

Pantheon Report

Generated at 2017-12-12 04:03:38 (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).

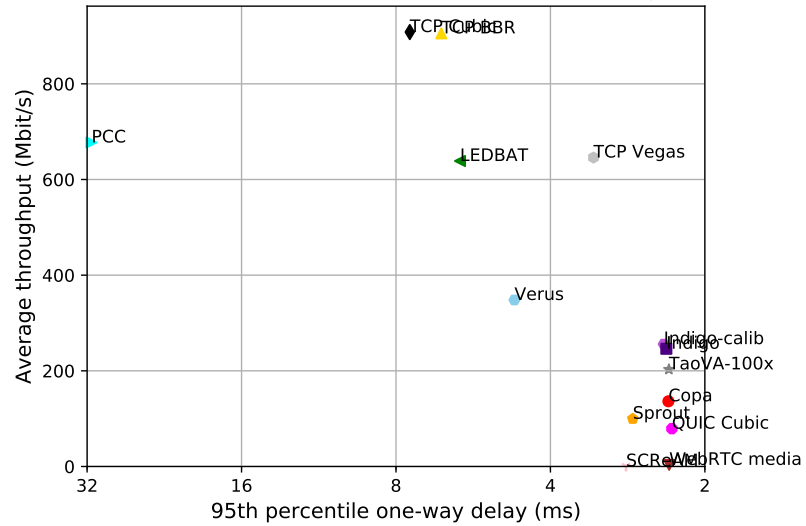
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

