

Pantheon Report

Generated at 2017-12-06 03:01:08 (UTC).

Data path: Brazil Ethernet (*remote*) → AWS Brazil 1 Ethernet (*local*).

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).

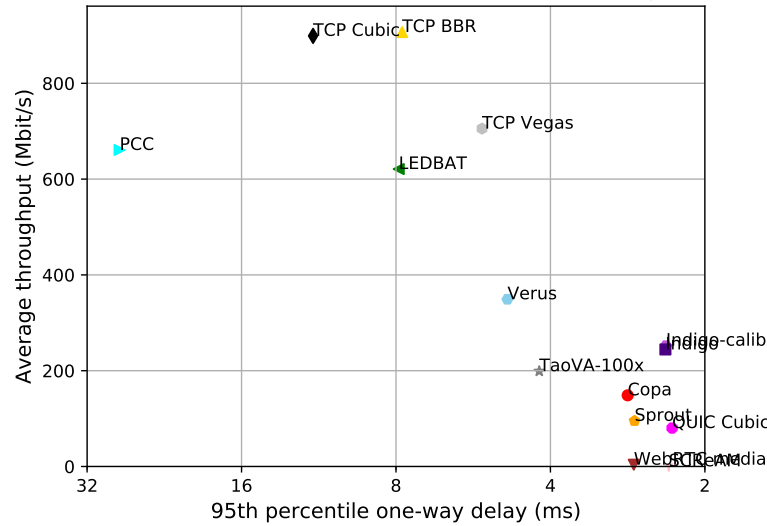
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

NTP offsets were measured against **gps.ntp.br** and have been applied to correct the timestamps in logs.

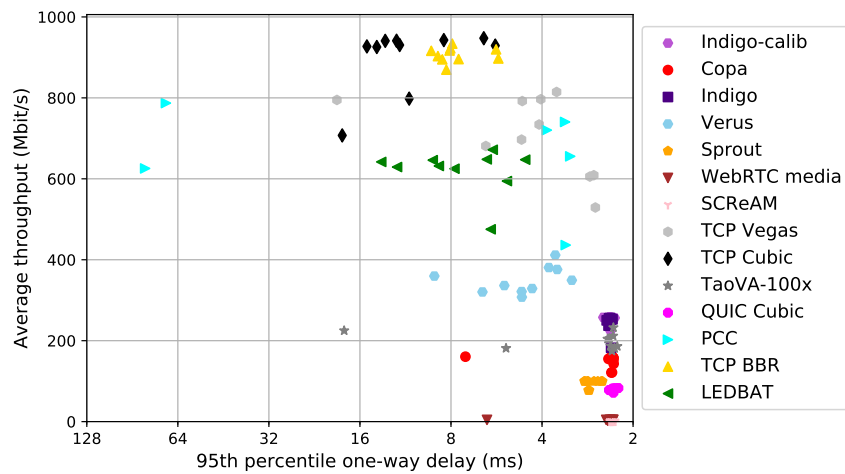
Git summary:

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

test from Brazil Ethernet to AWS Brazil 1 Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from Brazil Ethernet to AWS Brazil 1 Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows



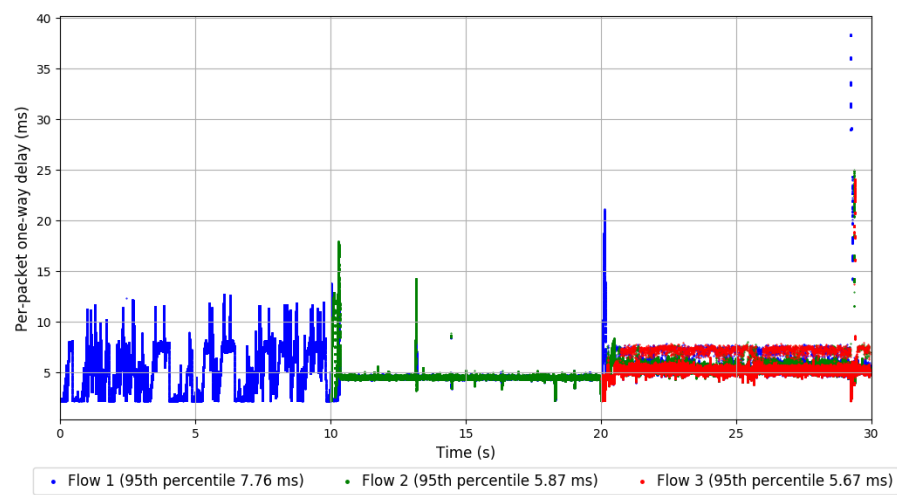
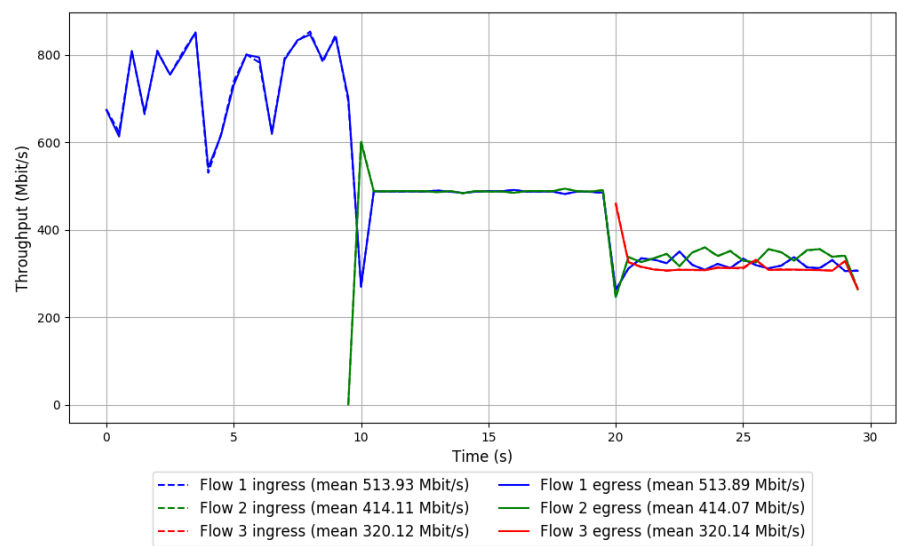
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	524.79	411.78	325.53	7.90	6.70	5.72	0.02	0.03	0.07
TCP Cubic	10	511.68	411.40	341.76	10.07	8.50	6.03	0.03	0.07	0.18
LEDBAT	10	348.12	310.26	200.67	8.16	7.41	5.96	0.02	0.01	0.08
PCC	6	495.64	181.52	132.40	31.24	6.10	5.60	0.87	0.03	0.06
QUIC Cubic	10	0.98	81.57	78.80	2.42	2.32	2.32	0.00	0.02	0.04
SCReAM	10	0.22	0.22	0.22	2.35	2.35	2.36	0.00	0.12	0.00
WebRTC media	10	1.69	1.53	0.58	2.89	2.76	2.77	0.01	0.01	0.01
Sprout	10	47.87	46.65	49.77	2.64	2.78	2.89	0.03	0.05	0.04
TaoVA-100x	10	120.26	85.90	83.21	4.20	4.21	4.25	0.01	0.02	0.05
TCP Vegas	10	390.24	315.09	317.68	4.66	5.63	5.41	0.01	0.02	0.05
Verus	10	201.58	159.47	127.10	4.53	5.85	3.52	0.01	0.03	0.05
Copa	10	84.02	67.89	80.04	2.82	2.84	2.84	0.02	0.02	0.03
Indigo	10	132.64	121.16	95.81	2.37	2.40	2.42	0.01	0.02	0.04
Indigo-calib	9	144.38	114.46	97.82	2.36	2.39	2.42	0.01	0.02	0.05

Run 1: Statistics of TCP BBR

Start at: 2017-12-05 19:10:59
End at: 2017-12-05 19:11:29
Local clock offset: -0.024 ms
Remote clock offset: -0.046 ms

Below is generated by plot.py at 2017-12-06 01:36:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 895.82 Mbit/s
95th percentile per-packet one-way delay: 7.551 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 513.89 Mbit/s
95th percentile per-packet one-way delay: 7.764 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 414.07 Mbit/s
95th percentile per-packet one-way delay: 5.865 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 320.14 Mbit/s
95th percentile per-packet one-way delay: 5.669 ms
Loss rate: 0.07%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-05 19:29:38

End at: 2017-12-05 19:30:08

Local clock offset: 0.201 ms

Remote clock offset: 0.312 ms

Below is generated by plot.py at 2017-12-06 01:36:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 903.15 Mbit/s

95th percentile per-packet one-way delay: 8.837 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 520.34 Mbit/s

95th percentile per-packet one-way delay: 8.964 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 413.63 Mbit/s

95th percentile per-packet one-way delay: 8.832 ms

Loss rate: 0.03%

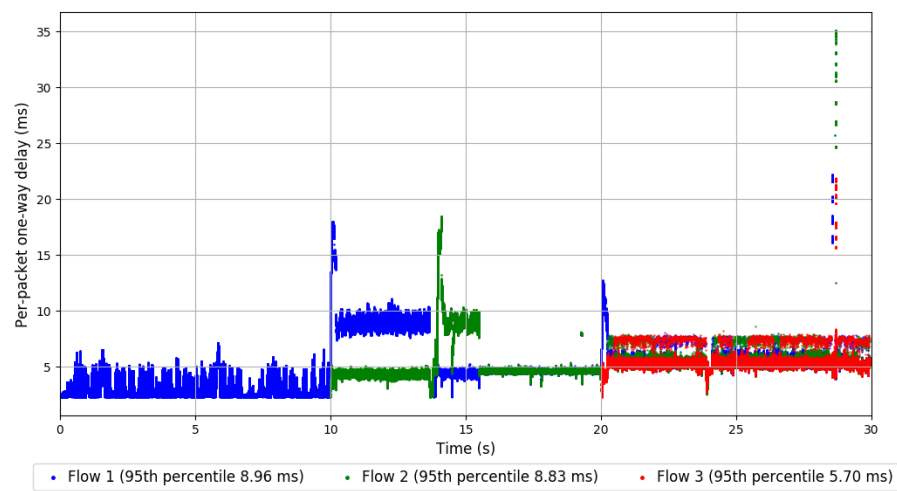
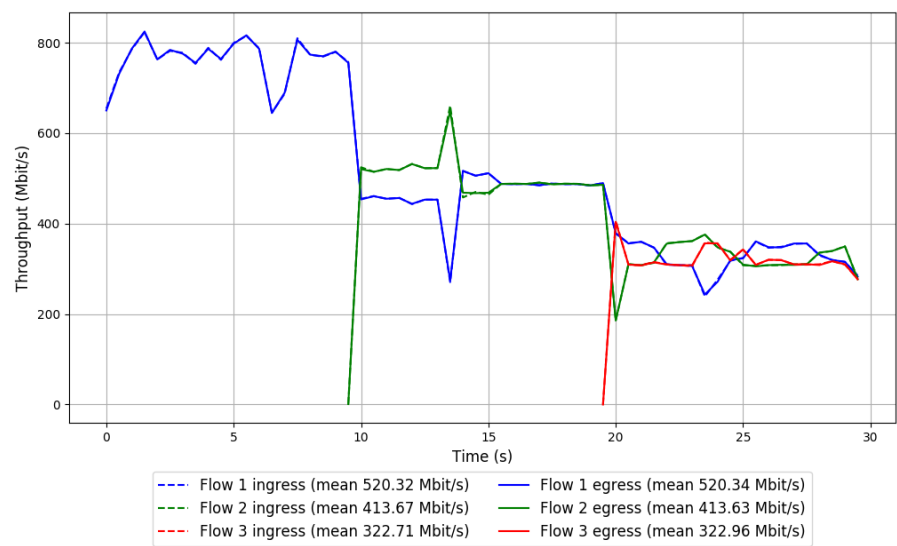
-- Flow 3:

Average throughput: 322.96 Mbit/s

95th percentile per-packet one-way delay: 5.700 ms

Loss rate: 0.07%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-05 19:48:20

End at: 2017-12-05 19:48:50

Local clock offset: 0.346 ms

Remote clock offset: 0.655 ms

Below is generated by plot.py at 2017-12-06 01:36:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 917.12 Mbit/s

95th percentile per-packet one-way delay: 8.084 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 535.79 Mbit/s

95th percentile per-packet one-way delay: 8.047 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 407.54 Mbit/s

95th percentile per-packet one-way delay: 8.890 ms

Loss rate: 0.03%

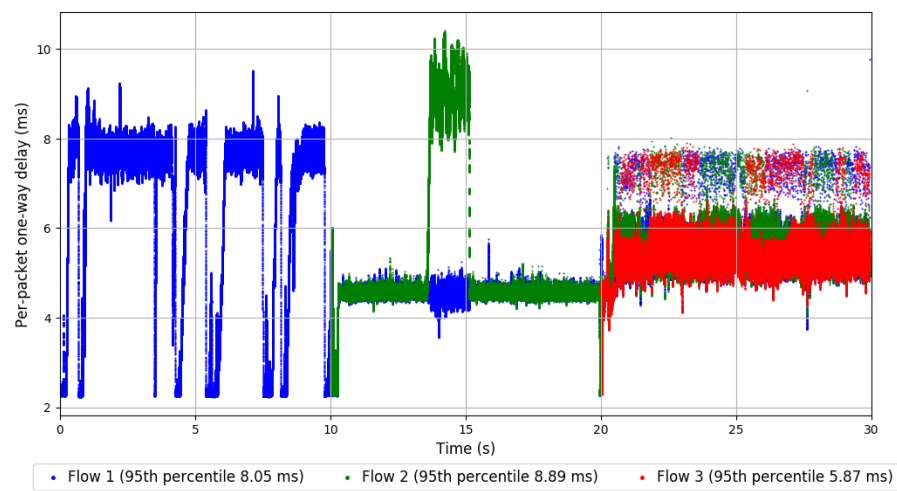
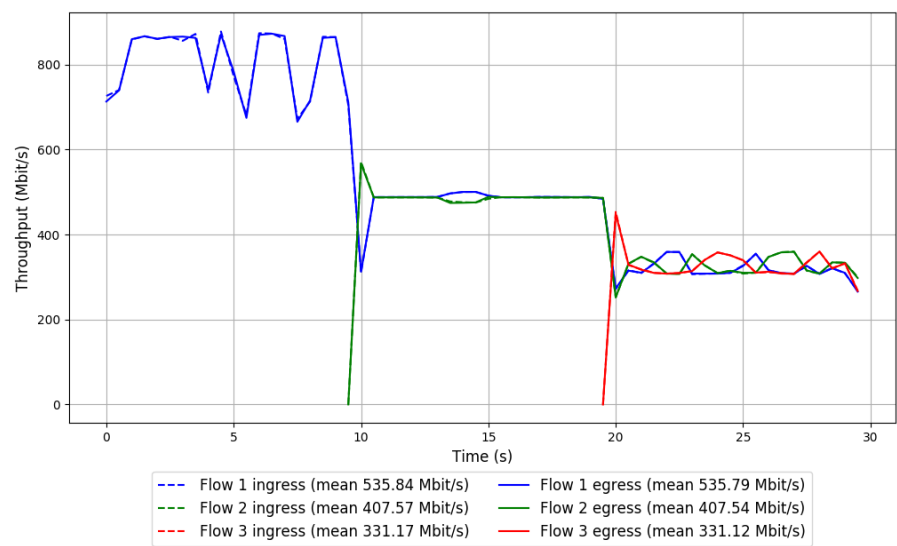
-- Flow 3:

Average throughput: 331.12 Mbit/s

95th percentile per-packet one-way delay: 5.868 ms

Loss rate: 0.08%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-05 20:06:59

End at: 2017-12-05 20:07:29

Local clock offset: 0.381 ms

Remote clock offset: 0.857 ms

Below is generated by plot.py at 2017-12-06 01:36:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 919.88 Mbit/s

95th percentile per-packet one-way delay: 5.675 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 536.25 Mbit/s

95th percentile per-packet one-way delay: 5.575 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 410.18 Mbit/s

95th percentile per-packet one-way delay: 5.686 ms

Loss rate: 0.03%

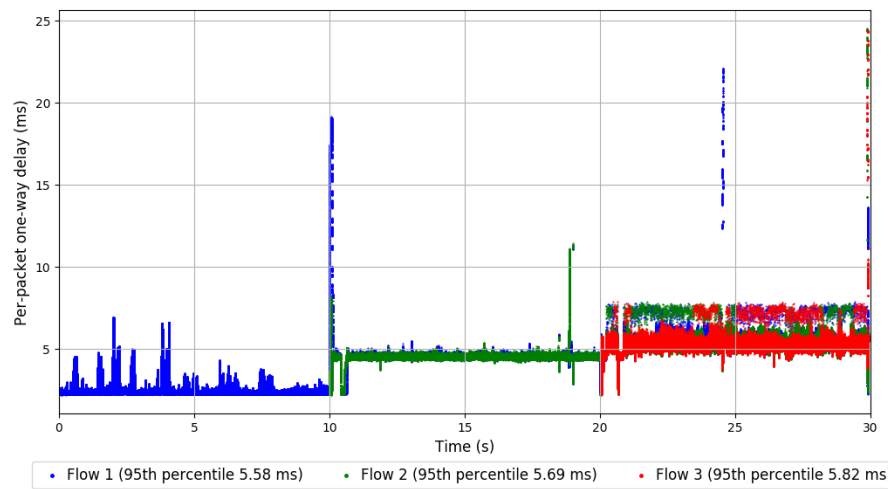
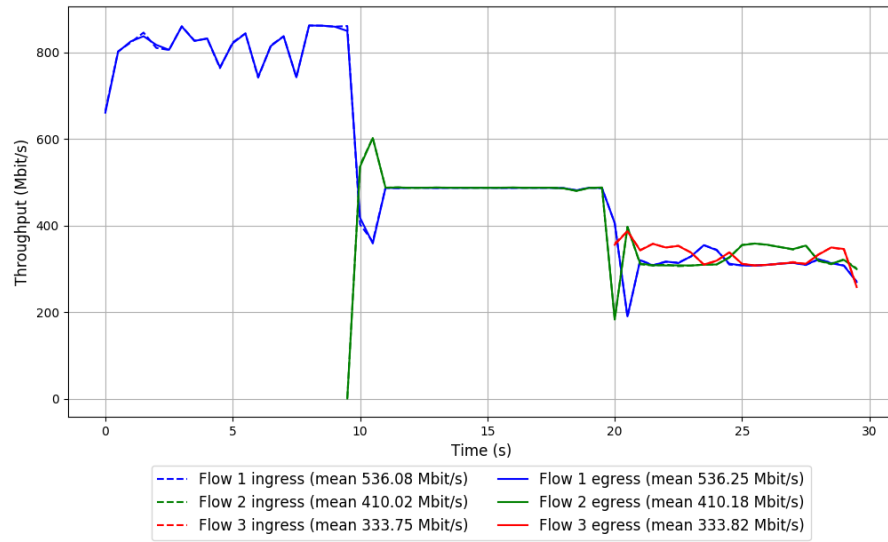
-- Flow 3:

Average throughput: 333.82 Mbit/s

95th percentile per-packet one-way delay: 5.816 ms

Loss rate: 0.07%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-05 20:25:43

End at: 2017-12-05 20:26:13

Local clock offset: 0.487 ms

Remote clock offset: 1.021 ms

Below is generated by plot.py at 2017-12-06 01:37:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 933.98 Mbit/s

95th percentile per-packet one-way delay: 7.922 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 549.69 Mbit/s

95th percentile per-packet one-way delay: 8.029 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 415.62 Mbit/s

95th percentile per-packet one-way delay: 5.794 ms

Loss rate: 0.03%

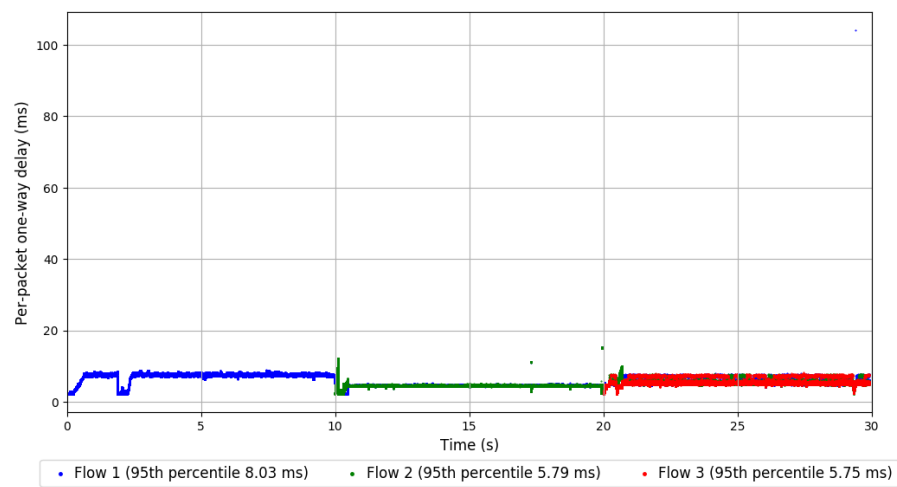
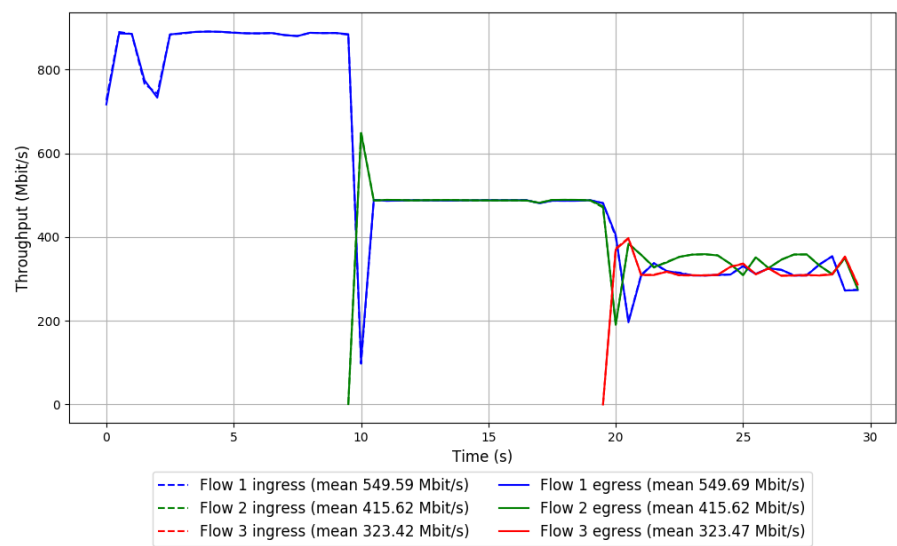
-- Flow 3:

Average throughput: 323.47 Mbit/s

95th percentile per-packet one-way delay: 5.753 ms

Loss rate: 0.07%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-05 20:44:21

End at: 2017-12-05 20:44:51

Local clock offset: 0.54 ms

Remote clock offset: 1.139 ms

Below is generated by plot.py at 2017-12-06 01:37:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 869.71 Mbit/s

95th percentile per-packet one-way delay: 8.287 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 485.20 Mbit/s

95th percentile per-packet one-way delay: 8.559 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 418.24 Mbit/s

95th percentile per-packet one-way delay: 5.666 ms

Loss rate: 0.03%

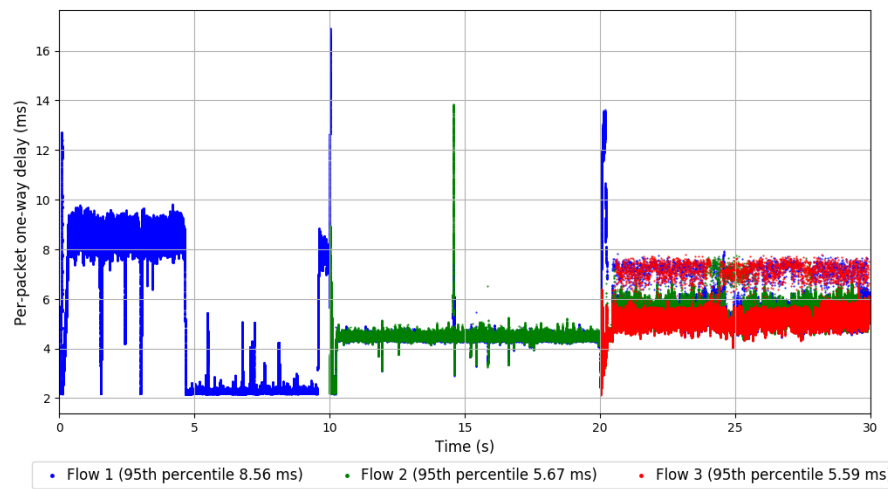
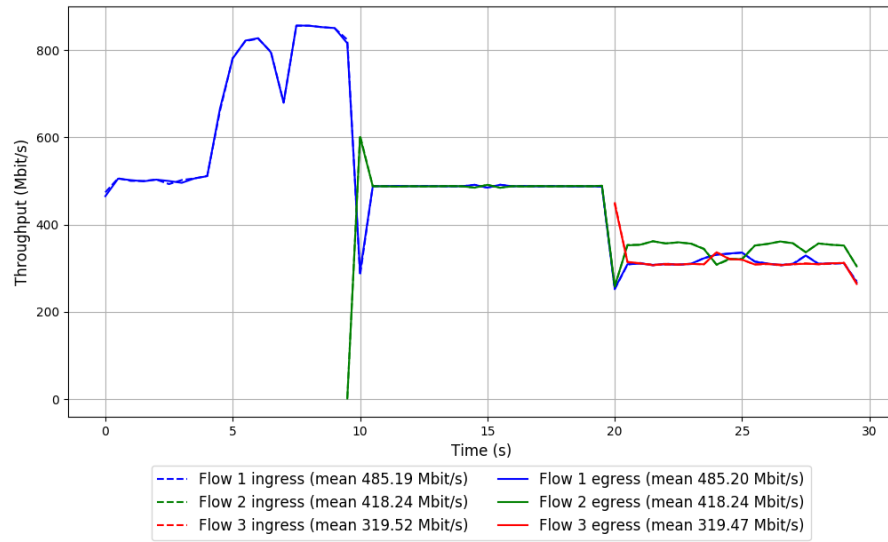
-- Flow 3:

Average throughput: 319.47 Mbit/s

95th percentile per-packet one-way delay: 5.587 ms

Loss rate: 0.08%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-05 21:03:09

End at: 2017-12-05 21:03:39

Local clock offset: 0.655 ms

Remote clock offset: 1.031 ms

Below is generated by plot.py at 2017-12-06 01:37:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 916.33 Mbit/s

95th percentile per-packet one-way delay: 9.294 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 535.96 Mbit/s

95th percentile per-packet one-way delay: 9.341 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 408.35 Mbit/s

95th percentile per-packet one-way delay: 9.393 ms

Loss rate: 0.03%

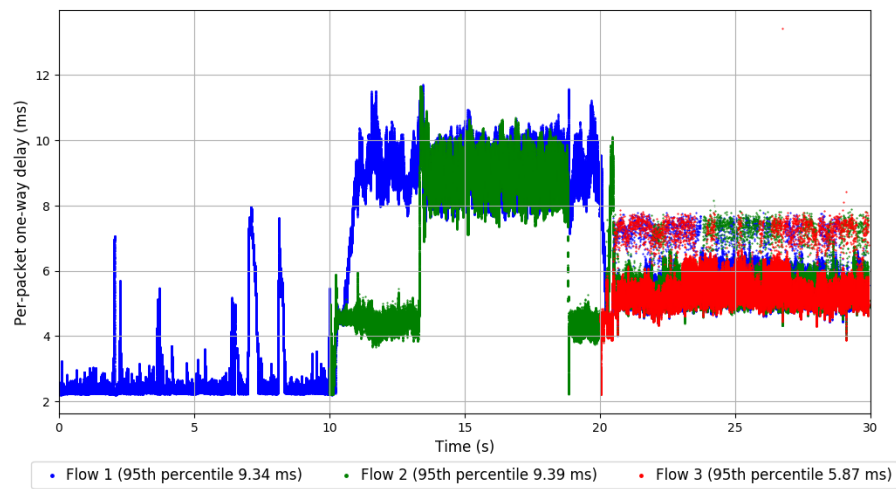
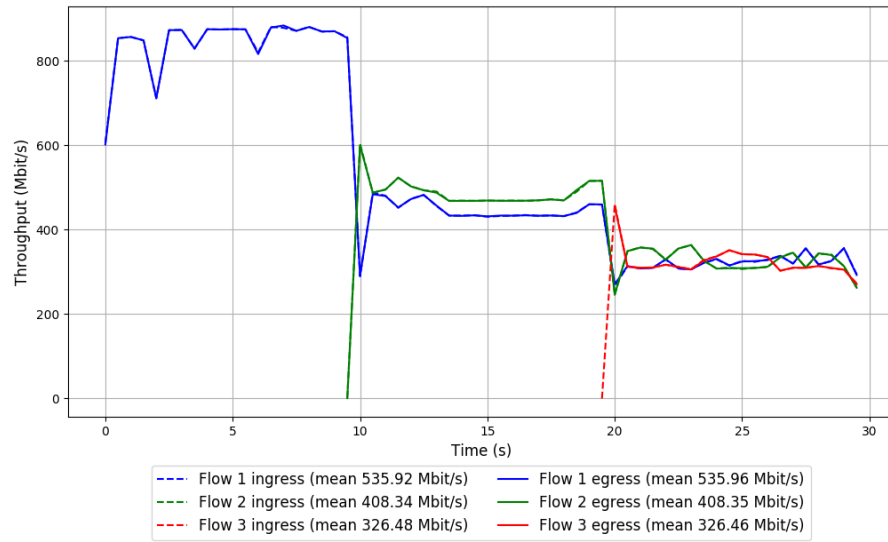
-- Flow 3:

Average throughput: 326.46 Mbit/s

95th percentile per-packet one-way delay: 5.865 ms

Loss rate: 0.07%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-05 21:21:37

End at: 2017-12-05 21:22:07

Local clock offset: 0.556 ms

Remote clock offset: 0.923 ms

Below is generated by plot.py at 2017-12-06 01:37:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 895.16 Mbit/s

95th percentile per-packet one-way delay: 8.547 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 510.56 Mbit/s

95th percentile per-packet one-way delay: 8.973 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 414.14 Mbit/s

95th percentile per-packet one-way delay: 5.549 ms

Loss rate: 0.03%

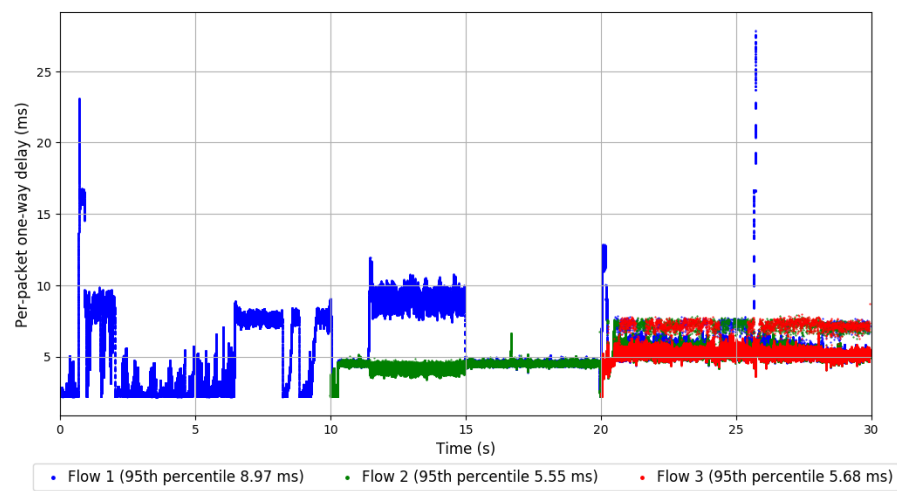
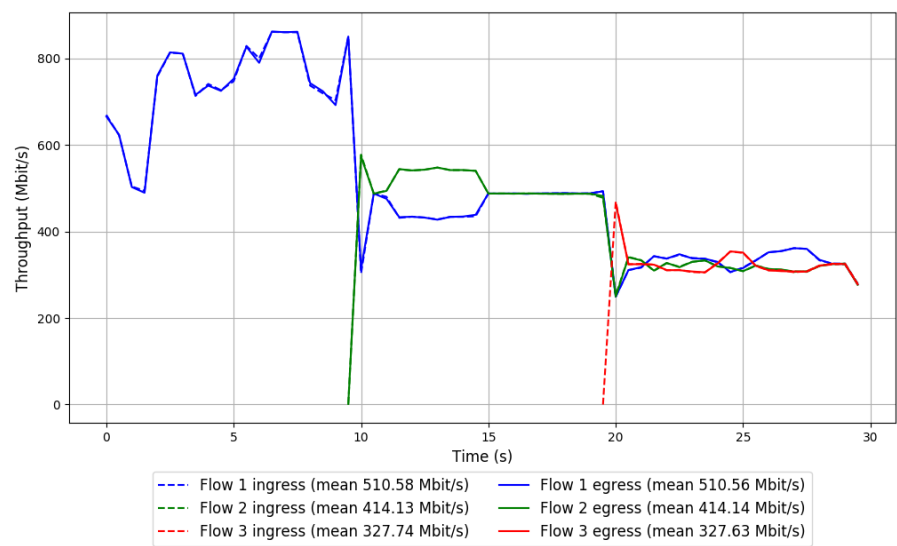
-- Flow 3:

Average throughput: 327.63 Mbit/s

95th percentile per-packet one-way delay: 5.680 ms

Loss rate: 0.07%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-05 21:40:14

End at: 2017-12-05 21:40:44

Local clock offset: 0.584 ms

Remote clock offset: 1.201 ms

Below is generated by plot.py at 2017-12-06 01:49:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 922.40 Mbit/s

95th percentile per-packet one-way delay: 8.039 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 542.12 Mbit/s

95th percentile per-packet one-way delay: 8.185 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 409.46 Mbit/s

95th percentile per-packet one-way delay: 5.667 ms

Loss rate: 0.03%

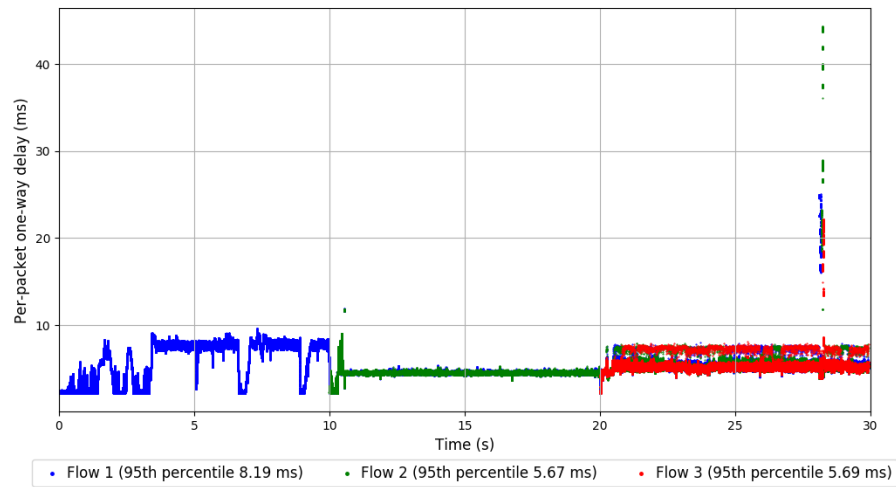
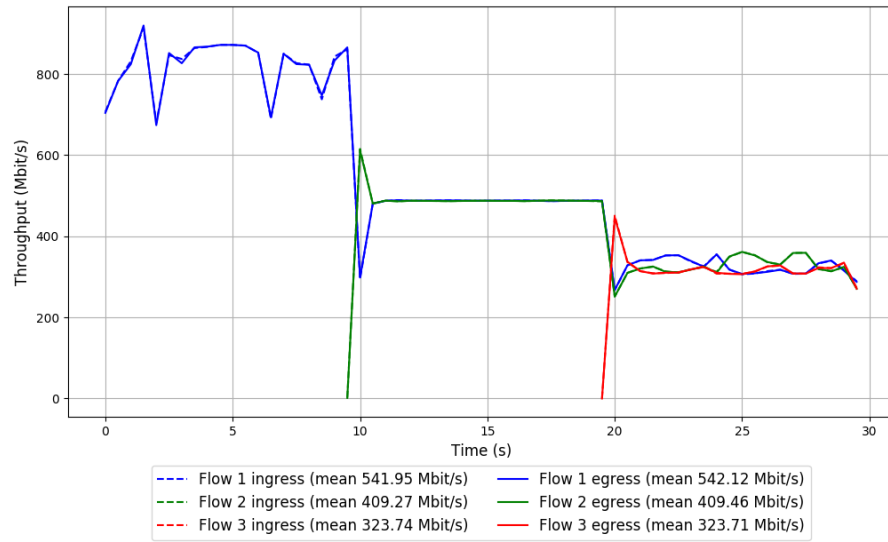
-- Flow 3:

Average throughput: 323.71 Mbit/s

95th percentile per-packet one-way delay: 5.690 ms

Loss rate: 0.07%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-05 21:59:05

End at: 2017-12-05 21:59:35

Local clock offset: 0.595 ms

Remote clock offset: 1.351 ms

Below is generated by plot.py at 2017-12-06 01:49:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 897.35 Mbit/s

95th percentile per-packet one-way delay: 5.578 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 518.10 Mbit/s

95th percentile per-packet one-way delay: 5.543 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 406.61 Mbit/s

95th percentile per-packet one-way delay: 5.612 ms

Loss rate: 0.03%

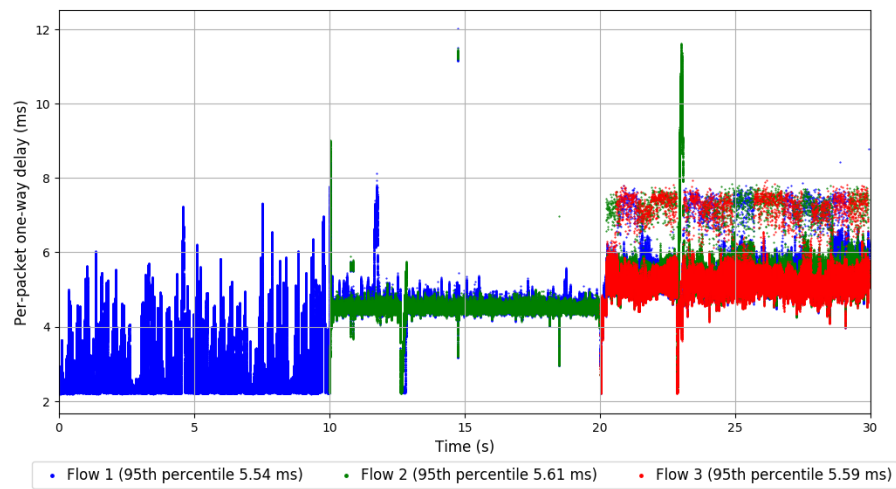
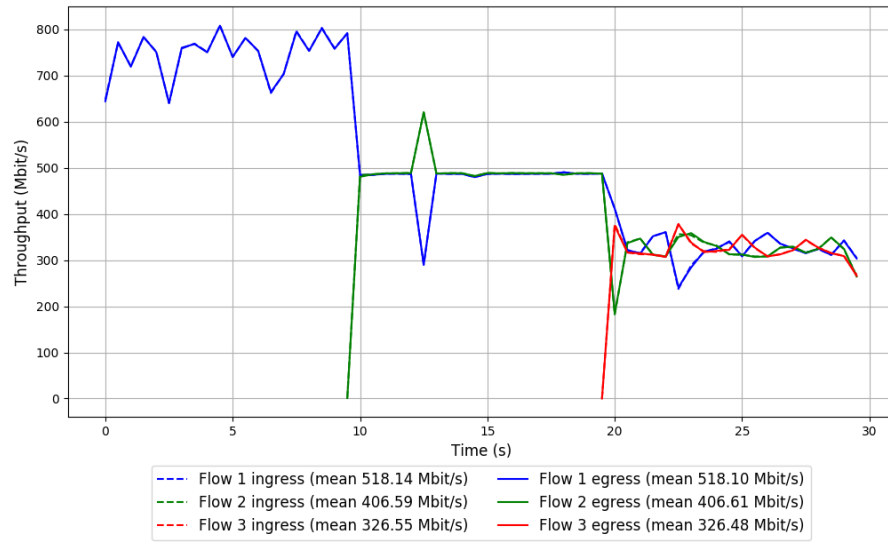
-- Flow 3:

Average throughput: 326.48 Mbit/s

95th percentile per-packet one-way delay: 5.594 ms

Loss rate: 0.09%

Run 10: Report of TCP BBR — Data Link

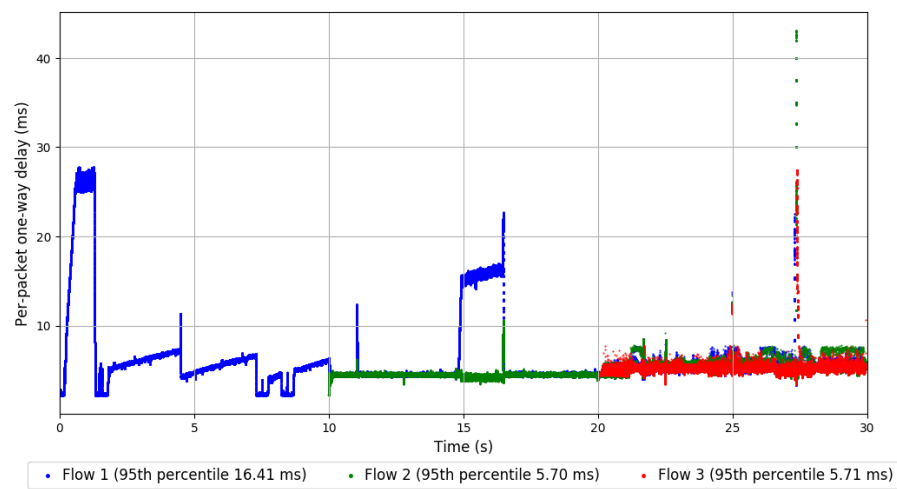
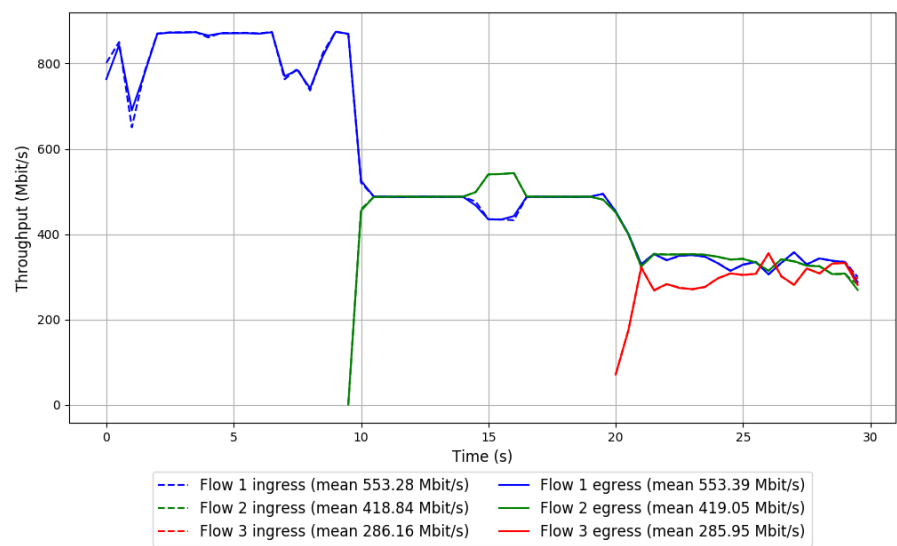


Run 1: Statistics of TCP Cubic

Start at: 2017-12-05 18:55:29
End at: 2017-12-05 18:55:59
Local clock offset: -0.115 ms
Remote clock offset: -0.187 ms

Below is generated by plot.py at 2017-12-06 01:49:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 927.13 Mbit/s
95th percentile per-packet one-way delay: 15.174 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 553.39 Mbit/s
95th percentile per-packet one-way delay: 16.415 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 419.05 Mbit/s
95th percentile per-packet one-way delay: 5.701 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 285.95 Mbit/s
95th percentile per-packet one-way delay: 5.705 ms
Loss rate: 0.32%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-05 19:14:17

End at: 2017-12-05 19:14:47

Local clock offset: 0.081 ms

Remote clock offset: 0.087 ms

Below is generated by plot.py at 2017-12-06 01:50:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 930.55 Mbit/s

95th percentile per-packet one-way delay: 11.824 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 555.17 Mbit/s

95th percentile per-packet one-way delay: 11.907 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 403.94 Mbit/s

95th percentile per-packet one-way delay: 5.656 ms

Loss rate: 0.09%

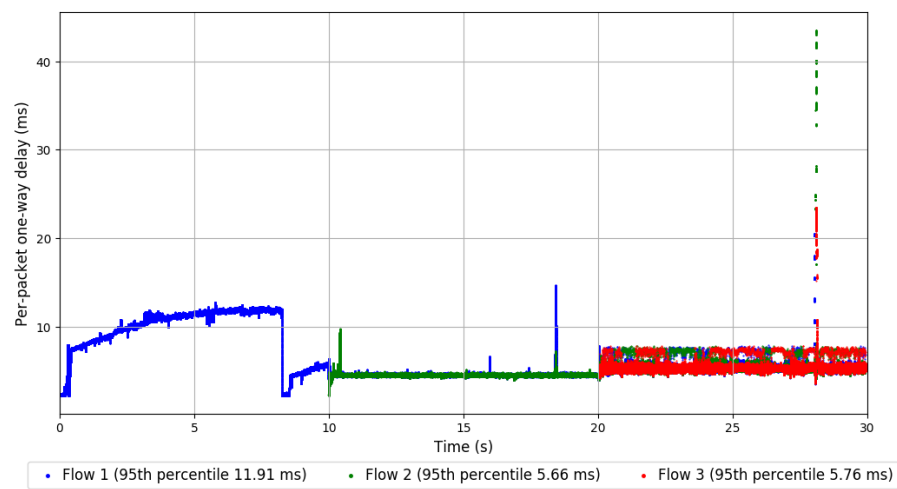
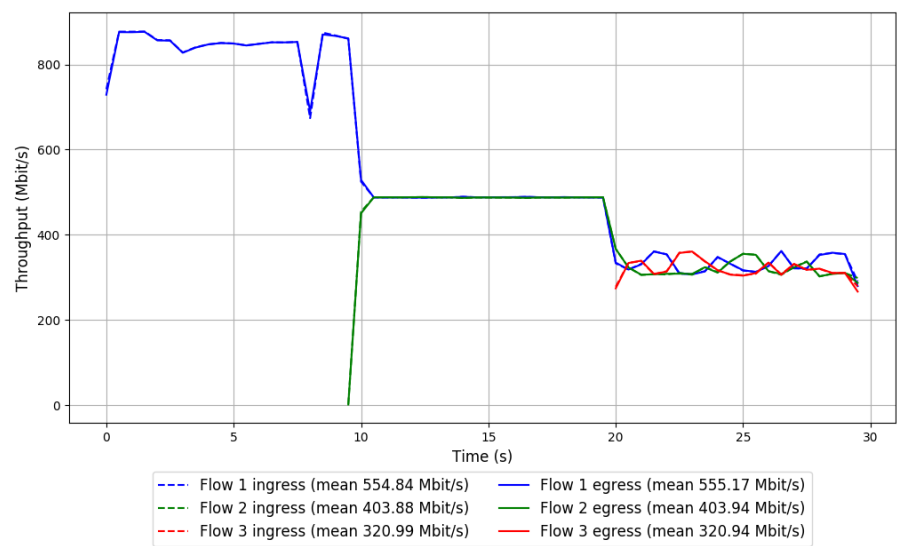
-- Flow 3:

Average throughput: 320.94 Mbit/s

95th percentile per-packet one-way delay: 5.759 ms

Loss rate: 0.23%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-05 19:32:56

End at: 2017-12-05 19:33:26

Local clock offset: 0.247 ms

Remote clock offset: 0.429 ms

Below is generated by plot.py at 2017-12-06 01:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 942.79 Mbit/s

95th percentile per-packet one-way delay: 8.448 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 565.06 Mbit/s

95th percentile per-packet one-way delay: 8.870 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 410.33 Mbit/s

95th percentile per-packet one-way delay: 5.605 ms

Loss rate: 0.09%

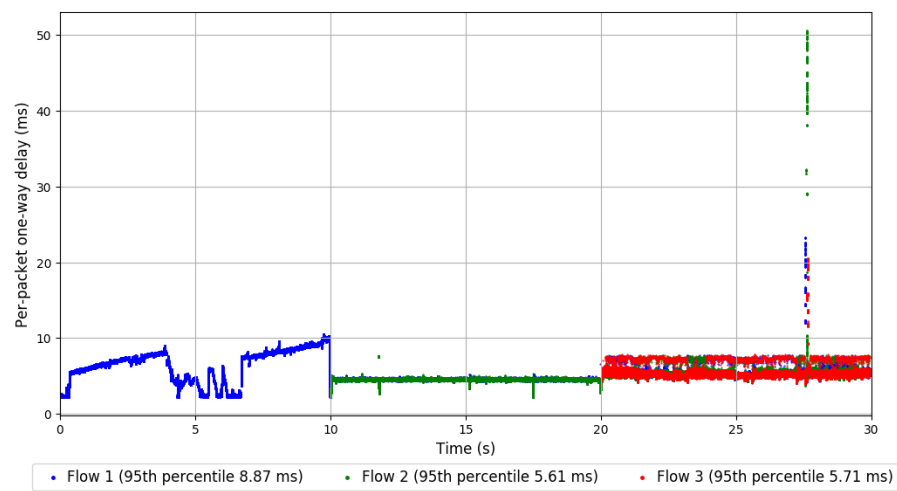
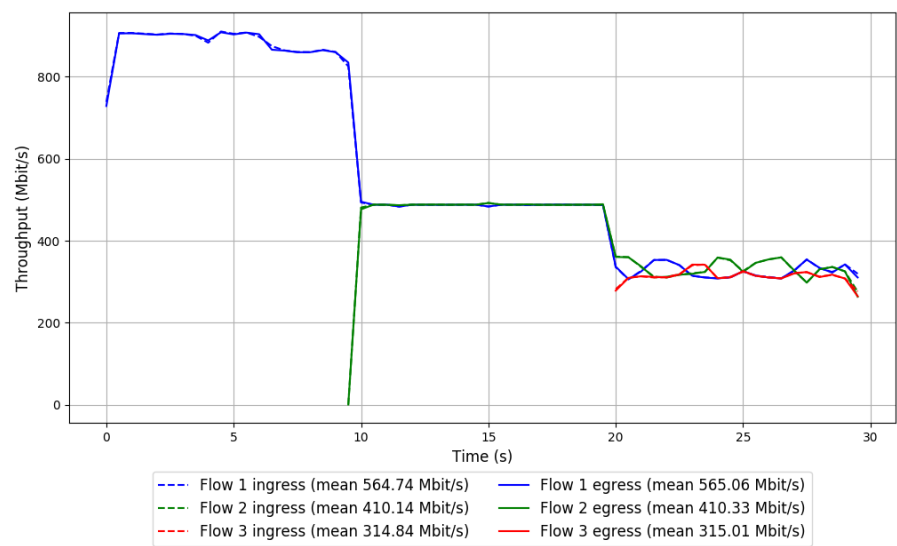
-- Flow 3:

Average throughput: 315.01 Mbit/s

95th percentile per-packet one-way delay: 5.714 ms

Loss rate: 0.24%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-05 19:51:37

End at: 2017-12-05 19:52:07

Local clock offset: 0.336 ms

Remote clock offset: 0.697 ms

Below is generated by plot.py at 2017-12-06 01:50:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 929.15 Mbit/s

95th percentile per-packet one-way delay: 5.710 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 552.87 Mbit/s

95th percentile per-packet one-way delay: 5.765 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 399.79 Mbit/s

95th percentile per-packet one-way delay: 5.641 ms

Loss rate: 0.03%

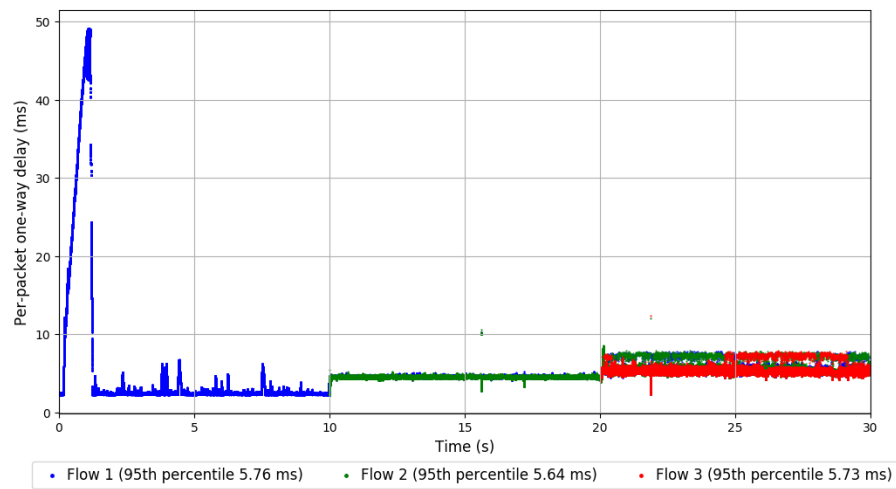
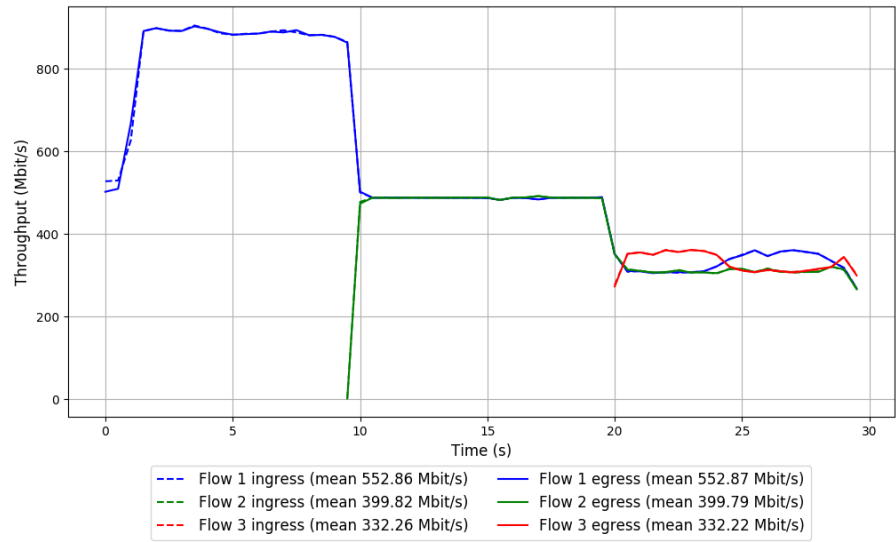
-- Flow 3:

Average throughput: 332.22 Mbit/s

95th percentile per-packet one-way delay: 5.732 ms

Loss rate: 0.08%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-05 20:10:17

End at: 2017-12-05 20:10:47

Local clock offset: 0.38 ms

Remote clock offset: 0.827 ms

Below is generated by plot.py at 2017-12-06 01:50:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 940.88 Mbit/s

95th percentile per-packet one-way delay: 13.196 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 560.46 Mbit/s

95th percentile per-packet one-way delay: 13.456 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 414.36 Mbit/s

95th percentile per-packet one-way delay: 5.779 ms

Loss rate: 0.10%

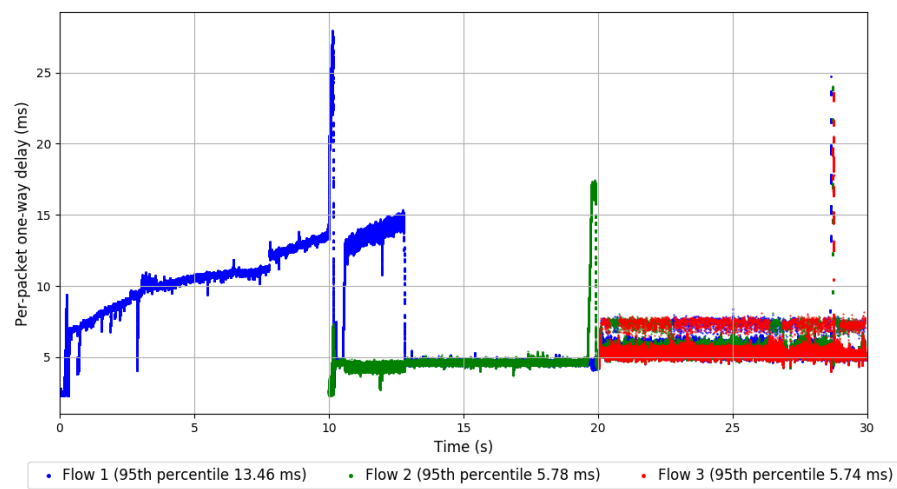
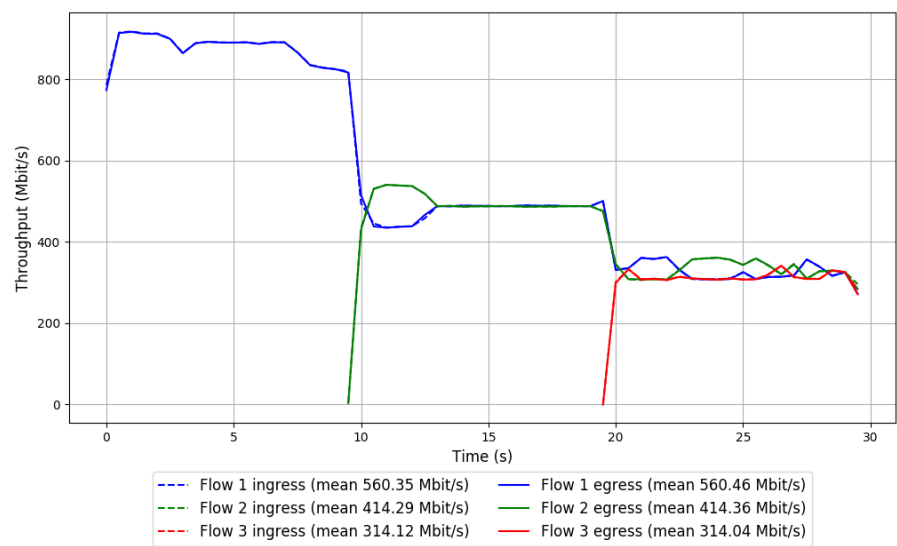
-- Flow 3:

Average throughput: 314.04 Mbit/s

95th percentile per-packet one-way delay: 5.737 ms

Loss rate: 0.24%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-05 20:28:53

End at: 2017-12-05 20:29:23

Local clock offset: 0.437 ms

Remote clock offset: 1.025 ms

Below is generated by plot.py at 2017-12-06 01:50:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 707.23 Mbit/s

95th percentile per-packet one-way delay: 18.308 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 168.05 Mbit/s

95th percentile per-packet one-way delay: 4.891 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 597.93 Mbit/s

95th percentile per-packet one-way delay: 19.338 ms

Loss rate: 0.03%

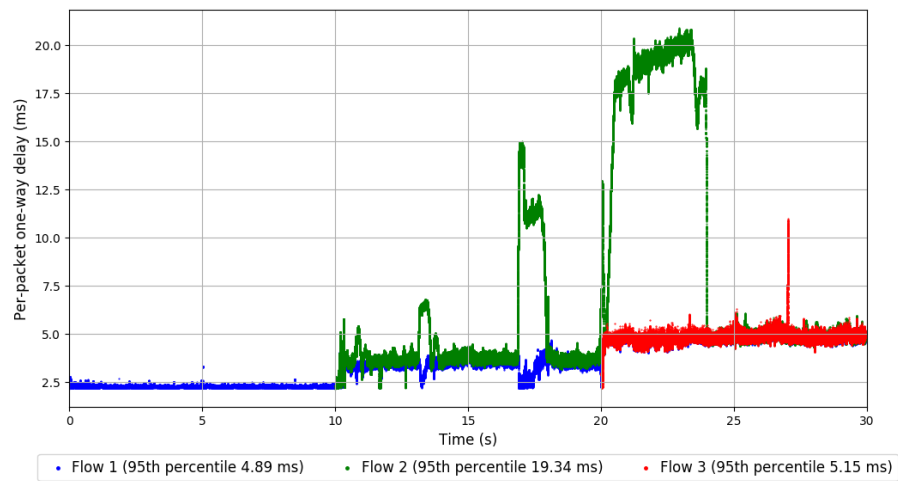
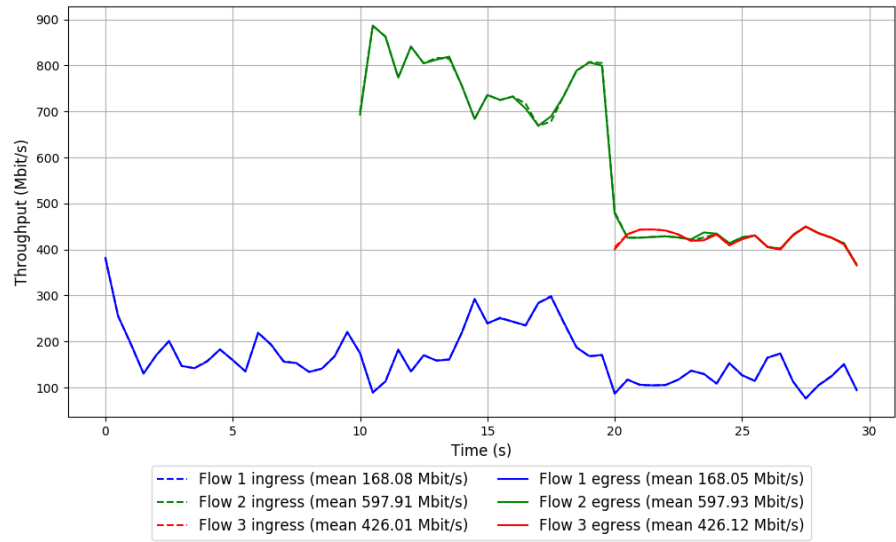
-- Flow 3:

Average throughput: 426.12 Mbit/s

95th percentile per-packet one-way delay: 5.146 ms

Loss rate: 0.07%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-05 20:47:34

End at: 2017-12-05 20:48:04

Local clock offset: 0.587 ms

Remote clock offset: 1.085 ms

Below is generated by plot.py at 2017-12-06 02:00:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 947.41 Mbit/s

95th percentile per-packet one-way delay: 6.232 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 568.23 Mbit/s

