

Pantheon Report

Generated at 2018-03-27 22:43:06 (UTC).

Data path: Colombia Ethernet (*remote*) → AWS Brazil 2 Ethernet (*local*).

Repeated the test of 17 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).

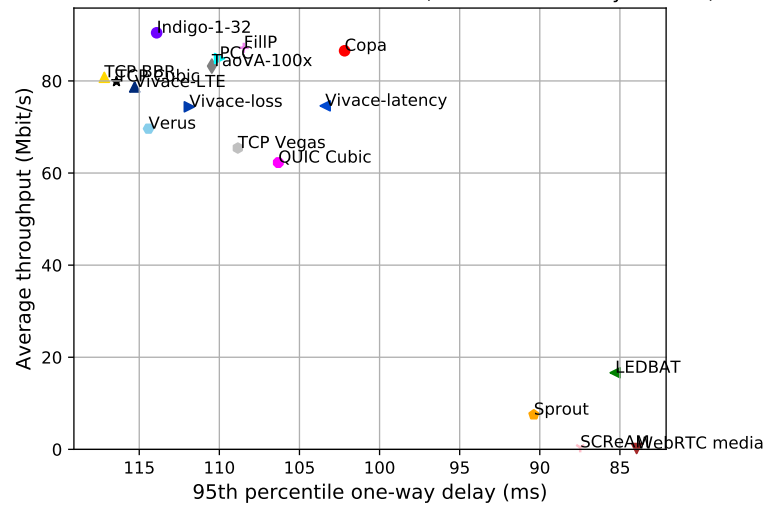
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

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

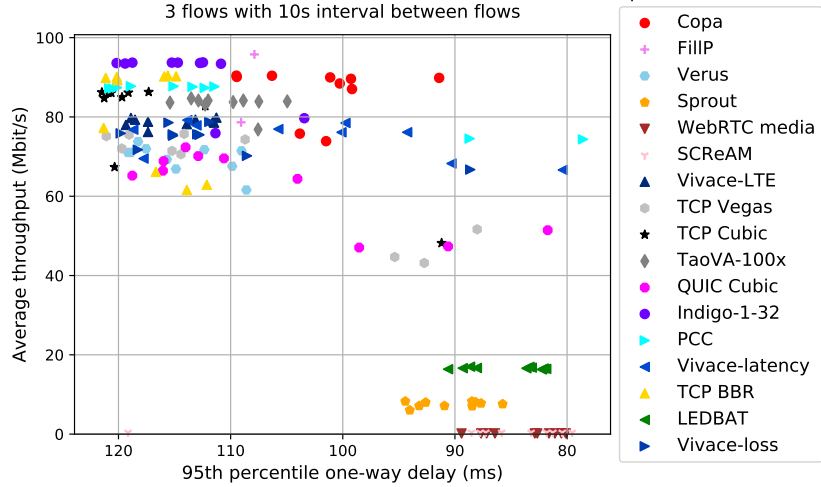
Git summary:

```
branch: master @ 503f51fe03f703a4c0a826a0792a4fead3e7d1b0
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecd9c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ f271183af822eee5d0031620f4bebf38aedc5581
```

test from Colombia Ethernet to AWS Brazil 2 Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from Colombia Ethernet to AWS Brazil 2 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	49.18	34.68	26.52	116.01	117.69	117.47	4.00	4.82	7.13
TCP Cubic	10	46.37	36.43	28.61	115.49	116.55	116.15	0.63	1.46	3.77
LEDBAT	10	10.84	7.09	3.39	84.86	85.13	83.69	1.21	1.84	3.74
PCC	10	59.39	26.31	24.76	109.43	109.23	110.95	3.25	4.41	6.56
QUIC Cubic	10	35.95	29.29	21.25	106.15	105.92	104.74	1.16	1.55	2.77
SCReAM	10	0.22	0.22	0.22	81.29	87.83	82.86	0.64	0.83	1.87
WebRTC media	10	0.06	0.06	0.05	83.06	83.18	83.61	0.11	0.02	0.30
Sprout	10	3.86	3.89	3.39	90.10	90.24	90.58	0.68	1.03	2.68
TaoVA-100x	10	50.07	38.95	22.31	108.65	111.02	112.24	1.02	1.97	3.45
TCP Vegas	10	33.36	36.18	24.66	108.29	108.16	109.17	0.82	1.09	2.60
Verus	10	36.81	37.91	23.65	112.66	114.38	116.27	0.57	1.12	1.22
Copa	10	68.11	20.57	14.60	101.08	103.04	103.48	2.35	4.16	6.11
FillP	2	55.57	38.80	26.77	106.70	108.39	110.72	9.02	11.10	16.38
Indigo-1-32	10	61.16	33.05	23.01	112.67	114.58	114.60	2.92	3.27	4.16
Vivace-latency	10	58.54	18.04	12.60	101.81	102.69	103.99	1.50	2.85	3.66
Vivace-loss	10	50.50	25.47	21.50	110.18	111.41	111.89	1.45	3.14	3.54
Vivace-LTE	10	51.59	30.32	21.52	113.94	115.75	115.80	1.31	4.22	6.05

Run 1: Statistics of TCP BBR

Start at: 2018-03-27 14:17:27

End at: 2018-03-27 14:17:57

Local clock offset: -6.769 ms

Remote clock offset: 8.49 ms

Below is generated by plot.py at 2018-03-27 22:22:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.42 Mbit/s

95th percentile per-packet one-way delay: 115.602 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 55.68 Mbit/s

95th percentile per-packet one-way delay: 115.140 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 38.26 Mbit/s

95th percentile per-packet one-way delay: 115.953 ms

Loss rate: 0.83%

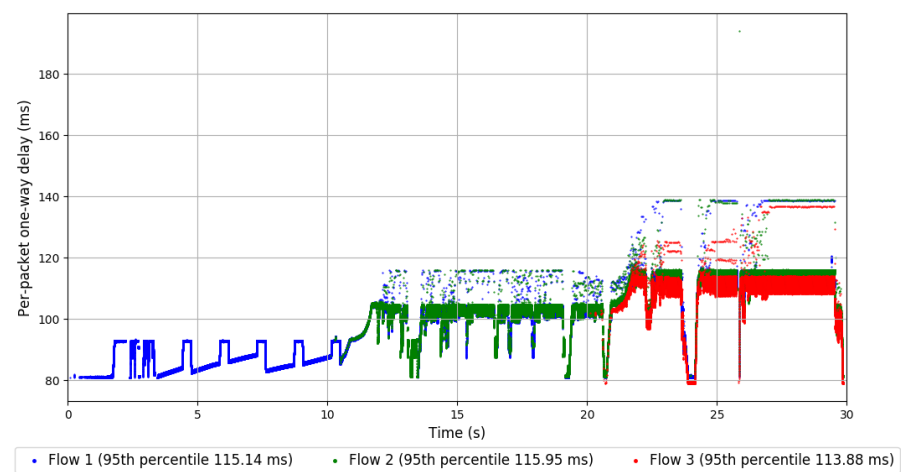
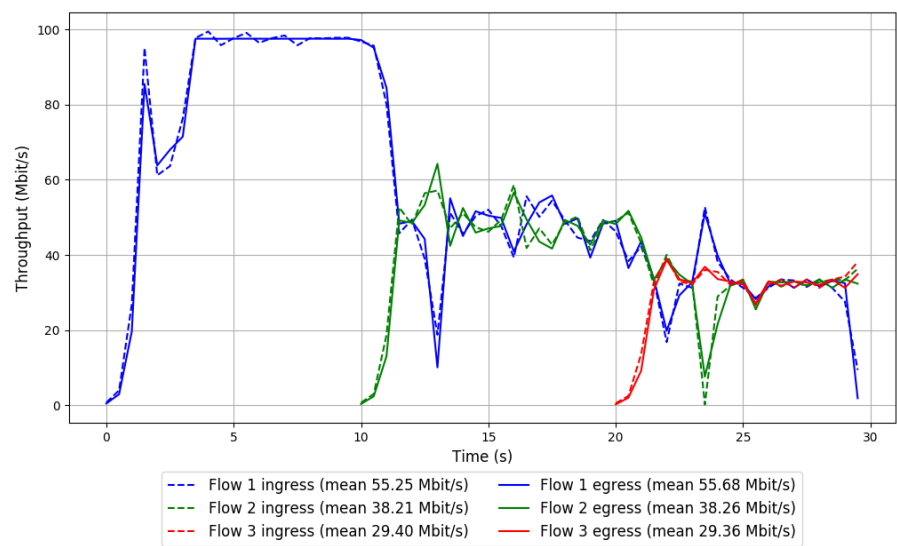
-- Flow 3:

Average throughput: 29.36 Mbit/s

95th percentile per-packet one-way delay: 113.882 ms

Loss rate: 2.21%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-03-27 14:41:16

End at: 2018-03-27 14:41:46

Local clock offset: -7.58 ms

Remote clock offset: 3.489 ms

Below is generated by plot.py at 2018-03-27 22:22:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.83 Mbit/s

95th percentile per-packet one-way delay: 121.140 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 54.09 Mbit/s

95th percentile per-packet one-way delay: 121.525 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 38.93 Mbit/s

95th percentile per-packet one-way delay: 119.632 ms

Loss rate: 0.88%

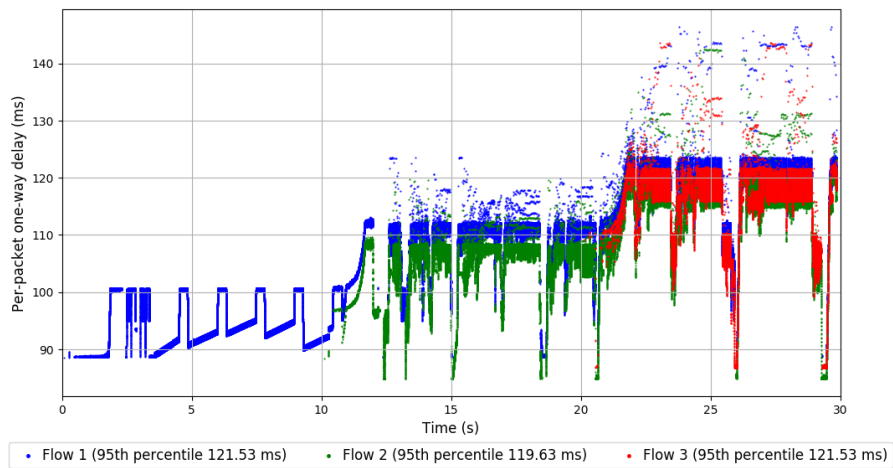
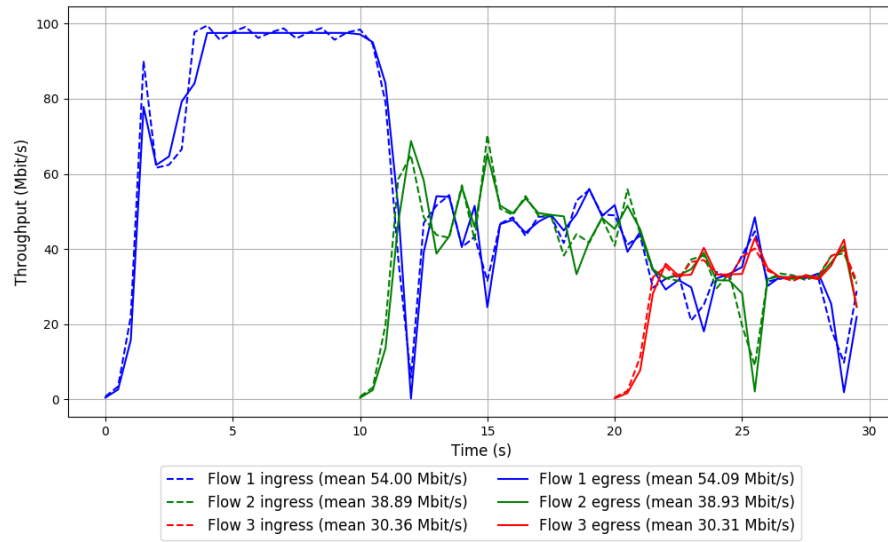
-- Flow 3:

Average throughput: 30.31 Mbit/s

95th percentile per-packet one-way delay: 121.534 ms

Loss rate: 2.39%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-03-27 15:05:20

End at: 2018-03-27 15:05:50

Local clock offset: -5.522 ms

Remote clock offset: 7.245 ms

Below is generated by plot.py at 2018-03-27 22:22:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.58 Mbit/s

95th percentile per-packet one-way delay: 113.904 ms

Loss rate: 13.24%

-- Flow 1:

Average throughput: 35.24 Mbit/s

95th percentile per-packet one-way delay: 113.147 ms

Loss rate: 11.85%

-- Flow 2:

Average throughput: 28.98 Mbit/s

95th percentile per-packet one-way delay: 115.469 ms

Loss rate: 14.71%

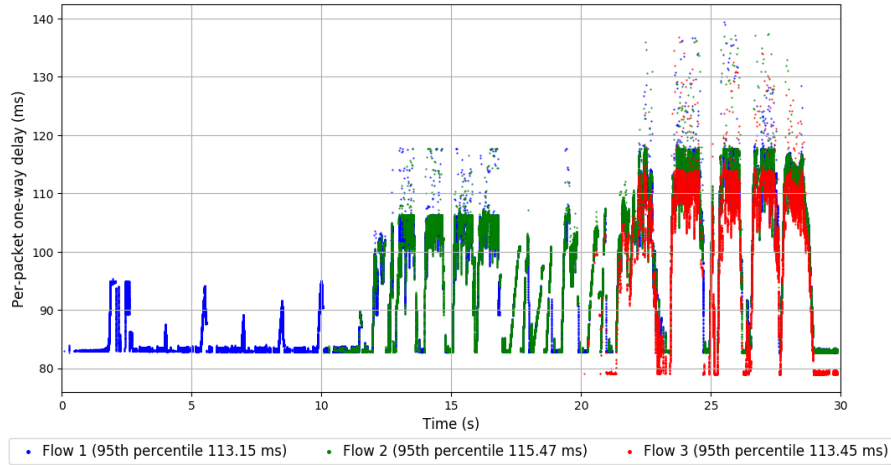
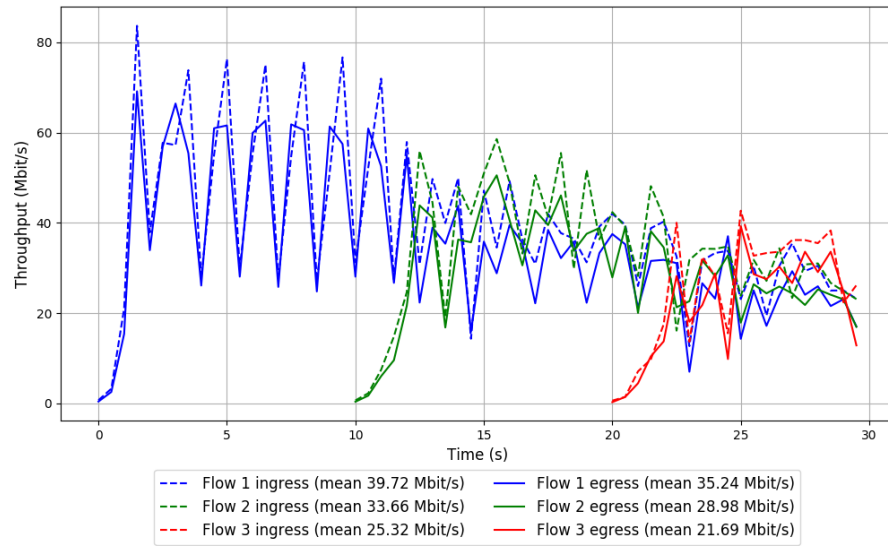
-- Flow 3:

Average throughput: 21.69 Mbit/s

95th percentile per-packet one-way delay: 113.449 ms

Loss rate: 15.91%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-03-27 15:29:25

End at: 2018-03-27 15:29:55

Local clock offset: -1.394 ms

Remote clock offset: 1.516 ms

Below is generated by plot.py at 2018-03-27 22:22:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.22 Mbit/s

95th percentile per-packet one-way delay: 121.323 ms

Loss rate: 3.17%

-- Flow 1:

Average throughput: 44.11 Mbit/s

95th percentile per-packet one-way delay: 120.195 ms

Loss rate: 4.39%

-- Flow 2:

Average throughput: 36.04 Mbit/s

95th percentile per-packet one-way delay: 120.833 ms

Loss rate: 1.11%

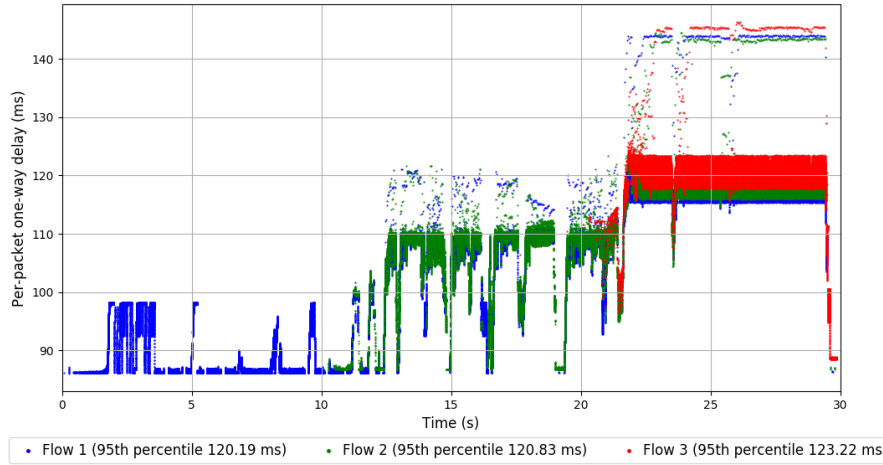
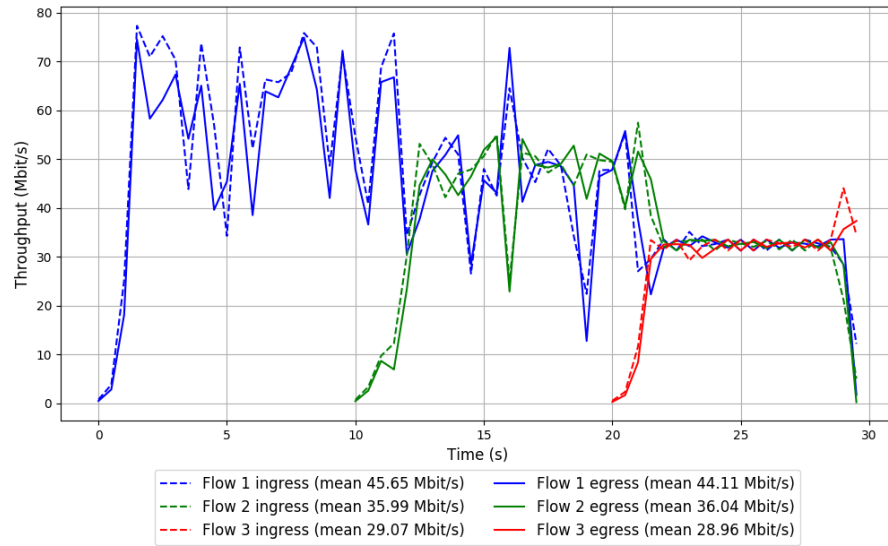
-- Flow 3:

Average throughput: 28.96 Mbit/s

95th percentile per-packet one-way delay: 123.222 ms

Loss rate: 2.51%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-03-27 15:53:24

End at: 2018-03-27 15:53:54

Local clock offset: -1.292 ms

Remote clock offset: 3.392 ms

Below is generated by plot.py at 2018-03-27 22:22:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.15 Mbit/s

95th percentile per-packet one-way delay: 116.662 ms

Loss rate: 12.26%

-- Flow 1:

Average throughput: 41.85 Mbit/s

95th percentile per-packet one-way delay: 113.382 ms

Loss rate: 10.43%

-- Flow 2:

Average throughput: 27.06 Mbit/s

95th percentile per-packet one-way delay: 117.702 ms

Loss rate: 14.36%

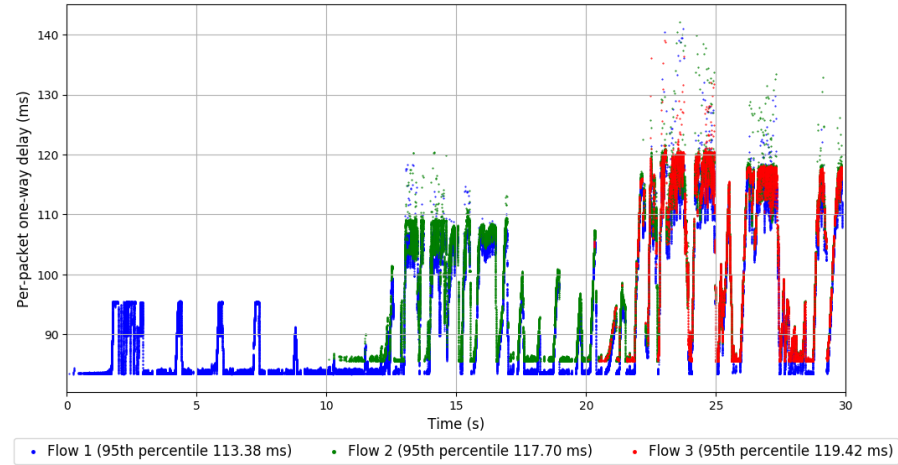
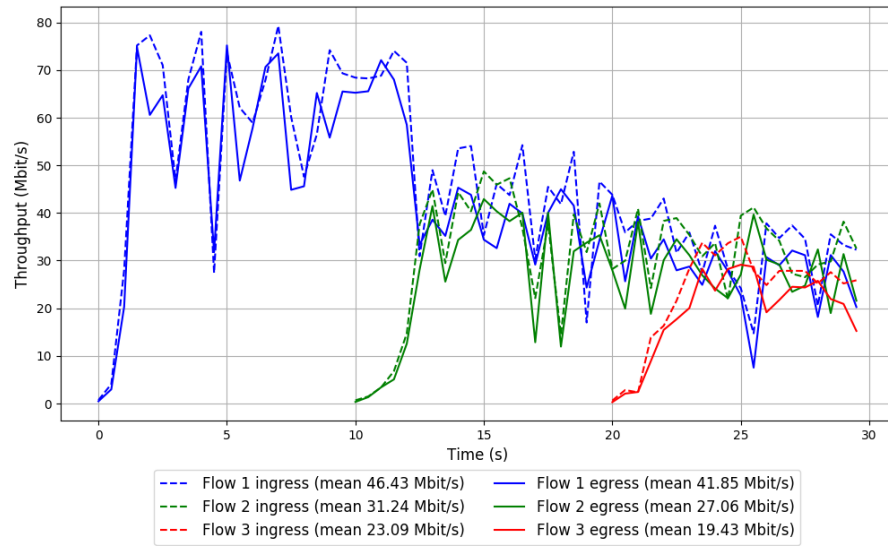
-- Flow 3:

Average throughput: 19.43 Mbit/s

95th percentile per-packet one-way delay: 119.422 ms

Loss rate: 17.62%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-03-27 16:17:25

End at: 2018-03-27 16:17:55

Local clock offset: -2.236 ms

Remote clock offset: 2.979 ms

Below is generated by plot.py at 2018-03-27 22:22:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.07 Mbit/s

95th percentile per-packet one-way delay: 120.152 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 55.41 Mbit/s

95th percentile per-packet one-way delay: 118.835 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 39.75 Mbit/s

95th percentile per-packet one-way delay: 120.547 ms

Loss rate: 0.16%

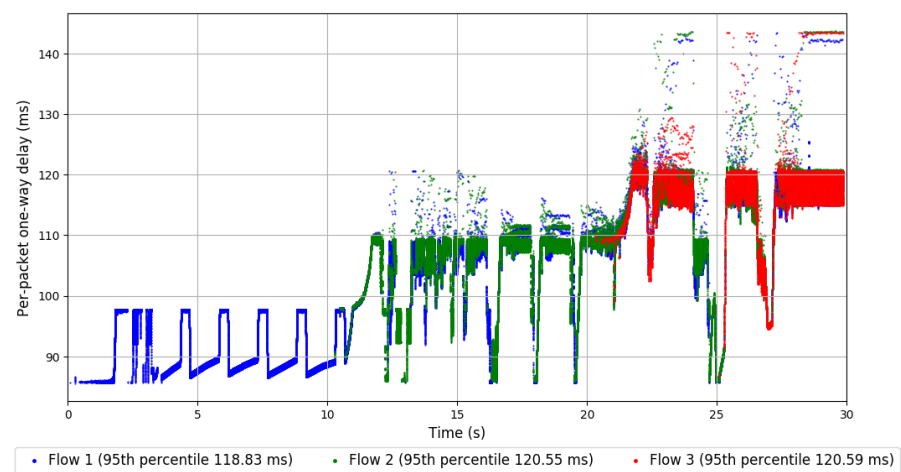
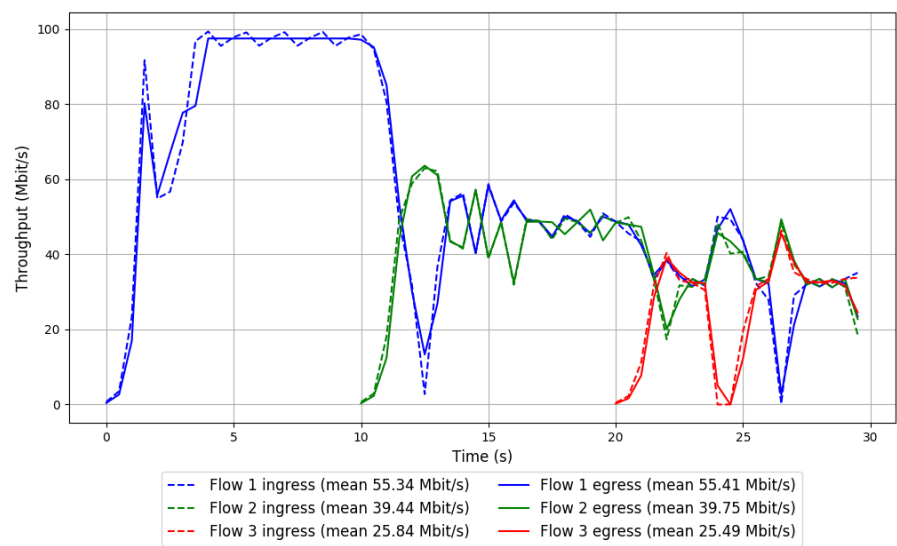
-- Flow 3:

Average throughput: 25.49 Mbit/s

95th percentile per-packet one-way delay: 120.587 ms

Loss rate: 3.54%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-03-27 16:41:31

End at: 2018-03-27 16:42:01

Local clock offset: -2.717 ms

Remote clock offset: 7.237 ms

Below is generated by plot.py at 2018-03-27 22:22:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.22 Mbit/s

95th percentile per-packet one-way delay: 115.922 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 55.03 Mbit/s

95th percentile per-packet one-way delay: 115.210 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 38.42 Mbit/s

95th percentile per-packet one-way delay: 116.266 ms

Loss rate: 0.96%

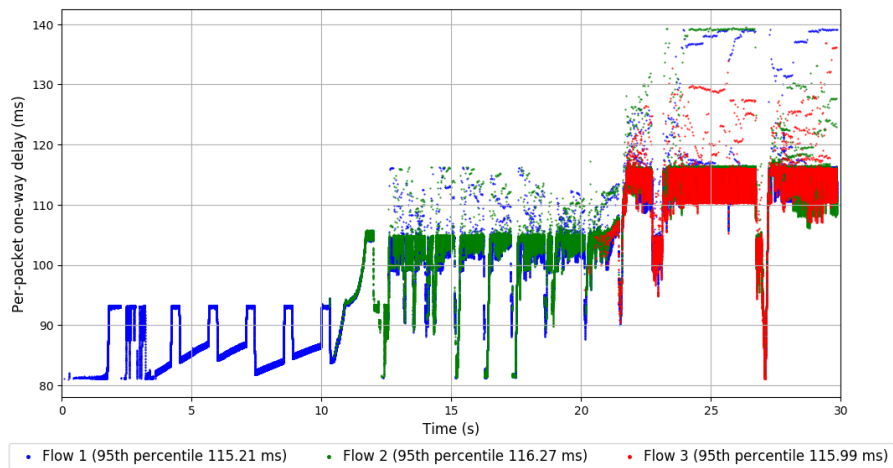
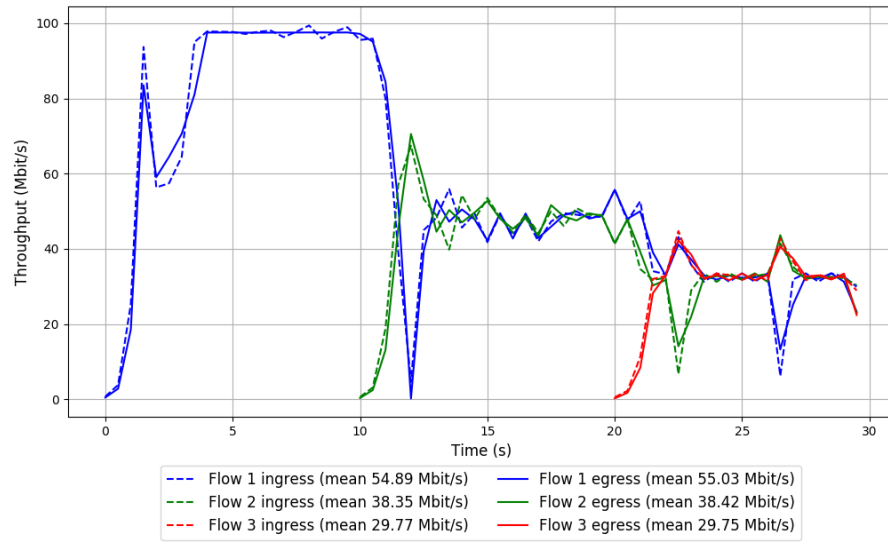
-- Flow 3:

Average throughput: 29.75 Mbit/s

95th percentile per-packet one-way delay: 115.989 ms

Loss rate: 2.25%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-03-27 17:05:40

End at: 2018-03-27 17:06:10

Local clock offset: -7.615 ms

Remote clock offset: 7.505 ms

Below is generated by plot.py at 2018-03-27 22:22:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.23 Mbit/s

95th percentile per-packet one-way delay: 114.860 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 55.42 Mbit/s

95th percentile per-packet one-way delay: 113.240 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 37.53 Mbit/s

95th percentile per-packet one-way delay: 116.623 ms

Loss rate: 2.27%

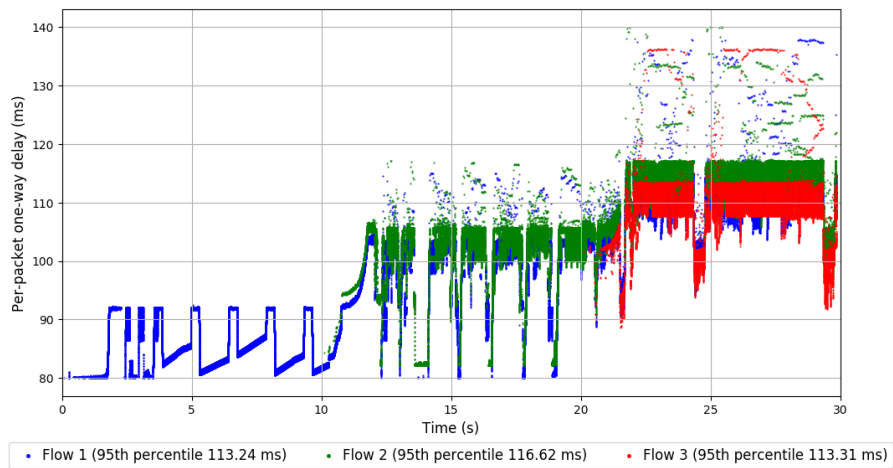
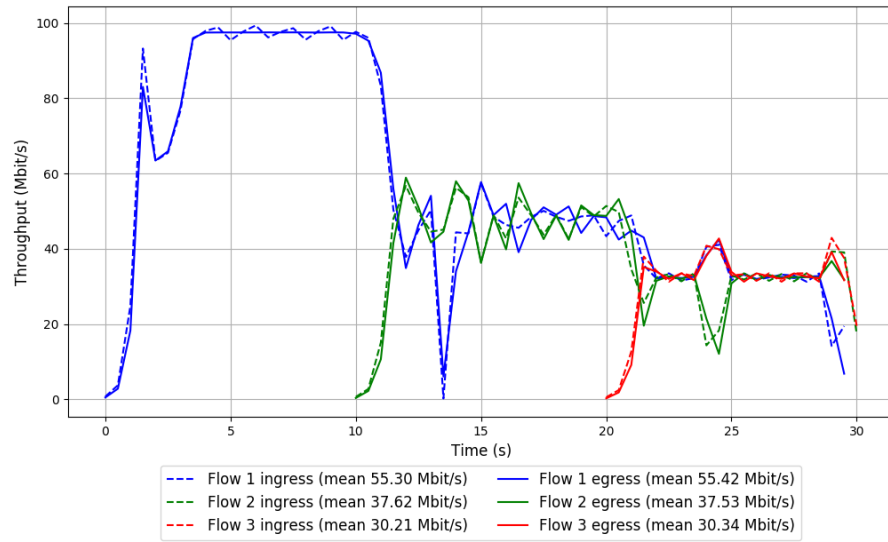
-- Flow 3:

Average throughput: 30.34 Mbit/s

95th percentile per-packet one-way delay: 113.313 ms

Loss rate: 5.73%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-03-27 17:29:41

End at: 2018-03-27 17:30:11

Local clock offset: -7.049 ms

Remote clock offset: 8.523 ms

Below is generated by plot.py at 2018-03-27 22:23:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.91 Mbit/s

95th percentile per-packet one-way delay: 112.124 ms

Loss rate: 11.72%

-- Flow 1:

Average throughput: 40.45 Mbit/s

95th percentile per-packet one-way delay: 110.122 ms

Loss rate: 10.66%

-- Flow 2:

Average throughput: 23.44 Mbit/s

95th percentile per-packet one-way delay: 113.495 ms

Loss rate: 12.04%

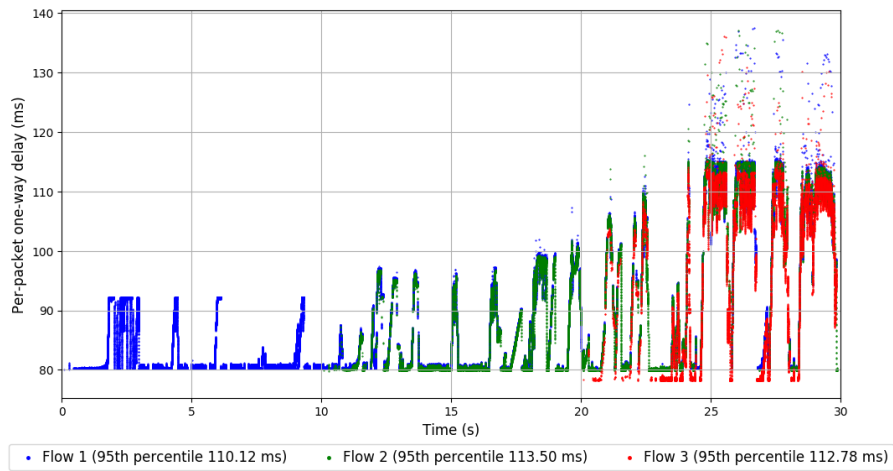
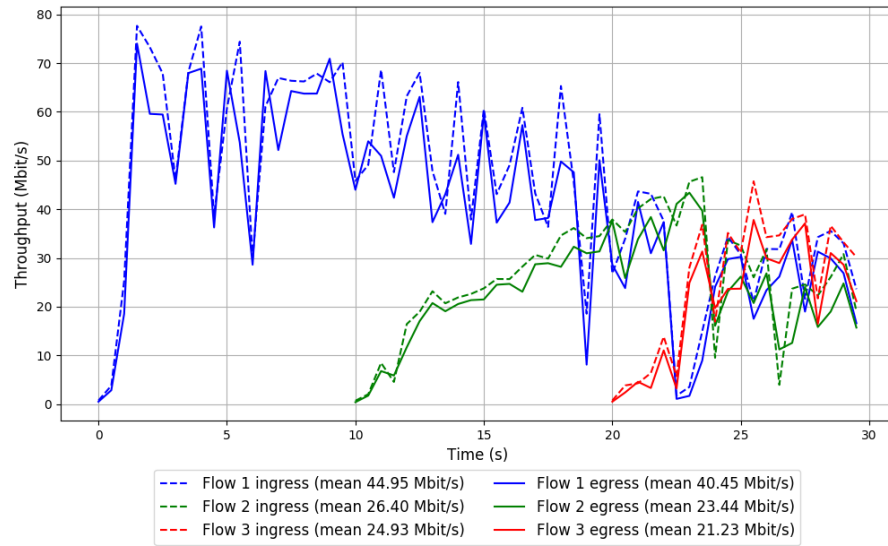
-- Flow 3:

Average throughput: 21.23 Mbit/s

95th percentile per-packet one-way delay: 112.776 ms

Loss rate: 16.75%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-03-27 17:53:32

End at: 2018-03-27 17:54:02

Local clock offset: -5.943 ms

Remote clock offset: 3.111 ms

Below is generated by plot.py at 2018-03-27 22:23:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.29 Mbit/s

95th percentile per-packet one-way delay: 120.099 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 54.48 Mbit/s

95th percentile per-packet one-way delay: 119.257 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 38.39 Mbit/s

95th percentile per-packet one-way delay: 120.349 ms

Loss rate: 0.88%

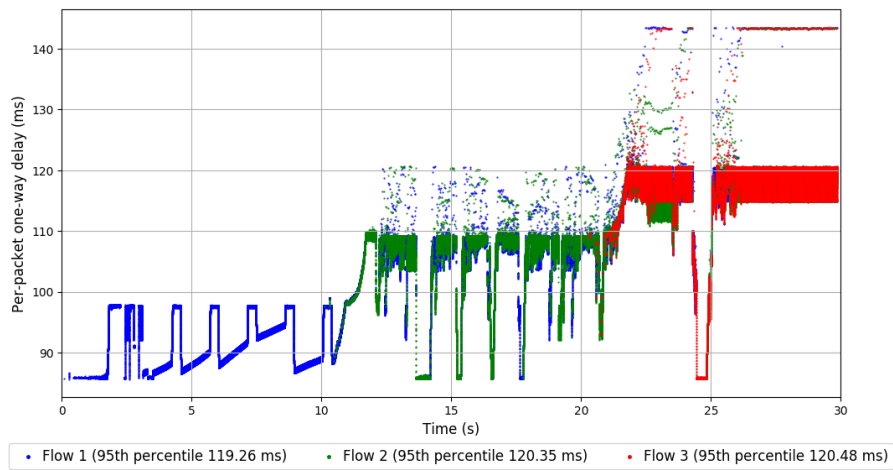
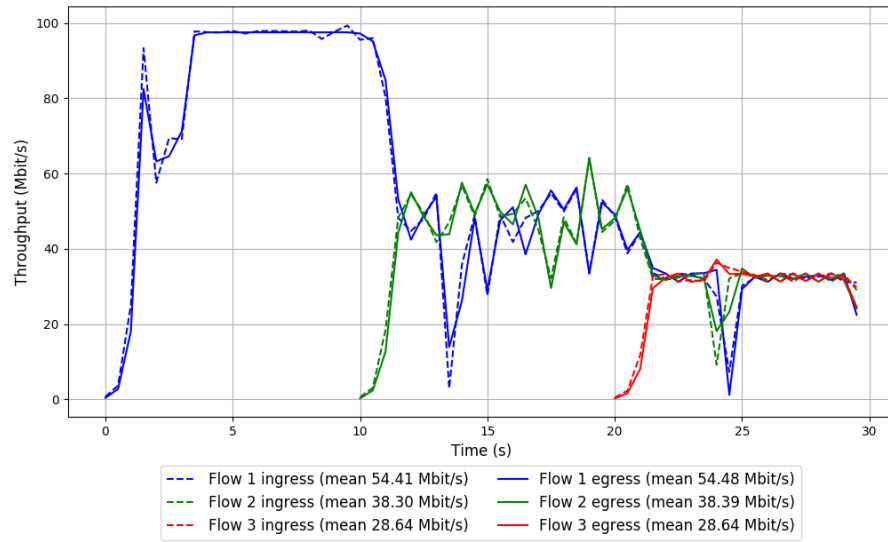
-- Flow 3:

Average throughput: 28.64 Mbit/s

95th percentile per-packet one-way delay: 120.481 ms

Loss rate: 2.36%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-03-27 14:20:08

End at: 2018-03-27 14:20:38

Local clock offset: -6.904 ms

Remote clock offset: 3.96 ms

Below is generated by plot.py at 2018-03-27 22:23:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.13 Mbit/s

95th percentile per-packet one-way delay: 119.123 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 51.14 Mbit/s

95th percentile per-packet one-way delay: 118.778 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 38.63 Mbit/s

95th percentile per-packet one-way delay: 119.849 ms

Loss rate: 1.46%

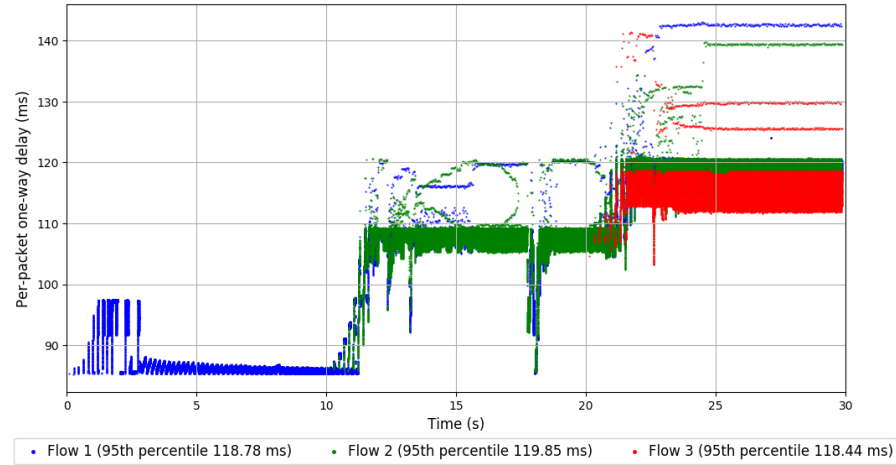
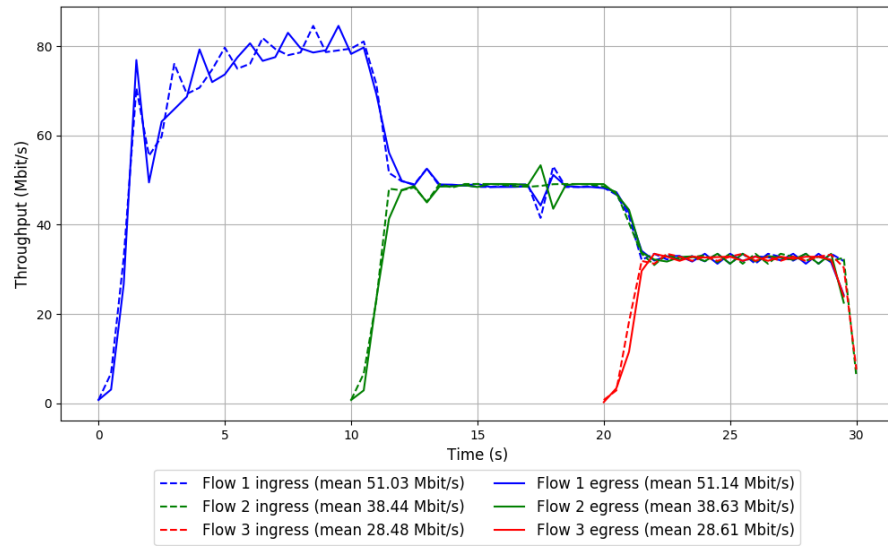
-- Flow 3:

Average throughput: 28.61 Mbit/s

95th percentile per-packet one-way delay: 118.440 ms

Loss rate: 3.82%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-03-27 14:43:57

End at: 2018-03-27 14:44:27

Local clock offset: -7.689 ms

Remote clock offset: 4.548 ms

Below is generated by plot.py at 2018-03-27 22:23:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.36 Mbit/s

95th percentile per-packet one-way delay: 120.345 ms

Loss rate: 1.56%

-- Flow 1:

Average throughput: 32.16 Mbit/s

95th percentile per-packet one-way delay: 120.710 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 38.99 Mbit/s

95th percentile per-packet one-way delay: 117.352 ms

Loss rate: 1.64%

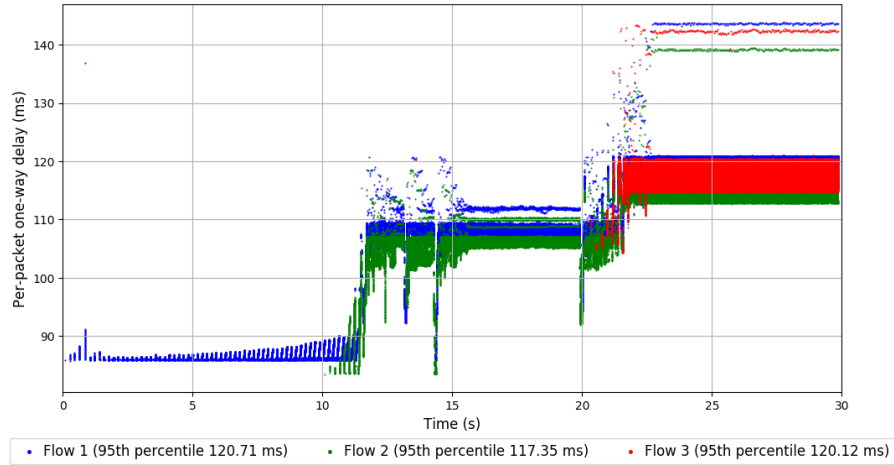
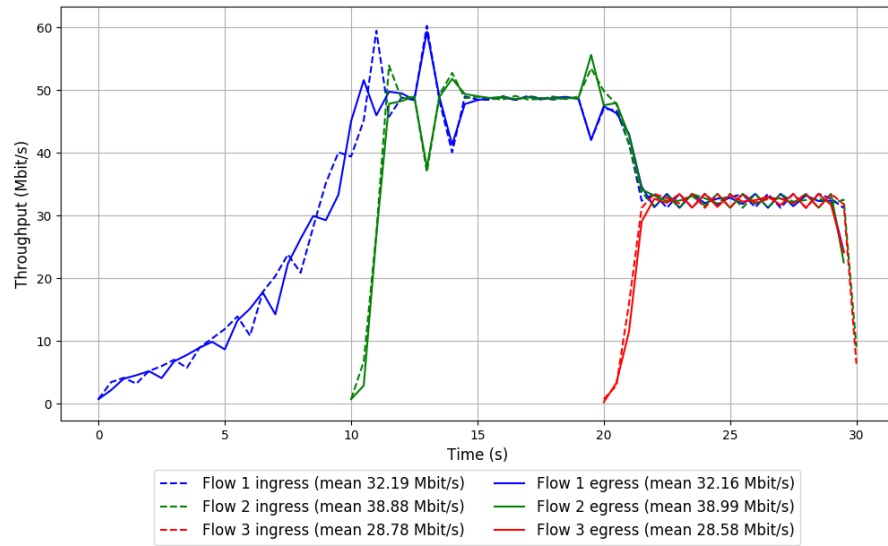
-- Flow 3:

Average throughput: 28.58 Mbit/s

95th percentile per-packet one-way delay: 120.123 ms

Loss rate: 3.91%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-03-27 15:08:11

End at: 2018-03-27 15:08:41

Local clock offset: -4.566 ms

Remote clock offset: 2.589 ms

Below is generated by plot.py at 2018-03-27 22:23:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.97 Mbit/s

95th percentile per-packet one-way delay: 119.685 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 50.56 Mbit/s

95th percentile per-packet one-way delay: 120.057 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 38.25 Mbit/s

95th percentile per-packet one-way delay: 119.367 ms

Loss rate: 1.27%

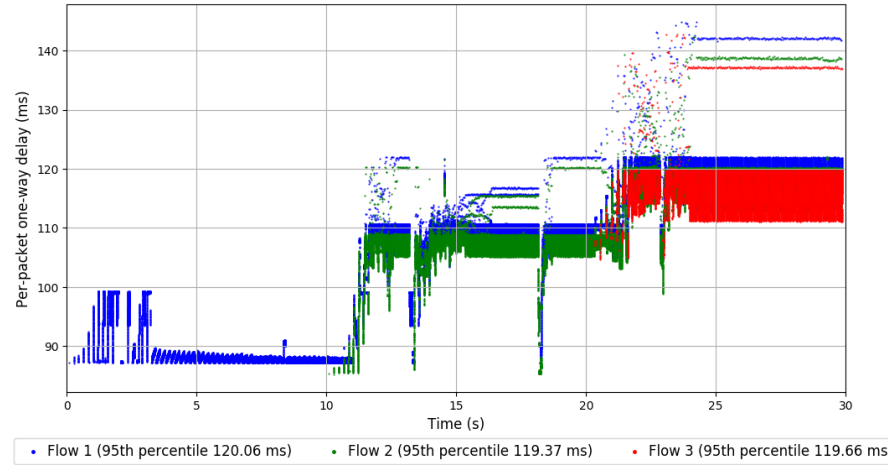
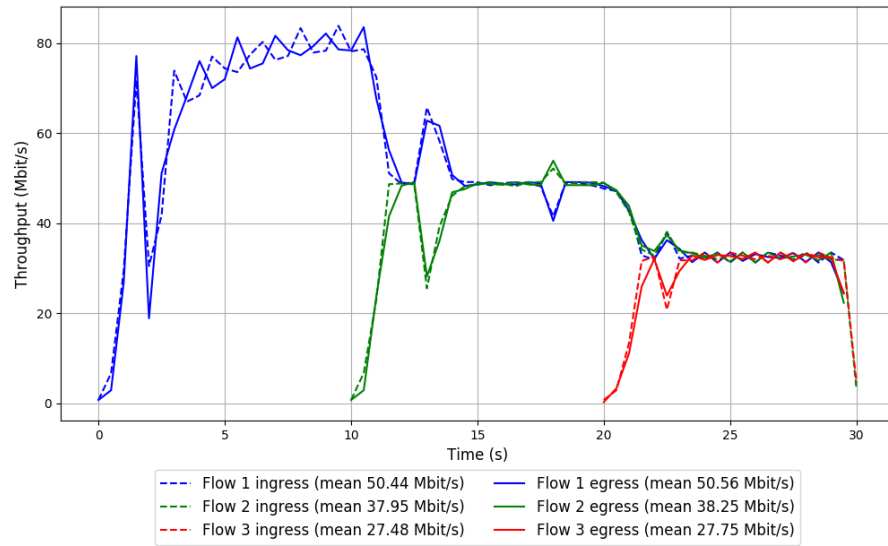
-- Flow 3:

Average throughput: 27.75 Mbit/s

95th percentile per-packet one-way delay: 119.659 ms

Loss rate: 3.51%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-03-27 15:32:06

End at: 2018-03-27 15:32:36

Local clock offset: -1.216 ms

Remote clock offset: 1.668 ms

Below is generated by plot.py at 2018-03-27 22:23:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.20 Mbit/s

95th percentile per-packet one-way delay: 121.482 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 51.33 Mbit/s

95th percentile per-packet one-way delay: 119.821 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 38.55 Mbit/s

95th percentile per-packet one-way delay: 122.283 ms

Loss rate: 1.46%

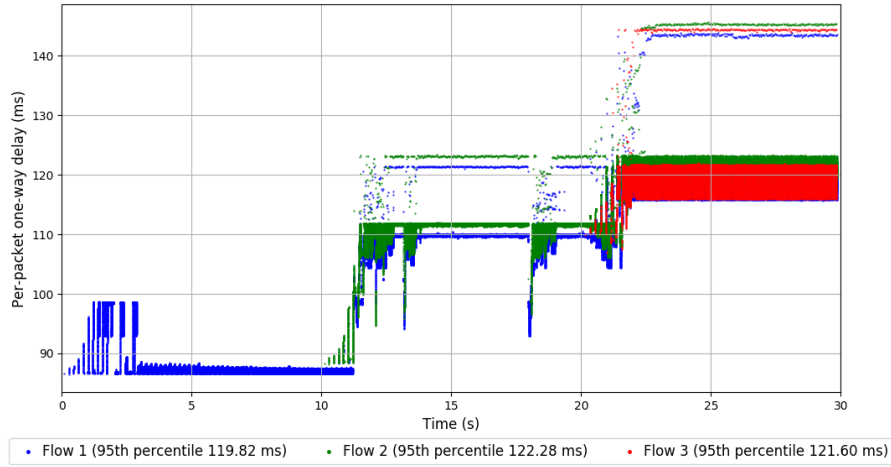
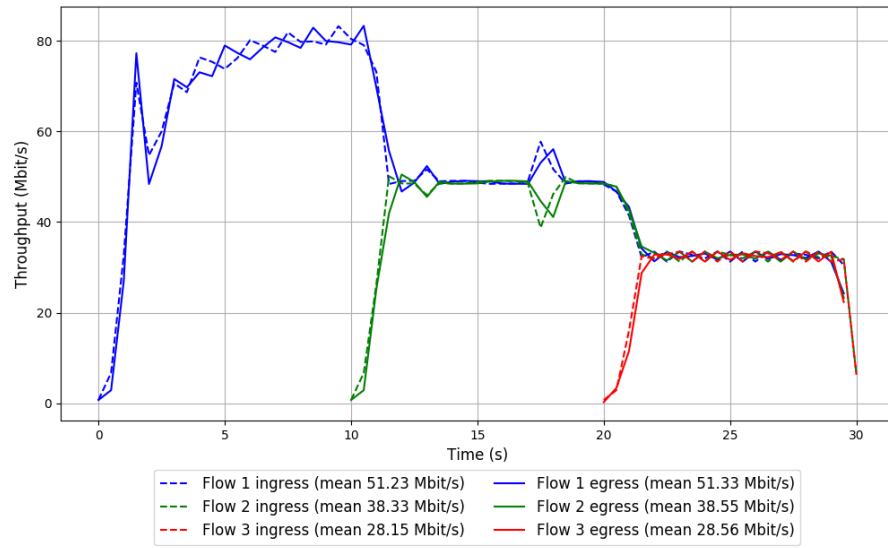
-- Flow 3:

Average throughput: 28.56 Mbit/s

95th percentile per-packet one-way delay: 121.601 ms

Loss rate: 3.90%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-03-27 15:56:05

End at: 2018-03-27 15:56:35

Local clock offset: -1.207 ms

Remote clock offset: 9.687 ms

Below is generated by plot.py at 2018-03-27 22:23:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 48.20 Mbit/s

95th percentile per-packet one-way delay: 91.190 ms

Loss rate: 1.76%

-- Flow 1:

Average throughput: 27.11 Mbit/s

95th percentile per-packet one-way delay: 91.152 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 17.02 Mbit/s

95th percentile per-packet one-way delay: 95.863 ms

Loss rate: 2.19%

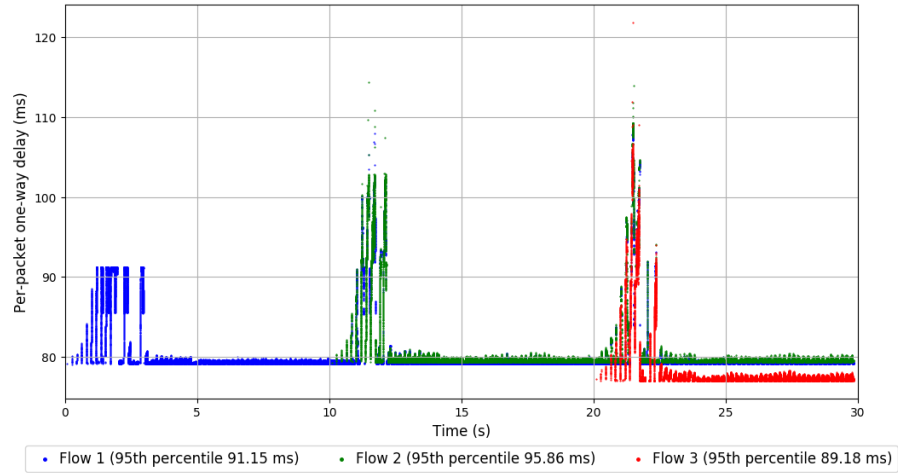
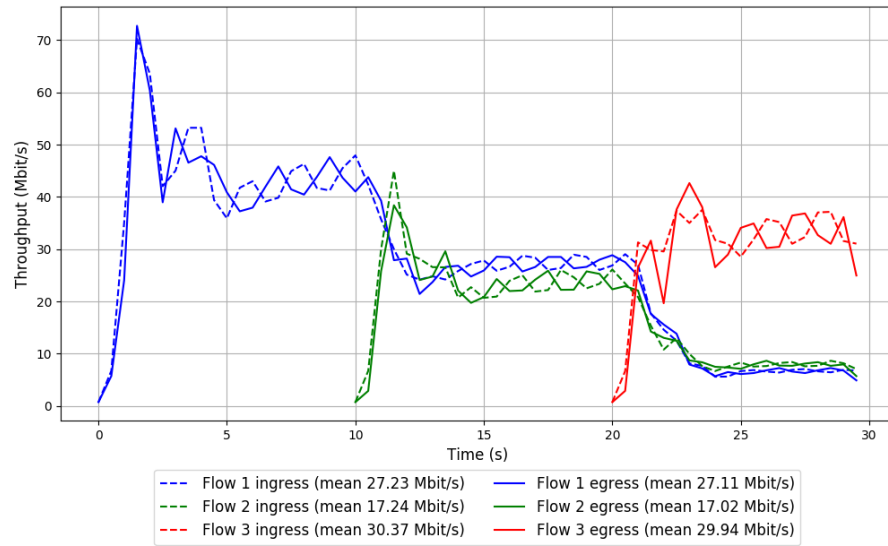
-- Flow 3:

Average throughput: 29.94 Mbit/s

95th percentile per-packet one-way delay: 89.183 ms

Loss rate: 3.22%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-03-27 16:20:09

End at: 2018-03-27 16:20:39

Local clock offset: -2.445 ms

Remote clock offset: 2.064 ms

Below is generated by plot.py at 2018-03-27 22:24:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.08 Mbit/s

95th percentile per-packet one-way delay: 120.895 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 51.07 Mbit/s

95th percentile per-packet one-way delay: 118.194 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 38.74 Mbit/s

95th percentile per-packet one-way delay: 120.708 ms

Loss rate: 1.46%

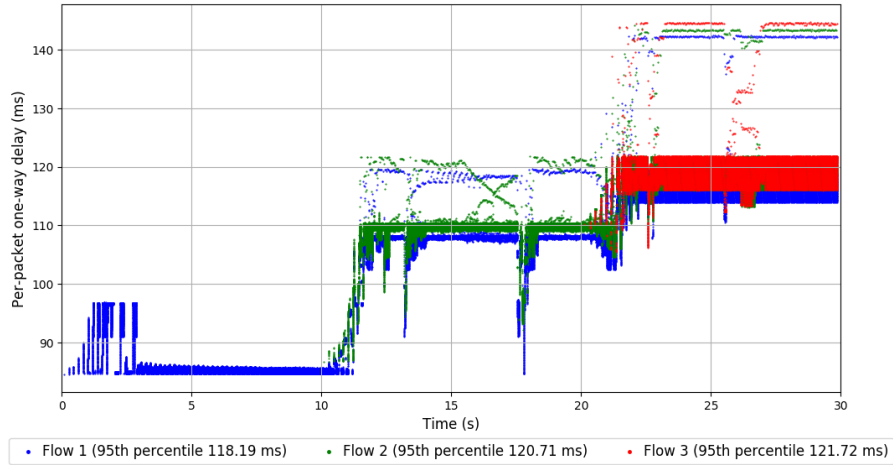
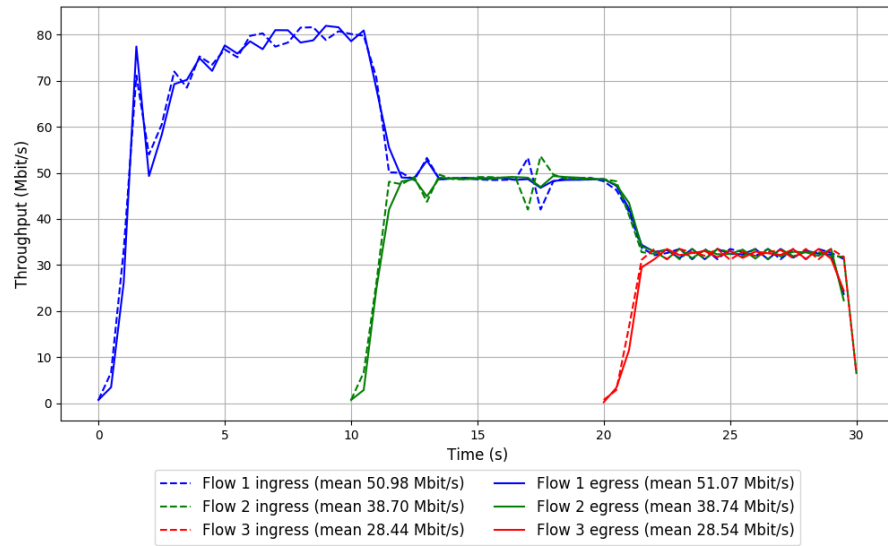
-- Flow 3:

Average throughput: 28.54 Mbit/s

95th percentile per-packet one-way delay: 121.719 ms

Loss rate: 3.89%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-03-27 16:44:17

End at: 2018-03-27 16:44:47

Local clock offset: -3.716 ms

Remote clock offset: 7.131 ms

Below is generated by plot.py at 2018-03-27 22:24:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.30 Mbit/s

95th percentile per-packet one-way delay: 117.310 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 51.19 Mbit/s

95th percentile per-packet one-way delay: 117.441 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 38.85 Mbit/s

95th percentile per-packet one-way delay: 117.381 ms

Loss rate: 1.03%

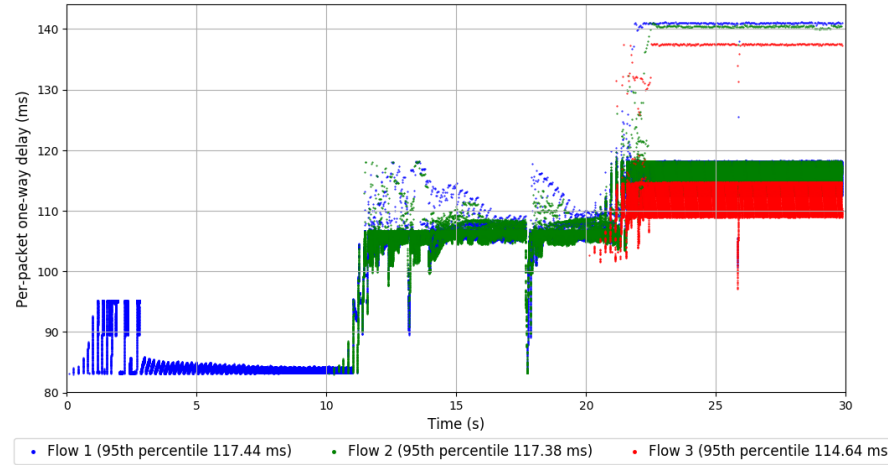
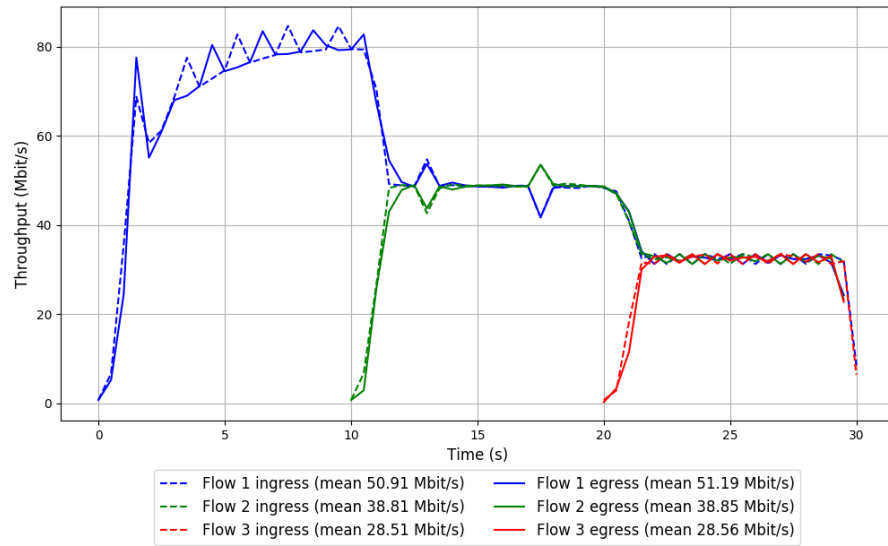
-- Flow 3:

Average throughput: 28.56 Mbit/s

95th percentile per-packet one-way delay: 114.642 ms

Loss rate: 3.84%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-03-27 17:08:23

End at: 2018-03-27 17:08:53

Local clock offset: -7.773 ms

Remote clock offset: 1.251 ms

Below is generated by plot.py at 2018-03-27 22:24:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.74 Mbit/s

95th percentile per-packet one-way delay: 121.272 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 49.96 Mbit/s

95th percentile per-packet one-way delay: 117.685 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 38.35 Mbit/s

95th percentile per-packet one-way delay: 121.372 ms

Loss rate: 1.34%

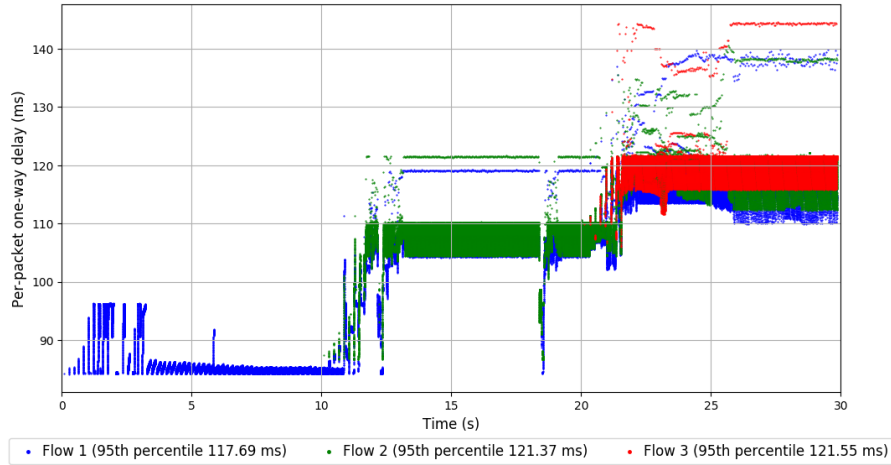
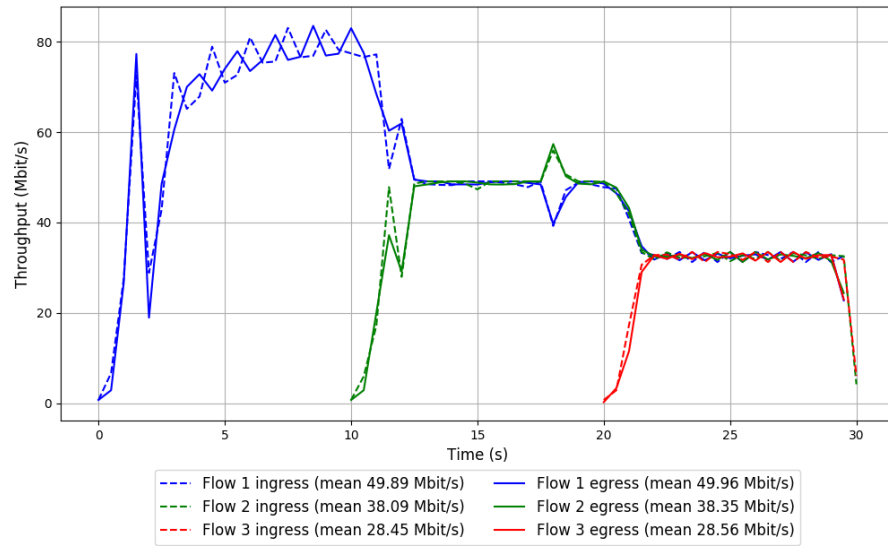
-- Flow 3:

Average throughput: 28.56 Mbit/s

95th percentile per-packet one-way delay: 121.546 ms

Loss rate: 3.85%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-03-27 17:32:21

End at: 2018-03-27 17:32:51

Local clock offset: -7.015 ms

Remote clock offset: 9.417 ms

Below is generated by plot.py at 2018-03-27 22:25:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.75 Mbit/s

95th percentile per-packet one-way delay: 112.262 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 47.86 Mbit/s

95th percentile per-packet one-way delay: 112.576 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 38.49 Mbit/s

95th percentile per-packet one-way delay: 111.513 ms

Loss rate: 1.45%

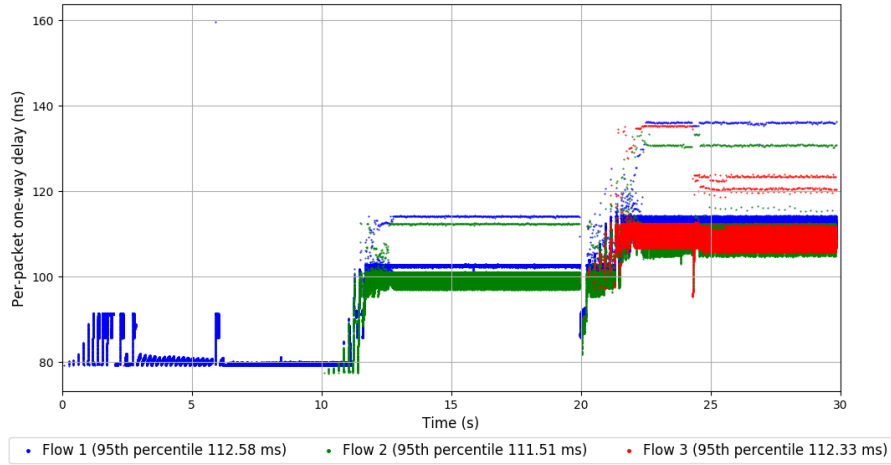
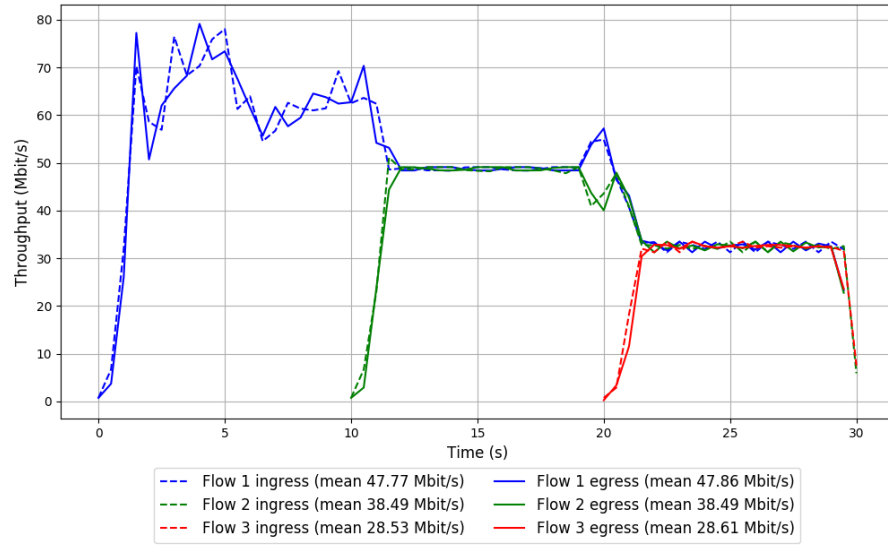
-- Flow 3:

Average throughput: 28.61 Mbit/s

95th percentile per-packet one-way delay: 112.330 ms

Loss rate: 3.86%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-03-27 17:56:14

End at: 2018-03-27 17:56:44

Local clock offset: -5.462 ms

Remote clock offset: 3.046 ms

Below is generated by plot.py at 2018-03-27 22:25:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.07 Mbit/s

95th percentile per-packet one-way delay: 120.639 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 51.30 Mbit/s

95th percentile per-packet one-way delay: 118.494 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 38.44 Mbit/s

