

Pantheon Report

Generated at 2018-01-17 15:26:10 (UTC).

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

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.

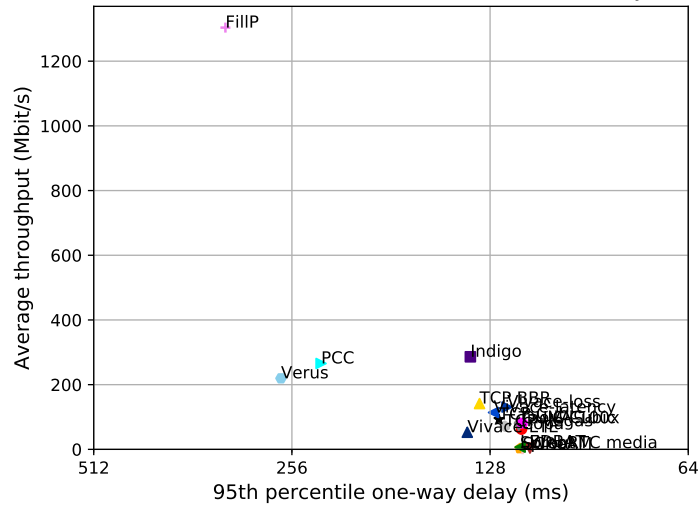
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

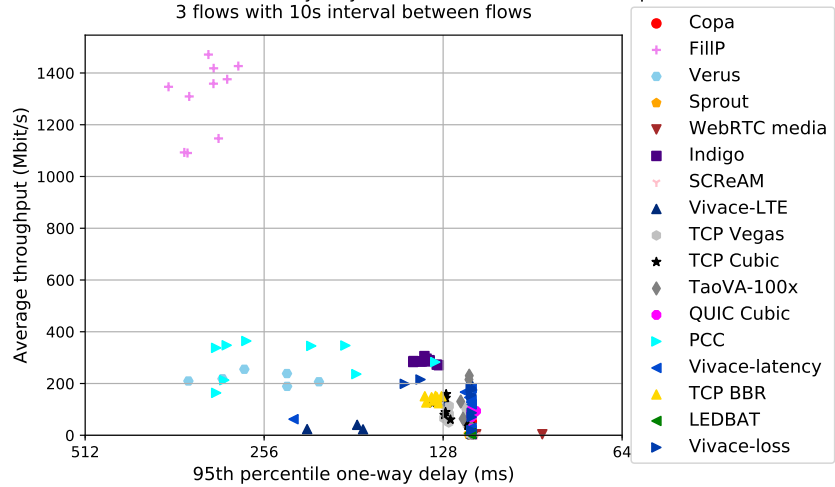
Git summary:

```
branch: master @ 54510ce29f849c716ac5c8199ca1604b6abdfbc3
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
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 @ 423cbca3e8ea1d599e7b5cf725835e8a2b6bfac6
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from GCE Iowa Ethernet to GCE Sydney 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	8	66.45	68.34	88.99	130.81	132.63	136.85	0.22	0.10	0.53
TCP Cubic	10	51.05	41.94	40.70	123.14	124.78	123.35	0.15	0.19	0.90
LEDBAT	10	3.78	3.41	2.24	115.38	114.57	114.21	0.13	0.14	0.00
PCC	10	194.94	83.33	46.25	228.92	230.95	224.39	0.88	1.04	1.73
QUIC Cubic	10	47.16	37.32	28.27	111.21	105.73	106.03	0.06	0.06	0.14
SCReAM	10	0.21	0.22	0.22	110.64	105.80	106.09	0.00	0.02	0.03
WebRTC media	9	2.10	1.28	0.48	102.04	105.01	114.73	0.00	0.00	0.00
Sprout	10	1.36	1.39	1.25	114.74	114.87	114.80	0.26	0.10	0.00
TaoVA-100x	10	40.16	48.68	40.52	114.98	115.64	116.69	0.06	0.05	0.08
TCP Vegas	9	53.11	8.92	37.33	120.05	117.73	118.71	0.10	0.23	0.20
Verus	6	129.20	110.51	54.08	248.92	274.42	235.73	2.33	2.52	1.76
Copa	9	36.08	27.20	35.49	114.63	114.43	114.06	0.09	0.17	0.25
FillP	10	659.83	684.25	572.09	319.69	303.01	286.03	9.99	12.64	14.83
Indigo	10	168.37	135.54	87.95	132.96	139.28	148.05	0.10	0.12	0.20
Vivace-latency	10	55.51	68.33	39.59	128.70	114.92	121.68	0.10	0.13	0.18
Vivace-loss	10	89.03	45.78	34.04	122.96	120.16	114.69	0.05	0.11	0.19
Vivace-LTE	10	26.30	28.77	24.89	125.30	143.21	115.56	0.01	0.02	0.10

Run 1: Statistics of TCP BBR

Start at: 2018-01-17 09:33:14

End at: 2018-01-17 09:33:44

Below is generated by plot.py at 2018-01-17 14:13:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.63 Mbit/s

95th percentile per-packet one-way delay: 128.792 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 69.00 Mbit/s

95th percentile per-packet one-way delay: 127.717 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 80.87 Mbit/s

95th percentile per-packet one-way delay: 127.918 ms

Loss rate: 0.00%

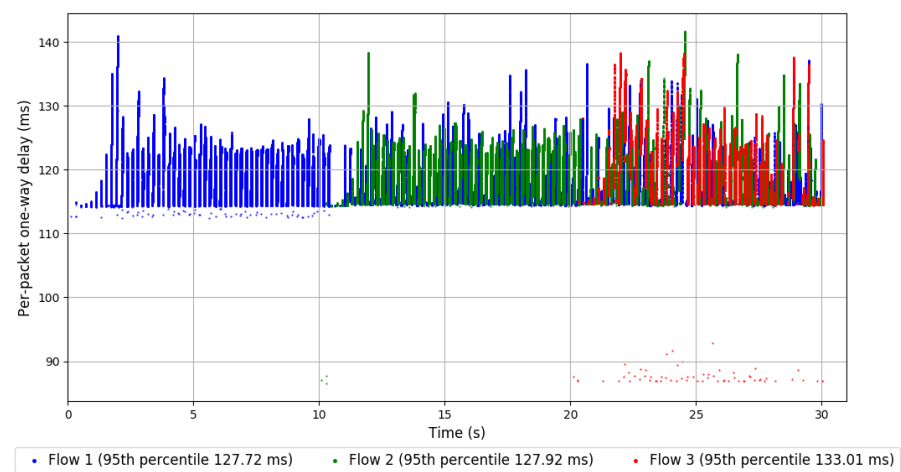
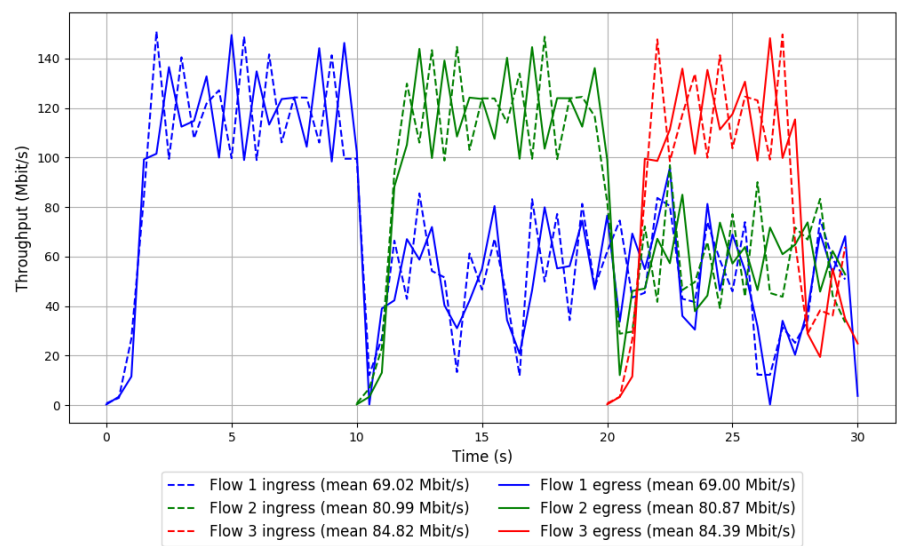
-- Flow 3:

Average throughput: 84.39 Mbit/s

95th percentile per-packet one-way delay: 133.013 ms

Loss rate: 0.25%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-17 09:50:50

End at: 2018-01-17 09:51:20

Below is generated by plot.py at 2018-01-17 14:13:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.09 Mbit/s

95th percentile per-packet one-way delay: 130.188 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 52.82 Mbit/s

95th percentile per-packet one-way delay: 129.520 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 55.80 Mbit/s

95th percentile per-packet one-way delay: 129.599 ms

Loss rate: 0.00%

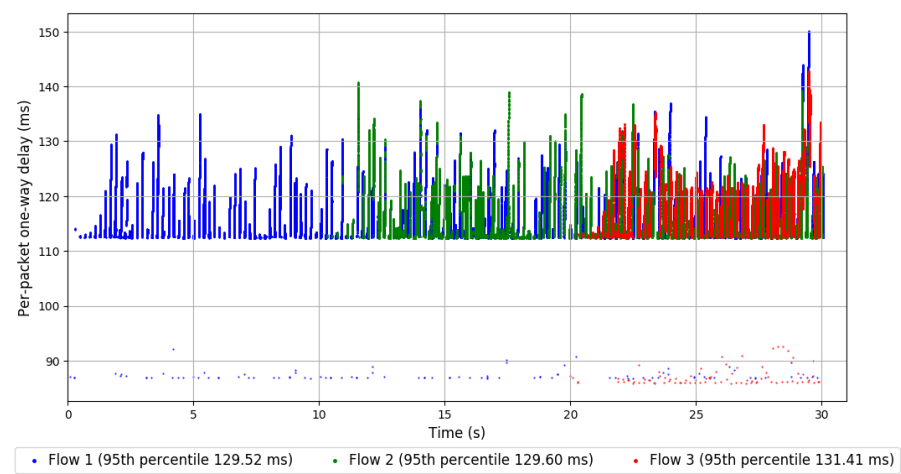
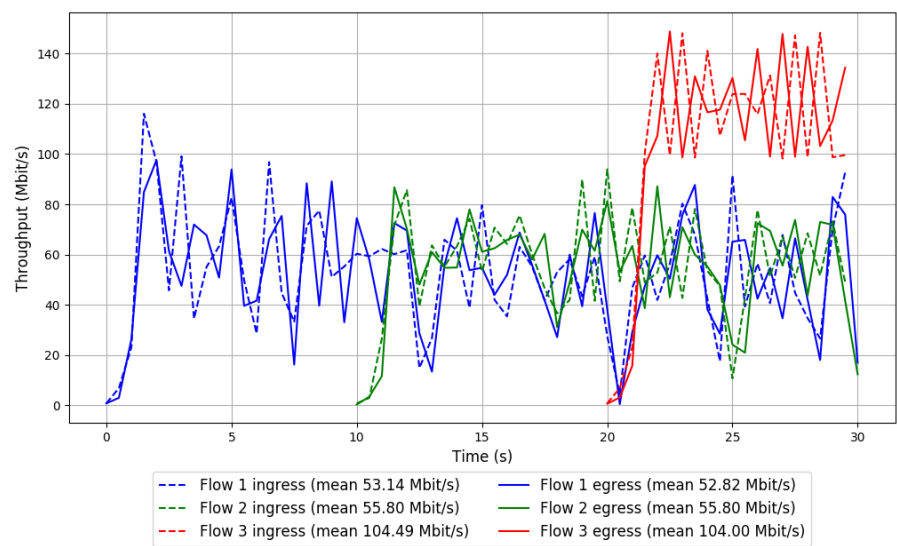
-- Flow 3:

Average throughput: 104.00 Mbit/s

95th percentile per-packet one-way delay: 131.412 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-17 10:07:37

End at: 2018-01-17 10:08:07

Below is generated by plot.py at 2018-01-17 14:13:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.97 Mbit/s

95th percentile per-packet one-way delay: 133.851 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 65.75 Mbit/s

95th percentile per-packet one-way delay: 132.232 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 76.01 Mbit/s

95th percentile per-packet one-way delay: 131.595 ms

Loss rate: 0.00%

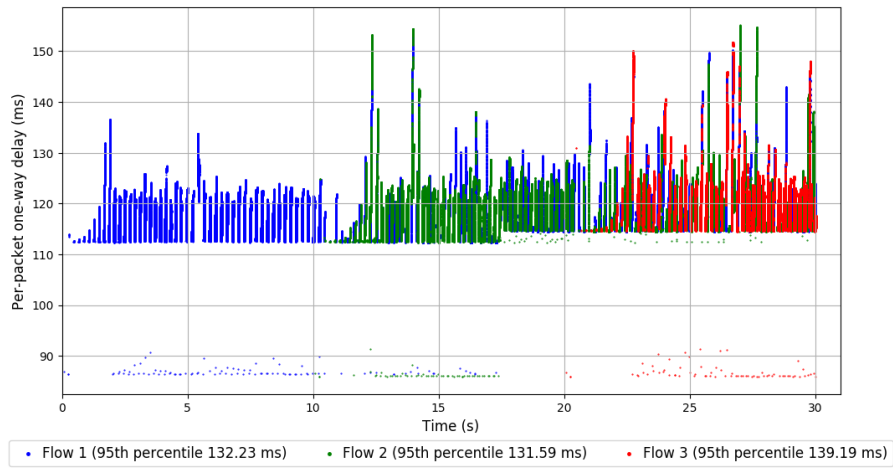
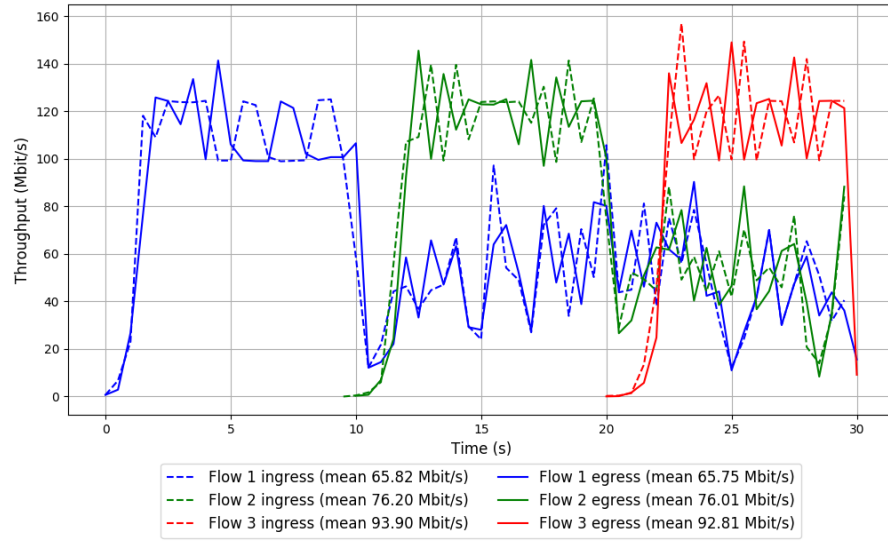
-- Flow 3:

Average throughput: 92.81 Mbit/s

95th percentile per-packet one-way delay: 139.191 ms

Loss rate: 1.01%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-17 10:25:08

End at: 2018-01-17 10:25:38

Below is generated by plot.py at 2018-01-17 14:13:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.89 Mbit/s

95th percentile per-packet one-way delay: 136.601 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 50.35 Mbit/s

95th percentile per-packet one-way delay: 136.898 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 64.83 Mbit/s

95th percentile per-packet one-way delay: 137.045 ms

Loss rate: 0.43%

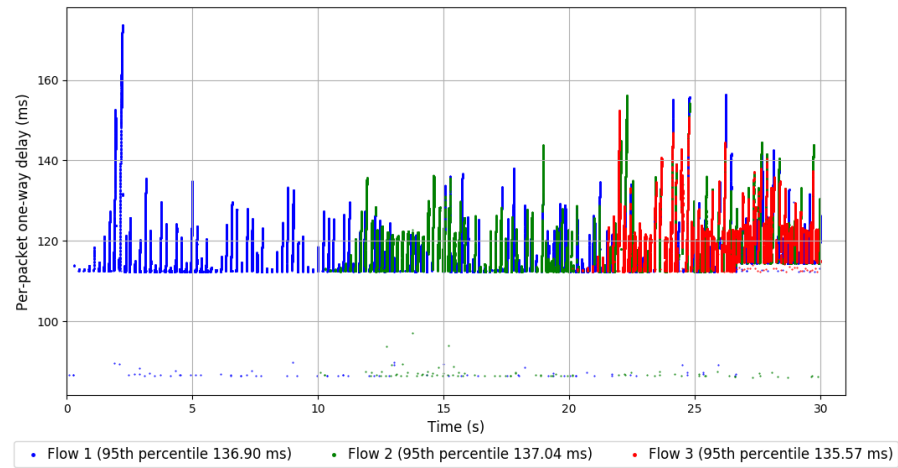
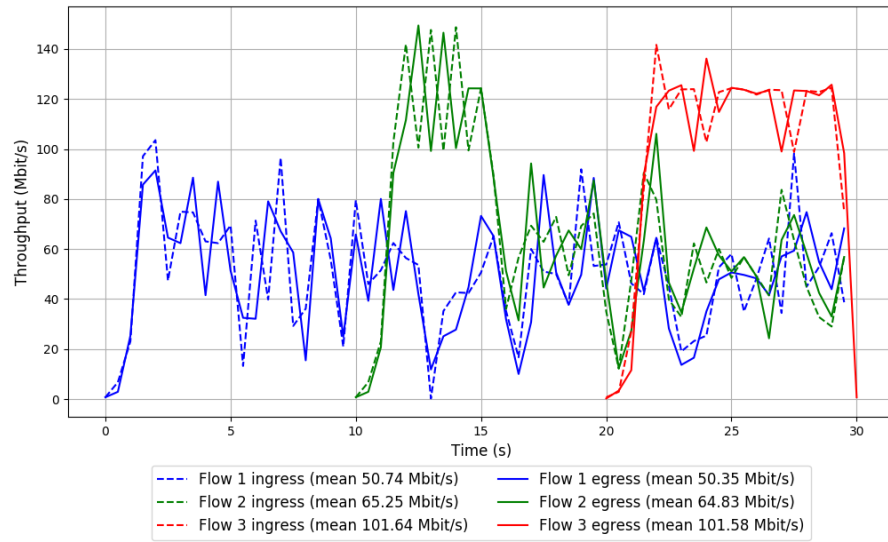
-- Flow 3:

Average throughput: 101.58 Mbit/s

95th percentile per-packet one-way delay: 135.567 ms

Loss rate: 0.03%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-17 10:41:32

End at: 2018-01-17 10:42:02

Below is generated by plot.py at 2018-01-17 14:13:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.07 Mbit/s

95th percentile per-packet one-way delay: 132.641 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 72.32 Mbit/s

95th percentile per-packet one-way delay: 129.731 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.62 Mbit/s

95th percentile per-packet one-way delay: 133.546 ms

Loss rate: 0.02%

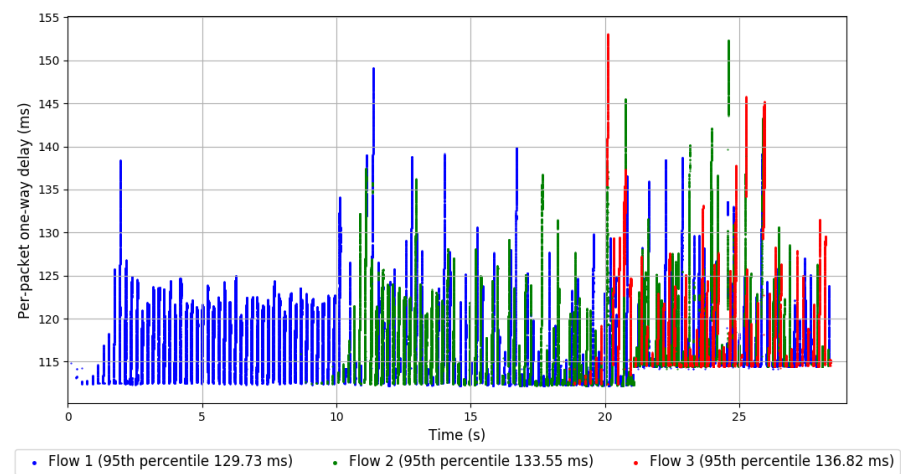
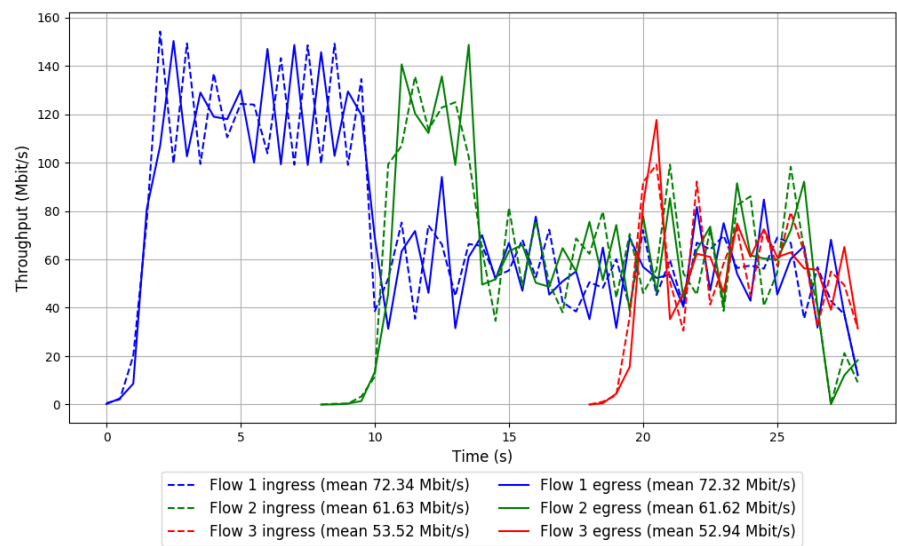
-- Flow 3:

Average throughput: 52.94 Mbit/s

95th percentile per-packet one-way delay: 136.822 ms

Loss rate: 1.07%

Run 5: Report of TCP BBR — Data Link

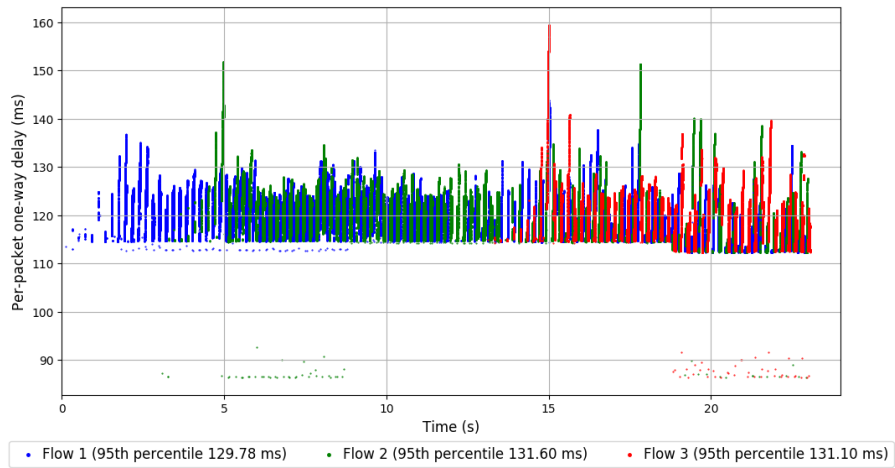
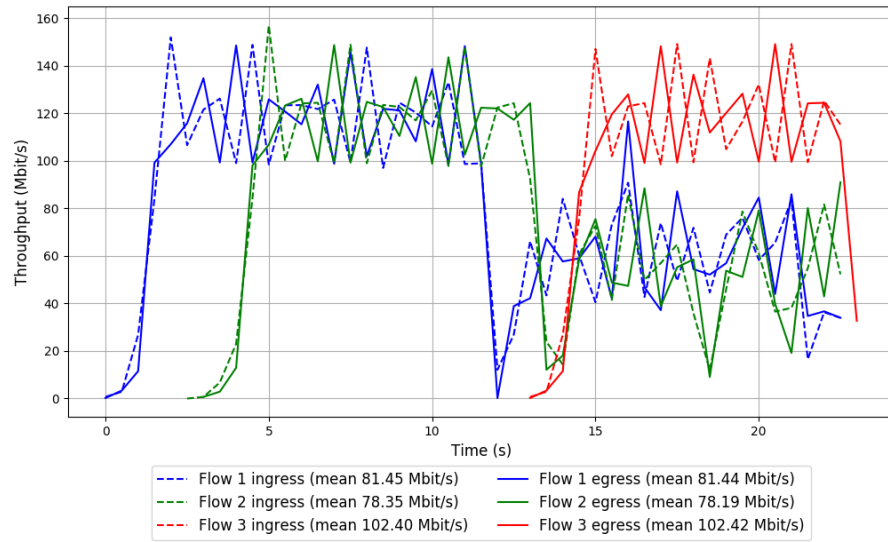


Run 6: Statistics of TCP BBR

Start at: 2018-01-17 10:58:39

End at: 2018-01-17 10:59:09

Run 6: Report of TCP BBR — Data Link

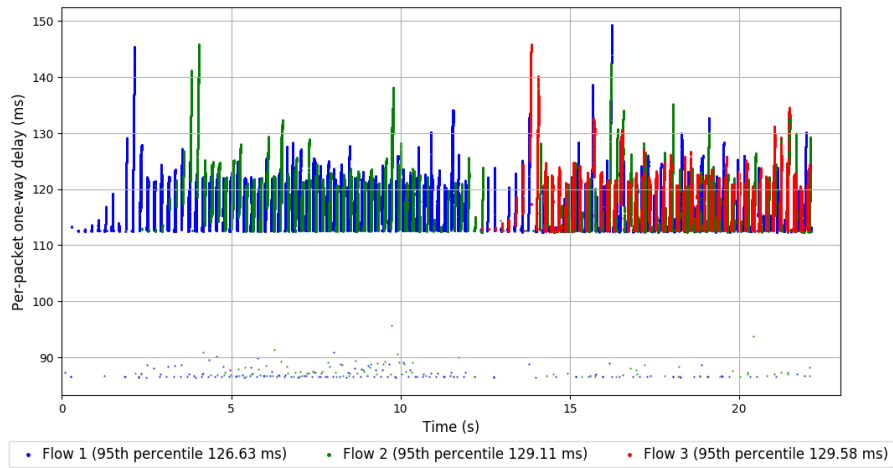
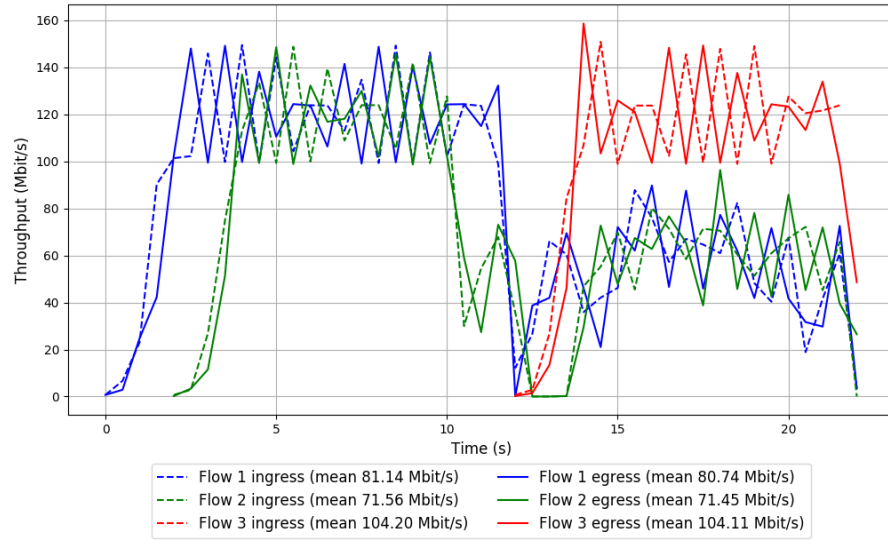


Run 7: Statistics of TCP BBR

Start at: 2018-01-17 11:15:20

End at: 2018-01-17 11:15:50

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-17 11:31:12

End at: 2018-01-17 11:31:42

Below is generated by plot.py at 2018-01-17 14:13:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.87 Mbit/s

95th percentile per-packet one-way delay: 137.397 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 70.82 Mbit/s

95th percentile per-packet one-way delay: 131.857 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 80.77 Mbit/s

95th percentile per-packet one-way delay: 135.679 ms

Loss rate: 0.00%

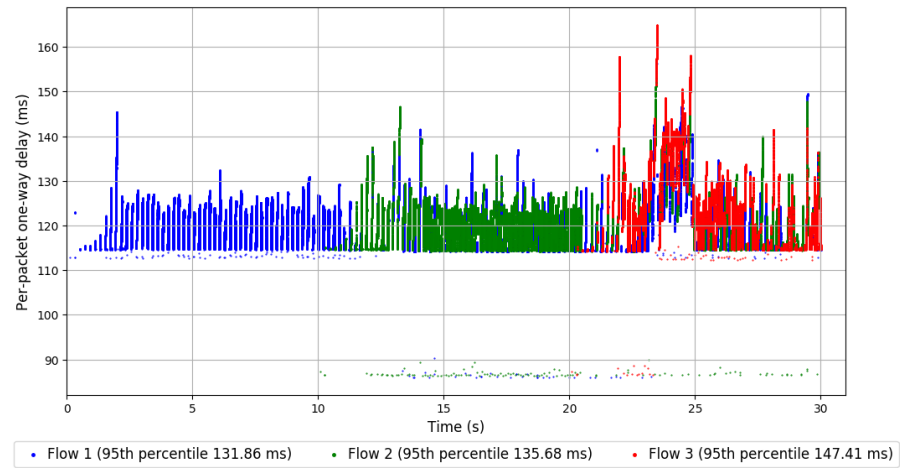
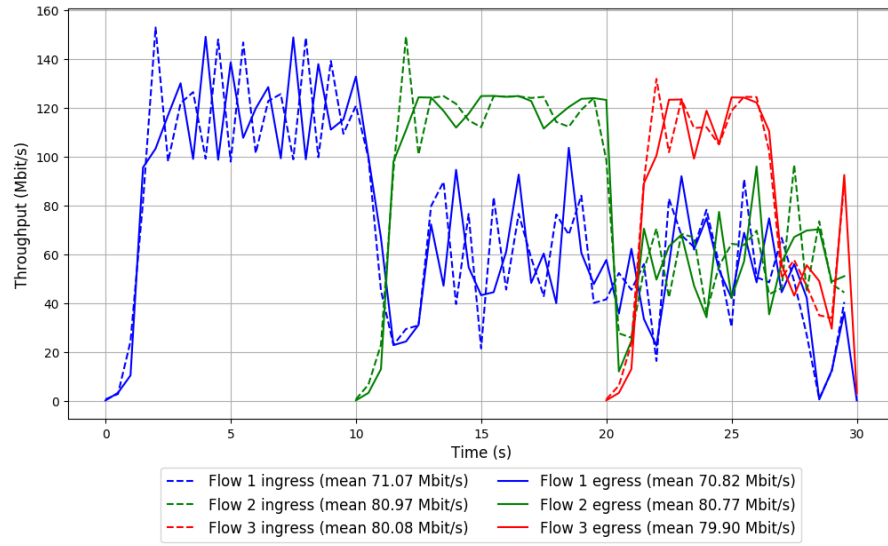
-- Flow 3:

Average throughput: 79.90 Mbit/s

95th percentile per-packet one-way delay: 147.415 ms

Loss rate: 0.24%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-17 11:47:25

End at: 2018-01-17 11:47:55

Below is generated by plot.py at 2018-01-17 14:15:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.31 Mbit/s

95th percentile per-packet one-way delay: 131.120 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 70.43 Mbit/s

95th percentile per-packet one-way delay: 127.388 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 65.37 Mbit/s

95th percentile per-packet one-way delay: 132.070 ms

Loss rate: 0.01%

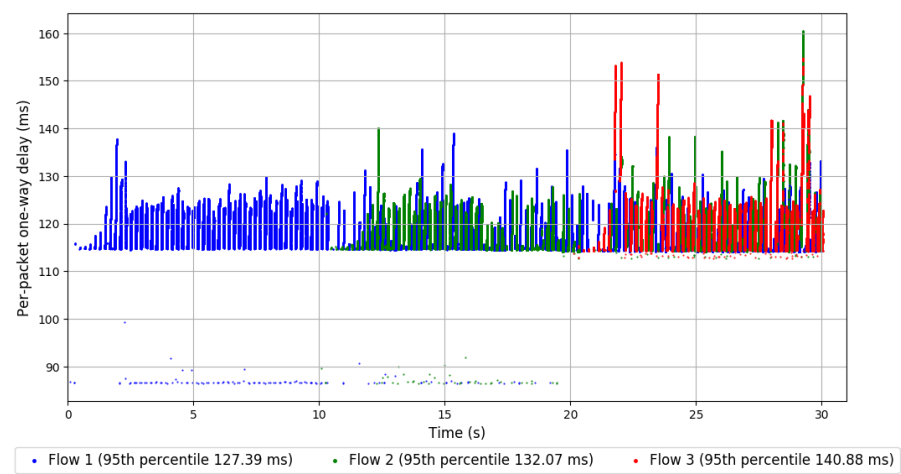
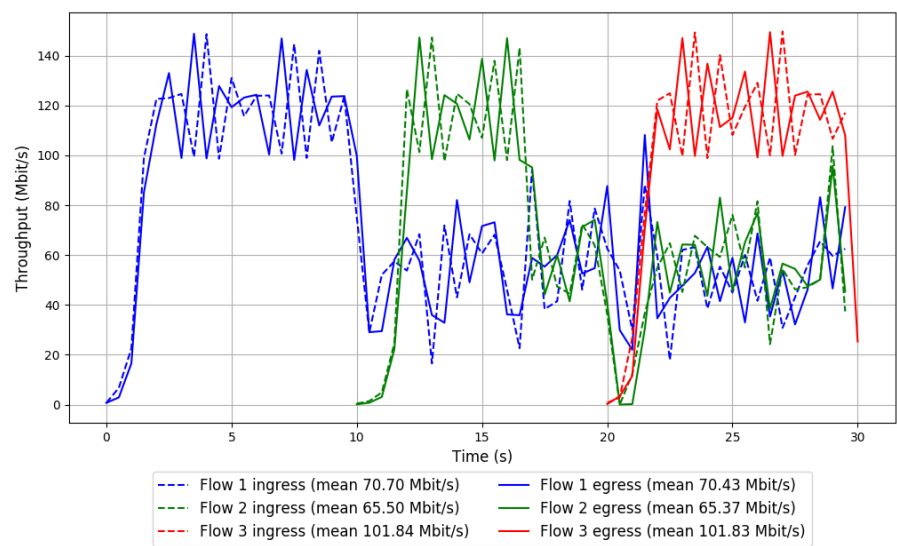
-- Flow 3:

Average throughput: 101.83 Mbit/s

95th percentile per-packet one-way delay: 140.877 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-17 12:04:16

End at: 2018-01-17 12:04:46

Below is generated by plot.py at 2018-01-17 14:15:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.86 Mbit/s

95th percentile per-packet one-way delay: 131.816 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 80.12 Mbit/s

95th percentile per-packet one-way delay: 131.145 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.48 Mbit/s

95th percentile per-packet one-way delay: 133.583 ms

Loss rate: 0.35%

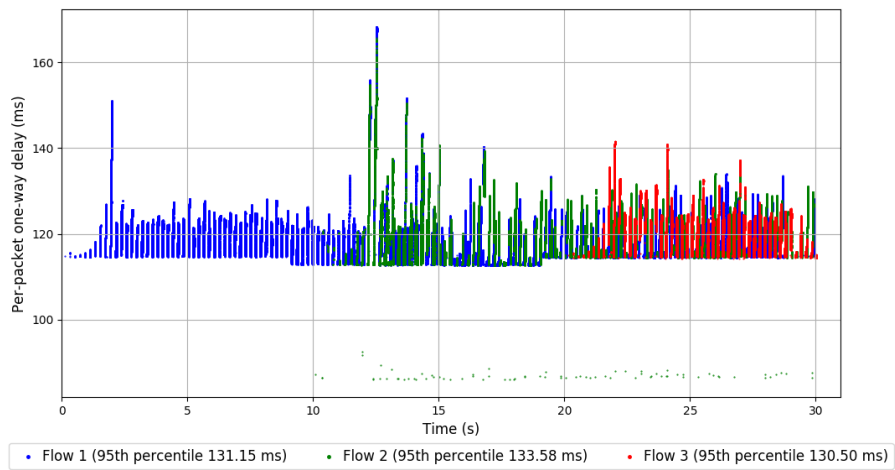
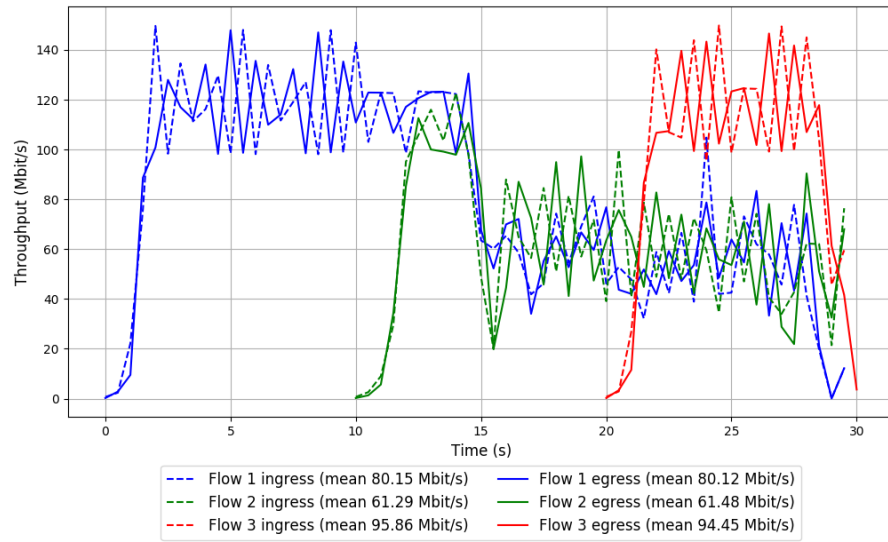
-- Flow 3:

Average throughput: 94.45 Mbit/s

95th percentile per-packet one-way delay: 130.499 ms

Loss rate: 1.61%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-17 09:30:45

End at: 2018-01-17 09:31:16

Below is generated by plot.py at 2018-01-17 14:15:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 144.43 Mbit/s

95th percentile per-packet one-way delay: 126.654 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 87.20 Mbit/s

95th percentile per-packet one-way delay: 125.625 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.11 Mbit/s

95th percentile per-packet one-way delay: 128.171 ms

Loss rate: 0.14%

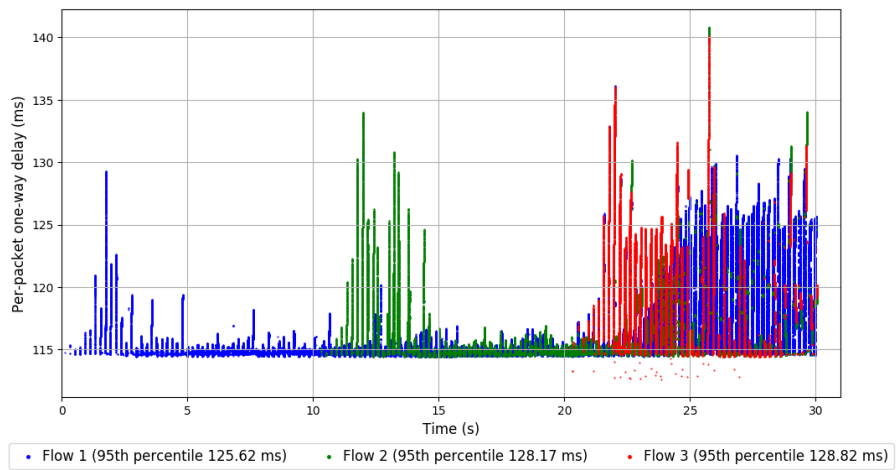
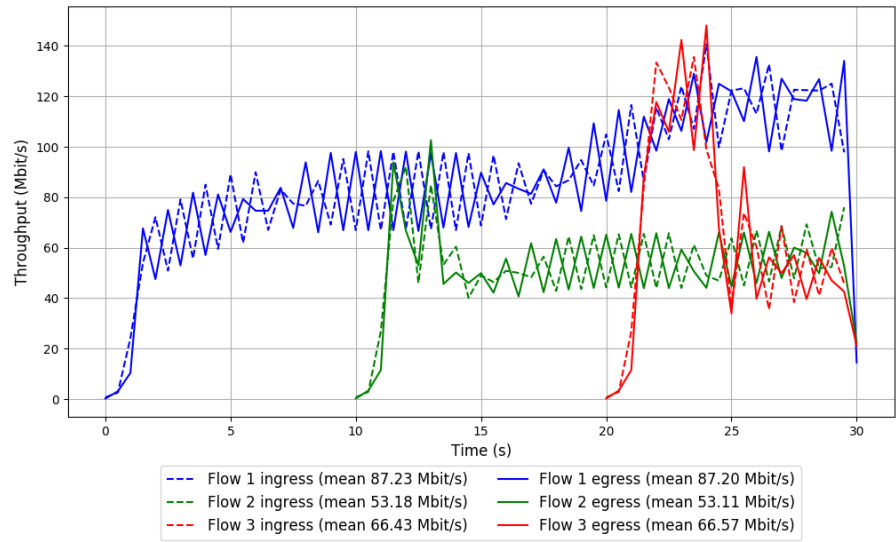
-- Flow 3:

Average throughput: 66.57 Mbit/s

95th percentile per-packet one-way delay: 128.820 ms

Loss rate: 0.03%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-17 09:48:13

End at: 2018-01-17 09:48:43

Below is generated by plot.py at 2018-01-17 14:15:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.75 Mbit/s

95th percentile per-packet one-way delay: 127.355 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 48.56 Mbit/s

95th percentile per-packet one-way delay: 126.460 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 111.48 Mbit/s

95th percentile per-packet one-way delay: 128.647 ms

Loss rate: 0.00%

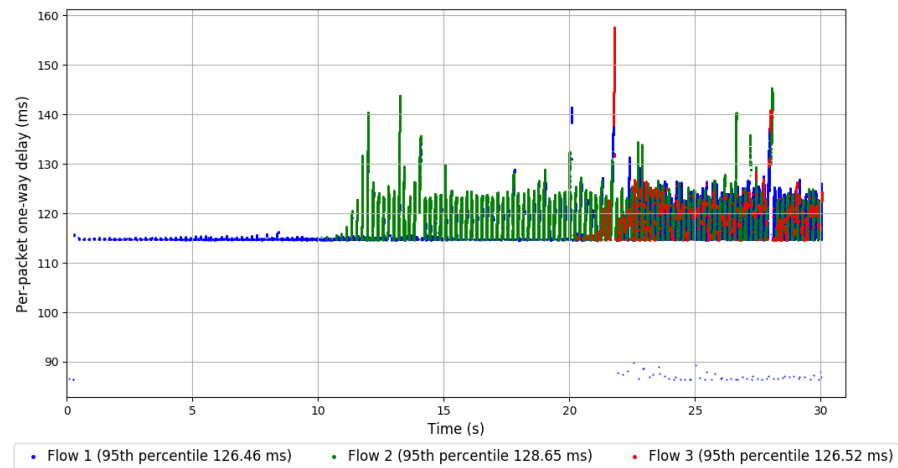
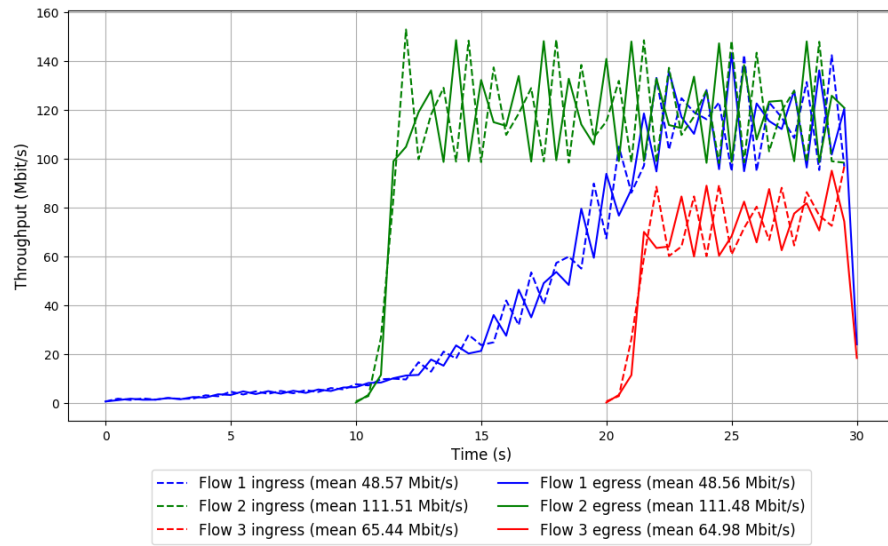
-- Flow 3:

Average throughput: 64.98 Mbit/s

95th percentile per-packet one-way delay: 126.522 ms

Loss rate: 0.73%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-17 10:05:17

End at: 2018-01-17 10:05:47

Below is generated by plot.py at 2018-01-17 14:15:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.92 Mbit/s

95th percentile per-packet one-way delay: 127.382 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 37.49 Mbit/s

95th percentile per-packet one-way delay: 125.072 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 14.75 Mbit/s

95th percentile per-packet one-way delay: 125.321 ms

Loss rate: 0.00%

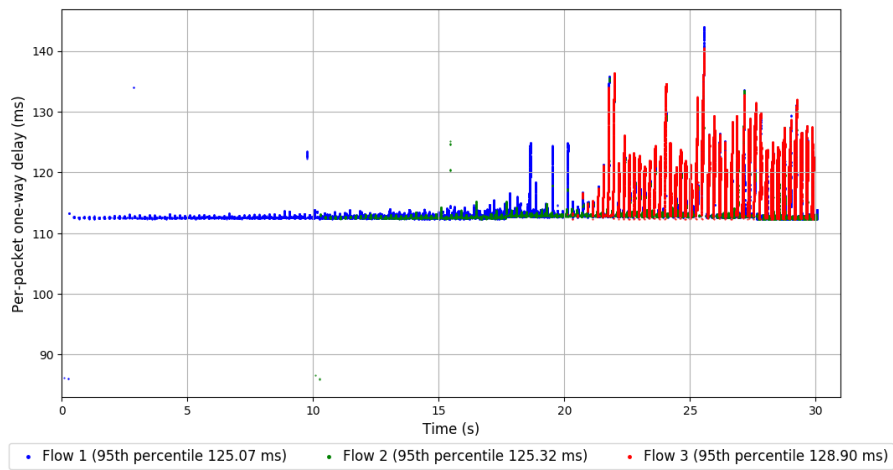
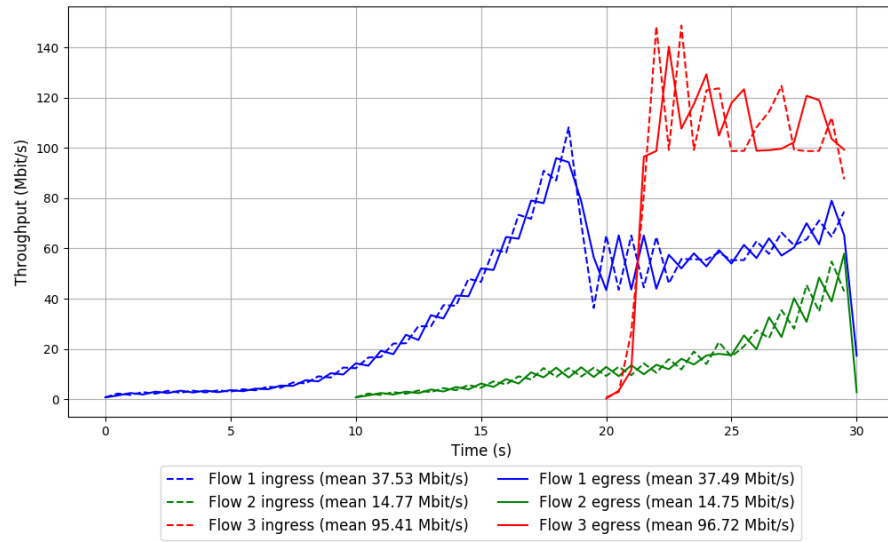
-- Flow 3:

Average throughput: 96.72 Mbit/s

95th percentile per-packet one-way delay: 128.895 ms

Loss rate: 0.06%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-17 10:22:20

End at: 2018-01-17 10:22:50

Below is generated by plot.py at 2018-01-17 14:16:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 158.74 Mbit/s

95th percentile per-packet one-way delay: 126.514 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 102.58 Mbit/s

95th percentile per-packet one-way delay: 126.169 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 83.67 Mbit/s

95th percentile per-packet one-way delay: 127.033 ms

Loss rate: 0.02%

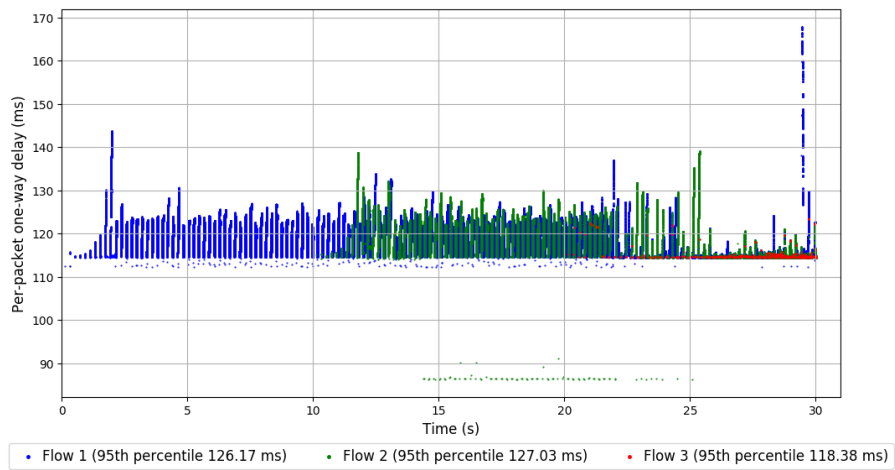
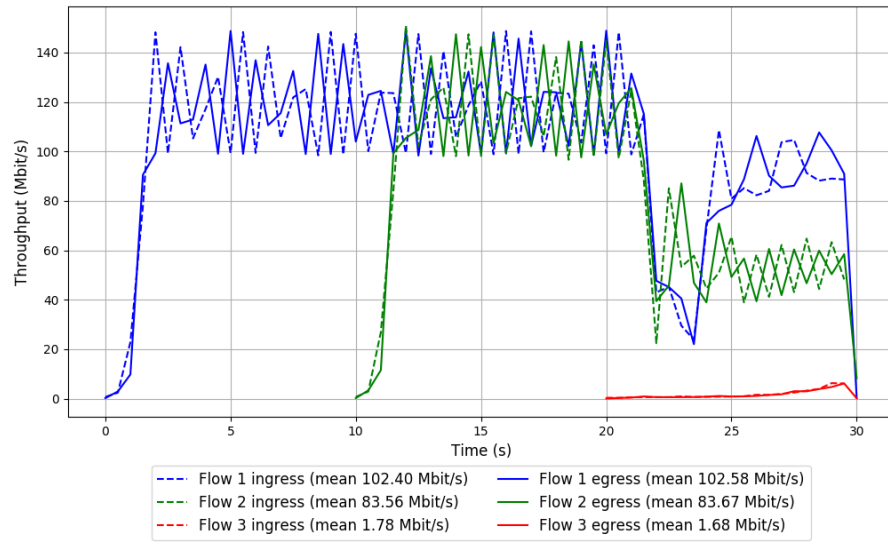
-- Flow 3:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 118.376 ms

Loss rate: 6.05%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-17 10:39:07

End at: 2018-01-17 10:39:37

Below is generated by plot.py at 2018-01-17 14:16:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.22 Mbit/s

95th percentile per-packet one-way delay: 115.430 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 33.04 Mbit/s

95th percentile per-packet one-way delay: 115.434 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 12.05 Mbit/s

95th percentile per-packet one-way delay: 115.467 ms

Loss rate: 0.46%

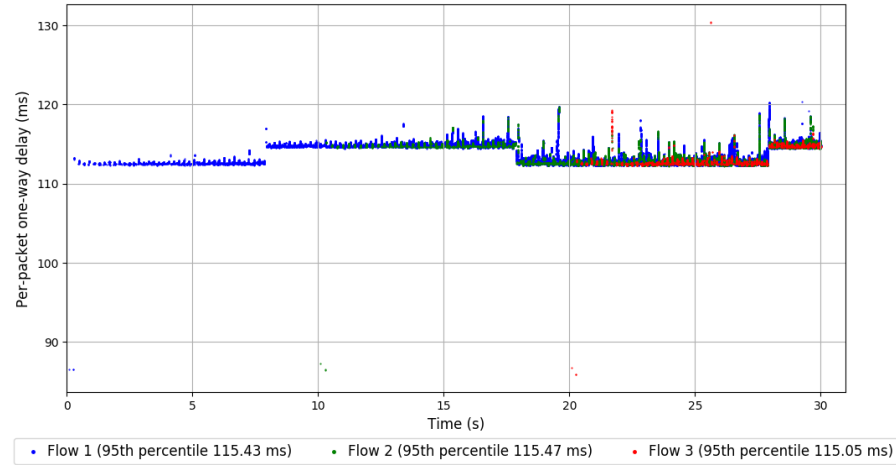
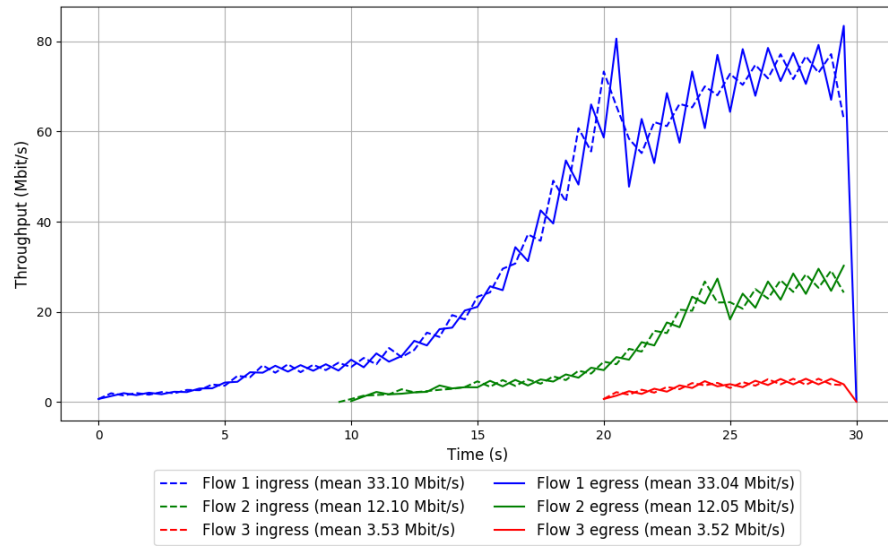
-- Flow 3:

Average throughput: 3.52 Mbit/s

95th percentile per-packet one-way delay: 115.045 ms

Loss rate: 0.14%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-17 10:56:18

End at: 2018-01-17 10:56:48

Below is generated by plot.py at 2018-01-17 14:16:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.47 Mbit/s

95th percentile per-packet one-way delay: 126.814 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 35.18 Mbit/s

95th percentile per-packet one-way delay: 125.687 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 30.31 Mbit/s

95th percentile per-packet one-way delay: 125.756 ms

Loss rate: 0.00%

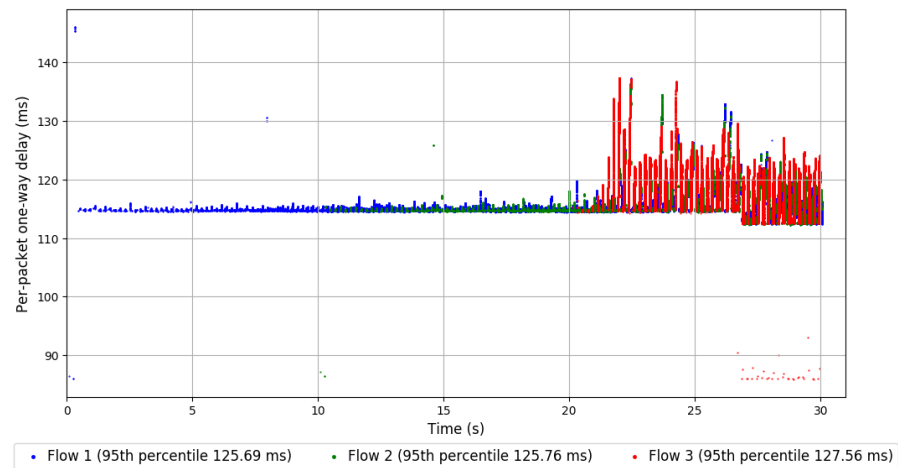
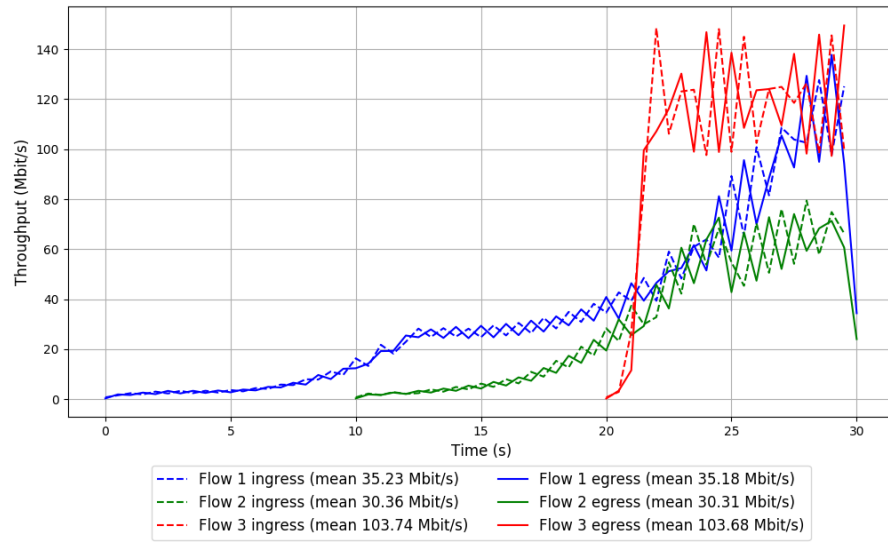
-- Flow 3:

Average throughput: 103.68 Mbit/s

95th percentile per-packet one-way delay: 127.555 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-17 11:12:59

End at: 2018-01-17 11:13:29

Below is generated by plot.py at 2018-01-17 14:16:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.87 Mbit/s

95th percentile per-packet one-way delay: 116.334 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 26.85 Mbit/s

95th percentile per-packet one-way delay: 116.214 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 25.82 Mbit/s

95th percentile per-packet one-way delay: 116.459 ms

Loss rate: 0.12%

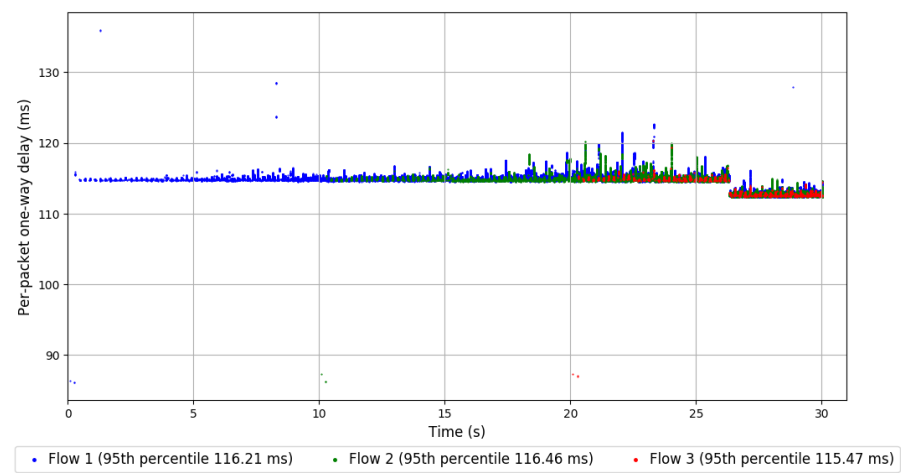
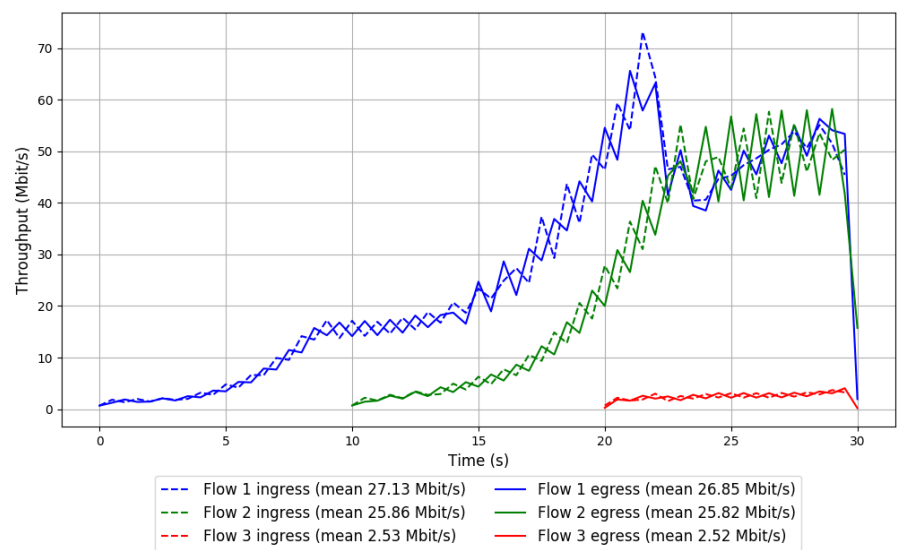
-- Flow 3:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 115.468 ms

Loss rate: 0.10%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-17 11:28:52

End at: 2018-01-17 11:29:22

Below is generated by plot.py at 2018-01-17 14:16:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.56 Mbit/s

95th percentile per-packet one-way delay: 124.441 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 32.64 Mbit/s

95th percentile per-packet one-way delay: 122.971 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.73 Mbit/s

95th percentile per-packet one-way delay: 125.054 ms

Loss rate: 0.00%

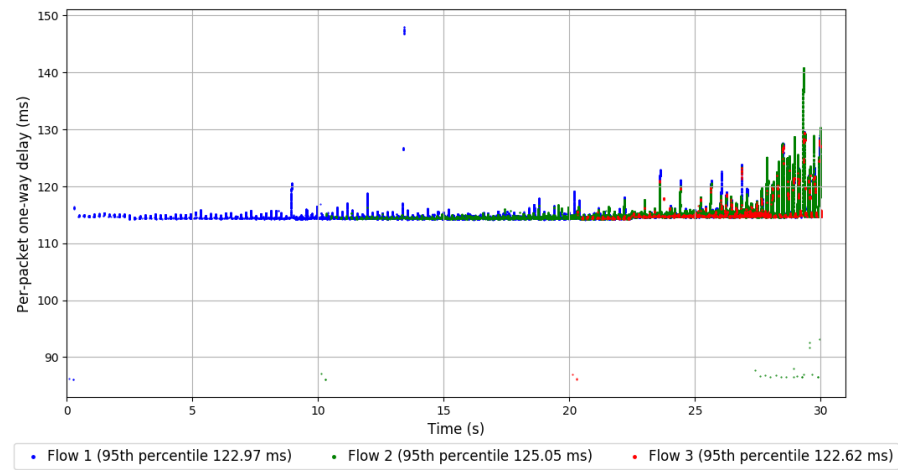
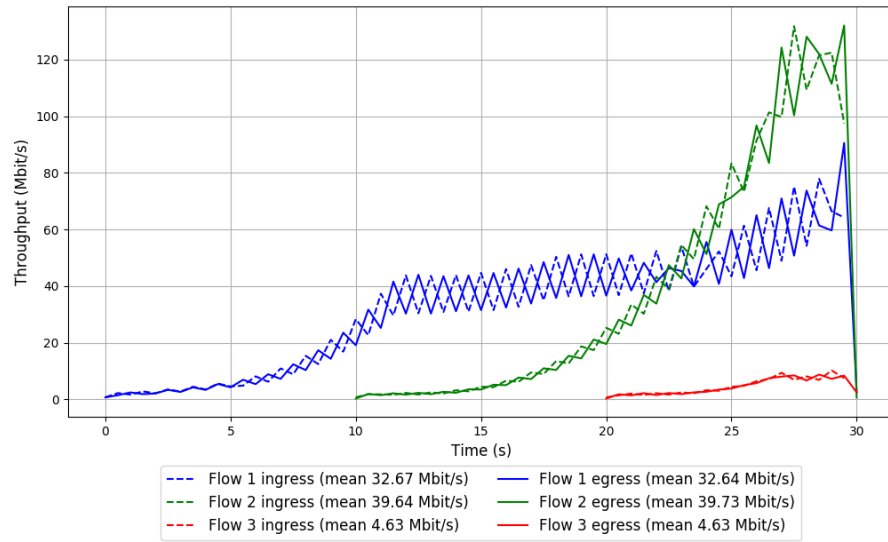
-- Flow 3:

Average throughput: 4.63 Mbit/s

95th percentile per-packet one-way delay: 122.623 ms

Loss rate: 0.29%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-17 11:44:41

End at: 2018-01-17 11:45:11

Below is generated by plot.py at 2018-01-17 14:17:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.24 Mbit/s

95th percentile per-packet one-way delay: 133.402 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 76.67 Mbit/s

95th percentile per-packet one-way delay: 131.173 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.20 Mbit/s

95th percentile per-packet one-way delay: 140.153 ms

Loss rate: 0.00%

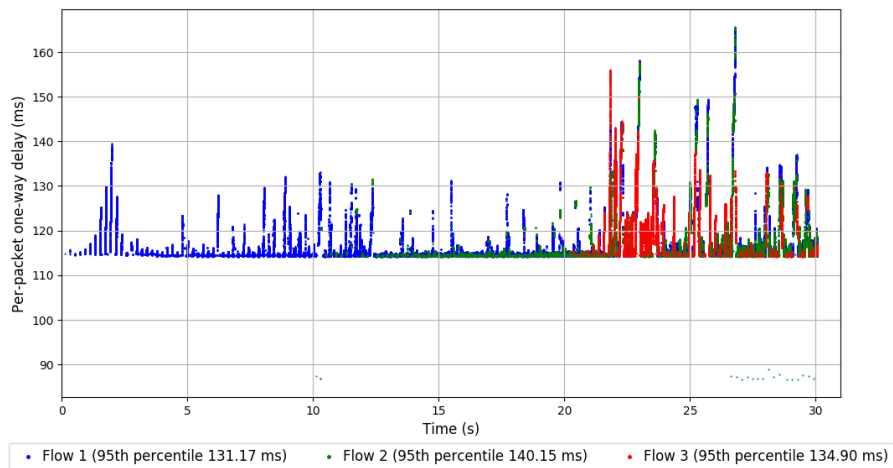
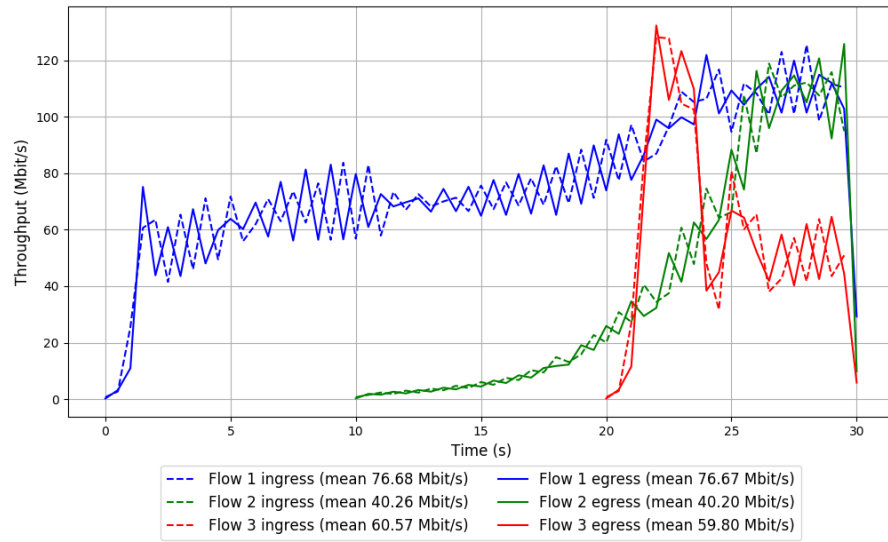
-- Flow 3:

Average throughput: 59.80 Mbit/s

95th percentile per-packet one-way delay: 134.899 ms

Loss rate: 1.26%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-17 12:01:58

End at: 2018-01-17 12:02:28

Below is generated by plot.py at 2018-01-17 14:17:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.75 Mbit/s

95th percentile per-packet one-way delay: 116.456 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 30.32 Mbit/s

95th percentile per-packet one-way delay: 116.638 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 8.29 Mbit/s

95th percentile per-packet one-way delay: 115.764 ms

Loss rate: 1.15%

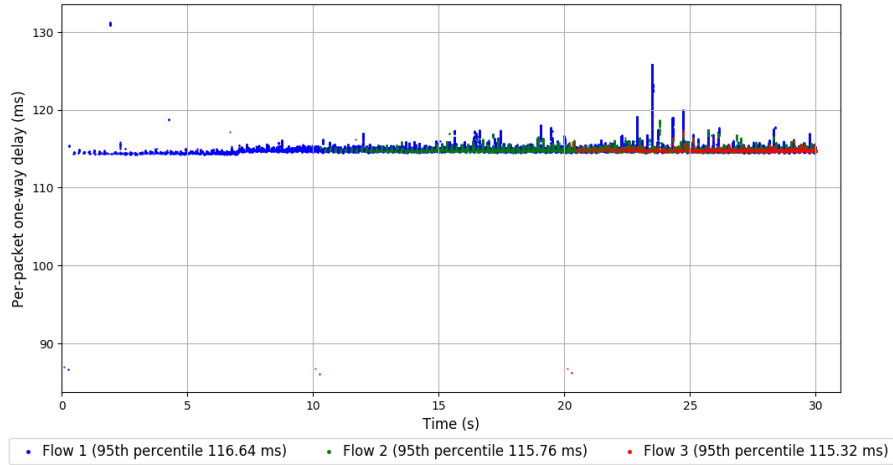
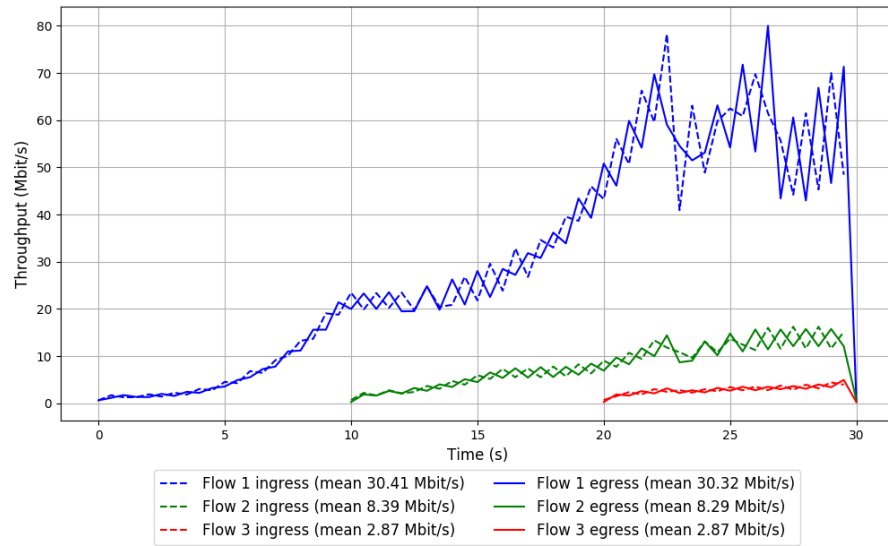
-- Flow 3:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 115.319 ms

Loss rate: 0.34%

Run 10: Report of TCP Cubic — Data Link

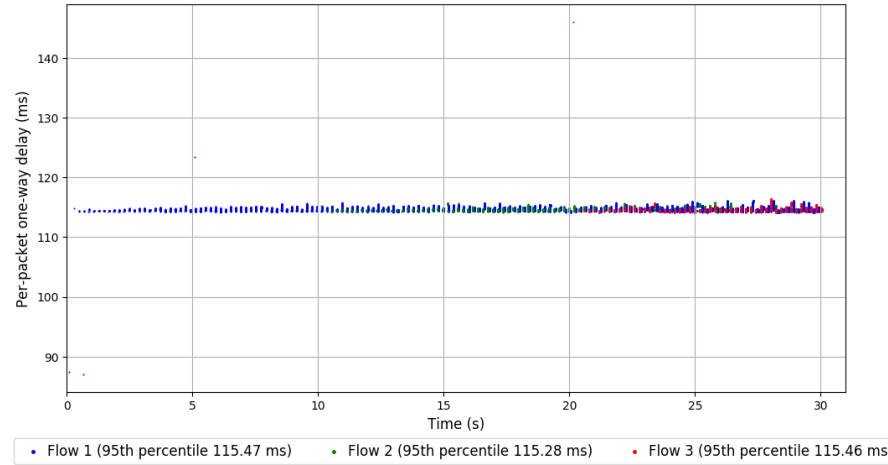
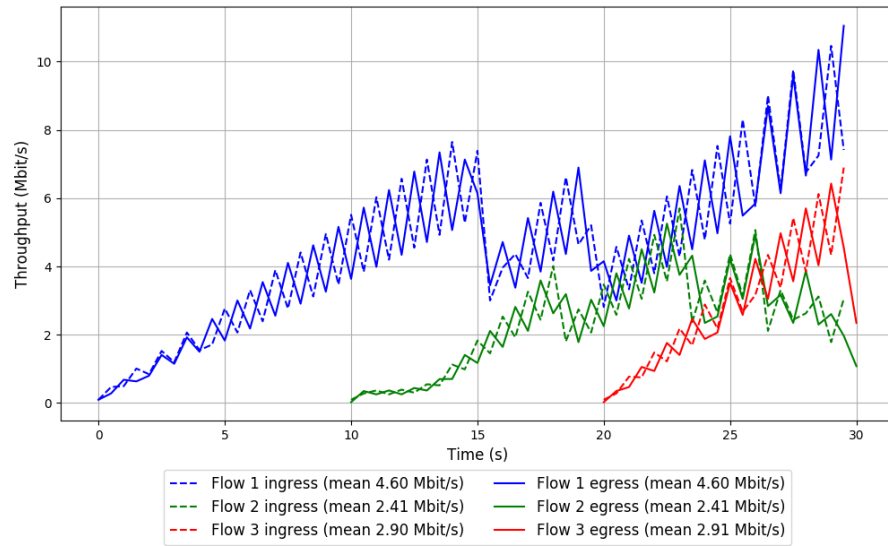


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-17 09:32:28
End at: 2018-01-17 09:32:58

# Below is generated by plot.py at 2018-01-17 14:17:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.14 Mbit/s
95th percentile per-packet one-way delay: 115.428 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.60 Mbit/s
95th percentile per-packet one-way delay: 115.468 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 115.280 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.91 Mbit/s
95th percentile per-packet one-way delay: 115.459 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

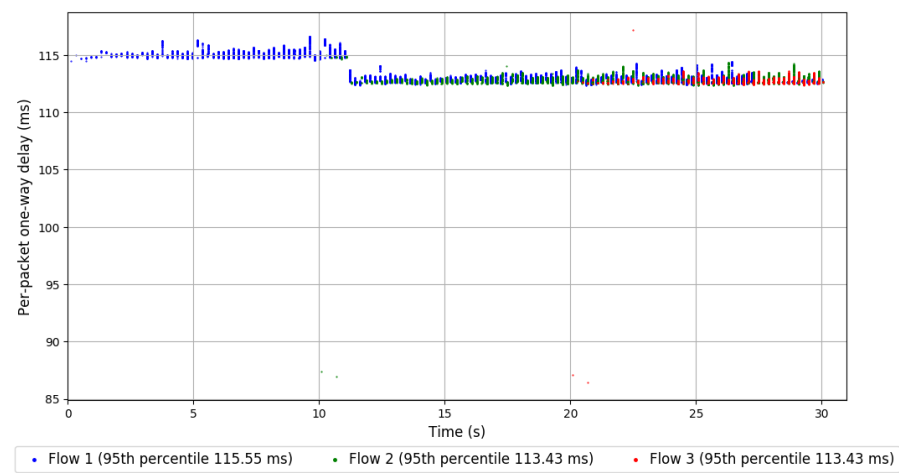
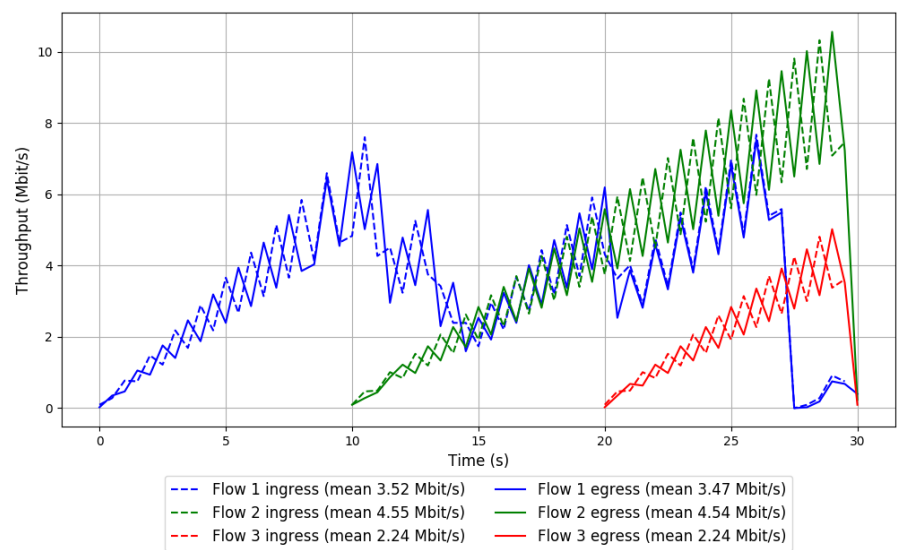


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-17 09:50:04
End at: 2018-01-17 09:50:34

# Below is generated by plot.py at 2018-01-17 14:17:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.24 Mbit/s
95th percentile per-packet one-way delay: 115.286 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 115.547 ms
Loss rate: 1.34%
-- Flow 2:
Average throughput: 4.54 Mbit/s
95th percentile per-packet one-way delay: 113.434 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 113.428 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-17 10:06:53

End at: 2018-01-17 10:07:23

Below is generated by plot.py at 2018-01-17 14:17:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 115.368 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.36 Mbit/s

95th percentile per-packet one-way delay: 115.499 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 115.201 ms

Loss rate: 0.00%

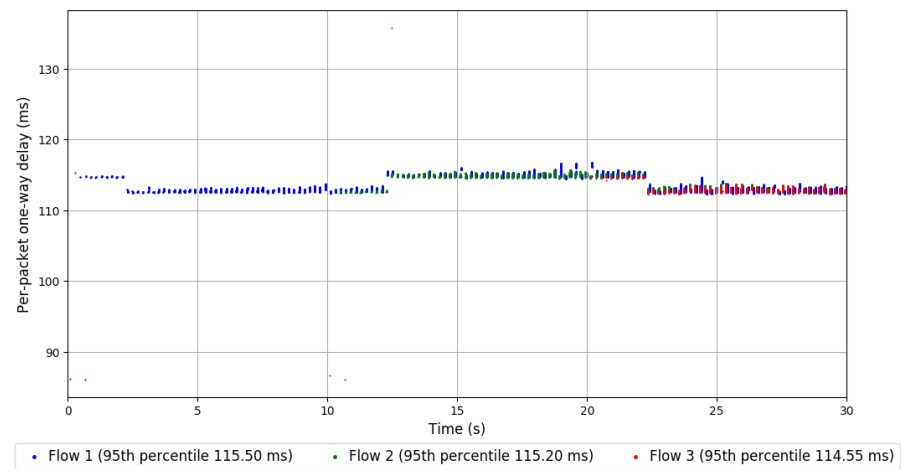
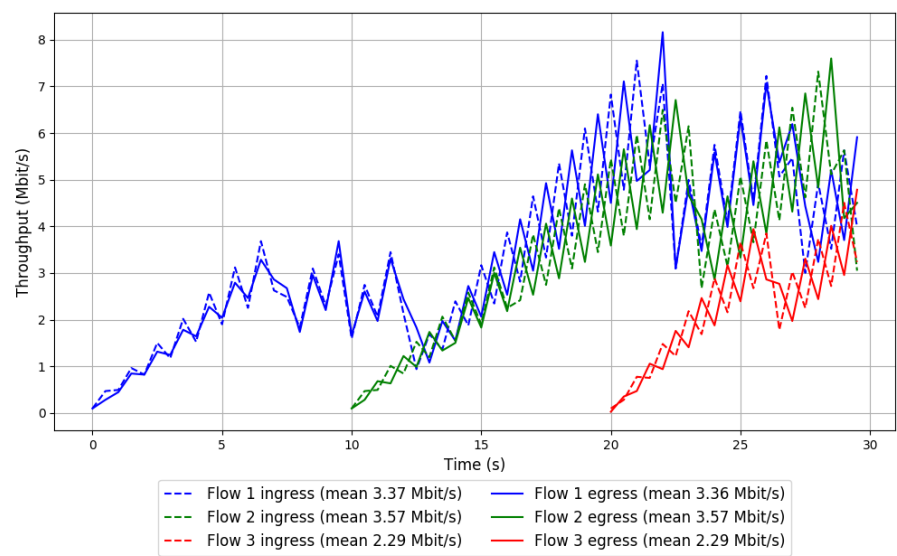
-- Flow 3:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 114.545 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-17 10:24:23

End at: 2018-01-17 10:24:54

Below is generated by plot.py at 2018-01-17 14:17:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.31 Mbit/s

95th percentile per-packet one-way delay: 114.927 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 115.093 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 113.282 ms

Loss rate: 0.00%

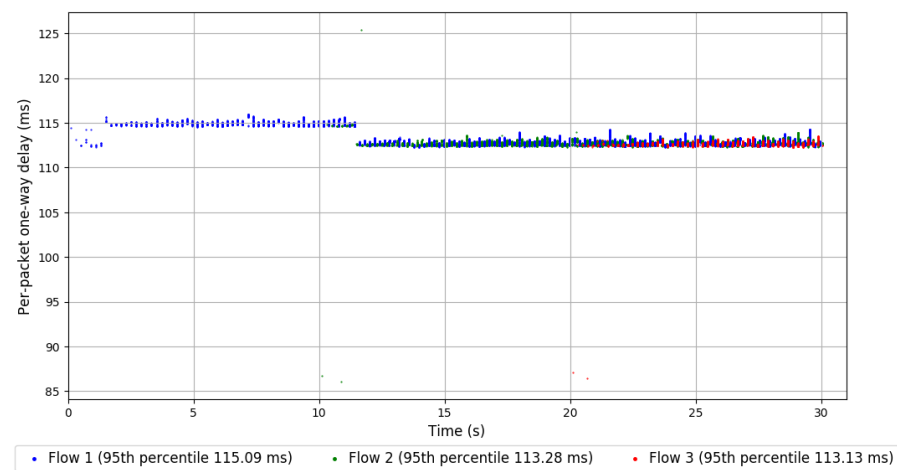
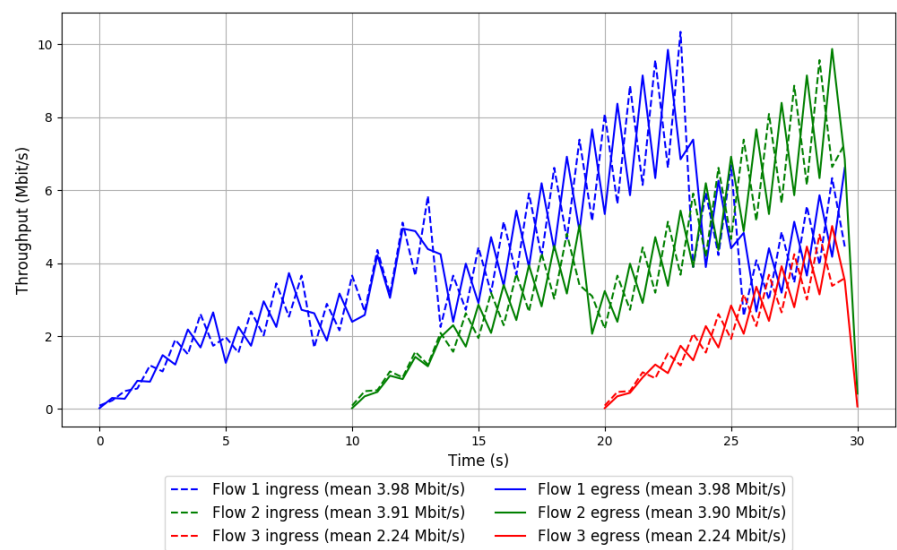
-- Flow 3:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 113.134 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-17 10:40:46

End at: 2018-01-17 10:41:16

Below is generated by plot.py at 2018-01-17 14:17:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.07 Mbit/s

95th percentile per-packet one-way delay: 115.331 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.95 Mbit/s

95th percentile per-packet one-way delay: 115.382 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.60 Mbit/s

95th percentile per-packet one-way delay: 115.255 ms

Loss rate: 0.00%

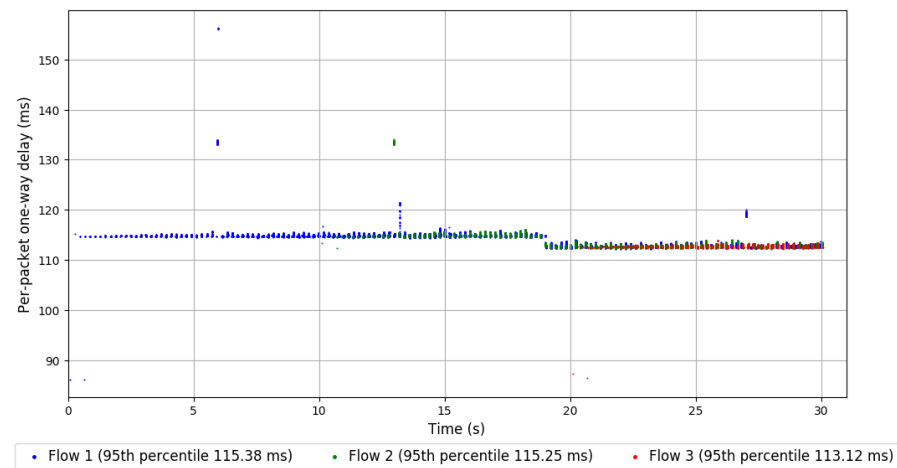
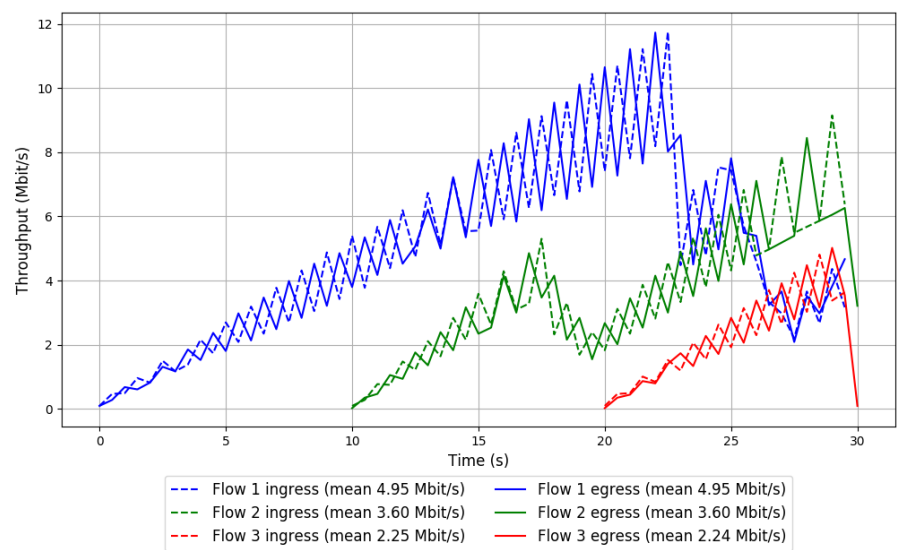
-- Flow 3:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 113.117 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-17 10:57:54

End at: 2018-01-17 10:58:24

Below is generated by plot.py at 2018-01-17 14:17:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.45 Mbit/s

95th percentile per-packet one-way delay: 114.961 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.68 Mbit/s

95th percentile per-packet one-way delay: 115.256 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.55 Mbit/s

95th percentile per-packet one-way delay: 113.663 ms

Loss rate: 0.00%

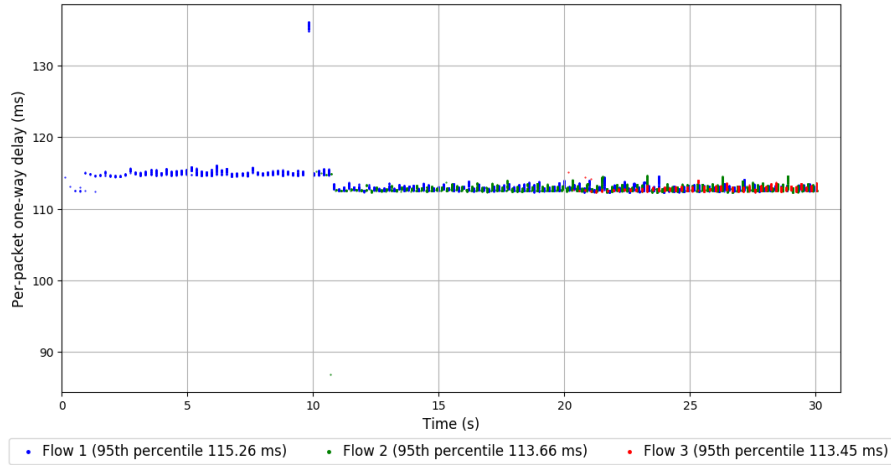
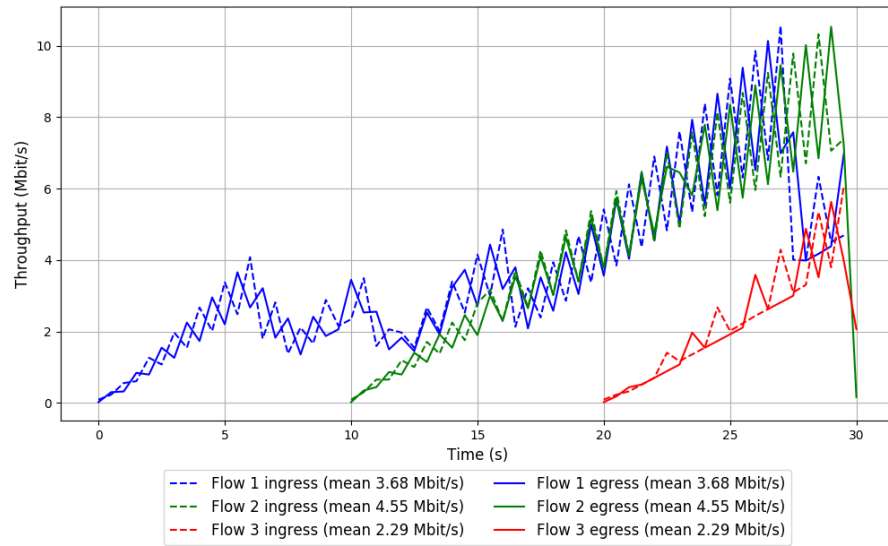
-- Flow 3:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 113.453 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-17 11:14:35

End at: 2018-01-17 11:15:05

Below is generated by plot.py at 2018-01-17 14:17:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.98 Mbit/s

95th percentile per-packet one-way delay: 114.967 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 115.087 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 113.387 ms

Loss rate: 0.00%

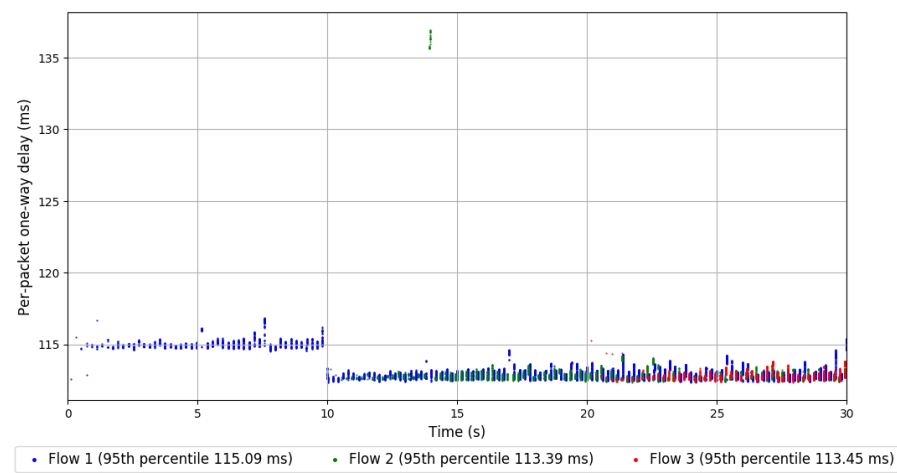
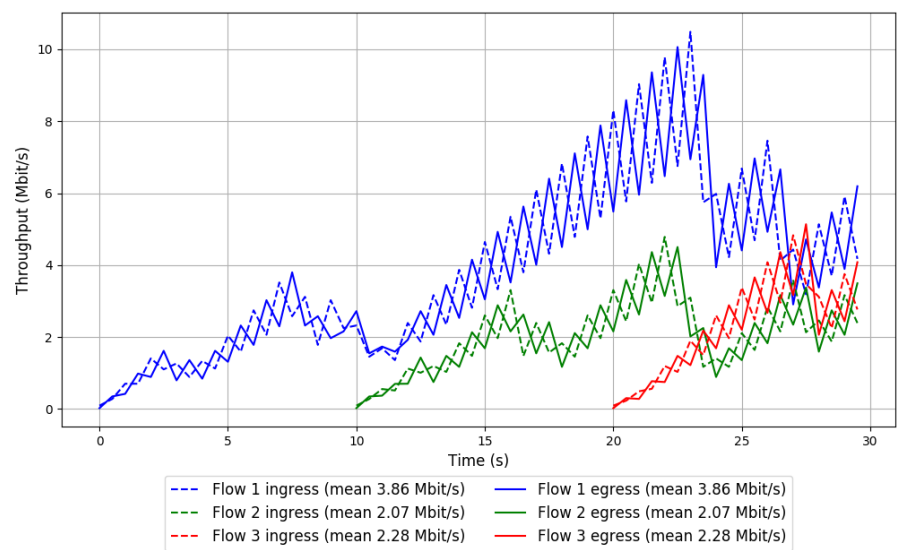
-- Flow 3:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 113.451 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-17 11:30:27

End at: 2018-01-17 11:30:57

Below is generated by plot.py at 2018-01-17 14:17:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.84 Mbit/s

95th percentile per-packet one-way delay: 115.473 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 115.575 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 115.386 ms

Loss rate: 0.00%

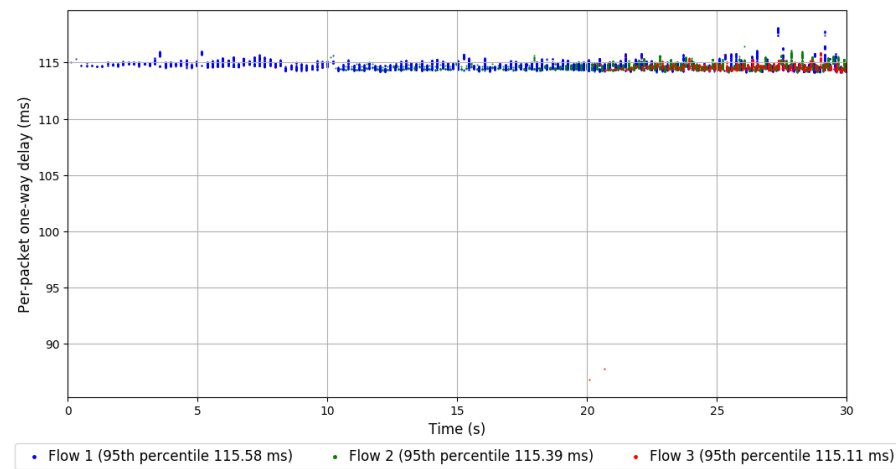
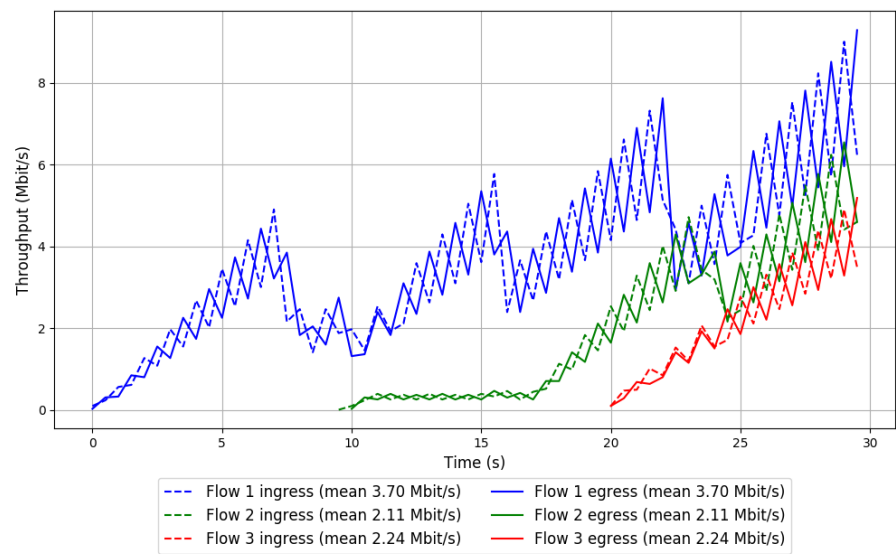
-- Flow 3:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 115.114 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-17 11:46:40

End at: 2018-01-17 11:47:10

Below is generated by plot.py at 2018-01-17 14:17:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.40 Mbit/s

95th percentile per-packet one-way delay: 115.496 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 2.72 Mbit/s

95th percentile per-packet one-way delay: 115.433 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 115.639 ms

Loss rate: 1.41%

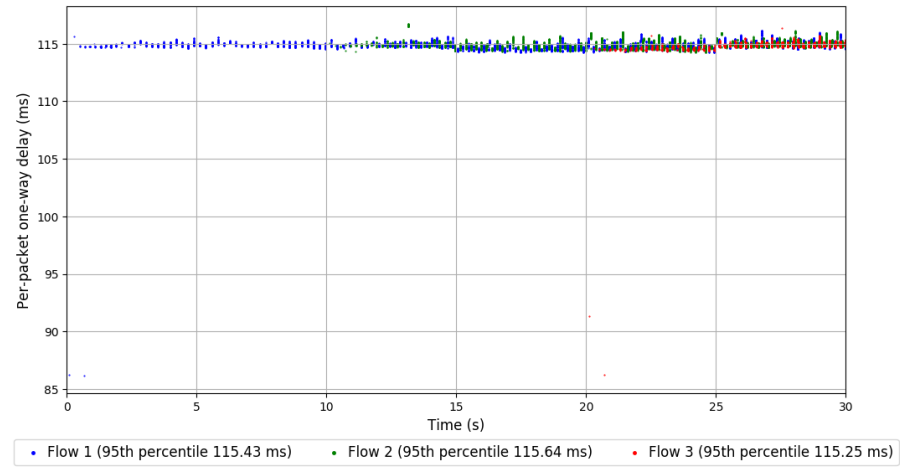
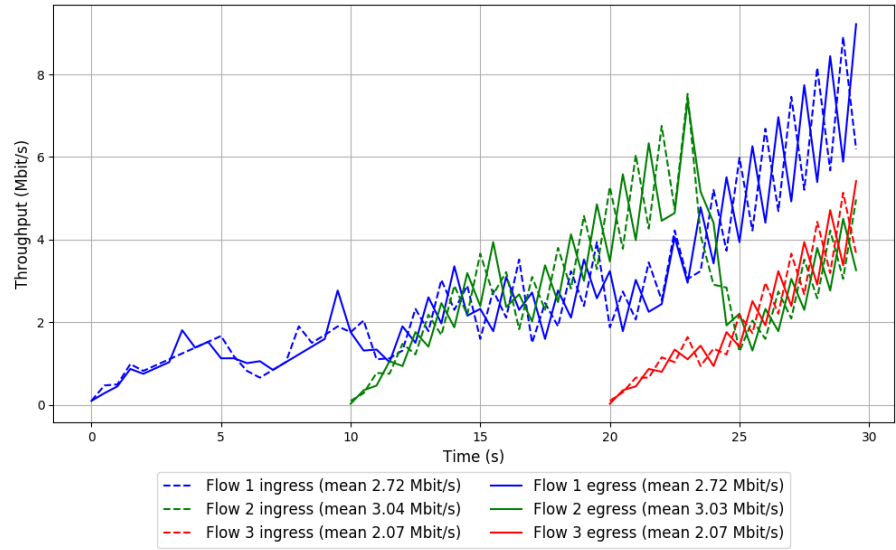
-- Flow 3:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 115.252 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

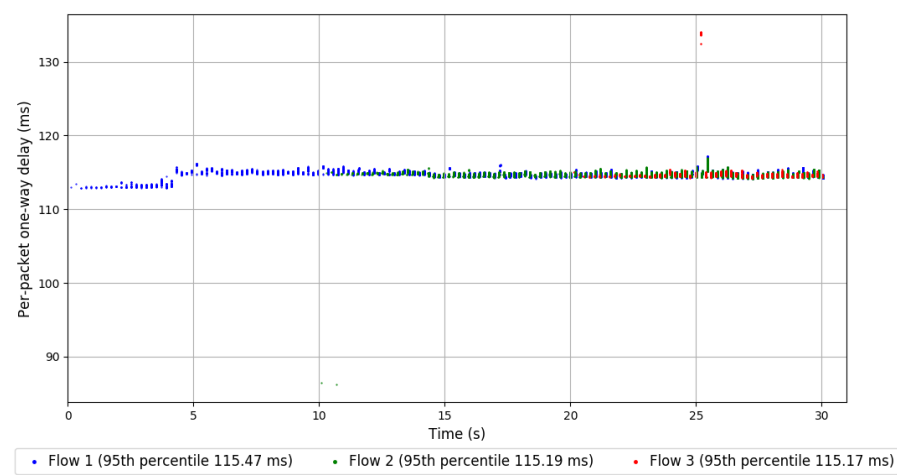
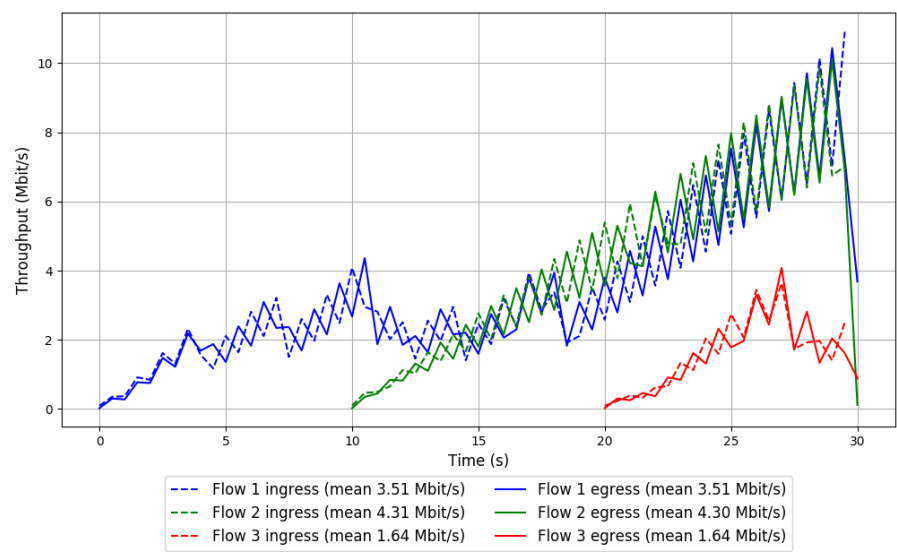


