

Pantheon Report

Generated at 2017-09-08 04:09:48 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

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

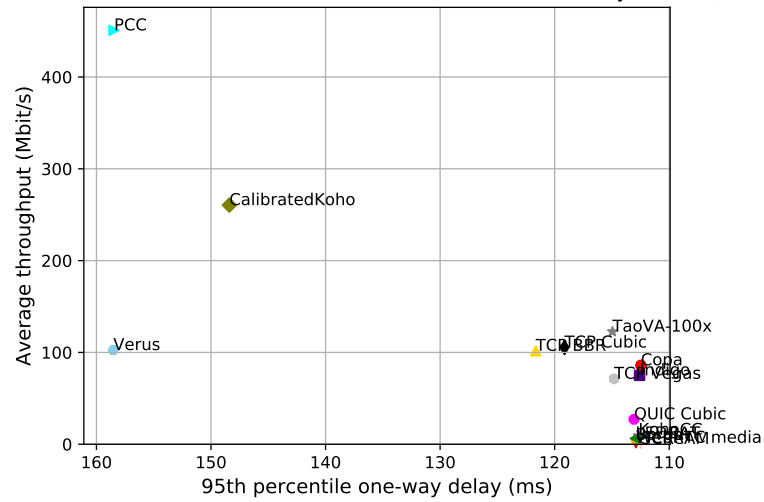
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

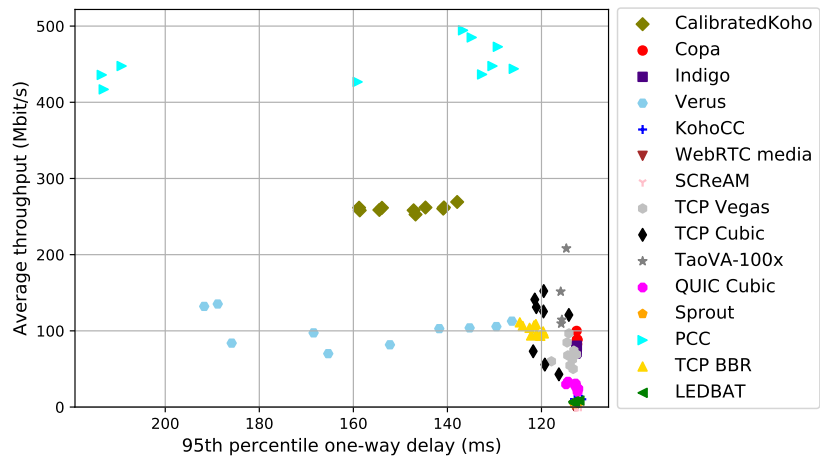
Git summary:

```
branch: master @ 2a98508c2457474d84cd2966a42b80b0bc62ecaf
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ 10192113fb6902d25c86e0e3e4c85d7a05e43d7e
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ 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/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	50.13	48.05	59.89	120.79	121.86	122.76	0.02	0.00	0.00
CalibratedKoho	10	183.09	104.46	23.47	154.50	136.88	120.34	0.02	0.08	0.15
Copa	8	51.36	42.72	26.28	112.31	112.49	112.51	0.00	0.00	0.00
TCP Cubic	8	45.10	58.07	67.77	577.23	118.53	120.02	0.00	0.00	0.01
Indigo	10	24.57	59.02	34.90	112.53	112.61	112.61	0.00	0.00	0.00
KohoCC	10	5.17	5.08	4.83	112.71	112.66	112.66	0.00	0.00	0.00
LEDBAT	10	3.62	3.17	1.98	112.96	112.91	112.80	0.06	0.01	0.04
PCC	10	278.17	183.77	155.69	168.76	121.05	122.15	0.52	0.00	0.01
QUIC Cubic	10	0.05	25.25	32.30	112.06	112.50	112.19	0.00	0.00	0.00
SCReAM	10	0.21	0.18	0.20	111.54	112.02	111.42	0.00	0.00	0.00
Sprout	10	2.43	2.46	1.97	112.92	112.90	112.81	0.06	0.06	0.04
TaoVA-100x	5	66.31	65.40	51.92	113.62	113.98	114.90	0.00	0.00	0.00
TCP Vegas	10	37.87	31.76	36.67	114.04	114.11	116.39	0.00	0.02	0.04
Verus	10	62.62	45.23	31.82	165.85	144.82	130.67	0.14	0.00	0.00
WebRTC media	10	0.24	1.36	0.23	113.05	112.66	113.01	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-09-08 00:14:04

End at: 2017-09-08 00:14:34

Below is generated by plot.py at 2017-09-08 03:43:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.88 Mbit/s

95th percentile per-packet one-way delay: 121.195 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.80 Mbit/s

95th percentile per-packet one-way delay: 121.191 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.75 Mbit/s

95th percentile per-packet one-way delay: 121.207 ms

Loss rate: 0.00%

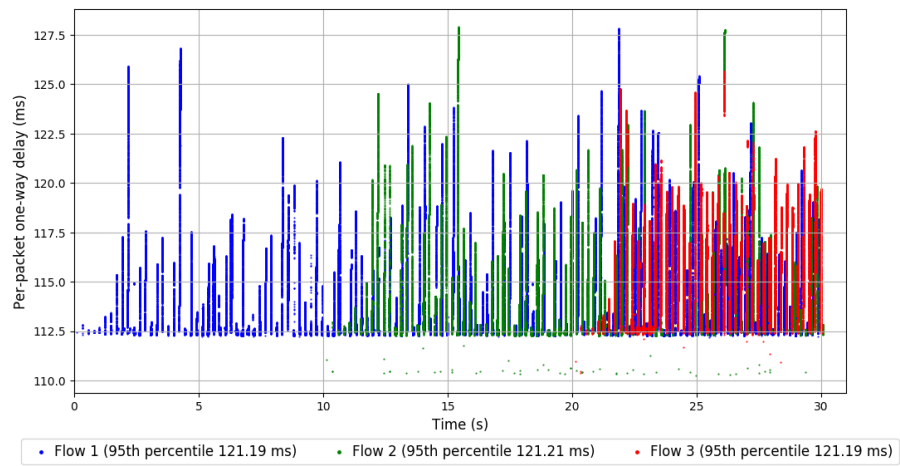
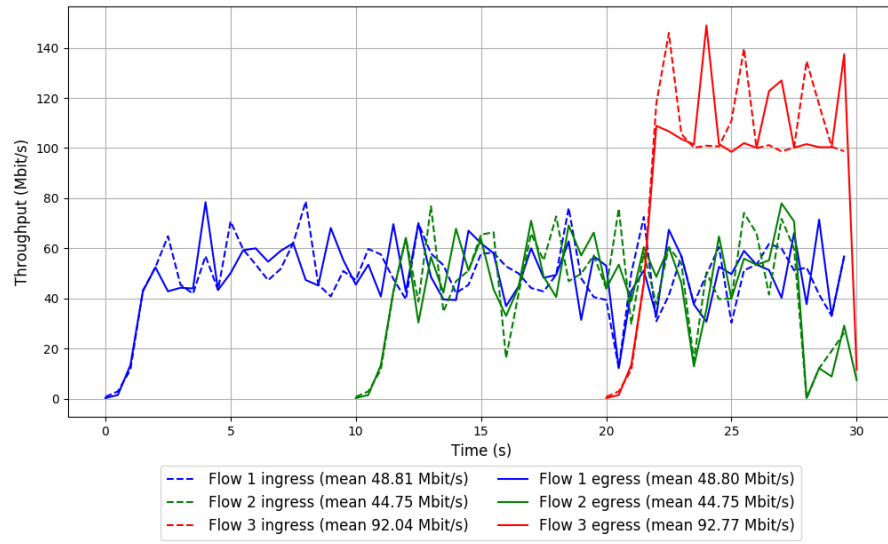
-- Flow 3:

Average throughput: 92.77 Mbit/s

95th percentile per-packet one-way delay: 121.191 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-09-08 00:27:15

End at: 2017-09-08 00:27:45

Below is generated by plot.py at 2017-09-08 03:43:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.20 Mbit/s

95th percentile per-packet one-way delay: 124.607 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 50.29 Mbit/s

95th percentile per-packet one-way delay: 122.066 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 52.49 Mbit/s

95th percentile per-packet one-way delay: 127.290 ms

Loss rate: 0.00%

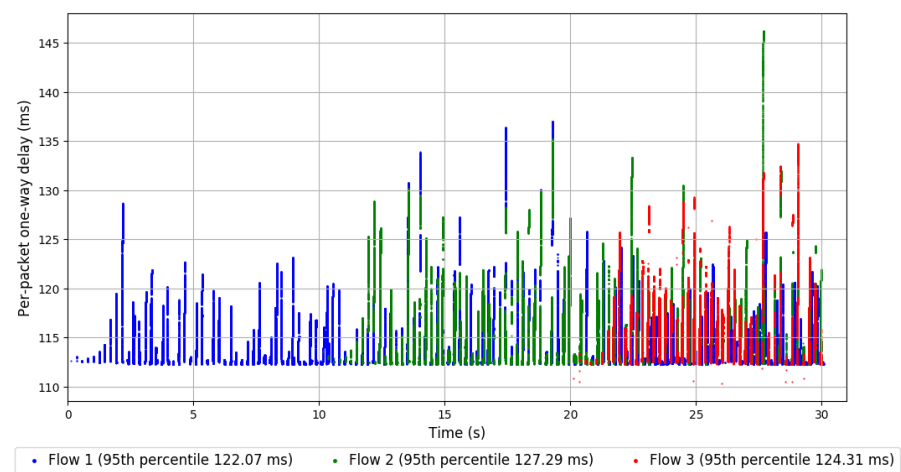
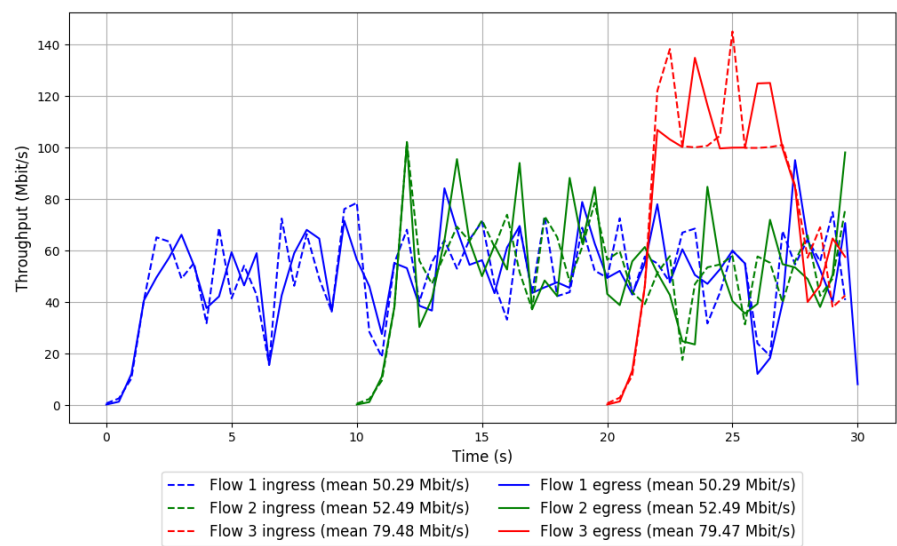
-- Flow 3:

Average throughput: 79.47 Mbit/s

95th percentile per-packet one-way delay: 124.314 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-09-08 00:40:25

End at: 2017-09-08 00:40:55

Below is generated by plot.py at 2017-09-08 03:44:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.98 Mbit/s

95th percentile per-packet one-way delay: 122.200 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.58 Mbit/s

95th percentile per-packet one-way delay: 122.007 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.73 Mbit/s

95th percentile per-packet one-way delay: 121.183 ms

Loss rate: 0.00%

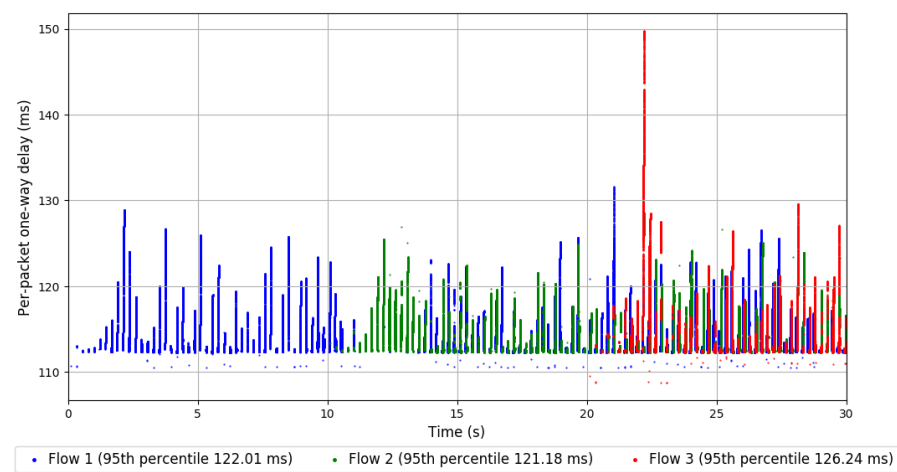
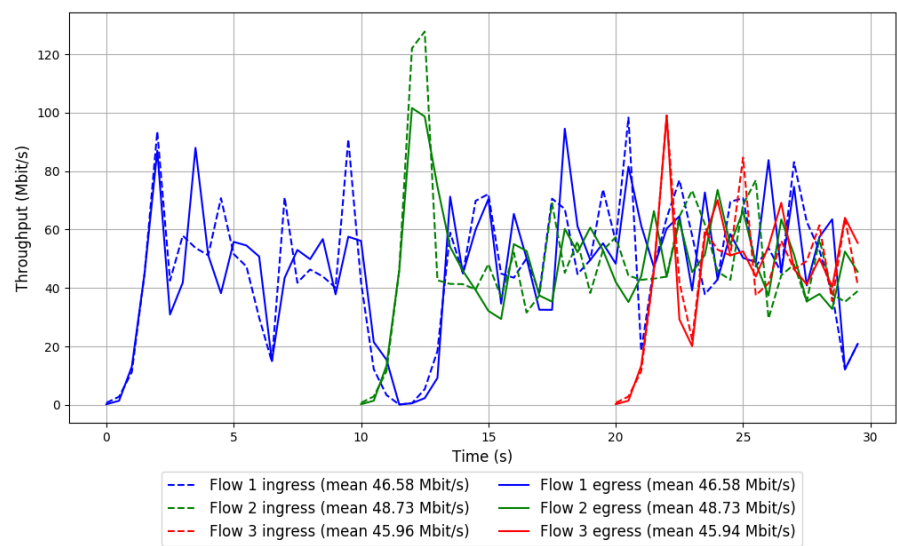
-- Flow 3:

Average throughput: 45.94 Mbit/s

95th percentile per-packet one-way delay: 126.240 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-09-08 00:53:36

End at: 2017-09-08 00:54:06

Below is generated by plot.py at 2017-09-08 03:44:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.49 Mbit/s

95th percentile per-packet one-way delay: 123.989 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.30 Mbit/s

95th percentile per-packet one-way delay: 121.273 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.85 Mbit/s

95th percentile per-packet one-way delay: 124.326 ms

Loss rate: 0.00%

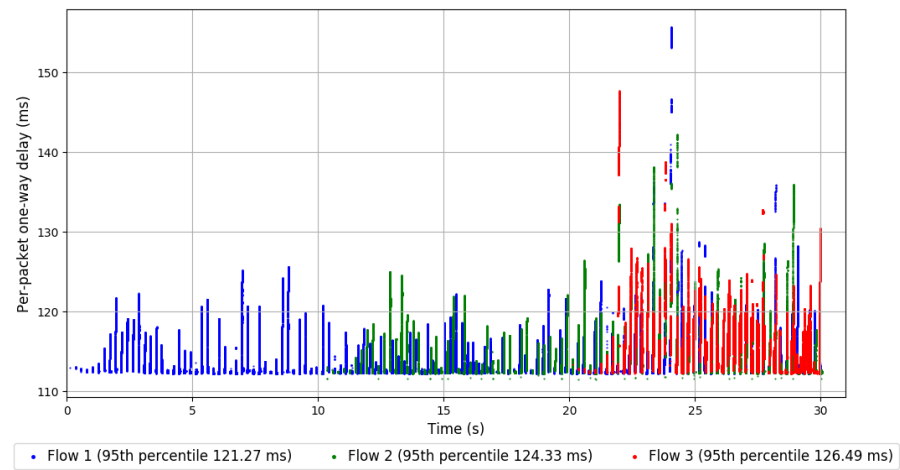
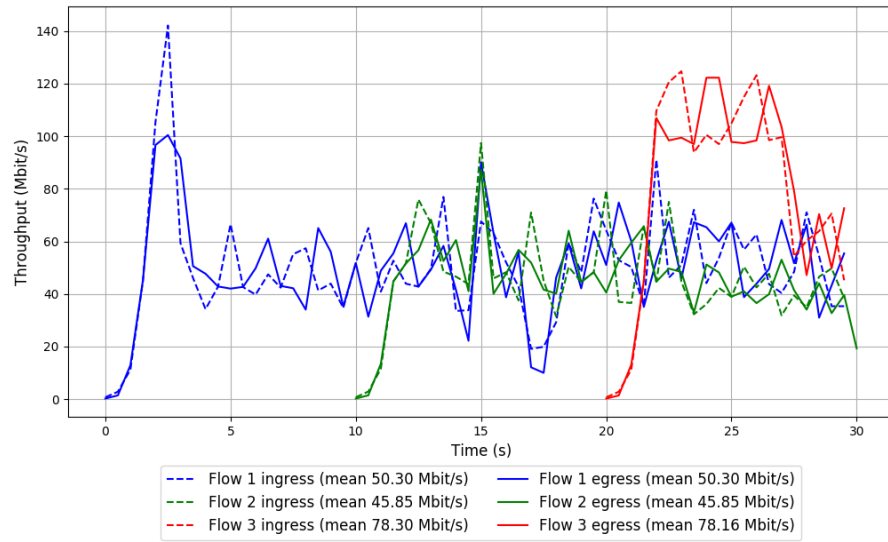
-- Flow 3:

Average throughput: 78.16 Mbit/s

95th percentile per-packet one-way delay: 126.489 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-09-08 01:06:52

End at: 2017-09-08 01:07:22

Below is generated by plot.py at 2017-09-08 03:44:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.67 Mbit/s

95th percentile per-packet one-way delay: 119.512 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.99 Mbit/s

95th percentile per-packet one-way delay: 120.215 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.10 Mbit/s

95th percentile per-packet one-way delay: 117.326 ms

Loss rate: 0.00%

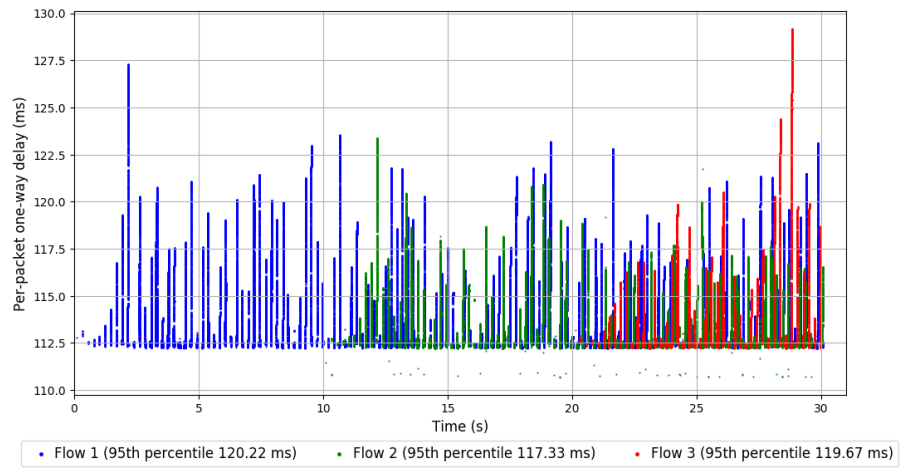
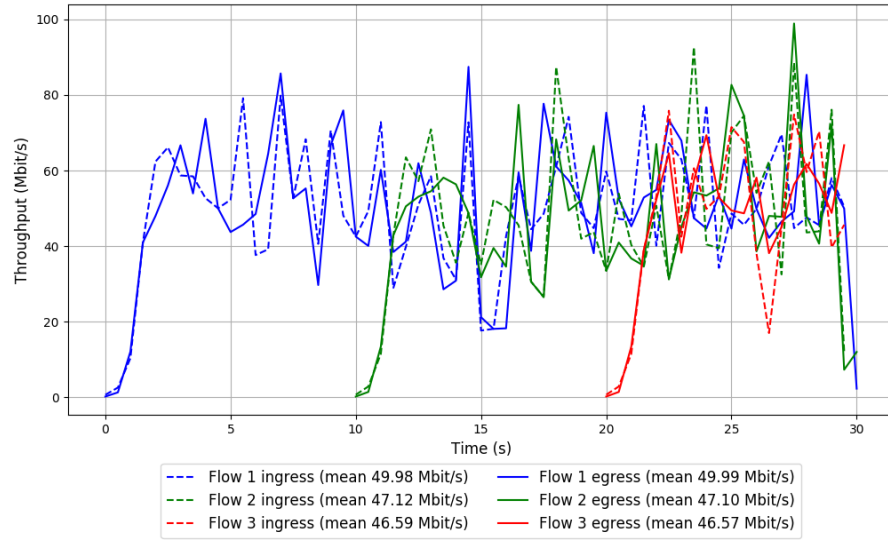
-- Flow 3:

Average throughput: 46.57 Mbit/s

95th percentile per-packet one-way delay: 119.667 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-09-08 01:20:14

End at: 2017-09-08 01:20:44

Below is generated by plot.py at 2017-09-08 03:44:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.53 Mbit/s

95th percentile per-packet one-way delay: 120.250 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.71 Mbit/s

95th percentile per-packet one-way delay: 119.196 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.73 Mbit/s

95th percentile per-packet one-way delay: 119.956 ms

Loss rate: 0.01%

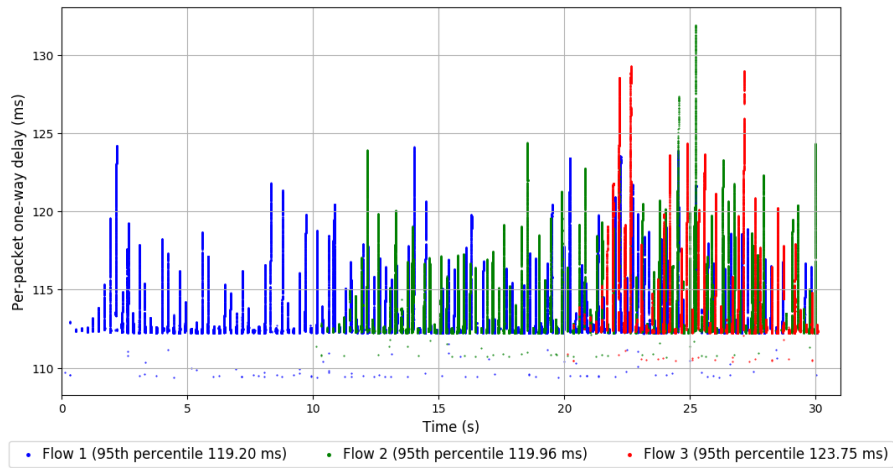
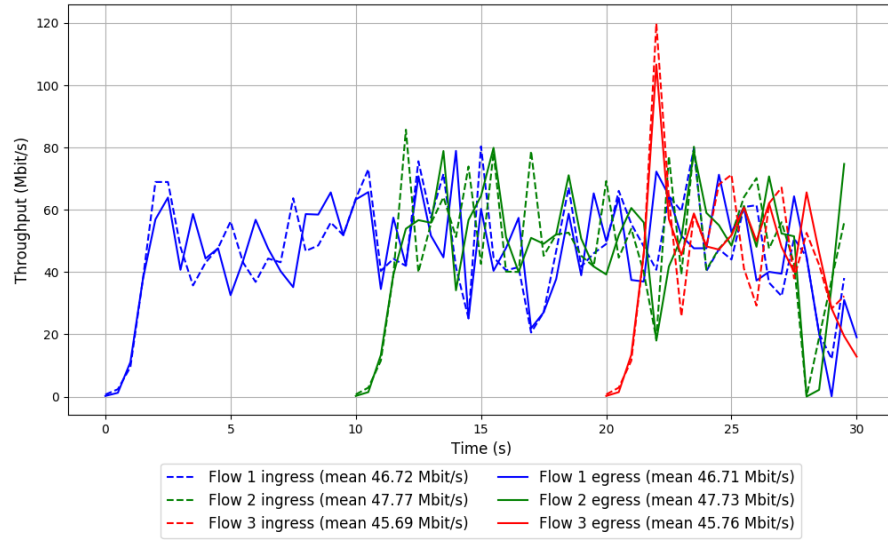
-- Flow 3:

Average throughput: 45.76 Mbit/s

95th percentile per-packet one-way delay: 123.753 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-09-08 01:33:36

End at: 2017-09-08 01:34:06

Below is generated by plot.py at 2017-09-08 03:44:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.01 Mbit/s

95th percentile per-packet one-way delay: 122.531 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 47.78 Mbit/s

95th percentile per-packet one-way delay: 121.583 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 52.81 Mbit/s

95th percentile per-packet one-way delay: 124.104 ms

Loss rate: 0.01%

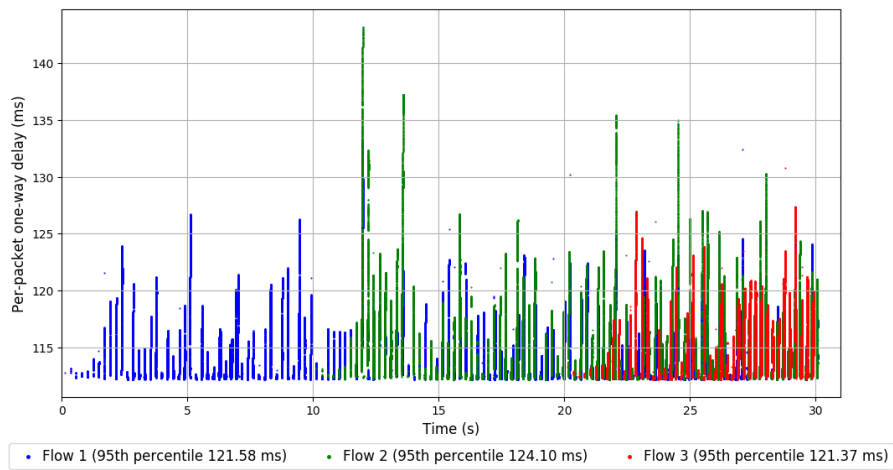
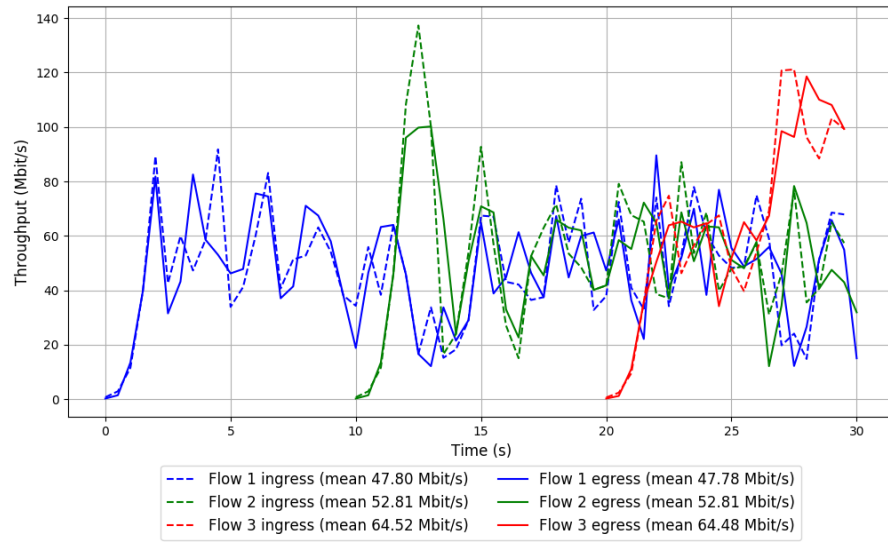
-- Flow 3:

Average throughput: 64.48 Mbit/s

95th percentile per-packet one-way delay: 121.370 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-09-08 01:46:56

End at: 2017-09-08 01:47:26

Below is generated by plot.py at 2017-09-08 03:44:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.79 Mbit/s

95th percentile per-packet one-way delay: 121.070 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.67 Mbit/s

95th percentile per-packet one-way delay: 121.390 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.08 Mbit/s

95th percentile per-packet one-way delay: 120.253 ms

Loss rate: 0.00%

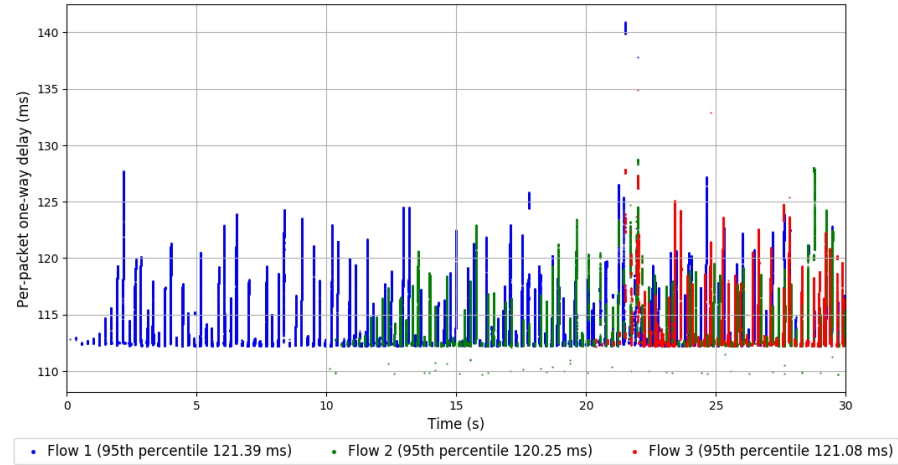
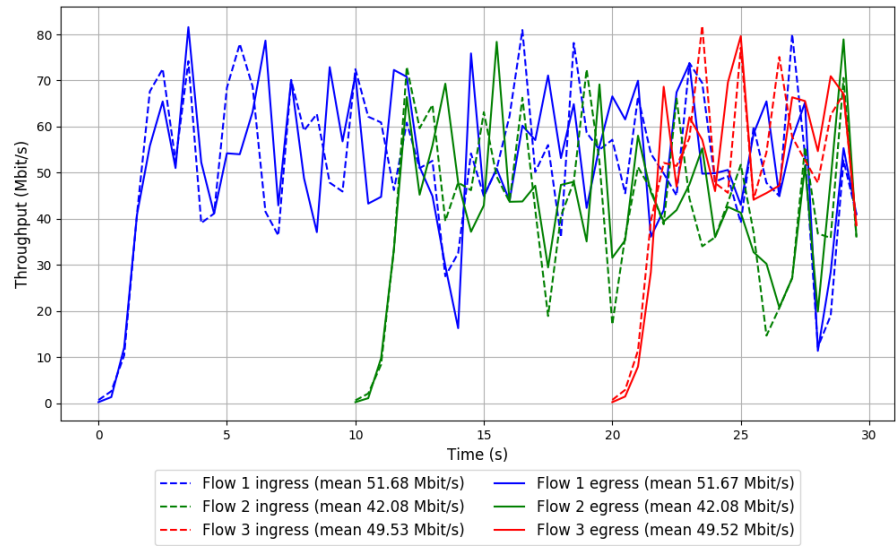
-- Flow 3:

Average throughput: 49.52 Mbit/s

95th percentile per-packet one-way delay: 121.081 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-09-08 02:00:05

End at: 2017-09-08 02:00:35

Below is generated by plot.py at 2017-09-08 03:45:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.24 Mbit/s

95th percentile per-packet one-way delay: 121.556 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 57.57 Mbit/s

95th percentile per-packet one-way delay: 120.090 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 49.28 Mbit/s

95th percentile per-packet one-way delay: 122.277 ms

Loss rate: 0.00%

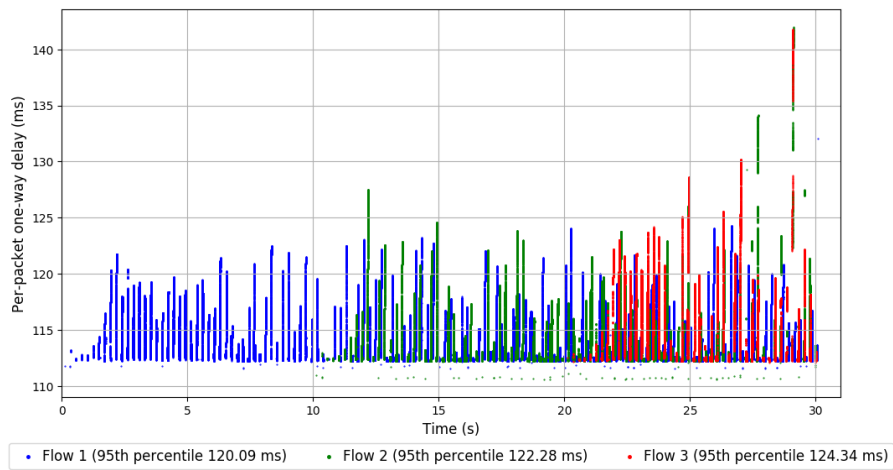
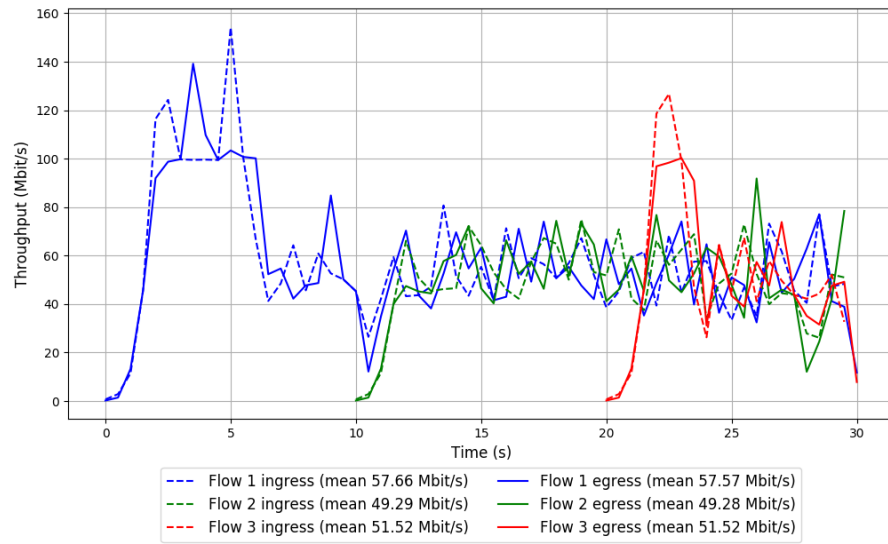
-- Flow 3:

Average throughput: 51.52 Mbit/s

95th percentile per-packet one-way delay: 124.340 ms

Loss rate: 0.01%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-09-08 02:13:29

End at: 2017-09-08 02:13:59

Below is generated by plot.py at 2017-09-08 03:45:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.28 Mbit/s

95th percentile per-packet one-way delay: 119.645 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 51.63 Mbit/s

95th percentile per-packet one-way delay: 118.913 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 49.72 Mbit/s

95th percentile per-packet one-way delay: 120.655 ms

Loss rate: 0.00%

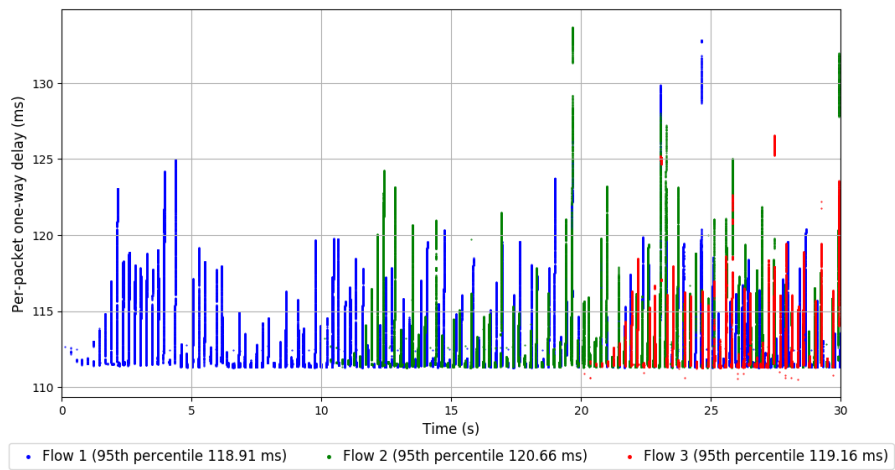
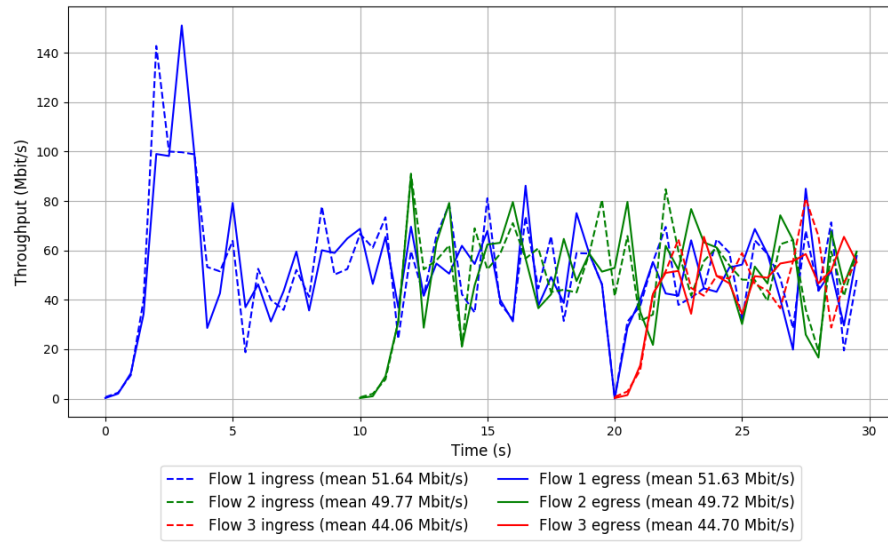
-- Flow 3:

Average throughput: 44.70 Mbit/s

95th percentile per-packet one-way delay: 119.164 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-09-08 00:04:54

End at: 2017-09-08 00:05:24

Below is generated by plot.py at 2017-09-08 03:46:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 261.52 Mbit/s

95th percentile per-packet one-way delay: 153.920 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 180.78 Mbit/s

95th percentile per-packet one-way delay: 163.084 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 110.57 Mbit/s

95th percentile per-packet one-way delay: 131.229 ms

Loss rate: 0.13%

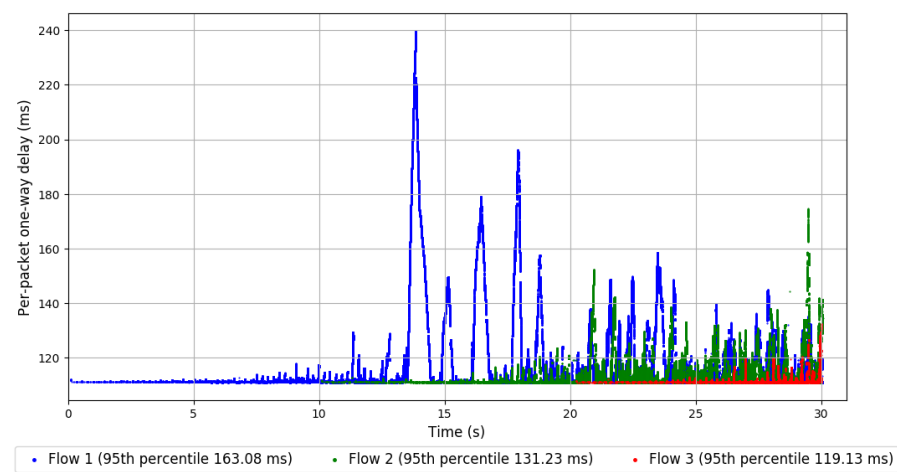
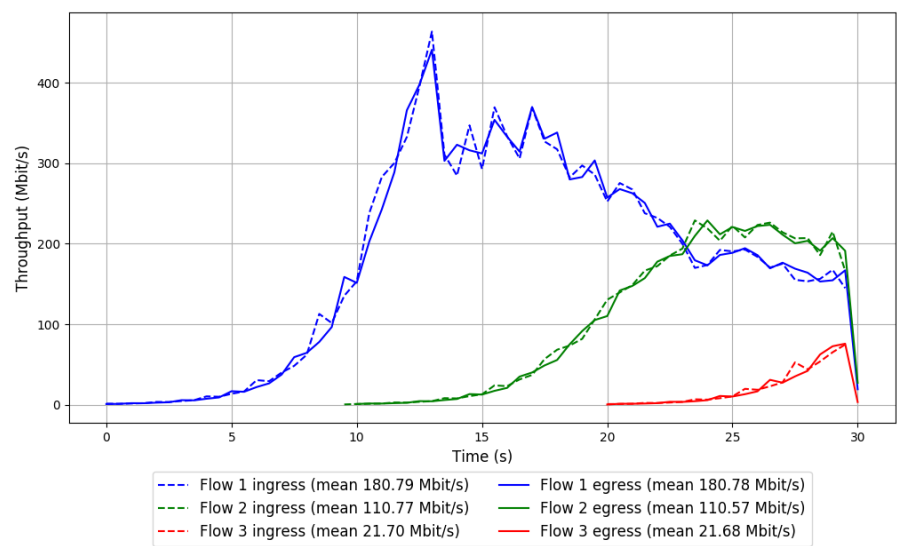
-- Flow 3:

Average throughput: 21.68 Mbit/s

95th percentile per-packet one-way delay: 119.129 ms

Loss rate: 0.06%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-09-08 00:18:14

End at: 2017-09-08 00:18:44

Below is generated by plot.py at 2017-09-08 03:46:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 261.89 Mbit/s

95th percentile per-packet one-way delay: 144.666 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 178.62 Mbit/s

95th percentile per-packet one-way delay: 146.687 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 113.24 Mbit/s

95th percentile per-packet one-way delay: 141.087 ms

Loss rate: 0.10%

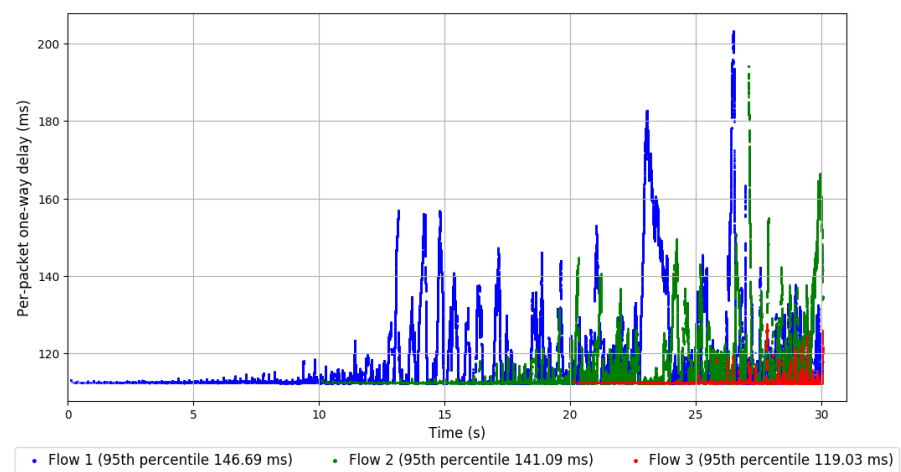
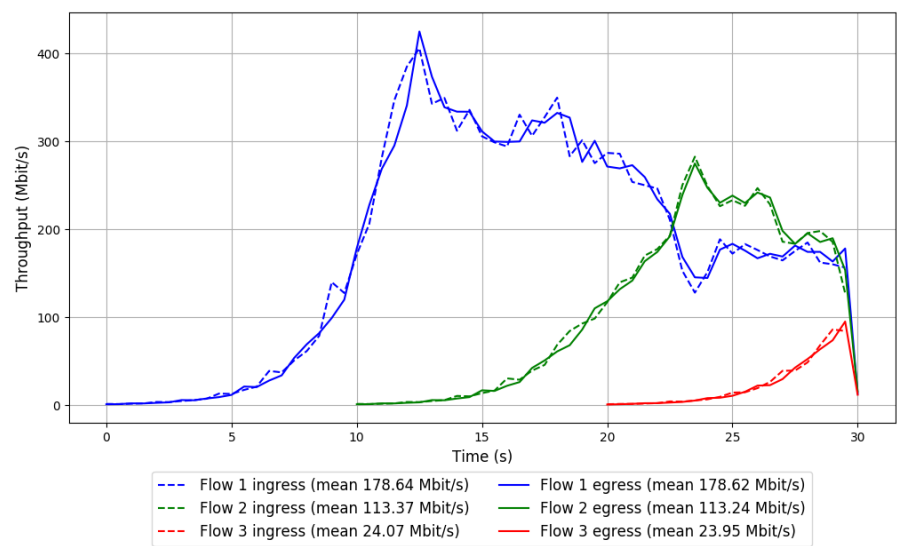
-- Flow 3:

Average throughput: 23.95 Mbit/s

95th percentile per-packet one-way delay: 119.029 ms

Loss rate: 0.48%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-09-08 00:31:28

End at: 2017-09-08 00:31:58

Below is generated by plot.py at 2017-09-08 03:46:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 258.25 Mbit/s

95th percentile per-packet one-way delay: 147.184 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 175.50 Mbit/s

95th percentile per-packet one-way delay: 151.236 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 110.60 Mbit/s

95th percentile per-packet one-way delay: 135.308 ms

Loss rate: 0.10%

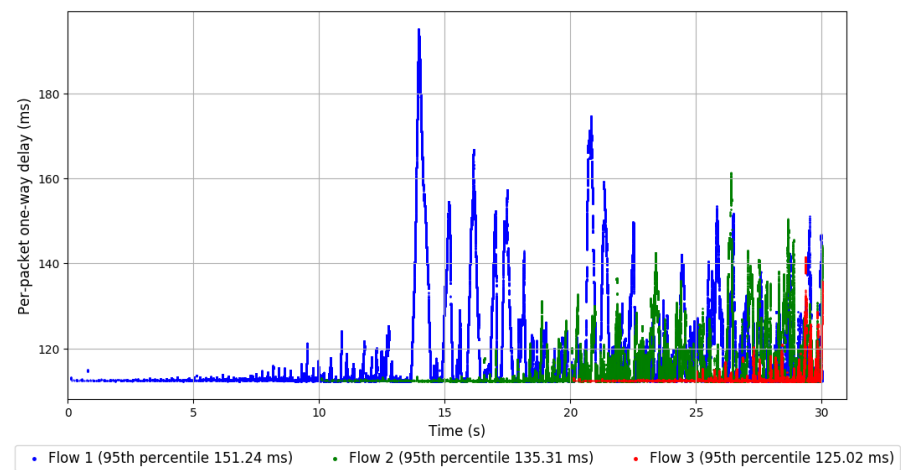
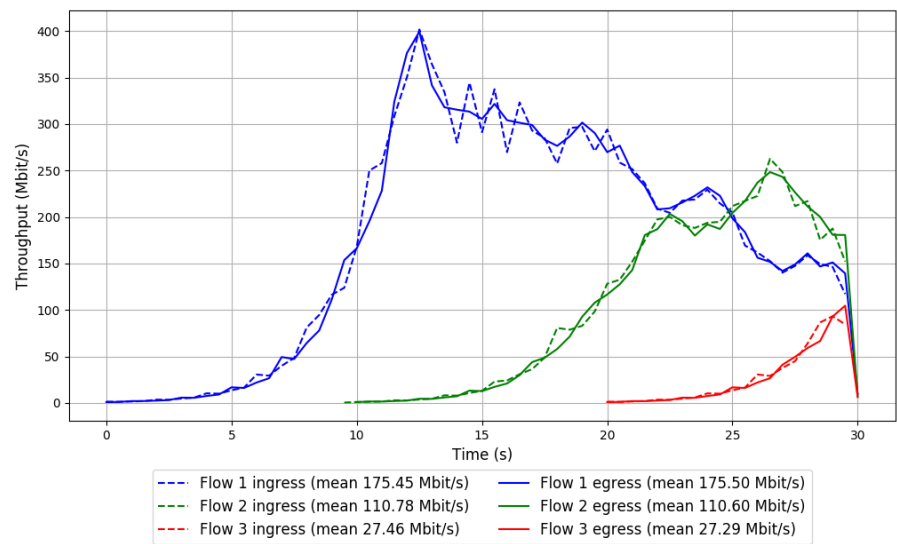
-- Flow 3:

Average throughput: 27.29 Mbit/s

95th percentile per-packet one-way delay: 125.022 ms

Loss rate: 0.63%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-09-08 00:44:38

End at: 2017-09-08 00:45:08

Below is generated by plot.py at 2017-09-08 03:47:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 258.66 Mbit/s

95th percentile per-packet one-way delay: 154.473 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 184.90 Mbit/s

95th percentile per-packet one-way delay: 163.766 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.95 Mbit/s

95th percentile per-packet one-way delay: 136.305 ms

Loss rate: 0.00%

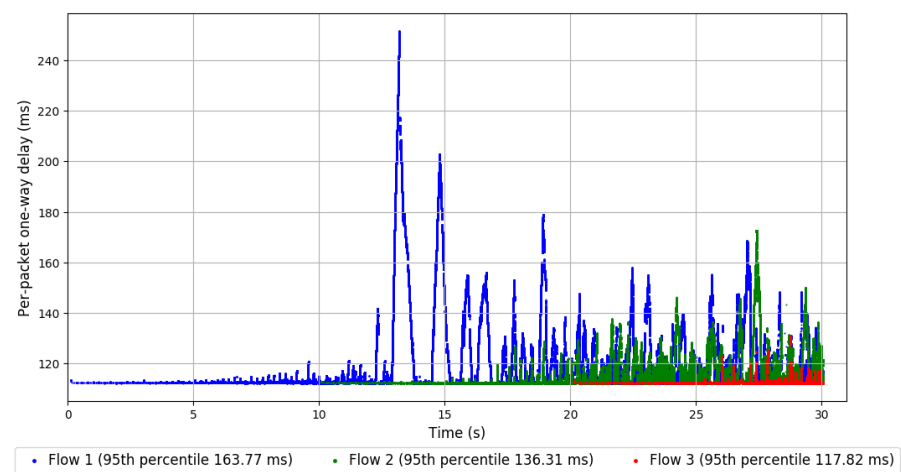
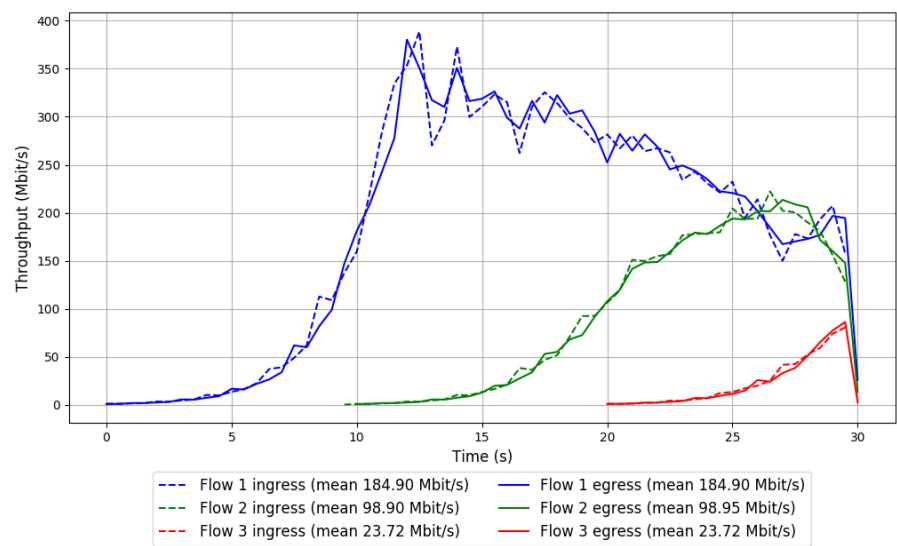
-- Flow 3:

Average throughput: 23.72 Mbit/s

95th percentile per-packet one-way delay: 117.819 ms

Loss rate: 0.00%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-09-08 00:57:45

End at: 2017-09-08 00:58:15

Below is generated by plot.py at 2017-09-08 03:47:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.38 Mbit/s

95th percentile per-packet one-way delay: 140.887 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 184.03 Mbit/s

95th percentile per-packet one-way delay: 145.355 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 103.00 Mbit/s

95th percentile per-packet one-way delay: 131.891 ms

Loss rate: 0.00%

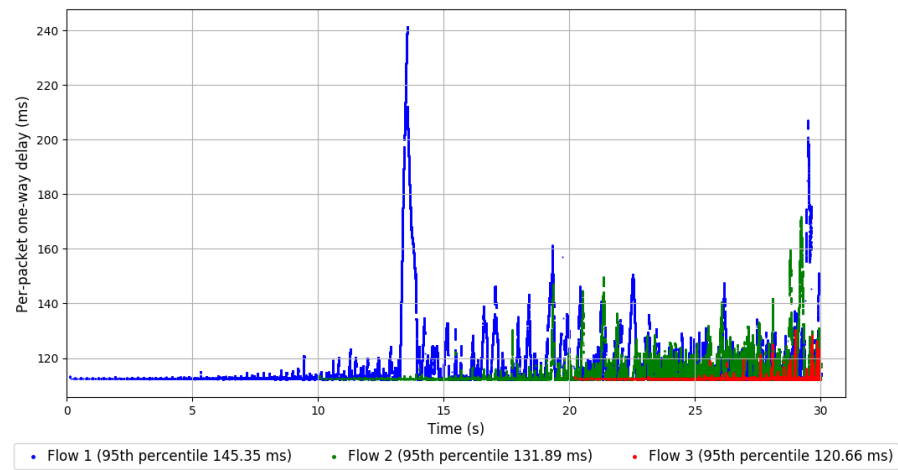
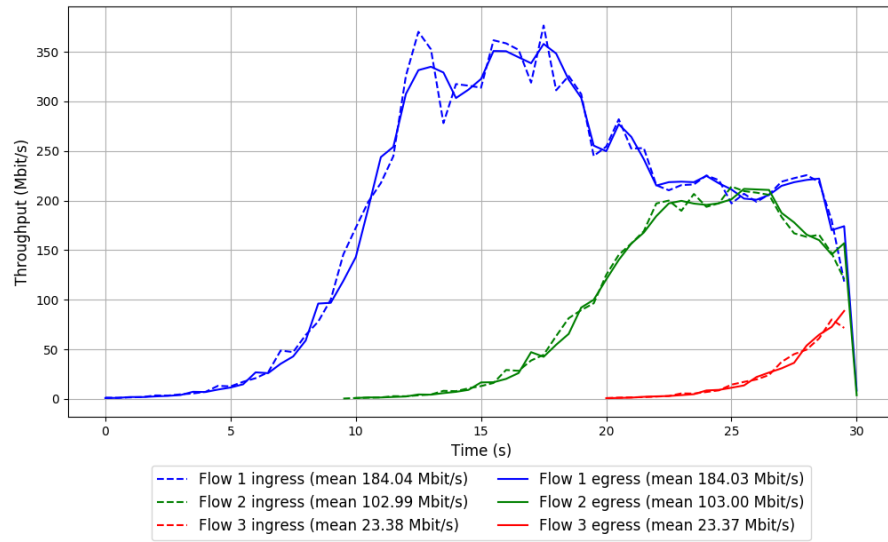
-- Flow 3:

Average throughput: 23.37 Mbit/s

95th percentile per-packet one-way delay: 120.663 ms

Loss rate: 0.02%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-09-08 01:11:02

End at: 2017-09-08 01:11:32

Below is generated by plot.py at 2017-09-08 03:47:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 261.99 Mbit/s

95th percentile per-packet one-way delay: 140.744 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 188.84 Mbit/s

95th percentile per-packet one-way delay: 142.923 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 99.11 Mbit/s

95th percentile per-packet one-way delay: 137.679 ms

Loss rate: 0.00%

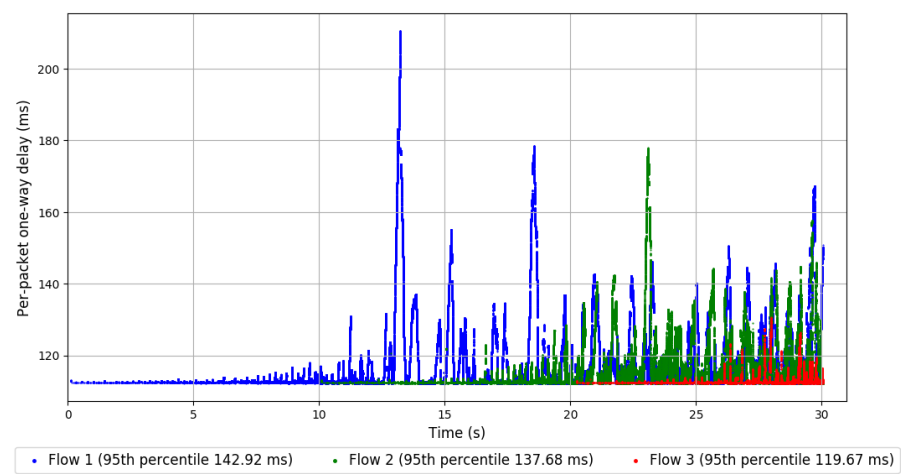
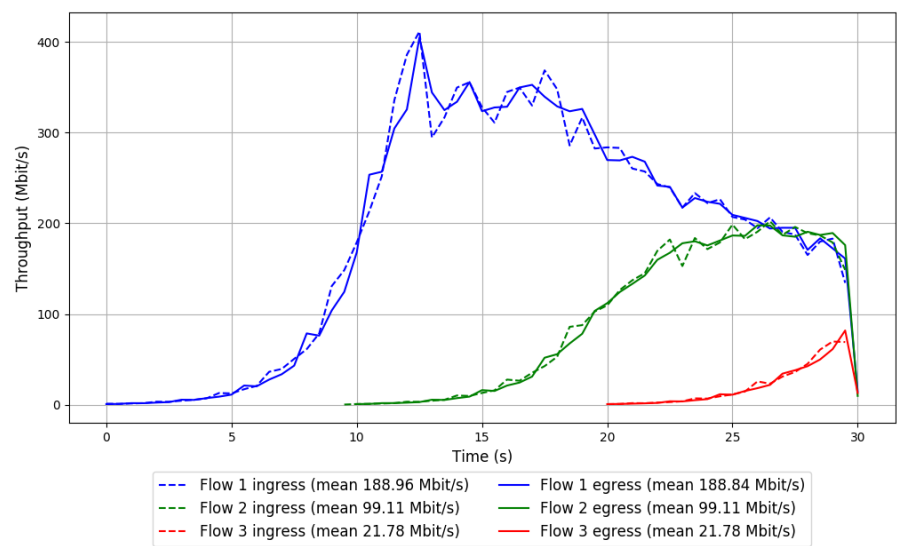
-- Flow 3:

Average throughput: 21.78 Mbit/s

95th percentile per-packet one-way delay: 119.666 ms

Loss rate: 0.00%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-09-08 01:24:24

End at: 2017-09-08 01:24:54

Below is generated by plot.py at 2017-09-08 03:48:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 269.17 Mbit/s

95th percentile per-packet one-way delay: 137.928 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 194.47 Mbit/s

95th percentile per-packet one-way delay: 143.186 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 101.74 Mbit/s

95th percentile per-packet one-way delay: 132.556 ms

Loss rate: 0.00%

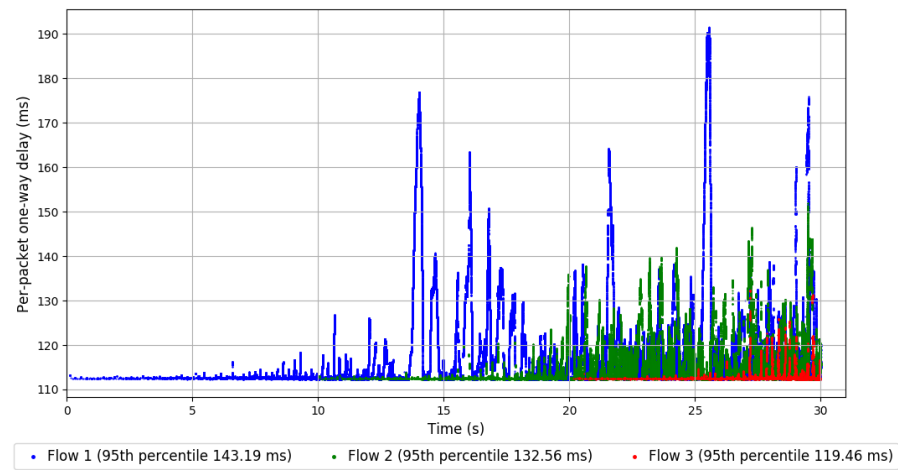
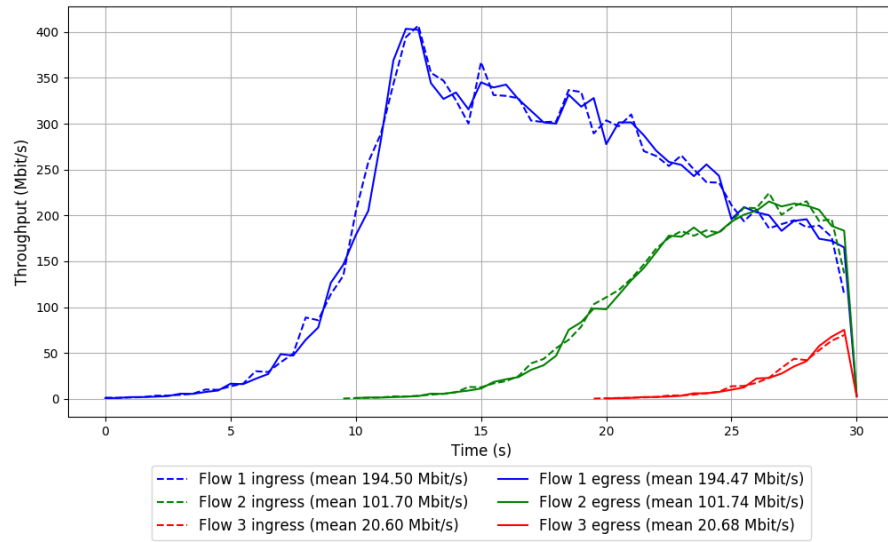
-- Flow 3:

Average throughput: 20.68 Mbit/s

95th percentile per-packet one-way delay: 119.463 ms

Loss rate: 0.09%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-09-08 01:37:48

End at: 2017-09-08 01:38:18

Below is generated by plot.py at 2017-09-08 03:48:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 261.64 Mbit/s

95th percentile per-packet one-way delay: 158.782 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 189.48 Mbit/s

95th percentile per-packet one-way delay: 170.873 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 96.52 Mbit/s

95th percentile per-packet one-way delay: 139.042 ms

Loss rate: 0.01%

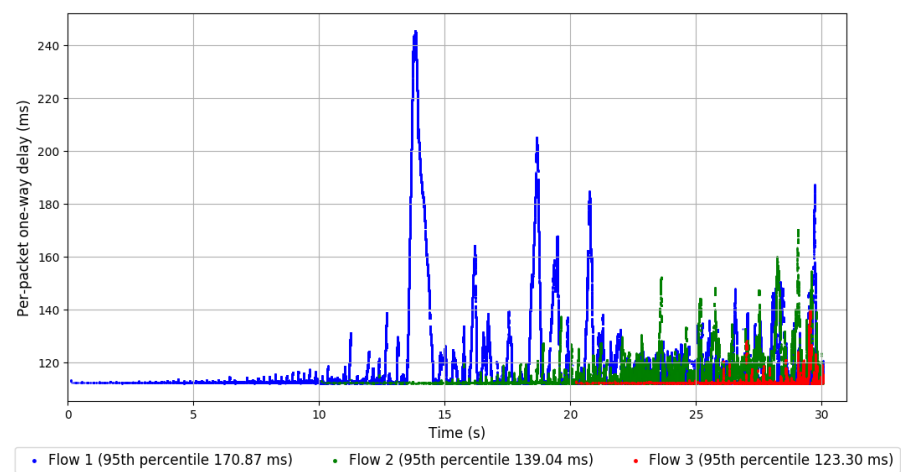
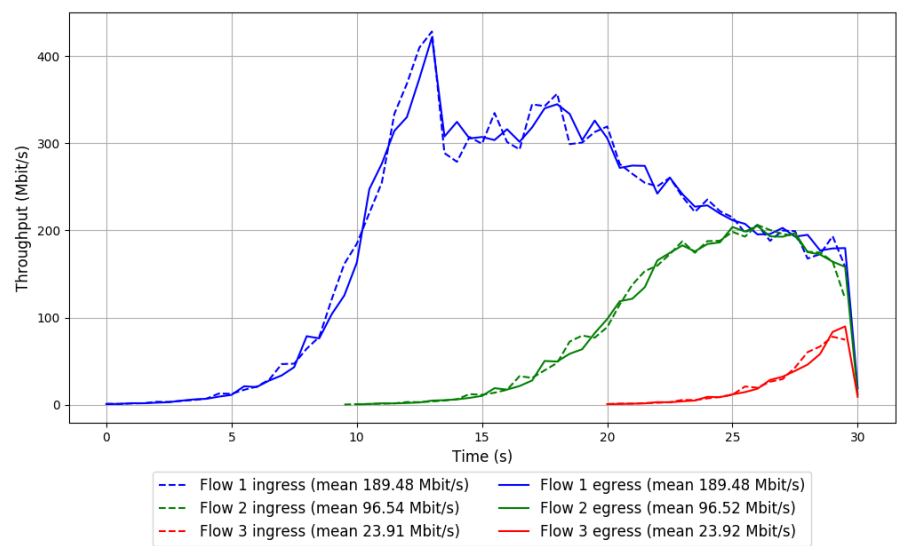
-- Flow 3:

Average throughput: 23.92 Mbit/s

95th percentile per-packet one-way delay: 123.303 ms

Loss rate: 0.01%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-09-08 01:51:05

End at: 2017-09-08 01:51:35

Below is generated by plot.py at 2017-09-08 03:49:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 258.13 Mbit/s

95th percentile per-packet one-way delay: 158.642 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 182.46 Mbit/s

95th percentile per-packet one-way delay: 169.534 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 101.68 Mbit/s

95th percentile per-packet one-way delay: 138.736 ms

Loss rate: 0.00%

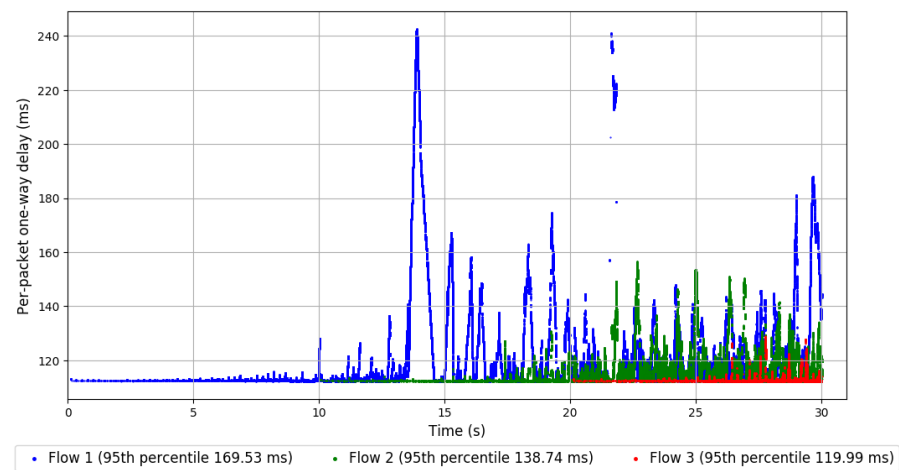
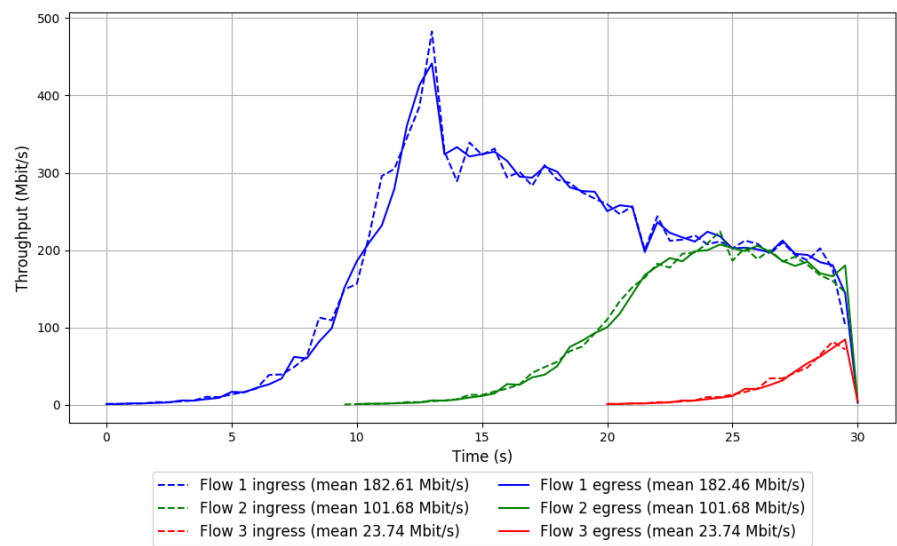
-- Flow 3:

Average throughput: 23.74 Mbit/s

95th percentile per-packet one-way delay: 119.989 ms

Loss rate: 0.00%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-09-08 02:04:18

End at: 2017-09-08 02:04:48

Below is generated by plot.py at 2017-09-08 03:49:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 252.71 Mbit/s

95th percentile per-packet one-way delay: 146.779 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 171.85 Mbit/s

95th percentile per-packet one-way delay: 148.325 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 109.14 Mbit/s

95th percentile per-packet one-way delay: 144.926 ms

Loss rate: 0.50%

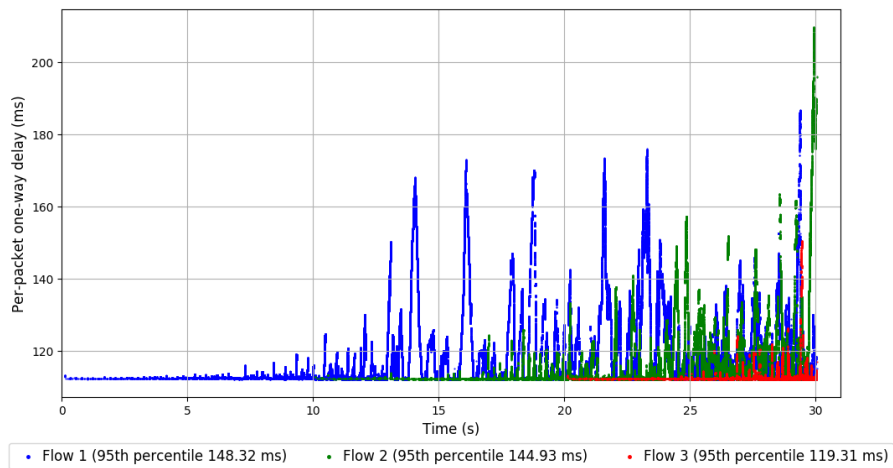
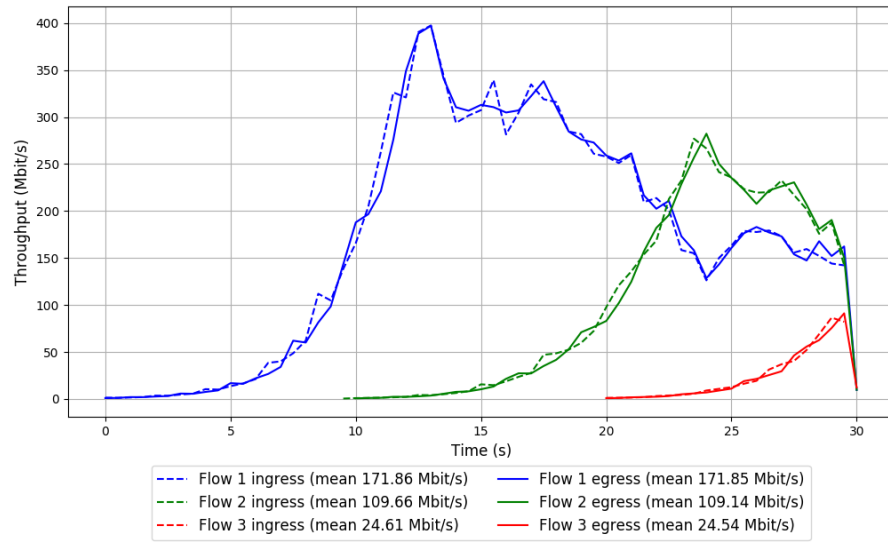
-- Flow 3:

Average throughput: 24.54 Mbit/s

95th percentile per-packet one-way delay: 119.309 ms

Loss rate: 0.26%

Run 10: Report of CalibratedKoho — Data Link

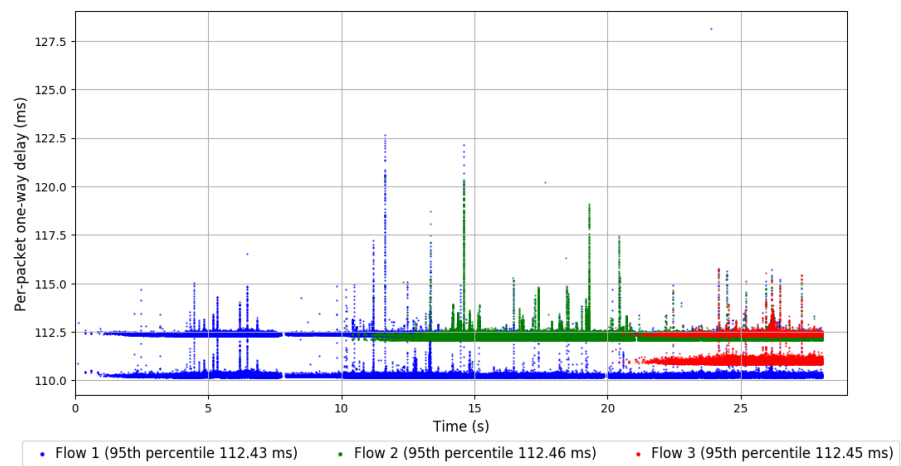
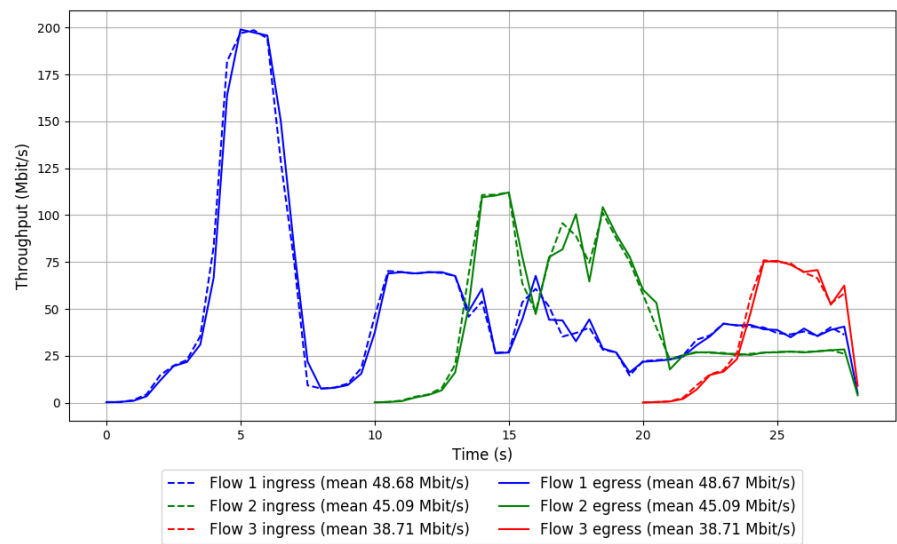


