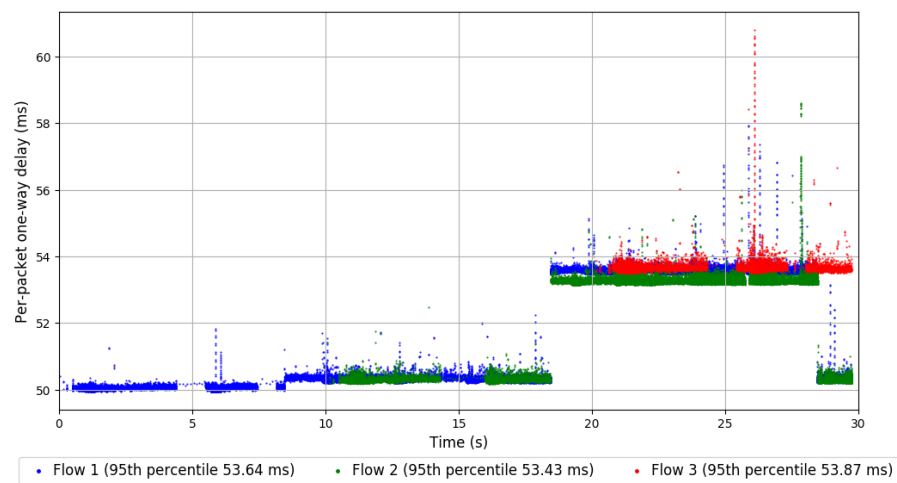
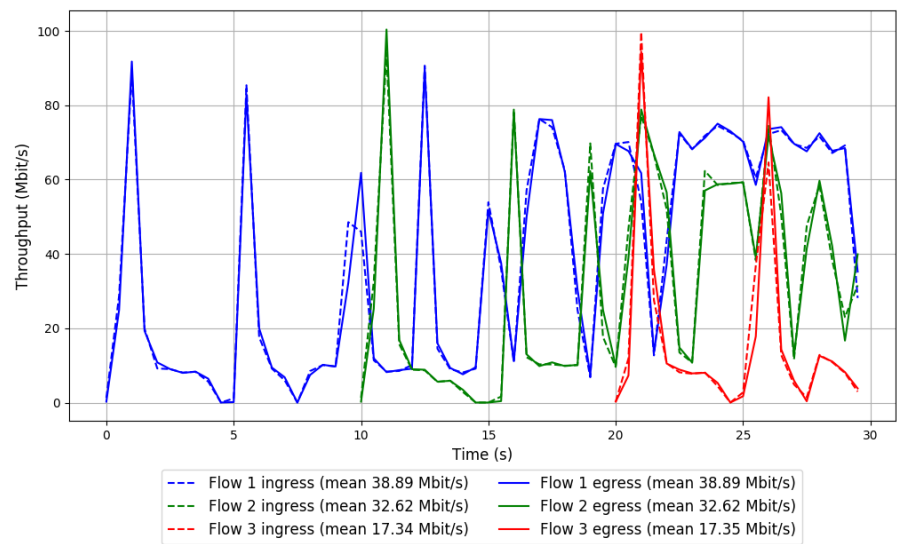
-- Flow 3:

Average throughput: 17.35 Mbit/s

95th percentile per-packet one-way delay: 53.867 ms

Loss rate: 0.01%

Run 9: Report of QUIC Cubic — Data Link

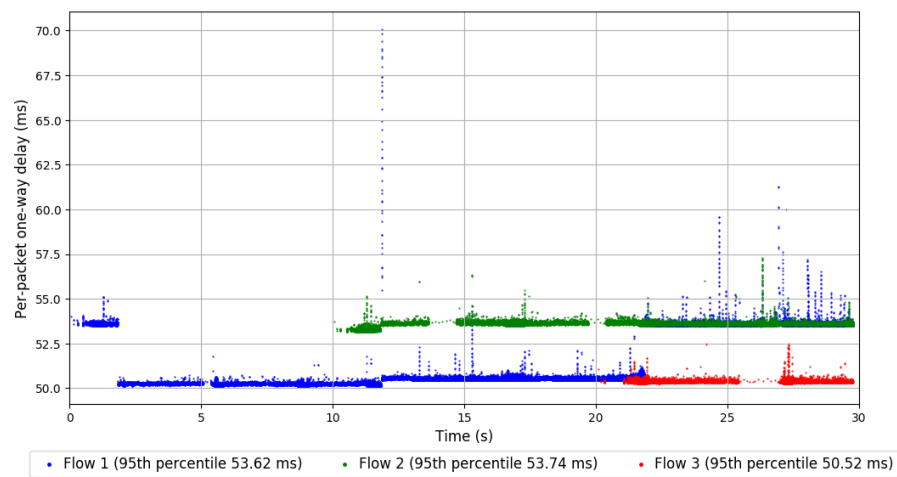
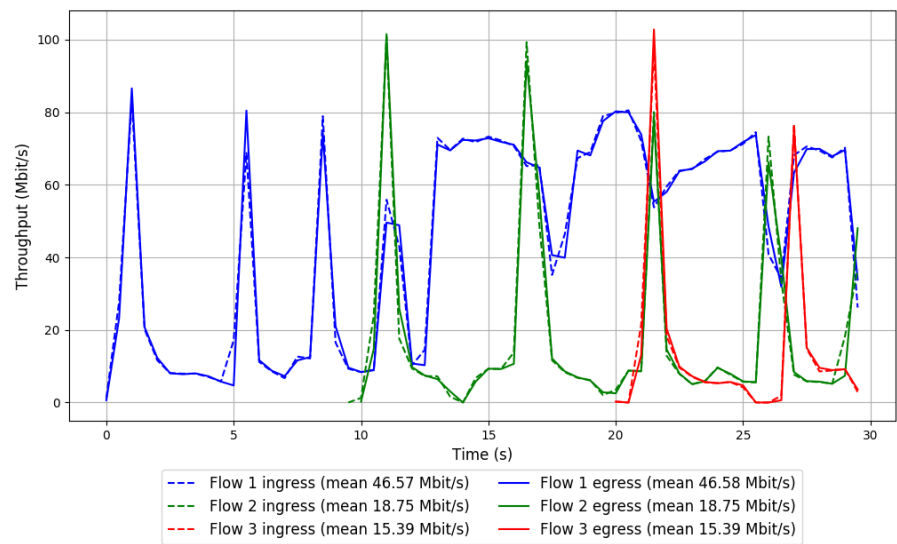


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-12 08:43:28
End at: 2017-12-12 08:43:58

# Below is generated by plot.py at 2017-12-12 10:38:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.03 Mbit/s
95th percentile per-packet one-way delay: 53.658 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.58 Mbit/s
95th percentile per-packet one-way delay: 53.621 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.75 Mbit/s
95th percentile per-packet one-way delay: 53.745 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.39 Mbit/s
95th percentile per-packet one-way delay: 50.517 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

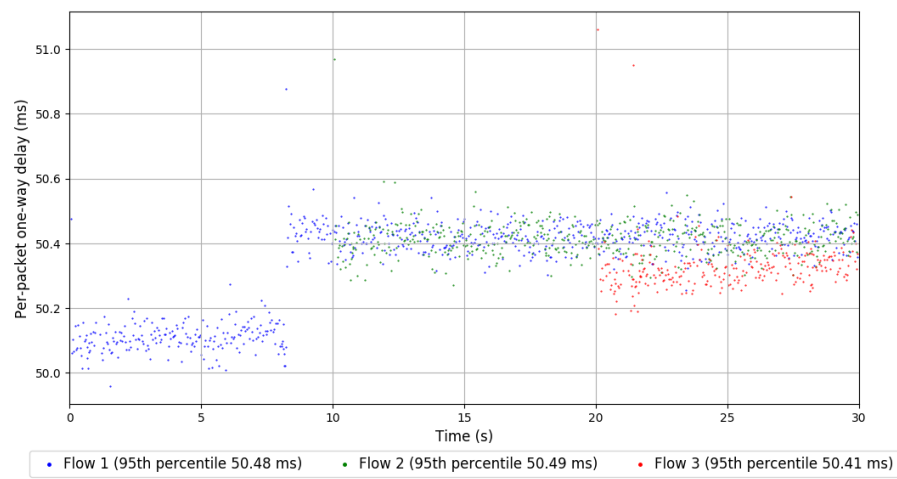
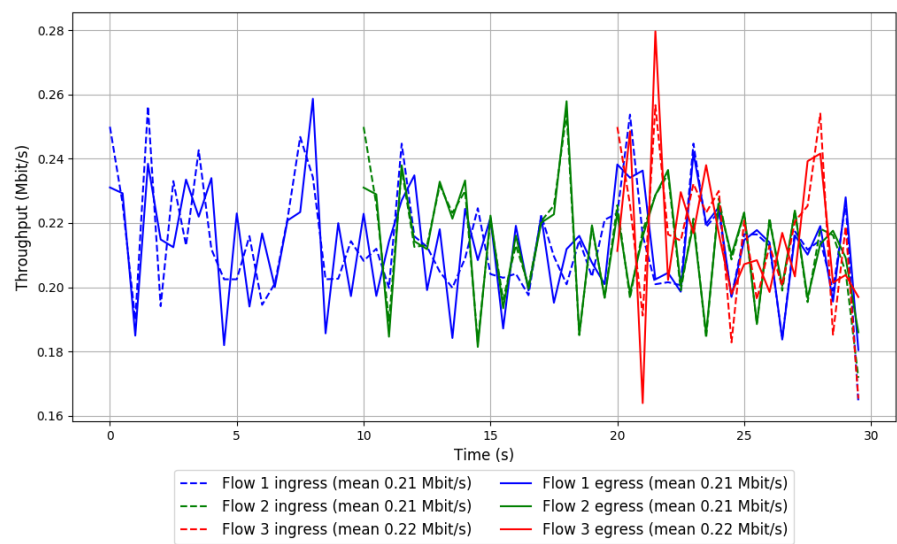


```
Run 1: Statistics of SCReAM

Start at: 2017-12-12 07:00:31
End at: 2017-12-12 07:01:01

# Below is generated by plot.py at 2017-12-12 10:38:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.480 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.479 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.491 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.406 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

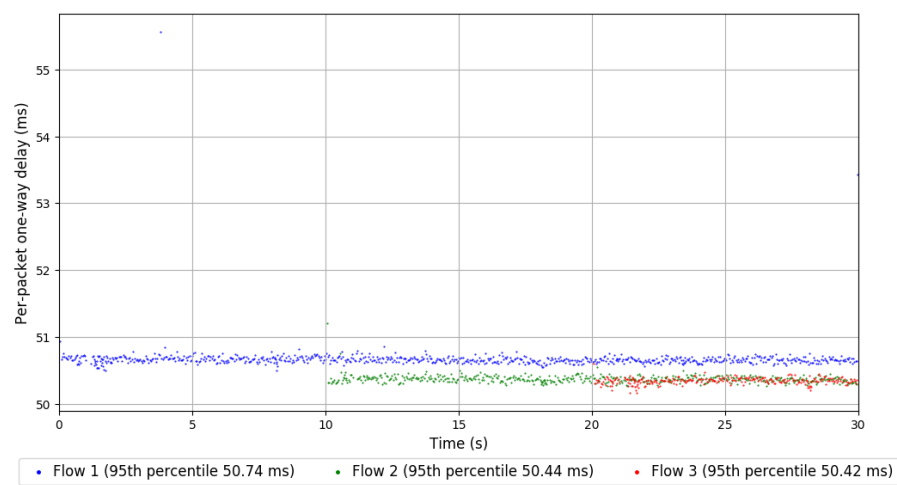
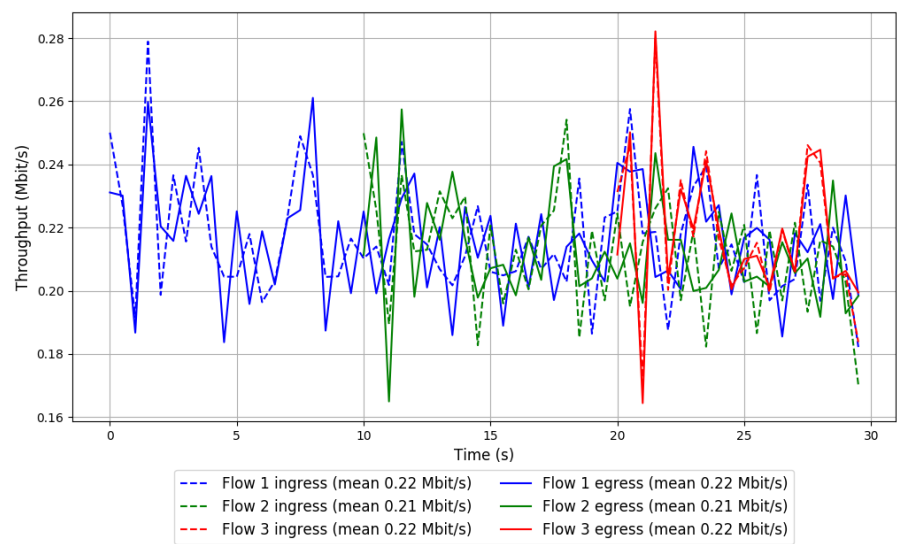


```
Run 2: Statistics of SReAM

Start at: 2017-12-12 07:12:50
End at: 2017-12-12 07:13:20

# Below is generated by plot.py at 2017-12-12 10:38:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.716 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.738 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.443 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.416 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-12 07:24:43

End at: 2017-12-12 07:25:13

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.821 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.241 ms

Loss rate: 0.00%

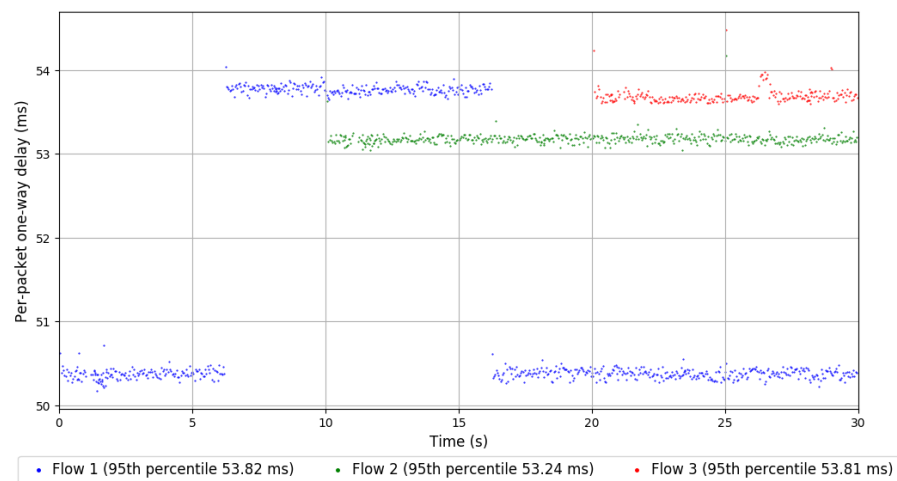
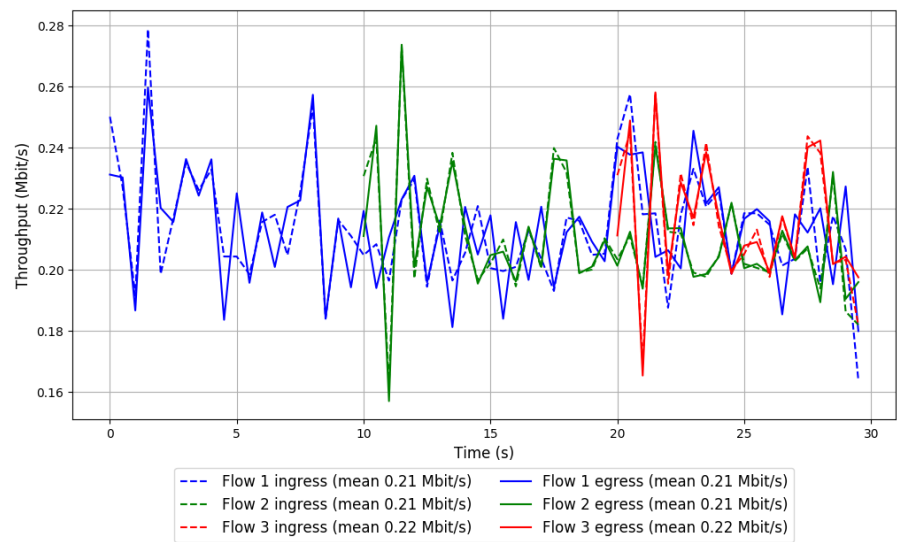
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

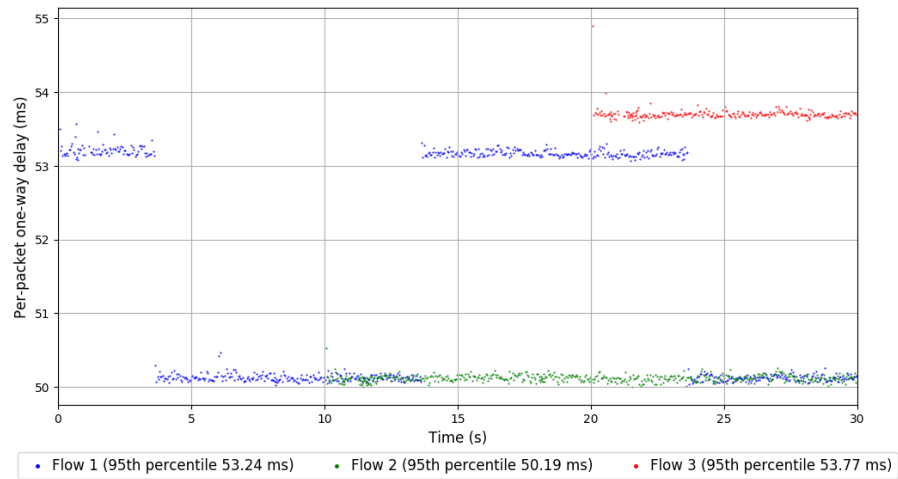
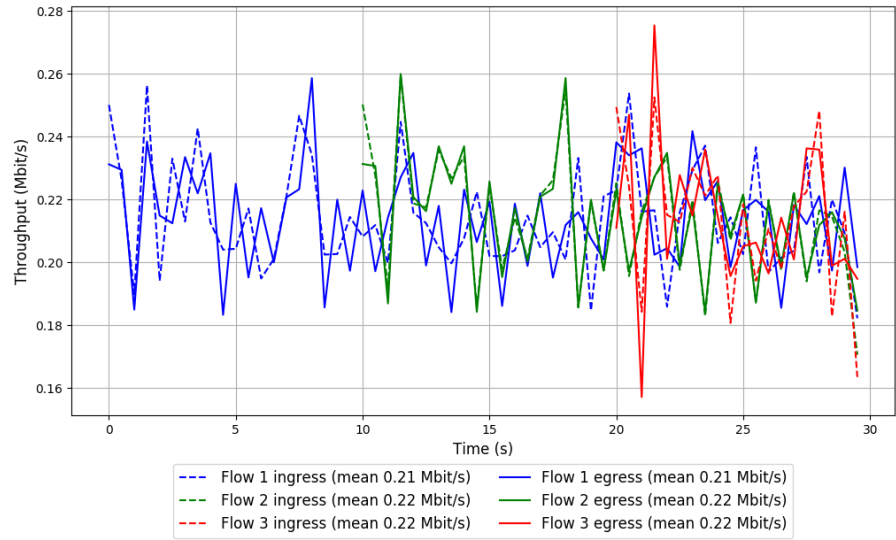


```
Run 4: Statistics of SCReAM

Start at: 2017-12-12 07:36:56
End at: 2017-12-12 07:37:26

# Below is generated by plot.py at 2017-12-12 10:38:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.711 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.239 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.192 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.771 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-12 07:49:17

End at: 2017-12-12 07:49:47

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.834 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.804 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.784 ms

Loss rate: 0.00%

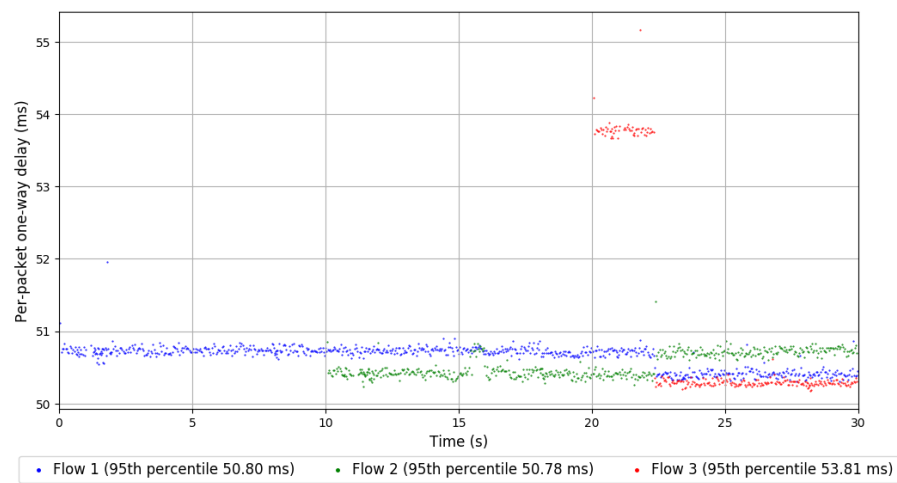
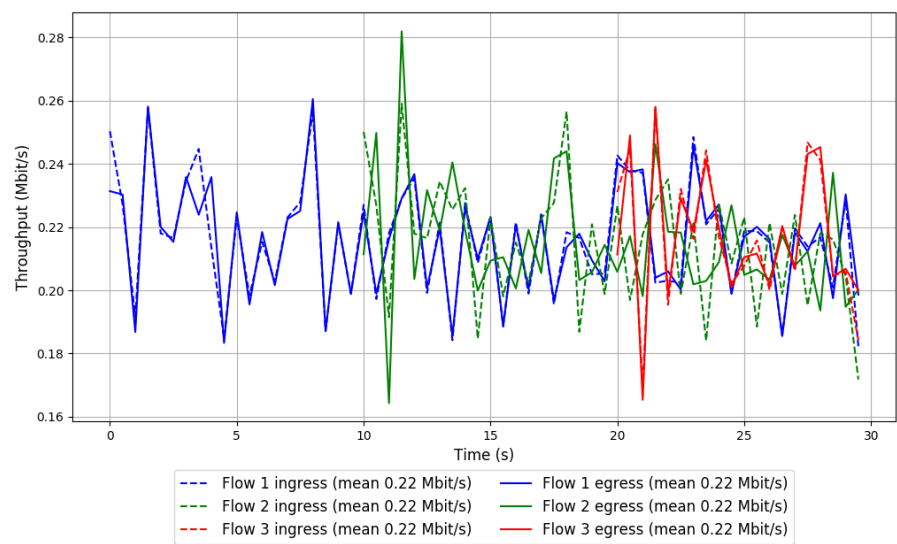
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.808 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

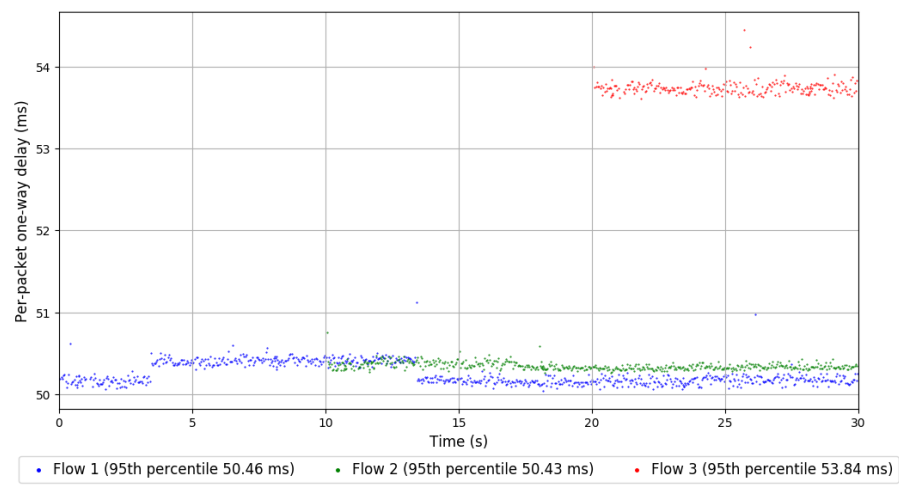
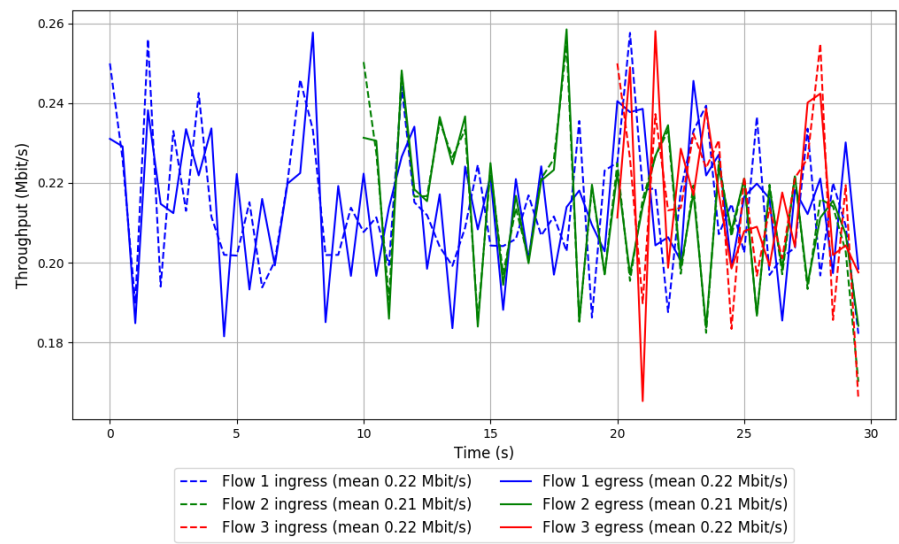


```
Run 6: Statistics of SCReAM

Start at: 2017-12-12 08:01:26
End at: 2017-12-12 08:01:56

# Below is generated by plot.py at 2017-12-12 10:38:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.769 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.456 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.430 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.838 ms
Loss rate: 0.00%
```

Run 6: Report of SReAM — Data Link

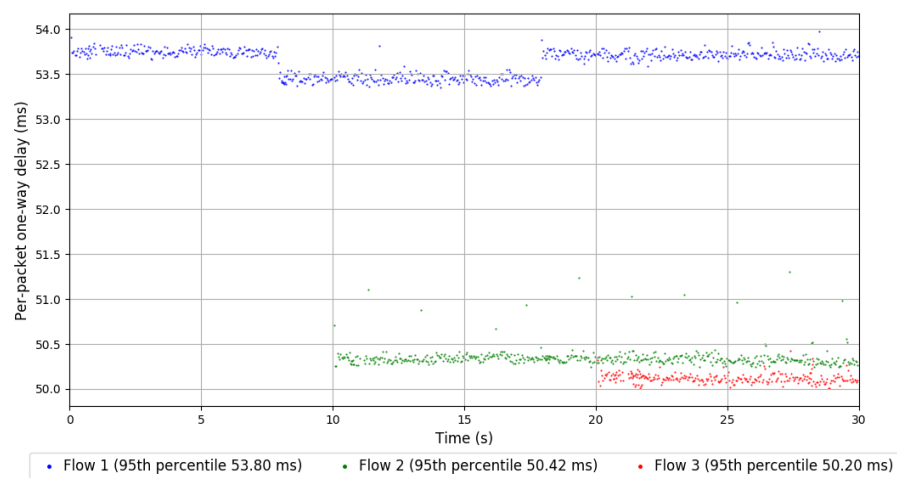
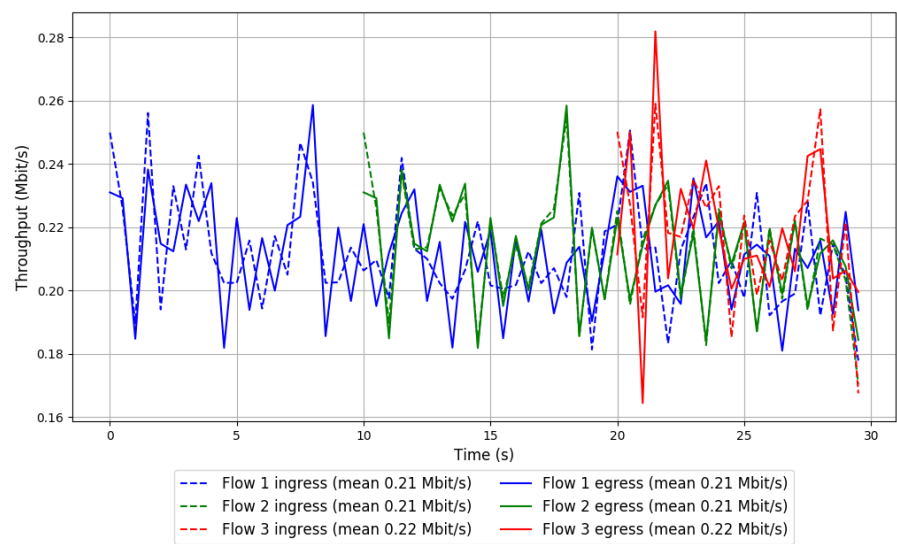


```
Run 7: Statistics of SReAM

Start at: 2017-12-12 08:13:52
End at: 2017-12-12 08:14:22

# Below is generated by plot.py at 2017-12-12 10:38:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.780 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.796 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.416 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.200 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-12-12 08:26:09

End at: 2017-12-12 08:26:39

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.799 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.00%

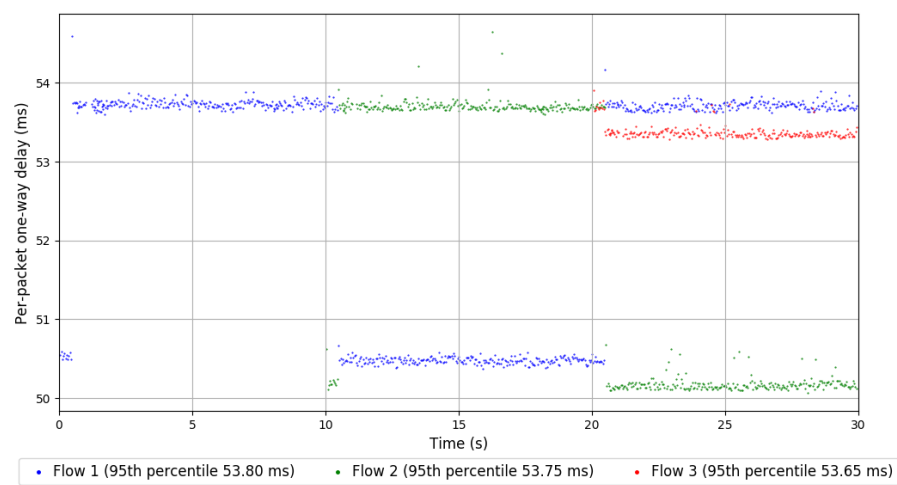
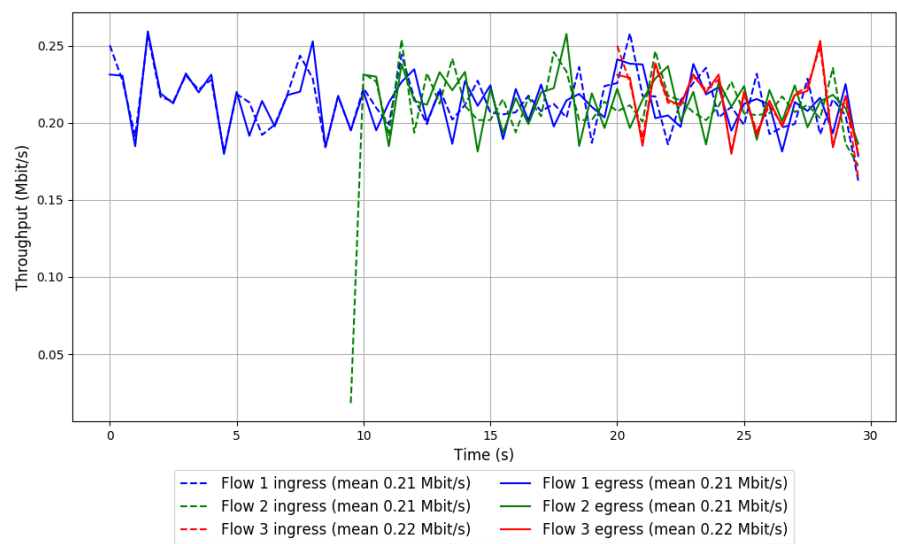
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.648 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-12 08:37:58

End at: 2017-12-12 08:38:28

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.762 ms

Loss rate: 0.00%

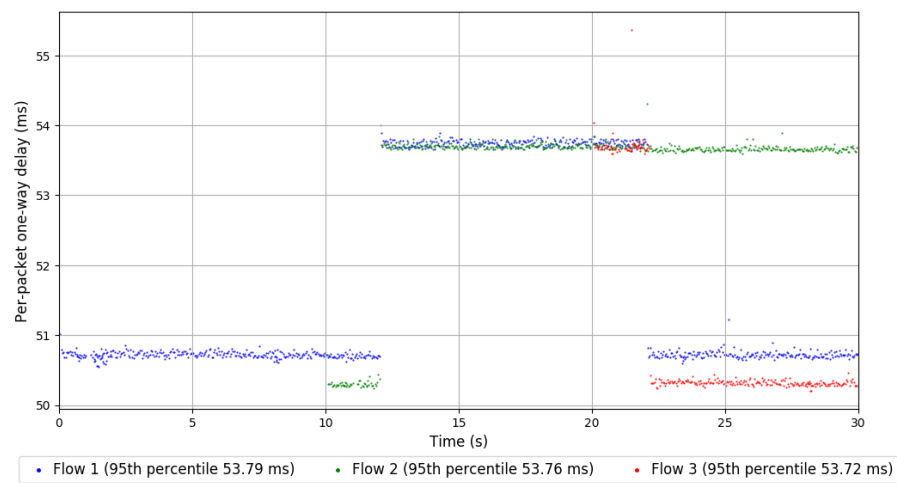
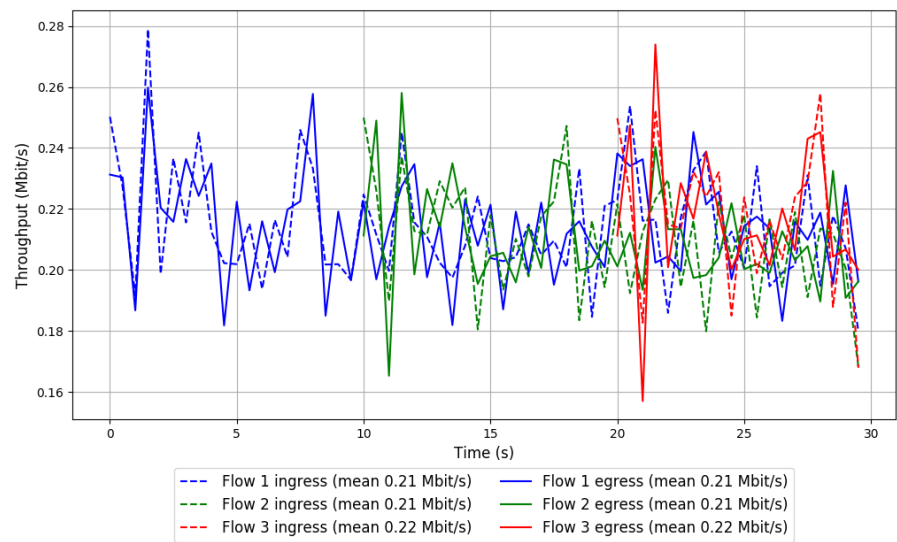
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

