

Pantheon Report

Generated at 2017-08-21 09:42:16 (UTC).

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

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.

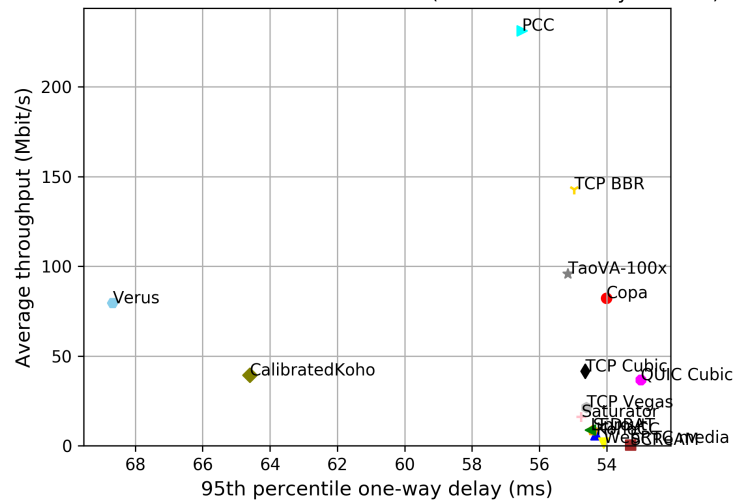
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