```
Run 10: Statistics of LEDBAT

Start at: 2018-01-17 12:03:31
End at: 2018-01-17 12:04:01

# Below is generated by plot.py at 2018-01-17 14:17:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 115.340 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 115.473 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 115.195 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 115.168 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

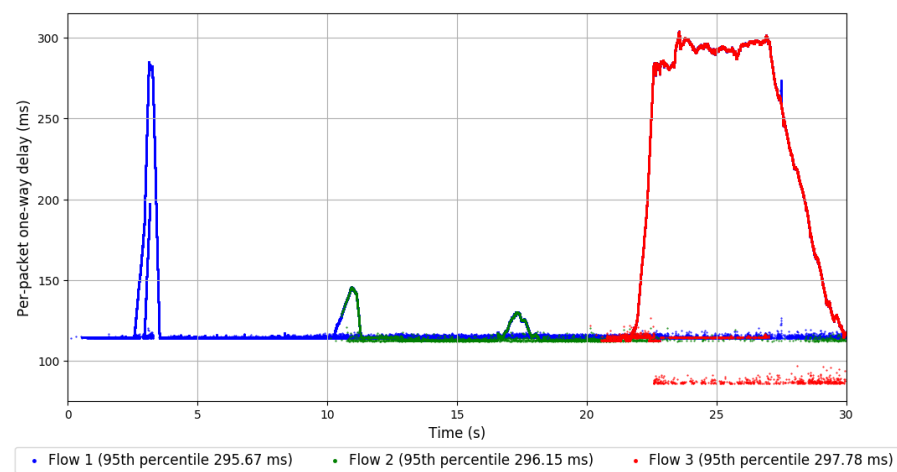
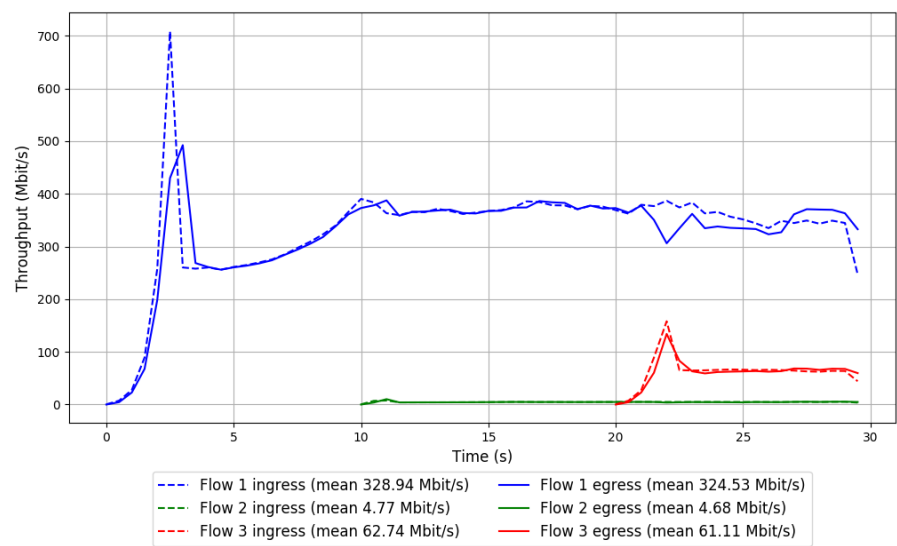


```
Run 1: Statistics of PCC

Start at: 2018-01-17 09:25:32
End at: 2018-01-17 09:26:02

# Below is generated by plot.py at 2018-01-17 14:22:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 347.75 Mbit/s
95th percentile per-packet one-way delay: 295.928 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 324.53 Mbit/s
95th percentile per-packet one-way delay: 295.670 ms
Loss rate: 1.34%
-- Flow 2:
Average throughput: 4.68 Mbit/s
95th percentile per-packet one-way delay: 296.149 ms
Loss rate: 1.80%
-- Flow 3:
Average throughput: 61.11 Mbit/s
95th percentile per-packet one-way delay: 297.784 ms
Loss rate: 2.68%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-17 09:42:55

End at: 2018-01-17 09:43:25

Below is generated by plot.py at 2018-01-17 14:22:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.75 Mbit/s

95th percentile per-packet one-way delay: 308.298 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 288.08 Mbit/s

95th percentile per-packet one-way delay: 308.099 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 58.56 Mbit/s

95th percentile per-packet one-way delay: 312.127 ms

Loss rate: 1.29%

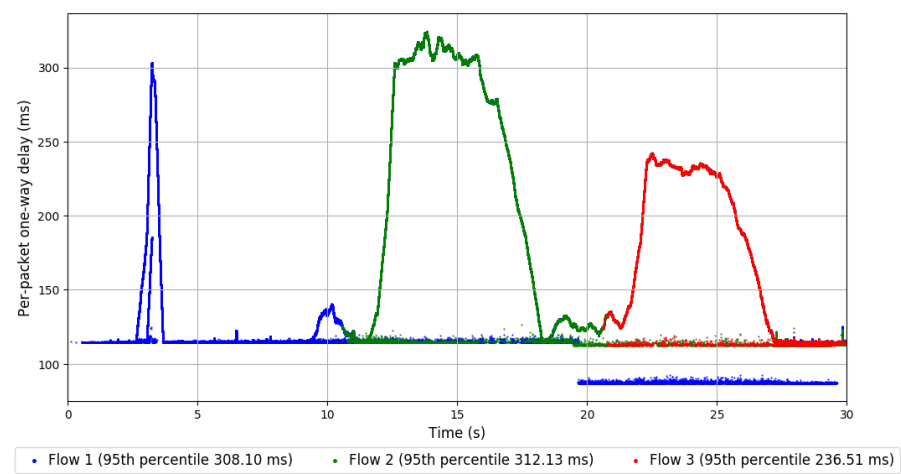
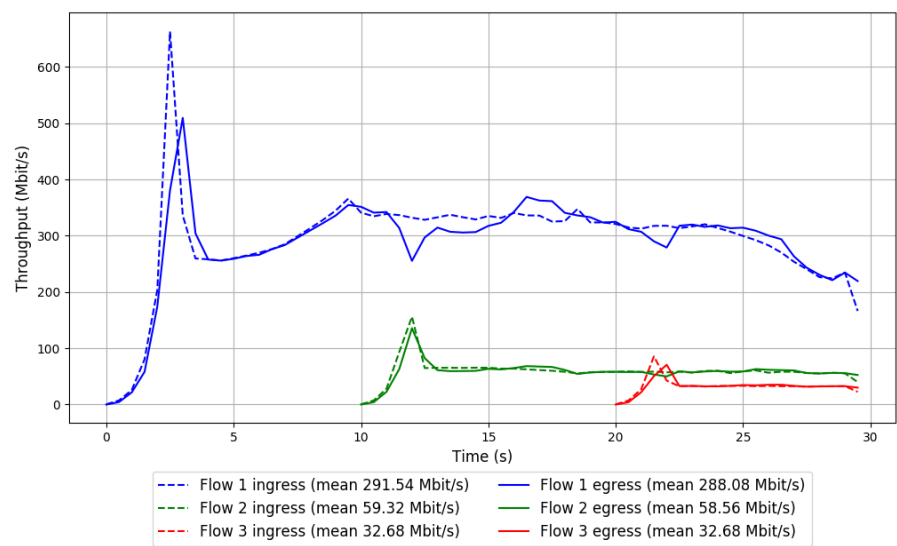
-- Flow 3:

Average throughput: 32.68 Mbit/s

95th percentile per-packet one-way delay: 236.515 ms

Loss rate: 0.00%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-17 10:00:07

End at: 2018-01-17 10:00:37

Below is generated by plot.py at 2018-01-17 14:22:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 212.84 Mbit/s

95th percentile per-packet one-way delay: 298.761 ms

Loss rate: 3.04%

-- Flow 1:

Average throughput: 5.01 Mbit/s

95th percentile per-packet one-way delay: 292.405 ms

Loss rate: 1.57%

-- Flow 2:

Average throughput: 255.52 Mbit/s

95th percentile per-packet one-way delay: 297.678 ms

Loss rate: 2.72%

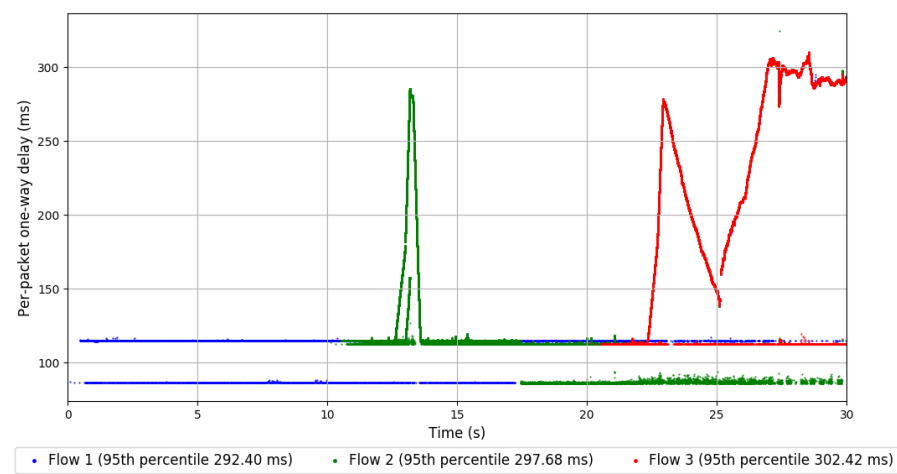
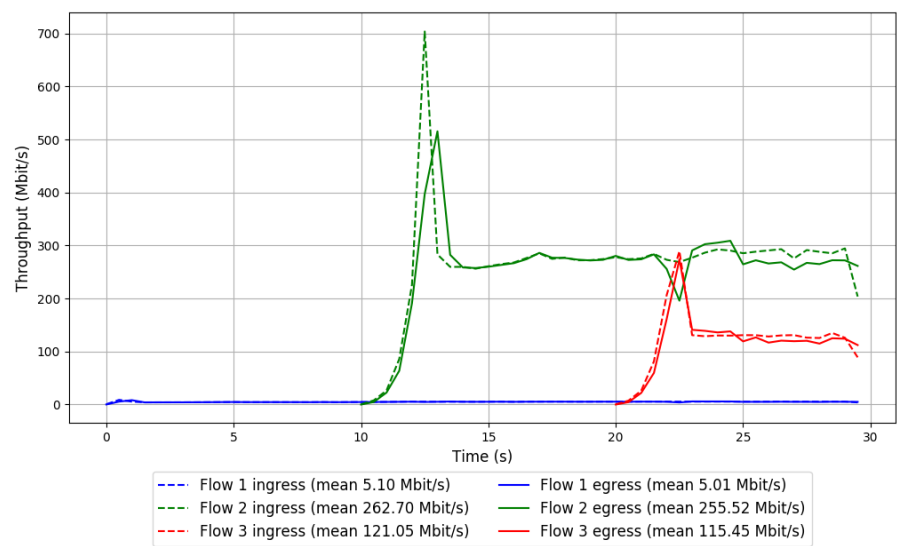
-- Flow 3:

Average throughput: 115.45 Mbit/s

95th percentile per-packet one-way delay: 302.422 ms

Loss rate: 4.60%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-17 10:16:51

End at: 2018-01-17 10:17:21

Below is generated by plot.py at 2018-01-17 14:22:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 364.30 Mbit/s

95th percentile per-packet one-way delay: 274.246 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 341.15 Mbit/s

95th percentile per-packet one-way delay: 272.496 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 32.80 Mbit/s

95th percentile per-packet one-way delay: 286.371 ms

Loss rate: 0.25%

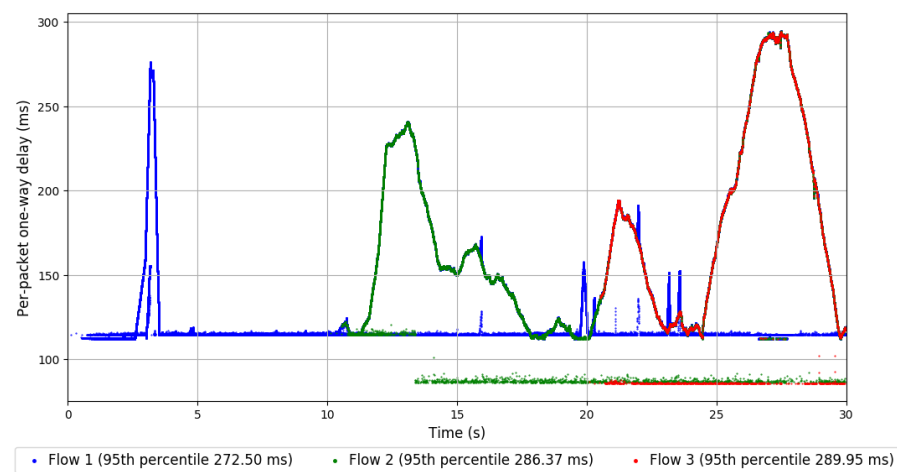
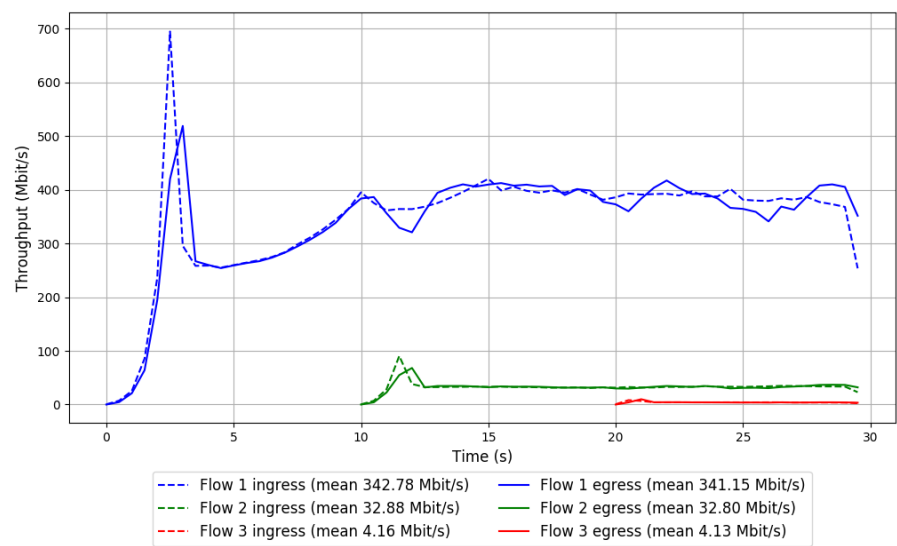
-- Flow 3:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 289.949 ms

Loss rate: 0.59%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-17 10:34:22

End at: 2018-01-17 10:34:52

Below is generated by plot.py at 2018-01-17 14:22:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 163.83 Mbit/s

95th percentile per-packet one-way delay: 308.241 ms

Loss rate: 4.68%

-- Flow 1:

Average throughput: 7.13 Mbit/s

95th percentile per-packet one-way delay: 306.773 ms

Loss rate: 2.23%

-- Flow 2:

Average throughput: 129.48 Mbit/s

95th percentile per-packet one-way delay: 307.549 ms

Loss rate: 2.61%

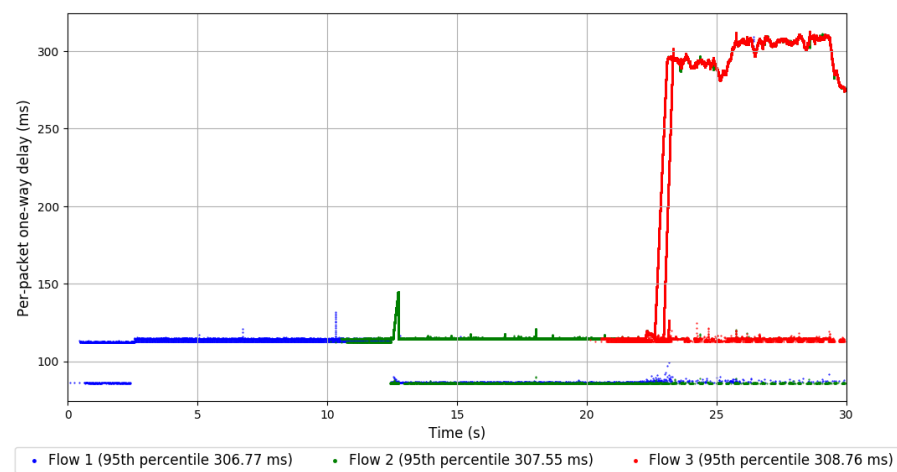
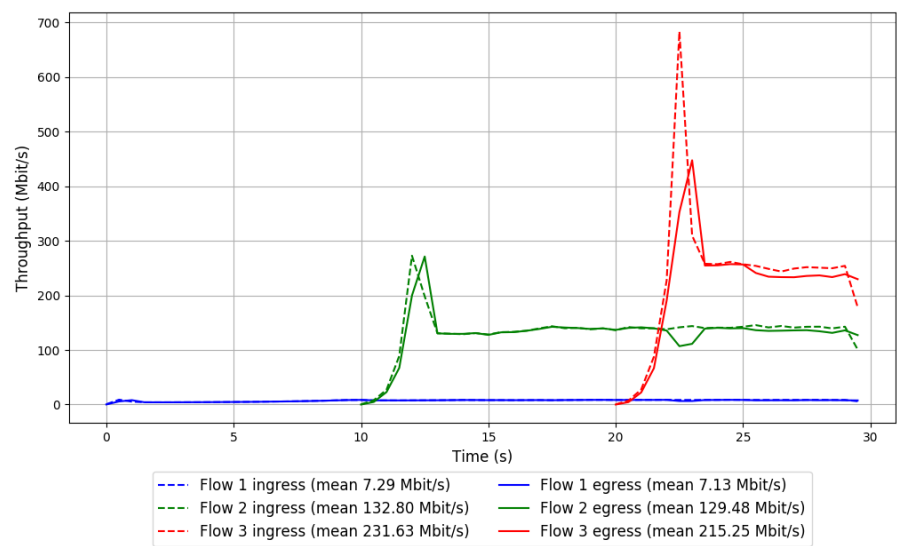
-- Flow 3:

Average throughput: 215.25 Mbit/s

95th percentile per-packet one-way delay: 308.764 ms

Loss rate: 7.31%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-17 10:51:14

End at: 2018-01-17 10:51:44

Below is generated by plot.py at 2018-01-17 14:22:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 345.28 Mbit/s

95th percentile per-packet one-way delay: 213.291 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 340.72 Mbit/s

95th percentile per-packet one-way delay: 213.288 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 4.82 Mbit/s

95th percentile per-packet one-way delay: 212.359 ms

Loss rate: 0.24%

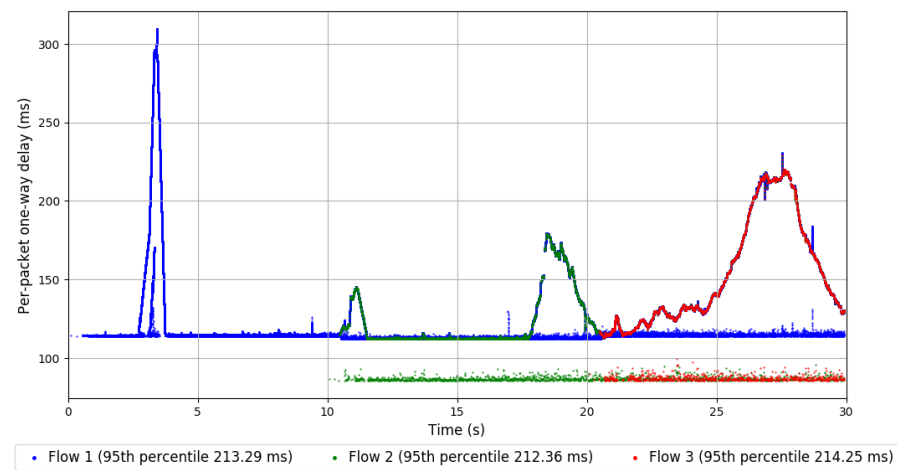
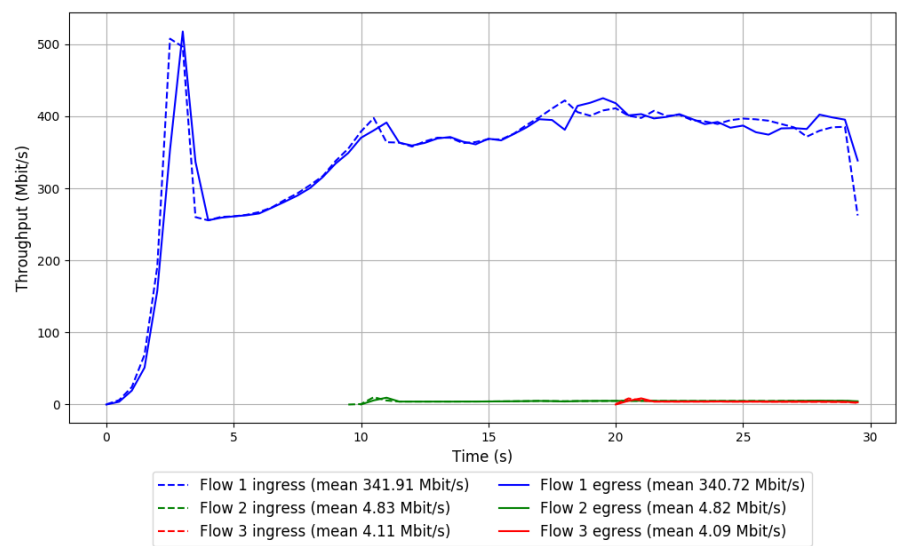
-- Flow 3:

Average throughput: 4.09 Mbit/s

95th percentile per-packet one-way delay: 214.252 ms

Loss rate: 0.33%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-17 11:07:57

End at: 2018-01-17 11:08:27

Below is generated by plot.py at 2018-01-17 14:22:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 346.82 Mbit/s

95th percentile per-packet one-way delay: 186.888 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 323.22 Mbit/s

95th percentile per-packet one-way delay: 187.036 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 33.42 Mbit/s

95th percentile per-packet one-way delay: 186.131 ms

Loss rate: 0.50%

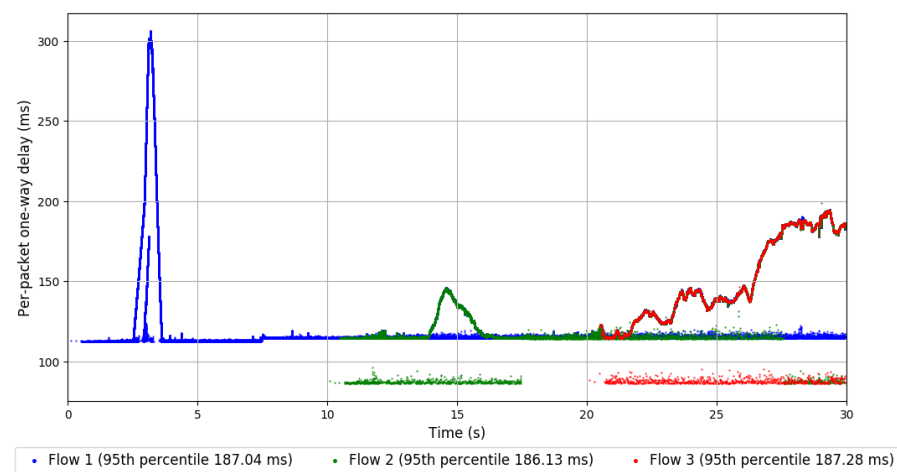
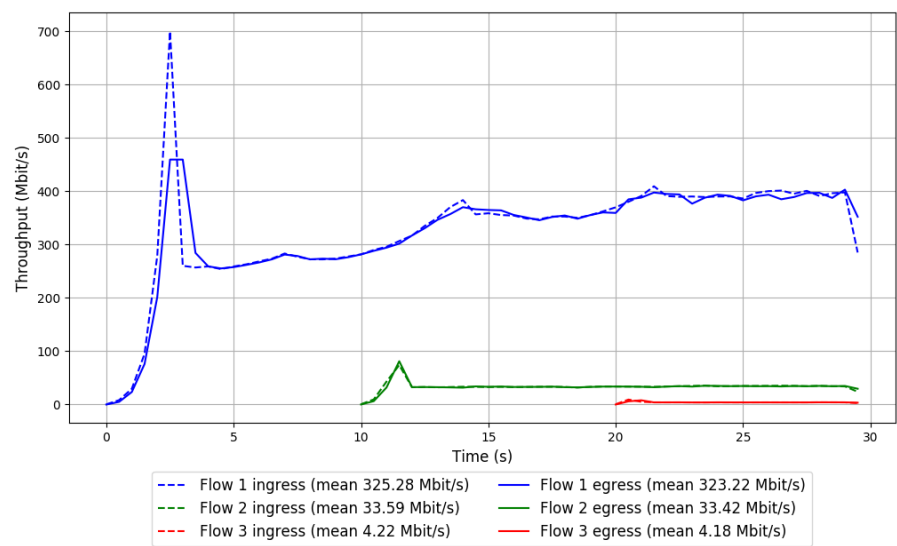
-- Flow 3:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 187.281 ms

Loss rate: 0.90%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-17 11:24:09

End at: 2018-01-17 11:24:39

Below is generated by plot.py at 2018-01-17 14:22:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 236.31 Mbit/s

95th percentile per-packet one-way delay: 179.116 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 34.43 Mbit/s

95th percentile per-packet one-way delay: 165.739 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 301.95 Mbit/s

95th percentile per-packet one-way delay: 180.816 ms

Loss rate: 0.77%

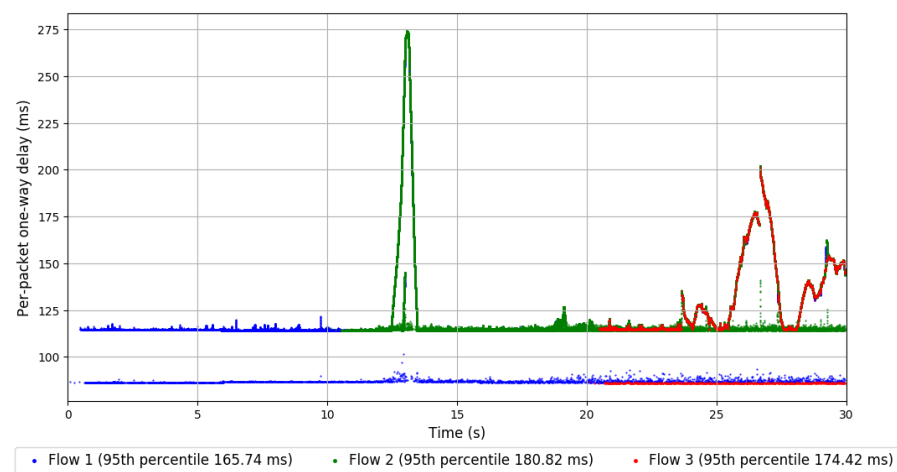
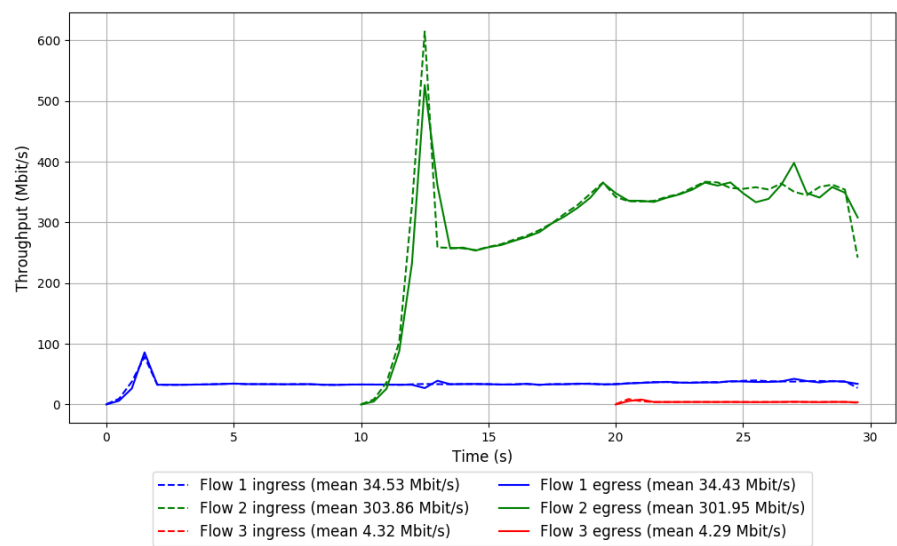
-- Flow 3:

Average throughput: 4.29 Mbit/s

95th percentile per-packet one-way delay: 174.421 ms

Loss rate: 0.57%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-17 11:39:49

End at: 2018-01-17 11:40:19

Below is generated by plot.py at 2018-01-17 14:24:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 282.79 Mbit/s

95th percentile per-packet one-way delay: 131.959 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 277.51 Mbit/s

95th percentile per-packet one-way delay: 132.989 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 5.76 Mbit/s

95th percentile per-packet one-way delay: 115.622 ms

Loss rate: 0.19%

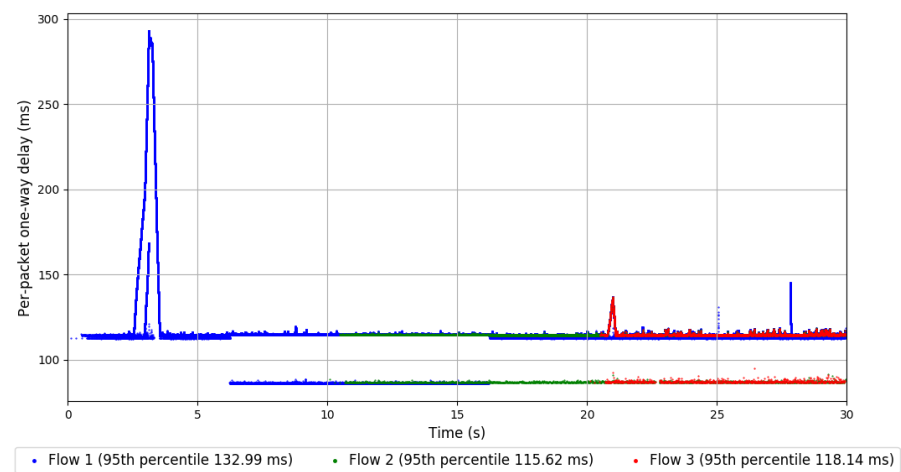
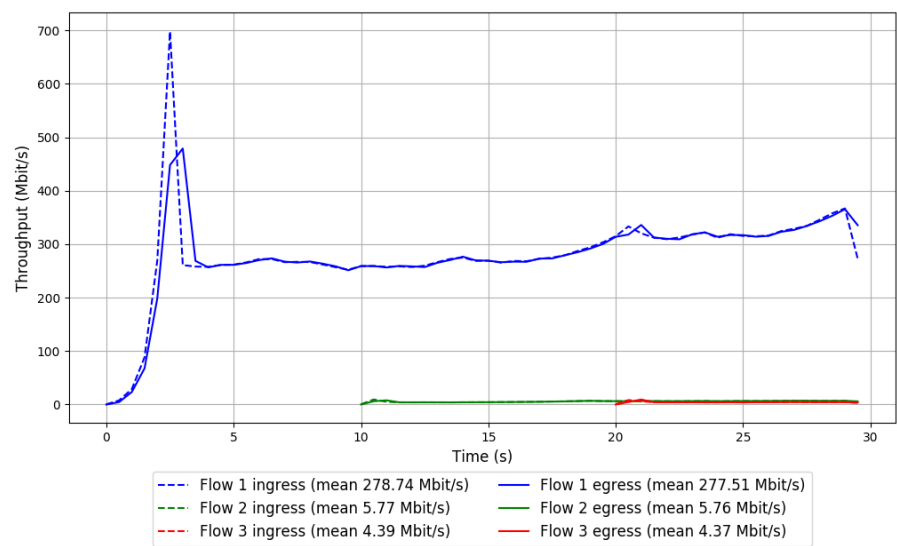
-- Flow 3:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 118.138 ms

Loss rate: 0.33%

Run 9: Report of PCC — Data Link

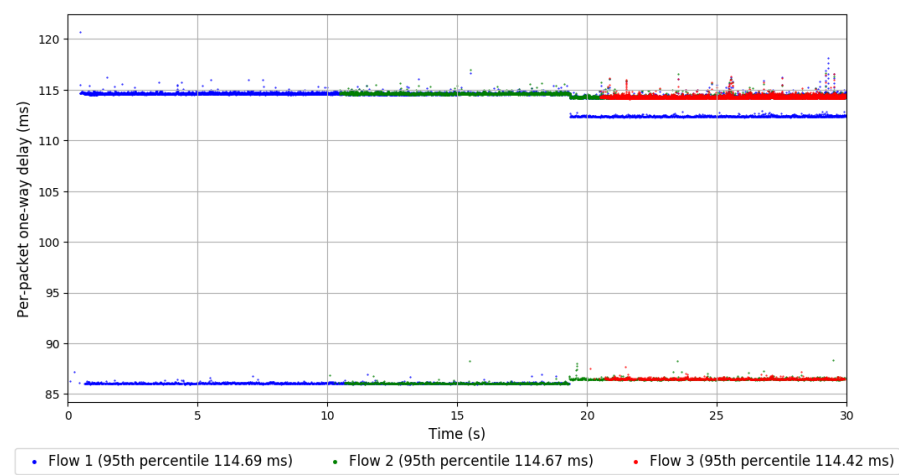
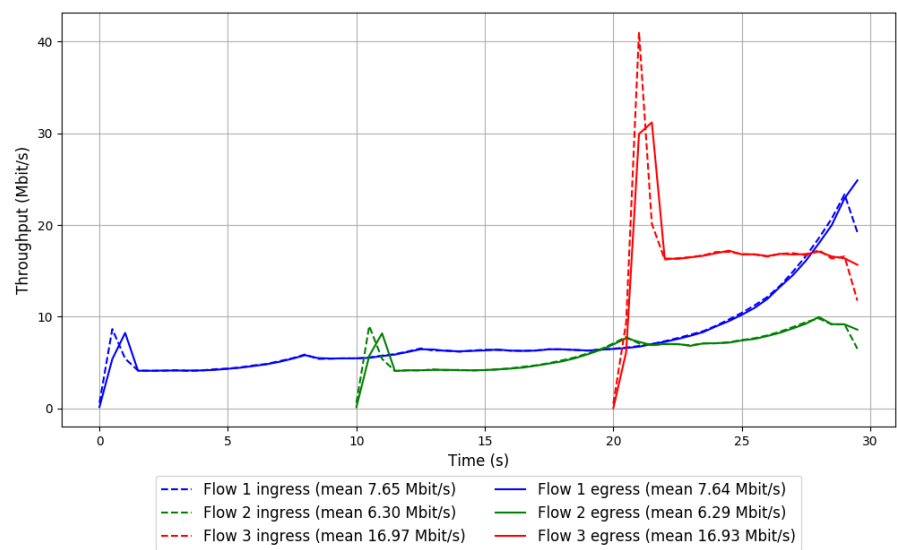