95th percentile per-packet one-way delay: 119.806 ms

Loss rate: 1.30%

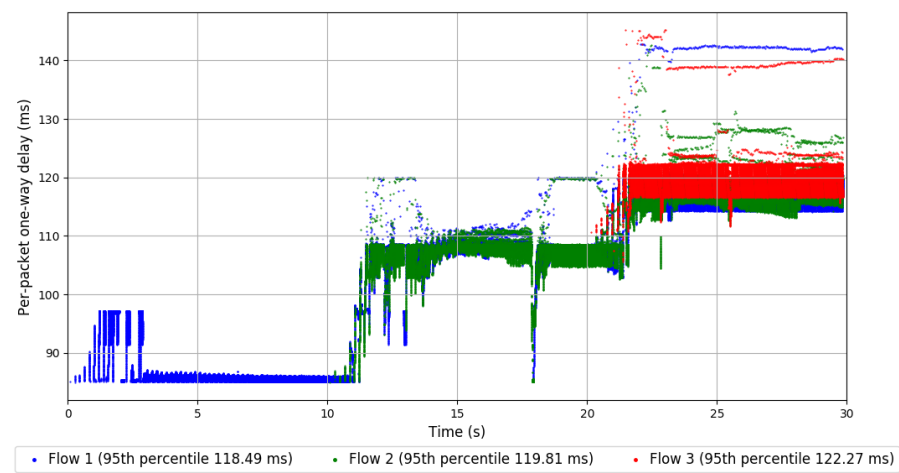
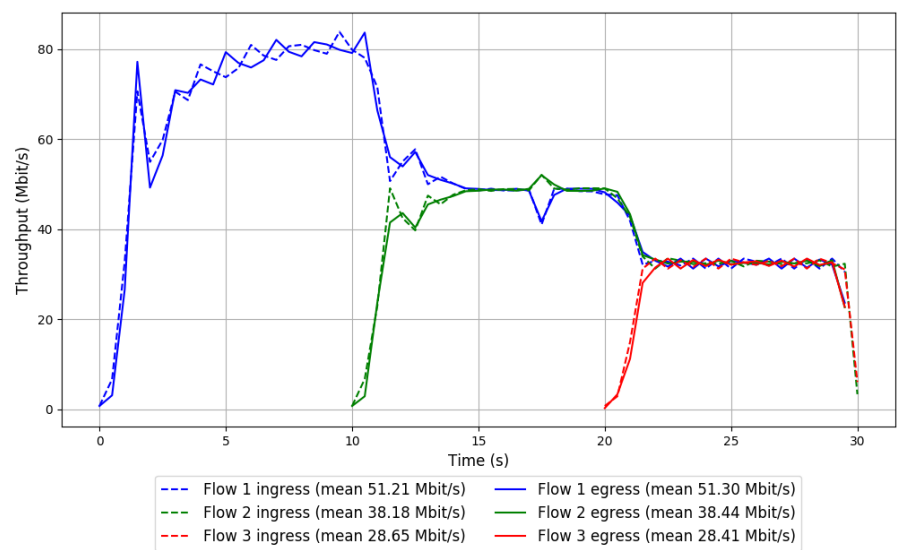
-- Flow 3:

Average throughput: 28.41 Mbit/s

95th percentile per-packet one-way delay: 122.266 ms

Loss rate: 3.88%

Run 10: Report of TCP Cubic — Data Link

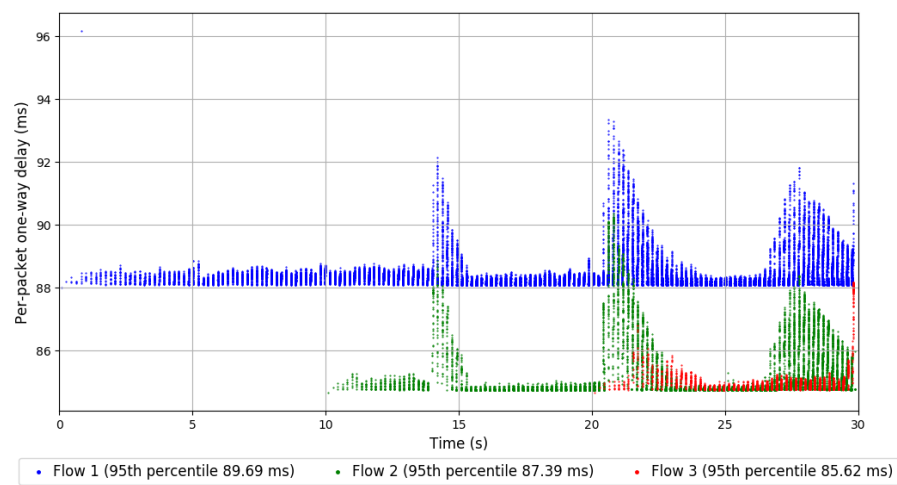
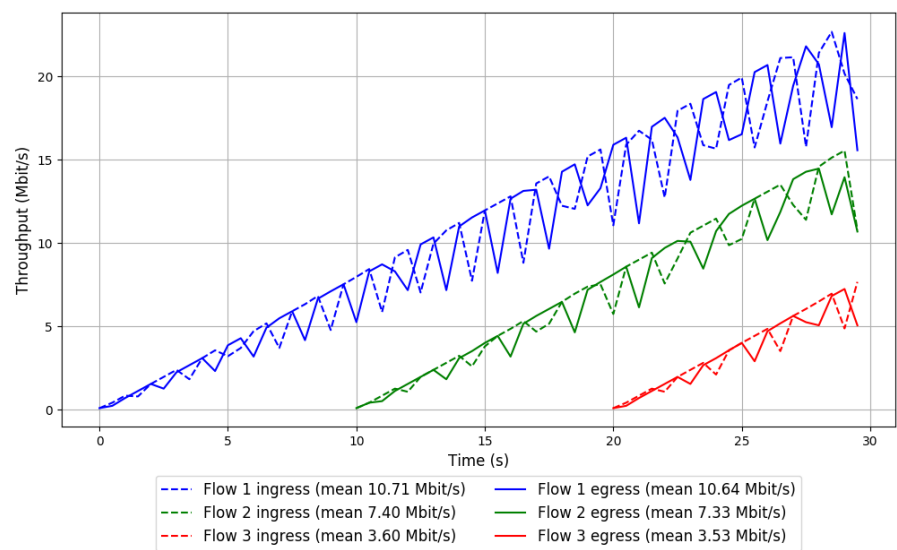


```
Run 1: Statistics of LEDBAT

Start at: 2018-03-27 14:30:50
End at: 2018-03-27 14:31:20
Local clock offset: -7.308 ms
Remote clock offset: 3.215 ms

# Below is generated by plot.py at 2018-03-27 22:25:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.63 Mbit/s
95th percentile per-packet one-way delay: 89.307 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 10.64 Mbit/s
95th percentile per-packet one-way delay: 89.690 ms
Loss rate: 1.23%
-- Flow 2:
Average throughput: 7.33 Mbit/s
95th percentile per-packet one-way delay: 87.386 ms
Loss rate: 1.80%
-- Flow 3:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 85.622 ms
Loss rate: 3.66%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-03-27 14:54:53

End at: 2018-03-27 14:55:23

Local clock offset: -8.14 ms

Remote clock offset: 9.462 ms

Below is generated by plot.py at 2018-03-27 22:25:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.96 Mbit/s

95th percentile per-packet one-way delay: 83.359 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 11.16 Mbit/s

95th percentile per-packet one-way delay: 82.902 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 7.24 Mbit/s

95th percentile per-packet one-way delay: 83.205 ms

Loss rate: 1.83%

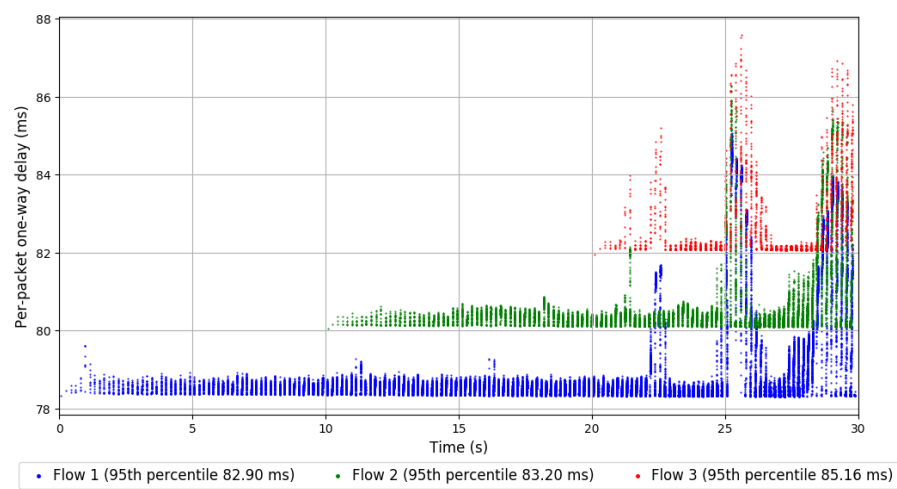
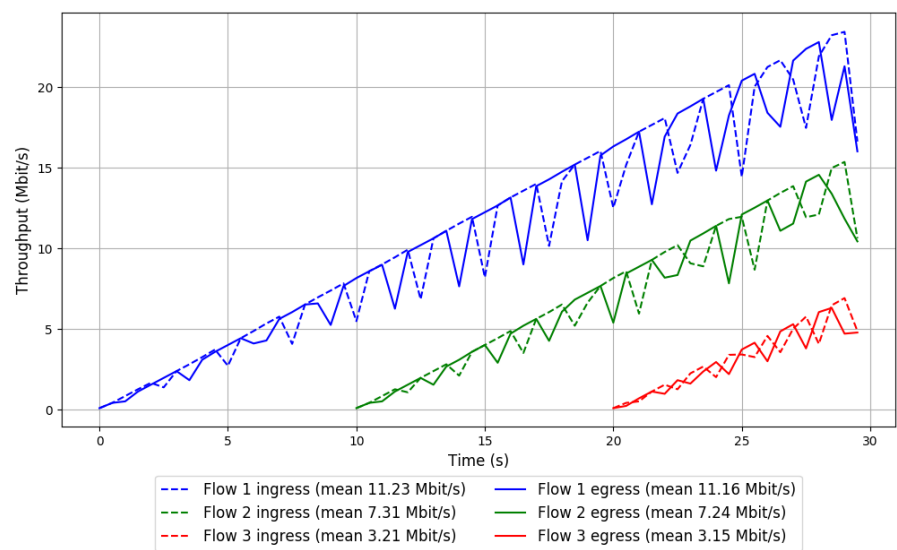
-- Flow 3:

Average throughput: 3.15 Mbit/s

95th percentile per-packet one-way delay: 85.157 ms

Loss rate: 3.89%

Run 2: Report of LEDBAT — Data Link

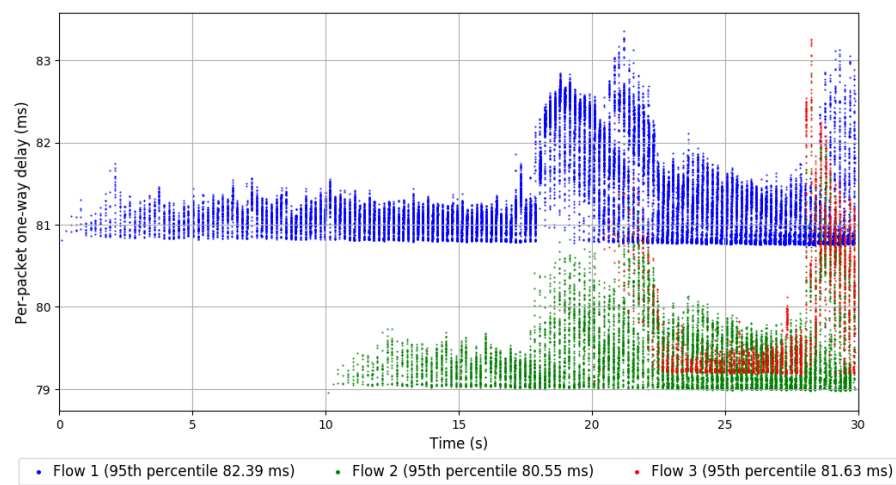
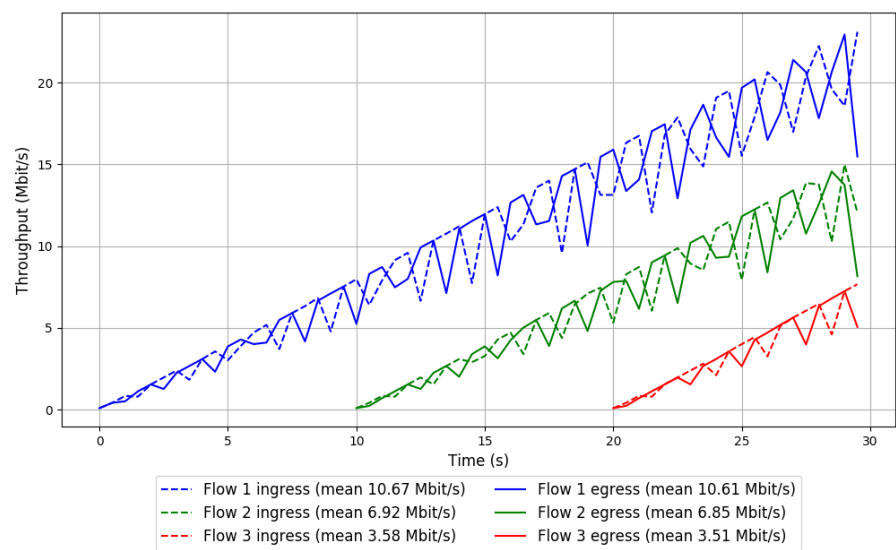


Run 3: Statistics of LEDBAT

Start at: 2018-03-27 15:18:58
End at: 2018-03-27 15:19:28
Local clock offset: -2.484 ms
Remote clock offset: 8.503 ms

Below is generated by plot.py at 2018-03-27 22:25:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 16.30 Mbit/s
95th percentile per-packet one-way delay: 82.256 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 10.61 Mbit/s
95th percentile per-packet one-way delay: 82.389 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 6.85 Mbit/s
95th percentile per-packet one-way delay: 80.551 ms
Loss rate: 1.86%
-- Flow 3:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 81.631 ms
Loss rate: 3.66%

Run 3: Report of LEDBAT — Data Link

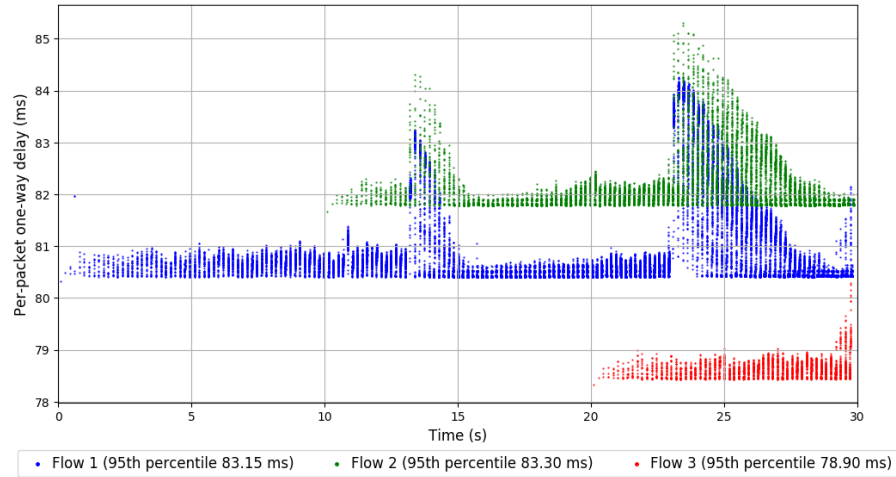
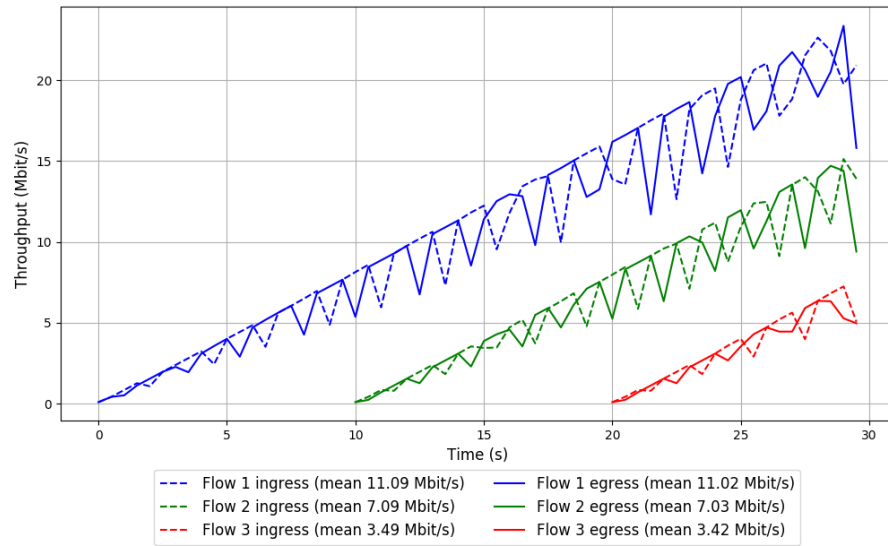


Run 4: Statistics of LEDBAT

Start at: 2018-03-27 15:42:53
End at: 2018-03-27 15:43:23
Local clock offset: -1.479 ms
Remote clock offset: 8.494 ms

Below is generated by plot.py at 2018-03-27 22:25:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 16.77 Mbit/s
95th percentile per-packet one-way delay: 83.151 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 11.02 Mbit/s
95th percentile per-packet one-way delay: 83.149 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 7.03 Mbit/s
95th percentile per-packet one-way delay: 83.298 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 78.904 ms
Loss rate: 3.73%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-03-27 16:06:50

End at: 2018-03-27 16:07:20

Local clock offset: -0.785 ms

Remote clock offset: 8.416 ms

Below is generated by plot.py at 2018-03-27 22:25:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.46 Mbit/s

95th percentile per-packet one-way delay: 81.862 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 10.77 Mbit/s

95th percentile per-packet one-way delay: 81.626 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 6.97 Mbit/s

95th percentile per-packet one-way delay: 82.550 ms

Loss rate: 1.85%

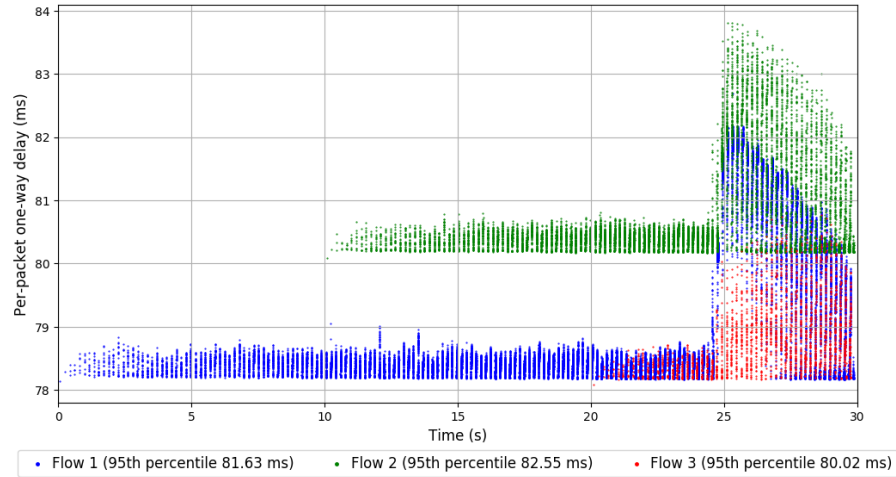
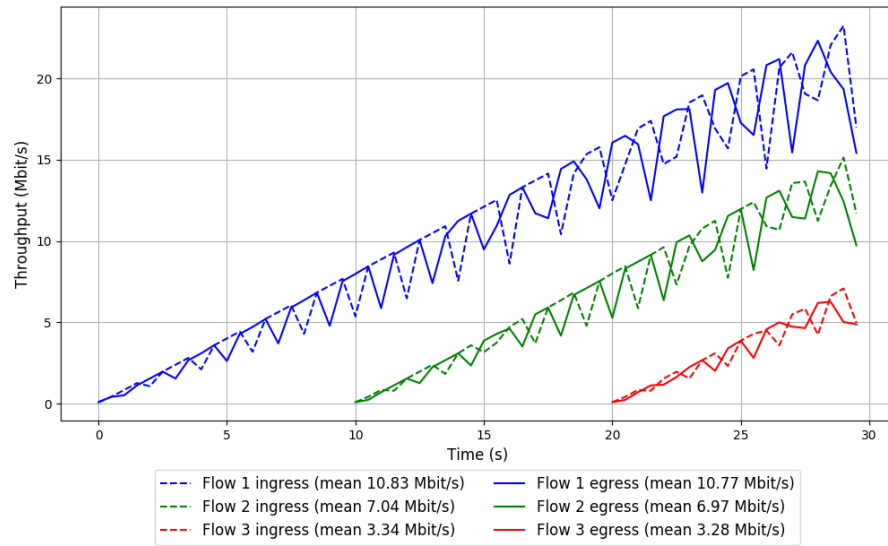
-- Flow 3:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 80.018 ms

Loss rate: 3.81%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-03-27 16:30:57

End at: 2018-03-27 16:31:27

Local clock offset: -2.794 ms

Remote clock offset: 2.166 ms

Below is generated by plot.py at 2018-03-27 22:25:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.01 Mbit/s

95th percentile per-packet one-way delay: 88.650 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 11.30 Mbit/s

95th percentile per-packet one-way delay: 86.803 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 6.98 Mbit/s

95th percentile per-packet one-way delay: 88.308 ms

Loss rate: 1.86%

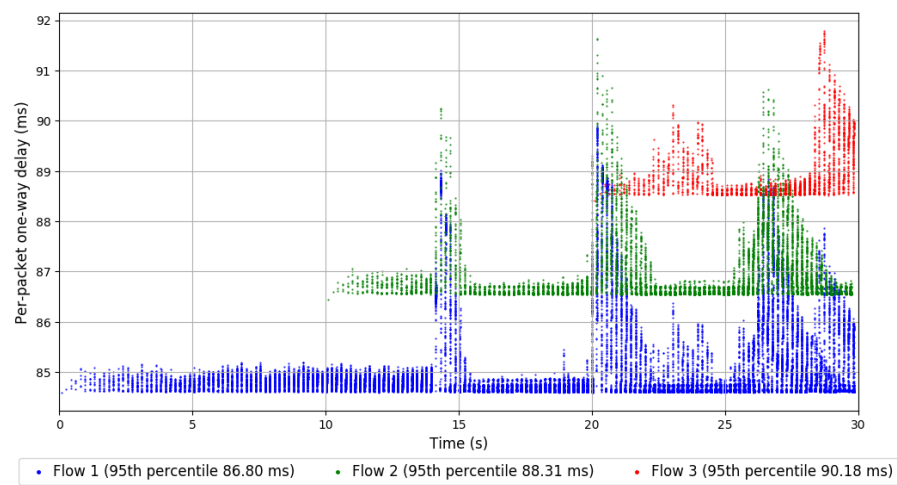
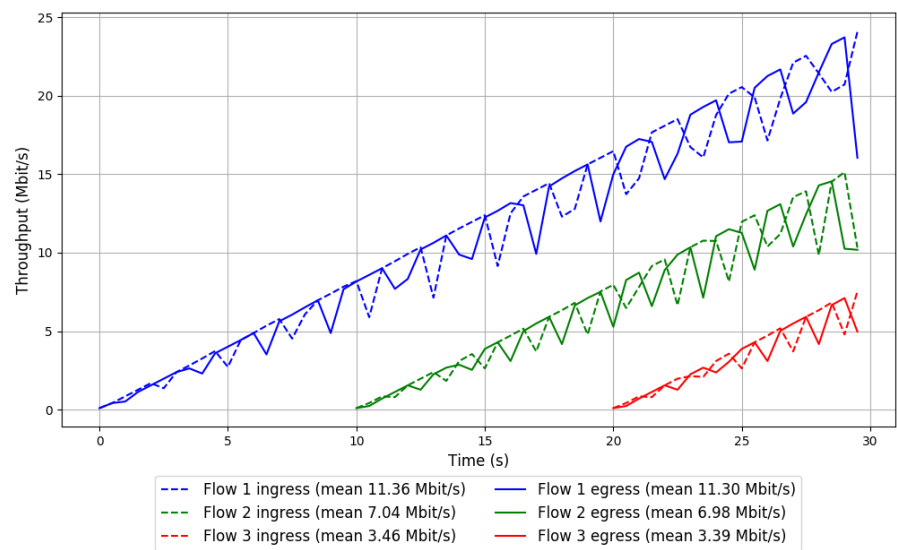
-- Flow 3:

Average throughput: 3.39 Mbit/s

95th percentile per-packet one-way delay: 90.182 ms

Loss rate: 3.73%

Run 6: Report of LEDBAT — Data Link

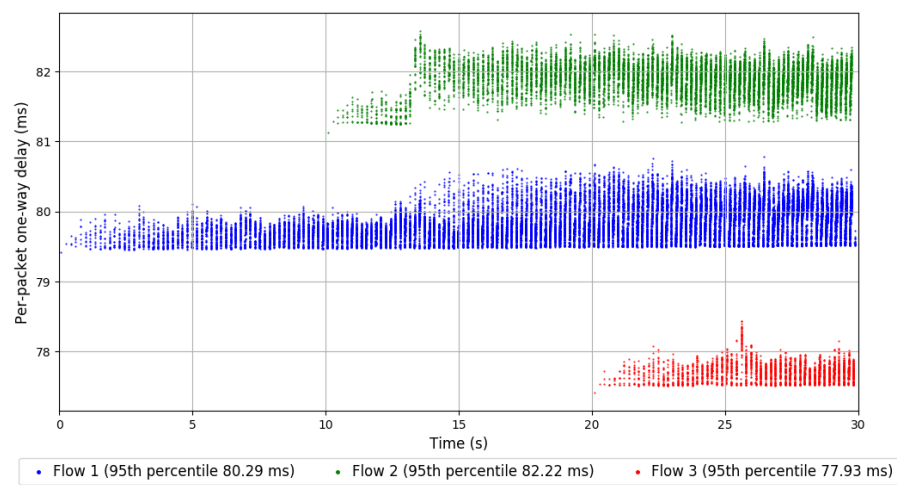
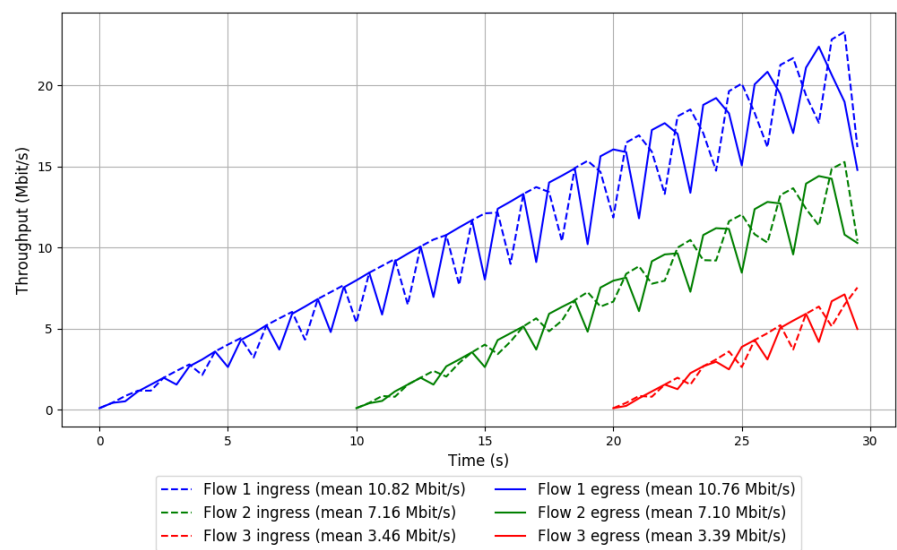


Run 7: Statistics of LEDBAT

Start at: 2018-03-27 16:55:10
End at: 2018-03-27 16:55:40
Local clock offset: -6.477 ms
Remote clock offset: 8.808 ms

Below is generated by plot.py at 2018-03-27 22:25:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 16.55 Mbit/s
95th percentile per-packet one-way delay: 82.091 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 10.76 Mbit/s
95th percentile per-packet one-way delay: 80.292 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 7.10 Mbit/s
95th percentile per-packet one-way delay: 82.220 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 3.39 Mbit/s
95th percentile per-packet one-way delay: 77.932 ms
Loss rate: 3.73%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-03-27 17:19:13

End at: 2018-03-27 17:19:43

Local clock offset: -7.762 ms

Remote clock offset: 1.872 ms

Below is generated by plot.py at 2018-03-27 22:25:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.68 Mbit/s

95th percentile per-packet one-way delay: 88.045 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 10.75 Mbit/s

95th percentile per-packet one-way delay: 87.176 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 7.24 Mbit/s

95th percentile per-packet one-way delay: 89.578 ms

Loss rate: 1.83%

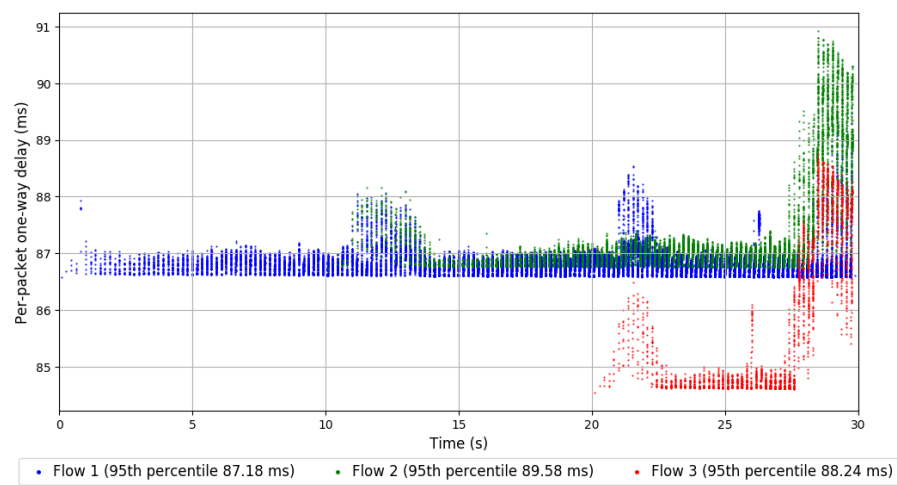
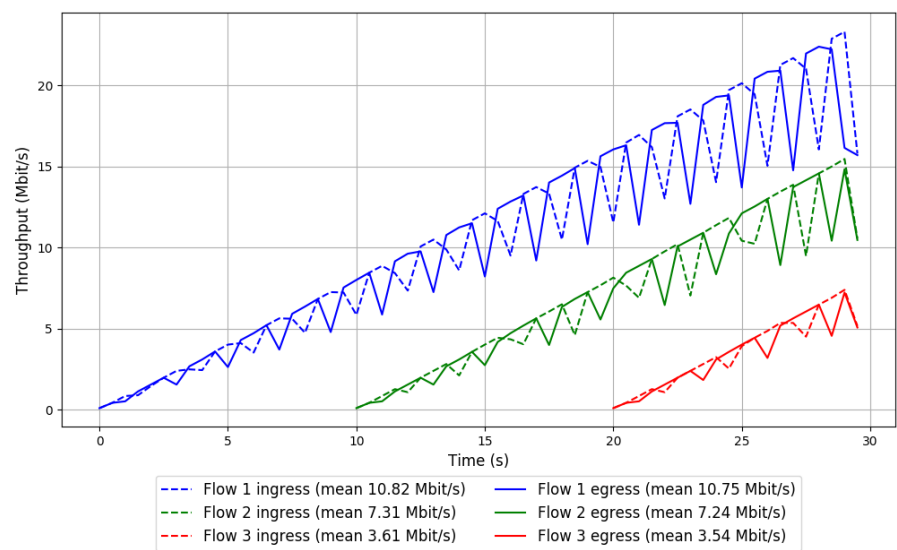
-- Flow 3:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 88.242 ms

Loss rate: 3.67%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-03-27 17:43:06

End at: 2018-03-27 17:43:36

Local clock offset: -6.952 ms

Remote clock offset: 2.172 ms

Below is generated by plot.py at 2018-03-27 22:25:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.37 Mbit/s

95th percentile per-packet one-way delay: 90.612 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 10.62 Mbit/s

95th percentile per-packet one-way delay: 91.074 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 7.07 Mbit/s

95th percentile per-packet one-way delay: 90.475 ms

Loss rate: 1.84%

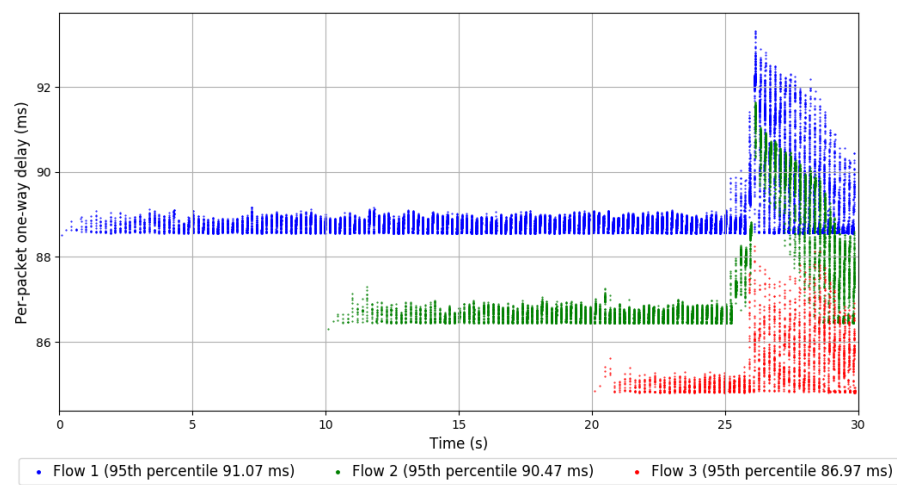
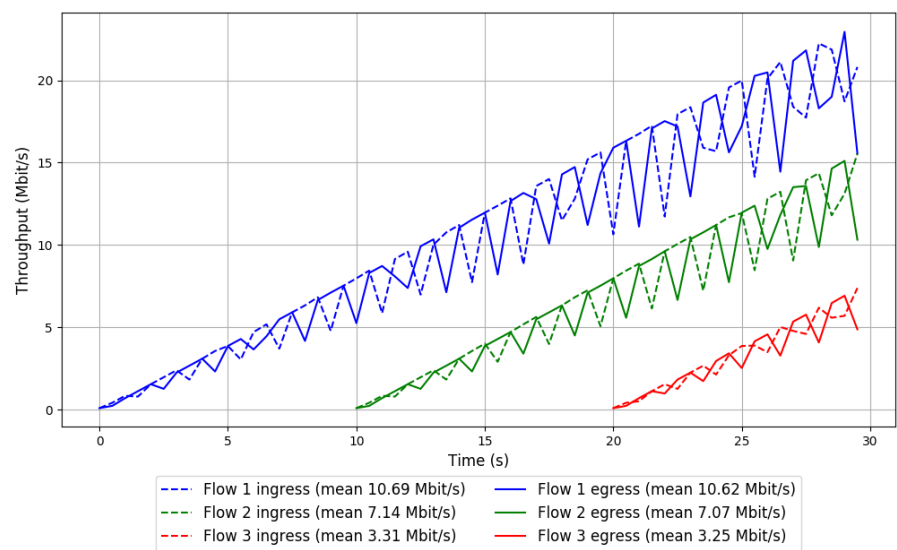
-- Flow 3:

Average throughput: 3.25 Mbit/s

95th percentile per-packet one-way delay: 86.974 ms

Loss rate: 3.81%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-03-27 18:07:05

End at: 2018-03-27 18:07:35

Local clock offset: -4.112 ms

Remote clock offset: 7.445 ms

Below is generated by plot.py at 2018-03-27 22:25:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.60 Mbit/s

95th percentile per-packet one-way delay: 83.628 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 10.80 Mbit/s

95th percentile per-packet one-way delay: 83.525 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 7.11 Mbit/s

95th percentile per-packet one-way delay: 83.717 ms

Loss rate: 1.85%

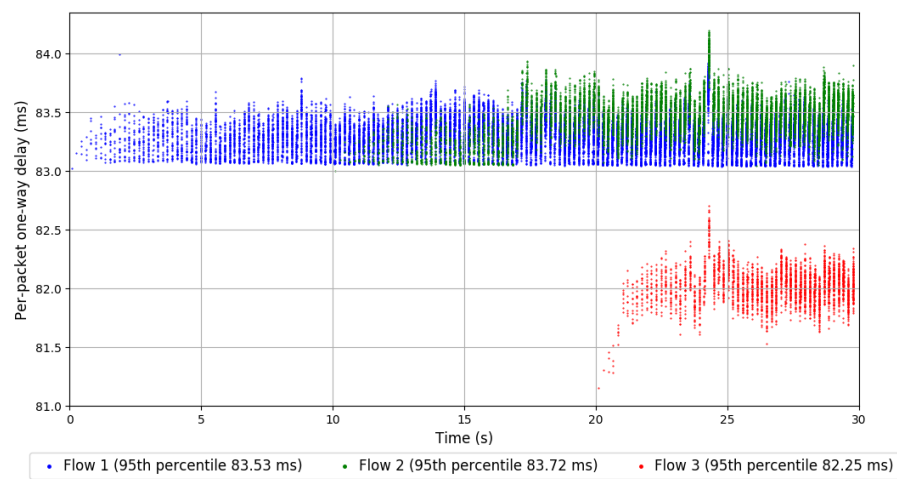
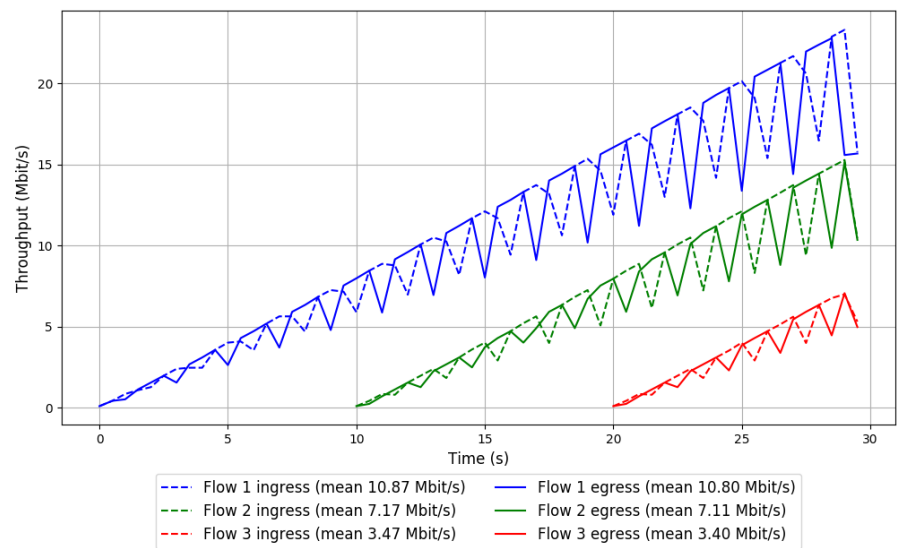
-- Flow 3:

Average throughput: 3.40 Mbit/s

95th percentile per-packet one-way delay: 82.251 ms

Loss rate: 3.75%

Run 10: Report of LEDBAT — Data Link

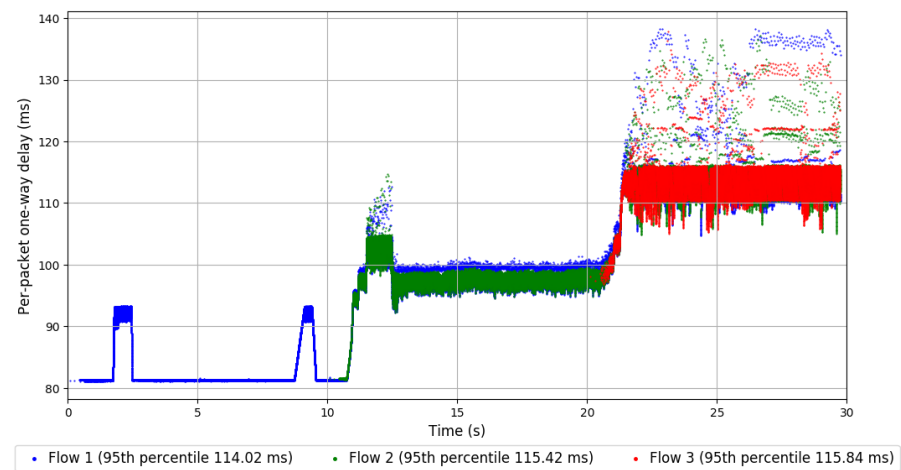
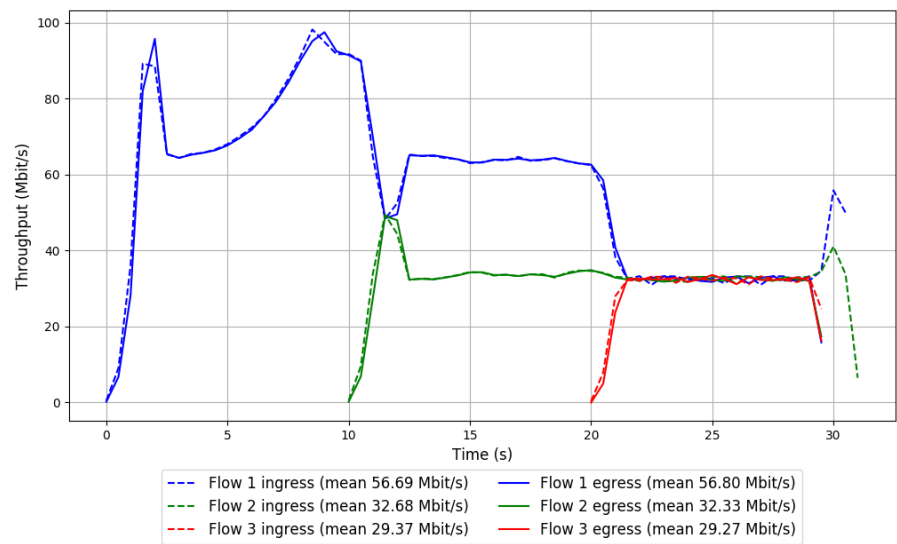


```
Run 1: Statistics of PCC

Start at: 2018-03-27 14:38:41
End at: 2018-03-27 14:39:11
Local clock offset: -7.502 ms
Remote clock offset: 8.718 ms

# Below is generated by plot.py at 2018-03-27 22:25:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.73 Mbit/s
95th percentile per-packet one-way delay: 115.086 ms
Loss rate: 4.65%
-- Flow 1:
Average throughput: 56.80 Mbit/s
95th percentile per-packet one-way delay: 114.021 ms
Loss rate: 3.75%
-- Flow 2:
Average throughput: 32.33 Mbit/s
95th percentile per-packet one-way delay: 115.424 ms
Loss rate: 7.75%
-- Flow 3:
Average throughput: 29.27 Mbit/s
95th percentile per-packet one-way delay: 115.841 ms
Loss rate: 2.74%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-03-27 15:02:46

End at: 2018-03-27 15:03:16

Local clock offset: -6.551 ms

Remote clock offset: 9.491 ms

Below is generated by plot.py at 2018-03-27 22:25:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.66 Mbit/s

95th percentile per-packet one-way delay: 111.440 ms

Loss rate: 3.80%

-- Flow 1:

Average throughput: 57.44 Mbit/s

95th percentile per-packet one-way delay: 110.009 ms

Loss rate: 3.38%

-- Flow 2:

Average throughput: 31.21 Mbit/s

95th percentile per-packet one-way delay: 112.052 ms

Loss rate: 5.38%

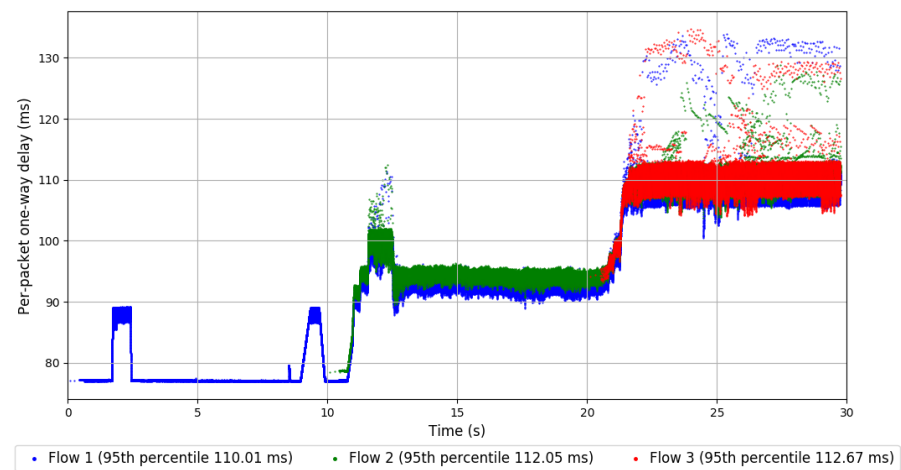
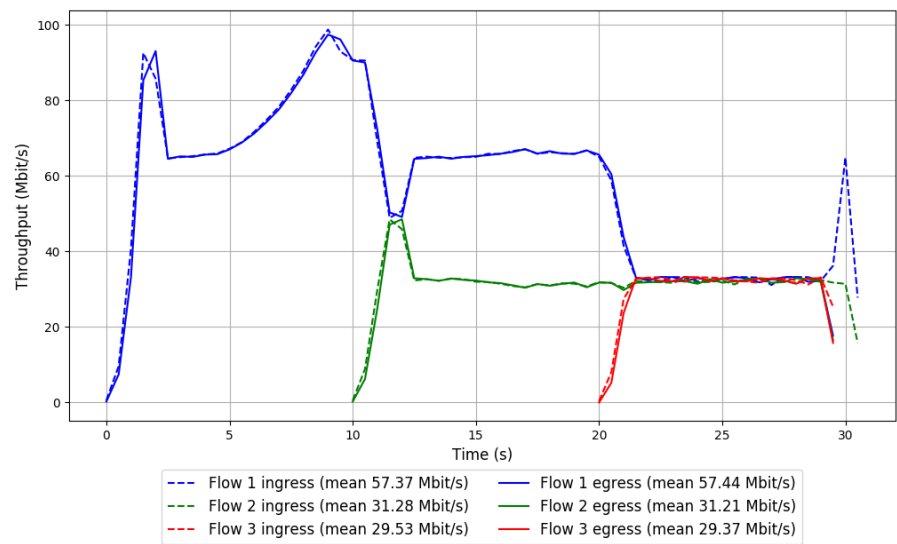
-- Flow 3:

Average throughput: 29.37 Mbit/s

95th percentile per-packet one-way delay: 112.669 ms

Loss rate: 2.82%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-03-27 15:26:51

End at: 2018-03-27 15:27:21

Local clock offset: -1.63 ms

Remote clock offset: 7.59 ms

Below is generated by plot.py at 2018-03-27 22:25:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.35 Mbit/s

95th percentile per-packet one-way delay: 78.582 ms

Loss rate: 2.62%

-- Flow 1:

Average throughput: 71.46 Mbit/s

95th percentile per-packet one-way delay: 78.487 ms

Loss rate: 2.57%

-- Flow 2:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 78.537 ms

Loss rate: 3.39%

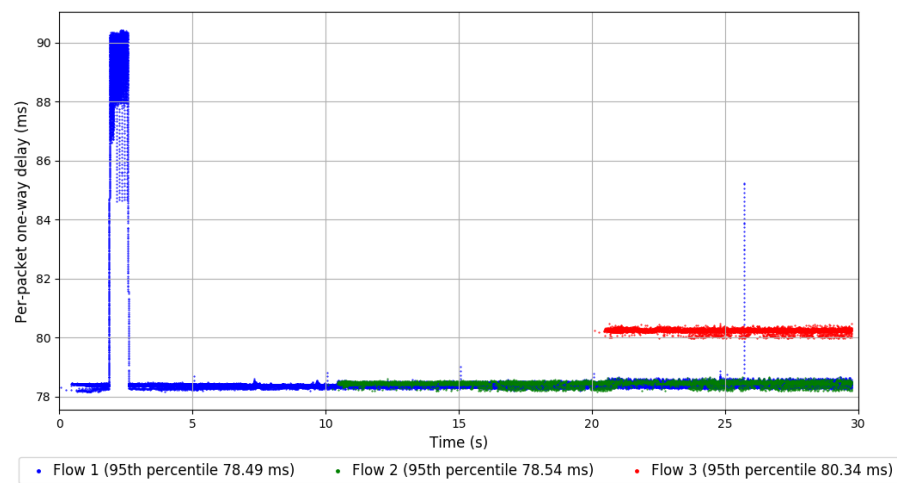
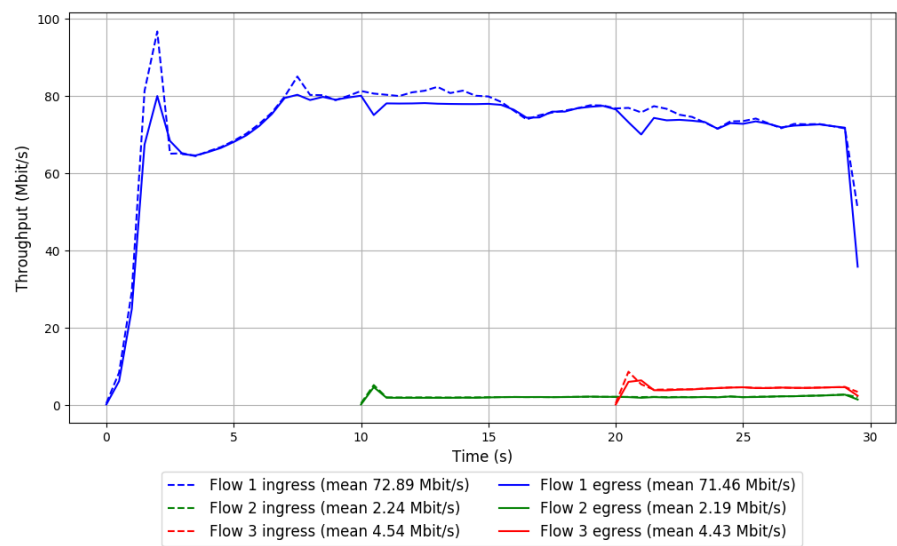
-- Flow 3:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 80.336 ms

Loss rate: 4.19%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-03-27 15:50:48

End at: 2018-03-27 15:51:18

Local clock offset: -1.386 ms

Remote clock offset: 2.248 ms

Below is generated by plot.py at 2018-03-27 22:26:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.73 Mbit/s

95th percentile per-packet one-way delay: 118.892 ms

Loss rate: 5.49%

-- Flow 1:

Average throughput: 57.38 Mbit/s

95th percentile per-packet one-way delay: 117.829 ms

Loss rate: 5.74%

-- Flow 2:

Average throughput: 31.52 Mbit/s

95th percentile per-packet one-way delay: 118.194 ms

Loss rate: 6.01%

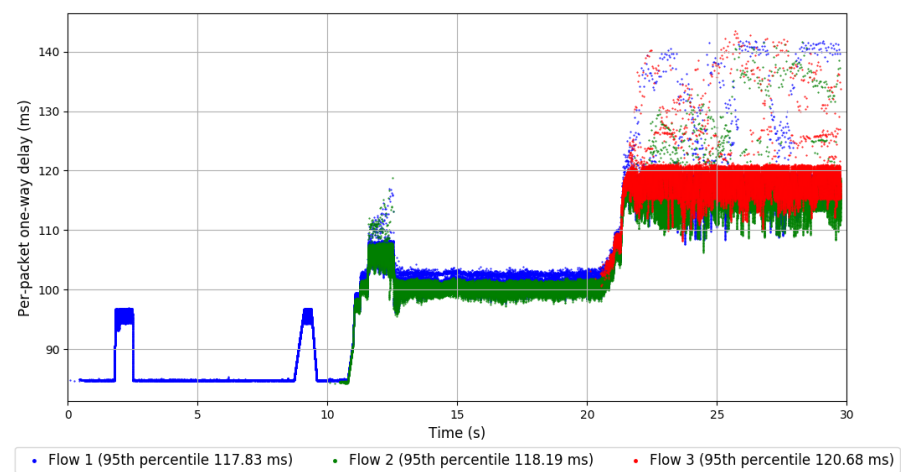
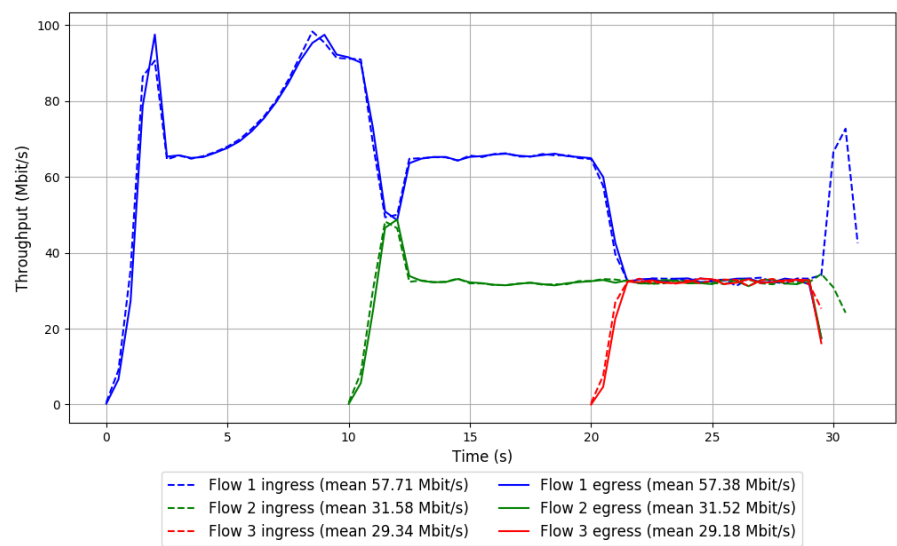
-- Flow 3:

Average throughput: 29.18 Mbit/s

95th percentile per-packet one-way delay: 120.683 ms

Loss rate: 2.75%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-03-27 16:14:49

End at: 2018-03-27 16:15:19

Local clock offset: -2.065 ms

Remote clock offset: 1.961 ms

Below is generated by plot.py at 2018-03-27 22:26:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.40 Mbit/s

95th percentile per-packet one-way delay: 120.120 ms

Loss rate: 4.64%

-- Flow 1:

Average throughput: 57.38 Mbit/s

95th percentile per-packet one-way delay: 119.523 ms

Loss rate: 4.20%

-- Flow 2:

Average throughput: 30.98 Mbit/s

95th percentile per-packet one-way delay: 120.688 ms

Loss rate: 1.24%

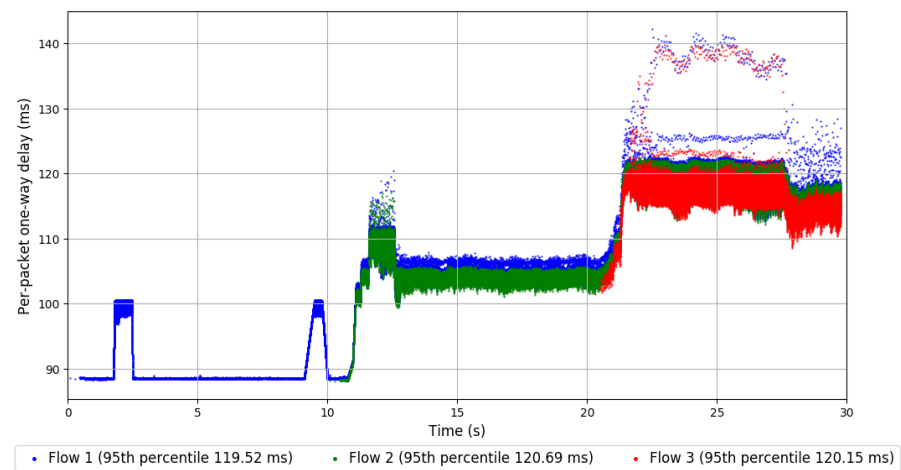
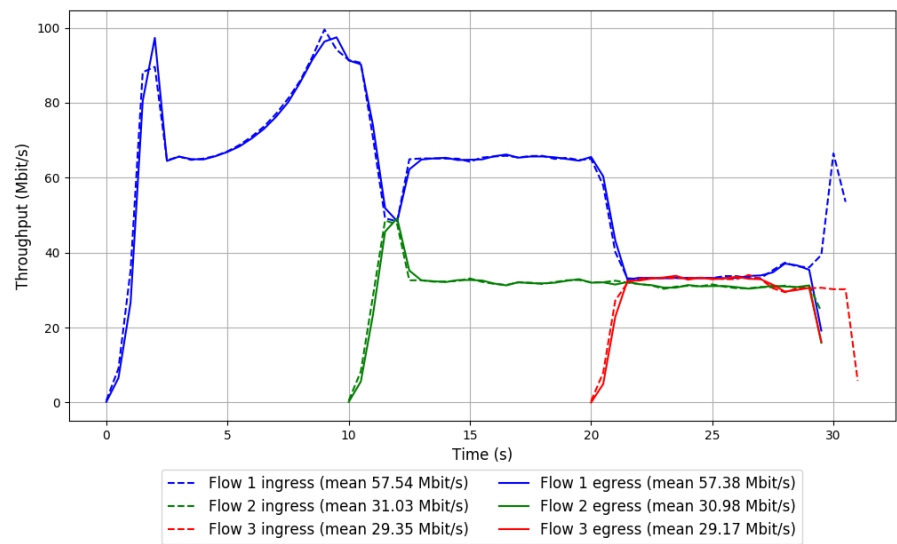
-- Flow 3:

Average throughput: 29.17 Mbit/s

95th percentile per-packet one-way delay: 120.146 ms

Loss rate: 13.49%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-03-27 16:38:49

End at: 2018-03-27 16:39:19

Local clock offset: -2.73 ms

Remote clock offset: 1.942 ms

Below is generated by plot.py at 2018-03-27 22:26:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.53 Mbit/s

95th percentile per-packet one-way delay: 88.687 ms

Loss rate: 3.77%

-- Flow 1:

Average throughput: 68.24 Mbit/s

95th percentile per-packet one-way delay: 88.693 ms

Loss rate: 3.60%

-- Flow 2:

Average throughput: 4.99 Mbit/s

95th percentile per-packet one-way delay: 84.953 ms

Loss rate: 4.52%

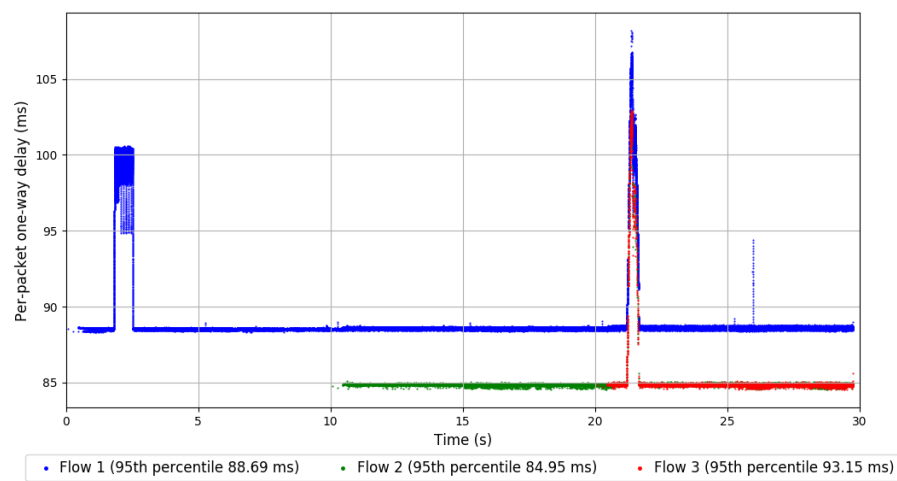
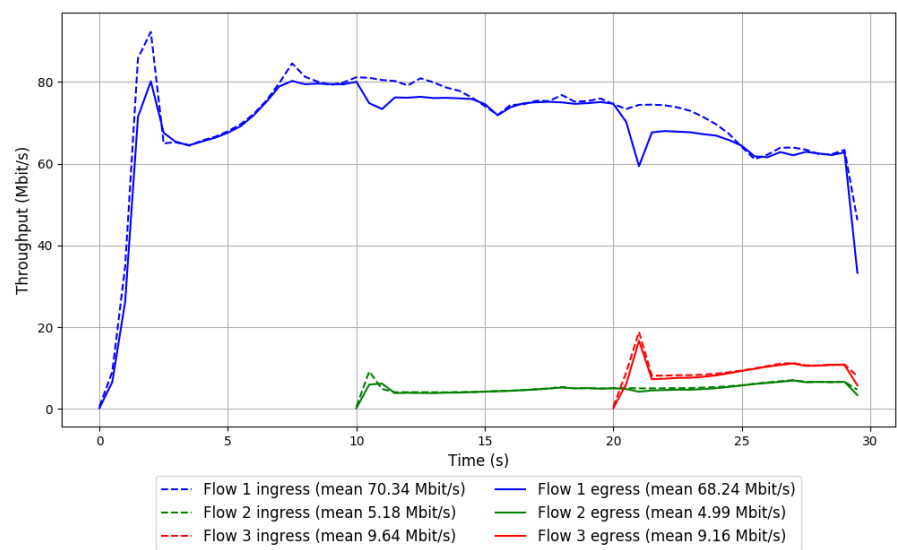
-- Flow 3:

Average throughput: 9.16 Mbit/s

95th percentile per-packet one-way delay: 93.152 ms

Loss rate: 6.76%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-03-27 17:03:05

End at: 2018-03-27 17:03:35

Local clock offset: -7.317 ms

Remote clock offset: 1.306 ms

Below is generated by plot.py at 2018-03-27 22:26:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.21 Mbit/s

95th percentile per-packet one-way delay: 120.825 ms

Loss rate: 2.16%

-- Flow 1:

Average throughput: 56.34 Mbit/s

95th percentile per-packet one-way delay: 121.436 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 32.19 Mbit/s

95th percentile per-packet one-way delay: 118.614 ms

Loss rate: 3.66%

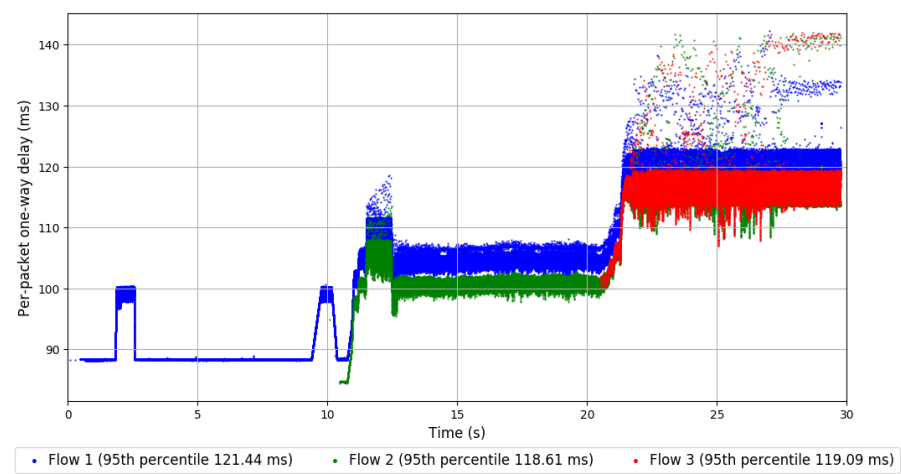
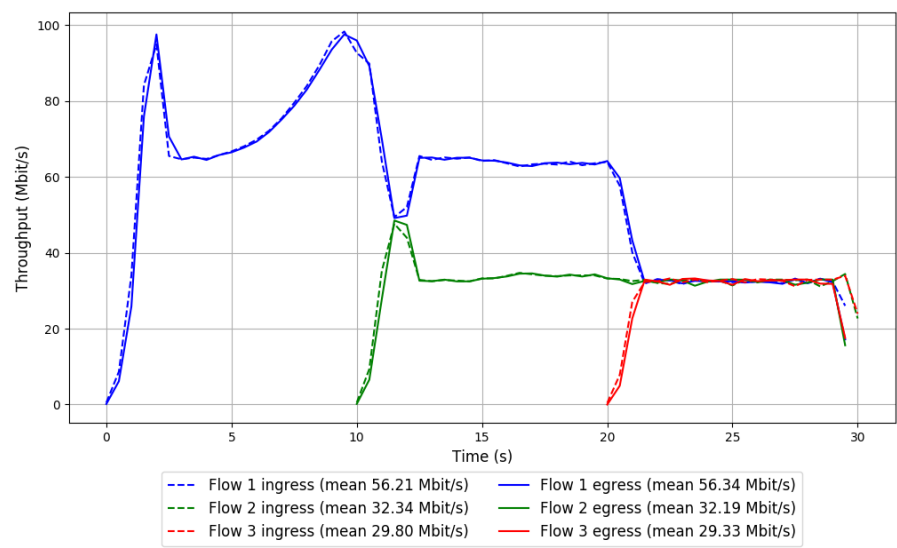
-- Flow 3:

Average throughput: 29.33 Mbit/s

95th percentile per-packet one-way delay: 119.095 ms

Loss rate: 7.99%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-03-27 17:27:06

End at: 2018-03-27 17:27:36

Local clock offset: -7.156 ms

Remote clock offset: 8.34 ms

Below is generated by plot.py at 2018-03-27 22:26:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.34 Mbit/s

95th percentile per-packet one-way delay: 112.311 ms

Loss rate: 1.84%

-- Flow 1:

Average throughput: 56.94 Mbit/s

95th percentile per-packet one-way delay: 110.118 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 31.43 Mbit/s

95th percentile per-packet one-way delay: 111.349 ms

Loss rate: 2.97%

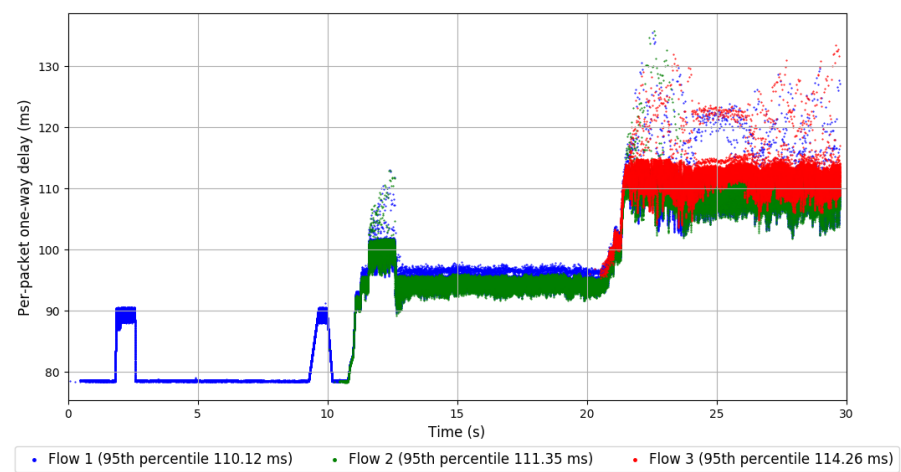
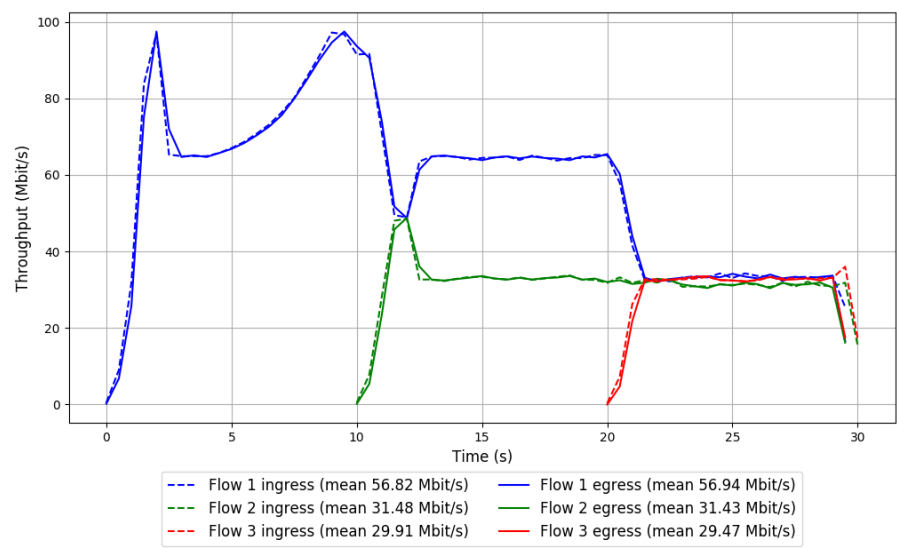
-- Flow 3:

Average throughput: 29.47 Mbit/s

95th percentile per-packet one-way delay: 114.256 ms

Loss rate: 7.10%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-03-27 17:50:56

End at: 2018-03-27 17:51:27

Local clock offset: -6.783 ms

Remote clock offset: 9.564 ms

Below is generated by plot.py at 2018-03-27 22:27:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.59 Mbit/s

95th percentile per-packet one-way delay: 113.397 ms

Loss rate: 4.65%

-- Flow 1:

Average throughput: 56.38 Mbit/s

95th percentile per-packet one-way delay: 113.968 ms

Loss rate: 3.78%

-- Flow 2:

Average throughput: 32.76 Mbit/s

95th percentile per-packet one-way delay: 112.684 ms

Loss rate: 7.61%

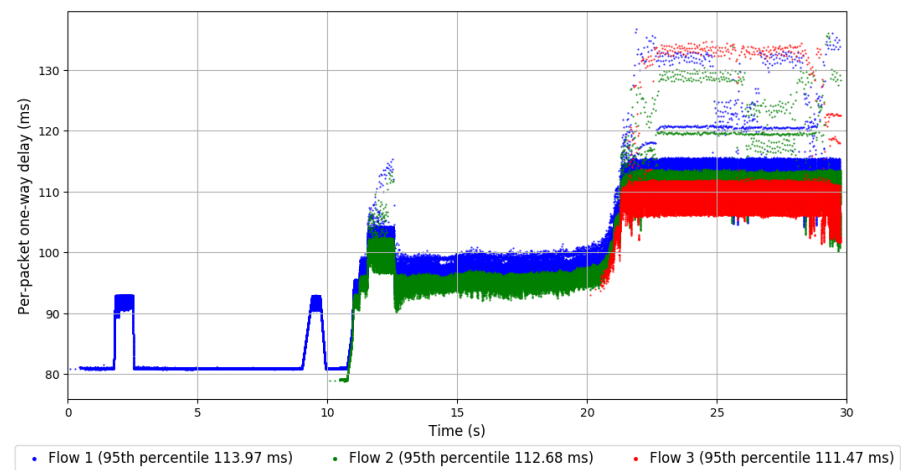
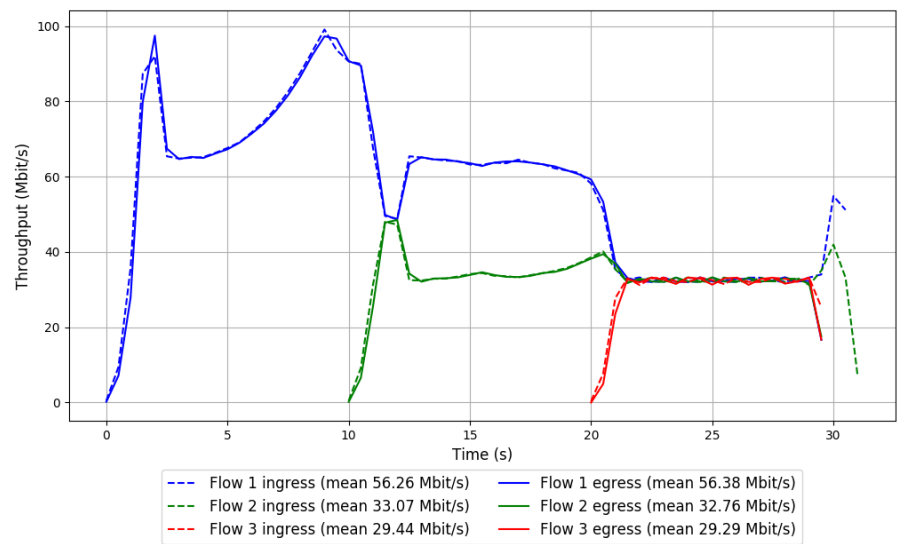
-- Flow 3:

Average throughput: 29.29 Mbit/s

95th percentile per-packet one-way delay: 111.475 ms

Loss rate: 2.81%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-03-27 18:14:59

End at: 2018-03-27 18:15:29

Local clock offset: -3.566 ms

Remote clock offset: 3.079 ms

Below is generated by plot.py at 2018-03-27 22:27:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.18 Mbit/s