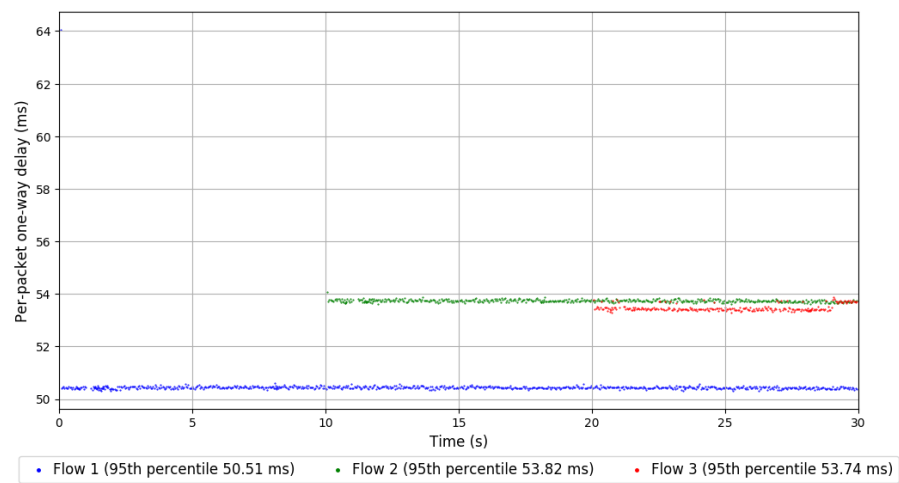
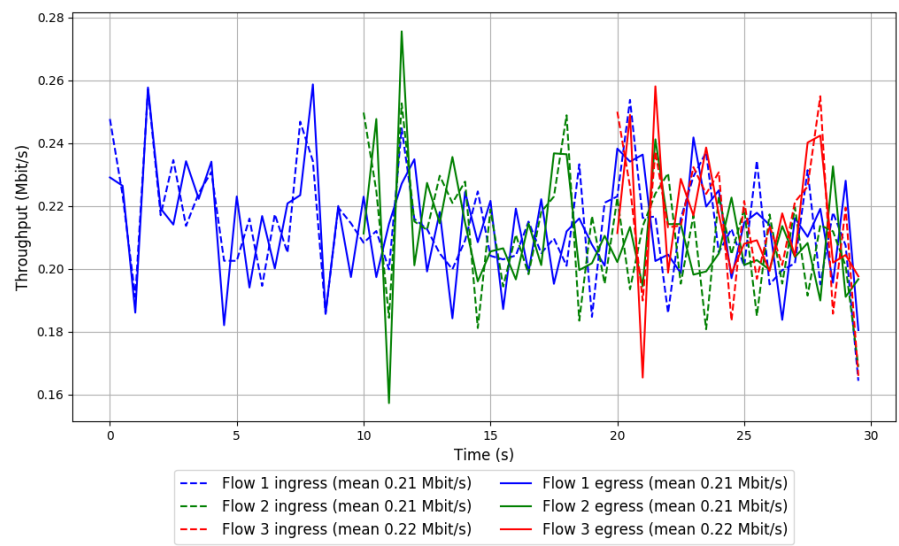


```
Run 10: Statistics of SReAM

Start at: 2017-12-12 08:50:11
End at: 2017-12-12 08:50:41

# Below is generated by plot.py at 2017-12-12 10:38:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.796 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.510 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.818 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.743 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

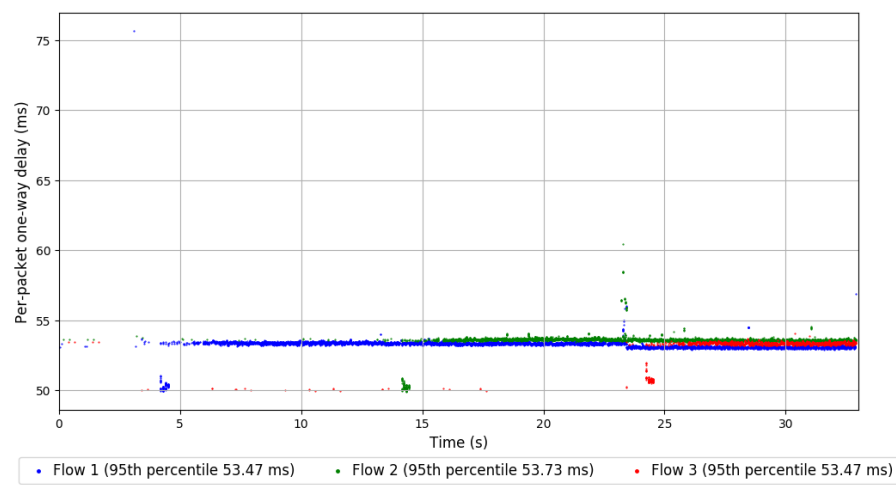
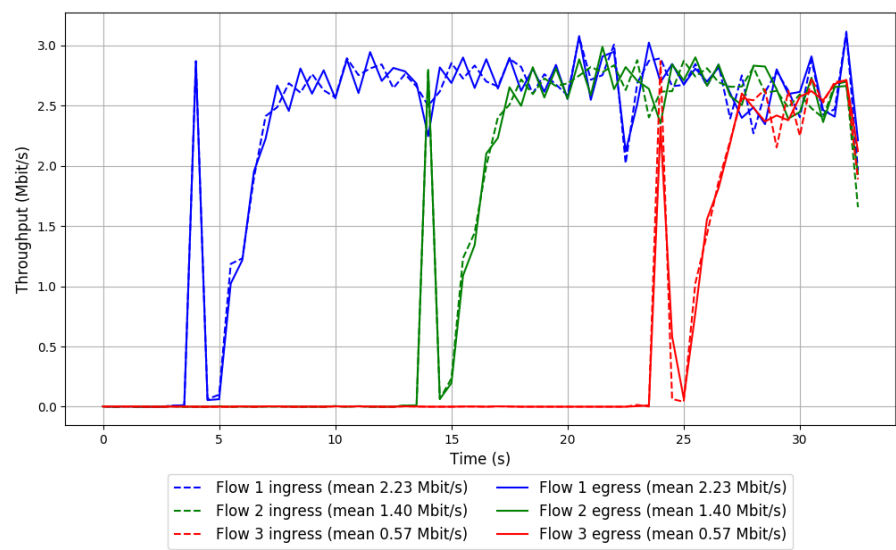


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-12 06:58:09
End at: 2017-12-12 06:58:39

# Below is generated by plot.py at 2017-12-12 10:38:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.19 Mbit/s
95th percentile per-packet one-way delay: 53.678 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 53.474 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 53.728 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 53.471 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-12 07:10:26

End at: 2017-12-12 07:10:56

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.23 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.411 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 53.684 ms

Loss rate: 0.00%

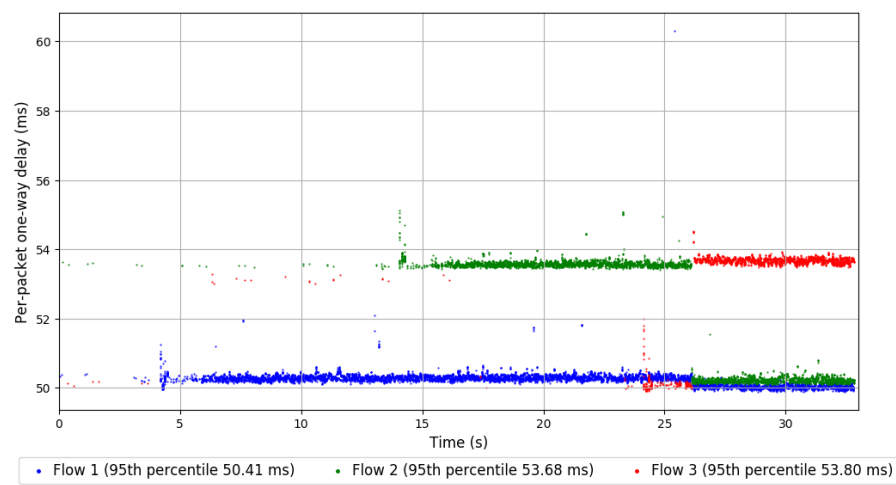
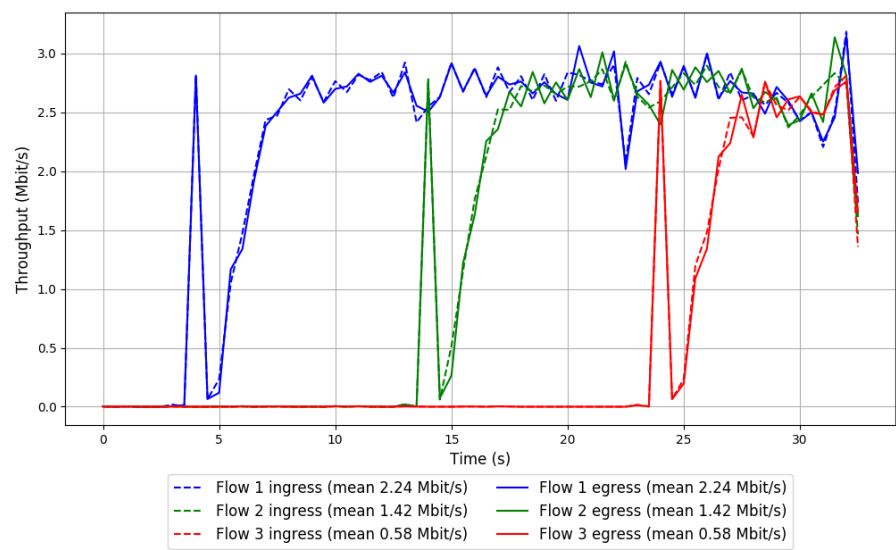
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 53.800 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-12 07:22:19

End at: 2017-12-12 07:22:49

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 53.773 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 53.246 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 50.766 ms

Loss rate: 0.00%

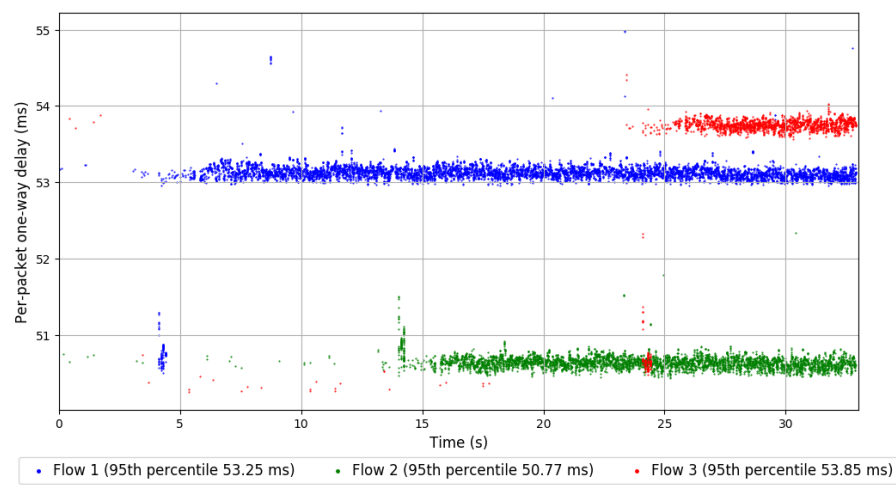
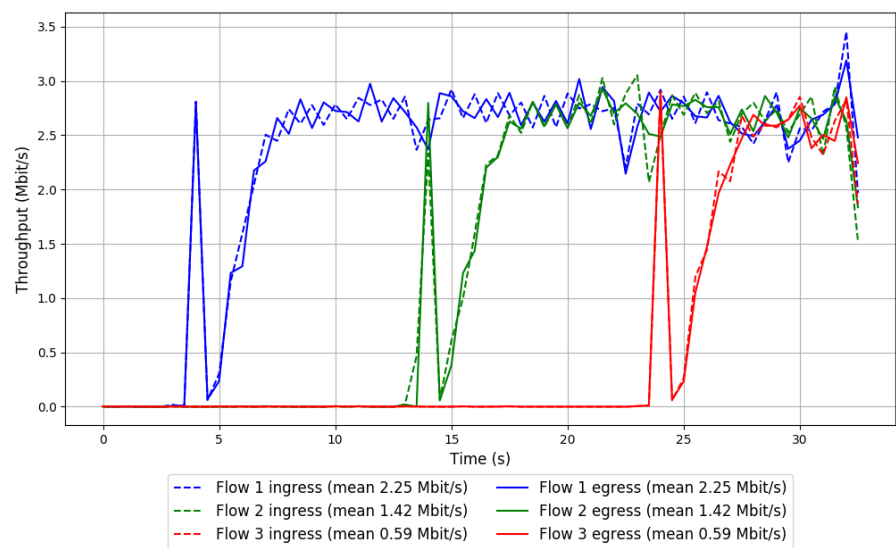
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 53.855 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-12 07:34:32

End at: 2017-12-12 07:35:02

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 53.231 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 53.141 ms

Loss rate: 0.00%

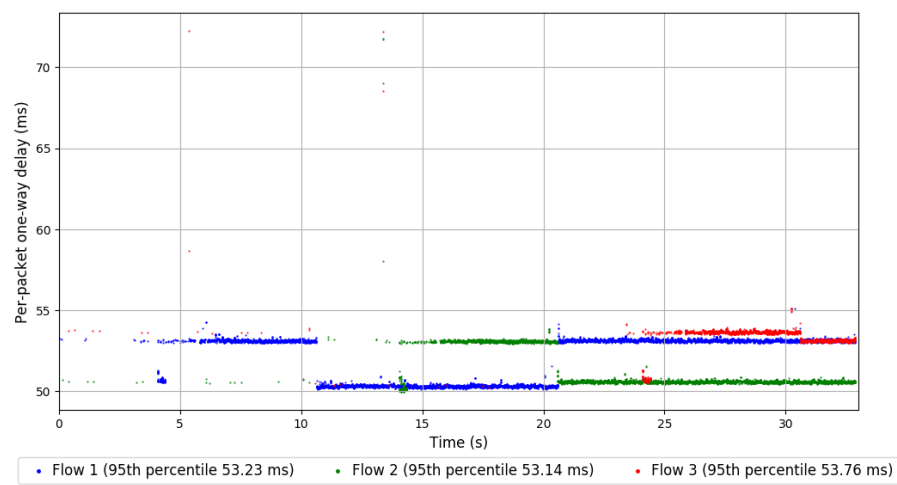
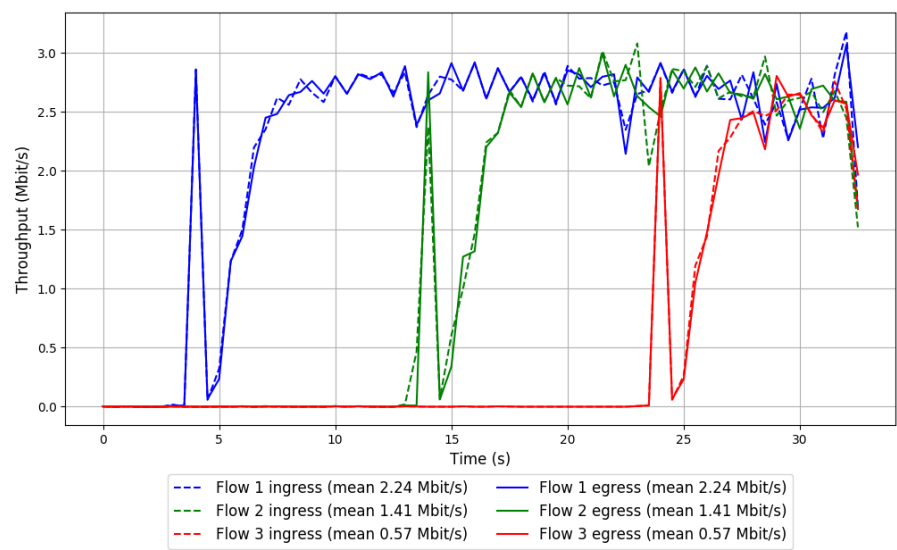
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 53.759 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-12 07:46:53

End at: 2017-12-12 07:47:23

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 53.763 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 53.799 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

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

Loss rate: 0.00%

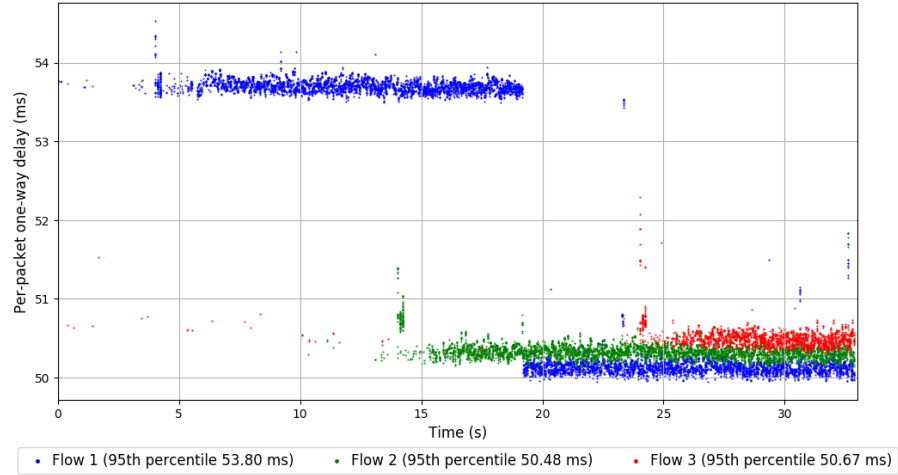
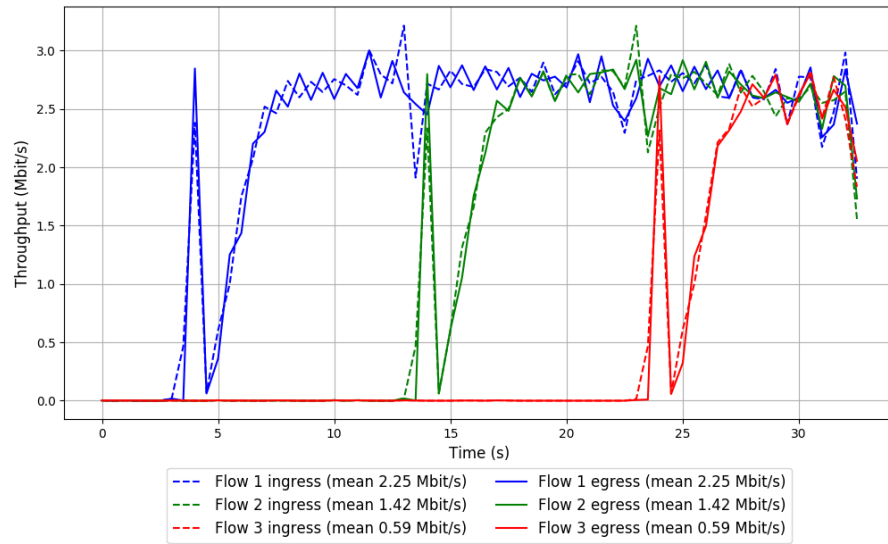
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 50.670 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-12 07:59:04

End at: 2017-12-12 07:59:34

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 53.771 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 53.797 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.497 ms

Loss rate: 0.00%

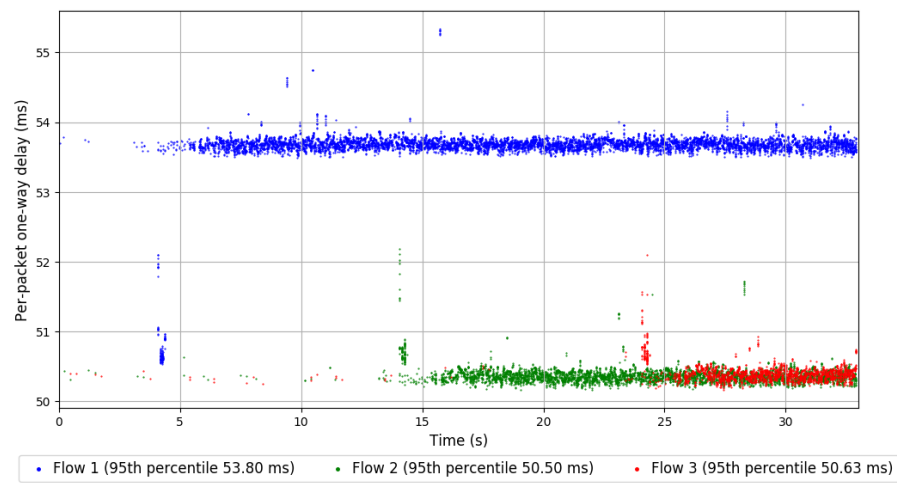
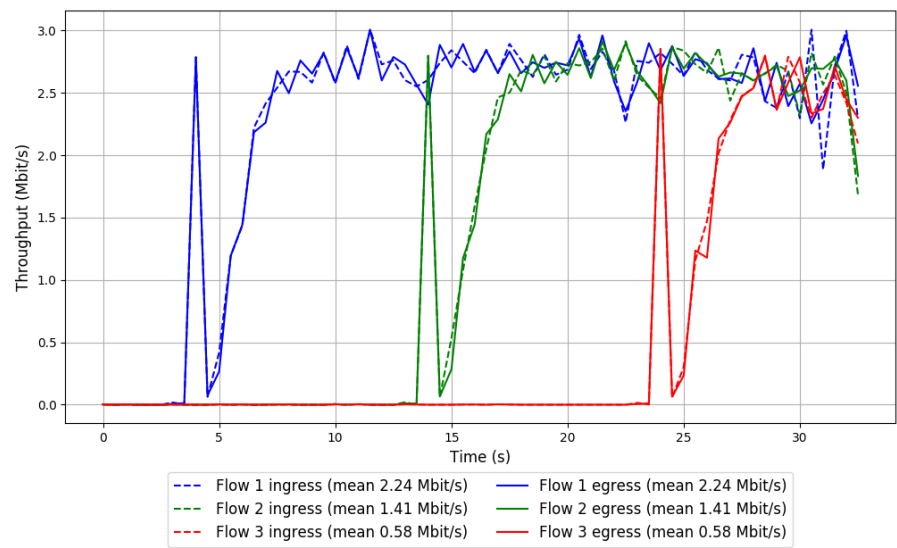
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 50.629 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-12 08:11:31

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

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.29 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.481 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 53.808 ms

Loss rate: 0.00%

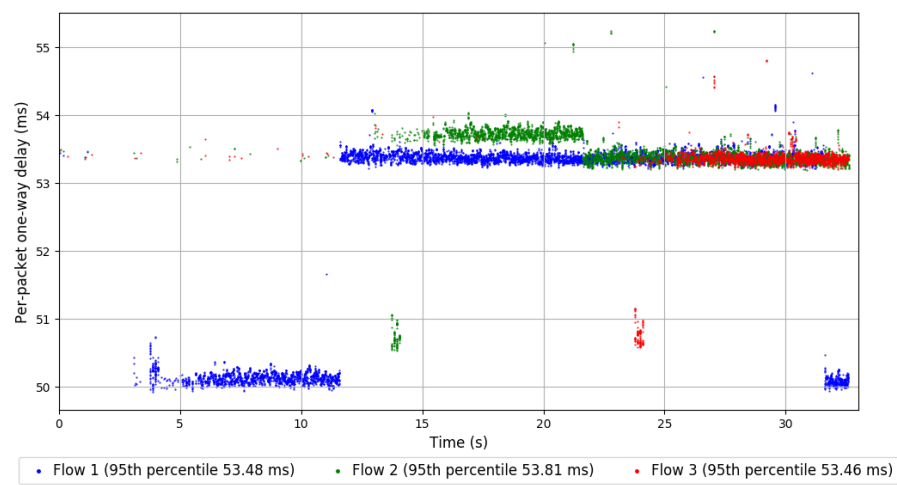
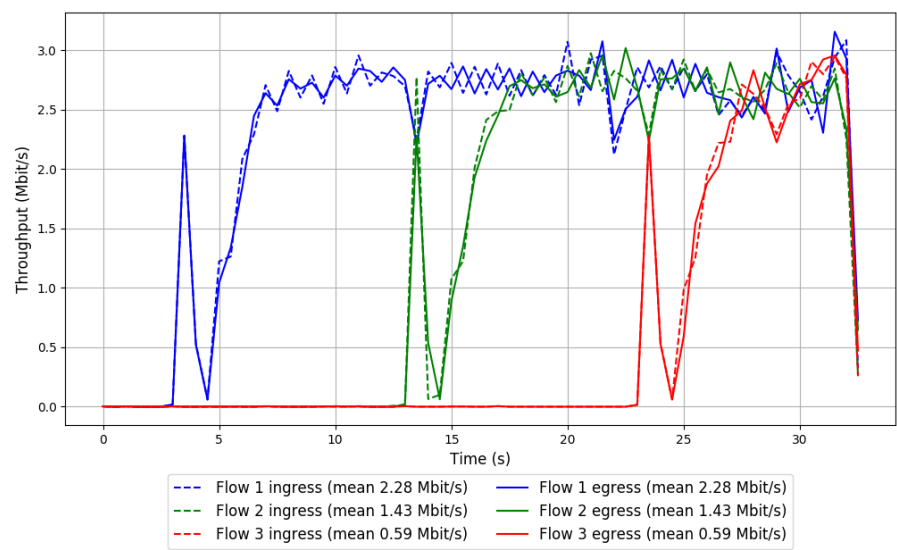
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 53.463 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-12 08:23:49

End at: 2017-12-12 08:24:19

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 53.469 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.455 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 50.862 ms

Loss rate: 0.00%

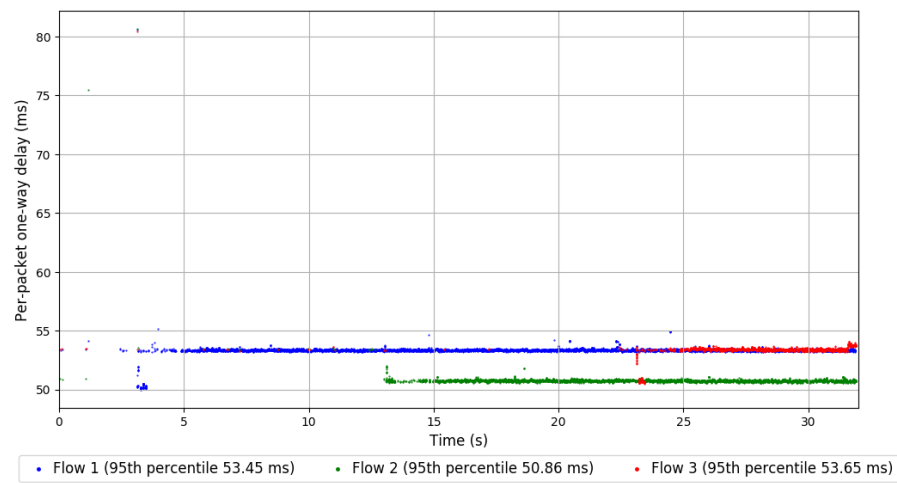
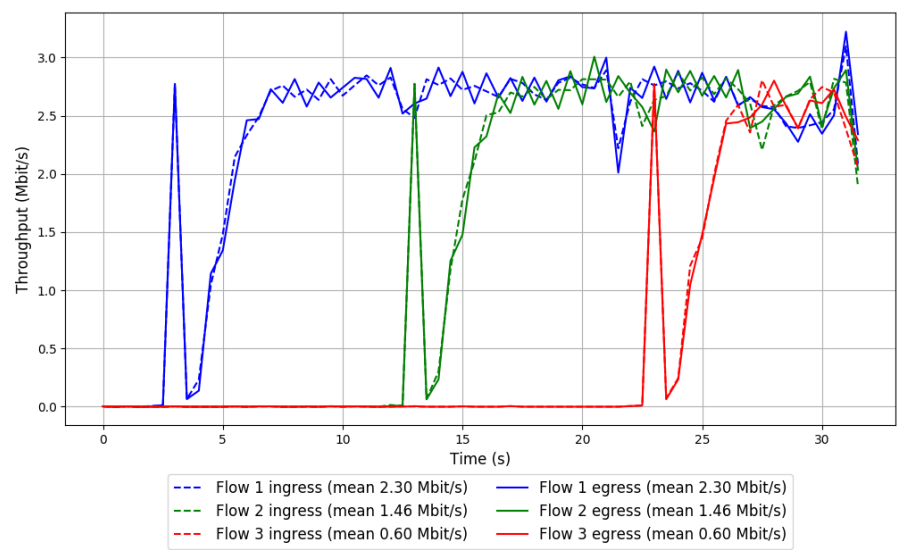
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 53.653 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-12 08:35:34

End at: 2017-12-12 08:36:04

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 53.754 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 53.334 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.40 Mbit/s

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

Loss rate: 0.00%

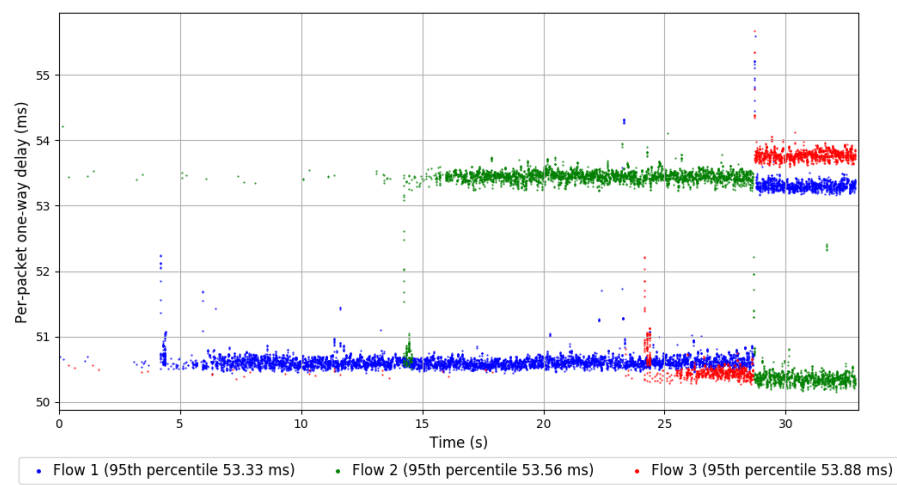
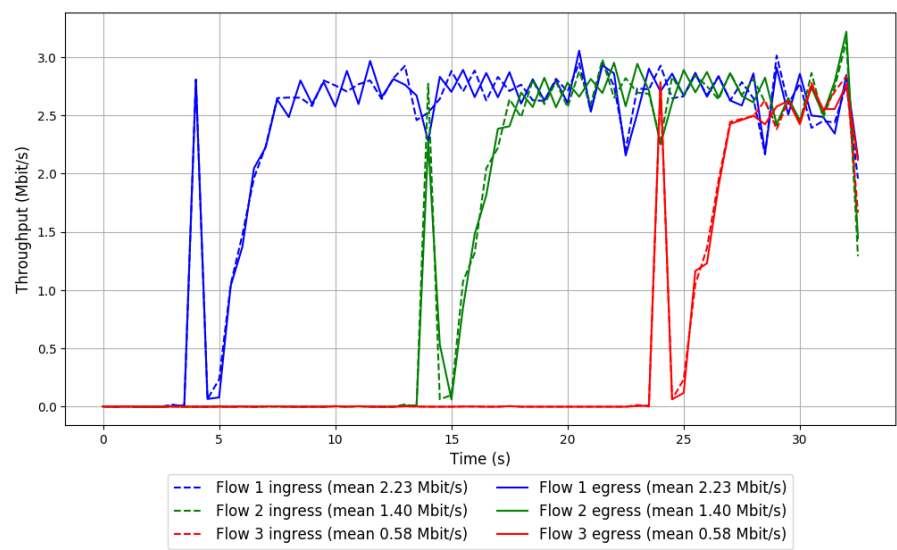
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 53.879 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-12 08:47:45

End at: 2017-12-12 08:48:15

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.19 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.636 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 53.800 ms

Loss rate: 0.00%

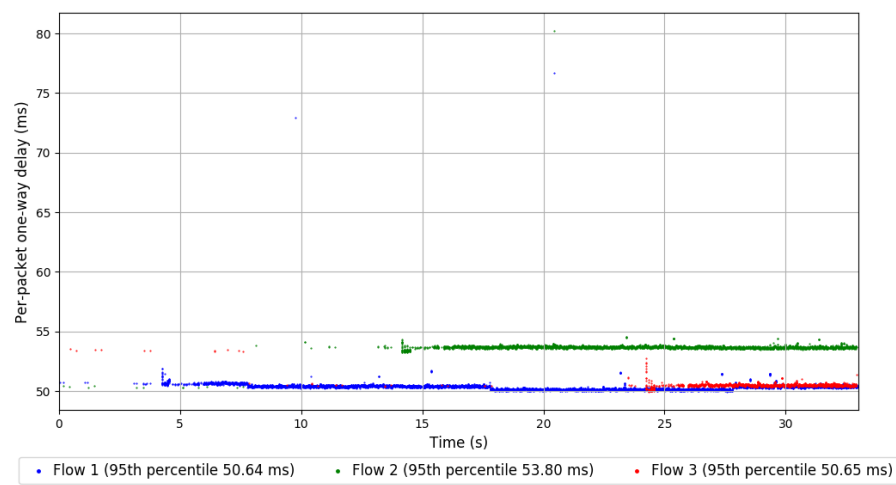
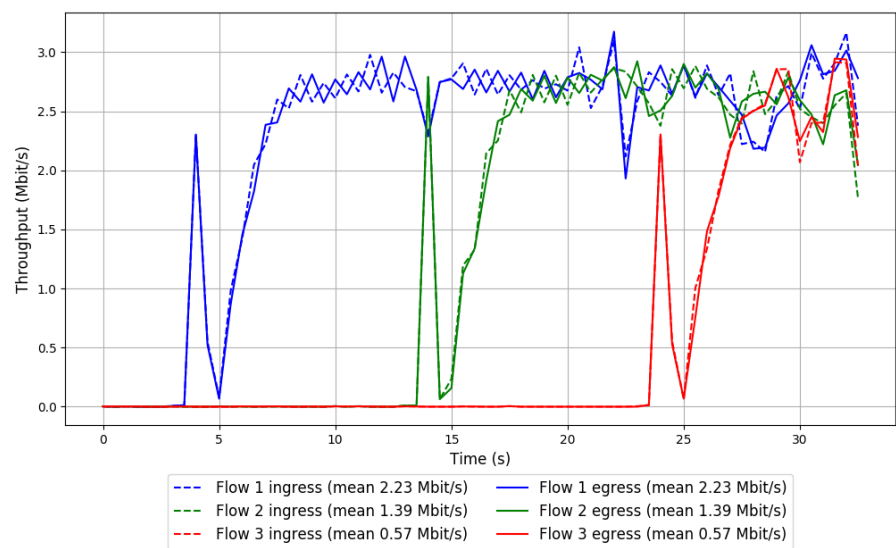
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 50.653 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-12 06:59:51

End at: 2017-12-12 07:00:21

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.49 Mbit/s

95th percentile per-packet one-way delay: 51.445 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 51.446 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 51.461 ms

Loss rate: 0.00%

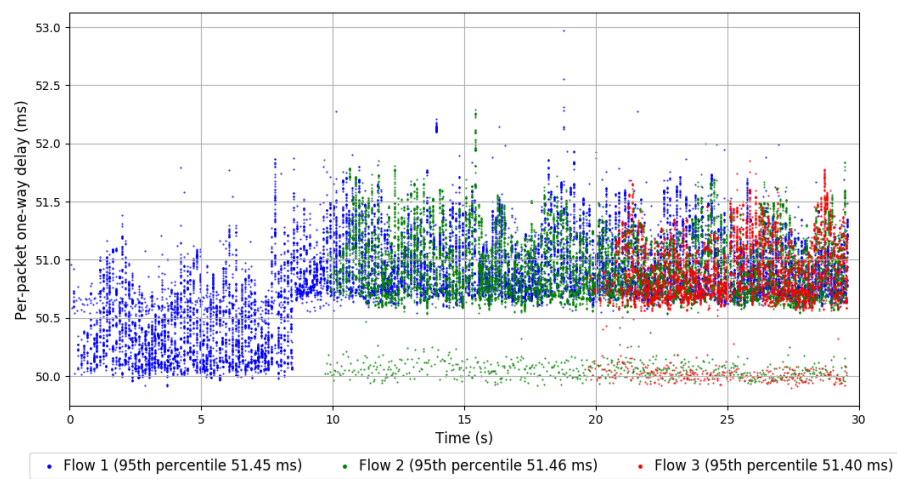
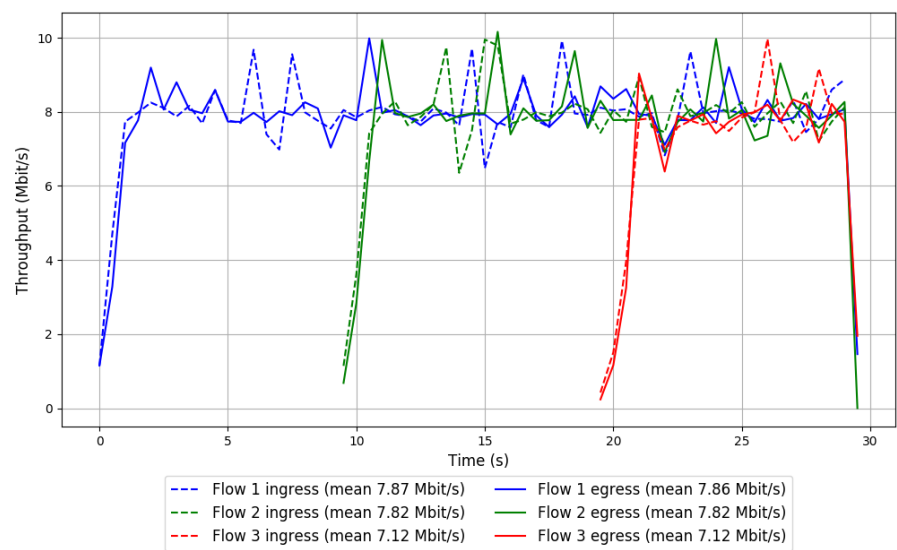
-- Flow 3:

Average throughput: 7.12 Mbit/s

95th percentile per-packet one-way delay: 51.398 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-12 07:12:09

End at: 2017-12-12 07:12:39

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.62 Mbit/s

95th percentile per-packet one-way delay: 51.347 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 51.333 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 51.429 ms

Loss rate: 0.00%

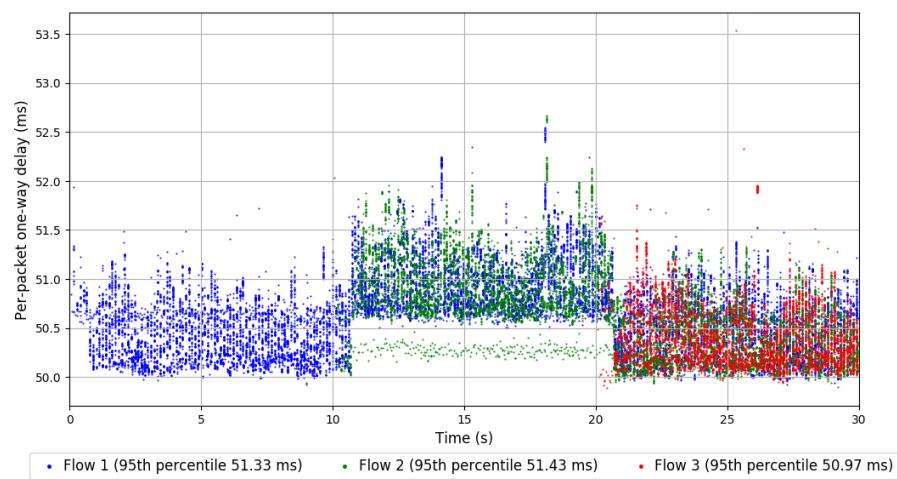
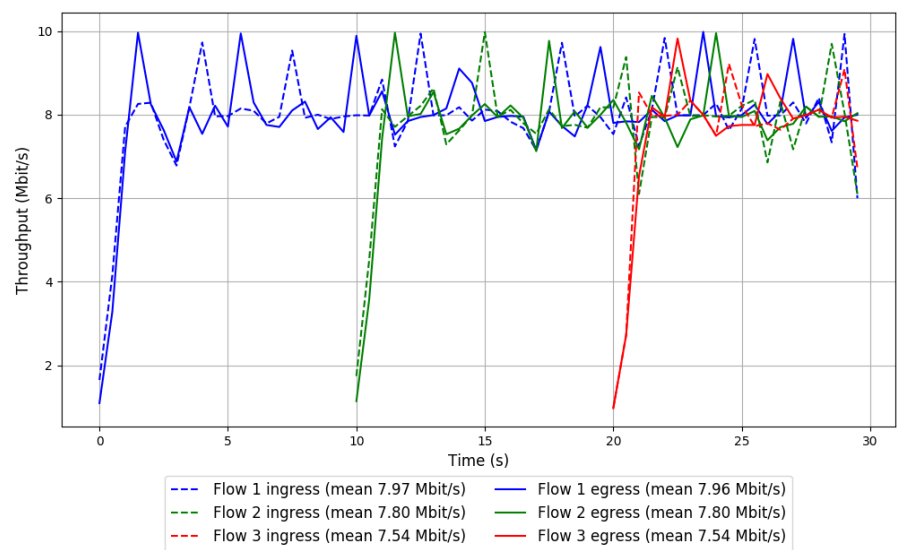
-- Flow 3:

Average throughput: 7.54 Mbit/s

95th percentile per-packet one-way delay: 50.971 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-12 07:24:03

End at: 2017-12-12 07:24:33

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.63 Mbit/s

95th percentile per-packet one-way delay: 54.594 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 54.550 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 54.701 ms

Loss rate: 0.00%

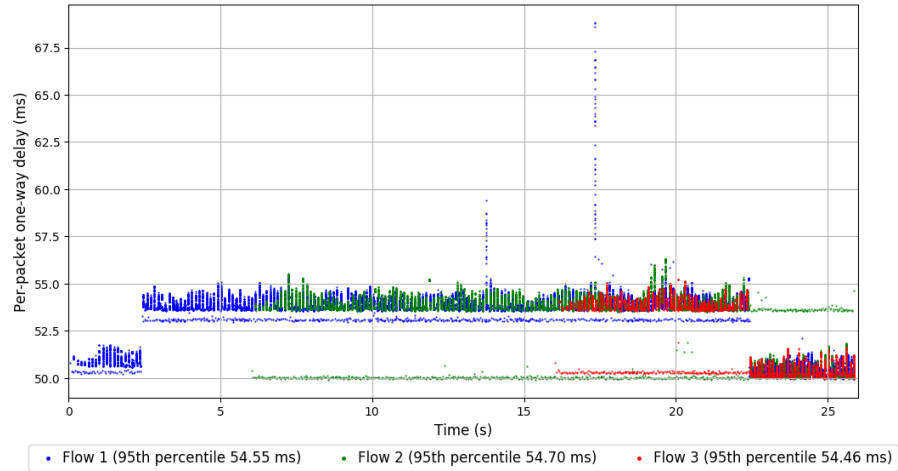
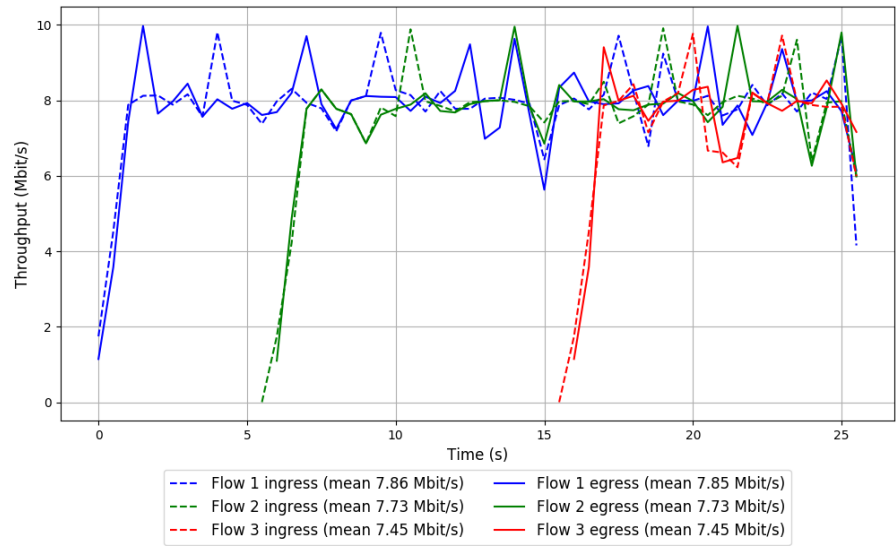
-- Flow 3:

Average throughput: 7.45 Mbit/s

95th percentile per-packet one-way delay: 54.459 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-12 07:36:15

End at: 2017-12-12 07:36:45

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.58 Mbit/s

95th percentile per-packet one-way delay: 51.483 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 51.446 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 51.556 ms

Loss rate: 0.00%

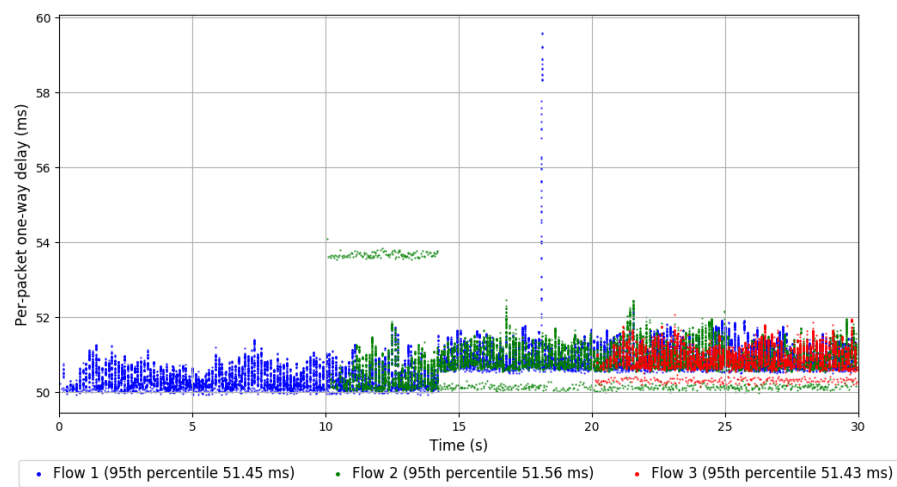
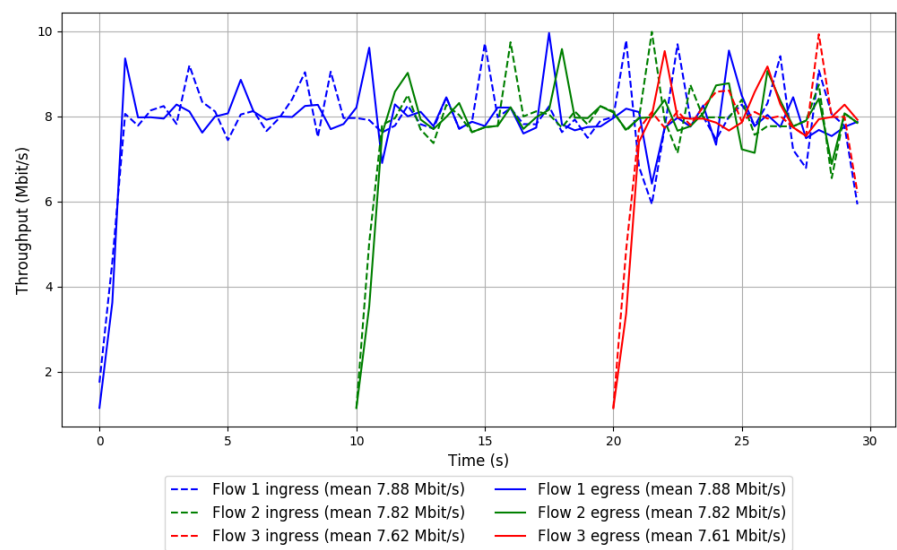
-- Flow 3:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 51.432 ms

Loss rate: 0.05%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-12 07:48:37

End at: 2017-12-12 07:49:07

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.52 Mbit/s

95th percentile per-packet one-way delay: 51.544 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 7.98 Mbit/s

95th percentile per-packet one-way delay: 51.604 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 51.514 ms

Loss rate: 0.02%

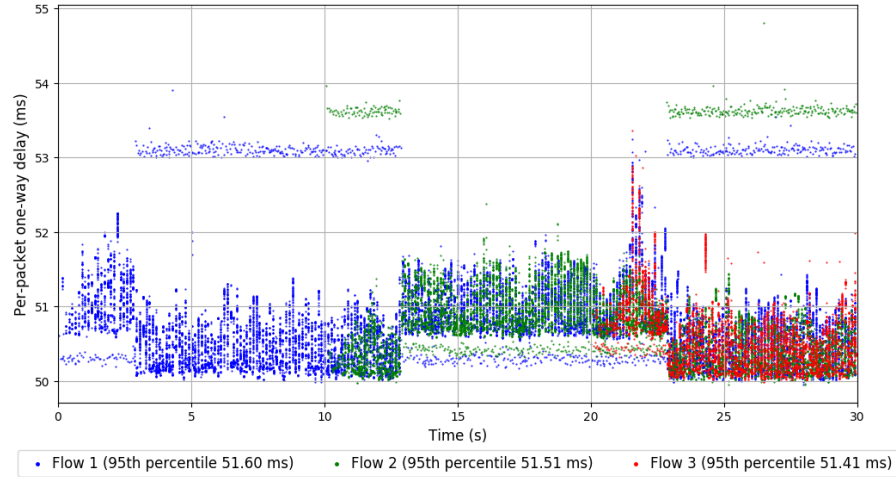
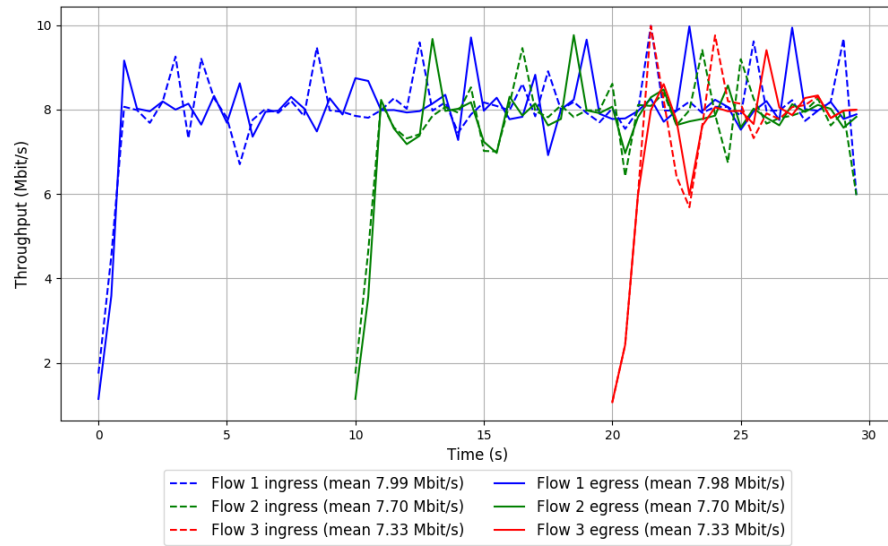
-- Flow 3:

Average throughput: 7.33 Mbit/s

95th percentile per-packet one-way delay: 51.405 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-12 08:00:46

End at: 2017-12-12 08:01:16

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.52 Mbit/s

95th percentile per-packet one-way delay: 53.983 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 53.839 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 53.958 ms

Loss rate: 0.00%

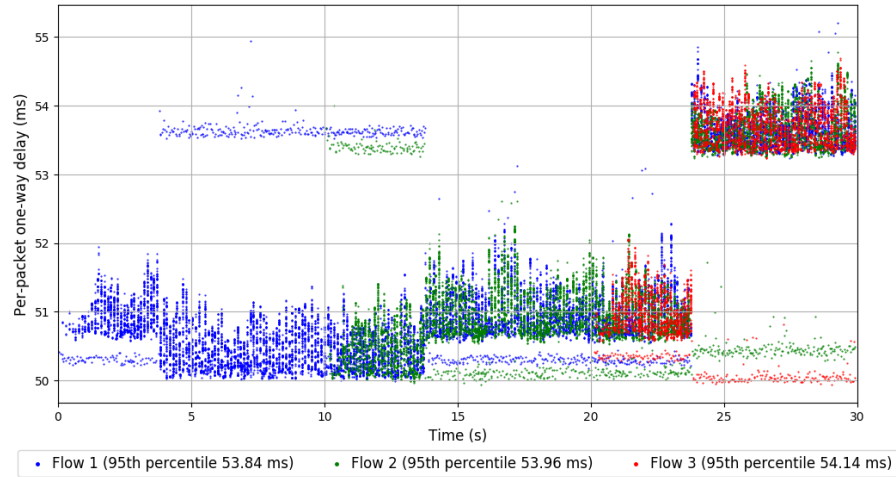
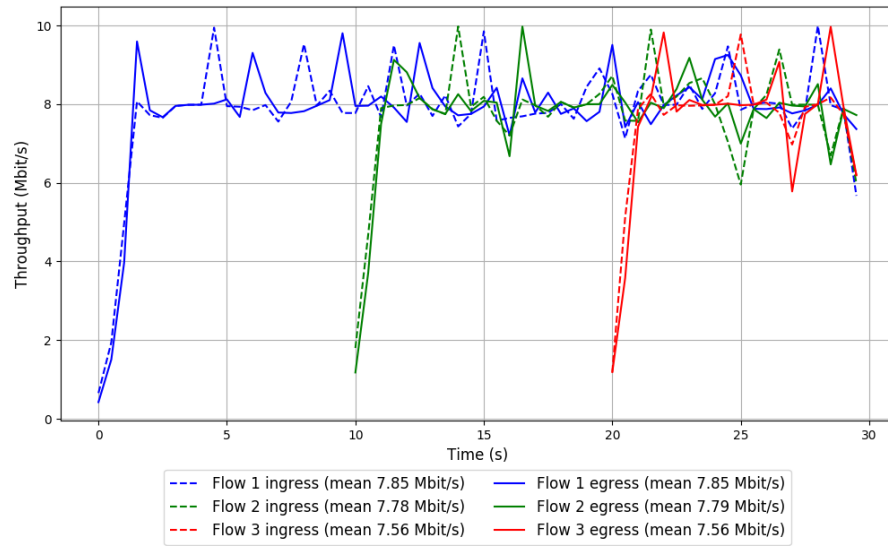
-- Flow 3:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 54.144 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-12 08:13:11

End at: 2017-12-12 08:13:41

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.59 Mbit/s

95th percentile per-packet one-way delay: 54.142 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 54.085 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 54.183 ms

Loss rate: 0.00%

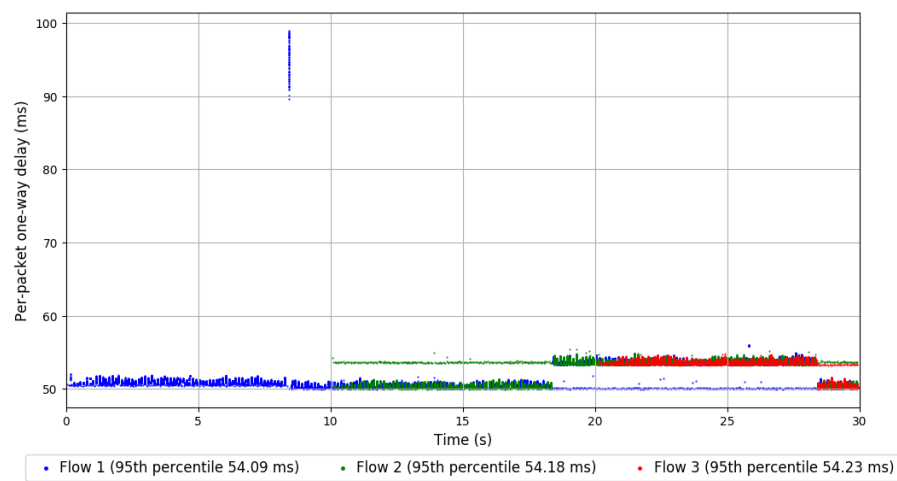
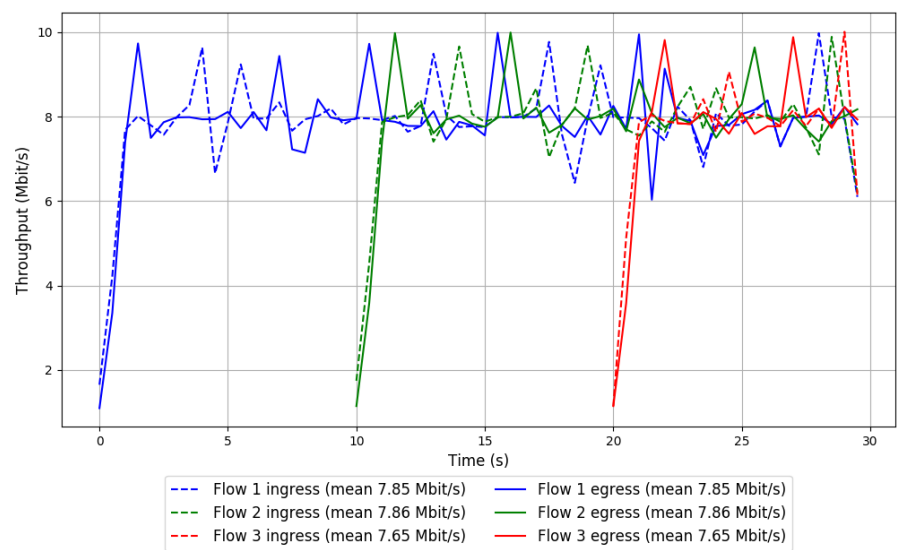
-- Flow 3:

Average throughput: 7.65 Mbit/s

95th percentile per-packet one-way delay: 54.226 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-12 08:25:29

End at: 2017-12-12 08:25:59

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.45 Mbit/s

95th percentile per-packet one-way delay: 51.478 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 51.432 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 7.66 Mbit/s

95th percentile per-packet one-way delay: 51.344 ms

Loss rate: 0.00%

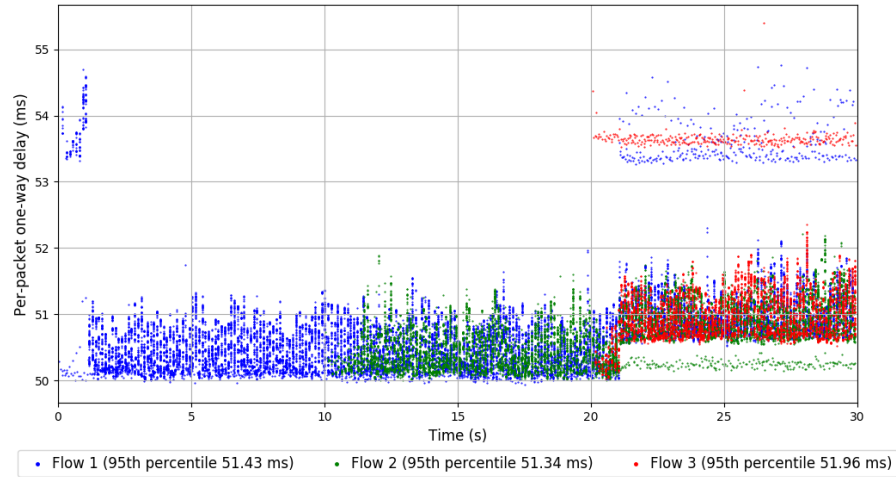
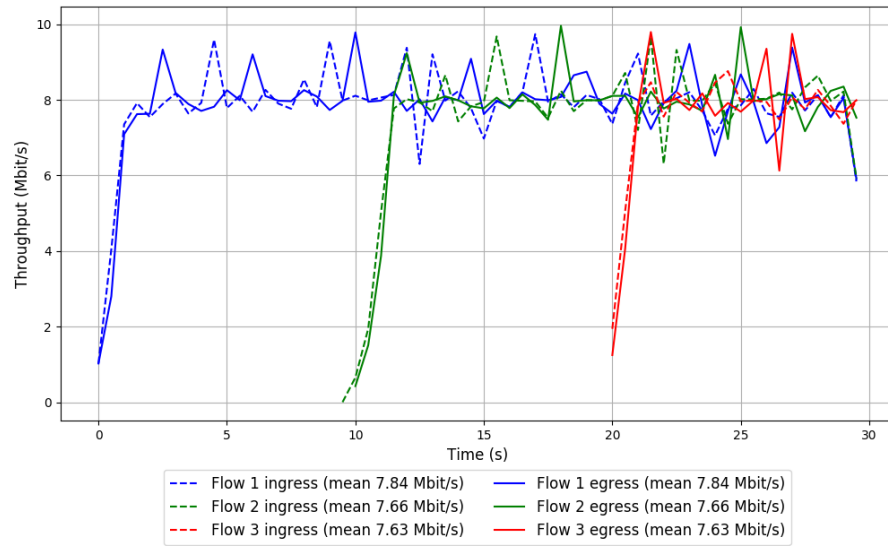
-- Flow 3:

Average throughput: 7.63 Mbit/s

95th percentile per-packet one-way delay: 51.963 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link

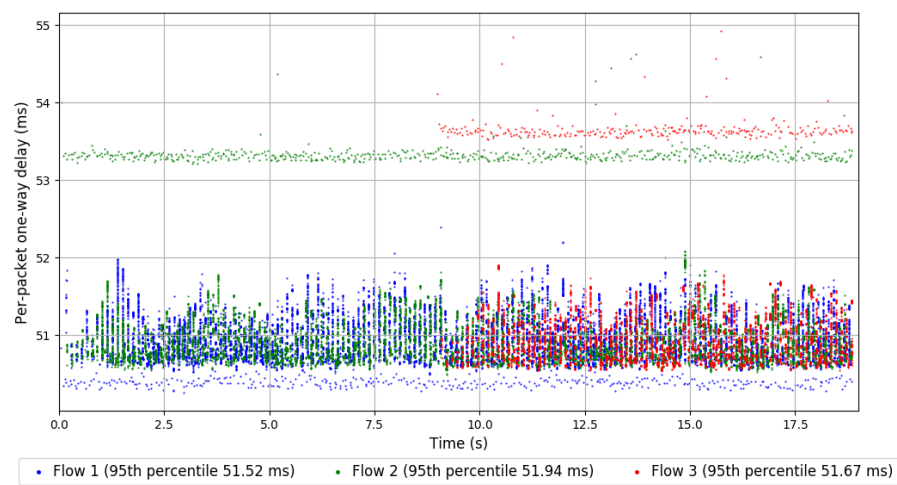
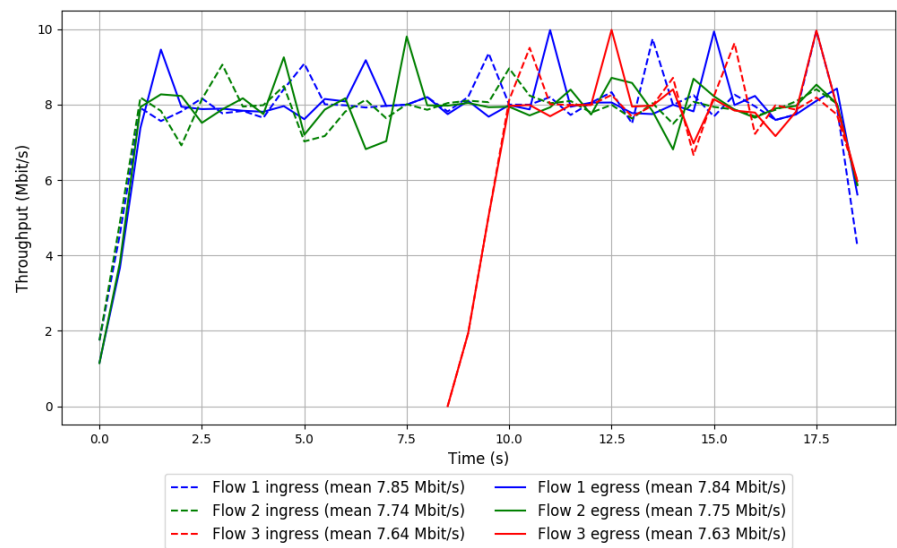


Run 9: Statistics of Sprout

Start at: 2017-12-12 08:37:17

End at: 2017-12-12 08:37:47

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-12 08:49:30

End at: 2017-12-12 08:50:00

Below is generated by plot.py at 2017-12-12 10:38:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.45 Mbit/s

95th percentile per-packet one-way delay: 54.041 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 7.89 Mbit/s

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

Loss rate: 0.16%

-- Flow 2:

Average throughput: 7.59 Mbit/s

95th percentile per-packet one-way delay: 54.090 ms

Loss rate: 0.66%

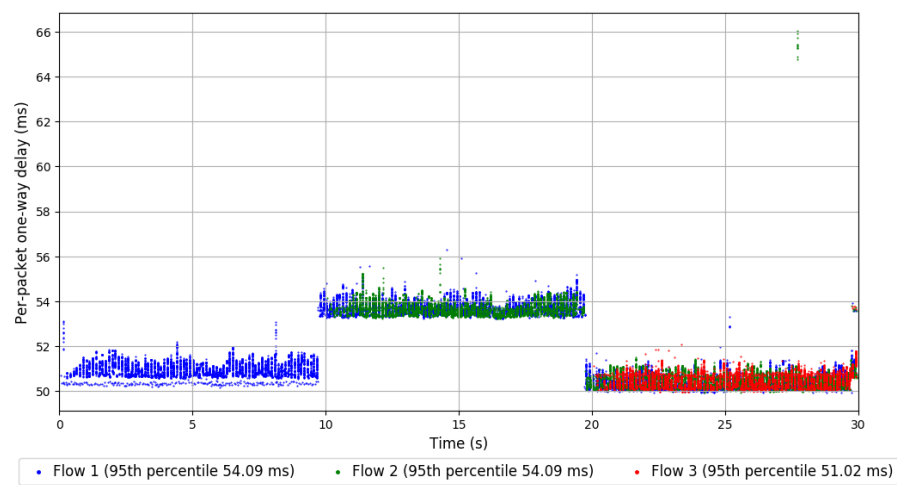
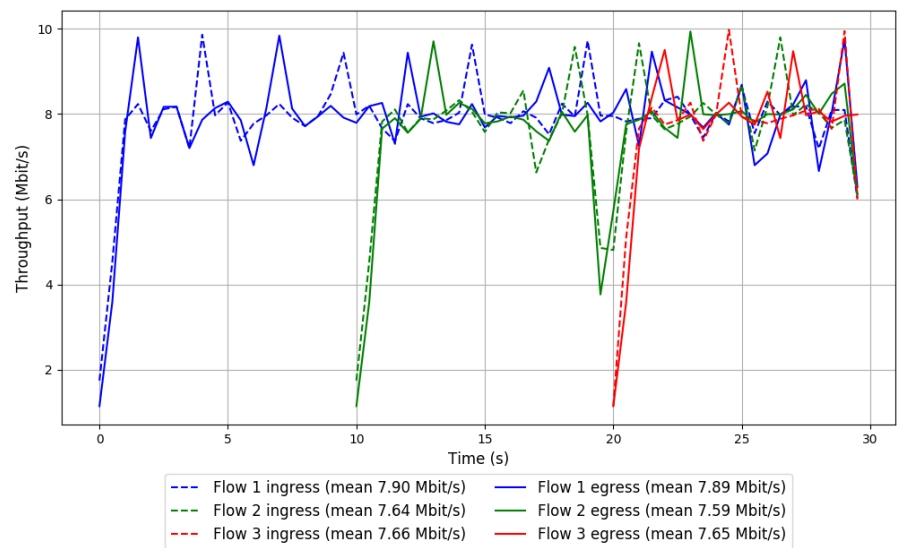
-- Flow 3:

Average throughput: 7.65 Mbit/s

95th percentile per-packet one-way delay: 51.024 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

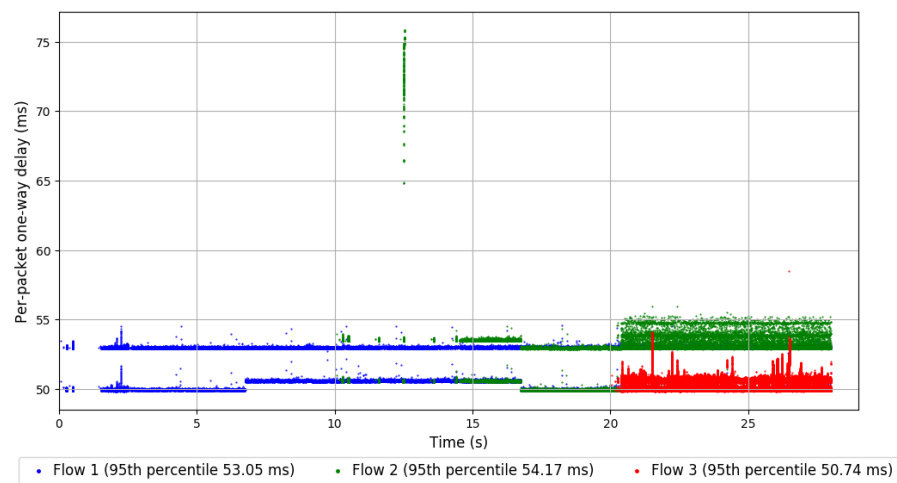
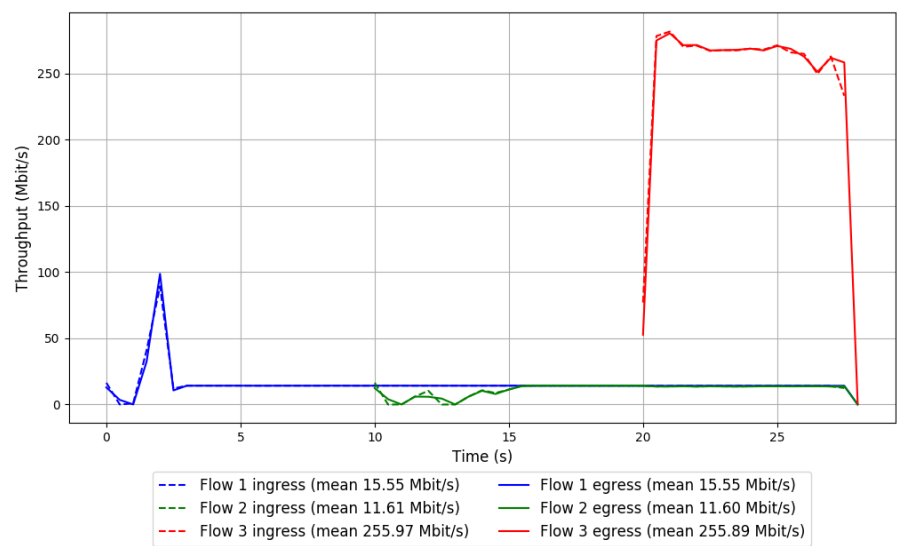


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-12 06:57:21
End at: 2017-12-12 06:57:51

# Below is generated by plot.py at 2017-12-12 10:38:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.65 Mbit/s
95th percentile per-packet one-way delay: 53.005 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 15.55 Mbit/s
95th percentile per-packet one-way delay: 53.054 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.60 Mbit/s
95th percentile per-packet one-way delay: 54.167 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 255.89 Mbit/s
95th percentile per-packet one-way delay: 50.744 ms
Loss rate: 0.01%
```