```
Run 10: Statistics of PCC

Start at: 2018-01-17 11:56:55
End at: 2018-01-17 11:57:25

# Below is generated by plot.py at 2018-01-17 14:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.41 Mbit/s
95th percentile per-packet one-way delay: 114.669 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 114.695 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.29 Mbit/s
95th percentile per-packet one-way delay: 114.671 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.93 Mbit/s
95th percentile per-packet one-way delay: 114.417 ms
Loss rate: 0.00%
```

Run 10: Report of PCC — Data Link

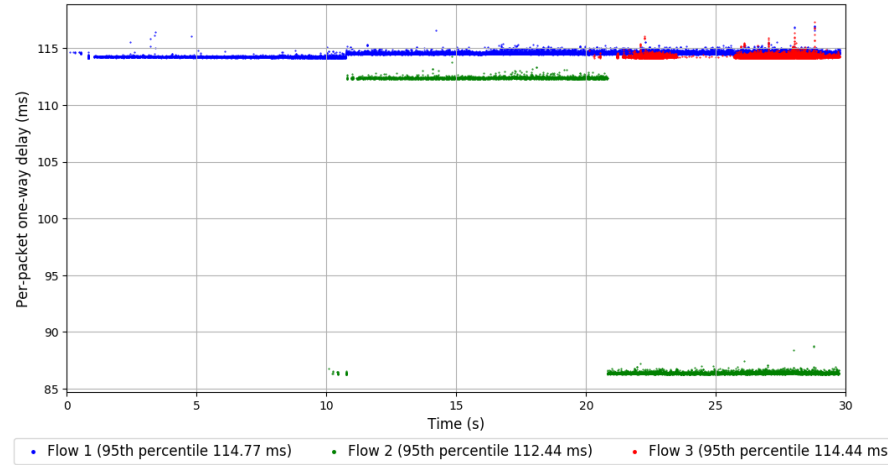
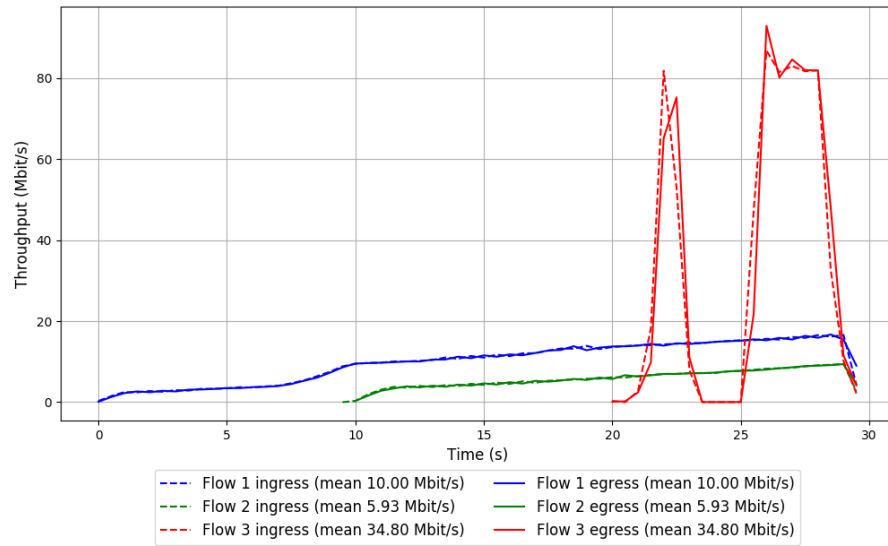


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-17 09:22:44
End at: 2018-01-17 09:23:14

# Below is generated by plot.py at 2018-01-17 14:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 25.25 Mbit/s
95th percentile per-packet one-way delay: 114.670 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.00 Mbit/s
95th percentile per-packet one-way delay: 114.768 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.93 Mbit/s
95th percentile per-packet one-way delay: 112.443 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.80 Mbit/s
95th percentile per-packet one-way delay: 114.438 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-17 09:39:56

End at: 2018-01-17 09:40:26

Below is generated by plot.py at 2018-01-17 14:24:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.85 Mbit/s

95th percentile per-packet one-way delay: 114.786 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.07 Mbit/s

95th percentile per-packet one-way delay: 112.651 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.51 Mbit/s

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

Loss rate: 0.00%

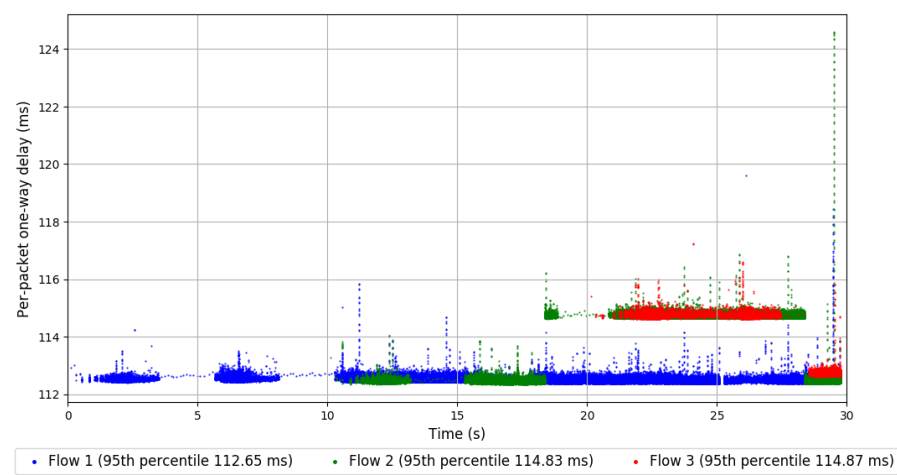
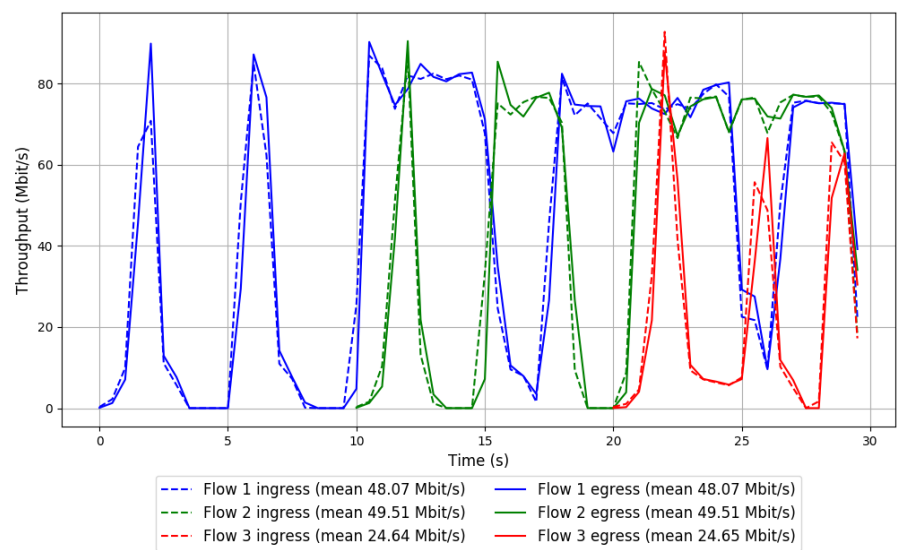
-- Flow 3:

Average throughput: 24.65 Mbit/s

95th percentile per-packet one-way delay: 114.871 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-17 09:57:21

End at: 2018-01-17 09:57:51

Below is generated by plot.py at 2018-01-17 14:24:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.29 Mbit/s

95th percentile per-packet one-way delay: 114.633 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 43.45 Mbit/s

95th percentile per-packet one-way delay: 114.648 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 31.57 Mbit/s

95th percentile per-packet one-way delay: 86.516 ms

Loss rate: 0.00%

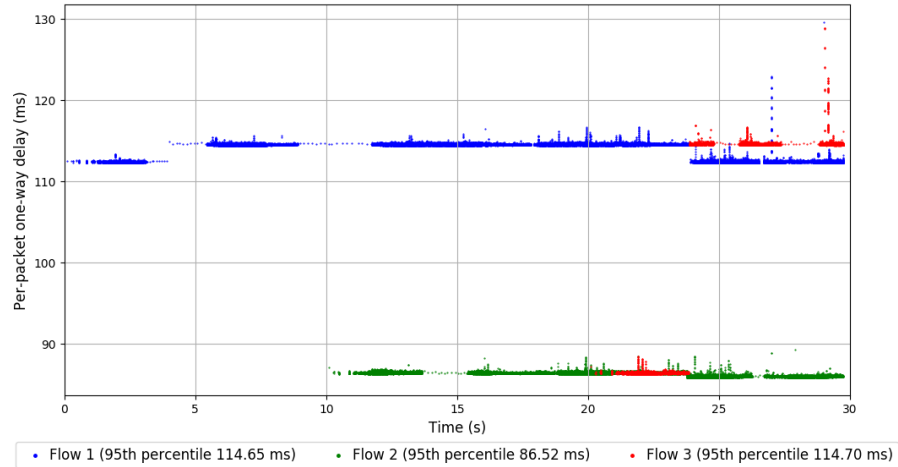
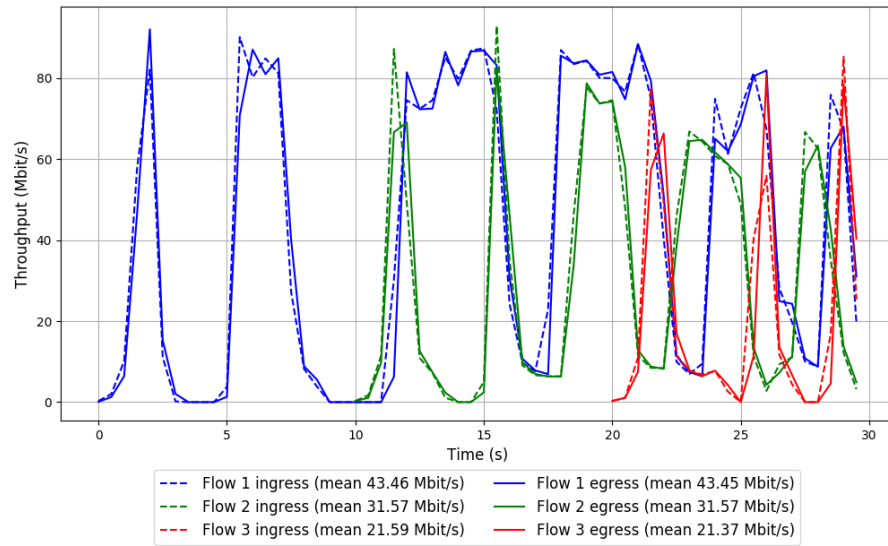
-- Flow 3:

Average throughput: 21.37 Mbit/s

95th percentile per-packet one-way delay: 114.698 ms

Loss rate: 0.97%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-17 10:14:09

End at: 2018-01-17 10:14:39

Below is generated by plot.py at 2018-01-17 14:24:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.56 Mbit/s

95th percentile per-packet one-way delay: 114.243 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.25 Mbit/s

95th percentile per-packet one-way delay: 114.281 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.15 Mbit/s

95th percentile per-packet one-way delay: 112.521 ms

Loss rate: 0.00%

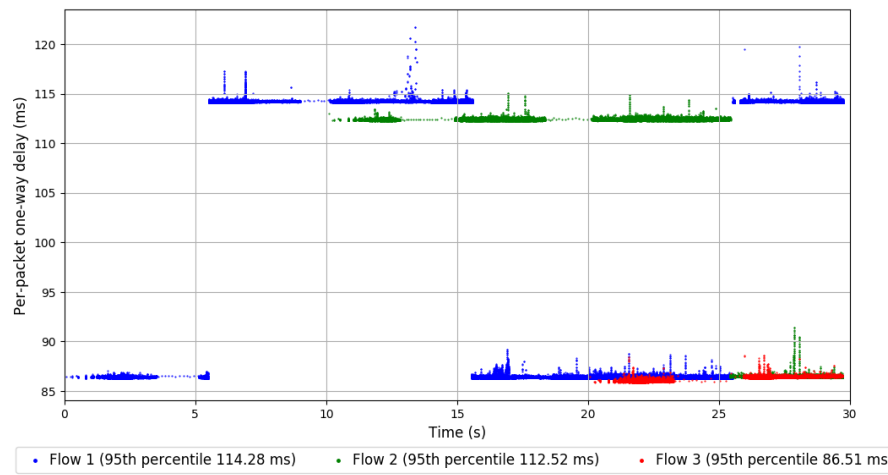
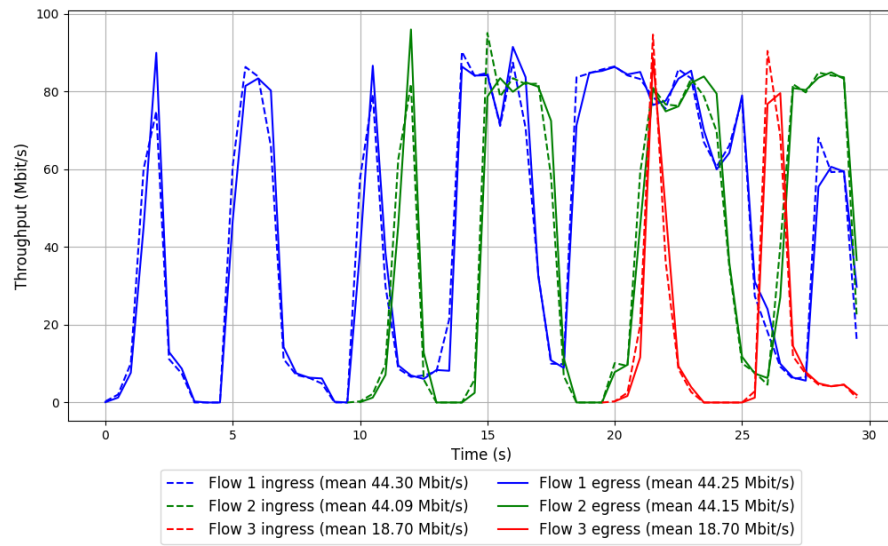
-- Flow 3:

Average throughput: 18.70 Mbit/s

95th percentile per-packet one-way delay: 86.506 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-17 10:31:43

End at: 2018-01-17 10:32:13

Below is generated by plot.py at 2018-01-17 14:24:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.96 Mbit/s

95th percentile per-packet one-way delay: 114.503 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 66.54 Mbit/s

95th percentile per-packet one-way delay: 112.846 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 34.03 Mbit/s

95th percentile per-packet one-way delay: 86.559 ms

Loss rate: 0.00%

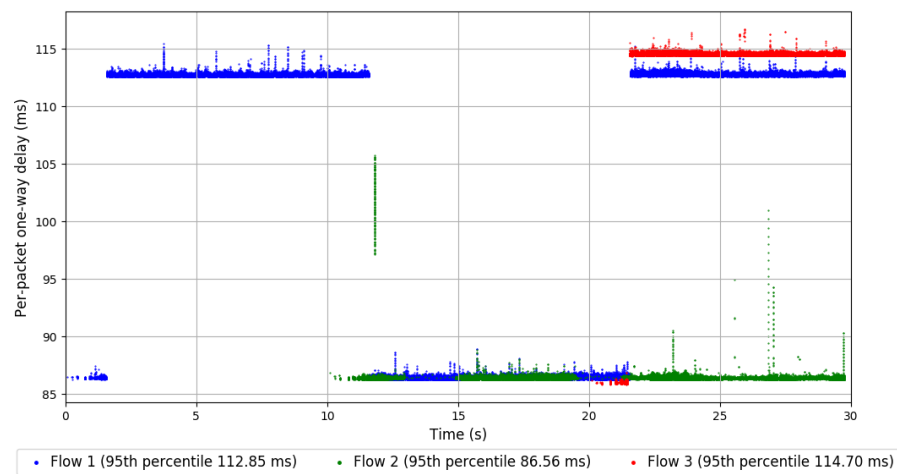
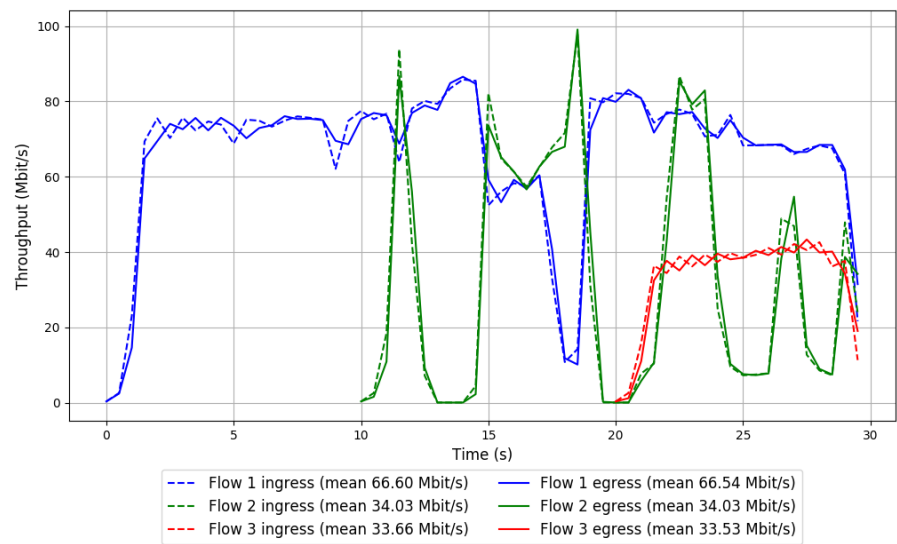
-- Flow 3:

Average throughput: 33.53 Mbit/s

95th percentile per-packet one-way delay: 114.696 ms

Loss rate: 0.38%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-17 10:48:12

End at: 2018-01-17 10:48:42

Below is generated by plot.py at 2018-01-17 14:24:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.45 Mbit/s

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

Loss rate: 0.14%

-- Flow 1:

Average throughput: 49.85 Mbit/s

95th percentile per-packet one-way delay: 114.632 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 49.93 Mbit/s

95th percentile per-packet one-way delay: 114.317 ms

Loss rate: 0.18%

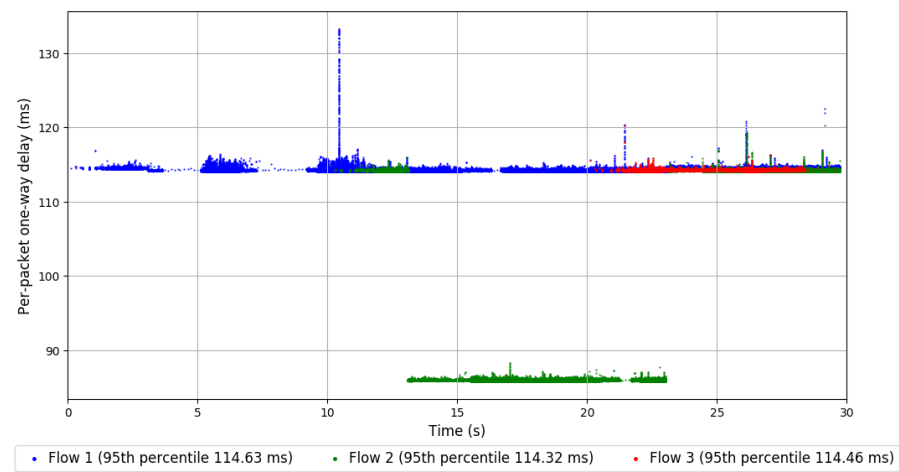
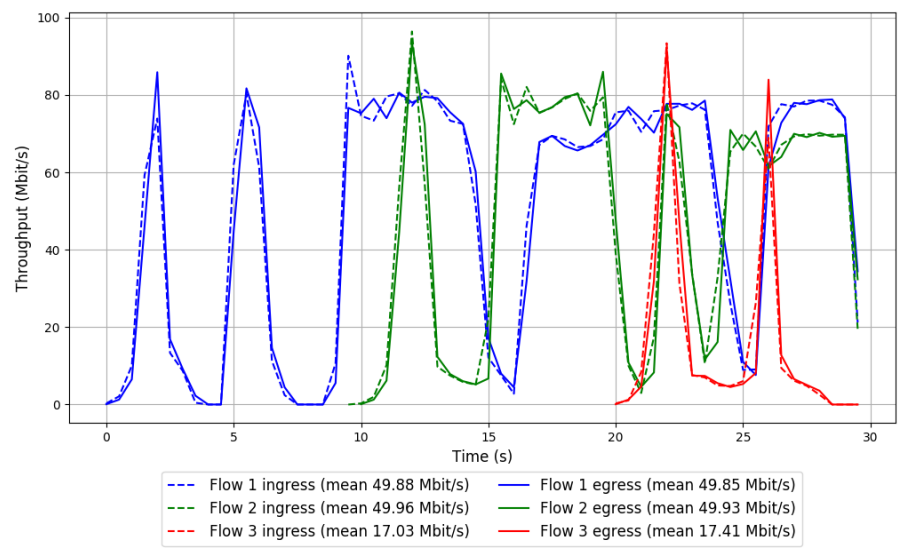
-- Flow 3:

Average throughput: 17.41 Mbit/s

95th percentile per-packet one-way delay: 114.464 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-17 11:05:12

End at: 2018-01-17 11:05:42

Below is generated by plot.py at 2018-01-17 14:24:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.84 Mbit/s

95th percentile per-packet one-way delay: 114.720 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 50.93 Mbit/s

95th percentile per-packet one-way delay: 114.709 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 48.98 Mbit/s

95th percentile per-packet one-way delay: 114.695 ms

Loss rate: 0.17%

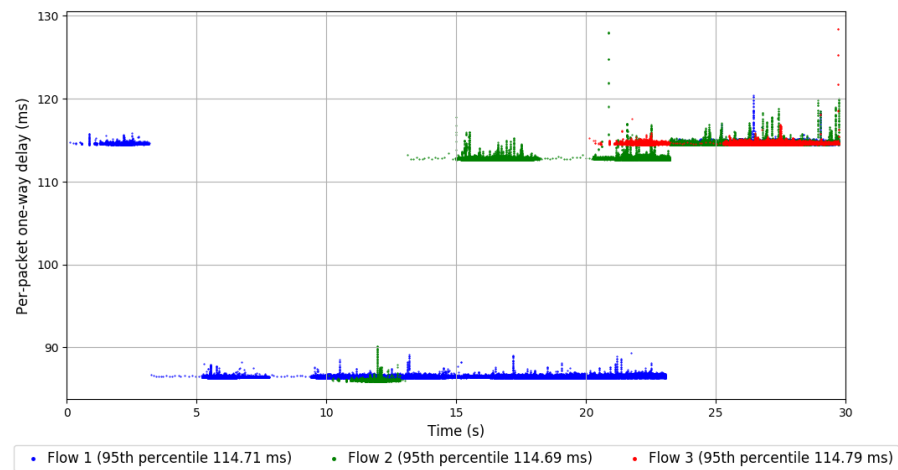
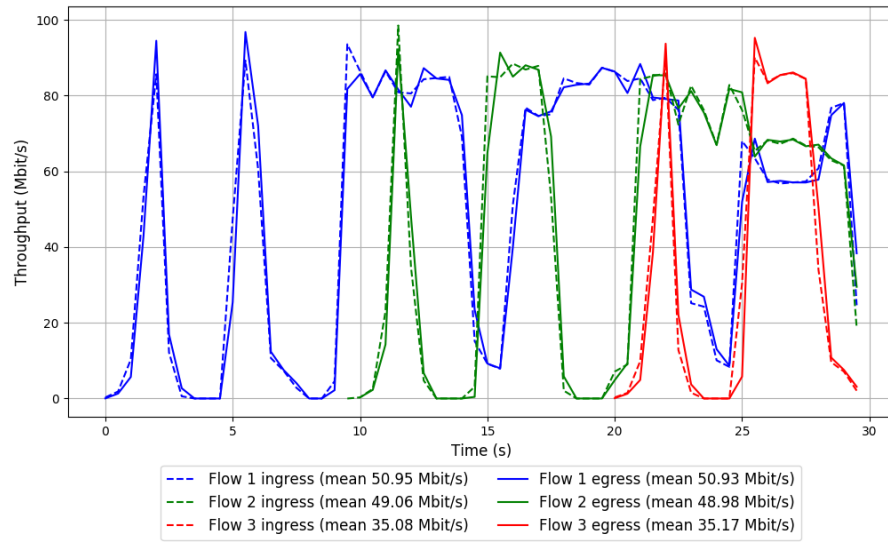
-- Flow 3:

Average throughput: 35.17 Mbit/s

95th percentile per-packet one-way delay: 114.792 ms

Loss rate: 0.05%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-17 11:21:31

End at: 2018-01-17 11:22:01

Below is generated by plot.py at 2018-01-17 14:24:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.88 Mbit/s

95th percentile per-packet one-way delay: 114.612 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 45.08 Mbit/s

95th percentile per-packet one-way delay: 114.648 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 32.34 Mbit/s

95th percentile per-packet one-way delay: 86.610 ms

Loss rate: 0.00%

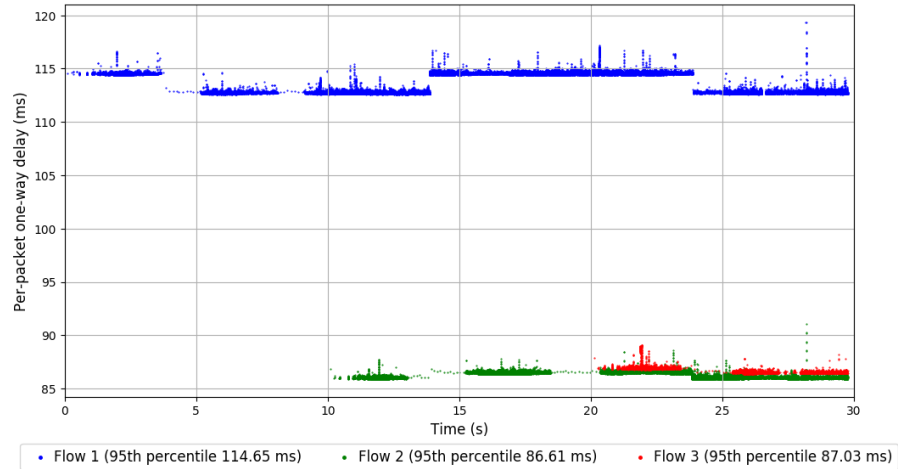
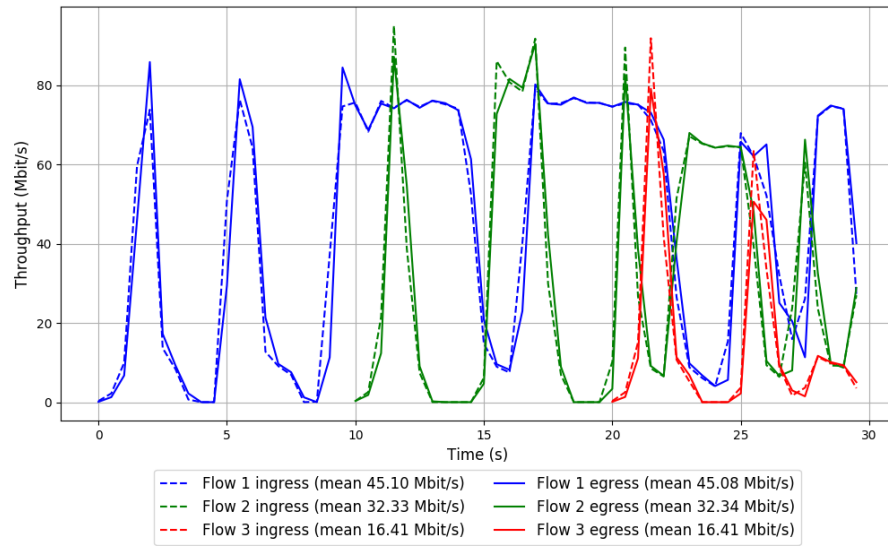
-- Flow 3:

Average throughput: 16.41 Mbit/s

95th percentile per-packet one-way delay: 87.026 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-17 11:37:06

End at: 2018-01-17 11:37:36

Below is generated by plot.py at 2018-01-17 14:25:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.86 Mbit/s

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

Loss rate: 0.06%

-- Flow 1:

Average throughput: 56.28 Mbit/s

95th percentile per-packet one-way delay: 86.318 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.35 Mbit/s

95th percentile per-packet one-way delay: 114.455 ms

Loss rate: 0.25%

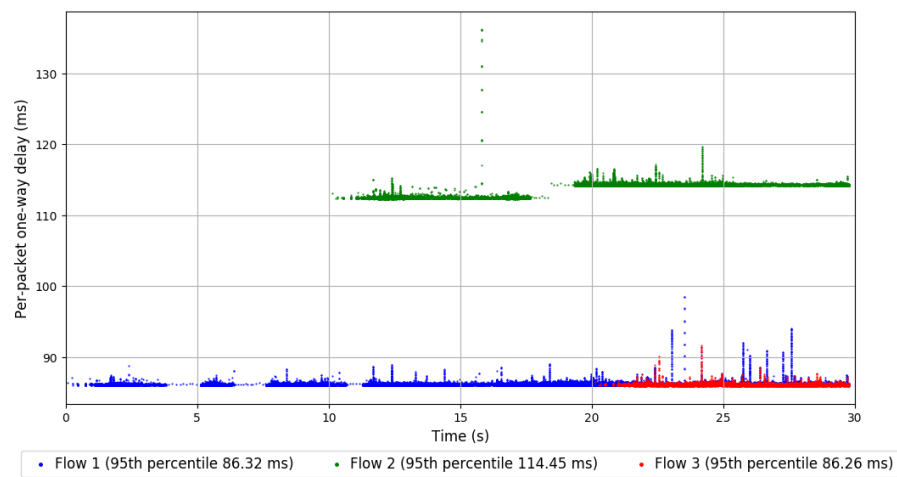
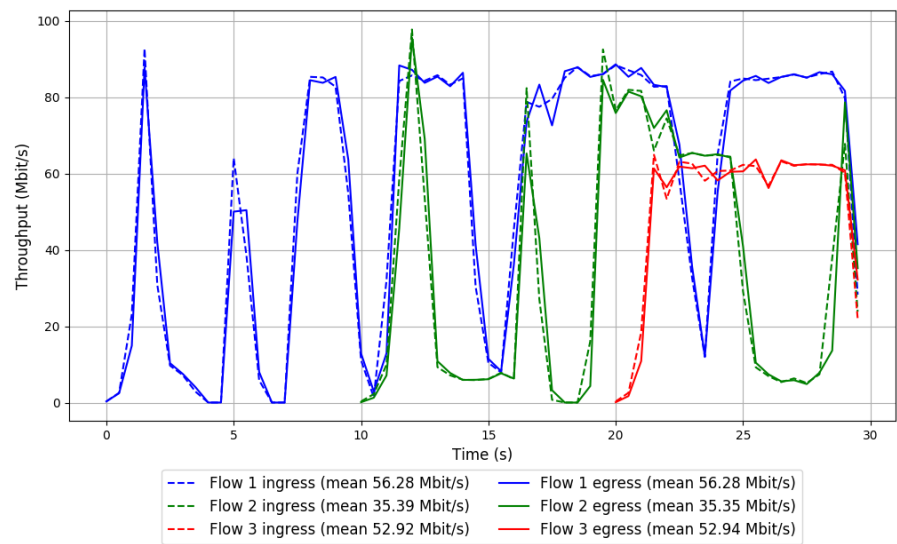
-- Flow 3:

Average throughput: 52.94 Mbit/s

95th percentile per-packet one-way delay: 86.264 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-01-17 11:54:10

End at: 2018-01-17 11:54:40

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.56 Mbit/s

95th percentile per-packet one-way delay: 112.656 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.14 Mbit/s

95th percentile per-packet one-way delay: 112.609 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.42 Mbit/s

95th percentile per-packet one-way delay: 114.309 ms

Loss rate: 0.00%

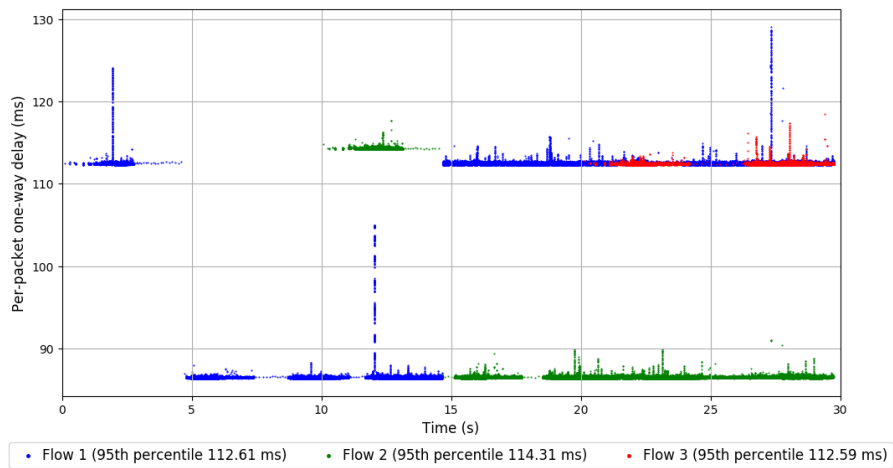
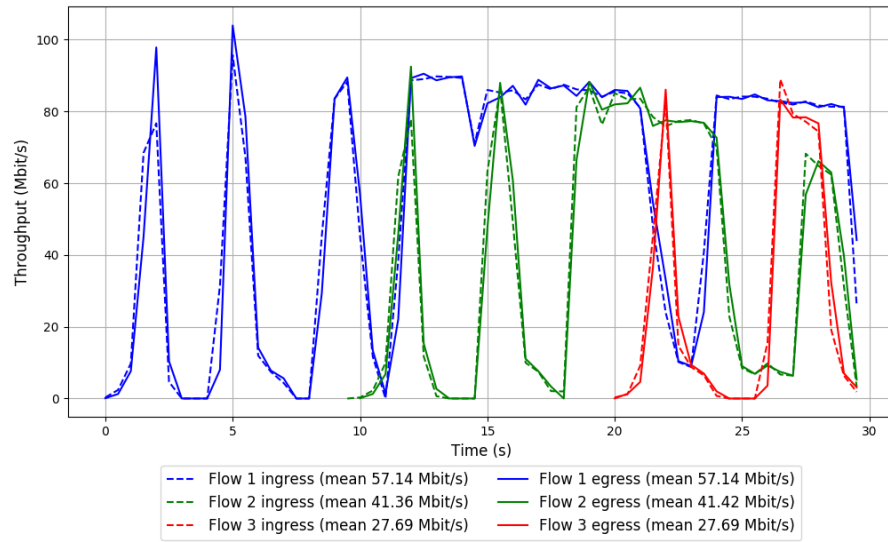
-- Flow 3:

Average throughput: 27.69 Mbit/s

95th percentile per-packet one-way delay: 112.595 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

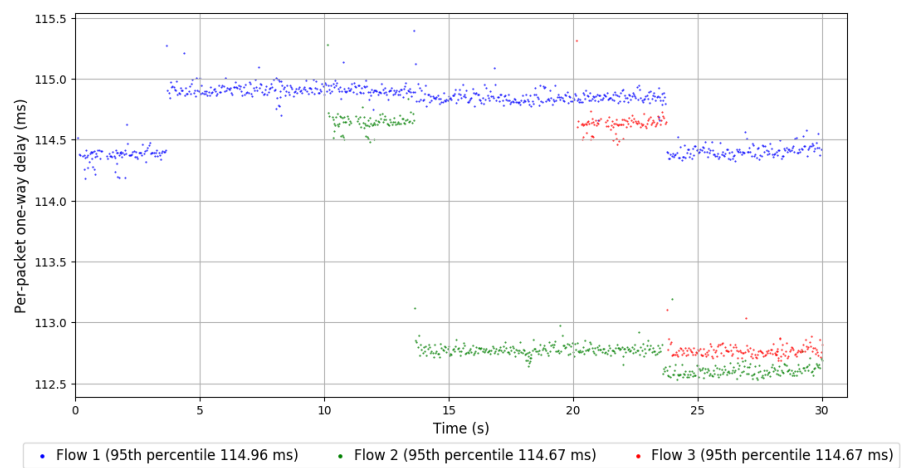
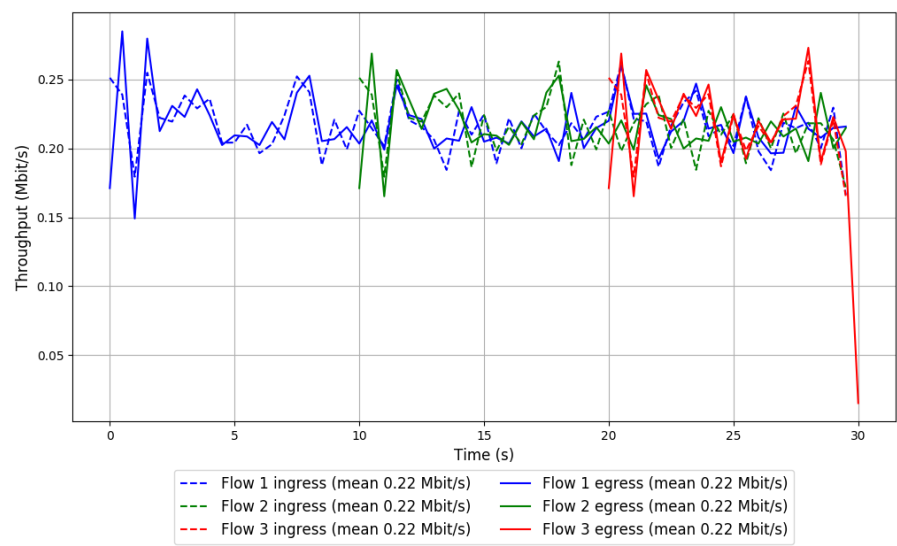


```
Run 1: Statistics of SCReAM

Start at: 2018-01-17 09:28:11
End at: 2018-01-17 09:28:41

# Below is generated by plot.py at 2018-01-17 14:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 114.934 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.958 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.672 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.671 ms
Loss rate: 0.00%
```

Run 1: Report of SCRaM — Data Link

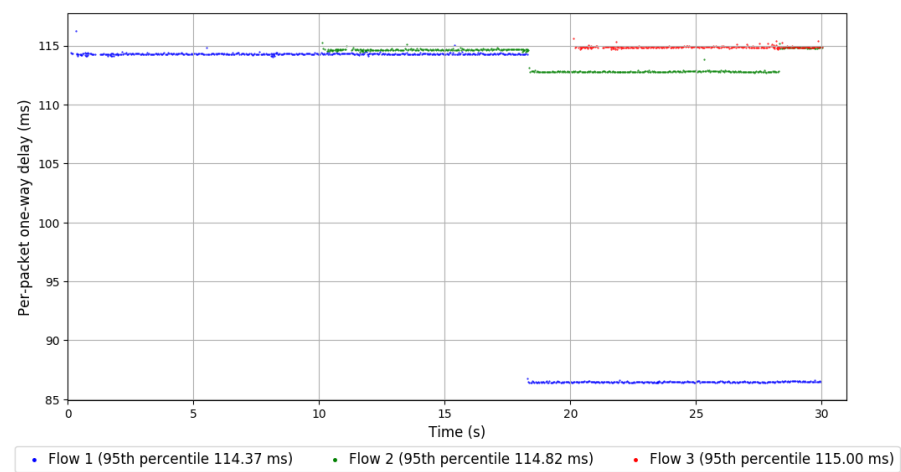
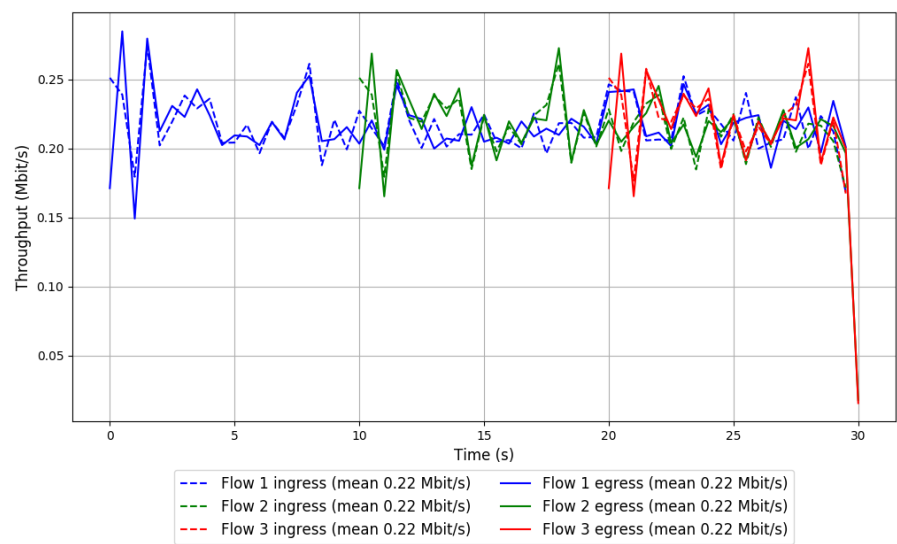


```
Run 2: Statistics of SReAM

Start at: 2018-01-17 09:45:37
End at: 2018-01-17 09:46:07

# Below is generated by plot.py at 2018-01-17 14:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 114.897 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.367 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.824 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 115.000 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

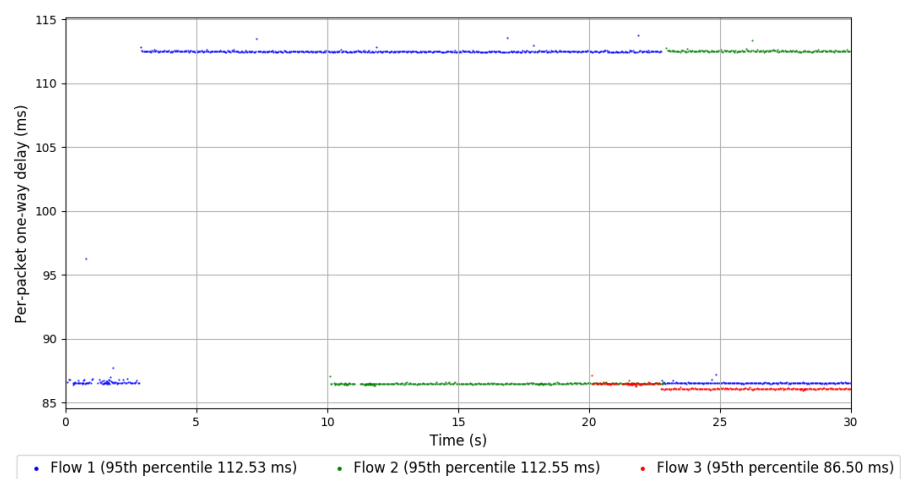
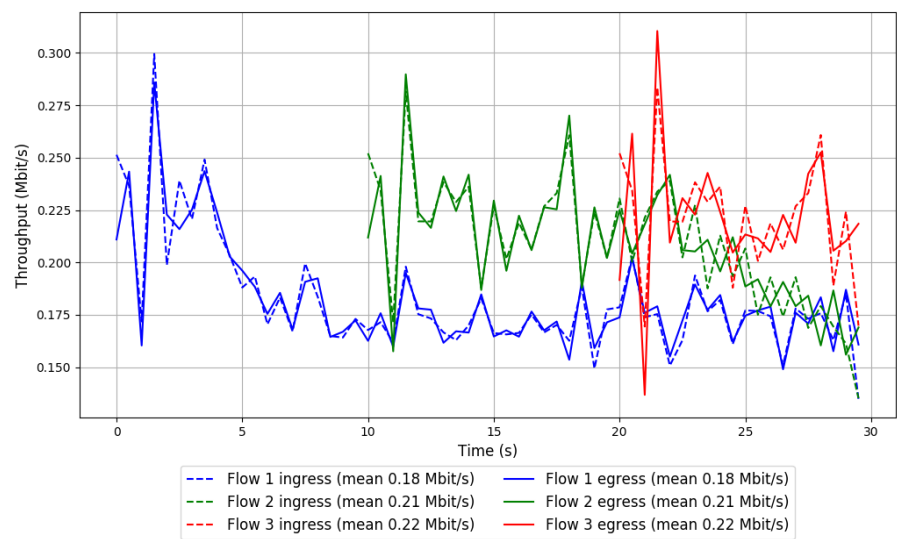


```
Run 3: Statistics of SCReAM

Start at: 2018-01-17 10:02:42
End at: 2018-01-17 10:03:12

# Below is generated by plot.py at 2018-01-17 14:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 112.538 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 112.533 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.546 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.503 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

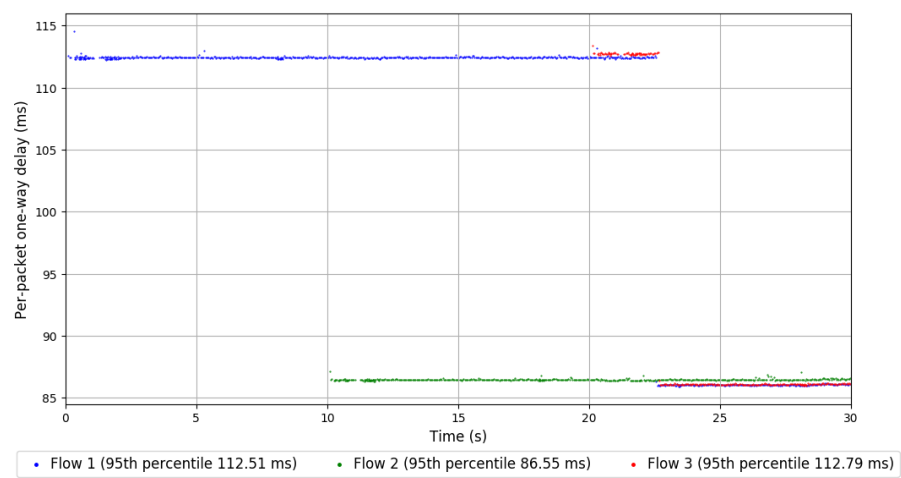
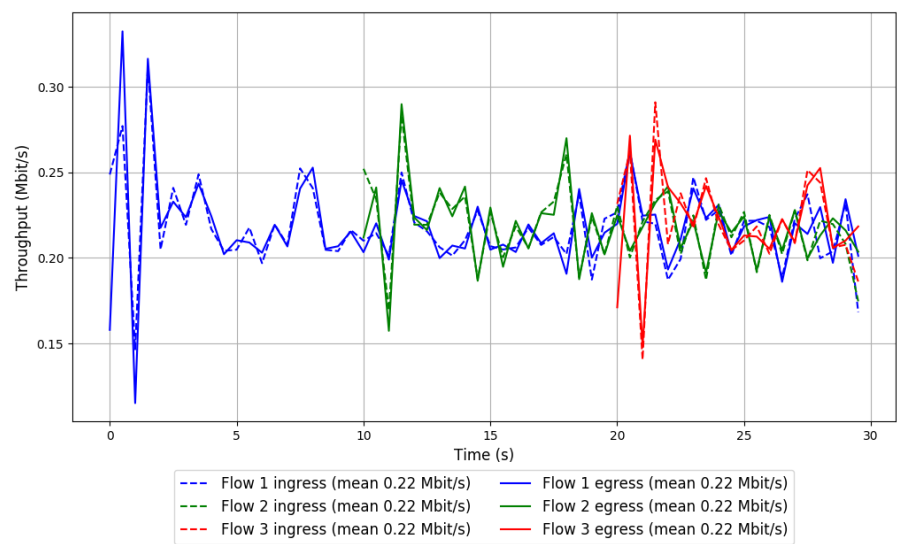


```
Run 4: Statistics of SCReAM

Start at: 2018-01-17 10:19:32
End at: 2018-01-17 10:20:02

# Below is generated by plot.py at 2018-01-17 14:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 112.644 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.511 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.546 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.788 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-01-17 10:36:45

End at: 2018-01-17 10:37:15

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.677 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.197 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.713 ms

Loss rate: 0.20%

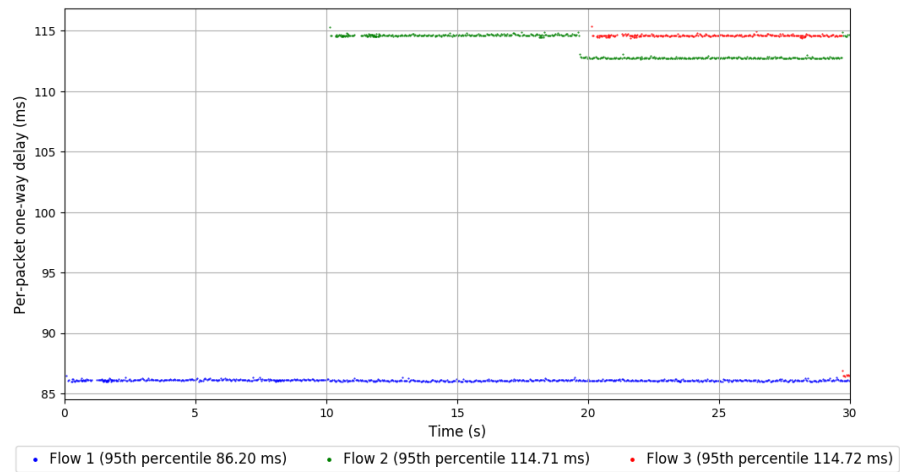
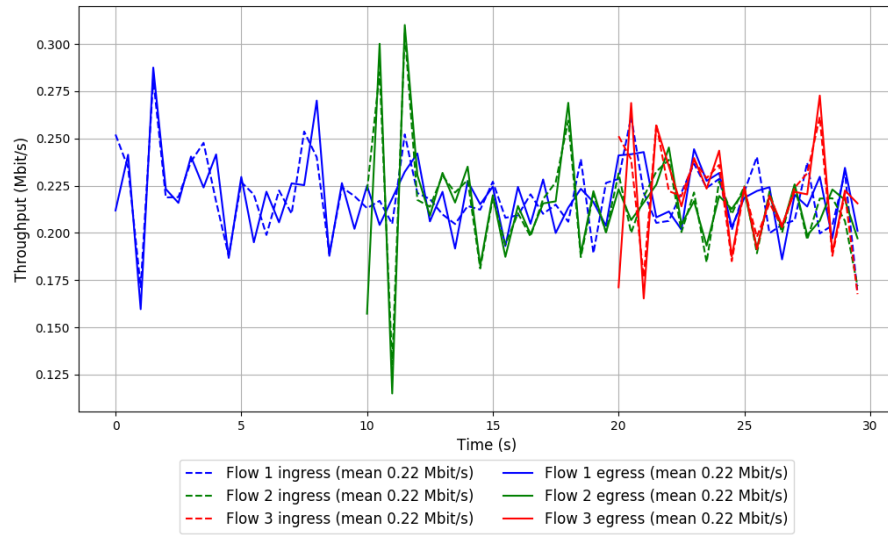
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.716 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-17 10:53:44

End at: 2018-01-17 10:54:14

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.388 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.406 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.648 ms

Loss rate: 0.00%

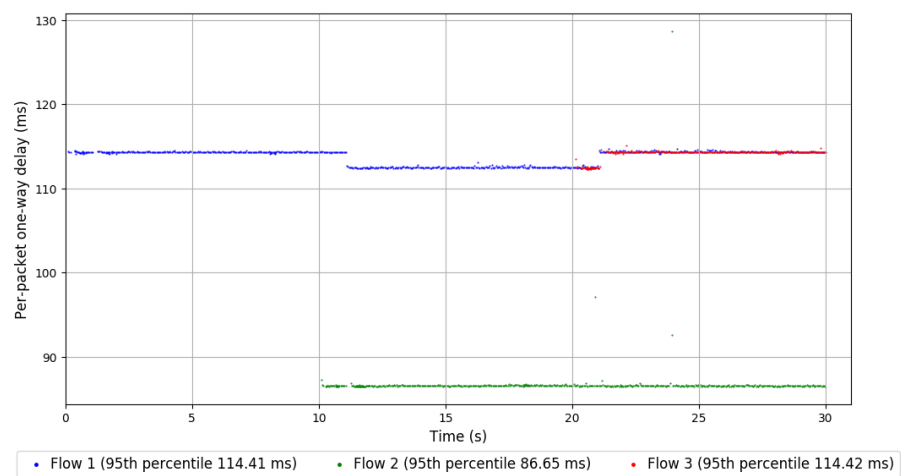
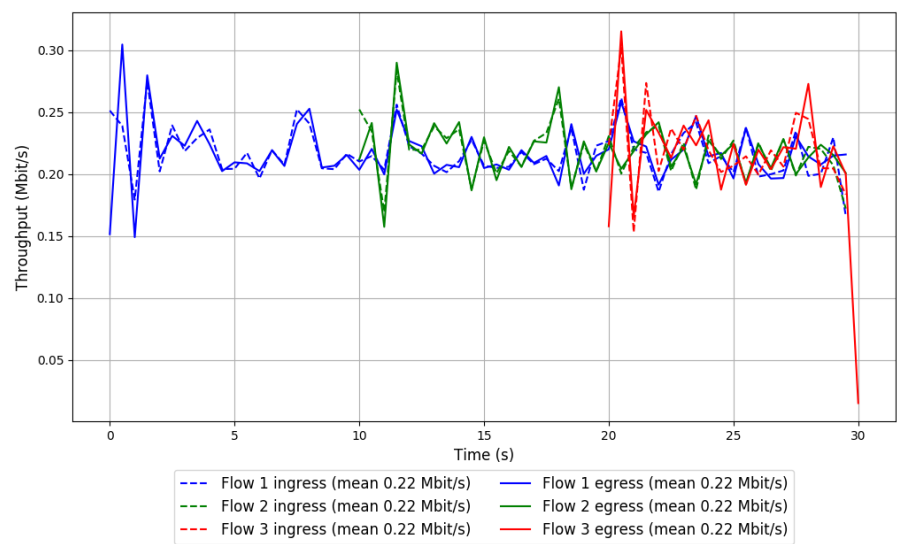
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.422 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

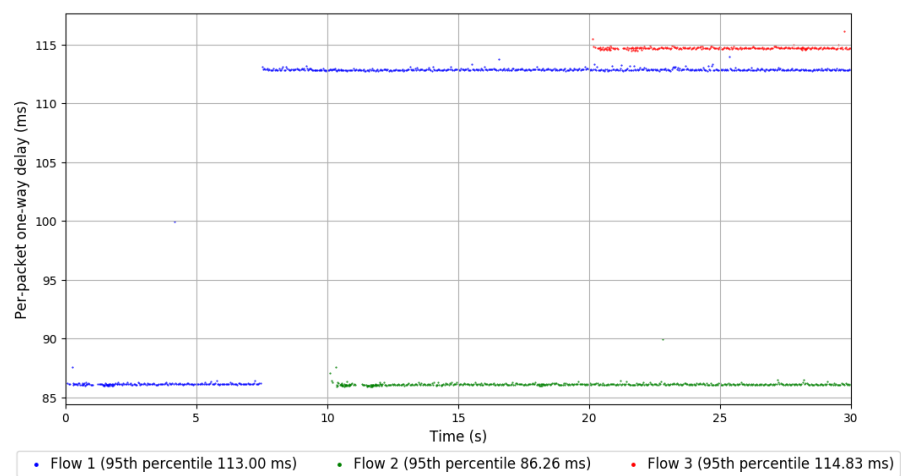
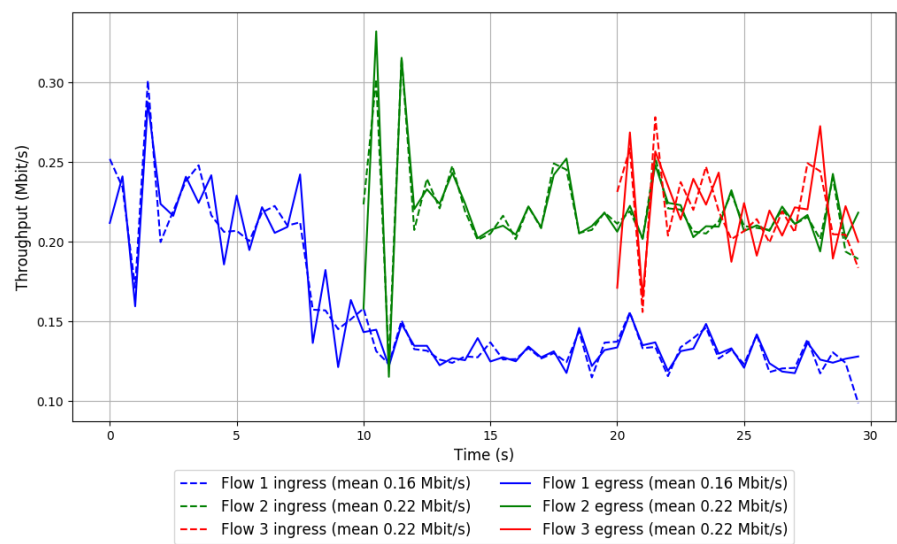


```
Run 7: Statistics of SReAM

Start at: 2018-01-17 11:10:27
End at: 2018-01-17 11:10:57

# Below is generated by plot.py at 2018-01-17 14:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 114.728 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 112.998 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.263 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.828 ms
Loss rate: 0.35%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-17 11:26:31

End at: 2018-01-17 11:27:01

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 114.755 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.905 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.825 ms

Loss rate: 0.00%

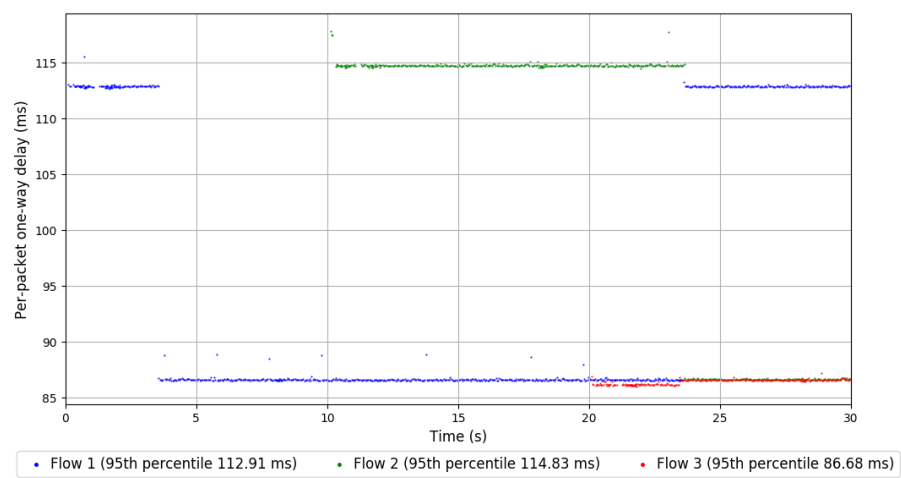
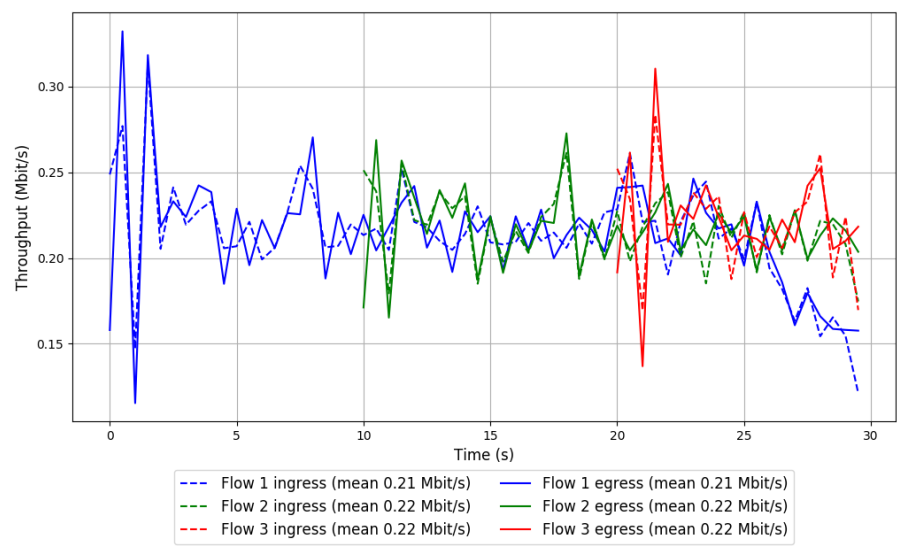
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link

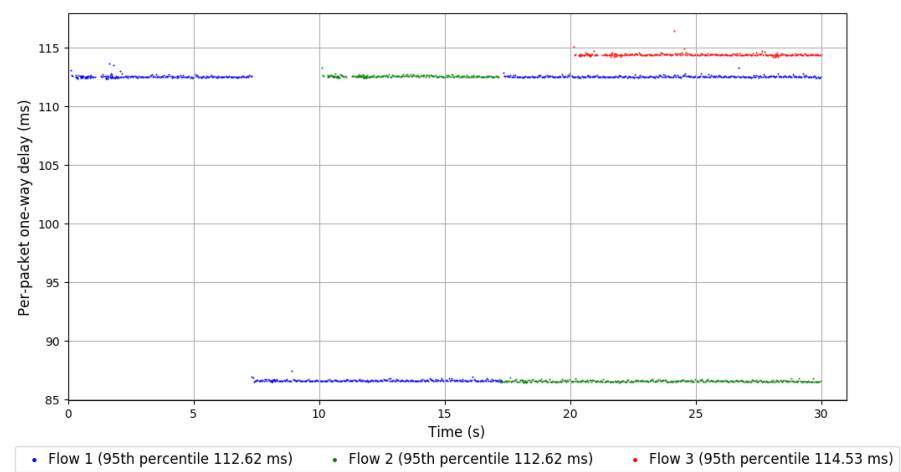
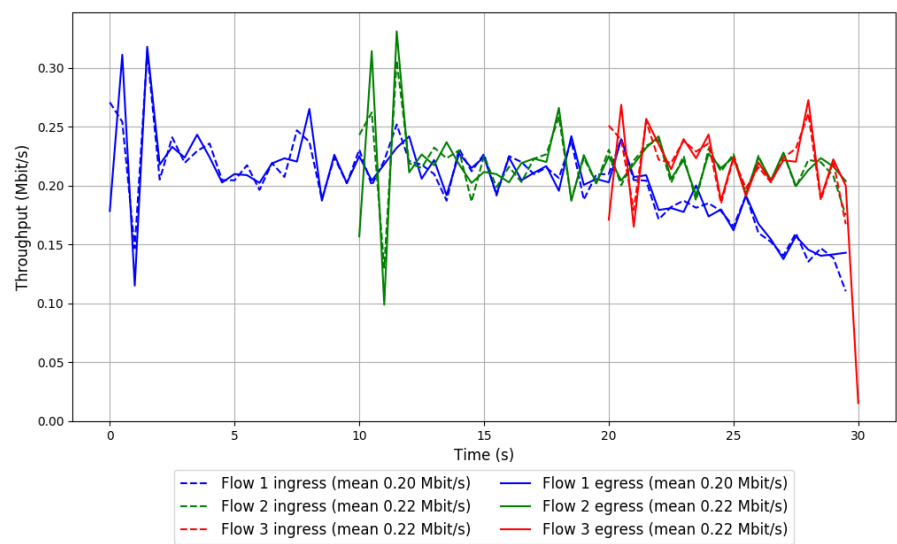


```
Run 9: Statistics of SCReAM

Start at: 2018-01-17 11:42:18
End at: 2018-01-17 11:42:48

# Below is generated by plot.py at 2018-01-17 14:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 114.418 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 112.625 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.619 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.531 ms
Loss rate: 0.00%
```

Run 9: Report of SCRaM — Data Link

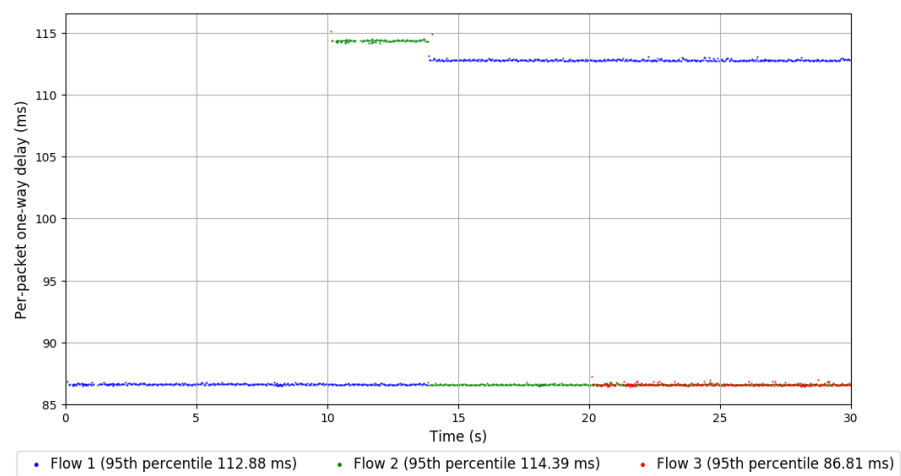
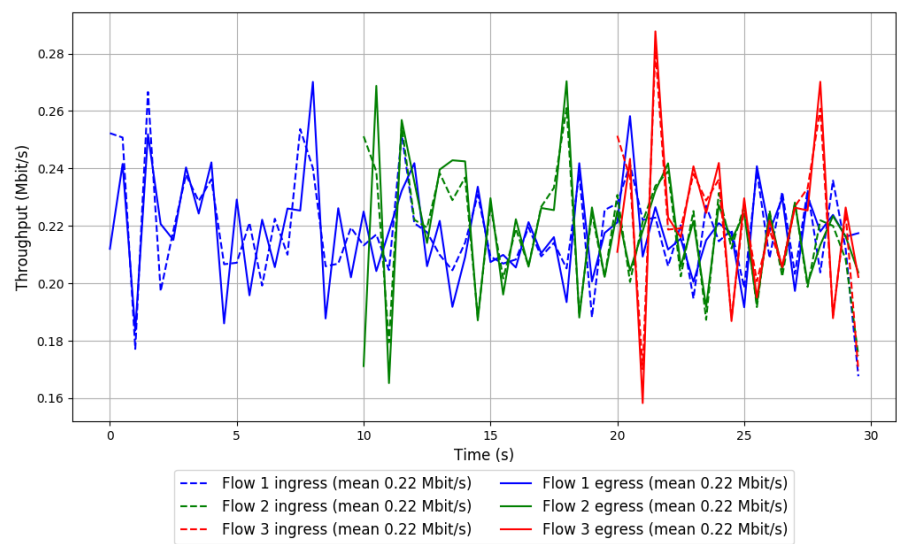


```
Run 10: Statistics of SReAM

Start at: 2018-01-17 11:59:21
End at: 2018-01-17 11:59:51

# Below is generated by plot.py at 2018-01-17 14:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 114.346 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.876 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.393 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.811 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

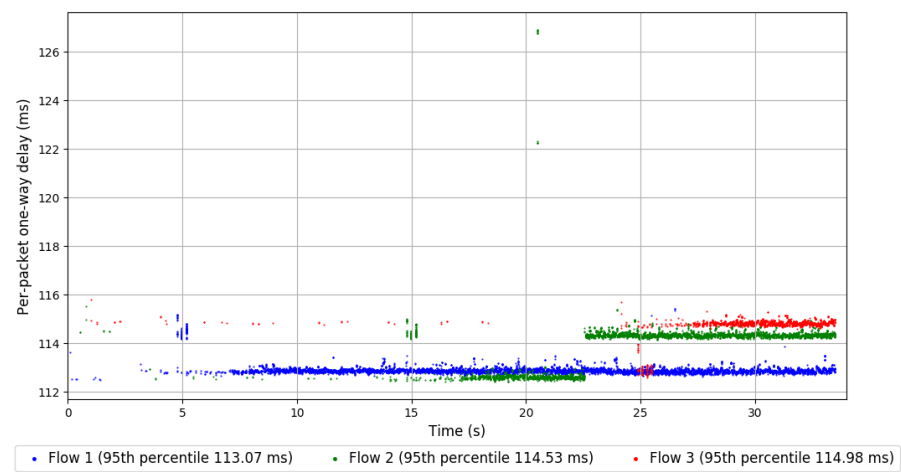
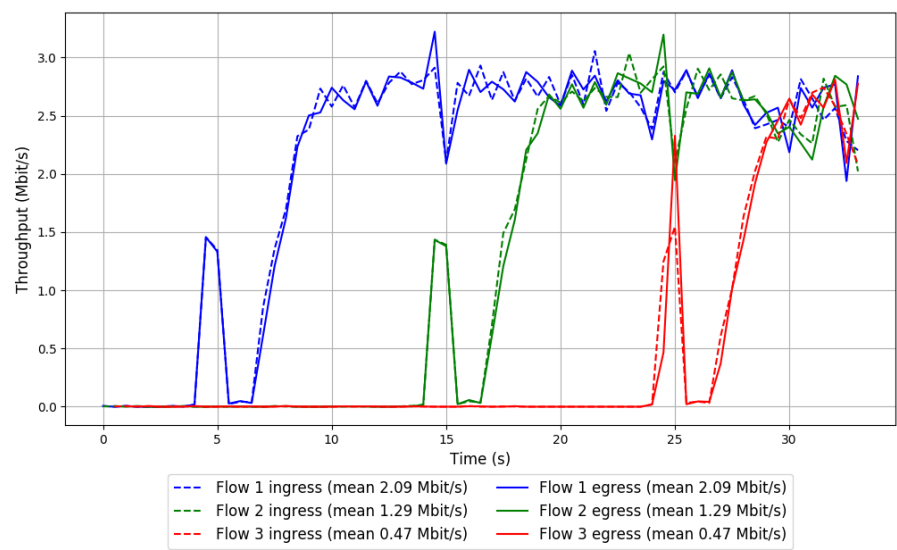


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-17 09:27:26
End at: 2018-01-17 09:27:56

# Below is generated by plot.py at 2018-01-17 14:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 114.844 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 113.074 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 114.535 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 114.976 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-17 09:44:51

End at: 2018-01-17 09:45:21

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.77 Mbit/s

95th percentile per-packet one-way delay: 114.937 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 114.974 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 86.742 ms

Loss rate: 0.00%

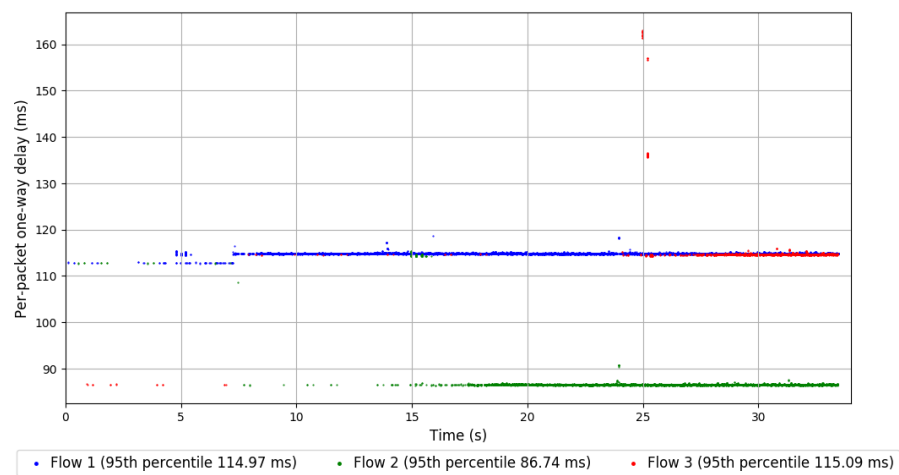
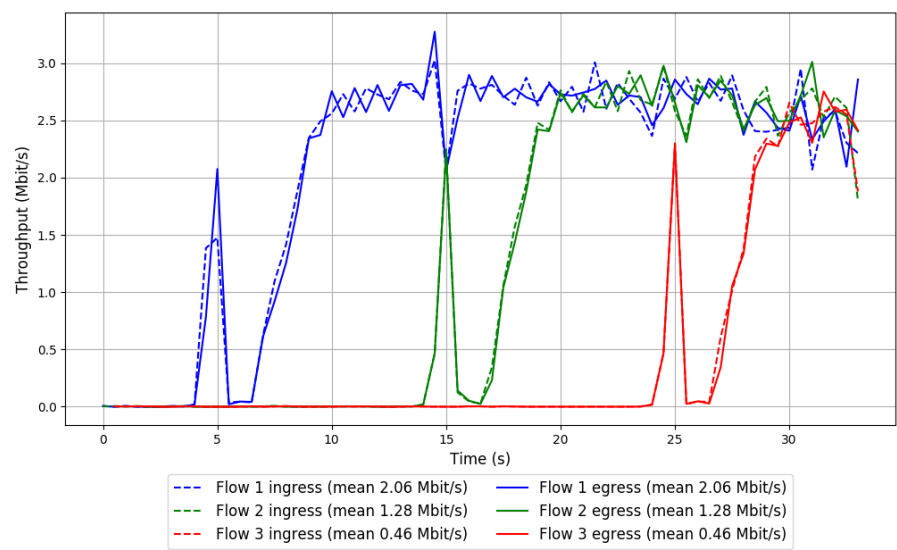
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 115.095 ms

Loss rate: 0.01%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-17 10:01:58

End at: 2018-01-17 10:02:28

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.71 Mbit/s

95th percentile per-packet one-way delay: 114.438 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 114.451 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 112.929 ms

Loss rate: 0.00%

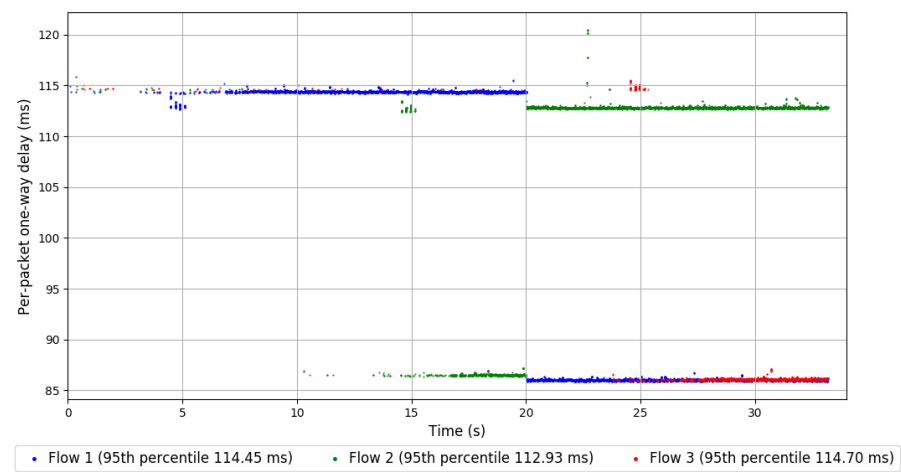
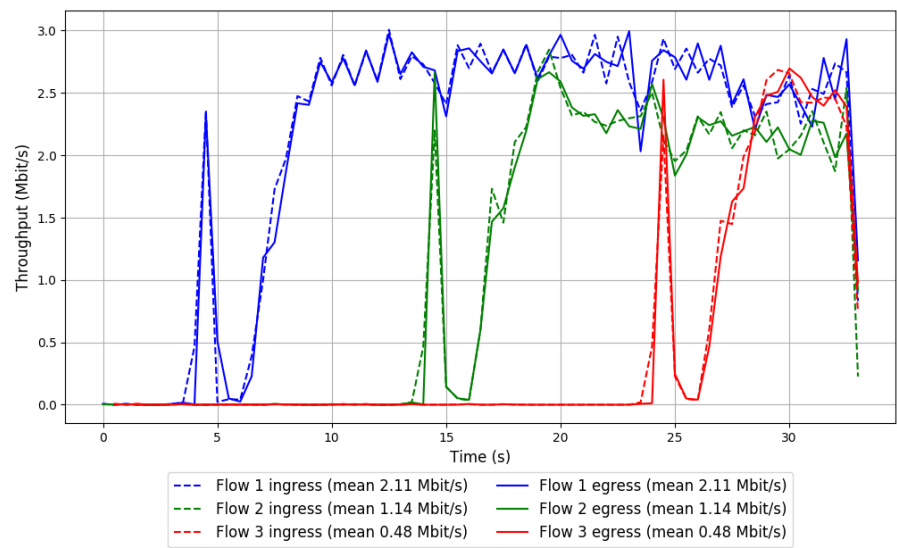
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 114.702 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-17 10:18:47

End at: 2018-01-17 10:19:17

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 114.540 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 114.249 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 114.613 ms