95th percentile per-packet one-way delay: 6.419 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 405.89 Mbit/s

95th percentile per-packet one-way delay: 5.715 ms

Loss rate: 0.10%

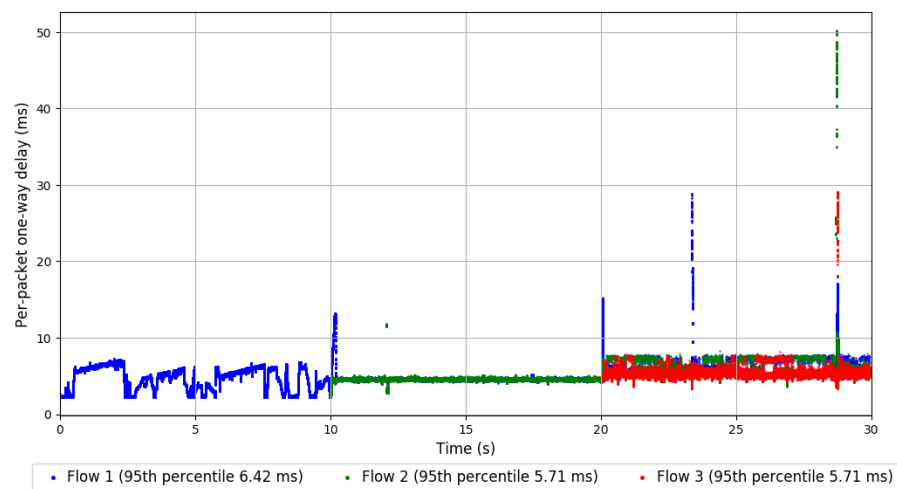
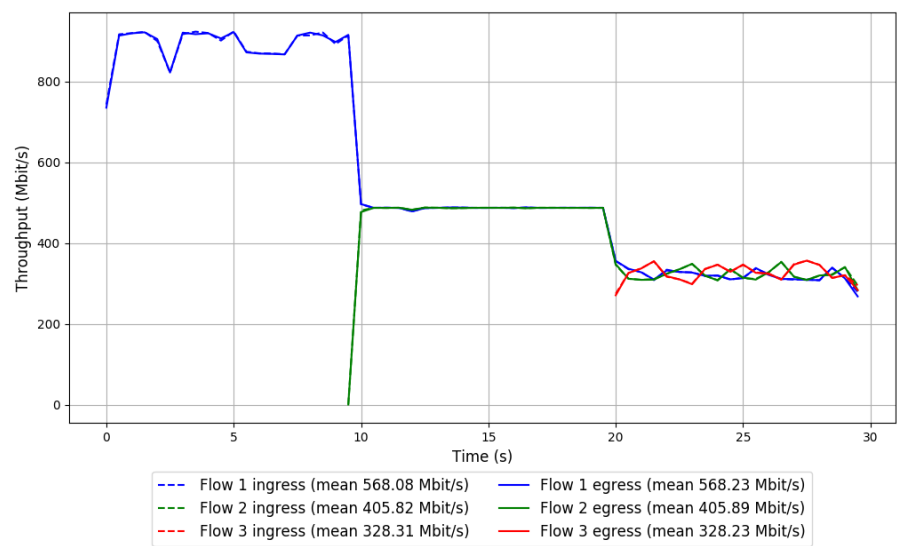
-- Flow 3:

Average throughput: 328.23 Mbit/s

95th percentile per-packet one-way delay: 5.713 ms

Loss rate: 0.24%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-05 21:06:15

End at: 2017-12-05 21:06:45

Local clock offset: 0.667 ms

Remote clock offset: 0.952 ms

Below is generated by plot.py at 2017-12-06 02:02:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 941.19 Mbit/s

95th percentile per-packet one-way delay: 12.109 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 563.41 Mbit/s

95th percentile per-packet one-way delay: 12.365 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 407.22 Mbit/s

95th percentile per-packet one-way delay: 5.660 ms

Loss rate: 0.09%

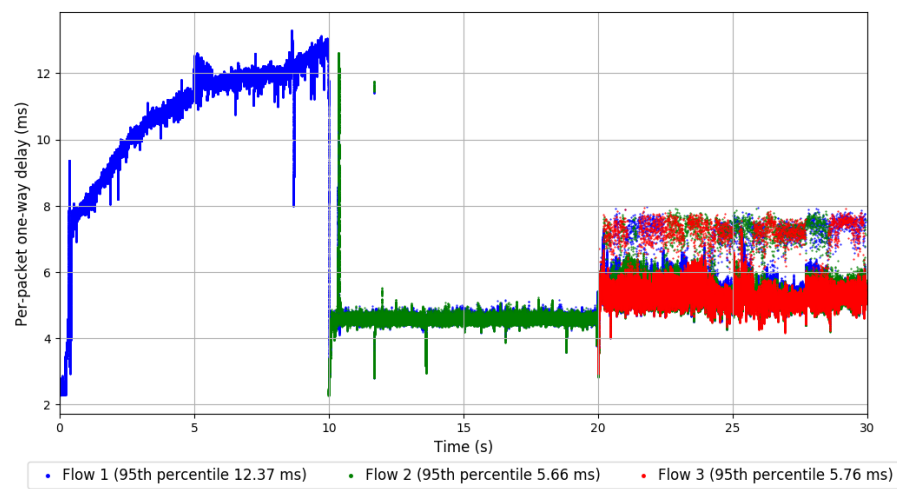
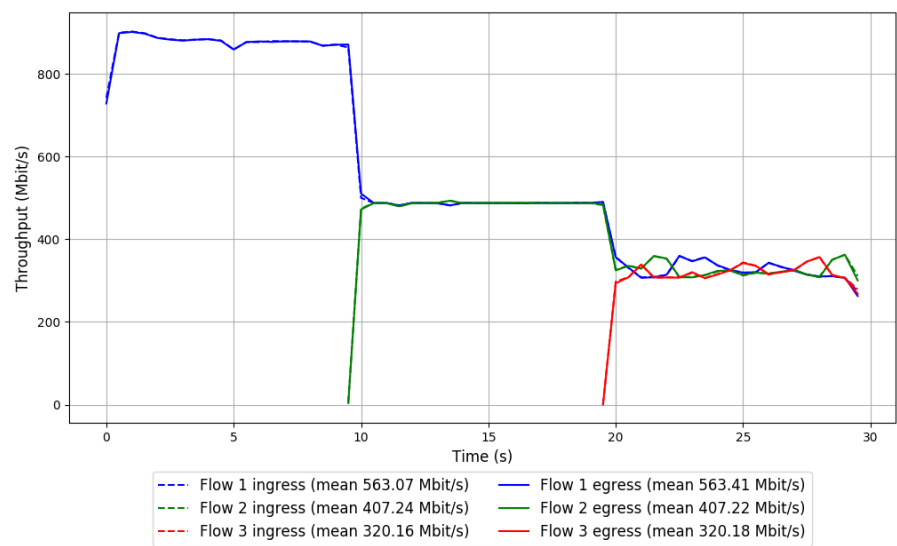
-- Flow 3:

Average throughput: 320.18 Mbit/s

95th percentile per-packet one-way delay: 5.762 ms

Loss rate: 0.22%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-05 21:24:46

End at: 2017-12-05 21:25:16

Local clock offset: 0.564 ms

Remote clock offset: 1.002 ms

Below is generated by plot.py at 2017-12-06 02:02:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 798.10 Mbit/s

95th percentile per-packet one-way delay: 10.997 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 425.92 Mbit/s

95th percentile per-packet one-way delay: 6.018 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 337.11 Mbit/s

95th percentile per-packet one-way delay: 20.230 ms

Loss rate: 0.03%

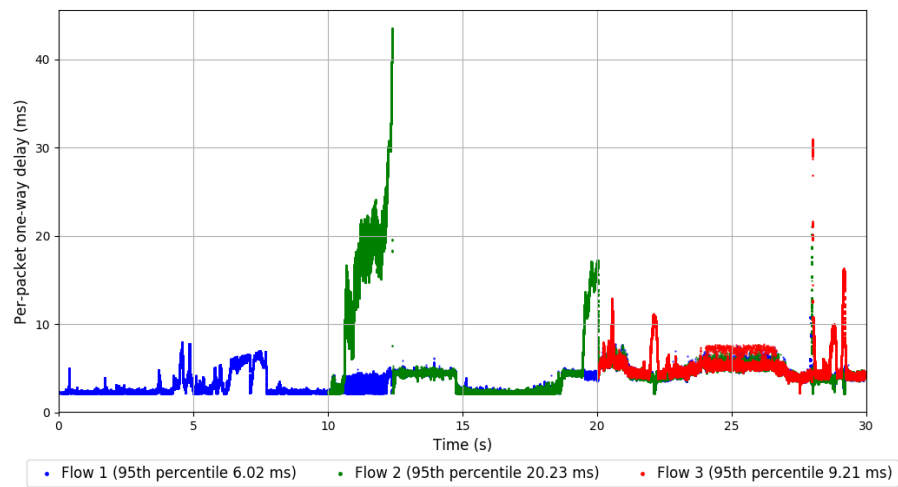
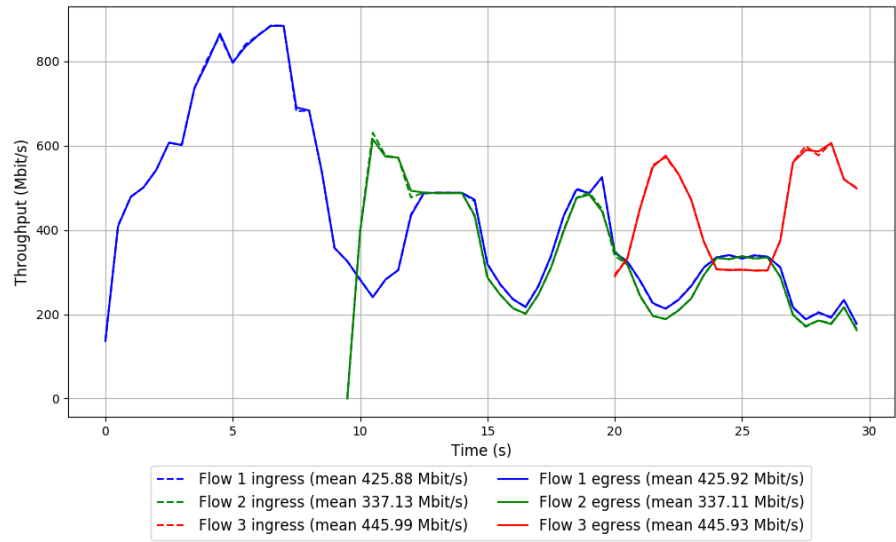
-- Flow 3:

Average throughput: 445.93 Mbit/s

95th percentile per-packet one-way delay: 9.210 ms

Loss rate: 0.08%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-05 21:43:28

End at: 2017-12-05 21:43:58

Local clock offset: 0.559 ms

Remote clock offset: 1.231 ms

Below is generated by plot.py at 2017-12-06 02:03:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 925.70 Mbit/s

95th percentile per-packet one-way delay: 14.072 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 604.24 Mbit/s

95th percentile per-packet one-way delay: 14.582 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 318.41 Mbit/s

95th percentile per-packet one-way delay: 5.667 ms

Loss rate: 0.04%

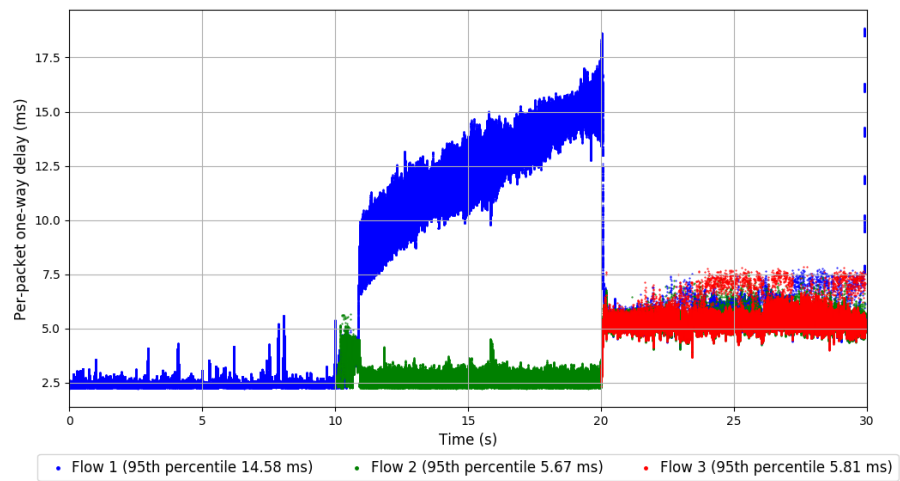
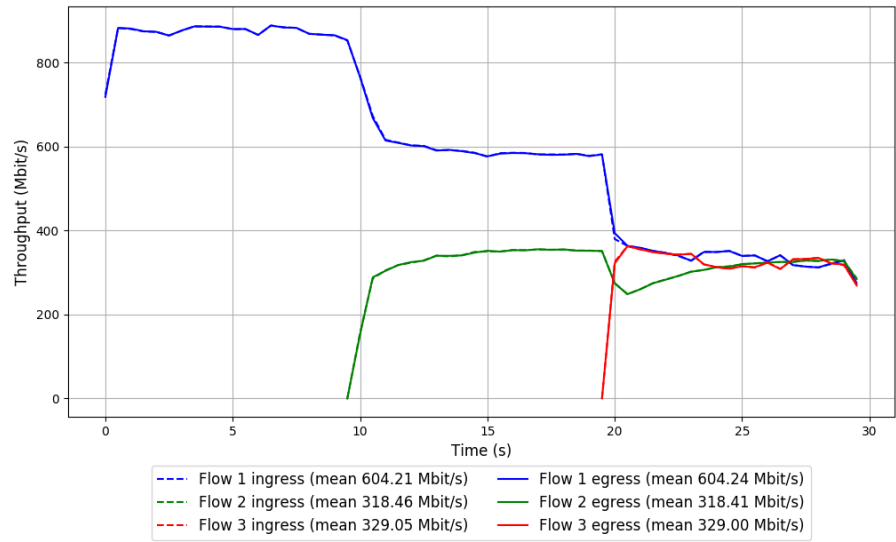
-- Flow 3:

Average throughput: 329.00 Mbit/s

95th percentile per-packet one-way delay: 5.810 ms

Loss rate: 0.08%

Run 10: Report of TCP Cubic — Data Link

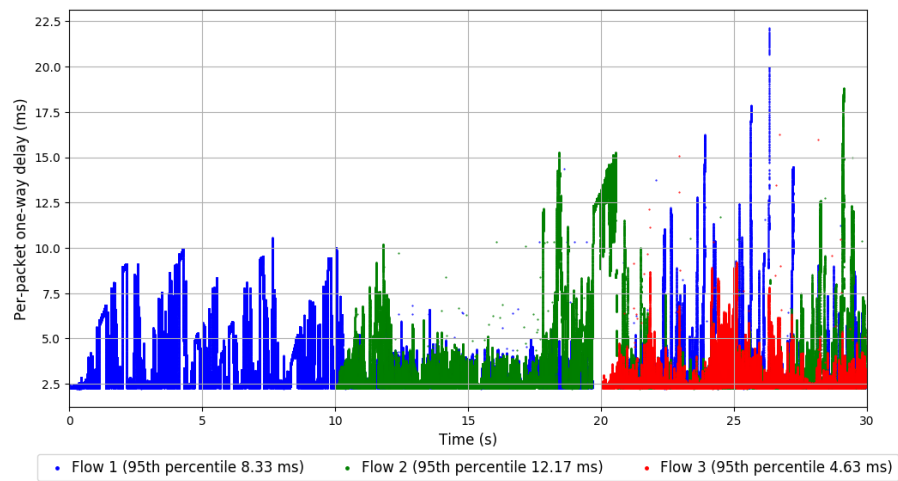
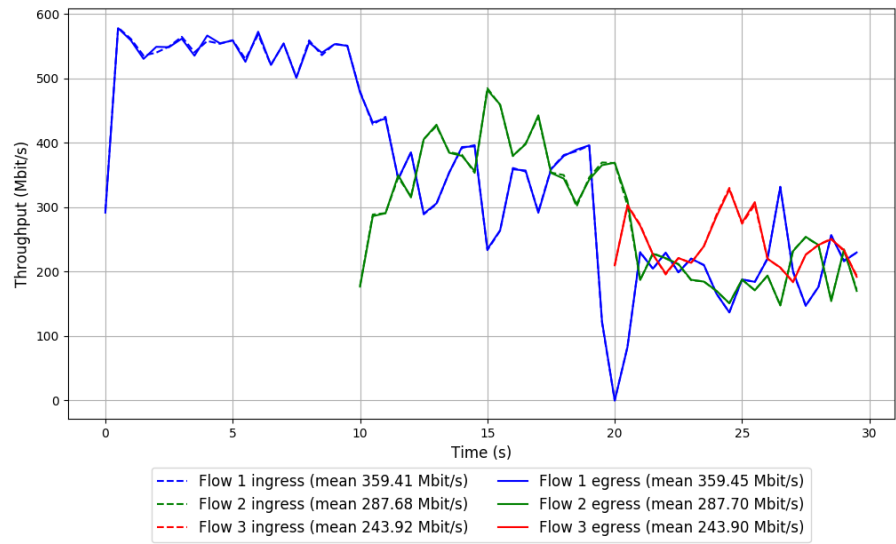


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-05 19:03:08
End at: 2017-12-05 19:03:38
Local clock offset: -0.036 ms
Remote clock offset: -0.174 ms

# Below is generated by plot.py at 2017-12-06 02:03:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 631.68 Mbit/s
95th percentile per-packet one-way delay: 8.775 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 359.45 Mbit/s
95th percentile per-packet one-way delay: 8.329 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 287.70 Mbit/s
95th percentile per-packet one-way delay: 12.174 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 243.90 Mbit/s
95th percentile per-packet one-way delay: 4.632 ms
Loss rate: 0.06%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-12-05 19:21:52

End at: 2017-12-05 19:22:22

Local clock offset: 0.124 ms

Remote clock offset: 0.239 ms

Below is generated by plot.py at 2017-12-06 02:03:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 594.37 Mbit/s

95th percentile per-packet one-way delay: 5.226 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 315.55 Mbit/s

95th percentile per-packet one-way delay: 4.663 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 306.28 Mbit/s

95th percentile per-packet one-way delay: 6.362 ms

Loss rate: 0.03%

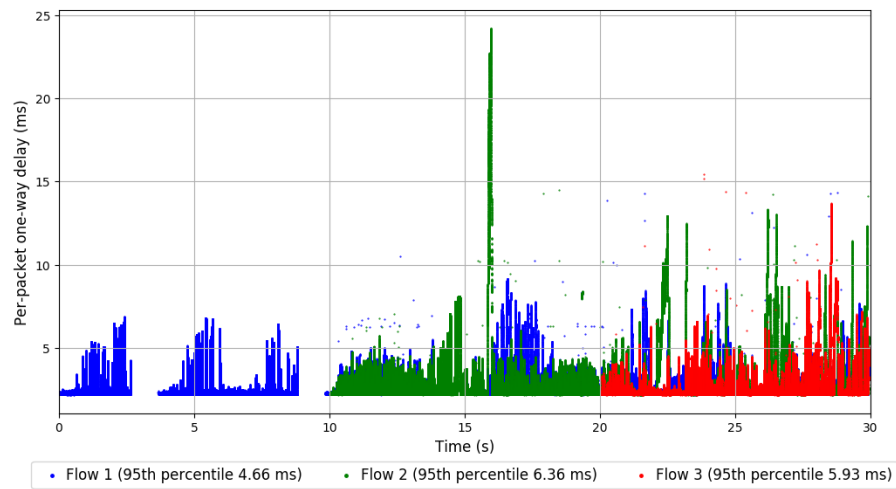
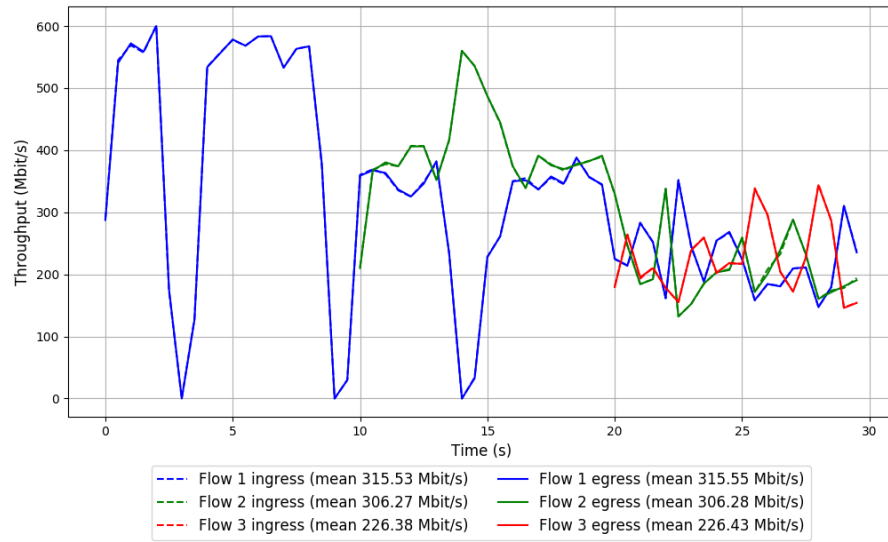
-- Flow 3:

Average throughput: 226.43 Mbit/s

95th percentile per-packet one-way delay: 5.929 ms

Loss rate: 0.04%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-05 19:40:29

End at: 2017-12-05 19:40:59

Local clock offset: 0.302 ms

Remote clock offset: 0.547 ms

Below is generated by plot.py at 2017-12-06 02:03:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 475.23 Mbit/s

95th percentile per-packet one-way delay: 5.914 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 158.20 Mbit/s

95th percentile per-packet one-way delay: 3.203 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 343.71 Mbit/s

95th percentile per-packet one-way delay: 5.236 ms

Loss rate: 0.01%

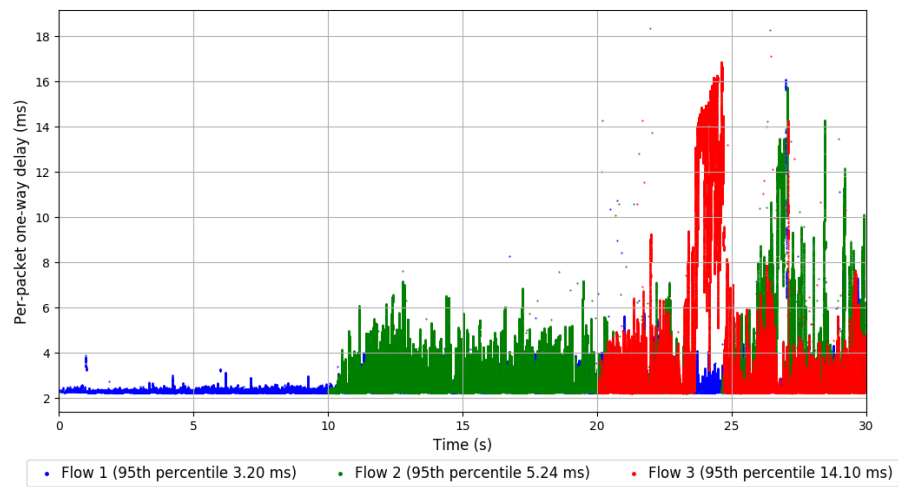
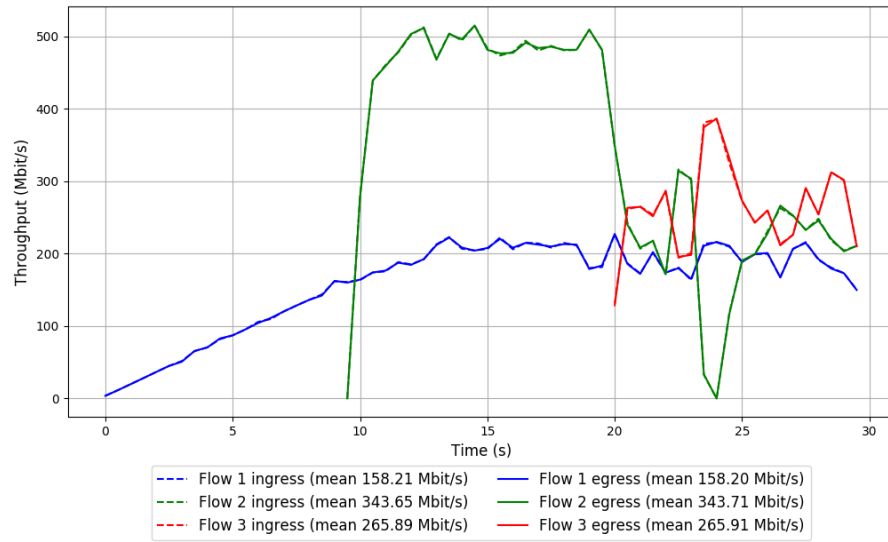
-- Flow 3:

Average throughput: 265.91 Mbit/s

95th percentile per-packet one-way delay: 14.102 ms

Loss rate: 0.06%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-05 19:59:12

End at: 2017-12-05 19:59:42

Local clock offset: 0.316 ms

Remote clock offset: 0.803 ms

Below is generated by plot.py at 2017-12-06 02:03:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 647.28 Mbit/s

95th percentile per-packet one-way delay: 4.547 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 381.05 Mbit/s

95th percentile per-packet one-way delay: 5.190 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 287.22 Mbit/s

95th percentile per-packet one-way delay: 4.073 ms

Loss rate: 0.00%

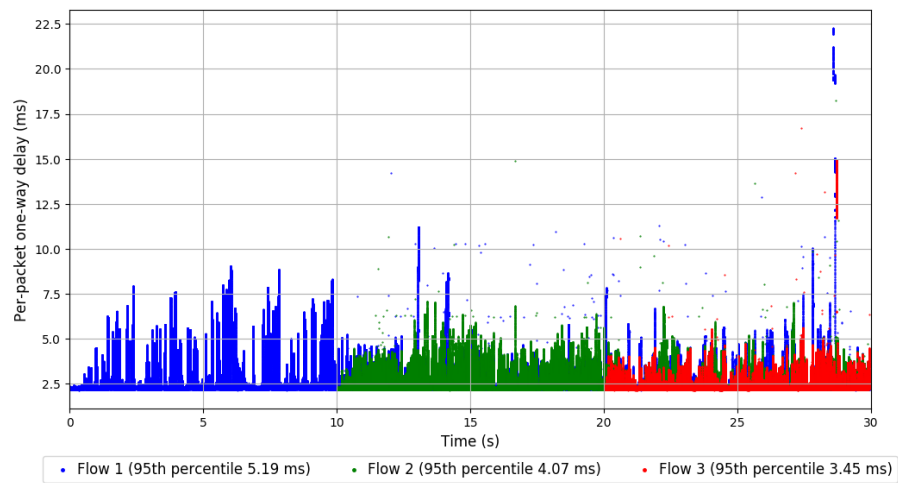
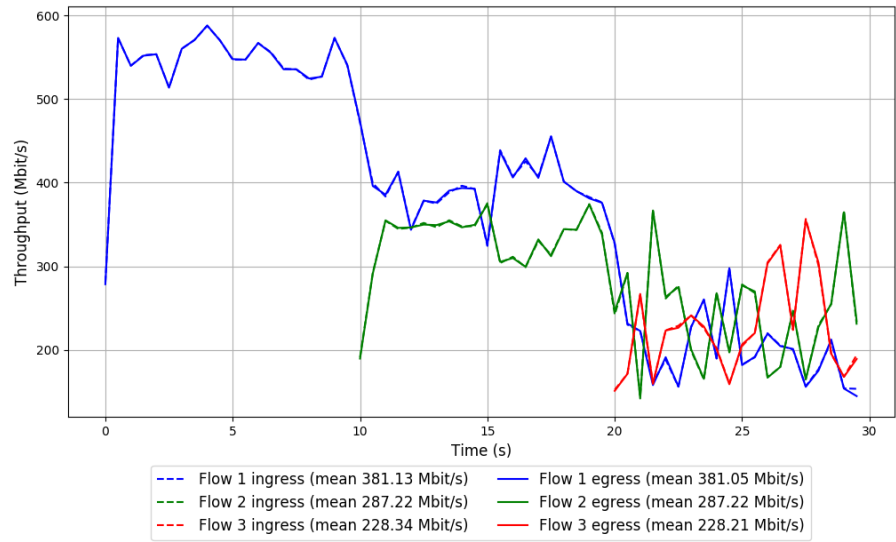
-- Flow 3:

Average throughput: 228.21 Mbit/s

95th percentile per-packet one-way delay: 3.446 ms

Loss rate: 0.12%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-05 20:17:50

End at: 2017-12-05 20:18:20

Local clock offset: 0.422 ms

Remote clock offset: 0.944 ms

Below is generated by plot.py at 2017-12-06 02:06:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 629.08 Mbit/s

95th percentile per-packet one-way delay: 12.061 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 367.05 Mbit/s

95th percentile per-packet one-way delay: 15.403 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 279.91 Mbit/s

95th percentile per-packet one-way delay: 4.121 ms

Loss rate: 0.00%

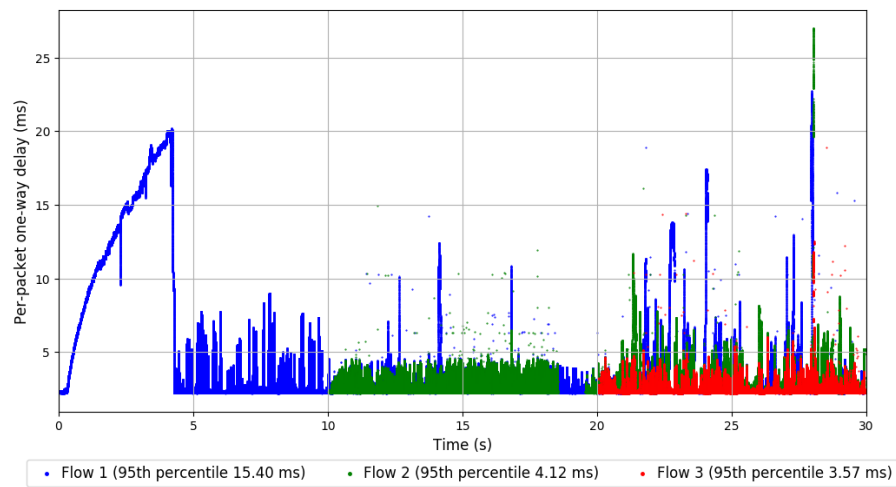
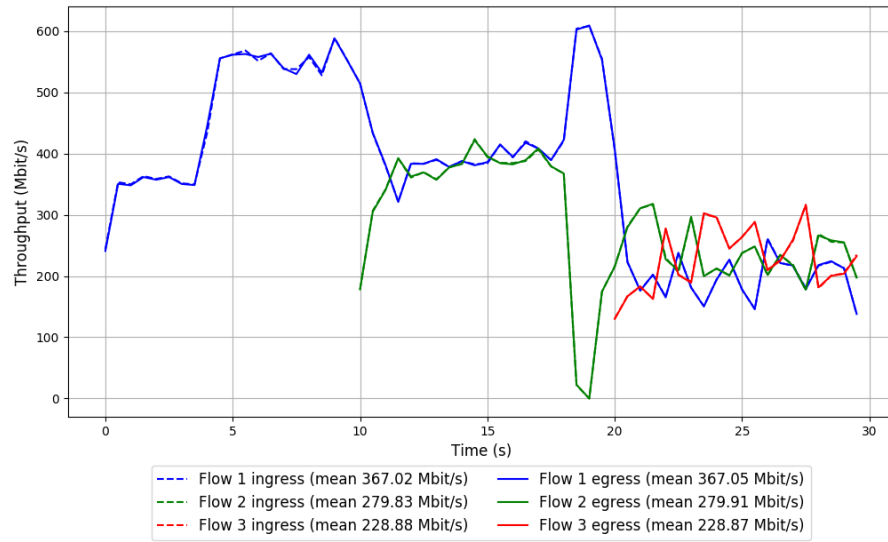
-- Flow 3:

Average throughput: 228.87 Mbit/s

95th percentile per-packet one-way delay: 3.572 ms

Loss rate: 0.07%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-05 20:36:28

End at: 2017-12-05 20:36:58

Local clock offset: 0.465 ms

Remote clock offset: 1.052 ms

Below is generated by plot.py at 2017-12-06 02:08:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 646.06 Mbit/s

95th percentile per-packet one-way delay: 9.193 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 388.88 Mbit/s

95th percentile per-packet one-way delay: 6.694 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 348.63 Mbit/s

95th percentile per-packet one-way delay: 17.498 ms

Loss rate: 0.02%

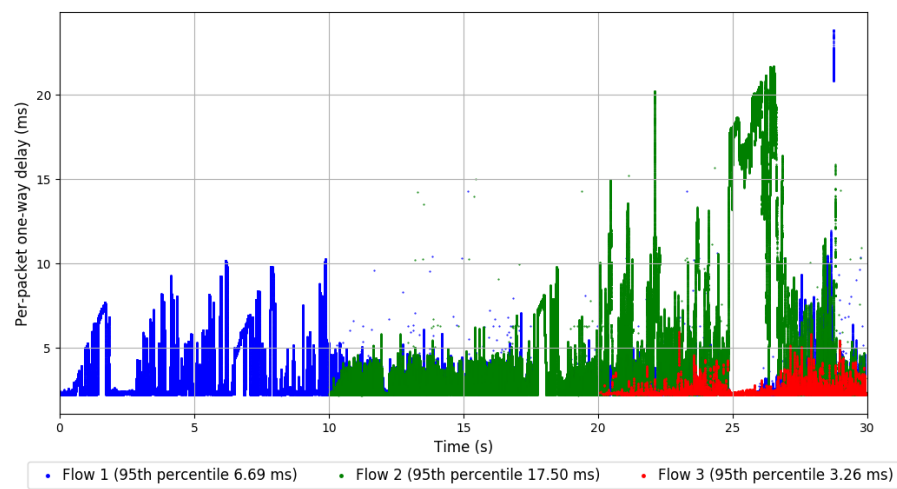
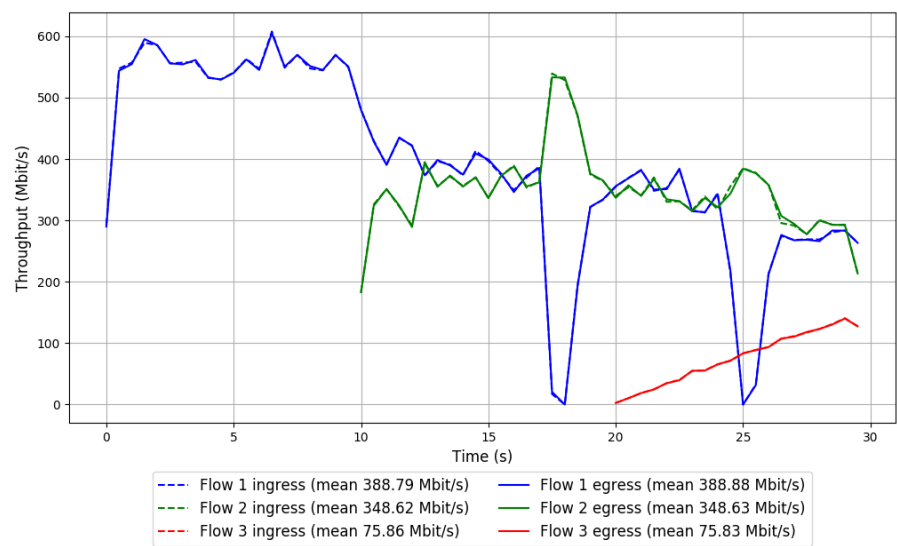
-- Flow 3:

Average throughput: 75.83 Mbit/s

95th percentile per-packet one-way delay: 3.260 ms

Loss rate: 0.08%

Run 6: Report of LEDBAT — Data Link

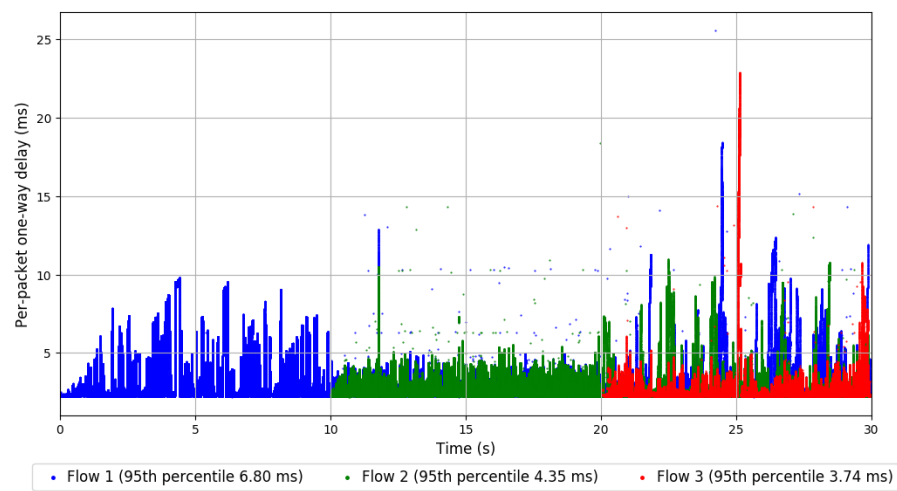
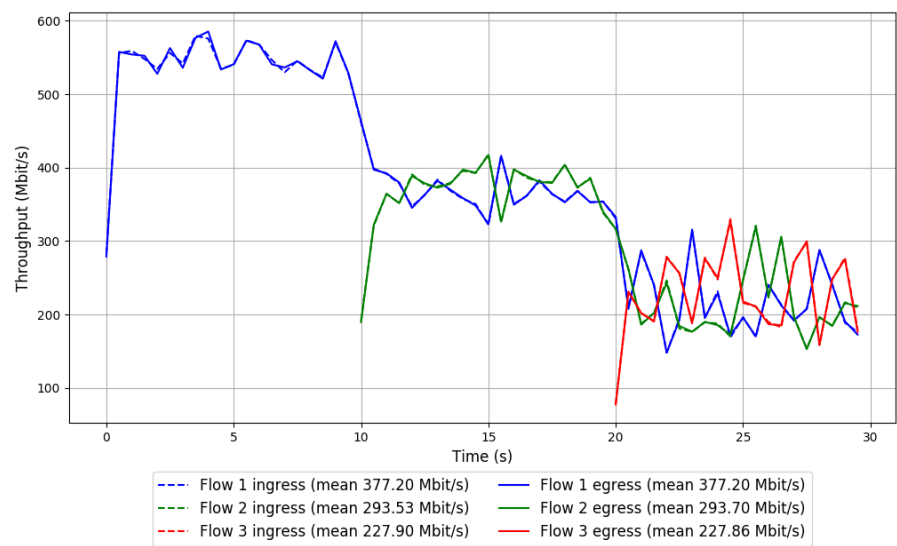


Run 7: Statistics of LEDBAT

Start at: 2017-12-05 20:55:15
End at: 2017-12-05 20:55:45
Local clock offset: 0.636 ms
Remote clock offset: 1.086 ms

```
# Below is generated by plot.py at 2017-12-06 02:09:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 648.02 Mbit/s
95th percentile per-packet one-way delay: 6.093 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 377.20 Mbit/s
95th percentile per-packet one-way delay: 6.799 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 293.70 Mbit/s
95th percentile per-packet one-way delay: 4.354 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 227.86 Mbit/s
95th percentile per-packet one-way delay: 3.740 ms
Loss rate: 0.12%
```

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-05 21:13:43

End at: 2017-12-05 21:14:13

Local clock offset: 0.644 ms

Remote clock offset: 0.921 ms

Below is generated by plot.py at 2017-12-06 02:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 641.73 Mbit/s

95th percentile per-packet one-way delay: 13.607 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 367.16 Mbit/s

95th percentile per-packet one-way delay: 16.476 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 294.16 Mbit/s

95th percentile per-packet one-way delay: 10.122 ms

Loss rate: 0.01%

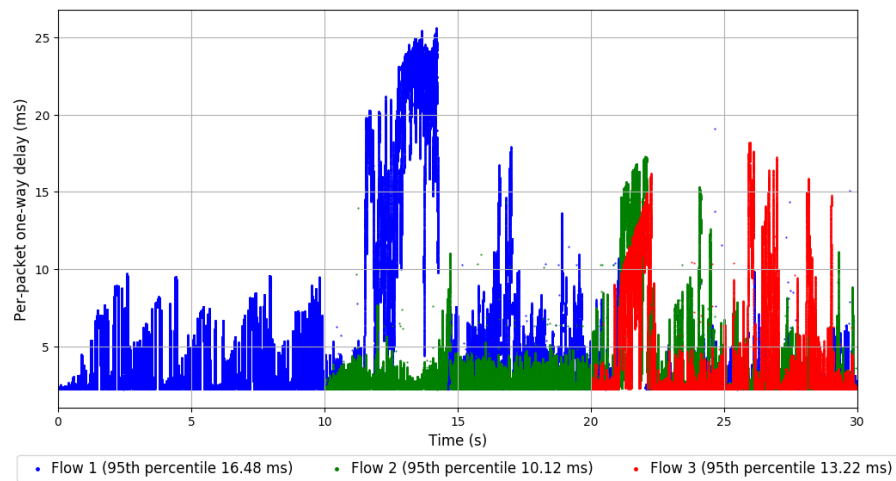
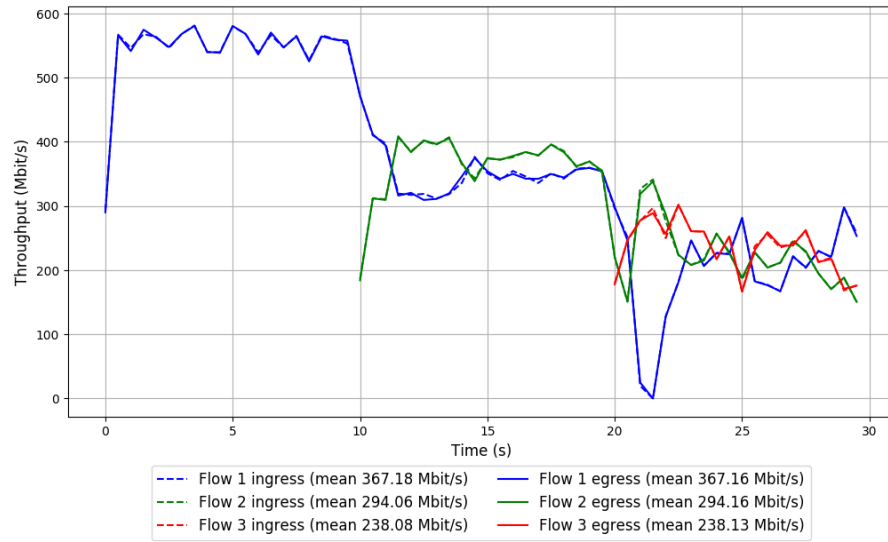
-- Flow 3:

Average throughput: 238.13 Mbit/s

95th percentile per-packet one-way delay: 13.224 ms

Loss rate: 0.03%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-05 21:32:24

End at: 2017-12-05 21:32:54

Local clock offset: 0.615 ms

Remote clock offset: 1.046 ms

Below is generated by plot.py at 2017-12-06 02:11:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 671.78 Mbit/s

95th percentile per-packet one-way delay: 5.822 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 401.84 Mbit/s

95th percentile per-packet one-way delay: 6.746 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 369.52 Mbit/s

95th percentile per-packet one-way delay: 4.174 ms

Loss rate: 0.01%

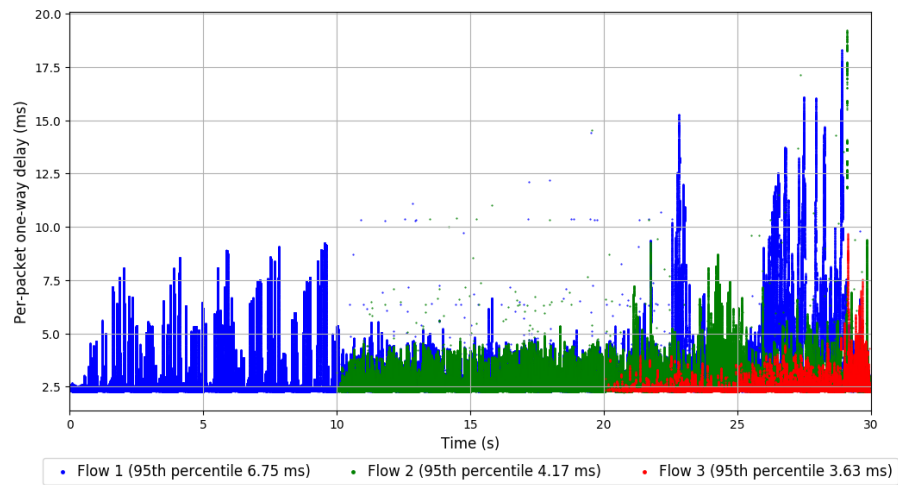
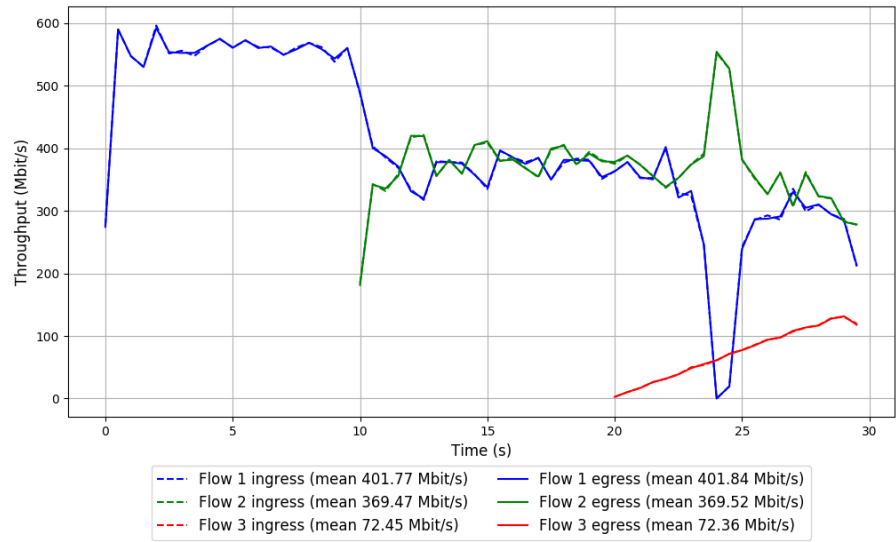
-- Flow 3:

Average throughput: 72.36 Mbit/s

95th percentile per-packet one-way delay: 3.634 ms

Loss rate: 0.14%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-05 21:51:13

End at: 2017-12-05 21:51:43

Local clock offset: 0.537 ms

Remote clock offset: 1.321 ms

Below is generated by plot.py at 2017-12-06 02:11:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 624.93 Mbit/s

95th percentile per-packet one-way delay: 7.792 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 364.84 Mbit/s

95th percentile per-packet one-way delay: 8.130 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 291.75 Mbit/s

95th percentile per-packet one-way delay: 5.938 ms

Loss rate: 0.01%

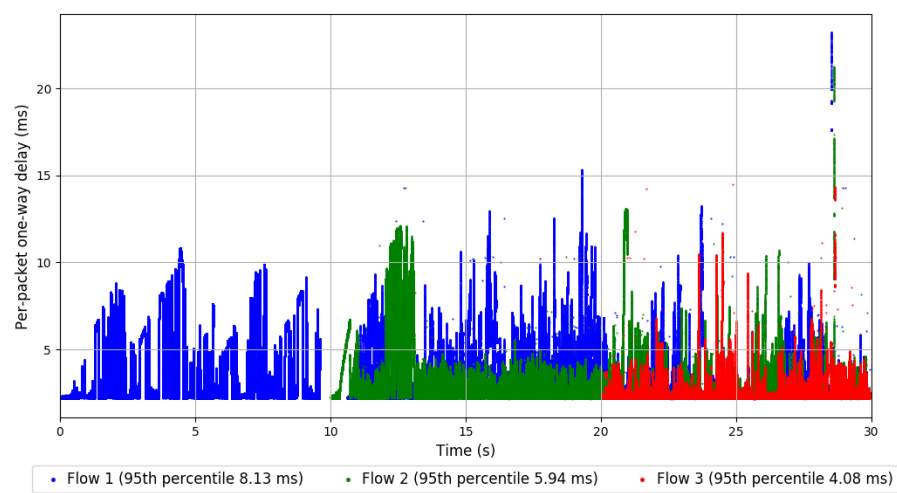
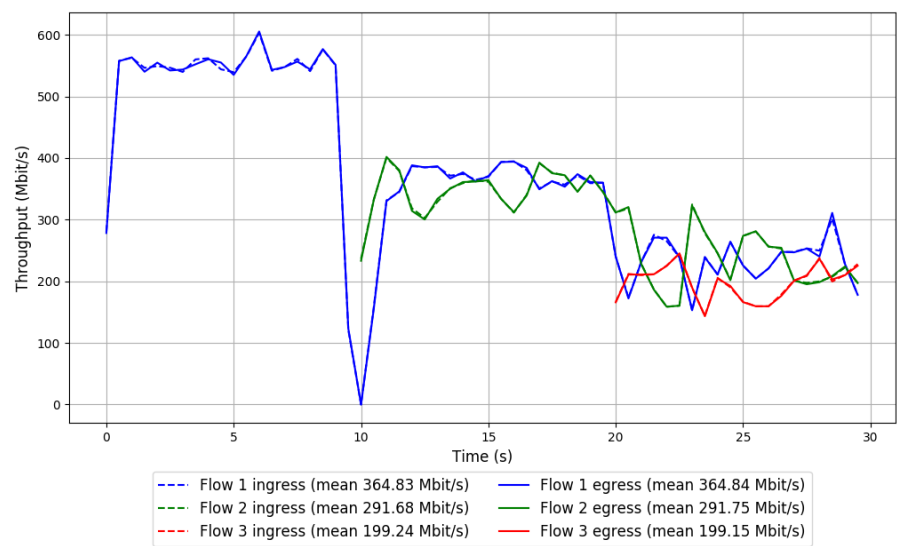
-- Flow 3:

Average throughput: 199.15 Mbit/s

95th percentile per-packet one-way delay: 4.078 ms

Loss rate: 0.09%

Run 10: Report of LEDBAT — Data Link

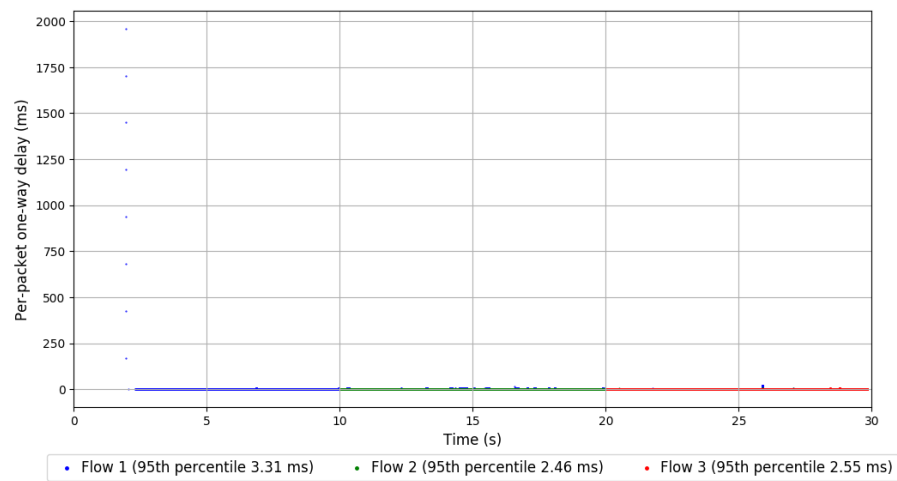
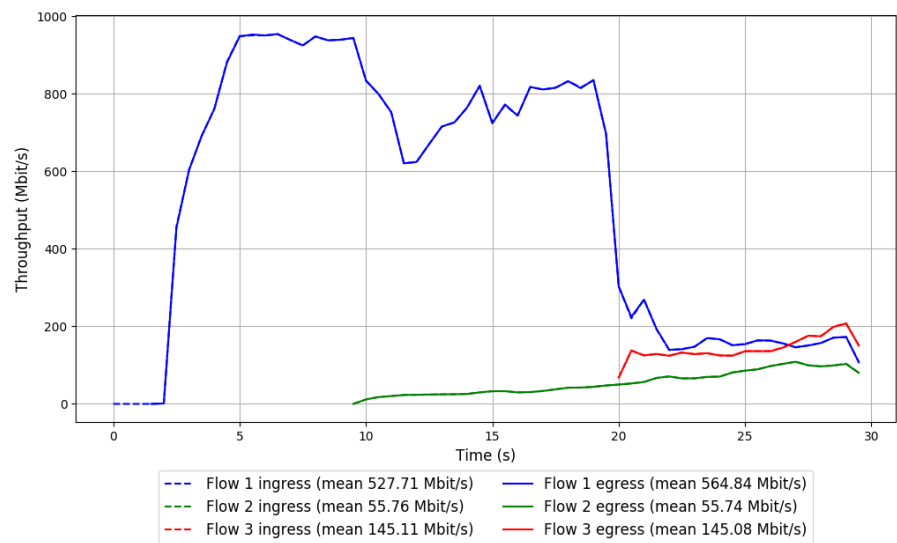


```
Run 1: Statistics of PCC

Start at: 2017-12-05 19:01:45
End at: 2017-12-05 19:02:15
Local clock offset: -0.066 ms
Remote clock offset: -0.15 ms

# Below is generated by plot.py at 2017-12-06 02:12:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 655.53 Mbit/s
95th percentile per-packet one-way delay: 3.227 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 564.84 Mbit/s
95th percentile per-packet one-way delay: 3.315 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 55.74 Mbit/s
95th percentile per-packet one-way delay: 2.462 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 145.08 Mbit/s
95th percentile per-packet one-way delay: 2.551 ms
Loss rate: 0.06%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

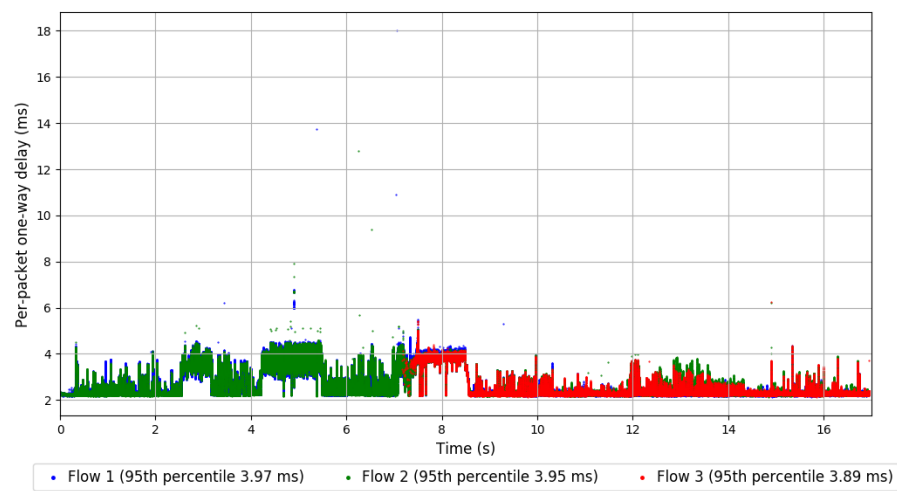
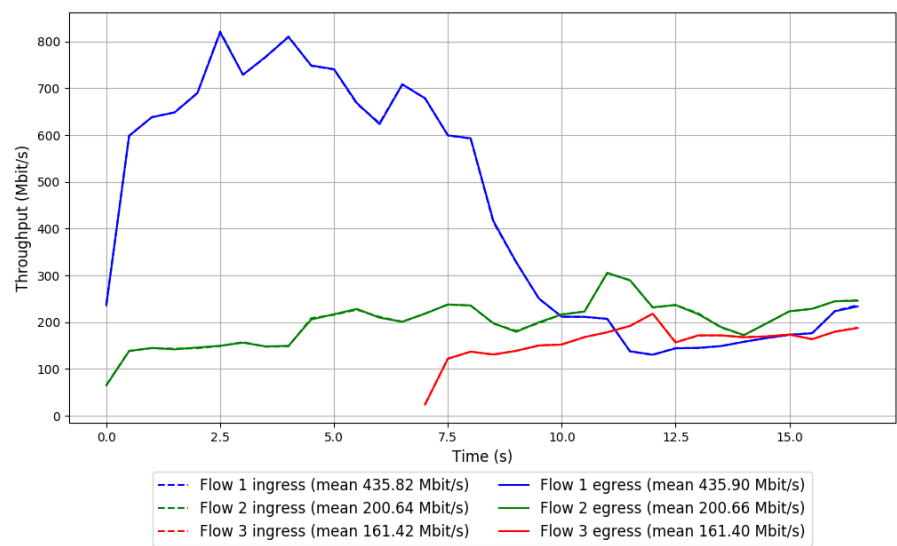
Start at: 2017-12-05 19:20:35

End at: 2017-12-05 19:21:05

Local clock offset: 0.128 ms

Remote clock offset: 0.223 ms

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

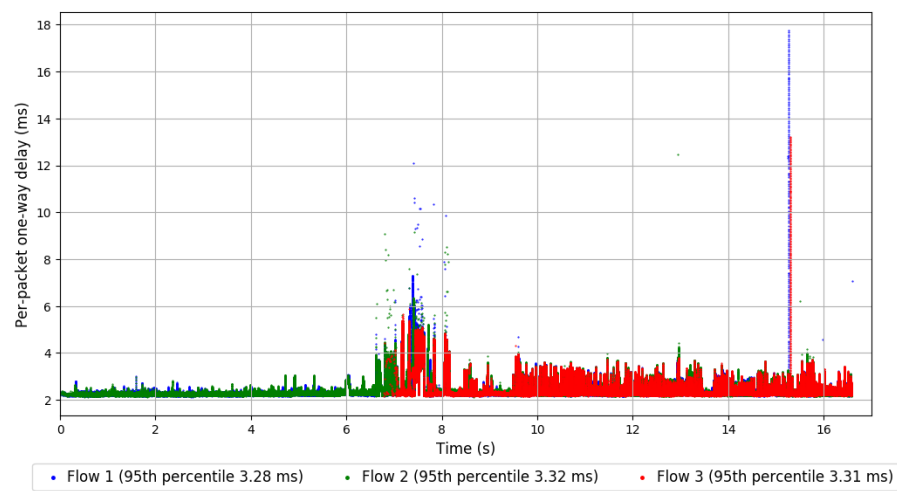
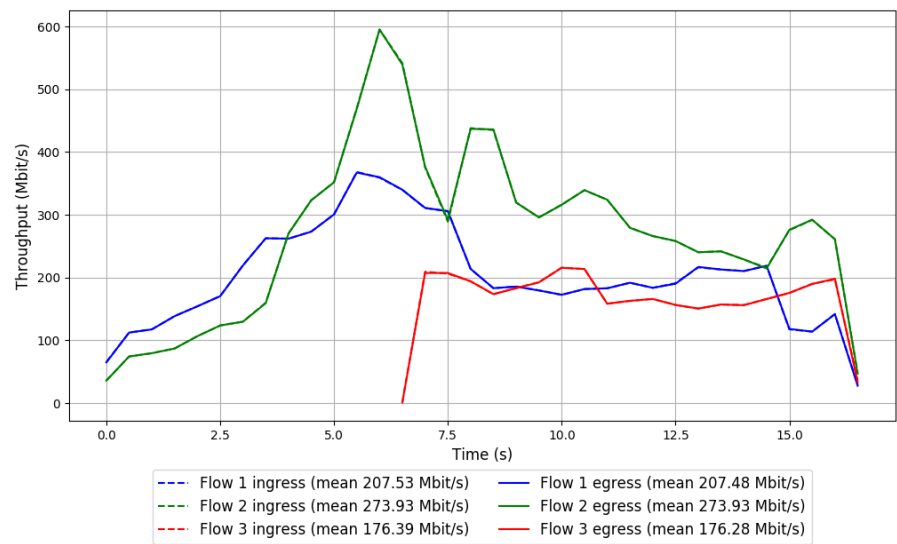
Start at: 2017-12-05 19:39:15

End at: 2017-12-05 19:39:45

Local clock offset: 0.273 ms

Remote clock offset: 0.528 ms

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-05 19:57:55

End at: 2017-12-05 19:58:25

Local clock offset: 0.262 ms

Remote clock offset: 0.777 ms

Below is generated by plot.py at 2017-12-06 02:15:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 436.23 Mbit/s

95th percentile per-packet one-way delay: 3.339 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 229.03 Mbit/s

95th percentile per-packet one-way delay: 3.366 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 287.58 Mbit/s

95th percentile per-packet one-way delay: 3.372 ms

Loss rate: 0.01%

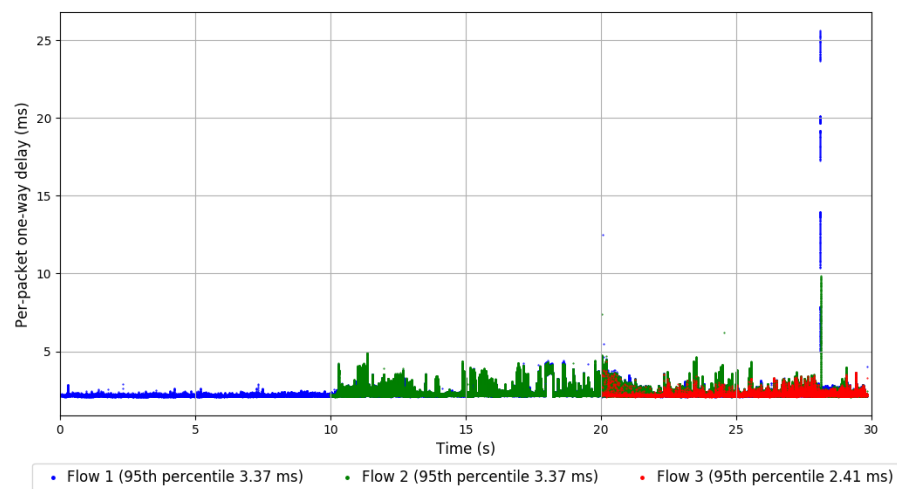
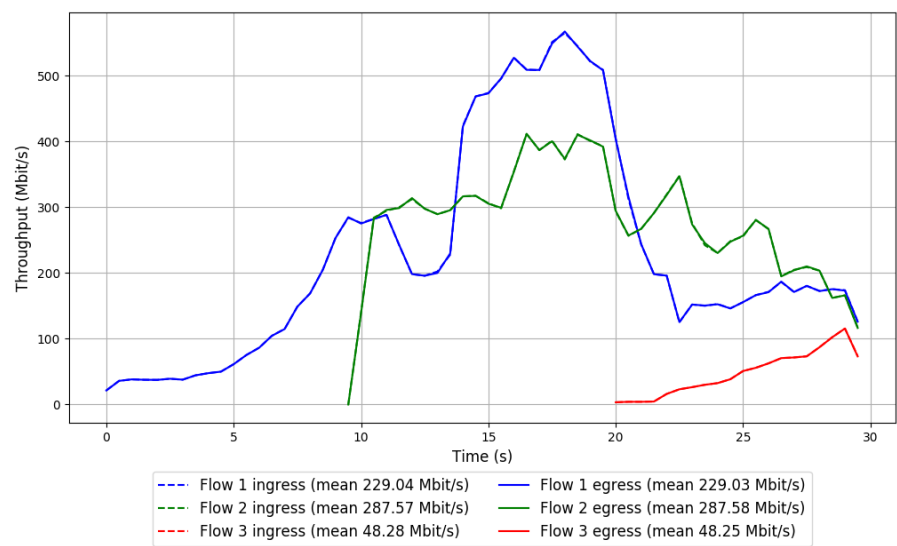
-- Flow 3:

Average throughput: 48.25 Mbit/s

95th percentile per-packet one-way delay: 2.406 ms

Loss rate: 0.11%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

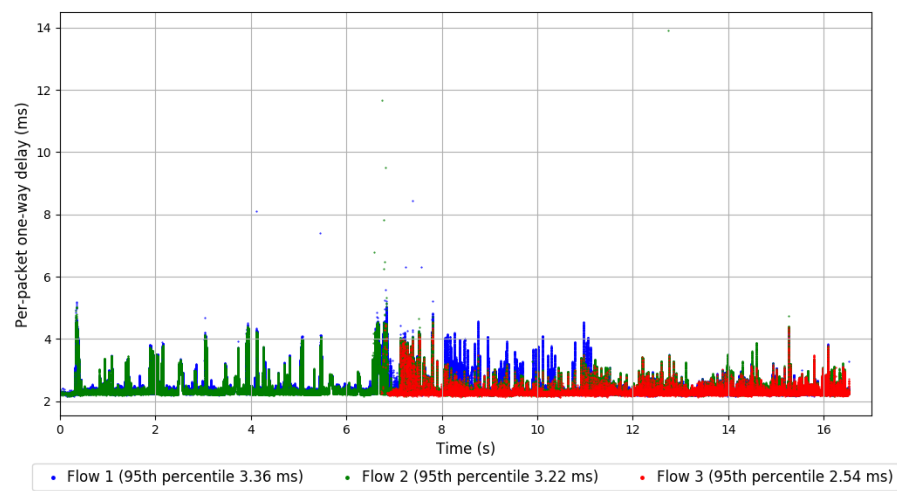
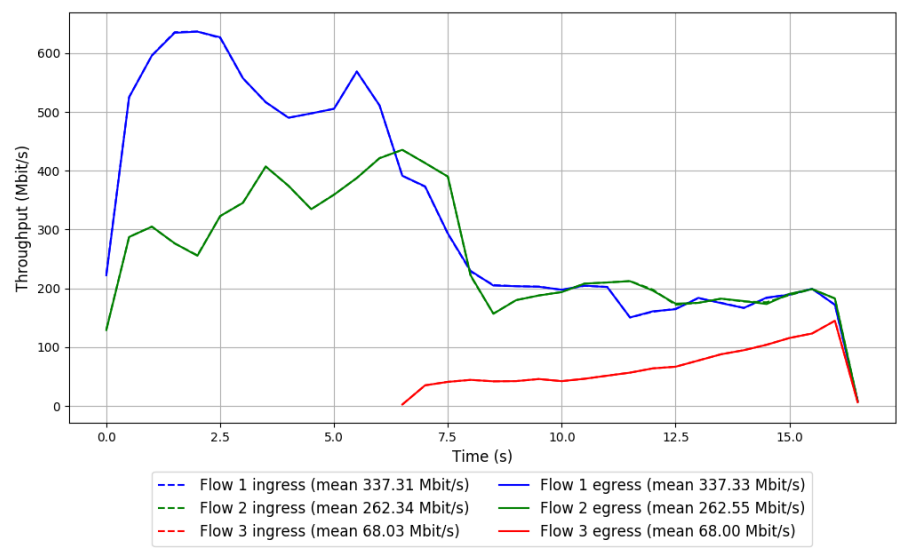
Start at: 2017-12-05 20:16:36

End at: 2017-12-05 20:17:06

Local clock offset: 0.421 ms

Remote clock offset: 0.938 ms

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-05 20:35:02

End at: 2017-12-05 20:35:32

Local clock offset: 0.438 ms

Remote clock offset: 1.114 ms

Below is generated by plot.py at 2017-12-06 02:21:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 740.51 Mbit/s

95th percentile per-packet one-way delay: 3.356 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 569.41 Mbit/s

95th percentile per-packet one-way delay: 3.450 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 155.70 Mbit/s

95th percentile per-packet one-way delay: 3.280 ms

Loss rate: 0.02%

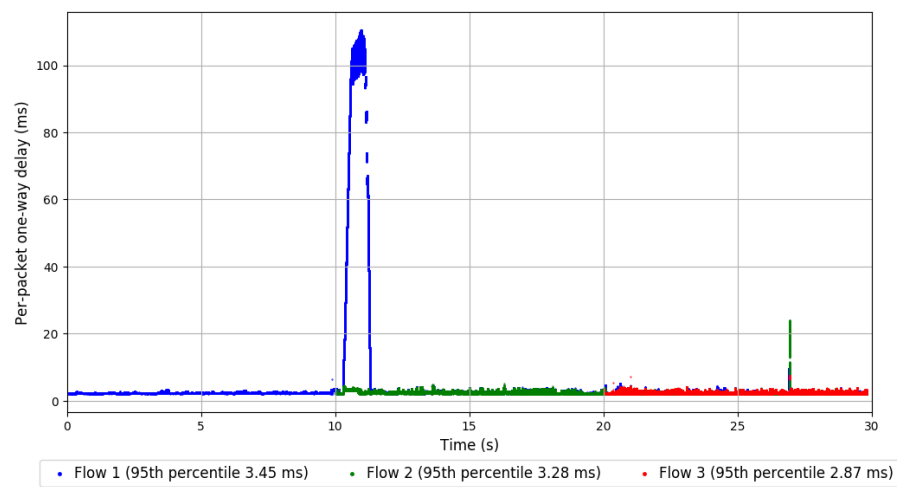
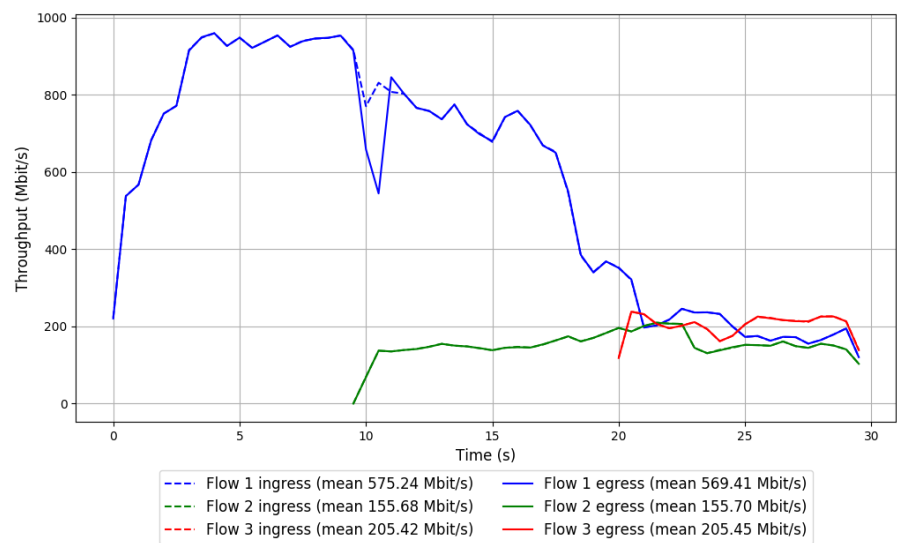
-- Flow 3:

Average throughput: 205.45 Mbit/s

95th percentile per-packet one-way delay: 2.865 ms

Loss rate: 0.05%

Run 6: Report of PCC — Data Link

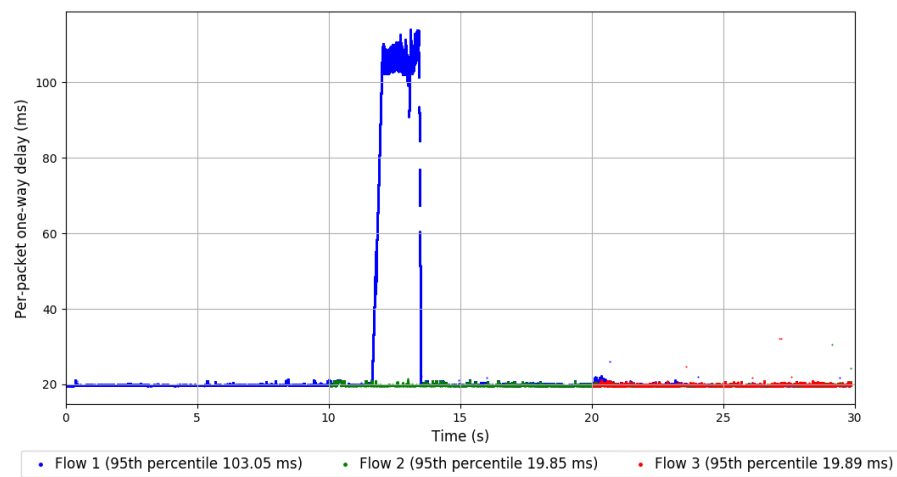
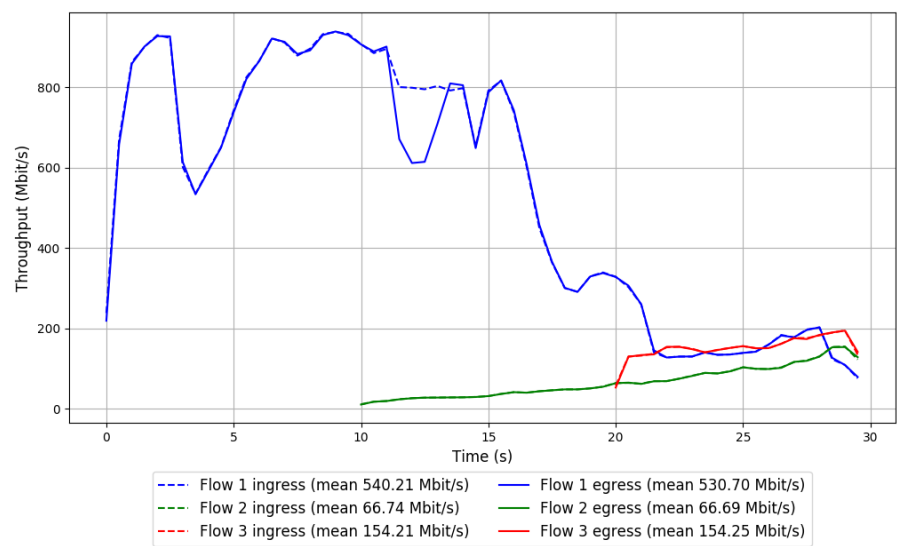


Run 7: Statistics of PCC

Start at: 2017-12-05 20:53:52
End at: 2017-12-05 20:54:22
Local clock offset: 0.576 ms
Remote clock offset: -16.29 ms

Below is generated by plot.py at 2017-12-06 02:21:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 625.63 Mbit/s
95th percentile per-packet one-way delay: 82.090 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 530.70 Mbit/s
95th percentile per-packet one-way delay: 103.048 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 66.69 Mbit/s
95th percentile per-packet one-way delay: 19.853 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 154.25 Mbit/s
95th percentile per-packet one-way delay: 19.891 ms
Loss rate: 0.02%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

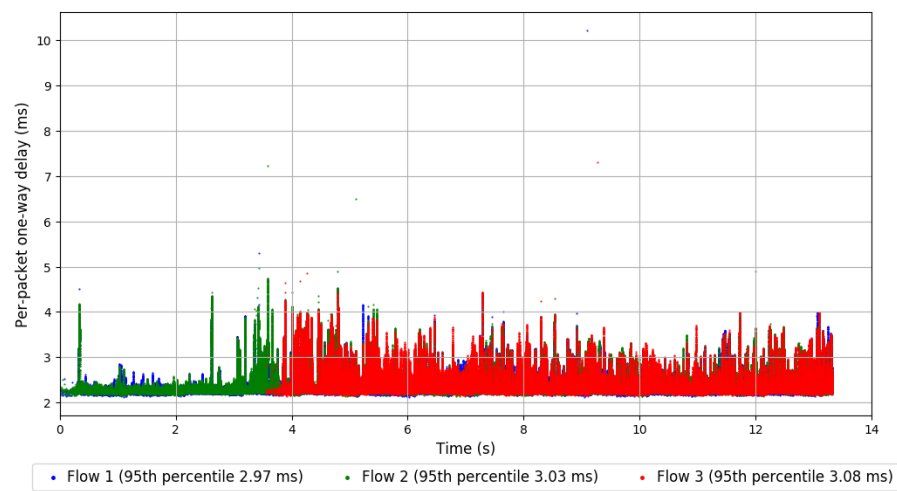
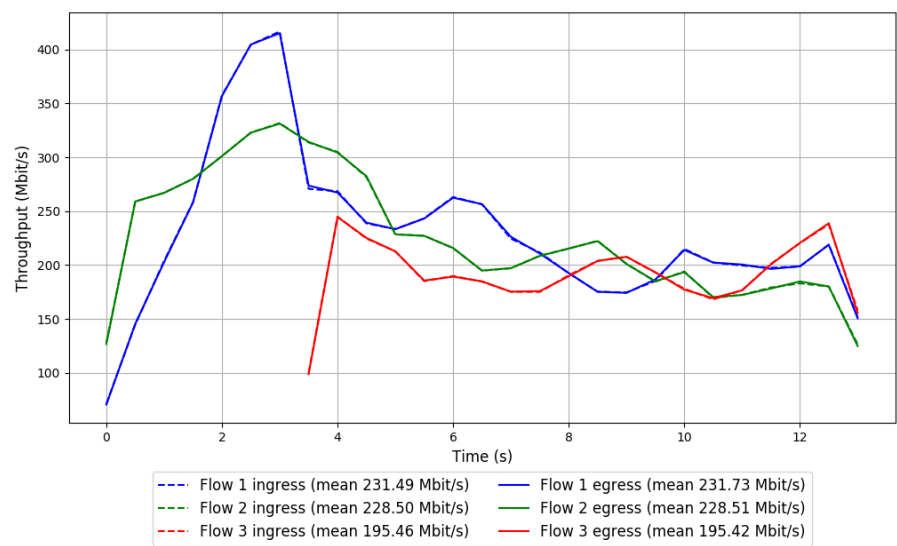
Start at: 2017-12-05 21:12:31

End at: 2017-12-05 21:13:01

Local clock offset: 0.653 ms

Remote clock offset: 0.989 ms

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-05 21:30:58

End at: 2017-12-05 21:31:28

Local clock offset: 0.579 ms

Remote clock offset: 1.06 ms

Below is generated by plot.py at 2017-12-06 02:22:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 720.30 Mbit/s

95th percentile per-packet one-way delay: 3.856 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 463.78 Mbit/s

95th percentile per-packet one-way delay: 3.937 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 360.96 Mbit/s

95th percentile per-packet one-way delay: 3.776 ms

Loss rate: 0.01%

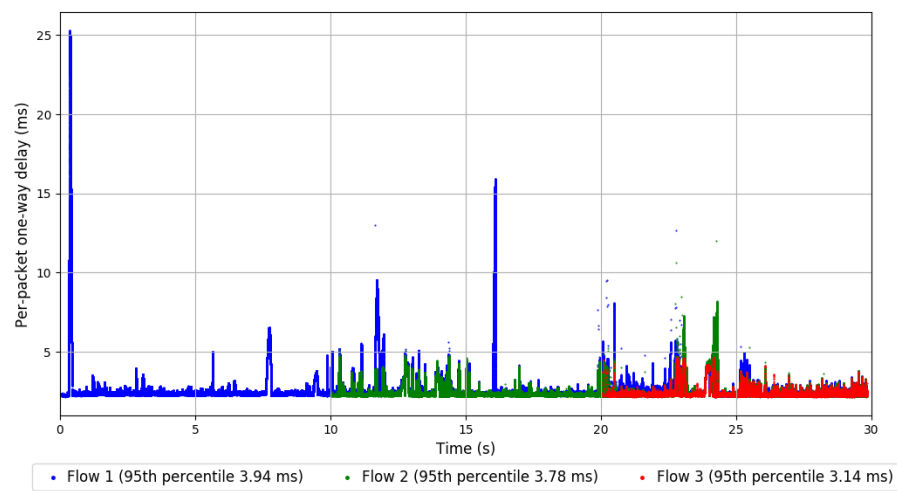
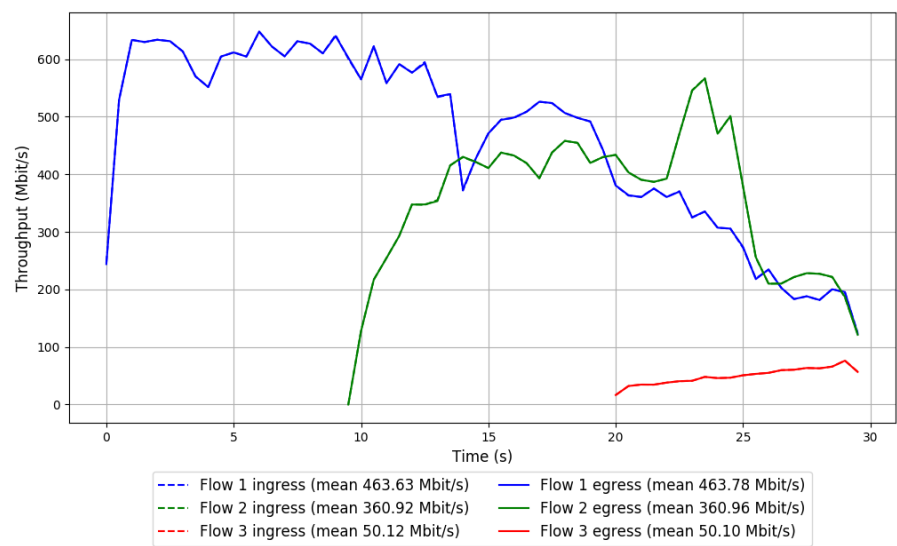
-- Flow 3:

Average throughput: 50.10 Mbit/s

95th percentile per-packet one-way delay: 3.136 ms

Loss rate: 0.08%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-05 21:49:46

End at: 2017-12-05 21:50:16

Local clock offset: 0.594 ms

Remote clock offset: 1.318 ms

Below is generated by plot.py at 2017-12-06 02:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 787.13 Mbit/s

95th percentile per-packet one-way delay: 70.084 ms

Loss rate: 1.84%

-- Flow 1:

Average throughput: 616.09 Mbit/s

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

Loss rate: 2.34%

-- Flow 2:

Average throughput: 162.45 Mbit/s

95th percentile per-packet one-way delay: 3.839 ms

Loss rate: 0.03%

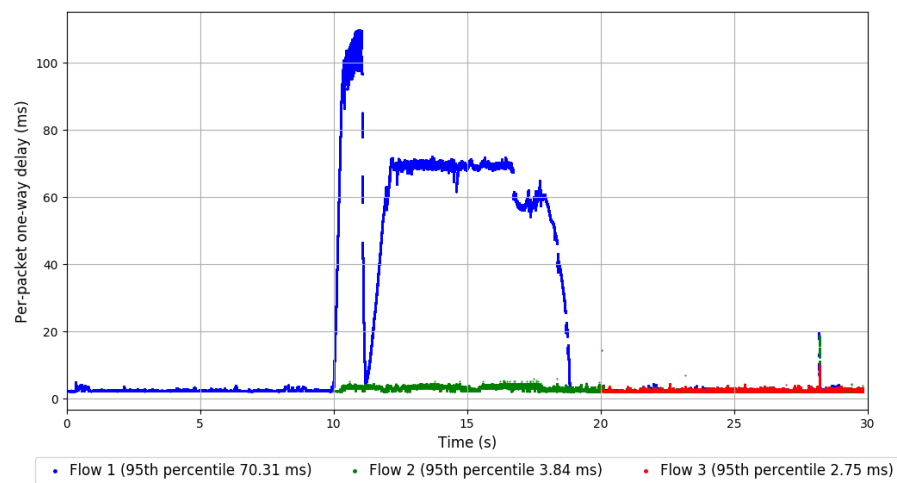
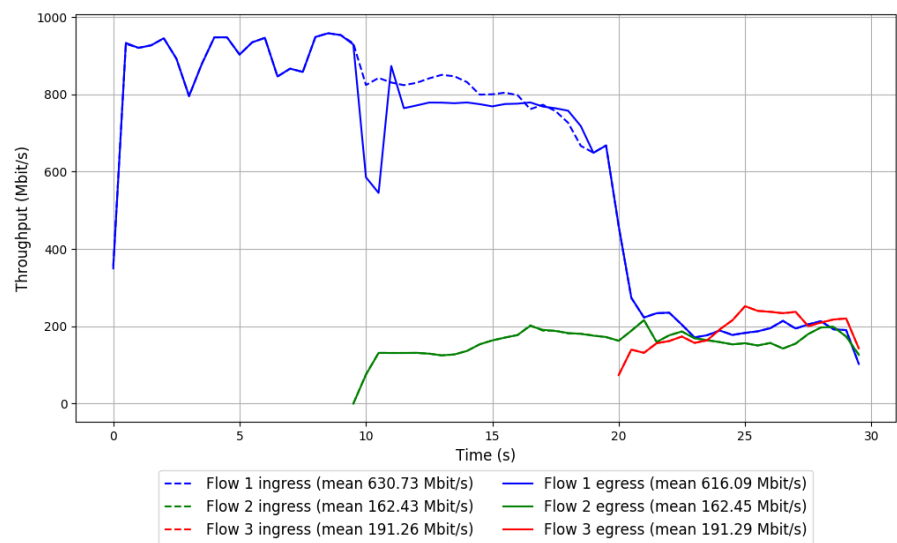
-- Flow 3:

Average throughput: 191.29 Mbit/s

95th percentile per-packet one-way delay: 2.748 ms

Loss rate: 0.02%

Run 10: Report of PCC — Data Link

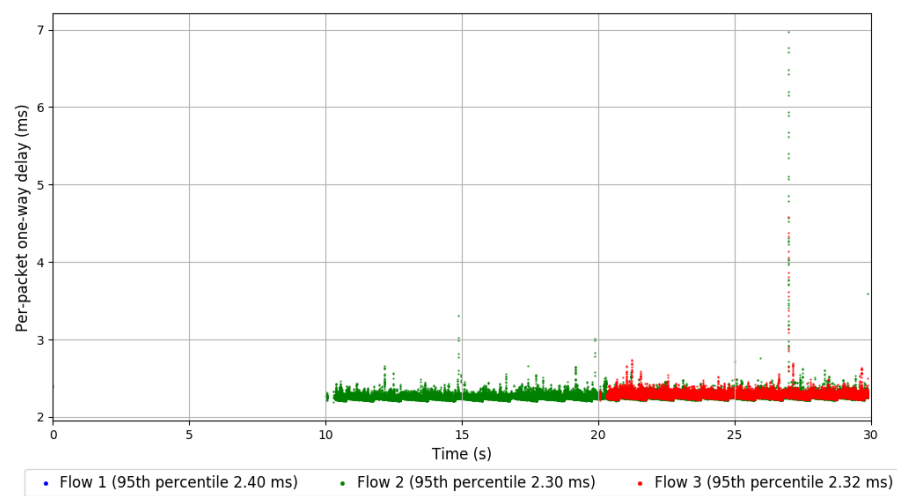
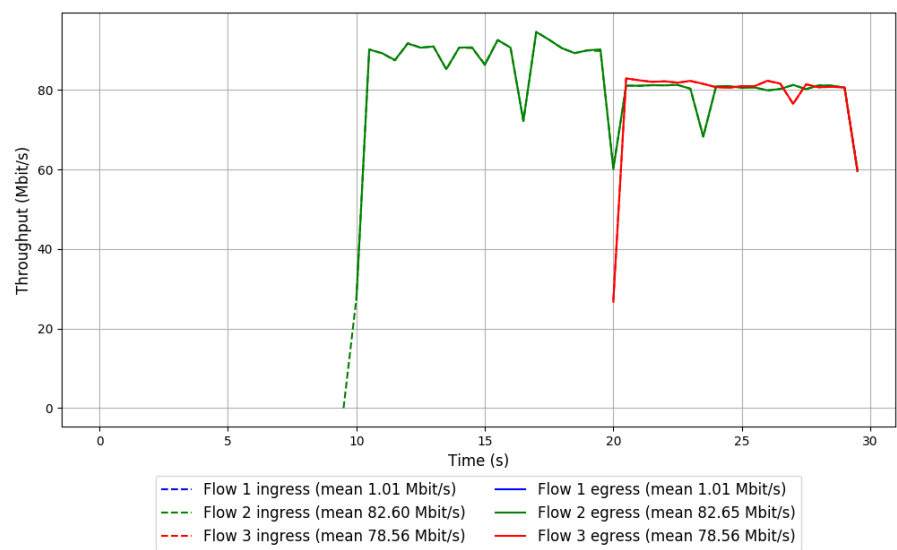


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-05 18:59:31
End at: 2017-12-05 19:00:01
Local clock offset: -0.058 ms
Remote clock offset: -0.171 ms

# Below is generated by plot.py at 2017-12-06 02:23:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.91 Mbit/s
95th percentile per-packet one-way delay: 2.312 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 2.403 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 82.65 Mbit/s
95th percentile per-packet one-way delay: 2.301 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 78.56 Mbit/s
95th percentile per-packet one-way delay: 2.323 ms
Loss rate: 0.04%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-05 19:18:21

End at: 2017-12-05 19:18:51

Local clock offset: 0.105 ms

Remote clock offset: 0.161 ms

Below is generated by plot.py at 2017-12-06 02:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.98 Mbit/s

95th percentile per-packet one-way delay: 2.331 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 2.389 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 83.84 Mbit/s

95th percentile per-packet one-way delay: 2.327 ms

Loss rate: 0.02%

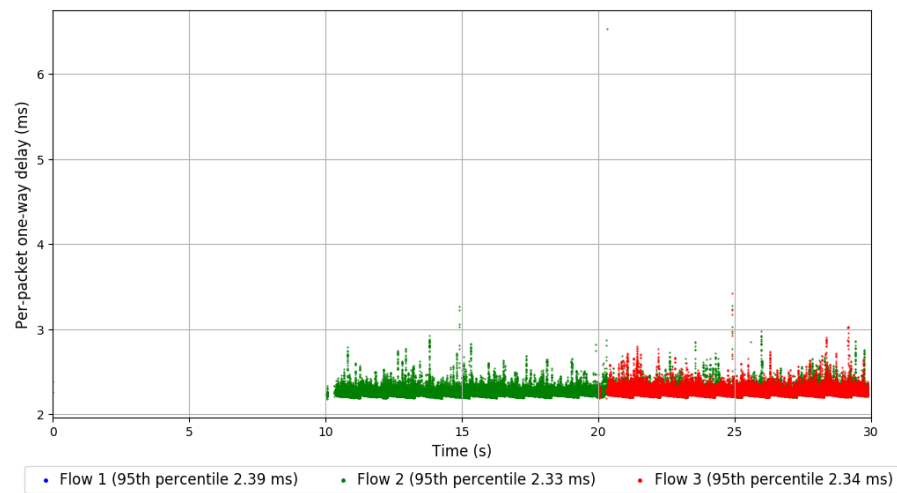
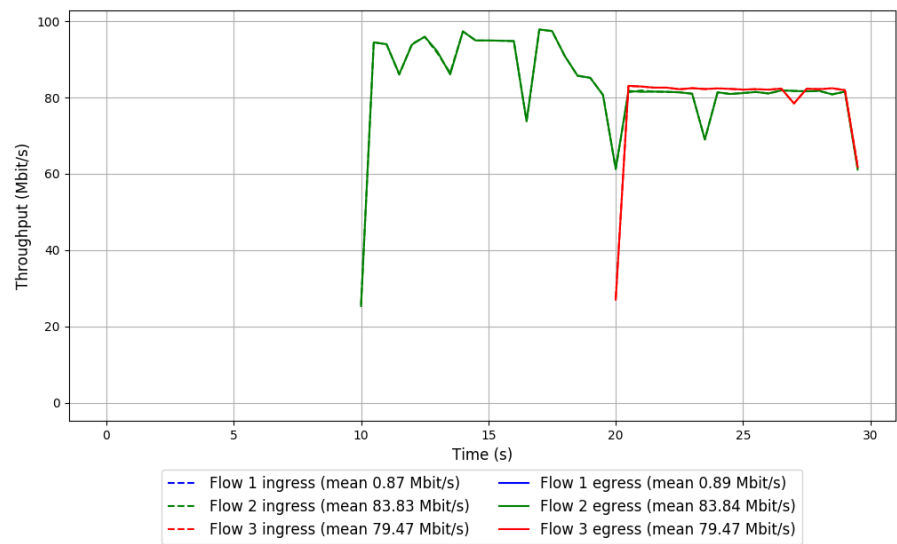
-- Flow 3:

Average throughput: 79.47 Mbit/s

95th percentile per-packet one-way delay: 2.338 ms

Loss rate: 0.03%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-05 19:37:01

End at: 2017-12-05 19:37:31

Local clock offset: 0.199 ms

Remote clock offset: 0.495 ms

Below is generated by plot.py at 2017-12-06 02:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.98 Mbit/s

95th percentile per-packet one-way delay: 2.237 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 2.436 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 85.32 Mbit/s

95th percentile per-packet one-way delay: 2.228 ms

Loss rate: 0.02%

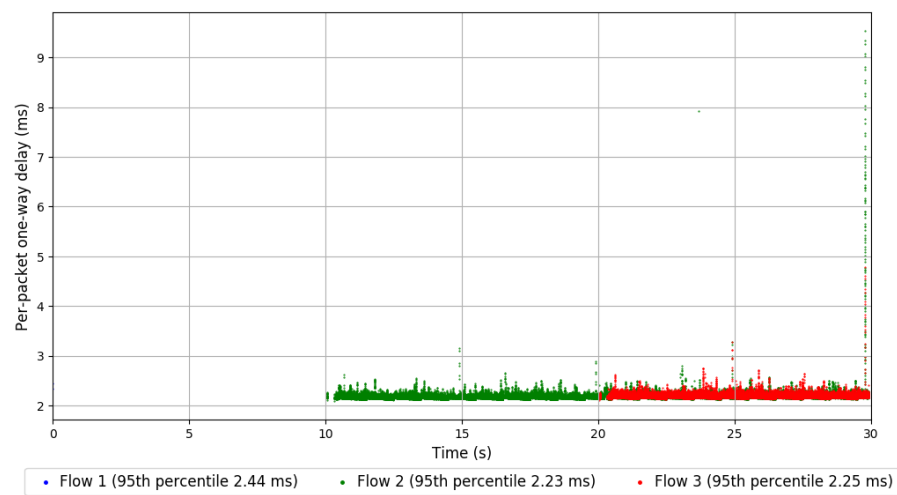
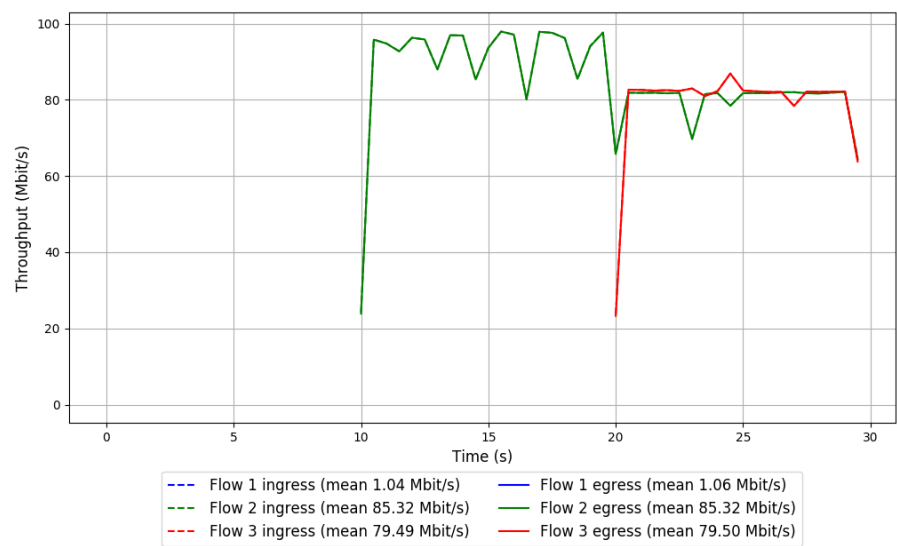
-- Flow 3:

Average throughput: 79.50 Mbit/s

95th percentile per-packet one-way delay: 2.247 ms

Loss rate: 0.04%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-05 19:55:41

End at: 2017-12-05 19:56:11

Local clock offset: 0.337 ms

Remote clock offset: 0.737 ms

Below is generated by plot.py at 2017-12-06 02:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.44 Mbit/s

95th percentile per-packet one-way delay: 2.346 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 1.13 Mbit/s

95th percentile per-packet one-way delay: 2.536 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.70 Mbit/s

95th percentile per-packet one-way delay: 2.345 ms

Loss rate: 0.02%

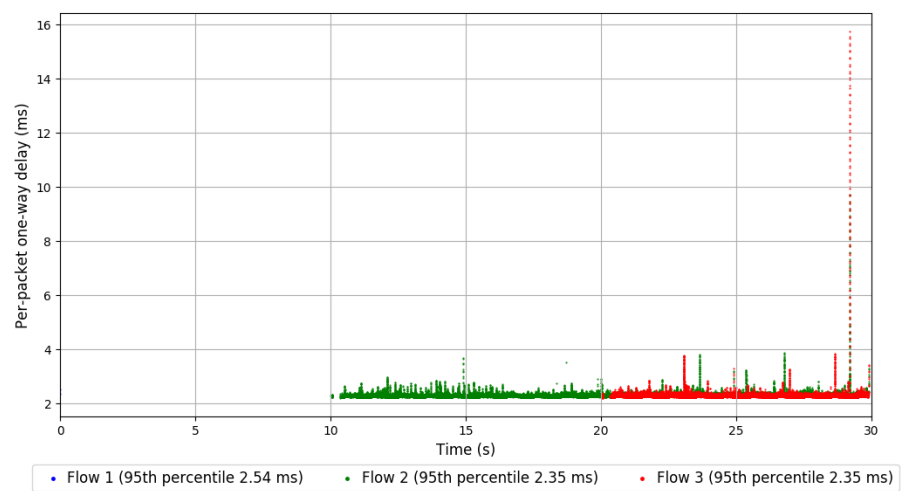
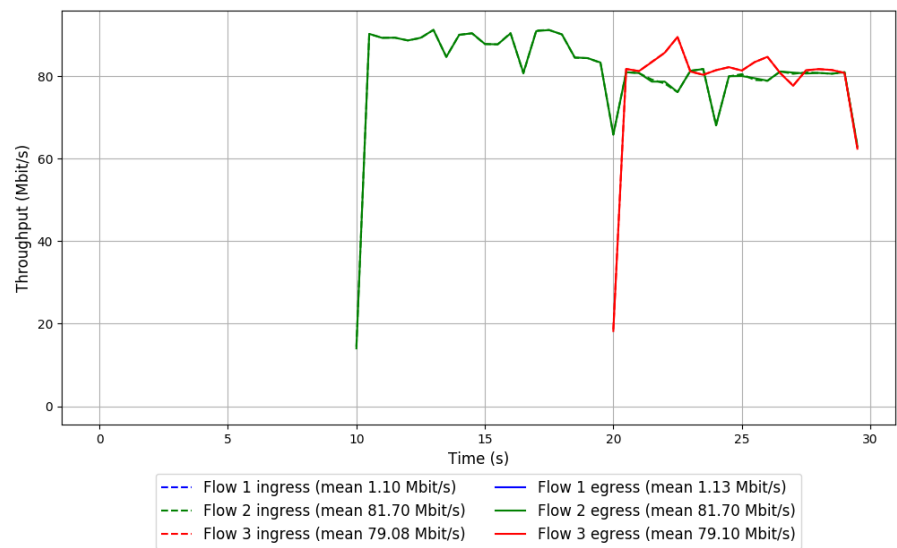
-- Flow 3:

Average throughput: 79.10 Mbit/s

95th percentile per-packet one-way delay: 2.346 ms

Loss rate: 0.04%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-05 20:14:21

End at: 2017-12-05 20:14:51

Local clock offset: 0.407 ms

Remote clock offset: 0.92 ms

Below is generated by plot.py at 2017-12-06 02:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.90 Mbit/s

95th percentile per-packet one-way delay: 2.346 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 2.355 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.94 Mbit/s

95th percentile per-packet one-way delay: 2.370 ms

Loss rate: 0.02%

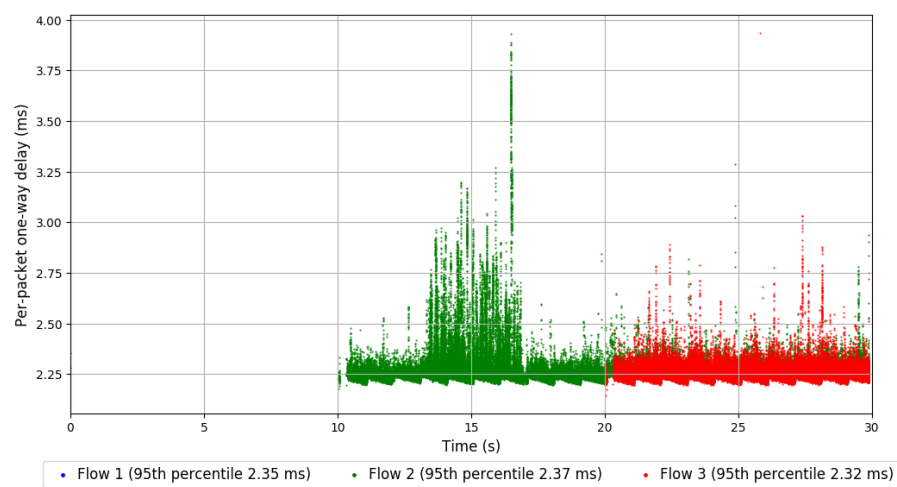
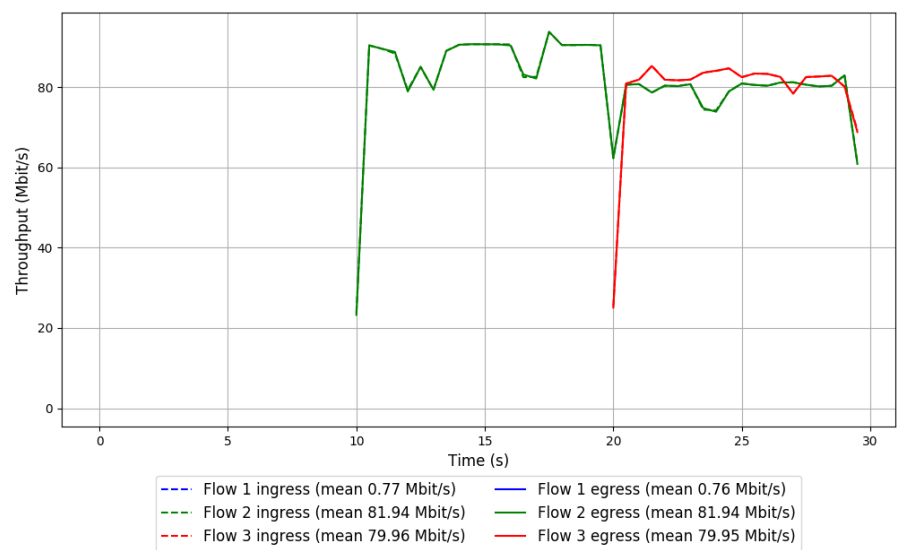
-- Flow 3:

Average throughput: 79.95 Mbit/s

95th percentile per-packet one-way delay: 2.318 ms

Loss rate: 0.05%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-05 20:32:48

End at: 2017-12-05 20:33:18

Local clock offset: 0.461 ms

Remote clock offset: 1.084 ms

Below is generated by plot.py at 2017-12-06 02:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.09 Mbit/s

95th percentile per-packet one-way delay: 2.273 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 2.432 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 84.60 Mbit/s

95th percentile per-packet one-way delay: 2.288 ms

Loss rate: 0.02%

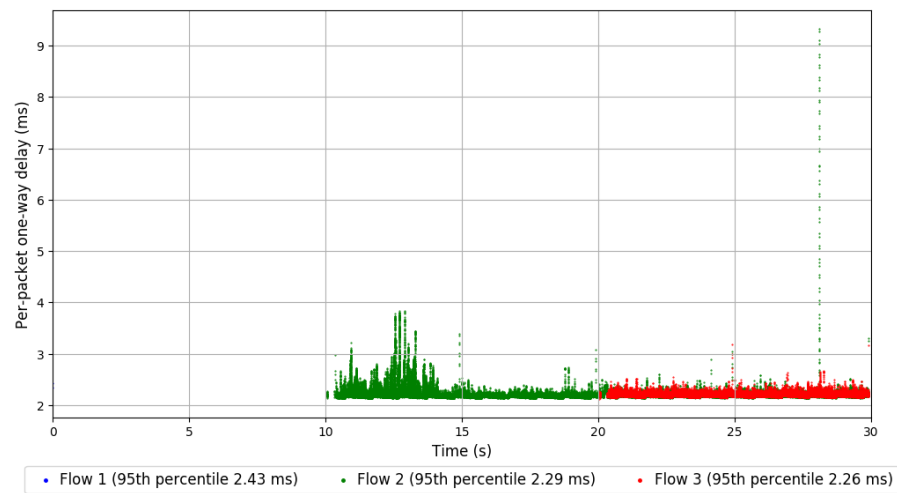
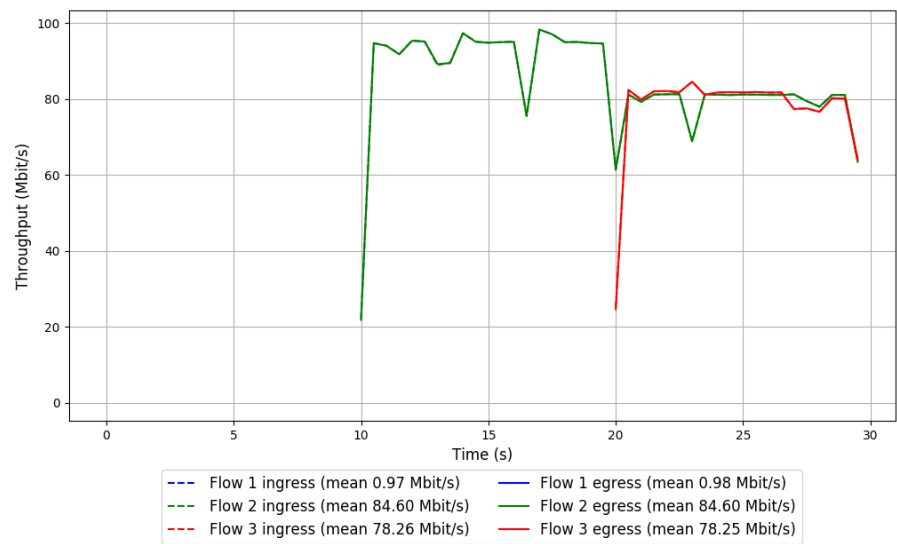
-- Flow 3:

Average throughput: 78.25 Mbit/s

95th percentile per-packet one-way delay: 2.261 ms

Loss rate: 0.05%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-05 20:51:38

End at: 2017-12-05 20:52:08

Local clock offset: 0.595 ms

Remote clock offset: 1.074 ms

Below is generated by plot.py at 2017-12-06 02:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.34 Mbit/s

95th percentile per-packet one-way delay: 2.324 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 2.547 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.18 Mbit/s

95th percentile per-packet one-way delay: 2.316 ms

Loss rate: 0.02%

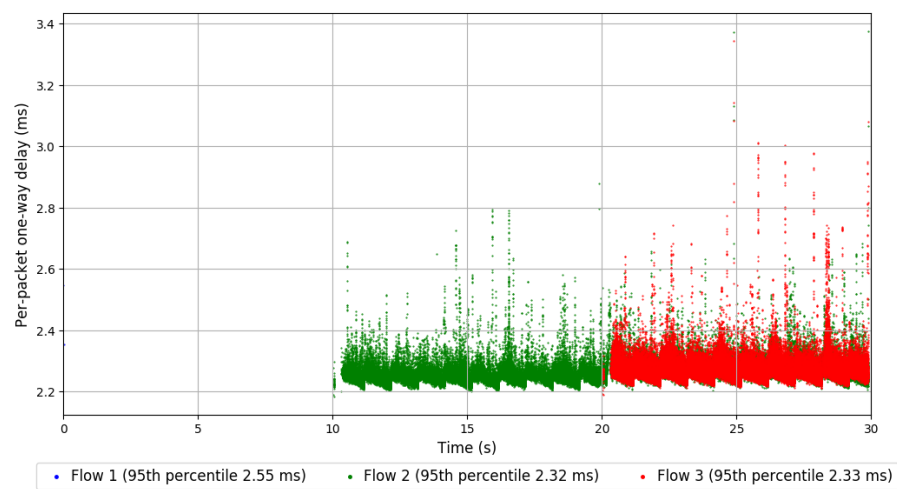
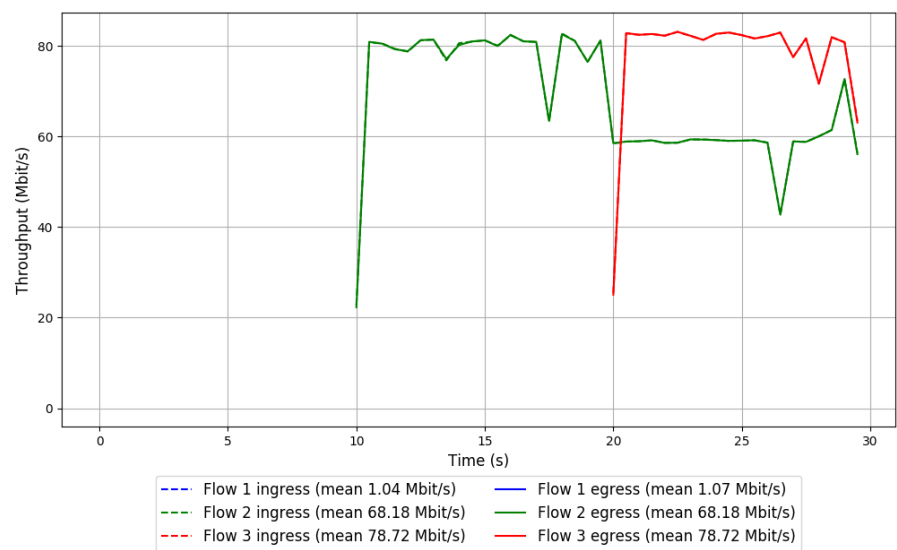
-- Flow 3:

Average throughput: 78.72 Mbit/s

95th percentile per-packet one-way delay: 2.335 ms

Loss rate: 0.05%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-05 21:10:17

End at: 2017-12-05 21:10:47

Local clock offset: 0.677 ms

Remote clock offset: 1.003 ms

Below is generated by plot.py at 2017-12-06 02:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.18 Mbit/s

95th percentile per-packet one-way delay: 2.290 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 2.301 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 85.55 Mbit/s

95th percentile per-packet one-way delay: 2.291 ms

Loss rate: 0.02%

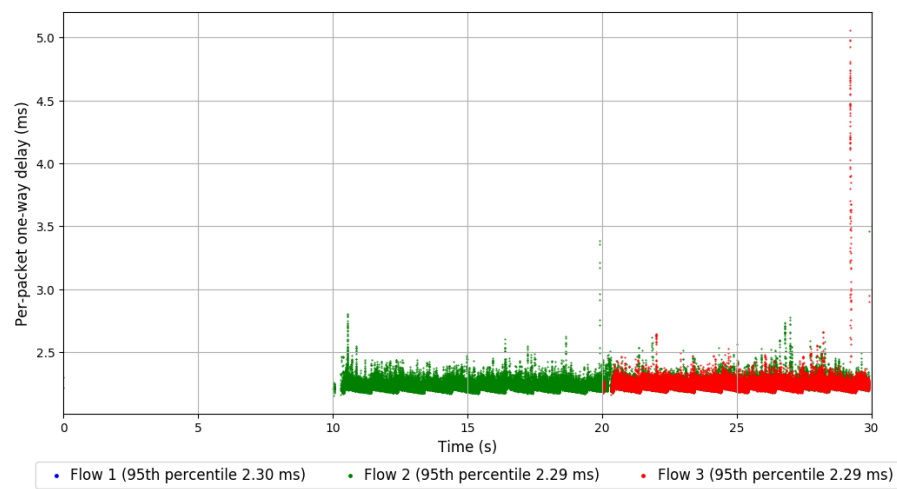
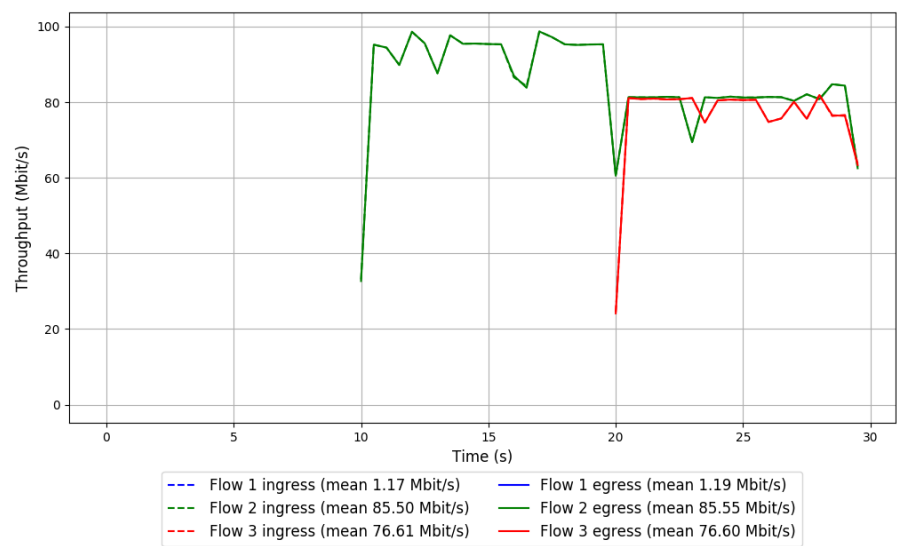
-- Flow 3:

Average throughput: 76.60 Mbit/s

95th percentile per-packet one-way delay: 2.290 ms

Loss rate: 0.05%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-05 21:28:45

End at: 2017-12-05 21:29:15

Local clock offset: 0.606 ms

Remote clock offset: 1.033 ms

Below is generated by plot.py at 2017-12-06 02:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.74 Mbit/s

95th percentile per-packet one-way delay: 2.309 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 2.385 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 83.88 Mbit/s

95th percentile per-packet one-way delay: 2.300 ms

Loss rate: 0.02%

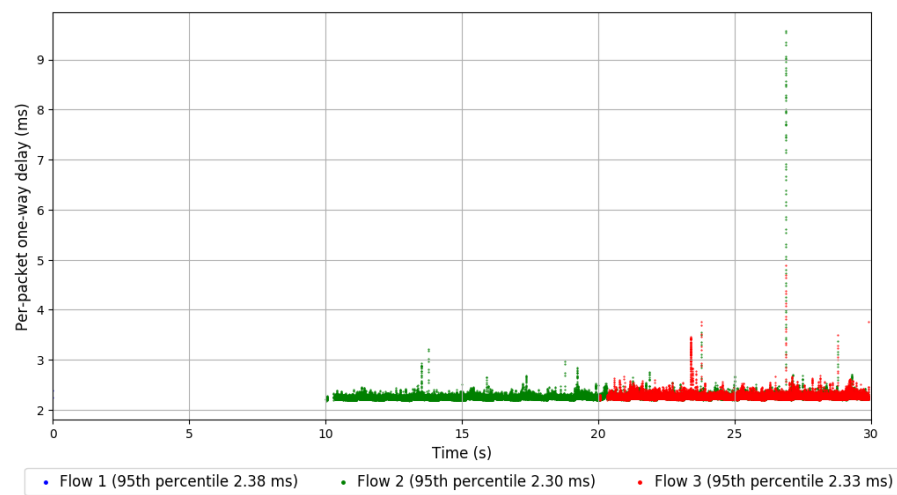
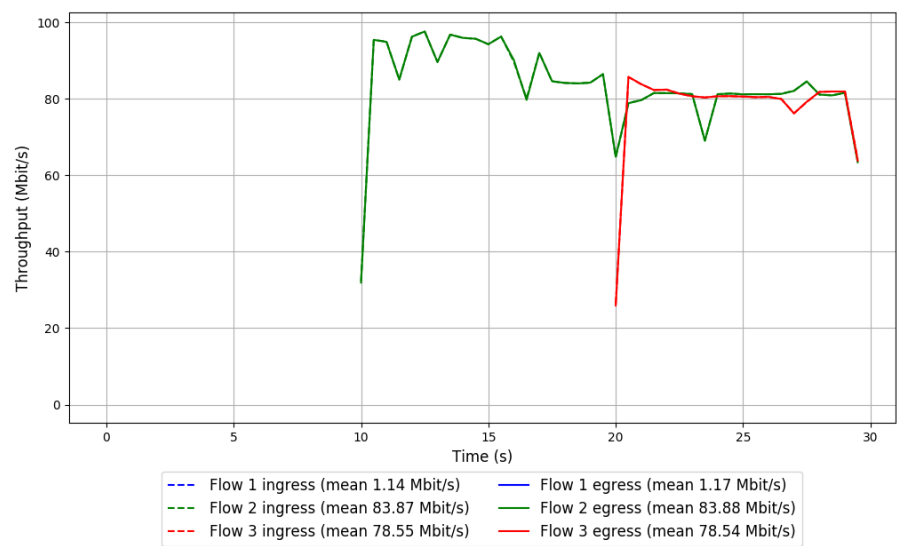
-- Flow 3:

Average throughput: 78.54 Mbit/s

95th percentile per-packet one-way delay: 2.325 ms

Loss rate: 0.05%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-05 21:47:32

End at: 2017-12-05 21:48:02

Local clock offset: 0.586 ms

Remote clock offset: 1.231 ms

Below is generated by plot.py at 2017-12-06 02:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.03 Mbit/s

95th percentile per-packet one-way delay: 2.402 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 2.450 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 78.01 Mbit/s

95th percentile per-packet one-way delay: 2.401 ms

Loss rate: 0.02%

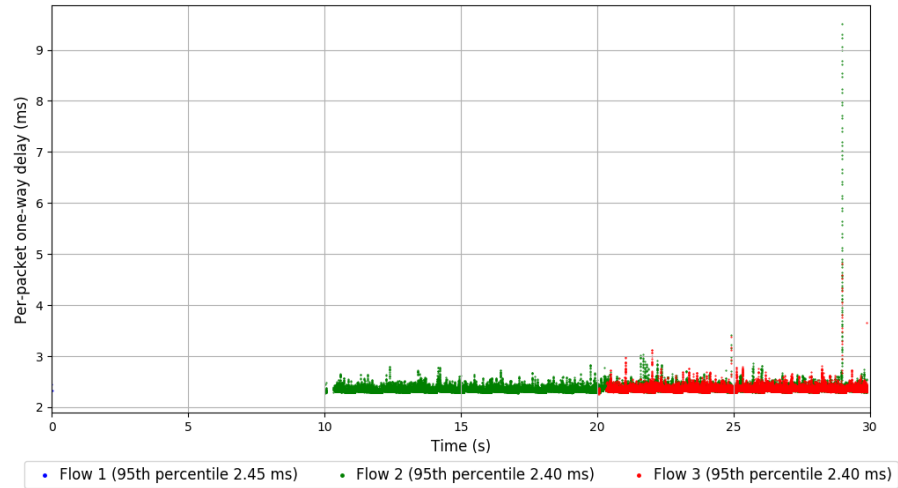
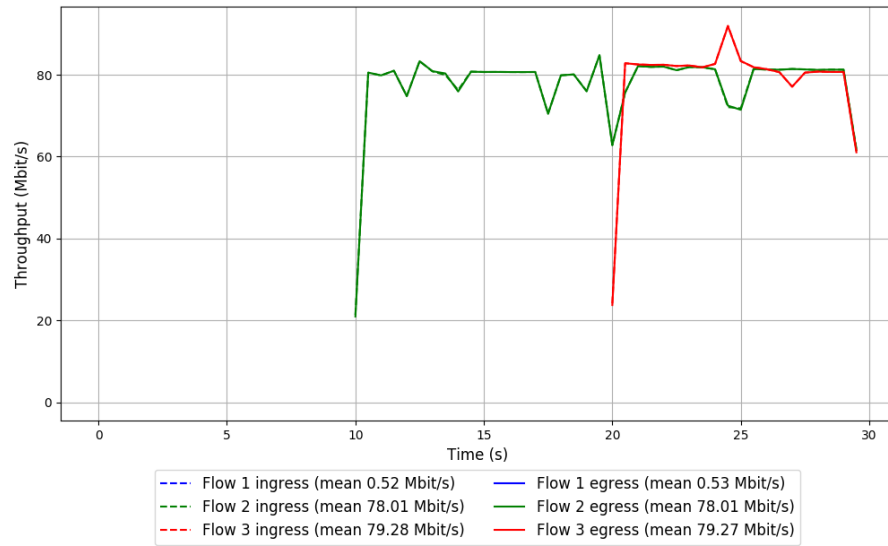
-- Flow 3:

Average throughput: 79.27 Mbit/s

95th percentile per-packet one-way delay: 2.403 ms

Loss rate: 0.04%

Run 10: Report of QUIC Cubic — Data Link

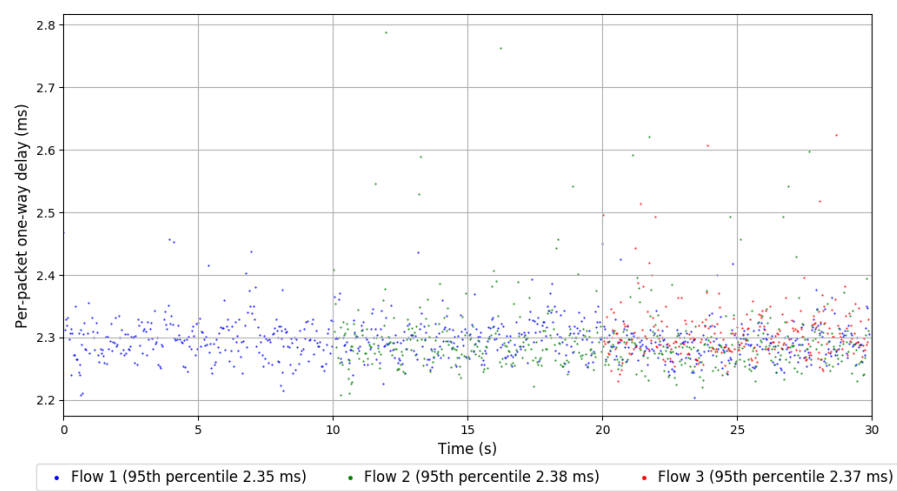
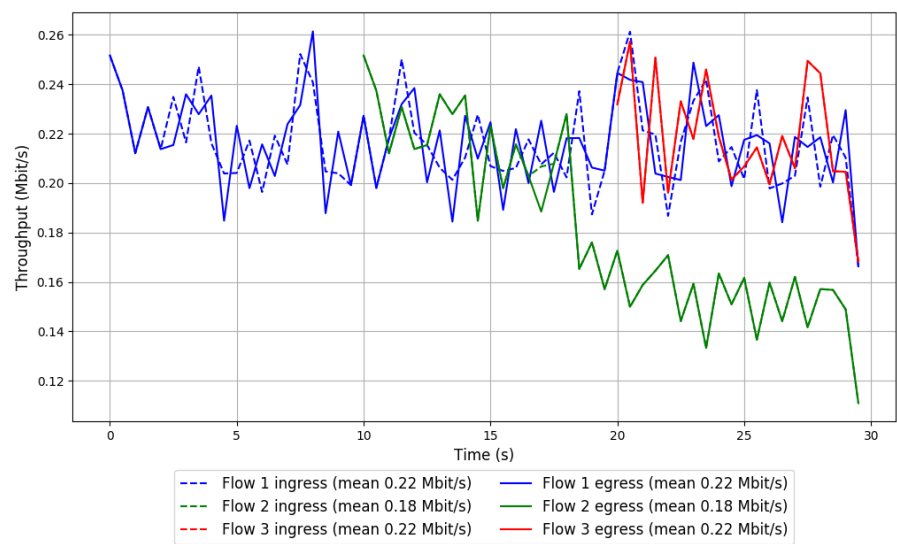


Run 1: Statistics of SCReAM

Start at: 2017-12-05 19:04:43
End at: 2017-12-05 19:05:13
Local clock offset: 0.001 ms
Remote clock offset: -0.091 ms

Below is generated by plot.py at 2017-12-06 02:23:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 2.363 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.345 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 2.382 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.372 ms
Loss rate: 0.00%

Run 1: Report of SReAM — Data Link

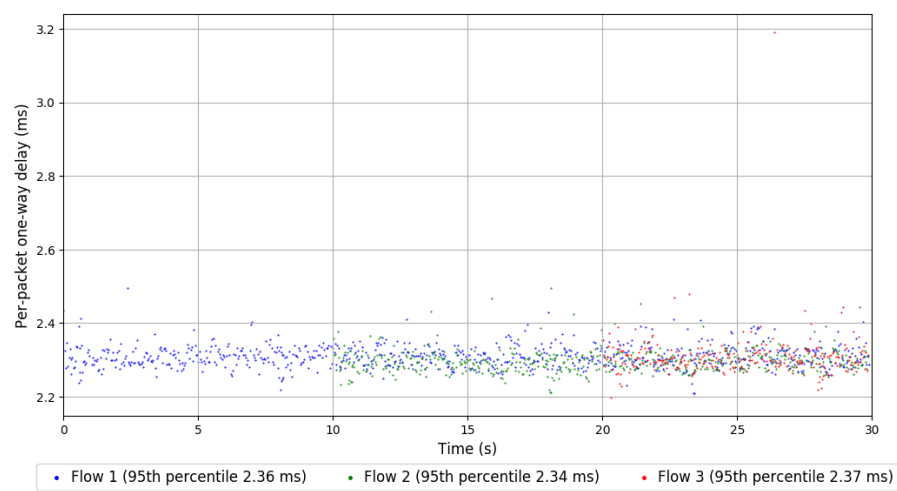
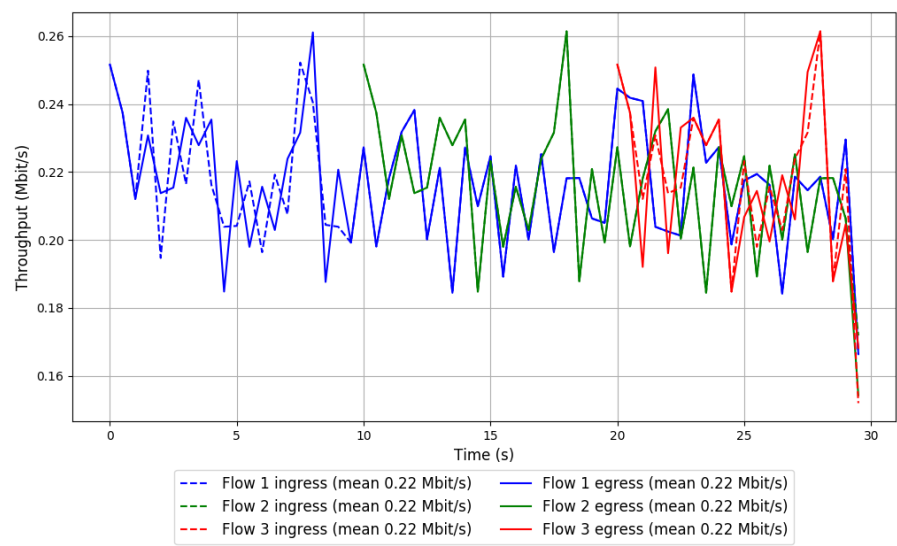


