

Pantheon Report

Generated at 2017-08-17 04:13:10 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

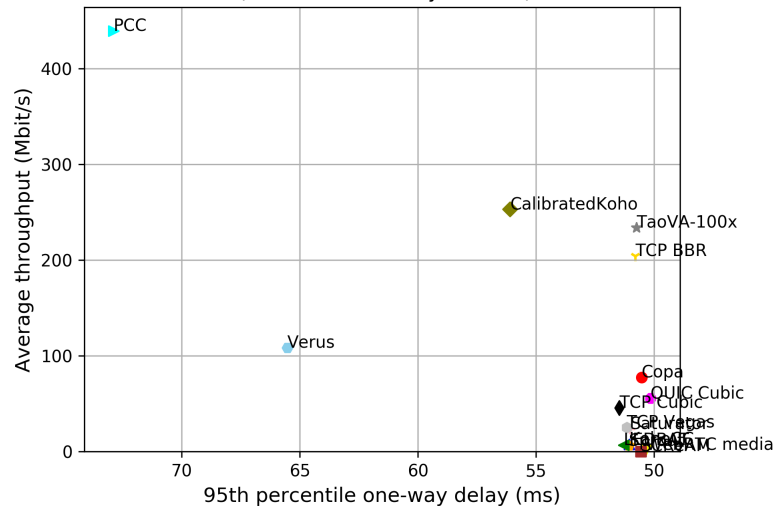
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

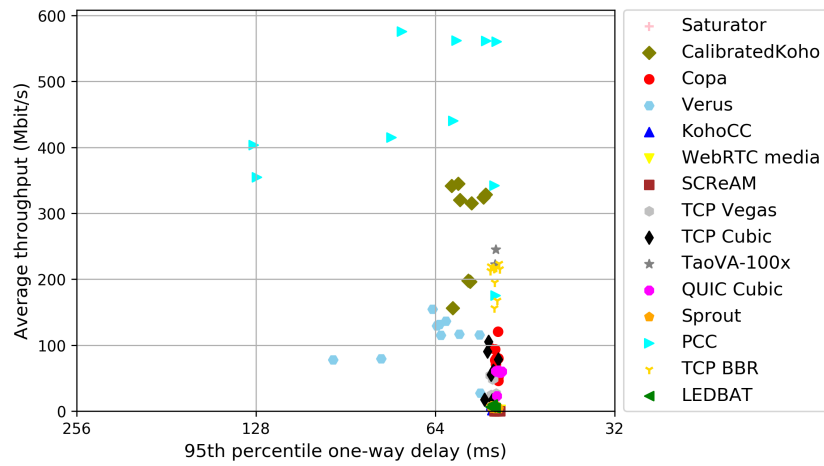
Git summary:

```
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 London Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from GCE London Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	204.20	50.80	0.95
CalibratedKoho	10	252.92	56.10	9.37
Copa	10	77.36	50.53	0.35
TCP Cubic	10	45.80	51.47	1.09
KohoCC	10	7.75	51.06	28.62
LEDBAT	5	6.80	51.30	0.94
PCC	10	439.26	72.88	10.87
QUIC Cubic	8	55.67	50.15	0.42
Saturator	2	23.52	51.02	0.44
SCReAM	10	0.22	50.57	0.34
Sprout	10	6.20	51.08	8.12
TaoVA-100x	2	233.81	50.75	1.56
TCP Vegas	10	25.05	51.16	1.08
Verus	10	108.53	65.53	18.29
WebRTC media	10	2.08	50.34	0.50

Run 1: Statistics of TCP BBR

Start at: 2017-08-16 23:44:19

End at: 2017-08-16 23:44:49

Below is generated by plot.py at 2017-08-17 03:51:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.90 Mbit/s

95th percentile per-packet one-way delay: 51.019 ms

Loss rate: 0.37%

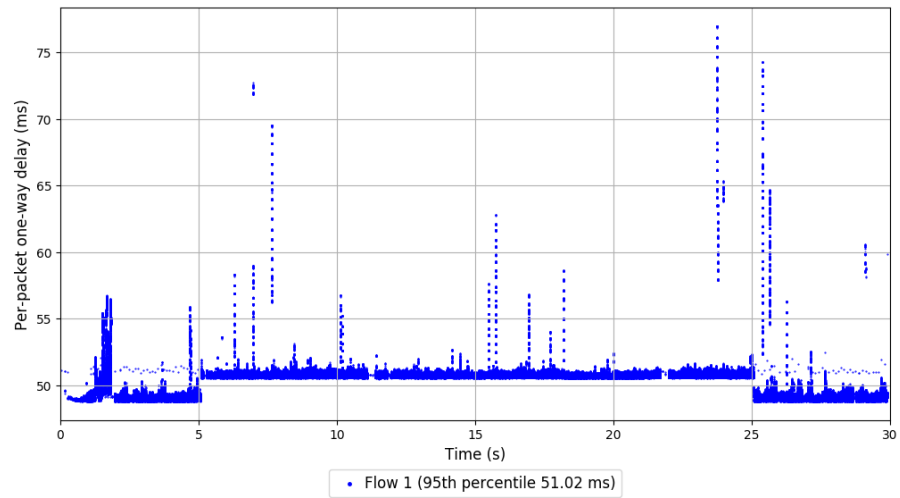
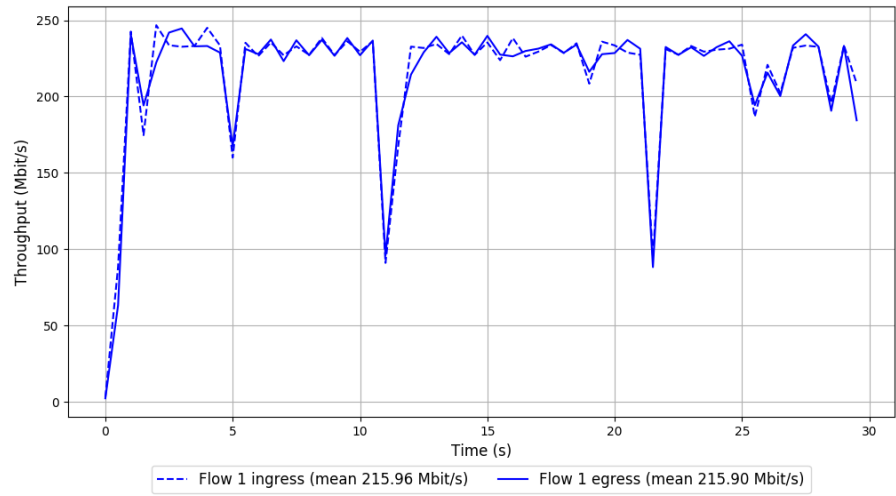
-- Flow 1:

Average throughput: 215.90 Mbit/s

95th percentile per-packet one-way delay: 51.019 ms

Loss rate: 0.37%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-16 23:54:37

End at: 2017-08-16 23:55:07

Below is generated by plot.py at 2017-08-17 03:51:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 220.08 Mbit/s

95th percentile per-packet one-way delay: 51.639 ms

Loss rate: 0.05%

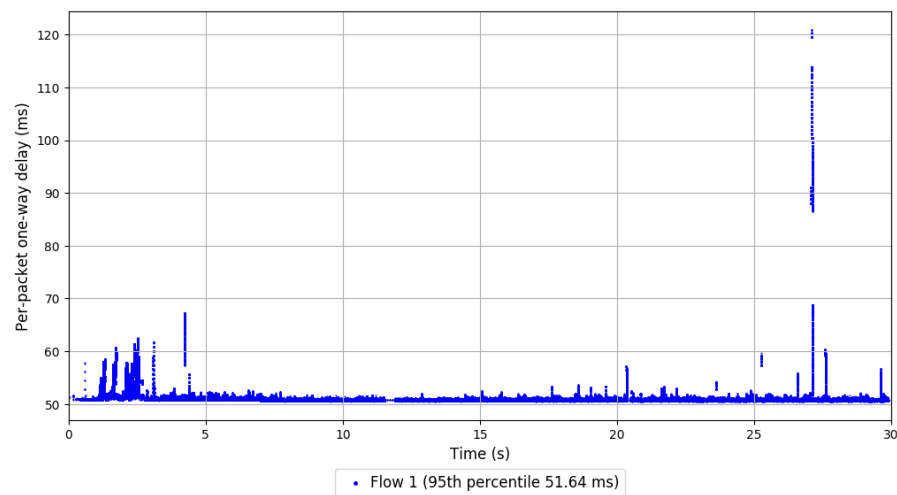
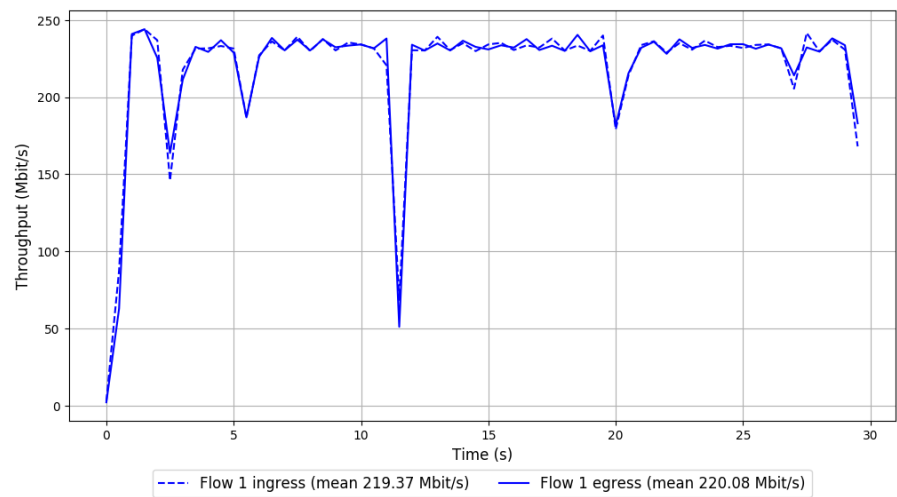