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

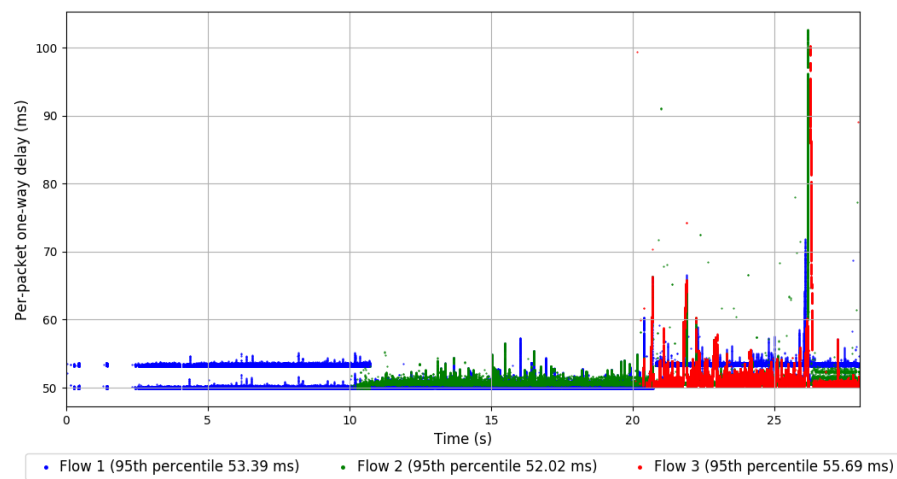
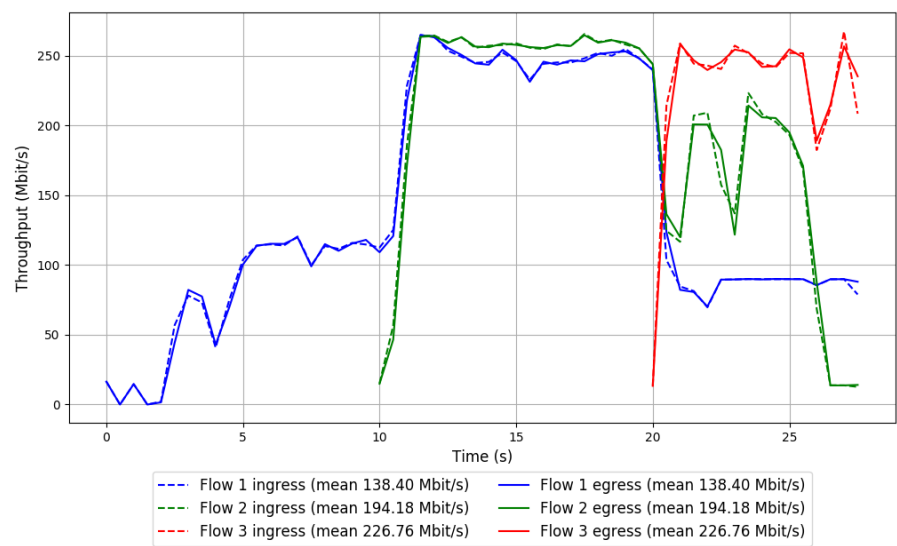


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-12 07:09:17
End at: 2017-12-12 07:09:47

# Below is generated by plot.py at 2017-12-12 10:42:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.04 Mbit/s
95th percentile per-packet one-way delay: 53.378 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 138.40 Mbit/s
95th percentile per-packet one-way delay: 53.393 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 194.18 Mbit/s
95th percentile per-packet one-way delay: 52.022 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 226.76 Mbit/s
95th percentile per-packet one-way delay: 55.687 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-12 07:21:33

End at: 2017-12-12 07:22:03

Below is generated by plot.py at 2017-12-12 10:42:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.60 Mbit/s

95th percentile per-packet one-way delay: 53.603 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 12.35 Mbit/s

95th percentile per-packet one-way delay: 53.717 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 14.51 Mbit/s

95th percentile per-packet one-way delay: 53.610 ms

Loss rate: 0.01%

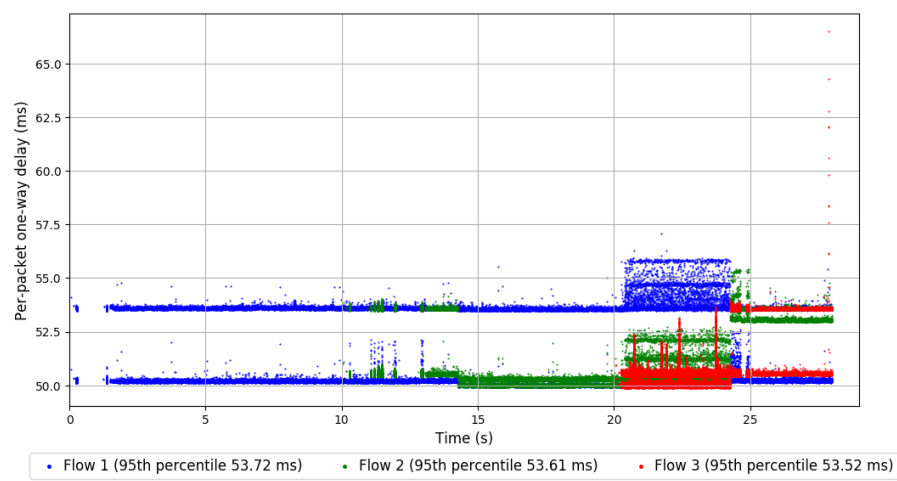
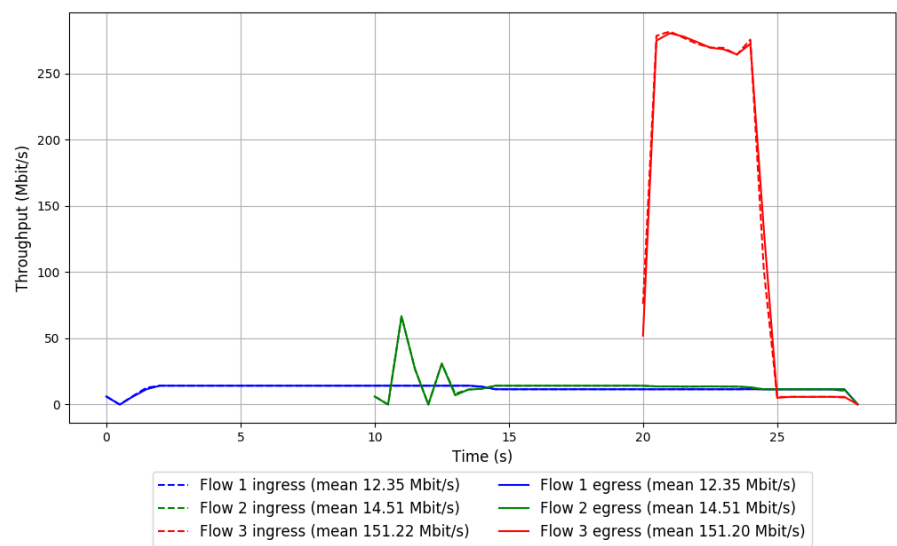
-- Flow 3:

Average throughput: 151.20 Mbit/s

95th percentile per-packet one-way delay: 53.519 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-12 07:33:28

End at: 2017-12-12 07:33:58

Below is generated by plot.py at 2017-12-12 10:42:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.94 Mbit/s

95th percentile per-packet one-way delay: 50.655 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 253.40 Mbit/s

95th percentile per-packet one-way delay: 50.610 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.55 Mbit/s

95th percentile per-packet one-way delay: 55.380 ms

Loss rate: 0.00%

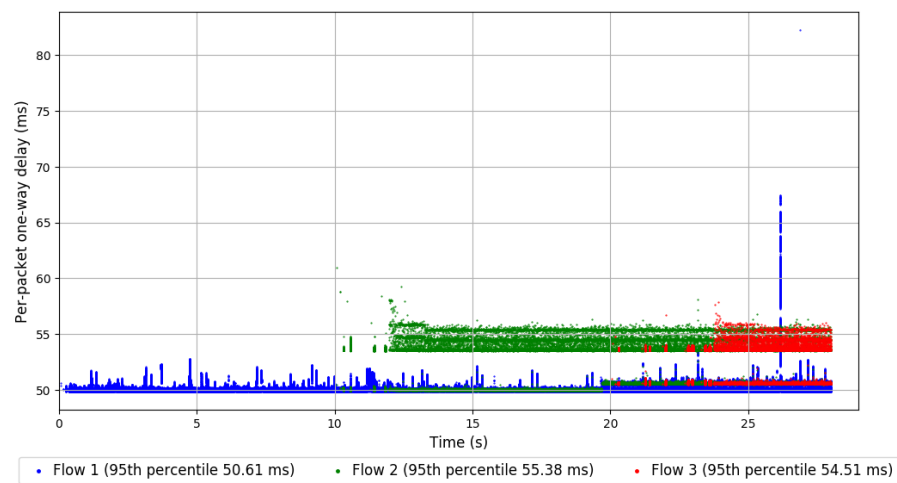
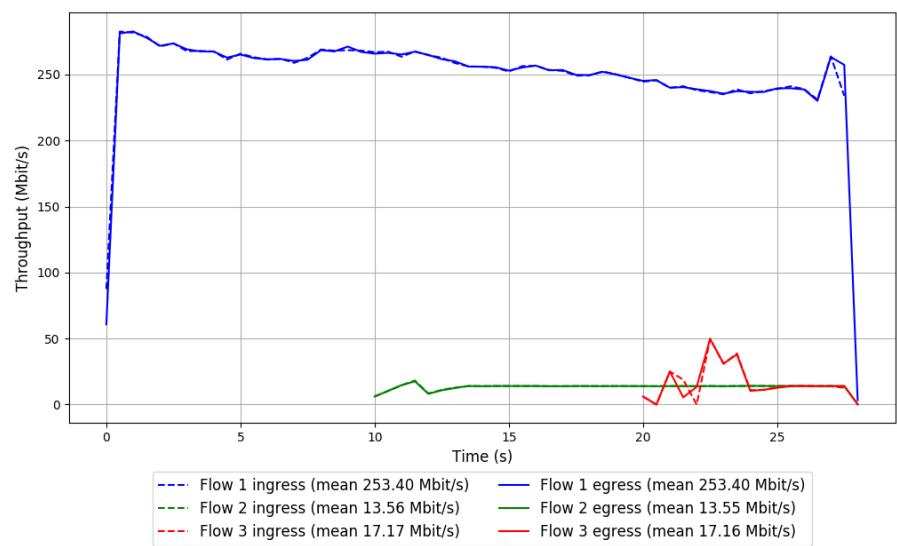
-- Flow 3:

Average throughput: 17.16 Mbit/s

95th percentile per-packet one-way delay: 54.509 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-12 07:45:39

End at: 2017-12-12 07:46:09

Below is generated by plot.py at 2017-12-12 10:45:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 382.31 Mbit/s

95th percentile per-packet one-way delay: 52.469 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 205.99 Mbit/s

95th percentile per-packet one-way delay: 51.471 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 180.23 Mbit/s

95th percentile per-packet one-way delay: 50.902 ms

Loss rate: 0.01%

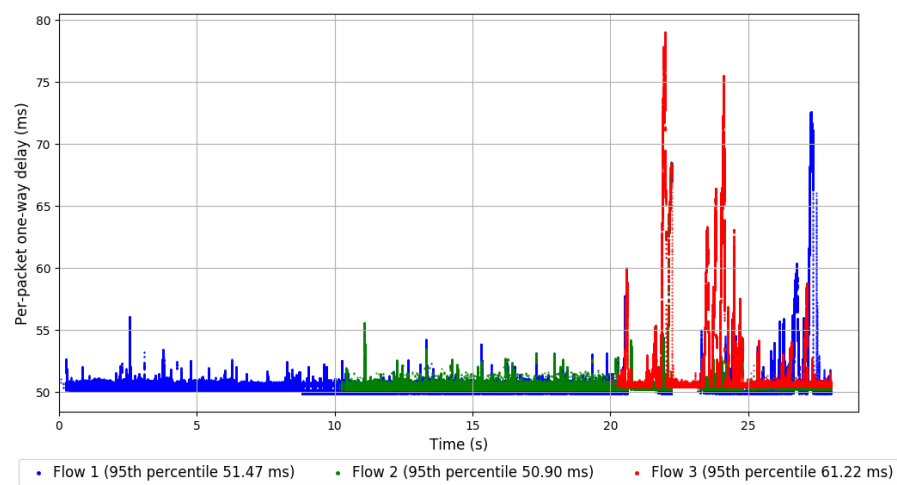
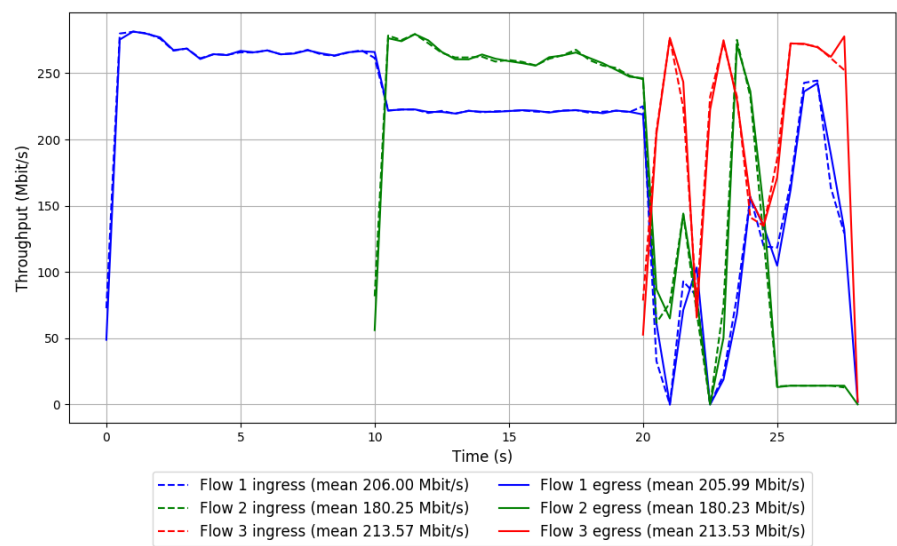
-- Flow 3:

Average throughput: 213.53 Mbit/s

95th percentile per-packet one-way delay: 61.218 ms

Loss rate: 0.02%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-12 07:57:58

End at: 2017-12-12 07:58:28

Below is generated by plot.py at 2017-12-12 10:45:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 283.78 Mbit/s

95th percentile per-packet one-way delay: 54.647 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 115.84 Mbit/s

95th percentile per-packet one-way delay: 54.492 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 255.71 Mbit/s

95th percentile per-packet one-way delay: 54.697 ms

Loss rate: 0.00%

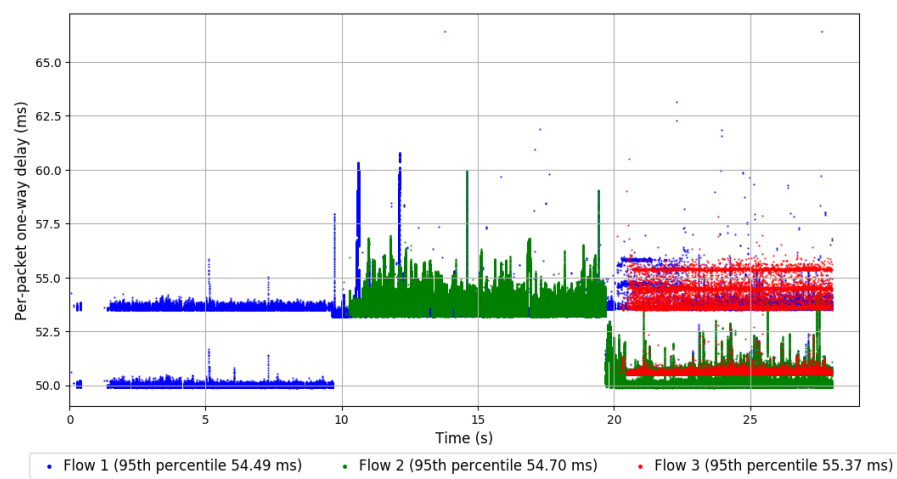
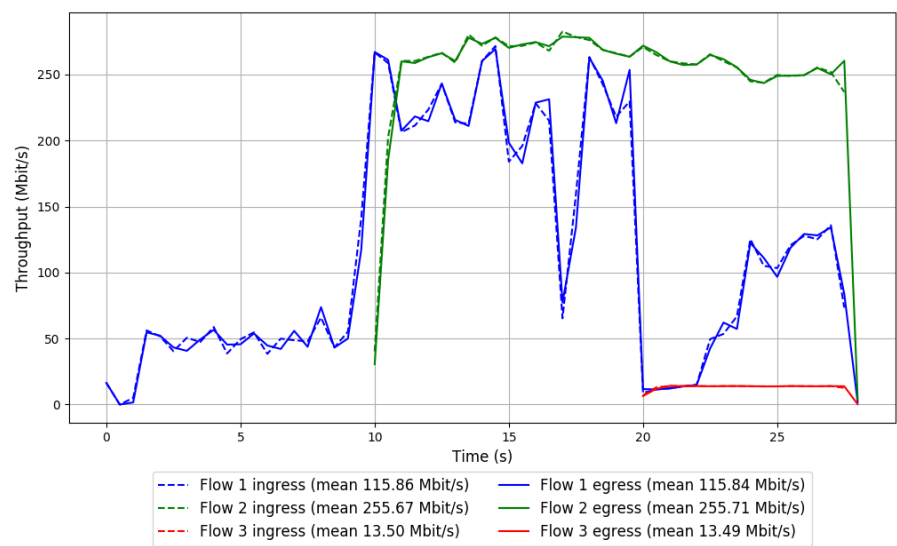
-- Flow 3:

Average throughput: 13.49 Mbit/s

95th percentile per-packet one-way delay: 55.374 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-12 08:10:12

End at: 2017-12-12 08:10:42

Below is generated by plot.py at 2017-12-12 10:47:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 426.97 Mbit/s

95th percentile per-packet one-way delay: 51.077 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 209.83 Mbit/s

95th percentile per-packet one-way delay: 50.836 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 242.99 Mbit/s

95th percentile per-packet one-way delay: 51.143 ms

Loss rate: 0.00%

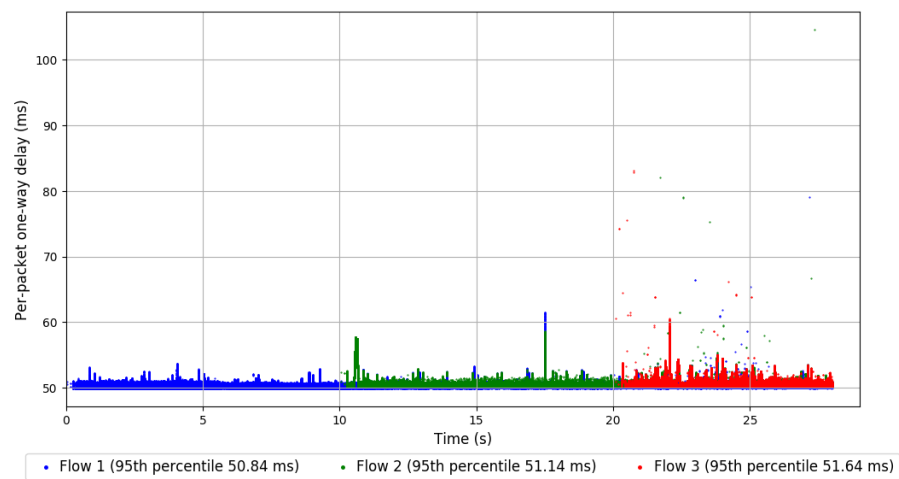
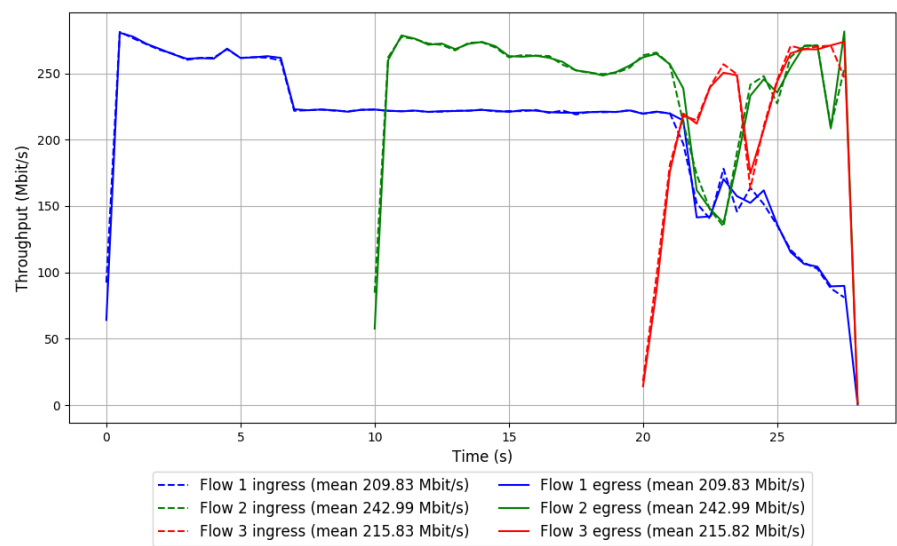
-- Flow 3:

Average throughput: 215.82 Mbit/s

95th percentile per-packet one-way delay: 51.636 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-12 08:22:31

End at: 2017-12-12 08:23:01

Below is generated by plot.py at 2017-12-12 10:48:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 425.48 Mbit/s

95th percentile per-packet one-way delay: 53.685 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 242.89 Mbit/s

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

Loss rate: 0.03%

-- Flow 2:

Average throughput: 236.06 Mbit/s

95th percentile per-packet one-way delay: 53.288 ms

Loss rate: 0.00%

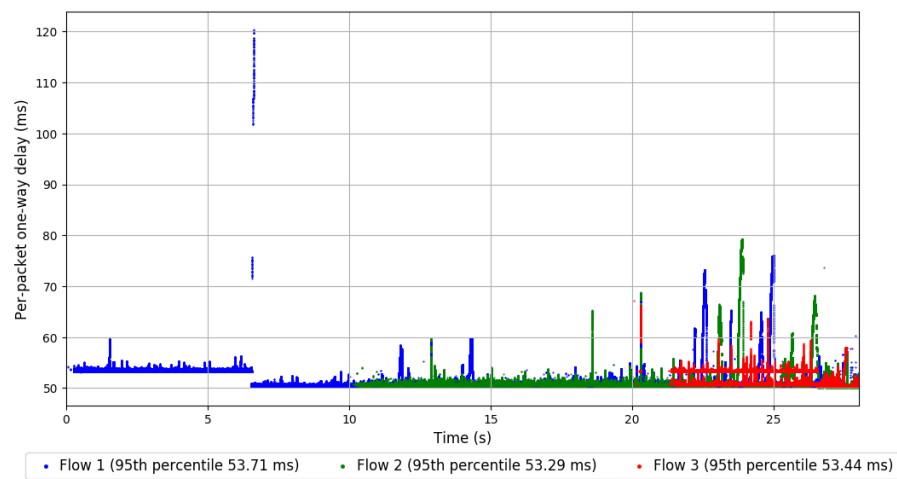
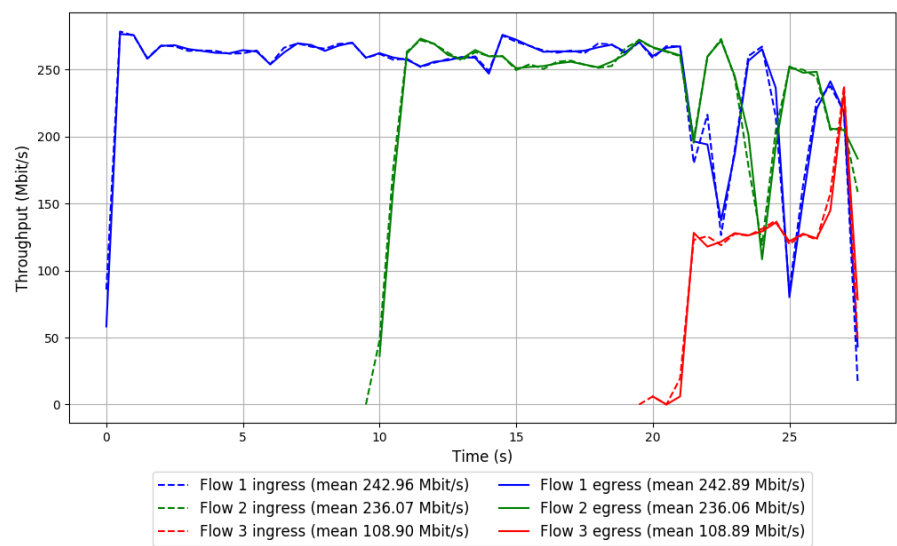
-- Flow 3:

Average throughput: 108.89 Mbit/s

95th percentile per-packet one-way delay: 53.441 ms

Loss rate: 0.02%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-12 08:34:52

End at: 2017-12-12 08:35:22

Below is generated by plot.py at 2017-12-12 10:48:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 26.15 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 14.12 Mbit/s

95th percentile per-packet one-way delay: 53.573 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 12.63 Mbit/s

95th percentile per-packet one-way delay: 53.548 ms

Loss rate: 0.00%

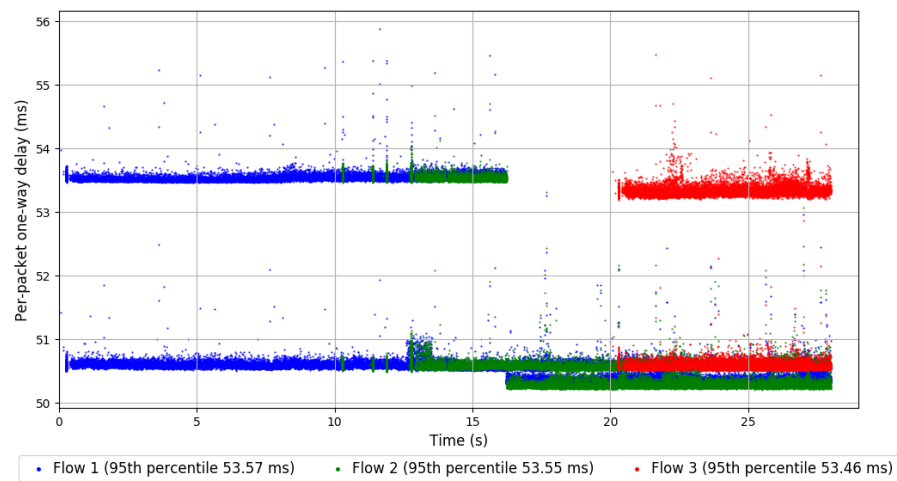
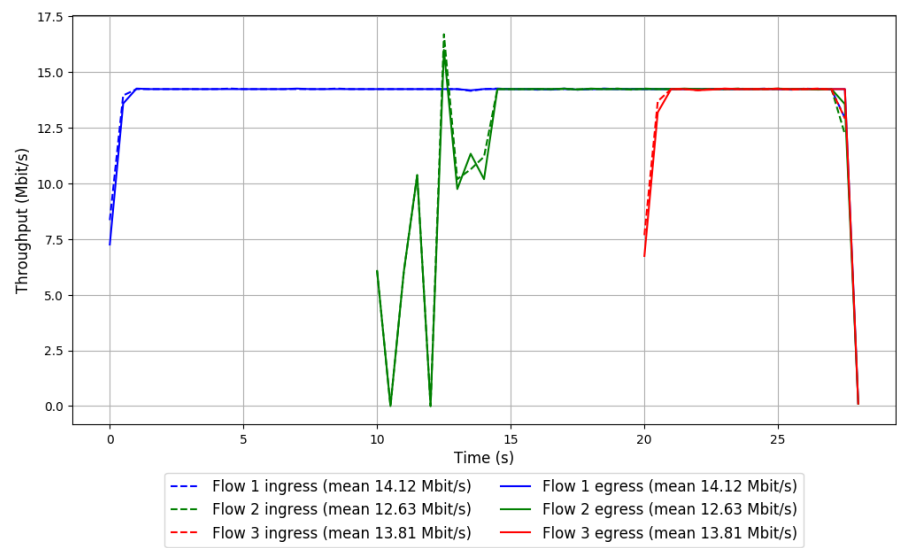
-- Flow 3:

Average throughput: 13.81 Mbit/s

95th percentile per-packet one-way delay: 53.462 ms

Loss rate: 0.00%

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

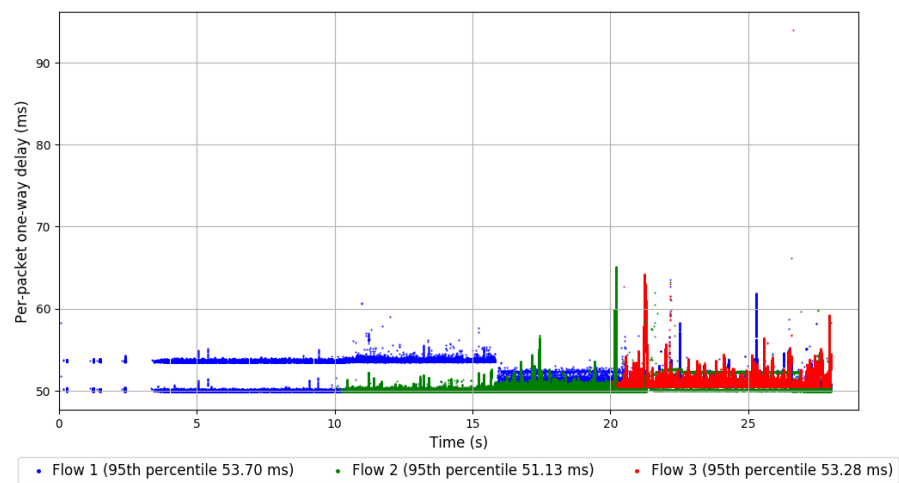
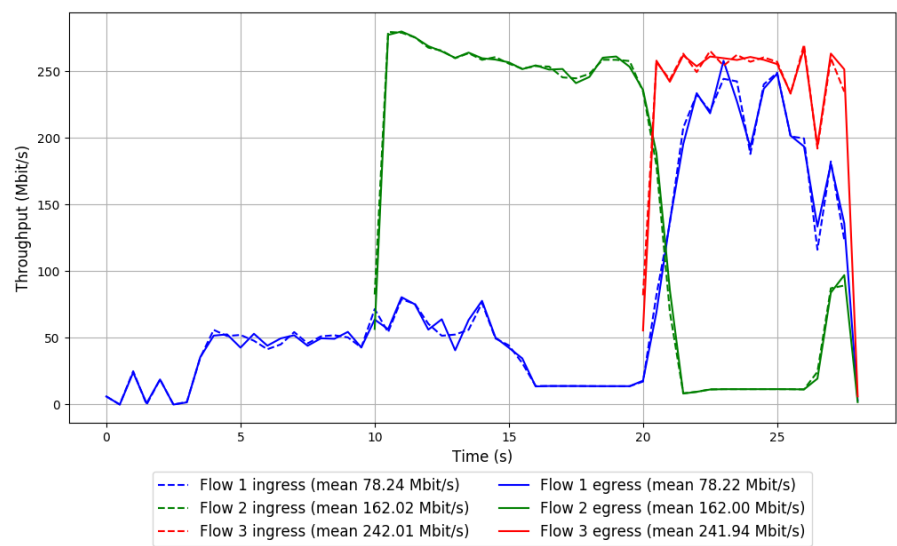


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-12 08:46:42
End at: 2017-12-12 08:47:12

# Below is generated by plot.py at 2017-12-12 10:48:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 250.93 Mbit/s
95th percentile per-packet one-way delay: 53.581 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 78.22 Mbit/s
95th percentile per-packet one-way delay: 53.695 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 162.00 Mbit/s
95th percentile per-packet one-way delay: 51.135 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 241.94 Mbit/s
95th percentile per-packet one-way delay: 53.284 ms
Loss rate: 0.01%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-12 07:03:08

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

Below is generated by plot.py at 2017-12-12 10:48:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.89 Mbit/s

95th percentile per-packet one-way delay: 54.129 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 76.39 Mbit/s

95th percentile per-packet one-way delay: 54.183 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 65.19 Mbit/s

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

Loss rate: 0.02%

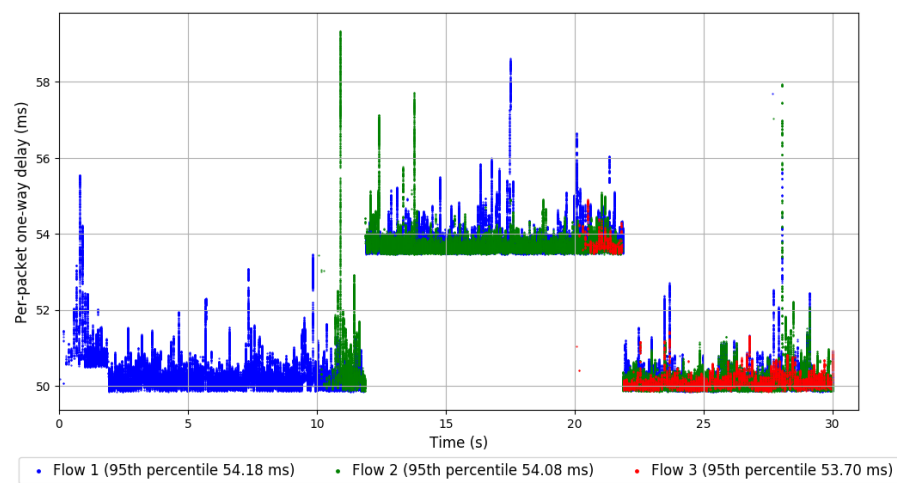
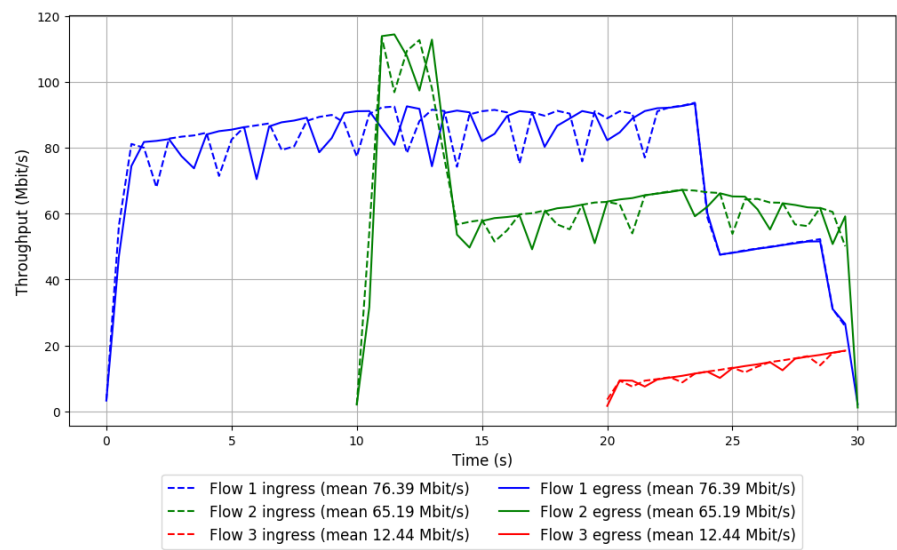
-- Flow 3:

Average throughput: 12.44 Mbit/s

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

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-12 07:15:26

End at: 2017-12-12 07:15:56

Below is generated by plot.py at 2017-12-12 10:48:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.15 Mbit/s

95th percentile per-packet one-way delay: 51.999 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 16.71 Mbit/s

95th percentile per-packet one-way delay: 51.318 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 115.80 Mbit/s

95th percentile per-packet one-way delay: 51.996 ms

Loss rate: 0.01%

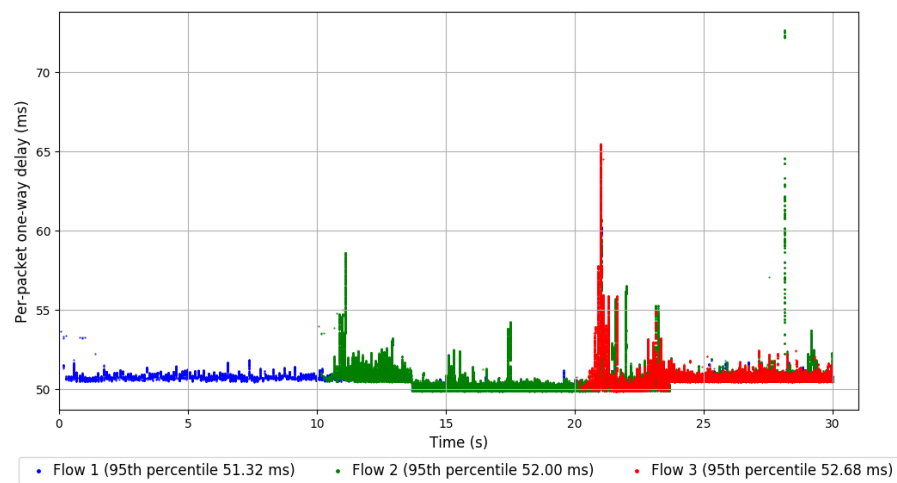
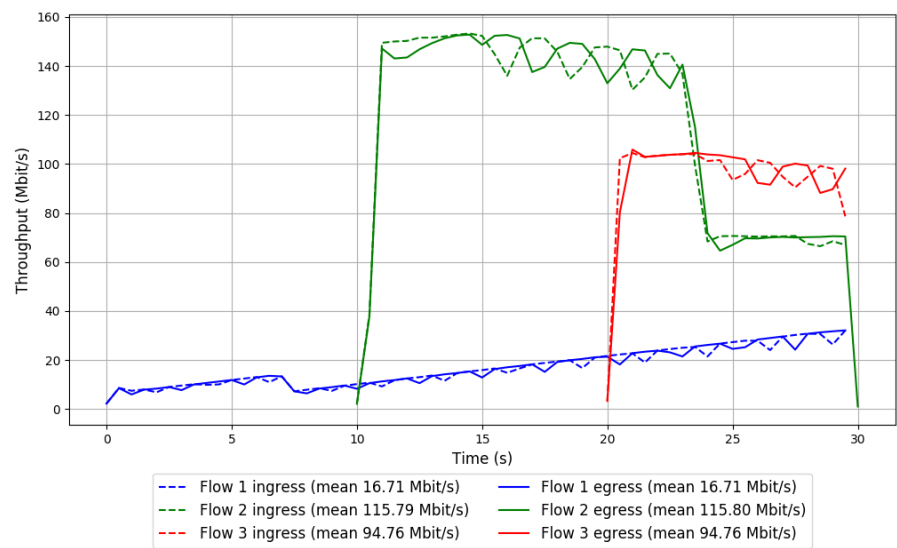
-- Flow 3:

Average throughput: 94.76 Mbit/s

95th percentile per-packet one-way delay: 52.679 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-12 07:27:19

End at: 2017-12-12 07:27:49

Below is generated by plot.py at 2017-12-12 10:48:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.57 Mbit/s

95th percentile per-packet one-way delay: 54.049 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 51.86 Mbit/s

95th percentile per-packet one-way delay: 53.803 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 94.89 Mbit/s

95th percentile per-packet one-way delay: 53.969 ms

Loss rate: 0.00%

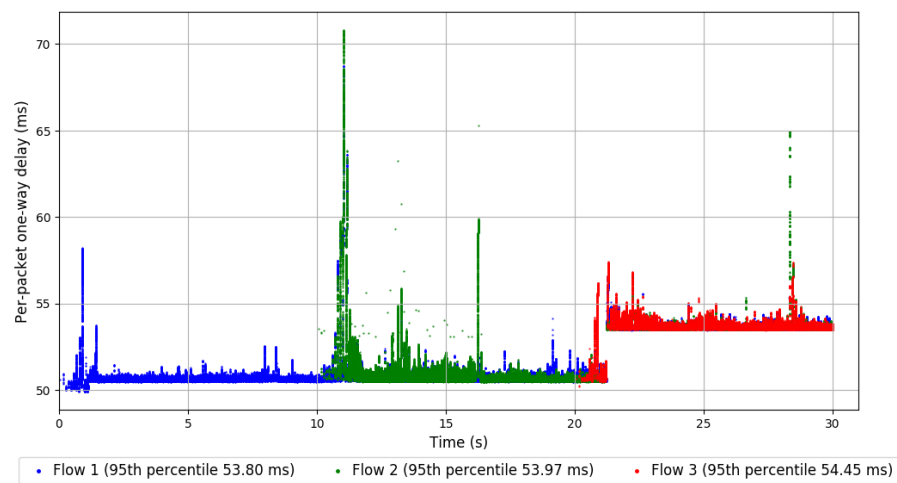
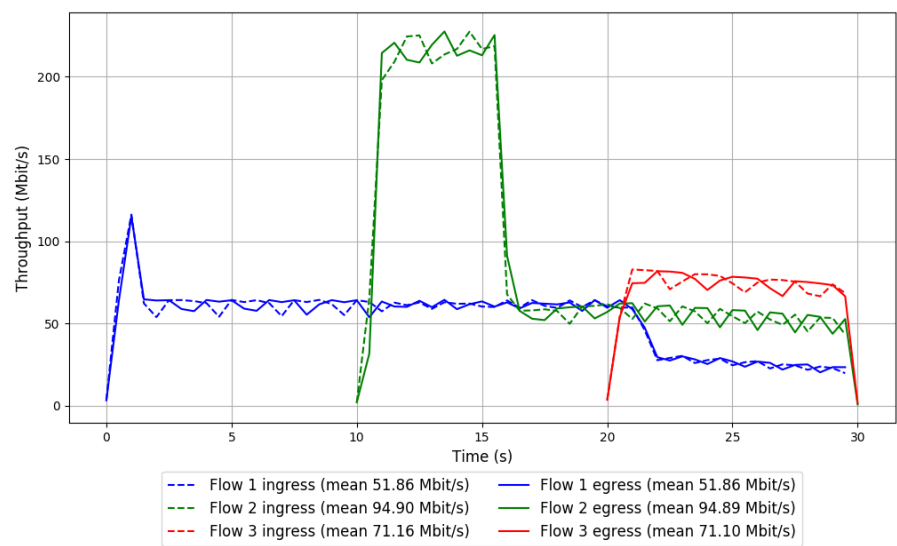
-- Flow 3:

Average throughput: 71.10 Mbit/s

95th percentile per-packet one-way delay: 54.446 ms

Loss rate: 0.07%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-12 07:39:34

End at: 2017-12-12 07:40:04

Below is generated by plot.py at 2017-12-12 10:48:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.58 Mbit/s

95th percentile per-packet one-way delay: 54.360 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.07 Mbit/s

95th percentile per-packet one-way delay: 51.027 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 71.38 Mbit/s

95th percentile per-packet one-way delay: 56.485 ms

Loss rate: 0.00%

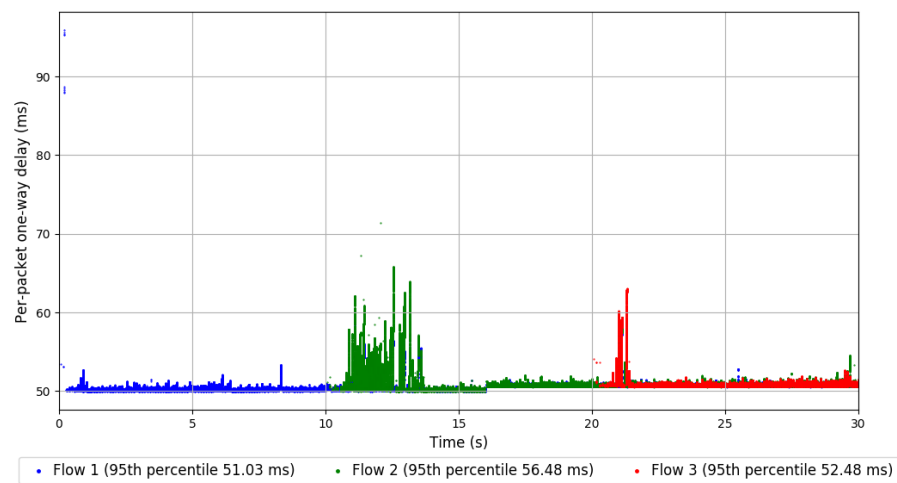
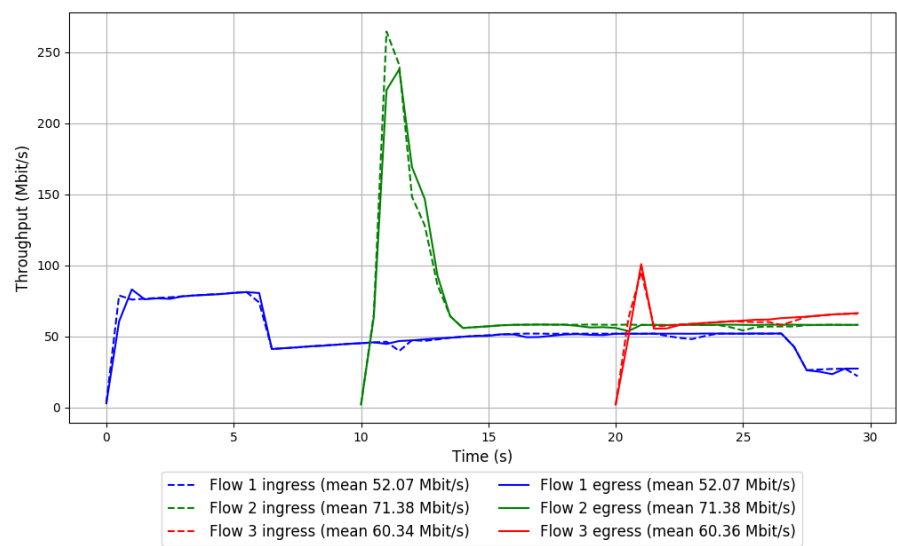
-- Flow 3:

Average throughput: 60.36 Mbit/s

95th percentile per-packet one-way delay: 52.484 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-12 07:51:54

End at: 2017-12-12 07:52:24

Below is generated by plot.py at 2017-12-12 10:48:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.80 Mbit/s

95th percentile per-packet one-way delay: 53.593 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 37.09 Mbit/s

95th percentile per-packet one-way delay: 54.610 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 50.19 Mbit/s

95th percentile per-packet one-way delay: 51.522 ms

Loss rate: 0.01%

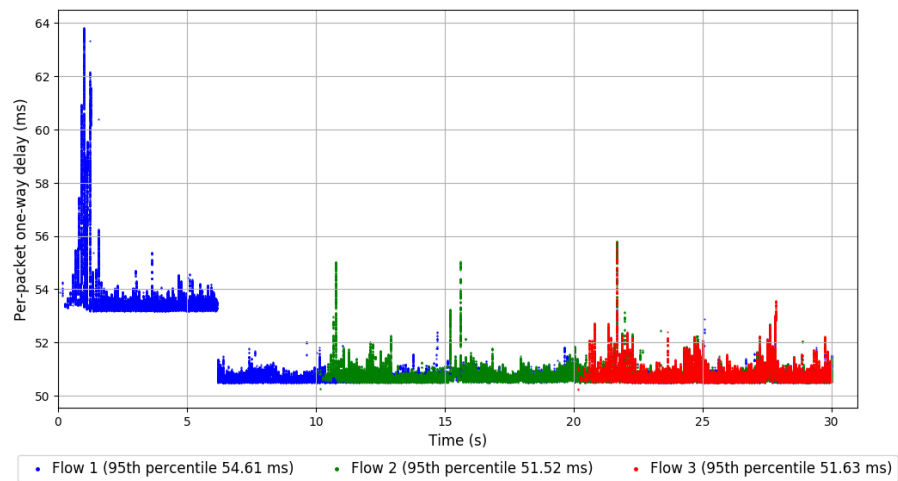
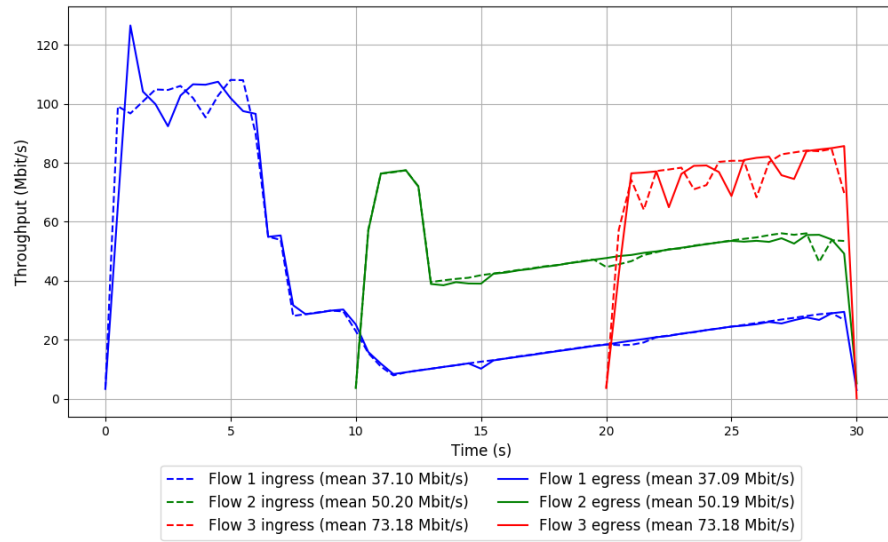
-- Flow 3:

Average throughput: 73.18 Mbit/s

95th percentile per-packet one-way delay: 51.628 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-12 08:04:04

End at: 2017-12-12 08:04:34

Below is generated by plot.py at 2017-12-12 10:48:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.96 Mbit/s

95th percentile per-packet one-way delay: 51.543 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 81.13 Mbit/s

95th percentile per-packet one-way delay: 51.593 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.44 Mbit/s

95th percentile per-packet one-way delay: 51.019 ms

Loss rate: 0.01%

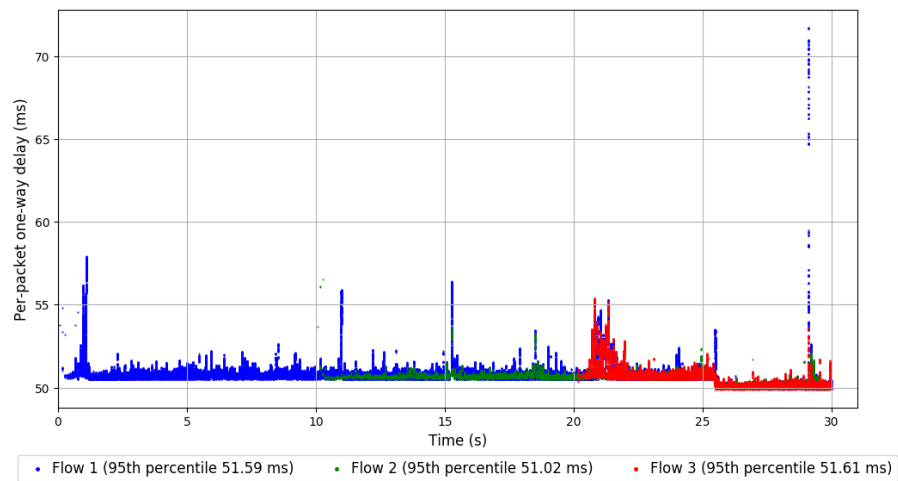
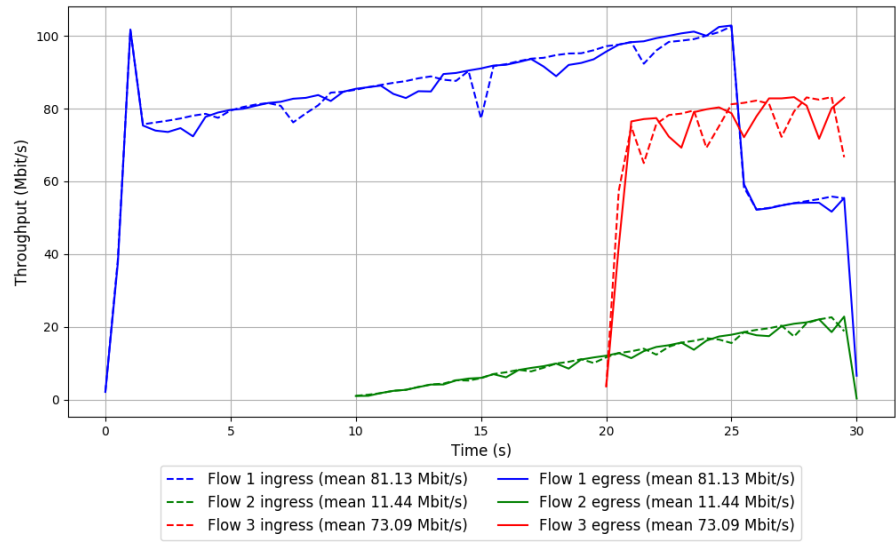
-- Flow 3:

Average throughput: 73.09 Mbit/s

95th percentile per-packet one-way delay: 51.607 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-12 08:16:28

End at: 2017-12-12 08:16:58

Below is generated by plot.py at 2017-12-12 10:48:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.11 Mbit/s

95th percentile per-packet one-way delay: 55.126 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 26.41 Mbit/s

95th percentile per-packet one-way delay: 54.219 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 100.52 Mbit/s

95th percentile per-packet one-way delay: 53.966 ms

Loss rate: 0.00%

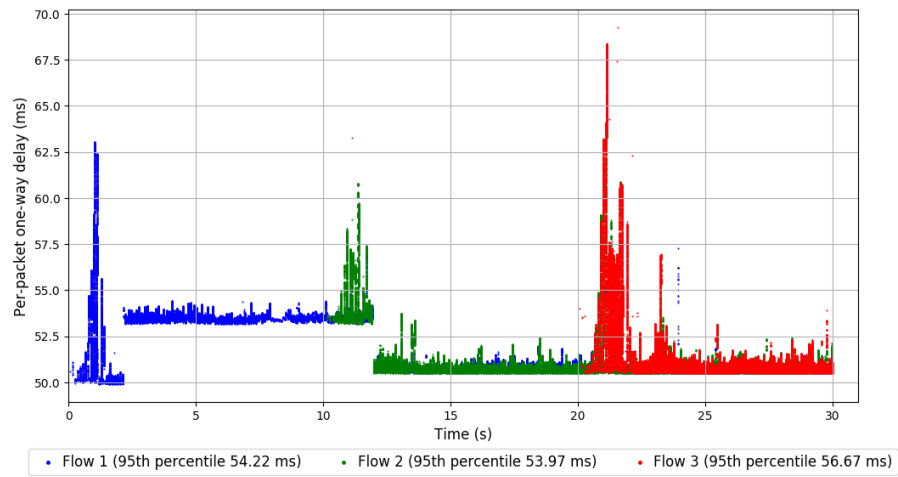
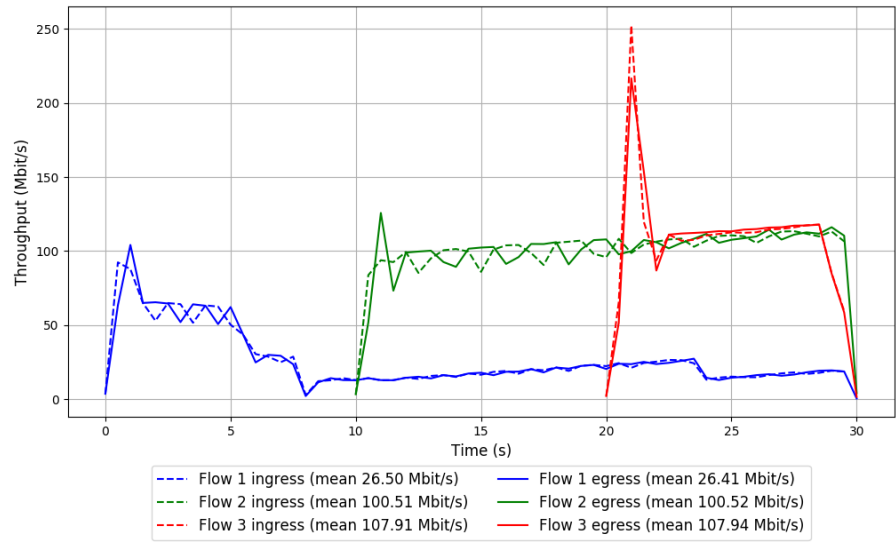
-- Flow 3:

Average throughput: 107.94 Mbit/s

95th percentile per-packet one-way delay: 56.668 ms

Loss rate: 0.01%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-12 08:28:46

End at: 2017-12-12 08:29:16

Below is generated by plot.py at 2017-12-12 10:48:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.65 Mbit/s

95th percentile per-packet one-way delay: 54.369 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 67.19 Mbit/s

95th percentile per-packet one-way delay: 54.874 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 74.03 Mbit/s

95th percentile per-packet one-way delay: 51.549 ms

Loss rate: 0.00%

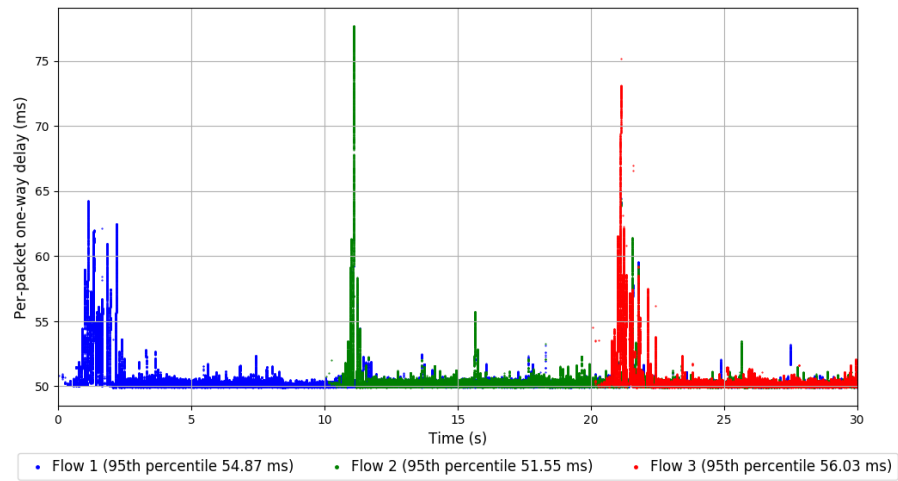
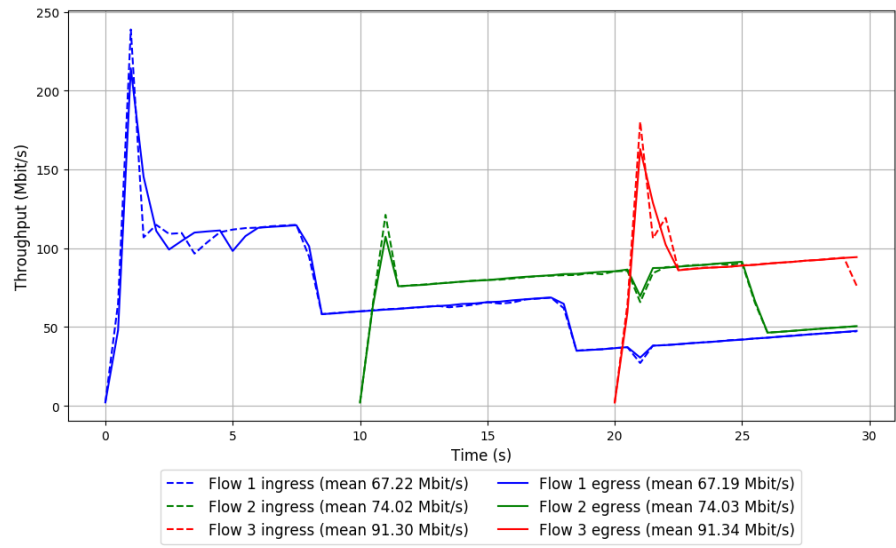
-- Flow 3:

Average throughput: 91.34 Mbit/s

95th percentile per-packet one-way delay: 56.033 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-12 08:40:35

End at: 2017-12-12 08:41:05

Below is generated by plot.py at 2017-12-12 10:48:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.74 Mbit/s

95th percentile per-packet one-way delay: 51.044 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 72.06 Mbit/s

95th percentile per-packet one-way delay: 51.082 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.56 Mbit/s

95th percentile per-packet one-way delay: 50.982 ms

Loss rate: 0.03%

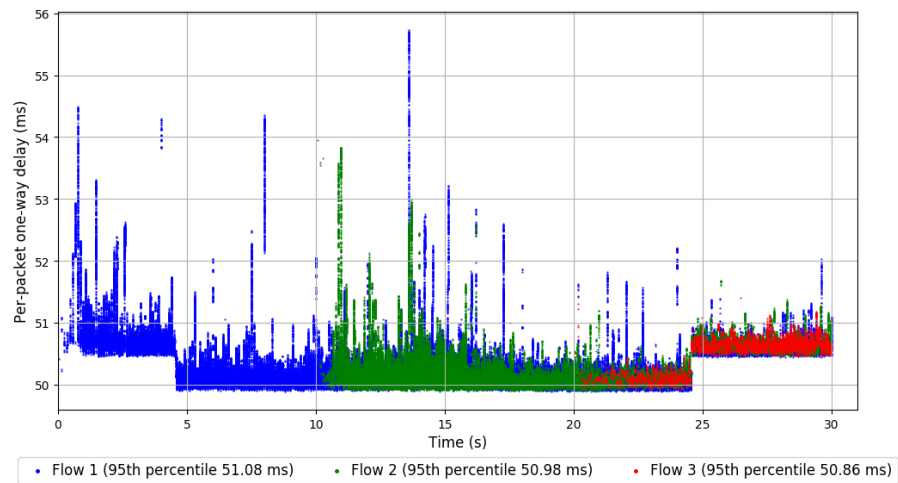
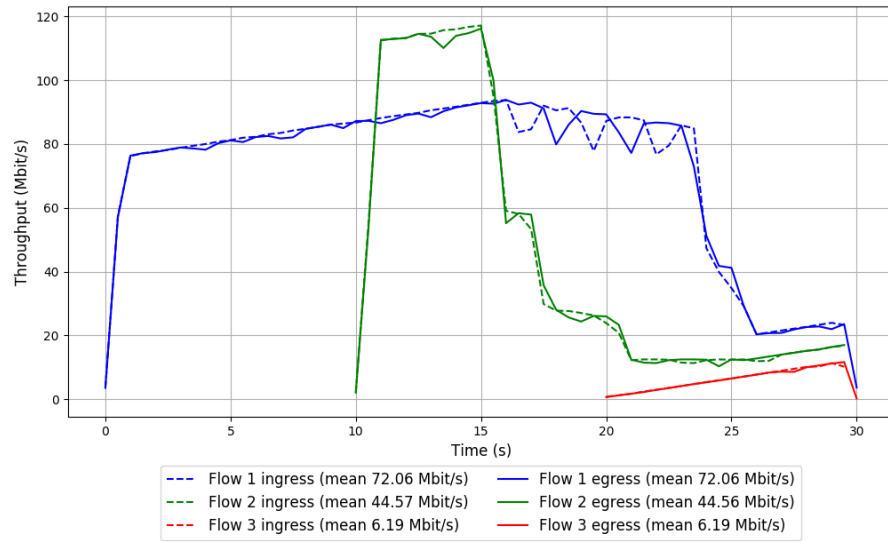
-- Flow 3:

Average throughput: 6.19 Mbit/s

95th percentile per-packet one-way delay: 50.856 ms

Loss rate: 0.12%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-12 08:52:47

End at: 2017-12-12 08:53:17

Below is generated by plot.py at 2017-12-12 10:48:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.85 Mbit/s

95th percentile per-packet one-way delay: 53.679 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 39.63 Mbit/s

95th percentile per-packet one-way delay: 53.588 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 58.94 Mbit/s

95th percentile per-packet one-way delay: 53.765 ms

Loss rate: 0.01%

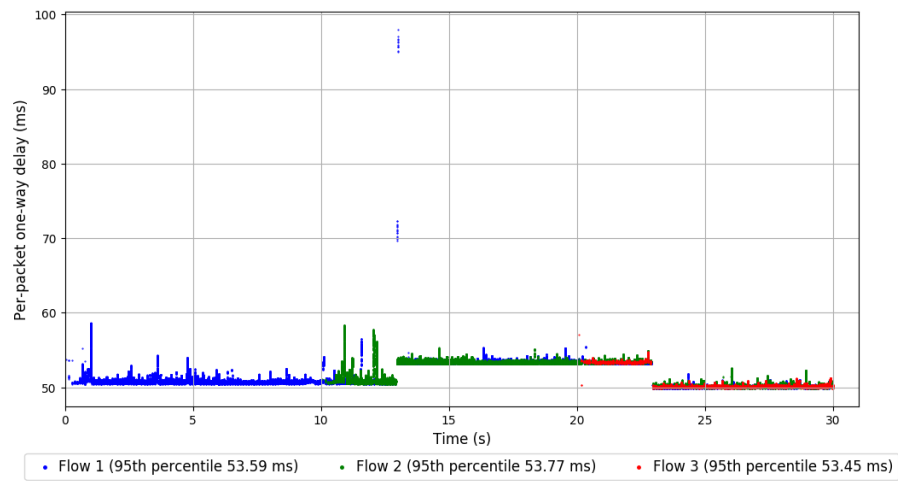
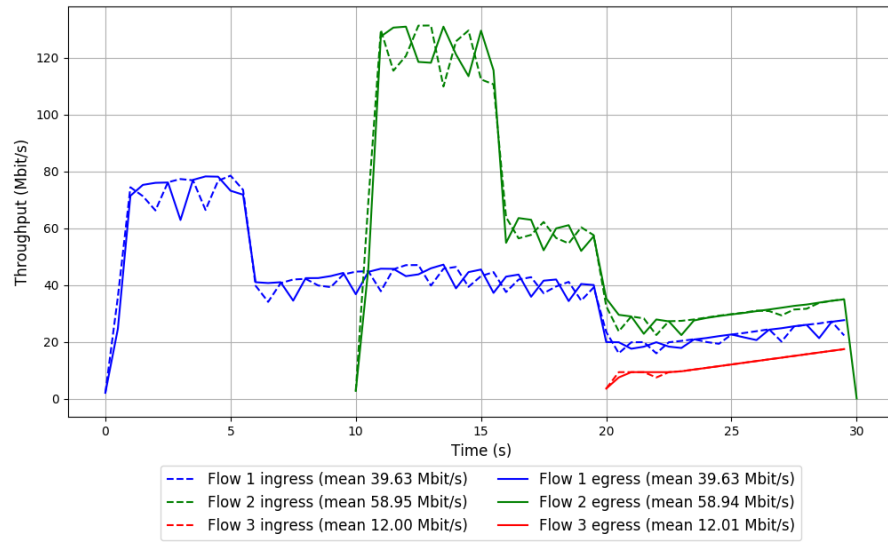
-- Flow 3:

Average throughput: 12.01 Mbit/s

95th percentile per-packet one-way delay: 53.451 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-12 07:02:04

End at: 2017-12-12 07:02:34

Below is generated by plot.py at 2017-12-12 10:51:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 367.16 Mbit/s

95th percentile per-packet one-way delay: 189.115 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 200.65 Mbit/s

95th percentile per-packet one-way delay: 138.300 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 200.32 Mbit/s

95th percentile per-packet one-way delay: 239.076 ms

Loss rate: 0.80%

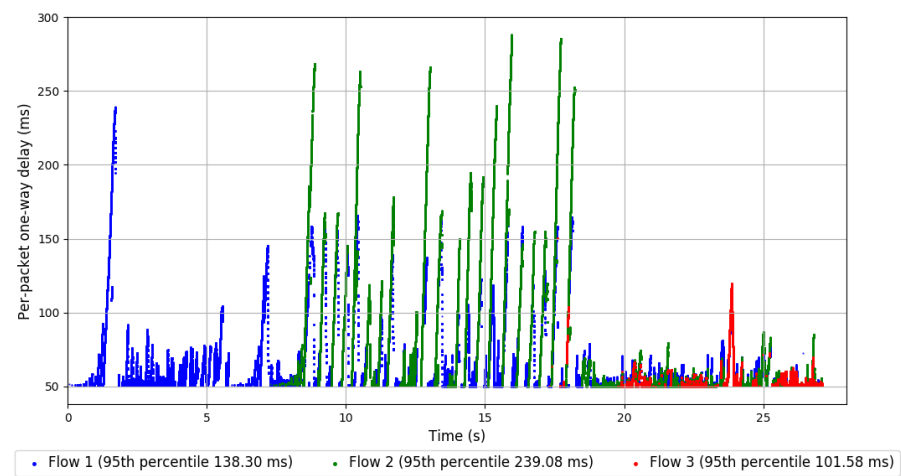
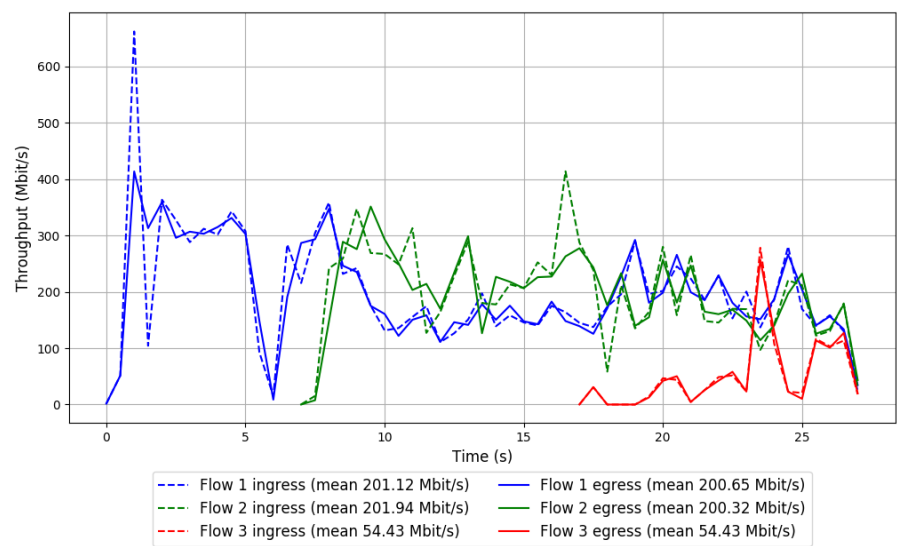
-- Flow 3:

Average throughput: 54.43 Mbit/s

95th percentile per-packet one-way delay: 101.579 ms

Loss rate: 0.00%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-12 07:14:23

End at: 2017-12-12 07:14:53

Below is generated by plot.py at 2017-12-12 10:51:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.97 Mbit/s

95th percentile per-packet one-way delay: 106.794 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 156.34 Mbit/s

95th percentile per-packet one-way delay: 92.403 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 168.74 Mbit/s

95th percentile per-packet one-way delay: 102.969 ms

Loss rate: 0.07%

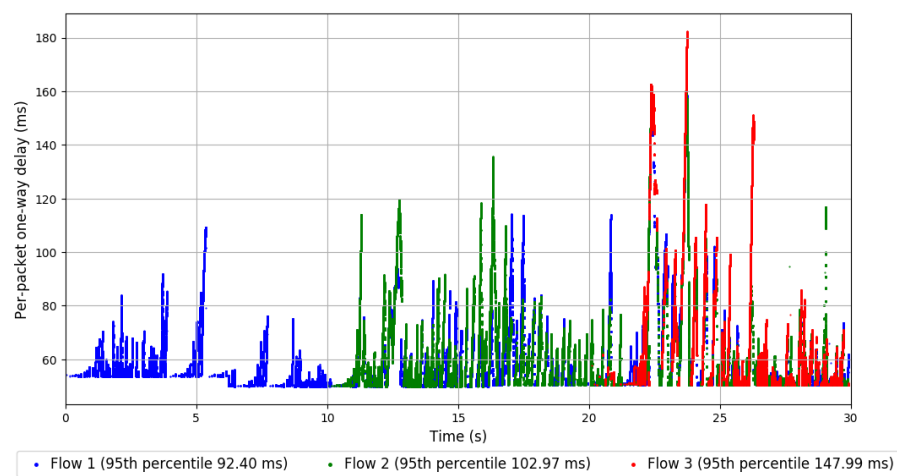
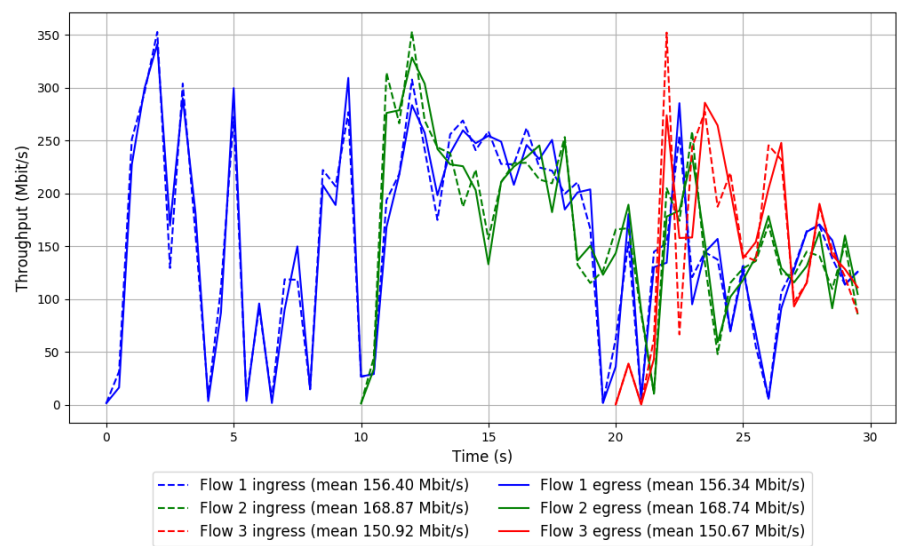
-- Flow 3:

Average throughput: 150.67 Mbit/s

95th percentile per-packet one-way delay: 147.989 ms

Loss rate: 0.24%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-12 07:26:16

End at: 2017-12-12 07:26:46

Below is generated by plot.py at 2017-12-12 10:51:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 323.52 Mbit/s

95th percentile per-packet one-way delay: 94.090 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 146.93 Mbit/s

95th percentile per-packet one-way delay: 79.460 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 185.02 Mbit/s

95th percentile per-packet one-way delay: 144.514 ms

Loss rate: 0.59%

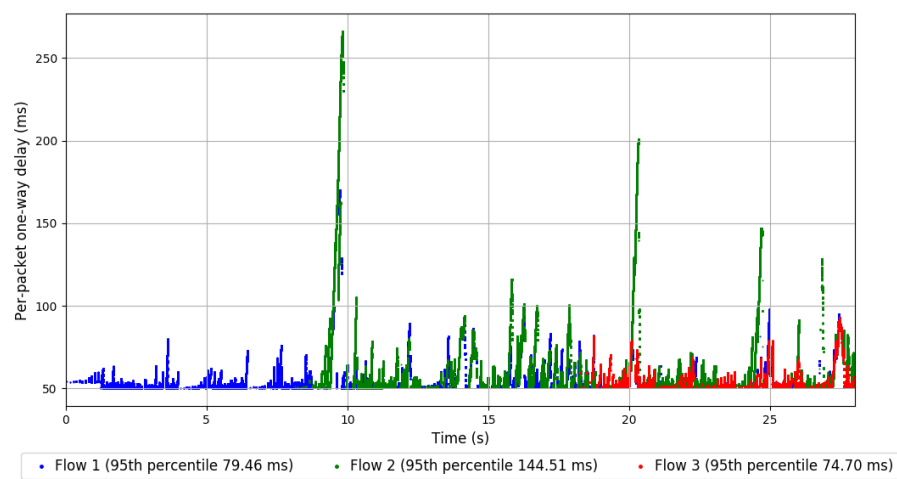
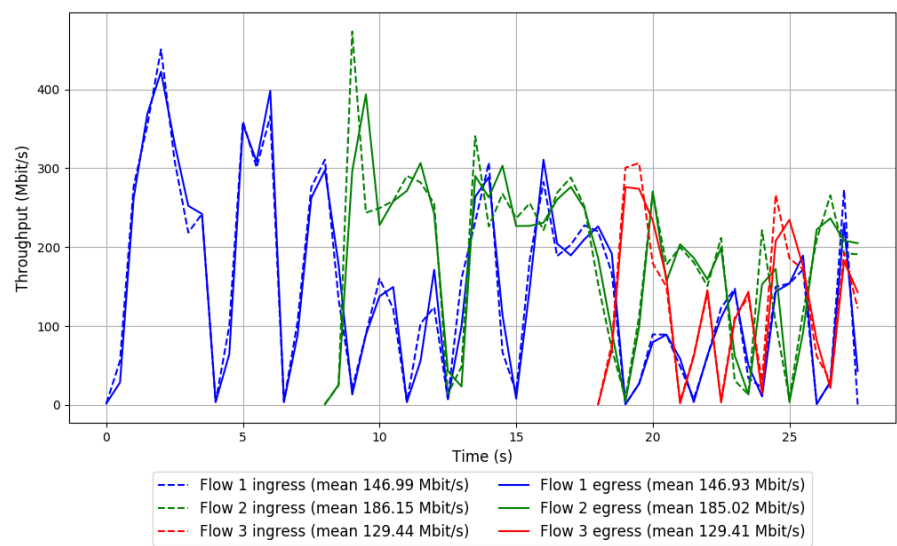
-- Flow 3:

Average throughput: 129.41 Mbit/s

95th percentile per-packet one-way delay: 74.705 ms

Loss rate: 0.00%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-12 07:38:28

End at: 2017-12-12 07:38:58

Below is generated by plot.py at 2017-12-12 10:52:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 363.53 Mbit/s

95th percentile per-packet one-way delay: 192.122 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 276.51 Mbit/s

95th percentile per-packet one-way delay: 200.564 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 96.18 Mbit/s

95th percentile per-packet one-way delay: 138.007 ms

Loss rate: 0.48%

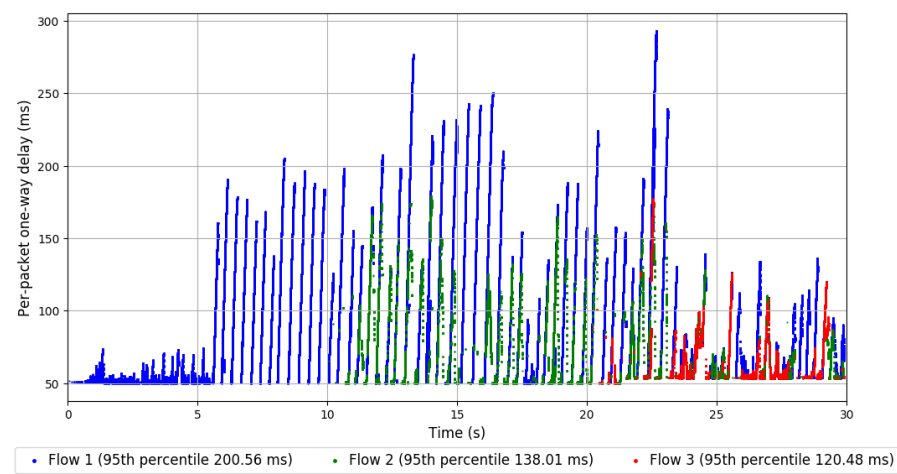
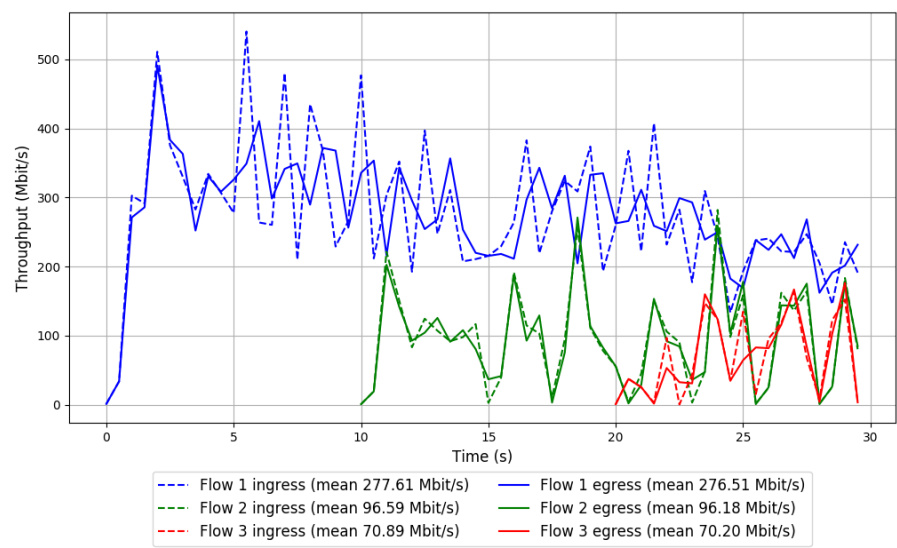
-- Flow 3:

Average throughput: 70.20 Mbit/s

95th percentile per-packet one-way delay: 120.478 ms

Loss rate: 0.92%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-12 07:50:51

End at: 2017-12-12 07:51:21

Below is generated by plot.py at 2017-12-12 10:52:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 305.64 Mbit/s

95th percentile per-packet one-way delay: 168.335 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 147.60 Mbit/s

95th percentile per-packet one-way delay: 106.952 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 204.69 Mbit/s

95th percentile per-packet one-way delay: 191.590 ms

Loss rate: 1.65%

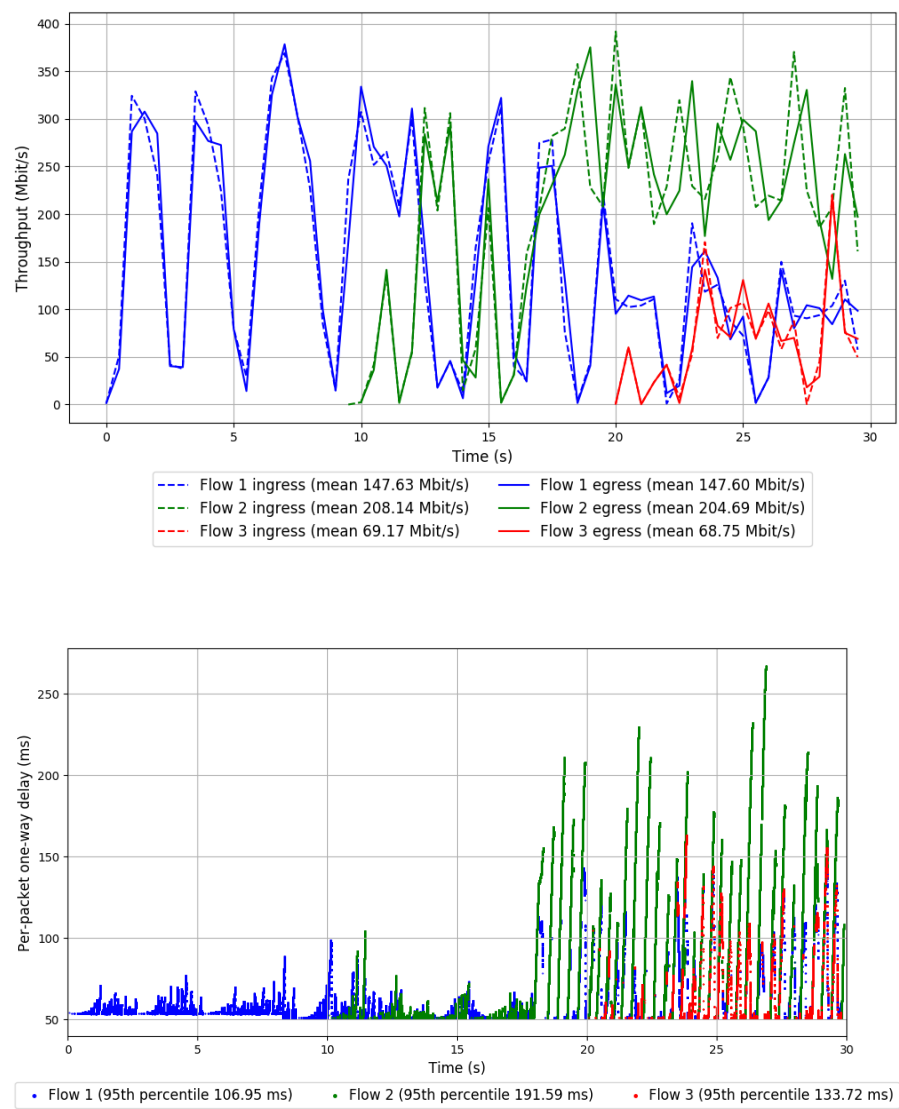
-- Flow 3:

Average throughput: 68.75 Mbit/s

95th percentile per-packet one-way delay: 133.717 ms

Loss rate: 0.59%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-12 08:02:59

End at: 2017-12-12 08:03:29

Below is generated by plot.py at 2017-12-12 10:52:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 363.98 Mbit/s

95th percentile per-packet one-way delay: 141.786 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 231.63 Mbit/s

95th percentile per-packet one-way delay: 155.464 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 124.76 Mbit/s

95th percentile per-packet one-way delay: 97.976 ms

Loss rate: 0.00%

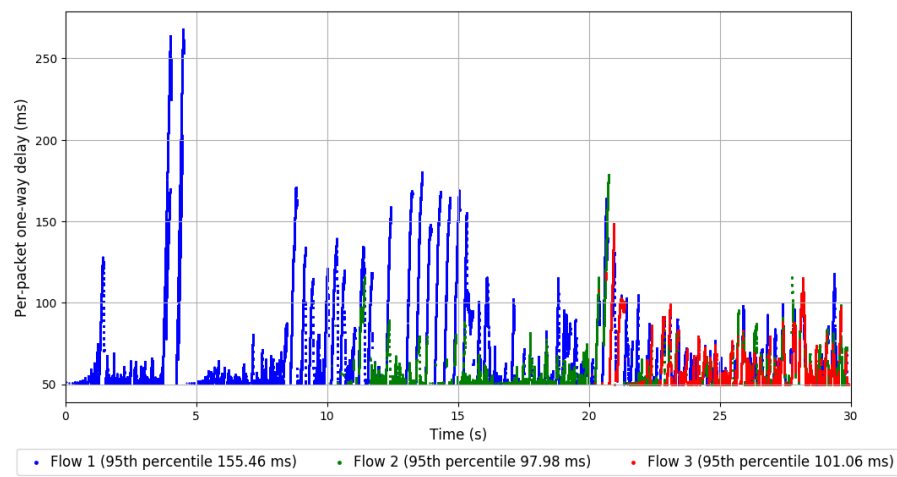
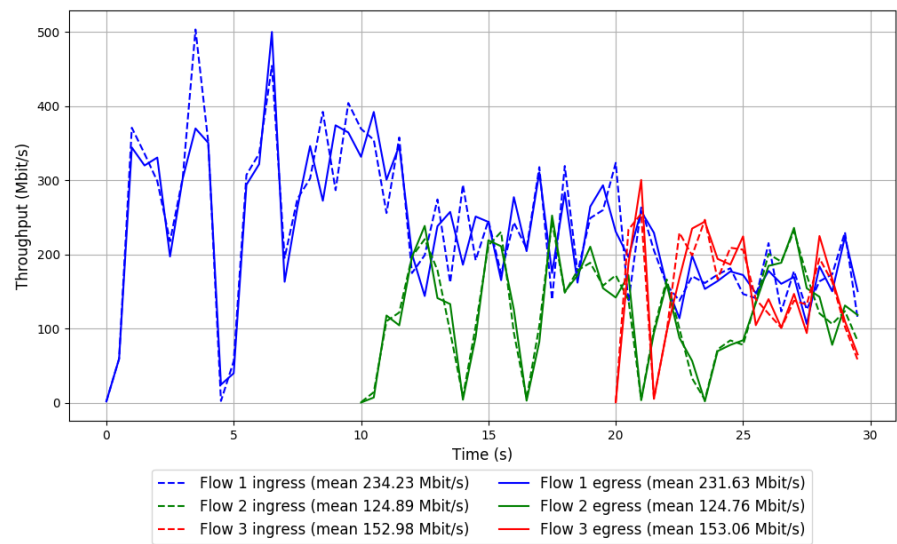
-- Flow 3:

Average throughput: 153.06 Mbit/s

95th percentile per-packet one-way delay: 101.064 ms

Loss rate: 0.01%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-12 08:15:24