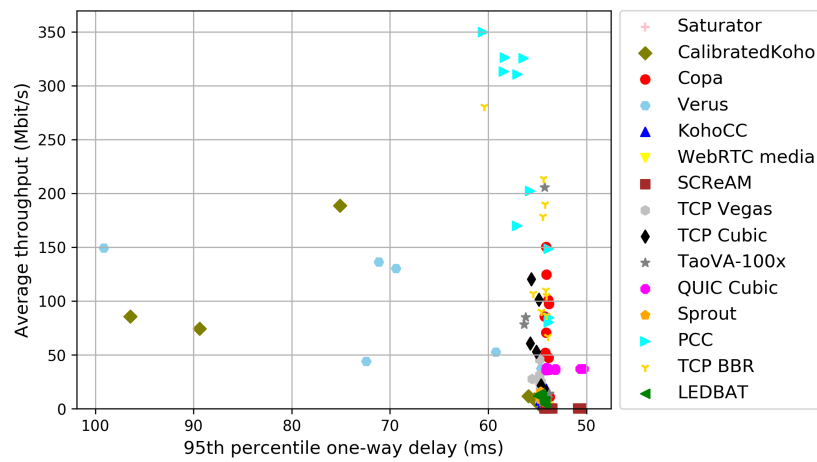
Git summary:

```
branch: master @ e43be7582298d552838afcf6382342bf187fbbd6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	75.42	40.20	140.56	605.92	54.04	56.18	7.48	24.89	8.71
CalibratedKoho	10	3.51	29.91	48.55	54.99	56.69	62.63	69.28	61.64	55.25
Copa	9	49.05	63.23	30.65	53.55	53.96	53.92	39.42	18.30	39.53
TCP Cubic	10	27.15	12.93	17.87	54.39	54.35	54.41	2.71	3.78	8.11
KohoCC	10	2.39	3.62	4.39	54.20	54.25	54.22	77.54	66.09	57.69
LEDBAT	10	3.81	5.47	3.96	54.35	54.39	53.87	5.16	4.91	6.44
PCC	10	168.57	77.41	35.23	55.61	55.98	54.26	23.40	36.96	45.01
QUIC Cubic	9	0.06	37.38	36.73	51.88	52.87	52.44	0.00	0.30	1.04
Saturator	6	11.77	11.74	10.36	54.64	54.54	54.56	36.94	36.84	34.41
SCReAM	9	0.21	0.21	0.22	52.32	51.86	52.75	0.32	0.42	0.95
Sprout	10	4.29	4.15	4.49	54.33	54.27	54.40	16.08	15.69	13.53
TaoVA-100x	4	43.67	30.18	126.02	54.10	53.30	55.22	22.84	30.56	25.87
TCP Vegas	10	9.73	16.06	3.11	54.48	54.37	54.07	1.95	4.50	9.96
Verus	7	50.01	39.23	9.12	66.45	65.07	54.37	50.89	36.75	72.57
WebRTC media	10	0.05	1.48	0.37	54.26	53.09	54.17	0.02	0.67	2.71

Run 1: Statistics of TCP BBR

Start at: 2017-08-21 05:22:44

End at: 2017-08-21 05:23:14

Below is generated by plot.py at 2017-08-21 09:26:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.16 Mbit/s

95th percentile per-packet one-way delay: 54.072 ms

Loss rate: 7.66%

-- Flow 1:

Average throughput: 42.69 Mbit/s

95th percentile per-packet one-way delay: 53.931 ms

Loss rate: 13.68%

-- Flow 2:

Average throughput: 10.14 Mbit/s

95th percentile per-packet one-way delay: 53.889 ms

Loss rate: 13.44%

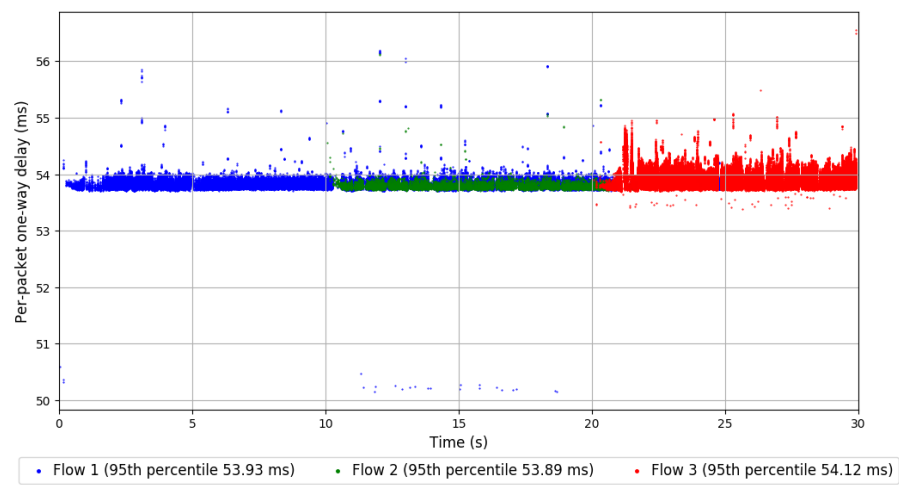
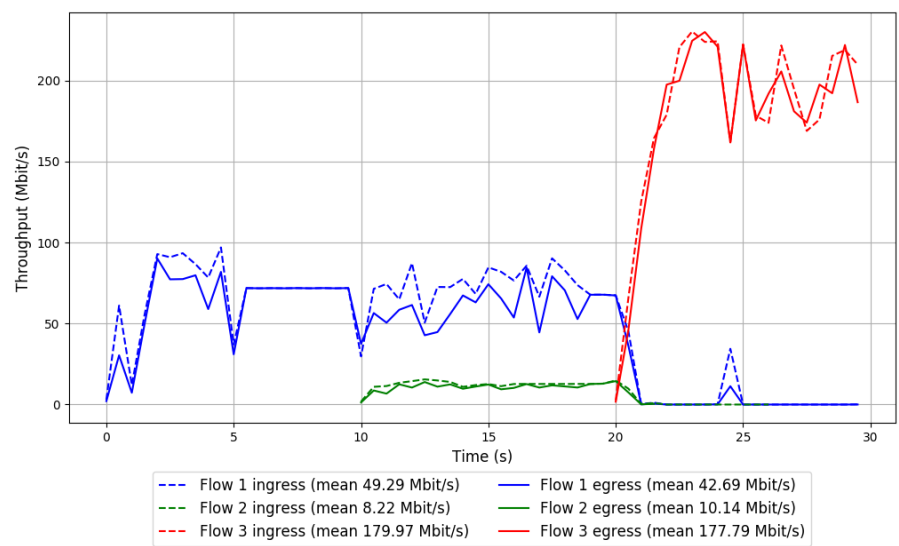
-- Flow 3:

Average throughput: 177.79 Mbit/s

95th percentile per-packet one-way delay: 54.120 ms

Loss rate: 2.25%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-21 05:33:27

End at: 2017-08-21 05:33:57

Below is generated by plot.py at 2017-08-21 09:27:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.59 Mbit/s

95th percentile per-packet one-way delay: 60.406 ms

Loss rate: 2.40%

-- Flow 1:

Average throughput: 193.55 Mbit/s

95th percentile per-packet one-way delay: 57.677 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 52.04 Mbit/s

95th percentile per-packet one-way delay: 54.303 ms

Loss rate: 13.58%

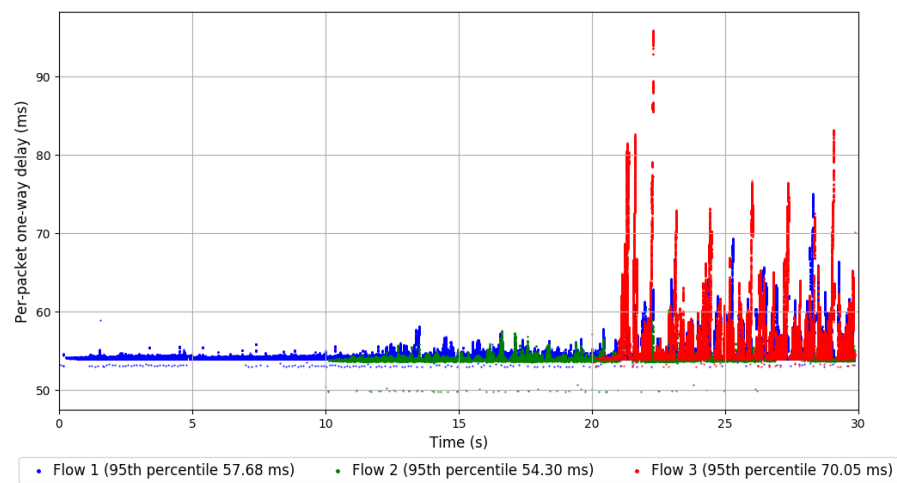
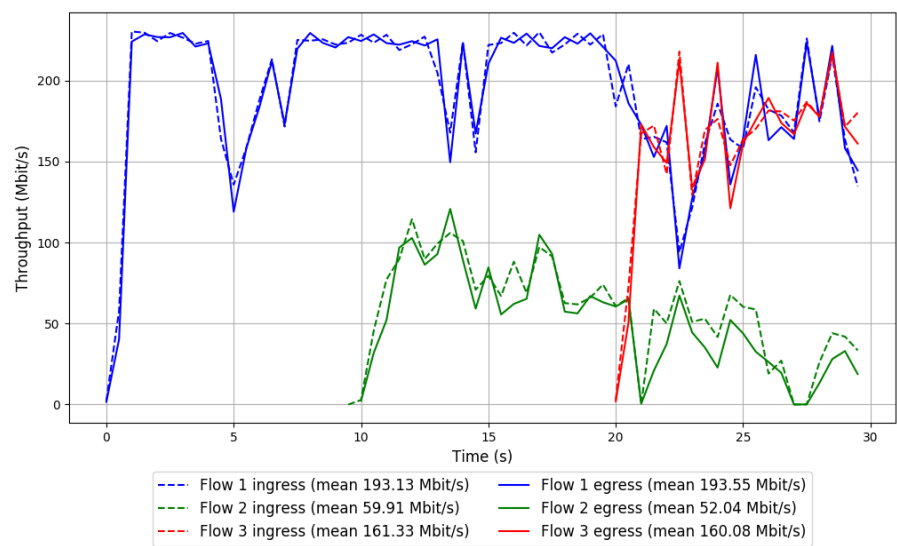
-- Flow 3:

Average throughput: 160.08 Mbit/s

95th percentile per-packet one-way delay: 70.045 ms

Loss rate: 1.86%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-21 05:44:25

End at: 2017-08-21 05:44:55

Below is generated by plot.py at 2017-08-21 09:27:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.57 Mbit/s

95th percentile per-packet one-way delay: 54.450 ms

Loss rate: 3.32%

-- Flow 1:

Average throughput: 33.24 Mbit/s

95th percentile per-packet one-way delay: 53.908 ms

Loss rate: 11.60%

-- Flow 2:

Average throughput: 198.25 Mbit/s

95th percentile per-packet one-way delay: 54.743 ms

Loss rate: 0.60%

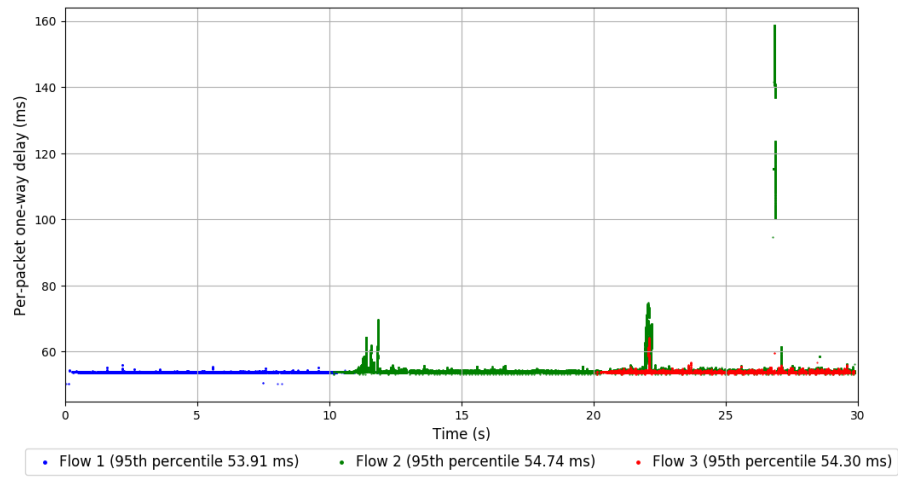
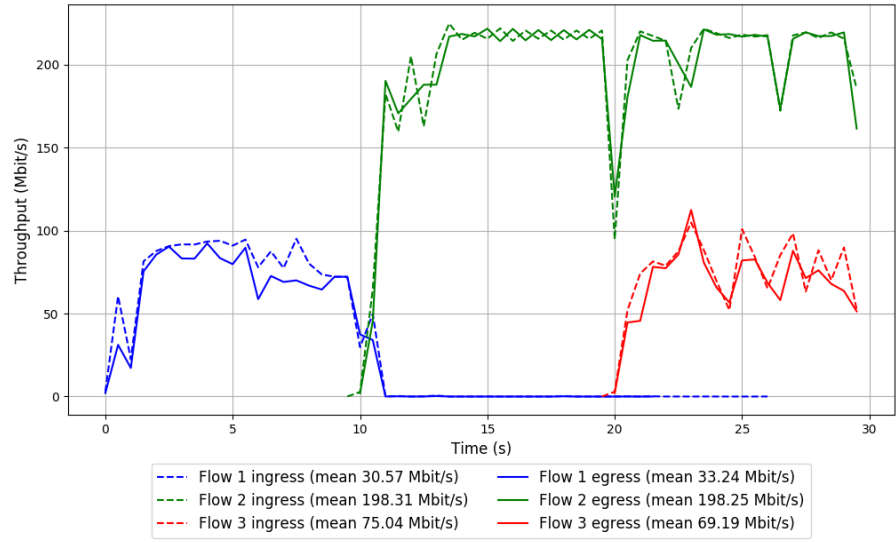
-- Flow 3:

Average throughput: 69.19 Mbit/s

95th percentile per-packet one-way delay: 54.297 ms

Loss rate: 8.77%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-21 05:55:16

End at: 2017-08-21 05:55:46

Below is generated by plot.py at 2017-08-21 09:27:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.35 Mbit/s

95th percentile per-packet one-way delay: 54.593 ms

Loss rate: 6.04%

-- Flow 1:

Average throughput: 11.21 Mbit/s

95th percentile per-packet one-way delay: 1186.343 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.92 Mbit/s

95th percentile per-packet one-way delay: 53.952 ms

Loss rate: 18.36%

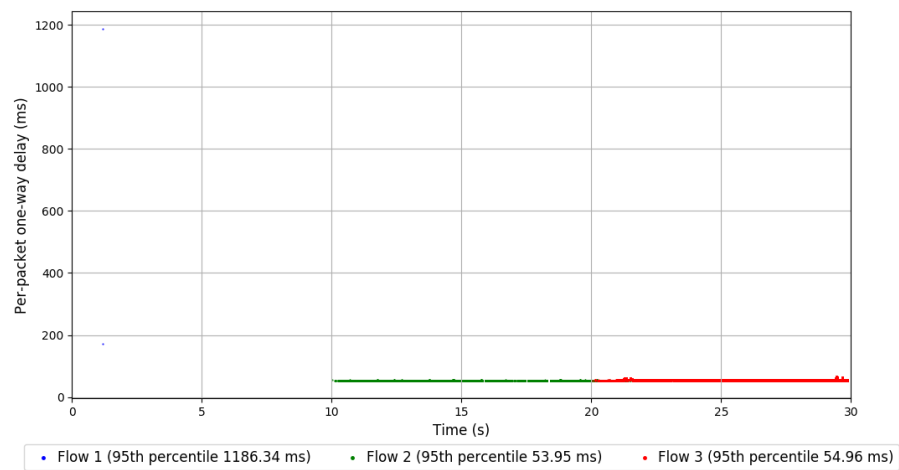
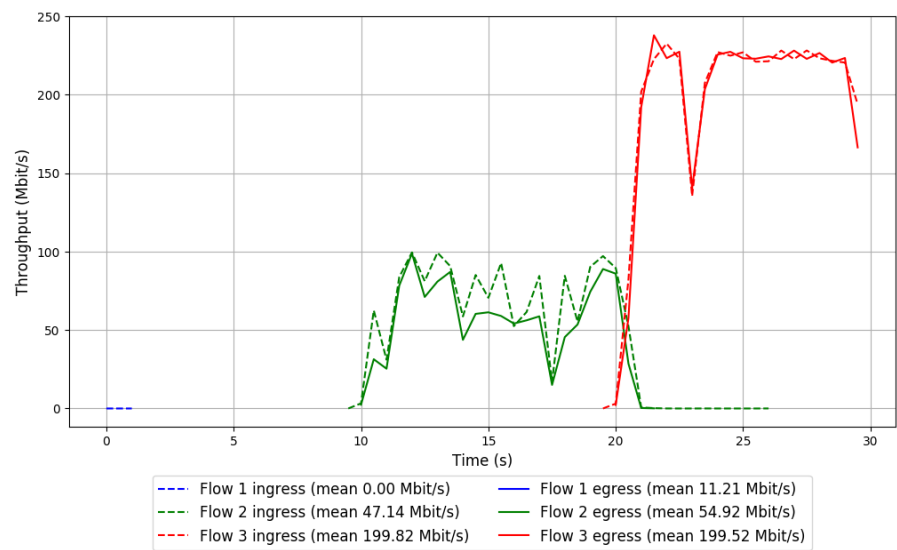
-- Flow 3:

Average throughput: 199.52 Mbit/s

95th percentile per-packet one-way delay: 54.961 ms

Loss rate: 1.25%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-08-21 06:05:46

End at: 2017-08-21 06:06:16

Below is generated by plot.py at 2017-08-21 09:28:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.86 Mbit/s

95th percentile per-packet one-way delay: 54.230 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 189.82 Mbit/s

95th percentile per-packet one-way delay: 54.230 ms

Loss rate: 1.14%

-- Flow 2:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 53.873 ms

Loss rate: 78.38%

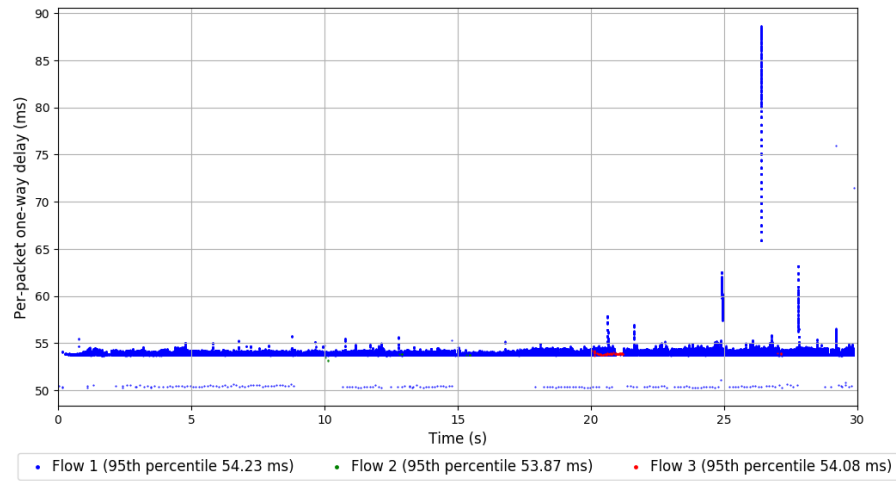
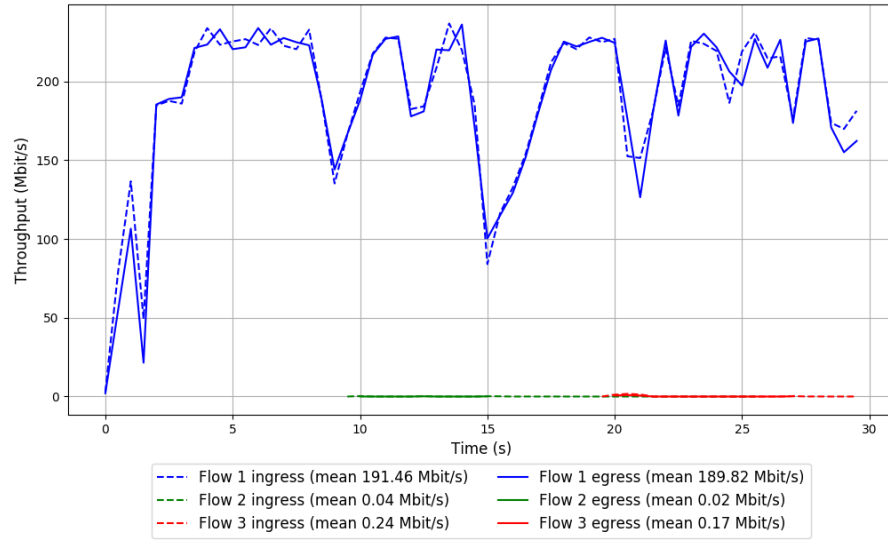
-- Flow 3:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 54.080 ms

Loss rate: 49.17%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-21 06:16:16

End at: 2017-08-21 06:16:46

Below is generated by plot.py at 2017-08-21 09:28:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.16 Mbit/s

95th percentile per-packet one-way delay: 55.429 ms

Loss rate: 7.97%

-- Flow 1:

Average throughput: 38.83 Mbit/s

95th percentile per-packet one-way delay: 53.923 ms

Loss rate: 13.88%

-- Flow 2:

Average throughput: 28.21 Mbit/s

95th percentile per-packet one-way delay: 53.916 ms

Loss rate: 20.54%

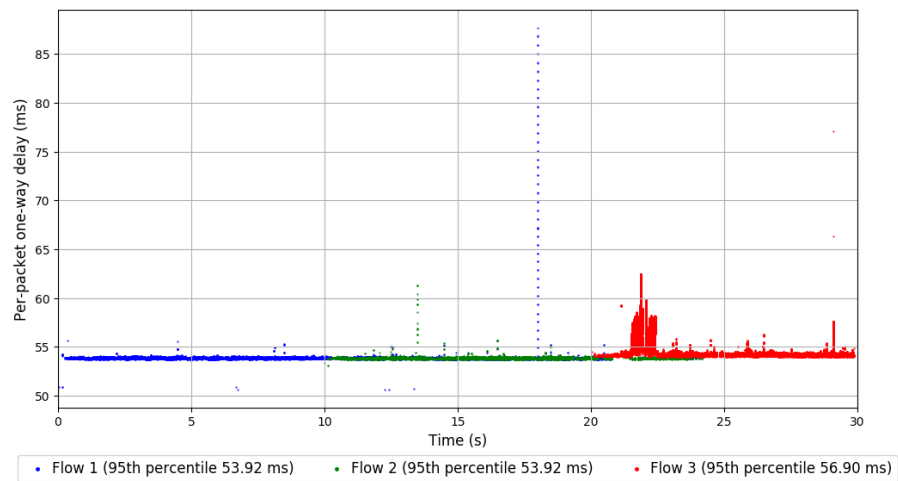
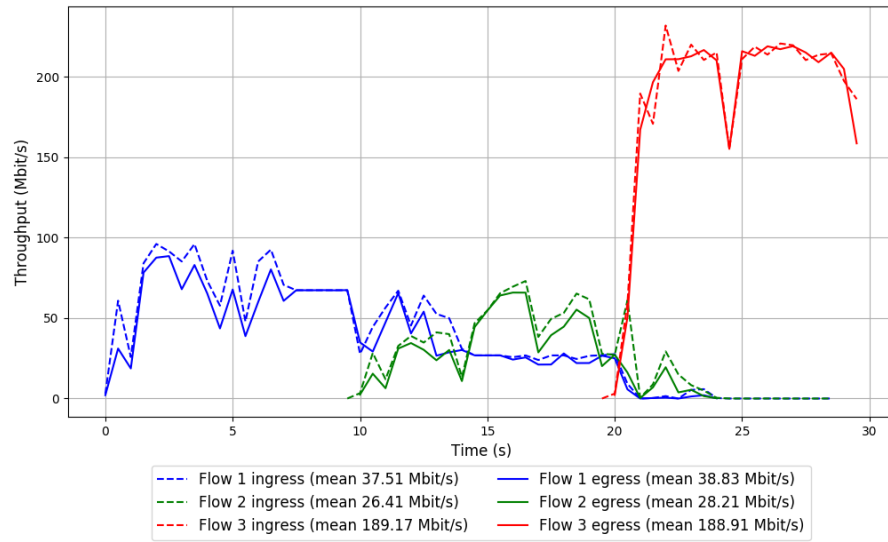
-- Flow 3:

Average throughput: 188.91 Mbit/s

95th percentile per-packet one-way delay: 56.898 ms

Loss rate: 1.19%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-21 06:27:12

End at: 2017-08-21 06:27:42

Below is generated by plot.py at 2017-08-21 09:28:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.72 Mbit/s

95th percentile per-packet one-way delay: 54.098 ms

Loss rate: 5.61%

-- Flow 1:

Average throughput: 15.67 Mbit/s

95th percentile per-packet one-way delay: 4437.109 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.96 Mbit/s

95th percentile per-packet one-way delay: 53.924 ms

Loss rate: 10.59%

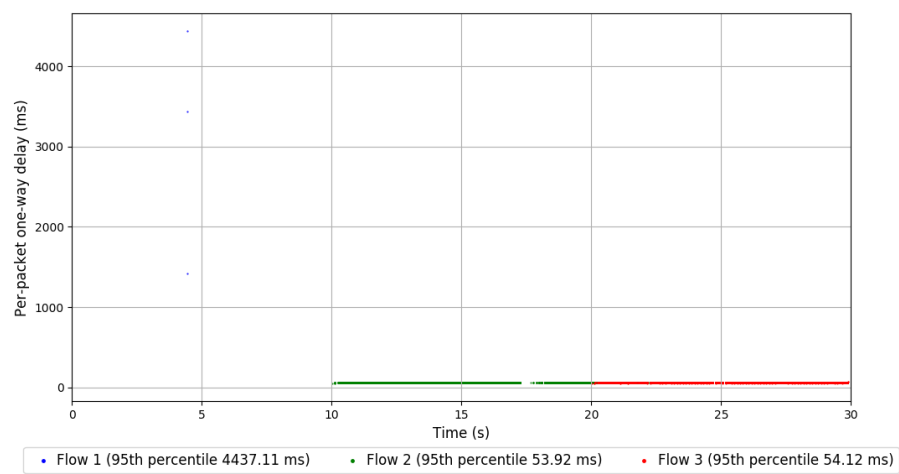
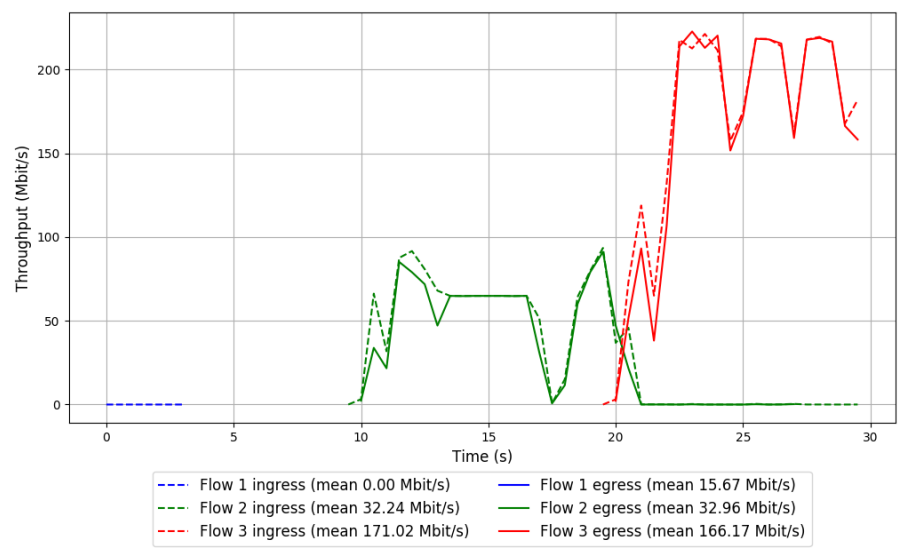
-- Flow 3:

Average throughput: 166.17 Mbit/s

95th percentile per-packet one-way delay: 54.124 ms

Loss rate: 3.75%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-21 06:37:45

End at: 2017-08-21 06:38:15

Below is generated by plot.py at 2017-08-21 09:28:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 213.73 Mbit/s

95th percentile per-packet one-way delay: 54.372 ms

Loss rate: 2.57%

-- Flow 1:

Average throughput: 145.84 Mbit/s

95th percentile per-packet one-way delay: 54.170 ms

Loss rate: 3.16%

-- Flow 2:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 53.986 ms

Loss rate: 55.85%

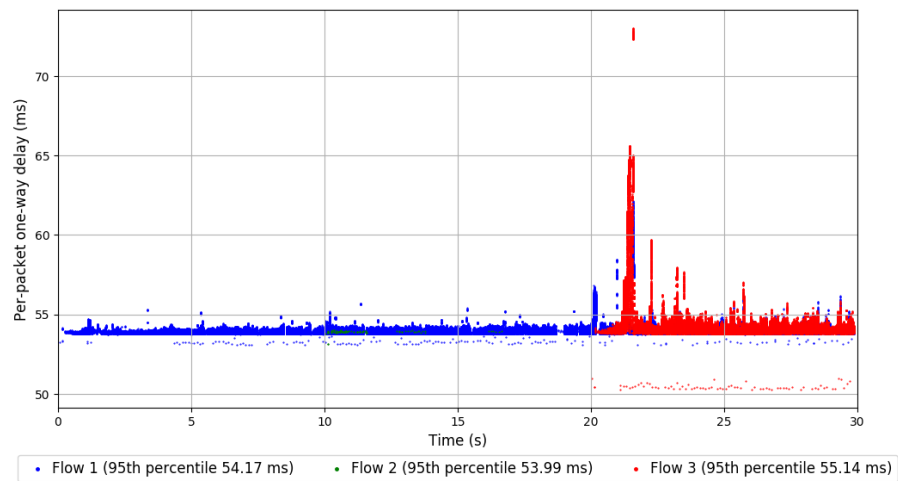
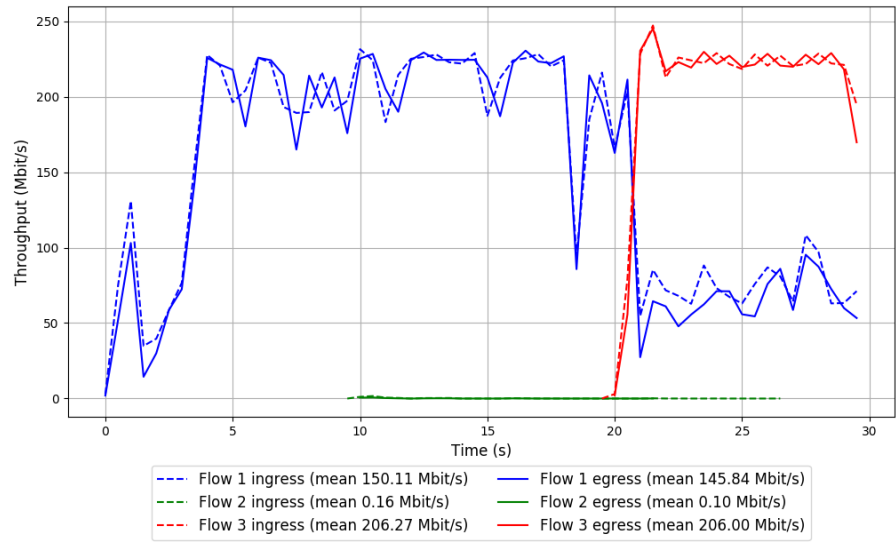
-- Flow 3:

Average throughput: 206.00 Mbit/s

95th percentile per-packet one-way delay: 55.139 ms

Loss rate: 1.19%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-21 06:48:31

End at: 2017-08-21 06:49:01

Below is generated by plot.py at 2017-08-21 09:28:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.93 Mbit/s

95th percentile per-packet one-way delay: 54.139 ms

Loss rate: 8.19%

-- Flow 1:

Average throughput: 40.49 Mbit/s

95th percentile per-packet one-way delay: 53.957 ms

Loss rate: 17.38%

-- Flow 2:

Average throughput: 5.62 Mbit/s

95th percentile per-packet one-way delay: 53.924 ms

Loss rate: 18.90%

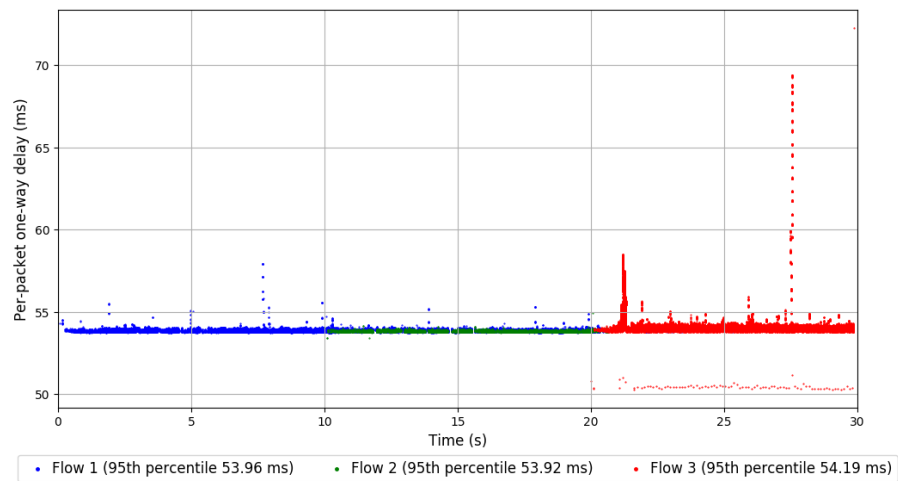
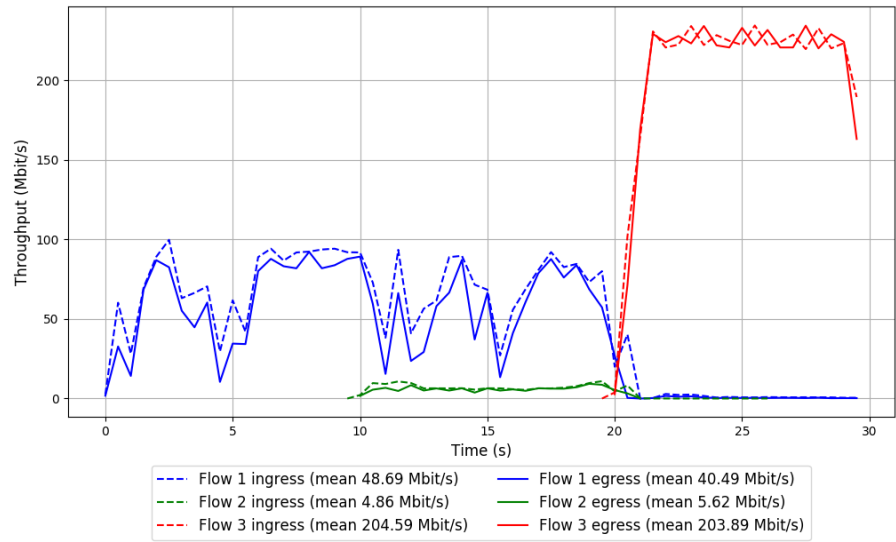
-- Flow 3:

Average throughput: 203.89 Mbit/s

95th percentile per-packet one-way delay: 54.193 ms

Loss rate: 1.18%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-21 06:59:01

End at: 2017-08-21 06:59:31

Below is generated by plot.py at 2017-08-21 09:28:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.20 Mbit/s

95th percentile per-packet one-way delay: 53.936 ms

Loss rate: 15.17%

-- Flow 1:

Average throughput: 42.88 Mbit/s

95th percentile per-packet one-way delay: 53.940 ms

Loss rate: 13.69%

-- Flow 2:

Average throughput: 19.71 Mbit/s

95th percentile per-packet one-way delay: 53.919 ms

Loss rate: 18.64%

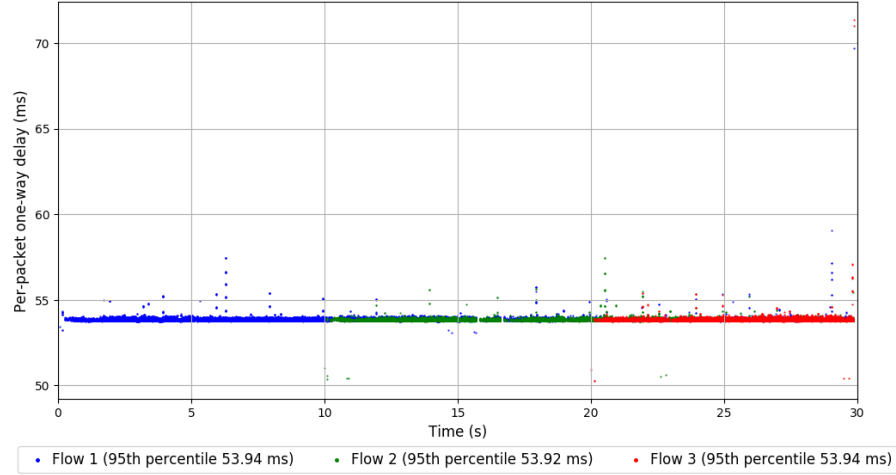
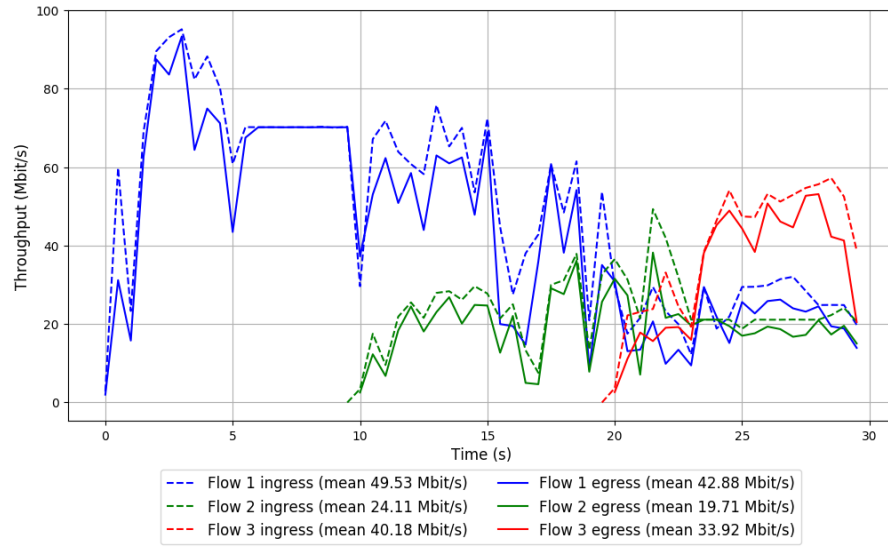
-- Flow 3:

Average throughput: 33.92 Mbit/s

95th percentile per-packet one-way delay: 53.935 ms

Loss rate: 16.45%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-21 05:26:54

End at: 2017-08-21 05:27:24

Below is generated by plot.py at 2017-08-21 09:28:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.72 Mbit/s

95th percentile per-packet one-way delay: 55.311 ms

Loss rate: 69.09%

-- Flow 1:

Average throughput: 6.85 Mbit/s

95th percentile per-packet one-way delay: 55.611 ms

Loss rate: 69.44%

-- Flow 2:

Average throughput: 1.86 Mbit/s

95th percentile per-packet one-way delay: 54.614 ms

Loss rate: 68.72%

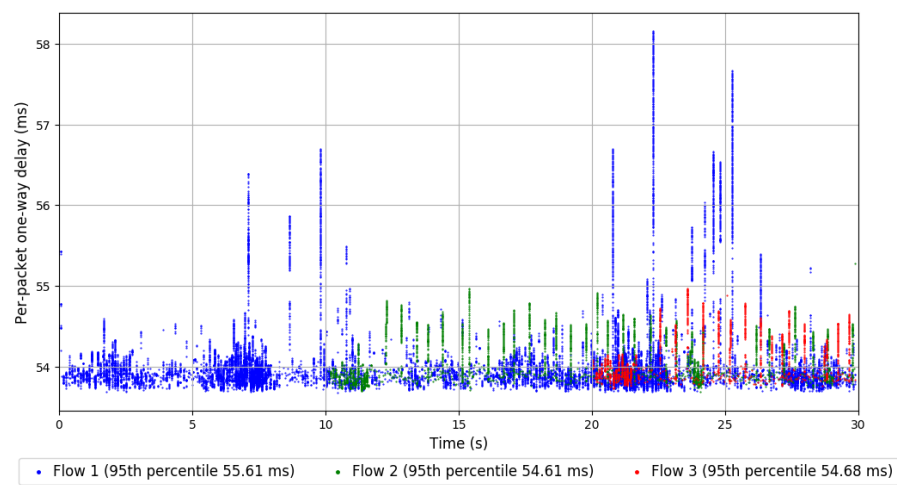
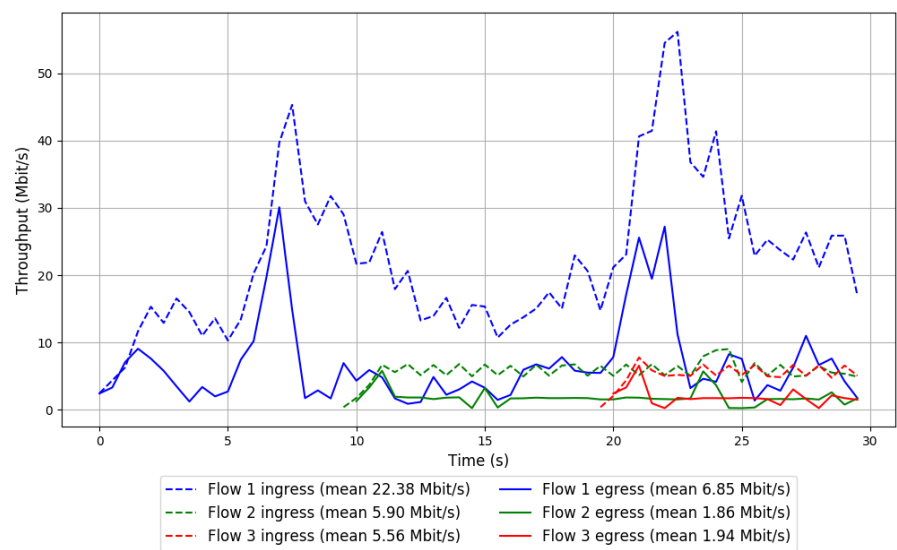
-- Flow 3:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 54.684 ms

Loss rate: 65.59%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-21 05:37:49

End at: 2017-08-21 05:38:19

Below is generated by plot.py at 2017-08-21 09:29:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.54 Mbit/s

95th percentile per-packet one-way delay: 75.100 ms

Loss rate: 1.99%

-- Flow 1:

Average throughput: 0.96 Mbit/s

95th percentile per-packet one-way delay: 54.809 ms

Loss rate: 69.54%

-- Flow 2:

Average throughput: 282.05 Mbit/s

95th percentile per-packet one-way delay: 75.155 ms

Loss rate: 0.84%

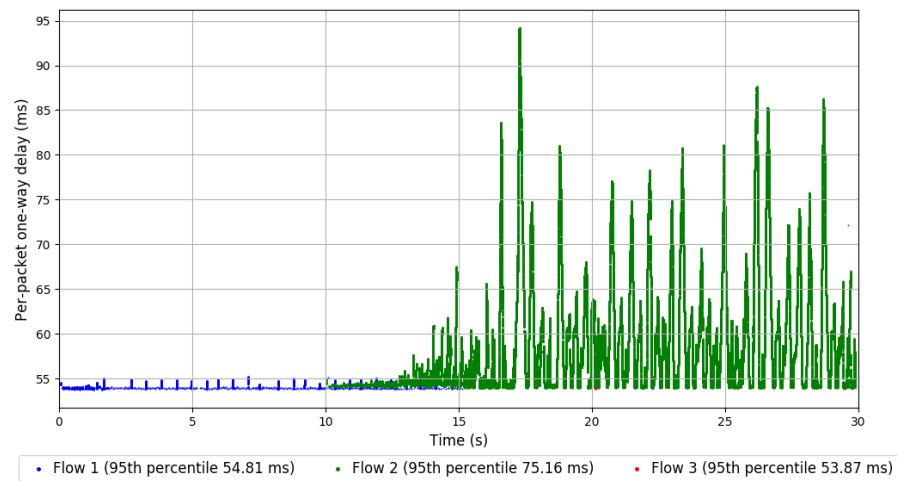
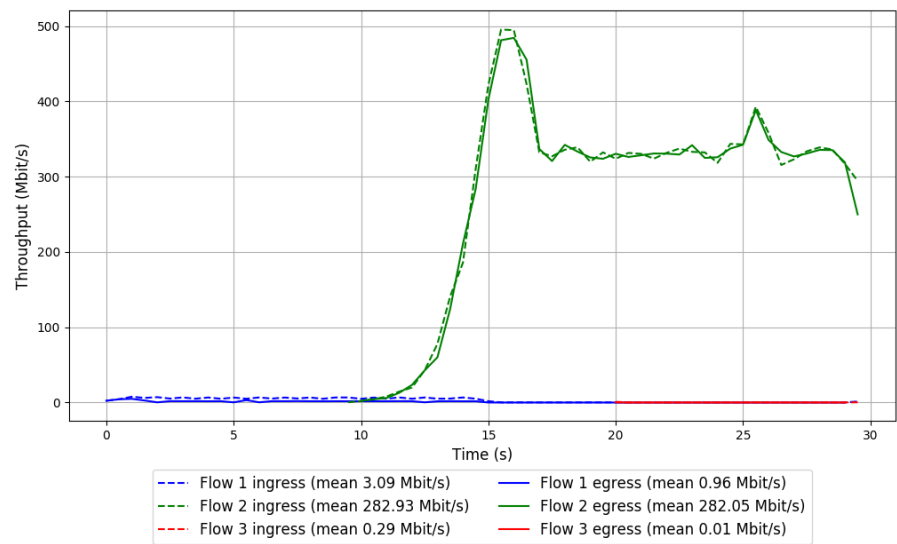
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 53.870 ms

Loss rate: 96.22%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-21 05:48:36

End at: 2017-08-21 05:49:06

Below is generated by plot.py at 2017-08-21 09:29:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.49 Mbit/s

95th percentile per-packet one-way delay: 54.709 ms

Loss rate: 67.37%

-- Flow 1:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 54.660 ms

Loss rate: 69.91%

-- Flow 2:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 54.781 ms

Loss rate: 68.47%

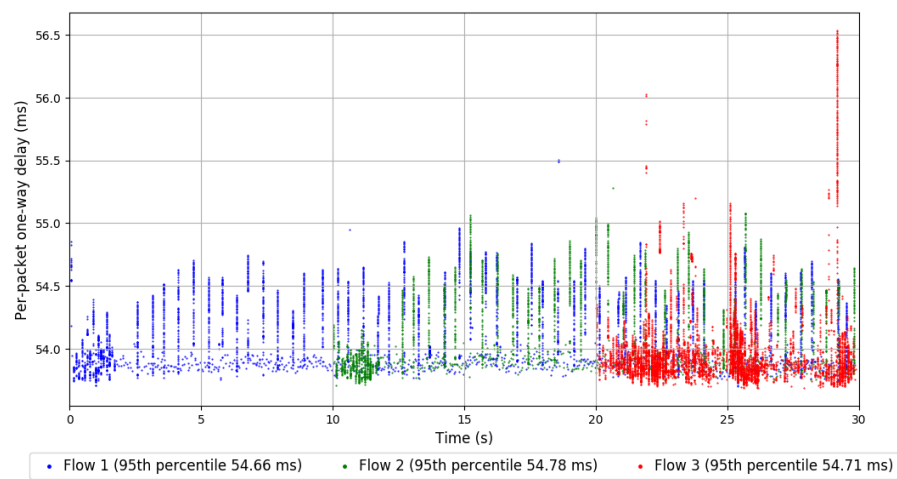
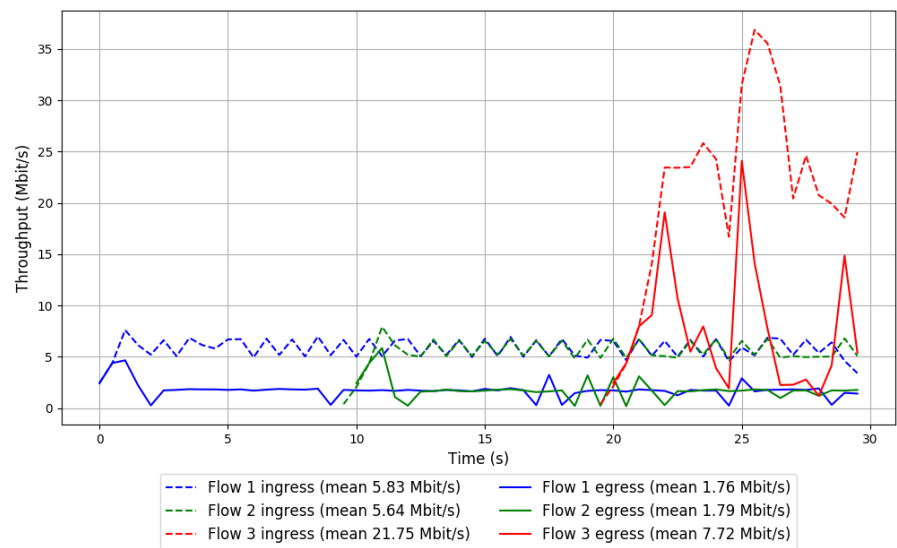
-- Flow 3:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 54.713 ms

Loss rate: 64.74%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-21 05:59:23

End at: 2017-08-21 05:59:53

Below is generated by plot.py at 2017-08-21 09:29:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.22 Mbit/s

95th percentile per-packet one-way delay: 89.399 ms

Loss rate: 11.64%

-- Flow 1:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 54.671 ms

Loss rate: 69.99%

-- Flow 2:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 54.241 ms

Loss rate: 68.14%

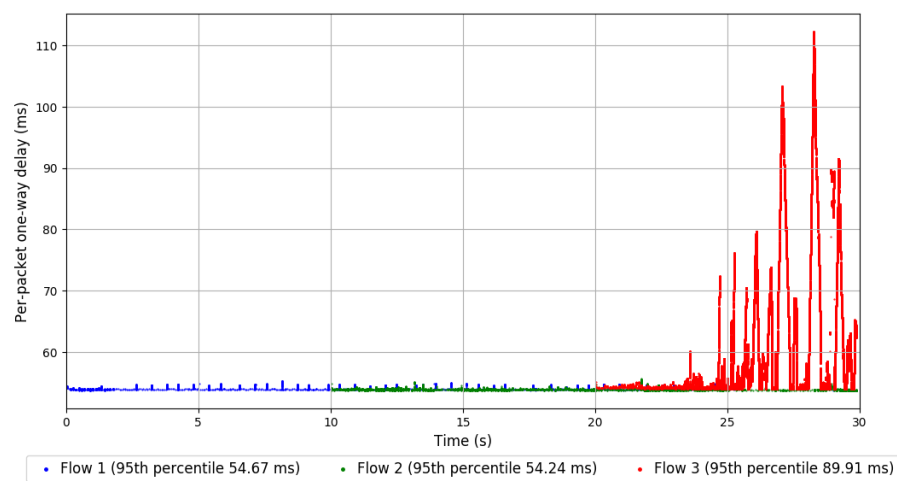
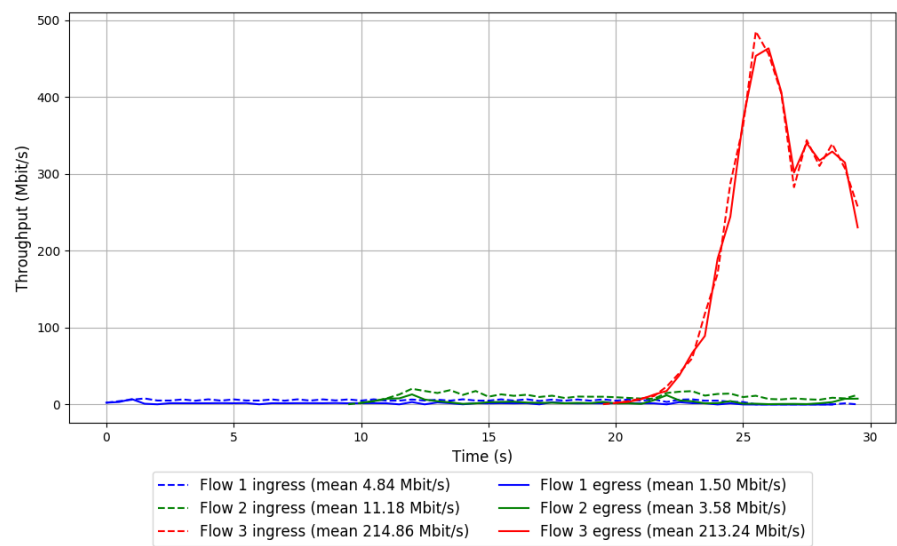
-- Flow 3:

Average throughput: 213.24 Mbit/s

95th percentile per-packet one-way delay: 89.911 ms

Loss rate: 1.80%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-21 06:09:59

End at: 2017-08-21 06:10:29

Below is generated by plot.py at 2017-08-21 09:29:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.87 Mbit/s

95th percentile per-packet one-way delay: 55.003 ms

Loss rate: 67.98%

-- Flow 1:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 54.619 ms

Loss rate: 69.59%

-- Flow 2:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 54.723 ms

Loss rate: 68.67%

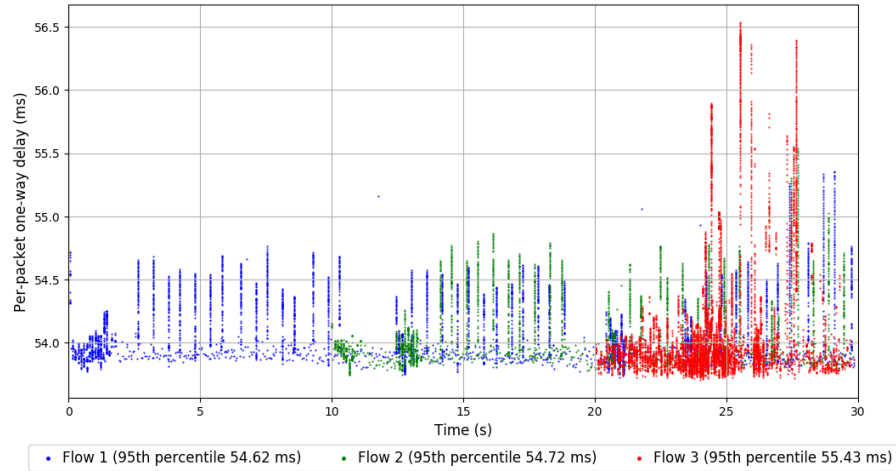
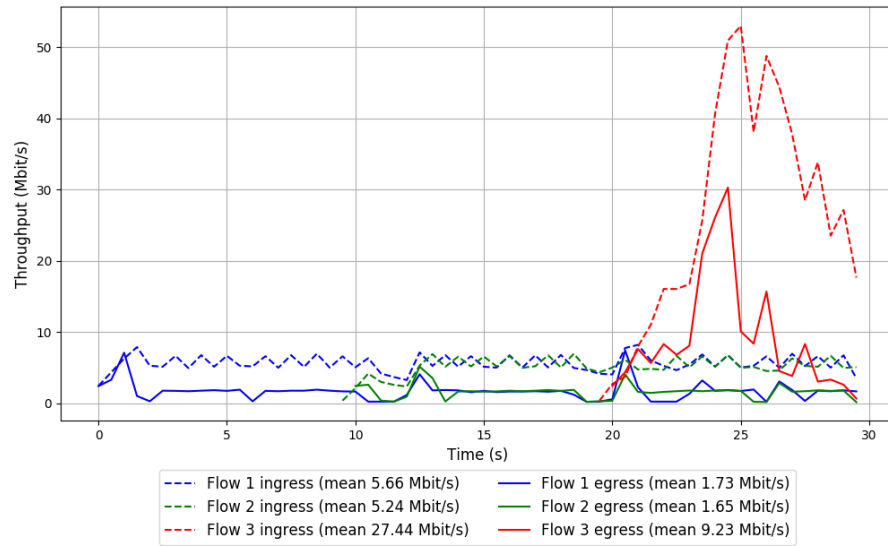
-- Flow 3:

Average throughput: 9.23 Mbit/s

95th percentile per-packet one-way delay: 55.427 ms

Loss rate: 66.72%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-21 06:20:23

End at: 2017-08-21 06:20:53

Below is generated by plot.py at 2017-08-21 09:29:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.78 Mbit/s

95th percentile per-packet one-way delay: 55.920 ms

Loss rate: 67.59%

-- Flow 1:

Average throughput: 9.94 Mbit/s

95th percentile per-packet one-way delay: 56.123 ms

Loss rate: 67.72%

-- Flow 2:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 54.792 ms

Loss rate: 67.49%

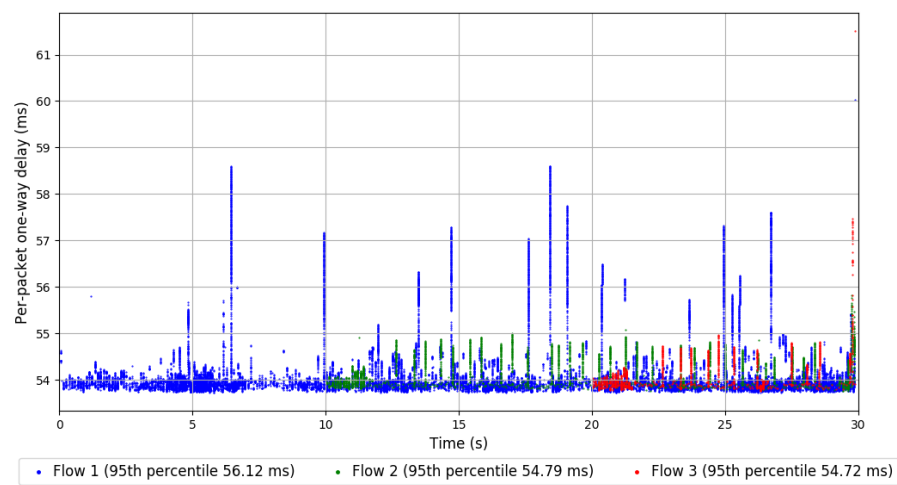
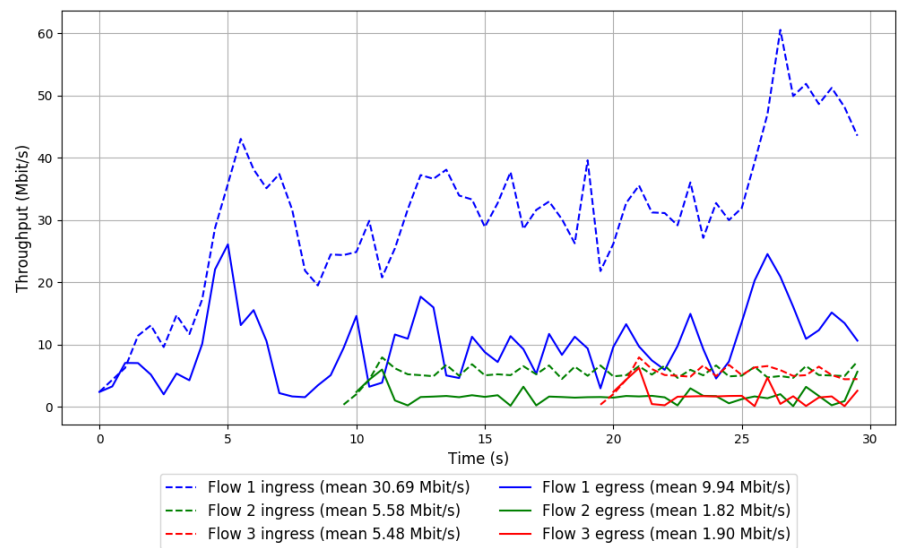
-- Flow 3:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 54.720 ms

Loss rate: 65.61%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-21 06:31:19

End at: 2017-08-21 06:31:49

Below is generated by plot.py at 2017-08-21 09:29:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 54.718 ms

Loss rate: 68.82%

-- Flow 1:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 54.780 ms

Loss rate: 69.73%

-- Flow 2:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 54.579 ms

Loss rate: 68.70%

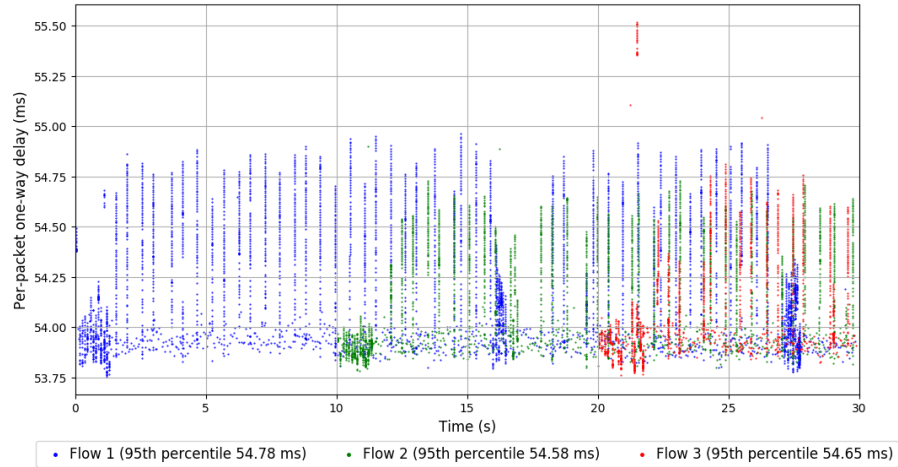
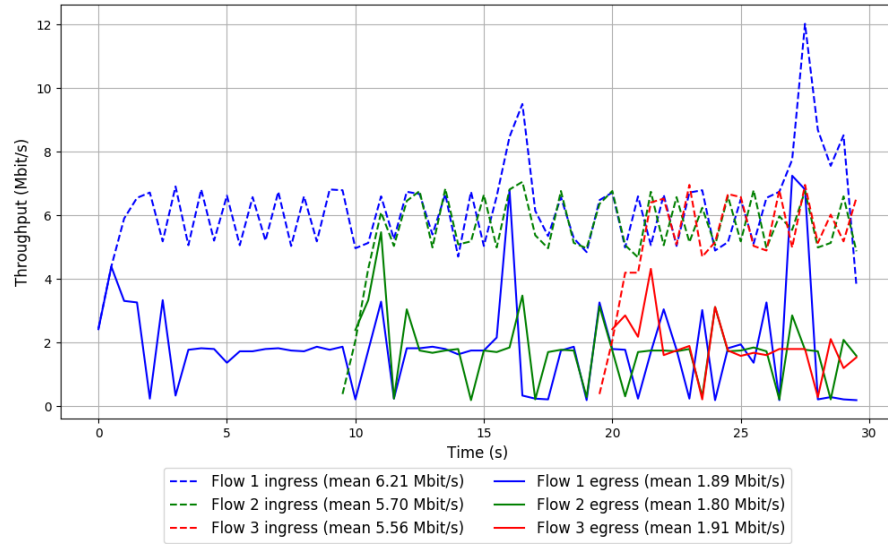
-- Flow 3:

Average throughput: 1.91 Mbit/s

95th percentile per-packet one-way delay: 54.648 ms

Loss rate: 66.04%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-21 06:41:58

End at: 2017-08-21 06:42:28

Below is generated by plot.py at 2017-08-21 09:29:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 54.699 ms

Loss rate: 68.41%

-- Flow 1:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 54.747 ms

Loss rate: 69.75%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 54.507 ms

Loss rate: 67.90%

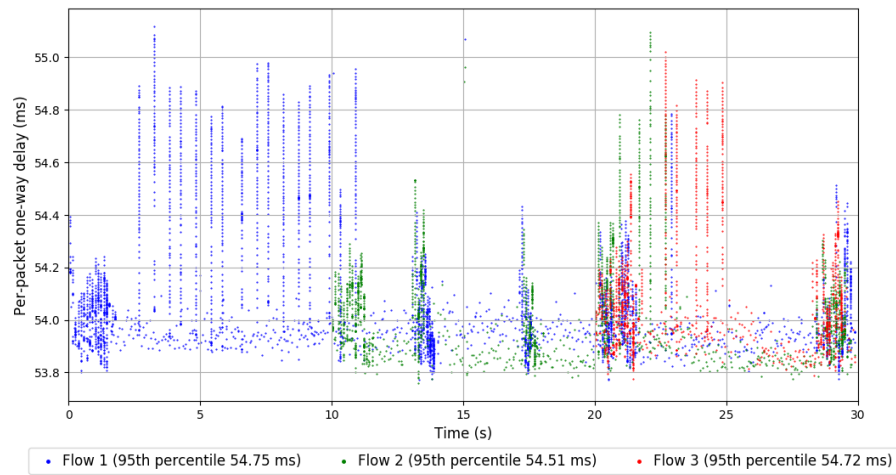
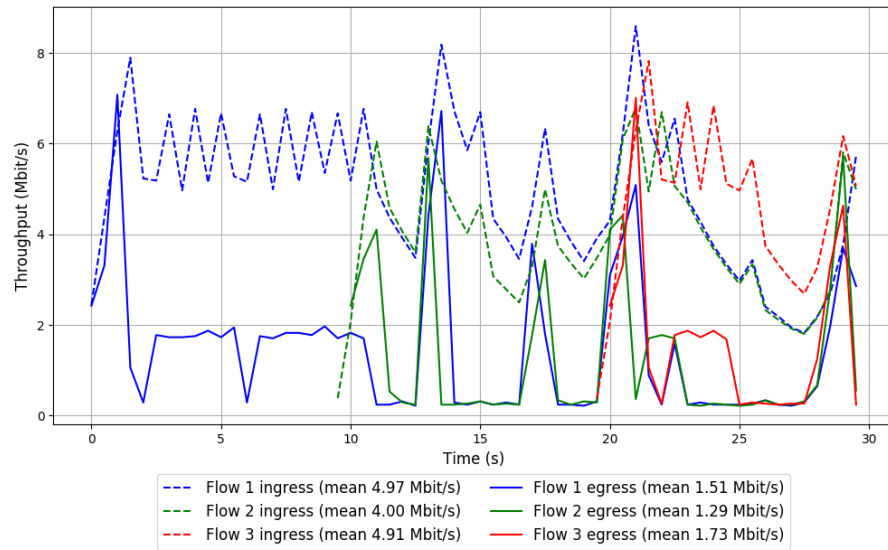
-- Flow 3:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 54.716 ms

Loss rate: 65.17%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-21 06:52:38

End at: 2017-08-21 06:53:08

Below is generated by plot.py at 2017-08-21 09:29:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.26 Mbit/s

95th percentile per-packet one-way delay: 54.735 ms

Loss rate: 63.85%

-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 54.638 ms

Loss rate: 69.65%

-- Flow 2:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 54.734 ms

Loss rate: 68.77%

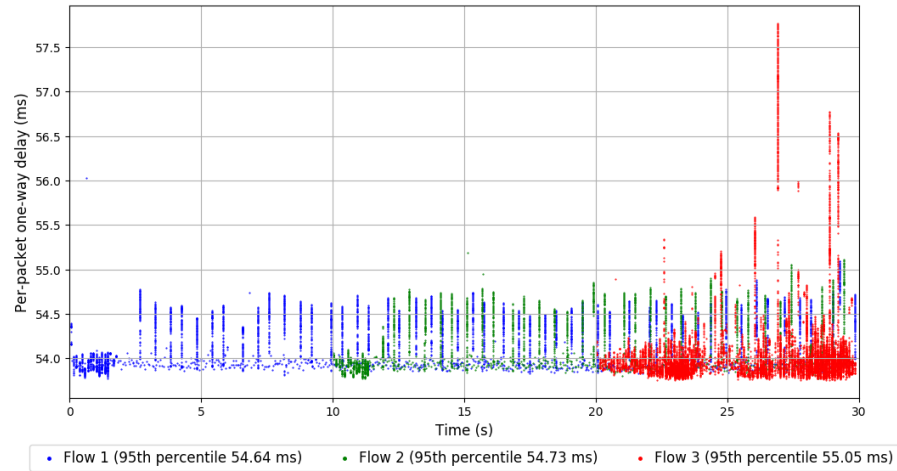
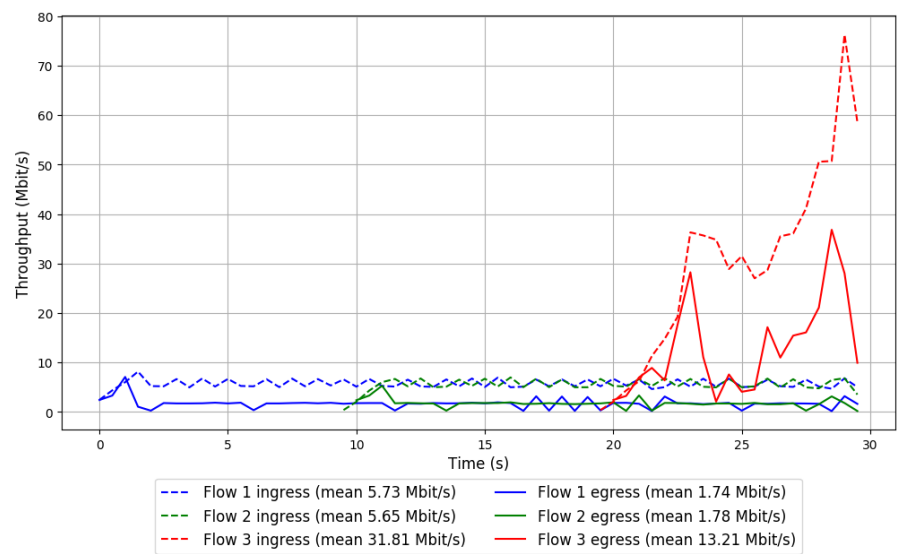
-- Flow 3:

Average throughput: 13.21 Mbit/s

95th percentile per-packet one-way delay: 55.054 ms

Loss rate: 58.94%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-21 07:03:11

End at: 2017-08-21 07:03:41

Below is generated by plot.py at 2017-08-21 09:29:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.54 Mbit/s

95th percentile per-packet one-way delay: 96.442 ms

Loss rate: 17.64%

-- Flow 1:

Average throughput: 7.23 Mbit/s

95th percentile per-packet one-way delay: 55.265 ms

Loss rate: 67.46%

-- Flow 2:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 54.762 ms

Loss rate: 68.65%

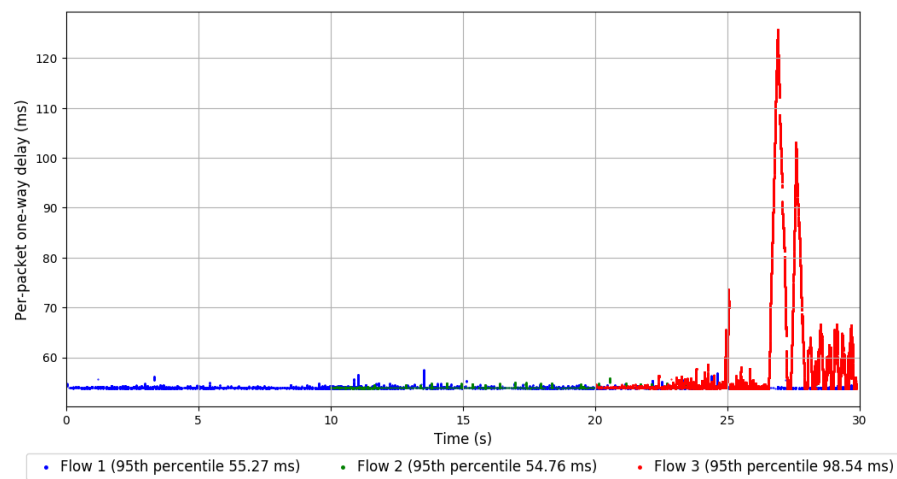
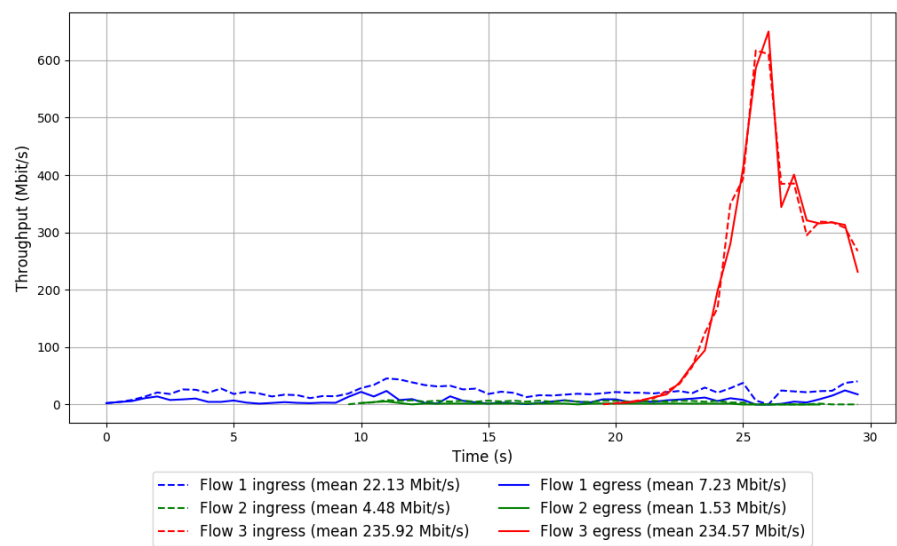
-- Flow 3:

Average throughput: 234.57 Mbit/s

95th percentile per-packet one-way delay: 98.540 ms

Loss rate: 1.64%

Run 10: Report of CalibratedKoho — Data Link



Run 1: Statistics of Copa

Start at: 2017-08-21 05:28:54

End at: 2017-08-21 05:29:24

Below is generated by plot.py at 2017-08-21 09:30:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.38 Mbit/s

95th percentile per-packet one-way delay: 53.843 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 93.39 Mbit/s

95th percentile per-packet one-way delay: 53.884 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 96.10 Mbit/s

95th percentile per-packet one-way delay: 53.819 ms

Loss rate: 0.58%

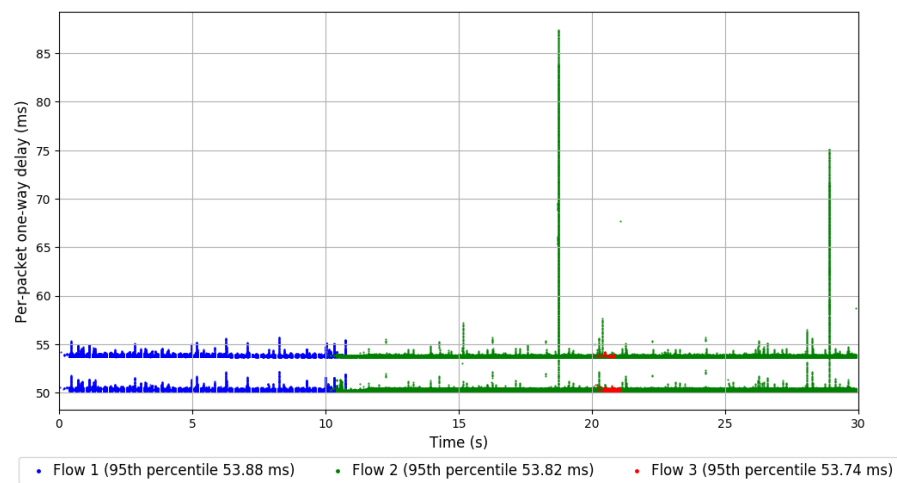
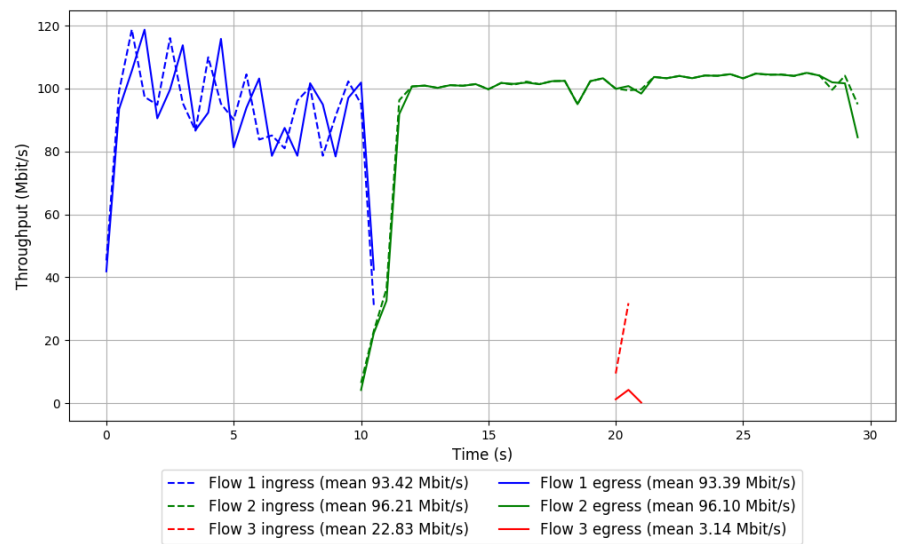
-- Flow 3:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 53.744 ms

Loss rate: 86.25%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-21 05:40:03

End at: 2017-08-21 05:40:33

Below is generated by plot.py at 2017-08-21 09:30:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.14 Mbit/s

95th percentile per-packet one-way delay: 53.755 ms

Loss rate: 85.94%

-- Flow 1:

Average throughput: 11.14 Mbit/s

95th percentile per-packet one-way delay: 53.755 ms

Loss rate: 85.94%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 53.856 ms

Loss rate: 76.95%

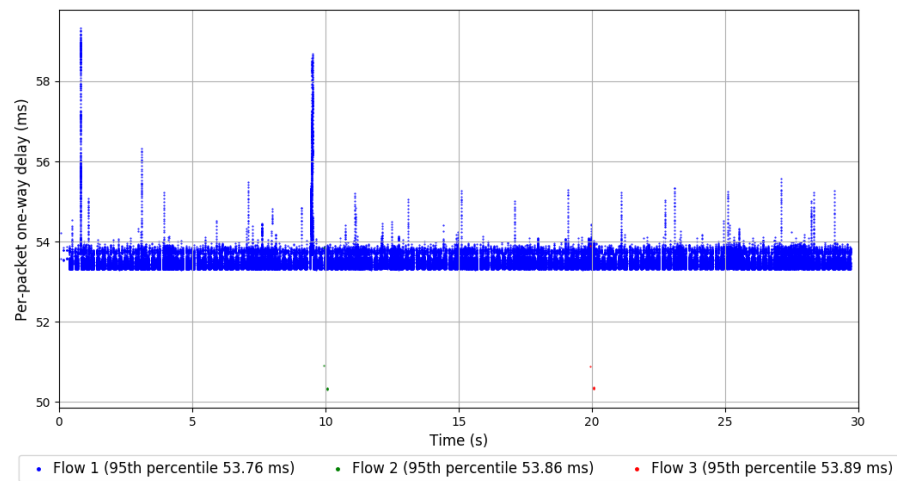
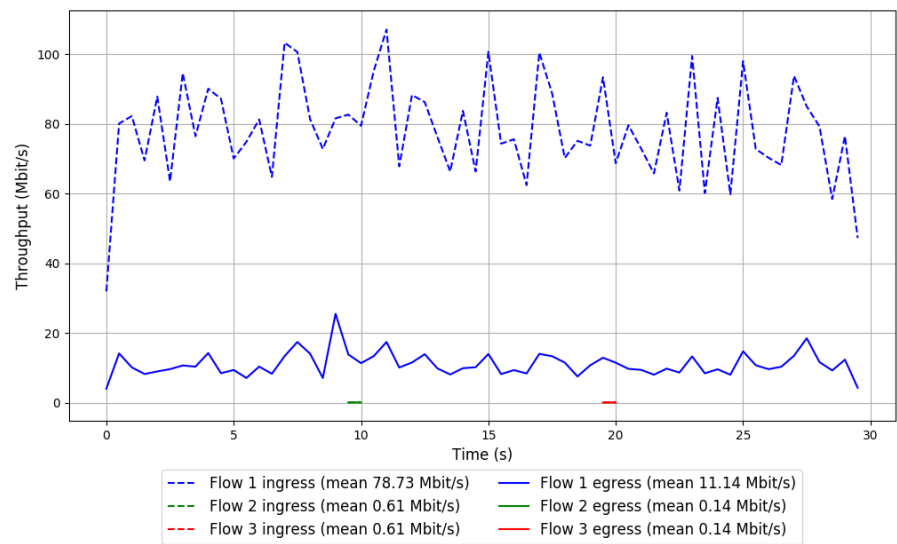
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 53.886 ms

Loss rate: 76.95%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-08-21 05:50:36

End at: 2017-08-21 05:51:06

Below is generated by plot.py at 2017-08-21 09:30:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.68 Mbit/s

95th percentile per-packet one-way delay: 54.074 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 73.54 Mbit/s

95th percentile per-packet one-way delay: 53.850 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 53.07 Mbit/s

95th percentile per-packet one-way delay: 54.178 ms

Loss rate: 0.52%

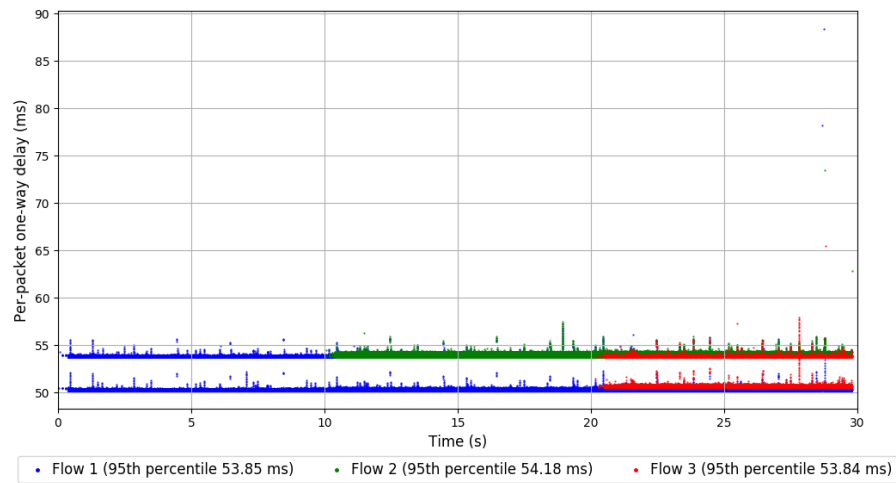
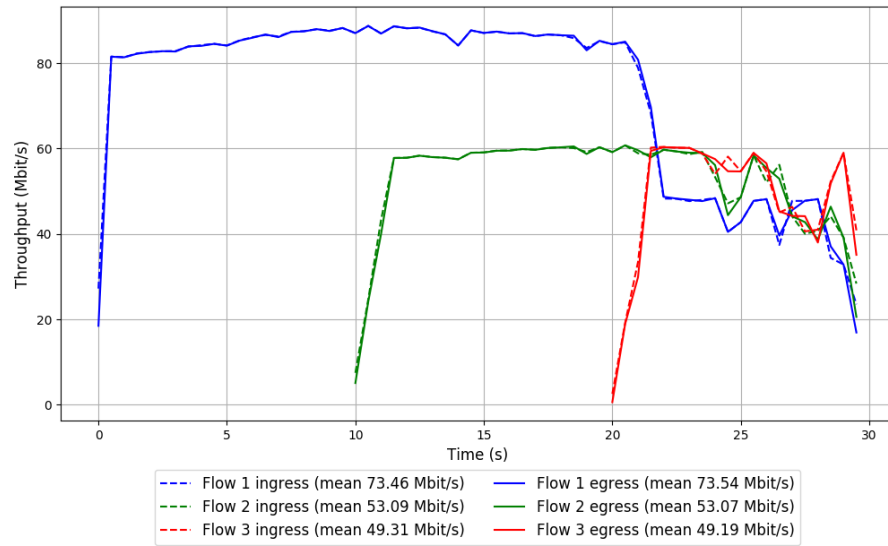
-- Flow 3:

Average throughput: 49.19 Mbit/s

95th percentile per-packet one-way delay: 53.842 ms

Loss rate: 1.26%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-08-21 06:01:28

End at: 2017-08-21 06:01:58

Below is generated by plot.py at 2017-08-21 09:30:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.62 Mbit/s

95th percentile per-packet one-way delay: 54.133 ms

Loss rate: 23.30%

-- Flow 1:

Average throughput: 11.20 Mbit/s

95th percentile per-packet one-way delay: 53.758 ms

Loss rate: 84.20%

-- Flow 2:

Average throughput: 100.11 Mbit/s

95th percentile per-packet one-way delay: 54.141 ms

Loss rate: 0.57%

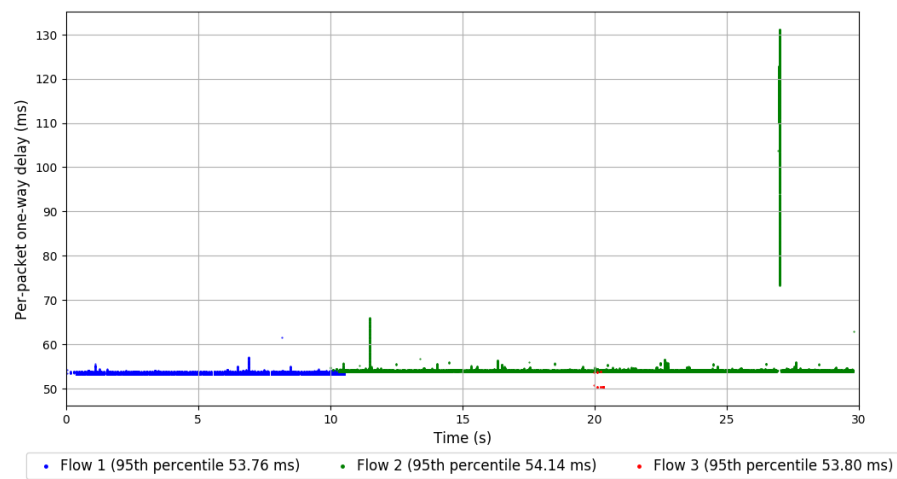
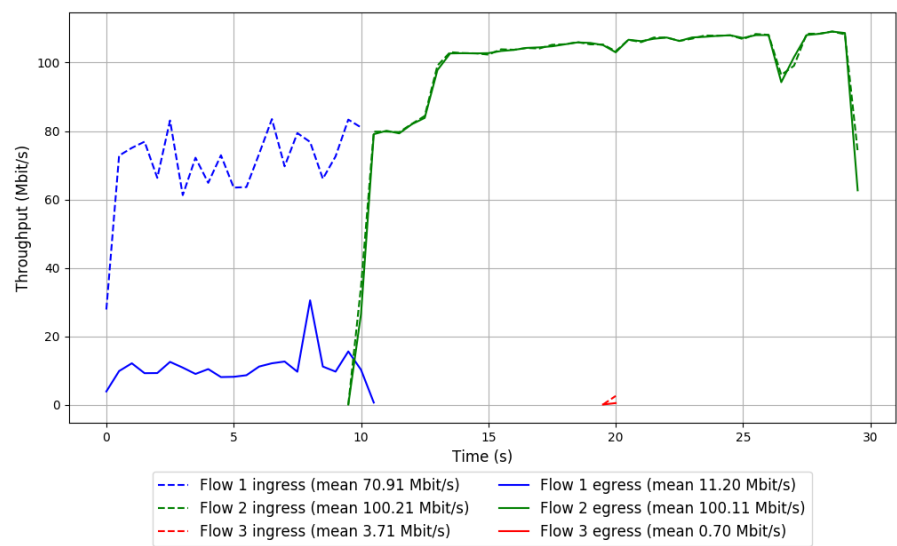
-- Flow 3:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 53.796 ms

Loss rate: 81.15%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-21 06:11:59

End at: 2017-08-21 06:12:29

Below is generated by plot.py at 2017-08-21 09:30:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 47.36 Mbit/s

95th percentile per-packet one-way delay: 53.848 ms

Loss rate: 25.33%

-- Flow 1:

Average throughput: 5.70 Mbit/s

95th percentile per-packet one-way delay: 54.185 ms

Loss rate: 91.86%

-- Flow 2:

Average throughput: 69.10 Mbit/s

95th percentile per-packet one-way delay: 53.843 ms

Loss rate: 18.75%

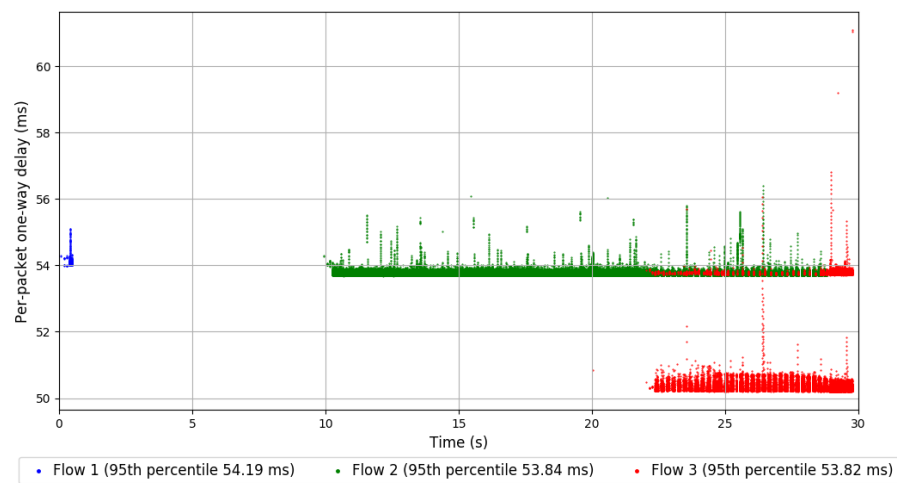
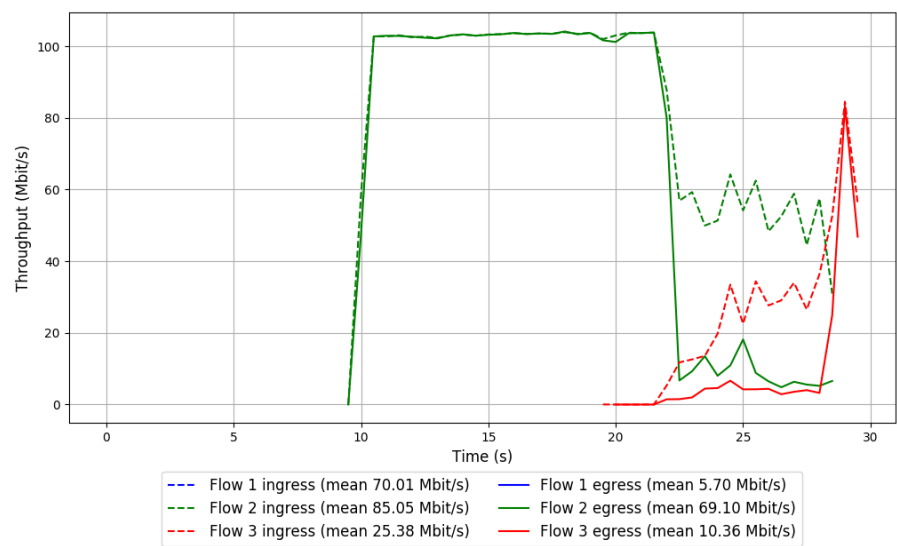
-- Flow 3:

Average throughput: 10.36 Mbit/s

95th percentile per-packet one-way delay: 53.823 ms

Loss rate: 59.58%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-08-21 06:22:24

End at: 2017-08-21 06:22:54

Below is generated by plot.py at 2017-08-21 09:31:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.10 Mbit/s

95th percentile per-packet one-way delay: 53.893 ms

Loss rate: 1.79%

-- Flow 1:

Average throughput: 7.38 Mbit/s

95th percentile per-packet one-way delay: 50.452 ms

Loss rate: 91.99%

-- Flow 2:

Average throughput: 111.79 Mbit/s

95th percentile per-packet one-way delay: 53.897 ms

Loss rate: 0.38%

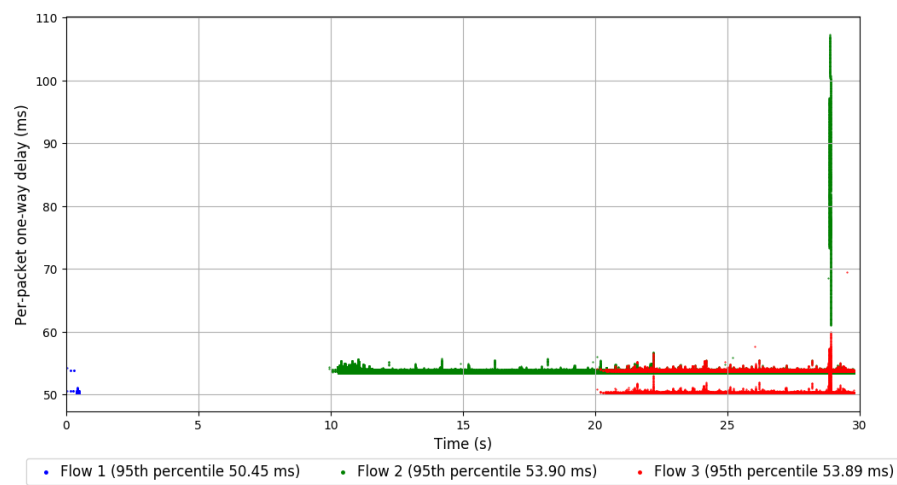
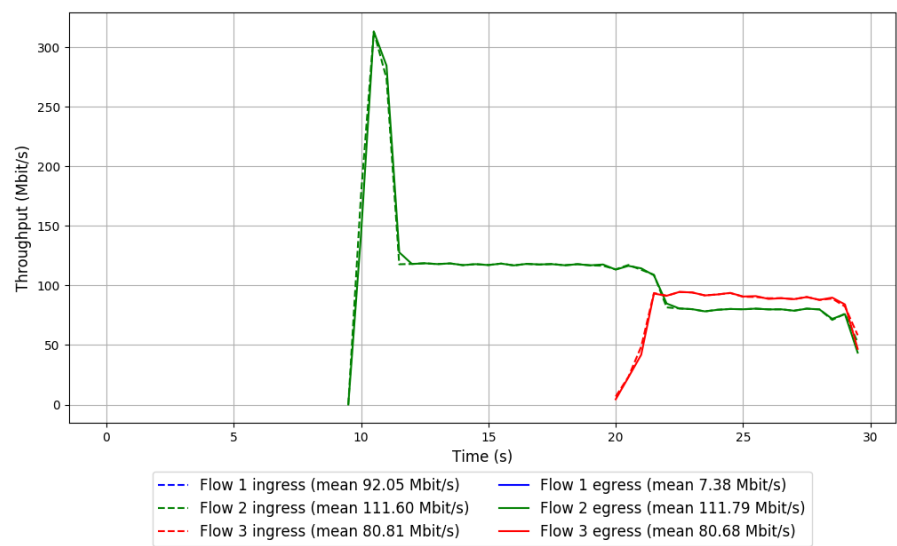
-- Flow 3:

Average throughput: 80.68 Mbit/s

95th percentile per-packet one-way delay: 53.886 ms

Loss rate: 1.17%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-21 06:33:20

End at: 2017-08-21 06:33:50

Below is generated by plot.py at 2017-08-21 09:31:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.21 Mbit/s

95th percentile per-packet one-way delay: 54.180 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 61.65 Mbit/s

95th percentile per-packet one-way delay: 53.843 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.29 Mbit/s

95th percentile per-packet one-way delay: 53.870 ms

Loss rate: 0.00%

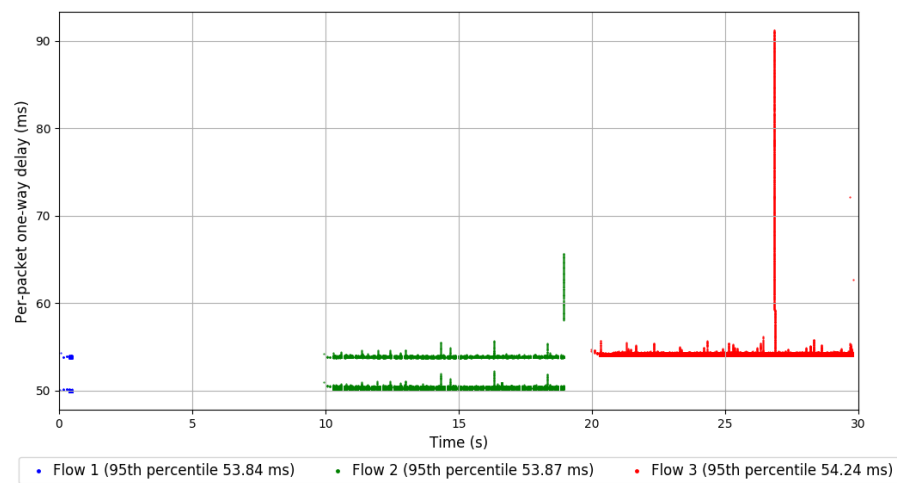
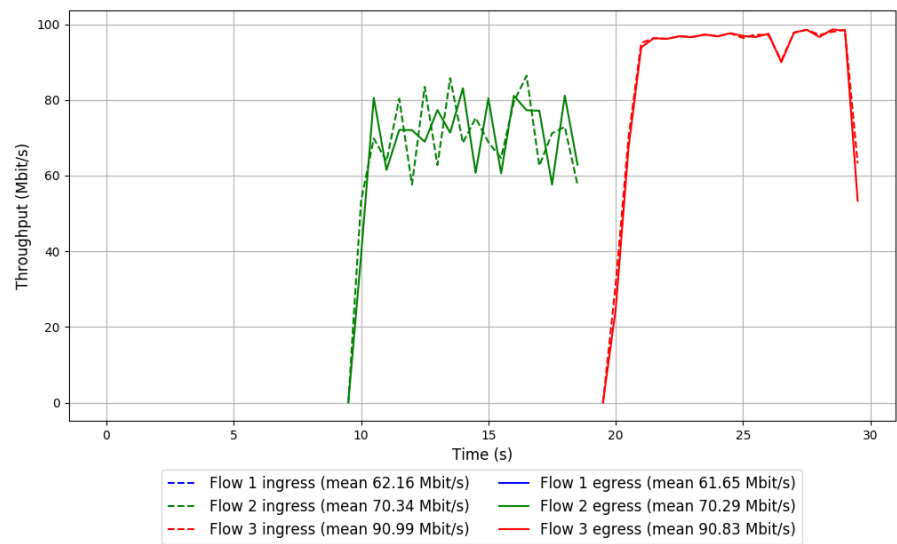
-- Flow 3:

Average throughput: 90.83 Mbit/s

95th percentile per-packet one-way delay: 54.239 ms

Loss rate: 1.14%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-08-21 06:43:59

End at: 2017-08-21 06:44:29

Below is generated by plot.py at 2017-08-21 09:32:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.44 Mbit/s

95th percentile per-packet one-way delay: 54.122 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 99.76 Mbit/s

95th percentile per-packet one-way delay: 53.916 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 58.48 Mbit/s

95th percentile per-packet one-way delay: 54.167 ms

Loss rate: 1.06%

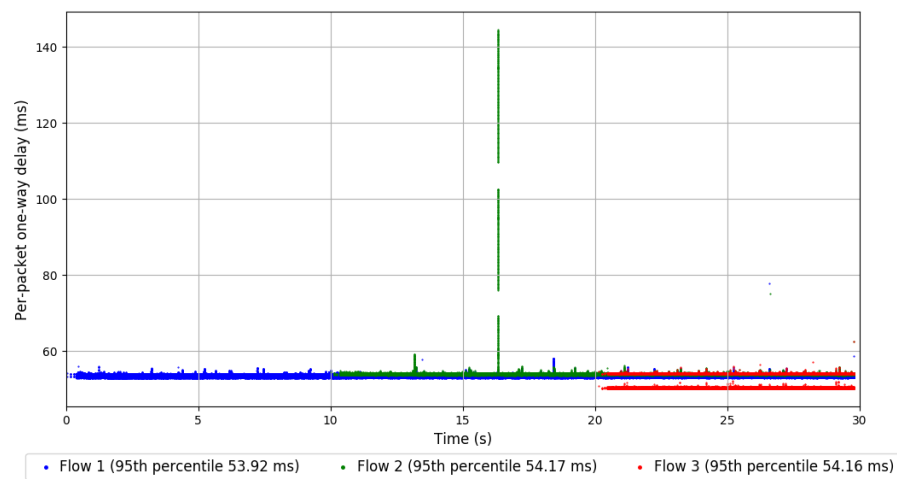
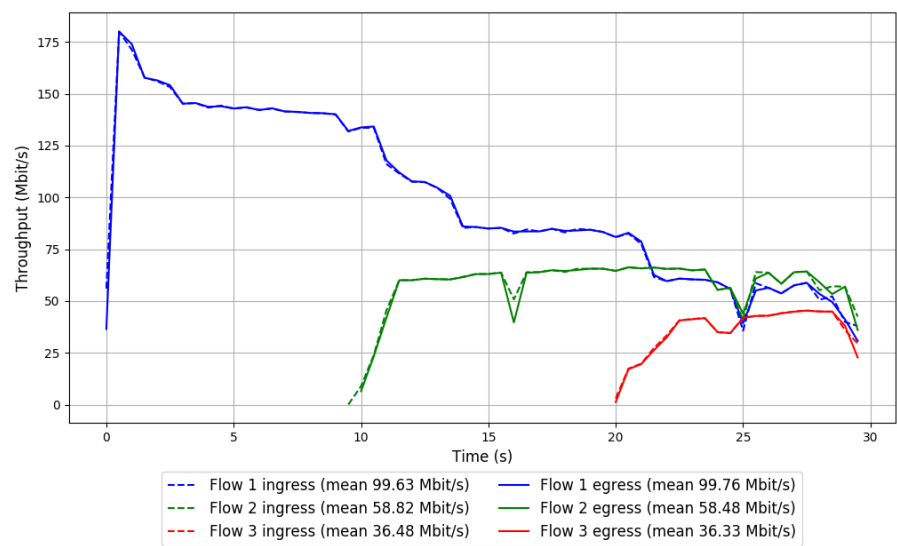
-- Flow 3:

Average throughput: 36.33 Mbit/s

95th percentile per-packet one-way delay: 54.155 ms

Loss rate: 1.35%

Run 8: Report of Copa — Data Link

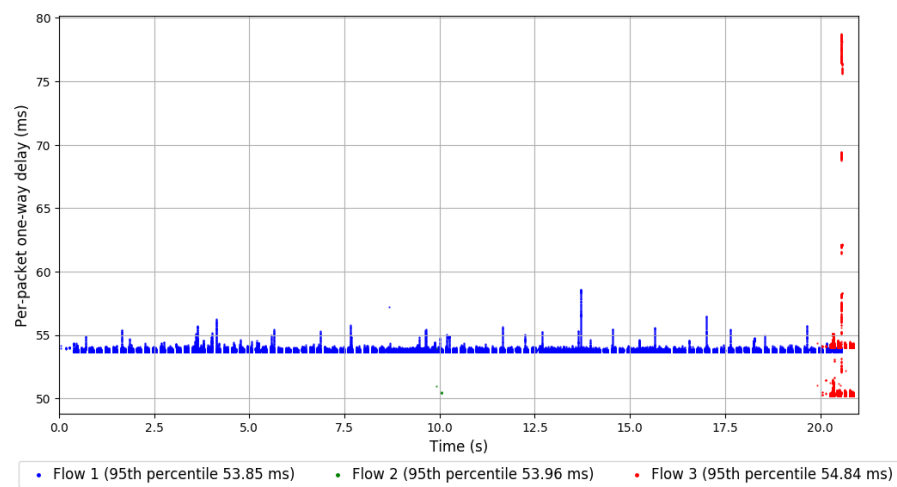
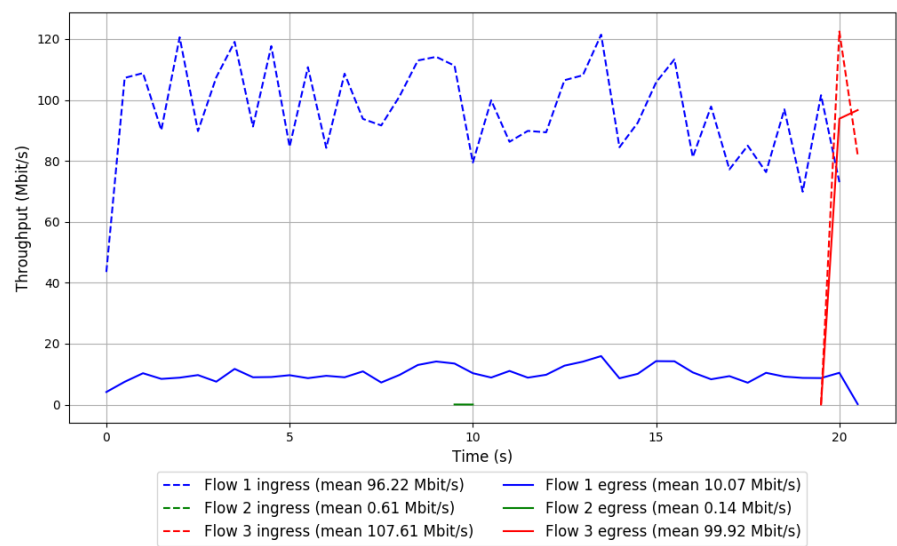


Run 9: Statistics of Copa

Start at: 2017-08-21 06:54:39

End at: 2017-08-21 06:55:09

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-08-21 07:05:18

End at: 2017-08-21 07:05:48

Below is generated by plot.py at 2017-08-21 09:32:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.75 Mbit/s

95th percentile per-packet one-way delay: 54.276 ms

Loss rate: 14.30%

-- Flow 1:

Average throughput: 77.68 Mbit/s

95th percentile per-packet one-way delay: 54.293 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 9.97 Mbit/s

95th percentile per-packet one-way delay: 53.841 ms

Loss rate: 65.85%

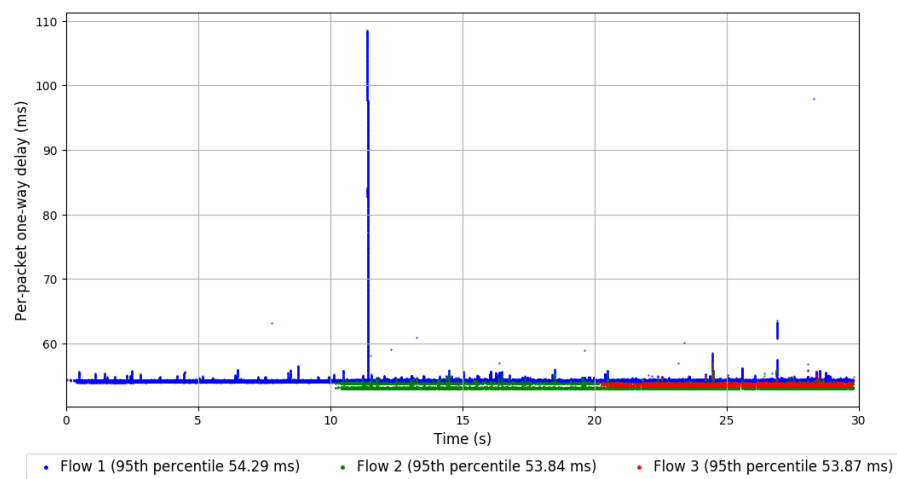
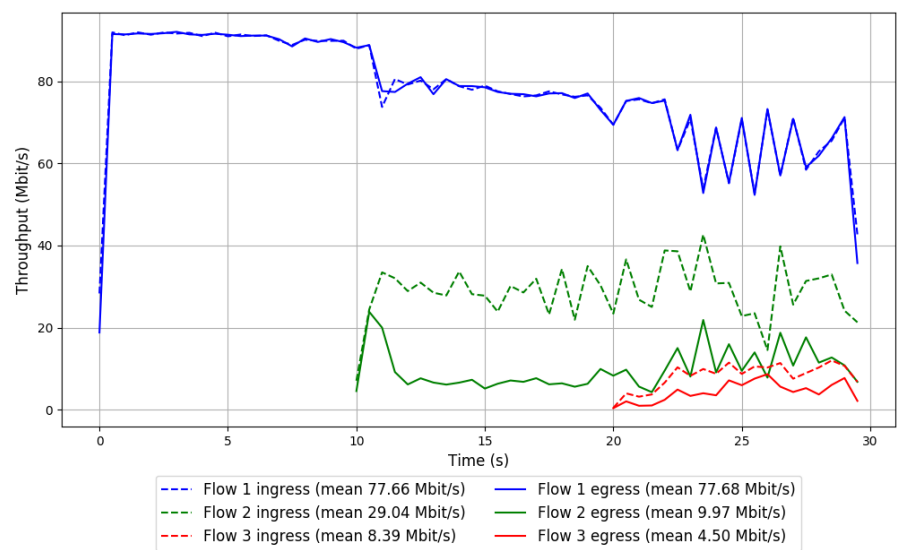
-- Flow 3:

Average throughput: 4.50 Mbit/s

95th percentile per-packet one-way delay: 53.865 ms

Loss rate: 46.95%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-21 05:25:31

End at: 2017-08-21 05:26:01

Below is generated by plot.py at 2017-08-21 09:32:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.69 Mbit/s

95th percentile per-packet one-way delay: 55.722 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 3.07 Mbit/s

95th percentile per-packet one-way delay: 54.093 ms

Loss rate: 4.97%

-- Flow 2:

Average throughput: 49.16 Mbit/s

95th percentile per-packet one-way delay: 55.261 ms

Loss rate: 0.76%

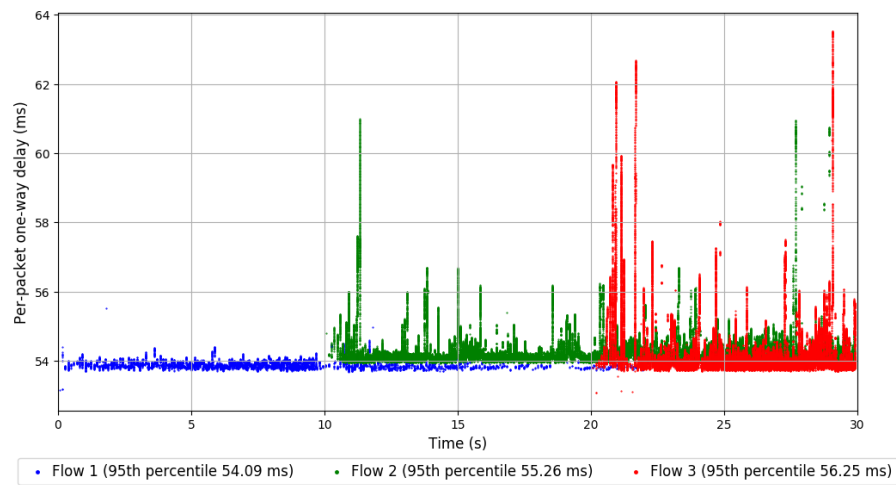
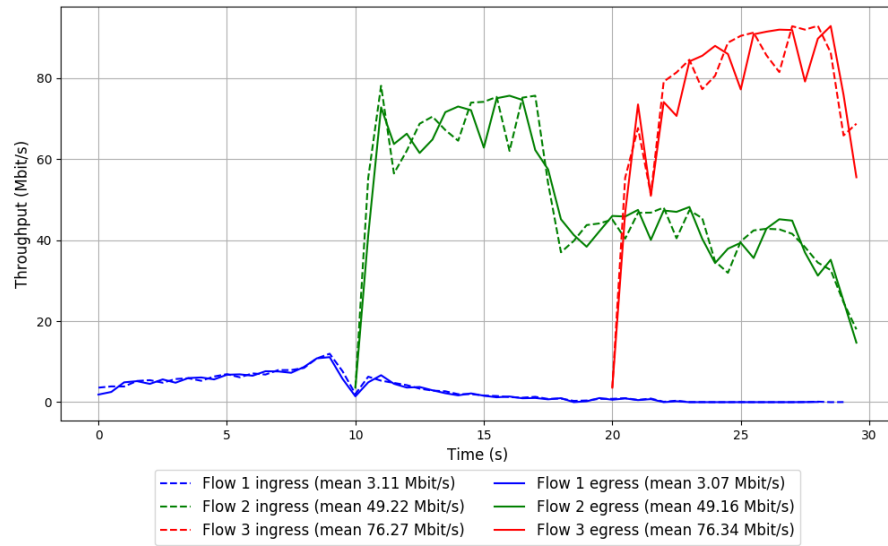
-- Flow 3:

Average throughput: 76.34 Mbit/s

95th percentile per-packet one-way delay: 56.252 ms

Loss rate: 1.15%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-21 05:36:23

End at: 2017-08-21 05:36:53

Below is generated by plot.py at 2017-08-21 09:32:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.33 Mbit/s

95th percentile per-packet one-way delay: 54.860 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 100.80 Mbit/s

95th percentile per-packet one-way delay: 54.862 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 53.977 ms

Loss rate: 6.30%

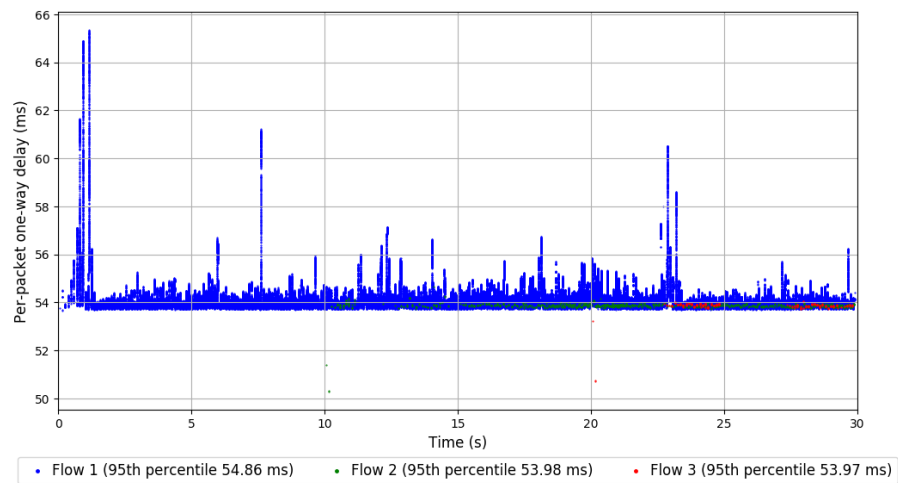
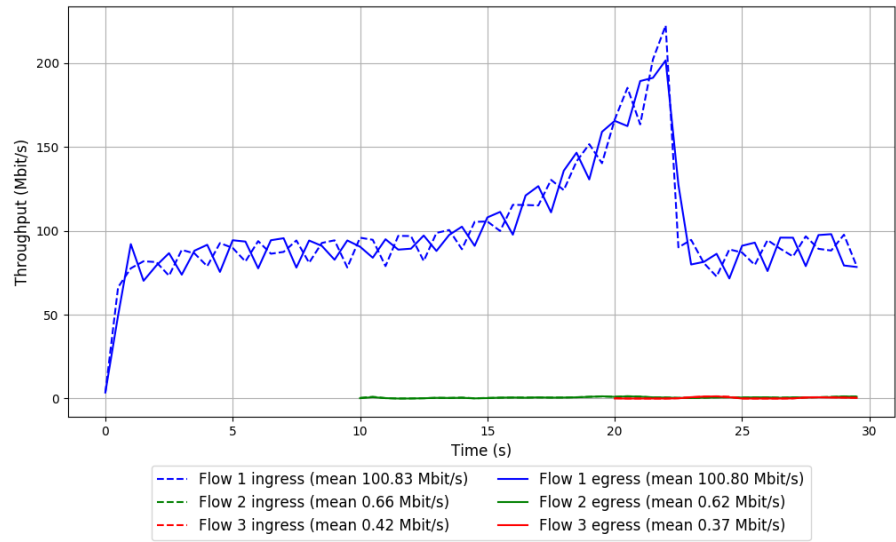
-- Flow 3:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 53.970 ms

Loss rate: 13.65%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-21 05:47:16

End at: 2017-08-21 05:47:46

Below is generated by plot.py at 2017-08-21 09:32:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 21.85 Mbit/s

95th percentile per-packet one-way delay: 54.647 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 21.17 Mbit/s

95th percentile per-packet one-way delay: 54.655 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 53.978 ms

Loss rate: 10.62%

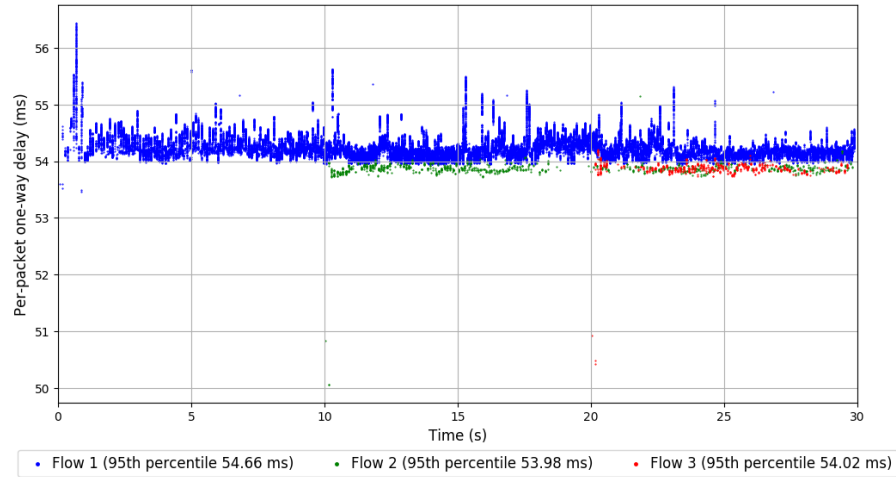
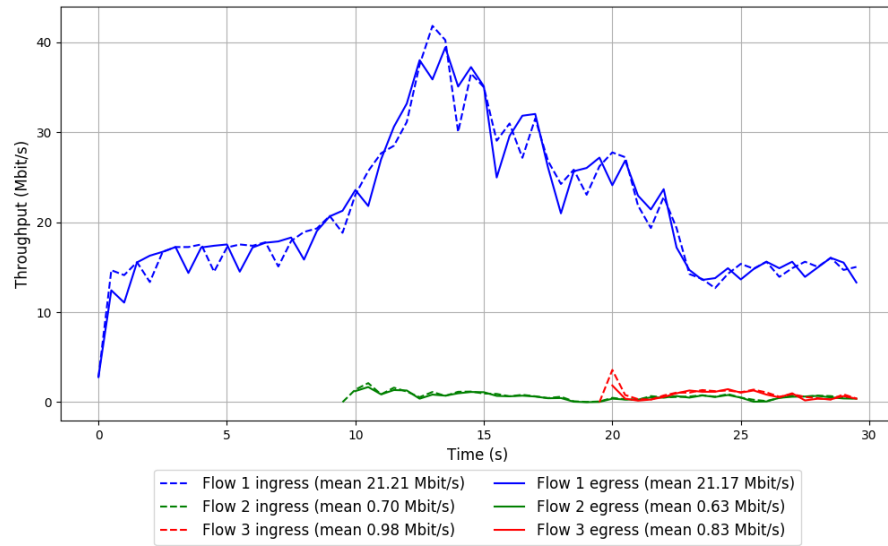
-- Flow 3:

Average throughput: 0.83 Mbit/s

95th percentile per-packet one-way delay: 54.015 ms

Loss rate: 17.61%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-08-21 05:58:01

End at: 2017-08-21 05:58:31

Below is generated by plot.py at 2017-08-21 09:32:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.00 Mbit/s

95th percentile per-packet one-way delay: 54.089 ms

Loss rate: 2.53%

-- Flow 1:

Average throughput: 6.21 Mbit/s

95th percentile per-packet one-way delay: 54.074 ms

Loss rate: 3.52%

-- Flow 2:

Average throughput: 8.70 Mbit/s

95th percentile per-packet one-way delay: 54.084 ms

Loss rate: 1.58%

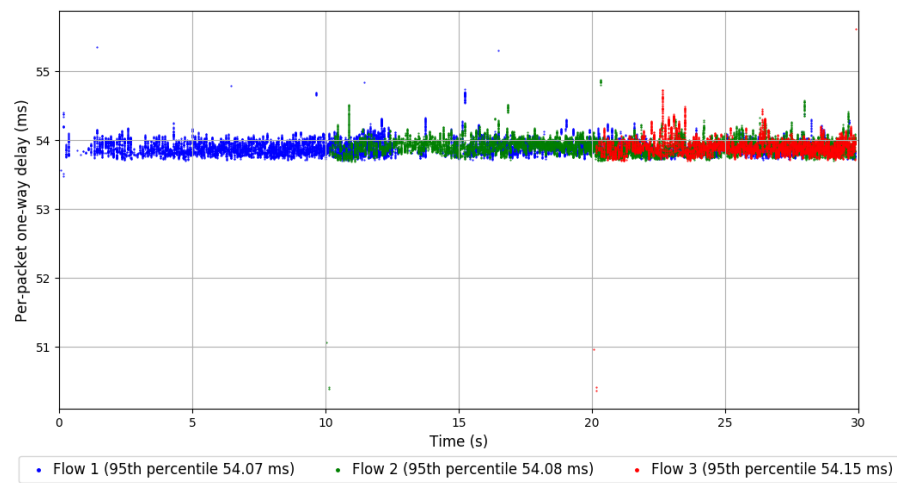
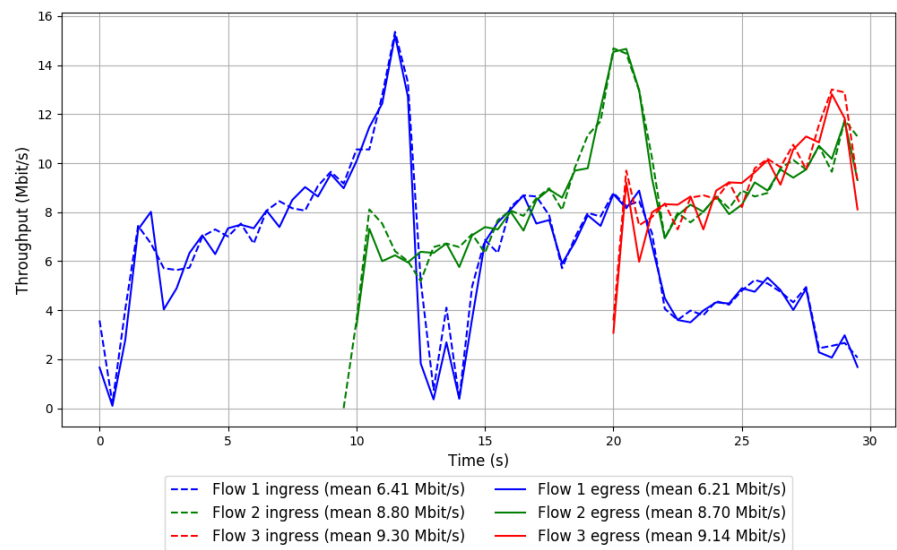
-- Flow 3:

Average throughput: 9.14 Mbit/s

95th percentile per-packet one-way delay: 54.147 ms

Loss rate: 2.26%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-21 06:08:36

End at: 2017-08-21 06:09:06

Below is generated by plot.py at 2017-08-21 09:32:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.00 Mbit/s

95th percentile per-packet one-way delay: 55.109 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 54.129 ms

Loss rate: 5.39%

-- Flow 2:

Average throughput: 36.11 Mbit/s

95th percentile per-packet one-way delay: 54.913 ms

Loss rate: 0.76%

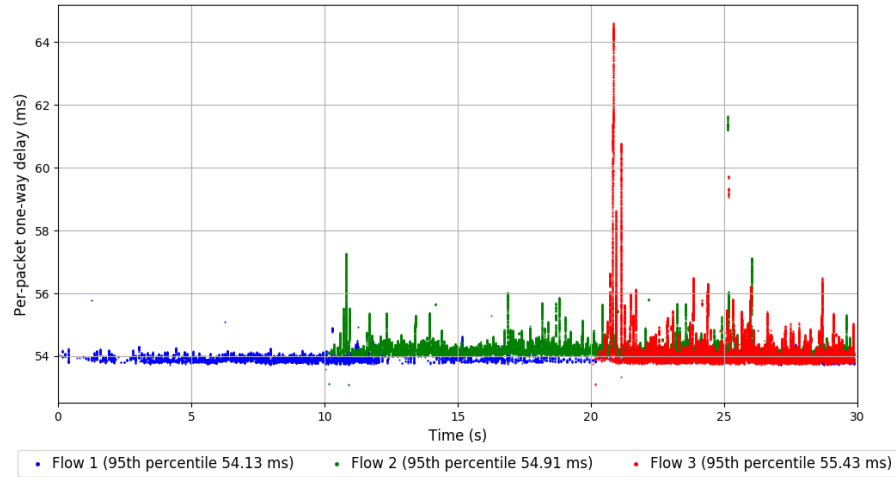
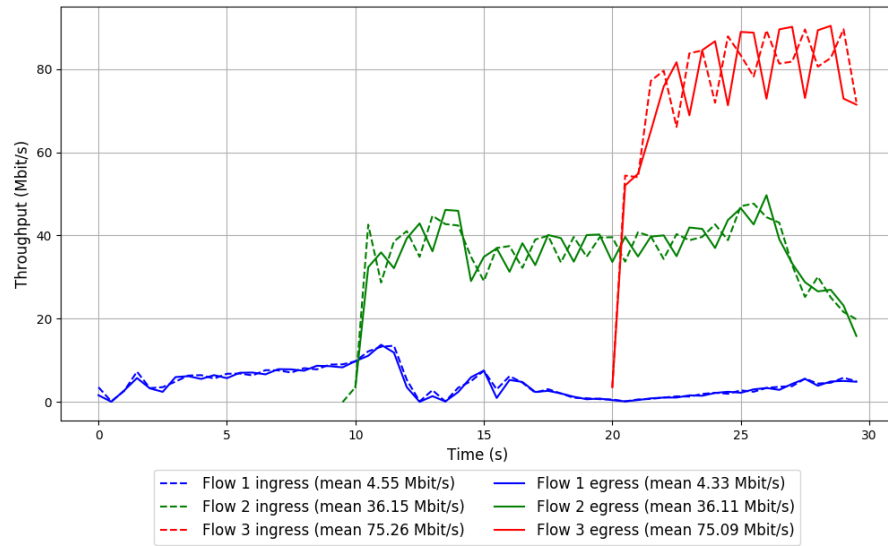
-- Flow 3:

Average throughput: 75.09 Mbit/s

95th percentile per-packet one-way delay: 55.431 ms

Loss rate: 1.30%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-21 06:19:03

End at: 2017-08-21 06:19:33

Below is generated by plot.py at 2017-08-21 09:32:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.72 Mbit/s

95th percentile per-packet one-way delay: 54.085 ms

Loss rate: 3.52%

-- Flow 1:

Average throughput: 5.66 Mbit/s

95th percentile per-packet one-way delay: 54.050 ms

Loss rate: 2.80%

-- Flow 2:

Average throughput: 7.22 Mbit/s

95th percentile per-packet one-way delay: 54.117 ms

Loss rate: 3.54%

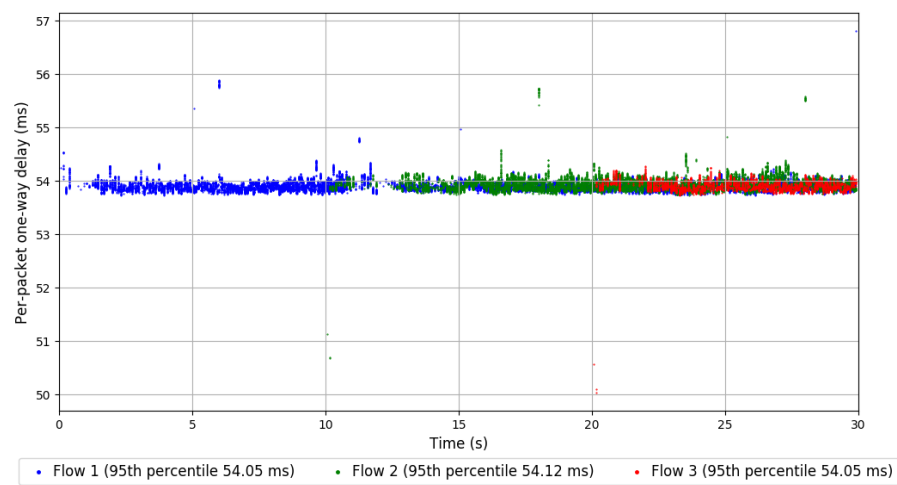
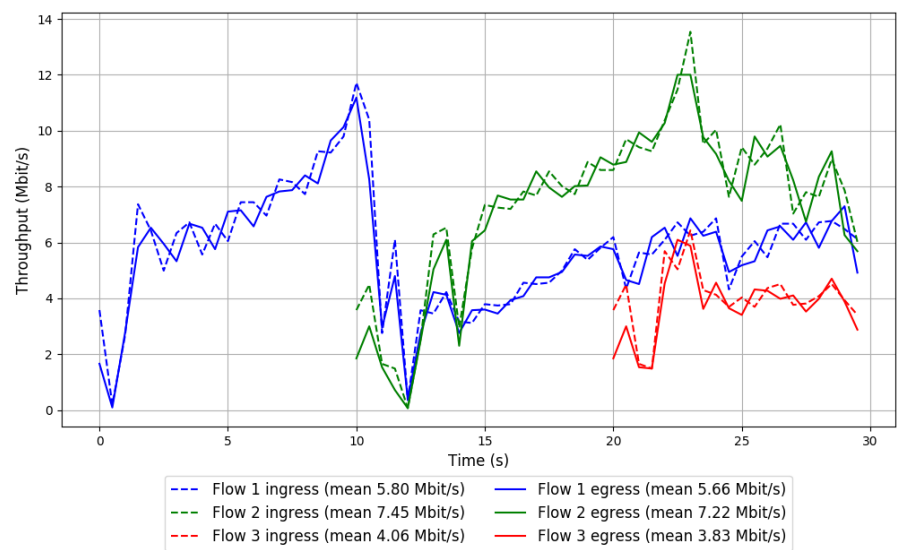
-- Flow 3:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 54.055 ms

Loss rate: 6.61%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-21 06:29:56

End at: 2017-08-21 06:30:26

Below is generated by plot.py at 2017-08-21 09:32:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.17 Mbit/s

95th percentile per-packet one-way delay: 54.067 ms

Loss rate: 3.68%

-- Flow 1:

Average throughput: 7.01 Mbit/s

95th percentile per-packet one-way delay: 54.081 ms

Loss rate: 2.71%

-- Flow 2:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 54.021 ms

Loss rate: 4.04%

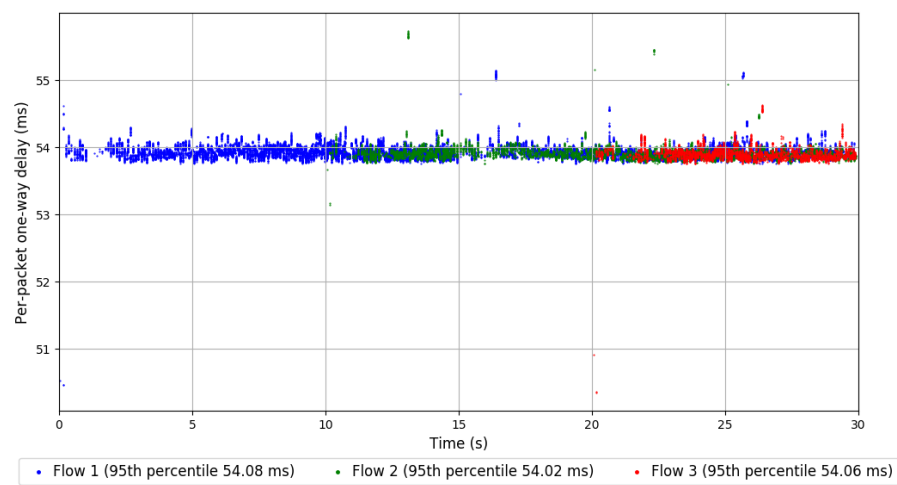
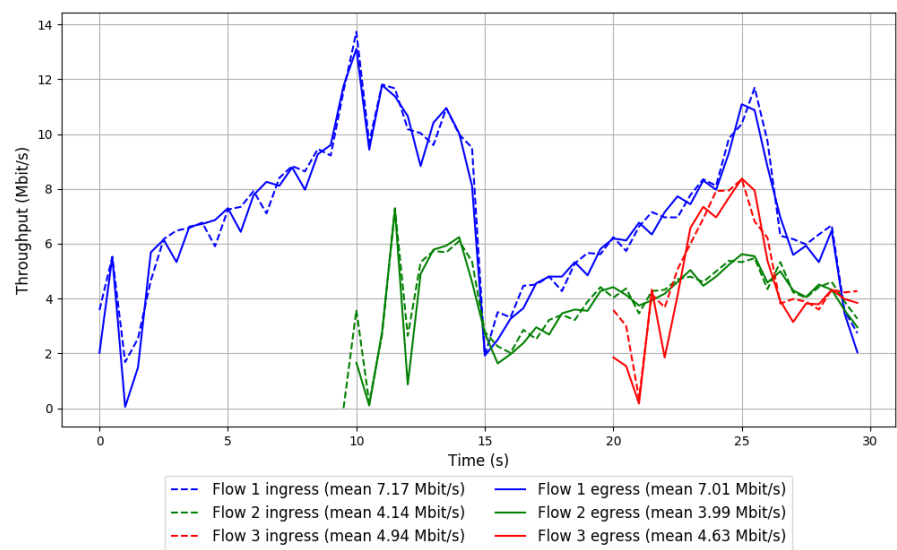
-- Flow 3:

Average throughput: 4.63 Mbit/s

95th percentile per-packet one-way delay: 54.065 ms

Loss rate: 7.34%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-21 06:40:38

End at: 2017-08-21 06:41:08

Below is generated by plot.py at 2017-08-21 09:32:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.00 Mbit/s

95th percentile per-packet one-way delay: 54.112 ms

Loss rate: 3.71%

-- Flow 1:

Average throughput: 7.11 Mbit/s

95th percentile per-packet one-way delay: 54.113 ms

Loss rate: 2.76%

-- Flow 2:

Average throughput: 4.72 Mbit/s

95th percentile per-packet one-way delay: 54.117 ms

Loss rate: 3.48%

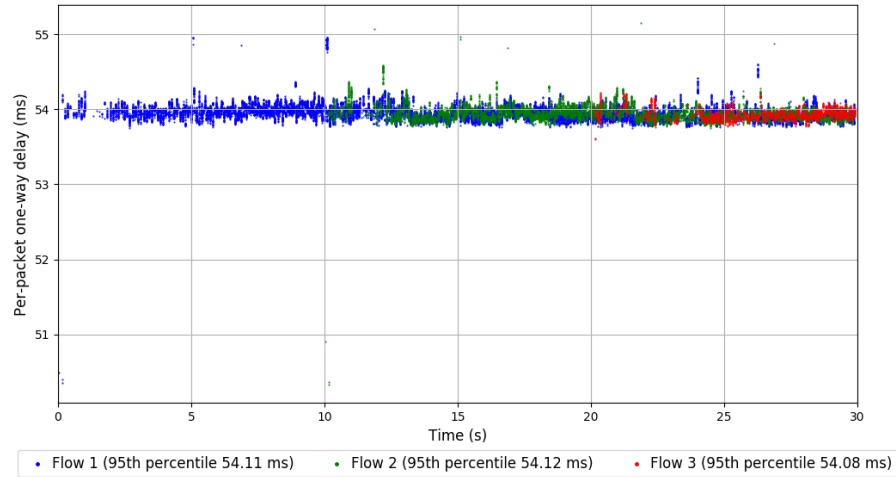
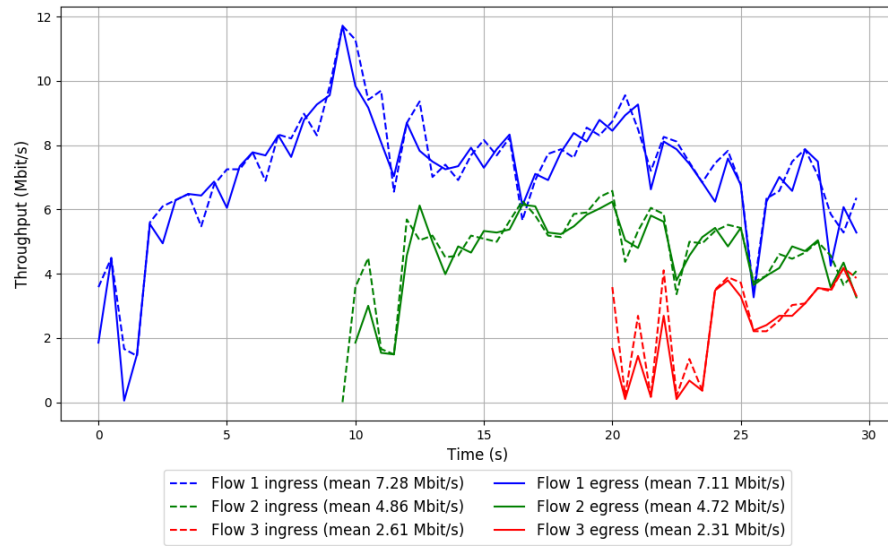
-- Flow 3:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 54.076 ms

Loss rate: 12.50%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-21 06:51:17

End at: 2017-08-21 06:51:47

Below is generated by plot.py at 2017-08-21 09:32:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.89 Mbit/s

95th percentile per-packet one-way delay: 54.110 ms

Loss rate: 4.66%

-- Flow 1:

Average throughput: 5.80 Mbit/s

95th percentile per-packet one-way delay: 54.093 ms

Loss rate: 3.48%

-- Flow 2:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 54.154 ms

Loss rate: 5.49%

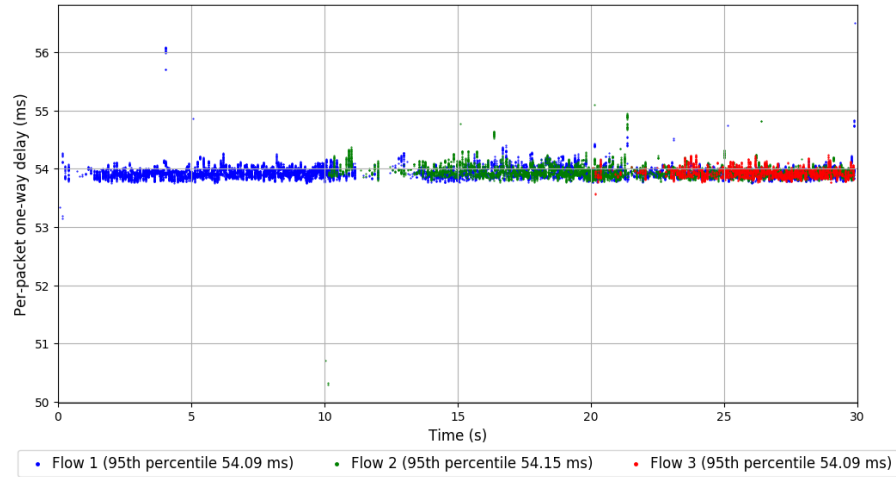
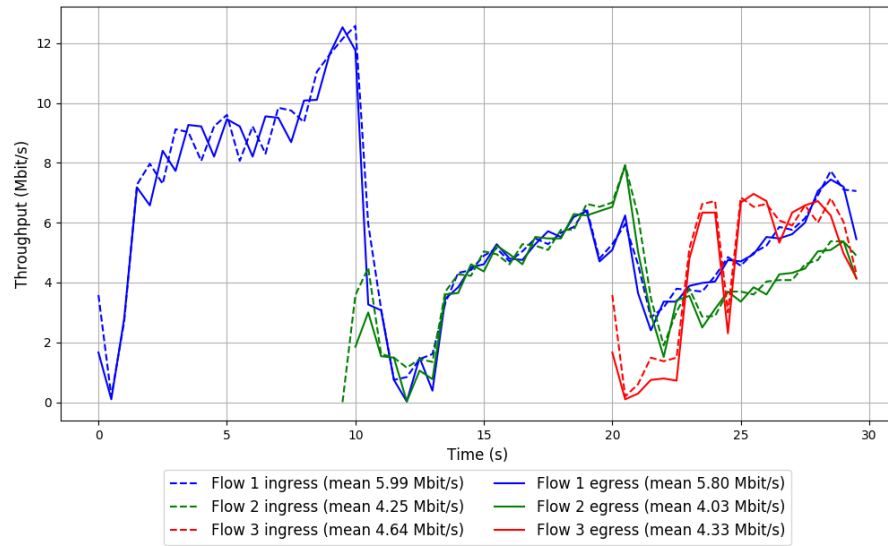
-- Flow 3:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 54.093 ms

Loss rate: 7.76%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-21 07:01:45

End at: 2017-08-21 07:02:15

Below is generated by plot.py at 2017-08-21 09:33:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.29 Mbit/s

95th percentile per-packet one-way delay: 55.632 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 110.37 Mbit/s

95th percentile per-packet one-way delay: 55.739 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 14.09 Mbit/s

95th percentile per-packet one-way delay: 54.832 ms

Loss rate: 1.19%

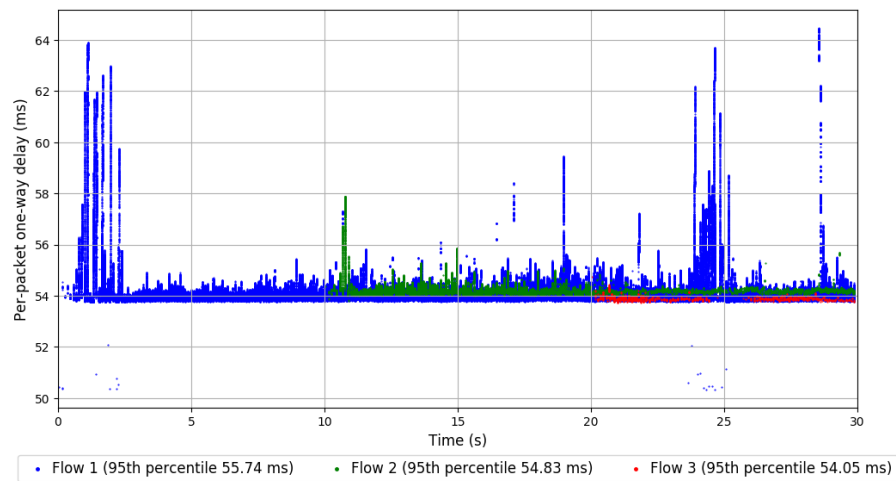
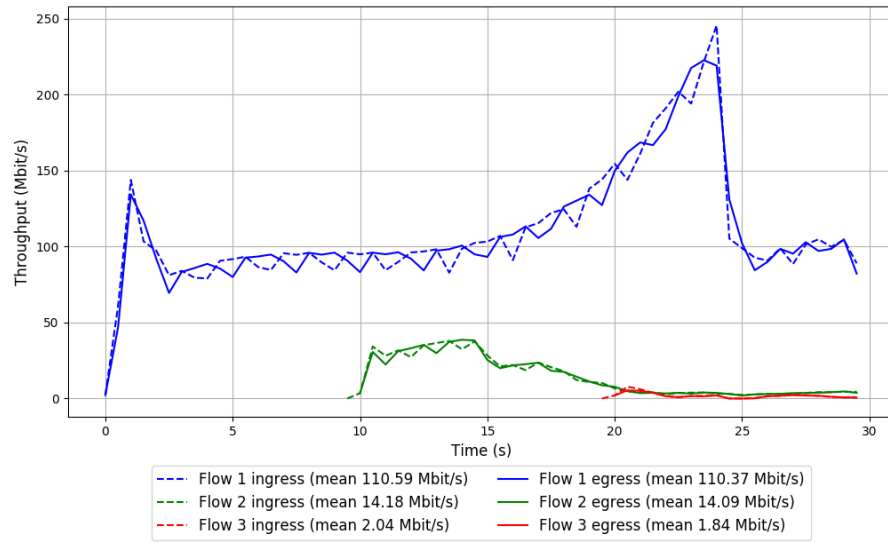
-- Flow 3:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 54.045 ms

Loss rate: 10.87%

Run 10: Report of TCP Cubic — Data Link

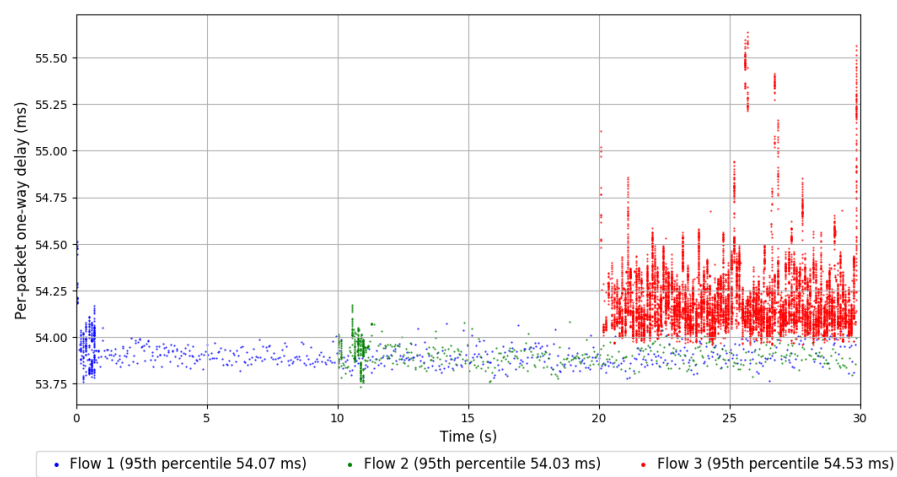
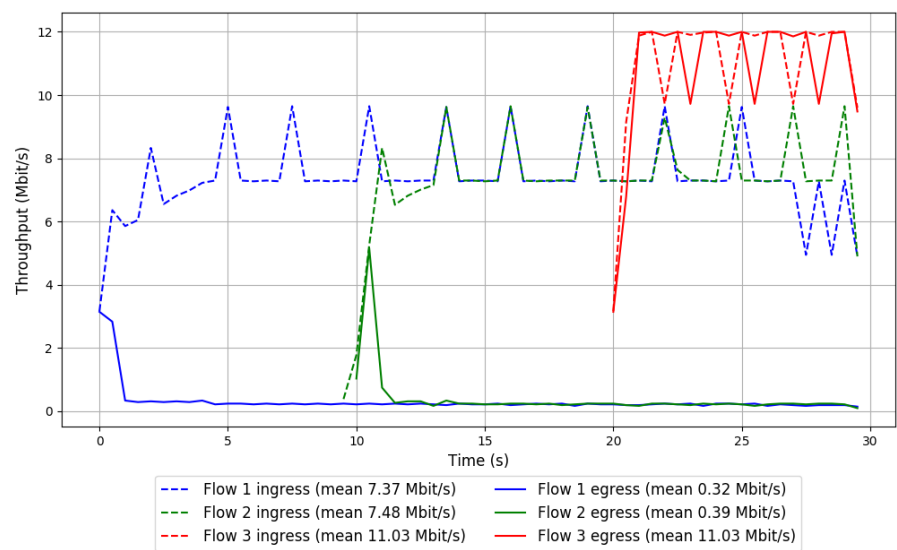