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

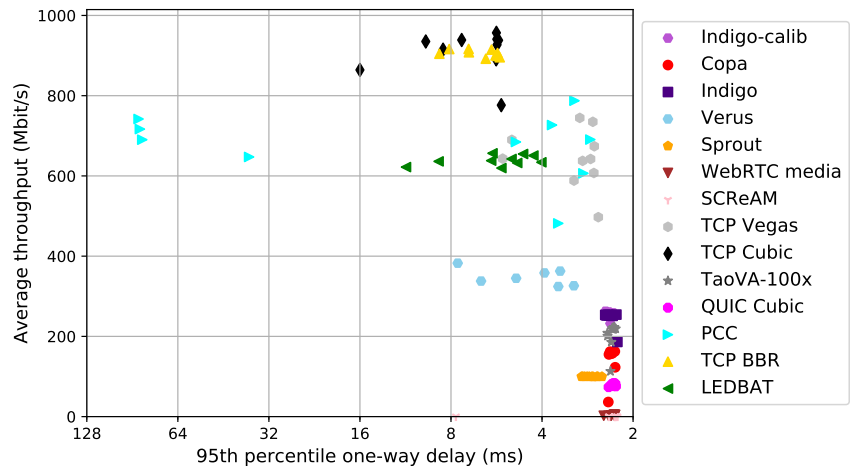
Git summary:

```
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



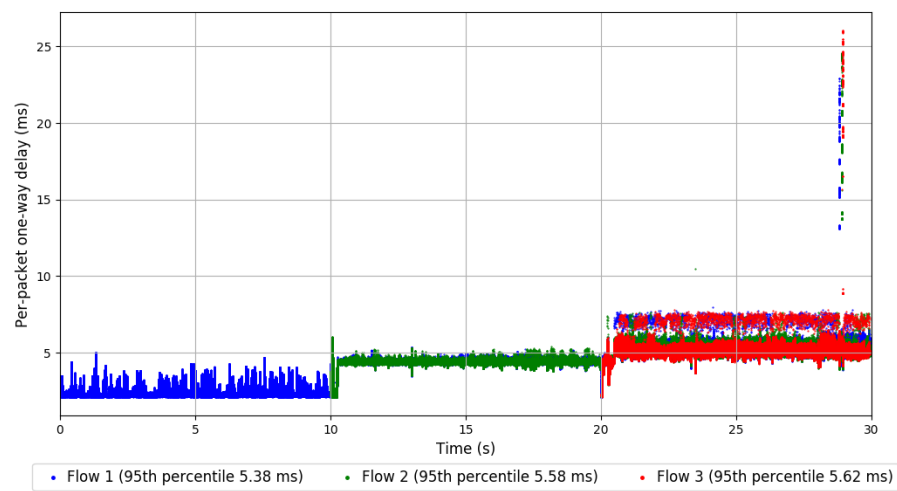
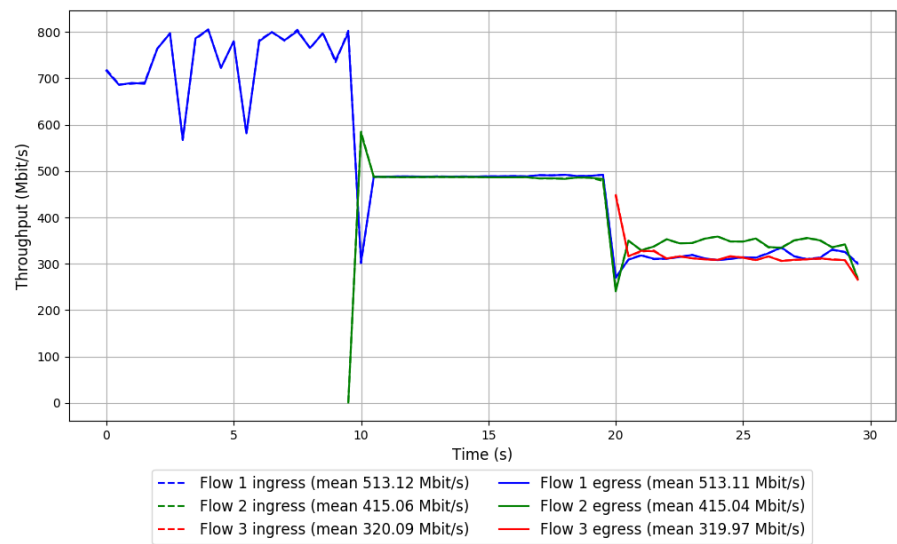
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	525.51	407.83	326.53	6.97	5.75	5.80	0.02	0.04	0.10
TCP Cubic	10	528.82	412.66	315.33	8.97	5.68	5.72	0.03	0.07	0.15
LEDBAT	10	370.27	291.57	225.38	7.02	5.62	5.40	0.02	0.02	0.06
PCC	10	540.85	131.33	149.77	34.97	3.23	2.94	0.88	0.04	0.07
QUIC Cubic	10	1.03	79.84	78.41	3.81	2.32	2.32	0.00	0.03	0.05
SCReAM	10	0.22	0.22	0.22	2.85	2.85	2.85	0.00	0.16	0.00
WebRTC media	10	1.20	1.52	0.66	2.39	2.35	2.37	0.02	0.05	0.08
Sprout	10	50.11	50.00	49.66	2.71	2.79	2.85	0.01	0.02	0.02
TaoVA-100x	10	122.25	89.60	82.00	2.34	2.36	2.51	0.01	0.03	0.06
TCP Vegas	10	340.83	286.61	344.57	2.95	3.41	3.24	0.01	0.02	0.04
Verus	7	210.59	143.85	106.91	5.11	4.20	4.64	0.02	0.02	0.05
Copa	7	72.76	59.49	96.14	2.36	2.36	2.37	0.01	0.01	0.03
Indigo	10	131.20	127.14	93.44	2.36	2.41	2.40	0.01	0.02	0.05
Indigo-calib	10	139.19	124.18	104.73	2.39	2.41	2.48	0.01	0.03	0.05

Run 1: Statistics of TCP BBR

Start at: 2017-12-11 20:10:23
End at: 2017-12-11 20:10:53
Local clock offset: -1.285 ms
Remote clock offset: -0.447 ms

Below is generated by plot.py at 2017-12-12 02:41:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 895.75 Mbit/s
95th percentile per-packet one-way delay: 5.520 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 513.11 Mbit/s
95th percentile per-packet one-way delay: 5.379 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 415.04 Mbit/s
95th percentile per-packet one-way delay: 5.576 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 319.97 Mbit/s
95th percentile per-packet one-way delay: 5.619 ms
Loss rate: 0.09%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-11 20:29:12

End at: 2017-12-11 20:29:42

Local clock offset: -0.852 ms

Remote clock offset: 0.206 ms

Below is generated by plot.py at 2017-12-12 02:41:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 900.43 Mbit/s

95th percentile per-packet one-way delay: 5.699 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 522.40 Mbit/s

95th percentile per-packet one-way delay: 5.665 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 400.49 Mbit/s

95th percentile per-packet one-way delay: 5.619 ms

Loss rate: 0.04%

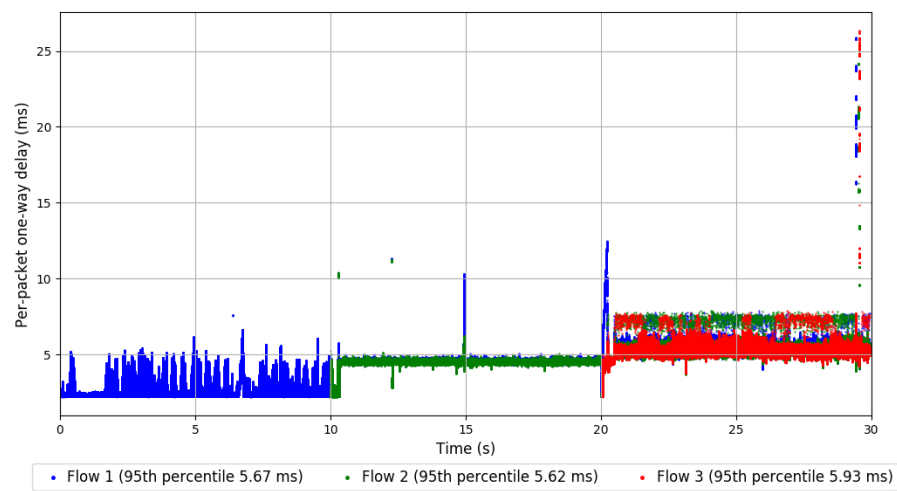
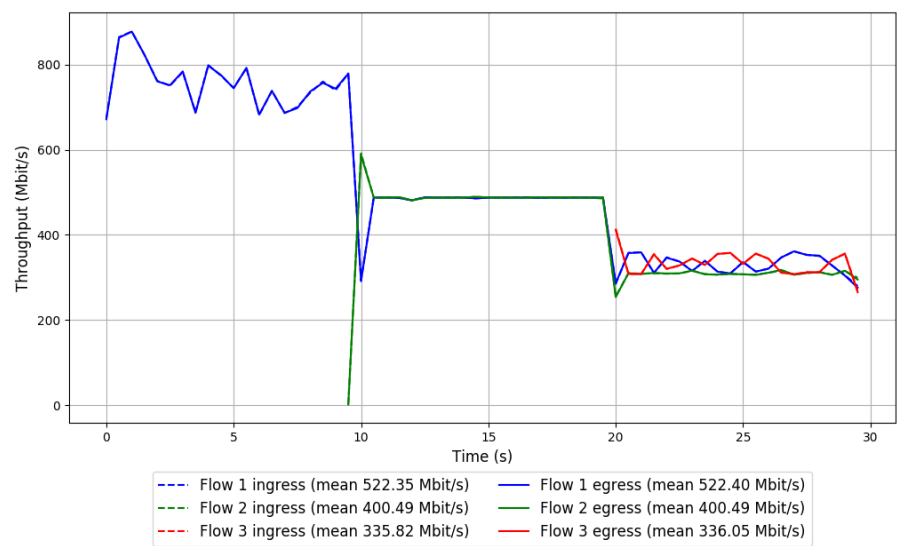
-- Flow 3:

Average throughput: 336.05 Mbit/s

95th percentile per-packet one-way delay: 5.928 ms

Loss rate: 0.10%

Run 2: Report of TCP BBR — Data Link

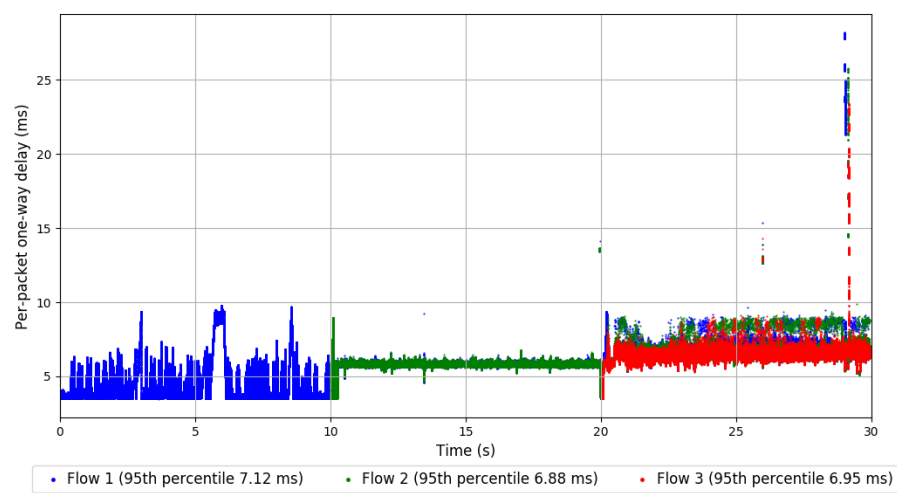
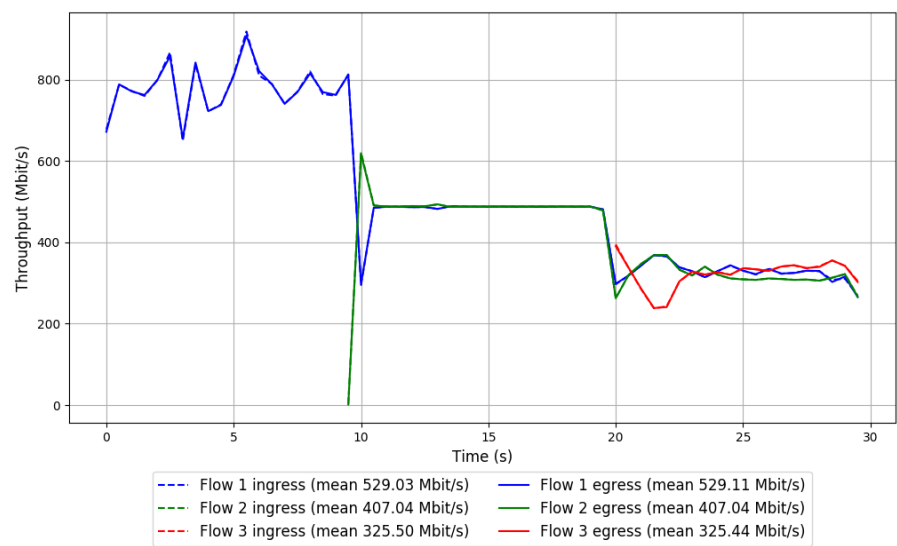


Run 3: Statistics of TCP BBR

Start at: 2017-12-11 20:47:52
End at: 2017-12-11 20:48:22
Local clock offset: -0.555 ms
Remote clock offset: -0.746 ms

Below is generated by plot.py at 2017-12-12 02:41:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 908.21 Mbit/s
95th percentile per-packet one-way delay: 6.980 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 529.11 Mbit/s
95th percentile per-packet one-way delay: 7.125 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 407.04 Mbit/s
95th percentile per-packet one-way delay: 6.884 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 325.44 Mbit/s
95th percentile per-packet one-way delay: 6.953 ms
Loss rate: 0.11%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-11 21:06:40

End at: 2017-12-11 21:07:10

Local clock offset: -0.082 ms

Remote clock offset: 0.935 ms

Below is generated by plot.py at 2017-12-12 02:41:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 916.30 Mbit/s

95th percentile per-packet one-way delay: 8.105 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 535.70 Mbit/s

95th percentile per-packet one-way delay: 8.259 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 409.79 Mbit/s

95th percentile per-packet one-way delay: 5.692 ms

Loss rate: 0.05%

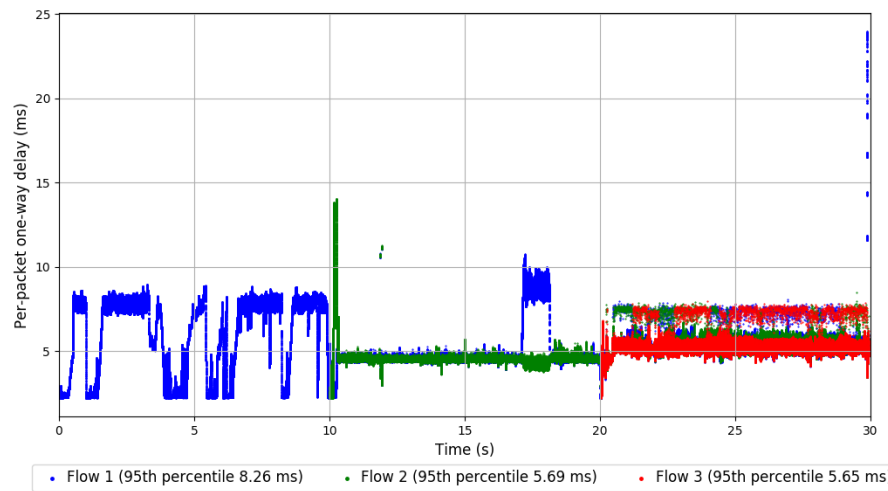
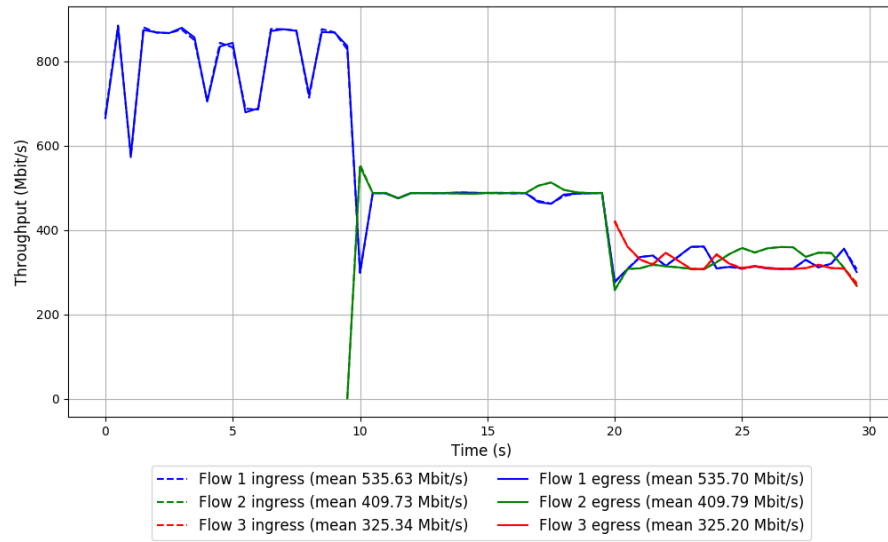
-- Flow 3:

Average throughput: 325.20 Mbit/s

95th percentile per-packet one-way delay: 5.650 ms

Loss rate: 0.14%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-11 21:25:19

End at: 2017-12-11 21:25:49

Local clock offset: 0.233 ms

Remote clock offset: 1.119 ms

Below is generated by plot.py at 2017-12-12 02:41:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 916.63 Mbit/s

95th percentile per-packet one-way delay: 6.995 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 534.20 Mbit/s

95th percentile per-packet one-way delay: 8.381 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 412.19 Mbit/s

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

Loss rate: 0.05%

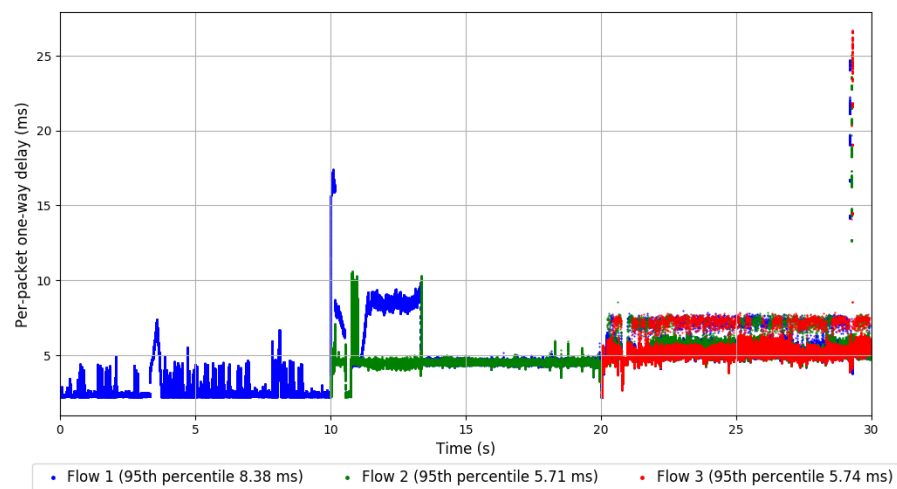
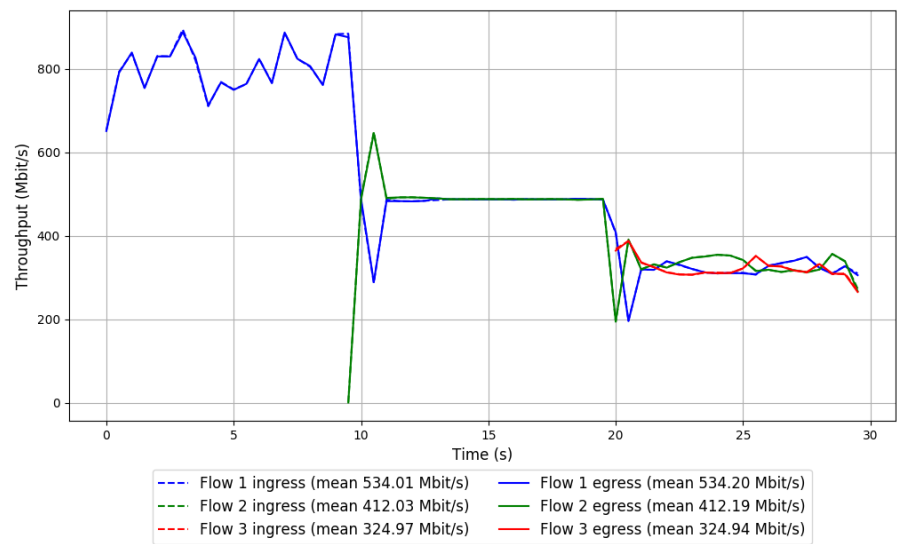
-- Flow 3:

Average throughput: 324.94 Mbit/s

95th percentile per-packet one-way delay: 5.738 ms

Loss rate: 0.12%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-11 21:44:08

End at: 2017-12-11 21:44:38

Local clock offset: 0.422 ms

Remote clock offset: 1.251 ms

Below is generated by plot.py at 2017-12-12 02:41:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 906.36 Mbit/s

95th percentile per-packet one-way delay: 5.613 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 528.69 Mbit/s

95th percentile per-packet one-way delay: 5.602 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 407.10 Mbit/s

95th percentile per-packet one-way delay: 5.625 ms

Loss rate: 0.03%

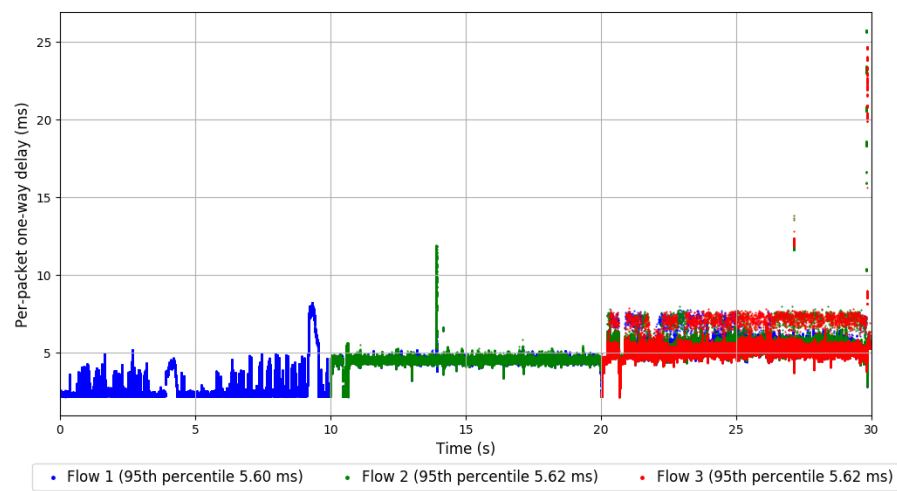
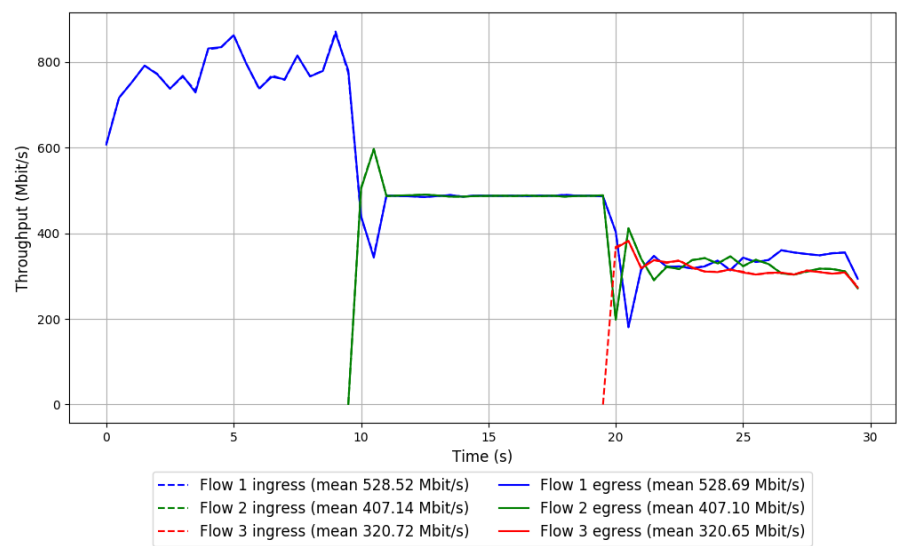
-- Flow 3:

Average throughput: 320.65 Mbit/s

95th percentile per-packet one-way delay: 5.616 ms

Loss rate: 0.08%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-11 22:02:55

End at: 2017-12-11 22:03:25

Local clock offset: 0.569 ms

Remote clock offset: 1.166 ms

Below is generated by plot.py at 2017-12-12 02:41:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 892.15 Mbit/s

95th percentile per-packet one-way delay: 6.138 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 512.07 Mbit/s

95th percentile per-packet one-way delay: 8.471 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 409.60 Mbit/s

95th percentile per-packet one-way delay: 5.506 ms

Loss rate: 0.03%

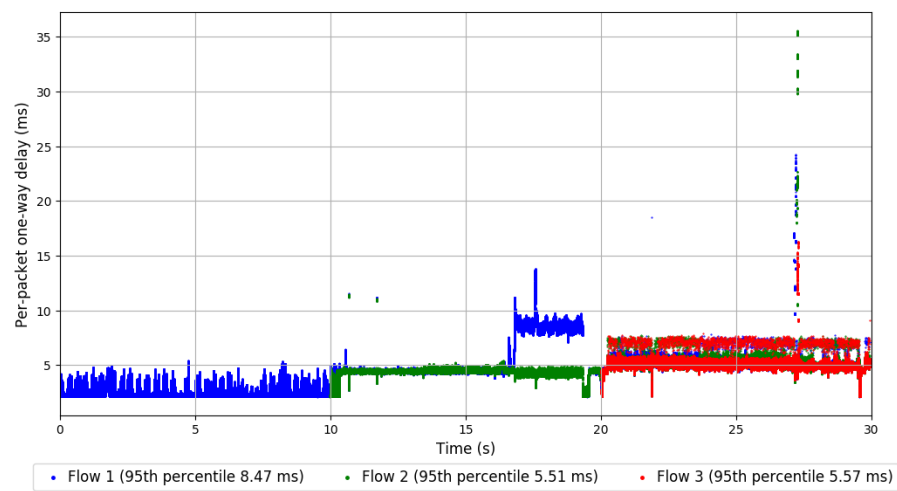
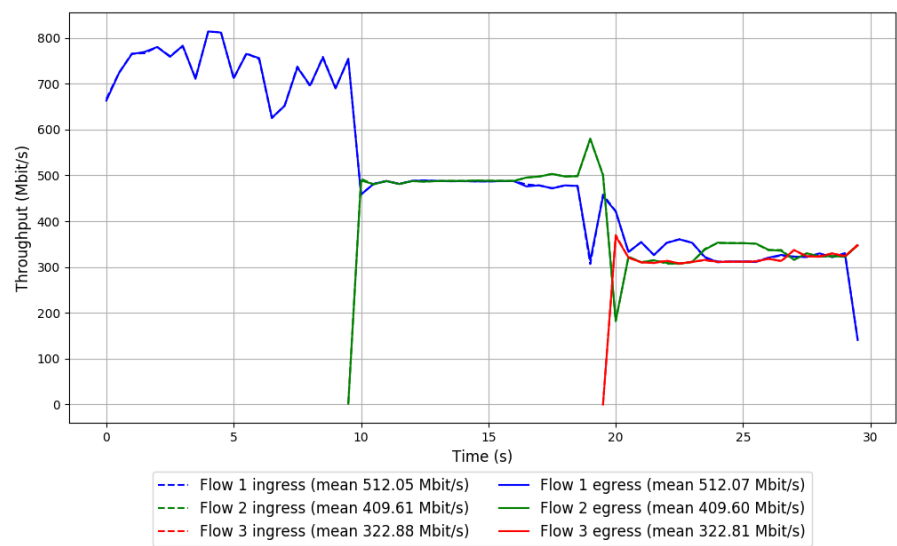
-- Flow 3:

Average throughput: 322.81 Mbit/s

95th percentile per-packet one-way delay: 5.567 ms

Loss rate: 0.07%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-11 22:21:33

End at: 2017-12-11 22:22:03

Local clock offset: 0.643 ms

Remote clock offset: 1.032 ms

Below is generated by plot.py at 2017-12-12 02:41:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 904.57 Mbit/s

95th percentile per-packet one-way delay: 8.738 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 519.68 Mbit/s

95th percentile per-packet one-way delay: 9.042 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 414.40 Mbit/s

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

Loss rate: 0.03%

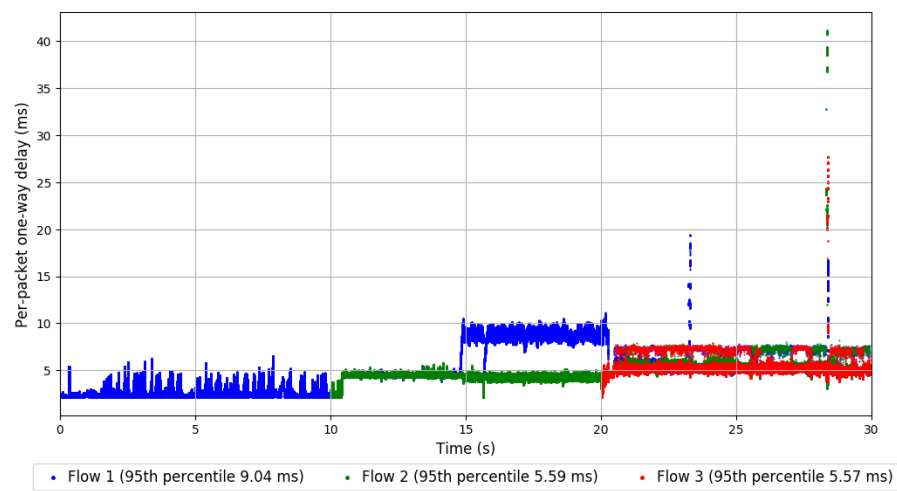
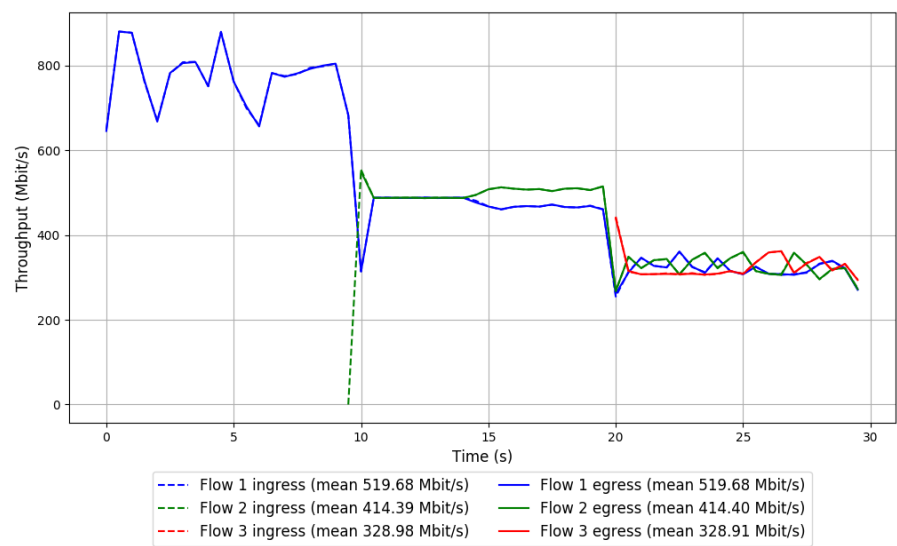
-- Flow 3:

Average throughput: 328.91 Mbit/s

95th percentile per-packet one-way delay: 5.571 ms

Loss rate: 0.08%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-11 22:40:14

End at: 2017-12-11 22:40:44

Local clock offset: 0.76 ms

Remote clock offset: 0.829 ms

Below is generated by plot.py at 2017-12-12 02:53:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 914.92 Mbit/s

95th percentile per-packet one-way delay: 5.876 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 542.48 Mbit/s

95th percentile per-packet one-way delay: 6.014 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 396.72 Mbit/s

95th percentile per-packet one-way delay: 5.781 ms

Loss rate: 0.03%

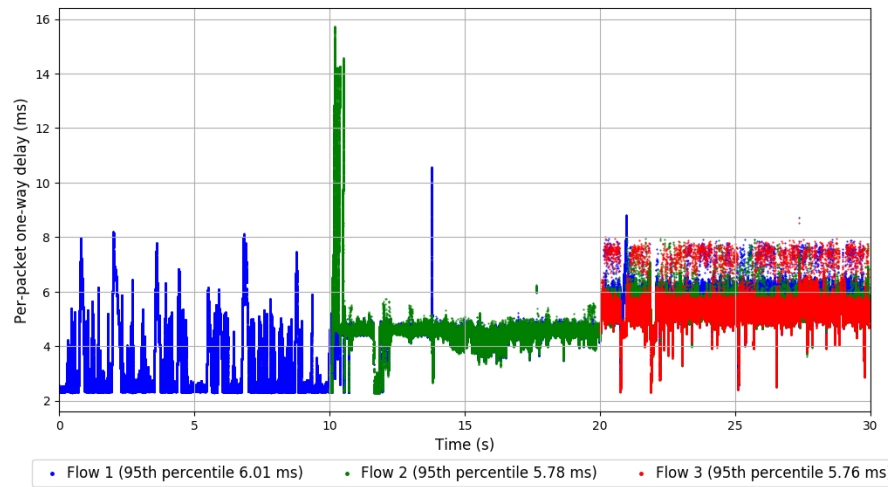
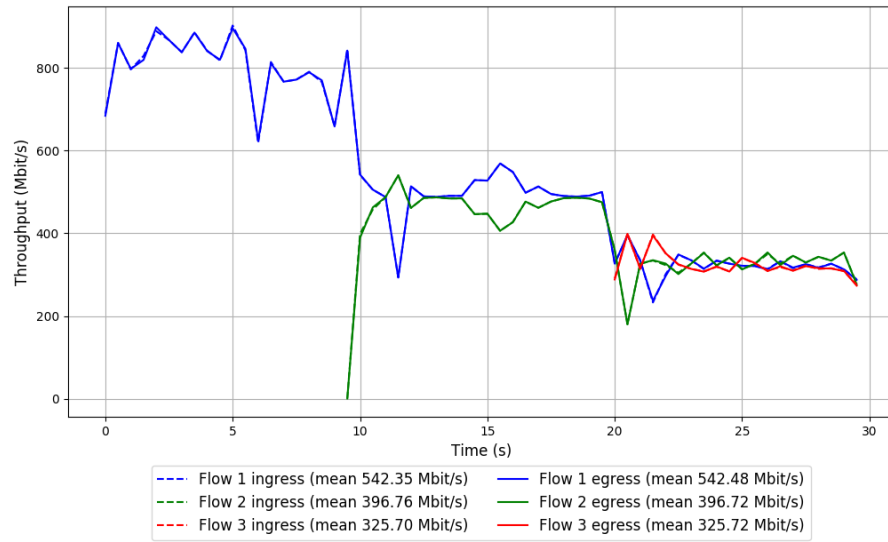
-- Flow 3:

Average throughput: 325.72 Mbit/s

95th percentile per-packet one-way delay: 5.763 ms

Loss rate: 0.08%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-11 22:58:50

End at: 2017-12-11 22:59:20

Local clock offset: 0.61 ms

Remote clock offset: 0.844 ms

Below is generated by plot.py at 2017-12-12 02:53:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 899.17 Mbit/s

95th percentile per-packet one-way delay: 5.619 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 517.67 Mbit/s

95th percentile per-packet one-way delay: 5.752 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 405.89 Mbit/s

95th percentile per-packet one-way delay: 5.520 ms

Loss rate: 0.03%

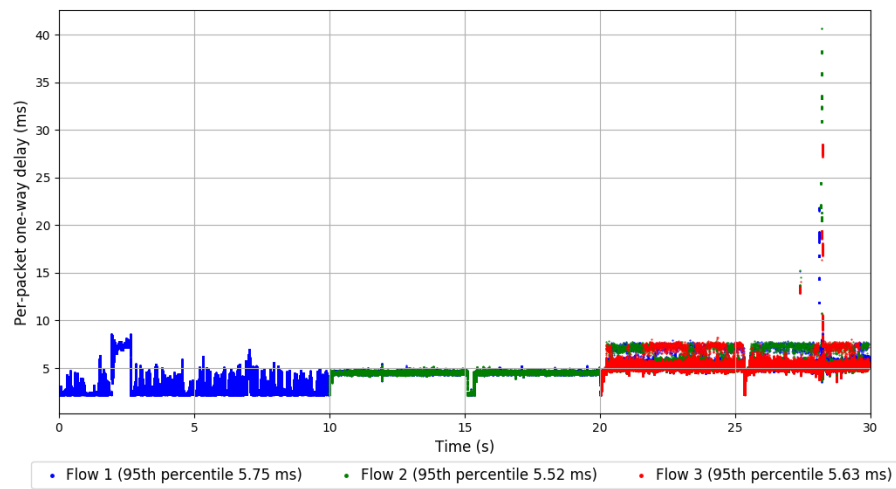
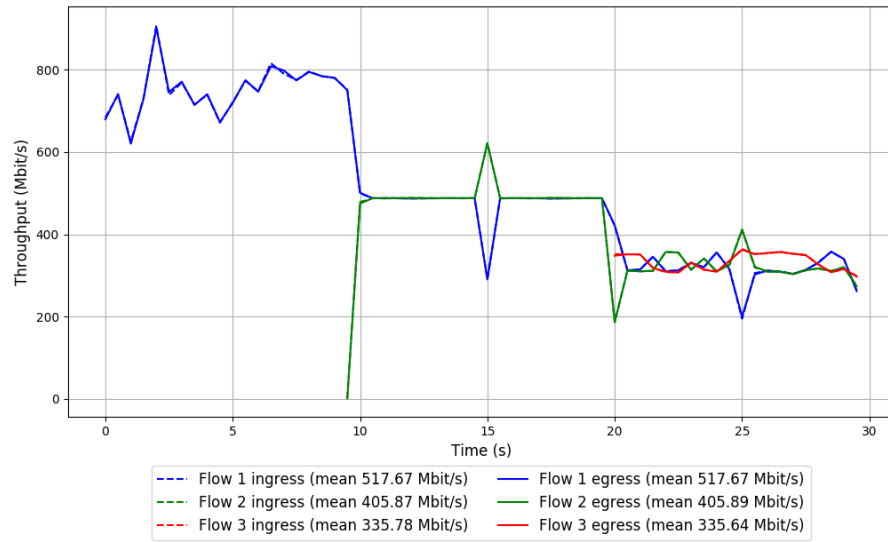
-- Flow 3:

Average throughput: 335.64 Mbit/s

95th percentile per-packet one-way delay: 5.634 ms

Loss rate: 0.09%

Run 10: Report of TCP BBR — Data Link

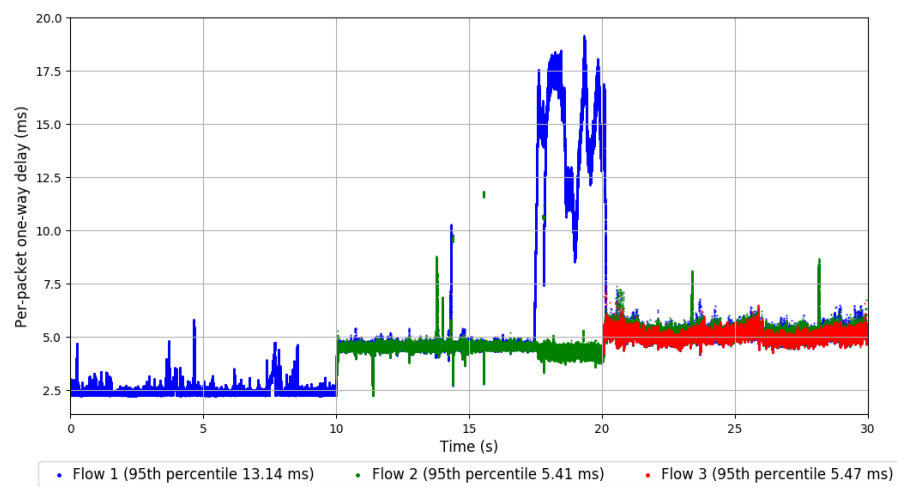
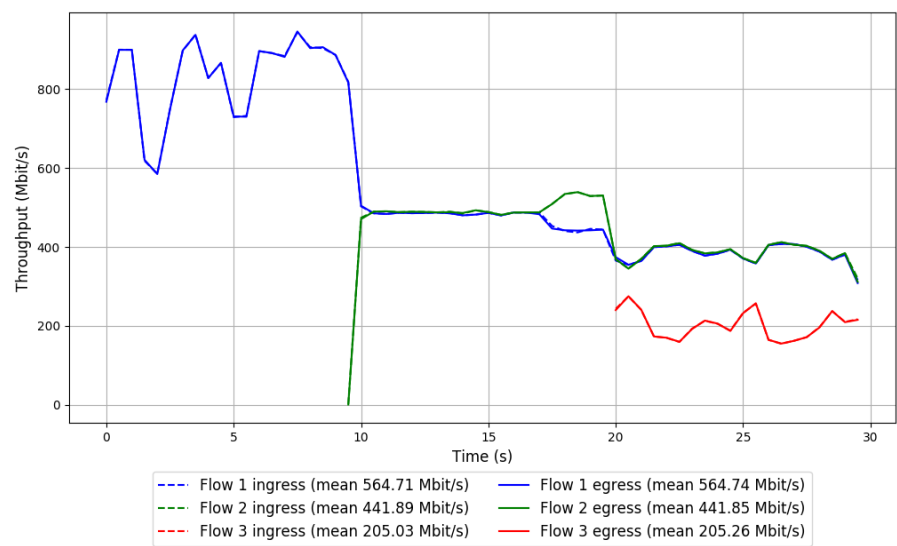


Run 1: Statistics of TCP Cubic

Start at: 2017-12-11 19:57:59
End at: 2017-12-11 19:58:29
Local clock offset: -1.328 ms
Remote clock offset: -0.719 ms

Below is generated by plot.py at 2017-12-12 02:54:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 927.03 Mbit/s
95th percentile per-packet one-way delay: 5.632 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 564.74 Mbit/s
95th percentile per-packet one-way delay: 13.142 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 441.85 Mbit/s
95th percentile per-packet one-way delay: 5.412 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 205.26 Mbit/s
95th percentile per-packet one-way delay: 5.466 ms
Loss rate: 0.11%

Run 1: Report of TCP Cubic — Data Link

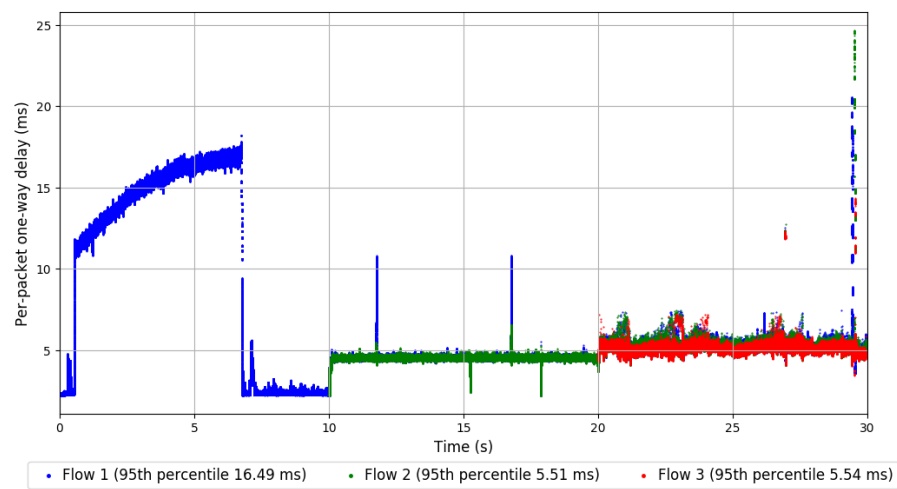
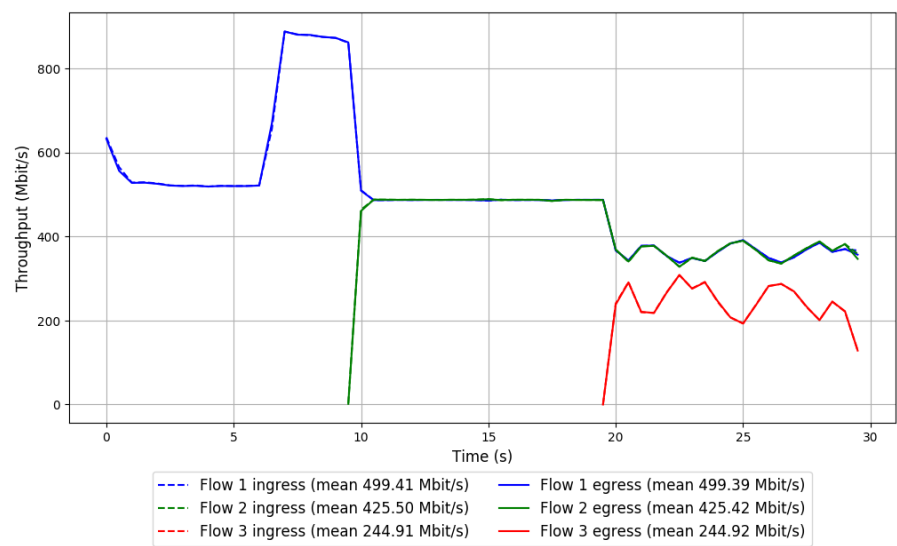


Run 2: Statistics of TCP Cubic

Start at: 2017-12-11 20:16:48
End at: 2017-12-11 20:17:18
Local clock offset: -1.048 ms
Remote clock offset: -0.203 ms

Below is generated by plot.py at 2017-12-12 02:54:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 864.18 Mbit/s
95th percentile per-packet one-way delay: 16.001 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 499.39 Mbit/s
95th percentile per-packet one-way delay: 16.487 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 425.42 Mbit/s
95th percentile per-packet one-way delay: 5.510 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 244.92 Mbit/s
95th percentile per-packet one-way delay: 5.544 ms
Loss rate: 0.05%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-11 20:35:41

End at: 2017-12-11 20:36:11

Local clock offset: -0.776 ms

Remote clock offset: 0.332 ms

Below is generated by plot.py at 2017-12-12 02:54:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 914.70 Mbit/s

95th percentile per-packet one-way delay: 8.496 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 540.41 Mbit/s

95th percentile per-packet one-way delay: 11.619 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 407.37 Mbit/s

95th percentile per-packet one-way delay: 5.767 ms

Loss rate: 0.09%

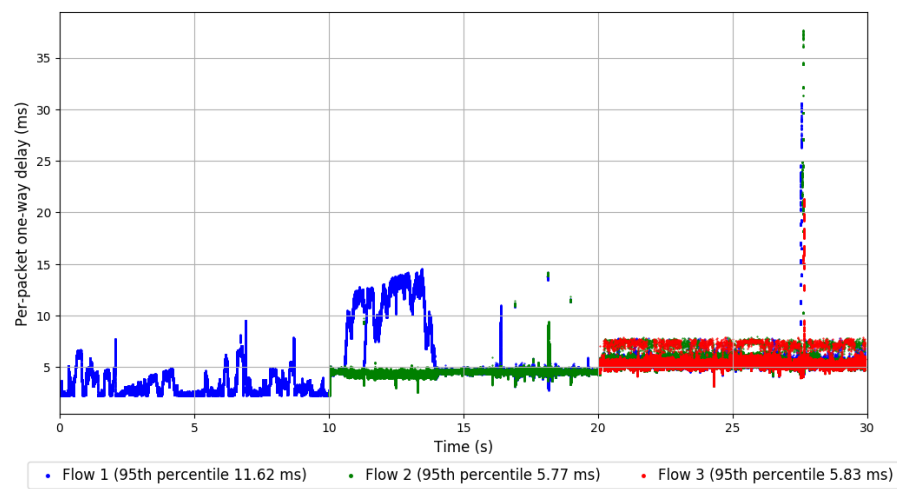
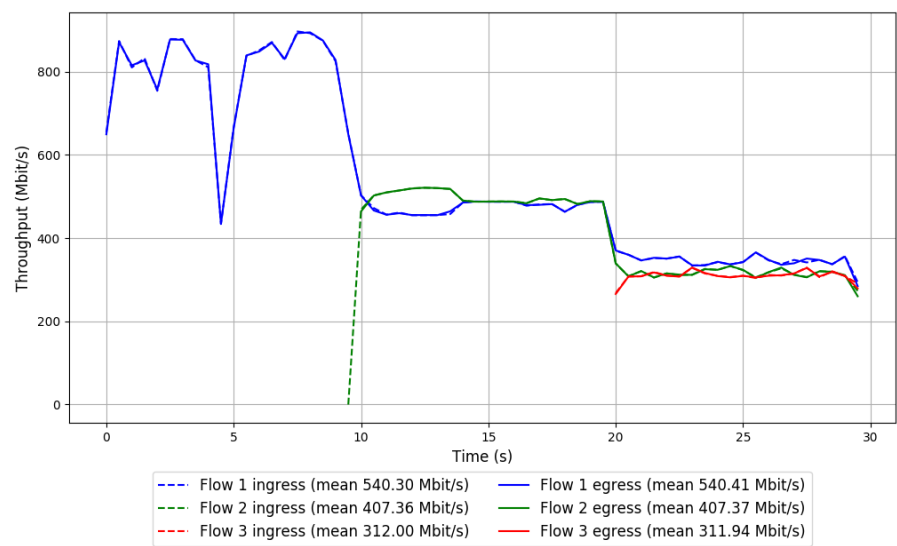
-- Flow 3:

Average throughput: 311.94 Mbit/s

95th percentile per-packet one-way delay: 5.828 ms

Loss rate: 0.24%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-11 20:54:17

End at: 2017-12-11 20:54:47

Local clock offset: -0.292 ms

Remote clock offset: 0.675 ms

Below is generated by plot.py at 2017-12-12 02:54:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 935.10 Mbit/s

95th percentile per-packet one-way delay: 9.694 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 568.76 Mbit/s

95th percentile per-packet one-way delay: 10.768 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 373.39 Mbit/s

95th percentile per-packet one-way delay: 5.558 ms

Loss rate: 0.03%

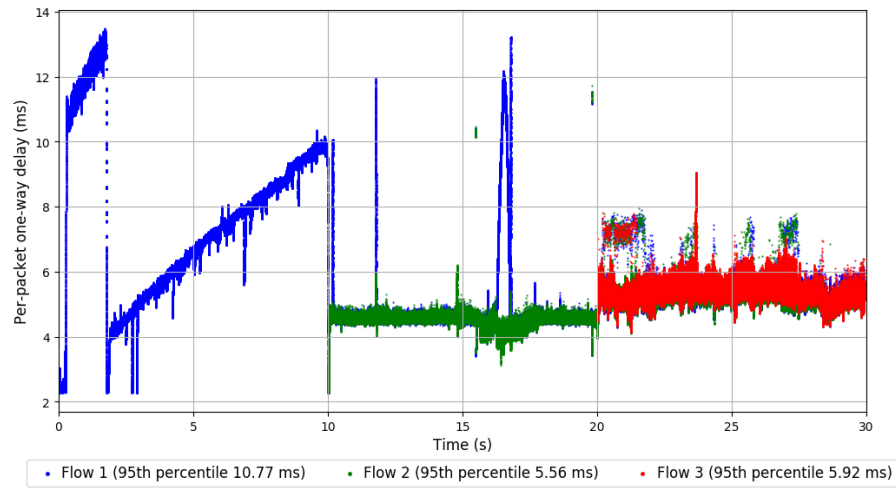
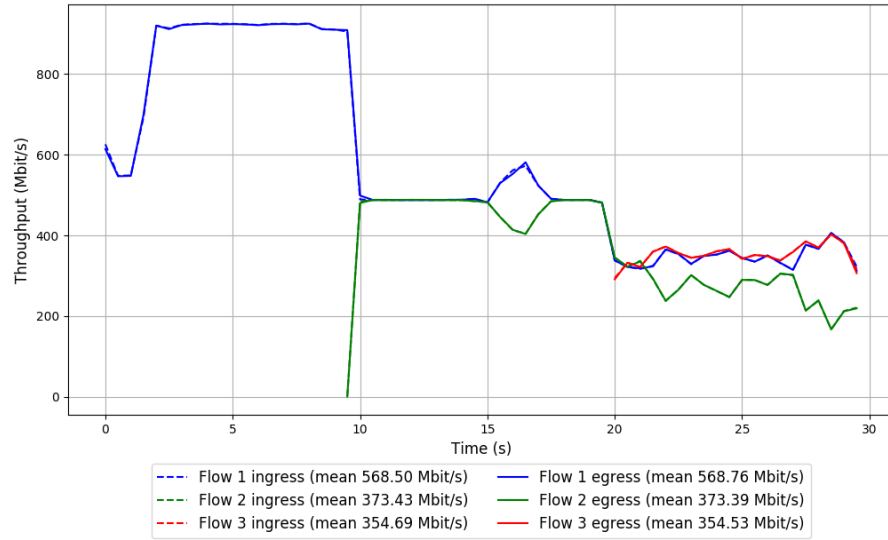
-- Flow 3:

Average throughput: 354.53 Mbit/s

95th percentile per-packet one-way delay: 5.925 ms

Loss rate: 0.21%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-11 21:13:04

End at: 2017-12-11 21:13:34

Local clock offset: -0.021 ms

Remote clock offset: 0.981 ms

Below is generated by plot.py at 2017-12-12 02:54:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 938.06 Mbit/s

95th percentile per-packet one-way delay: 5.567 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 557.07 Mbit/s

95th percentile per-packet one-way delay: 5.354 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 405.52 Mbit/s

95th percentile per-packet one-way delay: 5.637 ms

Loss rate: 0.07%

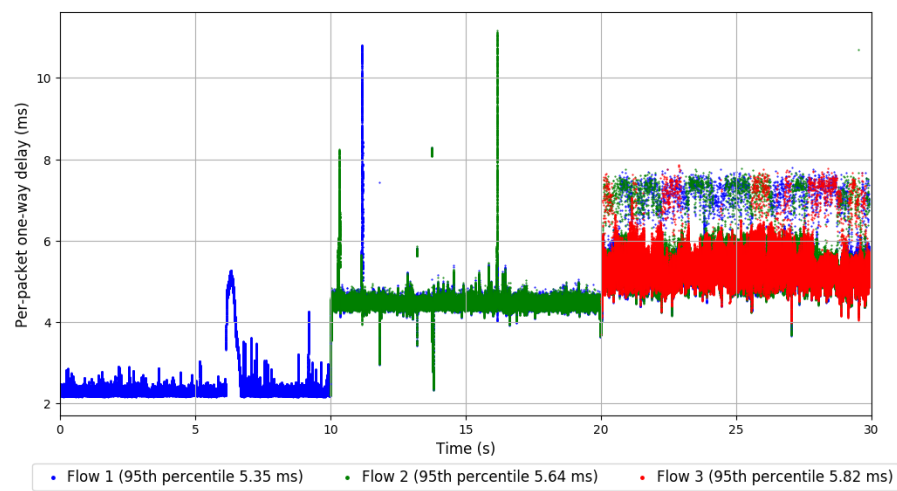
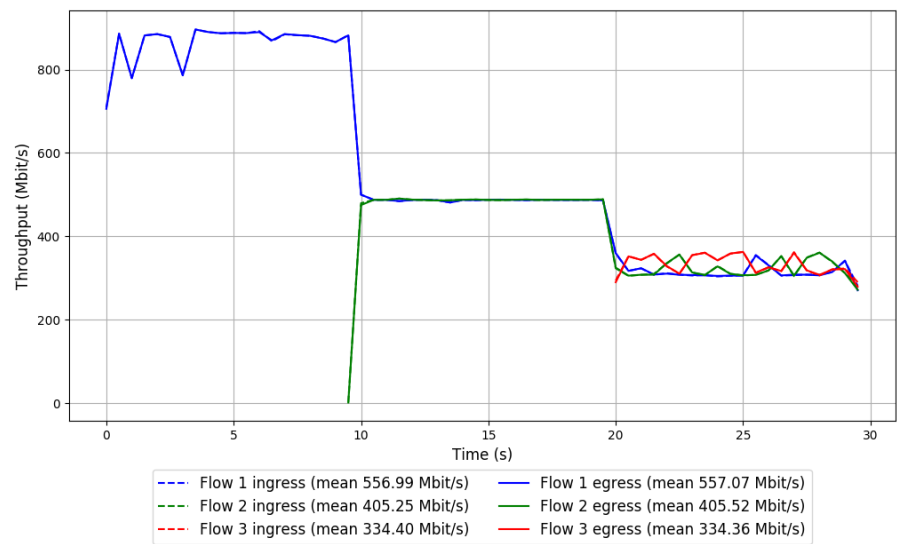
-- Flow 3:

Average throughput: 334.36 Mbit/s

95th percentile per-packet one-way delay: 5.820 ms

Loss rate: 0.23%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-11 21:31:45

End at: 2017-12-11 21:32:15

Local clock offset: 0.298 ms

Remote clock offset: 1.199 ms

Below is generated by plot.py at 2017-12-12 02:54:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 938.79 Mbit/s

95th percentile per-packet one-way delay: 7.374 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 560.72 Mbit/s

95th percentile per-packet one-way delay: 10.211 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 404.82 Mbit/s

95th percentile per-packet one-way delay: 6.353 ms

Loss rate: 0.10%

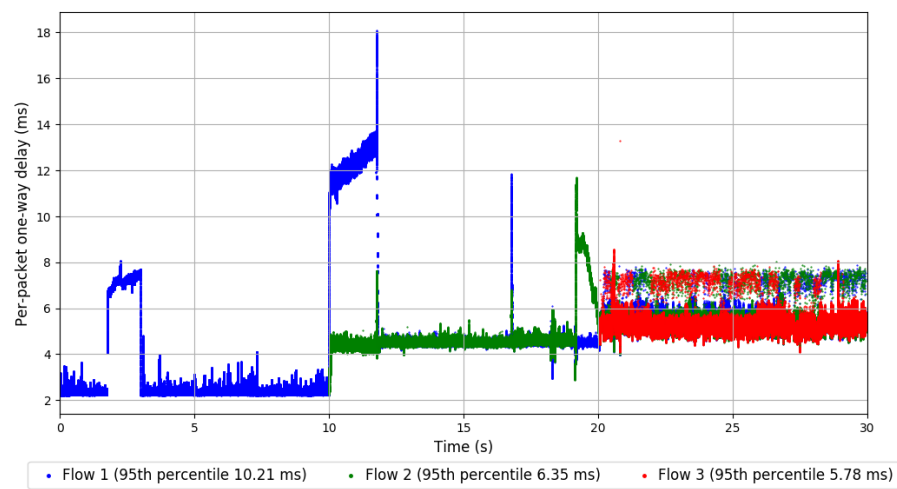
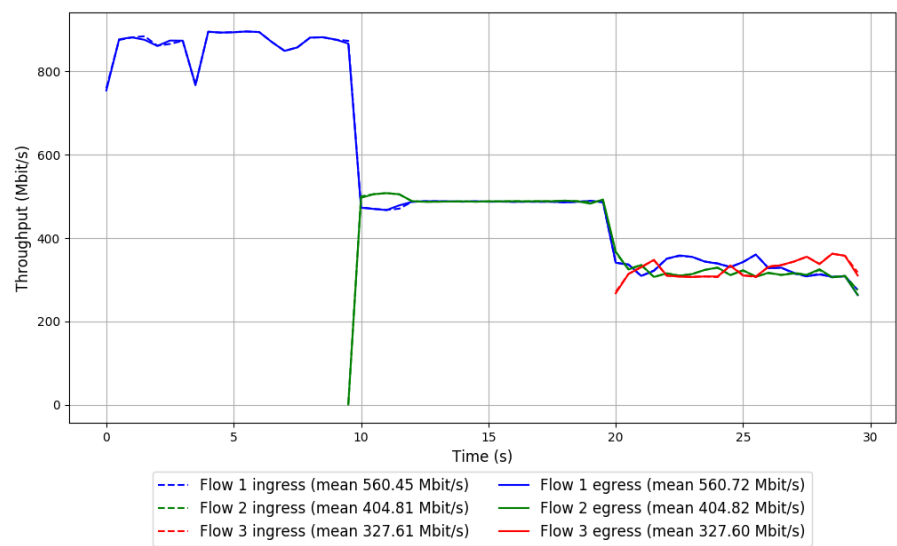
-- Flow 3:

Average throughput: 327.60 Mbit/s

95th percentile per-packet one-way delay: 5.783 ms

Loss rate: 0.18%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-11 21:50:33

End at: 2017-12-11 21:51:03

Local clock offset: 0.536 ms

Remote clock offset: 1.19 ms

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 940.73 Mbit/s

95th percentile per-packet one-way delay: 5.645 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 592.67 Mbit/s

95th percentile per-packet one-way delay: 5.607 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 355.40 Mbit/s

95th percentile per-packet one-way delay: 5.573 ms

Loss rate: 0.04%

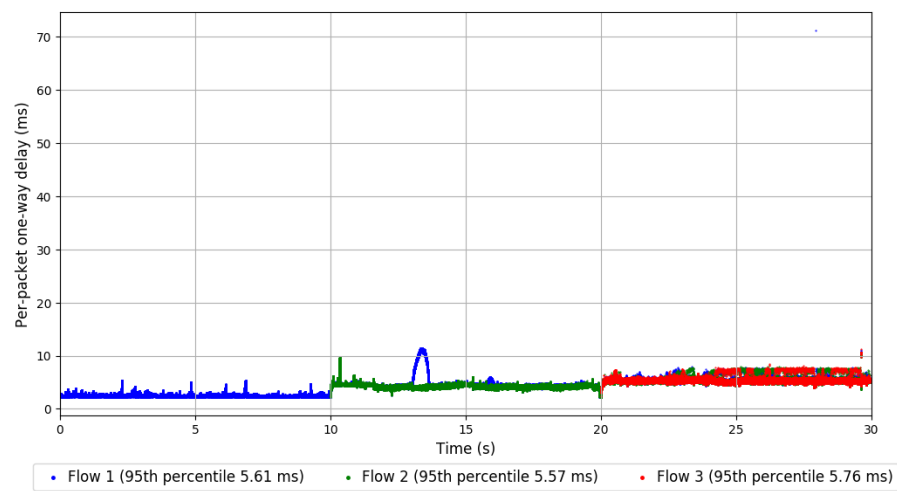
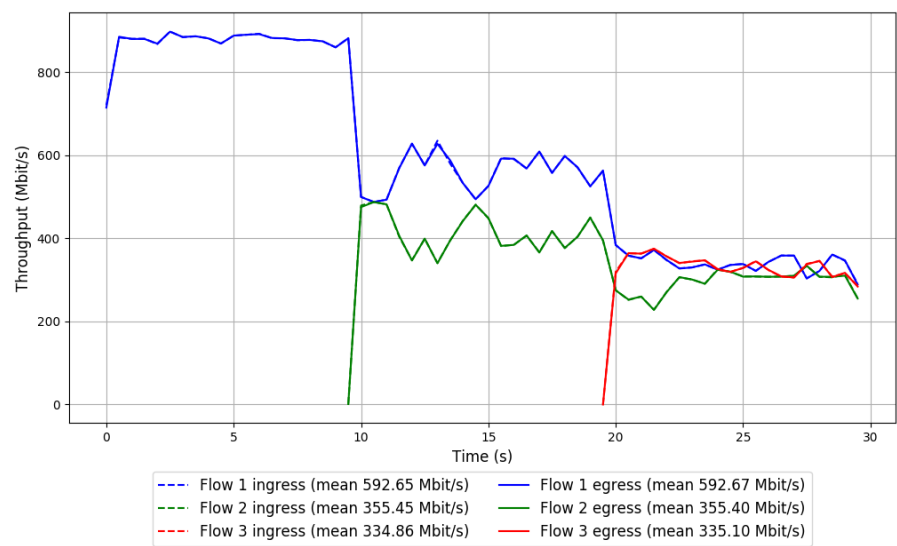
-- Flow 3:

Average throughput: 335.10 Mbit/s

95th percentile per-packet one-way delay: 5.763 ms

Loss rate: 0.08%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-11 22:09:23

End at: 2017-12-11 22:09:53

Local clock offset: 0.666 ms

Remote clock offset: 1.099 ms

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 890.60 Mbit/s

95th percentile per-packet one-way delay: 5.670 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 514.79 Mbit/s

95th percentile per-packet one-way delay: 5.574 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 400.21 Mbit/s

95th percentile per-packet one-way delay: 5.806 ms

Loss rate: 0.04%

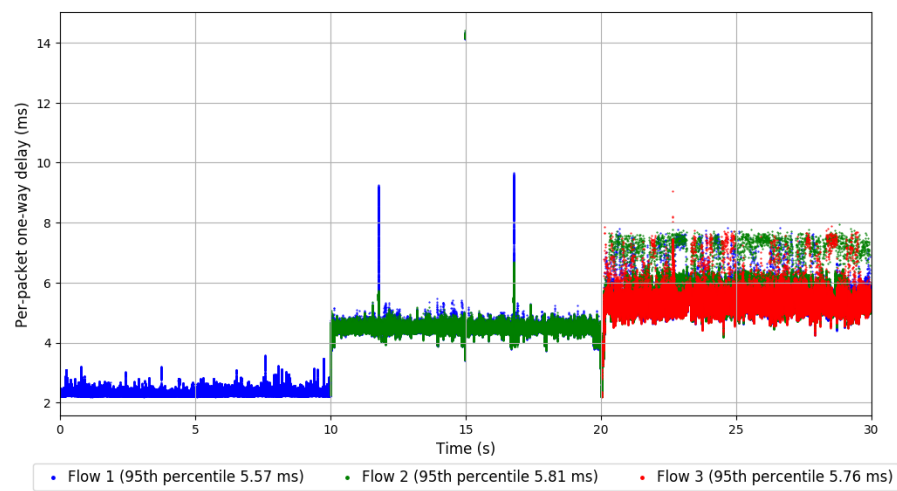
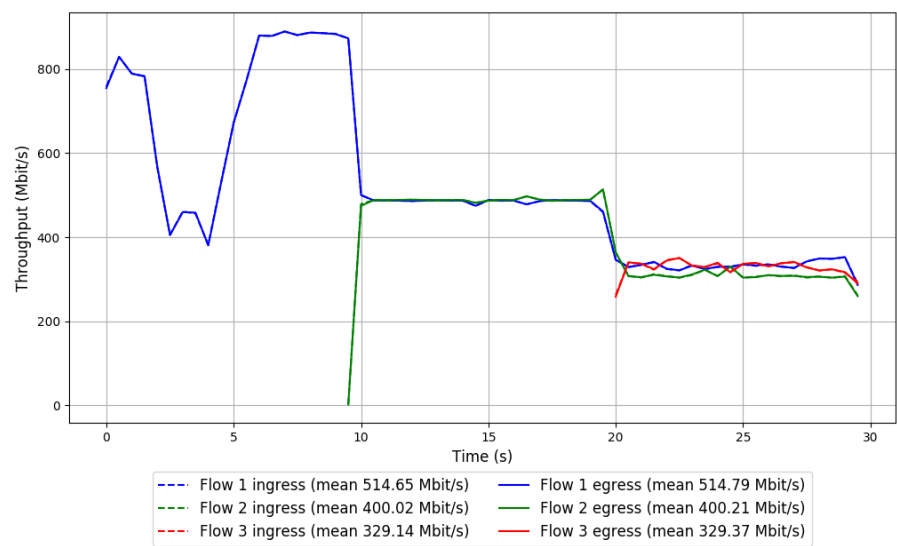
-- Flow 3:

Average throughput: 329.37 Mbit/s

95th percentile per-packet one-way delay: 5.761 ms

Loss rate: 0.10%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-11 22:27:58

End at: 2017-12-11 22:28:28

Local clock offset: 0.732 ms

Remote clock offset: 0.993 ms

Below is generated by plot.py at 2017-12-12 03:06:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 956.71 Mbit/s

95th percentile per-packet one-way delay: 5.661 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 572.90 Mbit/s

95th percentile per-packet one-way delay: 5.579 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 401.42 Mbit/s

95th percentile per-packet one-way delay: 5.747 ms

Loss rate: 0.10%

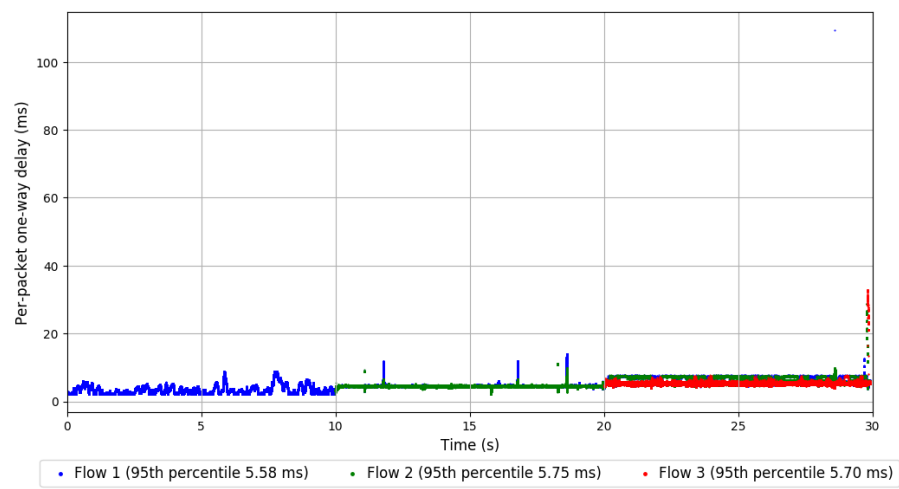
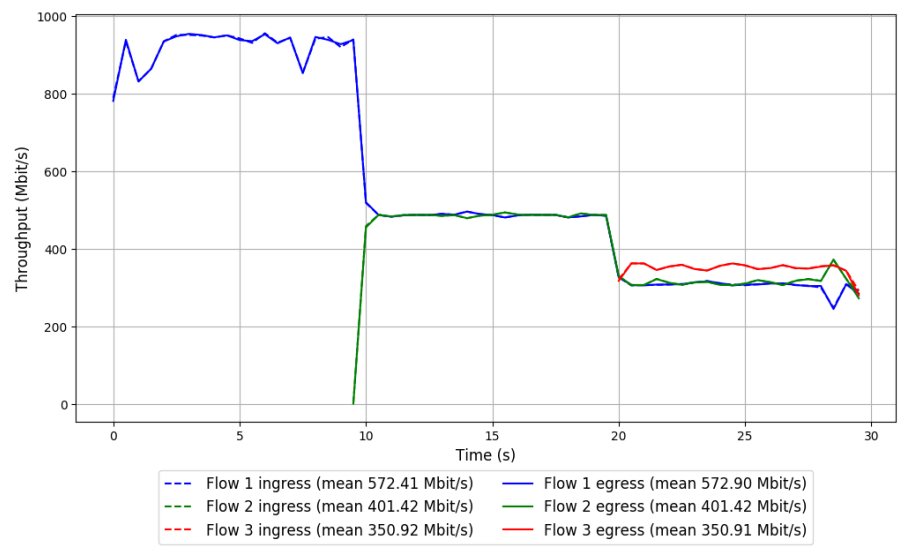
-- Flow 3:

Average throughput: 350.91 Mbit/s

95th percentile per-packet one-way delay: 5.696 ms

Loss rate: 0.23%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-11 22:46:36

End at: 2017-12-11 22:47:06

Local clock offset: 0.745 ms

Remote clock offset: 0.876 ms

Below is generated by plot.py at 2017-12-12 03:06:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 776.36 Mbit/s

95th percentile per-packet one-way delay: 5.455 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 316.73 Mbit/s

95th percentile per-packet one-way delay: 5.339 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 511.24 Mbit/s

95th percentile per-packet one-way delay: 5.478 ms

Loss rate: 0.03%

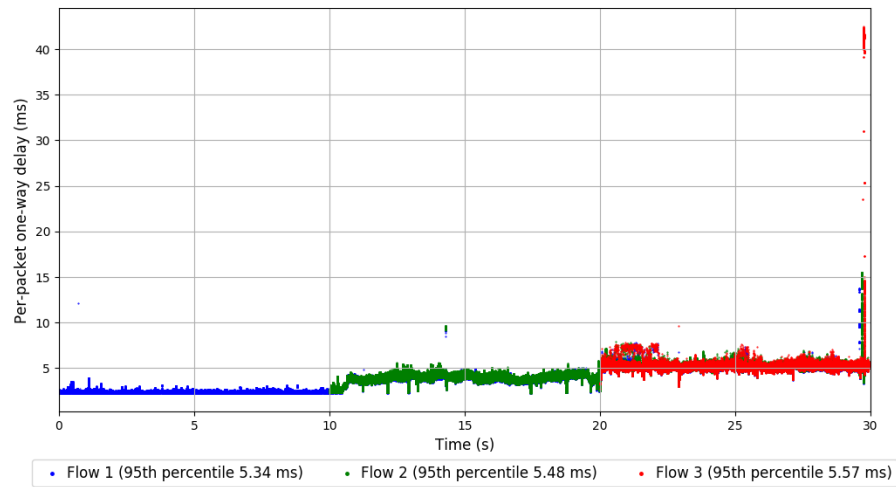
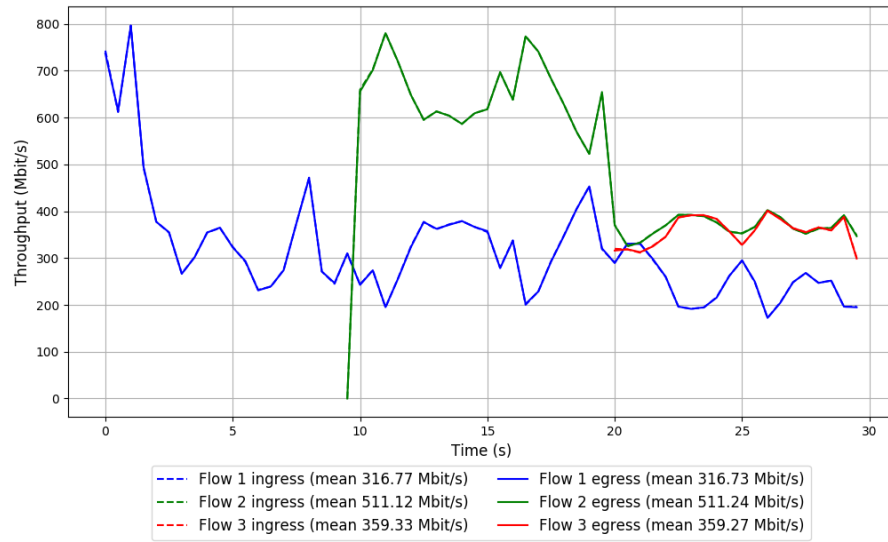
-- Flow 3:

Average throughput: 359.27 Mbit/s

95th percentile per-packet one-way delay: 5.569 ms

Loss rate: 0.08%

Run 10: Report of TCP Cubic — Data Link

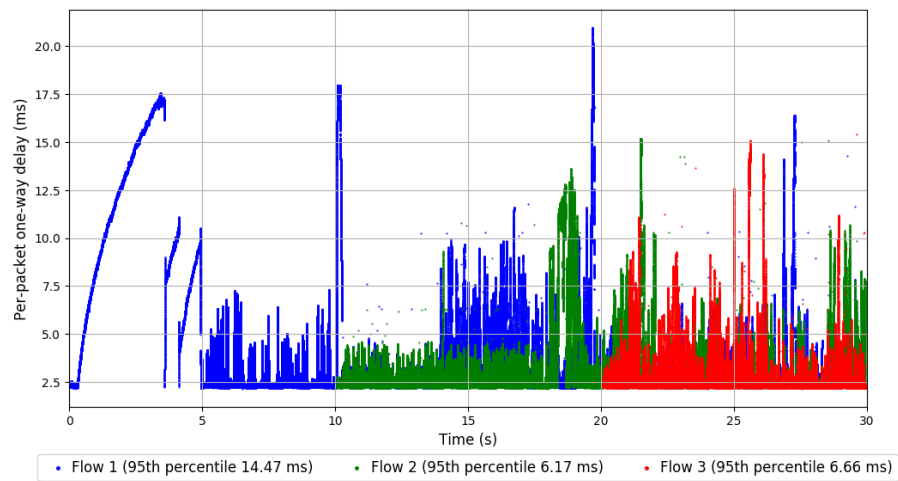
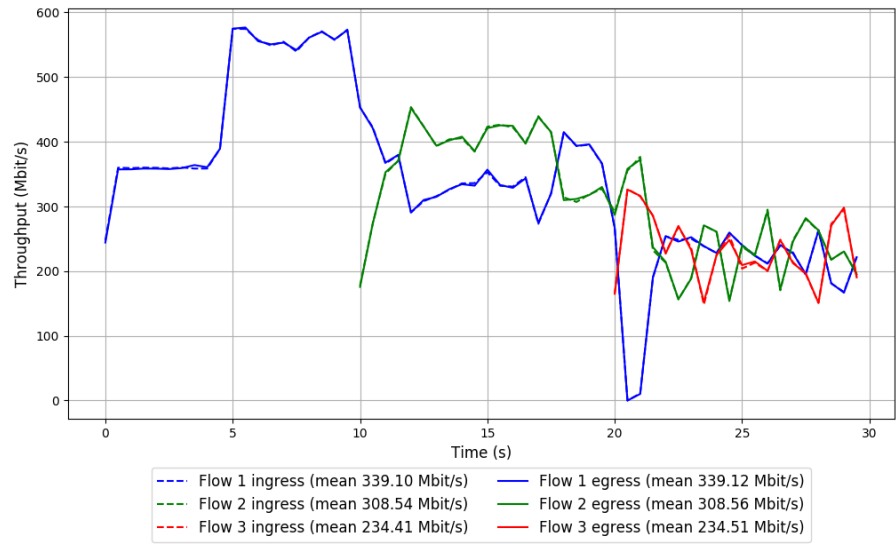


Run 1: Statistics of LEDBAT

Start at: 2017-12-11 20:08:49
End at: 2017-12-11 20:09:19
Local clock offset: -1.215 ms
Remote clock offset: -0.489 ms

Below is generated by plot.py at 2017-12-12 03:06:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 622.01 Mbit/s
95th percentile per-packet one-way delay: 11.269 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 339.12 Mbit/s
95th percentile per-packet one-way delay: 14.467 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 308.56 Mbit/s
95th percentile per-packet one-way delay: 6.166 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 234.51 Mbit/s
95th percentile per-packet one-way delay: 6.663 ms
Loss rate: 0.03%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-12-11 20:27:37

End at: 2017-12-11 20:28:07

Local clock offset: -0.878 ms

Remote clock offset: 0.156 ms

Below is generated by plot.py at 2017-12-12 03:06:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 638.08 Mbit/s

95th percentile per-packet one-way delay: 5.892 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 383.14 Mbit/s

95th percentile per-packet one-way delay: 8.557 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 269.85 Mbit/s

95th percentile per-packet one-way delay: 4.200 ms

Loss rate: 0.01%

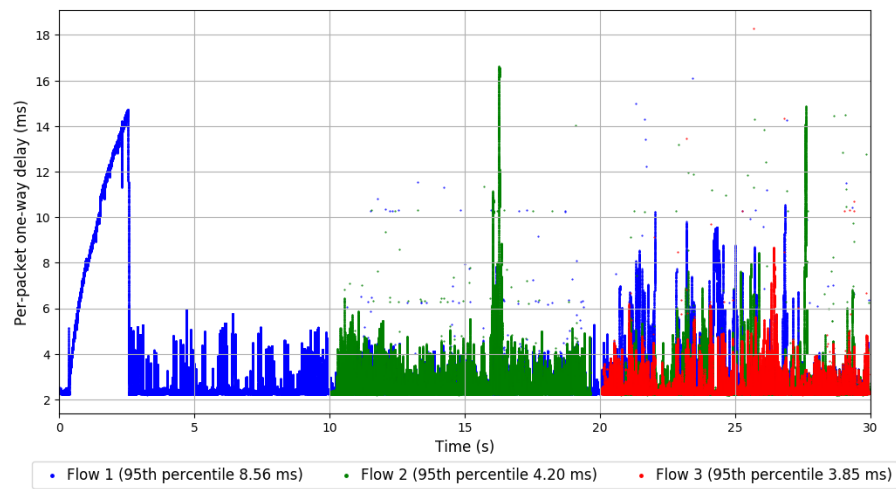
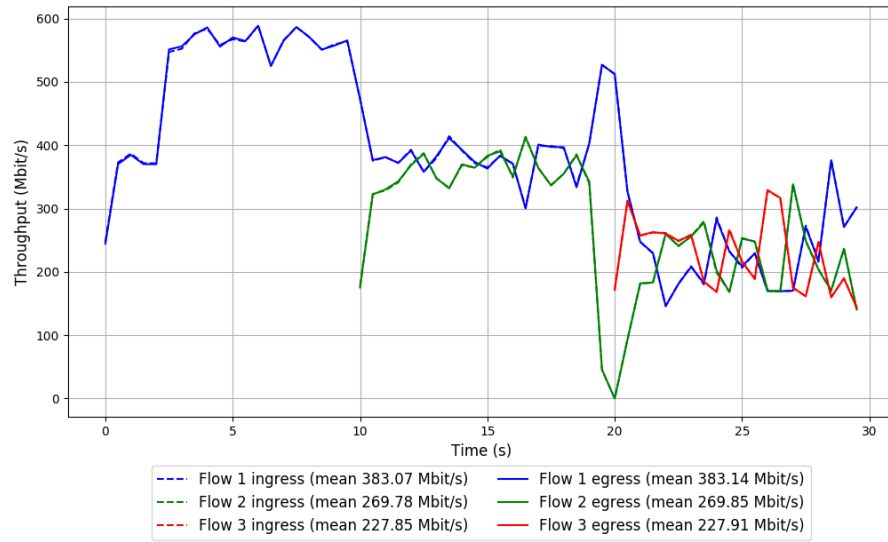
-- Flow 3:

Average throughput: 227.91 Mbit/s

95th percentile per-packet one-way delay: 3.847 ms

Loss rate: 0.03%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-11 20:46:18

End at: 2017-12-11 20:46:48

Local clock offset: -0.511 ms

Remote clock offset: 0.583 ms

Below is generated by plot.py at 2017-12-12 03:06:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 642.27 Mbit/s

95th percentile per-packet one-way delay: 5.047 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 364.44 Mbit/s

95th percentile per-packet one-way delay: 10.555 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 314.00 Mbit/s

95th percentile per-packet one-way delay: 3.914 ms

Loss rate: 0.02%

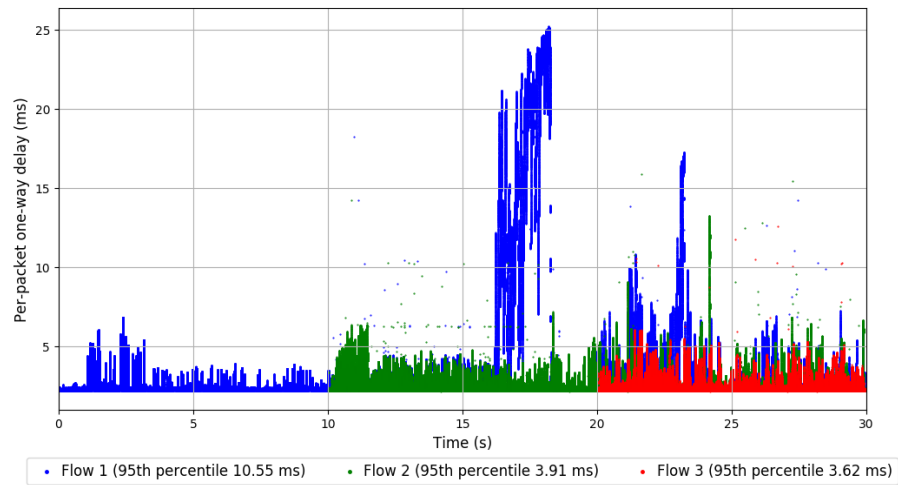
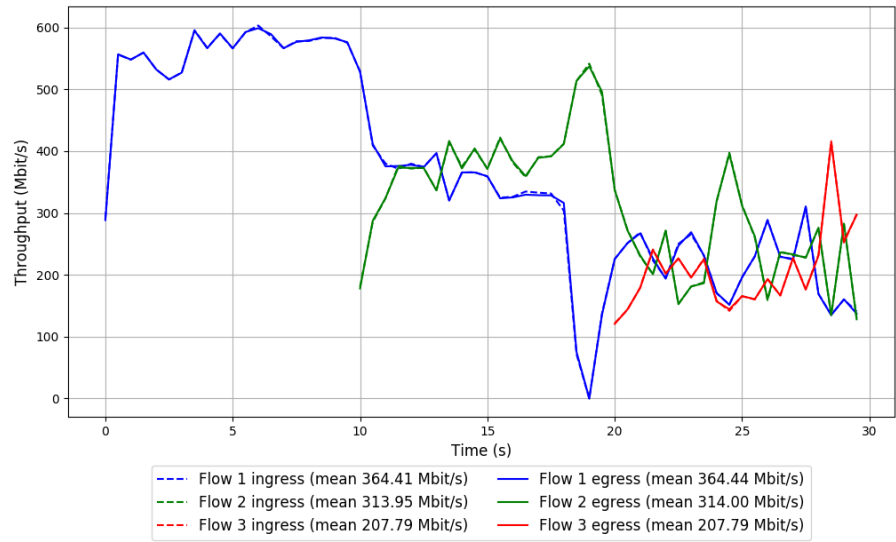
-- Flow 3:

Average throughput: 207.79 Mbit/s

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

Loss rate: 0.08%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-11 21:05:04

End at: 2017-12-11 21:05:34

Local clock offset: -0.186 ms

Remote clock offset: 0.914 ms

Below is generated by plot.py at 2017-12-12 03:06:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 650.76 Mbit/s

95th percentile per-packet one-way delay: 4.273 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 382.83 Mbit/s

95th percentile per-packet one-way delay: 4.444 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 280.68 Mbit/s

95th percentile per-packet one-way delay: 4.086 ms

Loss rate: 0.02%

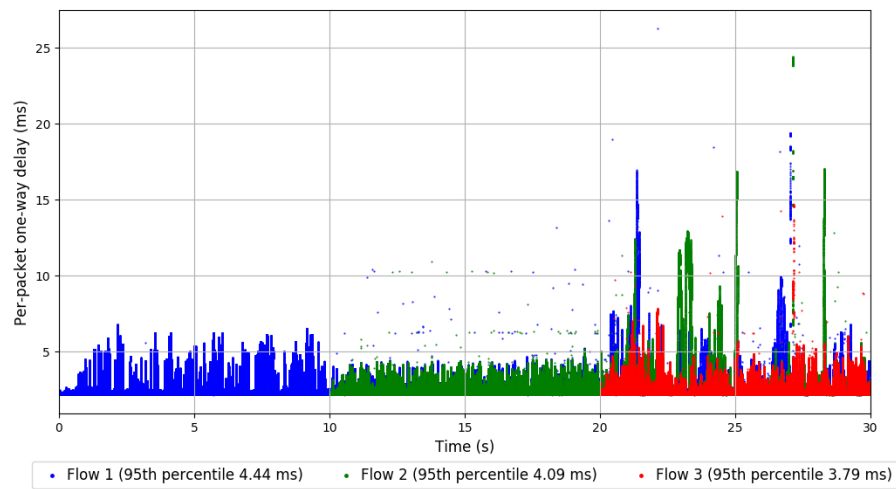
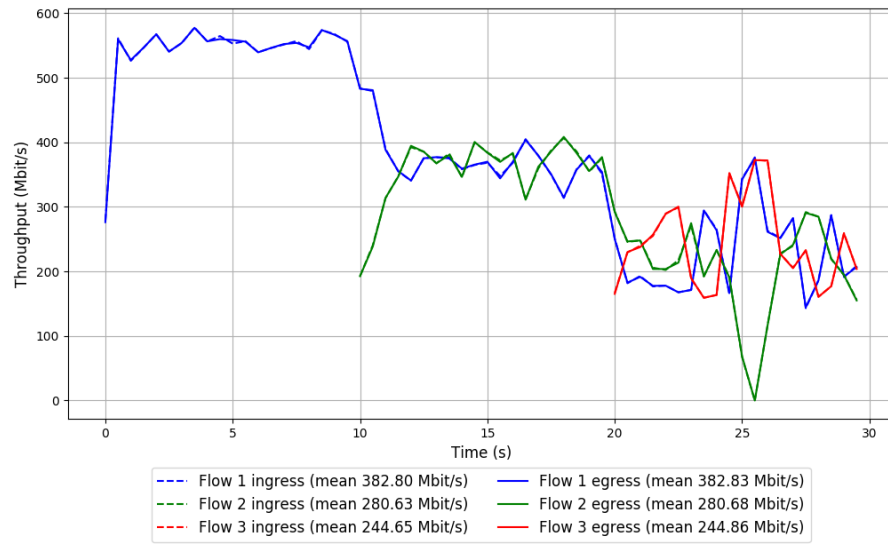
-- Flow 3:

Average throughput: 244.86 Mbit/s

95th percentile per-packet one-way delay: 3.791 ms

Loss rate: 0.03%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-11 21:23:45

End at: 2017-12-11 21:24:15

Local clock offset: 0.228 ms

Remote clock offset: 1.116 ms

Below is generated by plot.py at 2017-12-12 03:11:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 633.97 Mbit/s

95th percentile per-packet one-way delay: 4.021 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 346.54 Mbit/s

95th percentile per-packet one-way delay: 4.401 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 315.24 Mbit/s

95th percentile per-packet one-way delay: 3.608 ms

Loss rate: 0.00%

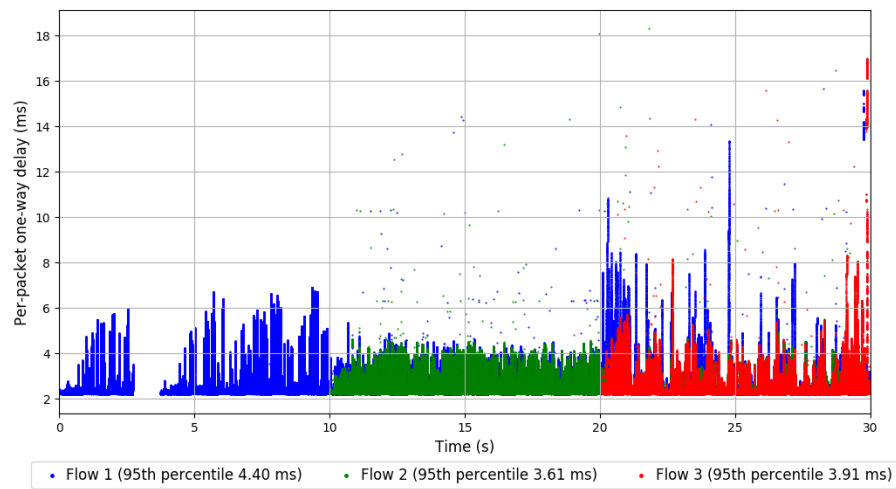
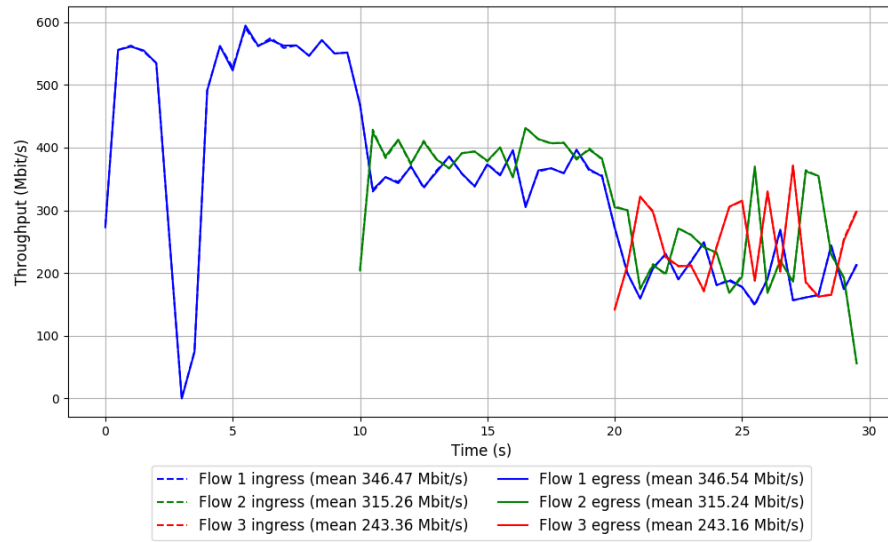
-- Flow 3:

Average throughput: 243.16 Mbit/s

95th percentile per-packet one-way delay: 3.912 ms

Loss rate: 0.14%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-11 21:42:33

End at: 2017-12-11 21:43:04

Local clock offset: 0.455 ms

Remote clock offset: 1.289 ms

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 654.70 Mbit/s

95th percentile per-packet one-way delay: 4.621 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 376.14 Mbit/s

95th percentile per-packet one-way delay: 4.698 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 310.82 Mbit/s

95th percentile per-packet one-way delay: 3.948 ms

Loss rate: 0.03%

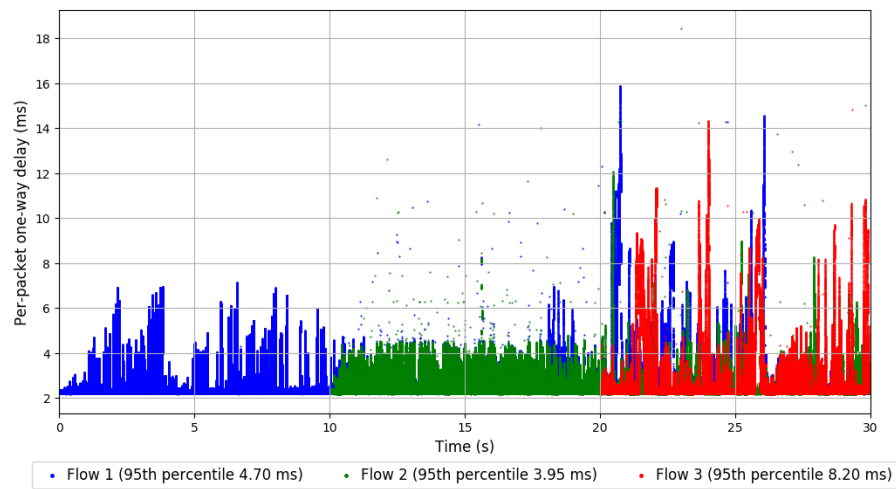
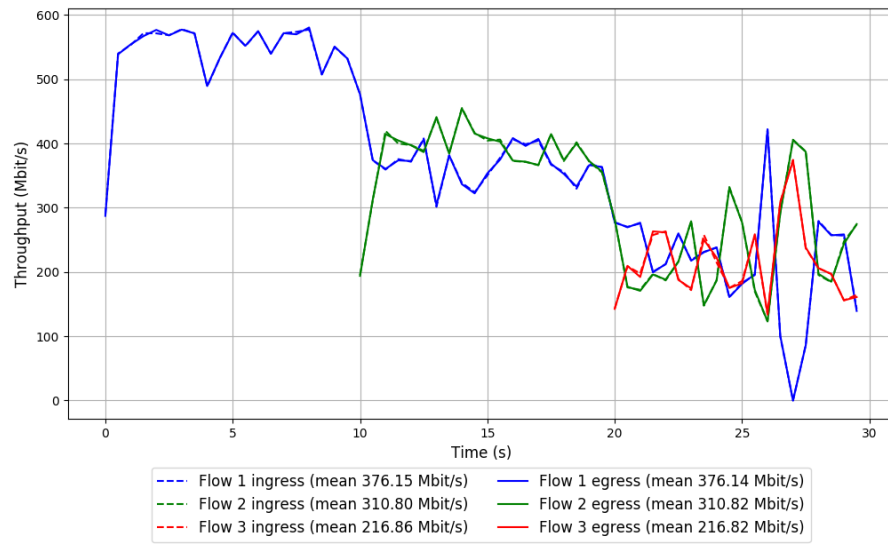
-- Flow 3:

Average throughput: 216.82 Mbit/s

95th percentile per-packet one-way delay: 8.204 ms

Loss rate: 0.09%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-11 22:01:20

End at: 2017-12-11 22:01:50

Local clock offset: 0.609 ms

Remote clock offset: 1.143 ms

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 636.22 Mbit/s

95th percentile per-packet one-way delay: 8.793 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 375.71 Mbit/s

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

Loss rate: 0.03%

-- Flow 2:

Average throughput: 285.48 Mbit/s

95th percentile per-packet one-way delay: 10.485 ms

Loss rate: 0.00%

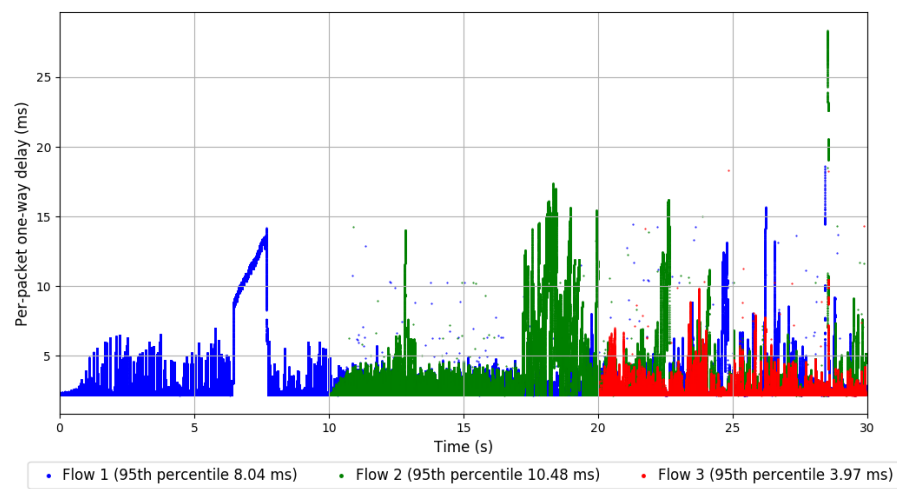
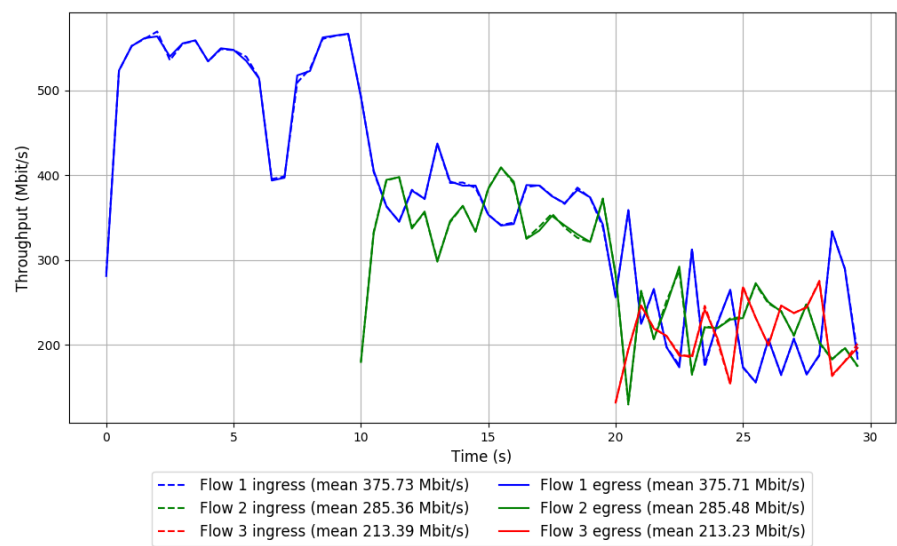
-- Flow 3:

Average throughput: 213.23 Mbit/s

95th percentile per-packet one-way delay: 3.971 ms

Loss rate: 0.14%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-11 22:19:58

End at: 2017-12-11 22:20:28

Local clock offset: 0.722 ms

Remote clock offset: 1.024 ms

Below is generated by plot.py at 2017-12-12 03:13:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 656.39 Mbit/s

95th percentile per-packet one-way delay: 5.834 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 384.70 Mbit/s

95th percentile per-packet one-way delay: 4.166 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 293.04 Mbit/s

95th percentile per-packet one-way delay: 11.501 ms

Loss rate: 0.04%

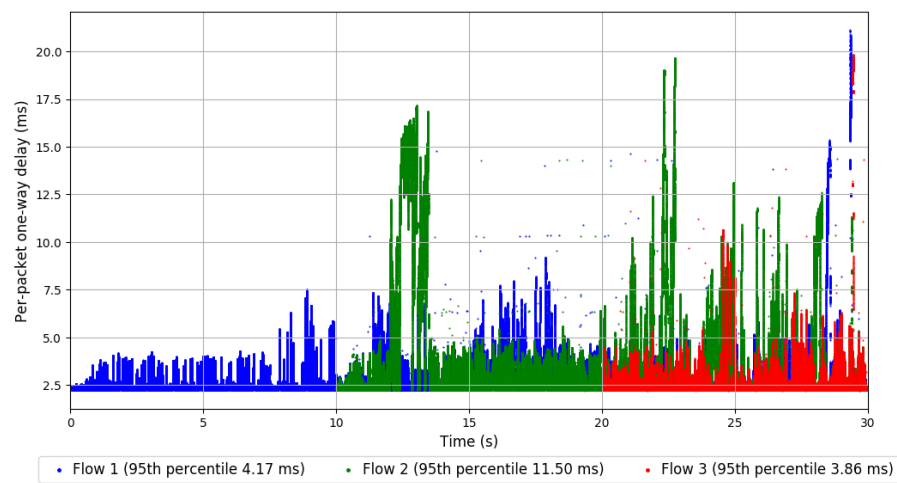
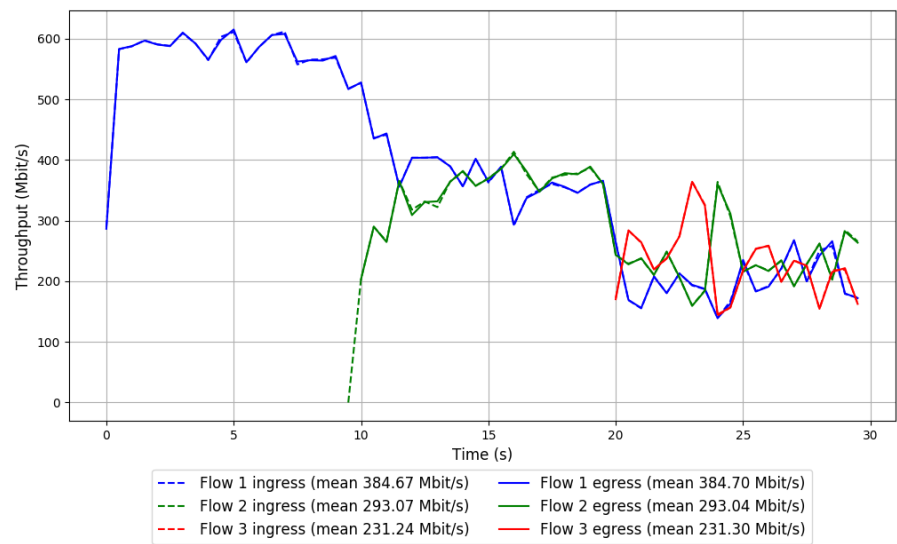
-- Flow 3:

Average throughput: 231.30 Mbit/s

95th percentile per-packet one-way delay: 3.864 ms

Loss rate: 0.02%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-11 22:38:40

End at: 2017-12-11 22:39:10

Local clock offset: 0.663 ms

Remote clock offset: 0.909 ms

Below is generated by plot.py at 2017-12-12 03:13:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 619.63 Mbit/s

95th percentile per-packet one-way delay: 5.452 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 360.59 Mbit/s

95th percentile per-packet one-way delay: 6.217 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 271.79 Mbit/s

95th percentile per-packet one-way delay: 3.965 ms

Loss rate: 0.03%

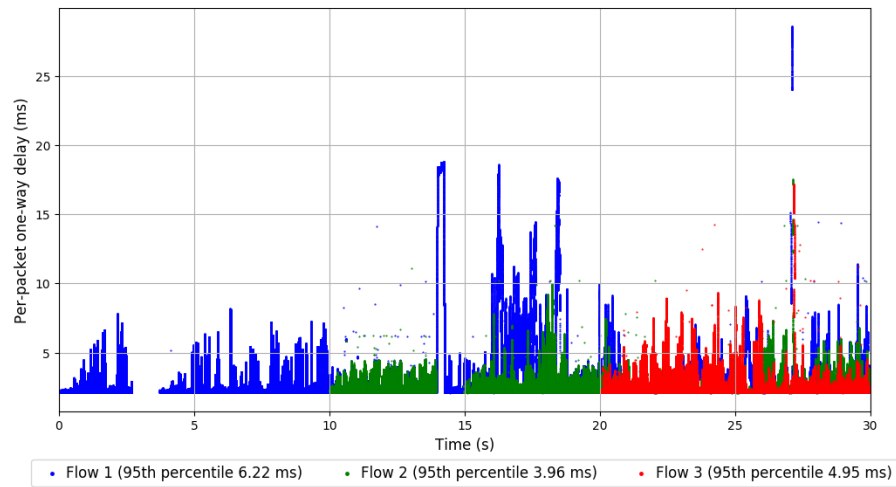
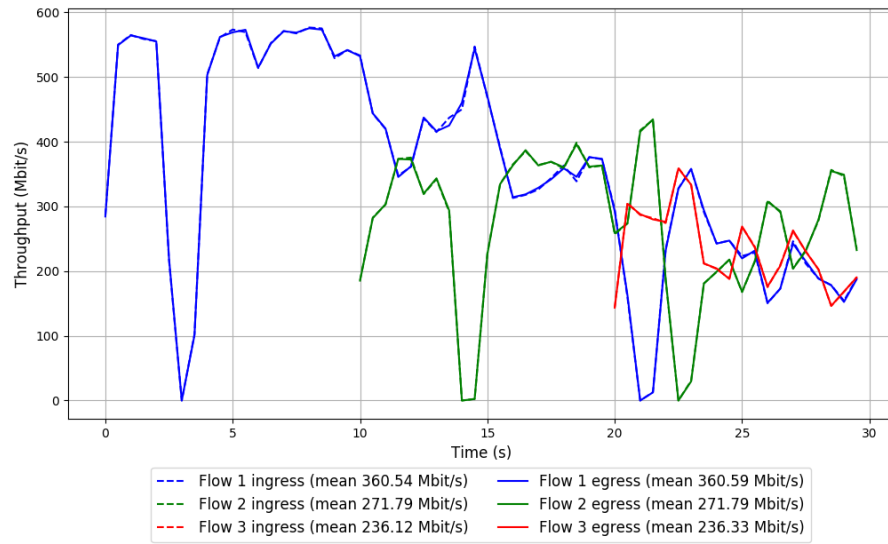
-- Flow 3:

Average throughput: 236.33 Mbit/s

95th percentile per-packet one-way delay: 4.945 ms

Loss rate: 0.01%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-11 22:57:15

End at: 2017-12-11 22:57:45

Local clock offset: 0.627 ms

Remote clock offset: 0.84 ms

Below is generated by plot.py at 2017-12-12 03:14:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 632.30 Mbit/s

95th percentile per-packet one-way delay: 4.832 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 389.53 Mbit/s

95th percentile per-packet one-way delay: 4.636 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 266.29 Mbit/s

95th percentile per-packet one-way delay: 4.319 ms

Loss rate: 0.02%

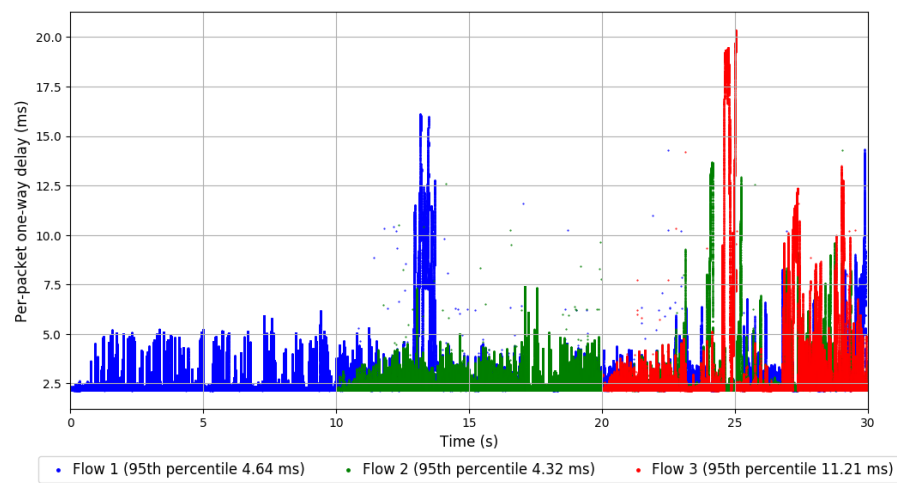
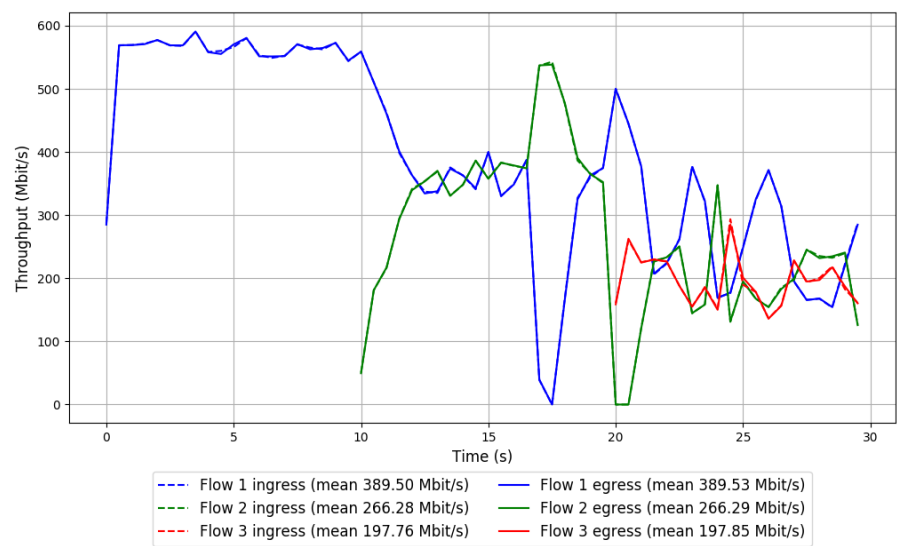
-- Flow 3:

Average throughput: 197.85 Mbit/s

95th percentile per-packet one-way delay: 11.214 ms

Loss rate: 0.02%

Run 10: Report of LEDBAT — Data Link

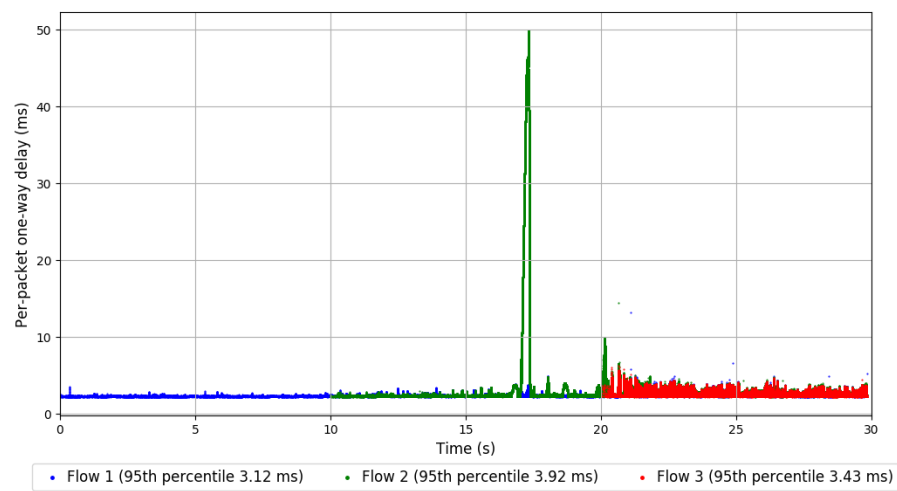
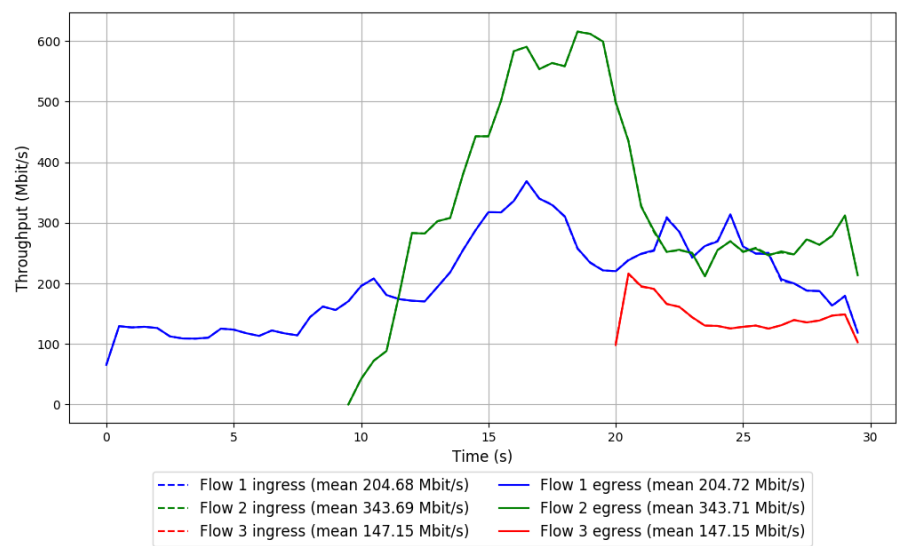


Run 1: Statistics of PCC

Start at: 2017-12-11 19:56:41
End at: 2017-12-11 19:57:11
Local clock offset: -1.317 ms
Remote clock offset: -0.724 ms

Below is generated by plot.py at 2017-12-12 03:14:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 481.68 Mbit/s
95th percentile per-packet one-way delay: 3.534 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 204.72 Mbit/s
95th percentile per-packet one-way delay: 3.120 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 343.71 Mbit/s
95th percentile per-packet one-way delay: 3.918 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 147.15 Mbit/s
95th percentile per-packet one-way delay: 3.433 ms
Loss rate: 0.04%

Run 1: Report of PCC — Data Link

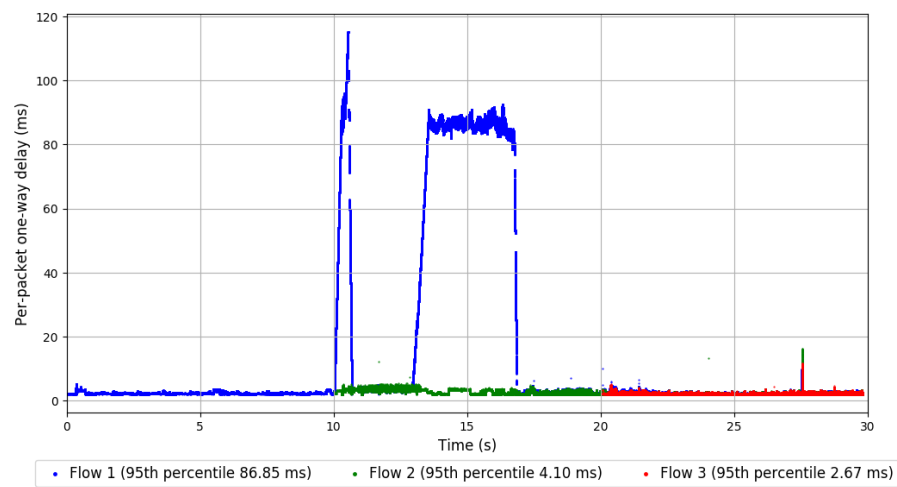
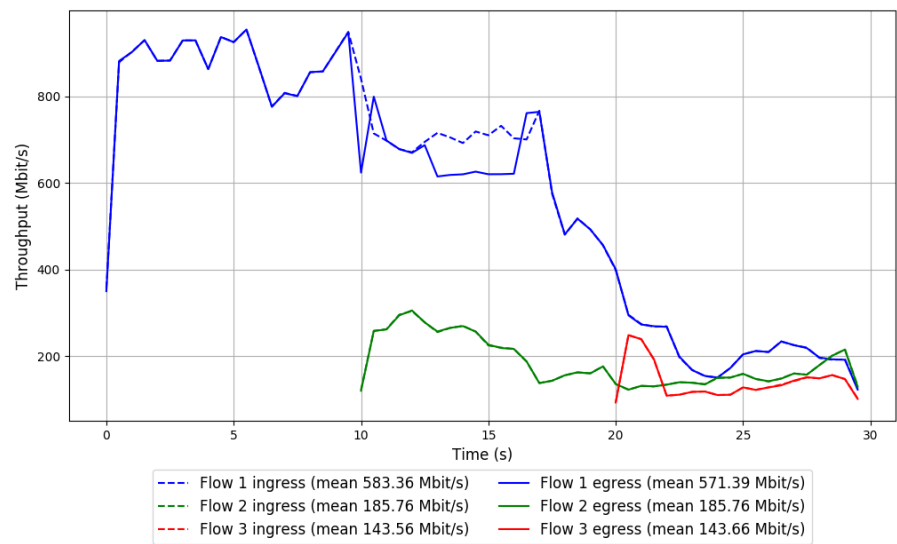


Run 2: Statistics of PCC

Start at: 2017-12-11 20:15:22
End at: 2017-12-11 20:15:52
Local clock offset: -1.156 ms
Remote clock offset: -0.246 ms

Below is generated by plot.py at 2017-12-12 03:16:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 741.91 Mbit/s
95th percentile per-packet one-way delay: 86.285 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 571.39 Mbit/s
95th percentile per-packet one-way delay: 86.854 ms
Loss rate: 2.06%
-- Flow 2:
Average throughput: 185.76 Mbit/s
95th percentile per-packet one-way delay: 4.102 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 143.66 Mbit/s
95th percentile per-packet one-way delay: 2.674 ms