95th percentile per-packet one-way delay: 120.507 ms

Loss rate: 5.05%

-- Flow 1:

Average throughput: 55.57 Mbit/s

95th percentile per-packet one-way delay: 120.225 ms

Loss rate: 4.53%

-- Flow 2:

Average throughput: 33.55 Mbit/s

95th percentile per-packet one-way delay: 119.838 ms

Loss rate: 1.54%

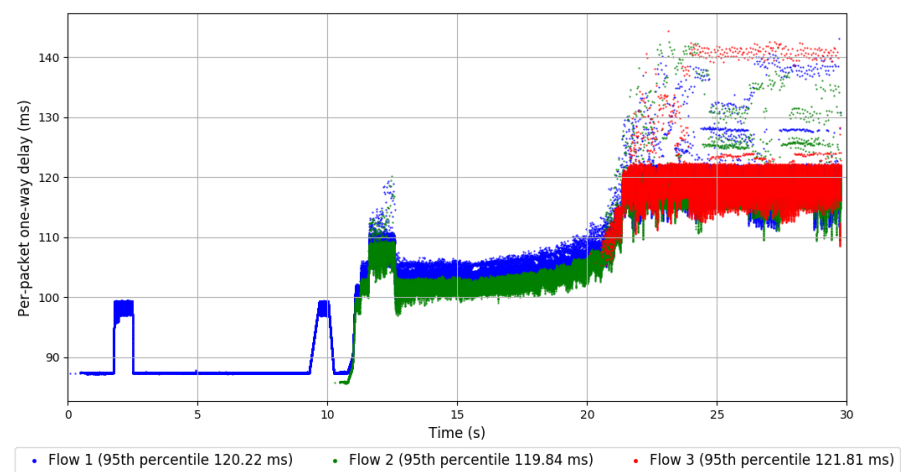
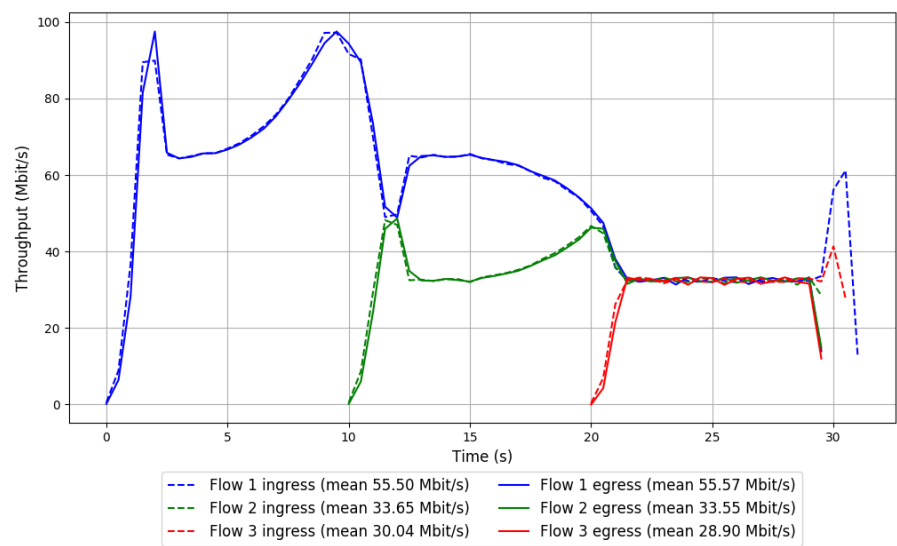
-- Flow 3:

Average throughput: 28.90 Mbit/s

95th percentile per-packet one-way delay: 121.805 ms

Loss rate: 14.97%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-03-27 14:21:28

End at: 2018-03-27 14:21:58

Local clock offset: -7.068 ms

Remote clock offset: 3.998 ms

Below is generated by plot.py at 2018-03-27 22:27:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.20 Mbit/s

95th percentile per-packet one-way delay: 118.767 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 39.57 Mbit/s

95th percentile per-packet one-way delay: 119.583 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 28.69 Mbit/s

95th percentile per-packet one-way delay: 118.499 ms

Loss rate: 1.21%

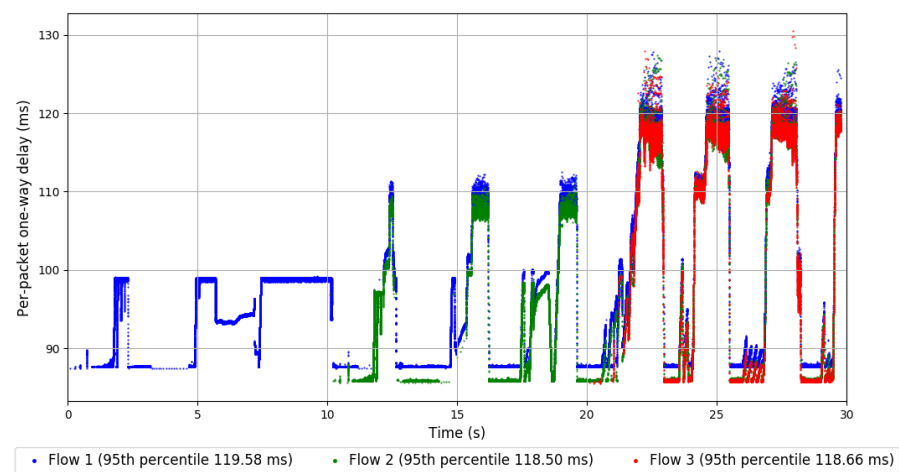
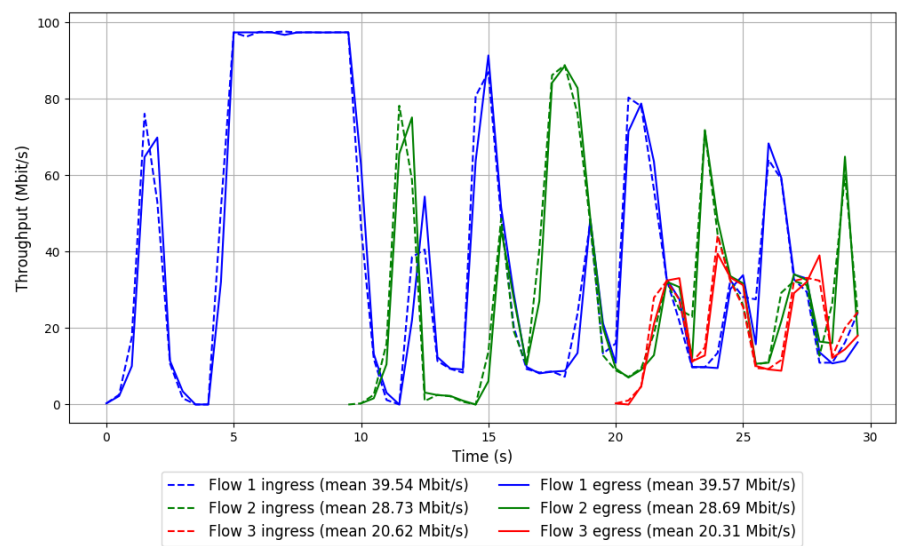
-- Flow 3:

Average throughput: 20.31 Mbit/s

95th percentile per-packet one-way delay: 118.658 ms

Loss rate: 3.50%

Run 1: Report of QUIC Cubic — Data Link

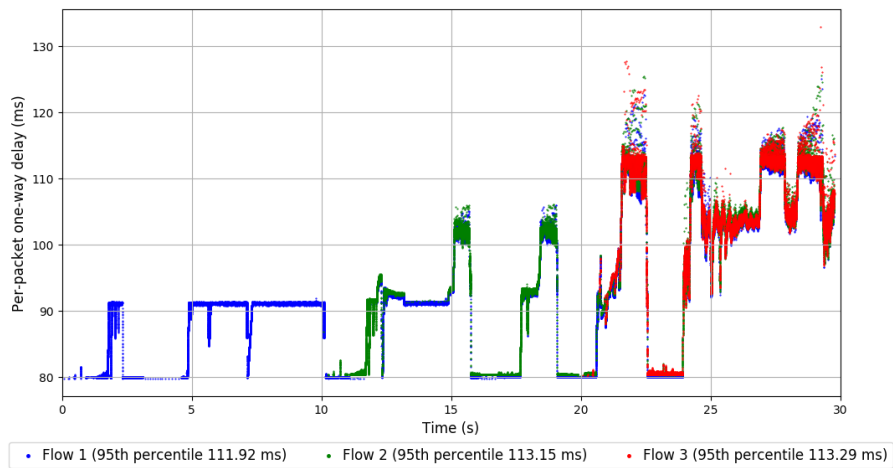
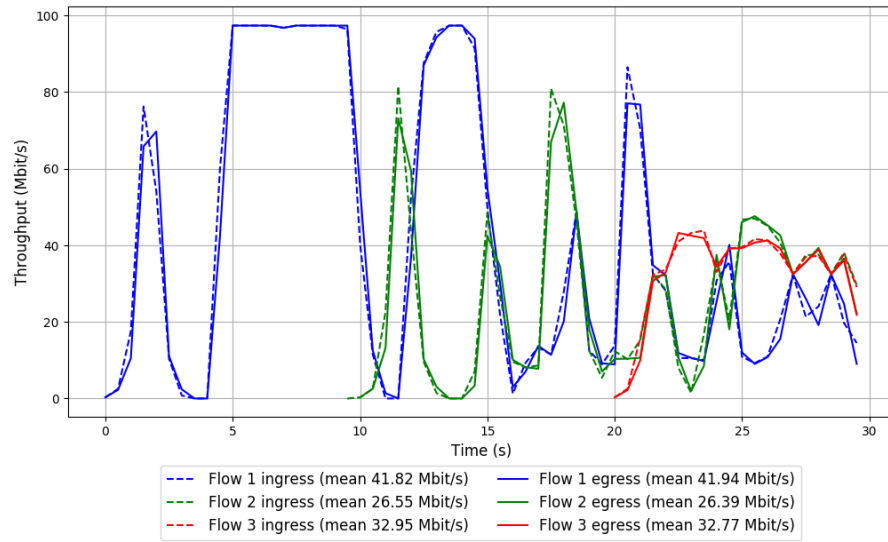


Run 2: Statistics of QUIC Cubic

Start at: 2018-03-27 14:45:16
End at: 2018-03-27 14:45:46
Local clock offset: -7.811 ms
Remote clock offset: 10.089 ms

Below is generated by plot.py at 2018-03-27 22:27:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 70.12 Mbit/s
95th percentile per-packet one-way delay: 112.890 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 41.94 Mbit/s
95th percentile per-packet one-way delay: 111.925 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 26.39 Mbit/s
95th percentile per-packet one-way delay: 113.148 ms
Loss rate: 1.56%
-- Flow 3:
Average throughput: 32.77 Mbit/s
95th percentile per-packet one-way delay: 113.287 ms
Loss rate: 2.46%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-03-27 15:09:31

End at: 2018-03-27 15:10:01

Local clock offset: -4.169 ms

Remote clock offset: 2.538 ms

Below is generated by plot.py at 2018-03-27 22:27:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.43 Mbit/s

95th percentile per-packet one-way delay: 116.034 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 38.46 Mbit/s

95th percentile per-packet one-way delay: 117.112 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 30.74 Mbit/s

95th percentile per-packet one-way delay: 115.584 ms

Loss rate: 1.12%

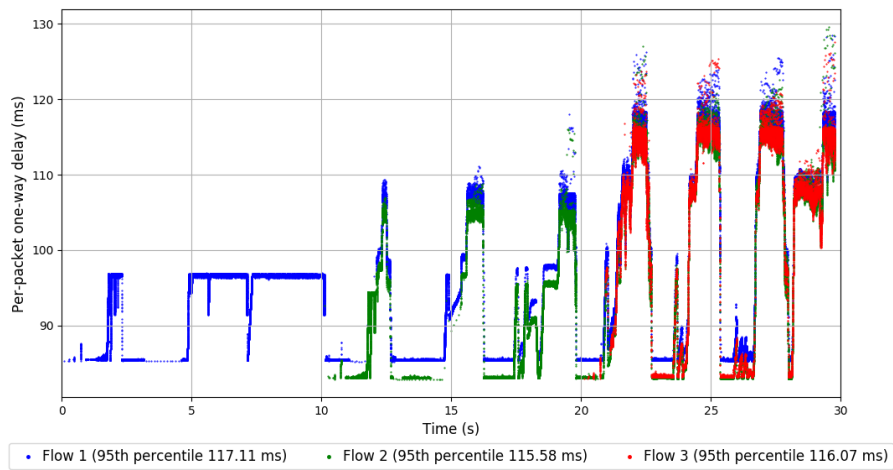
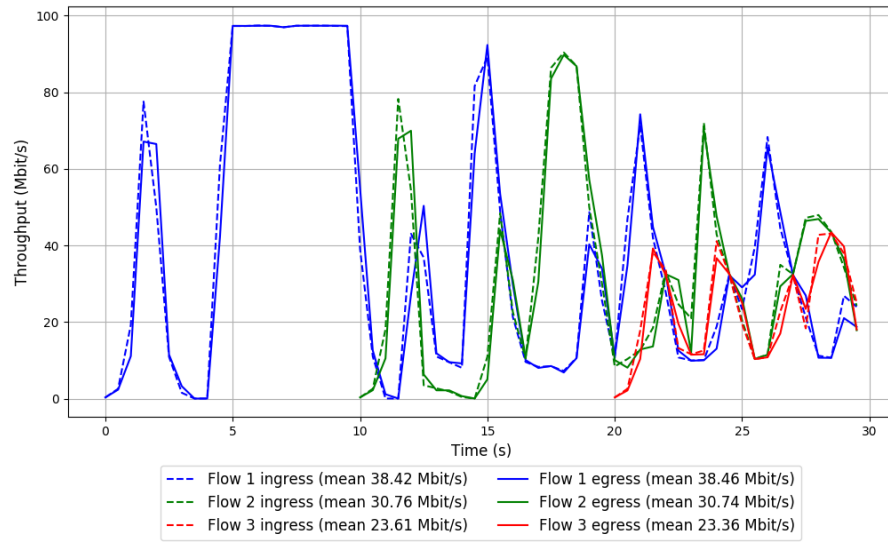
-- Flow 3:

Average throughput: 23.36 Mbit/s

95th percentile per-packet one-way delay: 116.072 ms

Loss rate: 3.04%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-03-27 15:33:26

End at: 2018-03-27 15:33:56

Local clock offset: -1.099 ms

Remote clock offset: 7.156 ms

Below is generated by plot.py at 2018-03-27 22:27:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.35 Mbit/s

95th percentile per-packet one-way delay: 114.016 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 39.67 Mbit/s

95th percentile per-packet one-way delay: 113.766 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 33.14 Mbit/s

95th percentile per-packet one-way delay: 113.928 ms

Loss rate: 1.06%

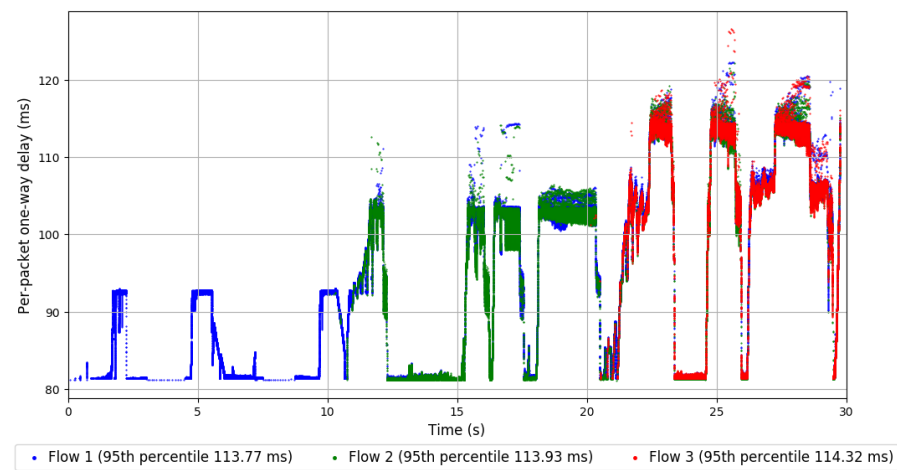
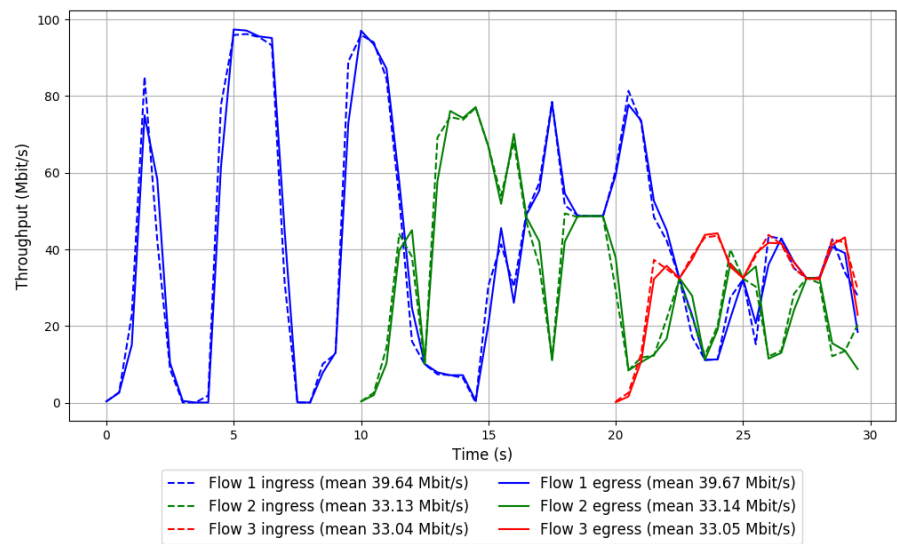
-- Flow 3:

Average throughput: 33.05 Mbit/s

95th percentile per-packet one-way delay: 114.322 ms

Loss rate: 2.17%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-03-27 15:57:24

End at: 2018-03-27 15:57:54

Local clock offset: -1.164 ms

Remote clock offset: 3.303 ms

Below is generated by plot.py at 2018-03-27 22:27:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 47.05 Mbit/s

95th percentile per-packet one-way delay: 98.539 ms

Loss rate: 3.12%

-- Flow 1:

Average throughput: 23.57 Mbit/s

95th percentile per-packet one-way delay: 98.581 ms

Loss rate: 2.92%

-- Flow 2:

Average throughput: 23.58 Mbit/s

95th percentile per-packet one-way delay: 98.876 ms

Loss rate: 3.61%

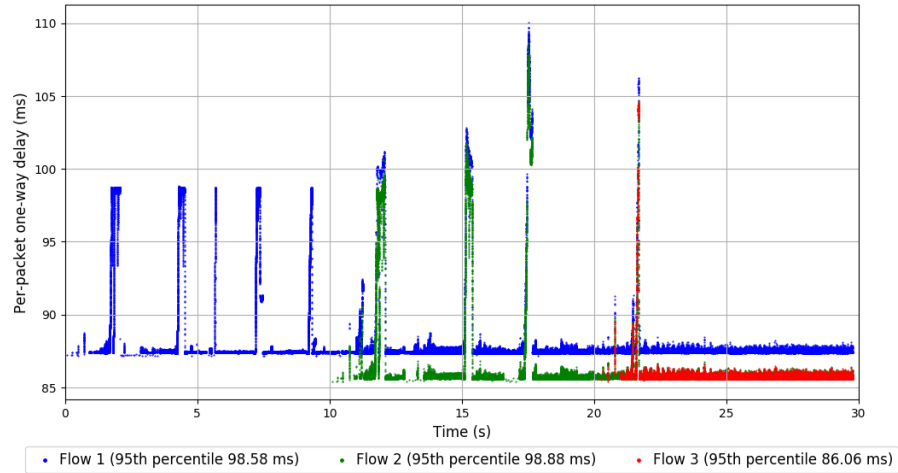
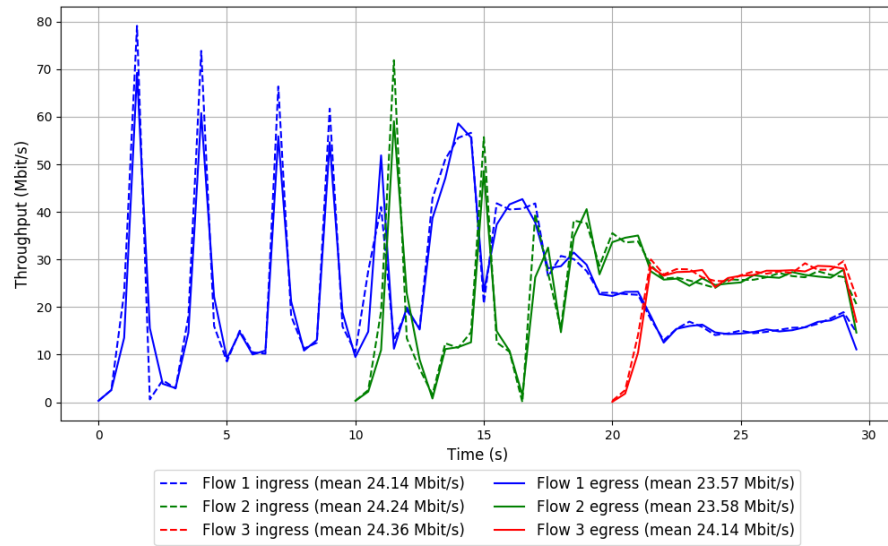
-- Flow 3:

Average throughput: 24.14 Mbit/s

95th percentile per-packet one-way delay: 86.062 ms

Loss rate: 2.75%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-03-27 16:21:30

End at: 2018-03-27 16:22:00

Local clock offset: -2.528 ms

Remote clock offset: 9.523 ms

Below is generated by plot.py at 2018-03-27 22:27:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 47.35 Mbit/s

95th percentile per-packet one-way delay: 90.607 ms

Loss rate: 2.30%

-- Flow 1:

Average throughput: 24.56 Mbit/s

95th percentile per-packet one-way delay: 90.639 ms

Loss rate: 2.42%

-- Flow 2:

Average throughput: 24.73 Mbit/s

95th percentile per-packet one-way delay: 87.188 ms

Loss rate: 2.07%

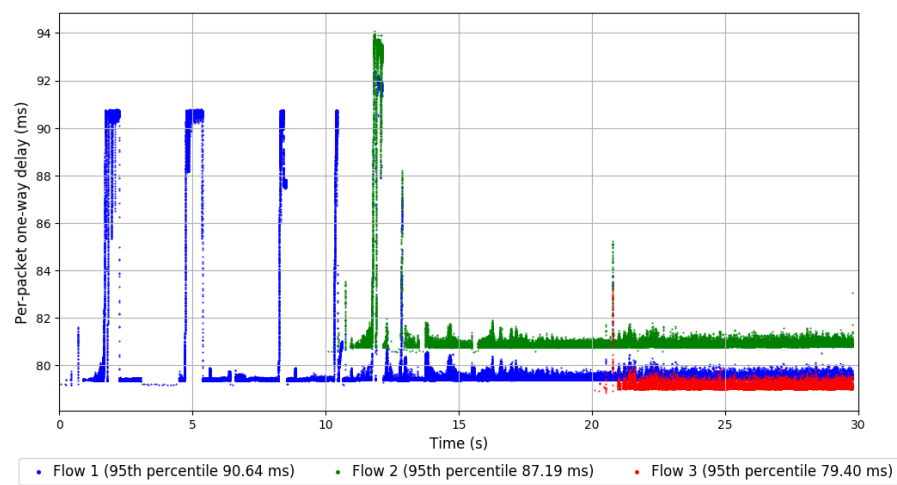
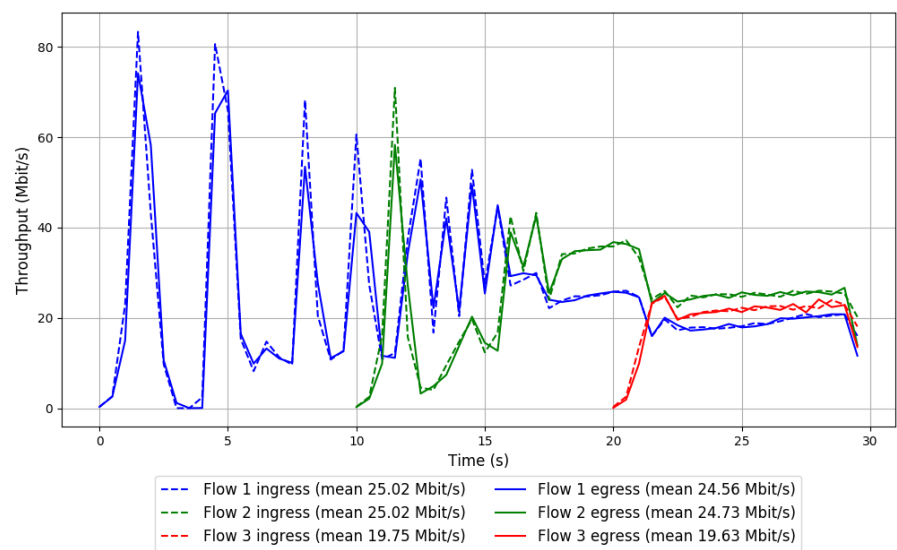
-- Flow 3:

Average throughput: 19.63 Mbit/s

95th percentile per-packet one-way delay: 79.396 ms

Loss rate: 2.42%

Run 6: Report of QUIC Cubic — Data Link

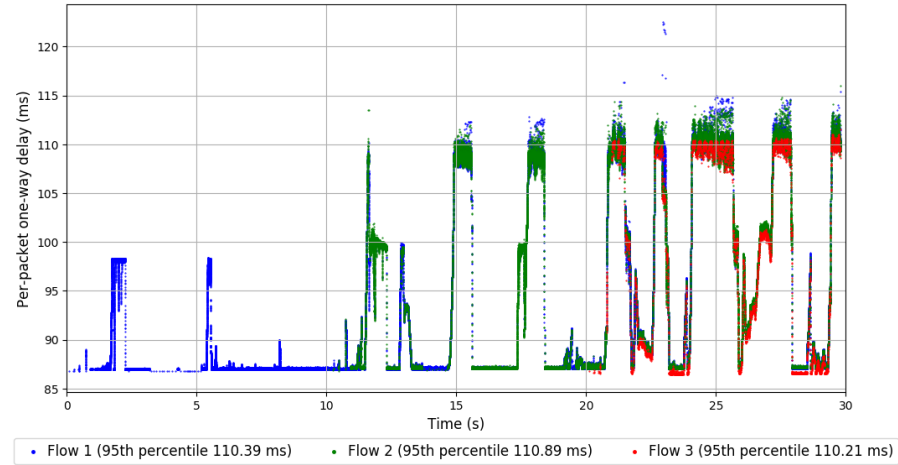
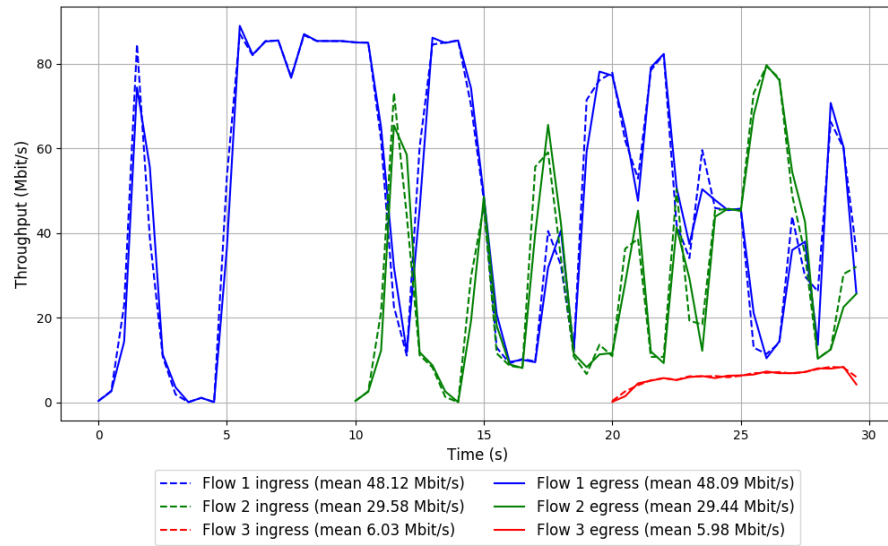


Run 7: Statistics of QUIC Cubic

Start at: 2018-03-27 16:45:39
End at: 2018-03-27 16:46:09
Local clock offset: -4.291 ms
Remote clock offset: 1.619 ms

Below is generated by plot.py at 2018-03-27 22:28:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 69.55 Mbit/s
95th percentile per-packet one-way delay: 110.593 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 48.09 Mbit/s
95th percentile per-packet one-way delay: 110.385 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 29.44 Mbit/s
95th percentile per-packet one-way delay: 110.886 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 5.98 Mbit/s
95th percentile per-packet one-way delay: 110.212 ms
Loss rate: 2.74%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-03-27 17:09:44

End at: 2018-03-27 17:10:14

Local clock offset: -7.921 ms

Remote clock offset: 7.705 ms

Below is generated by plot.py at 2018-03-27 22:28:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.39 Mbit/s

95th percentile per-packet one-way delay: 104.042 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 38.68 Mbit/s

95th percentile per-packet one-way delay: 102.714 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 31.30 Mbit/s

95th percentile per-packet one-way delay: 103.423 ms

Loss rate: 1.10%

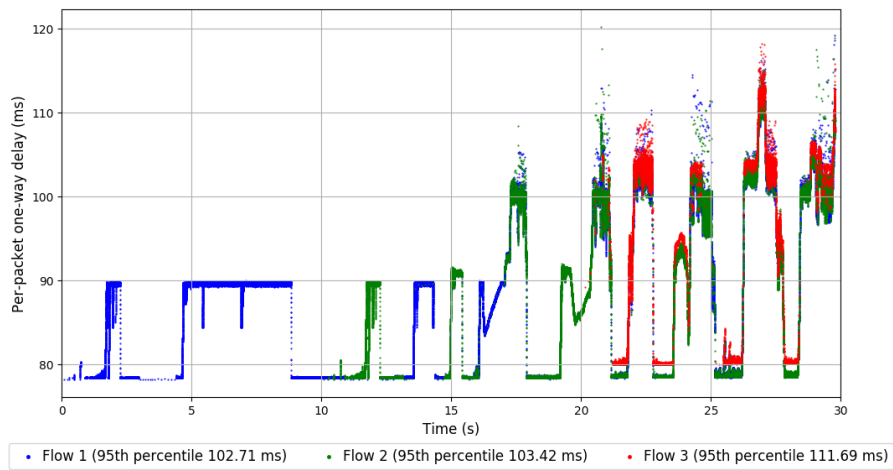
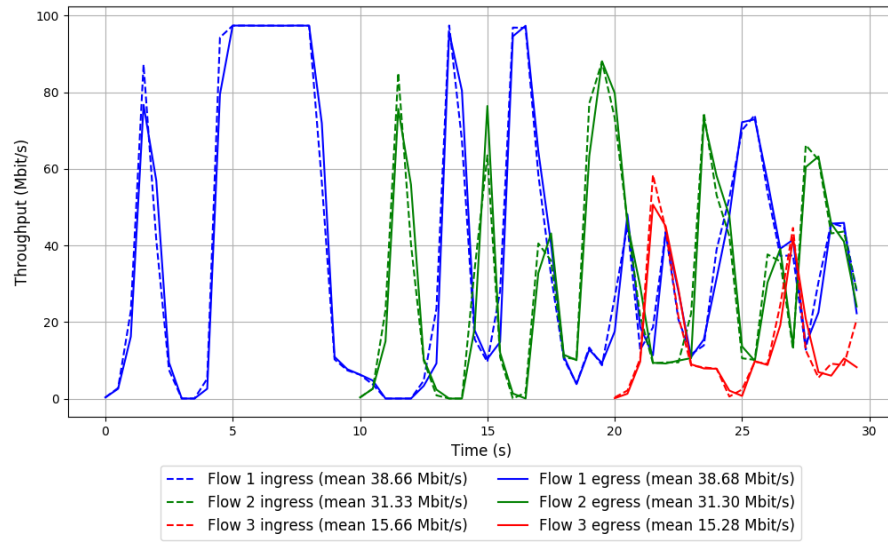
-- Flow 3:

Average throughput: 15.28 Mbit/s

95th percentile per-packet one-way delay: 111.690 ms

Loss rate: 4.49%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-03-27 17:33:41

End at: 2018-03-27 17:34:11

Local clock offset: -7.03 ms

Remote clock offset: 2.114 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.86 Mbit/s

95th percentile per-packet one-way delay: 115.979 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 37.55 Mbit/s

95th percentile per-packet one-way delay: 110.199 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 40.49 Mbit/s

95th percentile per-packet one-way delay: 117.053 ms

Loss rate: 1.09%

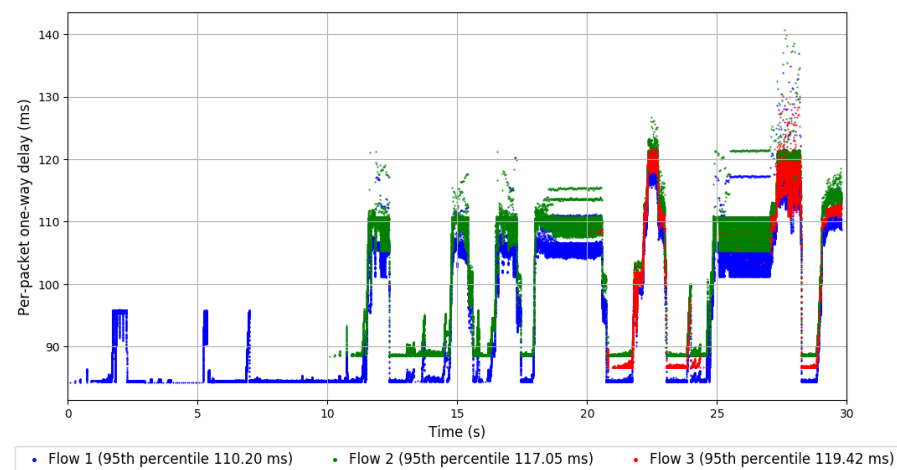
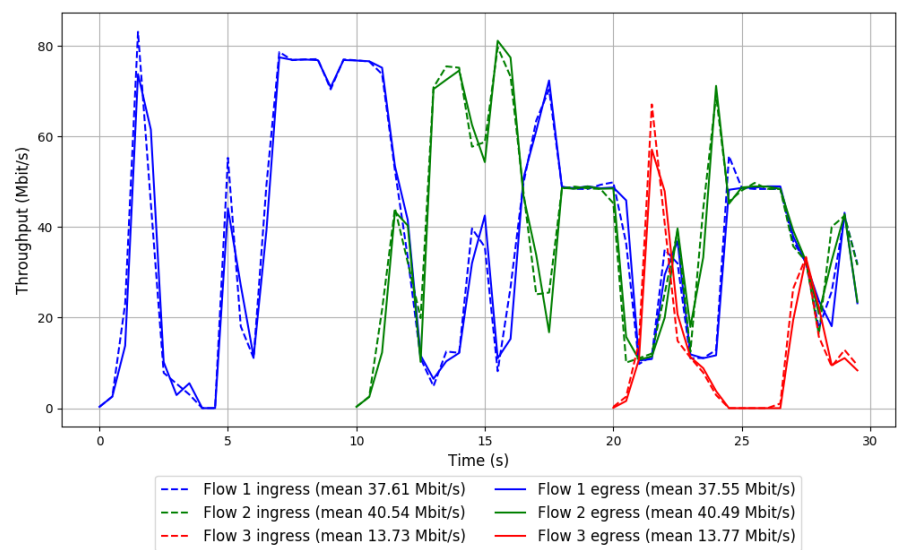
-- Flow 3:

Average throughput: 13.77 Mbit/s

95th percentile per-packet one-way delay: 119.421 ms

Loss rate: 1.62%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-03-27 17:57:34

End at: 2018-03-27 17:58:04

Local clock offset: -5.197 ms

Remote clock offset: 8.5 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.44 Mbit/s

95th percentile per-packet one-way delay: 81.731 ms

Loss rate: 1.86%

-- Flow 1:

Average throughput: 27.39 Mbit/s

95th percentile per-packet one-way delay: 86.556 ms

Loss rate: 1.99%

-- Flow 2:

Average throughput: 24.38 Mbit/s

95th percentile per-packet one-way delay: 80.610 ms

Loss rate: 1.32%

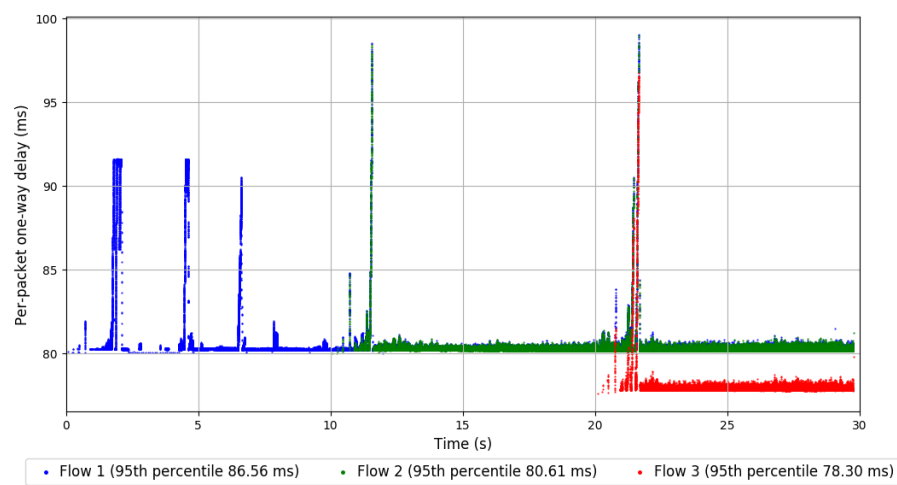
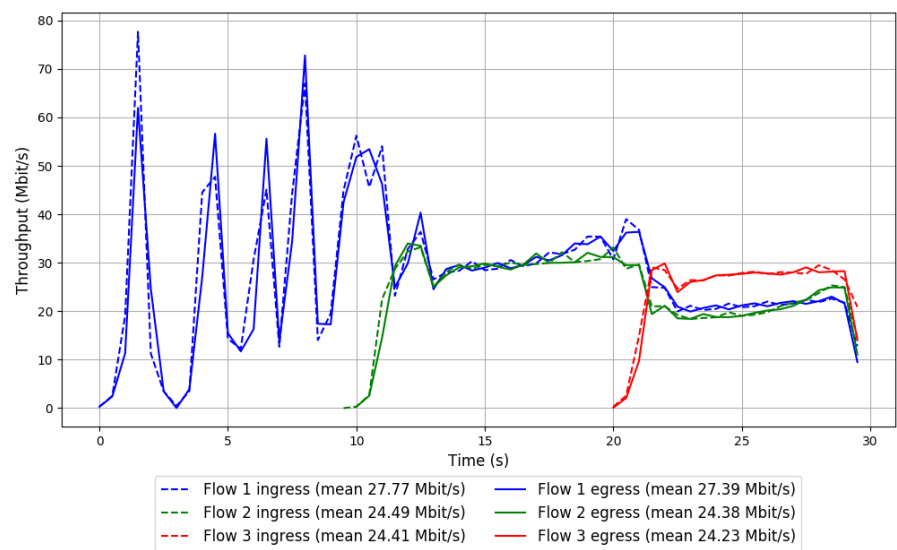
-- Flow 3:

Average throughput: 24.23 Mbit/s

95th percentile per-packet one-way delay: 78.297 ms

Loss rate: 2.53%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SReAM

Start at: 2018-03-27 14:16:13

End at: 2018-03-27 14:16:43

Local clock offset: -6.575 ms

Remote clock offset: 8.554 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 83.218 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 81.452 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.233 ms

Loss rate: 0.84%

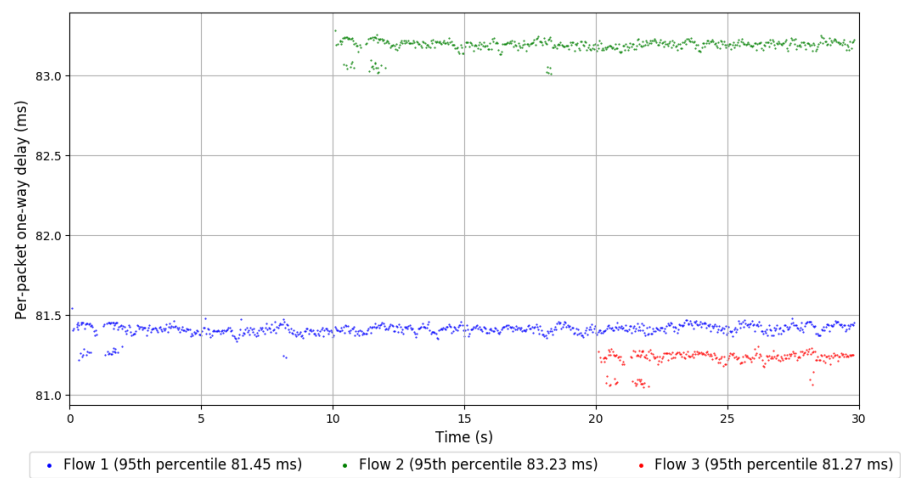
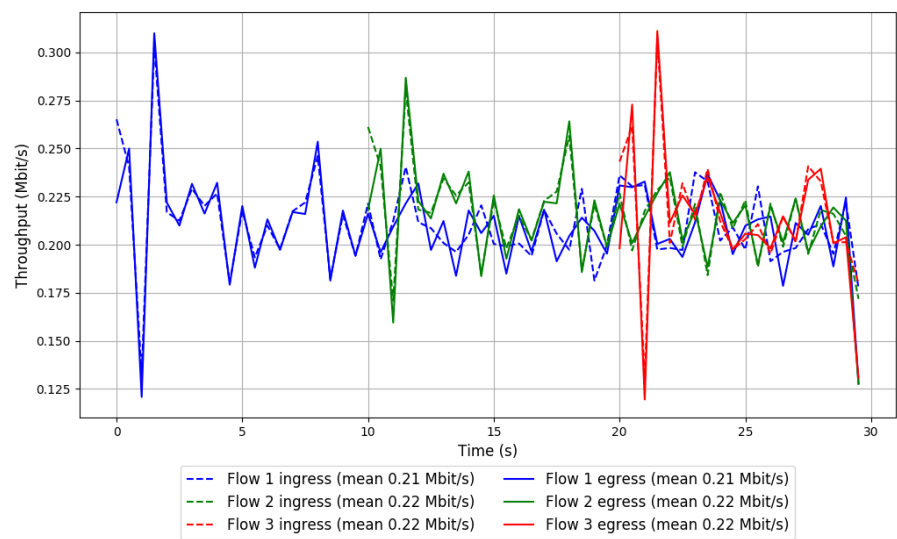
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 81.274 ms

Loss rate: 1.86%

Run 1: Report of SReAM — Data Link

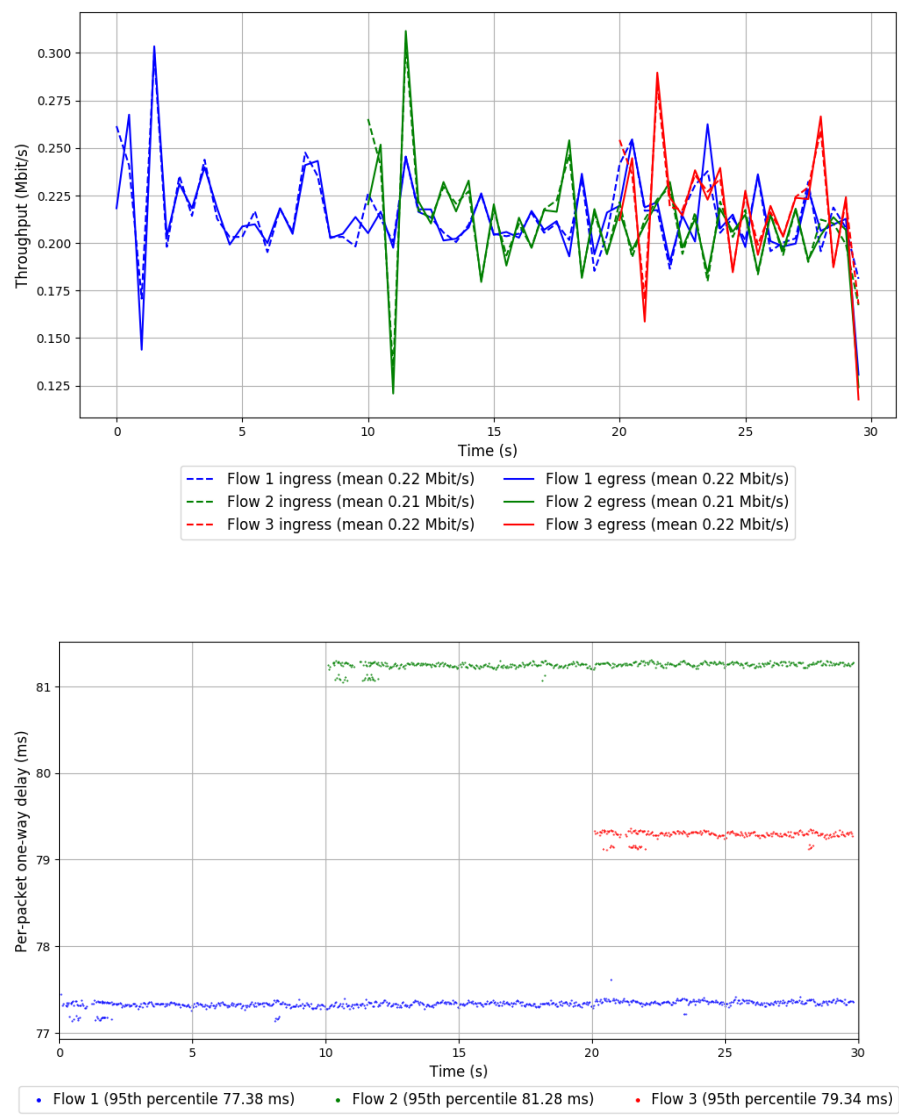


Run 2: Statistics of SReAM

Start at: 2018-03-27 14:40:01
End at: 2018-03-27 14:40:31
Local clock offset: -7.53 ms
Remote clock offset: 10.795 ms

Below is generated by plot.py at 2018-03-27 22:28:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 81.272 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.382 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 81.283 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.336 ms
Loss rate: 1.87%

Run 2: Report of SReAM — Data Link

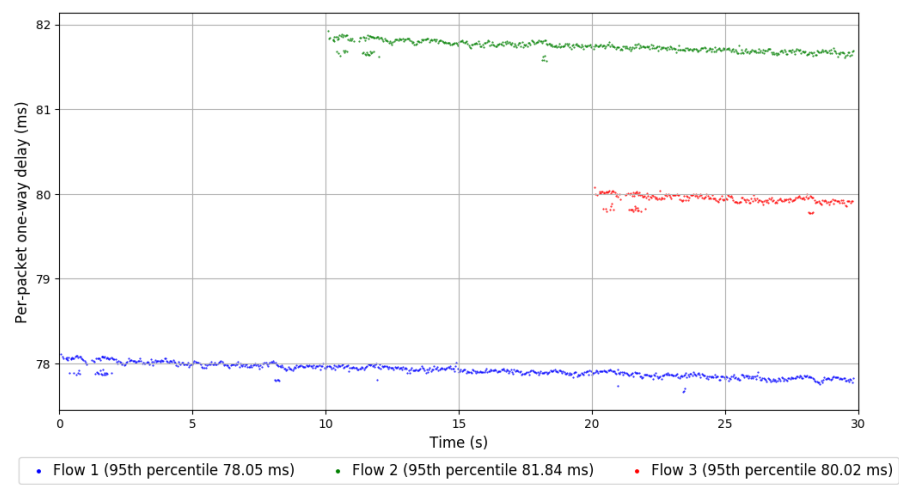
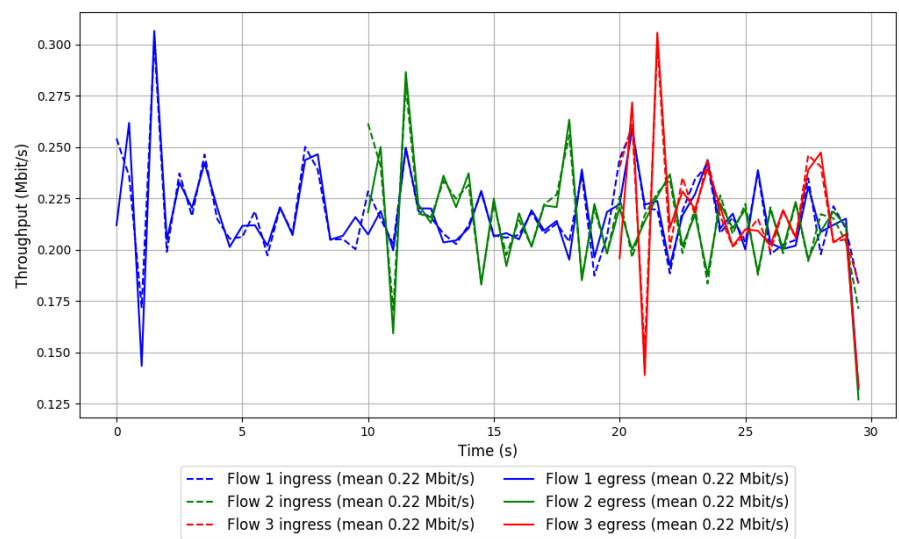


Run 3: Statistics of SReAM

Start at: 2018-03-27 15:04:06
End at: 2018-03-27 15:04:36
Local clock offset: -6.017 ms
Remote clock offset: 8.316 ms

Below is generated by plot.py at 2018-03-27 22:28:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 81.813 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.051 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.841 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.019 ms
Loss rate: 1.87%

Run 3: Report of SReAM — Data Link

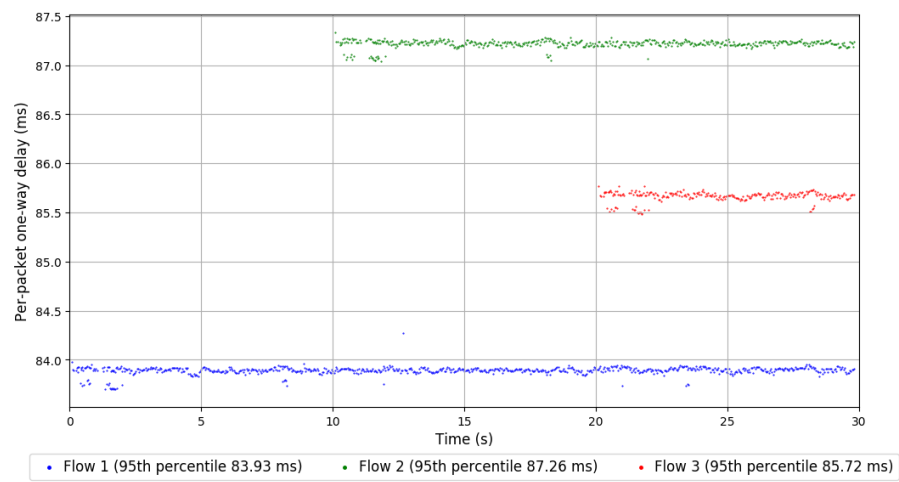
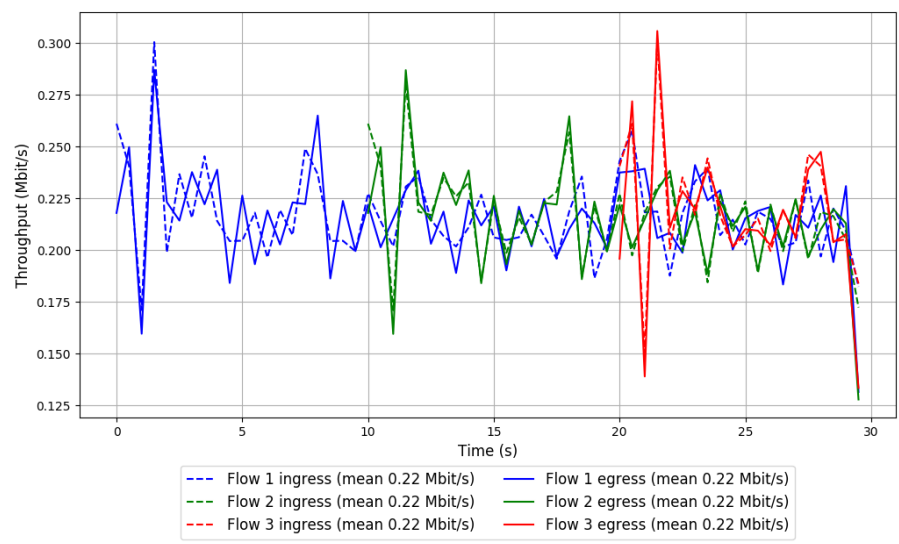


Run 4: Statistics of SReAM

Start at: 2018-03-27 15:28:09
End at: 2018-03-27 15:28:39
Local clock offset: -1.507 ms
Remote clock offset: 2.261 ms

Below is generated by plot.py at 2018-03-27 22:28:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 87.248 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.931 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.262 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.720 ms
Loss rate: 1.87%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-03-27 15:52:09

End at: 2018-03-27 15:52:39

Local clock offset: -1.337 ms

Remote clock offset: 8.656 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 80.436 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 80.268 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 80.447 ms

Loss rate: 0.84%

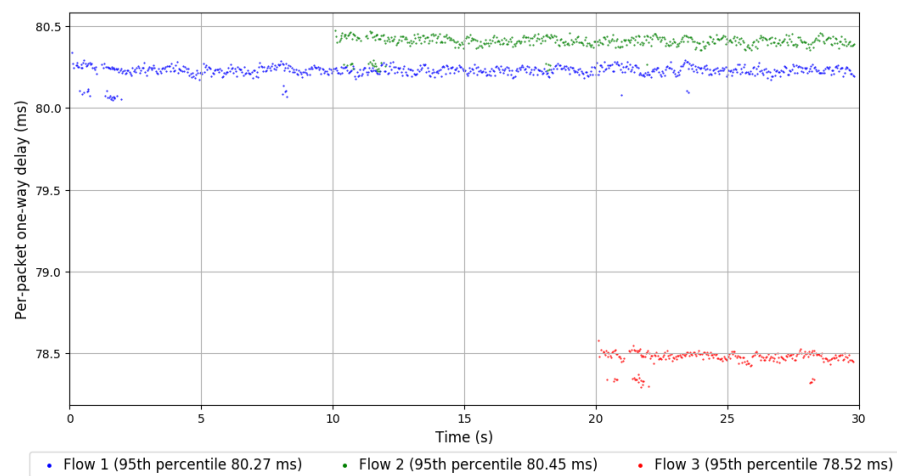
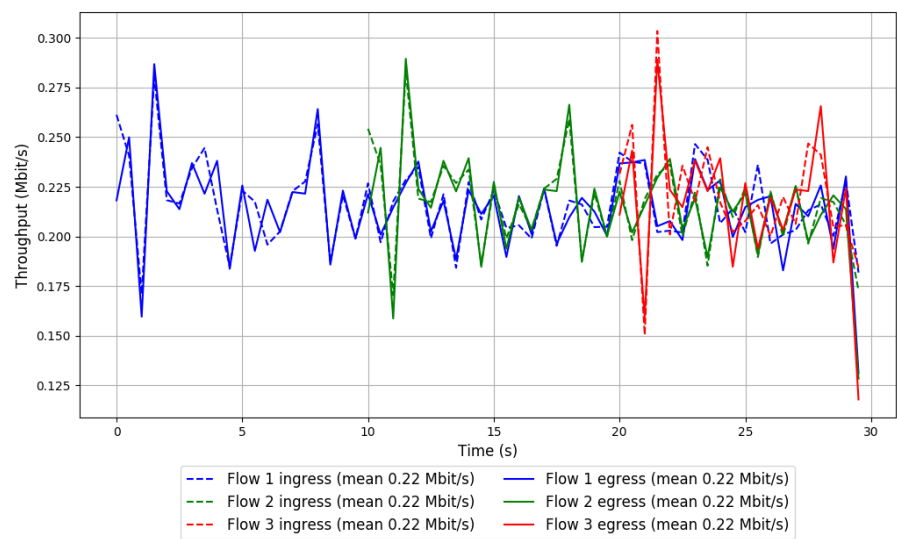
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 78.518 ms

Loss rate: 1.87%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-03-27 16:16:10

End at: 2018-03-27 16:16:40

Local clock offset: -2.144 ms

Remote clock offset: 2.908 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 87.751 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.023 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.794 ms

Loss rate: 0.84%

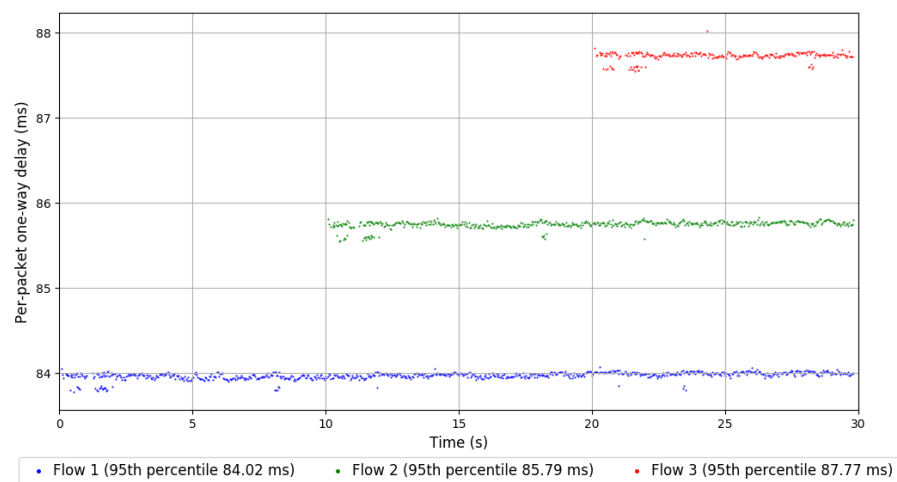
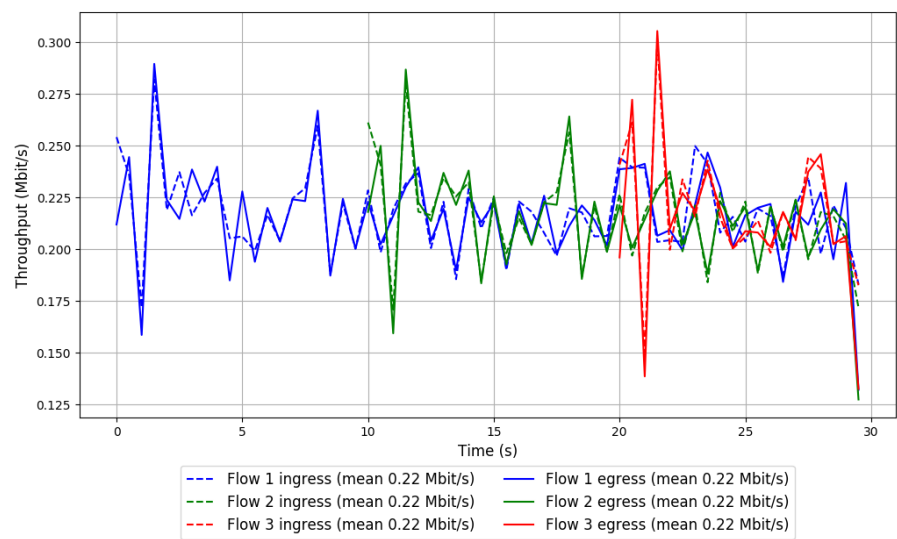
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.774 ms

Loss rate: 1.86%

Run 6: Report of SReAM — Data Link

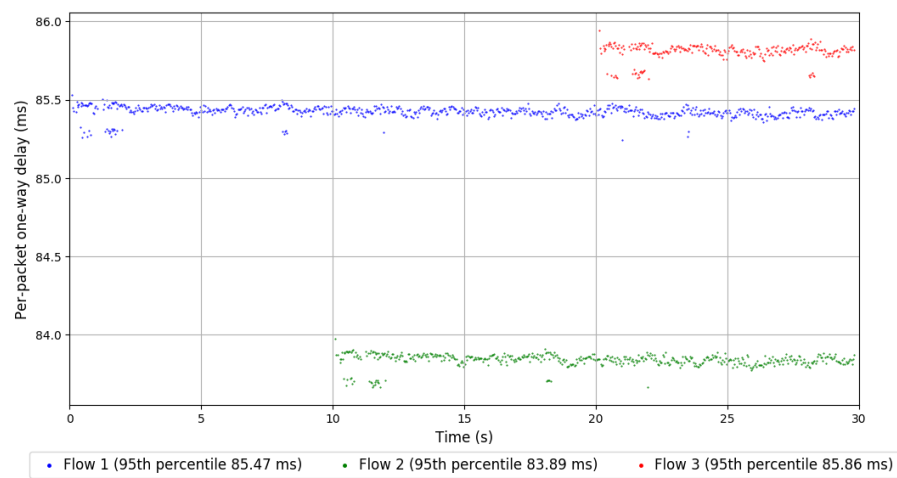
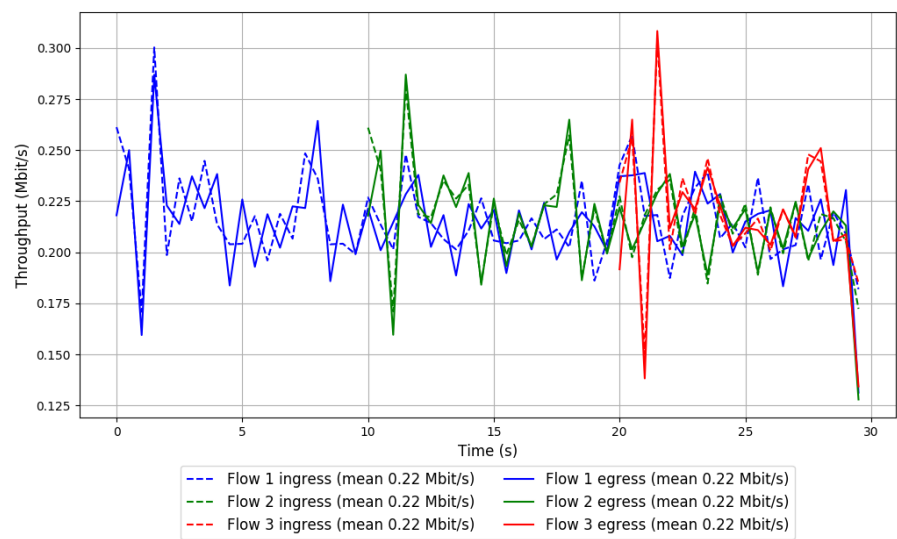


Run 7: Statistics of SReAM

Start at: 2018-03-27 16:40:16
End at: 2018-03-27 16:40:46
Local clock offset: -2.722 ms
Remote clock offset: 2.812 ms

Below is generated by plot.py at 2018-03-27 22:28:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 85.832 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.469 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.886 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.858 ms
Loss rate: 1.87%

Run 7: Report of SReAM — Data Link

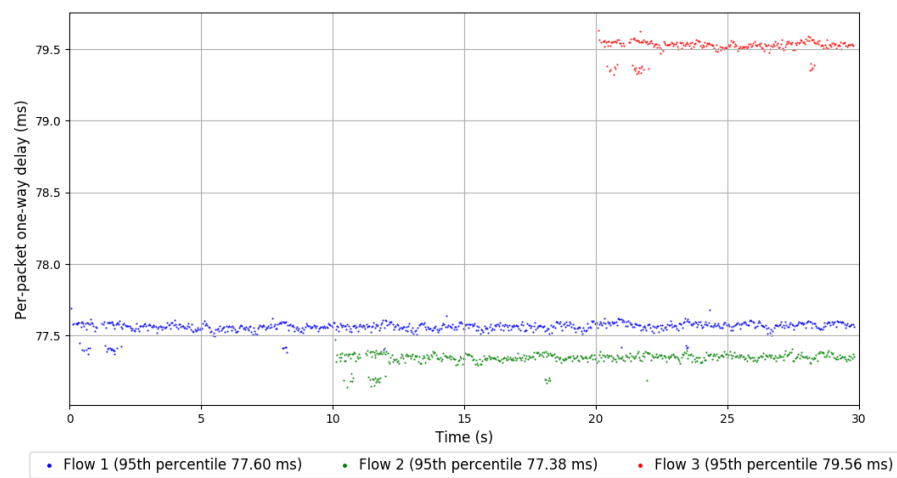
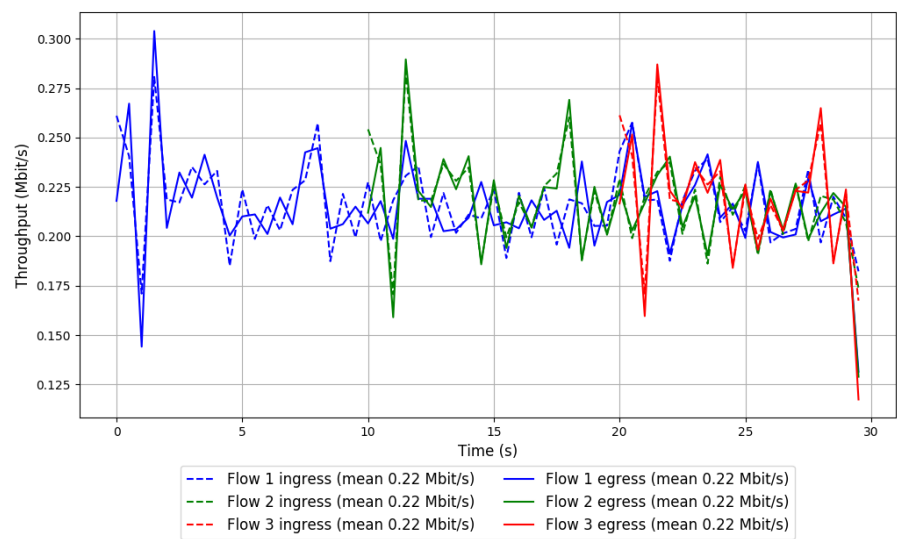


Run 8: Statistics of SReAM

Start at: 2018-03-27 17:04:25
End at: 2018-03-27 17:04:55
Local clock offset: -7.452 ms
Remote clock offset: 8.522 ms

Below is generated by plot.py at 2018-03-27 22:28:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 79.544 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.598 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.384 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.565 ms
Loss rate: 1.87%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-03-27 17:28:26

End at: 2018-03-27 17:28:56

Local clock offset: -7.099 ms

Remote clock offset: 2.142 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 88.519 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.602 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 88.333 ms

Loss rate: 0.84%

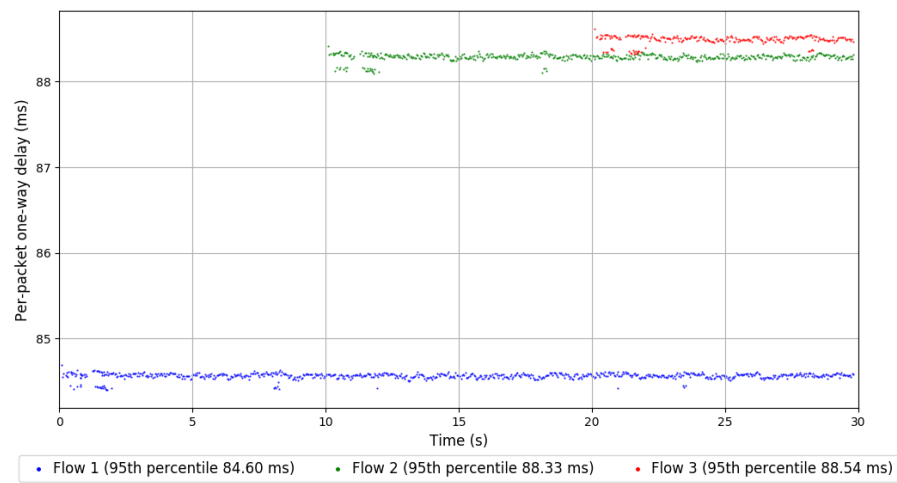
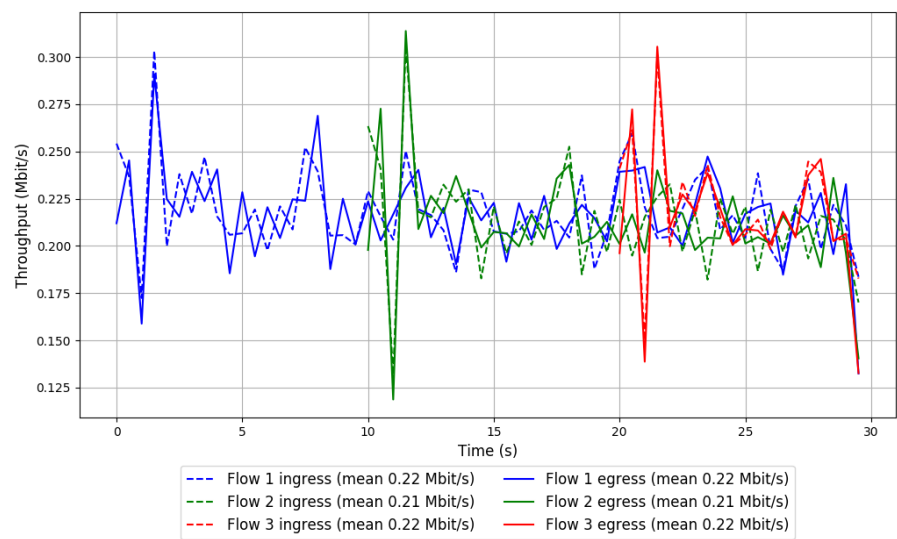
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.541 ms

Loss rate: 1.86%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SCReAM

Start at: 2018-03-27 17:52:17

End at: 2018-03-27 17:52:47

Local clock offset: -6.389 ms

Remote clock offset: 8.483 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 119.146 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 80.090 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 128.886 ms

Loss rate: 0.70%

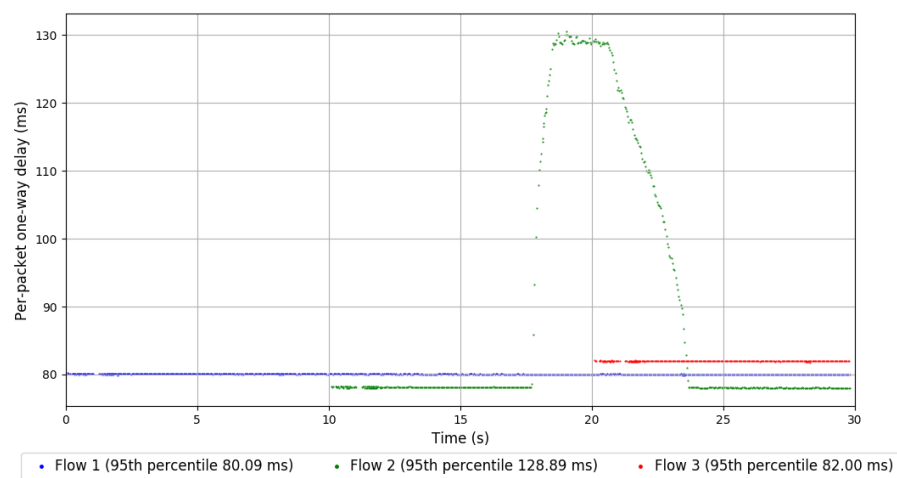
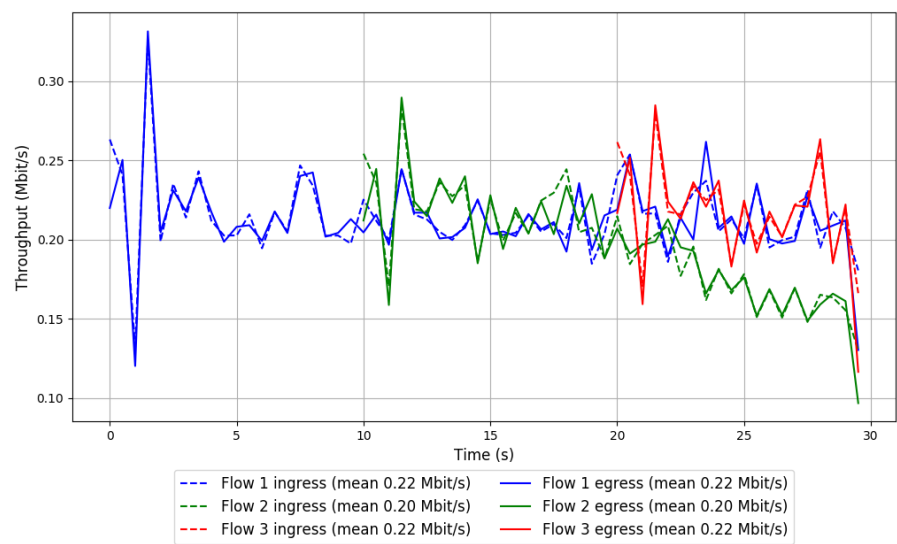
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 81.998 ms