End at: 2017-12-12 08:15:54

Below is generated by plot.py at 2017-12-12 10:53:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.54 Mbit/s

95th percentile per-packet one-way delay: 183.946 ms

Loss rate: 1.79%

-- Flow 1:

Average throughput: 242.03 Mbit/s

95th percentile per-packet one-way delay: 190.981 ms

Loss rate: 2.23%

-- Flow 2:

Average throughput: 106.75 Mbit/s

95th percentile per-packet one-way delay: 168.512 ms

Loss rate: 0.46%

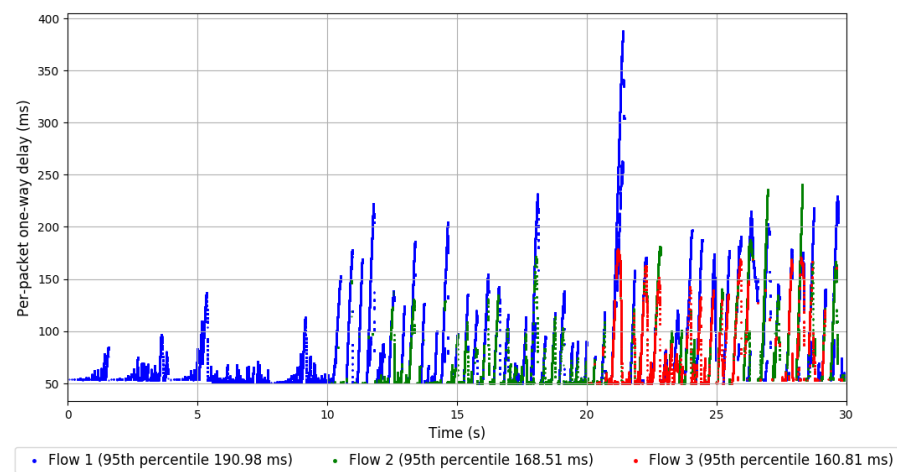
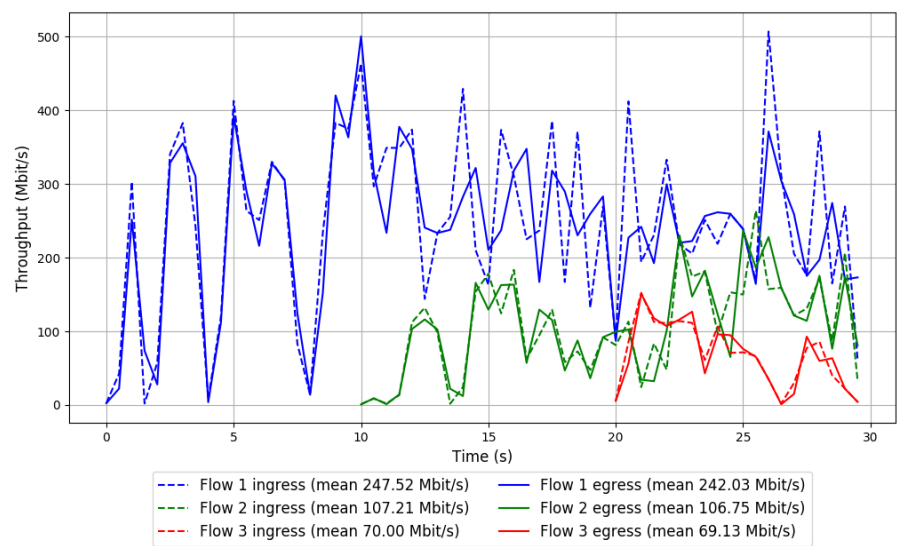
-- Flow 3:

Average throughput: 69.13 Mbit/s

95th percentile per-packet one-way delay: 160.812 ms

Loss rate: 1.21%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-12 08:27:41

End at: 2017-12-12 08:28:11

Below is generated by plot.py at 2017-12-12 10:55:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 338.74 Mbit/s

95th percentile per-packet one-way delay: 175.317 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 193.33 Mbit/s

95th percentile per-packet one-way delay: 191.336 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 191.35 Mbit/s

95th percentile per-packet one-way delay: 153.732 ms

Loss rate: 2.01%

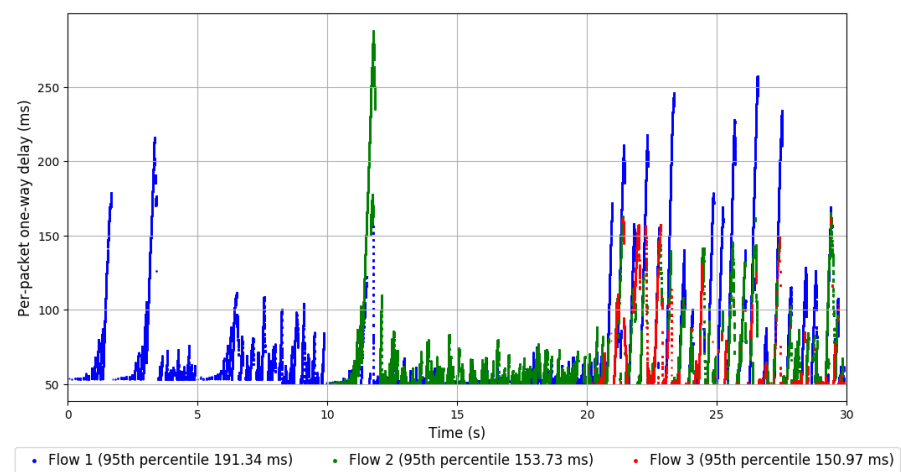
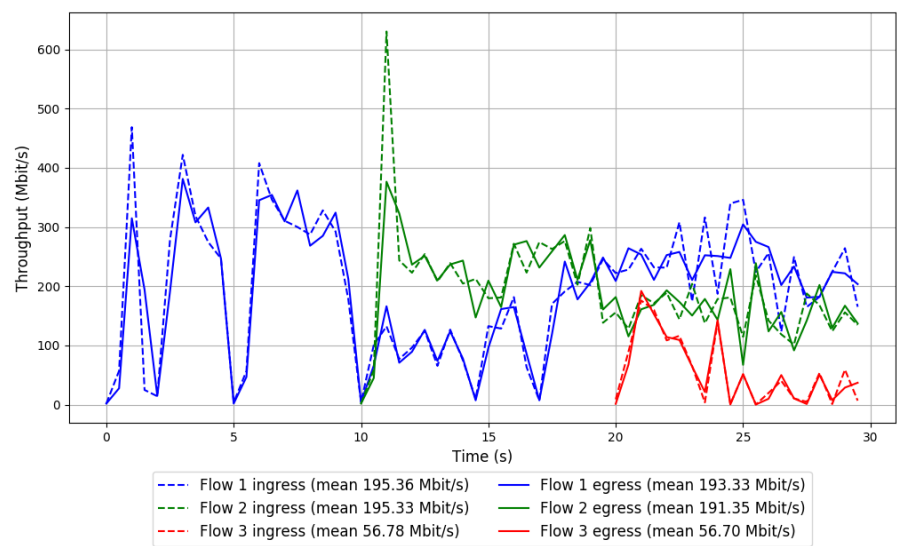
-- Flow 3:

Average throughput: 56.70 Mbit/s

95th percentile per-packet one-way delay: 150.969 ms

Loss rate: 0.25%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-12 08:39:31

End at: 2017-12-12 08:40:01

Below is generated by plot.py at 2017-12-12 10:56:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 341.95 Mbit/s

95th percentile per-packet one-way delay: 118.906 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 195.24 Mbit/s

95th percentile per-packet one-way delay: 150.430 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 138.56 Mbit/s

95th percentile per-packet one-way delay: 87.556 ms

Loss rate: 0.91%

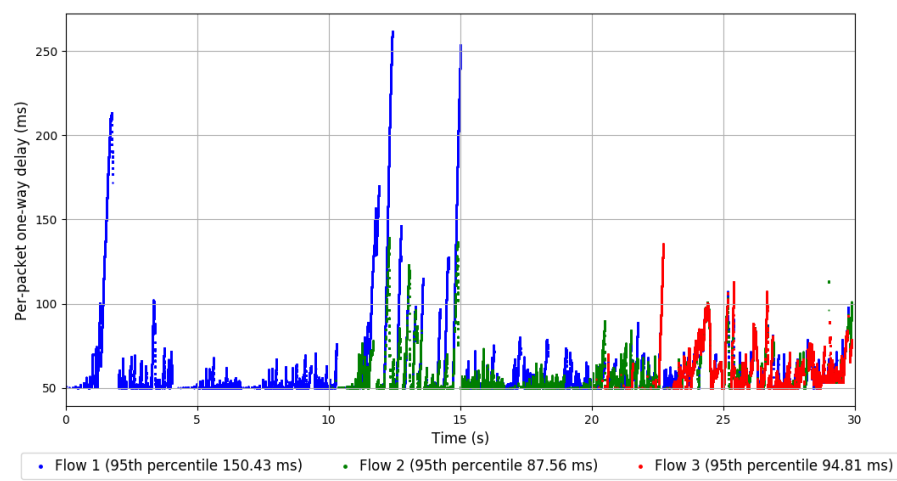
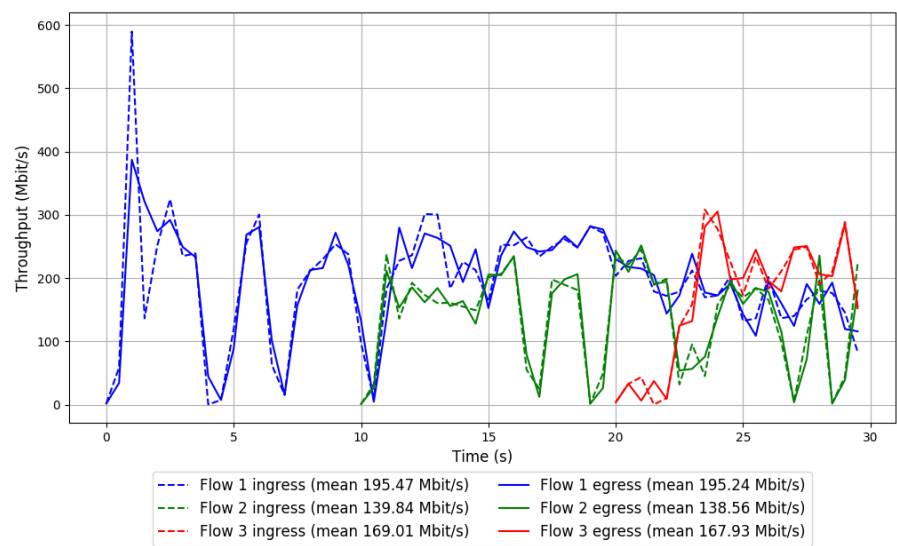
-- Flow 3:

Average throughput: 167.93 Mbit/s

95th percentile per-packet one-way delay: 94.814 ms

Loss rate: 0.65%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-12 08:51:42

End at: 2017-12-12 08:52:12

Below is generated by plot.py at 2017-12-12 10:57:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 353.89 Mbit/s

95th percentile per-packet one-way delay: 99.609 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 215.72 Mbit/s

95th percentile per-packet one-way delay: 104.093 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 157.80 Mbit/s

95th percentile per-packet one-way delay: 95.635 ms

Loss rate: 0.01%

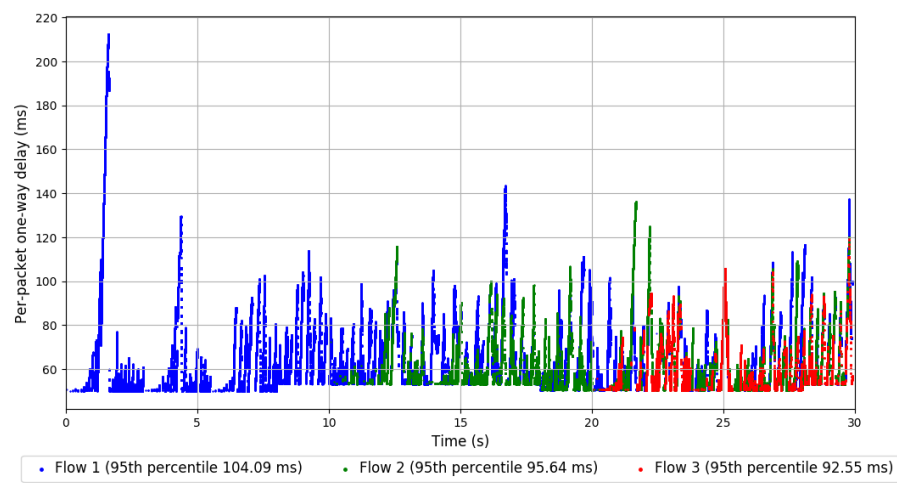
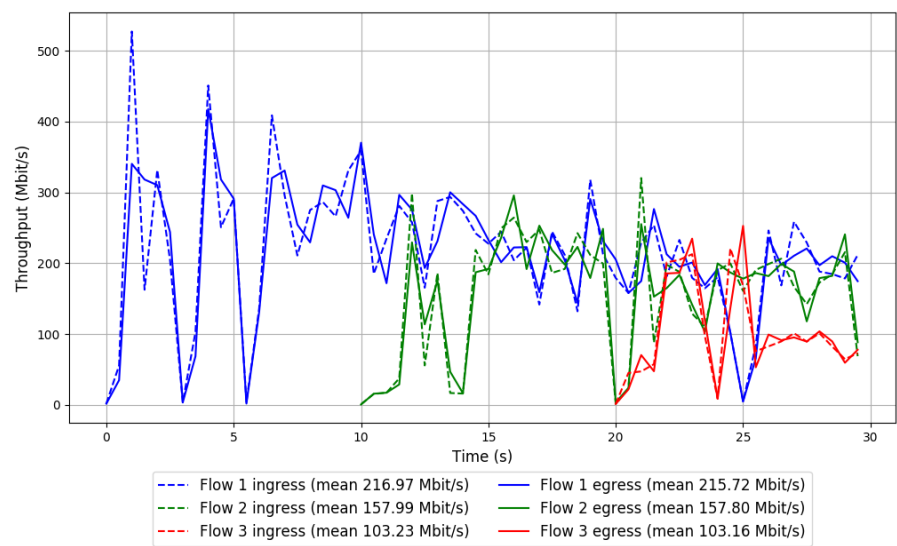
-- Flow 3:

Average throughput: 103.16 Mbit/s

95th percentile per-packet one-way delay: 92.546 ms

Loss rate: 0.02%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

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

End at: 2017-12-12 07:01:41

Below is generated by plot.py at 2017-12-12 10:57:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.48 Mbit/s

95th percentile per-packet one-way delay: 53.601 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 77.37 Mbit/s

95th percentile per-packet one-way delay: 53.638 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 72.94 Mbit/s

95th percentile per-packet one-way delay: 50.689 ms

Loss rate: 0.01%

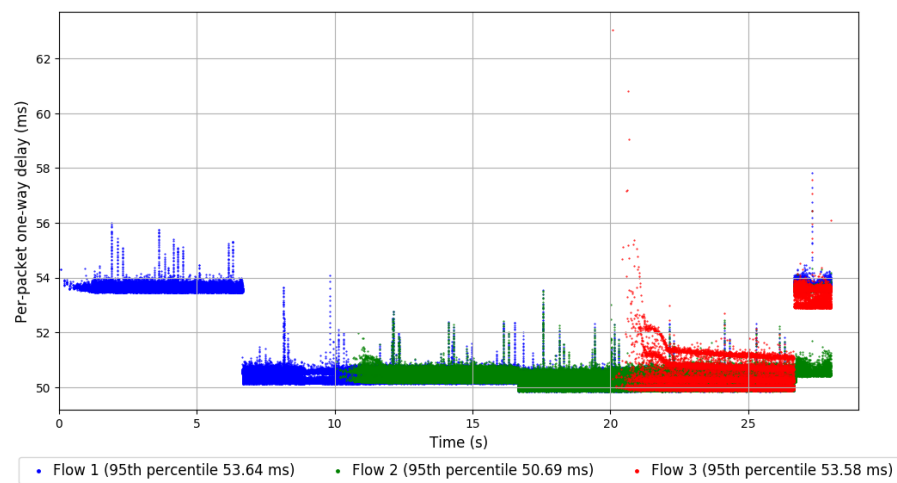
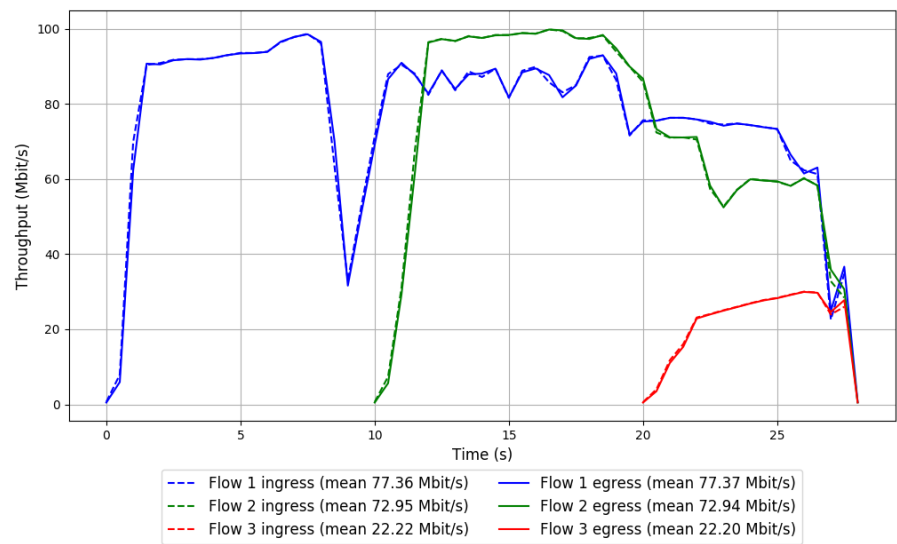
-- Flow 3:

Average throughput: 22.20 Mbit/s

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

Loss rate: 0.05%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-12 07:13:29

End at: 2017-12-12 07:13:59

Below is generated by plot.py at 2017-12-12 10:57:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.44 Mbit/s

95th percentile per-packet one-way delay: 50.653 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.23 Mbit/s

95th percentile per-packet one-way delay: 50.661 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 83.07 Mbit/s

95th percentile per-packet one-way delay: 50.647 ms

Loss rate: 0.00%

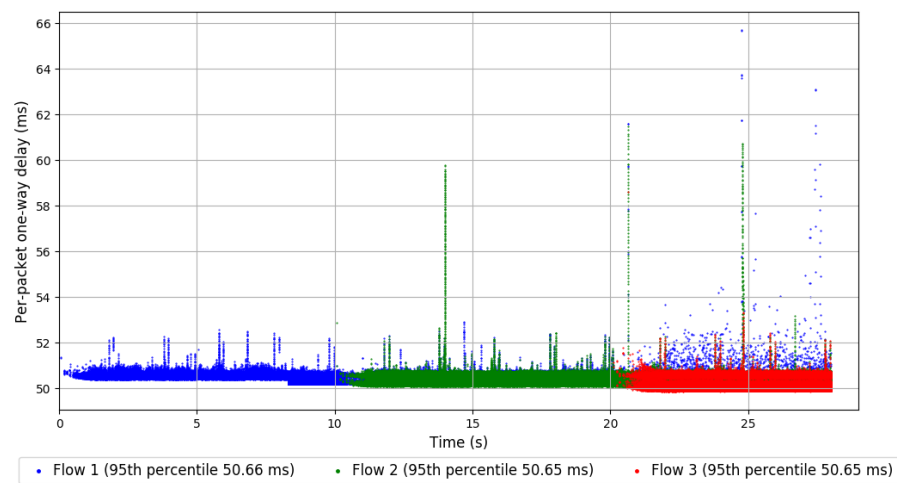
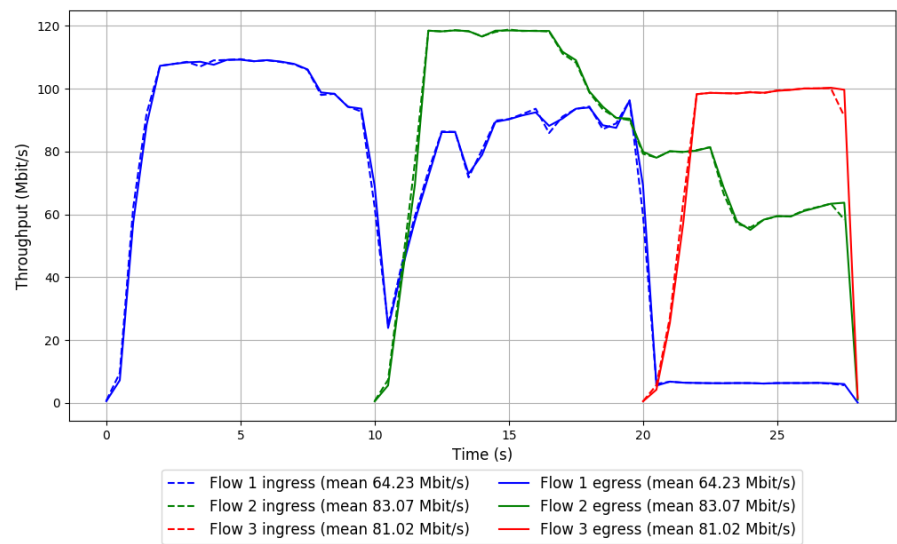
-- Flow 3:

Average throughput: 81.02 Mbit/s

95th percentile per-packet one-way delay: 50.648 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-12 07:25:23

End at: 2017-12-12 07:25:53

Below is generated by plot.py at 2017-12-12 10:57:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 160.60 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 86.69 Mbit/s

95th percentile per-packet one-way delay: 53.644 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 73.27 Mbit/s

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

Loss rate: 0.00%

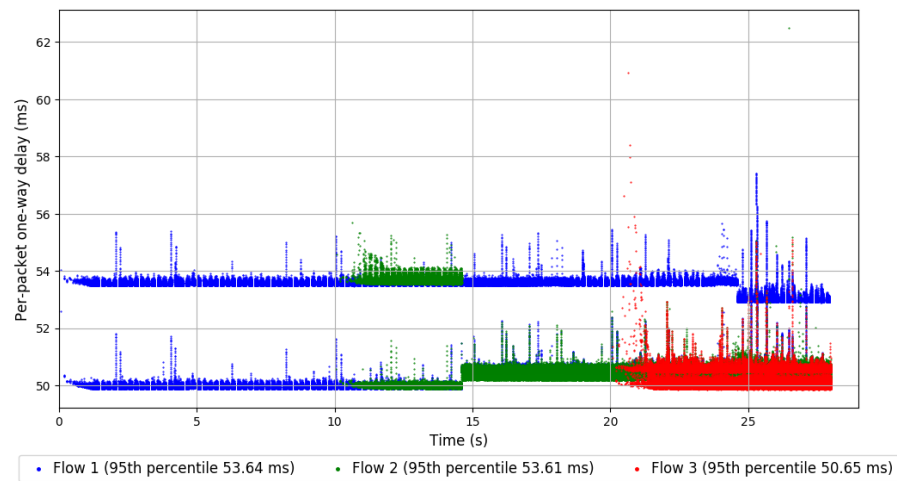
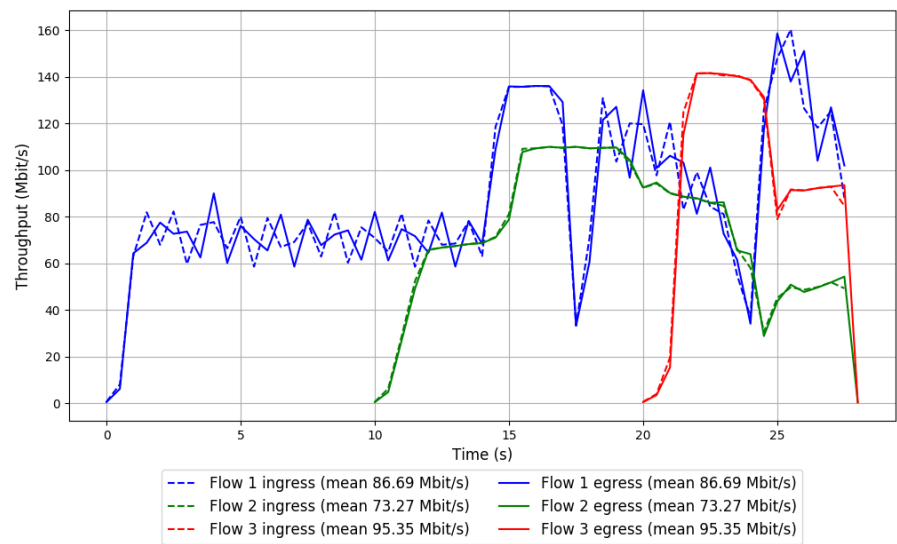
-- Flow 3:

Average throughput: 95.35 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-12 07:37:36

End at: 2017-12-12 07:38:06

Below is generated by plot.py at 2017-12-12 10:57:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.88 Mbit/s

95th percentile per-packet one-way delay: 53.673 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 78.86 Mbit/s

95th percentile per-packet one-way delay: 53.752 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.98 Mbit/s

95th percentile per-packet one-way delay: 53.115 ms

Loss rate: 0.00%

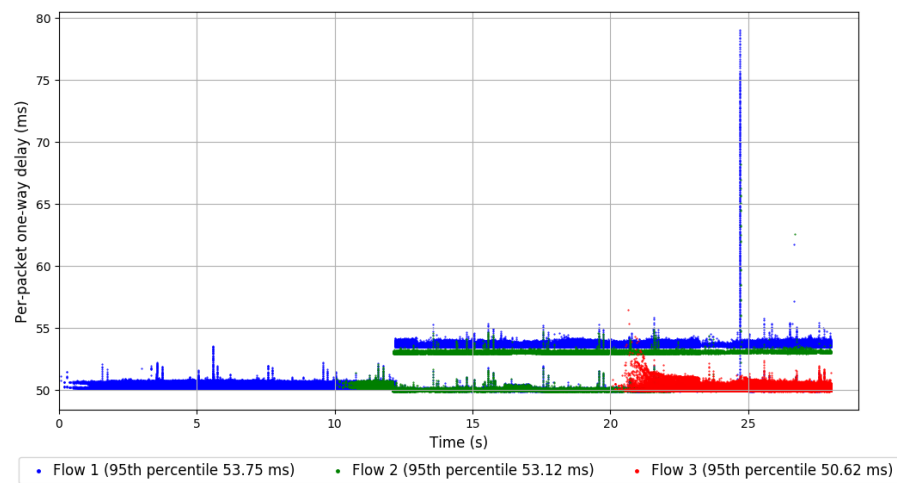
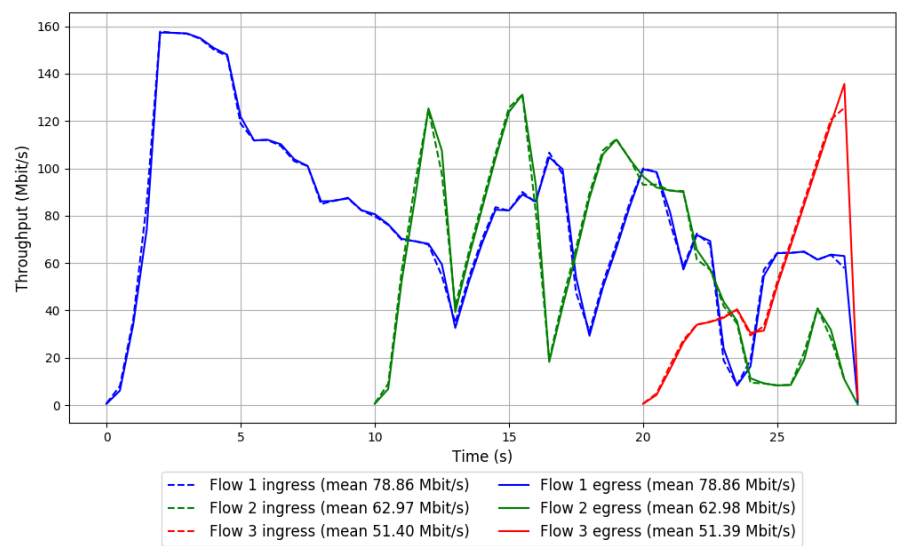
-- Flow 3:

Average throughput: 51.39 Mbit/s

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

Loss rate: 0.02%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-12 07:49:57

End at: 2017-12-12 07:50:27

Below is generated by plot.py at 2017-12-12 10:58:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.17 Mbit/s

95th percentile per-packet one-way delay: 53.653 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 86.08 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.61 Mbit/s

95th percentile per-packet one-way delay: 53.759 ms

Loss rate: 0.00%

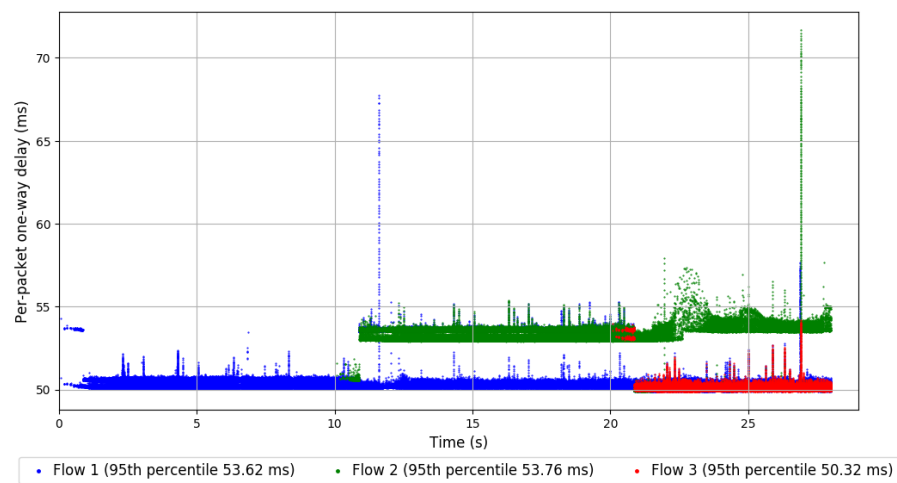
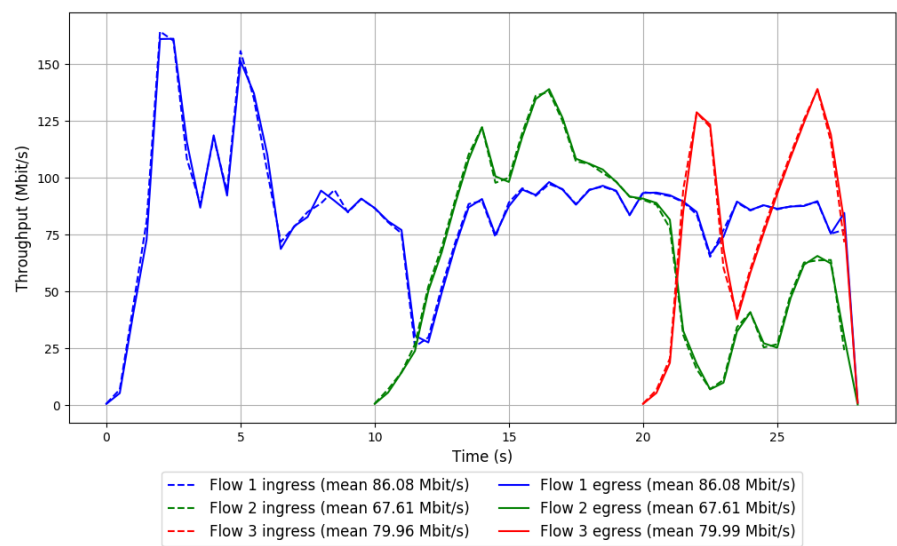
-- Flow 3:

Average throughput: 79.99 Mbit/s

95th percentile per-packet one-way delay: 50.319 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-12 08:02:06

End at: 2017-12-12 08:02:36

Below is generated by plot.py at 2017-12-12 10:59:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.73 Mbit/s

95th percentile per-packet one-way delay: 53.301 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 79.48 Mbit/s

95th percentile per-packet one-way delay: 53.295 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.35 Mbit/s

95th percentile per-packet one-way delay: 53.325 ms

Loss rate: 0.00%

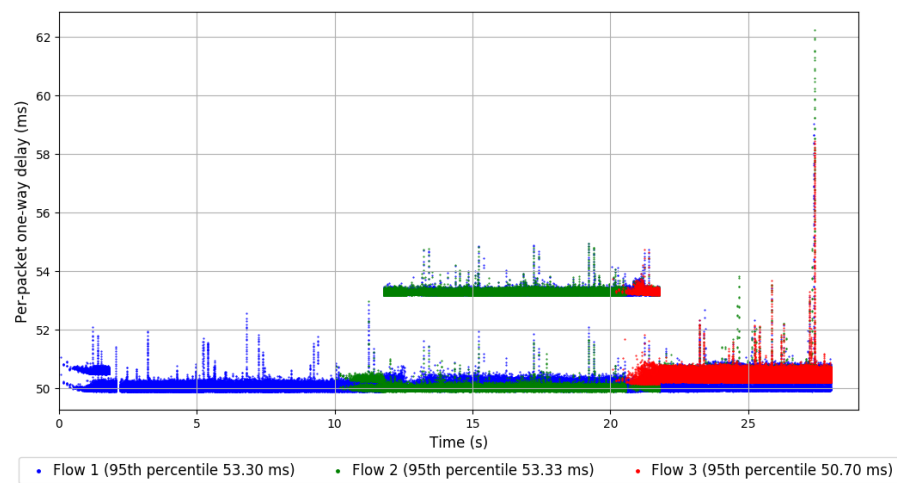
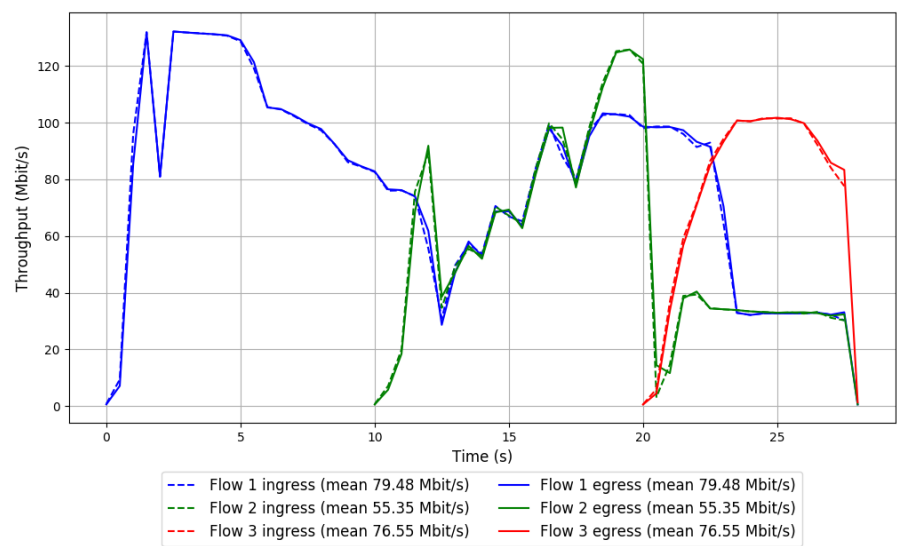
-- Flow 3:

Average throughput: 76.55 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-12 08:14:31

End at: 2017-12-12 08:15:01

Below is generated by plot.py at 2017-12-12 10:59:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.67 Mbit/s

95th percentile per-packet one-way delay: 53.721 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 78.30 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.06 Mbit/s

95th percentile per-packet one-way delay: 53.857 ms

Loss rate: 0.00%

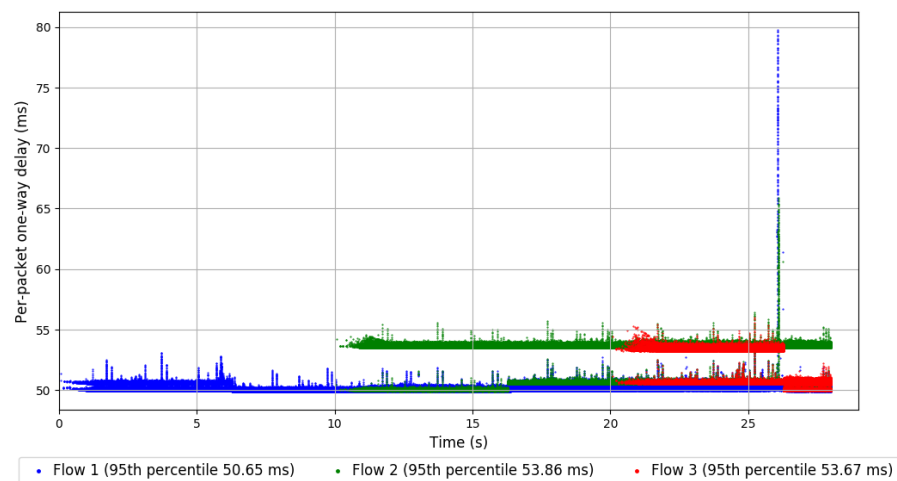
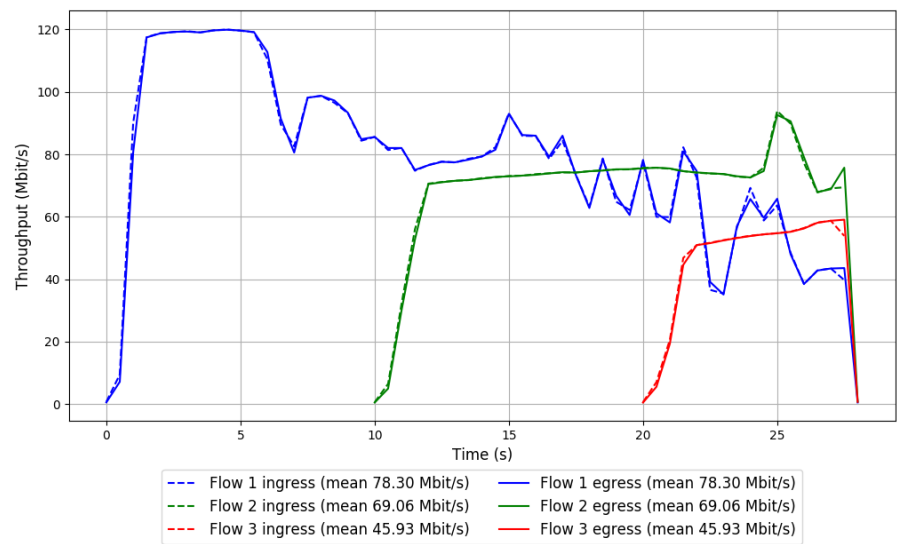
-- Flow 3:

Average throughput: 45.93 Mbit/s

95th percentile per-packet one-way delay: 53.672 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-12 08:26:49

End at: 2017-12-12 08:27:19

Below is generated by plot.py at 2017-12-12 10:59:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.63 Mbit/s

95th percentile per-packet one-way delay: 53.785 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 77.93 Mbit/s

95th percentile per-packet one-way delay: 53.489 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.09 Mbit/s