Loss rate: 0.06%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-11 20:34:18

End at: 2017-12-11 20:34:48

Local clock offset: -0.785 ms

Remote clock offset: 0.369 ms

Below is generated by plot.py at 2017-12-12 03:20:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 647.29 Mbit/s

95th percentile per-packet one-way delay: 37.200 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 567.80 Mbit/s

95th percentile per-packet one-way delay: 50.920 ms

Loss rate: 1.38%

-- Flow 2:

Average throughput: 67.59 Mbit/s

95th percentile per-packet one-way delay: 2.625 ms

Loss rate: 0.09%

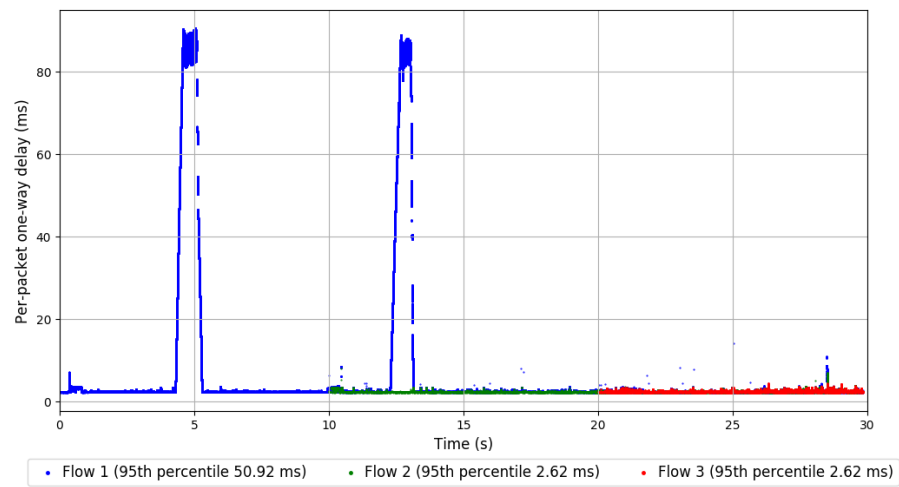
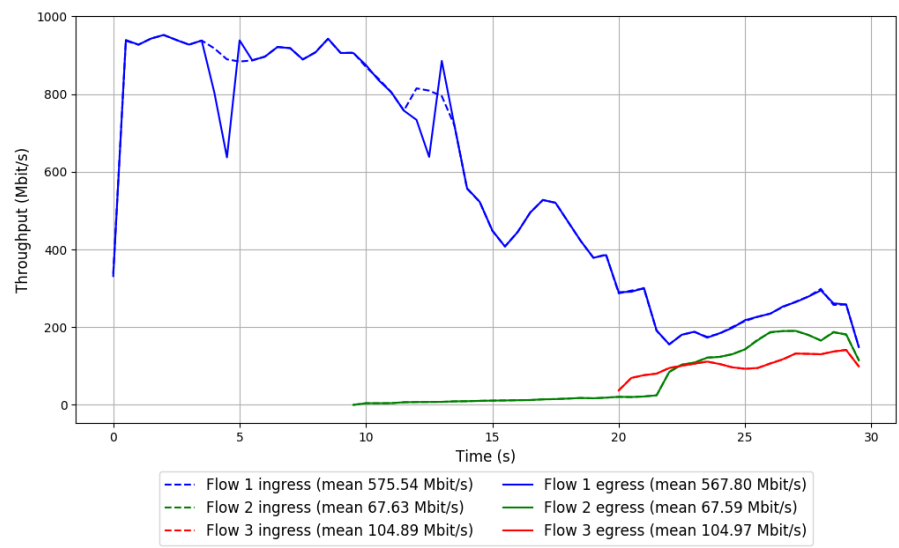
-- Flow 3:

Average throughput: 104.97 Mbit/s

95th percentile per-packet one-way delay: 2.620 ms

Loss rate: 0.08%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-11 20:52:53

End at: 2017-12-11 20:53:23

Local clock offset: -0.357 ms

Remote clock offset: 0.647 ms

Below is generated by plot.py at 2017-12-12 03:22:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 690.62 Mbit/s

95th percentile per-packet one-way delay: 2.769 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 583.69 Mbit/s

95th percentile per-packet one-way delay: 2.709 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 29.58 Mbit/s

95th percentile per-packet one-way delay: 2.659 ms

Loss rate: 0.04%

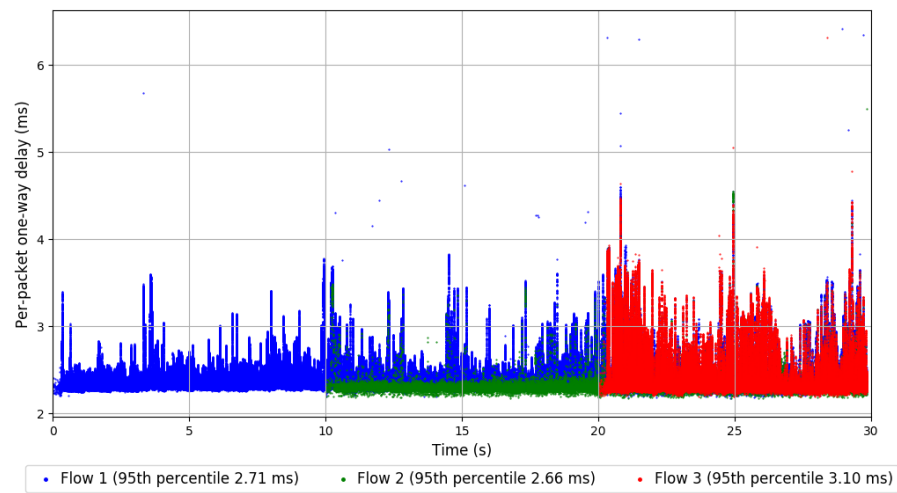
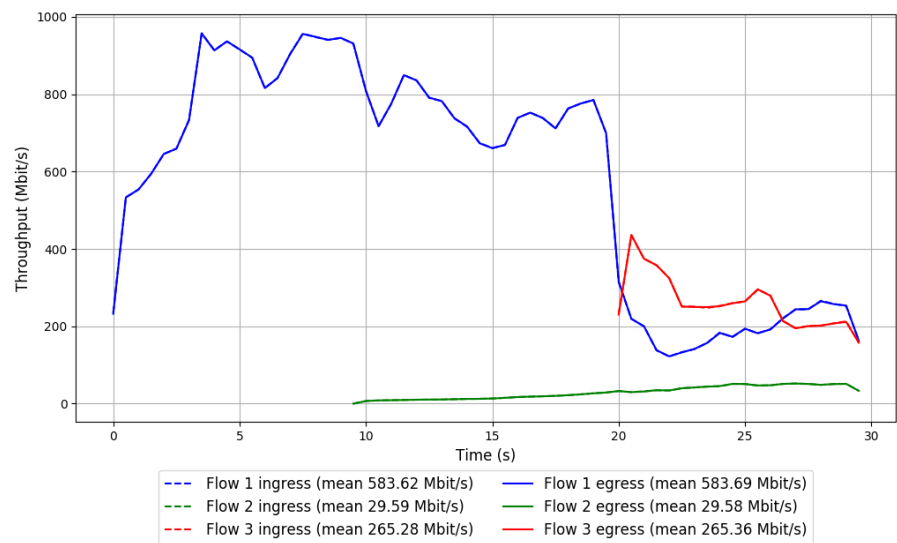
-- Flow 3:

Average throughput: 265.36 Mbit/s

95th percentile per-packet one-way delay: 3.098 ms

Loss rate: 0.05%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-11 21:11:40

End at: 2017-12-11 21:12:10

Local clock offset: -0.061 ms

Remote clock offset: 0.917 ms

Below is generated by plot.py at 2017-12-12 03:22:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 684.61 Mbit/s

95th percentile per-packet one-way delay: 4.879 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 544.75 Mbit/s

95th percentile per-packet one-way delay: 25.475 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 147.81 Mbit/s

95th percentile per-packet one-way delay: 2.940 ms

Loss rate: 0.02%

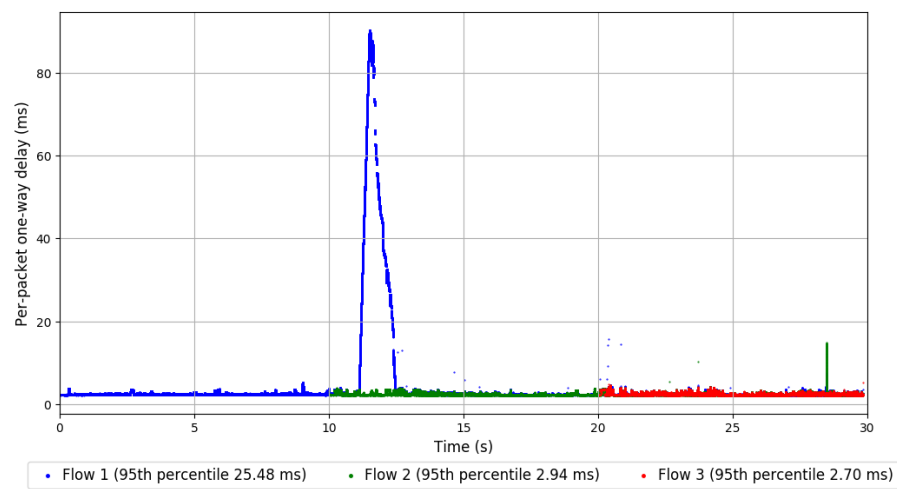
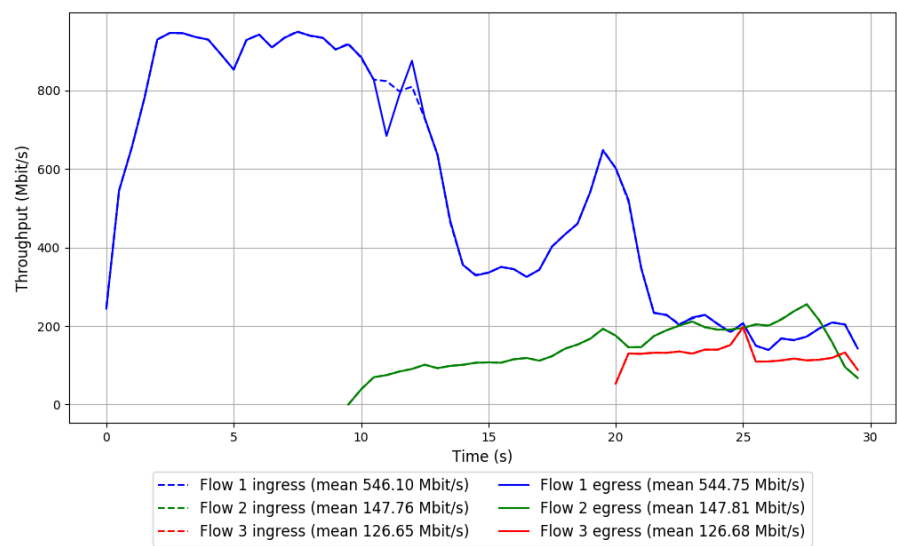
-- Flow 3:

Average throughput: 126.68 Mbit/s

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

Loss rate: 0.07%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-11 21:30:19

End at: 2017-12-11 21:30:49

Local clock offset: 0.26 ms

Remote clock offset: 1.219 ms

Below is generated by plot.py at 2017-12-12 03:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 726.79 Mbit/s

95th percentile per-packet one-way delay: 3.706 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 510.64 Mbit/s

95th percentile per-packet one-way delay: 3.411 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 305.03 Mbit/s

95th percentile per-packet one-way delay: 4.157 ms

Loss rate: 0.02%

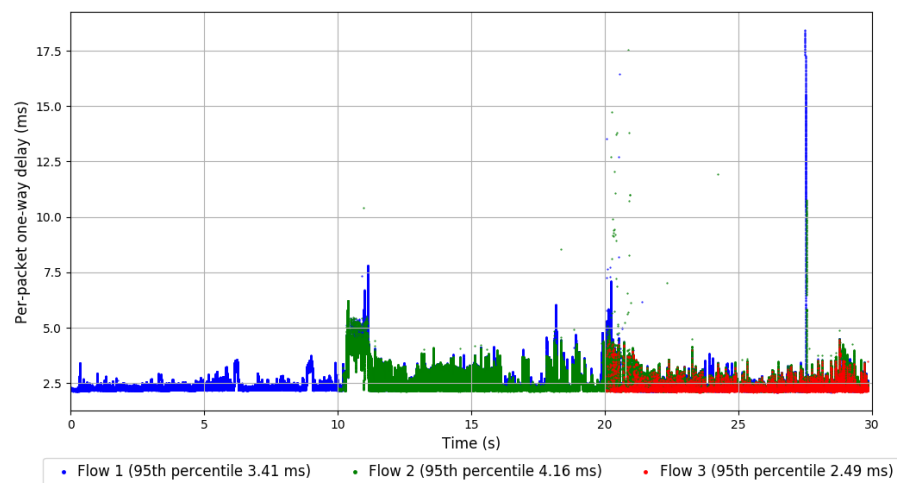
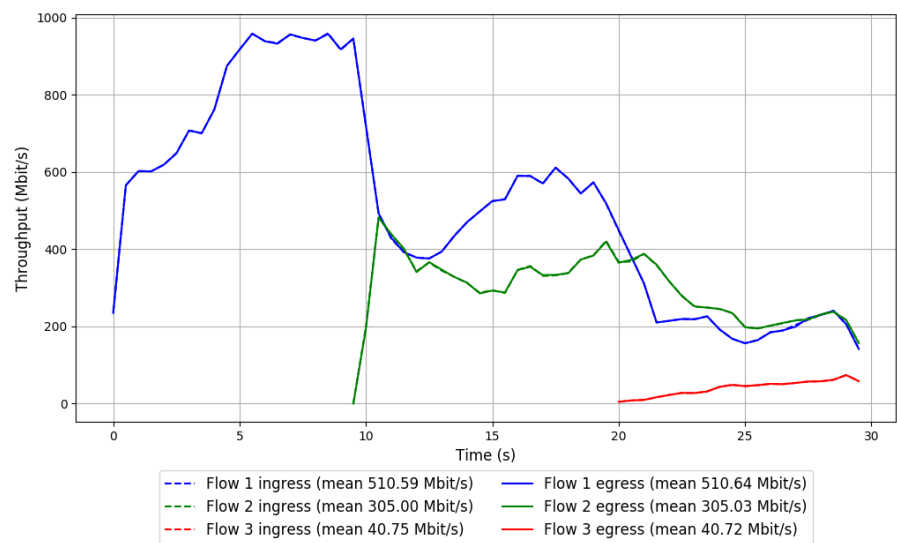
-- Flow 3:

Average throughput: 40.72 Mbit/s

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

Loss rate: 0.10%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-11 21:49:08

End at: 2017-12-11 21:49:38

Local clock offset: 0.535 ms

Remote clock offset: 1.229 ms

Below is generated by plot.py at 2017-12-12 03:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 690.31 Mbit/s

95th percentile per-packet one-way delay: 83.913 ms

Loss rate: 2.35%

-- Flow 1:

Average throughput: 577.06 Mbit/s

95th percentile per-packet one-way delay: 84.848 ms

Loss rate: 2.79%

-- Flow 2:

Average throughput: 50.28 Mbit/s

95th percentile per-packet one-way delay: 2.667 ms

Loss rate: 0.04%

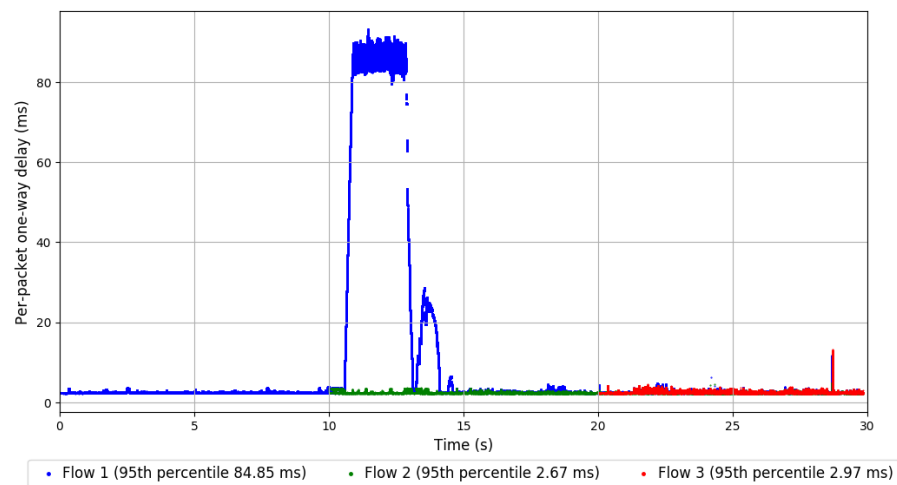
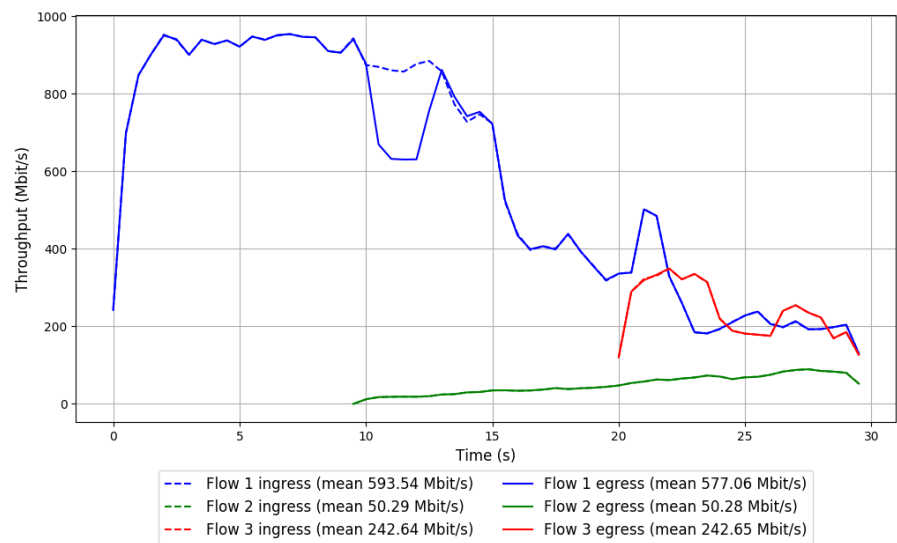
-- Flow 3:

Average throughput: 242.65 Mbit/s

95th percentile per-packet one-way delay: 2.969 ms

Loss rate: 0.04%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-11 22:07:55

End at: 2017-12-11 22:08:25

Local clock offset: 0.599 ms

Remote clock offset: 1.127 ms

Below is generated by plot.py at 2017-12-12 03:25:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 787.47 Mbit/s

95th percentile per-packet one-way delay: 3.124 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 679.22 Mbit/s

95th percentile per-packet one-way delay: 3.108 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 46.23 Mbit/s

95th percentile per-packet one-way delay: 2.999 ms

Loss rate: 0.06%

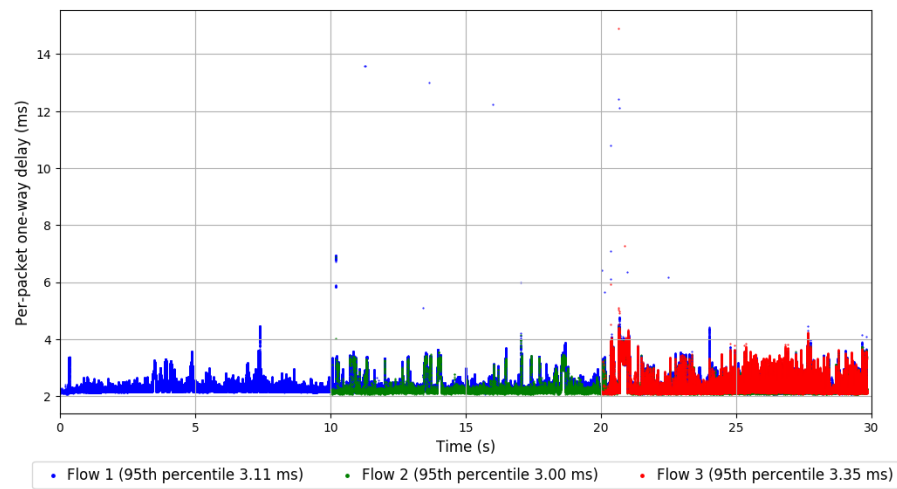
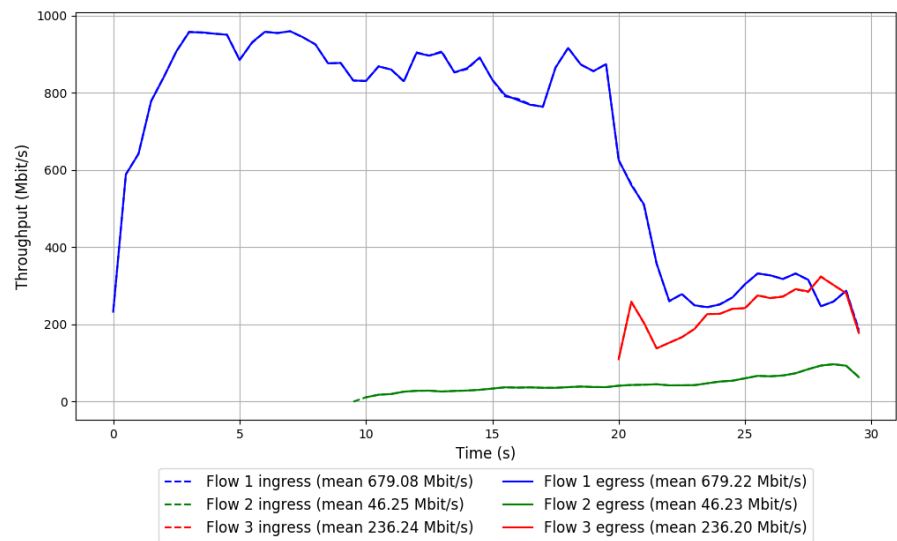
-- Flow 3:

Average throughput: 236.20 Mbit/s

95th percentile per-packet one-way delay: 3.355 ms

Loss rate: 0.06%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-11 22:26:32

End at: 2017-12-11 22:27:02

Local clock offset: 0.737 ms

Remote clock offset: 1.01 ms

Below is generated by plot.py at 2017-12-12 03:25:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 716.73 Mbit/s

95th percentile per-packet one-way delay: 85.447 ms

Loss rate: 2.10%

-- Flow 1:

Average throughput: 654.20 Mbit/s

95th percentile per-packet one-way delay: 86.291 ms

Loss rate: 2.29%

-- Flow 2:

Average throughput: 13.59 Mbit/s

95th percentile per-packet one-way delay: 3.456 ms

Loss rate: 0.04%

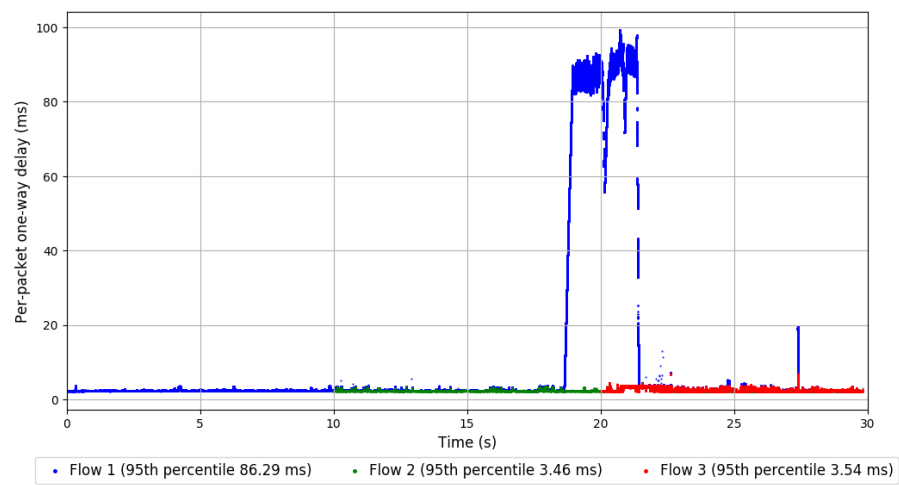
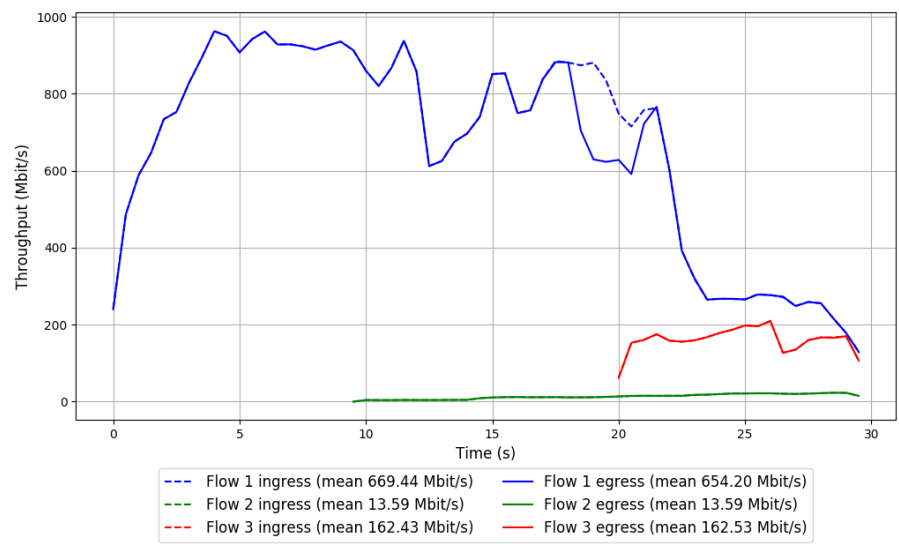
-- Flow 3:

Average throughput: 162.53 Mbit/s

95th percentile per-packet one-way delay: 3.536 ms

Loss rate: 0.04%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-11 22:45:14

End at: 2017-12-11 22:45:44

Local clock offset: 0.739 ms

Remote clock offset: 0.823 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 606.40 Mbit/s

95th percentile per-packet one-way delay: 2.919 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 515.00 Mbit/s

95th percentile per-packet one-way delay: 2.968 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 123.77 Mbit/s

95th percentile per-packet one-way delay: 2.767 ms

Loss rate: 0.03%

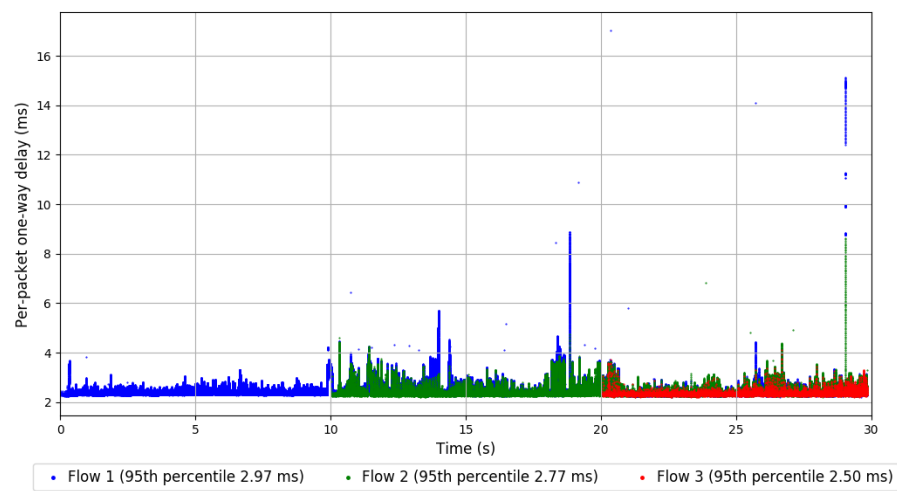
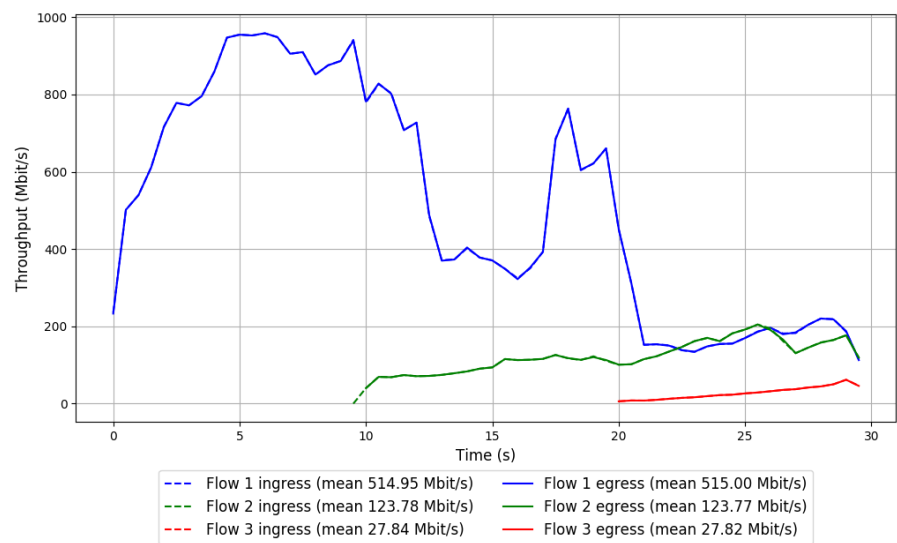
-- Flow 3:

Average throughput: 27.82 Mbit/s

95th percentile per-packet one-way delay: 2.498 ms

Loss rate: 0.12%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2017-12-11 20:14:15

End at: 2017-12-11 20:14:45

Local clock offset: -1.101 ms

Remote clock offset: -0.3 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.06 Mbit/s

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

Loss rate: 0.04%

-- Flow 1:

Average throughput: 1.13 Mbit/s

95th percentile per-packet one-way delay: 2.457 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 76.01 Mbit/s

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

Loss rate: 0.03%

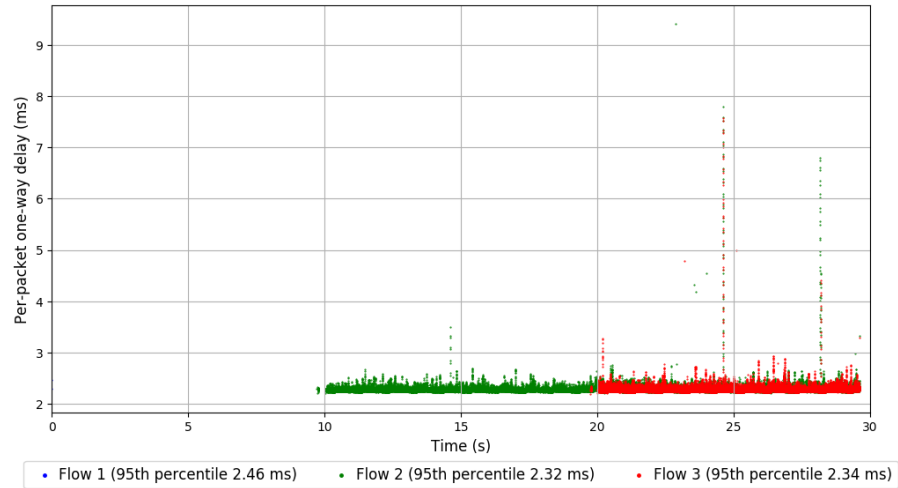
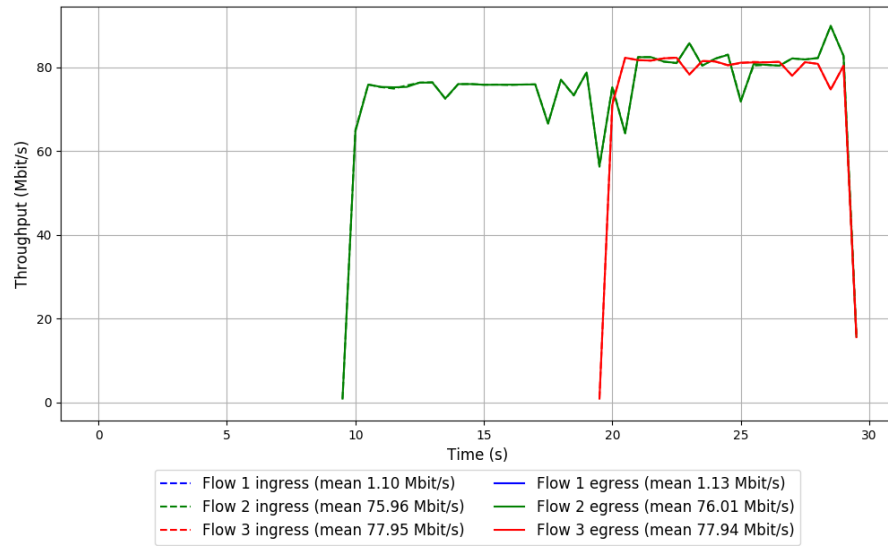
-- Flow 3:

Average throughput: 77.94 Mbit/s

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

Loss rate: 0.06%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-11 20:33:10

End at: 2017-12-11 20:33:40

Local clock offset: -0.792 ms

Remote clock offset: 0.353 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.88 Mbit/s

95th percentile per-packet one-way delay: 2.297 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 0.90 Mbit/s

95th percentile per-packet one-way delay: 14.650 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 85.22 Mbit/s

95th percentile per-packet one-way delay: 2.302 ms

Loss rate: 0.05%

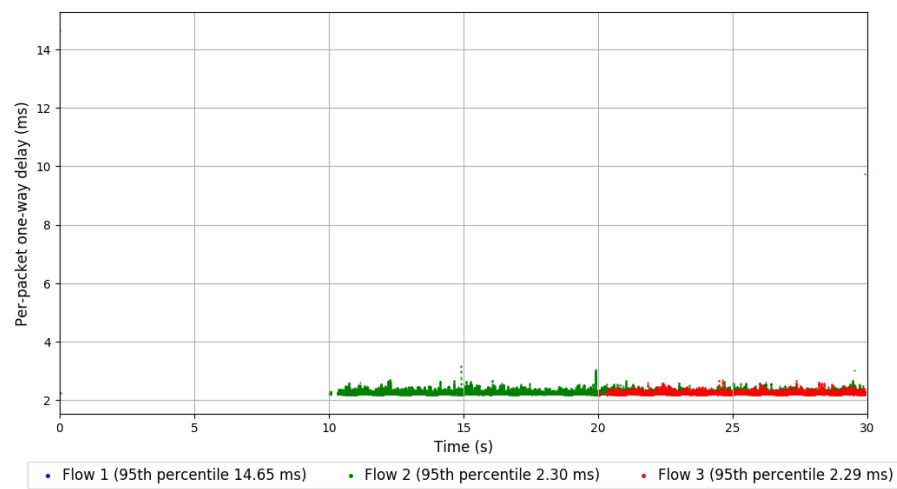
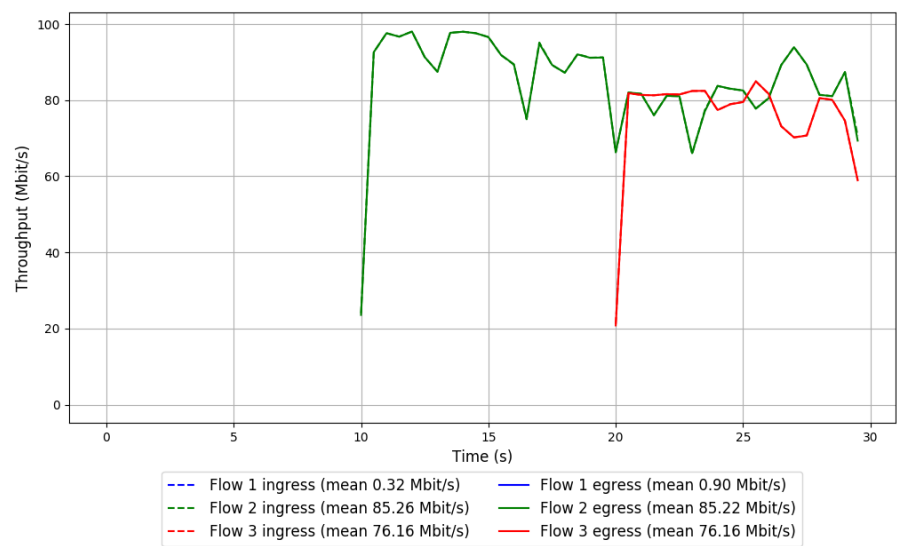
-- Flow 3:

Average throughput: 76.16 Mbit/s

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

Loss rate: 0.03%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-11 20:51:45

End at: 2017-12-11 20:52:15

Local clock offset: -0.354 ms

Remote clock offset: 0.706 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.93 Mbit/s

95th percentile per-packet one-way delay: 2.289 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 0.87 Mbit/s

95th percentile per-packet one-way delay: 3.945 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 83.98 Mbit/s

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

Loss rate: 0.02%

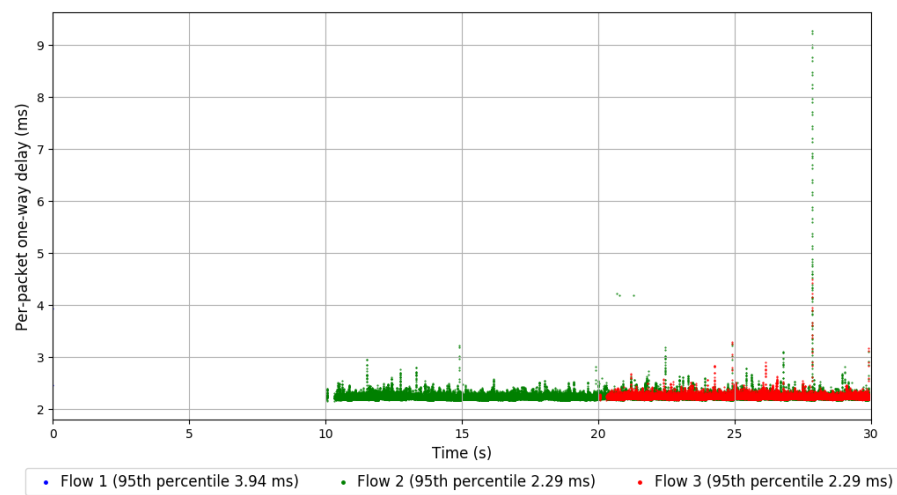
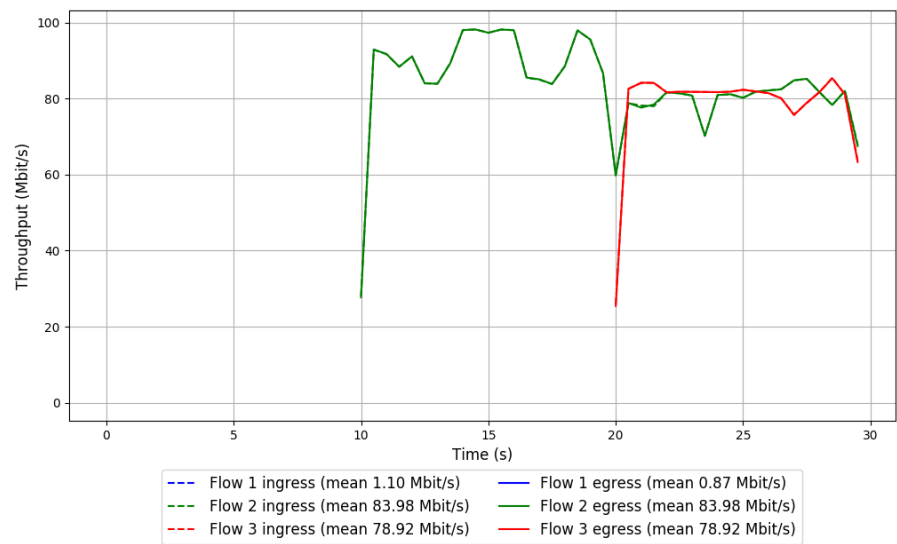
-- Flow 3:

Average throughput: 78.92 Mbit/s

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

Loss rate: 0.05%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-11 21:10:32

End at: 2017-12-11 21:11:02

Local clock offset: -0.017 ms

Remote clock offset: 0.962 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.10 Mbit/s

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

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 2.349 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 75.37 Mbit/s

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

Loss rate: 0.02%

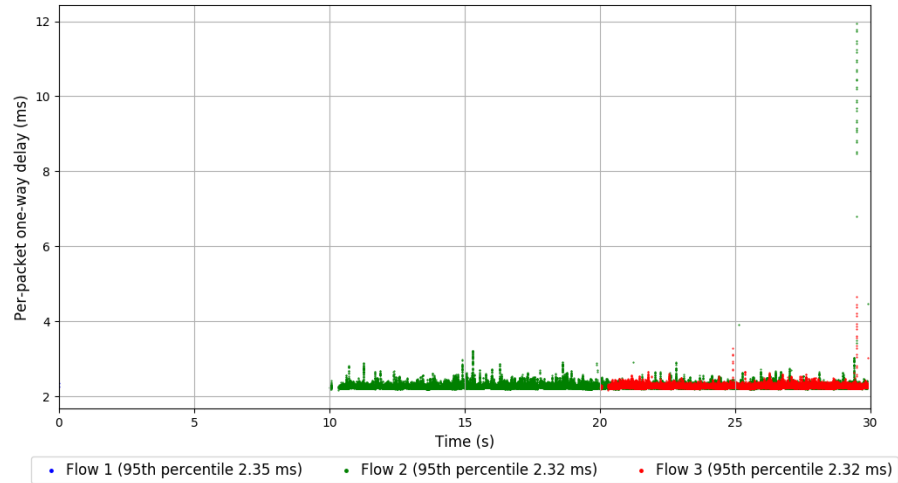
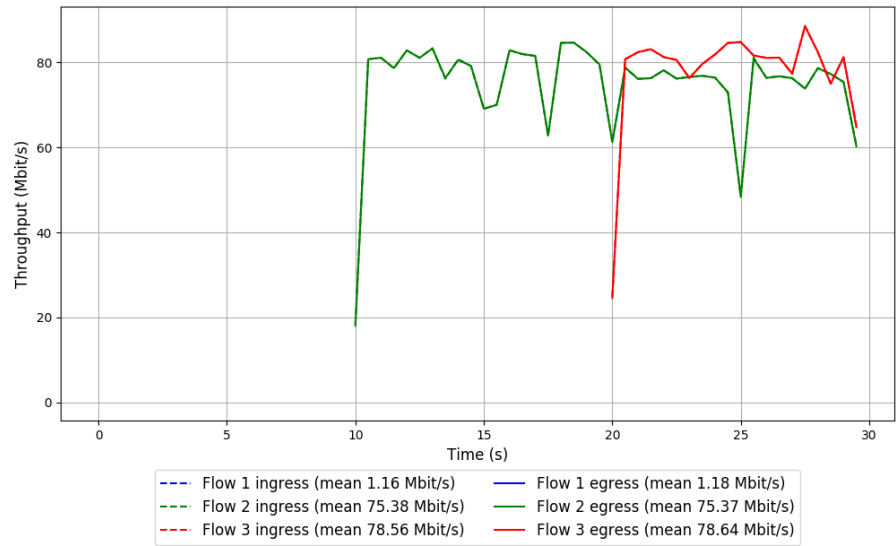
-- Flow 3:

Average throughput: 78.64 Mbit/s

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

Loss rate: 0.06%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-11 21:29:11

End at: 2017-12-11 21:29:41

Local clock offset: 0.273 ms

Remote clock offset: 1.176 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.68 Mbit/s

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

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.11 Mbit/s

95th percentile per-packet one-way delay: 2.503 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 86.57 Mbit/s

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

Loss rate: 0.02%

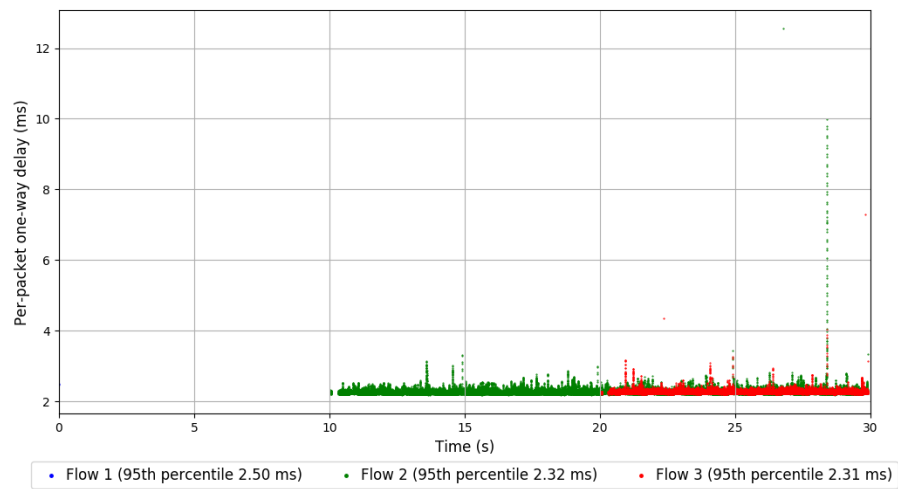
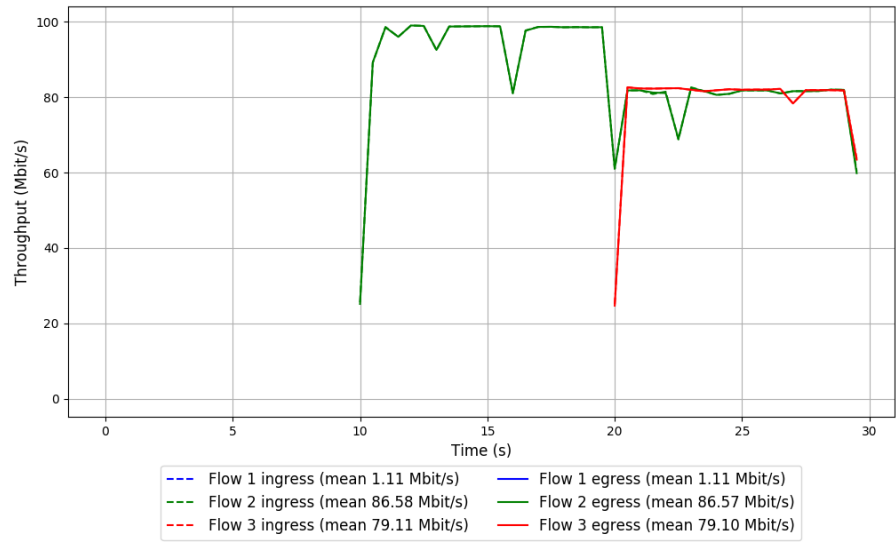
-- Flow 3:

Average throughput: 79.10 Mbit/s

95th percentile per-packet one-way delay: 2.315 ms

Loss rate: 0.04%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-11 21:48:00

End at: 2017-12-11 21:48:30

Local clock offset: 0.497 ms

Remote clock offset: 1.237 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.66 Mbit/s

95th percentile per-packet one-way delay: 2.279 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 2.468 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 74.51 Mbit/s

95th percentile per-packet one-way delay: 2.278 ms

Loss rate: 0.03%

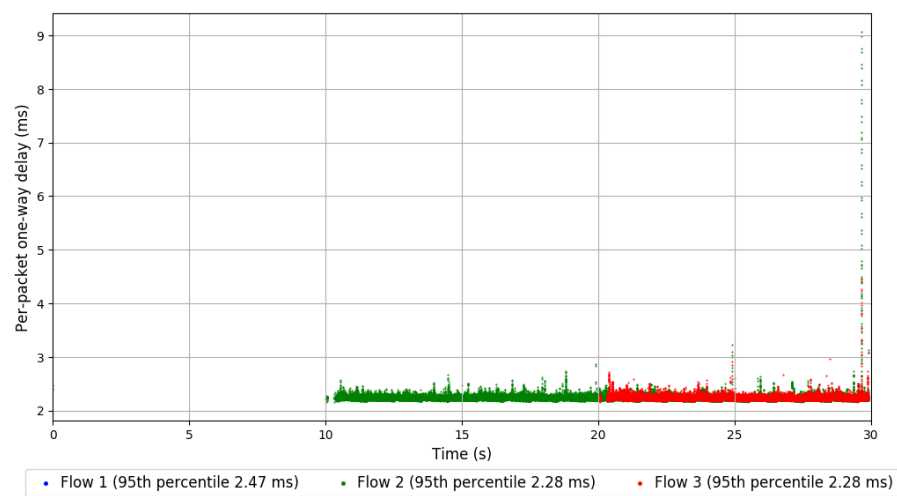
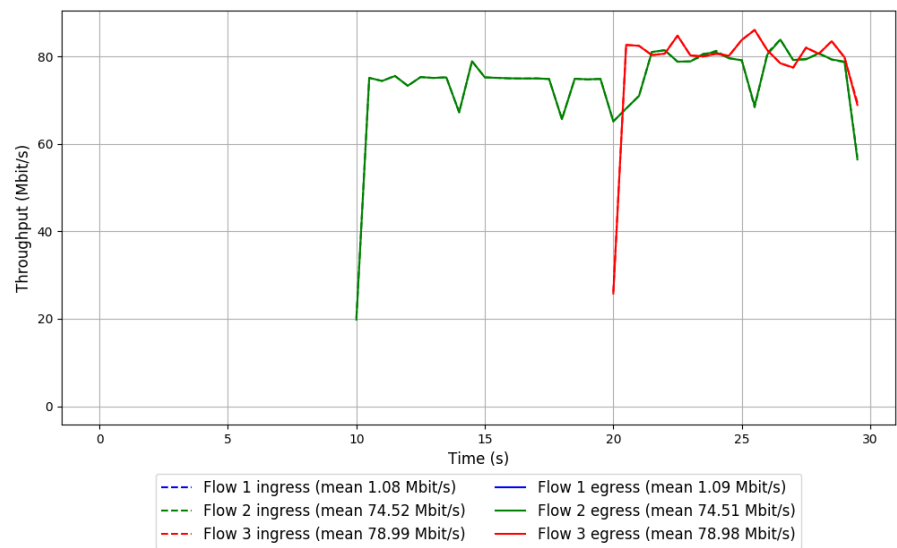
-- Flow 3:

Average throughput: 78.98 Mbit/s

95th percentile per-packet one-way delay: 2.281 ms

Loss rate: 0.05%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-11 22:06:48

End at: 2017-12-11 22:07:18

Local clock offset: 0.647 ms

Remote clock offset: 1.128 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.58 Mbit/s

95th percentile per-packet one-way delay: 2.302 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.10 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 85.25 Mbit/s

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

Loss rate: 0.02%

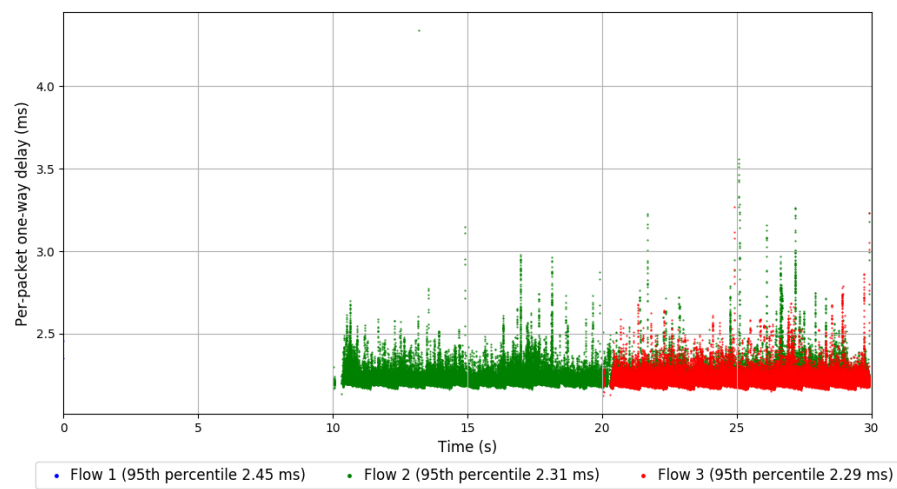
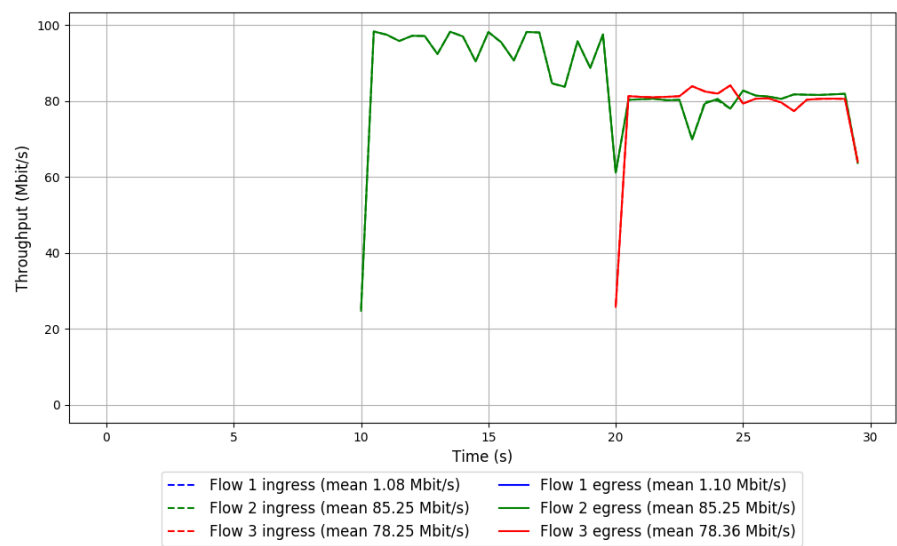
-- Flow 3:

Average throughput: 78.36 Mbit/s

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

Loss rate: 0.05%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-11 22:25:25

End at: 2017-12-11 22:25:55

Local clock offset: 0.728 ms

Remote clock offset: 0.905 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.58 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 2.390 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.44 Mbit/s

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

Loss rate: 0.02%

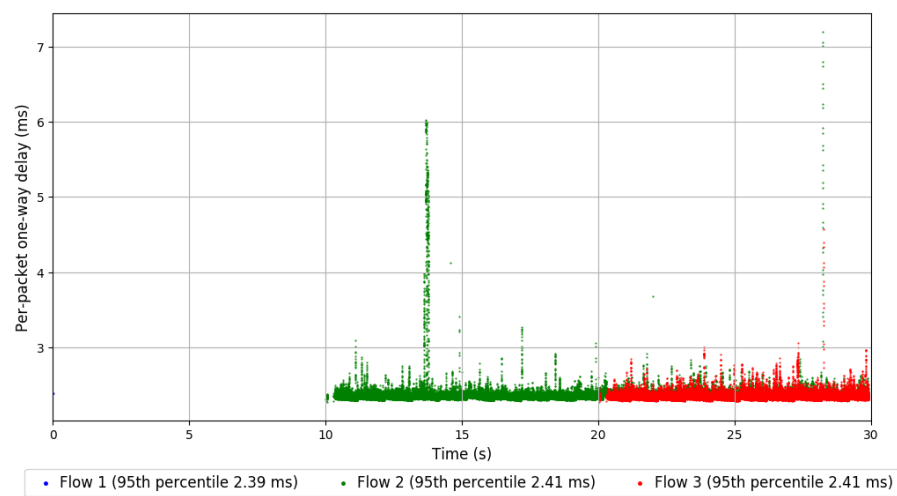
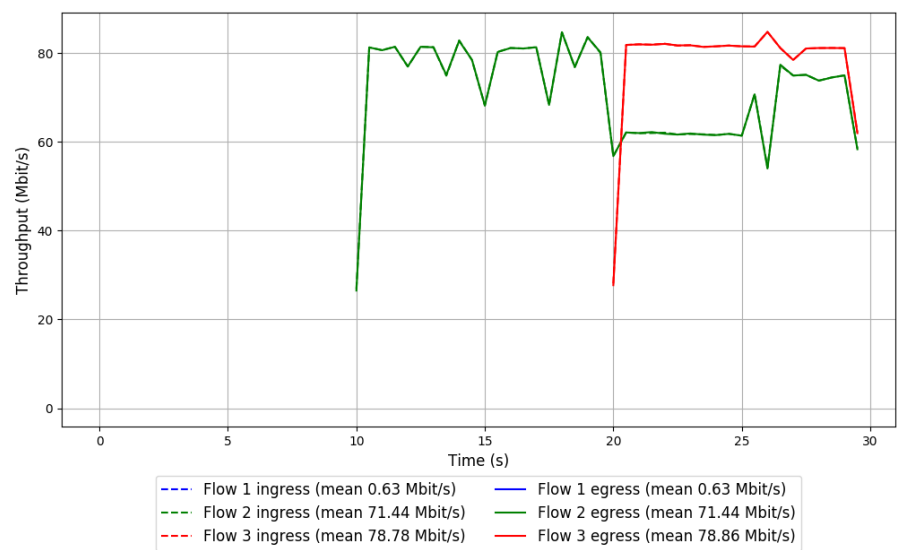
-- Flow 3:

Average throughput: 78.86 Mbit/s

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

Loss rate: 0.03%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-11 22:44:07

End at: 2017-12-11 22:44:37

Local clock offset: 0.741 ms

Remote clock offset: 0.906 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.93 Mbit/s

95th percentile per-packet one-way delay: 2.297 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 2.520 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 76.55 Mbit/s

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

Loss rate: 0.02%

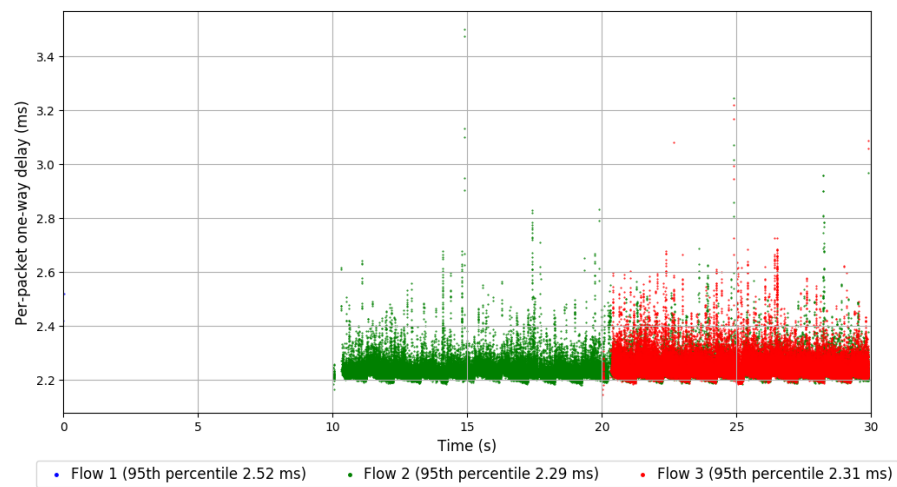
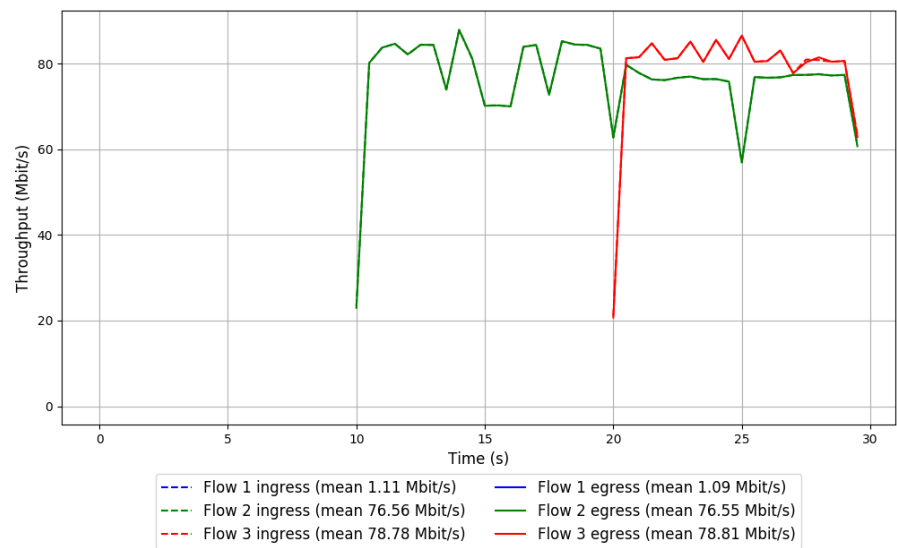
-- Flow 3:

Average throughput: 78.81 Mbit/s

95th percentile per-packet one-way delay: 2.314 ms

Loss rate: 0.05%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-11 23:02:43

End at: 2017-12-11 23:03:13

Local clock offset: 0.656 ms

Remote clock offset: 0.836 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.44 Mbit/s

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

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.20 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 83.52 Mbit/s

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

Loss rate: 0.03%

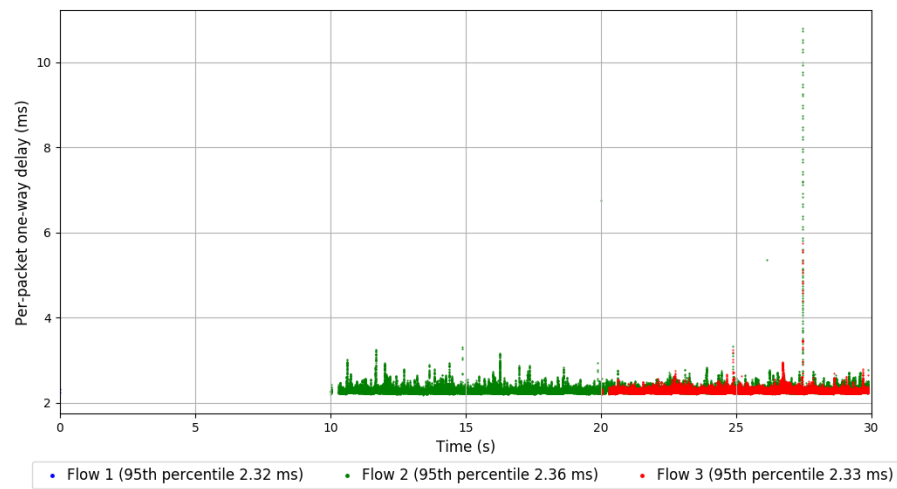
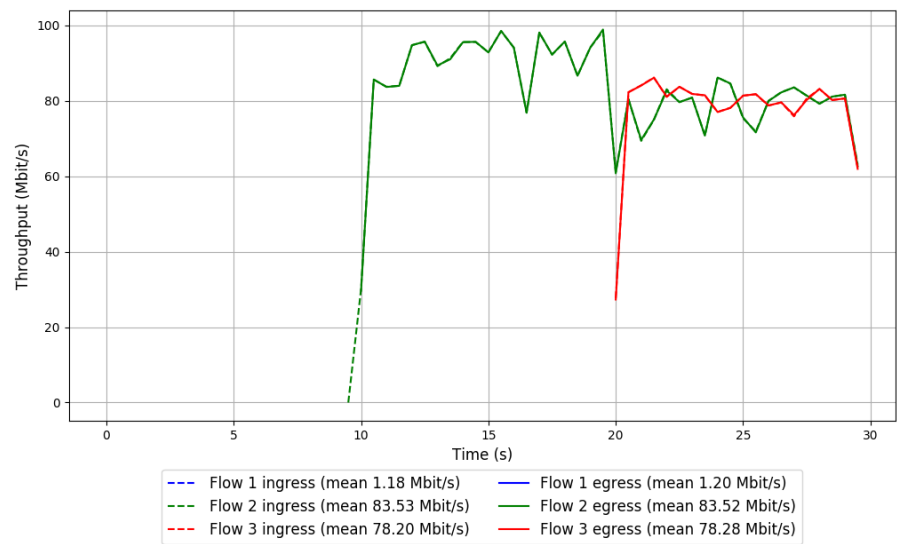
-- Flow 3:

Average throughput: 78.28 Mbit/s

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

Loss rate: 0.05%

Run 10: Report of QUIC Cubic — Data Link

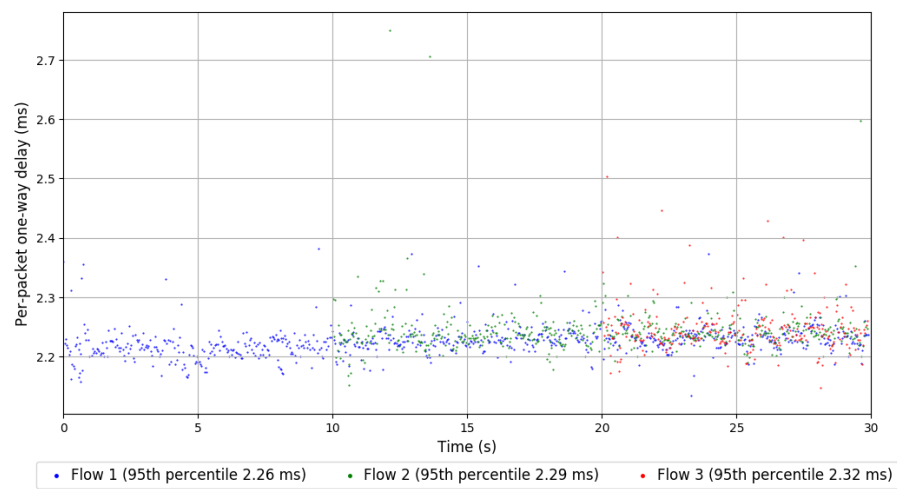
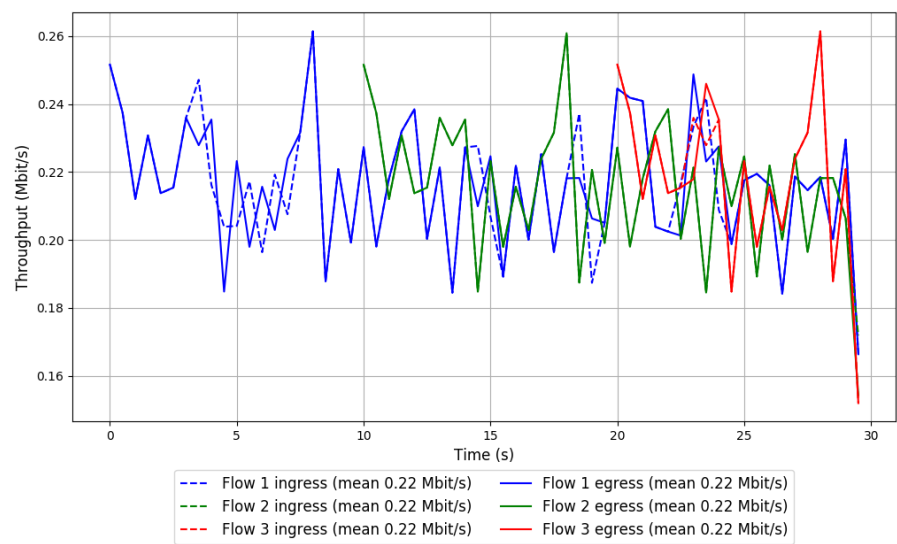


Run 1: Statistics of SReAM

Start at: 2017-12-11 20:13:11
End at: 2017-12-11 20:13:41
Local clock offset: -1.186 ms
Remote clock offset: -0.347 ms

Below is generated by plot.py at 2017-12-12 03:26:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.285 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.262 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.293 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.321 ms
Loss rate: 0.00%

Run 1: Report of SReAM — Data Link

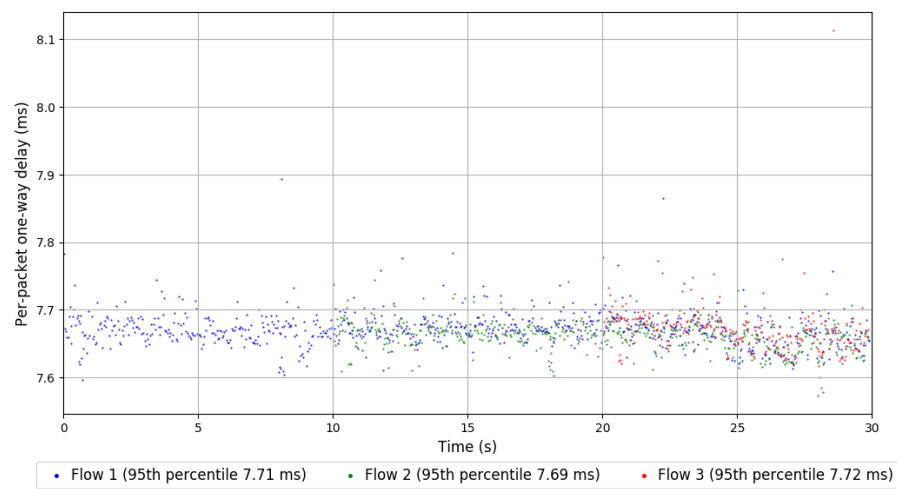
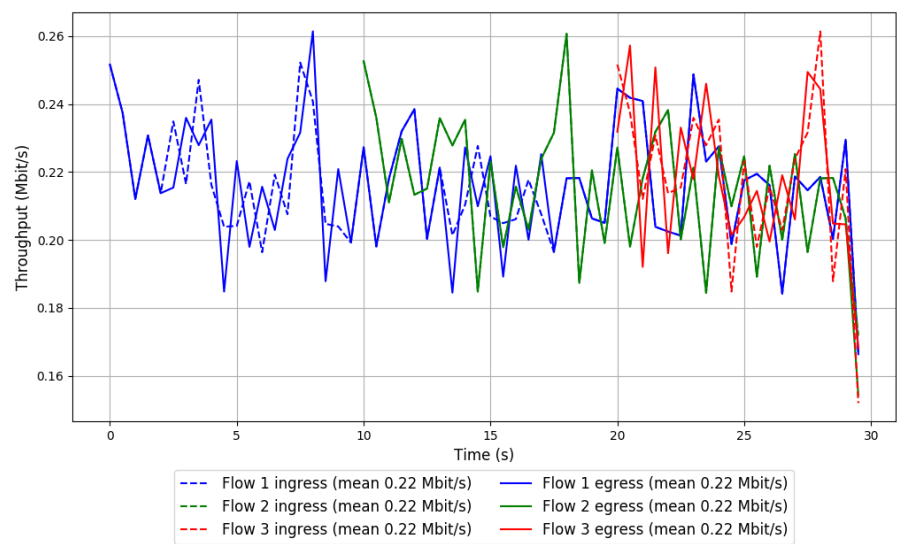


Run 2: Statistics of SReAM

Start at: 2017-12-11 20:32:00
End at: 2017-12-11 20:32:30
Local clock offset: -0.826 ms
Remote clock offset: -5.096 ms

Below is generated by plot.py at 2017-12-12 03:26:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 7.705 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 7.708 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 7.693 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 7.717 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

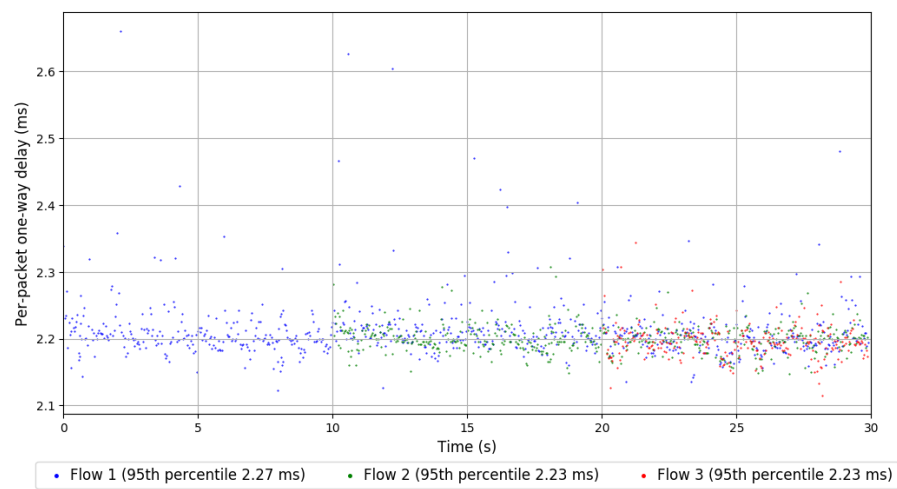
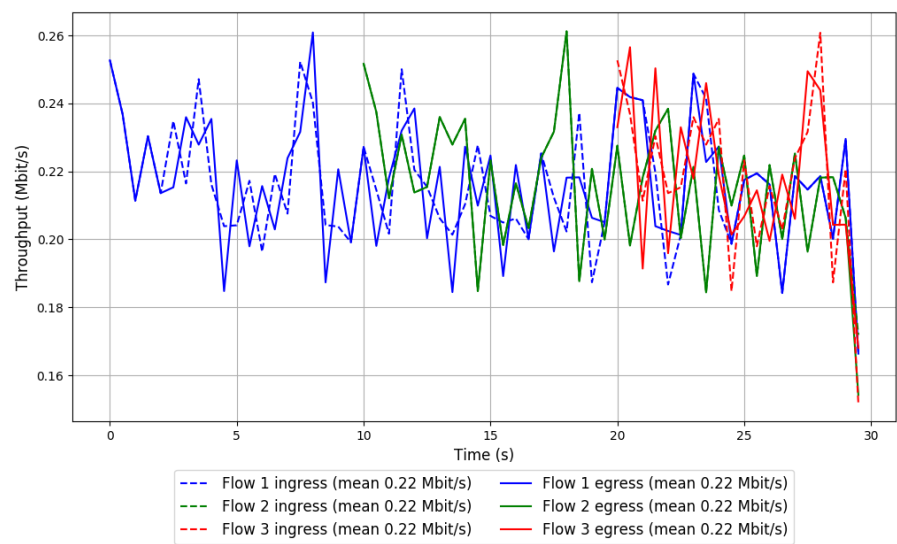


Run 3: Statistics of SReAM

Start at: 2017-12-11 20:50:41
End at: 2017-12-11 20:51:11
Local clock offset: -0.454 ms
Remote clock offset: 0.674 ms

Below is generated by plot.py at 2017-12-12 03:26:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.252 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.274 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.231 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.234 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2017-12-11 21:09:28

End at: 2017-12-11 21:09:58

Local clock offset: -0.057 ms

Remote clock offset: 0.971 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.289 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.292 ms

Loss rate: 0.20%

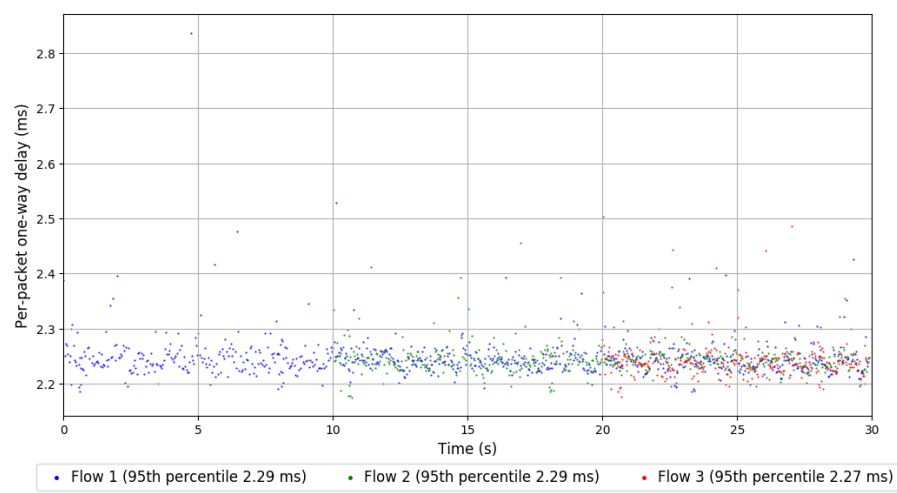
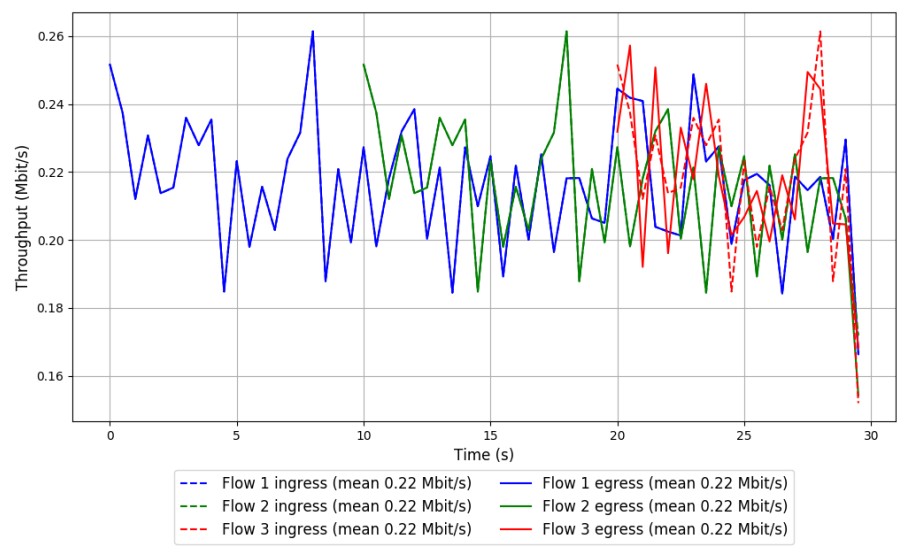
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.272 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2017-12-11 21:28:07

End at: 2017-12-11 21:28:37

Local clock offset: 0.213 ms

Remote clock offset: 1.167 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.295 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.285 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.20%

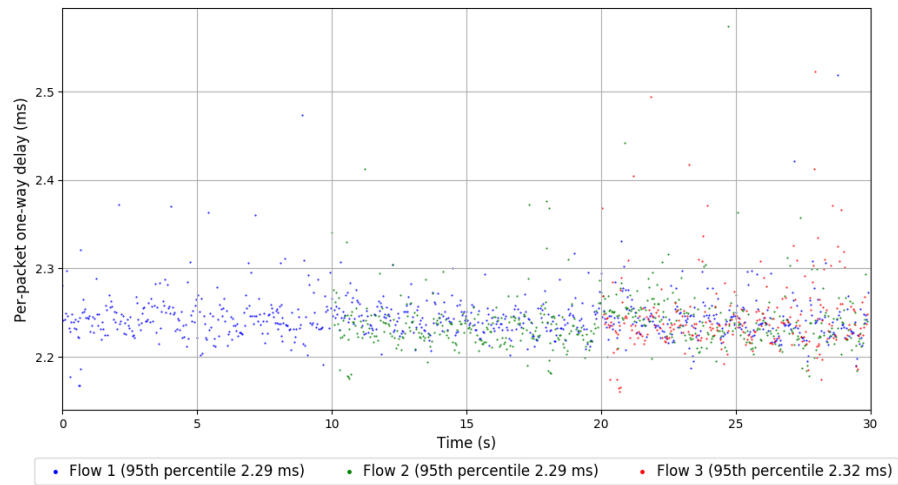
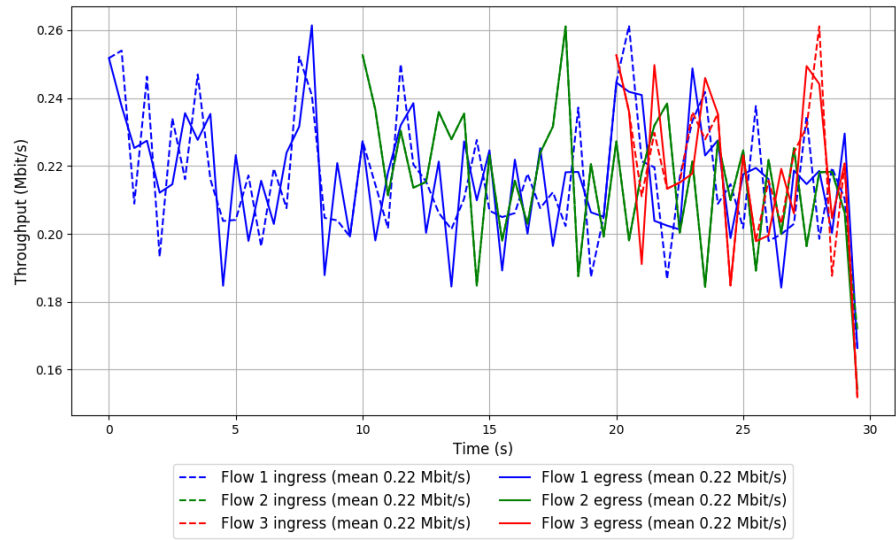
-- Flow 3:

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: 2017-12-11 21:46:56

End at: 2017-12-11 21:47:26

Local clock offset: 0.499 ms

Remote clock offset: 1.261 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.296 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.304 ms

Loss rate: 0.00%

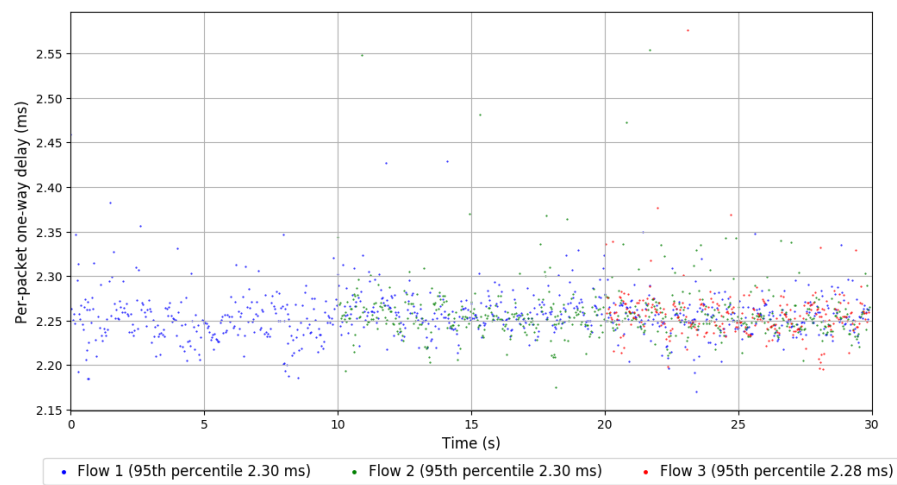
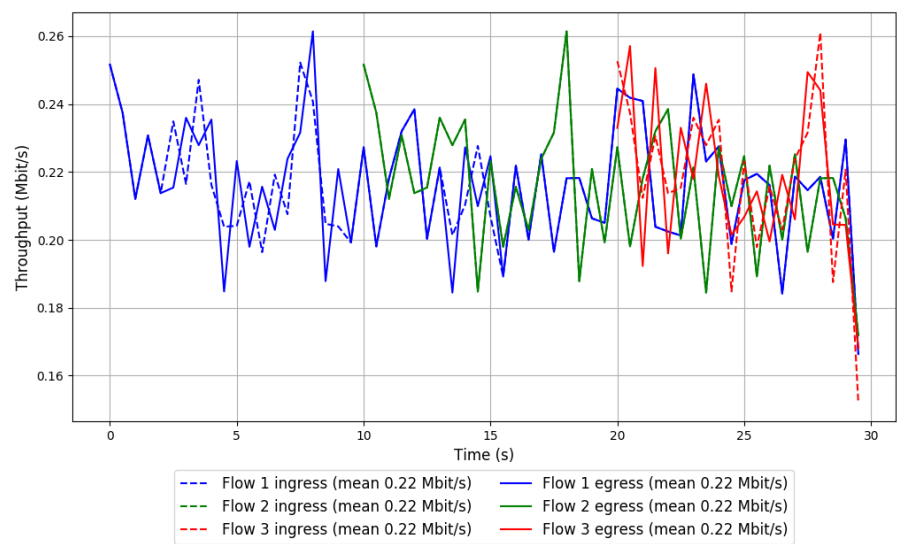
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.283 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2017-12-11 22:05:44

End at: 2017-12-11 22:06:14

Local clock offset: 0.581 ms

Remote clock offset: 1.125 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.255 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

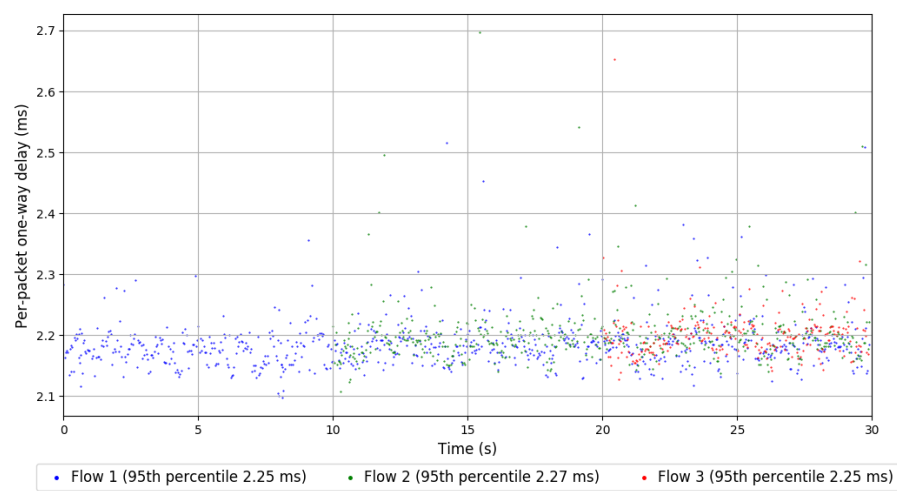
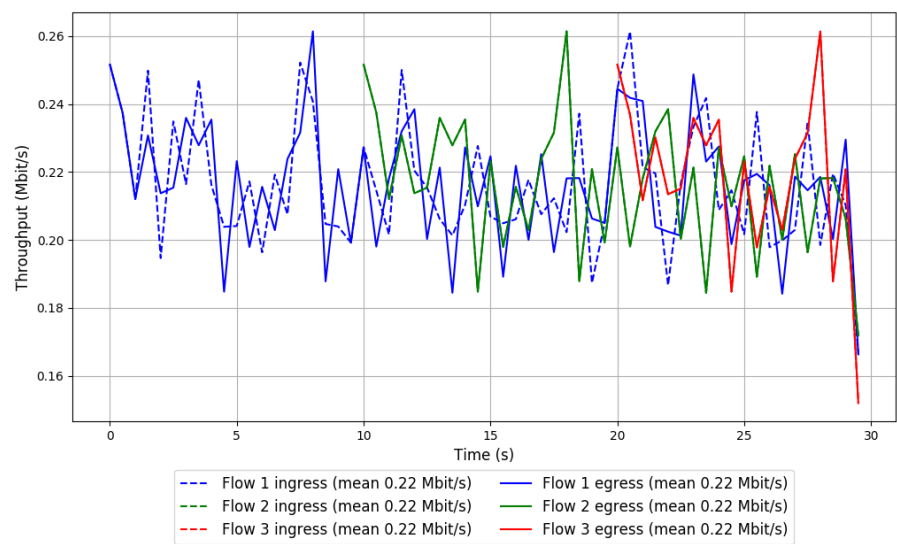
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.251 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-12-11 22:24:21

End at: 2017-12-11 22:24:51

Local clock offset: 0.715 ms

Remote clock offset: 1.018 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.304 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.20%

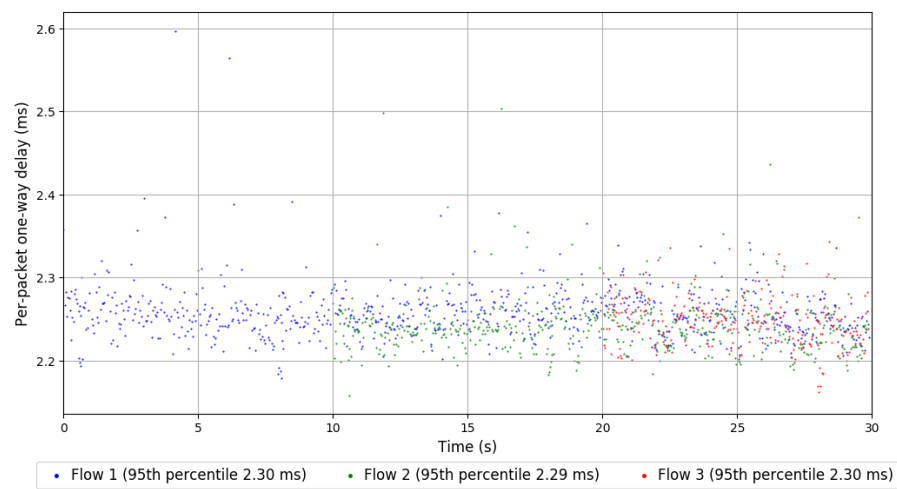
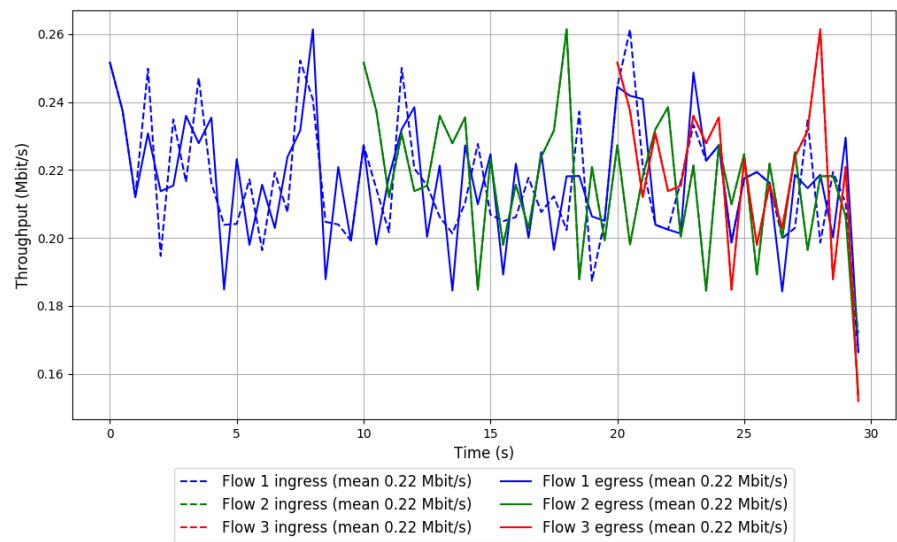
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2017-12-11 22:43:03

End at: 2017-12-11 22:43:33

Local clock offset: 0.737 ms

Remote clock offset: 0.829 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 2.405 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.378 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.20%

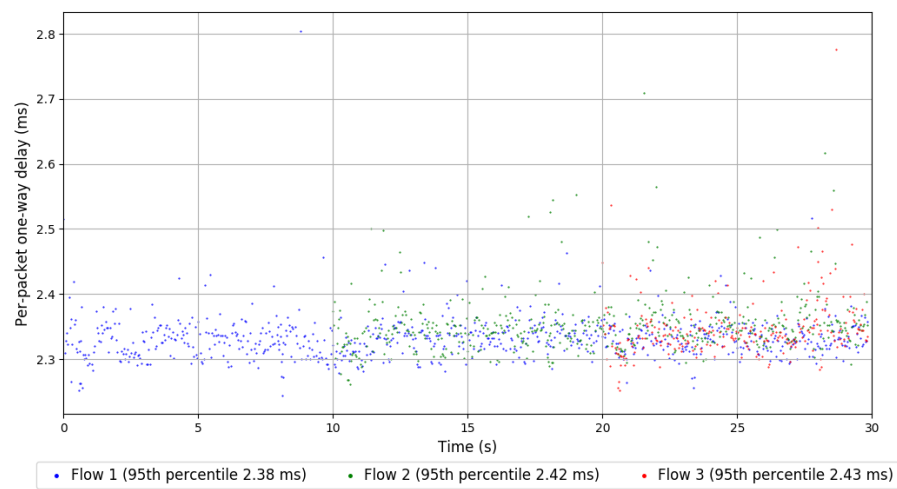
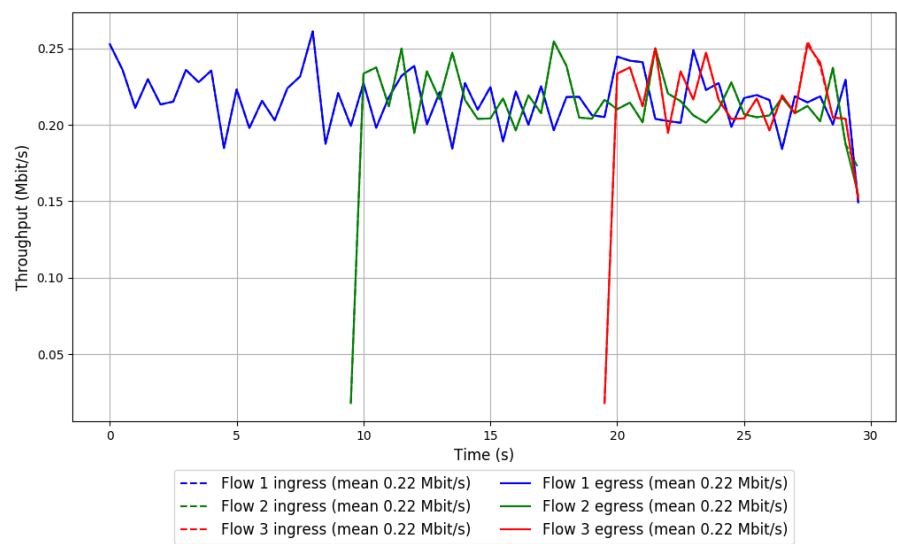
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.429 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-11 23:01:39

End at: 2017-12-11 23:02:09

Local clock offset: 0.657 ms

Remote clock offset: 0.774 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.410 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: 0.20%

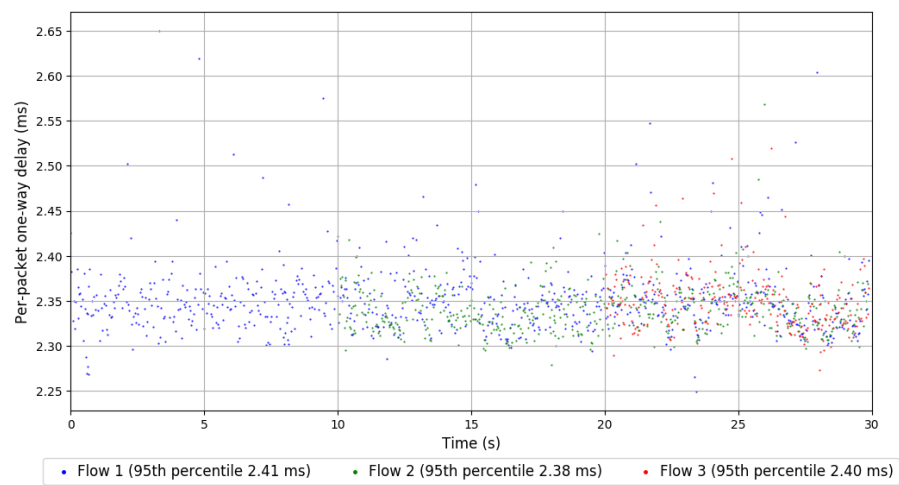
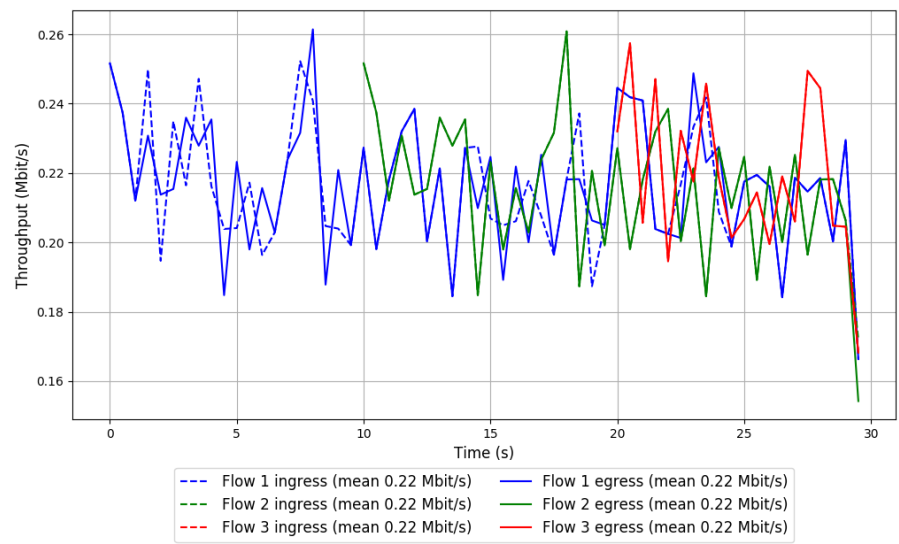
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

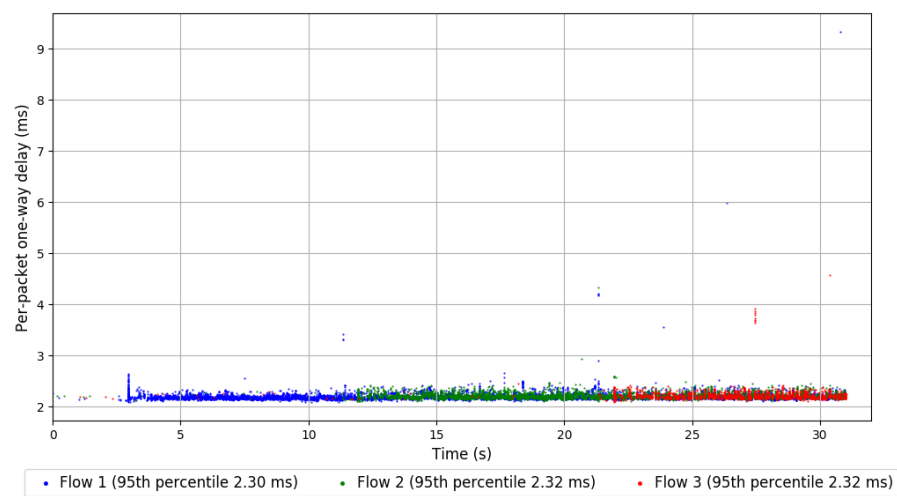
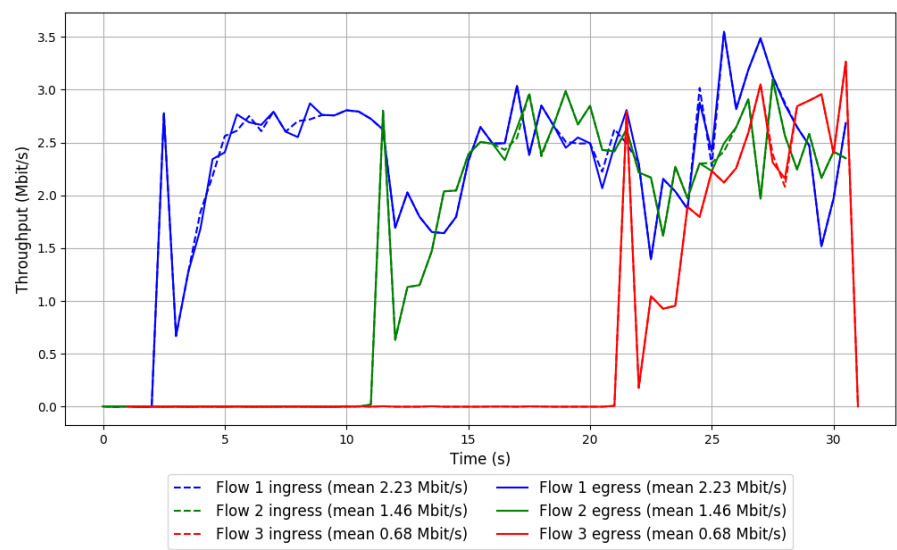


Run 1: Statistics of WebRTC media

Start at: 2017-12-11 20:03:40
End at: 2017-12-11 20:04:10
Local clock offset: -1.414 ms
Remote clock offset: -0.625 ms

Below is generated by plot.py at 2017-12-12 03:26:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.33 Mbit/s
95th percentile per-packet one-way delay: 2.310 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 2.300 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 2.319 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 2.319 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

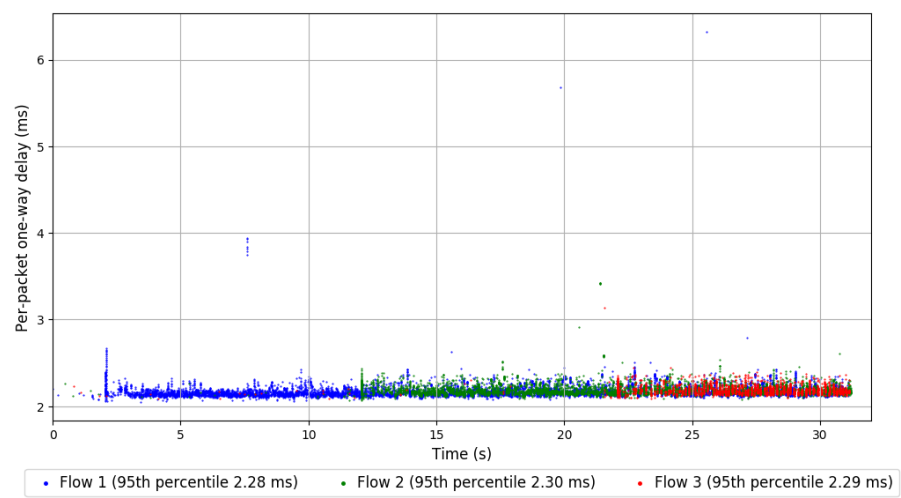
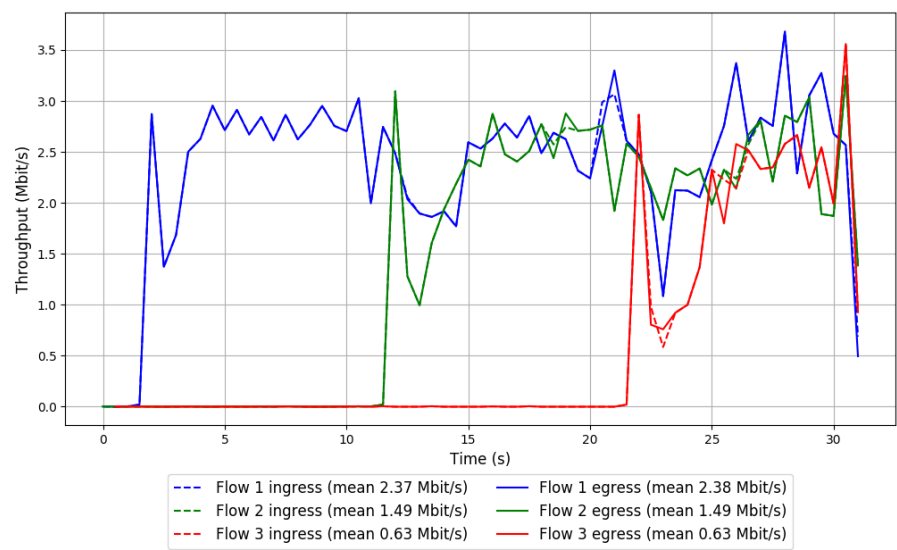


Run 2: Statistics of WebRTC media

Start at: 2017-12-11 20:22:27
End at: 2017-12-11 20:22:57
Local clock offset: -1.055 ms
Remote clock offset: -0.003 ms

Below is generated by plot.py at 2017-12-12 03:26:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 2.293 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 2.38 Mbit/s
95th percentile per-packet one-way delay: 2.284 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 2.299 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 2.295 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-11 20:41:17

End at: 2017-12-11 20:41:47

Local clock offset: -0.681 ms

Remote clock offset: 0.509 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 2.296 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.39 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 2.306 ms

Loss rate: 0.00%

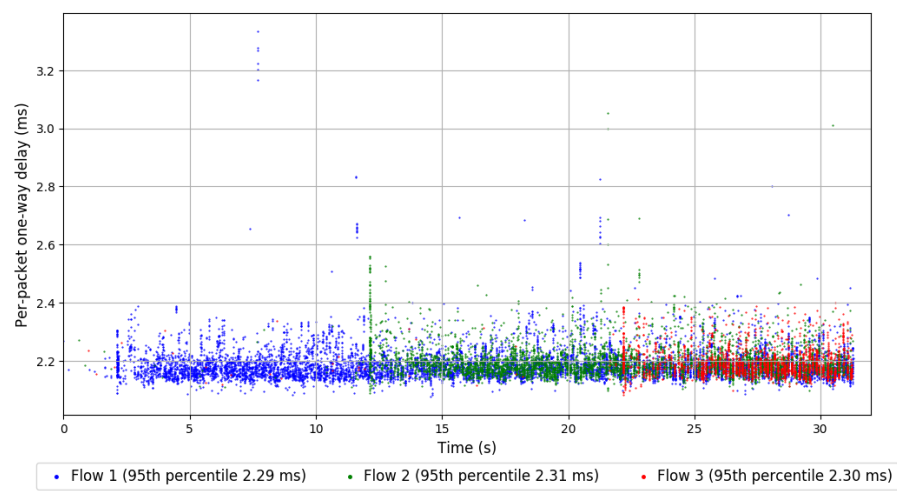
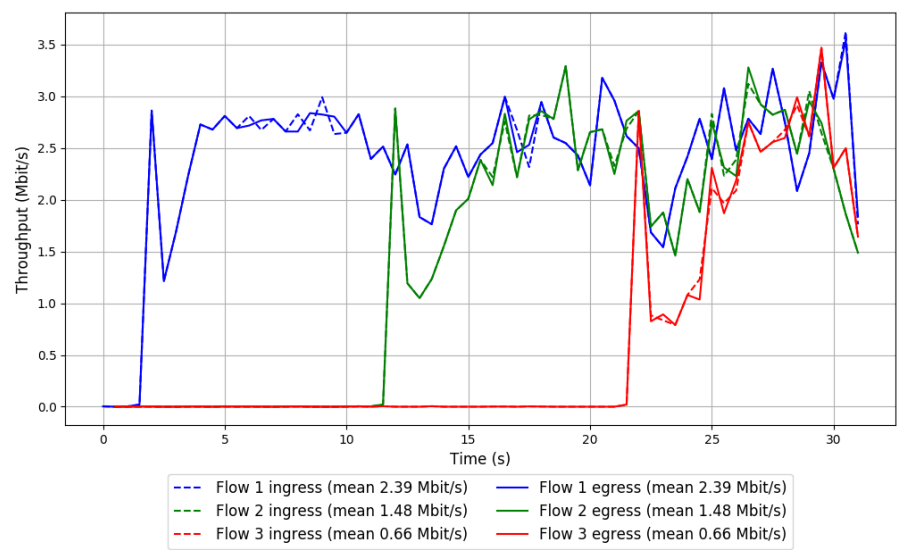
-- Flow 3:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 2.296 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-11 20:59:58

End at: 2017-12-11 21:00:28

Local clock offset: -0.197 ms

Remote clock offset: 0.825 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.23 Mbit/s

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

Loss rate: 0.22%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 2.801 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.56 Mbit/s

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

Loss rate: 0.00%

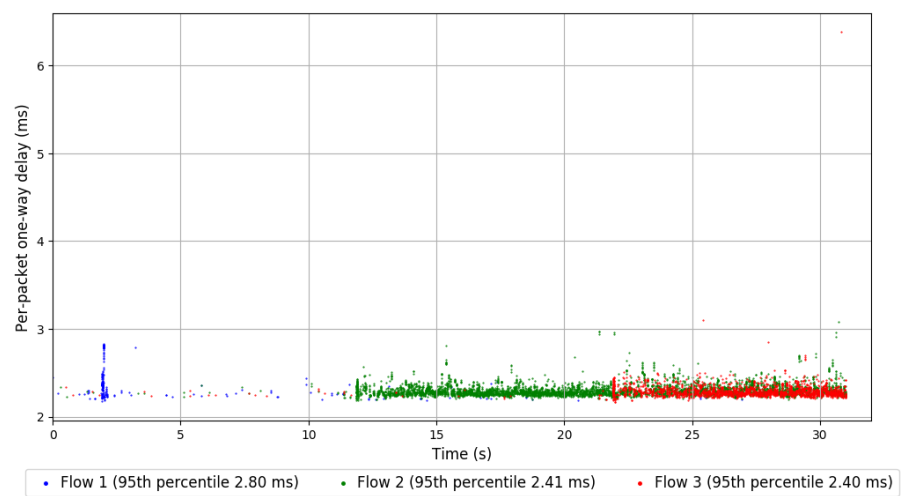
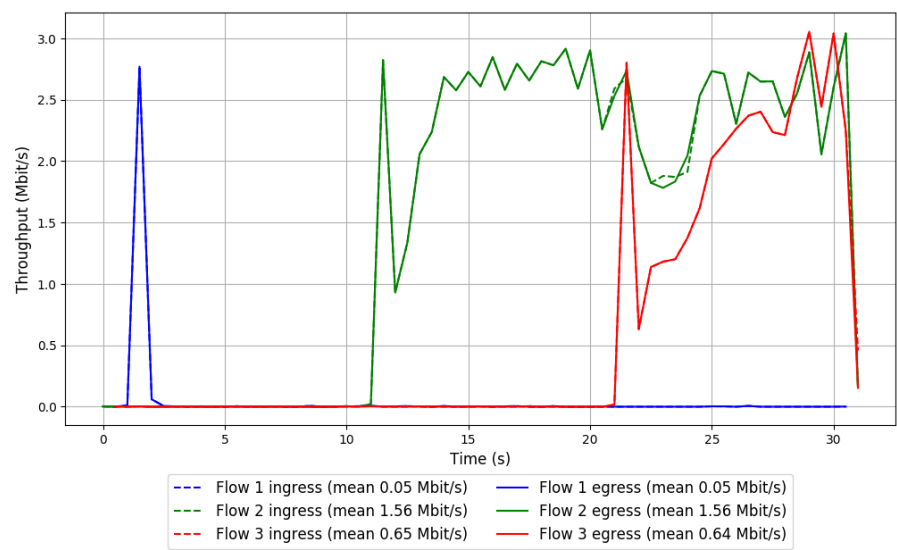
-- Flow 3:

Average throughput: 0.64 Mbit/s

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

Loss rate: 0.77%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-11 21:18:40

End at: 2017-12-11 21:19:10

Local clock offset: 0.062 ms

Remote clock offset: 1.043 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.42 Mbit/s

95th percentile per-packet one-way delay: 2.314 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 2.38 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

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

Loss rate: 0.37%

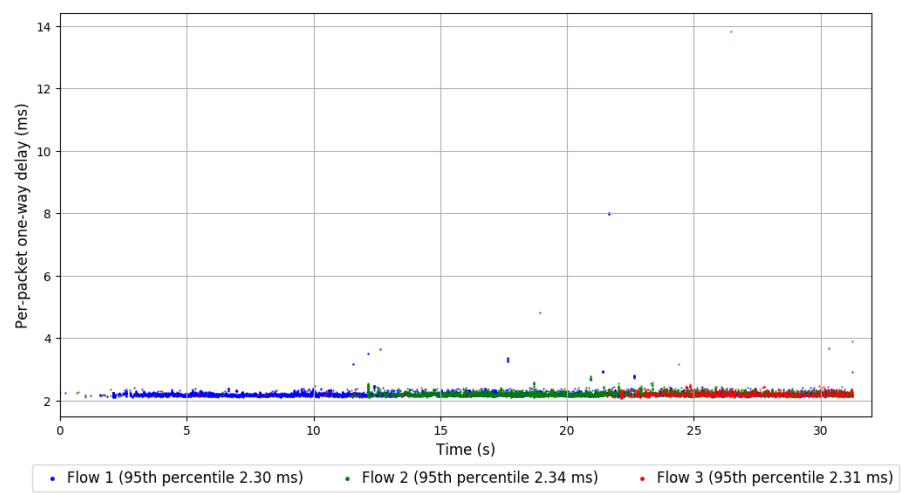
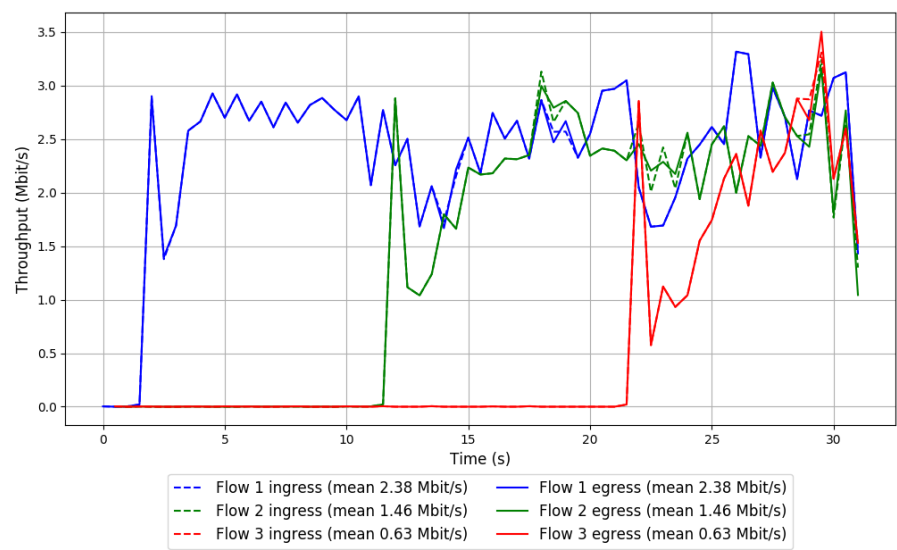
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 2.312 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-11 21:37:23

End at: 2017-12-11 21:37:53

Local clock offset: 0.359 ms

Remote clock offset: 1.246 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.34 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 2.361 ms

Loss rate: 0.00%

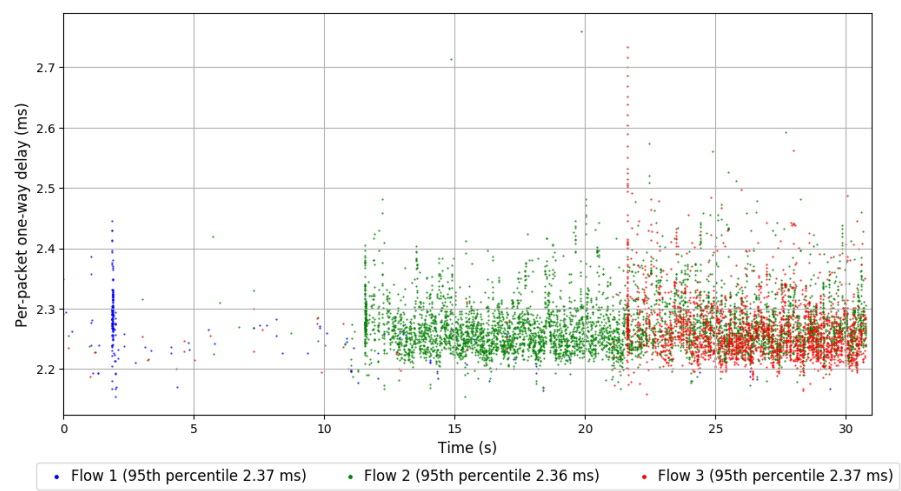
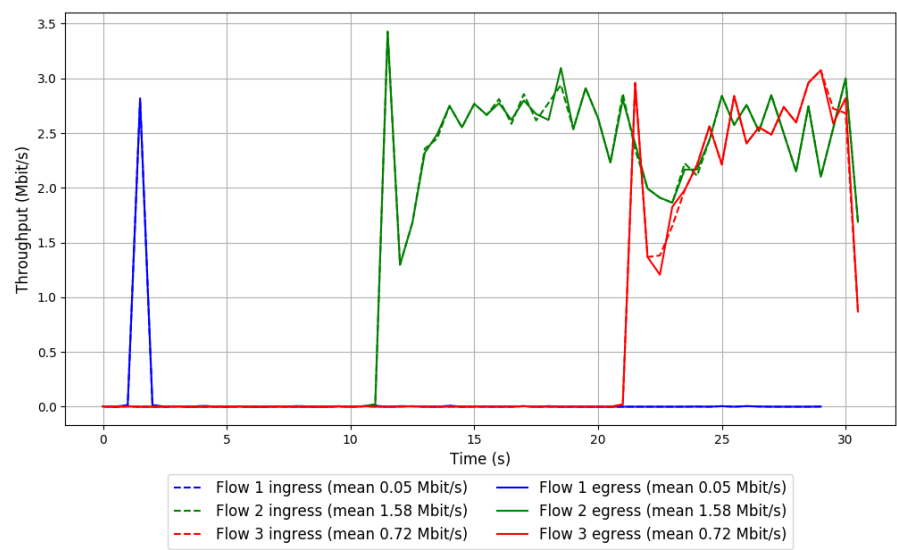
-- Flow 3:

Average throughput: 0.72 Mbit/s

95th percentile per-packet one-way delay: 2.367 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-11 21:56:12

End at: 2017-12-11 21:56:42

Local clock offset: 0.529 ms

Remote clock offset: 1.172 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.42 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 2.315 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.47 Mbit/s

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

Loss rate: 0.00%

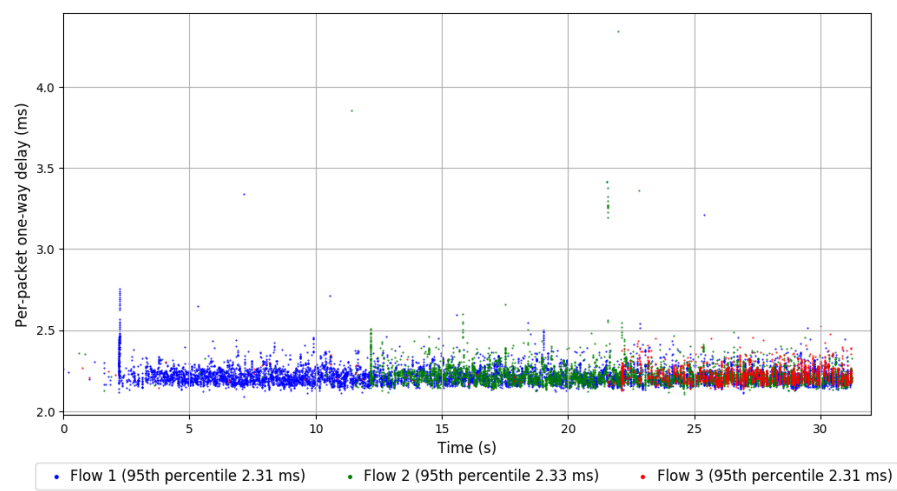
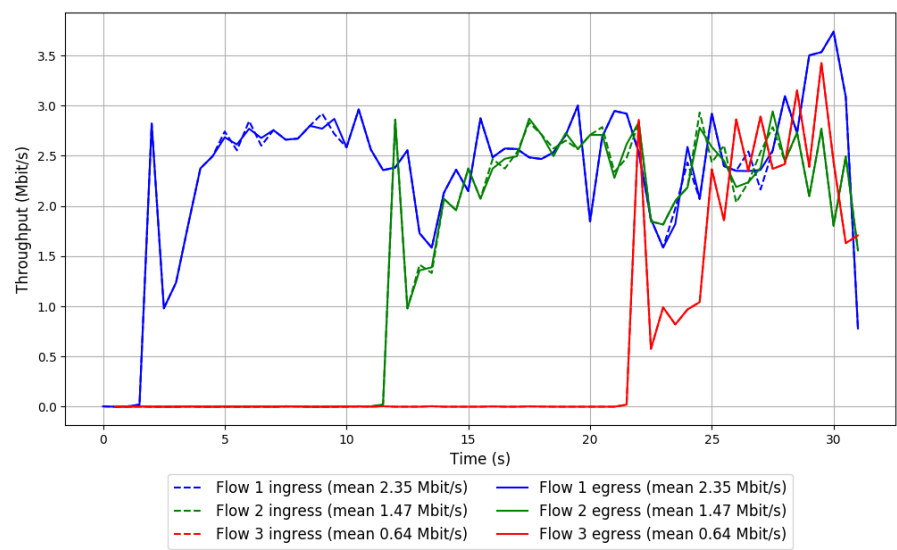
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 2.312 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-11 22:15:03

End at: 2017-12-11 22:15:33

Local clock offset: 0.601 ms

Remote clock offset: 1.048 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 2.304 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 2.347 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 2.306 ms

Loss rate: 0.00%

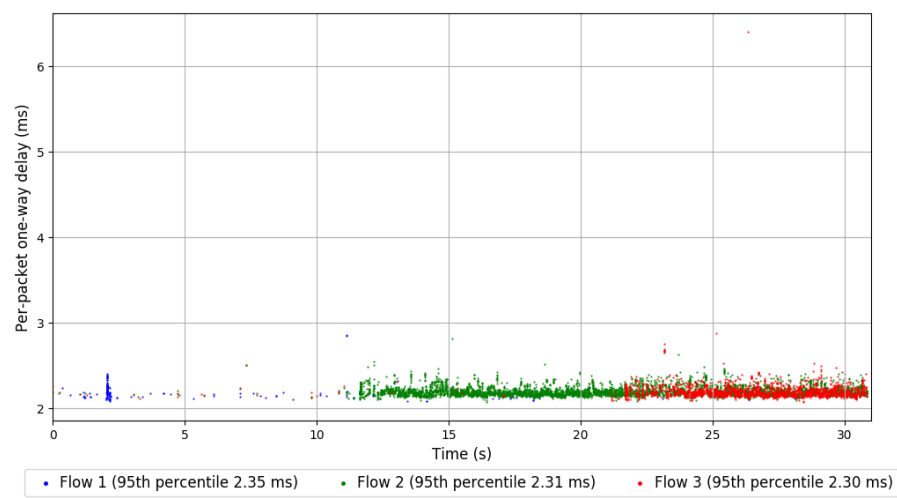
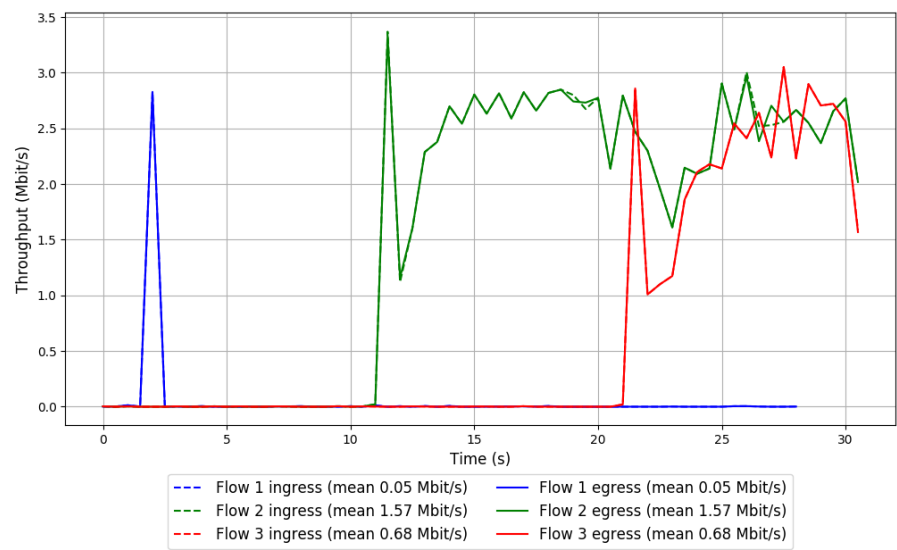
-- Flow 3:

Average throughput: 0.68 Mbit/s

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

Loss rate: 0.05%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-11 22:33:39

End at: 2017-12-11 22:34:09

Local clock offset: 0.679 ms

Remote clock offset: 0.922 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.27 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.56 Mbit/s

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

Loss rate: 0.00%

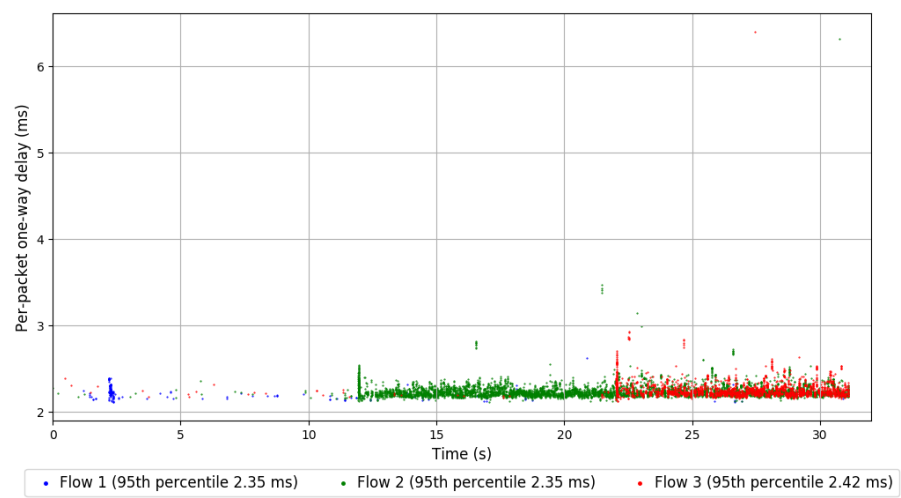
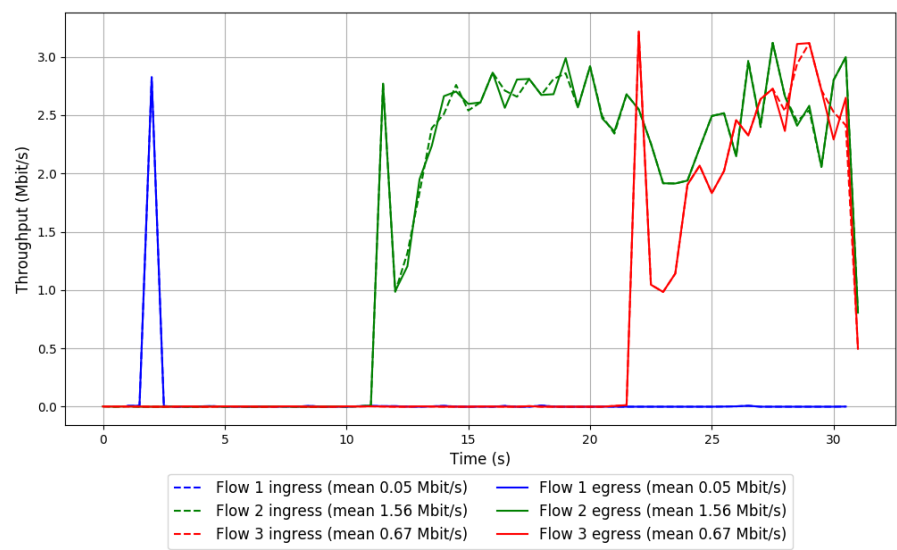
-- Flow 3:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 2.417 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-11 22:52:10

End at: 2017-12-11 22:52:40

Local clock offset: 0.699 ms

Remote clock offset: 0.78 ms

Below is generated by plot.py at 2017-12-12 03:26:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 2.500 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 2.562 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 2.447 ms

Loss rate: 0.16%

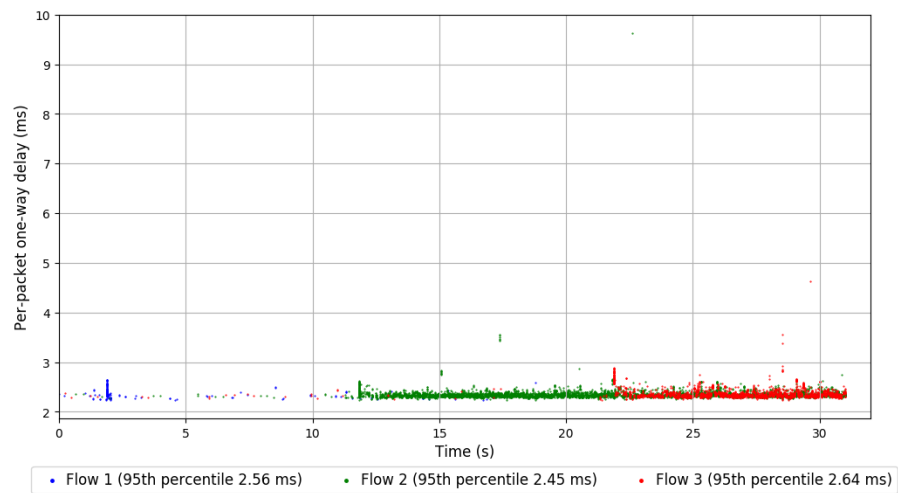
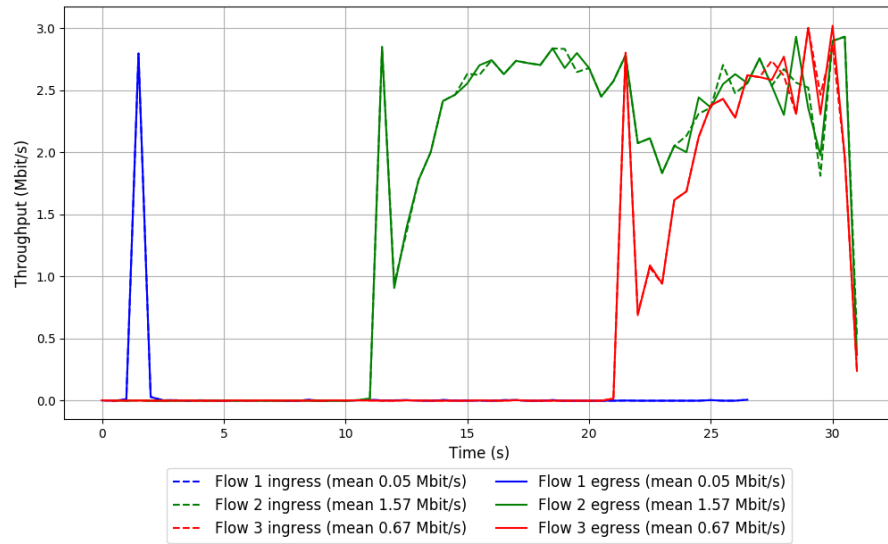
-- Flow 3:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 2.636 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

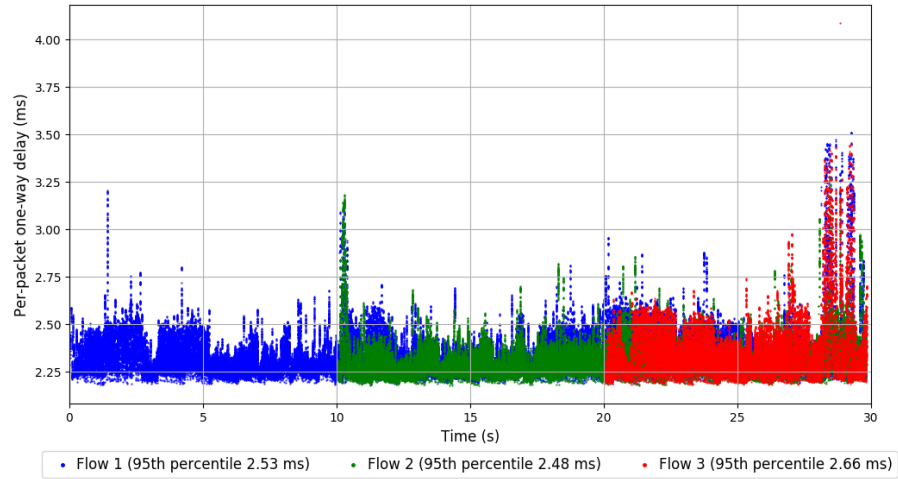
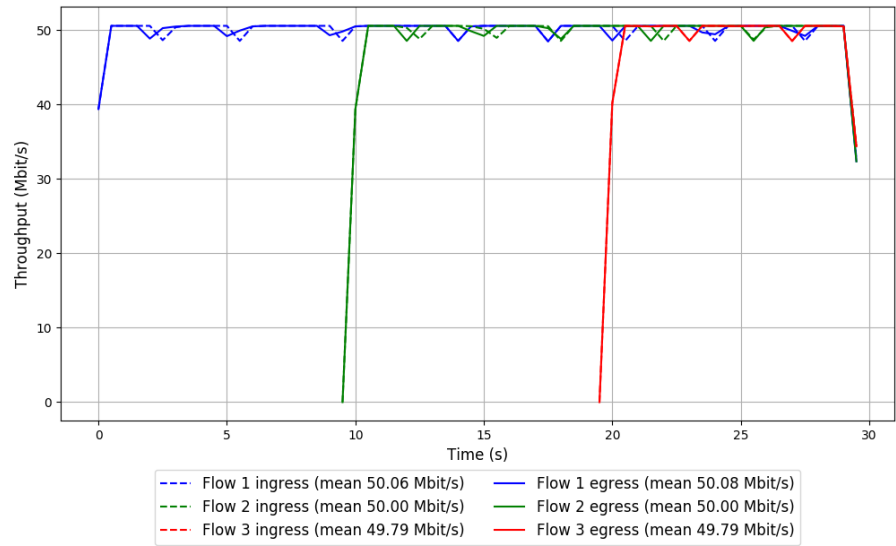


Run 1: Statistics of Sprout

Start at: 2017-12-11 20:12:04
End at: 2017-12-11 20:12:34
Local clock offset: -1.25 ms
Remote clock offset: -0.453 ms

Below is generated by plot.py at 2017-12-12 03:27:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 99.71 Mbit/s
95th percentile per-packet one-way delay: 2.535 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 50.08 Mbit/s
95th percentile per-packet one-way delay: 2.533 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 50.00 Mbit/s
95th percentile per-packet one-way delay: 2.481 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 49.79 Mbit/s
95th percentile per-packet one-way delay: 2.657 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

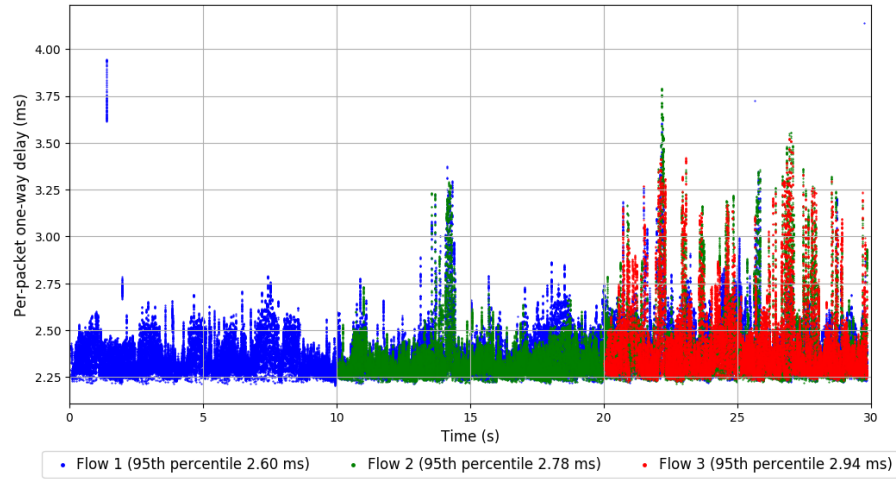
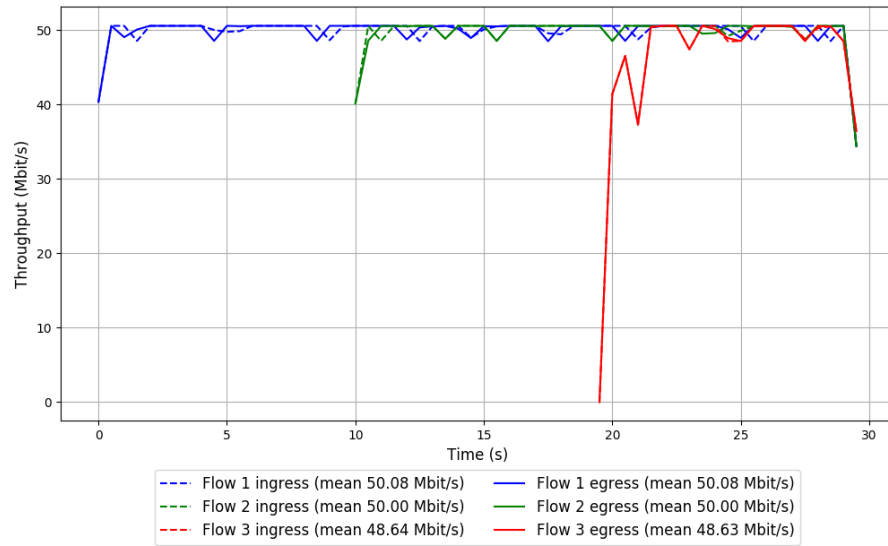


Run 2: Statistics of Sprout

Start at: 2017-12-11 20:30:54
End at: 2017-12-11 20:31:24
Local clock offset: -0.898 ms
Remote clock offset: 0.197 ms

Below is generated by plot.py at 2017-12-12 03:27:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 99.37 Mbit/s
95th percentile per-packet one-way delay: 2.708 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.08 Mbit/s
95th percentile per-packet one-way delay: 2.604 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.00 Mbit/s
95th percentile per-packet one-way delay: 2.783 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 48.63 Mbit/s
95th percentile per-packet one-way delay: 2.941 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-11 20:49:34

End at: 2017-12-11 20:50:04

Local clock offset: -0.42 ms

Remote clock offset: 0.579 ms

Below is generated by plot.py at 2017-12-12 03:27:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.74 Mbit/s

95th percentile per-packet one-way delay: 2.617 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 50.11 Mbit/s

95th percentile per-packet one-way delay: 2.608 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.01 Mbit/s

95th percentile per-packet one-way delay: 2.646 ms

Loss rate: 0.00%

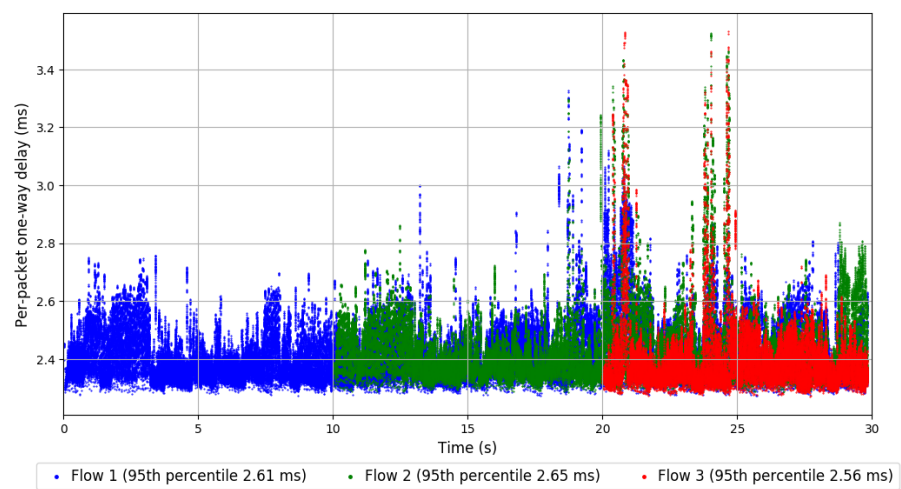
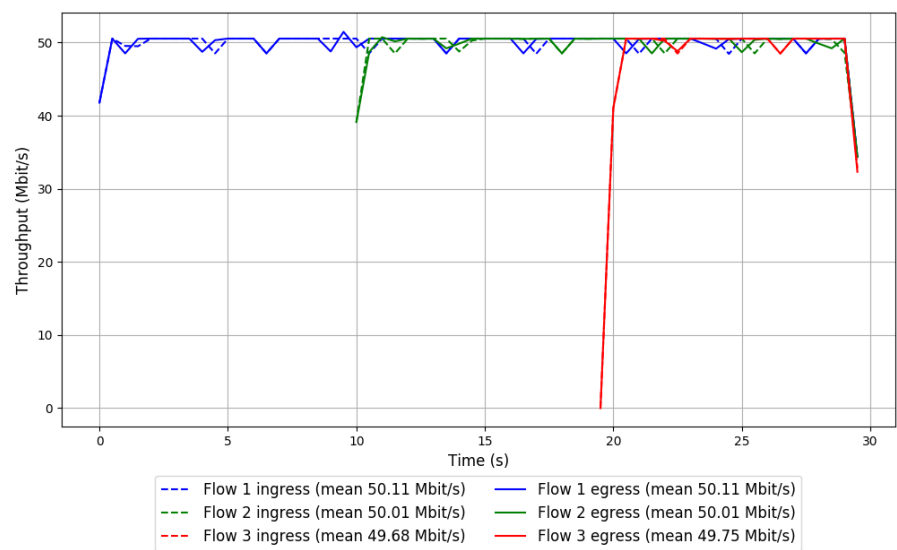
-- Flow 3:

Average throughput: 49.75 Mbit/s

95th percentile per-packet one-way delay: 2.565 ms

Loss rate: 0.06%

Run 3: Report of Sprout — Data Link

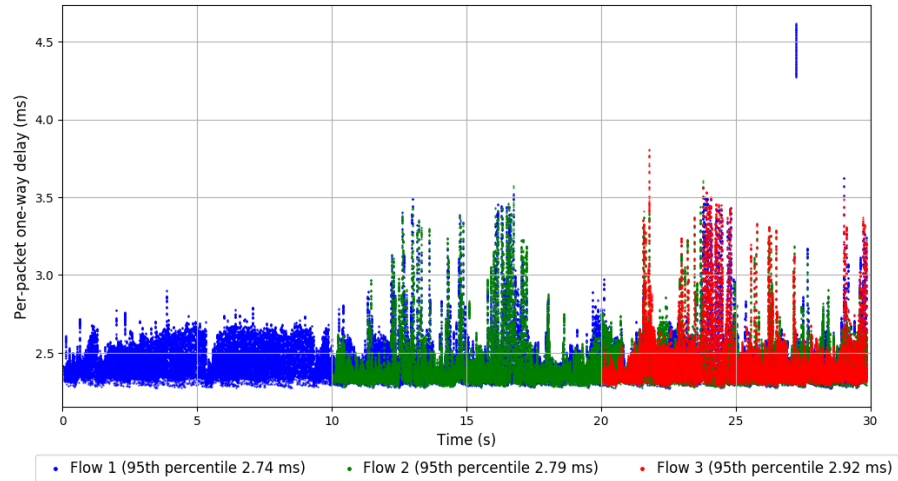
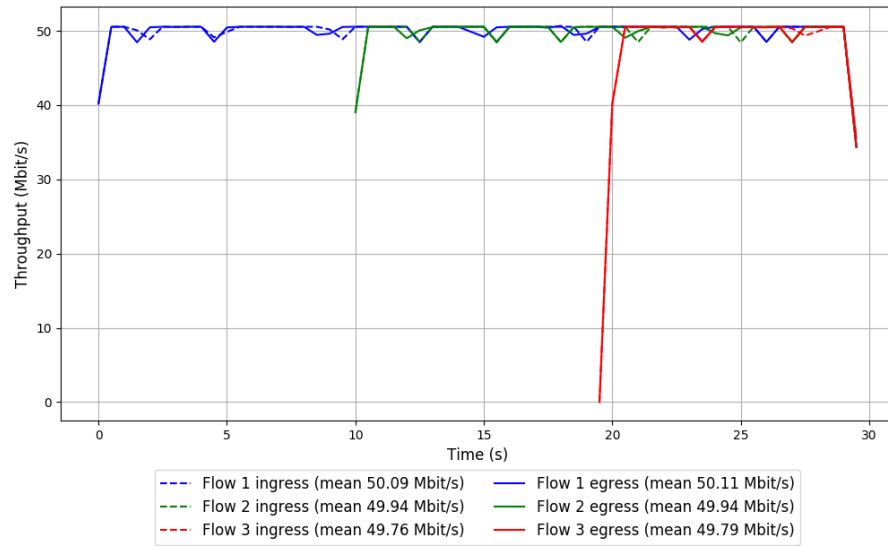


Run 4: Statistics of Sprout

Start at: 2017-12-11 21:08:21
End at: 2017-12-11 21:08:51
Local clock offset: -0.062 ms
Remote clock offset: 0.875 ms