Loss rate: 1.86%

Run 10: Report of SCReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-03-27 14:33:26

End at: 2018-03-27 14:33:56

Local clock offset: -7.331 ms

Remote clock offset: 9.556 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 82.877 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 83.642 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 81.990 ms

Loss rate: 0.00%

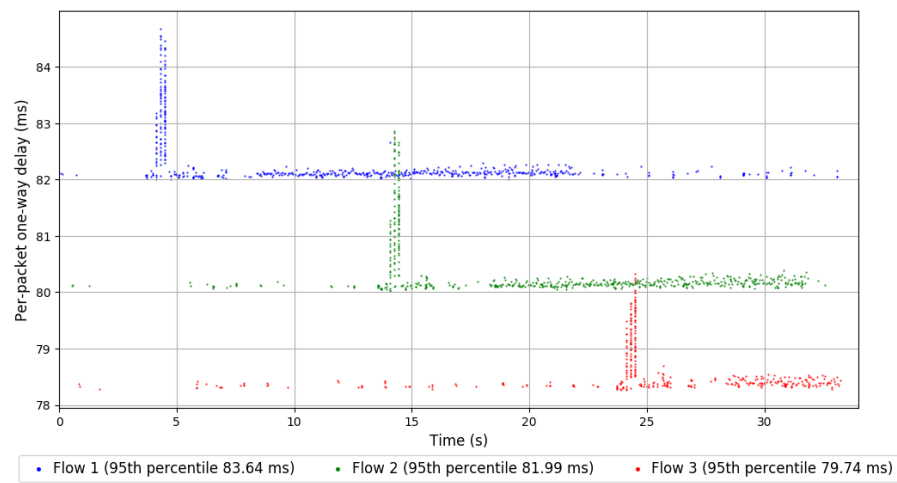
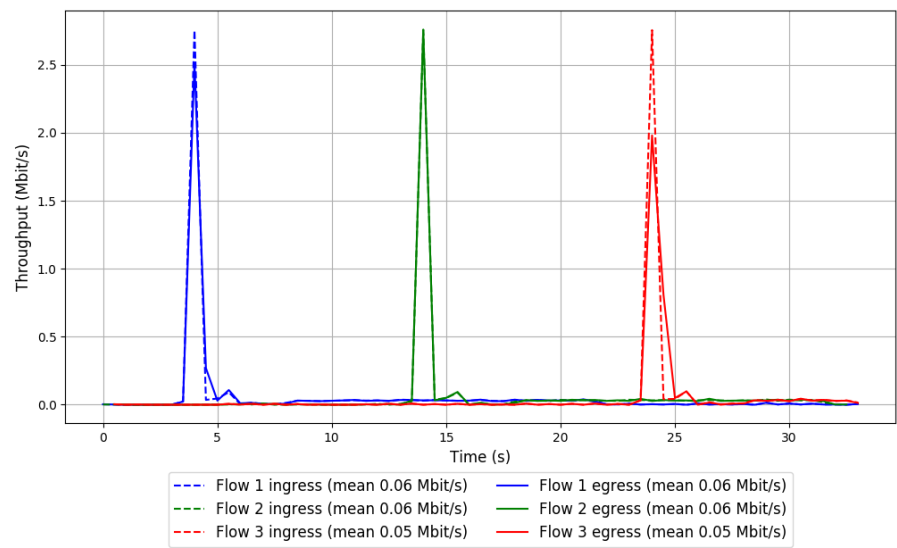
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 79.738 ms

Loss rate: 0.23%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-03-27 14:57:30

End at: 2018-03-27 14:58:00

Local clock offset: -8.252 ms

Remote clock offset: 3.597 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 86.431 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 86.839 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 85.322 ms

Loss rate: 0.13%

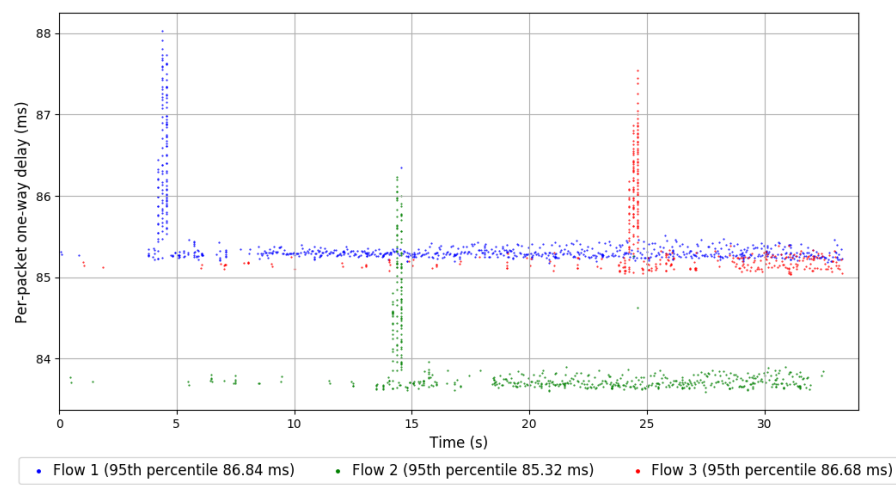
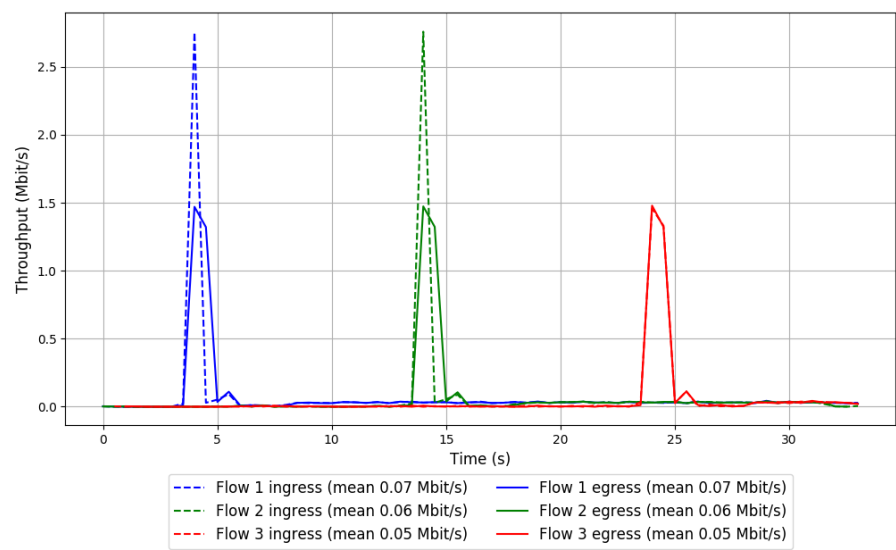
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.677 ms

Loss rate: 0.31%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-03-27 15:21:34

End at: 2018-03-27 15:22:04

Local clock offset: -2.214 ms

Remote clock offset: 8.326 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 80.124 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 78.199 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 80.655 ms

Loss rate: 0.00%

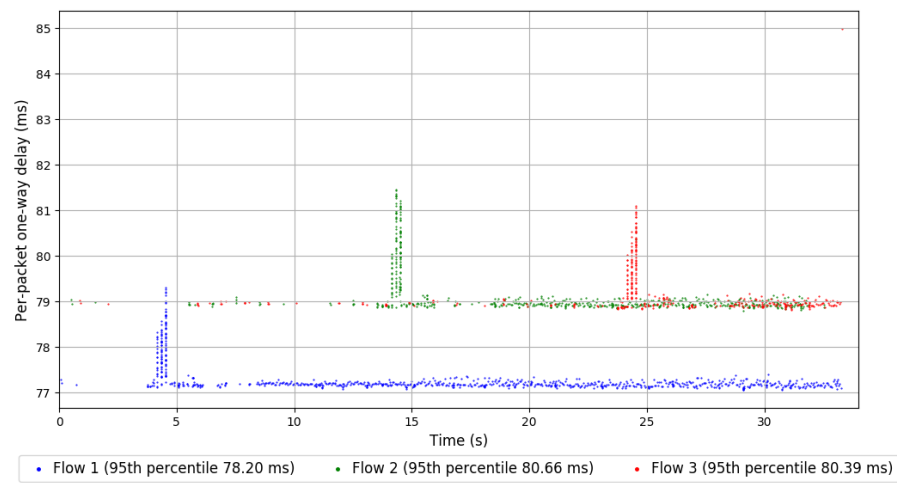
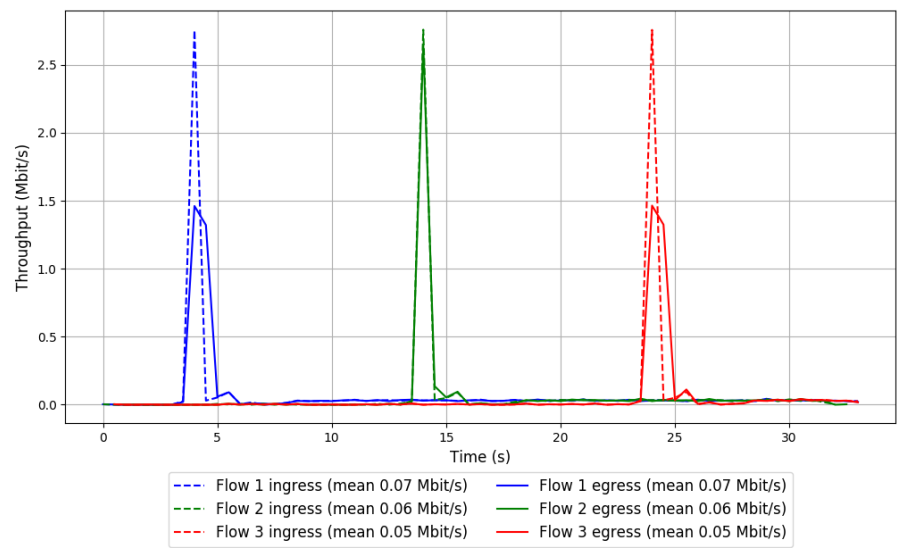
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 80.391 ms

Loss rate: 0.31%

Run 3: Report of WebRTC media — Data Link

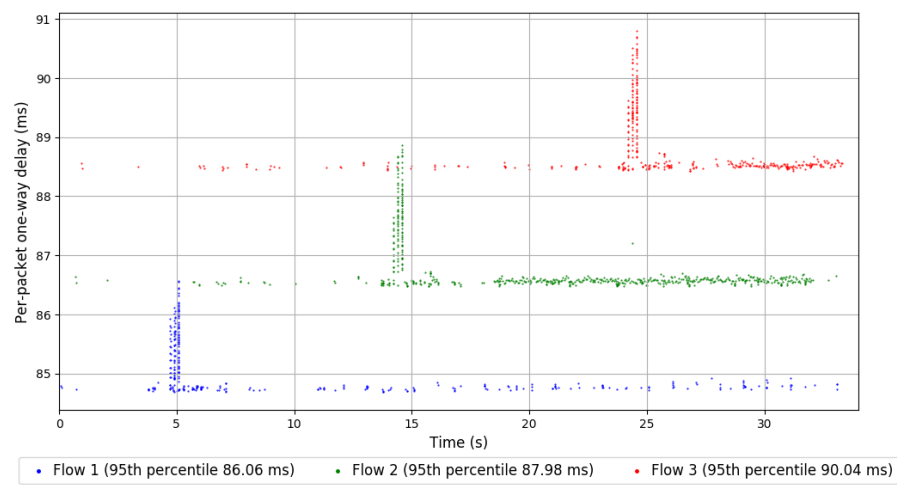
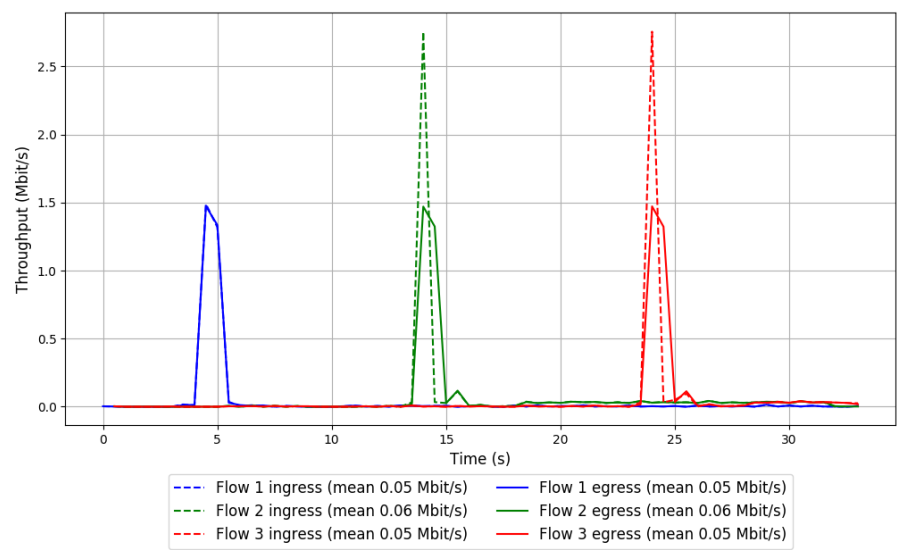


Run 4: Statistics of WebRTC media

Start at: 2018-03-27 15:45:31
End at: 2018-03-27 15:46:01
Local clock offset: -1.476 ms
Remote clock offset: 2.101 ms

Below is generated by plot.py at 2018-03-27 22:28:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 89.412 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.055 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 87.982 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 90.043 ms
Loss rate: 0.36%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-03-27 16:09:27

End at: 2018-03-27 16:09:57

Local clock offset: -1.168 ms

Remote clock offset: 2.028 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 87.179 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 85.948 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 86.025 ms

Loss rate: 0.00%

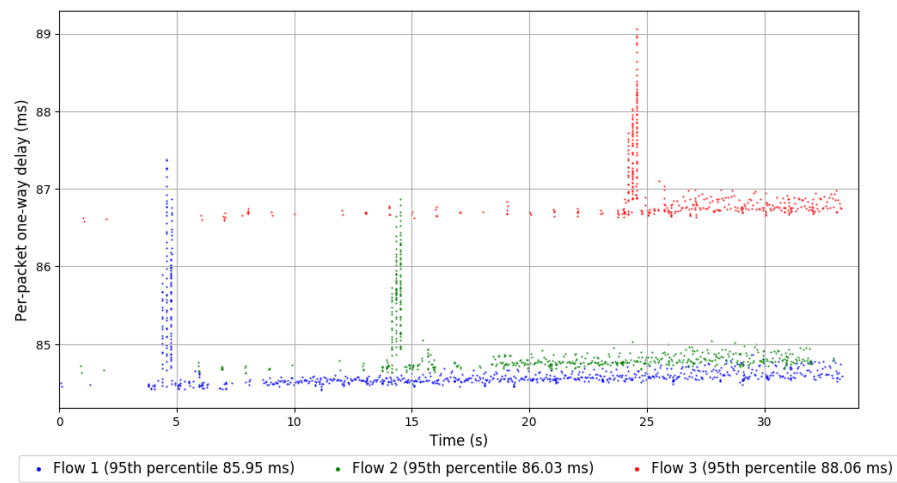
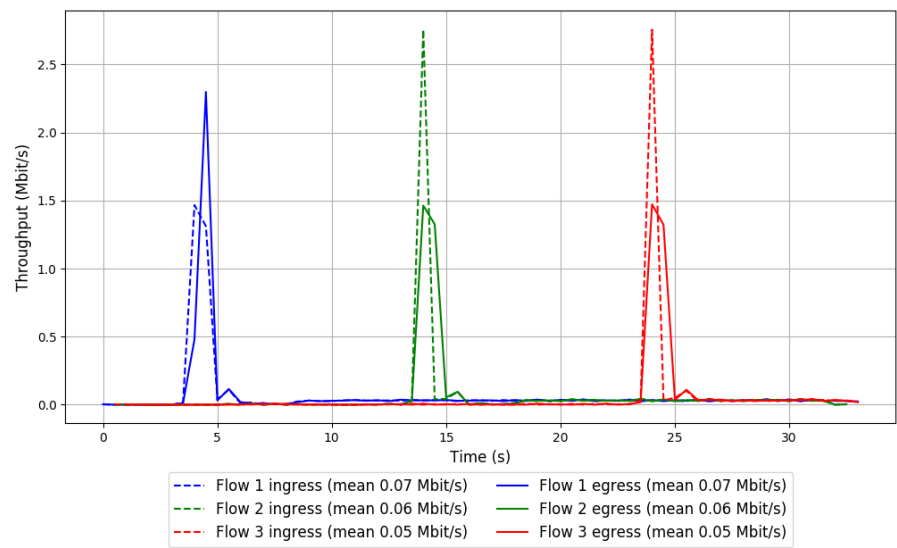
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 88.064 ms

Loss rate: 0.30%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-03-27 16:33:34

End at: 2018-03-27 16:34:04

Local clock offset: -2.743 ms

Remote clock offset: 8.564 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 82.660 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 83.144 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 78.889 ms

Loss rate: 0.00%

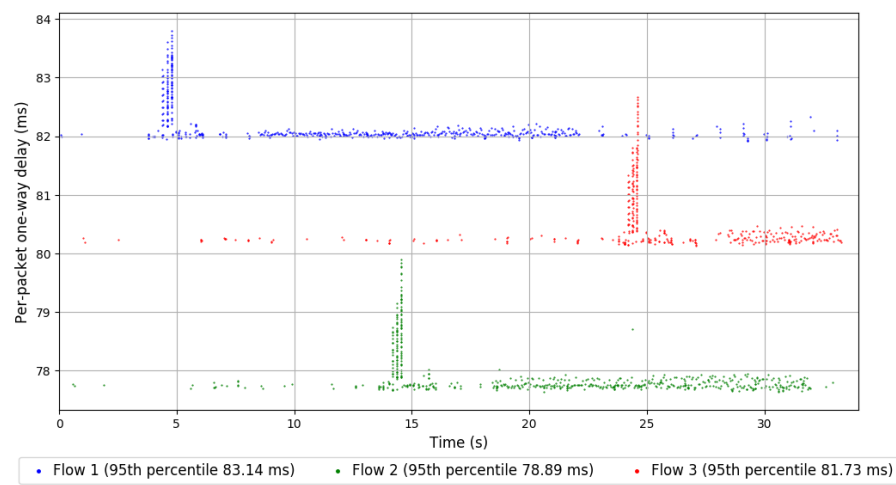
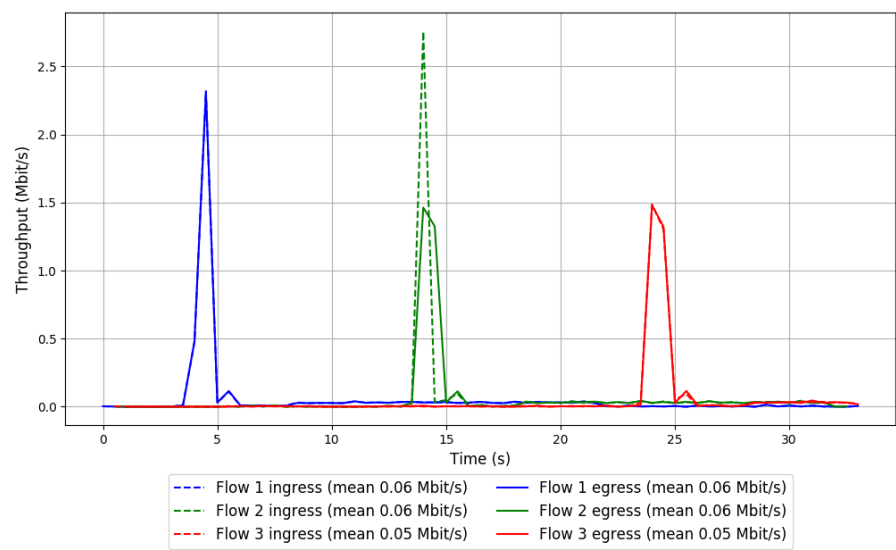
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 81.732 ms

Loss rate: 0.31%

Run 6: Report of WebRTC media — Data Link

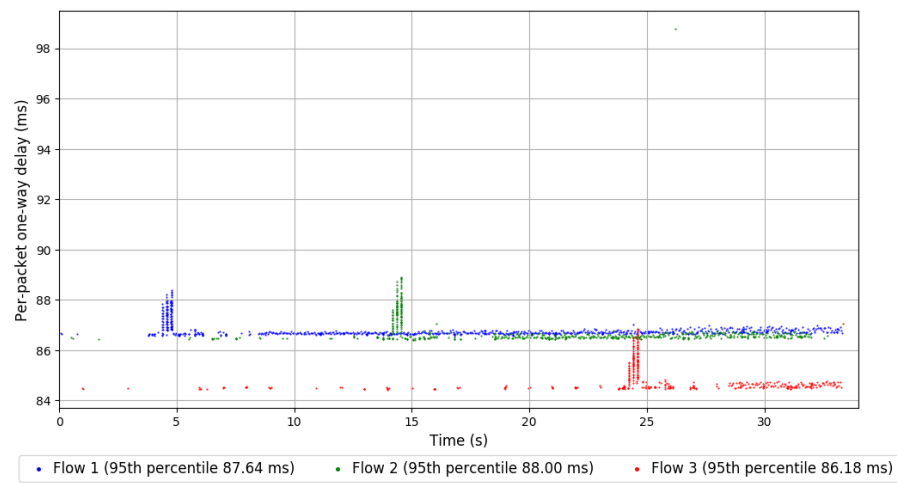
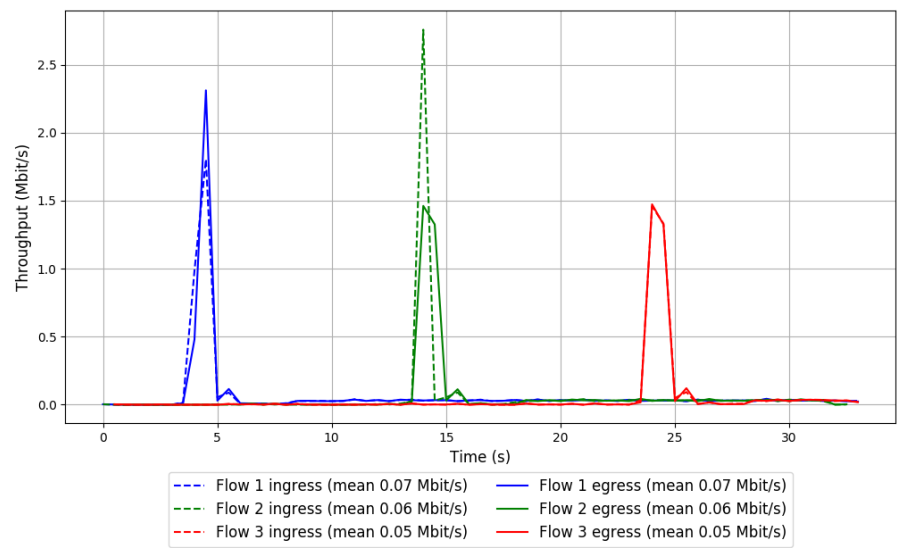


Run 7: Statistics of WebRTC media

Start at: 2018-03-27 16:57:48
End at: 2018-03-27 16:58:18
Local clock offset: -6.838 ms
Remote clock offset: 1.375 ms

```
# Below is generated by plot.py at 2018-03-27 22:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 87.666 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 87.636 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 87.996 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.177 ms
Loss rate: 0.23%
```

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-03-27 17:21:50

End at: 2018-03-27 17:22:20

Local clock offset: -7.518 ms

Remote clock offset: 8.415 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 81.087 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 79.148 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 81.388 ms

Loss rate: 0.04%

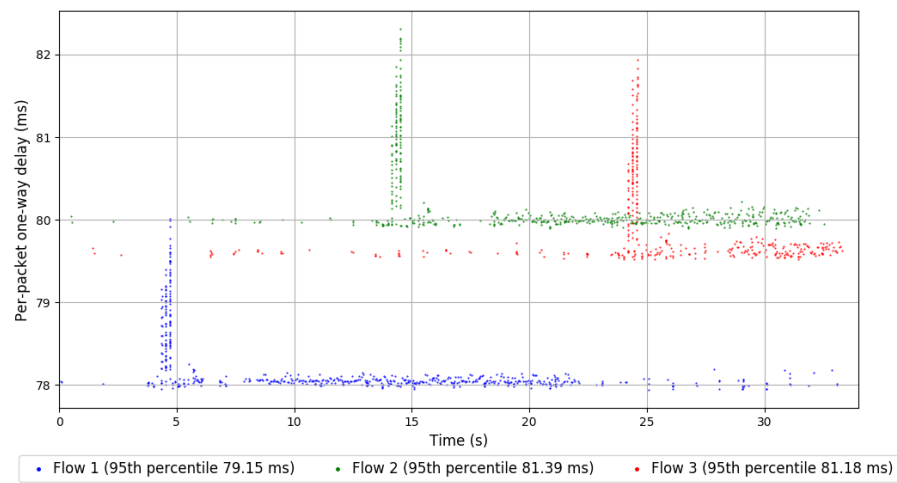
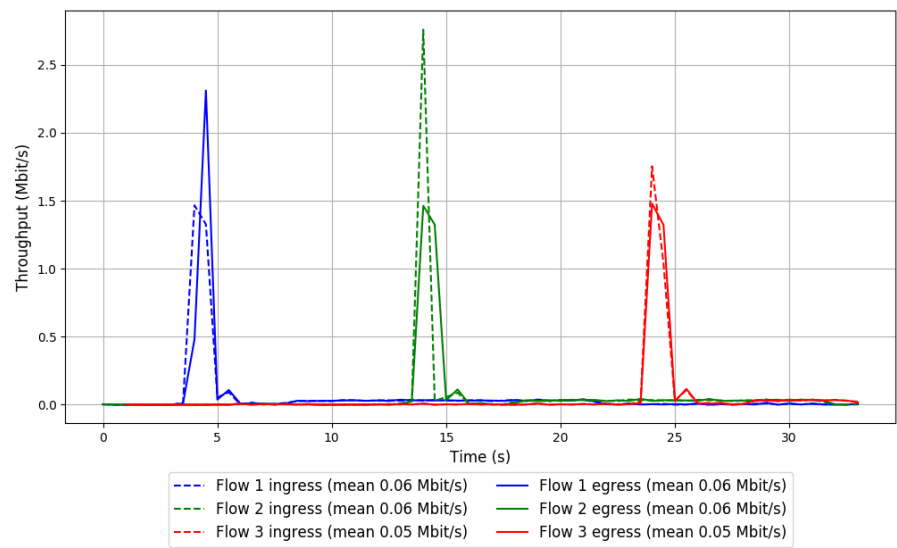
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 81.182 ms

Loss rate: 0.28%

Run 8: Report of WebRTC media — Data Link

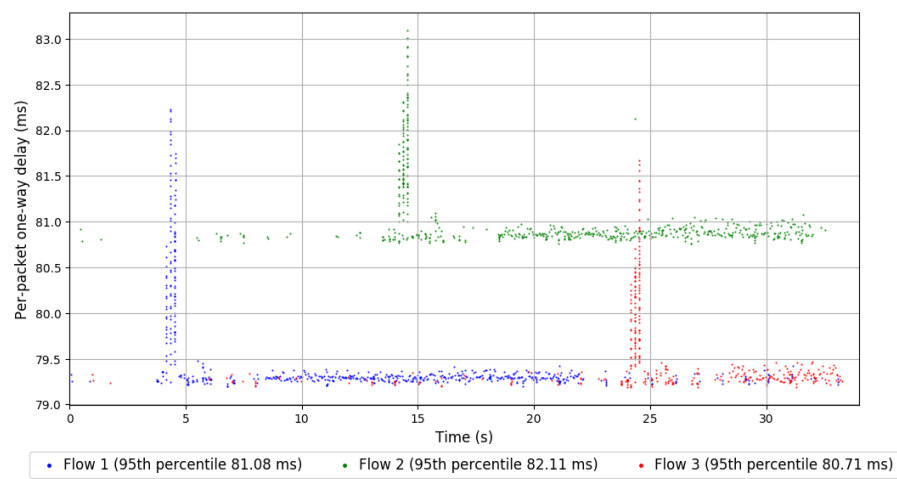
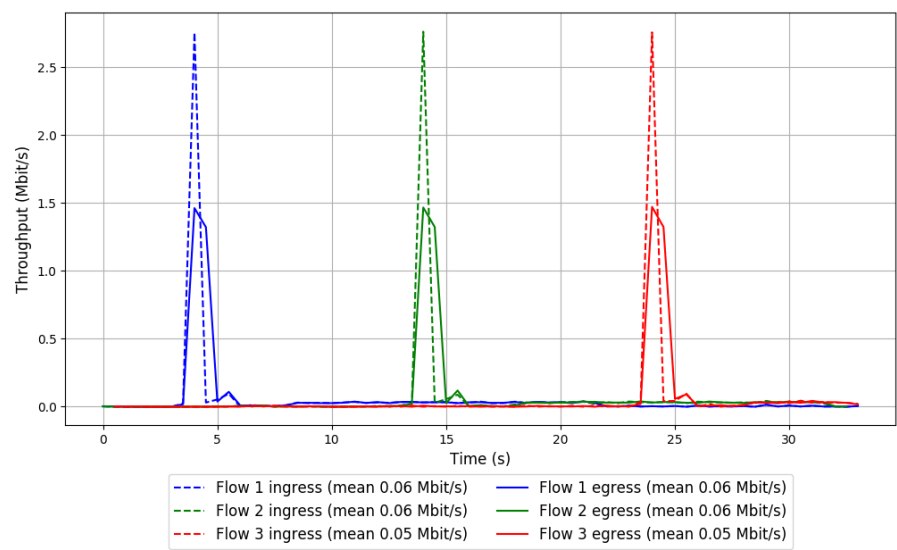


Run 9: Statistics of WebRTC media

Start at: 2018-03-27 17:45:42
End at: 2018-03-27 17:46:12
Local clock offset: -6.957 ms
Remote clock offset: 7.593 ms

Below is generated by plot.py at 2018-03-27 22:28:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 81.621 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 81.083 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 82.112 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 80.708 ms
Loss rate: 0.31%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-03-27 18:09:42

End at: 2018-03-27 18:10:12

Local clock offset: -3.94 ms

Remote clock offset: 8.523 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 80.509 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 78.950 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 79.425 ms

Loss rate: 0.04%

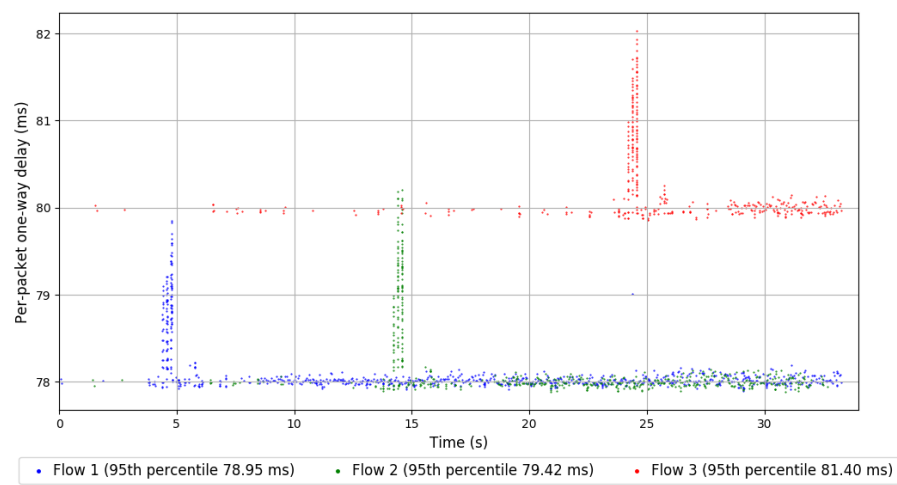
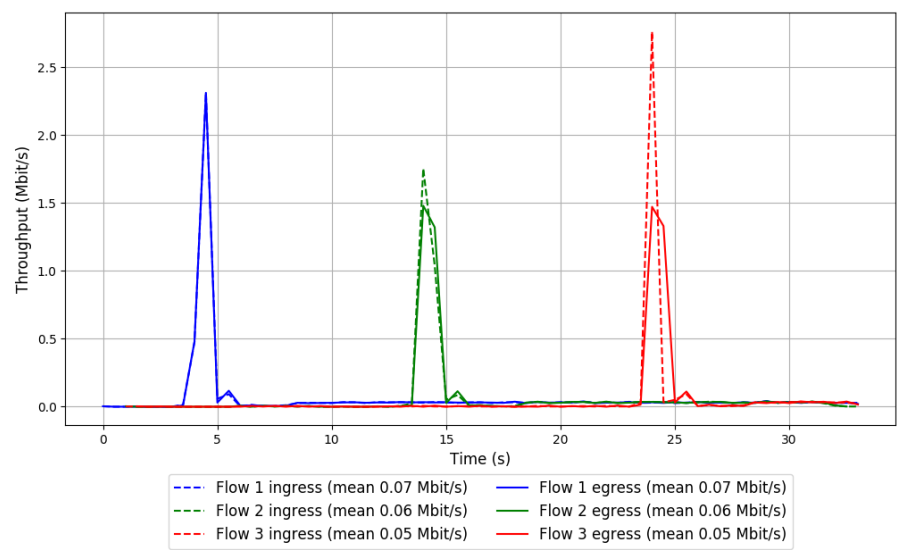
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 81.401 ms

Loss rate: 0.31%

Run 10: Report of WebRTC media — Data Link

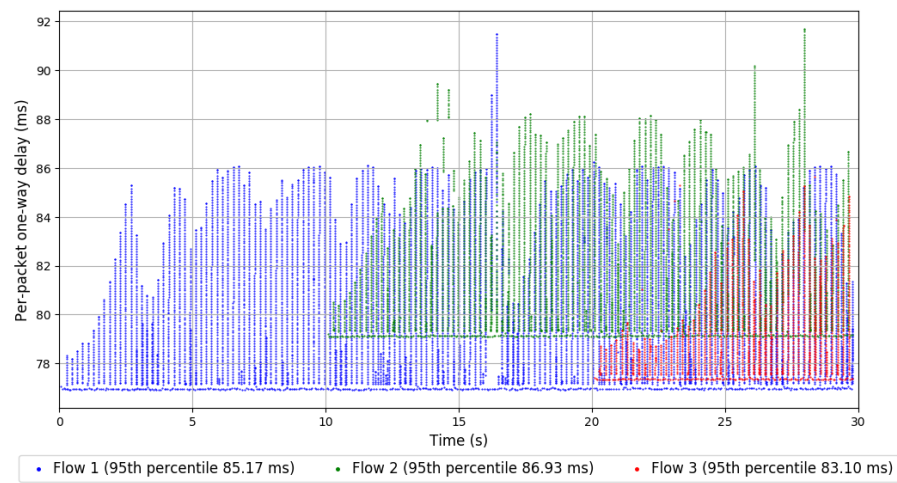
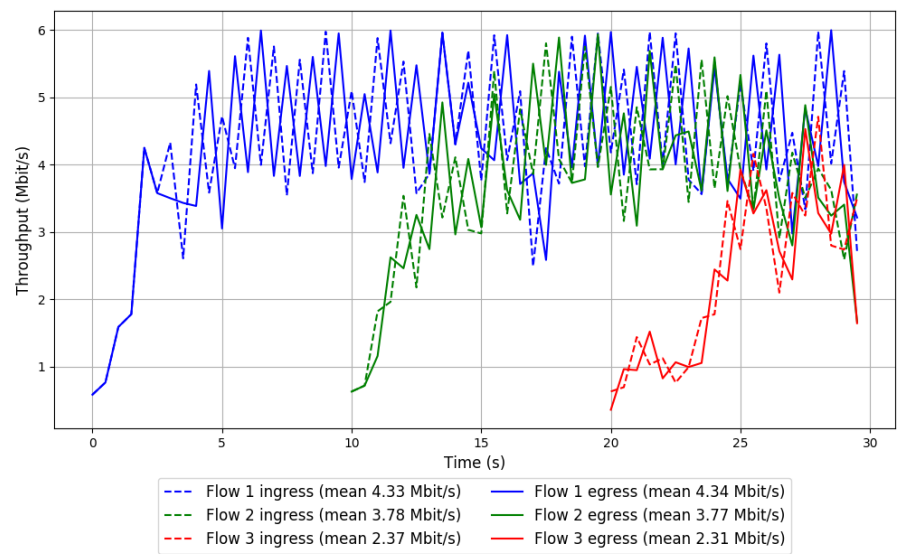


Run 1: Statistics of Sprout

Start at: 2018-03-27 14:34:40
End at: 2018-03-27 14:35:11
Local clock offset: -7.395 ms
Remote clock offset: 10.517 ms

Below is generated by plot.py at 2018-03-27 22:28:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.59 Mbit/s
95th percentile per-packet one-way delay: 85.748 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 85.168 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 86.928 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 83.096 ms
Loss rate: 3.98%

Run 1: Report of Sprout — Data Link

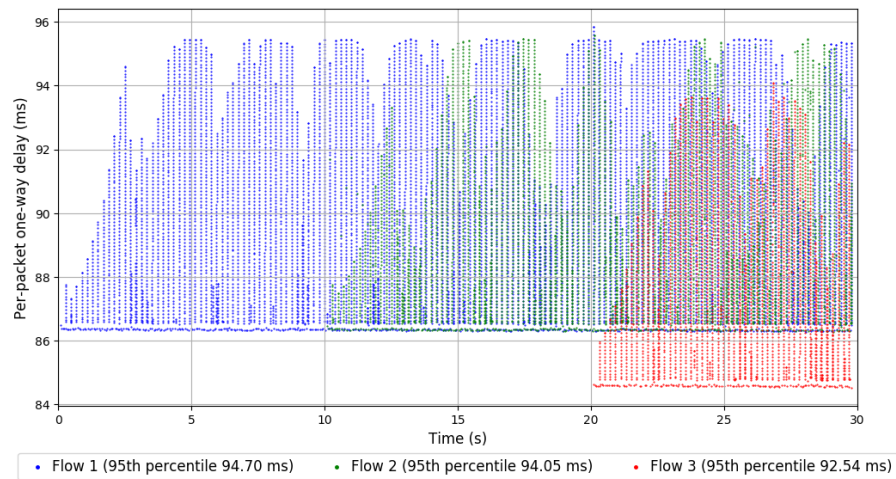
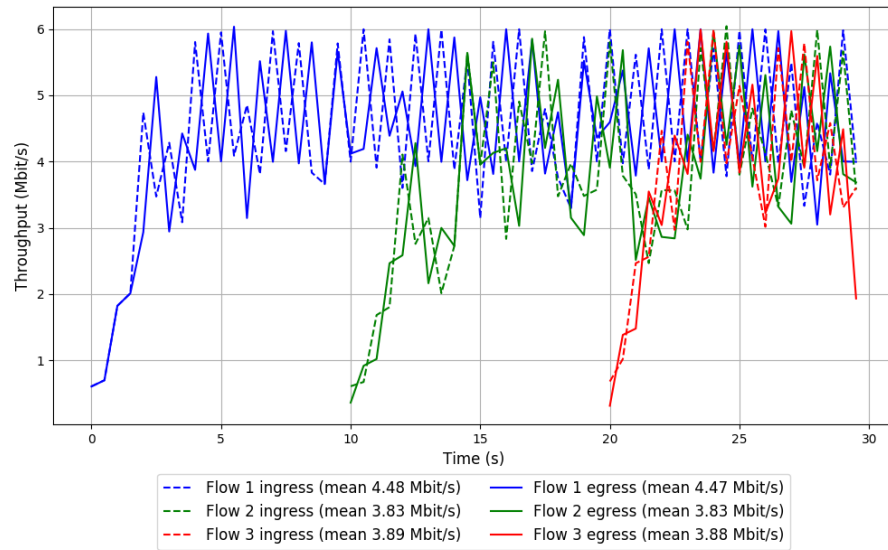


Run 2: Statistics of Sprout

Start at: 2018-03-27 14:58:44
End at: 2018-03-27 14:59:14
Local clock offset: -8.298 ms
Remote clock offset: 2.522 ms

```
# Below is generated by plot.py at 2018-03-27 22:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 94.425 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 94.700 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 3.83 Mbit/s
95th percentile per-packet one-way delay: 94.050 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 92.542 ms
Loss rate: 2.43%
```

Run 2: Report of Sprout — Data Link

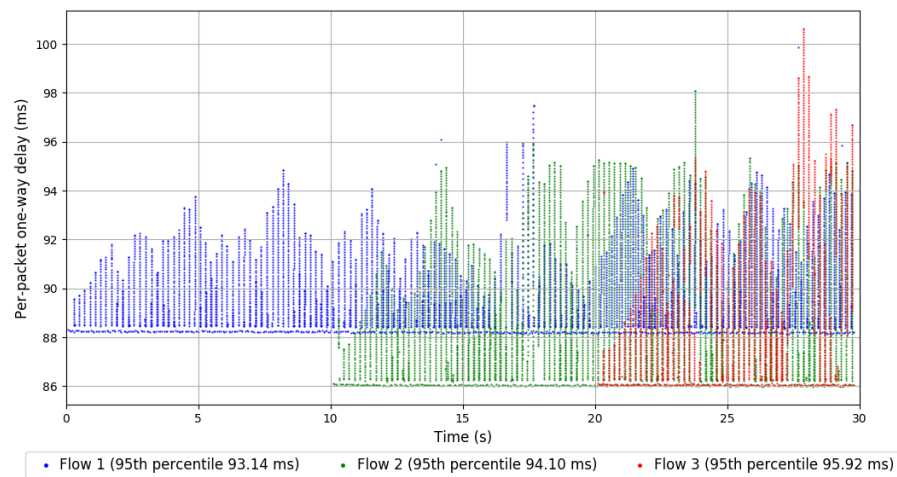
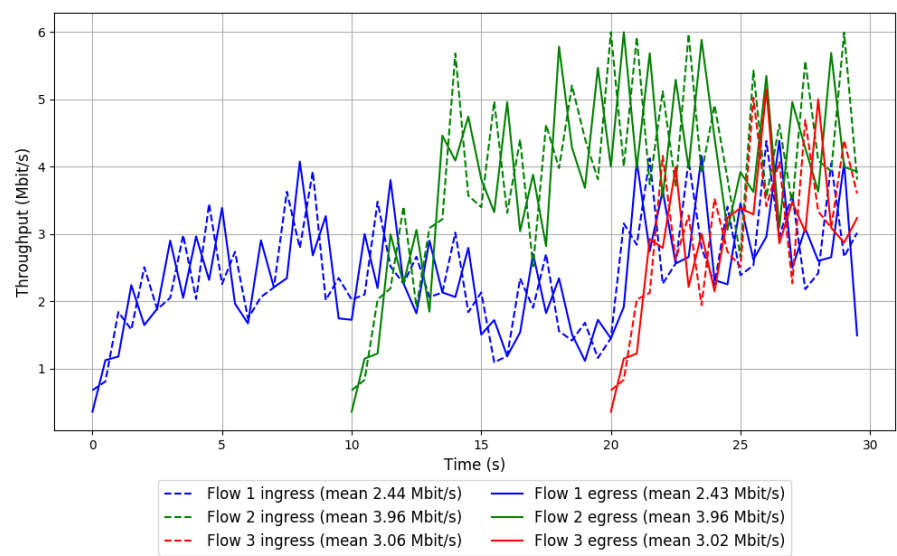


Run 3: Statistics of Sprout

Start at: 2018-03-27 15:22:49
End at: 2018-03-27 15:23:19
Local clock offset: -2.042 ms
Remote clock offset: 0.968 ms

```
# Below is generated by plot.py at 2018-03-27 22:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.03 Mbit/s
95th percentile per-packet one-way delay: 94.025 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 93.135 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 3.96 Mbit/s
95th percentile per-packet one-way delay: 94.101 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 95.925 ms
Loss rate: 3.13%
```


Run 3: Report of Sprout — Data Link

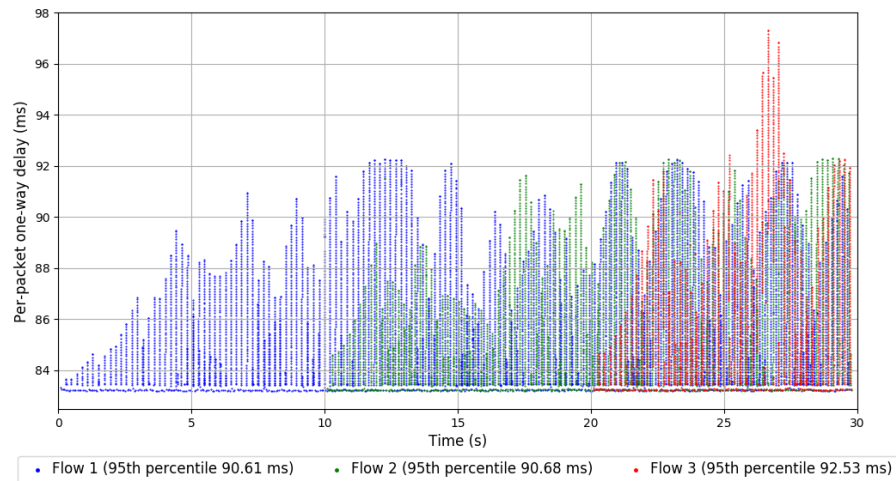
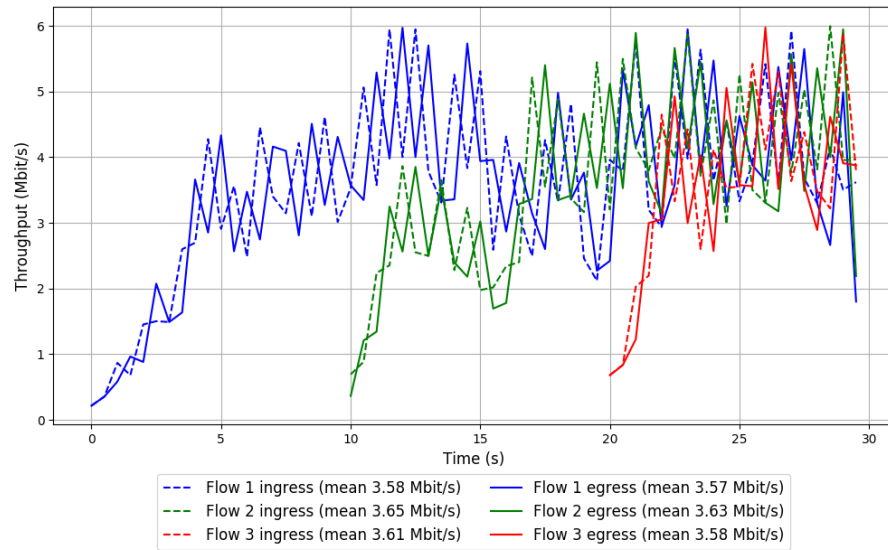


Run 4: Statistics of Sprout

Start at: 2018-03-27 15:46:45
End at: 2018-03-27 15:47:15
Local clock offset: -1.528 ms
Remote clock offset: 3.184 ms

```
# Below is generated by plot.py at 2018-03-27 22:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.14 Mbit/s
95th percentile per-packet one-way delay: 90.933 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 3.57 Mbit/s
95th percentile per-packet one-way delay: 90.610 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 3.63 Mbit/s
95th percentile per-packet one-way delay: 90.683 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 92.535 ms
Loss rate: 2.64%
```

Run 4: Report of Sprout — Data Link

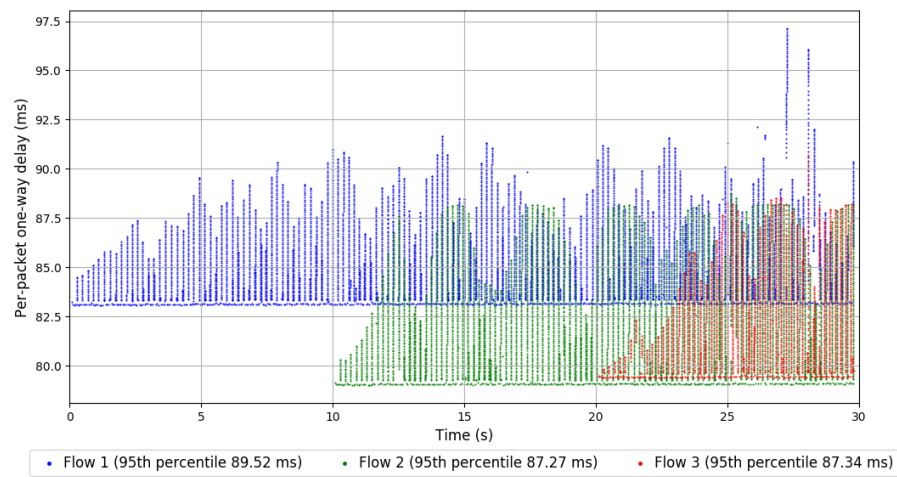
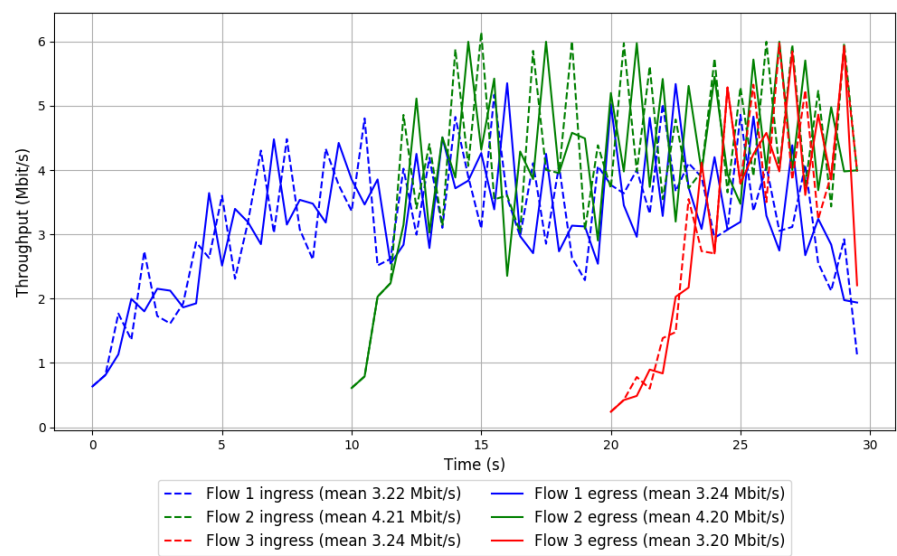


Run 5: Statistics of Sprout

Start at: 2018-03-27 16:10:41
End at: 2018-03-27 16:11:11
Local clock offset: -1.394 ms
Remote clock offset: 7.337 ms

Below is generated by plot.py at 2018-03-27 22:28:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.07 Mbit/s
95th percentile per-packet one-way delay: 88.463 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 3.24 Mbit/s
95th percentile per-packet one-way delay: 89.523 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 87.268 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 3.20 Mbit/s
95th percentile per-packet one-way delay: 87.337 ms
Loss rate: 2.78%

Run 5: Report of Sprout — Data Link

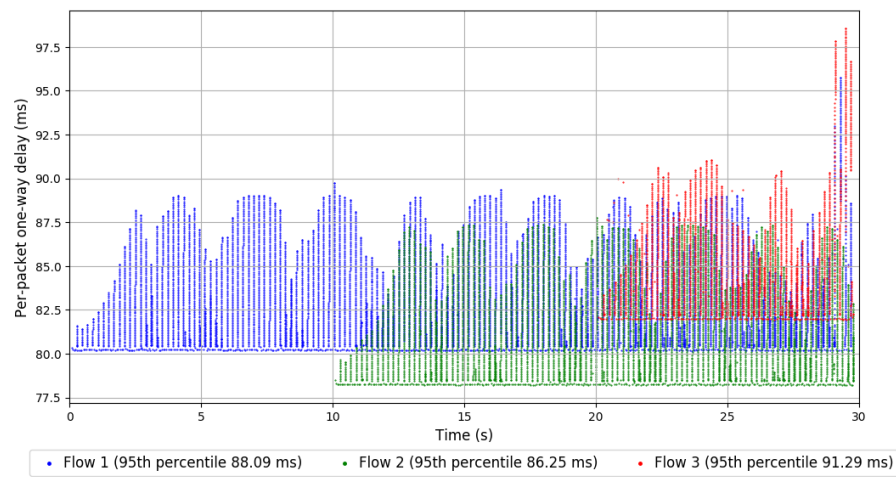
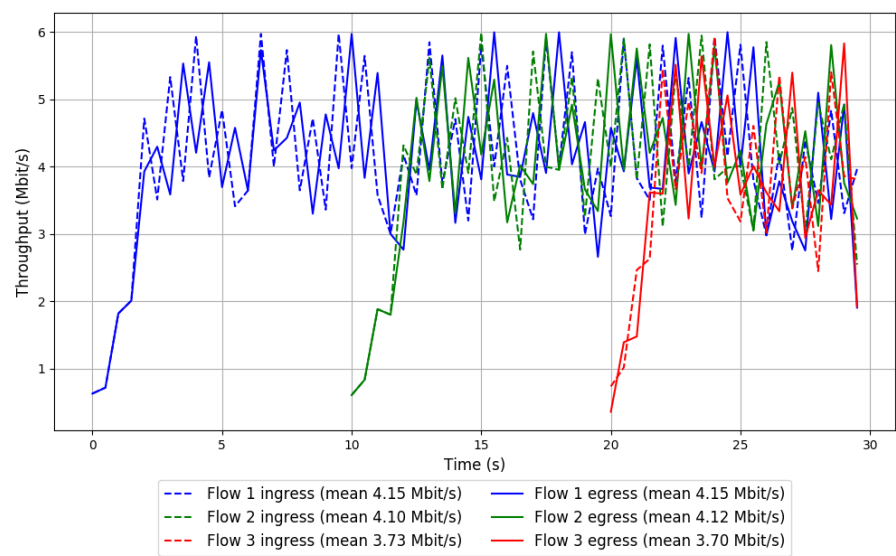


Run 6: Statistics of Sprout

Start at: 2018-03-27 16:34:49
End at: 2018-03-27 16:35:19
Local clock offset: -2.743 ms
Remote clock offset: 8.482 ms

```
# Below is generated by plot.py at 2018-03-27 22:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.08 Mbit/s
95th percentile per-packet one-way delay: 88.168 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 88.087 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 86.252 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 91.288 ms
Loss rate: 2.57%
```

Run 6: Report of Sprout — Data Link

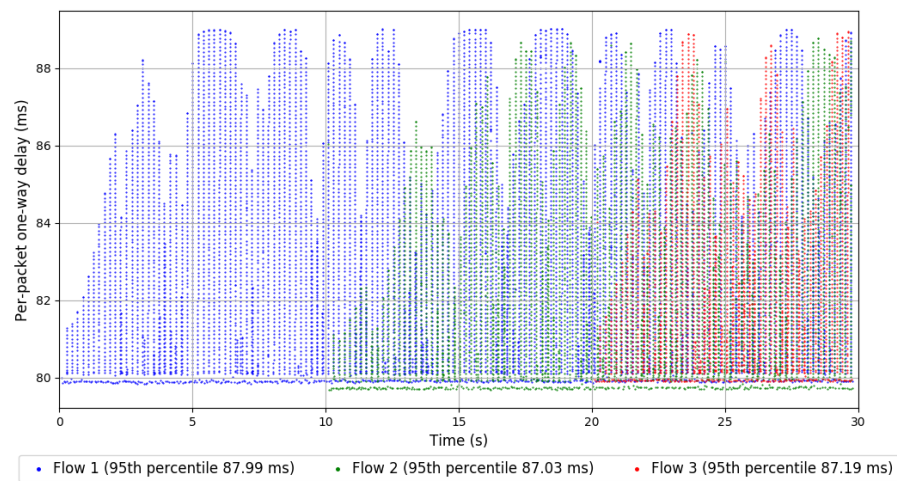
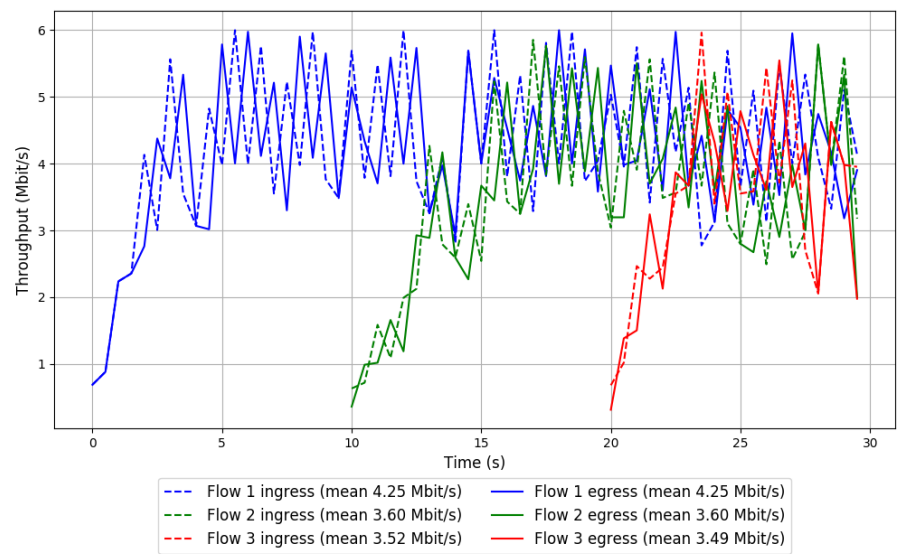


Run 7: Statistics of Sprout

Start at: 2018-03-27 16:59:02
End at: 2018-03-27 16:59:32
Local clock offset: -6.949 ms
Remote clock offset: 7.733 ms

Below is generated by plot.py at 2018-03-27 22:28:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.76 Mbit/s
95th percentile per-packet one-way delay: 87.672 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 4.25 Mbit/s
95th percentile per-packet one-way delay: 87.990 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 3.60 Mbit/s
95th percentile per-packet one-way delay: 87.029 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 87.192 ms
Loss rate: 2.85%

Run 7: Report of Sprout — Data Link

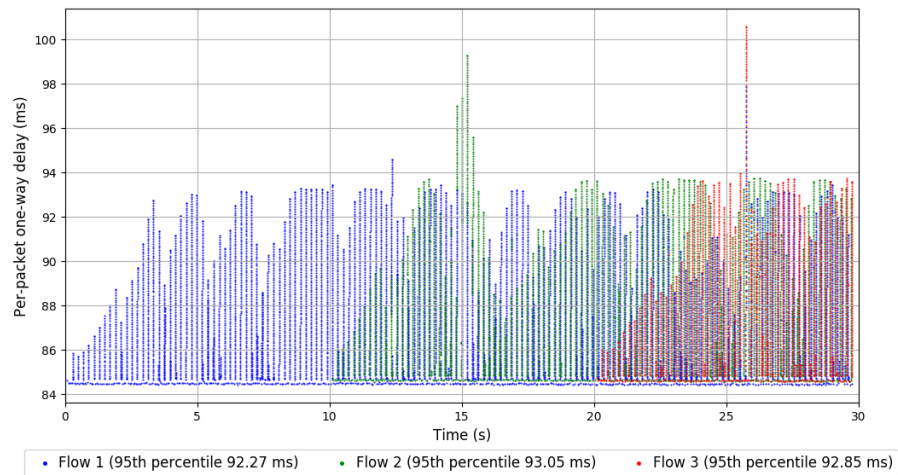
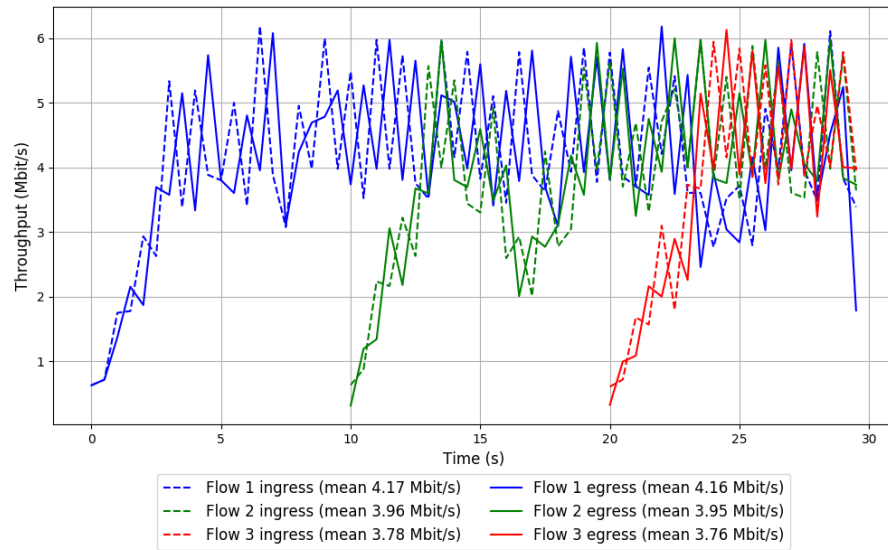


Run 8: Statistics of Sprout

Start at: 2018-03-27 17:23:04
End at: 2018-03-27 17:23:34
Local clock offset: -7.385 ms
Remote clock offset: 1.987 ms

```
# Below is generated by plot.py at 2018-03-27 22:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.00 Mbit/s
95th percentile per-packet one-way delay: 92.613 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 92.269 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 3.95 Mbit/s
95th percentile per-packet one-way delay: 93.045 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 92.854 ms
Loss rate: 2.65%
```

Run 8: Report of Sprout — Data Link

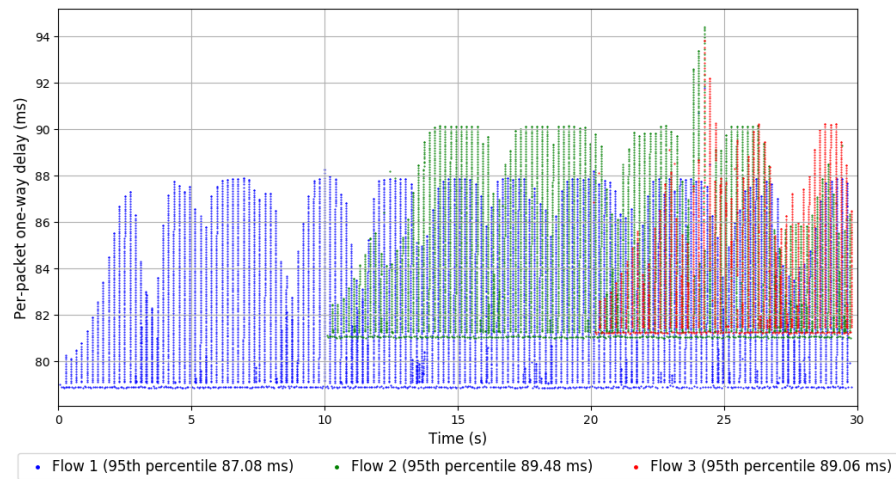
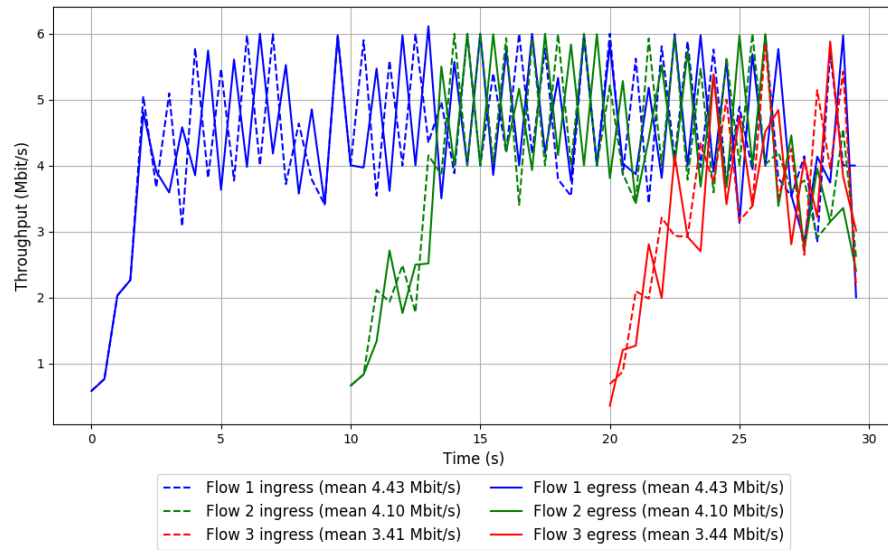


Run 9: Statistics of Sprout

Start at: 2018-03-27 17:46:56
End at: 2018-03-27 17:47:26
Local clock offset: -6.972 ms
Remote clock offset: 7.53 ms

```
# Below is generated by plot.py at 2018-03-27 22:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 88.485 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 4.43 Mbit/s
95th percentile per-packet one-way delay: 87.080 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 89.478 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 3.44 Mbit/s
95th percentile per-packet one-way delay: 89.061 ms
Loss rate: 1.10%
```

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-03-27 18:10:57

End at: 2018-03-27 18:11:27

Local clock offset: -3.809 ms

Remote clock offset: 3.075 ms

Below is generated by plot.py at 2018-03-27 22:28:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.13 Mbit/s

95th percentile per-packet one-way delay: 93.188 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 92.478 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 93.579 ms

Loss rate: 0.89%

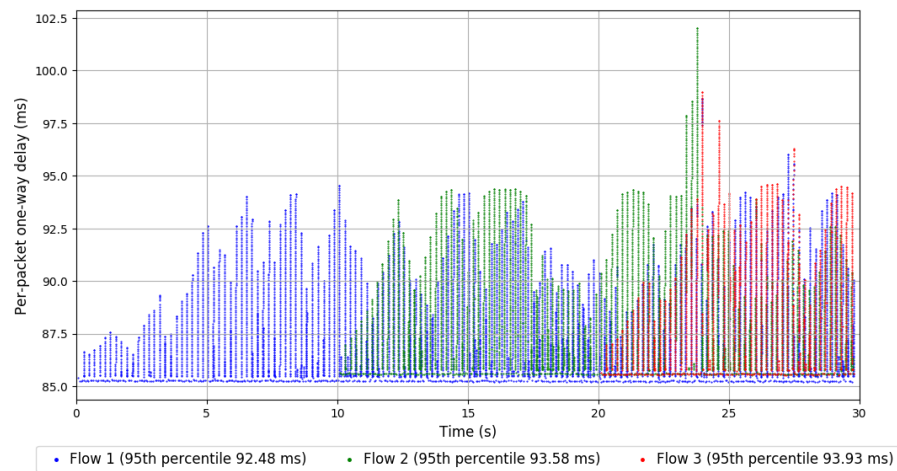
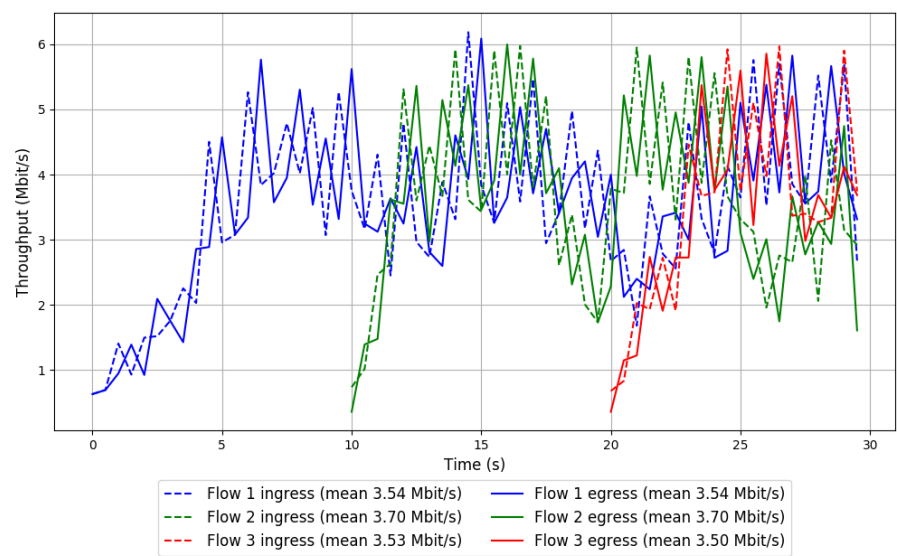
-- Flow 3:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 93.932 ms

Loss rate: 2.64%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-03-27 14:29:27

End at: 2018-03-27 14:29:57

Local clock offset: -7.349 ms

Remote clock offset: 4.051 ms

Below is generated by plot.py at 2018-03-27 22:30:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.75 Mbit/s

95th percentile per-packet one-way delay: 109.777 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 50.52 Mbit/s

95th percentile per-packet one-way delay: 108.397 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 41.47 Mbit/s

95th percentile per-packet one-way delay: 110.209 ms

Loss rate: 1.00%

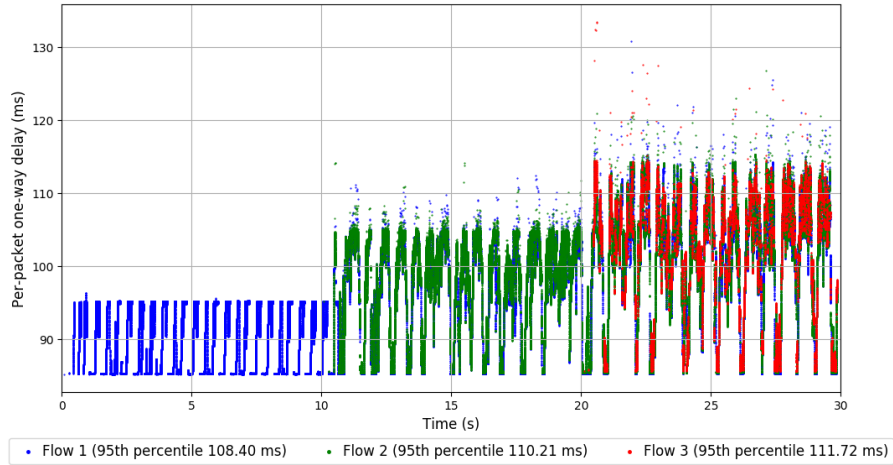
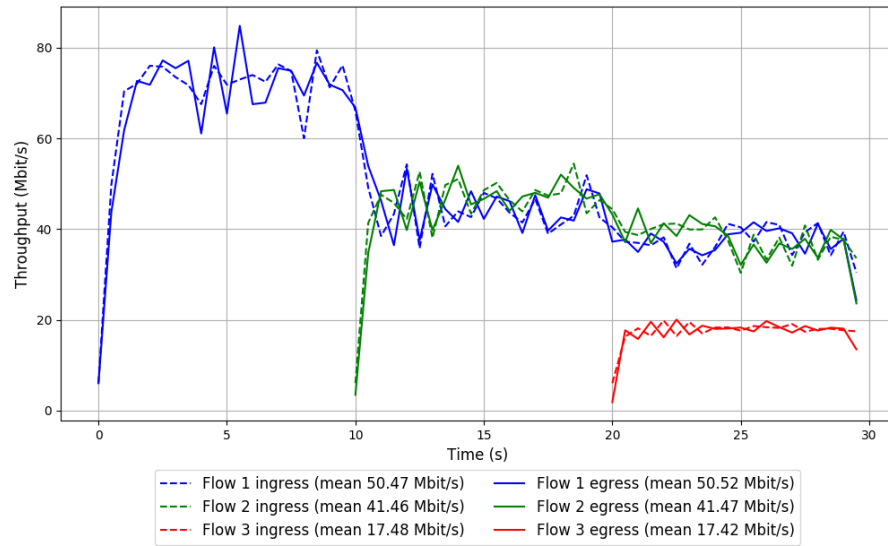
-- Flow 3:

Average throughput: 17.42 Mbit/s

95th percentile per-packet one-way delay: 111.725 ms

Loss rate: 2.02%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-03-27 14:53:28

End at: 2018-03-27 14:53:58

Local clock offset: -8.088 ms

Remote clock offset: 4.306 ms

Below is generated by plot.py at 2018-03-27 22:30:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.14 Mbit/s

95th percentile per-packet one-way delay: 112.875 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 50.25 Mbit/s

95th percentile per-packet one-way delay: 110.426 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 38.60 Mbit/s