```
Run 1: Statistics of KohoCC

Start at: 2017-08-21 05:23:31
End at: 2017-08-21 05:24:01

# Below is generated by plot.py at 2017-08-21 09:33:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 54.504 ms
Loss rate: 73.81%
-- Flow 1:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 54.066 ms
Loss rate: 95.65%
-- Flow 2:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 54.035 ms
Loss rate: 94.85%
-- Flow 3:
Average throughput: 11.03 Mbit/s
95th percentile per-packet one-way delay: 54.531 ms
Loss rate: 1.13%
```


Run 1: Report of KohoCC — Data Link

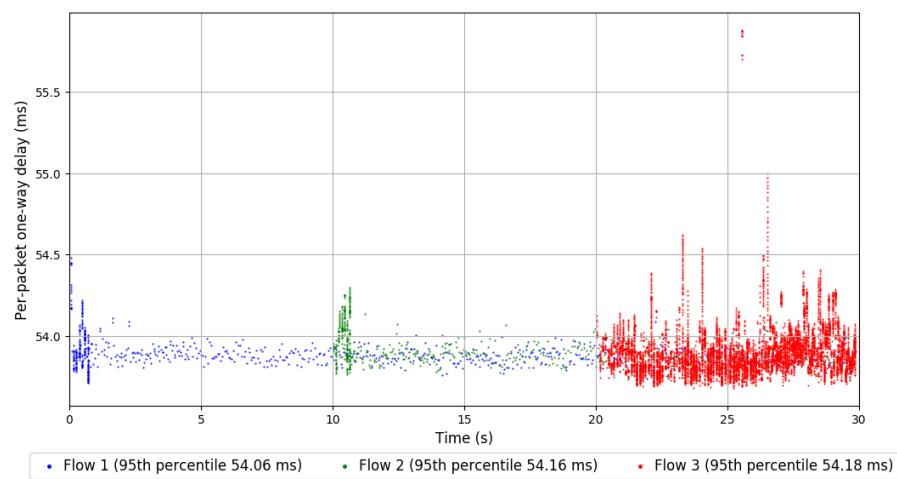
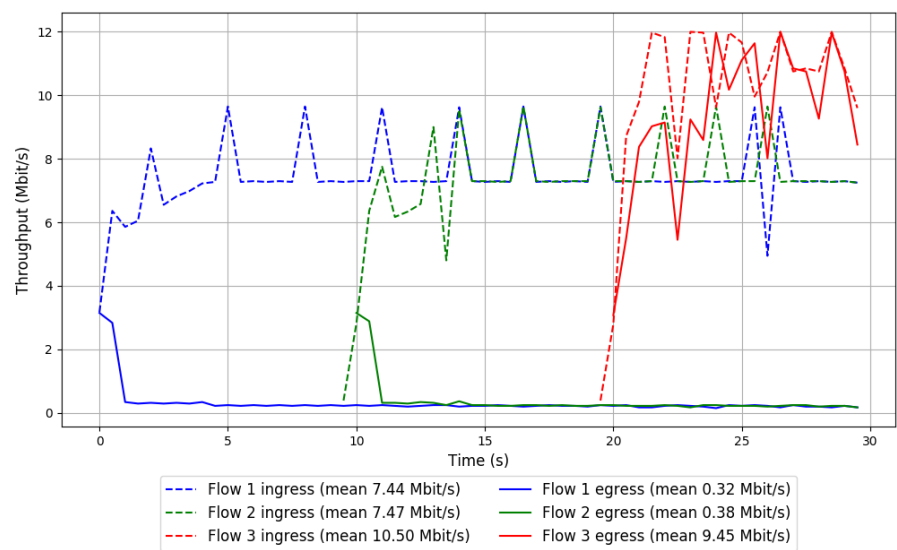


```
Run 2: Statistics of KohoCC

Start at: 2017-08-21 05:34:23
End at: 2017-08-21 05:34:53

# Below is generated by plot.py at 2017-08-21 09:33:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 54.168 ms
Loss rate: 76.92%
-- Flow 1:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 54.065 ms
Loss rate: 95.71%
-- Flow 2:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 54.162 ms
Loss rate: 94.95%
-- Flow 3:
Average throughput: 9.45 Mbit/s
95th percentile per-packet one-way delay: 54.178 ms
Loss rate: 10.98%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-21 05:45:15

End at: 2017-08-21 05:45:45

Below is generated by plot.py at 2017-08-21 09:33:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 54.251 ms

Loss rate: 91.67%

-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 54.249 ms

Loss rate: 95.56%

-- Flow 2:

Average throughput: 1.12 Mbit/s

95th percentile per-packet one-way delay: 54.273 ms

Loss rate: 85.55%

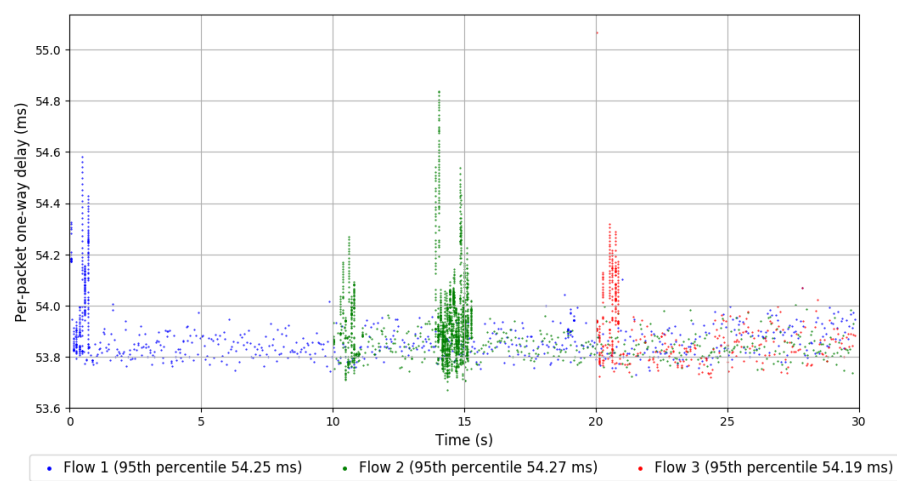
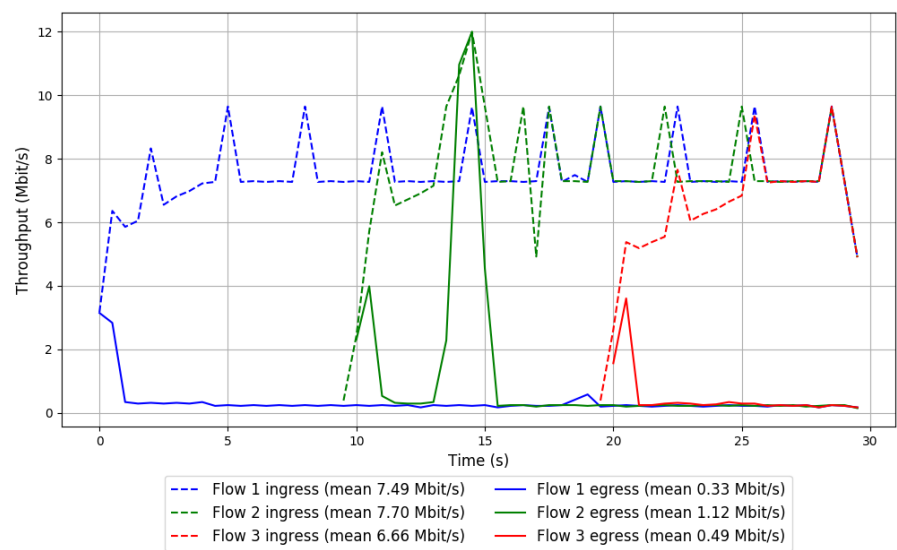
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 54.193 ms

Loss rate: 92.69%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-08-21 05:56:00

End at: 2017-08-21 05:56:30

Below is generated by plot.py at 2017-08-21 09:33:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.59 Mbit/s

95th percentile per-packet one-way delay: 54.243 ms

Loss rate: 71.14%

-- Flow 1:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 54.386 ms

Loss rate: 90.50%

-- Flow 2:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 54.151 ms

Loss rate: 94.47%

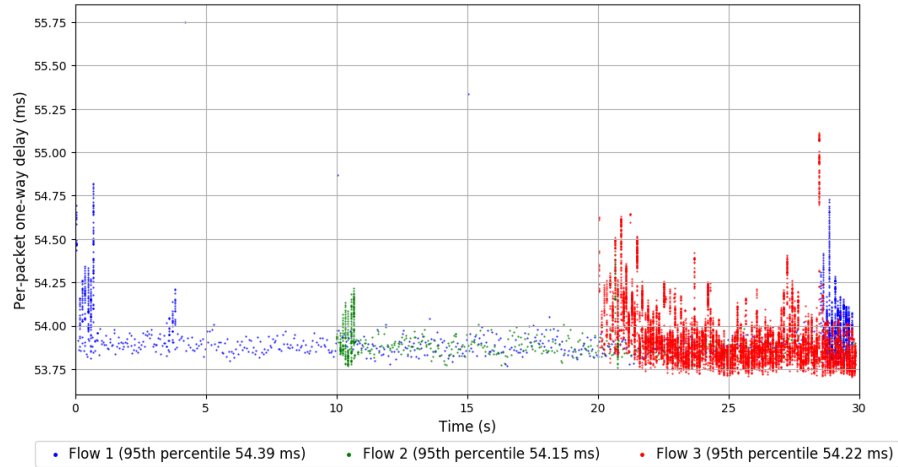
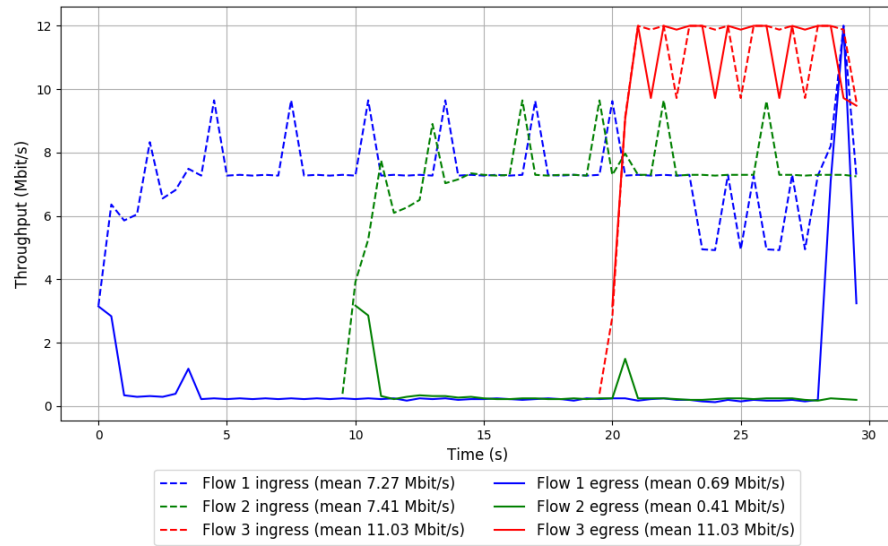
-- Flow 3:

Average throughput: 11.03 Mbit/s

95th percentile per-packet one-way delay: 54.222 ms

Loss rate: 1.10%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-08-21 06:06:36

End at: 2017-08-21 06:07:06

Below is generated by plot.py at 2017-08-21 09:33:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.61 Mbit/s

95th percentile per-packet one-way delay: 54.307 ms

Loss rate: 77.56%

-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 54.128 ms

Loss rate: 95.70%

-- Flow 2:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 54.082 ms

Loss rate: 93.32%

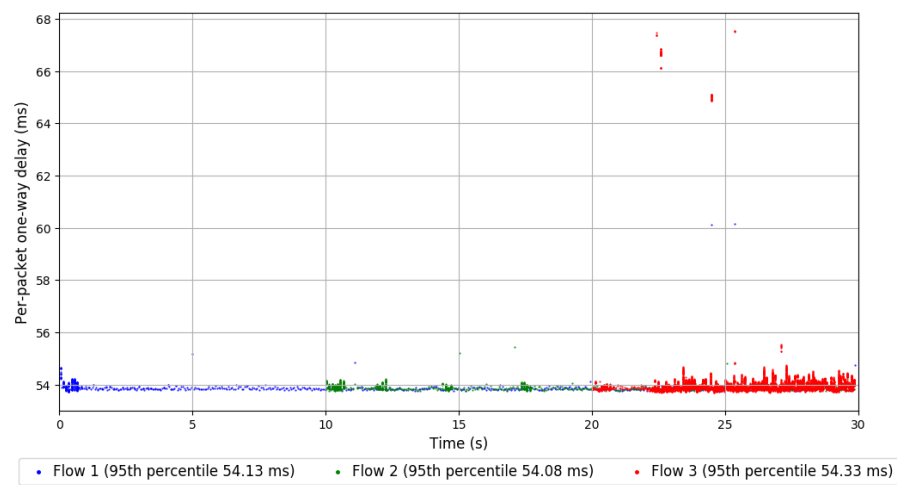
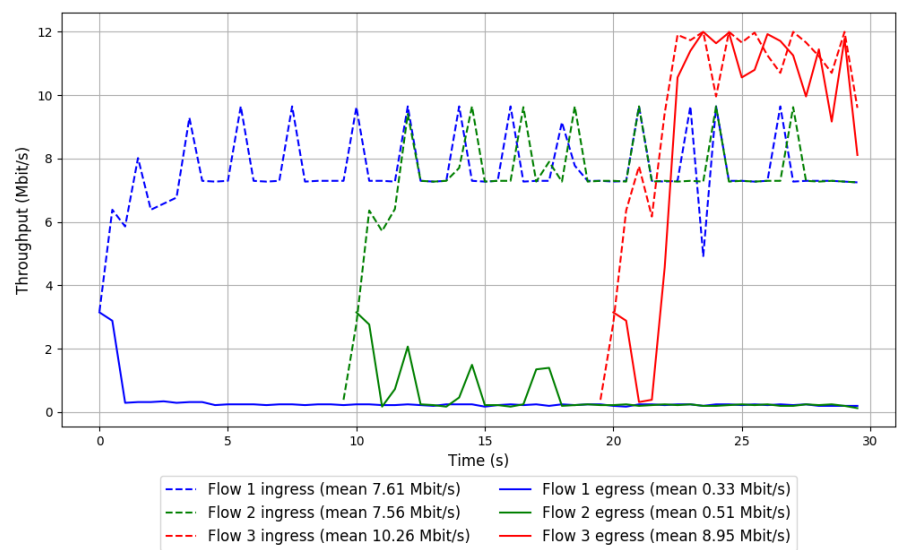
-- Flow 3:

Average throughput: 8.95 Mbit/s

95th percentile per-packet one-way delay: 54.328 ms

Loss rate: 13.63%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-21 06:17:02

End at: 2017-08-21 06:17:32

Below is generated by plot.py at 2017-08-21 09:33:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.26 Mbit/s

95th percentile per-packet one-way delay: 54.441 ms

Loss rate: 19.07%

-- Flow 1:

Average throughput: 9.58 Mbit/s

95th percentile per-packet one-way delay: 54.159 ms

Loss rate: 15.03%

-- Flow 2:

Average throughput: 11.25 Mbit/s

95th percentile per-packet one-way delay: 54.510 ms

Loss rate: 0.71%

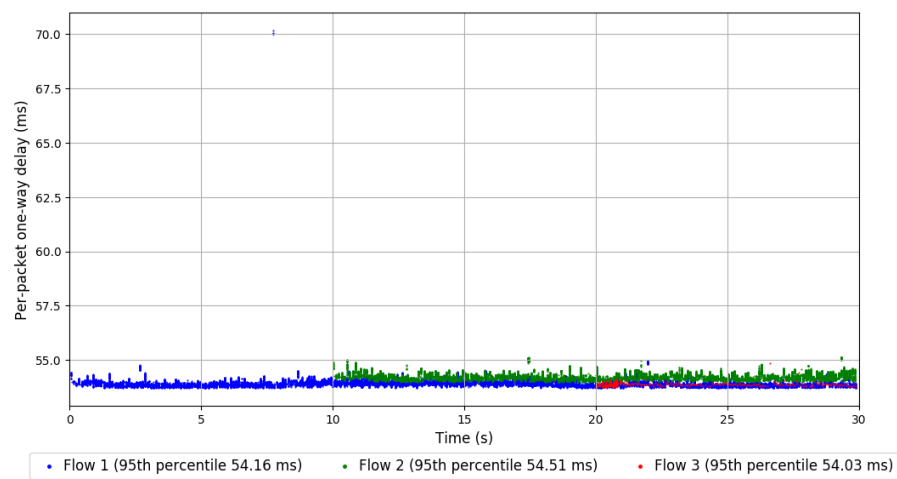
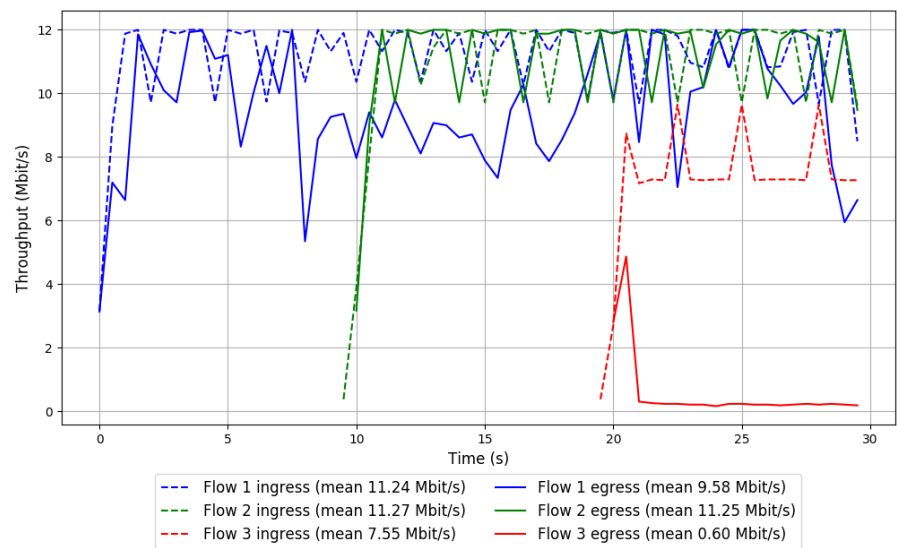
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 54.029 ms

Loss rate: 92.16%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-21 06:27:56

End at: 2017-08-21 06:28:26

Below is generated by plot.py at 2017-08-21 09:33:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.56 Mbit/s

95th percentile per-packet one-way delay: 54.130 ms

Loss rate: 10.52%

-- Flow 1:

Average throughput: 11.36 Mbit/s

95th percentile per-packet one-way delay: 54.172 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 10.60 Mbit/s

95th percentile per-packet one-way delay: 54.053 ms

Loss rate: 6.28%

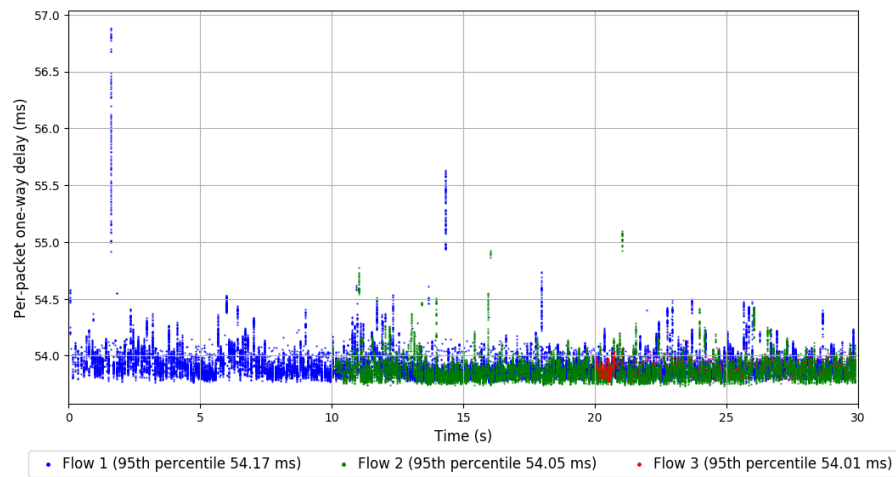
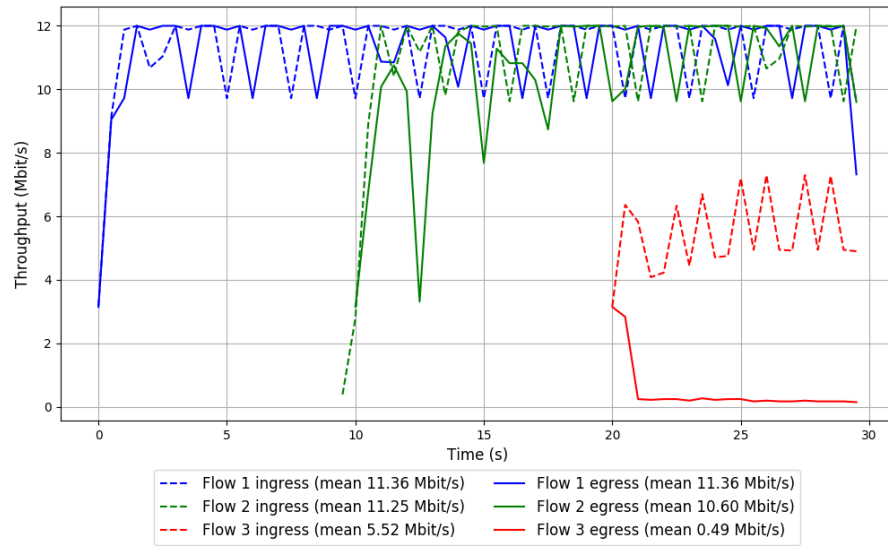
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 54.010 ms

Loss rate: 91.21%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-21 06:38:37

End at: 2017-08-21 06:39:07

Below is generated by plot.py at 2017-08-21 09:33:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 54.696 ms

Loss rate: 55.16%

-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 54.194 ms

Loss rate: 95.68%

-- Flow 2:

Average throughput: 10.77 Mbit/s

95th percentile per-packet one-way delay: 54.704 ms

Loss rate: 1.16%

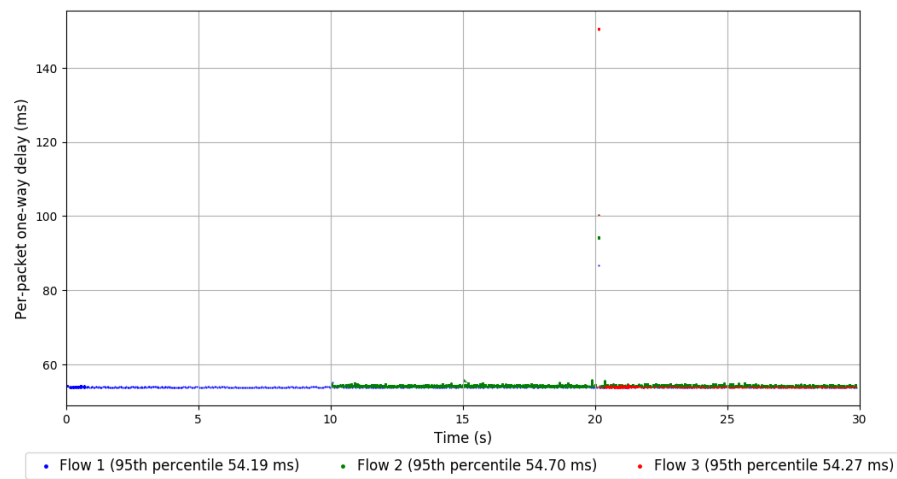
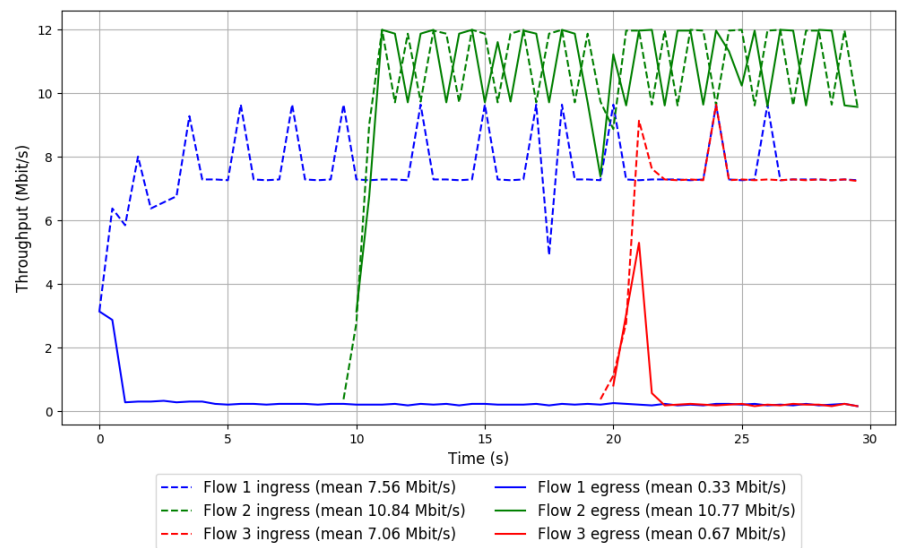
-- Flow 3:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 54.269 ms

Loss rate: 90.65%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-21 06:49:17

End at: 2017-08-21 06:49:47

Below is generated by plot.py at 2017-08-21 09:33:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.81 Mbit/s

95th percentile per-packet one-way delay: 54.305 ms

Loss rate: 94.67%

-- Flow 1:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 54.426 ms

Loss rate: 95.77%

-- Flow 2:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 54.286 ms

Loss rate: 94.95%

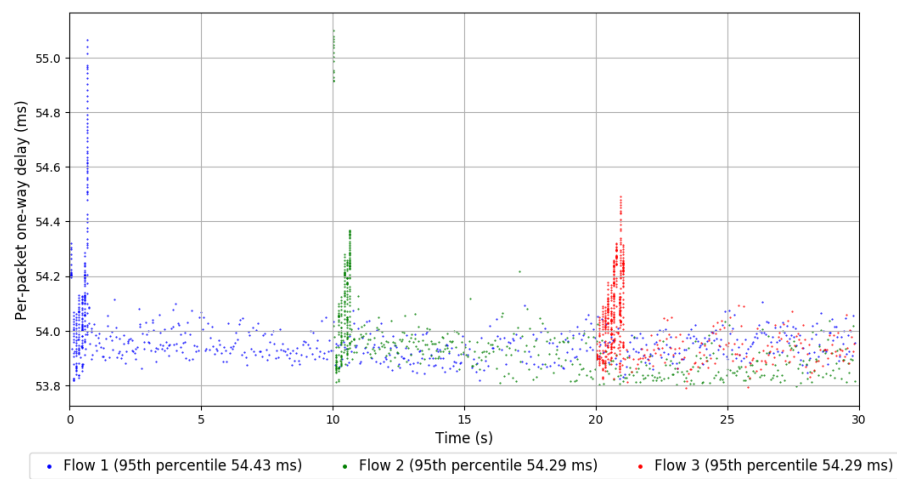
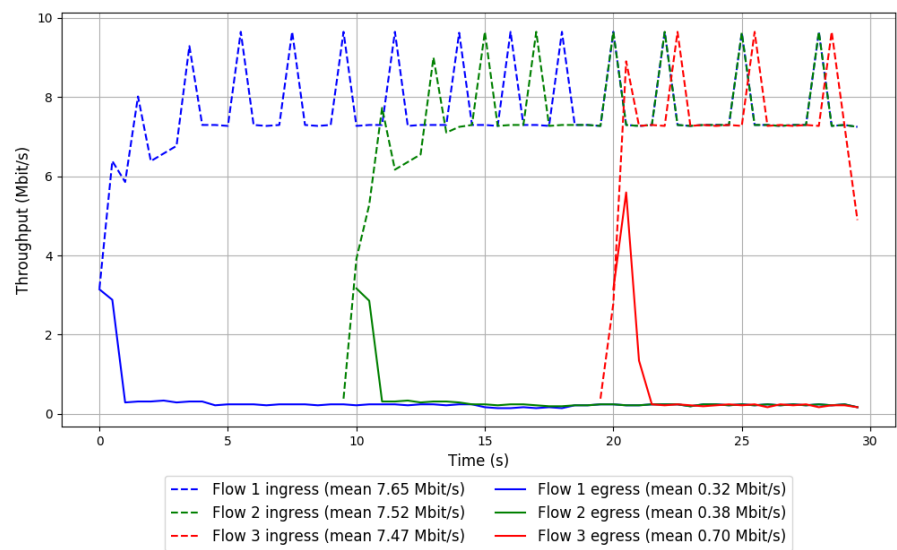
-- Flow 3:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 54.294 ms

Loss rate: 90.71%

Run 9: Report of KohoCC — Data Link

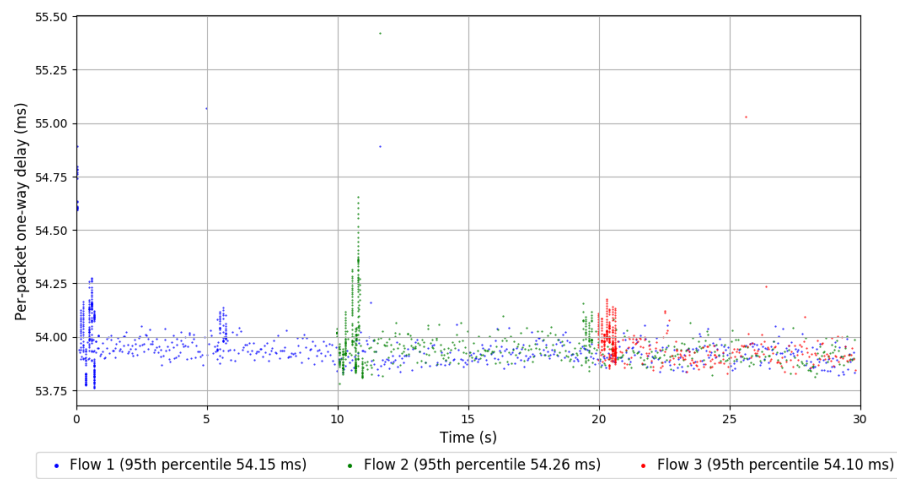
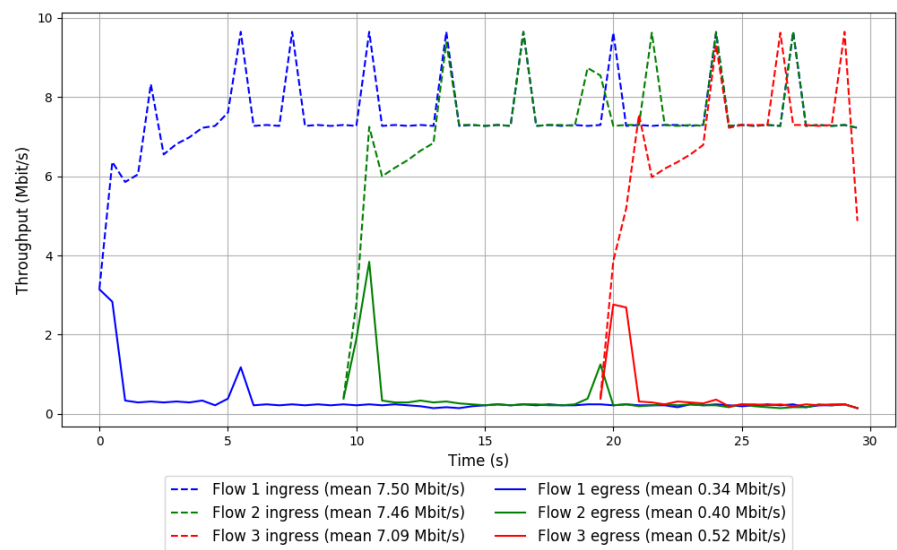


```
Run 10: Statistics of KohoCC

Start at: 2017-08-21 06:59:45
End at: 2017-08-21 07:00:15

# Below is generated by plot.py at 2017-08-21 09:33:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 54.157 ms
Loss rate: 94.74%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 54.152 ms
Loss rate: 95.48%
-- Flow 2:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 54.263 ms
Loss rate: 94.61%
-- Flow 3:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 54.103 ms
Loss rate: 92.68%
```

Run 10: Report of KohoCC — Data Link

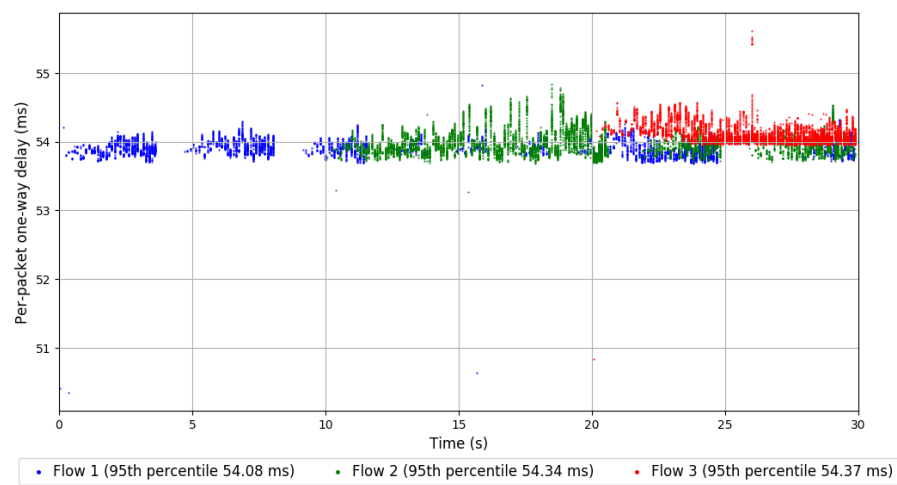
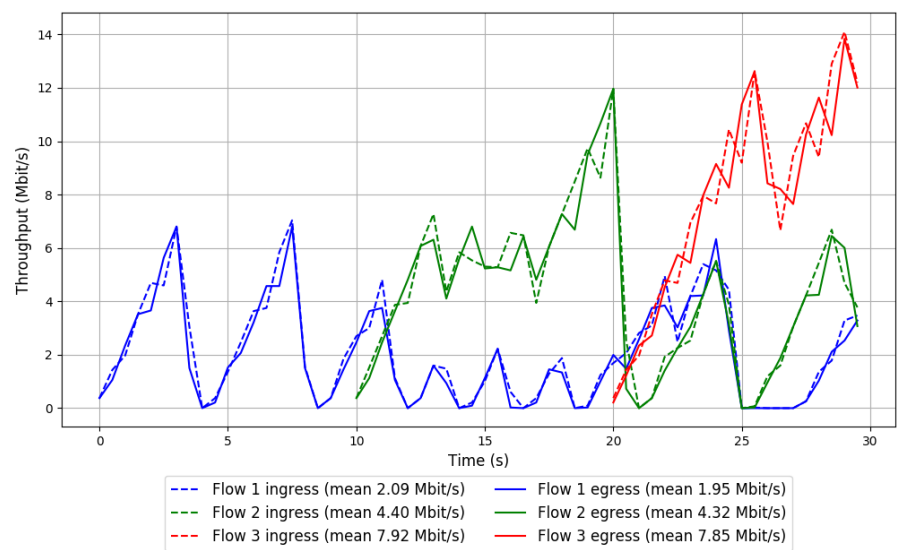


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-21 05:24:51
End at: 2017-08-21 05:25:21

# Below is generated by plot.py at 2017-08-21 09:33:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.39 Mbit/s
95th percentile per-packet one-way delay: 54.315 ms
Loss rate: 3.60%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 54.083 ms
Loss rate: 7.27%
-- Flow 2:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 54.343 ms
Loss rate: 2.41%
-- Flow 3:
Average throughput: 7.85 Mbit/s
95th percentile per-packet one-way delay: 54.365 ms
Loss rate: 1.99%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-08-21 05:35:43

End at: 2017-08-21 05:36:13

Below is generated by plot.py at 2017-08-21 09:33:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.84 Mbit/s

95th percentile per-packet one-way delay: 54.205 ms

Loss rate: 6.68%

-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 54.213 ms

Loss rate: 6.50%

-- Flow 2:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 54.225 ms

Loss rate: 6.24%

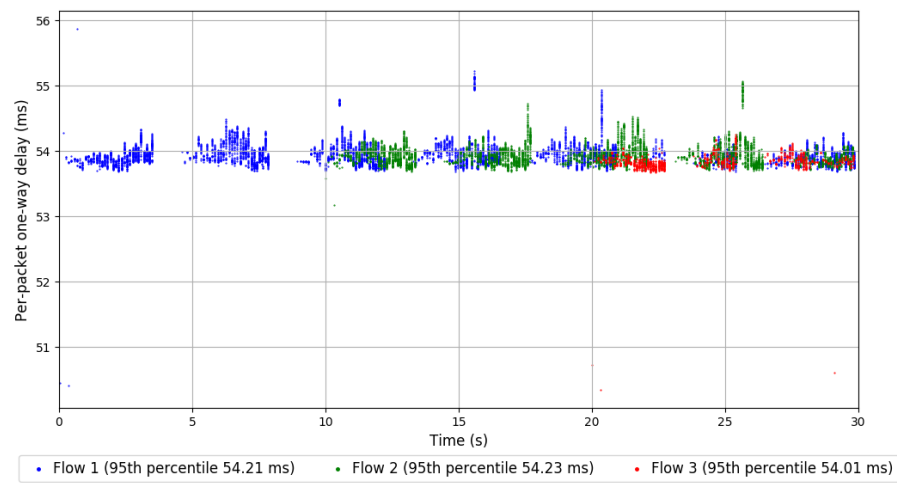
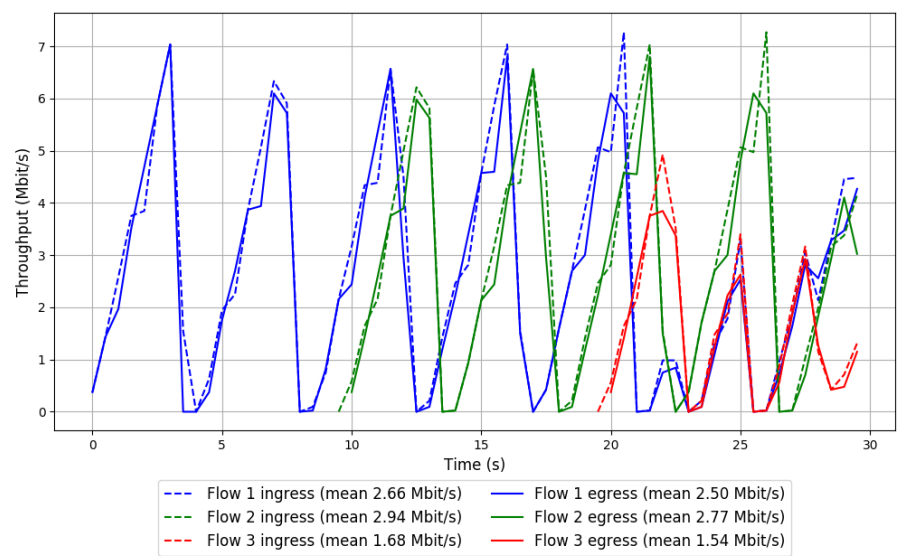
-- Flow 3:

Average throughput: 1.54 Mbit/s

95th percentile per-packet one-way delay: 54.011 ms

Loss rate: 9.03%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-21 05:46:35

End at: 2017-08-21 05:47:05

Below is generated by plot.py at 2017-08-21 09:33:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.36 Mbit/s

95th percentile per-packet one-way delay: 54.759 ms

Loss rate: 2.27%

-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 54.829 ms

Loss rate: 1.44%

-- Flow 2:

Average throughput: 0.86 Mbit/s

95th percentile per-packet one-way delay: 54.152 ms

Loss rate: 12.31%

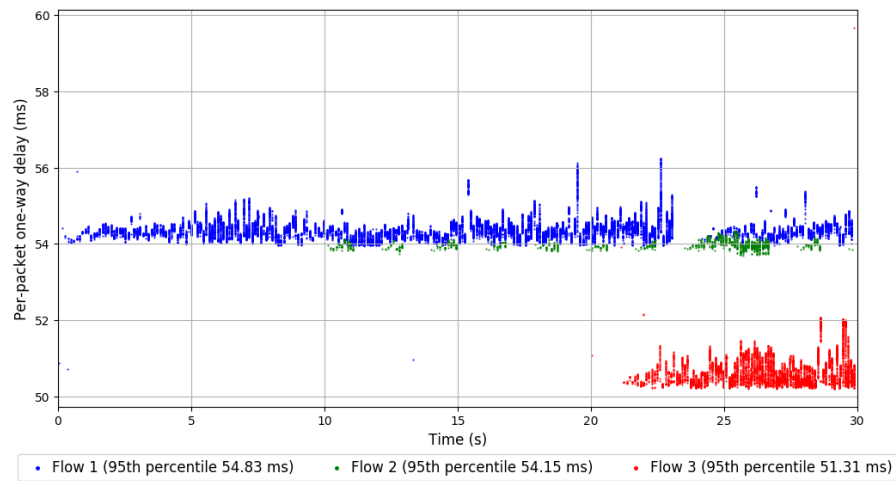
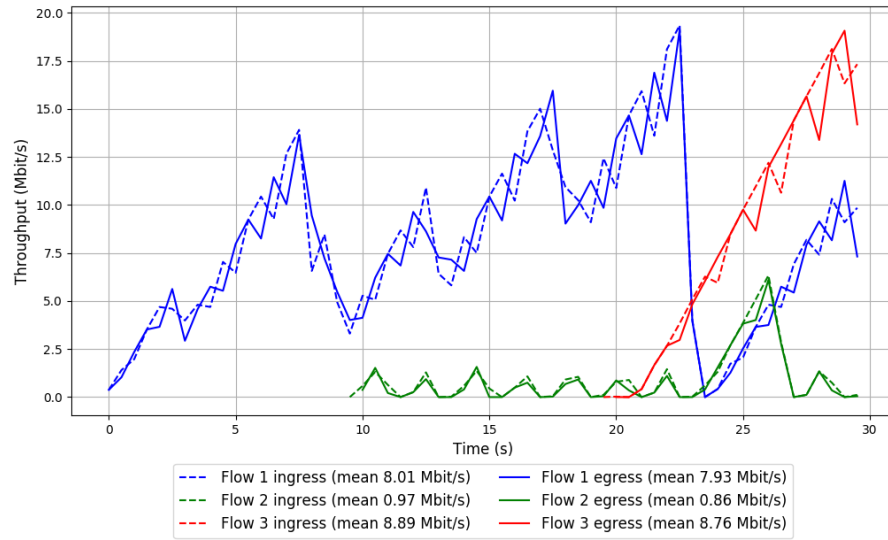
-- Flow 3:

Average throughput: 8.76 Mbit/s

95th percentile per-packet one-way delay: 51.306 ms

Loss rate: 2.34%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-21 05:57:20

End at: 2017-08-21 05:57:50

Below is generated by plot.py at 2017-08-21 09:33:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.80 Mbit/s

95th percentile per-packet one-way delay: 54.769 ms

Loss rate: 1.85%

-- Flow 1:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 54.148 ms

Loss rate: 4.55%

-- Flow 2:

Average throughput: 11.86 Mbit/s

95th percentile per-packet one-way delay: 54.861 ms

Loss rate: 0.58%

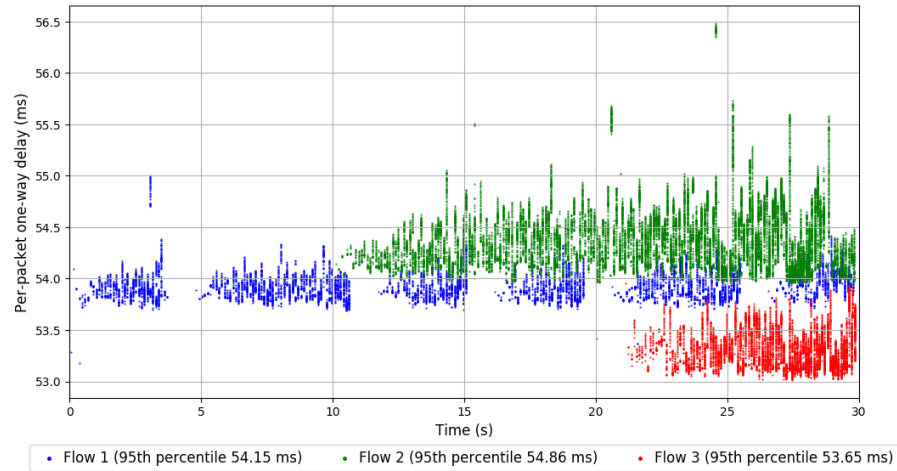
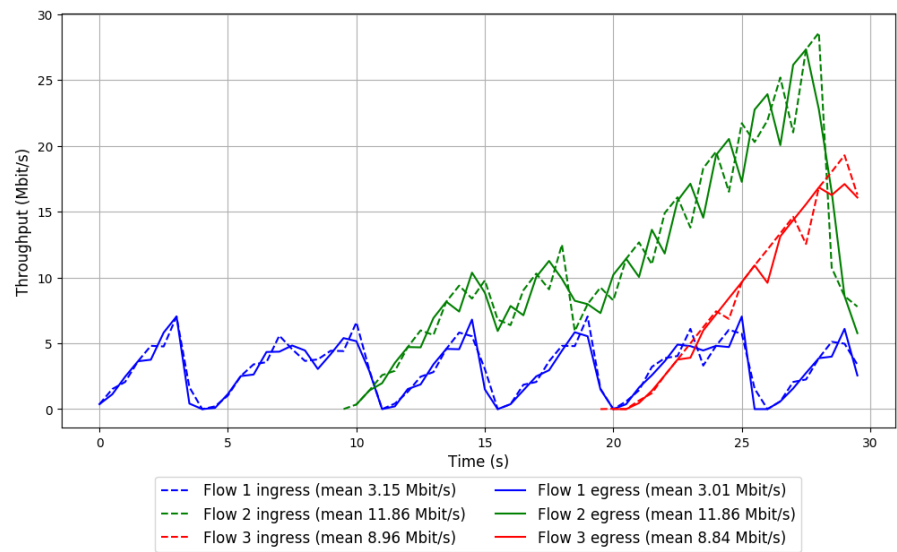
-- Flow 3:

Average throughput: 8.84 Mbit/s

95th percentile per-packet one-way delay: 53.654 ms

Loss rate: 2.36%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-08-21 06:07:56

End at: 2017-08-21 06:08:26

Below is generated by plot.py at 2017-08-21 09:33:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.01 Mbit/s

95th percentile per-packet one-way delay: 54.556 ms

Loss rate: 1.95%

-- Flow 1:

Average throughput: 2.74 Mbit/s

95th percentile per-packet one-way delay: 54.318 ms

Loss rate: 5.34%

-- Flow 2:

Average throughput: 12.14 Mbit/s

95th percentile per-packet one-way delay: 54.640 ms

Loss rate: 0.31%

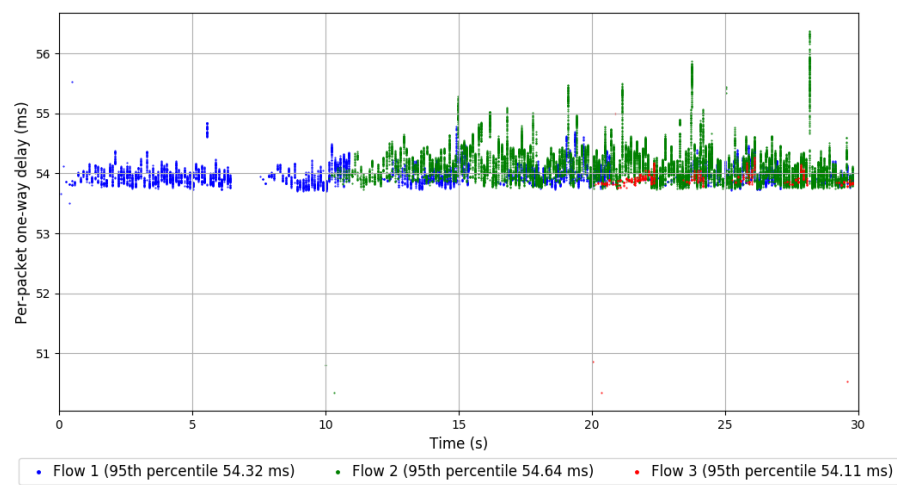
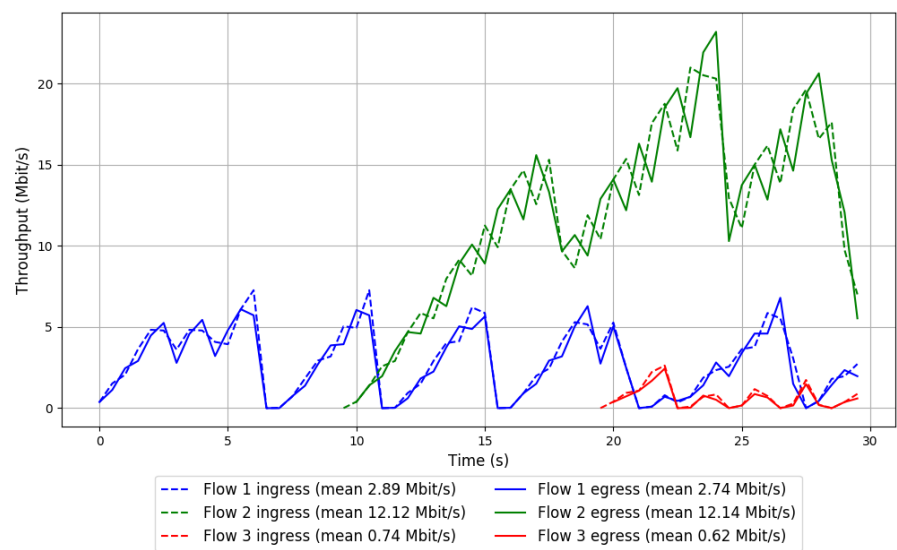
-- Flow 3:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 54.108 ms

Loss rate: 16.36%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-21 06:18:23

End at: 2017-08-21 06:18:53

Below is generated by plot.py at 2017-08-21 09:33:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.70 Mbit/s

95th percentile per-packet one-way delay: 54.261 ms

Loss rate: 6.68%

-- Flow 1:

Average throughput: 2.66 Mbit/s

95th percentile per-packet one-way delay: 54.279 ms

Loss rate: 6.27%

-- Flow 2:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 54.227 ms

Loss rate: 7.36%

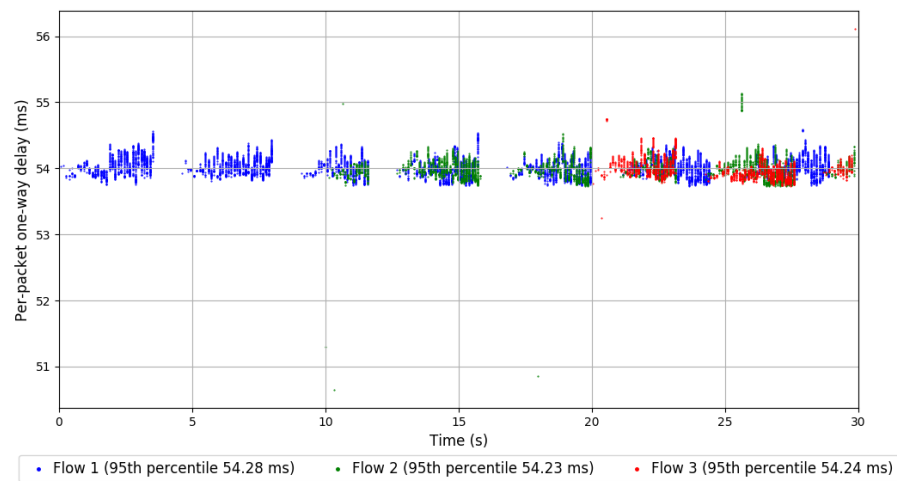
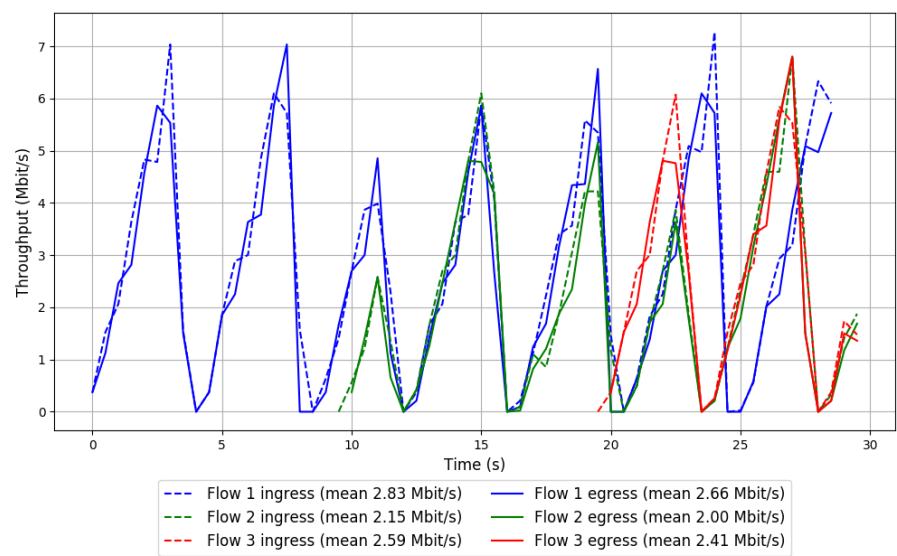
-- Flow 3:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 54.243 ms

Loss rate: 6.82%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-21 06:29:16

End at: 2017-08-21 06:29:46

Below is generated by plot.py at 2017-08-21 09:33:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 54.218 ms

Loss rate: 6.72%

-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 54.189 ms

Loss rate: 6.56%

-- Flow 2:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 54.244 ms

Loss rate: 6.58%

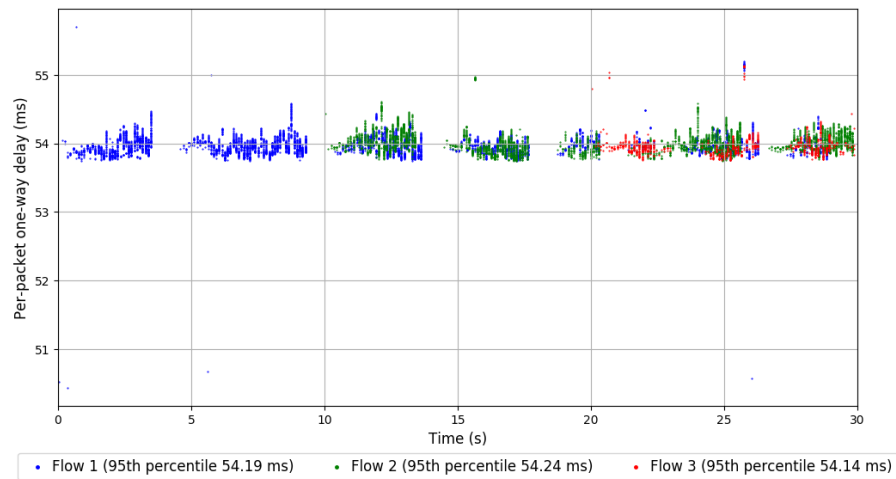
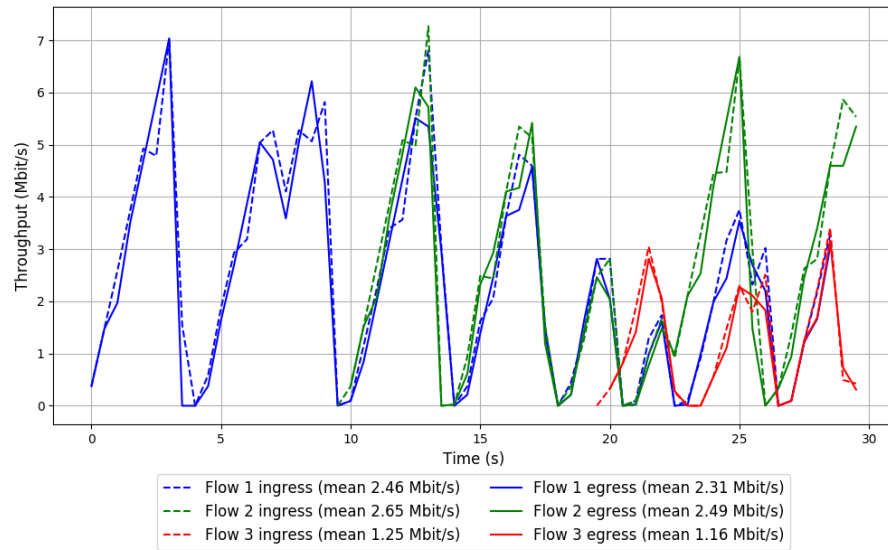
-- Flow 3:

Average throughput: 1.16 Mbit/s

95th percentile per-packet one-way delay: 54.144 ms

Loss rate: 8.20%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-08-21 06:39:57

End at: 2017-08-21 06:40:27

Below is generated by plot.py at 2017-08-21 09:33:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.00 Mbit/s

95th percentile per-packet one-way delay: 54.906 ms

Loss rate: 2.64%

-- Flow 1:

Average throughput: 9.68 Mbit/s

95th percentile per-packet one-way delay: 54.949 ms

Loss rate: 1.63%

-- Flow 2:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 54.301 ms

Loss rate: 6.61%

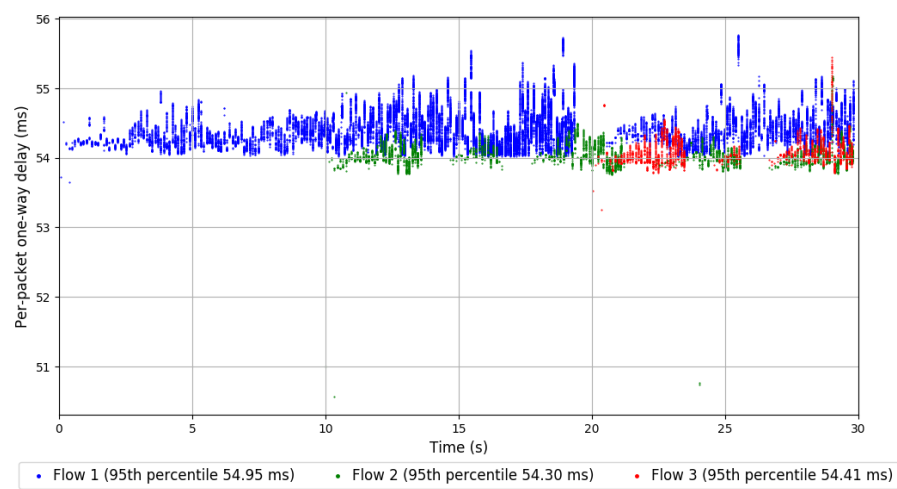
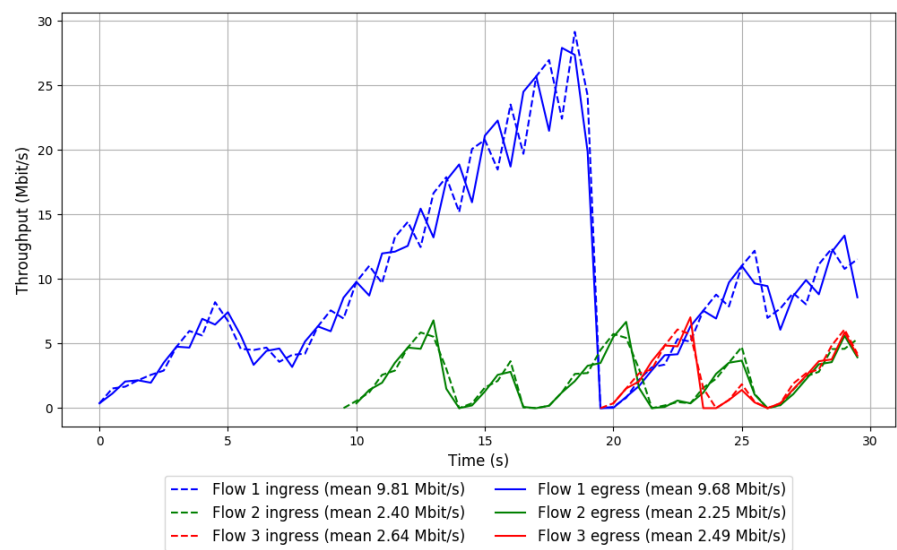
-- Flow 3:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 54.412 ms

Loss rate: 6.73%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-21 06:50:37

End at: 2017-08-21 06:51:07

Below is generated by plot.py at 2017-08-21 09:33:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.63 Mbit/s

95th percentile per-packet one-way delay: 54.232 ms

Loss rate: 5.65%

-- Flow 1:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 54.243 ms

Loss rate: 5.89%

-- Flow 2:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 54.208 ms

Loss rate: 6.22%

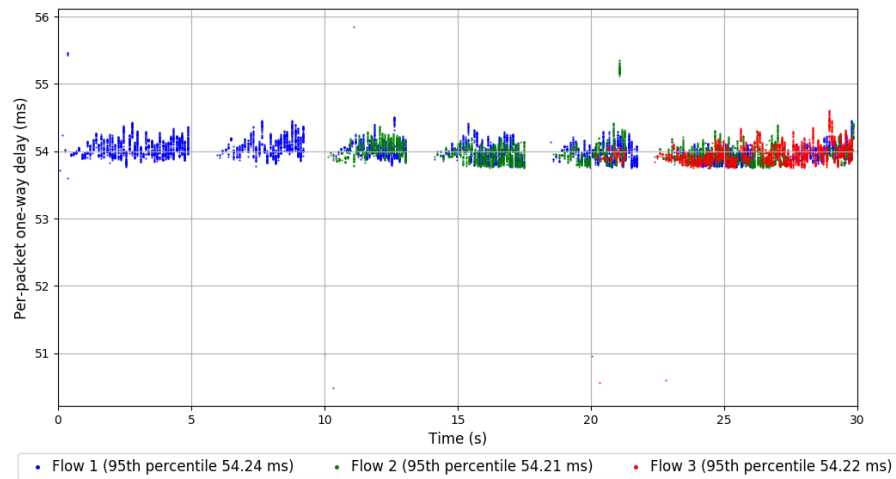
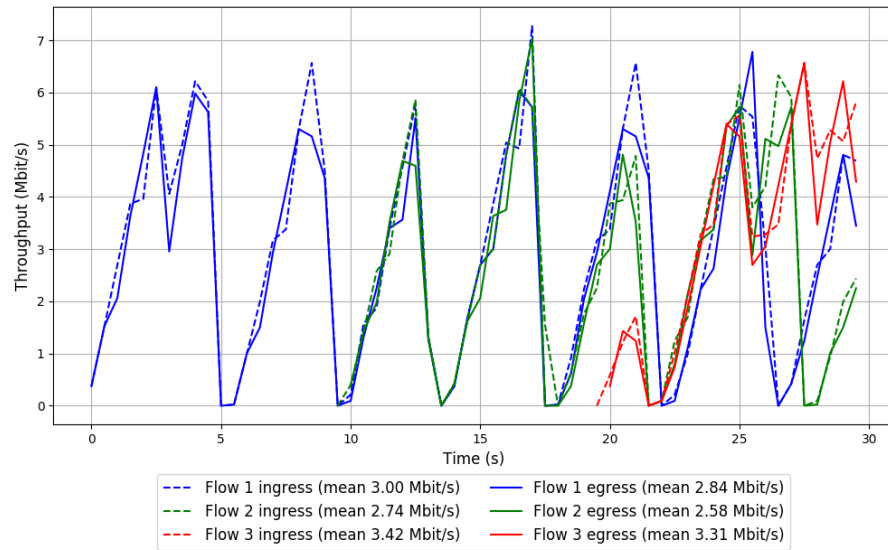
-- Flow 3:

Average throughput: 3.31 Mbit/s

95th percentile per-packet one-way delay: 54.218 ms

Loss rate: 4.11%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-08-21 07:01:05

End at: 2017-08-21 07:01:35

Below is generated by plot.py at 2017-08-21 09:33:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.30 Mbit/s

95th percentile per-packet one-way delay: 54.615 ms

Loss rate: 2.13%

-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 54.290 ms

Loss rate: 6.15%

-- Flow 2:

Average throughput: 13.48 Mbit/s

95th percentile per-packet one-way delay: 54.649 ms

Loss rate: 0.49%

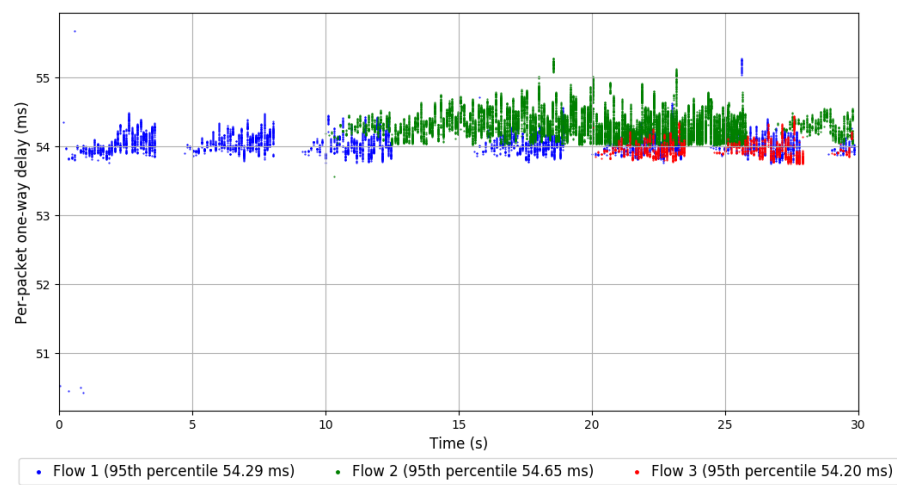
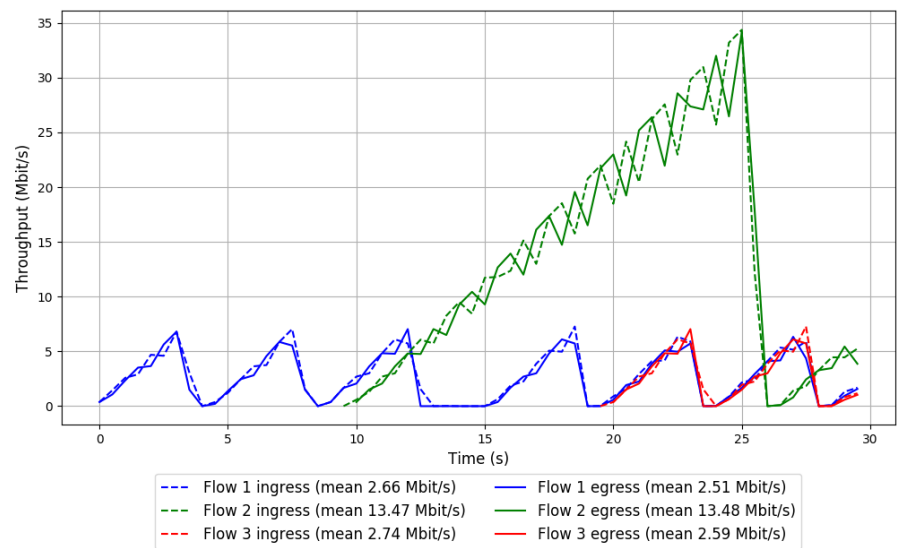
-- Flow 3:

Average throughput: 2.59 Mbit/s

95th percentile per-packet one-way delay: 54.198 ms

Loss rate: 6.49%

Run 10: Report of LEDBAT — Data Link

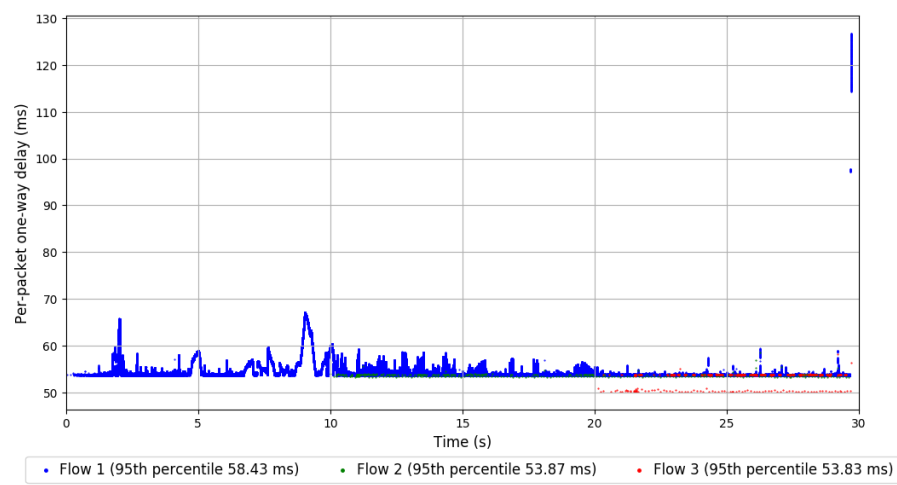
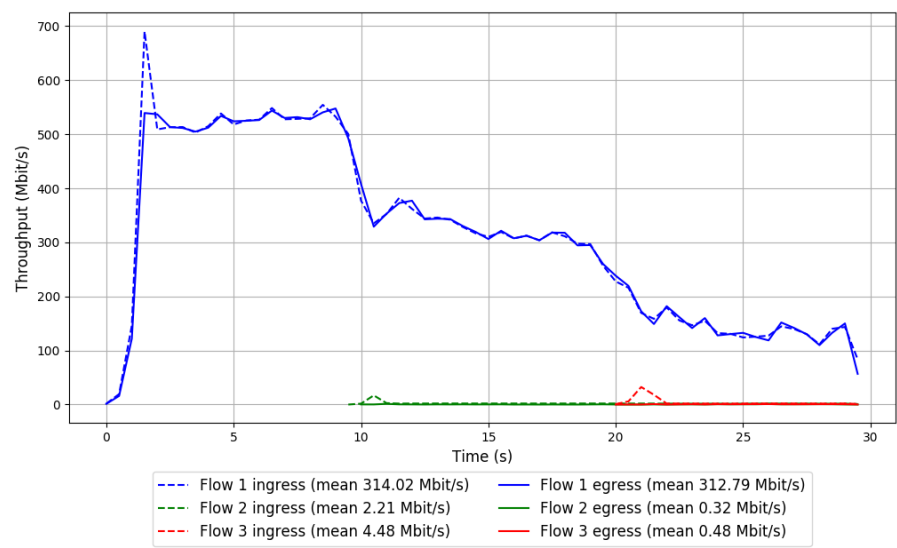


```
Run 1: Statistics of PCC

Start at: 2017-08-21 05:32:35
End at: 2017-08-21 05:33:05

# Below is generated by plot.py at 2017-08-21 09:34:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 313.15 Mbit/s
95th percentile per-packet one-way delay: 58.429 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 312.79 Mbit/s
95th percentile per-packet one-way delay: 58.432 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 53.866 ms
Loss rate: 85.63%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 53.825 ms
Loss rate: 89.35%
```