```
Run 2: Statistics of SReAM

Start at: 2017-12-05 19:23:25
End at: 2017-12-05 19:23:55
Local clock offset: 0.125 ms
Remote clock offset: 0.212 ms

# Below is generated by plot.py at 2017-12-06 02:23:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.357 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.357 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.343 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.373 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2017-12-05 19:41:56

End at: 2017-12-05 19:42:26

Local clock offset: 0.295 ms

Remote clock offset: 0.525 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.360 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.359 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.365 ms

Loss rate: 0.00%

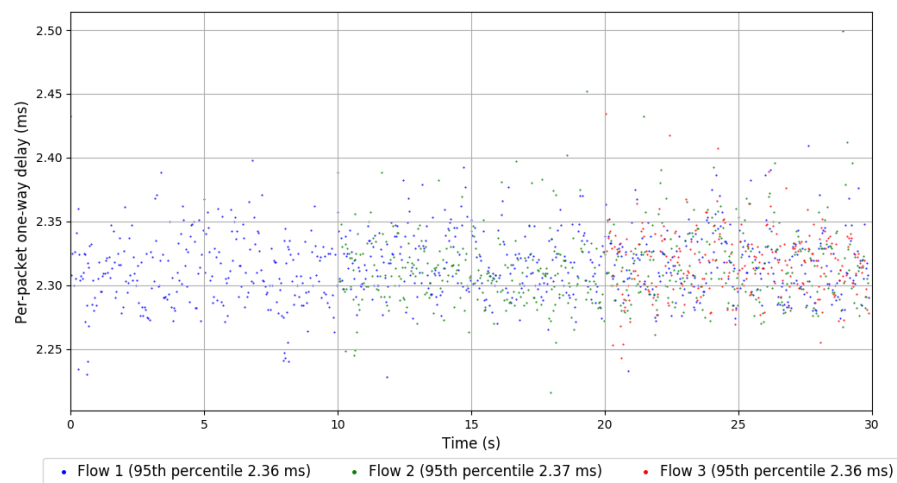
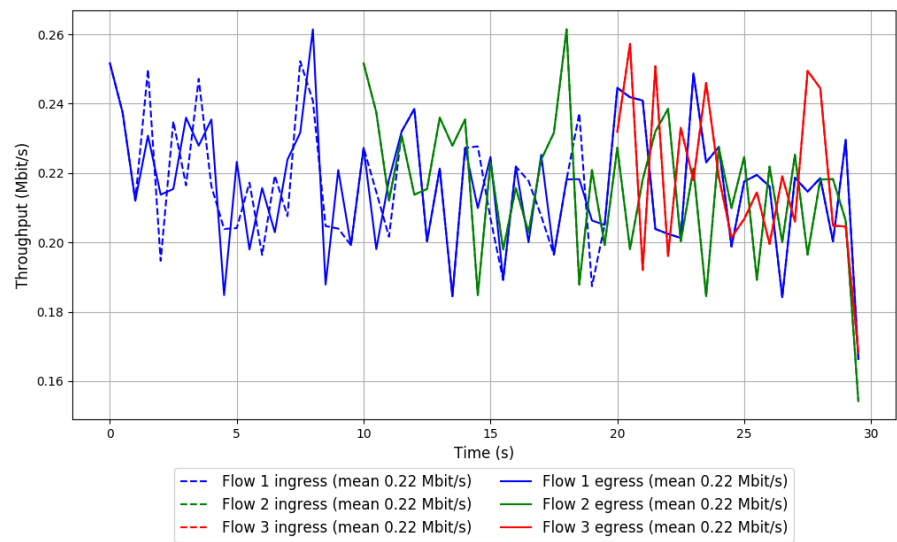
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.357 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2017-12-05 20:00:47

End at: 2017-12-05 20:01:17

Local clock offset: 0.336 ms

Remote clock offset: 0.783 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.331 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.342 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.318 ms

Loss rate: 0.00%

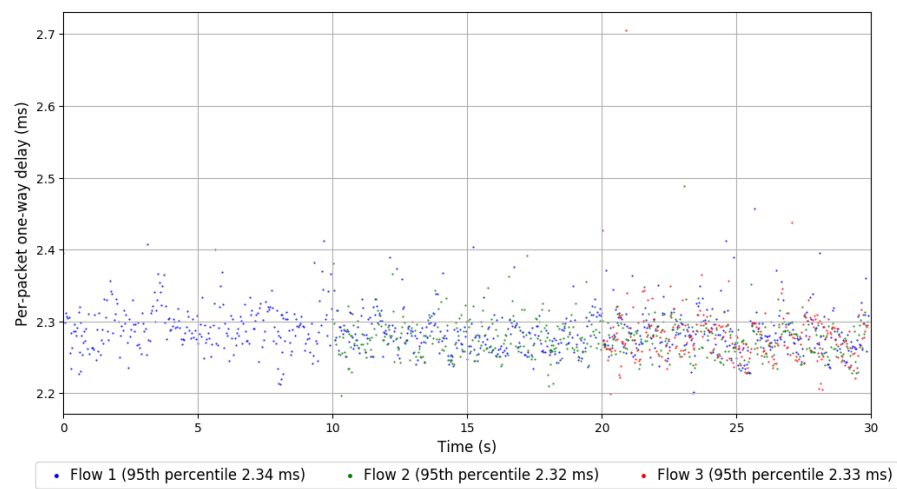
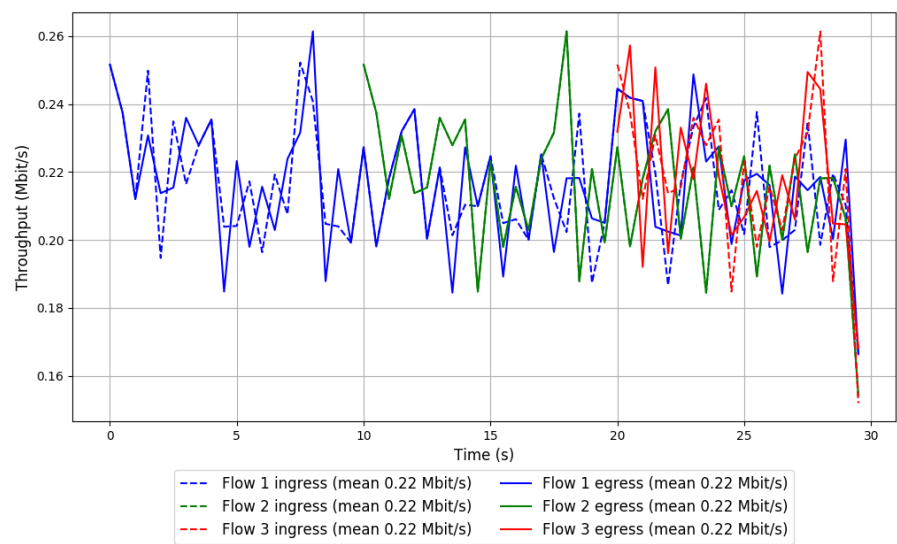
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.330 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2017-12-05 20:19:24

End at: 2017-12-05 20:19:54

Local clock offset: 0.423 ms

Remote clock offset: 0.961 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.319 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.316 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.322 ms

Loss rate: 0.20%

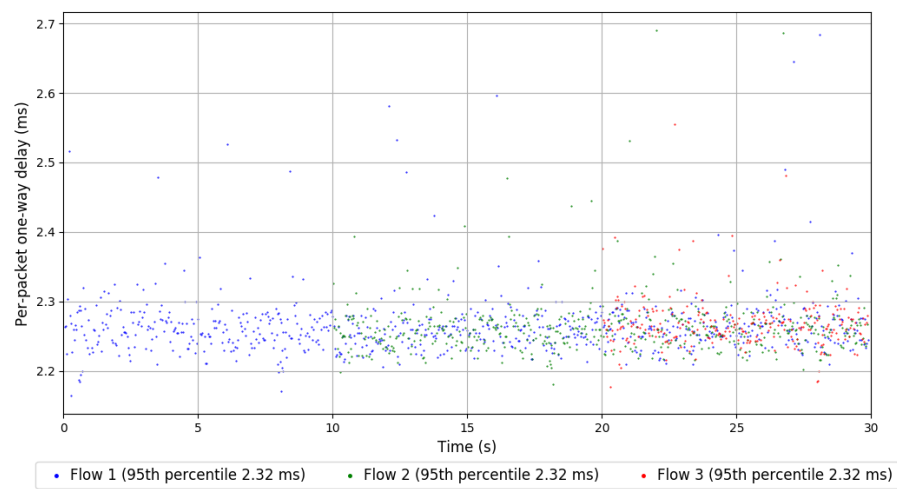
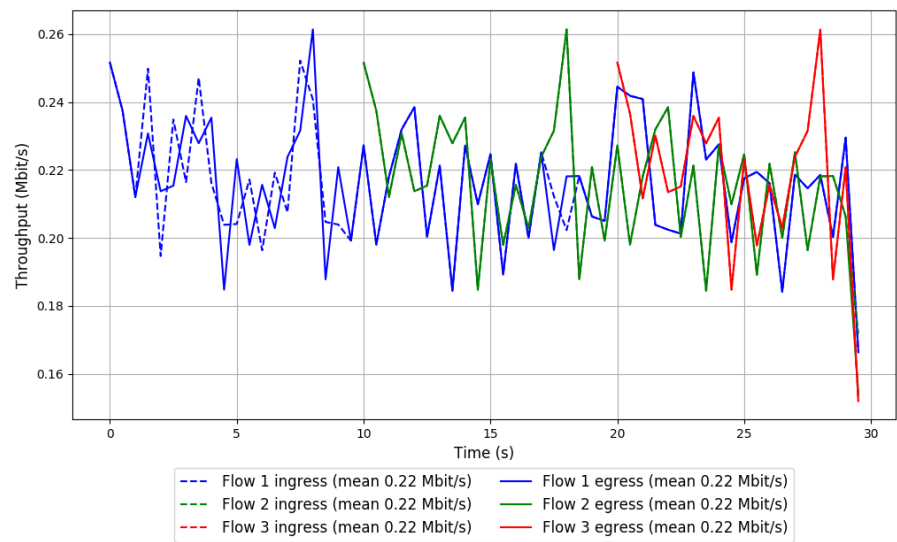
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.319 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2017-12-05 20:38:04

End at: 2017-12-05 20:38:34

Local clock offset: 0.517 ms

Remote clock offset: 1.147 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.287 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.287 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.294 ms

Loss rate: 0.20%

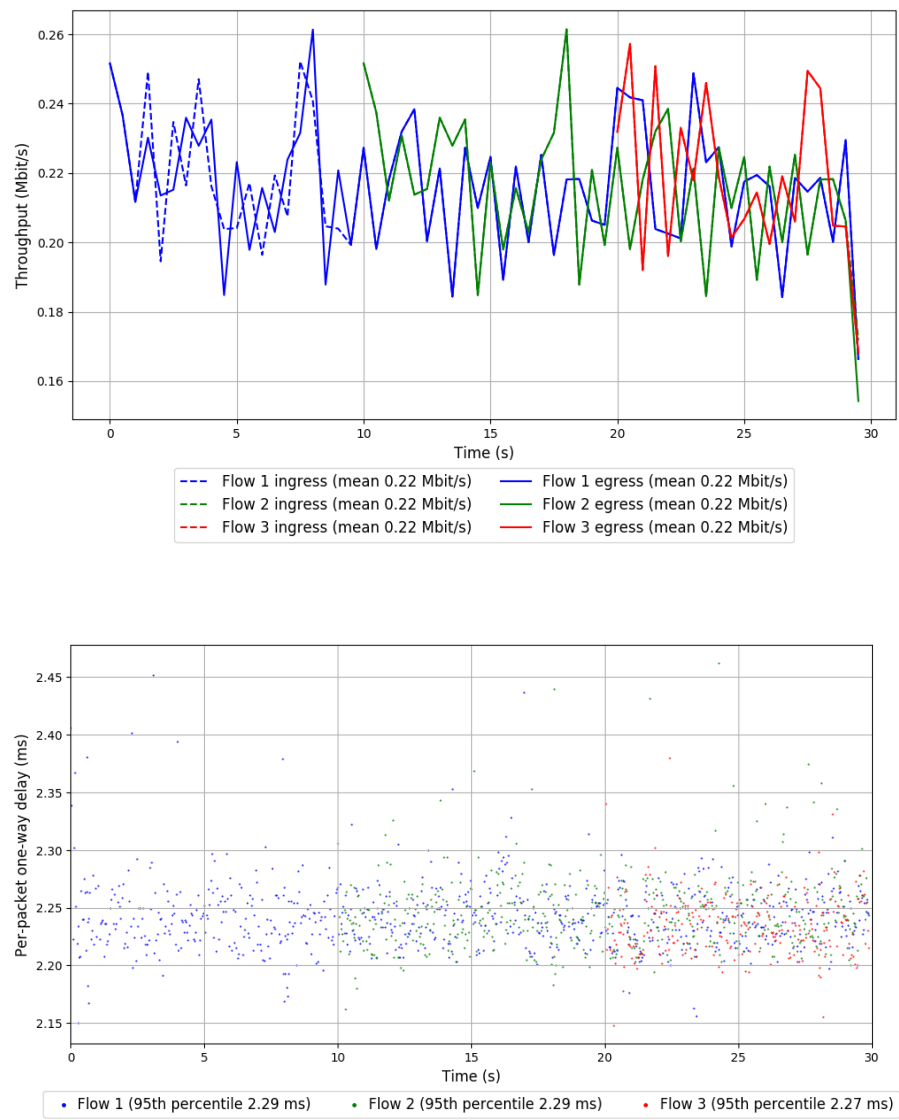
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.273 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

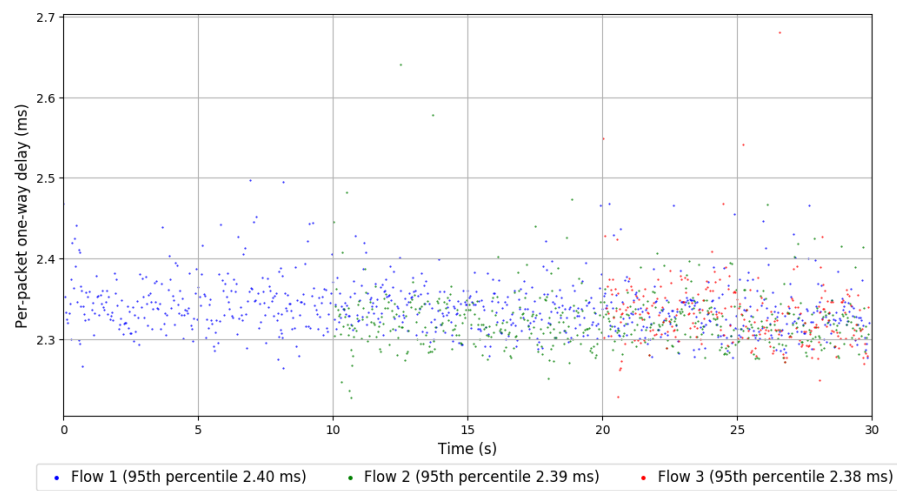
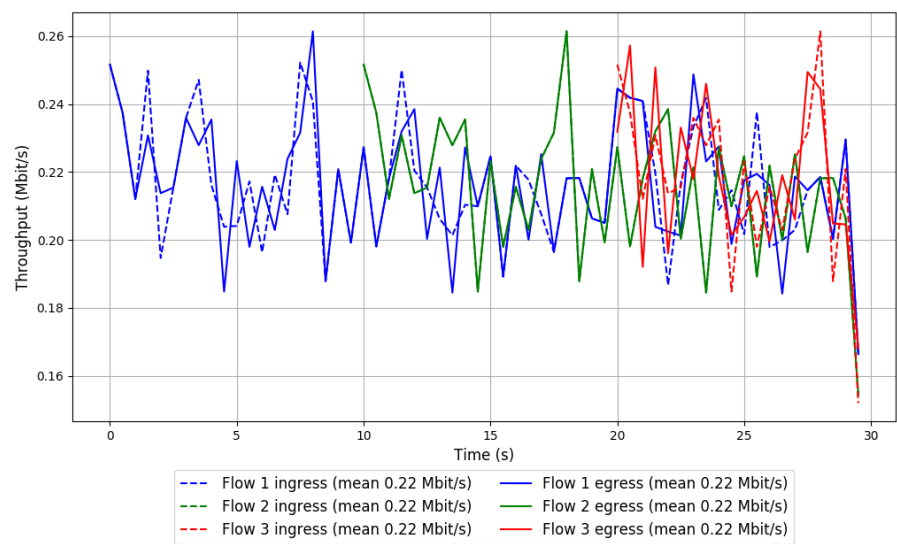


Run 7: Statistics of SReAM

Start at: 2017-12-05 20:56:50
End at: 2017-12-05 20:57:20
Local clock offset: 0.638 ms
Remote clock offset: 1.035 ms

Below is generated by plot.py at 2017-12-06 02:23:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.391 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.399 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.387 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.384 ms
Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-12-05 21:15:19

End at: 2017-12-05 21:15:49

Local clock offset: 0.682 ms

Remote clock offset: 0.935 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.392 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.382 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.374 ms

Loss rate: 0.20%

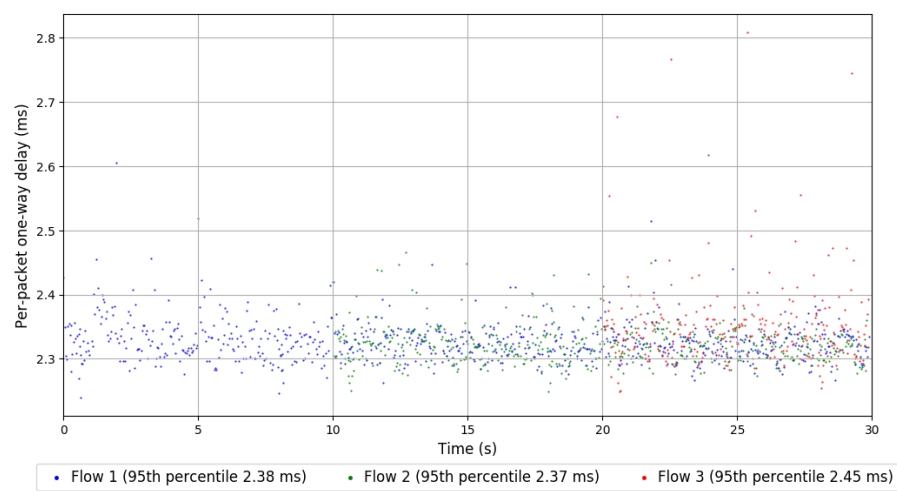
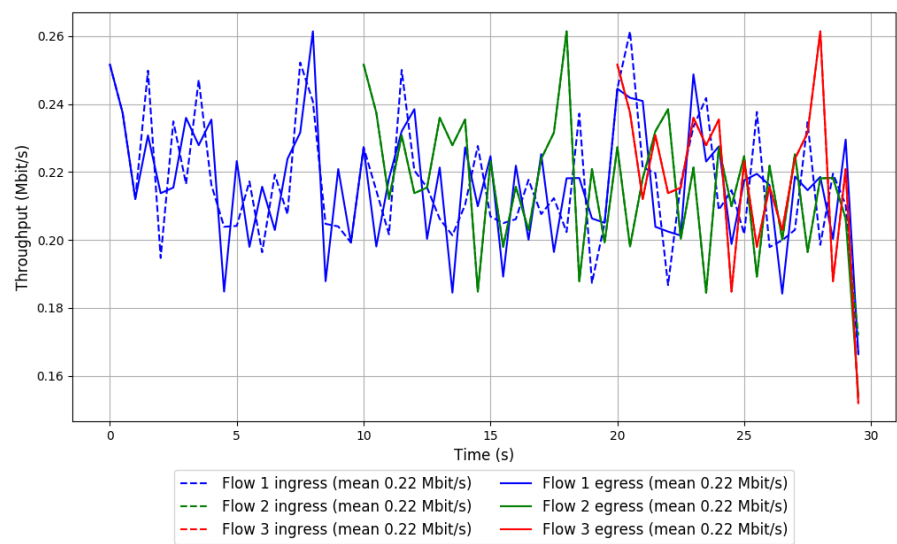
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.453 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2017-12-05 21:34:00

End at: 2017-12-05 21:34:30

Local clock offset: 0.587 ms

Remote clock offset: 1.108 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.340 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.345 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.329 ms

Loss rate: 0.20%

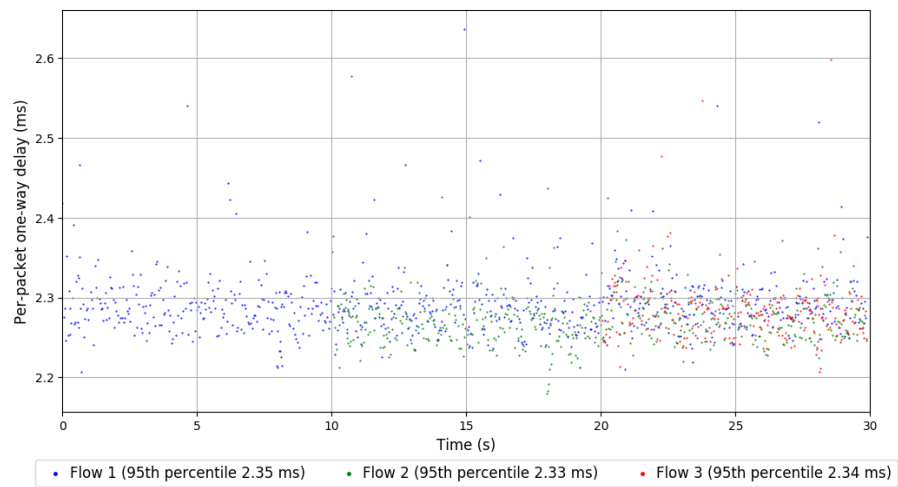
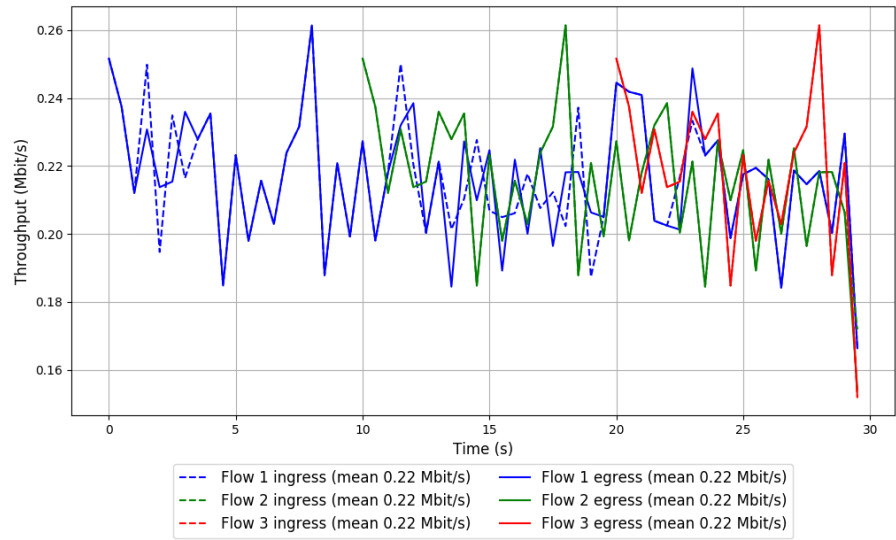
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.337 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SCReAM

Start at: 2017-12-05 21:52:48

End at: 2017-12-05 21:53:18

Local clock offset: 0.595 ms

Remote clock offset: 1.264 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.379 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.381 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.383 ms

Loss rate: 0.00%

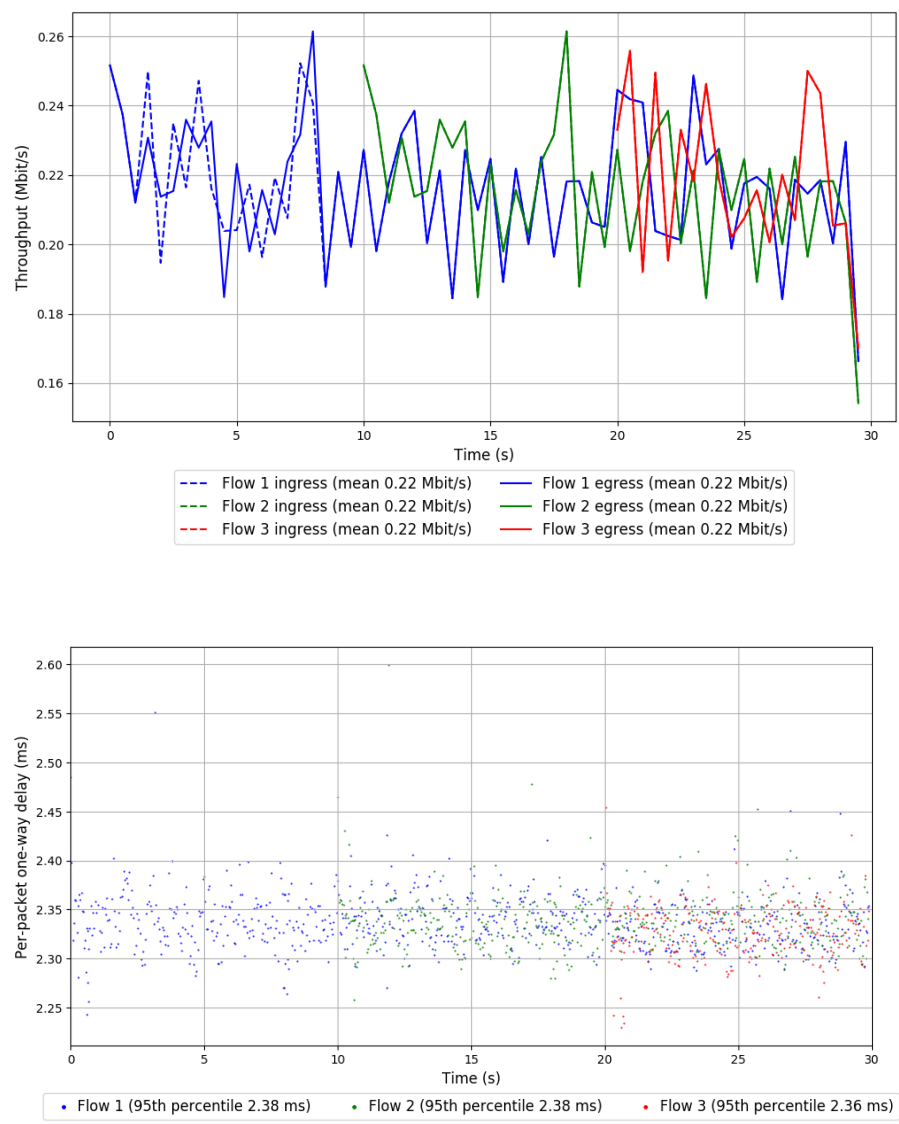
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.364 ms

Loss rate: 0.00%

Run 10: Report of SCRaM — Data Link

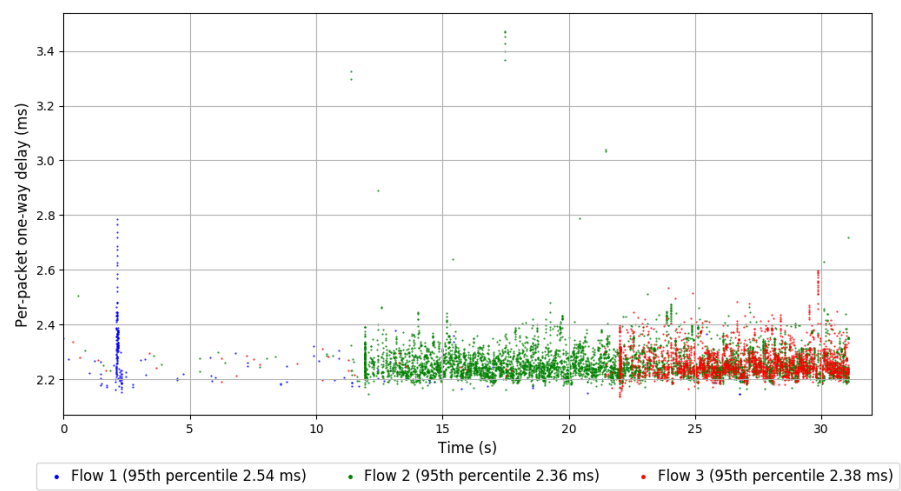
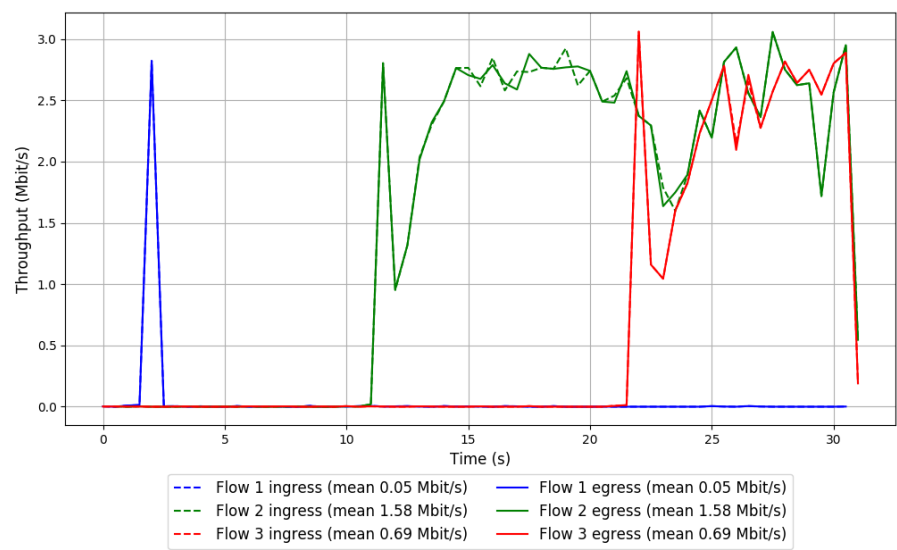


Run 1: Statistics of WebRTC media

Start at: 2017-12-05 18:57:11
End at: 2017-12-05 18:57:41
Local clock offset: -0.162 ms
Remote clock offset: -0.247 ms

Below is generated by plot.py at 2017-12-06 02:23:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 2.372 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 2.538 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 2.359 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 2.378 ms
Loss rate: 0.01%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-05 19:15:59

End at: 2017-12-05 19:16:29

Local clock offset: 0.005 ms

Remote clock offset: 0.12 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 2.327 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 2.325 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 2.324 ms

Loss rate: 0.00%

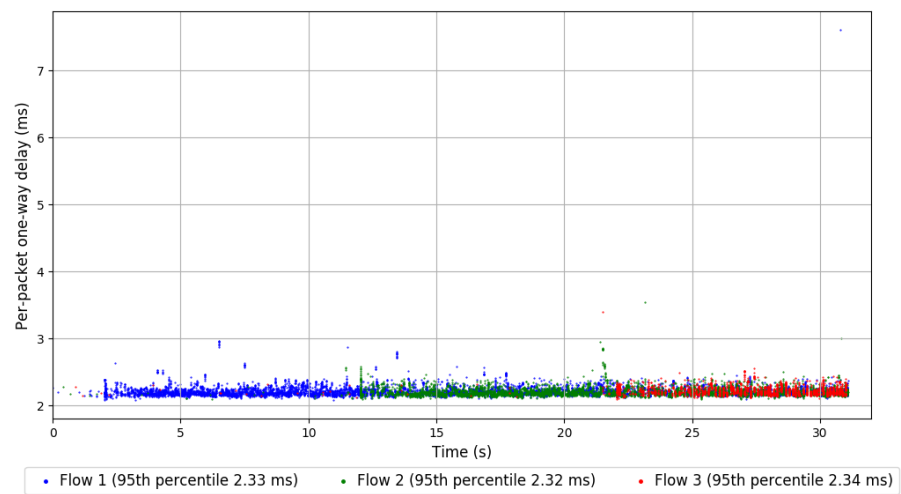
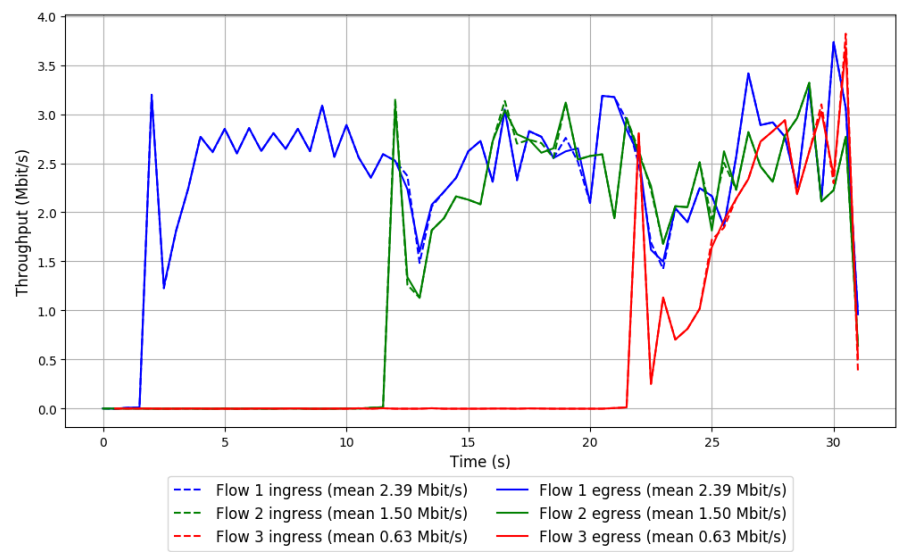
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 2.341 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-05 19:34:39

End at: 2017-12-05 19:35:09

Local clock offset: 0.199 ms

Remote clock offset: 0.392 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 2.414 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 2.480 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 2.403 ms

Loss rate: 0.00%

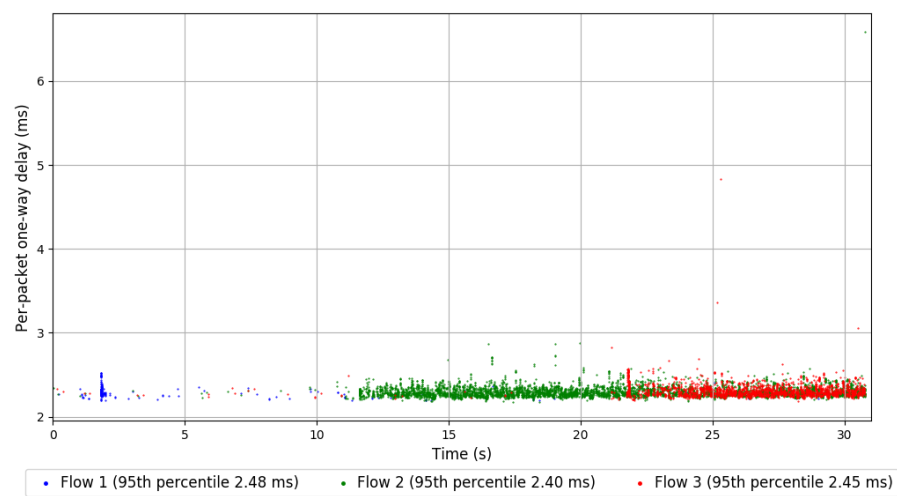
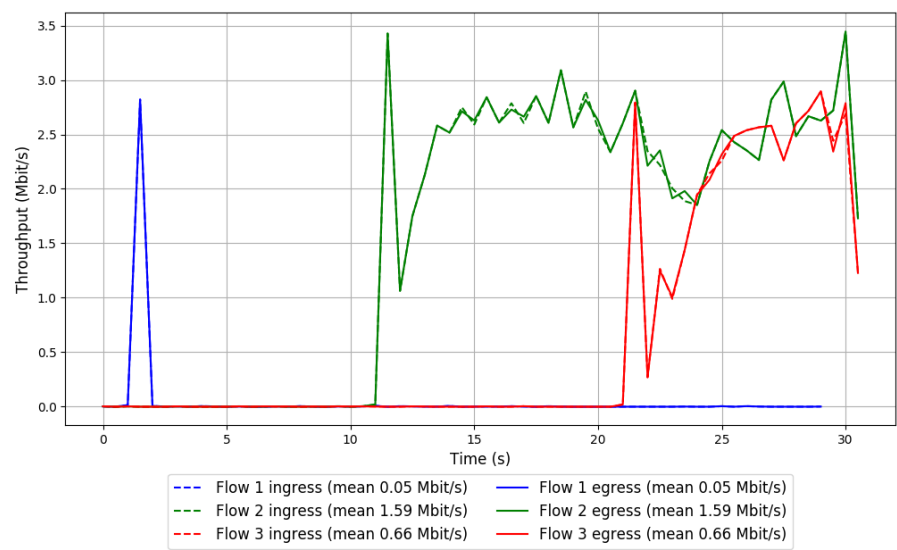
-- Flow 3:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 2.448 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-05 19:53:19

End at: 2017-12-05 19:53:49

Local clock offset: 0.31 ms

Remote clock offset: 0.724 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.46 Mbit/s

95th percentile per-packet one-way delay: 2.377 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 2.362 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 2.391 ms

Loss rate: 0.00%

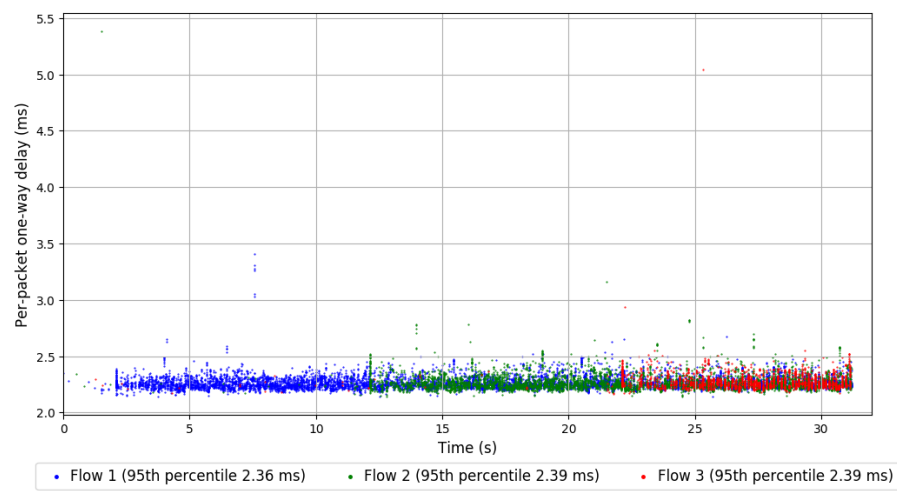
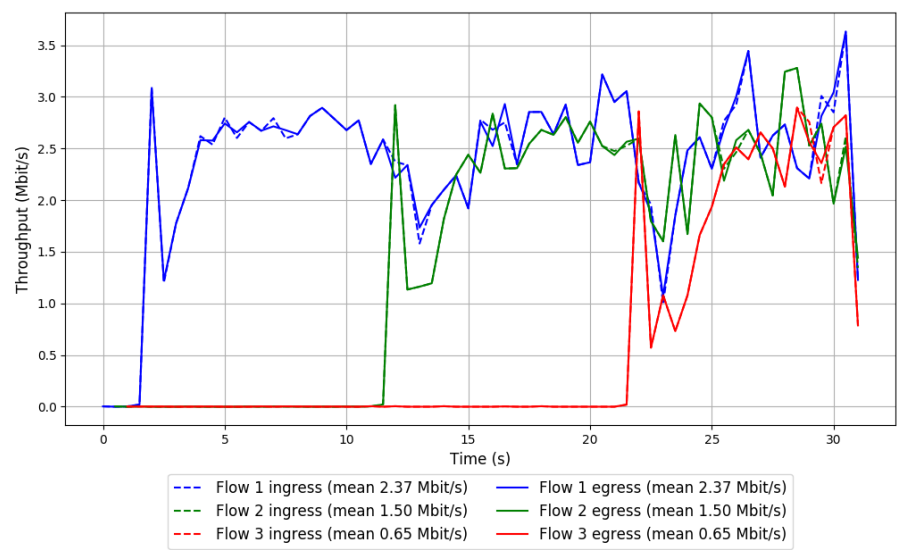
-- Flow 3:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 2.387 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link

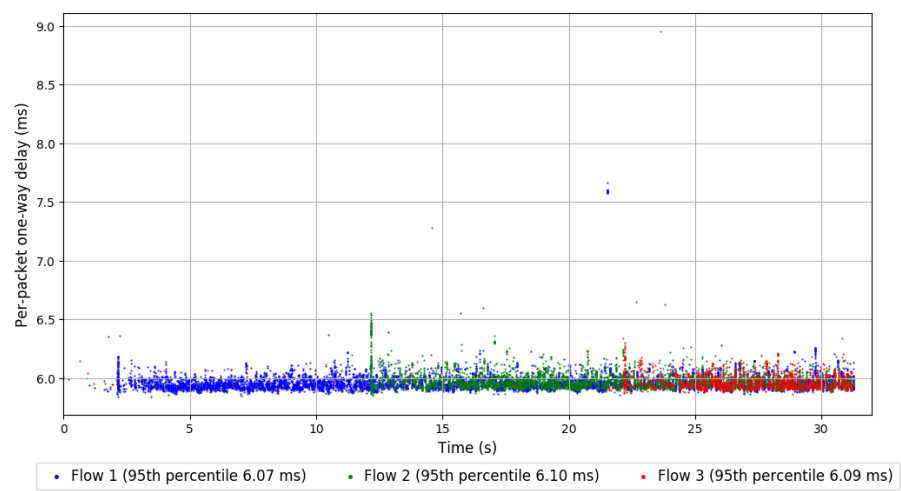
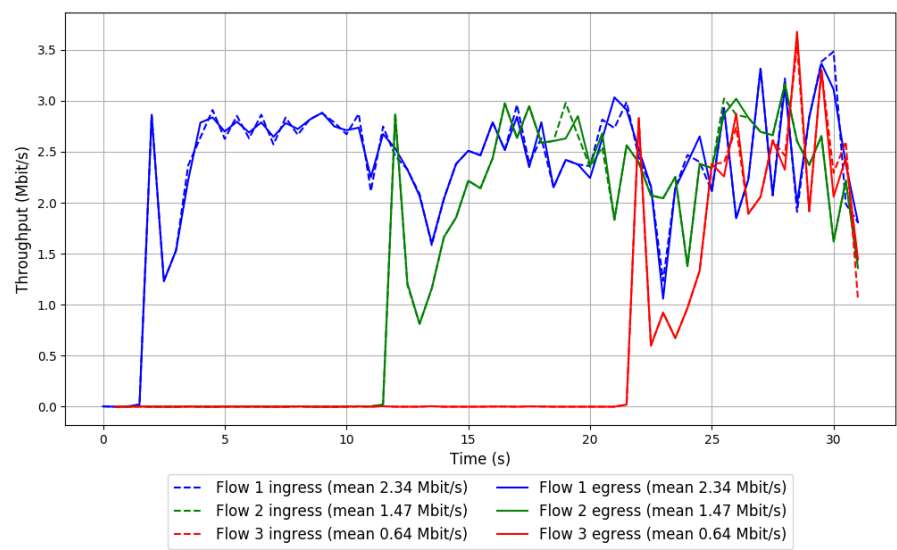


Run 5: Statistics of WebRTC media

Start at: 2017-12-05 20:11:59
End at: 2017-12-05 20:12:29
Local clock offset: 0.321 ms
Remote clock offset: -2.854 ms

Below is generated by plot.py at 2017-12-06 02:23:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.40 Mbit/s
95th percentile per-packet one-way delay: 6.082 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 6.069 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 6.104 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 6.092 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-05 20:30:26

End at: 2017-12-05 20:30:56

Local clock offset: 0.414 ms

Remote clock offset: 1.066 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.51 Mbit/s

95th percentile per-packet one-way delay: 2.327 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 2.40 Mbit/s

95th percentile per-packet one-way delay: 2.310 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 2.356 ms

Loss rate: 0.11%

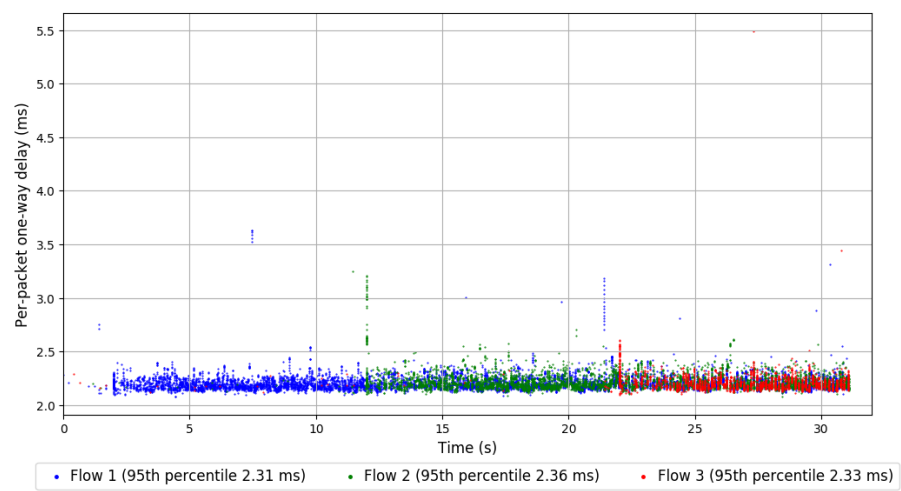
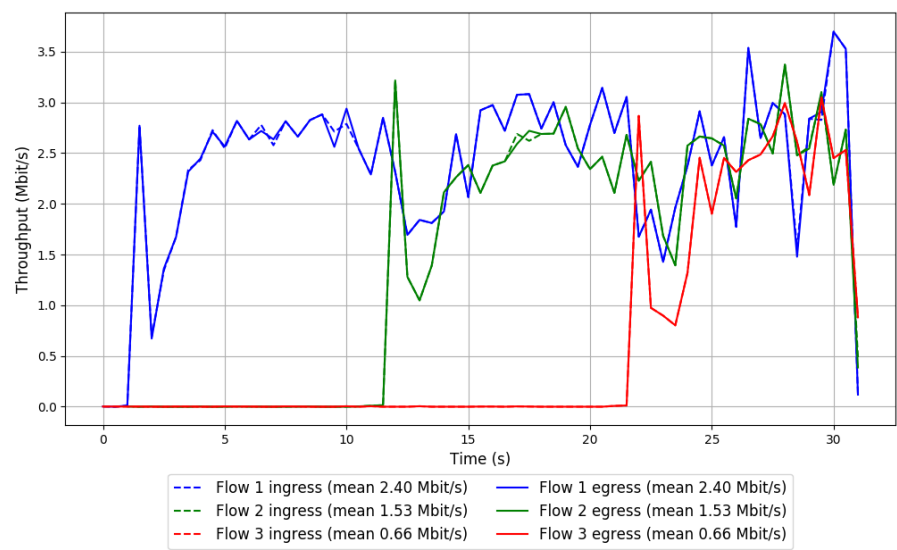
-- Flow 3:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 2.326 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-05 20:49:17

End at: 2017-12-05 20:49:47

Local clock offset: 0.579 ms

Remote clock offset: 1.043 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 2.454 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 2.451 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 2.456 ms

Loss rate: 0.00%

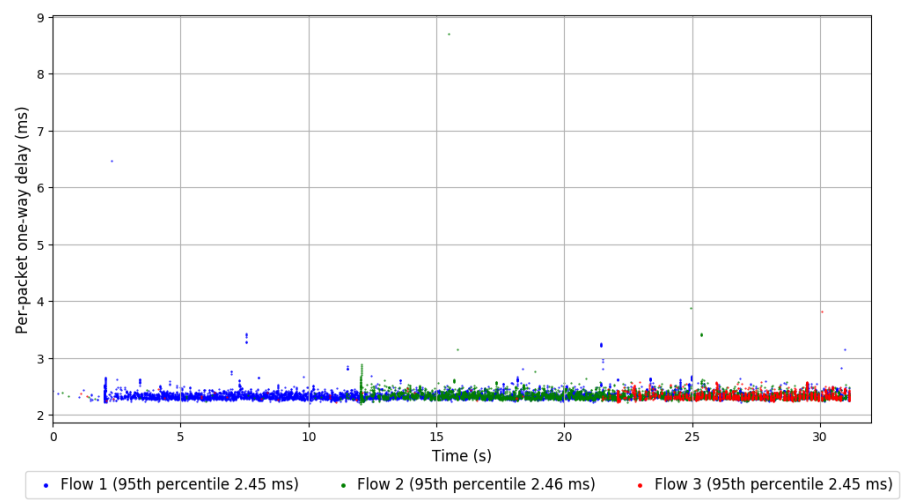
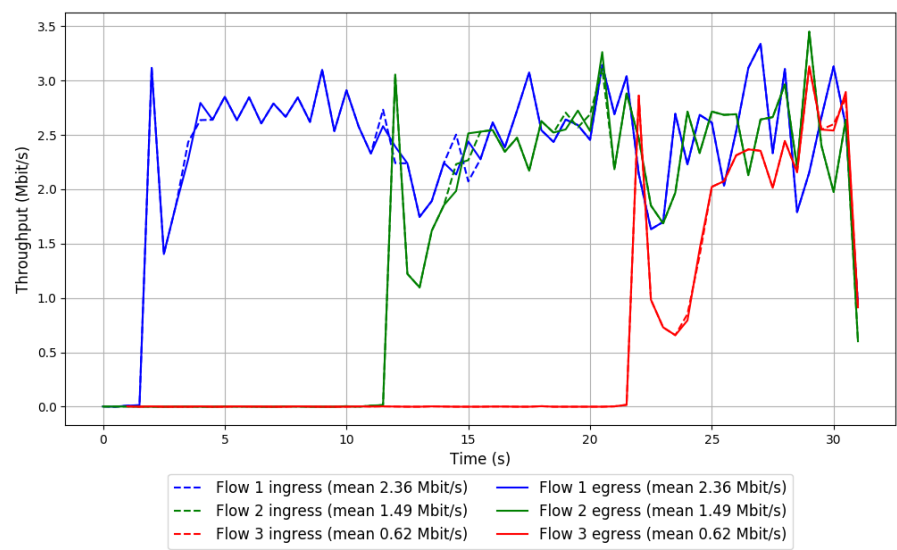
-- Flow 3:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 2.453 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-05 21:07:58

End at: 2017-12-05 21:08:28

Local clock offset: 0.688 ms

Remote clock offset: 1.008 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 2.392 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 2.377 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 2.403 ms

Loss rate: 0.00%

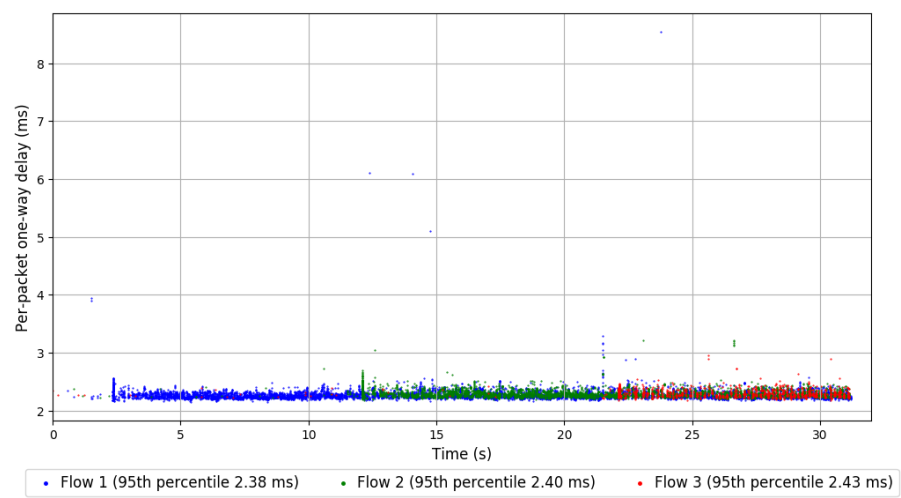
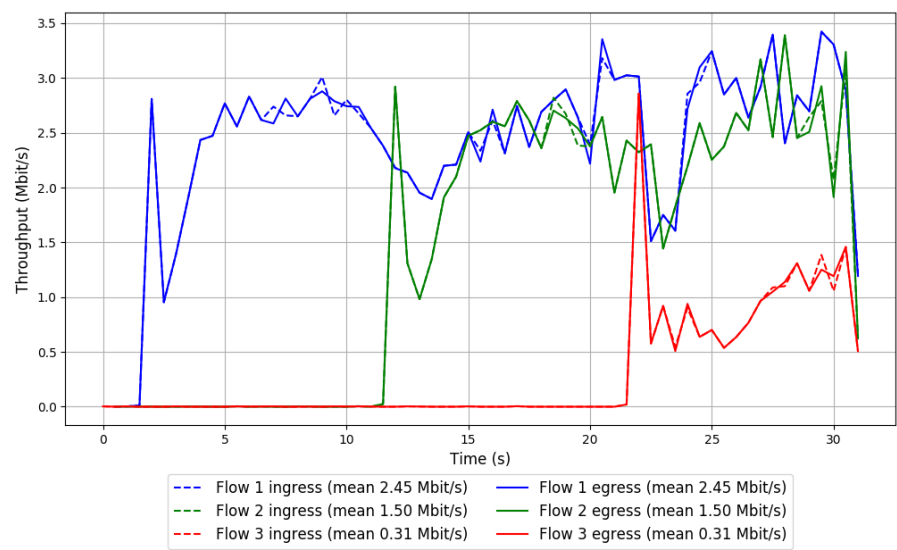
-- Flow 3:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 2.426 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-05 21:26:23

End at: 2017-12-05 21:26:53

Local clock offset: 0.561 ms

Remote clock offset: 1.018 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 2.350 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 2.339 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 1.54 Mbit/s

95th percentile per-packet one-way delay: 2.360 ms

Loss rate: 0.00%

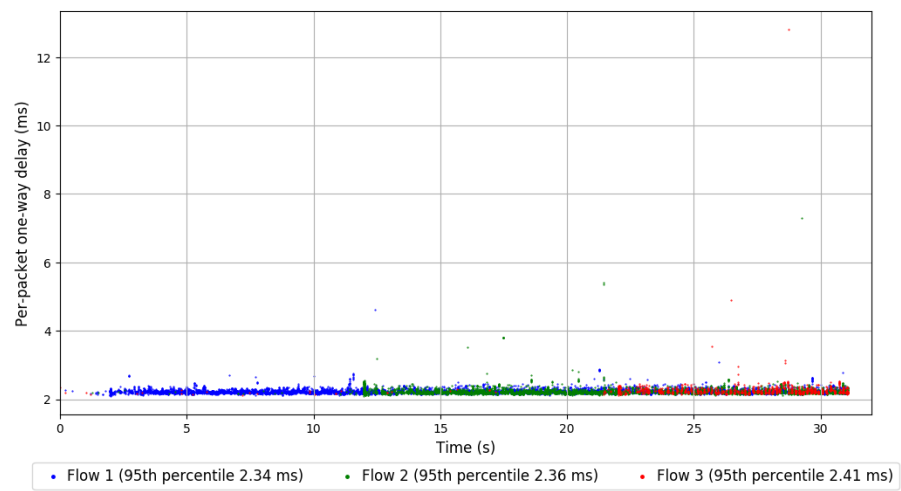
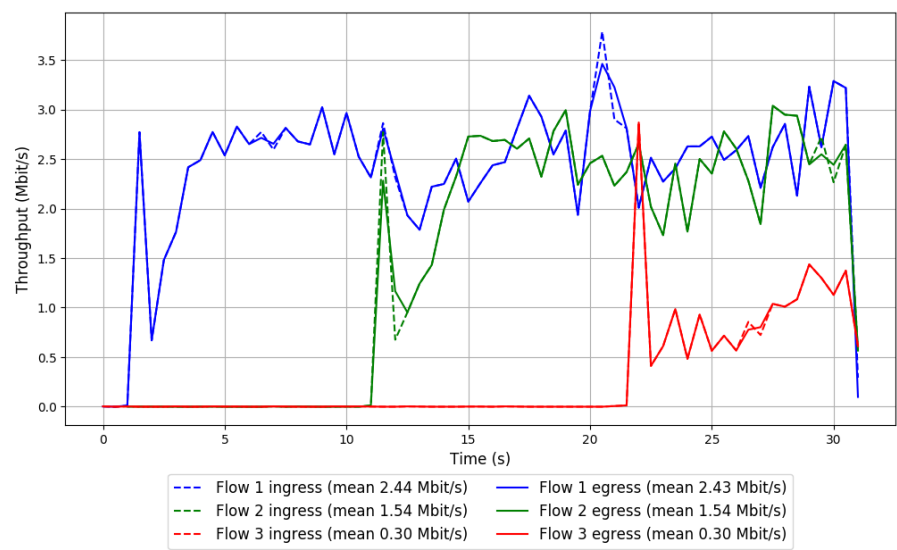
-- Flow 3:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 2.412 ms

Loss rate: 0.01%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-05 21:45:10

End at: 2017-12-05 21:45:40

Local clock offset: 0.507 ms

Remote clock offset: 1.205 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 2.425 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 3.638 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 2.424 ms

Loss rate: 0.00%

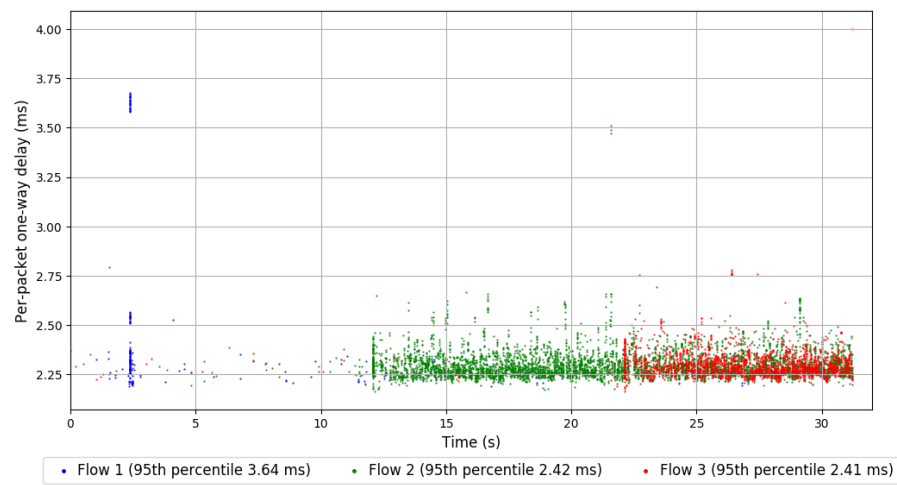
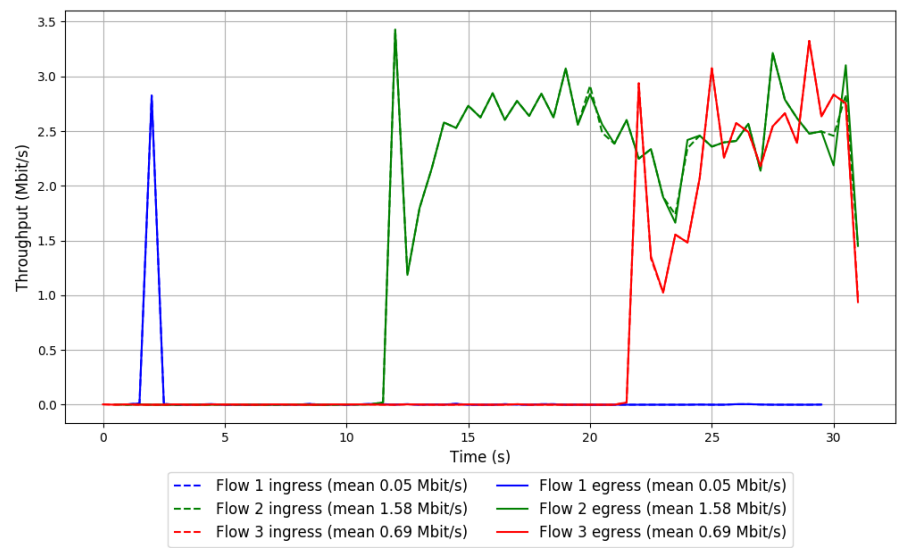
-- Flow 3:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 2.410 ms