```
# Below is generated by plot.py at 2017-12-12 03:27:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.72 Mbit/s
95th percentile per-packet one-way delay: 2.791 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 50.11 Mbit/s
95th percentile per-packet one-way delay: 2.736 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 49.94 Mbit/s
95th percentile per-packet one-way delay: 2.788 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.79 Mbit/s
95th percentile per-packet one-way delay: 2.924 ms
Loss rate: 0.13%
```

Run 4: Report of Sprout — Data Link

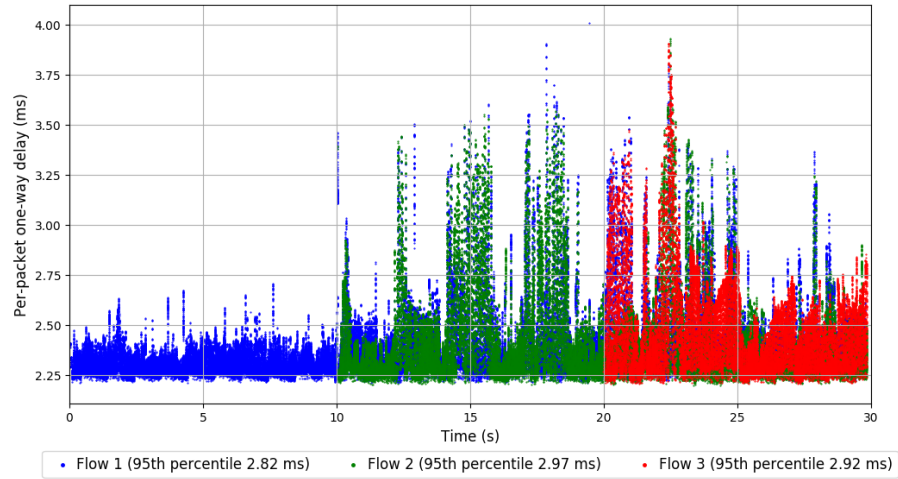
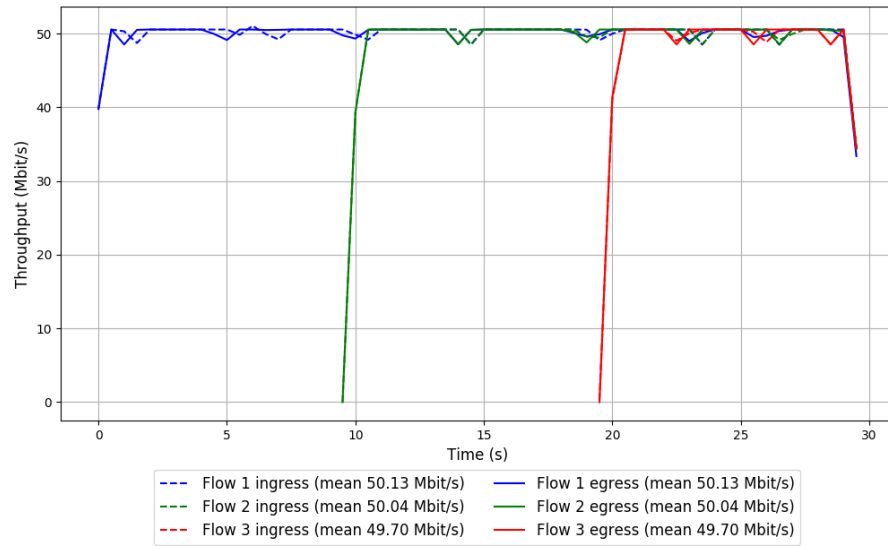


Run 5: Statistics of Sprout

Start at: 2017-12-11 21:27:00
End at: 2017-12-11 21:27:30
Local clock offset: 0.236 ms
Remote clock offset: 1.147 ms