95th percentile per-packet one-way delay: 53.947 ms

Loss rate: 0.00%

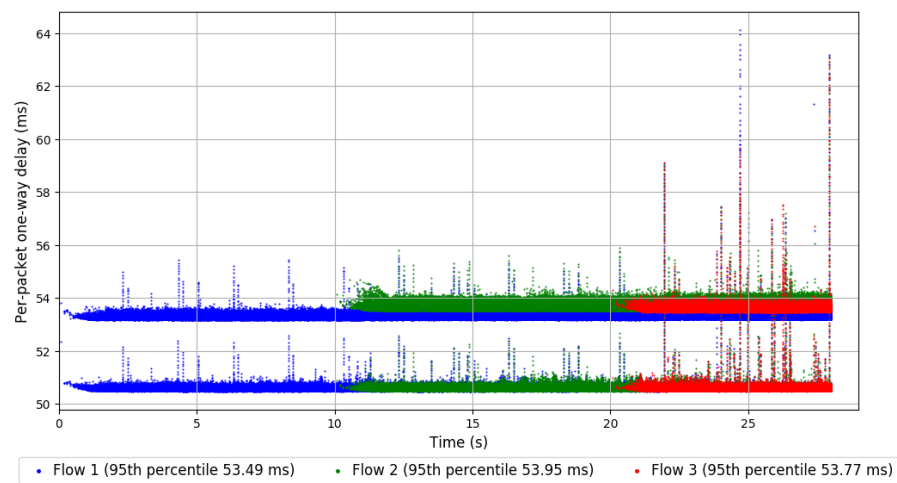
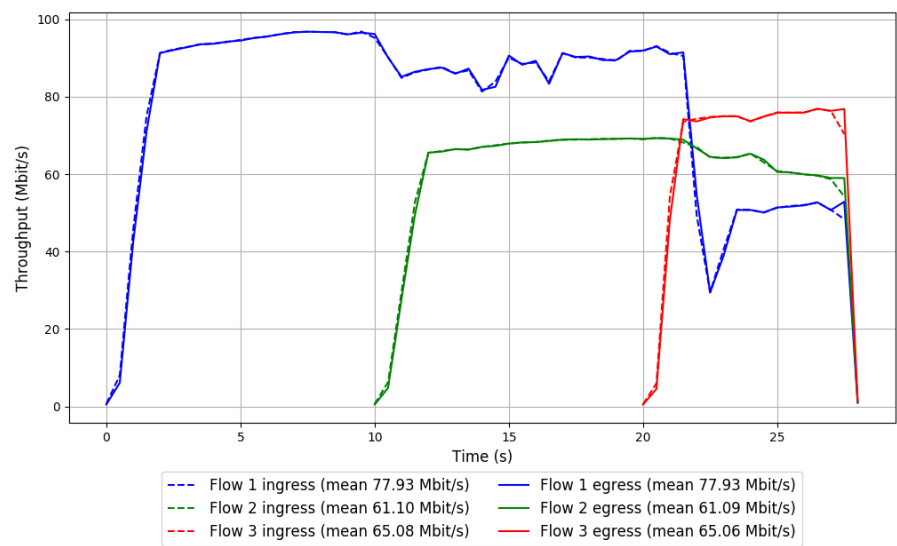
-- Flow 3:

Average throughput: 65.06 Mbit/s

95th percentile per-packet one-way delay: 53.765 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-12 08:38:37

End at: 2017-12-12 08:39:07

Below is generated by plot.py at 2017-12-12 11:00:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.15 Mbit/s

95th percentile per-packet one-way delay: 53.794 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 78.99 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.48 Mbit/s

95th percentile per-packet one-way delay: 53.965 ms

Loss rate: 0.00%

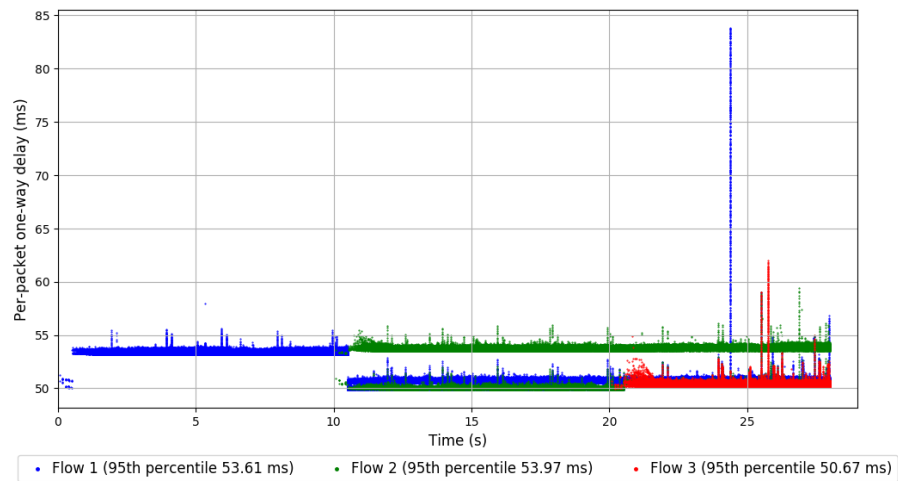
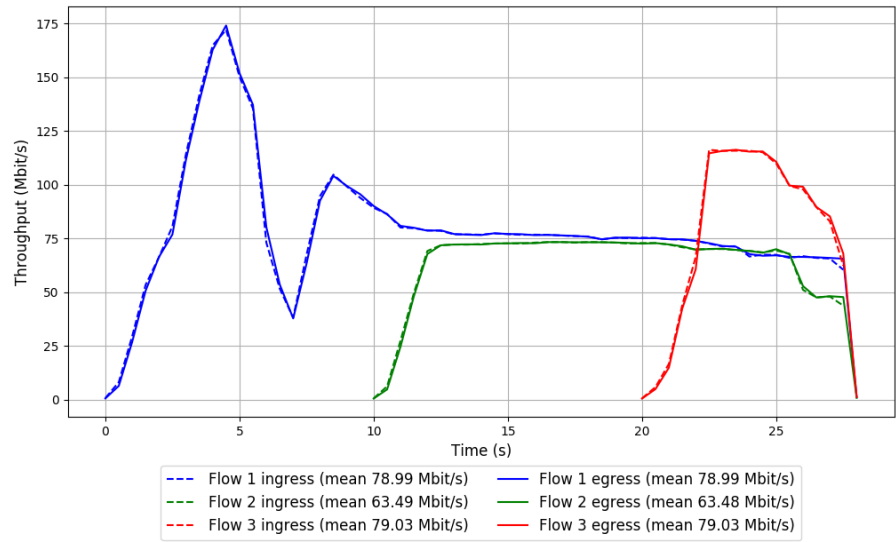
-- Flow 3:

Average throughput: 79.03 Mbit/s

95th percentile per-packet one-way delay: 50.667 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

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

End at: 2017-12-12 08:51:20

Below is generated by plot.py at 2017-12-12 11:00:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.42 Mbit/s

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

Loss rate: 0.04%

-- Flow 1:

Average throughput: 72.28 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.39 Mbit/s

95th percentile per-packet one-way delay: 53.603 ms

Loss rate: 0.12%

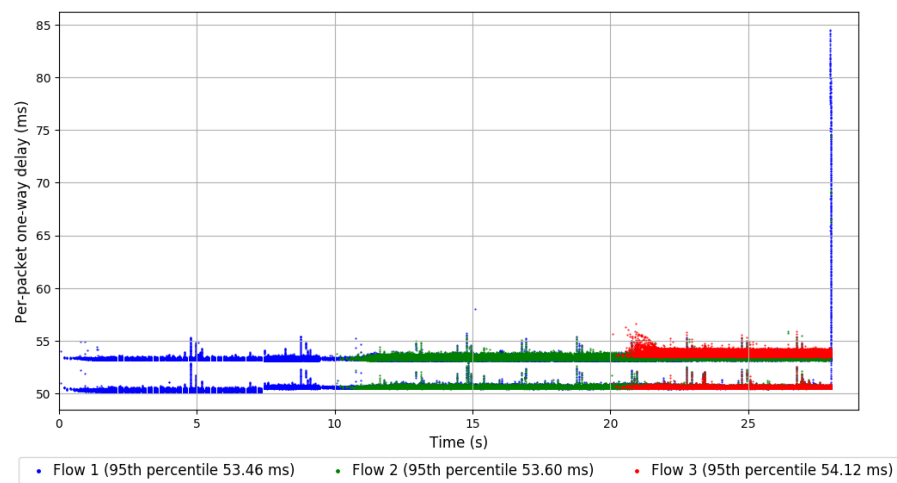
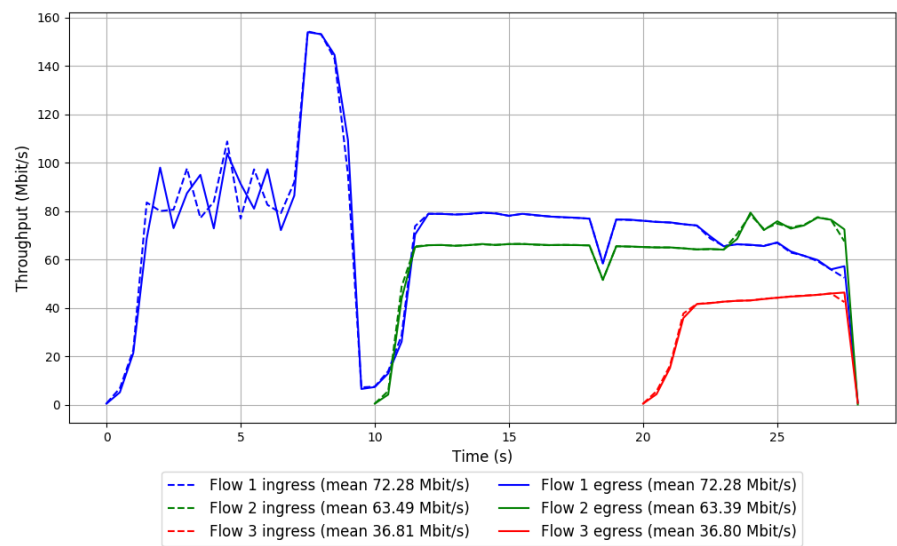
-- Flow 3:

Average throughput: 36.80 Mbit/s

95th percentile per-packet one-way delay: 54.125 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

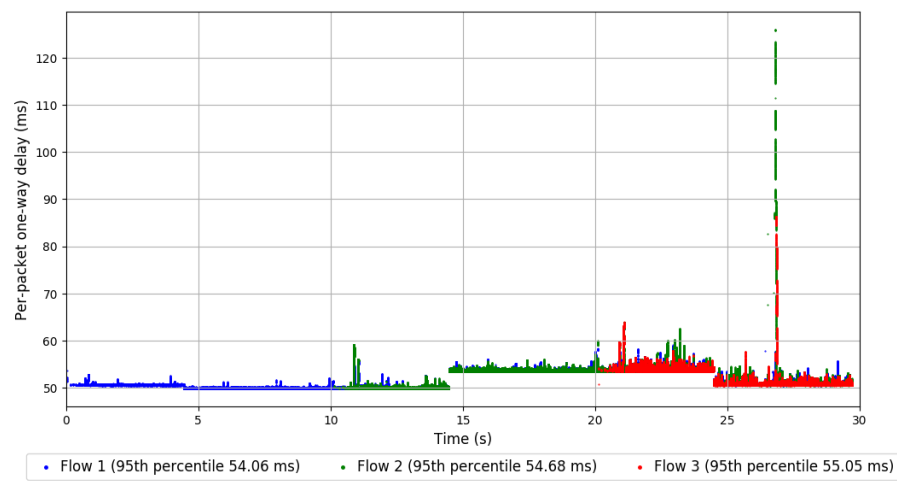
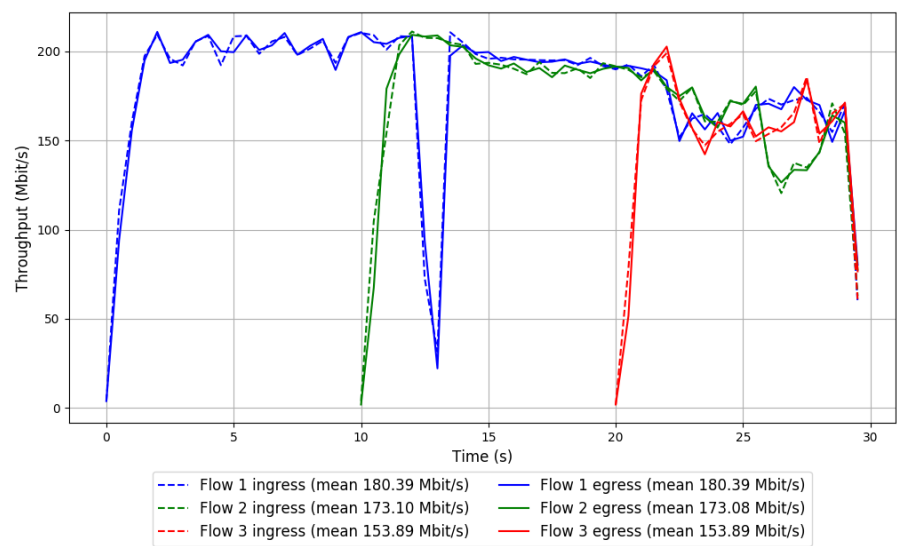


```
Run 1: Statistics of Indigo

Start at: 2017-12-12 07:03:55
End at: 2017-12-12 07:04:25

# Below is generated by plot.py at 2017-12-12 11:02:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 344.46 Mbit/s
95th percentile per-packet one-way delay: 54.441 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 180.39 Mbit/s
95th percentile per-packet one-way delay: 54.063 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 173.08 Mbit/s
95th percentile per-packet one-way delay: 54.683 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 153.89 Mbit/s
95th percentile per-packet one-way delay: 55.047 ms
Loss rate: 0.00%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-12 07:16:13

End at: 2017-12-12 07:16:43

Below is generated by plot.py at 2017-12-12 11:03:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 352.76 Mbit/s

95th percentile per-packet one-way delay: 53.581 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 185.33 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 179.03 Mbit/s

95th percentile per-packet one-way delay: 51.747 ms

Loss rate: 0.00%

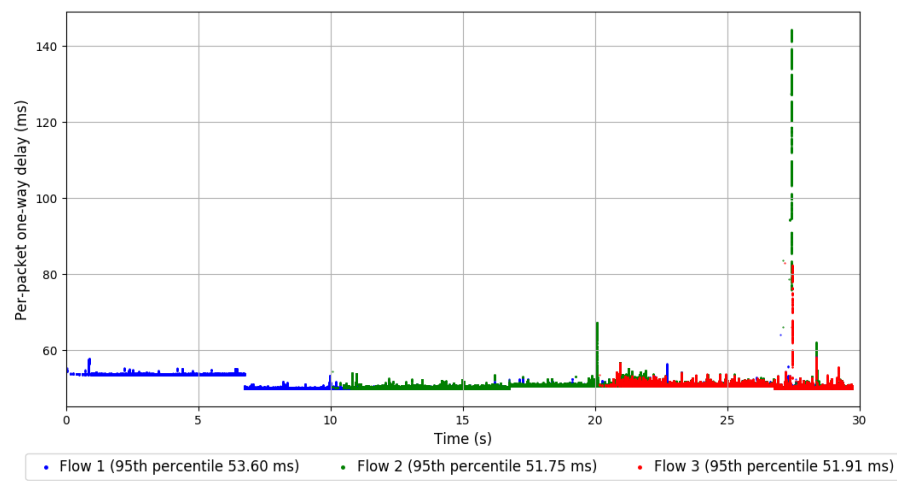
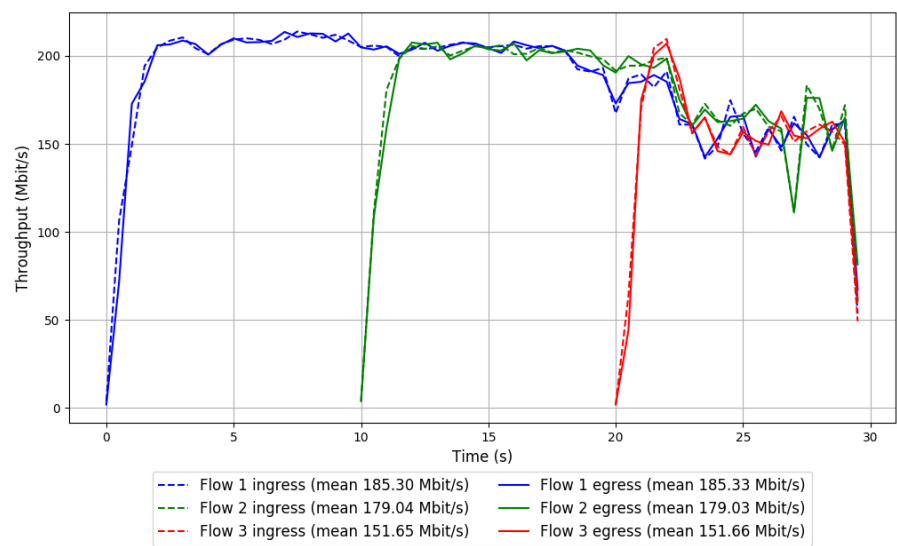
-- Flow 3:

Average throughput: 151.66 Mbit/s

95th percentile per-packet one-way delay: 51.912 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-12 07:28:06

End at: 2017-12-12 07:28:36

Below is generated by plot.py at 2017-12-12 11:04:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 344.29 Mbit/s

95th percentile per-packet one-way delay: 58.320 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 179.43 Mbit/s

95th percentile per-packet one-way delay: 55.669 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 174.21 Mbit/s

95th percentile per-packet one-way delay: 58.889 ms

Loss rate: 0.02%

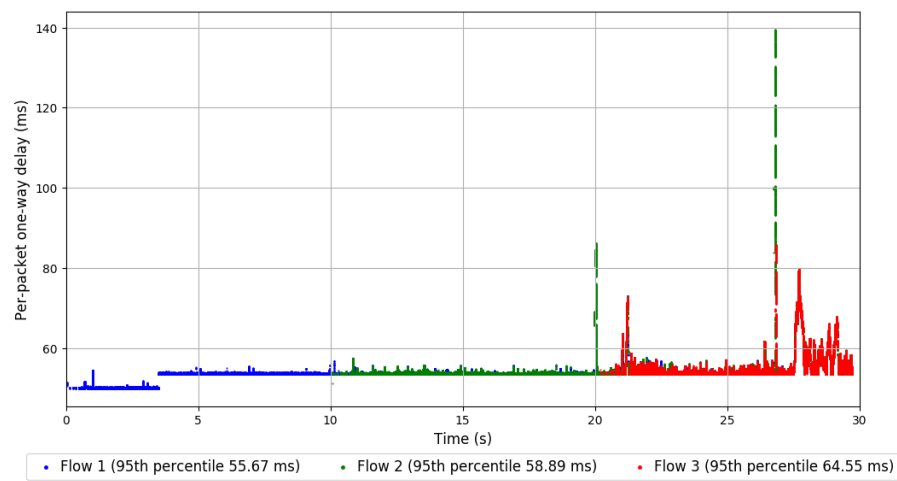
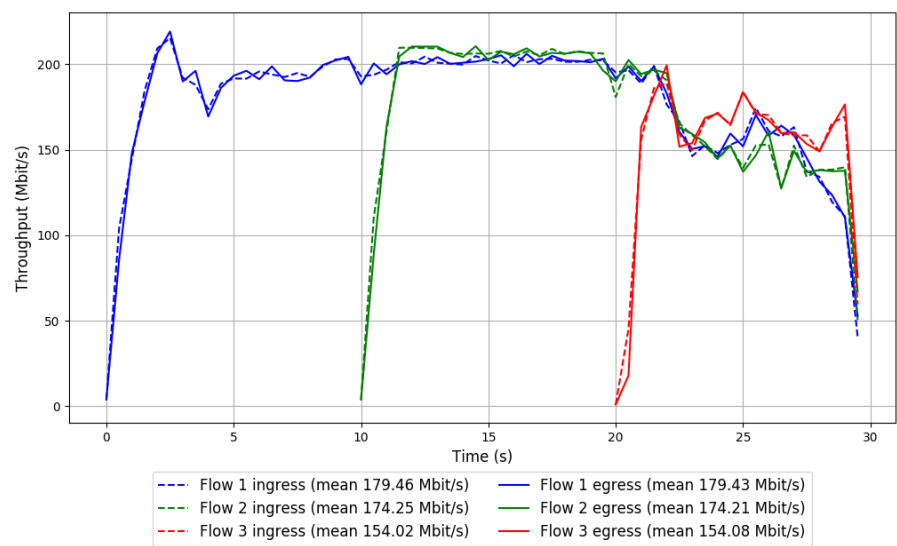
-- Flow 3:

Average throughput: 154.08 Mbit/s

95th percentile per-packet one-way delay: 64.552 ms

Loss rate: 0.01%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-12 07:40:21

End at: 2017-12-12 07:40:51

Below is generated by plot.py at 2017-12-12 11:04:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 344.85 Mbit/s

95th percentile per-packet one-way delay: 53.754 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 175.95 Mbit/s

95th percentile per-packet one-way delay: 53.768 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 178.85 Mbit/s

95th percentile per-packet one-way delay: 53.781 ms

Loss rate: 0.00%

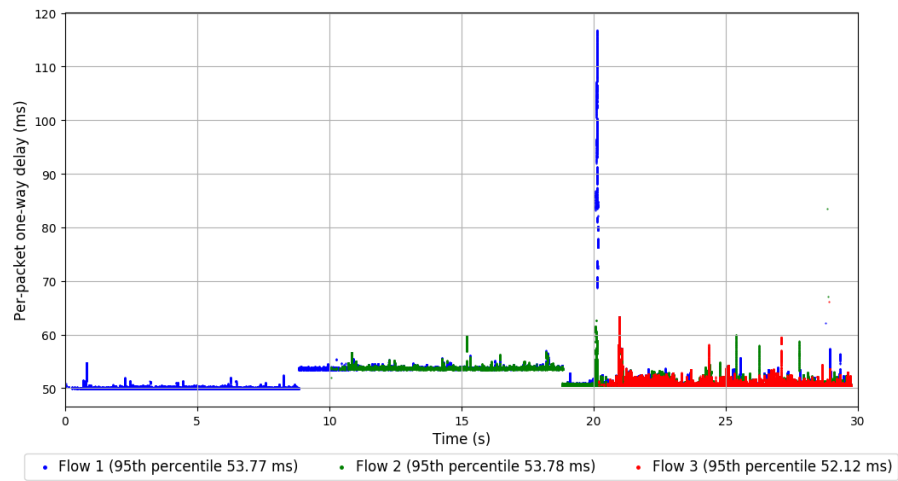
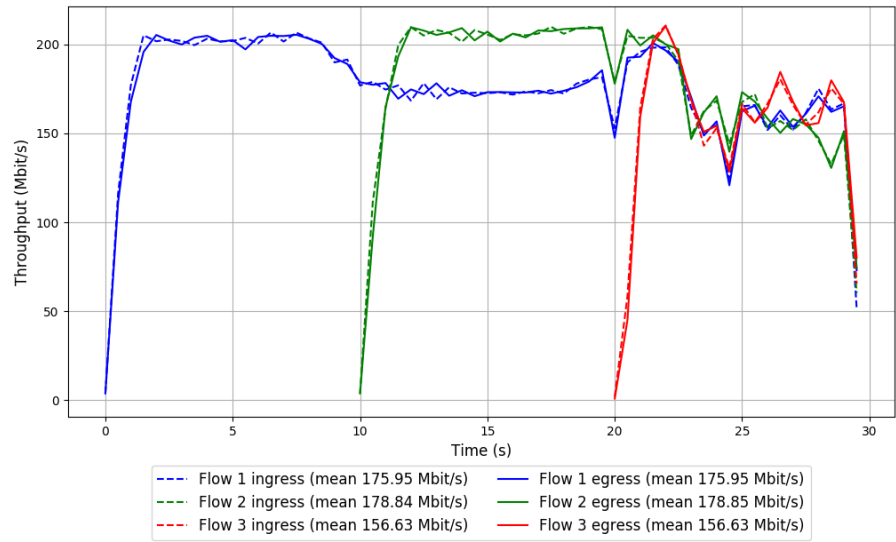
-- Flow 3:

Average throughput: 156.63 Mbit/s

95th percentile per-packet one-way delay: 52.115 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-12 07:52:39

End at: 2017-12-12 07:53:09

Below is generated by plot.py at 2017-12-12 11:05:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.53 Mbit/s

95th percentile per-packet one-way delay: 53.837 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 188.73 Mbit/s

95th percentile per-packet one-way delay: 52.429 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 178.77 Mbit/s

95th percentile per-packet one-way delay: 53.911 ms

Loss rate: 0.01%

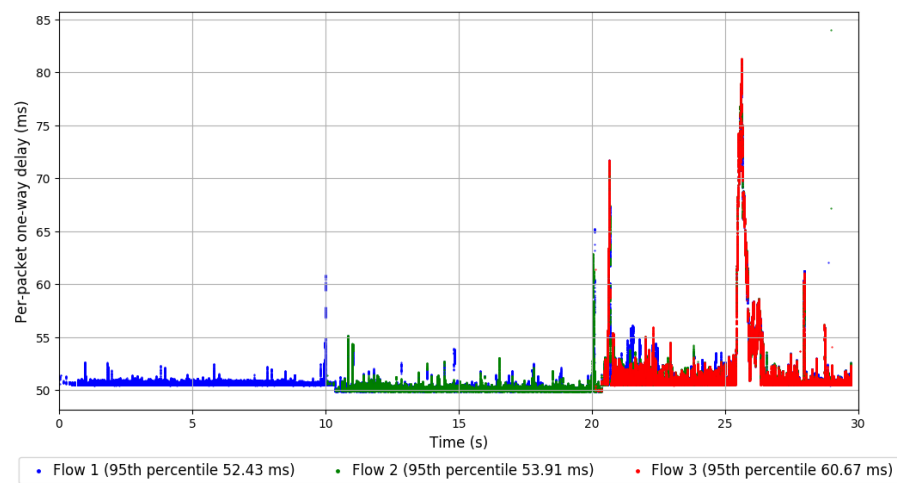
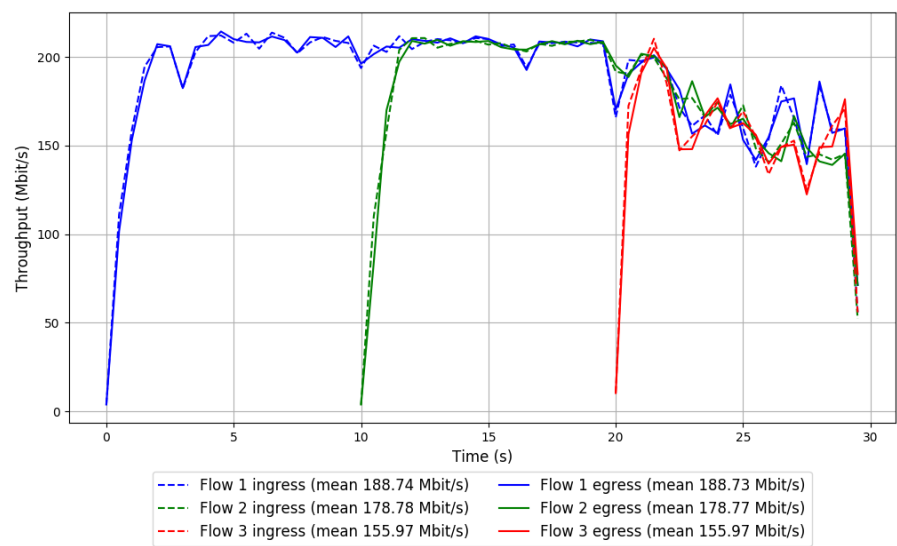
-- Flow 3:

Average throughput: 155.97 Mbit/s

95th percentile per-packet one-way delay: 60.675 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-12 08:04:51

End at: 2017-12-12 08:05:21

Below is generated by plot.py at 2017-12-12 11:05:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 341.23 Mbit/s

95th percentile per-packet one-way delay: 53.293 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 183.05 Mbit/s

95th percentile per-packet one-way delay: 53.314 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 162.16 Mbit/s

95th percentile per-packet one-way delay: 51.662 ms

Loss rate: 0.01%

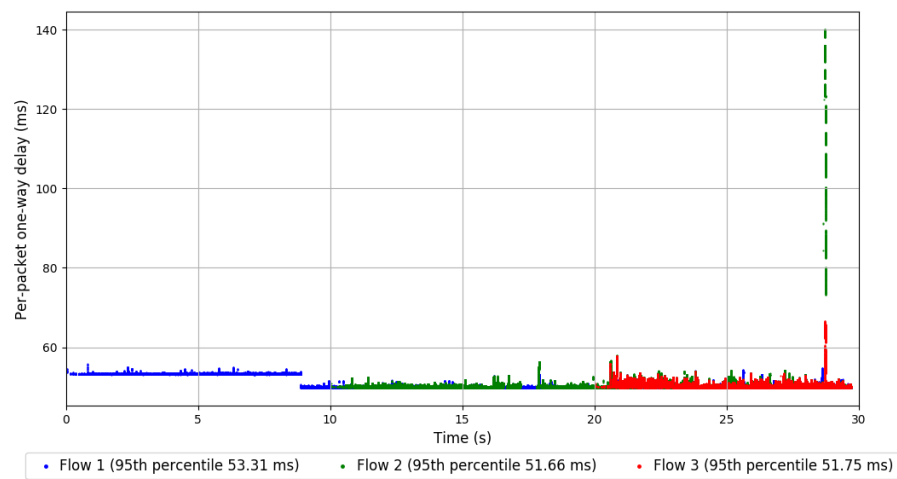
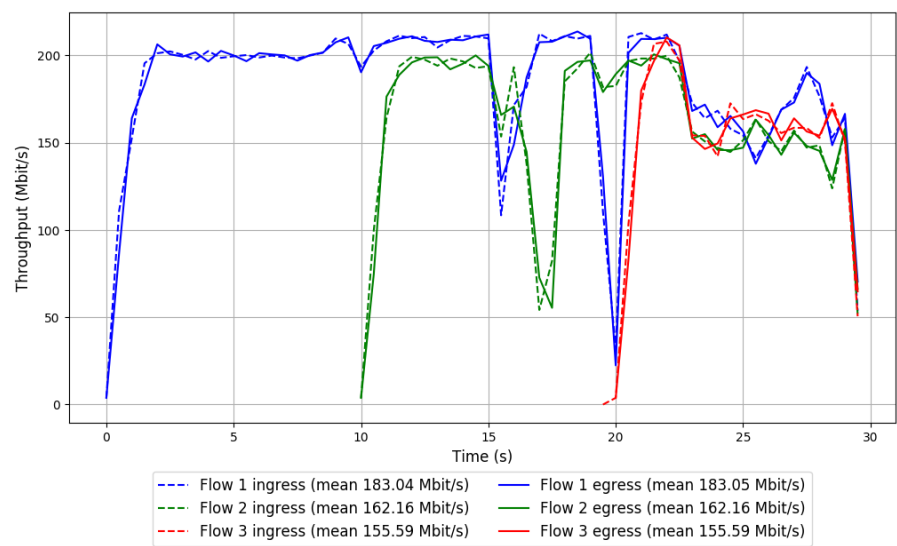
-- Flow 3:

Average throughput: 155.59 Mbit/s

95th percentile per-packet one-way delay: 51.750 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-12 08:17:15

End at: 2017-12-12 08:17:45

Below is generated by plot.py at 2017-12-12 11:06:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 361.00 Mbit/s

95th percentile per-packet one-way delay: 59.053 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 189.71 Mbit/s

95th percentile per-packet one-way delay: 55.708 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 181.40 Mbit/s

95th percentile per-packet one-way delay: 59.379 ms

Loss rate: 0.00%

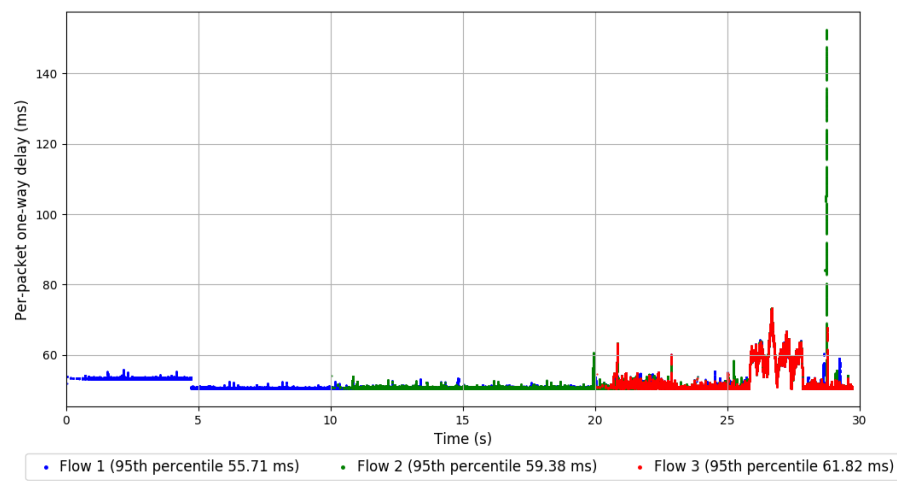
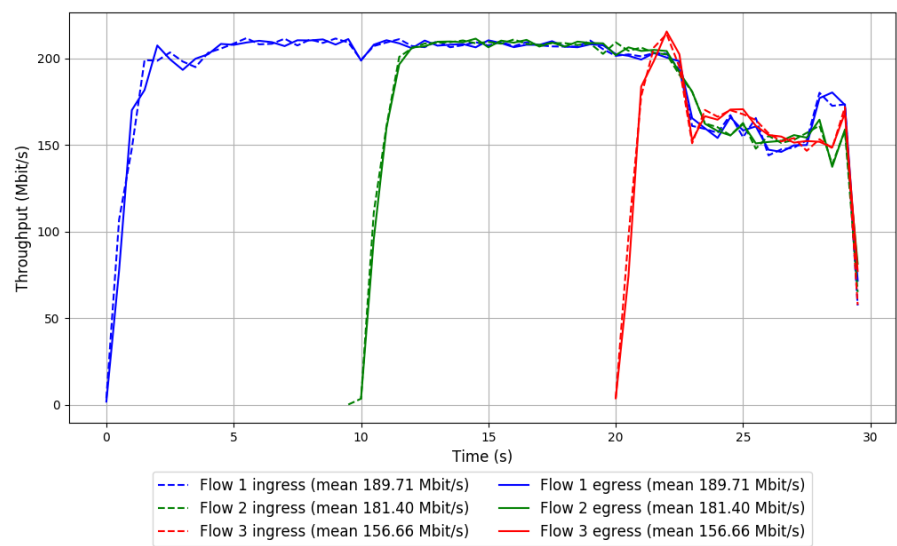
-- Flow 3:

Average throughput: 156.66 Mbit/s

95th percentile per-packet one-way delay: 61.817 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-12 08:29:33

End at: 2017-12-12 08:30:03

Below is generated by plot.py at 2017-12-12 11:07:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 358.99 Mbit/s

95th percentile per-packet one-way delay: 51.711 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 191.30 Mbit/s

95th percentile per-packet one-way delay: 51.372 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 183.53 Mbit/s

95th percentile per-packet one-way delay: 51.868 ms

Loss rate: 0.01%

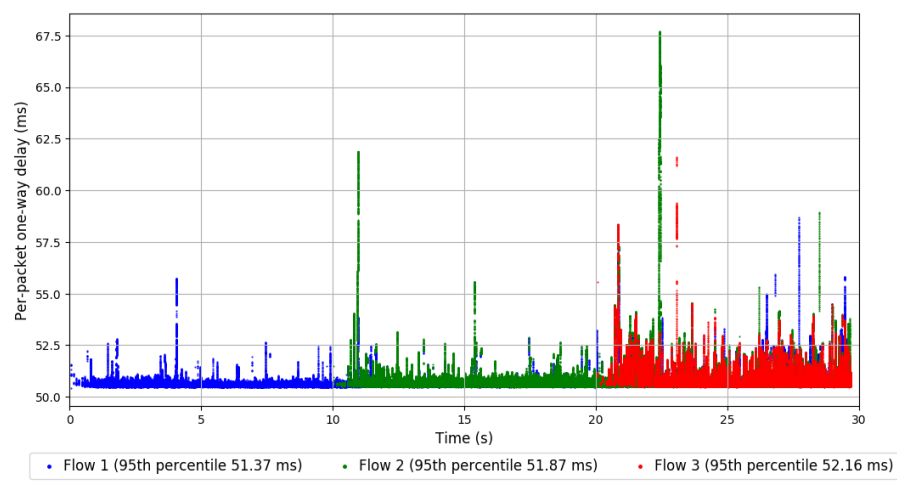
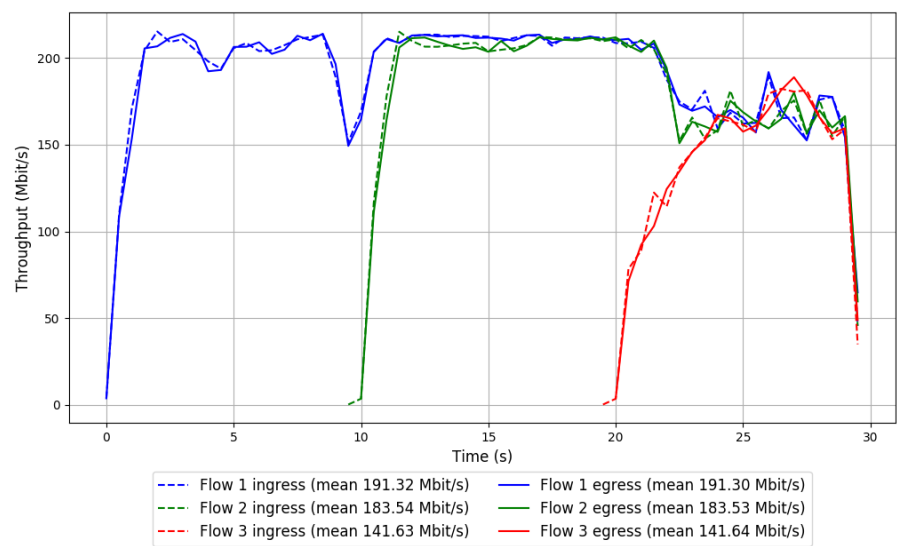
-- Flow 3:

Average throughput: 141.64 Mbit/s

95th percentile per-packet one-way delay: 52.162 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link

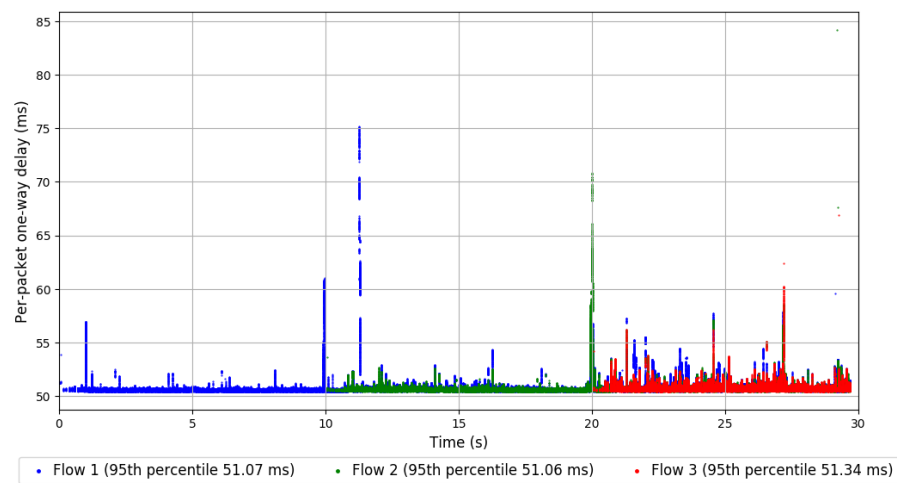
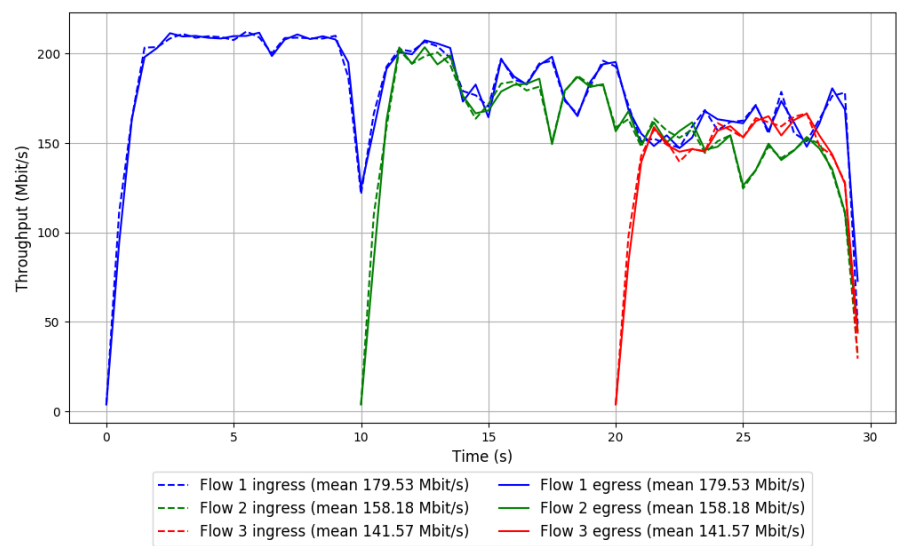