-- Flow 1:

Average throughput: 220.08 Mbit/s

95th percentile per-packet one-way delay: 51.639 ms

Loss rate: 0.05%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-17 00:04:52

End at: 2017-08-17 00:05:22

Below is generated by plot.py at 2017-08-17 03:51:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 156.13 Mbit/s

95th percentile per-packet one-way delay: 50.955 ms

Loss rate: 3.39%

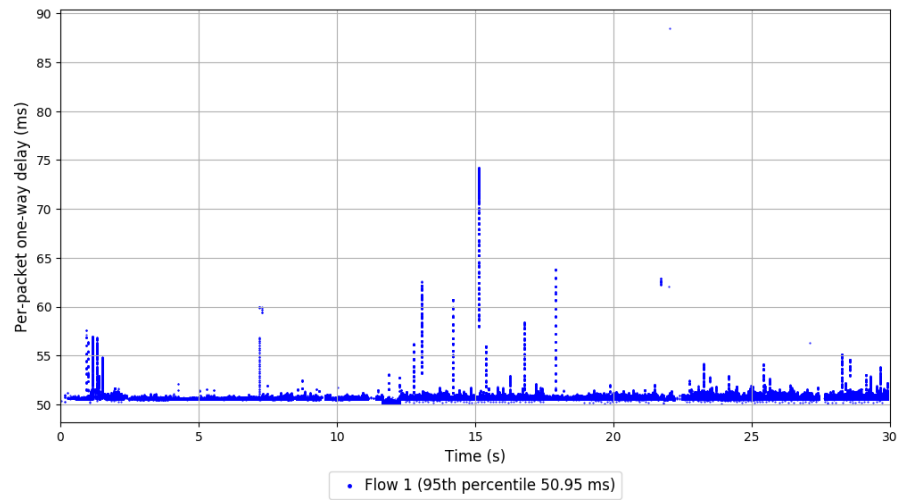
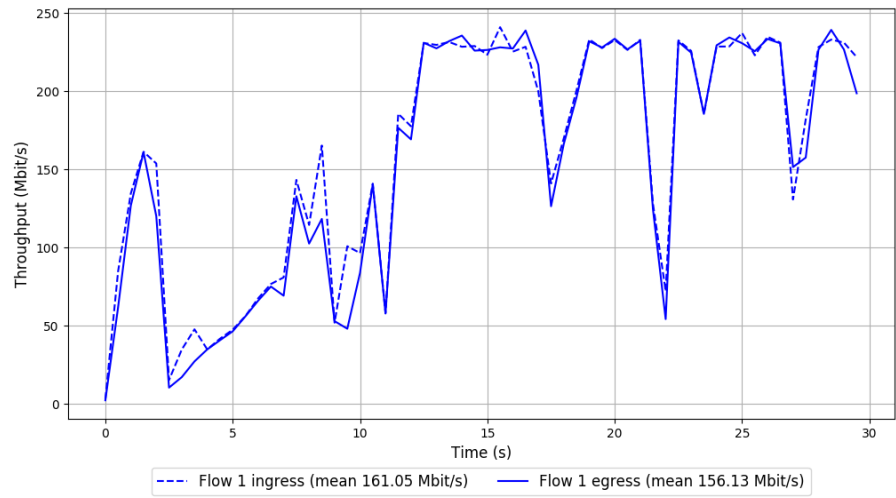
-- Flow 1:

Average throughput: 156.13 Mbit/s

95th percentile per-packet one-way delay: 50.955 ms

Loss rate: 3.39%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-17 00:15:42

End at: 2017-08-17 00:16:12

Below is generated by plot.py at 2017-08-17 03:51:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 216.78 Mbit/s

95th percentile per-packet one-way delay: 50.942 ms

Loss rate: 0.35%

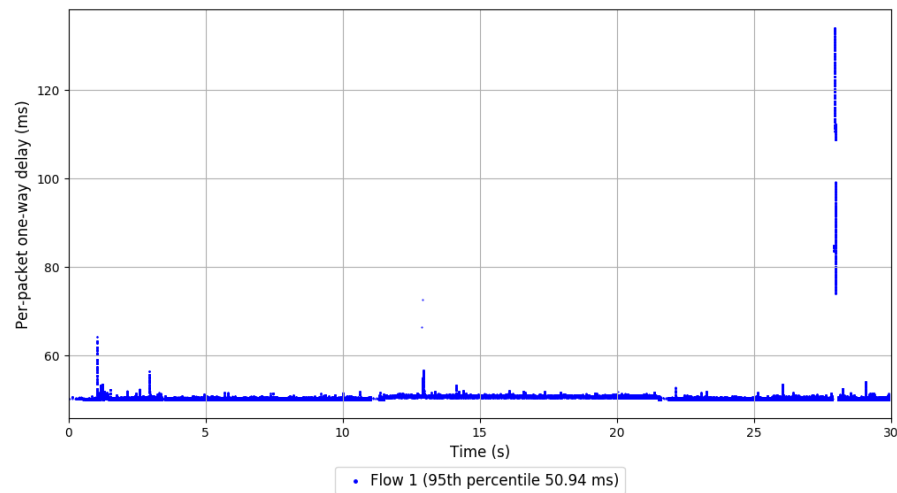
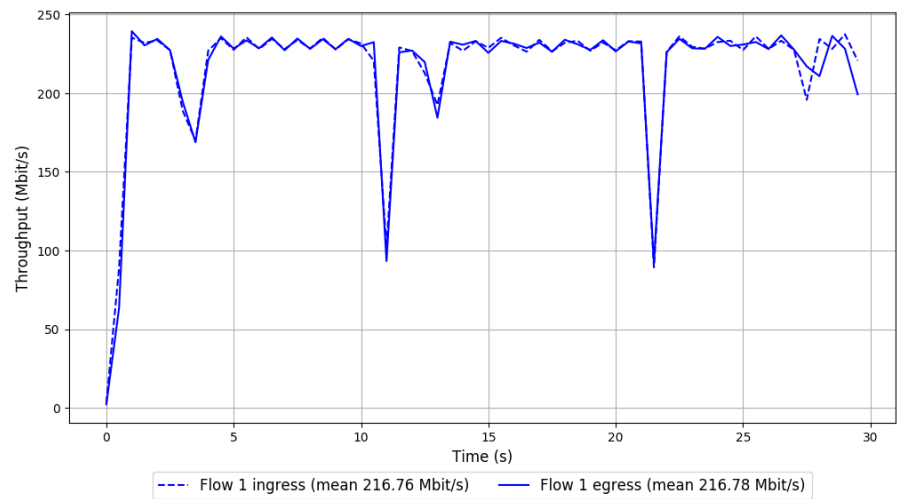
-- Flow 1:

Average throughput: 216.78 Mbit/s

95th percentile per-packet one-way delay: 50.942 ms

Loss rate: 0.35%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-08-17 00:26:07

End at: 2017-08-17 00:26:37

Below is generated by plot.py at 2017-08-17 03:52:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.75 Mbit/s

95th percentile per-packet one-way delay: 51.751 ms

Loss rate: 0.55%

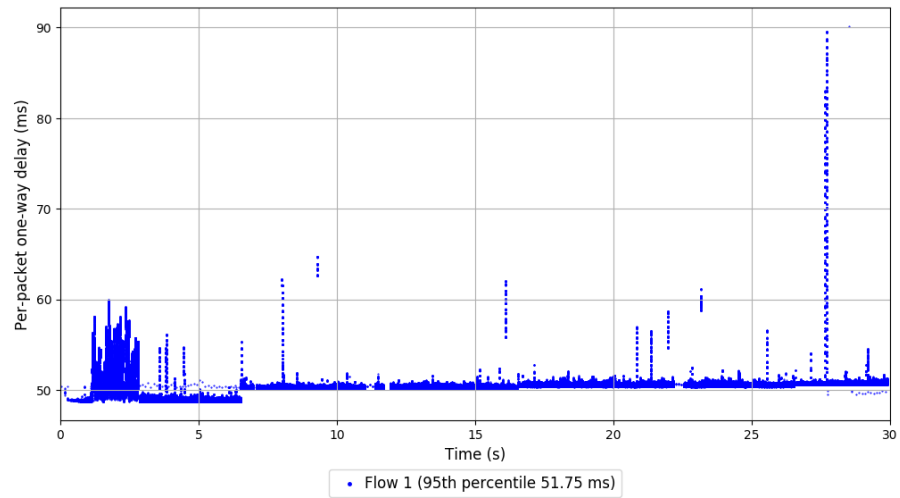
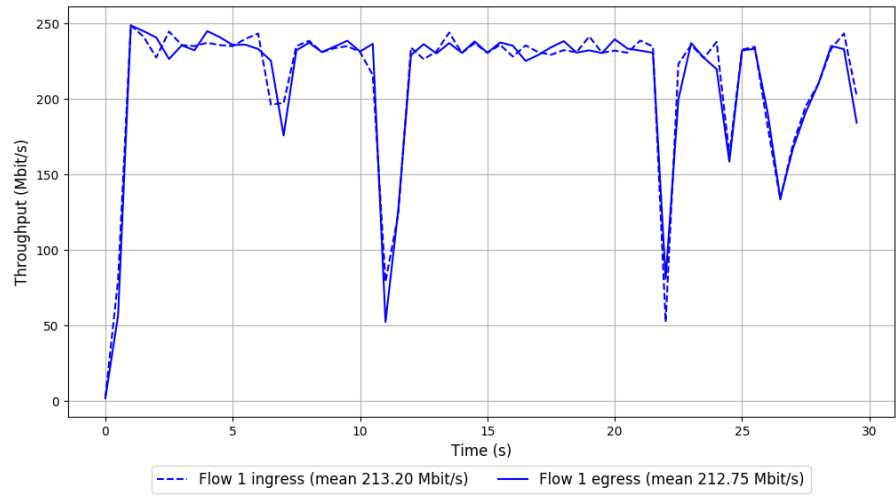
-- Flow 1:

Average throughput: 212.75 Mbit/s

95th percentile per-packet one-way delay: 51.751 ms

Loss rate: 0.55%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-17 00:36:33

End at: 2017-08-17 00:37:03