Loss rate: 0.09%

Run 10: Report of WebRTC media — Data Link

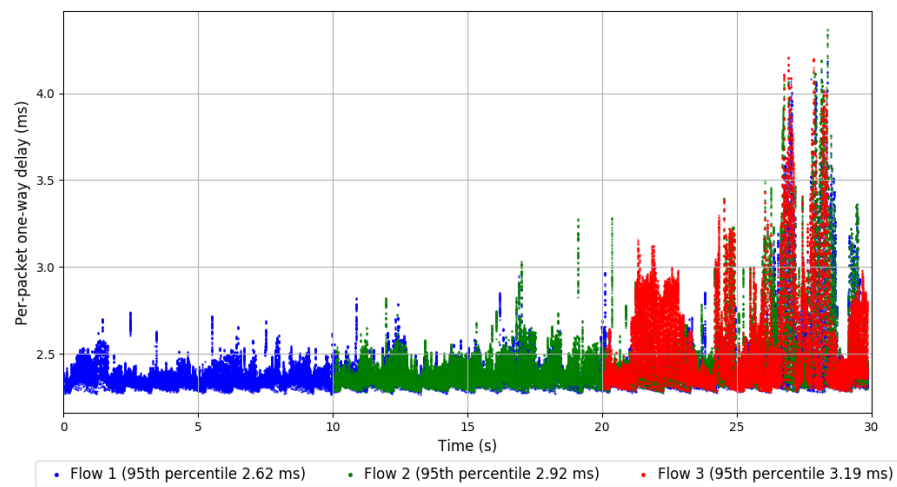
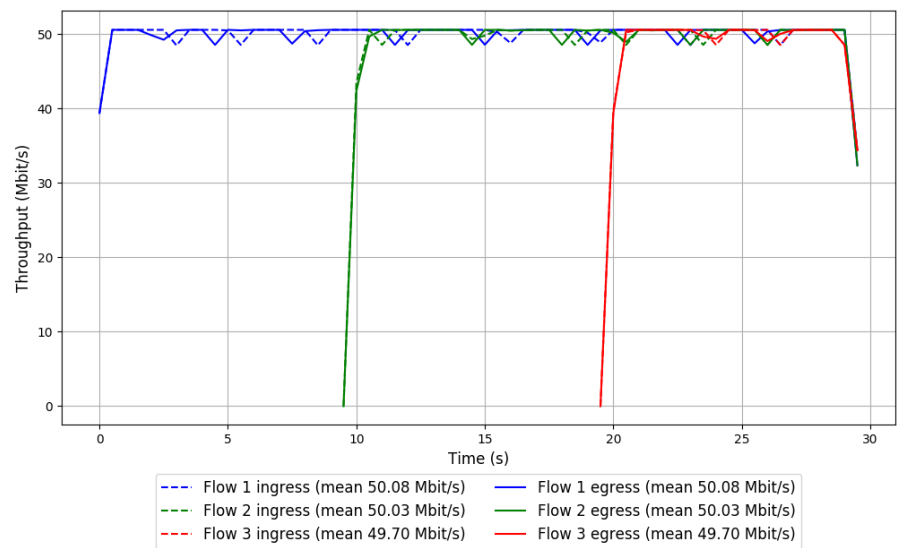


Run 1: Statistics of Sprout

Start at: 2017-12-05 19:00:39
End at: 2017-12-05 19:01:09
Local clock offset: -0.082 ms
Remote clock offset: -0.231 ms

Below is generated by plot.py at 2017-12-06 02:23:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 99.73 Mbit/s
95th percentile per-packet one-way delay: 2.888 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 50.08 Mbit/s
95th percentile per-packet one-way delay: 2.625 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 50.03 Mbit/s
95th percentile per-packet one-way delay: 2.923 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 49.70 Mbit/s
95th percentile per-packet one-way delay: 3.189 ms
Loss rate: 0.01%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-05 19:19:28

End at: 2017-12-05 19:19:58

Local clock offset: 0.137 ms

Remote clock offset: 0.135 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.74 Mbit/s

95th percentile per-packet one-way delay: 2.817 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.10 Mbit/s

95th percentile per-packet one-way delay: 2.672 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.95 Mbit/s

95th percentile per-packet one-way delay: 2.936 ms

Loss rate: 0.00%

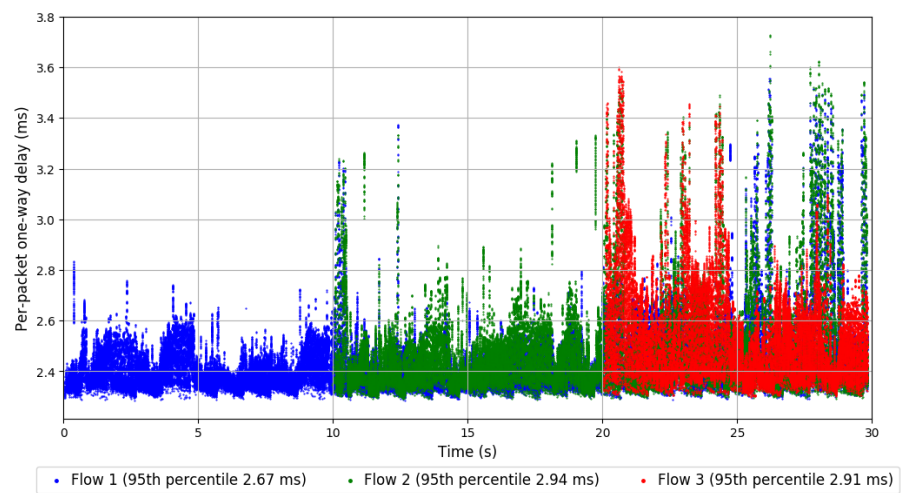
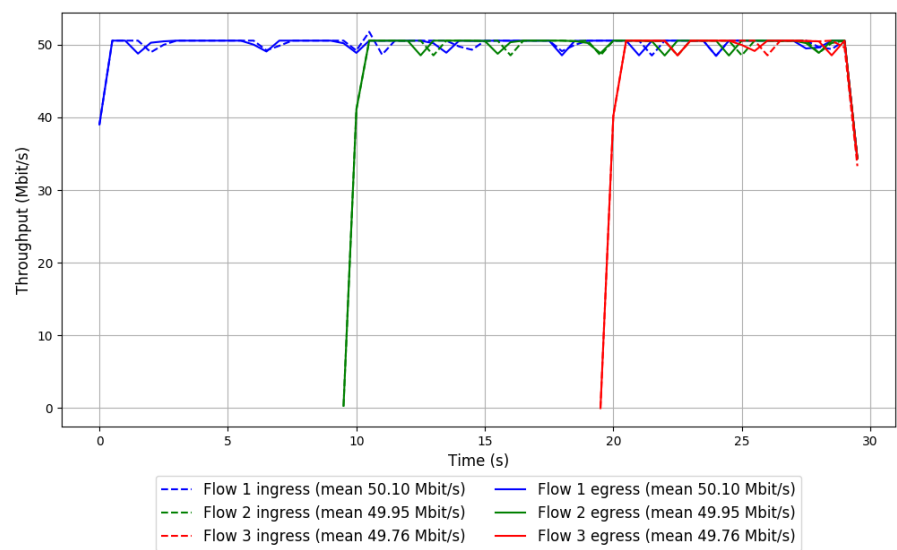
-- Flow 3:

Average throughput: 49.76 Mbit/s

95th percentile per-packet one-way delay: 2.909 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-05 19:38:08

End at: 2017-12-05 19:38:38

Local clock offset: 0.212 ms

Remote clock offset: 0.515 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.79 Mbit/s

95th percentile per-packet one-way delay: 2.693 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 50.15 Mbit/s

95th percentile per-packet one-way delay: 2.524 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.03 Mbit/s

95th percentile per-packet one-way delay: 2.729 ms

Loss rate: 0.10%

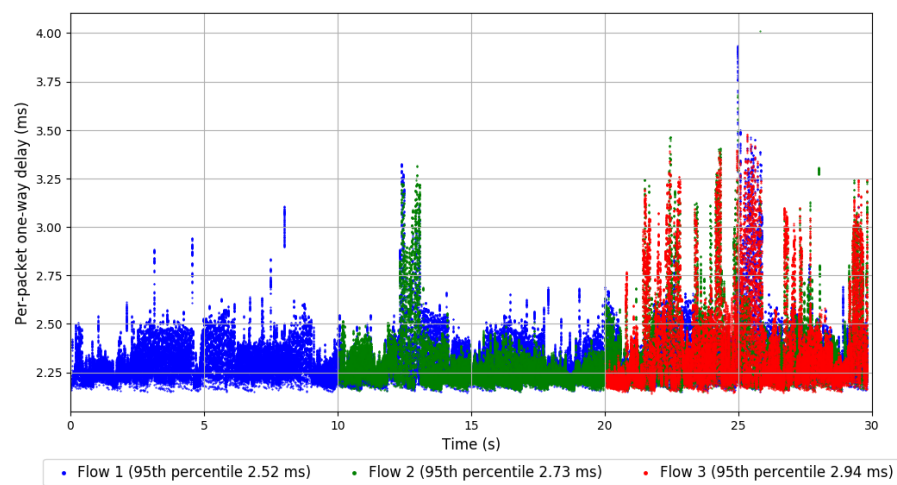
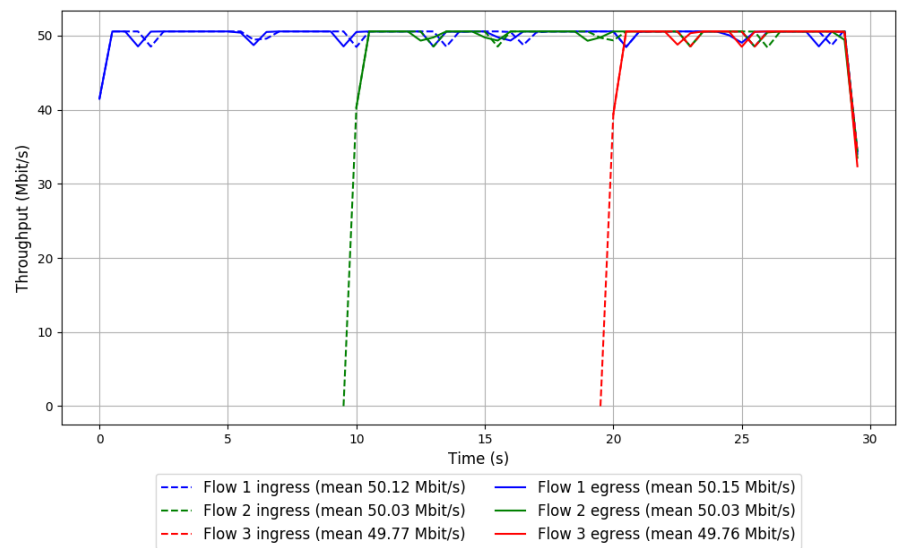
-- Flow 3:

Average throughput: 49.76 Mbit/s

95th percentile per-packet one-way delay: 2.944 ms

Loss rate: 0.21%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-05 19:56:48

End at: 2017-12-05 19:57:18

Local clock offset: 0.327 ms

Remote clock offset: 0.778 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.72 Mbit/s

95th percentile per-packet one-way delay: 2.837 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.13 Mbit/s

95th percentile per-packet one-way delay: 2.765 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.99 Mbit/s

95th percentile per-packet one-way delay: 2.983 ms

Loss rate: 0.00%

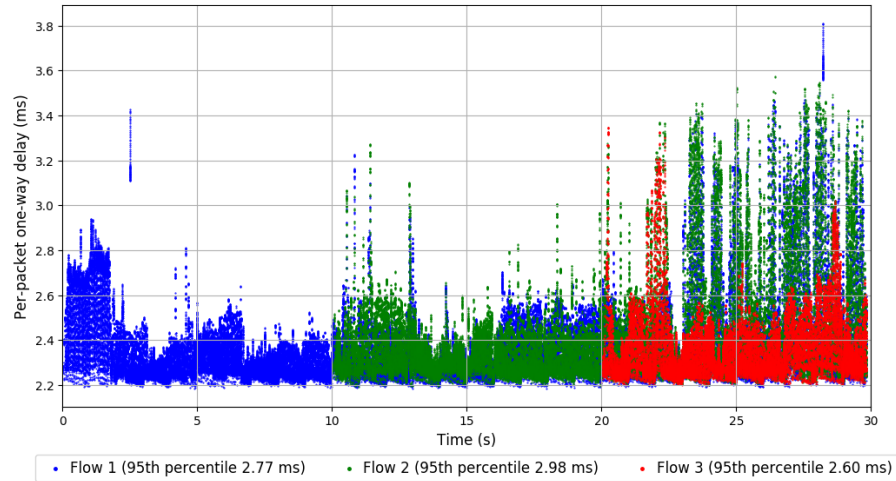
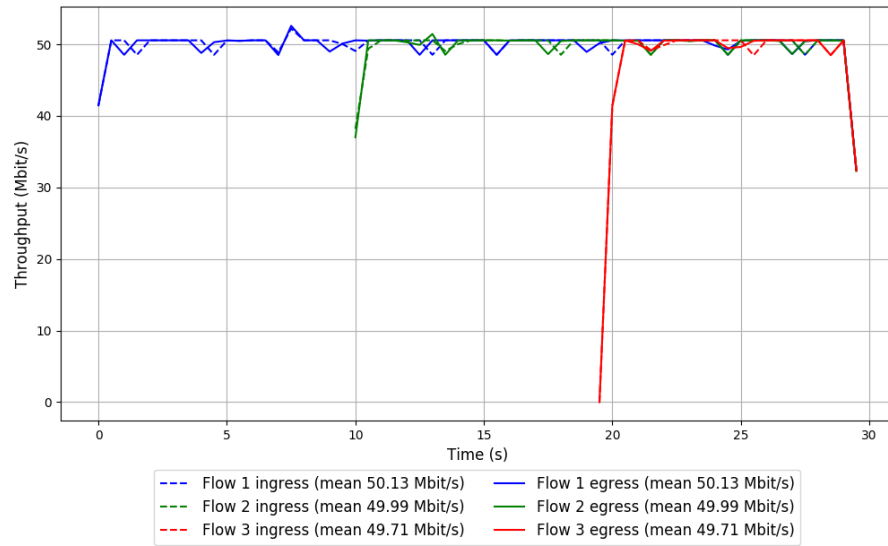
-- Flow 3:

Average throughput: 49.71 Mbit/s

95th percentile per-packet one-way delay: 2.599 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-05 20:15:29

End at: 2017-12-05 20:15:59

Local clock offset: 0.429 ms

Remote clock offset: 0.937 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.85 Mbit/s

95th percentile per-packet one-way delay: 2.897 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.14 Mbit/s

95th percentile per-packet one-way delay: 2.900 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.07 Mbit/s

95th percentile per-packet one-way delay: 2.837 ms

Loss rate: 0.00%

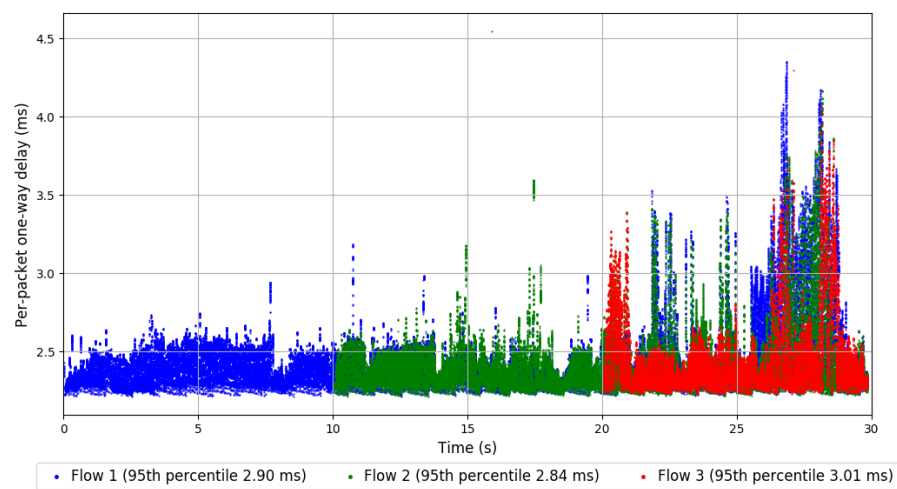
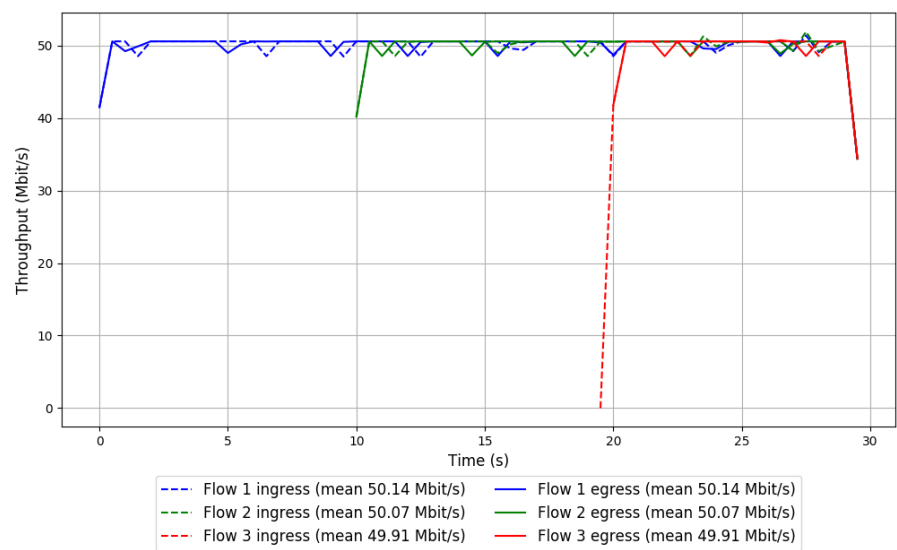
-- Flow 3:

Average throughput: 49.91 Mbit/s

95th percentile per-packet one-way delay: 3.007 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-05 20:33:55

End at: 2017-12-05 20:34:25

Local clock offset: 0.459 ms

Remote clock offset: 1.089 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.73 Mbit/s

95th percentile per-packet one-way delay: 2.526 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 50.09 Mbit/s

95th percentile per-packet one-way delay: 2.516 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.98 Mbit/s

95th percentile per-packet one-way delay: 2.494 ms

Loss rate: 0.10%

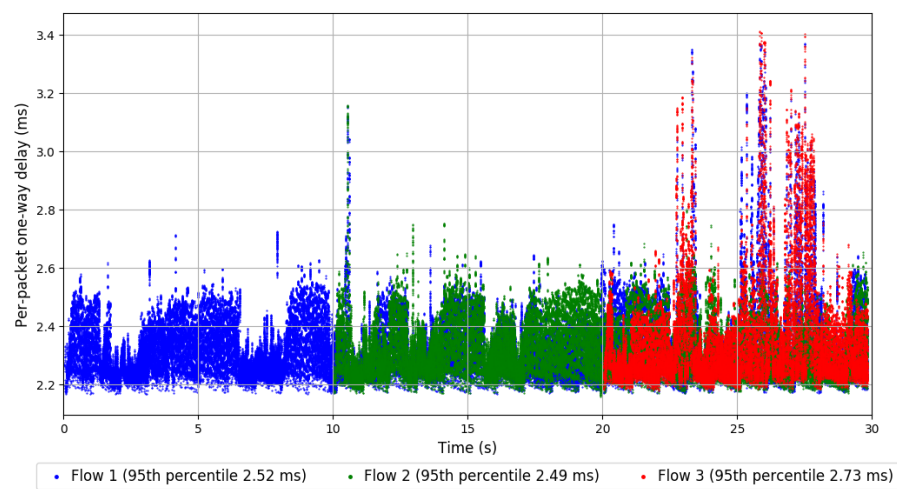
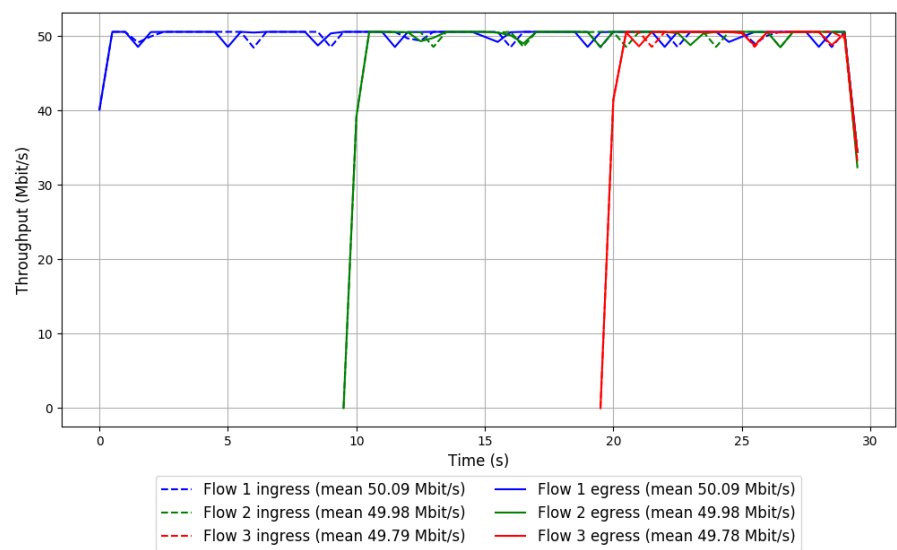
-- Flow 3:

Average throughput: 49.78 Mbit/s

95th percentile per-packet one-way delay: 2.731 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link

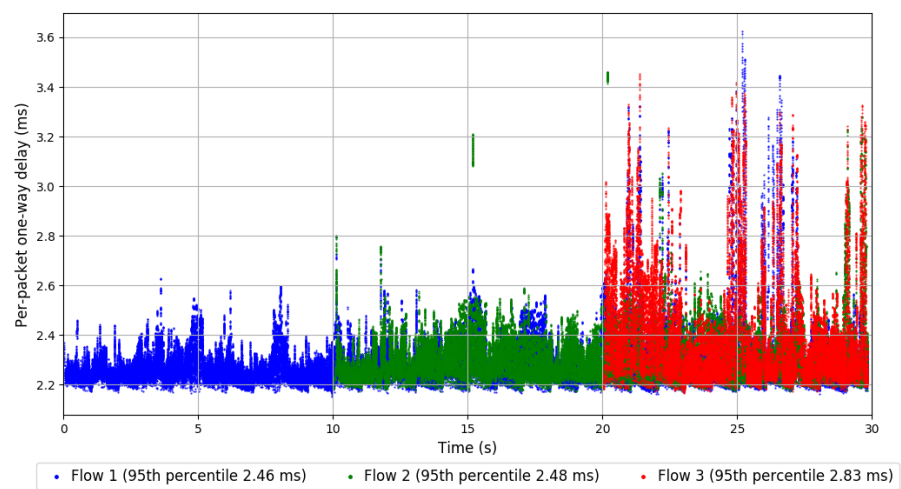
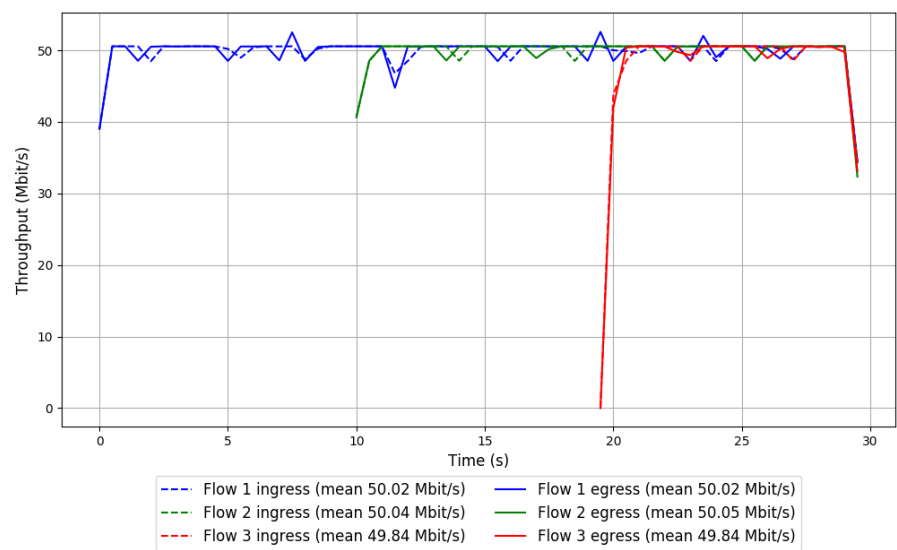


Run 7: Statistics of Sprout

Start at: 2017-12-05 20:52:46
End at: 2017-12-05 20:53:16
Local clock offset: 0.567 ms
Remote clock offset: 1.091 ms

```
# Below is generated by plot.py at 2017-12-06 02:23:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.69 Mbit/s
95th percentile per-packet one-way delay: 2.548 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 50.02 Mbit/s
95th percentile per-packet one-way delay: 2.459 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.05 Mbit/s
95th percentile per-packet one-way delay: 2.476 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 49.84 Mbit/s
95th percentile per-packet one-way delay: 2.833 ms
Loss rate: 0.21%
```


Run 7: Report of Sprout — Data Link

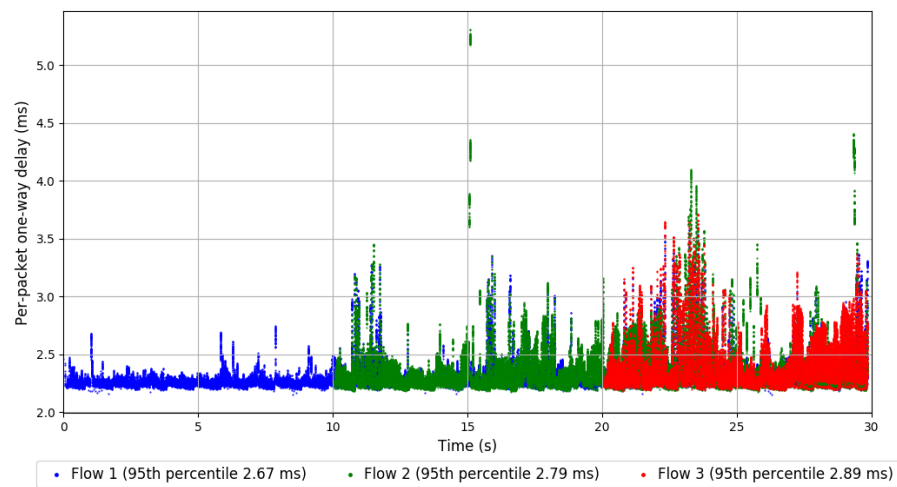
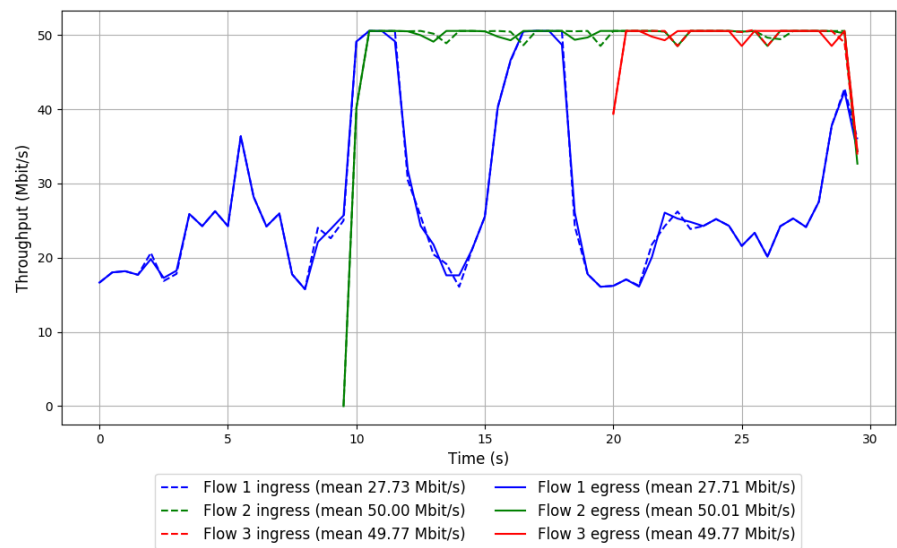


Run 8: Statistics of Sprout

Start at: 2017-12-05 21:11:25
End at: 2017-12-05 21:11:55
Local clock offset: 0.669 ms
Remote clock offset: 1.007 ms

```
# Below is generated by plot.py at 2017-12-06 02:23:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.34 Mbit/s
95th percentile per-packet one-way delay: 2.792 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 27.71 Mbit/s
95th percentile per-packet one-way delay: 2.670 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 50.01 Mbit/s
95th percentile per-packet one-way delay: 2.794 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 49.77 Mbit/s
95th percentile per-packet one-way delay: 2.892 ms
Loss rate: 0.00%
```

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-05 21:29:52

End at: 2017-12-05 21:30:22

Local clock offset: 0.618 ms

Remote clock offset: 1.043 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.38 Mbit/s

95th percentile per-packet one-way delay: 2.811 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 50.12 Mbit/s

95th percentile per-packet one-way delay: 2.691 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 16.37 Mbit/s

95th percentile per-packet one-way delay: 2.911 ms

Loss rate: 0.00%

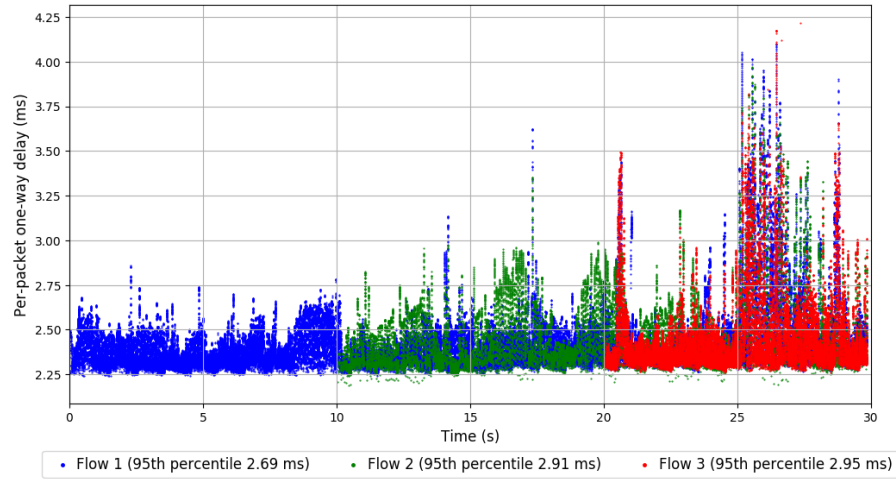
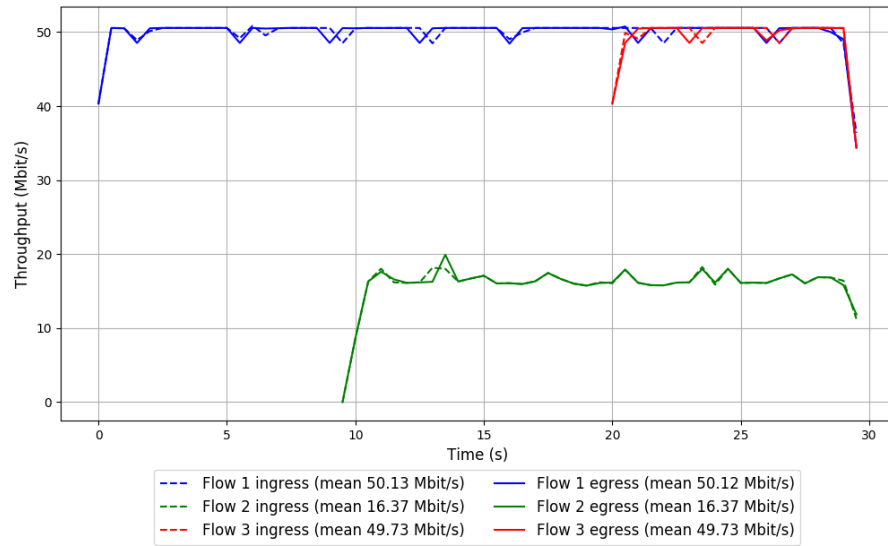
-- Flow 3:

Average throughput: 49.73 Mbit/s

95th percentile per-packet one-way delay: 2.947 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-05 21:48:39

End at: 2017-12-05 21:49:09

Local clock offset: 0.523 ms

Remote clock offset: 1.315 ms

Below is generated by plot.py at 2017-12-06 02:23:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.72 Mbit/s

95th percentile per-packet one-way delay: 2.616 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 50.11 Mbit/s

95th percentile per-packet one-way delay: 2.554 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 49.98 Mbit/s

95th percentile per-packet one-way delay: 2.685 ms

Loss rate: 0.00%

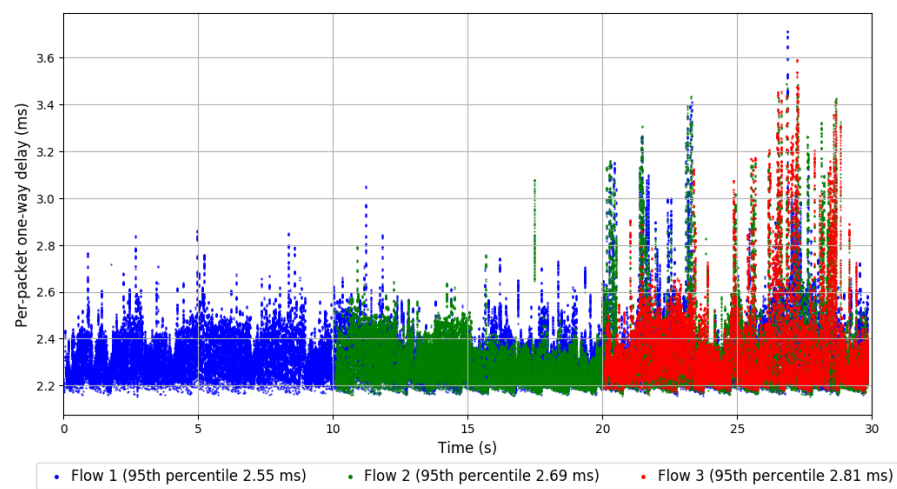
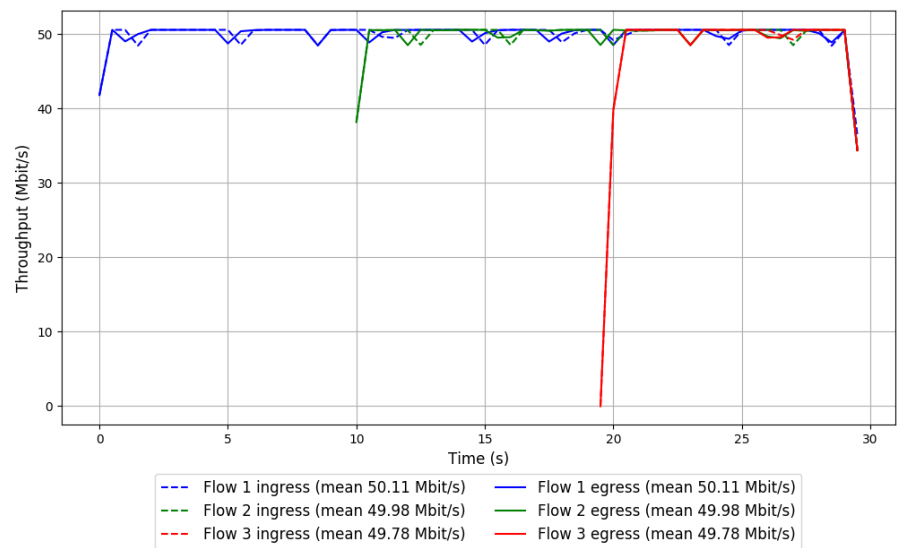
-- Flow 3:

Average throughput: 49.78 Mbit/s

95th percentile per-packet one-way delay: 2.812 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

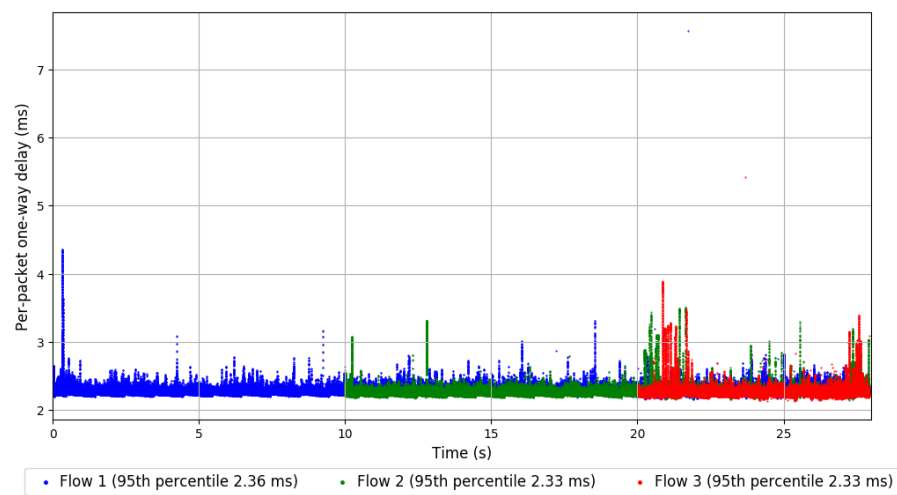
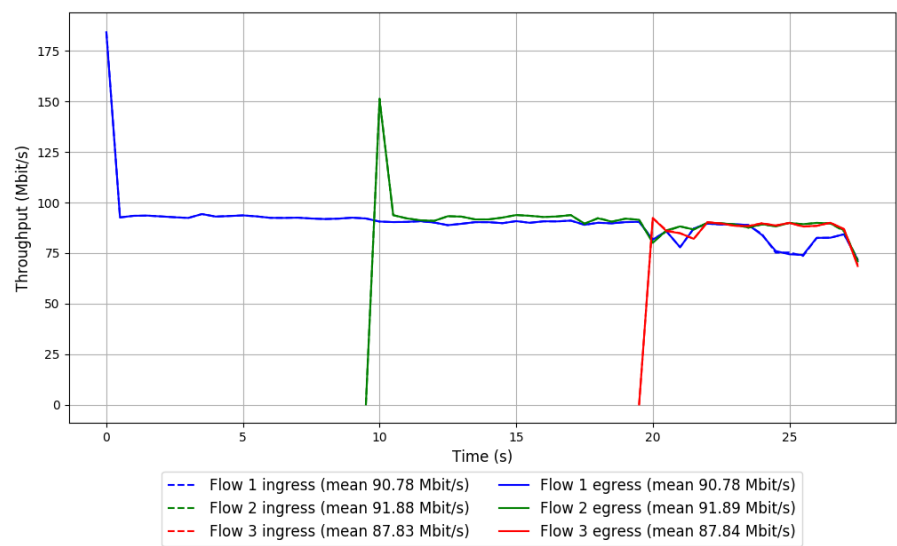