95th percentile per-packet one-way delay: 114.014 ms

Loss rate: 0.79%

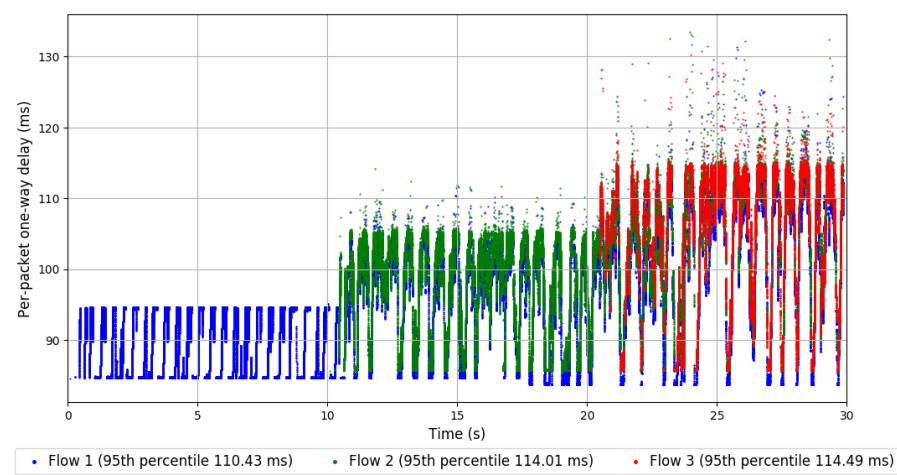
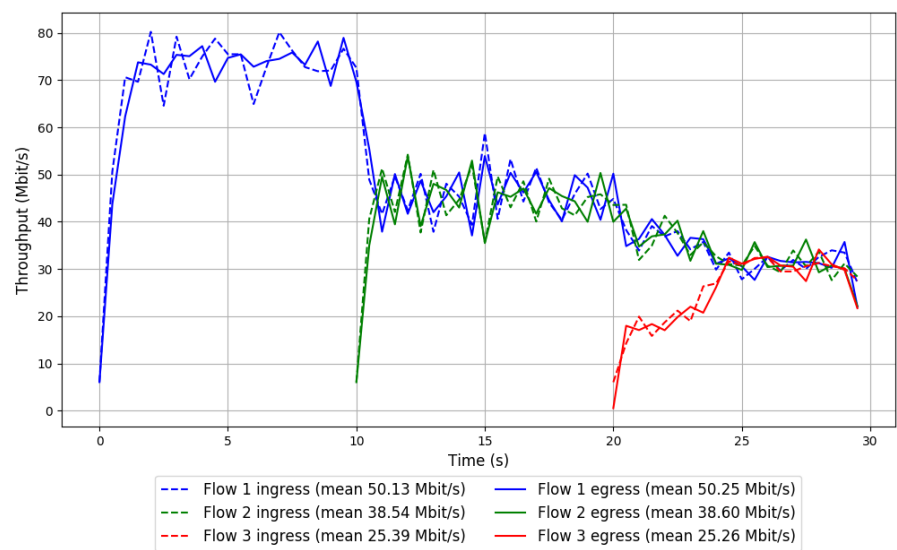
-- Flow 3:

Average throughput: 25.26 Mbit/s

95th percentile per-packet one-way delay: 114.491 ms

Loss rate: 2.22%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-03-27 15:17:34

End at: 2018-03-27 15:18:04

Local clock offset: -2.651 ms

Remote clock offset: 7.464 ms

Below is generated by plot.py at 2018-03-27 22:30:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.15 Mbit/s

95th percentile per-packet one-way delay: 108.867 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 50.08 Mbit/s

95th percentile per-packet one-way delay: 106.966 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 38.15 Mbit/s

95th percentile per-packet one-way delay: 110.540 ms

Loss rate: 0.89%

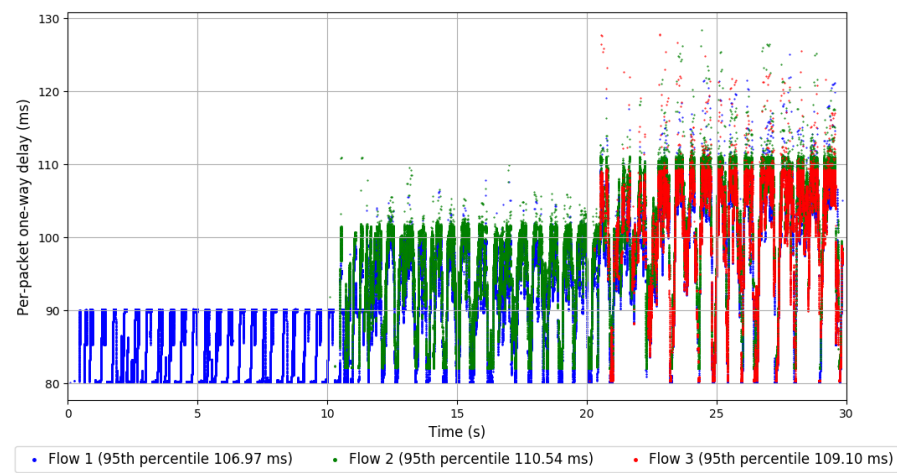
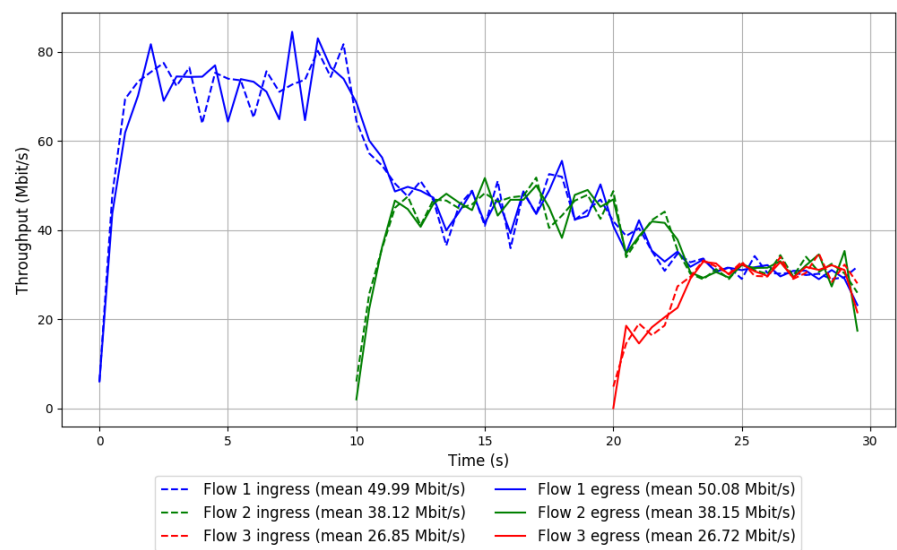
-- Flow 3:

Average throughput: 26.72 Mbit/s

95th percentile per-packet one-way delay: 109.099 ms

Loss rate: 2.49%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-03-27 15:41:27

End at: 2018-03-27 15:41:57

Local clock offset: -1.469 ms

Remote clock offset: 1.988 ms

Below is generated by plot.py at 2018-03-27 22:30:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.62 Mbit/s

95th percentile per-packet one-way delay: 115.407 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 49.97 Mbit/s

95th percentile per-packet one-way delay: 114.791 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 38.38 Mbit/s

95th percentile per-packet one-way delay: 116.407 ms

Loss rate: 0.88%

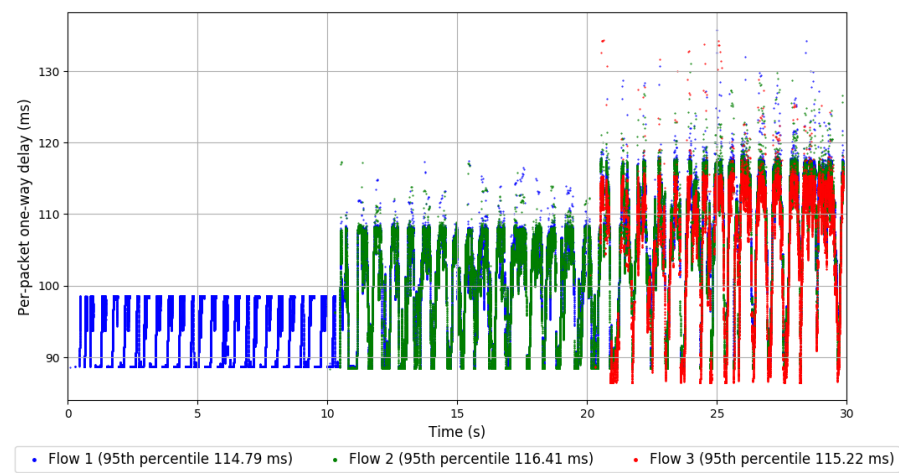
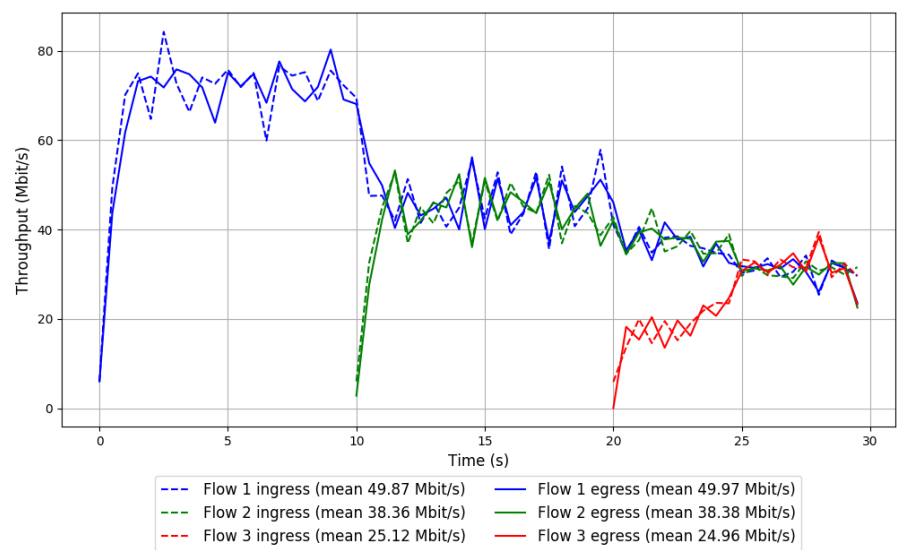
-- Flow 3:

Average throughput: 24.96 Mbit/s

95th percentile per-packet one-way delay: 115.219 ms

Loss rate: 2.72%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-03-27 16:05:26

End at: 2018-03-27 16:05:56

Local clock offset: -0.852 ms

Remote clock offset: 3.07 ms

Below is generated by plot.py at 2018-03-27 22:30:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.12 Mbit/s

95th percentile per-packet one-way delay: 112.267 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 49.67 Mbit/s

95th percentile per-packet one-way delay: 111.244 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 38.36 Mbit/s

95th percentile per-packet one-way delay: 111.578 ms

Loss rate: 1.01%

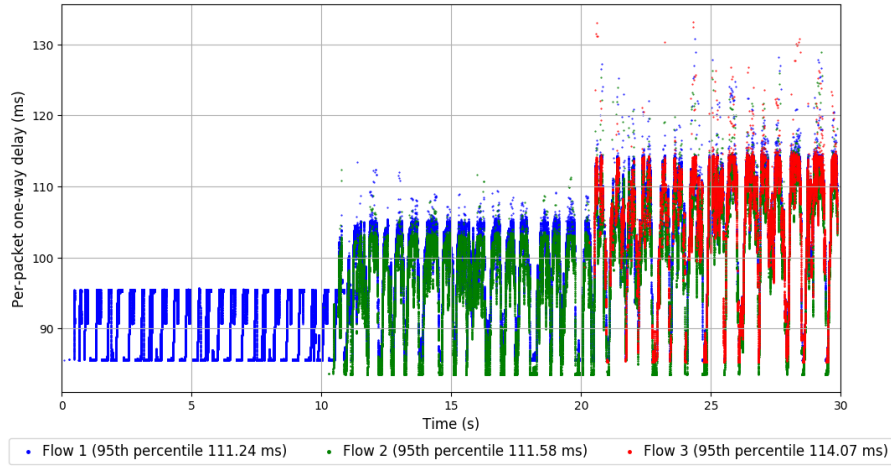
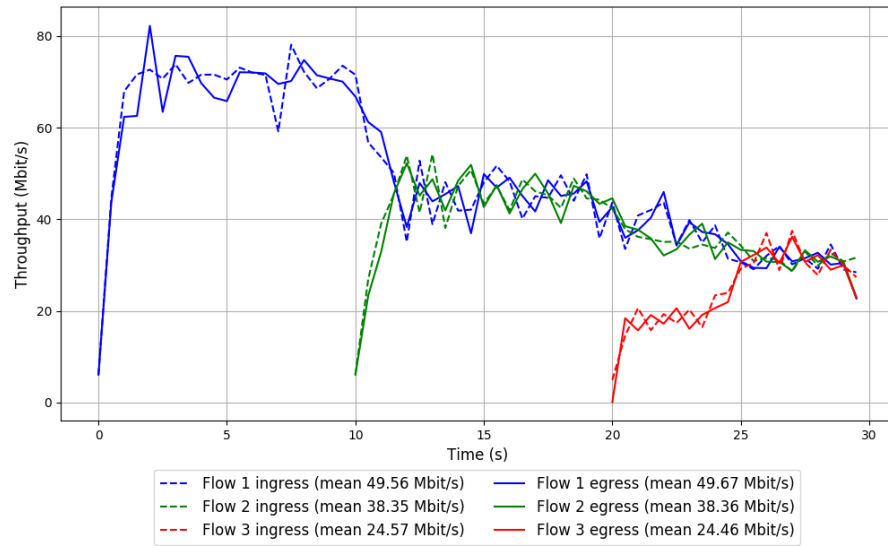
-- Flow 3:

Average throughput: 24.46 Mbit/s

95th percentile per-packet one-way delay: 114.072 ms

Loss rate: 2.41%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-03-27 16:29:33

End at: 2018-03-27 16:30:03

Local clock offset: -2.735 ms

Remote clock offset: 2.191 ms

Below is generated by plot.py at 2018-03-27 22:30:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.68 Mbit/s

95th percentile per-packet one-way delay: 113.518 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 50.48 Mbit/s

95th percentile per-packet one-way delay: 112.501 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 37.16 Mbit/s

95th percentile per-packet one-way delay: 113.284 ms

Loss rate: 0.90%

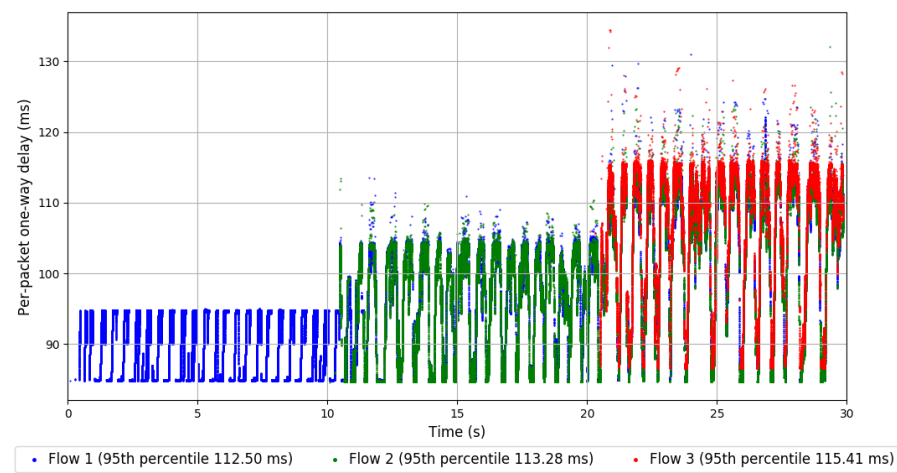
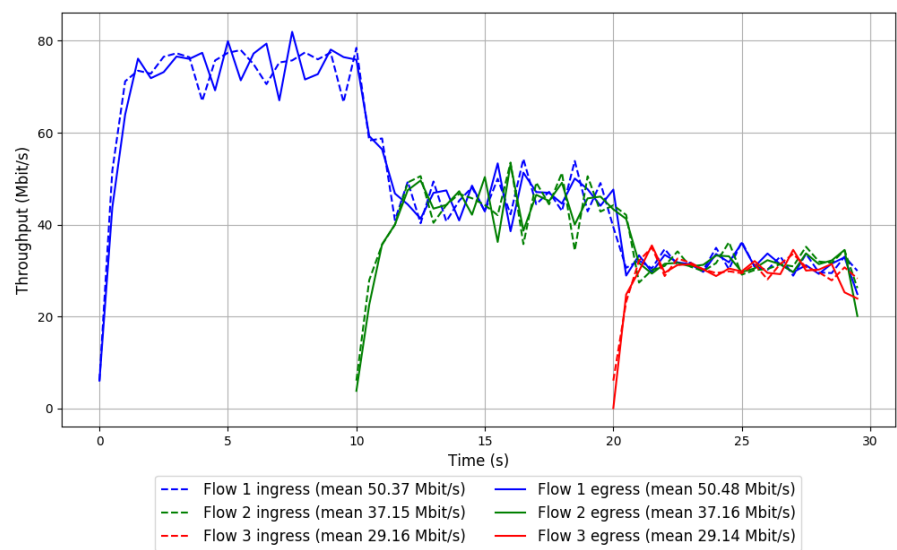
-- Flow 3:

Average throughput: 29.14 Mbit/s

95th percentile per-packet one-way delay: 115.413 ms

Loss rate: 2.17%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-03-27 16:53:45

End at: 2018-03-27 16:54:15

Local clock offset: -6.287 ms

Remote clock offset: 1.473 ms

Below is generated by plot.py at 2018-03-27 22:30:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.15 Mbit/s

95th percentile per-packet one-way delay: 112.002 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 51.34 Mbit/s

95th percentile per-packet one-way delay: 108.302 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 40.35 Mbit/s

95th percentile per-packet one-way delay: 113.856 ms

Loss rate: 0.75%

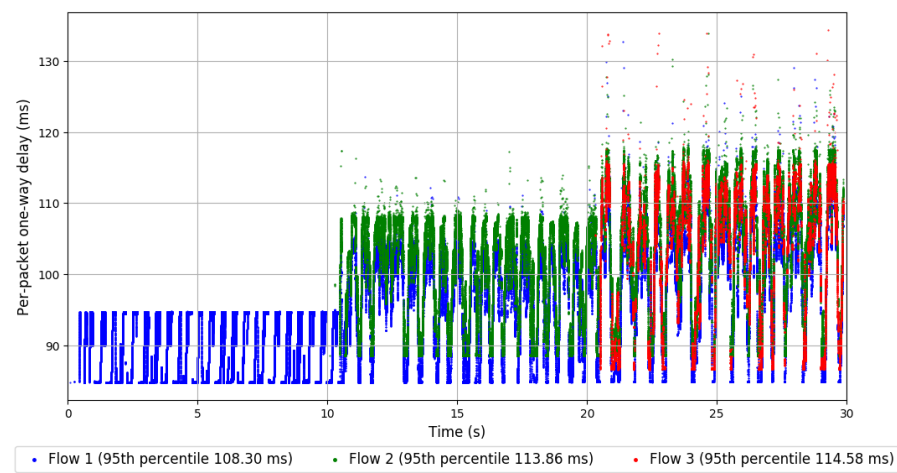
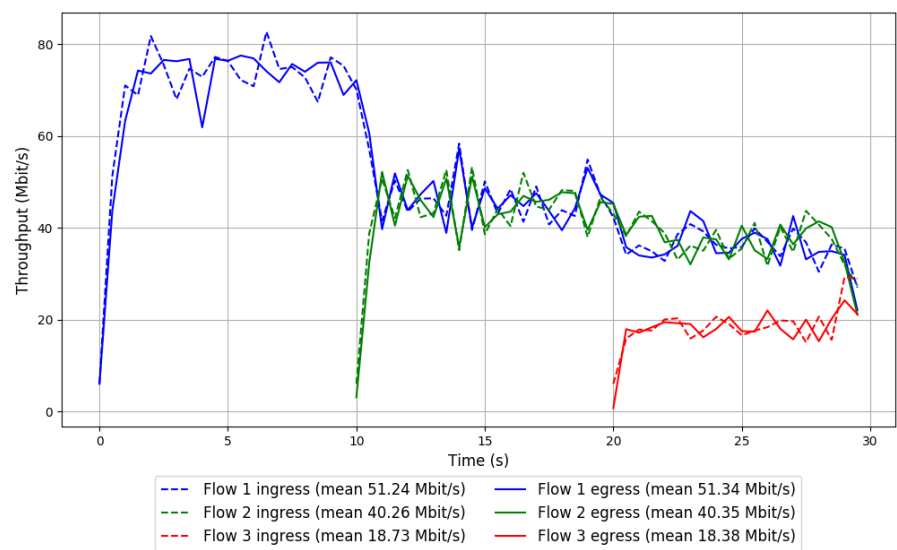
-- Flow 3:

Average throughput: 18.38 Mbit/s

95th percentile per-packet one-way delay: 114.580 ms

Loss rate: 3.85%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-03-27 17:17:48

End at: 2018-03-27 17:18:18

Local clock offset: -7.977 ms

Remote clock offset: 9.249 ms

Below is generated by plot.py at 2018-03-27 22:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.89 Mbit/s

95th percentile per-packet one-way delay: 107.487 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 50.00 Mbit/s

95th percentile per-packet one-way delay: 104.996 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 39.08 Mbit/s

95th percentile per-packet one-way delay: 106.928 ms

Loss rate: 0.86%

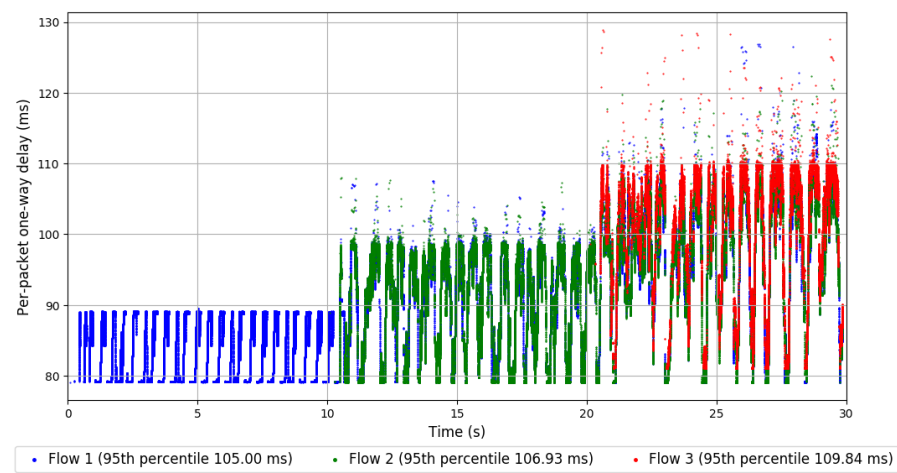
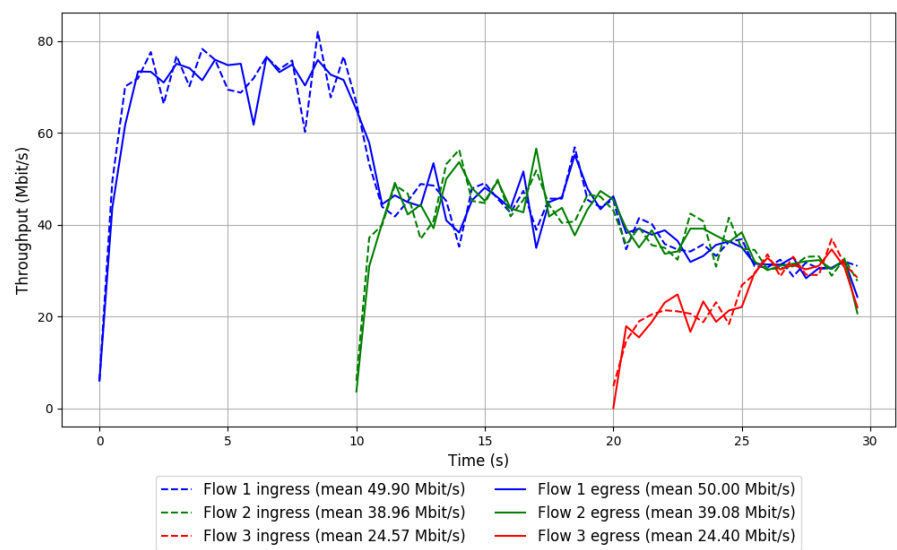
-- Flow 3:

Average throughput: 24.40 Mbit/s

95th percentile per-packet one-way delay: 109.840 ms

Loss rate: 2.84%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-03-27 17:41:41

End at: 2018-03-27 17:42:11

Local clock offset: -6.943 ms

Remote clock offset: 7.511 ms

Below is generated by plot.py at 2018-03-27 22:32:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.93 Mbit/s

95th percentile per-packet one-way delay: 104.948 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 51.27 Mbit/s

95th percentile per-packet one-way delay: 102.434 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 40.60 Mbit/s

95th percentile per-packet one-way delay: 106.209 ms

Loss rate: 1.04%

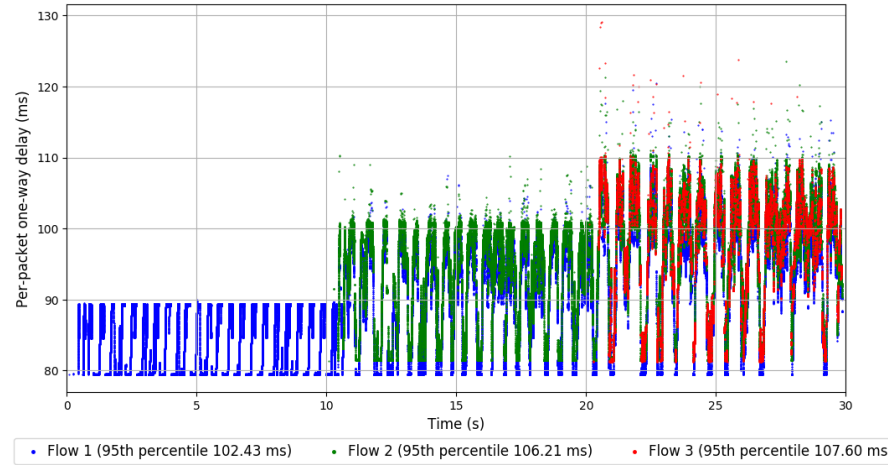
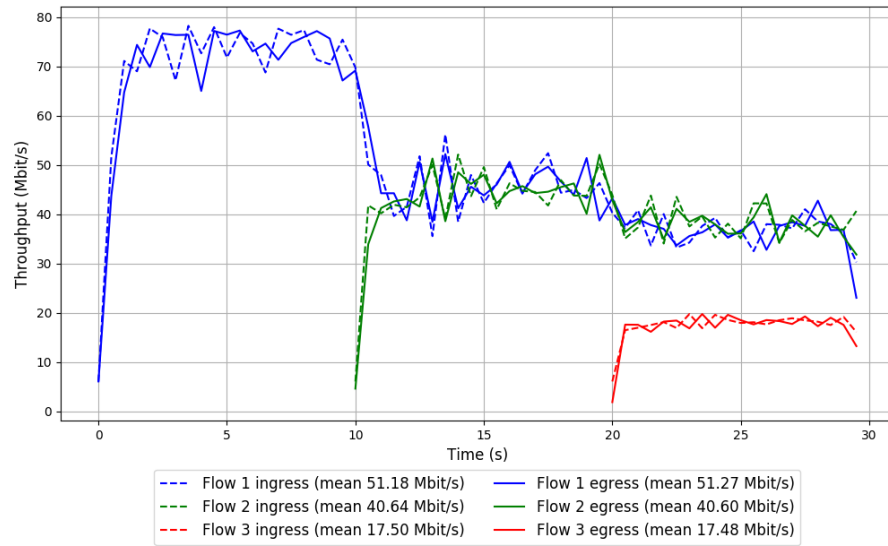
-- Flow 3:

Average throughput: 17.48 Mbit/s

95th percentile per-packet one-way delay: 107.601 ms

Loss rate: 2.11%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-03-27 18:05:41

End at: 2018-03-27 18:06:11

Local clock offset: -4.189 ms

Remote clock offset: 3.101 ms

Below is generated by plot.py at 2018-03-27 22:32:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.84 Mbit/s

95th percentile per-packet one-way delay: 107.553 ms

Loss rate: 8.44%

-- Flow 1:

Average throughput: 47.15 Mbit/s

95th percentile per-packet one-way delay: 106.471 ms

Loss rate: 6.35%

-- Flow 2:

Average throughput: 37.37 Mbit/s

95th percentile per-packet one-way delay: 107.127 ms

Loss rate: 11.56%

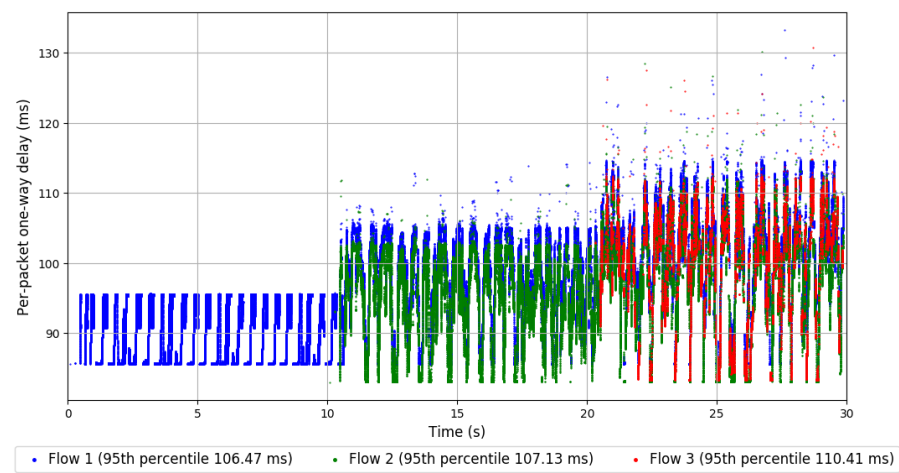
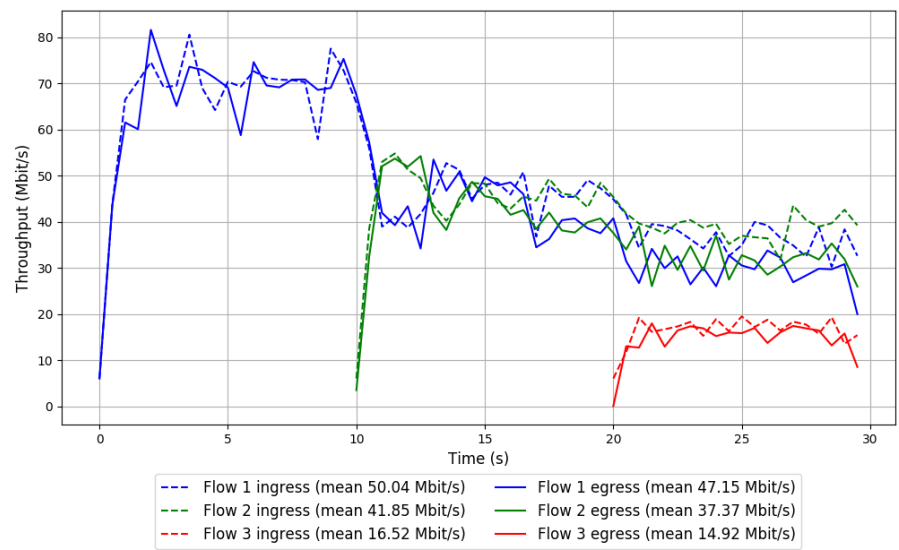
-- Flow 3:

Average throughput: 14.92 Mbit/s

95th percentile per-packet one-way delay: 110.405 ms

Loss rate: 11.69%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-03-27 14:26:48

End at: 2018-03-27 14:27:18

Local clock offset: -7.279 ms

Remote clock offset: 3.179 ms

Below is generated by plot.py at 2018-03-27 22:32:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.04 Mbit/s

95th percentile per-packet one-way delay: 119.703 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 38.93 Mbit/s

95th percentile per-packet one-way delay: 119.772 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 35.61 Mbit/s

95th percentile per-packet one-way delay: 119.911 ms

Loss rate: 0.97%

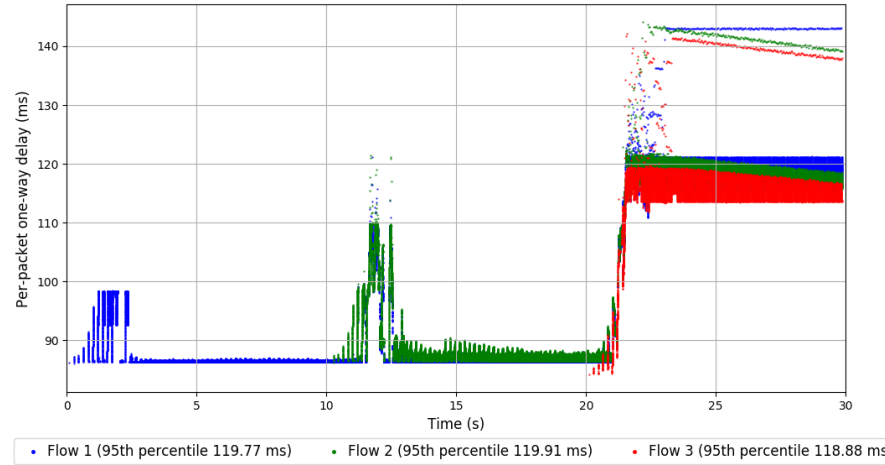
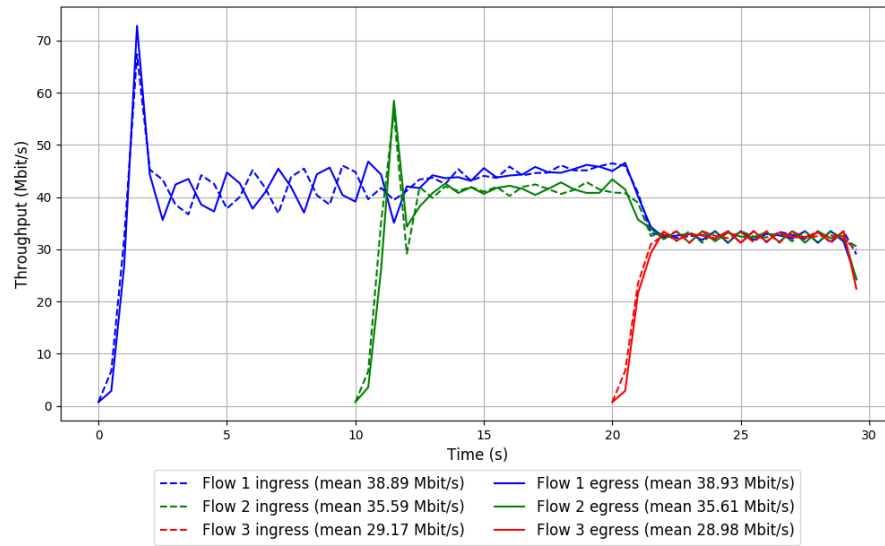
-- Flow 3:

Average throughput: 28.98 Mbit/s

95th percentile per-packet one-way delay: 118.879 ms

Loss rate: 2.44%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-03-27 14:50:40

End at: 2018-03-27 14:51:10

Local clock offset: -8.013 ms

Remote clock offset: 9.828 ms

Below is generated by plot.py at 2018-03-27 22:32:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 43.17 Mbit/s

95th percentile per-packet one-way delay: 92.737 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 24.06 Mbit/s

95th percentile per-packet one-way delay: 92.644 ms

Loss rate: 1.27%

-- Flow 2:

Average throughput: 19.60 Mbit/s

95th percentile per-packet one-way delay: 94.251 ms

Loss rate: 1.54%

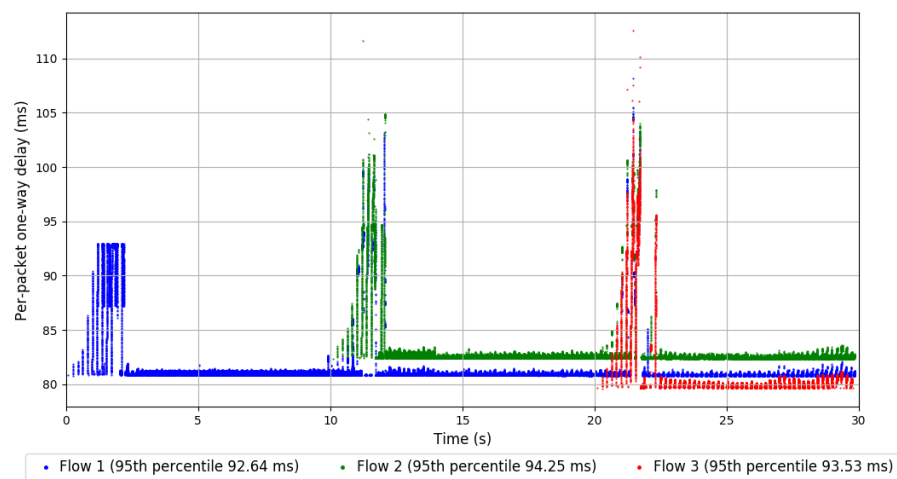
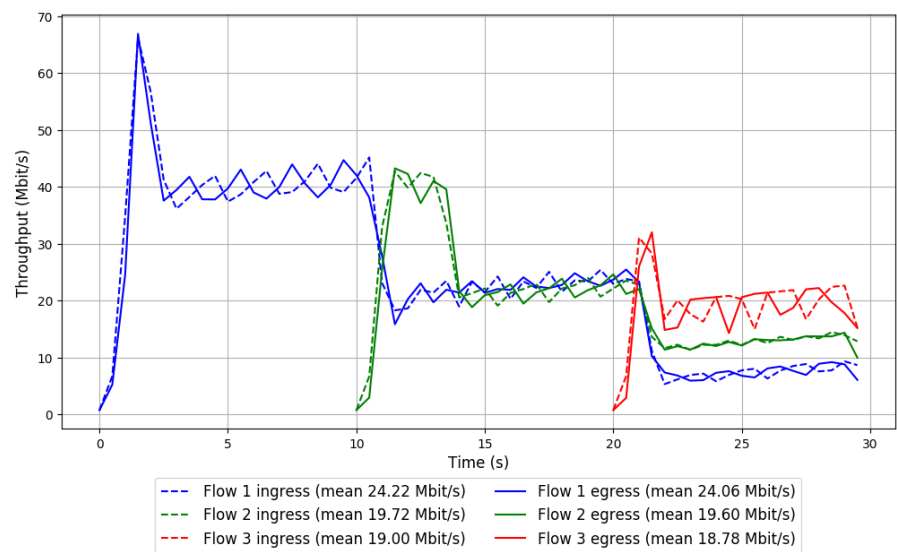
-- Flow 3:

Average throughput: 18.78 Mbit/s

95th percentile per-packet one-way delay: 93.528 ms

Loss rate: 3.41%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-03-27 15:14:53

End at: 2018-03-27 15:15:23

Local clock offset: -3.058 ms

Remote clock offset: 7.627 ms

Below is generated by plot.py at 2018-03-27 22:32:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.59 Mbit/s

95th percentile per-packet one-way delay: 114.427 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 36.73 Mbit/s

95th percentile per-packet one-way delay: 114.659 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 36.65 Mbit/s

95th percentile per-packet one-way delay: 114.033 ms

Loss rate: 0.97%

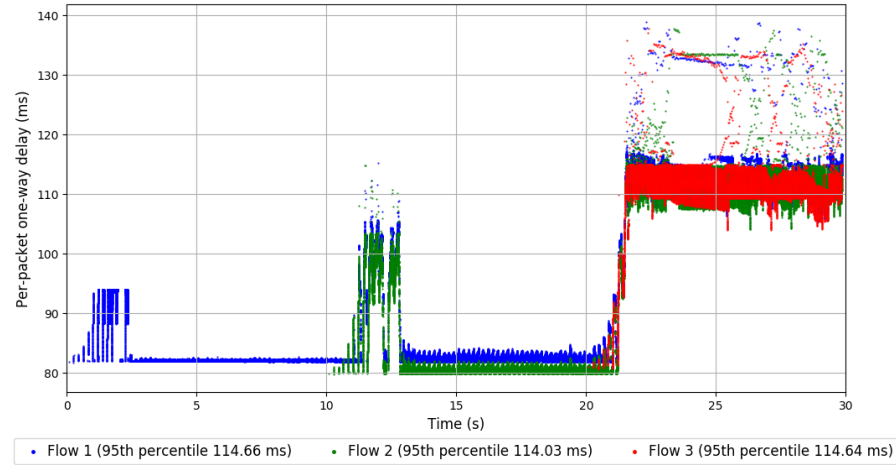
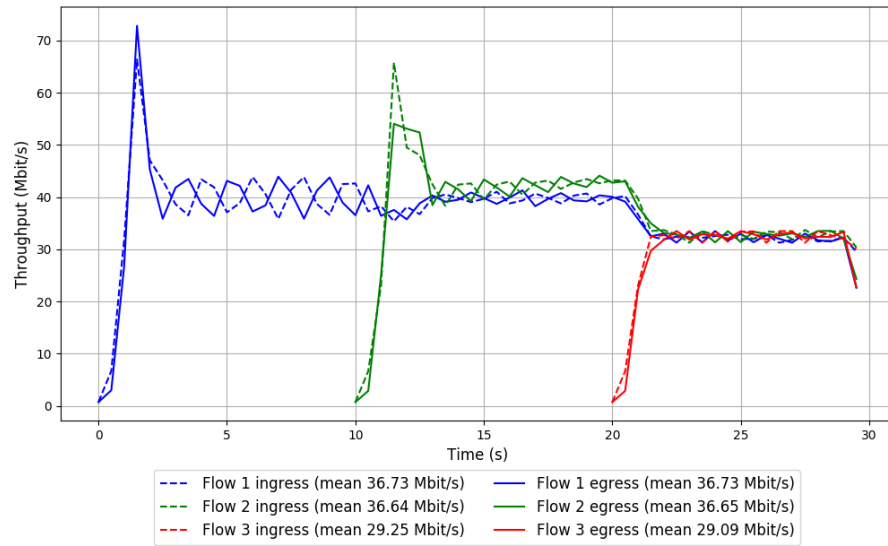
-- Flow 3:

Average throughput: 29.09 Mbit/s

95th percentile per-packet one-way delay: 114.643 ms

Loss rate: 2.43%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-03-27 15:38:48

End at: 2018-03-27 15:39:18

Local clock offset: -1.465 ms

Remote clock offset: 8.327 ms

Below is generated by plot.py at 2018-03-27 22:32:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.65 Mbit/s

95th percentile per-packet one-way delay: 88.019 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 25.02 Mbit/s

95th percentile per-packet one-way delay: 90.228 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 30.35 Mbit/s

95th percentile per-packet one-way delay: 80.954 ms

Loss rate: 1.17%

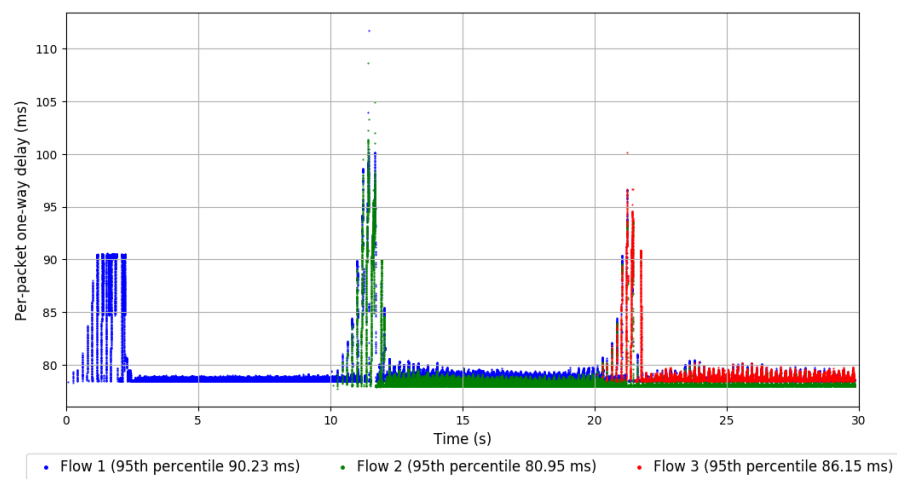
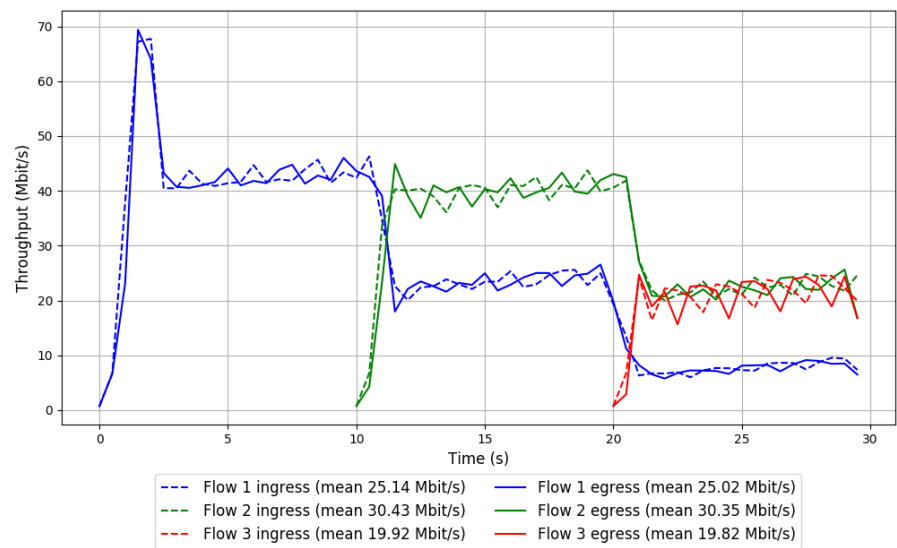
-- Flow 3:

Average throughput: 19.82 Mbit/s

95th percentile per-packet one-way delay: 86.152 ms

Loss rate: 2.34%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-03-27 16:02:44

End at: 2018-03-27 16:03:14

Local clock offset: -0.962 ms

Remote clock offset: 9.438 ms

Below is generated by plot.py at 2018-03-27 22:32:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.73 Mbit/s

95th percentile per-packet one-way delay: 114.145 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 37.21 Mbit/s

95th percentile per-packet one-way delay: 112.649 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 43.95 Mbit/s

95th percentile per-packet one-way delay: 112.815 ms

Loss rate: 0.80%

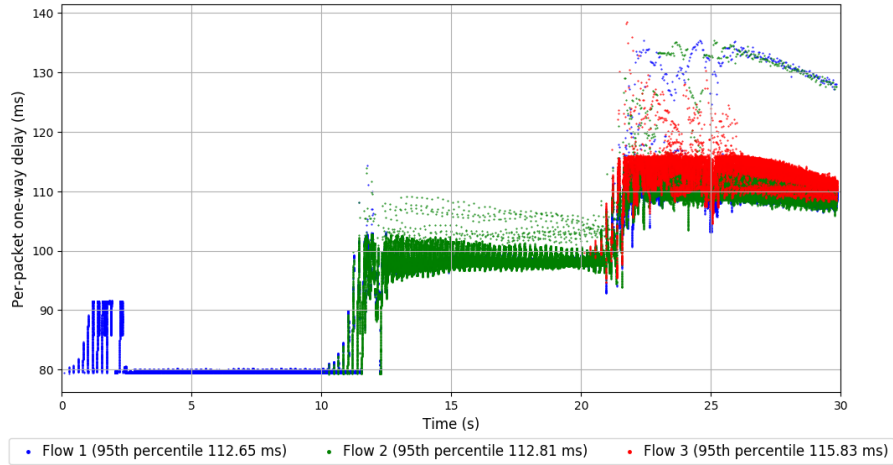
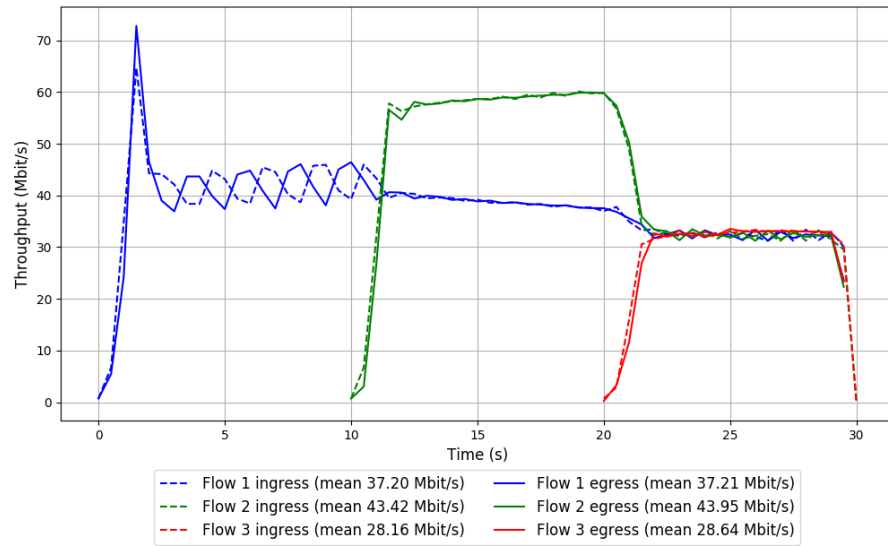
-- Flow 3:

Average throughput: 28.64 Mbit/s

95th percentile per-packet one-way delay: 115.828 ms

Loss rate: 2.52%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-03-27 16:26:52

End at: 2018-03-27 16:27:22

Local clock offset: -2.675 ms

Remote clock offset: 9.53 ms

Below is generated by plot.py at 2018-03-27 22:32:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.32 Mbit/s

95th percentile per-packet one-way delay: 108.708 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 41.23 Mbit/s

95th percentile per-packet one-way delay: 105.323 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 42.36 Mbit/s

95th percentile per-packet one-way delay: 110.098 ms

Loss rate: 1.04%

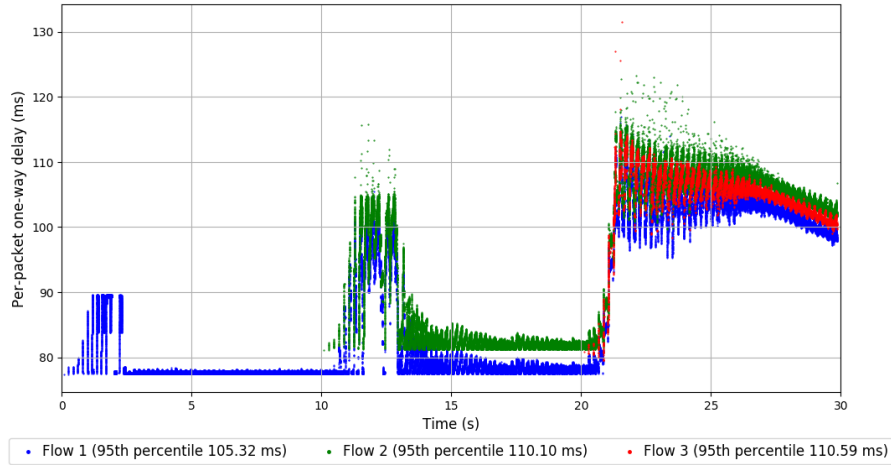
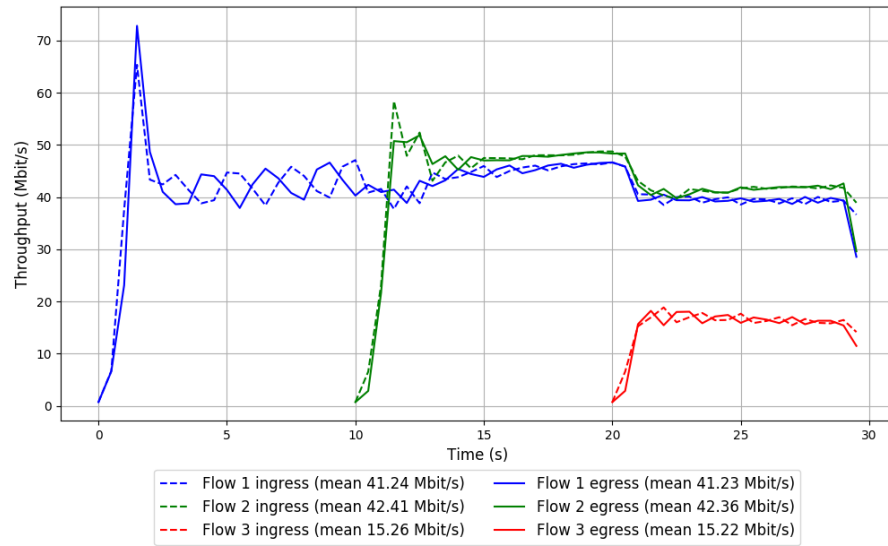
-- Flow 3:

Average throughput: 15.22 Mbit/s

95th percentile per-packet one-way delay: 110.590 ms

Loss rate: 2.14%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-03-27 16:51:03

End at: 2018-03-27 16:51:33

Local clock offset: -5.8 ms

Remote clock offset: 6.862 ms

Below is generated by plot.py at 2018-03-27 22:32:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.45 Mbit/s

95th percentile per-packet one-way delay: 115.227 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 37.48 Mbit/s

95th percentile per-packet one-way delay: 113.792 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 37.15 Mbit/s

95th percentile per-packet one-way delay: 115.785 ms

Loss rate: 0.96%

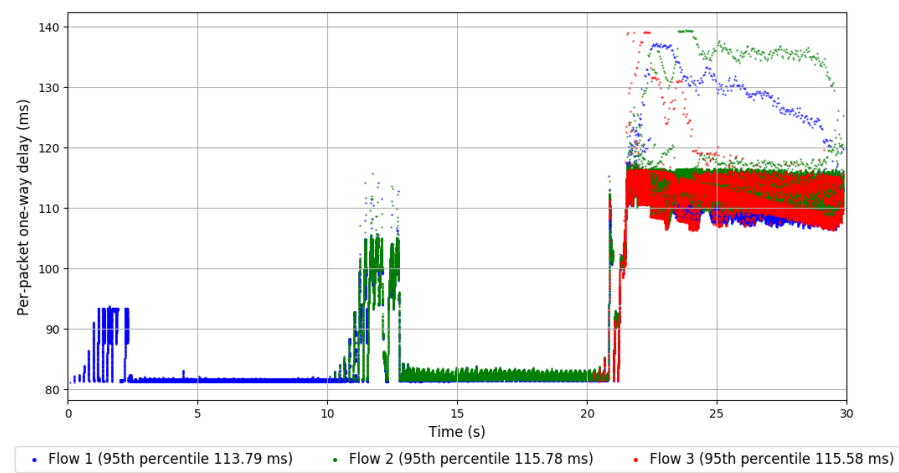
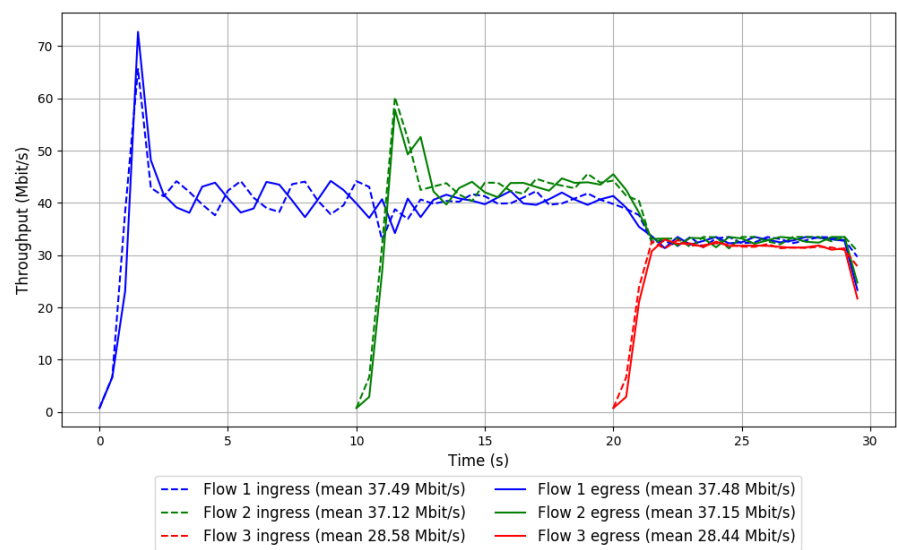
-- Flow 3:

Average throughput: 28.44 Mbit/s

95th percentile per-packet one-way delay: 115.583 ms

Loss rate: 2.28%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-03-27 17:15:07

End at: 2018-03-27 17:15:38

Local clock offset: -8.226 ms

Remote clock offset: 2.778 ms

Below is generated by plot.py at 2018-03-27 22:32:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.14 Mbit/s

95th percentile per-packet one-way delay: 121.087 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 35.81 Mbit/s

95th percentile per-packet one-way delay: 121.874 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 45.06 Mbit/s

95th percentile per-packet one-way delay: 117.535 ms

Loss rate: 0.78%

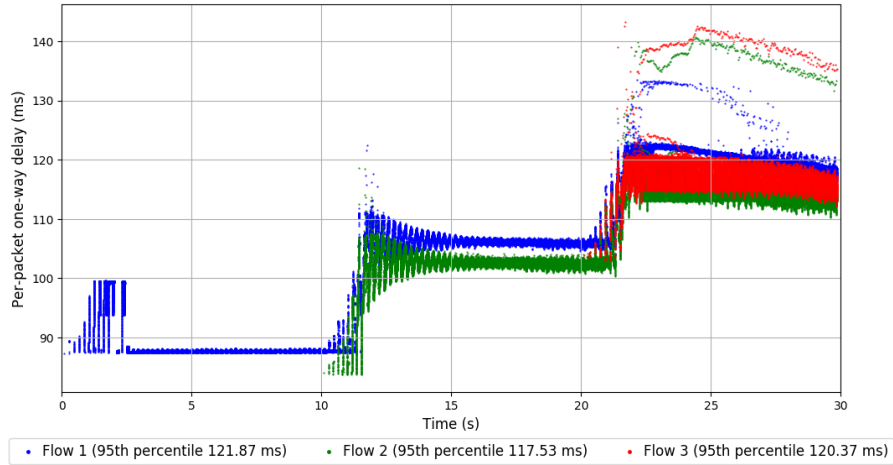
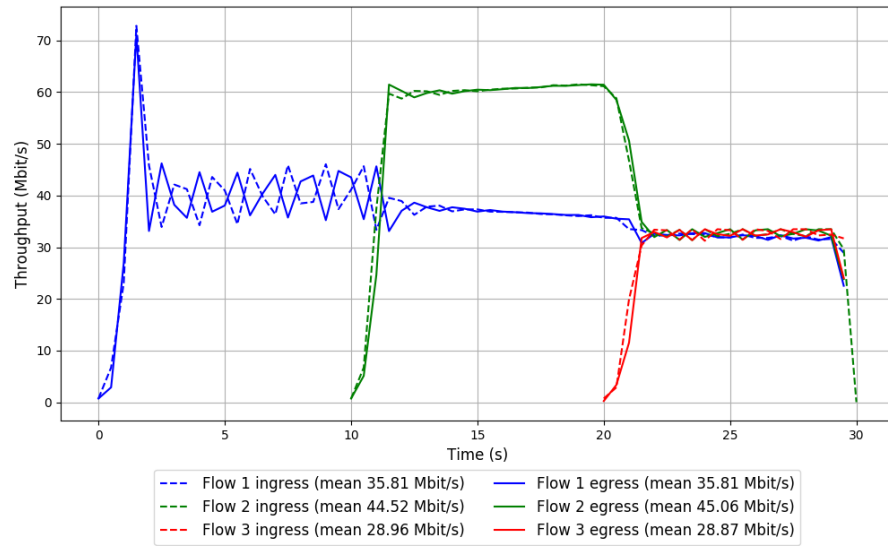
-- Flow 3:

Average throughput: 28.87 Mbit/s

95th percentile per-packet one-way delay: 120.368 ms

Loss rate: 2.50%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-03-27 17:39:02

End at: 2018-03-27 17:39:33

Local clock offset: -6.95 ms

Remote clock offset: 7.513 ms

Below is generated by plot.py at 2018-03-27 22:32:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.67 Mbit/s

95th percentile per-packet one-way delay: 95.369 ms

Loss rate: 1.93%

-- Flow 1:

Average throughput: 20.26 Mbit/s

95th percentile per-packet one-way delay: 93.383 ms

Loss rate: 1.49%

-- Flow 2:

Average throughput: 26.90 Mbit/s

95th percentile per-packet one-way delay: 96.960 ms

Loss rate: 1.86%

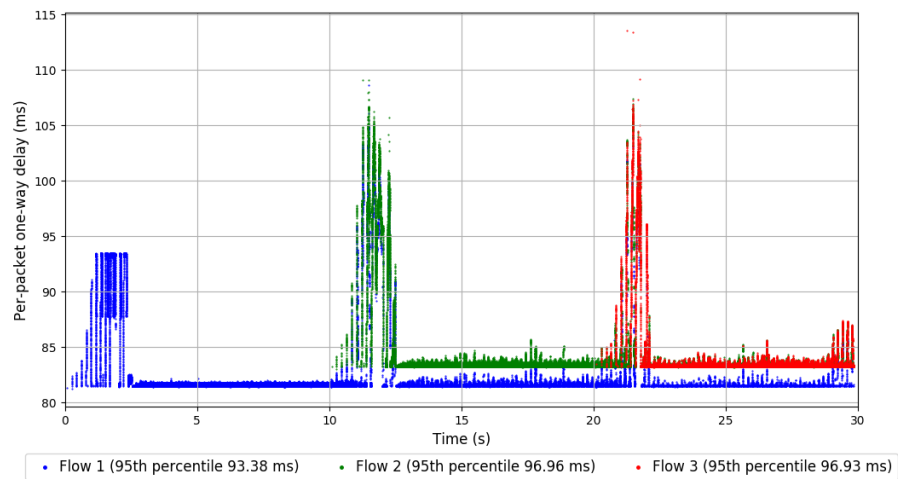
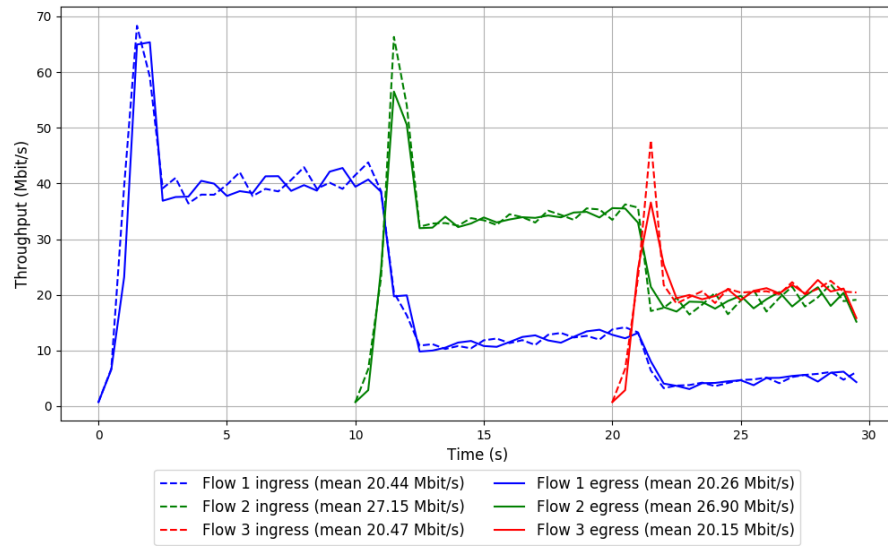
-- Flow 3:

Average throughput: 20.15 Mbit/s

95th percentile per-packet one-way delay: 96.927 ms

Loss rate: 3.42%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-03-27 18:02:58

End at: 2018-03-27 18:03:28

Local clock offset: -4.416 ms

Remote clock offset: 2.082 ms

Below is generated by plot.py at 2018-03-27 22:32:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.53 Mbit/s

95th percentile per-packet one-way delay: 119.054 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 36.87 Mbit/s

95th percentile per-packet one-way delay: 118.546 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 44.15 Mbit/s

95th percentile per-packet one-way delay: 119.239 ms

Loss rate: 0.80%

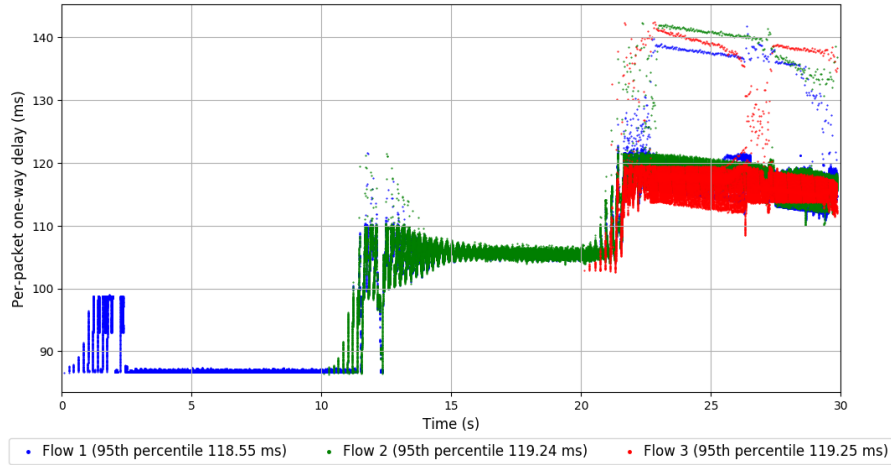
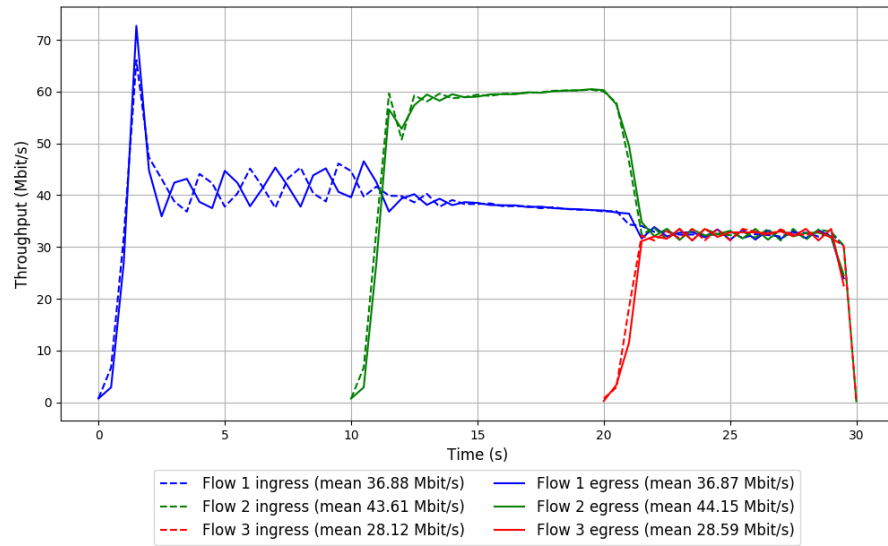
-- Flow 3:

Average throughput: 28.59 Mbit/s

95th percentile per-packet one-way delay: 119.249 ms

Loss rate: 2.52%

Run 10: Report of TCP Vegas — Data Link

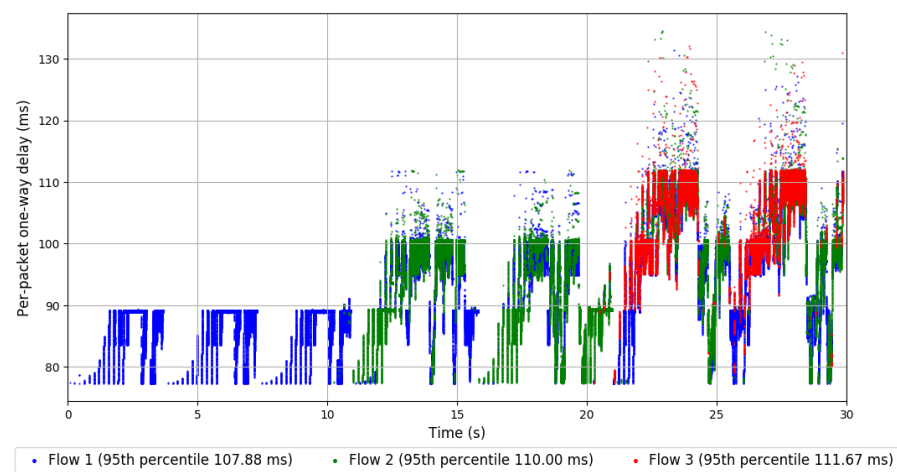
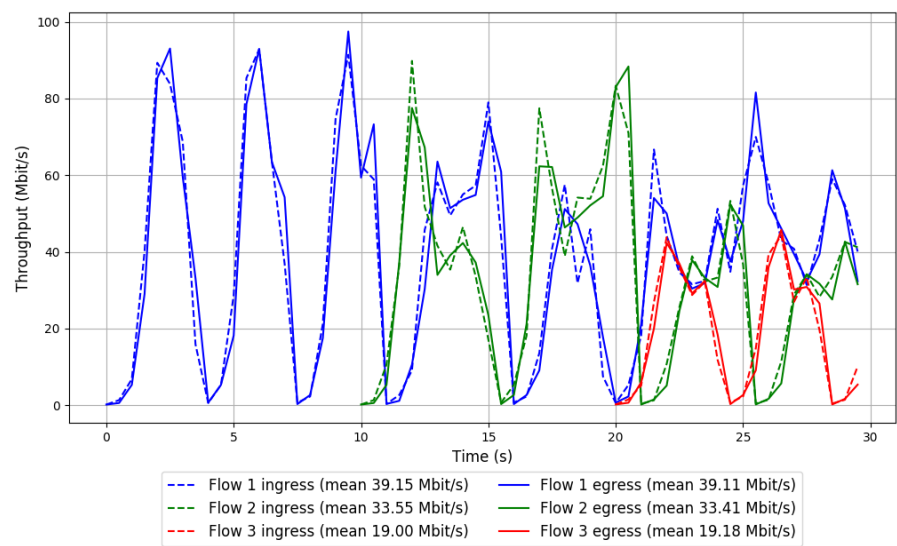


Run 1: Statistics of Verus

Start at: 2018-03-27 14:32:06
End at: 2018-03-27 14:32:36
Local clock offset: -7.305 ms
Remote clock offset: 10.518 ms

Below is generated by plot.py at 2018-03-27 22:32:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 67.57 Mbit/s
95th percentile per-packet one-way delay: 109.860 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 39.11 Mbit/s
95th percentile per-packet one-way delay: 107.881 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 33.41 Mbit/s
95th percentile per-packet one-way delay: 110.000 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 19.18 Mbit/s
95th percentile per-packet one-way delay: 111.666 ms
Loss rate: 1.25%

Run 1: Report of Verus — Data Link

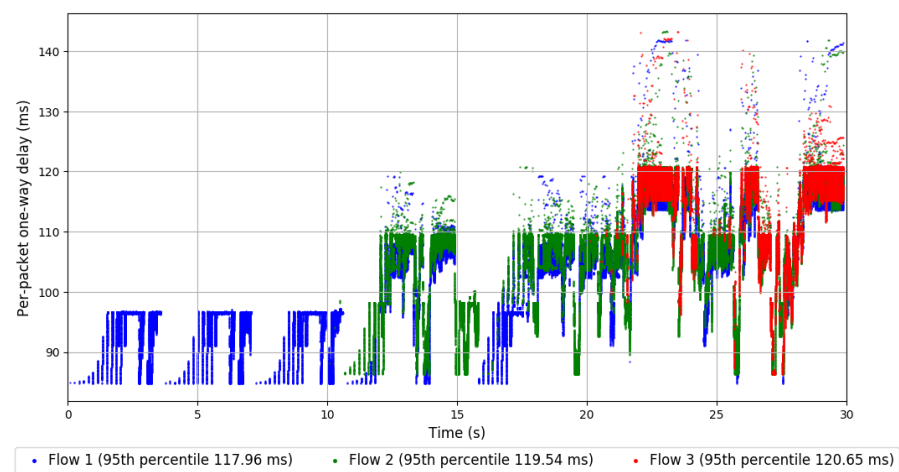
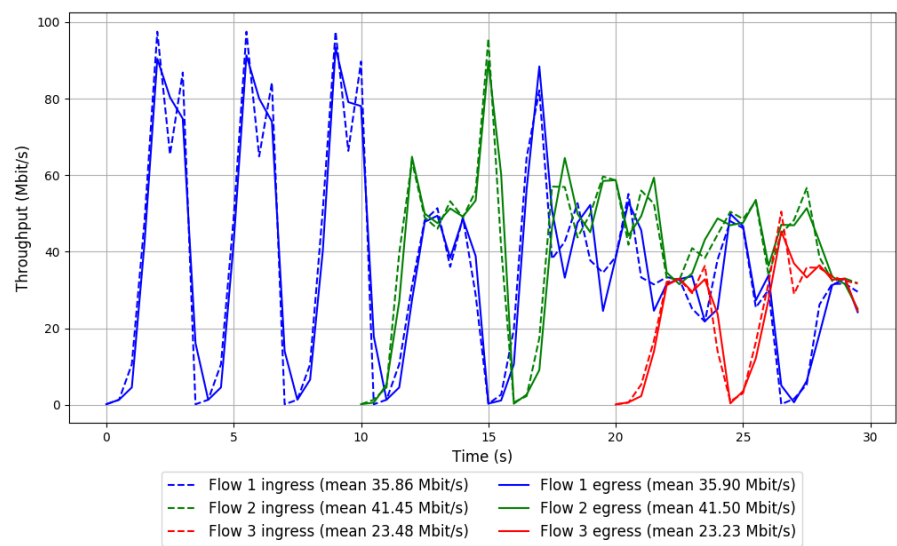