Below is generated by plot.py at 2017-08-17 03:52:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.35 Mbit/s

95th percentile per-packet one-way delay: 50.890 ms

Loss rate: 1.28%

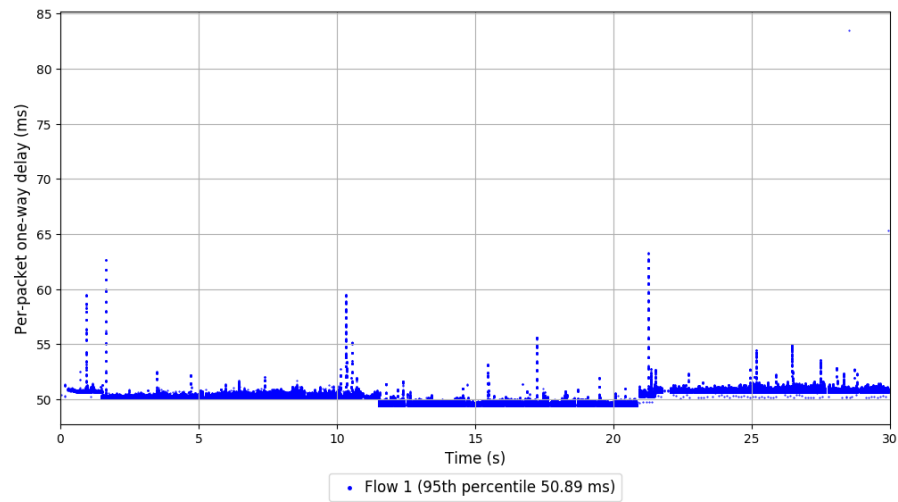
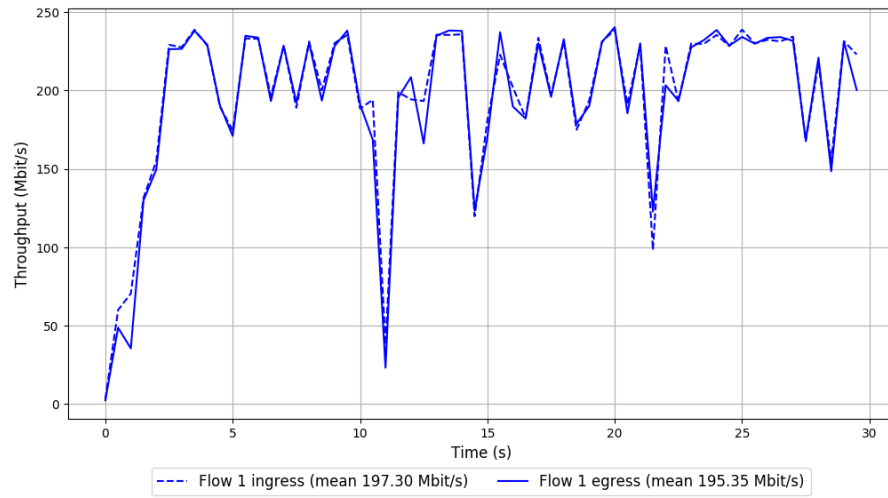
-- Flow 1:

Average throughput: 195.35 Mbit/s

95th percentile per-packet one-way delay: 50.890 ms

Loss rate: 1.28%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-17 00:47:21

End at: 2017-08-17 00:47:51

Below is generated by plot.py at 2017-08-17 03:52:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.46 Mbit/s

95th percentile per-packet one-way delay: 49.892 ms

Loss rate: 0.39%

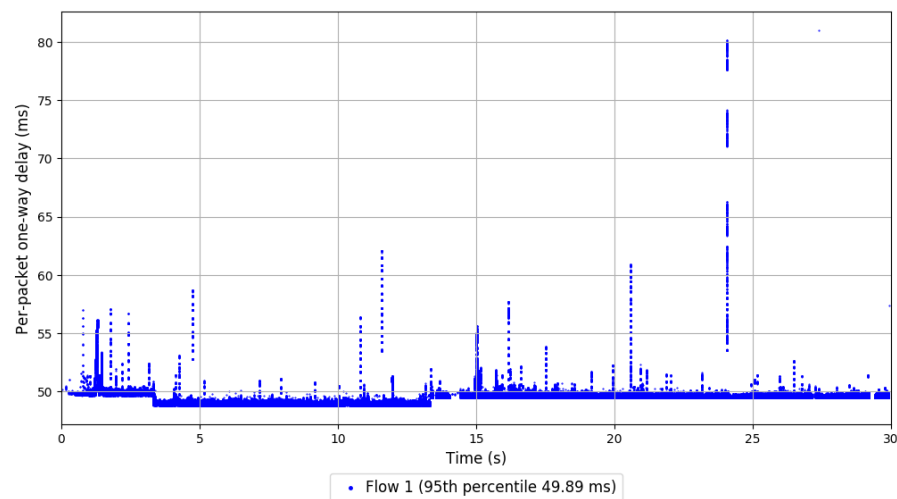
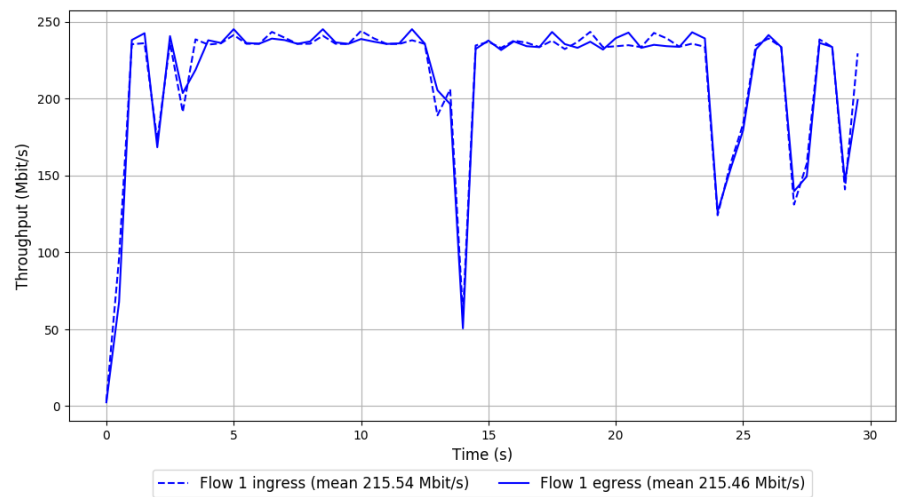
-- Flow 1:

Average throughput: 215.46 Mbit/s

95th percentile per-packet one-way delay: 49.892 ms

Loss rate: 0.39%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-17 00:57:38

End at: 2017-08-17 00:58:08

Below is generated by plot.py at 2017-08-17 03:52:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 223.68 Mbit/s

95th percentile per-packet one-way delay: 50.003 ms

Loss rate: 0.38%

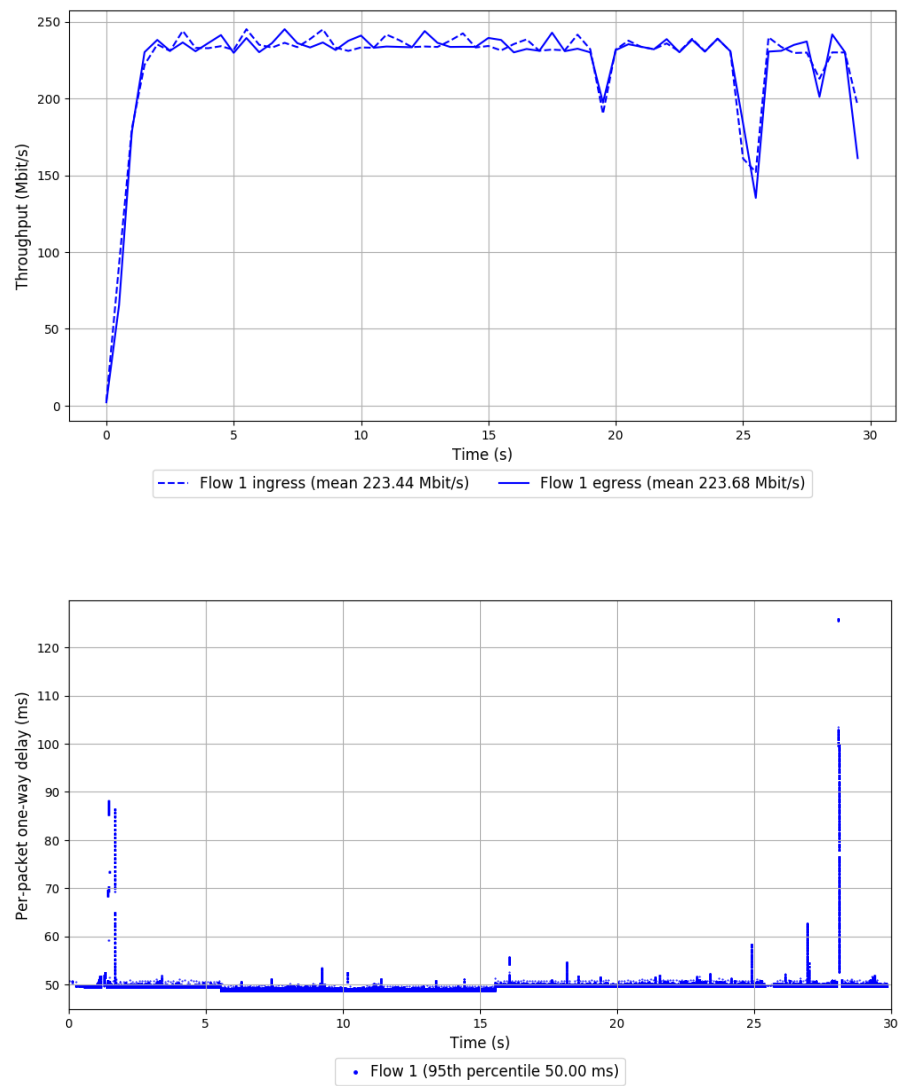
-- Flow 1:

Average throughput: 223.68 Mbit/s

95th percentile per-packet one-way delay: 50.003 ms

Loss rate: 0.38%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-17 01:08:19

End at: 2017-08-17 01:08:49

Below is generated by plot.py at 2017-08-17 03:53:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 167.97 Mbit/s

95th percentile per-packet one-way delay: 50.347 ms

Loss rate: 2.38%

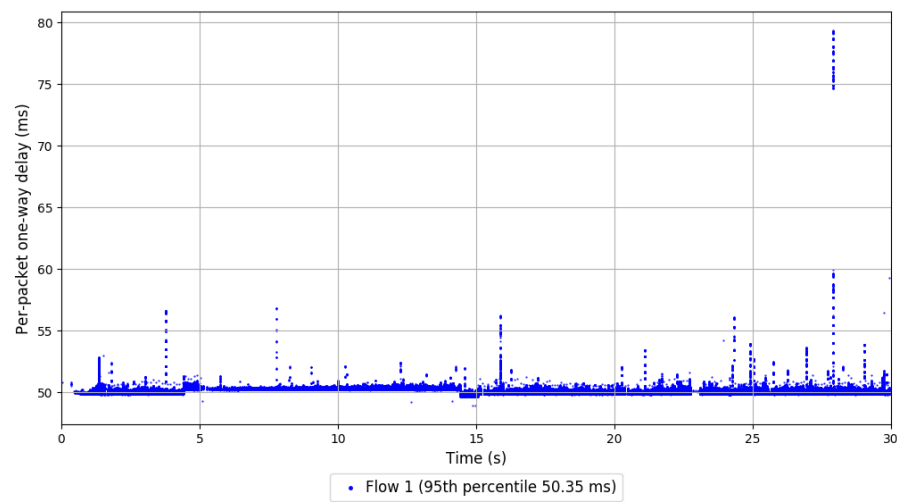
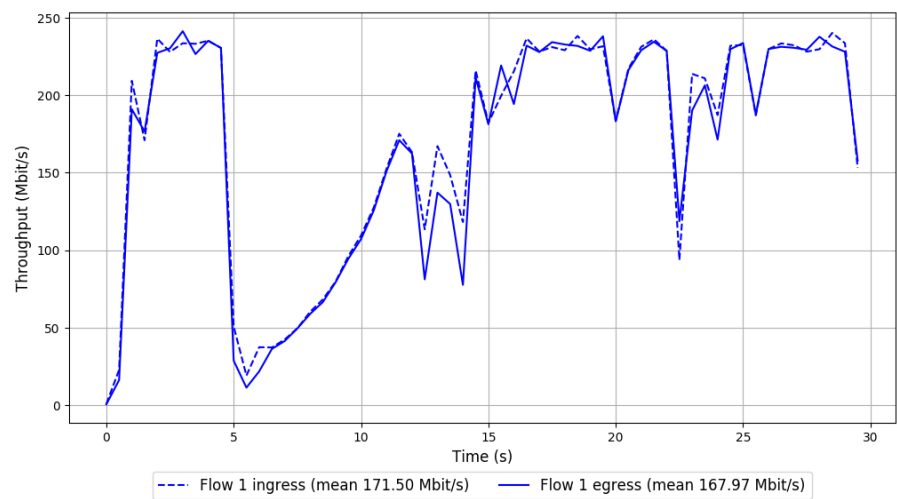
-- Flow 1:

Average throughput: 167.97 Mbit/s