```
# Below is generated by plot.py at 2017-12-12 03:27:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.80 Mbit/s
95th percentile per-packet one-way delay: 2.892 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 50.13 Mbit/s
95th percentile per-packet one-way delay: 2.823 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 50.04 Mbit/s
95th percentile per-packet one-way delay: 2.970 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 49.70 Mbit/s
95th percentile per-packet one-way delay: 2.918 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-11 21:45:50

End at: 2017-12-11 21:46:20

Local clock offset: 0.47 ms

Remote clock offset: 1.199 ms

Below is generated by plot.py at 2017-12-12 03:27:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.64 Mbit/s

95th percentile per-packet one-way delay: 2.636 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.08 Mbit/s

95th percentile per-packet one-way delay: 2.644 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.98 Mbit/s

95th percentile per-packet one-way delay: 2.663 ms

Loss rate: 0.00%

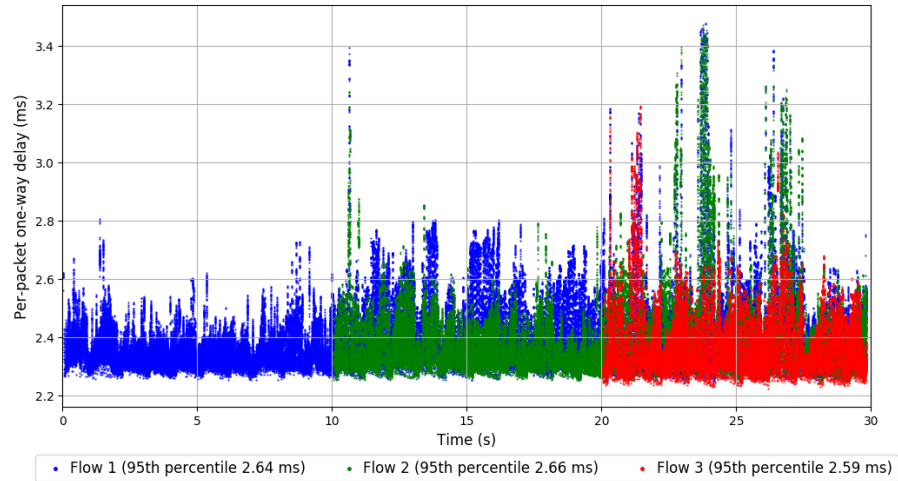
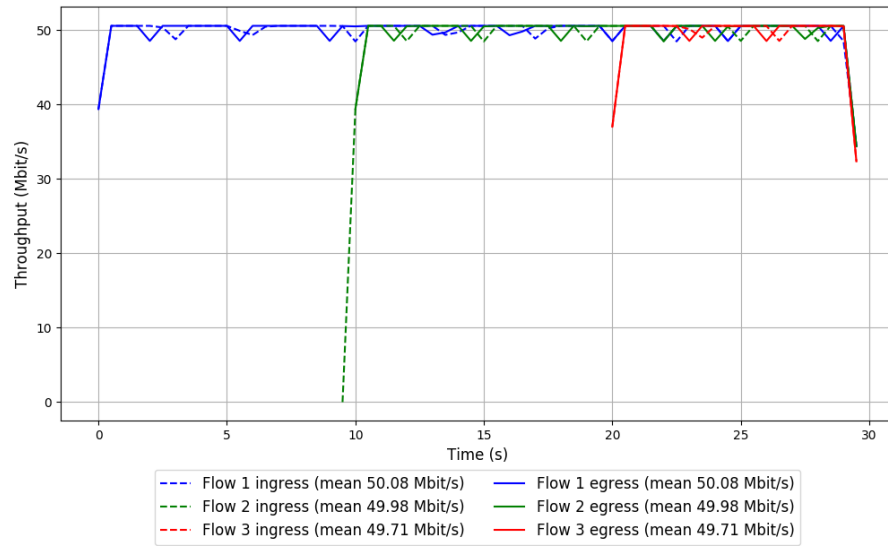
-- Flow 3:

Average throughput: 49.71 Mbit/s

95th percentile per-packet one-way delay: 2.588 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link

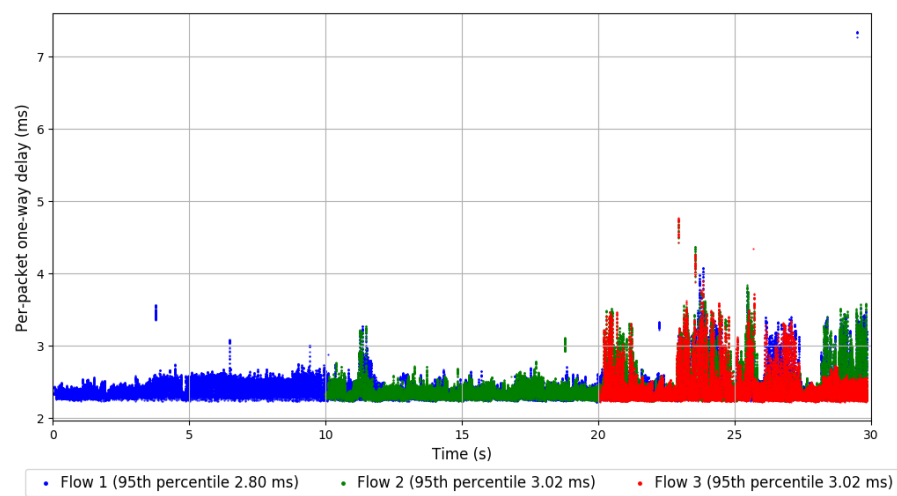
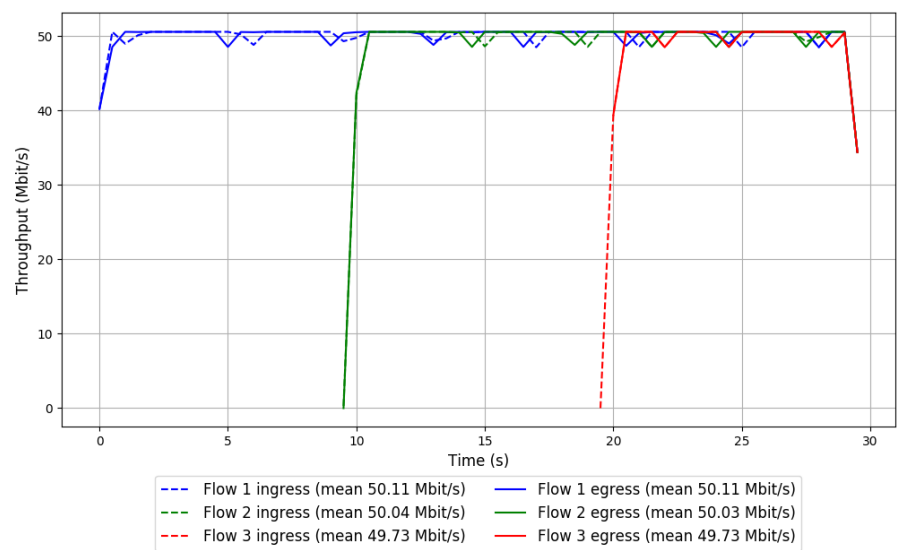


Run 7: Statistics of Sprout

Start at: 2017-12-11 22:04:37
End at: 2017-12-11 22:05:07
Local clock offset: 0.668 ms
Remote clock offset: 1.14 ms

Below is generated by plot.py at 2017-12-12 03:27:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 99.80 Mbit/s
95th percentile per-packet one-way delay: 2.935 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.11 Mbit/s
95th percentile per-packet one-way delay: 2.798 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.03 Mbit/s
95th percentile per-packet one-way delay: 3.021 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.73 Mbit/s
95th percentile per-packet one-way delay: 3.021 ms
Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-11 22:23:14

End at: 2017-12-11 22:23:44

Local clock offset: 0.66 ms

Remote clock offset: 1.001 ms

Below is generated by plot.py at 2017-12-12 03:28:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.83 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.14 Mbit/s

95th percentile per-packet one-way delay: 2.683 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.07 Mbit/s

95th percentile per-packet one-way delay: 2.941 ms

Loss rate: 0.00%

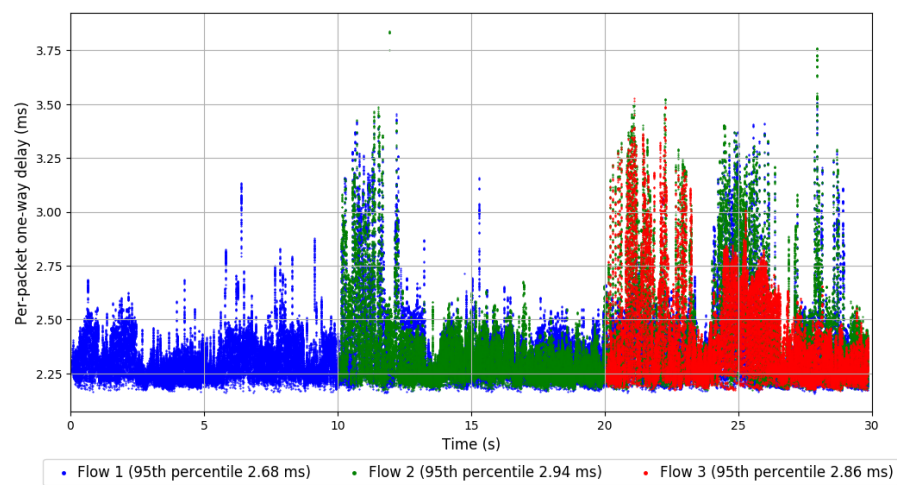
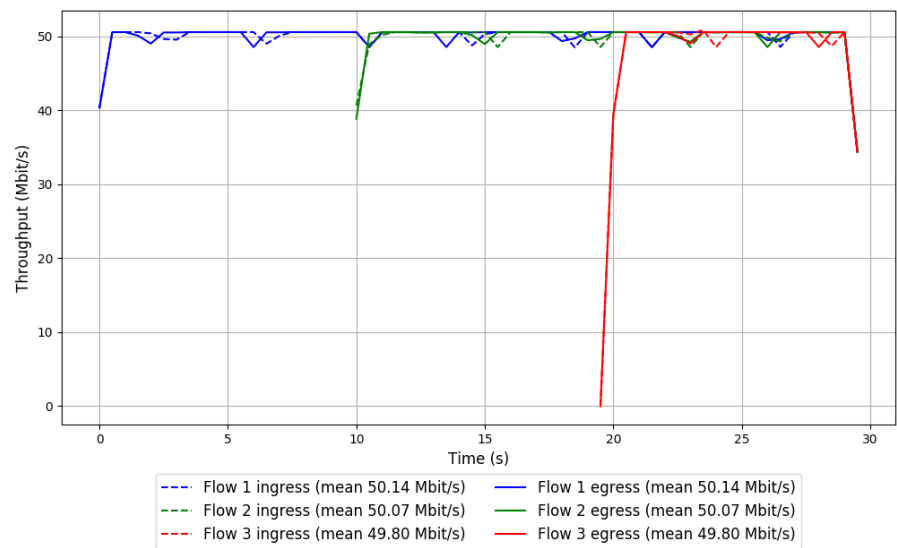
-- Flow 3:

Average throughput: 49.80 Mbit/s

95th percentile per-packet one-way delay: 2.856 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-11 22:41:56

End at: 2017-12-11 22:42:26

Local clock offset: 0.753 ms

Remote clock offset: 0.836 ms

Below is generated by plot.py at 2017-12-12 03:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.82 Mbit/s

95th percentile per-packet one-way delay: 2.734 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 50.13 Mbit/s

95th percentile per-packet one-way delay: 2.722 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.99 Mbit/s

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

Loss rate: 0.10%

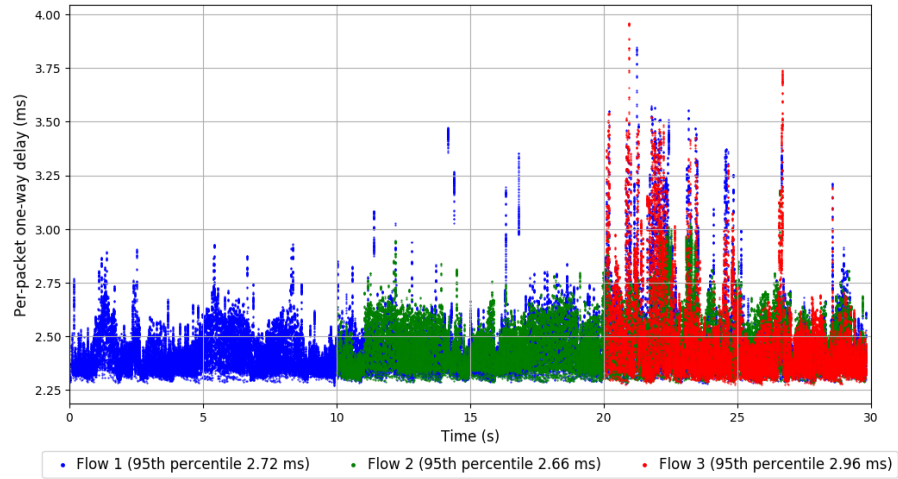
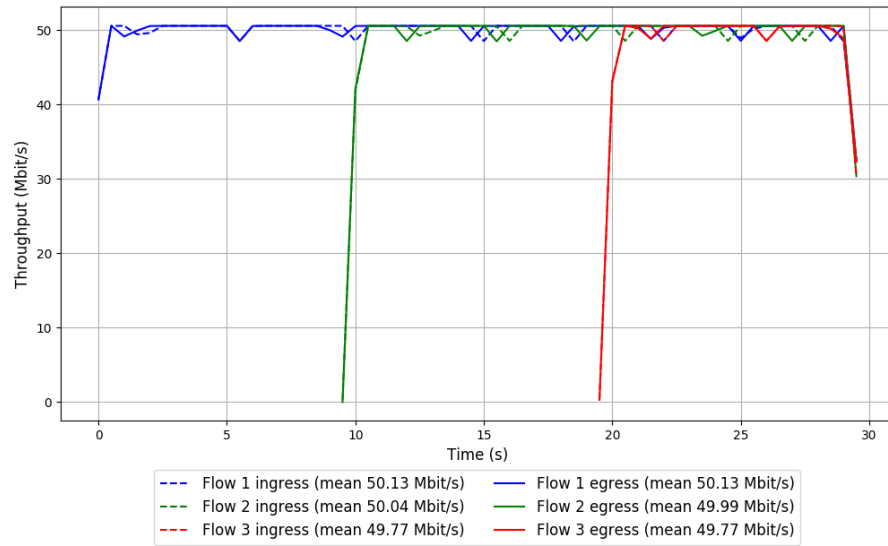
-- Flow 3:

Average throughput: 49.77 Mbit/s

95th percentile per-packet one-way delay: 2.965 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-11 23:00:32

End at: 2017-12-11 23:01:02

Local clock offset: 0.595 ms

Remote clock offset: 0.841 ms

Below is generated by plot.py at 2017-12-12 03:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.77 Mbit/s

95th percentile per-packet one-way delay: 2.960 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.09 Mbit/s

95th percentile per-packet one-way delay: 2.922 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.98 Mbit/s

95th percentile per-packet one-way delay: 2.894 ms

Loss rate: 0.00%

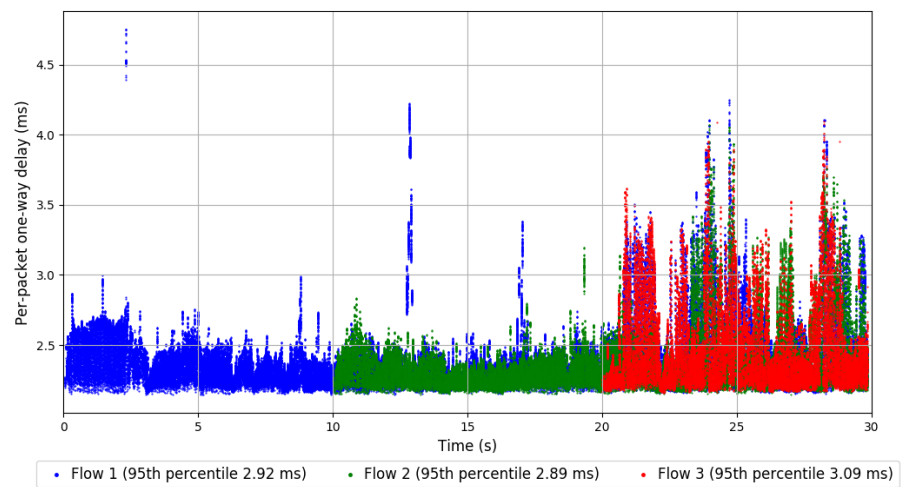
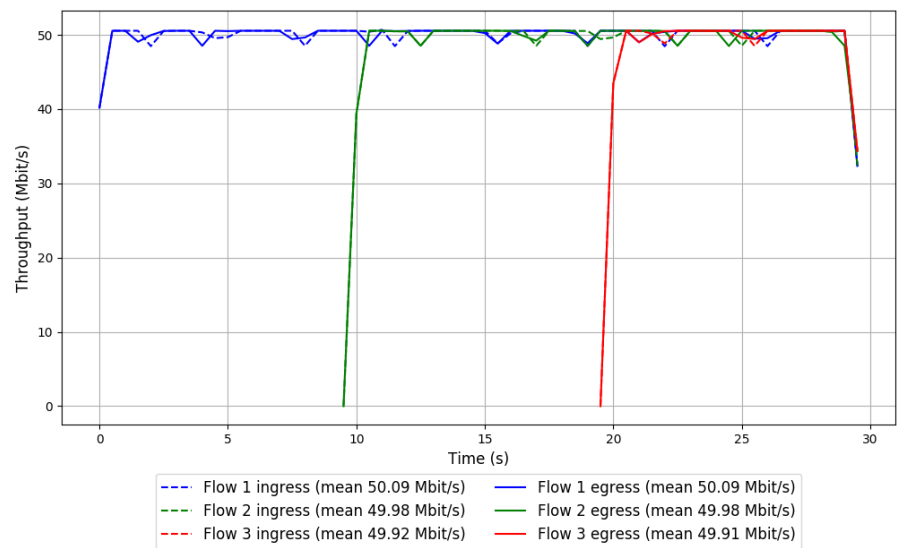
-- Flow 3:

Average throughput: 49.91 Mbit/s

95th percentile per-packet one-way delay: 3.093 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

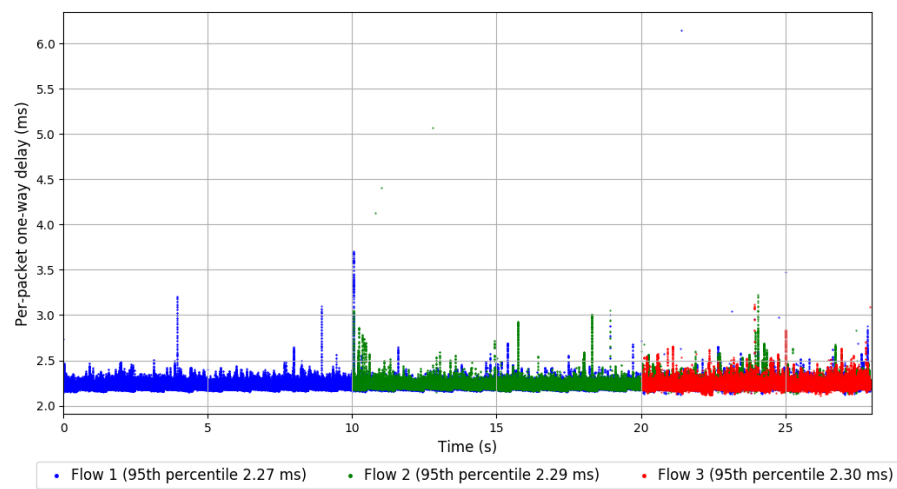
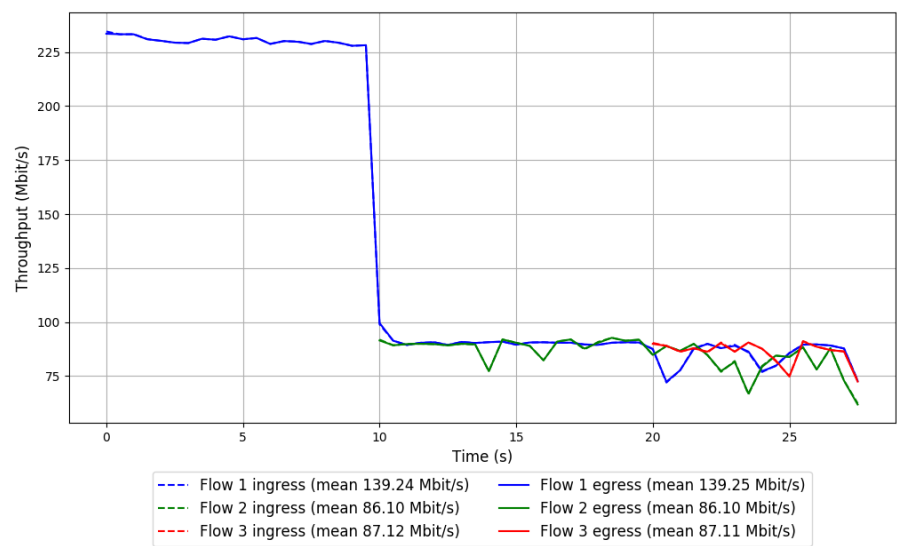


Run 1: Statistics of TaoVA-100x

Start at: 2017-12-11 19:59:41
End at: 2017-12-11 20:00:11
Local clock offset: -1.397 ms
Remote clock offset: -0.701 ms

Below is generated by plot.py at 2017-12-12 03:32:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 219.15 Mbit/s
95th percentile per-packet one-way delay: 2.283 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 139.25 Mbit/s
95th percentile per-packet one-way delay: 2.272 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 86.10 Mbit/s
95th percentile per-packet one-way delay: 2.295 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 87.11 Mbit/s
95th percentile per-packet one-way delay: 2.304 ms
Loss rate: 0.06%

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

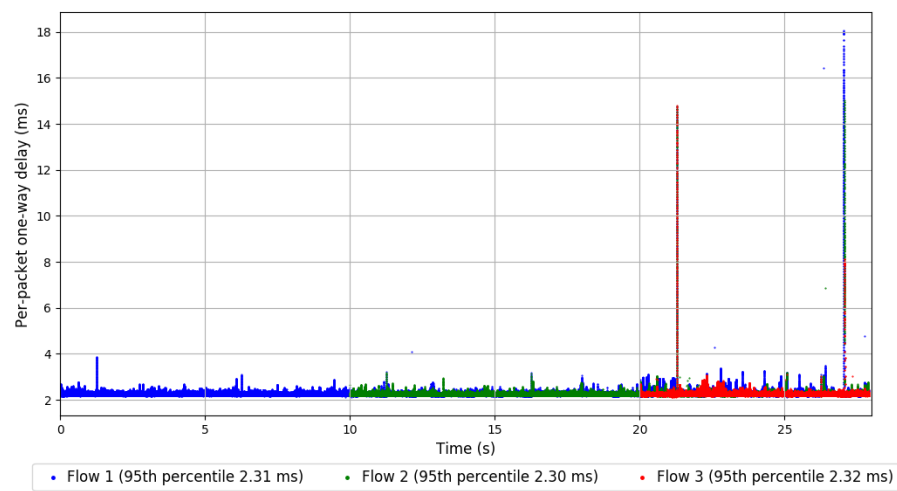
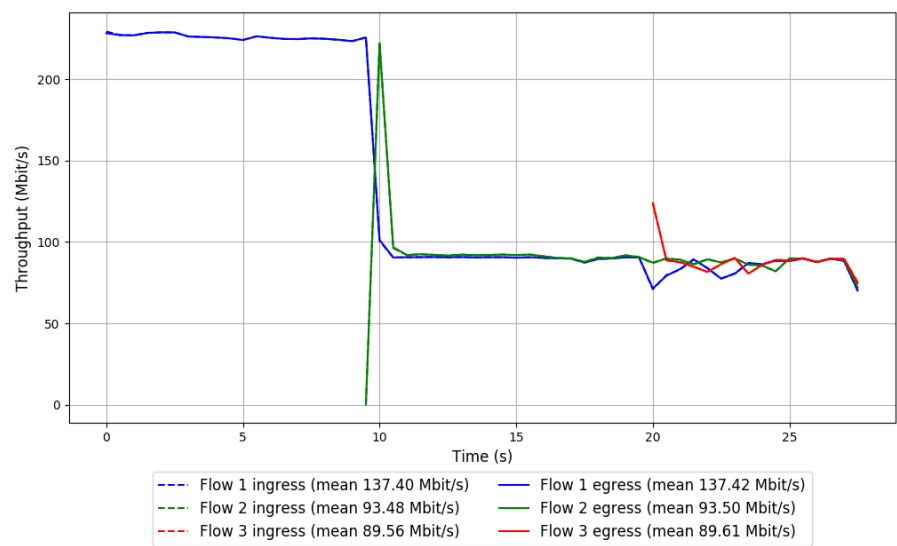


Run 2: Statistics of TaoVA-100x

Start at: 2017-12-11 20:18:27
End at: 2017-12-11 20:18:57
Local clock offset: -1.054 ms
Remote clock offset: -0.146 ms

Below is generated by plot.py at 2017-12-12 03:32:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 222.82 Mbit/s
95th percentile per-packet one-way delay: 2.310 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 137.42 Mbit/s
95th percentile per-packet one-way delay: 2.315 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 93.50 Mbit/s
95th percentile per-packet one-way delay: 2.299 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 89.61 Mbit/s
95th percentile per-packet one-way delay: 2.316 ms
Loss rate: 0.05%

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-11 20:37:23

End at: 2017-12-11 20:37:53

Local clock offset: -0.717 ms

Remote clock offset: 0.354 ms

Below is generated by plot.py at 2017-12-12 03:32:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 208.51 Mbit/s

95th percentile per-packet one-way delay: 2.431 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 127.87 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 89.06 Mbit/s

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

Loss rate: 0.03%

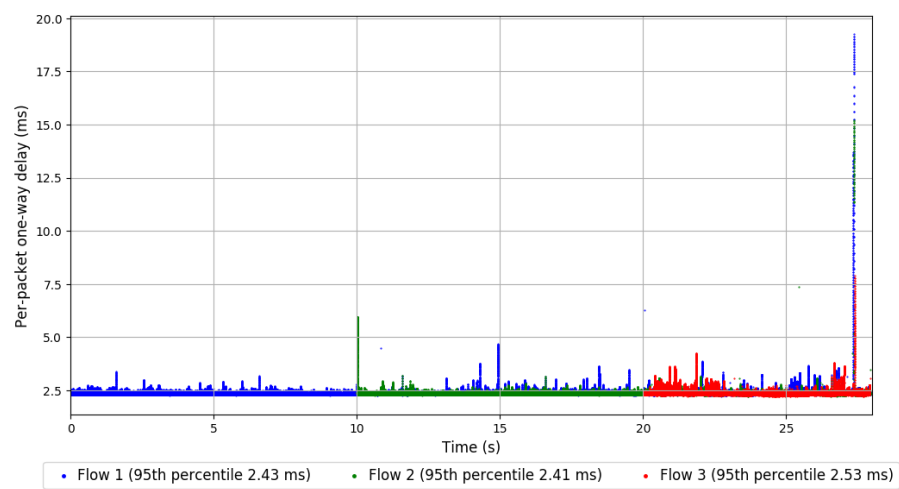
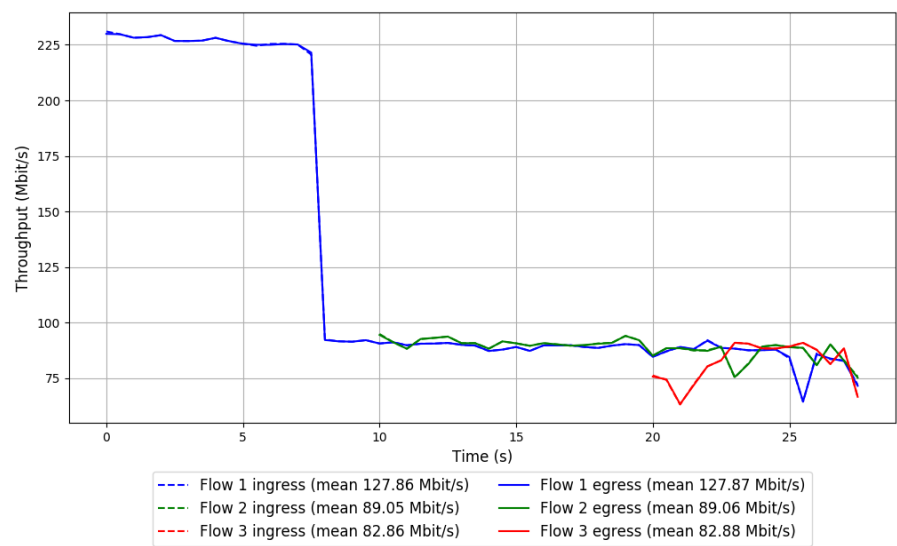
-- Flow 3:

Average throughput: 82.88 Mbit/s

95th percentile per-packet one-way delay: 2.531 ms

Loss rate: 0.03%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-11 20:55:59

End at: 2017-12-11 20:56:29

Local clock offset: -0.287 ms

Remote clock offset: 0.766 ms

Below is generated by plot.py at 2017-12-12 03:32:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.69 Mbit/s

95th percentile per-packet one-way delay: 2.312 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 112.91 Mbit/s

95th percentile per-packet one-way delay: 2.304 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 134.94 Mbit/s

95th percentile per-packet one-way delay: 2.293 ms

Loss rate: 0.02%

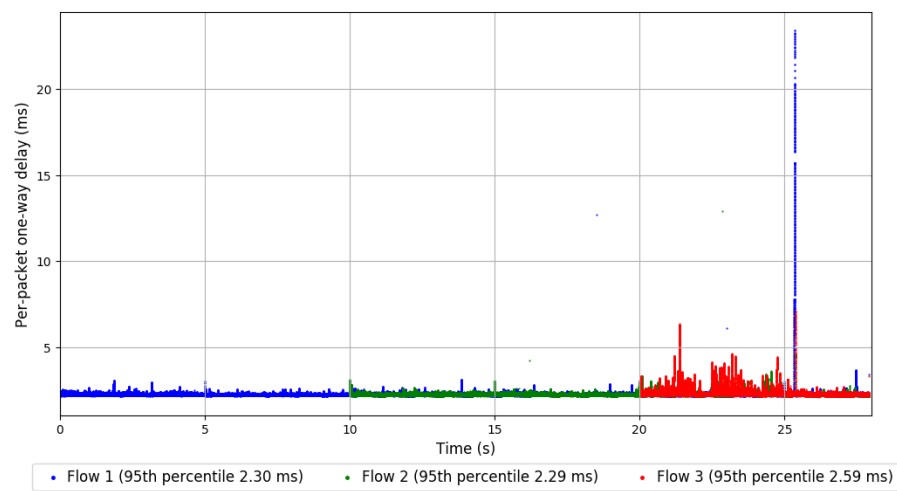
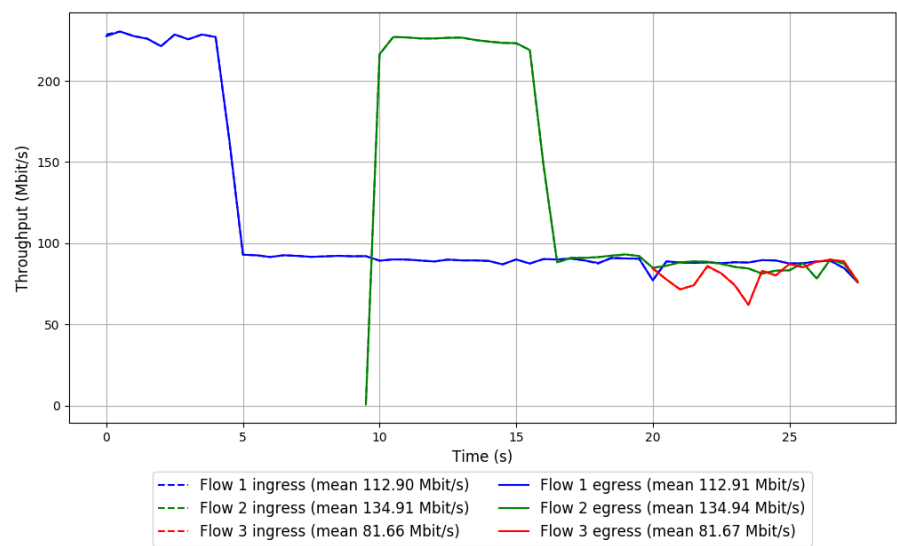
-- Flow 3:

Average throughput: 81.67 Mbit/s

95th percentile per-packet one-way delay: 2.594 ms

Loss rate: 0.06%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-11 21:14:46

End at: 2017-12-11 21:15:16

Local clock offset: 0.073 ms

Remote clock offset: 0.941 ms

Below is generated by plot.py at 2017-12-12 03:32:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.11 Mbit/s

95th percentile per-packet one-way delay: 2.376 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 56.45 Mbit/s

95th percentile per-packet one-way delay: 2.367 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 63.25 Mbit/s

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

Loss rate: 0.04%

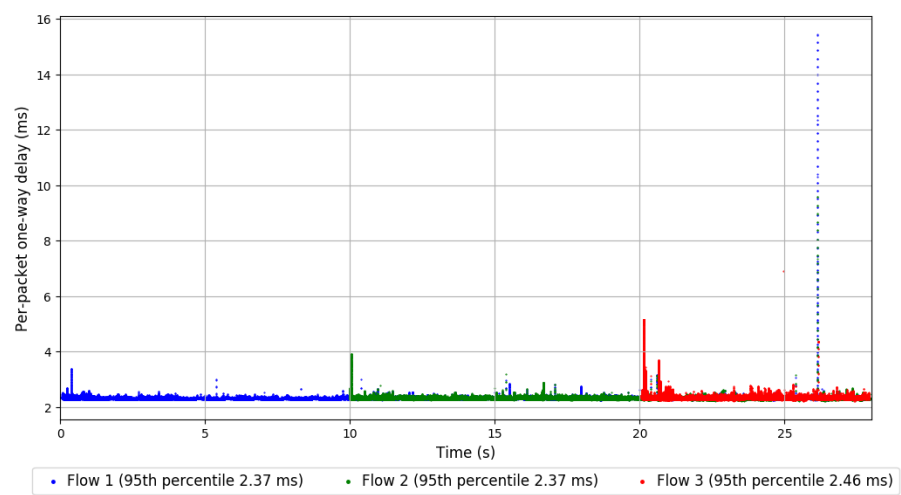
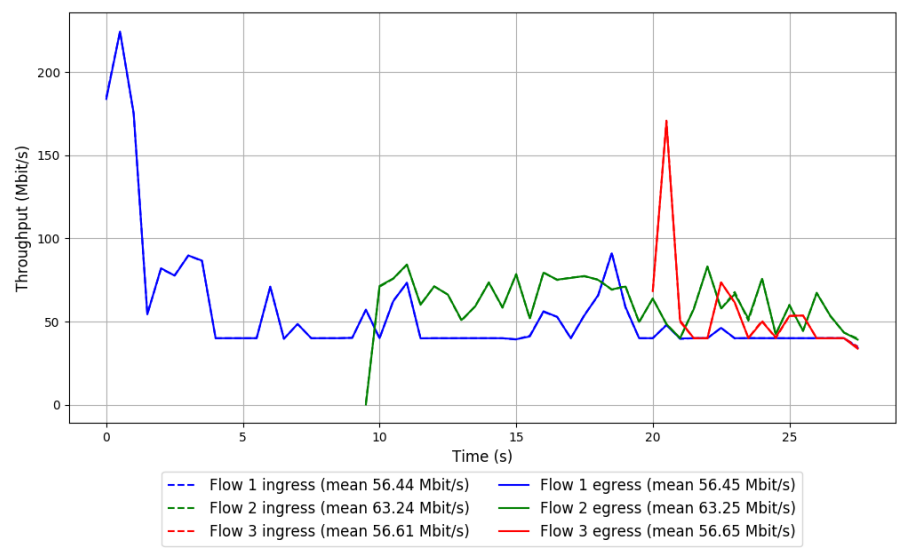
-- Flow 3:

Average throughput: 56.65 Mbit/s

95th percentile per-packet one-way delay: 2.459 ms

Loss rate: 0.15%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-11 21:33:27

End at: 2017-12-11 21:33:57

Local clock offset: 0.324 ms

Remote clock offset: 1.223 ms

Below is generated by plot.py at 2017-12-12 03:33:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.02 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 137.56 Mbit/s

95th percentile per-packet one-way delay: 2.308 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 87.54 Mbit/s

95th percentile per-packet one-way delay: 2.352 ms

Loss rate: 0.03%

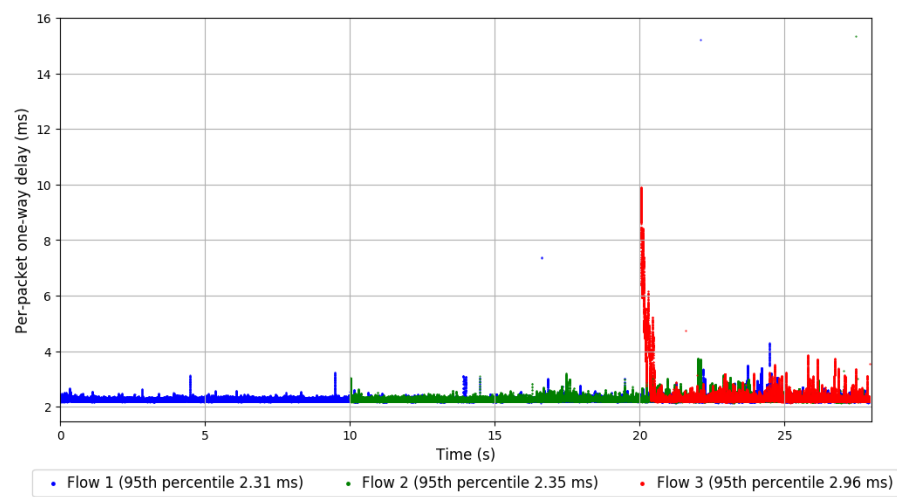
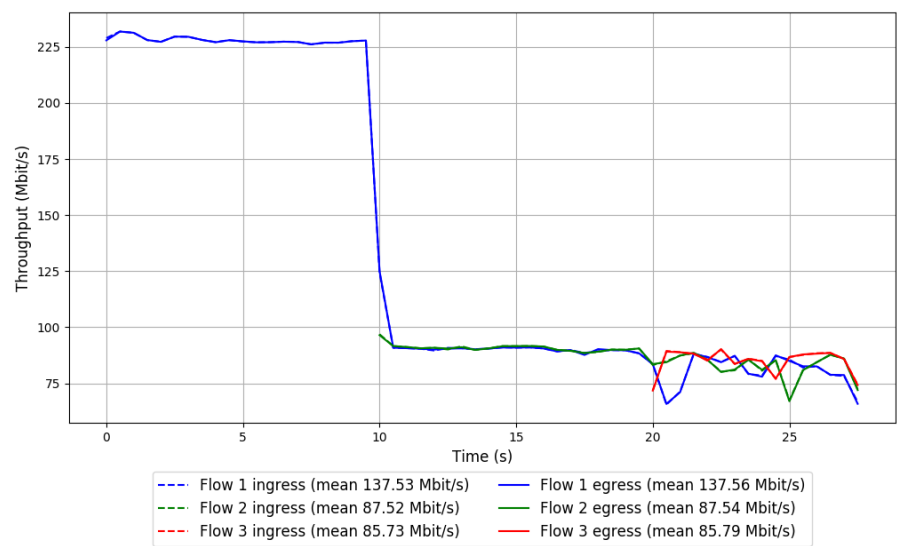
-- Flow 3:

Average throughput: 85.79 Mbit/s

95th percentile per-packet one-way delay: 2.960 ms

Loss rate: 0.05%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-11 21:52:15

End at: 2017-12-11 21:52:45

Local clock offset: 0.564 ms

Remote clock offset: 1.193 ms

Below is generated by plot.py at 2017-12-12 03:33:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 221.02 Mbit/s

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

Loss rate: 0.03%

-- Flow 1:

Average throughput: 138.20 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 92.06 Mbit/s

95th percentile per-packet one-way delay: 2.353 ms

Loss rate: 0.03%

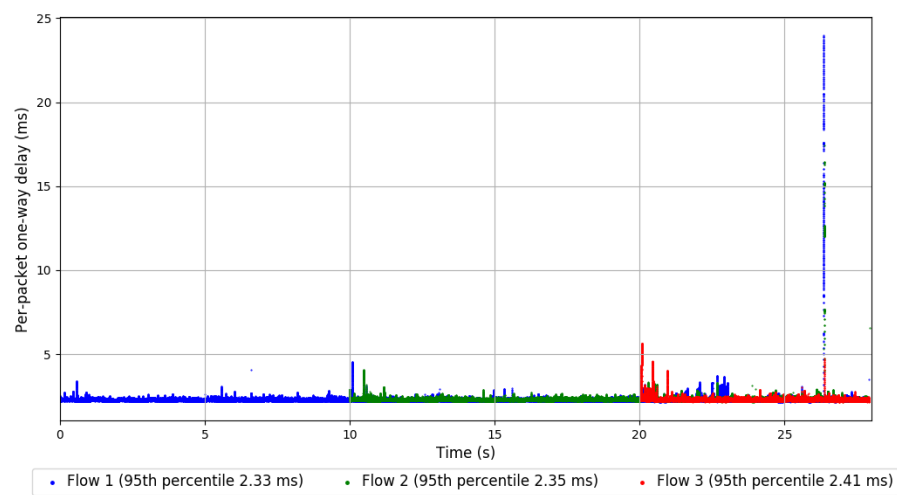
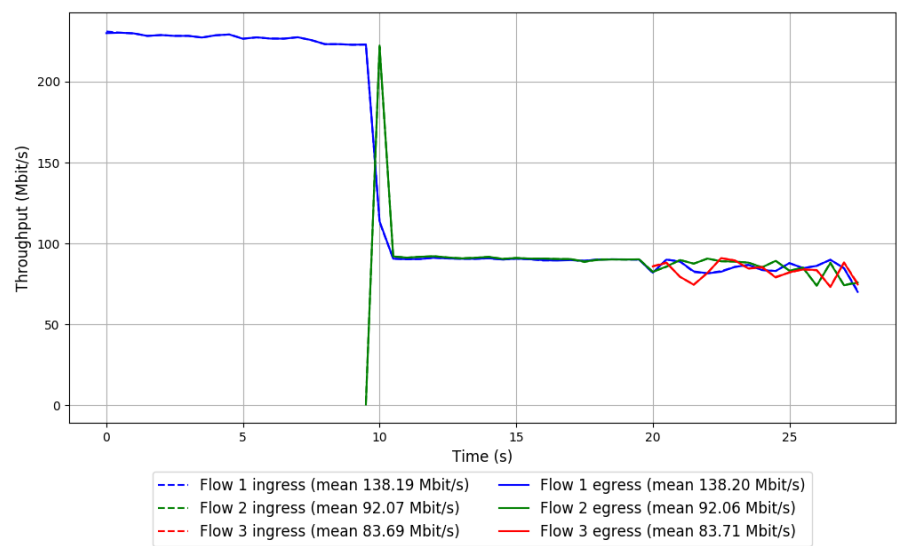
-- Flow 3:

Average throughput: 83.71 Mbit/s

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

Loss rate: 0.08%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-11 22:11:03

End at: 2017-12-11 22:11:33

Local clock offset: 0.674 ms

Remote clock offset: 1.088 ms

Below is generated by plot.py at 2017-12-12 03:33:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 217.64 Mbit/s

95th percentile per-packet one-way delay: 2.321 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 137.18 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 86.27 Mbit/s

95th percentile per-packet one-way delay: 2.390 ms

Loss rate: 0.02%

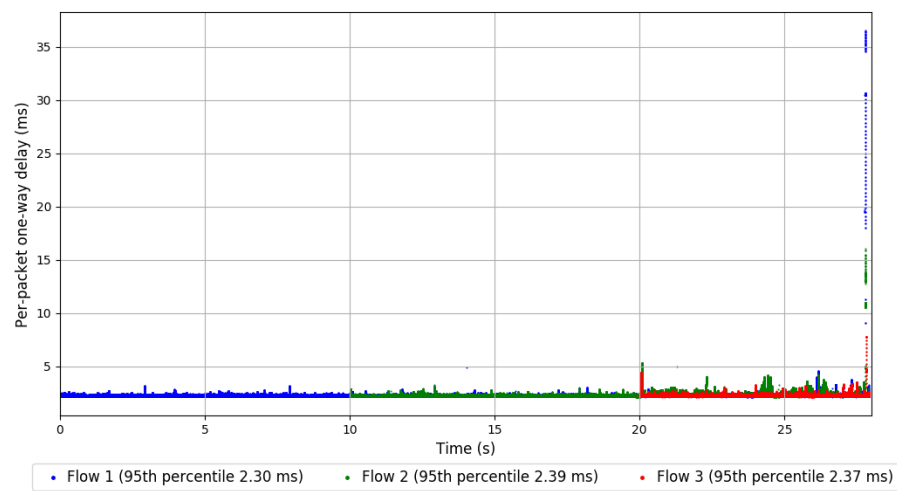
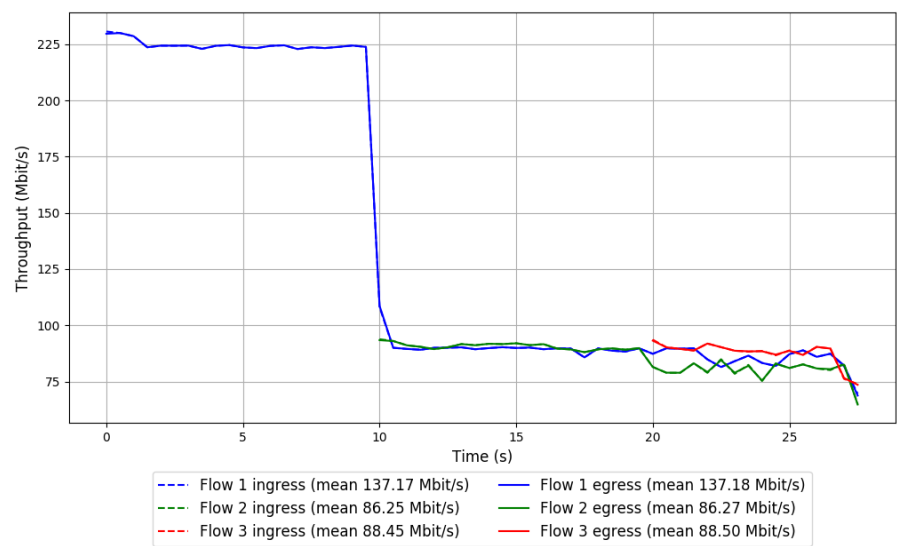
-- Flow 3:

Average throughput: 88.50 Mbit/s

95th percentile per-packet one-way delay: 2.373 ms

Loss rate: 0.02%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-11 22:29:41

End at: 2017-12-11 22:30:11

Local clock offset: 0.732 ms

Remote clock offset: 0.882 ms

Below is generated by plot.py at 2017-12-12 03:34:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 201.10 Mbit/s

95th percentile per-packet one-way delay: 2.429 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 130.45 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 74.06 Mbit/s

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

Loss rate: 0.03%

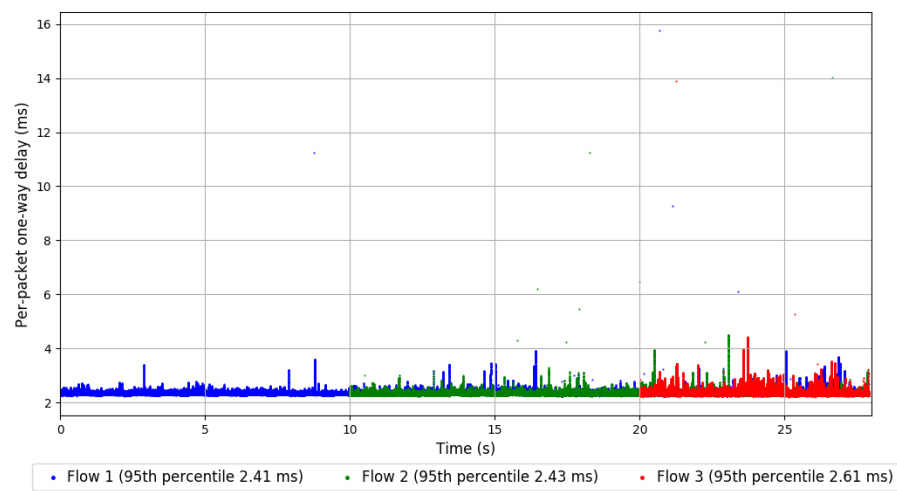
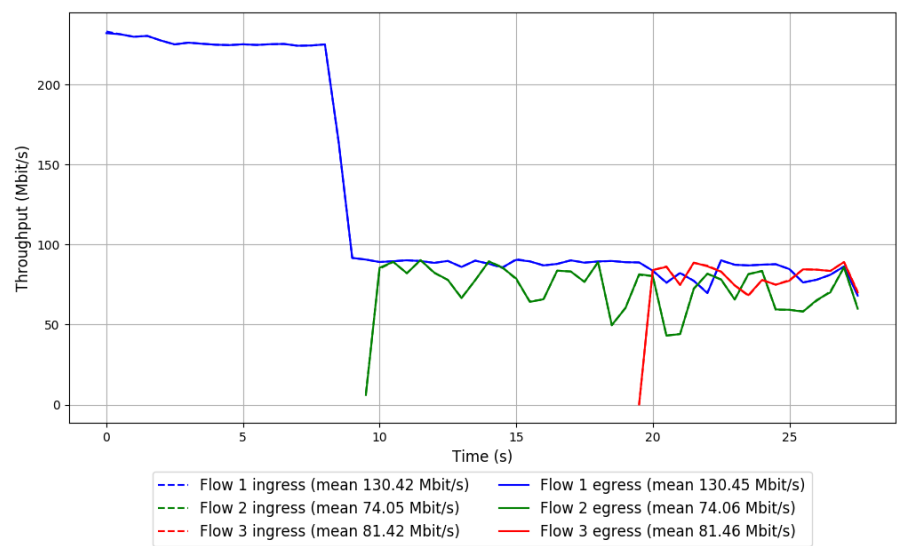
-- Flow 3:

Average throughput: 81.46 Mbit/s

95th percentile per-packet one-way delay: 2.613 ms

Loss rate: 0.06%

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



Run 10: Statistics of TaoVA-100x

Start at: 2017-12-11 22:48:12

End at: 2017-12-11 22:48:42

Local clock offset: 0.715 ms

Remote clock offset: 0.847 ms

Below is generated by plot.py at 2017-12-12 03:35:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.89 Mbit/s

95th percentile per-packet one-way delay: 2.361 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 105.16 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 89.27 Mbit/s

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

Loss rate: 0.02%

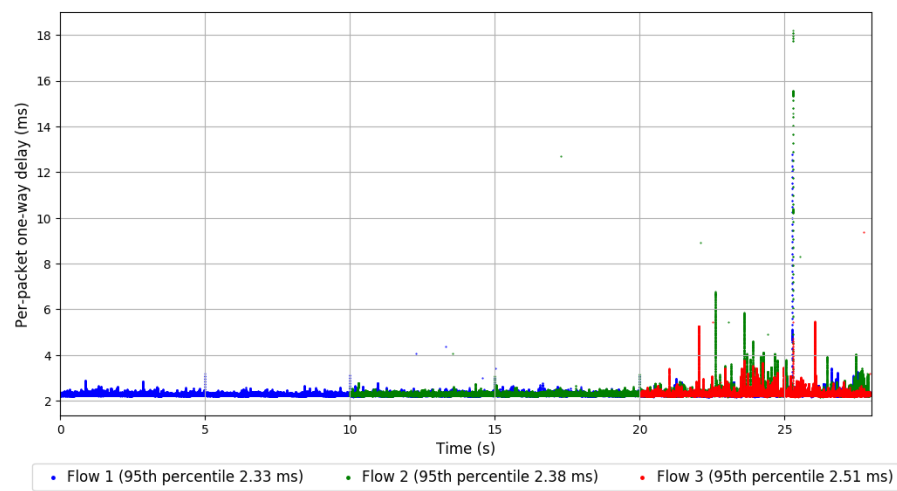
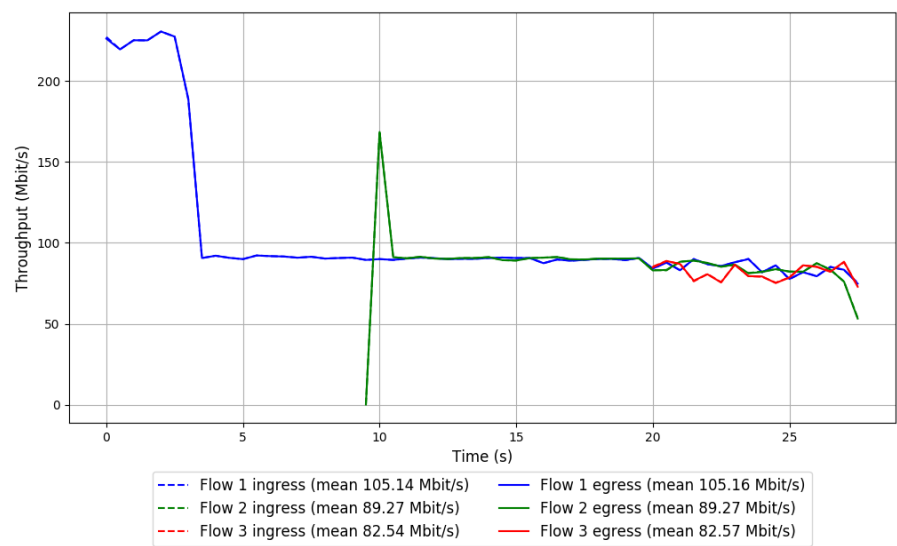
-- Flow 3:

Average throughput: 82.57 Mbit/s

95th percentile per-packet one-way delay: 2.511 ms

Loss rate: 0.06%

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

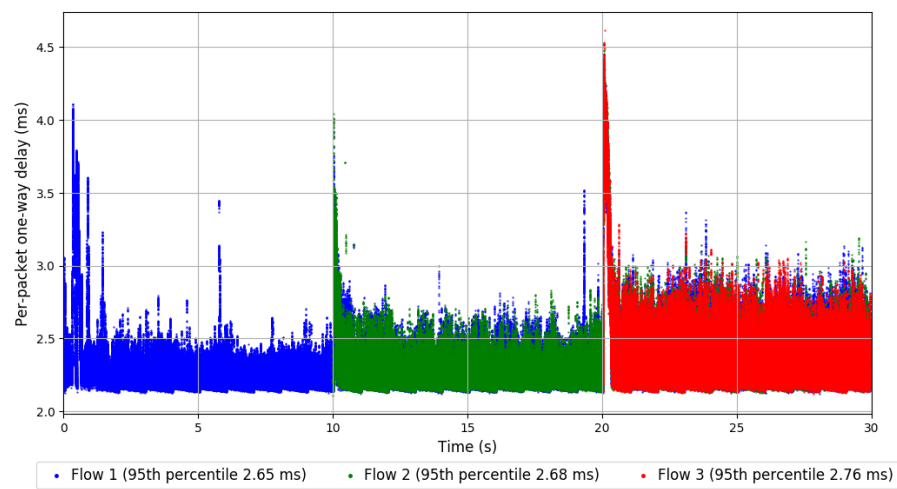
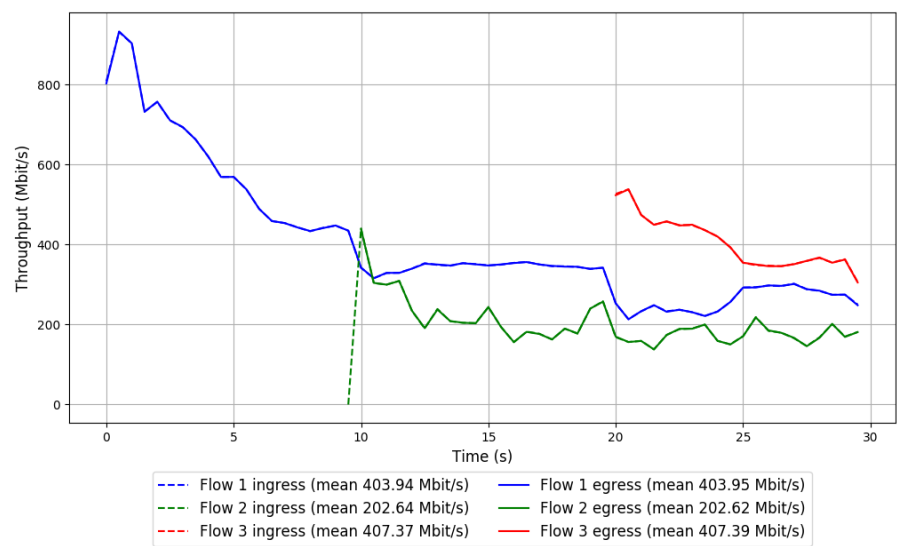


Run 1: Statistics of TCP Vegas

Start at: 2017-12-11 20:04:45
End at: 2017-12-11 20:05:15
Local clock offset: -1.399 ms
Remote clock offset: -0.604 ms

Below is generated by plot.py at 2017-12-12 03:41:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 673.89 Mbit/s
95th percentile per-packet one-way delay: 2.687 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 403.95 Mbit/s
95th percentile per-packet one-way delay: 2.651 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 202.62 Mbit/s
95th percentile per-packet one-way delay: 2.680 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 407.39 Mbit/s
95th percentile per-packet one-way delay: 2.761 ms
Loss rate: 0.04%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-11 20:23:31

End at: 2017-12-11 20:24:01

Local clock offset: -1.021 ms

Remote clock offset: 0.032 ms

Below is generated by plot.py at 2017-12-12 03:42:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 744.62 Mbit/s

95th percentile per-packet one-way delay: 3.001 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 444.99 Mbit/s

95th percentile per-packet one-way delay: 2.646 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 235.57 Mbit/s

95th percentile per-packet one-way delay: 2.711 ms

Loss rate: 0.03%

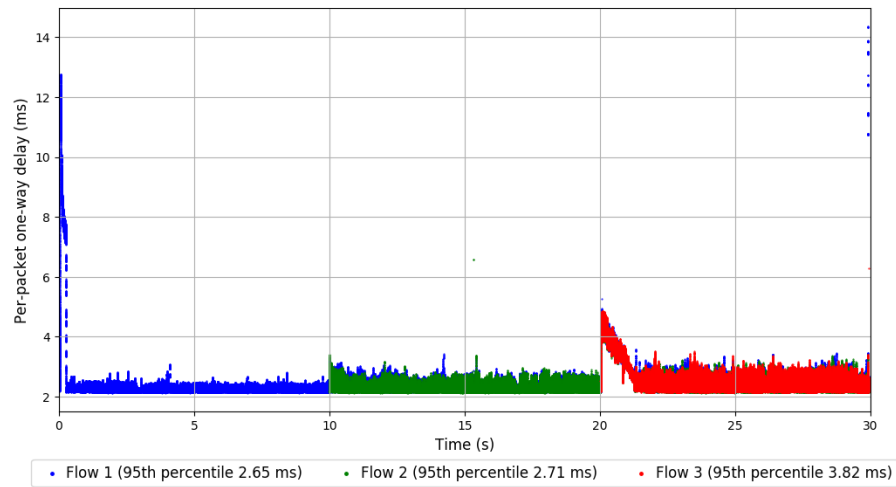
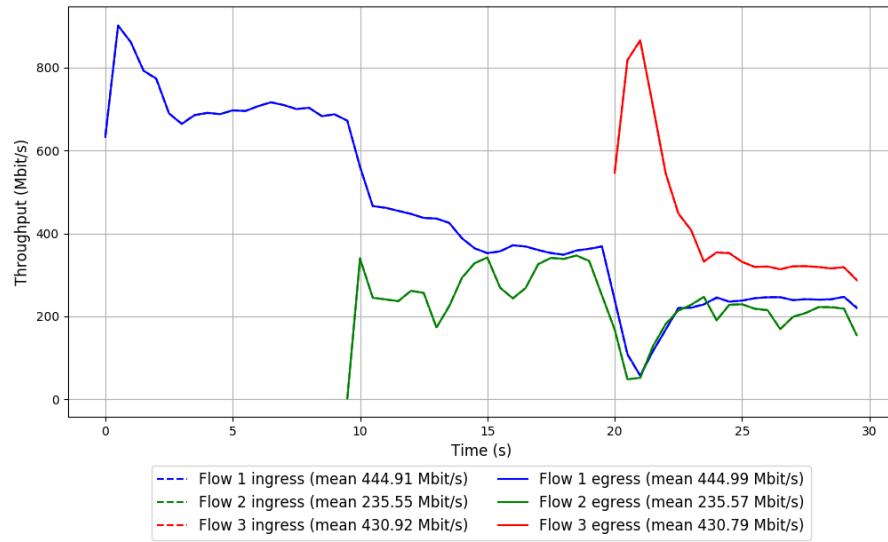
-- Flow 3:

Average throughput: 430.79 Mbit/s

95th percentile per-packet one-way delay: 3.823 ms

Loss rate: 0.03%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-11 20:42:21

End at: 2017-12-11 20:42:51

Local clock offset: -0.601 ms

Remote clock offset: 0.508 ms

Below is generated by plot.py at 2017-12-12 03:42:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 637.57 Mbit/s

95th percentile per-packet one-way delay: 2.937 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 291.87 Mbit/s

95th percentile per-packet one-way delay: 2.713 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 345.56 Mbit/s

95th percentile per-packet one-way delay: 3.513 ms

Loss rate: 0.02%

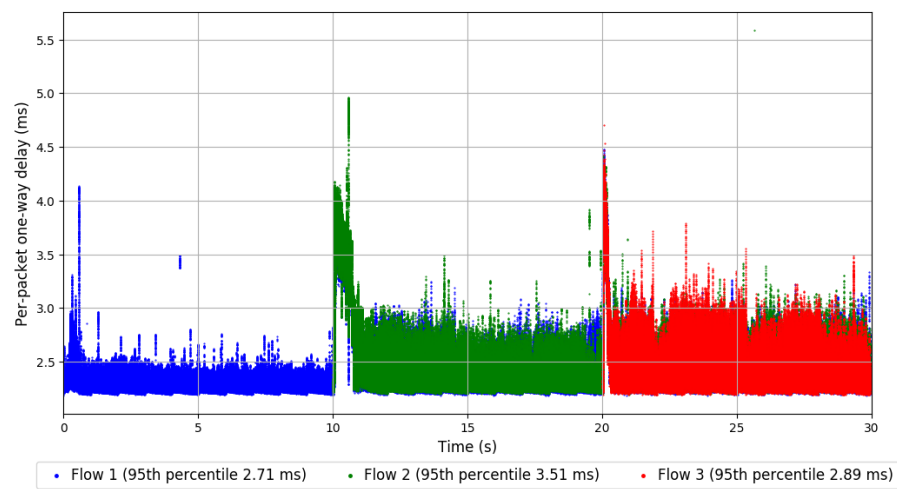
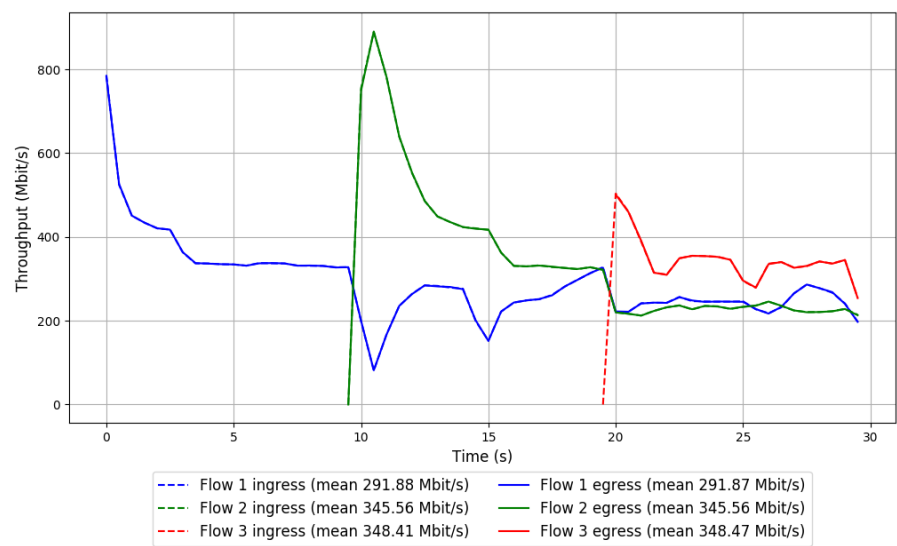
-- Flow 3:

Average throughput: 348.47 Mbit/s

95th percentile per-packet one-way delay: 2.892 ms

Loss rate: 0.03%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-11 21:01:03

End at: 2017-12-11 21:01:33

Local clock offset: -0.203 ms

Remote clock offset: 0.855 ms

Below is generated by plot.py at 2017-12-12 03:42:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 642.20 Mbit/s

95th percentile per-packet one-way delay: 2.764 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 340.11 Mbit/s

95th percentile per-packet one-way delay: 2.702 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 290.16 Mbit/s

95th percentile per-packet one-way delay: 2.767 ms

Loss rate: 0.02%

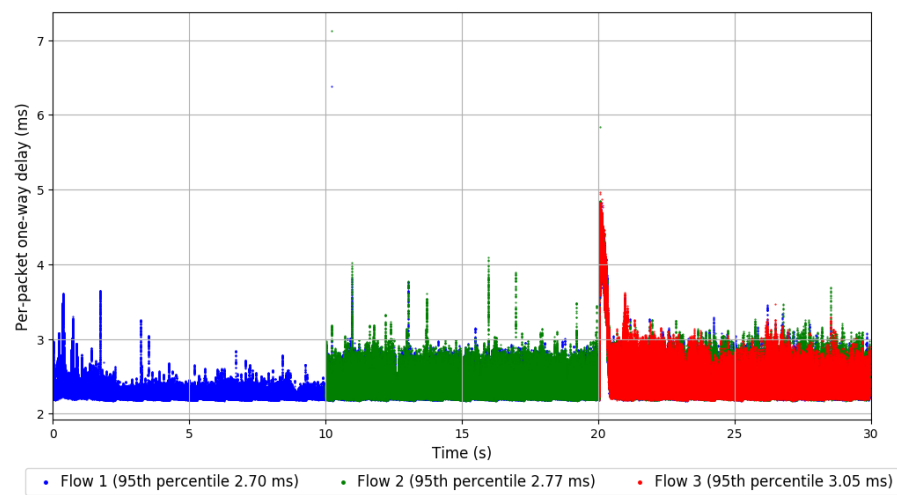
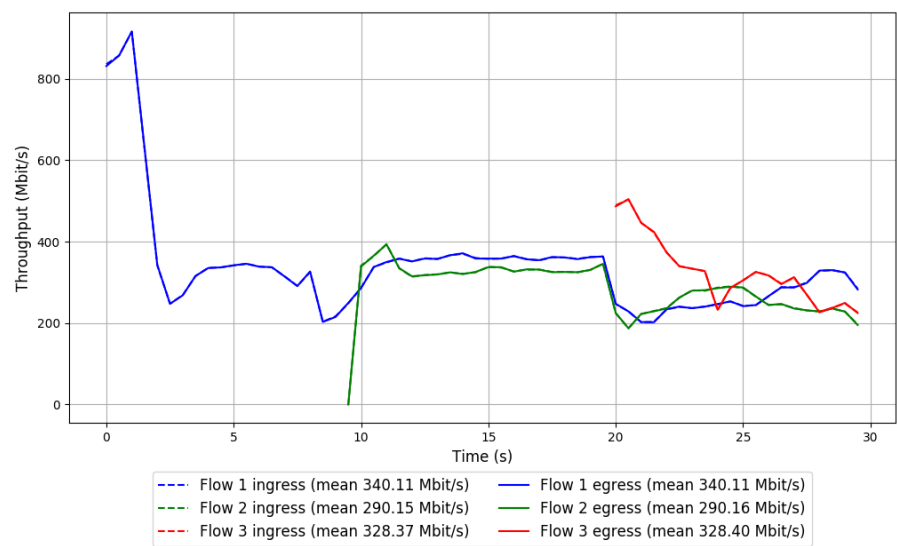
-- Flow 3:

Average throughput: 328.40 Mbit/s

95th percentile per-packet one-way delay: 3.054 ms

Loss rate: 0.04%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-11 21:19:44

End at: 2017-12-11 21:20:14

Local clock offset: 0.126 ms

Remote clock offset: 1.043 ms

Below is generated by plot.py at 2017-12-12 03:42:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 607.28 Mbit/s

95th percentile per-packet one-way delay: 2.696 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 257.13 Mbit/s

95th percentile per-packet one-way delay: 2.678 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 373.33 Mbit/s

95th percentile per-packet one-way delay: 2.701 ms

Loss rate: 0.02%

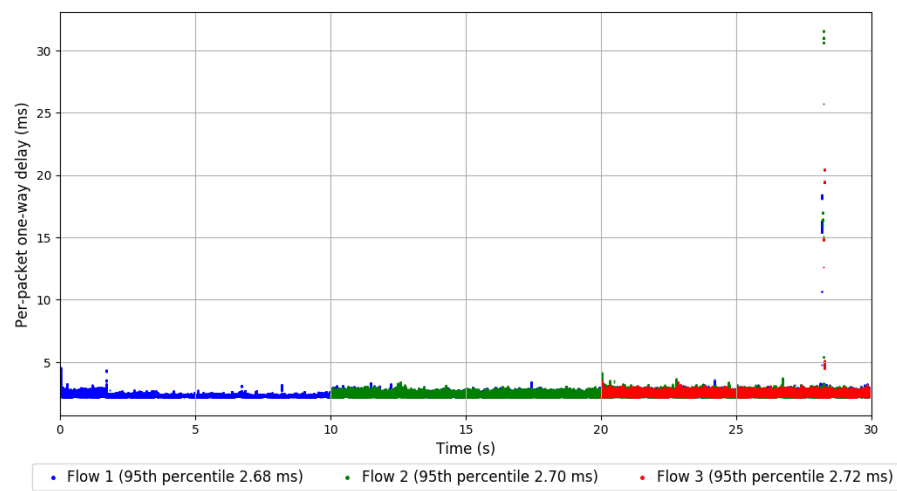
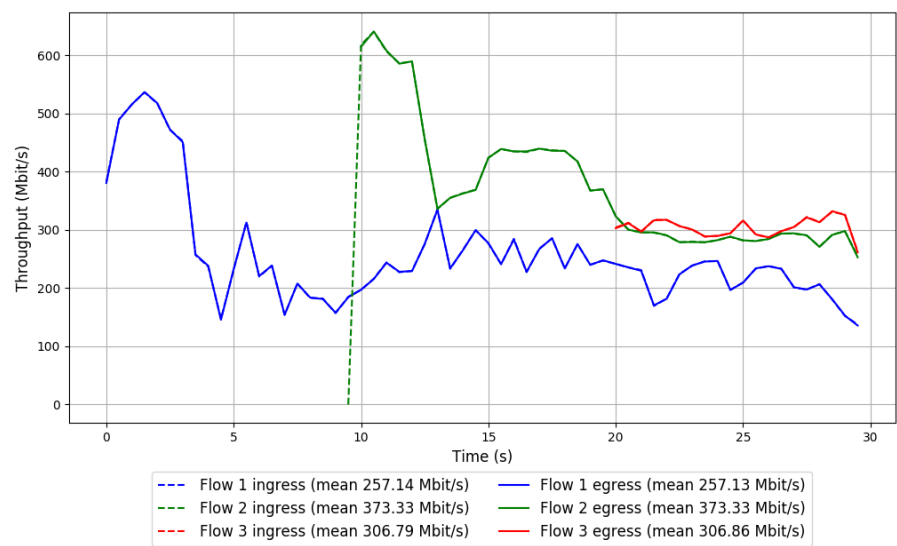
-- Flow 3:

Average throughput: 306.86 Mbit/s

95th percentile per-packet one-way delay: 2.719 ms

Loss rate: 0.05%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-11 21:38:27

End at: 2017-12-11 21:38:57

Local clock offset: 0.361 ms

Remote clock offset: 1.259 ms

Below is generated by plot.py at 2017-12-12 03:43:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 734.90 Mbit/s

95th percentile per-packet one-way delay: 2.717 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 417.72 Mbit/s

95th percentile per-packet one-way delay: 2.670 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 309.05 Mbit/s

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

Loss rate: 0.02%

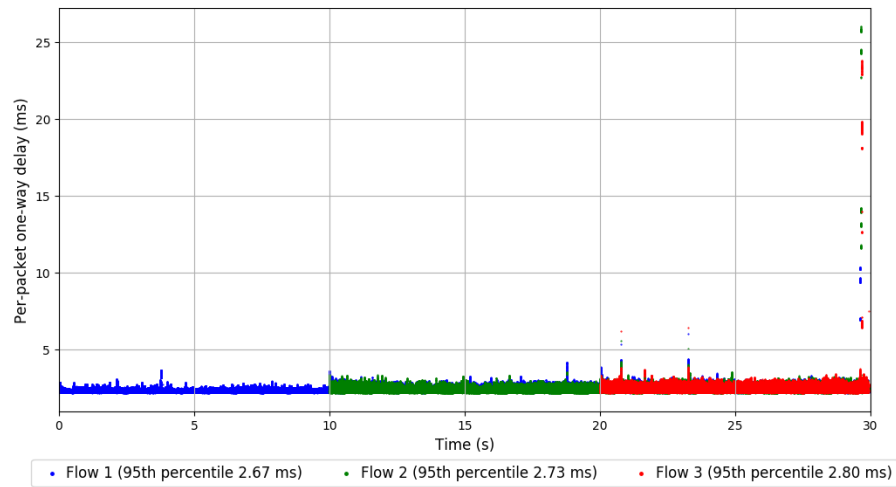
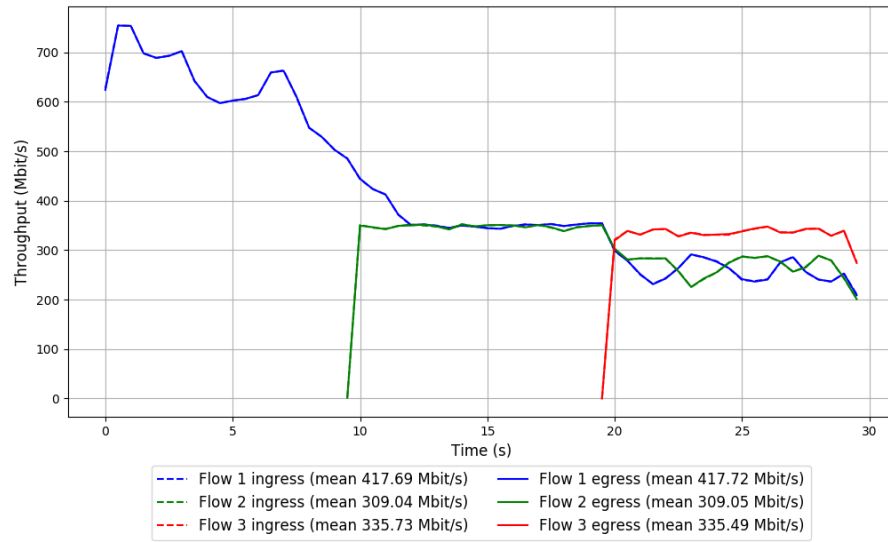
-- Flow 3:

Average throughput: 335.49 Mbit/s

95th percentile per-packet one-way delay: 2.802 ms

Loss rate: 0.04%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-11 21:57:16

End at: 2017-12-11 21:57:46

Local clock offset: 0.625 ms

Remote clock offset: 1.163 ms

Below is generated by plot.py at 2017-12-12 03:44:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 689.95 Mbit/s

95th percentile per-packet one-way delay: 5.033 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 397.49 Mbit/s

95th percentile per-packet one-way delay: 5.440 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 268.40 Mbit/s

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

Loss rate: 0.02%

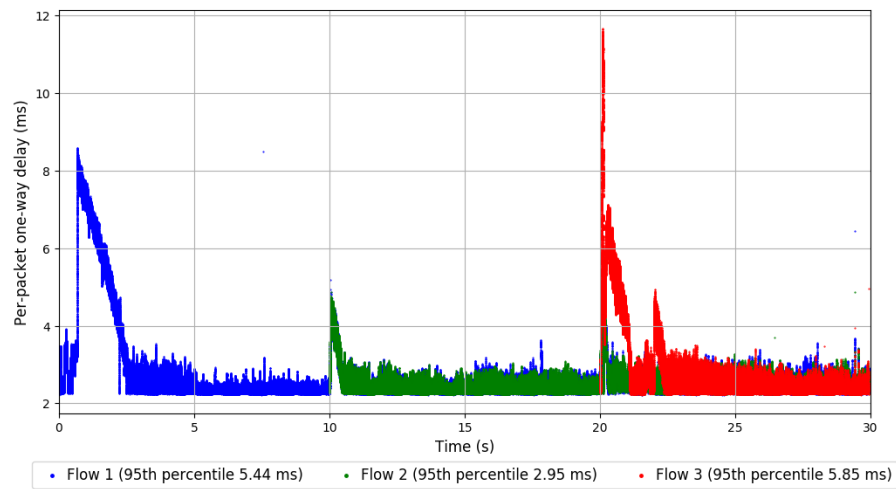
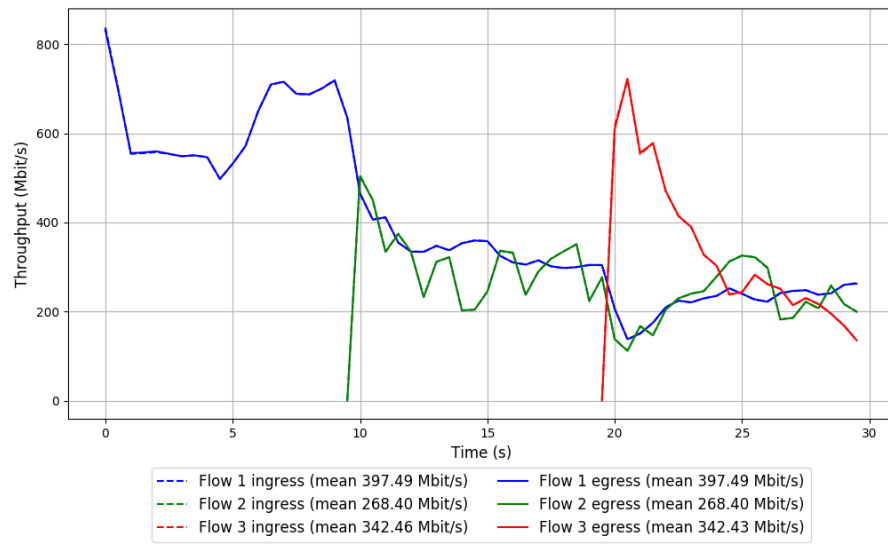
-- Flow 3:

Average throughput: 342.43 Mbit/s

95th percentile per-packet one-way delay: 5.849 ms

Loss rate: 0.03%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-11 22:16:07

End at: 2017-12-11 22:16:37

Local clock offset: 0.688 ms

Remote clock offset: 1.044 ms

Below is generated by plot.py at 2017-12-12 03:44:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 588.31 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 325.31 Mbit/s

95th percentile per-packet one-way delay: 2.733 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 214.38 Mbit/s

95th percentile per-packet one-way delay: 3.575 ms

Loss rate: 0.00%

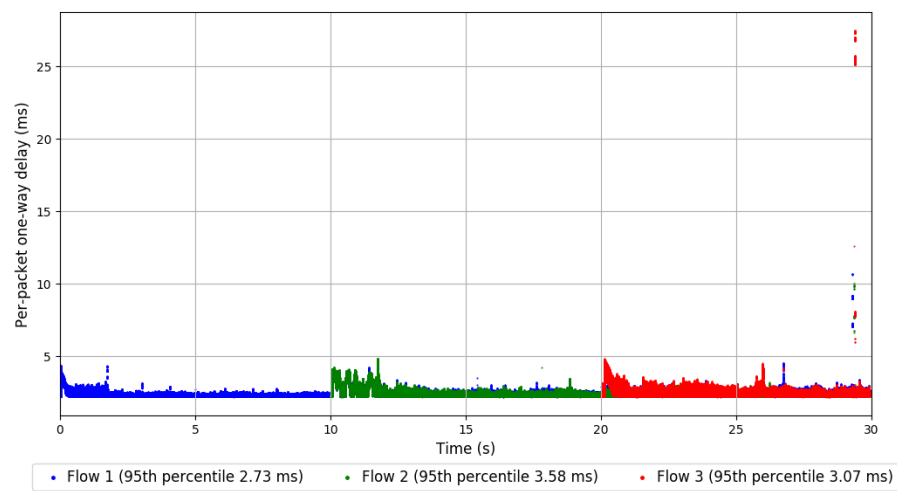
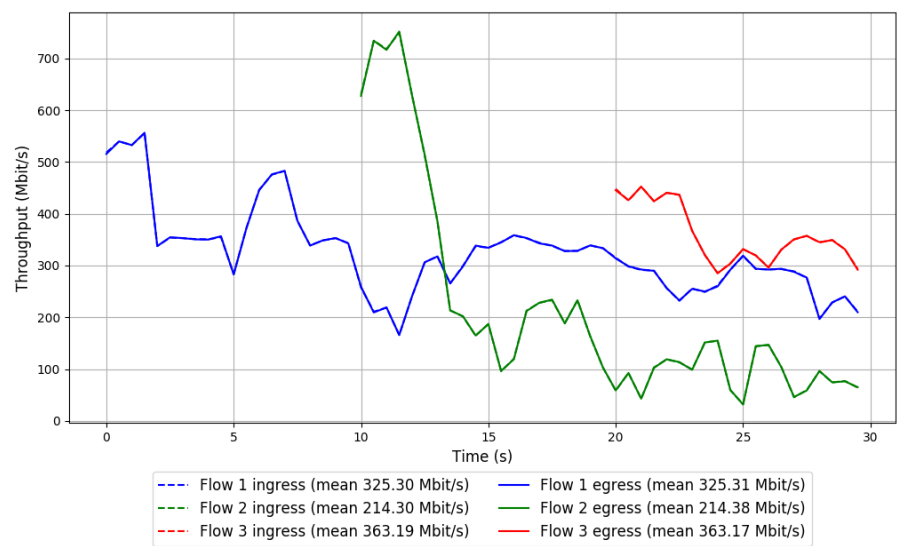
-- Flow 3:

Average throughput: 363.17 Mbit/s

95th percentile per-packet one-way delay: 3.072 ms

Loss rate: 0.04%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-11 22:34:43

End at: 2017-12-11 22:35:13

Local clock offset: 0.676 ms

Remote clock offset: 0.923 ms

Below is generated by plot.py at 2017-12-12 03:47:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 497.14 Mbit/s

95th percentile per-packet one-way delay: 2.606 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 176.16 Mbit/s

95th percentile per-packet one-way delay: 2.570 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 337.93 Mbit/s

95th percentile per-packet one-way delay: 2.613 ms

Loss rate: 0.02%

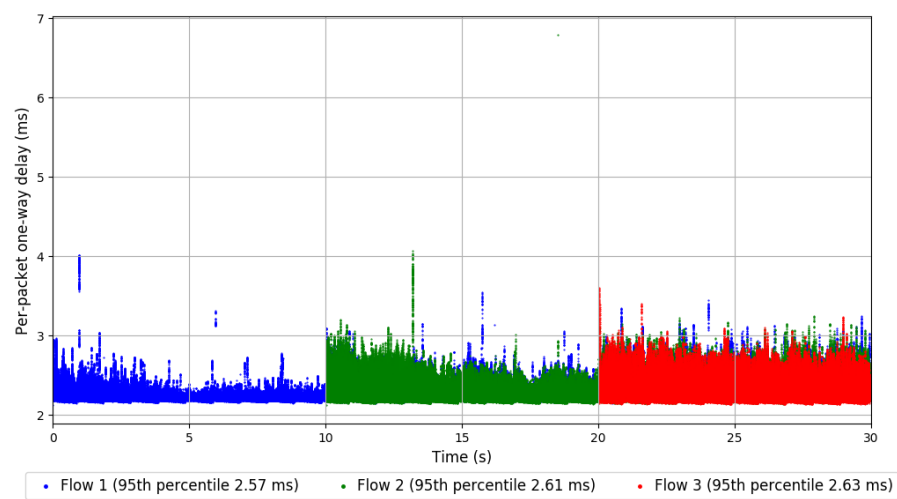
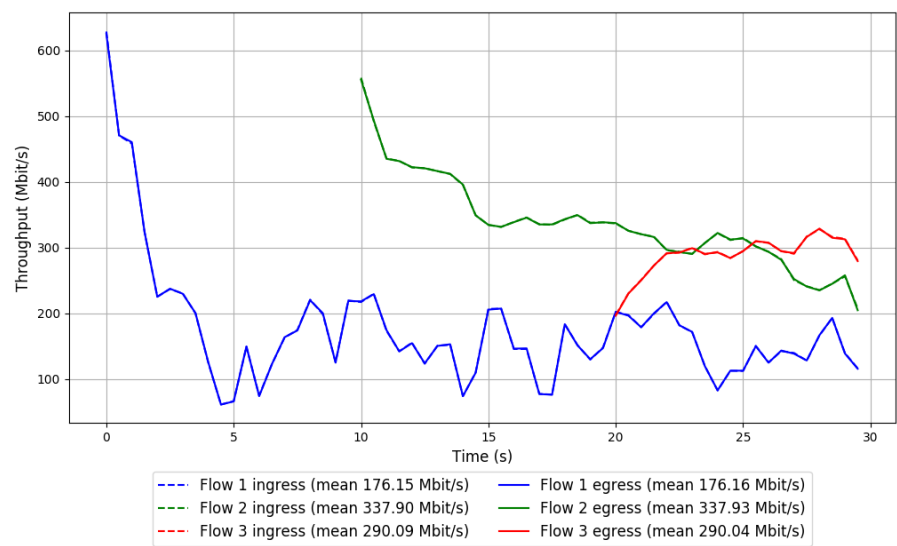
-- Flow 3:

Average throughput: 290.04 Mbit/s

95th percentile per-packet one-way delay: 2.633 ms

Loss rate: 0.06%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-11 22:53:14

End at: 2017-12-11 22:53:44

Local clock offset: 0.712 ms

Remote clock offset: 0.831 ms

Below is generated by plot.py at 2017-12-12 03:50:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 643.14 Mbit/s

95th percentile per-packet one-way delay: 5.398 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 353.53 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 289.15 Mbit/s

95th percentile per-packet one-way delay: 7.830 ms

Loss rate: 0.01%

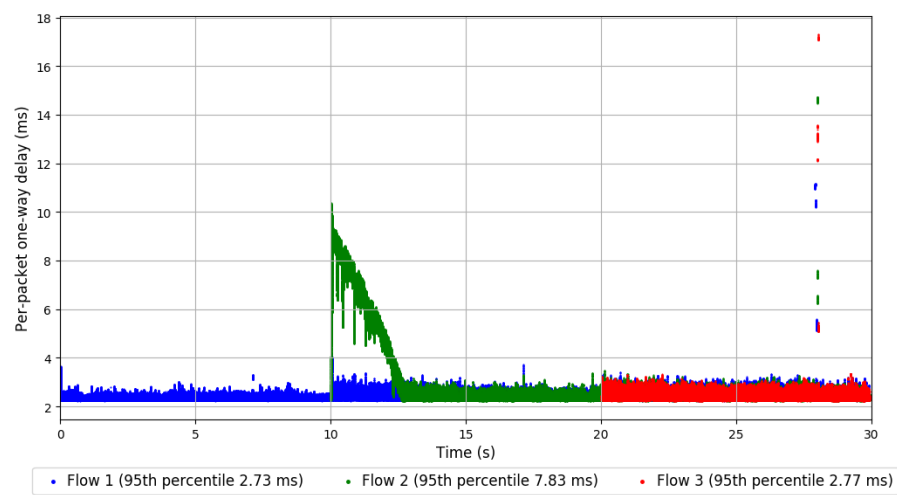
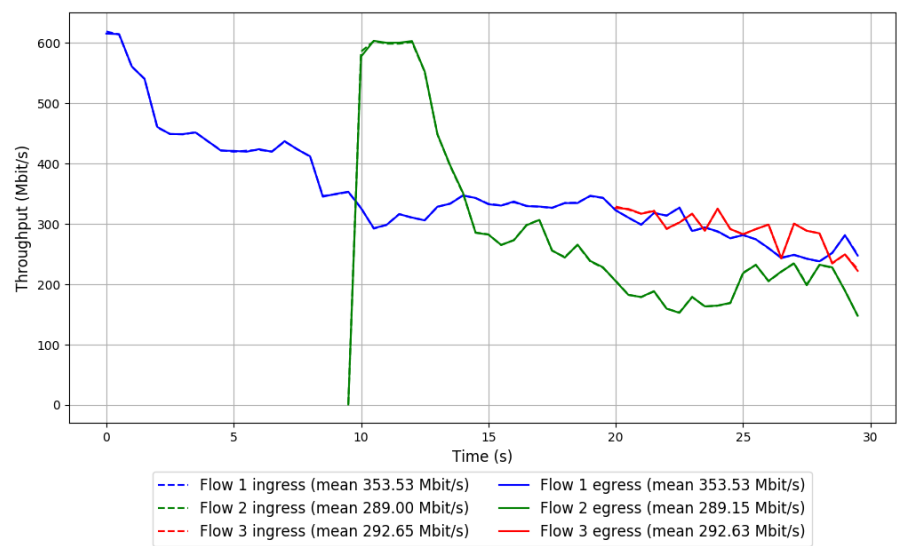
-- Flow 3:

Average throughput: 292.63 Mbit/s

95th percentile per-packet one-way delay: 2.766 ms

Loss rate: 0.05%

Run 10: Report of TCP Vegas — Data Link

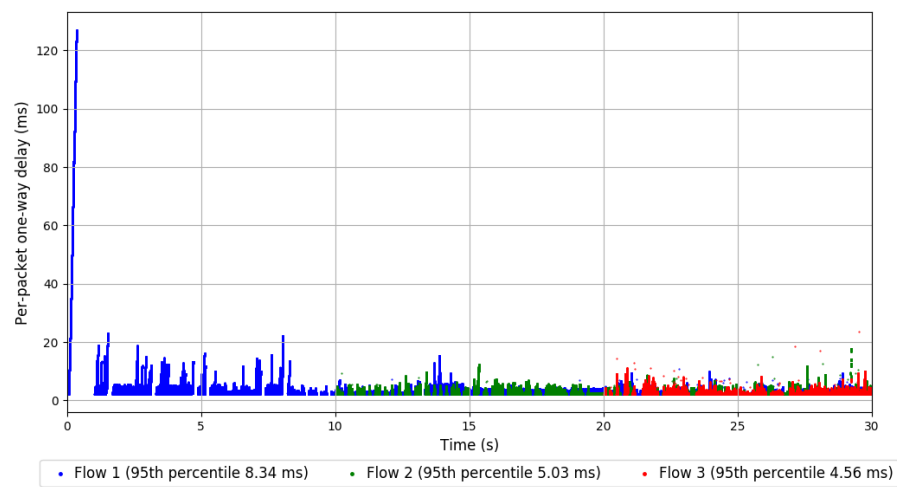
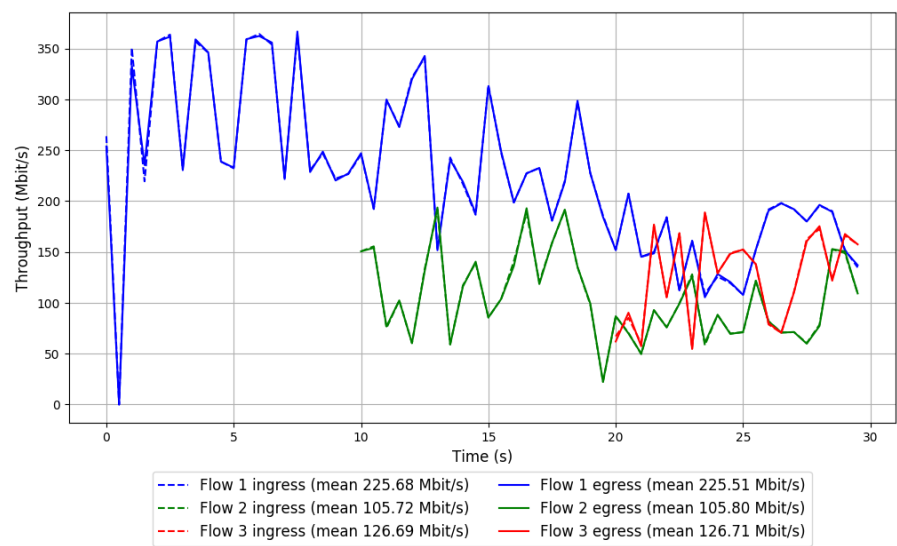


Run 1: Statistics of Verus

Start at: 2017-12-11 20:02:18
End at: 2017-12-11 20:02:48
Local clock offset: -1.386 ms
Remote clock offset: -0.657 ms

Below is generated by plot.py at 2017-12-12 03:50:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 337.90 Mbit/s
95th percentile per-packet one-way delay: 6.362 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 225.51 Mbit/s
95th percentile per-packet one-way delay: 8.344 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 105.80 Mbit/s
95th percentile per-packet one-way delay: 5.031 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 126.71 Mbit/s
95th percentile per-packet one-way delay: 4.558 ms
Loss rate: 0.00%

Run 1: Report of Verus — Data Link

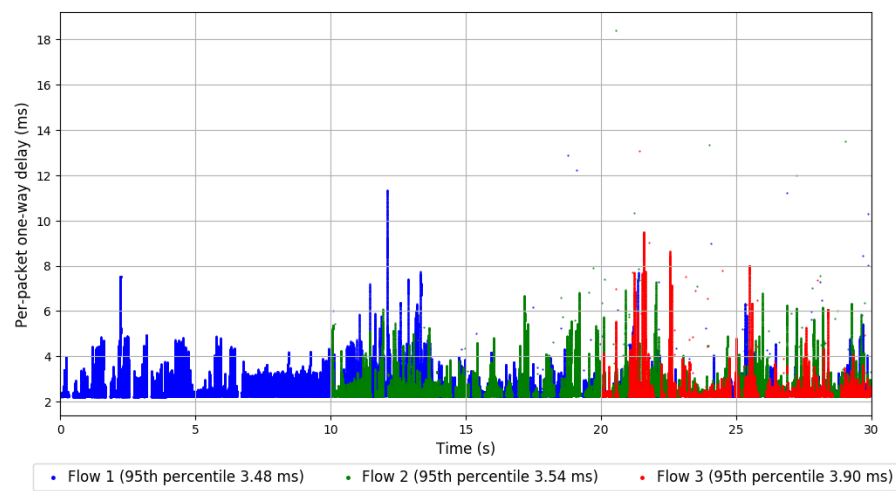
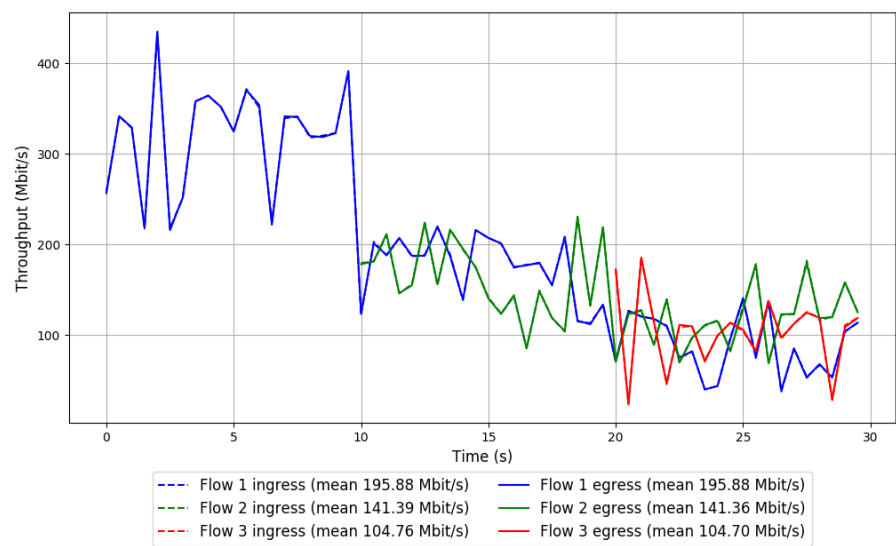


Run 2: Statistics of Verus

Start at: 2017-12-11 20:21:05
End at: 2017-12-11 20:21:35
Local clock offset: -0.984 ms
Remote clock offset: -0.056 ms

Below is generated by plot.py at 2017-12-12 03:50:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 324.28 Mbit/s
95th percentile per-packet one-way delay: 3.533 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 195.88 Mbit/s
95th percentile per-packet one-way delay: 3.481 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 141.36 Mbit/s
95th percentile per-packet one-way delay: 3.537 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 104.70 Mbit/s
95th percentile per-packet one-way delay: 3.899 ms
Loss rate: 0.11%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

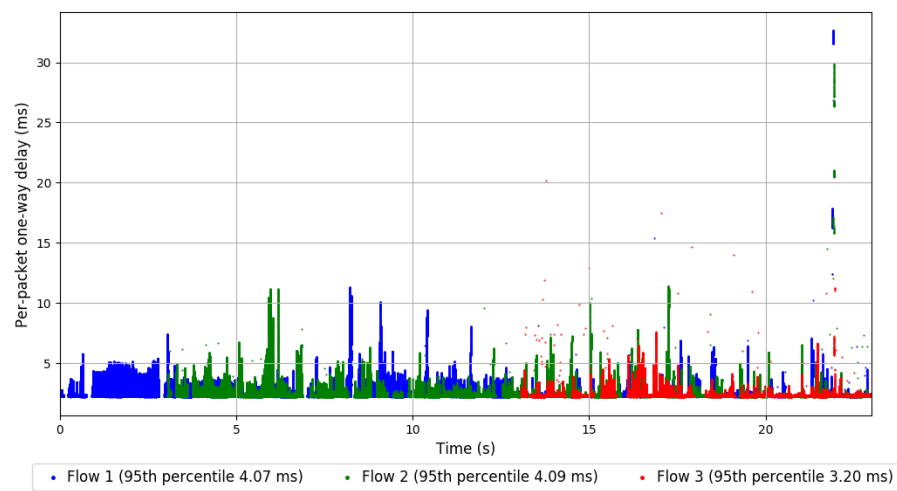
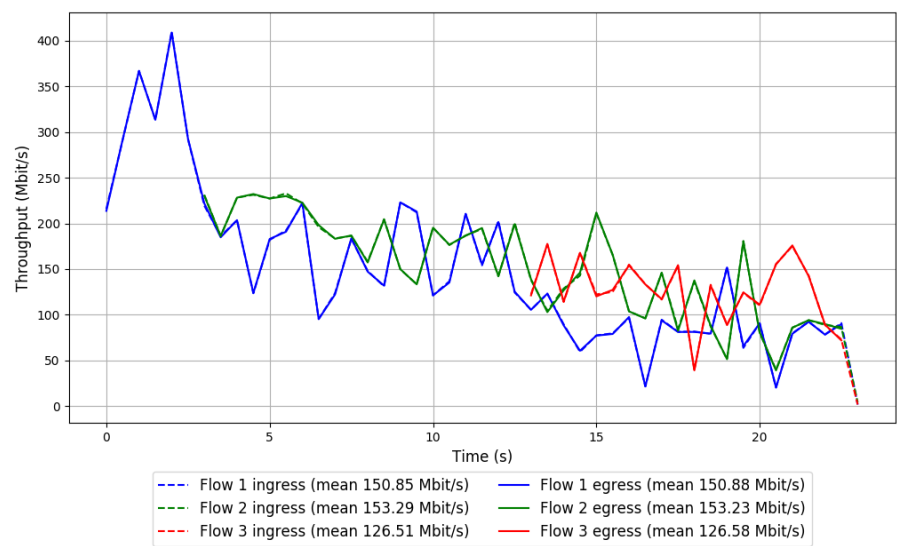
Start at: 2017-12-11 20:39:58

End at: 2017-12-11 20:40:28

Local clock offset: -0.669 ms

Remote clock offset: 0.471 ms

Run 3: Report of Verus — Data Link

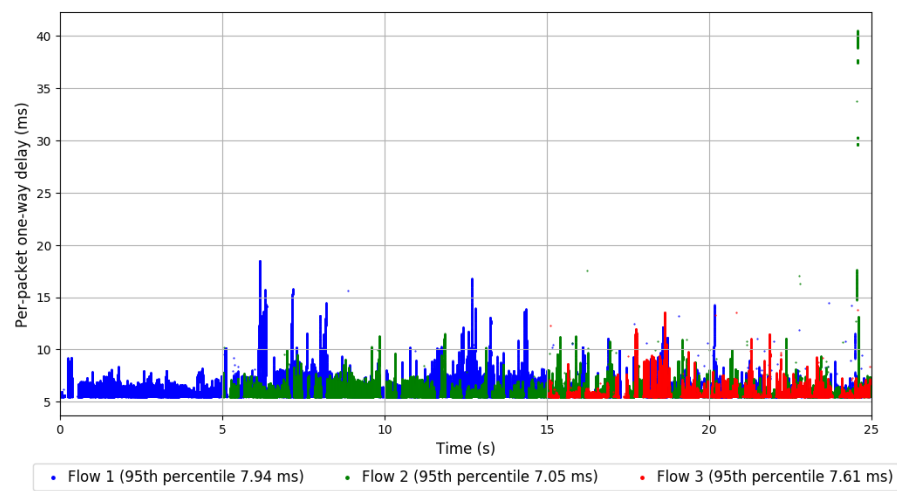
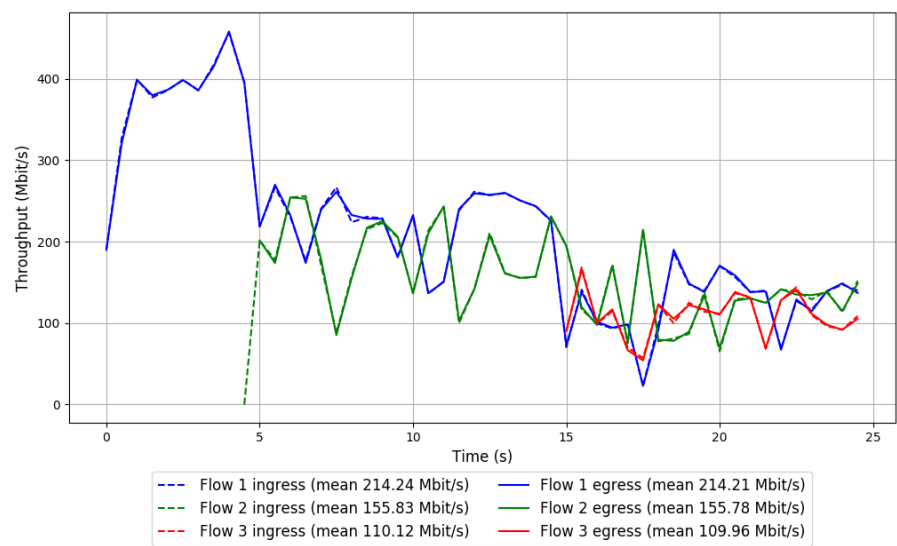


Run 4: Statistics of Verus

Start at: 2017-12-11 20:58:36
End at: 2017-12-11 20:59:06
Local clock offset: -0.201 ms
Remote clock offset: -2.439 ms

Below is generated by plot.py at 2017-12-12 03:50:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 382.53 Mbit/s
95th percentile per-packet one-way delay: 7.601 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 214.21 Mbit/s
95th percentile per-packet one-way delay: 7.936 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 155.78 Mbit/s
95th percentile per-packet one-way delay: 7.046 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 109.96 Mbit/s
95th percentile per-packet one-way delay: 7.609 ms
Loss rate: 0.16%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-11 21:17:16