```
Run 9: Statistics of Indigo

Start at: 2017-12-12 08:41:21
End at: 2017-12-12 08:41:51

# Below is generated by plot.py at 2017-12-12 11:08:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.23 Mbit/s
95th percentile per-packet one-way delay: 51.119 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 179.53 Mbit/s
95th percentile per-packet one-way delay: 51.068 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 158.18 Mbit/s
95th percentile per-packet one-way delay: 51.063 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 141.57 Mbit/s
95th percentile per-packet one-way delay: 51.345 ms
Loss rate: 0.00%
```


Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-12 08:53:31

End at: 2017-12-12 08:54:01

Below is generated by plot.py at 2017-12-12 11:08:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 341.24 Mbit/s

95th percentile per-packet one-way delay: 57.186 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 189.57 Mbit/s

95th percentile per-packet one-way delay: 55.616 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 182.81 Mbit/s

95th percentile per-packet one-way delay: 57.878 ms

Loss rate: 0.00%

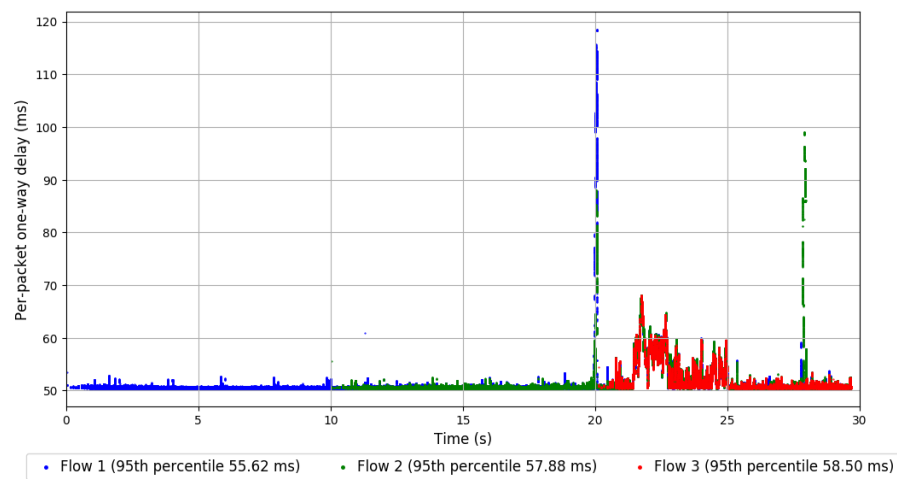
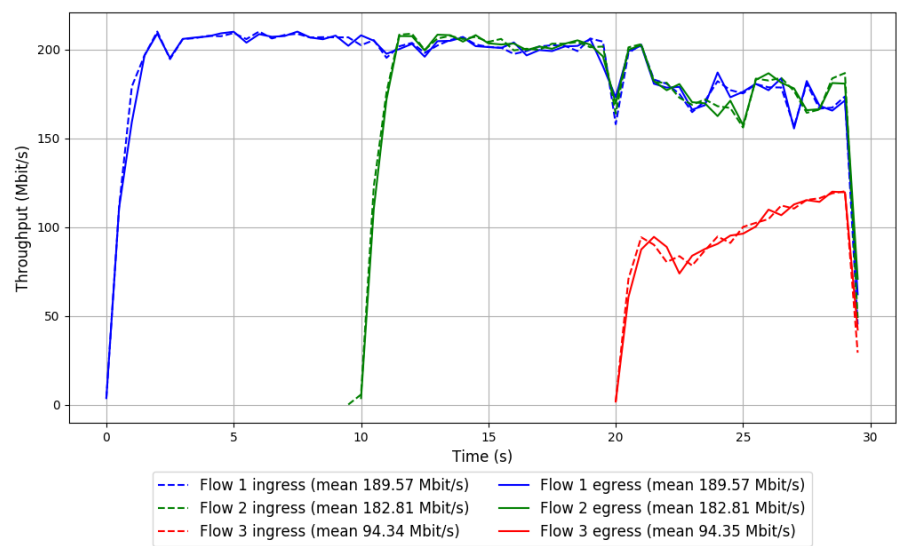
-- Flow 3:

Average throughput: 94.35 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

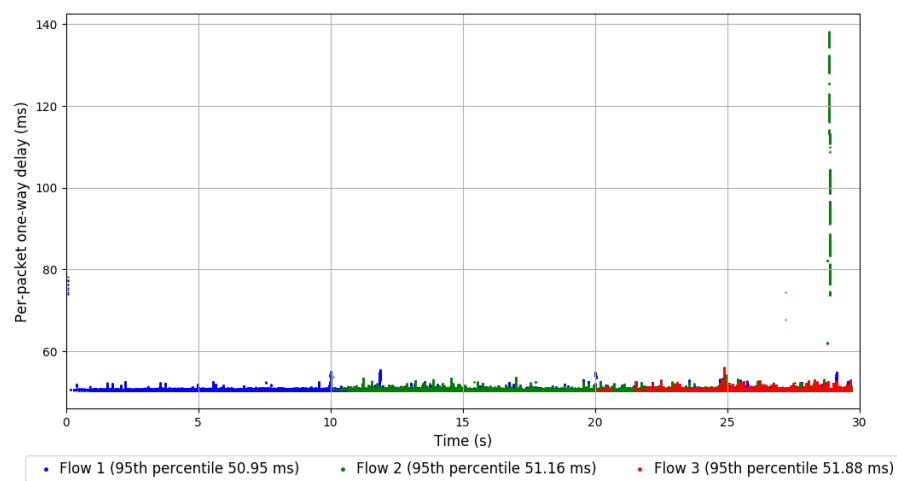
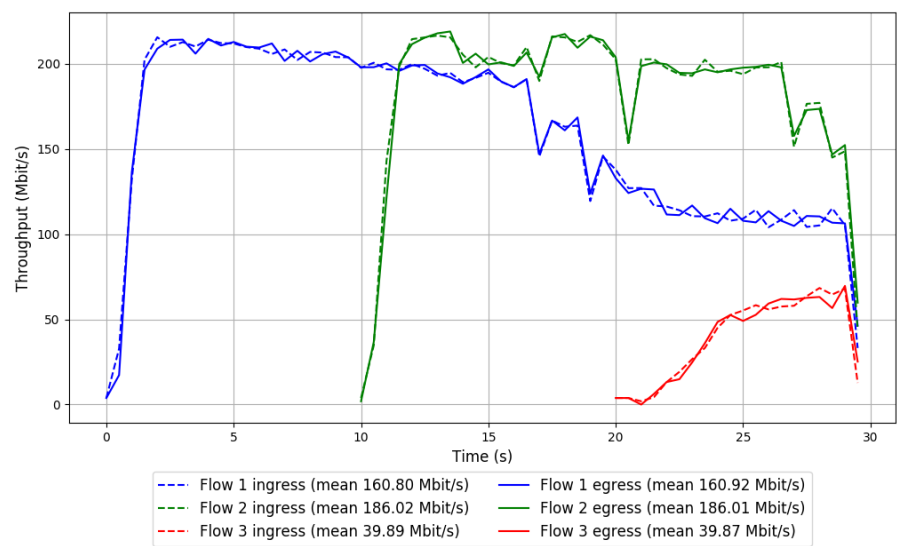


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-12 06:58:49
End at: 2017-12-12 06:59:19

# Below is generated by plot.py at 2017-12-12 11:09:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 296.81 Mbit/s
95th percentile per-packet one-way delay: 51.099 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 160.92 Mbit/s
95th percentile per-packet one-way delay: 50.946 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 186.01 Mbit/s
95th percentile per-packet one-way delay: 51.160 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.87 Mbit/s
95th percentile per-packet one-way delay: 51.875 ms
Loss rate: 0.02%
```

Run 1: Report of Indigo-calib — Data Link

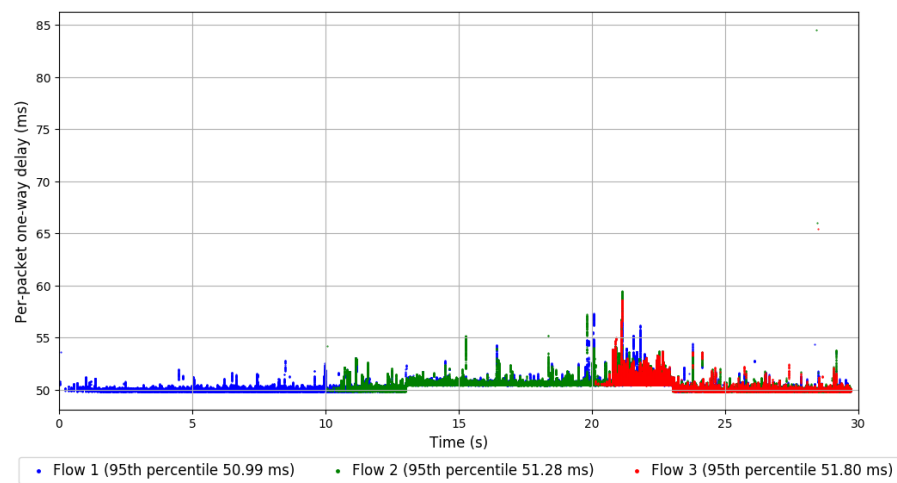
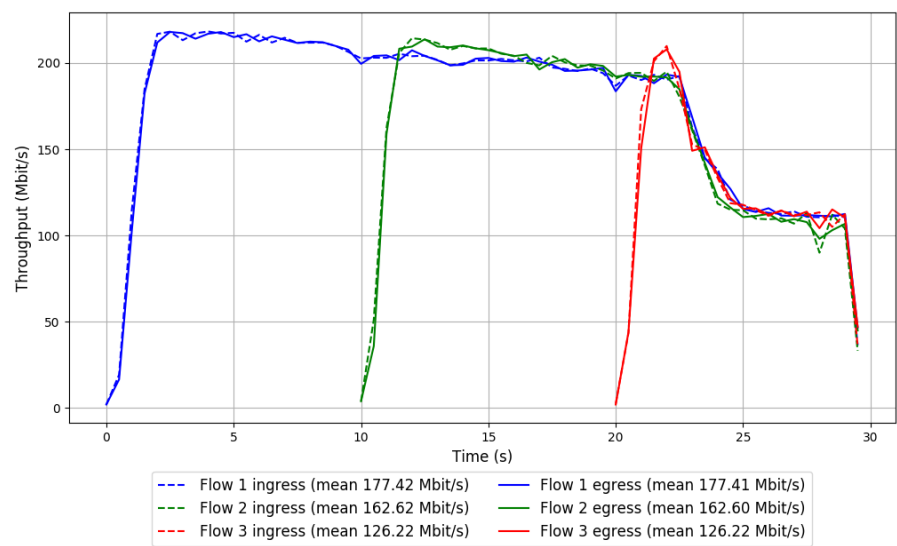


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-12 07:11:06
End at: 2017-12-12 07:11:36

# Below is generated by plot.py at 2017-12-12 11:10:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.79 Mbit/s
95th percentile per-packet one-way delay: 51.255 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 177.41 Mbit/s
95th percentile per-packet one-way delay: 50.991 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 162.60 Mbit/s
95th percentile per-packet one-way delay: 51.279 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 126.22 Mbit/s
95th percentile per-packet one-way delay: 51.799 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link

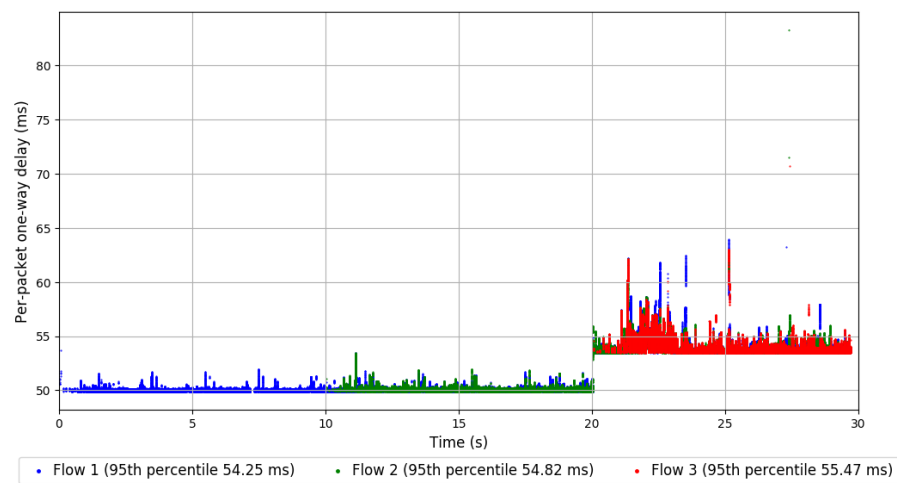
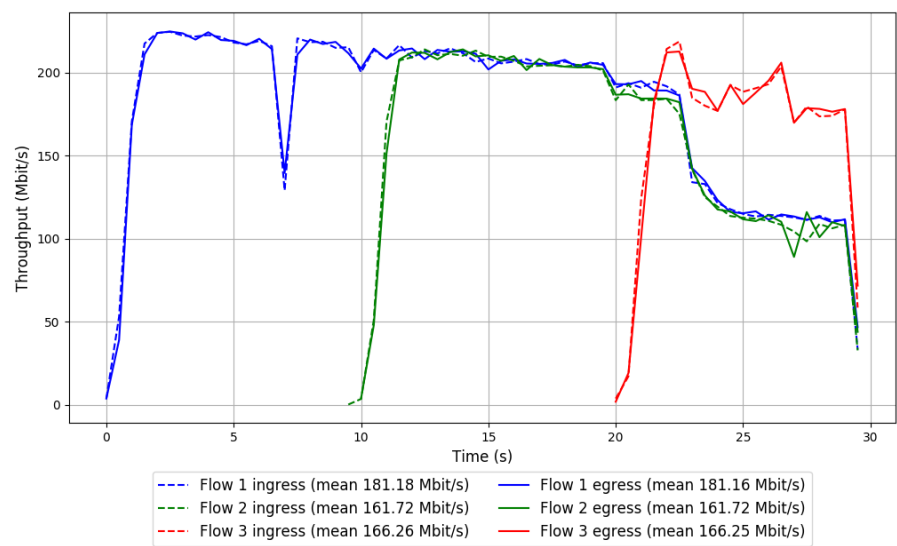


```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-12 07:22:59
End at: 2017-12-12 07:23:29

# Below is generated by plot.py at 2017-12-12 11:10:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 342.38 Mbit/s
95th percentile per-packet one-way delay: 54.762 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 181.16 Mbit/s
95th percentile per-packet one-way delay: 54.253 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 161.72 Mbit/s
95th percentile per-packet one-way delay: 54.824 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 166.25 Mbit/s
95th percentile per-packet one-way delay: 55.471 ms
Loss rate: 0.02%
```


Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-12 07:35:12

End at: 2017-12-12 07:35:42

Below is generated by plot.py at 2017-12-12 11:11:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.23 Mbit/s

95th percentile per-packet one-way delay: 51.190 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 172.93 Mbit/s

95th percentile per-packet one-way delay: 50.904 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 170.72 Mbit/s

95th percentile per-packet one-way delay: 51.170 ms

Loss rate: 0.00%

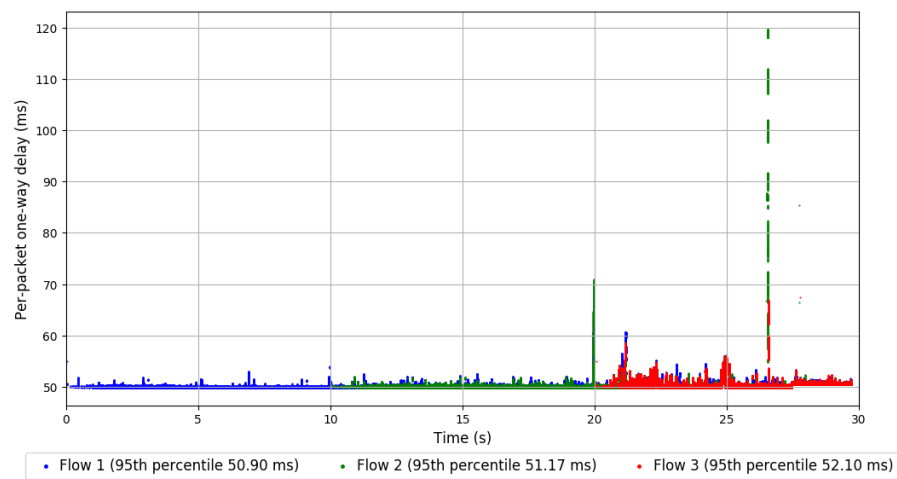
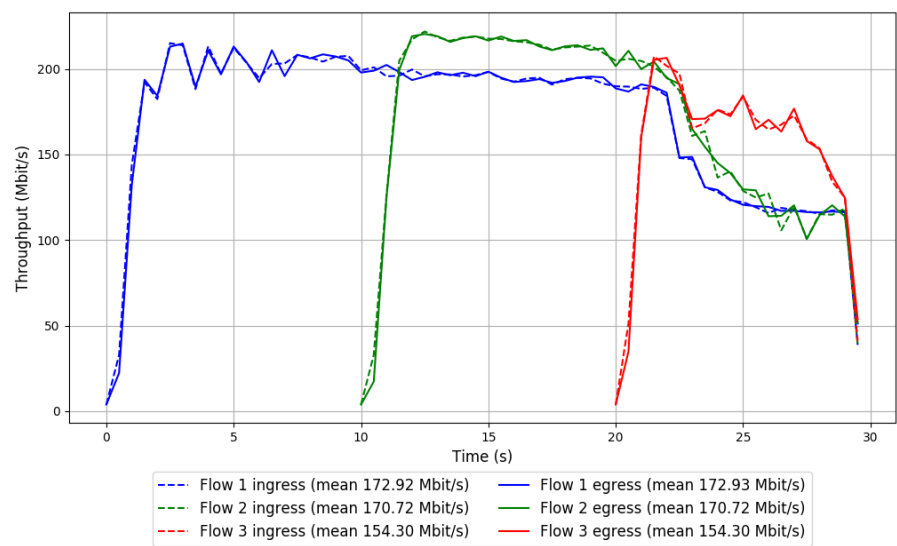
-- Flow 3:

Average throughput: 154.30 Mbit/s

95th percentile per-packet one-way delay: 52.099 ms

Loss rate: 0.00%

Run 4: Report of Indigo-calib — Data Link

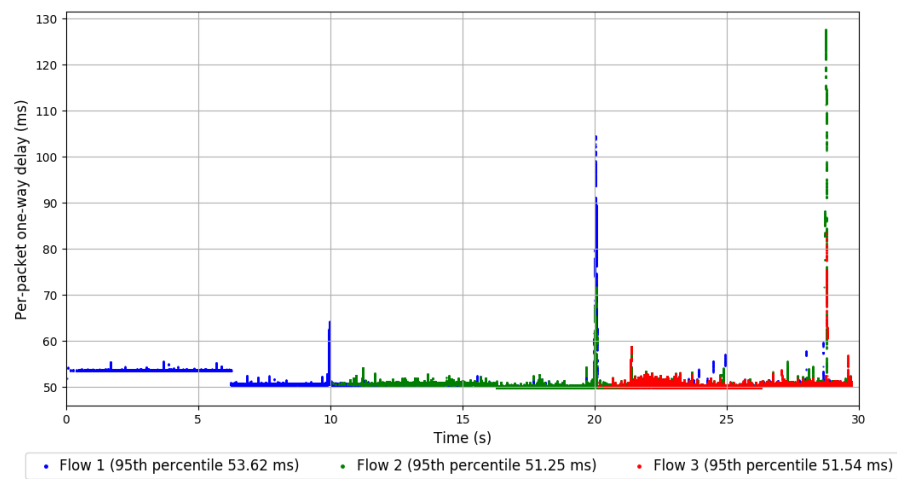
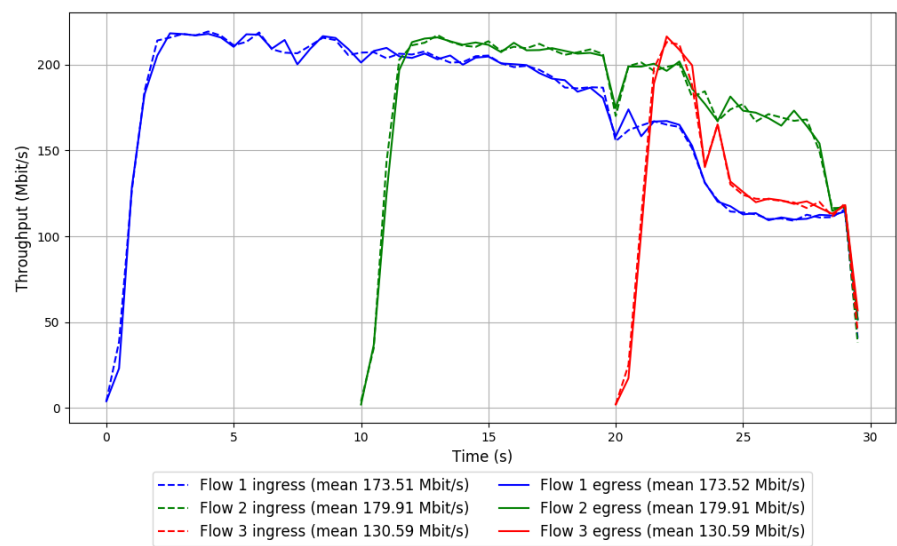


```
Run 5: Statistics of Indigo-calib

Start at: 2017-12-12 07:47:33
End at: 2017-12-12 07:48:03

# Below is generated by plot.py at 2017-12-12 11:11:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.71 Mbit/s
95th percentile per-packet one-way delay: 53.594 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 173.52 Mbit/s
95th percentile per-packet one-way delay: 53.621 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 179.91 Mbit/s
95th percentile per-packet one-way delay: 51.254 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 130.59 Mbit/s
95th percentile per-packet one-way delay: 51.536 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-calib — Data Link

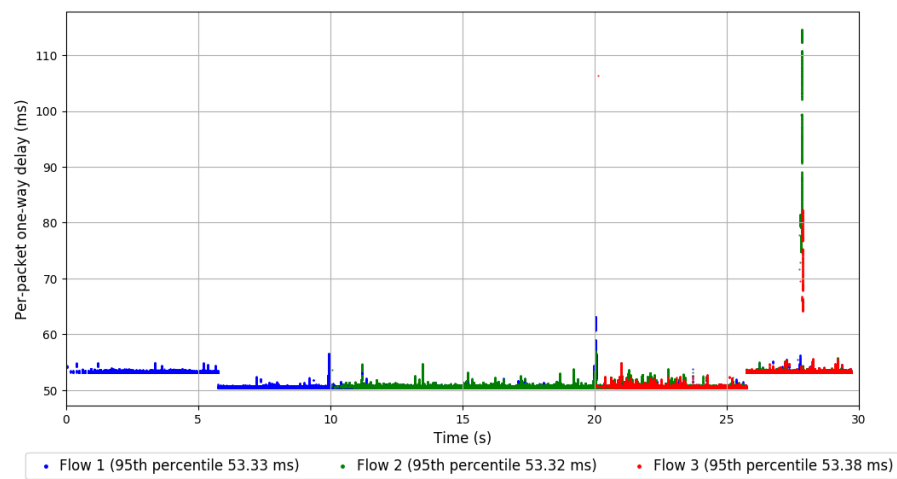
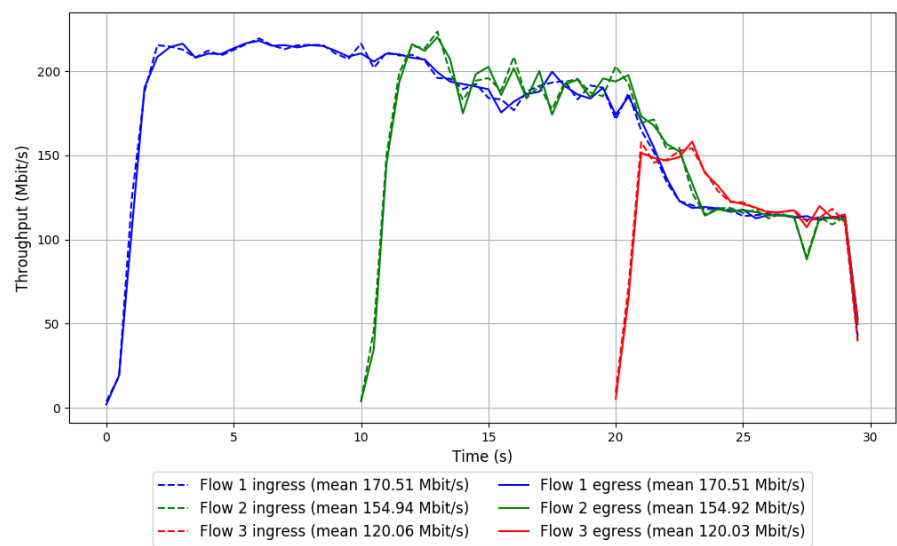


```
Run 6: Statistics of Indigo-calib

Start at: 2017-12-12 07:59:44
End at: 2017-12-12 08:00:14

# Below is generated by plot.py at 2017-12-12 11:12:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.19 Mbit/s
95th percentile per-packet one-way delay: 53.335 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 170.51 Mbit/s
95th percentile per-packet one-way delay: 53.331 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 154.92 Mbit/s
95th percentile per-packet one-way delay: 53.320 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 120.03 Mbit/s
95th percentile per-packet one-way delay: 53.383 ms
Loss rate: 0.00%
```

Run 6: Report of Indigo-calib — Data Link

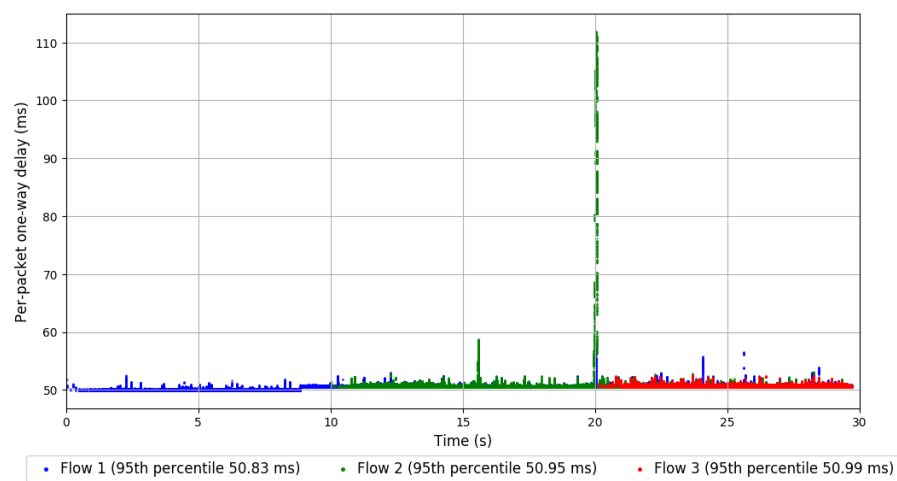
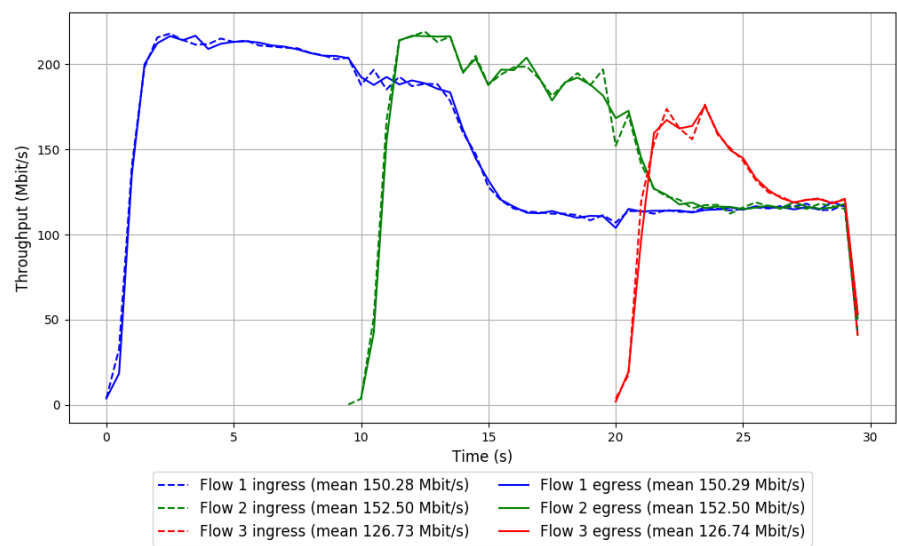


```
Run 7: Statistics of Indigo-calib

Start at: 2017-12-12 08:12:11
End at: 2017-12-12 08:12:41

# Below is generated by plot.py at 2017-12-12 11:12:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 292.43 Mbit/s
95th percentile per-packet one-way delay: 50.899 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 150.29 Mbit/s
95th percentile per-packet one-way delay: 50.825 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 152.50 Mbit/s
95th percentile per-packet one-way delay: 50.954 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 126.74 Mbit/s
95th percentile per-packet one-way delay: 50.991 ms
Loss rate: 0.00%
```


Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-12 08:24:29

End at: 2017-12-12 08:24:59

Below is generated by plot.py at 2017-12-12 11:12:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.82 Mbit/s

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

Loss rate: 0.07%

-- Flow 1:

Average throughput: 155.82 Mbit/s

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

Loss rate: 0.13%

-- Flow 2:

Average throughput: 122.43 Mbit/s

95th percentile per-packet one-way delay: 50.947 ms

Loss rate: 0.00%

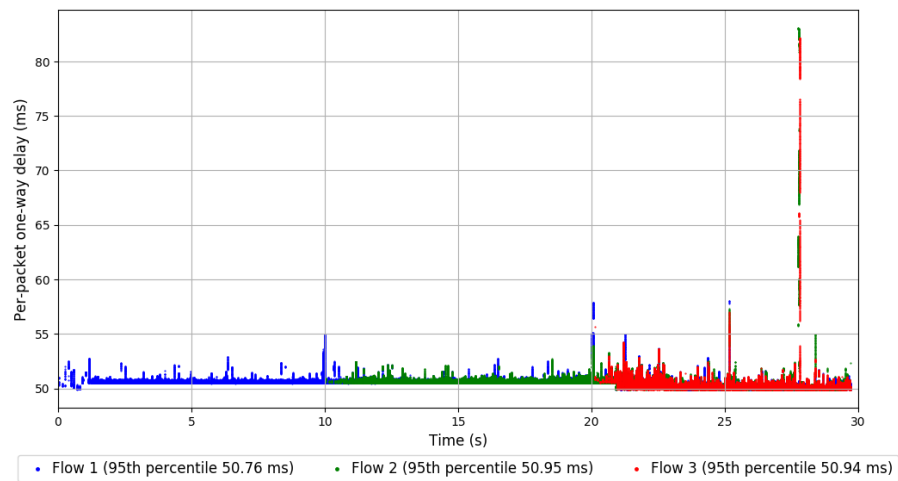
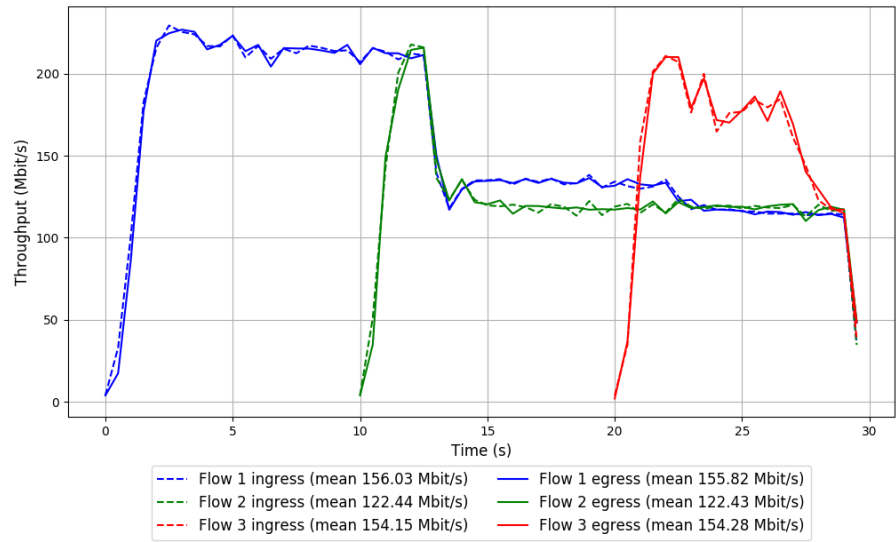
-- Flow 3:

Average throughput: 154.28 Mbit/s

95th percentile per-packet one-way delay: 50.938 ms

Loss rate: 0.00%

Run 8: Report of Indigo-calib — Data Link

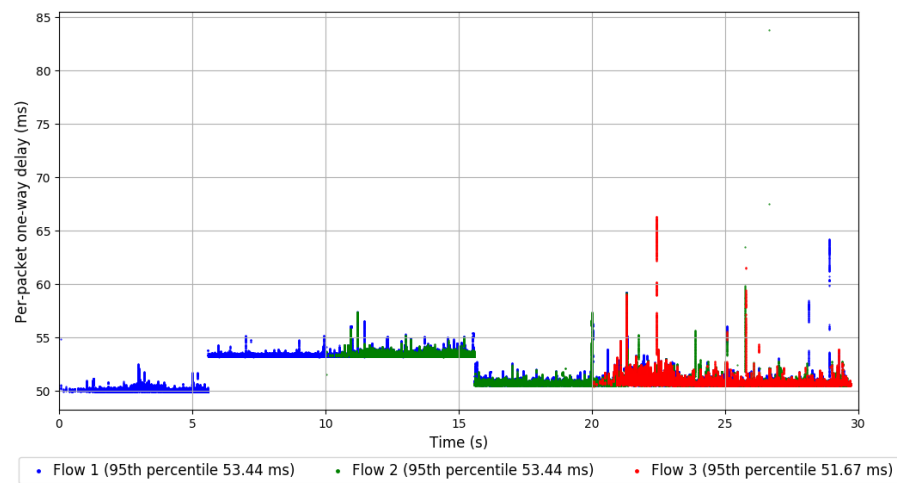
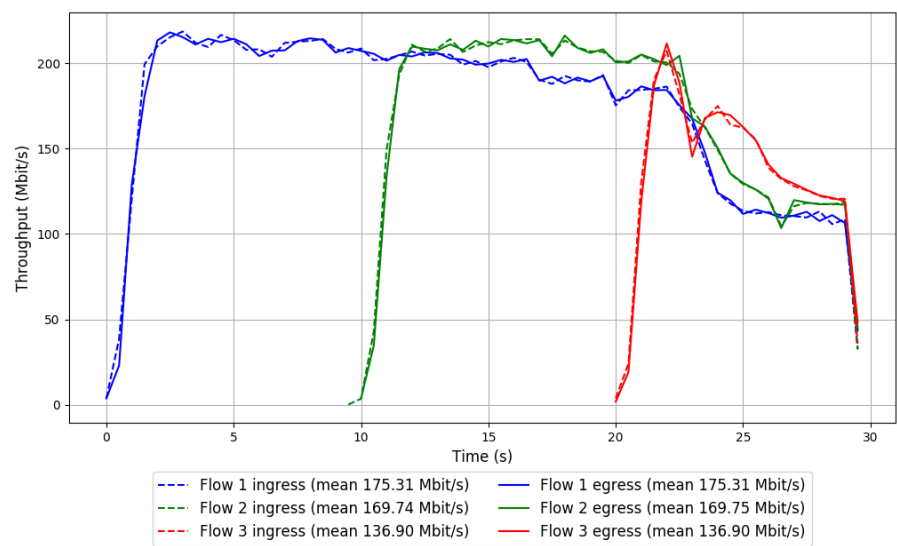


```
Run 9: Statistics of Indigo-calib

Start at: 2017-12-12 08:36:14
End at: 2017-12-12 08:36:44

# Below is generated by plot.py at 2017-12-12 11:12:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.30 Mbit/s
95th percentile per-packet one-way delay: 53.421 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 175.31 Mbit/s
95th percentile per-packet one-way delay: 53.436 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 169.75 Mbit/s
95th percentile per-packet one-way delay: 53.441 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 136.90 Mbit/s
95th percentile per-packet one-way delay: 51.666 ms
Loss rate: 0.00%
```

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-12 08:48:25

End at: 2017-12-12 08:48:55

Below is generated by plot.py at 2017-12-12 11:12:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 342.03 Mbit/s

95th percentile per-packet one-way delay: 53.442 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 180.17 Mbit/s

95th percentile per-packet one-way delay: 53.440 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 167.08 Mbit/s

95th percentile per-packet one-way delay: 53.492 ms

Loss rate: 0.01%

-- Flow 3:

Average throughput: 158.65 Mbit/s

95th percentile per-packet one-way delay: 52.675 ms

Loss rate: 0.00%

Run 10: Report of Indigo-calib — Data Link