Run 1: Report of PCC — Data Link

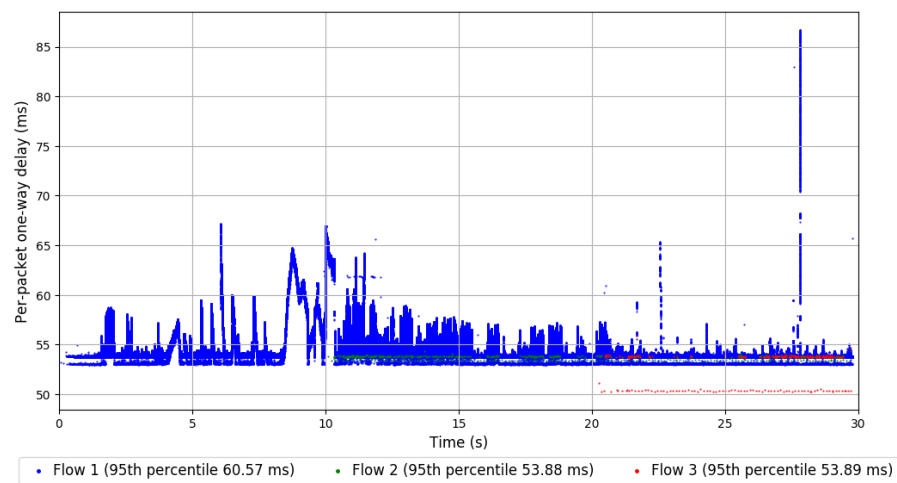
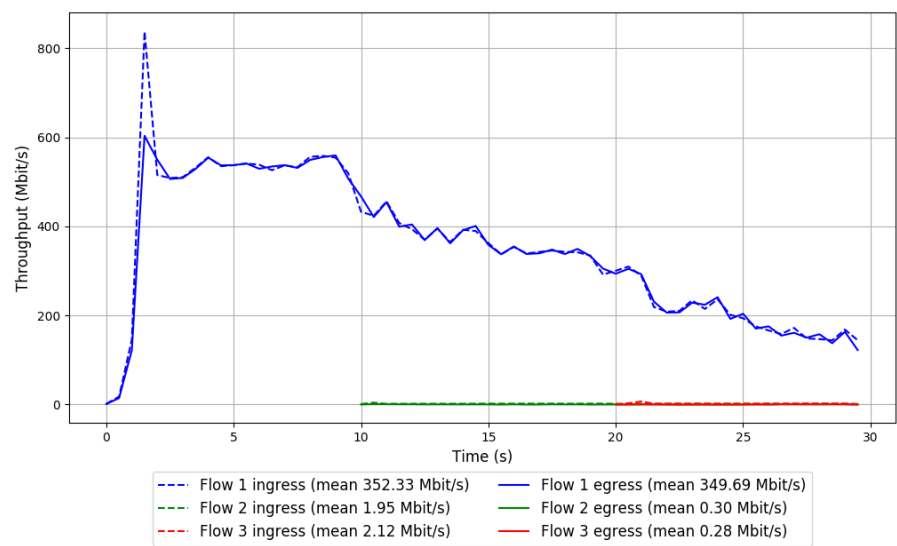


```
Run 2: Statistics of PCC

Start at: 2017-08-21 05:43:32
End at: 2017-08-21 05:44:02

# Below is generated by plot.py at 2017-08-21 09:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 349.98 Mbit/s
95th percentile per-packet one-way delay: 60.566 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 349.69 Mbit/s
95th percentile per-packet one-way delay: 60.569 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 53.882 ms
Loss rate: 84.63%
-- Flow 3:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 53.894 ms
Loss rate: 87.04%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-21 05:54:22

End at: 2017-08-21 05:54:52

Below is generated by plot.py at 2017-08-21 09:35:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 326.33 Mbit/s

95th percentile per-packet one-way delay: 58.308 ms

Loss rate: 6.38%

-- Flow 1:

Average throughput: 181.70 Mbit/s

95th percentile per-packet one-way delay: 53.902 ms

Loss rate: 9.29%

-- Flow 2:

Average throughput: 219.02 Mbit/s

95th percentile per-packet one-way delay: 70.250 ms

Loss rate: 1.25%

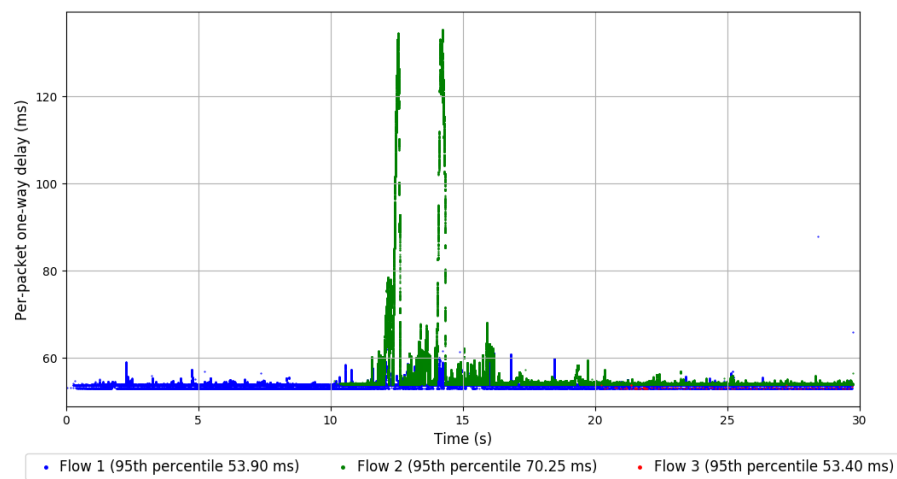
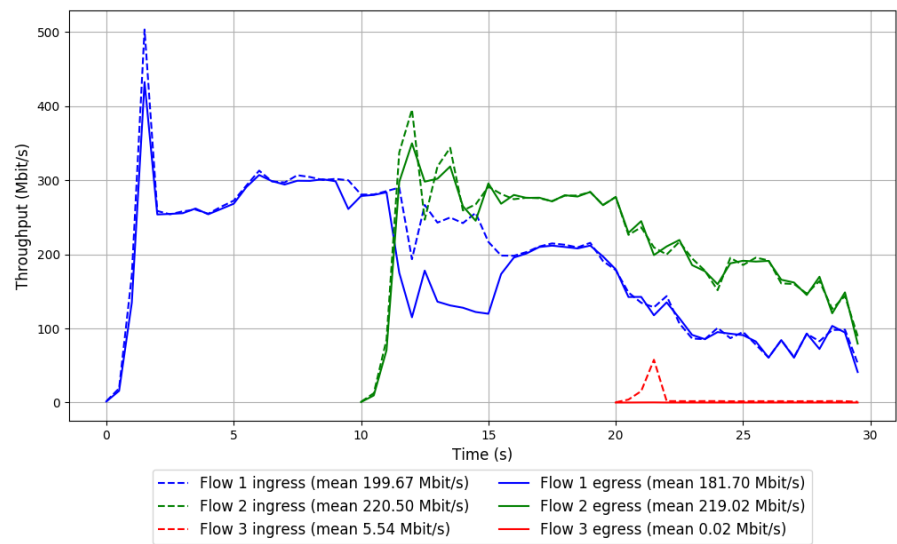
-- Flow 3:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 53.400 ms

Loss rate: 99.62%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-08-21 06:05:02

End at: 2017-08-21 06:05:32

Below is generated by plot.py at 2017-08-21 09:35:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.85 Mbit/s

95th percentile per-packet one-way delay: 53.824 ms

Loss rate: 4.20%

-- Flow 1:

Average throughput: 81.10 Mbit/s

95th percentile per-packet one-way delay: 53.820 ms

Loss rate: 4.22%

-- Flow 2:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 53.831 ms

Loss rate: 4.19%

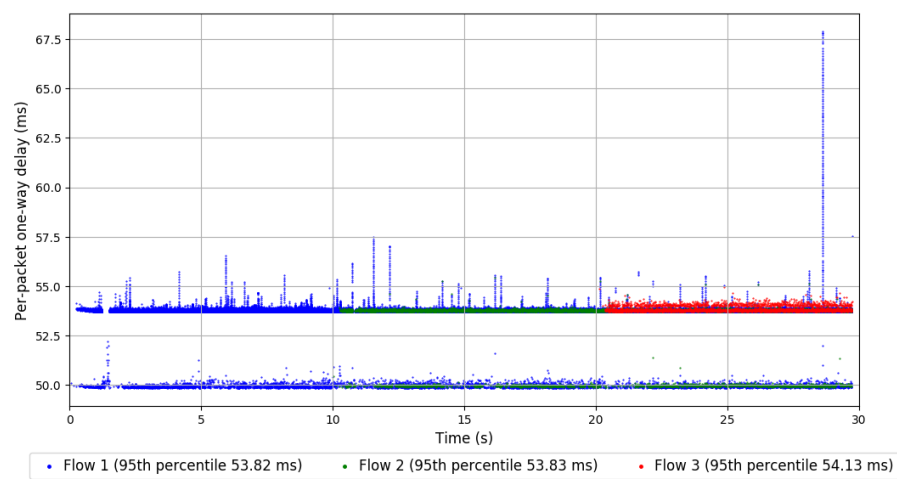
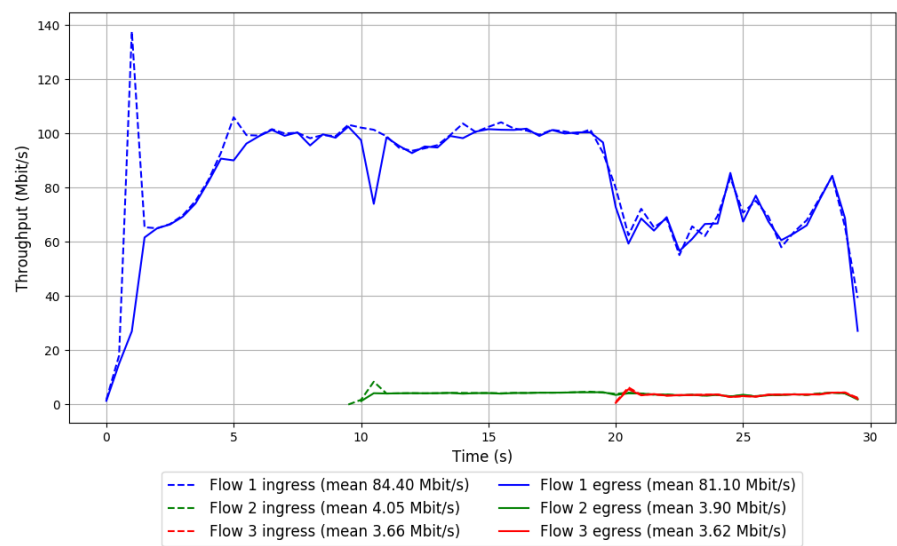
-- Flow 3:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 54.127 ms

Loss rate: 2.28%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-21 06:15:29

End at: 2017-08-21 06:15:59

Below is generated by plot.py at 2017-08-21 09:35:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 170.05 Mbit/s

95th percentile per-packet one-way delay: 57.075 ms

Loss rate: 23.41%

-- Flow 1:

Average throughput: 24.42 Mbit/s

95th percentile per-packet one-way delay: 53.848 ms

Loss rate: 67.60%

-- Flow 2:

Average throughput: 219.27 Mbit/s

95th percentile per-packet one-way delay: 57.400 ms

Loss rate: 0.28%

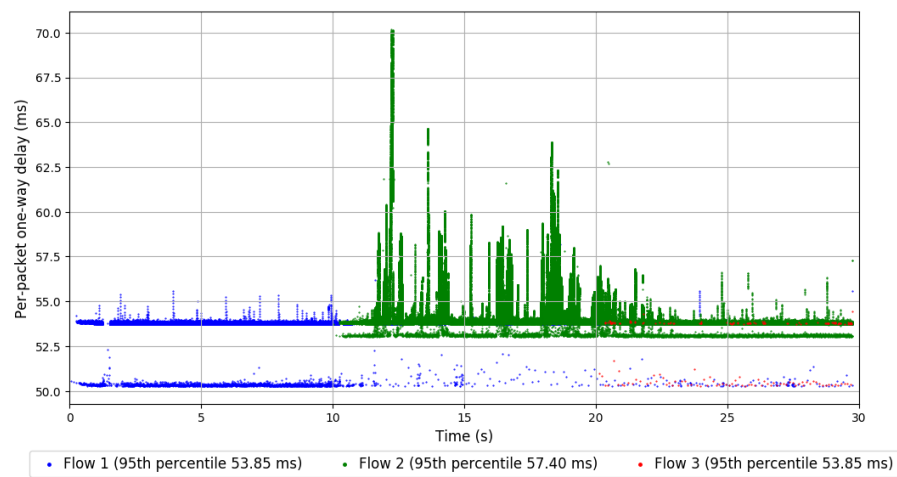
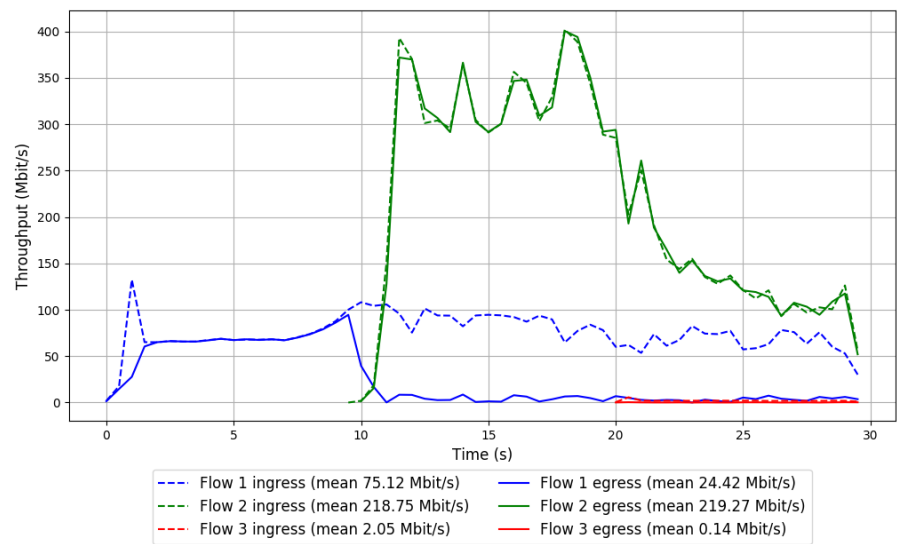
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 53.855 ms

Loss rate: 93.10%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-21 06:26:24

End at: 2017-08-21 06:26:54

Below is generated by plot.py at 2017-08-21 09:36:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.76 Mbit/s

95th percentile per-packet one-way delay: 53.870 ms

Loss rate: 31.56%

-- Flow 1:

Average throughput: 25.44 Mbit/s

95th percentile per-packet one-way delay: 53.841 ms

Loss rate: 71.82%

-- Flow 2:

Average throughput: 148.94 Mbit/s

95th percentile per-packet one-way delay: 53.870 ms

Loss rate: 3.21%

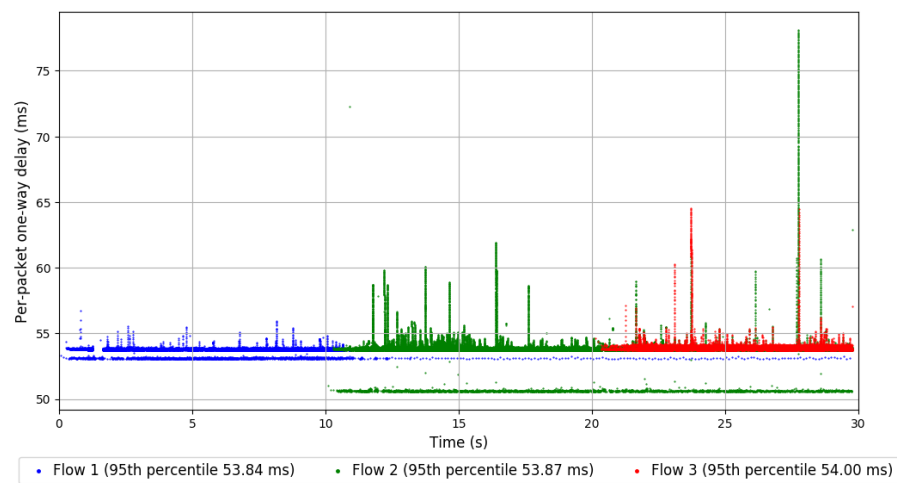
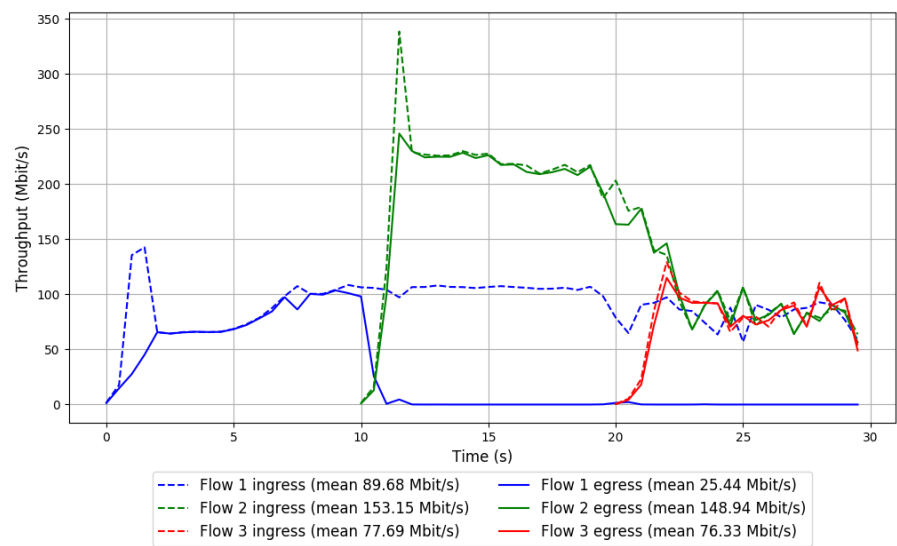
-- Flow 3:

Average throughput: 76.33 Mbit/s

95th percentile per-packet one-way delay: 54.002 ms

Loss rate: 2.78%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-21 06:36:53

End at: 2017-08-21 06:37:23

Below is generated by plot.py at 2017-08-21 09:36:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 325.46 Mbit/s

95th percentile per-packet one-way delay: 56.430 ms

Loss rate: 1.78%

-- Flow 1:

Average throughput: 300.43 Mbit/s

95th percentile per-packet one-way delay: 56.951 ms

Loss rate: 1.24%

-- Flow 2:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 54.752 ms

Loss rate: 95.80%

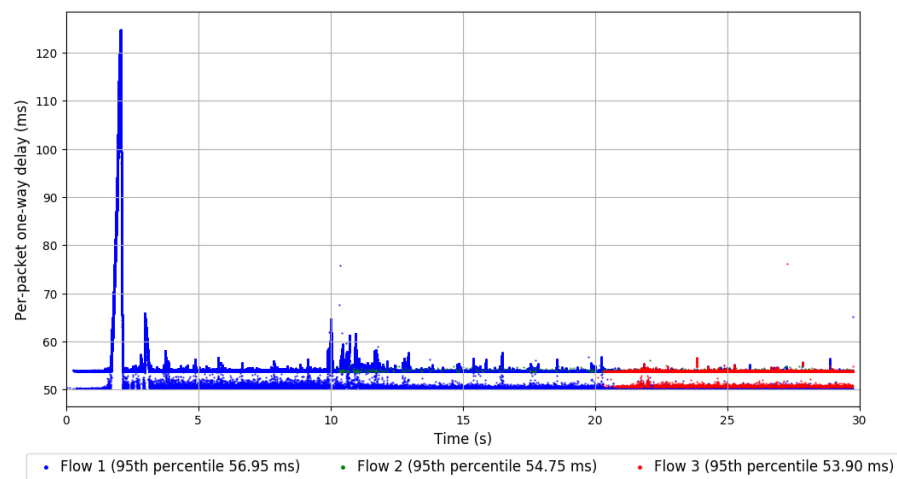
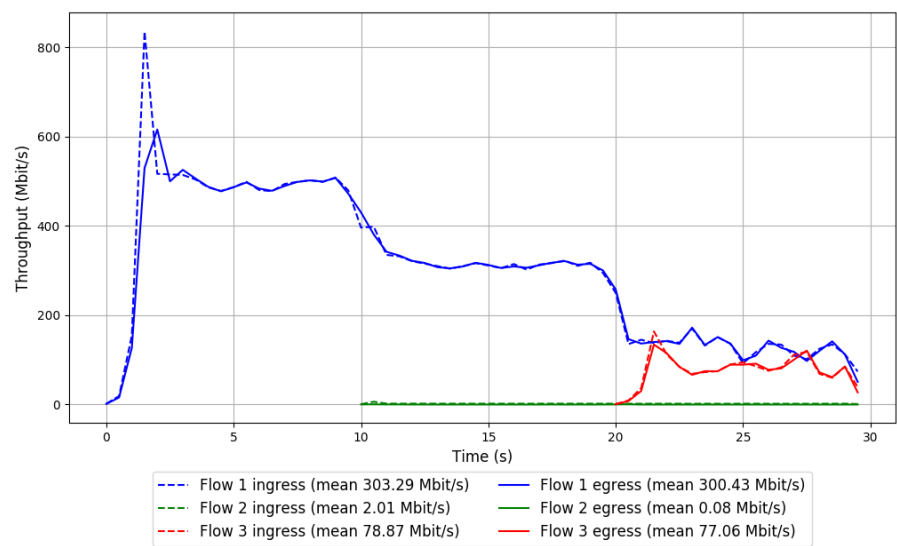
-- Flow 3:

Average throughput: 77.06 Mbit/s

95th percentile per-packet one-way delay: 53.904 ms

Loss rate: 3.31%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-21 06:47:39

End at: 2017-08-21 06:48:09

Below is generated by plot.py at 2017-08-21 09:37:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 310.73 Mbit/s

95th percentile per-packet one-way delay: 57.053 ms

Loss rate: 3.90%

-- Flow 1:

Average throughput: 310.27 Mbit/s

95th percentile per-packet one-way delay: 57.056 ms

Loss rate: 3.48%

-- Flow 2:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 54.145 ms

Loss rate: 79.43%

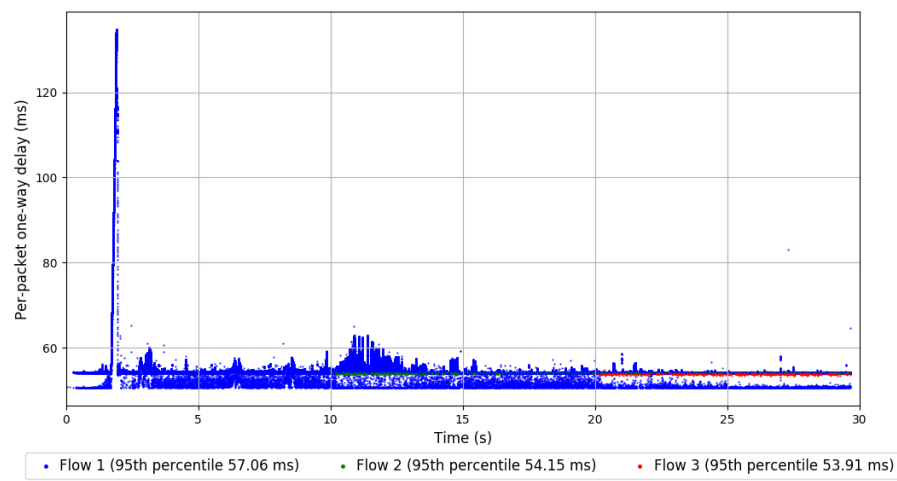
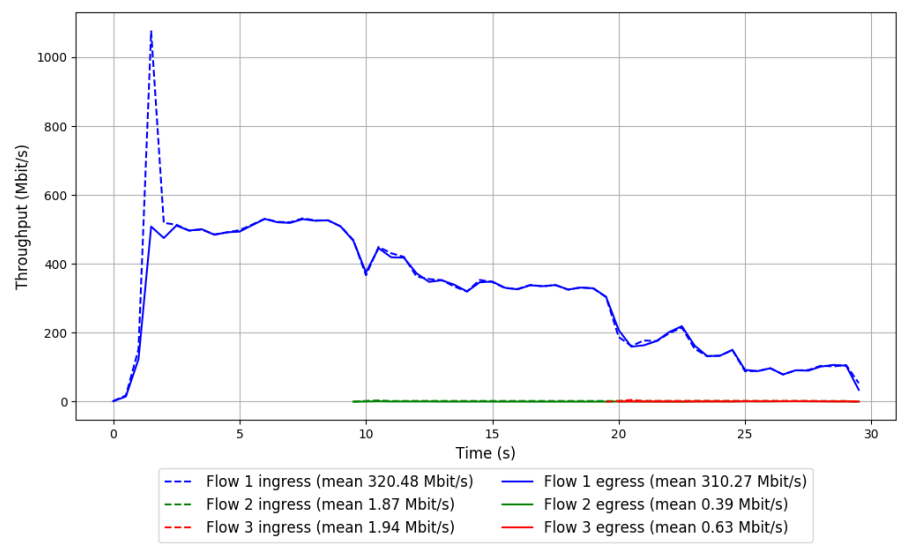
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 53.914 ms

Loss rate: 67.77%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-21 06:58:17

End at: 2017-08-21 06:58:47

Below is generated by plot.py at 2017-08-21 09:37:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.48 Mbit/s

95th percentile per-packet one-way delay: 53.863 ms

Loss rate: 8.03%

-- Flow 1:

Average throughput: 72.89 Mbit/s

95th percentile per-packet one-way delay: 53.862 ms

Loss rate: 8.16%

-- Flow 2:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 53.870 ms

Loss rate: 8.43%

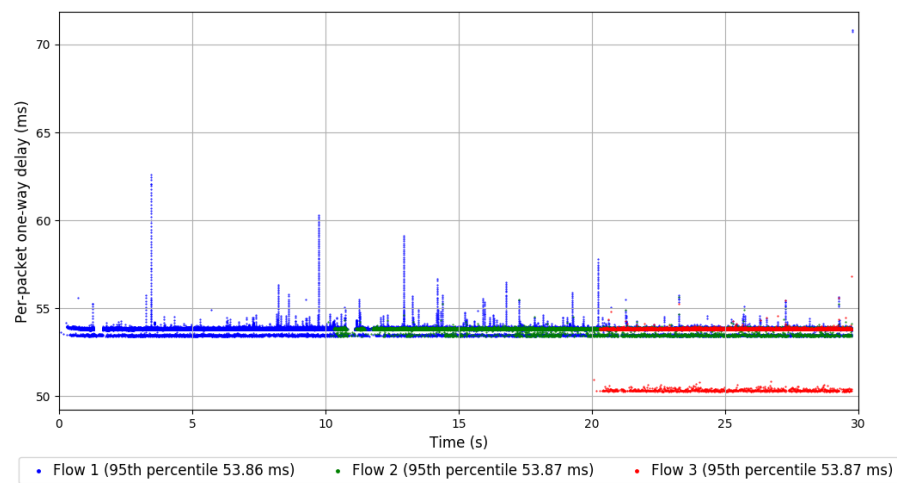
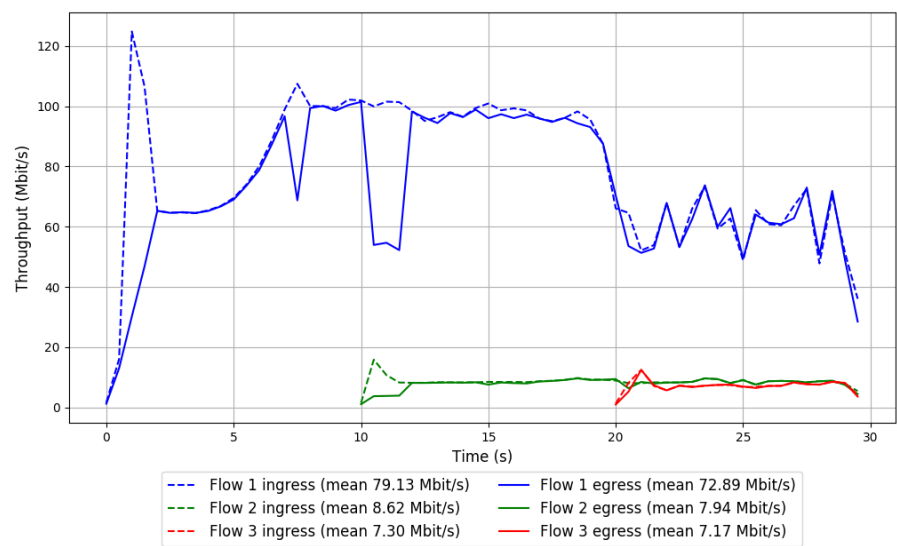
-- Flow 3:

Average throughput: 7.17 Mbit/s

95th percentile per-packet one-way delay: 53.868 ms

Loss rate: 2.77%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-21 07:09:01

End at: 2017-08-21 07:09:31

Below is generated by plot.py at 2017-08-21 09:37:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 202.47 Mbit/s

95th percentile per-packet one-way delay: 55.778 ms

Loss rate: 23.59%

-- Flow 1:

Average throughput: 26.93 Mbit/s

95th percentile per-packet one-way delay: 53.855 ms

Loss rate: 66.36%

-- Flow 2:

Average throughput: 173.89 Mbit/s

95th percentile per-packet one-way delay: 53.916 ms

Loss rate: 6.75%

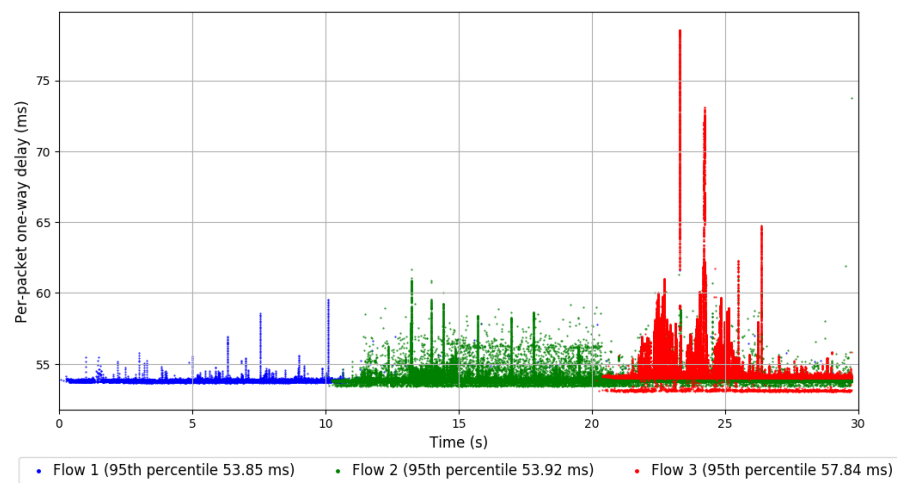
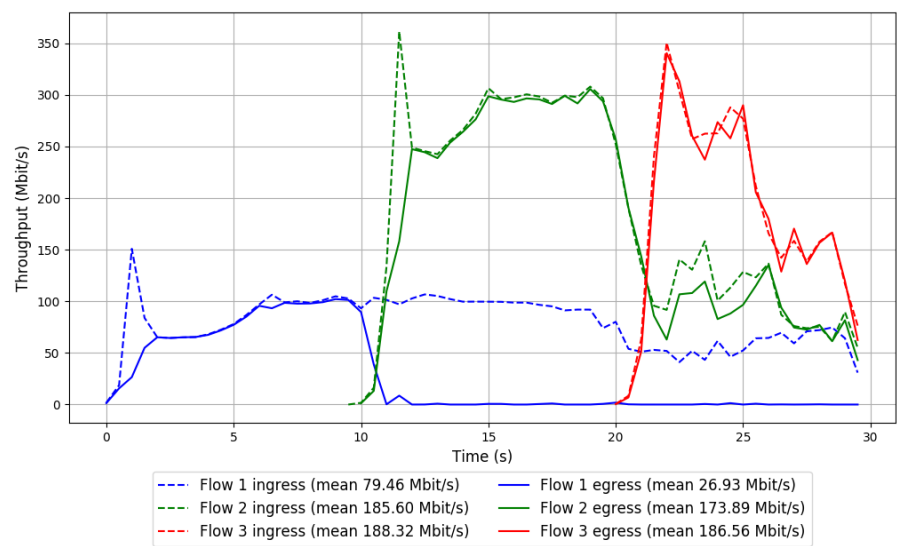
-- Flow 3:

Average throughput: 186.56 Mbit/s

95th percentile per-packet one-way delay: 57.845 ms

Loss rate: 2.06%

Run 10: Report of PCC — Data Link

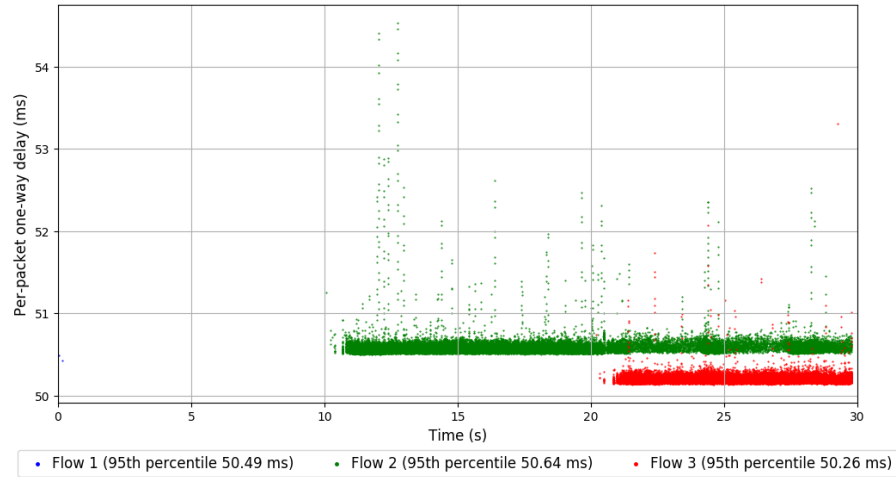
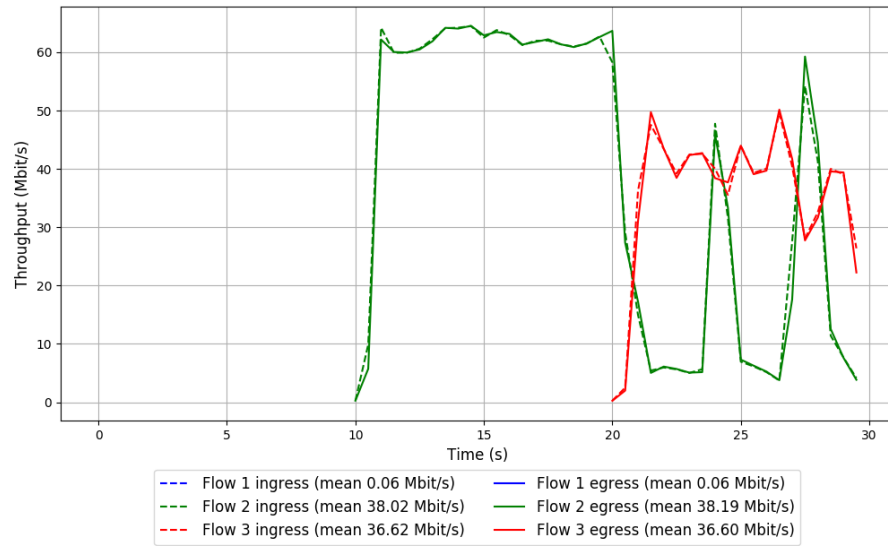


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-08-21 05:31:02
End at: 2017-08-21 05:31:32

# Below is generated by plot.py at 2017-08-21 09:37:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.13 Mbit/s
95th percentile per-packet one-way delay: 50.631 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 50.493 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.19 Mbit/s
95th percentile per-packet one-way delay: 50.643 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 36.60 Mbit/s
95th percentile per-packet one-way delay: 50.264 ms
Loss rate: 1.12%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-08-21 05:42:07

End at: 2017-08-21 05:42:37

Below is generated by plot.py at 2017-08-21 09:37:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.96 Mbit/s

95th percentile per-packet one-way delay: 54.080 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 50.443 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.23 Mbit/s

95th percentile per-packet one-way delay: 54.092 ms

Loss rate: 0.51%

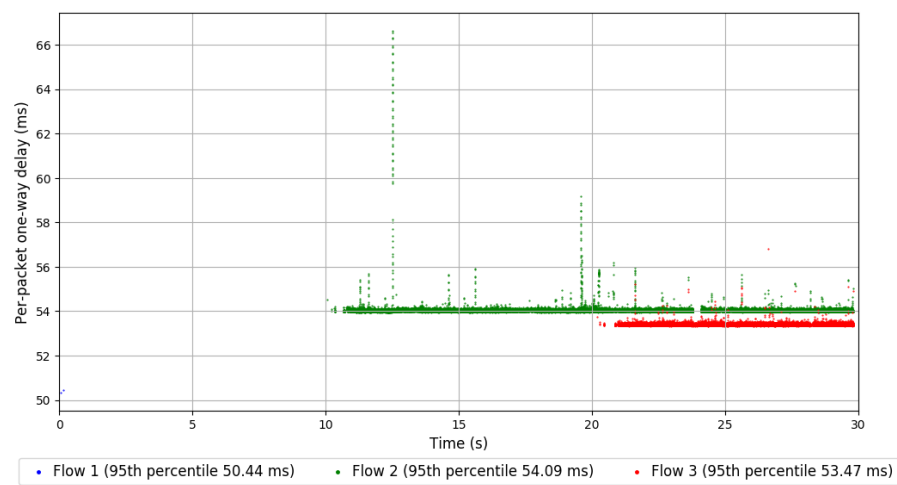
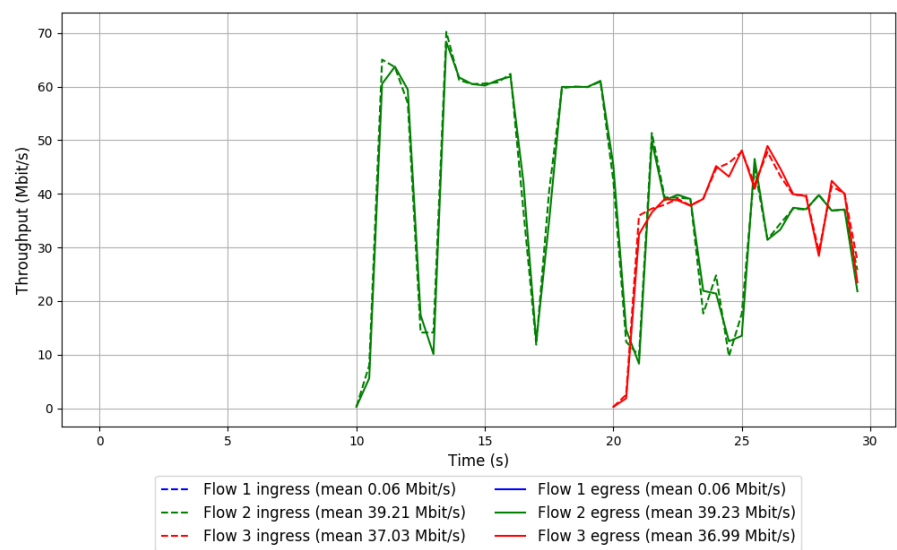
-- Flow 3:

Average throughput: 36.99 Mbit/s

95th percentile per-packet one-way delay: 53.467 ms

Loss rate: 1.14%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-21 05:52:50

End at: 2017-08-21 05:53:20

Below is generated by plot.py at 2017-08-21 09:37:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.97 Mbit/s

95th percentile per-packet one-way delay: 50.286 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 53.652 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.87 Mbit/s

95th percentile per-packet one-way delay: 49.994 ms

Loss rate: 0.12%

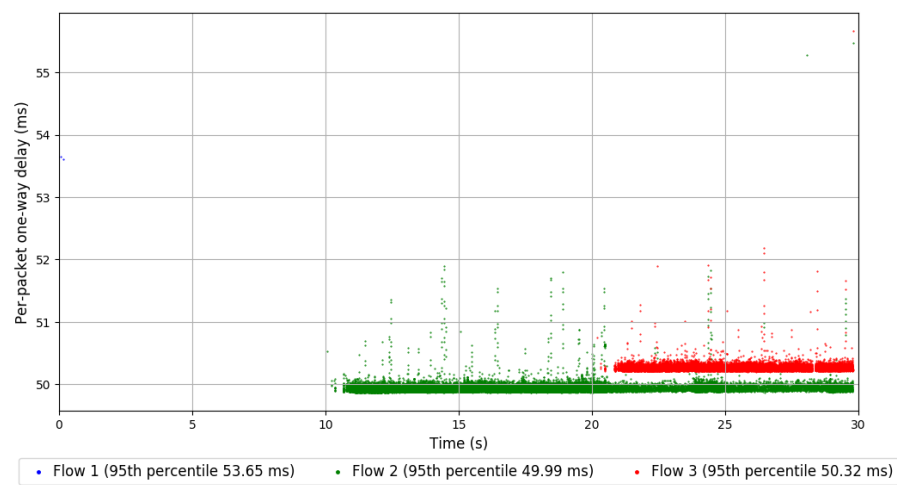
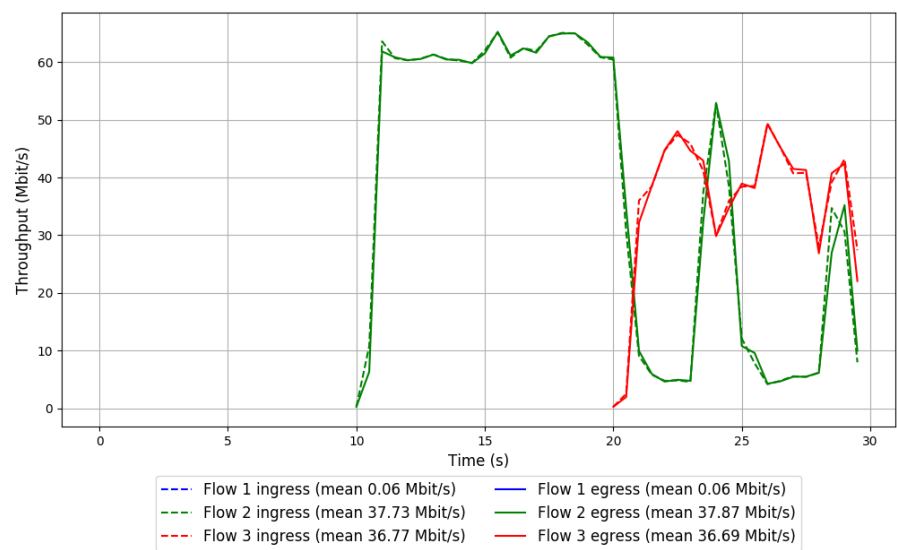
-- Flow 3:

Average throughput: 36.69 Mbit/s

95th percentile per-packet one-way delay: 50.320 ms

Loss rate: 1.23%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-21 06:03:35

End at: 2017-08-21 06:04:05

Below is generated by plot.py at 2017-08-21 09:37:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.09 Mbit/s

95th percentile per-packet one-way delay: 53.791 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 53.290 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.53 Mbit/s

95th percentile per-packet one-way delay: 53.156 ms

Loss rate: 0.10%

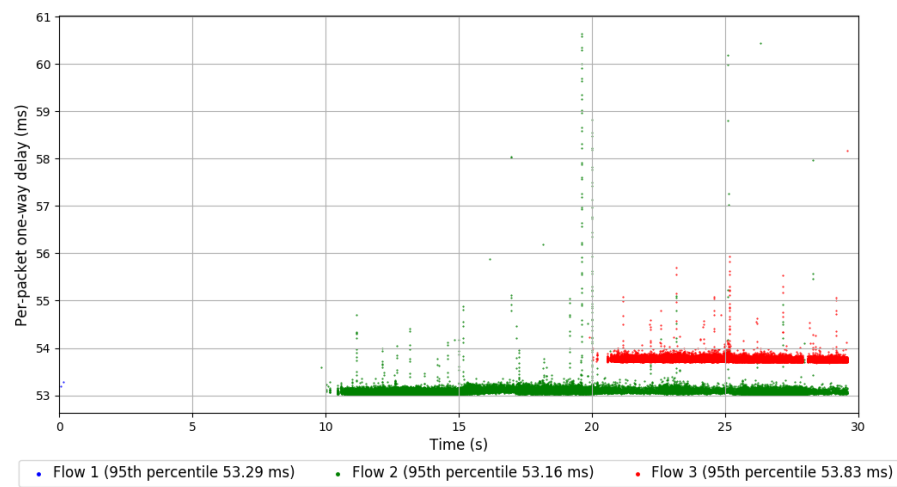
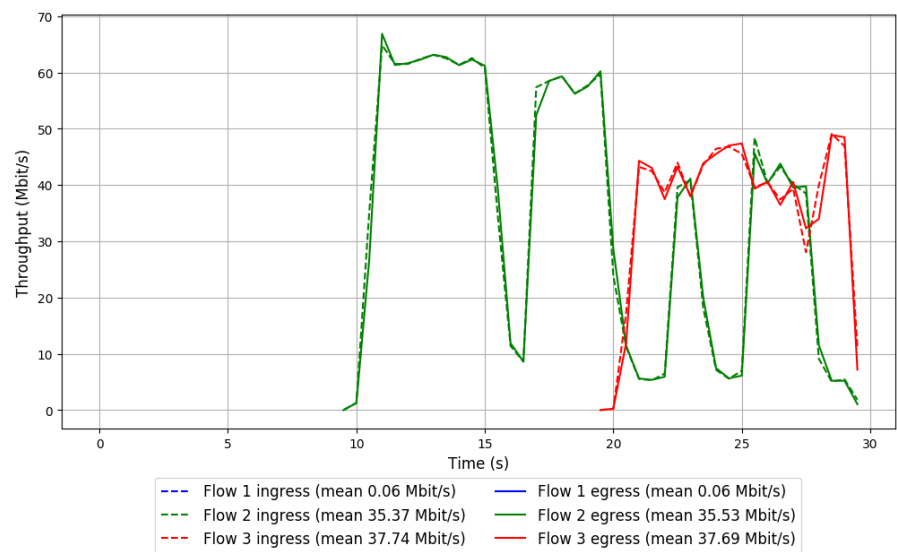
-- Flow 3:

Average throughput: 37.69 Mbit/s

95th percentile per-packet one-way delay: 53.826 ms

Loss rate: 1.17%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-08-21 06:14:04

End at: 2017-08-21 06:14:34

Below is generated by plot.py at 2017-08-21 09:37:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 35.95 Mbit/s

95th percentile per-packet one-way delay: 53.157 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 50.485 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.36 Mbit/s

95th percentile per-packet one-way delay: 53.153 ms

Loss rate: 0.69%

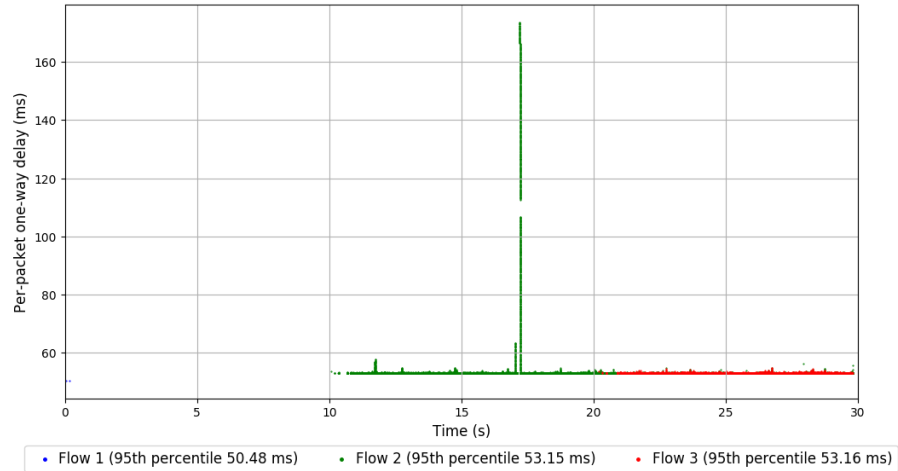
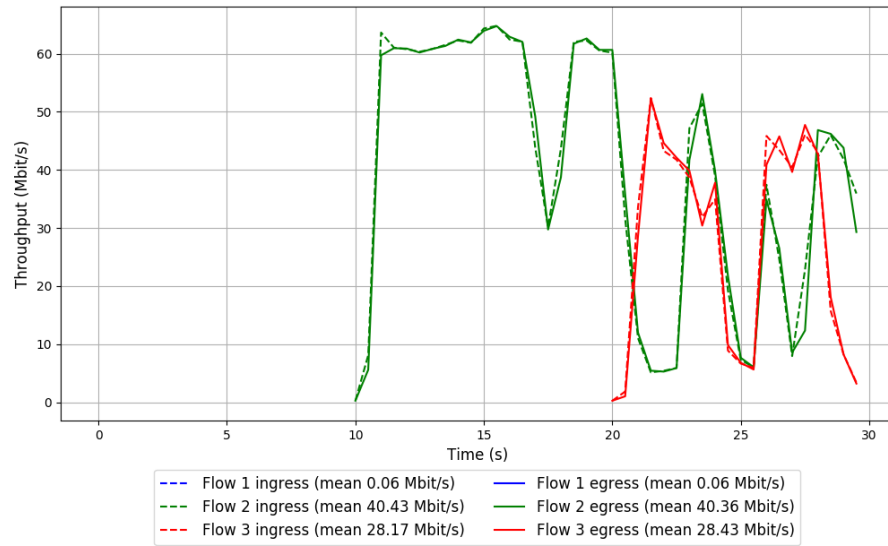
-- Flow 3:

Average throughput: 28.43 Mbit/s

95th percentile per-packet one-way delay: 53.162 ms

Loss rate: 0.17%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-21 06:24:52

End at: 2017-08-21 06:25:22

Below is generated by plot.py at 2017-08-21 09:37:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 35.72 Mbit/s

95th percentile per-packet one-way delay: 54.110 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 53.244 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 34.45 Mbit/s

95th percentile per-packet one-way delay: 53.974 ms

Loss rate: 0.11%

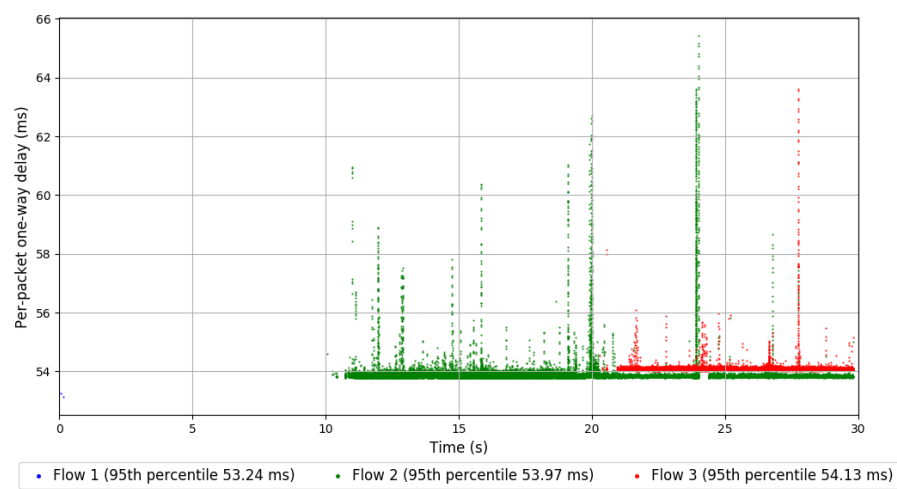
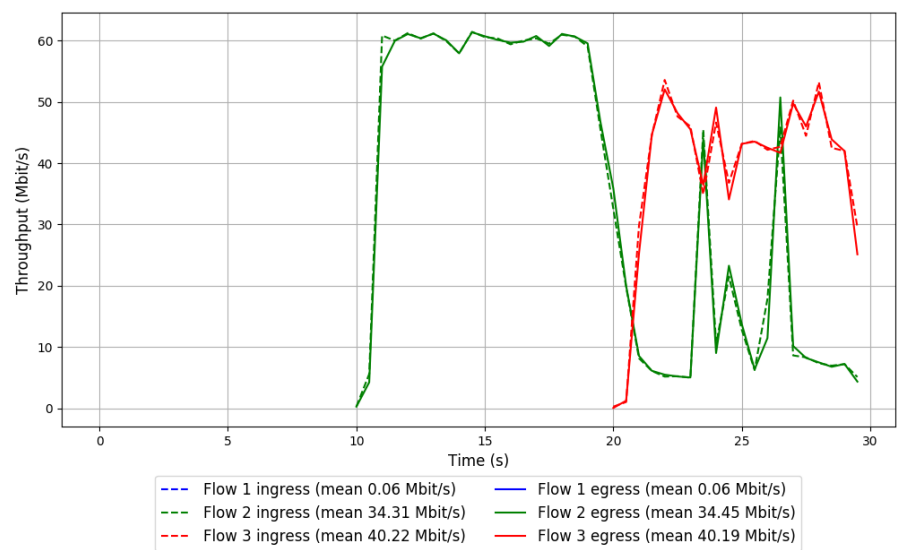
-- Flow 3:

Average throughput: 40.19 Mbit/s

95th percentile per-packet one-way delay: 54.127 ms

Loss rate: 1.16%

Run 6: Report of QUIC Cubic — Data Link

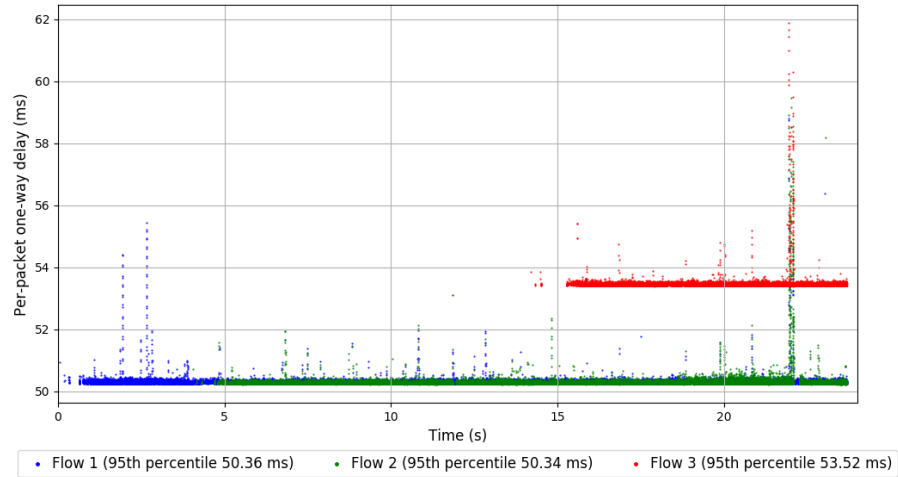
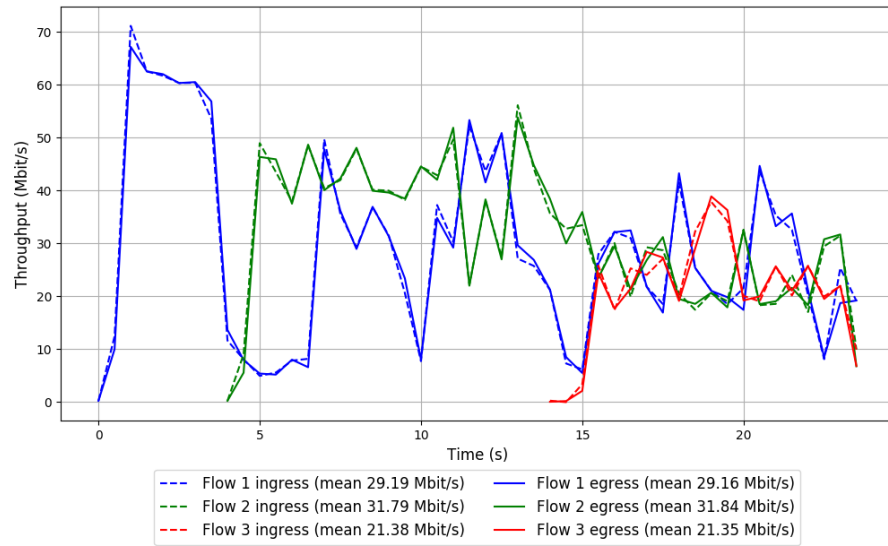


Run 7: Statistics of QUIC Cubic

Start at: 2017-08-21 06:35:24

End at: 2017-08-21 06:35:54

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-08-21 06:46:13

End at: 2017-08-21 06:46:43

Below is generated by plot.py at 2017-08-21 09:38:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.50 Mbit/s

95th percentile per-packet one-way delay: 53.901 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 50.917 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.54 Mbit/s

95th percentile per-packet one-way delay: 53.917 ms

Loss rate: 0.18%

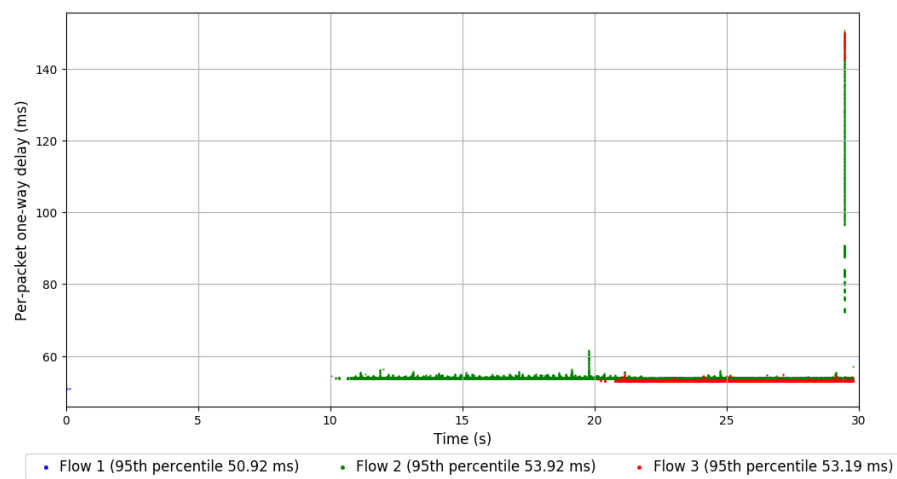
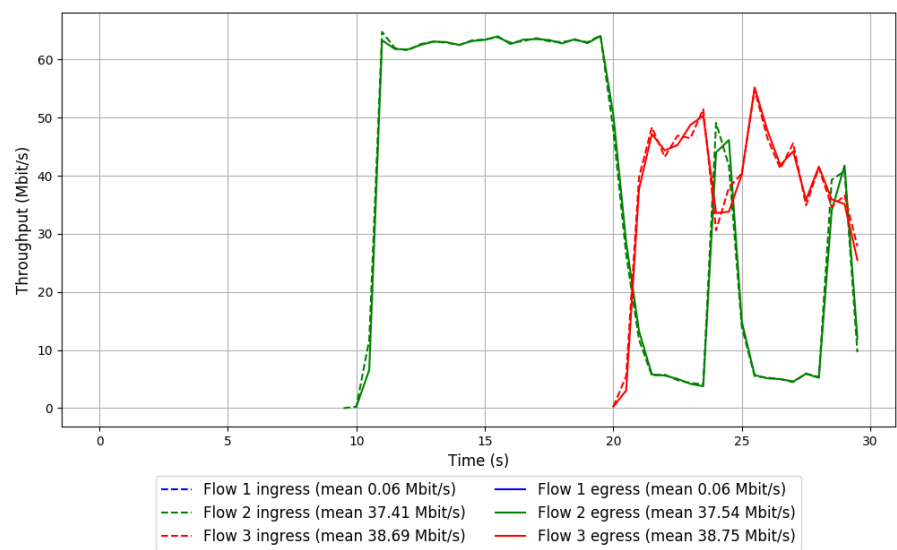
-- Flow 3:

Average throughput: 38.75 Mbit/s

95th percentile per-packet one-way delay: 53.194 ms

Loss rate: 0.91%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-21 06:56:49

End at: 2017-08-21 06:57:19

Below is generated by plot.py at 2017-08-21 09:38:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.88 Mbit/s

95th percentile per-packet one-way delay: 53.171 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 53.946 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.88 Mbit/s

95th percentile per-packet one-way delay: 53.140 ms

Loss rate: 0.82%

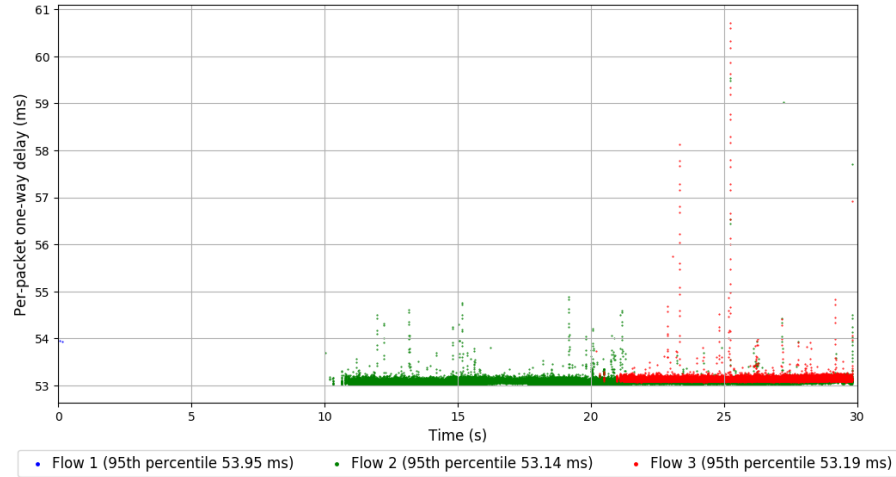
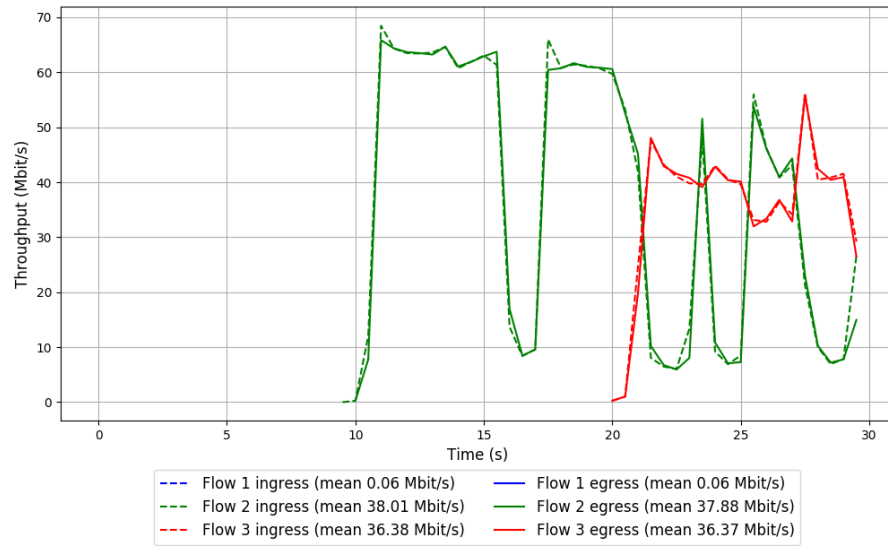
-- Flow 3:

Average throughput: 36.37 Mbit/s

95th percentile per-packet one-way delay: 53.194 ms

Loss rate: 1.05%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-08-21 07:07:35

End at: 2017-08-21 07:08:05

Below is generated by plot.py at 2017-08-21 09:38:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.13 Mbit/s

95th percentile per-packet one-way delay: 53.779 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 50.472 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.39 Mbit/s

95th percentile per-packet one-way delay: 53.791 ms

Loss rate: 0.08%

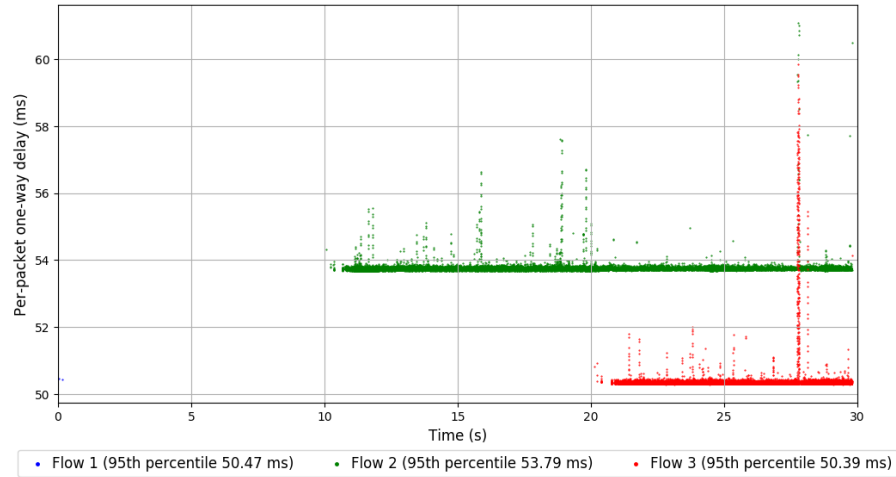
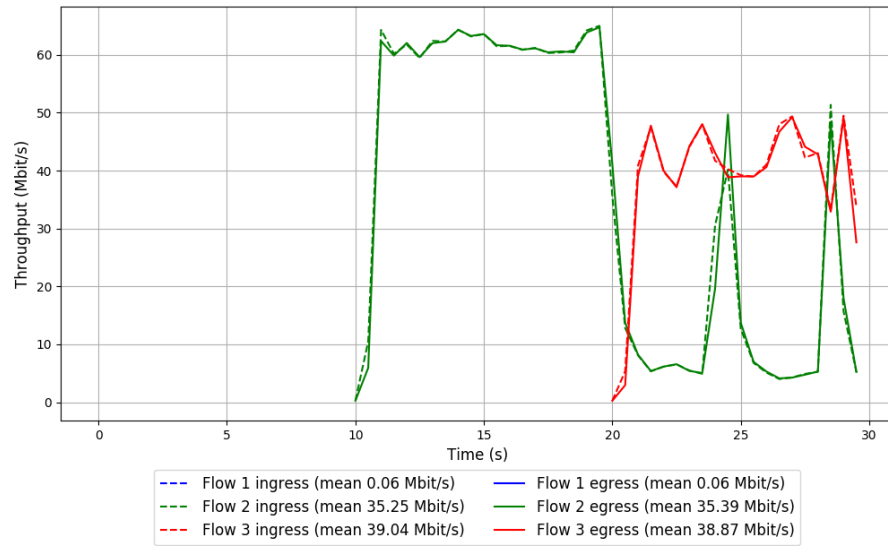
-- Flow 3:

Average throughput: 38.87 Mbit/s

95th percentile per-packet one-way delay: 50.394 ms

Loss rate: 1.43%

Run 10: Report of QUIC Cubic — Data Link

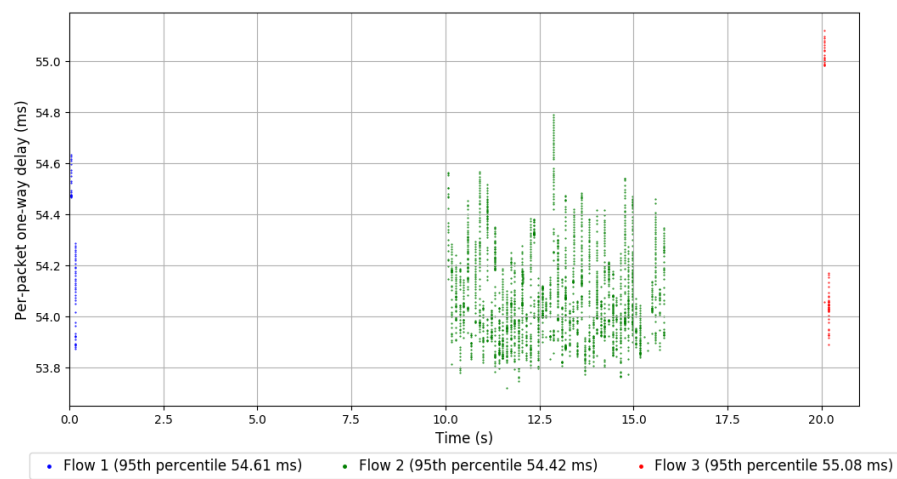
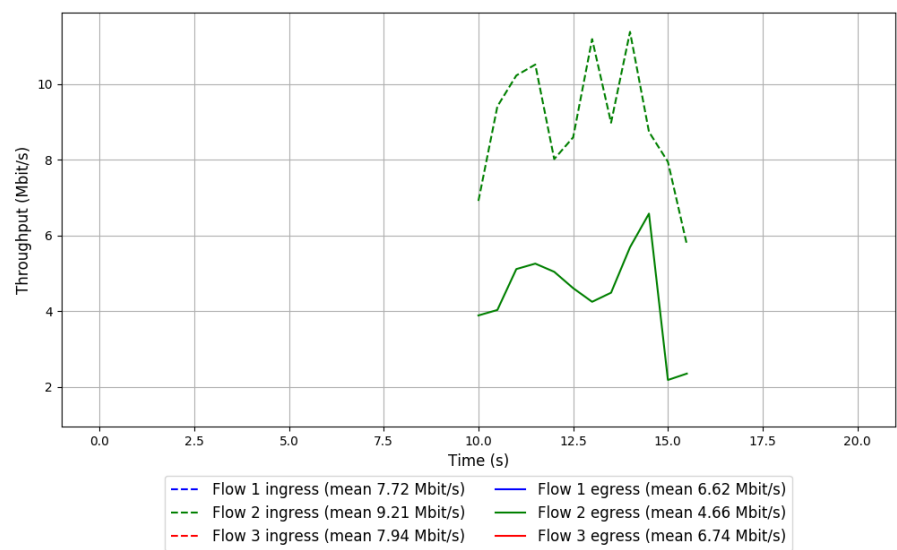


Run 1: Statistics of Saturator

Start at: 2017-08-21 05:26:14

End at: 2017-08-21 05:26:44

Run 1: Report of Saturator — Data Link



Run 2: Statistics of Saturator

Start at: 2017-08-21 05:37:08

End at: 2017-08-21 05:37:38

Below is generated by plot.py at 2017-08-21 09:38:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 22.71 Mbit/s

95th percentile per-packet one-way delay: 54.859 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 22.68 Mbit/s

95th percentile per-packet one-way delay: 54.859 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 6.58 Mbit/s

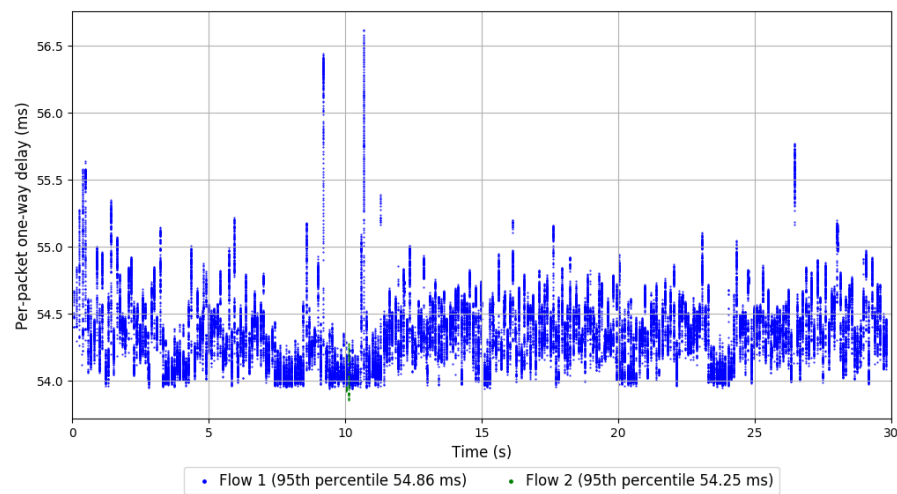
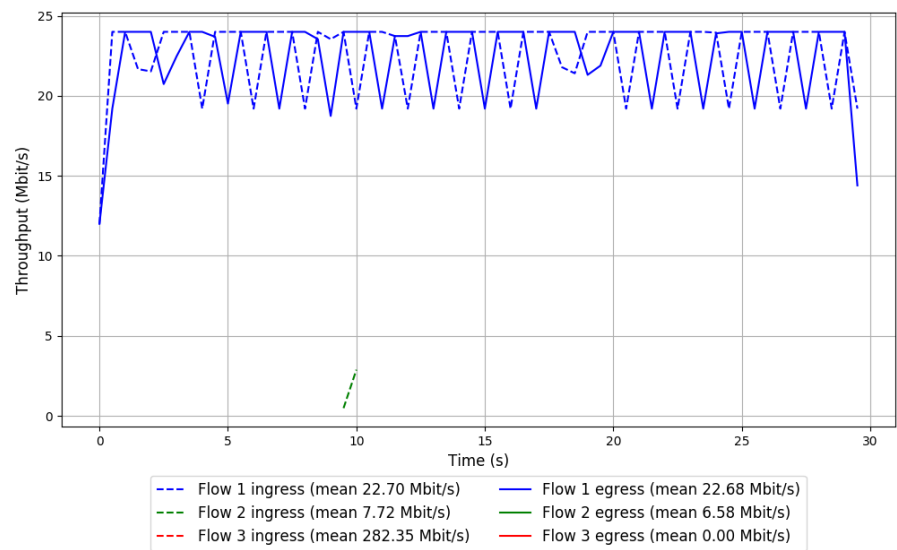
95th percentile per-packet one-way delay: 54.248 ms

Loss rate: 57.14%

-- Flow 3:

Average throughput: 0.00 Mbit/s

Run 2: Report of Saturator — Data Link

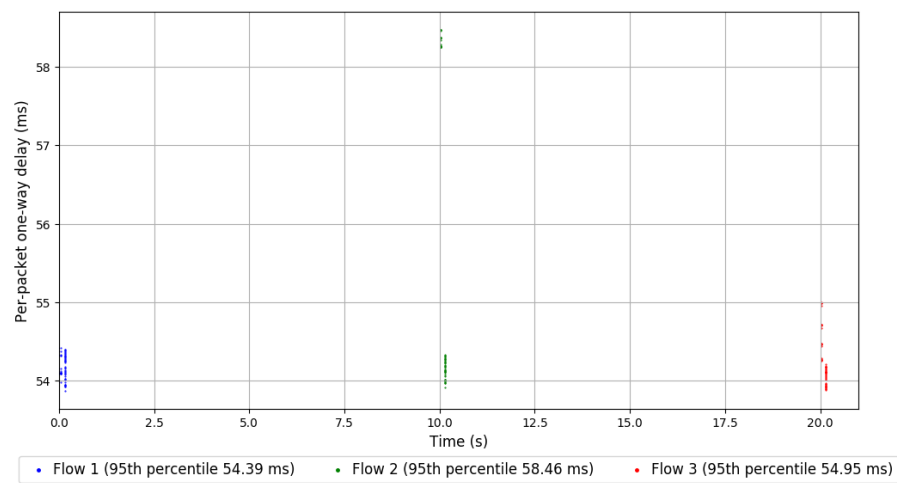
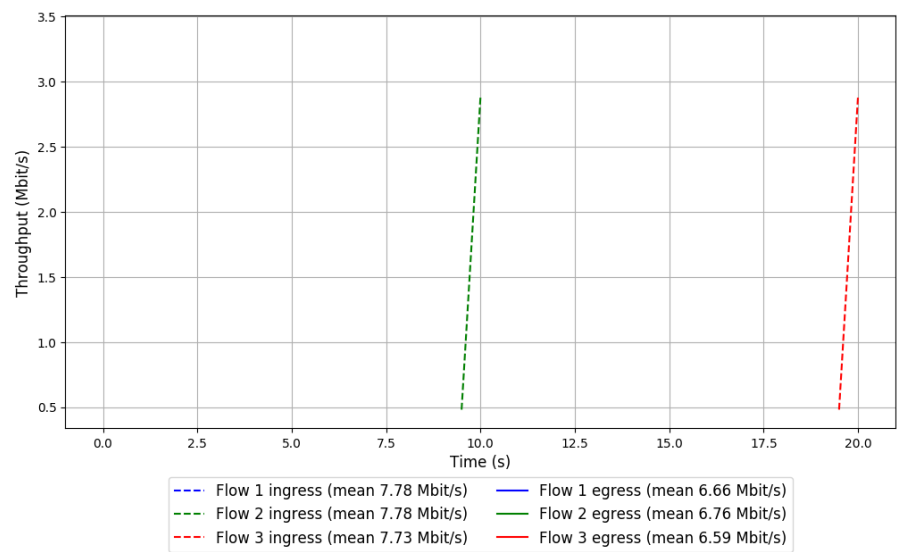


Run 3: Statistics of Saturator

Start at: 2017-08-21 05:47:57

End at: 2017-08-21 05:48:27

Run 3: Report of Saturator — Data Link



Run 4: Statistics of Saturator

Start at: 2017-08-21 05:58:42

End at: 2017-08-21 05:59:12

Below is generated by plot.py at 2017-08-21 09:38:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.78 Mbit/s

95th percentile per-packet one-way delay: 54.933 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 6.83 Mbit/s

95th percentile per-packet one-way delay: 54.593 ms

Loss rate: 57.14%

-- Flow 2:

Average throughput: 22.12 Mbit/s

95th percentile per-packet one-way delay: 54.936 ms

Loss rate: 0.61%

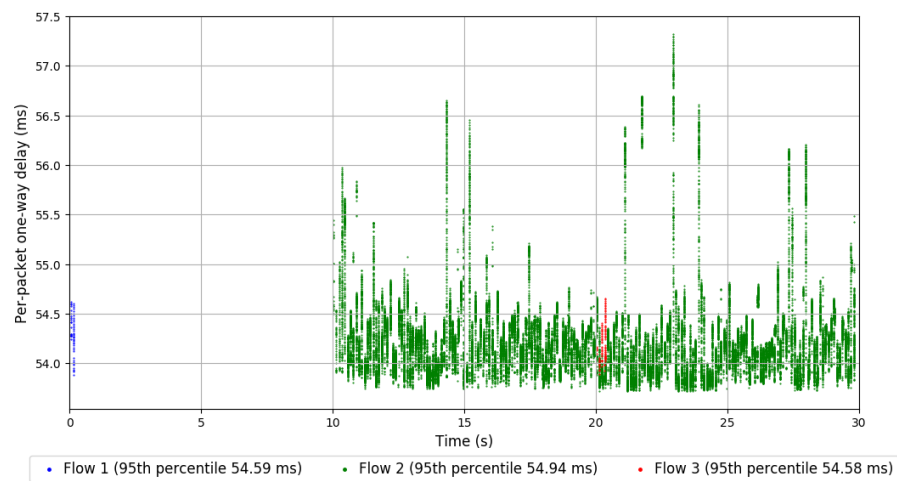
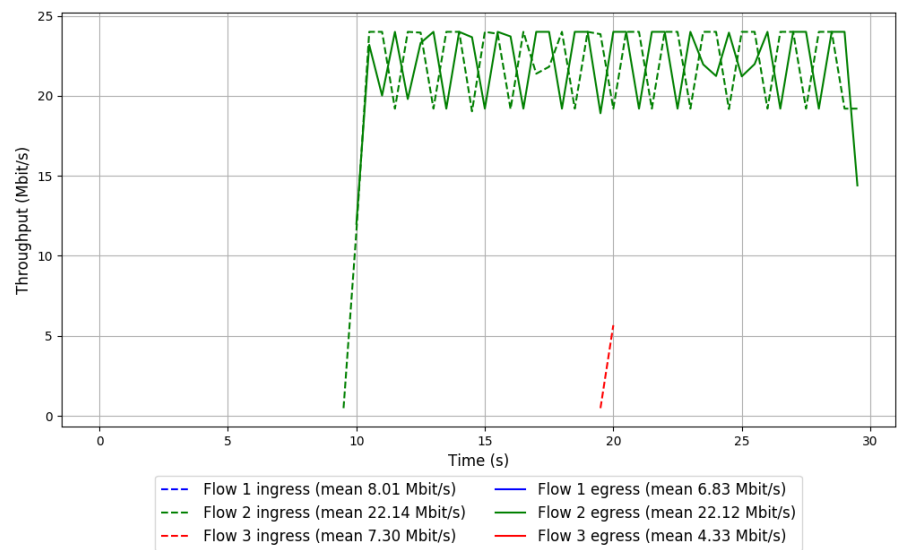
-- Flow 3:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 54.575 ms

Loss rate: 55.47%

Run 4: Report of Saturator — Data Link

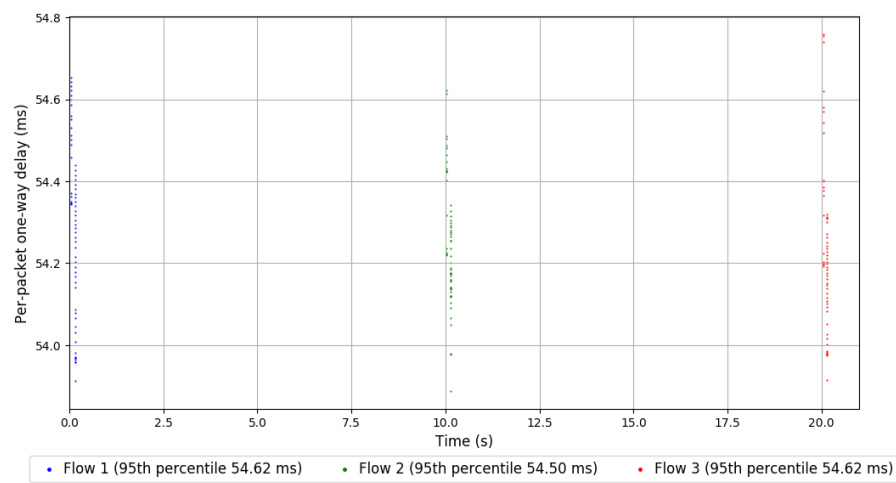
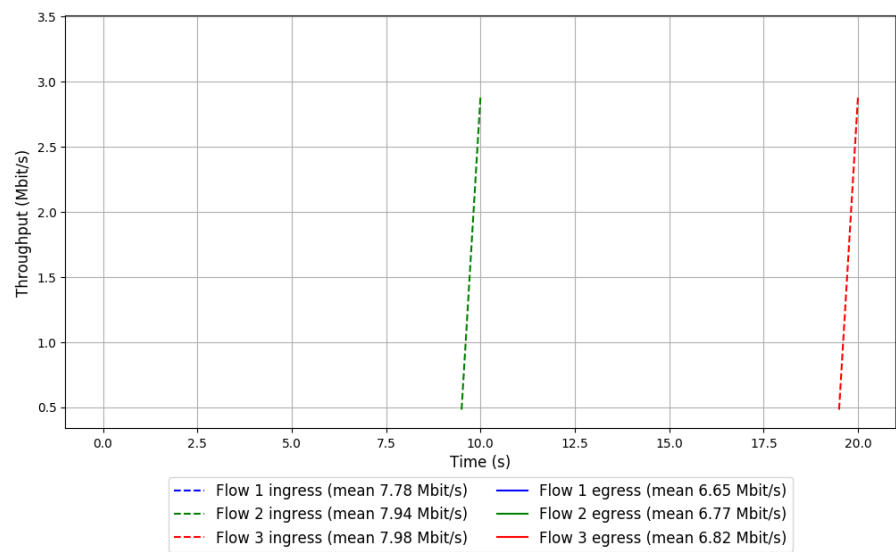


Run 5: Statistics of Saturator

Start at: 2017-08-21 06:09:19

End at: 2017-08-21 06:09:49

Run 5: Report of Saturator — Data Link



Run 6: Statistics of Saturator

Start at: 2017-08-21 06:19:43

End at: 2017-08-21 06:20:13

Below is generated by plot.py at 2017-08-21 09:38:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.07 Mbit/s

95th percentile per-packet one-way delay: 54.414 ms

Loss rate: 48.75%

-- Flow 1:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 54.442 ms

Loss rate: 49.46%

-- Flow 2:

Average throughput: 5.51 Mbit/s

95th percentile per-packet one-way delay: 54.392 ms

Loss rate: 48.21%

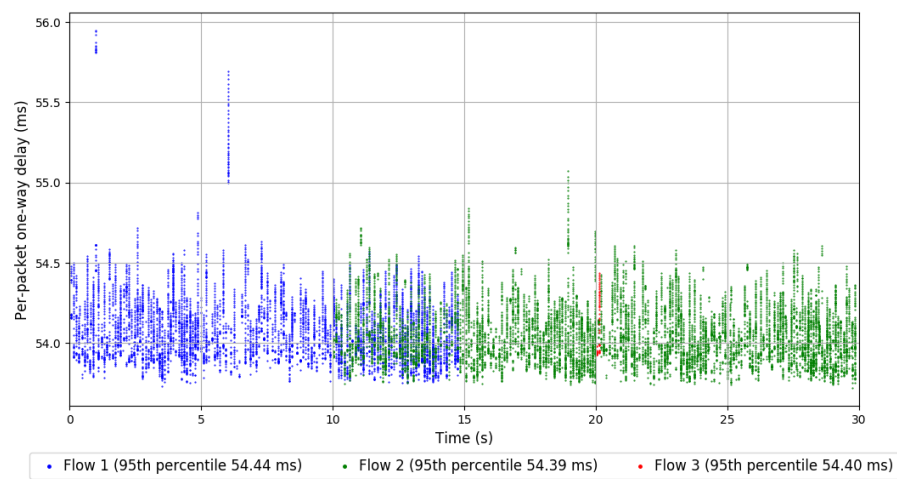
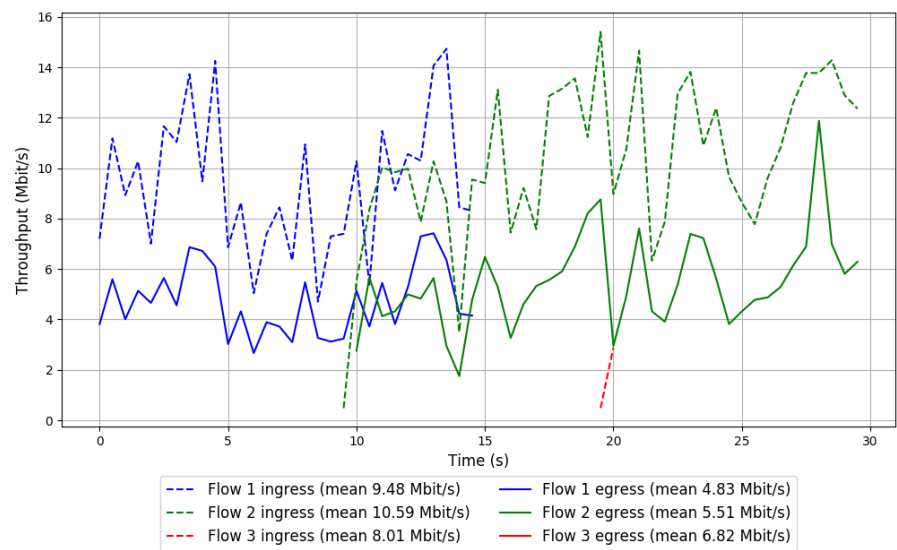
-- Flow 3:

Average throughput: 6.82 Mbit/s

95th percentile per-packet one-way delay: 54.403 ms

Loss rate: 57.14%

Run 6: Report of Saturator — Data Link



Run 7: Statistics of Saturator

Start at: 2017-08-21 06:30:37

End at: 2017-08-21 06:31:07

Below is generated by plot.py at 2017-08-21 09:38:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 30.00 Mbit/s

95th percentile per-packet one-way delay: 54.807 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 22.80 Mbit/s

95th percentile per-packet one-way delay: 54.793 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 6.82 Mbit/s

95th percentile per-packet one-way delay: 54.265 ms

Loss rate: 57.14%

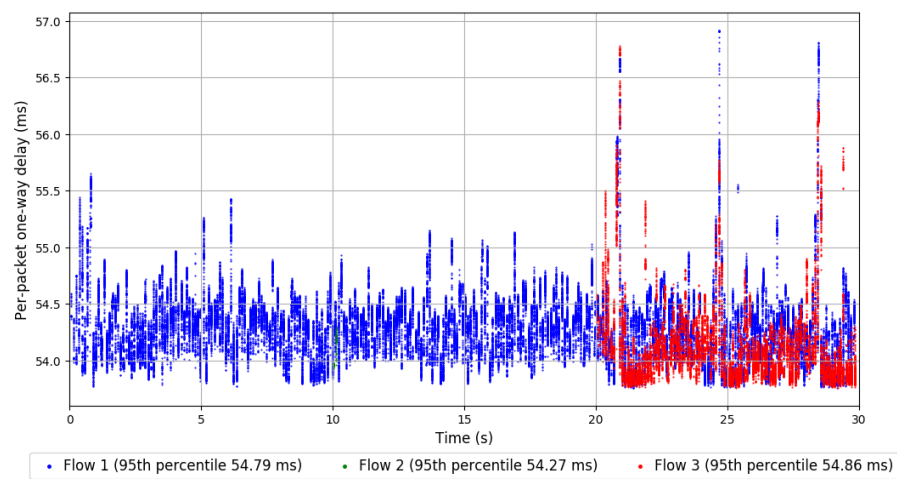
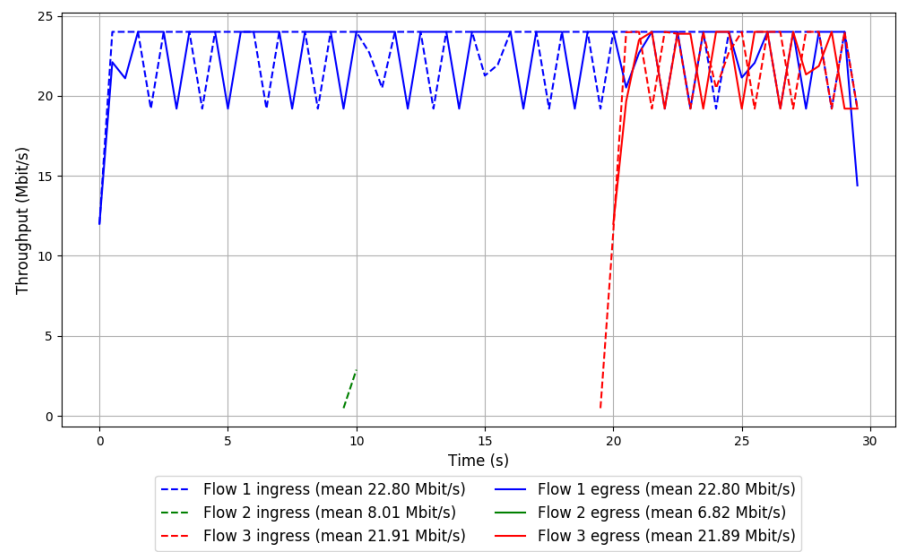
-- Flow 3:

Average throughput: 21.89 Mbit/s

95th percentile per-packet one-way delay: 54.860 ms

Loss rate: 1.14%

Run 7: Report of Saturator — Data Link



Run 8: Statistics of Saturator

Start at: 2017-08-21 06:41:18

End at: 2017-08-21 06:41:48

Below is generated by plot.py at 2017-08-21 09:38:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.40 Mbit/s

95th percentile per-packet one-way delay: 54.789 ms

Loss rate: 1.98%

-- Flow 1:

Average throughput: 6.84 Mbit/s

95th percentile per-packet one-way delay: 54.645 ms

Loss rate: 57.14%

-- Flow 2:

Average throughput: 6.80 Mbit/s

95th percentile per-packet one-way delay: 54.645 ms

Loss rate: 57.14%

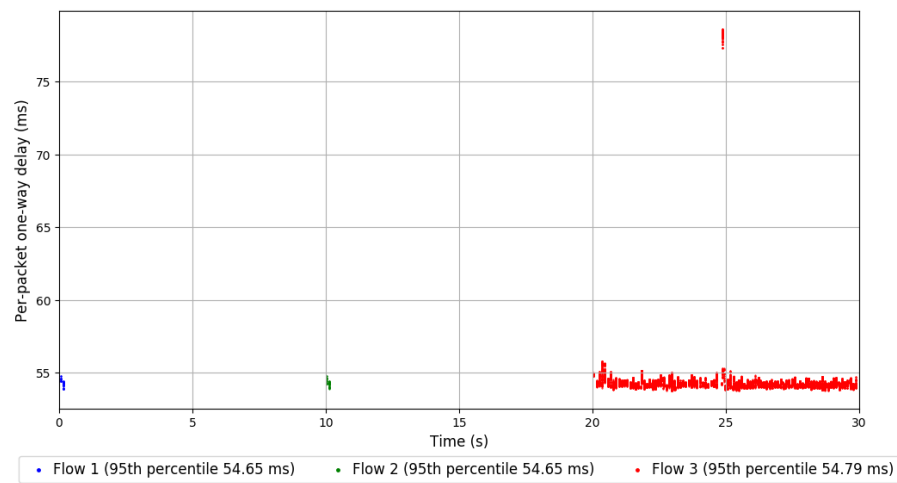
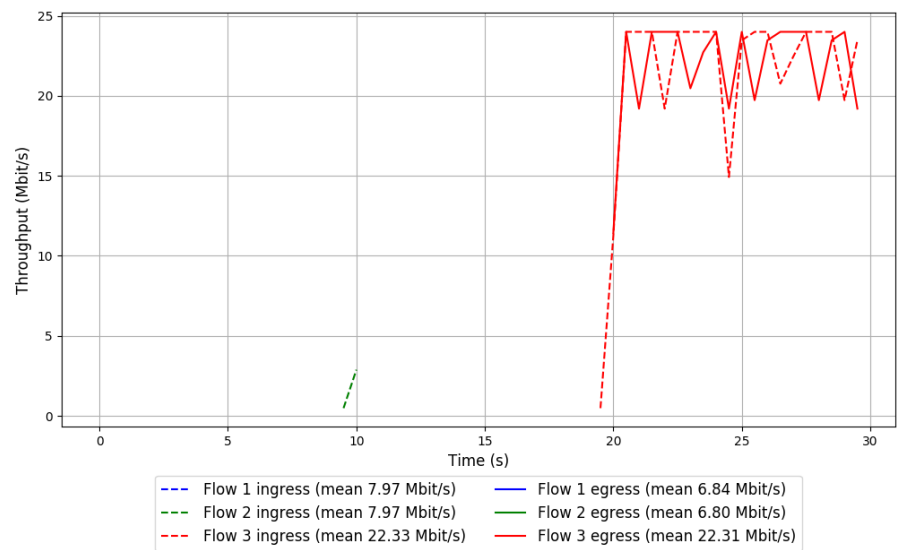
-- Flow 3:

Average throughput: 22.31 Mbit/s

95th percentile per-packet one-way delay: 54.790 ms

Loss rate: 1.15%

Run 8: Report of Saturator — Data Link



Run 9: Statistics of Saturator

Start at: 2017-08-21 06:51:57

End at: 2017-08-21 06:52:27

Below is generated by plot.py at 2017-08-21 09:38:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.08 Mbit/s

95th percentile per-packet one-way delay: 54.756 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 6.62 Mbit/s

95th percentile per-packet one-way delay: 54.484 ms

Loss rate: 57.14%

-- Flow 2:

Average throughput: 22.60 Mbit/s

95th percentile per-packet one-way delay: 54.757 ms

Loss rate: 0.79%

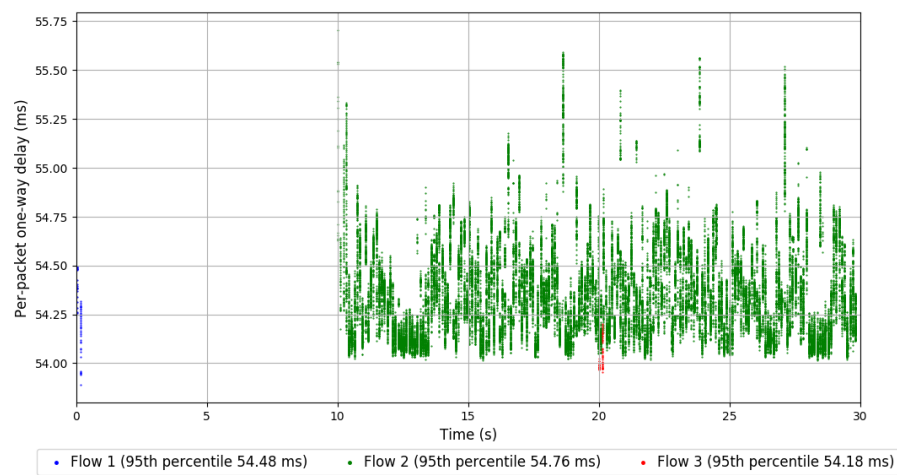
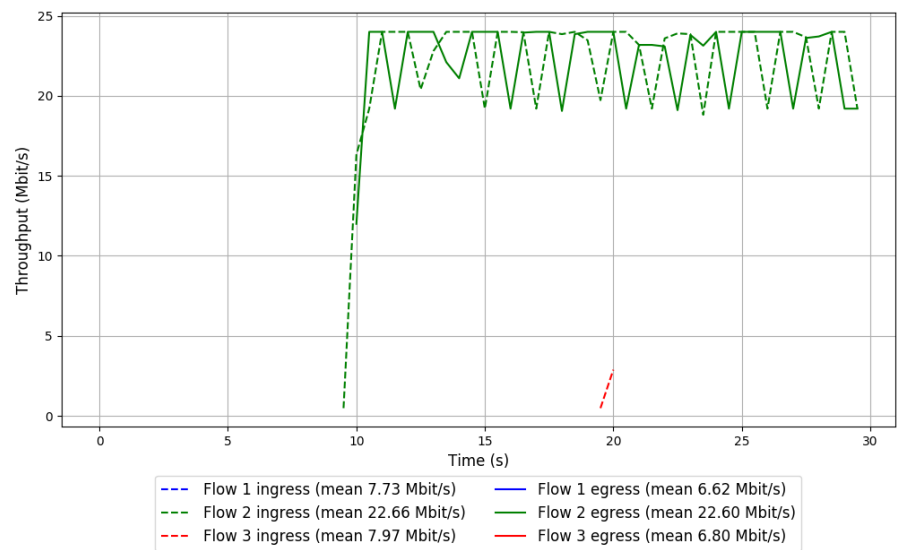
-- Flow 3:

Average throughput: 6.80 Mbit/s

95th percentile per-packet one-way delay: 54.176 ms

Loss rate: 57.14%

Run 9: Report of Saturator — Data Link

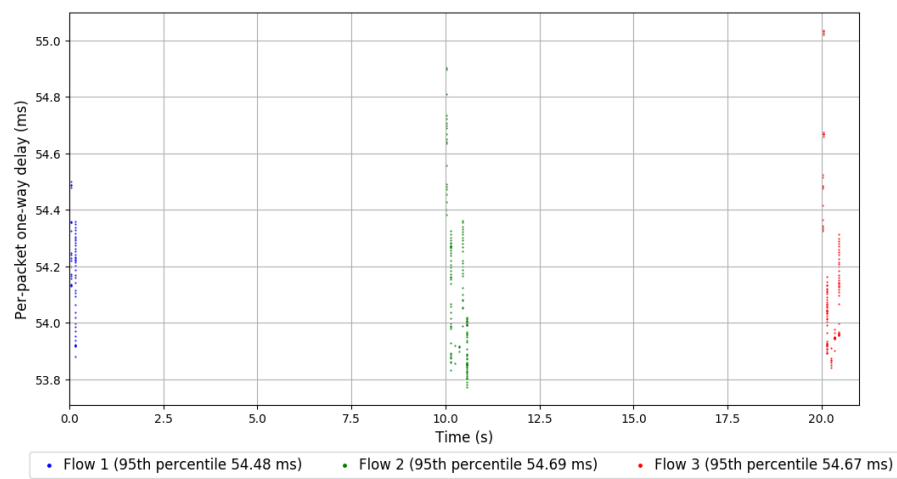
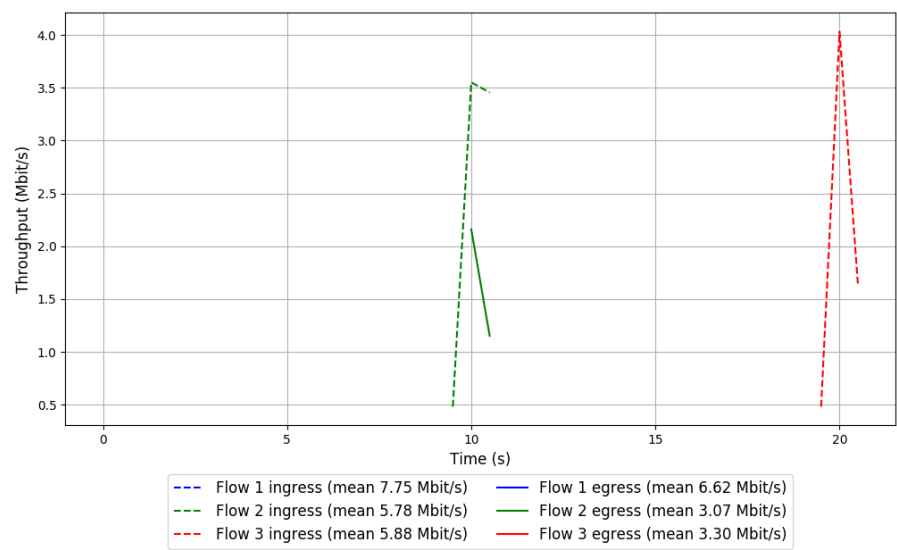


Run 10: Statistics of Saturator

Start at: 2017-08-21 07:02:32

End at: 2017-08-21 07:03:02

Run 10: Report of Saturator — Data Link

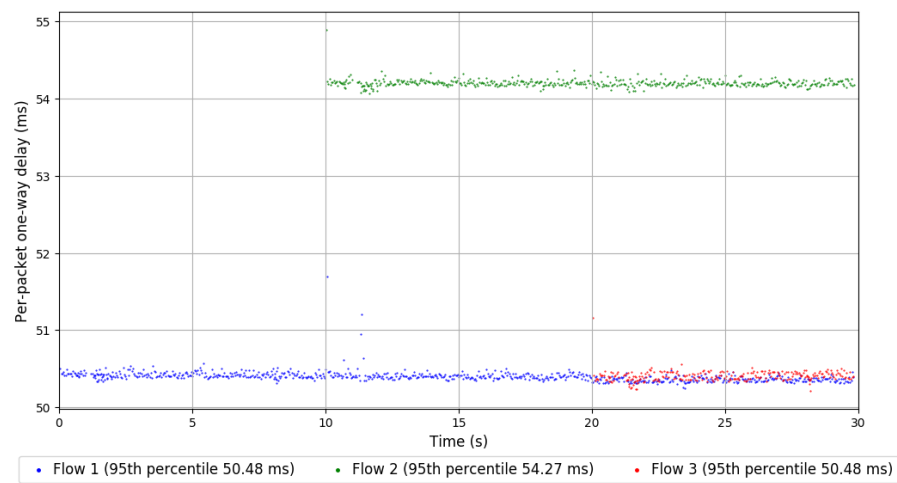
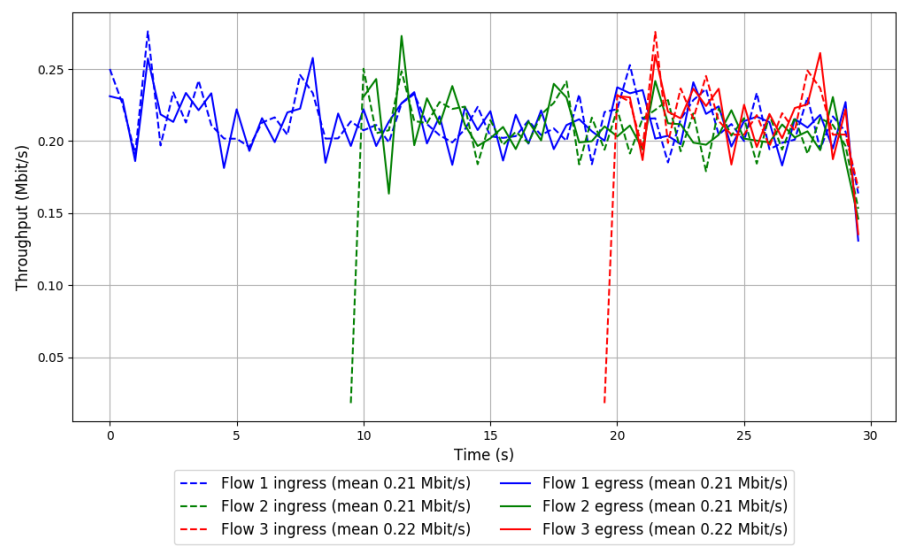


```
Run 1: Statistics of SCReAM

Start at: 2017-08-21 05:27:35
End at: 2017-08-21 05:28:05

# Below is generated by plot.py at 2017-08-21 09:38:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 54.238 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.481 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.268 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.478 ms
Loss rate: 1.11%
```

Run 1: Report of SReAM — Data Link

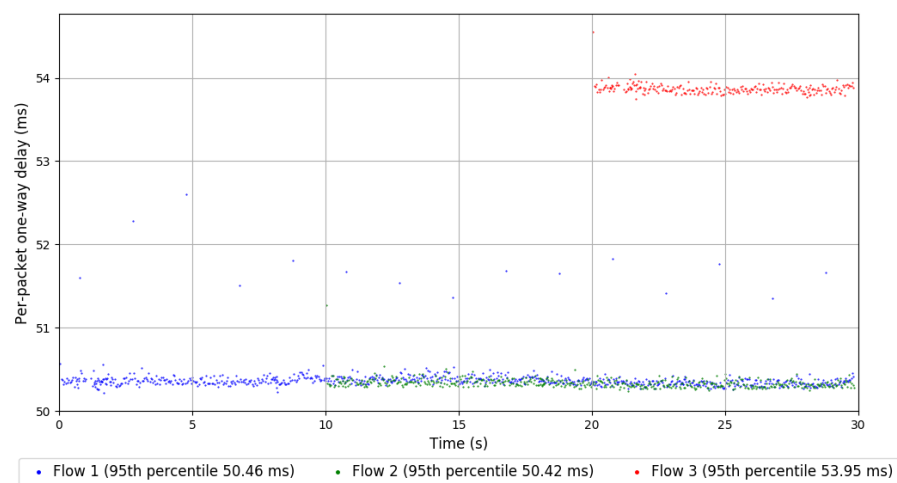
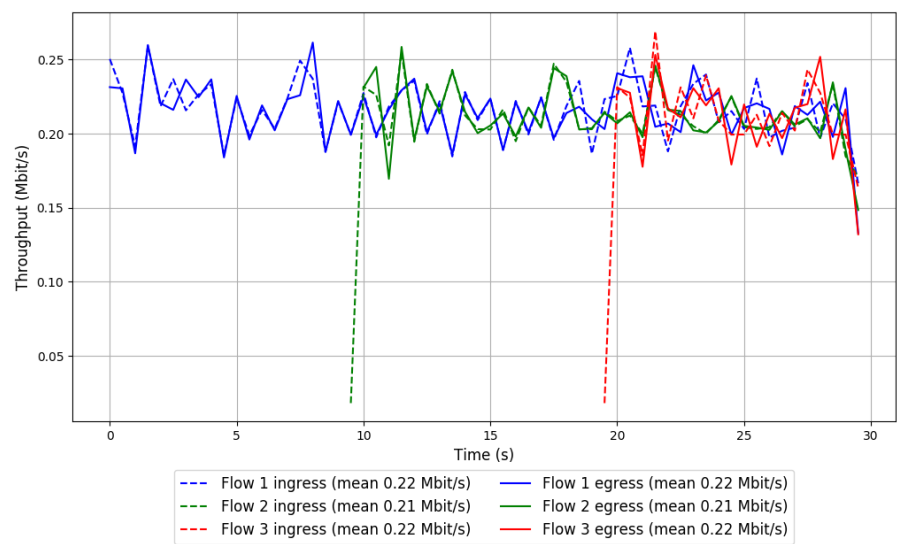