End at: 2017-12-11 21:17:46

Local clock offset: 0.116 ms

Remote clock offset: 0.972 ms

Below is generated by plot.py at 2017-12-12 03:50:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 362.75 Mbit/s

95th percentile per-packet one-way delay: 3.484 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 207.74 Mbit/s

95th percentile per-packet one-way delay: 3.642 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 179.75 Mbit/s

95th percentile per-packet one-way delay: 3.253 ms

Loss rate: 0.03%

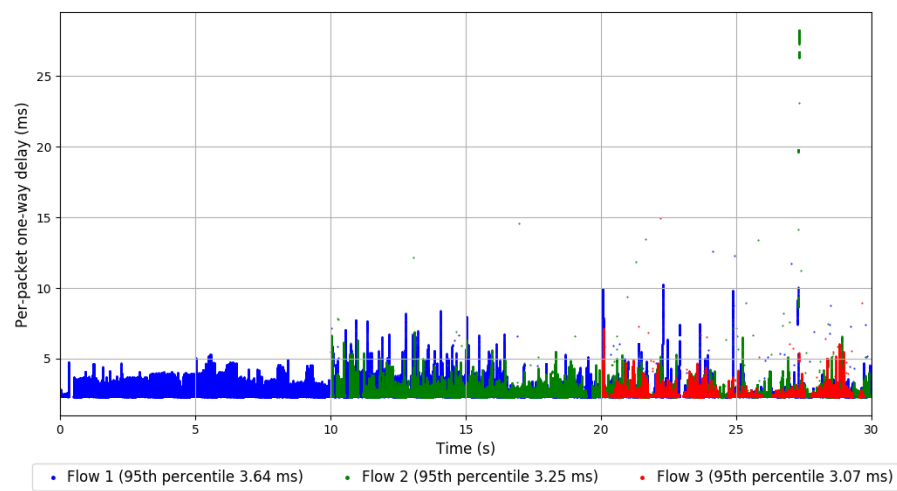
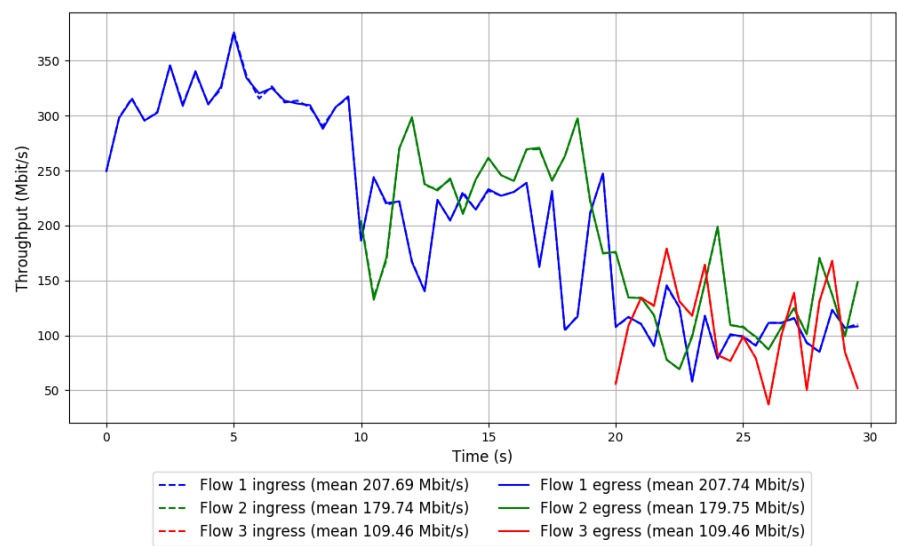
-- Flow 3:

Average throughput: 109.46 Mbit/s

95th percentile per-packet one-way delay: 3.074 ms

Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

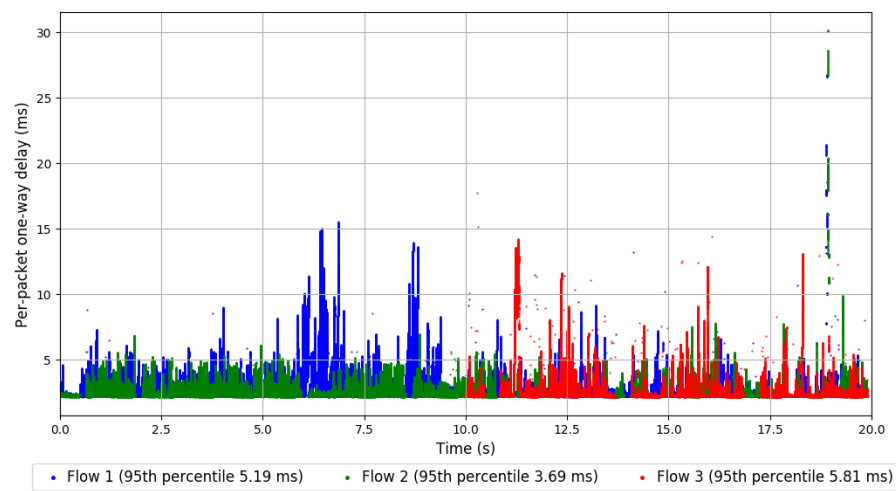
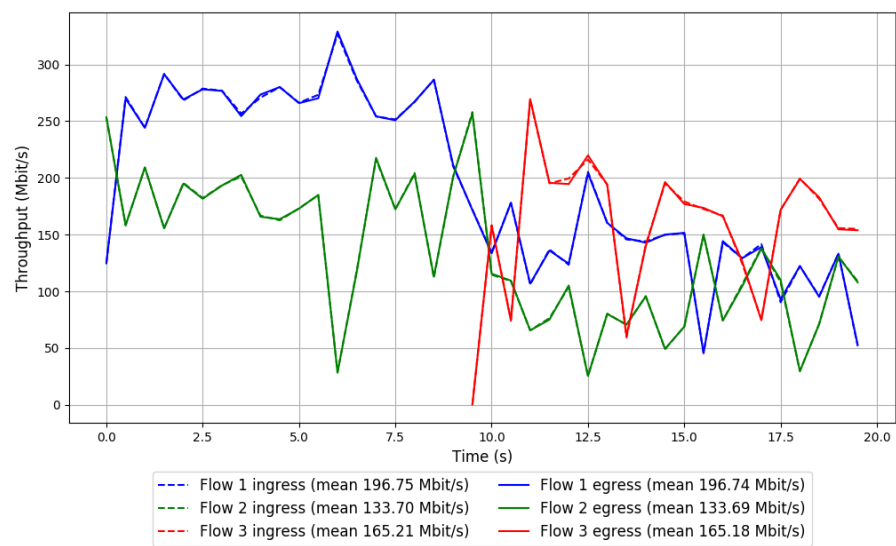
Start at: 2017-12-11 21:36:04

End at: 2017-12-11 21:36:34

Local clock offset: 0.277 ms

Remote clock offset: 1.242 ms

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-11 21:54:52

End at: 2017-12-11 21:55:22

Local clock offset: 0.514 ms

Remote clock offset: 1.188 ms

Below is generated by plot.py at 2017-12-12 03:50:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 326.21 Mbit/s

95th percentile per-packet one-way delay: 3.139 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 191.99 Mbit/s

95th percentile per-packet one-way delay: 3.437 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 126.95 Mbit/s

95th percentile per-packet one-way delay: 2.574 ms

Loss rate: 0.02%

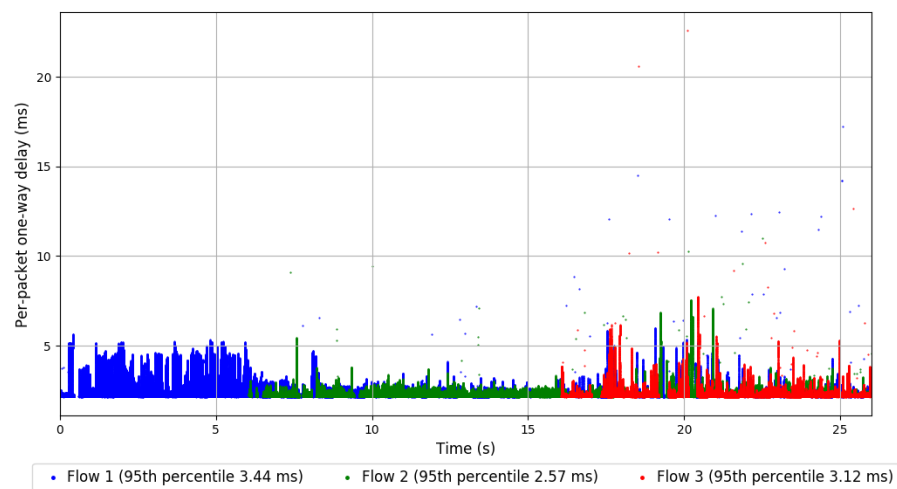
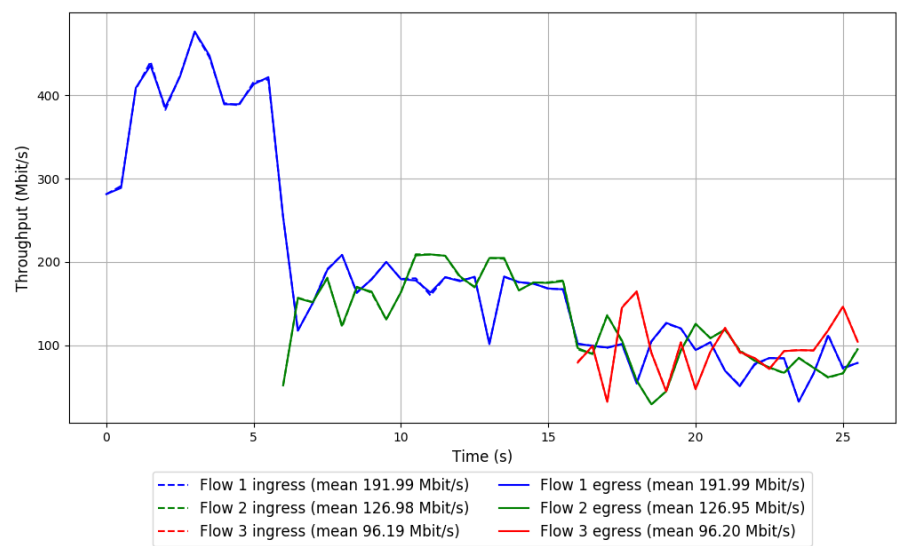
-- Flow 3:

Average throughput: 96.20 Mbit/s

95th percentile per-packet one-way delay: 3.120 ms

Loss rate: 0.04%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

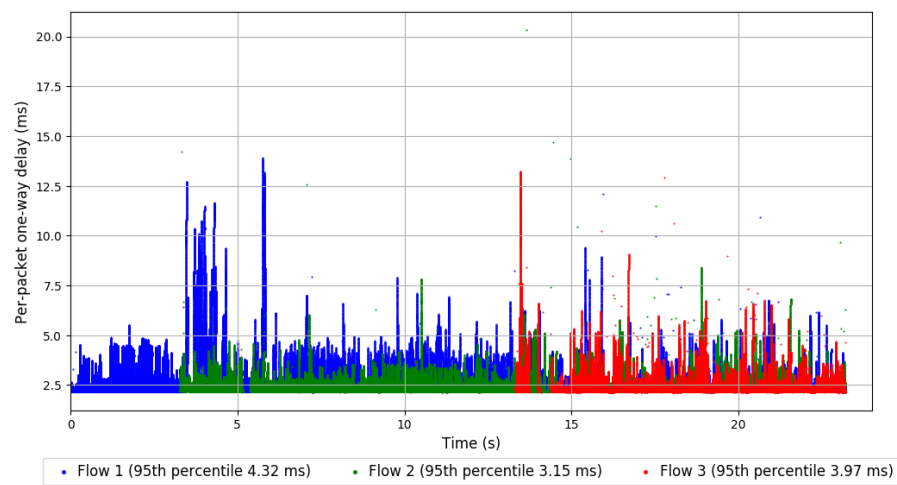
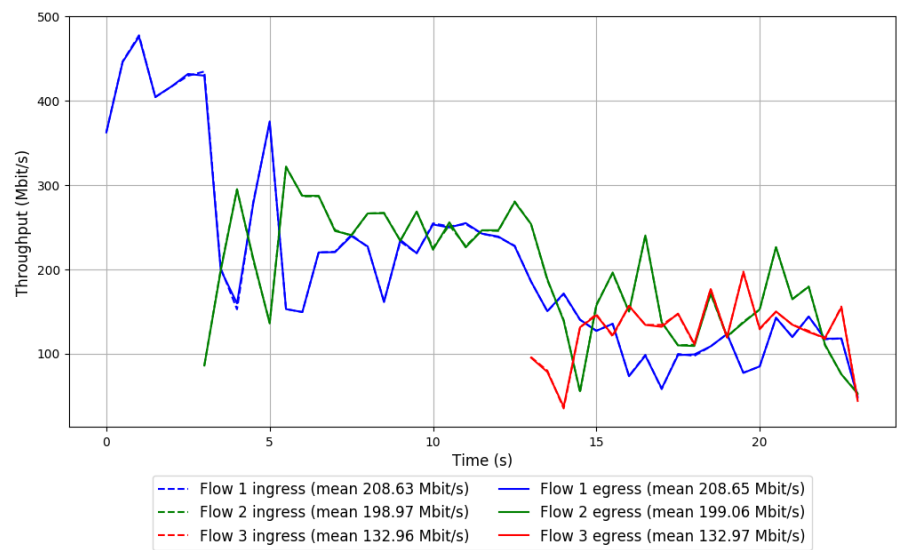
Start at: 2017-12-11 22:13:40

End at: 2017-12-11 22:14:10

Local clock offset: 0.631 ms

Remote clock offset: 1.064 ms

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-11 22:32:16

End at: 2017-12-11 22:32:46

Local clock offset: 0.738 ms

Remote clock offset: 0.866 ms

Below is generated by plot.py at 2017-12-12 03:51:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 344.89 Mbit/s

95th percentile per-packet one-way delay: 4.871 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 193.20 Mbit/s

95th percentile per-packet one-way delay: 5.324 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 163.61 Mbit/s

95th percentile per-packet one-way delay: 3.520 ms

Loss rate: 0.00%

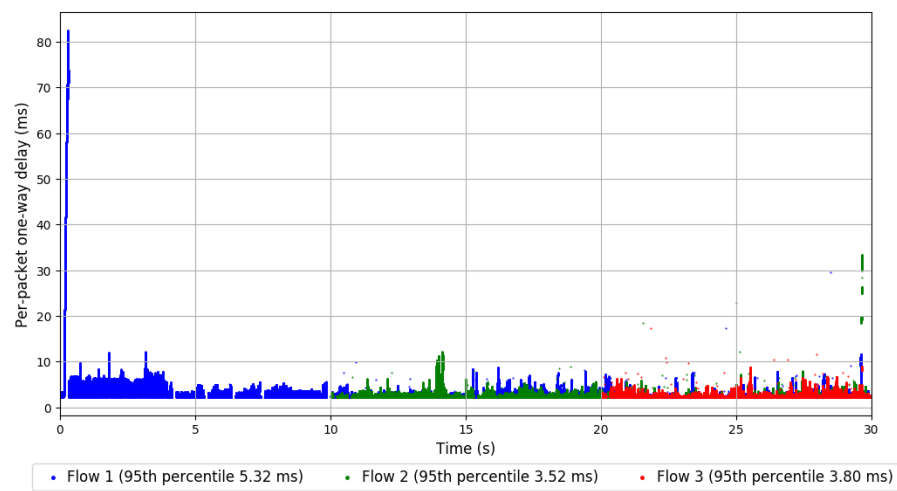
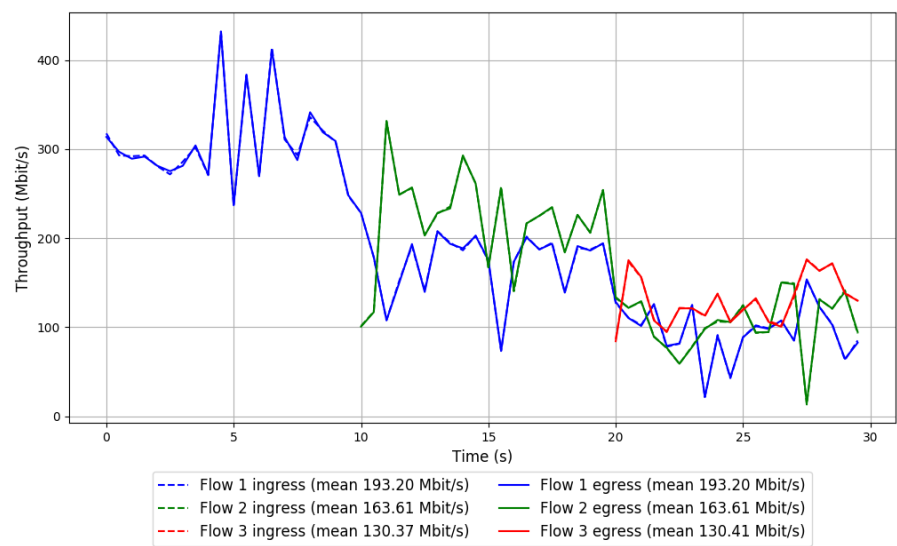
-- Flow 3:

Average throughput: 130.41 Mbit/s

95th percentile per-packet one-way delay: 3.799 ms

Loss rate: 0.05%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-11 22:50:47

End at: 2017-12-11 22:51:17

Local clock offset: 0.708 ms

Remote clock offset: 0.884 ms

Below is generated by plot.py at 2017-12-12 03:53:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 358.21 Mbit/s

95th percentile per-packet one-way delay: 3.926 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 245.57 Mbit/s

95th percentile per-packet one-way delay: 3.626 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 133.68 Mbit/s

95th percentile per-packet one-way delay: 4.445 ms

Loss rate: 0.02%

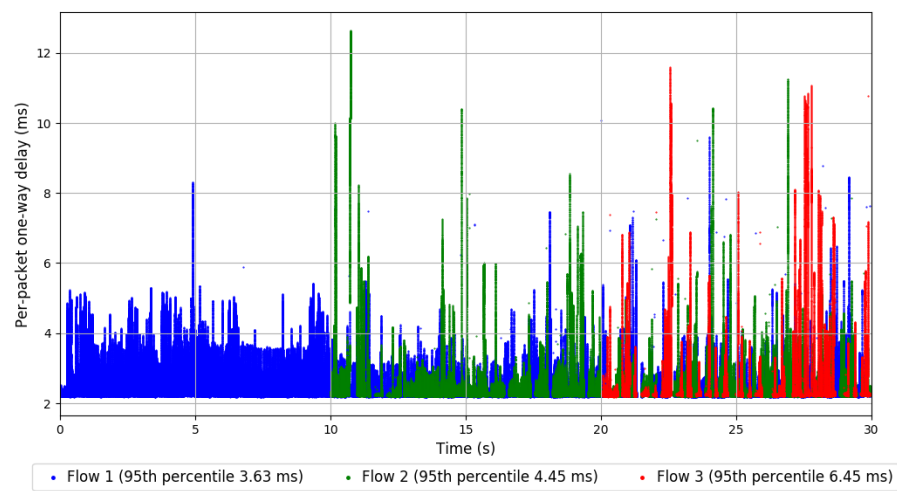
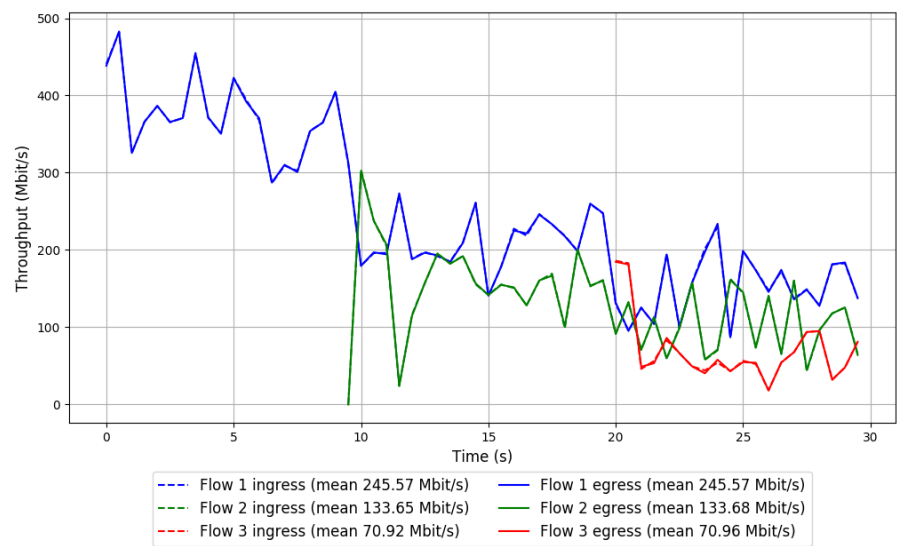
-- Flow 3:

Average throughput: 70.96 Mbit/s

95th percentile per-packet one-way delay: 6.446 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link

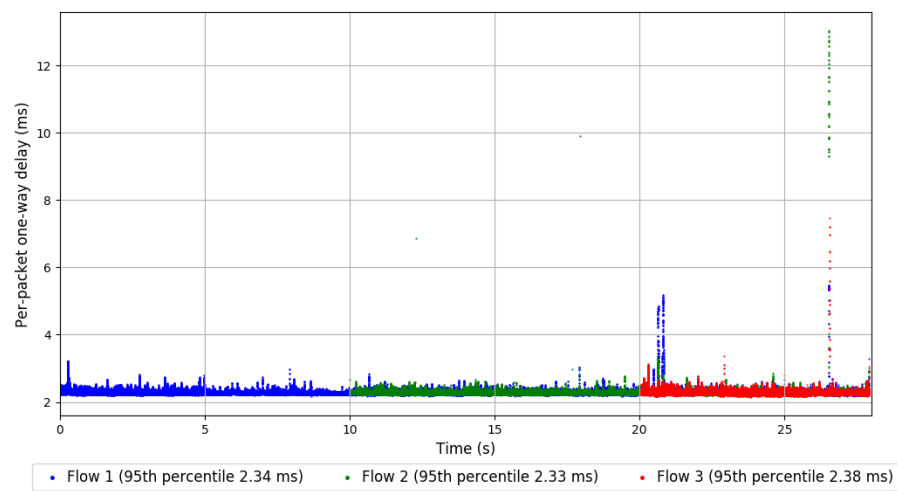
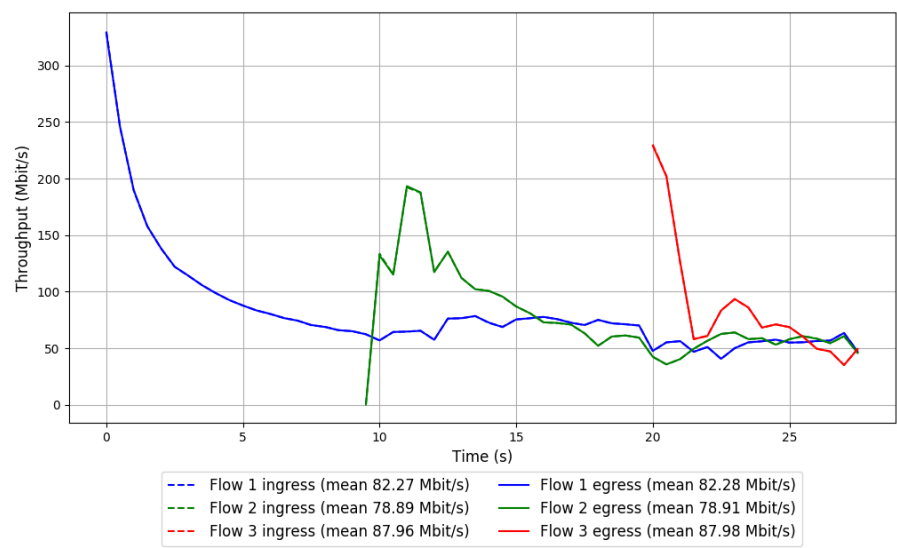


Run 1: Statistics of Copa

Start at: 2017-12-11 20:06:16
End at: 2017-12-11 20:06:46
Local clock offset: -1.276 ms
Remote clock offset: -0.577 ms

Below is generated by plot.py at 2017-12-12 03:53:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 157.80 Mbit/s
95th percentile per-packet one-way delay: 2.343 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 82.28 Mbit/s
95th percentile per-packet one-way delay: 2.344 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 78.91 Mbit/s
95th percentile per-packet one-way delay: 2.325 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 87.98 Mbit/s
95th percentile per-packet one-way delay: 2.379 ms
Loss rate: 0.03%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-11 20:25:05

End at: 2017-12-11 20:25:35

Local clock offset: -1.0 ms

Remote clock offset: 0.009 ms

Below is generated by plot.py at 2017-12-12 03:53:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 162.64 Mbit/s

95th percentile per-packet one-way delay: 2.298 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 81.23 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 79.66 Mbit/s

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

Loss rate: 0.00%

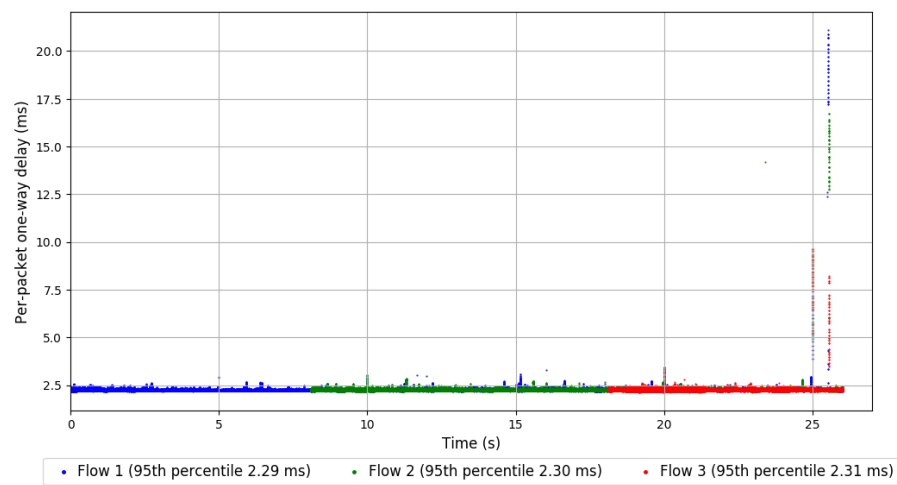
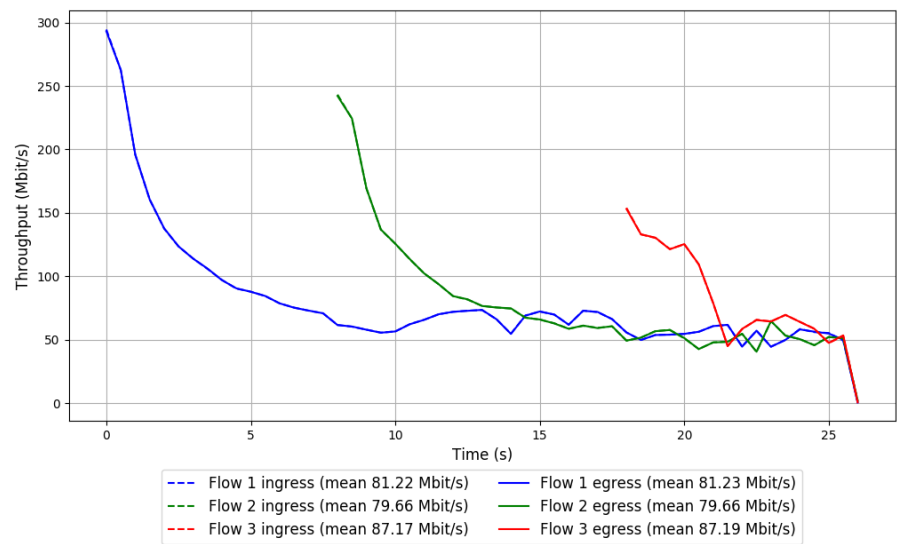
-- Flow 3:

Average throughput: 87.19 Mbit/s

95th percentile per-packet one-way delay: 2.306 ms

Loss rate: 0.03%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

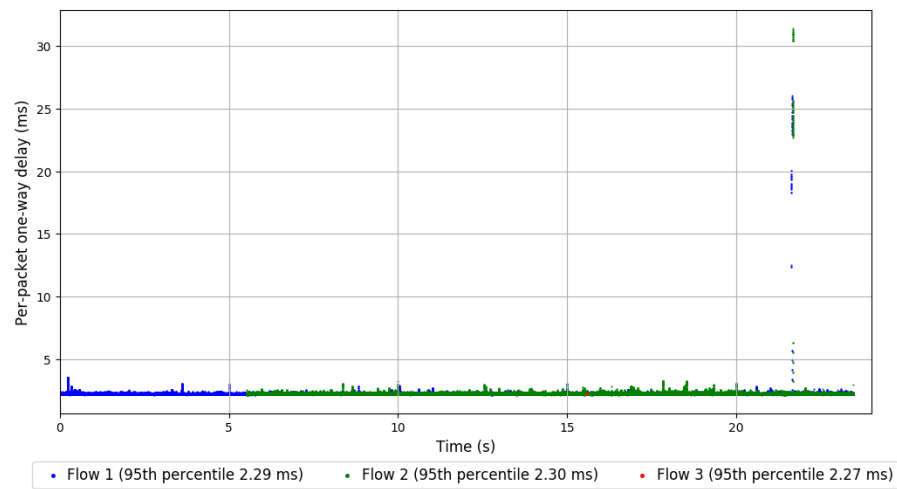
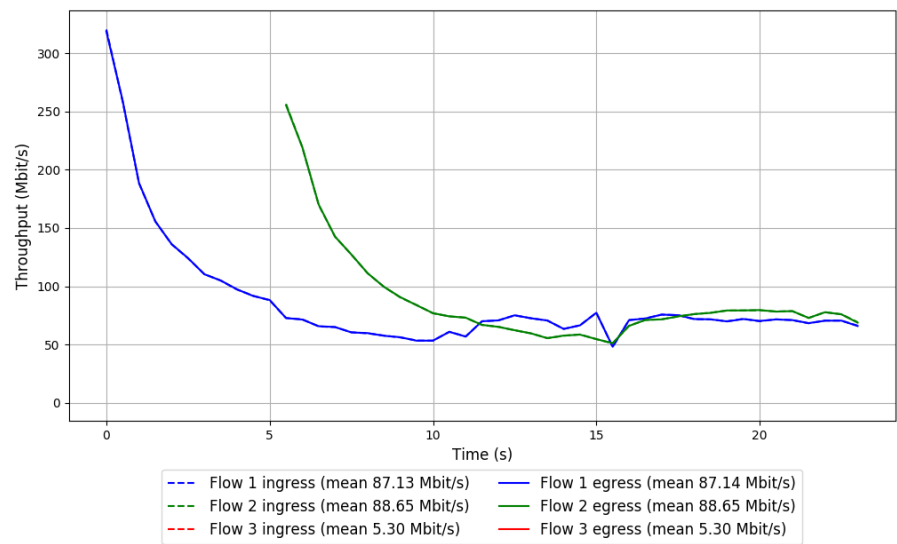
Start at: 2017-12-11 20:43:50

End at: 2017-12-11 20:44:20

Local clock offset: -0.564 ms

Remote clock offset: 0.539 ms

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

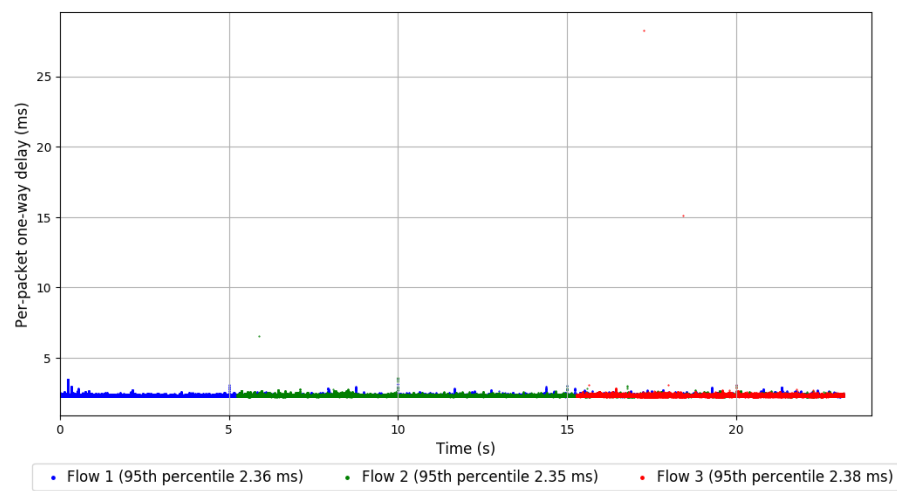
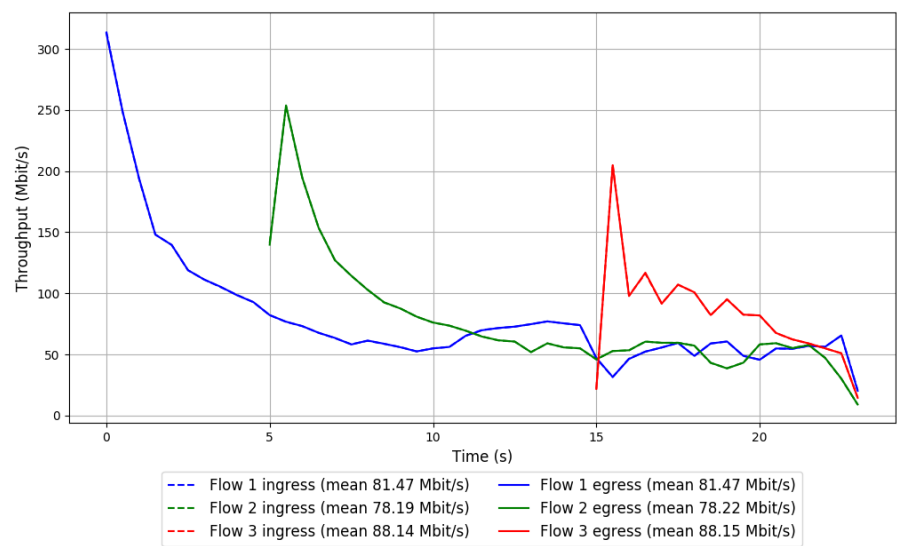
Start at: 2017-12-11 21:02:32

End at: 2017-12-11 21:03:02

Local clock offset: -0.174 ms

Remote clock offset: 0.814 ms

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

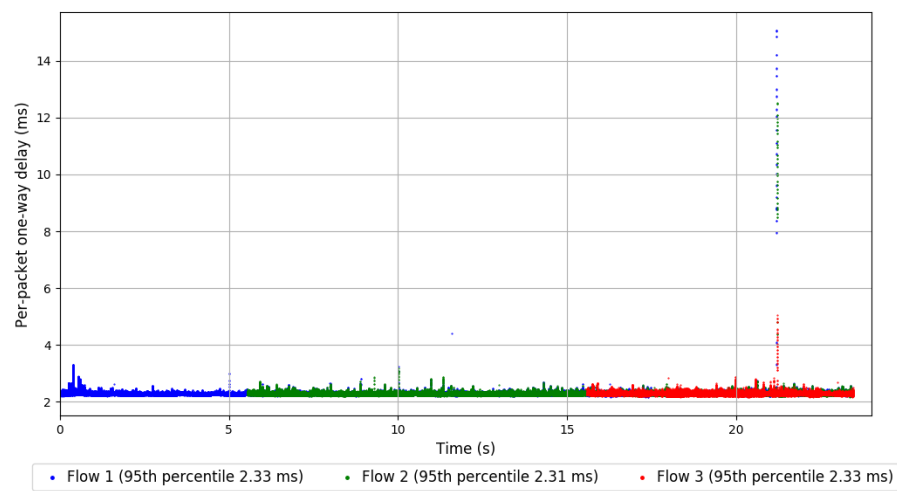
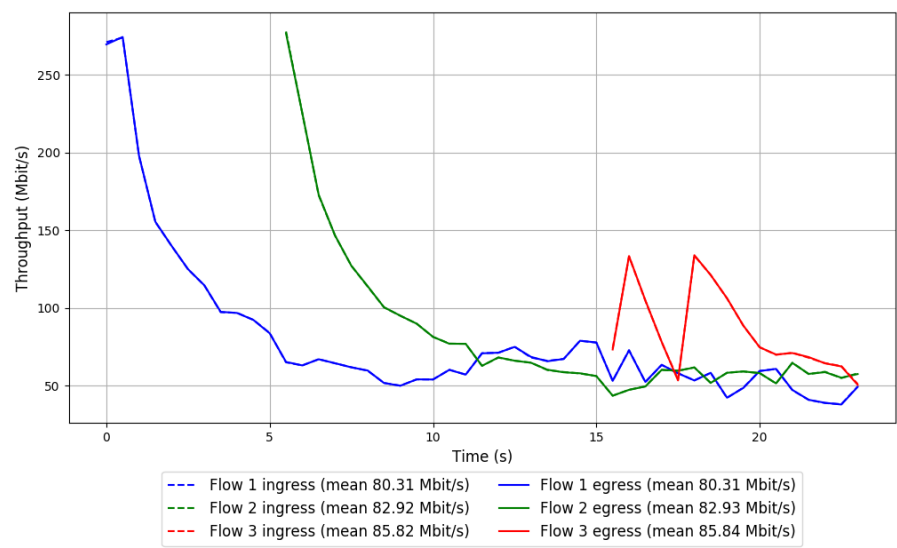
Start at: 2017-12-11 21:21:13

End at: 2017-12-11 21:21:43

Local clock offset: 0.158 ms

Remote clock offset: 1.055 ms

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-11 21:40:01

End at: 2017-12-11 21:40:31

Local clock offset: 0.427 ms

Remote clock offset: 1.197 ms

Below is generated by plot.py at 2017-12-12 03:55:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 155.04 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 81.63 Mbit/s

95th percentile per-packet one-way delay: 2.396 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 78.96 Mbit/s

95th percentile per-packet one-way delay: 2.395 ms

Loss rate: 0.03%

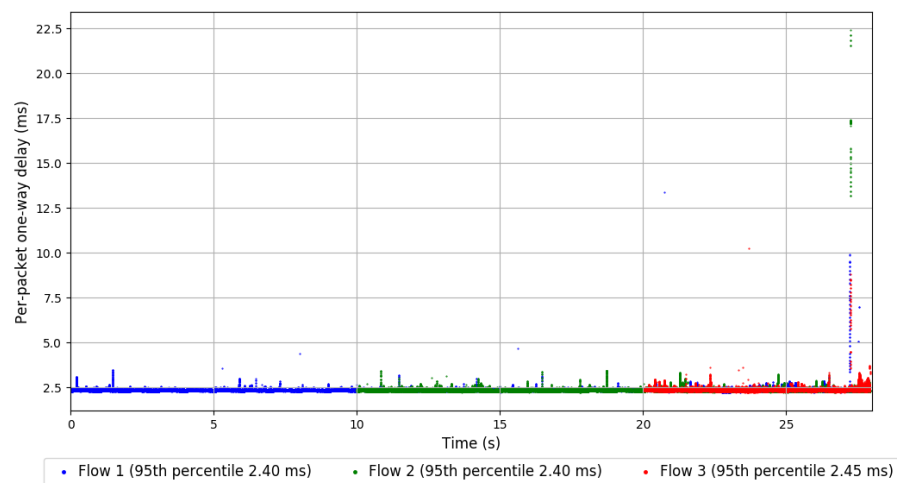
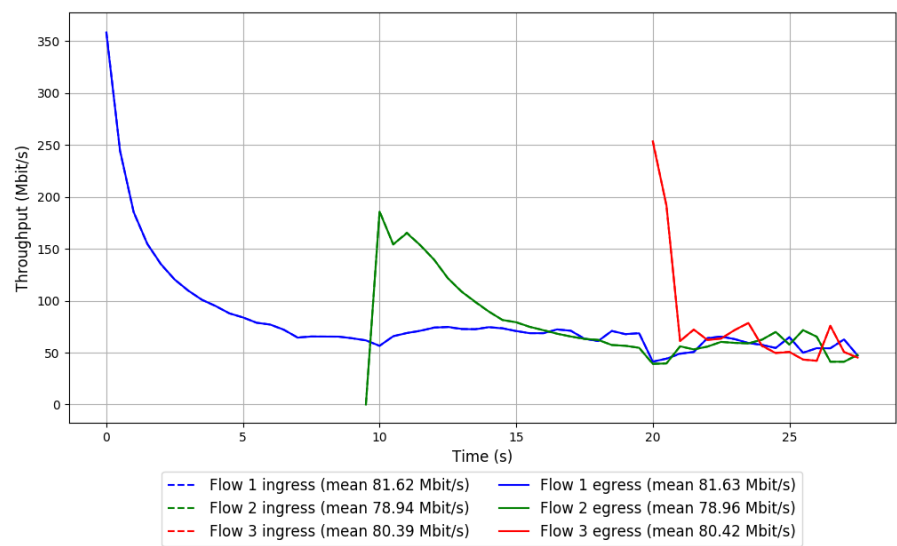
-- Flow 3:

Average throughput: 80.42 Mbit/s

95th percentile per-packet one-way delay: 2.452 ms

Loss rate: 0.03%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-11 21:58:48

End at: 2017-12-11 21:59:18

Local clock offset: 0.606 ms

Remote clock offset: 1.101 ms

Below is generated by plot.py at 2017-12-12 03:55:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 161.92 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 80.52 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 79.75 Mbit/s

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

Loss rate: 0.01%

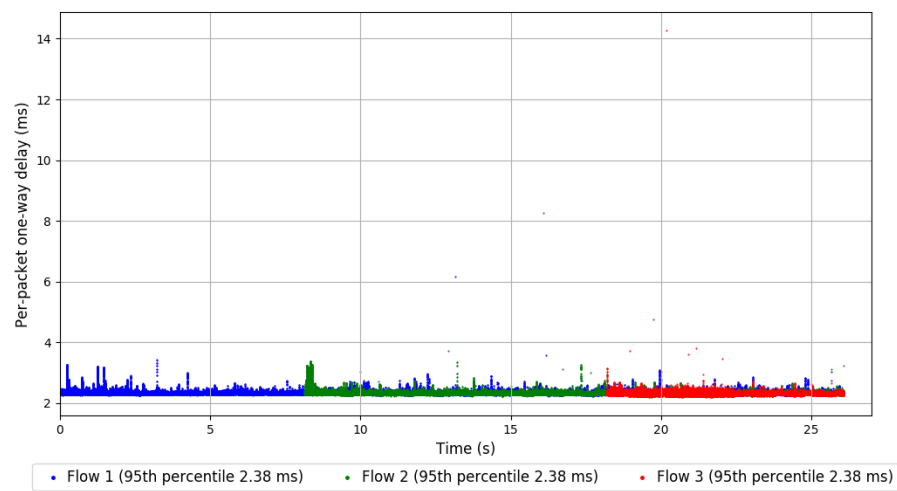
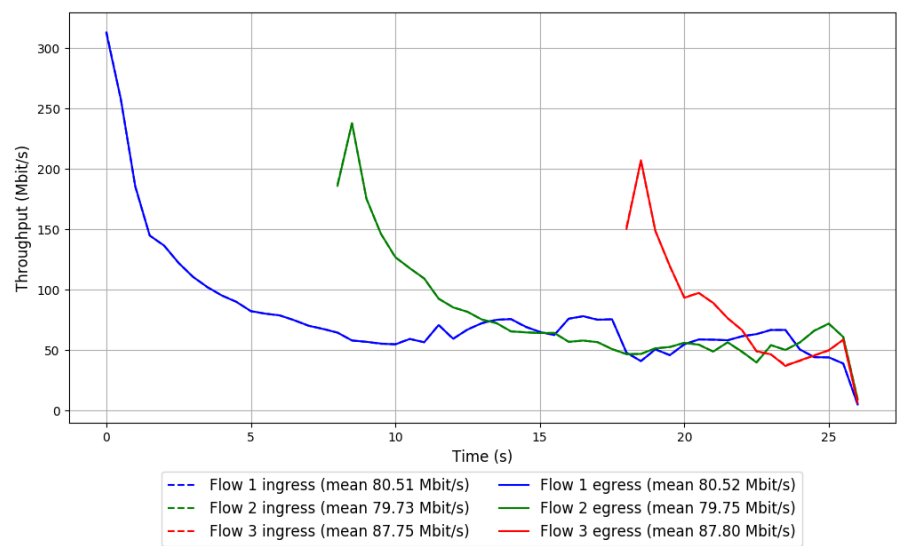
-- Flow 3:

Average throughput: 87.80 Mbit/s

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

Loss rate: 0.04%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-11 22:17:34

End at: 2017-12-11 22:18:04

Local clock offset: 0.697 ms

Remote clock offset: 1.019 ms

Below is generated by plot.py at 2017-12-12 03:55:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.43 Mbit/s

95th percentile per-packet one-way delay: 2.415 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 10.96 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 9.73 Mbit/s

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

Loss rate: 0.00%

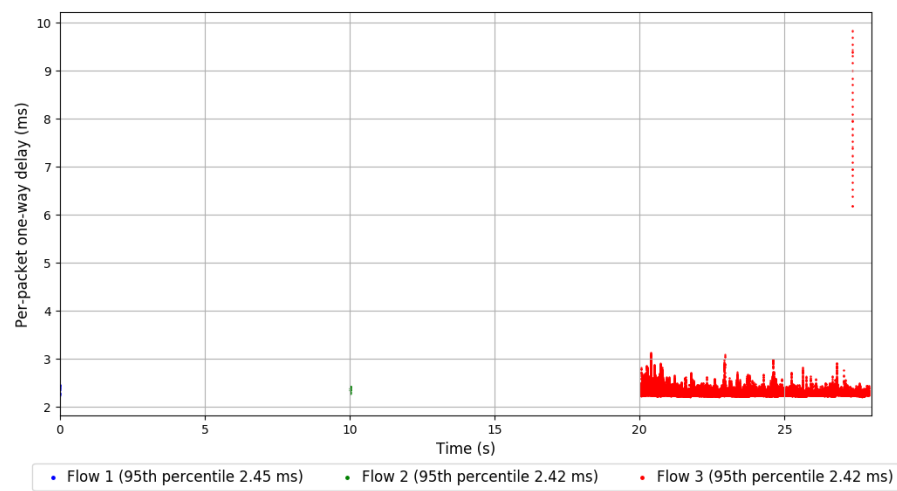
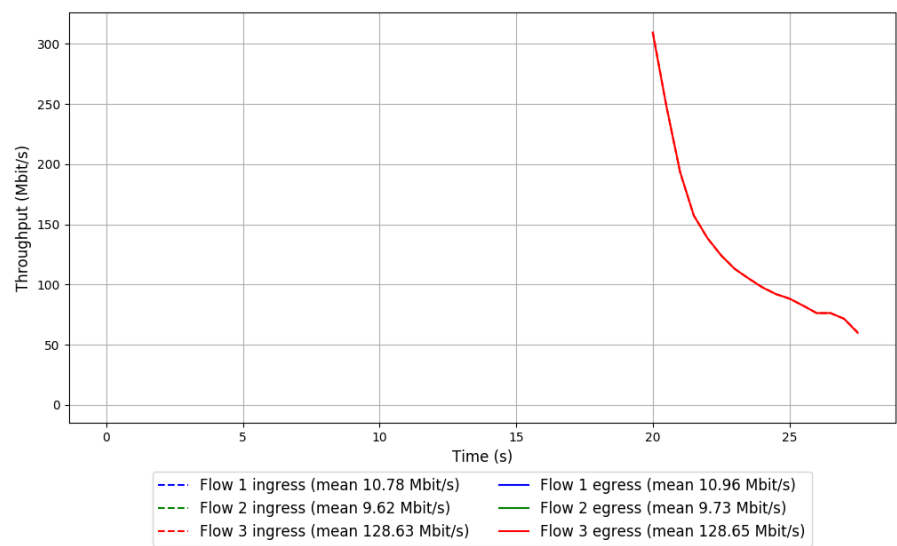
-- Flow 3:

Average throughput: 128.65 Mbit/s

95th percentile per-packet one-way delay: 2.415 ms

Loss rate: 0.04%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-11 22:36:07

End at: 2017-12-11 22:36:37

Local clock offset: 0.765 ms

Remote clock offset: 0.913 ms

Below is generated by plot.py at 2017-12-12 03:56:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 157.45 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 82.17 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 79.20 Mbit/s

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

Loss rate: 0.02%

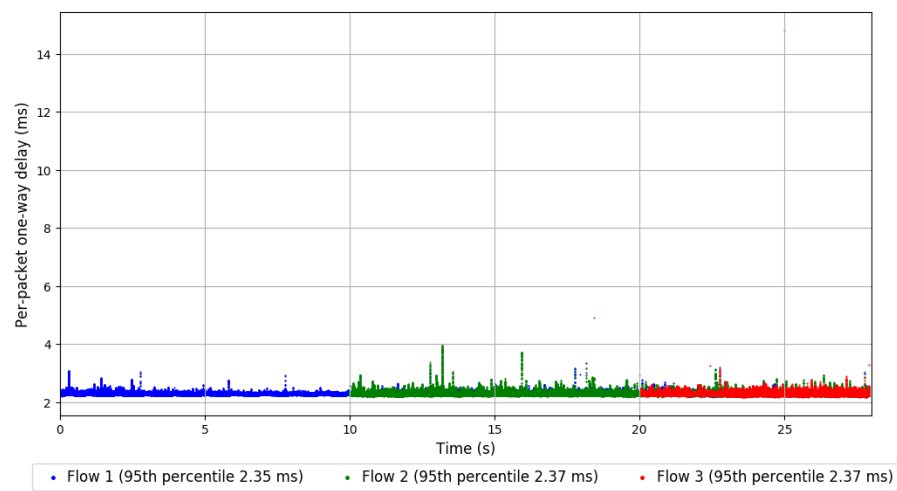
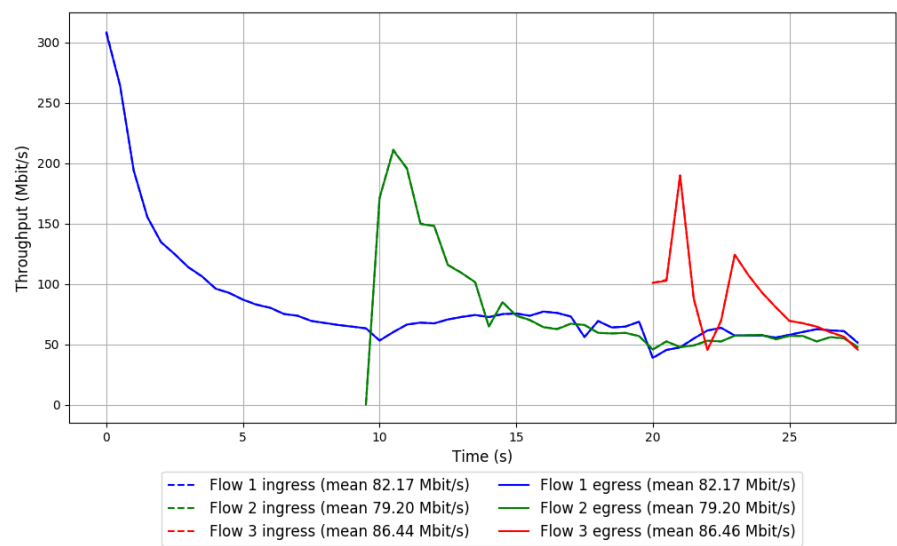
-- Flow 3:

Average throughput: 86.46 Mbit/s

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

Loss rate: 0.03%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-11 22:54:45

End at: 2017-12-11 22:55:15

Local clock offset: 0.667 ms

Remote clock offset: 0.831 ms

Below is generated by plot.py at 2017-12-12 03:56:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.98 Mbit/s

95th percentile per-packet one-way delay: 2.292 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 90.51 Mbit/s

95th percentile per-packet one-way delay: 2.281 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 10.19 Mbit/s

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

Loss rate: 0.00%

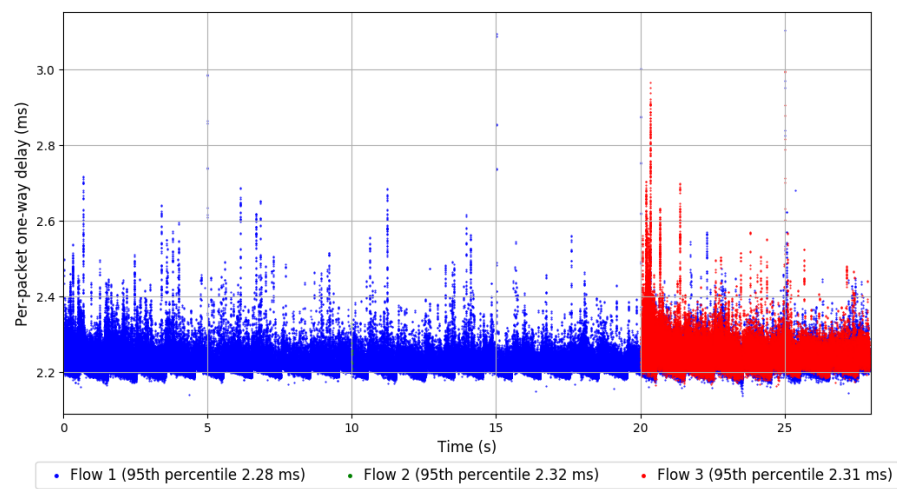
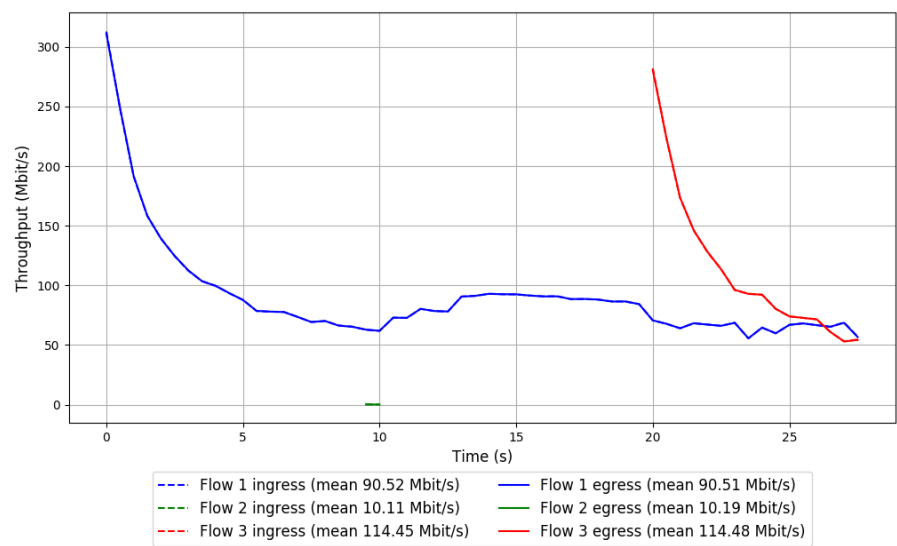
-- Flow 3:

Average throughput: 114.48 Mbit/s

95th percentile per-packet one-way delay: 2.312 ms

Loss rate: 0.04%

Run 10: Report of Copa — Data Link

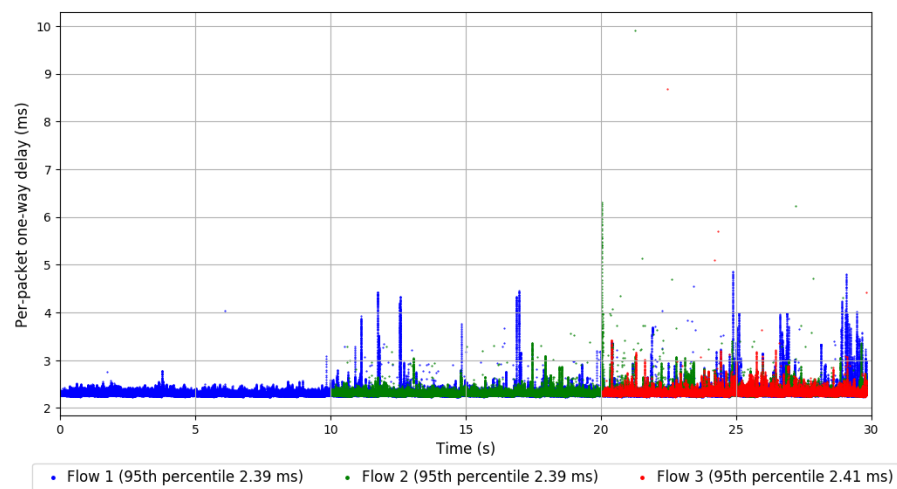
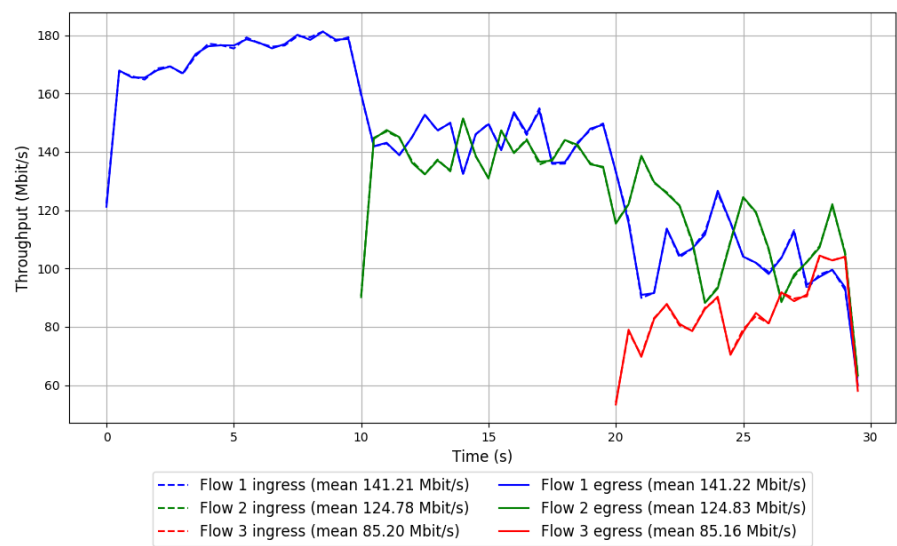


Run 1: Statistics of Indigo

Start at: 2017-12-11 20:07:31
End at: 2017-12-11 20:08:01
Local clock offset: -1.257 ms
Remote clock offset: -0.584 ms

Below is generated by plot.py at 2017-12-12 03:56:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 251.89 Mbit/s
95th percentile per-packet one-way delay: 2.393 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 141.22 Mbit/s
95th percentile per-packet one-way delay: 2.393 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 124.83 Mbit/s
95th percentile per-packet one-way delay: 2.387 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 85.16 Mbit/s
95th percentile per-packet one-way delay: 2.406 ms
Loss rate: 0.07%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-11 20:26:19

End at: 2017-12-11 20:26:49

Local clock offset: -0.919 ms

Remote clock offset: 0.037 ms

Below is generated by plot.py at 2017-12-12 03:56:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.55 Mbit/s

95th percentile per-packet one-way delay: 2.472 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 139.02 Mbit/s

95th percentile per-packet one-way delay: 2.437 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 125.65 Mbit/s

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

Loss rate: 0.02%

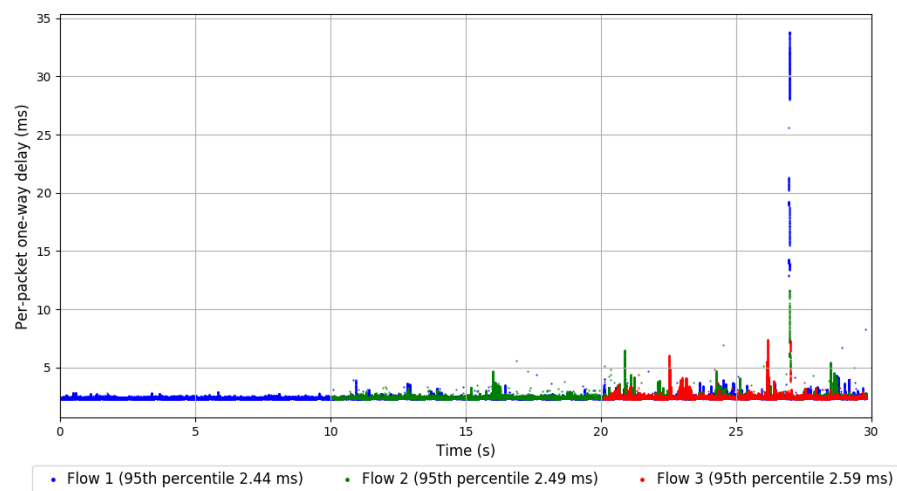
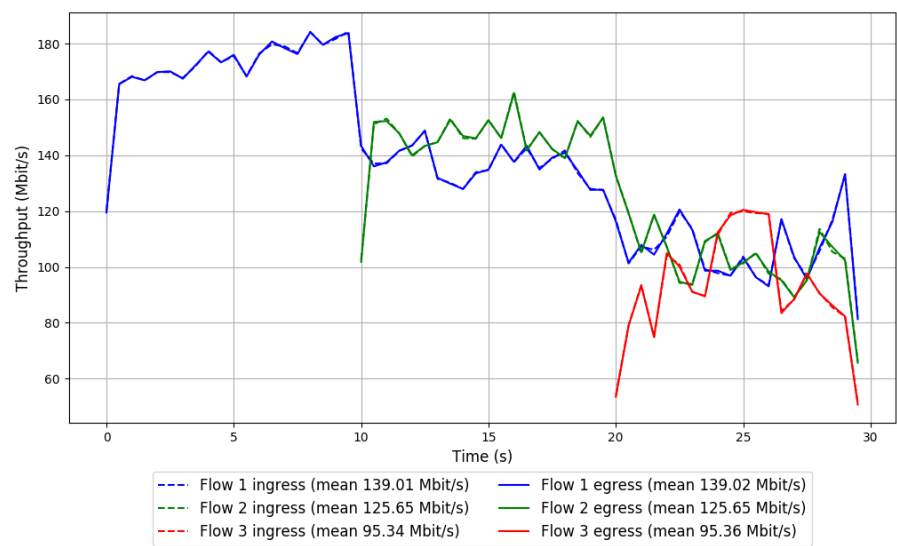
-- Flow 3:

Average throughput: 95.36 Mbit/s

95th percentile per-packet one-way delay: 2.589 ms

Loss rate: 0.04%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-11 20:45:04

End at: 2017-12-11 20:45:34

Local clock offset: -0.606 ms

Remote clock offset: 0.553 ms

Below is generated by plot.py at 2017-12-12 03:56:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.20 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 39.87 Mbit/s

95th percentile per-packet one-way delay: 2.245 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 152.67 Mbit/s

95th percentile per-packet one-way delay: 2.245 ms

Loss rate: 0.02%

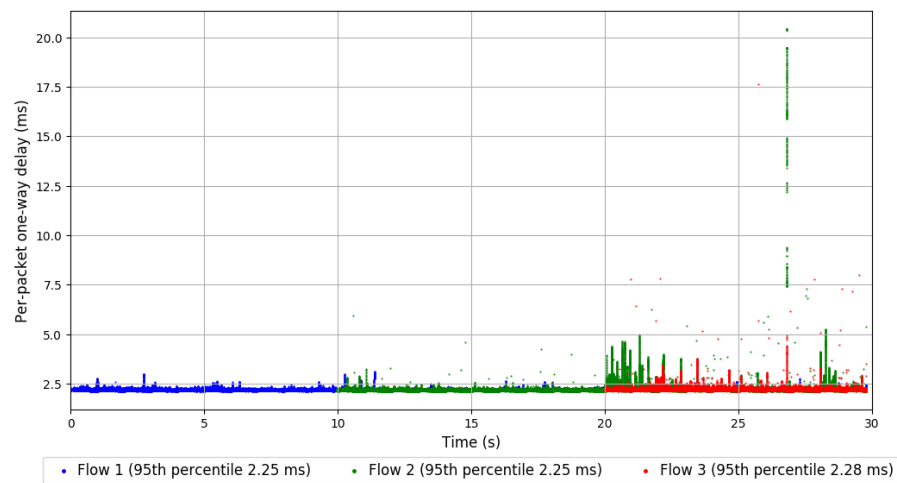
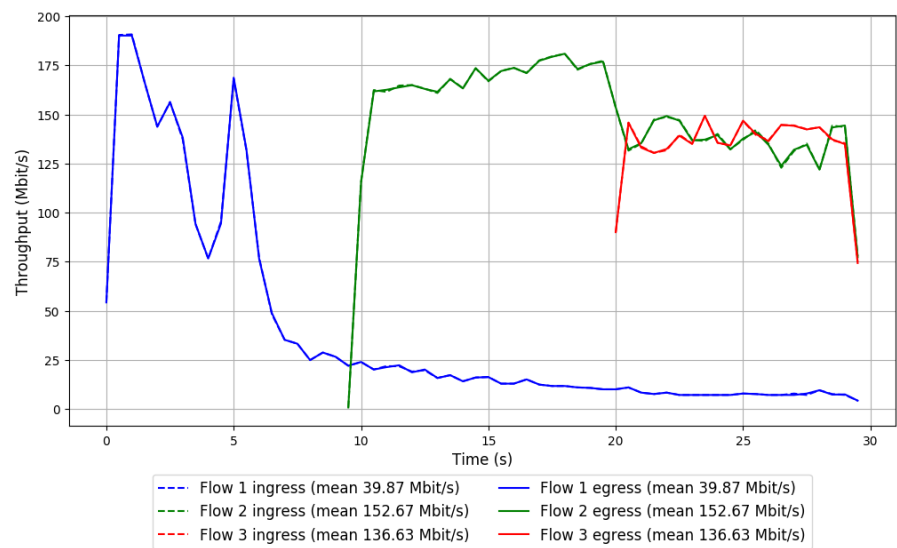
-- Flow 3:

Average throughput: 136.63 Mbit/s

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

Loss rate: 0.05%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-11 21:03:46

End at: 2017-12-11 21:04:16

Local clock offset: -0.151 ms

Remote clock offset: 0.91 ms

Below is generated by plot.py at 2017-12-12 03:57:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 251.72 Mbit/s

95th percentile per-packet one-way delay: 2.354 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 141.74 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 125.31 Mbit/s

95th percentile per-packet one-way delay: 2.336 ms

Loss rate: 0.03%

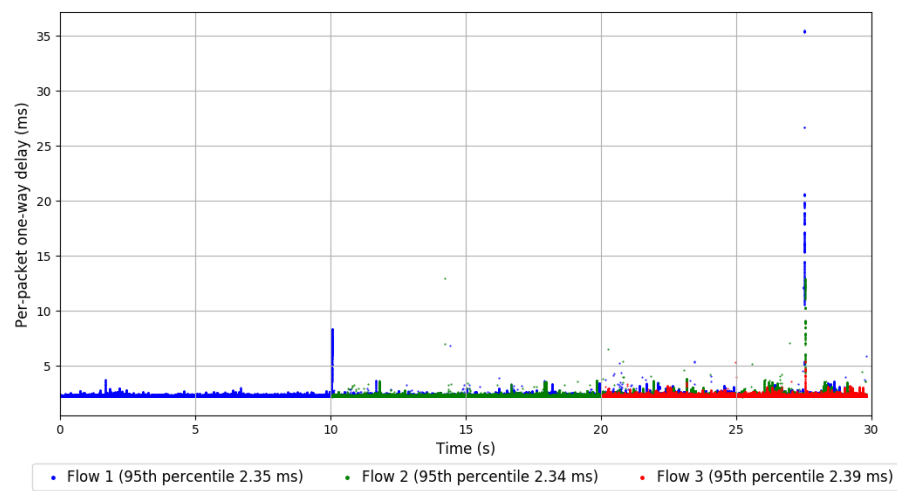
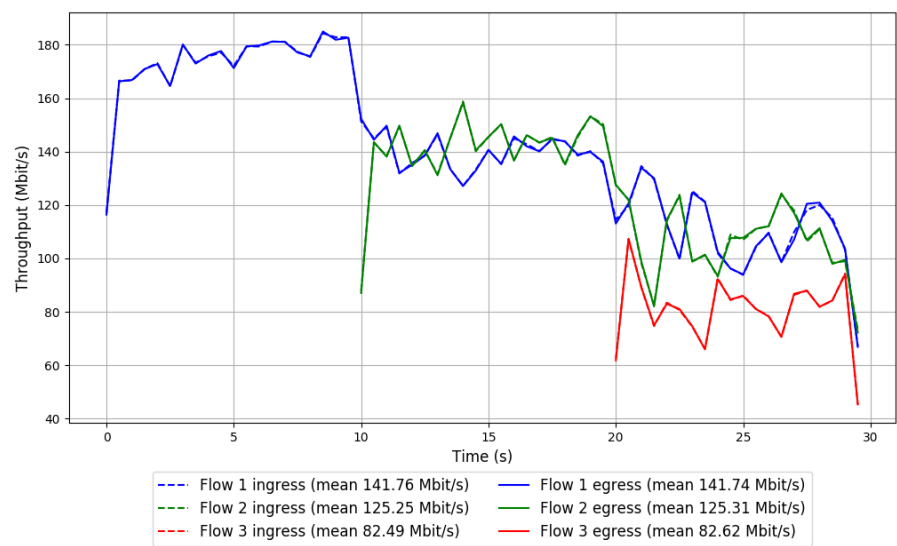
-- Flow 3:

Average throughput: 82.62 Mbit/s

95th percentile per-packet one-way delay: 2.393 ms

Loss rate: 0.02%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-11 21:22:27

End at: 2017-12-11 21:22:57

Local clock offset: 0.172 ms

Remote clock offset: 1.027 ms

Below is generated by plot.py at 2017-12-12 03:58:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.90 Mbit/s

95th percentile per-packet one-way delay: 2.417 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 141.06 Mbit/s

95th percentile per-packet one-way delay: 2.393 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 125.94 Mbit/s

95th percentile per-packet one-way delay: 2.472 ms

Loss rate: 0.02%

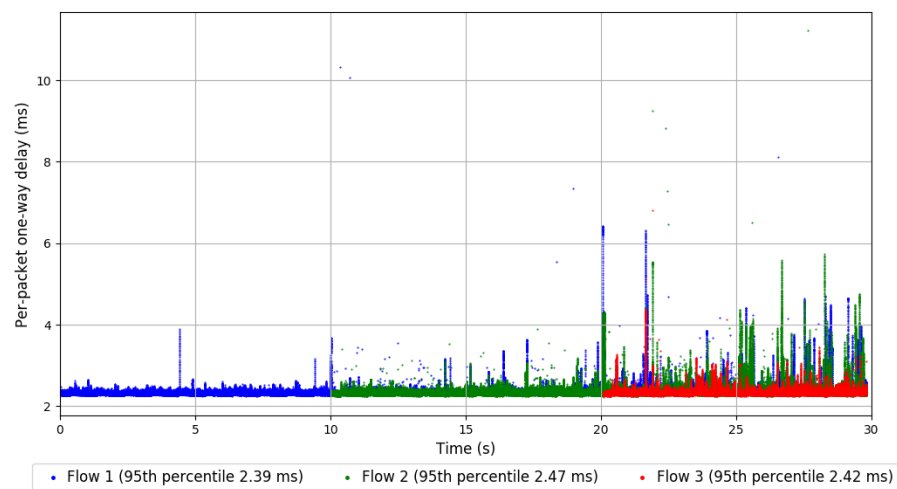
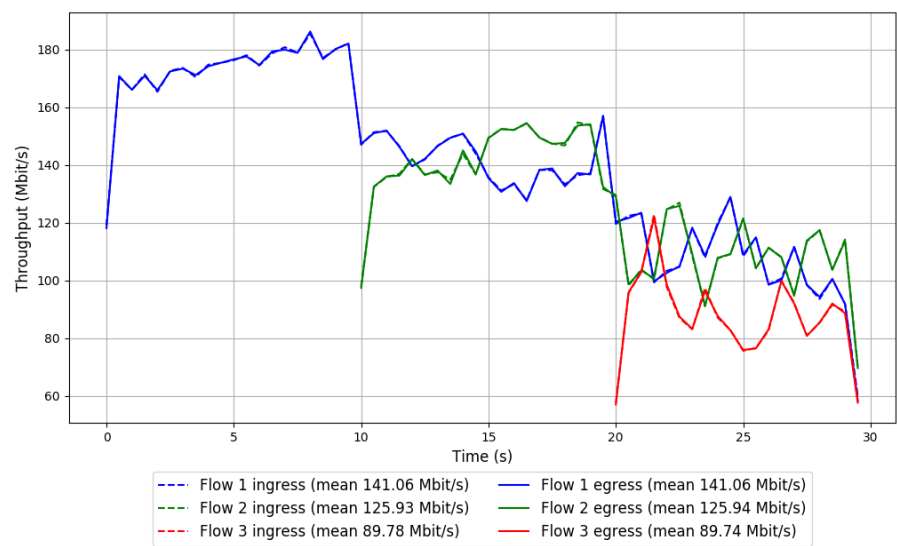
-- Flow 3:

Average throughput: 89.74 Mbit/s

95th percentile per-packet one-way delay: 2.418 ms

Loss rate: 0.08%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-11 21:41:16

End at: 2017-12-11 21:41:46

Local clock offset: 0.419 ms

Remote clock offset: 1.207 ms

Below is generated by plot.py at 2017-12-12 03:58:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 252.56 Mbit/s

95th percentile per-packet one-way delay: 2.452 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 139.98 Mbit/s

95th percentile per-packet one-way delay: 2.419 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 124.80 Mbit/s

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

Loss rate: 0.04%

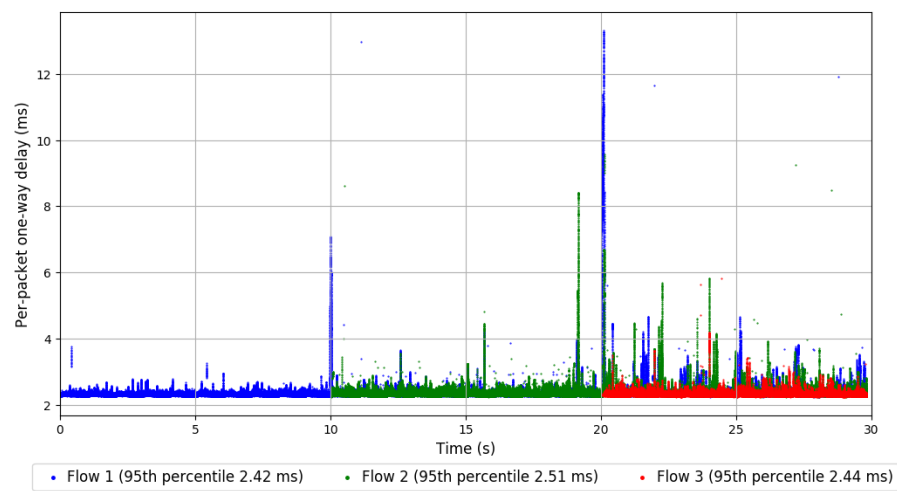
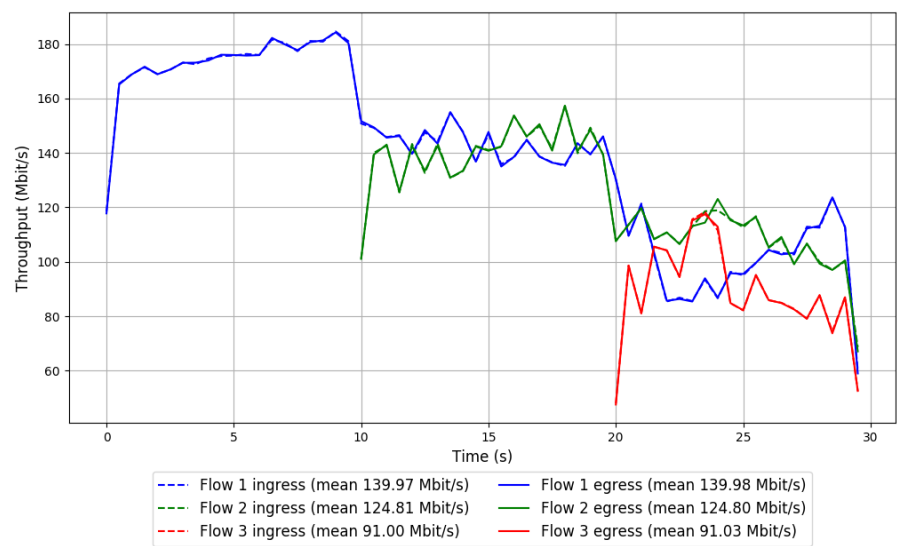
-- Flow 3:

Average throughput: 91.03 Mbit/s

95th percentile per-packet one-way delay: 2.435 ms

Loss rate: 0.04%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-11 22:00:03

End at: 2017-12-11 22:00:33

Local clock offset: 0.561 ms

Remote clock offset: 1.146 ms

Below is generated by plot.py at 2017-12-12 03:59:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 251.21 Mbit/s

95th percentile per-packet one-way delay: 2.336 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 140.90 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 120.88 Mbit/s

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

Loss rate: 0.03%

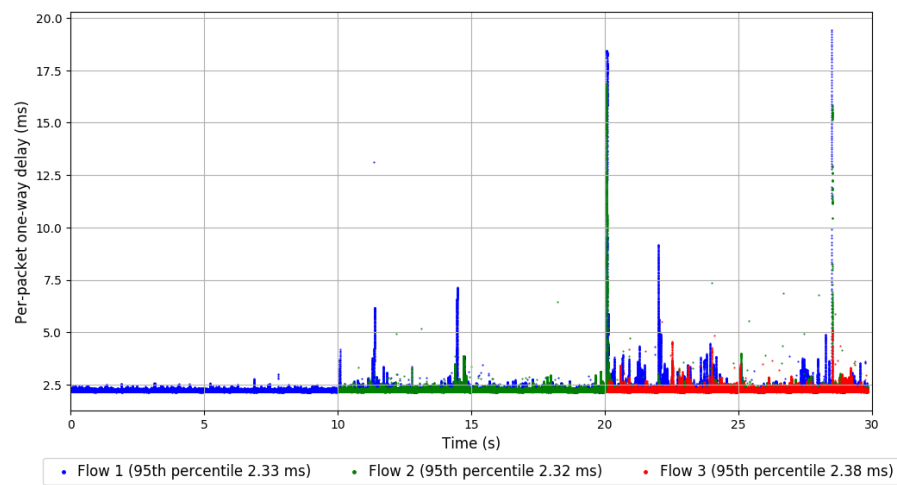
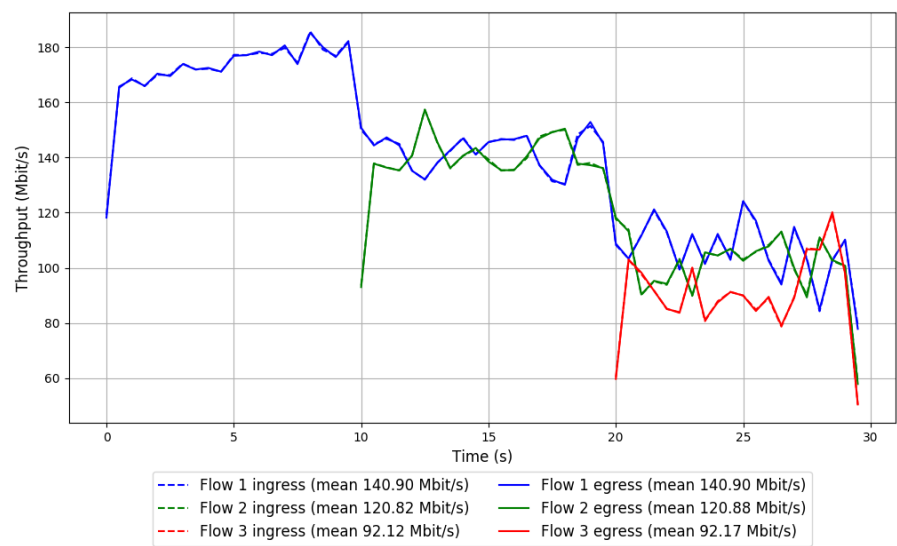
-- Flow 3:

Average throughput: 92.17 Mbit/s

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

Loss rate: 0.02%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-11 22:18:41

End at: 2017-12-11 22:19:11

Local clock offset: 0.715 ms

Remote clock offset: 1.046 ms

Below is generated by plot.py at 2017-12-12 03:59:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.24 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 141.70 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 123.05 Mbit/s

95th percentile per-packet one-way delay: 2.400 ms

Loss rate: 0.03%

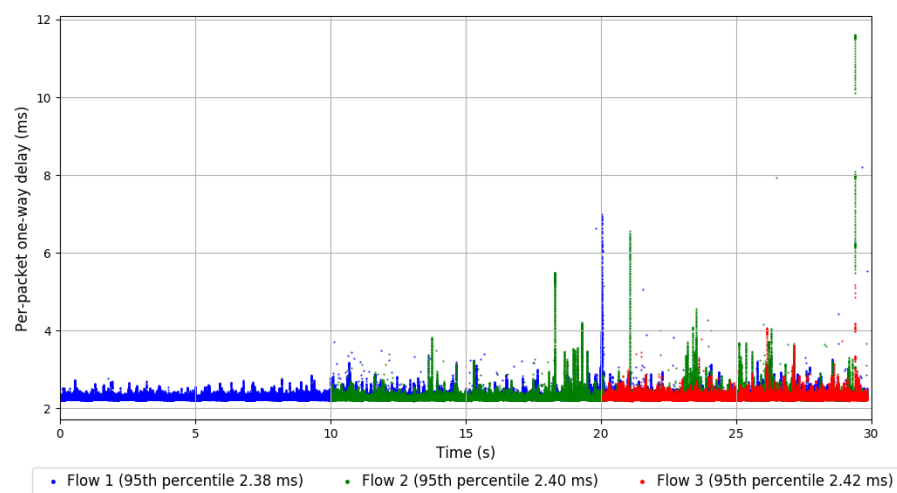
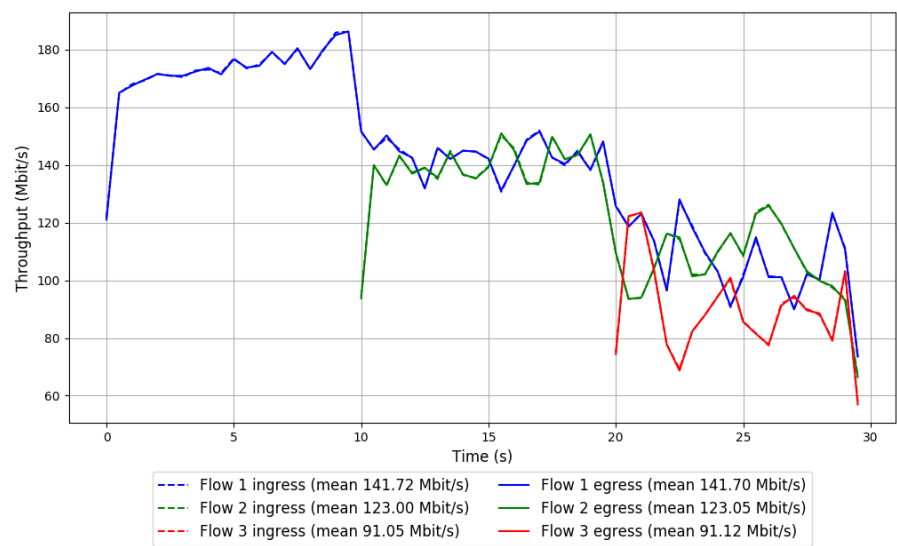
-- Flow 3:

Average throughput: 91.12 Mbit/s

95th percentile per-packet one-way delay: 2.417 ms

Loss rate: 0.09%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-11 22:37:22

End at: 2017-12-11 22:37:52

Local clock offset: 0.666 ms

Remote clock offset: 0.94 ms

Below is generated by plot.py at 2017-12-12 04:00:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 254.35 Mbit/s

95th percentile per-packet one-way delay: 2.271 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 143.11 Mbit/s

95th percentile per-packet one-way delay: 2.240 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 124.08 Mbit/s

95th percentile per-packet one-way delay: 2.313 ms

Loss rate: 0.00%

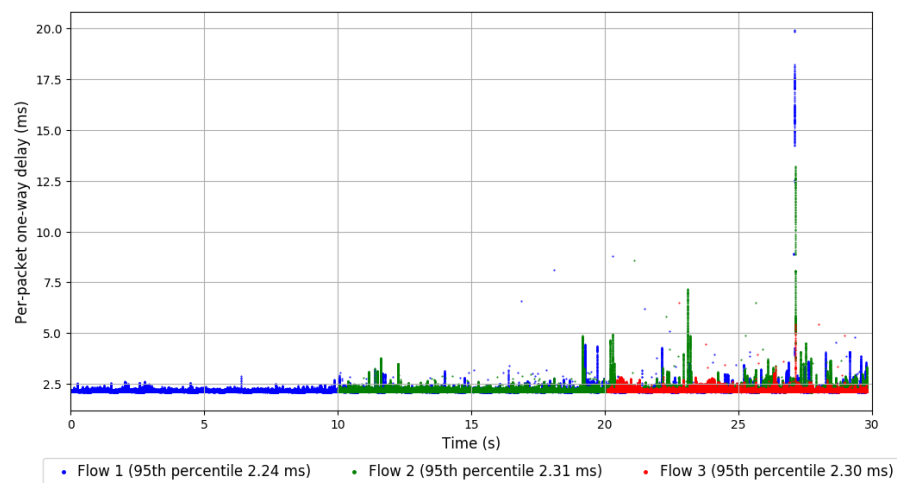
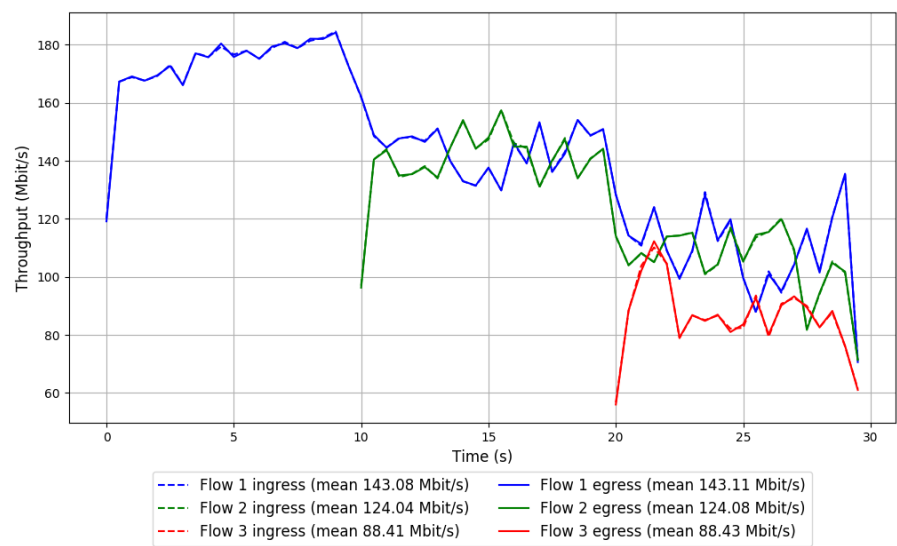
-- Flow 3:

Average throughput: 88.43 Mbit/s

95th percentile per-packet one-way delay: 2.298 ms

Loss rate: 0.02%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-11 22:55:57

End at: 2017-12-11 22:56:27

Local clock offset: 0.696 ms

Remote clock offset: 0.834 ms

Below is generated by plot.py at 2017-12-12 04:00:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 252.74 Mbit/s

95th percentile per-packet one-way delay: 2.435 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 143.42 Mbit/s

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

Loss rate: 0.02%

-- Flow 2:

Average throughput: 124.23 Mbit/s

95th percentile per-packet one-way delay: 2.574 ms

Loss rate: 0.01%

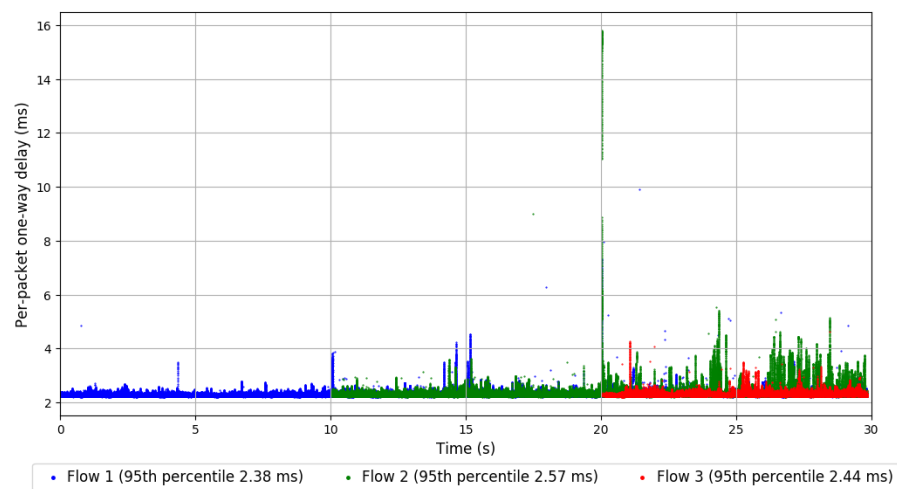
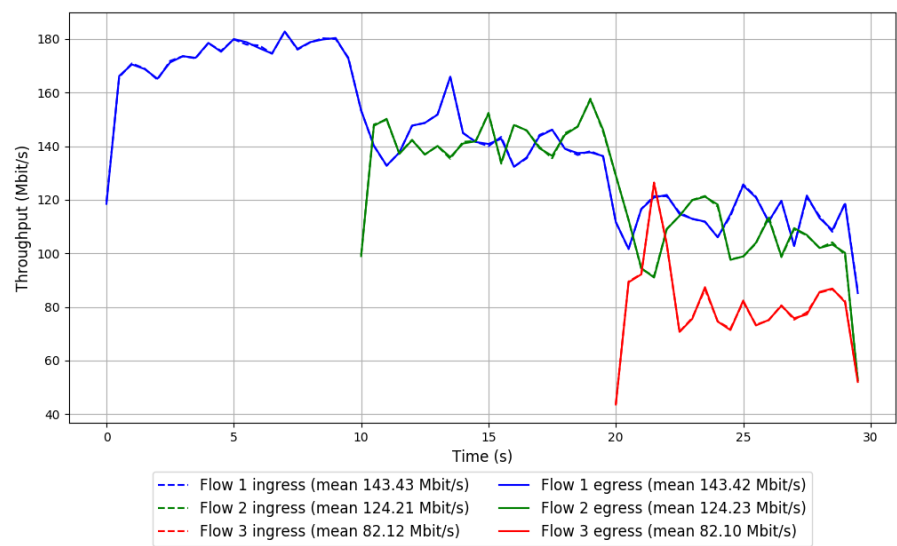
-- Flow 3:

Average throughput: 82.10 Mbit/s

95th percentile per-packet one-way delay: 2.435 ms

Loss rate: 0.06%

Run 10: Report of Indigo — Data Link

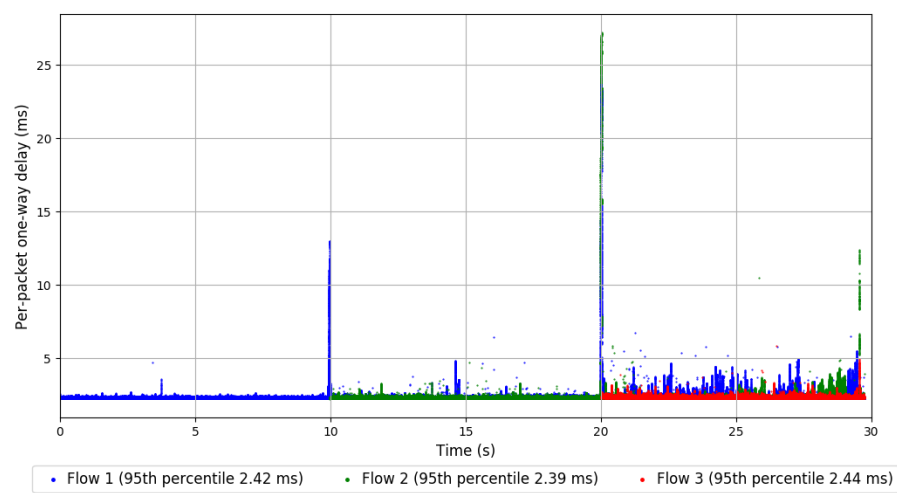
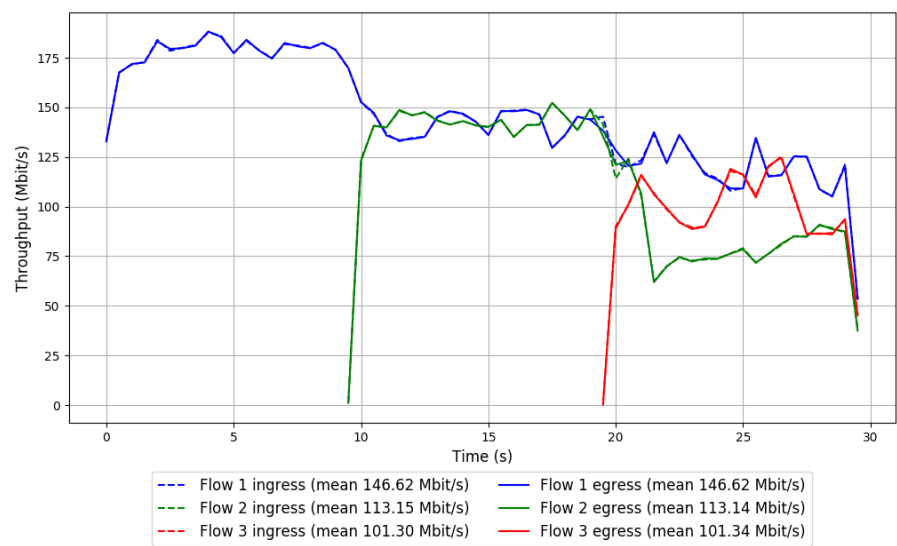


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-11 20:01:00
End at: 2017-12-11 20:01:30
Local clock offset: -1.367 ms
Remote clock offset: -0.695 ms

# Below is generated by plot.py at 2017-12-12 04:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 255.01 Mbit/s
95th percentile per-packet one-way delay: 2.414 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 146.62 Mbit/s
95th percentile per-packet one-way delay: 2.417 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 113.14 Mbit/s
95th percentile per-packet one-way delay: 2.392 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 101.34 Mbit/s
95th percentile per-packet one-way delay: 2.437 ms
Loss rate: 0.02%
```

Run 1: Report of Indigo-calib — Data Link

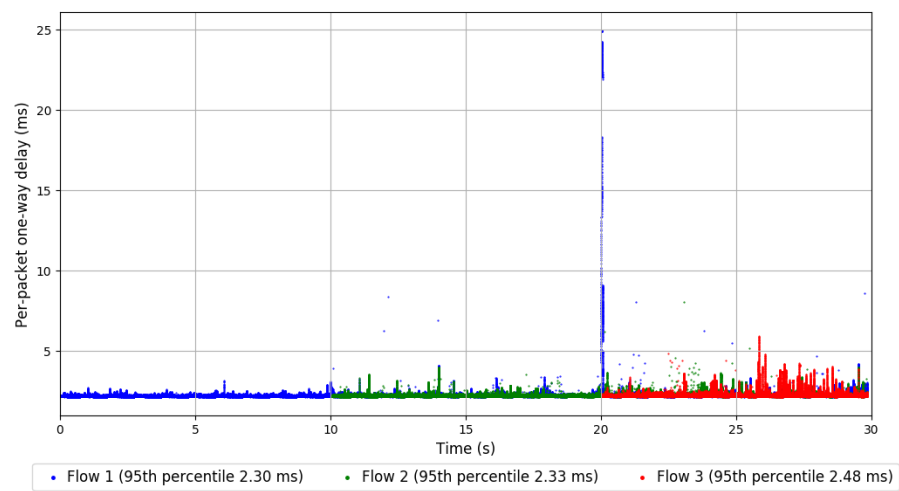
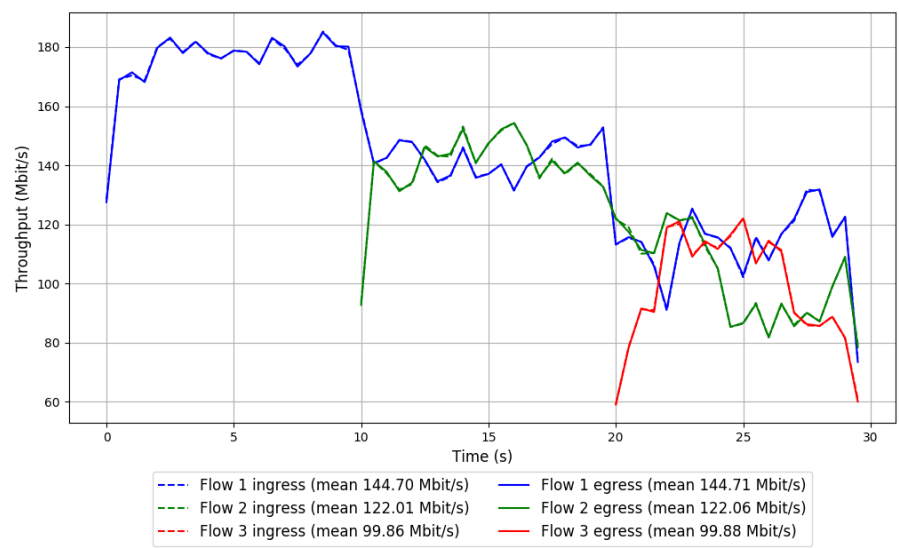


Run 2: Statistics of Indigo-calib

Start at: 2017-12-11 20:19:47
End at: 2017-12-11 20:20:17
Local clock offset: -1.005 ms
Remote clock offset: -0.071 ms

Below is generated by plot.py at 2017-12-12 04:01:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 258.39 Mbit/s
95th percentile per-packet one-way delay: 2.325 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 144.71 Mbit/s
95th percentile per-packet one-way delay: 2.299 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 122.06 Mbit/s
95th percentile per-packet one-way delay: 2.330 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 99.88 Mbit/s
95th percentile per-packet one-way delay: 2.481 ms
Loss rate: 0.05%

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-12-11 20:38:41

End at: 2017-12-11 20:39:12

Local clock offset: -0.688 ms

Remote clock offset: 0.446 ms

Below is generated by plot.py at 2017-12-12 04:02:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.42 Mbit/s

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

Loss rate: 0.07%

-- Flow 1:

Average throughput: 98.52 Mbit/s

95th percentile per-packet one-way delay: 2.347 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 138.64 Mbit/s

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

Loss rate: 0.11%

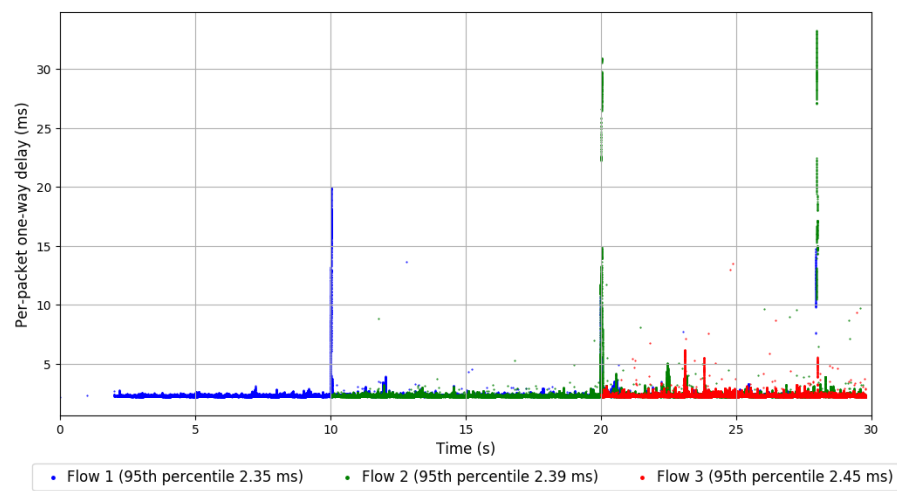
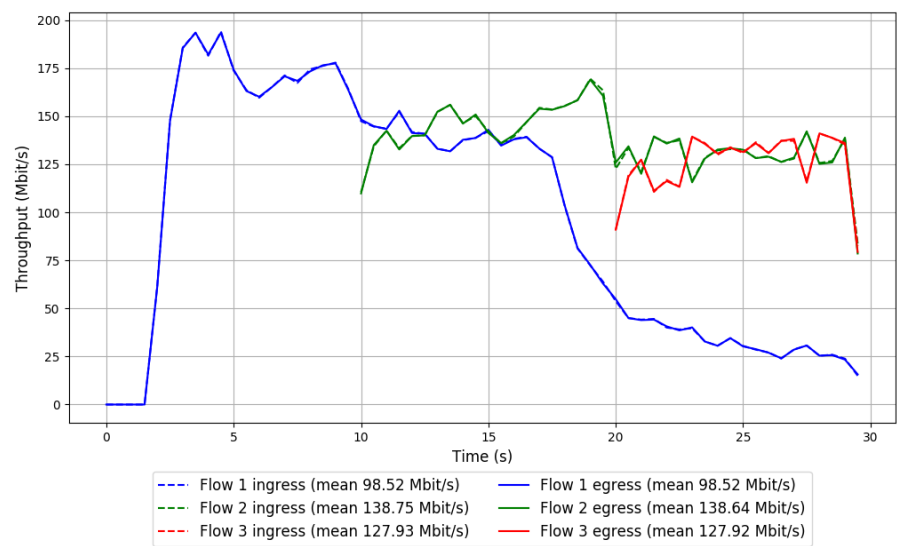
-- Flow 3:

Average throughput: 127.92 Mbit/s

95th percentile per-packet one-way delay: 2.446 ms

Loss rate: 0.13%

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-11 20:57:18

End at: 2017-12-11 20:57:48

Local clock offset: -0.231 ms

Remote clock offset: 0.782 ms

Below is generated by plot.py at 2017-12-12 04:02:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.17 Mbit/s

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

Loss rate: 0.03%

-- Flow 1:

Average throughput: 139.66 Mbit/s

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

Loss rate: 0.02%

-- Flow 2:

Average throughput: 129.32 Mbit/s

95th percentile per-packet one-way delay: 2.471 ms

Loss rate: 0.03%

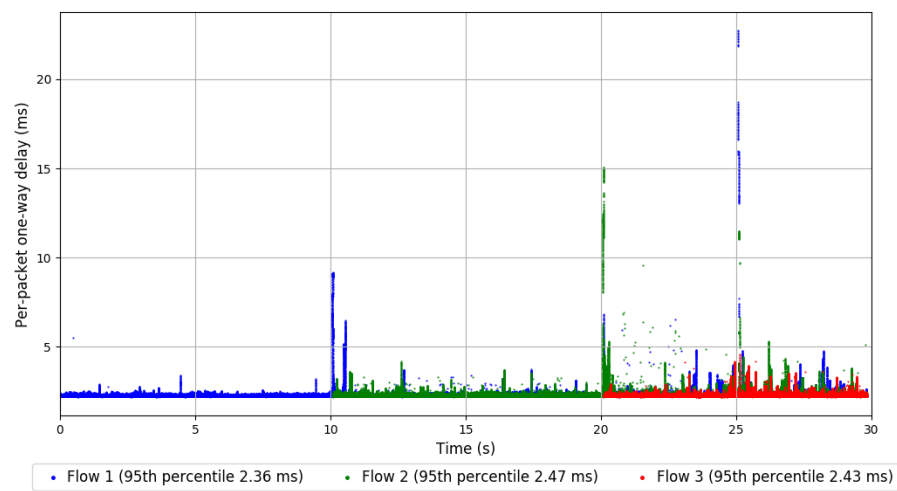
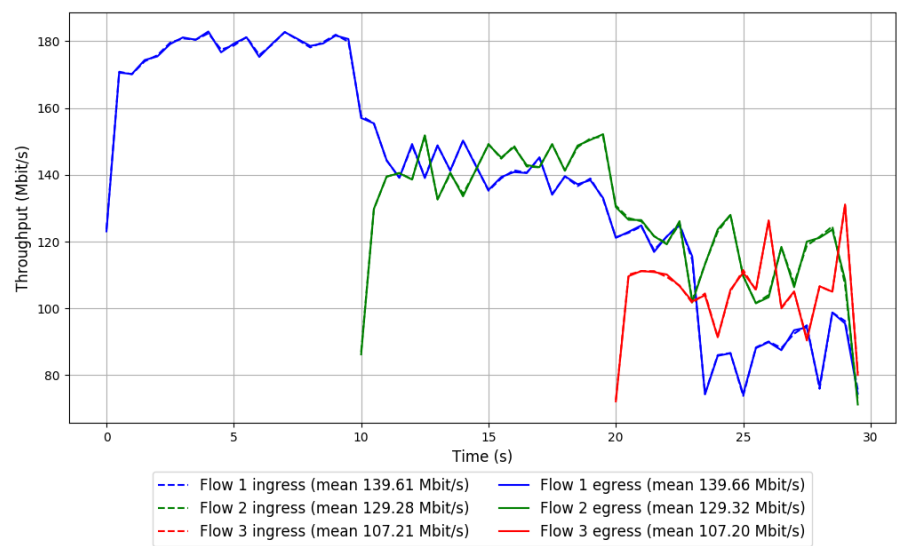
-- Flow 3:

Average throughput: 107.20 Mbit/s

95th percentile per-packet one-way delay: 2.431 ms

Loss rate: 0.06%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-11 21:15:58

End at: 2017-12-11 21:16:28

Local clock offset: 0.089 ms

Remote clock offset: 1.011 ms

Below is generated by plot.py at 2017-12-12 04:02:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 257.60 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 144.24 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 120.12 Mbit/s

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

Loss rate: 0.03%

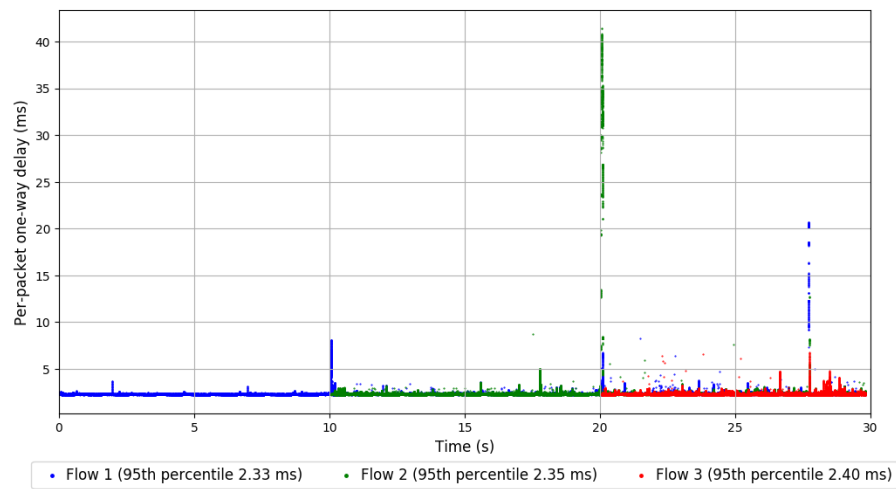
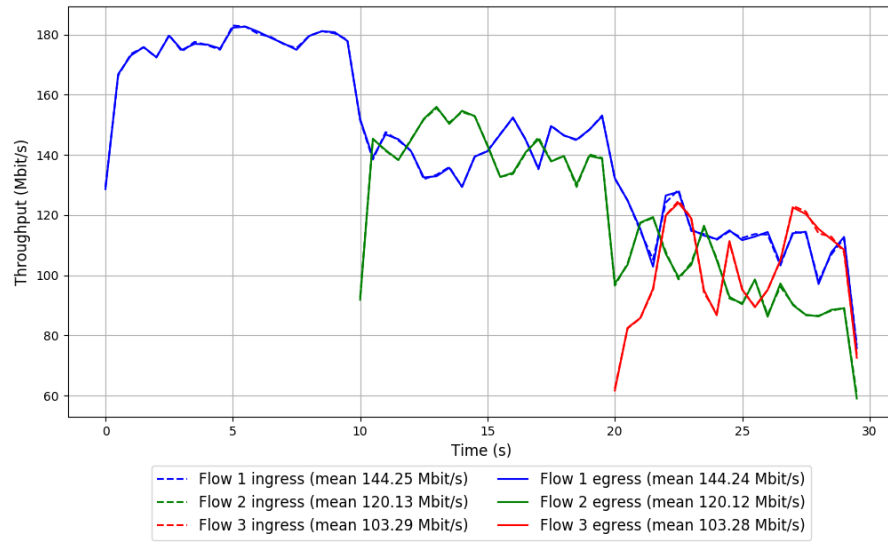
-- Flow 3:

Average throughput: 103.28 Mbit/s

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

Loss rate: 0.05%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-11 21:34:46

End at: 2017-12-11 21:35:16

Local clock offset: 0.346 ms

Remote clock offset: 1.165 ms

Below is generated by plot.py at 2017-12-12 04:03:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 262.63 Mbit/s

95th percentile per-packet one-way delay: 2.466 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 143.80 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 126.19 Mbit/s

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

Loss rate: 0.02%

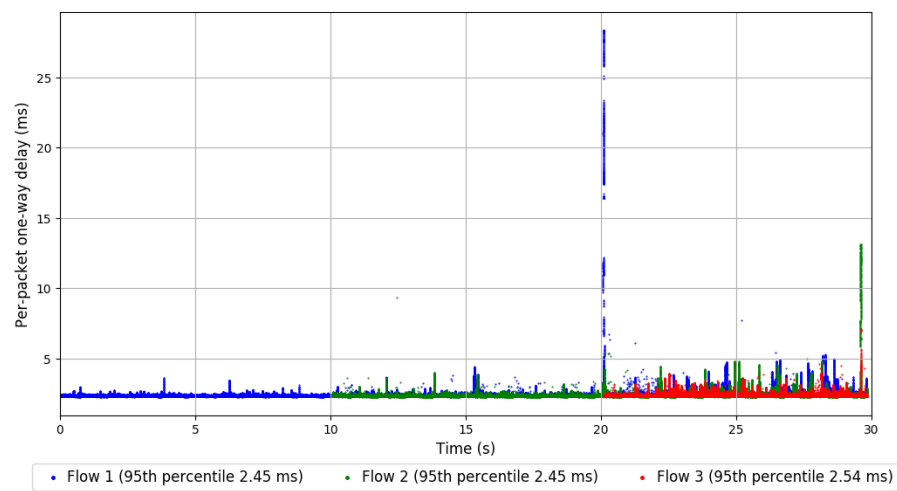
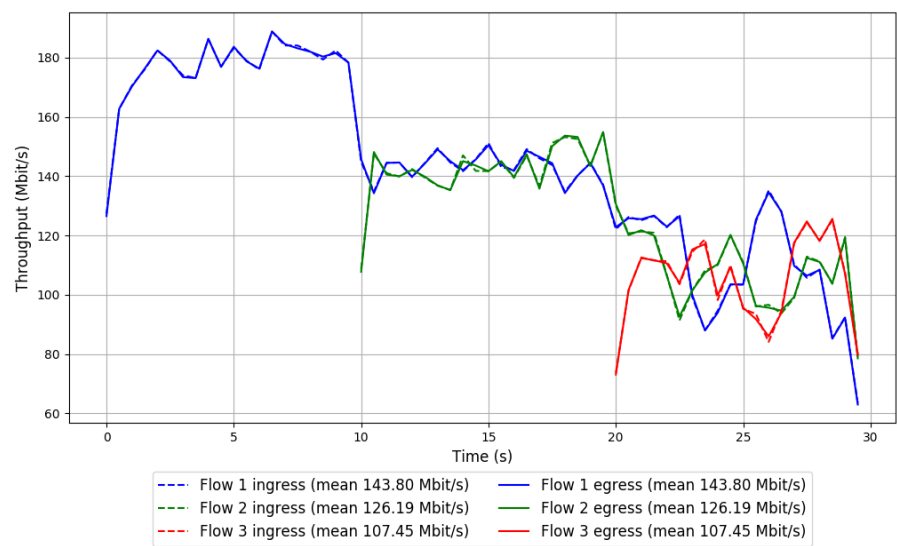
-- Flow 3:

Average throughput: 107.45 Mbit/s

95th percentile per-packet one-way delay: 2.543 ms

Loss rate: 0.04%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-11 21:53:34

End at: 2017-12-11 21:54:04

Local clock offset: 0.585 ms

Remote clock offset: 1.123 ms

Below is generated by plot.py at 2017-12-12 04:03:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.29 Mbit/s

95th percentile per-packet one-way delay: 2.467 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 145.93 Mbit/s

95th percentile per-packet one-way delay: 2.457 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 119.73 Mbit/s

95th percentile per-packet one-way delay: 2.478 ms

Loss rate: 0.02%

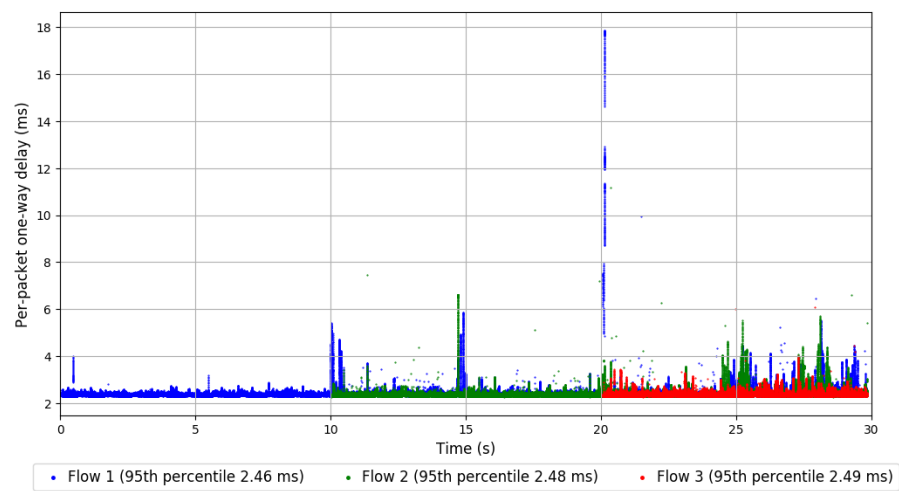
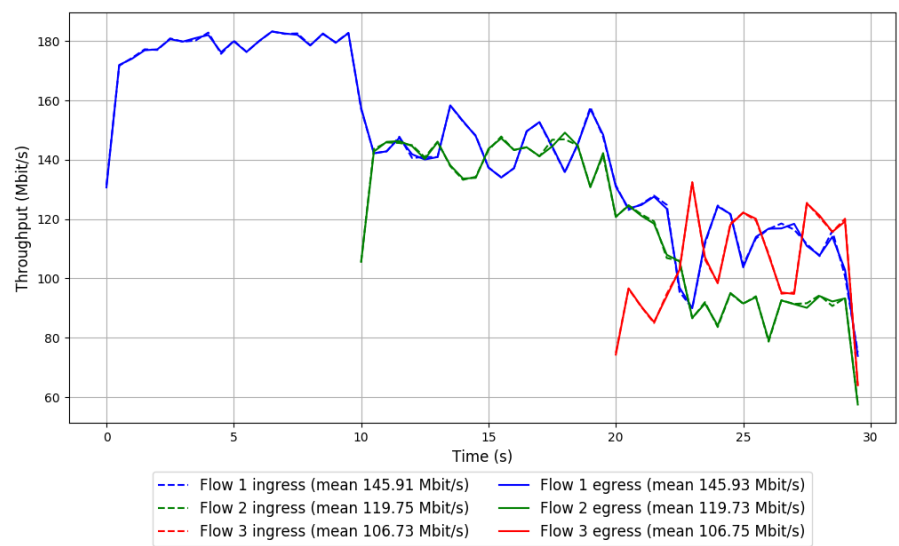
-- Flow 3:

Average throughput: 106.75 Mbit/s

95th percentile per-packet one-way delay: 2.486 ms

Loss rate: 0.03%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

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

End at: 2017-12-11 22:12:52

Local clock offset: 0.724 ms

Remote clock offset: 1.07 ms

Below is generated by plot.py at 2017-12-12 04:03:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 257.39 Mbit/s

95th percentile per-packet one-way delay: 2.440 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 141.53 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 127.34 Mbit/s

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

Loss rate: 0.02%

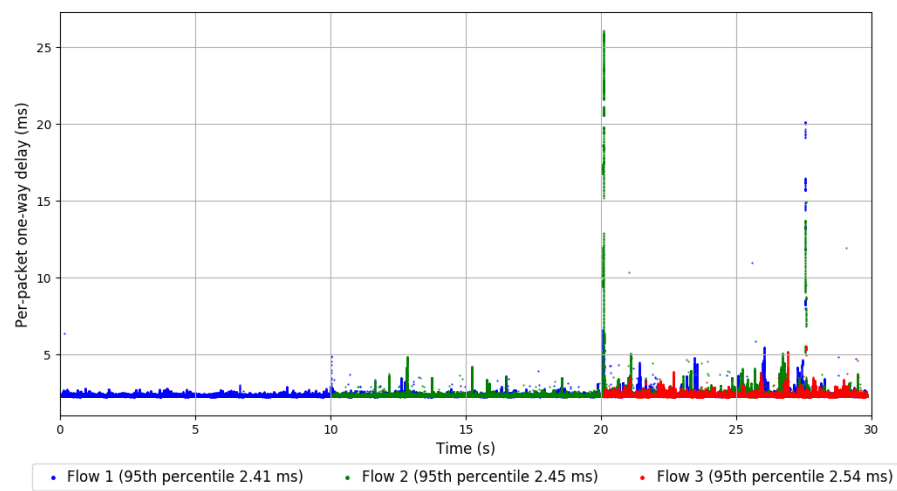
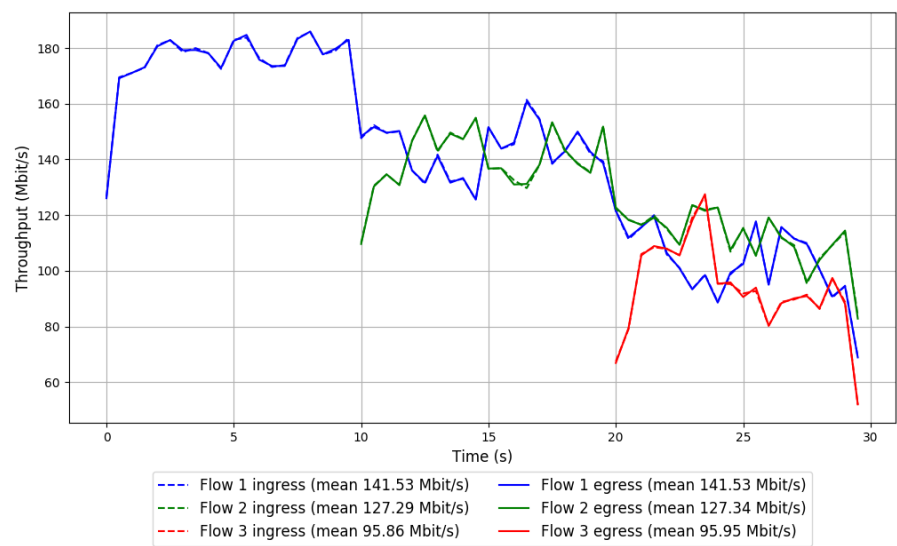
-- Flow 3:

Average throughput: 95.95 Mbit/s

95th percentile per-packet one-way delay: 2.539 ms

Loss rate: 0.04%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-11 22:30:59

End at: 2017-12-11 22:31:29

Local clock offset: 0.753 ms

Remote clock offset: 0.949 ms

Below is generated by plot.py at 2017-12-12 04:03:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.50 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 142.78 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 117.21 Mbit/s

95th percentile per-packet one-way delay: 2.393 ms

Loss rate: 0.02%

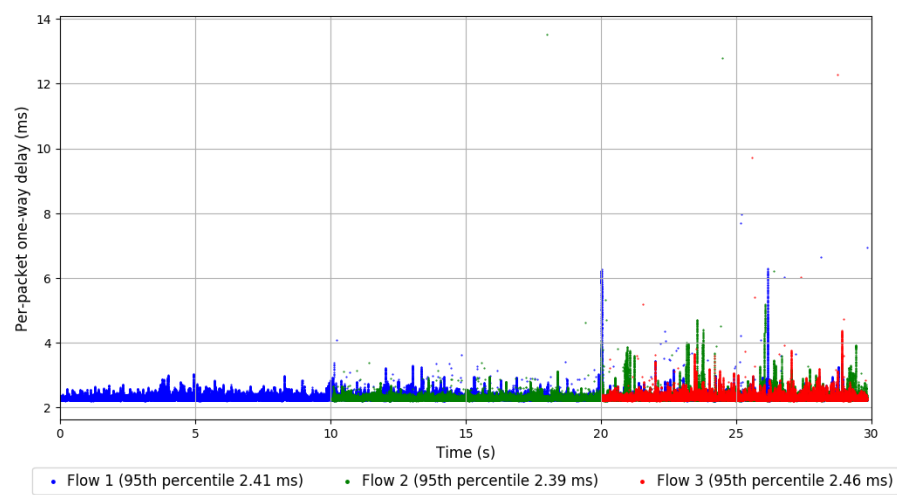
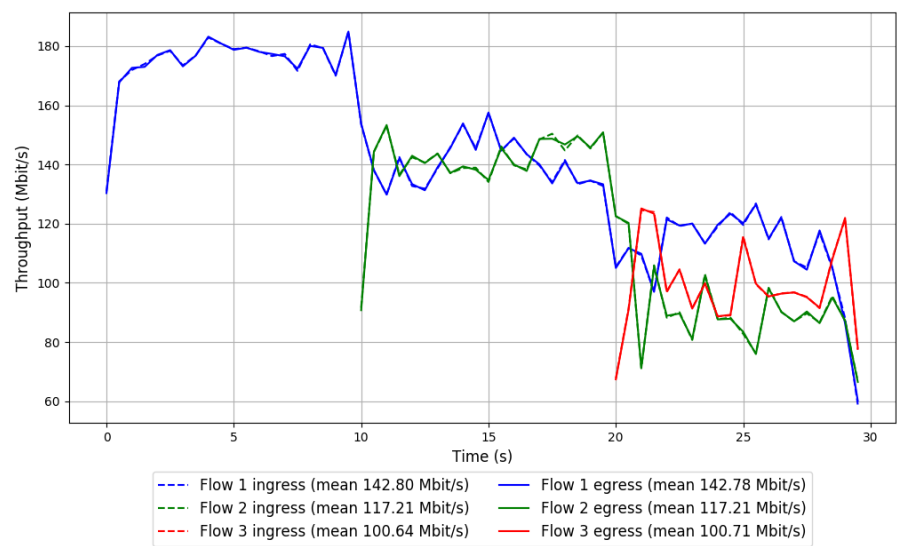
-- Flow 3:

Average throughput: 100.71 Mbit/s

95th percentile per-packet one-way delay: 2.464 ms

Loss rate: 0.00%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-11 22:49:29

End at: 2017-12-11 22:49:59

Local clock offset: 0.711 ms

Remote clock offset: 0.851 ms

Below is generated by plot.py at 2017-12-12 04:03:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.50 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 144.13 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 128.03 Mbit/s

95th percentile per-packet one-way delay: 2.422 ms

Loss rate: 0.02%

-- Flow 3:

Average throughput: 96.78 Mbit/s

95th percentile per-packet one-way delay: 2.527 ms

Loss rate: 0.08%

Run 10: Report of Indigo-calib — Data Link