```
Run 1: Statistics of Copa

Start at: 2017-09-08 00:12:22
End at: 2017-09-08 00:12:52

# Below is generated by plot.py at 2017-09-08 03:49:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.33 Mbit/s
95th percentile per-packet one-way delay: 112.441 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 48.67 Mbit/s
95th percentile per-packet one-way delay: 112.429 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.09 Mbit/s
95th percentile per-packet one-way delay: 112.462 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 38.71 Mbit/s
95th percentile per-packet one-way delay: 112.450 ms
Loss rate: 0.00%
```


Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-09-08 00:25:32

End at: 2017-09-08 00:26:02

Below is generated by plot.py at 2017-09-08 03:50:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.87 Mbit/s

95th percentile per-packet one-way delay: 112.532 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.70 Mbit/s

95th percentile per-packet one-way delay: 112.432 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.42 Mbit/s

95th percentile per-packet one-way delay: 112.647 ms

Loss rate: 0.00%

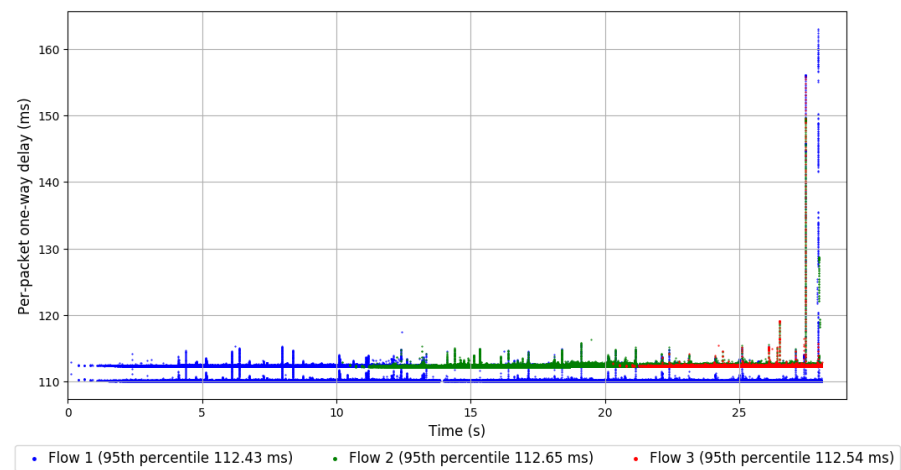
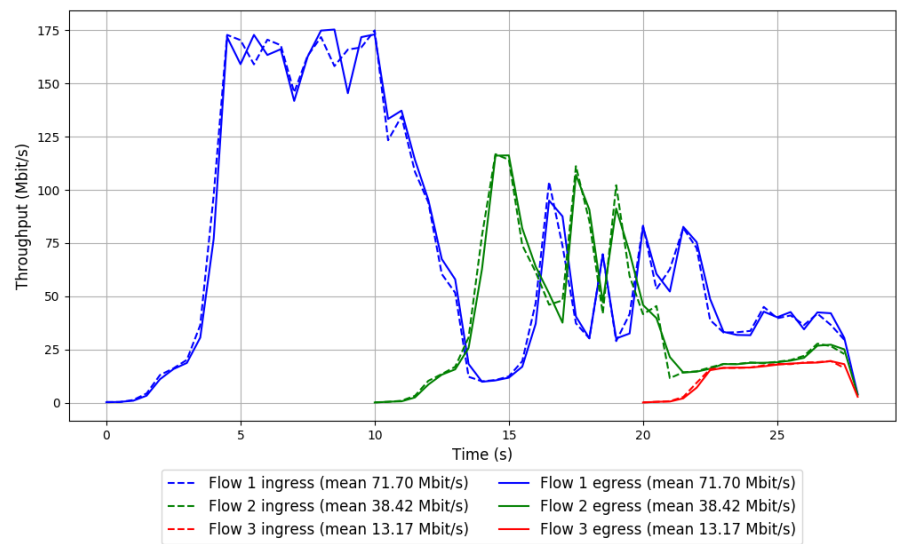
-- Flow 3:

Average throughput: 13.17 Mbit/s

95th percentile per-packet one-way delay: 112.538 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-09-08 00:38:44

End at: 2017-09-08 00:39:14

Below is generated by plot.py at 2017-09-08 03:50:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.41 Mbit/s

95th percentile per-packet one-way delay: 112.514 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.33 Mbit/s

95th percentile per-packet one-way delay: 112.489 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.33 Mbit/s

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

Loss rate: 0.00%

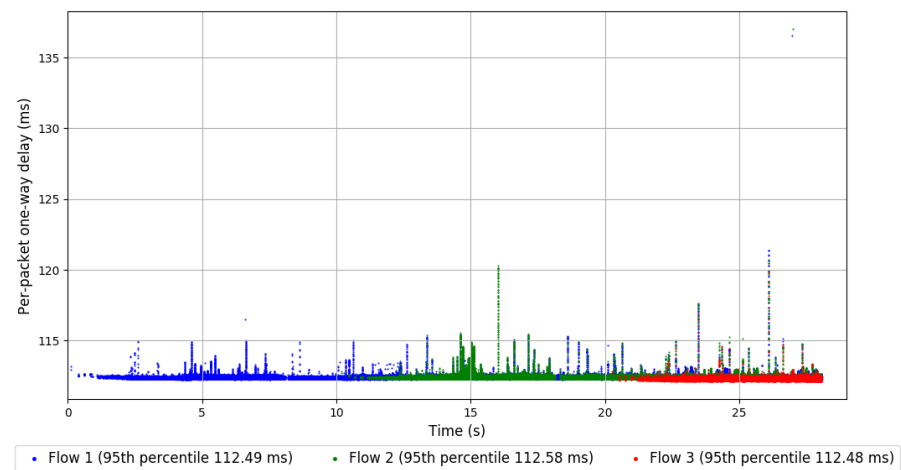
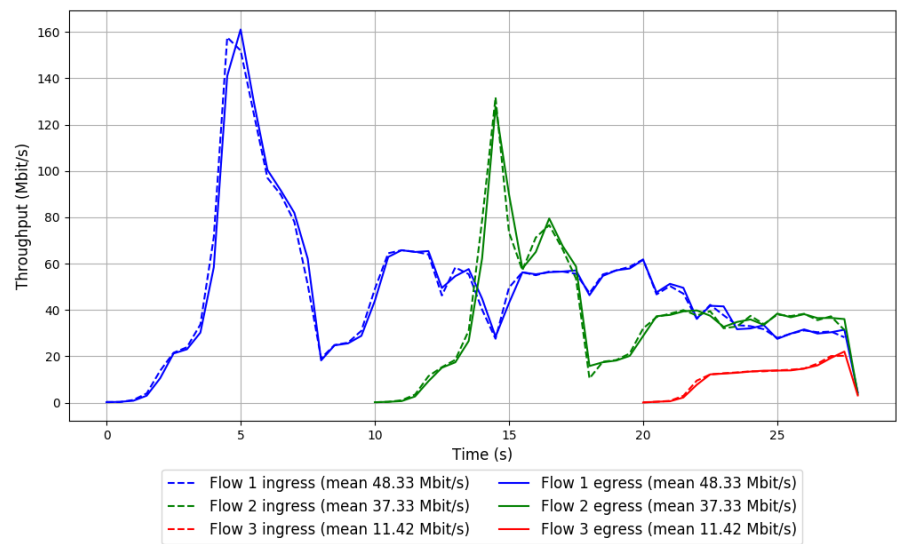
-- Flow 3:

Average throughput: 11.42 Mbit/s

95th percentile per-packet one-way delay: 112.483 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-09-08 00:51:54

End at: 2017-09-08 00:52:24

Below is generated by plot.py at 2017-09-08 03:50:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.66 Mbit/s

95th percentile per-packet one-way delay: 112.436 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.08 Mbit/s

95th percentile per-packet one-way delay: 112.452 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.70 Mbit/s

95th percentile per-packet one-way delay: 112.408 ms

Loss rate: 0.00%

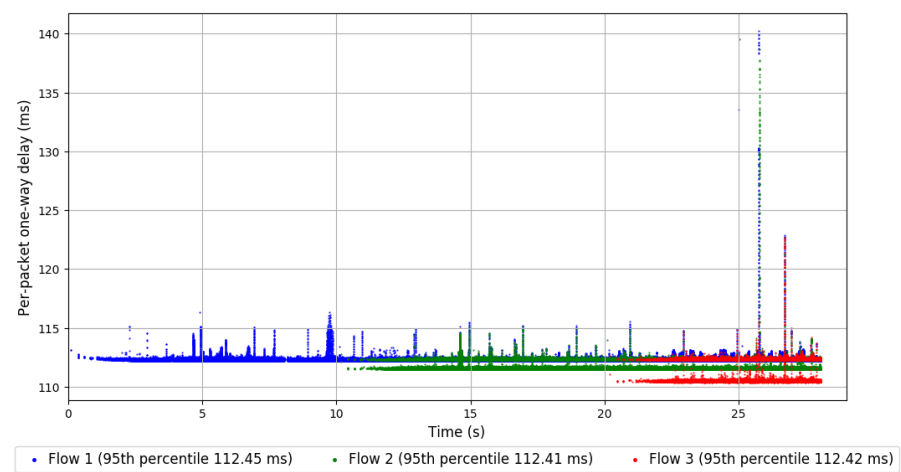
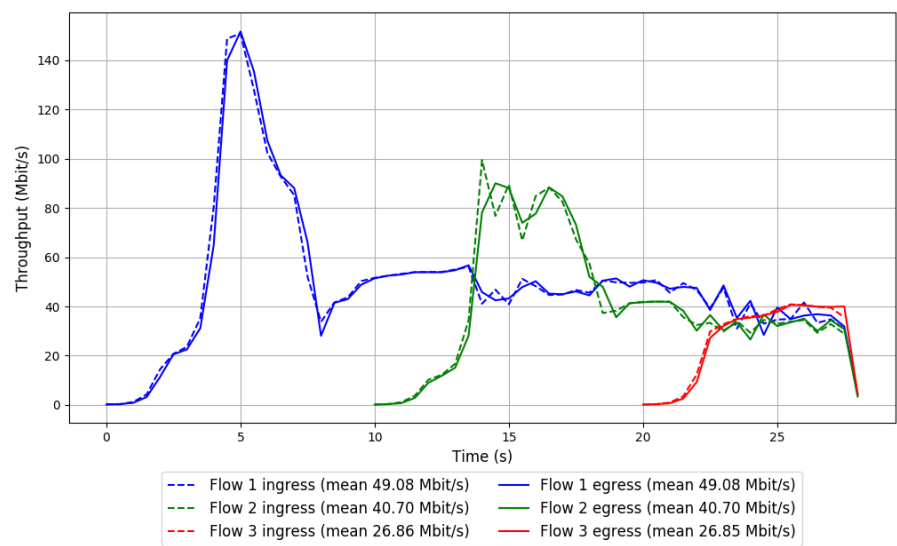
-- Flow 3:

Average throughput: 26.85 Mbit/s

95th percentile per-packet one-way delay: 112.418 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-09-08 01:05:10

End at: 2017-09-08 01:05:40

Below is generated by plot.py at 2017-09-08 03:50:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.11 Mbit/s

95th percentile per-packet one-way delay: 112.452 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.96 Mbit/s

95th percentile per-packet one-way delay: 112.446 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.01 Mbit/s

95th percentile per-packet one-way delay: 112.462 ms

Loss rate: 0.00%

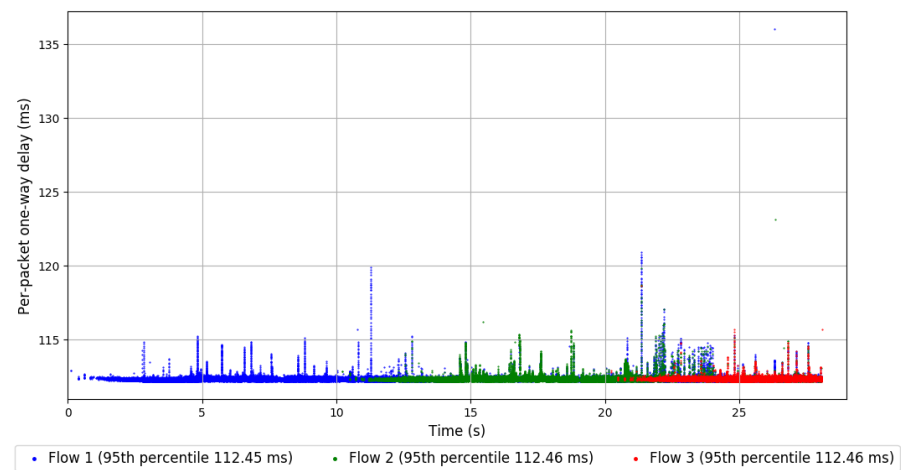
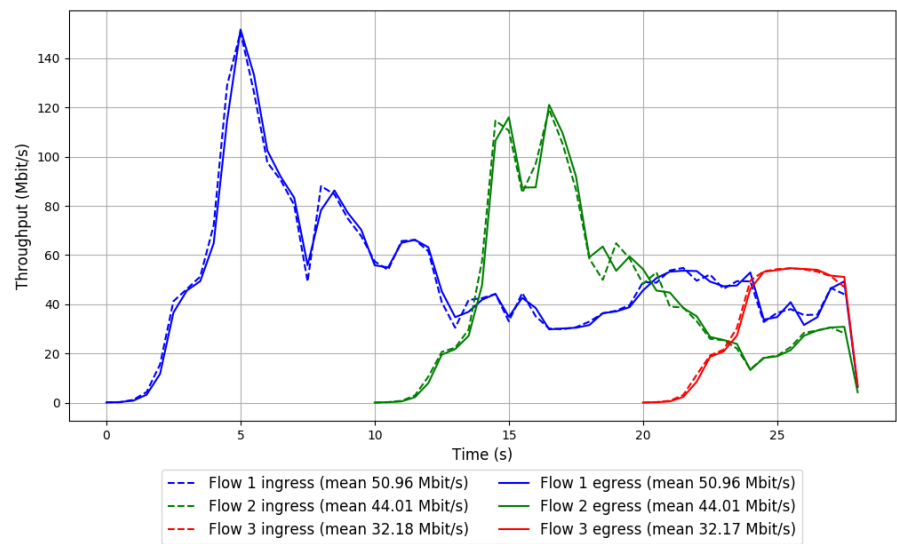
-- Flow 3:

Average throughput: 32.17 Mbit/s

95th percentile per-packet one-way delay: 112.460 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-09-08 01:18:32

End at: 2017-09-08 01:19:02

Below is generated by plot.py at 2017-09-08 03:51:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.50 Mbit/s

95th percentile per-packet one-way delay: 112.509 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.36 Mbit/s

95th percentile per-packet one-way delay: 112.413 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.86 Mbit/s

95th percentile per-packet one-way delay: 112.400 ms

Loss rate: 0.00%

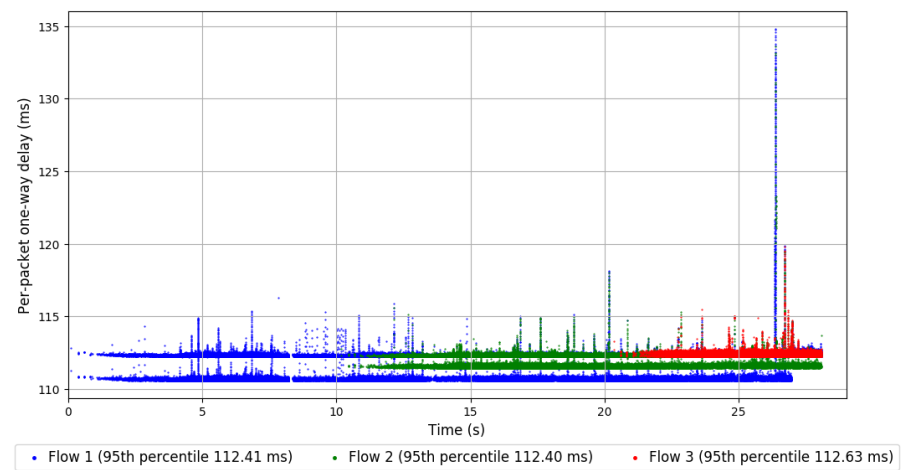
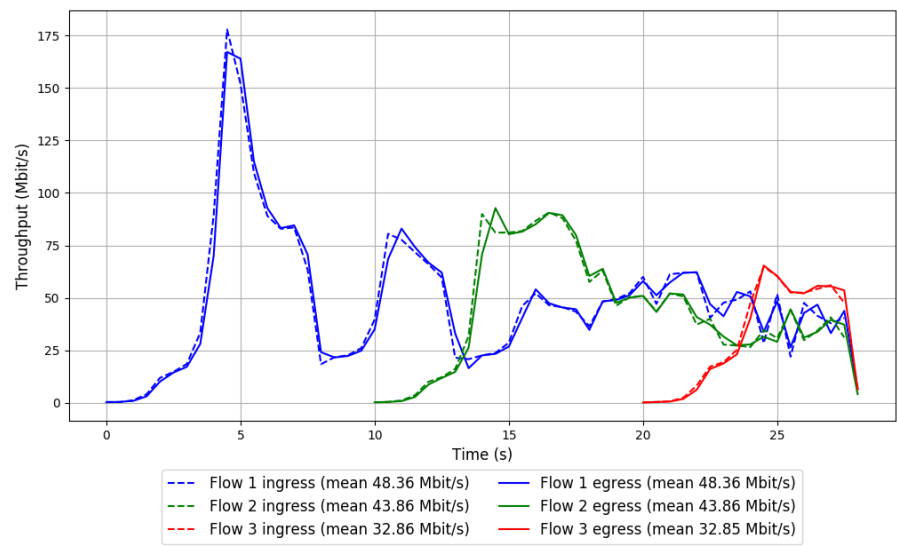
-- Flow 3:

Average throughput: 32.85 Mbit/s

95th percentile per-packet one-way delay: 112.626 ms

Loss rate: 0.03%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-09-08 01:31:54

End at: 2017-09-08 01:32:24

Below is generated by plot.py at 2017-09-08 03:51:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.55 Mbit/s

95th percentile per-packet one-way delay: 112.582 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.98 Mbit/s

95th percentile per-packet one-way delay: 112.371 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.36 Mbit/s

95th percentile per-packet one-way delay: 112.577 ms

Loss rate: 0.00%

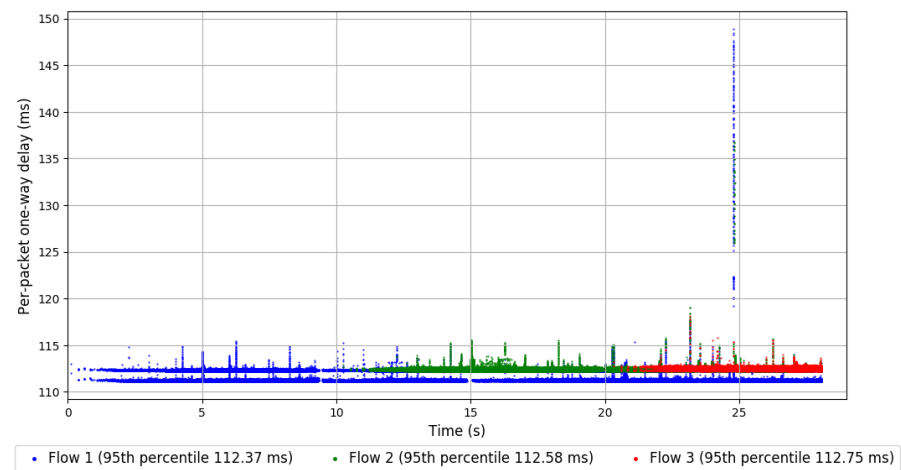
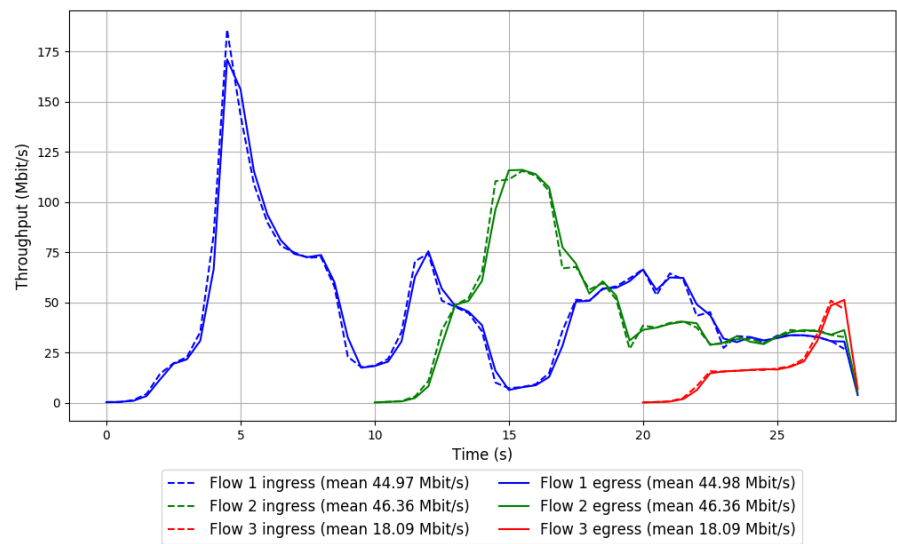
-- Flow 3:

Average throughput: 18.09 Mbit/s

95th percentile per-packet one-way delay: 112.748 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link

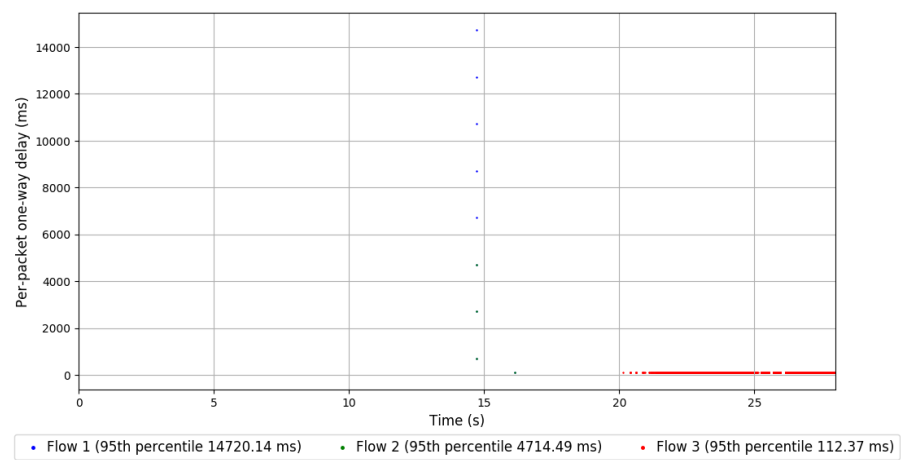
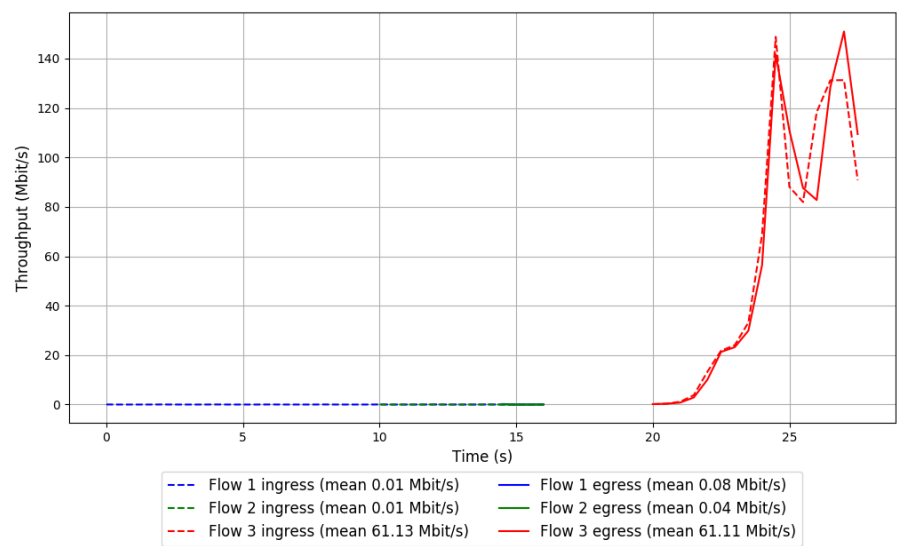


Run 8: Statistics of Copa

Start at: 2017-09-08 01:45:21

End at: 2017-09-08 01:45:51

Run 8: Report of Copa — Data Link

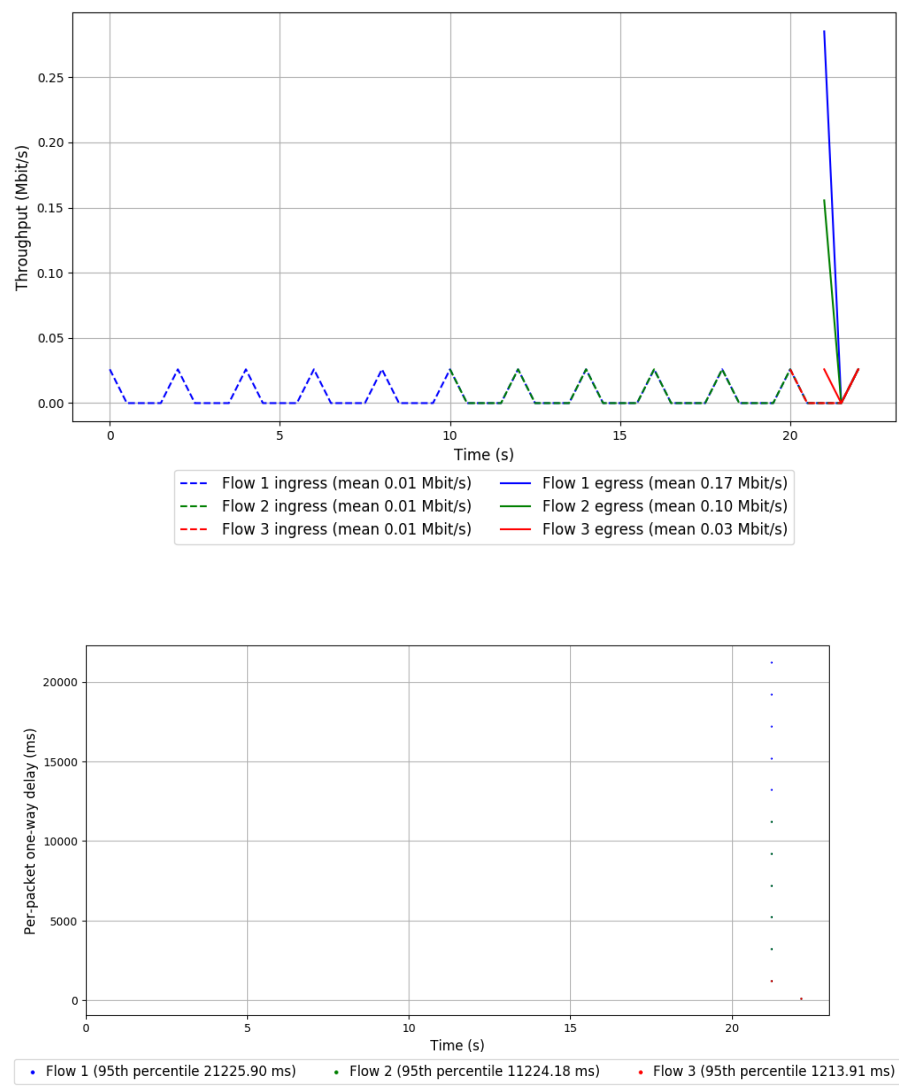


Run 9: Statistics of Copa

Start at: 2017-09-08 01:58:33

End at: 2017-09-08 01:59:03

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-09-08 02:11:47

End at: 2017-09-08 02:12:17

Below is generated by plot.py at 2017-09-08 03:51:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.48 Mbit/s

95th percentile per-packet one-way delay: 112.353 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.82 Mbit/s

95th percentile per-packet one-way delay: 111.470 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.02 Mbit/s

95th percentile per-packet one-way delay: 112.405 ms

Loss rate: 0.00%

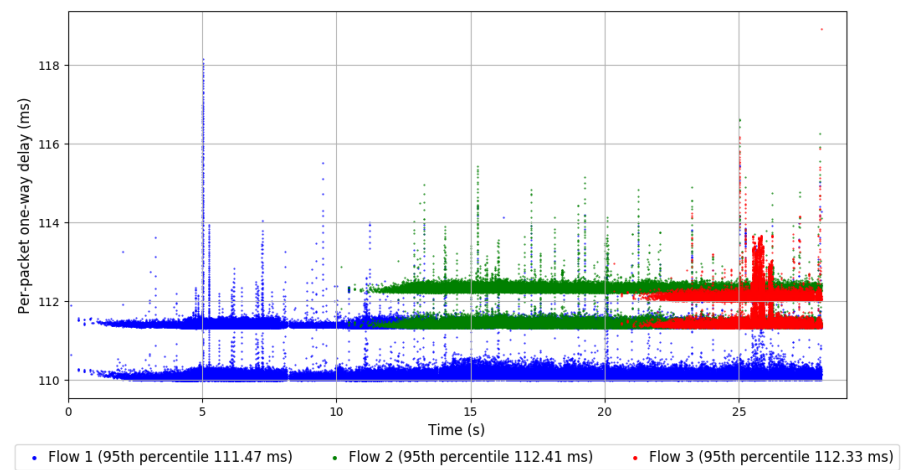
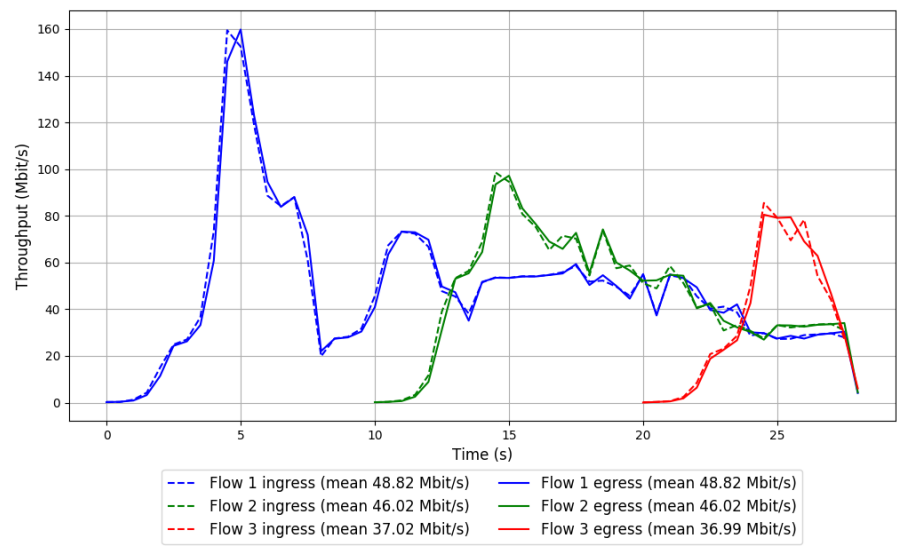
-- Flow 3:

Average throughput: 36.99 Mbit/s

95th percentile per-packet one-way delay: 112.325 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-09-08 00:08:51

End at: 2017-09-08 00:09:21

Below is generated by plot.py at 2017-09-08 03:51:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 141.10 Mbit/s

95th percentile per-packet one-way delay: 121.426 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.47 Mbit/s

95th percentile per-packet one-way delay: 118.214 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.92 Mbit/s

95th percentile per-packet one-way delay: 121.137 ms

Loss rate: 0.00%

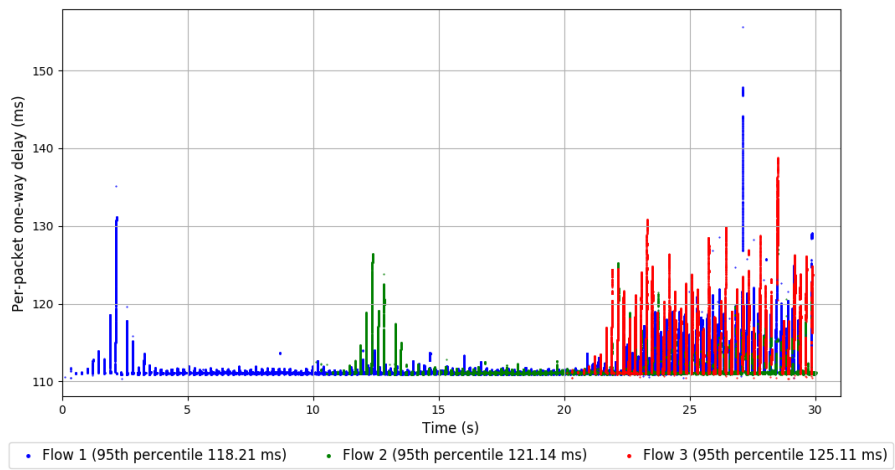
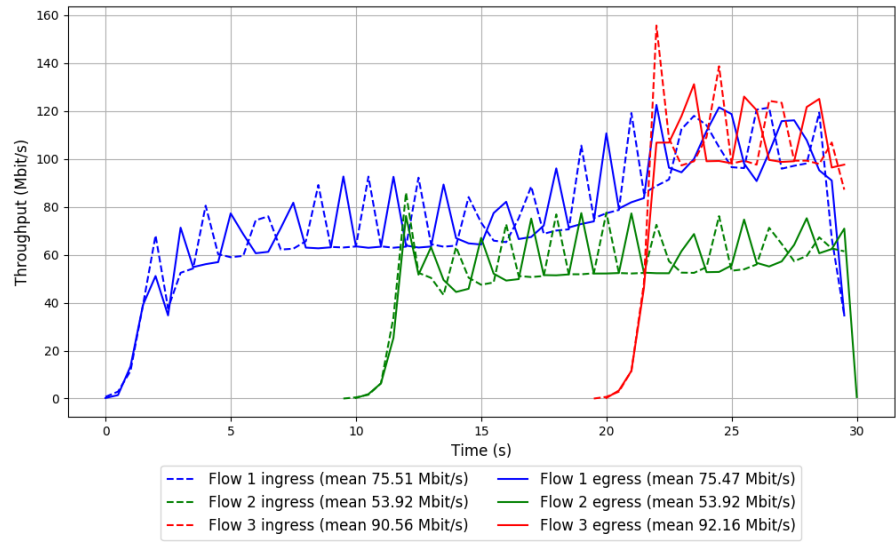
-- Flow 3:

Average throughput: 92.16 Mbit/s

95th percentile per-packet one-way delay: 125.114 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-09-08 00:22:10

End at: 2017-09-08 00:22:40

Below is generated by plot.py at 2017-09-08 03:52:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.87 Mbit/s

95th percentile per-packet one-way delay: 114.178 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 60.85 Mbit/s

95th percentile per-packet one-way delay: 113.619 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 65.86 Mbit/s

95th percentile per-packet one-way delay: 114.211 ms

Loss rate: 0.00%

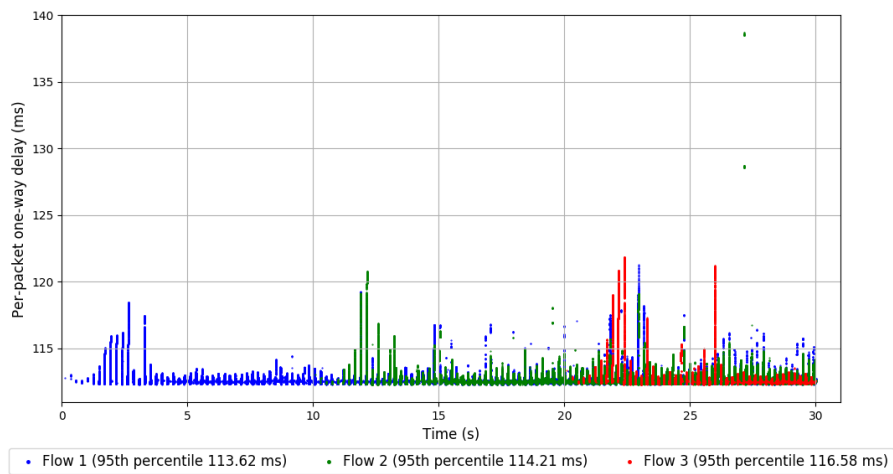
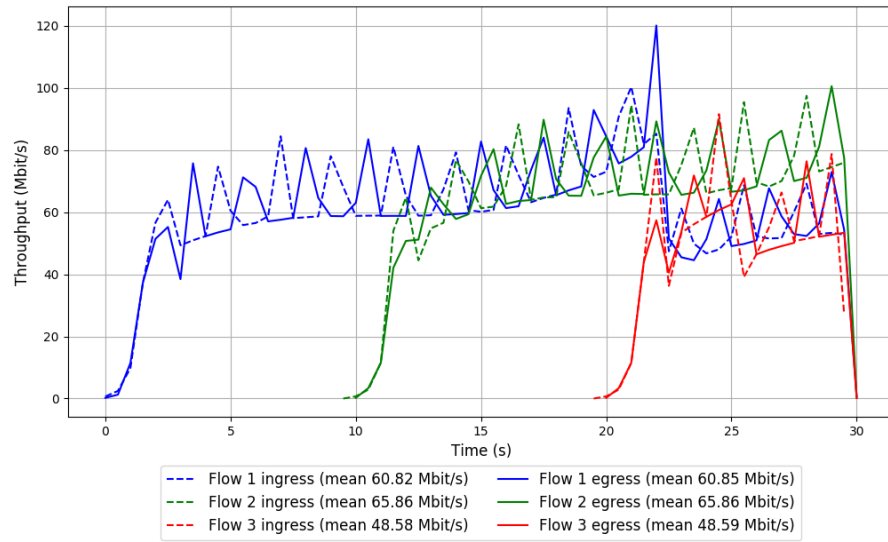
-- Flow 3:

Average throughput: 48.59 Mbit/s

95th percentile per-packet one-way delay: 116.580 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-09-08 00:35:24

End at: 2017-09-08 00:35:54

Below is generated by plot.py at 2017-09-08 03:52:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.21 Mbit/s

95th percentile per-packet one-way delay: 121.758 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 922.426 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.48 Mbit/s

95th percentile per-packet one-way delay: 118.409 ms

Loss rate: 0.00%

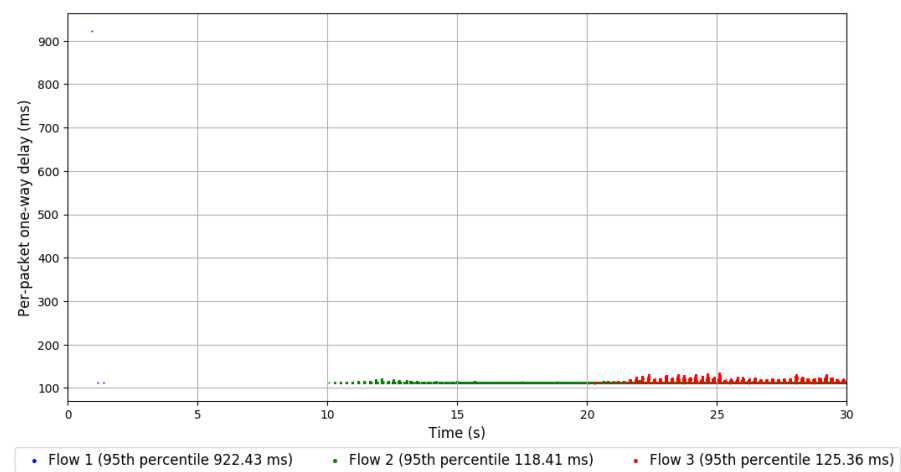
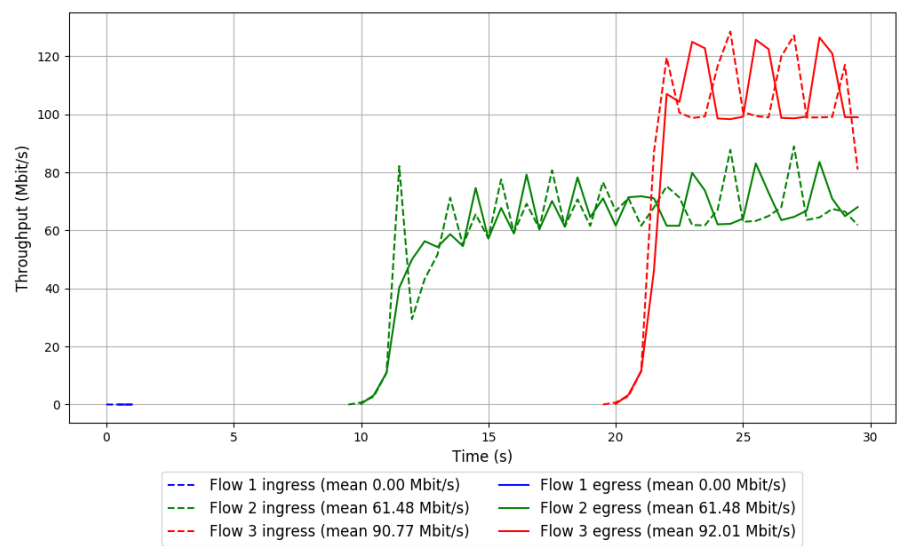
-- Flow 3:

Average throughput: 92.01 Mbit/s

95th percentile per-packet one-way delay: 125.358 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link

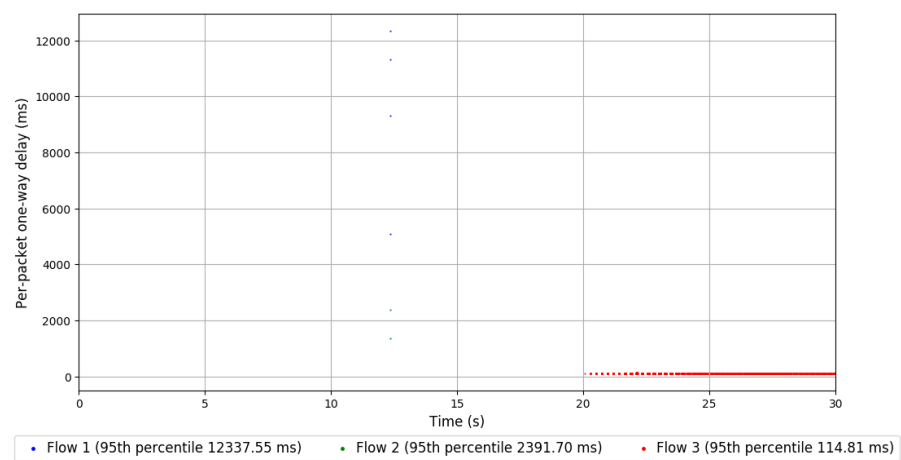
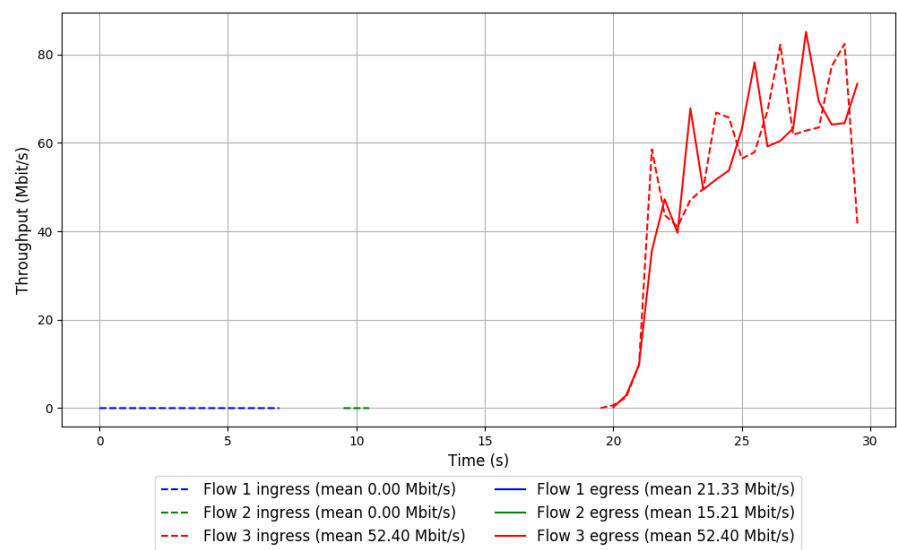


Run 4: Statistics of TCP Cubic

Start at: 2017-09-08 00:48:38

End at: 2017-09-08 00:49:08

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-09-08 01:01:44

End at: 2017-09-08 01:02:14

Below is generated by plot.py at 2017-09-08 03:52:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.47 Mbit/s

95th percentile per-packet one-way delay: 119.571 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 71.41 Mbit/s

95th percentile per-packet one-way delay: 119.941 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.72 Mbit/s

95th percentile per-packet one-way delay: 117.307 ms

Loss rate: 0.01%

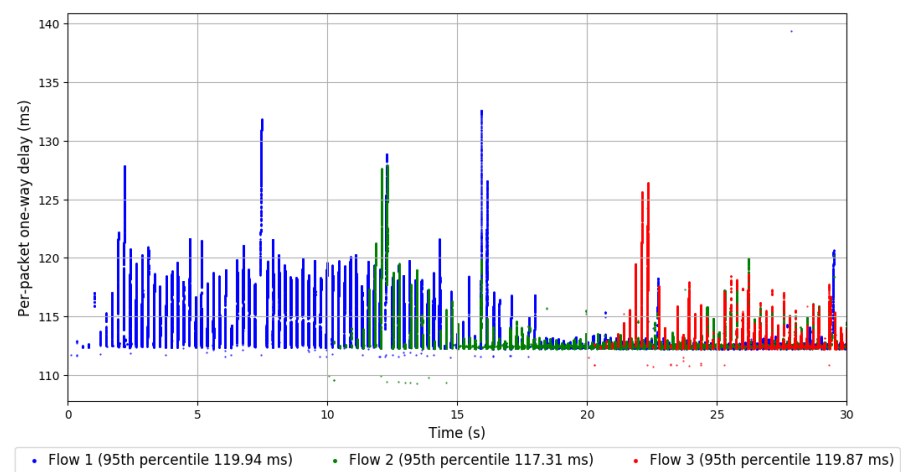
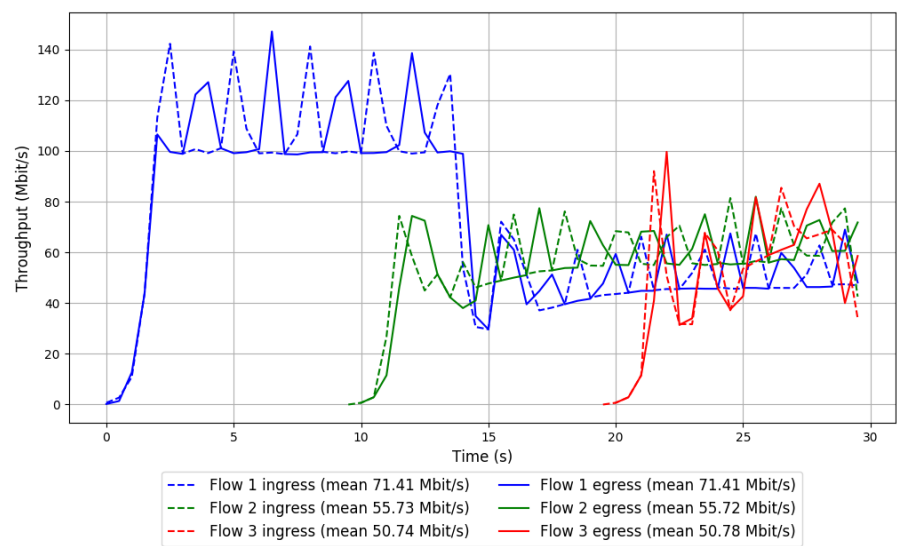
-- Flow 3:

Average throughput: 50.78 Mbit/s

95th percentile per-packet one-way delay: 119.867 ms

Loss rate: 0.04%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-09-08 01:14:57

End at: 2017-09-08 01:15:27

Below is generated by plot.py at 2017-09-08 03:52:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.23 Mbit/s

95th percentile per-packet one-way delay: 119.519 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 79.63 Mbit/s

95th percentile per-packet one-way delay: 117.463 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.59 Mbit/s

95th percentile per-packet one-way delay: 116.652 ms

Loss rate: 0.01%

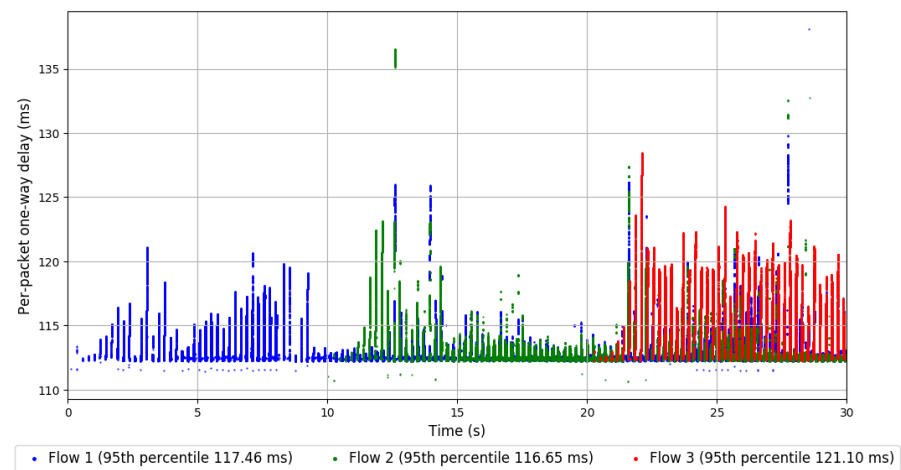
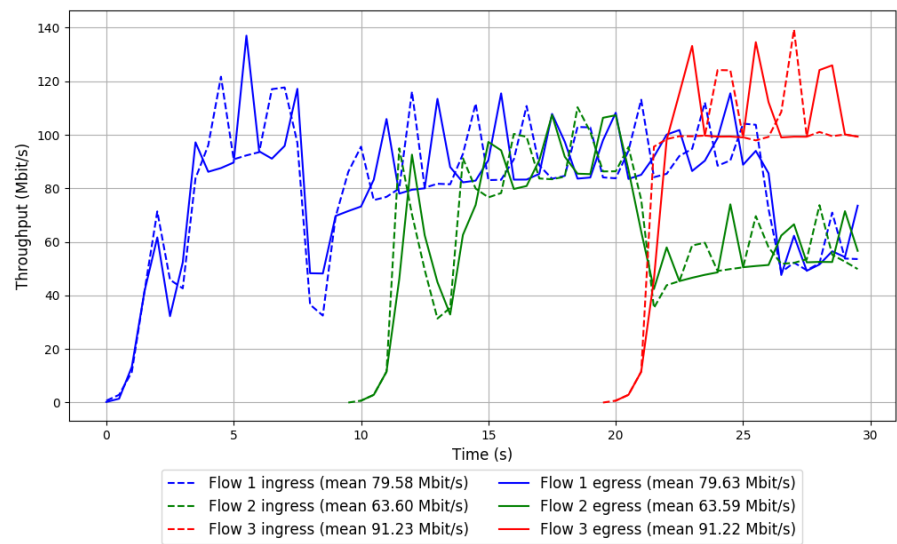
-- Flow 3:

Average throughput: 91.22 Mbit/s

95th percentile per-packet one-way delay: 121.098 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link

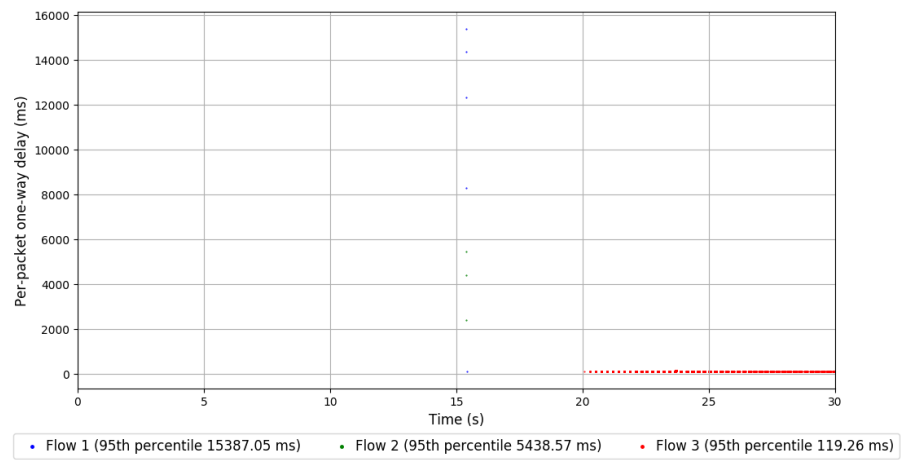
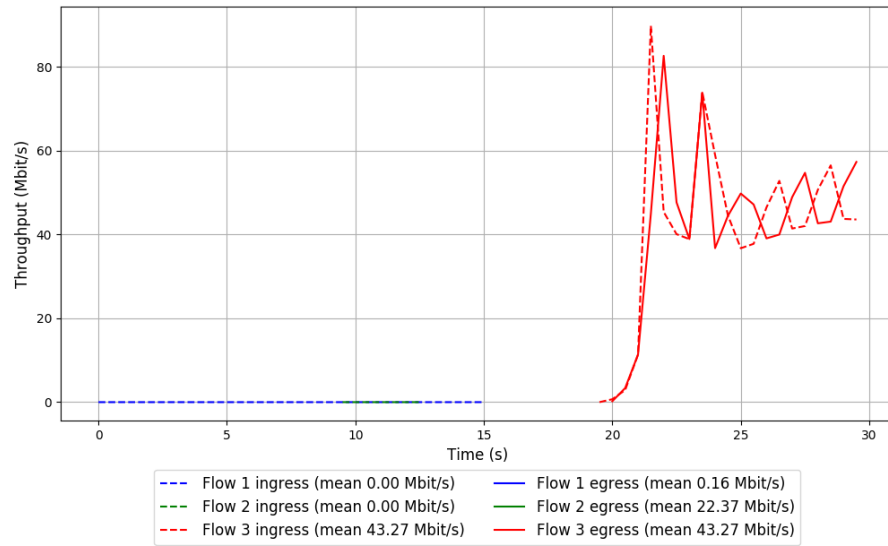


Run 7: Statistics of TCP Cubic

Start at: 2017-09-08 01:28:21

End at: 2017-09-08 01:28:51

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-09-08 01:41:48

End at: 2017-09-08 01:42:18

Below is generated by plot.py at 2017-09-08 03:53:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.11 Mbit/s

95th percentile per-packet one-way delay: 121.097 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.57 Mbit/s

95th percentile per-packet one-way delay: 117.259 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.09 Mbit/s

95th percentile per-packet one-way delay: 124.266 ms

Loss rate: 0.00%

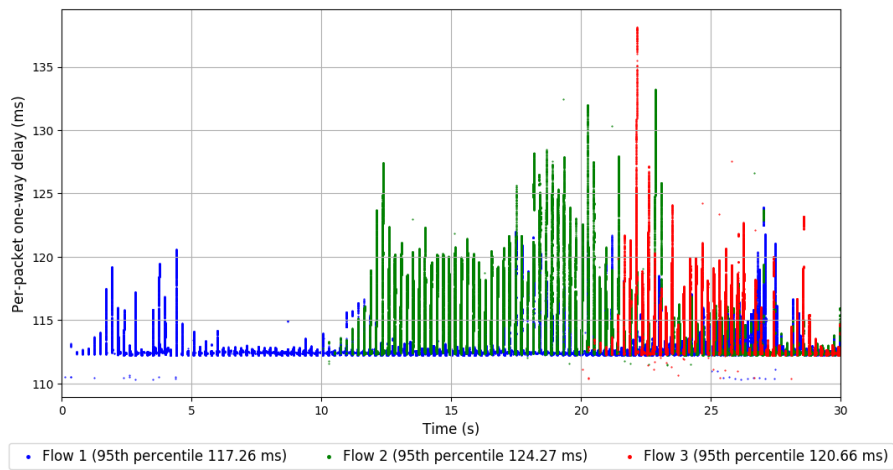
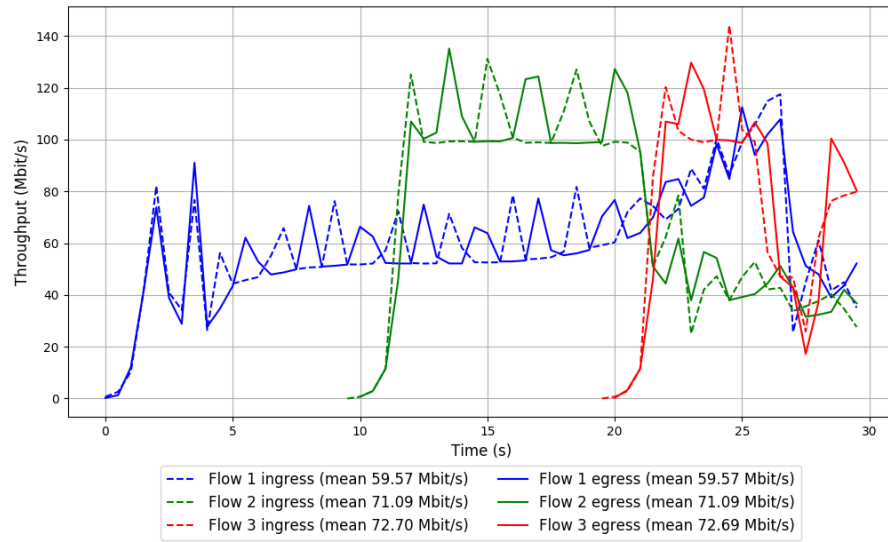
-- Flow 3:

Average throughput: 72.69 Mbit/s

95th percentile per-packet one-way delay: 120.656 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-09-08 01:55:02

End at: 2017-09-08 01:55:32

Below is generated by plot.py at 2017-09-08 03:53:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.96 Mbit/s

95th percentile per-packet one-way delay: 116.295 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 542.998 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.53 Mbit/s

95th percentile per-packet one-way delay: 116.073 ms

Loss rate: 0.01%

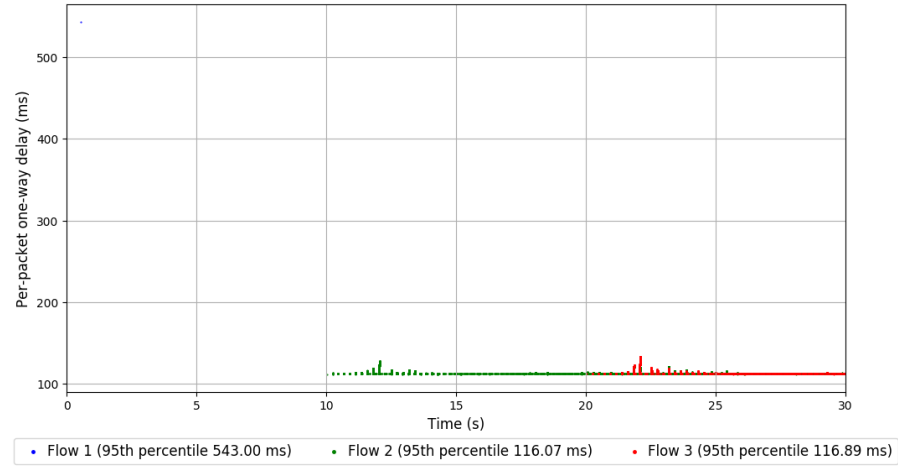
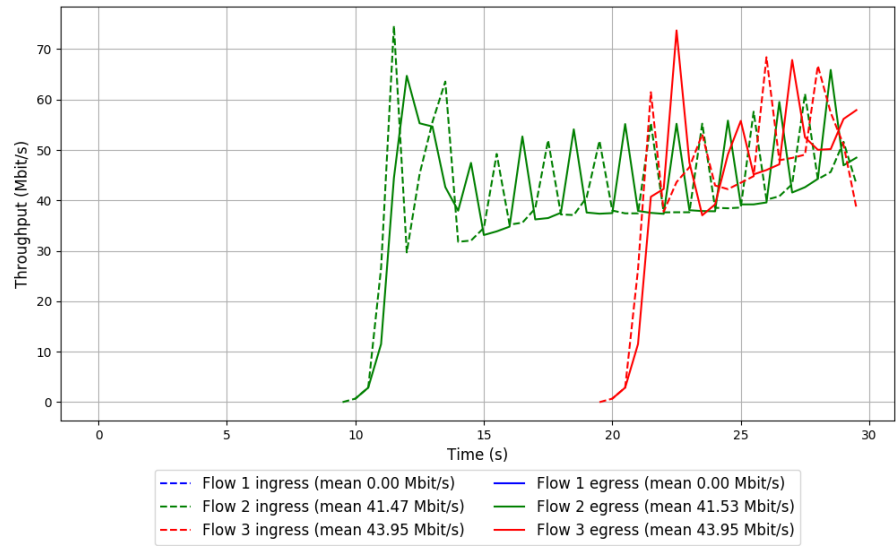
-- Flow 3:

Average throughput: 43.95 Mbit/s

95th percentile per-packet one-way delay: 116.895 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-09-08 02:08:11

End at: 2017-09-08 02:08:41

Below is generated by plot.py at 2017-09-08 03:53:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.74 Mbit/s

95th percentile per-packet one-way delay: 119.290 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 13.84 Mbit/s

95th percentile per-packet one-way delay: 2565.917 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.38 Mbit/s

95th percentile per-packet one-way delay: 120.223 ms

Loss rate: 0.00%

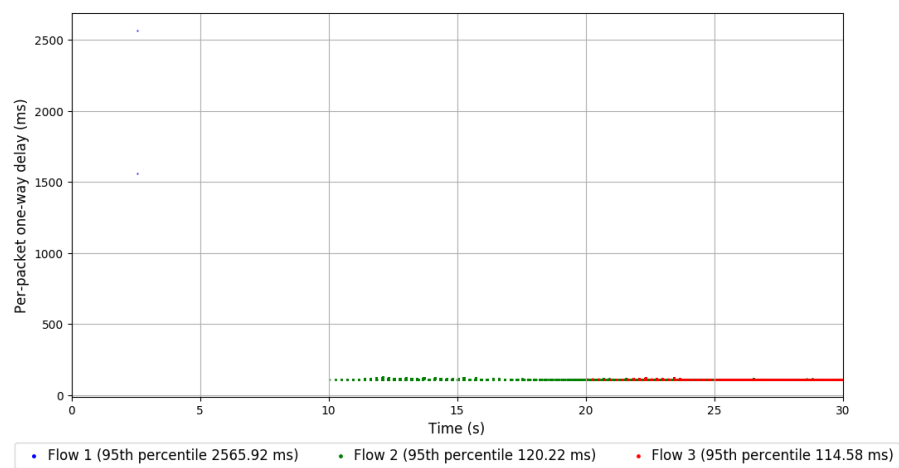
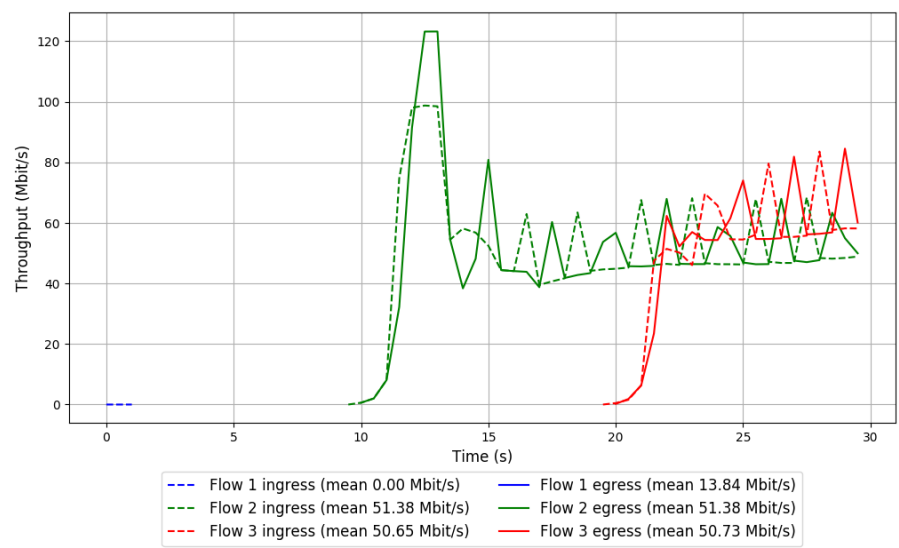
-- Flow 3:

Average throughput: 50.73 Mbit/s

95th percentile per-packet one-way delay: 114.577 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

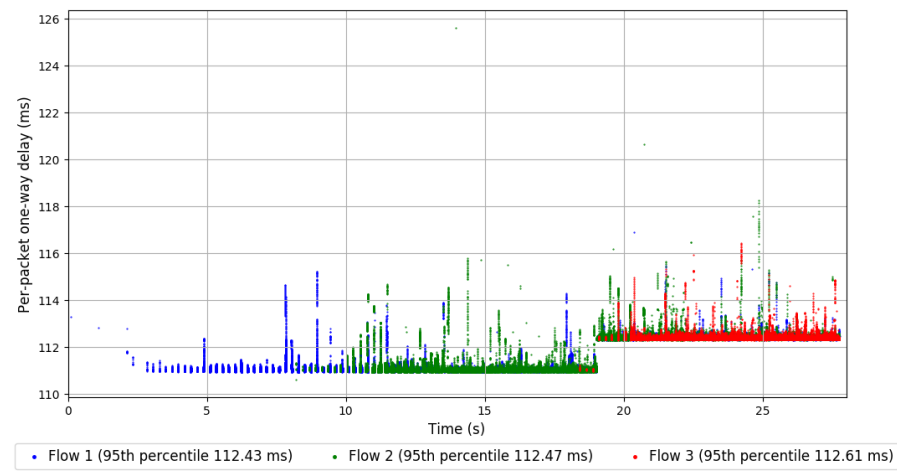
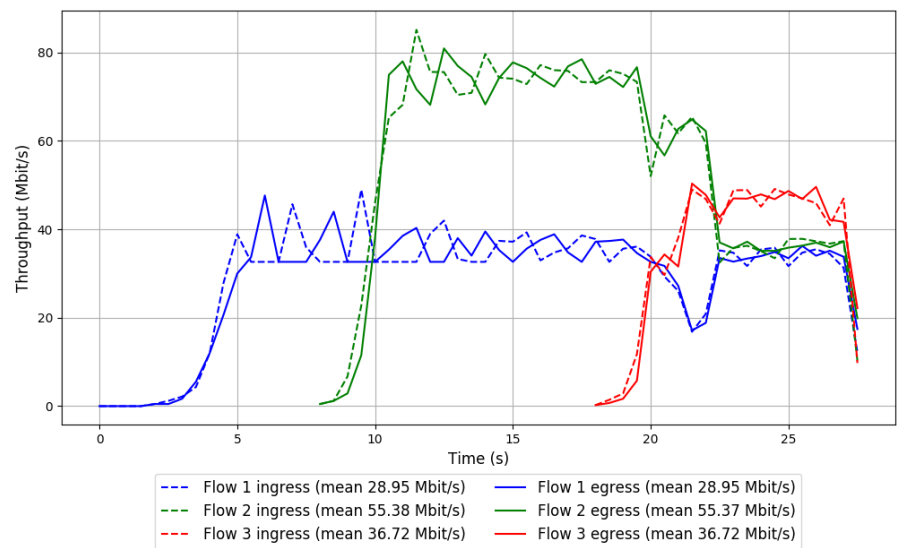