Run 2: Statistics of Verus

Start at: 2018-03-27 14:56:09
End at: 2018-03-27 14:56:39
Local clock offset: -8.193 ms
Remote clock offset: 2.822 ms

Below is generated by plot.py at 2018-03-27 22:32:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 71.03 Mbit/s
95th percentile per-packet one-way delay: 119.151 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 35.90 Mbit/s
95th percentile per-packet one-way delay: 117.956 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 41.50 Mbit/s
95th percentile per-packet one-way delay: 119.542 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 23.23 Mbit/s
95th percentile per-packet one-way delay: 120.654 ms
Loss rate: 3.24%

Run 2: Report of Verus — Data Link

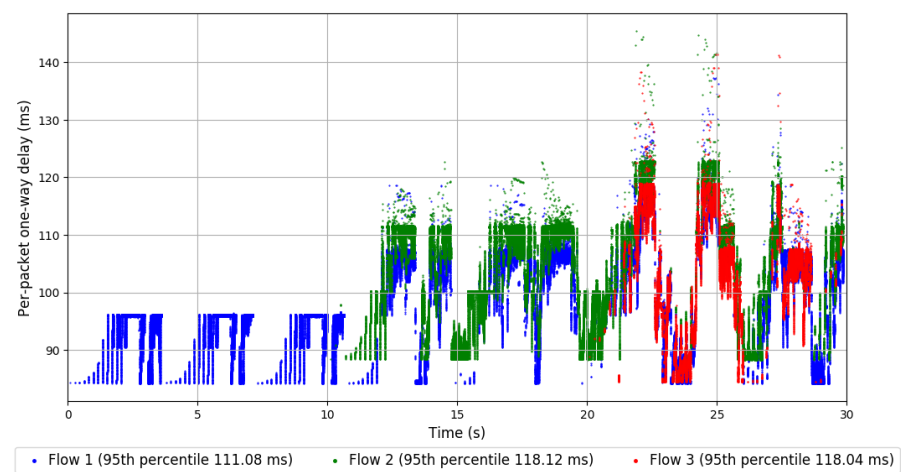
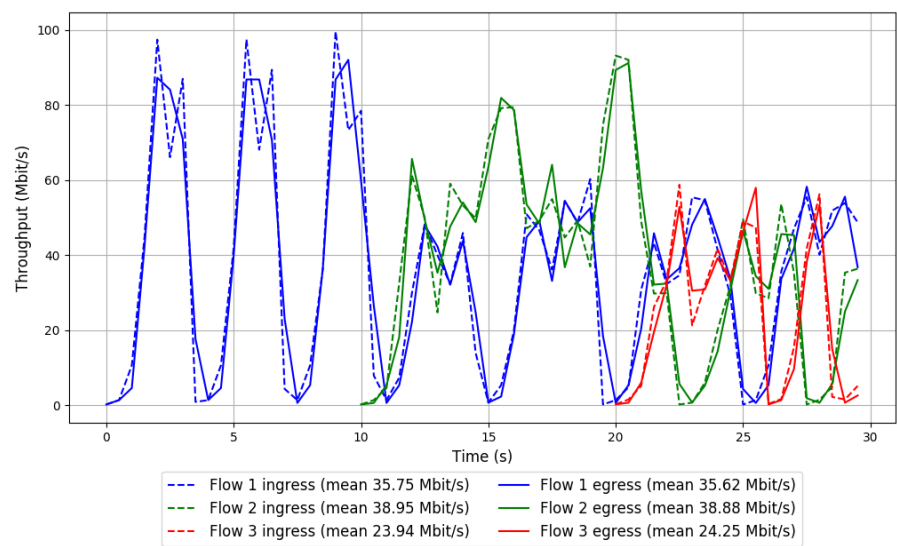


Run 3: Statistics of Verus

Start at: 2018-03-27 15:20:14
End at: 2018-03-27 15:20:44
Local clock offset: -2.326 ms
Remote clock offset: 1.082 ms

Below is generated by plot.py at 2018-03-27 22:33:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 69.30 Mbit/s
95th percentile per-packet one-way delay: 115.682 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 35.62 Mbit/s
95th percentile per-packet one-way delay: 111.079 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 38.88 Mbit/s
95th percentile per-packet one-way delay: 118.121 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 24.25 Mbit/s
95th percentile per-packet one-way delay: 118.037 ms
Loss rate: 0.72%

Run 3: Report of Verus — Data Link

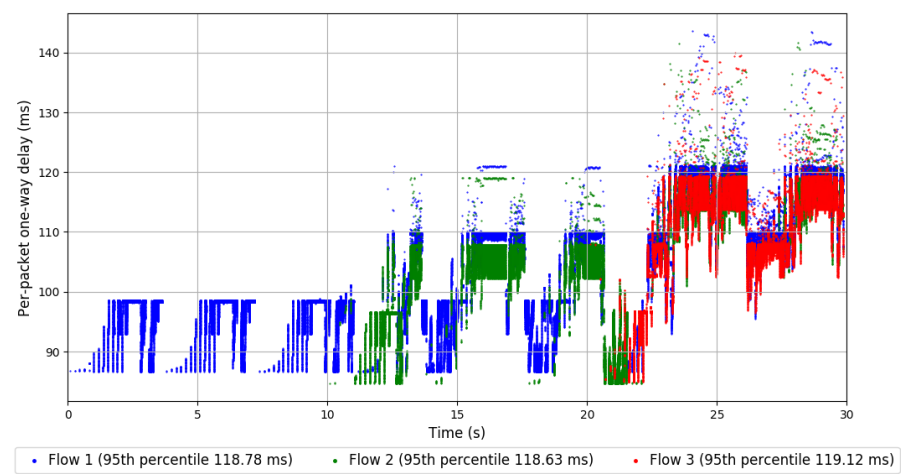
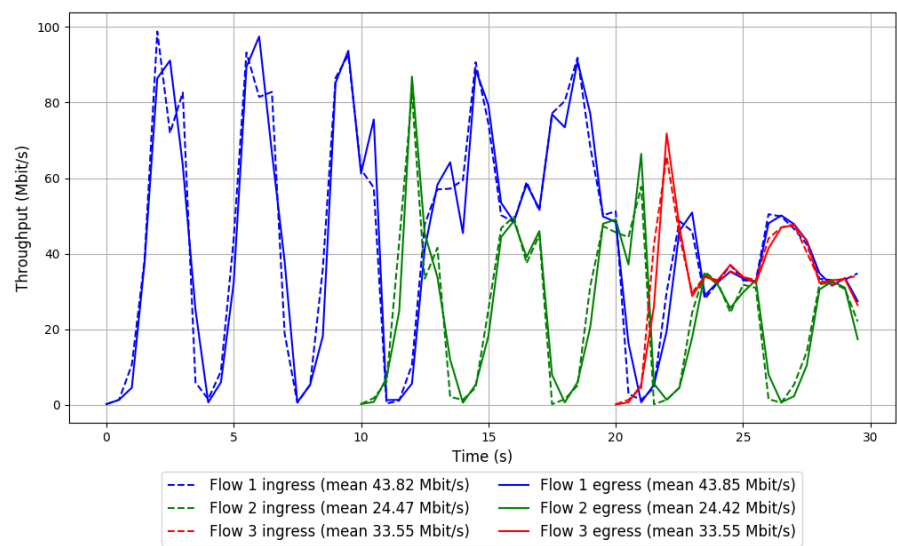


Run 4: Statistics of Verus

Start at: 2018-03-27 15:44:09
End at: 2018-03-27 15:44:39
Local clock offset: -1.469 ms
Remote clock offset: 2.115 ms

Below is generated by plot.py at 2018-03-27 22:33:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 71.04 Mbit/s
95th percentile per-packet one-way delay: 118.894 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 43.85 Mbit/s
95th percentile per-packet one-way delay: 118.780 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 24.42 Mbit/s
95th percentile per-packet one-way delay: 118.633 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 33.55 Mbit/s
95th percentile per-packet one-way delay: 119.125 ms
Loss rate: 2.17%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-03-27 16:08:06

End at: 2018-03-27 16:08:36

Local clock offset: -0.844 ms

Remote clock offset: 7.439 ms

Below is generated by plot.py at 2018-03-27 22:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.87 Mbit/s

95th percentile per-packet one-way delay: 114.876 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 36.73 Mbit/s

95th percentile per-packet one-way delay: 113.626 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 36.60 Mbit/s

95th percentile per-packet one-way delay: 114.703 ms

Loss rate: 1.33%

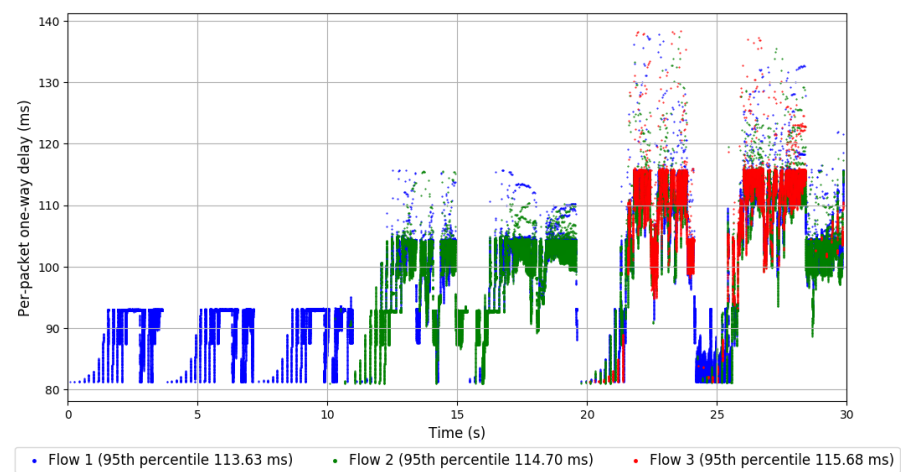
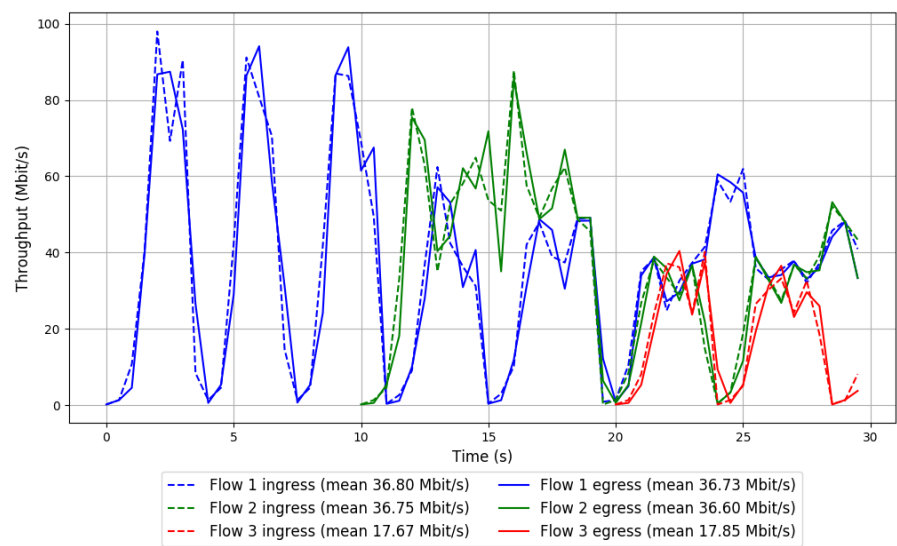
-- Flow 3:

Average throughput: 17.85 Mbit/s

95th percentile per-packet one-way delay: 115.680 ms

Loss rate: 1.25%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-03-27 16:32:14

End at: 2018-03-27 16:32:44

Local clock offset: -2.81 ms

Remote clock offset: 3.236 ms

Below is generated by plot.py at 2018-03-27 22:33:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.97 Mbit/s

95th percentile per-packet one-way delay: 117.541 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 32.05 Mbit/s

95th percentile per-packet one-way delay: 118.301 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 50.52 Mbit/s

95th percentile per-packet one-way delay: 116.240 ms

Loss rate: 1.66%

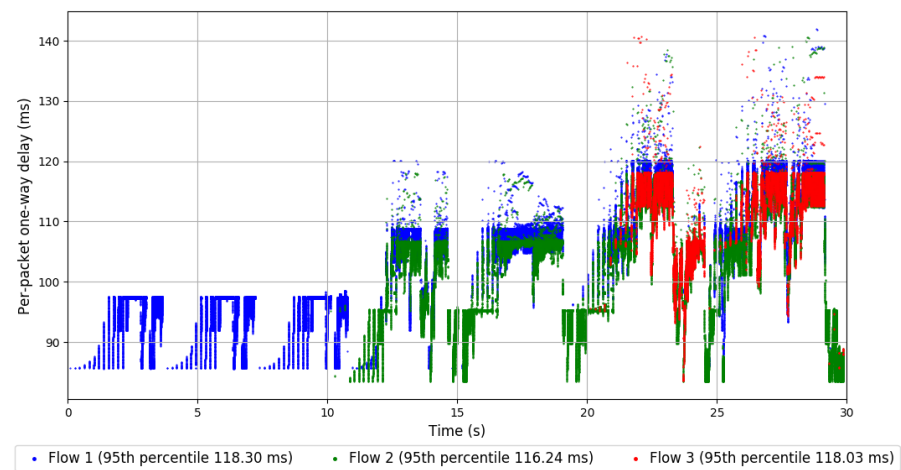
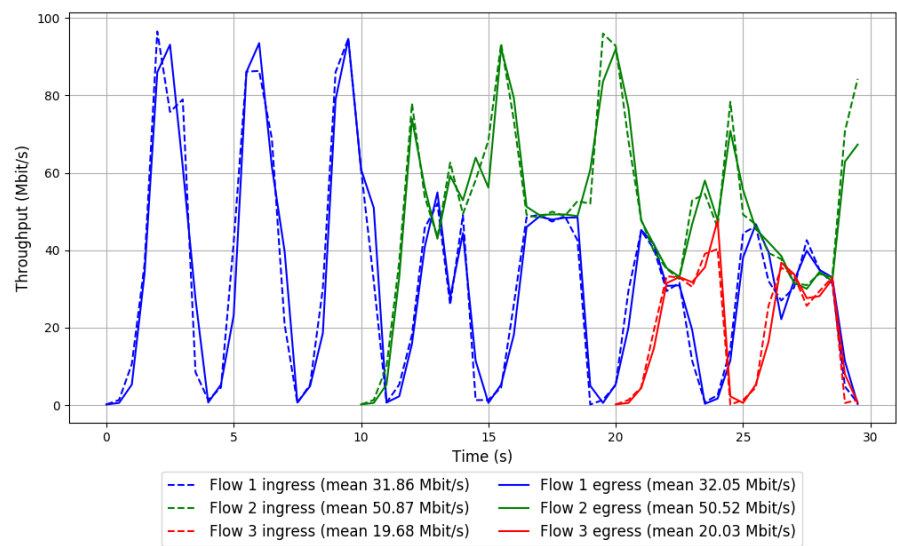
-- Flow 3:

Average throughput: 20.03 Mbit/s

95th percentile per-packet one-way delay: 118.026 ms

Loss rate: 0.19%

Run 6: Report of Verus — Data Link

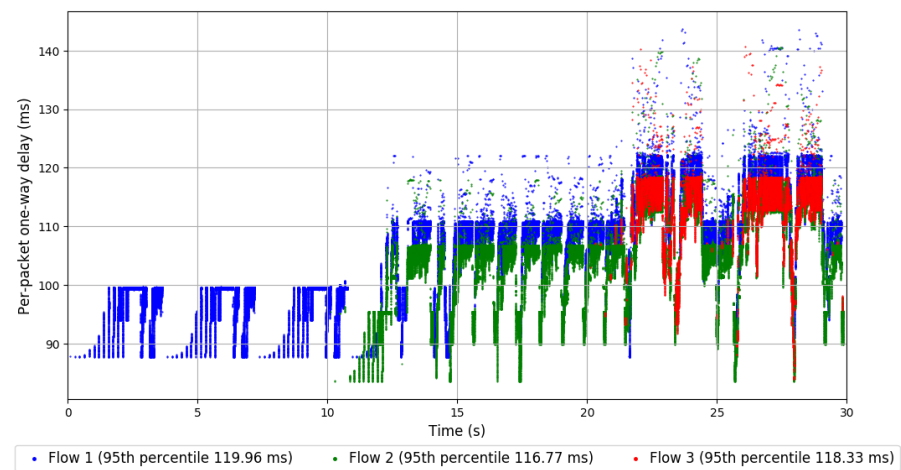
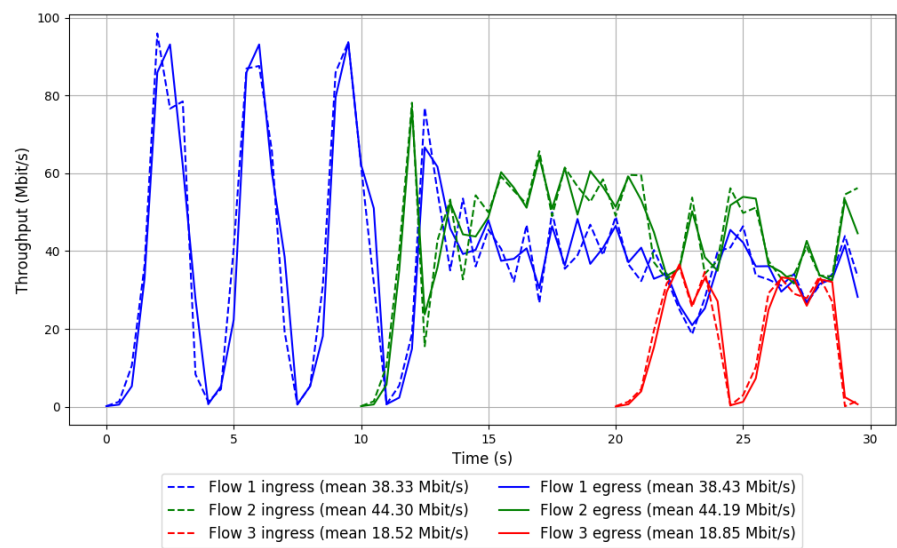


Run 7: Statistics of Verus

Start at: 2018-03-27 16:56:26
End at: 2018-03-27 16:56:56
Local clock offset: -6.613 ms
Remote clock offset: 2.364 ms

Below is generated by plot.py at 2018-03-27 22:33:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 73.80 Mbit/s
95th percentile per-packet one-way delay: 118.253 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 38.43 Mbit/s
95th percentile per-packet one-way delay: 119.956 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 44.19 Mbit/s
95th percentile per-packet one-way delay: 116.767 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 18.85 Mbit/s
95th percentile per-packet one-way delay: 118.329 ms
Loss rate: 0.23%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-03-27 17:20:29

End at: 2018-03-27 17:20:59

Local clock offset: -7.612 ms

Remote clock offset: 8.294 ms

Below is generated by plot.py at 2018-03-27 22:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.73 Mbit/s

95th percentile per-packet one-way delay: 112.345 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 41.45 Mbit/s

95th percentile per-packet one-way delay: 109.377 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 32.66 Mbit/s

95th percentile per-packet one-way delay: 112.643 ms

Loss rate: 1.57%

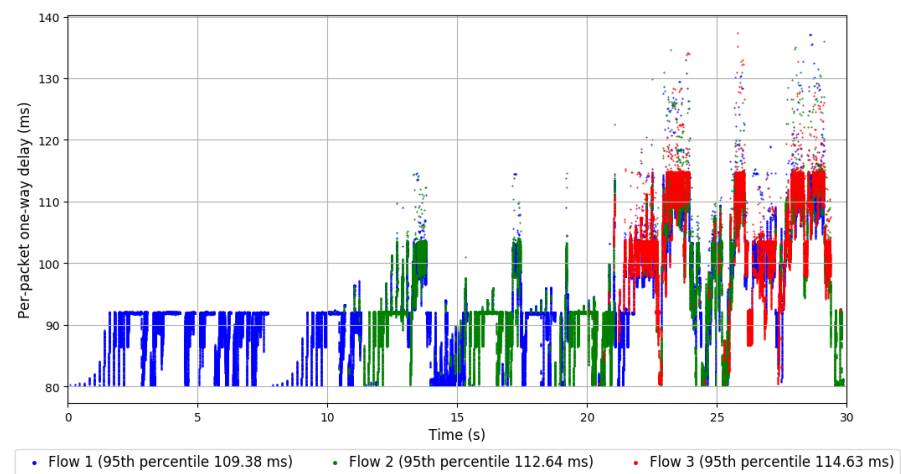
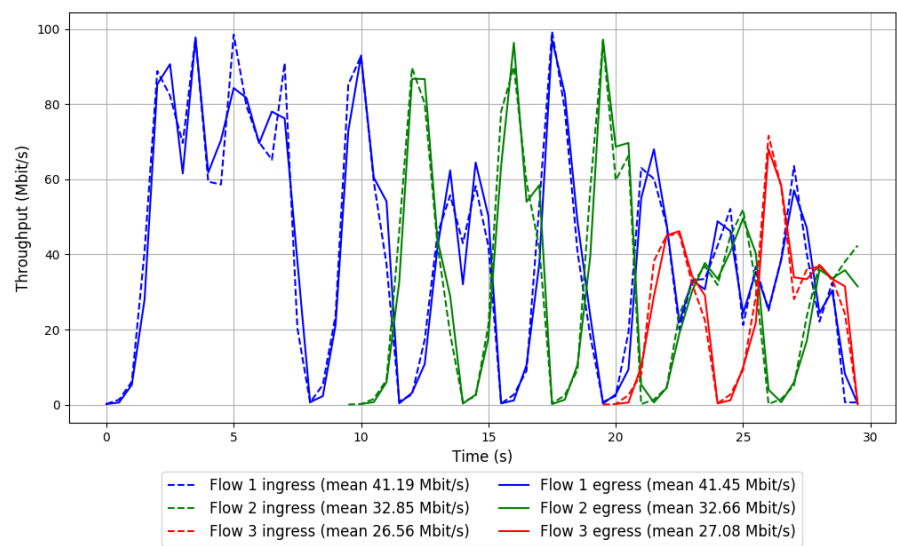
-- Flow 3:

Average throughput: 27.08 Mbit/s

95th percentile per-packet one-way delay: 114.629 ms

Loss rate: 0.04%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-03-27 17:44:22

End at: 2018-03-27 17:44:52

Local clock offset: -6.943 ms

Remote clock offset: 8.559 ms

Below is generated by plot.py at 2018-03-27 22:33:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.57 Mbit/s

95th percentile per-packet one-way delay: 108.596 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 33.85 Mbit/s

95th percentile per-packet one-way delay: 103.970 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 26.95 Mbit/s

95th percentile per-packet one-way delay: 109.370 ms

Loss rate: 0.02%

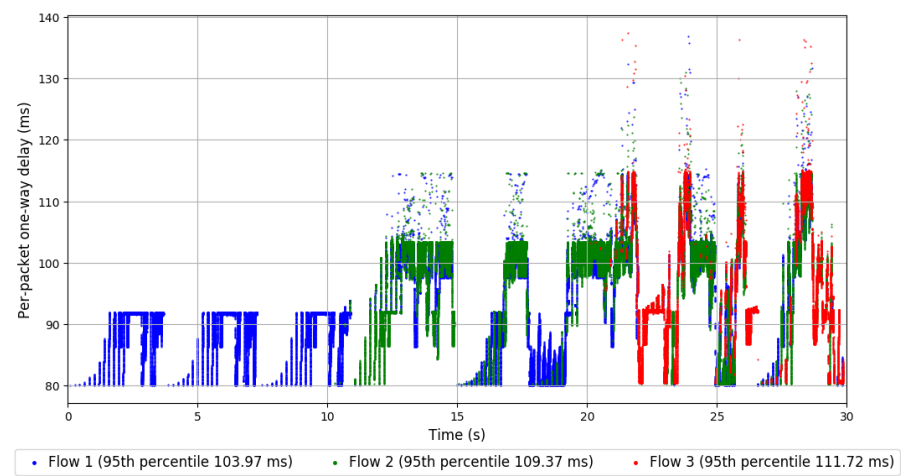
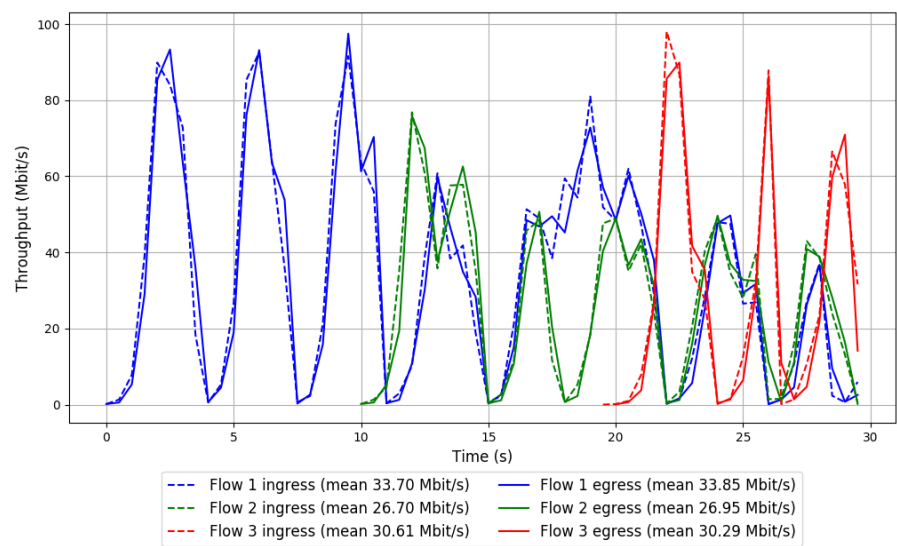
-- Flow 3:

Average throughput: 30.29 Mbit/s

95th percentile per-packet one-way delay: 111.720 ms

Loss rate: 3.06%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-03-27 18:08:21

End at: 2018-03-27 18:08:51

Local clock offset: -3.932 ms

Remote clock offset: 9.411 ms

Below is generated by plot.py at 2018-03-27 22:33:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.45 Mbit/s

95th percentile per-packet one-way delay: 109.031 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 31.11 Mbit/s

95th percentile per-packet one-way delay: 105.713 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 49.98 Mbit/s

95th percentile per-packet one-way delay: 107.806 ms

Loss rate: 1.01%

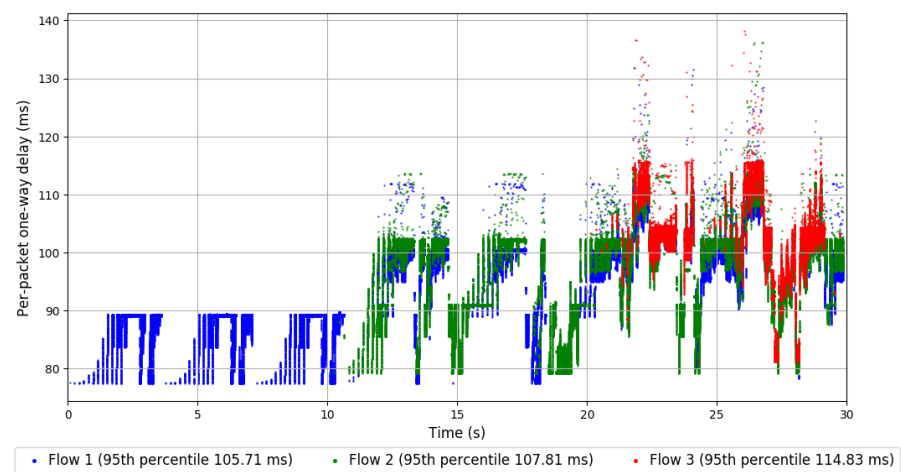
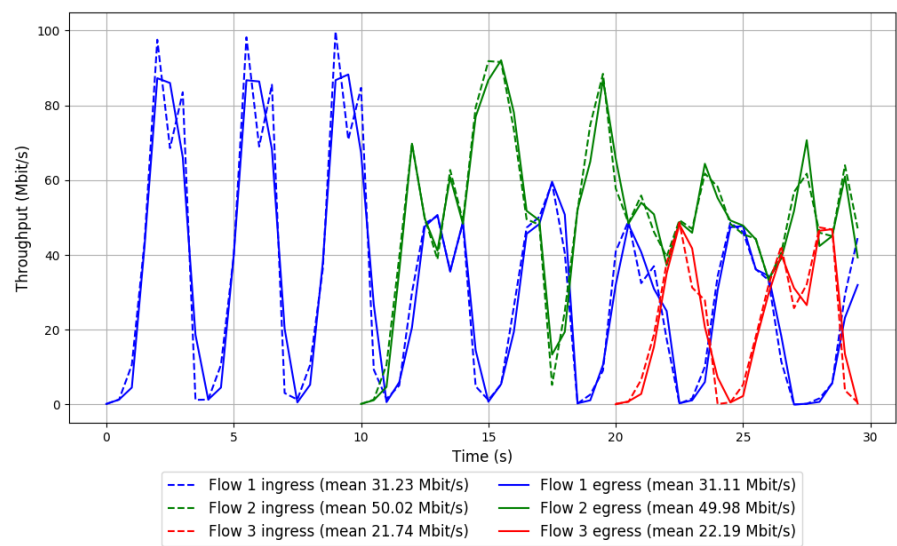
-- Flow 3:

Average throughput: 22.19 Mbit/s

95th percentile per-packet one-way delay: 114.828 ms

Loss rate: 0.09%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-03-27 14:35:56

End at: 2018-03-27 14:36:26

Local clock offset: -7.471 ms

Remote clock offset: 4.263 ms

Below is generated by plot.py at 2018-03-27 22:35:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.62 Mbit/s

95th percentile per-packet one-way delay: 99.271 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 77.97 Mbit/s

95th percentile per-packet one-way delay: 99.111 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 11.23 Mbit/s

95th percentile per-packet one-way delay: 101.033 ms

Loss rate: 0.68%

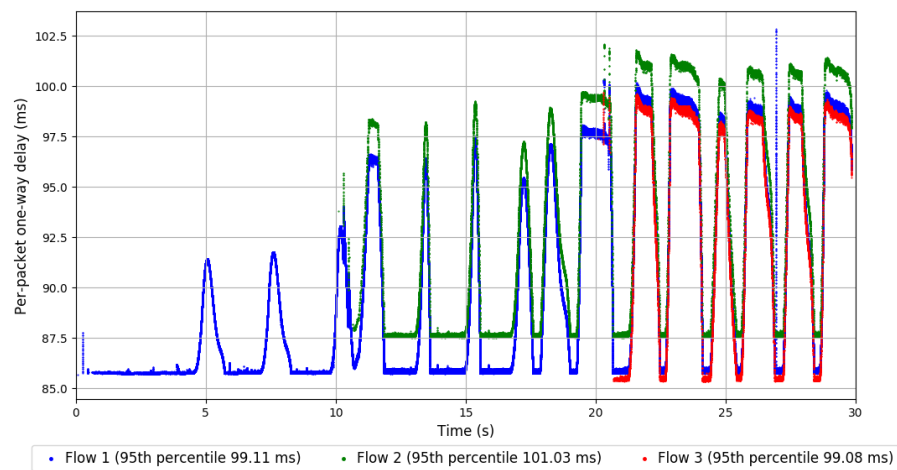
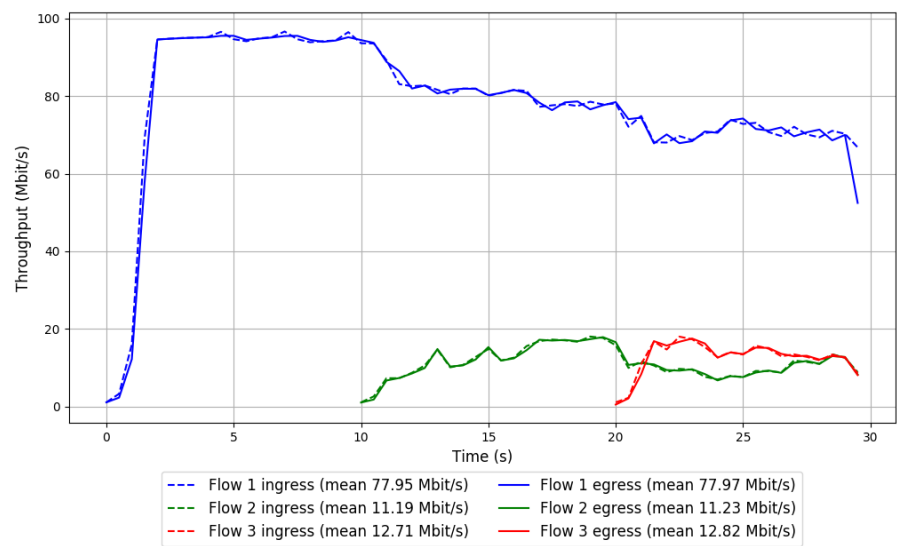
-- Flow 3:

Average throughput: 12.82 Mbit/s

95th percentile per-packet one-way delay: 99.079 ms

Loss rate: 1.12%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-03-27 14:59:59

End at: 2018-03-27 15:00:29

Local clock offset: -8.205 ms

Remote clock offset: 8.666 ms

Below is generated by plot.py at 2018-03-27 22:35:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.39 Mbit/s

95th percentile per-packet one-way delay: 106.315 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 66.83 Mbit/s

95th percentile per-packet one-way delay: 105.536 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 22.95 Mbit/s

95th percentile per-packet one-way delay: 105.318 ms

Loss rate: 2.49%

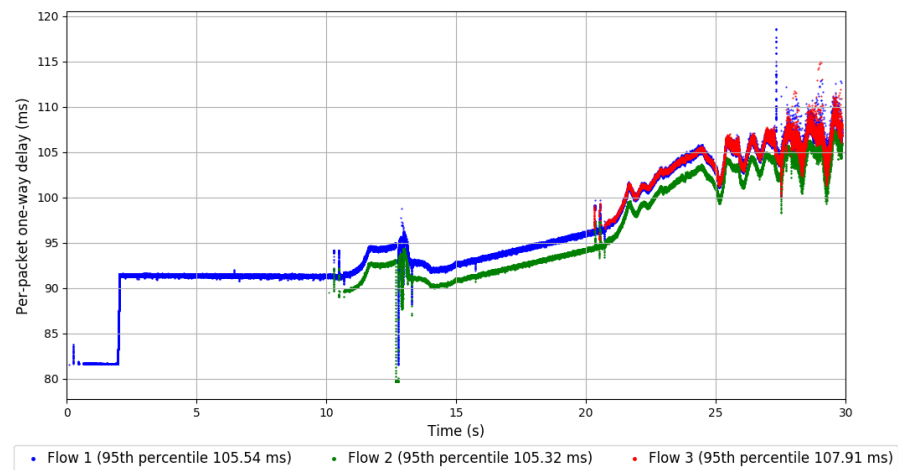
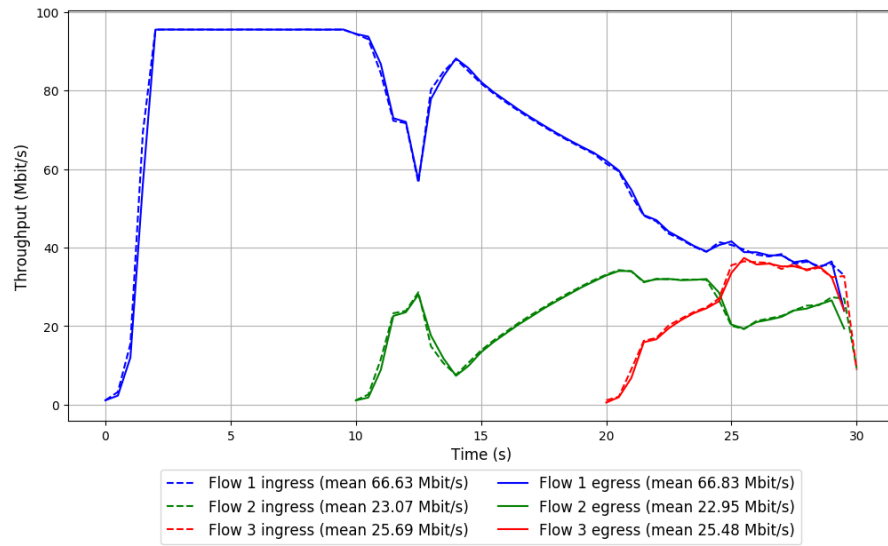
-- Flow 3:

Average throughput: 25.48 Mbit/s

95th percentile per-packet one-way delay: 107.913 ms

Loss rate: 4.78%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-03-27 15:24:04

End at: 2018-03-27 15:24:34

Local clock offset: -1.919 ms

Remote clock offset: 6.331 ms

Below is generated by plot.py at 2018-03-27 22:35:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.41 Mbit/s

95th percentile per-packet one-way delay: 109.487 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 66.28 Mbit/s

95th percentile per-packet one-way delay: 106.732 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 25.55 Mbit/s

95th percentile per-packet one-way delay: 109.663 ms

Loss rate: 2.32%

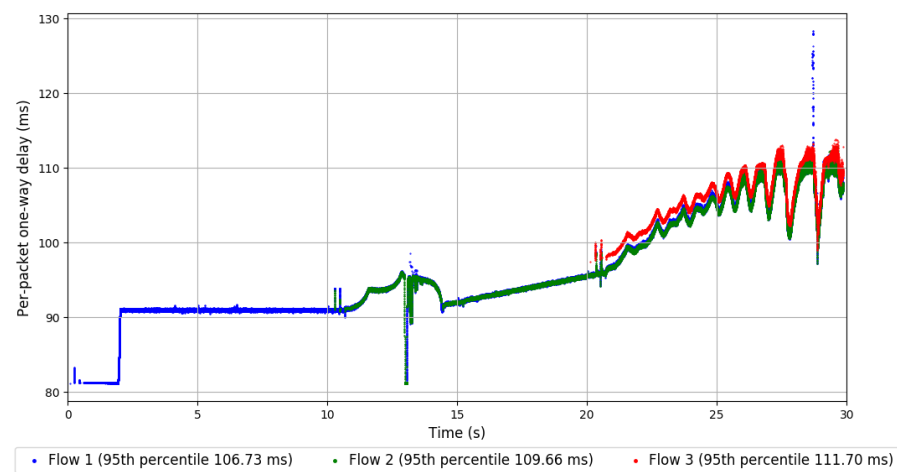
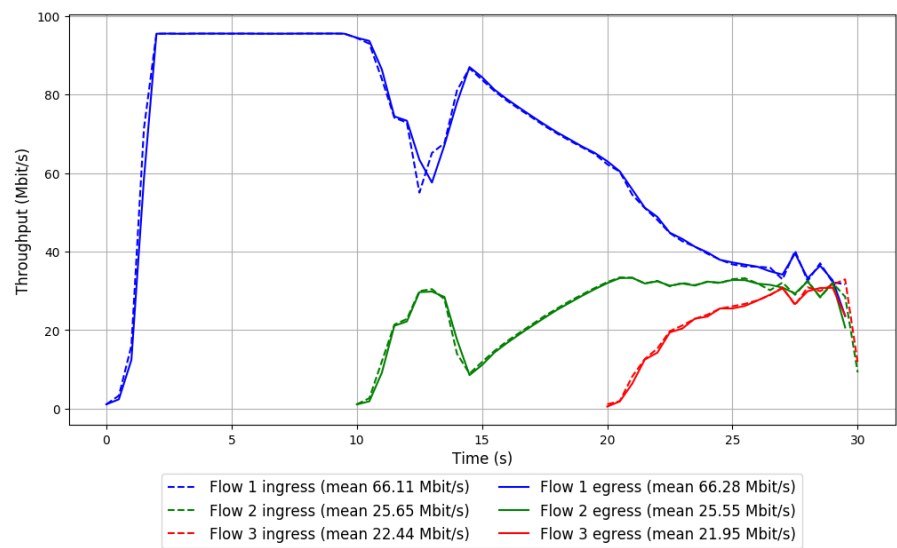
-- Flow 3:

Average throughput: 21.95 Mbit/s

95th percentile per-packet one-way delay: 111.705 ms

Loss rate: 6.16%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-03-27 15:48:00

End at: 2018-03-27 15:48:30

Local clock offset: -1.519 ms

Remote clock offset: 8.648 ms

Below is generated by plot.py at 2018-03-27 22:35:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.85 Mbit/s

95th percentile per-packet one-way delay: 91.409 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 77.00 Mbit/s

95th percentile per-packet one-way delay: 91.325 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 12.16 Mbit/s

95th percentile per-packet one-way delay: 91.573 ms

Loss rate: 1.14%

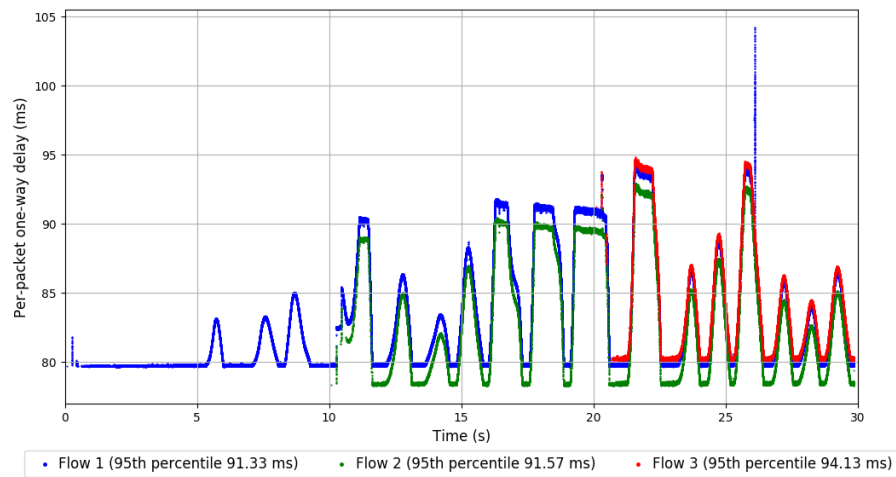
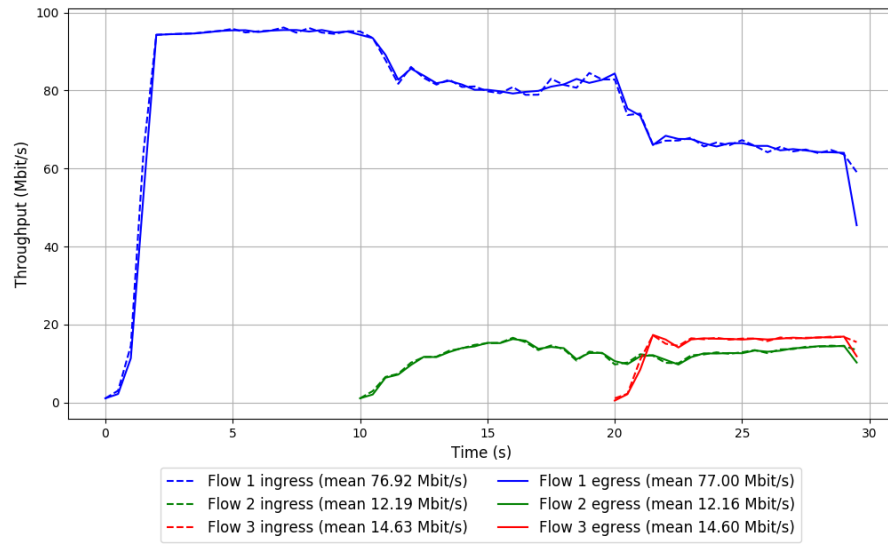
-- Flow 3:

Average throughput: 14.60 Mbit/s

95th percentile per-packet one-way delay: 94.126 ms

Loss rate: 2.20%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-03-27 16:11:56

End at: 2018-03-27 16:12:26

Local clock offset: -1.654 ms

Remote clock offset: 2.967 ms

Below is generated by plot.py at 2018-03-27 22:36:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.09 Mbit/s

95th percentile per-packet one-way delay: 109.452 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 67.71 Mbit/s

95th percentile per-packet one-way delay: 107.996 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 23.73 Mbit/s

95th percentile per-packet one-way delay: 110.611 ms

Loss rate: 0.55%

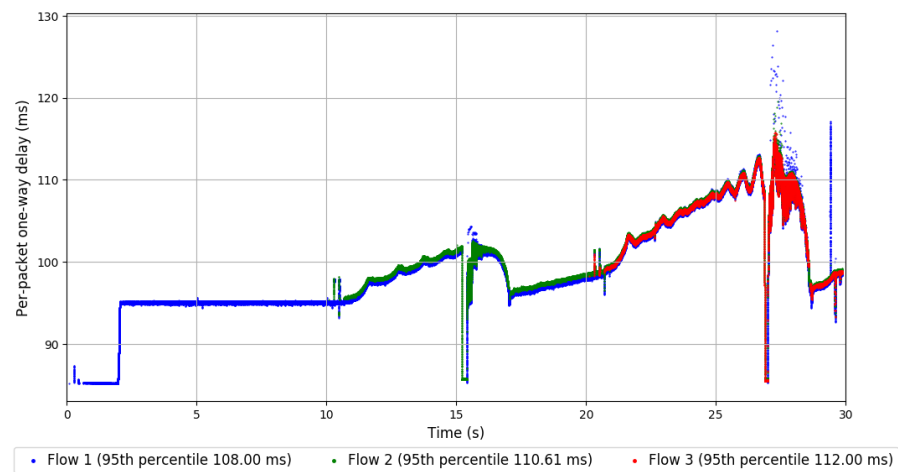
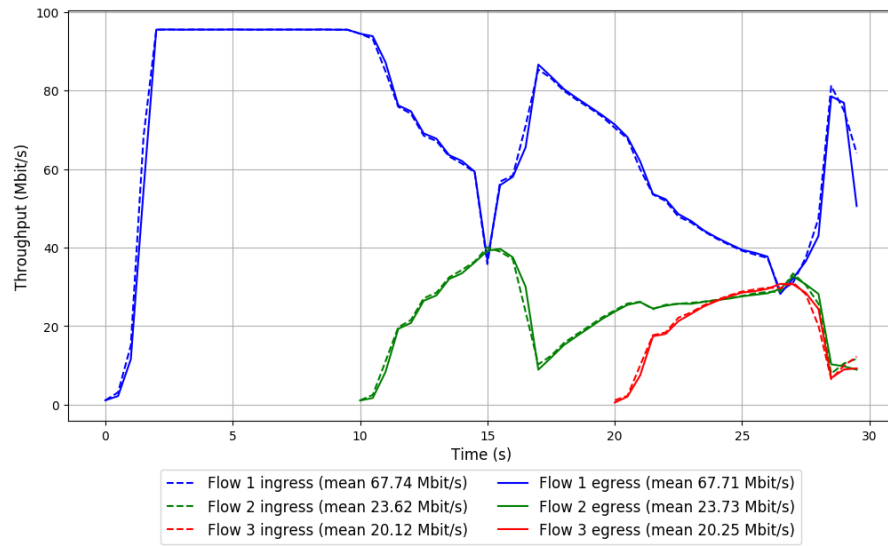
-- Flow 3:

Average throughput: 20.25 Mbit/s

95th percentile per-packet one-way delay: 112.003 ms

Loss rate: 1.35%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-03-27 16:36:04

End at: 2018-03-27 16:36:34

Local clock offset: -2.761 ms

Remote clock offset: 1.991 ms

Below is generated by plot.py at 2018-03-27 22:36:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.44 Mbit/s

95th percentile per-packet one-way delay: 100.271 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 73.64 Mbit/s

95th percentile per-packet one-way delay: 100.413 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 16.41 Mbit/s

95th percentile per-packet one-way delay: 100.173 ms

Loss rate: 1.12%

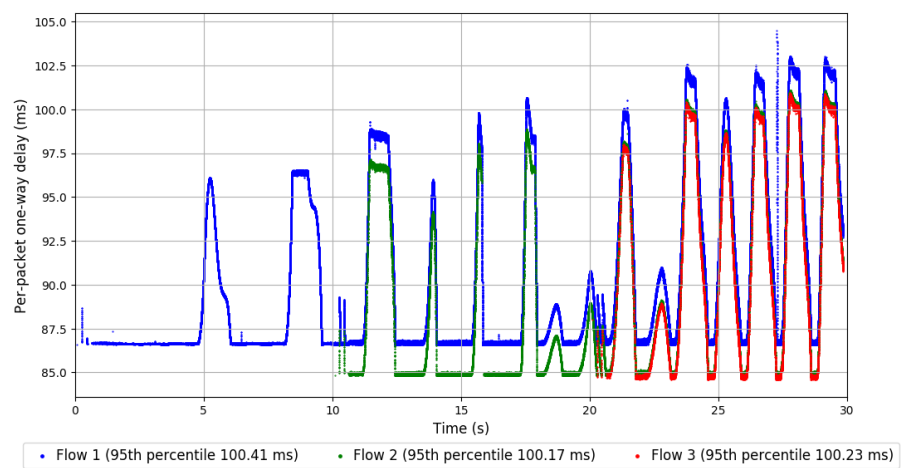
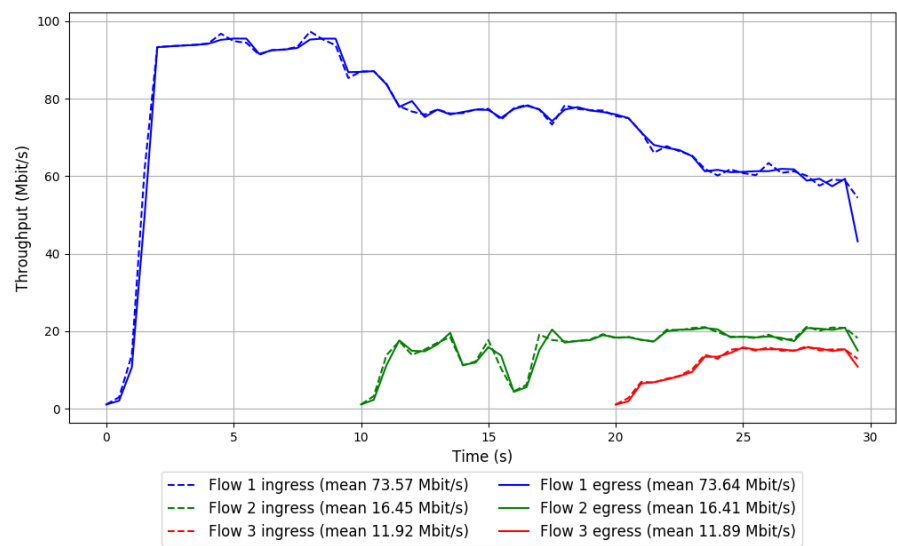
-- Flow 3:

Average throughput: 11.89 Mbit/s

95th percentile per-packet one-way delay: 100.234 ms

Loss rate: 2.12%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-03-27 17:00:18

End at: 2018-03-27 17:00:48

Local clock offset: -7.121 ms

Remote clock offset: 2.306 ms

Below is generated by plot.py at 2018-03-27 22:36:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.89 Mbit/s

95th percentile per-packet one-way delay: 101.488 ms

Loss rate: 12.21%

-- Flow 1:

Average throughput: 54.01 Mbit/s

95th percentile per-packet one-way delay: 97.809 ms

Loss rate: 10.77%

-- Flow 2:

Average throughput: 25.64 Mbit/s

95th percentile per-packet one-way delay: 105.530 ms

Loss rate: 15.39%

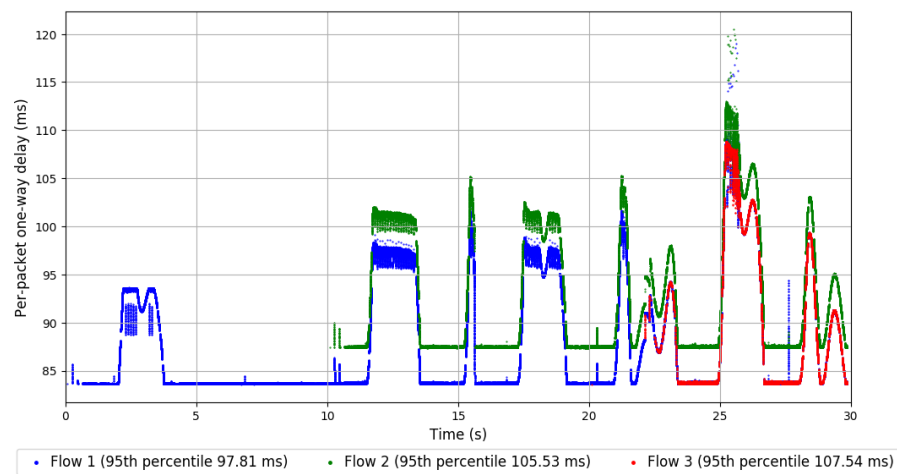
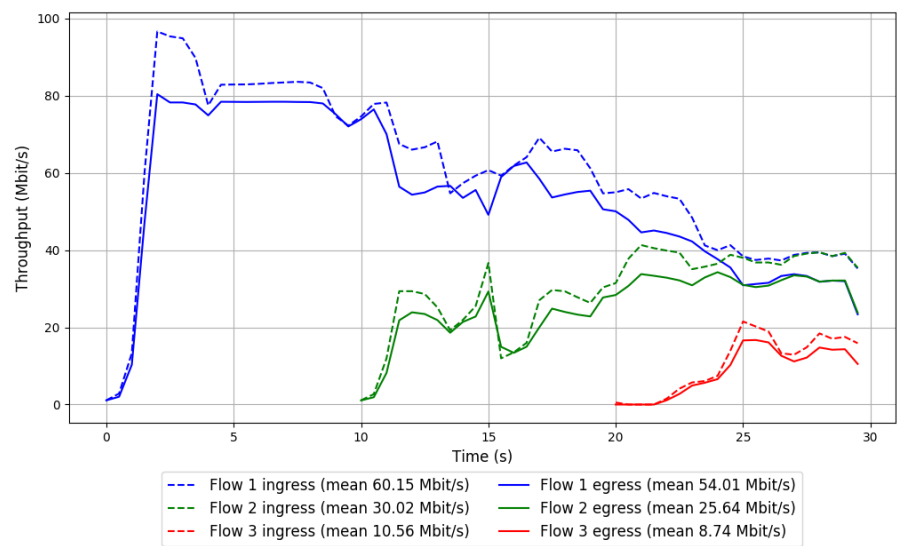
-- Flow 3:

Average throughput: 8.74 Mbit/s

95th percentile per-packet one-way delay: 107.540 ms

Loss rate: 18.79%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-03-27 17:24:19

End at: 2018-03-27 17:24:49

Local clock offset: -7.313 ms

Remote clock offset: 2.064 ms

Below is generated by plot.py at 2018-03-27 22:36:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.04 Mbit/s

95th percentile per-packet one-way delay: 99.178 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 72.38 Mbit/s

95th percentile per-packet one-way delay: 98.682 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 17.64 Mbit/s

95th percentile per-packet one-way delay: 101.037 ms

Loss rate: 0.98%

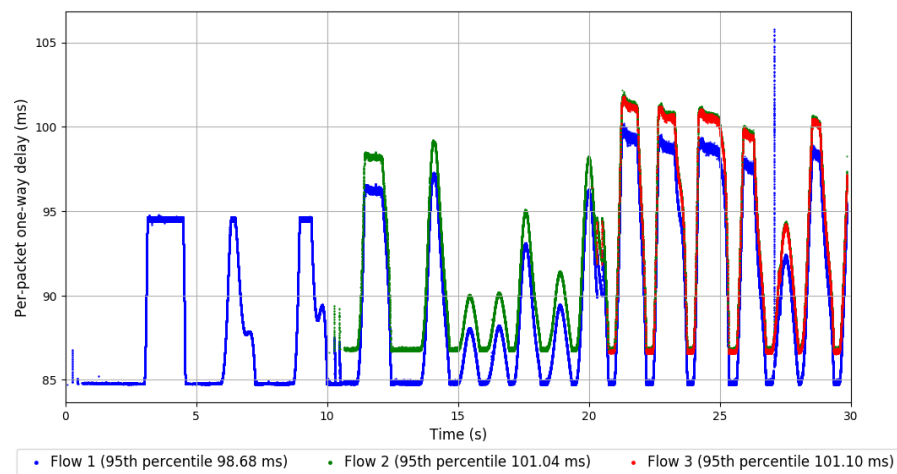
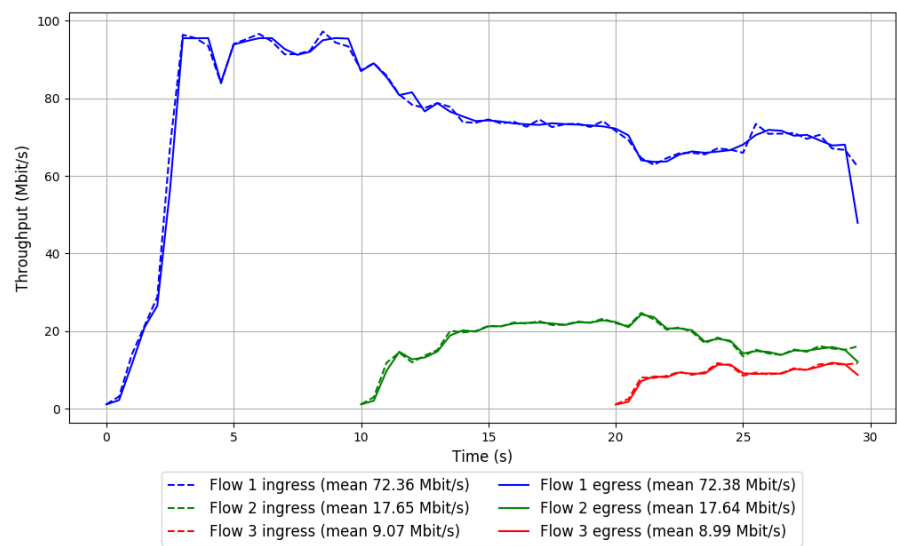
-- Flow 3:

Average throughput: 8.99 Mbit/s

95th percentile per-packet one-way delay: 101.104 ms

Loss rate: 2.80%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-03-27 17:48:11

End at: 2018-03-27 17:48:41

Local clock offset: -7.05 ms

Remote clock offset: 2.069 ms

Below is generated by plot.py at 2018-03-27 22:37:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.79 Mbit/s

95th percentile per-packet one-way delay: 103.829 ms

Loss rate: 11.00%

-- Flow 1:

Average throughput: 52.69 Mbit/s

95th percentile per-packet one-way delay: 103.489 ms

Loss rate: 8.58%

-- Flow 2:

Average throughput: 31.77 Mbit/s

95th percentile per-packet one-way delay: 104.027 ms

Loss rate: 15.80%

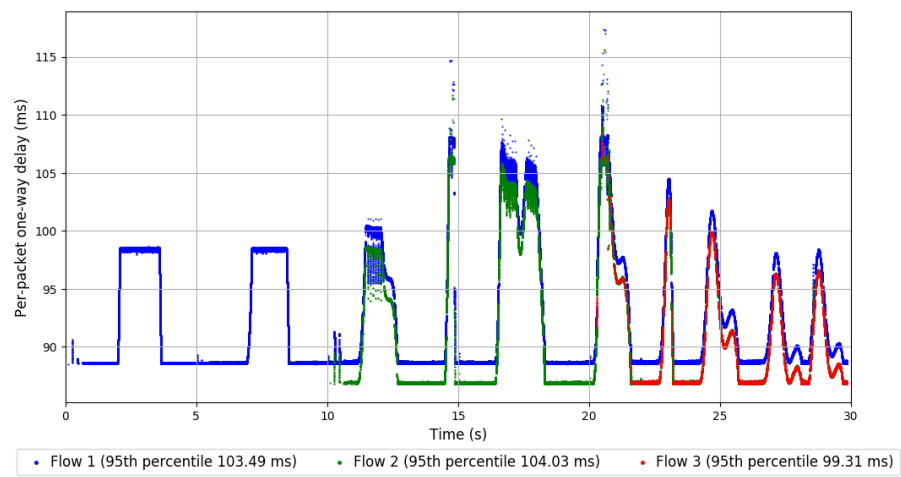
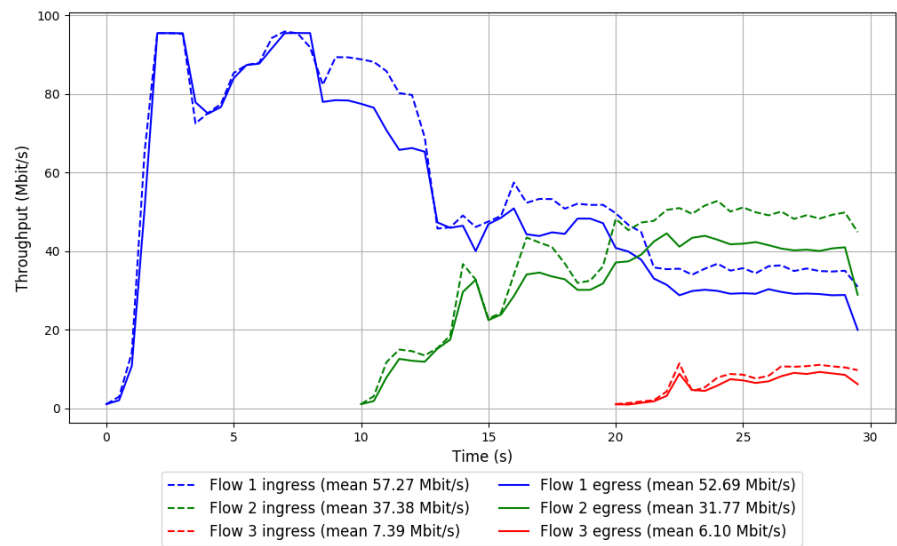
-- Flow 3:

Average throughput: 6.10 Mbit/s

95th percentile per-packet one-way delay: 99.309 ms

Loss rate: 19.01%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-03-27 18:12:12

End at: 2018-03-27 18:12:42

Local clock offset: -3.698 ms

Remote clock offset: 8.437 ms

Below is generated by plot.py at 2018-03-27 22:37:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.97 Mbit/s

95th percentile per-packet one-way delay: 101.124 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 72.62 Mbit/s

95th percentile per-packet one-way delay: 99.687 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 18.65 Mbit/s

95th percentile per-packet one-way delay: 101.431 ms

Loss rate: 1.13%

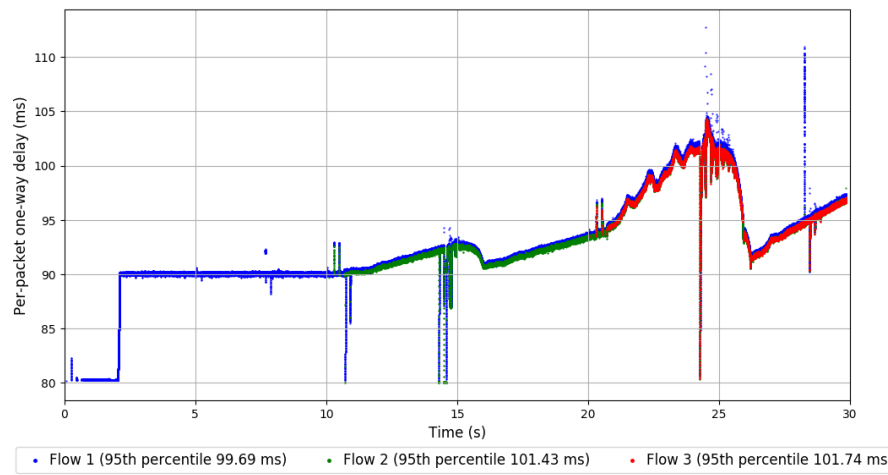
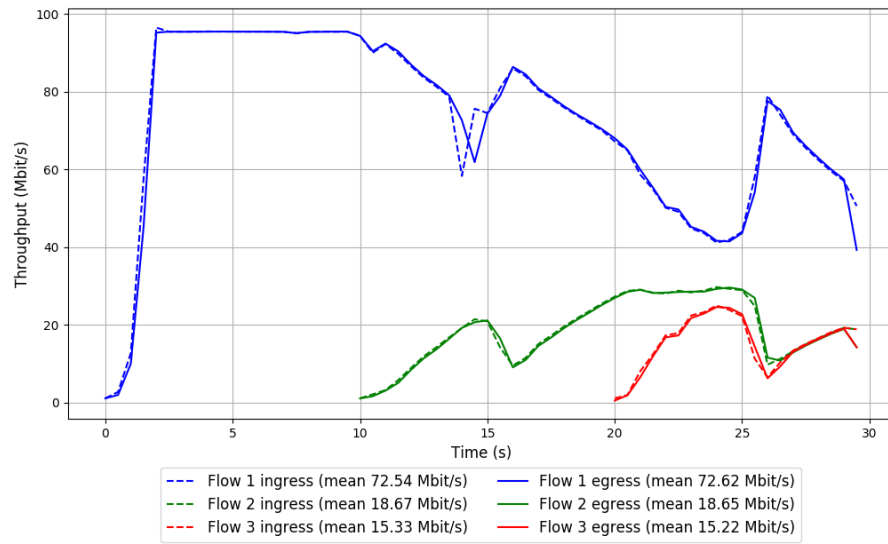
-- Flow 3:

Average throughput: 15.22 Mbit/s

95th percentile per-packet one-way delay: 101.739 ms

Loss rate: 2.76%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-03-27 14:24:08

End at: 2018-03-27 14:24:38

Local clock offset: -7.182 ms

Remote clock offset: 3.081 ms

Run 1: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of FillP

Start at: 2018-03-27 14:47:59

End at: 2018-03-27 14:48:29

Local clock offset: -7.868 ms

Remote clock offset: 4.861 ms

Run 2: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of FillP

Start at: 2018-03-27 15:12:12

End at: 2018-03-27 15:12:42

Local clock offset: -3.546 ms

Remote clock offset: 6.788 ms

Run 3: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 4: Statistics of FillP

Start at: 2018-03-27 15:36:08

End at: 2018-03-27 15:36:38

Local clock offset: -1.312 ms

Remote clock offset: 8.245 ms

Run 4: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 5: Statistics of FillP

Start at: 2018-03-27 16:00:03

End at: 2018-03-27 16:00:33

Local clock offset: -1.046 ms

Remote clock offset: 8.617 ms

Below is generated by plot.py at 2018-03-27 22:37:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.64 Mbit/s

95th percentile per-packet one-way delay: 109.071 ms

Loss rate: 19.80%

-- Flow 1:

Average throughput: 48.74 Mbit/s

95th percentile per-packet one-way delay: 107.662 ms

Loss rate: 17.64%

-- Flow 2:

Average throughput: 32.73 Mbit/s

95th percentile per-packet one-way delay: 107.764 ms

Loss rate: 21.42%

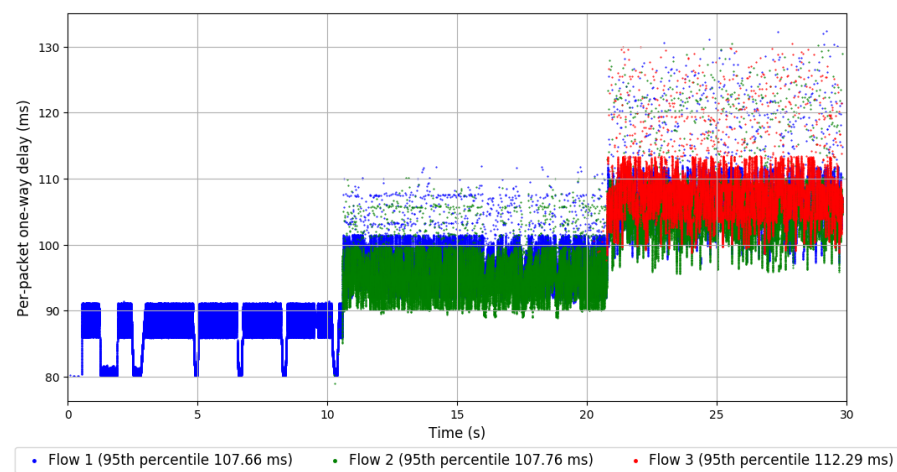
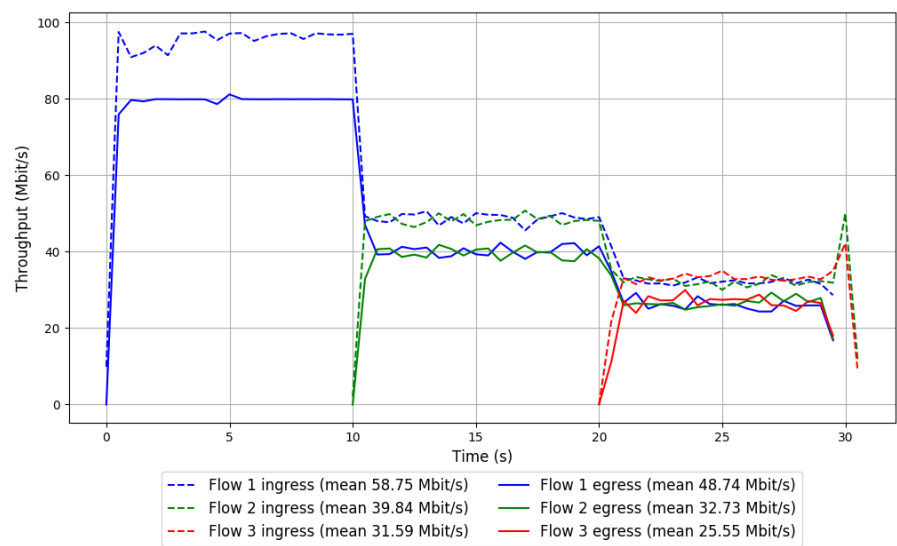
-- Flow 3:

Average throughput: 25.55 Mbit/s

95th percentile per-packet one-way delay: 112.290 ms

Loss rate: 27.22%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-03-27 16:24:10

End at: 2018-03-27 16:24:40

Local clock offset: -2.693 ms

Remote clock offset: 3.211 ms

Run 6: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 7: Statistics of FillP

Start at: 2018-03-27 16:48:22

End at: 2018-03-27 16:48:52

Local clock offset: -5.133 ms

Remote clock offset: 7.007 ms

Run 7: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of FillP

Start at: 2018-03-27 17:12:27

End at: 2018-03-27 17:12:57

Local clock offset: -8.012 ms

Remote clock offset: 7.969 ms

Run 8: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of FillP

Start at: 2018-03-27 17:36:23

End at: 2018-03-27 17:36:53

Local clock offset: -7.028 ms

Remote clock offset: 3.204 ms

Run 9: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of FillP

Start at: 2018-03-27 18:00:15

End at: 2018-03-27 18:00:45

Local clock offset: -4.757 ms

Remote clock offset: 8.503 ms

Below is generated by plot.py at 2018-03-27 22:37:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.77 Mbit/s

95th percentile per-packet one-way delay: 107.878 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 62.40 Mbit/s

95th percentile per-packet one-way delay: 105.745 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 44.87 Mbit/s