```
Run 2: Statistics of SReAM

Start at: 2017-08-21 05:38:42
End at: 2017-08-21 05:39:12

# Below is generated by plot.py at 2017-08-21 09:38:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.886 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.464 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.419 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.945 ms
Loss rate: 1.11%
```

Run 2: Report of SReAM — Data Link

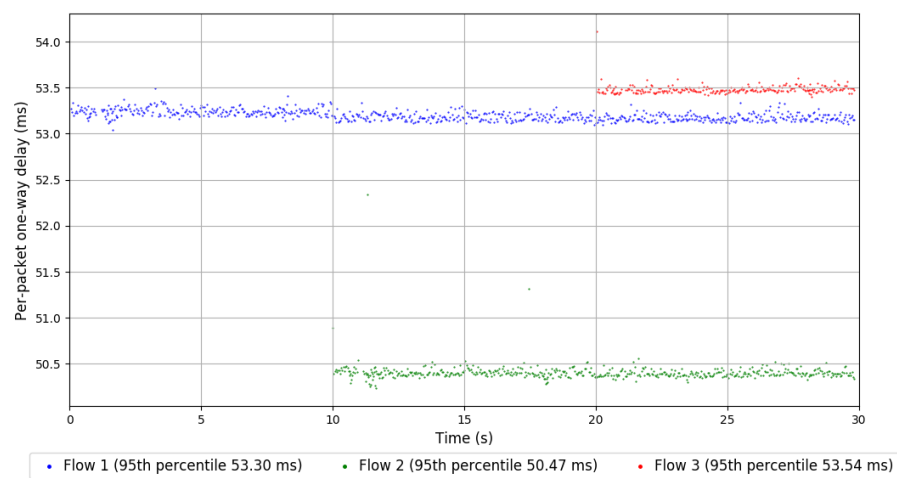
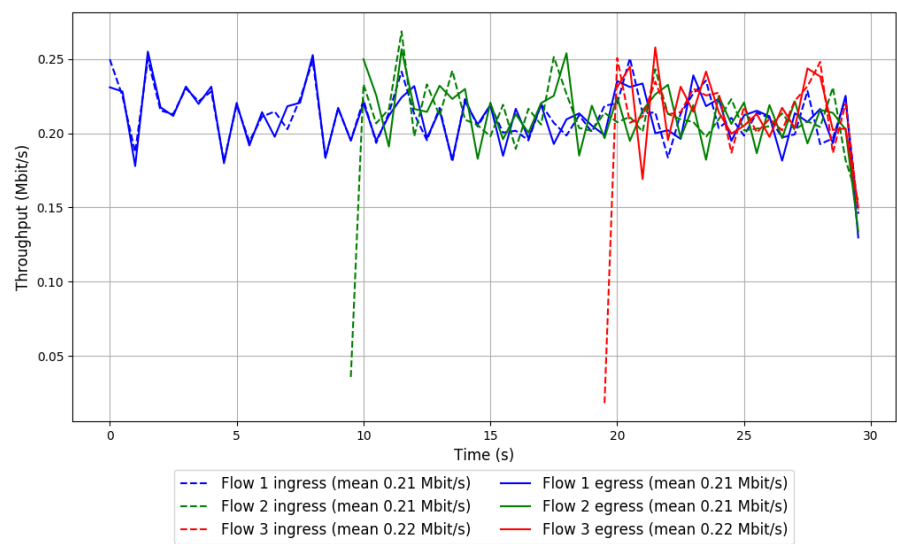


```
Run 3: Statistics of SCReAM

Start at: 2017-08-21 05:49:16
End at: 2017-08-21 05:49:46

# Below is generated by plot.py at 2017-08-21 09:38:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.491 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.302 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.471 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.542 ms
Loss rate: 0.74%
```


Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-21 06:00:08

End at: 2017-08-21 06:00:38

Below is generated by plot.py at 2017-08-21 09:38:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 54.208 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.252 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.255 ms

Loss rate: 0.43%

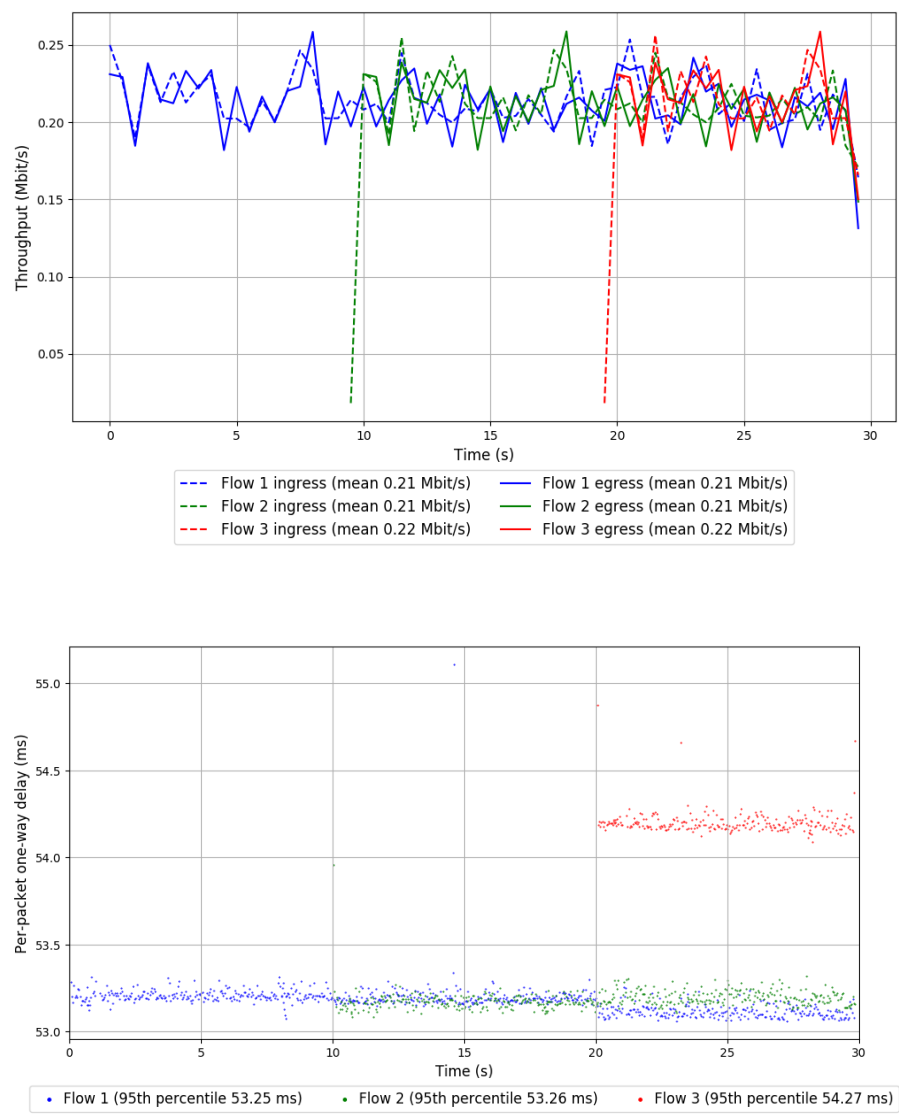
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 54.268 ms

Loss rate: 0.74%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-08-21 06:10:39

End at: 2017-08-21 06:11:09

Below is generated by plot.py at 2017-08-21 09:38:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.532 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.547 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.422 ms

Loss rate: 0.42%

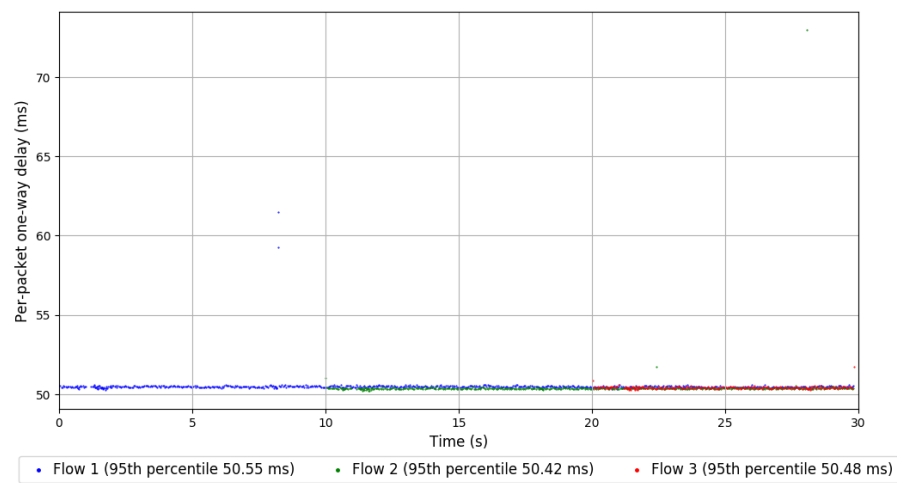
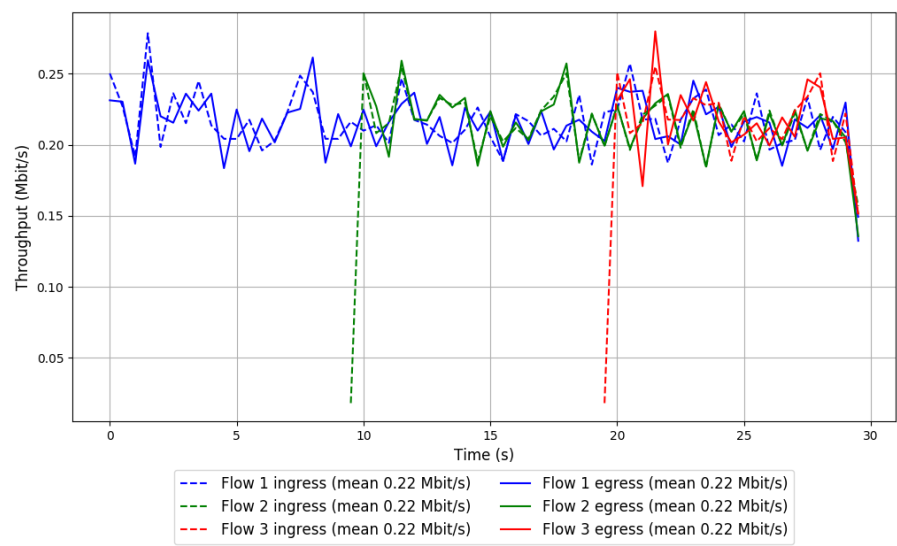
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.481 ms

Loss rate: 0.74%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-21 06:21:05

End at: 2017-08-21 06:21:35

Below is generated by plot.py at 2017-08-21 09:38:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 54.254 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.281 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.292 ms

Loss rate: 0.42%

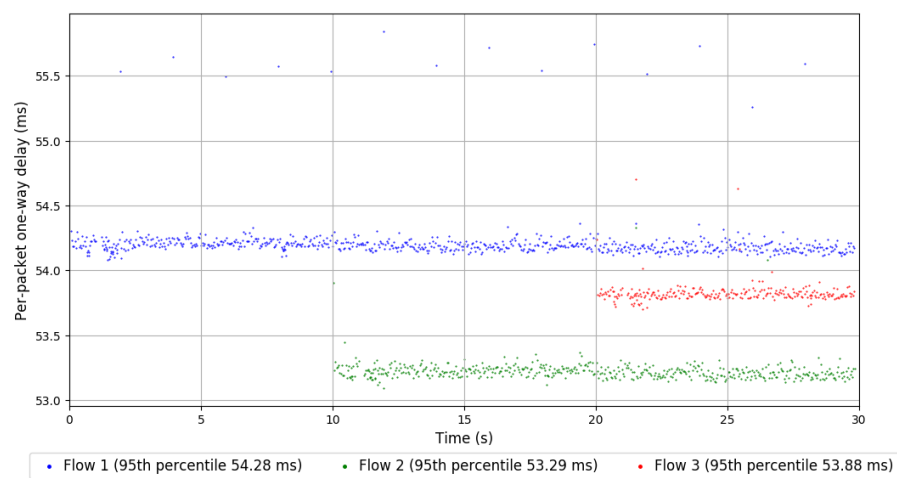
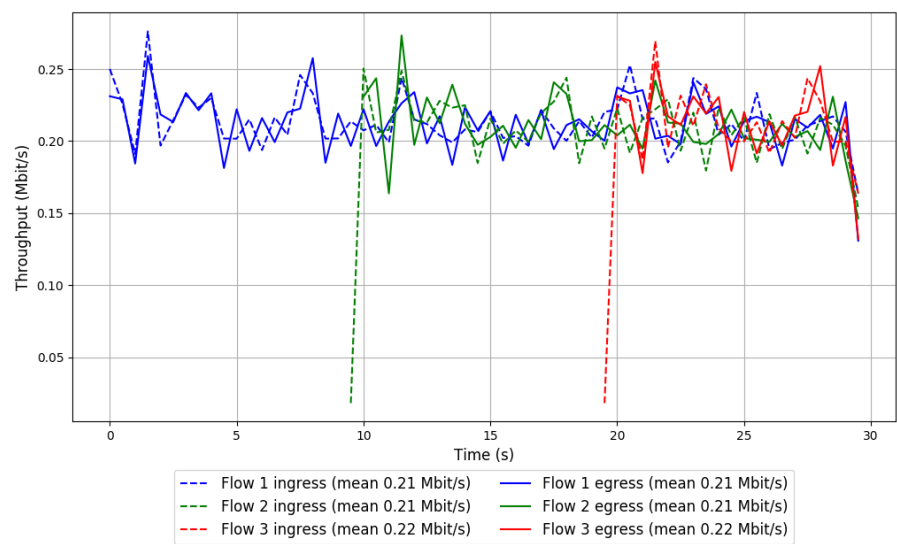
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.878 ms

Loss rate: 1.11%

Run 6: Report of SReAM — Data Link

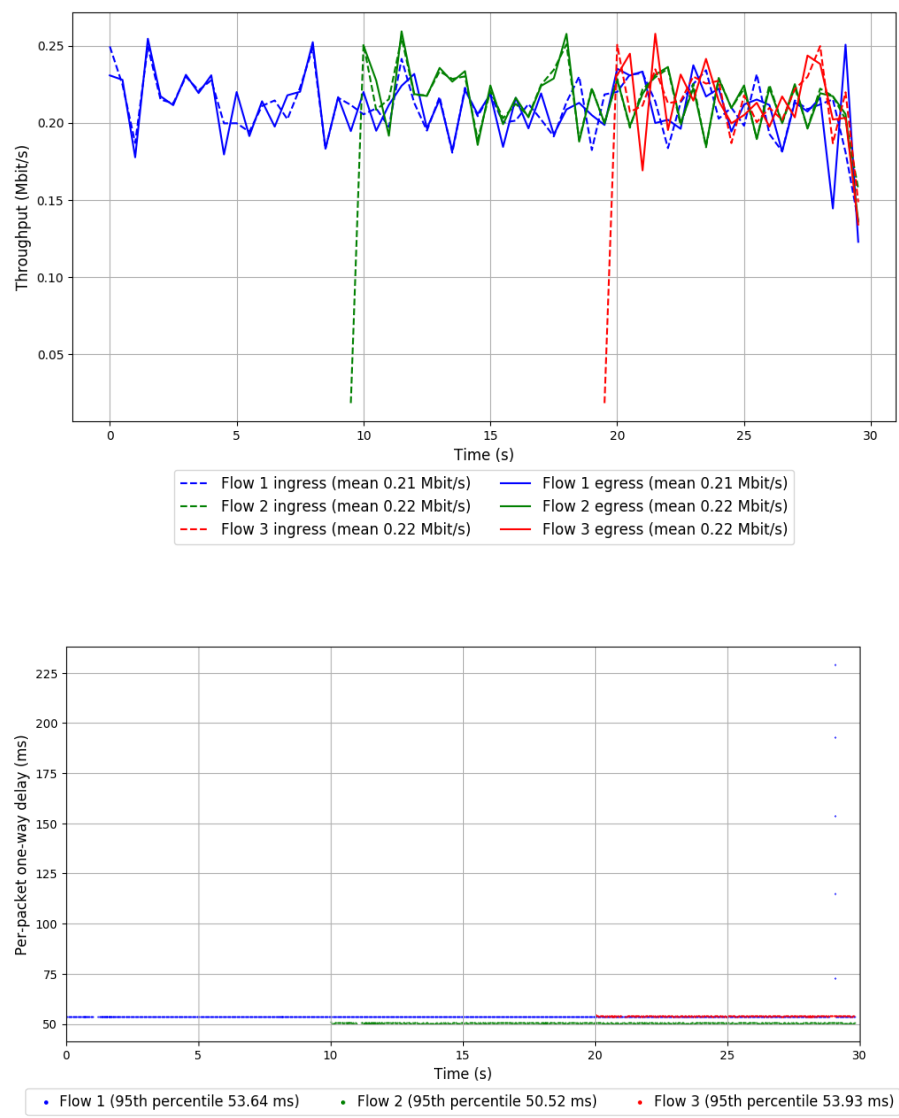


```
Run 7: Statistics of SReAM

Start at: 2017-08-21 06:31:59
End at: 2017-08-21 06:32:29

# Below is generated by plot.py at 2017-08-21 09:38:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.889 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.640 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.516 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.932 ms
Loss rate: 1.11%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-21 06:42:38

End at: 2017-08-21 06:43:08

Below is generated by plot.py at 2017-08-21 09:38:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.878 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.601 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.815 ms

Loss rate: 0.42%

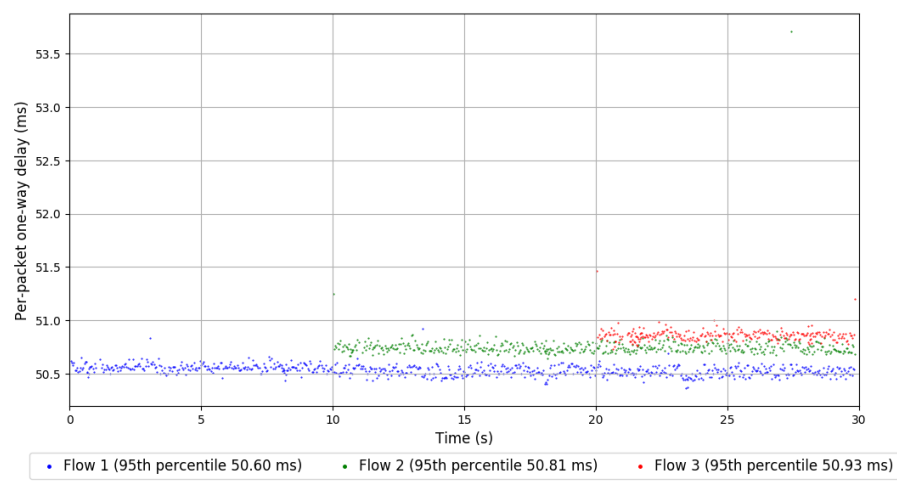
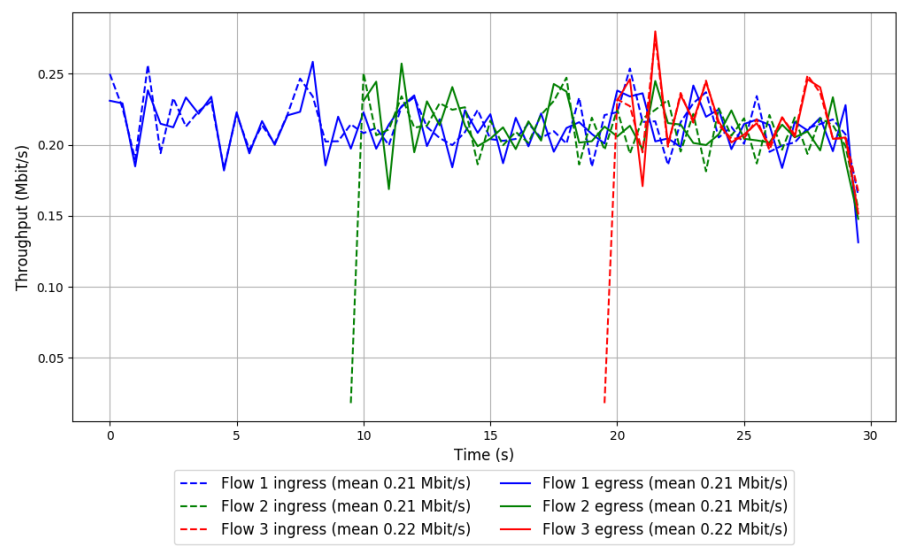
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.930 ms

Loss rate: 0.74%

Run 8: Report of SReAM — Data Link

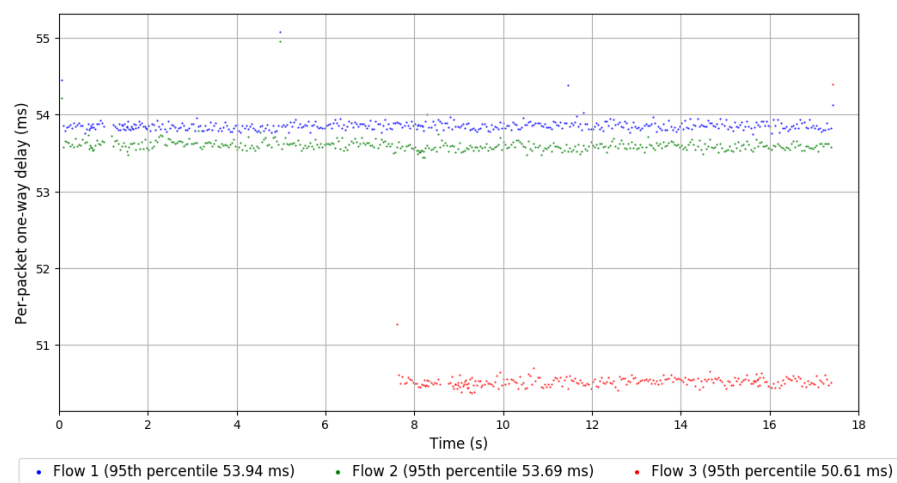
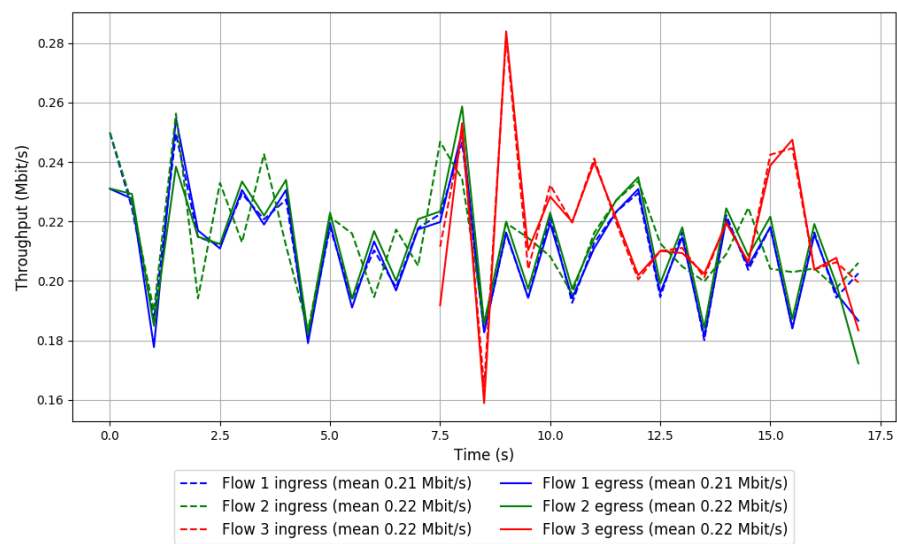


Run 9: Statistics of SReAM

Start at: 2017-08-21 06:53:18

End at: 2017-08-21 06:53:48

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-08-21 07:03:57

End at: 2017-08-21 07:04:27

Below is generated by plot.py at 2017-08-21 09:38:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 54.315 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.333 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.278 ms

Loss rate: 0.42%

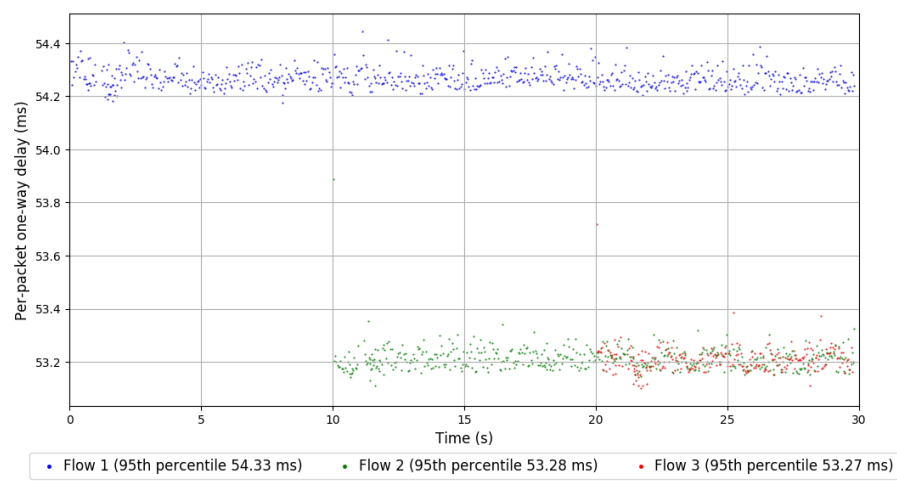
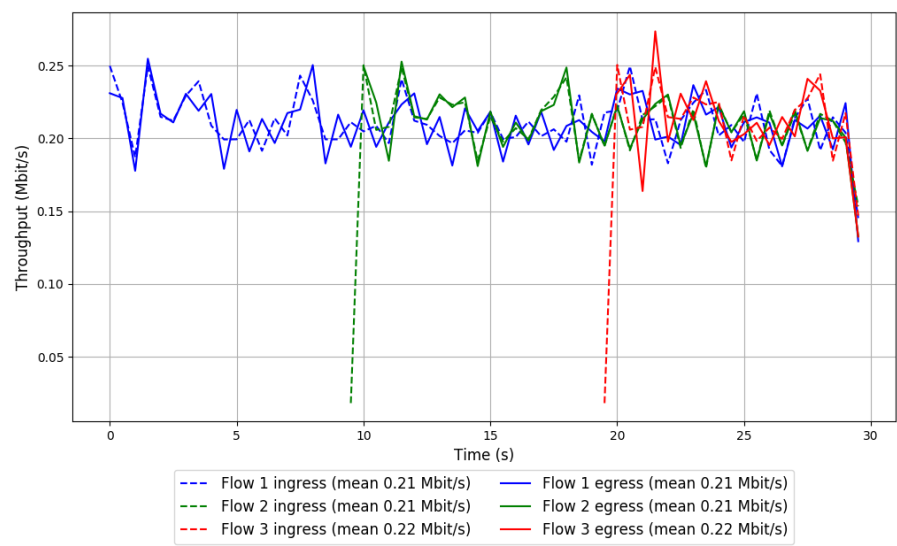
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.270 ms

Loss rate: 1.11%

Run 10: Report of SCReAM — Data Link

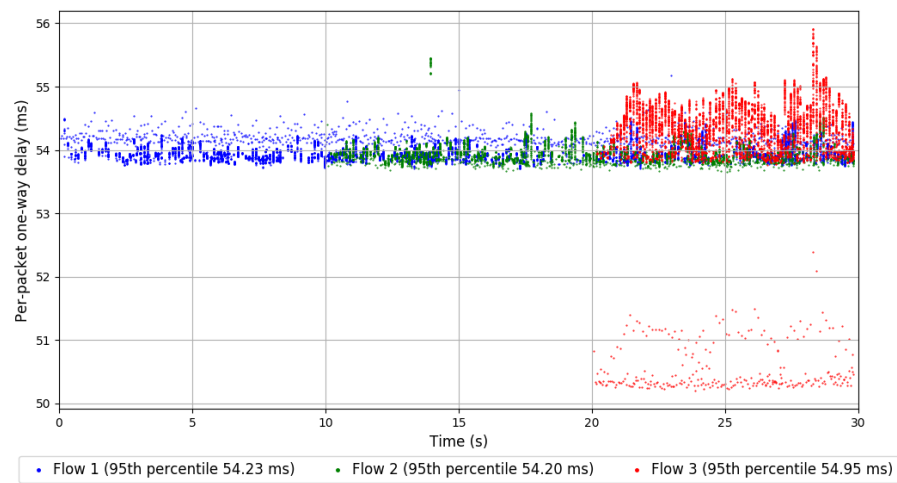
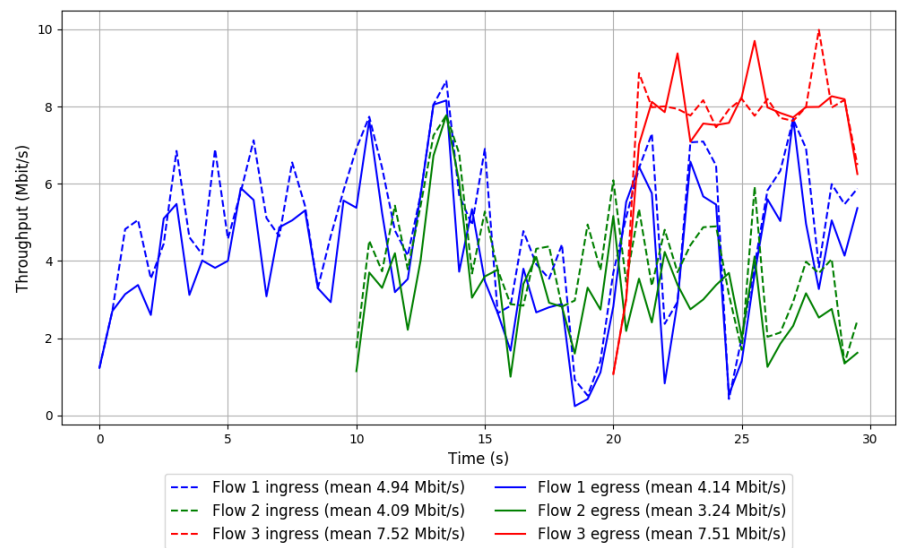


```
Run 1: Statistics of Sprout

Start at: 2017-08-21 05:29:43
End at: 2017-08-21 05:30:13

# Below is generated by plot.py at 2017-08-21 09:38:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.75 Mbit/s
95th percentile per-packet one-way delay: 54.693 ms
Loss rate: 13.96%
-- Flow 1:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 54.226 ms
Loss rate: 16.40%
-- Flow 2:
Average throughput: 3.24 Mbit/s
95th percentile per-packet one-way delay: 54.202 ms
Loss rate: 21.11%
-- Flow 3:
Average throughput: 7.51 Mbit/s
95th percentile per-packet one-way delay: 54.952 ms
Loss rate: 1.30%
```


Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-21 05:40:47

End at: 2017-08-21 05:41:17

Below is generated by plot.py at 2017-08-21 09:38:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 54.208 ms

Loss rate: 15.70%

-- Flow 1:

Average throughput: 3.21 Mbit/s

95th percentile per-packet one-way delay: 54.221 ms

Loss rate: 20.54%

-- Flow 2:

Average throughput: 5.66 Mbit/s

95th percentile per-packet one-way delay: 54.200 ms

Loss rate: 8.67%

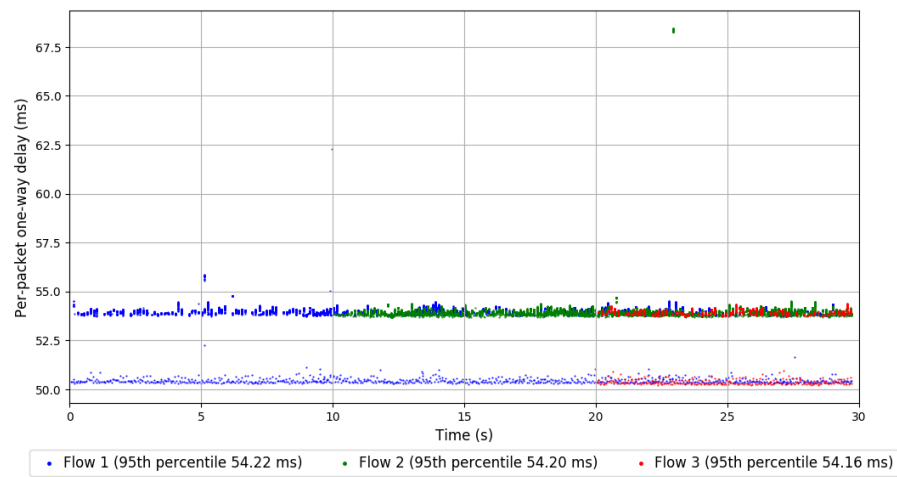
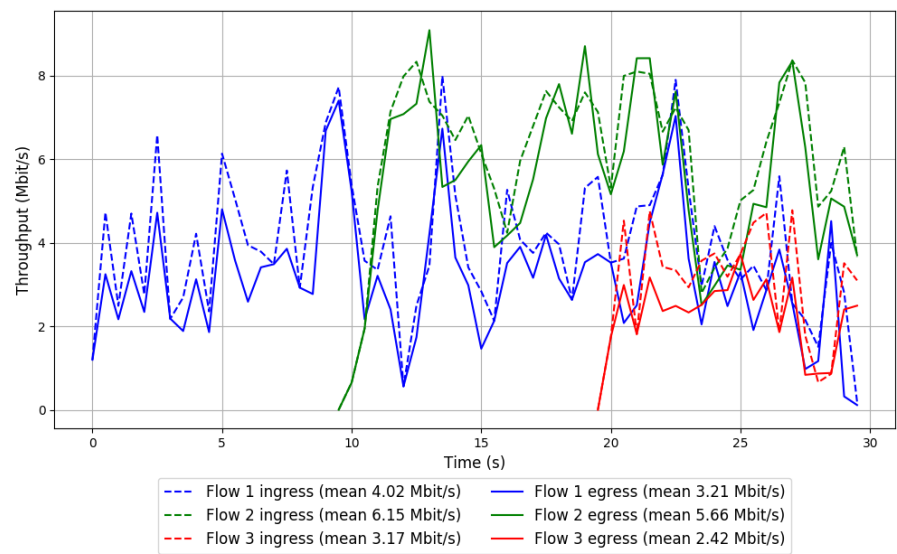
-- Flow 3:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 54.158 ms

Loss rate: 24.63%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-21 05:51:29

End at: 2017-08-21 05:51:59

Below is generated by plot.py at 2017-08-21 09:38:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.28 Mbit/s

95th percentile per-packet one-way delay: 54.192 ms

Loss rate: 20.67%

-- Flow 1:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 54.171 ms

Loss rate: 18.91%

-- Flow 2:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 54.237 ms

Loss rate: 23.25%

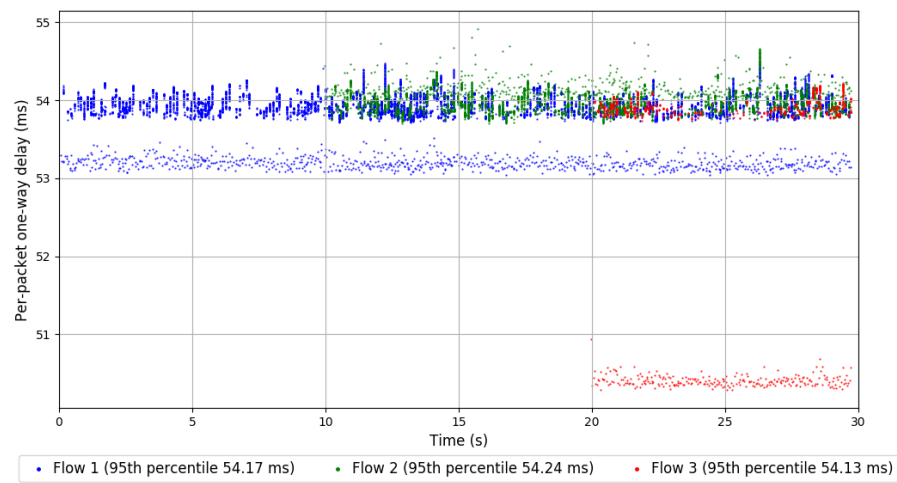
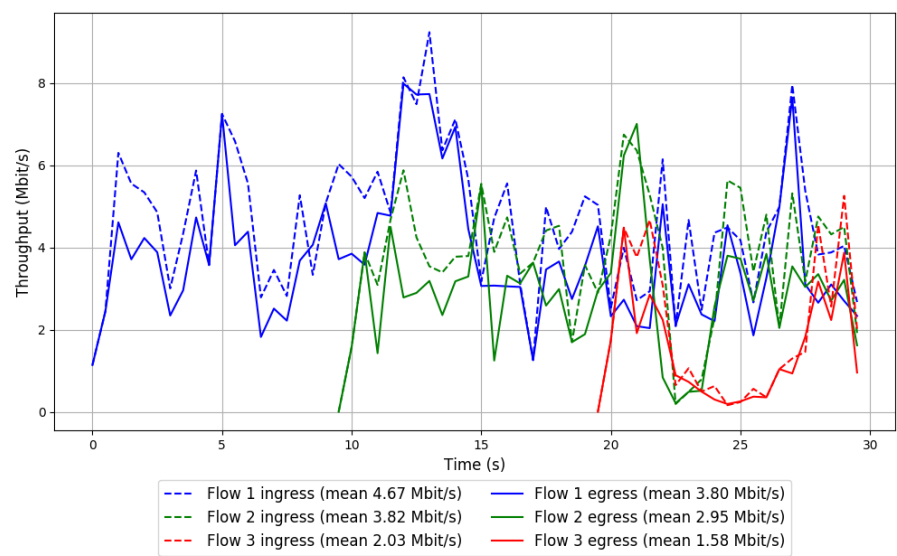
-- Flow 3:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 54.134 ms

Loss rate: 23.02%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-08-21 06:02:16

End at: 2017-08-21 06:02:46

Below is generated by plot.py at 2017-08-21 09:38:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.54 Mbit/s

95th percentile per-packet one-way delay: 54.171 ms

Loss rate: 19.15%

-- Flow 1:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 54.139 ms

Loss rate: 18.77%

-- Flow 2:

Average throughput: 3.16 Mbit/s

95th percentile per-packet one-way delay: 54.185 ms

Loss rate: 20.72%

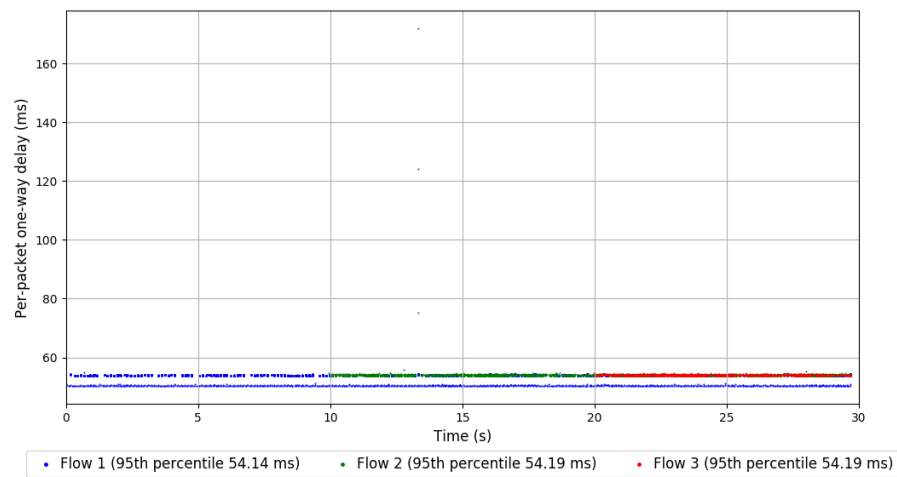
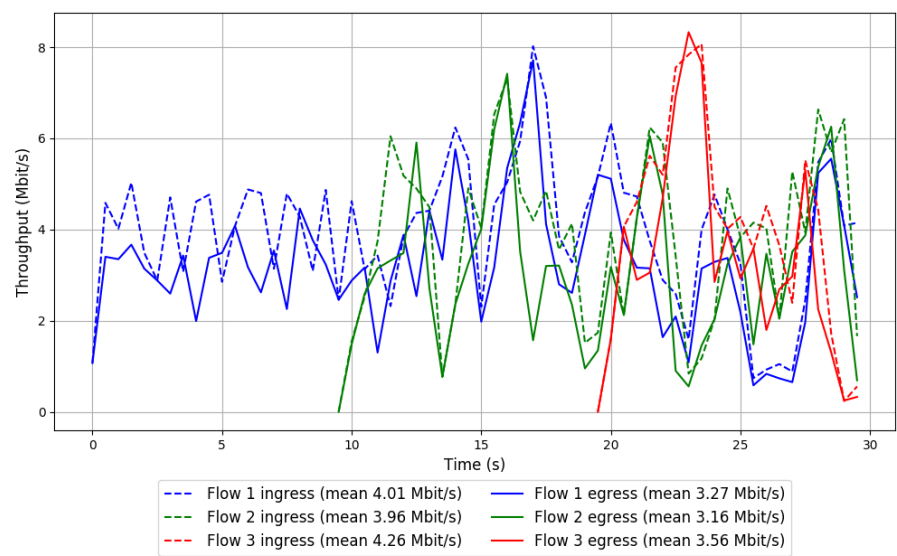
-- Flow 3:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 54.194 ms

Loss rate: 17.29%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-21 06:12:44

End at: 2017-08-21 06:13:14

Below is generated by plot.py at 2017-08-21 09:38:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.70 Mbit/s

95th percentile per-packet one-way delay: 54.516 ms

Loss rate: 11.48%

-- Flow 1:

Average throughput: 2.68 Mbit/s

95th percentile per-packet one-way delay: 54.205 ms

Loss rate: 23.21%

-- Flow 2:

Average throughput: 7.31 Mbit/s

95th percentile per-packet one-way delay: 54.557 ms

Loss rate: 1.21%

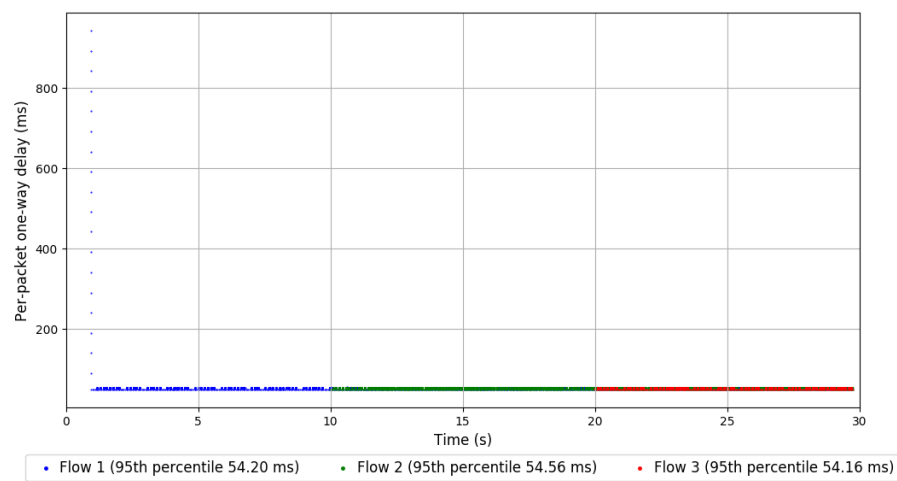
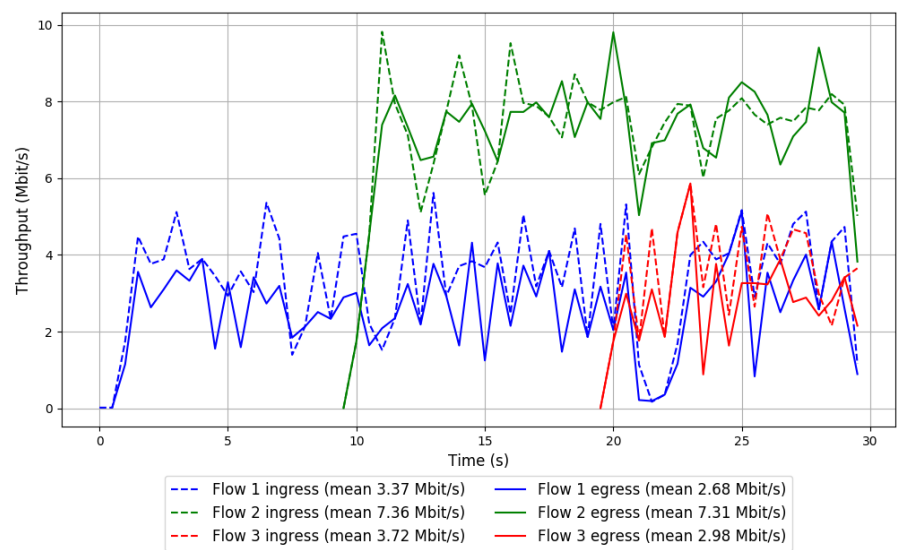
-- Flow 3:

Average throughput: 2.98 Mbit/s

95th percentile per-packet one-way delay: 54.160 ms

Loss rate: 20.41%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-21 06:23:14

End at: 2017-08-21 06:23:44

Below is generated by plot.py at 2017-08-21 09:38:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.16 Mbit/s

95th percentile per-packet one-way delay: 54.675 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 54.755 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 7.10 Mbit/s

95th percentile per-packet one-way delay: 54.489 ms

Loss rate: 1.79%

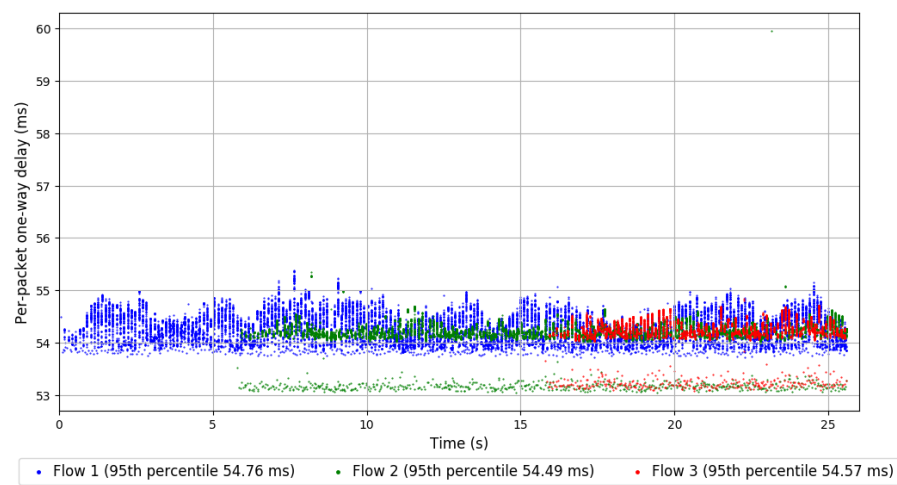
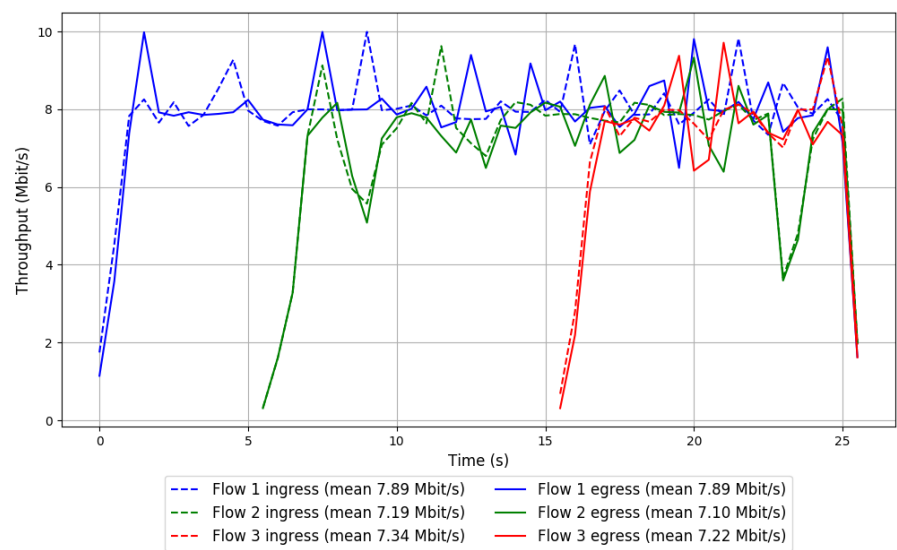
-- Flow 3:

Average throughput: 7.22 Mbit/s

95th percentile per-packet one-way delay: 54.574 ms

Loss rate: 2.68%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-21 06:34:04

End at: 2017-08-21 06:34:34

Below is generated by plot.py at 2017-08-21 09:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay: 54.473 ms

Loss rate: 16.09%

-- Flow 1:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 54.233 ms

Loss rate: 21.29%

-- Flow 2:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 54.198 ms

Loss rate: 21.47%

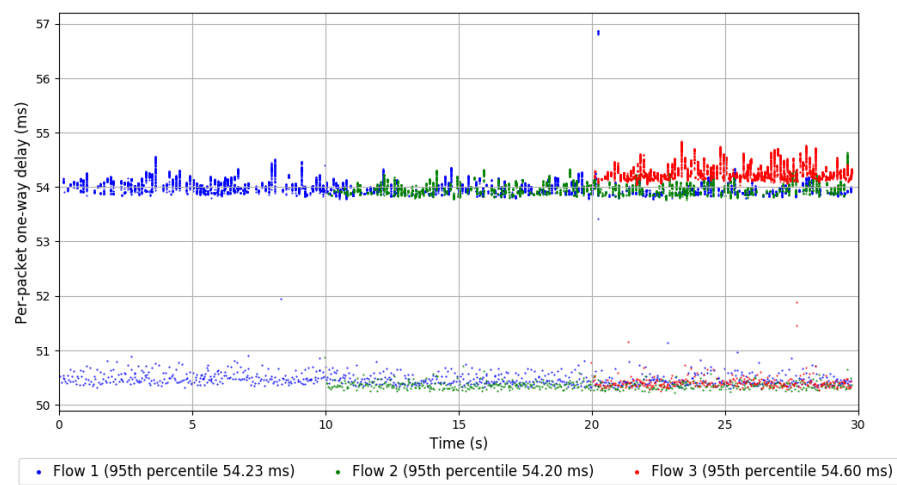
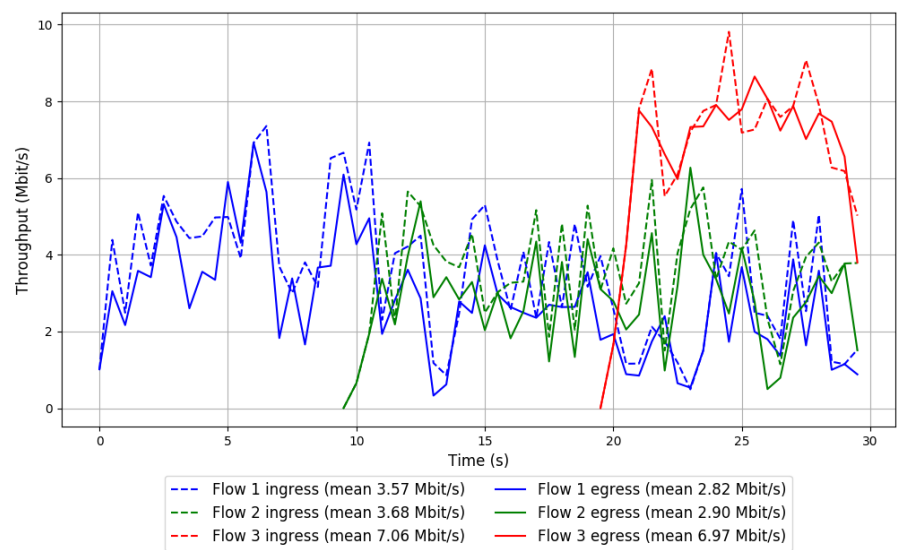
-- Flow 3:

Average throughput: 6.97 Mbit/s

95th percentile per-packet one-way delay: 54.603 ms

Loss rate: 2.49%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-21 06:44:54

End at: 2017-08-21 06:45:24

Below is generated by plot.py at 2017-08-21 09:38:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.07 Mbit/s

95th percentile per-packet one-way delay: 54.239 ms

Loss rate: 19.27%

-- Flow 1:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 54.242 ms

Loss rate: 18.44%

-- Flow 2:

Average throughput: 3.47 Mbit/s

95th percentile per-packet one-way delay: 54.279 ms

Loss rate: 19.05%

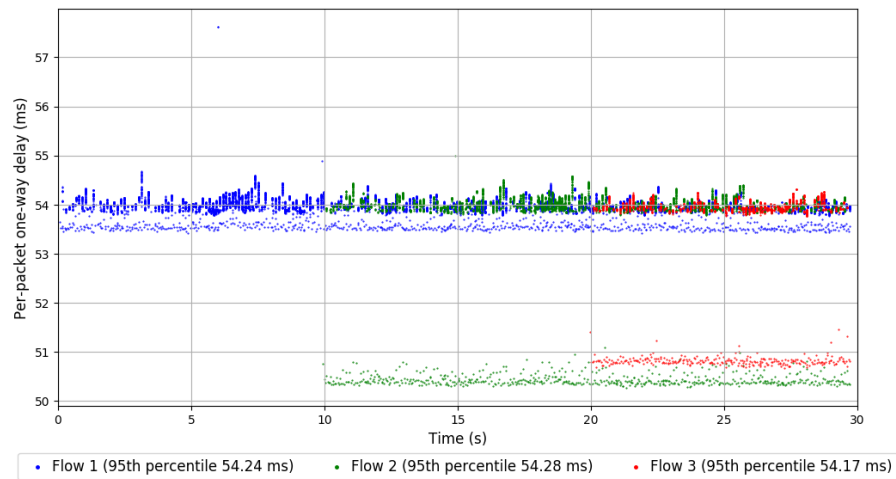
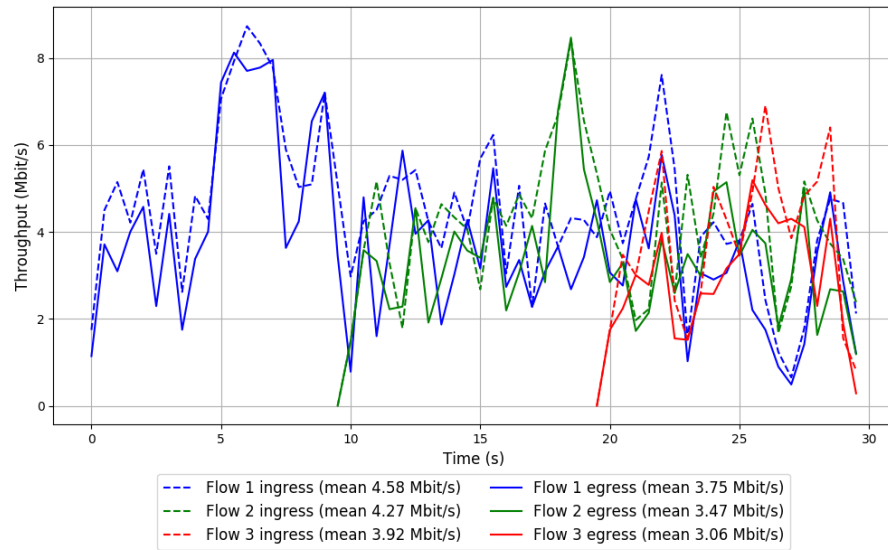
-- Flow 3:

Average throughput: 3.06 Mbit/s

95th percentile per-packet one-way delay: 54.168 ms

Loss rate: 22.65%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-21 06:55:22

End at: 2017-08-21 06:55:52

Below is generated by plot.py at 2017-08-21 09:39:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.20 Mbit/s

95th percentile per-packet one-way delay: 54.853 ms

Loss rate: 4.09%

-- Flow 1:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 54.875 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 54.146 ms

Loss rate: 18.44%

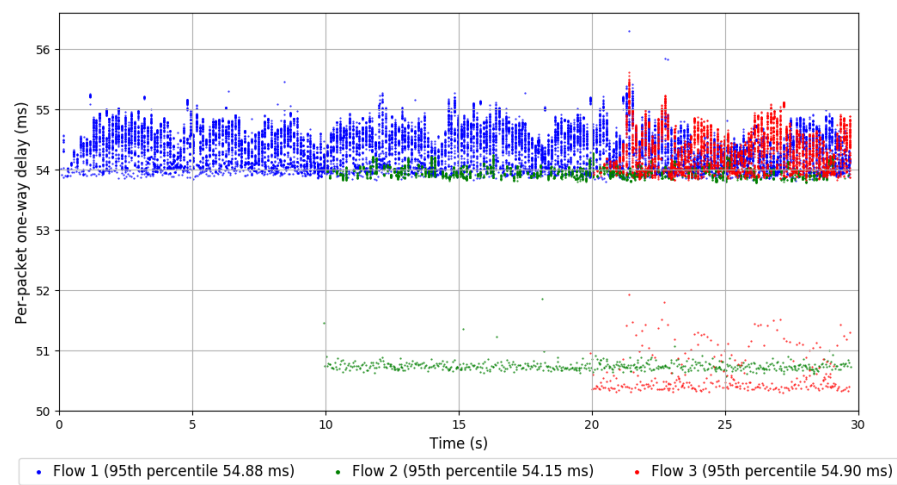
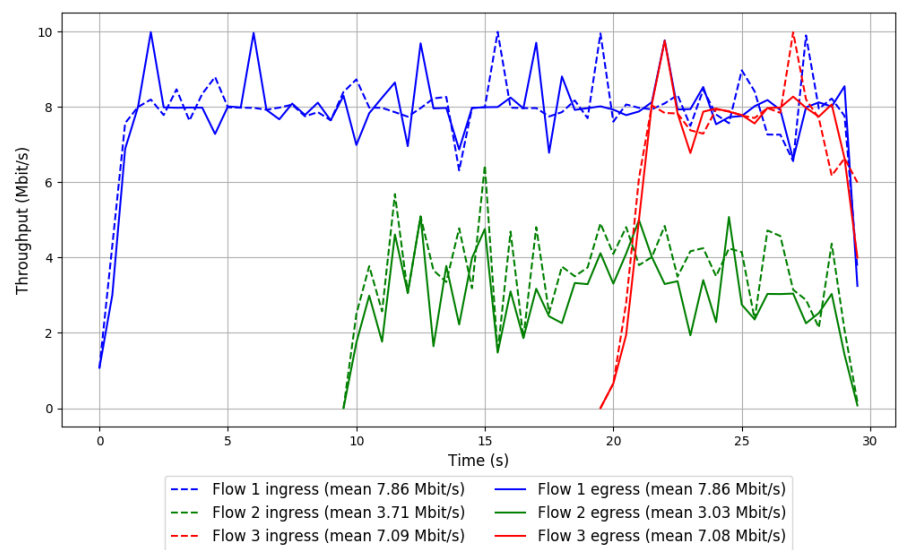
-- Flow 3:

Average throughput: 7.08 Mbit/s

95th percentile per-packet one-way delay: 54.896 ms

Loss rate: 1.43%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-21 07:06:07

End at: 2017-08-21 07:06:37

Below is generated by plot.py at 2017-08-21 09:39:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.10 Mbit/s

95th percentile per-packet one-way delay: 54.191 ms

Loss rate: 21.72%

-- Flow 1:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 54.213 ms

Loss rate: 22.52%

-- Flow 2:

Average throughput: 2.65 Mbit/s

95th percentile per-packet one-way delay: 54.173 ms

Loss rate: 21.16%

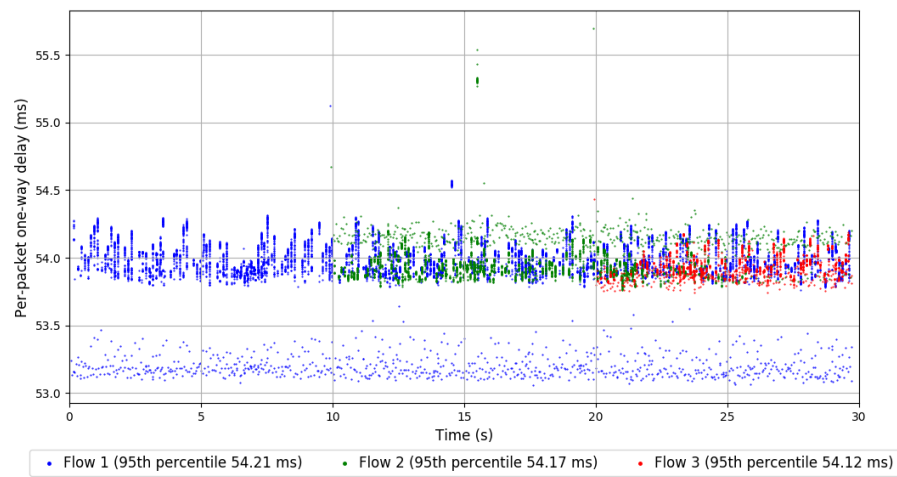
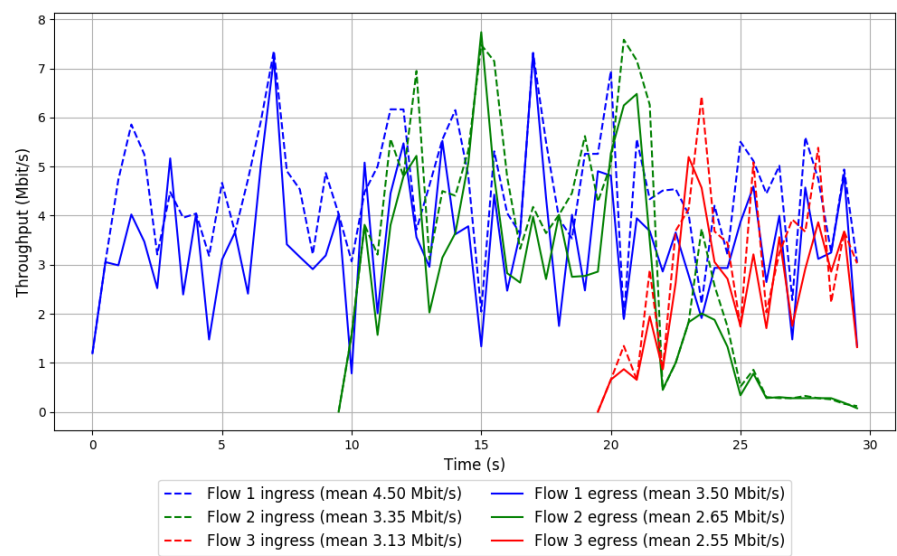
-- Flow 3:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 54.120 ms

Loss rate: 19.44%

Run 10: Report of Sprout — Data Link

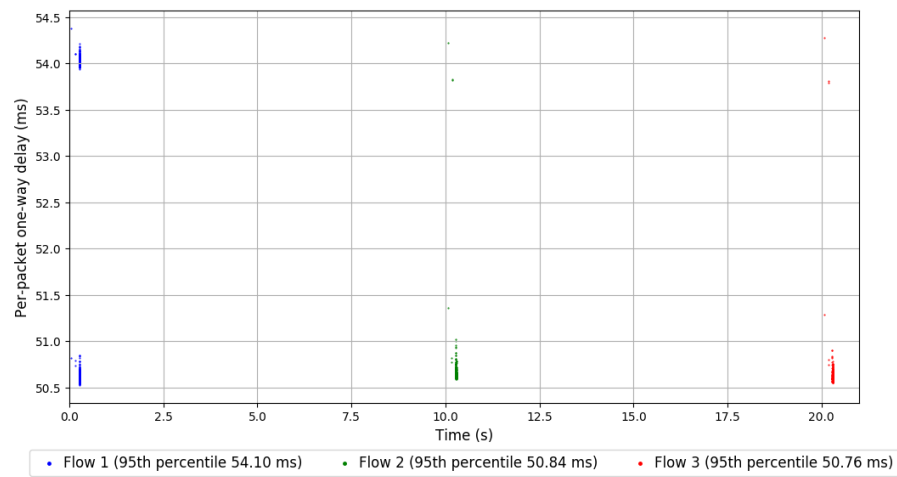
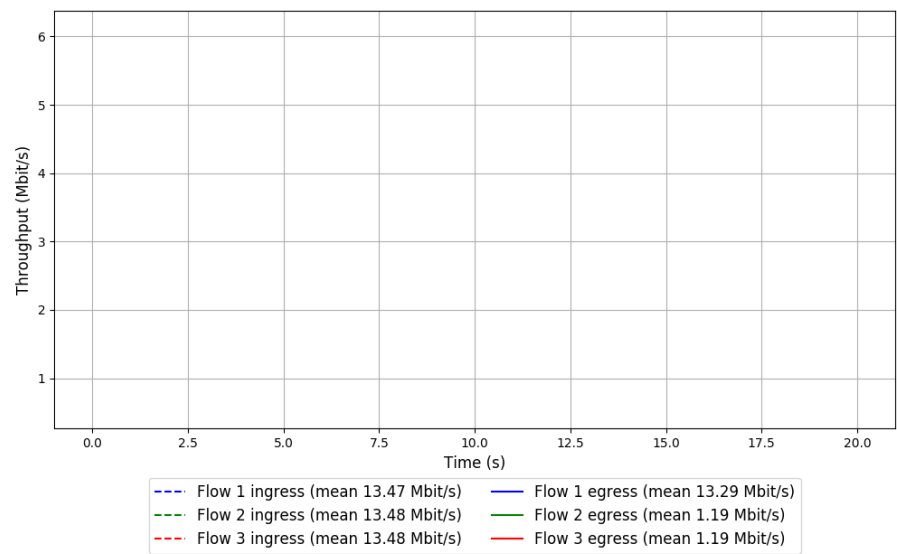