```
Run 1: Statistics of Indigo

Start at: 2017-09-08 00:10:33
End at: 2017-09-08 00:11:03

# Below is generated by plot.py at 2017-09-08 03:53:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.47 Mbit/s
95th percentile per-packet one-way delay: 112.479 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 28.95 Mbit/s
95th percentile per-packet one-way delay: 112.430 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 55.37 Mbit/s
95th percentile per-packet one-way delay: 112.470 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.72 Mbit/s
95th percentile per-packet one-way delay: 112.613 ms
Loss rate: 0.00%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-09-08 00:23:51

End at: 2017-09-08 00:24:21

Below is generated by plot.py at 2017-09-08 03:53:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.35 Mbit/s

95th percentile per-packet one-way delay: 112.565 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 27.30 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.72 Mbit/s

95th percentile per-packet one-way delay: 112.596 ms

Loss rate: 0.00%

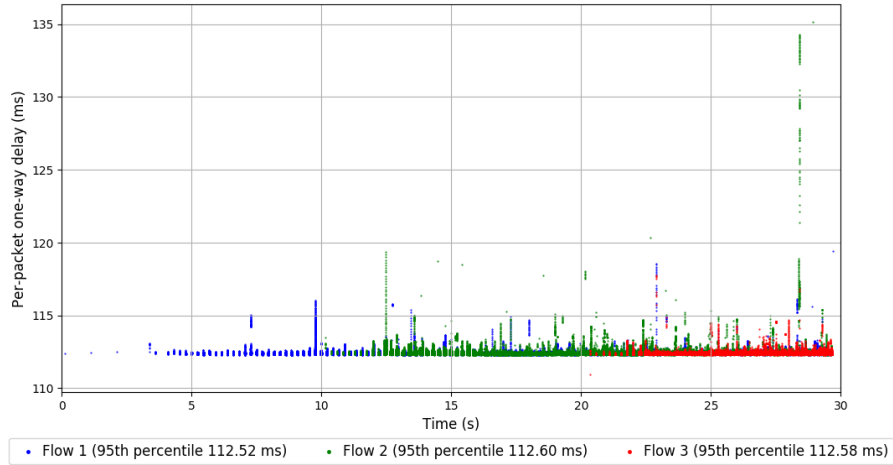
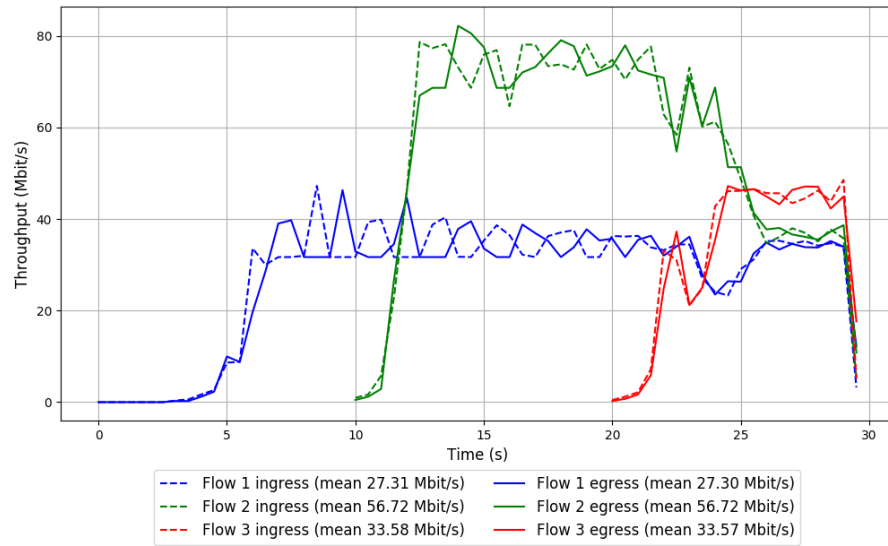
-- Flow 3:

Average throughput: 33.57 Mbit/s

95th percentile per-packet one-way delay: 112.581 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-09-08 00:37:02

End at: 2017-09-08 00:37:32

Below is generated by plot.py at 2017-09-08 03:53:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.18 Mbit/s

95th percentile per-packet one-way delay: 112.796 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 18.92 Mbit/s

95th percentile per-packet one-way delay: 112.624 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 65.24 Mbit/s

95th percentile per-packet one-way delay: 112.940 ms

Loss rate: 0.00%

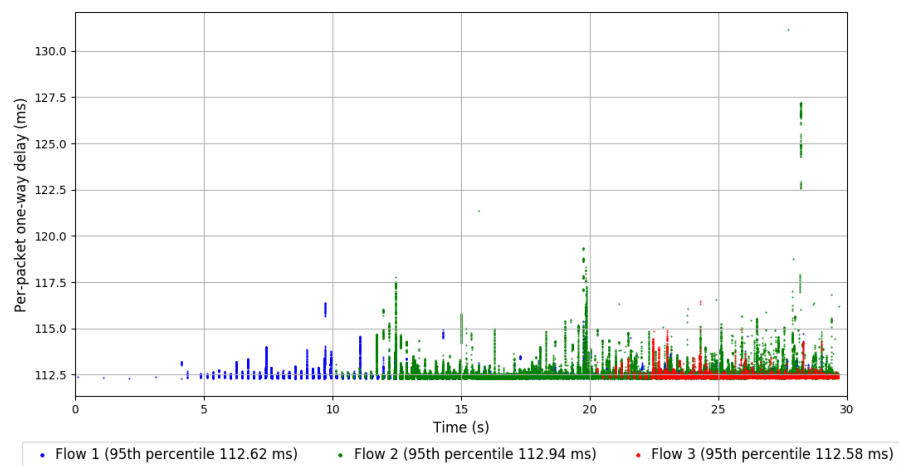
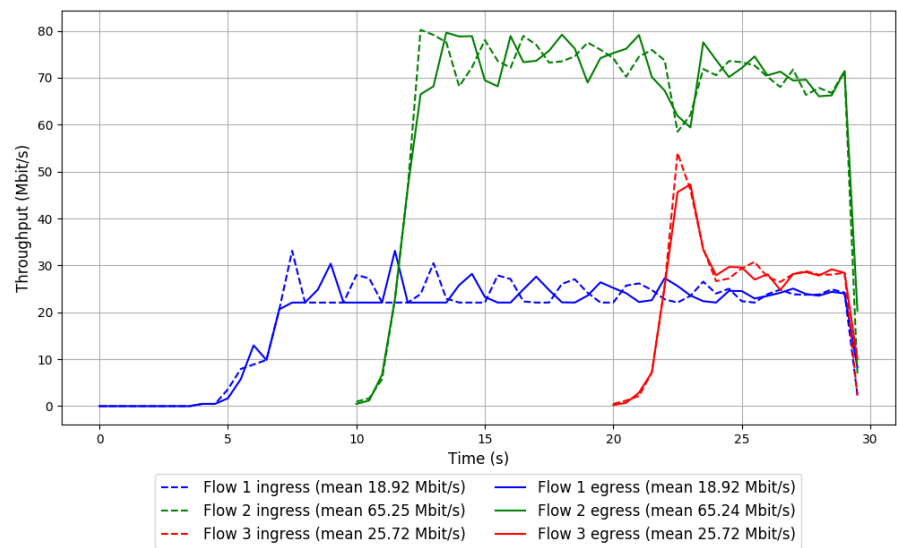
-- Flow 3:

Average throughput: 25.72 Mbit/s

95th percentile per-packet one-way delay: 112.583 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-09-08 00:50:12

End at: 2017-09-08 00:50:42

Below is generated by plot.py at 2017-09-08 03:53:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.62 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 18.94 Mbit/s

95th percentile per-packet one-way delay: 112.562 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 62.25 Mbit/s

95th percentile per-packet one-way delay: 112.726 ms

Loss rate: 0.00%

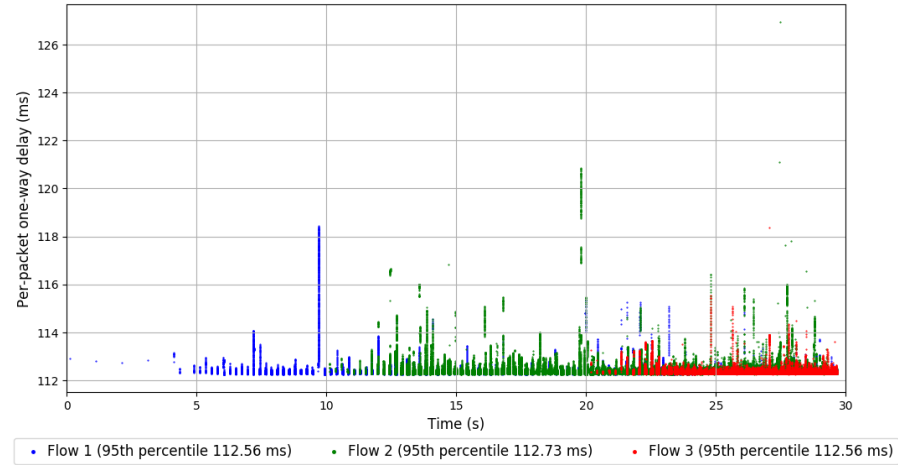
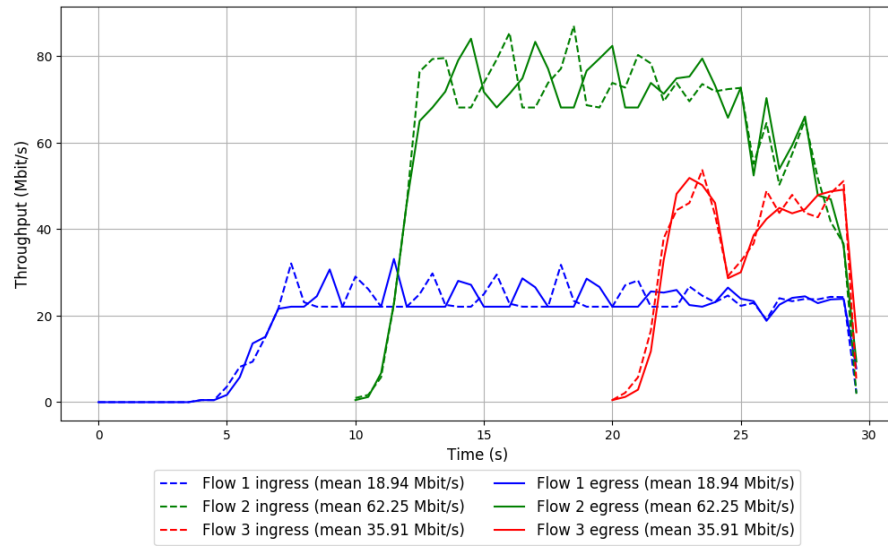
-- Flow 3:

Average throughput: 35.91 Mbit/s

95th percentile per-packet one-way delay: 112.559 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-09-08 01:03:26

End at: 2017-09-08 01:03:56

Below is generated by plot.py at 2017-09-08 03:54:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.78 Mbit/s

95th percentile per-packet one-way delay: 112.614 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 26.20 Mbit/s

95th percentile per-packet one-way delay: 112.621 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.64 Mbit/s

95th percentile per-packet one-way delay: 112.665 ms

Loss rate: 0.00%

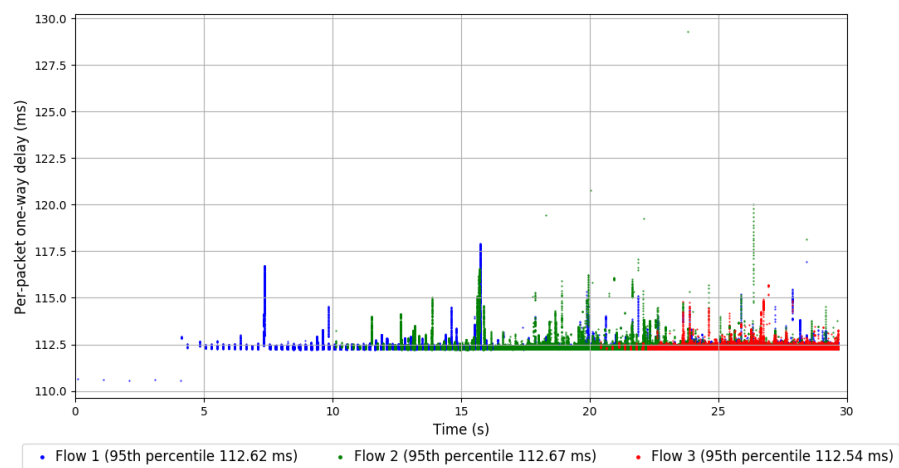
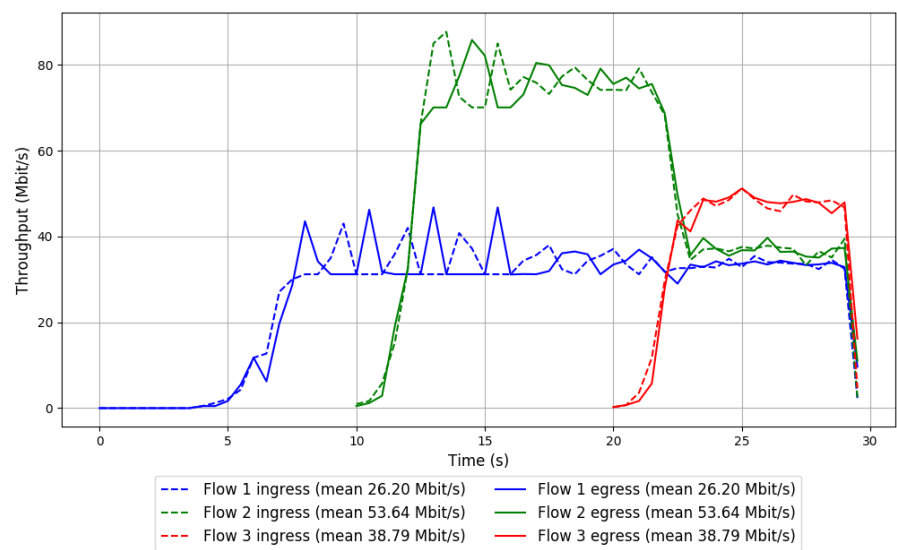
-- Flow 3:

Average throughput: 38.79 Mbit/s

95th percentile per-packet one-way delay: 112.537 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-09-08 01:16:40

End at: 2017-09-08 01:17:10

Below is generated by plot.py at 2017-09-08 03:54:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.16 Mbit/s

95th percentile per-packet one-way delay: 112.516 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.58 Mbit/s

95th percentile per-packet one-way delay: 112.508 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.48 Mbit/s

95th percentile per-packet one-way delay: 112.490 ms

Loss rate: 0.00%

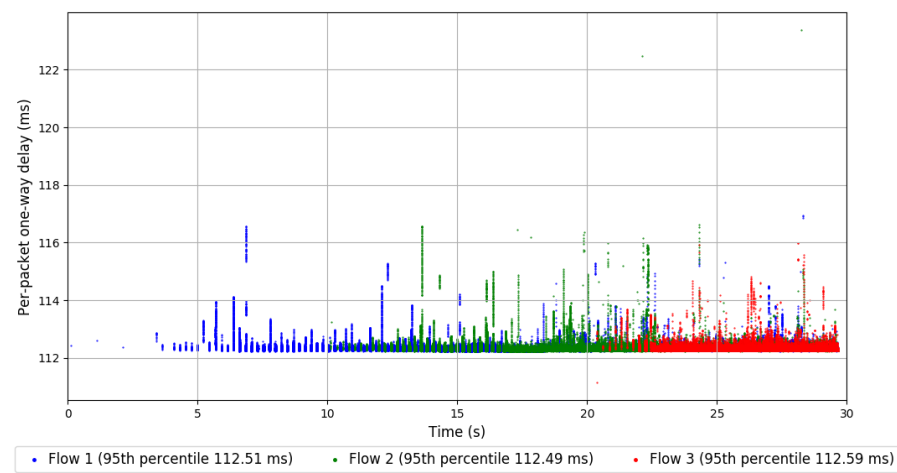
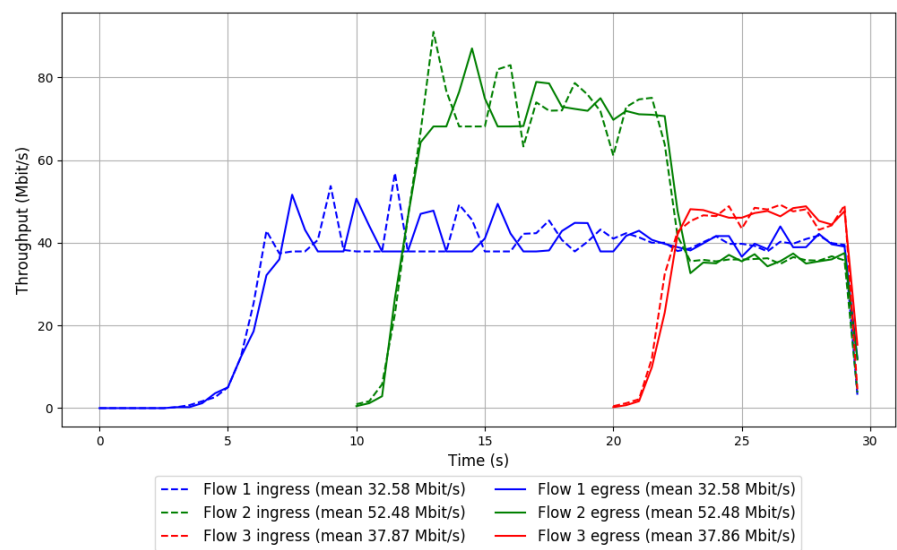
-- Flow 3:

Average throughput: 37.86 Mbit/s

95th percentile per-packet one-way delay: 112.586 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-09-08 01:29:55

End at: 2017-09-08 01:30:25

Below is generated by plot.py at 2017-09-08 03:54:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.23 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.15 Mbit/s

95th percentile per-packet one-way delay: 112.589 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.64 Mbit/s

95th percentile per-packet one-way delay: 112.610 ms

Loss rate: 0.00%

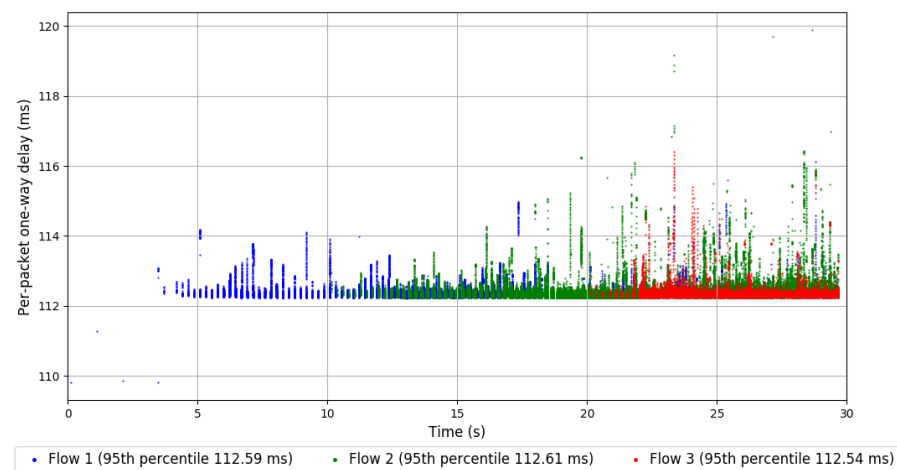
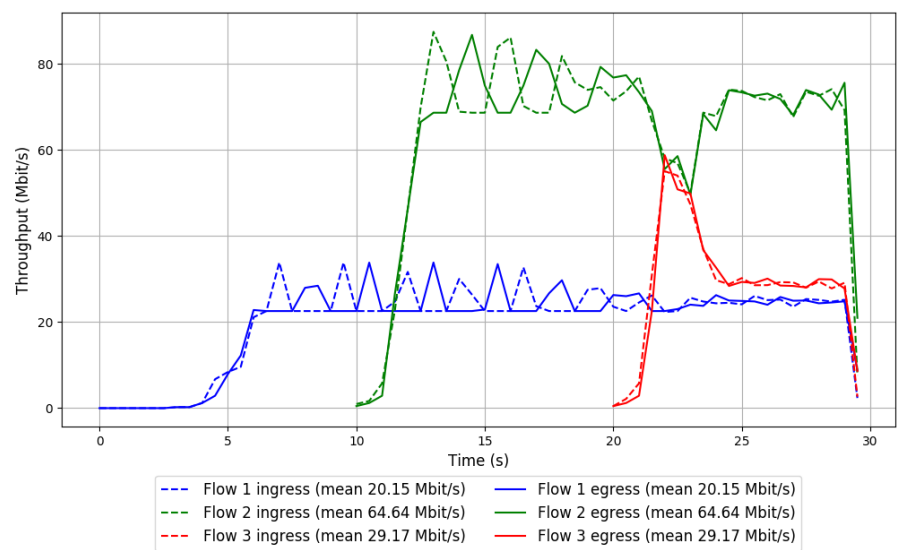
-- Flow 3:

Average throughput: 29.17 Mbit/s

95th percentile per-packet one-way delay: 112.544 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-09-08 01:43:30

End at: 2017-09-08 01:44:00

Below is generated by plot.py at 2017-09-08 03:54:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.13 Mbit/s

95th percentile per-packet one-way delay: 112.543 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 26.52 Mbit/s

95th percentile per-packet one-way delay: 112.489 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.73 Mbit/s

95th percentile per-packet one-way delay: 112.522 ms

Loss rate: 0.00%

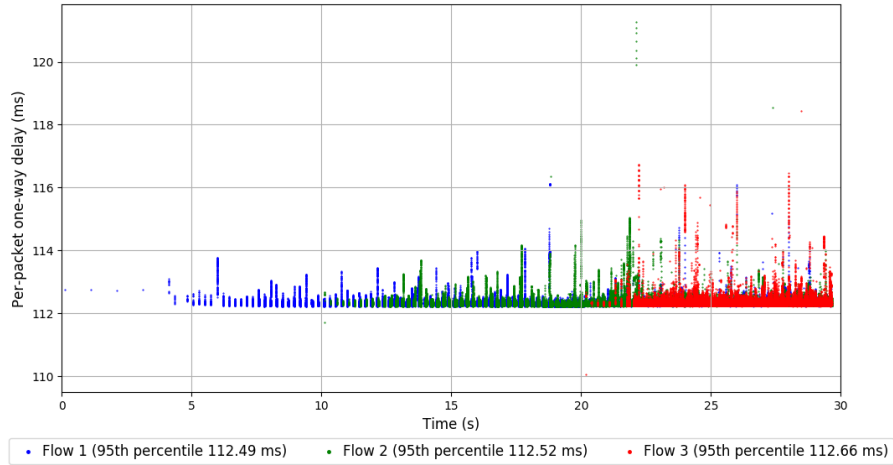
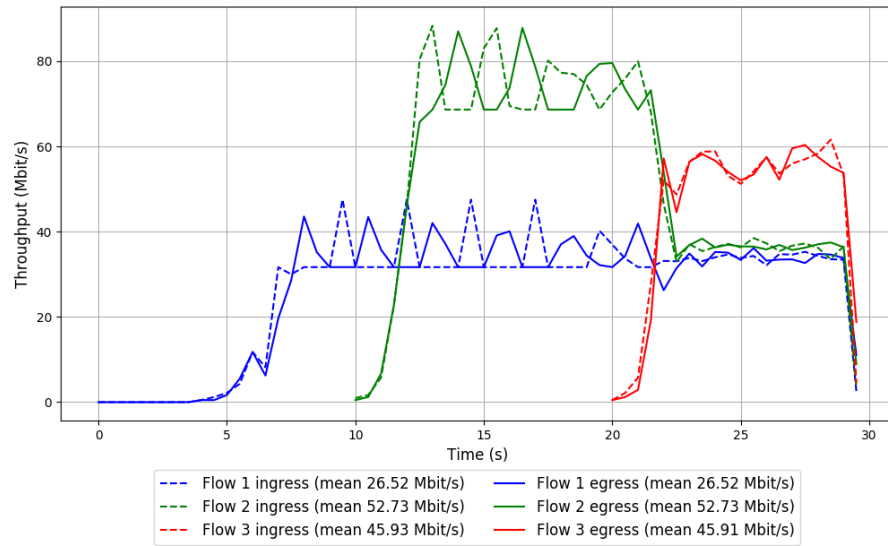
-- Flow 3:

Average throughput: 45.91 Mbit/s

95th percentile per-packet one-way delay: 112.662 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-09-08 01:56:38

End at: 2017-09-08 01:57:08

Below is generated by plot.py at 2017-09-08 03:54:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.09 Mbit/s

95th percentile per-packet one-way delay: 112.525 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 27.15 Mbit/s

95th percentile per-packet one-way delay: 112.458 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.69 Mbit/s

95th percentile per-packet one-way delay: 112.549 ms

Loss rate: 0.00%

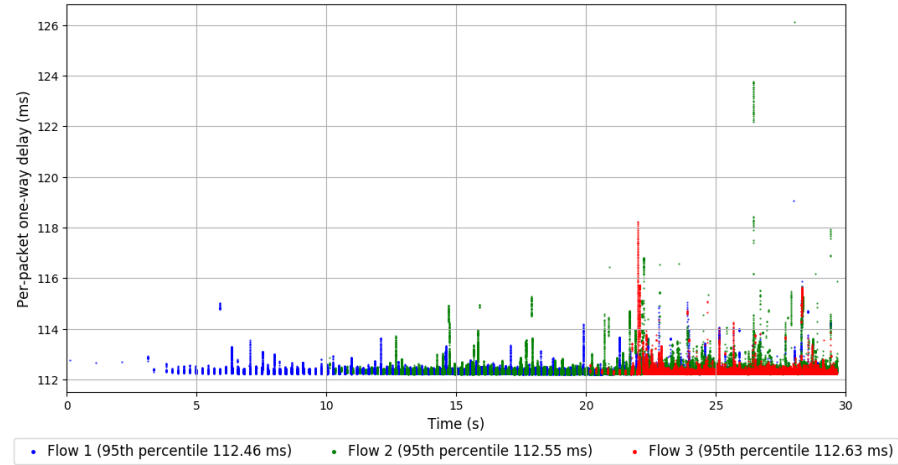
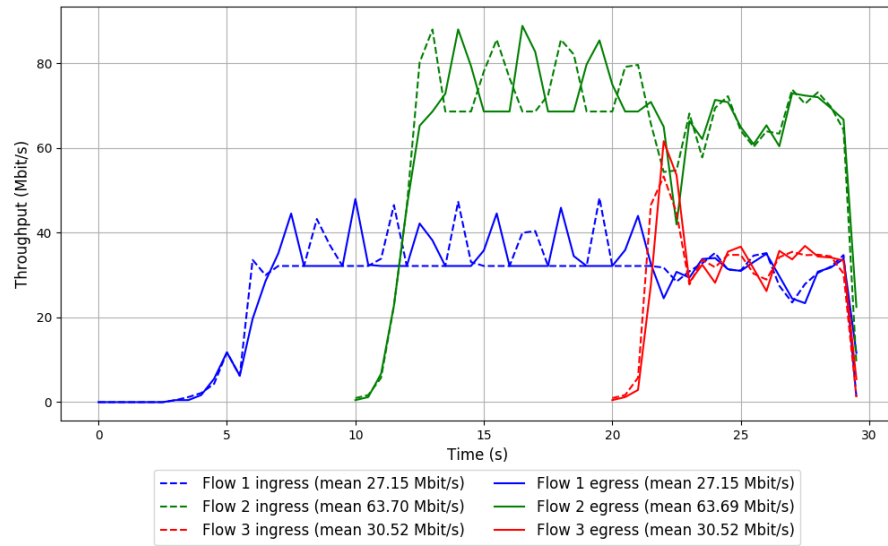
-- Flow 3:

Average throughput: 30.52 Mbit/s

95th percentile per-packet one-way delay: 112.626 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-09-08 02:09:47

End at: 2017-09-08 02:10:17

Below is generated by plot.py at 2017-09-08 03:54:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.06 Mbit/s

95th percentile per-packet one-way delay: 112.599 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 18.96 Mbit/s

95th percentile per-packet one-way delay: 112.542 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.43 Mbit/s

95th percentile per-packet one-way delay: 112.573 ms

Loss rate: 0.00%

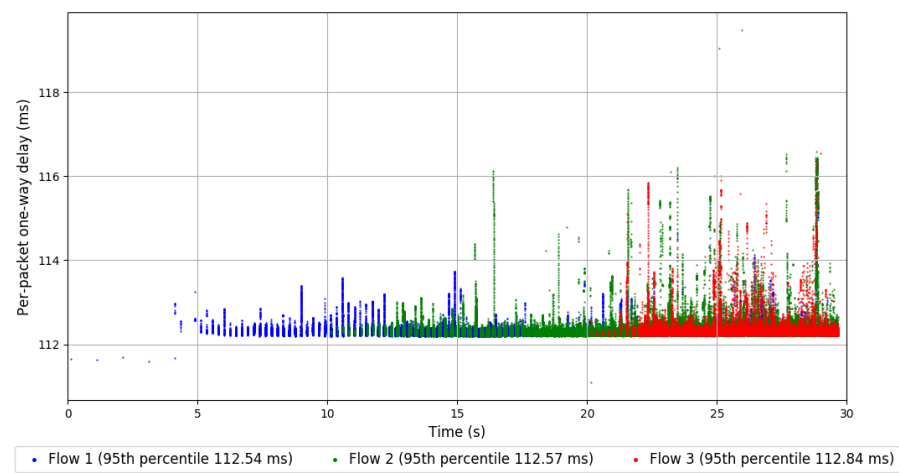
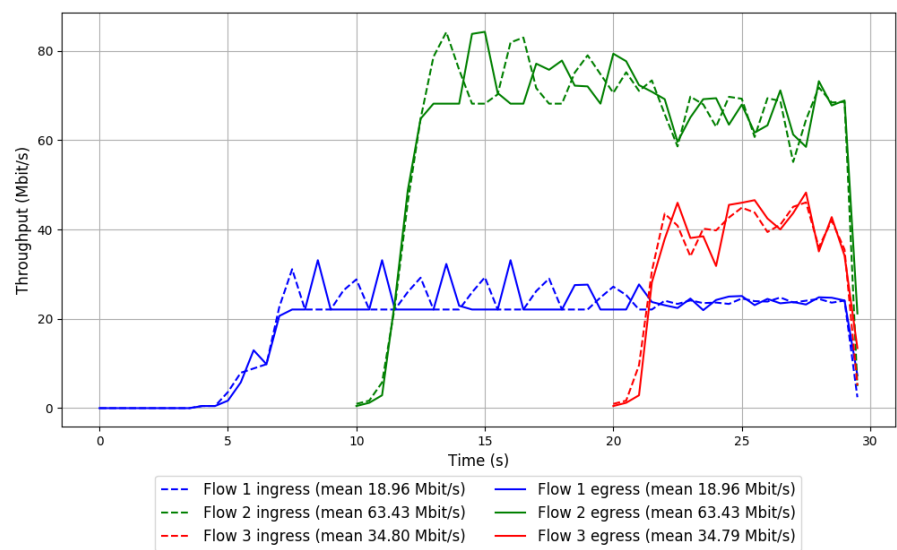
-- Flow 3:

Average throughput: 34.79 Mbit/s

95th percentile per-packet one-way delay: 112.843 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

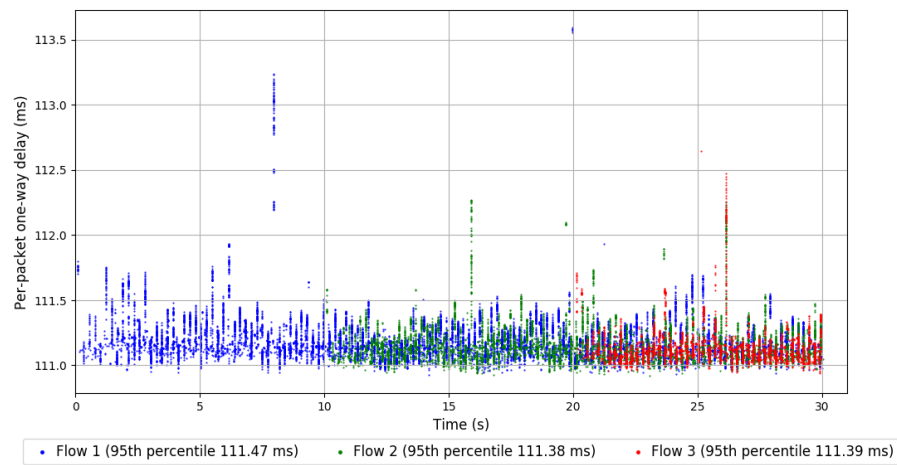
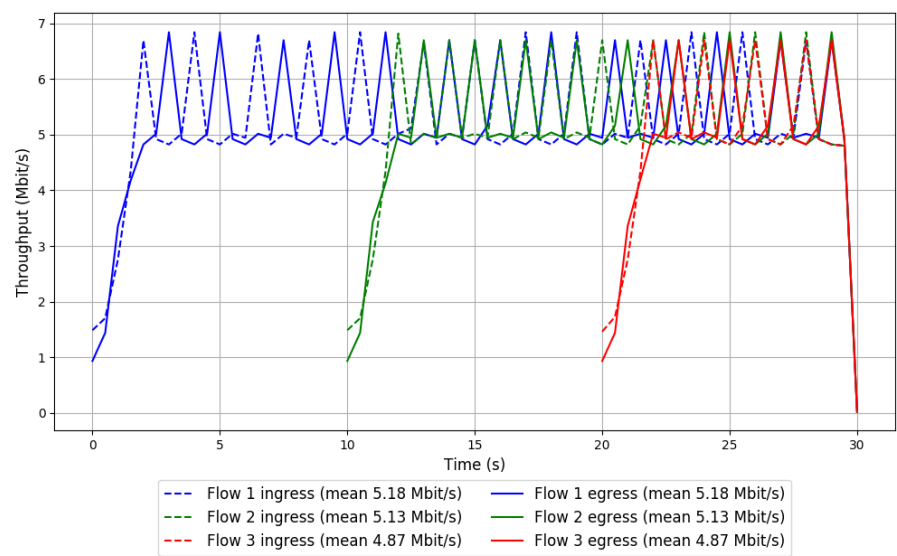


```
Run 1: Statistics of KohoCC

Start at: 2017-09-08 00:04:07
End at: 2017-09-08 00:04:37

# Below is generated by plot.py at 2017-09-08 03:54:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.21 Mbit/s
95th percentile per-packet one-way delay: 111.429 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 111.475 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.13 Mbit/s
95th percentile per-packet one-way delay: 111.384 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.87 Mbit/s
95th percentile per-packet one-way delay: 111.387 ms
Loss rate: 0.00%
```

Run 1: Report of KohoCC — Data Link

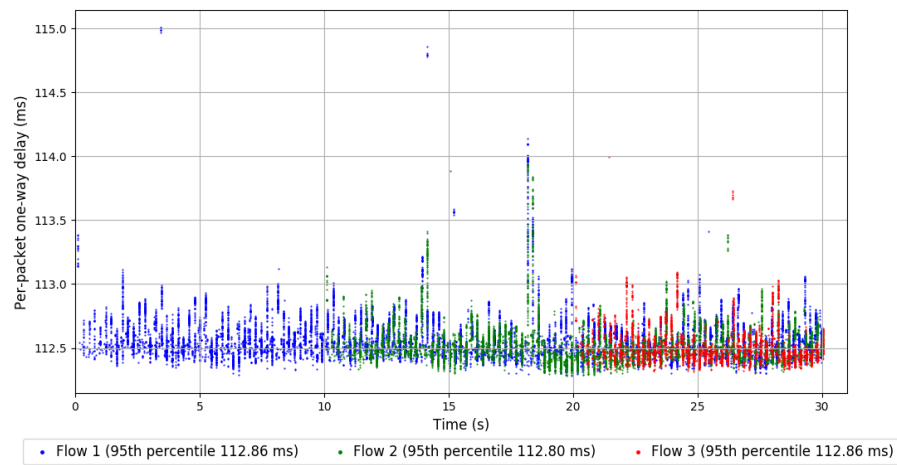
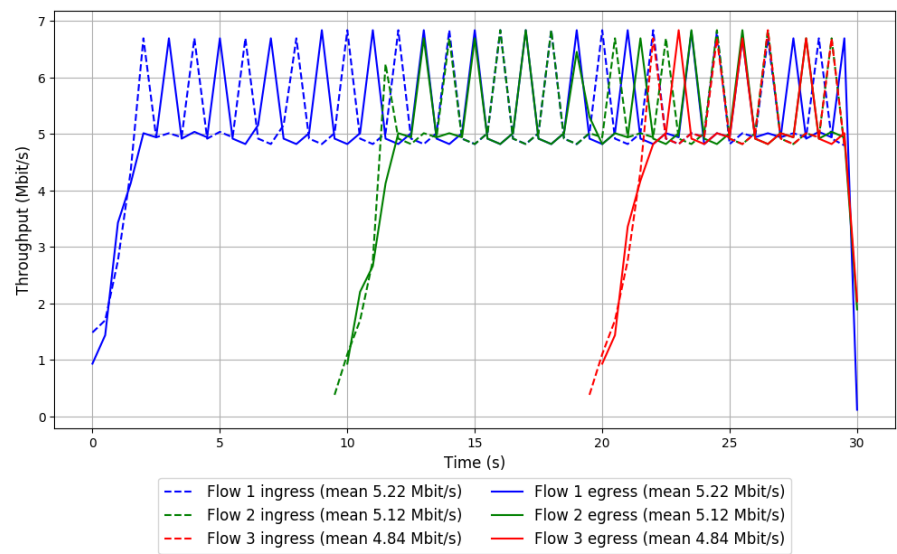


```
Run 2: Statistics of KohoCC

Start at: 2017-09-08 00:17:27
End at: 2017-09-08 00:17:57

# Below is generated by plot.py at 2017-09-08 03:54:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.24 Mbit/s
95th percentile per-packet one-way delay: 112.849 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 112.860 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 112.804 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 112.862 ms
Loss rate: 0.00%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-09-08 00:30:40

End at: 2017-09-08 00:31:10

Below is generated by plot.py at 2017-09-08 03:54:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.13 Mbit/s

95th percentile per-packet one-way delay: 112.839 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 112.826 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.07 Mbit/s

95th percentile per-packet one-way delay: 112.867 ms

Loss rate: 0.00%

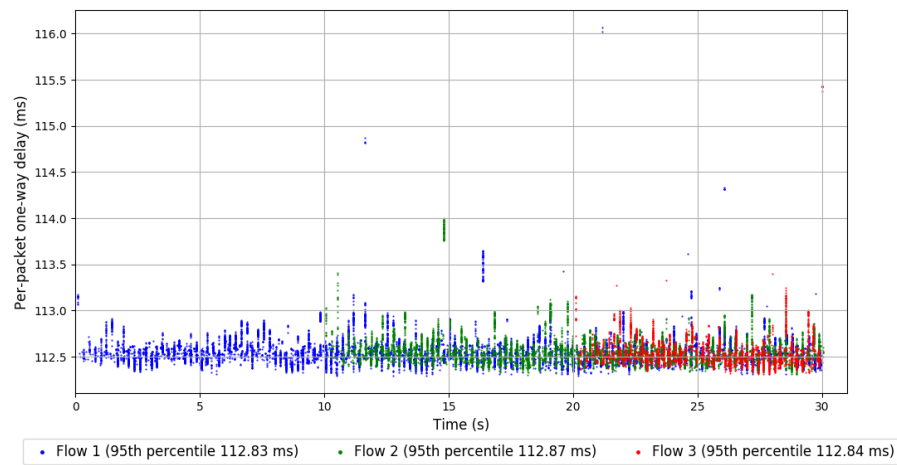
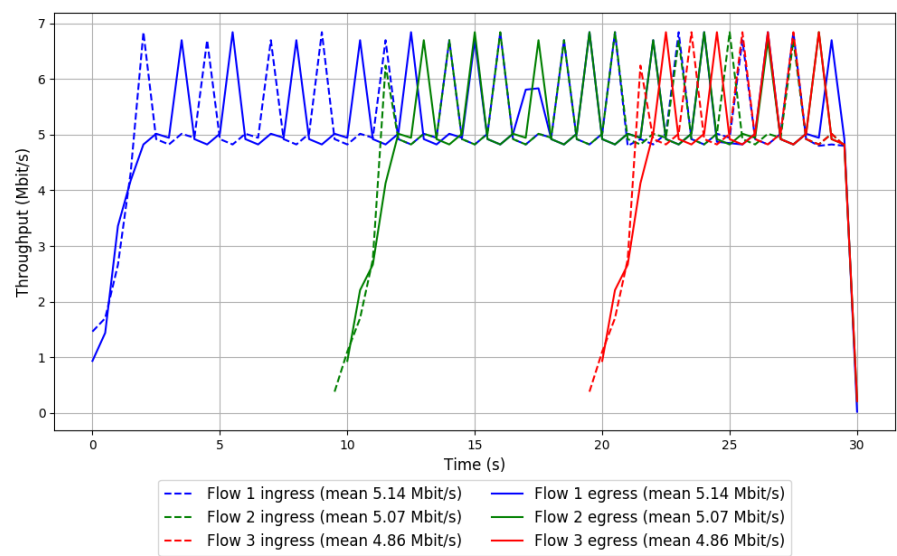
-- Flow 3:

Average throughput: 4.86 Mbit/s

95th percentile per-packet one-way delay: 112.839 ms

Loss rate: 0.00%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-09-08 00:43:51

End at: 2017-09-08 00:44:21

Below is generated by plot.py at 2017-09-08 03:54:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.14 Mbit/s

95th percentile per-packet one-way delay: 112.903 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.18 Mbit/s

95th percentile per-packet one-way delay: 112.936 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.07 Mbit/s

95th percentile per-packet one-way delay: 112.867 ms

Loss rate: 0.00%

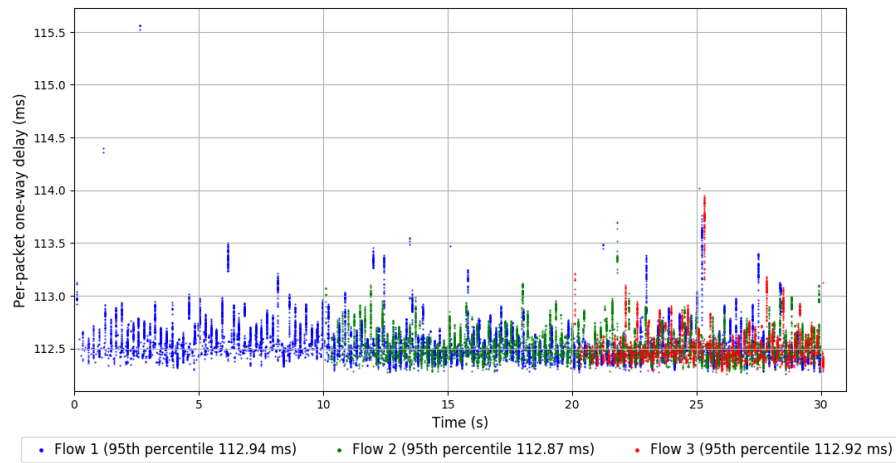
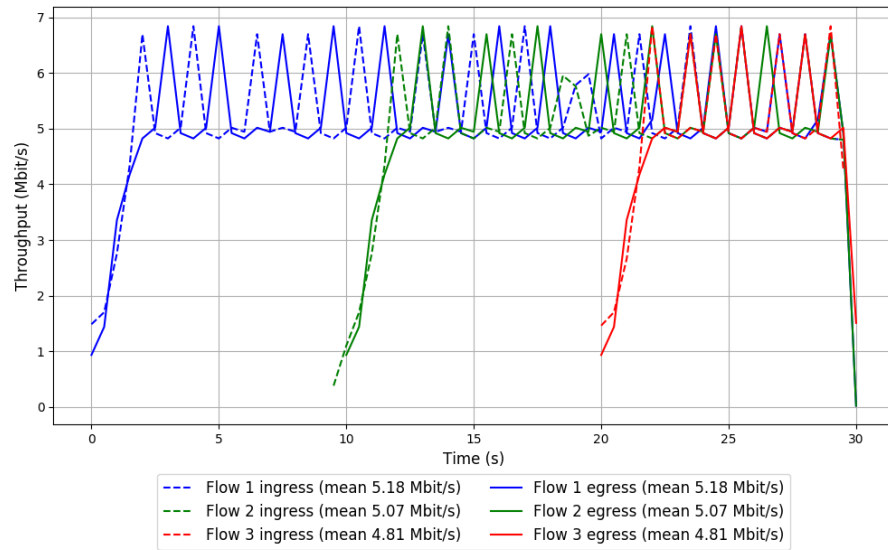
-- Flow 3:

Average throughput: 4.81 Mbit/s

95th percentile per-packet one-way delay: 112.916 ms

Loss rate: 0.00%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-09-08 00:56:58

End at: 2017-09-08 00:57:28

Below is generated by plot.py at 2017-09-08 03:54:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.09 Mbit/s

95th percentile per-packet one-way delay: 112.775 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 112.791 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.06 Mbit/s

95th percentile per-packet one-way delay: 112.791 ms

Loss rate: 0.00%

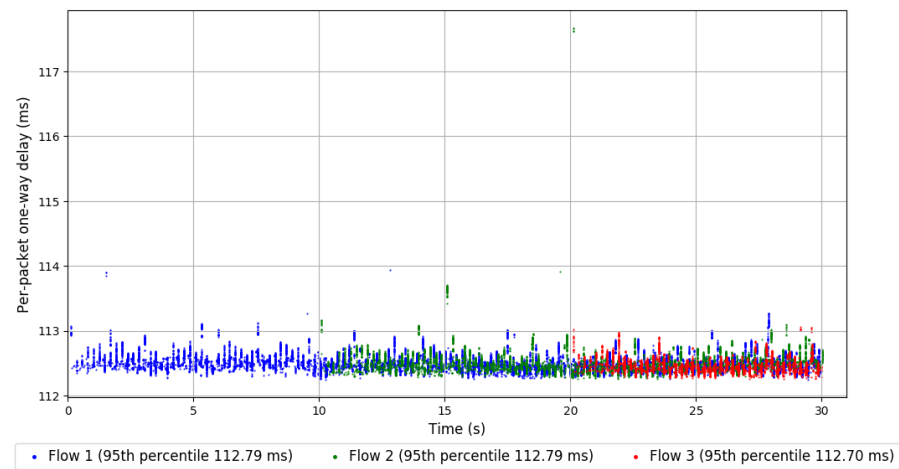
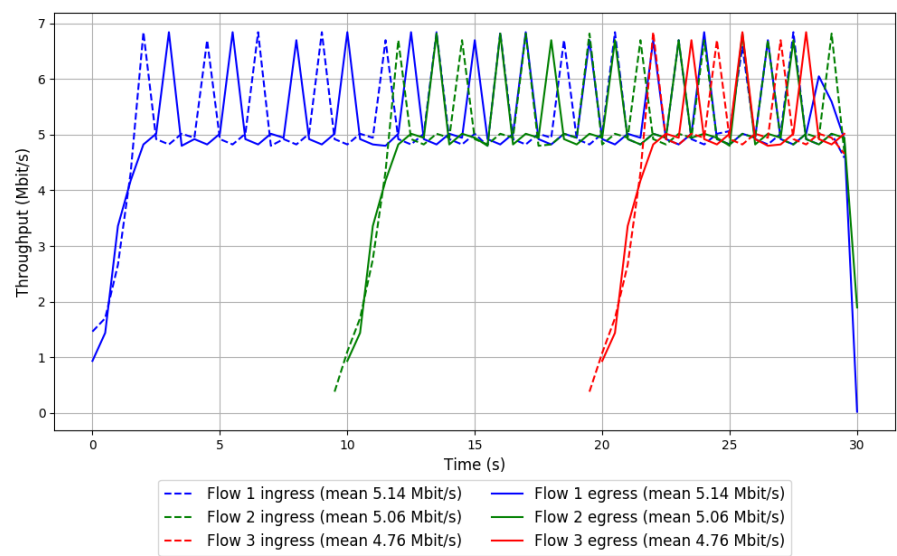
-- Flow 3:

Average throughput: 4.76 Mbit/s

95th percentile per-packet one-way delay: 112.699 ms

Loss rate: 0.00%

Run 5: Report of KohoCC — Data Link

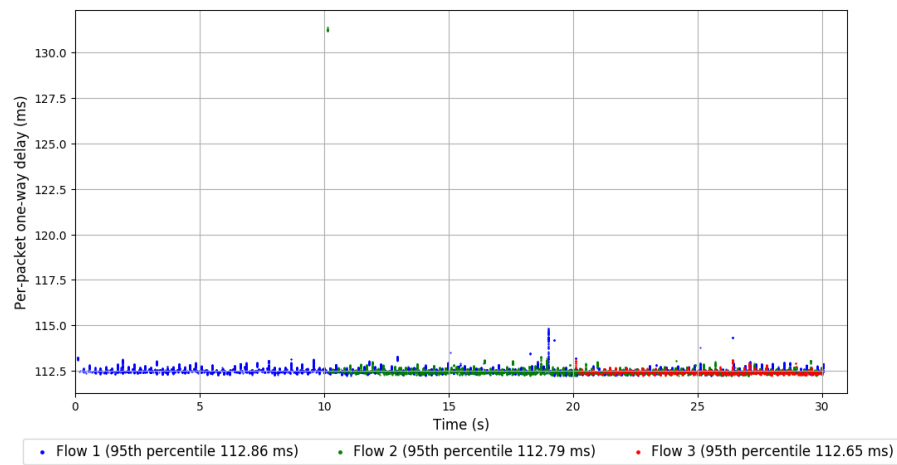
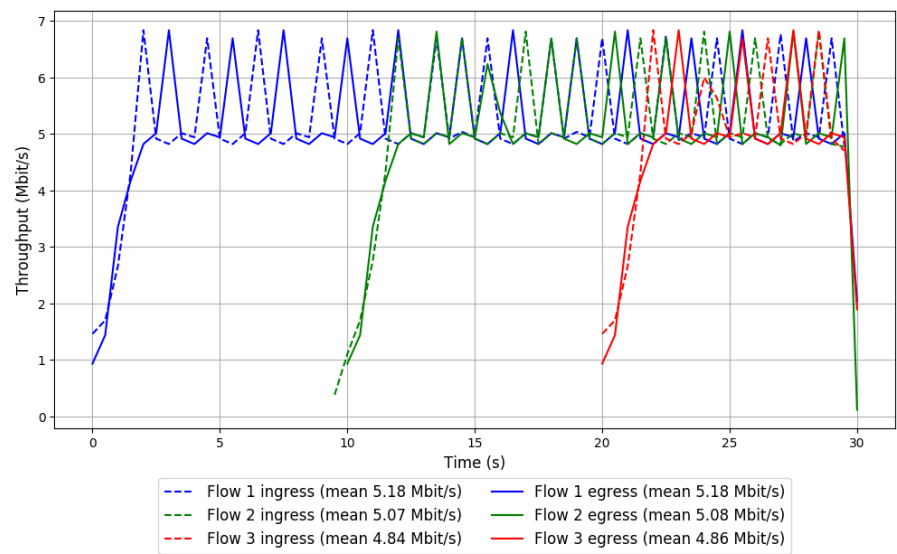