Loss rate: 0.00%

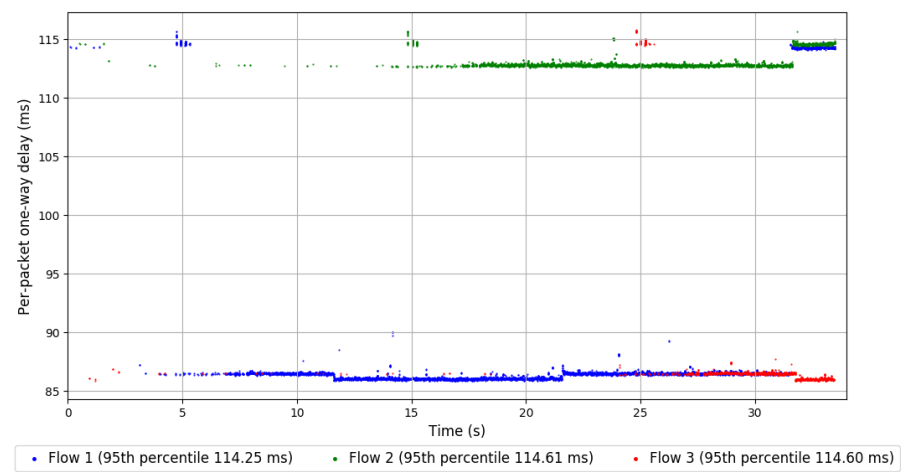
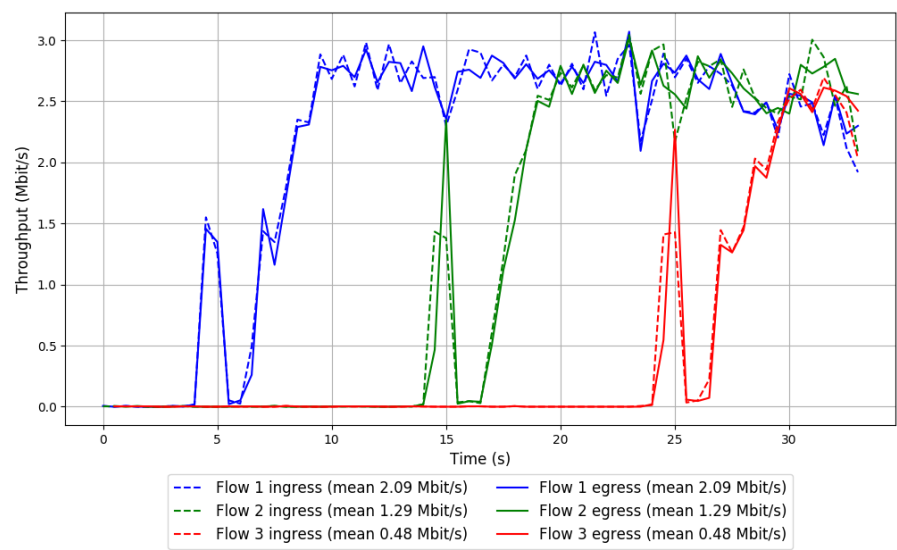
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 114.602 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link

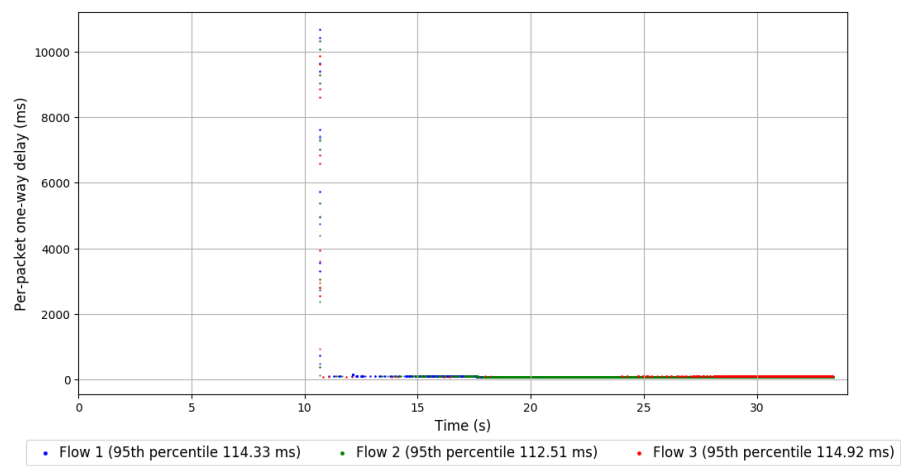
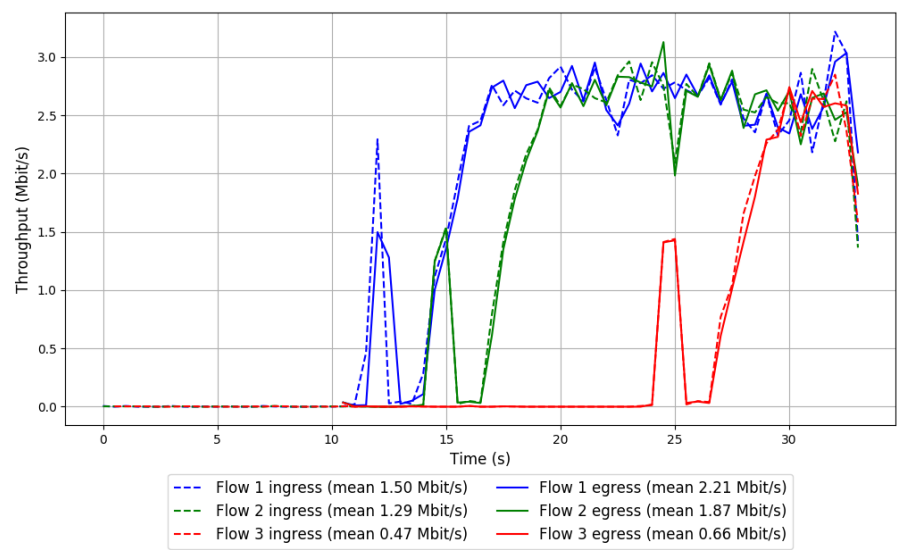


Run 5: Statistics of WebRTC media

Start at: 2018-01-17 10:36:00

End at: 2018-01-17 10:36:30

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-17 10:52:59

End at: 2018-01-17 10:53:29

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.84 Mbit/s

95th percentile per-packet one-way delay: 114.443 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 86.790 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

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

Loss rate: 0.00%

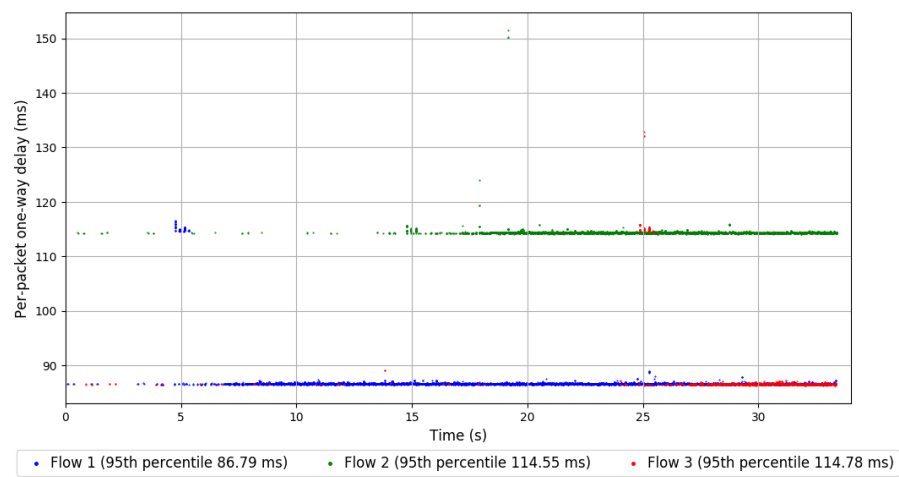
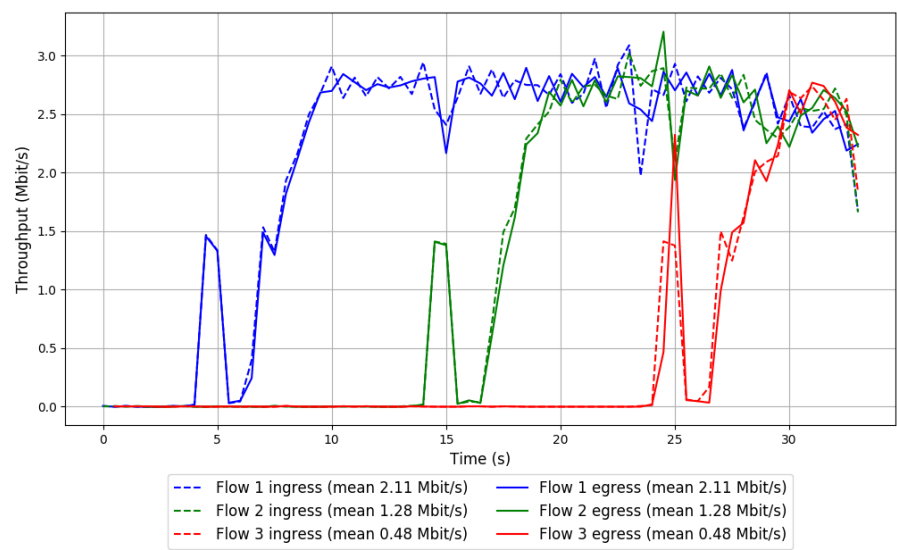
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 114.780 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-17 11:09:42

End at: 2018-01-17 11:10:12

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 114.402 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 114.417 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 112.984 ms

Loss rate: 0.00%

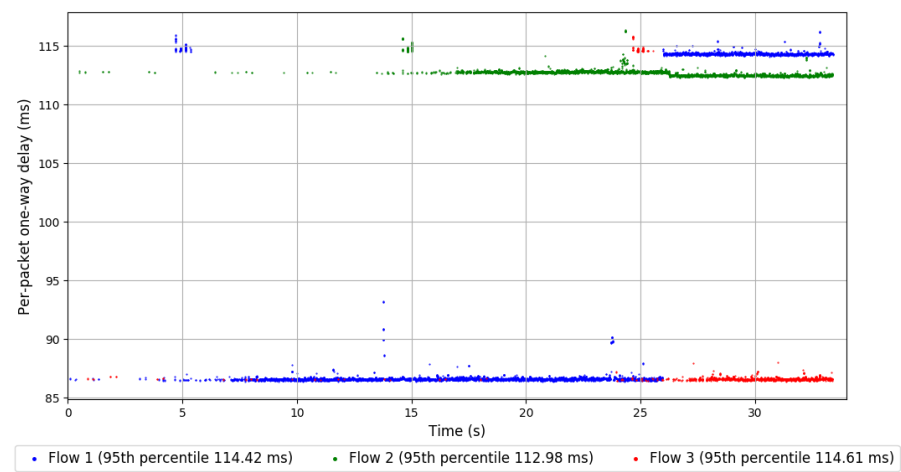
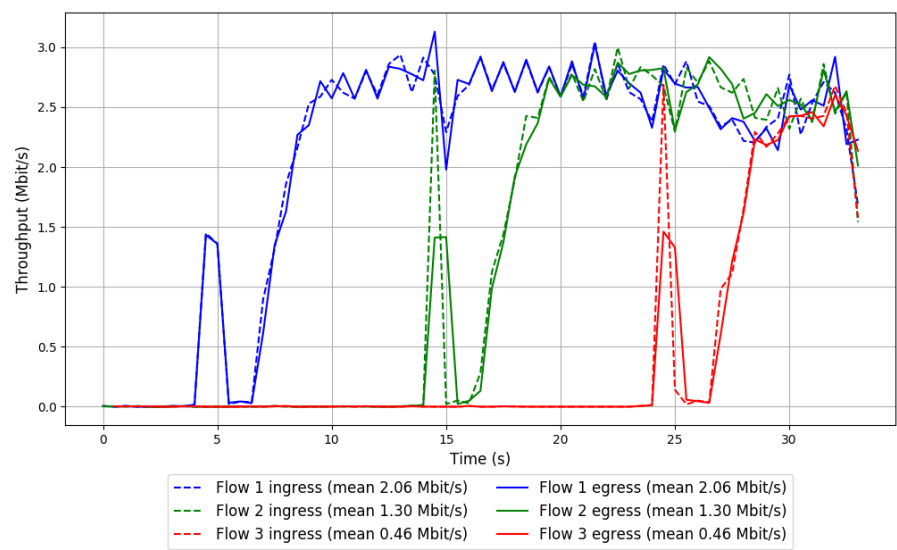
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 114.610 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-17 11:25:47

End at: 2018-01-17 11:26:17

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 87.174 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 86.829 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 87.243 ms

Loss rate: 0.00%

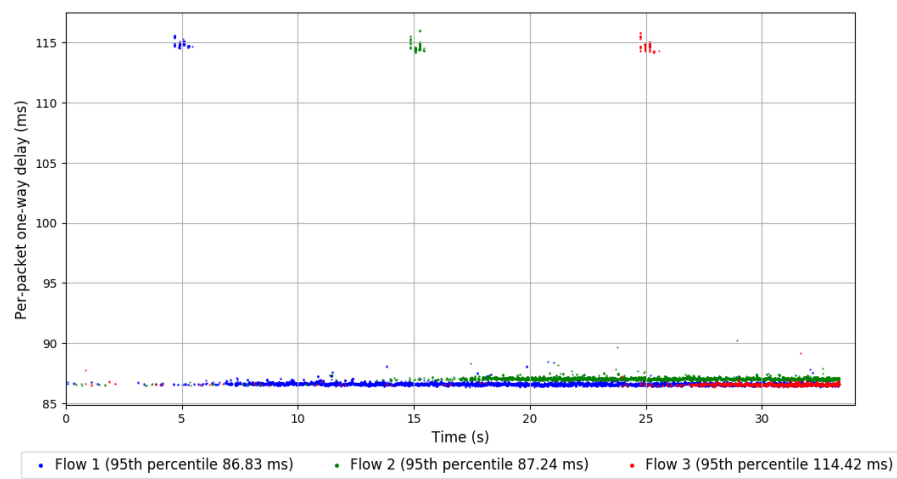
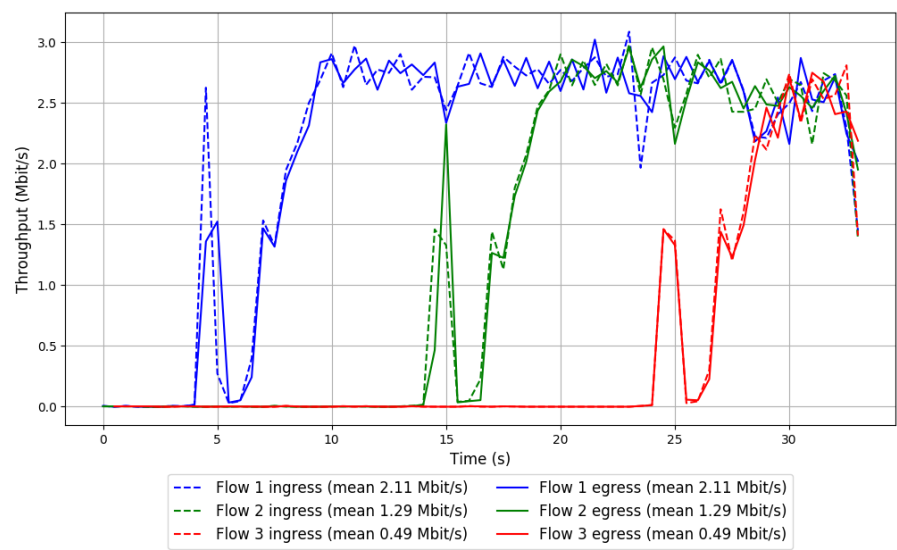
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 114.423 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-17 11:41:34

End at: 2018-01-17 11:42:04

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 114.542 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 86.792 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 114.655 ms

Loss rate: 0.00%

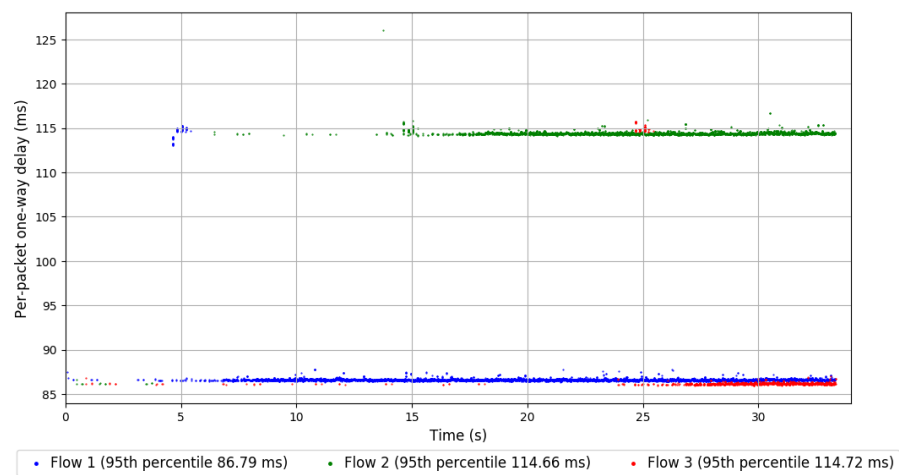
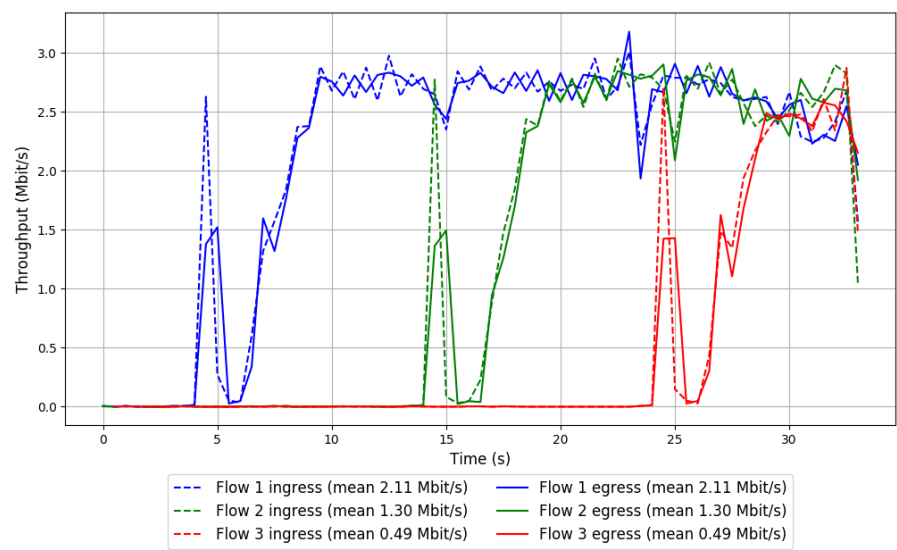
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 114.723 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-17 11:58:37

End at: 2018-01-17 11:59:07

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 112.609 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 86.785 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 86.823 ms

Loss rate: 0.00%

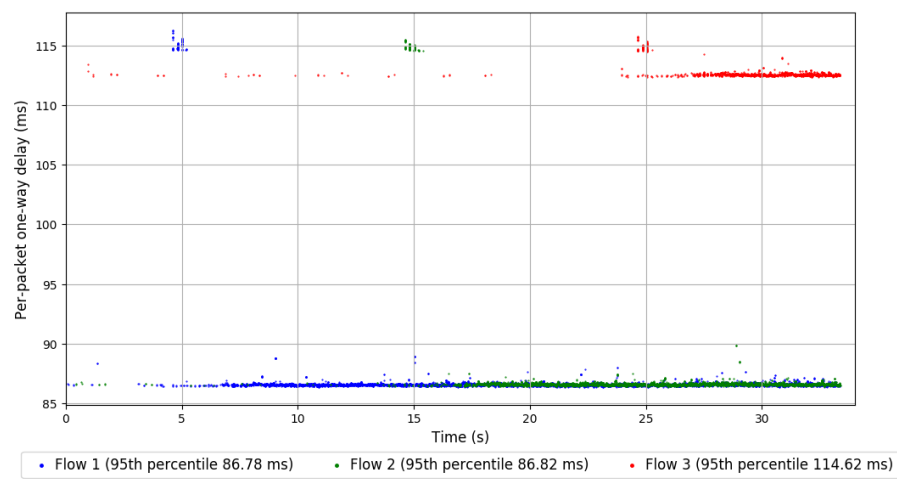
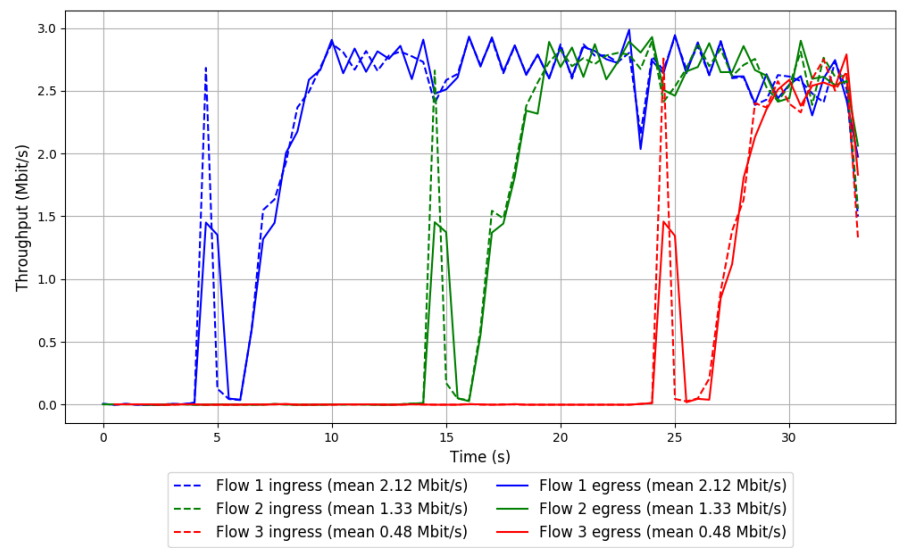
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 114.623 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-01-17 09:17:49

End at: 2018-01-17 09:18:19

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.19 Mbit/s

95th percentile per-packet one-way delay: 115.622 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 115.627 ms

Loss rate: 1.14%

-- Flow 2:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 115.683 ms

Loss rate: 0.00%

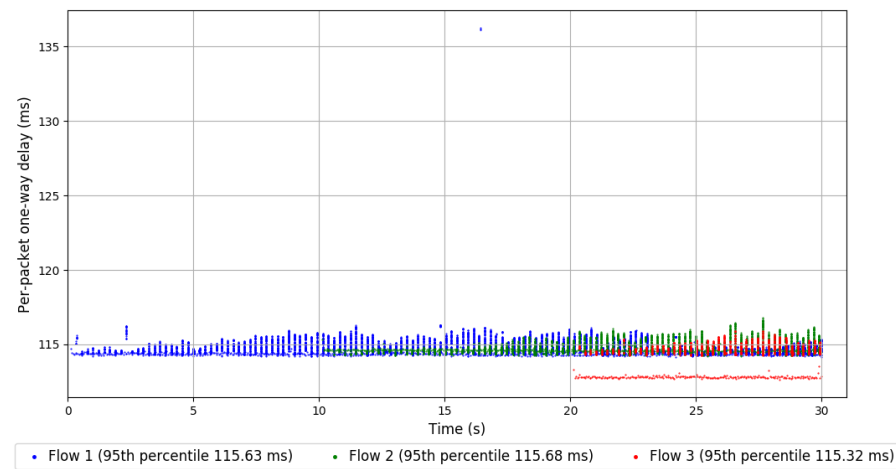
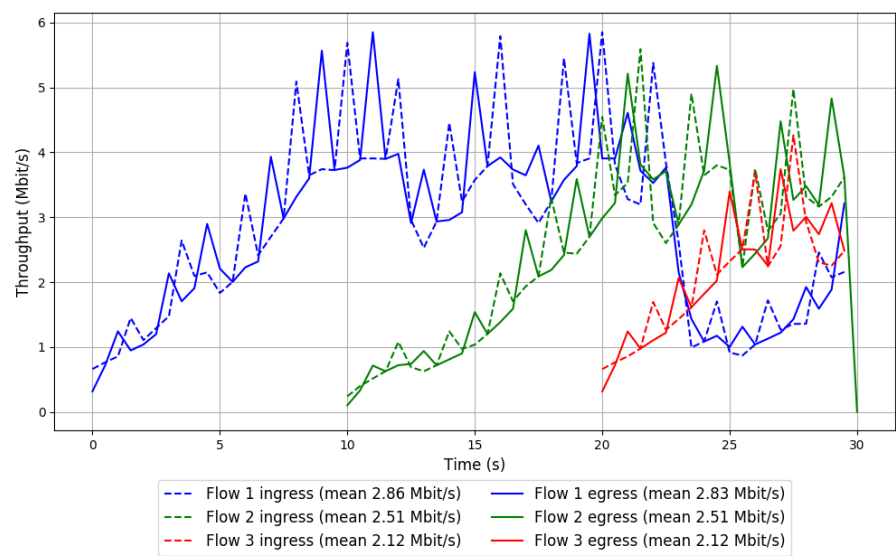
-- Flow 3:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 115.317 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-17 09:35:14

End at: 2018-01-17 09:35:44

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.49 Mbit/s

95th percentile per-packet one-way delay: 115.835 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 115.937 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 114.806 ms

Loss rate: 0.00%

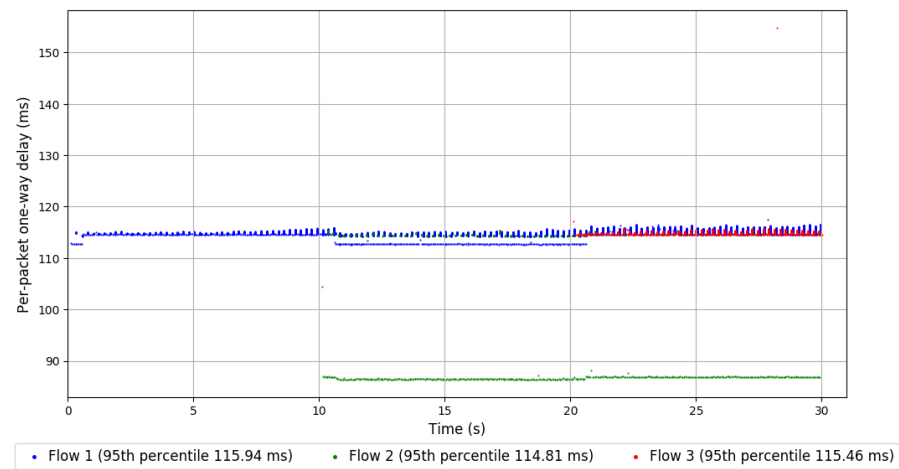
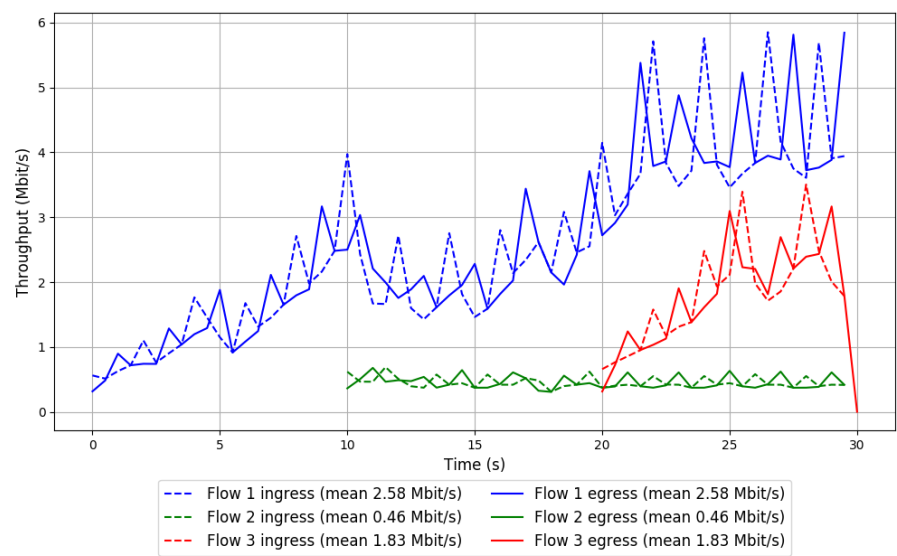
-- Flow 3:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 115.456 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-17 09:52:46

End at: 2018-01-17 09:53:16

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.04 Mbit/s

95th percentile per-packet one-way delay: 114.832 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 113.351 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 114.954 ms

Loss rate: 0.00%

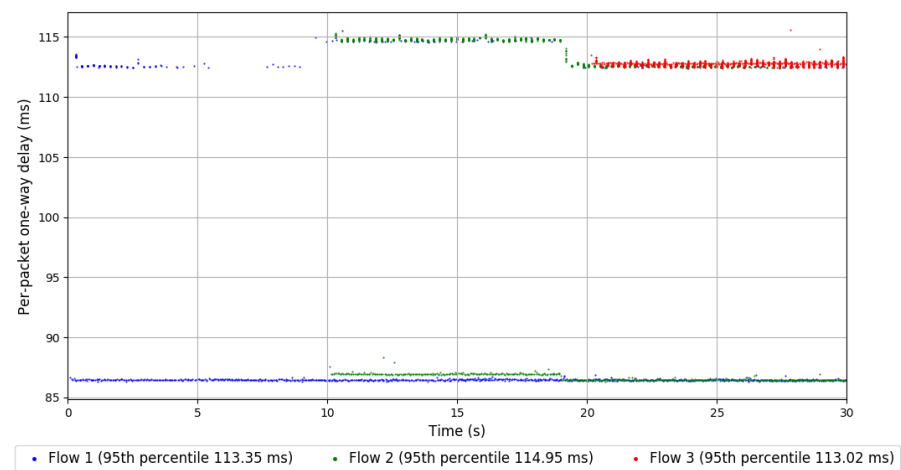
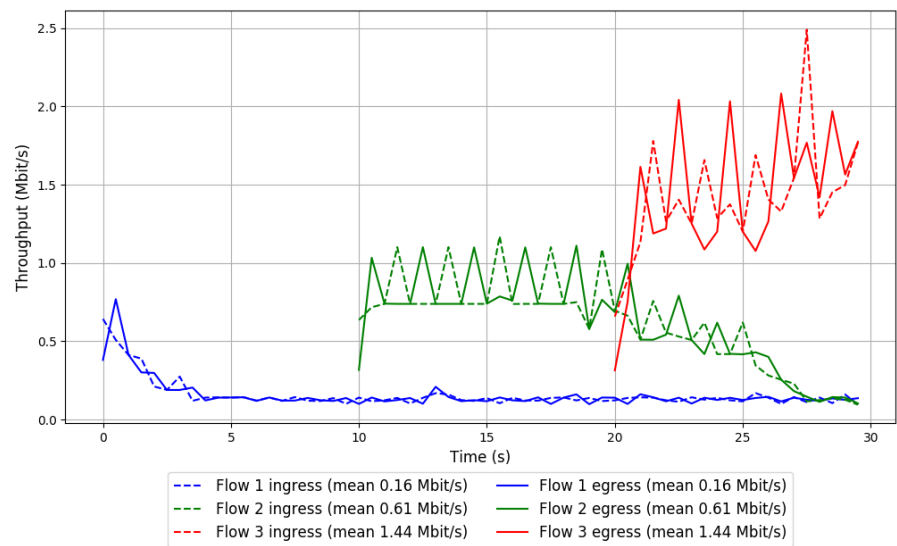
-- Flow 3:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 113.021 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-17 10:09:34

End at: 2018-01-17 10:10:04

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.73 Mbit/s

95th percentile per-packet one-way delay: 114.994 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 112.686 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 112.923 ms

Loss rate: 0.00%

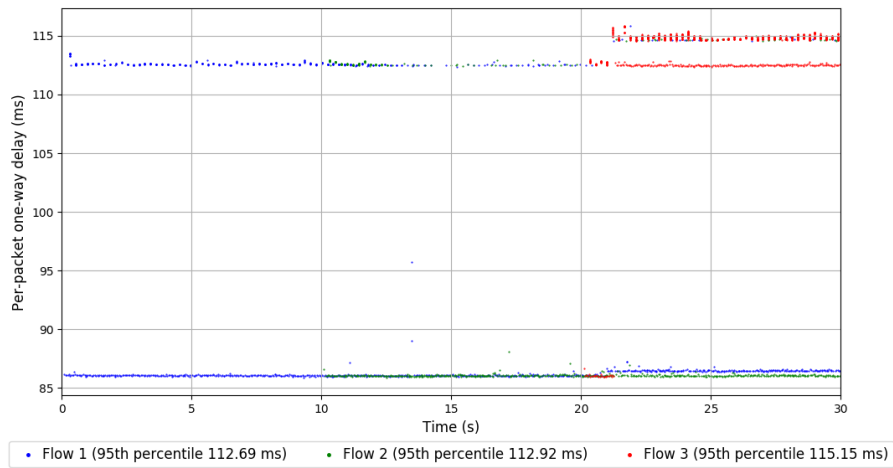
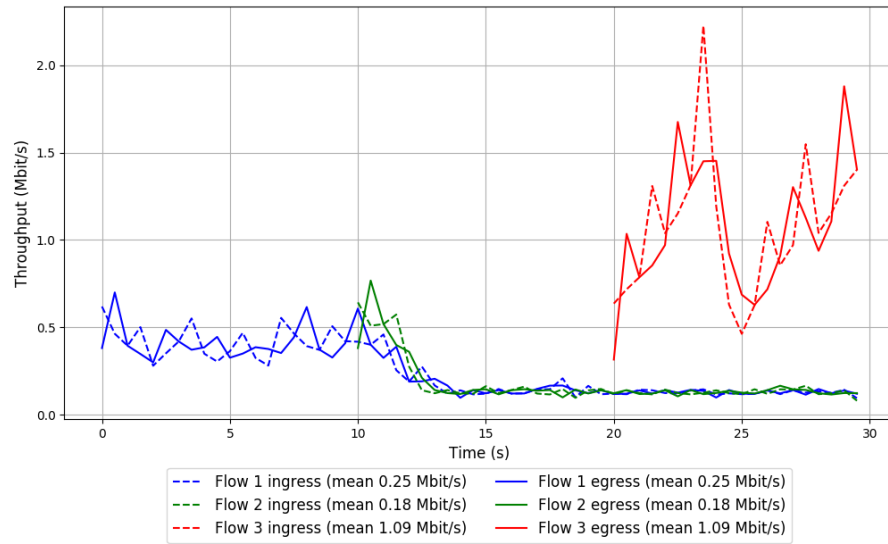
-- Flow 3:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 115.153 ms

Loss rate: 0.01%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-17 10:27:08

End at: 2018-01-17 10:27:38

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 115.130 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.80 Mbit/s

95th percentile per-packet one-way delay: 115.198 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 114.852 ms

Loss rate: 0.00%

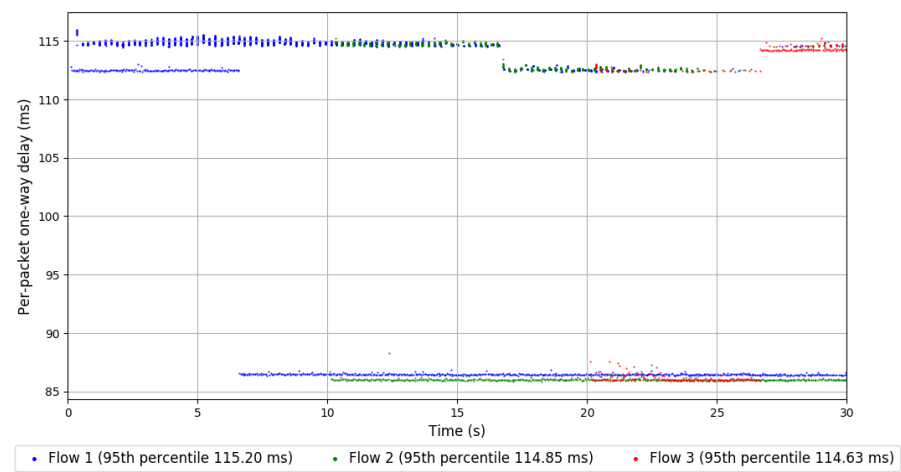
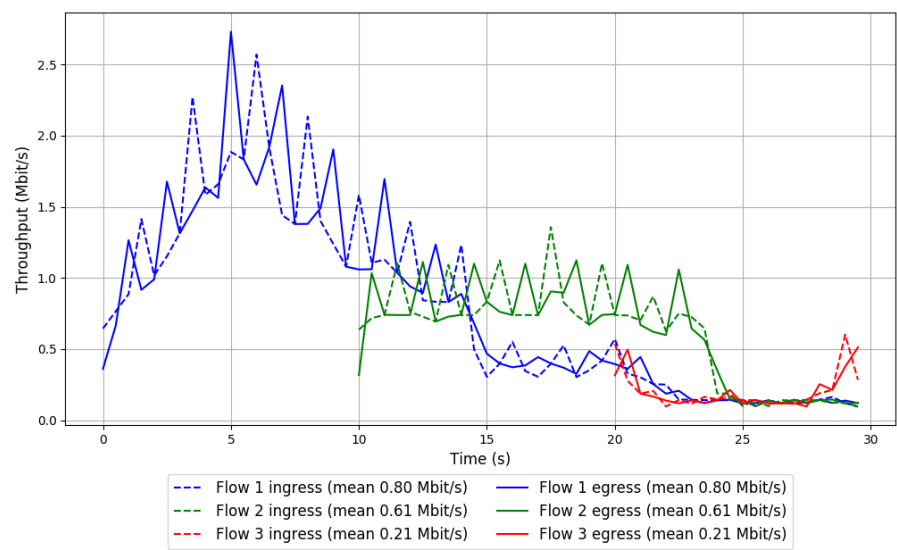
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.633 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-17 10:43:25

End at: 2018-01-17 10:43:55

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 113.768 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 112.629 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 113.866 ms

Loss rate: 0.00%

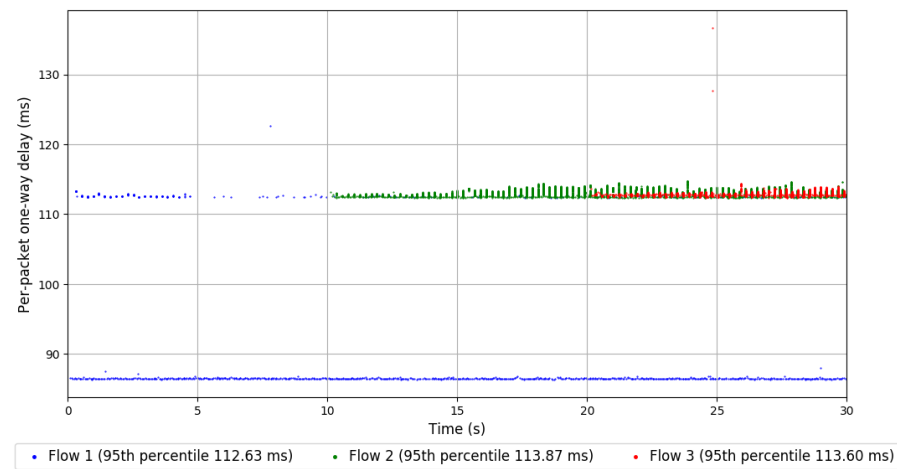
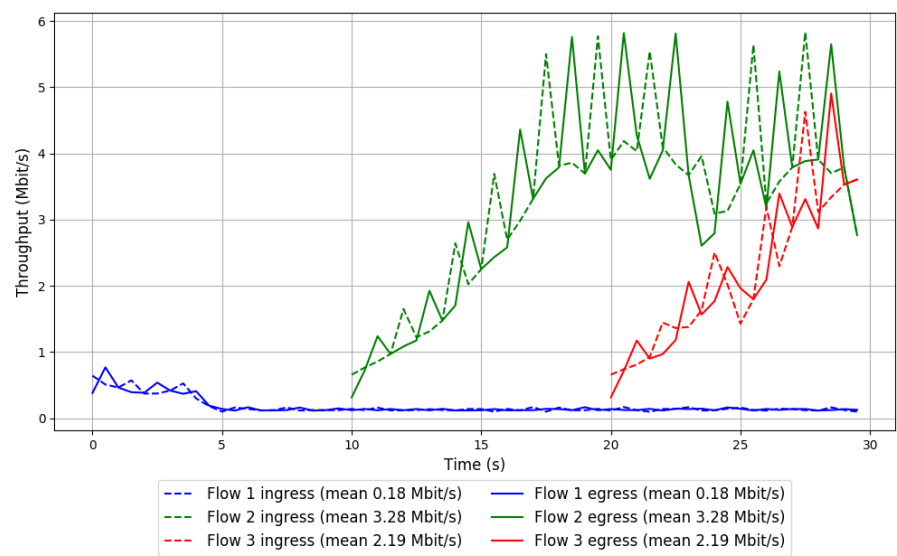
-- Flow 3:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 113.598 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-17 11:00:27

End at: 2018-01-17 11:00:57

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.67 Mbit/s

95th percentile per-packet one-way delay: 115.913 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 115.076 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 116.076 ms

Loss rate: 1.00%

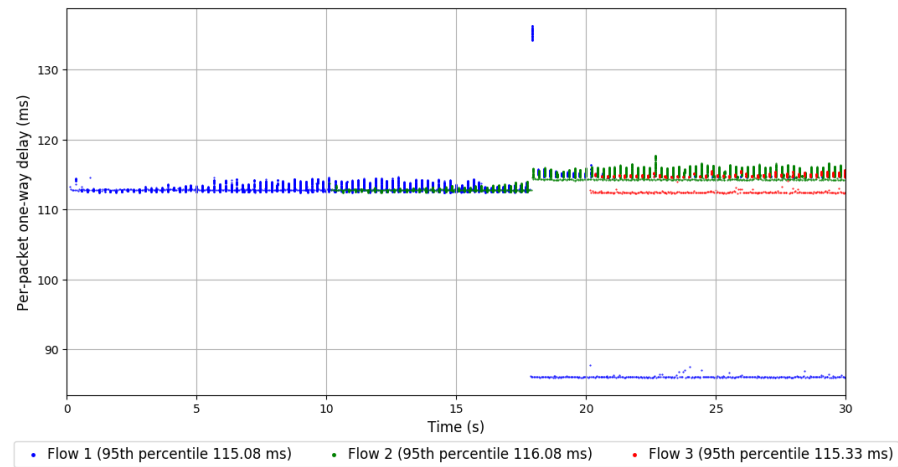
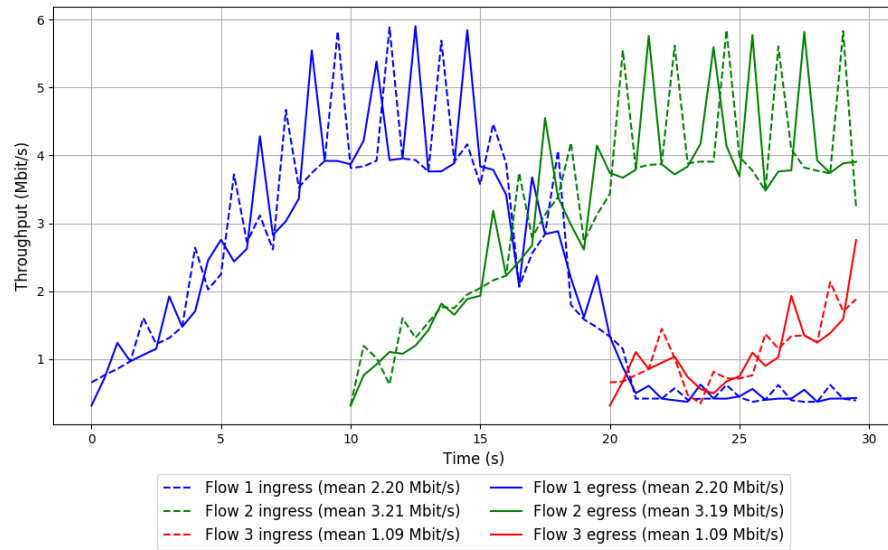
-- Flow 3:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 115.329 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-17 11:17:02

End at: 2018-01-17 11:17:32

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.11 Mbit/s

95th percentile per-packet one-way delay: 115.099 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 115.144 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 0.83 Mbit/s

95th percentile per-packet one-way delay: 115.077 ms

Loss rate: 0.00%

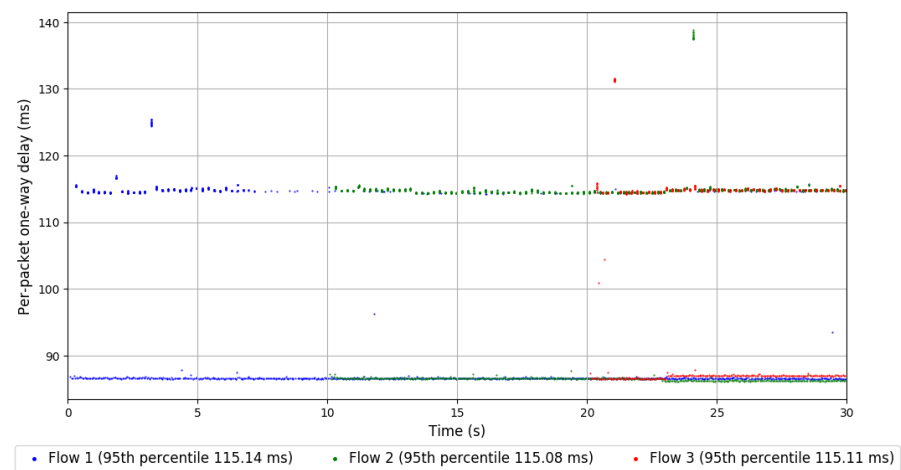
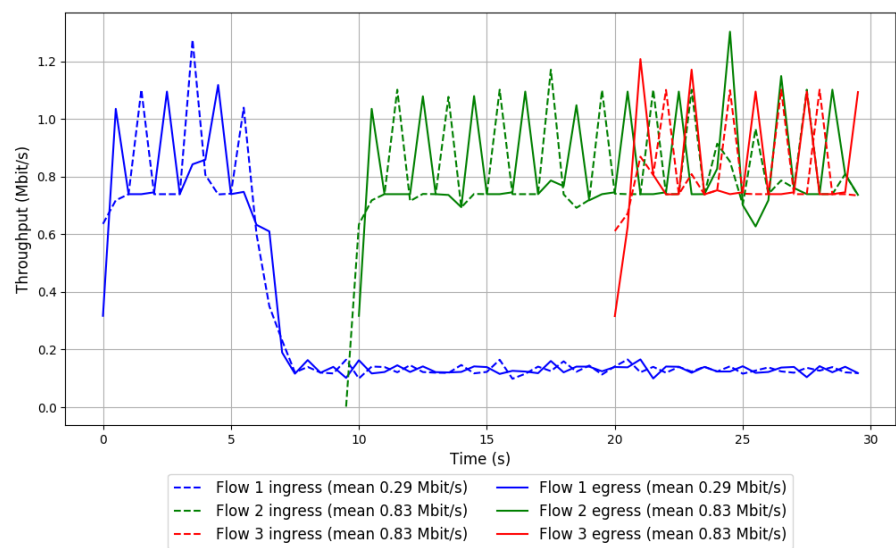
-- Flow 3:

Average throughput: 0.83 Mbit/s

95th percentile per-packet one-way delay: 115.109 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-17 11:32:53

End at: 2018-01-17 11:33:23

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.16 Mbit/s

95th percentile per-packet one-way delay: 116.001 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 116.074 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.73 Mbit/s

95th percentile per-packet one-way delay: 115.011 ms

Loss rate: 0.00%

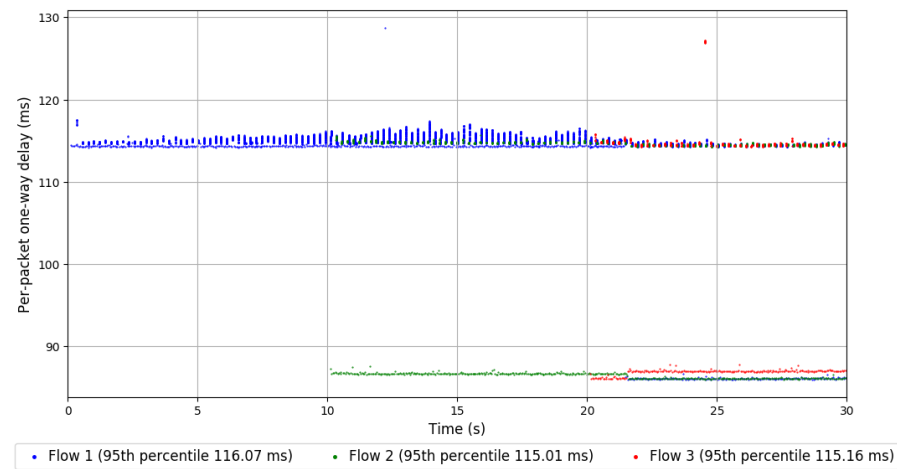
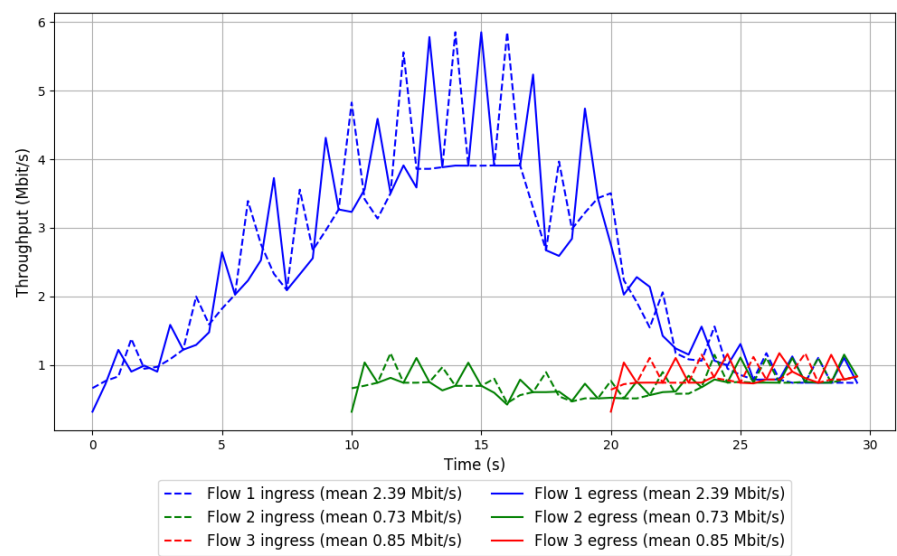
-- Flow 3:

Average throughput: 0.85 Mbit/s

95th percentile per-packet one-way delay: 115.155 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-17 11:49:24

End at: 2018-01-17 11:49:54

Below is generated by plot.py at 2018-01-17 14:25:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.20 Mbit/s

95th percentile per-packet one-way delay: 115.548 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 115.712 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 115.426 ms

Loss rate: 0.00%

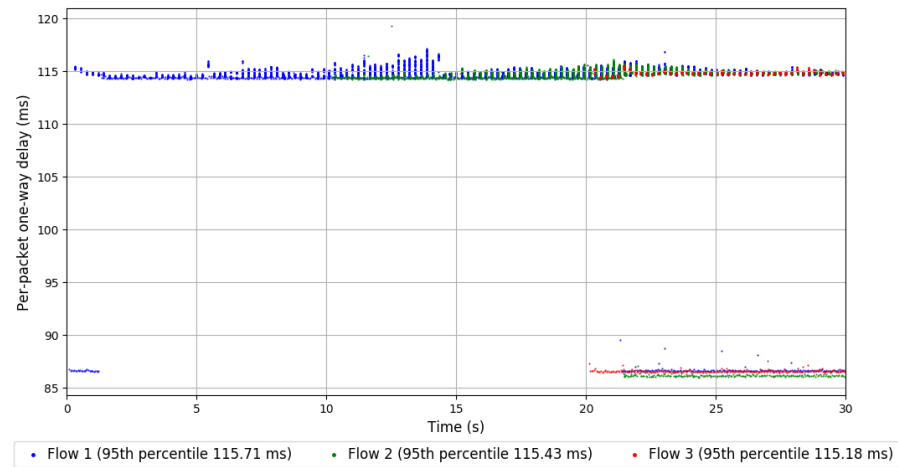
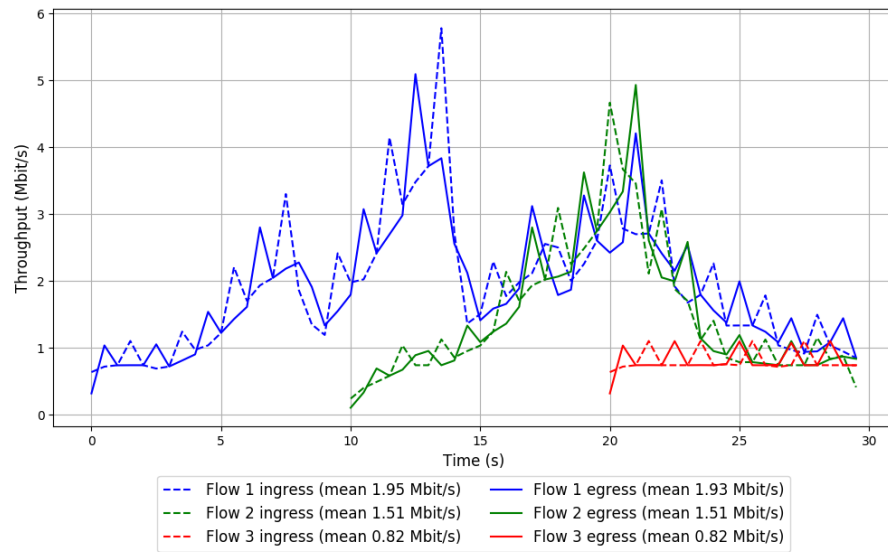
-- Flow 3:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 115.181 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

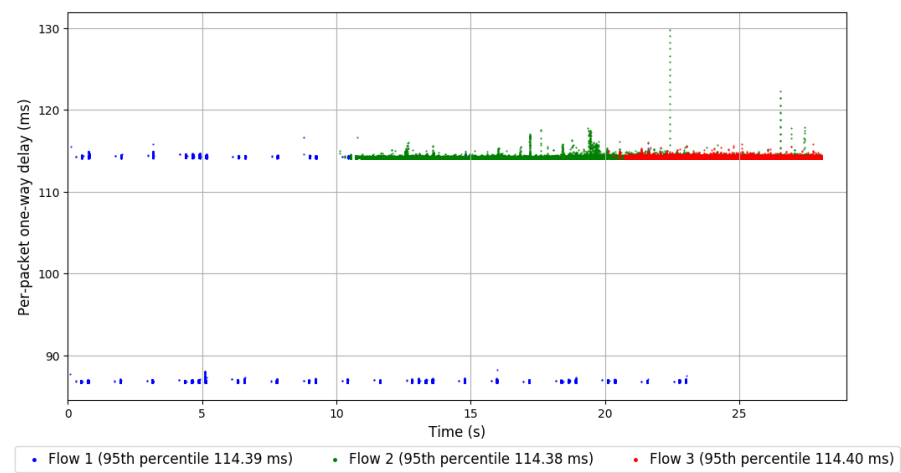
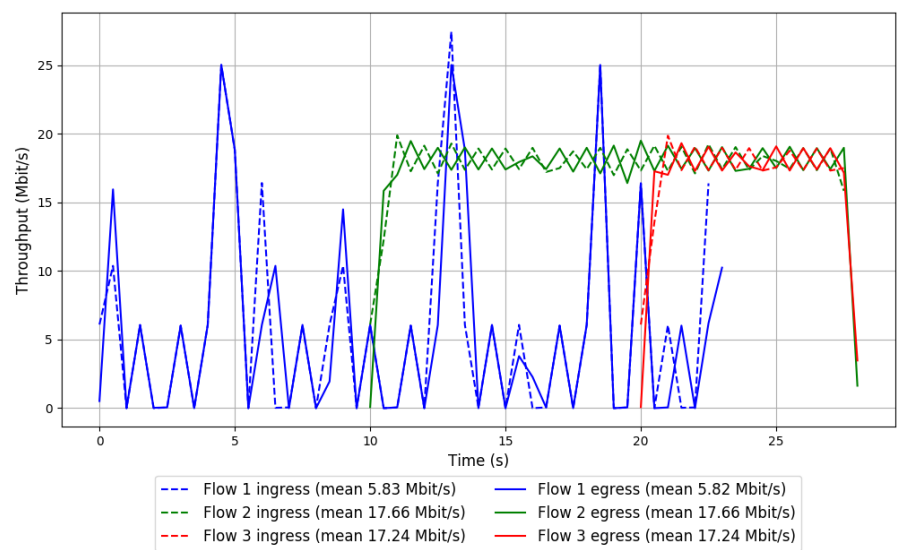


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-17 09:31:40
End at: 2018-01-17 09:32:10

# Below is generated by plot.py at 2018-01-17 14:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.99 Mbit/s
95th percentile per-packet one-way delay: 114.390 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.82 Mbit/s
95th percentile per-packet one-way delay: 114.391 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 17.66 Mbit/s
95th percentile per-packet one-way delay: 114.383 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.24 Mbit/s
95th percentile per-packet one-way delay: 114.403 ms
Loss rate: 0.00%
```


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

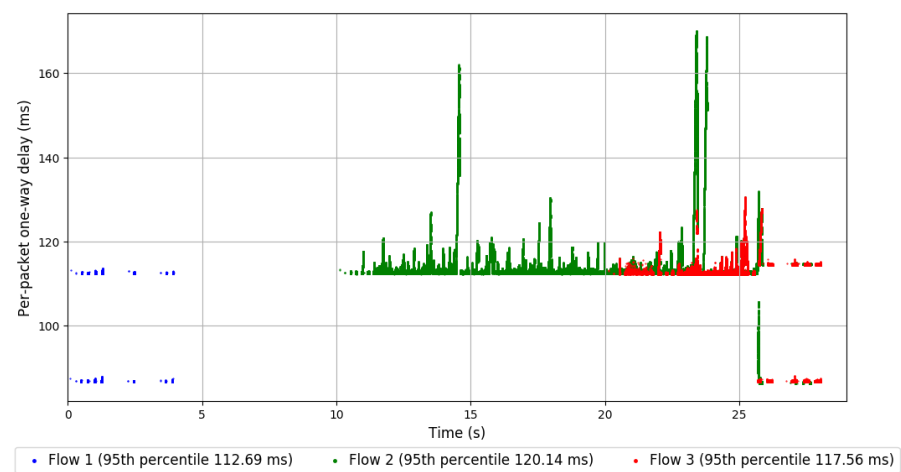
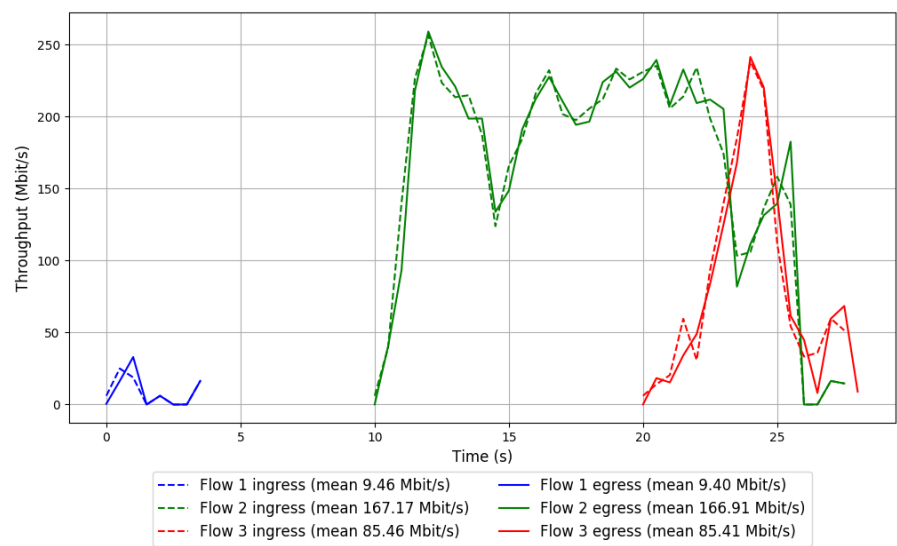


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-17 09:49:07
End at: 2018-01-17 09:49:37

# Below is generated by plot.py at 2018-01-17 14:28:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 130.33 Mbit/s
95th percentile per-packet one-way delay: 119.572 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 112.686 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 166.91 Mbit/s
95th percentile per-packet one-way delay: 120.142 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 85.41 Mbit/s
95th percentile per-packet one-way delay: 117.557 ms
Loss rate: 0.15%
```

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

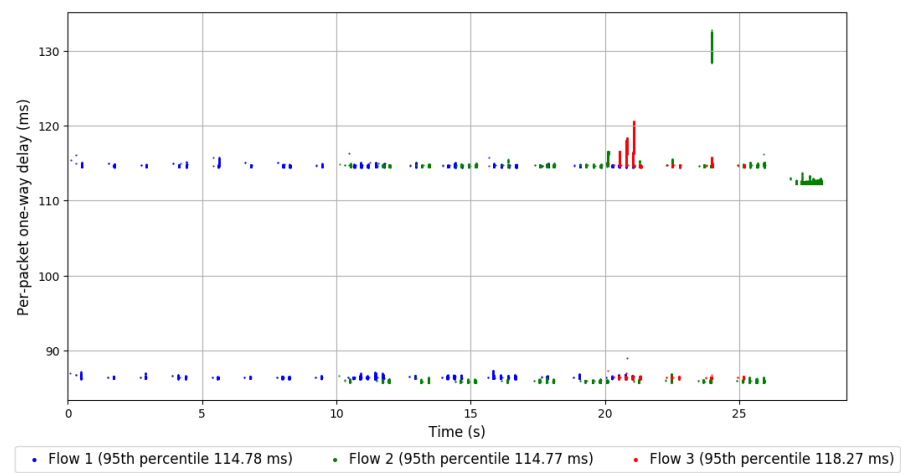
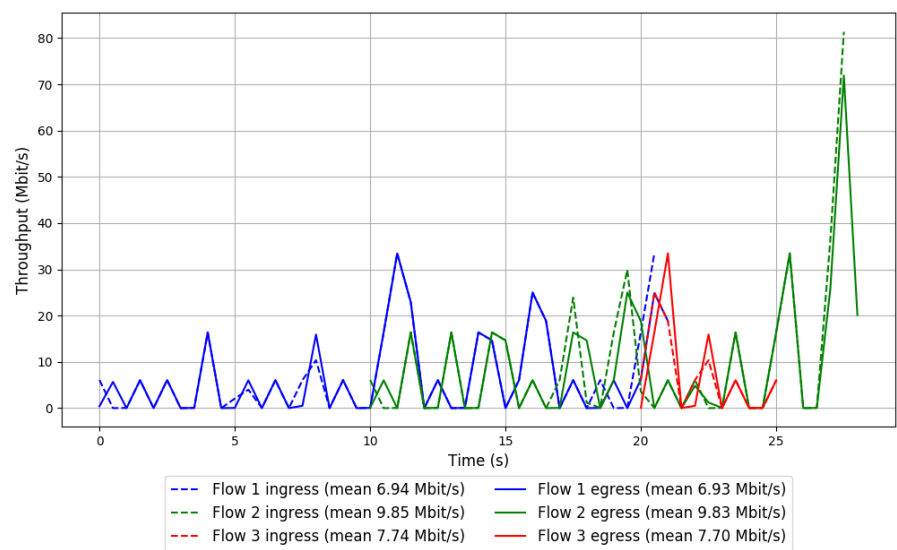


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-17 10:06:07
End at: 2018-01-17 10:06:37

# Below is generated by plot.py at 2018-01-17 14:28:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.92 Mbit/s
95th percentile per-packet one-way delay: 115.120 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.93 Mbit/s
95th percentile per-packet one-way delay: 114.776 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.83 Mbit/s
95th percentile per-packet one-way delay: 114.771 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 118.266 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-17 10:23:15

End at: 2018-01-17 10:23:45

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 230.34 Mbit/s

95th percentile per-packet one-way delay: 115.675 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 128.53 Mbit/s

95th percentile per-packet one-way delay: 115.504 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 127.89 Mbit/s

95th percentile per-packet one-way delay: 115.624 ms

Loss rate: 0.00%

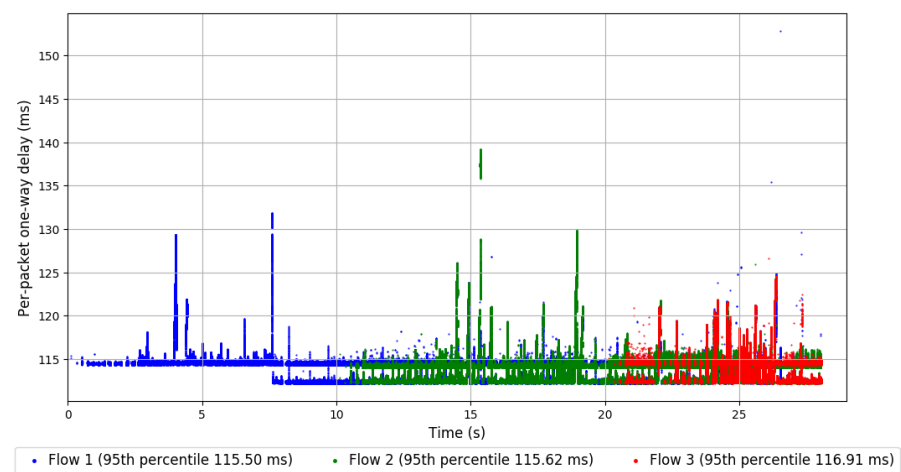
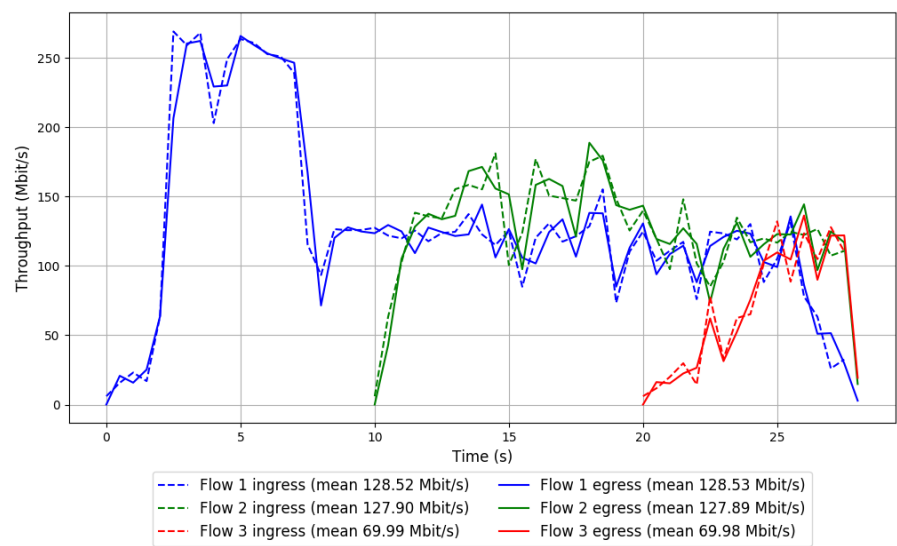
-- Flow 3:

Average throughput: 69.98 Mbit/s

95th percentile per-packet one-way delay: 116.910 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-17 10:39:54

End at: 2018-01-17 10:40:24

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.56 Mbit/s

95th percentile per-packet one-way delay: 114.730 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 116.411 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 110.31 Mbit/s

95th percentile per-packet one-way delay: 114.727 ms

Loss rate: 0.33%

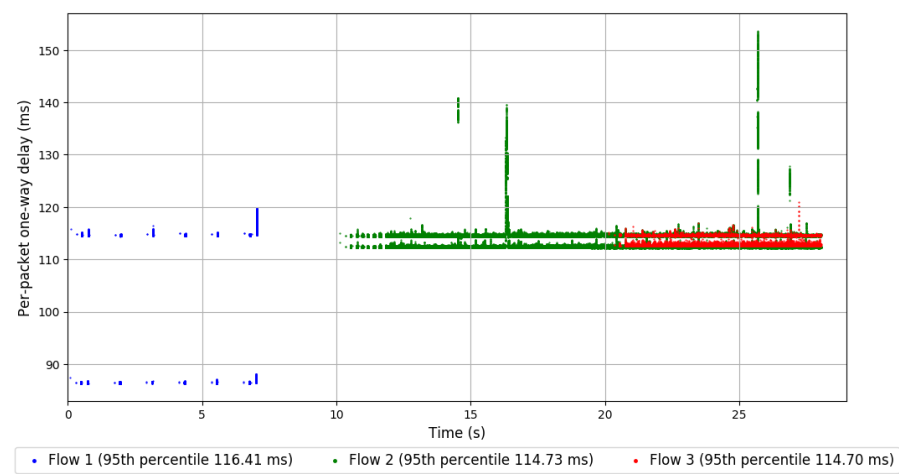
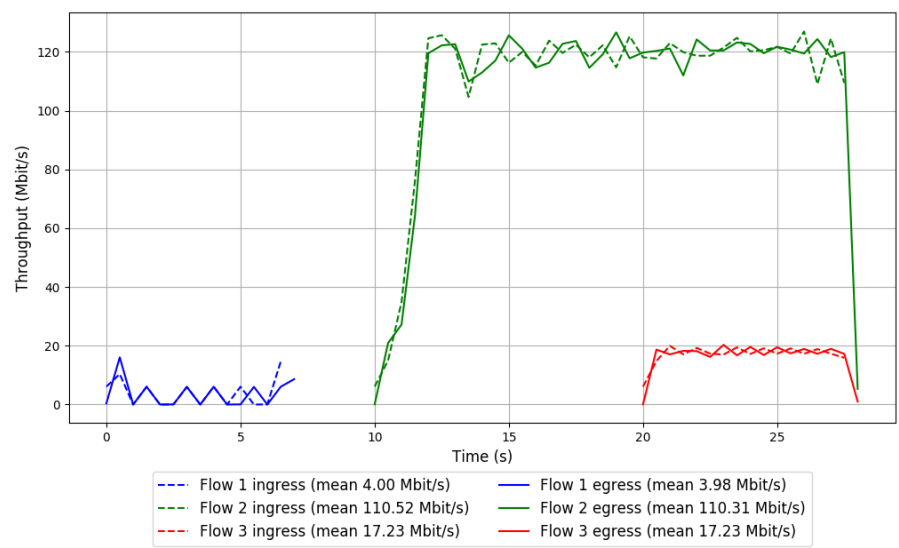
-- Flow 3:

Average throughput: 17.23 Mbit/s

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

Loss rate: 0.31%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-17 10:57:09

End at: 2018-01-17 10:57:39

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.54 Mbit/s

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

Loss rate: 0.14%

-- Flow 1:

Average throughput: 6.56 Mbit/s

95th percentile per-packet one-way delay: 114.685 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 10.12 Mbit/s