95th percentile per-packet one-way delay: 50.347 ms

Loss rate: 2.38%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-17 01:19:02

End at: 2017-08-17 01:19:32

Below is generated by plot.py at 2017-08-17 03:53:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.88 Mbit/s

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

Loss rate: 0.37%

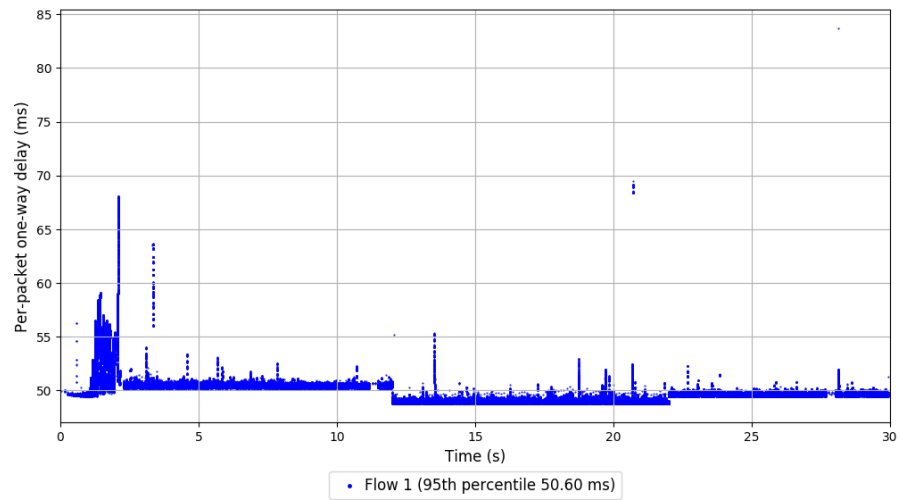
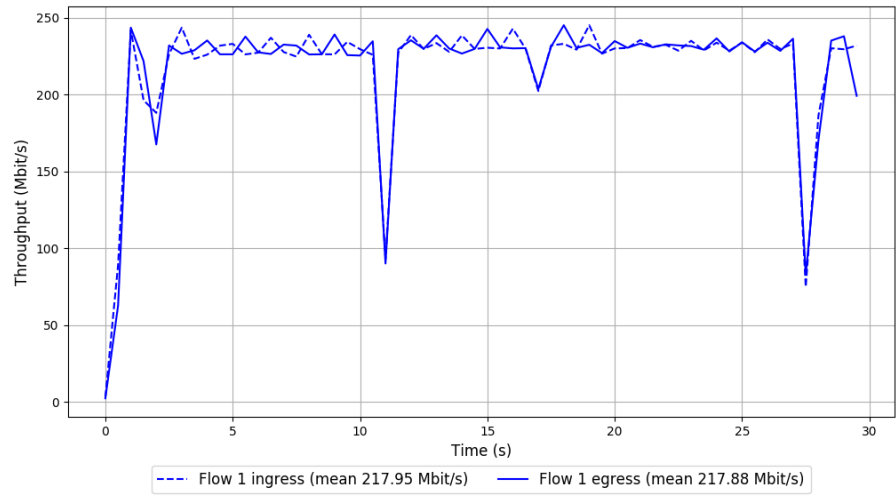
-- Flow 1:

Average throughput: 217.88 Mbit/s

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

Loss rate: 0.37%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-16 23:35:58

End at: 2017-08-16 23:36:28

Below is generated by plot.py at 2017-08-17 03:54:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 323.98 Mbit/s

95th percentile per-packet one-way delay: 53.143 ms

Loss rate: 0.40%

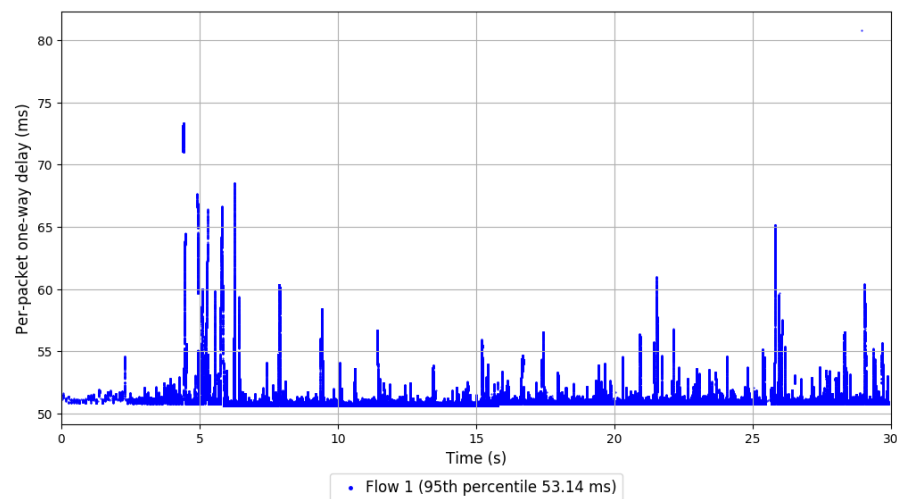
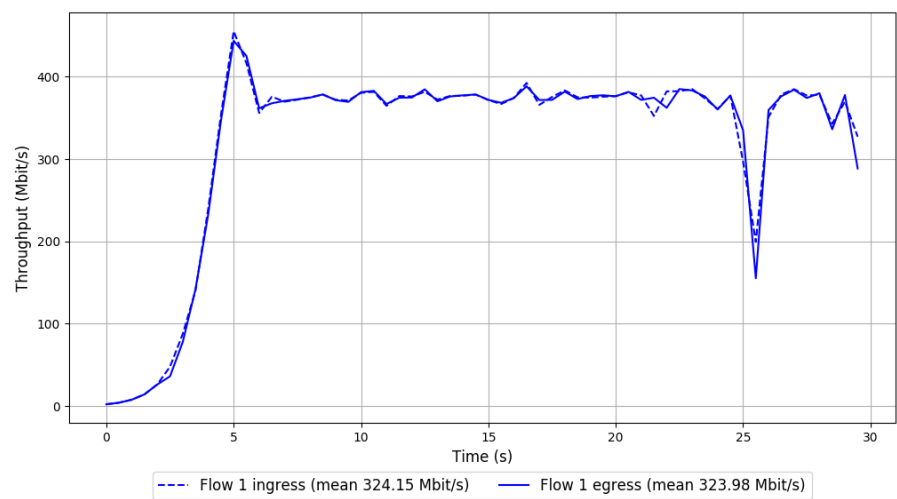
-- Flow 1:

Average throughput: 323.98 Mbit/s

95th percentile per-packet one-way delay: 53.143 ms

Loss rate: 0.40%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-16 23:46:24

End at: 2017-08-16 23:46:54

Below is generated by plot.py at 2017-08-17 03:54:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 328.40 Mbit/s

95th percentile per-packet one-way delay: 52.640 ms

Loss rate: 0.41%

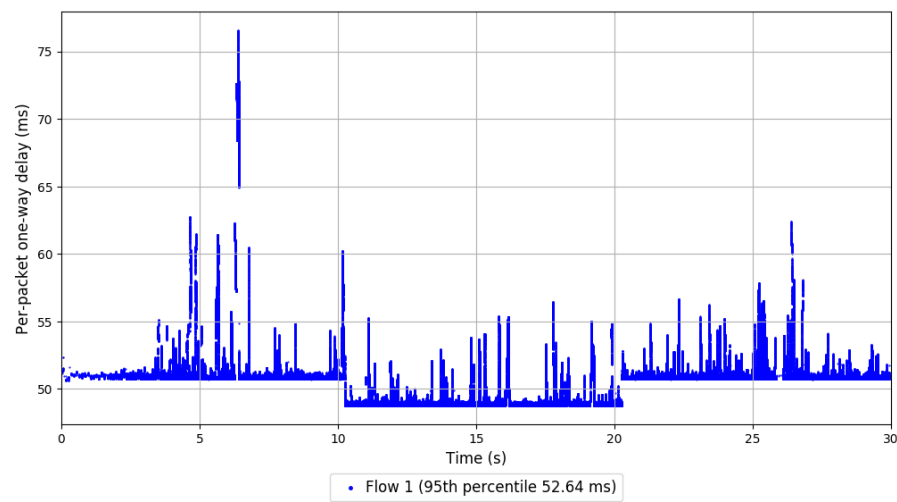
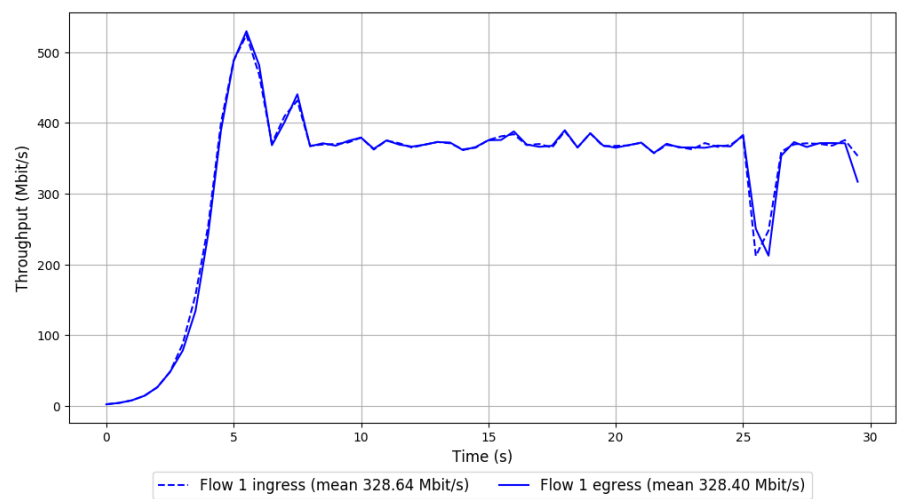
-- Flow 1:

Average throughput: 328.40 Mbit/s

95th percentile per-packet one-way delay: 52.640 ms

Loss rate: 0.41%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-16 23:56:42

End at: 2017-08-16 23:57:12

Below is generated by plot.py at 2017-08-17 03:54:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.78 Mbit/s