```
Run 6: Statistics of KohoCC

Start at: 2017-09-08 01:10:14
End at: 2017-09-08 01:10:44

# Below is generated by plot.py at 2017-09-08 03:54:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.16 Mbit/s
95th percentile per-packet one-way delay: 112.823 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 112.860 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.08 Mbit/s
95th percentile per-packet one-way delay: 112.793 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.86 Mbit/s
95th percentile per-packet one-way delay: 112.646 ms
Loss rate: 0.02%
```

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-09-08 01:23:36

End at: 2017-09-08 01:24:06

Below is generated by plot.py at 2017-09-08 03:54:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.13 Mbit/s

95th percentile per-packet one-way delay: 112.880 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 112.909 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.07 Mbit/s

95th percentile per-packet one-way delay: 112.797 ms

Loss rate: 0.00%

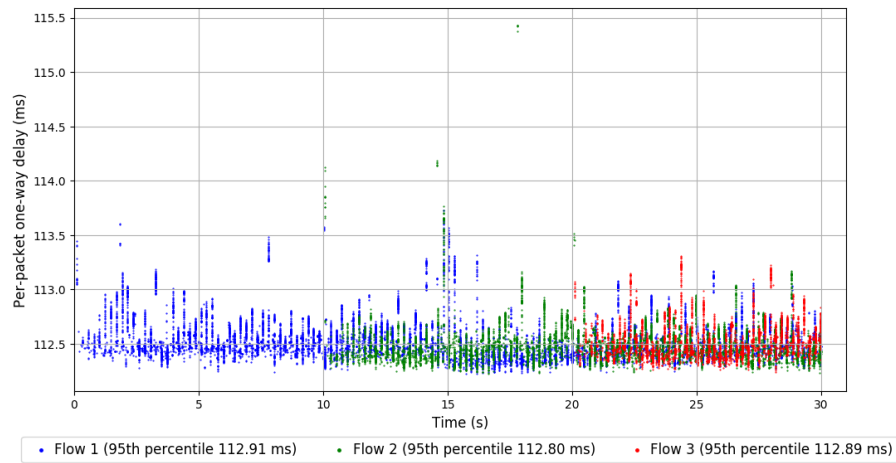
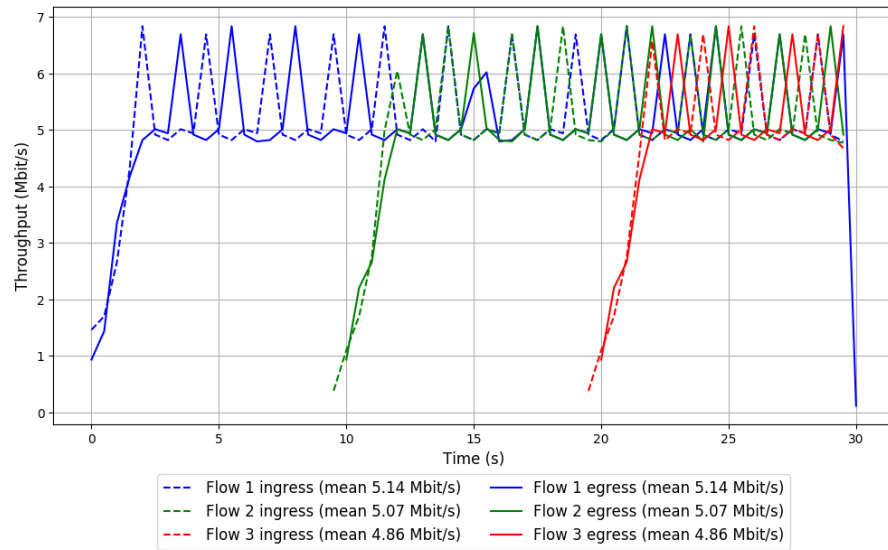
-- Flow 3:

Average throughput: 4.86 Mbit/s

95th percentile per-packet one-way delay: 112.890 ms

Loss rate: 0.00%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-09-08 01:37:01

End at: 2017-09-08 01:37:31

Below is generated by plot.py at 2017-09-08 03:54:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.17 Mbit/s

95th percentile per-packet one-way delay: 112.785 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.18 Mbit/s

95th percentile per-packet one-way delay: 112.735 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.07 Mbit/s

95th percentile per-packet one-way delay: 112.838 ms

Loss rate: 0.00%

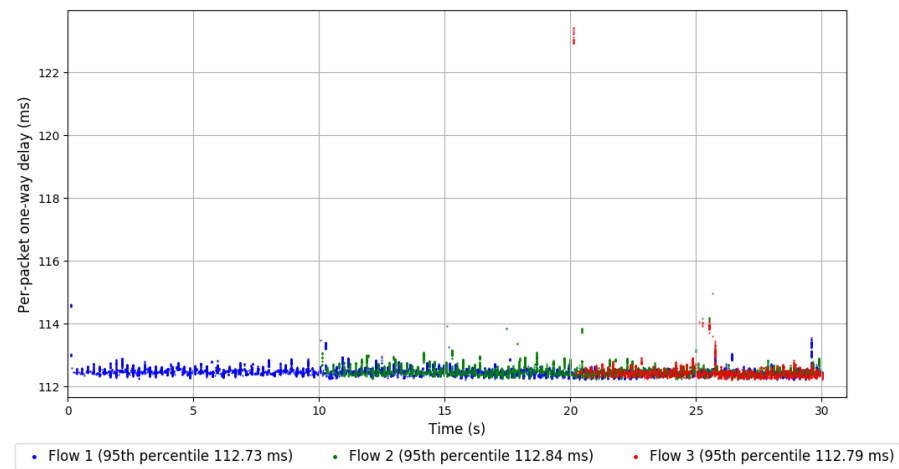
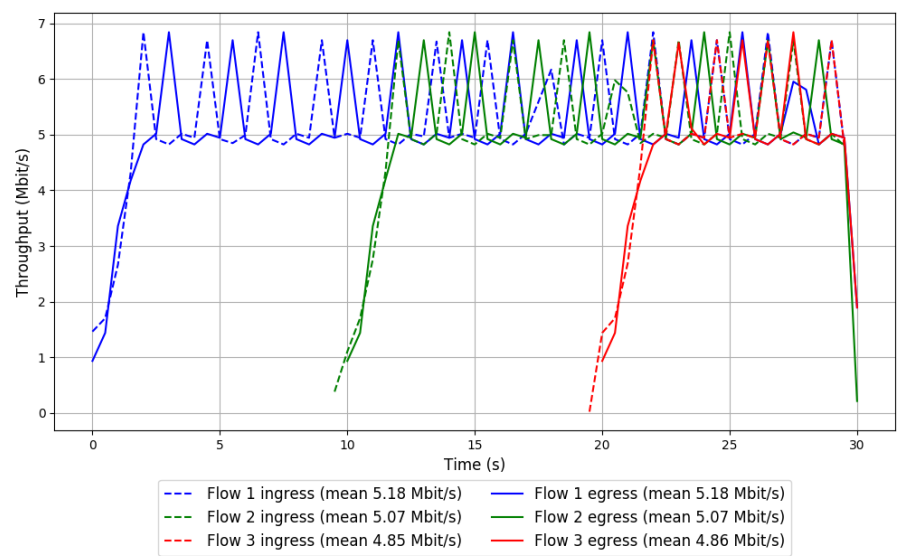
-- Flow 3:

Average throughput: 4.86 Mbit/s

95th percentile per-packet one-way delay: 112.792 ms

Loss rate: 0.00%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-09-08 01:50:18

End at: 2017-09-08 01:50:48

Below is generated by plot.py at 2017-09-08 03:54:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.08 Mbit/s

95th percentile per-packet one-way delay: 112.819 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 112.870 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.07 Mbit/s

95th percentile per-packet one-way delay: 112.710 ms

Loss rate: 0.00%

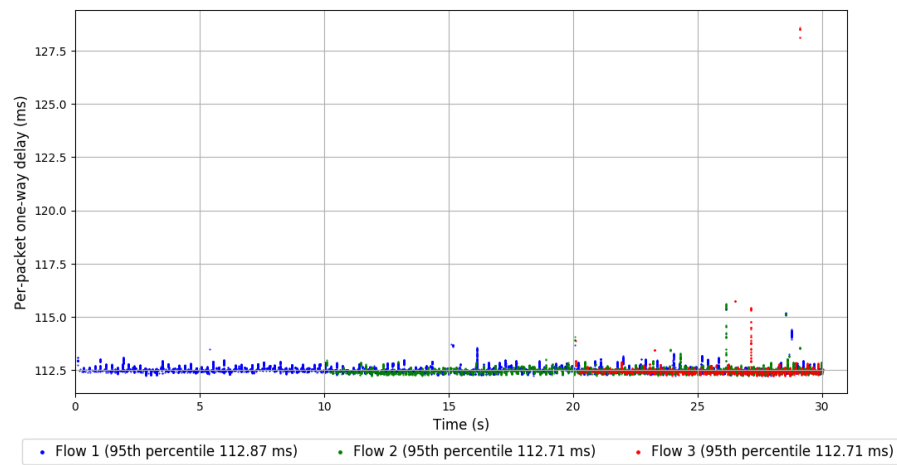
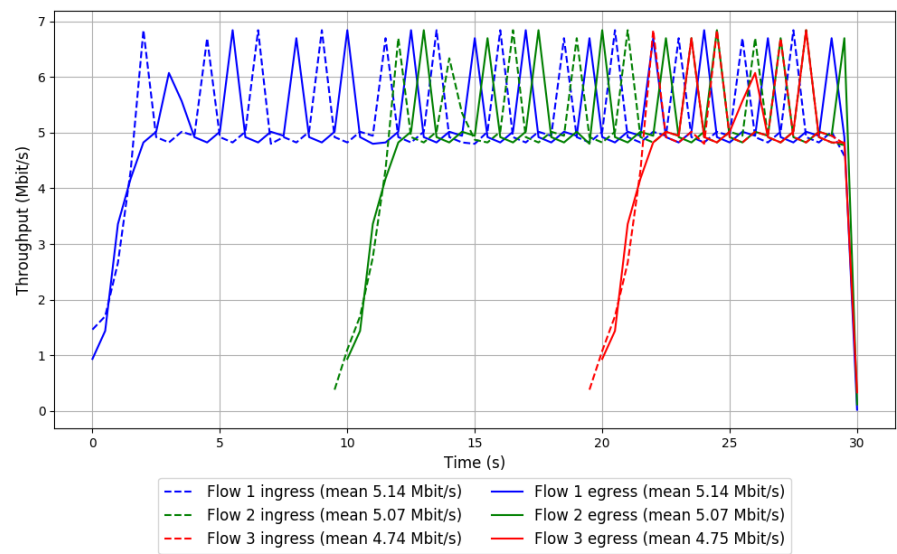
-- Flow 3:

Average throughput: 4.75 Mbit/s

95th percentile per-packet one-way delay: 112.713 ms

Loss rate: 0.00%

Run 9: Report of KohoCC — Data Link

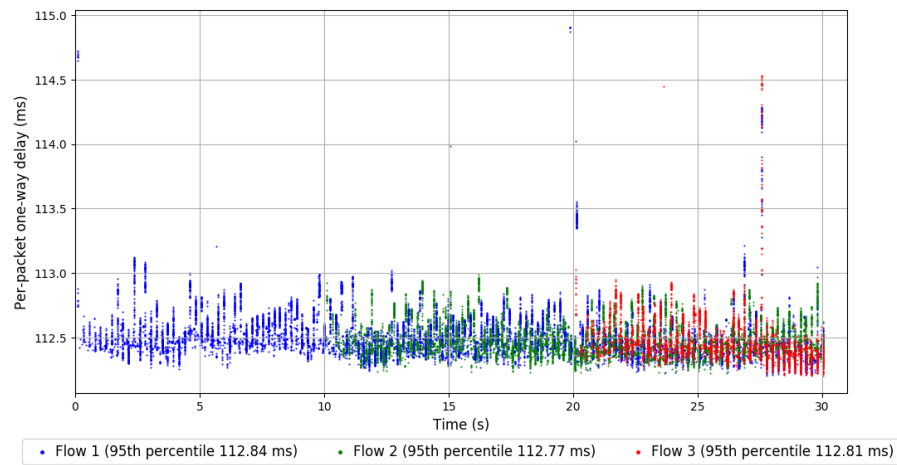
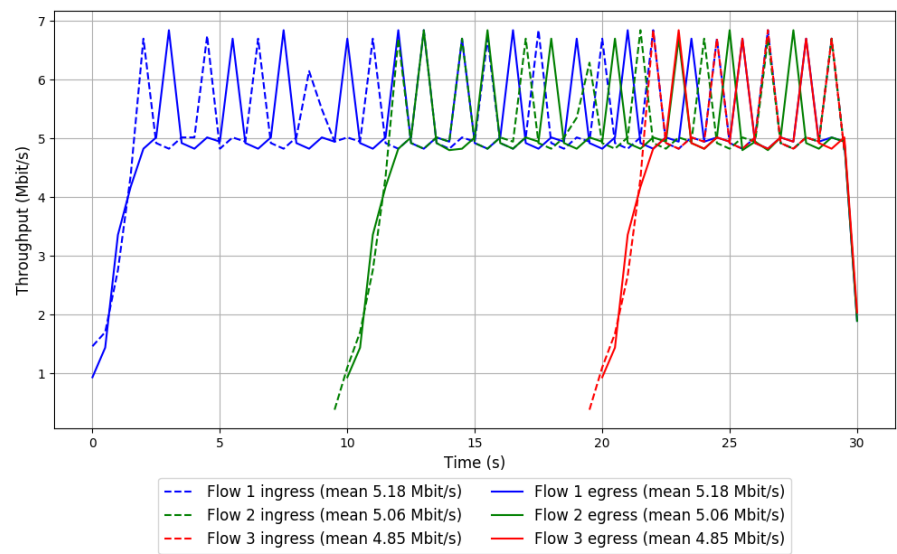


```
Run 10: Statistics of KohoCC

Start at: 2017-09-08 02:03:31
End at: 2017-09-08 02:04:01

# Below is generated by plot.py at 2017-09-08 03:54:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.16 Mbit/s
95th percentile per-packet one-way delay: 112.806 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 112.840 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.06 Mbit/s
95th percentile per-packet one-way delay: 112.771 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.85 Mbit/s
95th percentile per-packet one-way delay: 112.809 ms
Loss rate: 0.00%
```

Run 10: Report of KohoCC — Data Link

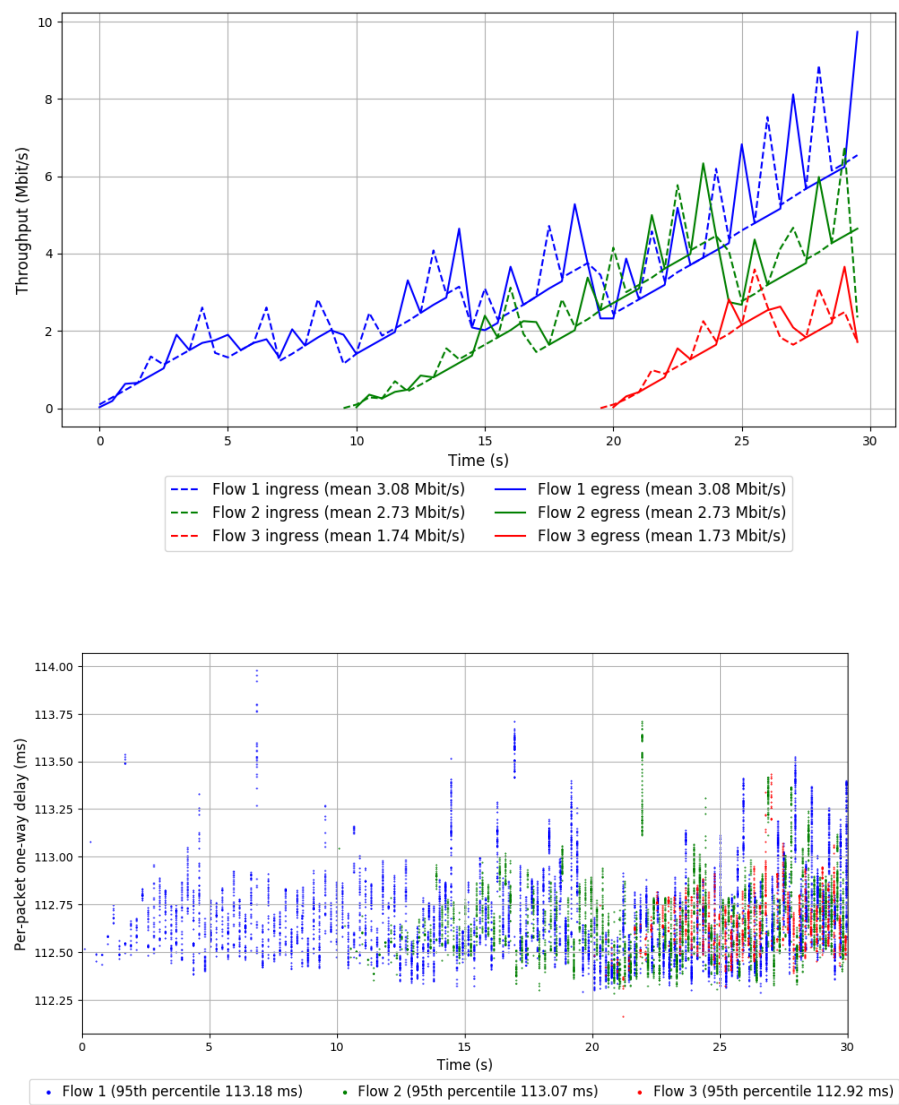


```
Run 1: Statistics of LEDBAT

Start at: 2017-09-08 00:14:58
End at: 2017-09-08 00:15:28

# Below is generated by plot.py at 2017-09-08 03:54:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.45 Mbit/s
95th percentile per-packet one-way delay: 113.132 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 113.176 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 113.074 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 112.920 ms
Loss rate: 0.27%
```


Run 1: Report of LEDBAT — Data Link

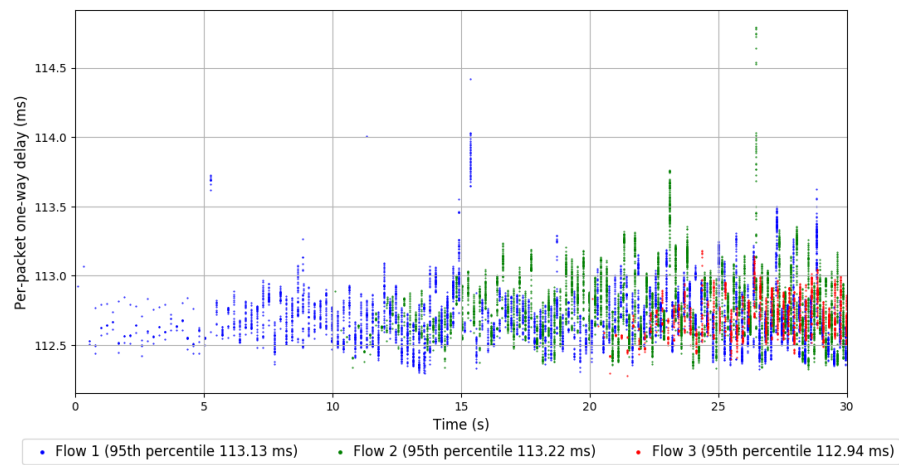
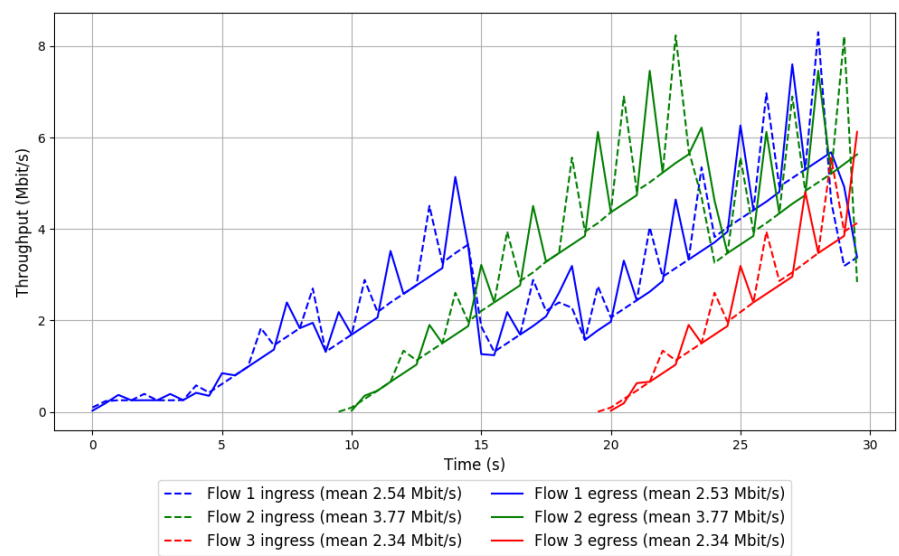


```
Run 2: Statistics of LEDBAT

Start at: 2017-09-08 00:28:10
End at: 2017-09-08 00:28:40

# Below is generated by plot.py at 2017-09-08 03:54:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.80 Mbit/s
95th percentile per-packet one-way delay: 113.160 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 113.132 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 113.215 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 112.944 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-09-08 00:41:19

End at: 2017-09-08 00:41:49

Below is generated by plot.py at 2017-09-08 03:54:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.14 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.70 Mbit/s

95th percentile per-packet one-way delay: 113.155 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.86 Mbit/s

95th percentile per-packet one-way delay: 112.909 ms

Loss rate: 0.00%

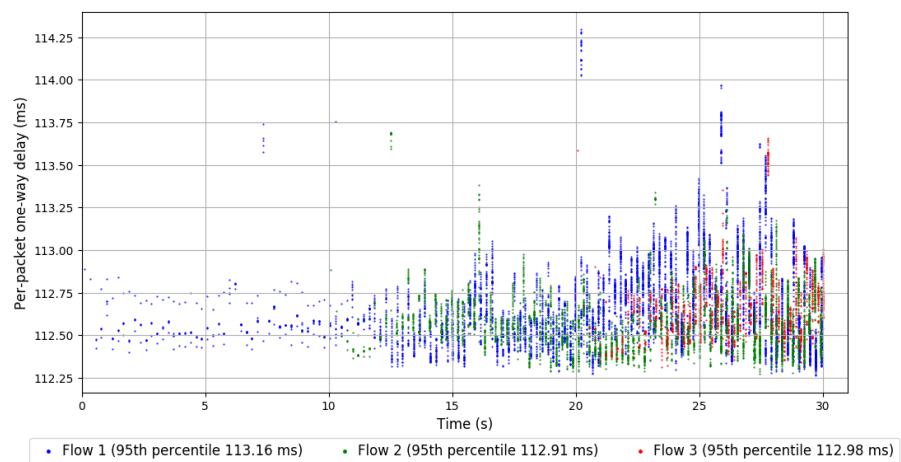
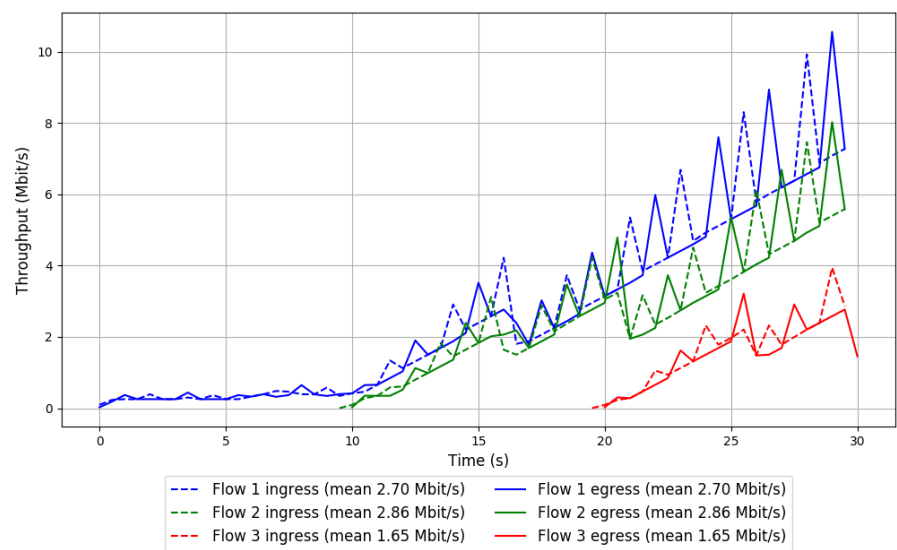
-- Flow 3:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 112.977 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-09-08 00:54:30

End at: 2017-09-08 00:55:00

Below is generated by plot.py at 2017-09-08 03:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.15 Mbit/s

95th percentile per-packet one-way delay: 113.121 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 3.45 Mbit/s

95th percentile per-packet one-way delay: 113.189 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 3.07 Mbit/s

95th percentile per-packet one-way delay: 112.968 ms

Loss rate: 0.00%

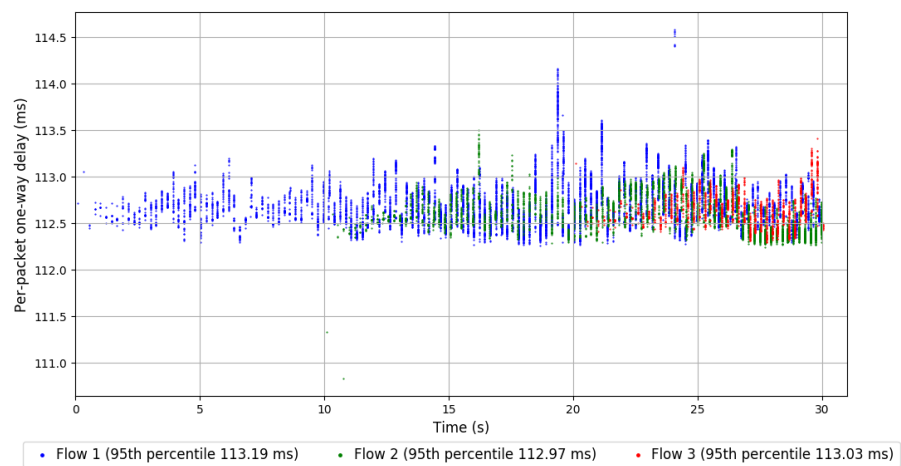
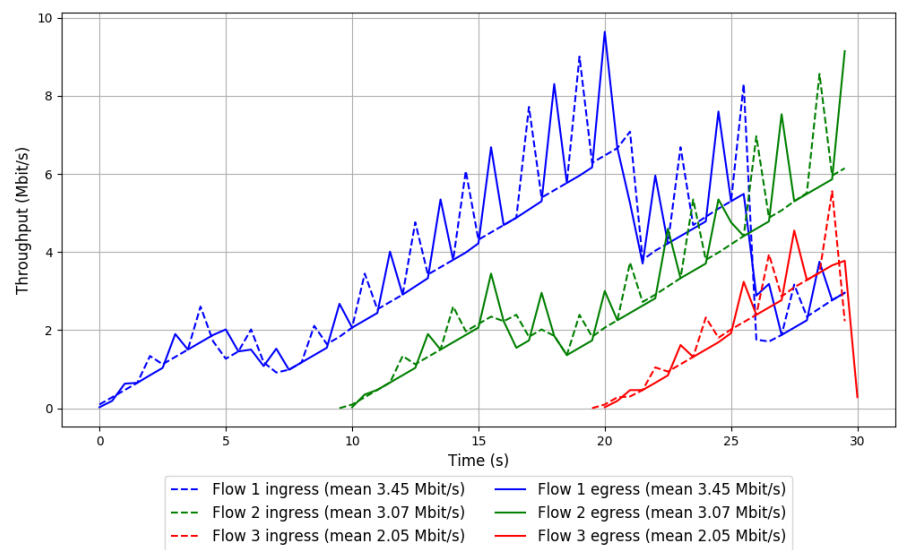
-- Flow 3:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 113.032 ms

Loss rate: 0.17%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-09-08 01:07:46

End at: 2017-09-08 01:08:16

Below is generated by plot.py at 2017-09-08 03:55:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.19 Mbit/s

95th percentile per-packet one-way delay: 113.231 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 113.130 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 4.68 Mbit/s

95th percentile per-packet one-way delay: 113.318 ms

Loss rate: 0.00%

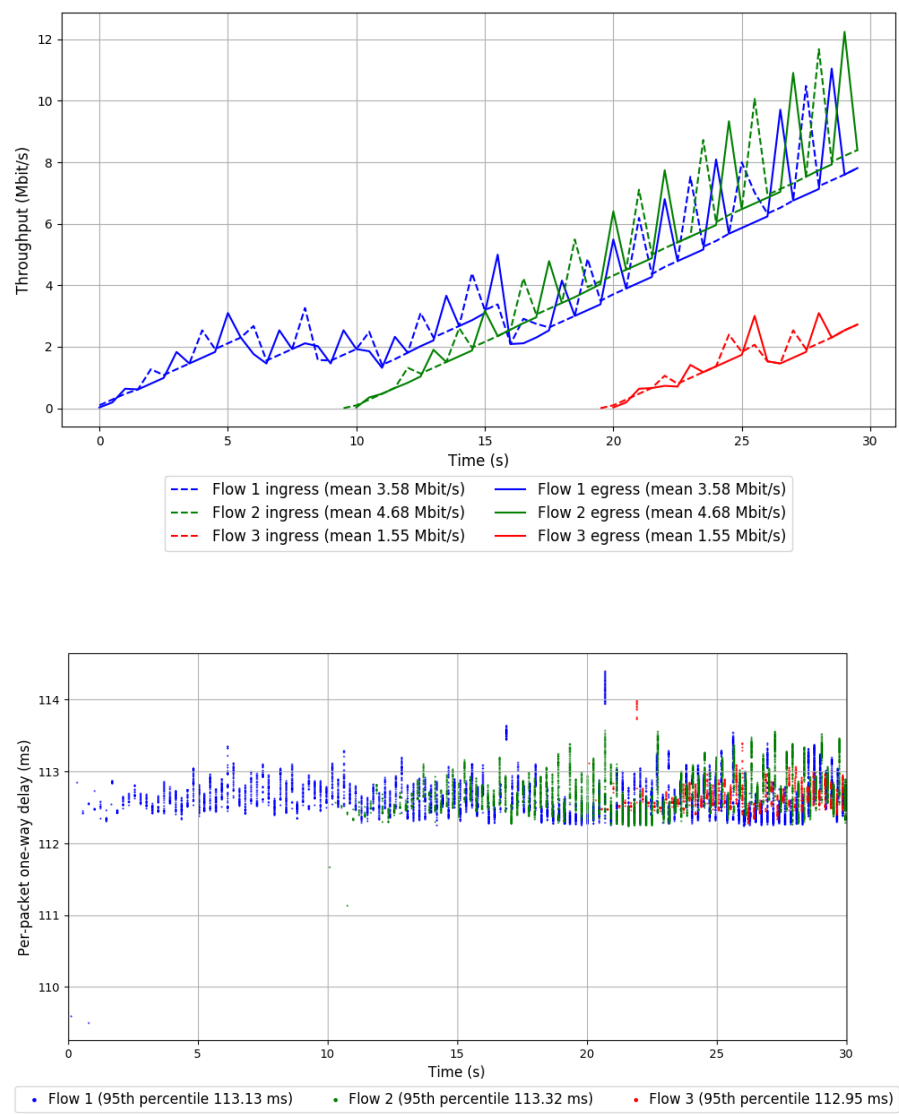
-- Flow 3:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 112.947 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-09-08 01:21:08

End at: 2017-09-08 01:21:38

Below is generated by plot.py at 2017-09-08 03:55:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.96 Mbit/s

95th percentile per-packet one-way delay: 112.963 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 3.24 Mbit/s

95th percentile per-packet one-way delay: 112.977 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 3.17 Mbit/s

95th percentile per-packet one-way delay: 112.974 ms

Loss rate: 0.00%

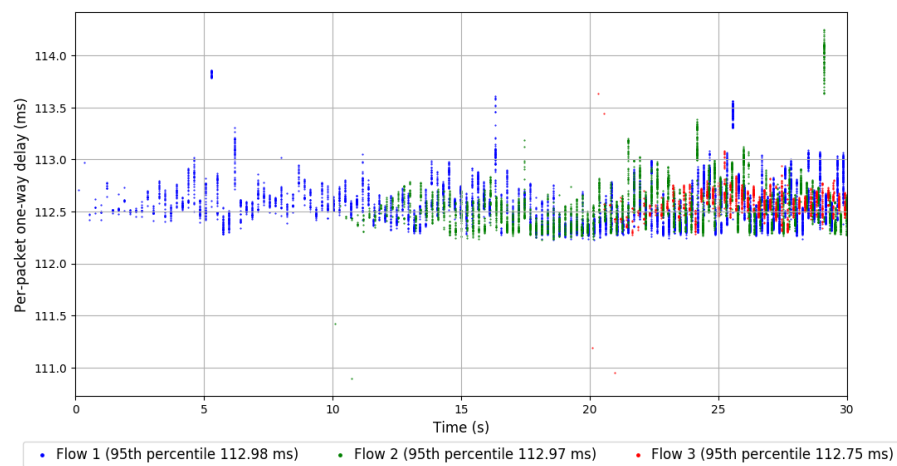
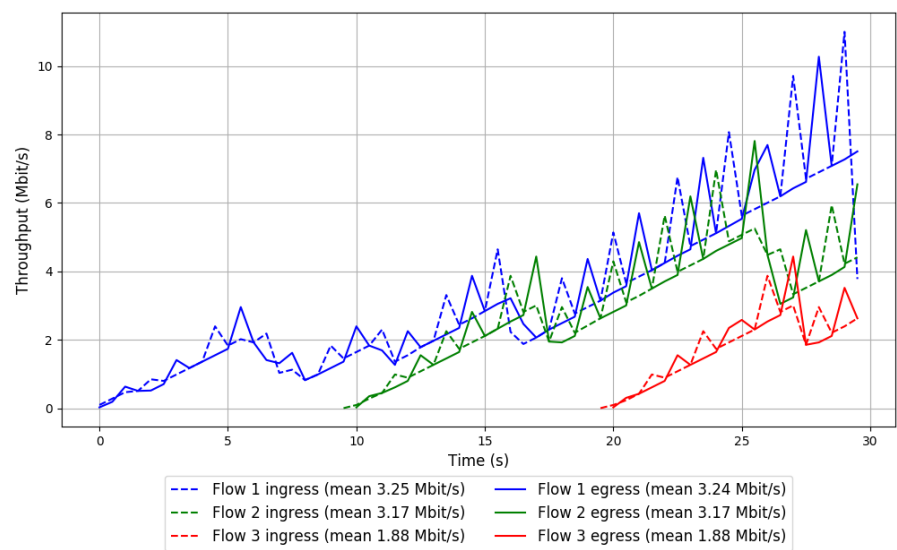
-- Flow 3:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 112.748 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link

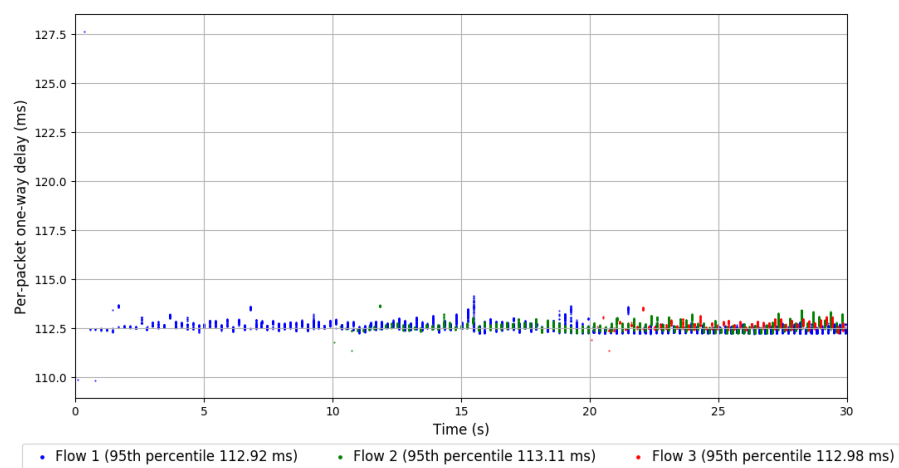
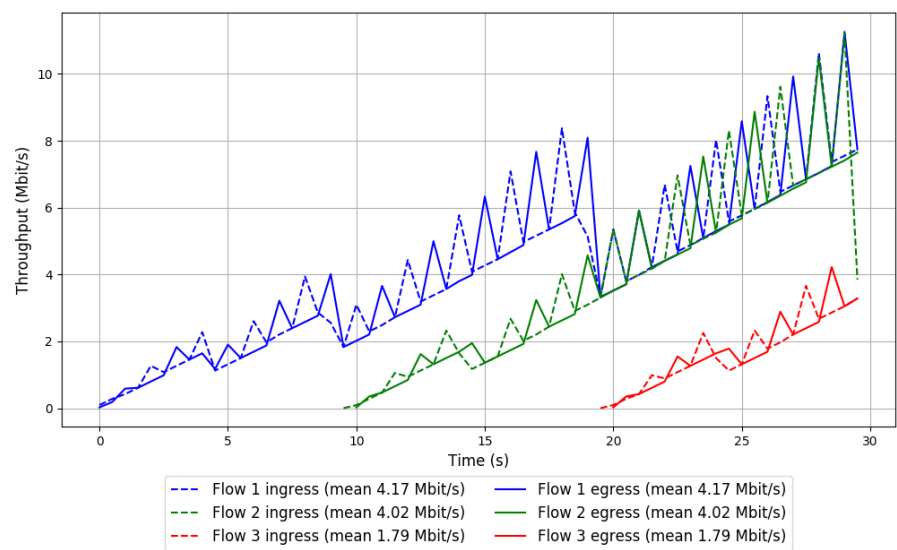


```
Run 7: Statistics of LEDBAT

Start at: 2017-09-08 01:34:31
End at: 2017-09-08 01:35:01

# Below is generated by plot.py at 2017-09-08 03:55:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.41 Mbit/s
95th percentile per-packet one-way delay: 113.021 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 112.917 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 113.106 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 112.983 ms
Loss rate: 0.00%
```

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-09-08 01:47:49

End at: 2017-09-08 01:48:19

Below is generated by plot.py at 2017-09-08 03:55:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 112.976 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 113.031 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.68 Mbit/s

95th percentile per-packet one-way delay: 112.858 ms

Loss rate: 0.00%

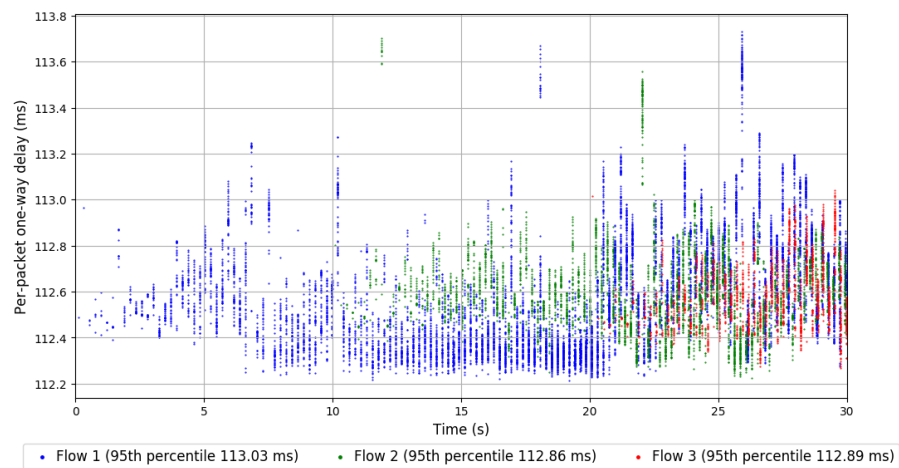
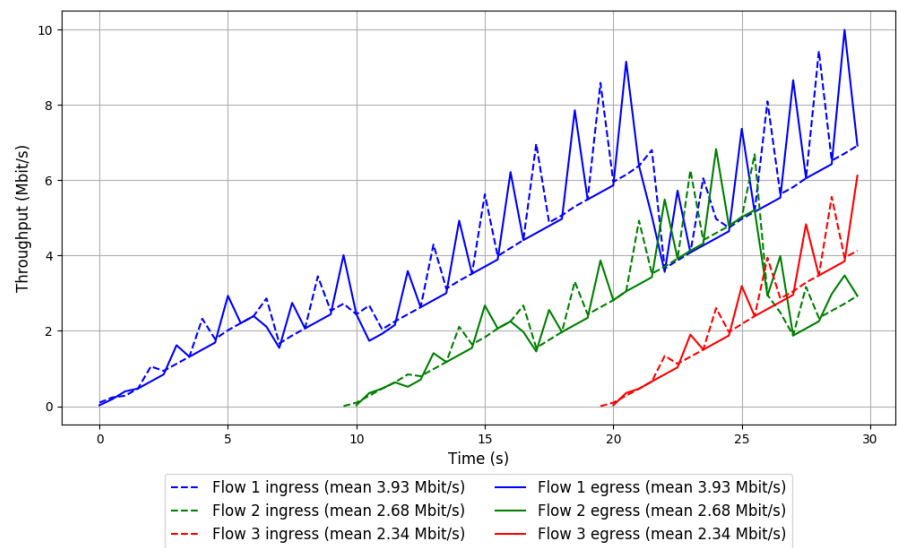
-- Flow 3:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 112.886 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link

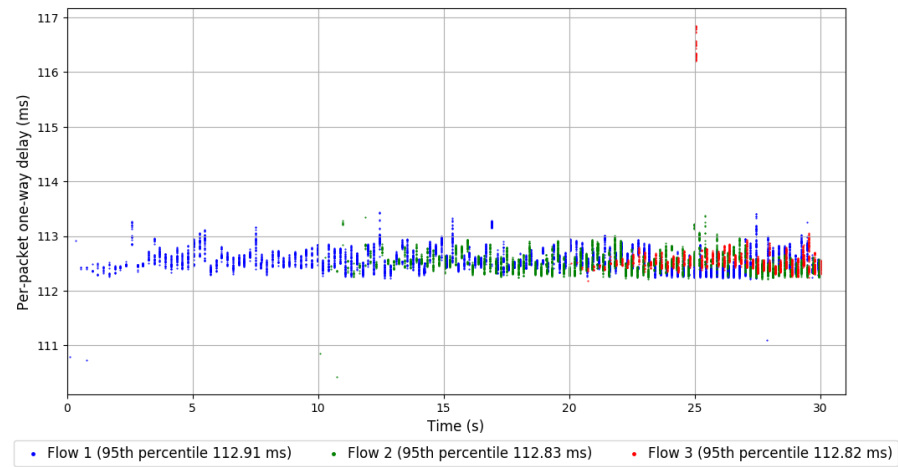
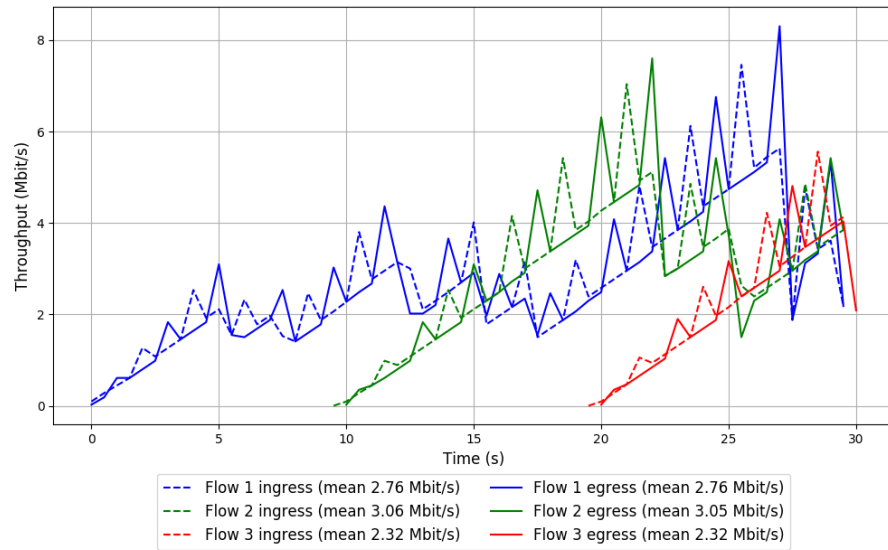


```
Run 9: Statistics of LEDBAT

Start at: 2017-09-08 02:01:00
End at: 2017-09-08 02:01:30

# Below is generated by plot.py at 2017-09-08 03:55:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.56 Mbit/s
95th percentile per-packet one-way delay: 112.871 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 2.76 Mbit/s
95th percentile per-packet one-way delay: 112.906 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 3.05 Mbit/s
95th percentile per-packet one-way delay: 112.831 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 112.820 ms
Loss rate: 0.00%
```


Run 9: Report of LEDBAT — Data Link

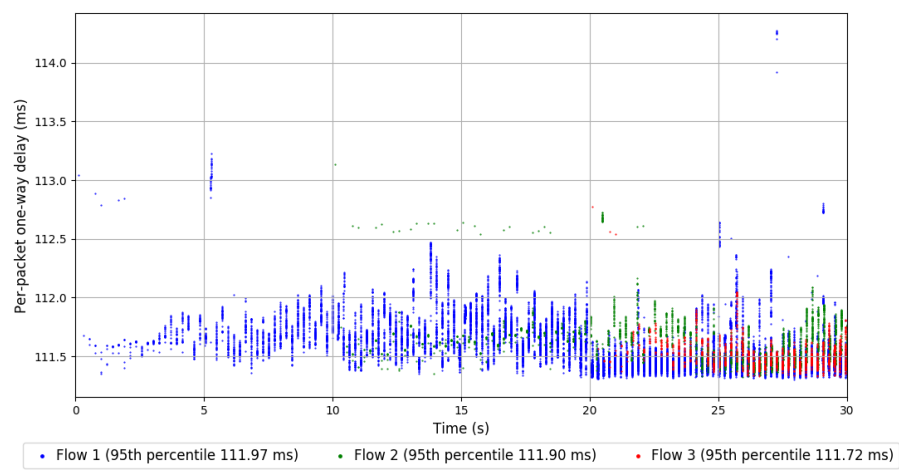
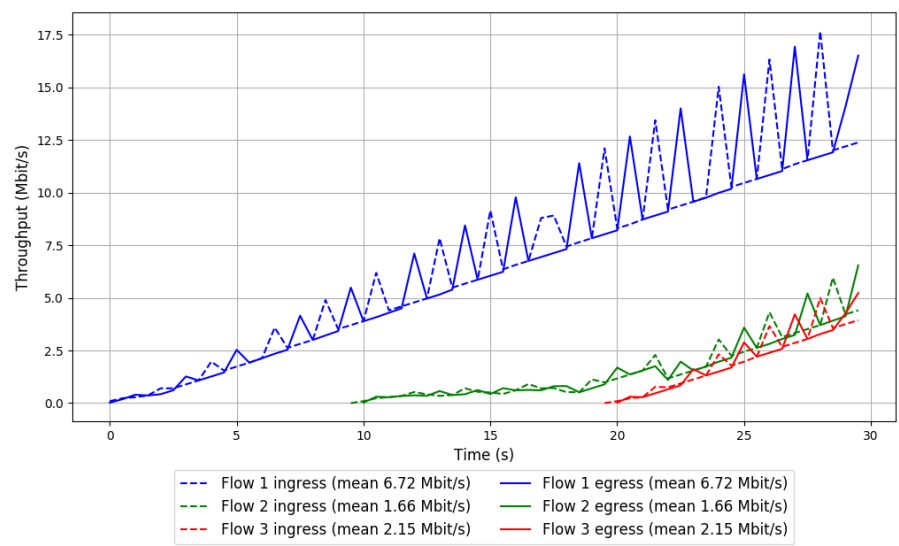


```
Run 10: Statistics of LEDBAT

Start at: 2017-09-08 02:14:23
End at: 2017-09-08 02:14:53

# Below is generated by plot.py at 2017-09-08 03:55:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.52 Mbit/s
95th percentile per-packet one-way delay: 111.945 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.72 Mbit/s
95th percentile per-packet one-way delay: 111.970 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 111.896 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 111.720 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

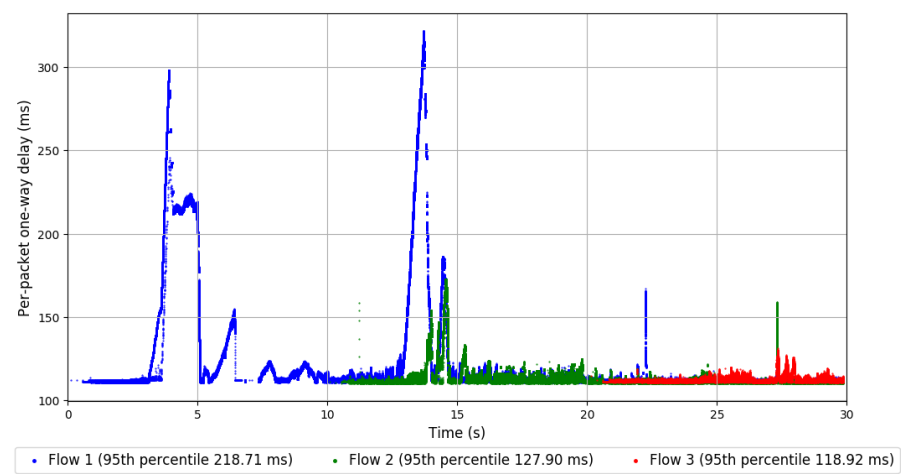
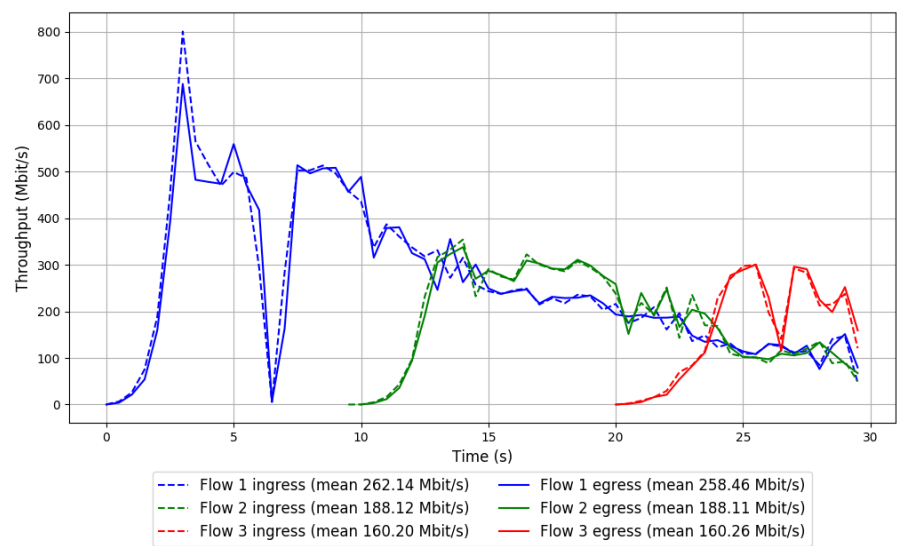


```
Run 1: Statistics of PCC

Start at: 2017-09-08 00:07:43
End at: 2017-09-08 00:08:13

# Below is generated by plot.py at 2017-09-08 03:56:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 435.91 Mbit/s
95th percentile per-packet one-way delay: 213.492 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 258.46 Mbit/s
95th percentile per-packet one-way delay: 218.707 ms
Loss rate: 1.40%
-- Flow 2:
Average throughput: 188.11 Mbit/s
95th percentile per-packet one-way delay: 127.898 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 160.26 Mbit/s
95th percentile per-packet one-way delay: 118.919 ms
Loss rate: 0.00%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-09-08 00:21:03

End at: 2017-09-08 00:21:33

Below is generated by plot.py at 2017-09-08 03:56:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 443.91 Mbit/s

95th percentile per-packet one-way delay: 125.887 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 281.58 Mbit/s

95th percentile per-packet one-way delay: 132.848 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 162.79 Mbit/s

95th percentile per-packet one-way delay: 116.121 ms

Loss rate: 0.00%

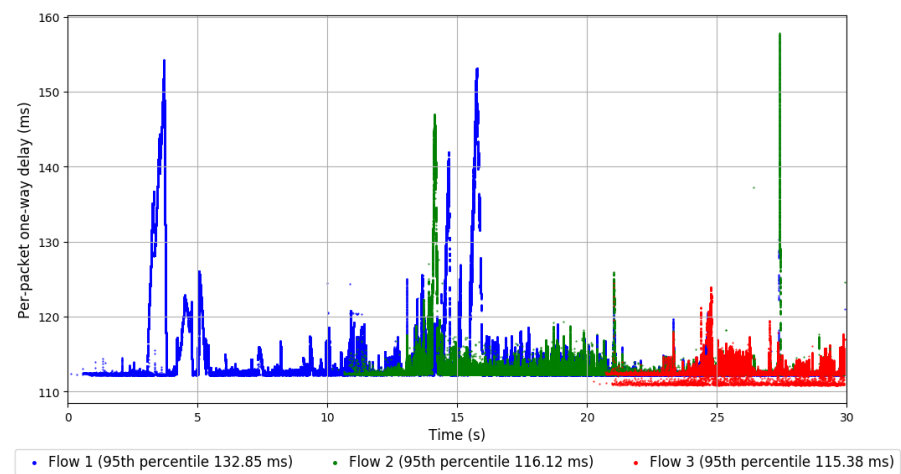
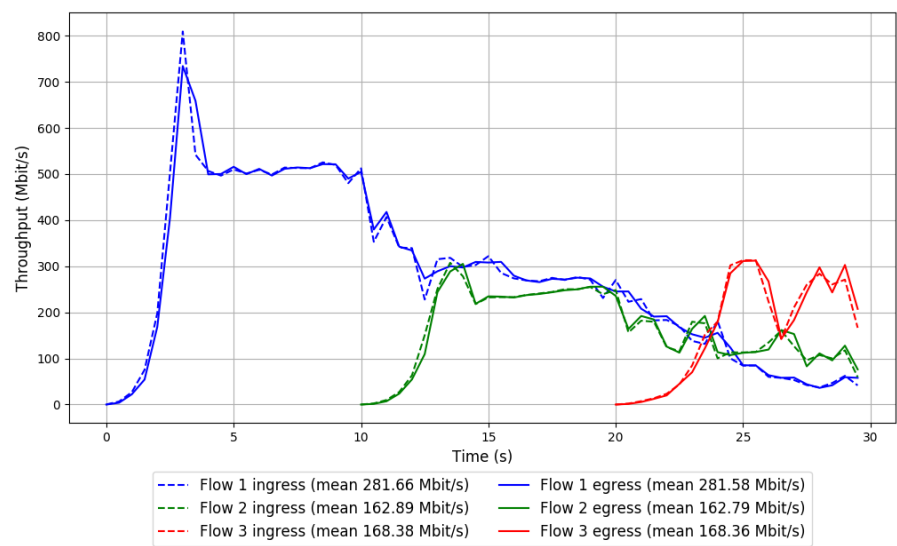
-- Flow 3:

Average throughput: 168.36 Mbit/s

95th percentile per-packet one-way delay: 115.379 ms

Loss rate: 0.04%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-09-08 00:34:17

End at: 2017-09-08 00:34:47

Below is generated by plot.py at 2017-09-08 03:58:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 436.53 Mbit/s

95th percentile per-packet one-way delay: 132.624 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 267.08 Mbit/s

95th percentile per-packet one-way delay: 143.490 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 170.45 Mbit/s

95th percentile per-packet one-way delay: 114.584 ms

Loss rate: 0.00%

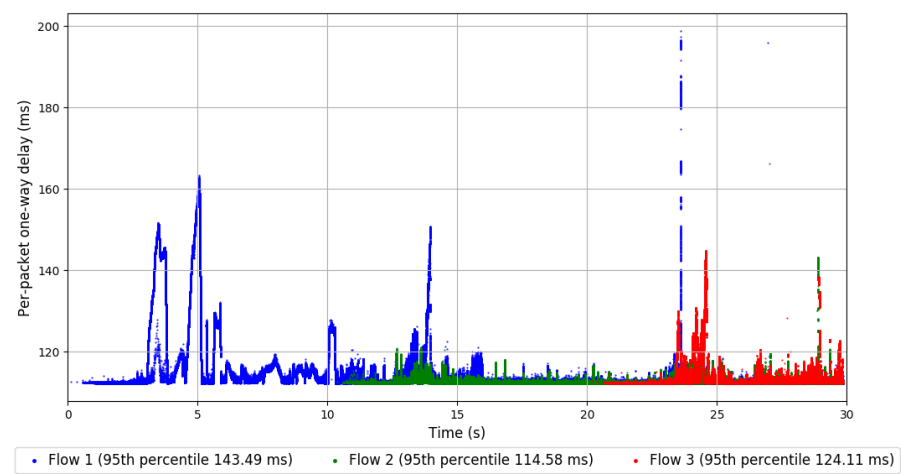
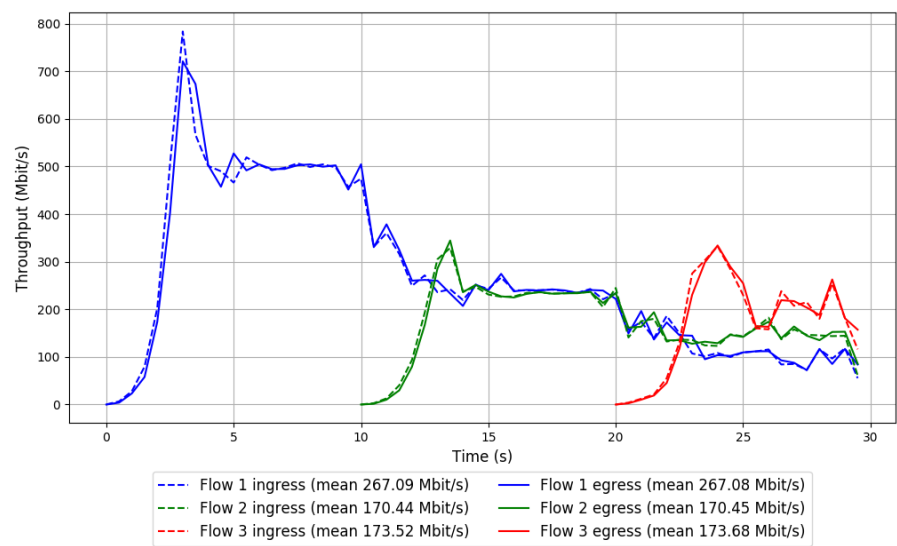
-- Flow 3:

Average throughput: 173.68 Mbit/s

95th percentile per-packet one-way delay: 124.105 ms

Loss rate: 0.00%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-09-08 00:47:28