95th percentile per-packet one-way delay: 113.070 ms

Loss rate: 0.00%

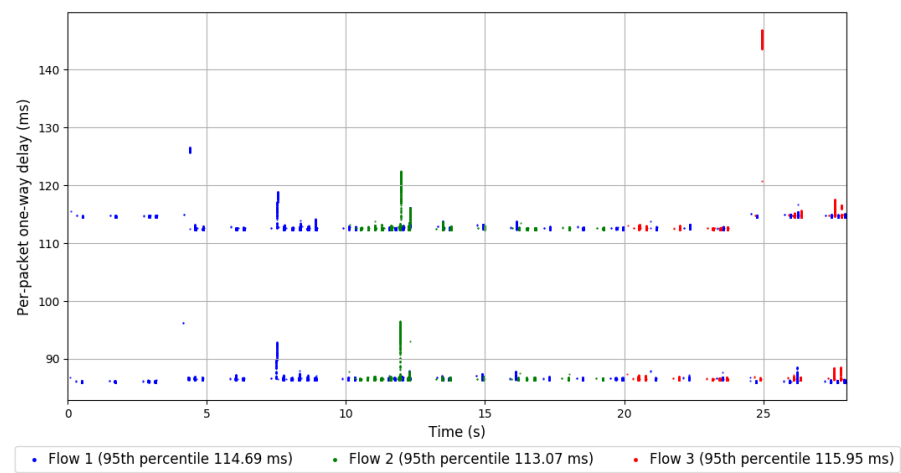
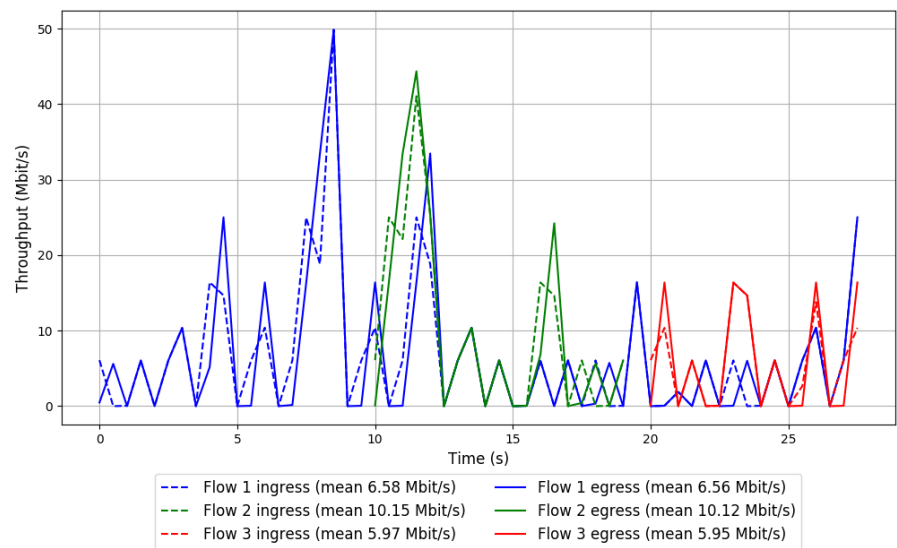
-- Flow 3:

Average throughput: 5.95 Mbit/s

95th percentile per-packet one-way delay: 115.948 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-17 11:13:45

End at: 2018-01-17 11:14:15

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.86 Mbit/s

95th percentile per-packet one-way delay: 118.467 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 116.066 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.38 Mbit/s

95th percentile per-packet one-way delay: 118.451 ms

Loss rate: 0.00%

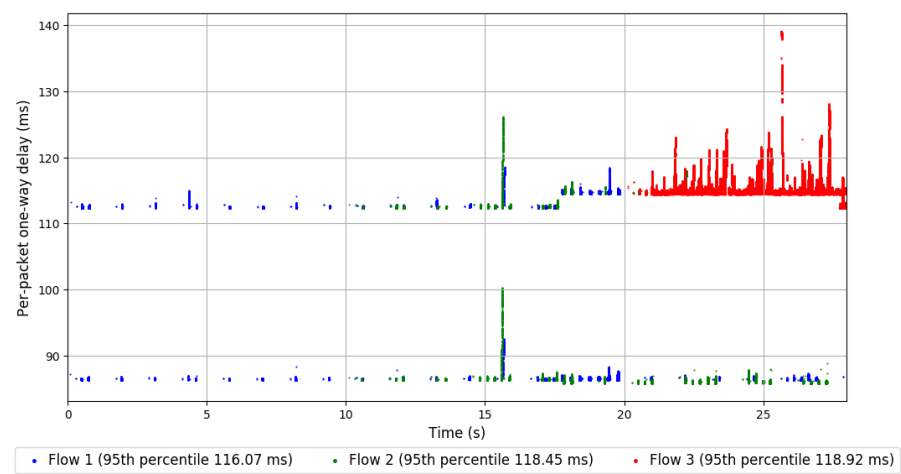
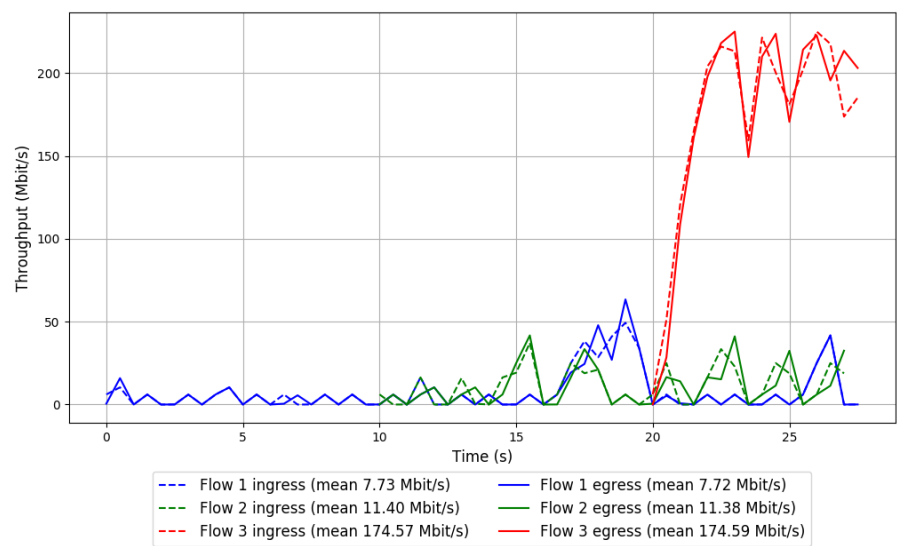
-- Flow 3:

Average throughput: 174.59 Mbit/s

95th percentile per-packet one-way delay: 118.923 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-17 11:29:40

End at: 2018-01-17 11:30:10

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 31.40 Mbit/s

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

Loss rate: 0.28%

-- Flow 1:

Average throughput: 25.22 Mbit/s

95th percentile per-packet one-way delay: 114.639 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 7.15 Mbit/s

95th percentile per-packet one-way delay: 115.091 ms

Loss rate: 0.00%

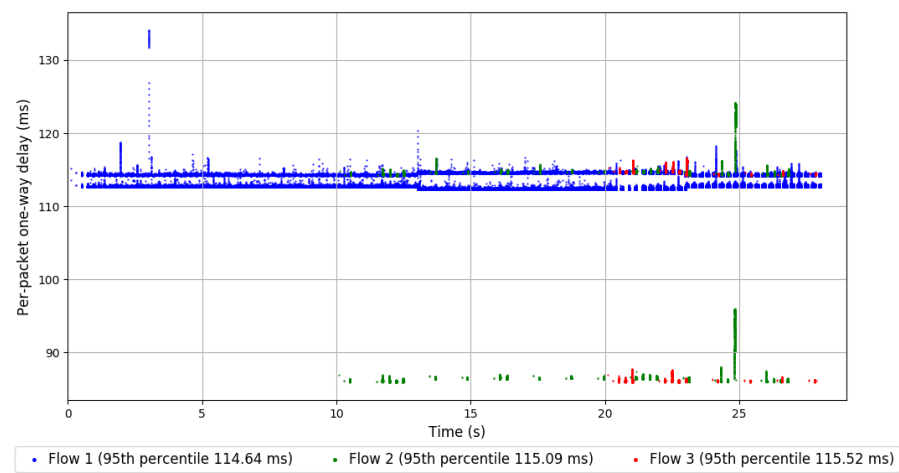
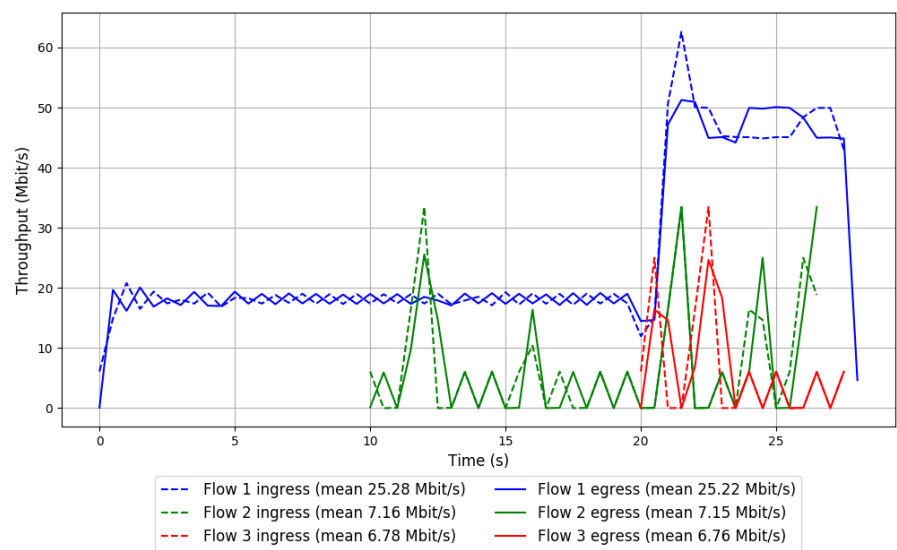
-- Flow 3:

Average throughput: 6.76 Mbit/s

95th percentile per-packet one-way delay: 115.519 ms

Loss rate: 0.00%

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

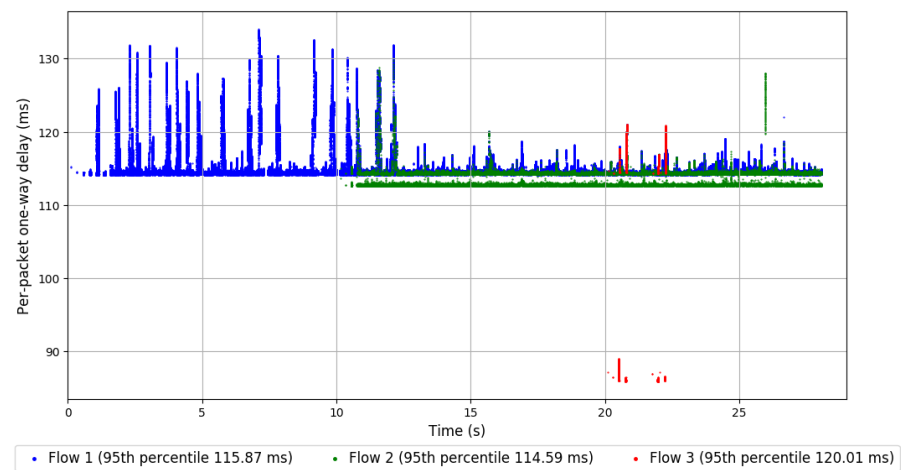
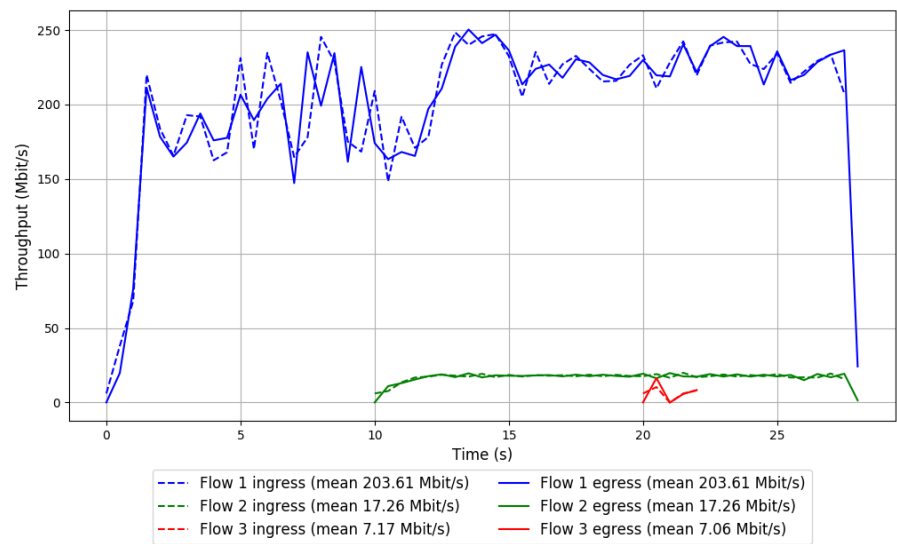


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-17 11:45:35
End at: 2018-01-17 11:46:05

# Below is generated by plot.py at 2018-01-17 14:31:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 215.22 Mbit/s
95th percentile per-packet one-way delay: 115.821 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 203.61 Mbit/s
95th percentile per-packet one-way delay: 115.872 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 17.26 Mbit/s
95th percentile per-packet one-way delay: 114.595 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.06 Mbit/s
95th percentile per-packet one-way delay: 120.006 ms
Loss rate: 0.00%
```


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

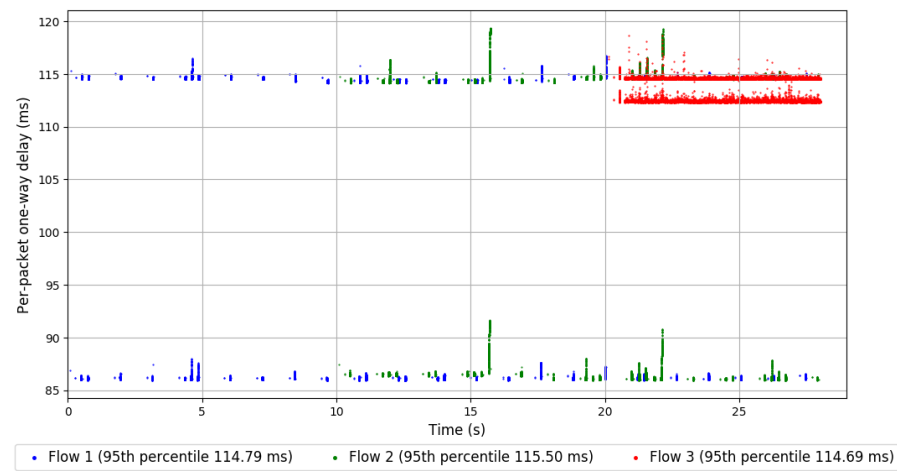
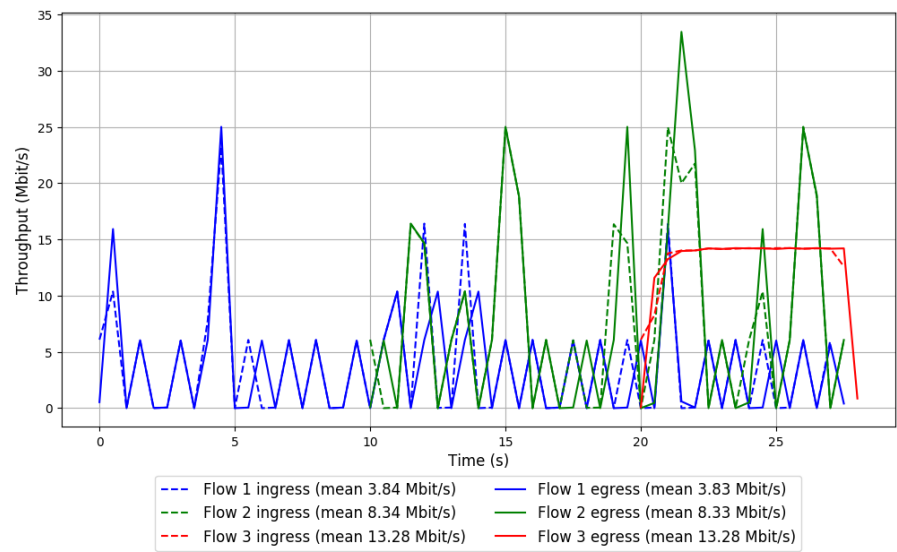


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-17 12:02:45
End at: 2018-01-17 12:03:15

# Below is generated by plot.py at 2018-01-17 14:31:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.85 Mbit/s
95th percentile per-packet one-way delay: 114.855 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 3.83 Mbit/s
95th percentile per-packet one-way delay: 114.790 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 115.498 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.28 Mbit/s
95th percentile per-packet one-way delay: 114.689 ms
Loss rate: 0.38%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-17 09:20:43

End at: 2018-01-17 09:21:13

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.00 Mbit/s

95th percentile per-packet one-way delay: 125.033 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 113.18 Mbit/s

95th percentile per-packet one-way delay: 125.045 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 0.71 Mbit/s

95th percentile per-packet one-way delay: 120.845 ms

Loss rate: 0.59%

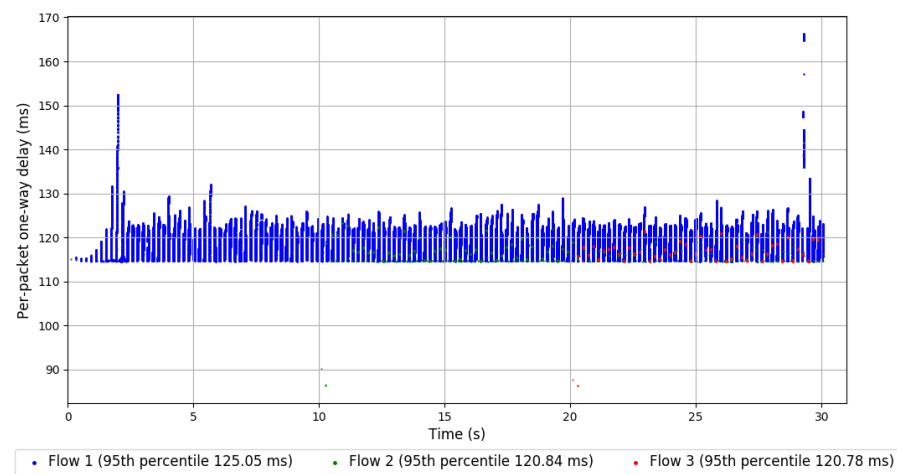
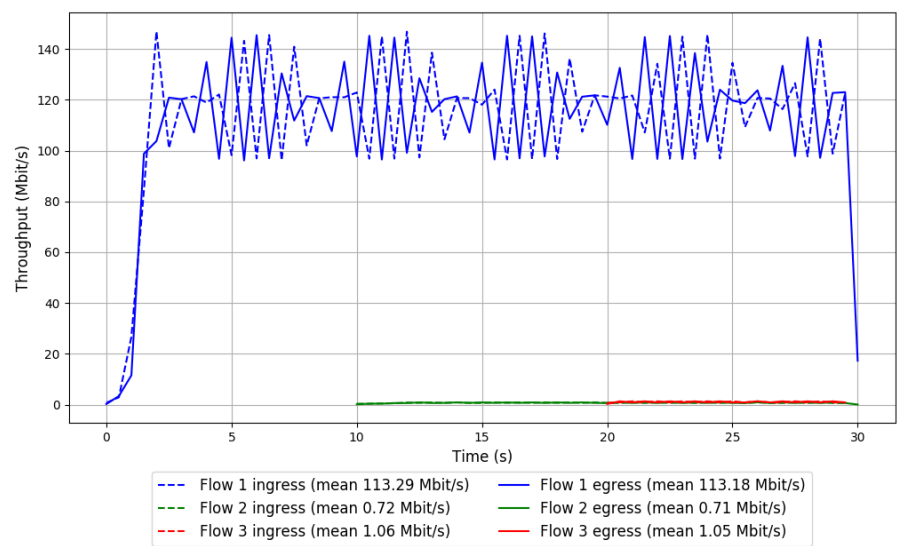
-- Flow 3:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 120.777 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-17 09:37:57

End at: 2018-01-17 09:38:27

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.69 Mbit/s

95th percentile per-packet one-way delay: 117.125 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 59.50 Mbit/s

95th percentile per-packet one-way delay: 116.888 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 70.41 Mbit/s

95th percentile per-packet one-way delay: 117.594 ms

Loss rate: 0.33%

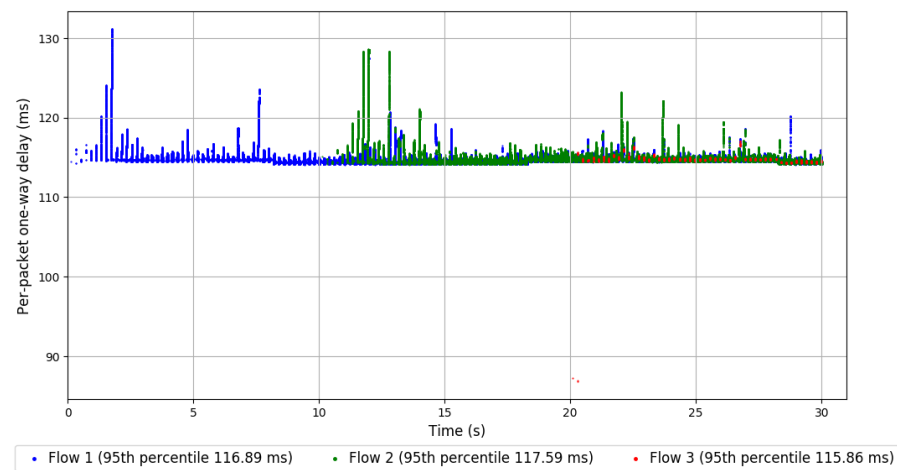
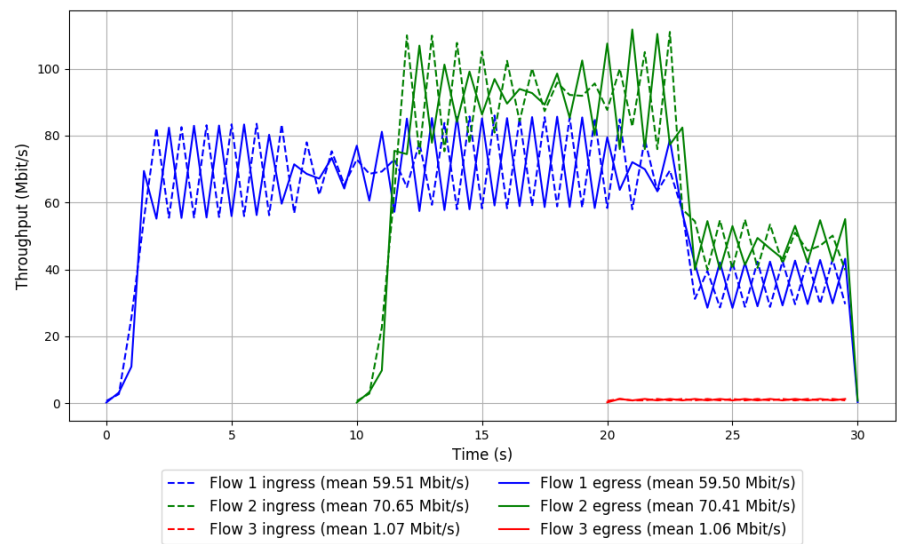
-- Flow 3:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 115.864 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-17 09:55:22

End at: 2018-01-17 09:55:52

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.59 Mbit/s

95th percentile per-packet one-way delay: 127.624 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.52 Mbit/s

95th percentile per-packet one-way delay: 127.642 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 115.000 ms

Loss rate: 0.00%

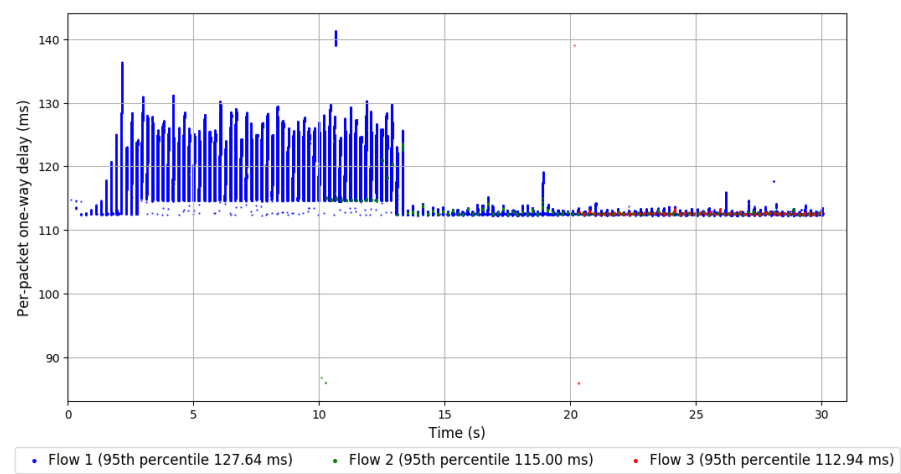
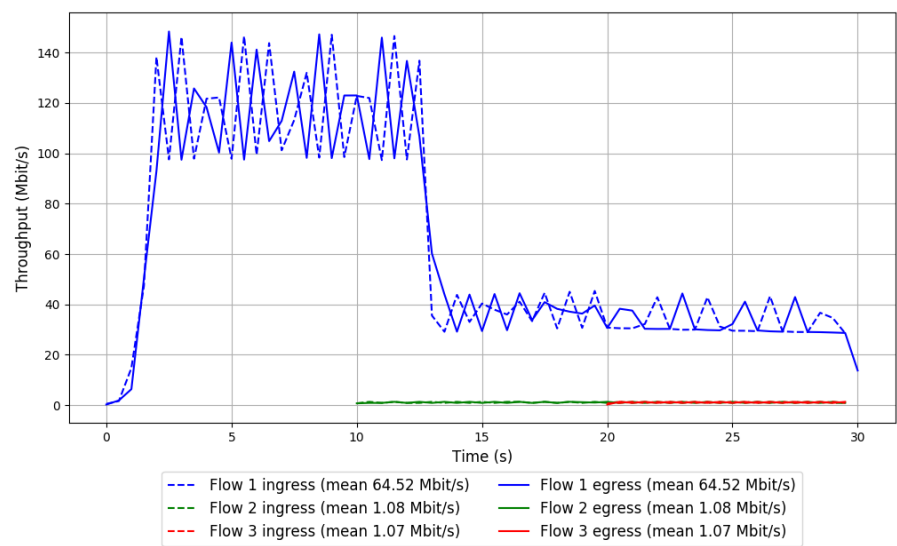
-- Flow 3:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 112.939 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-17 10:12:13

End at: 2018-01-17 10:12:43

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 49.30 Mbit/s

95th percentile per-packet one-way delay: 125.242 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 17.44 Mbit/s

95th percentile per-packet one-way delay: 115.927 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 116.104 ms

Loss rate: 0.87%

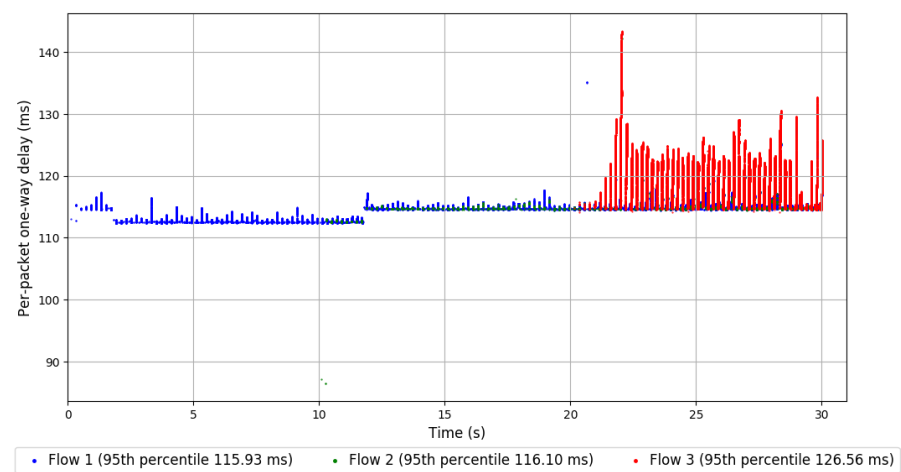
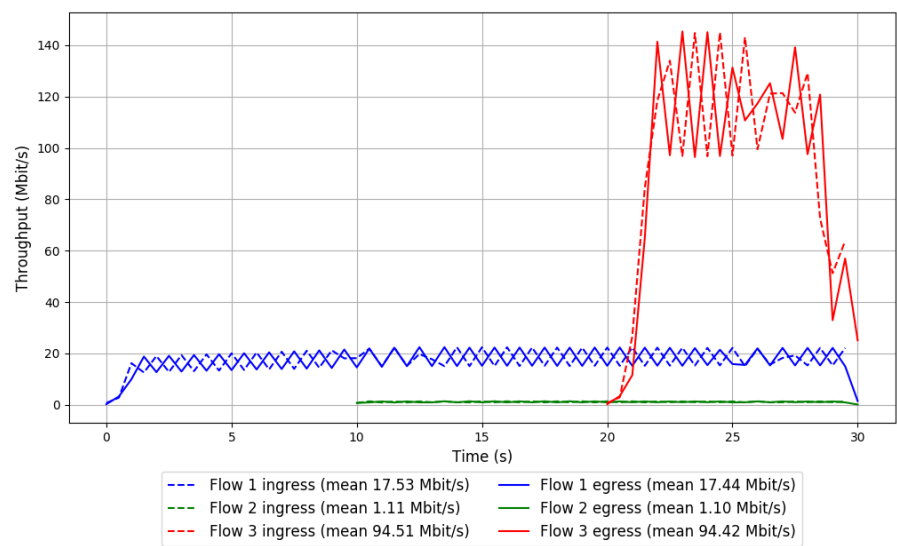
-- Flow 3:

Average throughput: 94.42 Mbit/s

95th percentile per-packet one-way delay: 126.555 ms

Loss rate: 0.01%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-17 10:29:46

End at: 2018-01-17 10:30:16

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.25 Mbit/s

95th percentile per-packet one-way delay: 125.009 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 46.98 Mbit/s

95th percentile per-packet one-way delay: 121.407 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 122.759 ms

Loss rate: 0.00%

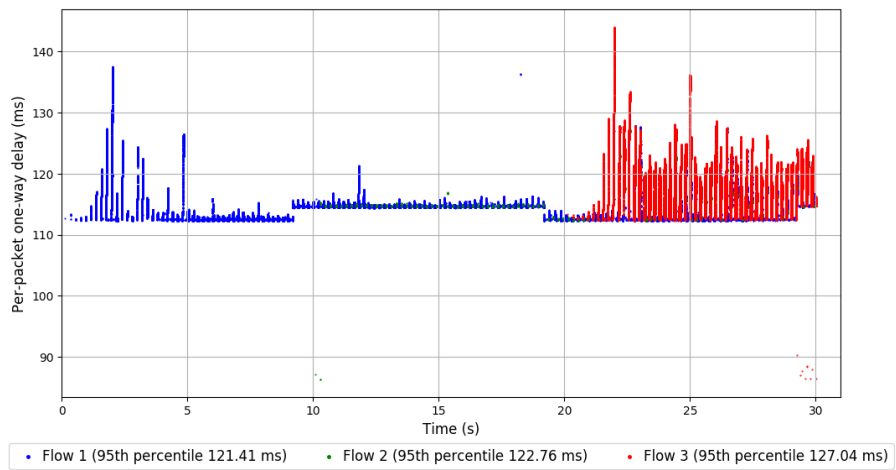
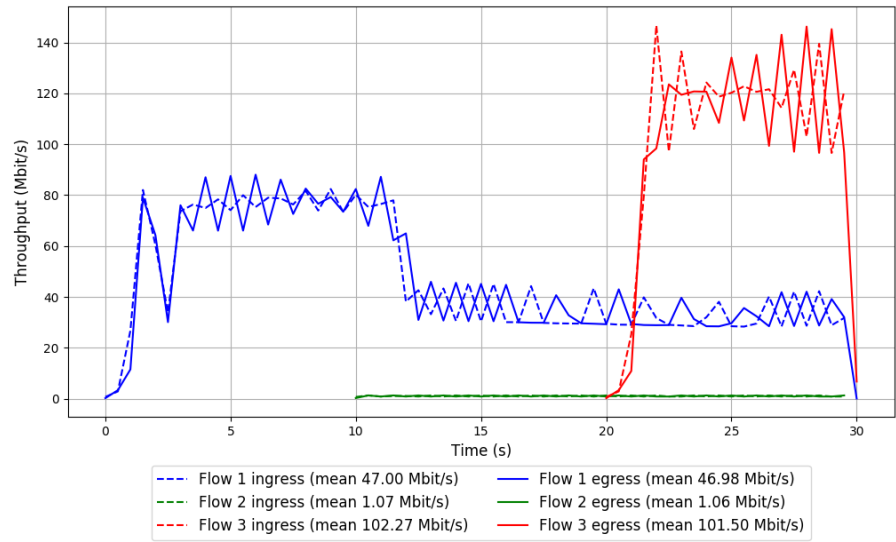
-- Flow 3:

Average throughput: 101.50 Mbit/s

95th percentile per-packet one-way delay: 127.039 ms

Loss rate: 0.86%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-17 10:46:13

End at: 2018-01-17 10:46:43

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.14 Mbit/s

95th percentile per-packet one-way delay: 125.514 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.16 Mbit/s

95th percentile per-packet one-way delay: 125.988 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 122.043 ms

Loss rate: 0.00%

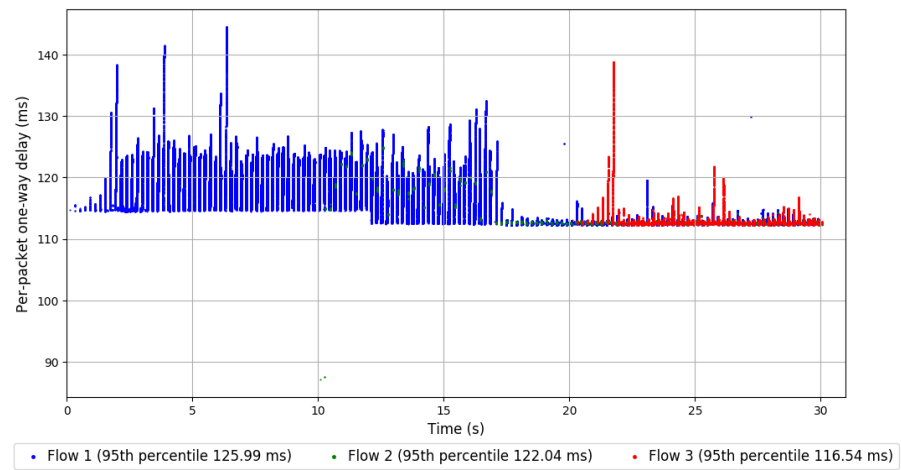
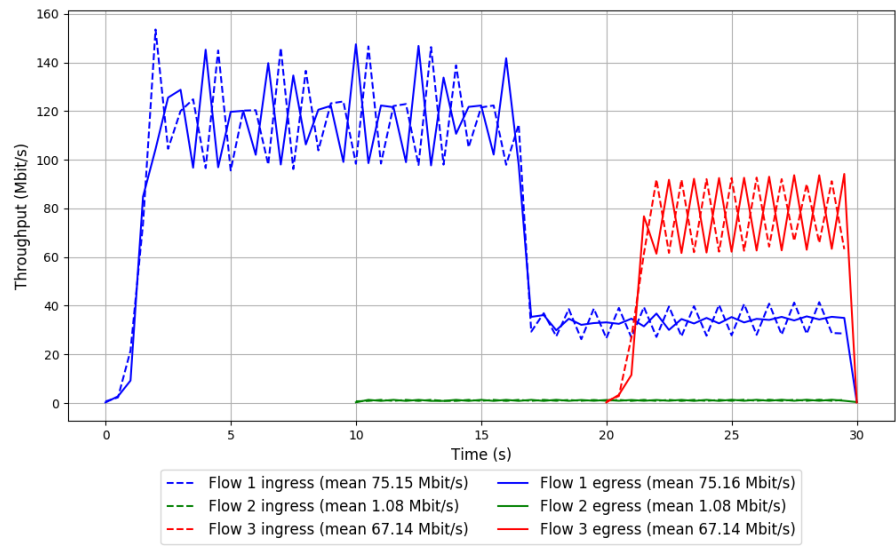
-- Flow 3:

Average throughput: 67.14 Mbit/s

95th percentile per-packet one-way delay: 116.543 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-17 11:03:18

End at: 2018-01-17 11:03:48

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.05 Mbit/s

95th percentile per-packet one-way delay: 116.533 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 15.86 Mbit/s

95th percentile per-packet one-way delay: 115.461 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 115.064 ms

Loss rate: 0.19%

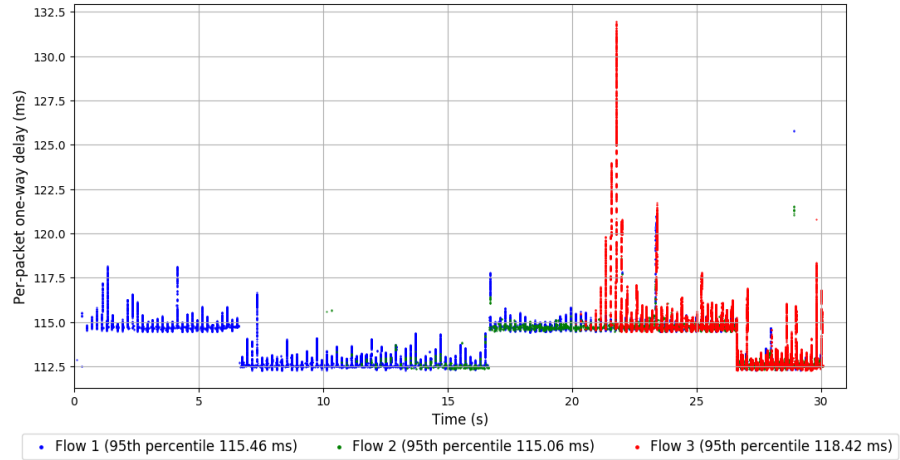
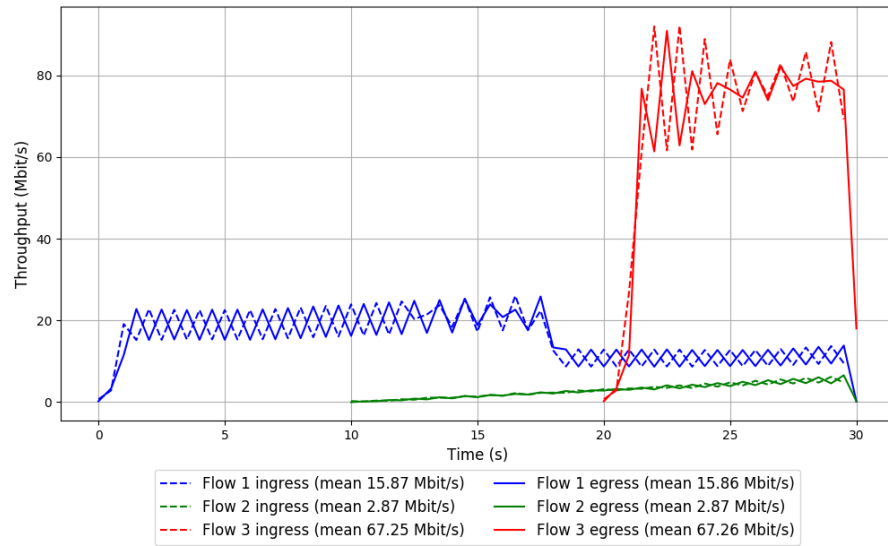
-- Flow 3:

Average throughput: 67.26 Mbit/s

95th percentile per-packet one-way delay: 118.420 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-17 11:19:36

End at: 2018-01-17 11:20:06

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.41 Mbit/s

95th percentile per-packet one-way delay: 116.904 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 84.24 Mbit/s

95th percentile per-packet one-way delay: 116.942 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 115.055 ms

Loss rate: 0.11%

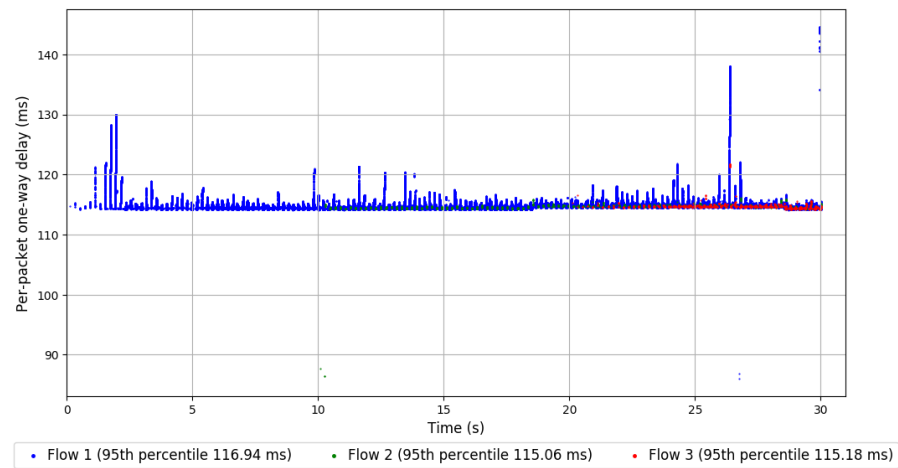
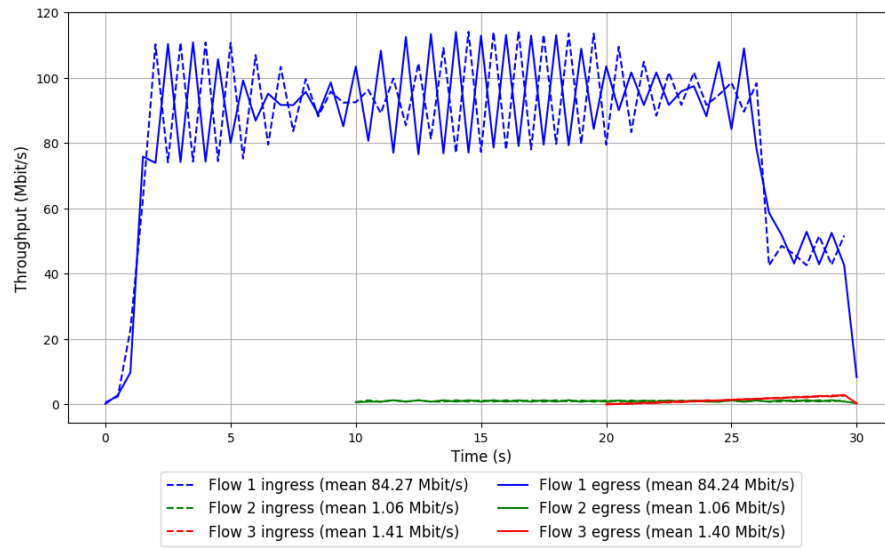
-- Flow 3:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 115.176 ms

Loss rate: 0.77%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-17 11:35:16

End at: 2018-01-17 11:35:46

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 115.115 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 1.11 Mbit/s

95th percentile per-packet one-way delay: 115.119 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 115.109 ms

Loss rate: 0.00%

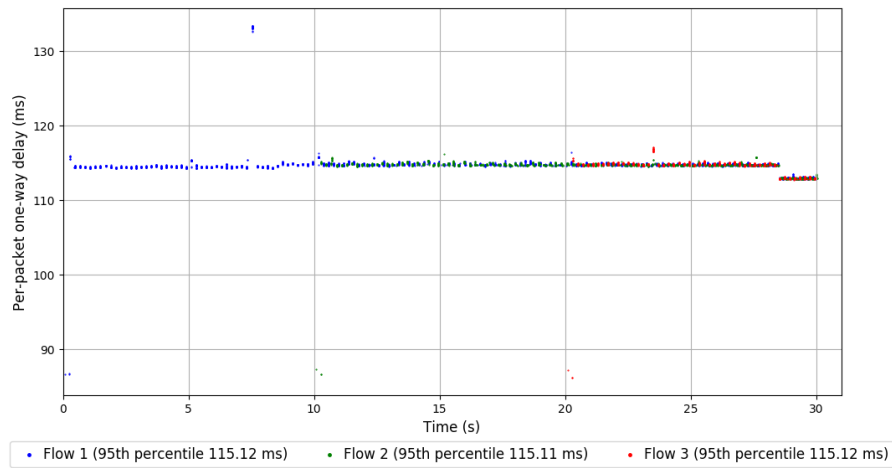
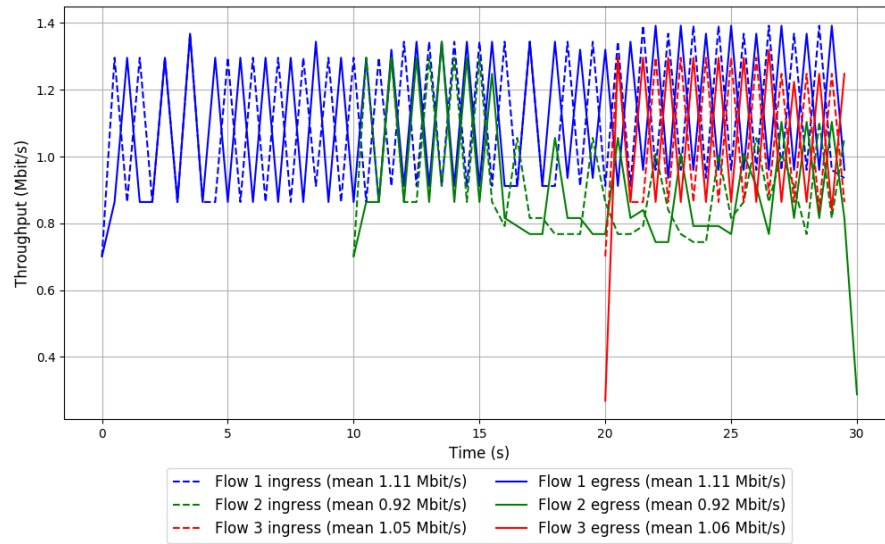
-- Flow 3:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 115.119 ms

Loss rate: 0.12%

Run 9: Report of TCP Vegas — Data Link

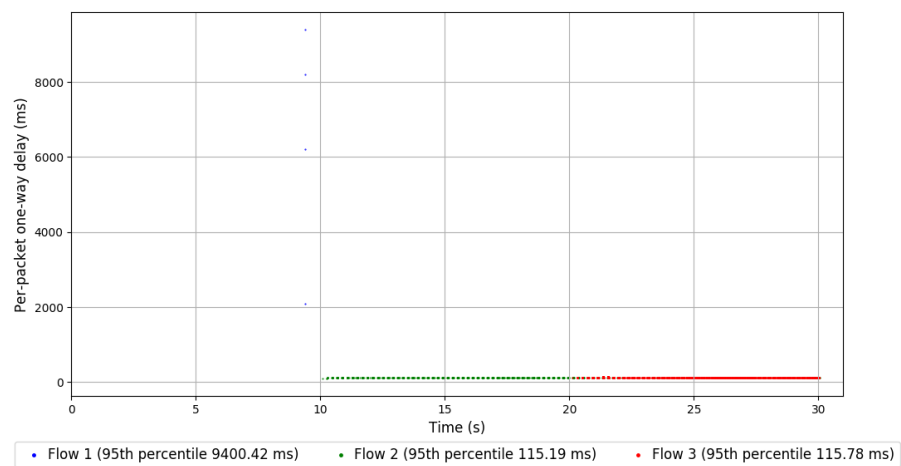
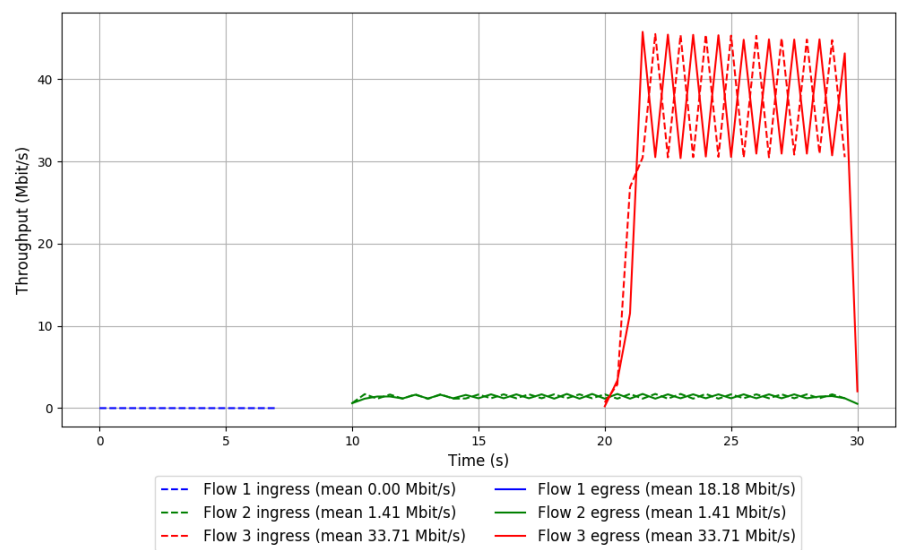


Run 10: Statistics of TCP Vegas

Start at: 2018-01-17 11:52:18

End at: 2018-01-17 11:52:48

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-17 09:18:34

End at: 2018-01-17 09:19:04

Below is generated by plot.py at 2018-01-17 14:31:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.97 Mbit/s

95th percentile per-packet one-way delay: 234.201 ms

Loss rate: 1.93%

-- Flow 1:

Average throughput: 102.02 Mbit/s

95th percentile per-packet one-way delay: 268.766 ms

Loss rate: 3.35%

-- Flow 2:

Average throughput: 115.16 Mbit/s

95th percentile per-packet one-way delay: 221.046 ms

Loss rate: 0.00%

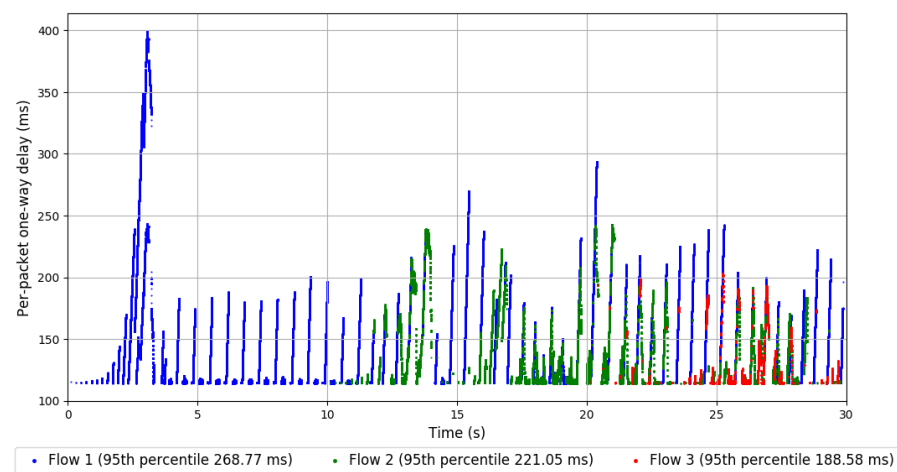
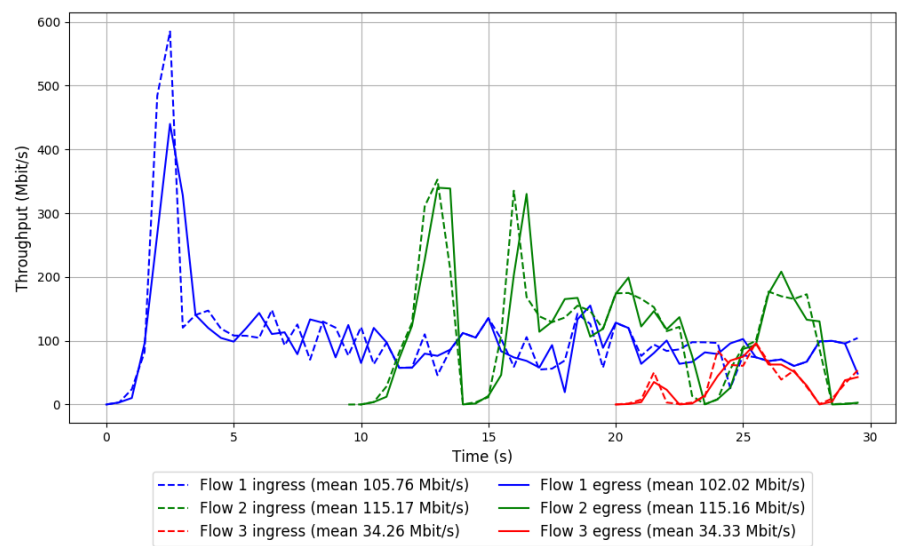
-- Flow 3:

Average throughput: 34.33 Mbit/s

95th percentile per-packet one-way delay: 188.583 ms

Loss rate: 1.61%

Run 1: Report of Verus — Data Link

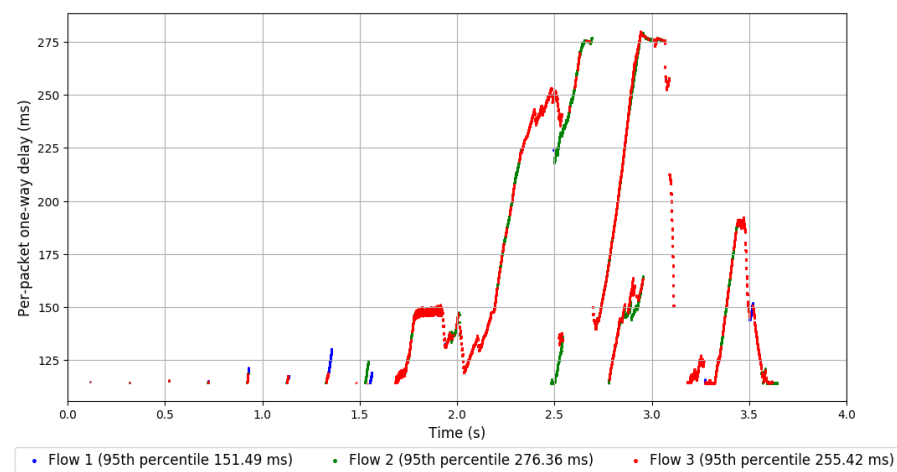
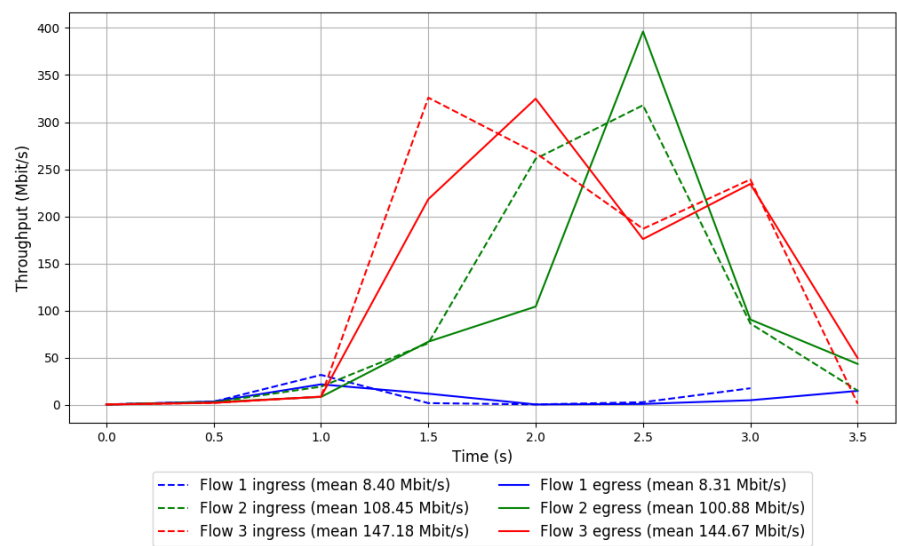


Run 2: Statistics of Verus

Start at: 2018-01-17 09:36:00

End at: 2018-01-17 09:36:30

Run 2: Report of Verus — Data Link

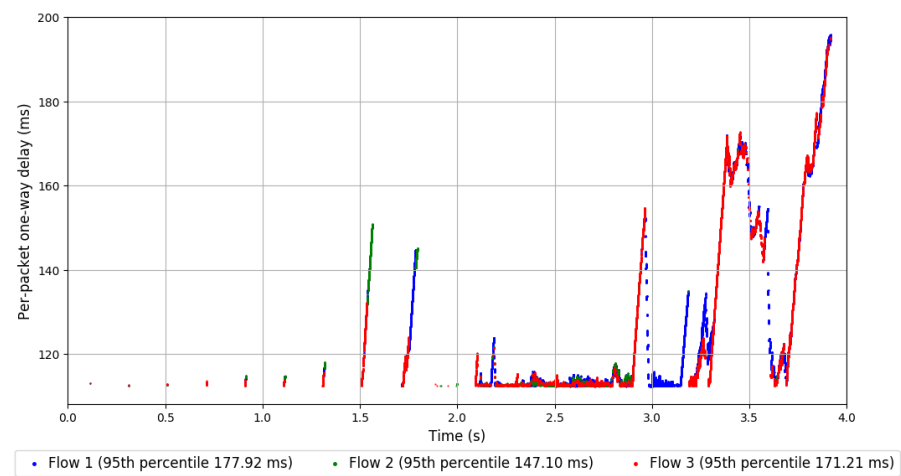
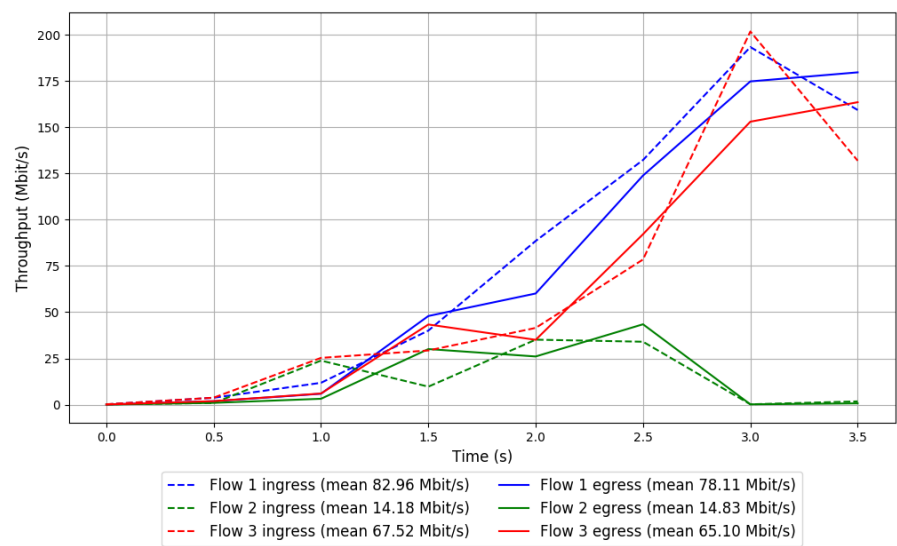


Run 3: Statistics of Verus

Start at: 2018-01-17 09:53:31

End at: 2018-01-17 09:54:01

Run 3: Report of Verus — Data Link

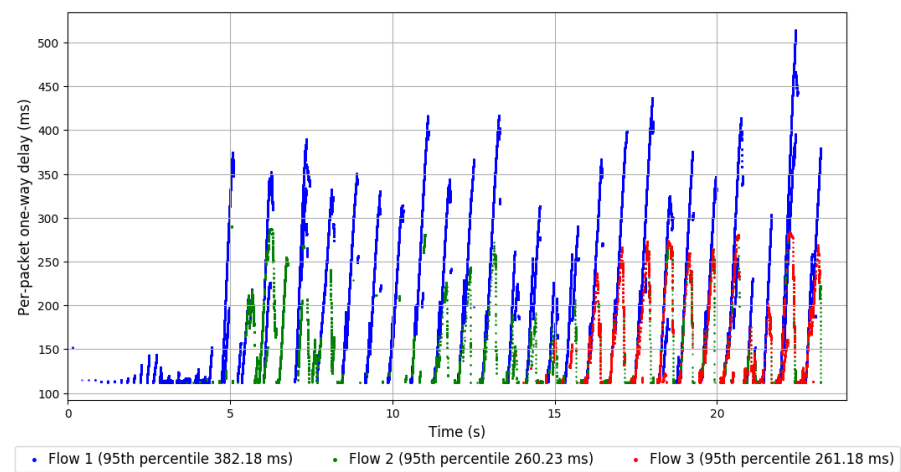
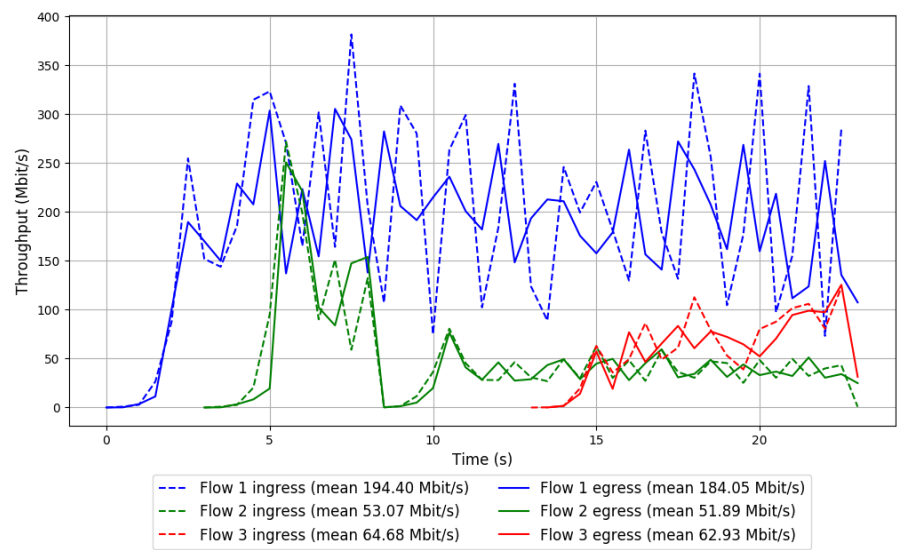


Run 4: Statistics of Verus

Start at: 2018-01-17 10:10:17

End at: 2018-01-17 10:10:47

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-17 10:27:52

End at: 2018-01-17 10:28:22

Below is generated by plot.py at 2018-01-17 14:32:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 206.77 Mbit/s

95th percentile per-packet one-way delay: 207.048 ms

Loss rate: 2.34%

-- Flow 1:

Average throughput: 143.82 Mbit/s

95th percentile per-packet one-way delay: 234.782 ms

Loss rate: 3.20%

-- Flow 2:

Average throughput: 50.00 Mbit/s

95th percentile per-packet one-way delay: 175.487 ms

Loss rate: 0.00%

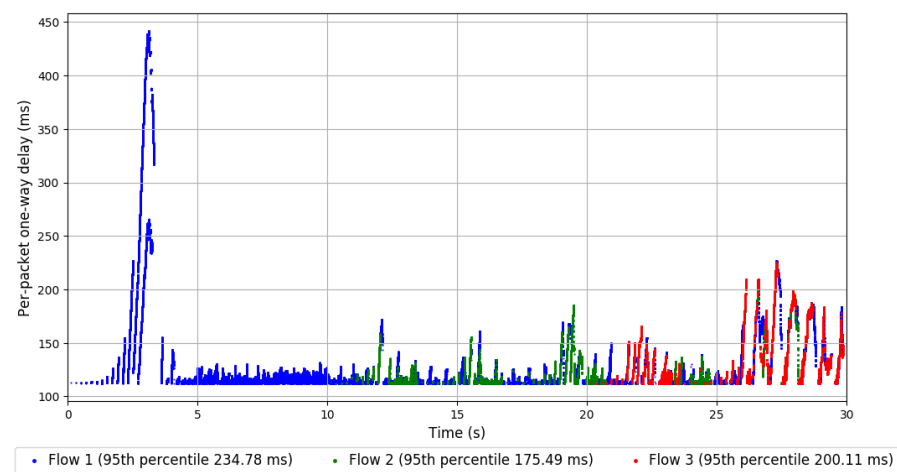
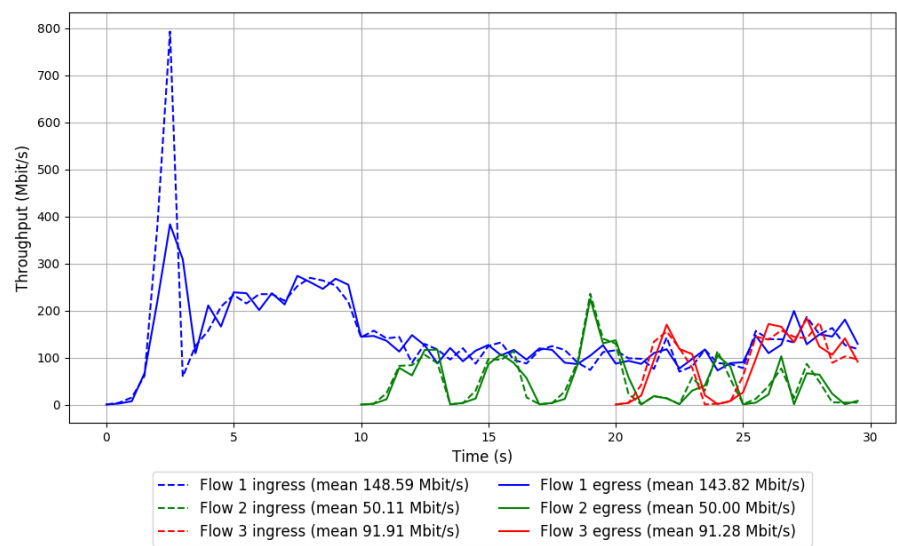
-- Flow 3:

Average throughput: 91.28 Mbit/s

95th percentile per-packet one-way delay: 200.111 ms

Loss rate: 0.63%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-17 10:44:10

End at: 2018-01-17 10:44:40

Below is generated by plot.py at 2018-01-17 14:32:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 209.73 Mbit/s

95th percentile per-packet one-way delay: 343.260 ms

Loss rate: 2.74%

-- Flow 1:

Average throughput: 64.39 Mbit/s

95th percentile per-packet one-way delay: 254.906 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 204.11 Mbit/s

95th percentile per-packet one-way delay: 383.751 ms

Loss rate: 3.65%

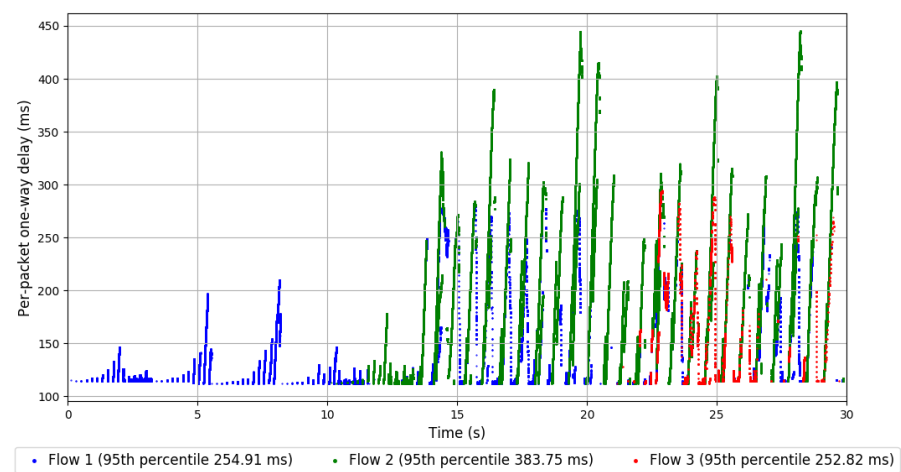
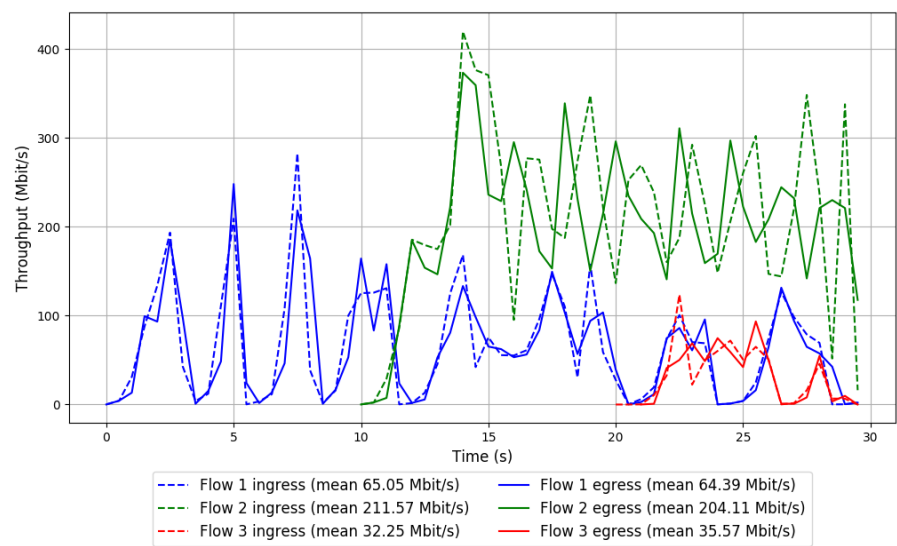
-- Flow 3:

Average throughput: 35.57 Mbit/s

95th percentile per-packet one-way delay: 252.820 ms

Loss rate: 1.26%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-17 11:01:11

End at: 2018-01-17 11:01:41

Below is generated by plot.py at 2018-01-17 14:33:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.29 Mbit/s

95th percentile per-packet one-way delay: 300.817 ms

Loss rate: 4.03%

-- Flow 1:

Average throughput: 120.65 Mbit/s

95th percentile per-packet one-way delay: 291.169 ms

Loss rate: 3.86%

-- Flow 2:

Average throughput: 125.27 Mbit/s

95th percentile per-packet one-way delay: 312.828 ms

Loss rate: 4.28%

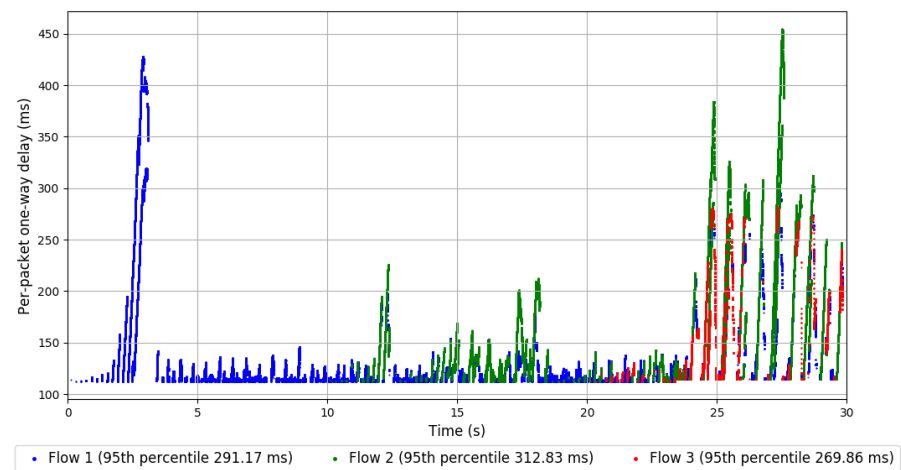
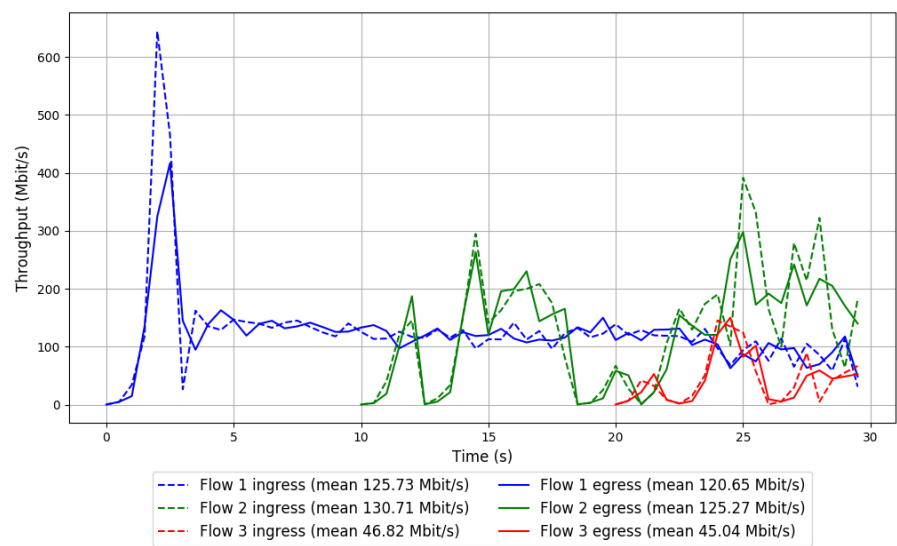
-- Flow 3:

Average throughput: 45.04 Mbit/s

95th percentile per-packet one-way delay: 269.860 ms

Loss rate: 4.01%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-17 11:17:45

End at: 2018-01-17 11:18:15

Below is generated by plot.py at 2018-01-17 14:33:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 255.07 Mbit/s

95th percentile per-packet one-way delay: 276.380 ms

Loss rate: 3.33%

-- Flow 1:

Average throughput: 172.20 Mbit/s

95th percentile per-packet one-way delay: 220.828 ms

Loss rate: 2.40%

-- Flow 2:

Average throughput: 100.38 Mbit/s

95th percentile per-packet one-way delay: 318.490 ms

Loss rate: 6.44%

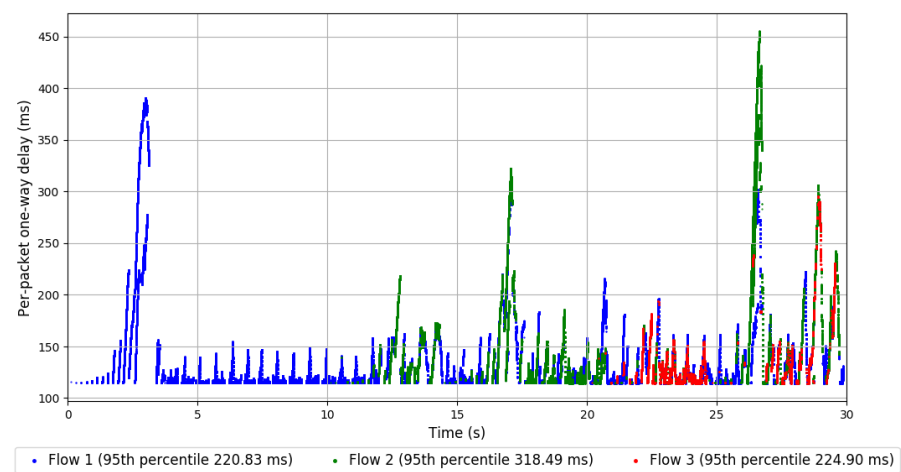
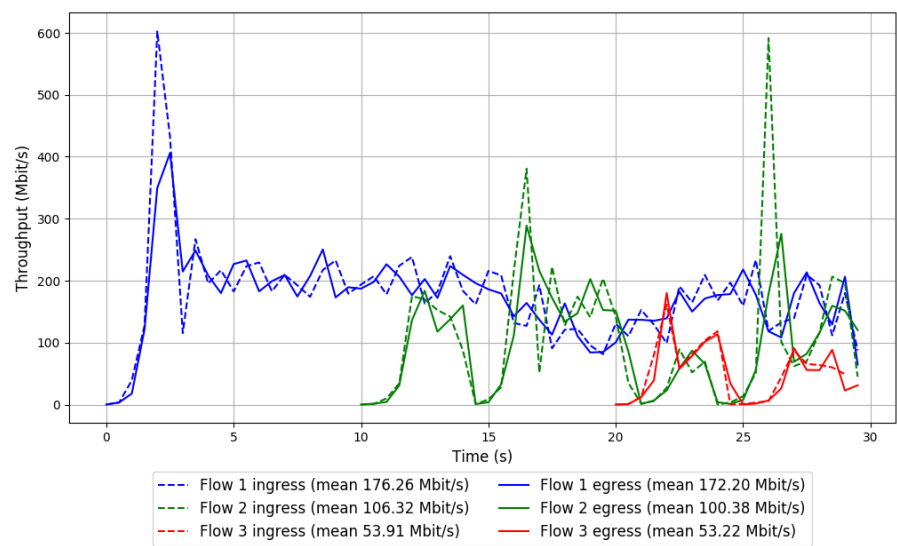
-- Flow 3:

Average throughput: 53.22 Mbit/s

95th percentile per-packet one-way delay: 224.895 ms

Loss rate: 0.04%

Run 8: Report of Verus — Data Link

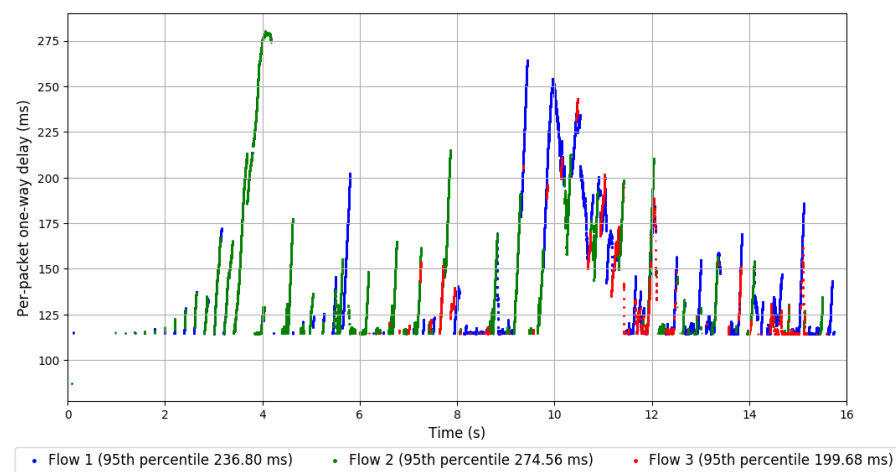
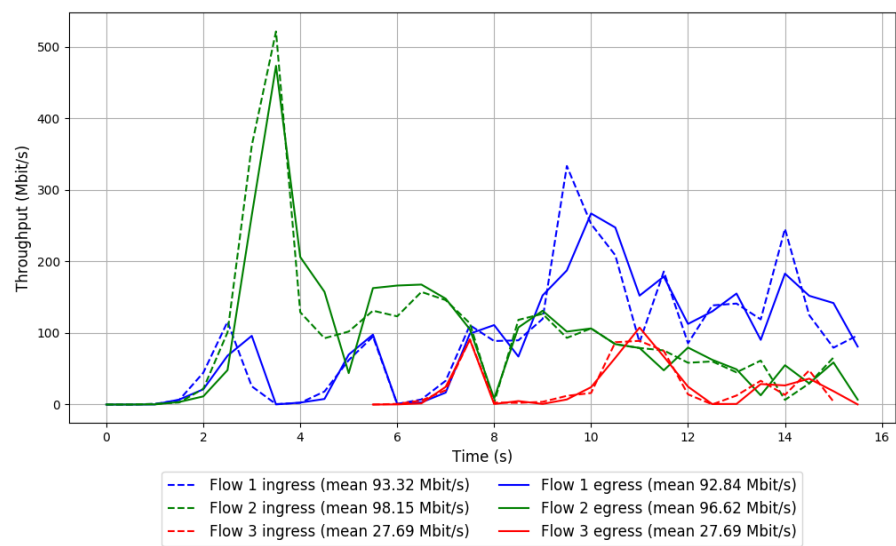


Run 9: Statistics of Verus

Start at: 2018-01-17 11:33:37

End at: 2018-01-17 11:34:07

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-17 11:50:09

End at: 2018-01-17 11:50:39

Below is generated by plot.py at 2018-01-17 14:35:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 238.46 Mbit/s

95th percentile per-packet one-way delay: 234.321 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 172.14 Mbit/s

95th percentile per-packet one-way delay: 223.060 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 68.17 Mbit/s

95th percentile per-packet one-way delay: 234.946 ms

Loss rate: 0.78%

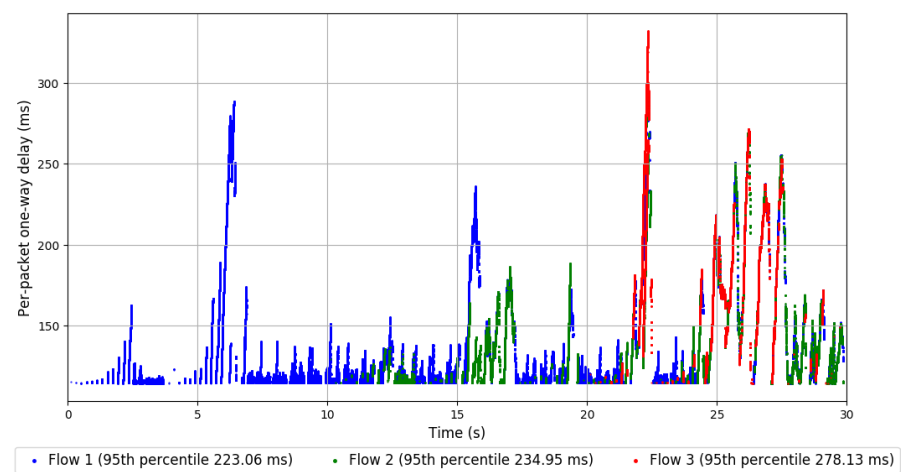
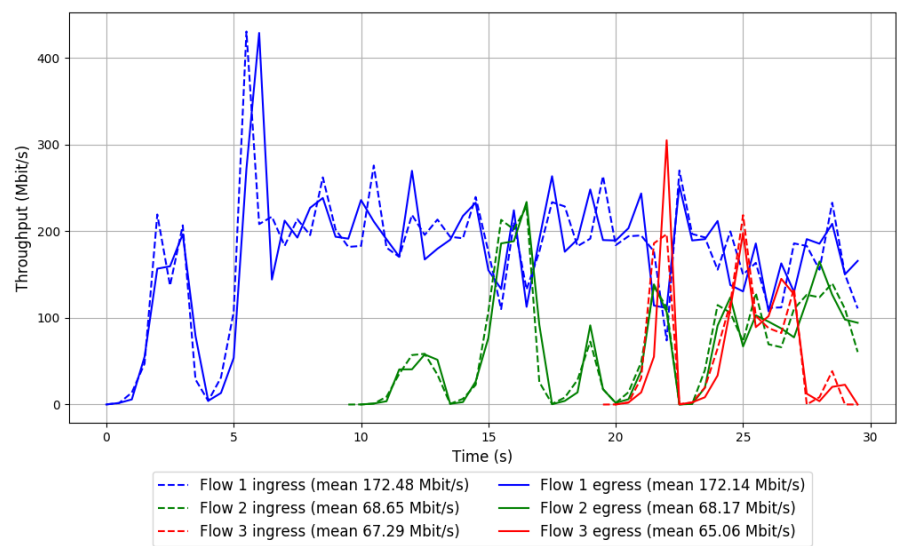
-- Flow 3:

Average throughput: 65.06 Mbit/s

95th percentile per-packet one-way delay: 278.135 ms

Loss rate: 3.02%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-01-17 09:26:33

End at: 2018-01-17 09:27:03

Below is generated by plot.py at 2018-01-17 14:35:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.22 Mbit/s

95th percentile per-packet one-way delay: 114.712 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.15 Mbit/s

95th percentile per-packet one-way delay: 114.625 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.80 Mbit/s

95th percentile per-packet one-way delay: 114.743 ms

Loss rate: 0.00%

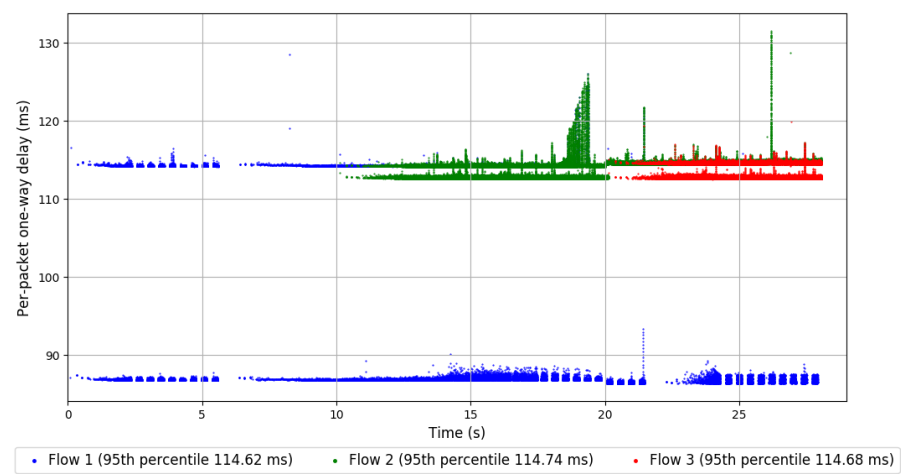
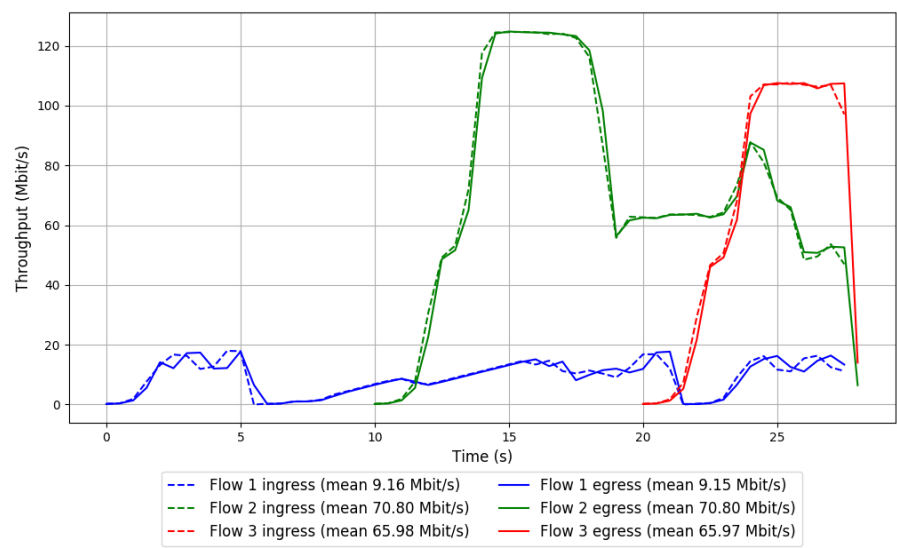
-- Flow 3:

Average throughput: 65.97 Mbit/s

95th percentile per-packet one-way delay: 114.676 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-17 09:43:56

End at: 2018-01-17 09:44:26

Below is generated by plot.py at 2018-01-17 14:35:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.62 Mbit/s

95th percentile per-packet one-way delay: 114.875 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 64.43 Mbit/s

95th percentile per-packet one-way delay: 114.907 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 8.73 Mbit/s

95th percentile per-packet one-way delay: 114.625 ms

Loss rate: 0.08%

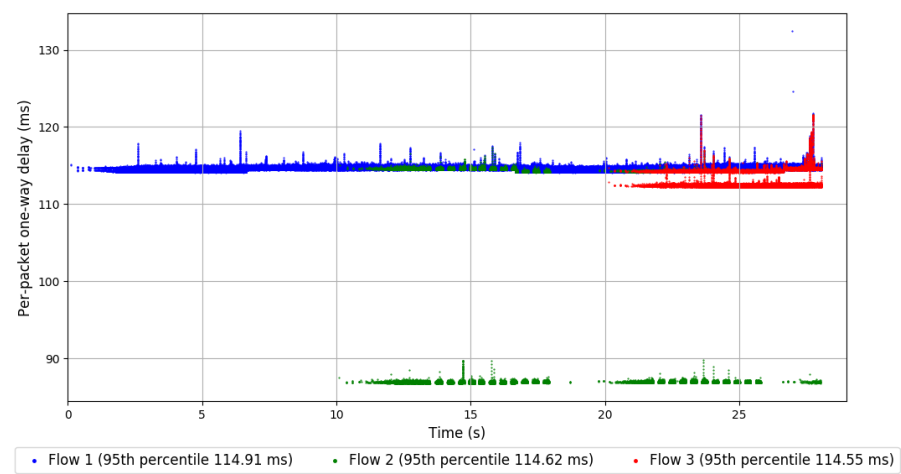
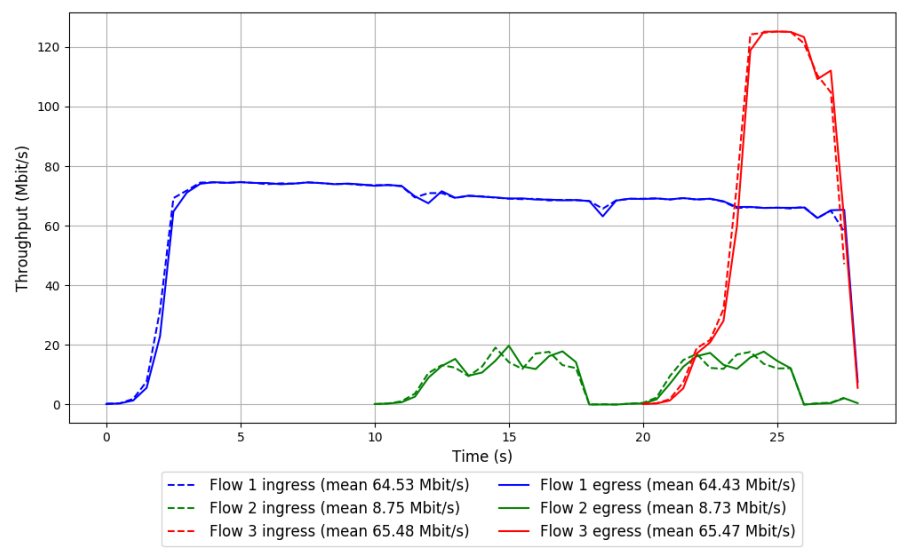
-- Flow 3:

Average throughput: 65.47 Mbit/s

95th percentile per-packet one-way delay: 114.554 ms

Loss rate: 0.01%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-17 10:01:03

End at: 2018-01-17 10:01:33

Below is generated by plot.py at 2018-01-17 14:35:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.47 Mbit/s

95th percentile per-packet one-way delay: 114.612 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.99 Mbit/s

95th percentile per-packet one-way delay: 114.618 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 10.57 Mbit/s

95th percentile per-packet one-way delay: 114.637 ms

Loss rate: 0.00%

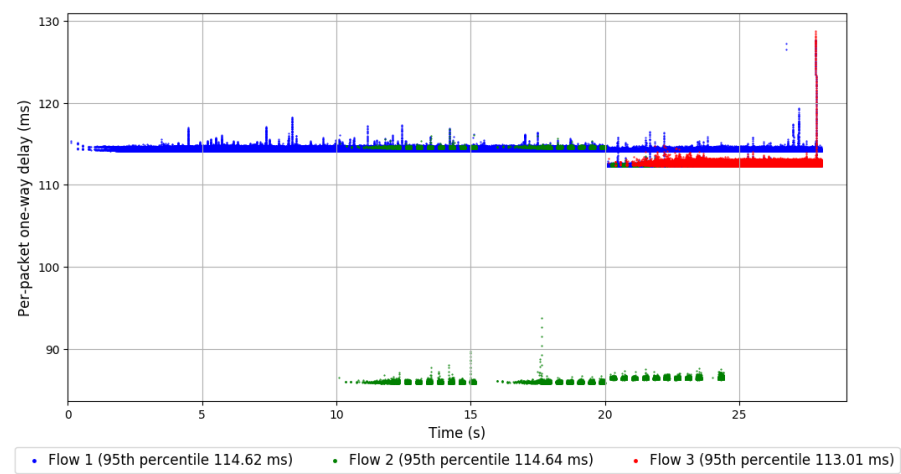
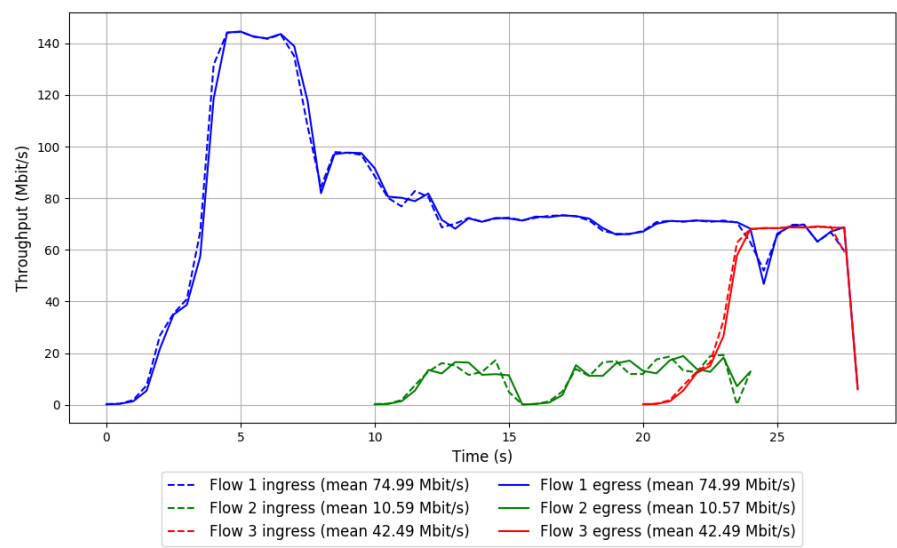
-- Flow 3:

Average throughput: 42.49 Mbit/s

95th percentile per-packet one-way delay: 113.009 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-17 10:17:52

End at: 2018-01-17 10:18:22

Below is generated by plot.py at 2018-01-17 14:35:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.07 Mbit/s

95th percentile per-packet one-way delay: 114.661 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 34.09 Mbit/s

95th percentile per-packet one-way delay: 114.634 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 75.22 Mbit/s

95th percentile per-packet one-way delay: 114.623 ms

Loss rate: 0.23%

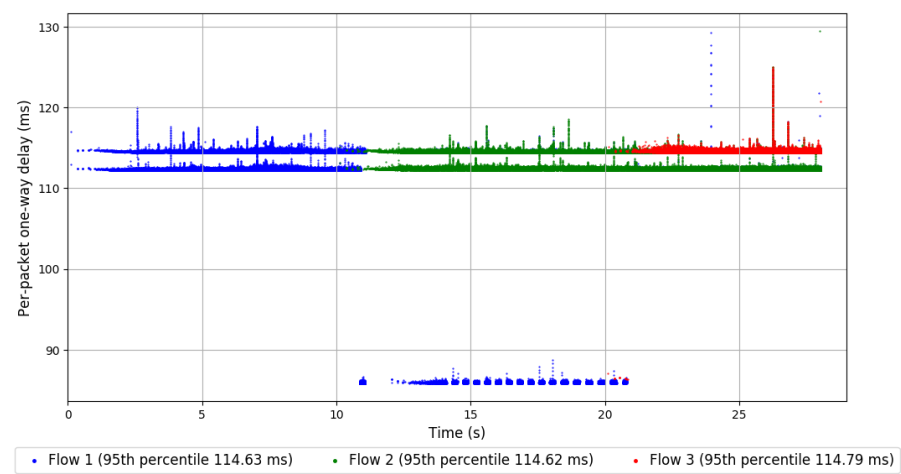
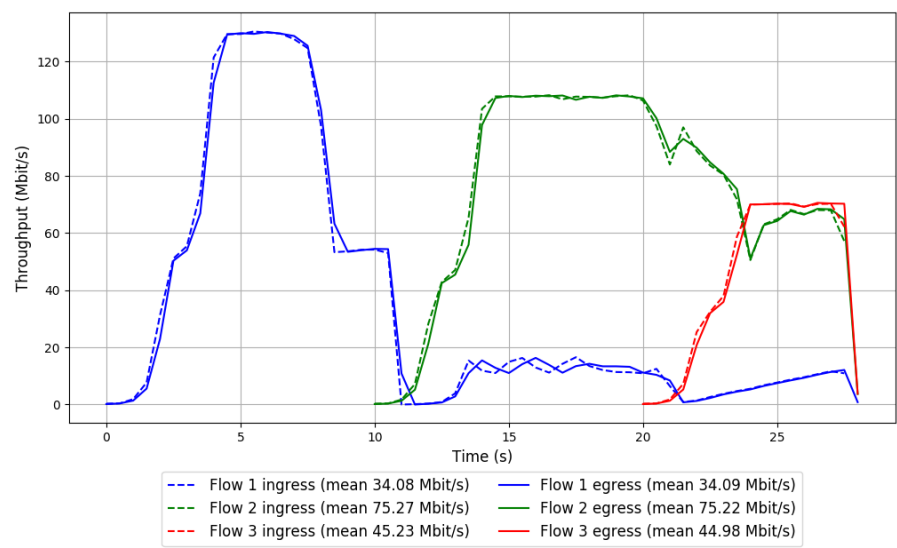
-- Flow 3:

Average throughput: 44.98 Mbit/s

95th percentile per-packet one-way delay: 114.792 ms

Loss rate: 0.54%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-17 10:35:15

End at: 2018-01-17 10:35:45

Below is generated by plot.py at 2018-01-17 14:35:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.35 Mbit/s

95th percentile per-packet one-way delay: 114.554 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 8.96 Mbit/s

95th percentile per-packet one-way delay: 114.574 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 9.60 Mbit/s

95th percentile per-packet one-way delay: 114.536 ms

Loss rate: 0.00%

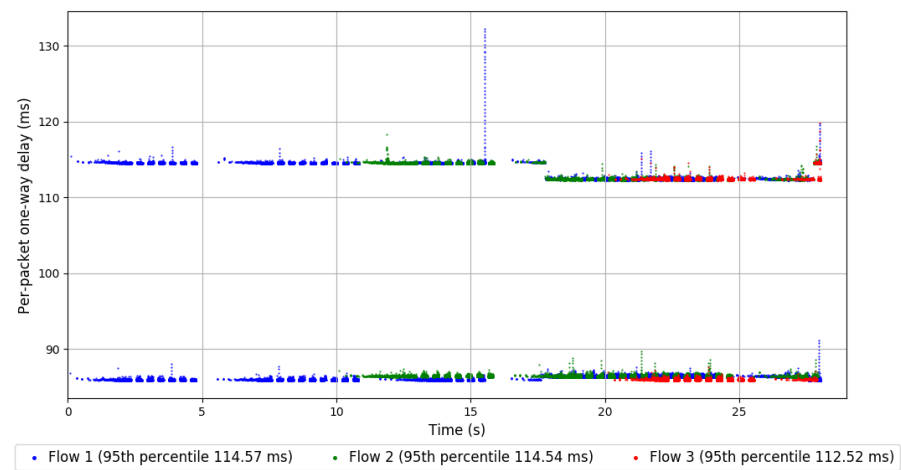
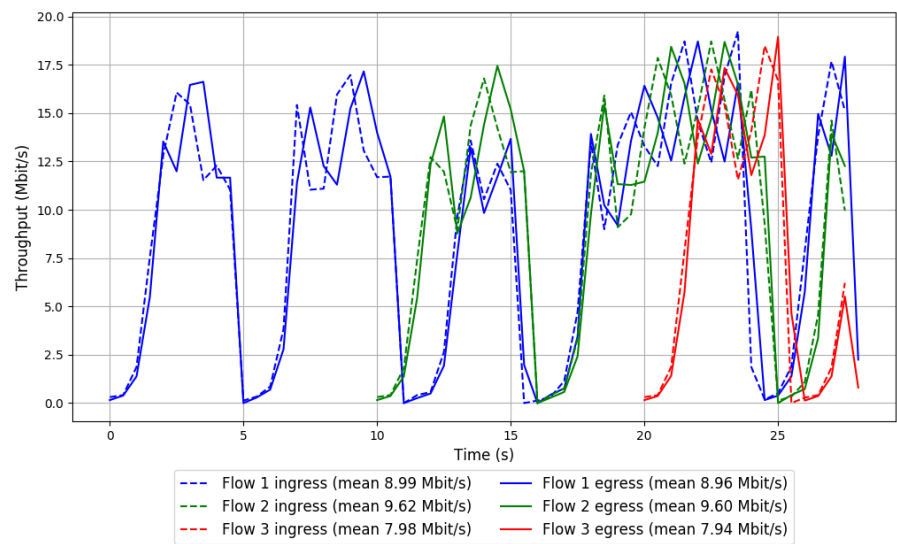
-- Flow 3:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 112.519 ms

Loss rate: 0.45%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-17 10:52:14

End at: 2018-01-17 10:52:44

Below is generated by plot.py at 2018-01-17 14:35:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.49 Mbit/s

95th percentile per-packet one-way delay: 114.591 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 10.27 Mbit/s

95th percentile per-packet one-way delay: 114.583 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 9.30 Mbit/s

95th percentile per-packet one-way delay: 112.469 ms

Loss rate: 1.03%

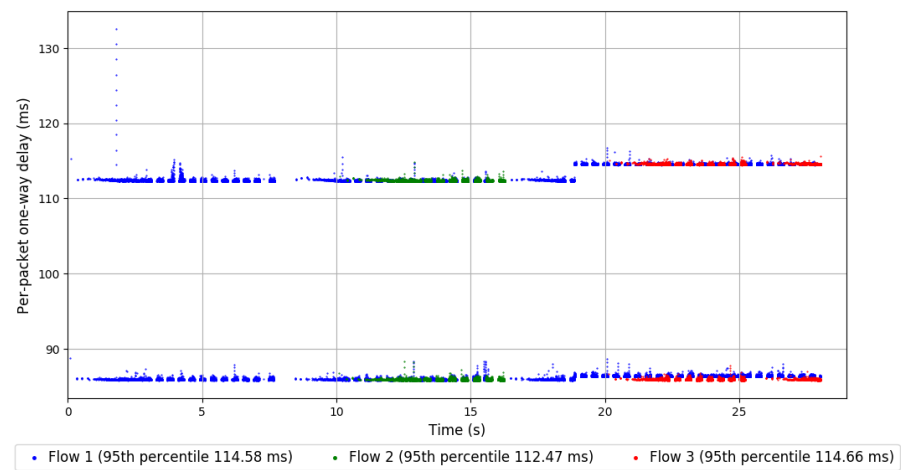
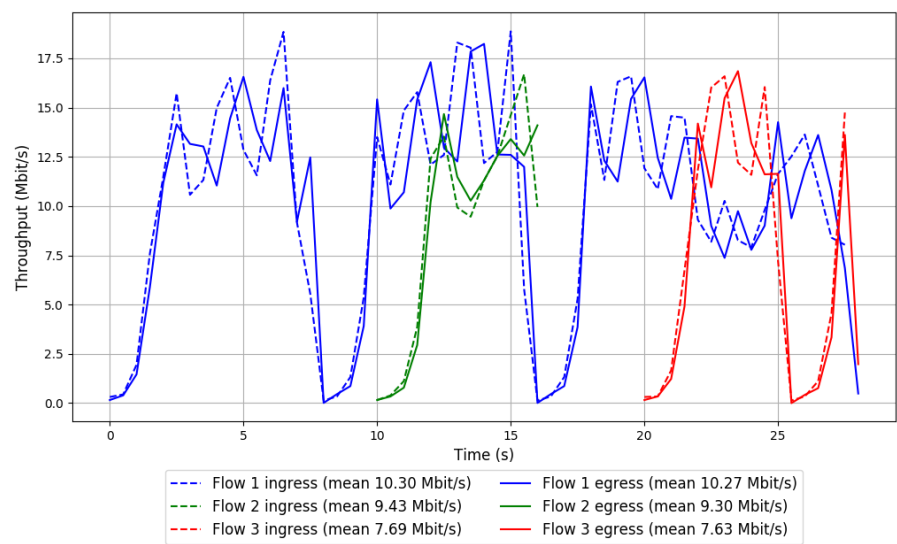
-- Flow 3:

Average throughput: 7.63 Mbit/s

95th percentile per-packet one-way delay: 114.655 ms

Loss rate: 0.65%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-17 11:08:57

End at: 2018-01-17 11:09:27

Below is generated by plot.py at 2018-01-17 14:35:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.44 Mbit/s

95th percentile per-packet one-way delay: 114.616 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 8.82 Mbit/s

95th percentile per-packet one-way delay: 114.619 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 12.93 Mbit/s

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

Loss rate: 0.00%

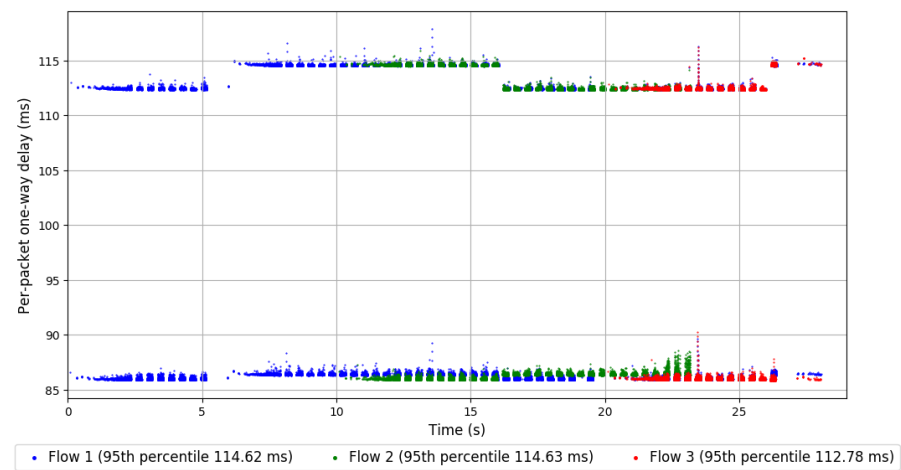
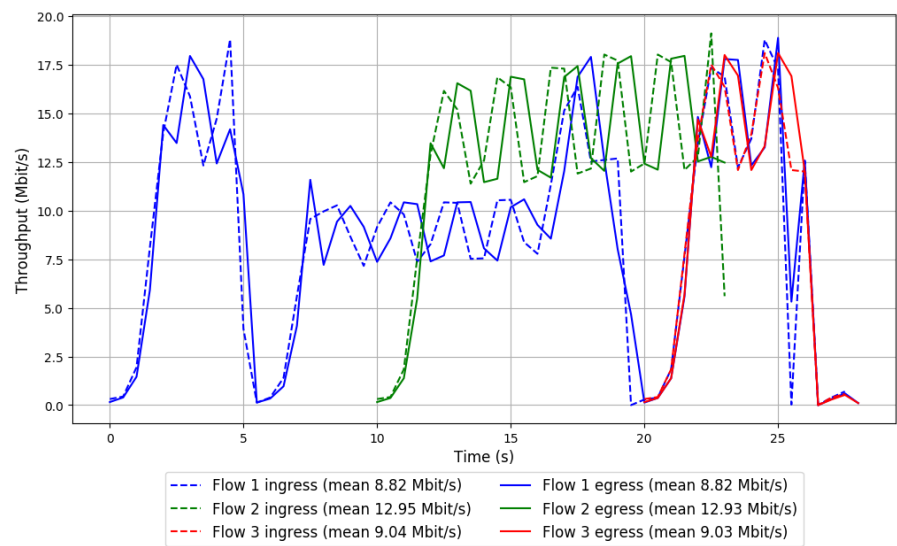
-- Flow 3:

Average throughput: 9.03 Mbit/s

95th percentile per-packet one-way delay: 112.777 ms

Loss rate: 0.03%

Run 7: Report of Copa — Data Link

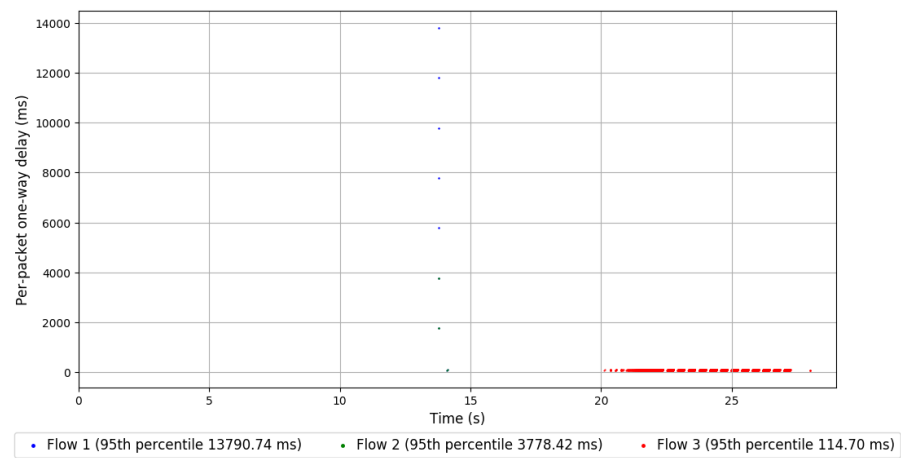
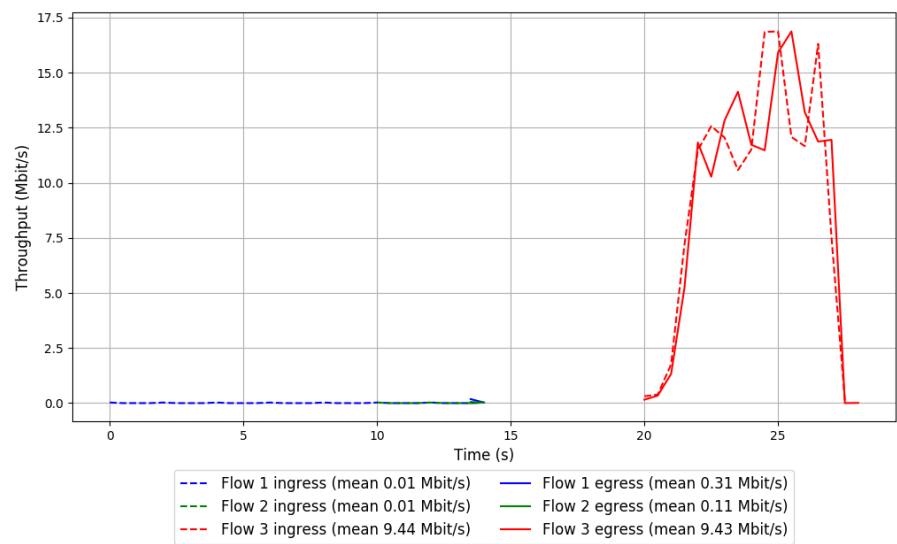


Run 8: Statistics of Copa

Start at: 2018-01-17 11:25:03

End at: 2018-01-17 11:25:33

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-17 11:40:44

End at: 2018-01-17 11:41:14

Below is generated by plot.py at 2018-01-17 14:35:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.44 Mbit/s

95th percentile per-packet one-way delay: 114.556 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 47.57 Mbit/s

95th percentile per-packet one-way delay: 114.454 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 8.23 Mbit/s

95th percentile per-packet one-way delay: 114.650 ms

Loss rate: 0.02%

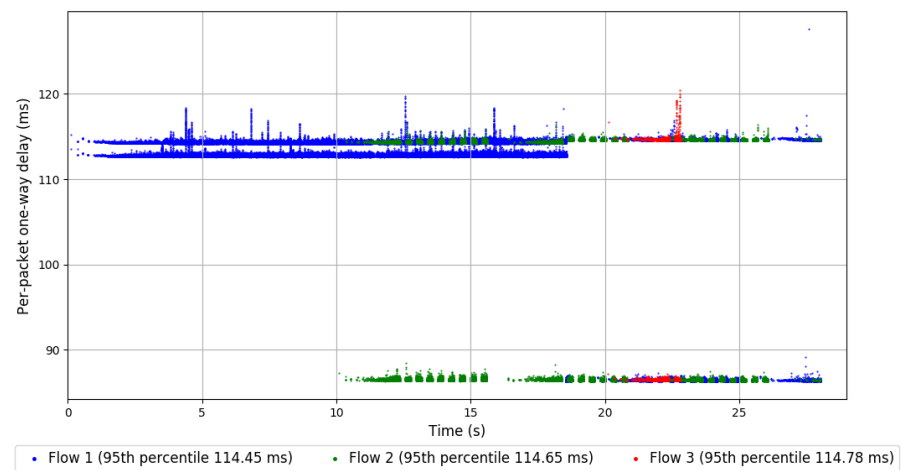
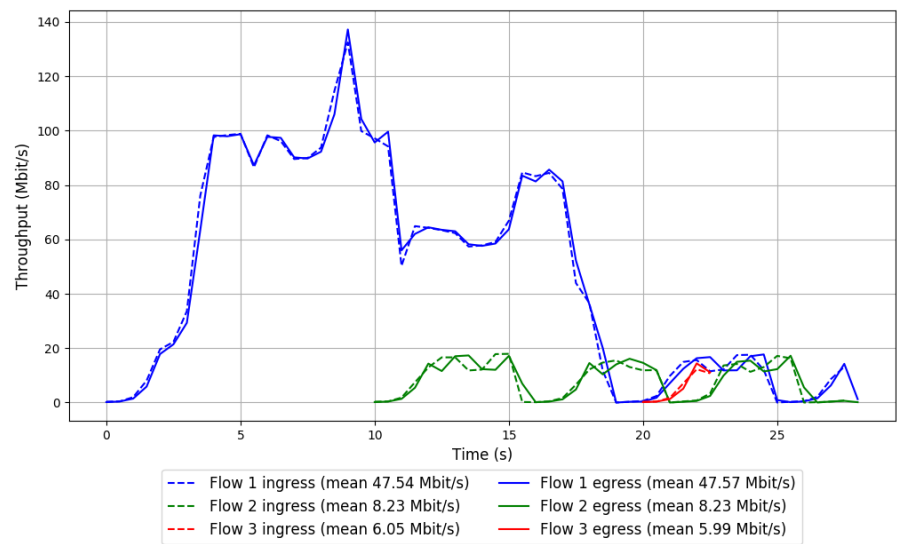
-- Flow 3:

Average throughput: 5.99 Mbit/s

95th percentile per-packet one-way delay: 114.777 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-17 11:57:42

End at: 2018-01-17 11:58:12

Below is generated by plot.py at 2018-01-17 14:37:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.47 Mbit/s

95th percentile per-packet one-way delay: 114.799 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 66.41 Mbit/s

95th percentile per-packet one-way delay: 114.683 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 39.38 Mbit/s

95th percentile per-packet one-way delay: 114.953 ms

Loss rate: 0.18%

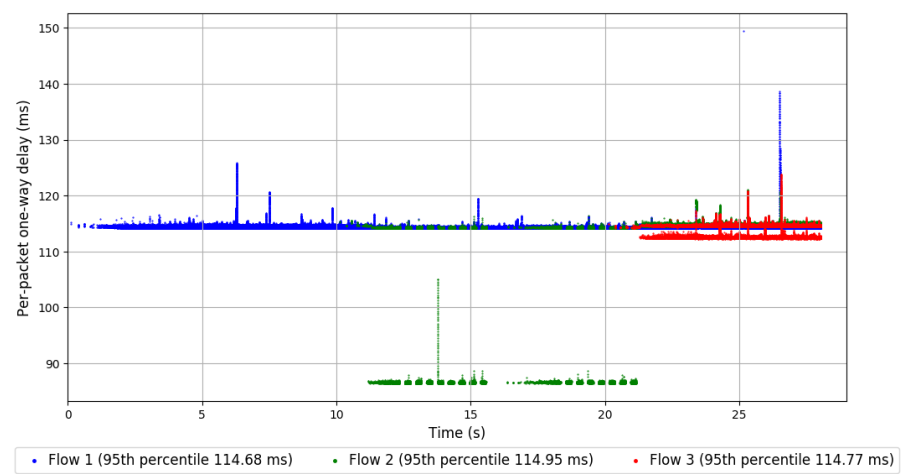
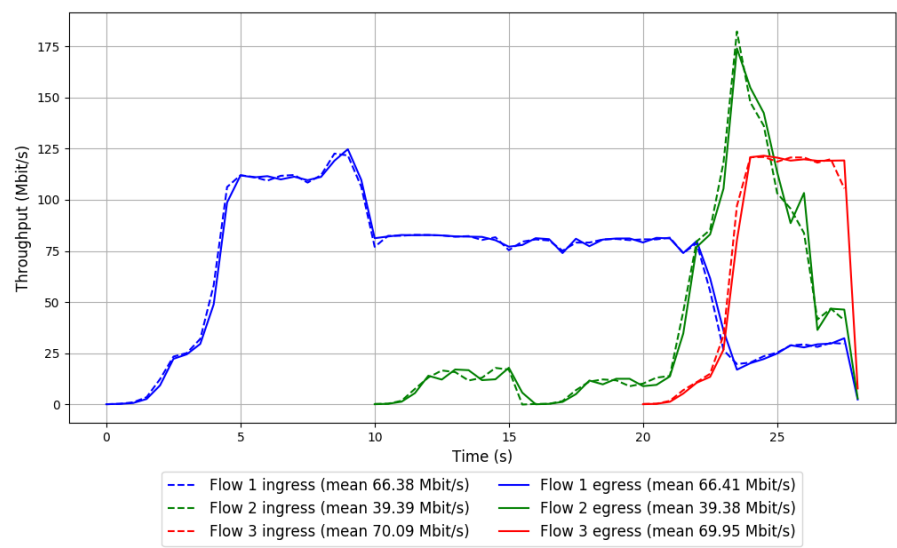
-- Flow 3:

Average throughput: 69.95 Mbit/s

95th percentile per-packet one-way delay: 114.773 ms

Loss rate: 0.56%

Run 10: Report of Copa — Data Link

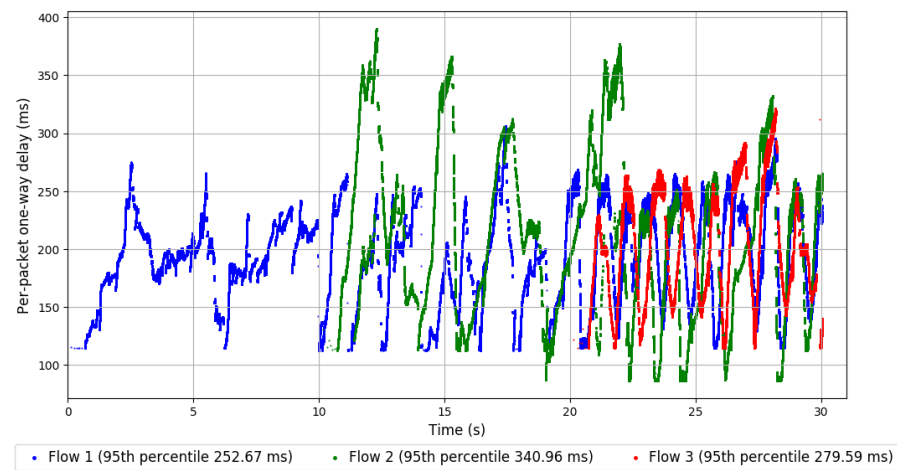
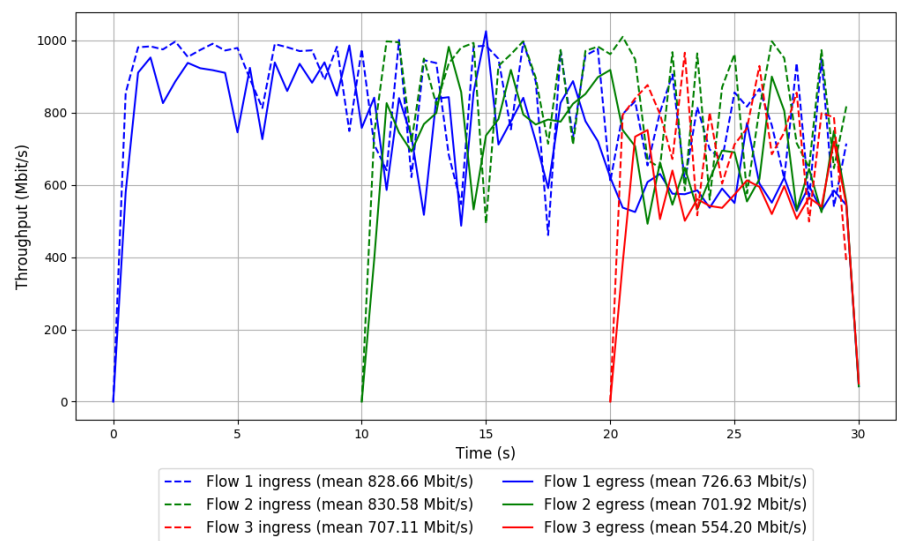