95th percentile per-packet one-way delay: 56.353 ms

Loss rate: 2.25%

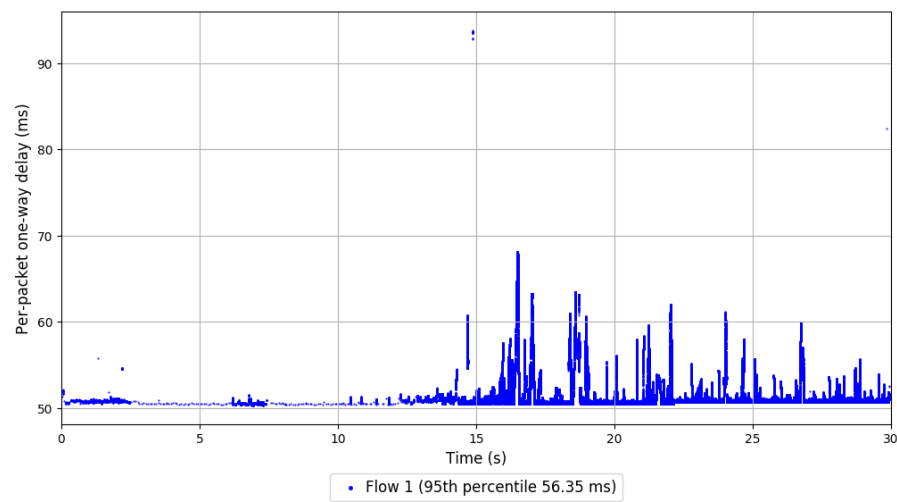
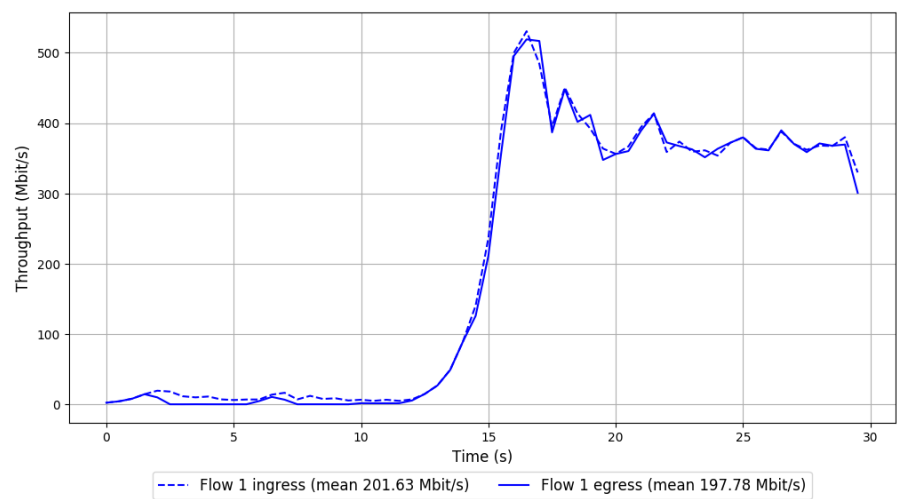
-- Flow 1:

Average throughput: 197.78 Mbit/s

95th percentile per-packet one-way delay: 56.353 ms

Loss rate: 2.25%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-17 00:06:54

End at: 2017-08-17 00:07:24

Below is generated by plot.py at 2017-08-17 03:55:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 345.17 Mbit/s

95th percentile per-packet one-way delay: 58.549 ms

Loss rate: 0.50%

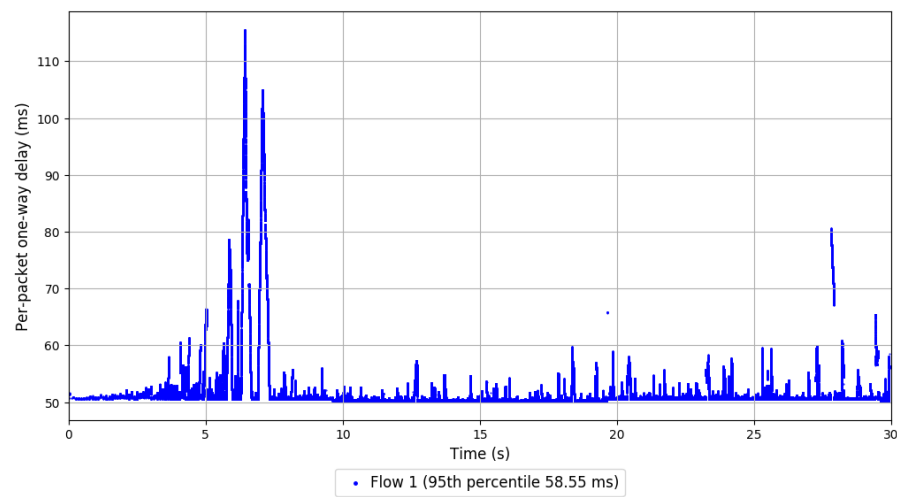
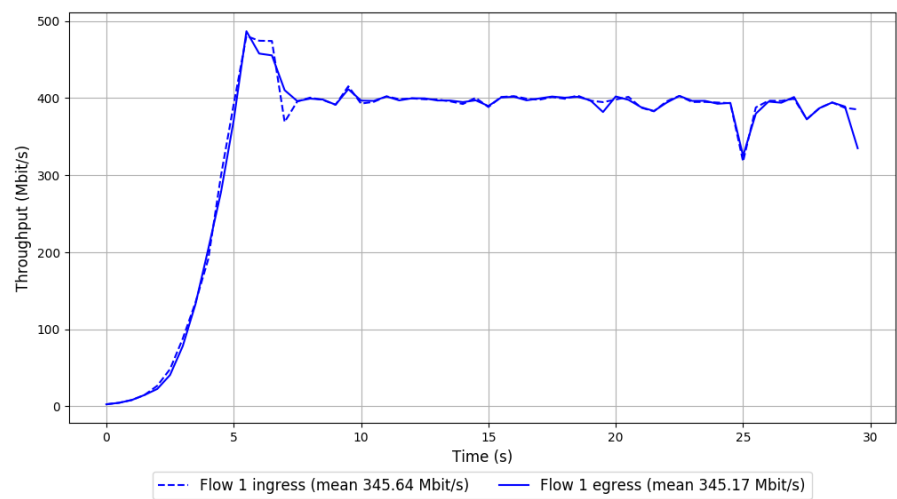
-- Flow 1:

Average throughput: 345.17 Mbit/s

95th percentile per-packet one-way delay: 58.549 ms

Loss rate: 0.50%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-17 00:17:48

End at: 2017-08-17 00:18:18

Below is generated by plot.py at 2017-08-17 03:55:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 156.59 Mbit/s

95th percentile per-packet one-way delay: 59.833 ms

Loss rate: 15.69%

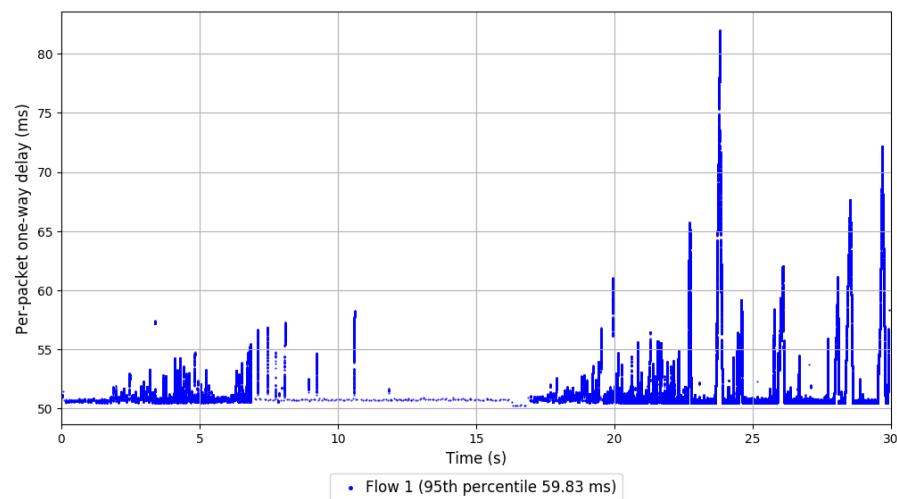
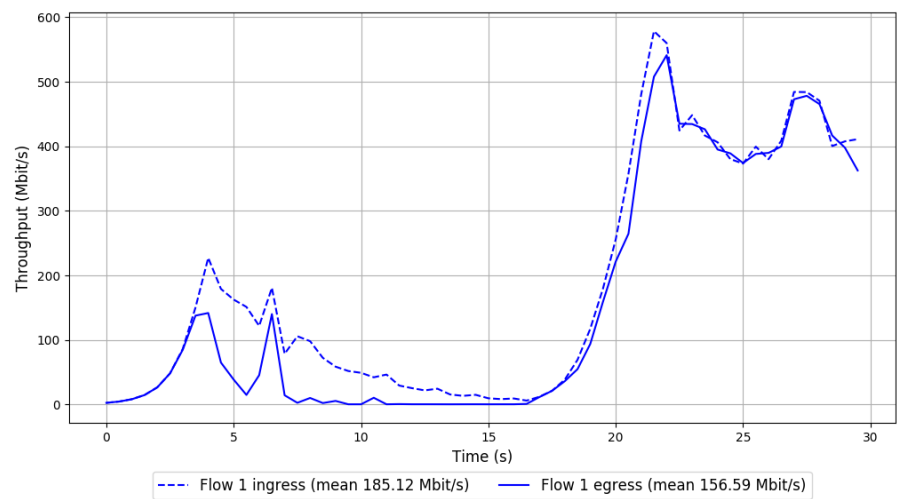
-- Flow 1:

Average throughput: 156.59 Mbit/s

95th percentile per-packet one-way delay: 59.833 ms

Loss rate: 15.69%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-17 00:28:12

End at: 2017-08-17 00:28:42

Below is generated by plot.py at 2017-08-17 03:55:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.37 Mbit/s

95th percentile per-packet one-way delay: 55.935 ms

Loss rate: 2.84%

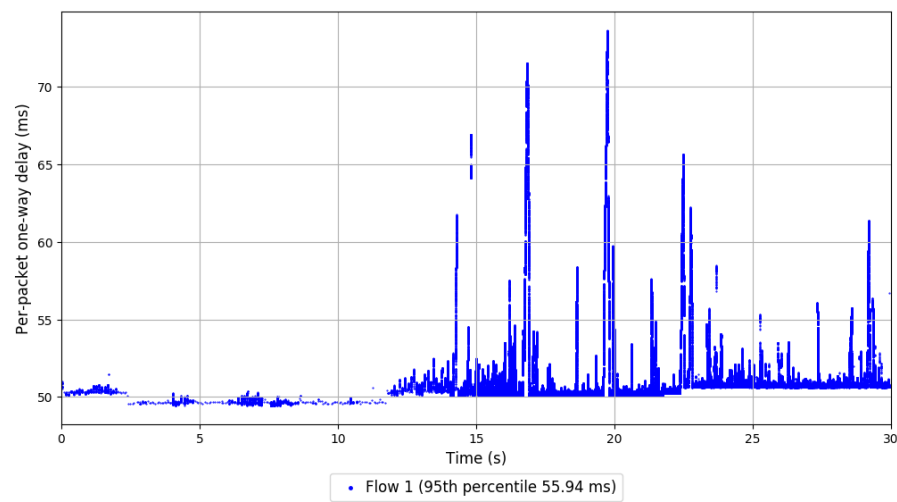
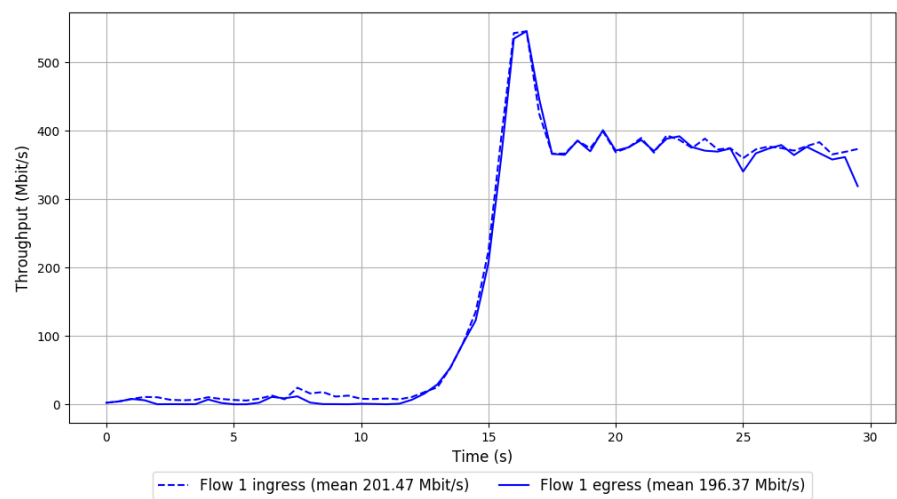
-- Flow 1:

Average throughput: 196.37 Mbit/s

95th percentile per-packet one-way delay: 55.935 ms