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-05 19:07:10
End at: 2017-12-05 19:07:40
Local clock offset: 0.006 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2017-12-06 02:25:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 174.71 Mbit/s
95th percentile per-packet one-way delay: 2.349 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 90.78 Mbit/s
95th percentile per-packet one-way delay: 2.362 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 91.89 Mbit/s
95th percentile per-packet one-way delay: 2.330 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 87.84 Mbit/s
95th percentile per-packet one-way delay: 2.334 ms
Loss rate: 0.06%
```


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



Run 2: Statistics of TaoVA-100x

Start at: 2017-12-05 19:25:49

End at: 2017-12-05 19:26:19

Local clock offset: 0.198 ms

Remote clock offset: 0.261 ms

Below is generated by plot.py at 2017-12-06 02:26:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 205.40 Mbit/s

95th percentile per-packet one-way delay: 2.392 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 123.27 Mbit/s

95th percentile per-packet one-way delay: 2.383 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 89.42 Mbit/s

95th percentile per-packet one-way delay: 2.406 ms

Loss rate: 0.03%

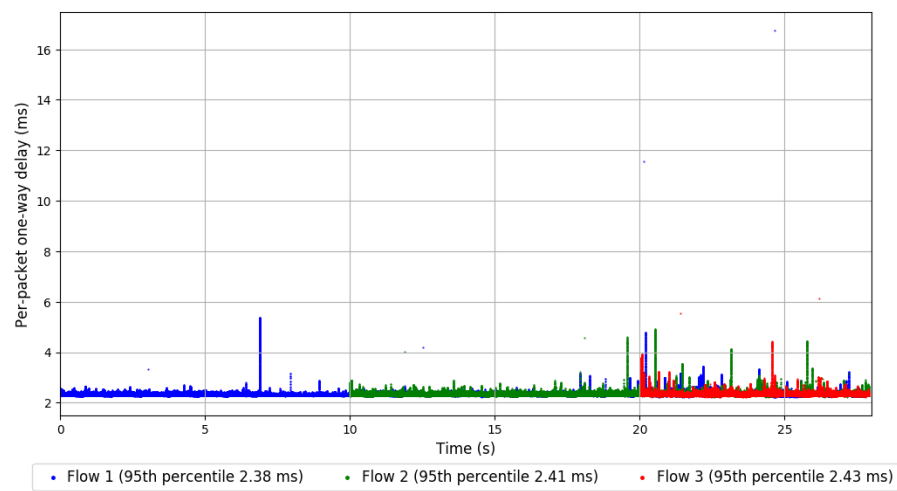
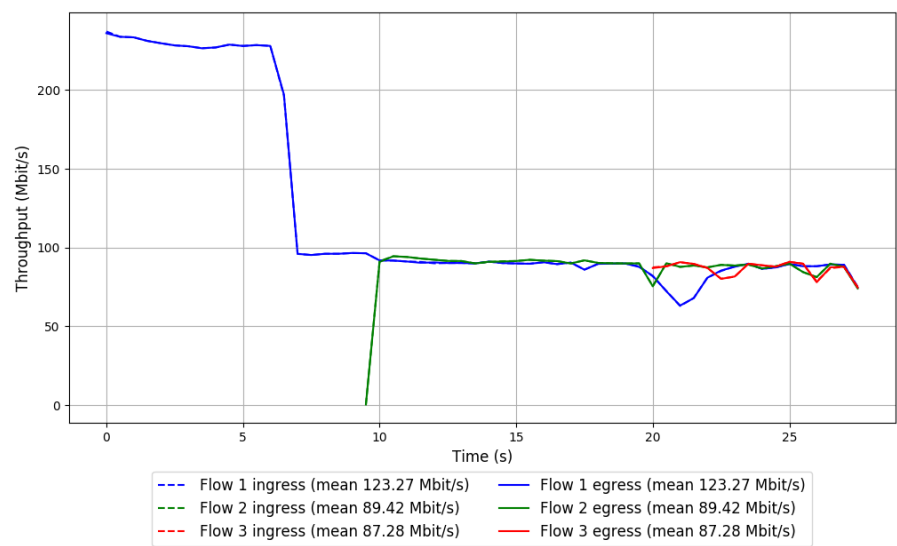
-- Flow 3:

Average throughput: 87.28 Mbit/s

95th percentile per-packet one-way delay: 2.427 ms

Loss rate: 0.06%

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

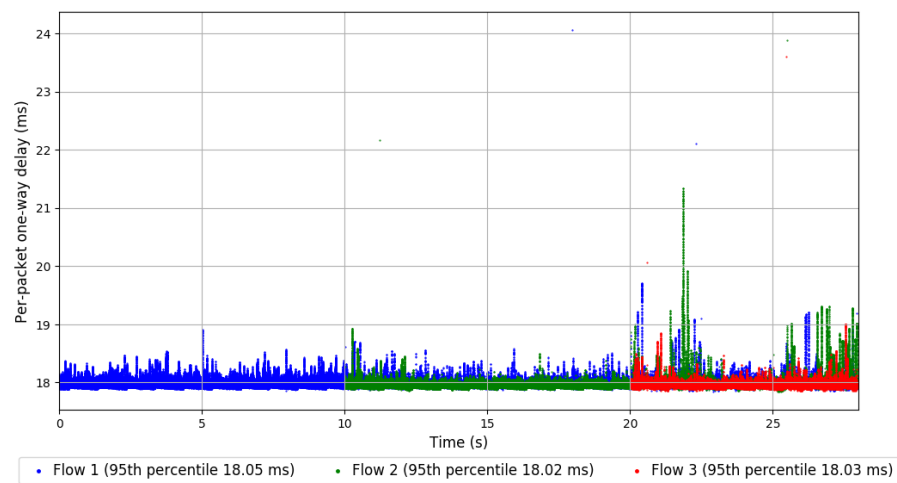
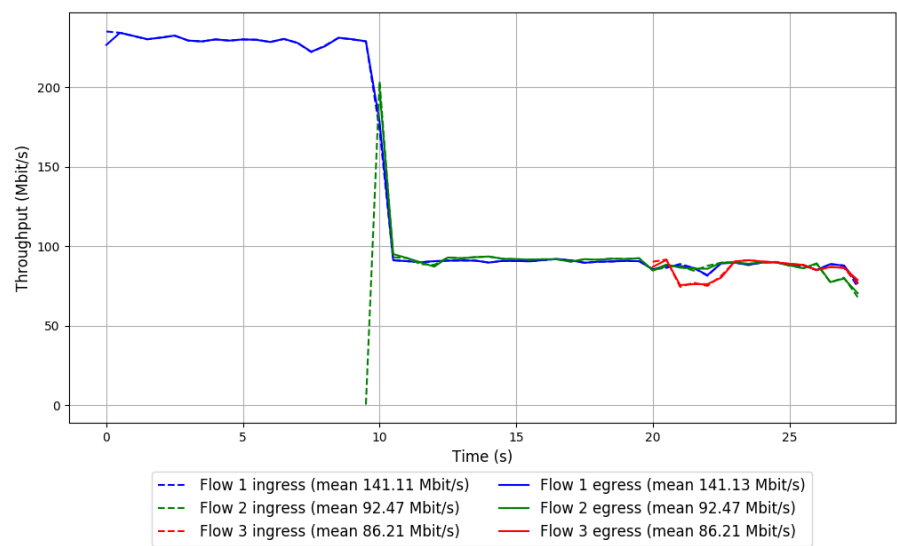


Run 3: Statistics of TaoVA-100x

Start at: 2017-12-05 19:44:27
End at: 2017-12-05 19:44:57
Local clock offset: 0.309 ms
Remote clock offset: -15.088 ms

Below is generated by plot.py at 2017-12-06 02:26:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 224.92 Mbit/s
95th percentile per-packet one-way delay: 18.041 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 141.13 Mbit/s
95th percentile per-packet one-way delay: 18.048 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 92.47 Mbit/s
95th percentile per-packet one-way delay: 18.024 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 86.21 Mbit/s
95th percentile per-packet one-way delay: 18.029 ms
Loss rate: 0.06%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-05 20:03:12

End at: 2017-12-05 20:03:42

Local clock offset: 0.374 ms

Remote clock offset: 0.754 ms

Below is generated by plot.py at 2017-12-06 02:26:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 204.36 Mbit/s

95th percentile per-packet one-way delay: 2.428 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 138.51 Mbit/s

95th percentile per-packet one-way delay: 2.408 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 66.55 Mbit/s

95th percentile per-packet one-way delay: 2.436 ms

Loss rate: 0.03%

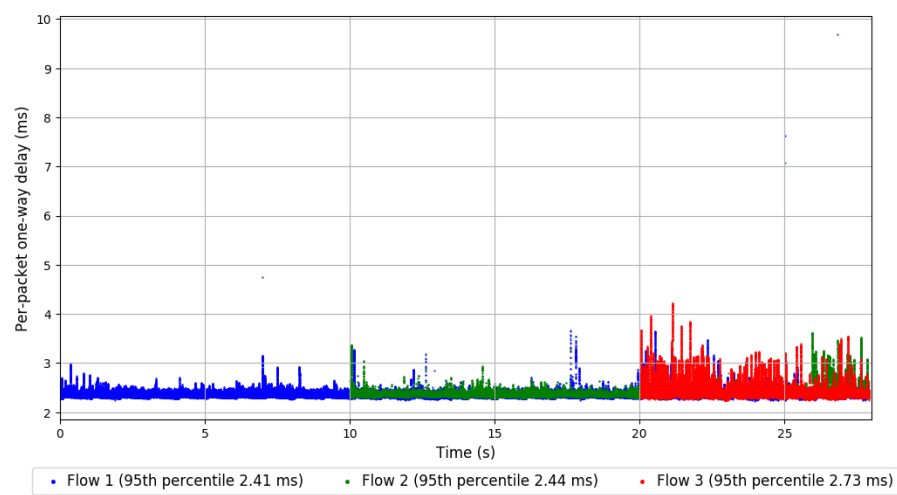
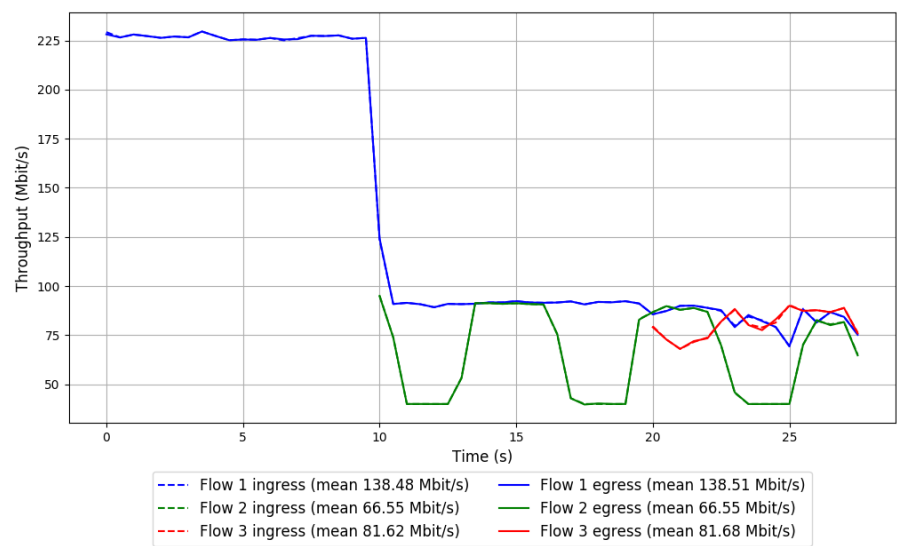
-- Flow 3:

Average throughput: 81.68 Mbit/s

95th percentile per-packet one-way delay: 2.729 ms

Loss rate: 0.06%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-05 20:21:50

End at: 2017-12-05 20:22:20

Local clock offset: 0.459 ms

Remote clock offset: 0.994 ms

Below is generated by plot.py at 2017-12-06 02:27:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.44 Mbit/s

95th percentile per-packet one-way delay: 2.323 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 147.60 Mbit/s

95th percentile per-packet one-way delay: 2.305 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 94.91 Mbit/s

95th percentile per-packet one-way delay: 2.375 ms

Loss rate: 0.02%

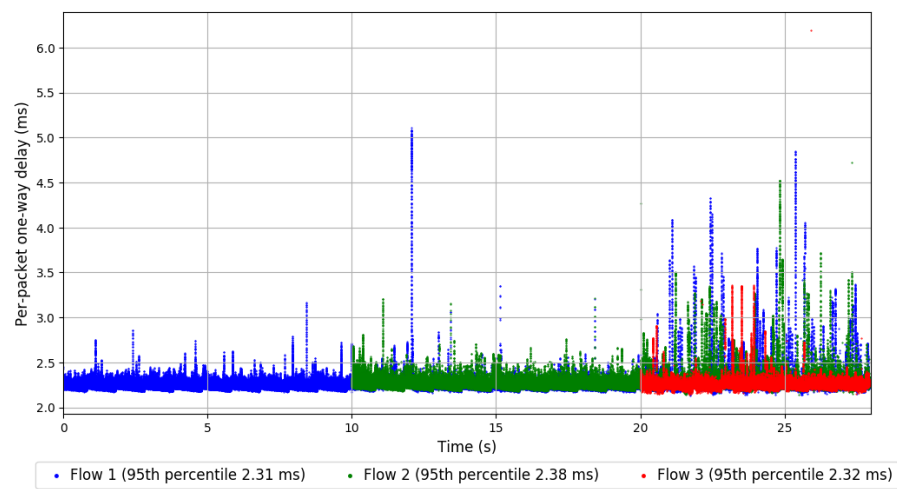
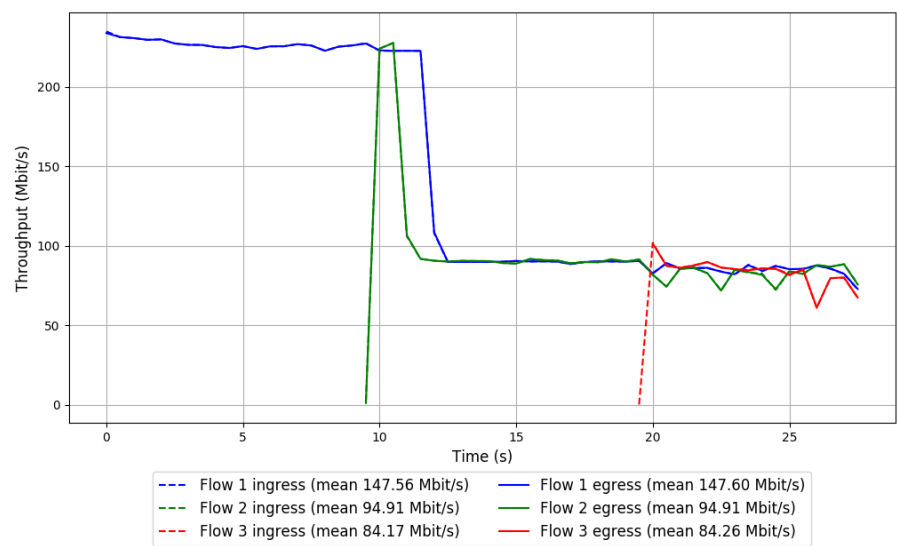
-- Flow 3:

Average throughput: 84.26 Mbit/s

95th percentile per-packet one-way delay: 2.318 ms

Loss rate: 0.02%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-05 20:40:30

End at: 2017-12-05 20:41:00

Local clock offset: 0.458 ms

Remote clock offset: 1.065 ms

Below is generated by plot.py at 2017-12-06 02:27:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 211.87 Mbit/s

95th percentile per-packet one-way delay: 2.329 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 128.98 Mbit/s

95th percentile per-packet one-way delay: 2.317 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 91.04 Mbit/s

95th percentile per-packet one-way delay: 2.351 ms

Loss rate: 0.02%

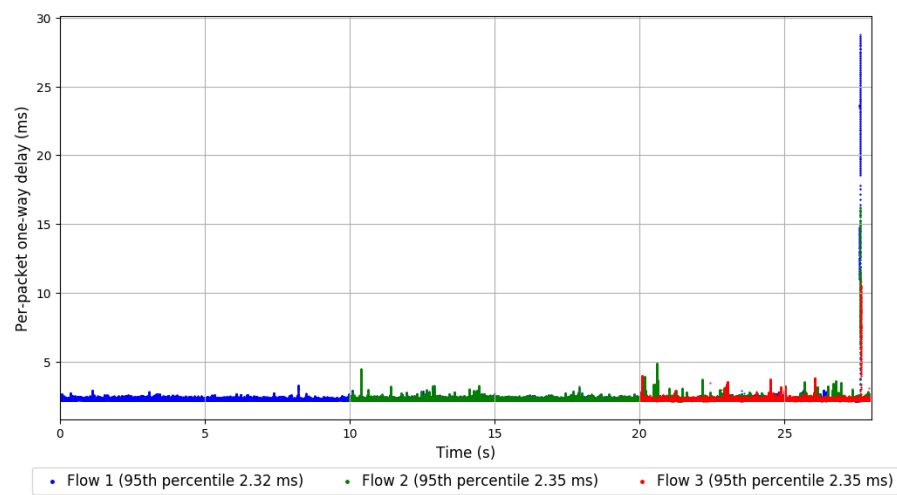
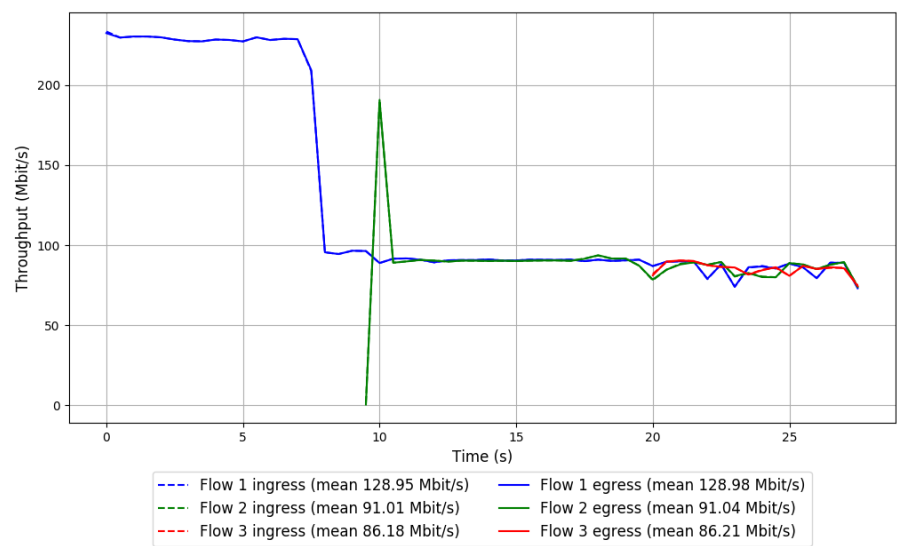
-- Flow 3:

Average throughput: 86.21 Mbit/s

95th percentile per-packet one-way delay: 2.355 ms

Loss rate: 0.06%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-05 20:59:19

End at: 2017-12-05 20:59:49

Local clock offset: 0.56 ms

Remote clock offset: 1.057 ms

Below is generated by plot.py at 2017-12-06 02:27:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.11 Mbit/s

95th percentile per-packet one-way delay: 2.256 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 103.43 Mbit/s

95th percentile per-packet one-way delay: 2.254 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 92.32 Mbit/s

95th percentile per-packet one-way delay: 2.257 ms

Loss rate: 0.03%

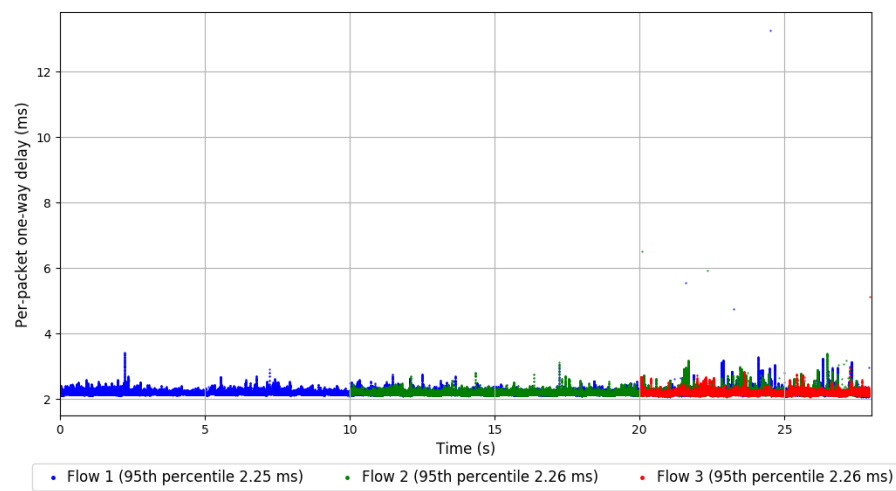
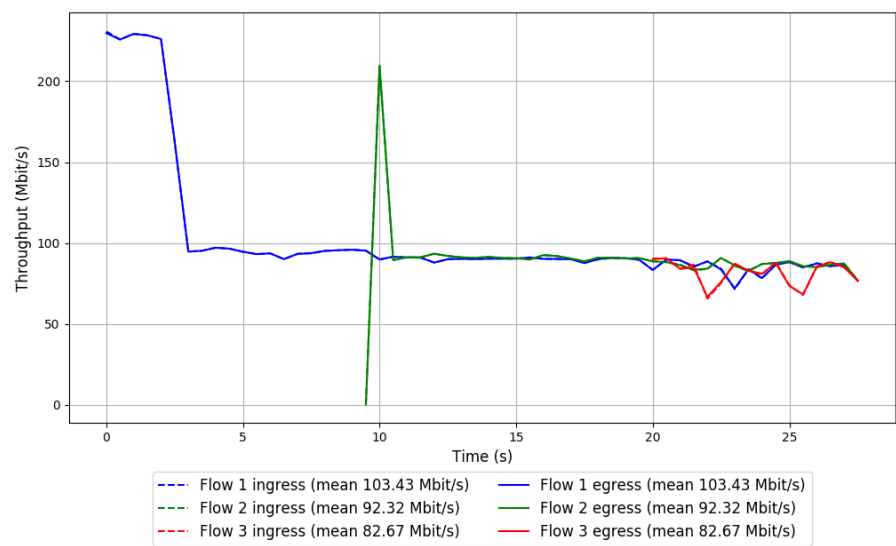
-- Flow 3:

Average throughput: 82.67 Mbit/s

95th percentile per-packet one-way delay: 2.263 ms

Loss rate: 0.06%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-05 21:17:47

End at: 2017-12-05 21:18:17

Local clock offset: 0.662 ms

Remote clock offset: 0.958 ms

Below is generated by plot.py at 2017-12-06 02:28:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.50 Mbit/s

95th percentile per-packet one-way delay: 2.375 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 104.56 Mbit/s

95th percentile per-packet one-way delay: 2.363 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 90.76 Mbit/s

95th percentile per-packet one-way delay: 2.359 ms

Loss rate: 0.02%

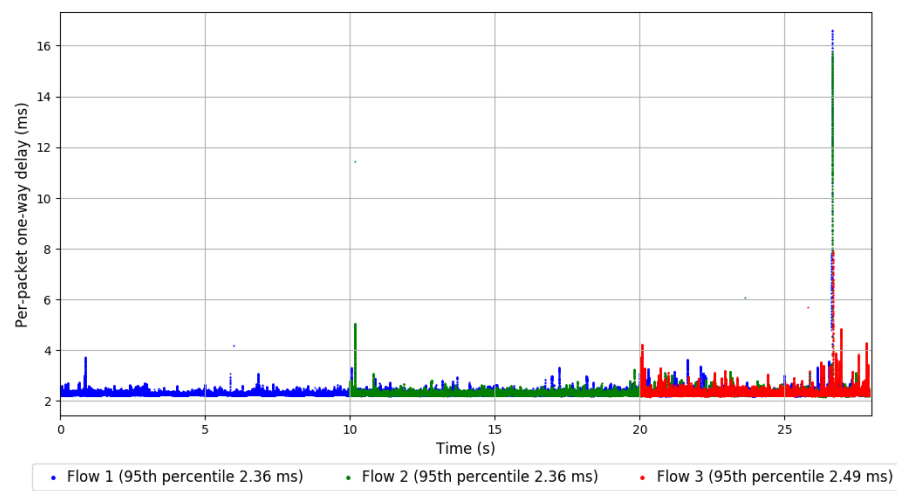
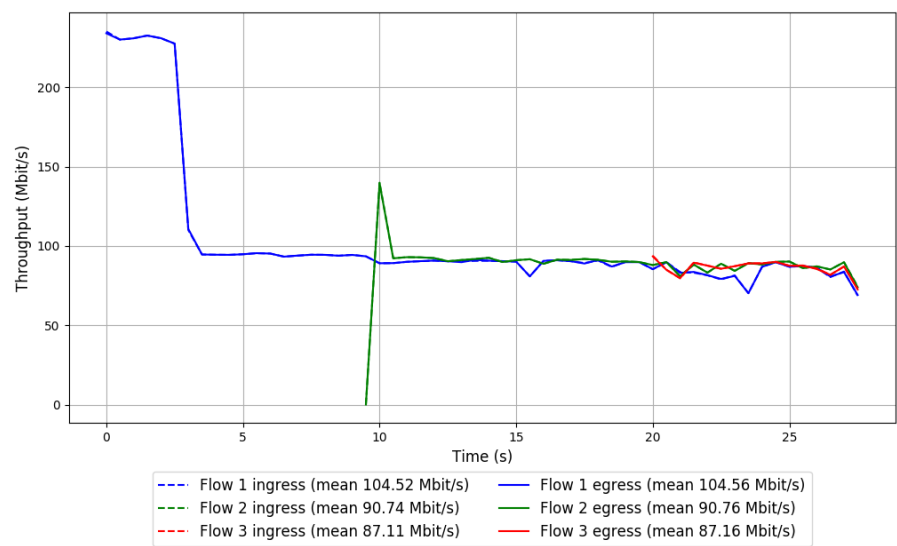
-- Flow 3:

Average throughput: 87.16 Mbit/s

95th percentile per-packet one-way delay: 2.494 ms

Loss rate: 0.06%

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

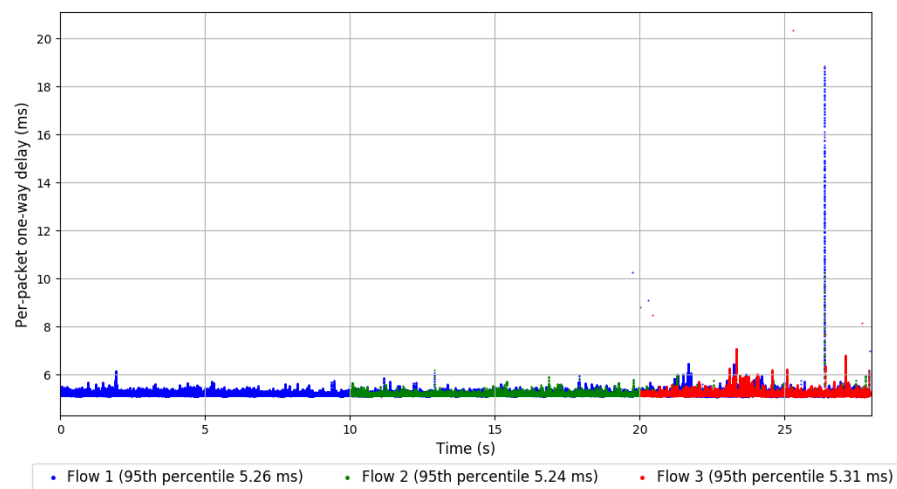
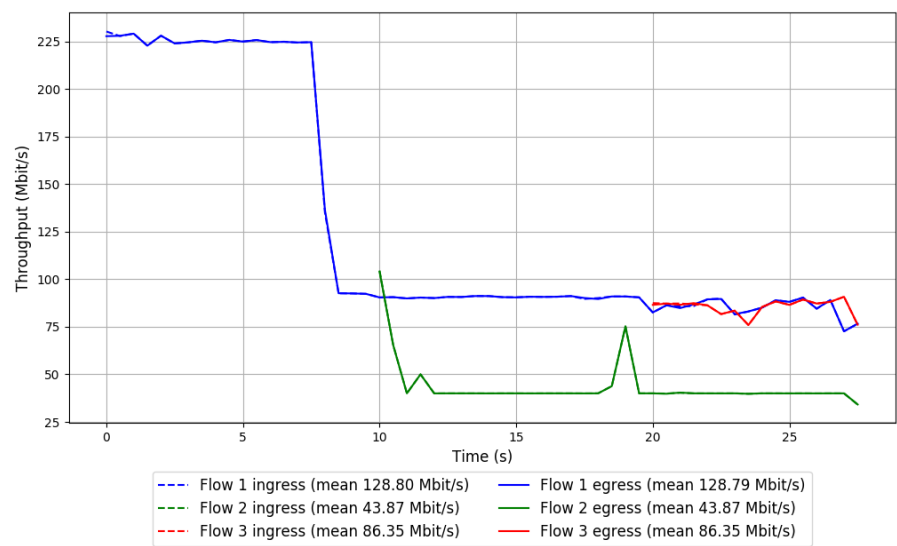


Run 9: Statistics of TaoVA-100x

Start at: 2017-12-05 21:36:27
End at: 2017-12-05 21:36:57
Local clock offset: 0.585 ms
Remote clock offset: -1.752 ms

Below is generated by plot.py at 2017-12-06 02:29:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 181.41 Mbit/s
95th percentile per-packet one-way delay: 5.261 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 128.79 Mbit/s
95th percentile per-packet one-way delay: 5.260 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 43.87 Mbit/s
95th percentile per-packet one-way delay: 5.241 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 86.35 Mbit/s
95th percentile per-packet one-way delay: 5.308 ms
Loss rate: 0.06%

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



Run 10: Statistics of TaoVA-100x

Start at: 2017-12-05 21:55:16

End at: 2017-12-05 21:55:46

Local clock offset: 0.539 ms

Remote clock offset: 1.341 ms

Below is generated by plot.py at 2017-12-06 02:30:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.18 Mbit/s

95th percentile per-packet one-way delay: 2.301 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 95.58 Mbit/s

95th percentile per-packet one-way delay: 2.273 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 105.81 Mbit/s

95th percentile per-packet one-way delay: 2.344 ms

Loss rate: 0.02%

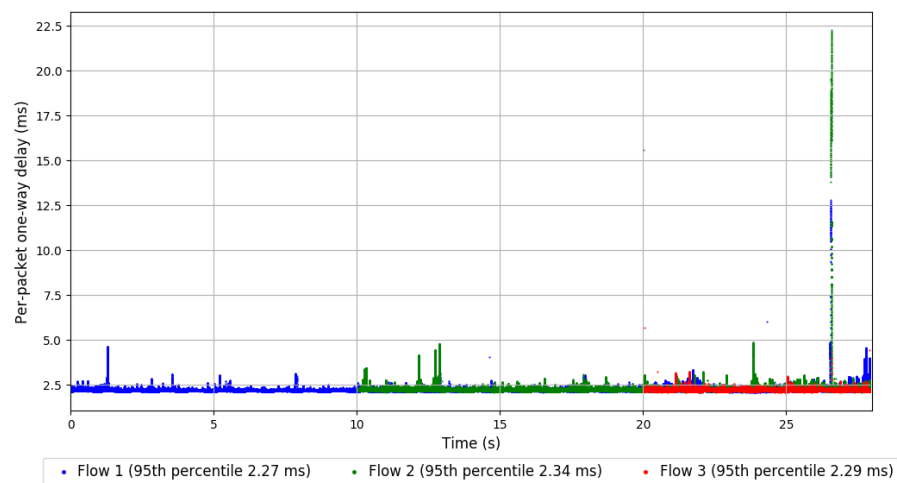
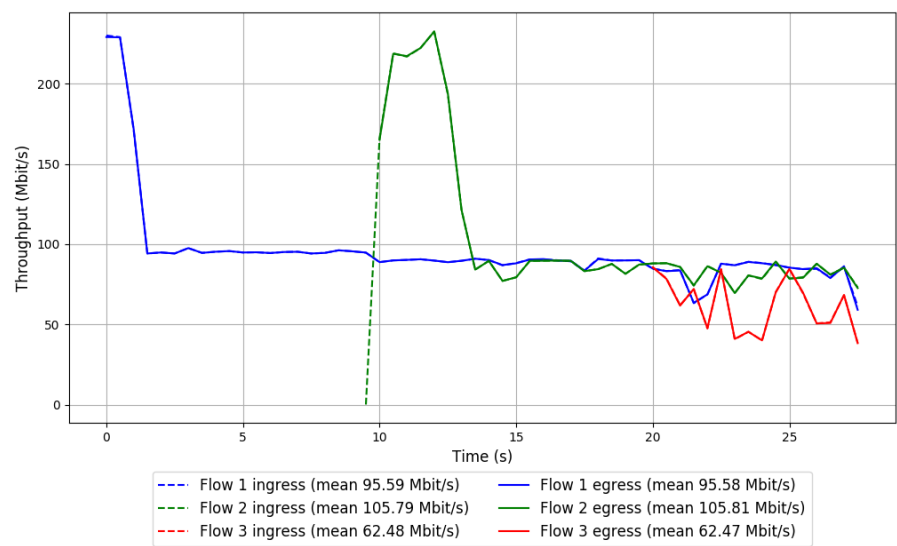
-- Flow 3:

Average throughput: 62.47 Mbit/s

95th percentile per-packet one-way delay: 2.286 ms

Loss rate: 0.03%

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-05 19:12:40

End at: 2017-12-05 19:13:10

Local clock offset: -0.013 ms

Remote clock offset: 0.005 ms

Below is generated by plot.py at 2017-12-06 02:38:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 814.59 Mbit/s

95th percentile per-packet one-way delay: 3.580 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 460.63 Mbit/s

95th percentile per-packet one-way delay: 2.842 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 413.89 Mbit/s

95th percentile per-packet one-way delay: 3.951 ms

Loss rate: 0.02%

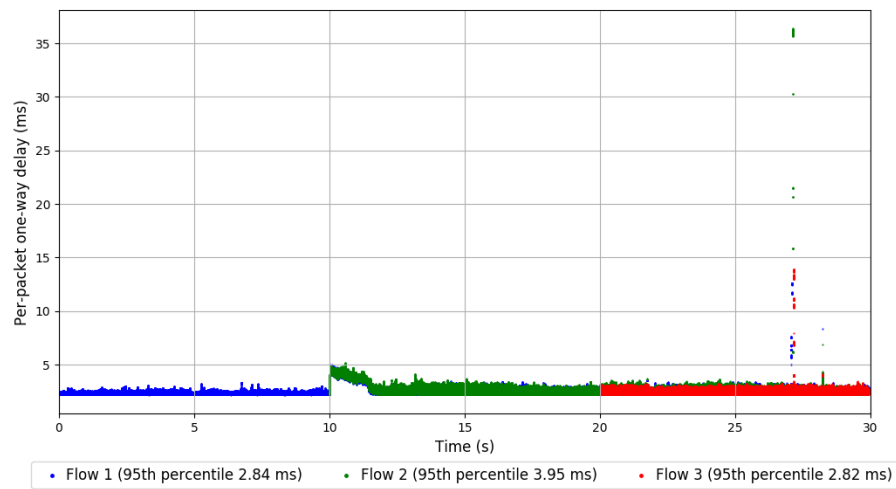
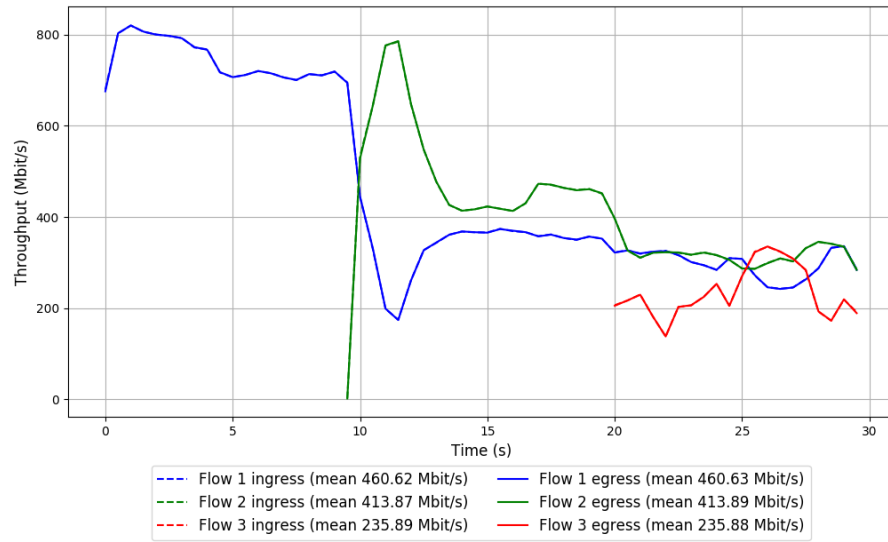
-- Flow 3:

Average throughput: 235.88 Mbit/s

95th percentile per-packet one-way delay: 2.824 ms

Loss rate: 0.05%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-05 19:31:19

End at: 2017-12-05 19:31:49

Local clock offset: 0.238 ms

Remote clock offset: 0.407 ms

Below is generated by plot.py at 2017-12-06 02:38:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 792.13 Mbit/s

95th percentile per-packet one-way delay: 4.649 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 439.64 Mbit/s

95th percentile per-packet one-way delay: 3.629 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 364.35 Mbit/s

95th percentile per-packet one-way delay: 7.509 ms

Loss rate: 0.02%

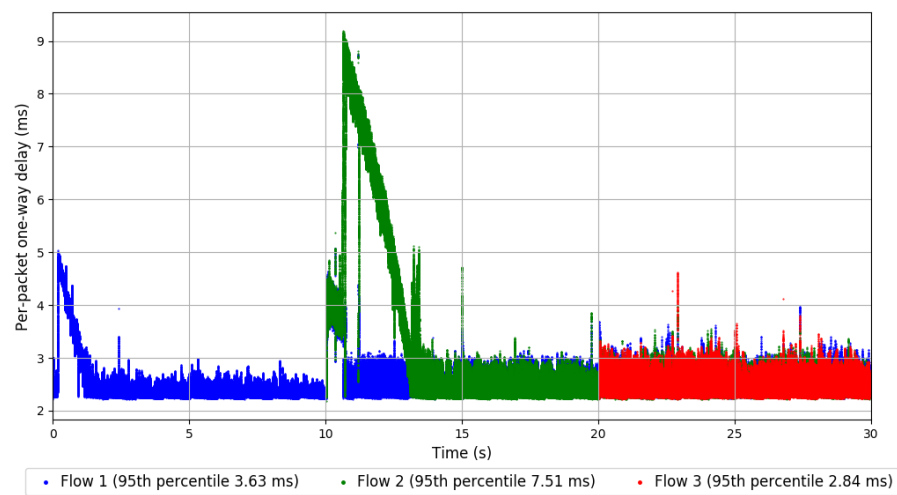
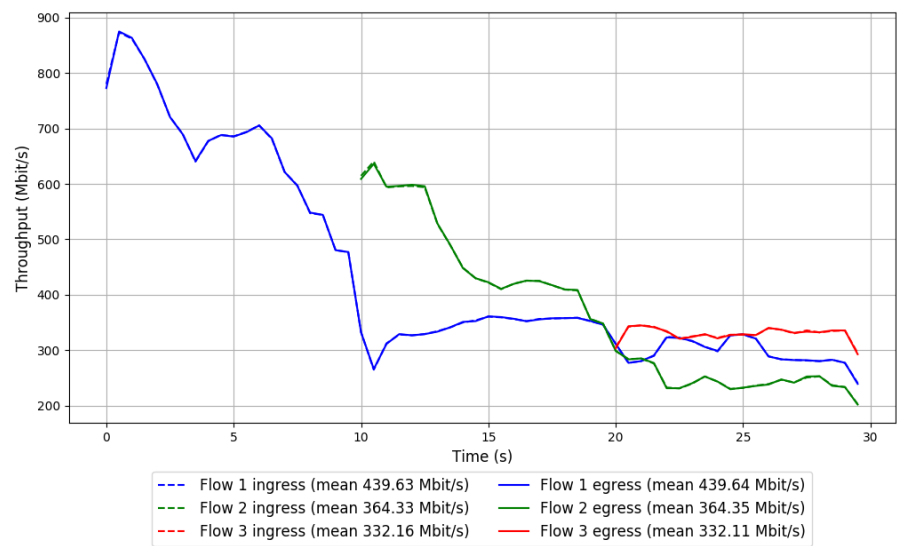
-- Flow 3:

Average throughput: 332.11 Mbit/s

95th percentile per-packet one-way delay: 2.836 ms

Loss rate: 0.05%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-05 19:50:01

End at: 2017-12-05 19:50:31

Local clock offset: 0.26 ms

Remote clock offset: 0.61 ms

Below is generated by plot.py at 2017-12-06 02:38:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 796.65 Mbit/s

95th percentile per-packet one-way delay: 4.038 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 471.64 Mbit/s

95th percentile per-packet one-way delay: 2.859 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 318.34 Mbit/s

95th percentile per-packet one-way delay: 4.594 ms

Loss rate: 0.02%

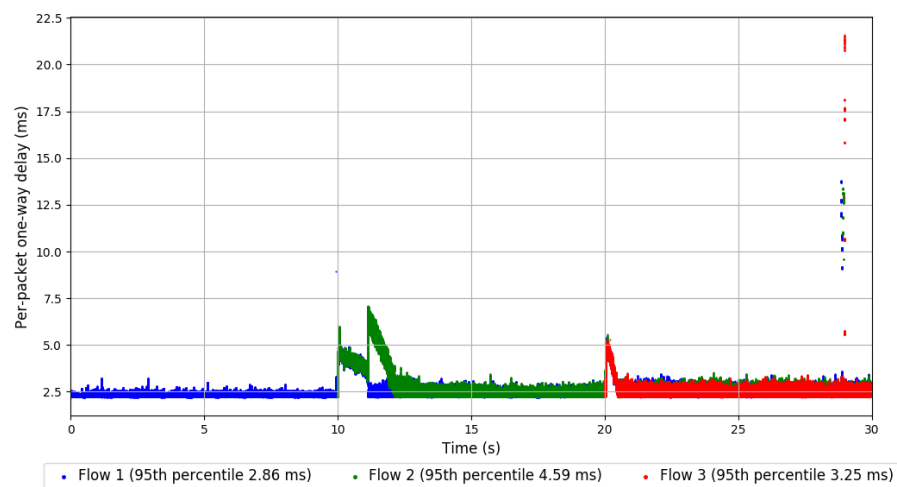
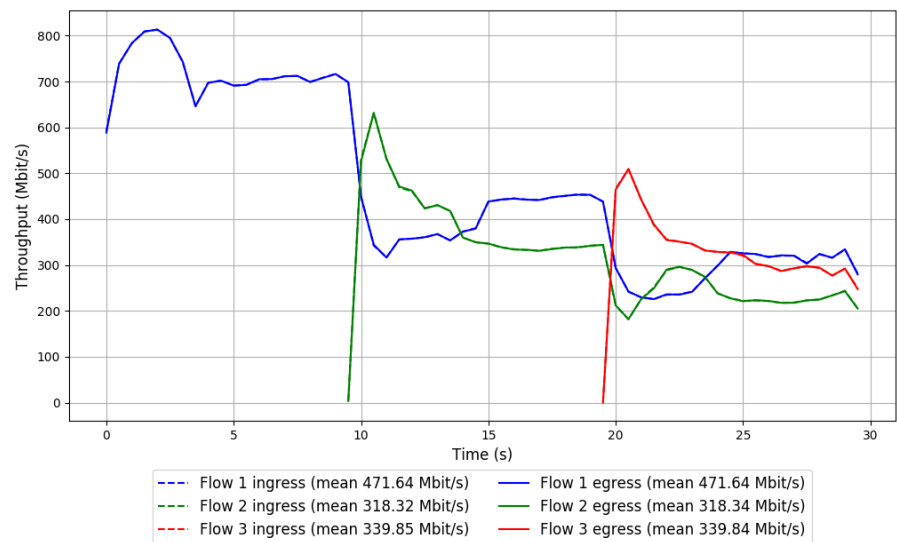
-- Flow 3:

Average throughput: 339.84 Mbit/s

95th percentile per-packet one-way delay: 3.248 ms

Loss rate: 0.04%

Run 3: Report of TCP Vegas — Data Link

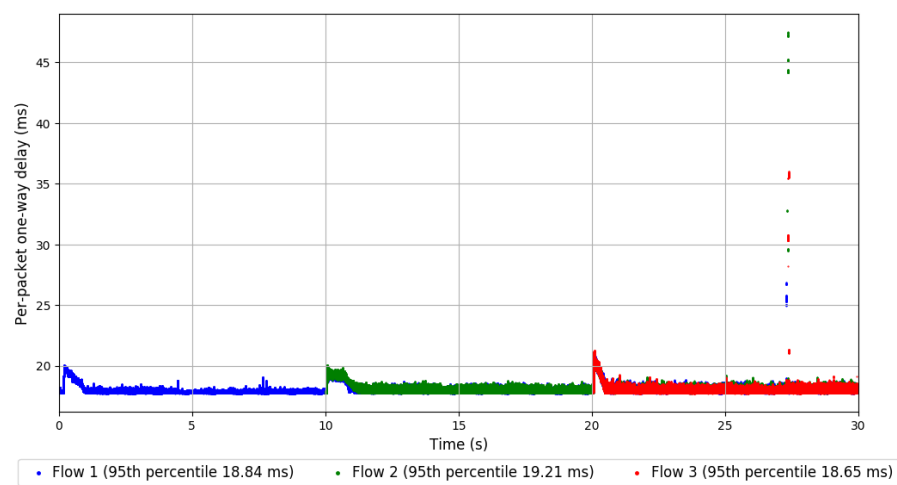
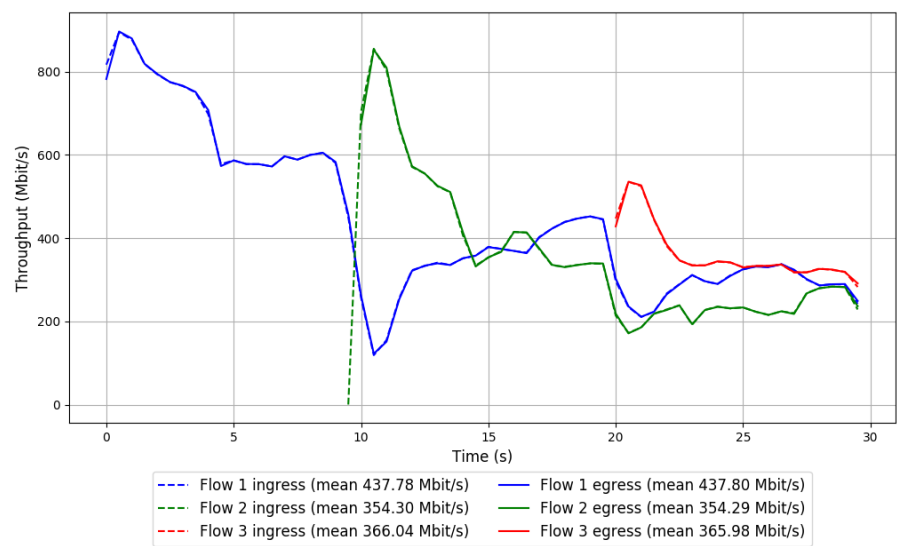


Run 4: Statistics of TCP Vegas

Start at: 2017-12-05 20:08:41
End at: 2017-12-05 20:09:11
Local clock offset: 0.407 ms
Remote clock offset: -14.617 ms

Below is generated by plot.py at 2017-12-06 02:38:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 794.89 Mbit/s
95th percentile per-packet one-way delay: 19.065 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 437.80 Mbit/s
95th percentile per-packet one-way delay: 18.837 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 354.29 Mbit/s
95th percentile per-packet one-way delay: 19.213 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 365.98 Mbit/s
95th percentile per-packet one-way delay: 18.646 ms
Loss rate: 0.05%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-05 20:27:25

End at: 2017-12-05 20:27:55

Local clock offset: 0.485 ms

Remote clock offset: 1.035 ms

Below is generated by plot.py at 2017-12-06 02:38:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 608.91 Mbit/s

95th percentile per-packet one-way delay: 2.697 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 344.73 Mbit/s

95th percentile per-packet one-way delay: 2.658 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 277.08 Mbit/s

95th percentile per-packet one-way delay: 2.721 ms

Loss rate: 0.02%

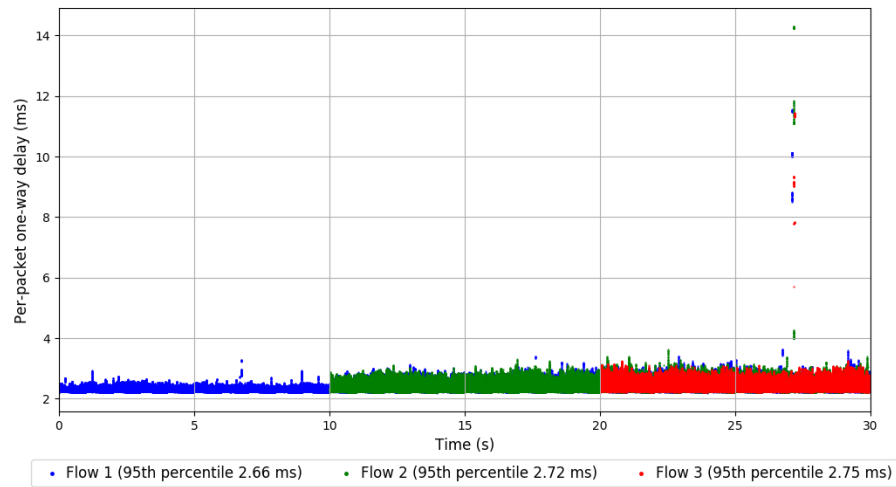
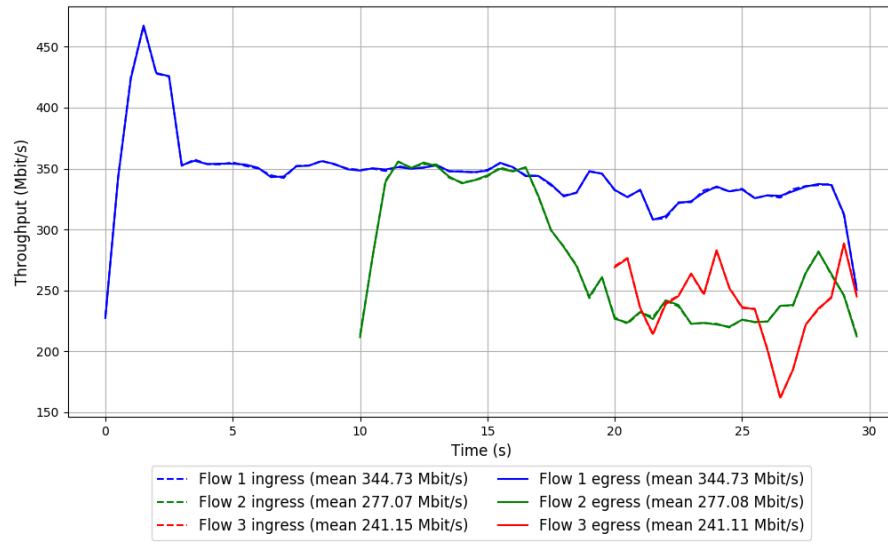
-- Flow 3:

Average throughput: 241.11 Mbit/s

95th percentile per-packet one-way delay: 2.747 ms

Loss rate: 0.06%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-05 20:46:00

End at: 2017-12-05 20:46:30

Local clock offset: 0.551 ms

Remote clock offset: 1.146 ms

Below is generated by plot.py at 2017-12-06 02:39:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 734.18 Mbit/s

95th percentile per-packet one-way delay: 4.090 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 457.88 Mbit/s

95th percentile per-packet one-way delay: 2.664 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 187.45 Mbit/s

95th percentile per-packet one-way delay: 2.728 ms

Loss rate: 0.04%

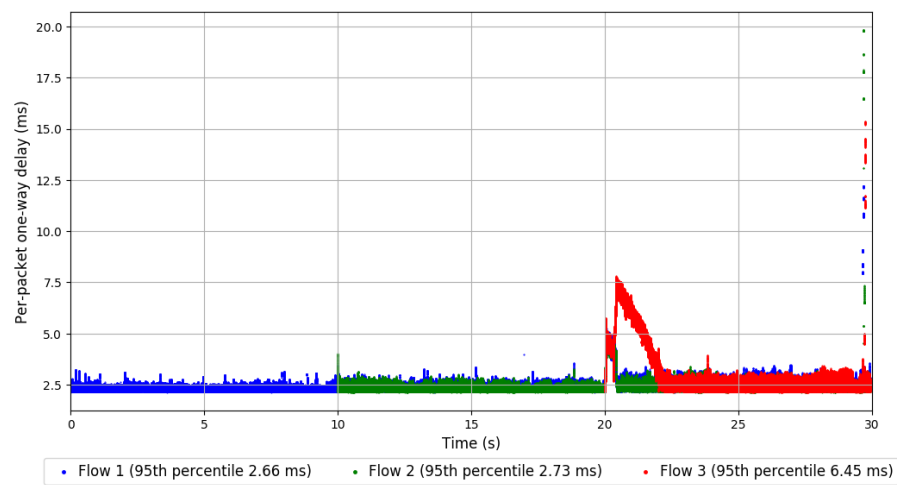
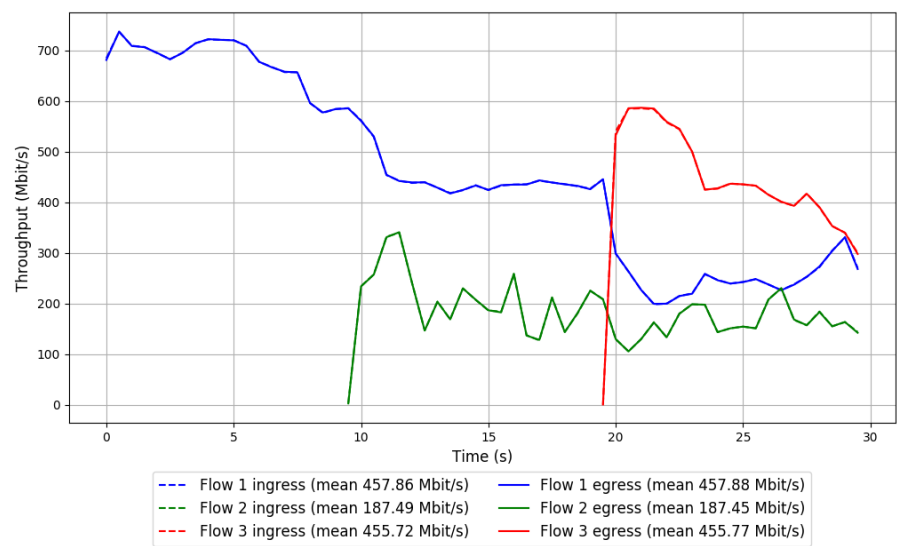
-- Flow 3:

Average throughput: 455.77 Mbit/s

95th percentile per-packet one-way delay: 6.454 ms

Loss rate: 0.04%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-05 21:04:50

End at: 2017-12-05 21:05:20

Local clock offset: 0.658 ms

Remote clock offset: 1.048 ms

Below is generated by plot.py at 2017-12-06 02:39:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 529.10 Mbit/s

95th percentile per-packet one-way delay: 2.665 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 179.74 Mbit/s

95th percentile per-packet one-way delay: 2.579 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 340.38 Mbit/s

95th percentile per-packet one-way delay: 2.660 ms

Loss rate: 0.02%

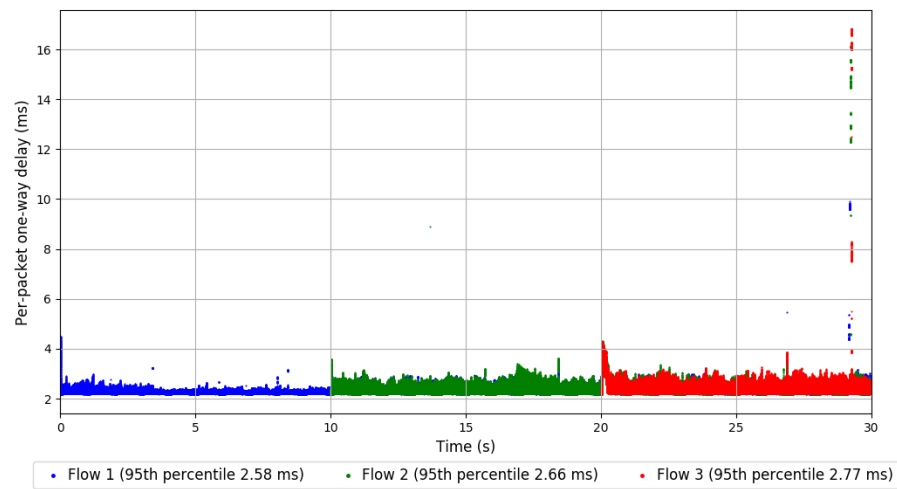
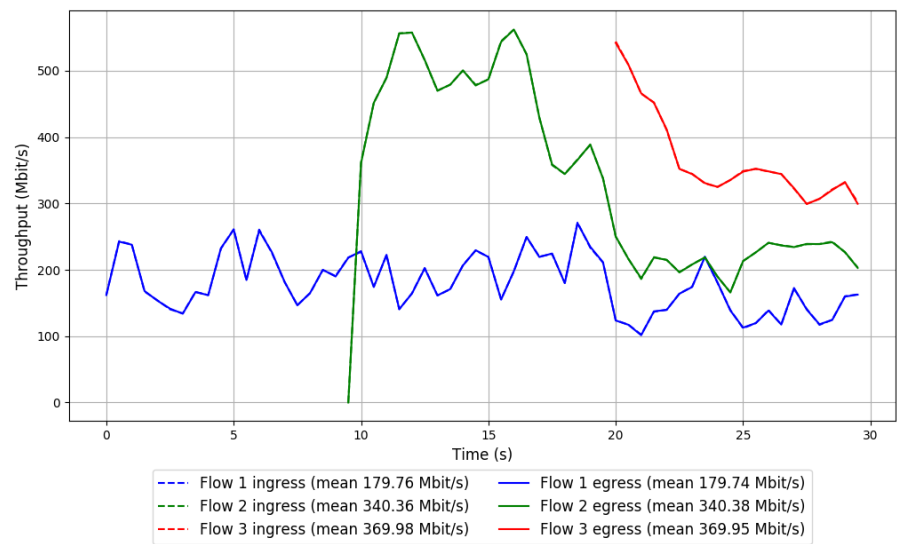
-- Flow 3:

Average throughput: 369.95 Mbit/s

95th percentile per-packet one-way delay: 2.773 ms

Loss rate: 0.05%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-05 21:23:18

End at: 2017-12-05 21:23:48

Local clock offset: 0.656 ms

Remote clock offset: 0.991 ms

Below is generated by plot.py at 2017-12-06 02:39:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 605.51 Mbit/s

95th percentile per-packet one-way delay: 2.779 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 295.23 Mbit/s

95th percentile per-packet one-way delay: 2.730 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 326.57 Mbit/s

95th percentile per-packet one-way delay: 2.795 ms

Loss rate: 0.02%

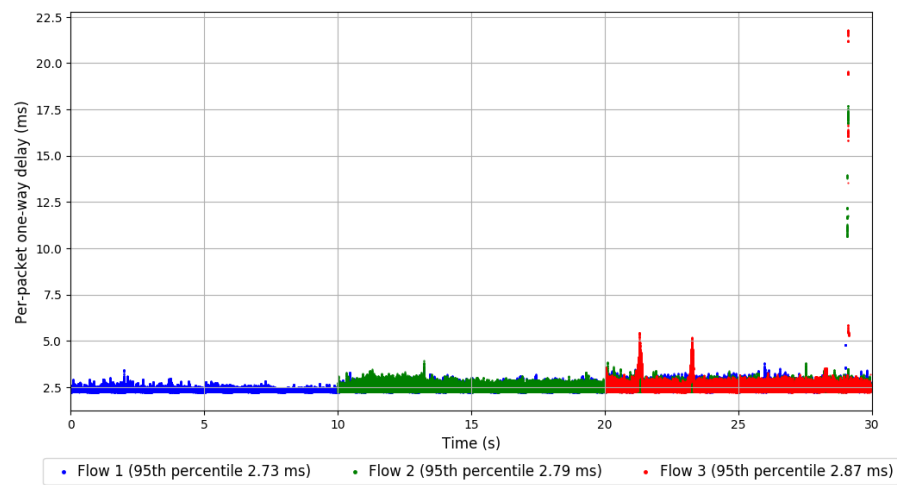
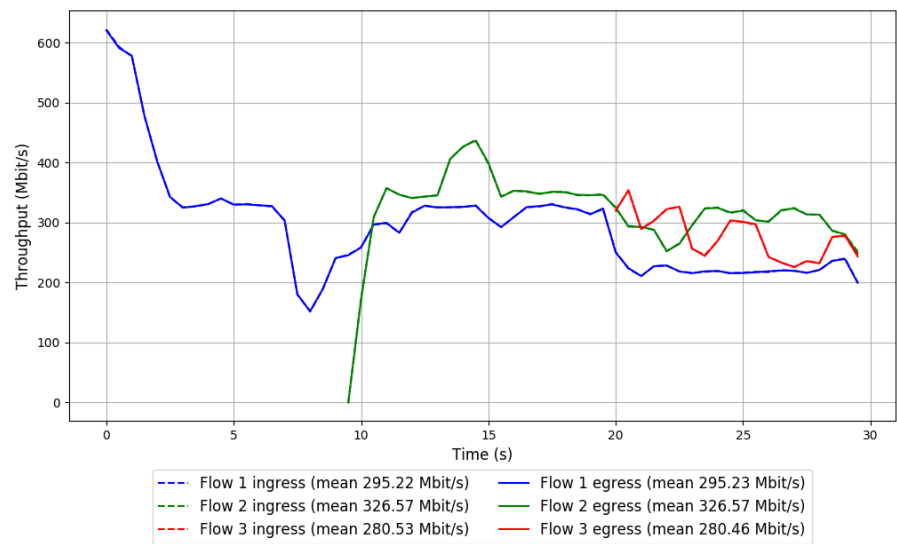
-- Flow 3:

Average throughput: 280.46 Mbit/s

95th percentile per-packet one-way delay: 2.867 ms

Loss rate: 0.06%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-05 21:41:56

End at: 2017-12-05 21:42:26

Local clock offset: 0.564 ms

Remote clock offset: 1.178 ms

Below is generated by plot.py at 2017-12-06 02:46:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 696.88 Mbit/s

95th percentile per-packet one-way delay: 4.675 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 359.74 Mbit/s

95th percentile per-packet one-way delay: 2.912 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 352.59 Mbit/s

95th percentile per-packet one-way delay: 7.355 ms

Loss rate: 0.02%

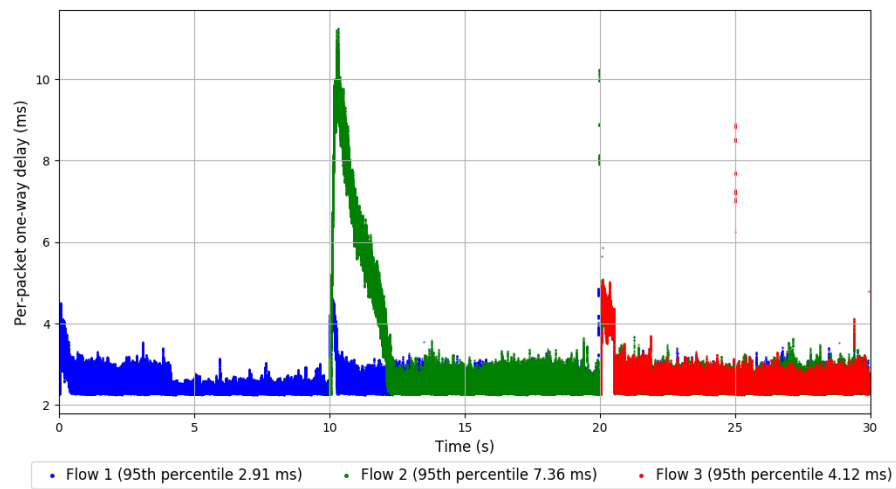
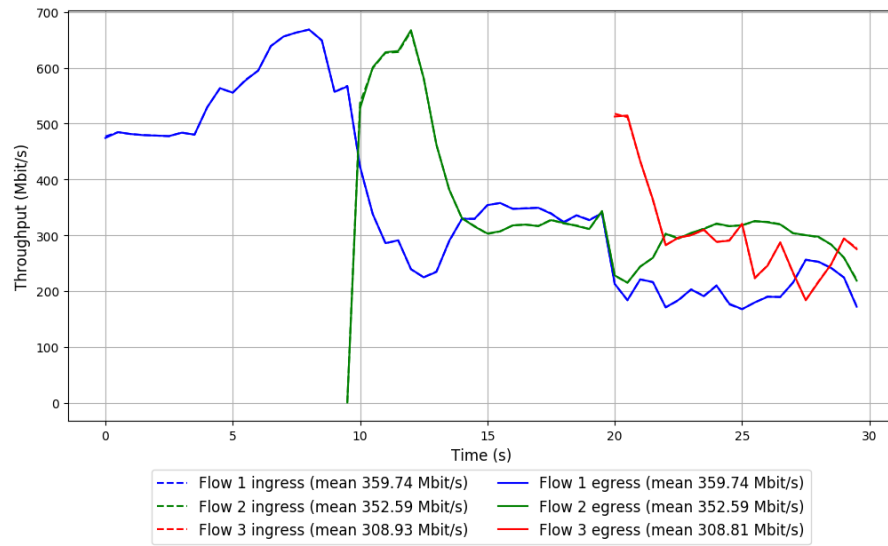
-- Flow 3:

Average throughput: 308.81 Mbit/s

95th percentile per-packet one-way delay: 4.123 ms

Loss rate: 0.06%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-05 22:00:46

End at: 2017-12-05 22:01:16

Local clock offset: 0.633 ms

Remote clock offset: 1.293 ms

Below is generated by plot.py at 2017-12-06 02:47:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 681.08 Mbit/s

95th percentile per-packet one-way delay: 6.136 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 455.40 Mbit/s

95th percentile per-packet one-way delay: 4.911 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 216.00 Mbit/s

95th percentile per-packet one-way delay: 2.807 ms

Loss rate: 0.03%

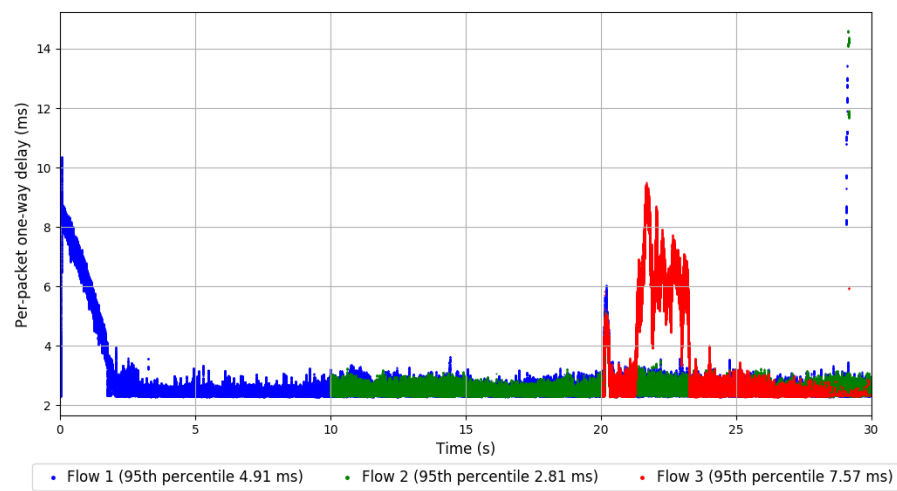
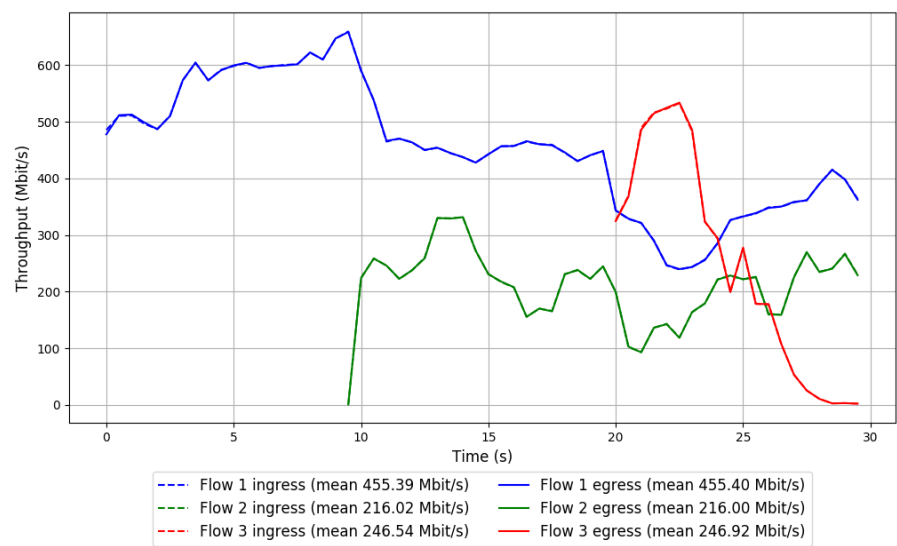
-- Flow 3:

Average throughput: 246.92 Mbit/s

95th percentile per-packet one-way delay: 7.568 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

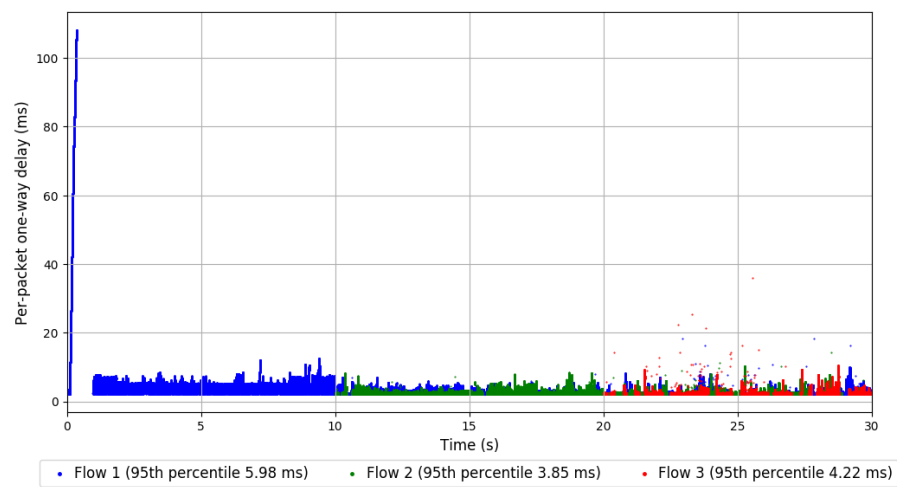
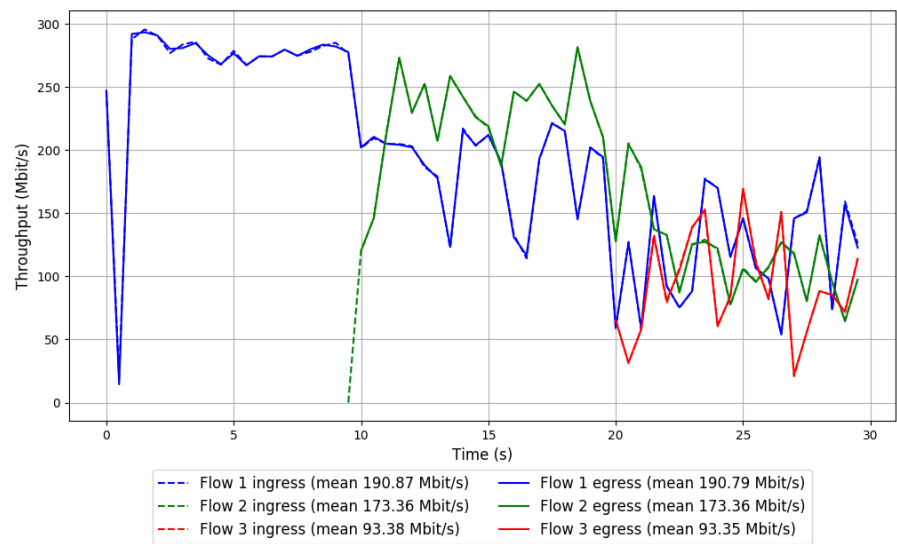


Run 1: Statistics of Verus

Start at: 2017-12-05 19:05:47
End at: 2017-12-05 19:06:17
Local clock offset: 0.006 ms
Remote clock offset: -0.078 ms

Below is generated by plot.py at 2017-12-06 02:47:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 336.24 Mbit/s
95th percentile per-packet one-way delay: 5.330 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 190.79 Mbit/s
95th percentile per-packet one-way delay: 5.980 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 173.36 Mbit/s
95th percentile per-packet one-way delay: 3.846 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 93.35 Mbit/s
95th percentile per-packet one-way delay: 4.218 ms
Loss rate: 0.06%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-05 19:24:29

End at: 2017-12-05 19:24:59

Local clock offset: 0.151 ms

Remote clock offset: 0.287 ms

Below is generated by plot.py at 2017-12-06 02:47:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 307.62 Mbit/s

95th percentile per-packet one-way delay: 4.663 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 184.18 Mbit/s

95th percentile per-packet one-way delay: 4.554 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 127.33 Mbit/s

95th percentile per-packet one-way delay: 5.532 ms

Loss rate: 0.04%

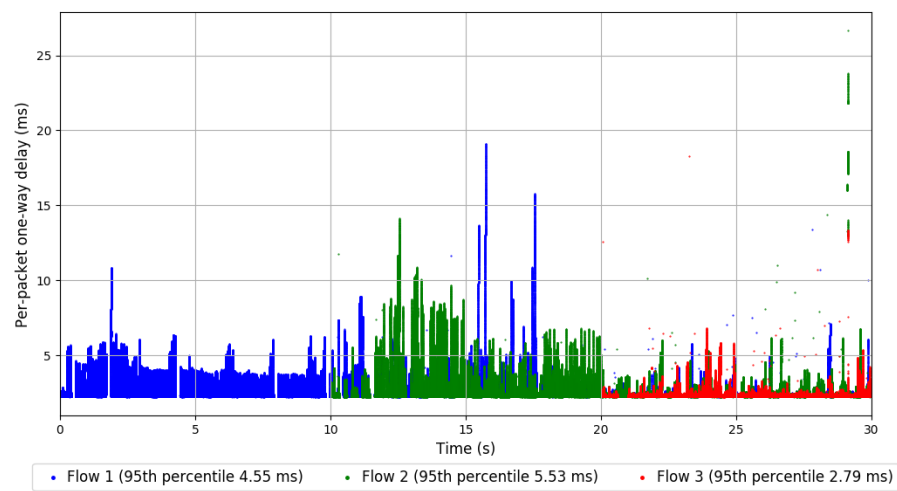
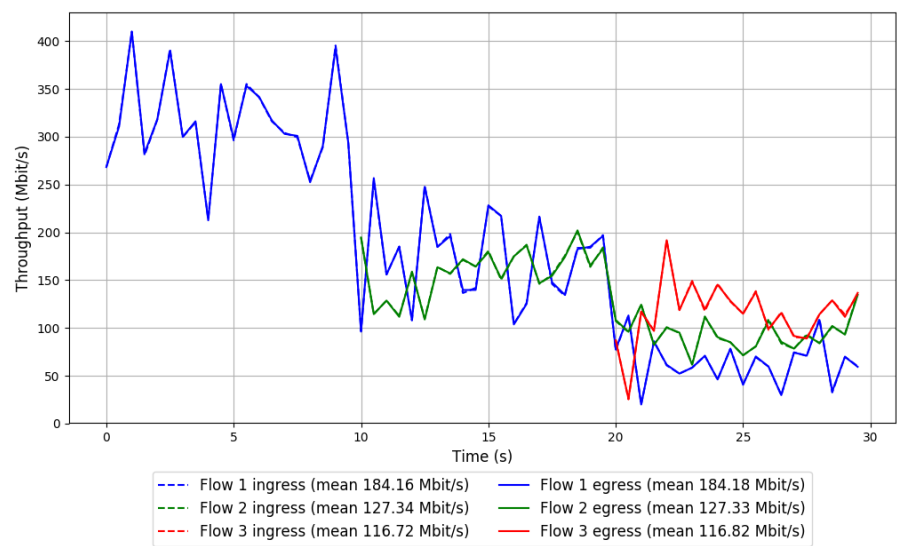
-- Flow 3:

Average throughput: 116.82 Mbit/s

95th percentile per-packet one-way delay: 2.788 ms

Loss rate: 0.03%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-05 19:43:00

End at: 2017-12-05 19:43:30

Local clock offset: 0.298 ms

Remote clock offset: 0.584 ms

Below is generated by plot.py at 2017-12-06 02:47:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 411.53 Mbit/s

95th percentile per-packet one-way delay: 3.616 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 239.04 Mbit/s

95th percentile per-packet one-way delay: 3.687 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 194.06 Mbit/s

95th percentile per-packet one-way delay: 3.431 ms

Loss rate: 0.03%

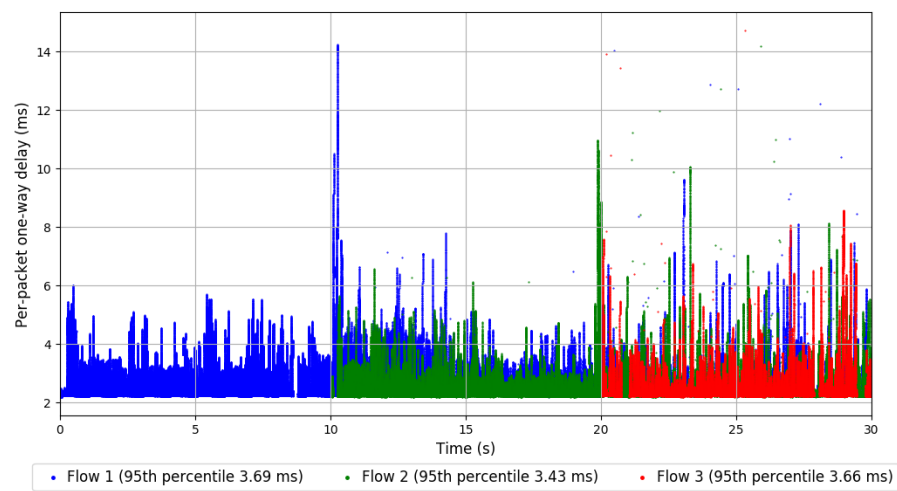
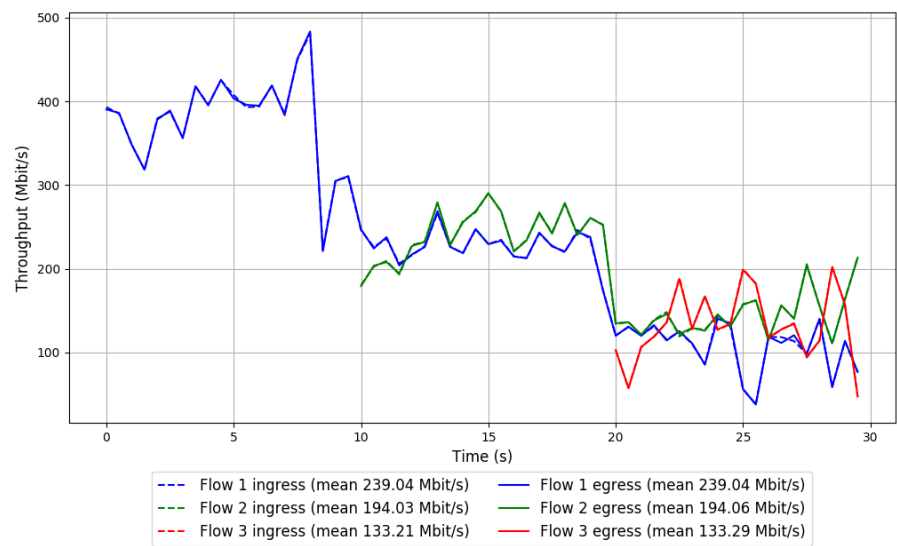
-- Flow 3:

Average throughput: 133.29 Mbit/s

95th percentile per-packet one-way delay: 3.657 ms

Loss rate: 0.02%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-05 20:01:51

End at: 2017-12-05 20:02:21

Local clock offset: 0.325 ms

Remote clock offset: 0.81 ms

Below is generated by plot.py at 2017-12-06 02:47:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 320.40 Mbit/s

95th percentile per-packet one-way delay: 6.295 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 181.35 Mbit/s

95th percentile per-packet one-way delay: 3.515 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 141.02 Mbit/s

95th percentile per-packet one-way delay: 11.217 ms

Loss rate: 0.06%

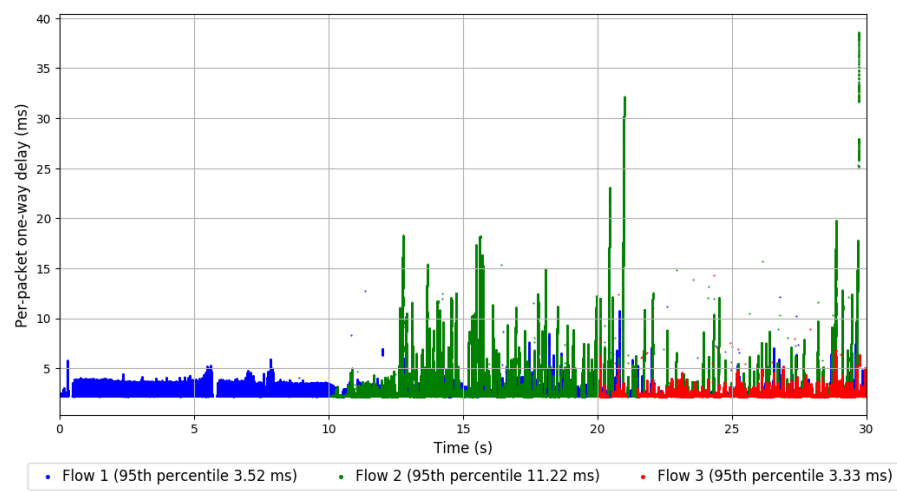
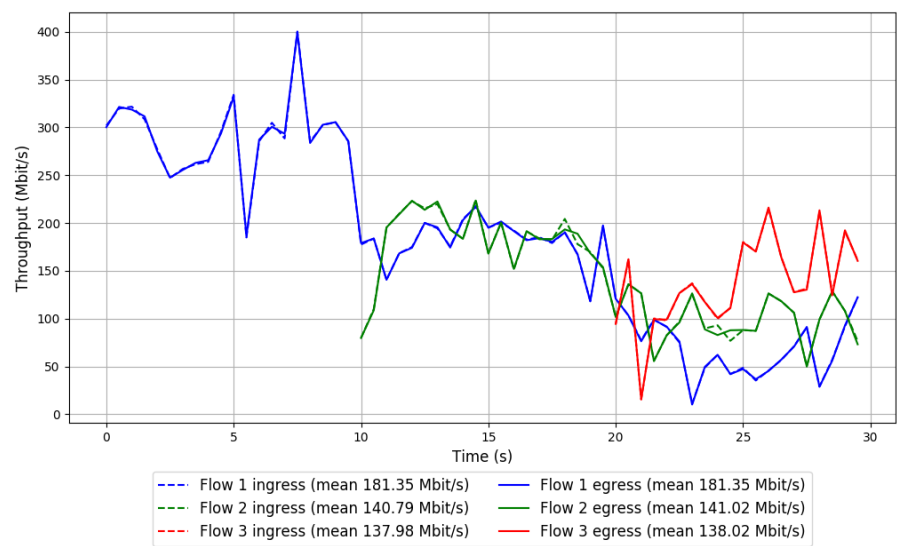
-- Flow 3:

Average throughput: 138.02 Mbit/s

95th percentile per-packet one-way delay: 3.325 ms

Loss rate: 0.06%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-05 20:20:28

End at: 2017-12-05 20:20:58

Local clock offset: 0.439 ms

Remote clock offset: 0.975 ms

Below is generated by plot.py at 2017-12-06 02:47:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 321.38 Mbit/s

95th percentile per-packet one-way delay: 4.671 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 195.45 Mbit/s

95th percentile per-packet one-way delay: 4.637 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 124.47 Mbit/s

95th percentile per-packet one-way delay: 5.270 ms

Loss rate: 0.04%

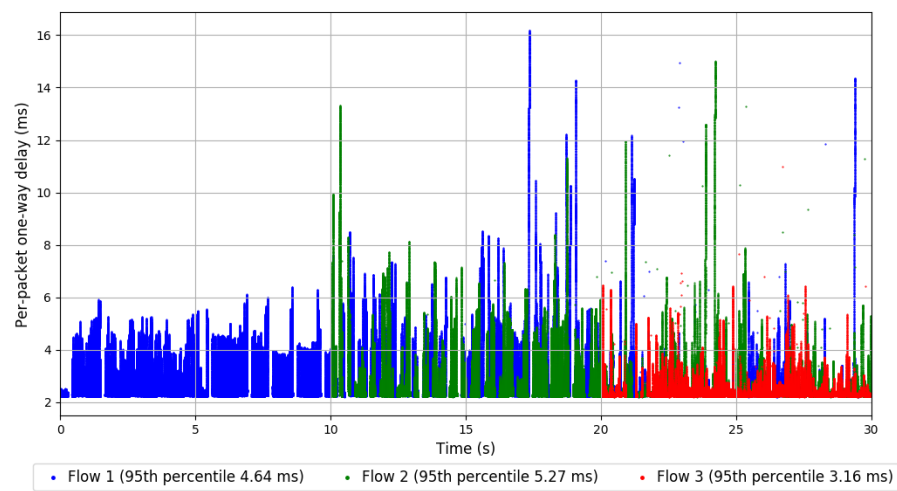
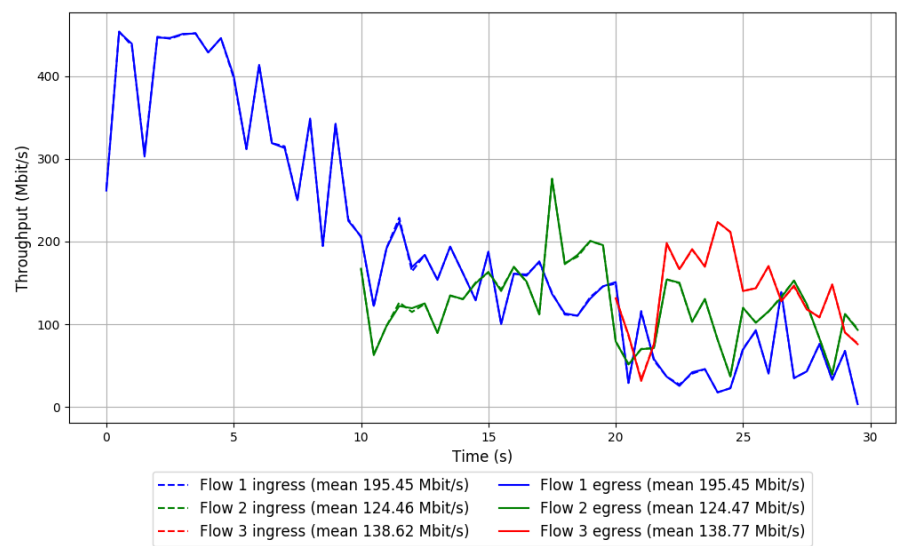
-- Flow 3:

Average throughput: 138.77 Mbit/s

95th percentile per-packet one-way delay: 3.159 ms

Loss rate: 0.04%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-05 20:39:08

End at: 2017-12-05 20:39:38

Local clock offset: 0.505 ms

Remote clock offset: 1.151 ms

Below is generated by plot.py at 2017-12-06 02:47:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.88 Mbit/s

95th percentile per-packet one-way delay: 4.312 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 177.31 Mbit/s

95th percentile per-packet one-way delay: 4.532 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 161.00 Mbit/s

95th percentile per-packet one-way delay: 3.581 ms

Loss rate: 0.00%

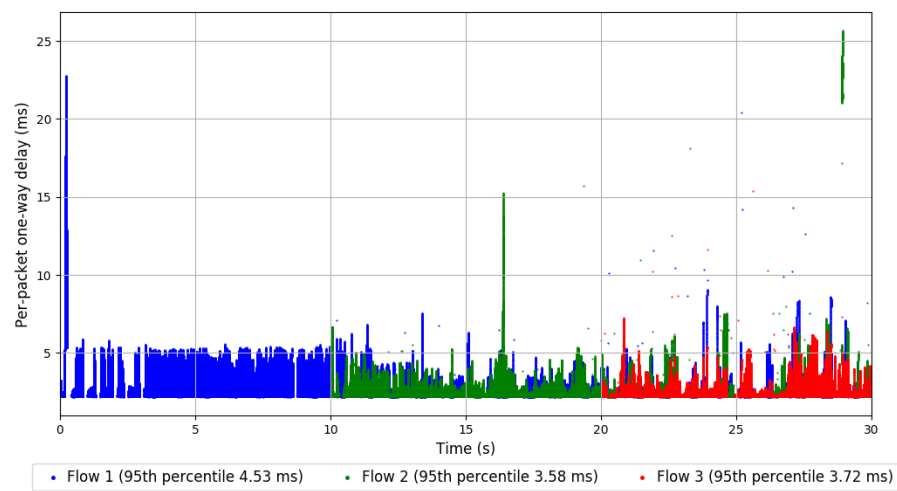
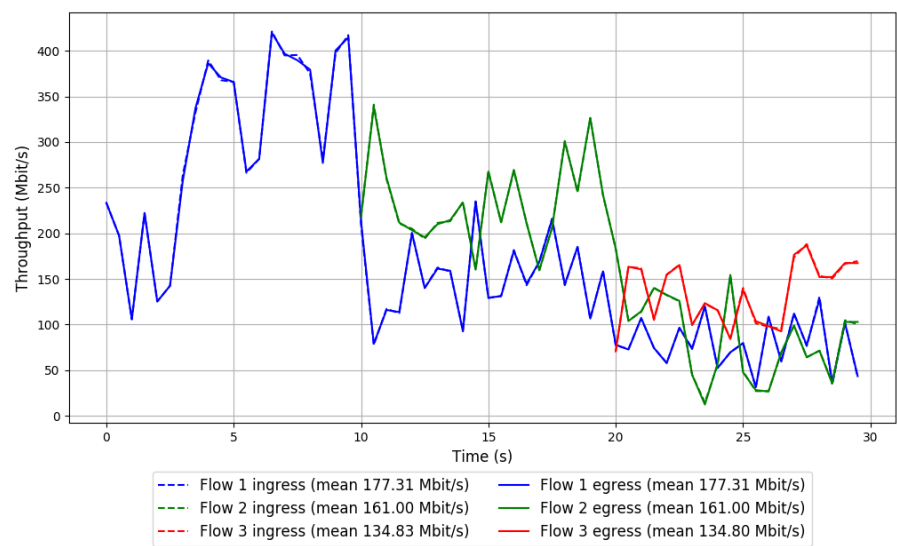
-- Flow 3:

Average throughput: 134.80 Mbit/s

95th percentile per-packet one-way delay: 3.723 ms

Loss rate: 0.09%

Run 6: Report of Verus — Data Link

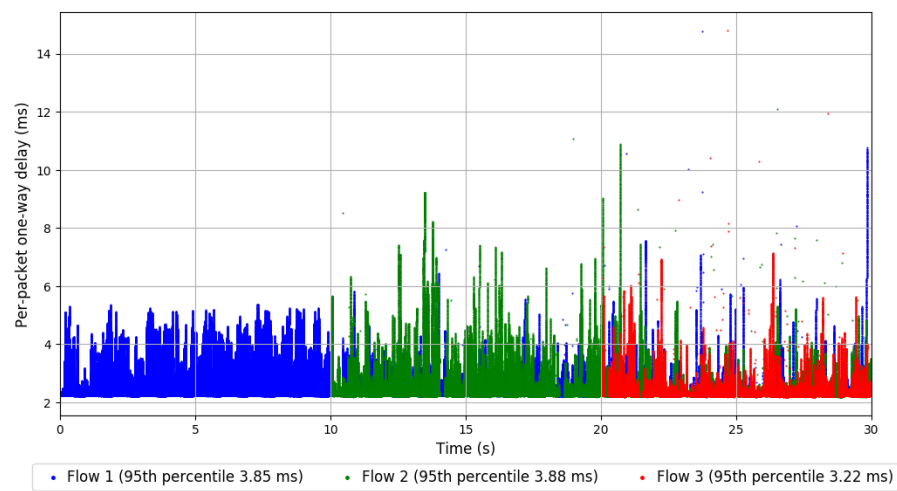
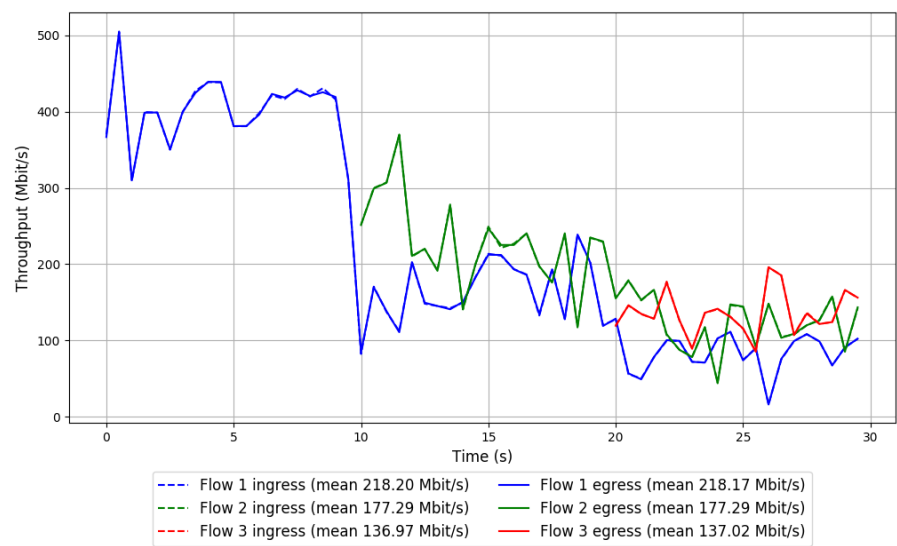


Run 7: Statistics of Verus

Start at: 2017-12-05 20:57:54
End at: 2017-12-05 20:58:24
Local clock offset: 0.625 ms
Remote clock offset: 1.073 ms

Below is generated by plot.py at 2017-12-06 02:48:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 380.77 Mbit/s
95th percentile per-packet one-way delay: 3.798 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 218.17 Mbit/s
95th percentile per-packet one-way delay: 3.849 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 177.29 Mbit/s
95th percentile per-packet one-way delay: 3.884 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 137.02 Mbit/s
95th percentile per-packet one-way delay: 3.224 ms
Loss rate: 0.03%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-05 21:16:23

End at: 2017-12-05 21:16:53

Local clock offset: 0.613 ms

Remote clock offset: 0.959 ms

Below is generated by plot.py at 2017-12-06 02:48:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 375.97 Mbit/s

95th percentile per-packet one-way delay: 3.564 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 203.05 Mbit/s

95th percentile per-packet one-way delay: 3.390 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 197.27 Mbit/s

95th percentile per-packet one-way delay: 3.890 ms

Loss rate: 0.00%

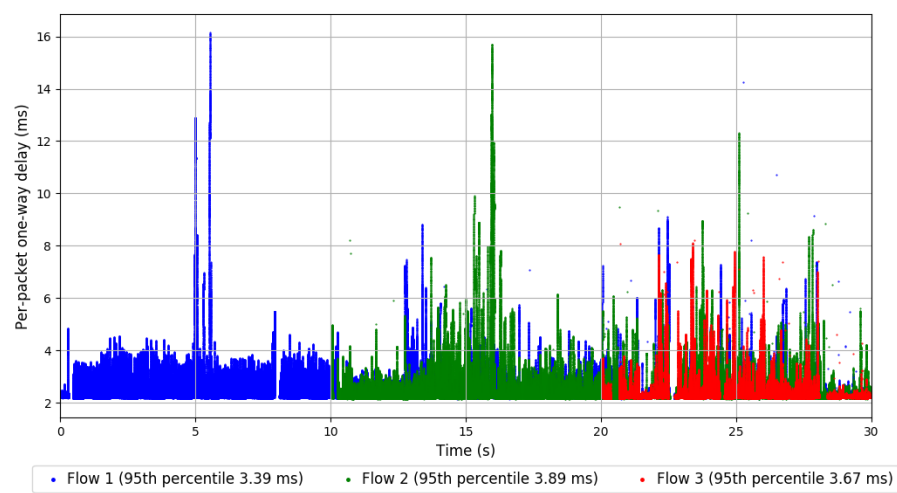
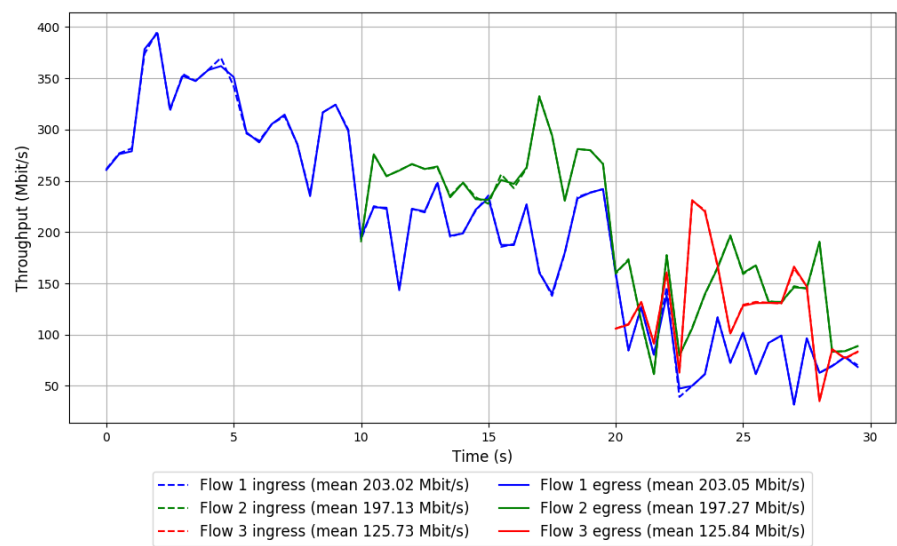
-- Flow 3:

Average throughput: 125.84 Mbit/s

95th percentile per-packet one-way delay: 3.674 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link

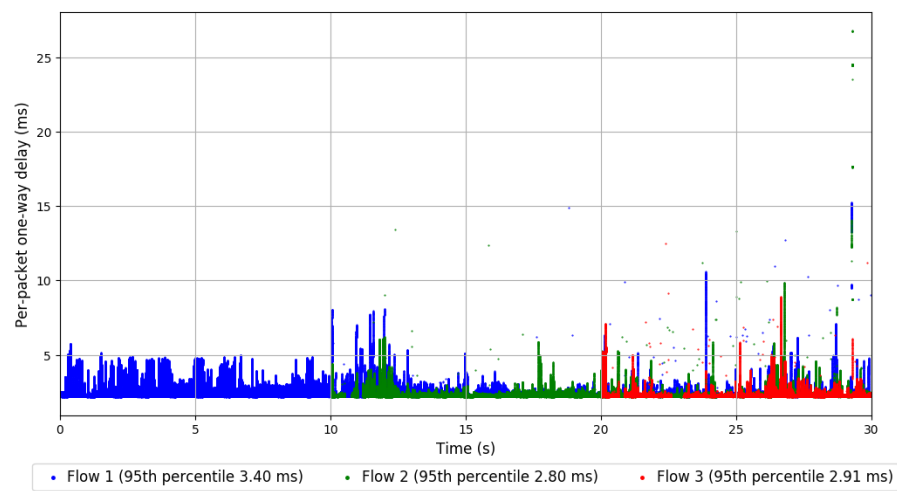
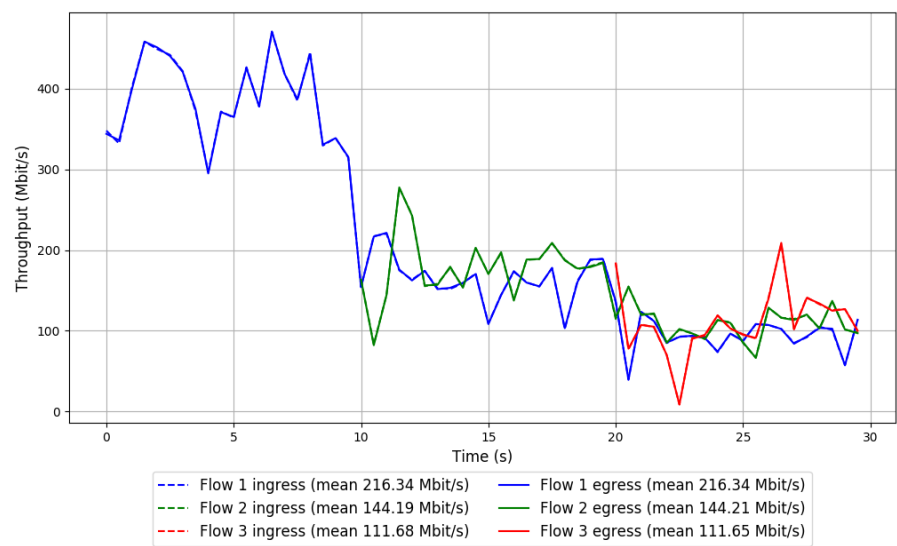


Run 9: Statistics of Verus

Start at: 2017-12-05 21:35:04
End at: 2017-12-05 21:35:34
Local clock offset: 0.579 ms
Remote clock offset: 1.148 ms

Below is generated by plot.py at 2017-12-06 02:48:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 349.40 Mbit/s
95th percentile per-packet one-way delay: 3.188 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 216.34 Mbit/s
95th percentile per-packet one-way delay: 3.405 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 144.21 Mbit/s
95th percentile per-packet one-way delay: 2.804 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 111.65 Mbit/s
95th percentile per-packet one-way delay: 2.910 ms
Loss rate: 0.04%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-05 21:53:52

End at: 2017-12-05 21:54:22

Local clock offset: 0.534 ms

Remote clock offset: 1.354 ms

Below is generated by plot.py at 2017-12-06 02:49:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 359.68 Mbit/s

95th percentile per-packet one-way delay: 9.081 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 210.12 Mbit/s

95th percentile per-packet one-way delay: 7.716 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 154.70 Mbit/s

95th percentile per-packet one-way delay: 15.061 ms

Loss rate: 0.06%

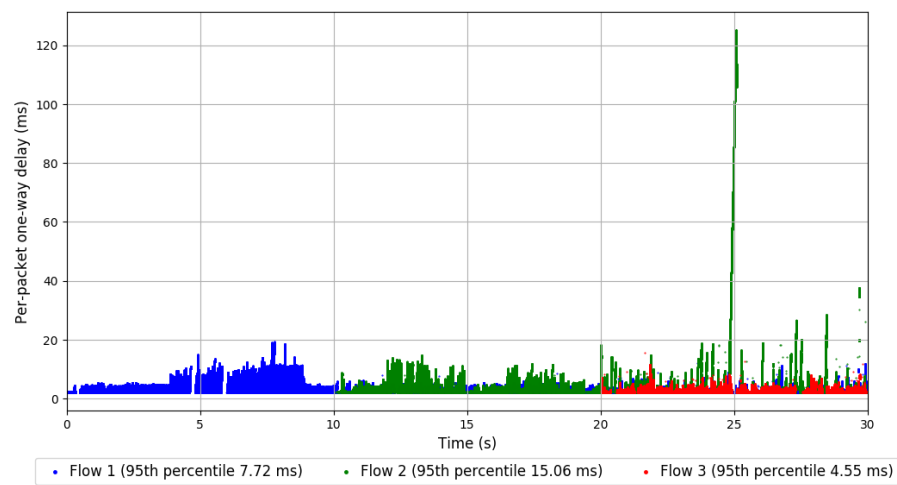
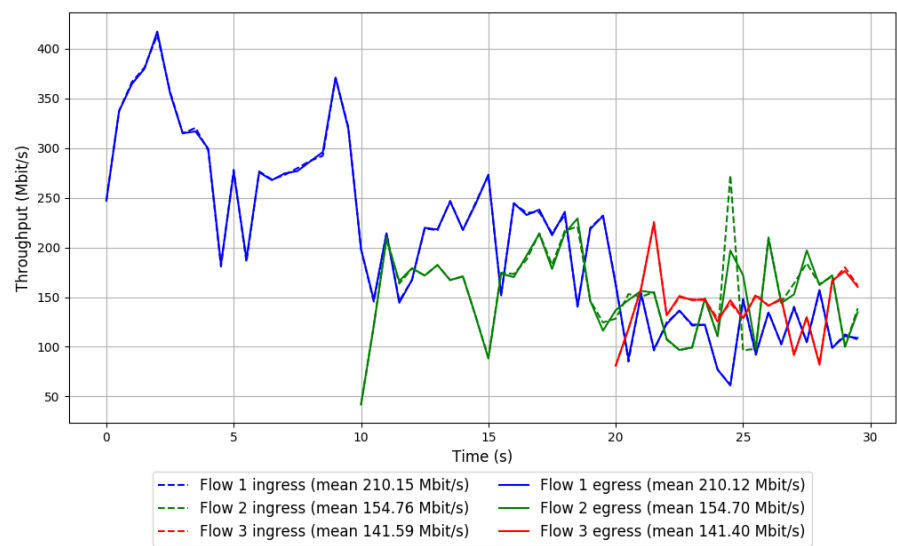
-- Flow 3:

Average throughput: 141.40 Mbit/s

95th percentile per-packet one-way delay: 4.550 ms

Loss rate: 0.18%

Run 10: Report of Verus — Data Link

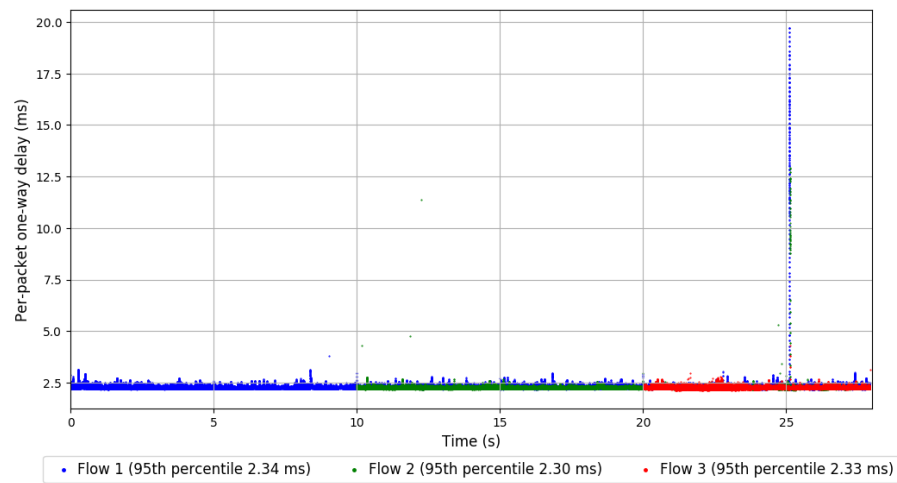
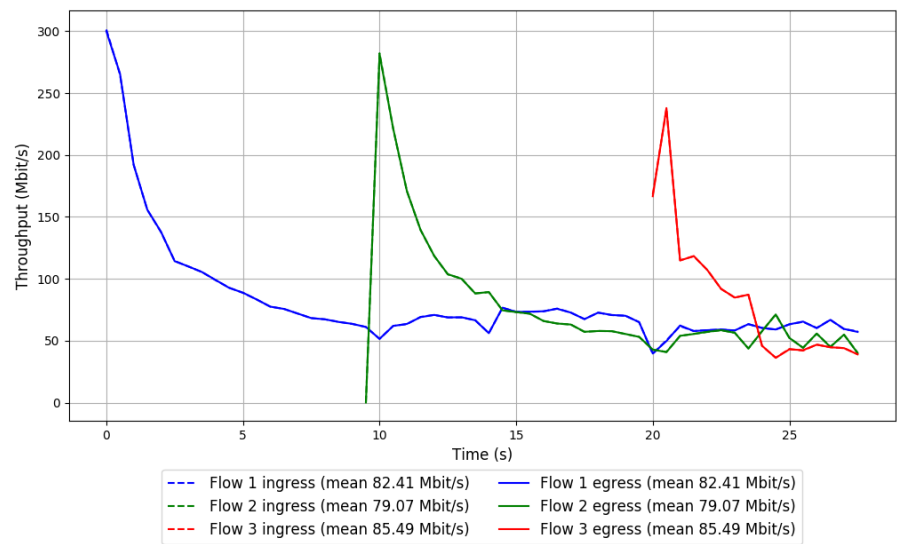


Run 1: Statistics of Copa

Start at: 2017-12-05 19:09:44
End at: 2017-12-05 19:10:14
Local clock offset: -0.042 ms
Remote clock offset: -0.062 ms

Below is generated by plot.py at 2017-12-06 02:49:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 157.34 Mbit/s
95th percentile per-packet one-way delay: 2.324 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 82.41 Mbit/s
95th percentile per-packet one-way delay: 2.343 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 79.07 Mbit/s
95th percentile per-packet one-way delay: 2.303 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 85.49 Mbit/s
95th percentile per-packet one-way delay: 2.326 ms
Loss rate: 0.05%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-05 19:28:25

End at: 2017-12-05 19:28:56

Local clock offset: 0.222 ms

Remote clock offset: 0.359 ms

Below is generated by plot.py at 2017-12-06 02:49:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.28 Mbit/s

95th percentile per-packet one-way delay: 2.359 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 89.57 Mbit/s

95th percentile per-packet one-way delay: 2.324 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 12.36 Mbit/s

95th percentile per-packet one-way delay: 2.366 ms

Loss rate: 0.00%

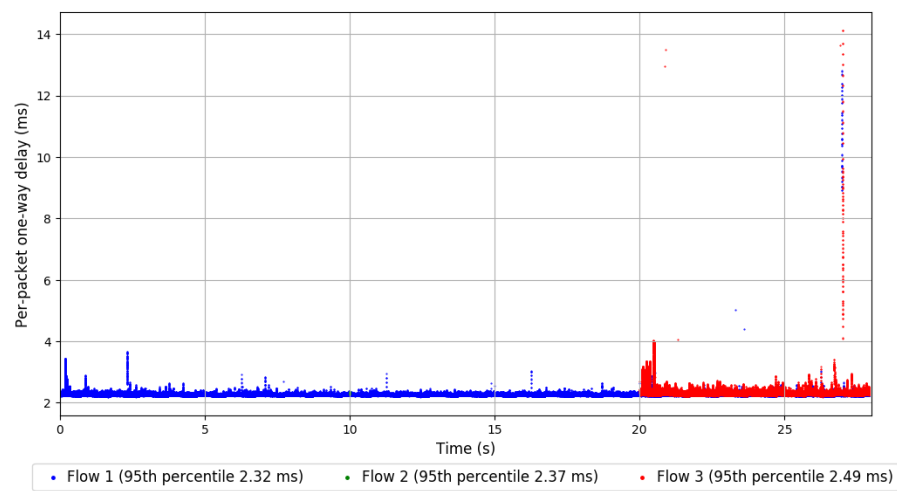
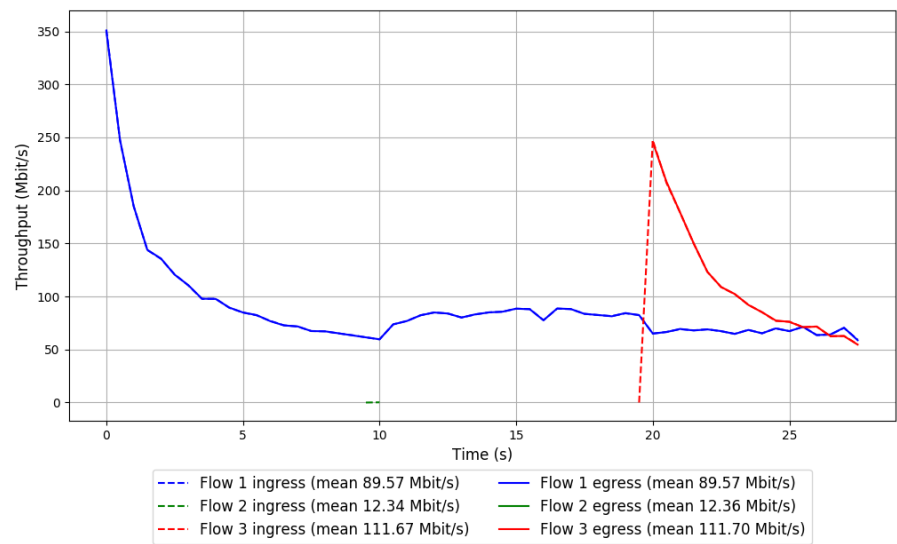
-- Flow 3:

Average throughput: 111.70 Mbit/s

95th percentile per-packet one-way delay: 2.489 ms

Loss rate: 0.03%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-05 19:47:05

End at: 2017-12-05 19:47:35

Local clock offset: 0.343 ms

Remote clock offset: 0.573 ms

Below is generated by plot.py at 2017-12-06 02:50:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 155.01 Mbit/s

95th percentile per-packet one-way delay: 2.412 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 82.71 Mbit/s

95th percentile per-packet one-way delay: 2.414 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 80.66 Mbit/s

95th percentile per-packet one-way delay: 2.412 ms

Loss rate: 0.03%

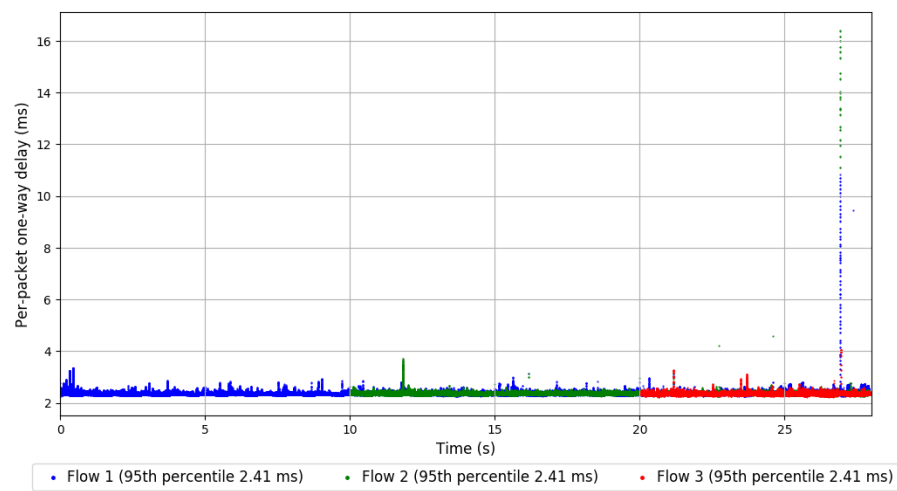
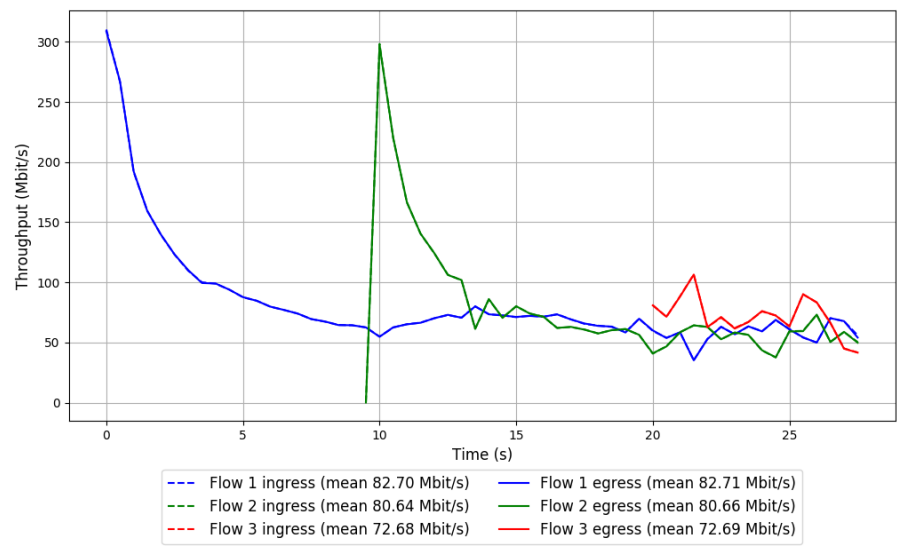
-- Flow 3:

Average throughput: 72.69 Mbit/s

95th percentile per-packet one-way delay: 2.409 ms

Loss rate: 0.04%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-05 20:05:45

End at: 2017-12-05 20:06:15

Local clock offset: 0.315 ms

Remote clock offset: 0.791 ms

Below is generated by plot.py at 2017-12-06 02:51:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.08 Mbit/s

95th percentile per-packet one-way delay: 2.323 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 82.20 Mbit/s

95th percentile per-packet one-way delay: 2.309 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 83.19 Mbit/s

95th percentile per-packet one-way delay: 2.332 ms

Loss rate: 0.02%

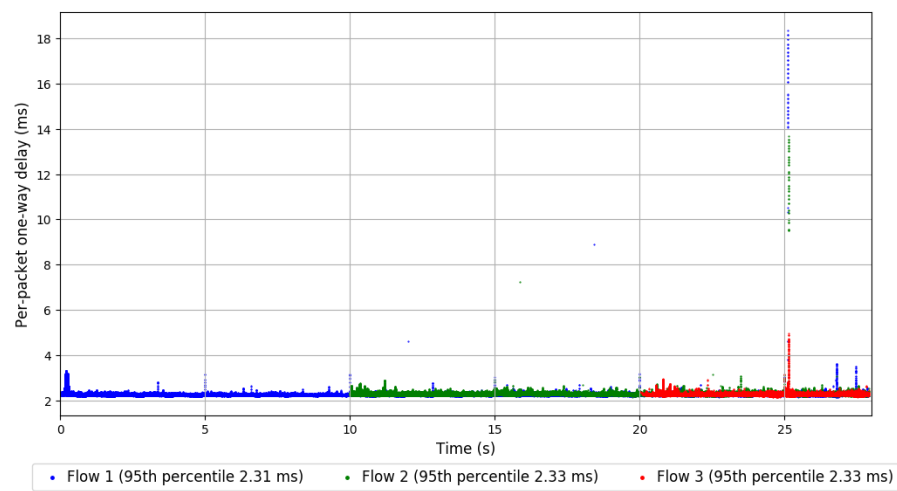
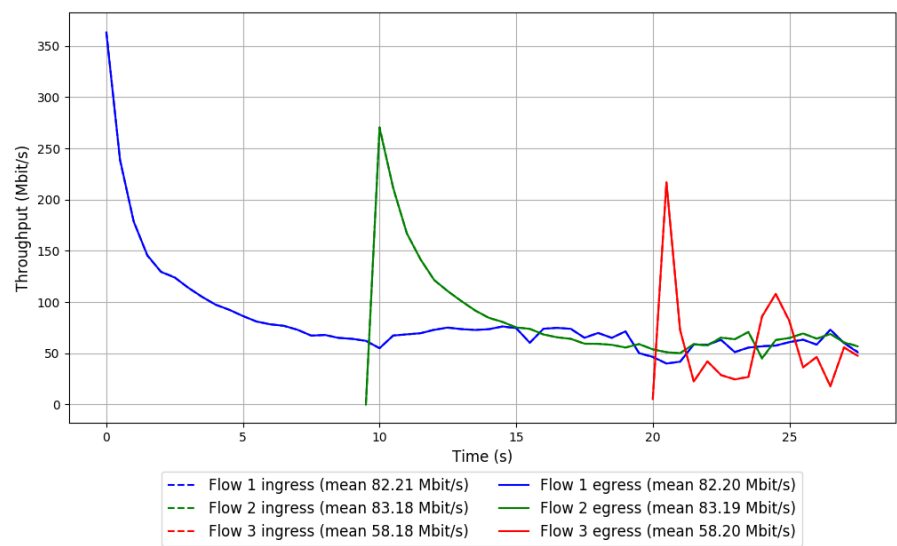
-- Flow 3:

Average throughput: 58.20 Mbit/s

95th percentile per-packet one-way delay: 2.332 ms

Loss rate: 0.02%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-05 20:24:28

End at: 2017-12-05 20:24:58

Local clock offset: 0.461 ms

Remote clock offset: 1.004 ms

Below is generated by plot.py at 2017-12-06 02:51:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 157.42 Mbit/s

95th percentile per-packet one-way delay: 2.323 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 82.14 Mbit/s

95th percentile per-packet one-way delay: 2.320 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 80.33 Mbit/s

95th percentile per-packet one-way delay: 2.333 ms

Loss rate: 0.02%

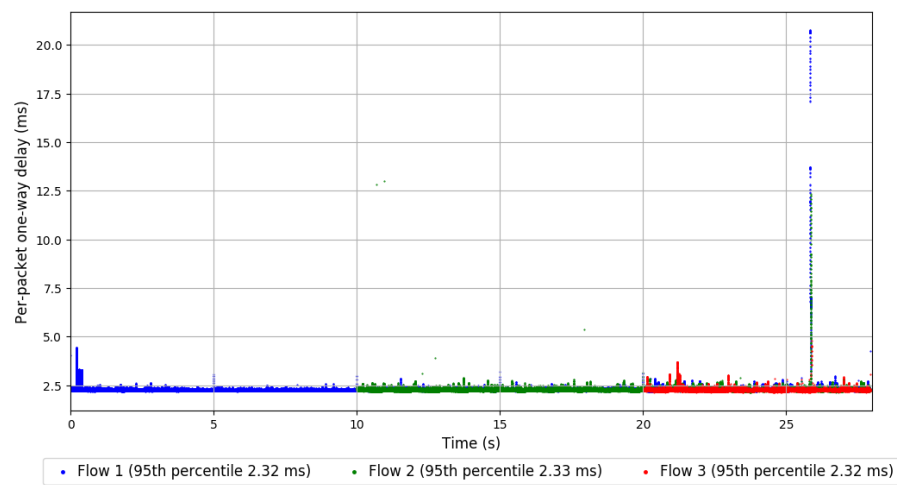
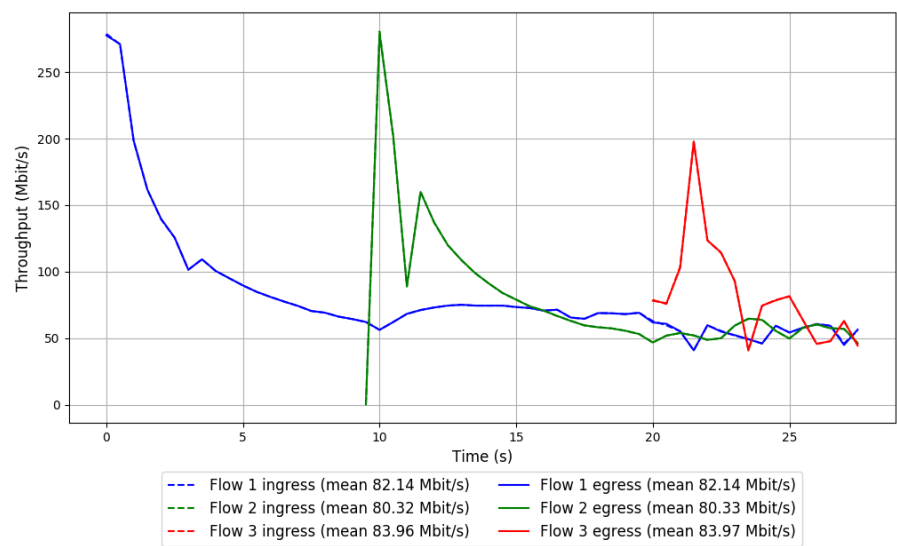
-- Flow 3:

Average throughput: 83.97 Mbit/s

95th percentile per-packet one-way delay: 2.316 ms

Loss rate: 0.03%

Run 5: Report of Copa — Data Link

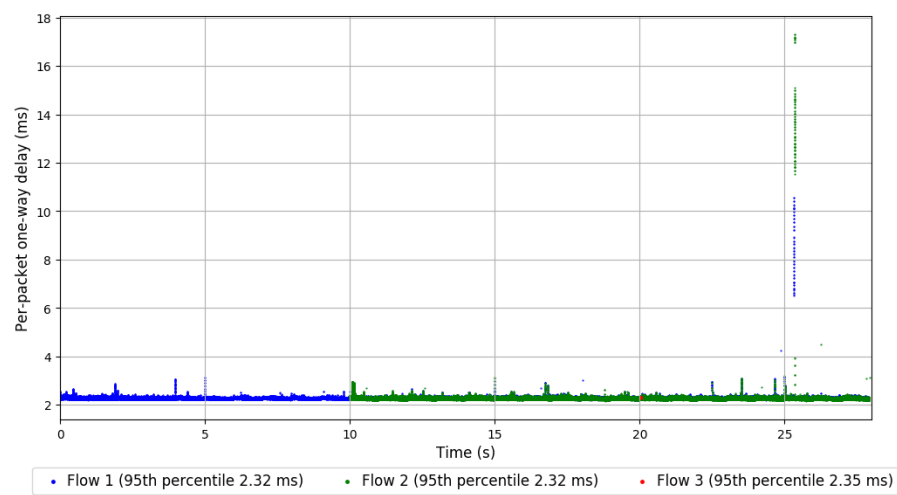
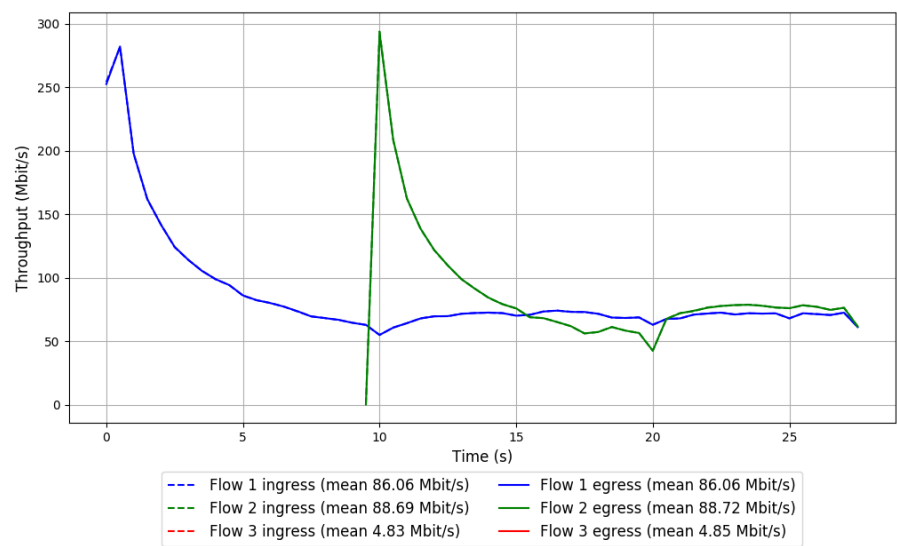


Run 6: Statistics of Copa

Start at: 2017-12-05 20:43:07
End at: 2017-12-05 20:43:37
Local clock offset: 0.563 ms
Remote clock offset: 1.113 ms