95th percentile per-packet one-way delay: 109.019 ms

Loss rate: 0.78%

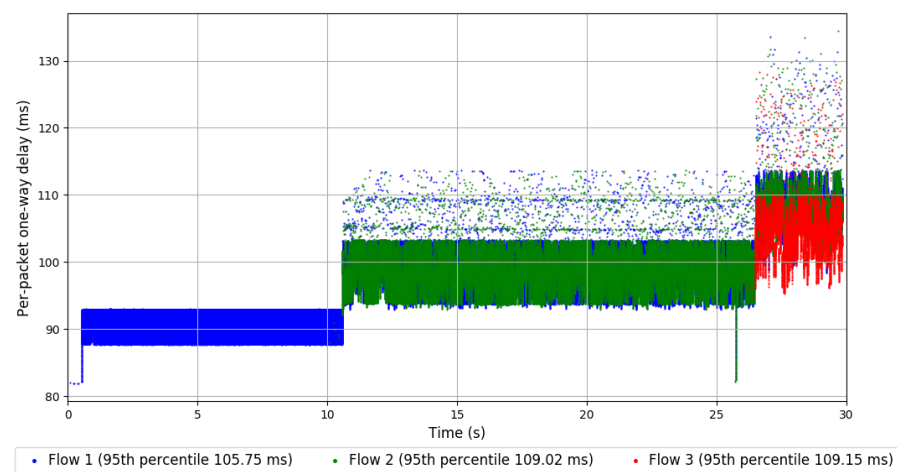
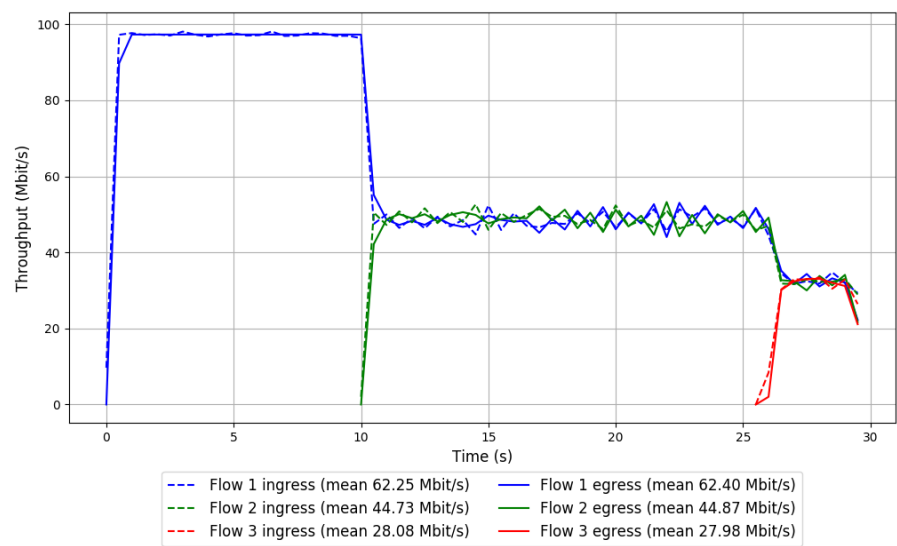
-- Flow 3:

Average throughput: 27.98 Mbit/s

95th percentile per-packet one-way delay: 109.153 ms

Loss rate: 5.53%

Run 10: Report of FillP — Data Link



Run 1: Statistics of Indigo-1-32

Start at: 2018-03-27 14:37:20

End at: 2018-03-27 14:37:50

Local clock offset: -7.456 ms

Remote clock offset: 3.248 ms

Below is generated by plot.py at 2018-03-27 22:37:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.70 Mbit/s

95th percentile per-packet one-way delay: 114.705 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 65.96 Mbit/s

95th percentile per-packet one-way delay: 114.017 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 29.15 Mbit/s

95th percentile per-packet one-way delay: 115.669 ms

Loss rate: 0.68%

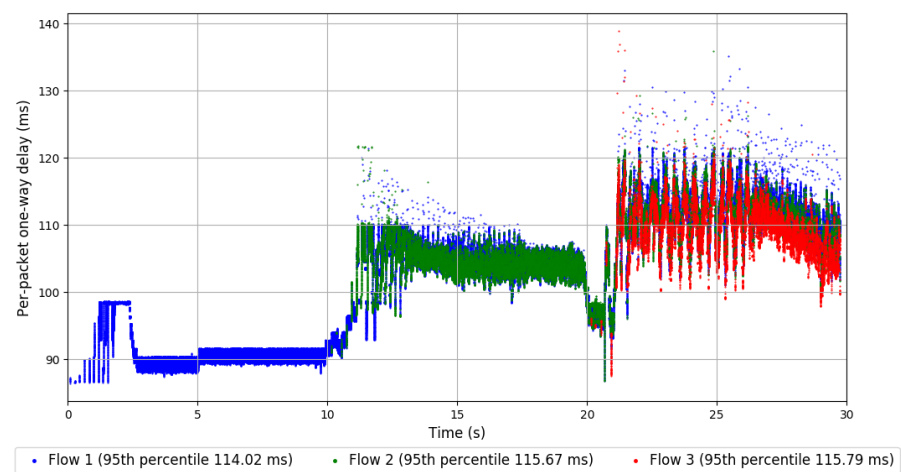
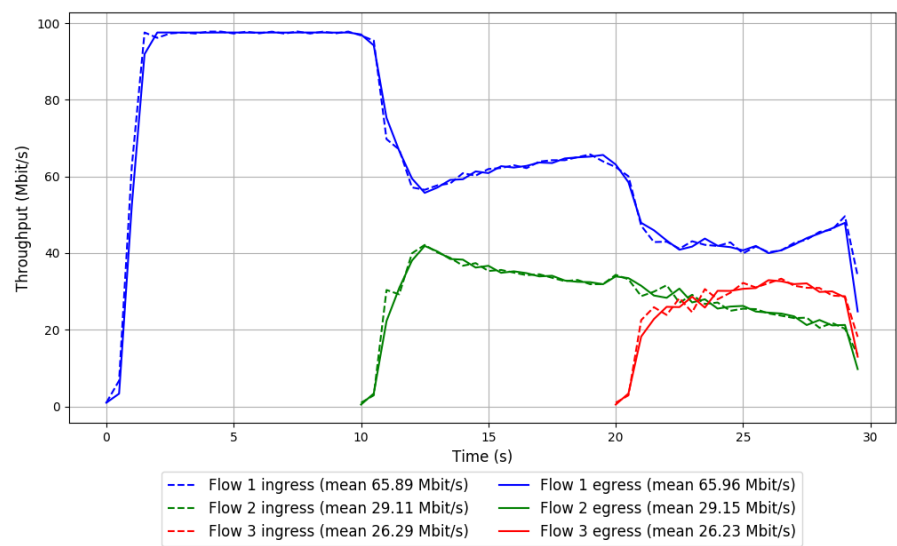
-- Flow 3:

Average throughput: 26.23 Mbit/s

95th percentile per-packet one-way delay: 115.787 ms

Loss rate: 2.16%

Run 1: Report of Indigo-1-32 — Data Link



Run 2: Statistics of Indigo-1-32

Start at: 2018-03-27 15:01:24

End at: 2018-03-27 15:01:54

Local clock offset: -7.284 ms

Remote clock offset: 9.56 ms

Below is generated by plot.py at 2018-03-27 22:37:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.76 Mbit/s

95th percentile per-packet one-way delay: 112.467 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 59.27 Mbit/s

95th percentile per-packet one-way delay: 109.179 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 39.38 Mbit/s

95th percentile per-packet one-way delay: 114.552 ms

Loss rate: 0.91%

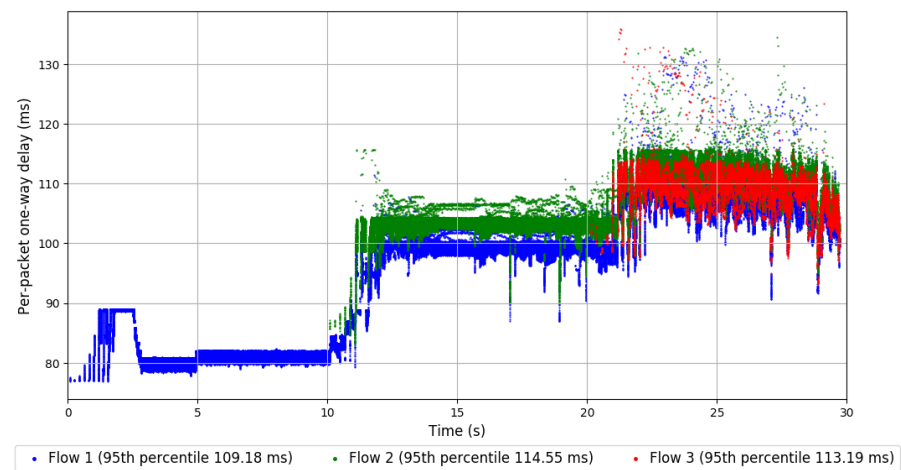
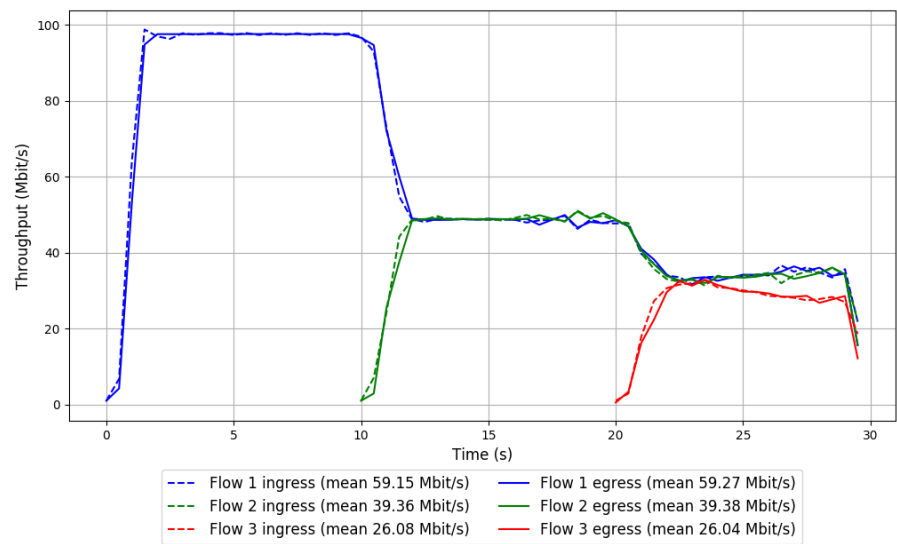
-- Flow 3:

Average throughput: 26.04 Mbit/s

95th percentile per-packet one-way delay: 113.188 ms

Loss rate: 2.23%

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-03-27 15:25:29

End at: 2018-03-27 15:25:59

Local clock offset: -1.761 ms

Remote clock offset: 1.986 ms

Below is generated by plot.py at 2018-03-27 22:37:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.70 Mbit/s

95th percentile per-packet one-way delay: 118.761 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 66.17 Mbit/s

95th percentile per-packet one-way delay: 117.000 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 26.06 Mbit/s

95th percentile per-packet one-way delay: 120.463 ms

Loss rate: 1.18%

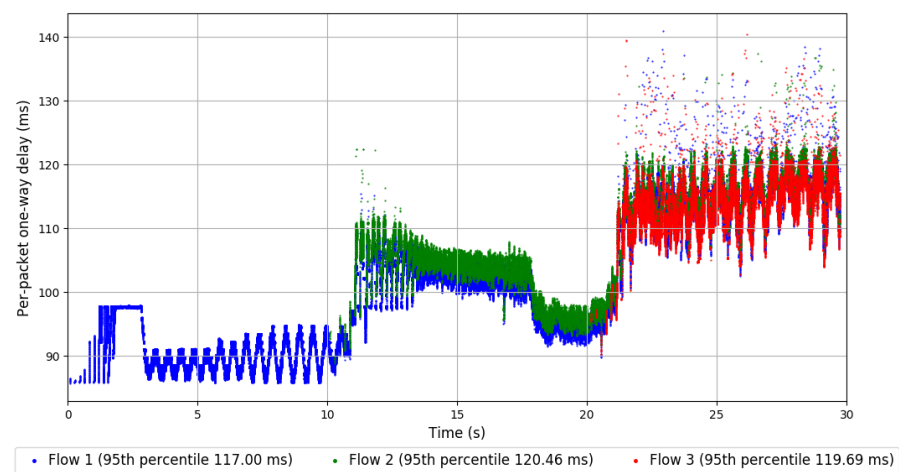
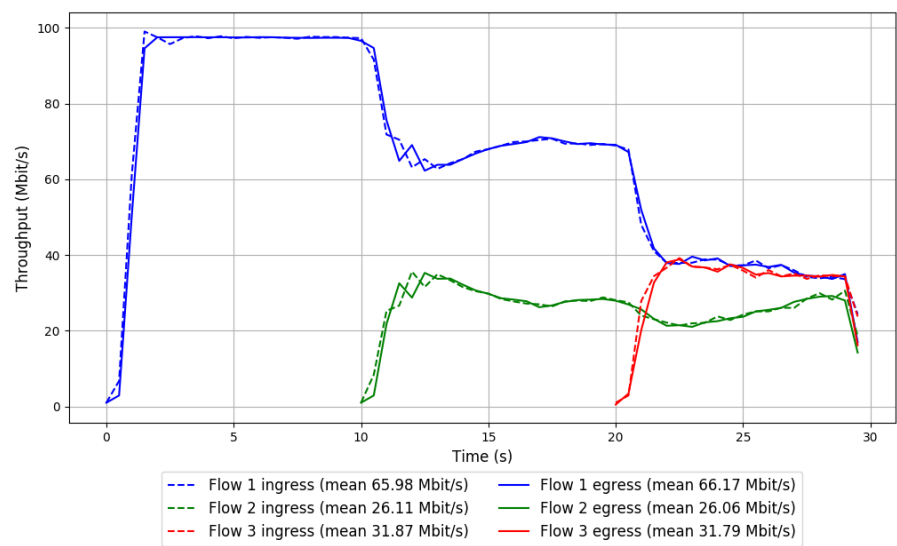
-- Flow 3:

Average throughput: 31.79 Mbit/s

95th percentile per-packet one-way delay: 119.689 ms

Loss rate: 2.49%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-03-27 15:49:26

End at: 2018-03-27 15:49:56

Local clock offset: -1.404 ms

Remote clock offset: 9.666 ms

Below is generated by plot.py at 2018-03-27 22:37:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.61 Mbit/s

95th percentile per-packet one-way delay: 112.730 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 59.17 Mbit/s

95th percentile per-packet one-way delay: 112.428 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 38.14 Mbit/s

95th percentile per-packet one-way delay: 113.414 ms

Loss rate: 0.94%

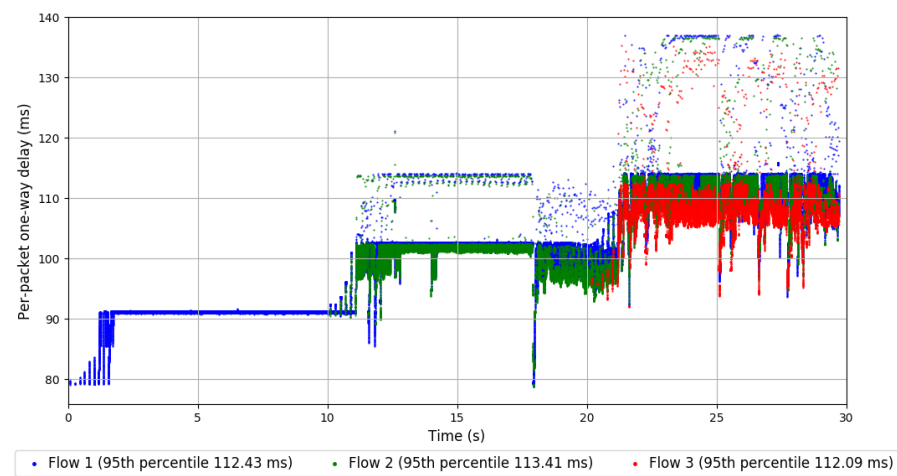
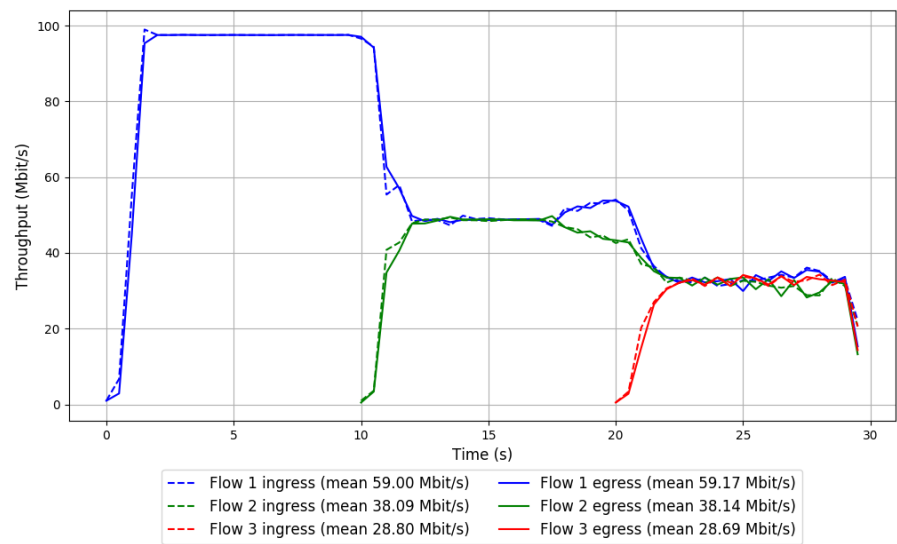
-- Flow 3:

Average throughput: 28.69 Mbit/s

95th percentile per-packet one-way delay: 112.091 ms

Loss rate: 2.42%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-03-27 16:13:26

End at: 2018-03-27 16:13:56

Local clock offset: -1.828 ms

Remote clock offset: 2.964 ms

Below is generated by plot.py at 2018-03-27 22:38:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.70 Mbit/s

95th percentile per-packet one-way delay: 115.243 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 64.17 Mbit/s

95th percentile per-packet one-way delay: 113.460 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 34.12 Mbit/s

95th percentile per-packet one-way delay: 117.015 ms

Loss rate: 0.73%

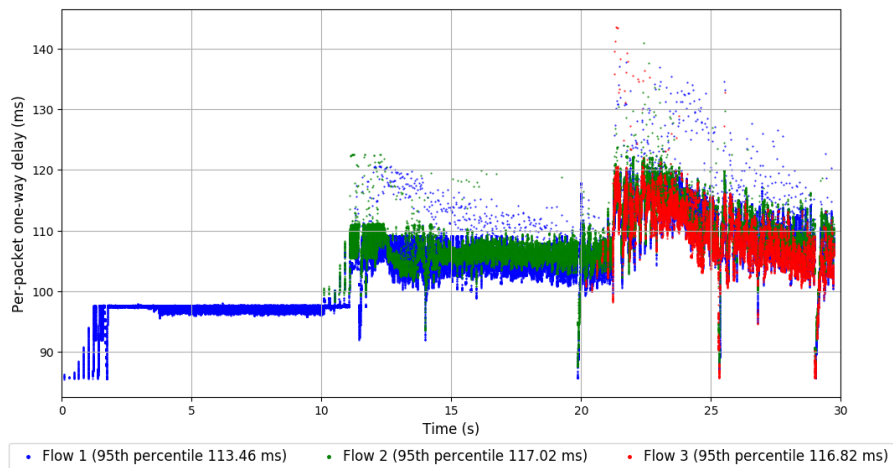
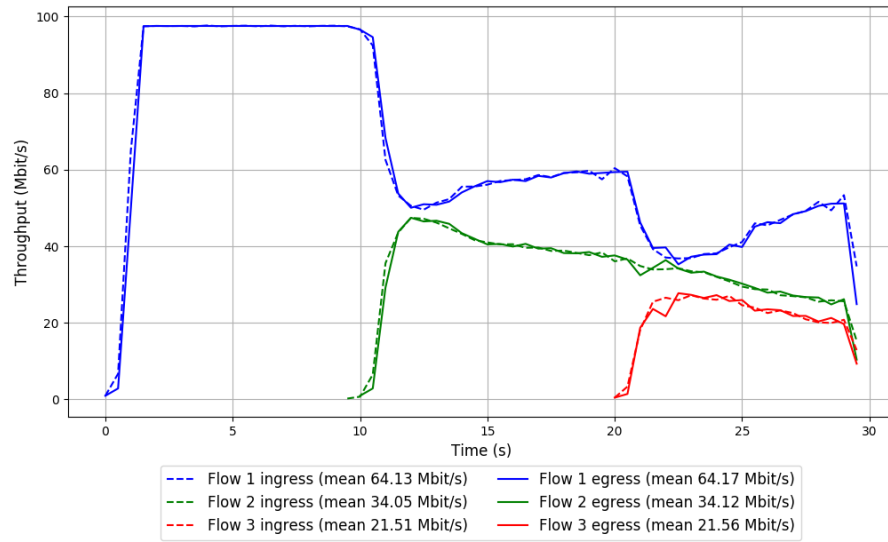
-- Flow 3:

Average throughput: 21.56 Mbit/s

95th percentile per-packet one-way delay: 116.822 ms

Loss rate: 1.81%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-03-27 16:37:28

End at: 2018-03-27 16:37:58

Local clock offset: -2.744 ms

Remote clock offset: 8.42 ms

Below is generated by plot.py at 2018-03-27 22:38:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.90 Mbit/s

95th percentile per-packet one-way delay: 111.355 ms

Loss rate: 14.95%

-- Flow 1:

Average throughput: 57.21 Mbit/s

95th percentile per-packet one-way delay: 108.147 ms

Loss rate: 14.16%

-- Flow 2:

Average throughput: 16.10 Mbit/s

95th percentile per-packet one-way delay: 112.752 ms

Loss rate: 15.55%

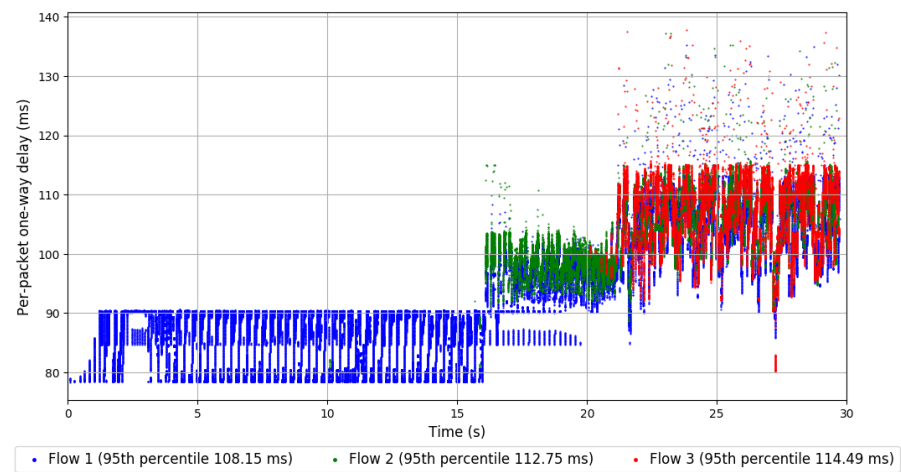
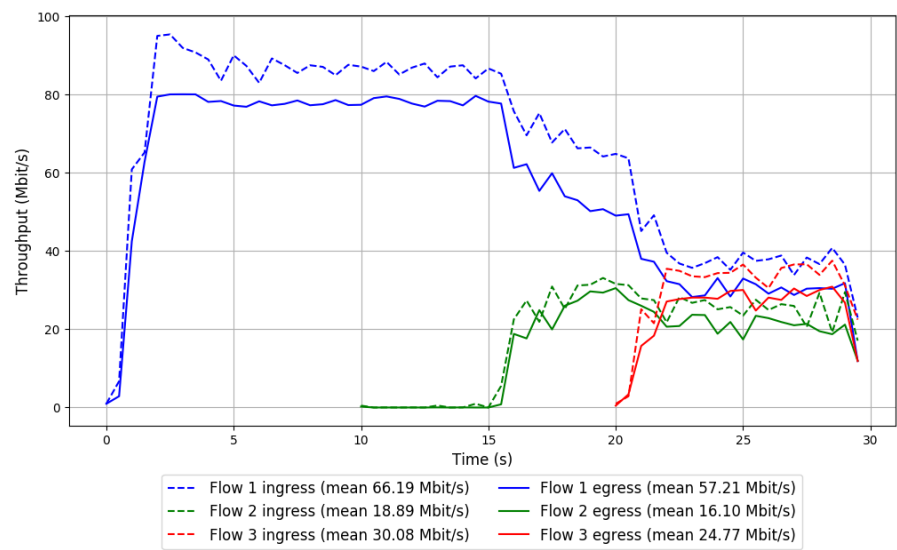
-- Flow 3:

Average throughput: 24.77 Mbit/s

95th percentile per-packet one-way delay: 114.487 ms

Loss rate: 19.52%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-03-27 17:01:42

End at: 2018-03-27 17:02:12

Local clock offset: -7.229 ms

Remote clock offset: 1.307 ms

Below is generated by plot.py at 2018-03-27 22:38:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.47 Mbit/s

95th percentile per-packet one-way delay: 119.405 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 62.28 Mbit/s

95th percentile per-packet one-way delay: 117.181 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 33.74 Mbit/s

95th percentile per-packet one-way delay: 120.426 ms

Loss rate: 1.01%

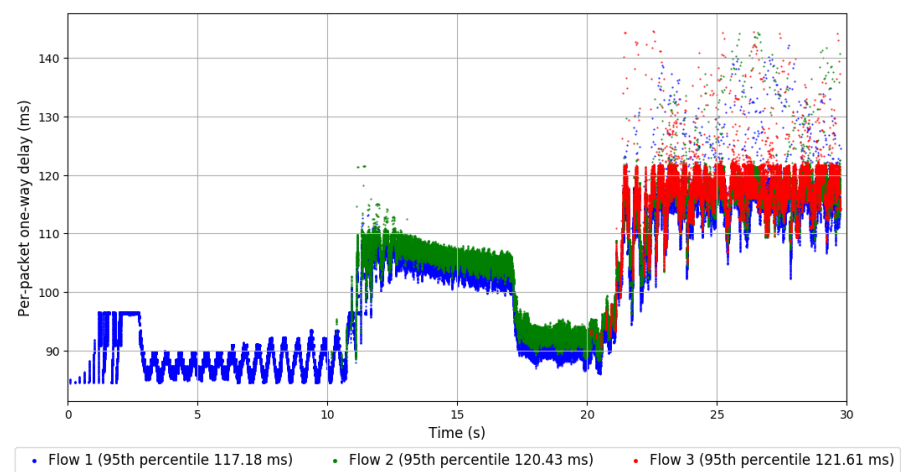
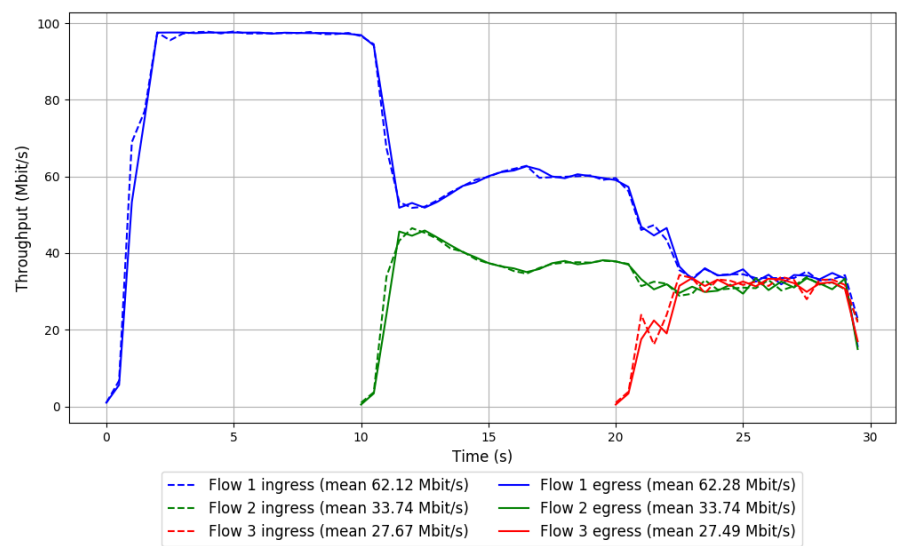
-- Flow 3:

Average throughput: 27.49 Mbit/s

95th percentile per-packet one-way delay: 121.610 ms

Loss rate: 2.56%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-03-27 17:25:44

End at: 2018-03-27 17:26:14

Local clock offset: -7.304 ms

Remote clock offset: 3.022 ms

Below is generated by plot.py at 2018-03-27 22:38:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.41 Mbit/s

95th percentile per-packet one-way delay: 110.861 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 65.35 Mbit/s

95th percentile per-packet one-way delay: 110.892 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 40.39 Mbit/s

95th percentile per-packet one-way delay: 108.767 ms

Loss rate: 0.84%

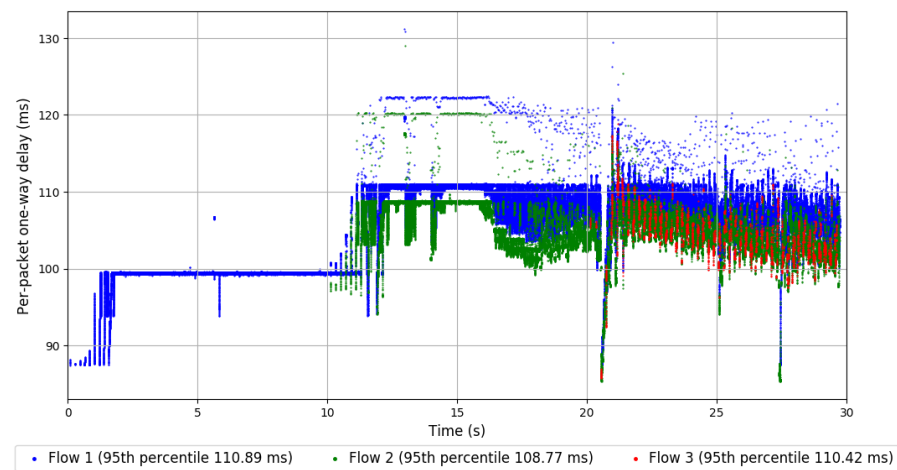
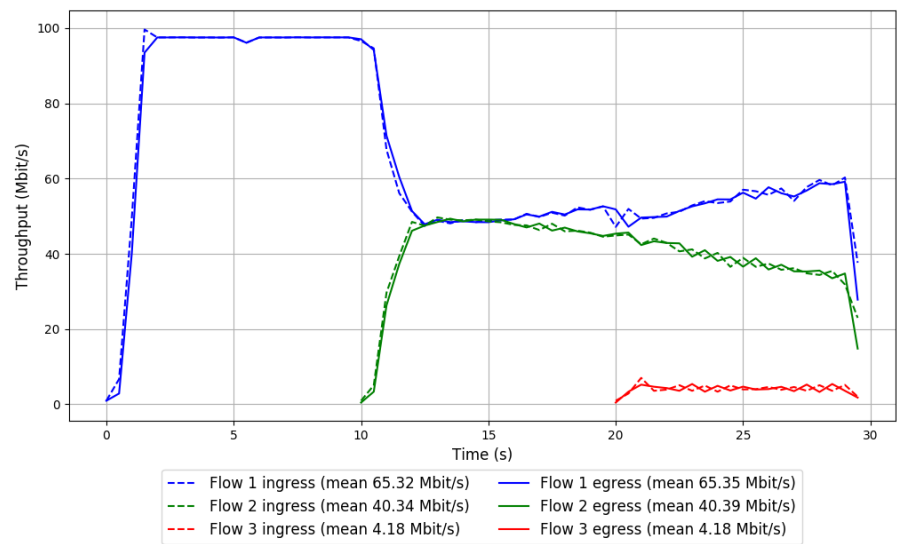
-- Flow 3:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 110.416 ms

Loss rate: 2.22%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-03-27 17:49:35

End at: 2018-03-27 17:50:05

Local clock offset: -7.049 ms

Remote clock offset: 8.553 ms

Below is generated by plot.py at 2018-03-27 22:38:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.68 Mbit/s

95th percentile per-packet one-way delay: 103.431 ms

Loss rate: 10.62%

-- Flow 1:

Average throughput: 52.80 Mbit/s

95th percentile per-packet one-way delay: 103.369 ms

Loss rate: 11.39%

-- Flow 2:

Average throughput: 35.13 Mbit/s

95th percentile per-packet one-way delay: 103.488 ms

Loss rate: 9.89%

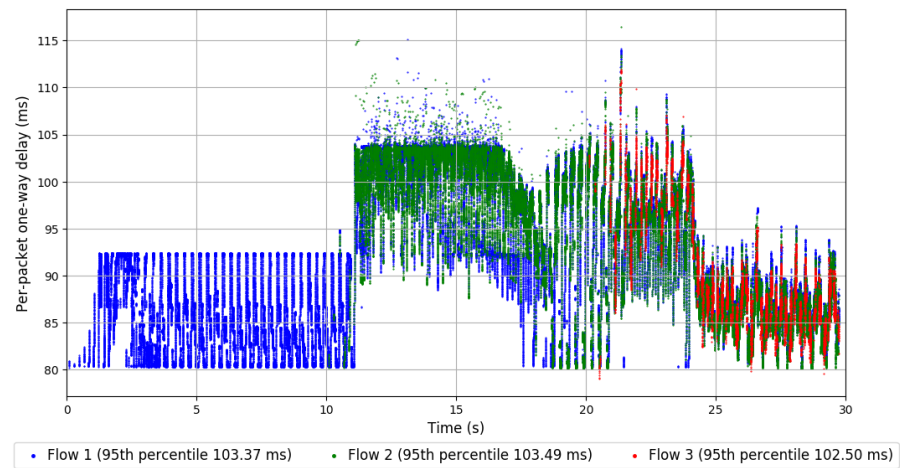
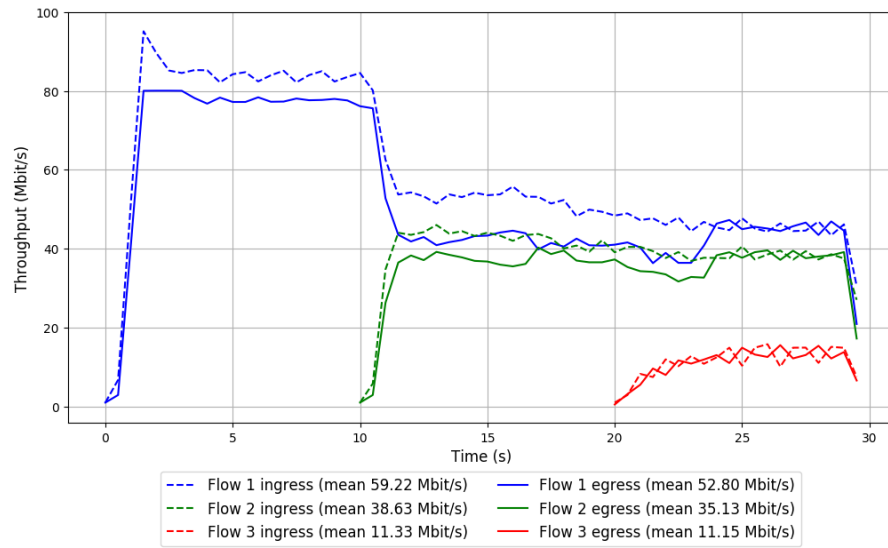
-- Flow 3:

Average throughput: 11.15 Mbit/s

95th percentile per-packet one-way delay: 102.497 ms

Loss rate: 3.47%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-03-27 18:13:37

End at: 2018-03-27 18:14:07

Local clock offset: -3.694 ms

Remote clock offset: 2.16 ms

Below is generated by plot.py at 2018-03-27 22:39:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.59 Mbit/s

95th percentile per-packet one-way delay: 120.168 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 59.20 Mbit/s

95th percentile per-packet one-way delay: 120.977 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 38.27 Mbit/s

95th percentile per-packet one-way delay: 119.238 ms

Loss rate: 0.95%

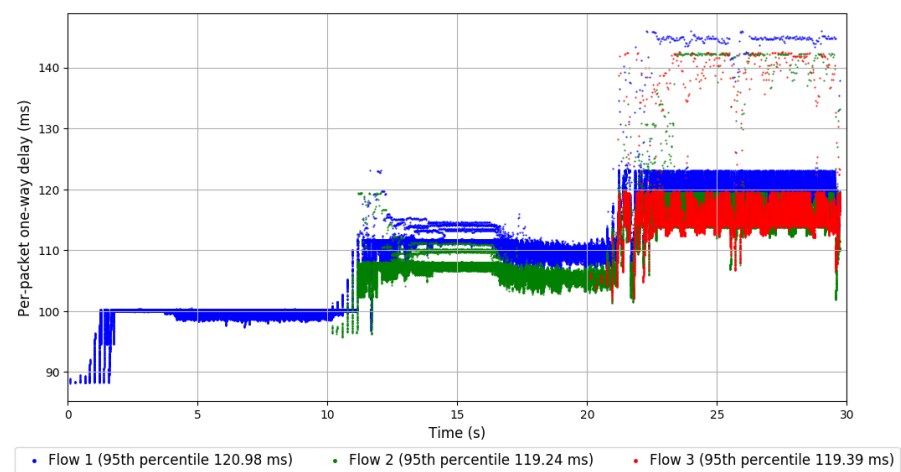
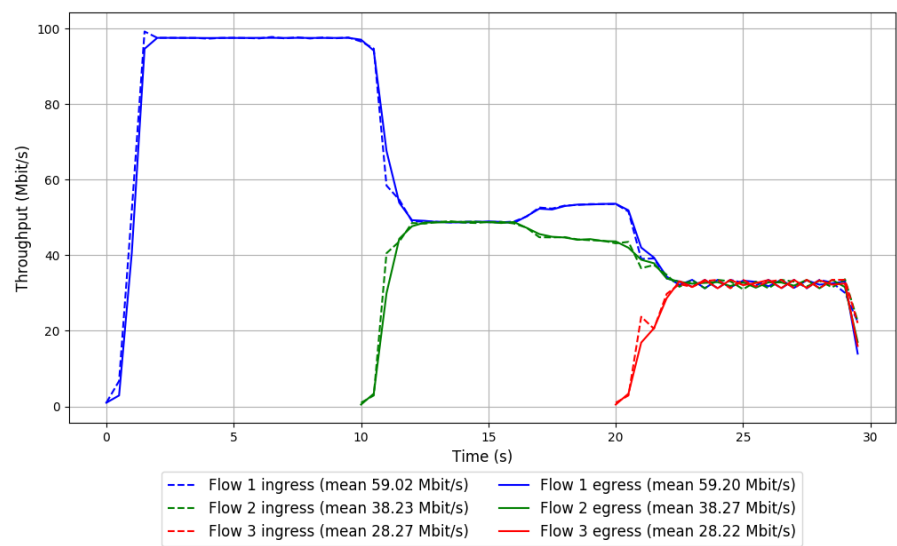
-- Flow 3:

Average throughput: 28.22 Mbit/s

95th percentile per-packet one-way delay: 119.389 ms

Loss rate: 2.70%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-03-27 14:28:06

End at: 2018-03-27 14:28:36

Local clock offset: -7.291 ms

Remote clock offset: 8.493 ms

Below is generated by plot.py at 2018-03-27 22:39:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.87 Mbit/s

95th percentile per-packet one-way delay: 113.046 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 50.37 Mbit/s

95th percentile per-packet one-way delay: 109.648 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 31.02 Mbit/s

95th percentile per-packet one-way delay: 113.656 ms

Loss rate: 1.10%

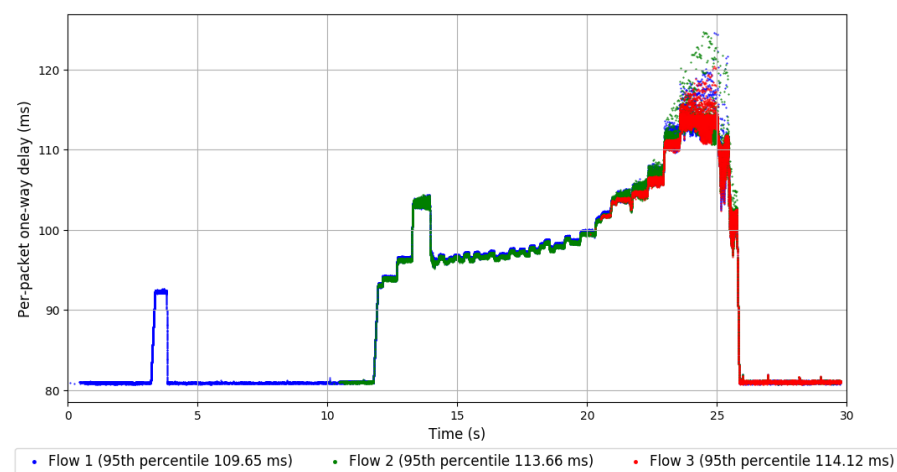
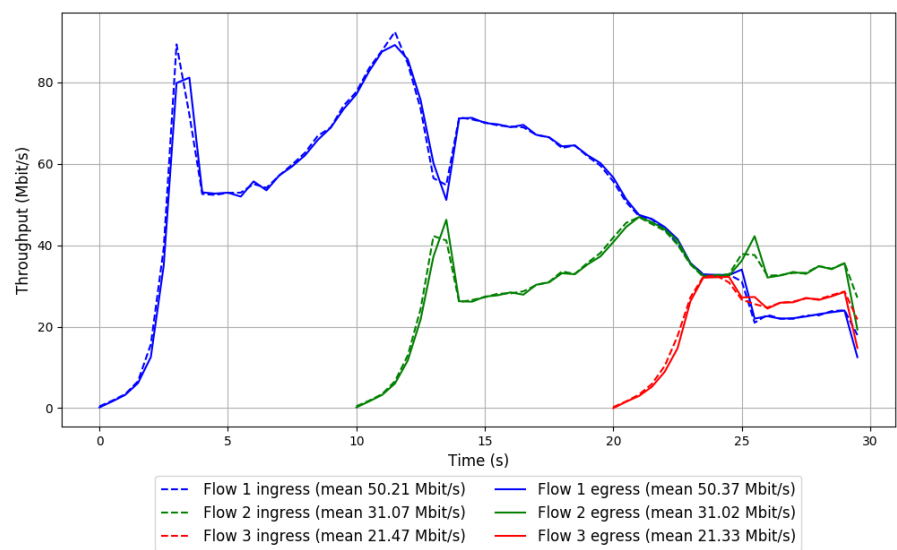
-- Flow 3:

Average throughput: 21.33 Mbit/s

95th percentile per-packet one-way delay: 114.123 ms

Loss rate: 2.75%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-03-27 14:51:58

End at: 2018-03-27 14:52:28

Local clock offset: -8.014 ms

Remote clock offset: 4.664 ms

Below is generated by plot.py at 2018-03-27 22:39:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.50 Mbit/s

95th percentile per-packet one-way delay: 117.768 ms

Loss rate: 2.15%

-- Flow 1:

Average throughput: 57.18 Mbit/s

95th percentile per-packet one-way delay: 110.048 ms

Loss rate: 1.75%

-- Flow 2:

Average throughput: 12.65 Mbit/s

95th percentile per-packet one-way delay: 117.619 ms

Loss rate: 3.21%

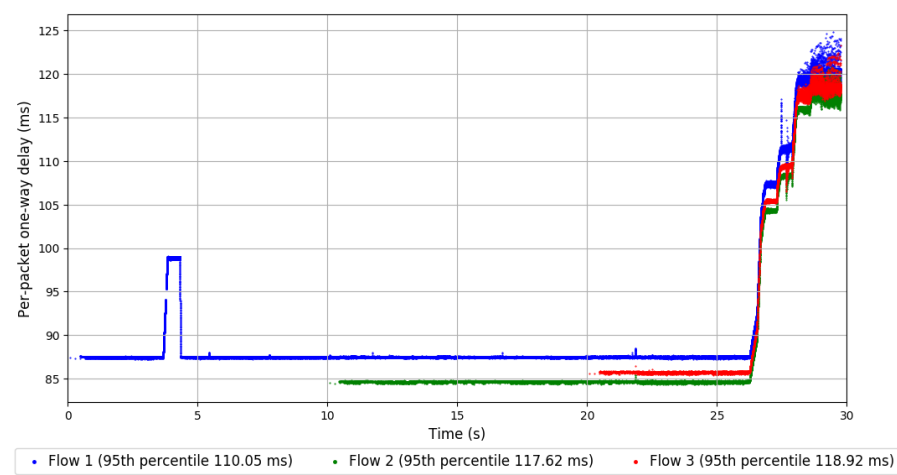
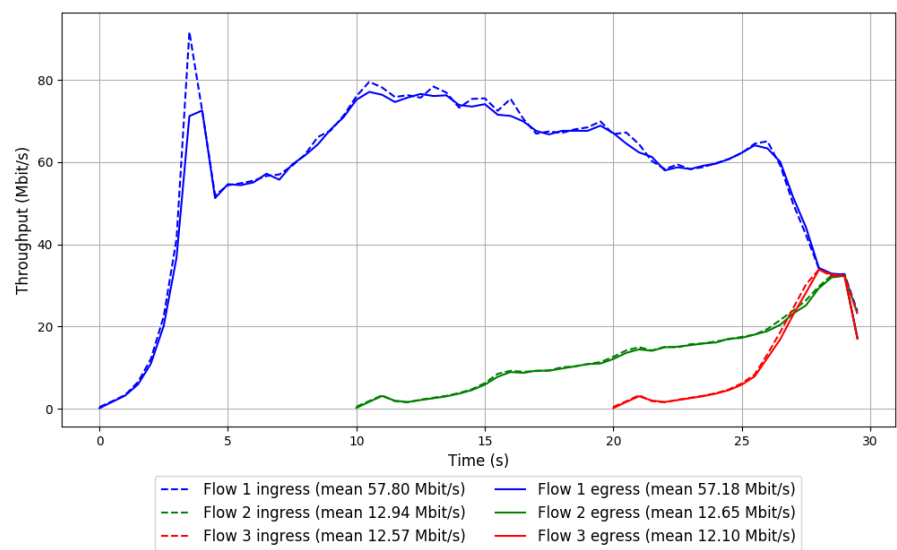
-- Flow 3:

Average throughput: 12.10 Mbit/s

95th percentile per-packet one-way delay: 118.918 ms

Loss rate: 5.59%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-03-27 15:16:12

End at: 2018-03-27 15:16:42

Local clock offset: -2.859 ms

Remote clock offset: 1.155 ms

Below is generated by plot.py at 2018-03-27 22:39:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.12 Mbit/s

95th percentile per-packet one-way delay: 100.117 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 64.46 Mbit/s

95th percentile per-packet one-way delay: 99.540 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 14.05 Mbit/s

95th percentile per-packet one-way delay: 103.145 ms

Loss rate: 1.46%

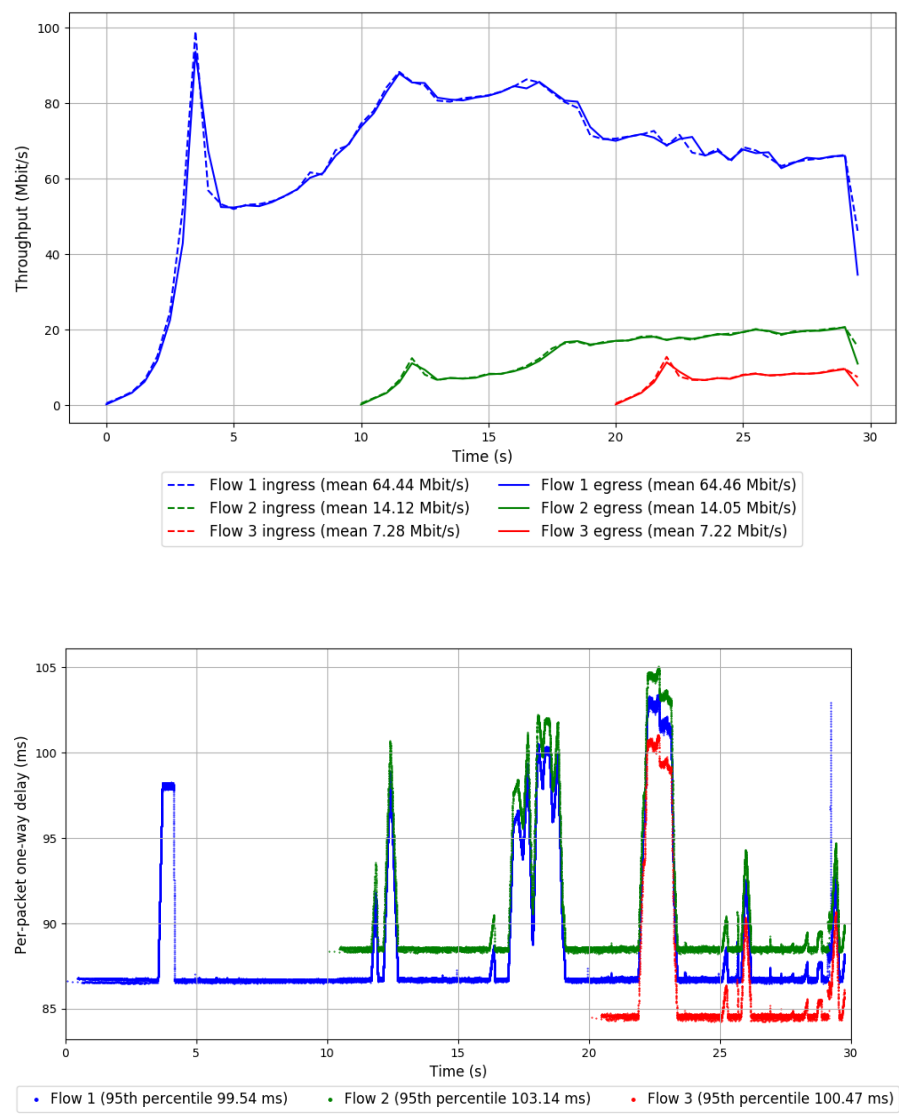
-- Flow 3:

Average throughput: 7.22 Mbit/s

95th percentile per-packet one-way delay: 100.473 ms

Loss rate: 2.70%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-03-27 15:40:06

End at: 2018-03-27 15:40:36

Local clock offset: -1.468 ms

Remote clock offset: 3.03 ms

Below is generated by plot.py at 2018-03-27 22:39:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.25 Mbit/s

95th percentile per-packet one-way delay: 90.313 ms

Loss rate: 3.95%

-- Flow 1:

Average throughput: 54.86 Mbit/s

95th percentile per-packet one-way delay: 90.861 ms

Loss rate: 3.74%

-- Flow 2:

Average throughput: 16.89 Mbit/s

95th percentile per-packet one-way delay: 88.562 ms

Loss rate: 4.87%

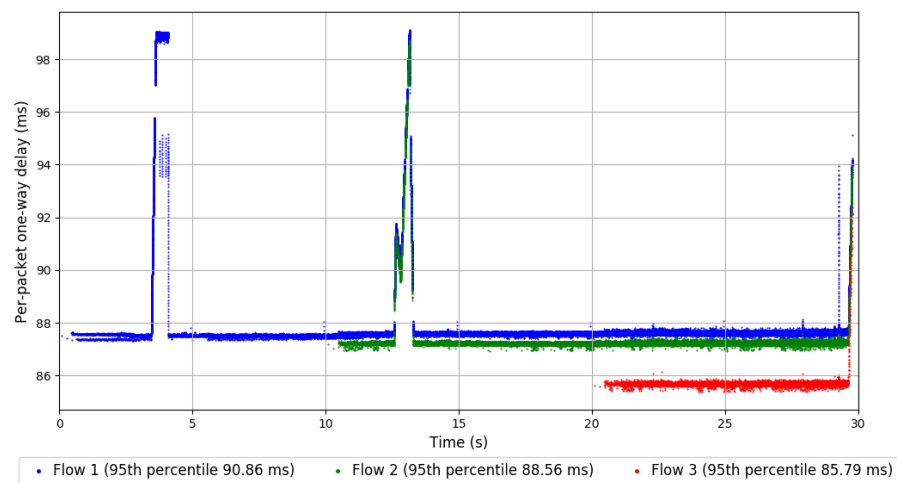
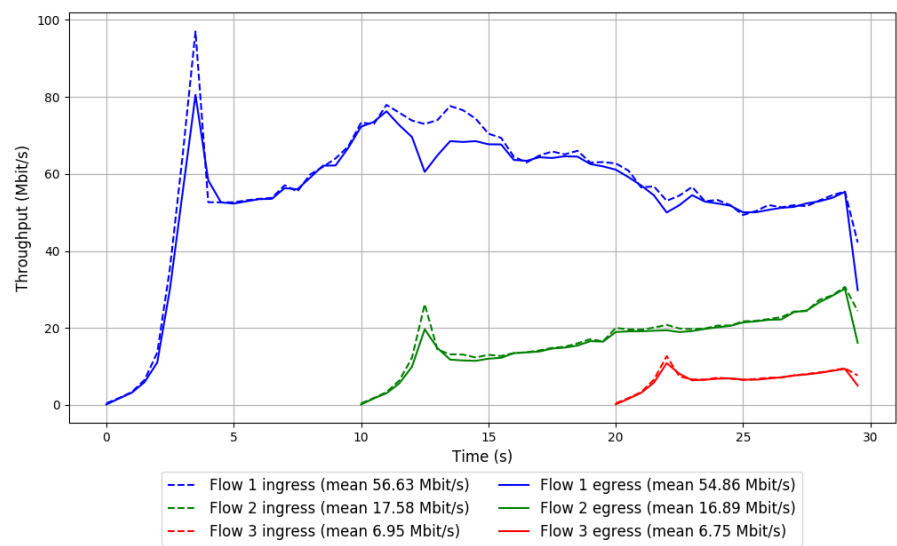
-- Flow 3:

Average throughput: 6.75 Mbit/s

95th percentile per-packet one-way delay: 85.789 ms

Loss rate: 4.63%

Run 4: Report of Vivace-latency — Data Link

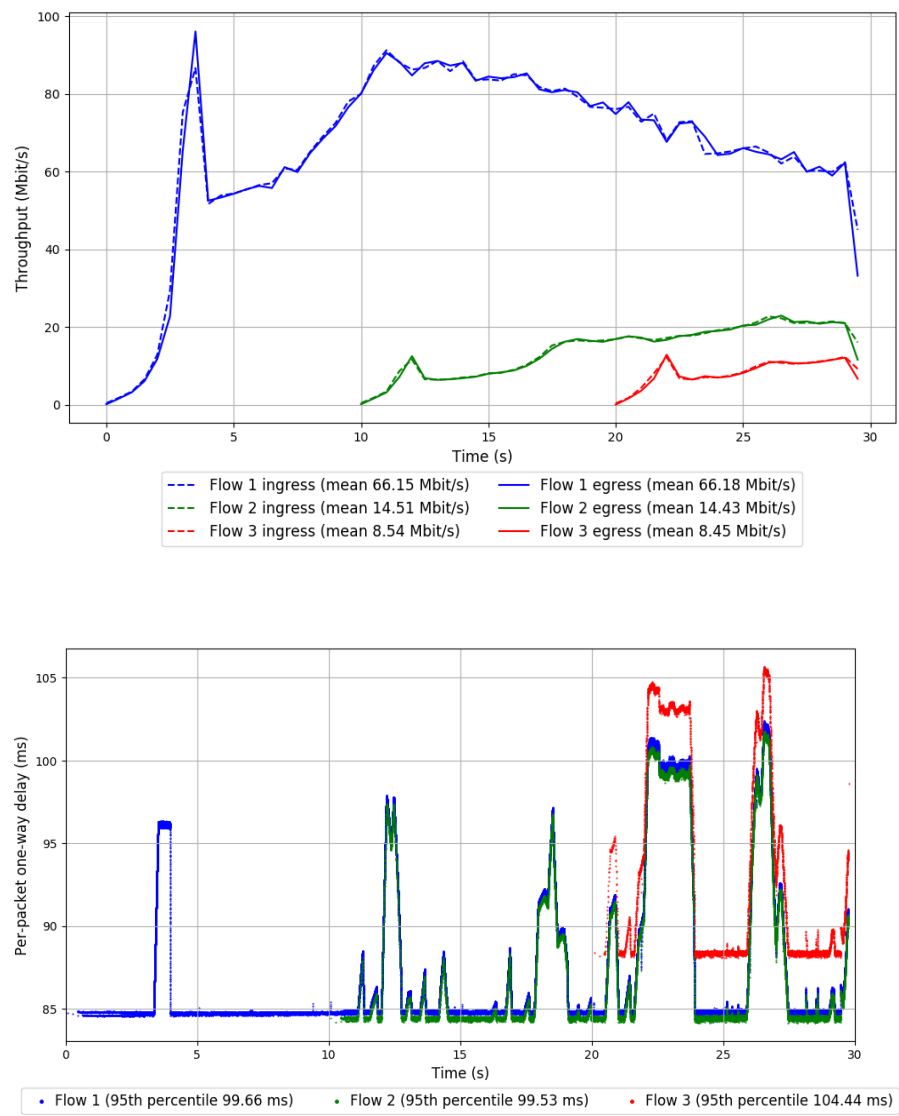


Run 5: Statistics of Vivace-latency

Start at: 2018-03-27 16:04:04
End at: 2018-03-27 16:04:34
Local clock offset: -0.879 ms
Remote clock offset: 2.151 ms

Below is generated by plot.py at 2018-03-27 22:40:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 78.48 Mbit/s
95th percentile per-packet one-way delay: 99.763 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 66.18 Mbit/s
95th percentile per-packet one-way delay: 99.660 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 14.43 Mbit/s
95th percentile per-packet one-way delay: 99.525 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 8.45 Mbit/s
95th percentile per-packet one-way delay: 104.441 ms
Loss rate: 2.83%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-03-27 16:28:12

End at: 2018-03-27 16:28:42

Local clock offset: -2.707 ms

Remote clock offset: 2.15 ms

Below is generated by plot.py at 2018-03-27 22:40:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.93 Mbit/s

95th percentile per-packet one-way delay: 105.749 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 61.78 Mbit/s

95th percentile per-packet one-way delay: 102.088 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 15.70 Mbit/s

95th percentile per-packet one-way delay: 106.515 ms

Loss rate: 1.52%

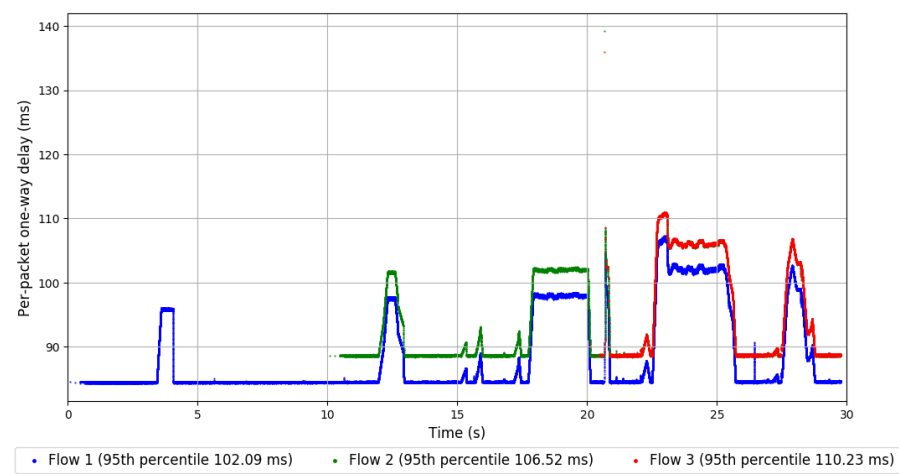
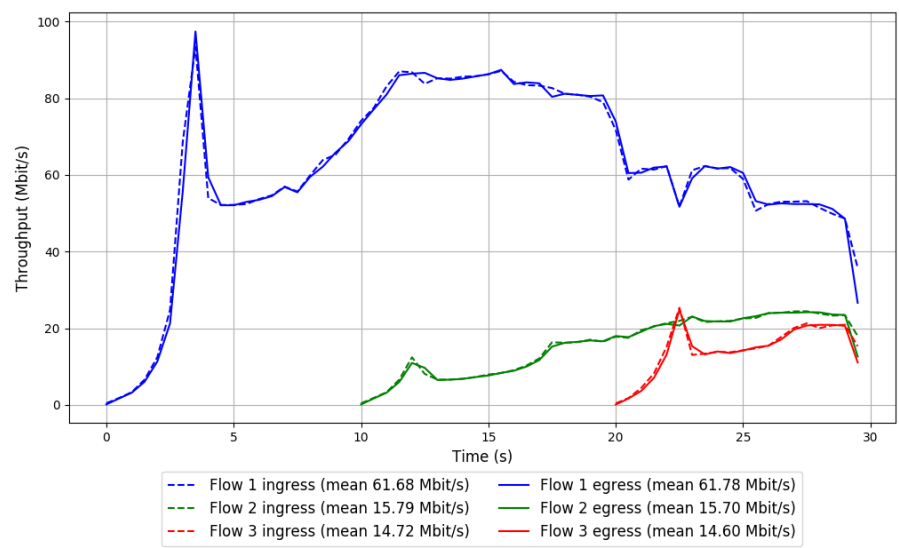
-- Flow 3:

Average throughput: 14.60 Mbit/s

95th percentile per-packet one-way delay: 110.235 ms

Loss rate: 2.74%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-03-27 16:52:23

End at: 2018-03-27 16:52:53

Local clock offset: -6.041 ms

Remote clock offset: 2.499 ms

Below is generated by plot.py at 2018-03-27 22:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.79 Mbit/s

95th percentile per-packet one-way delay: 118.679 ms

Loss rate: 2.83%

-- Flow 1:

Average throughput: 52.95 Mbit/s

95th percentile per-packet one-way delay: 118.172 ms

Loss rate: 2.63%

-- Flow 2:

Average throughput: 25.11 Mbit/s

95th percentile per-packet one-way delay: 116.889 ms

Loss rate: 3.15%

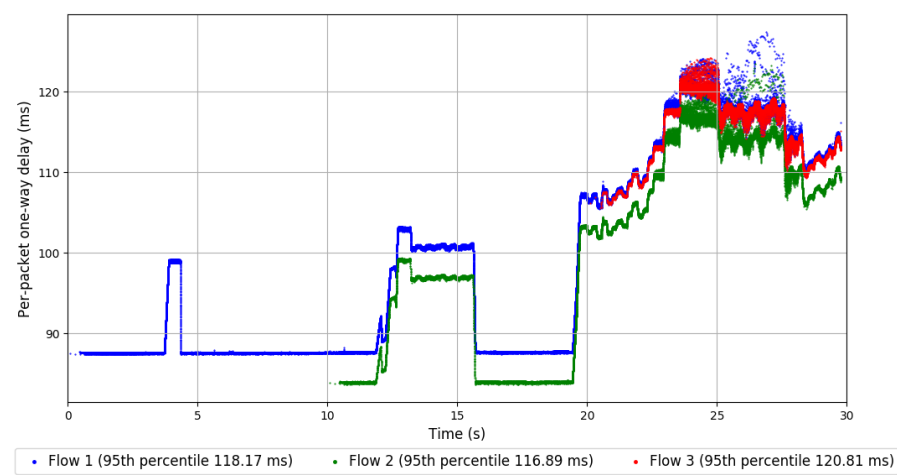
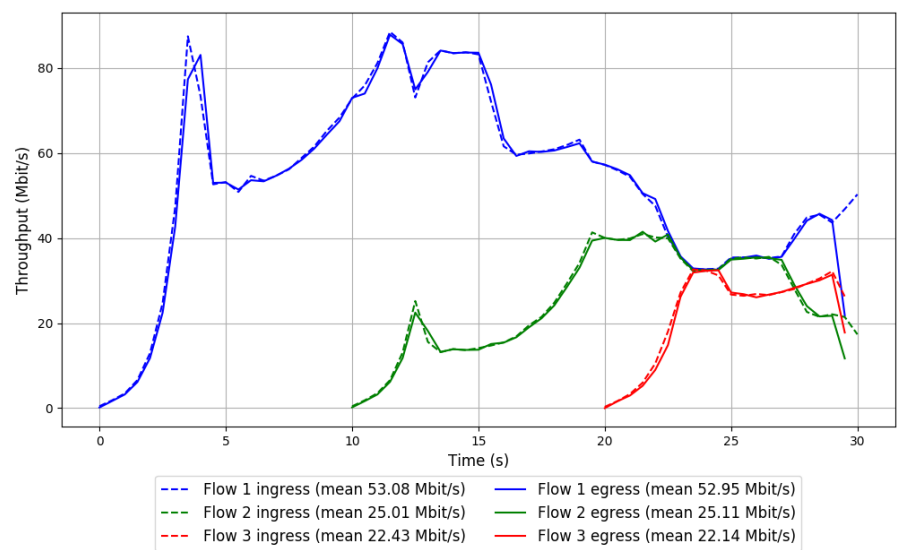
-- Flow 3:

Average throughput: 22.14 Mbit/s

95th percentile per-packet one-way delay: 120.815 ms

Loss rate: 3.61%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-03-27 17:16:27

End at: 2018-03-27 17:16:57

Local clock offset: -8.204 ms

Remote clock offset: 8.186 ms

Below is generated by plot.py at 2018-03-27 22:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.63 Mbit/s

95th percentile per-packet one-way delay: 80.385 ms

Loss rate: 2.45%

-- Flow 1:

Average throughput: 60.76 Mbit/s

95th percentile per-packet one-way delay: 80.391 ms

Loss rate: 2.33%

-- Flow 2:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 78.260 ms

Loss rate: 3.42%

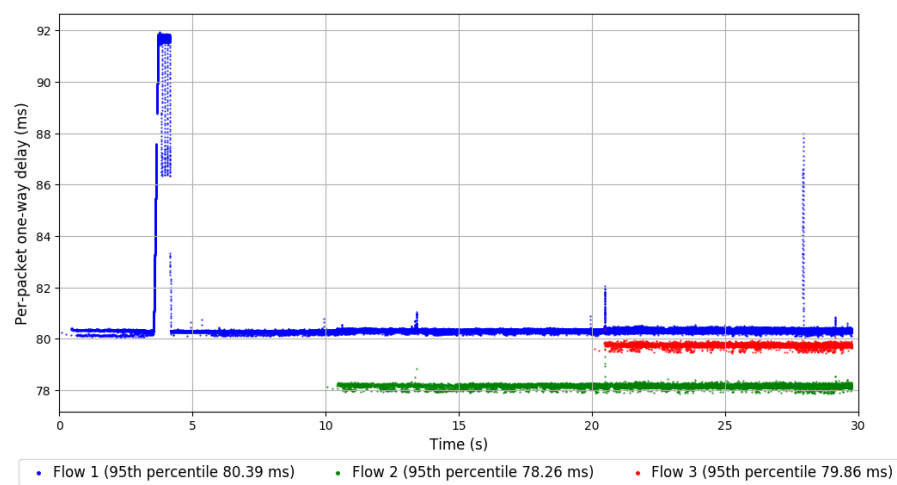
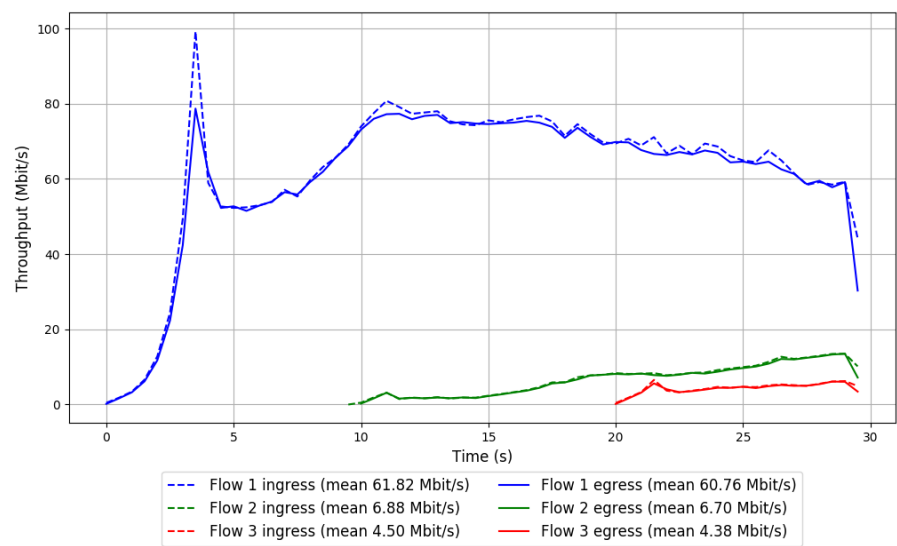
-- Flow 3:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 79.863 ms

Loss rate: 4.60%

Run 8: Report of Vivace-latency — Data Link

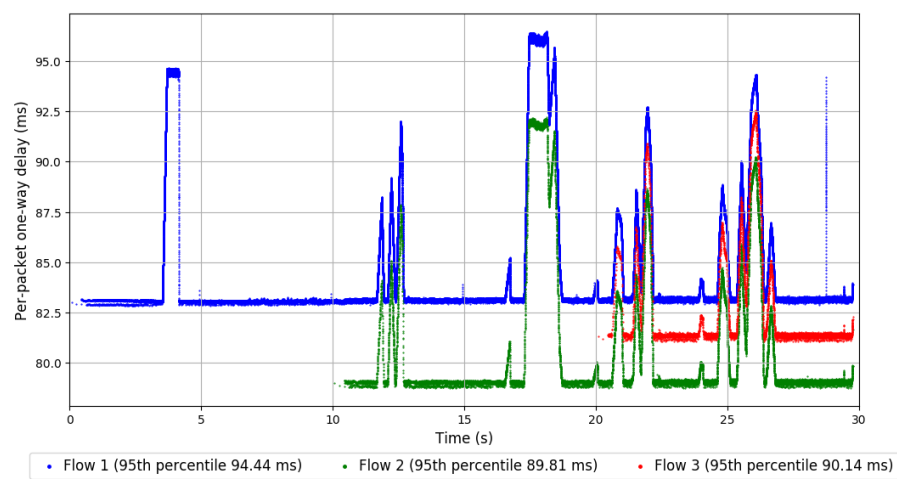
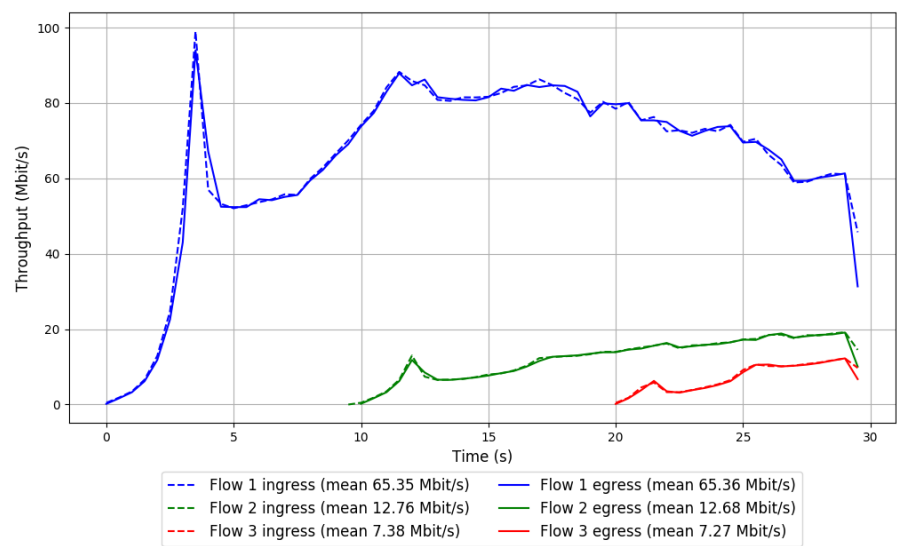


Run 9: Statistics of Vivace-latency

Start at: 2018-03-27 17:40:20
End at: 2018-03-27 17:40:50
Local clock offset: -6.949 ms
Remote clock offset: 7.643 ms

Below is generated by plot.py at 2018-03-27 22:40:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 76.14 Mbit/s
95th percentile per-packet one-way delay: 94.261 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 65.36 Mbit/s
95th percentile per-packet one-way delay: 94.436 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 89.810 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 7.27 Mbit/s
95th percentile per-packet one-way delay: 90.143 ms
Loss rate: 3.43%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-03-27 18:04:18

End at: 2018-03-27 18:04:48

Local clock offset: -4.306 ms

Remote clock offset: 8.373 ms

Below is generated by plot.py at 2018-03-27 22:40:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.20 Mbit/s

95th percentile per-packet one-way delay: 113.863 ms

Loss rate: 3.46%

-- Flow 1:

Average throughput: 51.49 Mbit/s

95th percentile per-packet one-way delay: 113.226 ms

Loss rate: 2.01%

-- Flow 2:

Average throughput: 31.12 Mbit/s

95th percentile per-packet one-way delay: 112.956 ms

Loss rate: 6.83%

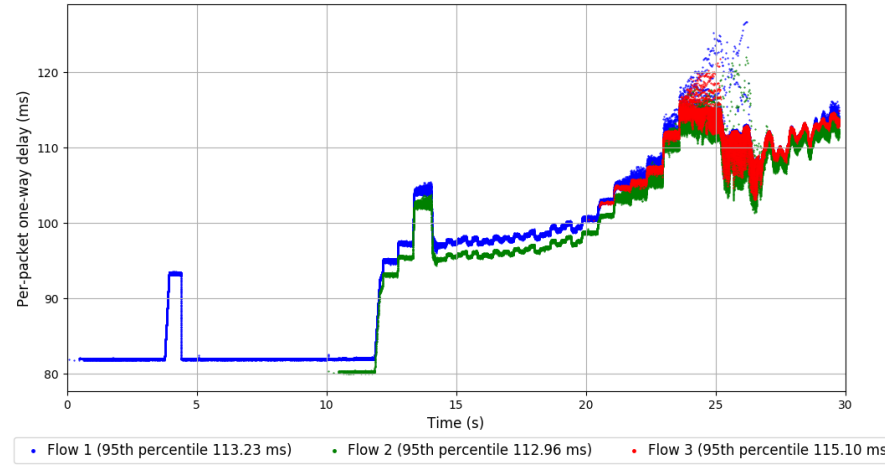
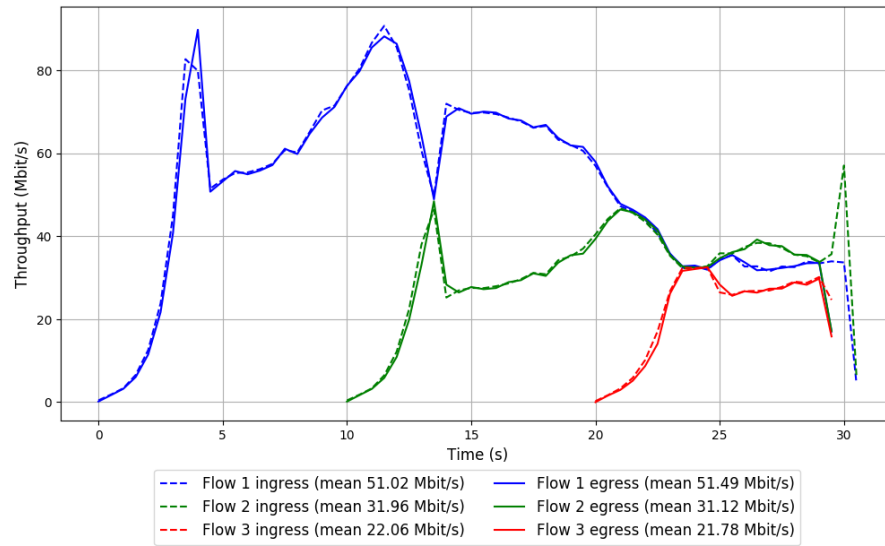
-- Flow 3:

Average throughput: 21.78 Mbit/s

95th percentile per-packet one-way delay: 115.097 ms

Loss rate: 3.68%

Run 10: Report of Vivace-latency — Data Link



Run 1: Statistics of Vivace-loss

Start at: 2018-03-27 14:18:48

End at: 2018-03-27 14:19:18

Local clock offset: -6.8 ms

Remote clock offset: 3.068 ms

Below is generated by plot.py at 2018-03-27 22:40:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.86 Mbit/s

95th percentile per-packet one-way delay: 119.803 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 47.86 Mbit/s

95th percentile per-packet one-way delay: 117.098 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 30.20 Mbit/s

95th percentile per-packet one-way delay: 121.447 ms

Loss rate: 1.19%

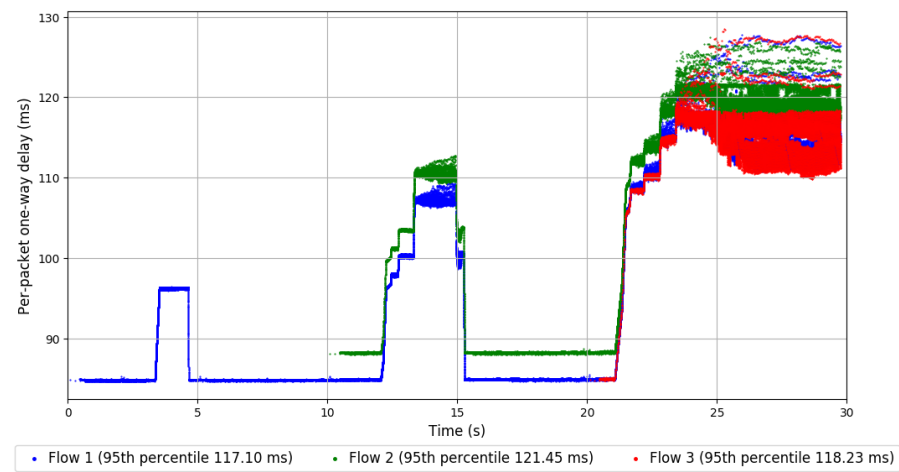
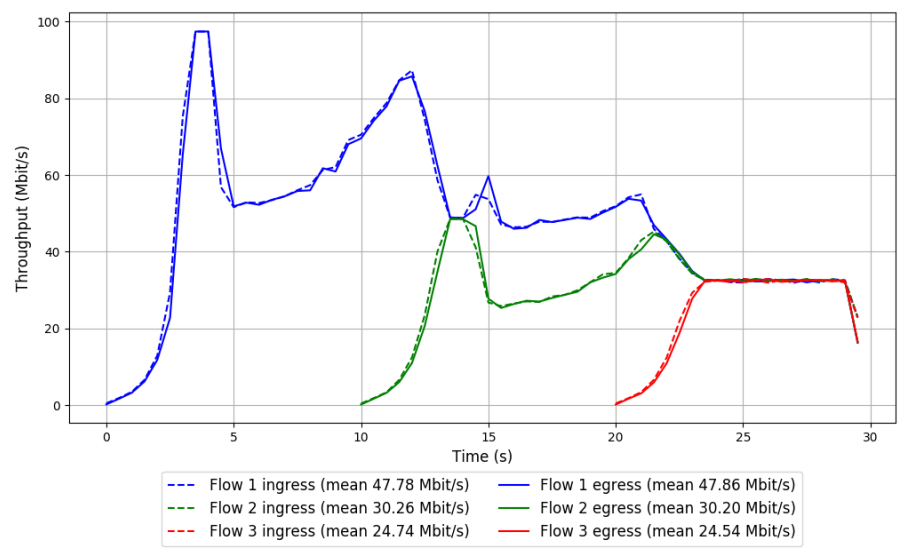
-- Flow 3:

Average throughput: 24.54 Mbit/s

95th percentile per-packet one-way delay: 118.227 ms

Loss rate: 2.74%

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-03-27 14:42:37

End at: 2018-03-27 14:43:07

Local clock offset: -7.698 ms

Remote clock offset: 9.951 ms

Below is generated by plot.py at 2018-03-27 22:40:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.27 Mbit/s

95th percentile per-packet one-way delay: 115.134 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 47.42 Mbit/s

95th percentile per-packet one-way delay: 113.553 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 30.03 Mbit/s

95th percentile per-packet one-way delay: 113.388 ms

Loss rate: 1.18%

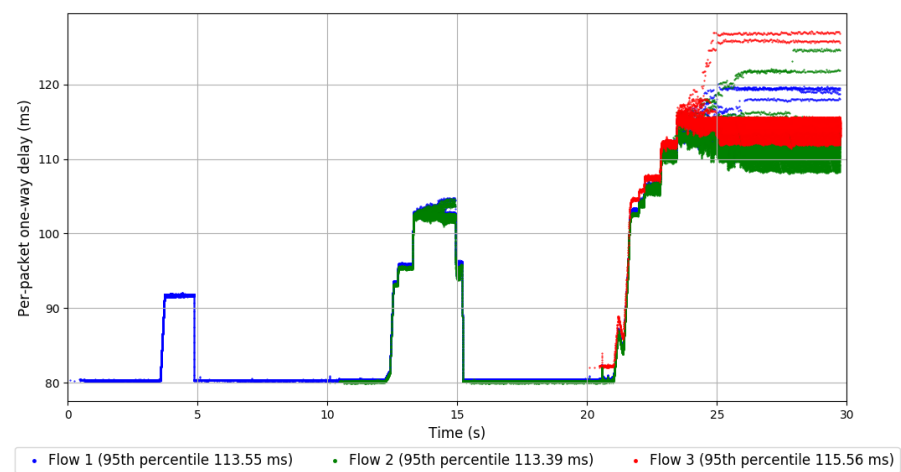
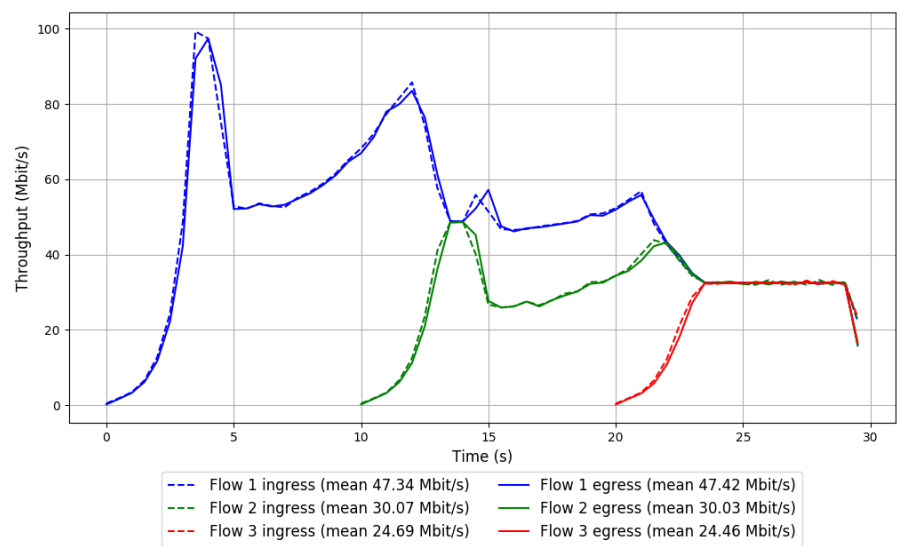
-- Flow 3:

Average throughput: 24.46 Mbit/s

95th percentile per-packet one-way delay: 115.562 ms

Loss rate: 2.91%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-03-27 15:06:50

End at: 2018-03-27 15:07:20

Local clock offset: -4.989 ms

Remote clock offset: 2.732 ms

Below is generated by plot.py at 2018-03-27 22:41:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.72 Mbit/s

95th percentile per-packet one-way delay: 118.274 ms

Loss rate: 2.01%

-- Flow 1:

Average throughput: 55.12 Mbit/s

95th percentile per-packet one-way delay: 117.400 ms

Loss rate: 1.75%

-- Flow 2:

Average throughput: 11.49 Mbit/s

95th percentile per-packet one-way delay: 118.157 ms

Loss rate: 3.30%

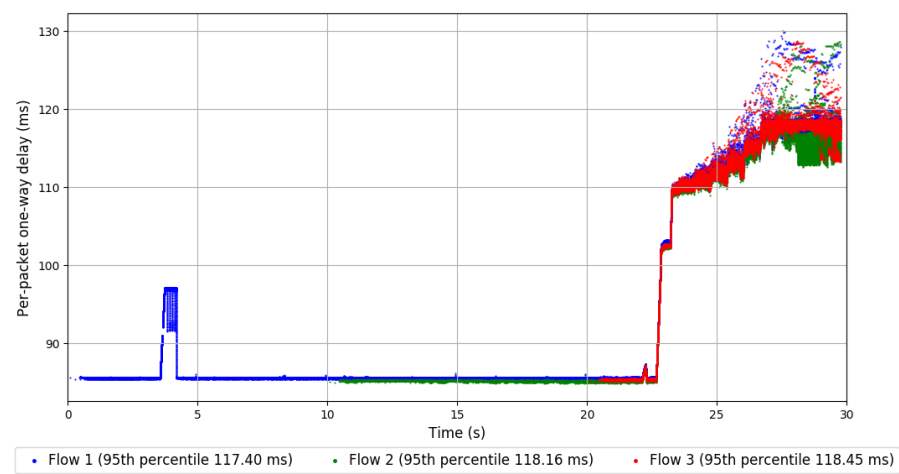
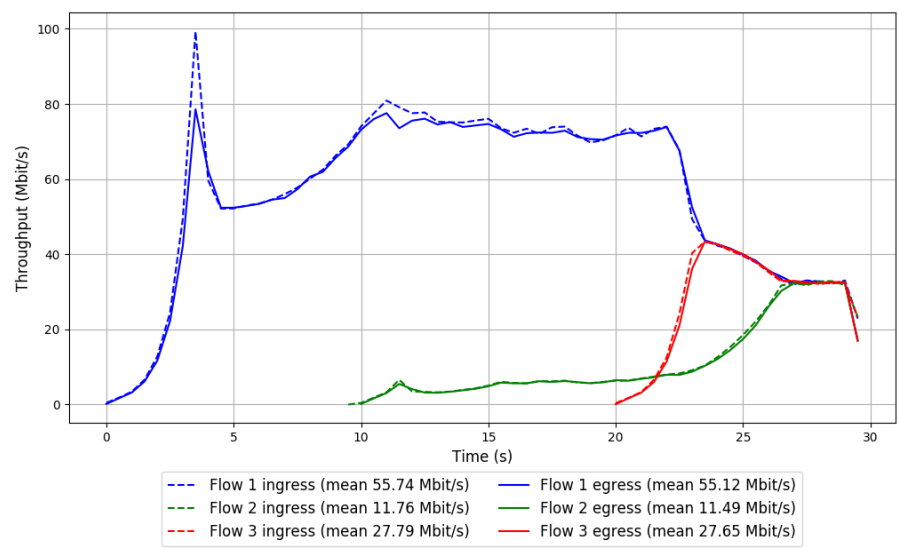
-- Flow 3:

Average throughput: 27.65 Mbit/s

95th percentile per-packet one-way delay: 118.455 ms

Loss rate: 2.50%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-03-27 15:30:45

End at: 2018-03-27 15:31:15

Local clock offset: -1.28 ms

Remote clock offset: 7.976 ms

Below is generated by plot.py at 2018-03-27 22:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.59 Mbit/s

95th percentile per-packet one-way delay: 115.161 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 47.46 Mbit/s

95th percentile per-packet one-way delay: 115.359 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 30.42 Mbit/s

95th percentile per-packet one-way delay: 113.510 ms

Loss rate: 1.16%

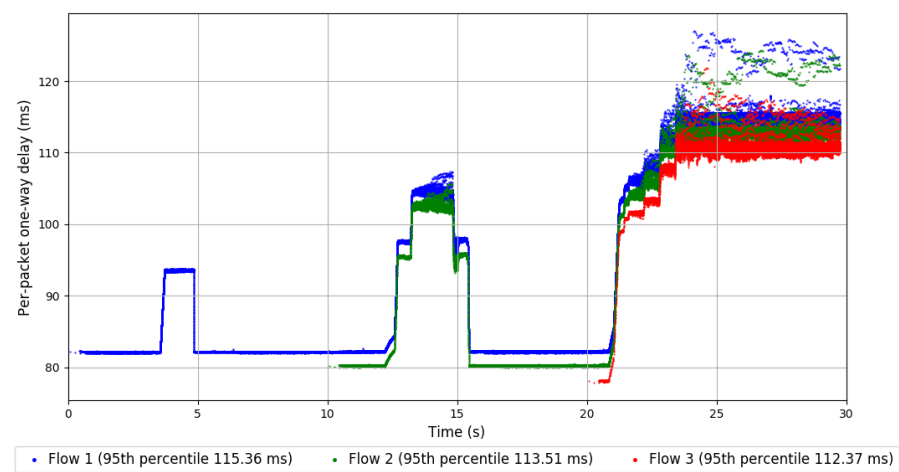
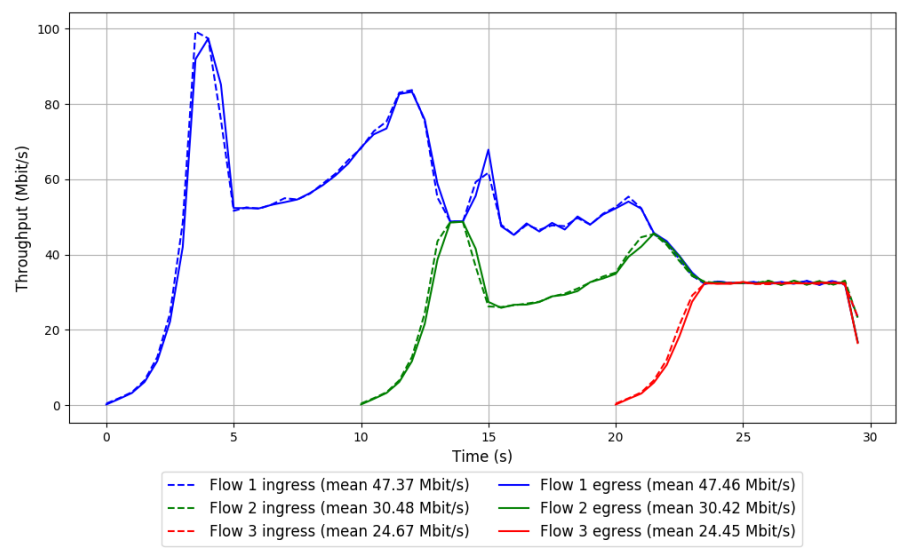
-- Flow 3:

Average throughput: 24.45 Mbit/s

95th percentile per-packet one-way delay: 112.369 ms

Loss rate: 2.84%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-03-27 15:54:45

End at: 2018-03-27 15:55:15

Local clock offset: -1.232 ms

Remote clock offset: 2.348 ms

Below is generated by plot.py at 2018-03-27 22:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.71 Mbit/s

95th percentile per-packet one-way delay: 88.635 ms

Loss rate: 3.38%

-- Flow 1:

Average throughput: 53.01 Mbit/s

95th percentile per-packet one-way delay: 88.455 ms

Loss rate: 3.17%

-- Flow 2:

Average throughput: 18.12 Mbit/s

95th percentile per-packet one-way delay: 86.915 ms

Loss rate: 3.88%

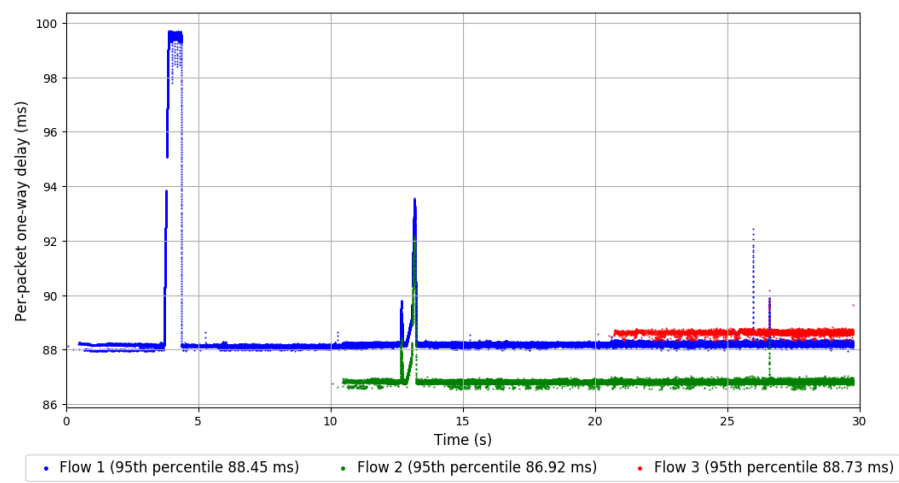
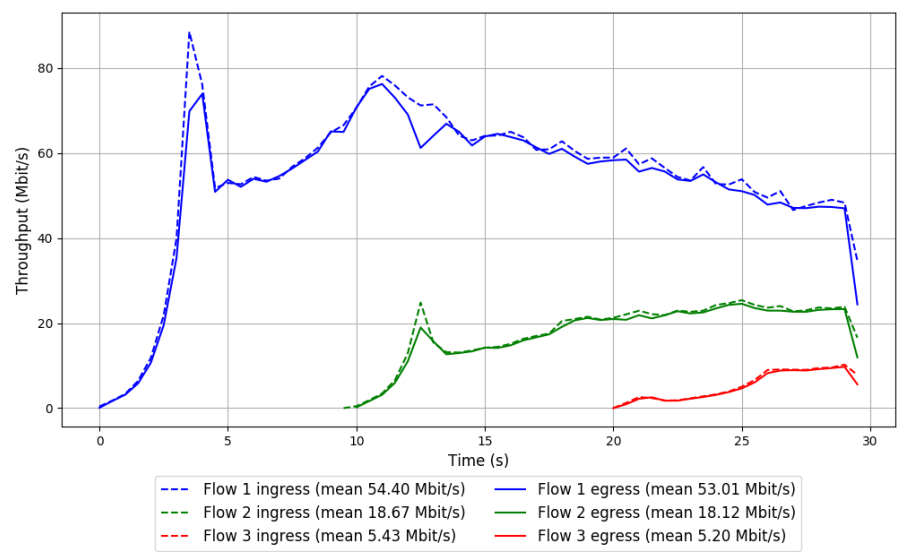
-- Flow 3:

Average throughput: 5.20 Mbit/s

95th percentile per-packet one-way delay: 88.727 ms

Loss rate: 6.08%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-03-27 16:18:46

End at: 2018-03-27 16:19:16

Local clock offset: -2.368 ms

Remote clock offset: 9.481 ms

Below is generated by plot.py at 2018-03-27 22:41:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.76 Mbit/s

95th percentile per-packet one-way delay: 111.900 ms

Loss rate: 3.69%

-- Flow 1:

Average throughput: 51.05 Mbit/s

95th percentile per-packet one-way delay: 112.132 ms

Loss rate: 2.42%

-- Flow 2:

Average throughput: 29.93 Mbit/s

95th percentile per-packet one-way delay: 110.286 ms

Loss rate: 7.03%

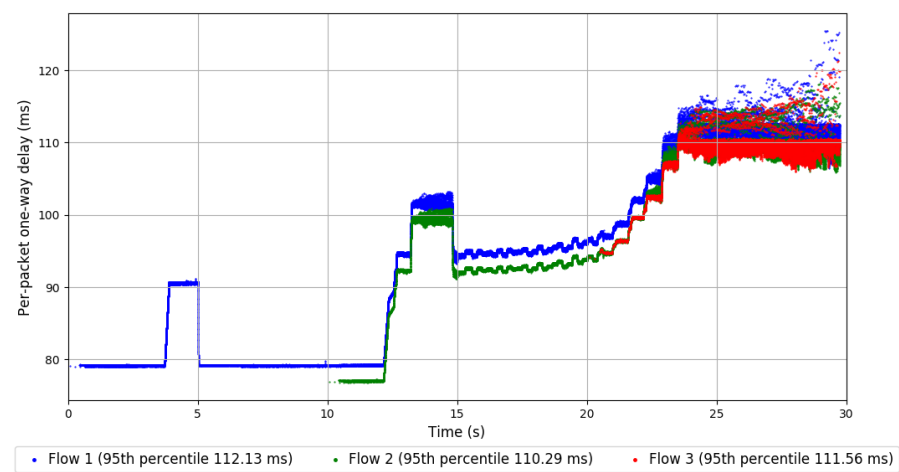
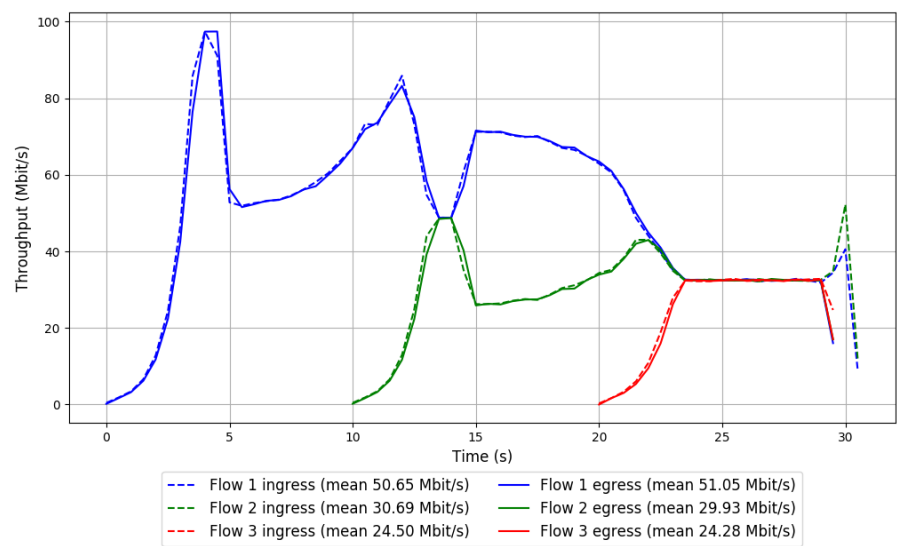
-- Flow 3:

Average throughput: 24.28 Mbit/s

95th percentile per-packet one-way delay: 111.562 ms

Loss rate: 3.15%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-03-27 16:42:54

End at: 2018-03-27 16:43:24

Local clock offset: -3.078 ms

Remote clock offset: 9.066 ms

Below is generated by plot.py at 2018-03-27 22:41:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.49 Mbit/s

95th percentile per-packet one-way delay: 112.774 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 47.44 Mbit/s

95th percentile per-packet one-way delay: 110.977 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 30.31 Mbit/s

95th percentile per-packet one-way delay: 111.052 ms

Loss rate: 1.12%

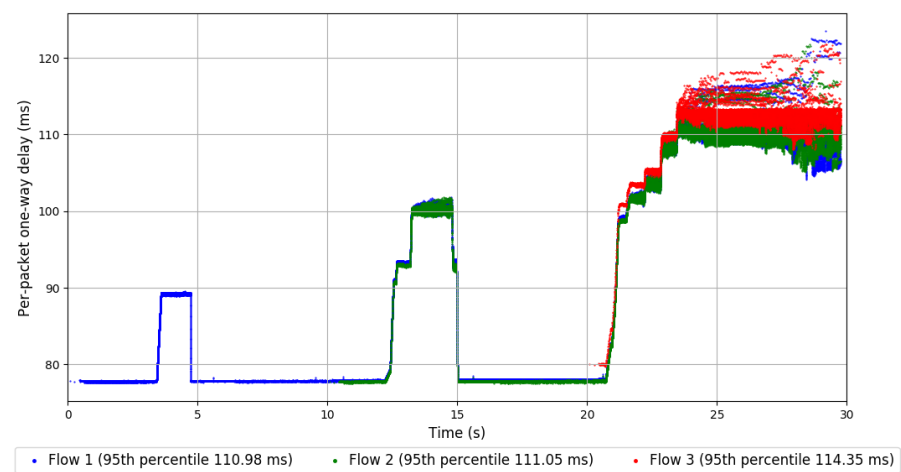
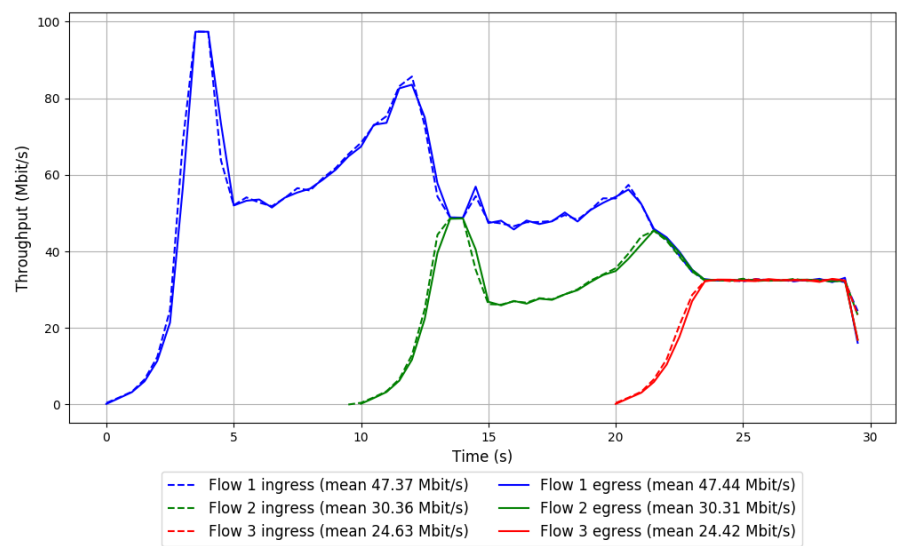
-- Flow 3:

Average throughput: 24.42 Mbit/s

95th percentile per-packet one-way delay: 114.348 ms

Loss rate: 2.89%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-03-27 17:07:01

End at: 2018-03-27 17:07:31

Local clock offset: -7.683 ms

Remote clock offset: 7.449 ms

Below is generated by plot.py at 2018-03-27 22:41:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.63 Mbit/s

95th percentile per-packet one-way delay: 112.974 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 47.54 Mbit/s

95th percentile per-packet one-way delay: 113.249 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 30.32 Mbit/s

95th percentile per-packet one-way delay: 111.477 ms

Loss rate: 1.12%

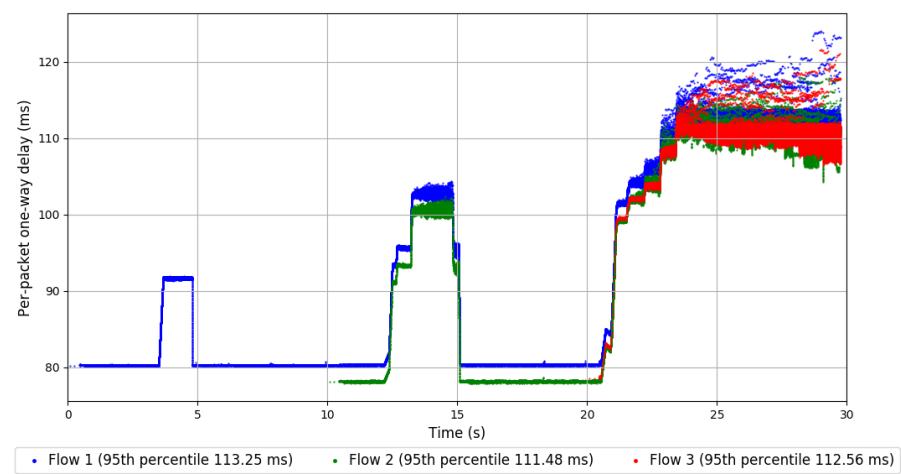
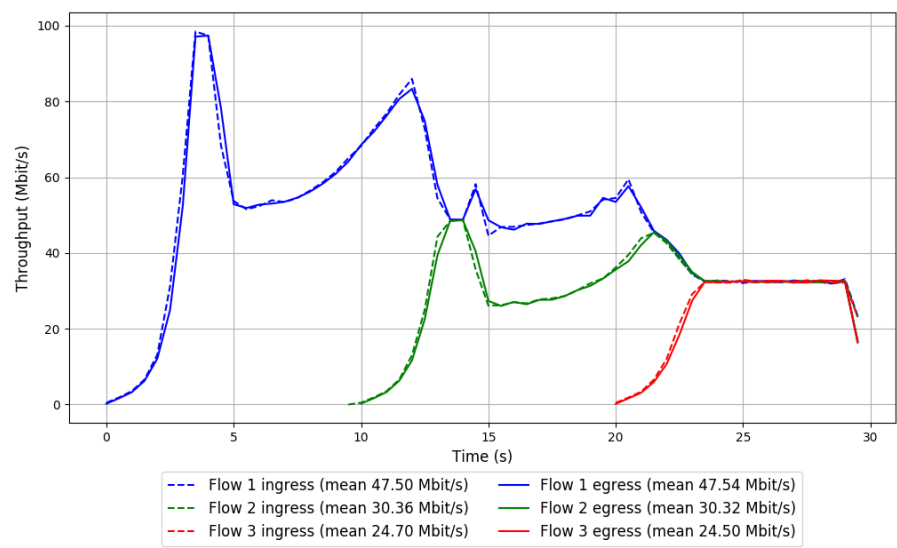
-- Flow 3:

Average throughput: 24.50 Mbit/s

95th percentile per-packet one-way delay: 112.560 ms

Loss rate: 2.77%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-03-27 17:31:01

End at: 2018-03-27 17:31:31

Local clock offset: -7.028 ms

Remote clock offset: 9.526 ms

Below is generated by plot.py at 2018-03-27 22:41:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.19 Mbit/s

95th percentile per-packet one-way delay: 108.543 ms

Loss rate: 2.62%

-- Flow 1:

Average throughput: 57.35 Mbit/s

95th percentile per-packet one-way delay: 99.413 ms

Loss rate: 2.22%

-- Flow 2:

Average throughput: 13.80 Mbit/s

95th percentile per-packet one-way delay: 111.976 ms

Loss rate: 3.64%

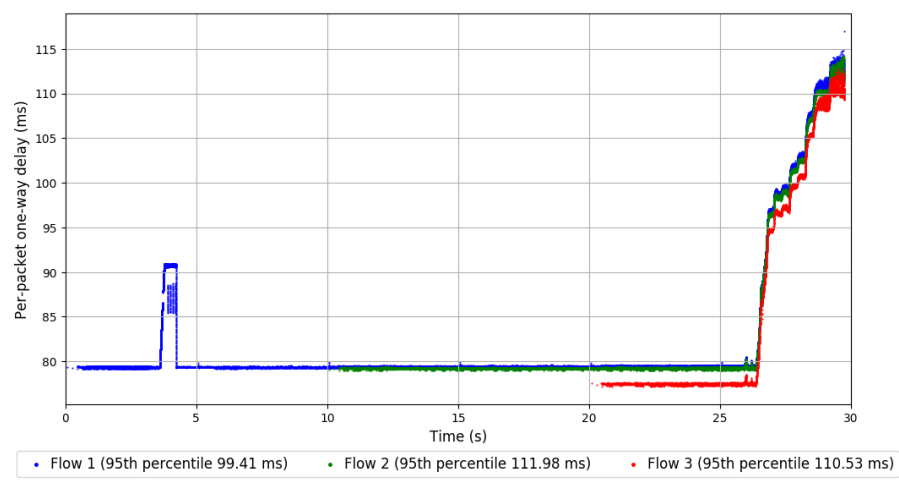
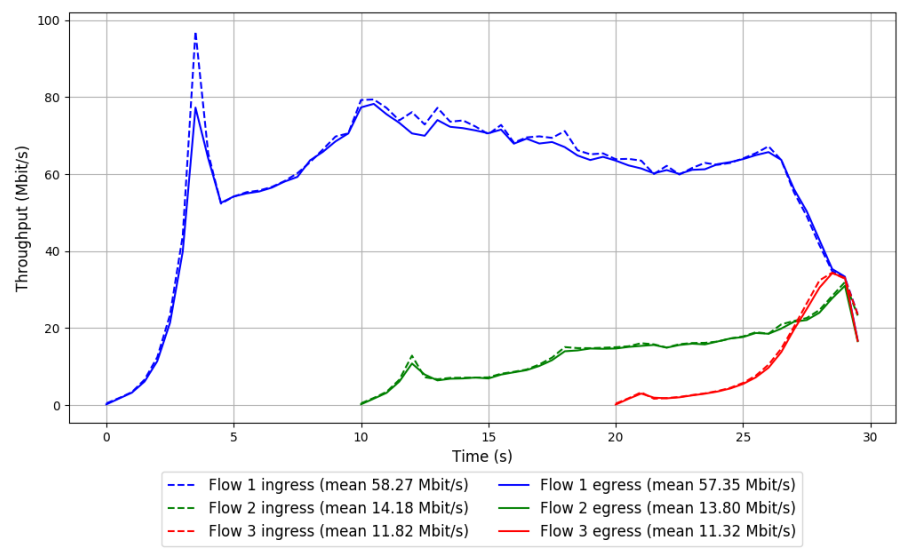
-- Flow 3:

Average throughput: 11.32 Mbit/s

95th percentile per-packet one-way delay: 110.530 ms

Loss rate: 6.14%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-03-27 17:54:52

End at: 2018-03-27 17:55:22

Local clock offset: -5.714 ms

Remote clock offset: 7.506 ms

Below is generated by plot.py at 2018-03-27 22:42:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.56 Mbit/s

95th percentile per-packet one-way delay: 115.539 ms

Loss rate: 3.98%

-- Flow 1:

Average throughput: 50.74 Mbit/s

95th percentile per-packet one-way delay: 114.156 ms

Loss rate: 2.48%

-- Flow 2:

Average throughput: 30.12 Mbit/s

95th percentile per-packet one-way delay: 115.860 ms

Loss rate: 7.82%

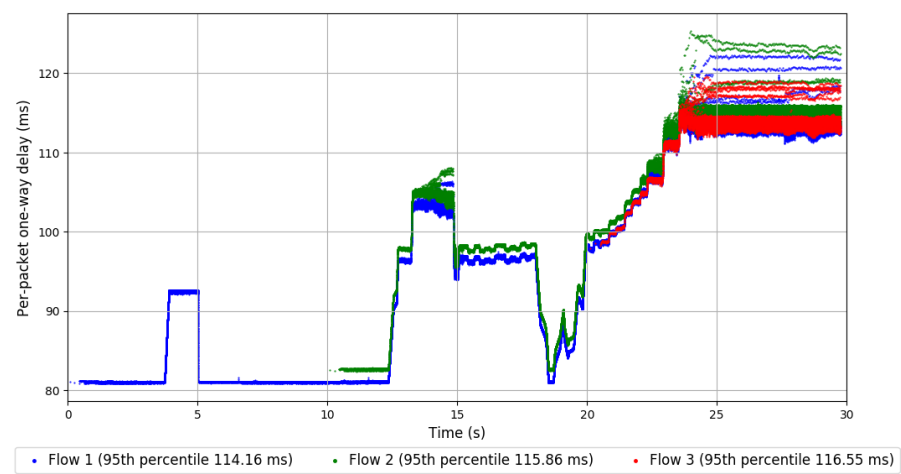
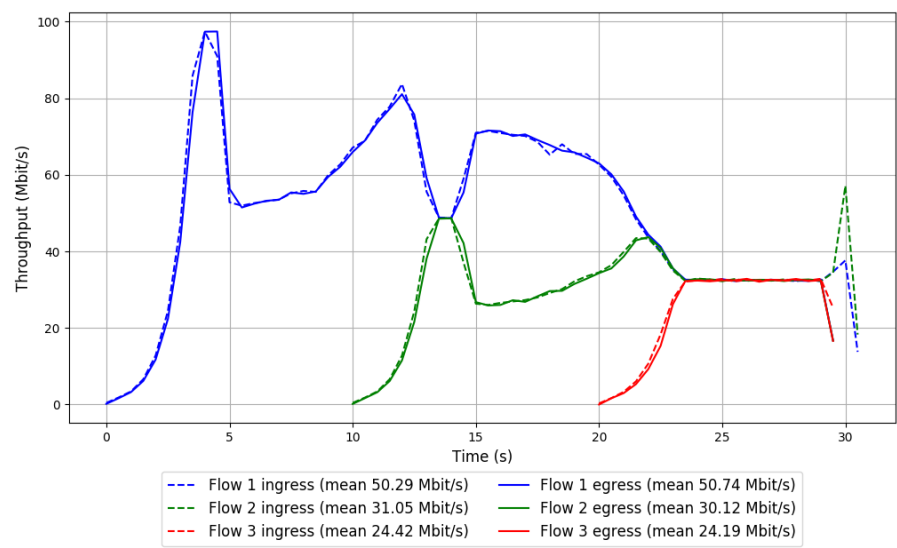
-- Flow 3:

Average throughput: 24.19 Mbit/s

95th percentile per-packet one-way delay: 116.553 ms

Loss rate: 3.39%

Run 10: Report of Vivace-loss — Data Link

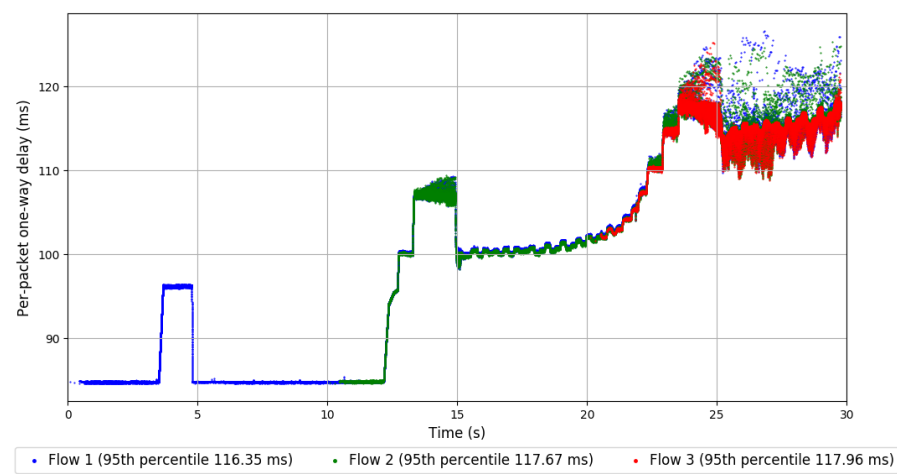
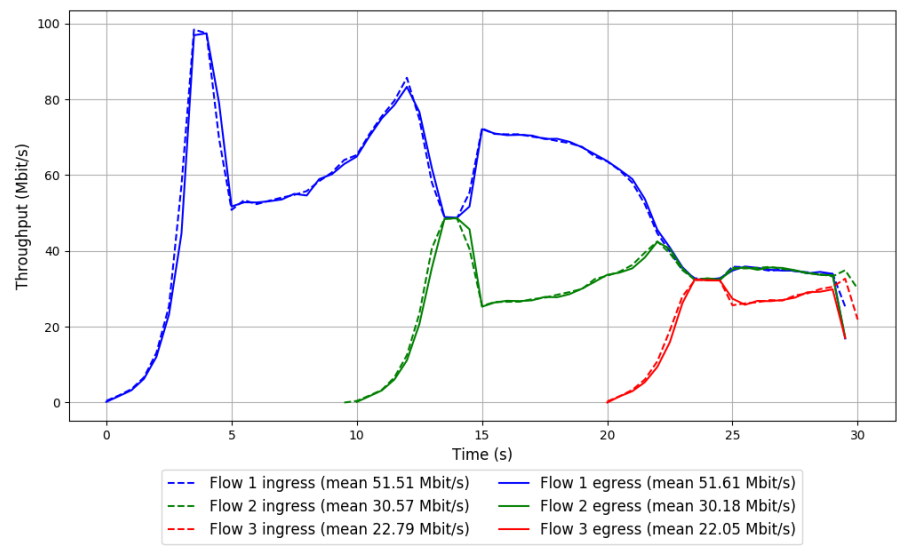


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-03-27 14:25:26
End at: 2018-03-27 14:25:57
Local clock offset: -7.318 ms
Remote clock offset: 3.075 ms

# Below is generated by plot.py at 2018-03-27 22:42:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.79 Mbit/s
95th percentile per-packet one-way delay: 117.367 ms
Loss rate: 2.43%
-- Flow 1:
Average throughput: 51.61 Mbit/s
95th percentile per-packet one-way delay: 116.346 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 30.18 Mbit/s
95th percentile per-packet one-way delay: 117.674 ms
Loss rate: 4.46%
-- Flow 3:
Average throughput: 22.05 Mbit/s
95th percentile per-packet one-way delay: 117.959 ms
Loss rate: 9.61%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-03-27 14:49:18

End at: 2018-03-27 14:49:48

Local clock offset: -7.908 ms

Remote clock offset: 4.415 ms

Below is generated by plot.py at 2018-03-27 22:42:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.73 Mbit/s

95th percentile per-packet one-way delay: 118.891 ms

Loss rate: 2.59%

-- Flow 1:

Average throughput: 52.88 Mbit/s

95th percentile per-packet one-way delay: 117.072 ms

Loss rate: 1.81%

-- Flow 2:

Average throughput: 30.25 Mbit/s

95th percentile per-packet one-way delay: 120.467 ms

Loss rate: 4.32%

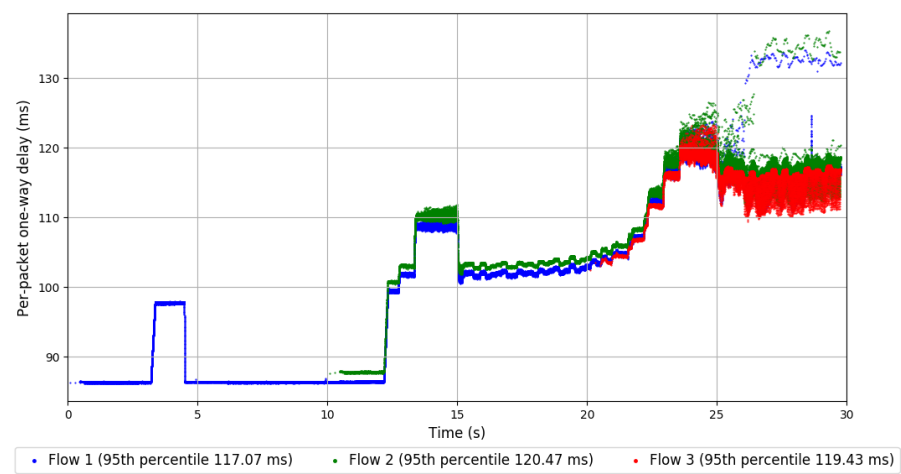
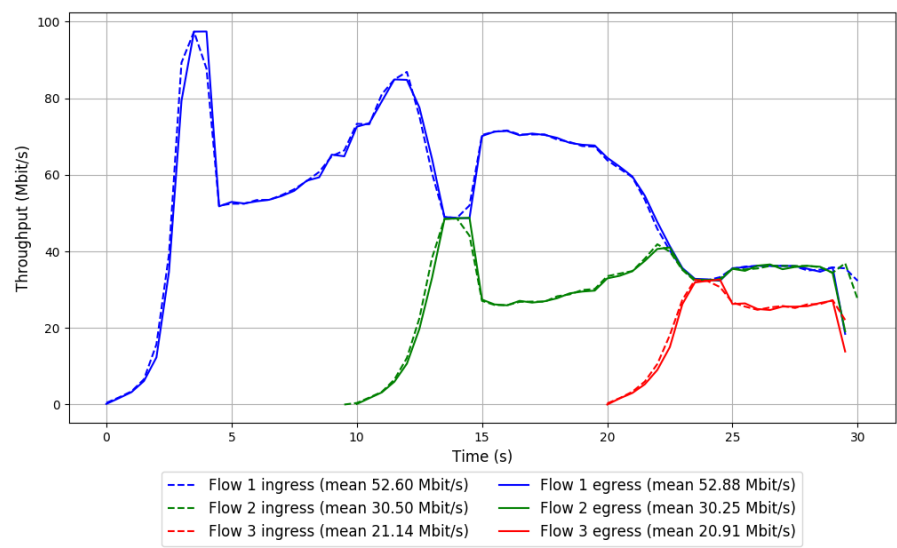
-- Flow 3:

Average throughput: 20.91 Mbit/s

95th percentile per-packet one-way delay: 119.429 ms

Loss rate: 3.42%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-03-27 15:13:31

End at: 2018-03-27 15:14:01

Local clock offset: -3.35 ms

Remote clock offset: 7.701 ms

Below is generated by plot.py at 2018-03-27 22:42:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.83 Mbit/s

95th percentile per-packet one-way delay: 111.268 ms

Loss rate: 3.16%

-- Flow 1:

Average throughput: 52.57 Mbit/s

95th percentile per-packet one-way delay: 110.086 ms

Loss rate: 2.33%

-- Flow 2:

Average throughput: 30.23 Mbit/s

95th percentile per-packet one-way delay: 112.635 ms

Loss rate: 5.13%

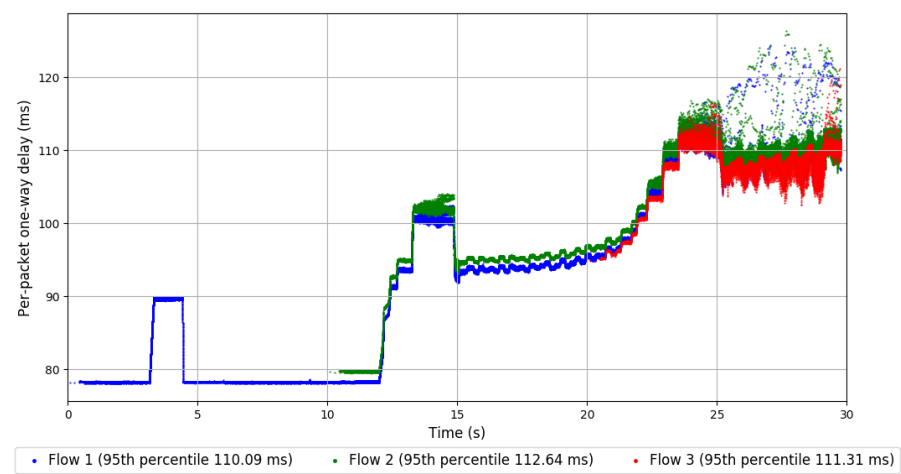
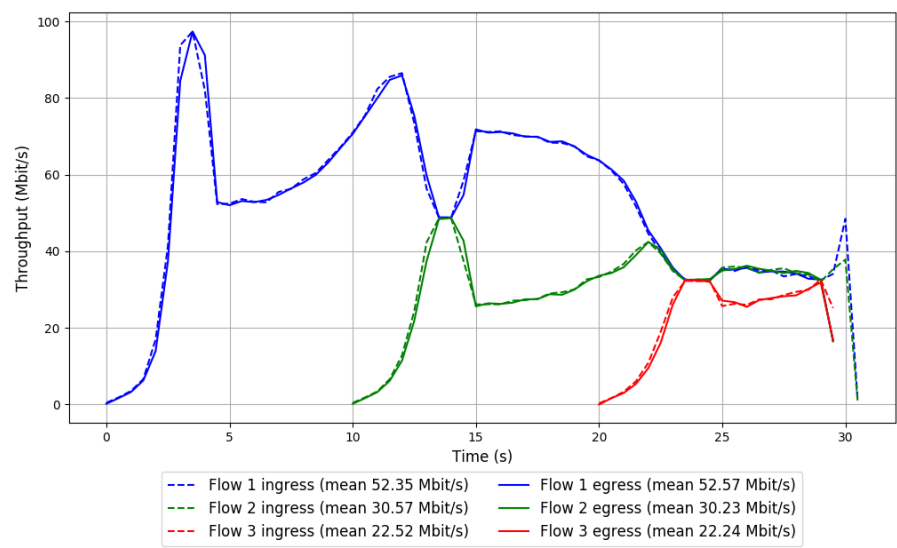
-- Flow 3:

Average throughput: 22.24 Mbit/s

95th percentile per-packet one-way delay: 111.315 ms

Loss rate: 3.54%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-03-27 15:37:26

End at: 2018-03-27 15:37:56

Local clock offset: -1.345 ms

Remote clock offset: 2.94 ms

Below is generated by plot.py at 2018-03-27 22:42:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.30 Mbit/s

95th percentile per-packet one-way delay: 118.525 ms

Loss rate: 2.39%

-- Flow 1:

Average throughput: 51.82 Mbit/s

95th percentile per-packet one-way delay: 116.755 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 30.71 Mbit/s

95th percentile per-packet one-way delay: 120.107 ms

Loss rate: 4.37%

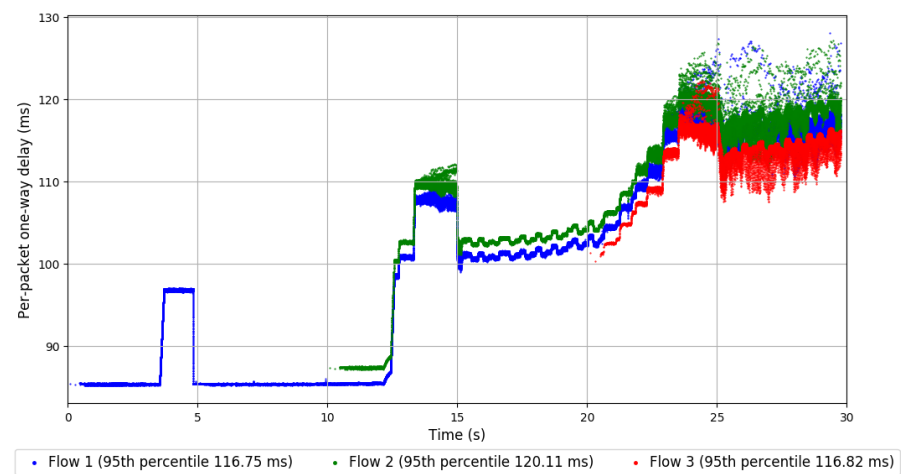
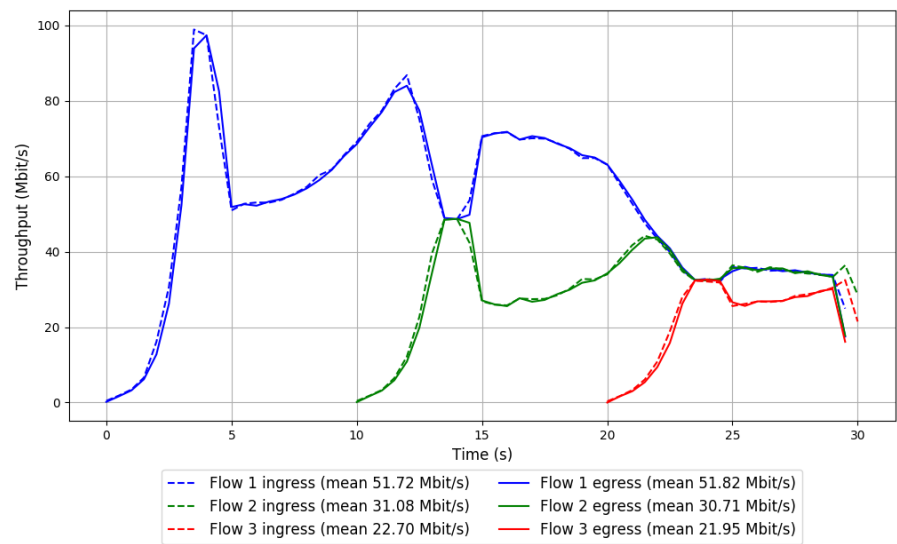
-- Flow 3:

Average throughput: 21.95 Mbit/s

95th percentile per-packet one-way delay: 116.820 ms

Loss rate: 9.58%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-03-27 16:01:23

End at: 2018-03-27 16:01:53

Local clock offset: -1.036 ms

Remote clock offset: 2.317 ms

Below is generated by plot.py at 2018-03-27 22:42:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.99 Mbit/s

95th percentile per-packet one-way delay: 119.340 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 49.63 Mbit/s

95th percentile per-packet one-way delay: 118.523 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 32.10 Mbit/s

95th percentile per-packet one-way delay: 118.967 ms

Loss rate: 1.28%

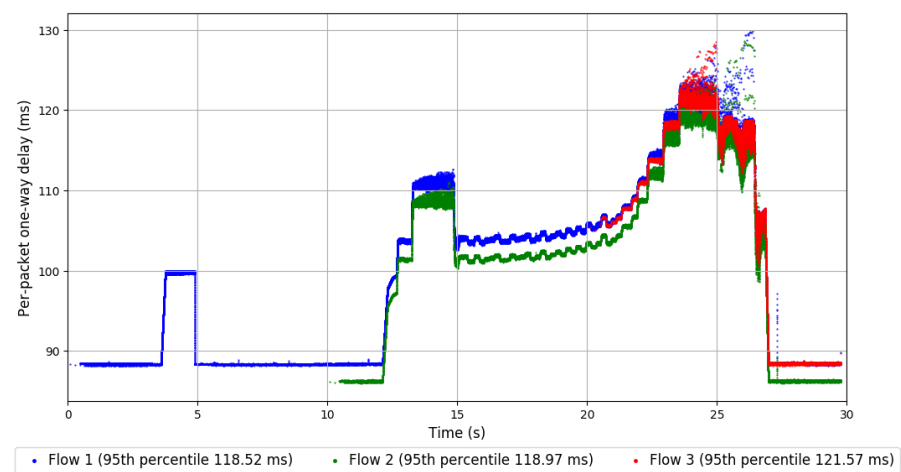
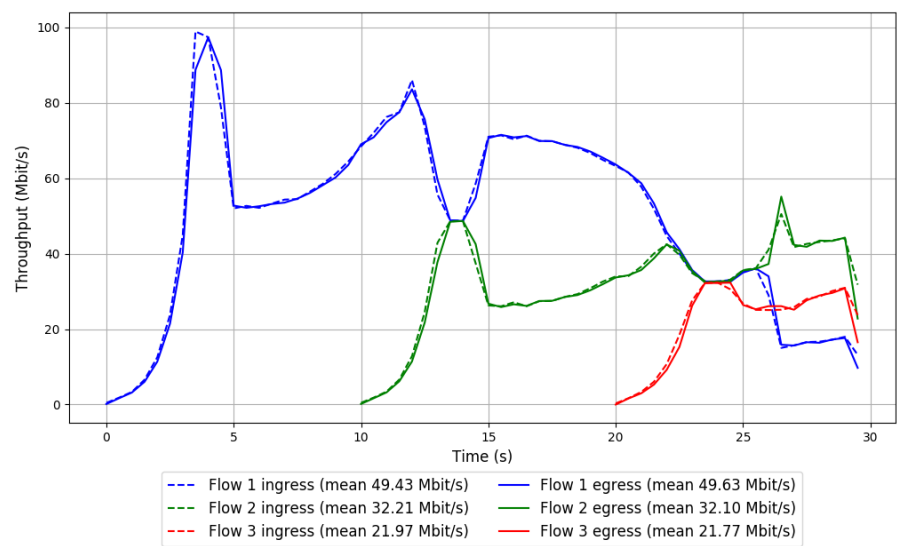
-- Flow 3:

Average throughput: 21.77 Mbit/s

95th percentile per-packet one-way delay: 121.574 ms

Loss rate: 2.96%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-03-27 16:25:29

End at: 2018-03-27 16:25:59

Local clock offset: -2.66 ms

Remote clock offset: 8.537 ms

Below is generated by plot.py at 2018-03-27 22:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.31 Mbit/s

95th percentile per-packet one-way delay: 113.139 ms

Loss rate: 3.73%

-- Flow 1:

Average throughput: 51.96 Mbit/s

95th percentile per-packet one-way delay: 111.626 ms

Loss rate: 2.58%

-- Flow 2:

Average throughput: 30.44 Mbit/s

95th percentile per-packet one-way delay: 111.223 ms

Loss rate: 6.66%

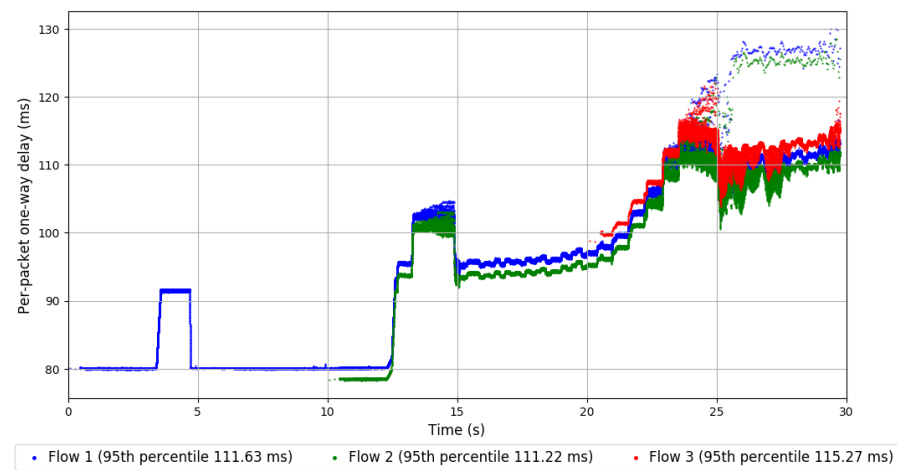
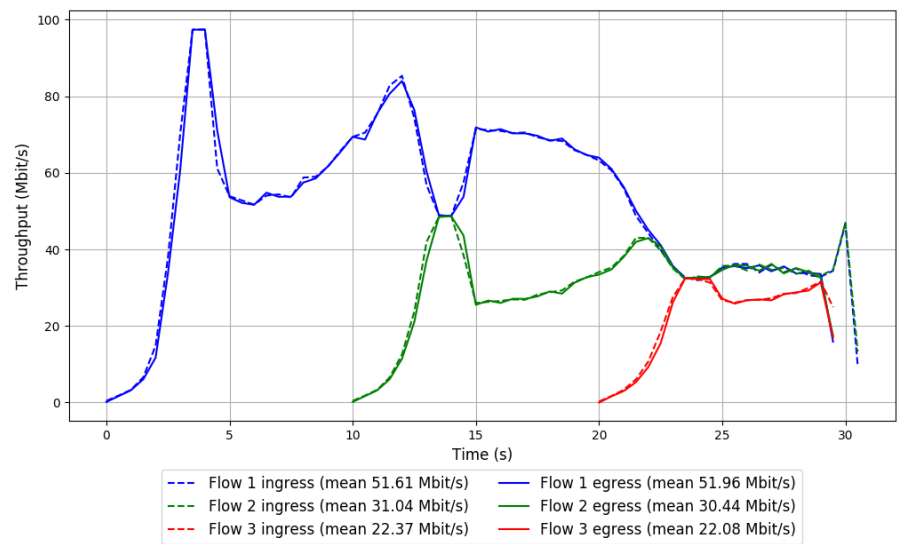
-- Flow 3:

Average throughput: 22.08 Mbit/s

95th percentile per-packet one-way delay: 115.266 ms

Loss rate: 3.48%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-03-27 16:49:41

End at: 2018-03-27 16:50:11

Local clock offset: -5.433 ms

Remote clock offset: 6.856 ms

Below is generated by plot.py at 2018-03-27 22:43:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.18 Mbit/s

95th percentile per-packet one-way delay: 113.908 ms

Loss rate: 2.36%

-- Flow 1:

Average throughput: 50.65 Mbit/s

95th percentile per-packet one-way delay: 113.518 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 30.73 Mbit/s

95th percentile per-packet one-way delay: 114.542 ms

Loss rate: 4.20%

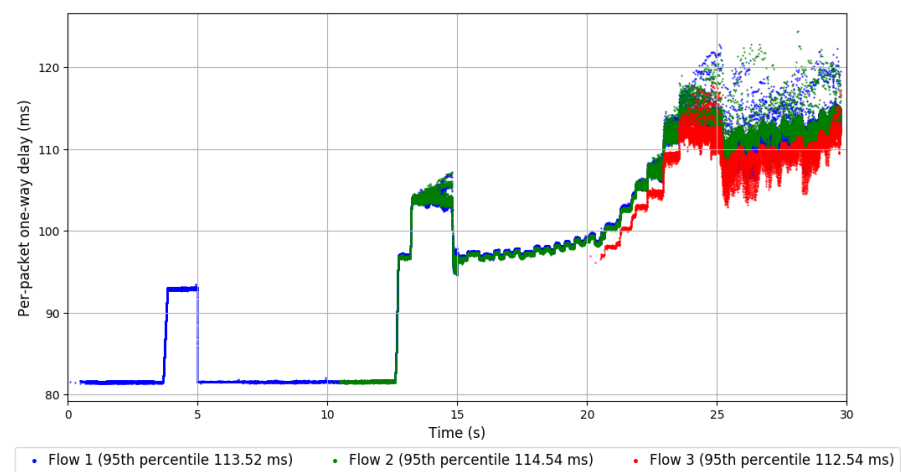
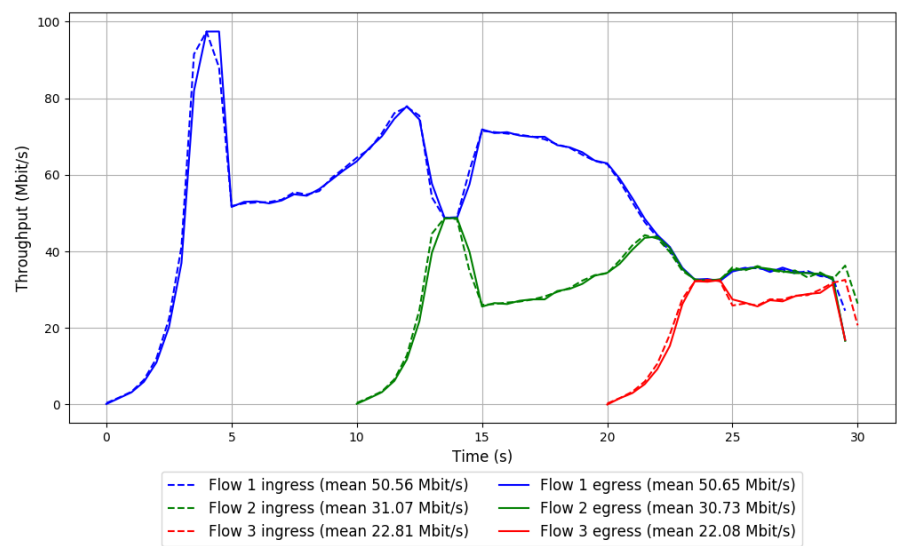
-- Flow 3:

Average throughput: 22.08 Mbit/s

95th percentile per-packet one-way delay: 112.537 ms

Loss rate: 9.32%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-03-27 17:13:46

End at: 2018-03-27 17:14:16

Local clock offset: -8.099 ms

Remote clock offset: 9.024 ms

Below is generated by plot.py at 2018-03-27 22:43:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.92 Mbit/s

95th percentile per-packet one-way delay: 111.573 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 52.67 Mbit/s

95th percentile per-packet one-way delay: 107.768 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 29.26 Mbit/s

95th percentile per-packet one-way delay: 114.173 ms

Loss rate: 1.26%

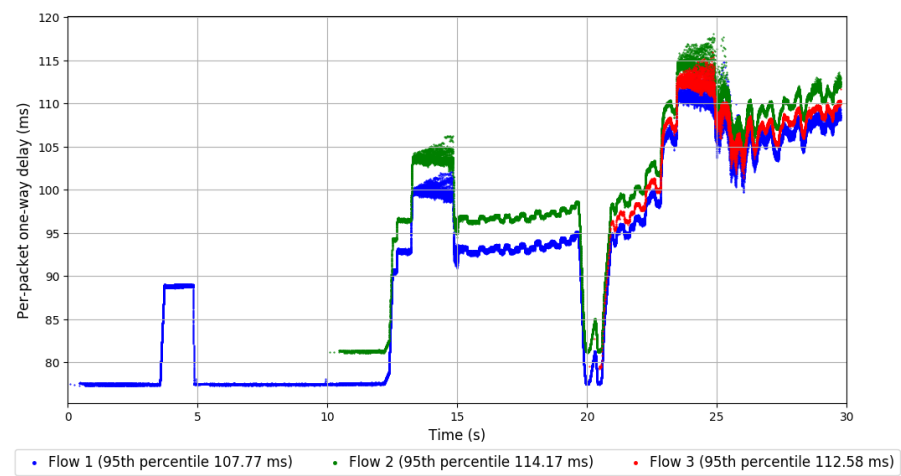
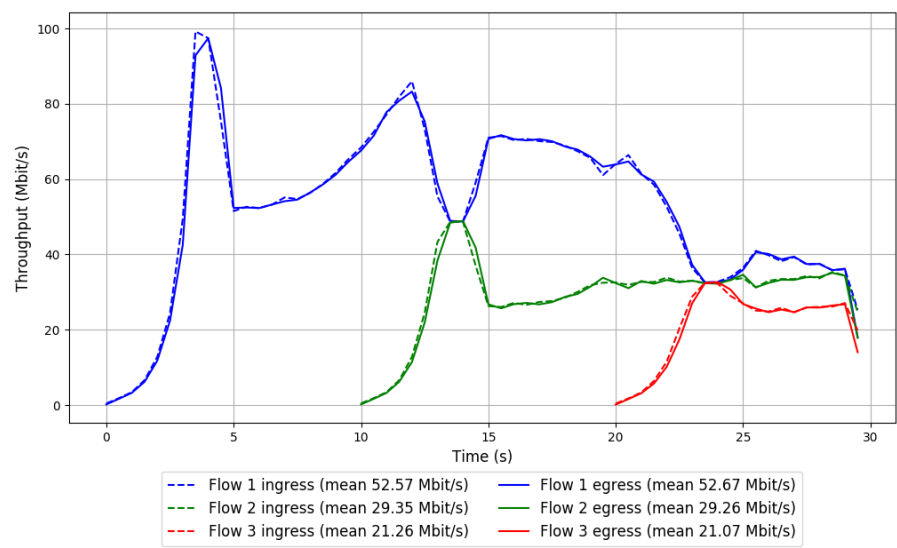
-- Flow 3:

Average throughput: 21.07 Mbit/s

95th percentile per-packet one-way delay: 112.581 ms

Loss rate: 2.79%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-03-27 17:37:41

End at: 2018-03-27 17:38:11

Local clock offset: -6.964 ms

Remote clock offset: 3.166 ms

Below is generated by plot.py at 2018-03-27 22:43:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.21 Mbit/s

95th percentile per-packet one-way delay: 117.364 ms

Loss rate: 3.79%

-- Flow 1:

Average throughput: 51.08 Mbit/s

95th percentile per-packet one-way delay: 115.827 ms

Loss rate: 1.96%

-- Flow 2:

Average throughput: 28.52 Mbit/s

95th percentile per-packet one-way delay: 116.665 ms

Loss rate: 5.48%

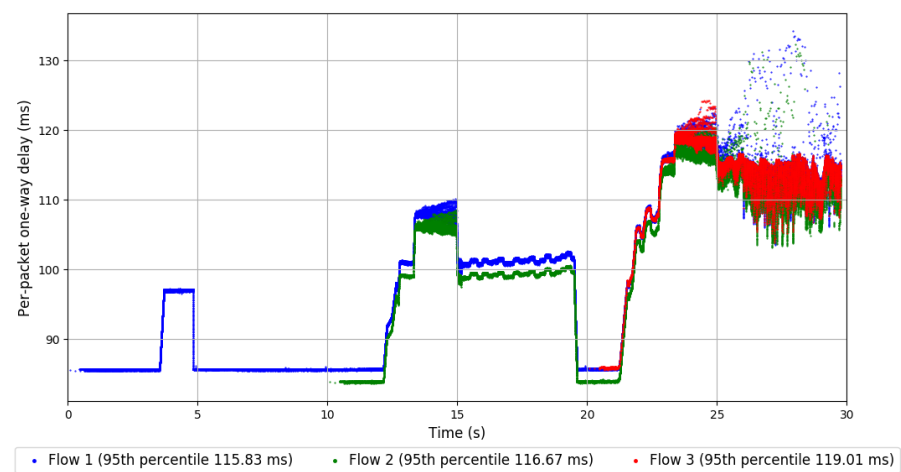
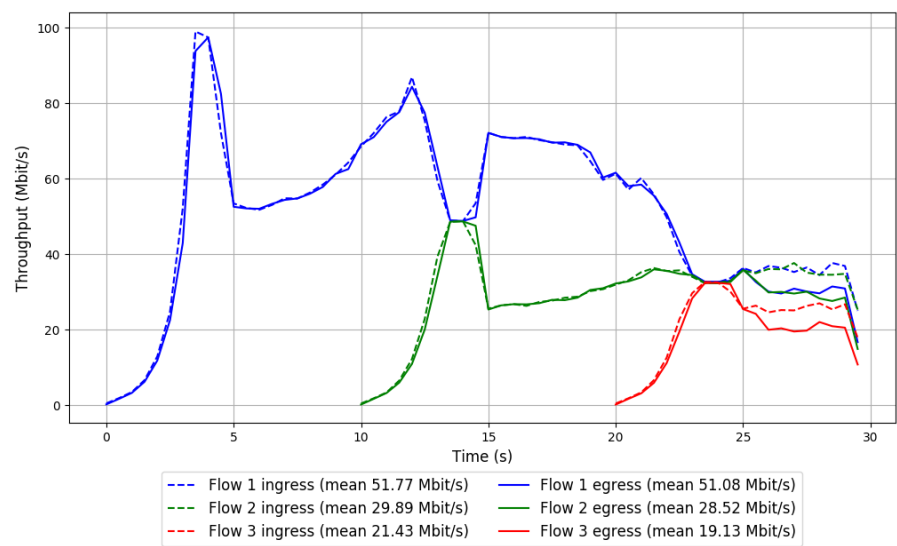
-- Flow 3:

Average throughput: 19.13 Mbit/s

95th percentile per-packet one-way delay: 119.008 ms

Loss rate: 12.42%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-03-27 18:01:35

End at: 2018-03-27 18:02:05

Local clock offset: -4.591 ms

Remote clock offset: 8.435 ms

Below is generated by plot.py at 2018-03-27 22:43:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.56 Mbit/s

95th percentile per-packet one-way delay: 111.478 ms

Loss rate: 3.07%

-- Flow 1:

Average throughput: 51.00 Mbit/s

95th percentile per-packet one-way delay: 111.836 ms

Loss rate: 2.19%

-- Flow 2:

Average throughput: 30.83 Mbit/s

95th percentile per-packet one-way delay: 111.016 ms

Loss rate: 5.09%

-- Flow 3:

Average throughput: 21.93 Mbit/s

95th percentile per-packet one-way delay: 111.483 ms

Loss rate: 3.41%

Run 10: Report of Vivace-LTE — Data Link