Loss rate: 2.84%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-17 00:38:37

End at: 2017-08-17 00:39:07

Below is generated by plot.py at 2017-08-17 03:56:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 341.94 Mbit/s

95th percentile per-packet one-way delay: 60.055 ms

Loss rate: 0.40%

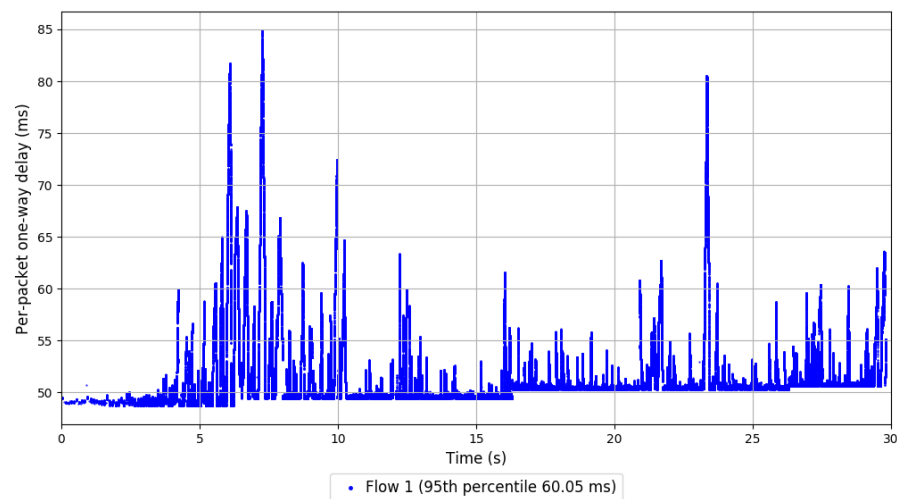
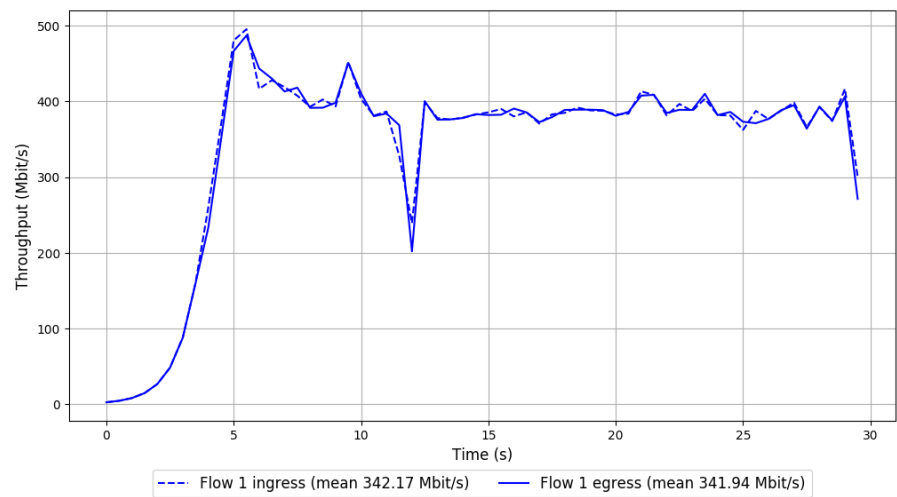
-- Flow 1:

Average throughput: 341.94 Mbit/s

95th percentile per-packet one-way delay: 60.055 ms

Loss rate: 0.40%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-17 00:49:22

End at: 2017-08-17 00:49:52

Below is generated by plot.py at 2017-08-17 03:56:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 50.689 ms

Loss rate: 70.50%

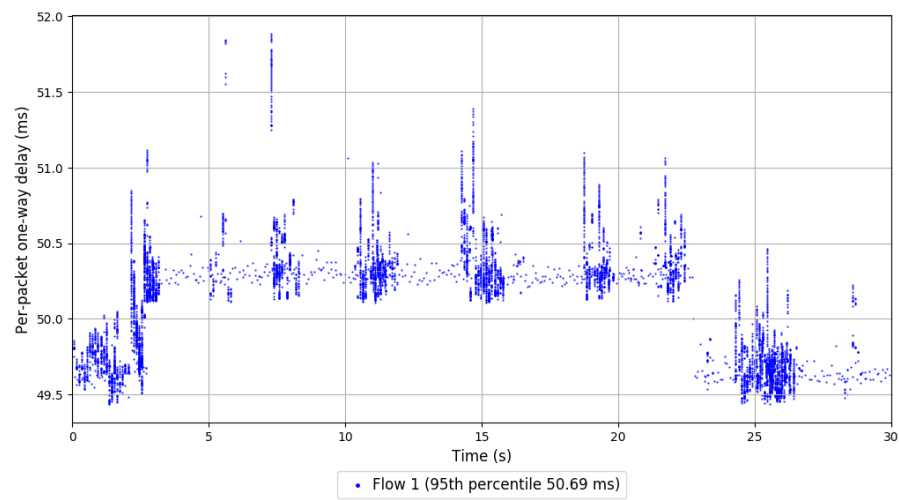
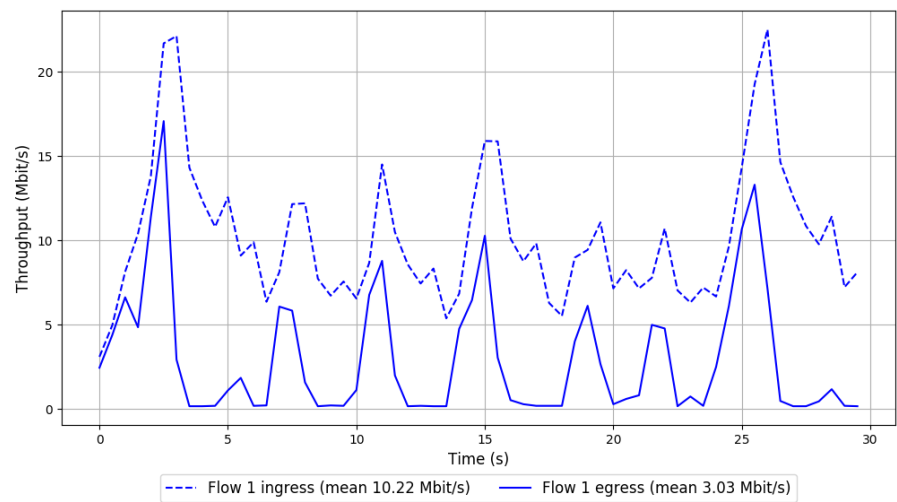
-- Flow 1:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 50.689 ms

Loss rate: 70.50%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-17 00:59:41

End at: 2017-08-17 01:00:12

Below is generated by plot.py at 2017-08-17 03:56:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 320.50 Mbit/s

95th percentile per-packet one-way delay: 58.181 ms

Loss rate: 0.32%

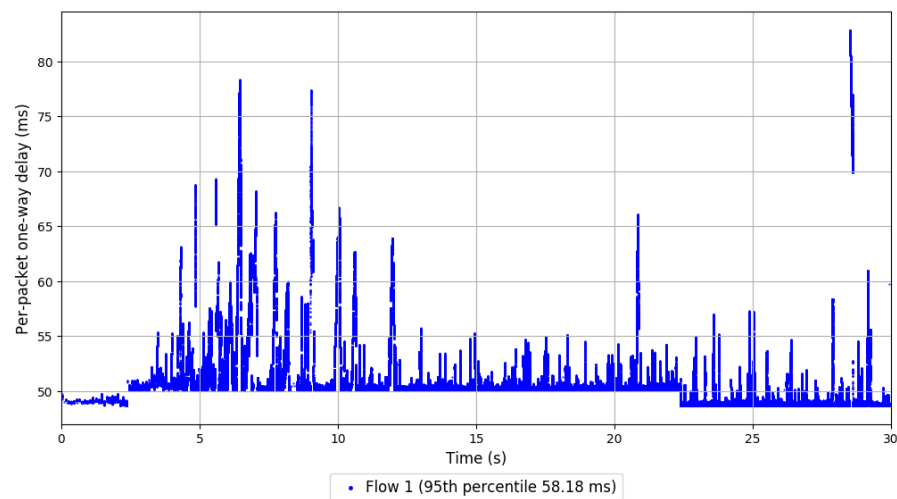
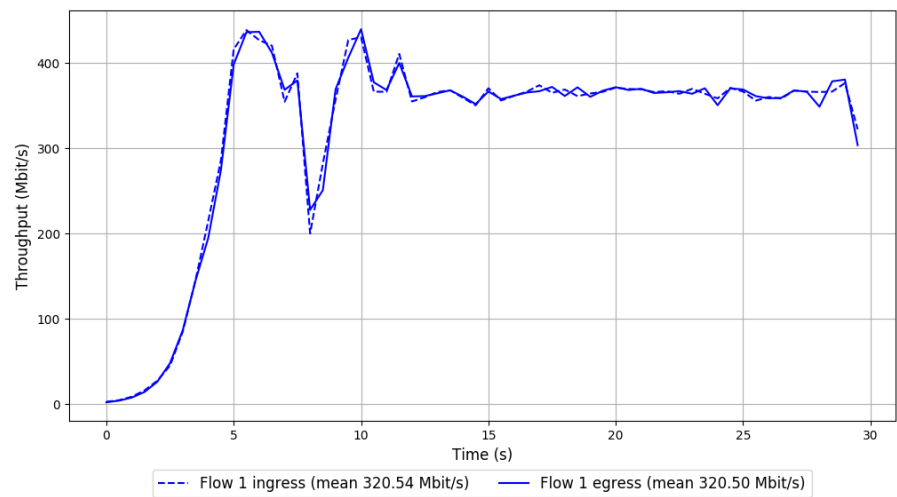
-- Flow 1:

Average throughput: 320.50 Mbit/s

95th percentile per-packet one-way delay: 58.181 ms

Loss rate: 0.32%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-17 01:10:22

End at: 2017-08-17 01:10:52

Below is generated by plot.py at 2017-08-17 03:57:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 315.48 Mbit/s

95th percentile per-packet one-way delay: 55.625 ms

Loss rate: 0.34%

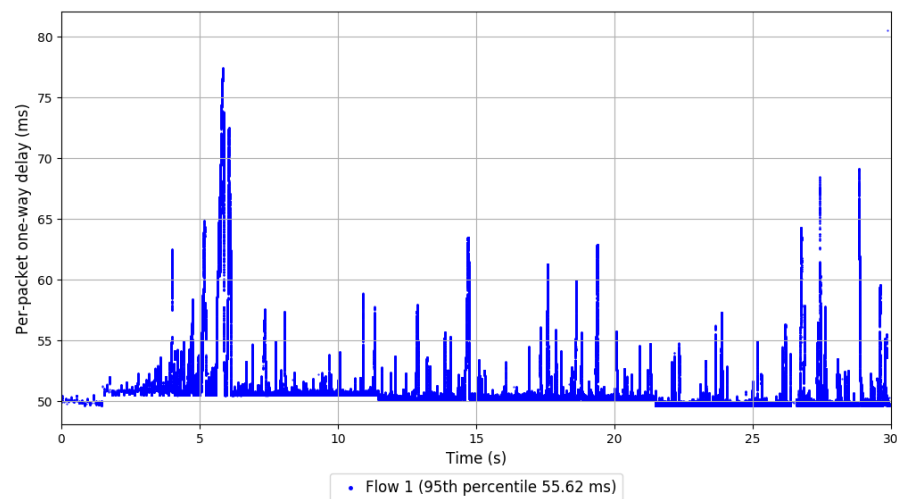