End at: 2017-09-08 00:47:58

Below is generated by plot.py at 2017-09-08 03:58:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 494.43 Mbit/s

95th percentile per-packet one-way delay: 136.677 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 310.32 Mbit/s

95th percentile per-packet one-way delay: 154.804 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 213.43 Mbit/s

95th percentile per-packet one-way delay: 125.936 ms

Loss rate: 0.00%

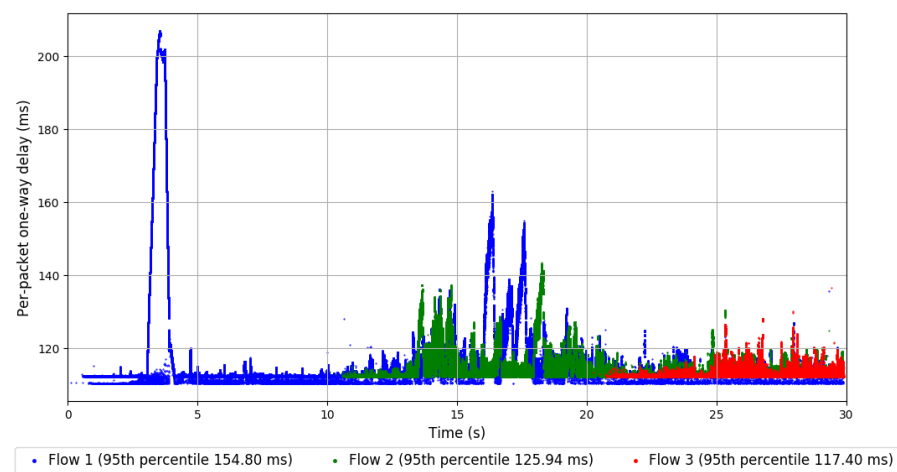
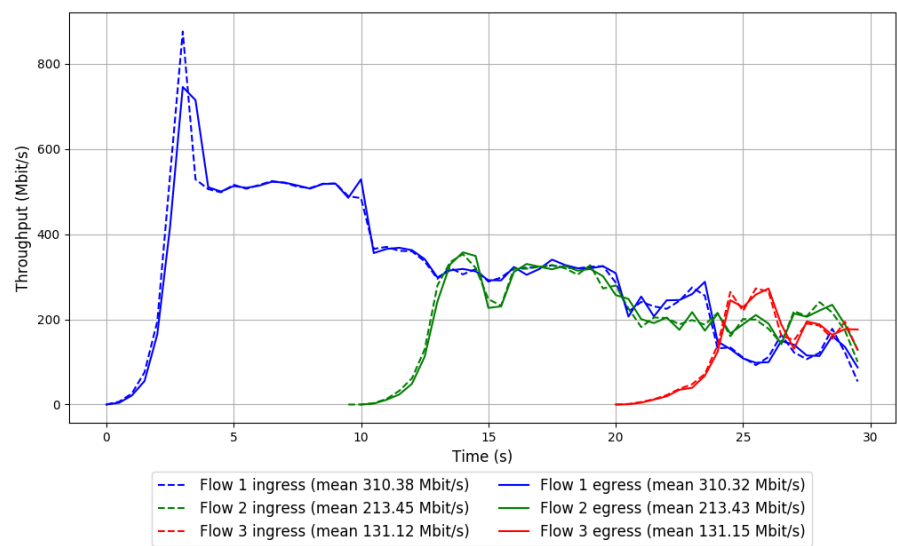
-- Flow 3:

Average throughput: 131.15 Mbit/s

95th percentile per-packet one-way delay: 117.398 ms

Loss rate: 0.00%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-09-08 01:00:36

End at: 2017-09-08 01:01:06

Below is generated by plot.py at 2017-09-08 03:59:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 472.82 Mbit/s

95th percentile per-packet one-way delay: 129.277 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 289.52 Mbit/s

95th percentile per-packet one-way delay: 135.036 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 220.08 Mbit/s

95th percentile per-packet one-way delay: 125.488 ms

Loss rate: 0.00%

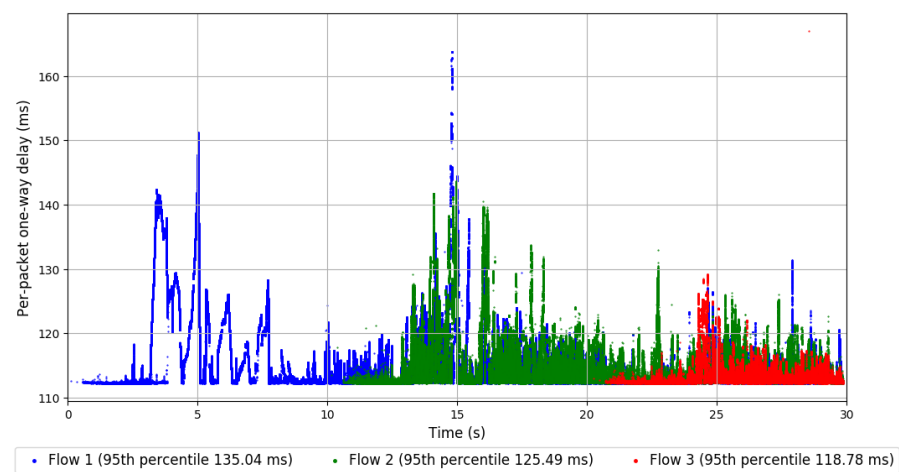
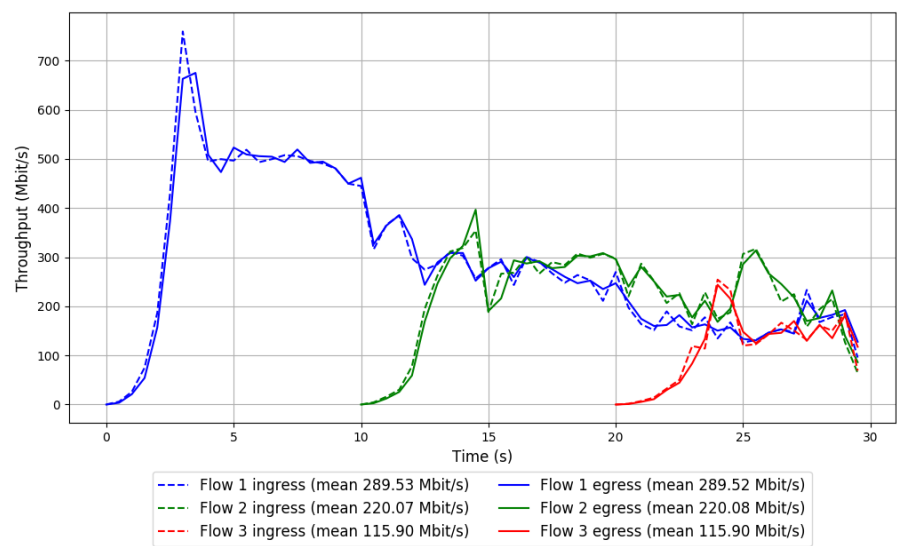
-- Flow 3:

Average throughput: 115.90 Mbit/s

95th percentile per-packet one-way delay: 118.777 ms

Loss rate: 0.01%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-09-08 01:13:51

End at: 2017-09-08 01:14:21

Below is generated by plot.py at 2017-09-08 03:59:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 426.73 Mbit/s

95th percentile per-packet one-way delay: 159.086 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 274.29 Mbit/s

95th percentile per-packet one-way delay: 205.405 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 168.77 Mbit/s

95th percentile per-packet one-way delay: 115.740 ms

Loss rate: 0.00%

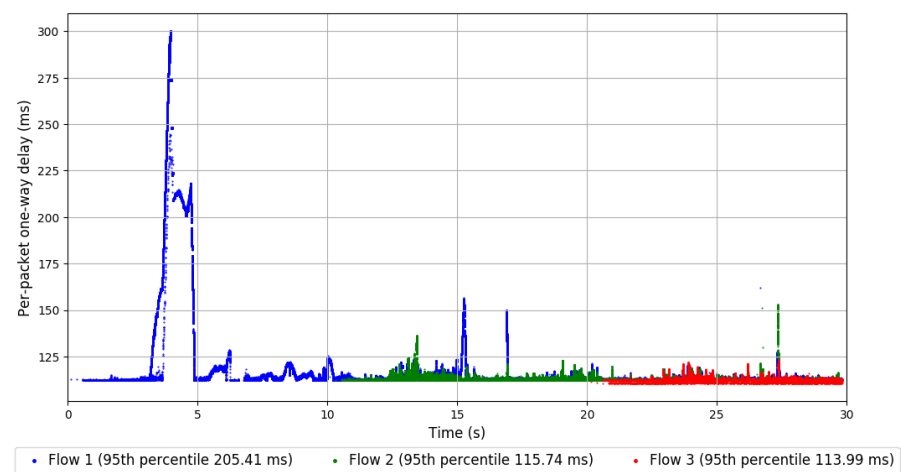
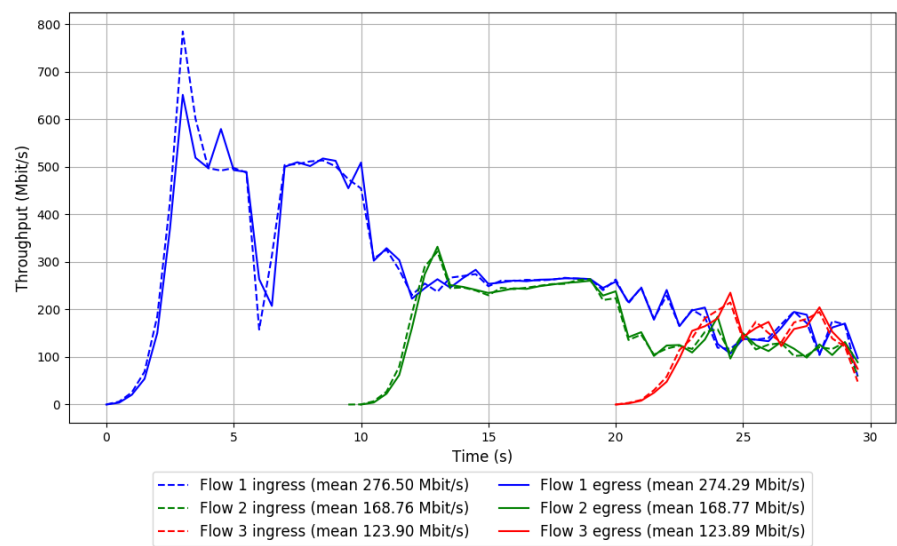
-- Flow 3:

Average throughput: 123.89 Mbit/s

95th percentile per-packet one-way delay: 113.991 ms

Loss rate: 0.00%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-09-08 01:27:14

End at: 2017-09-08 01:27:44

Below is generated by plot.py at 2017-09-08 04:01:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 447.58 Mbit/s

95th percentile per-packet one-way delay: 209.266 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 270.18 Mbit/s

95th percentile per-packet one-way delay: 209.941 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 178.57 Mbit/s

95th percentile per-packet one-way delay: 115.047 ms

Loss rate: 0.00%

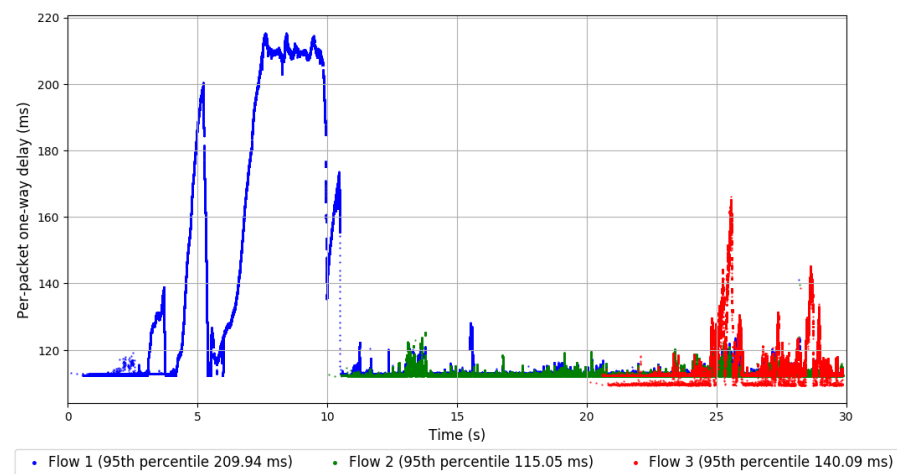
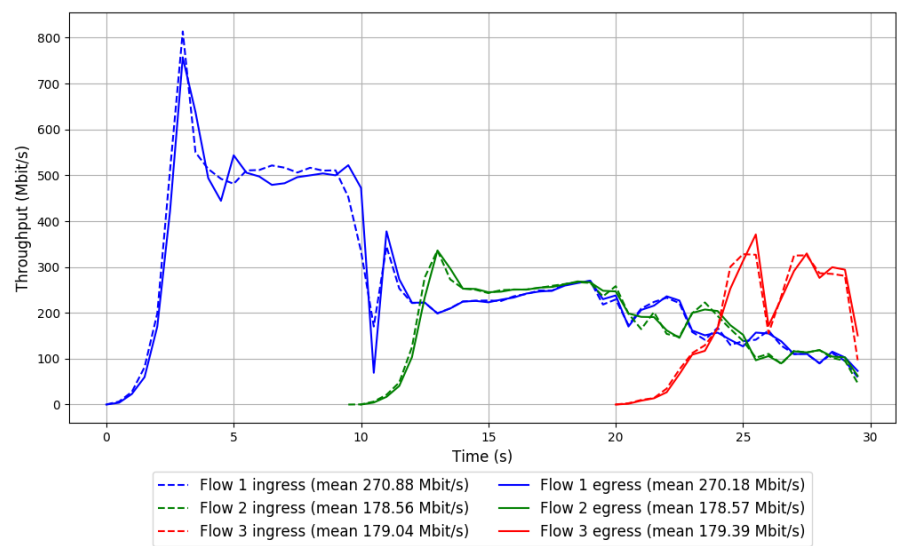
-- Flow 3:

Average throughput: 179.39 Mbit/s

95th percentile per-packet one-way delay: 140.086 ms

Loss rate: 0.00%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-09-08 01:40:39

End at: 2017-09-08 01:41:09

Below is generated by plot.py at 2017-09-08 04:01:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 485.08 Mbit/s

95th percentile per-packet one-way delay: 134.826 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 275.16 Mbit/s

95th percentile per-packet one-way delay: 135.199 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 229.51 Mbit/s

95th percentile per-packet one-way delay: 135.577 ms

Loss rate: 0.00%

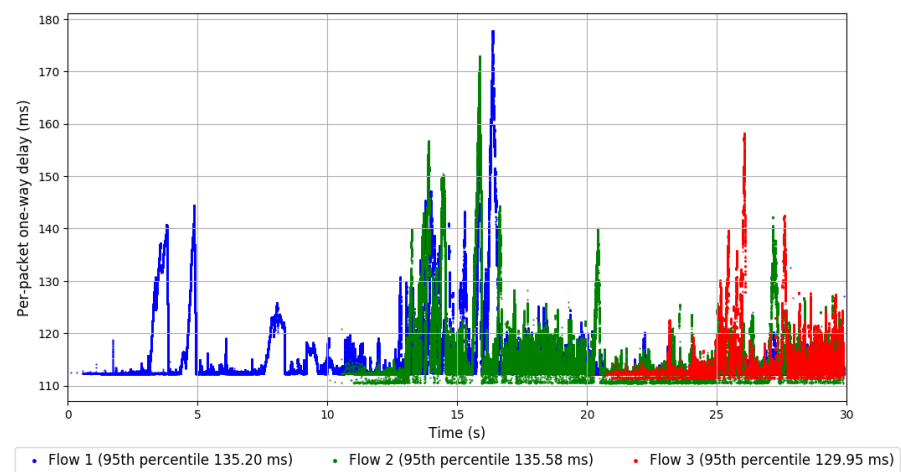
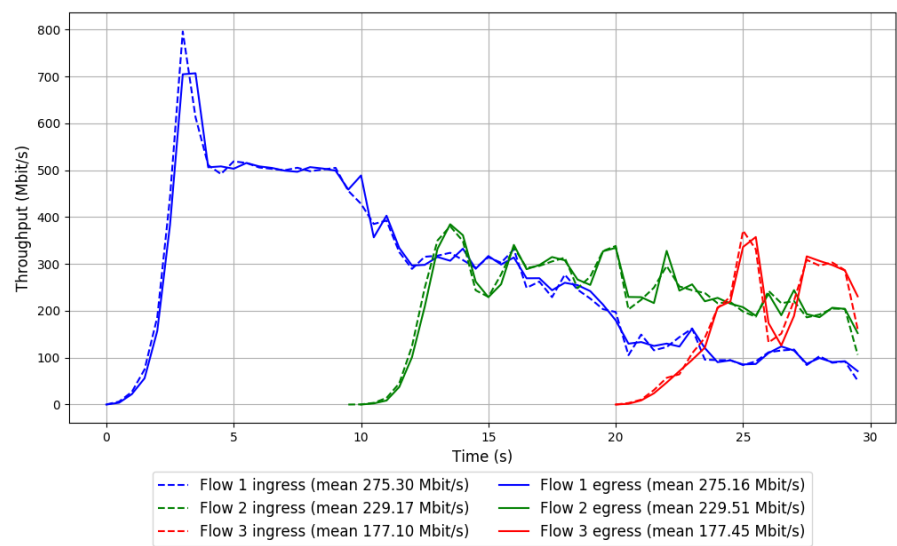
-- Flow 3:

Average throughput: 177.45 Mbit/s

95th percentile per-packet one-way delay: 129.946 ms

Loss rate: 0.00%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-09-08 01:53:55

End at: 2017-09-08 01:54:25

Below is generated by plot.py at 2017-09-08 04:02:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 447.57 Mbit/s

95th percentile per-packet one-way delay: 130.411 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 285.40 Mbit/s

95th percentile per-packet one-way delay: 136.402 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 155.04 Mbit/s

95th percentile per-packet one-way delay: 117.529 ms

Loss rate: 0.01%

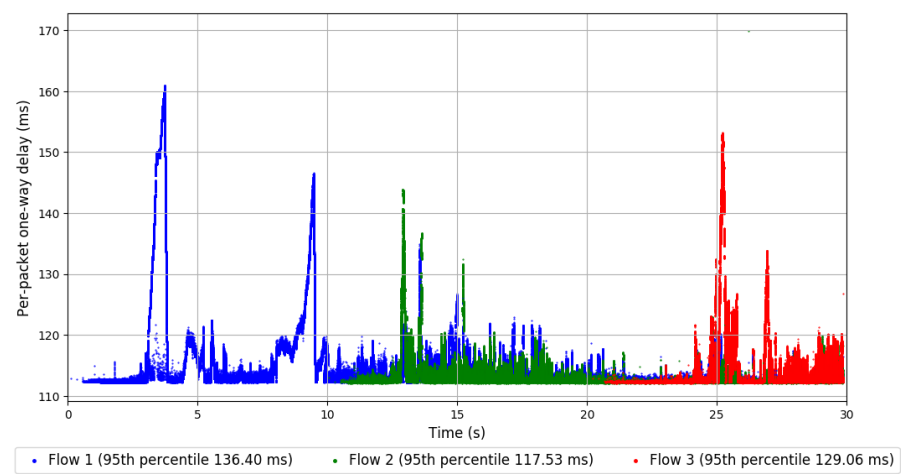
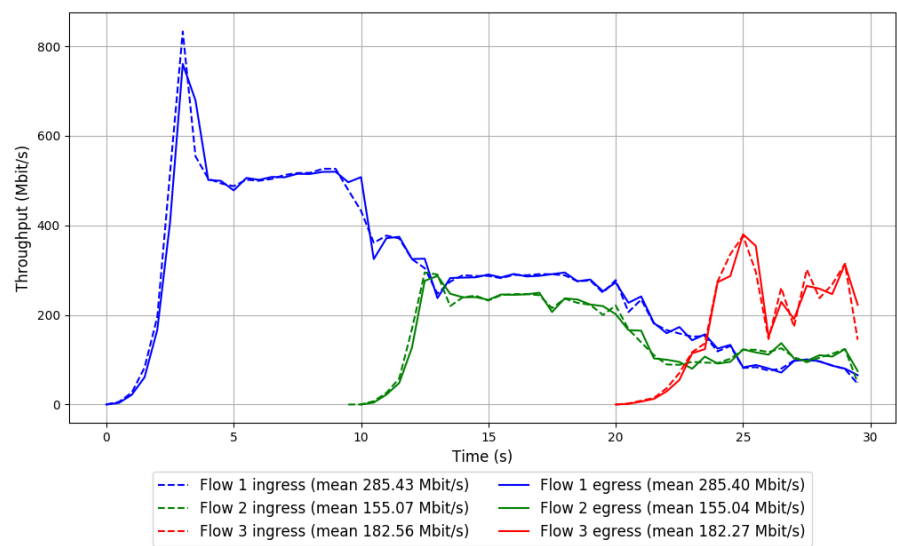
-- Flow 3:

Average throughput: 182.27 Mbit/s

95th percentile per-packet one-way delay: 129.065 ms

Loss rate: 0.04%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-09-08 02:07:05

End at: 2017-09-08 02:07:35

Below is generated by plot.py at 2017-09-08 04:02:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 416.92 Mbit/s

95th percentile per-packet one-way delay: 213.074 ms

Loss rate: 1.77%

-- Flow 1:

Average throughput: 269.75 Mbit/s

95th percentile per-packet one-way delay: 215.735 ms

Loss rate: 2.70%

-- Flow 2:

Average throughput: 150.95 Mbit/s

95th percentile per-packet one-way delay: 116.550 ms

Loss rate: 0.01%

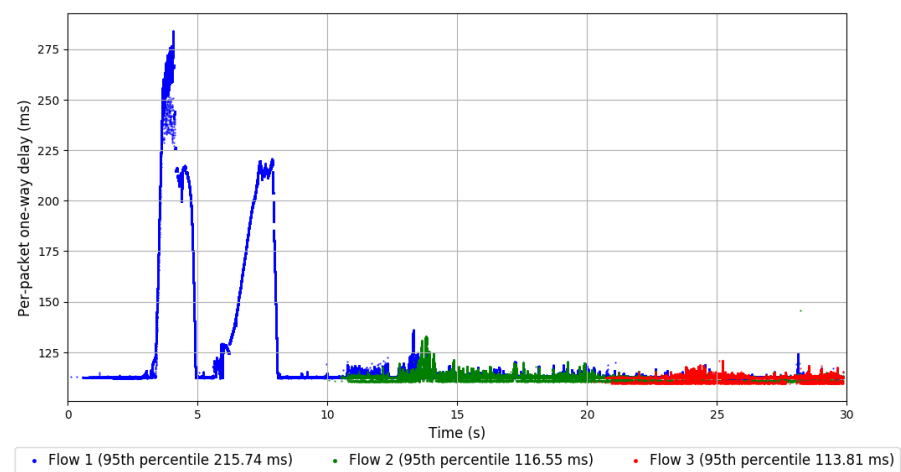
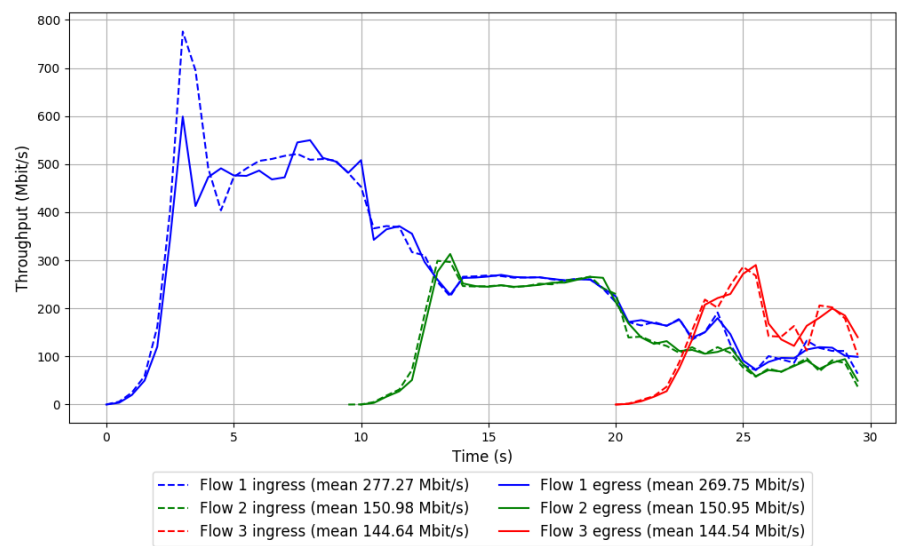
-- Flow 3:

Average throughput: 144.54 Mbit/s

95th percentile per-packet one-way delay: 113.813 ms

Loss rate: 0.03%

Run 10: Report of PCC — Data Link

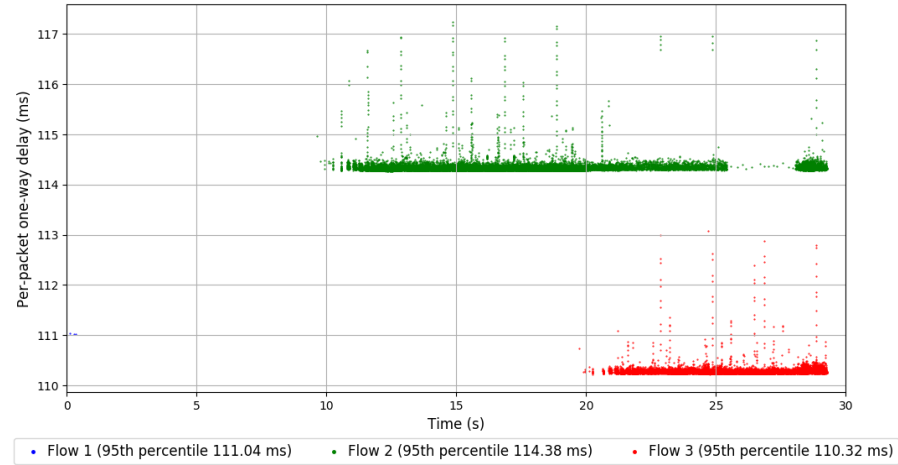
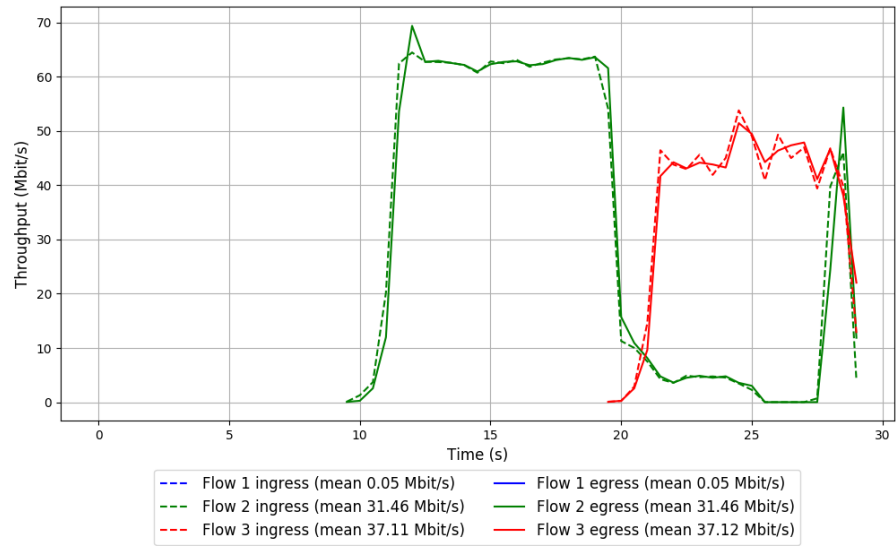


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-09-08 00:06:53
End at: 2017-09-08 00:07:23

# Below is generated by plot.py at 2017-09-08 04:02:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.33 Mbit/s
95th percentile per-packet one-way delay: 114.361 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 111.044 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.46 Mbit/s
95th percentile per-packet one-way delay: 114.380 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 37.12 Mbit/s
95th percentile per-packet one-way delay: 110.322 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-09-08 00:20:12

End at: 2017-09-08 00:20:42

Below is generated by plot.py at 2017-09-08 04:02:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.86 Mbit/s

95th percentile per-packet one-way delay: 114.767 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.786 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 28.89 Mbit/s

95th percentile per-packet one-way delay: 114.788 ms

Loss rate: 0.00%

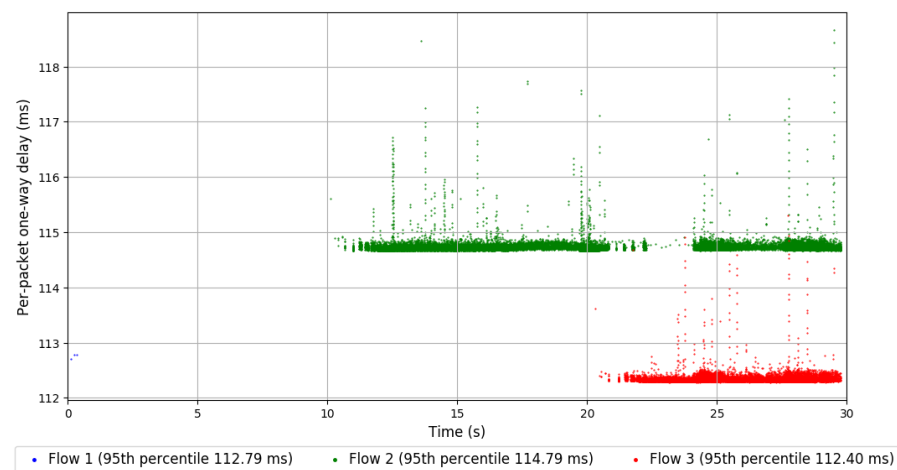
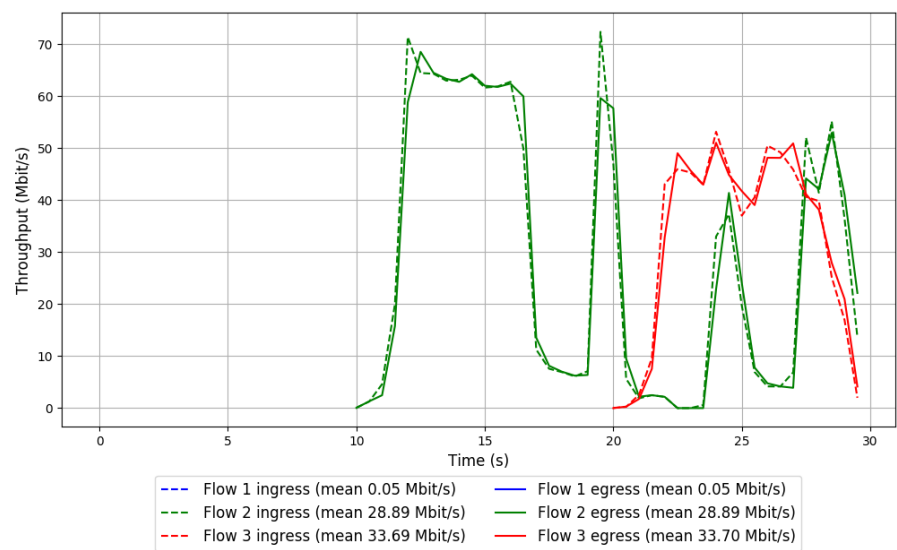
-- Flow 3:

Average throughput: 33.70 Mbit/s

95th percentile per-packet one-way delay: 112.404 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-09-08 00:33:27

End at: 2017-09-08 00:33:57

Below is generated by plot.py at 2017-09-08 04:02:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 30.85 Mbit/s

95th percentile per-packet one-way delay: 112.732 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 111.030 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 30.26 Mbit/s

95th percentile per-packet one-way delay: 112.746 ms

Loss rate: 0.00%

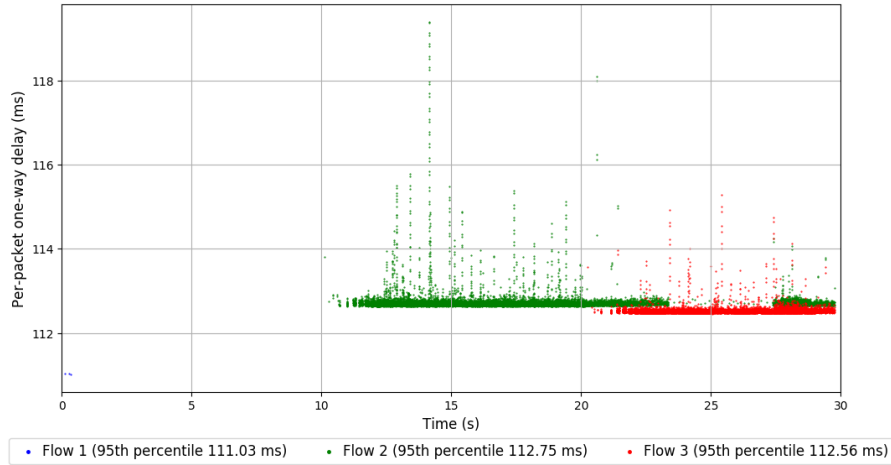
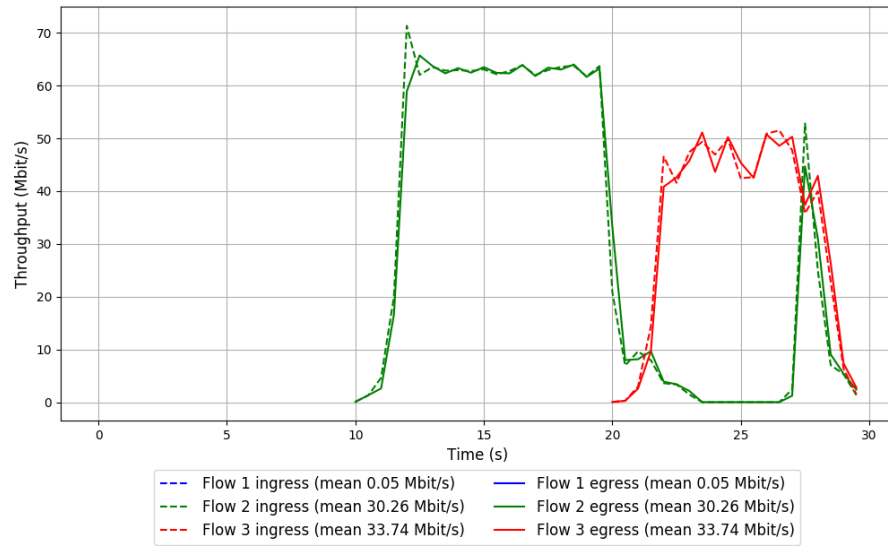
-- Flow 3:

Average throughput: 33.74 Mbit/s

95th percentile per-packet one-way delay: 112.561 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-09-08 00:46:38

End at: 2017-09-08 00:47:08

Below is generated by plot.py at 2017-09-08 04:02:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 32.75 Mbit/s

95th percentile per-packet one-way delay: 114.386 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.473 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.11 Mbit/s

95th percentile per-packet one-way delay: 114.404 ms

Loss rate: 0.00%

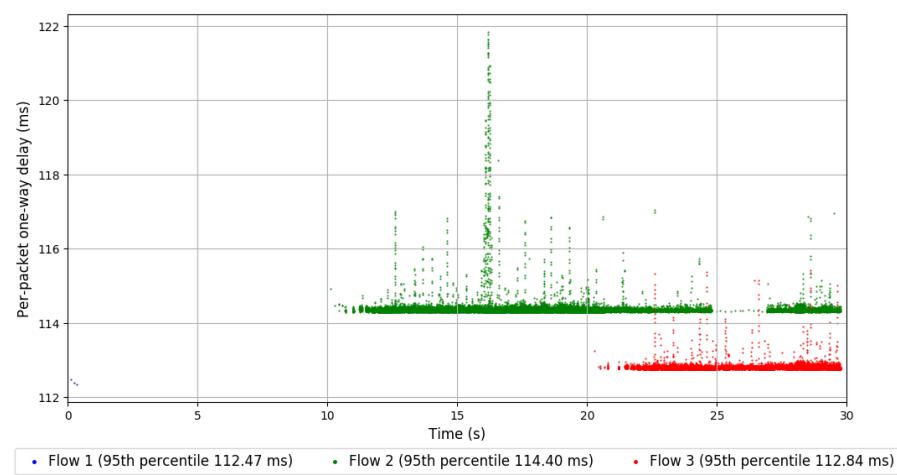
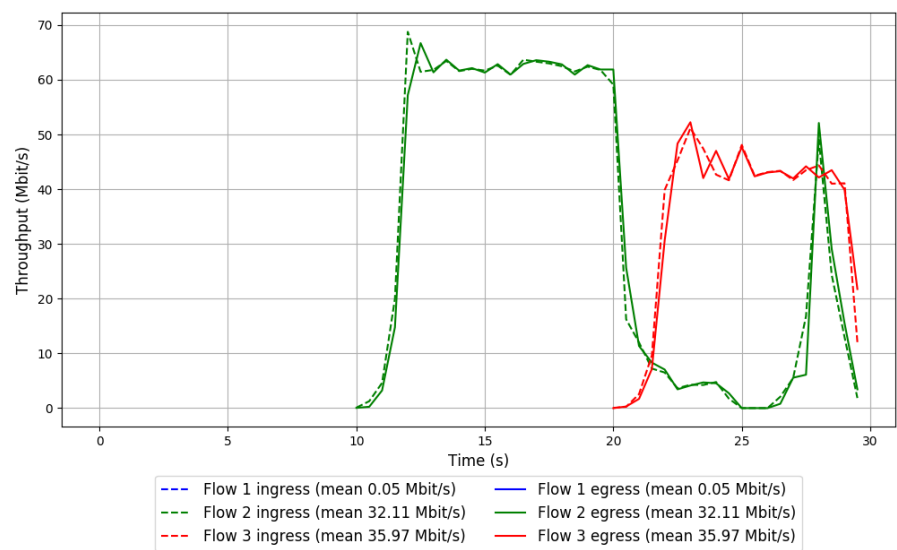
-- Flow 3:

Average throughput: 35.97 Mbit/s

95th percentile per-packet one-way delay: 112.838 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-09-08 00:59:45

End at: 2017-09-08 01:00:15

Below is generated by plot.py at 2017-09-08 04:03:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 28.33 Mbit/s

95th percentile per-packet one-way delay: 112.843 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.723 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 25.30 Mbit/s

95th percentile per-packet one-way delay: 112.728 ms

Loss rate: 0.00%

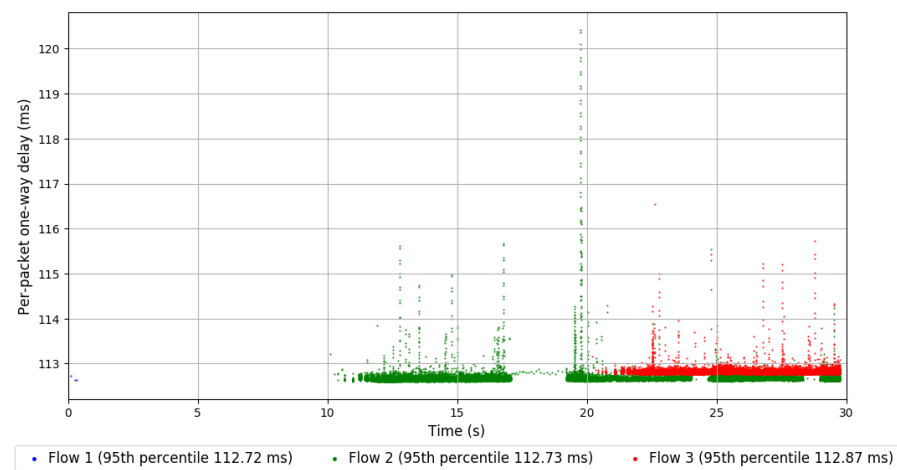
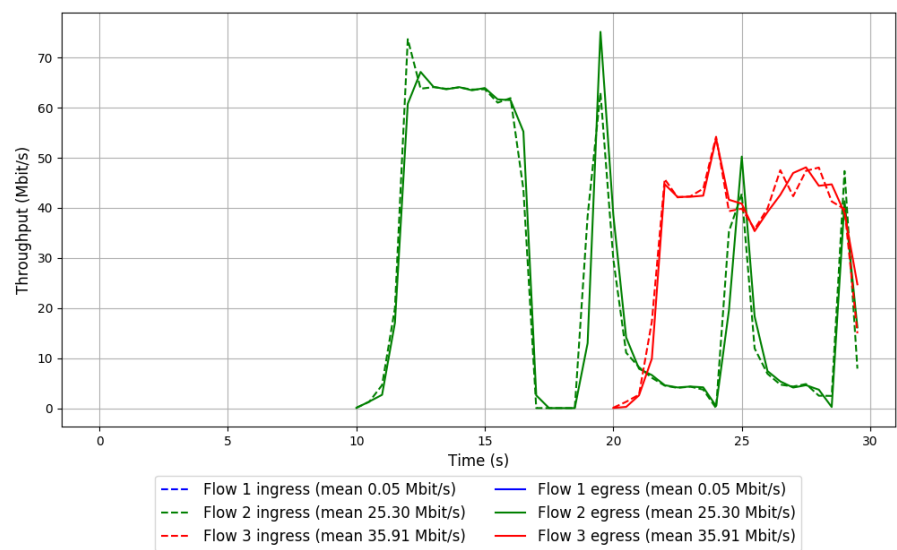
-- Flow 3:

Average throughput: 35.91 Mbit/s

95th percentile per-packet one-way delay: 112.870 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-09-08 01:13:00

End at: 2017-09-08 01:13:30

Below is generated by plot.py at 2017-09-08 04:03:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 25.68 Mbit/s

95th percentile per-packet one-way delay: 112.582 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.774 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.98 Mbit/s

95th percentile per-packet one-way delay: 112.608 ms

Loss rate: 0.01%

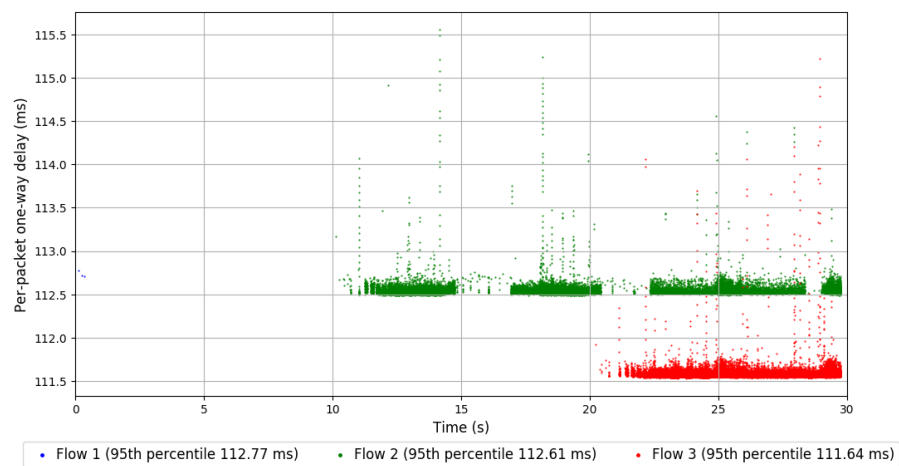
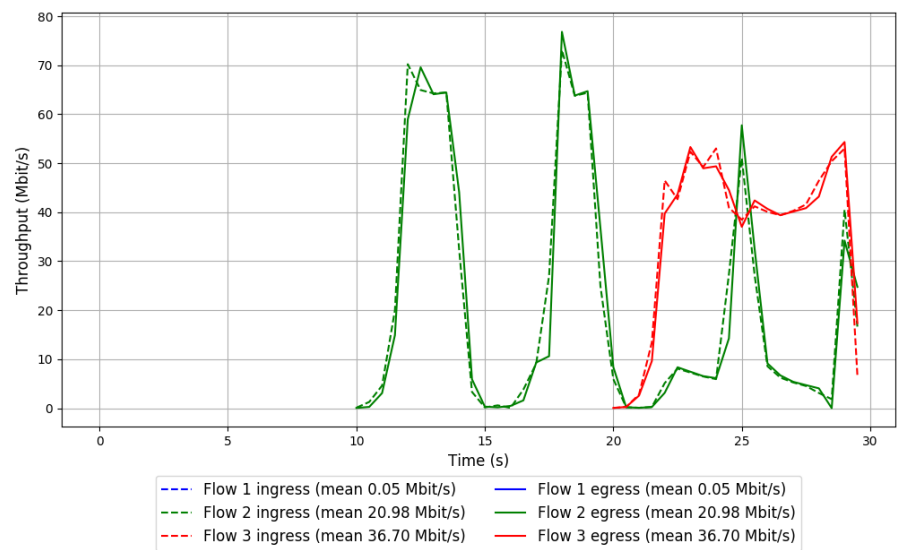
-- Flow 3:

Average throughput: 36.70 Mbit/s

95th percentile per-packet one-way delay: 111.641 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-09-08 01:26:23

End at: 2017-09-08 01:26:53

Below is generated by plot.py at 2017-09-08 04:03:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 22.21 Mbit/s

95th percentile per-packet one-way delay: 112.316 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.781 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 19.83 Mbit/s

95th percentile per-packet one-way delay: 111.289 ms

Loss rate: 0.00%

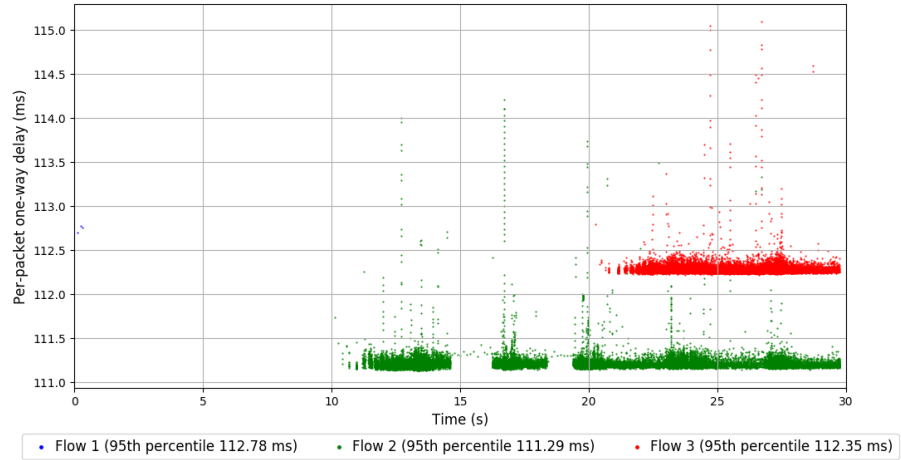
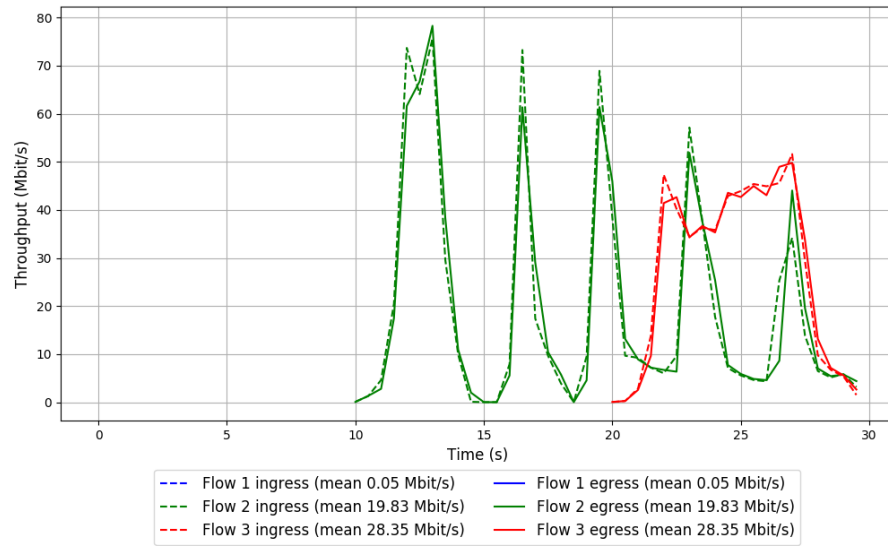
-- Flow 3:

Average throughput: 28.35 Mbit/s

95th percentile per-packet one-way delay: 112.348 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-09-08 01:39:49

End at: 2017-09-08 01:40:19

Below is generated by plot.py at 2017-09-08 04:03:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 24.28 Mbit/s

95th percentile per-packet one-way delay: 112.307 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.699 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.83 Mbit/s

95th percentile per-packet one-way delay: 110.748 ms

Loss rate: 0.00%

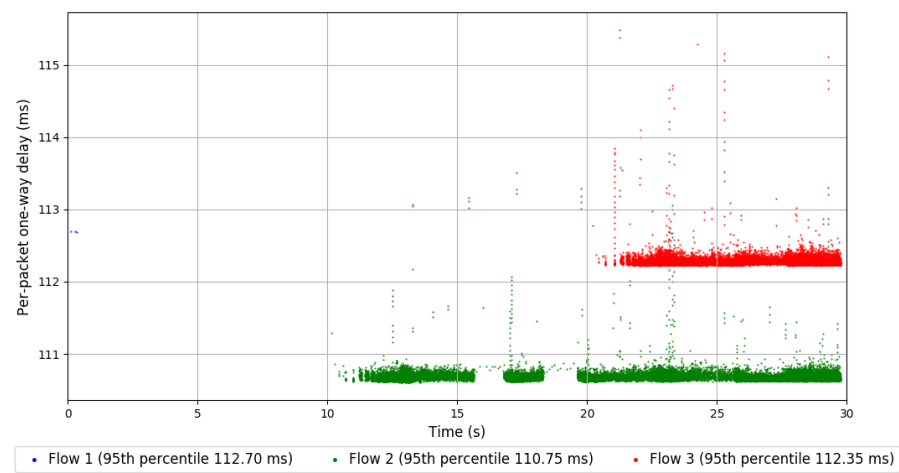
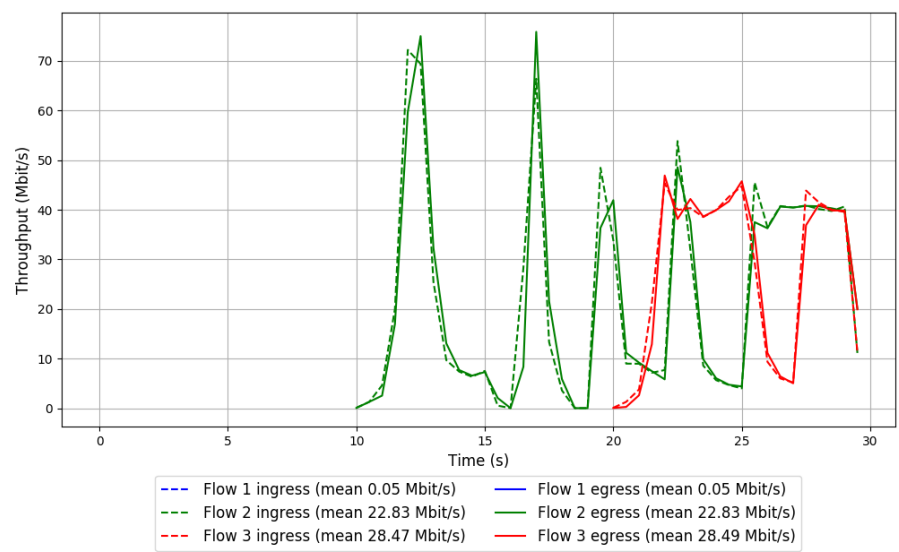
-- Flow 3:

Average throughput: 28.49 Mbit/s

95th percentile per-packet one-way delay: 112.351 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-09-08 01:53:05

End at: 2017-09-08 01:53:35

Below is generated by plot.py at 2017-09-08 04:03:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 24.12 Mbit/s

95th percentile per-packet one-way delay: 112.164 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 111.673 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 19.98 Mbit/s

95th percentile per-packet one-way delay: 109.744 ms

Loss rate: 0.00%

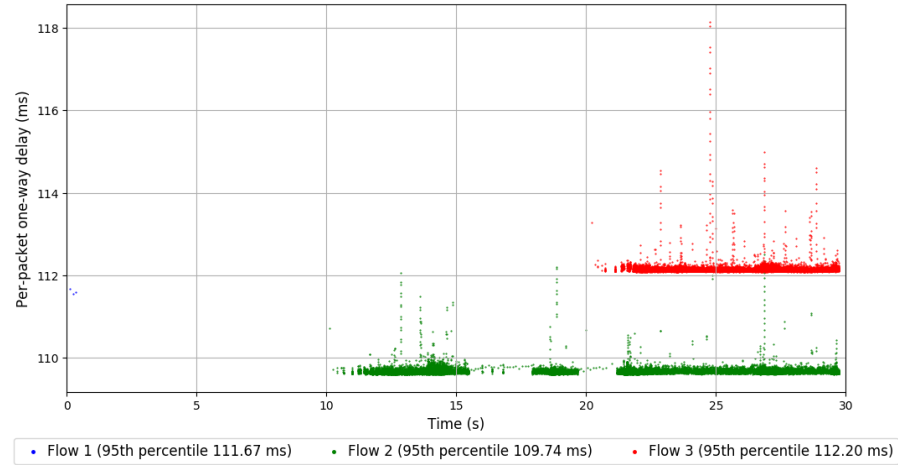
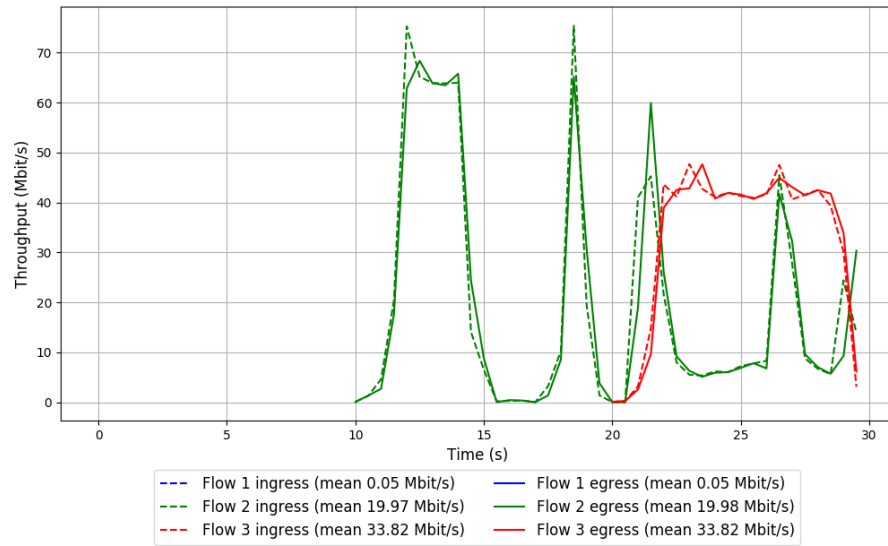
-- Flow 3:

Average throughput: 33.82 Mbit/s

95th percentile per-packet one-way delay: 112.198 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-09-08 02:06:15

End at: 2017-09-08 02:06:45

Below is generated by plot.py at 2017-09-08 04:03:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.95 Mbit/s

95th percentile per-packet one-way delay: 112.324 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 110.619 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.84 Mbit/s

95th percentile per-packet one-way delay: 111.601 ms

Loss rate: 0.00%

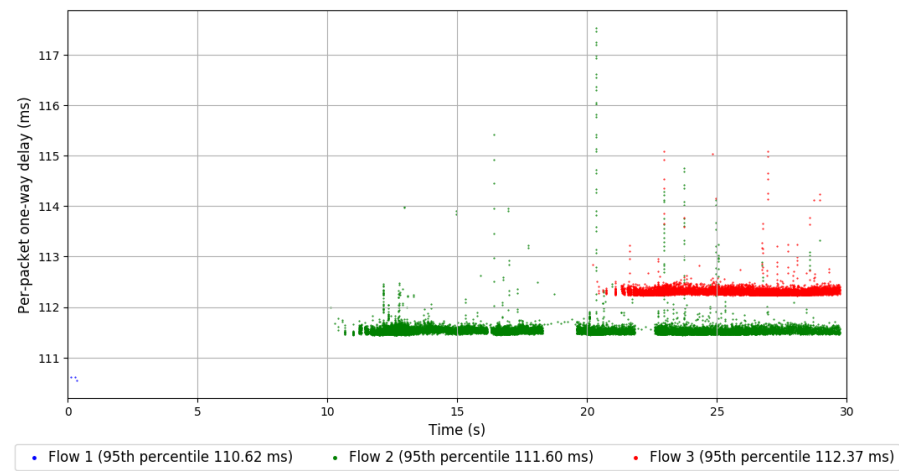
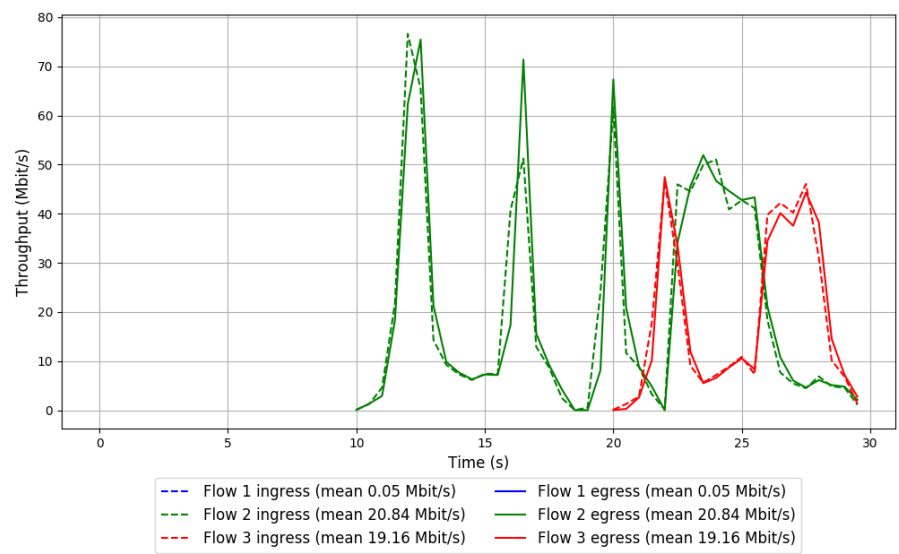
-- Flow 3:

Average throughput: 19.16 Mbit/s

95th percentile per-packet one-way delay: 112.374 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

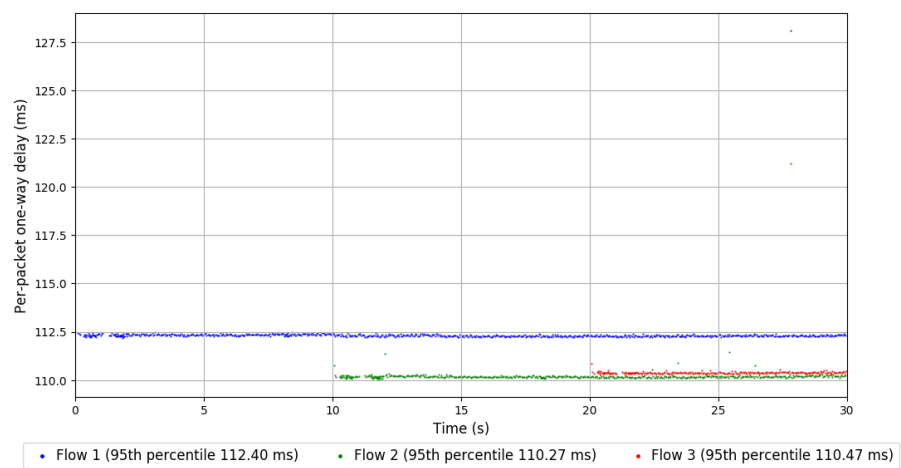
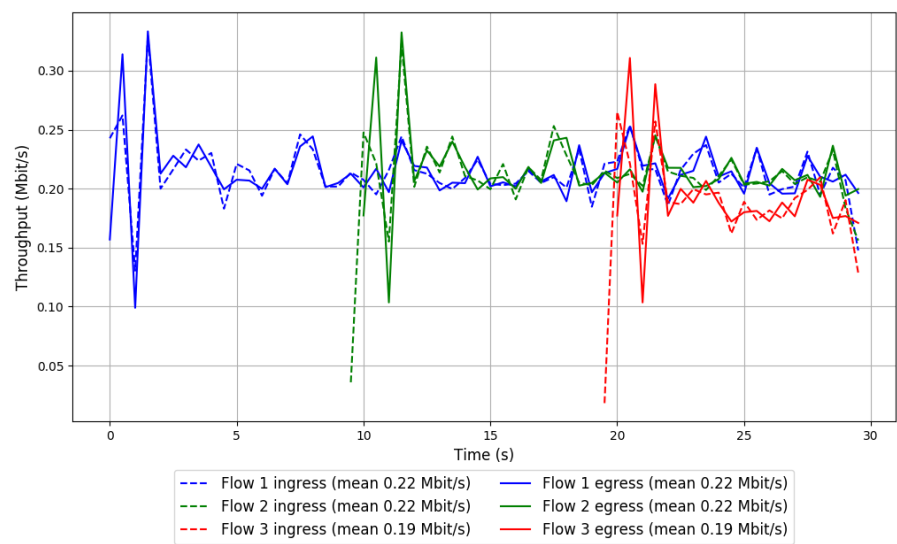


```
Run 1: Statistics of SCReAM

Start at: 2017-09-08 00:13:18
End at: 2017-09-08 00:13:48

# Below is generated by plot.py at 2017-09-08 04:03:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 112.385 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.403 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.268 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 110.471 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

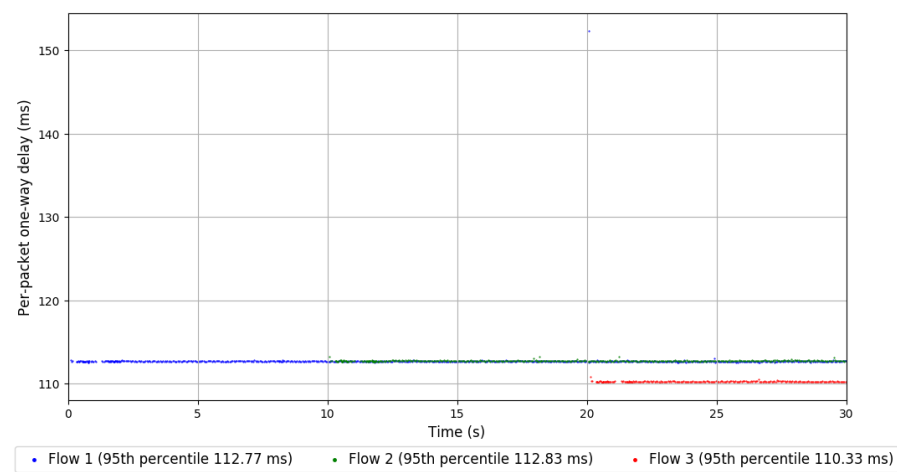
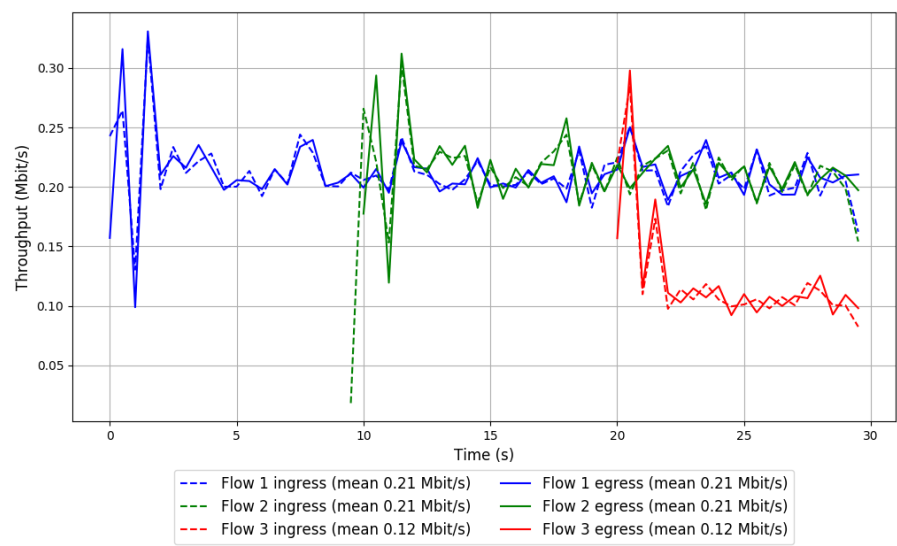