```
Run 1: Statistics of FillP

Start at: 2018-01-17 09:28:56
End at: 2018-01-17 09:29:26

# Below is generated by plot.py at 2018-01-17 15:00:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1375.81 Mbit/s
95th percentile per-packet one-way delay: 295.384 ms
Loss rate: 14.78%
-- Flow 1:
Average throughput: 726.63 Mbit/s
95th percentile per-packet one-way delay: 252.673 ms
Loss rate: 12.32%
-- Flow 2:
Average throughput: 701.92 Mbit/s
95th percentile per-packet one-way delay: 340.965 ms
Loss rate: 15.56%
-- Flow 3:
Average throughput: 554.20 Mbit/s
95th percentile per-packet one-way delay: 279.593 ms
Loss rate: 21.69%
```


Run 1: Report of FillP — Data Link

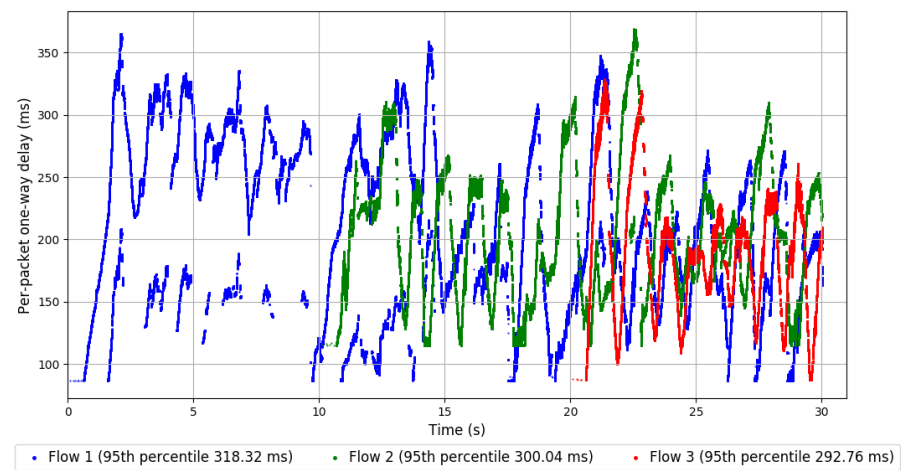
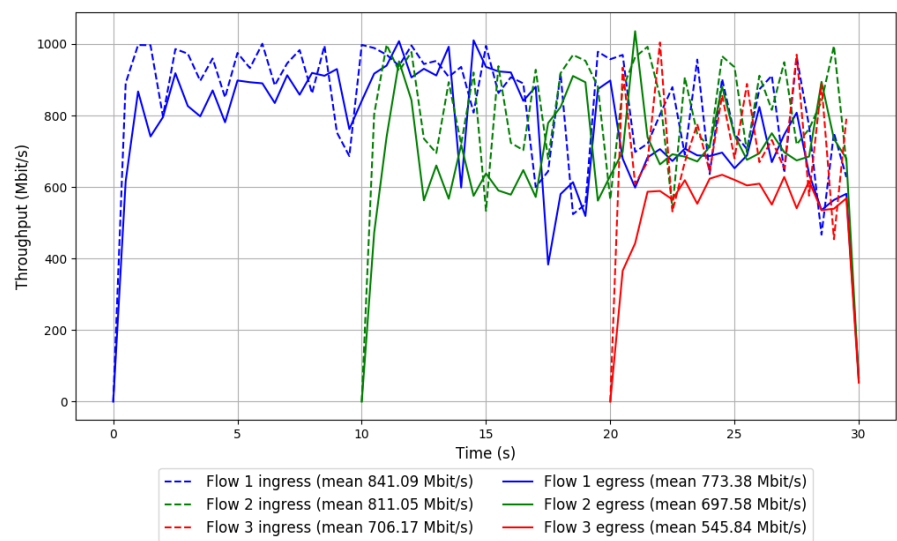


```
Run 2: Statistics of FillP

Start at: 2018-01-17 09:46:21
End at: 2018-01-17 09:46:51

# Below is generated by plot.py at 2018-01-17 15:01:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1418.11 Mbit/s
95th percentile per-packet one-way delay: 311.272 ms
Loss rate: 12.09%
-- Flow 1:
Average throughput: 773.38 Mbit/s
95th percentile per-packet one-way delay: 318.325 ms
Loss rate: 7.96%
-- Flow 2:
Average throughput: 697.58 Mbit/s
95th percentile per-packet one-way delay: 300.035 ms
Loss rate: 14.00%
-- Flow 3:
Average throughput: 545.84 Mbit/s
95th percentile per-packet one-way delay: 292.758 ms
Loss rate: 22.51%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-17 10:03:26

End at: 2018-01-17 10:03:56

Below is generated by plot.py at 2018-01-17 15:01:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 1346.60 Mbit/s

95th percentile per-packet one-way delay: 370.702 ms

Loss rate: 14.69%

-- Flow 1:

Average throughput: 685.07 Mbit/s

95th percentile per-packet one-way delay: 385.217 ms

Loss rate: 15.45%

-- Flow 2:

Average throughput: 708.11 Mbit/s

95th percentile per-packet one-way delay: 287.600 ms

Loss rate: 12.23%

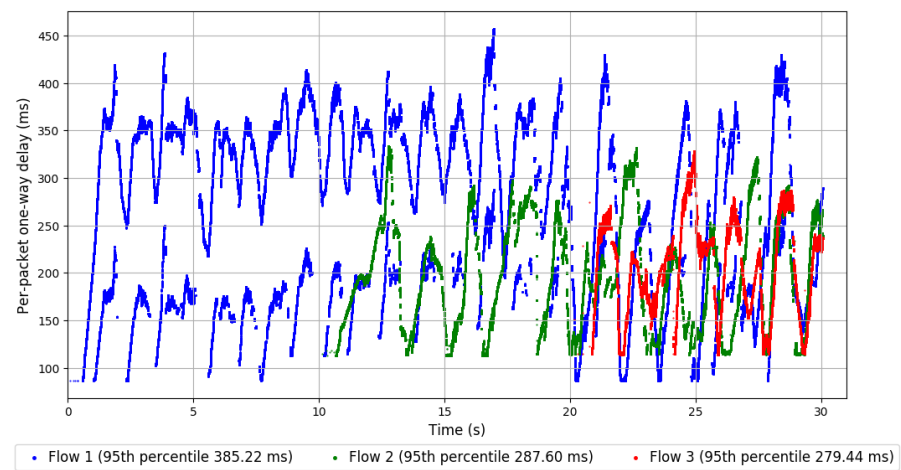
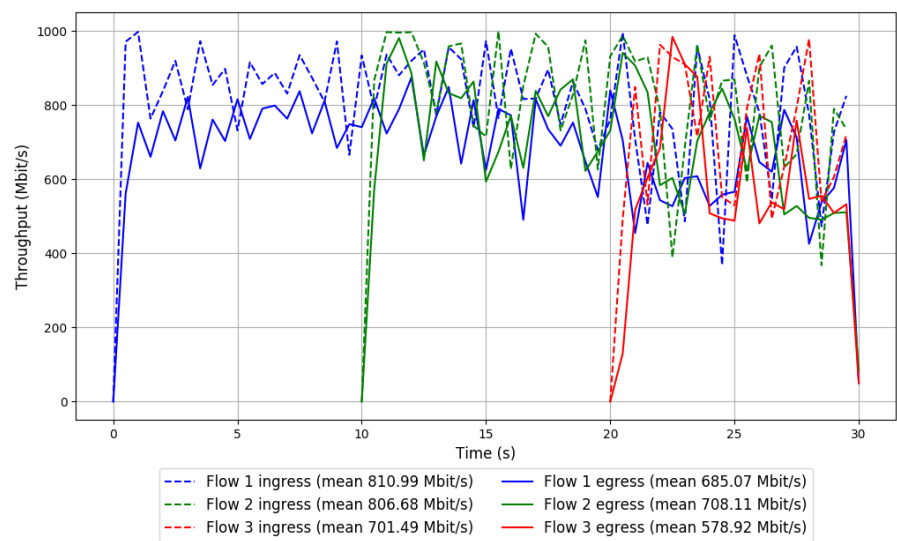
-- Flow 3:

Average throughput: 578.92 Mbit/s

95th percentile per-packet one-way delay: 279.435 ms

Loss rate: 17.77%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-17 10:20:17

End at: 2018-01-17 10:20:47

Below is generated by plot.py at 2018-01-17 15:03:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 1471.18 Mbit/s

95th percentile per-packet one-way delay: 317.647 ms

Loss rate: 10.78%

-- Flow 1:

Average throughput: 777.38 Mbit/s

95th percentile per-packet one-way delay: 298.660 ms

Loss rate: 9.58%

-- Flow 2:

Average throughput: 701.71 Mbit/s

95th percentile per-packet one-way delay: 321.156 ms

Loss rate: 10.62%

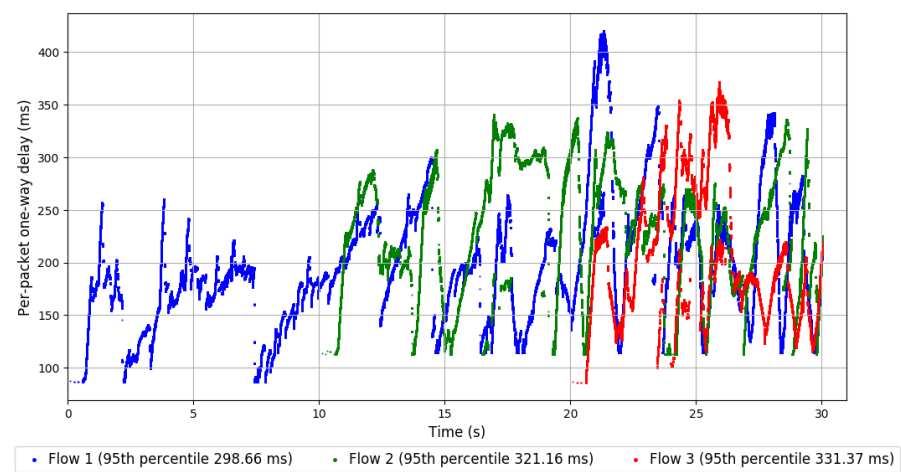
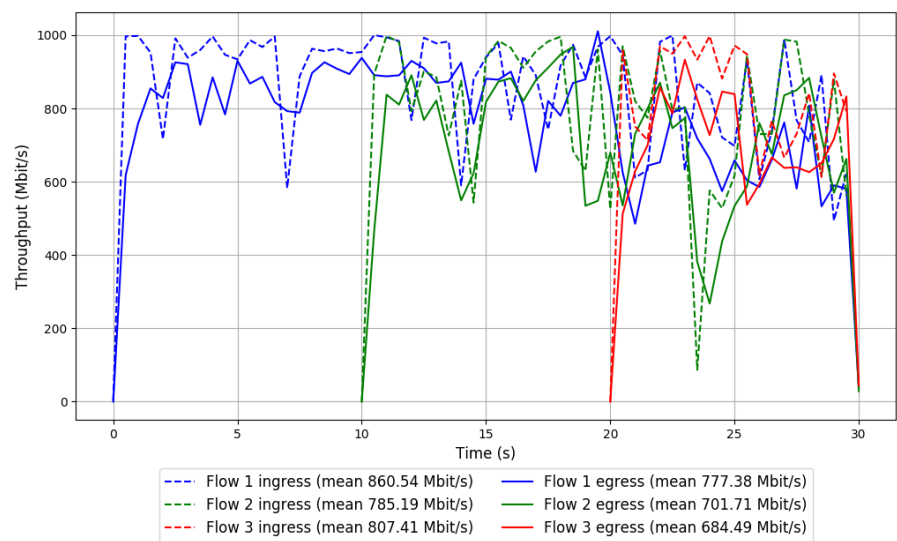
-- Flow 3:

Average throughput: 684.49 Mbit/s

95th percentile per-packet one-way delay: 331.367 ms

Loss rate: 14.97%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-17 10:37:29

End at: 2018-01-17 10:37:59

Below is generated by plot.py at 2018-01-17 15:03:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 1090.76 Mbit/s

95th percentile per-packet one-way delay: 344.470 ms

Loss rate: 9.35%

-- Flow 1:

Average throughput: 346.95 Mbit/s

95th percentile per-packet one-way delay: 349.593 ms

Loss rate: 8.46%

-- Flow 2:

Average throughput: 775.67 Mbit/s

95th percentile per-packet one-way delay: 341.470 ms

Loss rate: 8.60%

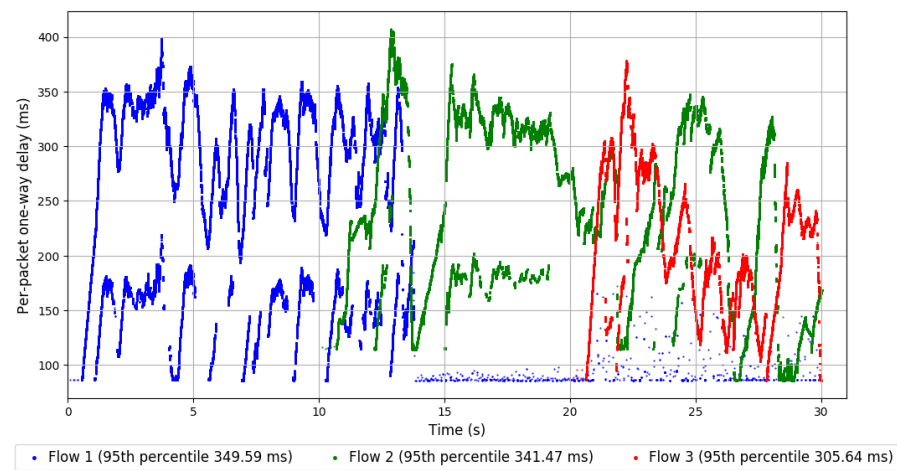
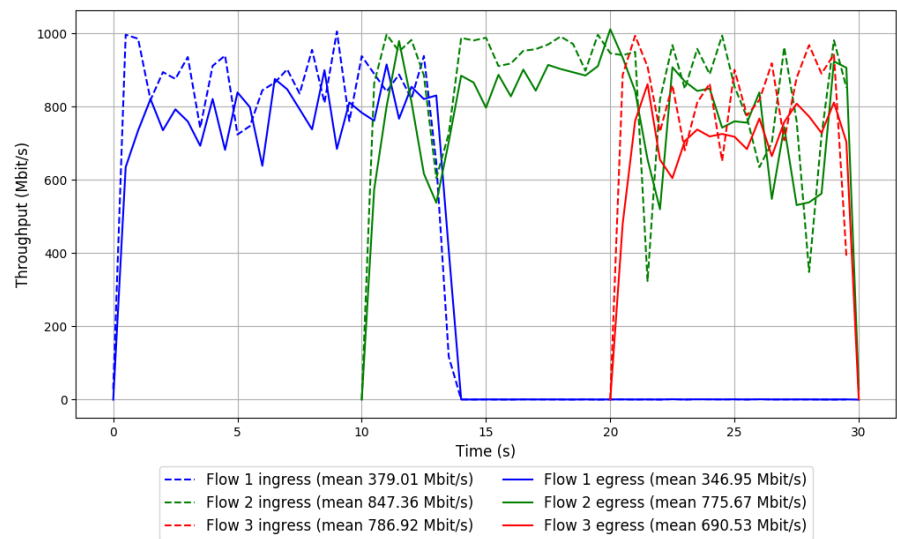
-- Flow 3:

Average throughput: 690.53 Mbit/s

95th percentile per-packet one-way delay: 305.637 ms

Loss rate: 12.27%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-17 10:54:27

End at: 2018-01-17 10:54:57

Below is generated by plot.py at 2018-01-17 15:03:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 1426.71 Mbit/s

95th percentile per-packet one-way delay: 282.924 ms

Loss rate: 12.29%

-- Flow 1:

Average throughput: 757.02 Mbit/s

95th percentile per-packet one-way delay: 290.588 ms

Loss rate: 9.05%

-- Flow 2:

Average throughput: 697.53 Mbit/s

95th percentile per-packet one-way delay: 277.687 ms

Loss rate: 13.75%

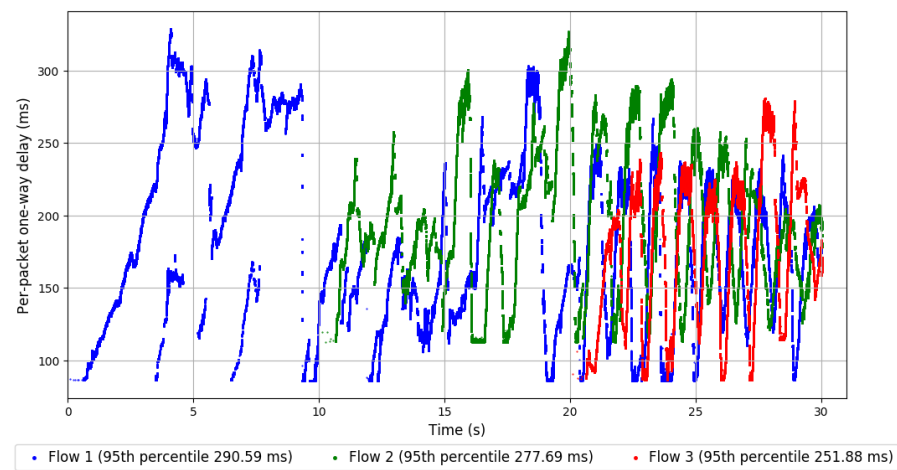
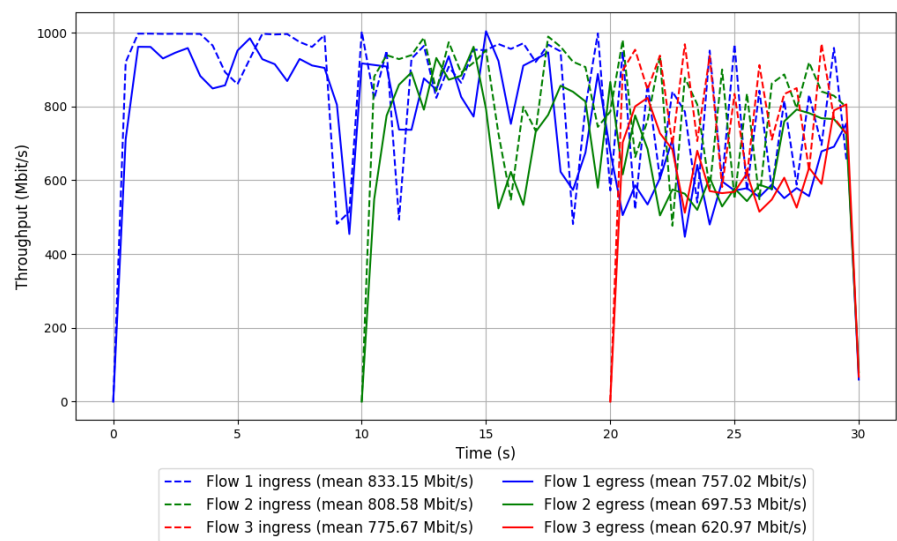
-- Flow 3:

Average throughput: 620.97 Mbit/s

95th percentile per-packet one-way delay: 251.883 ms

Loss rate: 19.74%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-17 11:11:11

End at: 2018-01-17 11:11:41

Below is generated by plot.py at 2018-01-17 15:03:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 1309.35 Mbit/s

95th percentile per-packet one-way delay: 342.169 ms

Loss rate: 11.30%

-- Flow 1:

Average throughput: 767.72 Mbit/s

95th percentile per-packet one-way delay: 348.674 ms

Loss rate: 9.28%

-- Flow 2:

Average throughput: 657.00 Mbit/s

95th percentile per-packet one-way delay: 260.280 ms

Loss rate: 15.55%

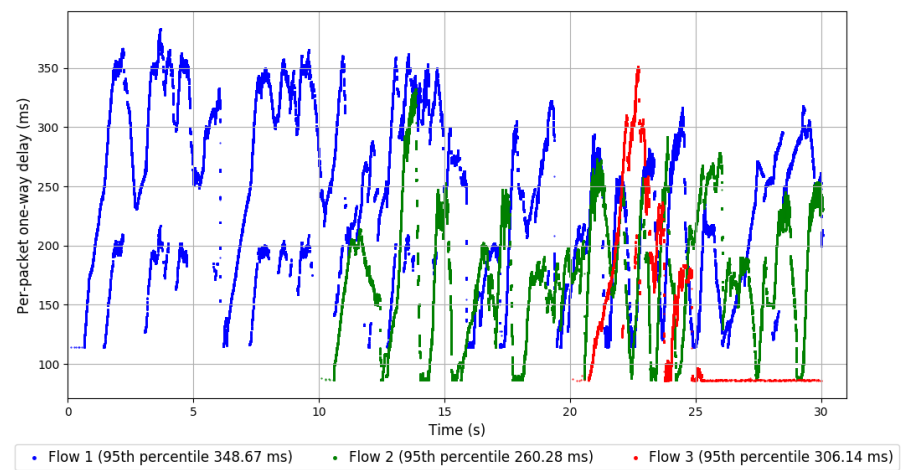
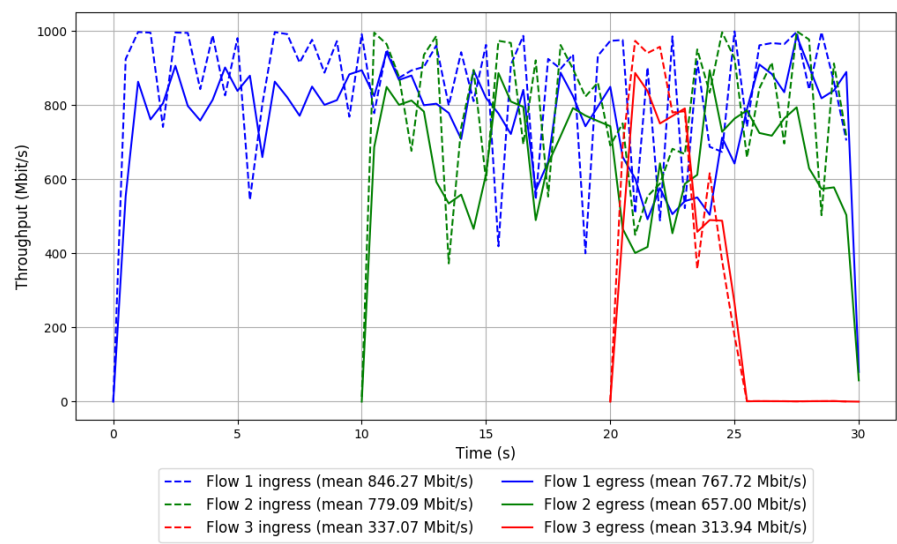
-- Flow 3:

Average throughput: 313.94 Mbit/s

95th percentile per-packet one-way delay: 306.136 ms

Loss rate: 6.87%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-17 11:27:15

End at: 2018-01-17 11:27:45

Below is generated by plot.py at 2018-01-17 15:03:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 1147.00 Mbit/s

95th percentile per-packet one-way delay: 305.433 ms

Loss rate: 7.66%

-- Flow 1:

Average throughput: 503.98 Mbit/s

95th percentile per-packet one-way delay: 319.077 ms

Loss rate: 9.44%

-- Flow 2:

Average throughput: 753.55 Mbit/s

95th percentile per-packet one-way delay: 251.329 ms

Loss rate: 6.04%

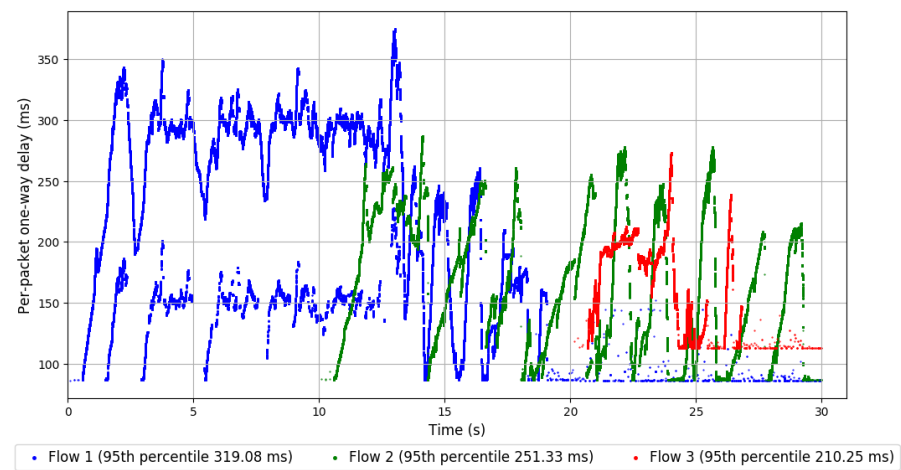
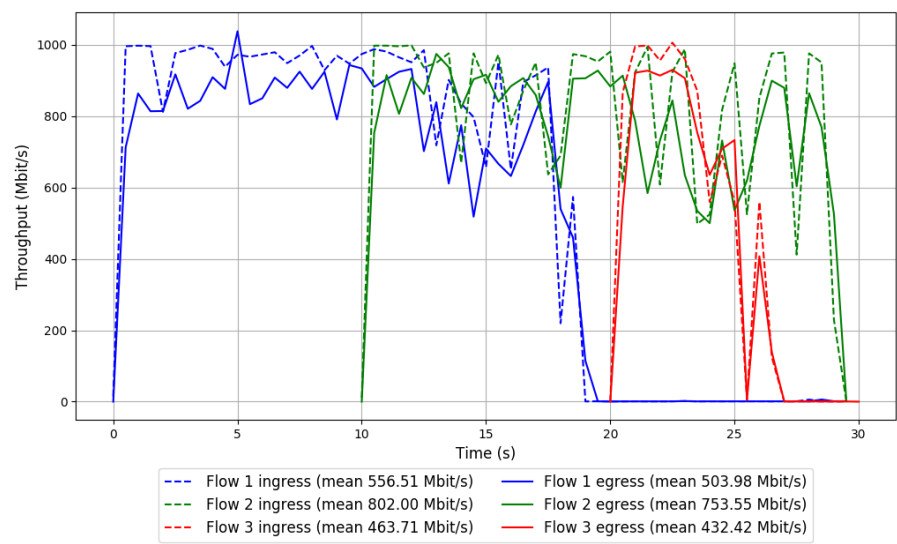
-- Flow 3:

Average throughput: 432.42 Mbit/s

95th percentile per-packet one-way delay: 210.245 ms

Loss rate: 6.80%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-17 11:43:02

End at: 2018-01-17 11:43:32

Below is generated by plot.py at 2018-01-17 15:20:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 1093.01 Mbit/s

95th percentile per-packet one-way delay: 348.728 ms

Loss rate: 13.41%

-- Flow 1:

Average throughput: 443.10 Mbit/s

95th percentile per-packet one-way delay: 321.135 ms

Loss rate: 11.39%

-- Flow 2:

Average throughput: 665.26 Mbit/s

95th percentile per-packet one-way delay: 363.762 ms

Loss rate: 15.04%

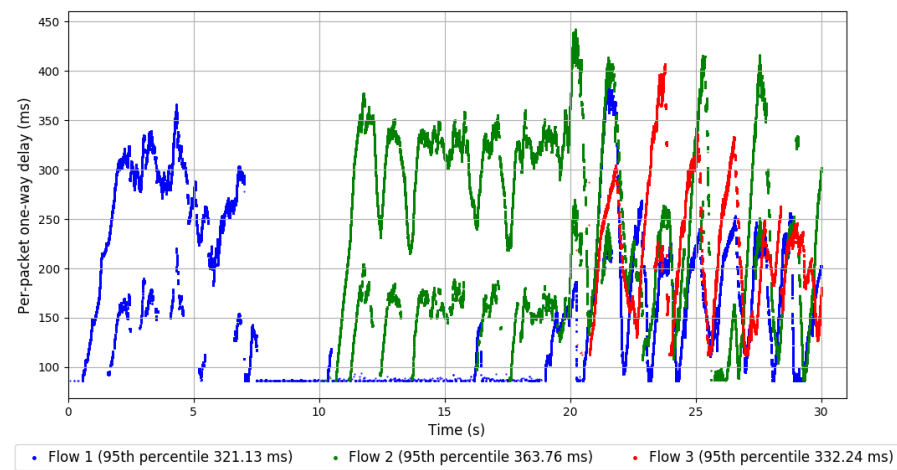
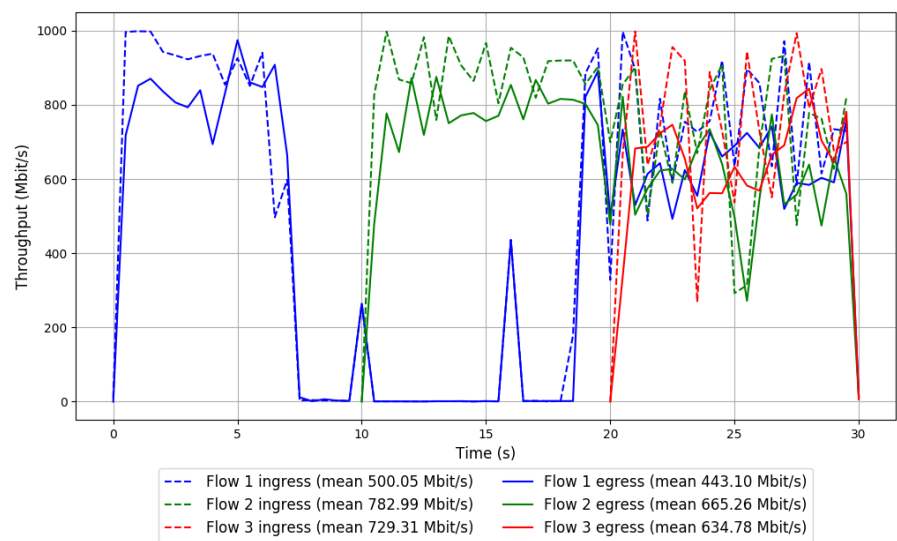
-- Flow 3:

Average throughput: 634.78 Mbit/s

95th percentile per-packet one-way delay: 332.241 ms

Loss rate: 14.11%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-17 12:00:06

End at: 2018-01-17 12:00:36

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 1358.71 Mbit/s

95th percentile per-packet one-way delay: 311.515 ms

Loss rate: 9.74%

-- Flow 1:

Average throughput: 817.06 Mbit/s

95th percentile per-packet one-way delay: 312.985 ms

Loss rate: 6.95%

-- Flow 2:

Average throughput: 484.13 Mbit/s

95th percentile per-packet one-way delay: 285.767 ms

Loss rate: 15.00%

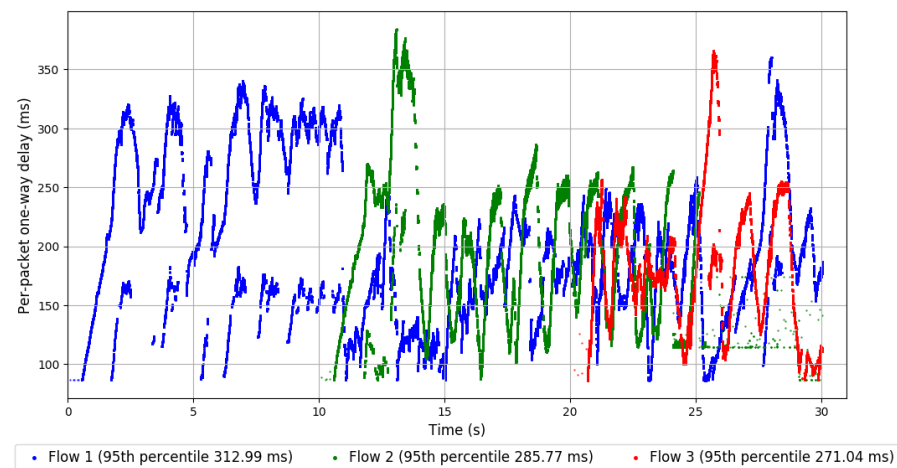
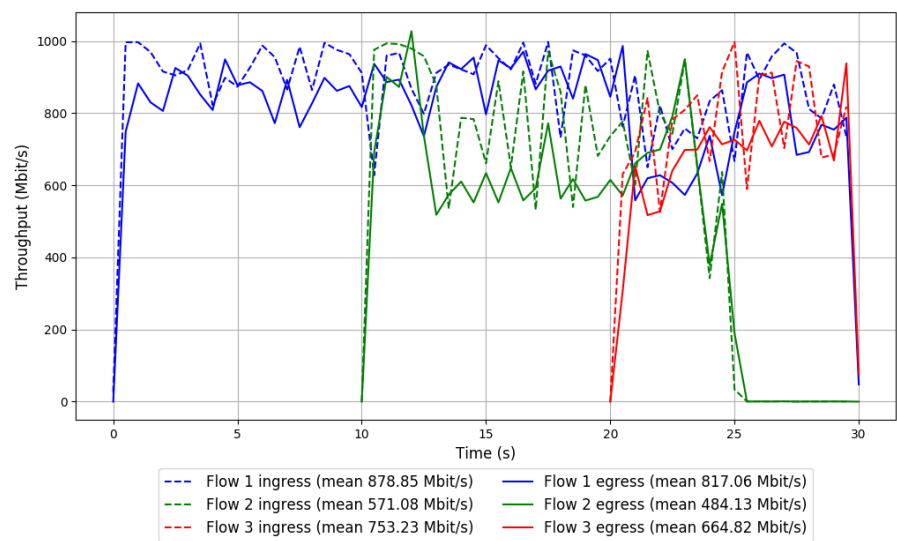
-- Flow 3:

Average throughput: 664.82 Mbit/s

95th percentile per-packet one-way delay: 271.041 ms

Loss rate: 11.59%

Run 10: Report of FillP — Data Link

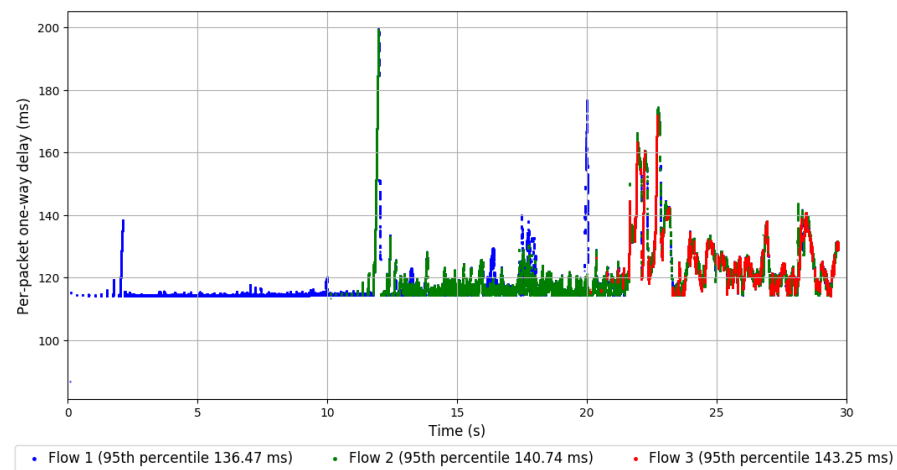
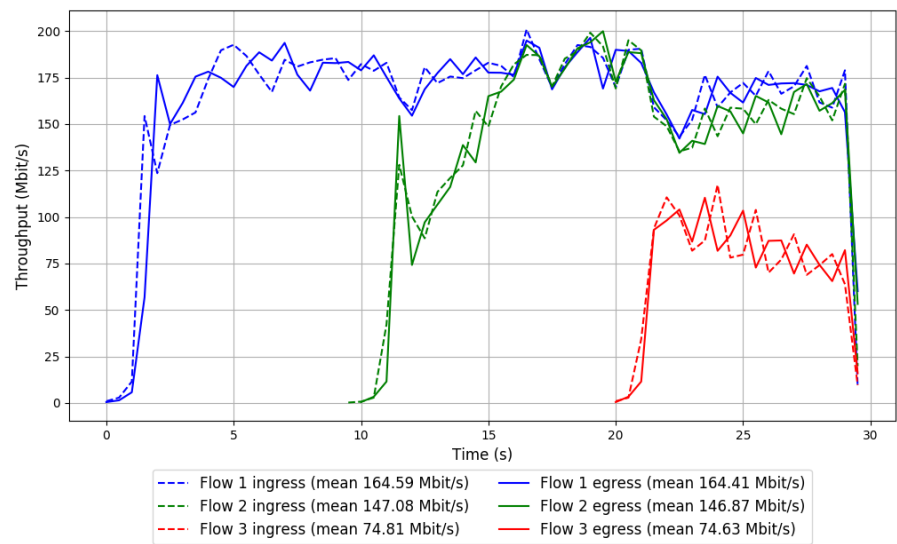


```
Run 1: Statistics of Indigo

Start at: 2018-01-17 09:21:35
End at: 2018-01-17 09:22:05

# Below is generated by plot.py at 2018-01-17 15:25:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 285.54 Mbit/s
95th percentile per-packet one-way delay: 138.939 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 164.41 Mbit/s
95th percentile per-packet one-way delay: 136.470 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 146.87 Mbit/s
95th percentile per-packet one-way delay: 140.737 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 74.63 Mbit/s
95th percentile per-packet one-way delay: 143.251 ms
Loss rate: 0.19%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-01-17 09:38:49

End at: 2018-01-17 09:39:19

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 270.88 Mbit/s

95th percentile per-packet one-way delay: 130.169 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 174.45 Mbit/s

95th percentile per-packet one-way delay: 127.905 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 102.82 Mbit/s

95th percentile per-packet one-way delay: 131.938 ms

Loss rate: 0.00%

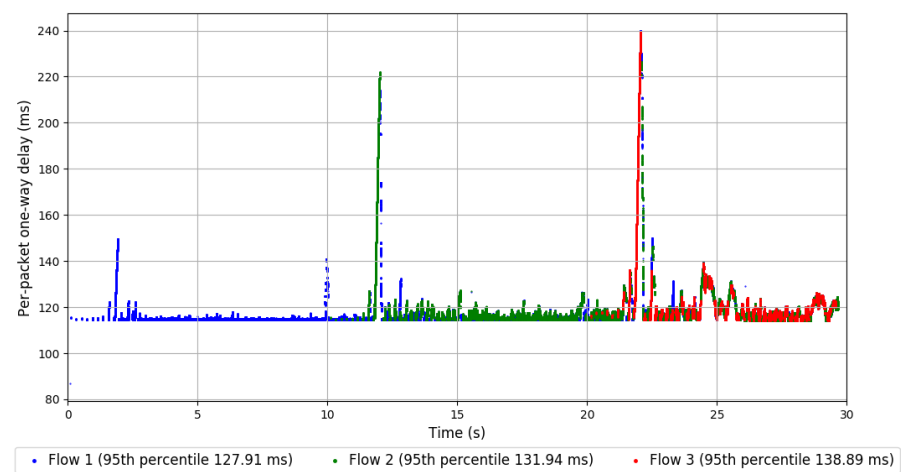
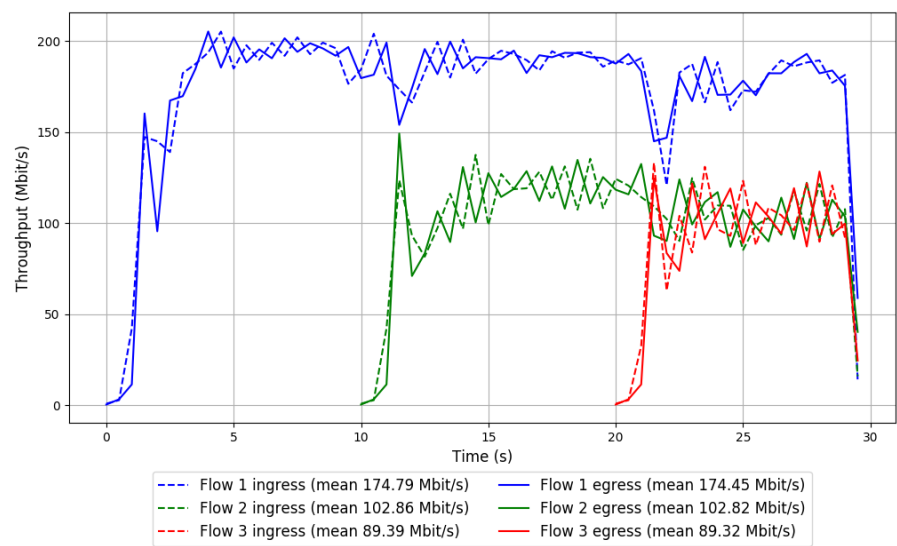
-- Flow 3:

Average throughput: 89.32 Mbit/s

95th percentile per-packet one-way delay: 138.892 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-17 09:56:10

End at: 2018-01-17 09:56:40

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 295.85 Mbit/s

95th percentile per-packet one-way delay: 136.496 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 160.78 Mbit/s

95th percentile per-packet one-way delay: 132.366 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 150.64 Mbit/s

95th percentile per-packet one-way delay: 134.045 ms

Loss rate: 0.07%

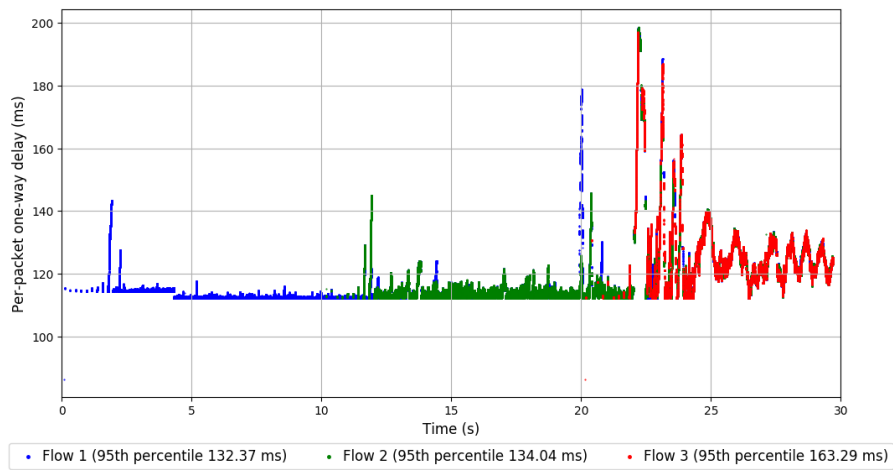
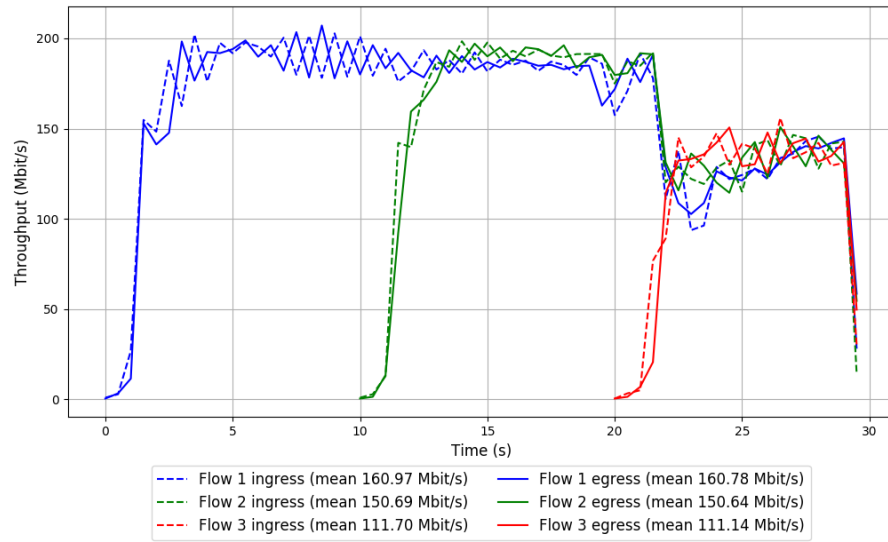
-- Flow 3:

Average throughput: 111.14 Mbit/s

95th percentile per-packet one-way delay: 163.289 ms

Loss rate: 0.18%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-17 10:13:01

End at: 2018-01-17 10:13:31

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 285.53 Mbit/s

95th percentile per-packet one-way delay: 134.838 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 166.74 Mbit/s

95th percentile per-packet one-way delay: 132.485 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 145.65 Mbit/s

95th percentile per-packet one-way delay: 140.112 ms

Loss rate: 0.00%

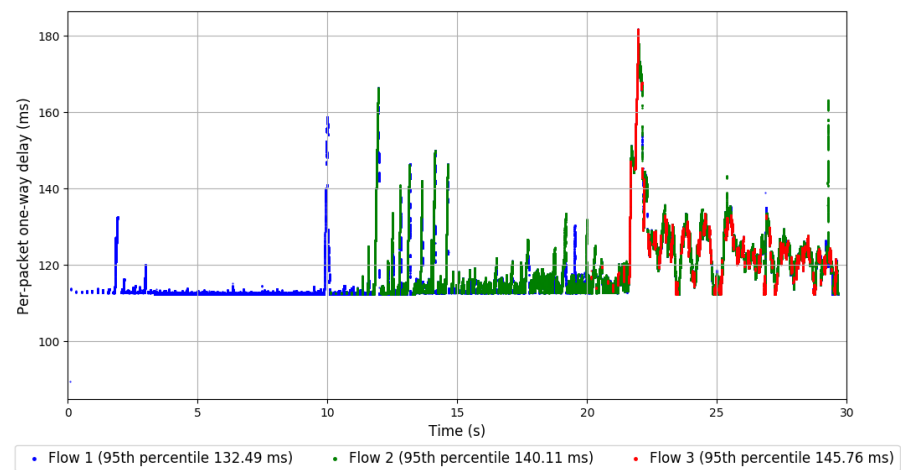
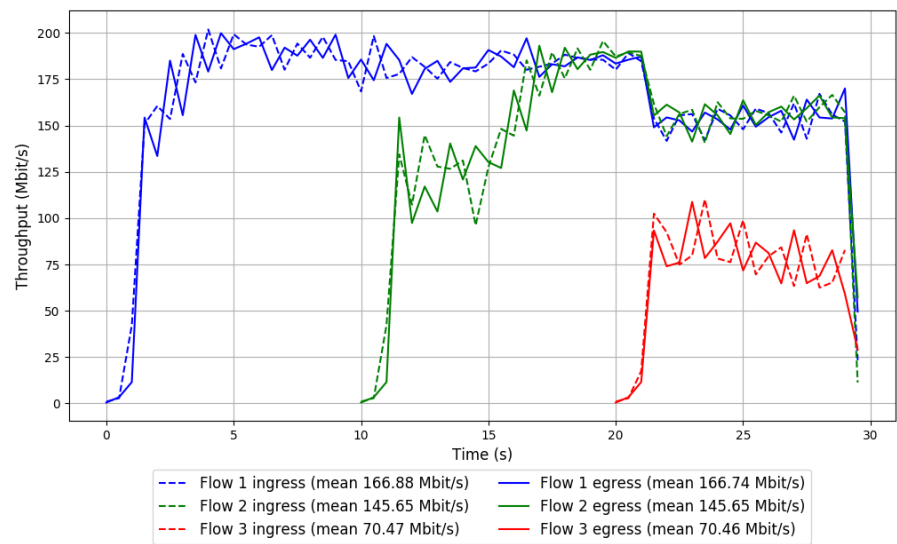
-- Flow 3:

Average throughput: 70.46 Mbit/s

95th percentile per-packet one-way delay: 145.764 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-17 10:30:35

End at: 2018-01-17 10:31:05

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 305.87 Mbit/s

95th percentile per-packet one-way delay: 137.619 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 170.02 Mbit/s

95th percentile per-packet one-way delay: 131.785 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 158.71 Mbit/s

95th percentile per-packet one-way delay: 143.501 ms

Loss rate: 0.25%

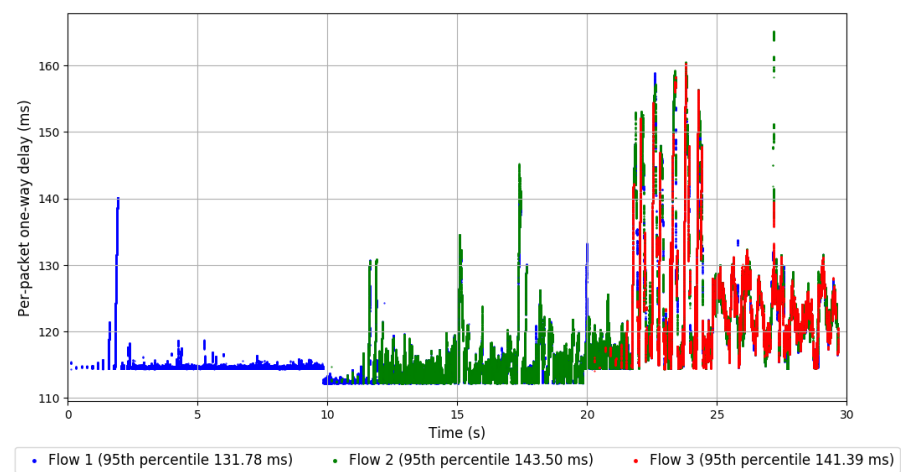
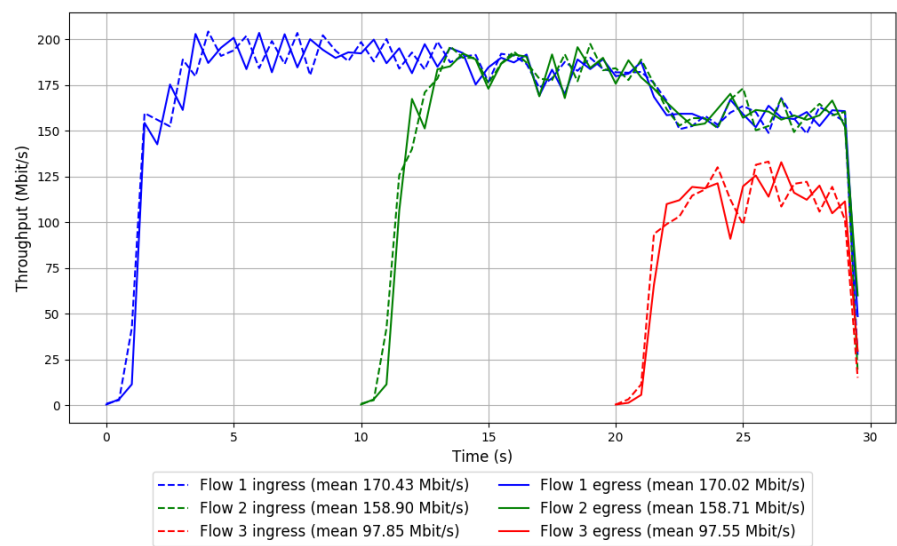
-- Flow 3:

Average throughput: 97.55 Mbit/s

95th percentile per-packet one-way delay: 141.392 ms

Loss rate: 0.56%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-17 10:47:04

End at: 2018-01-17 10:47:34

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 290.13 Mbit/s

95th percentile per-packet one-way delay: 134.900 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 169.80 Mbit/s

95th percentile per-packet one-way delay: 130.567 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 146.10 Mbit/s

95th percentile per-packet one-way delay: 138.645 ms

Loss rate: 0.18%

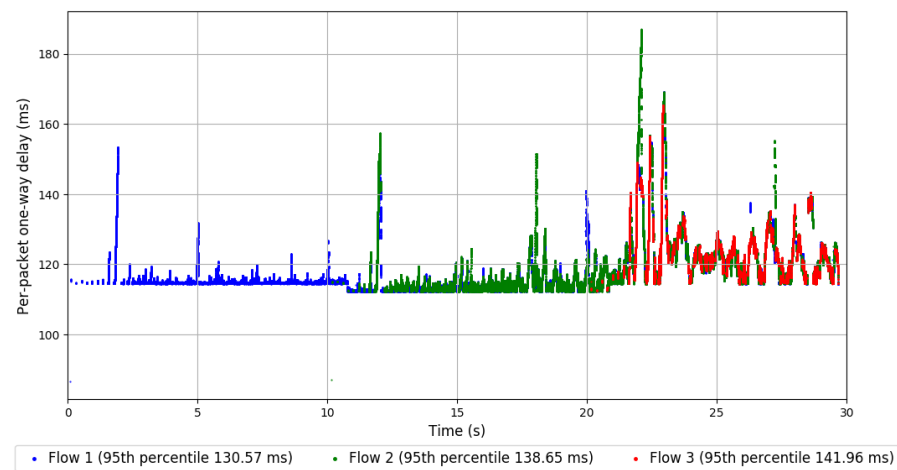
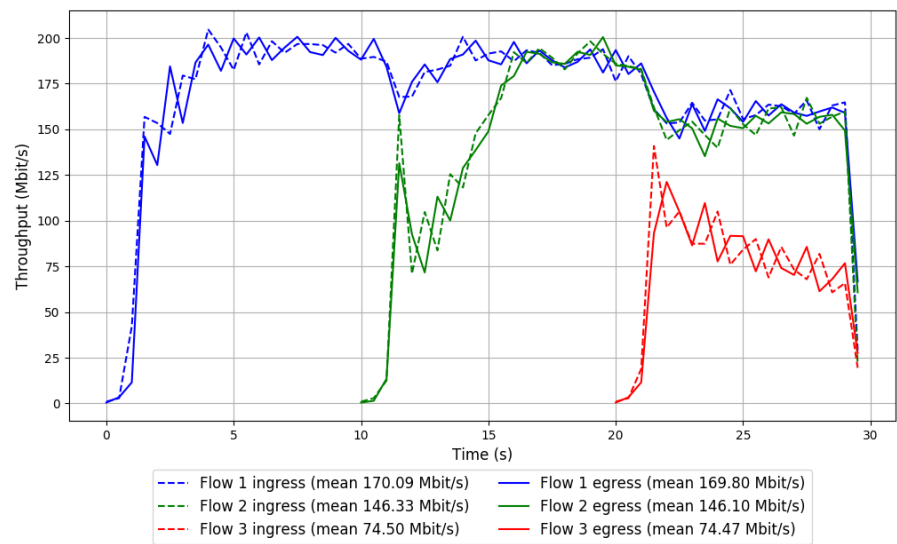
-- Flow 3:

Average throughput: 74.47 Mbit/s

95th percentile per-packet one-way delay: 141.958 ms

Loss rate: 0.08%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-17 11:04:05

End at: 2018-01-17 11:04:35

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 283.18 Mbit/s

95th percentile per-packet one-way delay: 143.700 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 168.72 Mbit/s

95th percentile per-packet one-way delay: 138.714 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 130.33 Mbit/s

95th percentile per-packet one-way delay: 147.166 ms

Loss rate: 0.19%

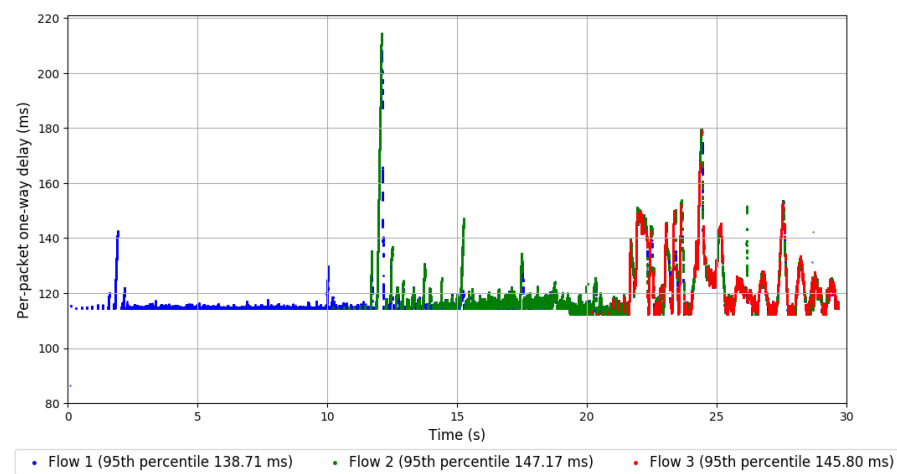
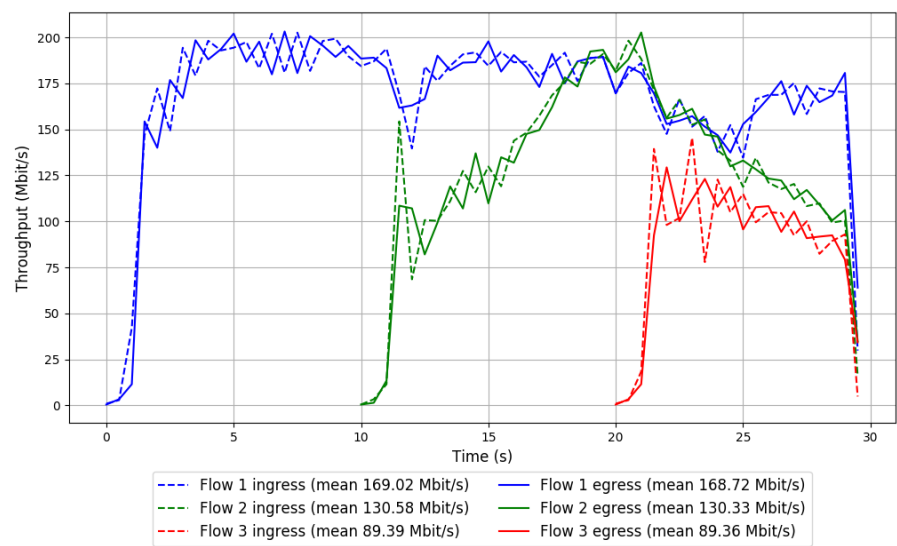
-- Flow 3:

Average throughput: 89.36 Mbit/s

95th percentile per-packet one-way delay: 145.798 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-17 11:20:25

End at: 2018-01-17 11:20:55

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 272.91 Mbit/s

95th percentile per-packet one-way delay: 131.206 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 171.82 Mbit/s

95th percentile per-packet one-way delay: 129.783 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 88.44 Mbit/s

95th percentile per-packet one-way delay: 126.948 ms

Loss rate: 0.00%

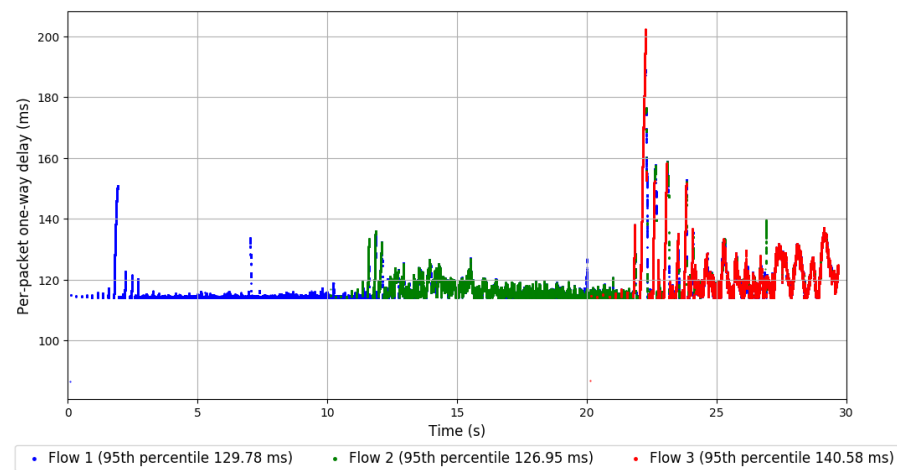
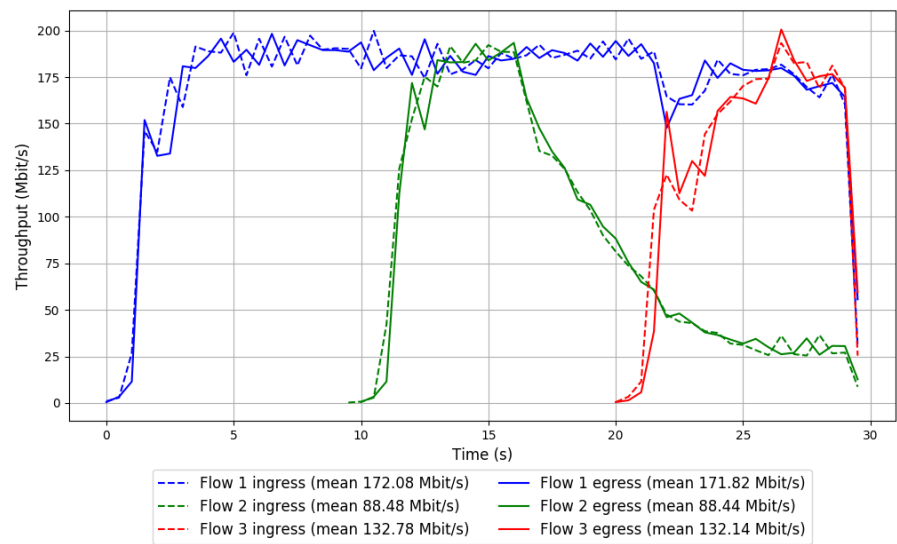
-- Flow 3:

Average throughput: 132.14 Mbit/s

95th percentile per-packet one-way delay: 140.576 ms

Loss rate: 0.47%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-17 11:36:01

End at: 2018-01-17 11:36:31

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 284.82 Mbit/s

95th percentile per-packet one-way delay: 139.886 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 169.18 Mbit/s

95th percentile per-packet one-way delay: 133.472 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 139.42 Mbit/s

95th percentile per-packet one-way delay: 143.503 ms

Loss rate: 0.32%

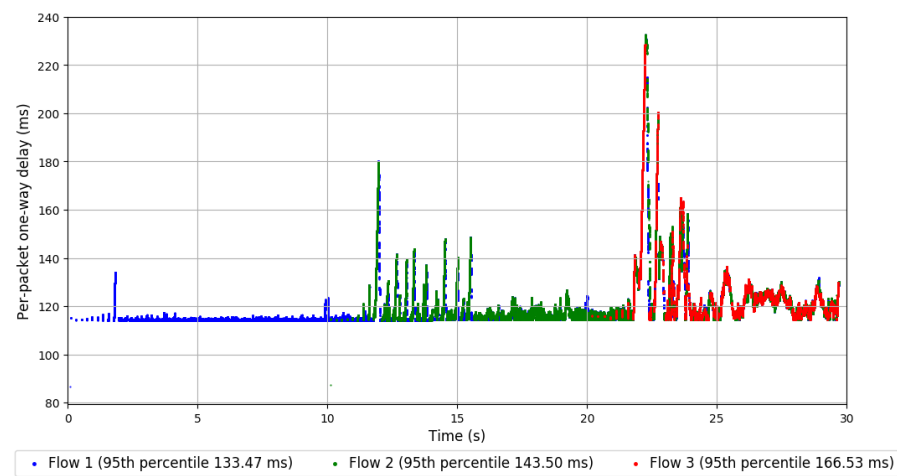
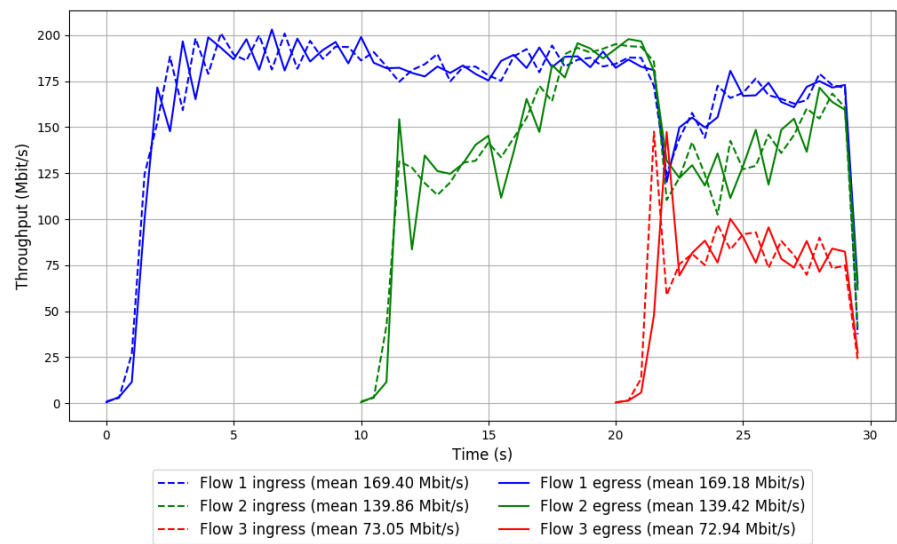
-- Flow 3:

Average throughput: 72.94 Mbit/s

95th percentile per-packet one-way delay: 166.535 ms

Loss rate: 0.41%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-17 11:53:03

End at: 2018-01-17 11:53:33

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.65 Mbit/s

95th percentile per-packet one-way delay: 143.607 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 167.79 Mbit/s

95th percentile per-packet one-way delay: 136.100 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 146.38 Mbit/s

95th percentile per-packet one-way delay: 146.243 ms

Loss rate: 0.10%

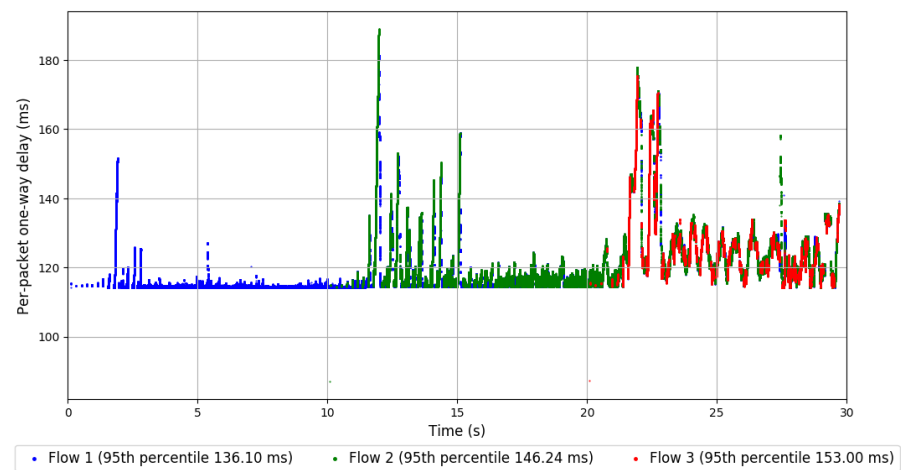
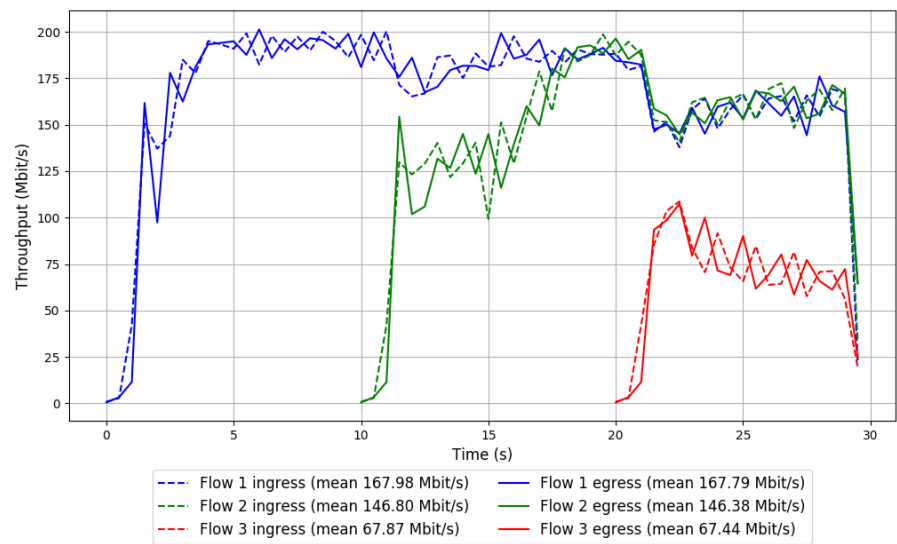
-- Flow 3:

Average throughput: 67.44 Mbit/s

95th percentile per-packet one-way delay: 153.002 ms

Loss rate: 0.16%

Run 10: Report of Indigo — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-01-17 09:16:48

End at: 2018-01-17 09:17:18

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 128.35 Mbit/s

95th percentile per-packet one-way delay: 114.888 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 9.39 Mbit/s

95th percentile per-packet one-way delay: 114.668 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 173.12 Mbit/s

95th percentile per-packet one-way delay: 114.959 ms

Loss rate: 0.13%

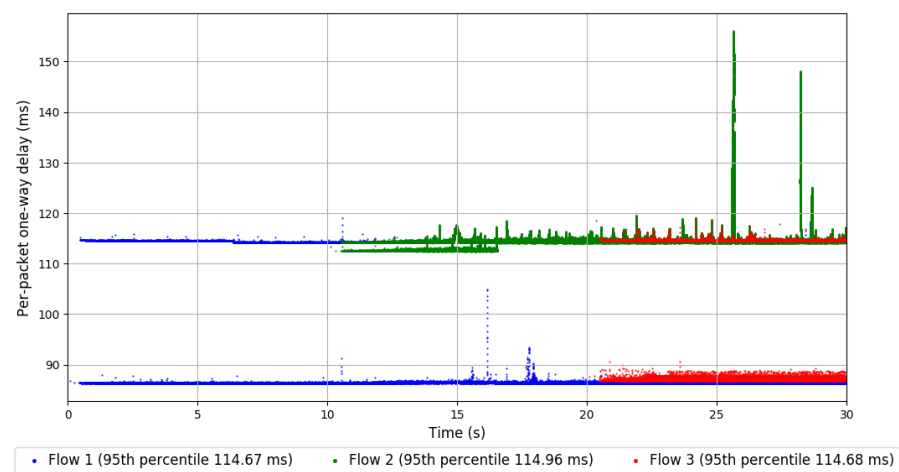
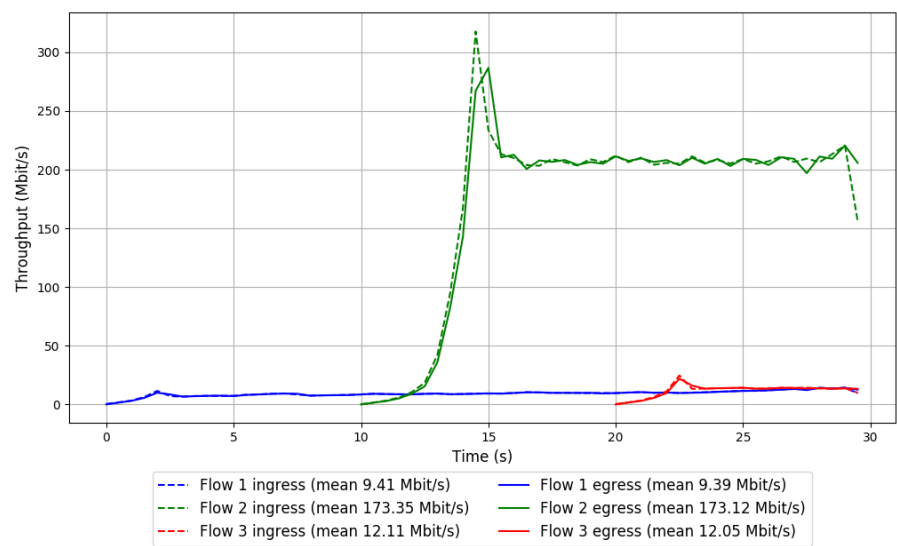
-- Flow 3:

Average throughput: 12.05 Mbit/s

95th percentile per-packet one-way delay: 114.681 ms

Loss rate: 0.26%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-01-17 09:34:11

End at: 2018-01-17 09:34:41

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 166.73 Mbit/s

95th percentile per-packet one-way delay: 117.641 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 123.08 Mbit/s

95th percentile per-packet one-way delay: 114.949 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.24 Mbit/s

95th percentile per-packet one-way delay: 115.549 ms

Loss rate: 0.00%

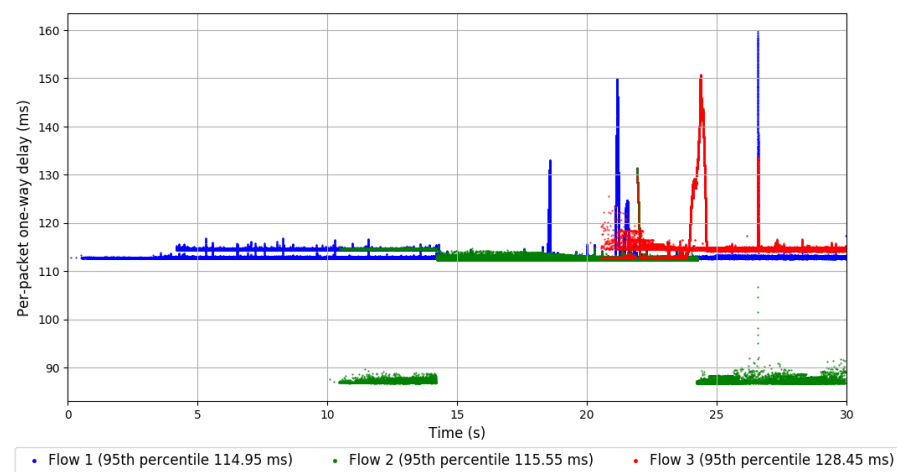
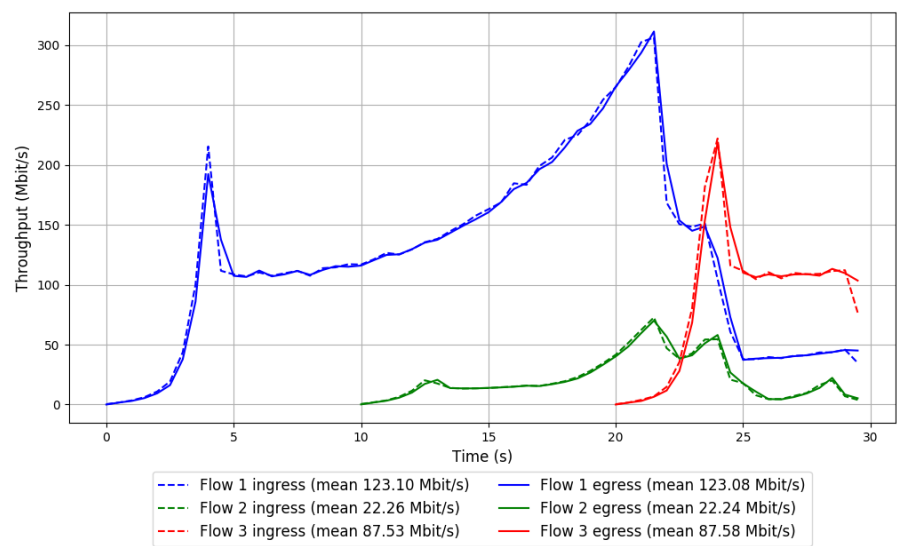
-- Flow 3:

Average throughput: 87.58 Mbit/s

95th percentile per-packet one-way delay: 128.449 ms

Loss rate: 0.01%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-01-17 09:51:45

End at: 2018-01-17 09:52:15

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.18 Mbit/s

95th percentile per-packet one-way delay: 114.713 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.19 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 150.66 Mbit/s

95th percentile per-packet one-way delay: 114.730 ms

Loss rate: 0.00%

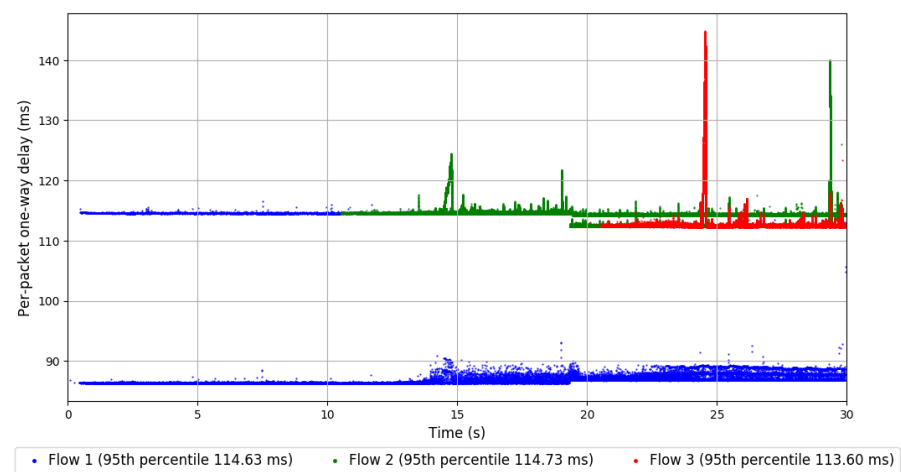
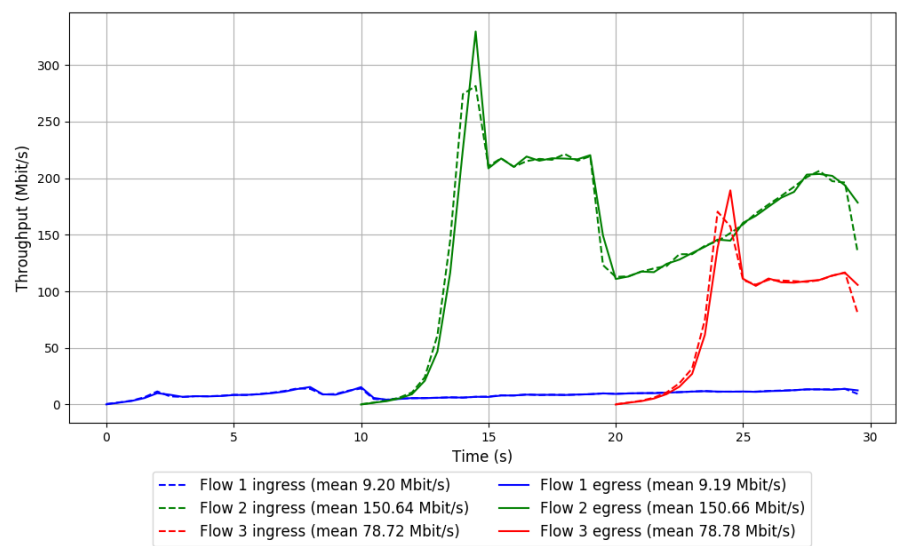
-- Flow 3:

Average throughput: 78.78 Mbit/s

95th percentile per-packet one-way delay: 113.601 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-01-17 10:08:33

End at: 2018-01-17 10:09:03

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.08 Mbit/s

95th percentile per-packet one-way delay: 114.881 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 113.33 Mbit/s

95th percentile per-packet one-way delay: 114.680 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 9.54 Mbit/s

95th percentile per-packet one-way delay: 114.718 ms

Loss rate: 0.15%

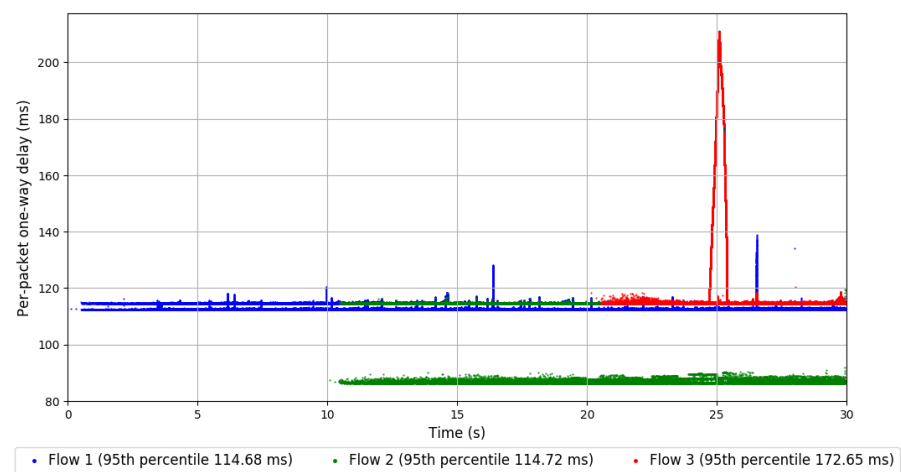
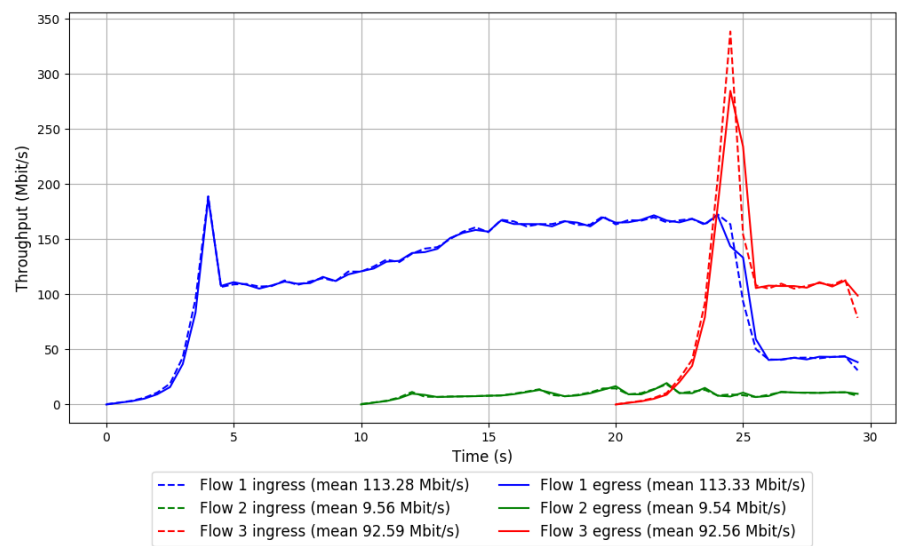
-- Flow 3:

Average throughput: 92.56 Mbit/s

95th percentile per-packet one-way delay: 172.648 ms

Loss rate: 0.35%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-01-17 10:26:03

End at: 2018-01-17 10:26:33

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.21 Mbit/s

95th percentile per-packet one-way delay: 114.624 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 108.42 Mbit/s

95th percentile per-packet one-way delay: 114.623 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 106.71 Mbit/s

95th percentile per-packet one-way delay: 114.624 ms

Loss rate: 0.17%

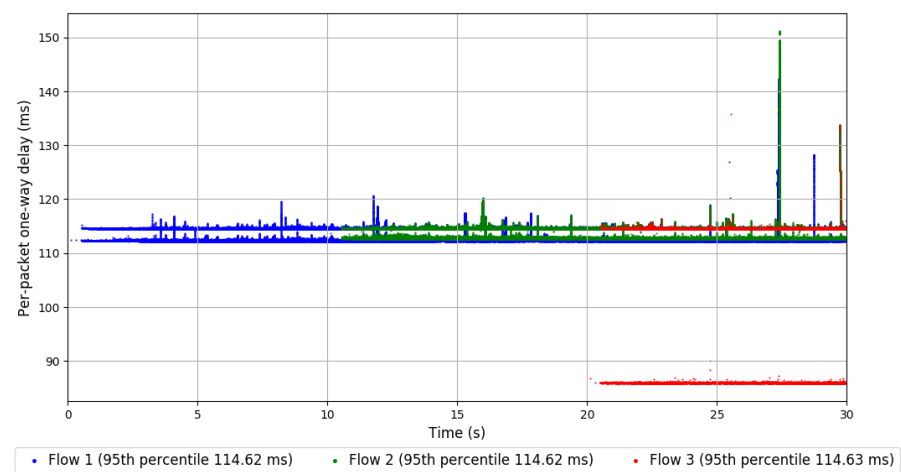
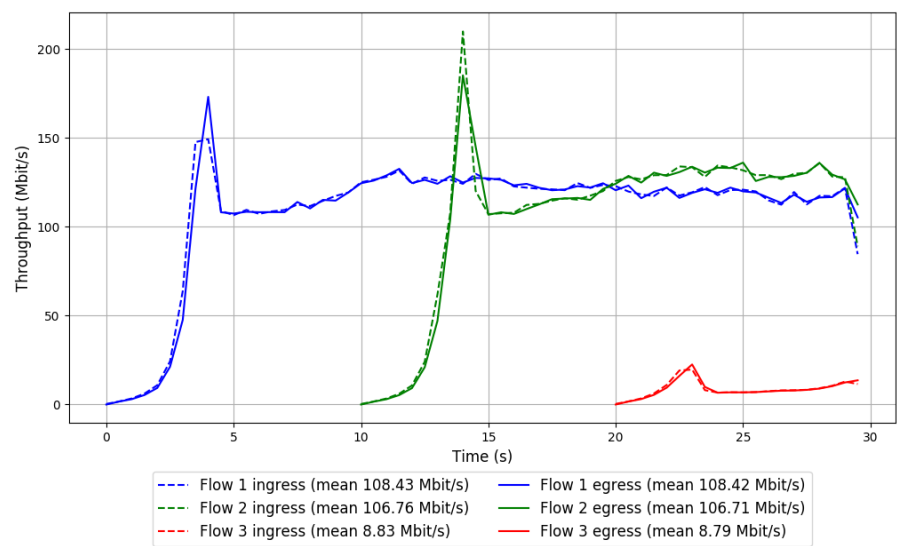
-- Flow 3:

Average throughput: 8.79 Mbit/s

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

Loss rate: 0.48%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-01-17 10:42:27

End at: 2018-01-17 10:42:57

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.26 Mbit/s

95th percentile per-packet one-way delay: 114.610 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 108.80 Mbit/s

95th percentile per-packet one-way delay: 114.601 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 10.94 Mbit/s

95th percentile per-packet one-way delay: 114.644 ms

Loss rate: 0.15%

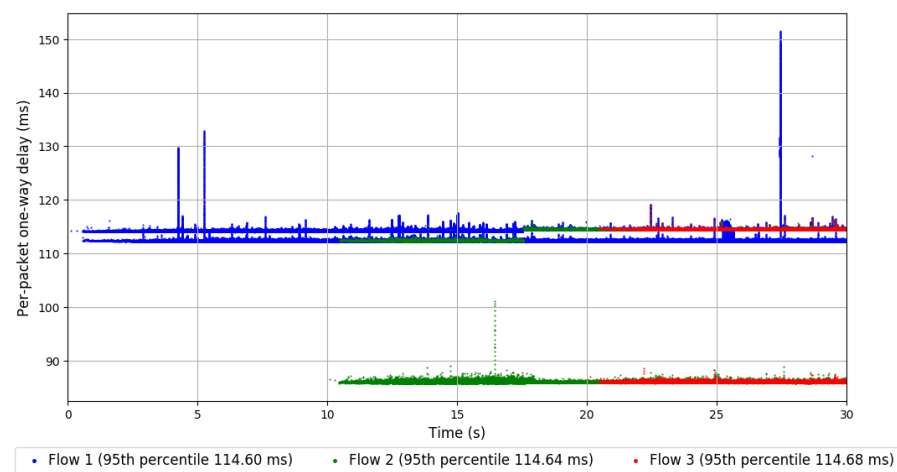
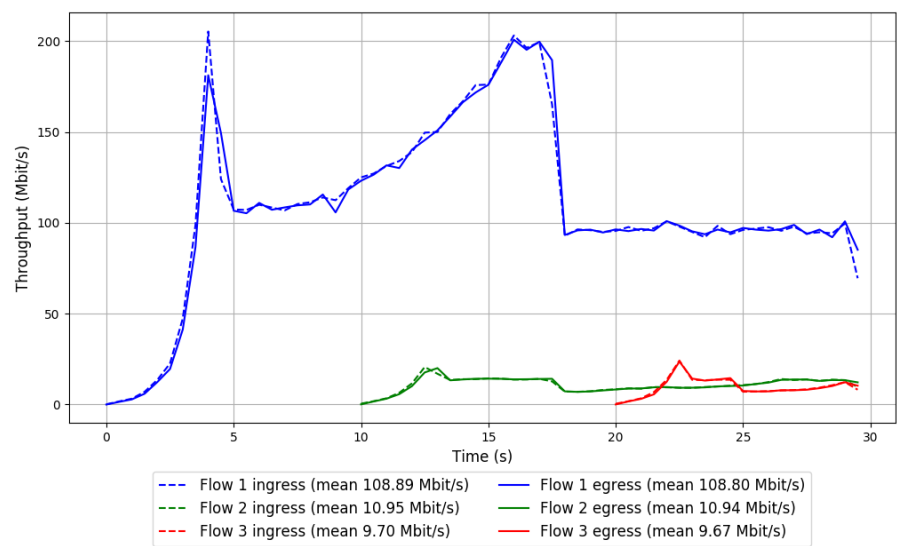
-- Flow 3:

Average throughput: 9.67 Mbit/s

95th percentile per-packet one-way delay: 114.680 ms

Loss rate: 0.30%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-01-17 10:59:36

End at: 2018-01-17 11:00:06

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.13 Mbit/s

95th percentile per-packet one-way delay: 228.489 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 52.10 Mbit/s

95th percentile per-packet one-way delay: 254.866 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 10.50 Mbit/s

95th percentile per-packet one-way delay: 114.645 ms

Loss rate: 0.00%

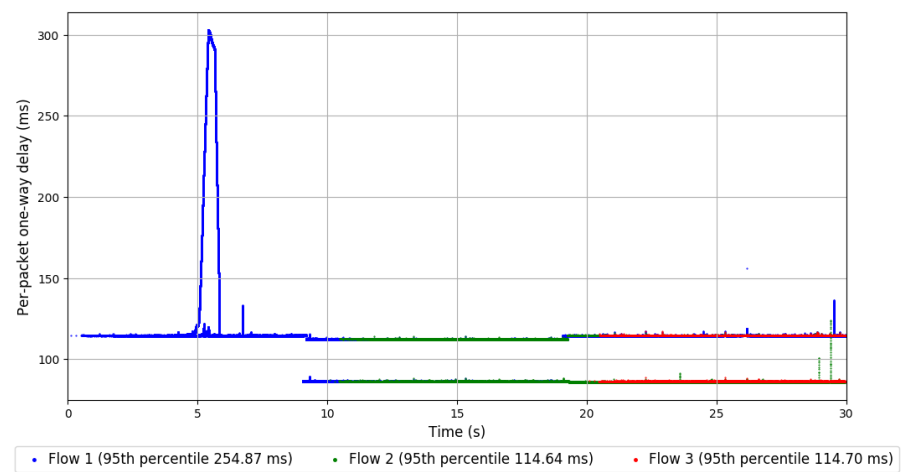
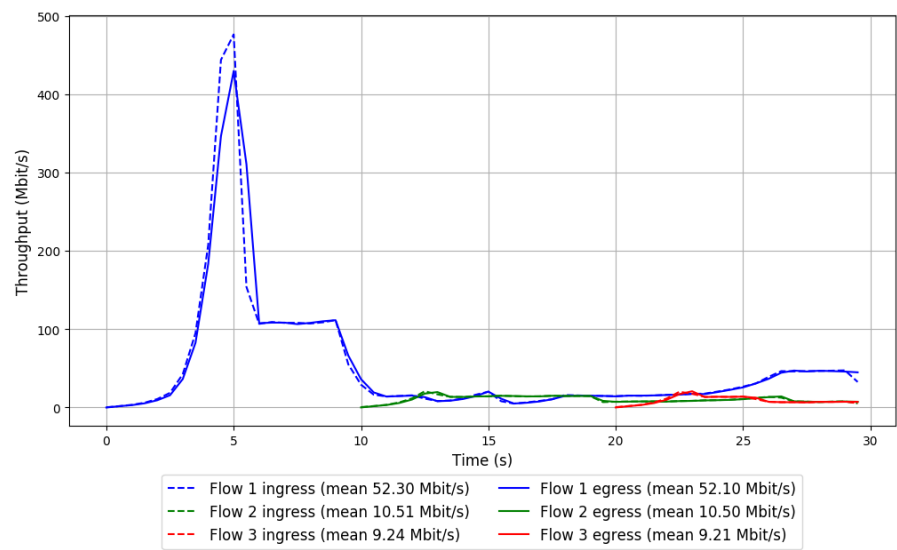
-- Flow 3:

Average throughput: 9.21 Mbit/s

95th percentile per-packet one-way delay: 114.701 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-01-17 11:16:15

End at: 2018-01-17 11:16:45

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 28.97 Mbit/s

95th percentile per-packet one-way delay: 114.677 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 10.40 Mbit/s

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

Loss rate: 0.11%

-- Flow 2:

Average throughput: 22.67 Mbit/s

95th percentile per-packet one-way delay: 114.715 ms

Loss rate: 0.54%

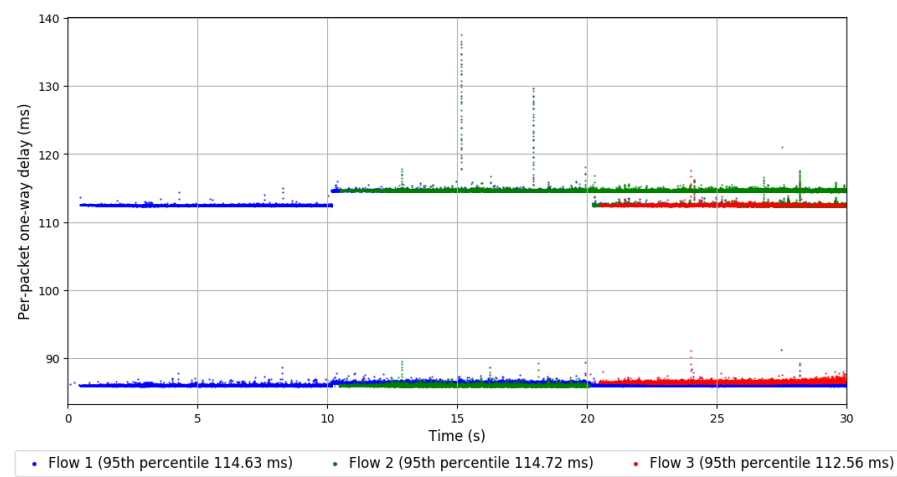
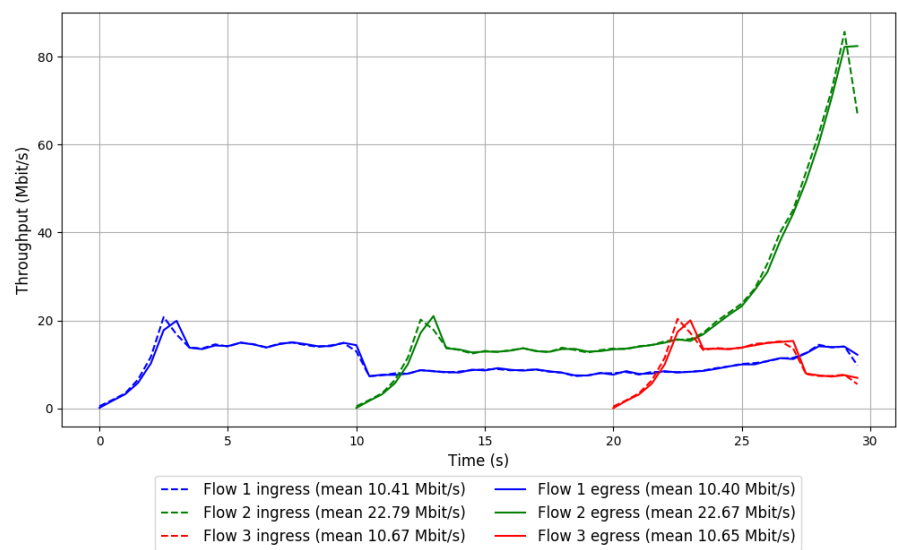
-- Flow 3:

Average throughput: 10.65 Mbit/s

95th percentile per-packet one-way delay: 112.563 ms

Loss rate: 0.16%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-01-17 11:32:07

End at: 2018-01-17 11:32:37

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.28 Mbit/s

95th percentile per-packet one-way delay: 114.681 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 10.64 Mbit/s

95th percentile per-packet one-way delay: 114.668 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 10.83 Mbit/s

95th percentile per-packet one-way delay: 114.699 ms

Loss rate: 0.15%

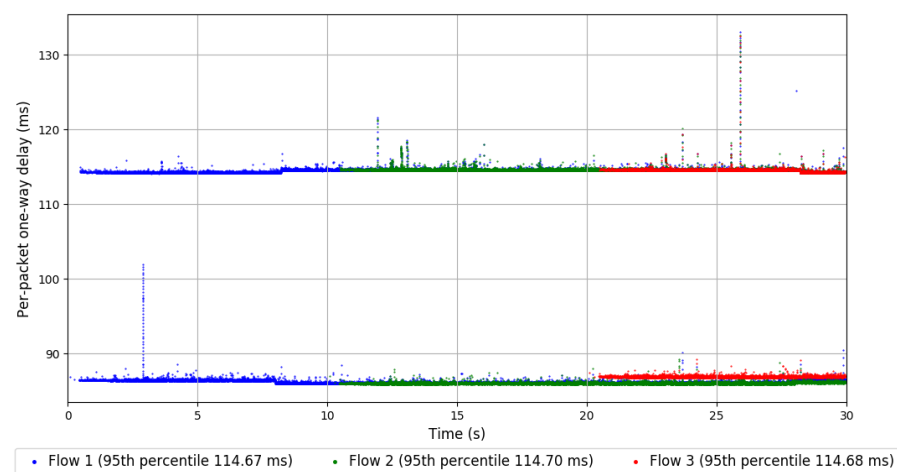
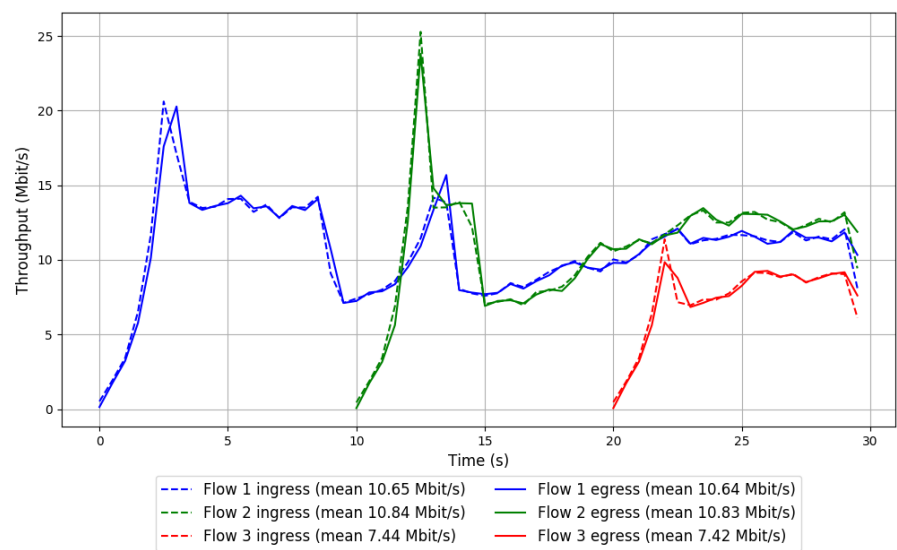
-- Flow 3:

Average throughput: 7.42 Mbit/s

95th percentile per-packet one-way delay: 114.679 ms

Loss rate: 0.28%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-01-17 11:48:22

End at: 2018-01-17 11:48:52

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.10 Mbit/s

95th percentile per-packet one-way delay: 115.714 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.77 Mbit/s

95th percentile per-packet one-way delay: 114.725 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 166.09 Mbit/s

95th percentile per-packet one-way delay: 115.902 ms

Loss rate: 0.00%

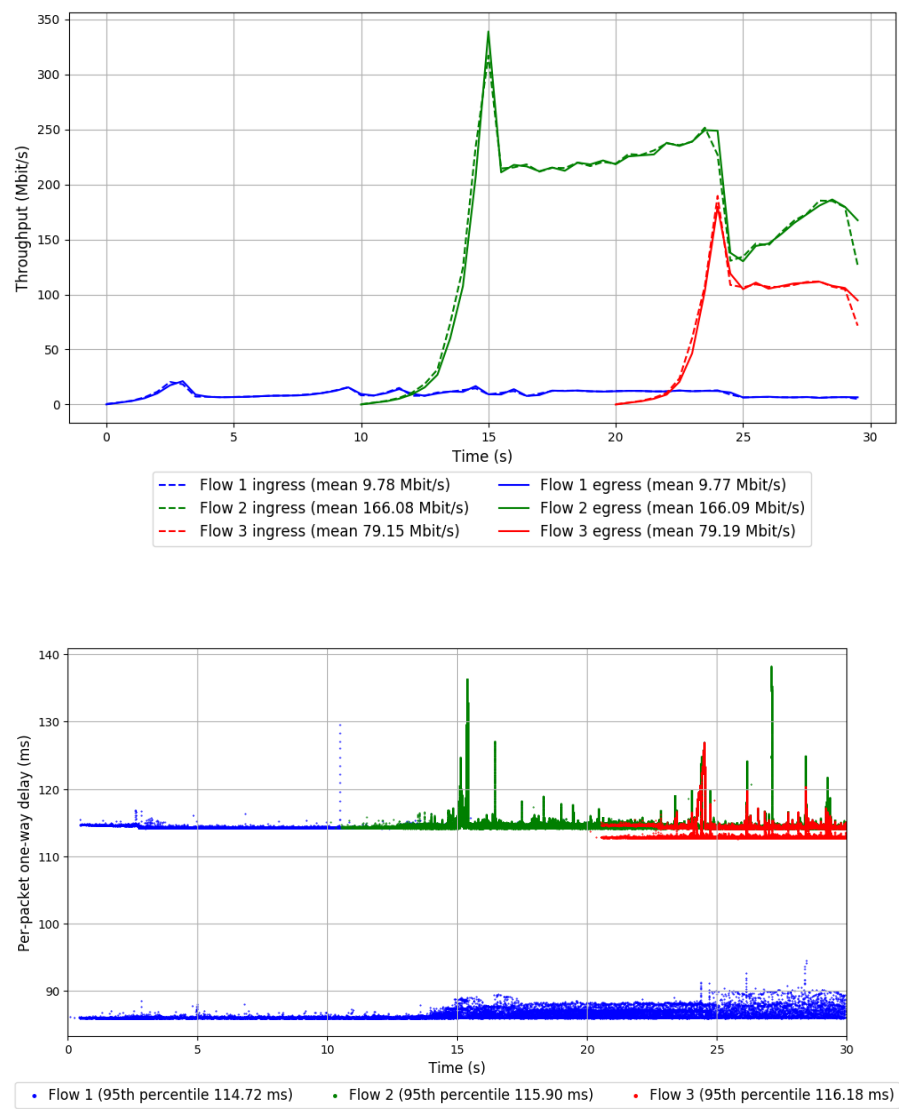
-- Flow 3:

Average throughput: 79.19 Mbit/s

95th percentile per-packet one-way delay: 116.184 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

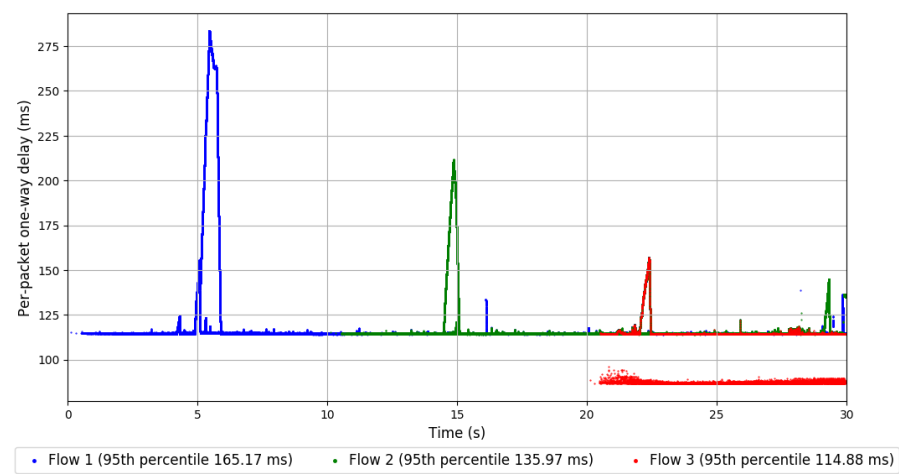
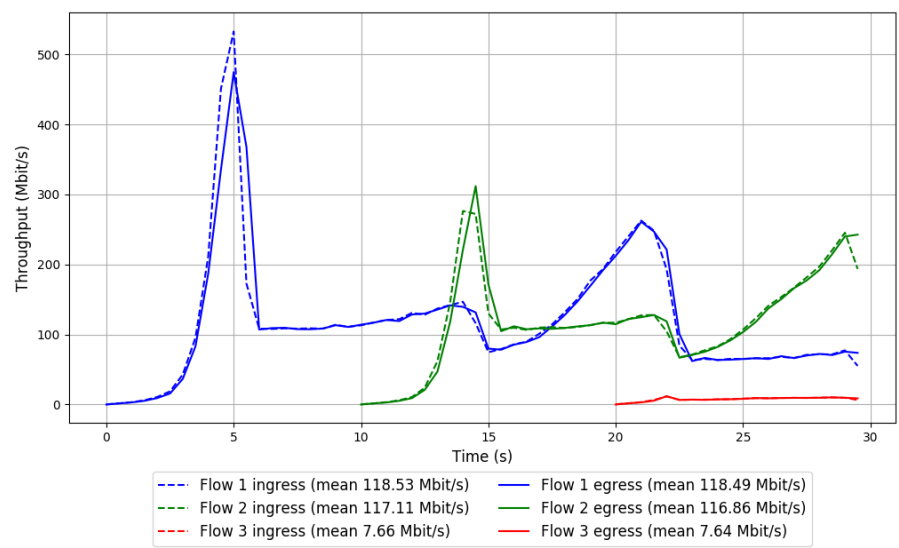