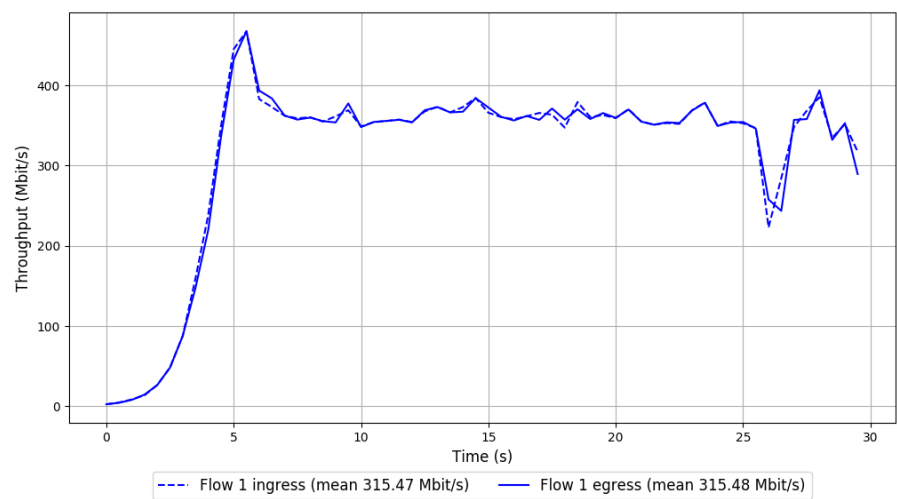
-- Flow 1:

Average throughput: 315.48 Mbit/s

95th percentile per-packet one-way delay: 55.625 ms

Loss rate: 0.34%

Run 10: Report of CalibratedKoho — Data Link



Run 1: Statistics of Copa

Start at: 2017-08-16 23:41:33

End at: 2017-08-16 23:42:03

Below is generated by plot.py at 2017-08-17 03:57:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.76 Mbit/s

95th percentile per-packet one-way delay: 50.782 ms

Loss rate: 0.41%

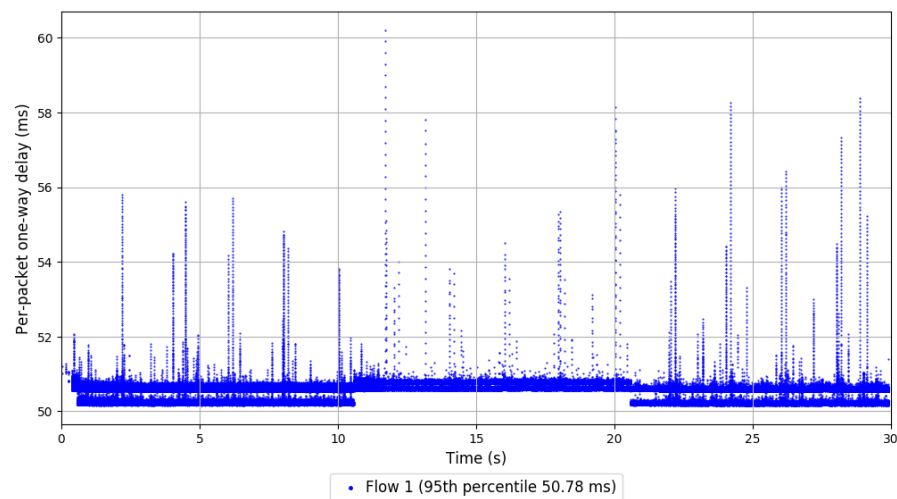
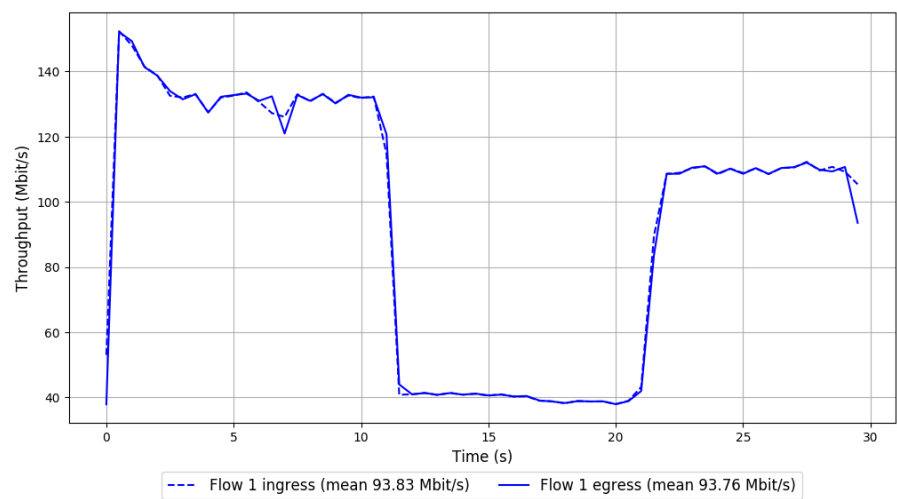
-- Flow 1:

Average throughput: 93.76 Mbit/s

95th percentile per-packet one-way delay: 50.782 ms

Loss rate: 0.41%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-16 23:51:51

End at: 2017-08-16 23:52:21

Below is generated by plot.py at 2017-08-17 03:57:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.69 Mbit/s

95th percentile per-packet one-way delay: 51.683 ms

Loss rate: 0.43%

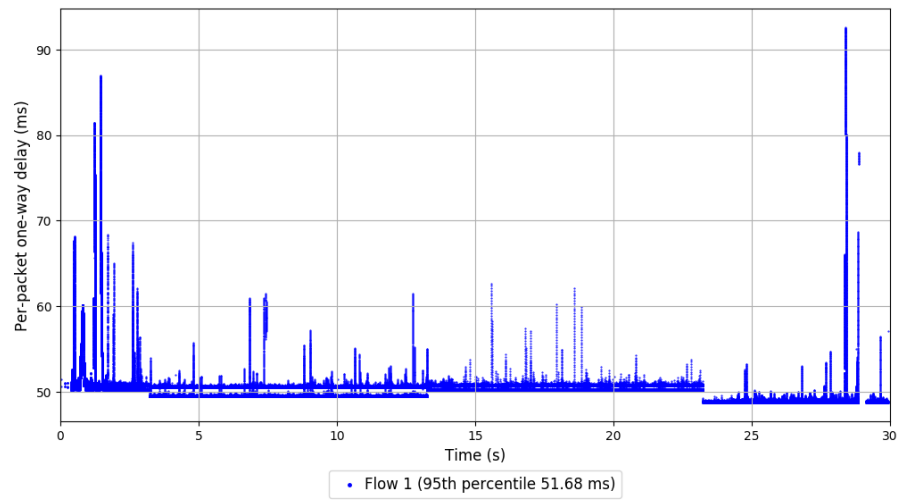
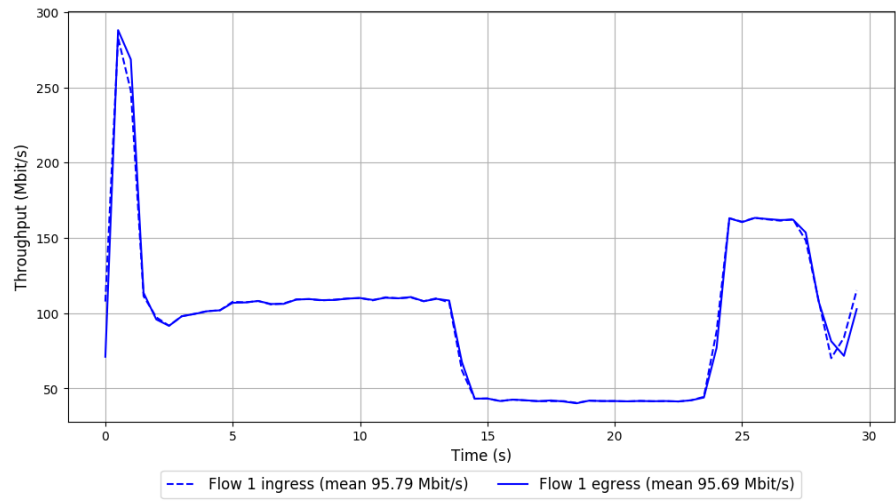
-- Flow 1:

Average throughput: 95.69 Mbit/s

95th percentile per-packet one-way delay: 51.683 ms

Loss rate: 0.43%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-08-17 00:02:09

End at: 2017-08-17 00:02:39

Below is generated by plot.py at 2017-08-17 03:57:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.41 Mbit/s

95th percentile per-packet one-way delay: 50.162 ms

Loss rate: 0.56%

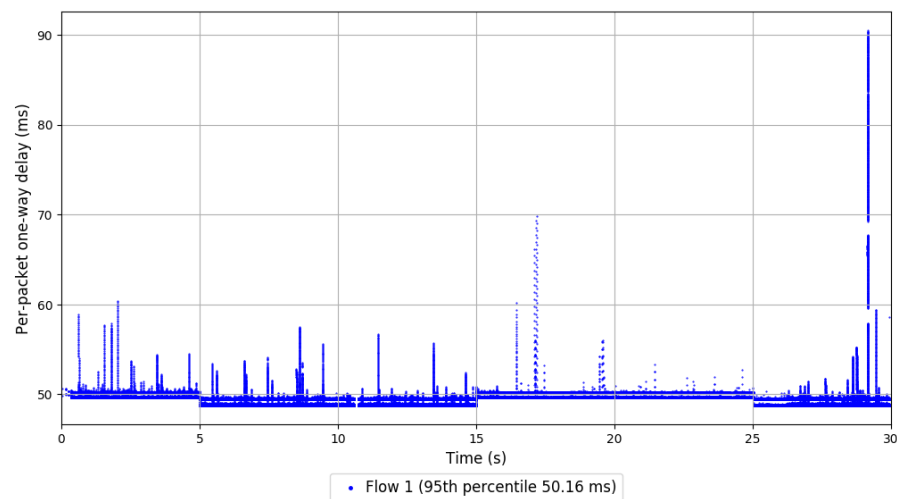
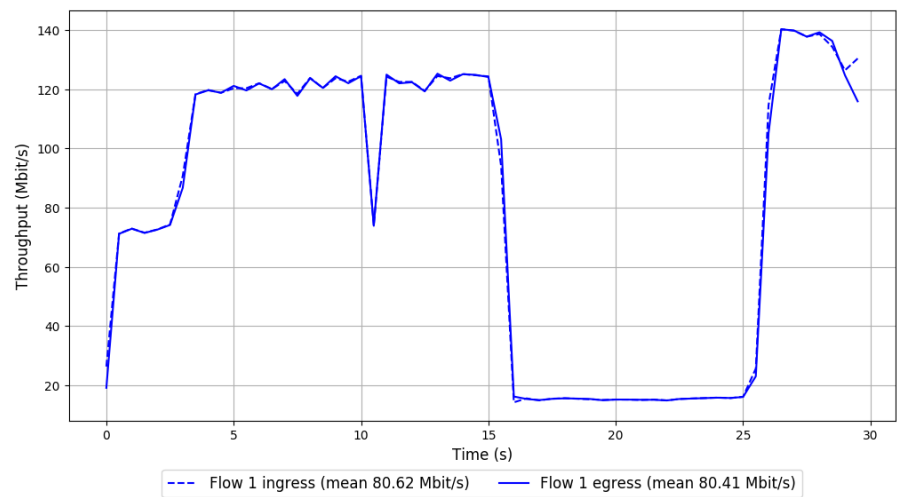
-- Flow 1:

Average throughput: 80.41 Mbit/s

95th percentile per-packet one-way delay: 50.162 ms

Loss rate: 0.56%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-08-17 00:12:53