```
Run 2: Statistics of SCReAM

Start at: 2017-09-08 00:26:29
End at: 2017-09-08 00:26:59

# Below is generated by plot.py at 2017-09-08 04:03:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 112.792 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.769 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.827 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 110.334 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-09-08 00:39:39

End at: 2017-09-08 00:40:09

Below is generated by plot.py at 2017-09-08 04:03:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 112.417 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.441 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 112.354 ms

Loss rate: 0.00%

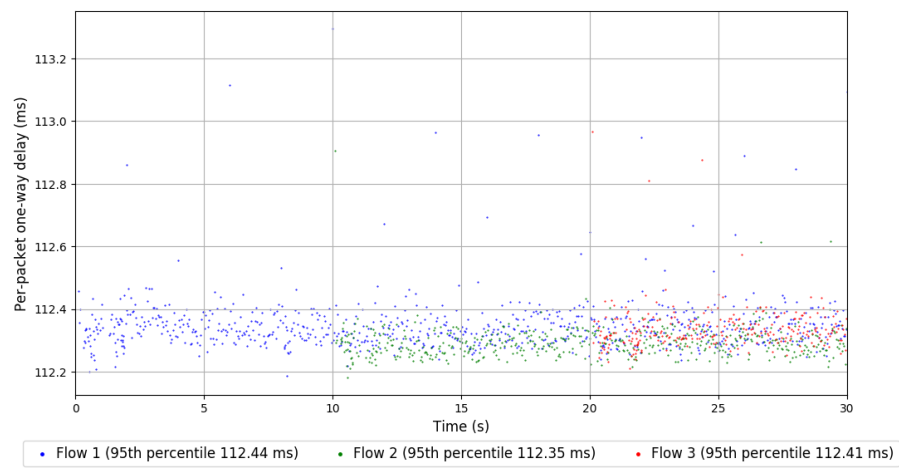
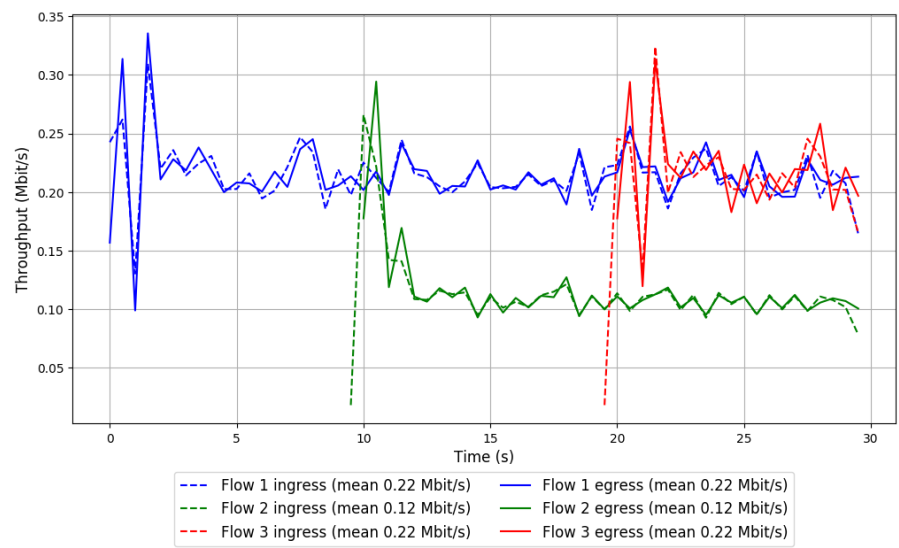
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.412 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

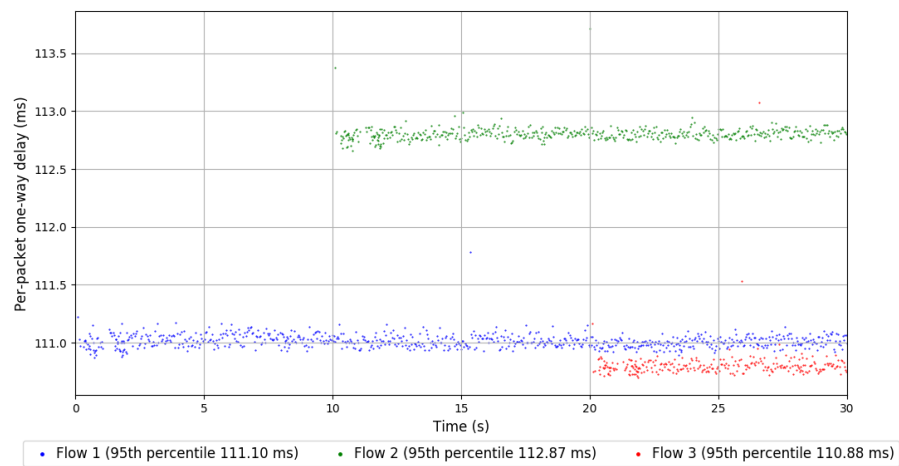
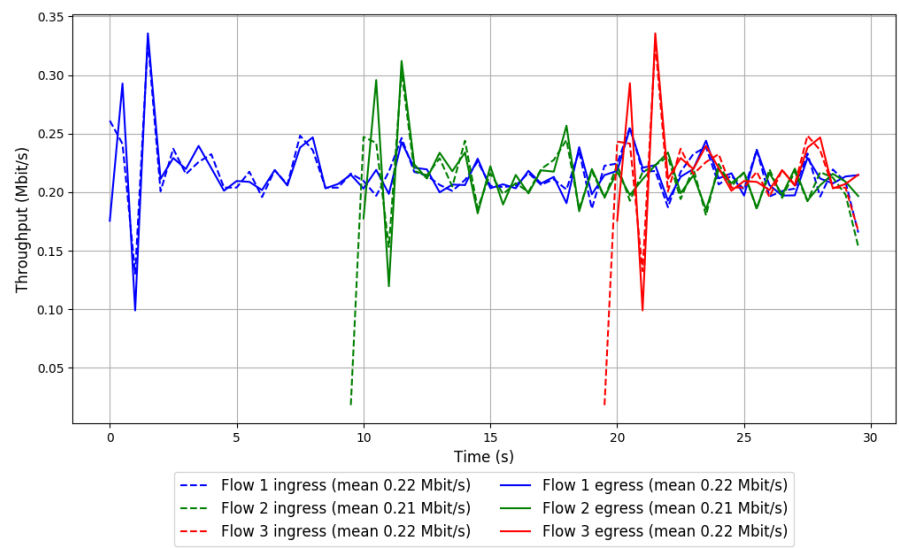


```
Run 4: Statistics of SCReAM

Start at: 2017-09-08 00:52:49
End at: 2017-09-08 00:53:19

# Below is generated by plot.py at 2017-09-08 04:03:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.844 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.103 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.868 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.879 ms
Loss rate: 0.00%
```

Run 4: Report of SCRaM — Data Link



Run 5: Statistics of SReAM

Start at: 2017-09-08 01:06:06

End at: 2017-09-08 01:06:36

Below is generated by plot.py at 2017-09-08 04:03:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.625 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 108.955 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.658 ms

Loss rate: 0.00%

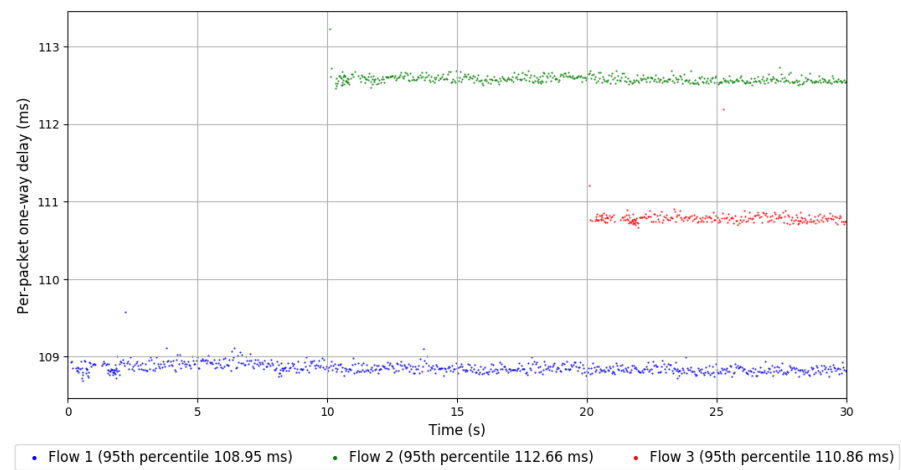
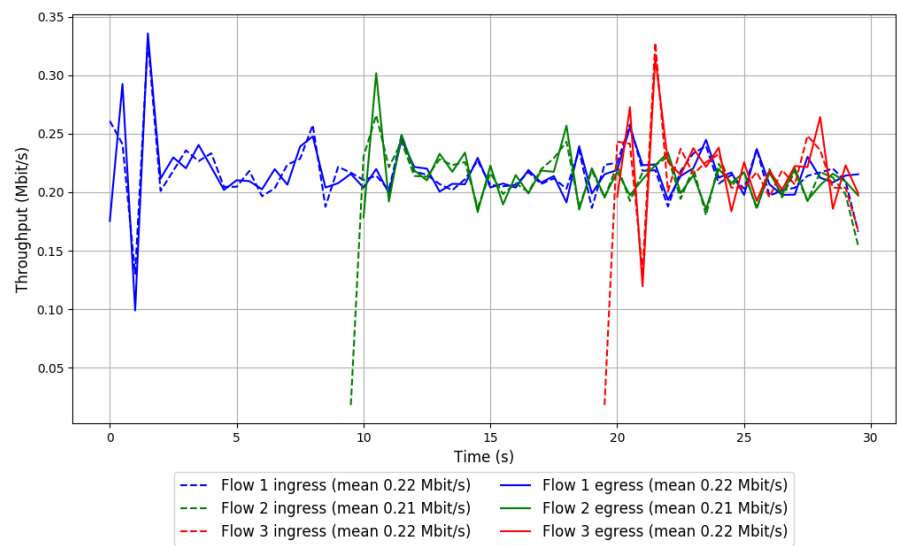
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.862 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-09-08 01:19:27

End at: 2017-09-08 01:19:57

Below is generated by plot.py at 2017-09-08 04:03:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 111.630 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.642 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 111.666 ms

Loss rate: 0.00%

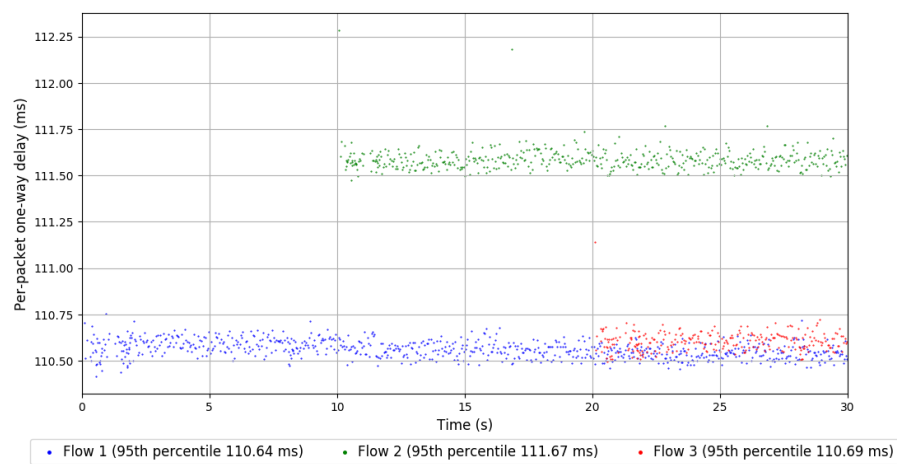
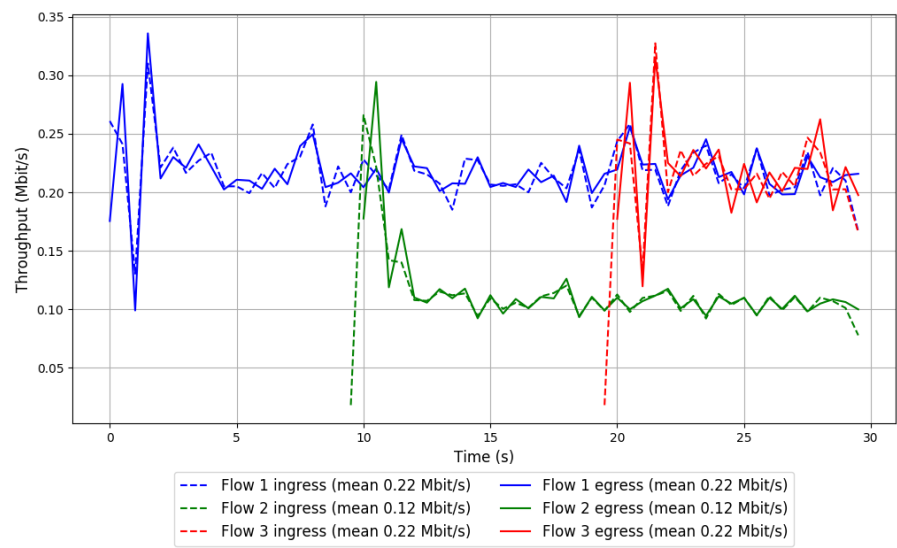
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.685 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

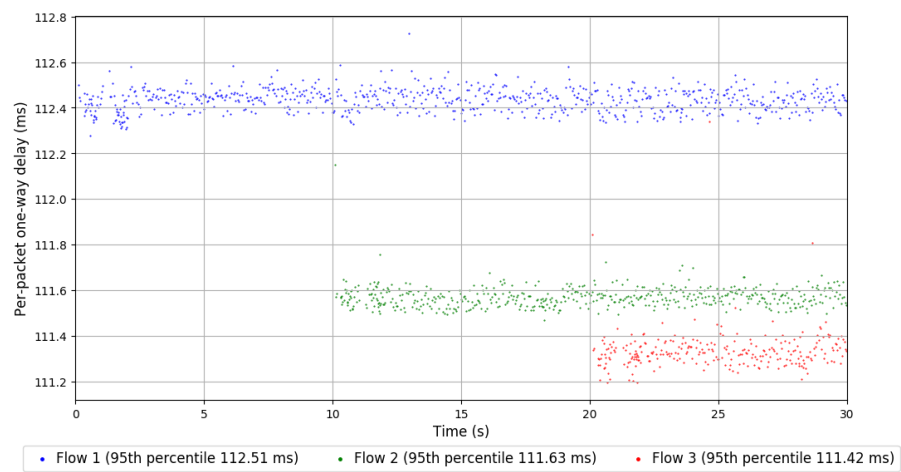
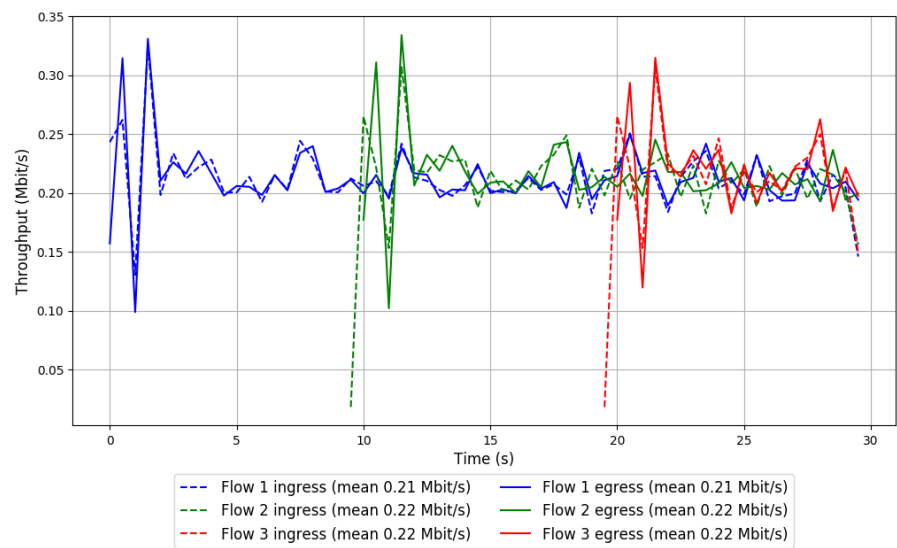


```
Run 7: Statistics of SReAM

Start at: 2017-09-08 01:32:50
End at: 2017-09-08 01:33:20

# Below is generated by plot.py at 2017-09-08 04:03:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.491 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 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: 111.634 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.416 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-09-08 01:46:09

End at: 2017-09-08 01:46:39

Below is generated by plot.py at 2017-09-08 04:03:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 112.695 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 111.655 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 111.647 ms

Loss rate: 0.00%

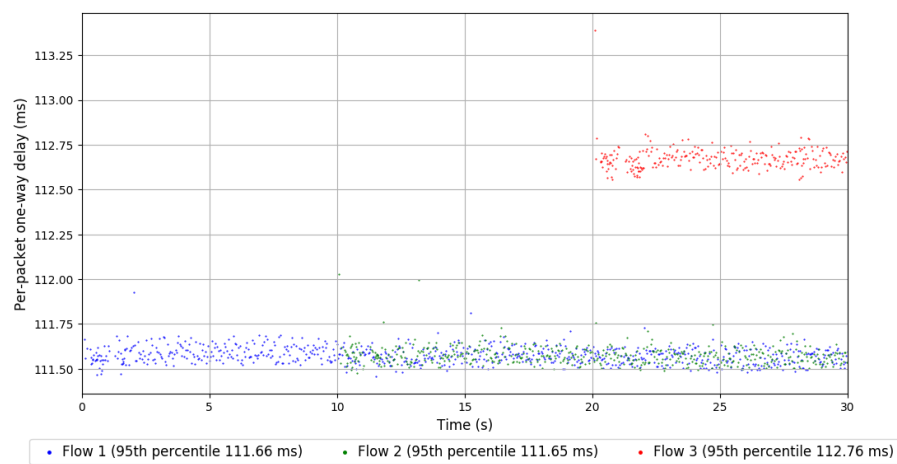
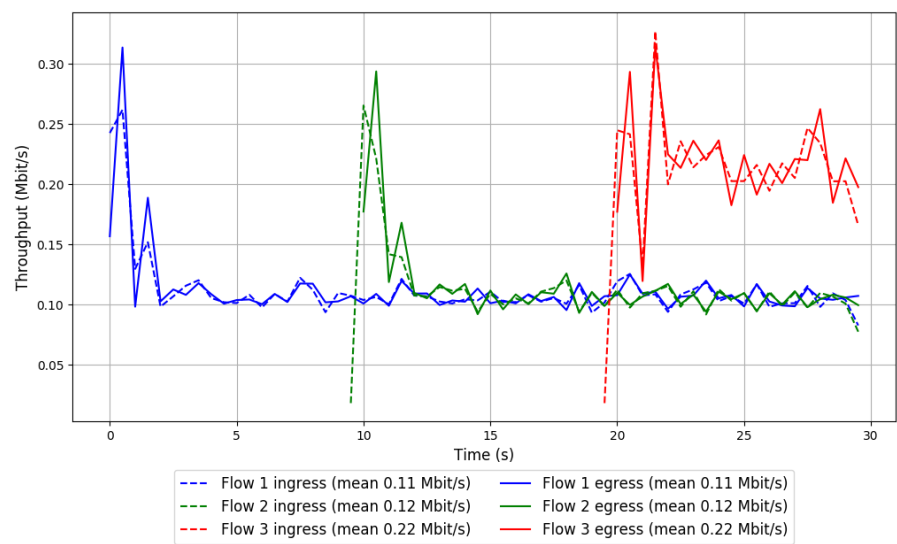
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.756 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2017-09-08 01:59:19

End at: 2017-09-08 01:59:49

Below is generated by plot.py at 2017-09-08 04:03:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 112.303 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.320 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 111.718 ms

Loss rate: 0.00%

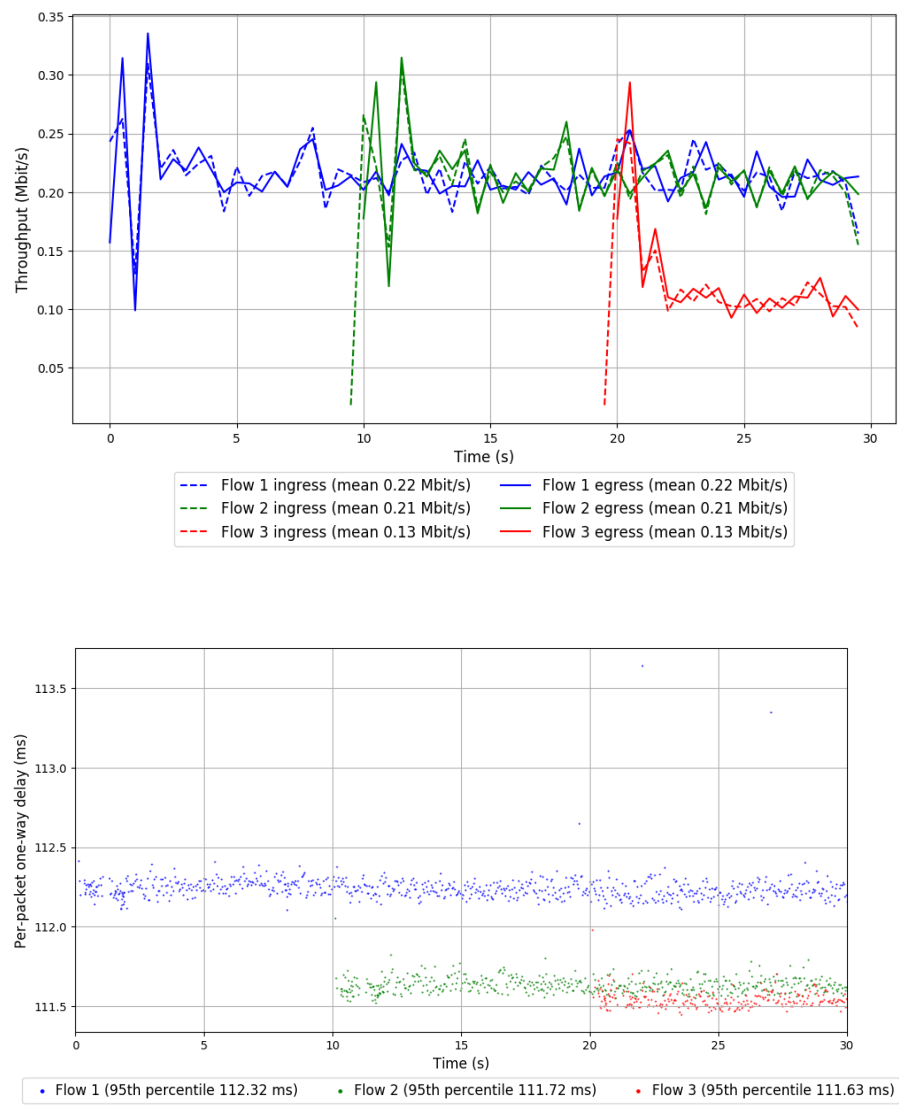
-- Flow 3:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 111.633 ms

Loss rate: 0.00%

Run 9: Report of SCRaM — Data Link

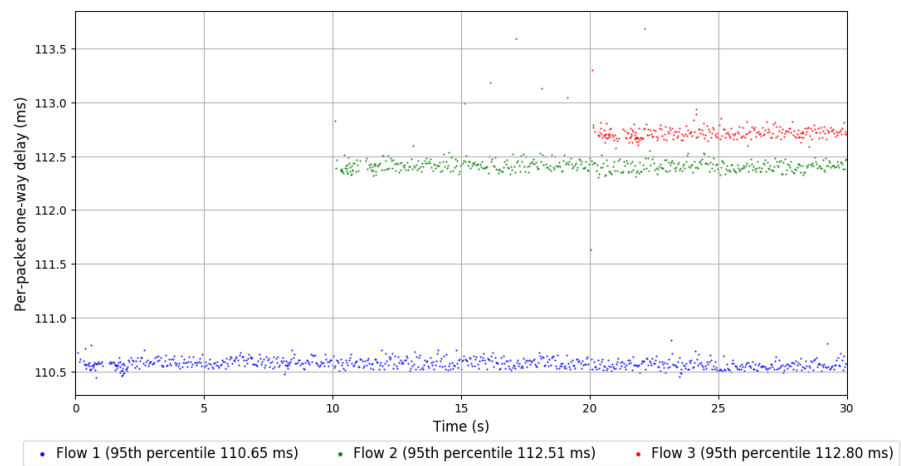
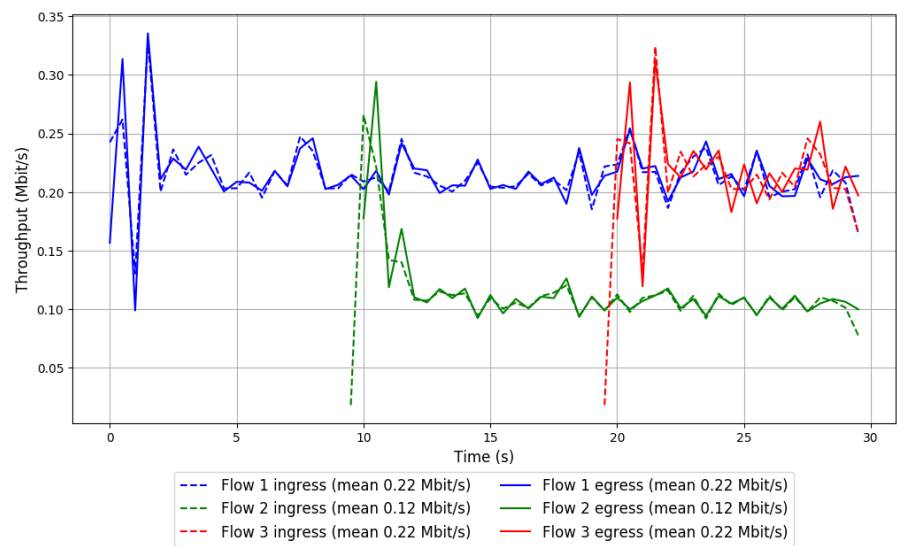


```
Run 10: Statistics of SReAM

Start at: 2017-09-08 02:12:43
End at: 2017-09-08 02:13:13

# Below is generated by plot.py at 2017-09-08 04:03:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 112.747 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.648 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 112.514 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.801 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2017-09-08 00:09:46

End at: 2017-09-08 00:10:16

Below is generated by plot.py at 2017-09-08 04:03:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.54 Mbit/s

95th percentile per-packet one-way delay: 112.135 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 112.106 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 112.223 ms

Loss rate: 0.39%

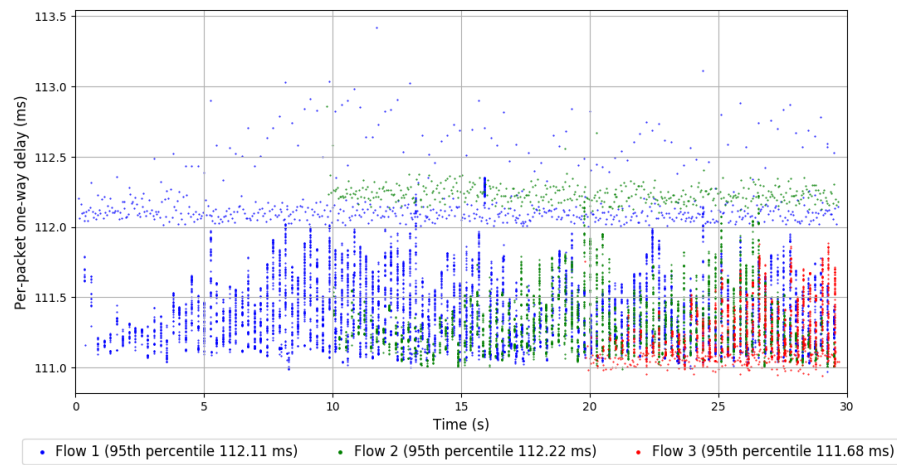
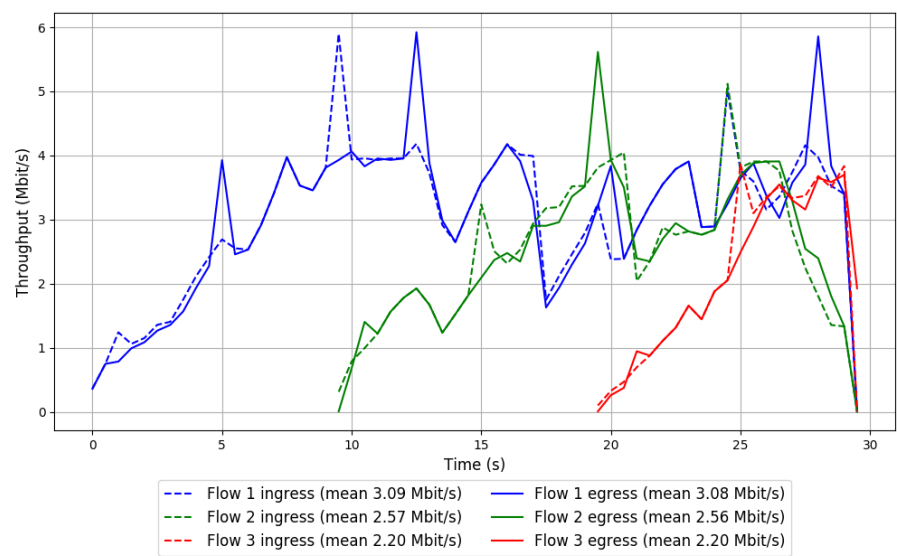
-- Flow 3:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 111.678 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-09-08 00:23:04

End at: 2017-09-08 00:23:34

Below is generated by plot.py at 2017-09-08 04:03:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.64 Mbit/s

95th percentile per-packet one-way delay: 113.012 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 113.023 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.35 Mbit/s

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

Loss rate: 0.00%

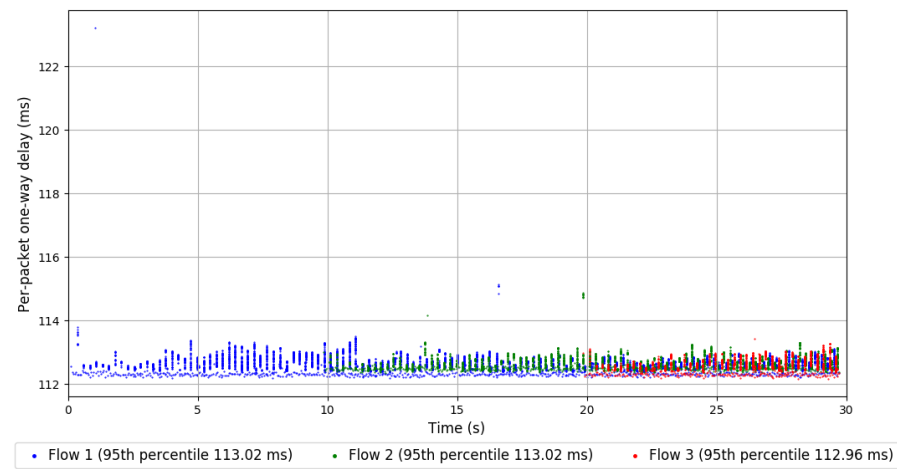
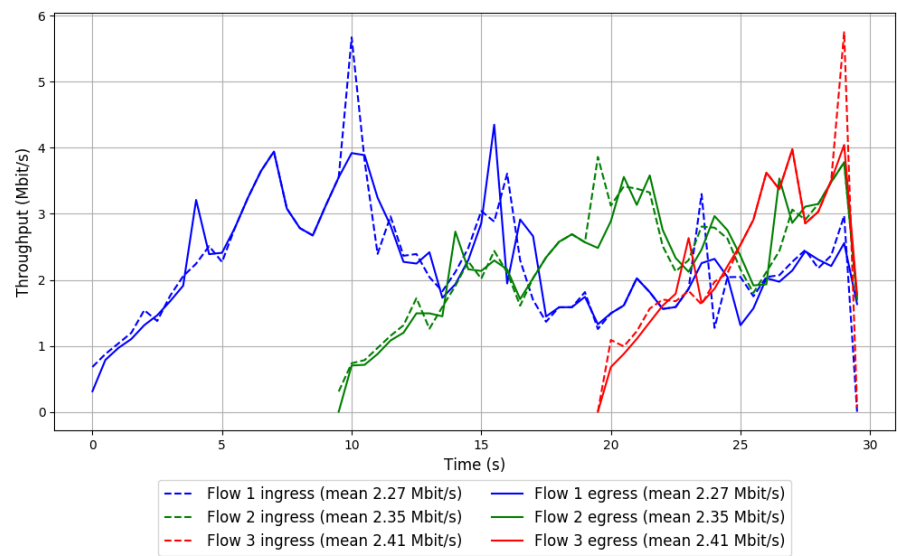
-- Flow 3:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 112.958 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-09-08 00:36:15

End at: 2017-09-08 00:36:45

Below is generated by plot.py at 2017-09-08 04:03:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 112.971 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 112.953 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 113.022 ms

Loss rate: 0.10%

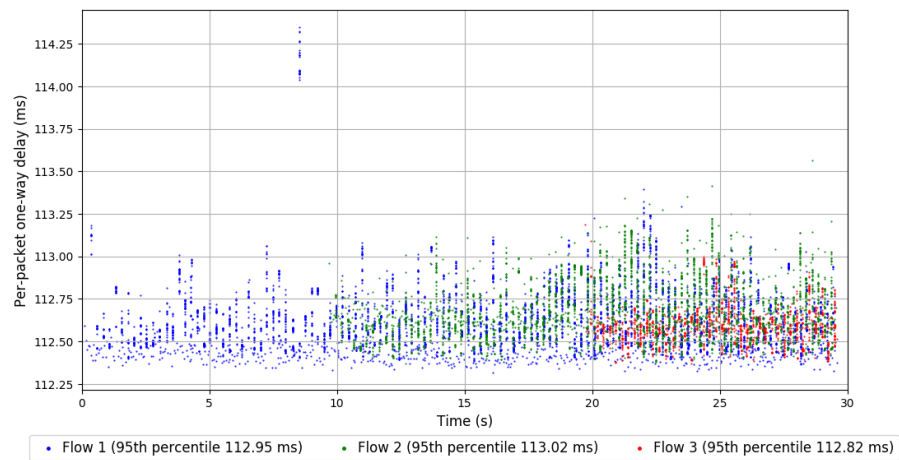
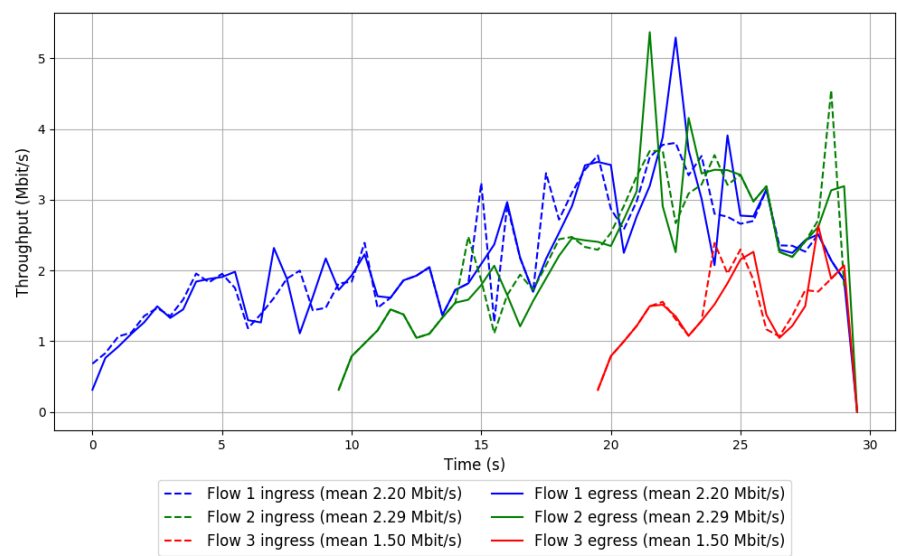
-- Flow 3:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 112.823 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-09-08 00:49:25

End at: 2017-09-08 00:49:55

Below is generated by plot.py at 2017-09-08 04:03:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.85 Mbit/s

95th percentile per-packet one-way delay: 113.018 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 2.36 Mbit/s

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

Loss rate: 0.44%

-- Flow 2:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 112.971 ms

Loss rate: 0.00%

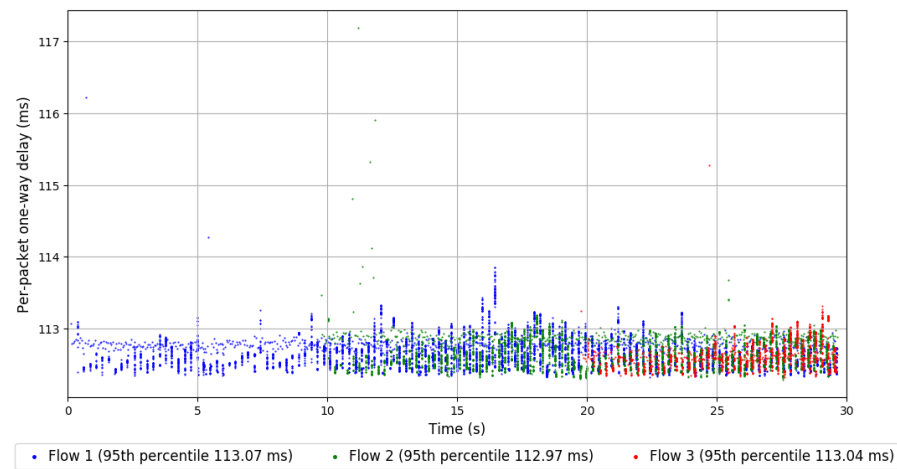
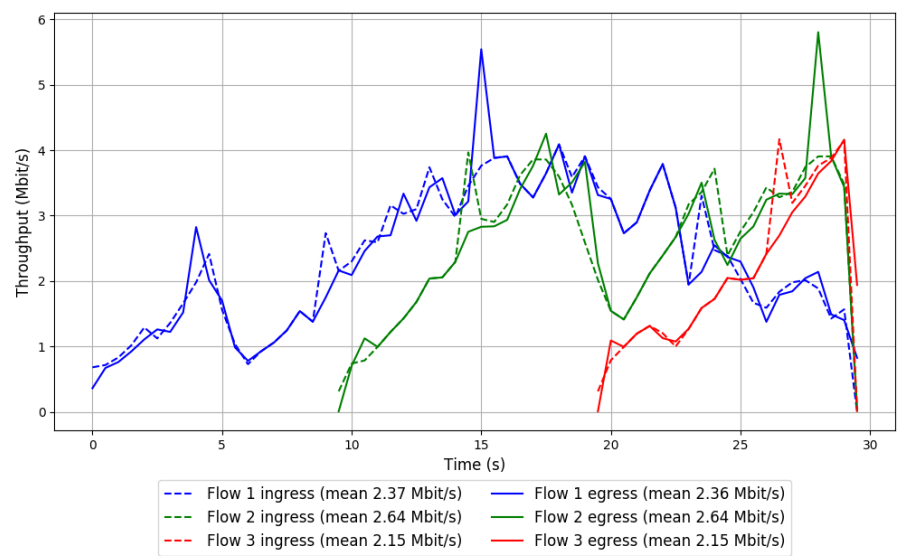
-- Flow 3:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 113.038 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-09-08 01:02:40

End at: 2017-09-08 01:03:10

Below is generated by plot.py at 2017-09-08 04:03:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.86 Mbit/s

95th percentile per-packet one-way delay: 113.109 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 113.144 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 112.987 ms

Loss rate: 0.00%

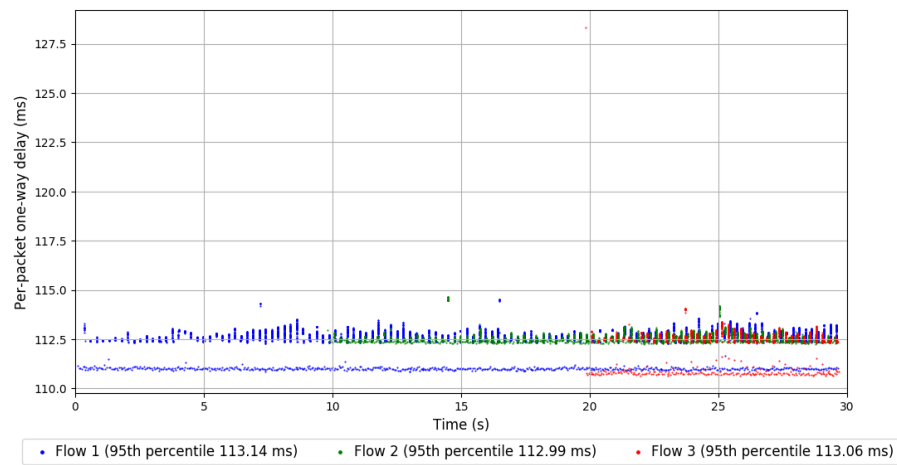
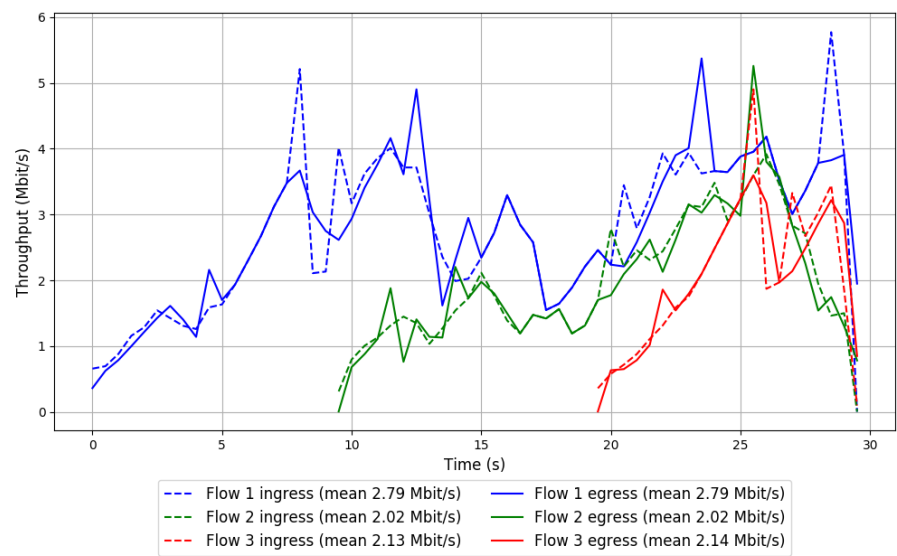
-- Flow 3:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 113.059 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-09-08 01:15:53

End at: 2017-09-08 01:16:23

Below is generated by plot.py at 2017-09-08 04:03:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.23 Mbit/s

95th percentile per-packet one-way delay: 113.048 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 112.993 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 113.097 ms

Loss rate: 0.00%

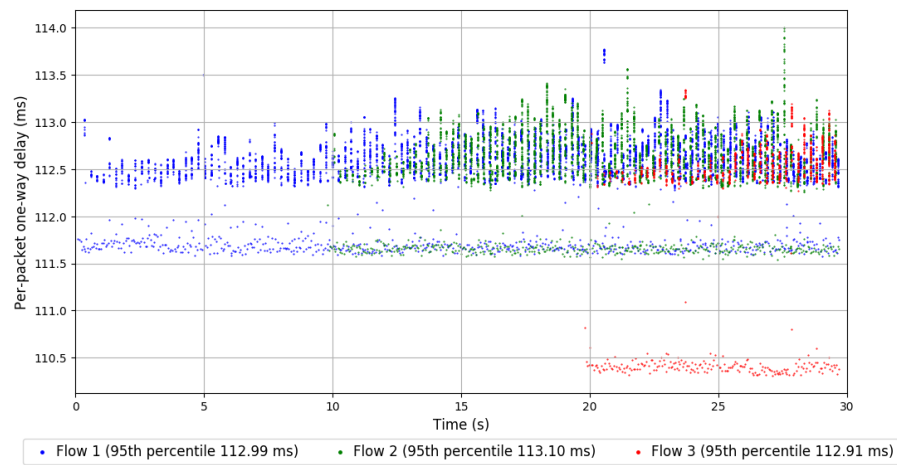
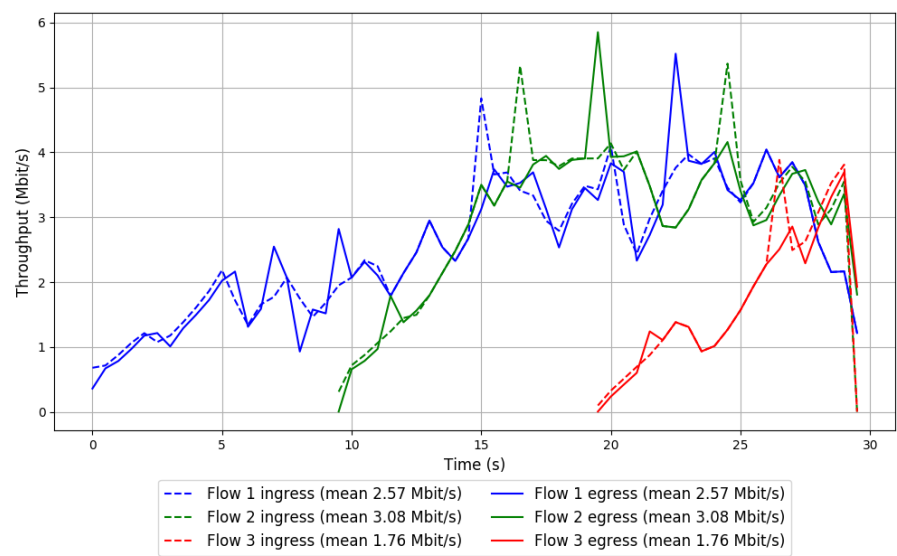
-- Flow 3:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 112.911 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-09-08 01:29:08

End at: 2017-09-08 01:29:38

Below is generated by plot.py at 2017-09-08 04:03:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 113.059 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 113.120 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 112.949 ms

Loss rate: 0.00%

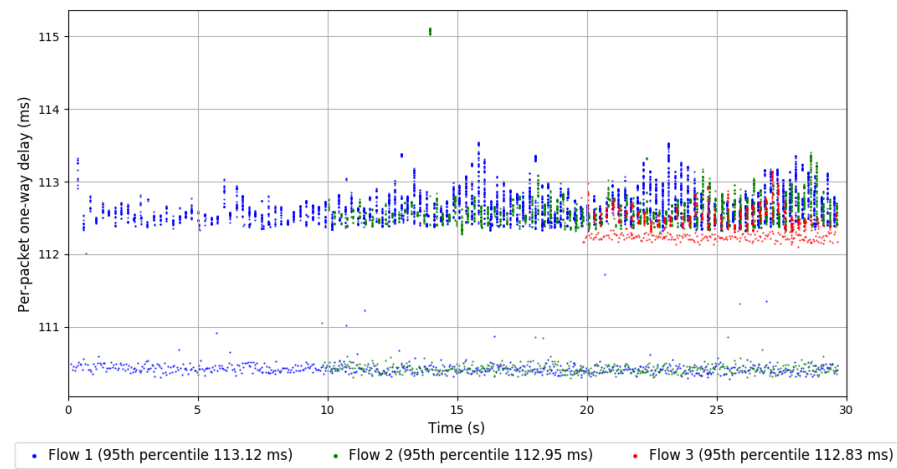
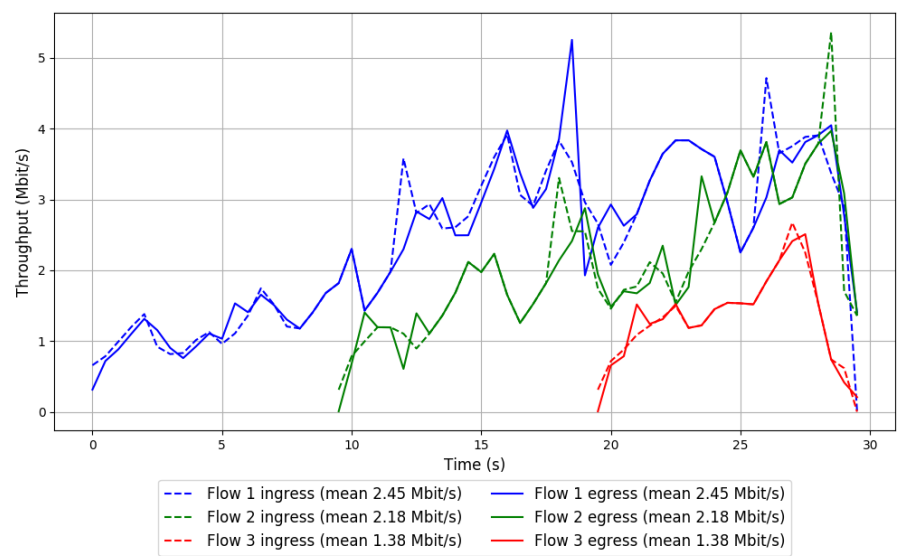
-- Flow 3:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 112.833 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-09-08 01:42:43

End at: 2017-09-08 01:43:13

Below is generated by plot.py at 2017-09-08 04:03:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 113.047 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 113.087 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 112.977 ms

Loss rate: 0.09%

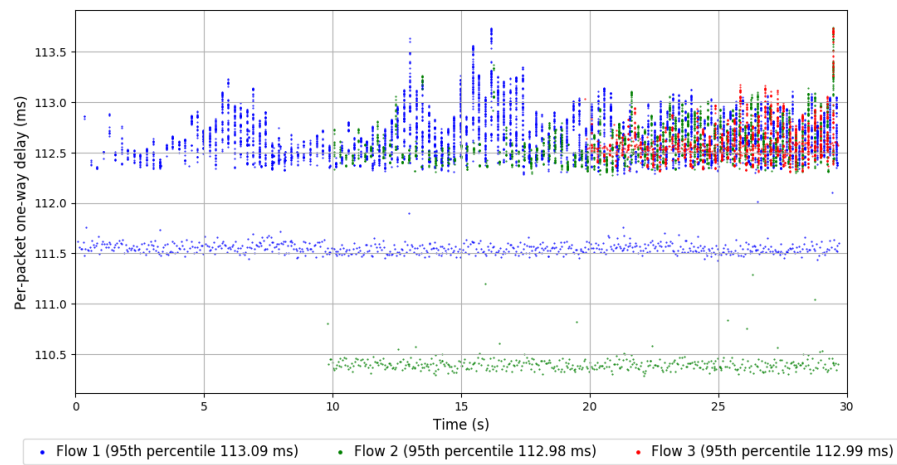
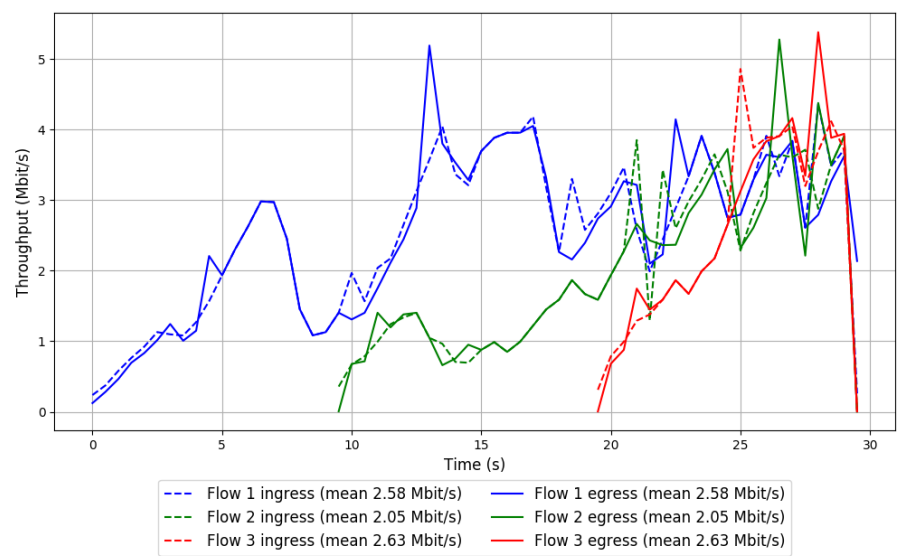
-- Flow 3:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 112.989 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-09-08 01:55:51

End at: 2017-09-08 01:56:21

Below is generated by plot.py at 2017-09-08 04:03:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.29 Mbit/s

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

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 112.792 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.15 Mbit/s

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

Loss rate: 0.06%

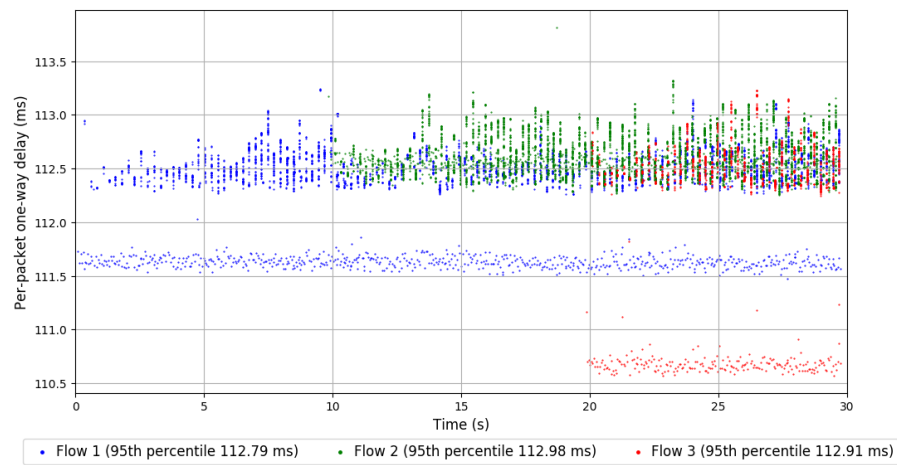
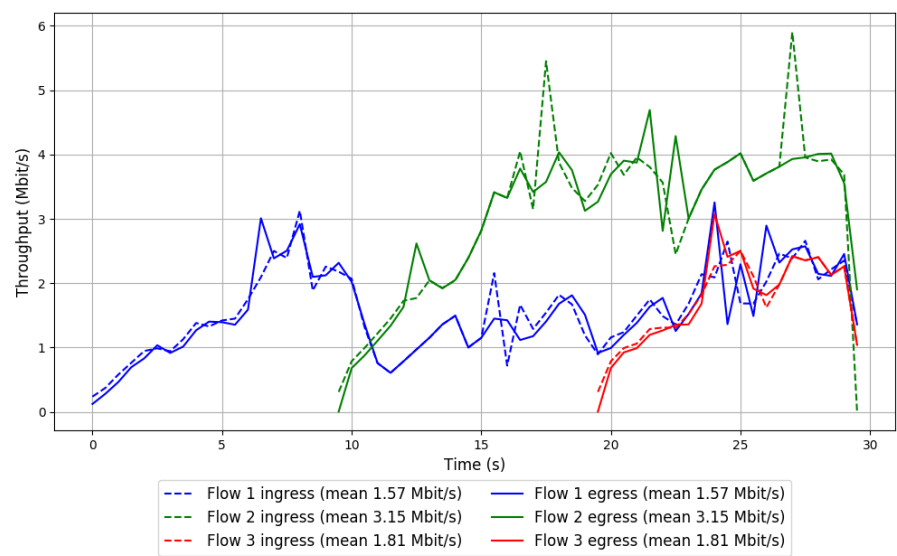
-- Flow 3:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 112.908 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-09-08 02:09:01

End at: 2017-09-08 02:09:31

Below is generated by plot.py at 2017-09-08 04:03:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.45 Mbit/s

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

Loss rate: 0.05%

-- Flow 1:

Average throughput: 2.39 Mbit/s

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

Loss rate: 0.02%

-- Flow 2:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 112.794 ms

Loss rate: 0.00%

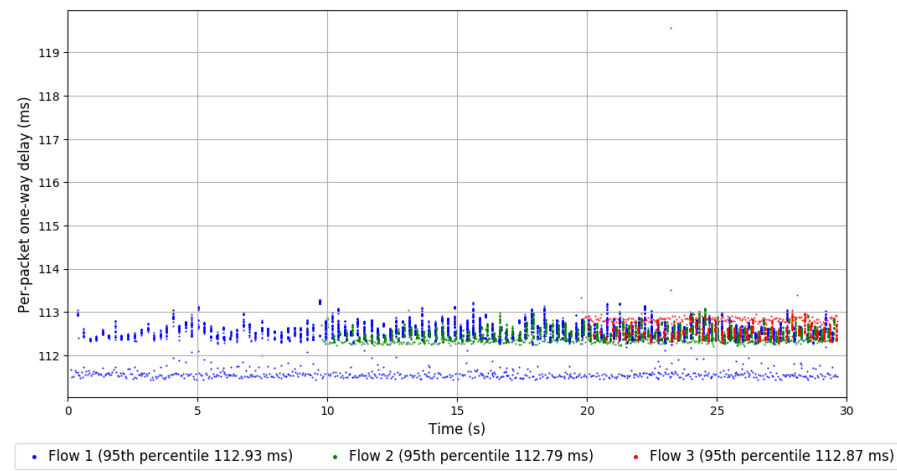
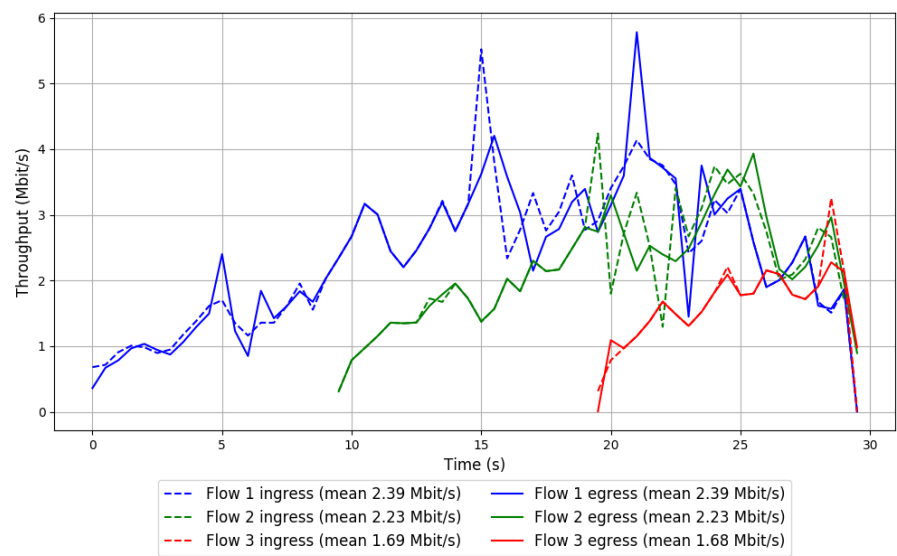
-- Flow 3:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 112.870 ms

Loss rate: 0.36%

Run 10: Report of Sprout — Data Link

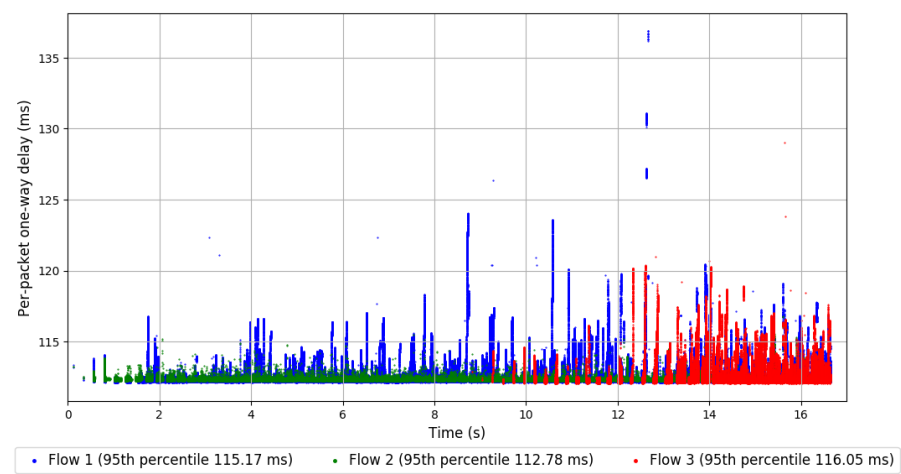
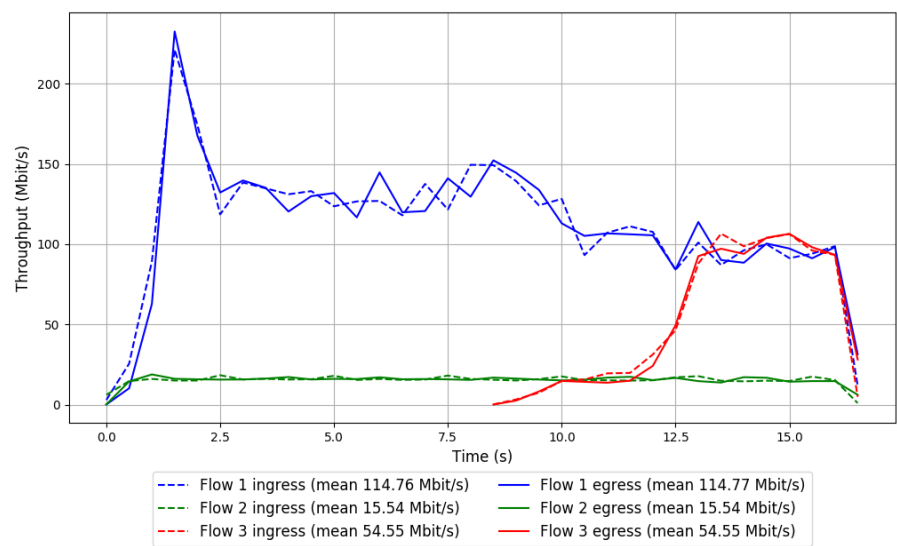