```
# Below is generated by plot.py at 2017-12-06 02:51:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 143.03 Mbit/s
95th percentile per-packet one-way delay: 2.319 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 86.06 Mbit/s
95th percentile per-packet one-way delay: 2.320 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 88.72 Mbit/s
95th percentile per-packet one-way delay: 2.317 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 4.85 Mbit/s
95th percentile per-packet one-way delay: 2.348 ms
Loss rate: 0.00%
```

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-05 21:01:53

End at: 2017-12-05 21:02:23

Local clock offset: 0.663 ms

Remote clock offset: 1.035 ms

Below is generated by plot.py at 2017-12-06 02:52:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 159.07 Mbit/s

95th percentile per-packet one-way delay: 2.333 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 82.04 Mbit/s

95th percentile per-packet one-way delay: 2.326 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 81.78 Mbit/s

95th percentile per-packet one-way delay: 2.333 ms

Loss rate: 0.02%

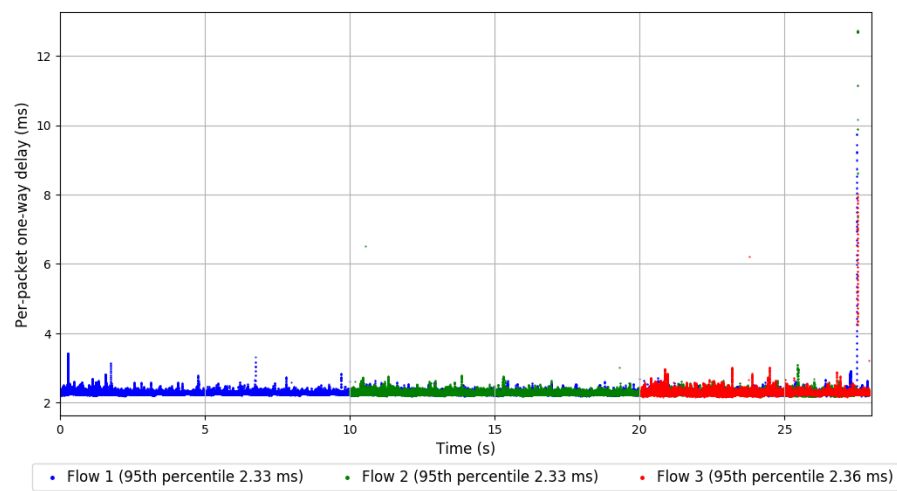
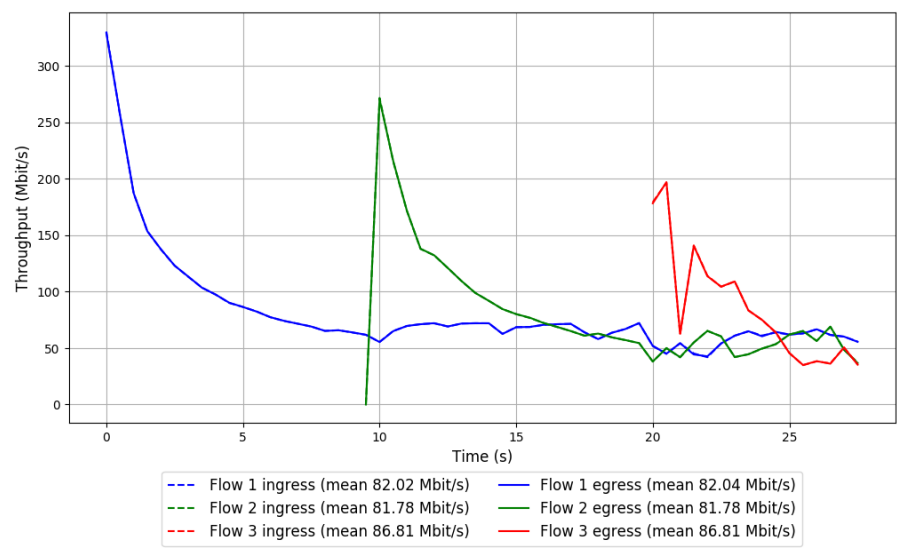
-- Flow 3:

Average throughput: 86.81 Mbit/s

95th percentile per-packet one-way delay: 2.359 ms

Loss rate: 0.04%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-05 21:20:22

End at: 2017-12-05 21:20:52

Local clock offset: 0.678 ms

Remote clock offset: 0.974 ms

Below is generated by plot.py at 2017-12-06 02:52:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 158.62 Mbit/s

95th percentile per-packet one-way delay: 2.374 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 82.53 Mbit/s

95th percentile per-packet one-way delay: 2.375 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 79.80 Mbit/s

95th percentile per-packet one-way delay: 2.370 ms

Loss rate: 0.01%

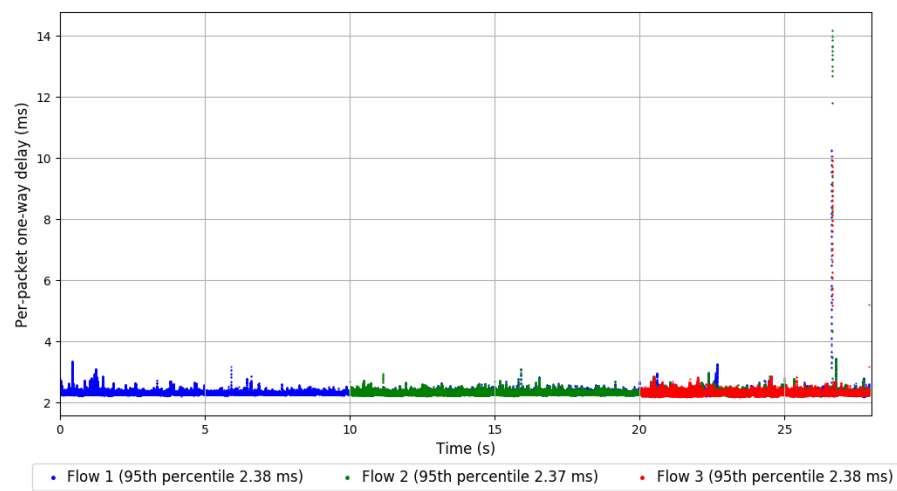
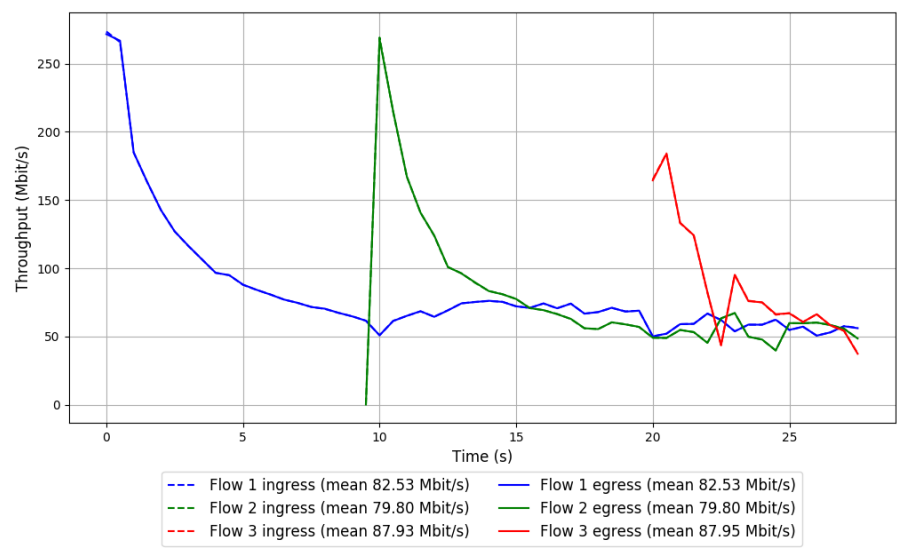
-- Flow 3:

Average throughput: 87.95 Mbit/s

95th percentile per-packet one-way delay: 2.381 ms

Loss rate: 0.03%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-05 21:39:01

End at: 2017-12-05 21:39:31

Local clock offset: 0.556 ms

Remote clock offset: 1.174 ms

Below is generated by plot.py at 2017-12-06 02:52:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.61 Mbit/s

95th percentile per-packet one-way delay: 2.348 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 89.30 Mbit/s

95th percentile per-packet one-way delay: 2.345 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 11.36 Mbit/s

95th percentile per-packet one-way delay: 2.385 ms

Loss rate: 0.00%

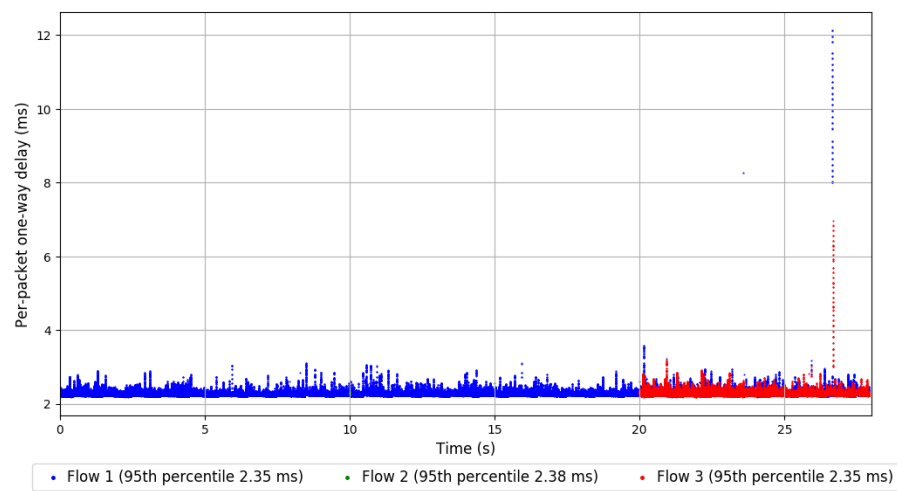
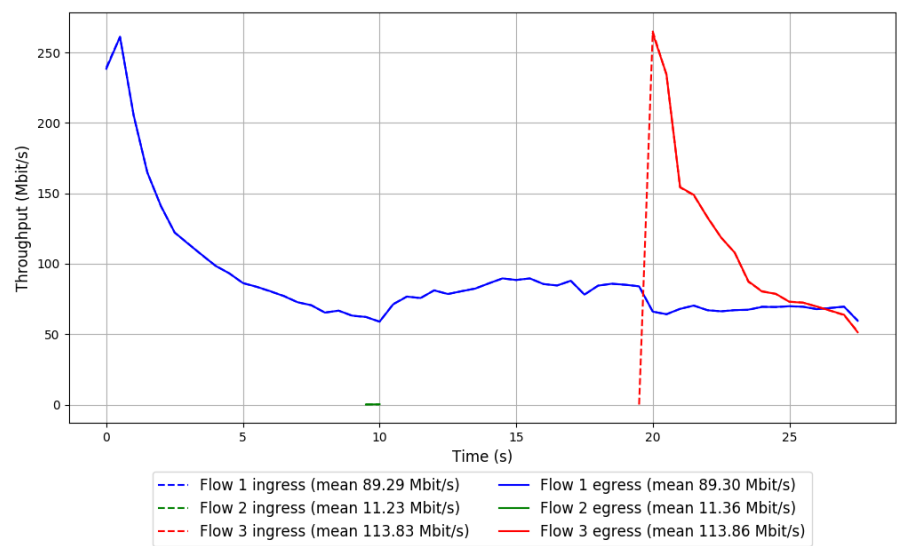
-- Flow 3:

Average throughput: 113.86 Mbit/s

95th percentile per-packet one-way delay: 2.355 ms

Loss rate: 0.03%

Run 9: Report of Copa — Data Link

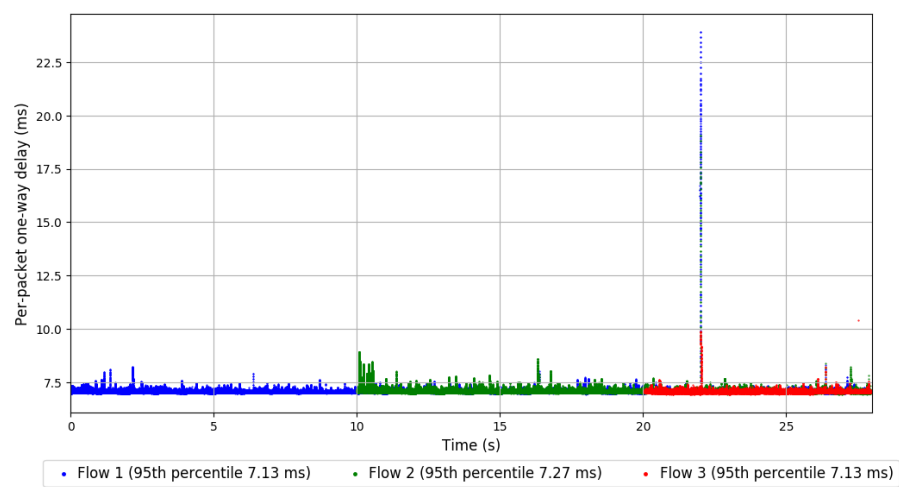
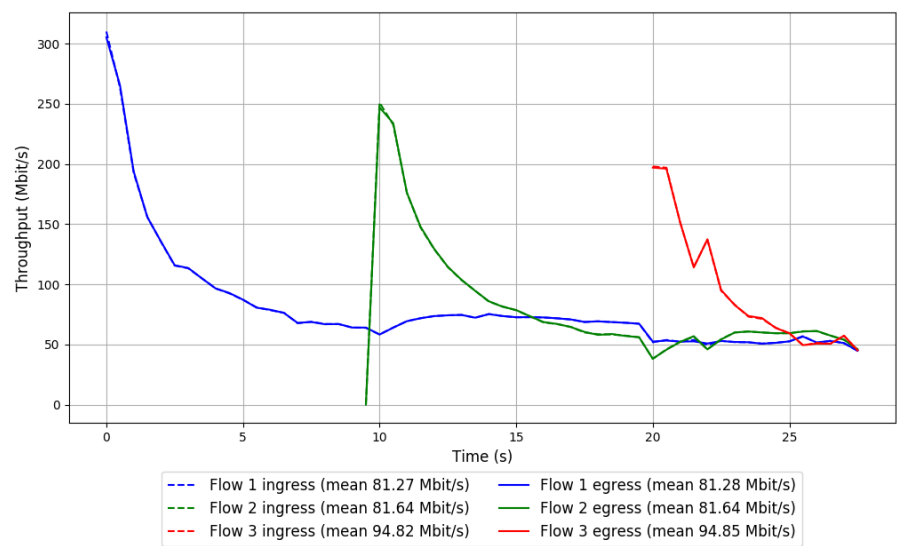


Run 10: Statistics of Copa

Start at: 2017-12-05 21:57:50
End at: 2017-12-05 21:58:20
Local clock offset: 0.633 ms
Remote clock offset: -3.438 ms

Below is generated by plot.py at 2017-12-06 02:53:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 160.49 Mbit/s
95th percentile per-packet one-way delay: 7.167 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 81.28 Mbit/s
95th percentile per-packet one-way delay: 7.135 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 81.64 Mbit/s
95th percentile per-packet one-way delay: 7.272 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 94.85 Mbit/s
95th percentile per-packet one-way delay: 7.128 ms
Loss rate: 0.03%

Run 10: Report of Copa — Data Link

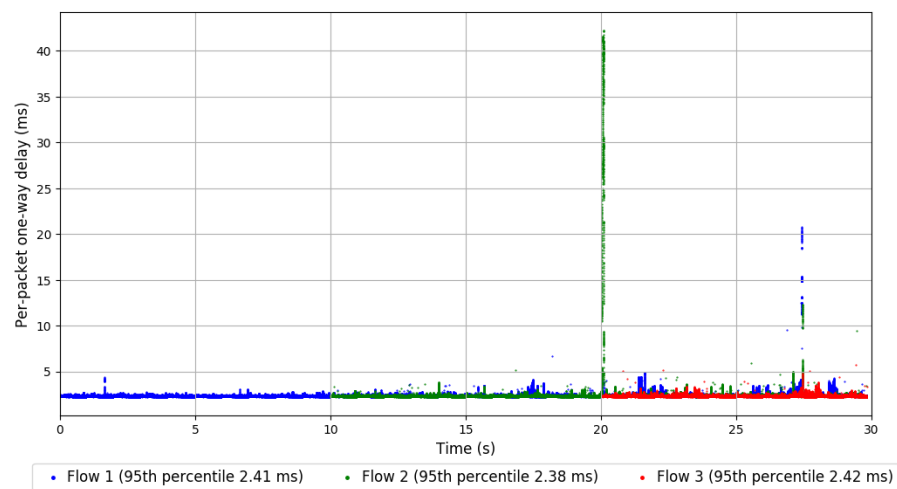
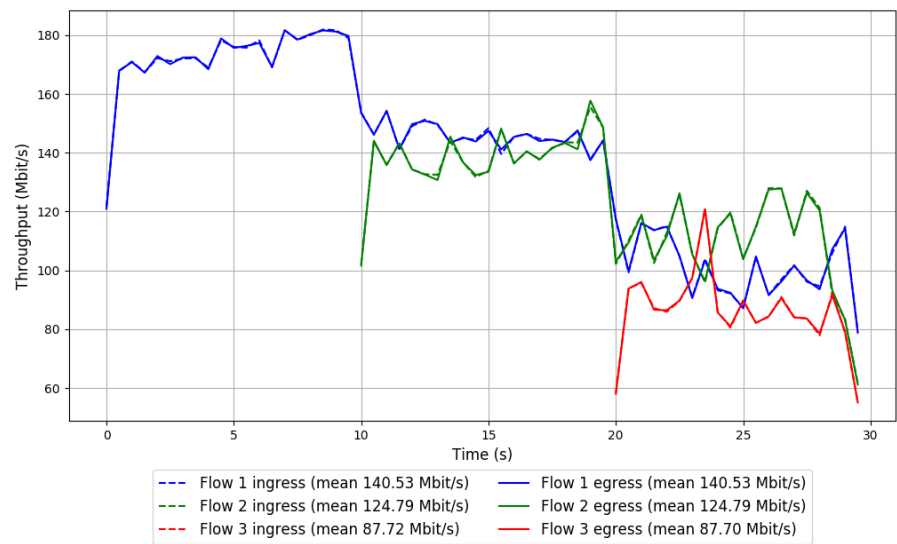


```
Run 1: Statistics of Indigo

Start at: 2017-12-05 19:08:26
End at: 2017-12-05 19:08:56
Local clock offset: 0.025 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2017-12-06 02:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 252.14 Mbit/s
95th percentile per-packet one-way delay: 2.402 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 140.53 Mbit/s
95th percentile per-packet one-way delay: 2.408 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 124.79 Mbit/s
95th percentile per-packet one-way delay: 2.385 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 87.70 Mbit/s
95th percentile per-packet one-way delay: 2.416 ms
Loss rate: 0.02%
```


Run 1: Report of Indigo — Data Link

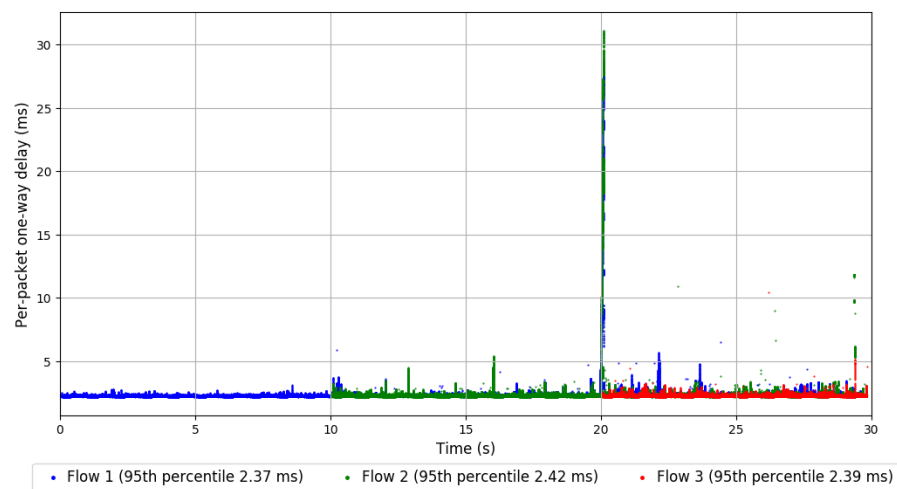
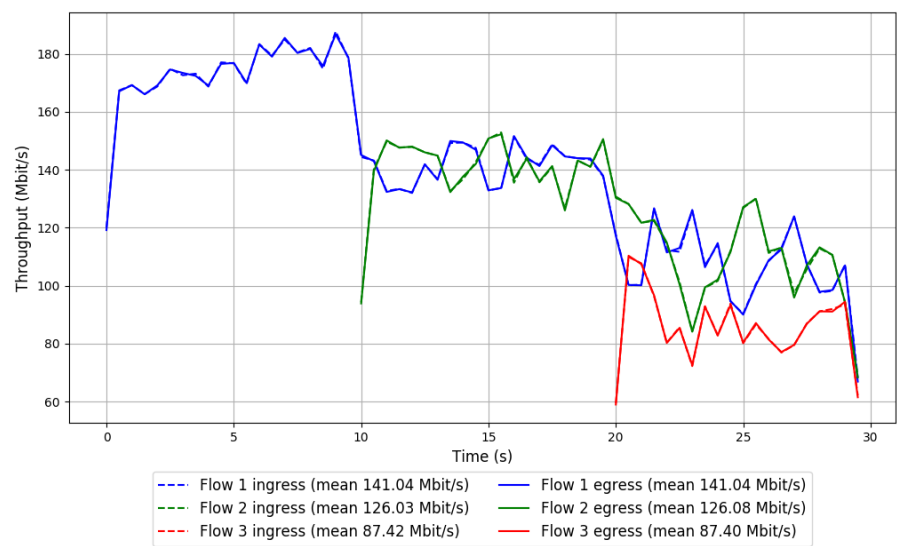


```
Run 2: Statistics of Indigo

Start at: 2017-12-05 19:27:08
End at: 2017-12-05 19:27:38
Local clock offset: 0.173 ms
Remote clock offset: 0.327 ms