Run 1: Statistics of TaoVA-100x

Start at: 2017-08-21 05:30:23

End at: 2017-08-21 05:30:53

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

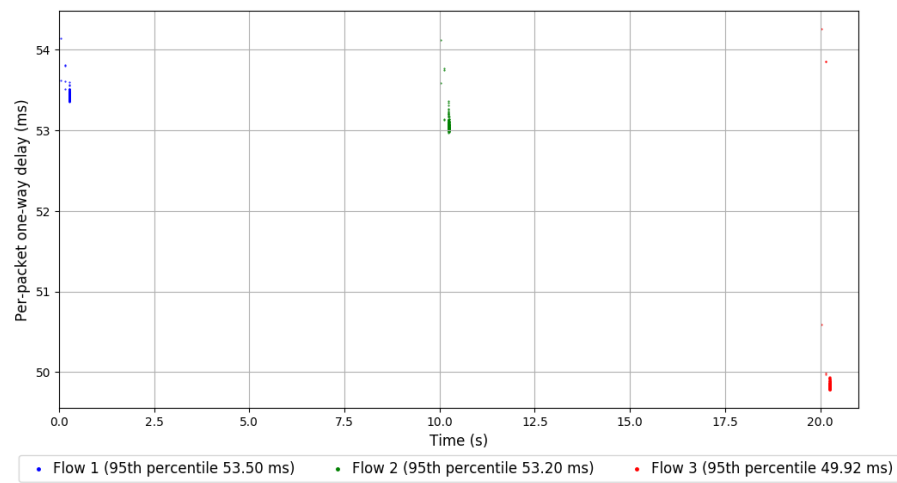
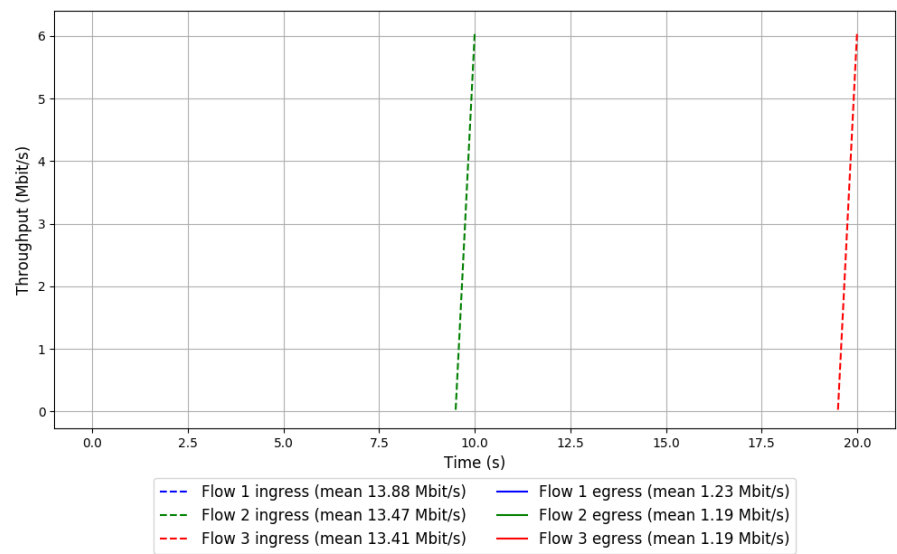


Run 2: Statistics of TaoVA-100x

Start at: 2017-08-21 05:41:28

End at: 2017-08-21 05:41:58

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-08-21 05:52:09

End at: 2017-08-21 05:52:39

Below is generated by plot.py at 2017-08-21 09:39:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.96 Mbit/s

95th percentile per-packet one-way delay: 53.805 ms

Loss rate: 27.19%

-- Flow 1:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 54.313 ms

Loss rate: 91.17%

-- Flow 2:

Average throughput: 16.52 Mbit/s

95th percentile per-packet one-way delay: 53.802 ms

Loss rate: 30.53%

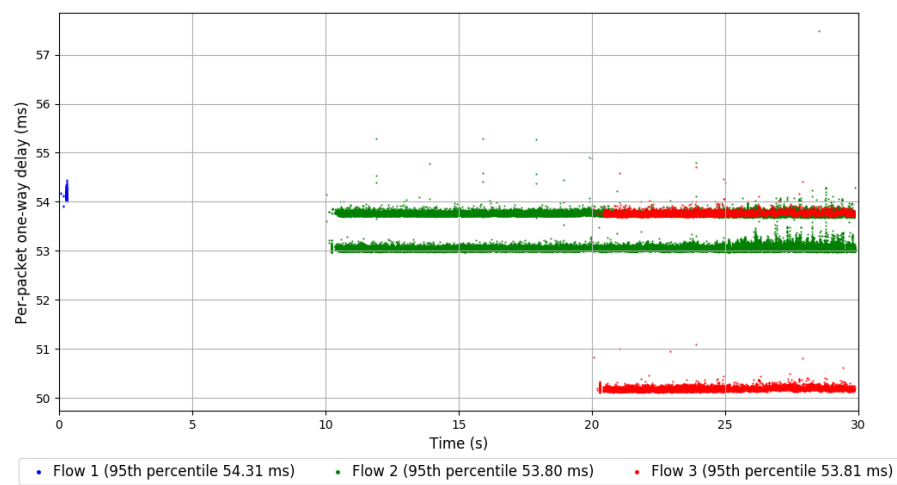
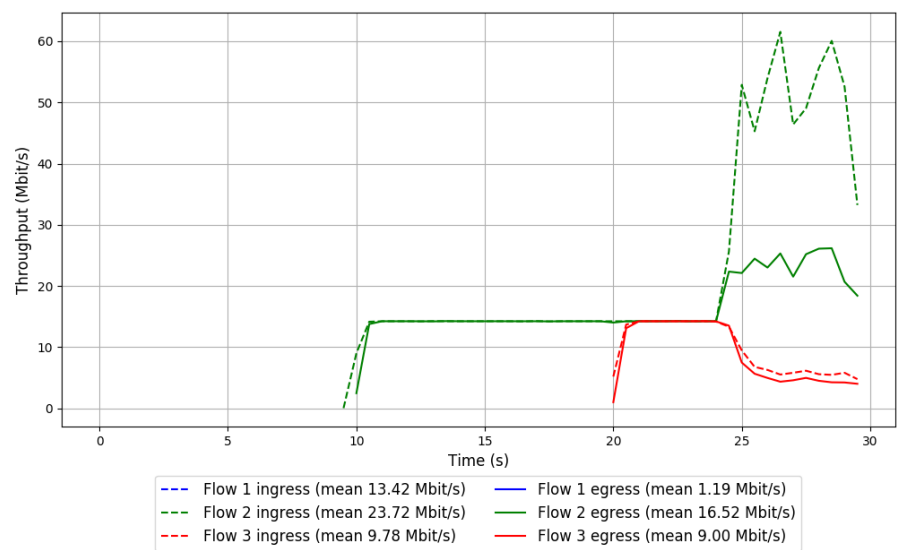
-- Flow 3:

Average throughput: 9.00 Mbit/s

95th percentile per-packet one-way delay: 53.807 ms

Loss rate: 8.90%

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

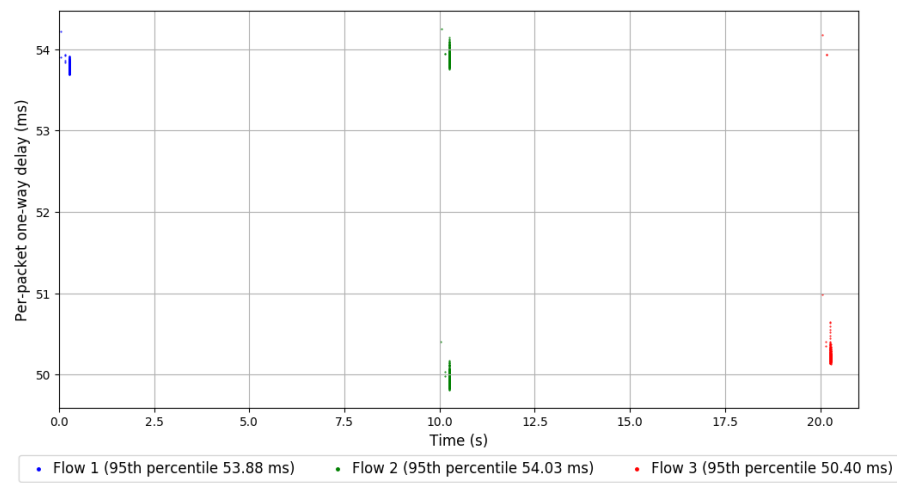
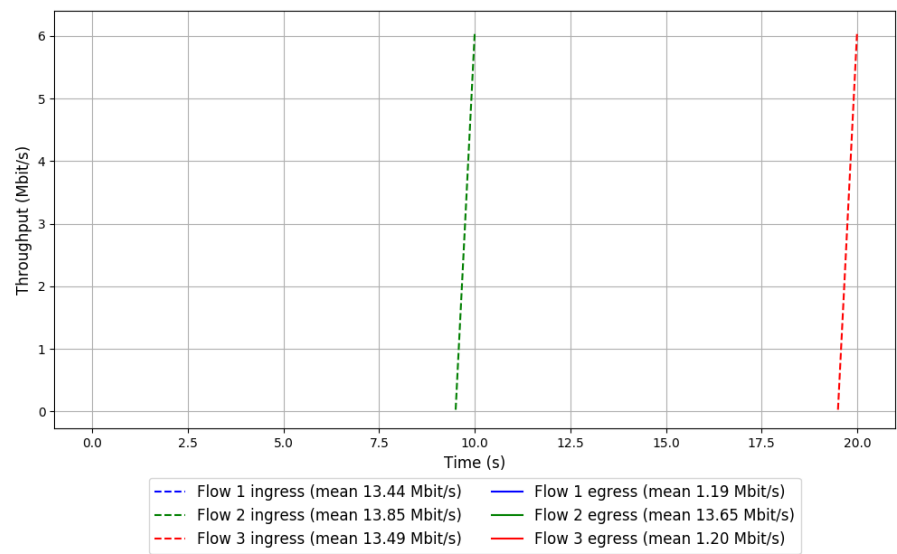


Run 4: Statistics of TaoVA-100x

Start at: 2017-08-21 06:02:55

End at: 2017-08-21 06:03:25

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

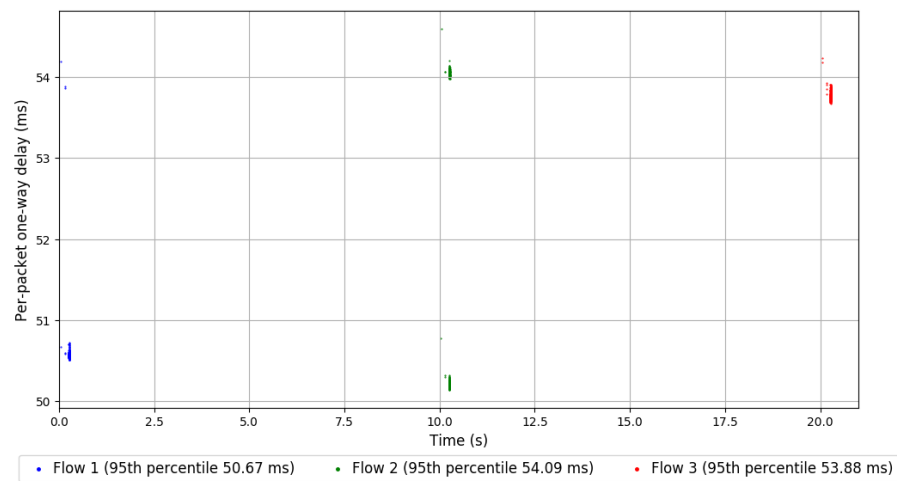
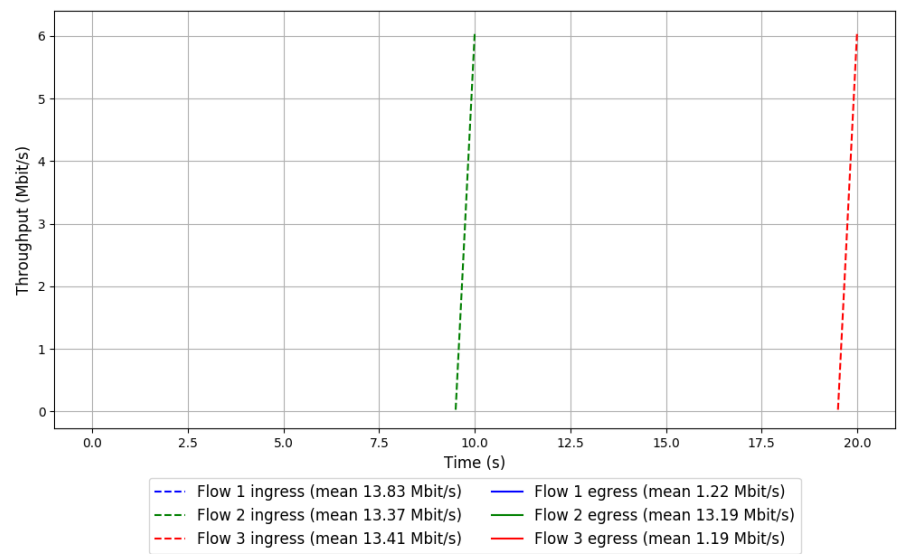


Run 5: Statistics of TaoVA-100x

Start at: 2017-08-21 06:13:24

End at: 2017-08-21 06:13:54

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-08-21 06:23:54

End at: 2017-08-21 06:24:24

Below is generated by plot.py at 2017-08-21 09:40:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 205.74 Mbit/s

95th percentile per-packet one-way delay: 54.275 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 146.16 Mbit/s

95th percentile per-packet one-way delay: 54.291 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 89.72 Mbit/s

95th percentile per-packet one-way delay: 54.102 ms

Loss rate: 0.53%

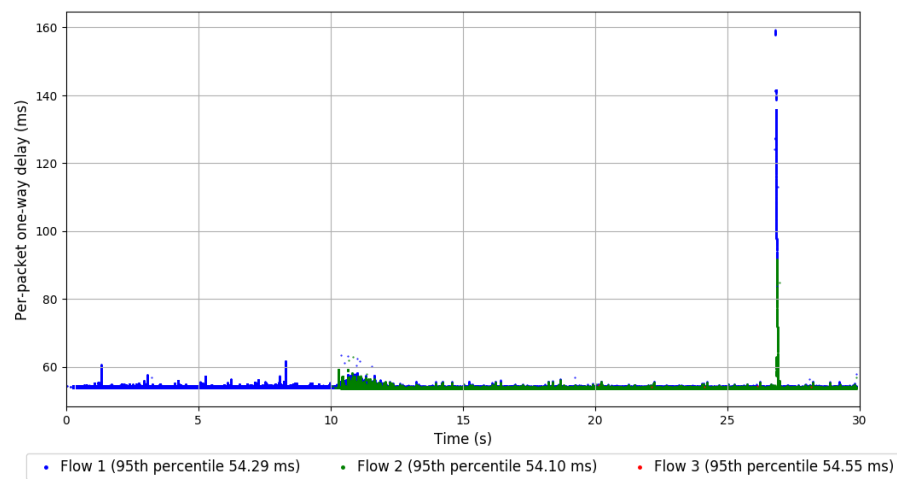
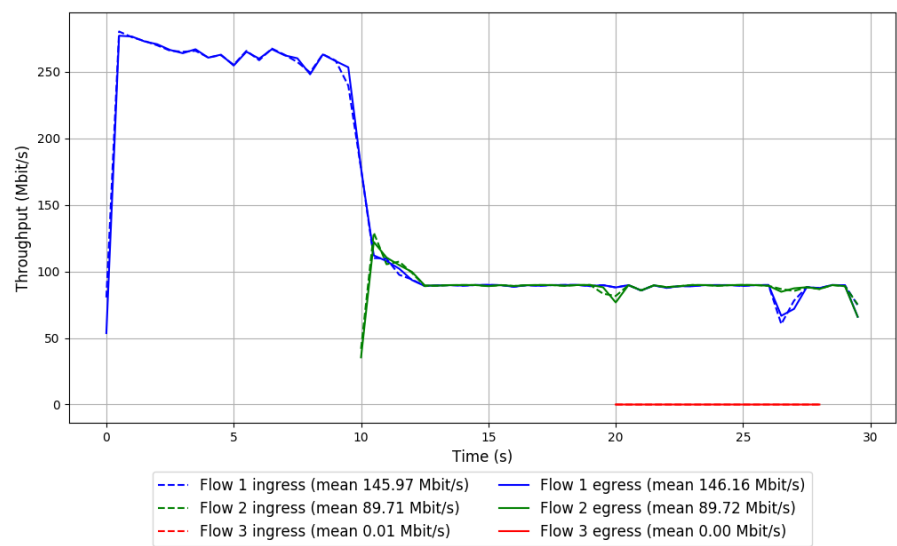
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 54.553 ms

Loss rate: 92.35%

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

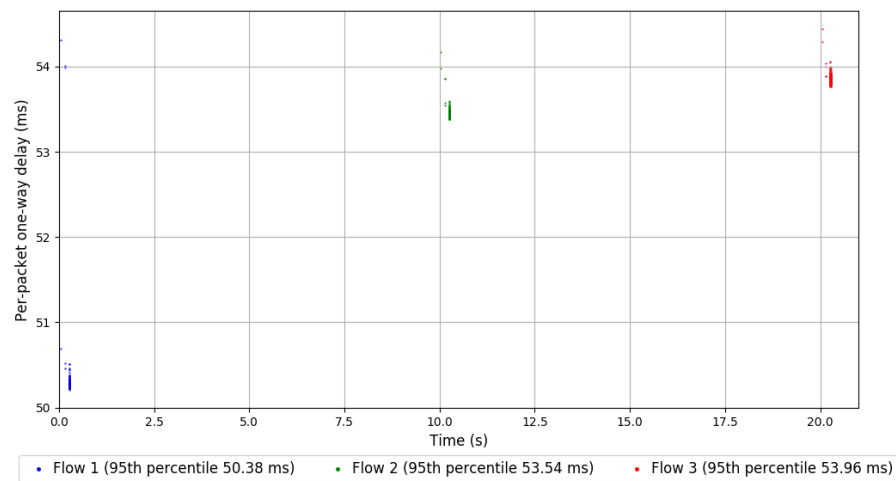
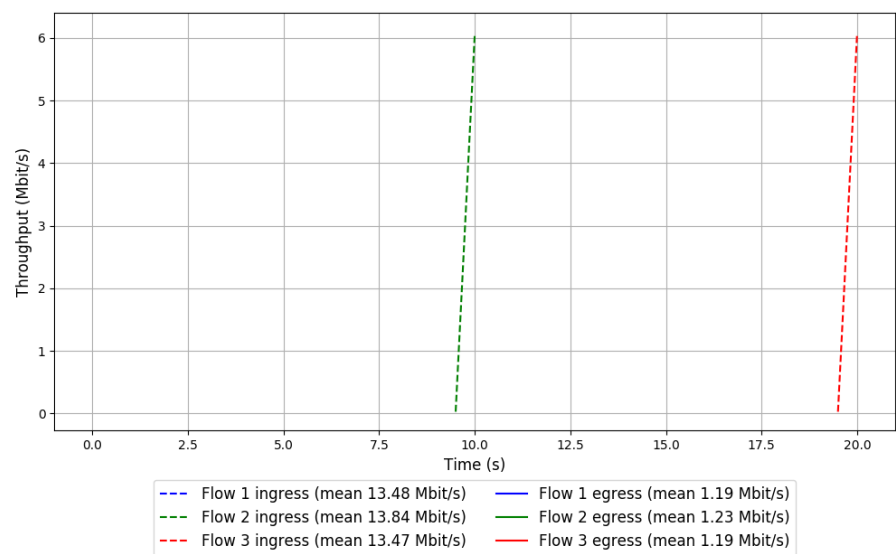


Run 7: Statistics of TaoVA-100x

Start at: 2017-08-21 06:34:44

End at: 2017-08-21 06:35:14

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

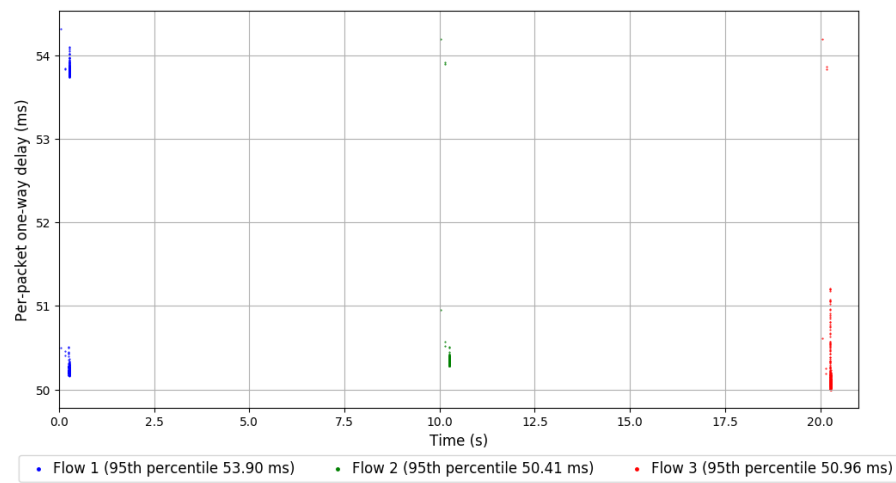
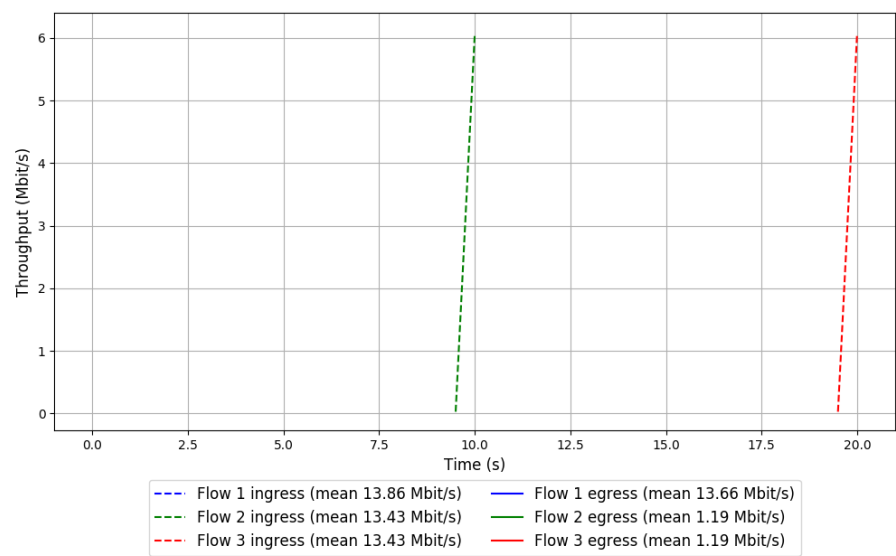


Run 8: Statistics of TaoVA-100x

Start at: 2017-08-21 06:45:34

End at: 2017-08-21 06:46:04

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

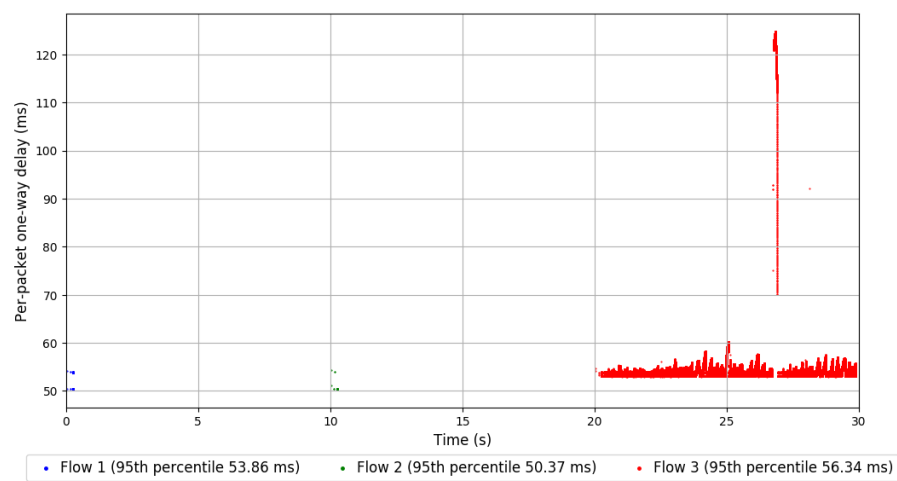
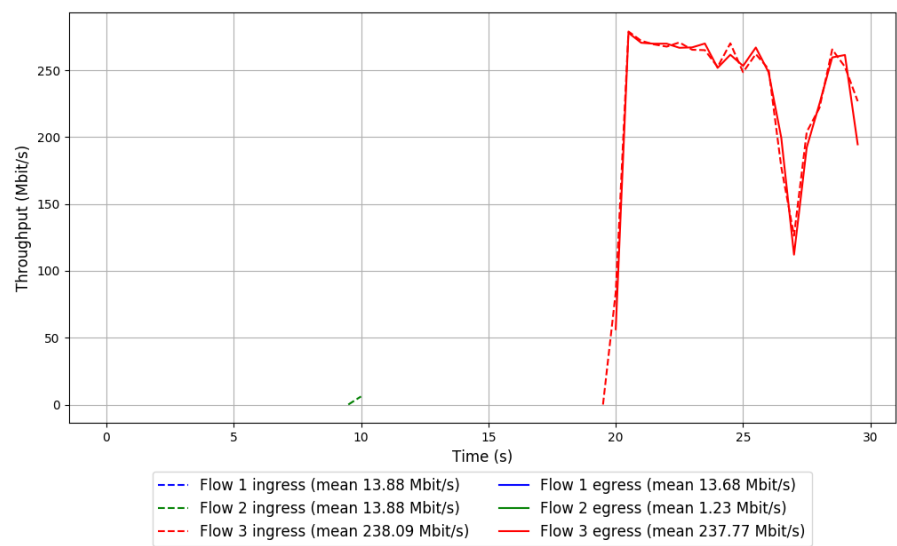


```
Run 9: Statistics of TaoVA-100x

Start at: 2017-08-21 06:56:03
End at: 2017-08-21 06:56:33

# Below is generated by plot.py at 2017-08-21 09:40:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.46 Mbit/s
95th percentile per-packet one-way delay: 56.339 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 13.68 Mbit/s
95th percentile per-packet one-way delay: 53.861 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 50.367 ms
Loss rate: 91.17%
-- Flow 3:
Average throughput: 237.77 Mbit/s
95th percentile per-packet one-way delay: 56.343 ms
Loss rate: 1.20%
```

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

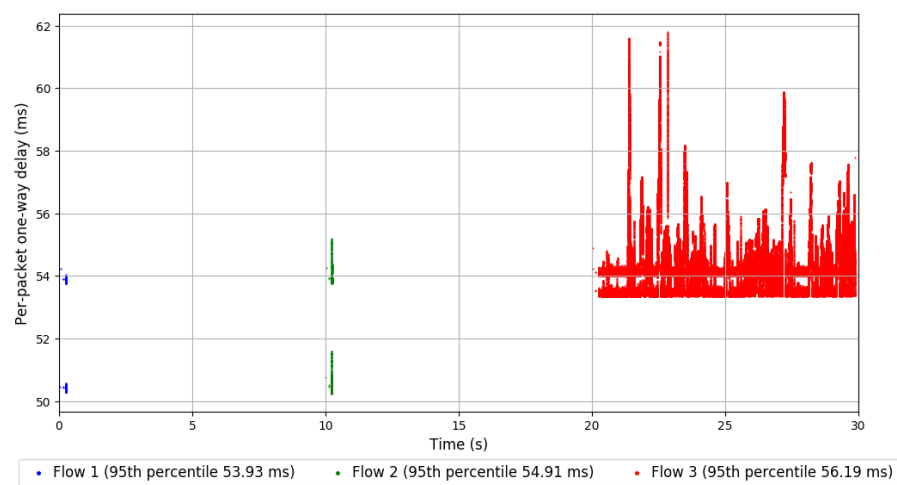
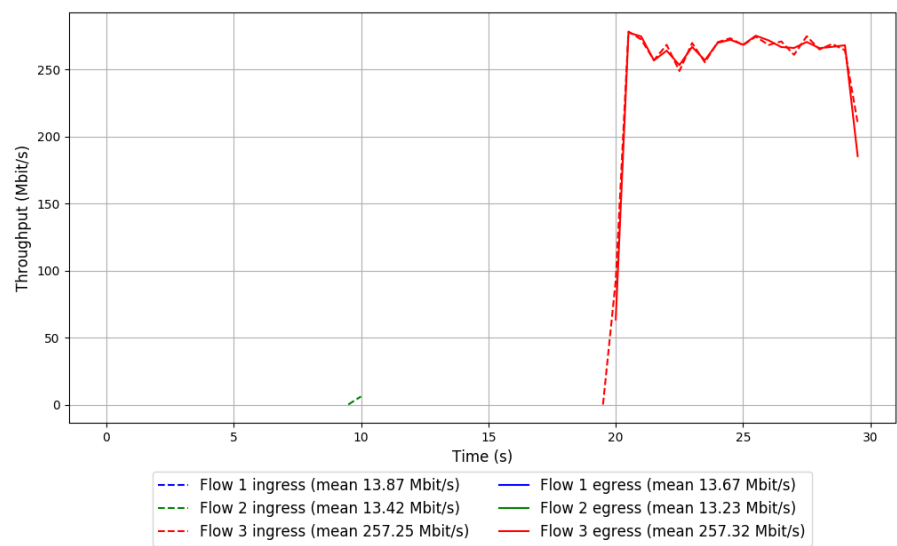


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-08-21 07:06:47
End at: 2017-08-21 07:07:17

# Below is generated by plot.py at 2017-08-21 09:40:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.10 Mbit/s
95th percentile per-packet one-way delay: 56.188 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 13.67 Mbit/s
95th percentile per-packet one-way delay: 53.934 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 13.23 Mbit/s
95th percentile per-packet one-way delay: 54.913 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 257.32 Mbit/s
95th percentile per-packet one-way delay: 56.191 ms
Loss rate: 1.02%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-21 05:28:14

End at: 2017-08-21 05:28:44

Below is generated by plot.py at 2017-08-21 09:40:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.64 Mbit/s

95th percentile per-packet one-way delay: 54.264 ms

Loss rate: 1.88%

-- Flow 1:

Average throughput: 5.08 Mbit/s

95th percentile per-packet one-way delay: 54.189 ms

Loss rate: 1.89%

-- Flow 2:

Average throughput: 7.33 Mbit/s

95th percentile per-packet one-way delay: 54.304 ms

Loss rate: 0.57%

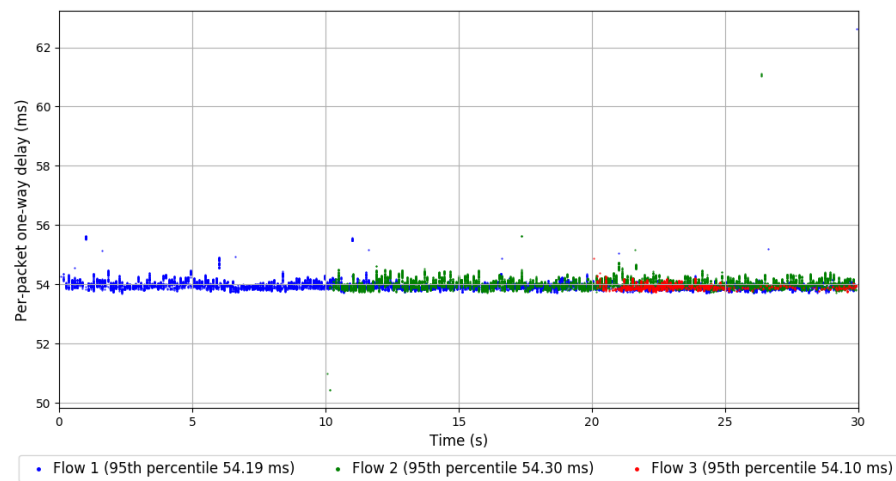
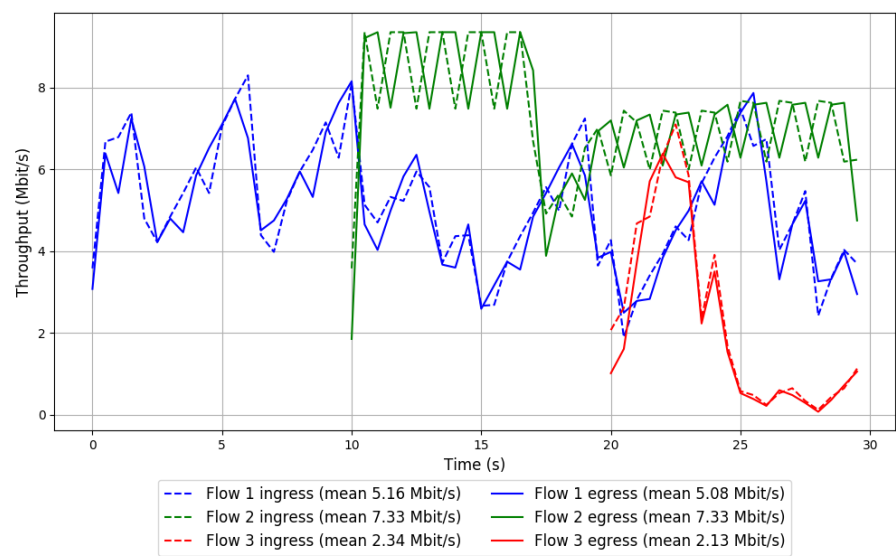
-- Flow 3:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 54.101 ms

Loss rate: 10.04%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-21 05:39:21

End at: 2017-08-21 05:39:51

Below is generated by plot.py at 2017-08-21 09:40:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 45.71 Mbit/s

95th percentile per-packet one-way delay: 54.793 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 15.35 Mbit/s

95th percentile per-packet one-way delay: 54.829 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 45.62 Mbit/s

95th percentile per-packet one-way delay: 54.779 ms

Loss rate: 0.75%

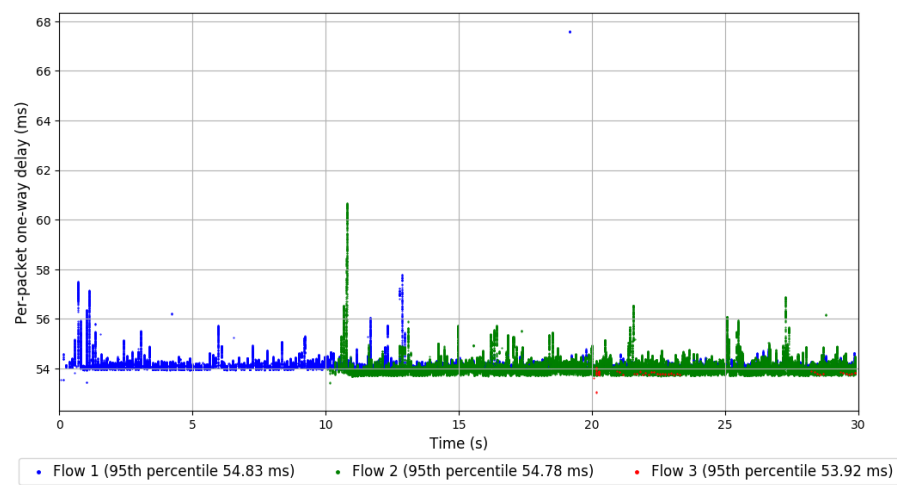
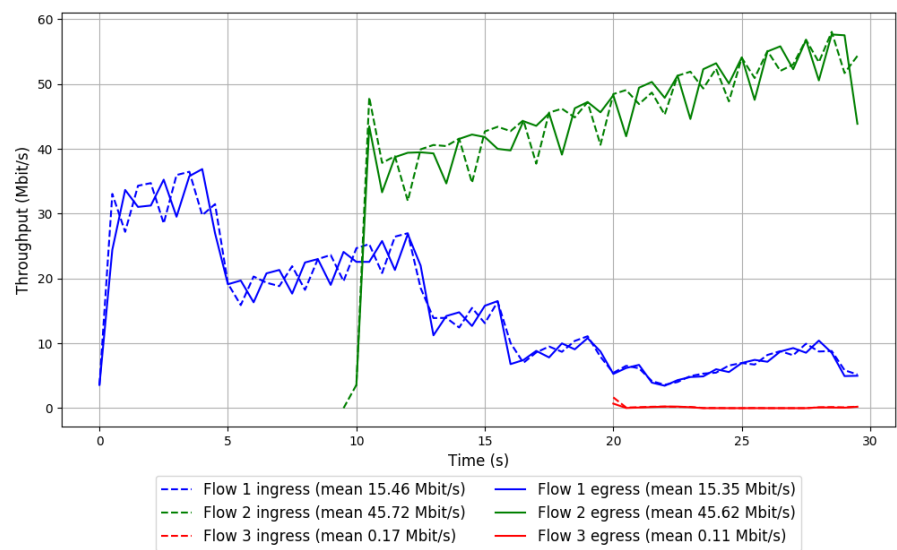
-- Flow 3:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 53.923 ms

Loss rate: 38.83%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-21 05:49:56

End at: 2017-08-21 05:50:26

Below is generated by plot.py at 2017-08-21 09:40:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.11 Mbit/s

95th percentile per-packet one-way delay: 54.074 ms

Loss rate: 3.09%

-- Flow 1:

Average throughput: 4.71 Mbit/s

95th percentile per-packet one-way delay: 54.065 ms

Loss rate: 2.26%

-- Flow 2:

Average throughput: 4.50 Mbit/s

95th percentile per-packet one-way delay: 54.083 ms

Loss rate: 4.08%

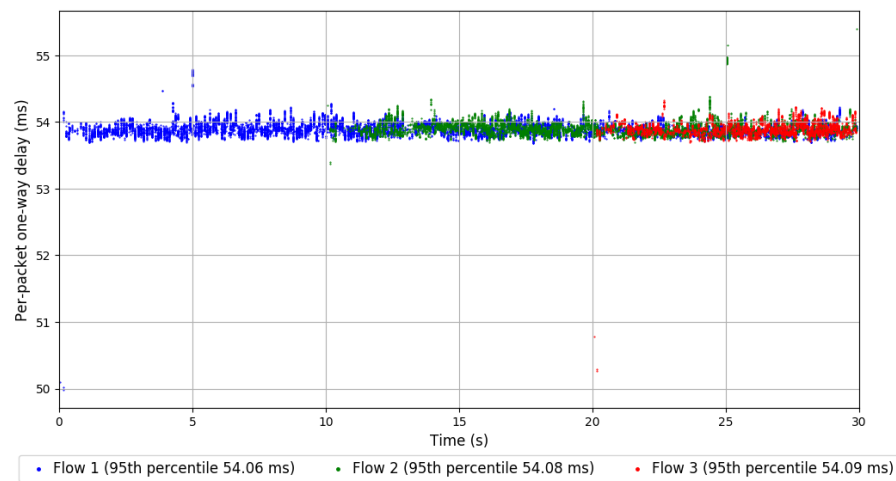
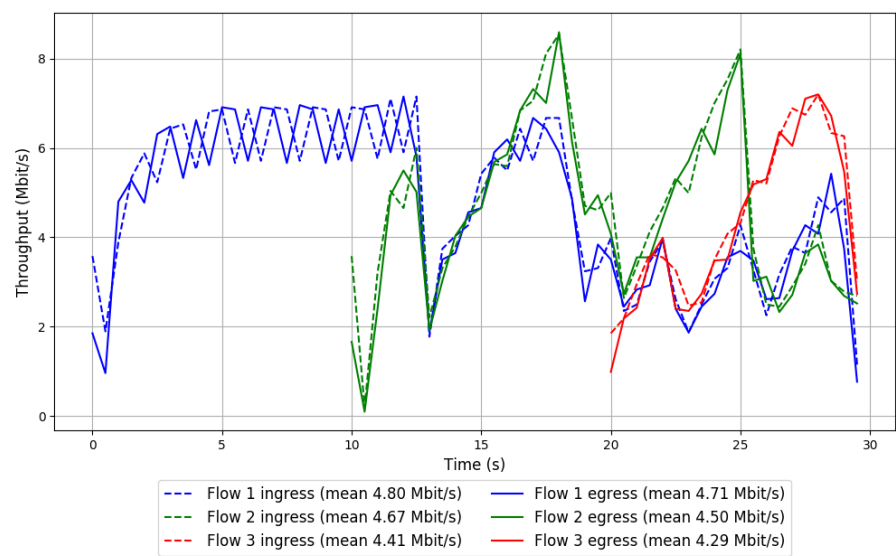
-- Flow 3:

Average throughput: 4.29 Mbit/s

95th percentile per-packet one-way delay: 54.088 ms

Loss rate: 3.73%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-21 06:00:47

End at: 2017-08-21 06:01:17

Below is generated by plot.py at 2017-08-21 09:40:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.04 Mbit/s

95th percentile per-packet one-way delay: 54.714 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 3.36 Mbit/s

95th percentile per-packet one-way delay: 54.233 ms

Loss rate: 2.82%

-- Flow 2:

Average throughput: 21.74 Mbit/s

95th percentile per-packet one-way delay: 54.819 ms

Loss rate: 0.85%

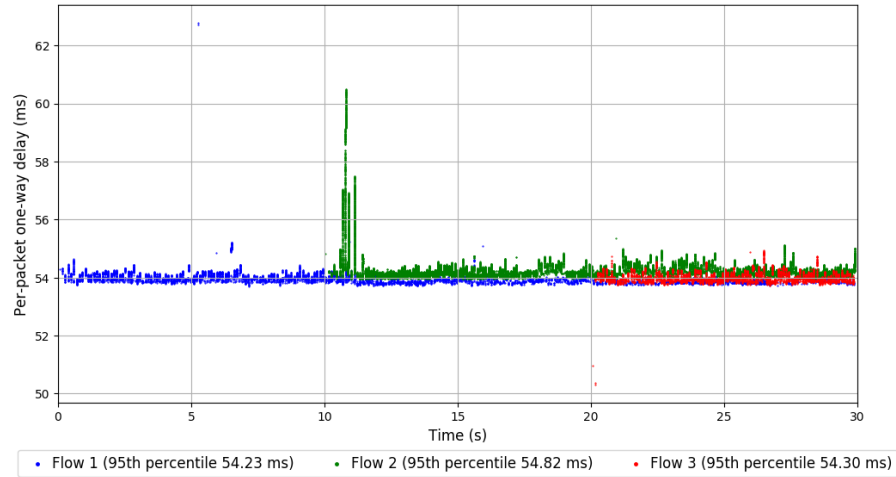
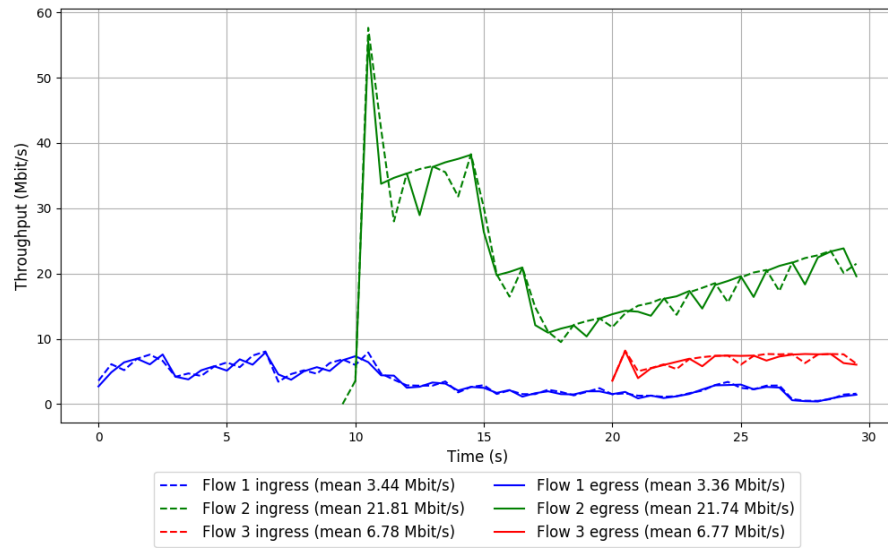
-- Flow 3:

Average throughput: 6.77 Mbit/s

95th percentile per-packet one-way delay: 54.303 ms

Loss rate: 1.21%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-08-21 06:11:19

End at: 2017-08-21 06:11:49

Below is generated by plot.py at 2017-08-21 09:40:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.50 Mbit/s

95th percentile per-packet one-way delay: 54.404 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 8.90 Mbit/s

95th percentile per-packet one-way delay: 54.420 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 54.010 ms

Loss rate: 13.85%

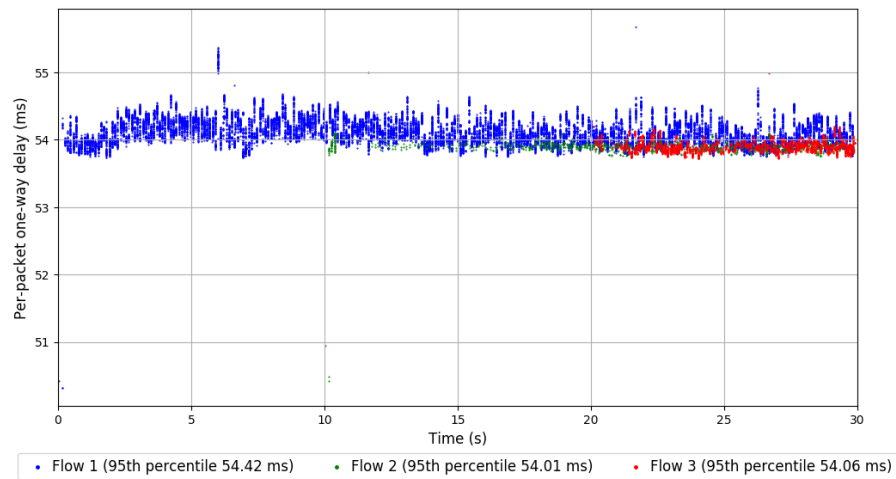
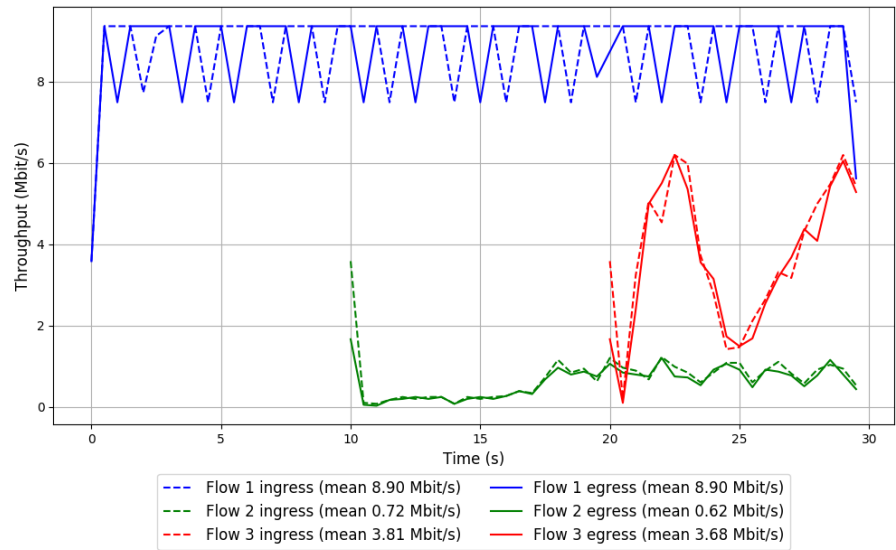
-- Flow 3:

Average throughput: 3.68 Mbit/s

95th percentile per-packet one-way delay: 54.064 ms

Loss rate: 4.50%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-21 06:21:44

End at: 2017-08-21 06:22:14

Below is generated by plot.py at 2017-08-21 09:40:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 54.079 ms

Loss rate: 2.97%

-- Flow 1:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 54.119 ms

Loss rate: 4.19%

-- Flow 2:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 54.047 ms

Loss rate: 1.77%

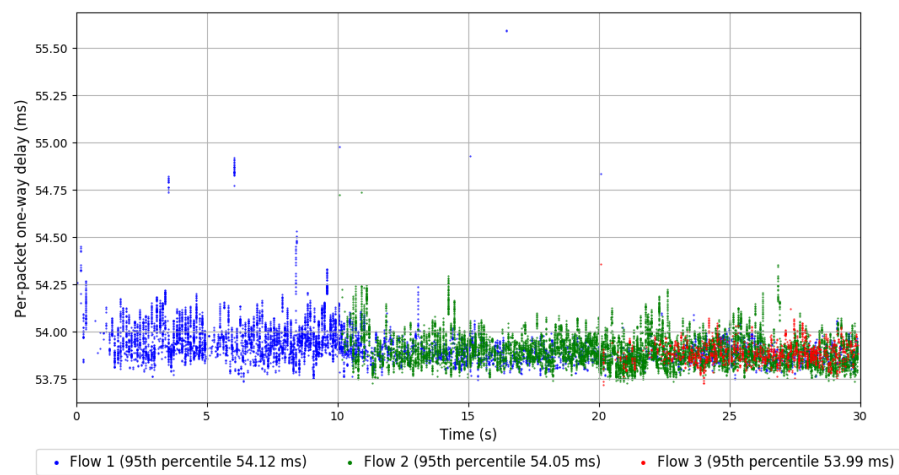
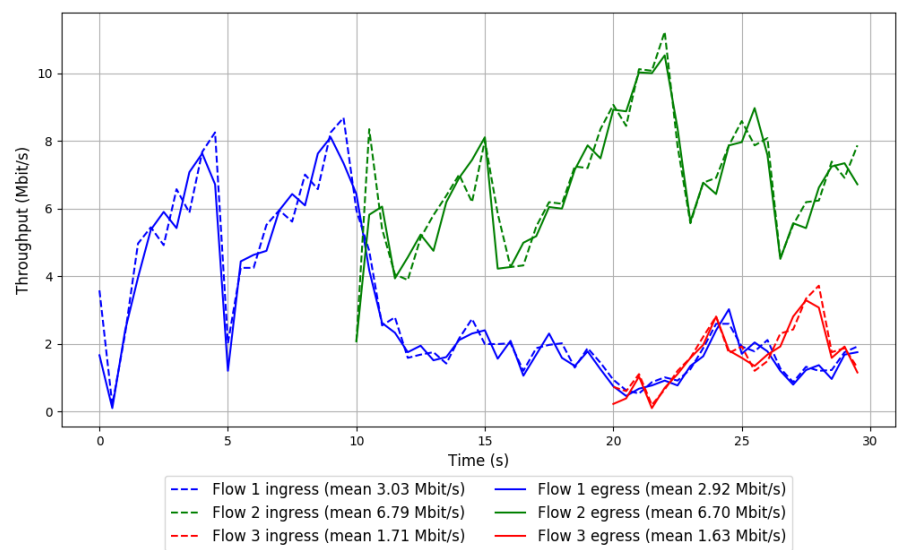
-- Flow 3:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 53.993 ms

Loss rate: 6.05%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-21 06:32:39

End at: 2017-08-21 06:33:09

Below is generated by plot.py at 2017-08-21 09:40:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 31.25 Mbit/s

95th percentile per-packet one-way delay: 54.769 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 54.147 ms

Loss rate: 4.21%

-- Flow 2:

Average throughput: 42.94 Mbit/s

95th percentile per-packet one-way delay: 54.804 ms

Loss rate: 0.65%

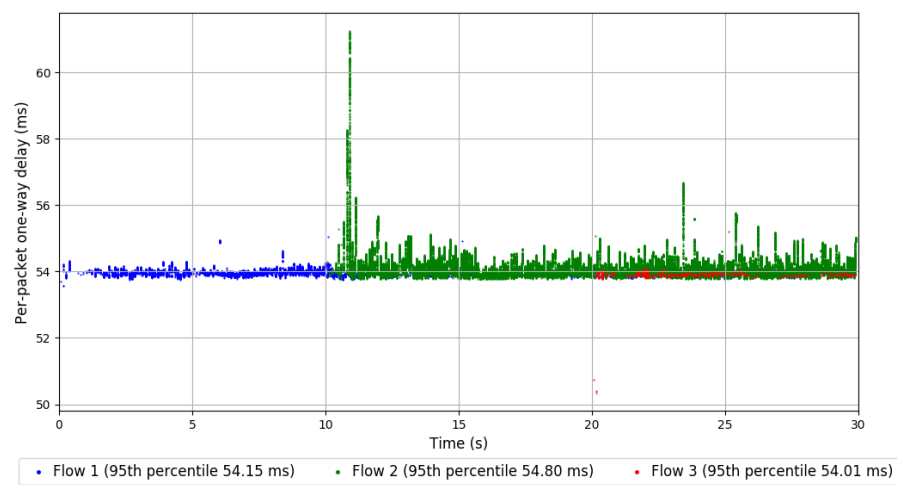
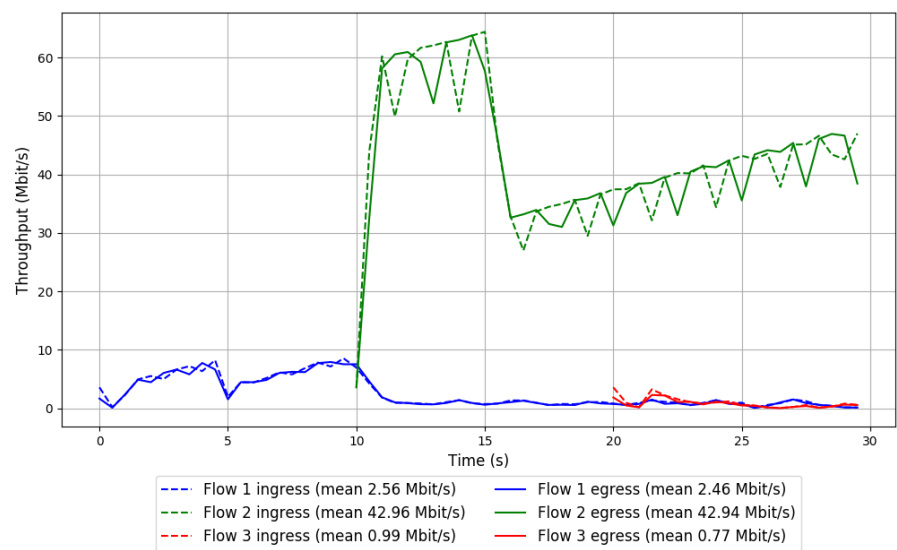
-- Flow 3:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 54.014 ms

Loss rate: 23.19%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-21 06:43:18

End at: 2017-08-21 06:43:48

Below is generated by plot.py at 2017-08-21 09:40:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 26.25 Mbit/s

95th percentile per-packet one-way delay: 54.775 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 24.51 Mbit/s

95th percentile per-packet one-way delay: 54.792 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 54.075 ms

Loss rate: 8.72%

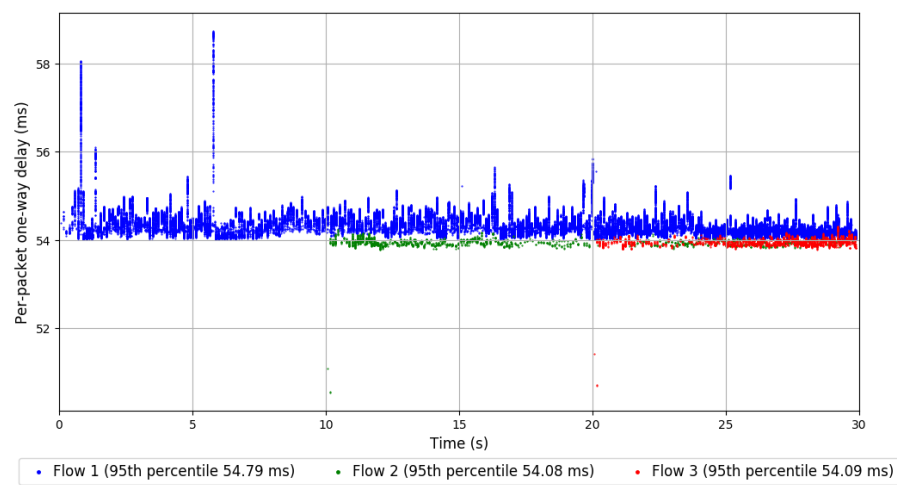
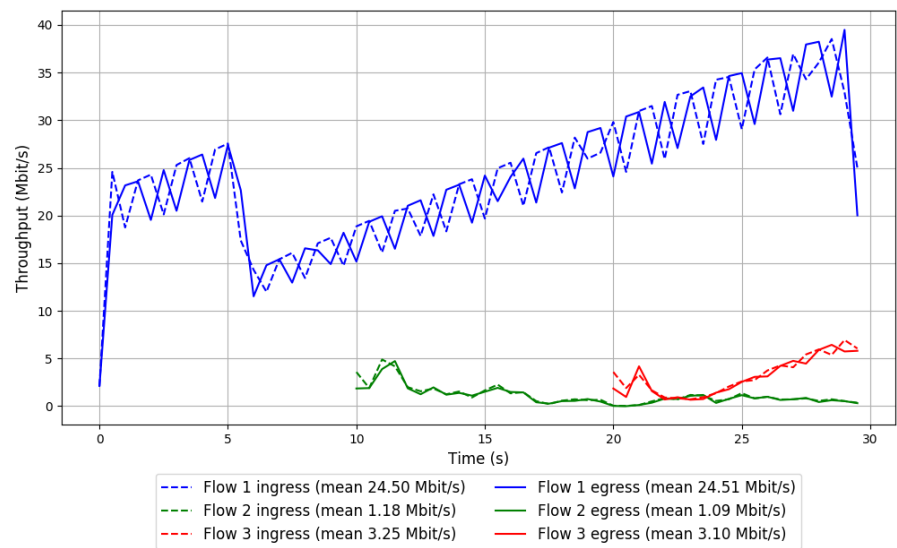
-- Flow 3:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 54.087 ms

Loss rate: 5.48%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-21 06:53:58

End at: 2017-08-21 06:54:28

Below is generated by plot.py at 2017-08-21 09:40:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 27.75 Mbit/s

95th percentile per-packet one-way delay: 55.560 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 25.73 Mbit/s

95th percentile per-packet one-way delay: 55.878 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 54.056 ms

Loss rate: 13.02%

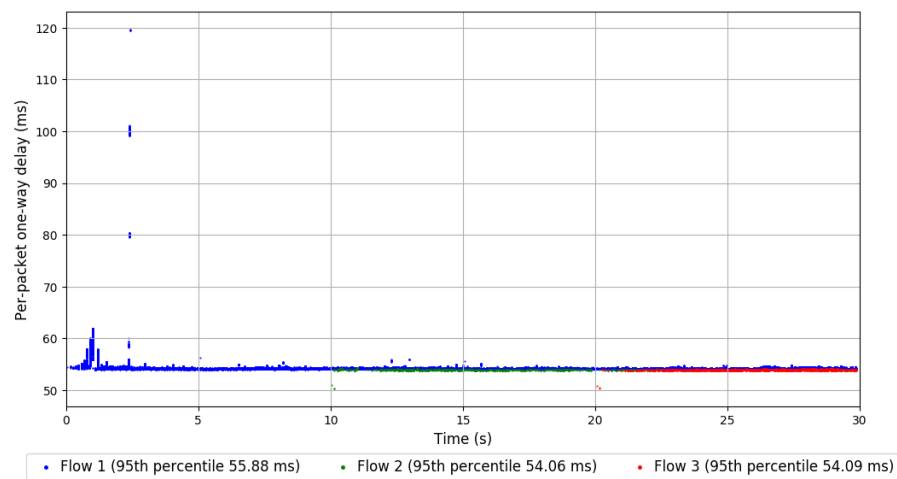
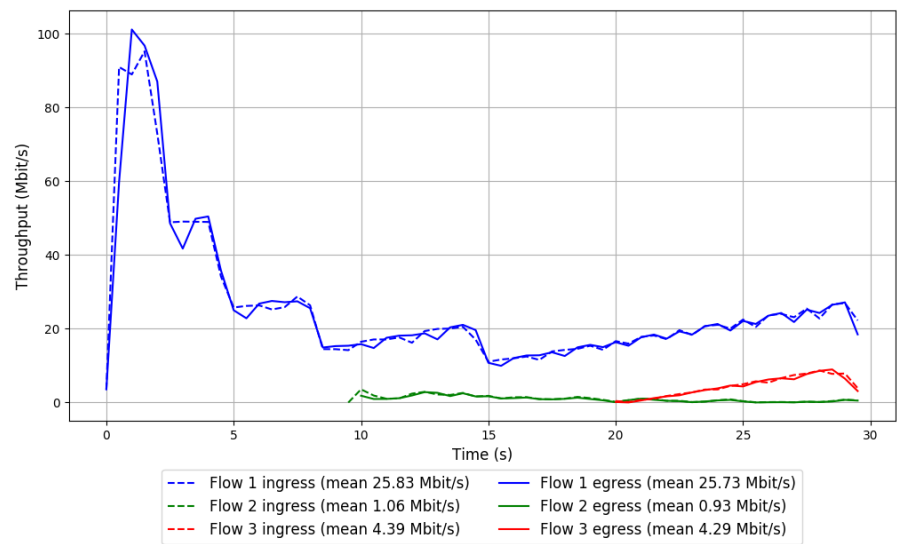
-- Flow 3:

Average throughput: 4.29 Mbit/s

95th percentile per-packet one-way delay: 54.090 ms

Loss rate: 3.34%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-21 07:04:37

End at: 2017-08-21 07:05:07

Below is generated by plot.py at 2017-08-21 09:40:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 25.01 Mbit/s

95th percentile per-packet one-way delay: 54.631 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 54.159 ms

Loss rate: 1.51%

-- Flow 2:

Average throughput: 29.12 Mbit/s

95th percentile per-packet one-way delay: 54.754 ms

Loss rate: 0.73%

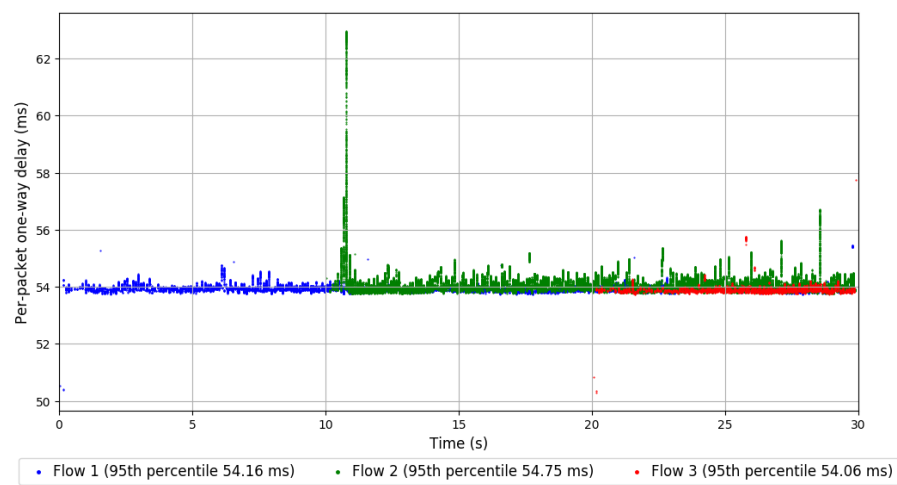
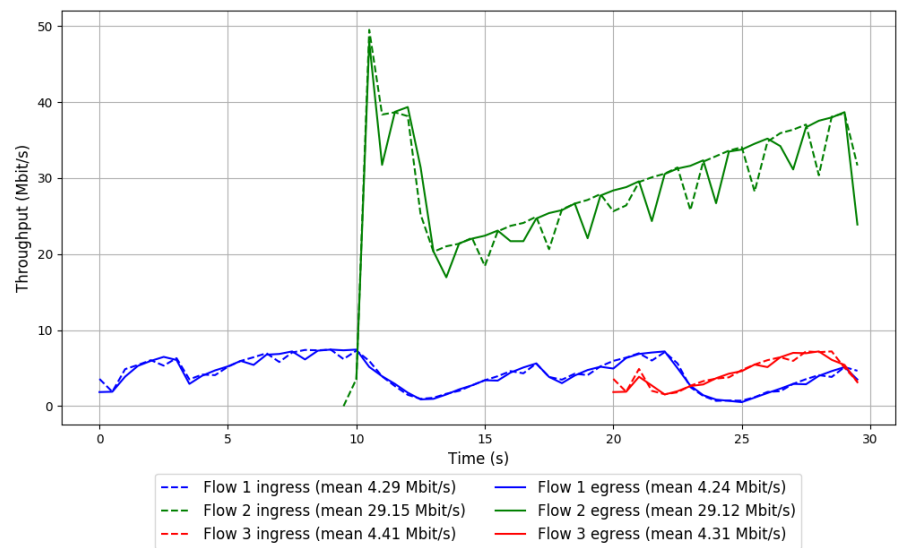
-- Flow 3:

Average throughput: 4.31 Mbit/s

95th percentile per-packet one-way delay: 54.062 ms

Loss rate: 3.26%

Run 10: Report of TCP Vegas — Data Link

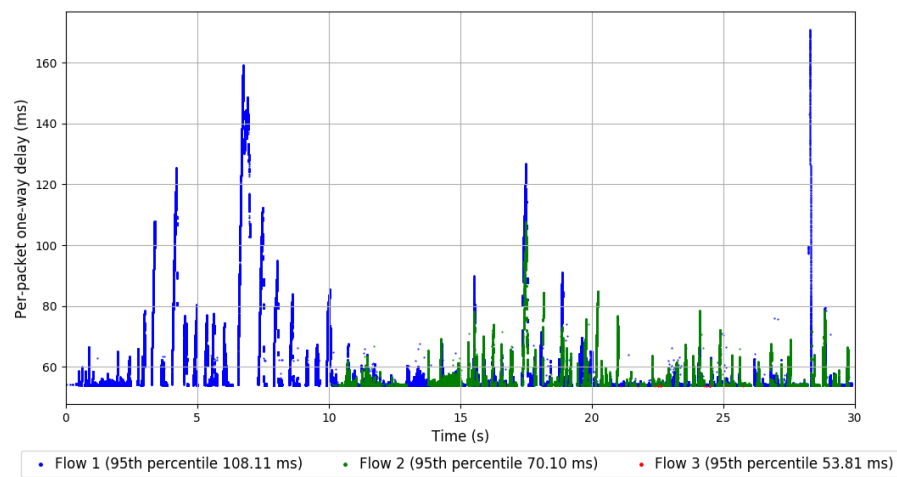
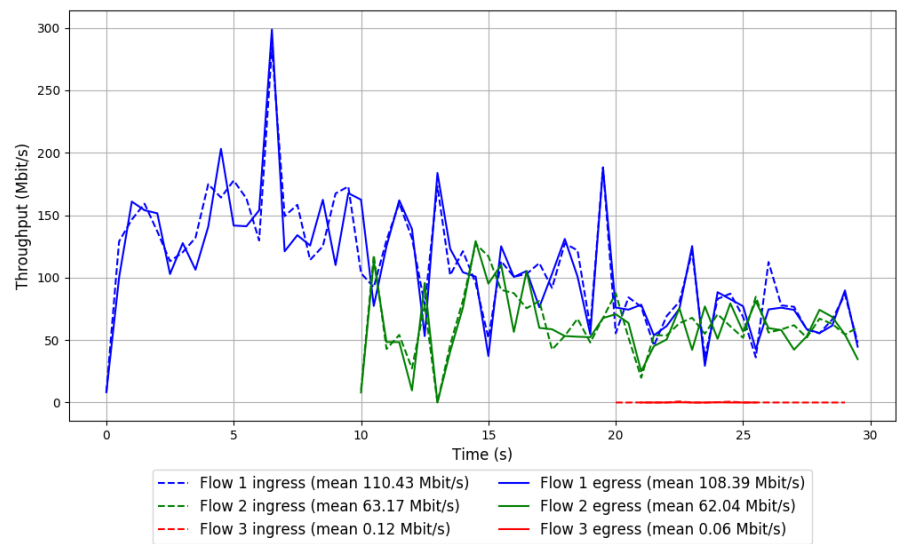


```
Run 1: Statistics of Verus

Start at: 2017-08-21 05:31:45
End at: 2017-08-21 05:32:15

# Below is generated by plot.py at 2017-08-21 09:41:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 149.38 Mbit/s
95th percentile per-packet one-way delay: 99.136 ms
Loss rate: 2.34%
-- Flow 1:
Average throughput: 108.39 Mbit/s
95th percentile per-packet one-way delay: 108.114 ms
Loss rate: 2.19%
-- Flow 2:
Average throughput: 62.04 Mbit/s
95th percentile per-packet one-way delay: 70.101 ms
Loss rate: 2.66%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 53.810 ms
Loss rate: 77.32%
```

Run 1: Report of Verus — Data Link

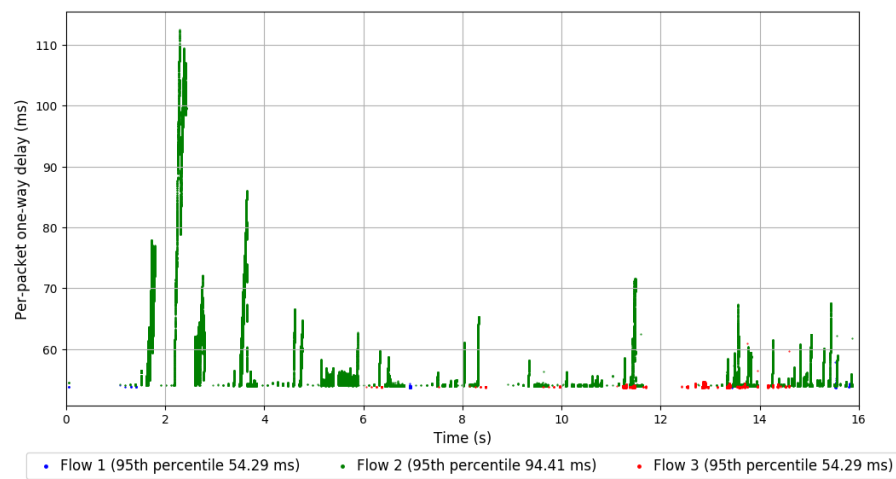
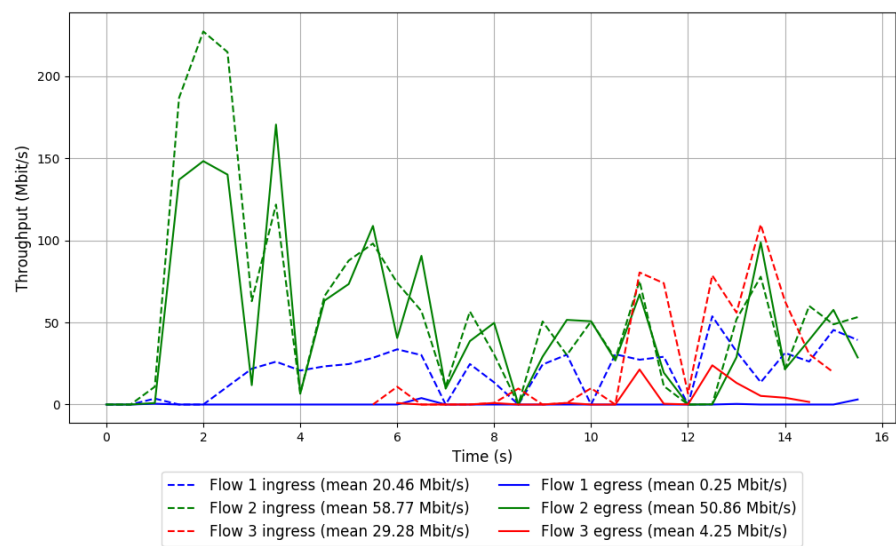


Run 2: Statistics of Verus

Start at: 2017-08-21 05:42:50

End at: 2017-08-21 05:43:20

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-21 05:53:33

End at: 2017-08-21 05:54:03

Below is generated by plot.py at 2017-08-21 09:41:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.29 Mbit/s

95th percentile per-packet one-way delay: 69.379 ms

Loss rate: 2.03%

-- Flow 1:

Average throughput: 109.68 Mbit/s

95th percentile per-packet one-way delay: 70.211 ms

Loss rate: 1.96%

-- Flow 2:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 53.897 ms

Loss rate: 89.18%

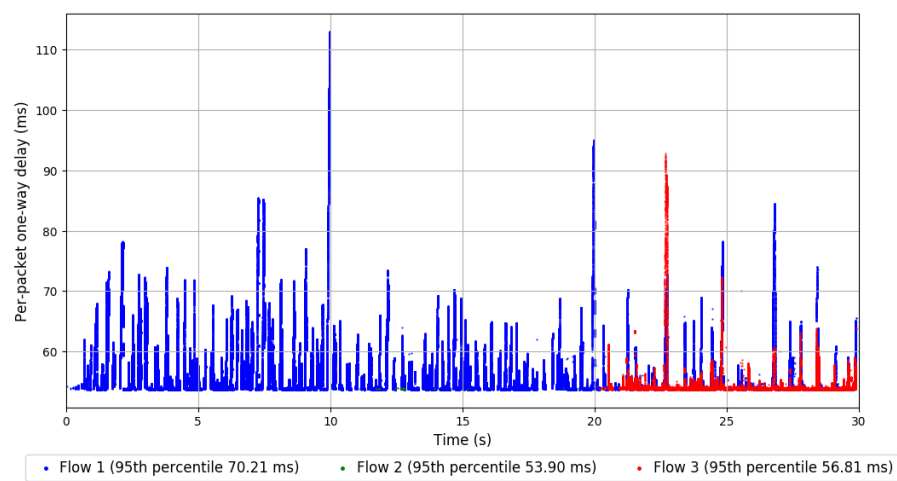
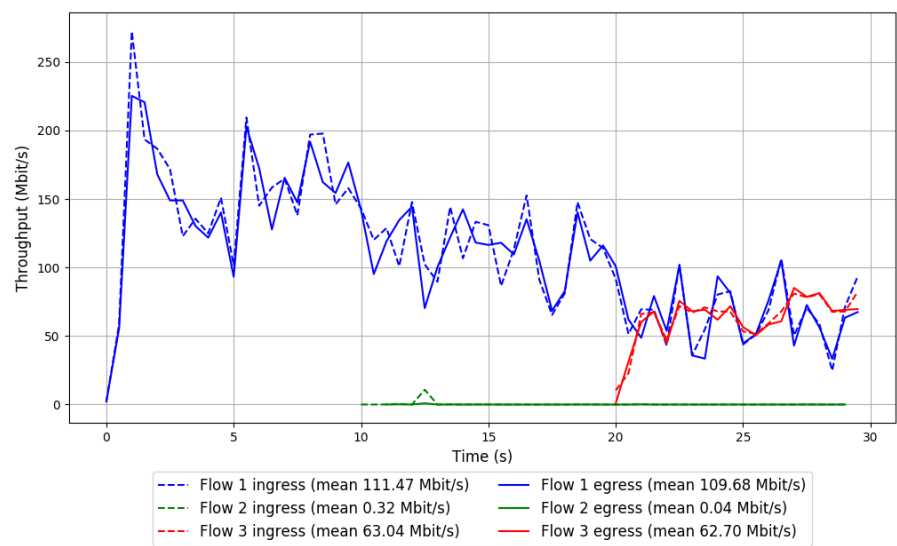
-- Flow 3:

Average throughput: 62.70 Mbit/s

95th percentile per-packet one-way delay: 56.809 ms

Loss rate: 1.51%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-21 06:04:18

End at: 2017-08-21 06:04:48

Below is generated by plot.py at 2017-08-21 09:41:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.40 Mbit/s

95th percentile per-packet one-way delay: 54.641 ms

Loss rate: 70.63%

-- Flow 1:

Average throughput: 17.40 Mbit/s

95th percentile per-packet one-way delay: 54.600 ms

Loss rate: 75.33%

-- Flow 2:

Average throughput: 30.09 Mbit/s

95th percentile per-packet one-way delay: 54.718 ms

Loss rate: 64.35%

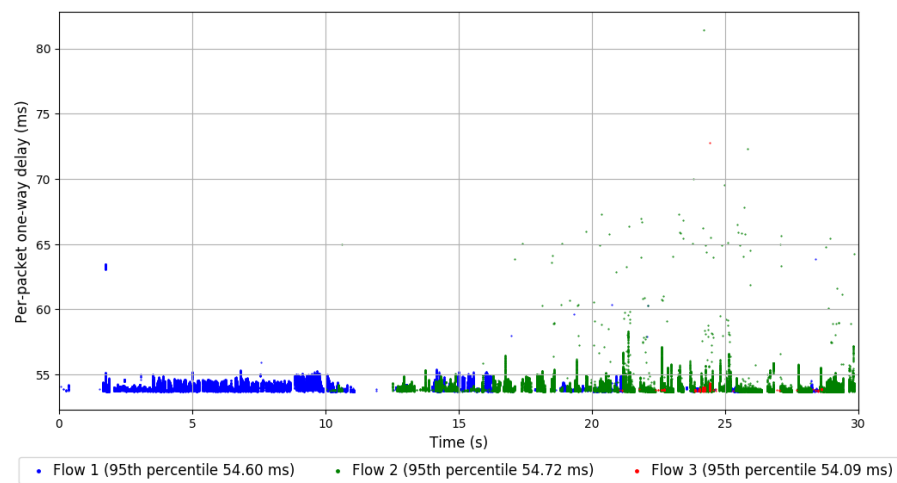
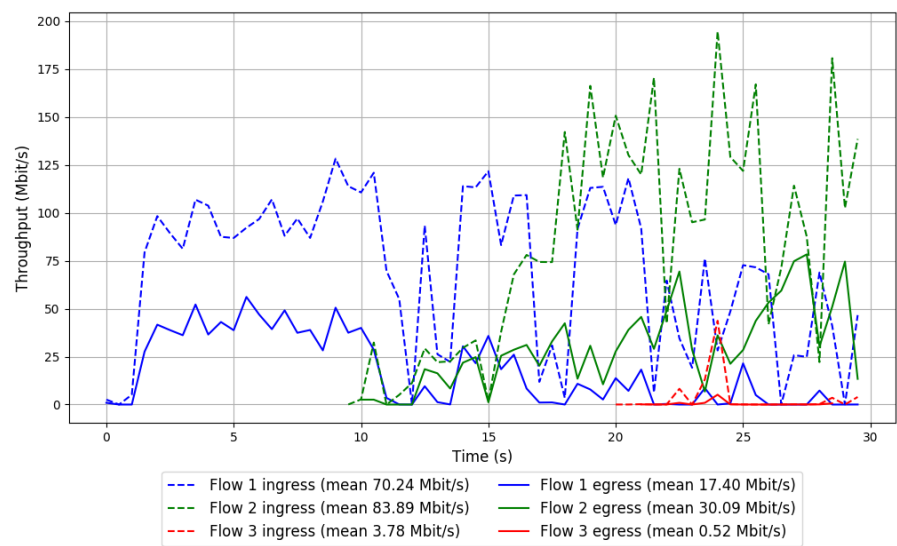
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 54.087 ms

Loss rate: 89.25%

Run 4: Report of Verus — Data Link

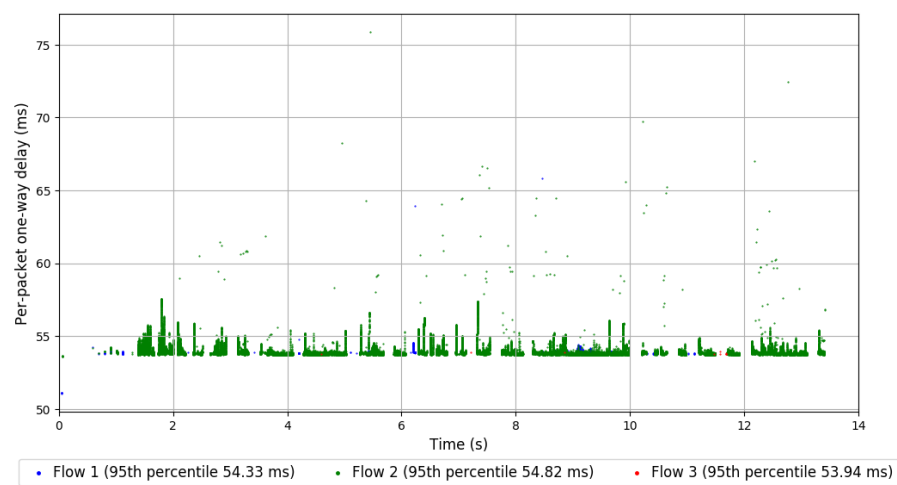
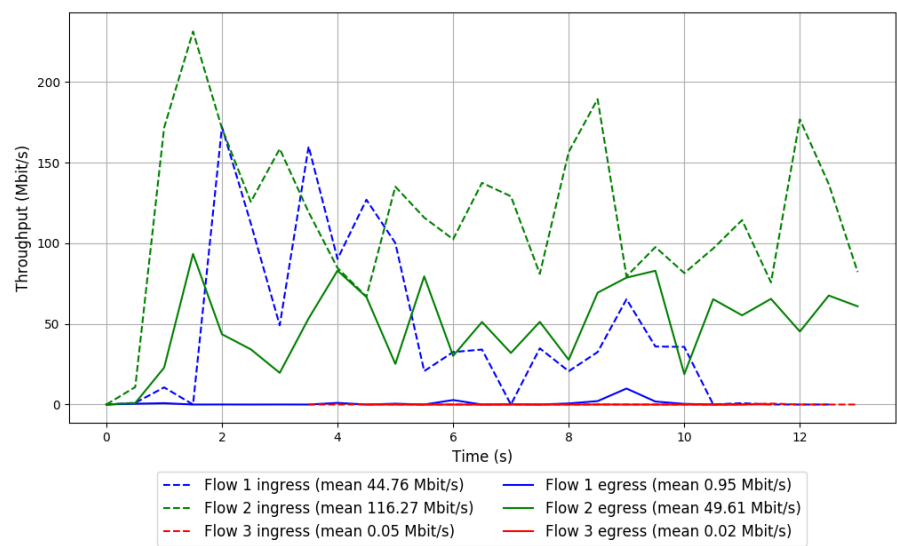


Run 5: Statistics of Verus

Start at: 2017-08-21 06:14:46

End at: 2017-08-21 06:15:16

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-21 06:25:34

End at: 2017-08-21 06:26:04

Below is generated by plot.py at 2017-08-21 09:41:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.35 Mbit/s

95th percentile per-packet one-way delay: 71.166 ms

Loss rate: 3.33%

-- Flow 1:

Average throughput: 94.05 Mbit/s

95th percentile per-packet one-way delay: 68.430 ms

Loss rate: 3.37%

-- Flow 2:

Average throughput: 64.78 Mbit/s

95th percentile per-packet one-way delay: 89.026 ms

Loss rate: 3.19%

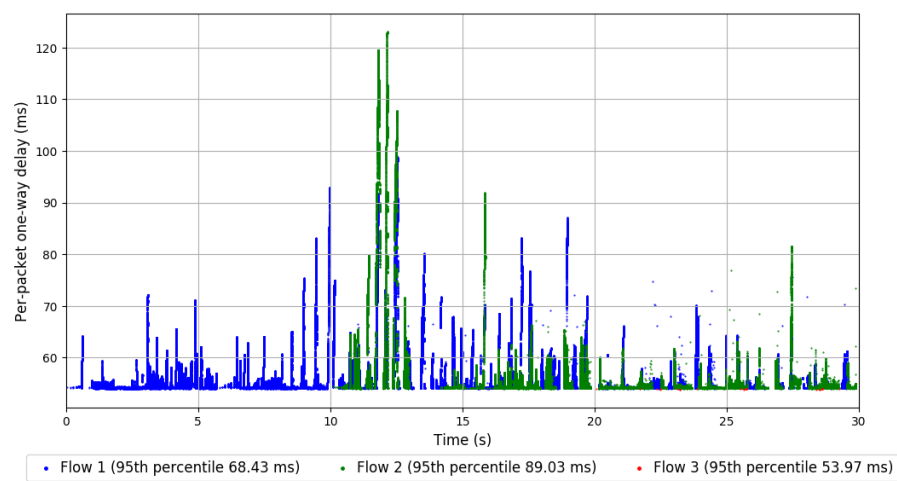
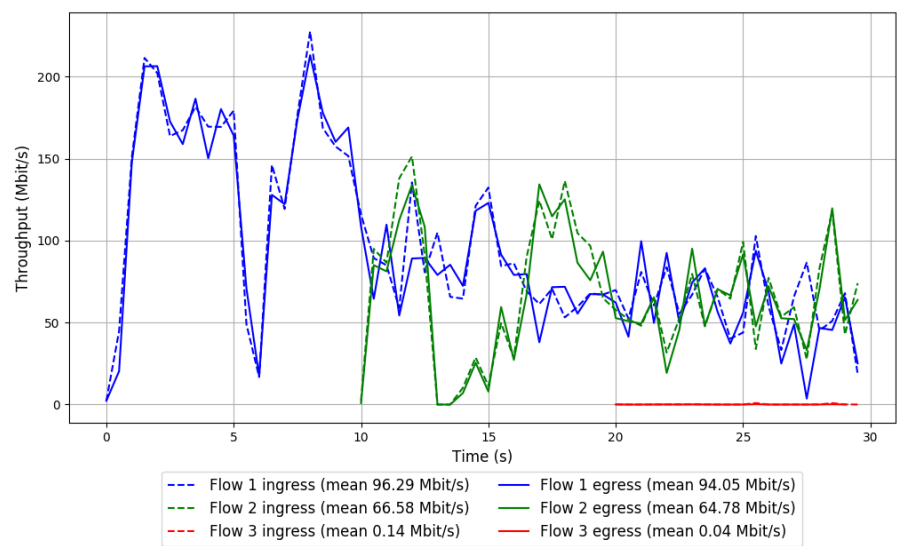
-- Flow 3:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 53.966 ms

Loss rate: 75.22%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-21 06:36:08

End at: 2017-08-21 06:36:38

Below is generated by plot.py at 2017-08-21 09:41:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.55 Mbit/s

95th percentile per-packet one-way delay: 59.232 ms

Loss rate: 58.60%

-- Flow 1:

Average throughput: 14.26 Mbit/s

95th percentile per-packet one-way delay: 54.645 ms

Loss rate: 84.31%

-- Flow 2:

Average throughput: 59.86 Mbit/s

95th percentile per-packet one-way delay: 60.233 ms

Loss rate: 0.24%

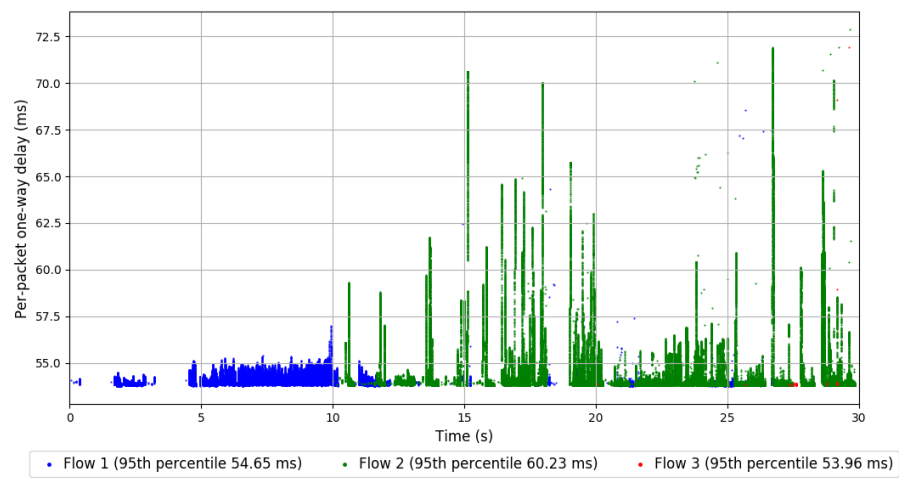
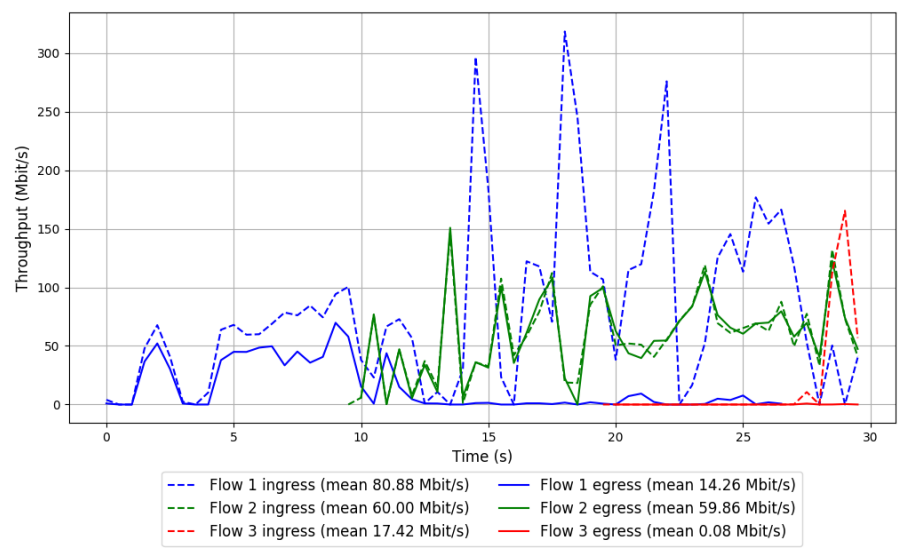
-- Flow 3:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 53.958 ms

Loss rate: 99.58%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-21 06:46:57

End at: 2017-08-21 06:47:27

Below is generated by plot.py at 2017-08-21 09:41:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.29 Mbit/s

95th percentile per-packet one-way delay: 54.725 ms

Loss rate: 93.85%

-- Flow 1:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 54.789 ms

Loss rate: 91.34%

-- Flow 2:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 54.216 ms

Loss rate: 96.33%

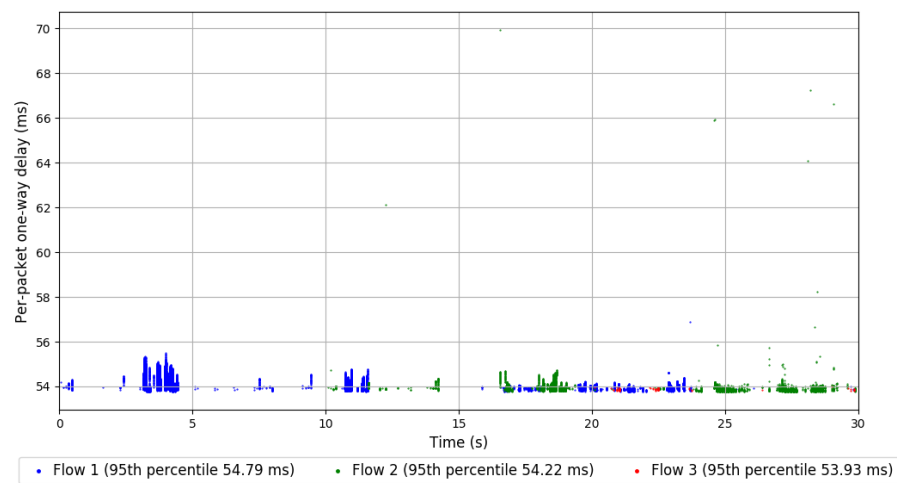
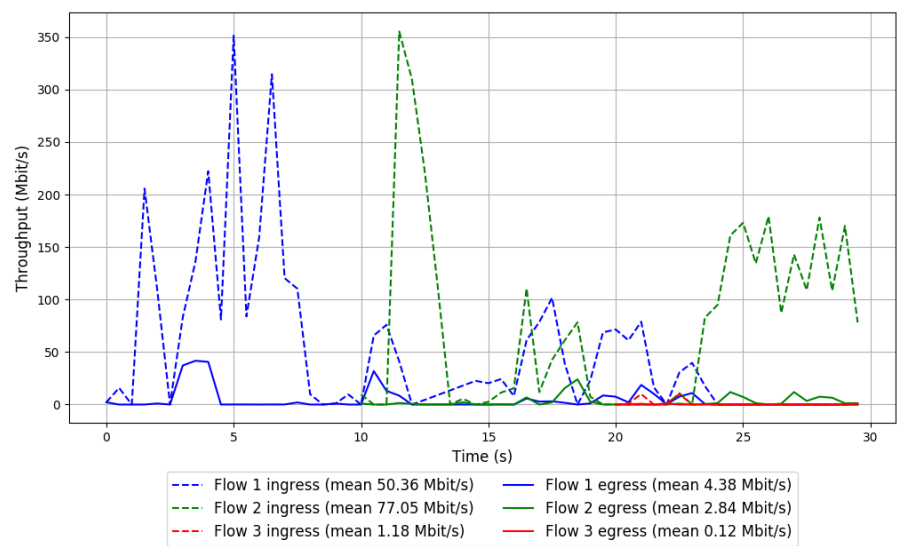
-- Flow 3:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 53.929 ms

Loss rate: 90.32%

Run 8: Report of Verus — Data Link

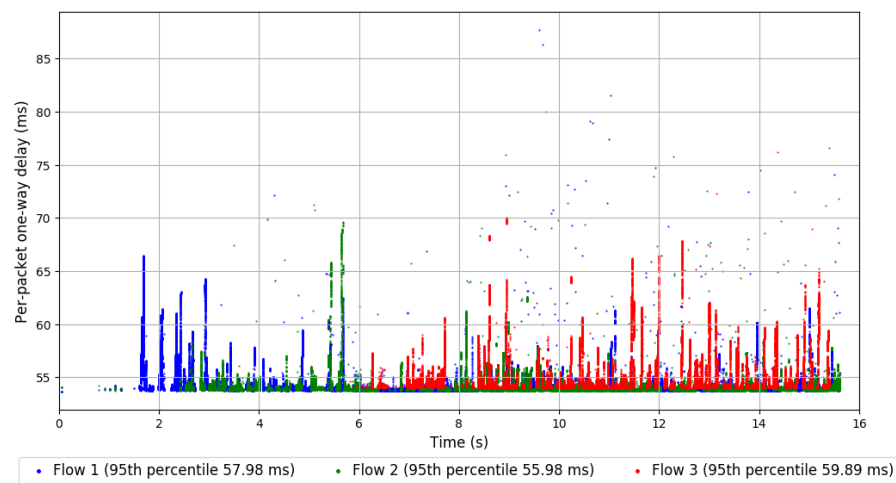
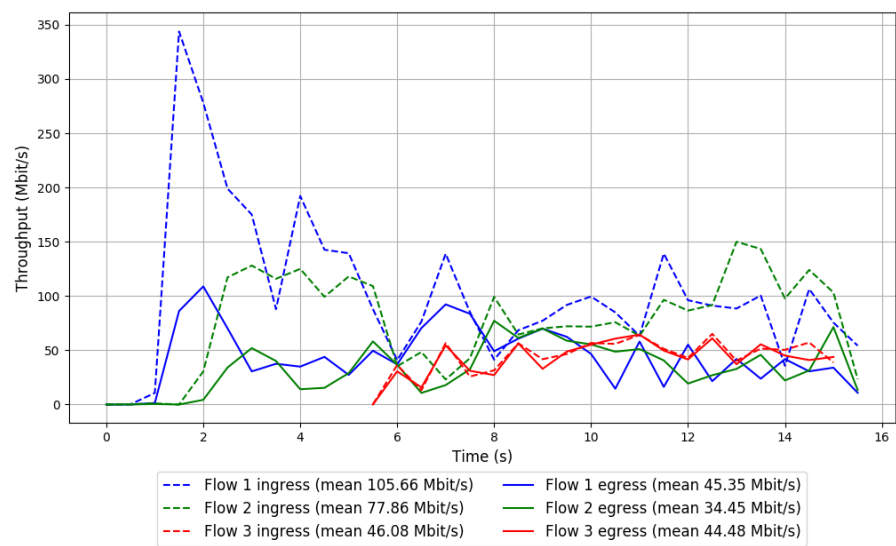


Run 9: Statistics of Verus

Start at: 2017-08-21 06:57:32

End at: 2017-08-21 06:58:02

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-08-21 07:08:18

End at: 2017-08-21 07:08:48

Below is generated by plot.py at 2017-08-21 09:42:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.20 Mbit/s

95th percentile per-packet one-way delay: 72.420 ms

Loss rate: 64.67%

-- Flow 1:

Average throughput: 1.91 Mbit/s

95th percentile per-packet one-way delay: 54.328 ms

Loss rate: 97.71%

-- Flow 2:

Average throughput: 54.94 Mbit/s

95th percentile per-packet one-way delay: 73.333 ms

Loss rate: 1.27%

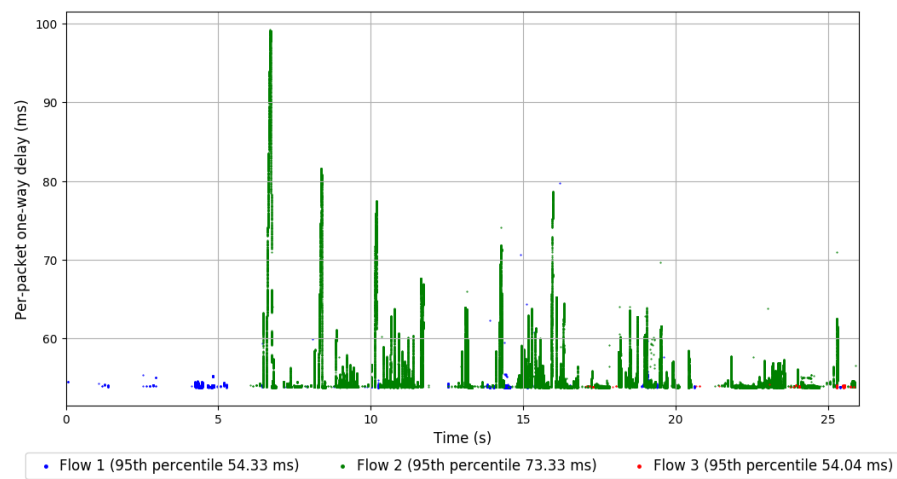
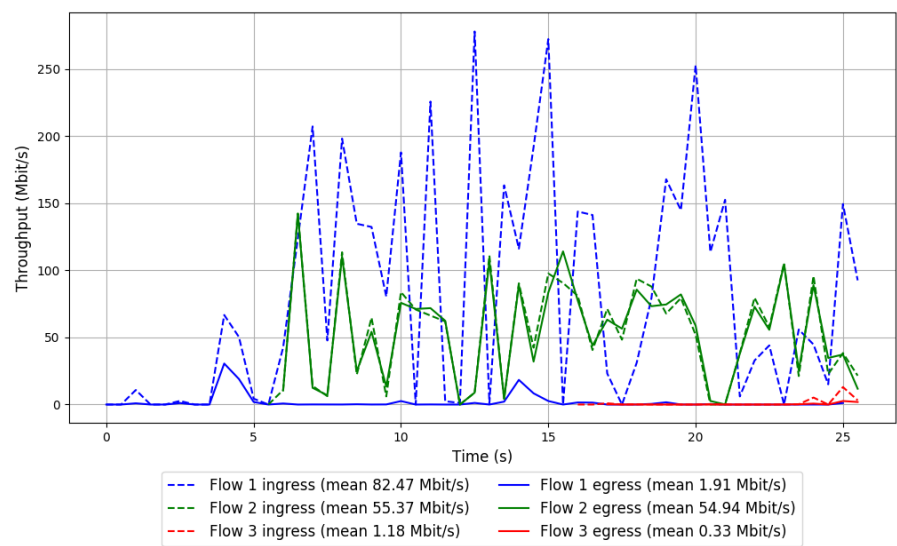
-- Flow 3:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 54.038 ms

Loss rate: 74.82%

Run 10: Report of Verus — Data Link

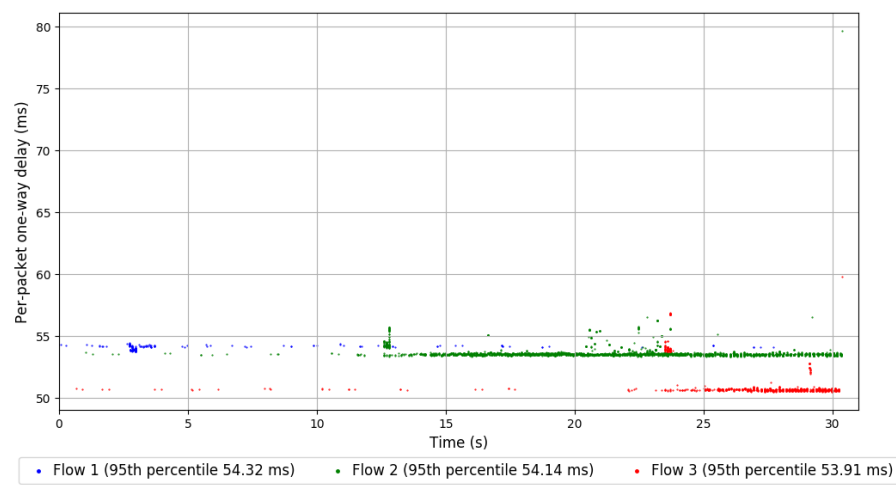
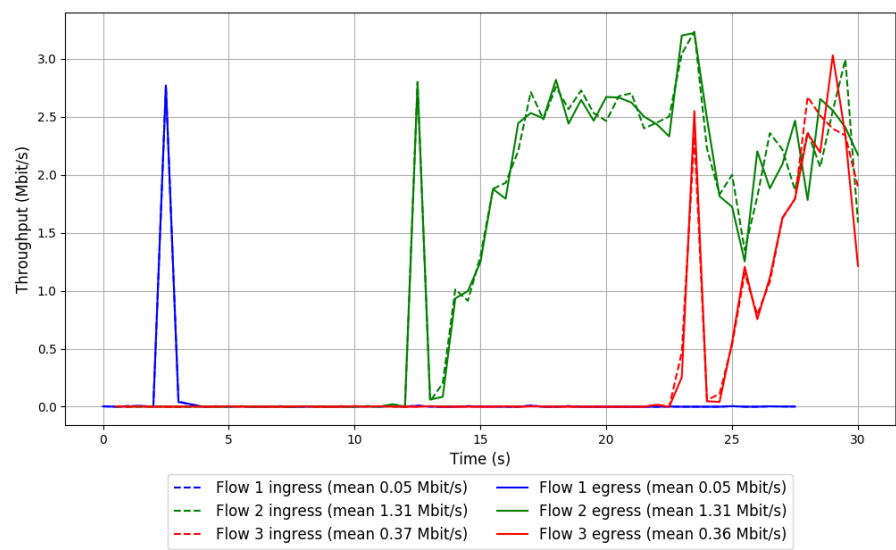


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-21 05:24:11
End at: 2017-08-21 05:24:41

# Below is generated by plot.py at 2017-08-21 09:42:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 54.183 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.317 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 54.140 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 53.910 ms
Loss rate: 3.13%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-08-21 05:35:03

End at: 2017-08-21 05:35:33

Below is generated by plot.py at 2017-08-21 09:42:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 53.845 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 54.309 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 51.006 ms

Loss rate: 0.90%

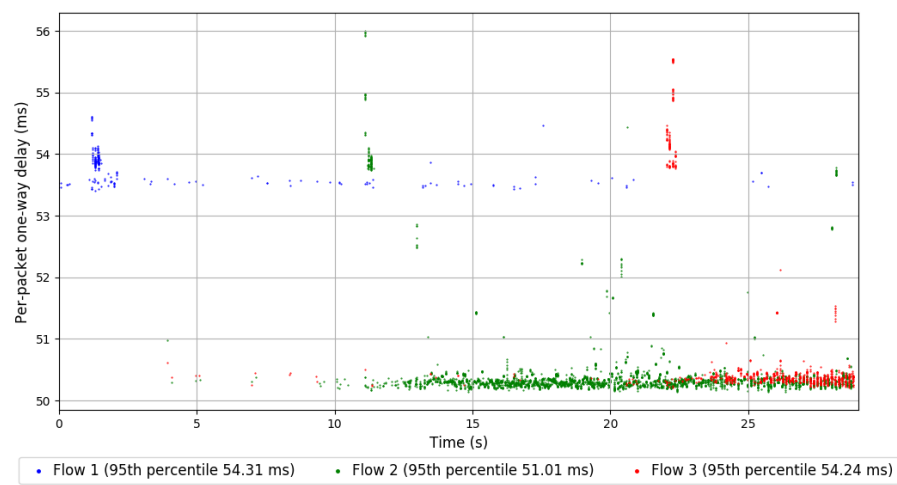
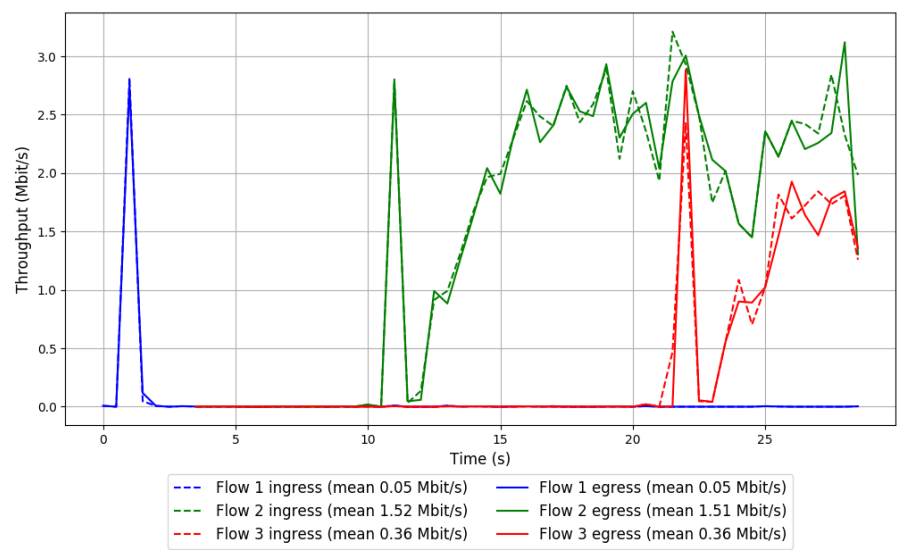
-- Flow 3:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 54.240 ms

Loss rate: 1.72%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-21 05:45:55

End at: 2017-08-21 05:46:25

Below is generated by plot.py at 2017-08-21 09:42:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 54.326 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 54.493 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 54.402 ms

Loss rate: 0.94%

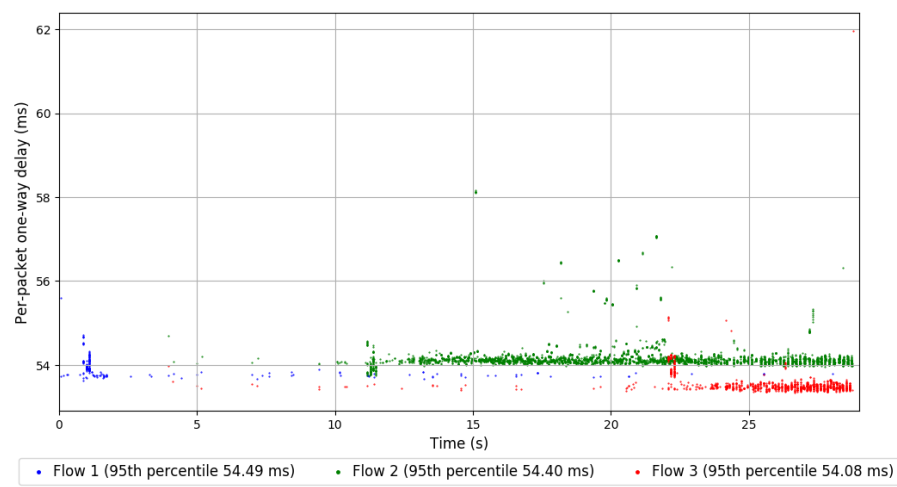
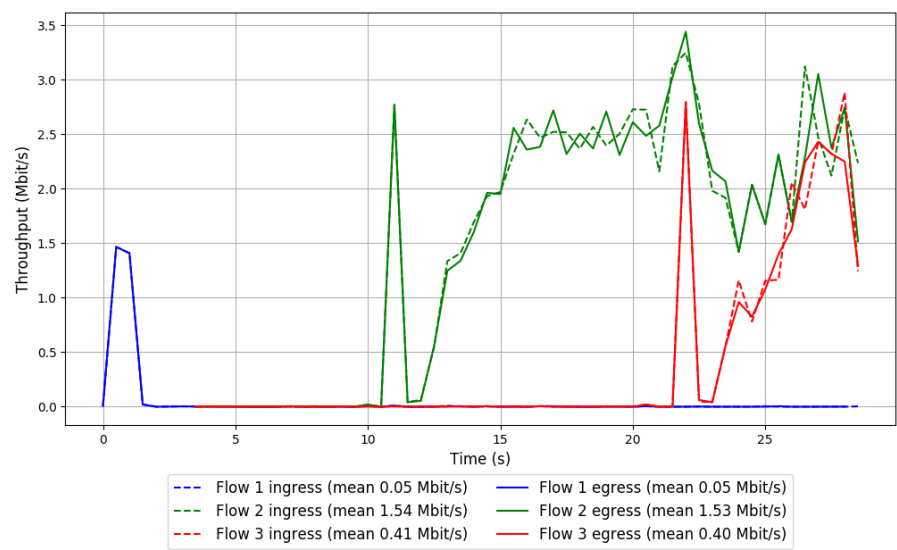
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 54.084 ms

Loss rate: 2.83%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-21 05:56:41

End at: 2017-08-21 05:57:11

Below is generated by plot.py at 2017-08-21 09:42:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 53.929 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 54.126 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 51.001 ms

Loss rate: 0.37%

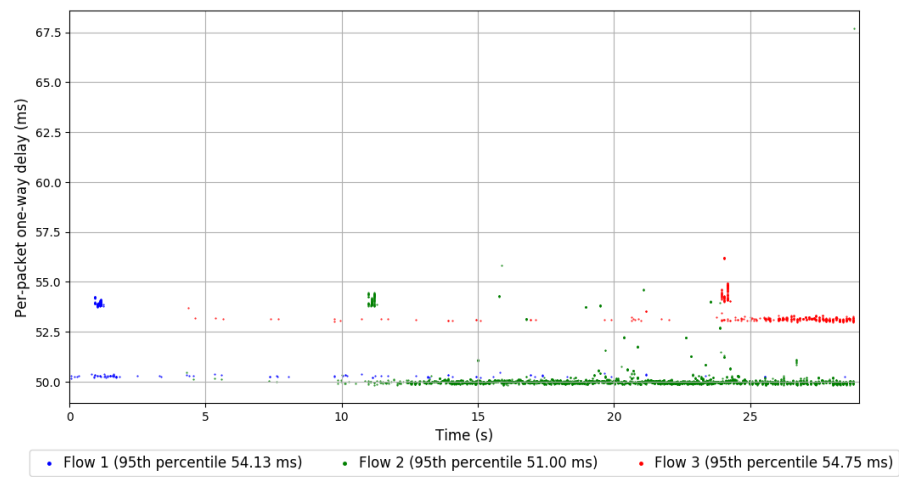
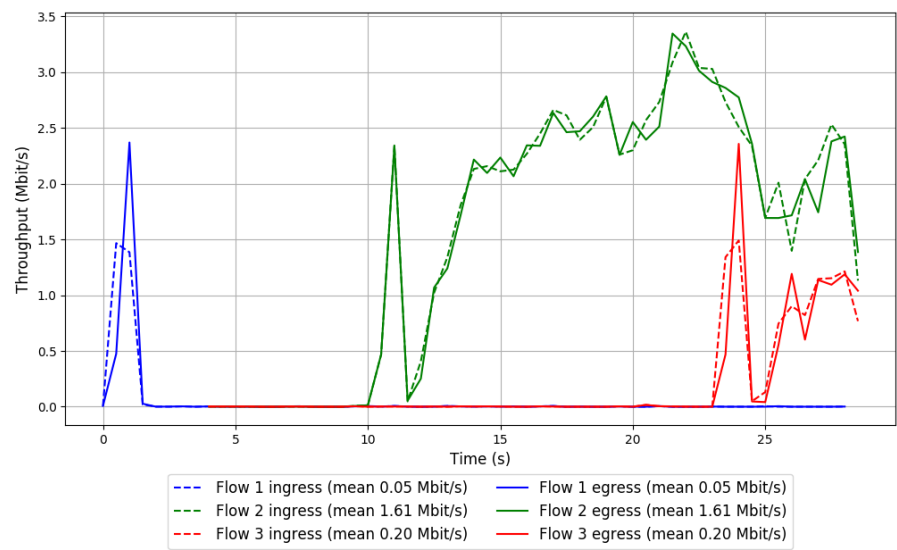
-- Flow 3:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 54.754 ms

Loss rate: 0.42%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-08-21 06:07:16

End at: 2017-08-21 06:07:46

Below is generated by plot.py at 2017-08-21 09:42:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 54.218 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 54.211 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 54.266 ms

Loss rate: 0.75%

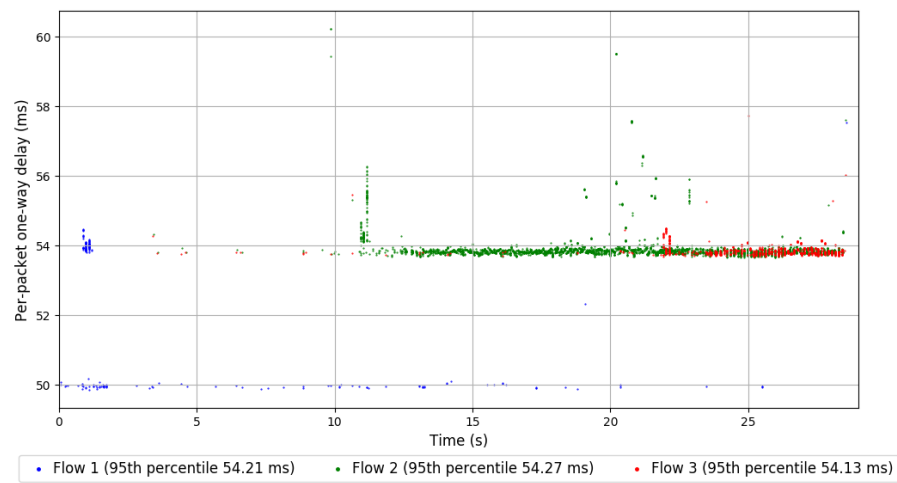
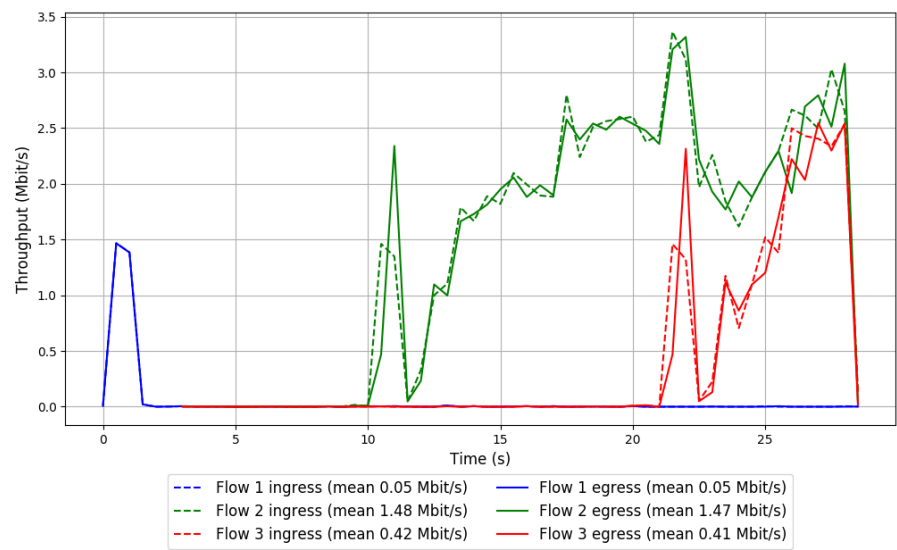
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 54.135 ms

Loss rate: 3.10%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-21 06:17:43

End at: 2017-08-21 06:18:13

Below is generated by plot.py at 2017-08-21 09:42:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 54.005 ms

Loss rate: 1.51%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 54.072 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 53.672 ms

Loss rate: 0.98%

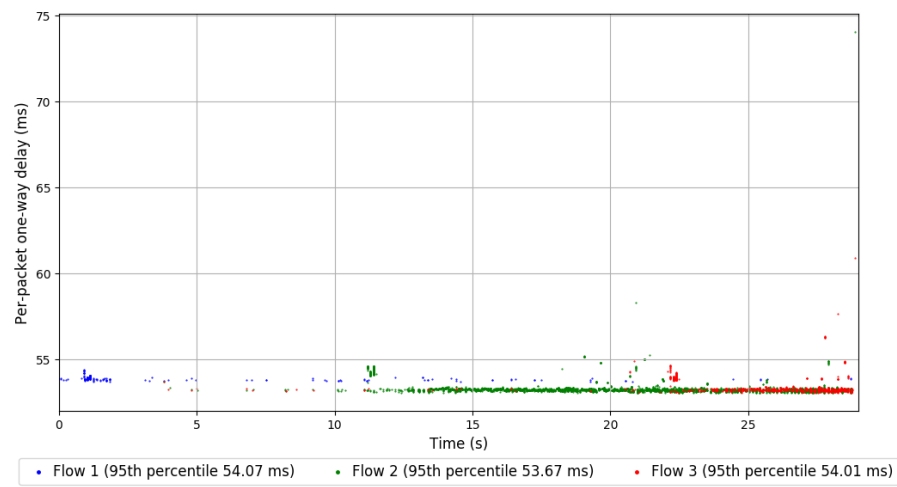
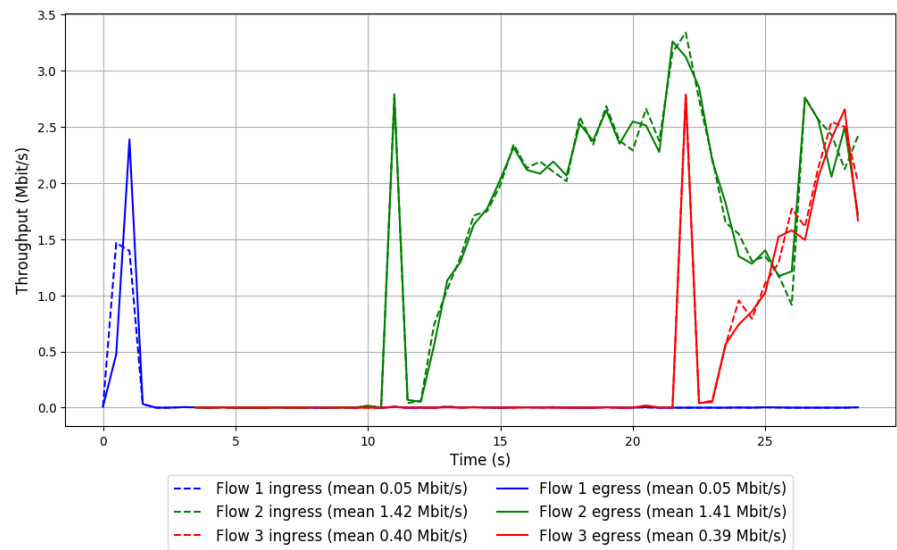
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 54.014 ms

Loss rate: 3.60%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-21 06:28:37

End at: 2017-08-21 06:29:07

Below is generated by plot.py at 2017-08-21 09:42:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 54.101 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 54.510 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 53.678 ms

Loss rate: 0.74%

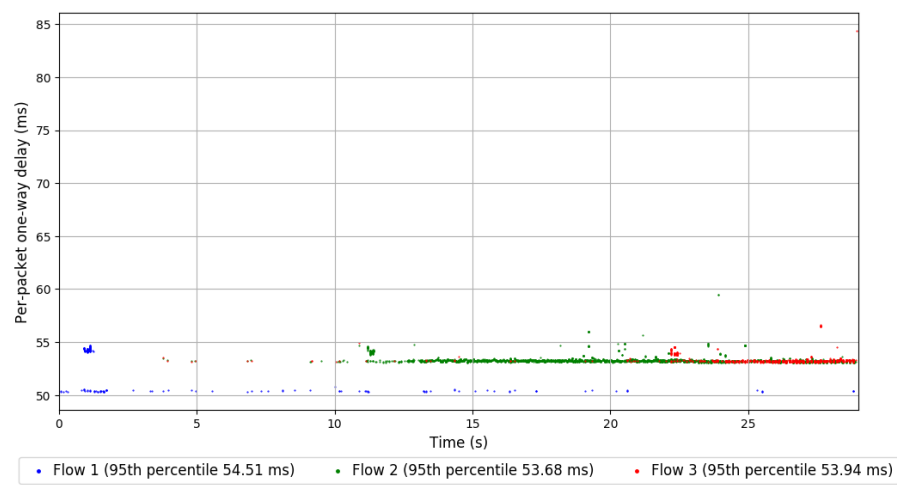
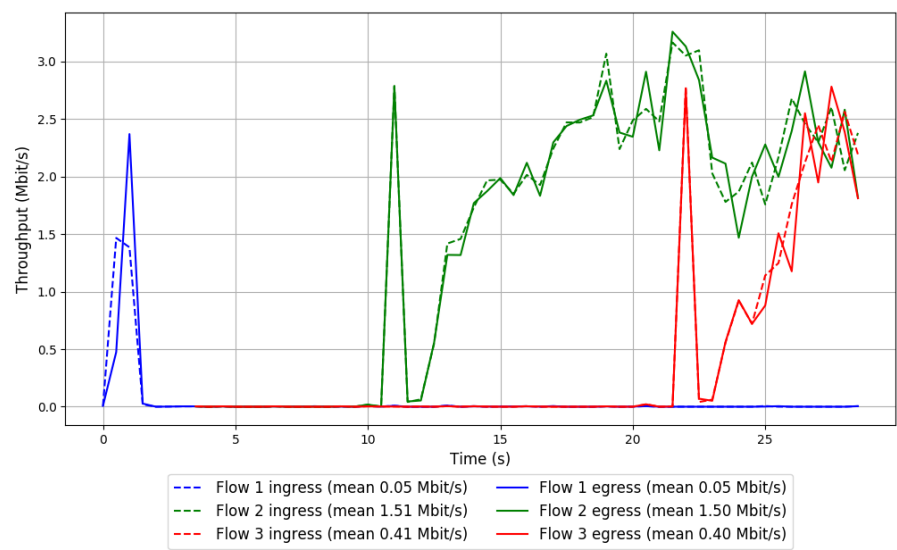
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 53.940 ms

Loss rate: 2.69%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-21 06:39:17

End at: 2017-08-21 06:39:47

Below is generated by plot.py at 2017-08-21 09:42:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 54.009 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 54.233 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 53.778 ms

Loss rate: 0.61%

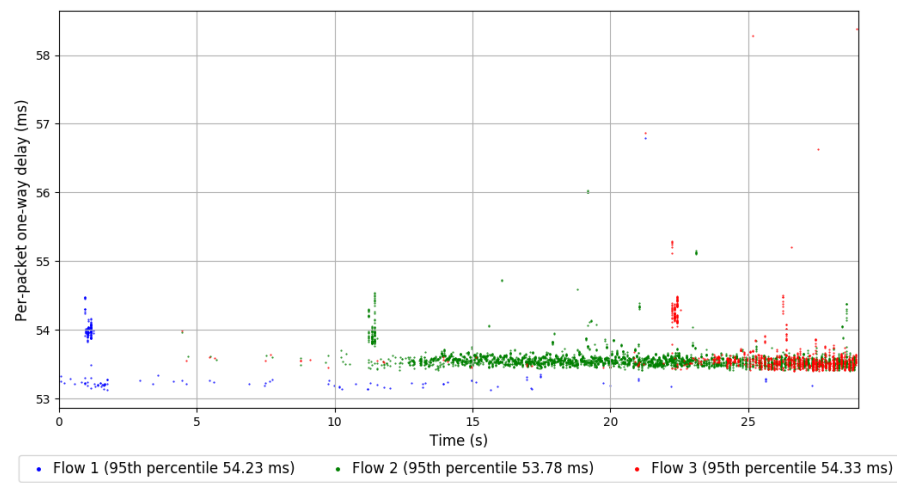
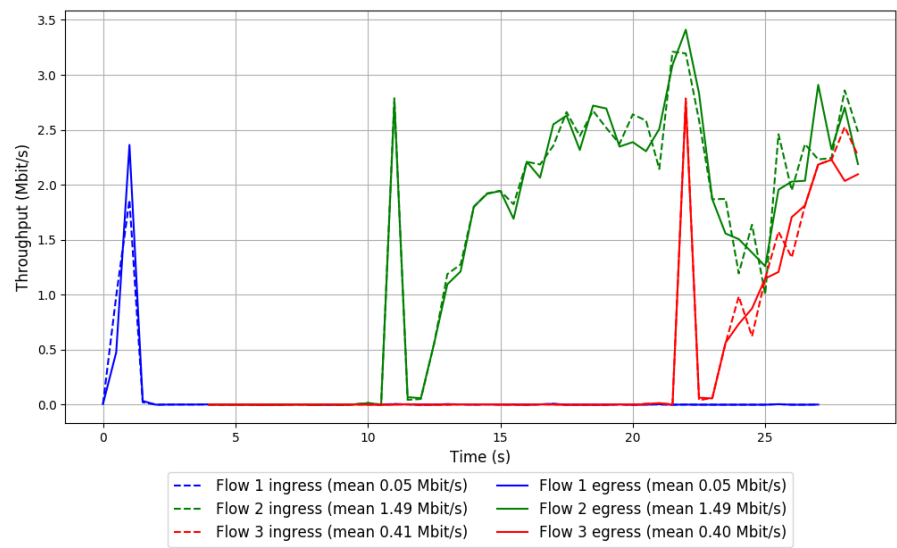
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 54.333 ms

Loss rate: 3.28%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-21 06:49:57

End at: 2017-08-21 06:50:27

Below is generated by plot.py at 2017-08-21 09:42:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 54.363 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 54.278 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 54.389 ms

Loss rate: 0.83%

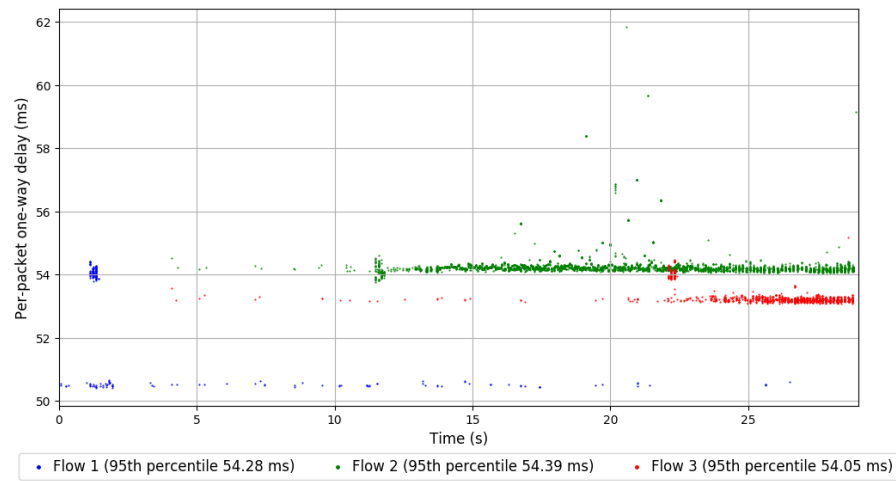
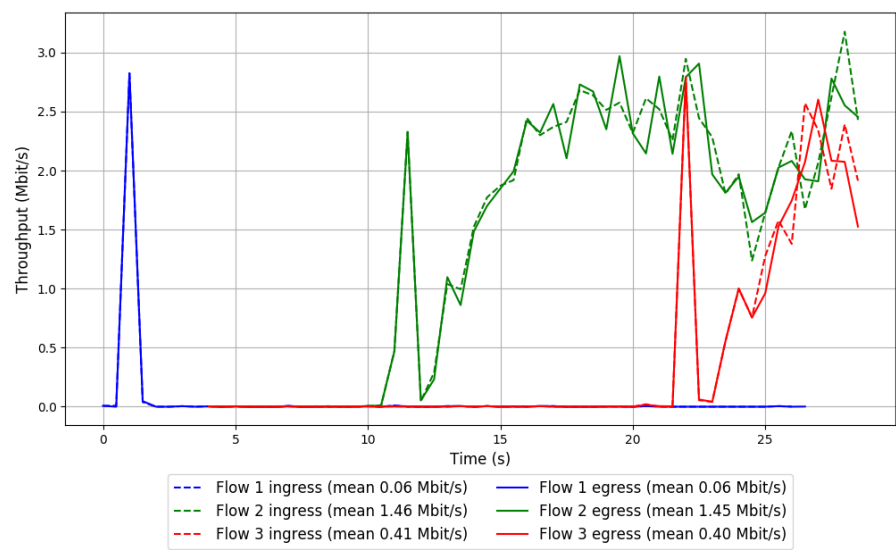
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 54.054 ms

Loss rate: 3.43%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-21 07:00:25

End at: 2017-08-21 07:00:55

Below is generated by plot.py at 2017-08-21 09:42:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 53.920 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 54.092 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 50.581 ms

Loss rate: 0.58%

-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 54.241 ms

Loss rate: 2.95%

Run 10: Report of WebRTC media — Data Link