Run 1: Statistics of TaoVA-100x

Start at: 2017-09-08 00:11:25

End at: 2017-09-08 00:11:55

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

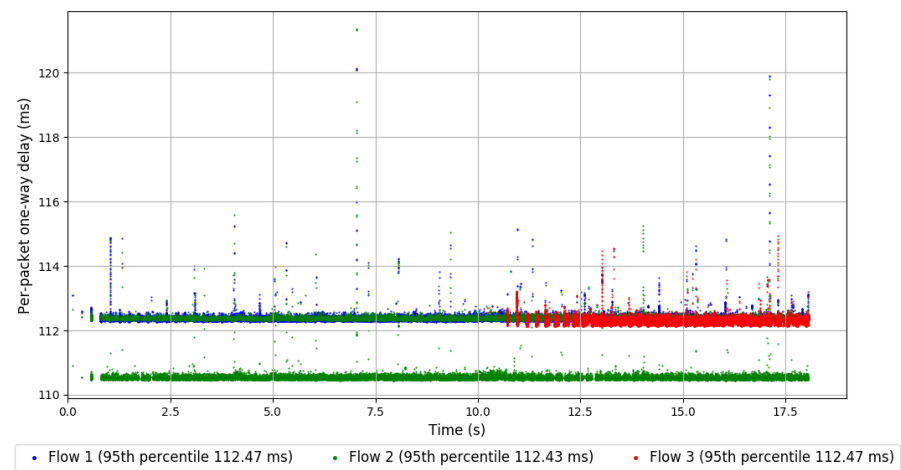
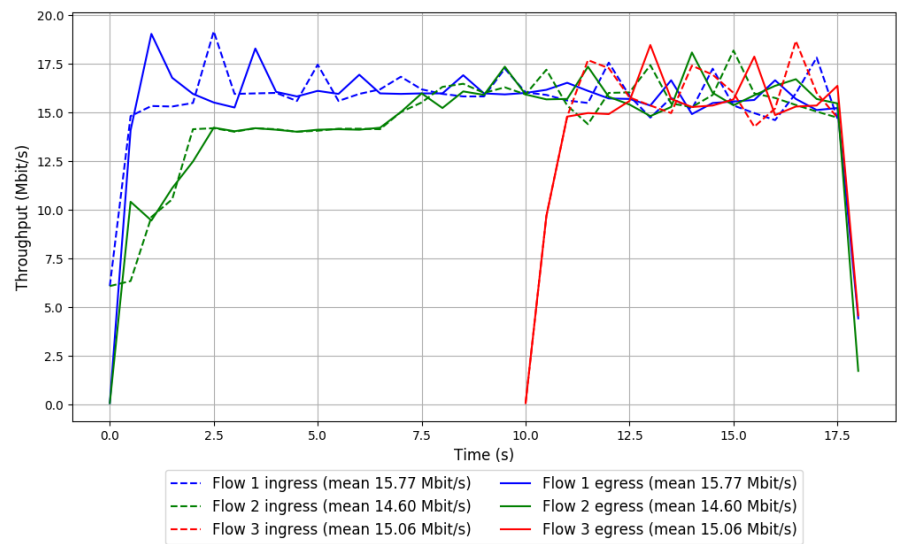


Run 2: Statistics of TaoVA-100x

Start at: 2017-09-08 00:24:43

End at: 2017-09-08 00:25:13

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-09-08 00:37:54

End at: 2017-09-08 00:38:24

Below is generated by plot.py at 2017-09-08 04:04:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.37 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 15.82 Mbit/s

95th percentile per-packet one-way delay: 112.430 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.66 Mbit/s

95th percentile per-packet one-way delay: 112.440 ms

Loss rate: 0.00%

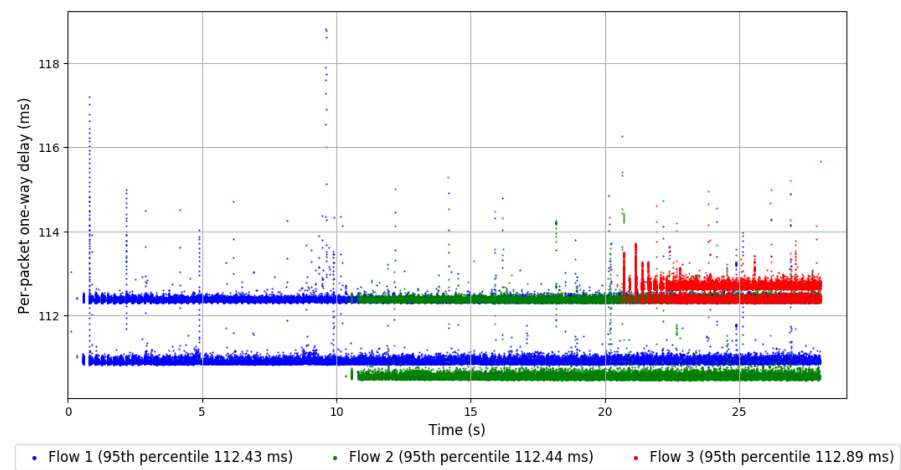
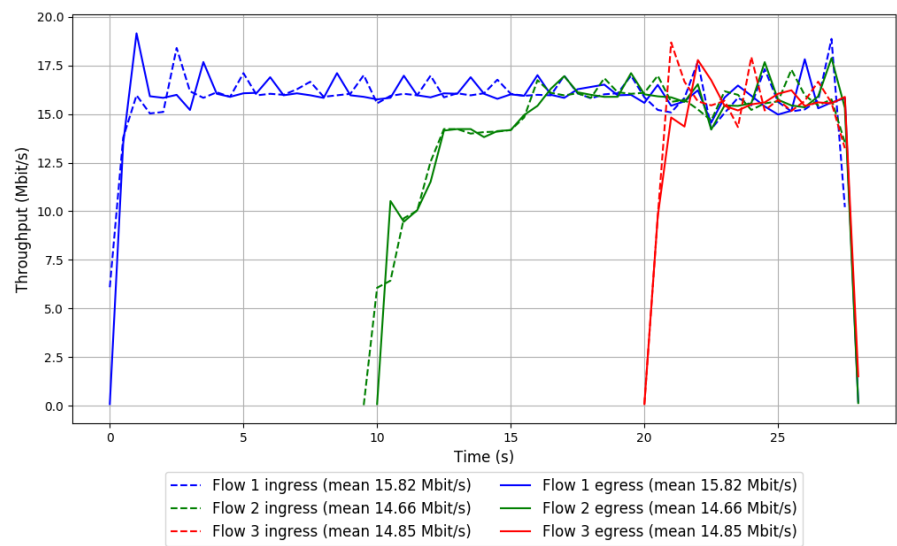
-- Flow 3:

Average throughput: 14.85 Mbit/s

95th percentile per-packet one-way delay: 112.892 ms

Loss rate: 0.00%

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

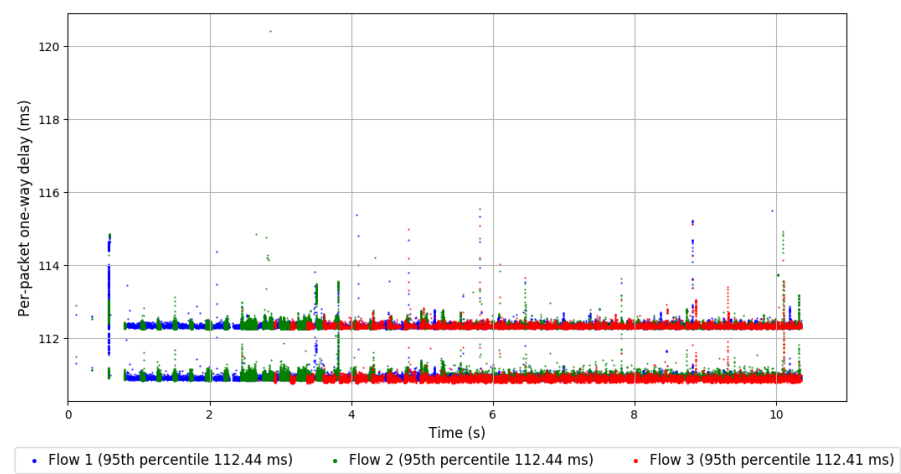
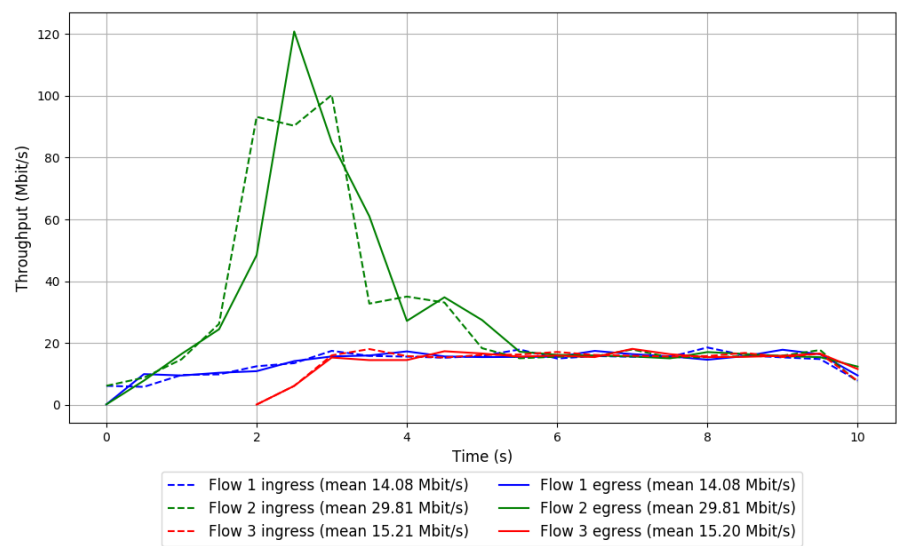


Run 4: Statistics of TaoVA-100x

Start at: 2017-09-08 00:51:05

End at: 2017-09-08 00:51:35

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

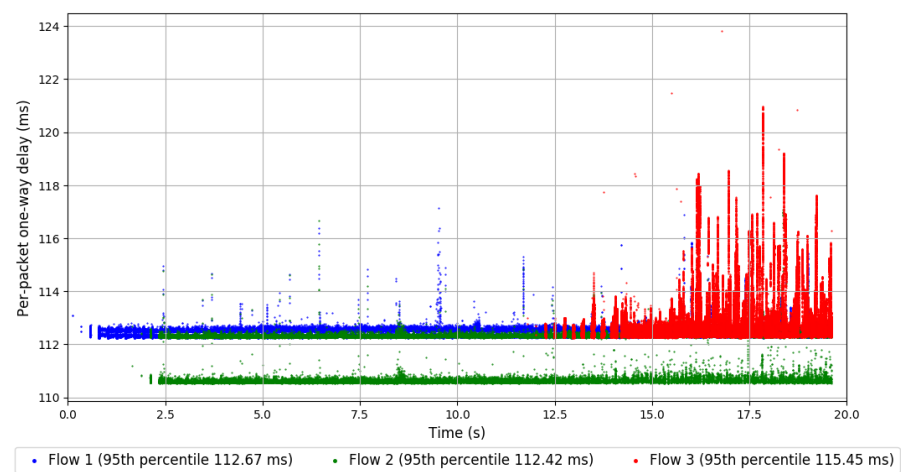
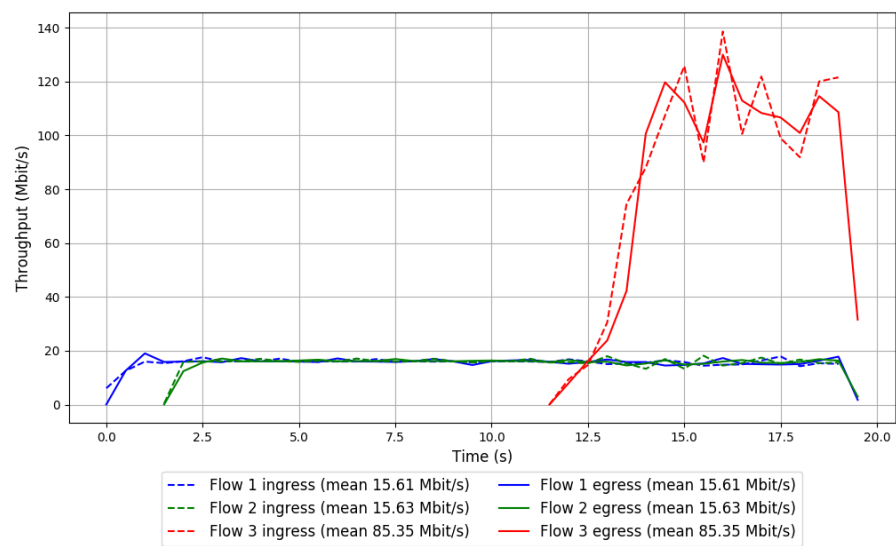


Run 5: Statistics of TaoVA-100x

Start at: 2017-09-08 01:04:18

End at: 2017-09-08 01:04:48

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-09-08 01:17:33

End at: 2017-09-08 01:18:03

Below is generated by plot.py at 2017-09-08 04:04:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.58 Mbit/s

95th percentile per-packet one-way delay: 115.664 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 15.86 Mbit/s

95th percentile per-packet one-way delay: 112.460 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 119.32 Mbit/s

95th percentile per-packet one-way delay: 115.788 ms

Loss rate: 0.00%

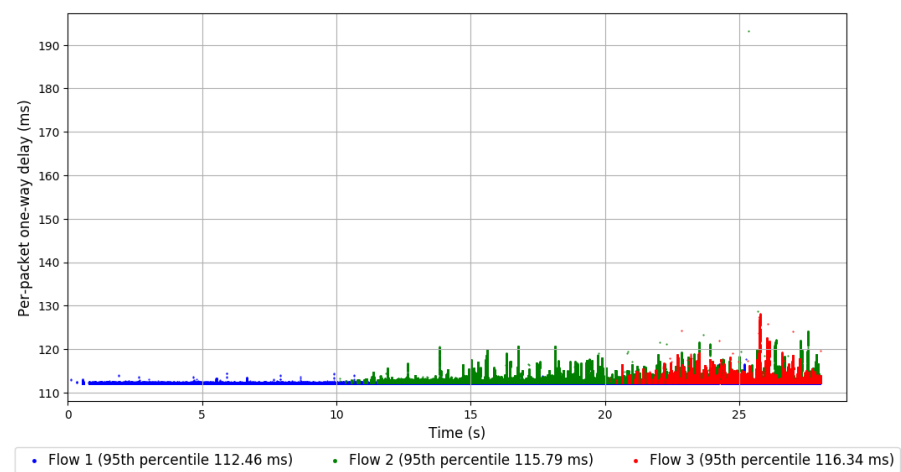
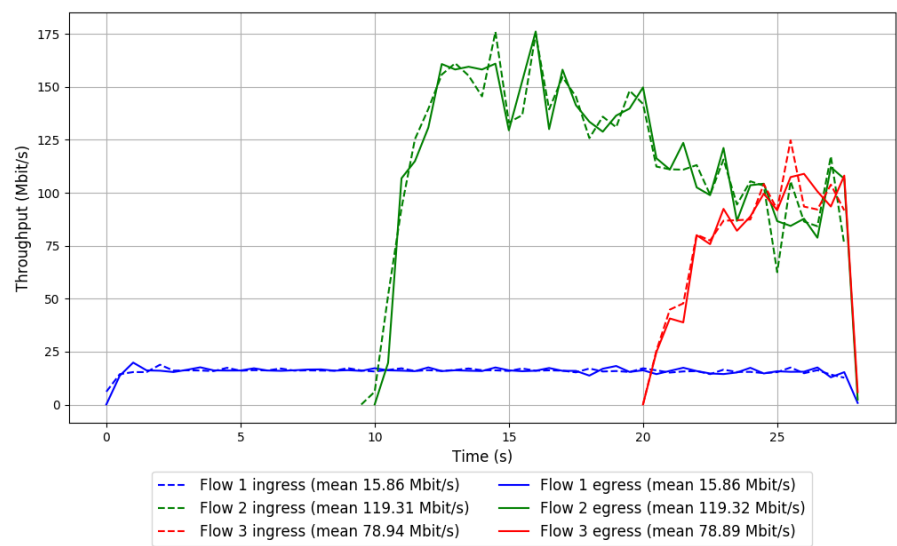
-- Flow 3:

Average throughput: 78.89 Mbit/s

95th percentile per-packet one-way delay: 116.342 ms

Loss rate: 0.01%

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

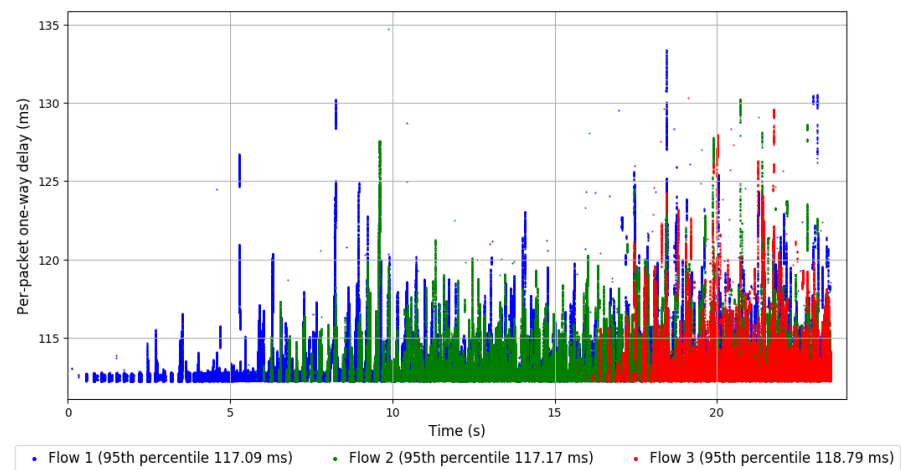
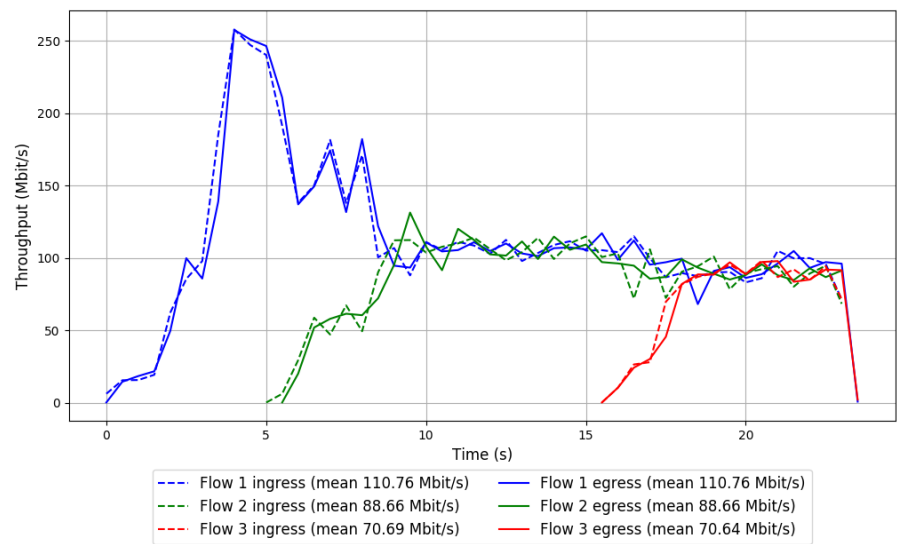


Run 7: Statistics of TaoVA-100x

Start at: 2017-09-08 01:30:47

End at: 2017-09-08 01:31:17

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-09-08 01:44:22

End at: 2017-09-08 01:44:52

Below is generated by plot.py at 2017-09-08 04:05:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.57 Mbit/s

95th percentile per-packet one-way delay: 115.803 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 14.50 Mbit/s

95th percentile per-packet one-way delay: 112.404 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 113.89 Mbit/s

95th percentile per-packet one-way delay: 115.685 ms

Loss rate: 0.00%

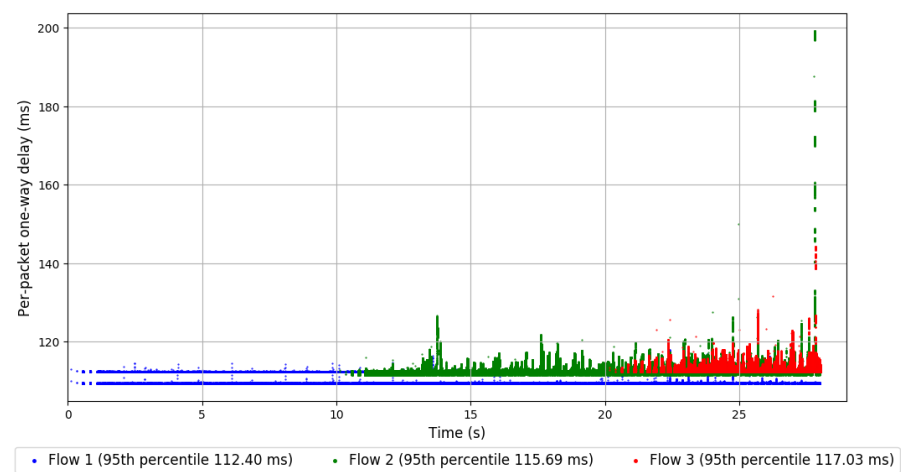
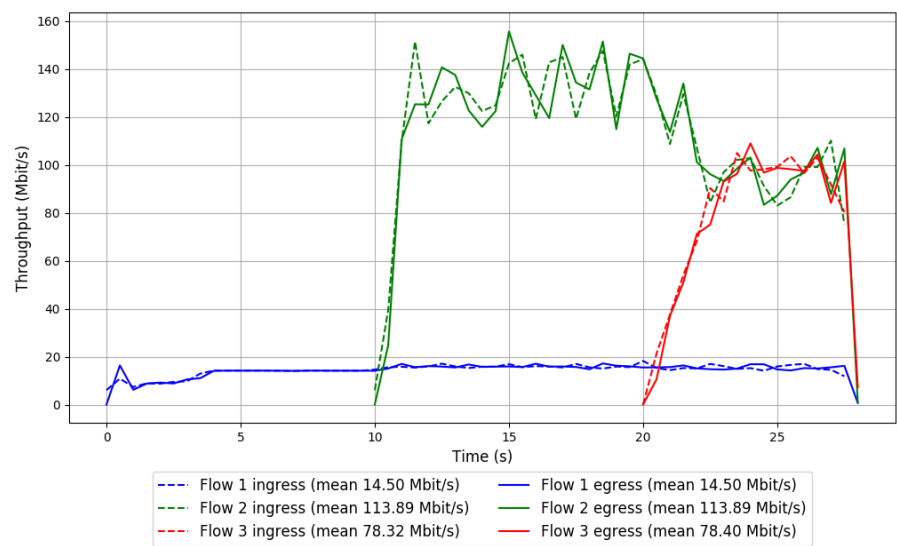
-- Flow 3:

Average throughput: 78.40 Mbit/s

95th percentile per-packet one-way delay: 117.026 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-09-08 01:57:31

End at: 2017-09-08 01:58:01

Below is generated by plot.py at 2017-09-08 04:06:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.54 Mbit/s

95th percentile per-packet one-way delay: 115.916 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 141.67 Mbit/s

95th percentile per-packet one-way delay: 116.010 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.83 Mbit/s

95th percentile per-packet one-way delay: 112.353 ms

Loss rate: 0.00%

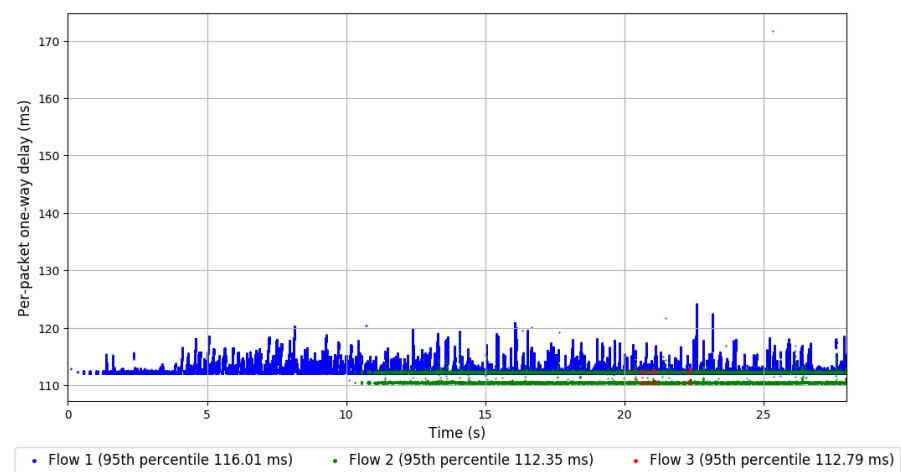
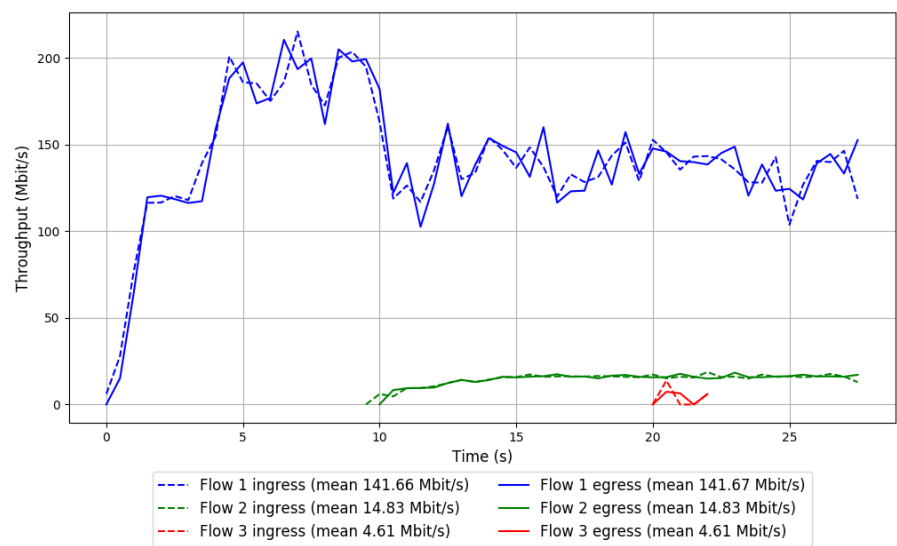
-- Flow 3:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 112.787 ms

Loss rate: 0.00%

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

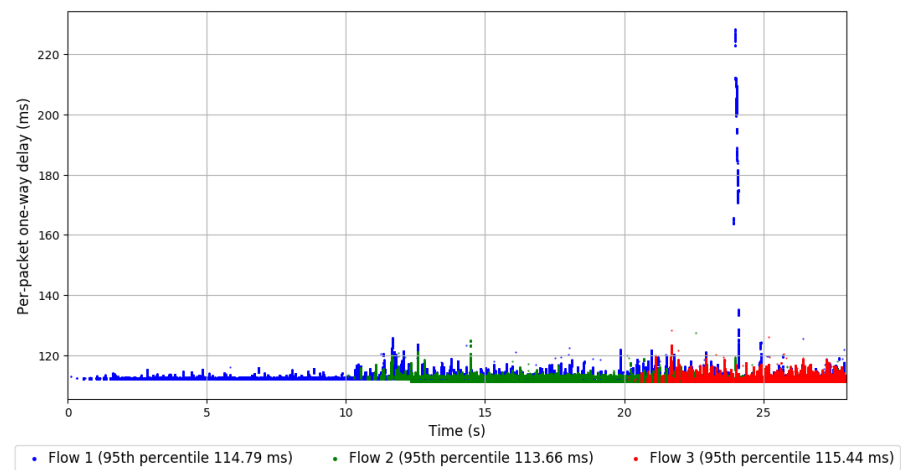
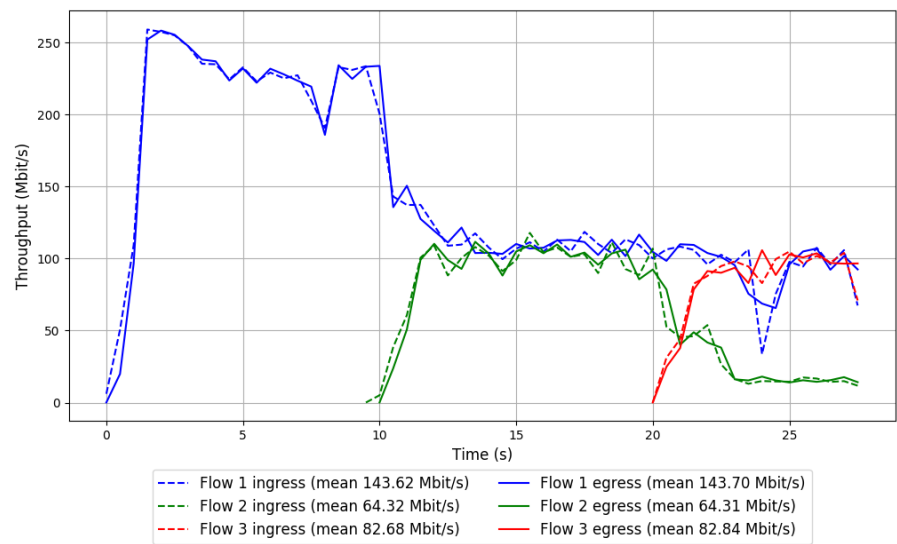


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-09-08 02:10:40
End at: 2017-09-08 02:11:10

# Below is generated by plot.py at 2017-09-08 04:06:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 208.18 Mbit/s
95th percentile per-packet one-way delay: 114.713 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 143.70 Mbit/s
95th percentile per-packet one-way delay: 114.789 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 64.31 Mbit/s
95th percentile per-packet one-way delay: 113.658 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 82.84 Mbit/s
95th percentile per-packet one-way delay: 115.436 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-09-08 00:06:02

End at: 2017-09-08 00:06:32

Below is generated by plot.py at 2017-09-08 04:06:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.08 Mbit/s

95th percentile per-packet one-way delay: 112.564 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.92 Mbit/s

95th percentile per-packet one-way delay: 111.838 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.87 Mbit/s

95th percentile per-packet one-way delay: 113.383 ms

Loss rate: 0.00%

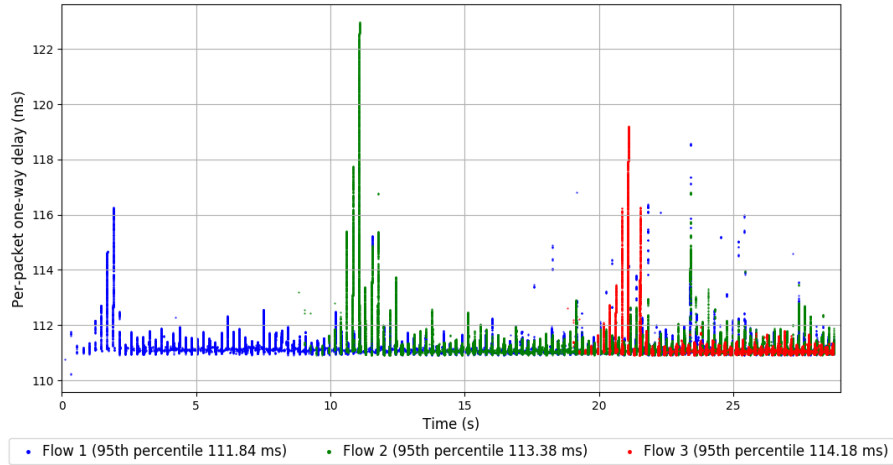
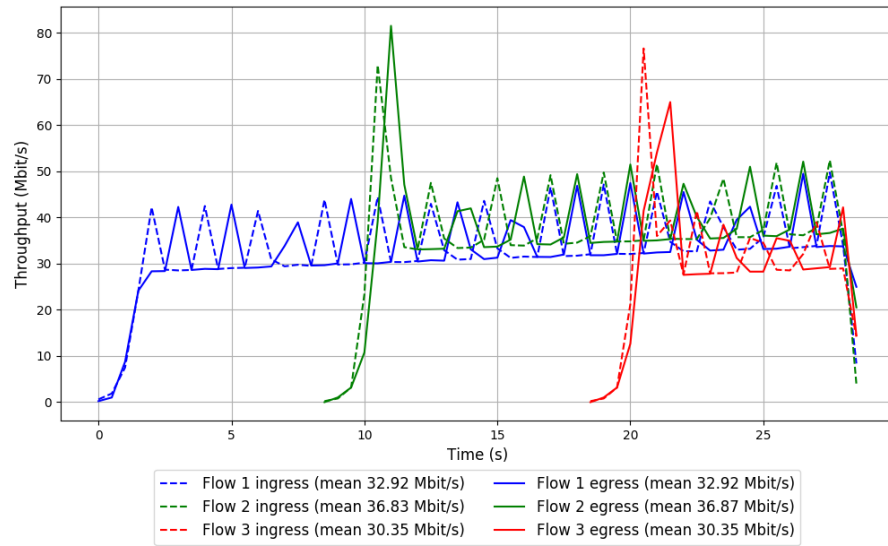
-- Flow 3:

Average throughput: 30.35 Mbit/s

95th percentile per-packet one-way delay: 114.181 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-09-08 00:19:23

End at: 2017-09-08 00:19:53

Below is generated by plot.py at 2017-09-08 04:06:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.56 Mbit/s

95th percentile per-packet one-way delay: 113.931 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 30.36 Mbit/s

95th percentile per-packet one-way delay: 113.753 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 28.70 Mbit/s

95th percentile per-packet one-way delay: 114.396 ms

Loss rate: 0.00%

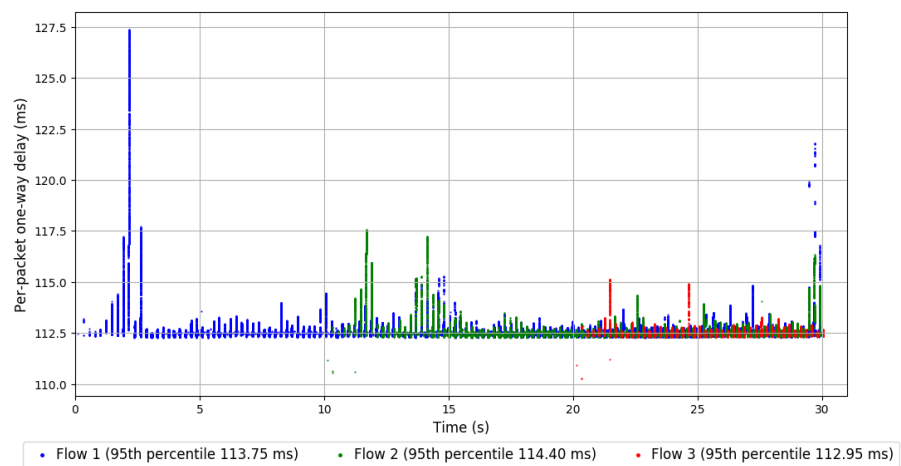
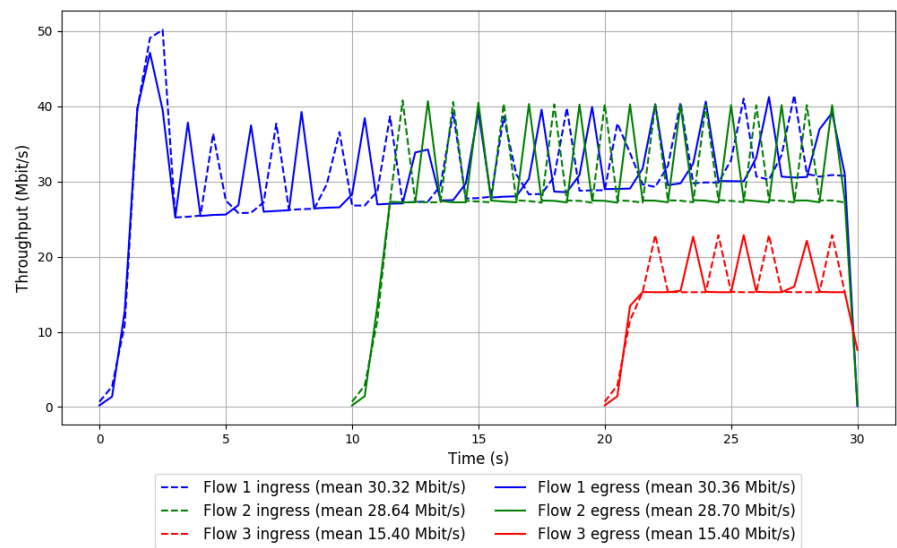
-- Flow 3:

Average throughput: 15.40 Mbit/s

95th percentile per-packet one-way delay: 112.953 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-09-08 00:32:36

End at: 2017-09-08 00:33:06

Below is generated by plot.py at 2017-09-08 04:06:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.01 Mbit/s

95th percentile per-packet one-way delay: 117.889 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 36.72 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 114.906 ms

Loss rate: 0.07%

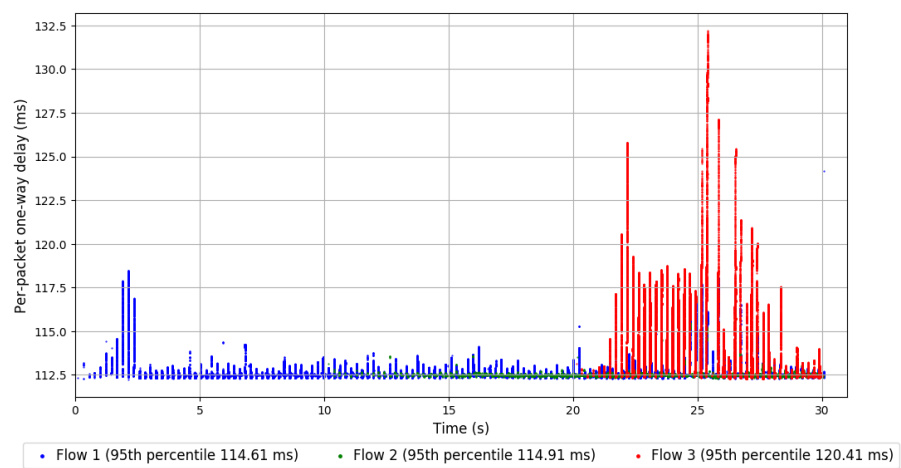
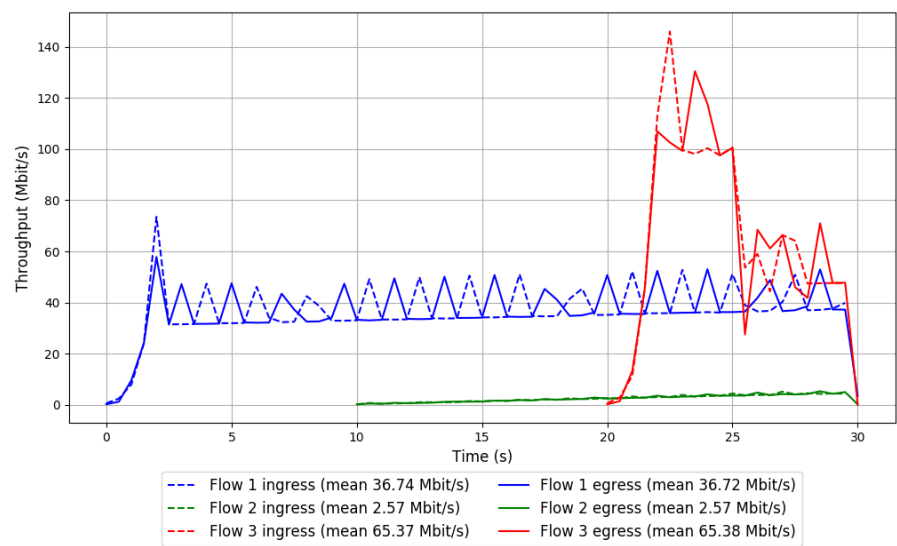
-- Flow 3:

Average throughput: 65.38 Mbit/s

95th percentile per-packet one-way delay: 120.411 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-09-08 00:45:47

End at: 2017-09-08 00:46:17

Below is generated by plot.py at 2017-09-08 04:06:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.78 Mbit/s

95th percentile per-packet one-way delay: 114.404 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.79 Mbit/s

95th percentile per-packet one-way delay: 114.969 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.14 Mbit/s

95th percentile per-packet one-way delay: 113.049 ms

Loss rate: 0.00%

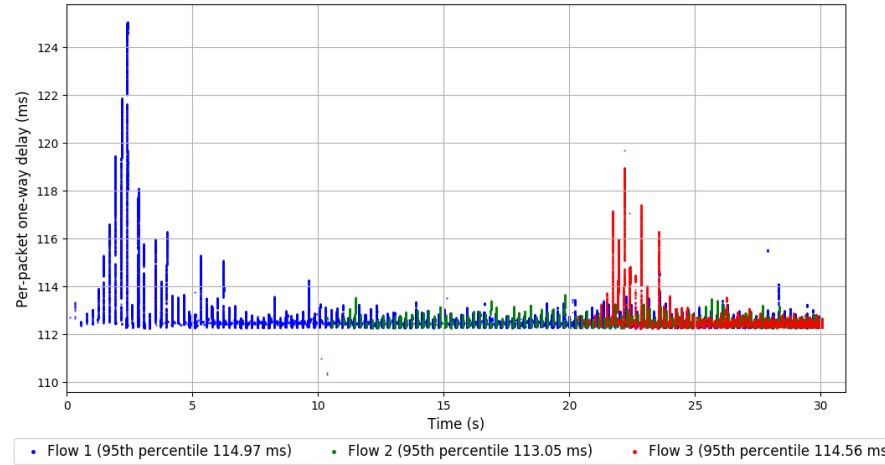
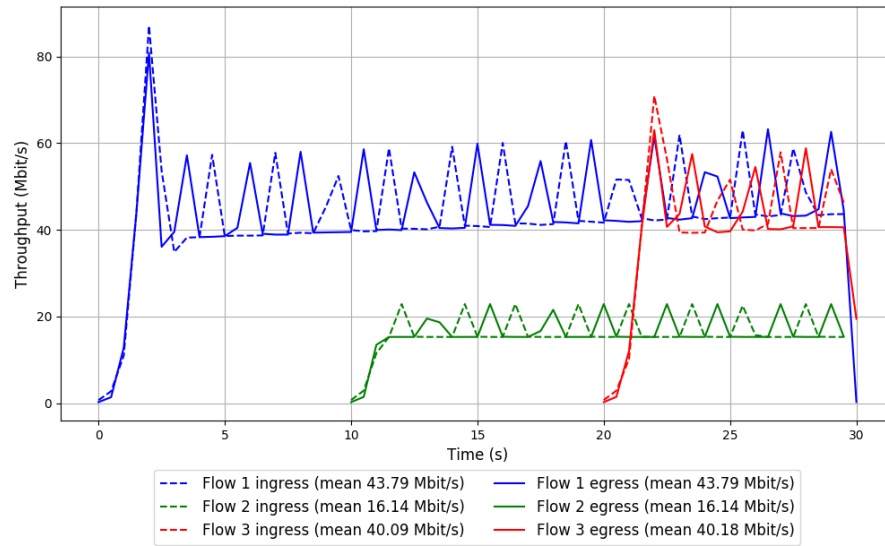
-- Flow 3:

Average throughput: 40.18 Mbit/s

95th percentile per-packet one-way delay: 114.563 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-09-08 00:58:54

End at: 2017-09-08 00:59:24

Below is generated by plot.py at 2017-09-08 04:07:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.78 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 53.11 Mbit/s

95th percentile per-packet one-way delay: 114.264 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.75 Mbit/s

95th percentile per-packet one-way delay: 113.243 ms

Loss rate: 0.00%

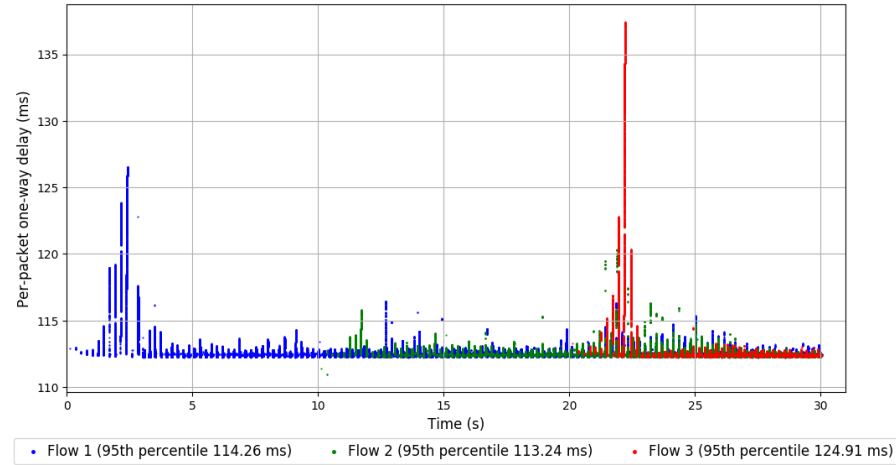
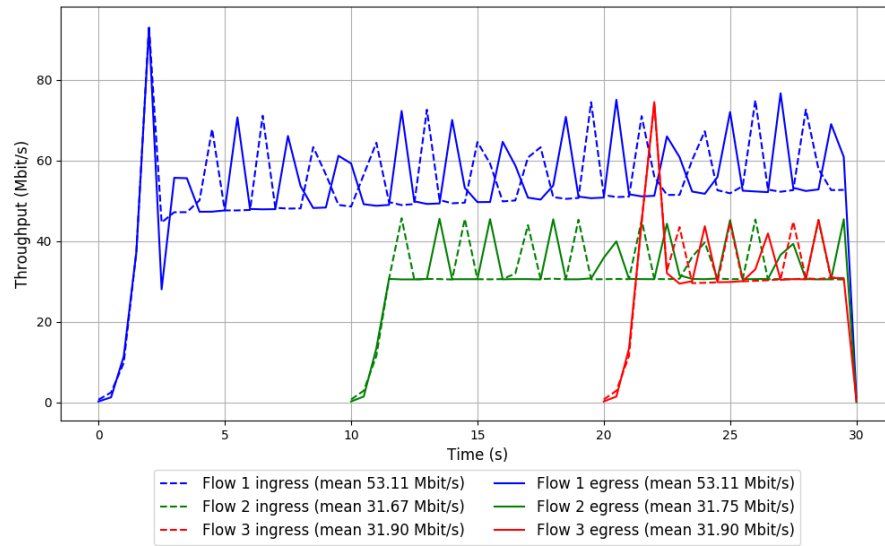
-- Flow 3:

Average throughput: 31.90 Mbit/s

95th percentile per-packet one-way delay: 124.910 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-09-08 01:12:10

End at: 2017-09-08 01:12:40

Below is generated by plot.py at 2017-09-08 04:07:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.46 Mbit/s

95th percentile per-packet one-way delay: 113.426 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 16.32 Mbit/s

95th percentile per-packet one-way delay: 113.362 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.36 Mbit/s

95th percentile per-packet one-way delay: 113.450 ms

Loss rate: 0.00%

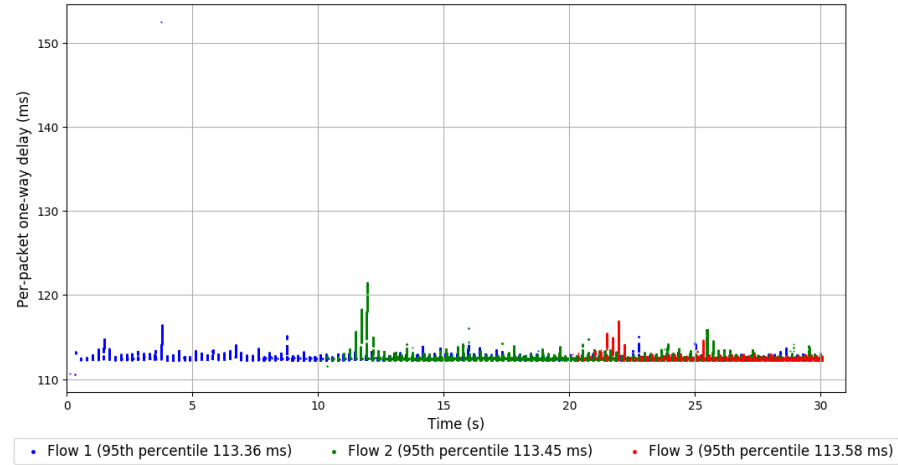
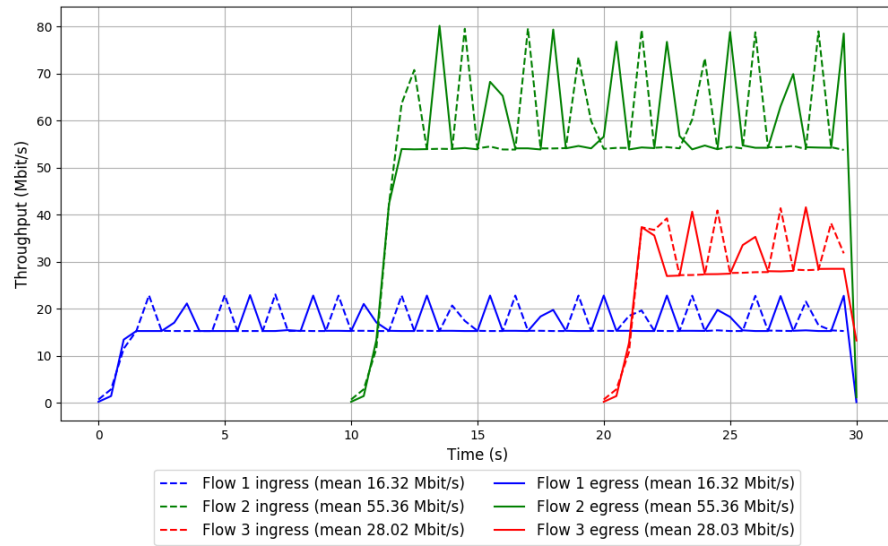
-- Flow 3:

Average throughput: 28.03 Mbit/s

95th percentile per-packet one-way delay: 113.582 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-09-08 01:25:32

End at: 2017-09-08 01:26:02

Below is generated by plot.py at 2017-09-08 04:07:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.97 Mbit/s

95th percentile per-packet one-way delay: 113.118 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 27.51 Mbit/s

95th percentile per-packet one-way delay: 113.084 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.39 Mbit/s

95th percentile per-packet one-way delay: 113.203 ms

Loss rate: 0.00%

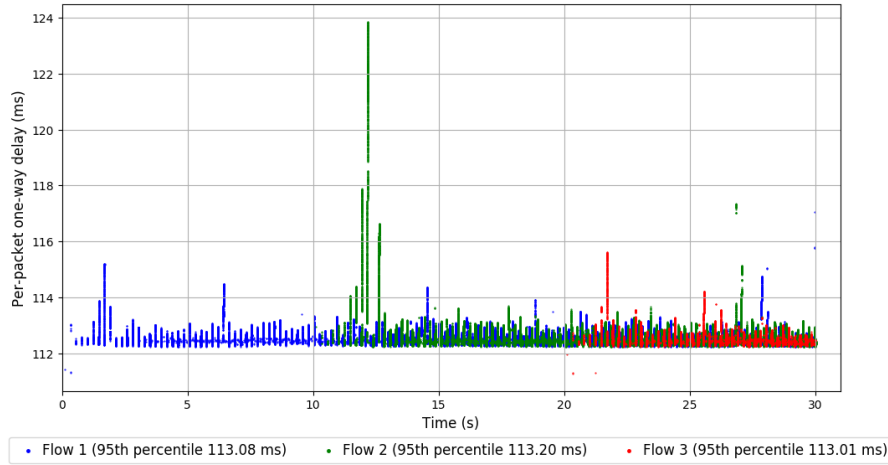
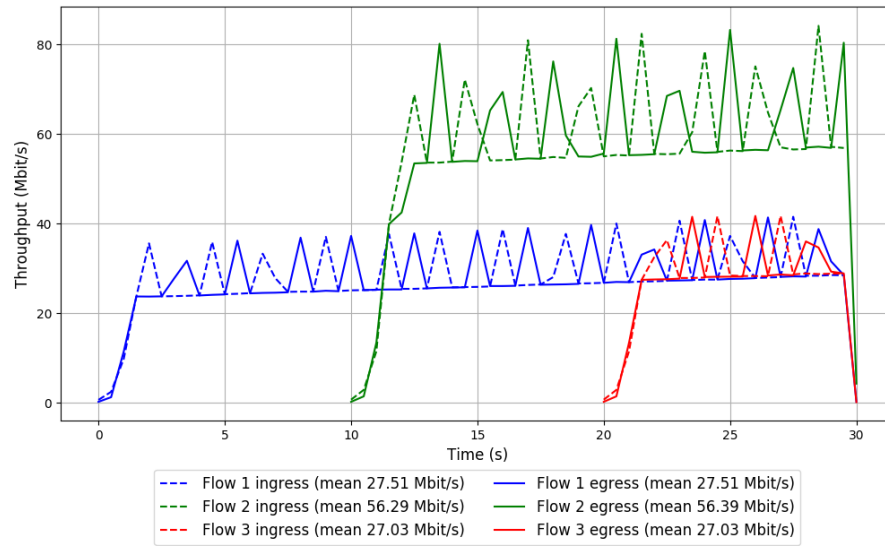
-- Flow 3:

Average throughput: 27.03 Mbit/s

95th percentile per-packet one-way delay: 113.014 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-09-08 01:38:56

End at: 2017-09-08 01:39:26

Below is generated by plot.py at 2017-09-08 04:07:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.71 Mbit/s

95th percentile per-packet one-way delay: 114.162 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.88 Mbit/s

95th percentile per-packet one-way delay: 113.594 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.22 Mbit/s

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

Loss rate: 0.00%

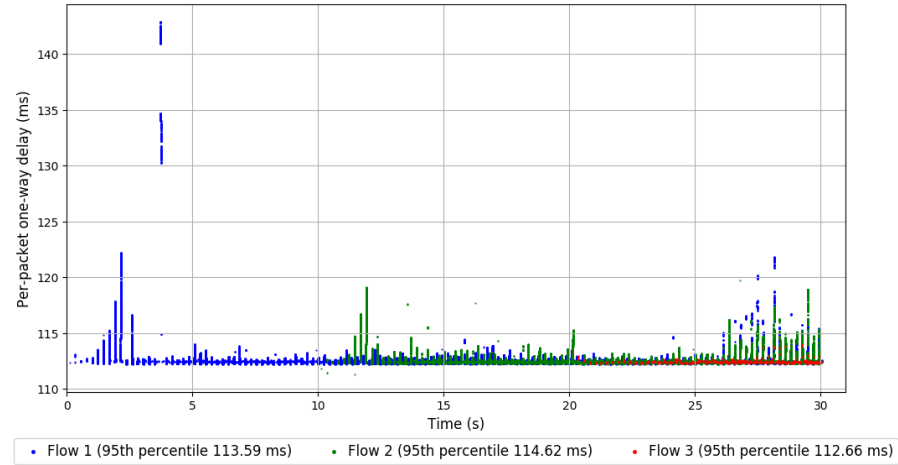
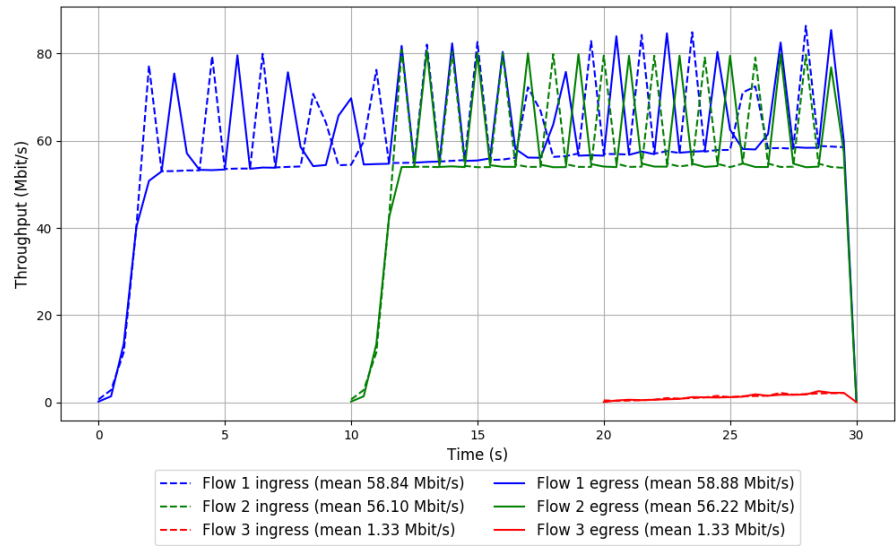
-- Flow 3:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 112.657 ms

Loss rate: 0.36%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-09-08 01:52:13

End at: 2017-09-08 01:52:43

Below is generated by plot.py at 2017-09-08 04:07:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.41 Mbit/s

95th percentile per-packet one-way delay: 120.862 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.97 Mbit/s

95th percentile per-packet one-way delay: 117.532 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.04 Mbit/s

95th percentile per-packet one-way delay: 118.229 ms

Loss rate: 0.00%

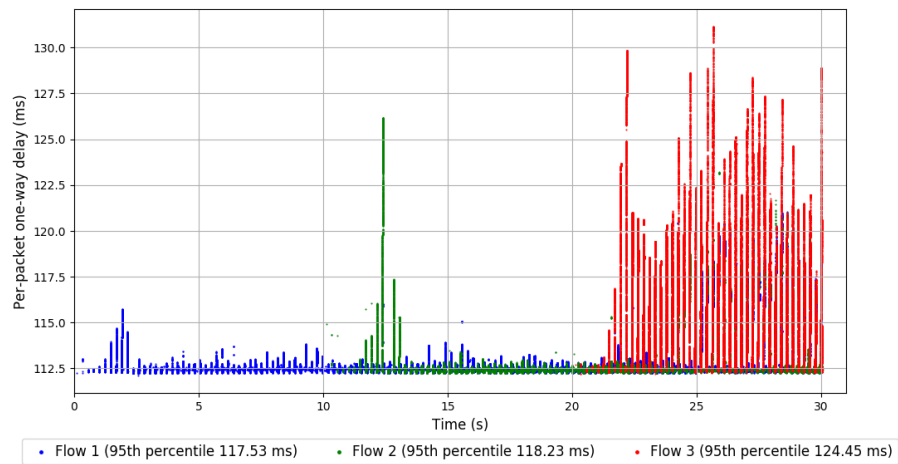
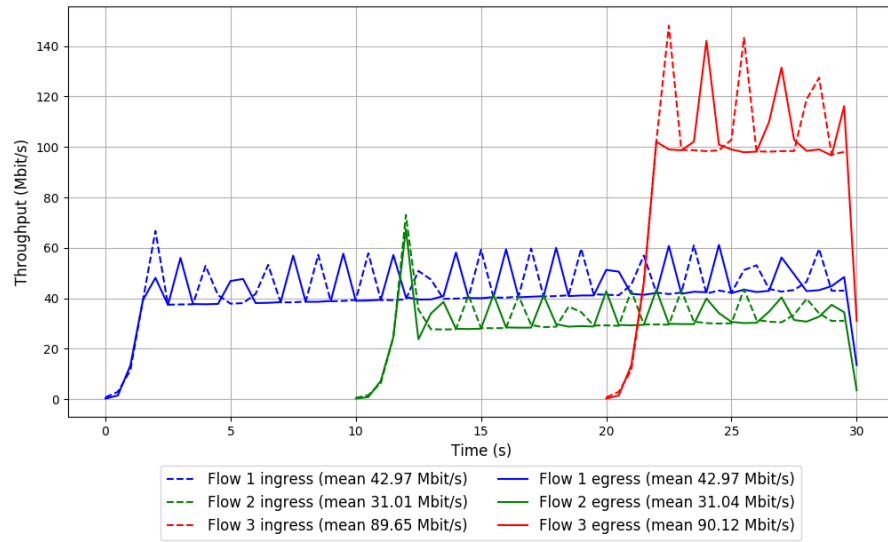
-- Flow 3:

Average throughput: 90.12 Mbit/s

95th percentile per-packet one-way delay: 124.451 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-09-08 02:05:25

End at: 2017-09-08 02:05:55

Below is generated by plot.py at 2017-09-08 04:07:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 50.04 Mbit/s

95th percentile per-packet one-way delay: 113.269 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 36.10 Mbit/s

95th percentile per-packet one-way delay: 113.348 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 112.575 ms

Loss rate: 0.09%

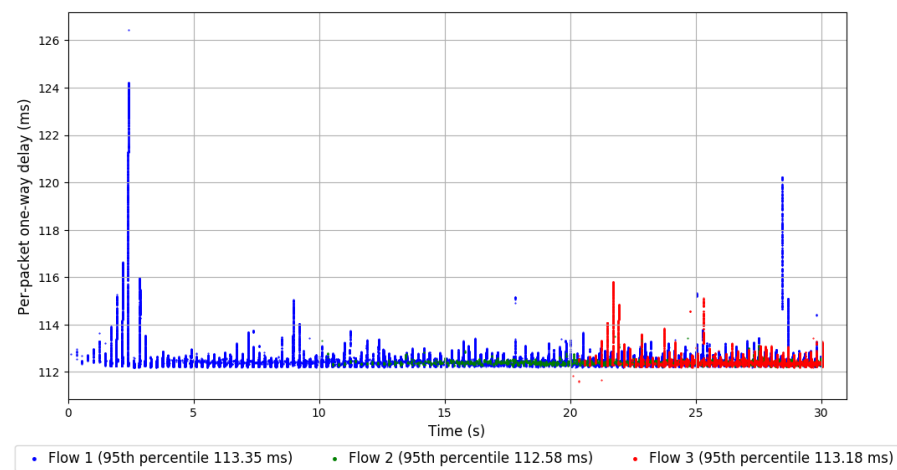
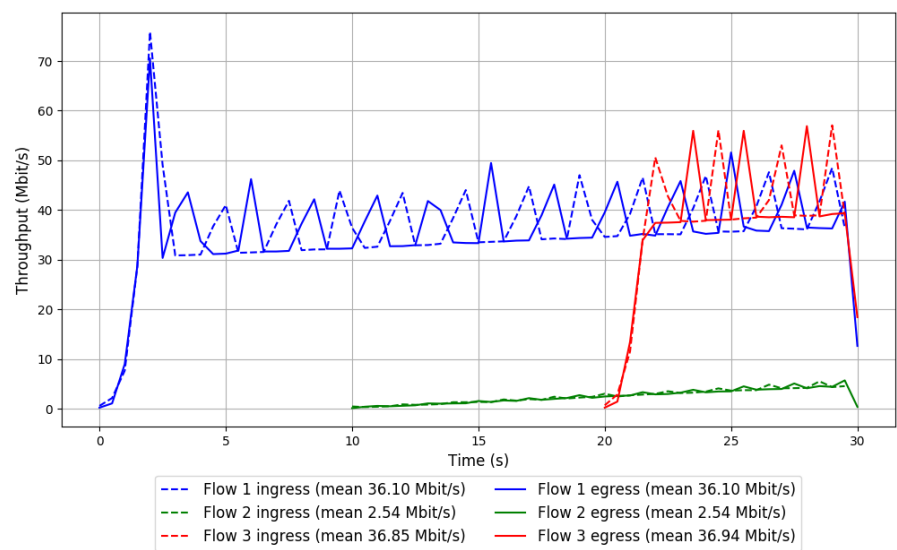
-- Flow 3:

Average throughput: 36.94 Mbit/s

95th percentile per-packet one-way delay: 113.183 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-09-08 00:15:45

End at: 2017-09-08 00:16:15

Below is generated by plot.py at 2017-09-08 04:08:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.91 Mbit/s

95th percentile per-packet one-way delay: 135.274 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.54 Mbit/s

95th percentile per-packet one-way delay: 126.056 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.05 Mbit/s