```
Run 1: Statistics of Vivace-loss

Start at: 2018-01-17 09:19:36
End at: 2018-01-17 09:20:06

# Below is generated by plot.py at 2018-01-17 15:25:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 198.67 Mbit/s
95th percentile per-packet one-way delay: 148.474 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 118.49 Mbit/s
95th percentile per-packet one-way delay: 165.170 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 116.86 Mbit/s
95th percentile per-packet one-way delay: 135.973 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 114.884 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-01-17 09:36:47

End at: 2018-01-17 09:37:17

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 215.42 Mbit/s

95th percentile per-packet one-way delay: 139.704 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 159.00 Mbit/s

95th percentile per-packet one-way delay: 146.431 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.46 Mbit/s

95th percentile per-packet one-way delay: 148.203 ms

Loss rate: 0.00%

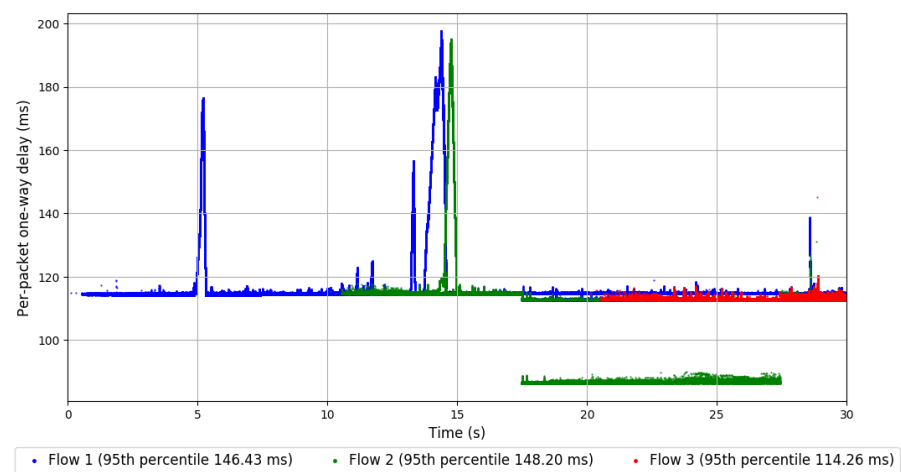
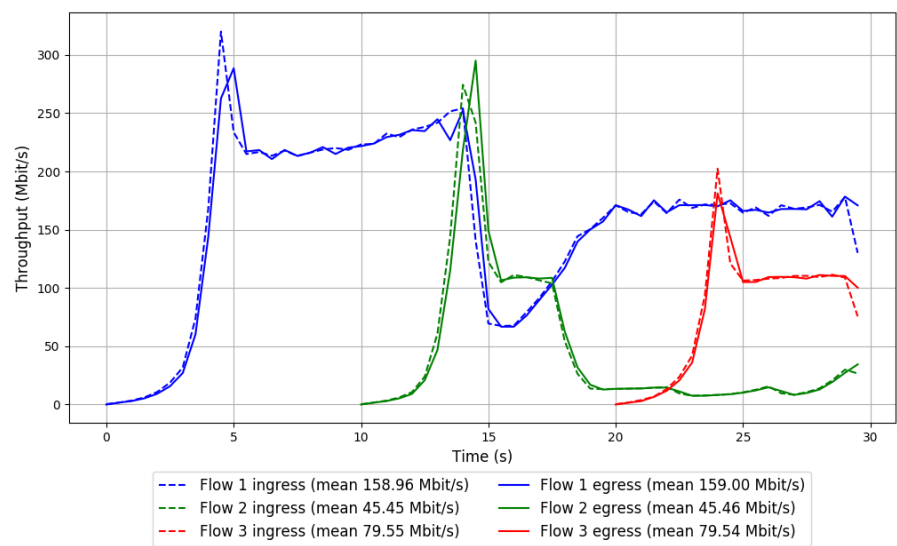
-- Flow 3:

Average throughput: 79.54 Mbit/s

95th percentile per-packet one-way delay: 114.264 ms

Loss rate: 0.01%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-01-17 09:54:16

End at: 2018-01-17 09:54:46

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.77 Mbit/s

95th percentile per-packet one-way delay: 114.933 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 150.07 Mbit/s

95th percentile per-packet one-way delay: 115.047 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.42 Mbit/s

95th percentile per-packet one-way delay: 114.680 ms

Loss rate: 0.00%

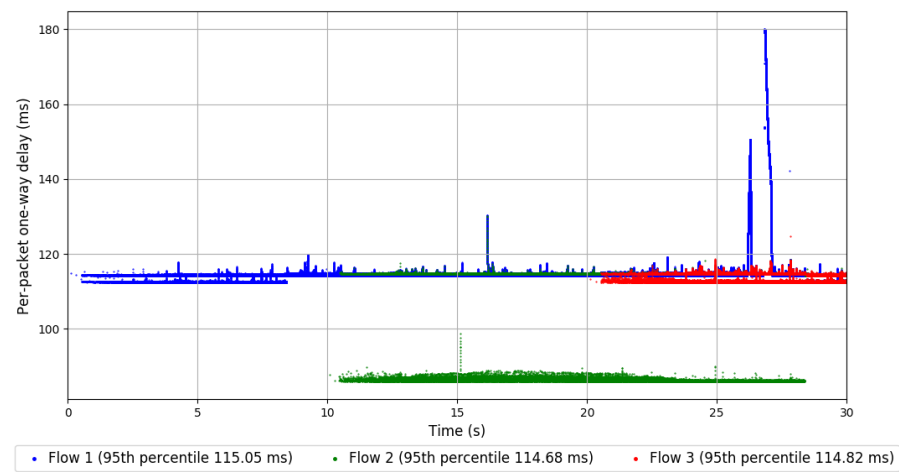
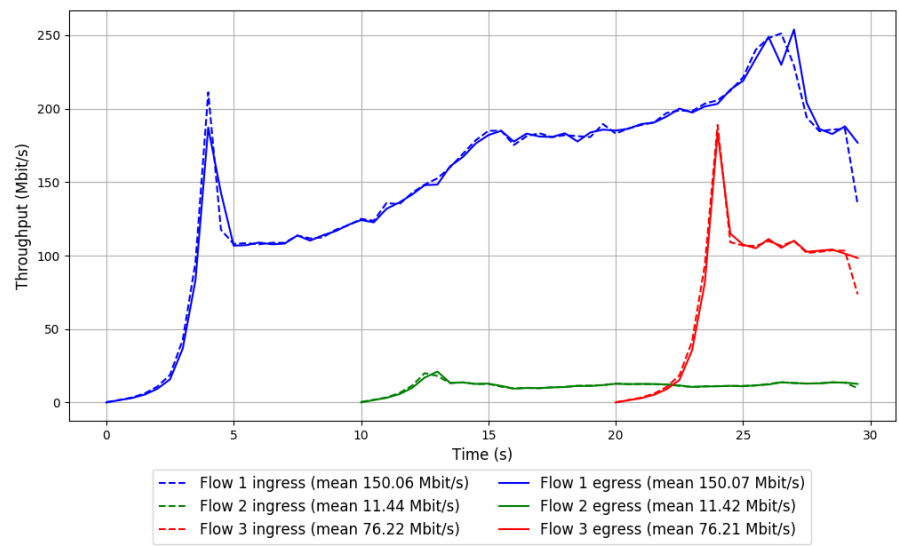
-- Flow 3:

Average throughput: 76.21 Mbit/s

95th percentile per-packet one-way delay: 114.821 ms

Loss rate: 0.00%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-01-17 10:11:18

End at: 2018-01-17 10:11:48

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.56 Mbit/s

95th percentile per-packet one-way delay: 114.555 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.60 Mbit/s

95th percentile per-packet one-way delay: 114.571 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 110.77 Mbit/s

95th percentile per-packet one-way delay: 114.551 ms

Loss rate: 0.00%

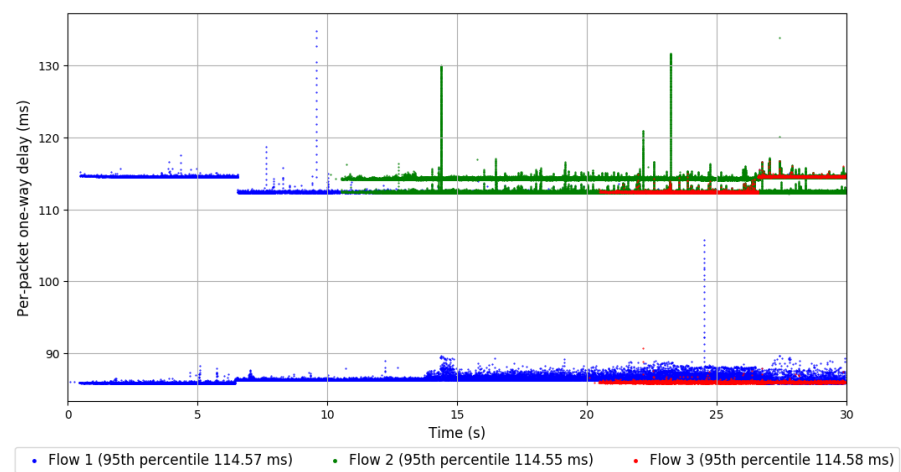
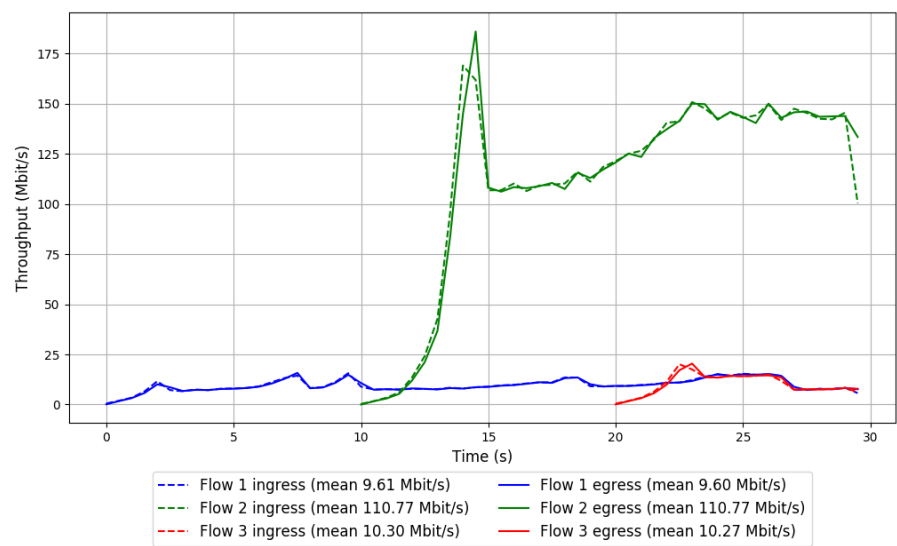
-- Flow 3:

Average throughput: 10.27 Mbit/s

95th percentile per-packet one-way delay: 114.578 ms

Loss rate: 0.06%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-01-17 10:28:54

End at: 2018-01-17 10:29:24

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.46 Mbit/s

95th percentile per-packet one-way delay: 114.584 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 57.78 Mbit/s

95th percentile per-packet one-way delay: 114.568 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 14.30 Mbit/s

95th percentile per-packet one-way delay: 114.623 ms

Loss rate: 0.25%

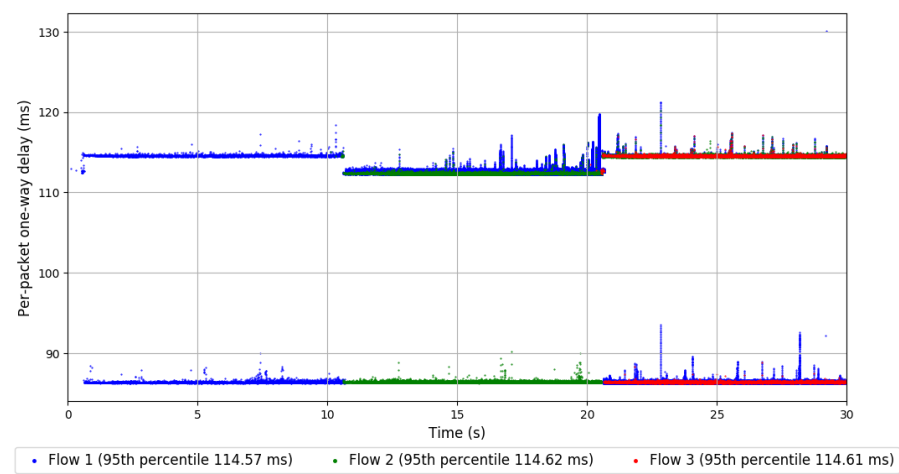
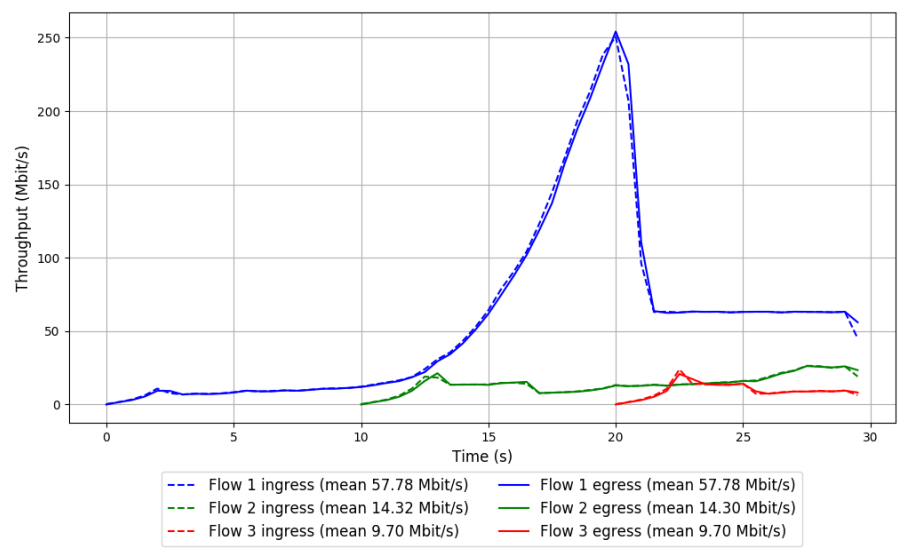
-- Flow 3:

Average throughput: 9.70 Mbit/s

95th percentile per-packet one-way delay: 114.615 ms

Loss rate: 0.23%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-01-17 10:45:11

End at: 2018-01-17 10:45:41

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 155.74 Mbit/s

95th percentile per-packet one-way delay: 114.755 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 131.67 Mbit/s

95th percentile per-packet one-way delay: 114.795 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 26.93 Mbit/s

95th percentile per-packet one-way delay: 114.596 ms

Loss rate: 0.10%

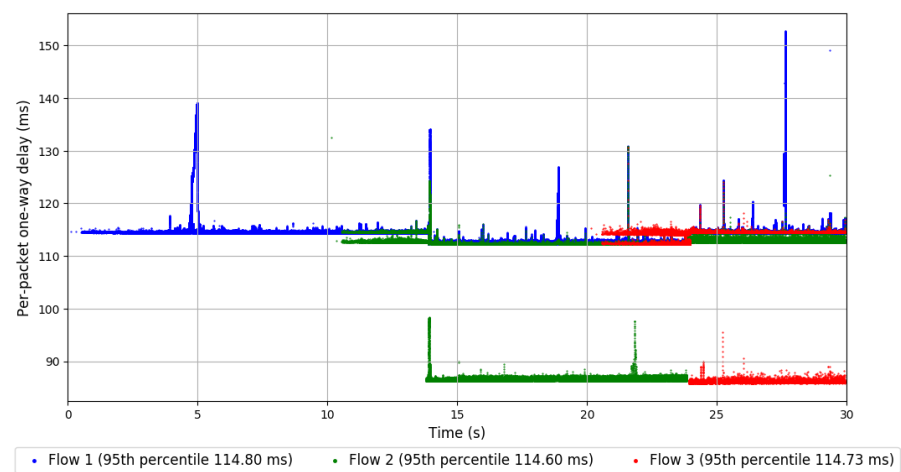
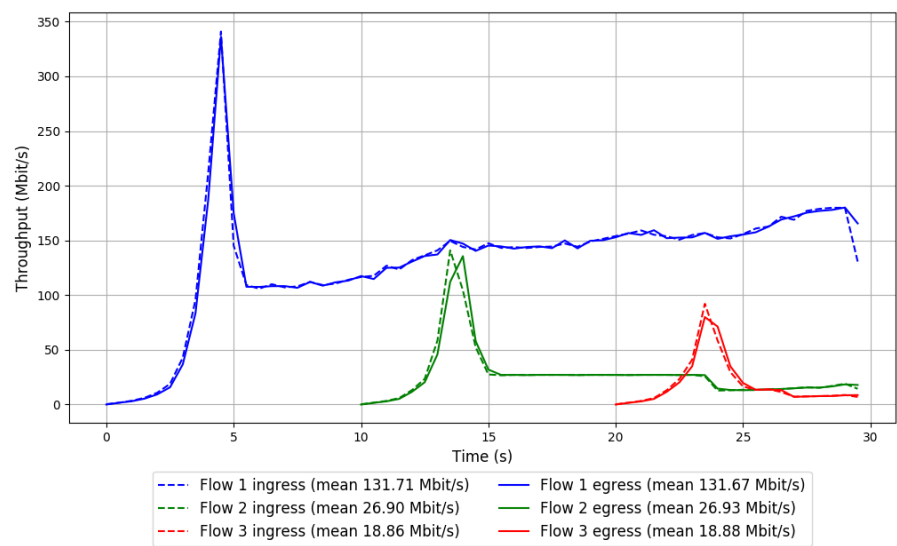
-- Flow 3:

Average throughput: 18.88 Mbit/s

95th percentile per-packet one-way delay: 114.729 ms

Loss rate: 0.12%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-01-17 11:02:14

End at: 2018-01-17 11:02:44

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.03 Mbit/s

95th percentile per-packet one-way delay: 114.921 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 122.64 Mbit/s

95th percentile per-packet one-way delay: 115.030 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 54.36 Mbit/s

95th percentile per-packet one-way delay: 114.871 ms

Loss rate: 0.02%

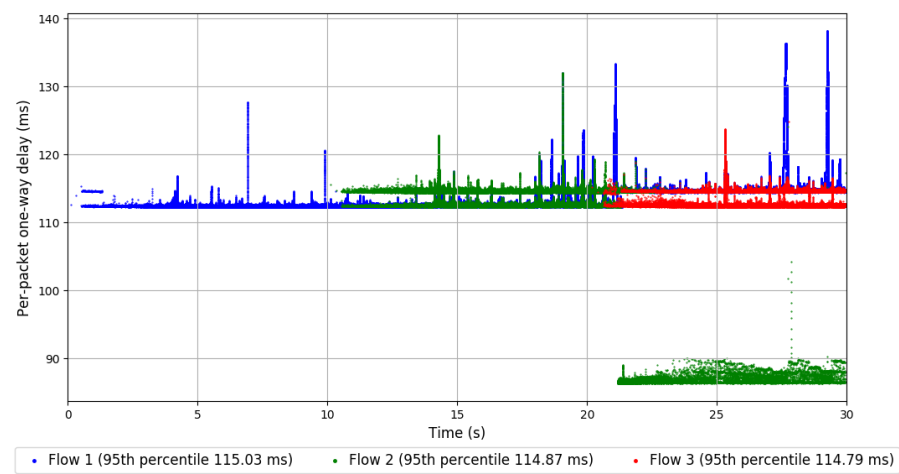
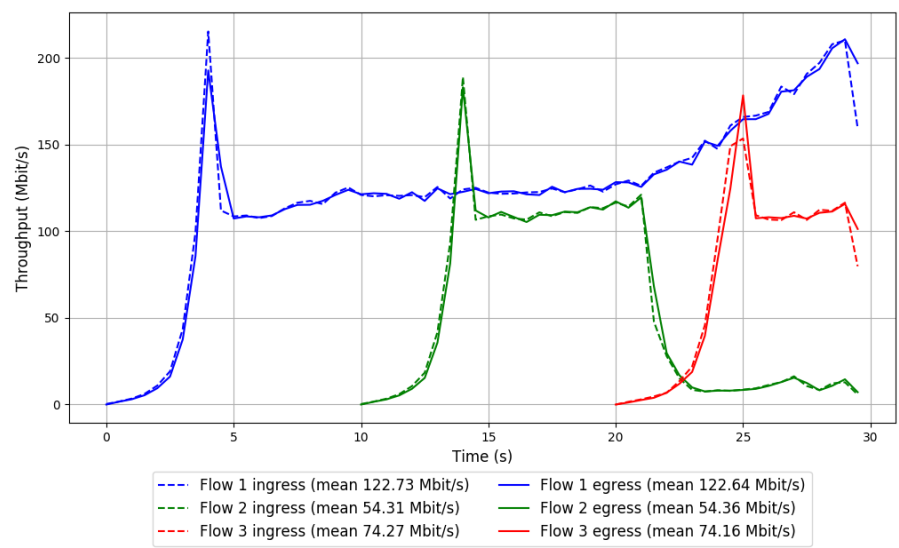
-- Flow 3:

Average throughput: 74.16 Mbit/s

95th percentile per-packet one-way delay: 114.793 ms

Loss rate: 0.42%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-01-17 11:18:50

End at: 2018-01-17 11:19:20

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.12 Mbit/s

95th percentile per-packet one-way delay: 114.652 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 9.38 Mbit/s

95th percentile per-packet one-way delay: 114.652 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 9.52 Mbit/s

95th percentile per-packet one-way delay: 114.662 ms

Loss rate: 0.11%

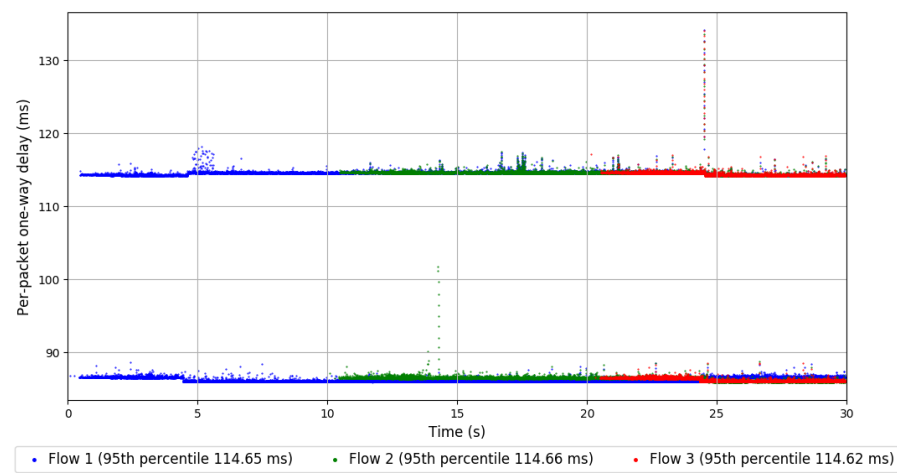
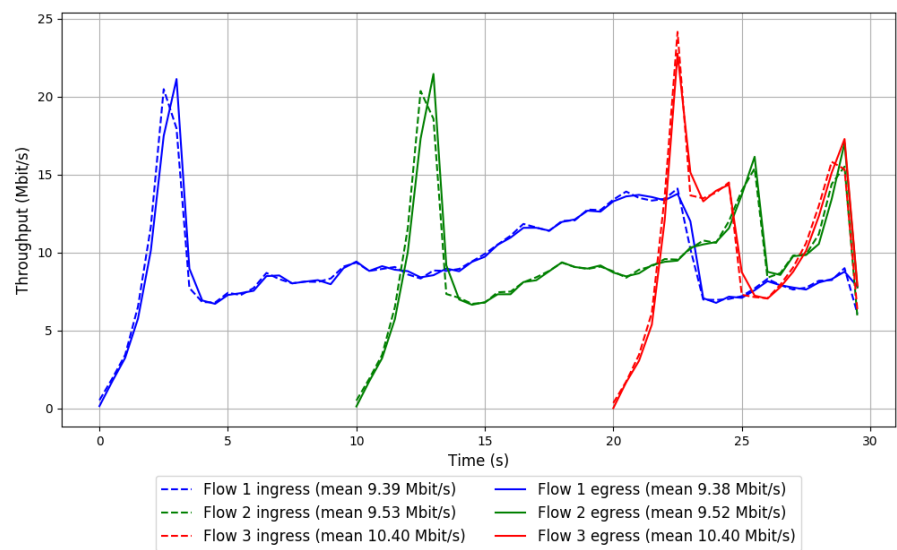
-- Flow 3:

Average throughput: 10.40 Mbit/s

95th percentile per-packet one-way delay: 114.624 ms

Loss rate: 0.22%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-01-17 11:34:30

End at: 2018-01-17 11:35:00

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.34 Mbit/s

95th percentile per-packet one-way delay: 114.650 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 11.06 Mbit/s

95th percentile per-packet one-way delay: 114.641 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 8.70 Mbit/s

95th percentile per-packet one-way delay: 114.656 ms

Loss rate: 0.19%

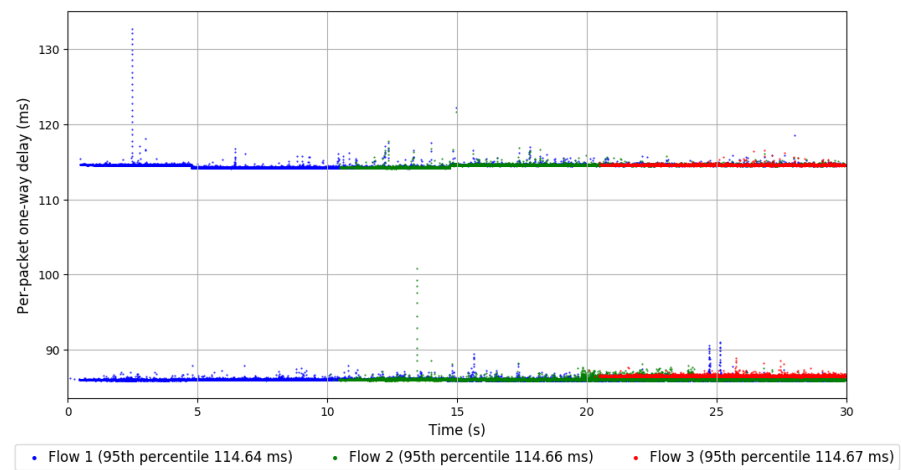
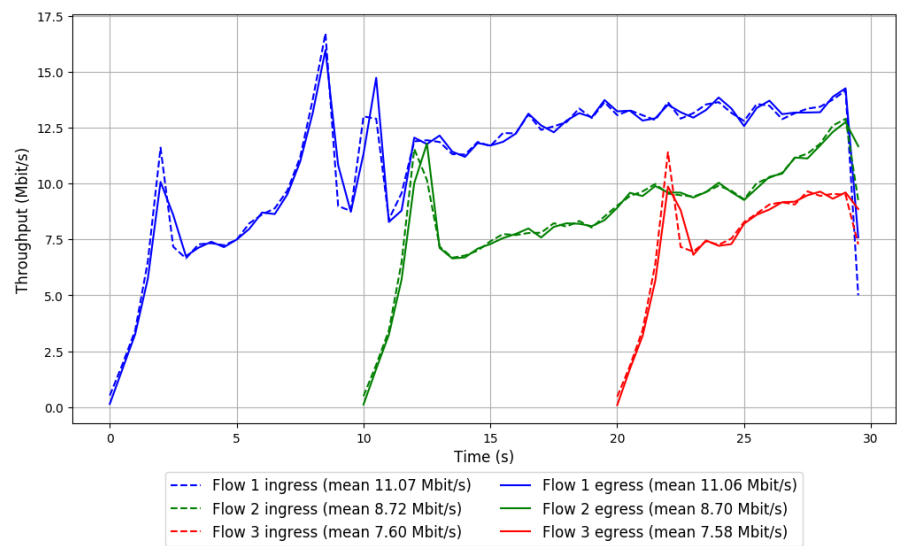
-- Flow 3:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 114.666 ms

Loss rate: 0.37%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-01-17 11:51:14

End at: 2018-01-17 11:51:44

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 175.34 Mbit/s

95th percentile per-packet one-way delay: 114.751 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 120.66 Mbit/s

95th percentile per-packet one-way delay: 114.666 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 59.50 Mbit/s

95th percentile per-packet one-way delay: 114.814 ms

Loss rate: 0.24%

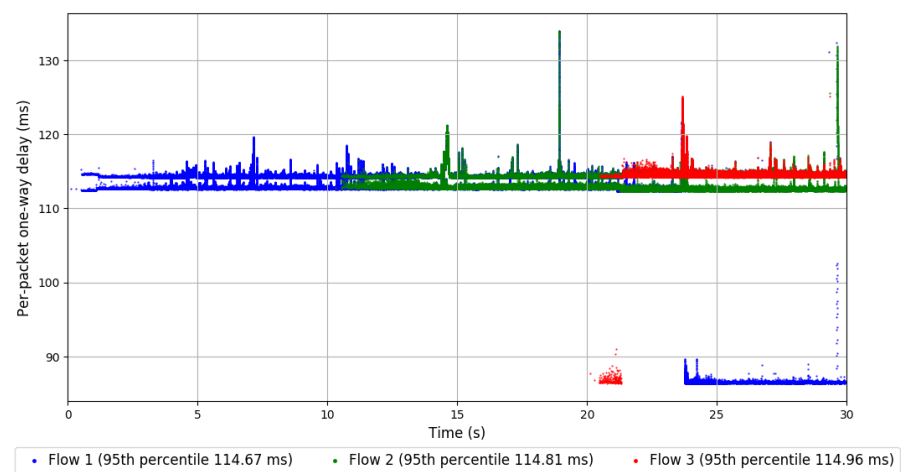
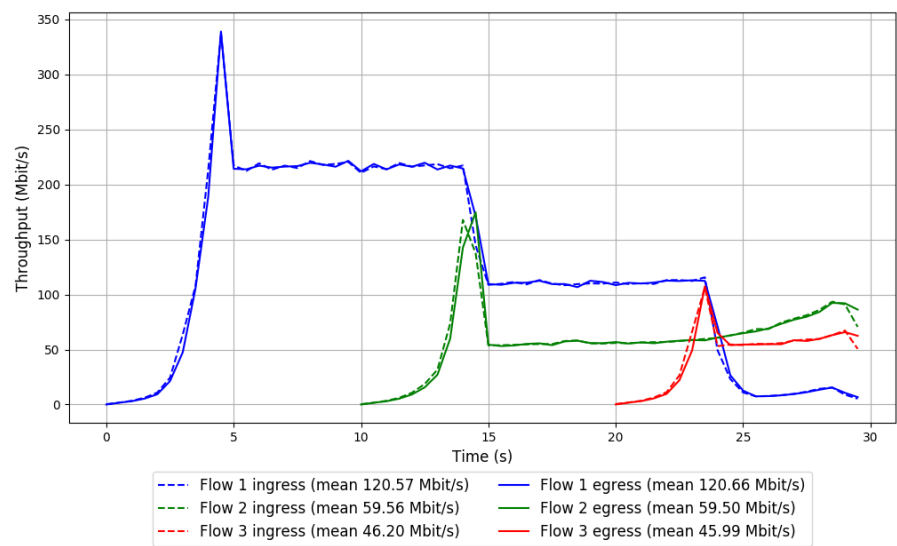
-- Flow 3:

Average throughput: 45.99 Mbit/s

95th percentile per-packet one-way delay: 114.960 ms

Loss rate: 0.45%

Run 10: Report of Vivace-loss — Data Link

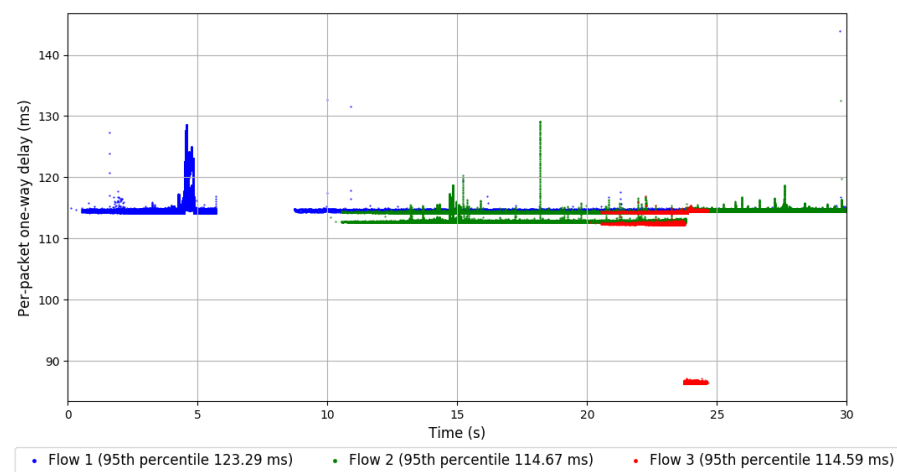
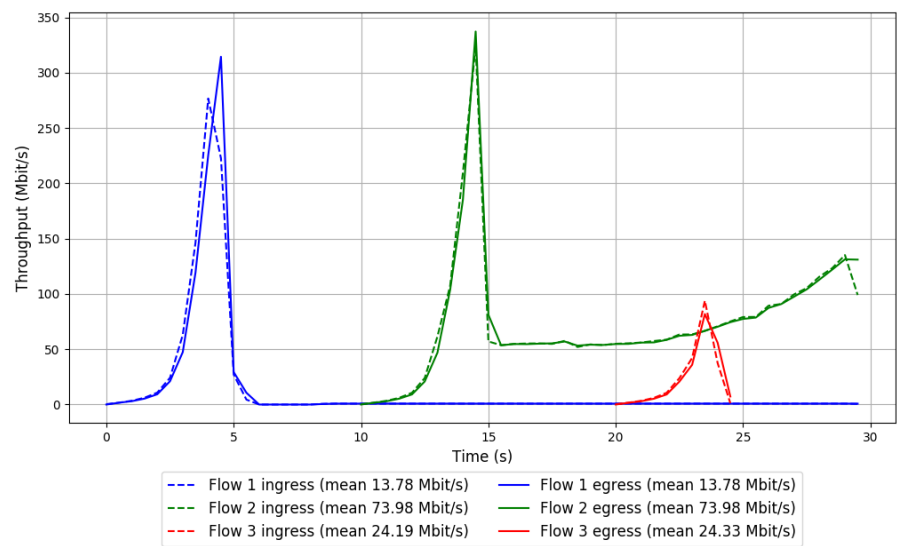


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-01-17 09:23:31
End at: 2018-01-17 09:24:01

# Below is generated by plot.py at 2018-01-17 15:25:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.63 Mbit/s
95th percentile per-packet one-way delay: 117.050 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.78 Mbit/s
95th percentile per-packet one-way delay: 123.294 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 73.98 Mbit/s
95th percentile per-packet one-way delay: 114.672 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.33 Mbit/s
95th percentile per-packet one-way delay: 114.587 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-01-17 09:40:48

End at: 2018-01-17 09:41:18

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.71 Mbit/s

95th percentile per-packet one-way delay: 126.483 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.84 Mbit/s

95th percentile per-packet one-way delay: 114.706 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.97 Mbit/s

95th percentile per-packet one-way delay: 198.836 ms

Loss rate: 0.00%

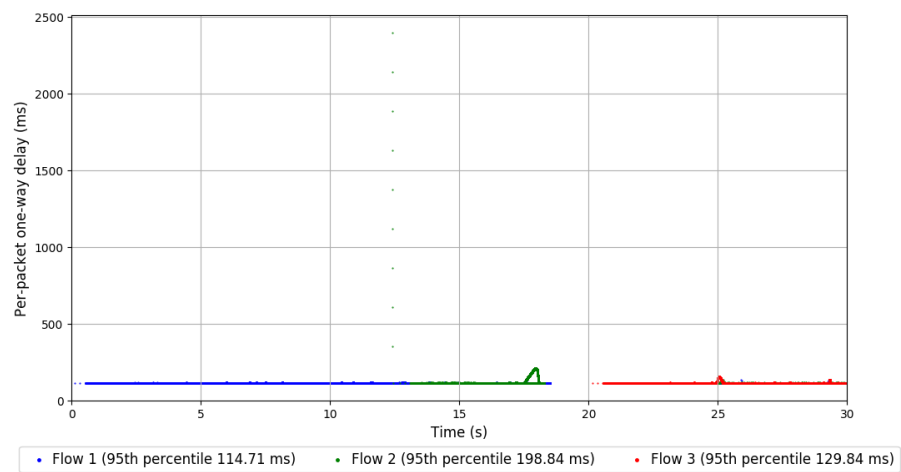
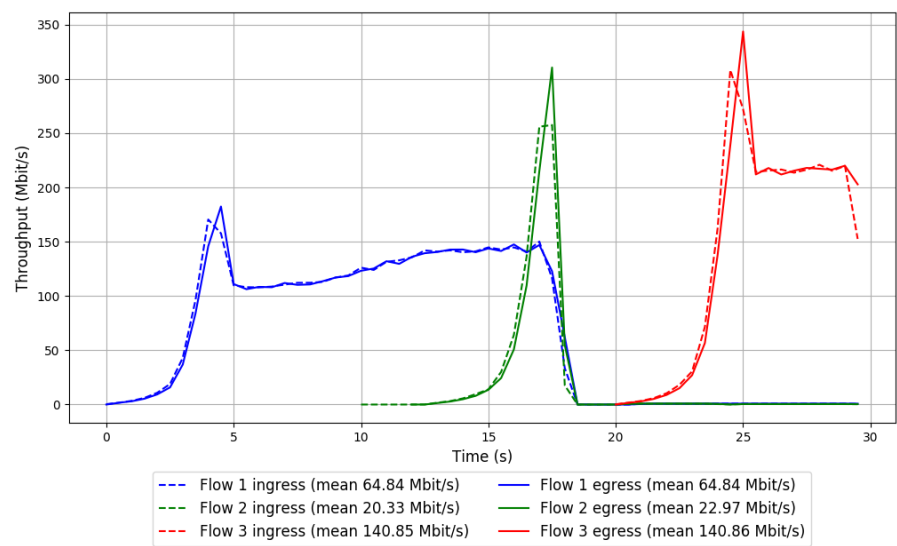
-- Flow 3:

Average throughput: 140.86 Mbit/s

95th percentile per-packet one-way delay: 129.839 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-01-17 09:58:11

End at: 2018-01-17 09:58:41

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 32.67 Mbit/s

95th percentile per-packet one-way delay: 114.628 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.05 Mbit/s

95th percentile per-packet one-way delay: 114.562 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 114.647 ms

Loss rate: 0.04%

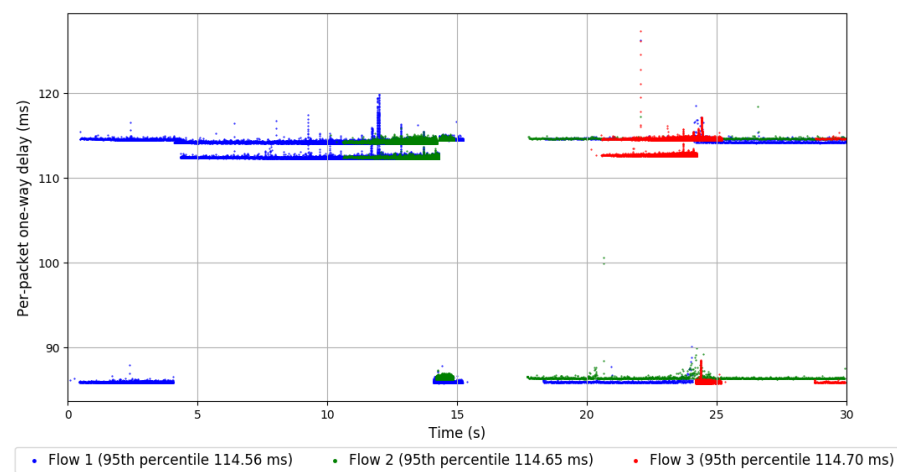
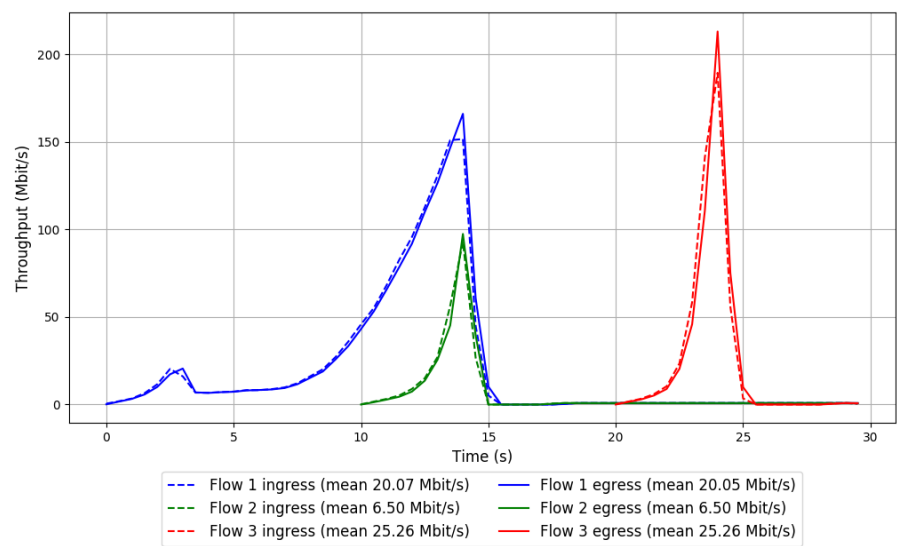
-- Flow 3:

Average throughput: 25.26 Mbit/s

95th percentile per-packet one-way delay: 114.701 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-01-17 10:14:58

End at: 2018-01-17 10:15:28

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.85 Mbit/s

95th percentile per-packet one-way delay: 114.573 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 1.13 Mbit/s

95th percentile per-packet one-way delay: 114.257 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 114.627 ms

Loss rate: 0.00%

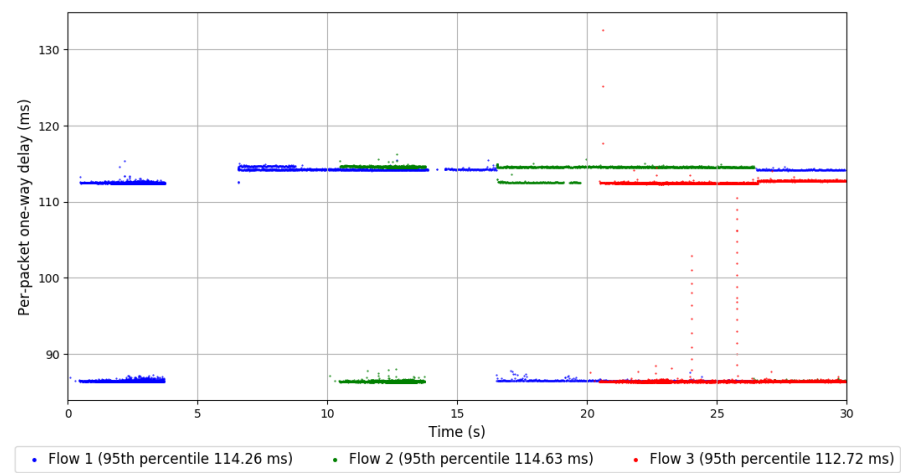
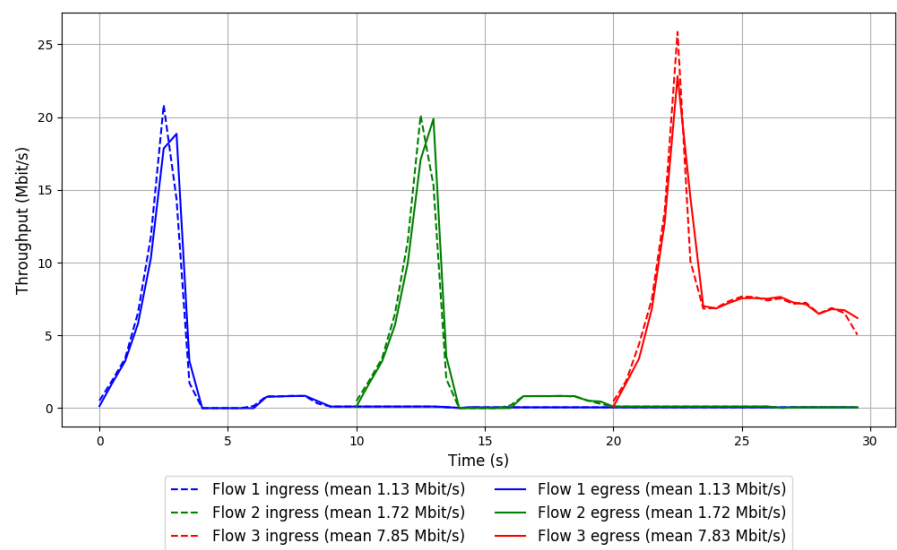
-- Flow 3:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 112.722 ms

Loss rate: 0.20%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-01-17 10:32:33

End at: 2018-01-17 10:33:03

Below is generated by plot.py at 2018-01-17 15:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.99 Mbit/s

95th percentile per-packet one-way delay: 114.624 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 114.625 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 9.89 Mbit/s

95th percentile per-packet one-way delay: 114.614 ms

Loss rate: 0.15%

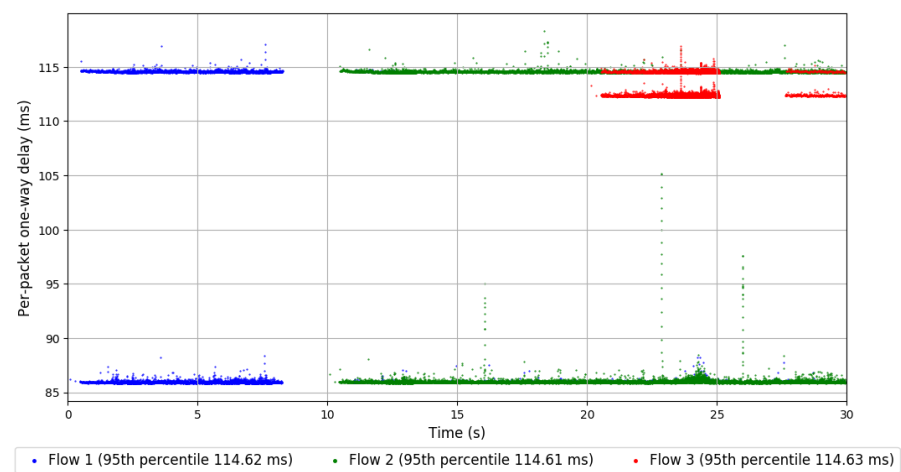
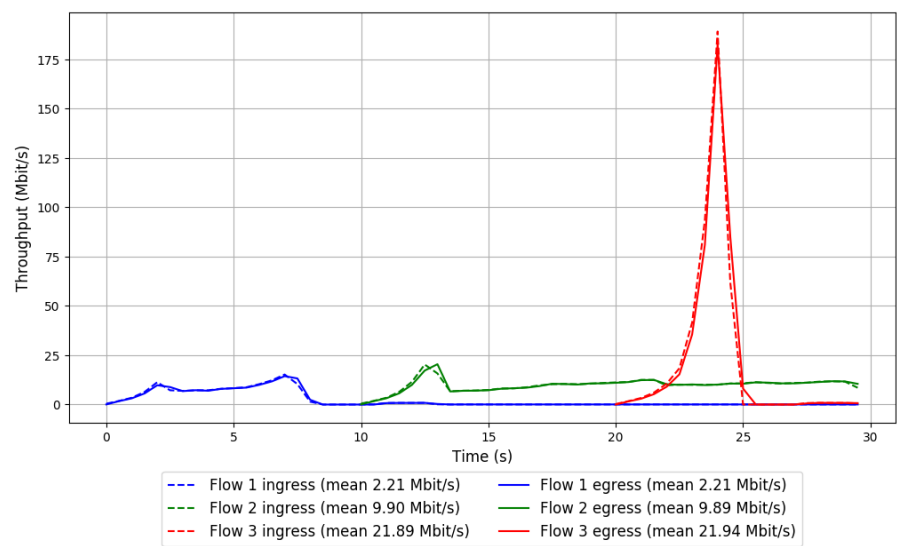
-- Flow 3:

Average throughput: 21.94 Mbit/s

95th percentile per-packet one-way delay: 114.633 ms

Loss rate: 0.01%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-01-17 10:49:01

End at: 2018-01-17 10:49:31

Below is generated by plot.py at 2018-01-17 15:26:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 191.94 Mbit/s

95th percentile per-packet one-way delay: 114.396 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 109.08 Mbit/s

95th percentile per-packet one-way delay: 114.359 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 122.82 Mbit/s

95th percentile per-packet one-way delay: 114.443 ms

Loss rate: 0.00%

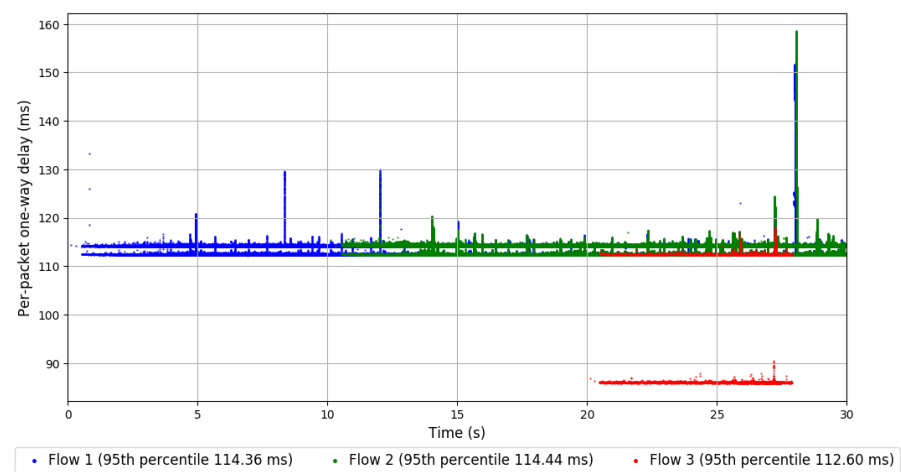
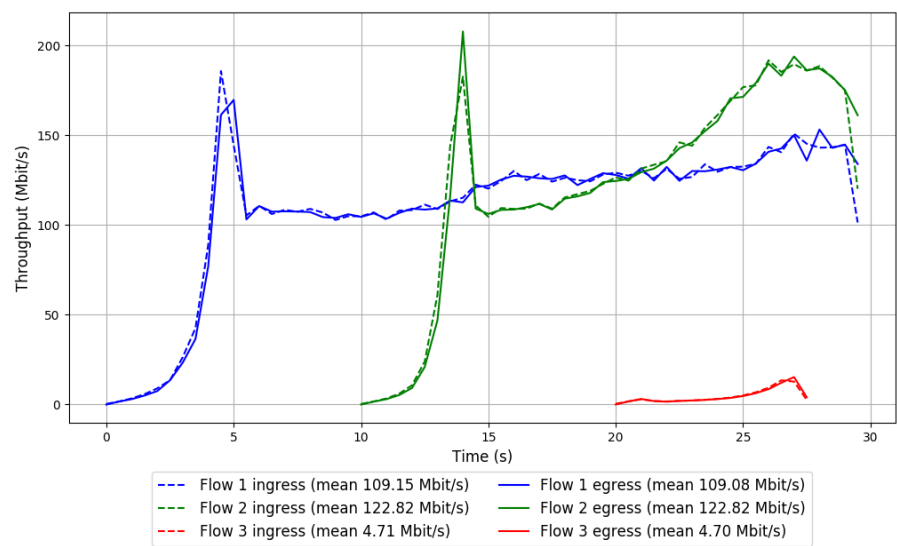
-- Flow 3:

Average throughput: 4.70 Mbit/s

95th percentile per-packet one-way delay: 112.601 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-01-17 11:06:02

End at: 2018-01-17 11:06:32

Below is generated by plot.py at 2018-01-17 15:26:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 23.72 Mbit/s

95th percentile per-packet one-way delay: 216.736 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 114.606 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 26.98 Mbit/s

95th percentile per-packet one-way delay: 231.009 ms

Loss rate: 0.00%

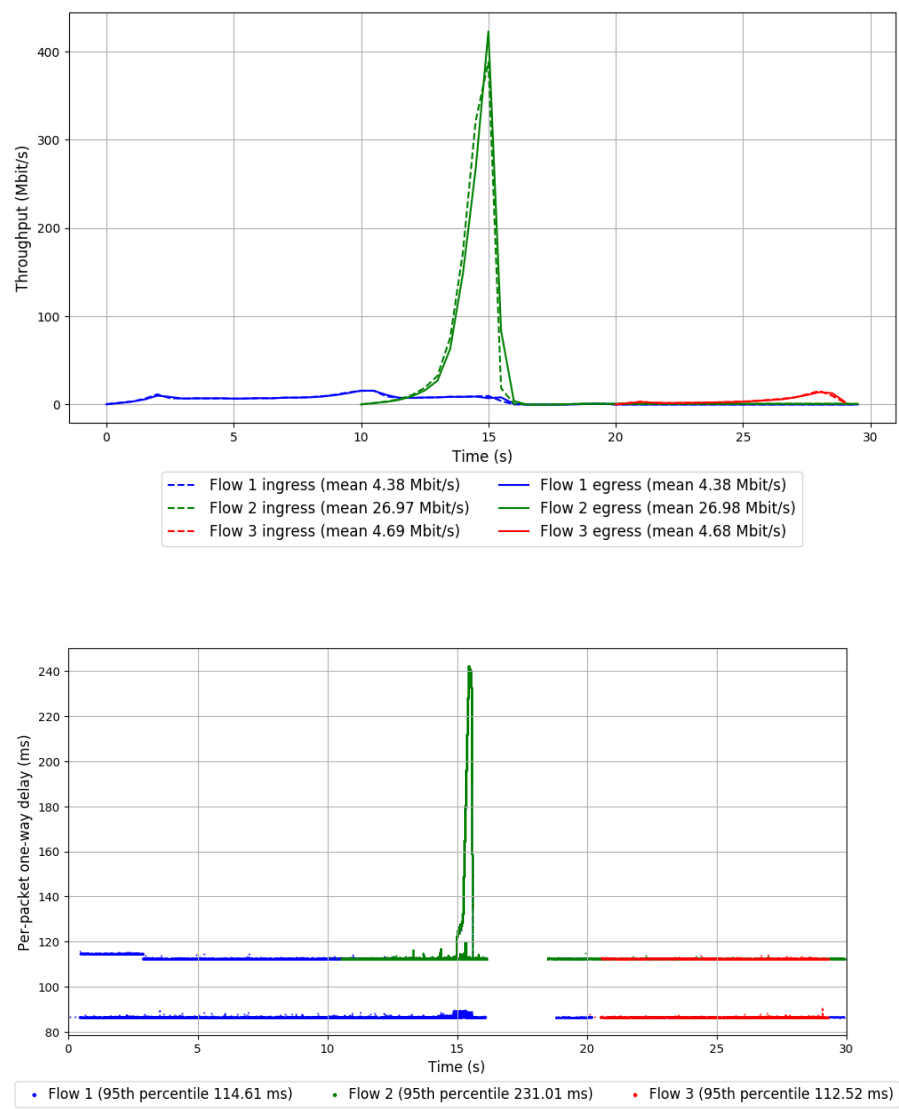
-- Flow 3:

Average throughput: 4.68 Mbit/s

95th percentile per-packet one-way delay: 112.515 ms

Loss rate: 0.00%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-01-17 11:22:19

End at: 2018-01-17 11:22:49

Below is generated by plot.py at 2018-01-17 15:26:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.43 Mbit/s

95th percentile per-packet one-way delay: 114.570 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 114.331 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 114.397 ms

Loss rate: 0.00%

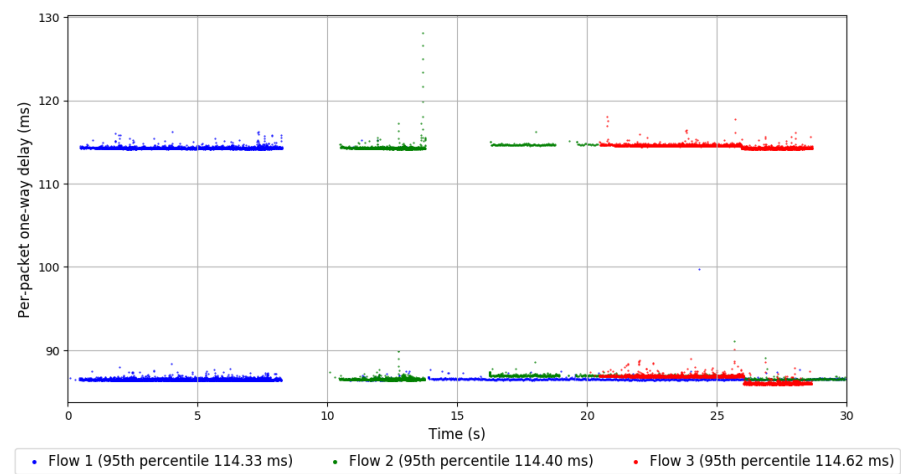
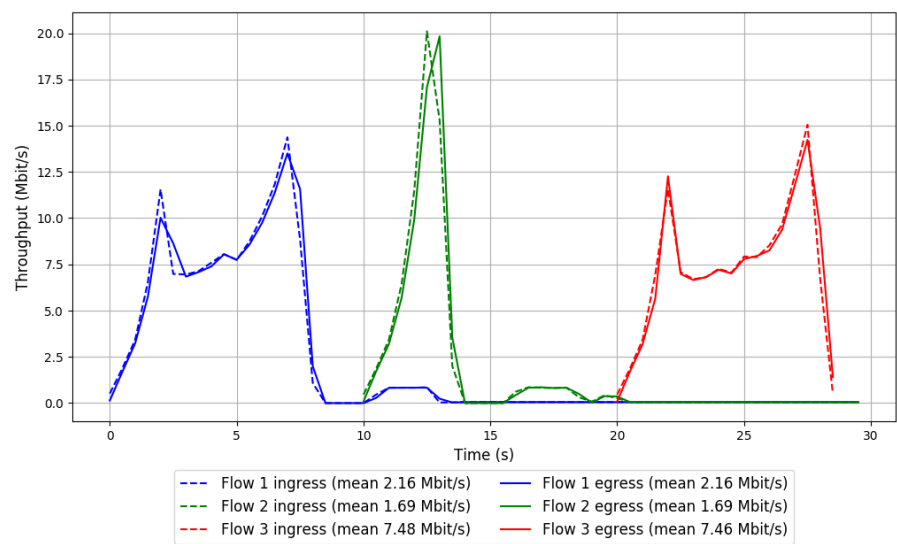
-- Flow 3:

Average throughput: 7.46 Mbit/s

95th percentile per-packet one-way delay: 114.620 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-01-17 11:37:57

End at: 2018-01-17 11:38:27

Below is generated by plot.py at 2018-01-17 15:26:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 22.85 Mbit/s

95th percentile per-packet one-way delay: 174.550 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 19.31 Mbit/s

95th percentile per-packet one-way delay: 180.783 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 114.349 ms

Loss rate: 0.00%

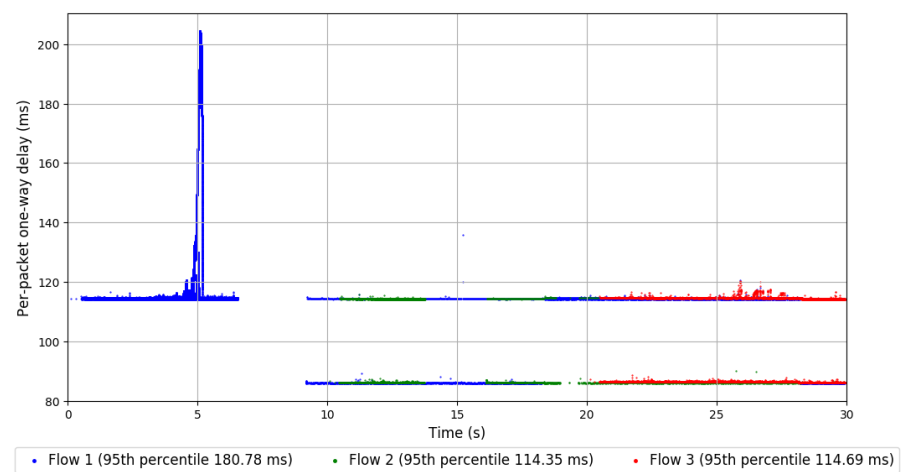
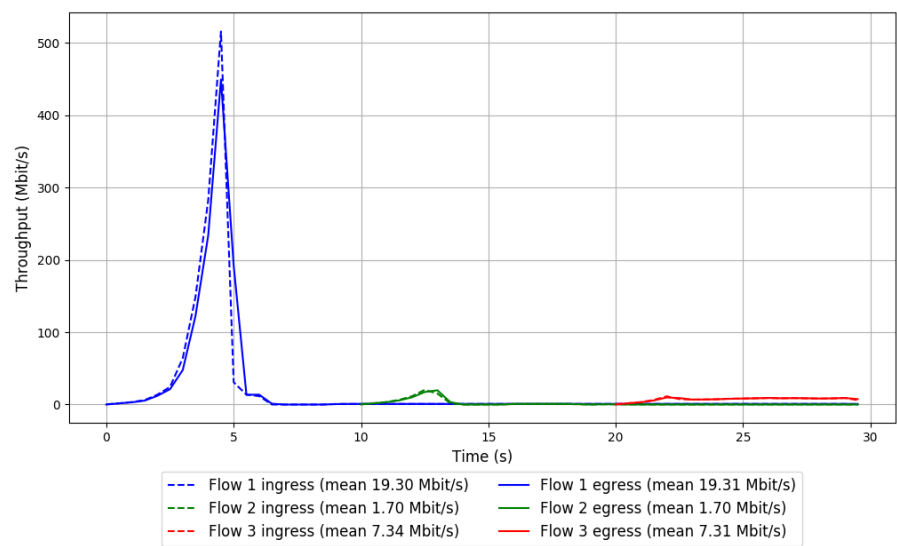
-- Flow 3:

Average throughput: 7.31 Mbit/s

95th percentile per-packet one-way delay: 114.690 ms

Loss rate: 0.32%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-01-17 11:55:00

End at: 2018-01-17 11:55:30

Below is generated by plot.py at 2018-01-17 15:26:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.43 Mbit/s

95th percentile per-packet one-way delay: 178.538 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 26.06 Mbit/s

95th percentile per-packet one-way delay: 147.524 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 19.46 Mbit/s

95th percentile per-packet one-way delay: 200.460 ms

Loss rate: 0.01%

-- Flow 3:

Average throughput: 4.55 Mbit/s

95th percentile per-packet one-way delay: 114.686 ms

Loss rate: 0.46%

Run 10: Report of Vivace-LTE — Data Link