# Below is generated by plot.py at 2017-12-06 02:55:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 253.36 Mbit/s
95th percentile per-packet one-way delay: 2.388 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 141.04 Mbit/s
95th percentile per-packet one-way delay: 2.370 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 126.08 Mbit/s
95th percentile per-packet one-way delay: 2.418 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 87.40 Mbit/s
95th percentile per-packet one-way delay: 2.391 ms
Loss rate: 0.04%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-05 19:45:47

End at: 2017-12-05 19:46:17

Local clock offset: 0.302 ms

Remote clock offset: 0.617 ms

Below is generated by plot.py at 2017-12-06 02:55:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 256.08 Mbit/s

95th percentile per-packet one-way delay: 2.380 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 143.19 Mbit/s

95th percentile per-packet one-way delay: 2.366 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 121.47 Mbit/s

95th percentile per-packet one-way delay: 2.406 ms

Loss rate: 0.01%

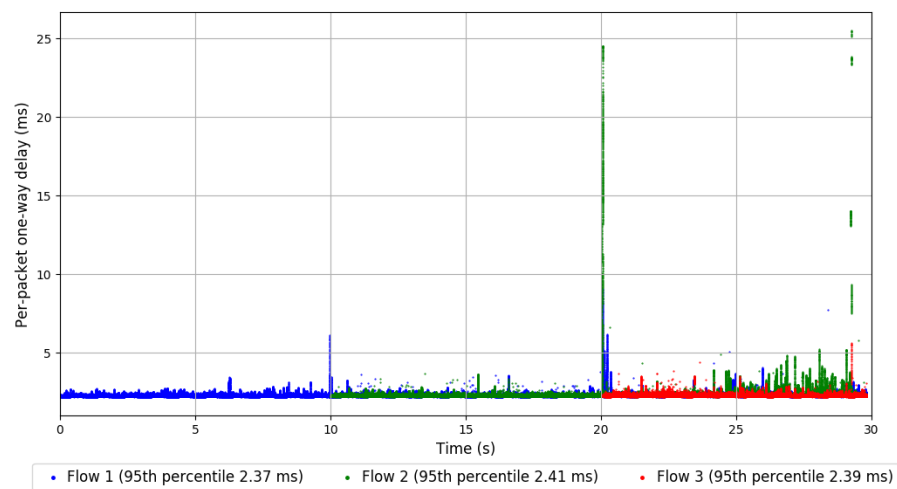
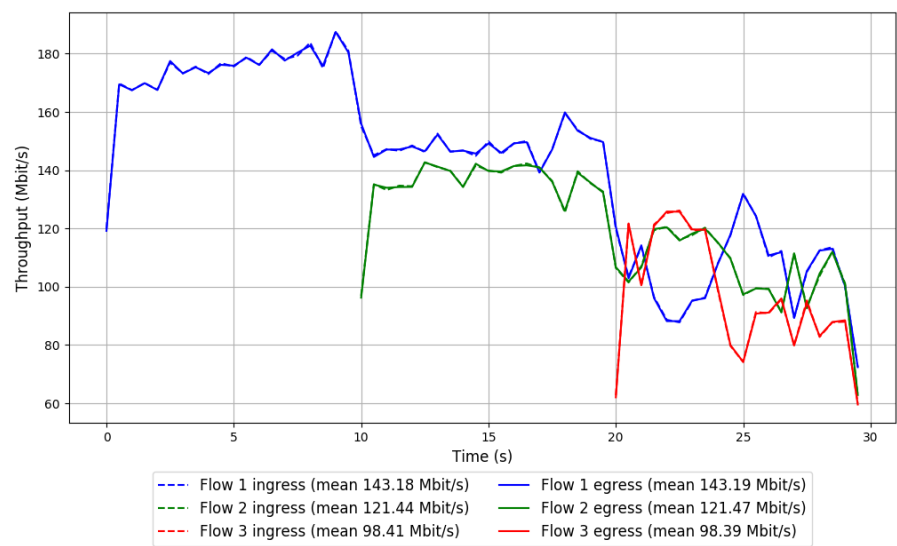
-- Flow 3:

Average throughput: 98.39 Mbit/s

95th percentile per-packet one-way delay: 2.388 ms

Loss rate: 0.03%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-05 20:04:31

End at: 2017-12-05 20:05:01

Local clock offset: 0.379 ms

Remote clock offset: 0.855 ms

Below is generated by plot.py at 2017-12-06 02:55:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.55 Mbit/s

95th percentile per-packet one-way delay: 2.364 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 44.98 Mbit/s

95th percentile per-packet one-way delay: 2.341 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 146.01 Mbit/s

95th percentile per-packet one-way delay: 2.369 ms

Loss rate: 0.03%

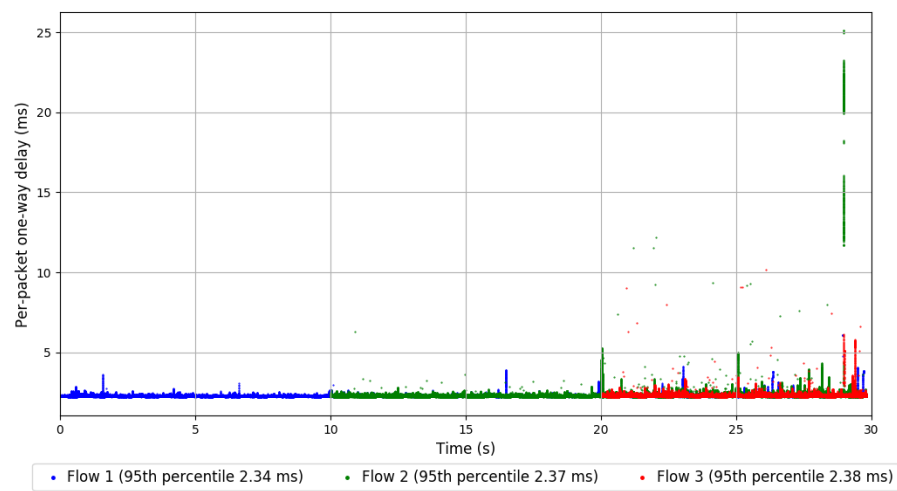
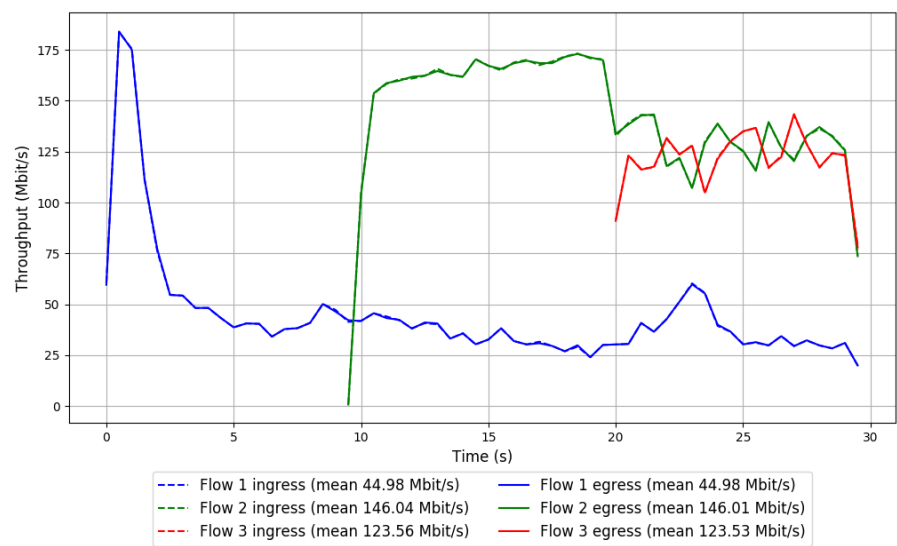
-- Flow 3:

Average throughput: 123.53 Mbit/s

95th percentile per-packet one-way delay: 2.380 ms

Loss rate: 0.06%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-05 20:23:10

End at: 2017-12-05 20:23:40

Local clock offset: 0.378 ms

Remote clock offset: 0.917 ms

Below is generated by plot.py at 2017-12-06 02:55:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 251.72 Mbit/s

95th percentile per-packet one-way delay: 2.380 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 141.03 Mbit/s

95th percentile per-packet one-way delay: 2.369 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 122.29 Mbit/s

95th percentile per-packet one-way delay: 2.394 ms

Loss rate: 0.03%

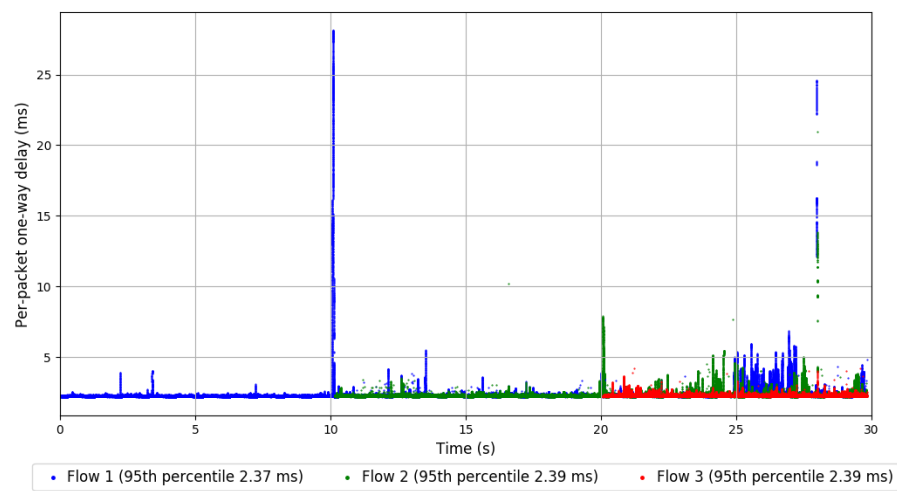
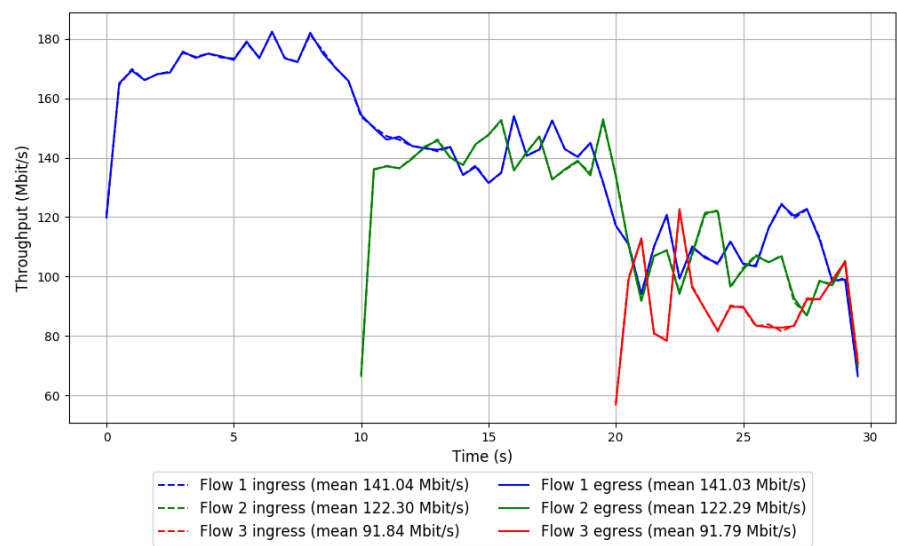
-- Flow 3:

Average throughput: 91.79 Mbit/s

95th percentile per-packet one-way delay: 2.386 ms

Loss rate: 0.09%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-05 20:41:49

End at: 2017-12-05 20:42:19

Local clock offset: 0.528 ms

Remote clock offset: 1.058 ms

Below is generated by plot.py at 2017-12-06 02:56:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 255.33 Mbit/s

95th percentile per-packet one-way delay: 2.402 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 143.53 Mbit/s

95th percentile per-packet one-way delay: 2.371 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 126.05 Mbit/s

95th percentile per-packet one-way delay: 2.433 ms

Loss rate: 0.03%

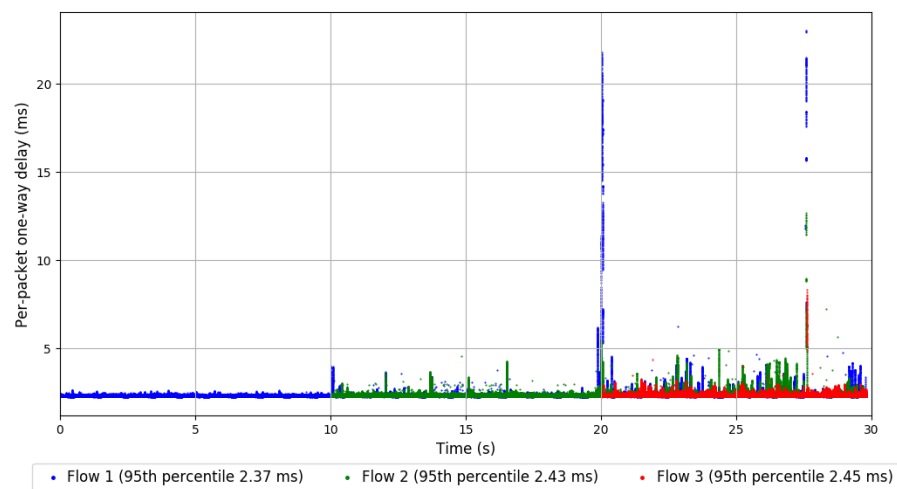
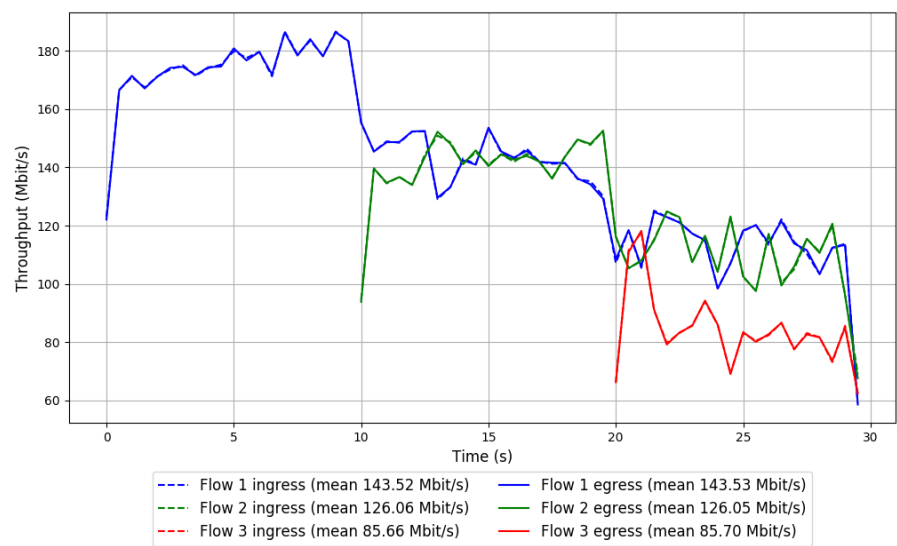
-- Flow 3:

Average throughput: 85.70 Mbit/s

95th percentile per-packet one-way delay: 2.454 ms

Loss rate: 0.04%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-05 21:00:36

End at: 2017-12-05 21:01:06

Local clock offset: 0.642 ms

Remote clock offset: 1.065 ms

Below is generated by plot.py at 2017-12-06 02:56:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 252.41 Mbit/s

95th percentile per-packet one-way delay: 2.365 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 142.24 Mbit/s

95th percentile per-packet one-way delay: 2.333 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 123.45 Mbit/s

95th percentile per-packet one-way delay: 2.413 ms

Loss rate: 0.01%

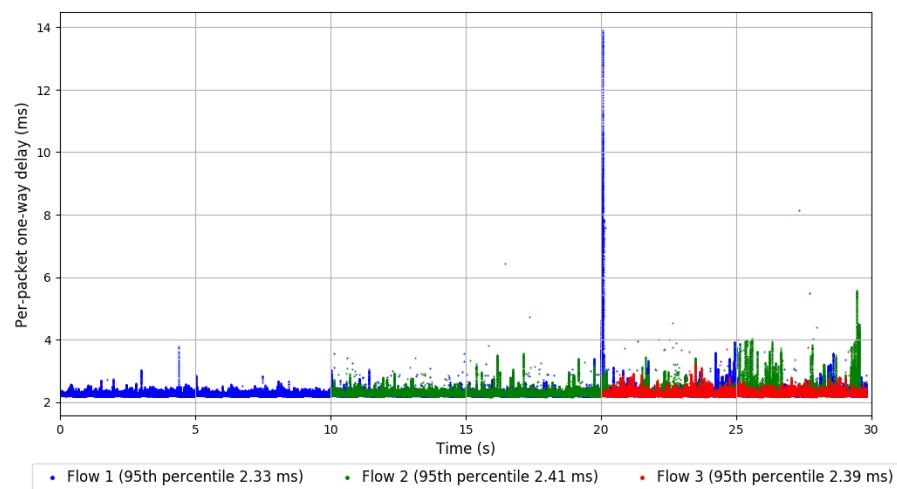
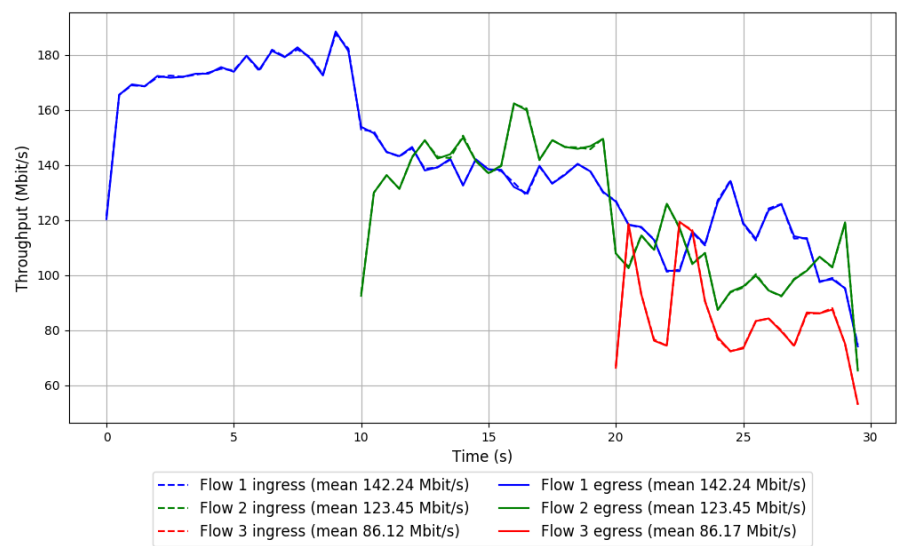
-- Flow 3:

Average throughput: 86.17 Mbit/s

95th percentile per-packet one-way delay: 2.394 ms

Loss rate: 0.02%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-05 21:19:05

End at: 2017-12-05 21:19:35

Local clock offset: 0.636 ms

Remote clock offset: 0.899 ms

Below is generated by plot.py at 2017-12-06 02:57:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 250.13 Mbit/s

95th percentile per-packet one-way delay: 2.445 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 138.03 Mbit/s

95th percentile per-packet one-way delay: 2.451 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 123.28 Mbit/s

95th percentile per-packet one-way delay: 2.406 ms

Loss rate: 0.03%

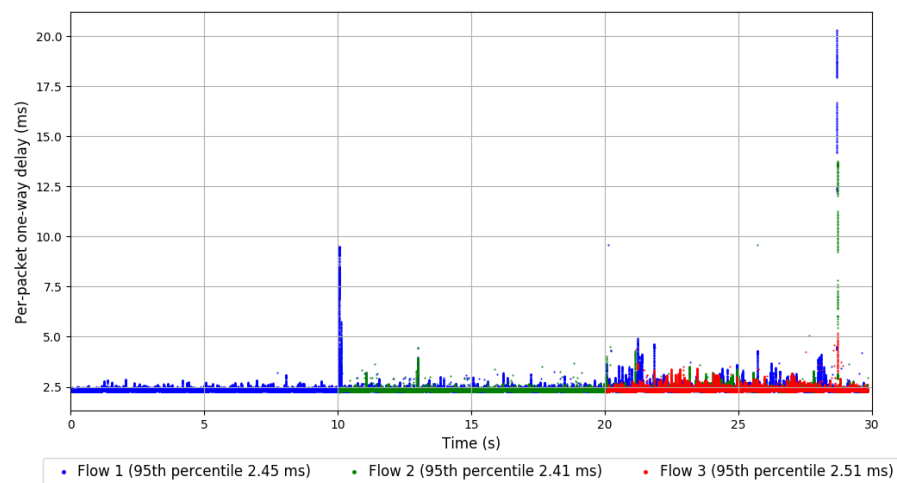
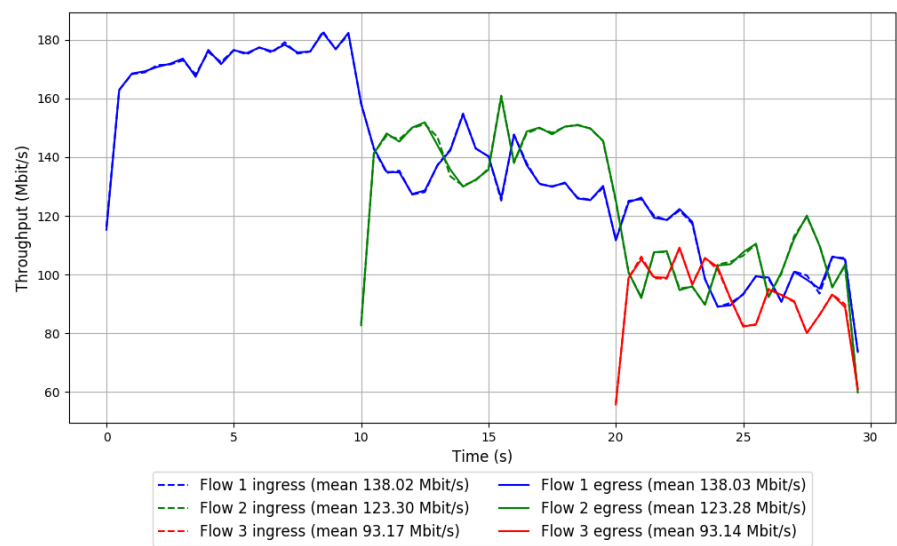
-- Flow 3:

Average throughput: 93.14 Mbit/s

95th percentile per-packet one-way delay: 2.507 ms

Loss rate: 0.07%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-05 21:37:44

End at: 2017-12-05 21:38:14

Local clock offset: 0.524 ms

Remote clock offset: 1.165 ms

Below is generated by plot.py at 2017-12-06 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 252.85 Mbit/s

95th percentile per-packet one-way delay: 2.339 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 143.02 Mbit/s

95th percentile per-packet one-way delay: 2.276 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 121.60 Mbit/s

95th percentile per-packet one-way delay: 2.423 ms

Loss rate: 0.03%

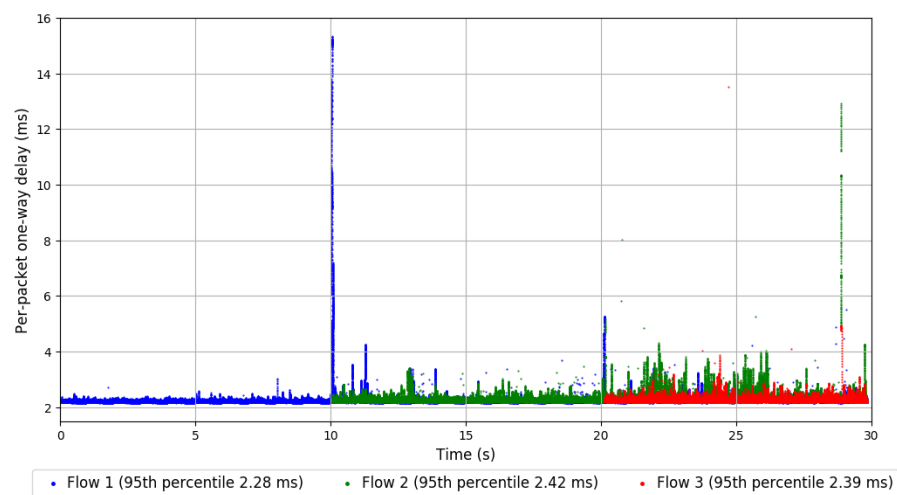
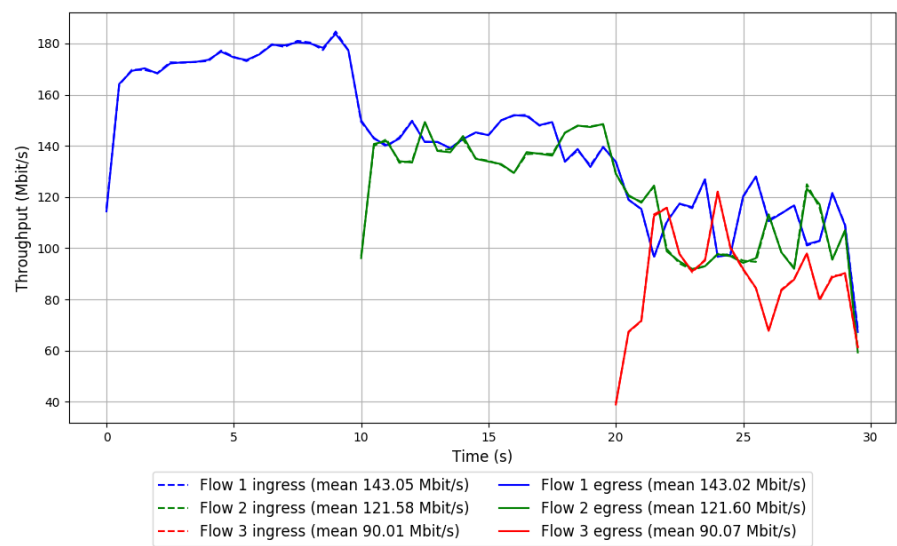
-- Flow 3:

Average throughput: 90.07 Mbit/s

95th percentile per-packet one-way delay: 2.388 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-05 21:56:33

End at: 2017-12-05 21:57:03

Local clock offset: 0.642 ms

Remote clock offset: 1.346 ms

Below is generated by plot.py at 2017-12-06 02:58:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 237.09 Mbit/s

95th percentile per-packet one-way delay: 2.411 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 148.83 Mbit/s

95th percentile per-packet one-way delay: 2.412 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 76.58 Mbit/s

95th percentile per-packet one-way delay: 2.369 ms

Loss rate: 0.02%

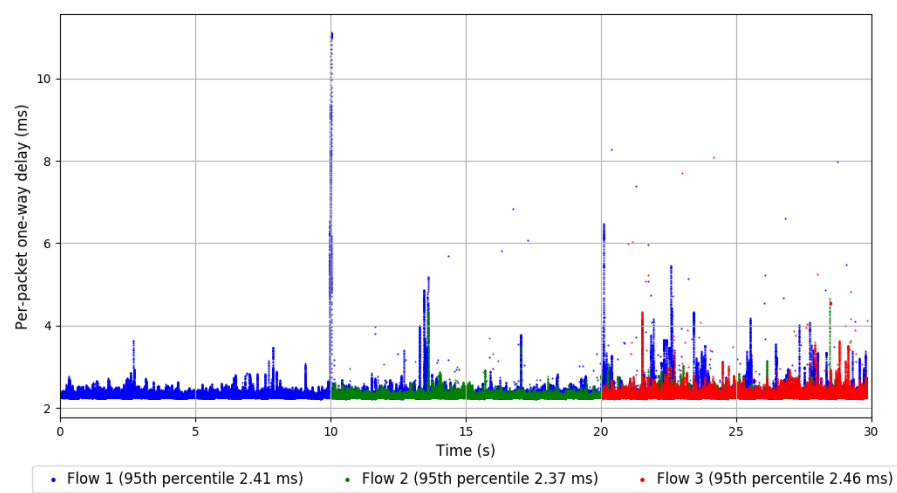
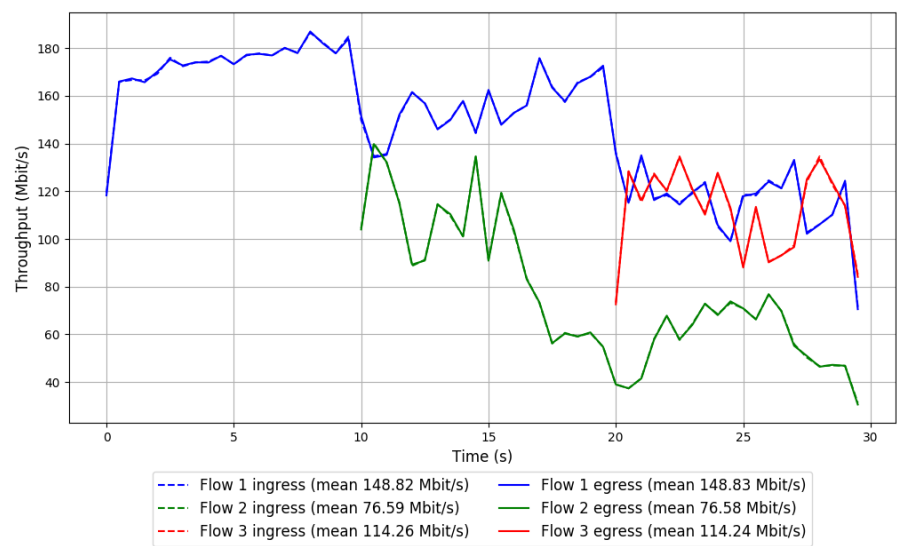
-- Flow 3:

Average throughput: 114.24 Mbit/s

95th percentile per-packet one-way delay: 2.456 ms

Loss rate: 0.06%

Run 10: Report of Indigo — Data Link

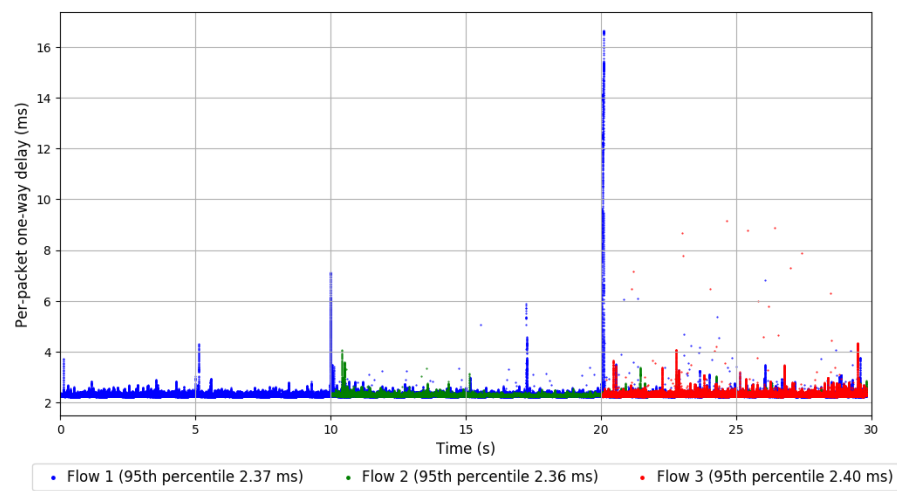
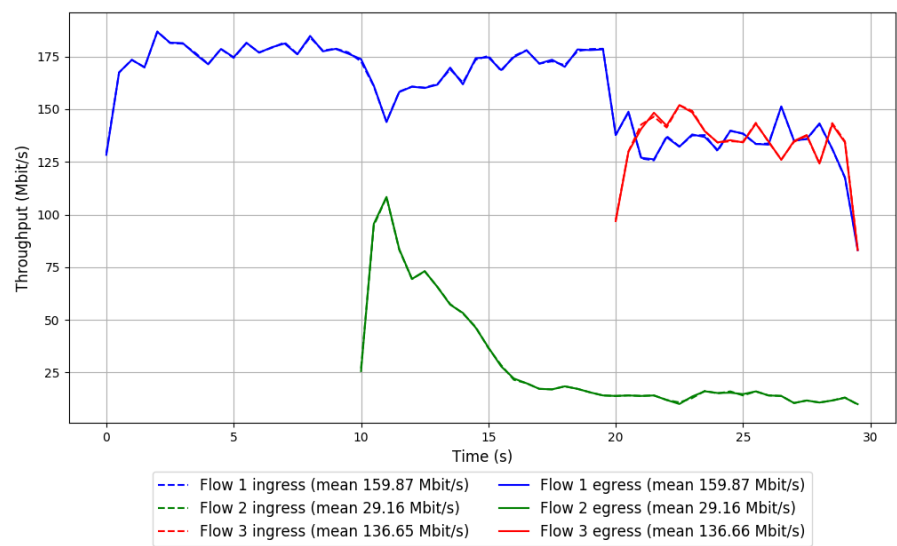


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-05 18:58:15
End at: 2017-12-05 18:58:45
Local clock offset: -0.08 ms
Remote clock offset: -0.192 ms

# Below is generated by plot.py at 2017-12-06 02:58:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 223.85 Mbit/s
95th percentile per-packet one-way delay: 2.375 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 159.87 Mbit/s
95th percentile per-packet one-way delay: 2.368 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 29.16 Mbit/s
95th percentile per-packet one-way delay: 2.360 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 136.66 Mbit/s
95th percentile per-packet one-way delay: 2.405 ms
Loss rate: 0.05%
```

Run 1: Report of Indigo-calib — Data Link



Run 2: Statistics of Indigo-calib

Start at: 2017-12-05 19:17:03

End at: 2017-12-05 19:17:33

Local clock offset: 0.117 ms

Remote clock offset: 0.143 ms

Below is generated by plot.py at 2017-12-06 02:59:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 255.00 Mbit/s

95th percentile per-packet one-way delay: 2.397 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 142.67 Mbit/s

95th percentile per-packet one-way delay: 2.399 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 121.36 Mbit/s

95th percentile per-packet one-way delay: 2.383 ms

Loss rate: 0.02%

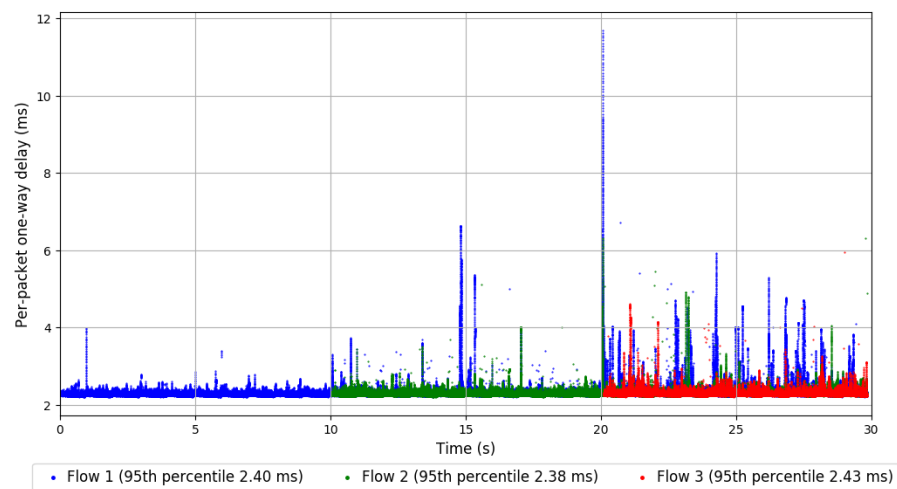
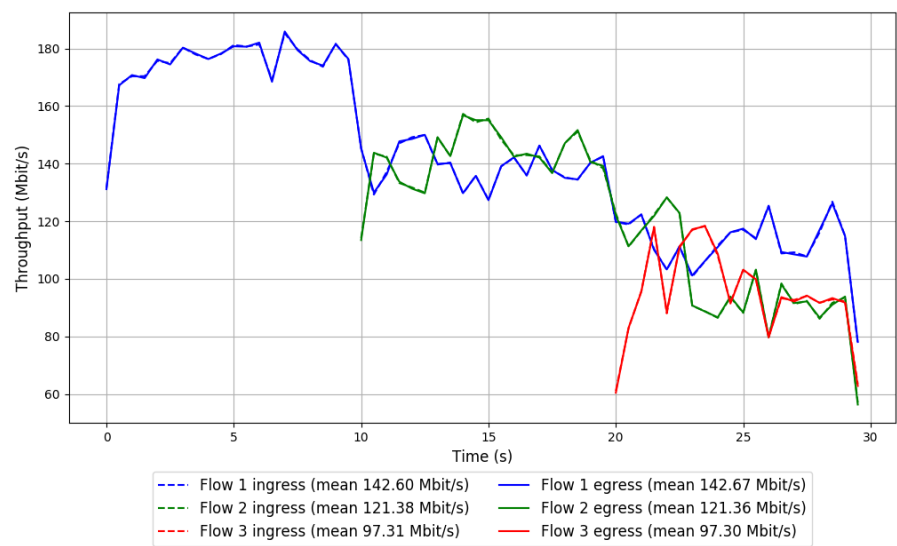
-- Flow 3:

Average throughput: 97.30 Mbit/s

95th percentile per-packet one-way delay: 2.426 ms

Loss rate: 0.07%

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-12-05 19:35:43

End at: 2017-12-05 19:36:13

Local clock offset: 0.171 ms

Remote clock offset: 0.481 ms

Below is generated by plot.py at 2017-12-06 02:59:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 256.36 Mbit/s

95th percentile per-packet one-way delay: 2.300 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 142.55 Mbit/s

95th percentile per-packet one-way delay: 2.265 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 120.87 Mbit/s

95th percentile per-packet one-way delay: 2.299 ms

Loss rate: 0.08%

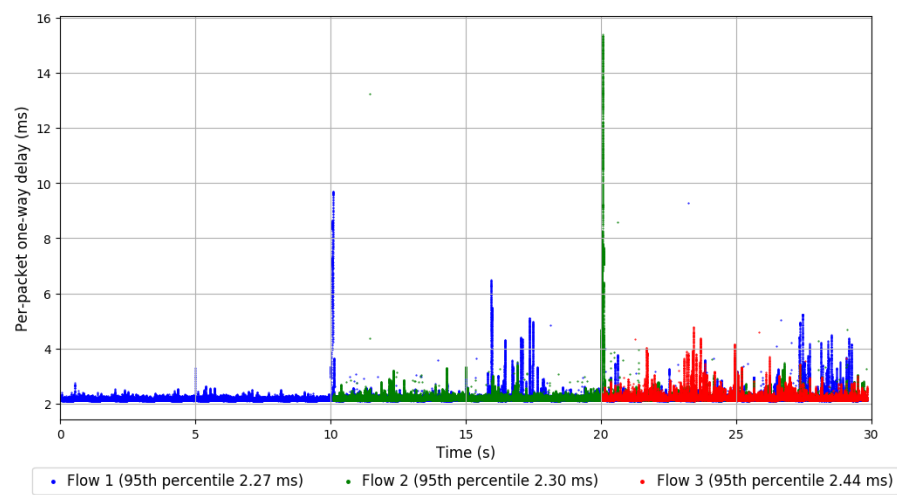
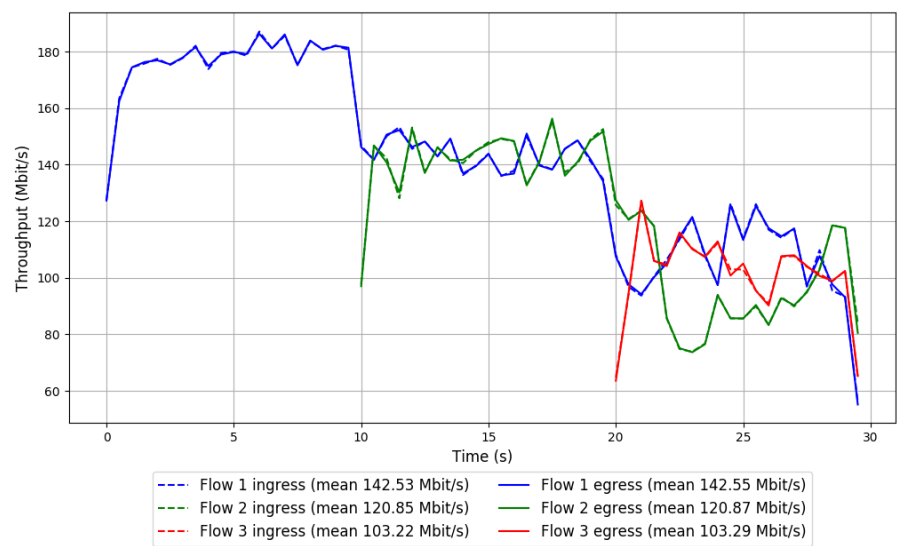
-- Flow 3:

Average throughput: 103.29 Mbit/s

95th percentile per-packet one-way delay: 2.445 ms

Loss rate: 0.00%

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-05 19:54:23

End at: 2017-12-05 19:54:53

Local clock offset: 0.251 ms

Remote clock offset: 0.66 ms

Below is generated by plot.py at 2017-12-06 03:00:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 258.85 Mbit/s

95th percentile per-packet one-way delay: 2.388 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 140.75 Mbit/s

95th percentile per-packet one-way delay: 2.357 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 124.87 Mbit/s

95th percentile per-packet one-way delay: 2.407 ms

Loss rate: 0.03%

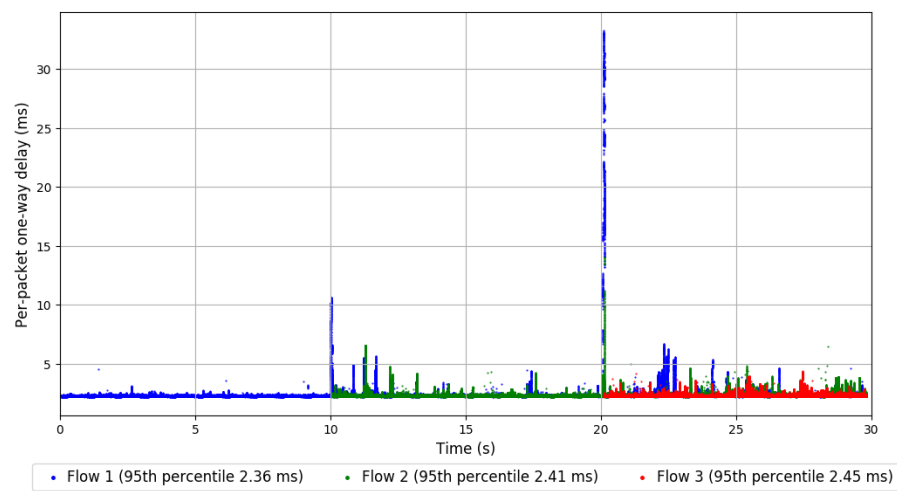
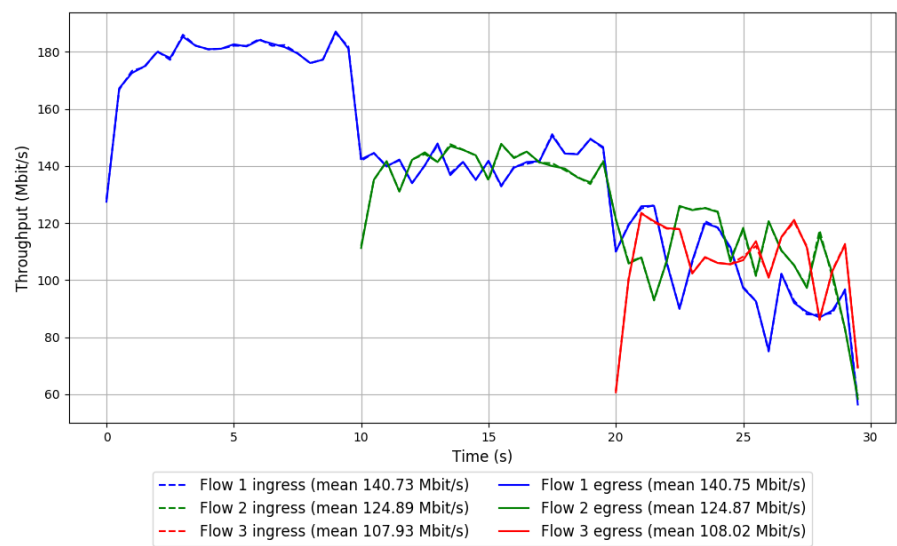
-- Flow 3:

Average throughput: 108.02 Mbit/s

95th percentile per-packet one-way delay: 2.450 ms

Loss rate: 0.03%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-05 20:13:03

End at: 2017-12-05 20:13:33

Local clock offset: 0.414 ms

Remote clock offset: 0.92 ms

Below is generated by plot.py at 2017-12-06 03:00:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 257.64 Mbit/s

95th percentile per-packet one-way delay: 2.361 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 143.50 Mbit/s

95th percentile per-packet one-way delay: 2.355 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 126.56 Mbit/s

95th percentile per-packet one-way delay: 2.369 ms

Loss rate: 0.02%

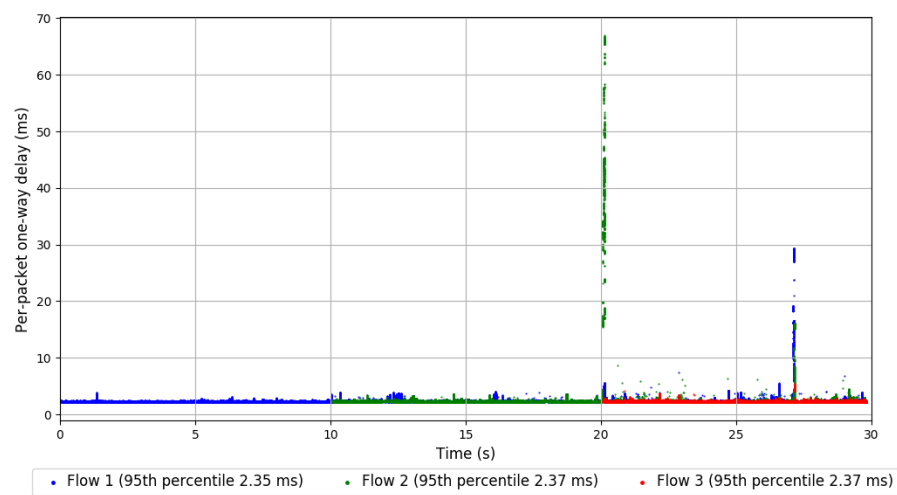
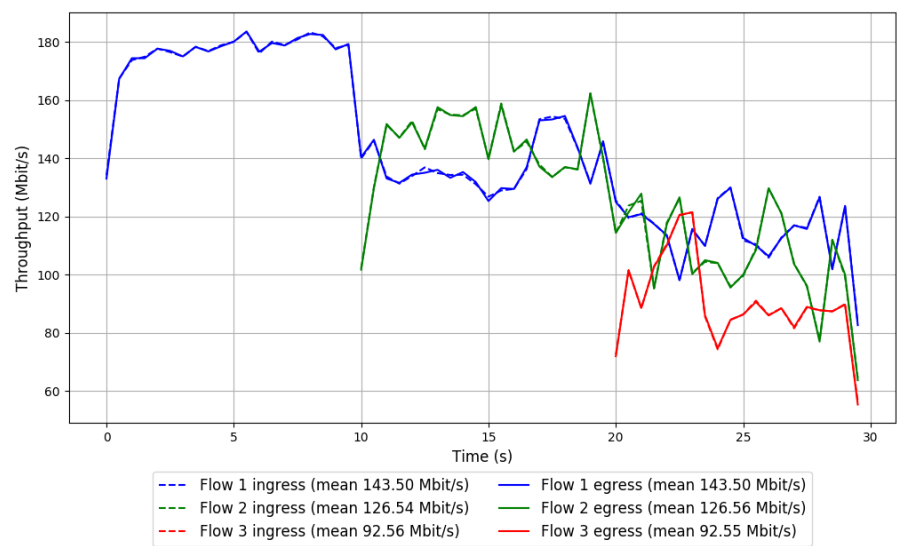
-- Flow 3:

Average throughput: 92.55 Mbit/s

95th percentile per-packet one-way delay: 2.369 ms

Loss rate: 0.06%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-05 20:31:30

End at: 2017-12-05 20:32:00

Local clock offset: 0.467 ms

Remote clock offset: 1.068 ms

Below is generated by plot.py at 2017-12-06 03:00:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 252.85 Mbit/s

95th percentile per-packet one-way delay: 2.373 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 145.74 Mbit/s

95th percentile per-packet one-way delay: 2.351 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 132.15 Mbit/s

95th percentile per-packet one-way delay: 2.415 ms

Loss rate: 0.02%

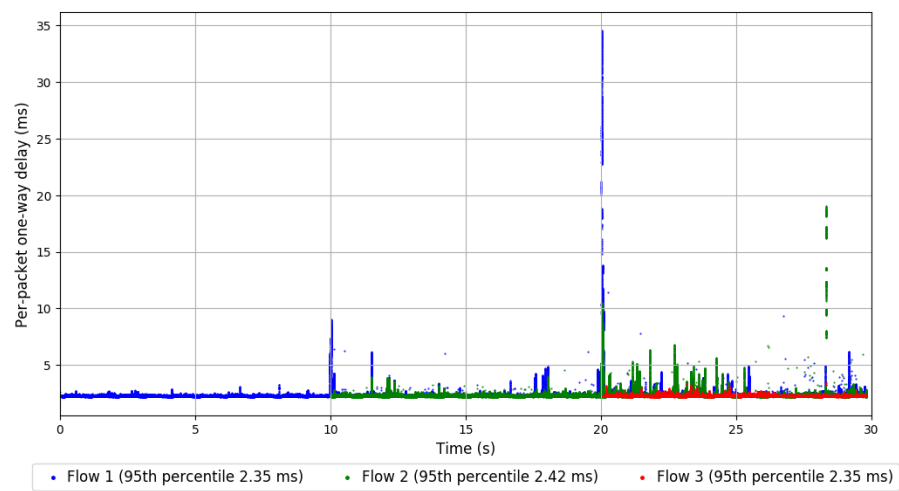
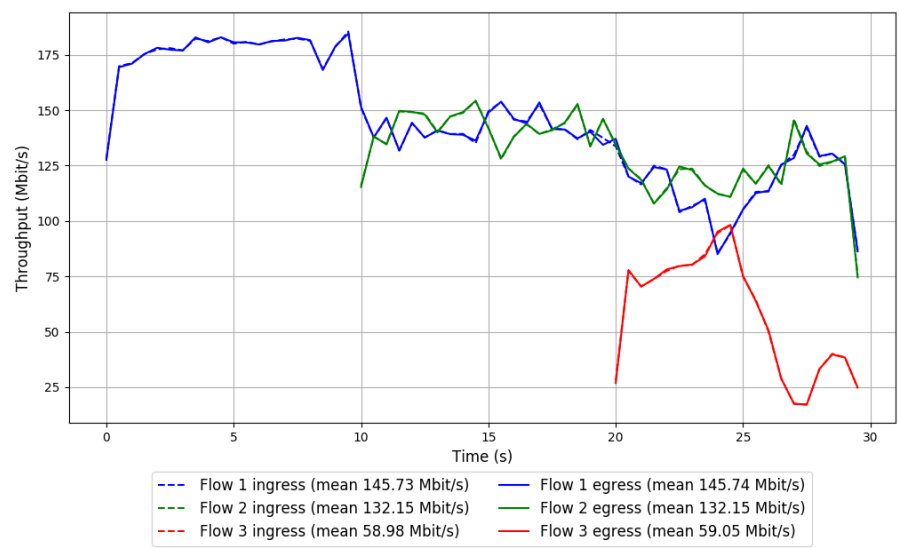
-- Flow 3:

Average throughput: 59.05 Mbit/s

95th percentile per-packet one-way delay: 2.347 ms

Loss rate: 0.02%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-05 20:50:21

End at: 2017-12-05 20:50:51

Local clock offset: 0.597 ms

Remote clock offset: 1.089 ms

Below is generated by plot.py at 2017-12-06 03:00:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 251.99 Mbit/s

95th percentile per-packet one-way delay: 2.401 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 141.78 Mbit/s

95th percentile per-packet one-way delay: 2.371 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 129.03 Mbit/s

95th percentile per-packet one-way delay: 2.453 ms

Loss rate: 0.00%

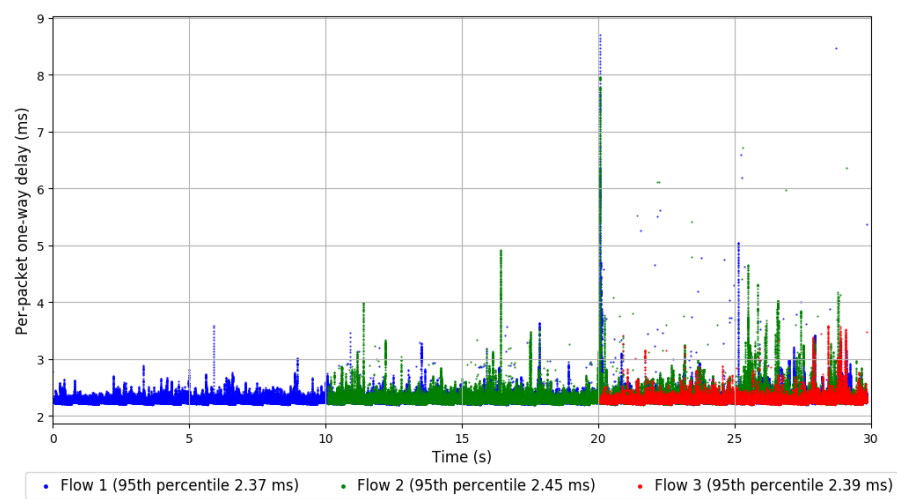
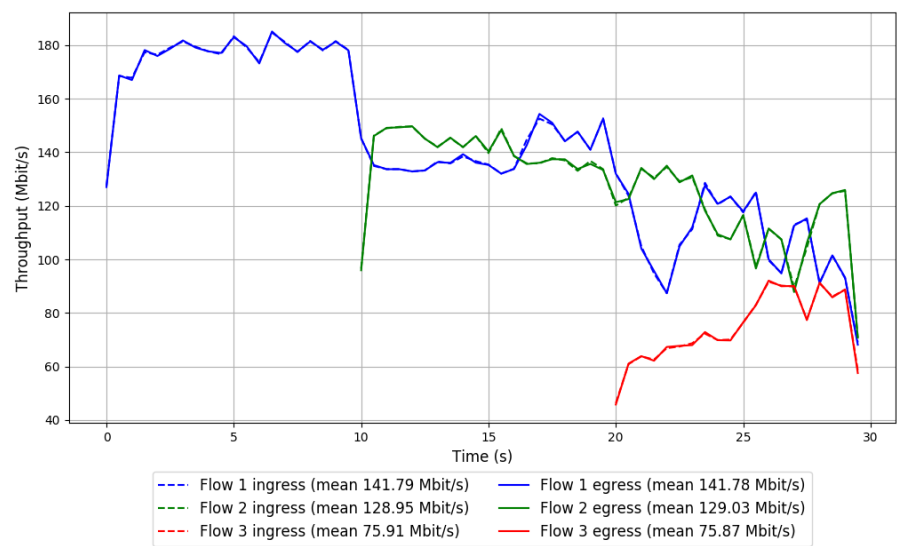
-- Flow 3:

Average throughput: 75.87 Mbit/s

95th percentile per-packet one-way delay: 2.387 ms

Loss rate: 0.09%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

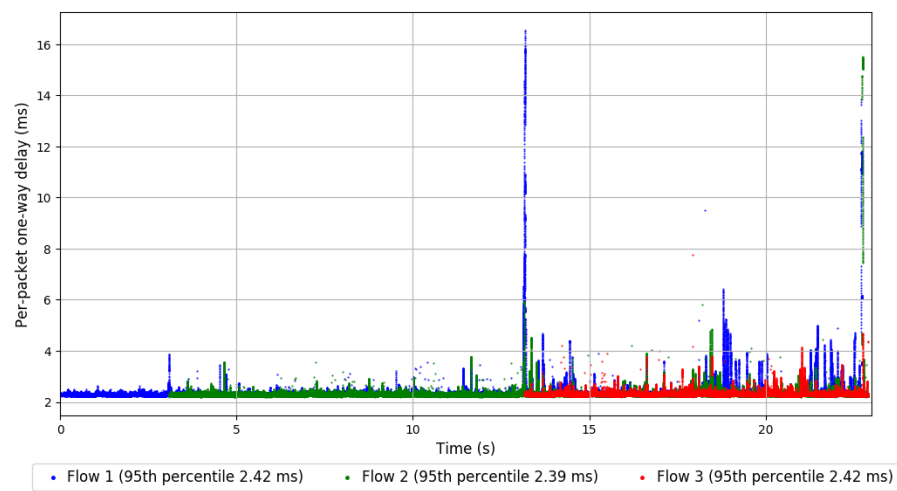
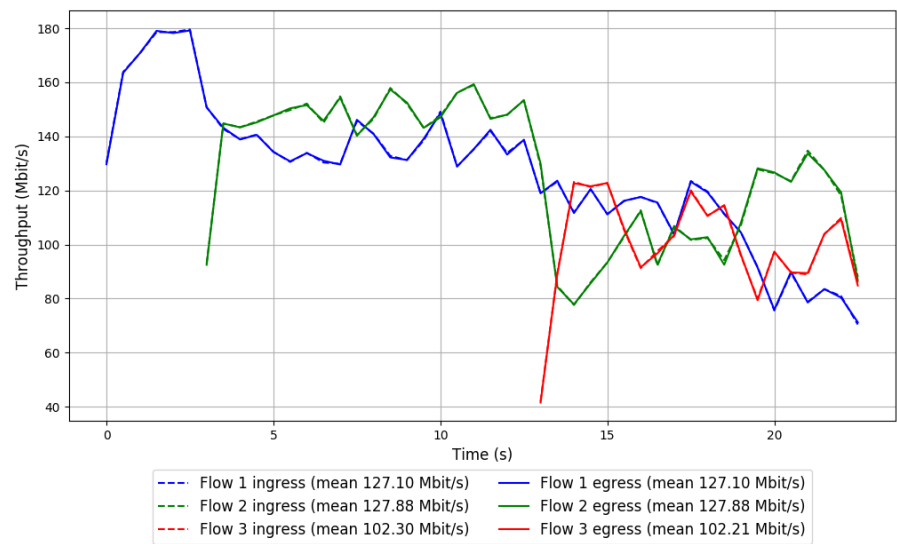
Start at: 2017-12-05 21:09:02

End at: 2017-12-05 21:09:32

Local clock offset: 0.702 ms

Remote clock offset: 1.007 ms

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-05 21:27:27

End at: 2017-12-05 21:27:57

Local clock offset: 0.539 ms

Remote clock offset: 1.026 ms

Below is generated by plot.py at 2017-12-06 03:00:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 255.57 Mbit/s

95th percentile per-packet one-way delay: 2.331 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 141.27 Mbit/s

95th percentile per-packet one-way delay: 2.299 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 119.28 Mbit/s

95th percentile per-packet one-way delay: 2.355 ms

Loss rate: 0.03%

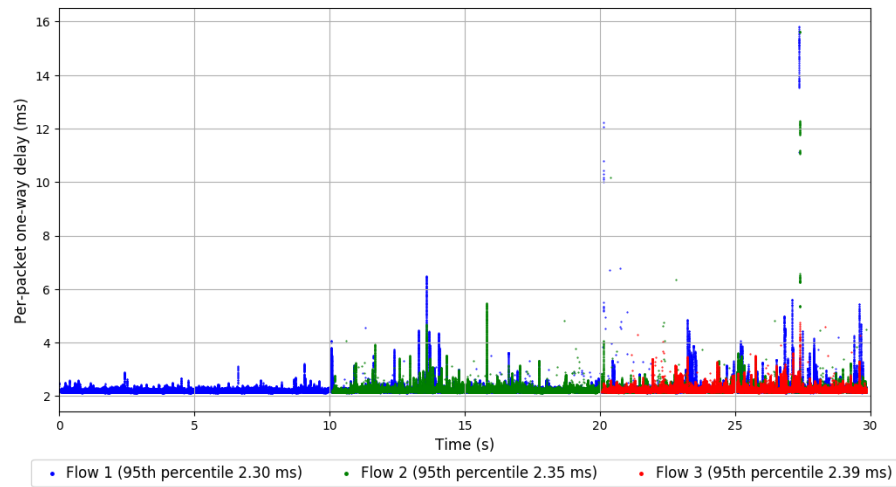
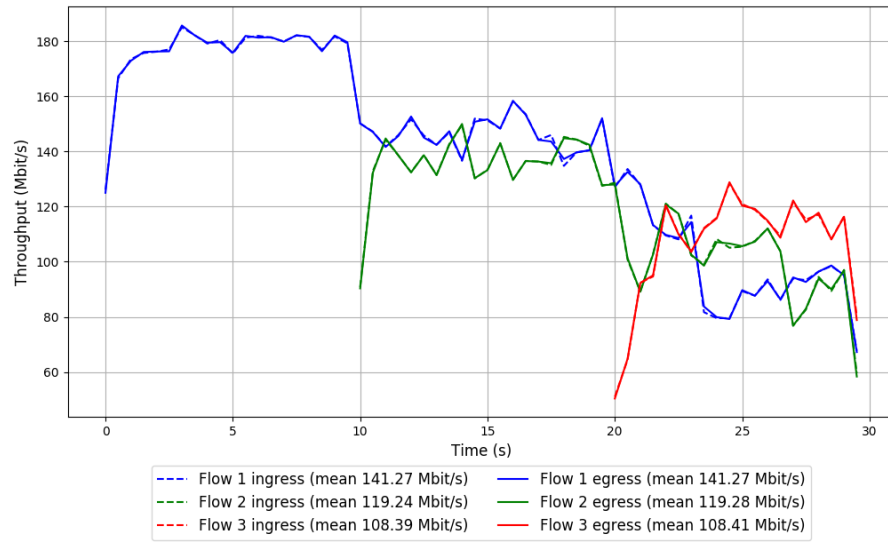
-- Flow 3:

Average throughput: 108.41 Mbit/s

95th percentile per-packet one-way delay: 2.393 ms

Loss rate: 0.09%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-05 21:46:14

End at: 2017-12-05 21:46:44

Local clock offset: 0.592 ms

Remote clock offset: 1.267 ms

Below is generated by plot.py at 2017-12-06 03:01:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 257.68 Mbit/s

95th percentile per-packet one-way delay: 2.509 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 141.32 Mbit/s

95th percentile per-packet one-way delay: 2.504 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 126.85 Mbit/s

95th percentile per-packet one-way delay: 2.500 ms

Loss rate: 0.02%

-- Flow 3:

Average throughput: 99.23 Mbit/s

95th percentile per-packet one-way delay: 2.546 ms

Loss rate: 0.02%

Run 10: Report of Indigo-calib — Data Link