95th percentile per-packet one-way delay: 147.403 ms

Loss rate: 0.00%

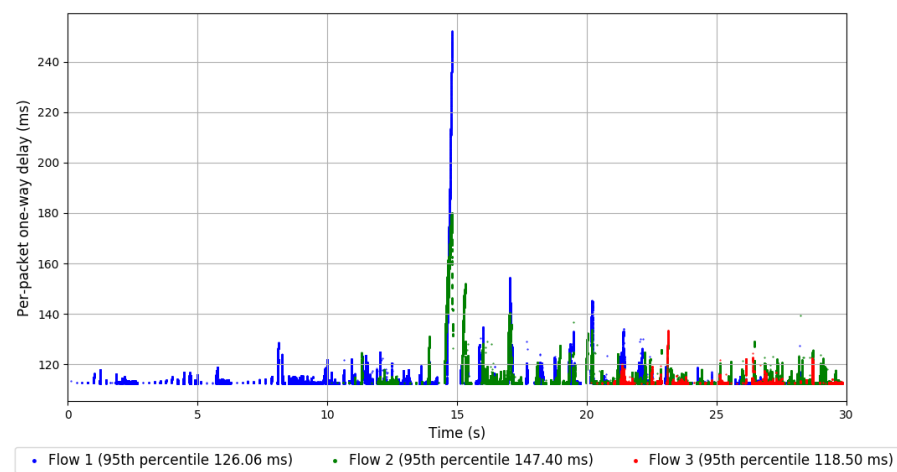
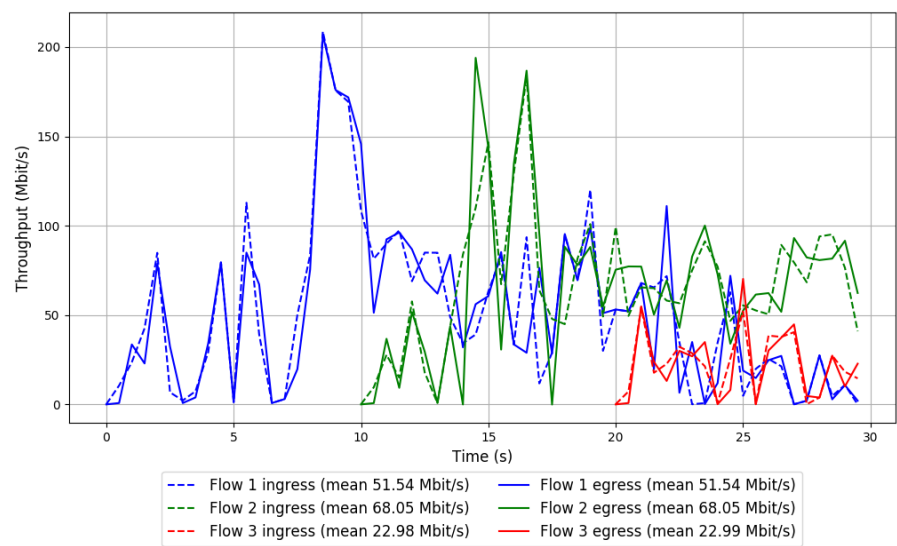
-- Flow 3:

Average throughput: 22.99 Mbit/s

95th percentile per-packet one-way delay: 118.496 ms

Loss rate: 0.00%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-09-08 00:28:57

End at: 2017-09-08 00:29:27

Below is generated by plot.py at 2017-09-08 04:08:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.73 Mbit/s

95th percentile per-packet one-way delay: 126.282 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.88 Mbit/s

95th percentile per-packet one-way delay: 126.644 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.45 Mbit/s

95th percentile per-packet one-way delay: 127.411 ms

Loss rate: 0.00%

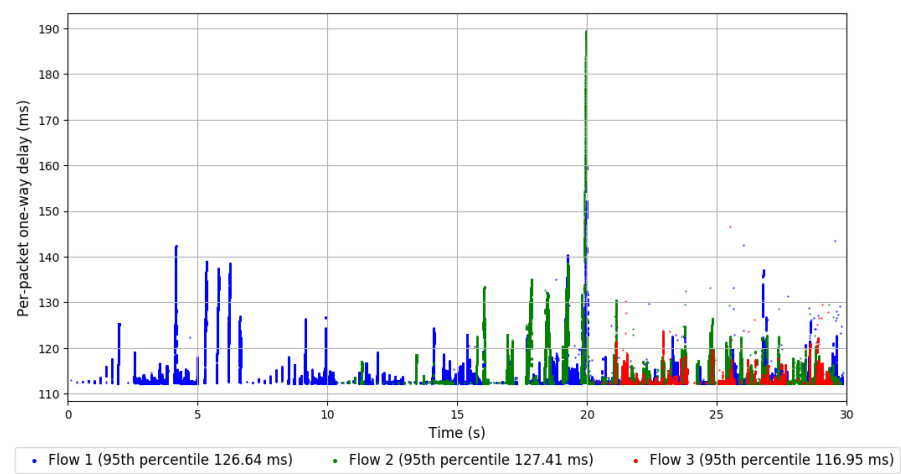
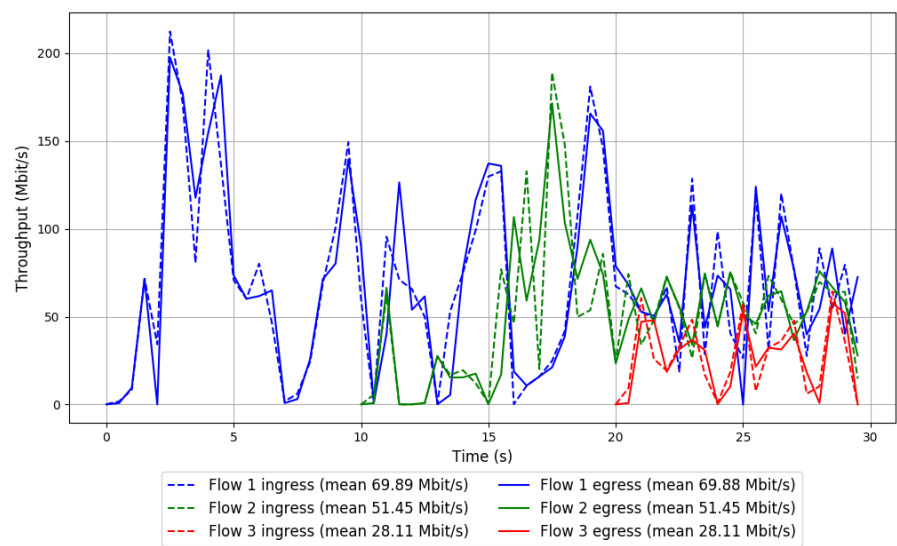
-- Flow 3:

Average throughput: 28.11 Mbit/s

95th percentile per-packet one-way delay: 116.954 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-09-08 00:42:06

End at: 2017-09-08 00:42:36

Below is generated by plot.py at 2017-09-08 04:08:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.24 Mbit/s

95th percentile per-packet one-way delay: 188.837 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 98.81 Mbit/s

95th percentile per-packet one-way delay: 211.201 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 26.90 Mbit/s

95th percentile per-packet one-way delay: 127.961 ms

Loss rate: 0.00%

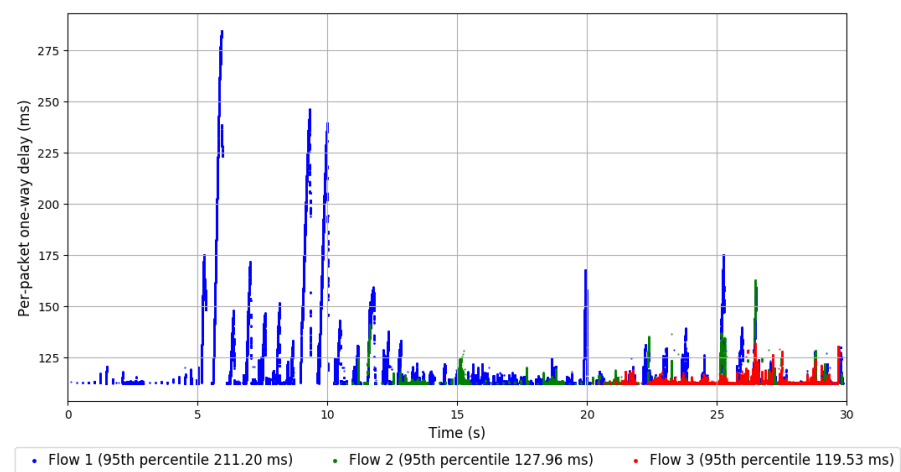
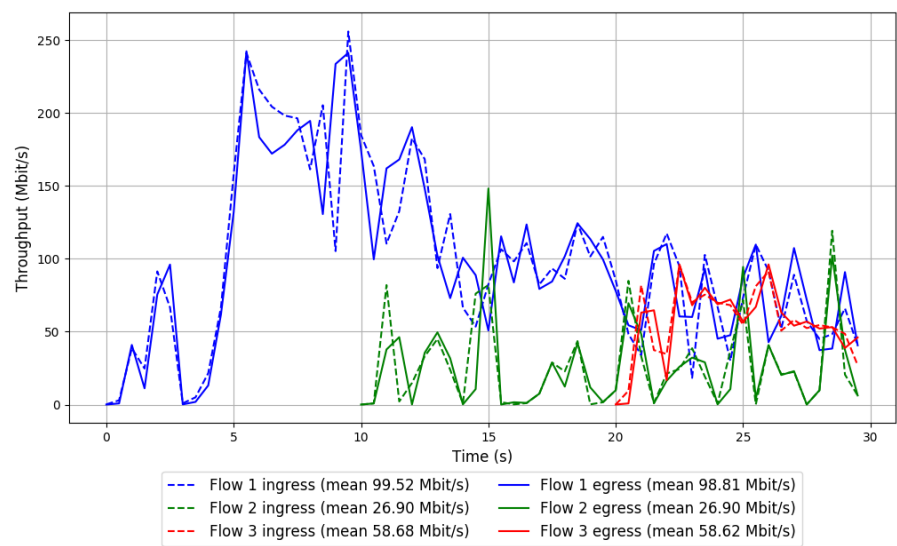
-- Flow 3:

Average throughput: 58.62 Mbit/s

95th percentile per-packet one-way delay: 119.526 ms

Loss rate: 0.00%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-09-08 00:55:17

End at: 2017-09-08 00:55:47

Below is generated by plot.py at 2017-09-08 04:08:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.72 Mbit/s

95th percentile per-packet one-way delay: 152.223 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 37.17 Mbit/s

95th percentile per-packet one-way delay: 176.276 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.03 Mbit/s

95th percentile per-packet one-way delay: 116.966 ms

Loss rate: 0.00%

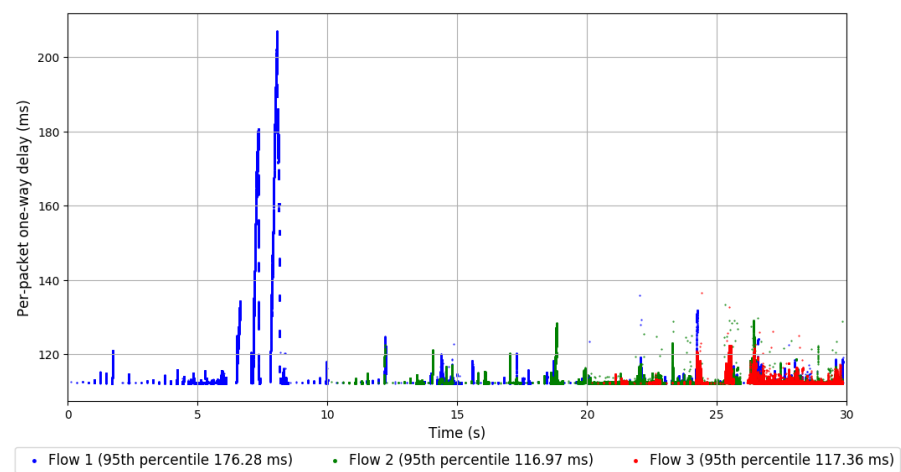
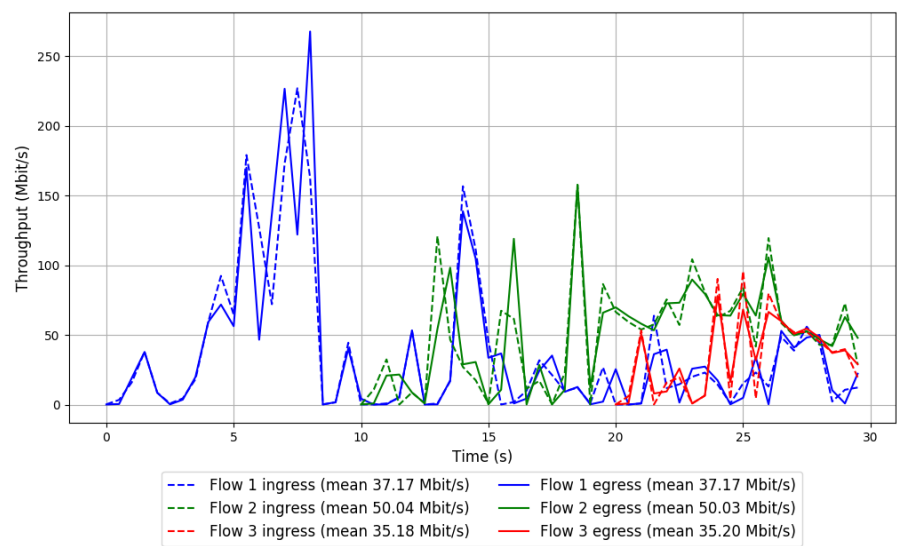
-- Flow 3:

Average throughput: 35.20 Mbit/s

95th percentile per-packet one-way delay: 117.358 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-09-08 01:08:34

End at: 2017-09-08 01:09:04

Below is generated by plot.py at 2017-09-08 04:08:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.89 Mbit/s

95th percentile per-packet one-way delay: 185.872 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.20 Mbit/s

95th percentile per-packet one-way delay: 223.298 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.83 Mbit/s

95th percentile per-packet one-way delay: 138.710 ms

Loss rate: 0.00%

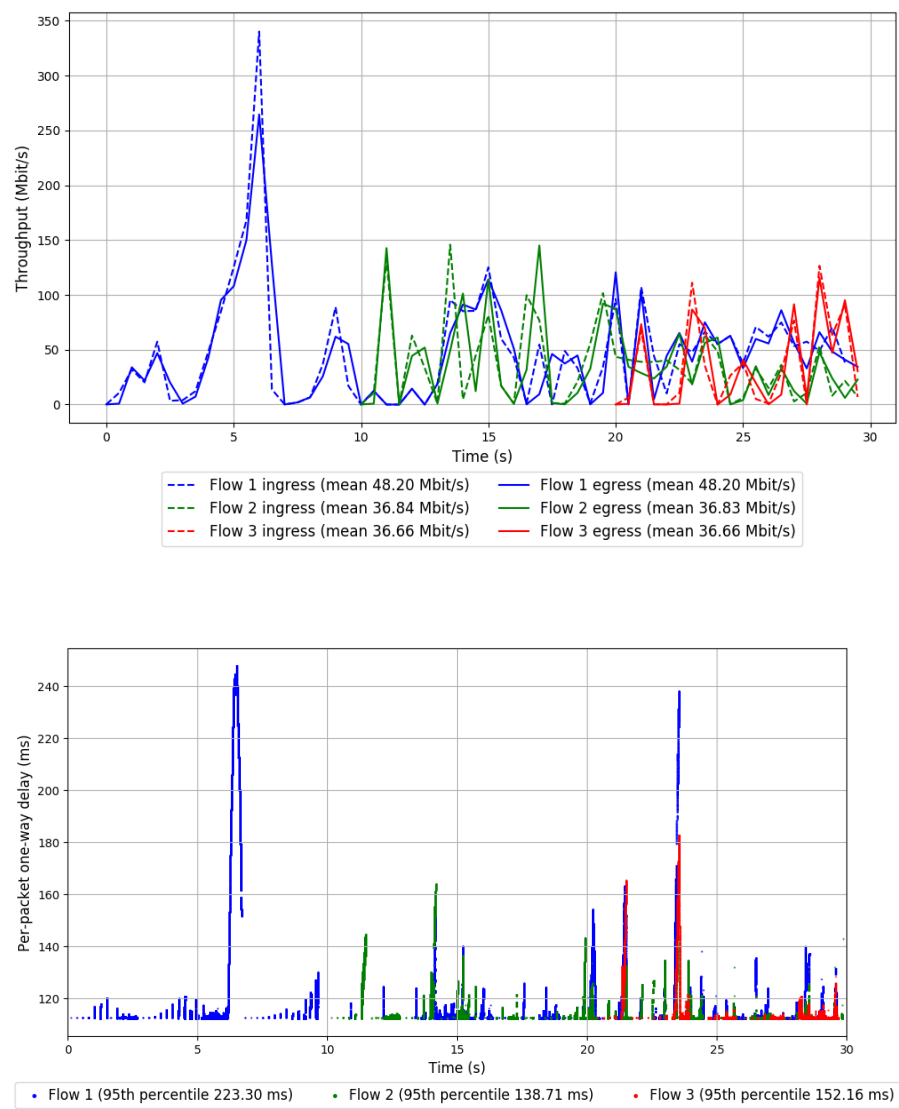
-- Flow 3:

Average throughput: 36.66 Mbit/s

95th percentile per-packet one-way delay: 152.164 ms

Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-09-08 01:21:54

End at: 2017-09-08 01:22:24

Below is generated by plot.py at 2017-09-08 04:09:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.91 Mbit/s

95th percentile per-packet one-way delay: 141.731 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 45.32 Mbit/s

95th percentile per-packet one-way delay: 140.868 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 76.13 Mbit/s

95th percentile per-packet one-way delay: 145.849 ms

Loss rate: 0.00%

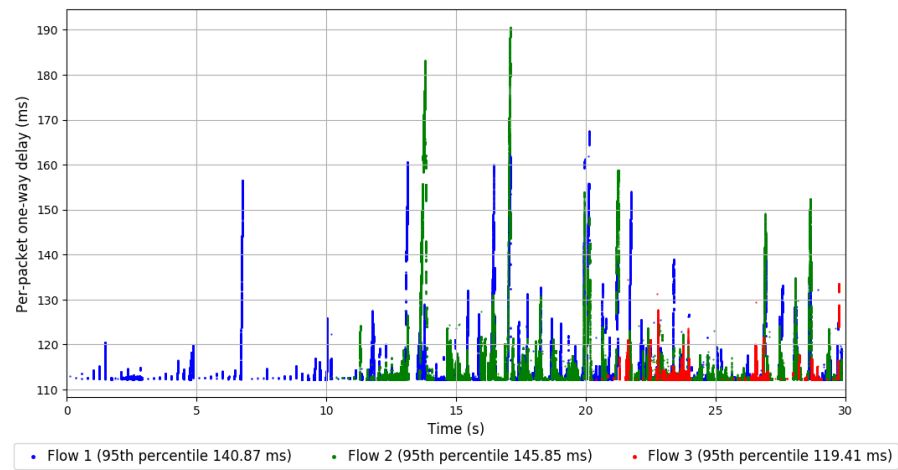
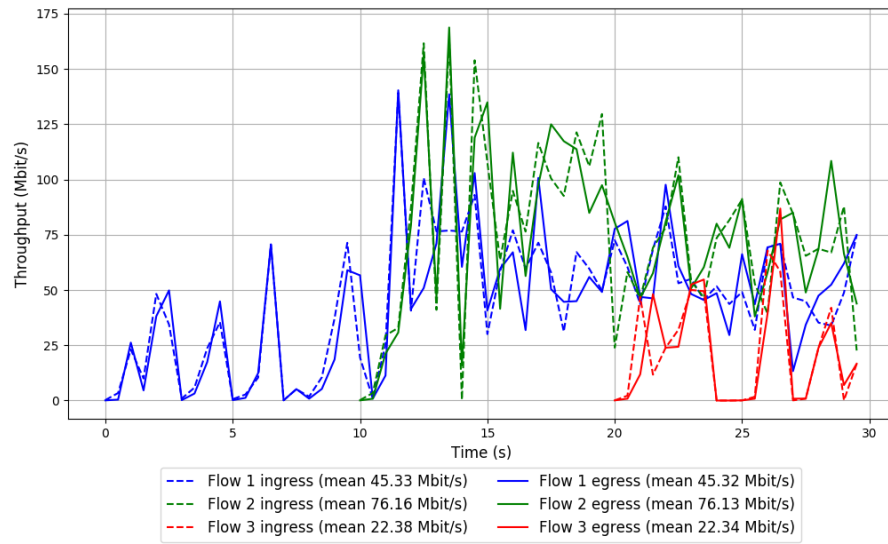
-- Flow 3:

Average throughput: 22.34 Mbit/s

95th percentile per-packet one-way delay: 119.414 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-09-08 01:35:18

End at: 2017-09-08 01:35:48

Below is generated by plot.py at 2017-09-08 04:09:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.63 Mbit/s

95th percentile per-packet one-way delay: 129.582 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 79.59 Mbit/s

95th percentile per-packet one-way delay: 132.730 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.23 Mbit/s

95th percentile per-packet one-way delay: 120.116 ms

Loss rate: 0.00%

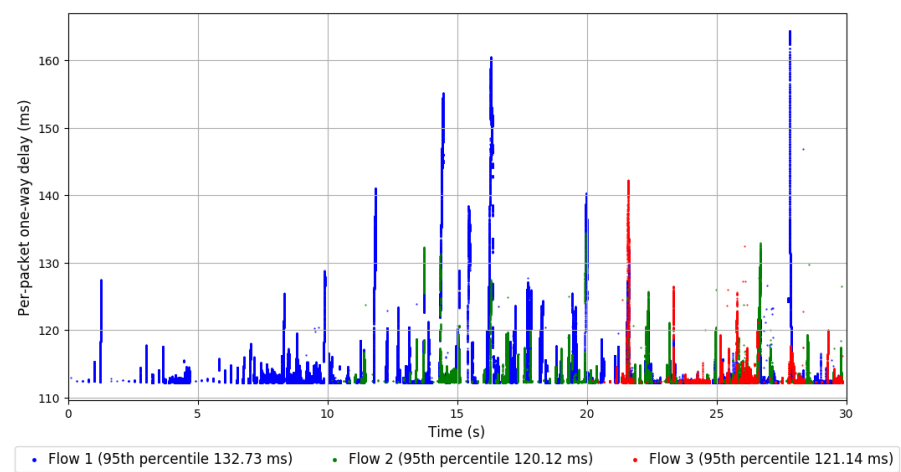
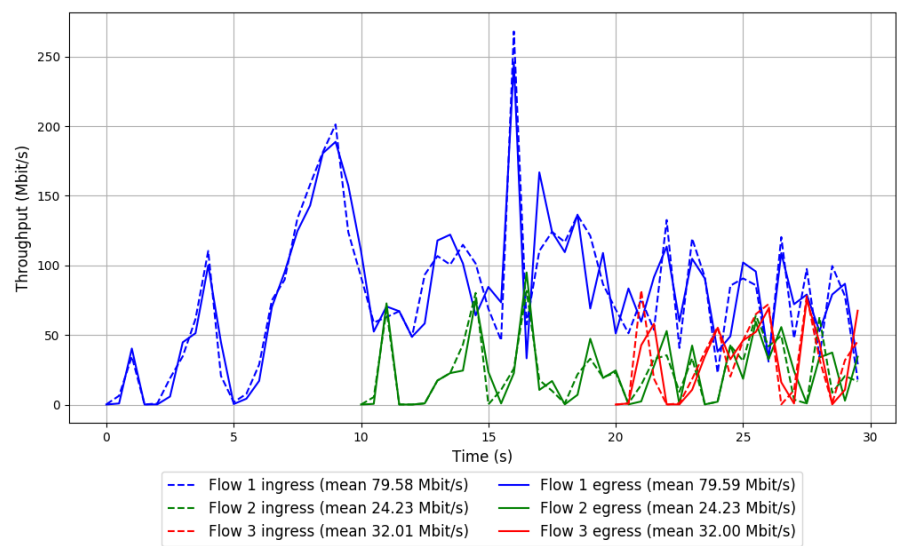
-- Flow 3:

Average throughput: 32.00 Mbit/s

95th percentile per-packet one-way delay: 121.139 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-09-08 01:48:36

End at: 2017-09-08 01:49:06

Below is generated by plot.py at 2017-09-08 04:09:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.37 Mbit/s

95th percentile per-packet one-way delay: 168.457 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.44 Mbit/s

95th percentile per-packet one-way delay: 167.687 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.03 Mbit/s

95th percentile per-packet one-way delay: 181.226 ms

Loss rate: 0.00%

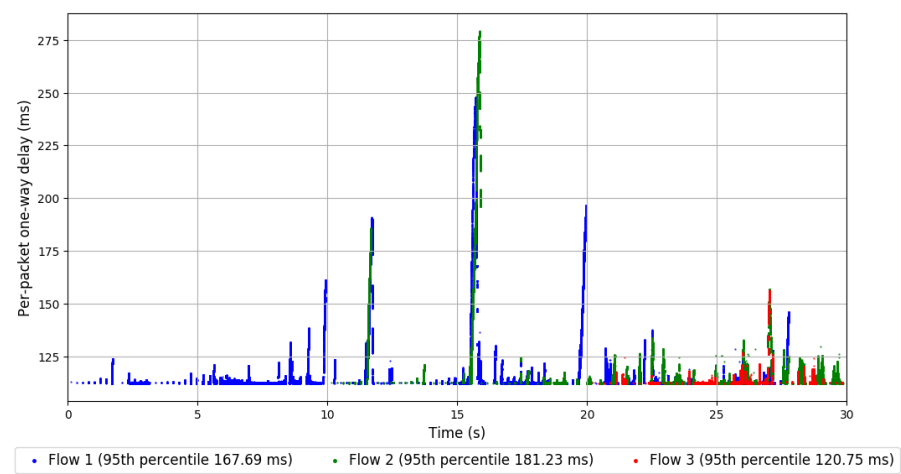
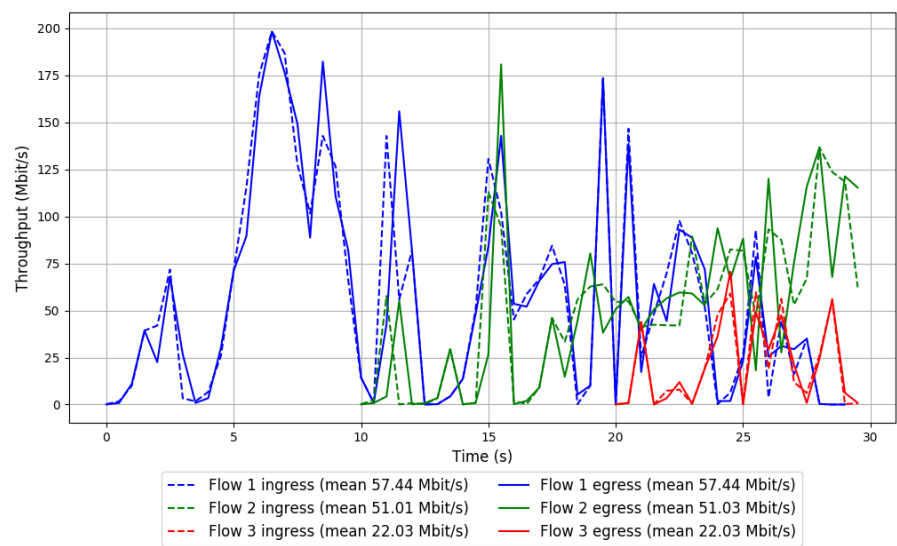
-- Flow 3:

Average throughput: 22.03 Mbit/s

95th percentile per-packet one-way delay: 120.751 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-09-08 02:01:46

End at: 2017-09-08 02:02:16

Below is generated by plot.py at 2017-09-08 04:09:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.11 Mbit/s

95th percentile per-packet one-way delay: 191.715 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 96.22 Mbit/s

95th percentile per-packet one-way delay: 195.062 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 41.36 Mbit/s

95th percentile per-packet one-way delay: 183.634 ms

Loss rate: 0.00%

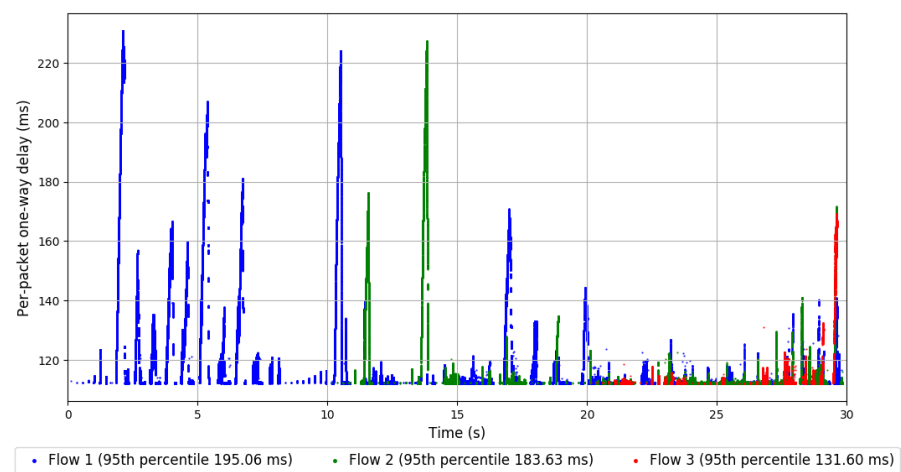
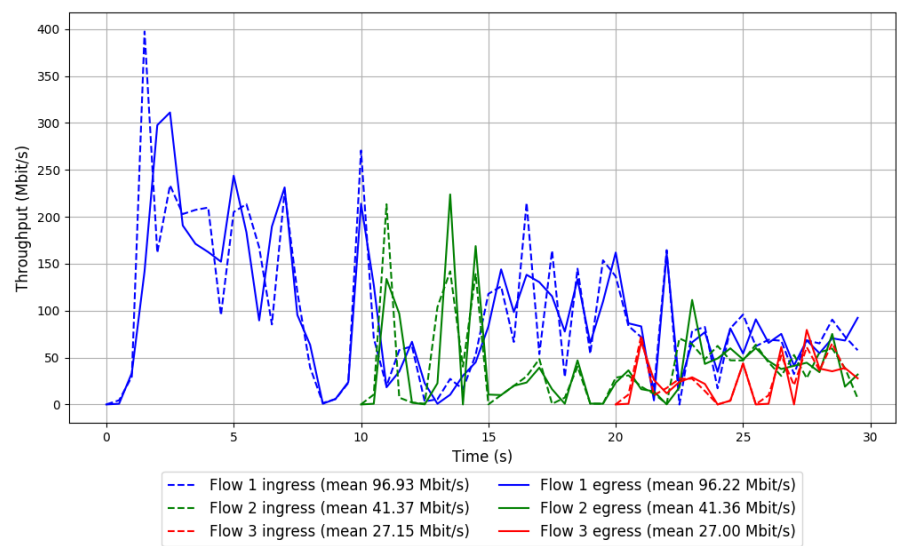
-- Flow 3:

Average throughput: 27.00 Mbit/s

95th percentile per-packet one-way delay: 131.605 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-09-08 02:15:10

End at: 2017-09-08 02:15:40

Below is generated by plot.py at 2017-09-08 04:09:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.10 Mbit/s

95th percentile per-packet one-way delay: 165.340 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.00 Mbit/s

95th percentile per-packet one-way delay: 158.678 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 26.26 Mbit/s

95th percentile per-packet one-way delay: 158.893 ms

Loss rate: 0.00%

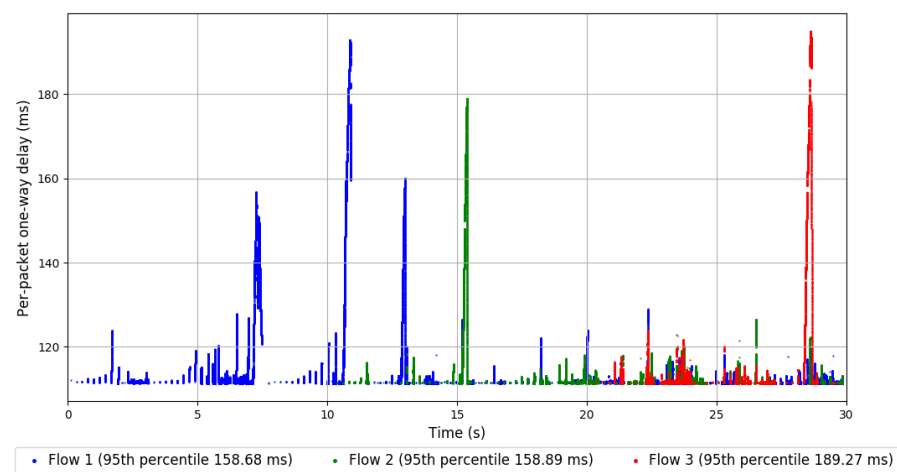
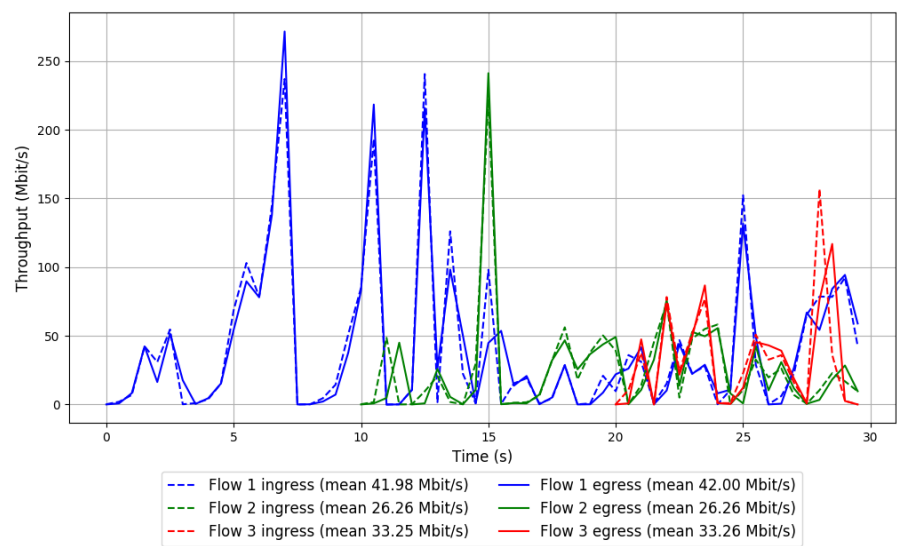
-- Flow 3:

Average throughput: 33.26 Mbit/s

95th percentile per-packet one-way delay: 189.273 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link



Run 1: Statistics of WebRTC media

Start at: 2017-09-08 00:03:20

End at: 2017-09-08 00:03:50

Below is generated by plot.py at 2017-09-08 04:09:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 112.438 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.91 Mbit/s

95th percentile per-packet one-way delay: 112.359 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 111.227 ms

Loss rate: 0.00%

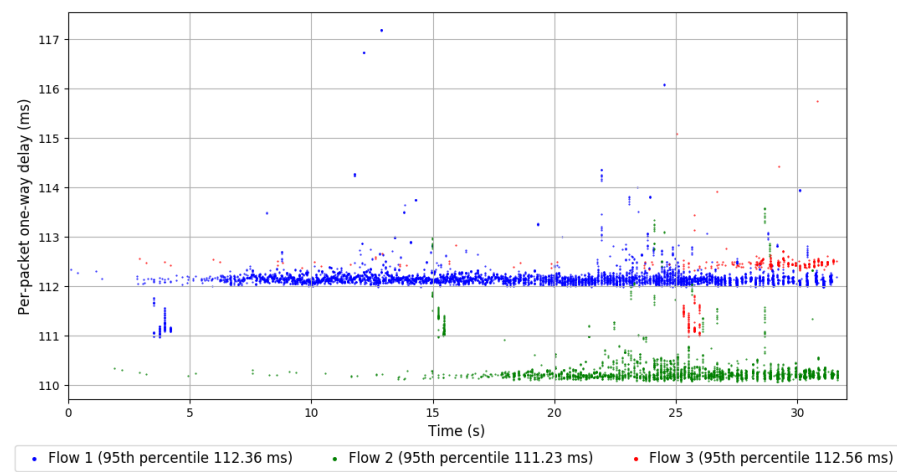
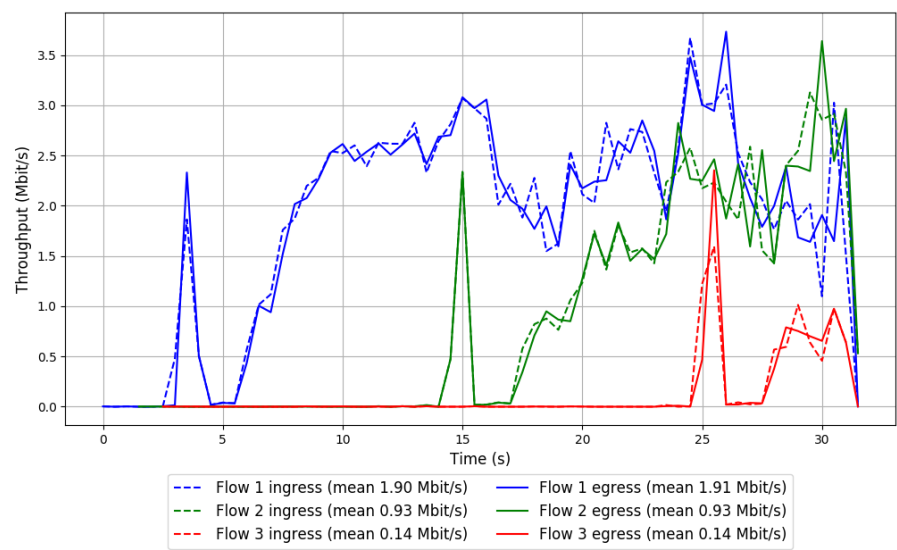
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 112.565 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-09-08 00:16:41

End at: 2017-09-08 00:17:11

Below is generated by plot.py at 2017-09-08 04:09:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 112.750 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 113.150 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 112.694 ms

Loss rate: 0.00%

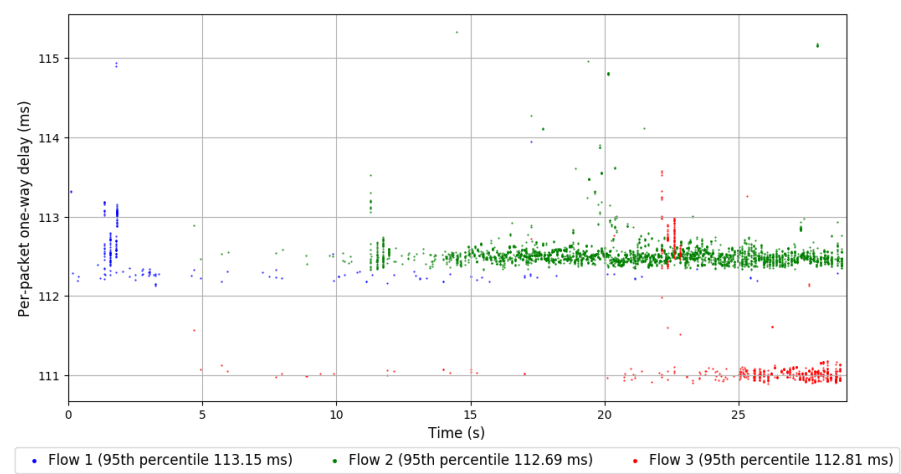
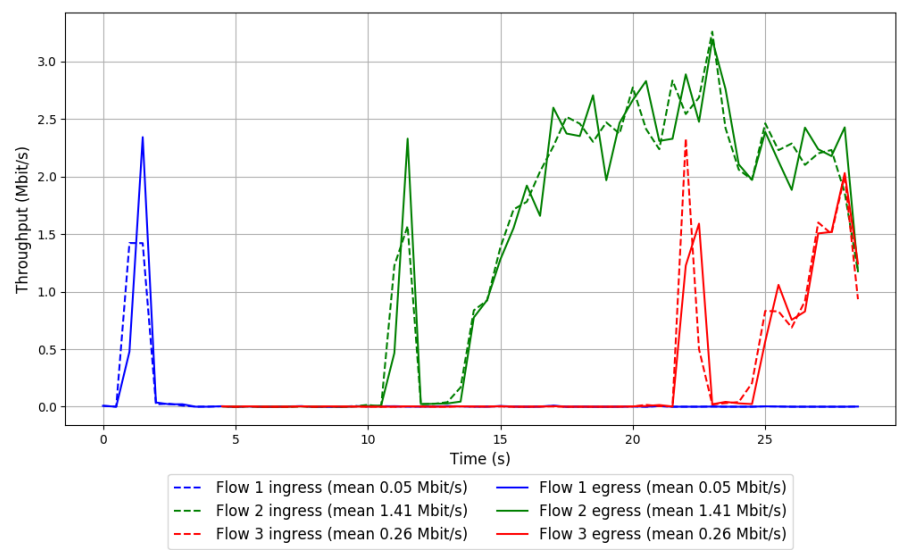
-- Flow 3:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 112.806 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-09-08 00:29:54

End at: 2017-09-08 00:30:24

Below is generated by plot.py at 2017-09-08 04:09:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 112.858 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.800 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 112.872 ms

Loss rate: 0.00%

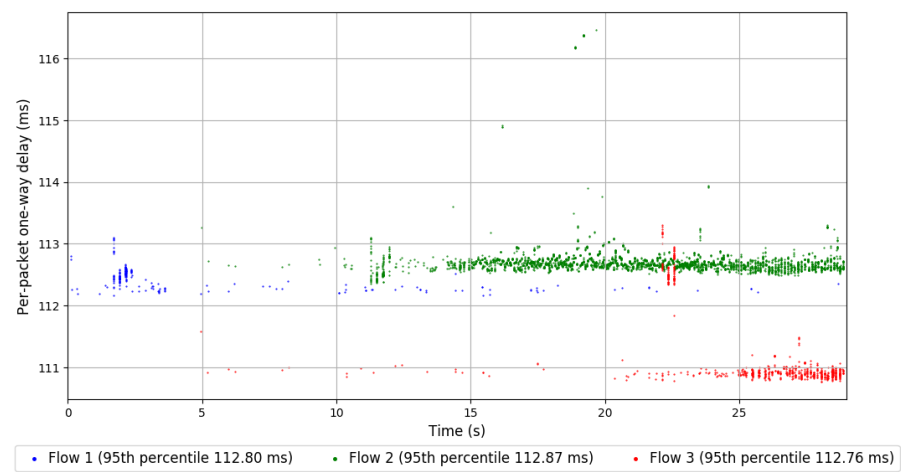
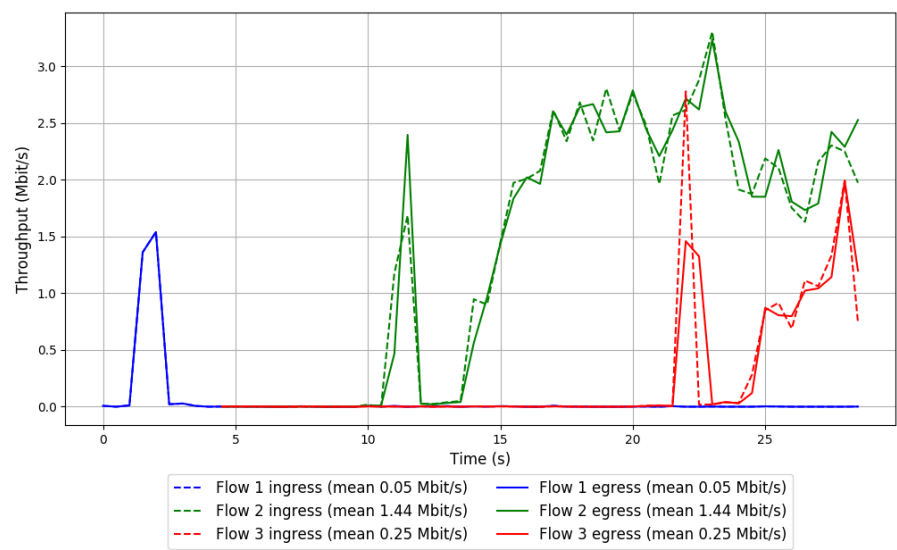
-- Flow 3:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 112.759 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-09-08 00:43:05

End at: 2017-09-08 00:43:35

Below is generated by plot.py at 2017-09-08 04:09:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 113.104 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 113.035 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 113.069 ms

Loss rate: 0.00%

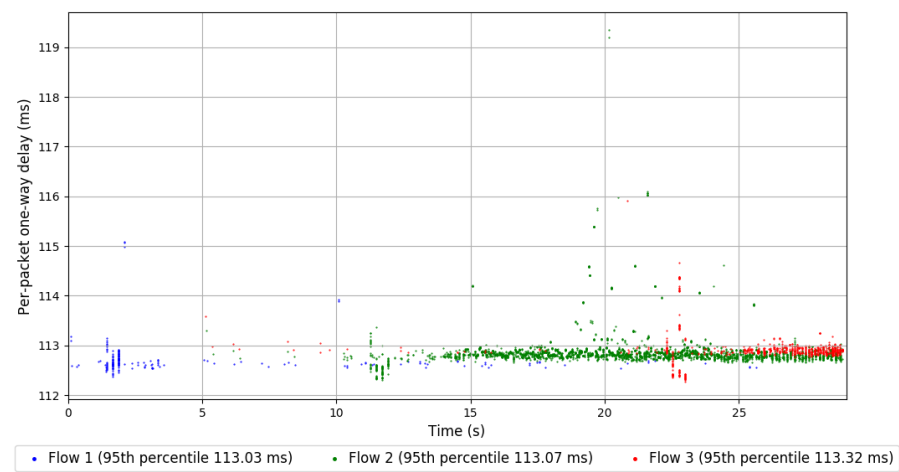
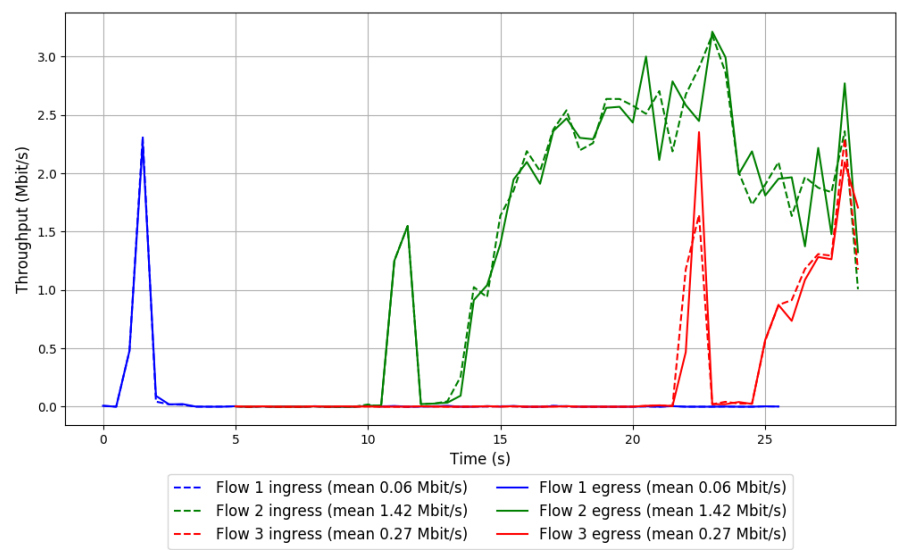
-- Flow 3:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 113.318 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-09-08 00:56:11

End at: 2017-09-08 00:56:41

Below is generated by plot.py at 2017-09-08 04:09:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 113.043 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 113.102 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 113.079 ms

Loss rate: 0.00%

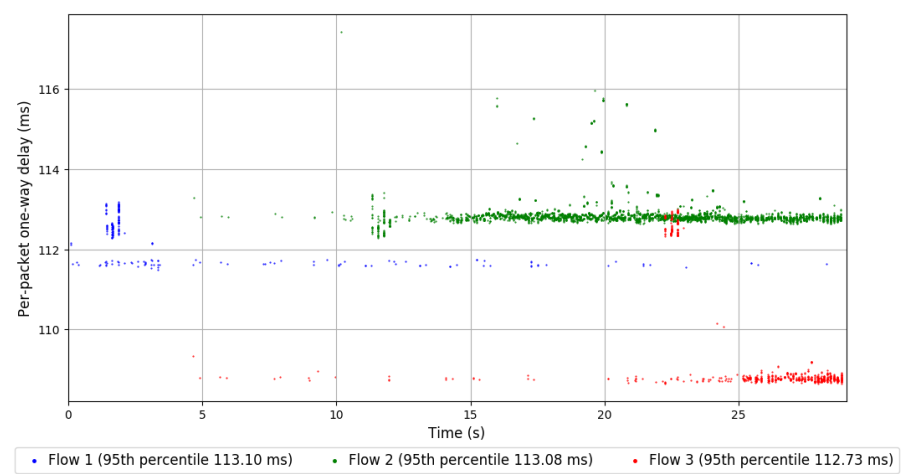
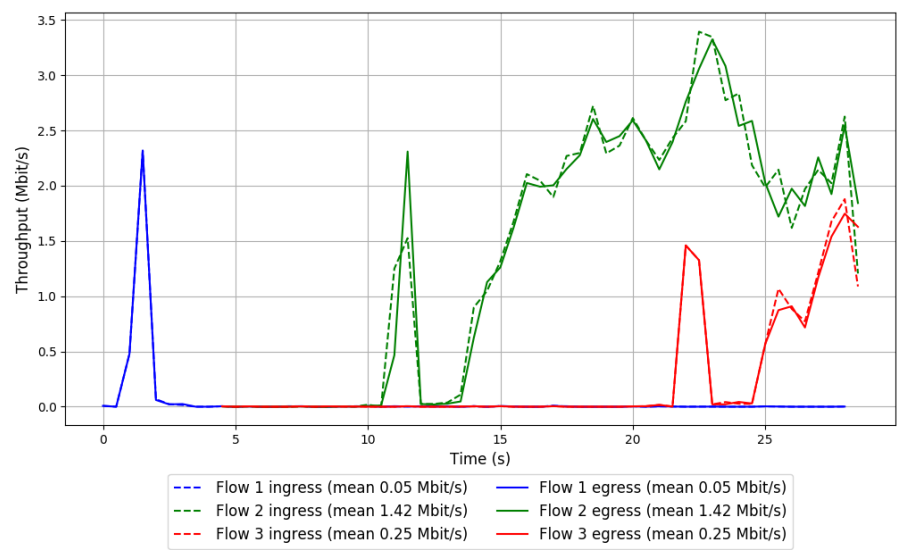
-- Flow 3:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 112.734 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-09-08 01:09:28

End at: 2017-09-08 01:09:58

Below is generated by plot.py at 2017-09-08 04:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 113.026 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.818 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 113.003 ms

Loss rate: 0.00%

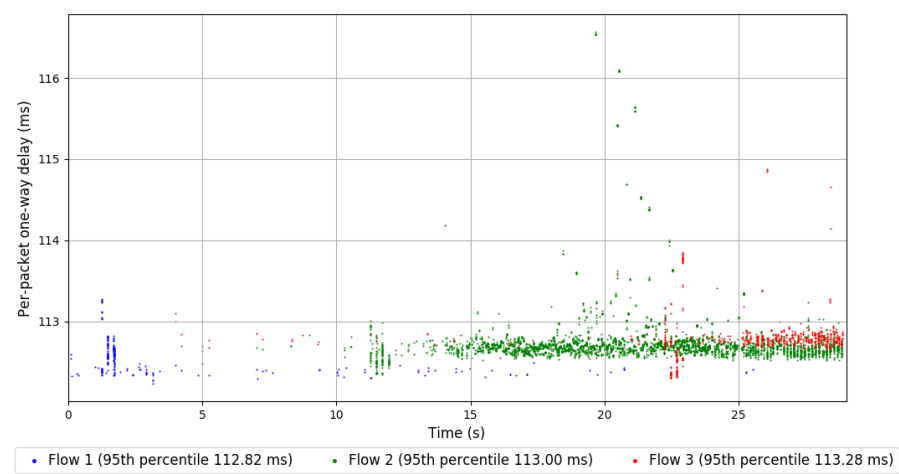
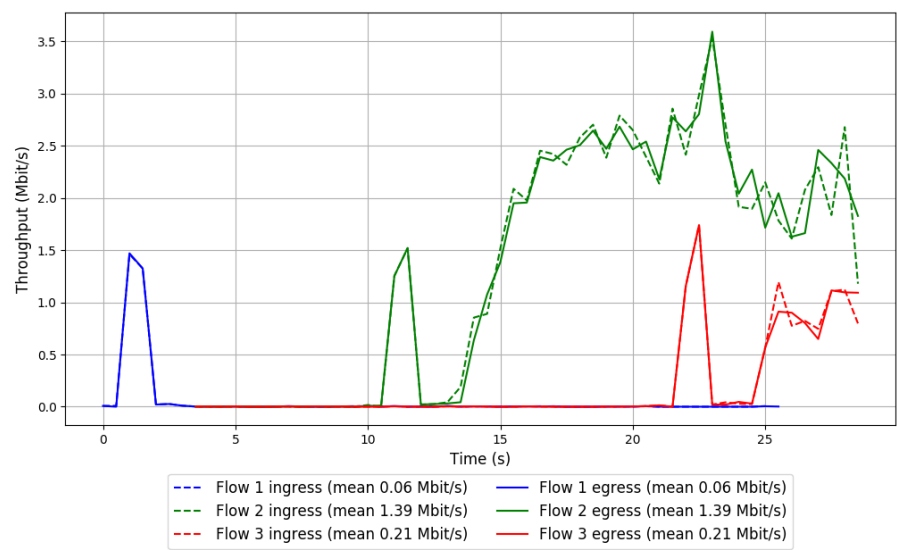
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.276 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-09-08 01:22:50

End at: 2017-09-08 01:23:20

Below is generated by plot.py at 2017-09-08 04:09:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 113.098 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 114.465 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 112.703 ms

Loss rate: 0.00%

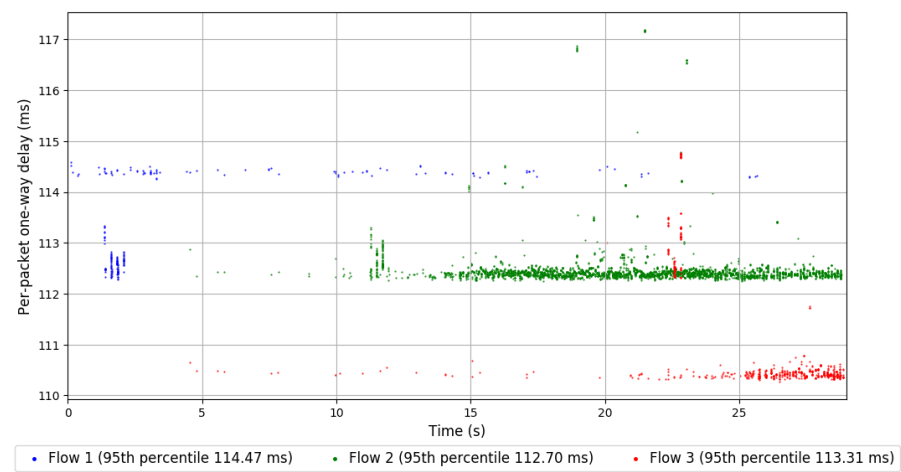
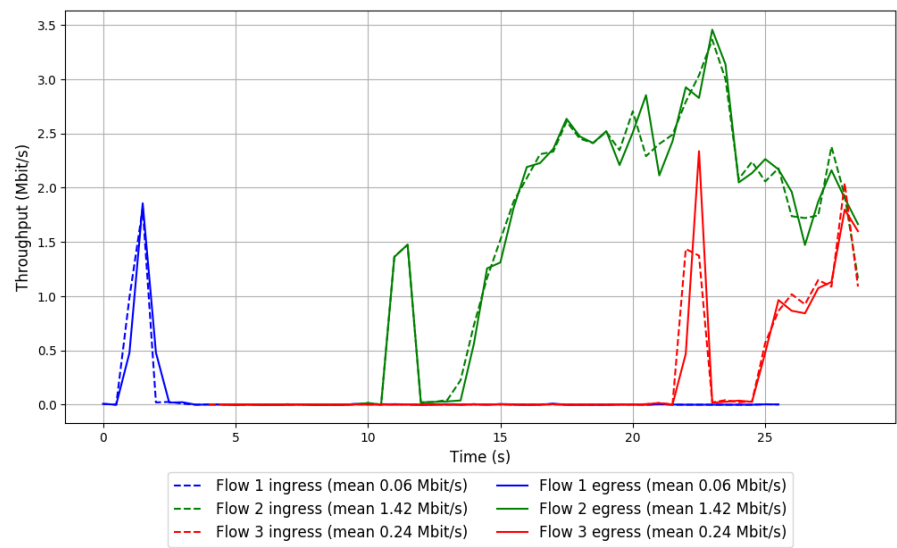
-- Flow 3:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 113.306 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-09-08 01:36:14

End at: 2017-09-08 01:36:44

Below is generated by plot.py at 2017-09-08 04:09:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 112.857 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.547 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 112.690 ms

Loss rate: 0.00%

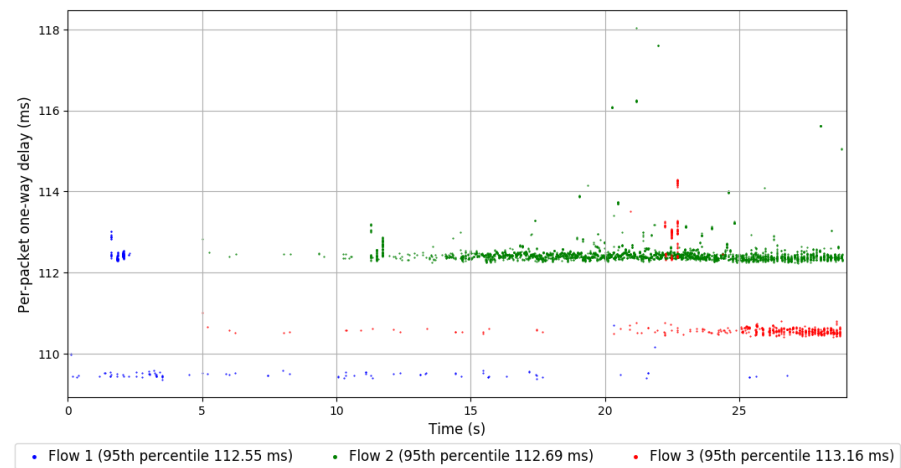
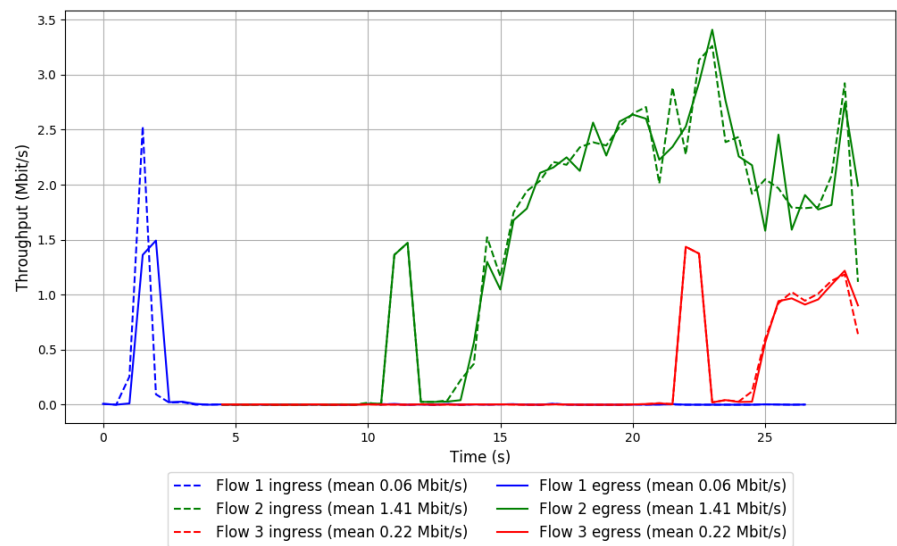
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.161 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-09-08 01:49:32

End at: 2017-09-08 01:50:02

Below is generated by plot.py at 2017-09-08 04:09:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 113.012 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.869 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 113.006 ms

Loss rate: 0.00%

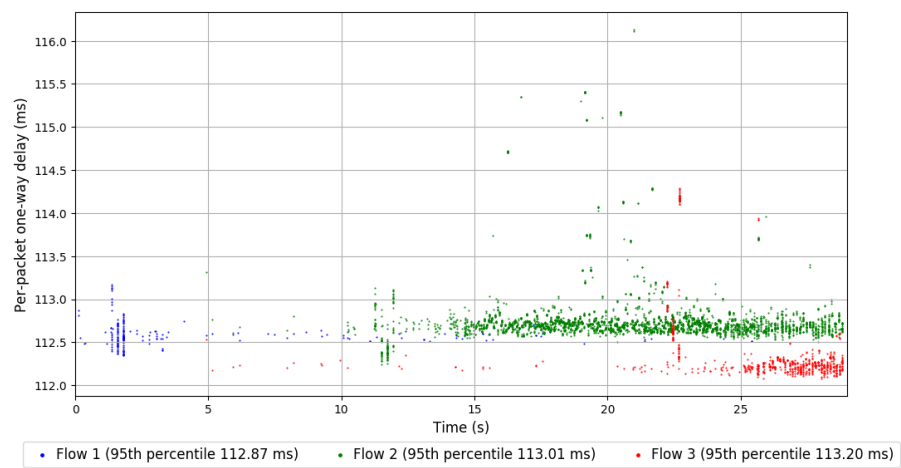
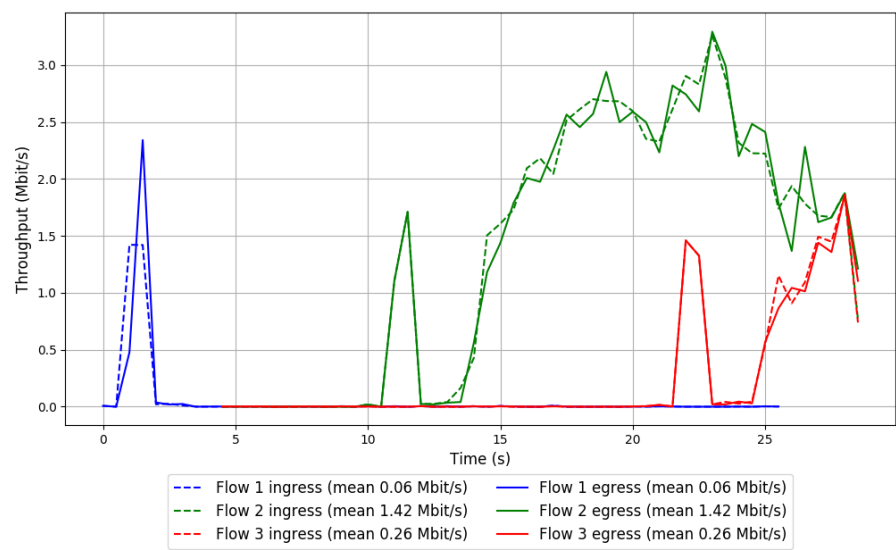
-- Flow 3:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 113.204 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-09-08 02:02:44

End at: 2017-09-08 02:03:14

Below is generated by plot.py at 2017-09-08 04:09:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.44 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 113.360 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 112.214 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.25 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