End at: 2017-08-17 00:13:23

Below is generated by plot.py at 2017-08-17 03:58:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.25 Mbit/s

95th percentile per-packet one-way delay: 50.553 ms

Loss rate: 0.54%

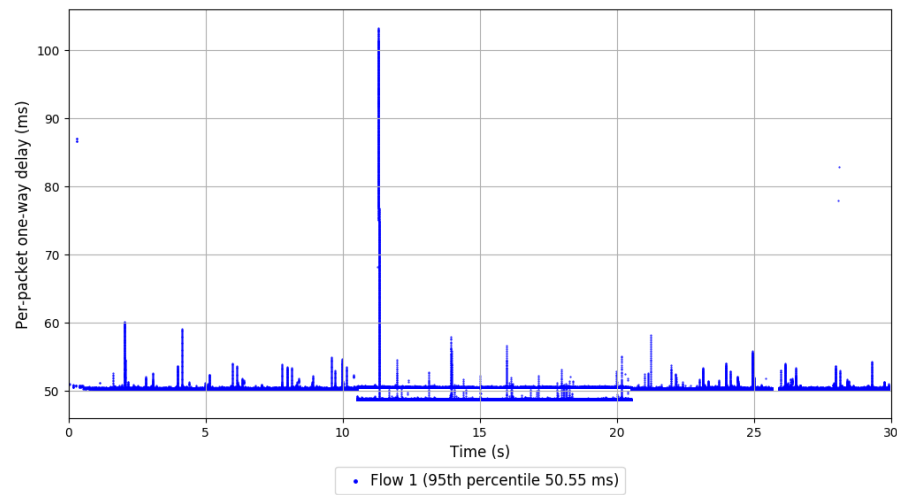
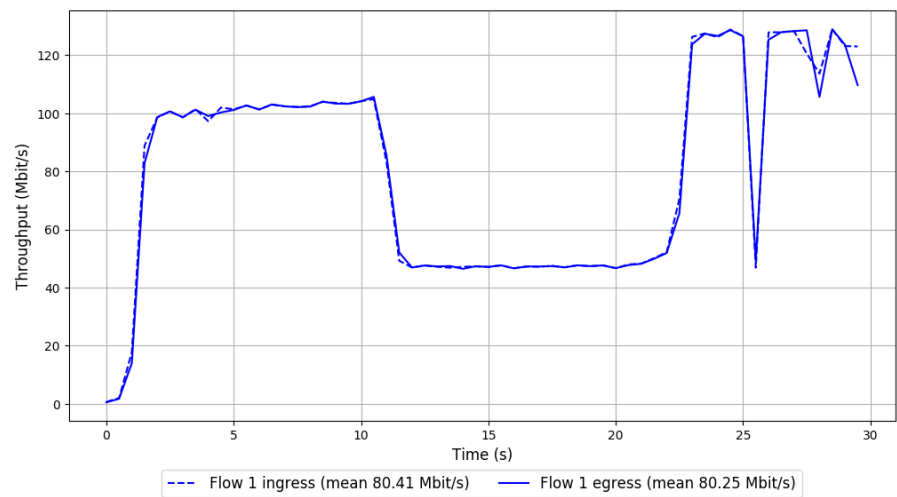
-- Flow 1:

Average throughput: 80.25 Mbit/s

95th percentile per-packet one-way delay: 50.553 ms

Loss rate: 0.54%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-17 00:23:19

End at: 2017-08-17 00:23:49

Below is generated by plot.py at 2017-08-17 03:58:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.58 Mbit/s

95th percentile per-packet one-way delay: 50.618 ms

Loss rate: 0.09%

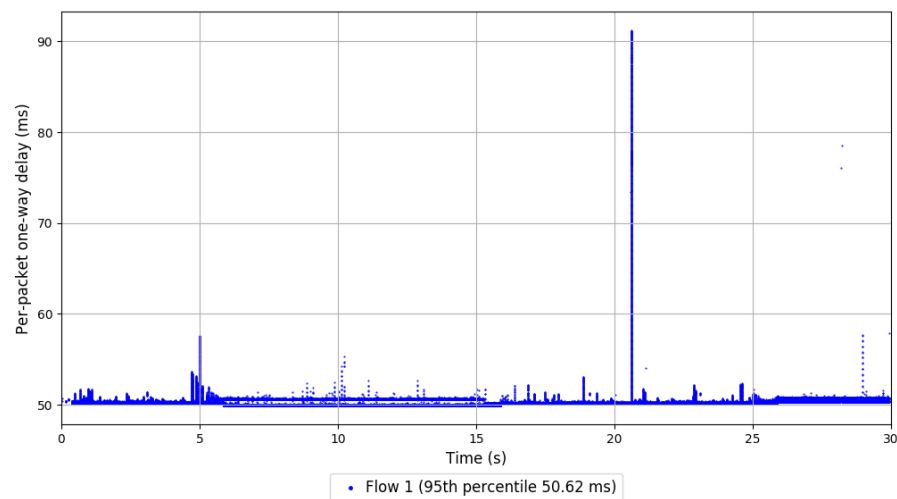
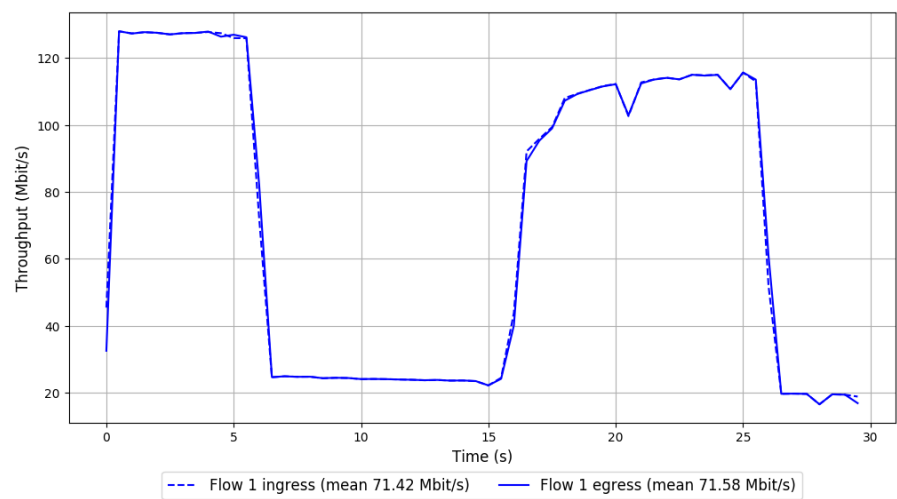
-- Flow 1:

Average throughput: 71.58 Mbit/s

95th percentile per-packet one-way delay: 50.618 ms

Loss rate: 0.09%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-08-17 00:33:55

End at: 2017-08-17 00:34:25

Below is generated by plot.py at 2017-08-17 03:58:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.01 Mbit/s

95th percentile per-packet one-way delay: 50.133 ms

Loss rate: 0.05%

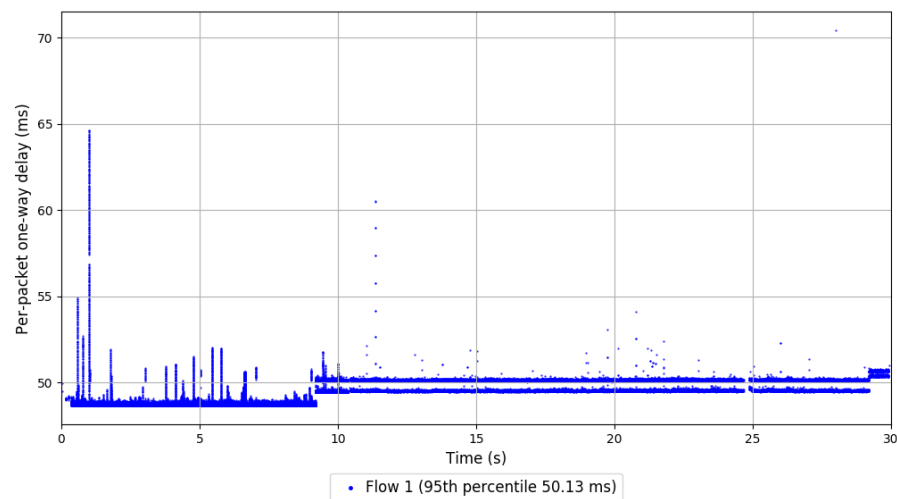
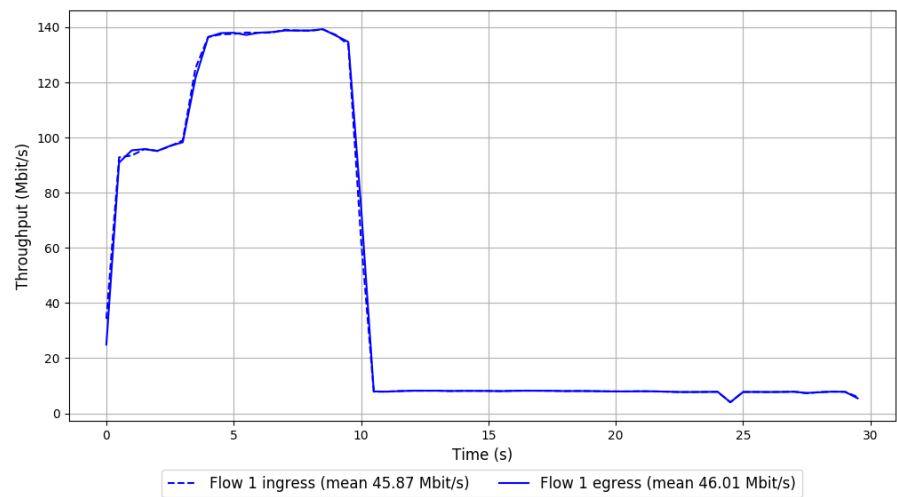
-- Flow 1:

Average throughput: 46.01 Mbit/s

95th percentile per-packet one-way delay: 50.133 ms

Loss rate: 0.05%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-17 00:44:29

End at: 2017-08-17 00:44:59

Below is generated by plot.py at 2017-08-17 03:58:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.60 Mbit/s

95th percentile per-packet one-way delay: 50.216 ms

Loss rate: 0.32%

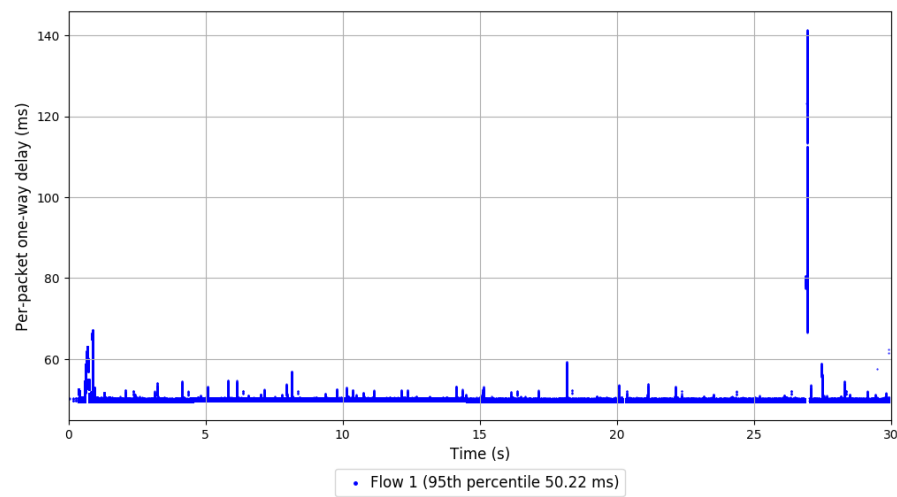
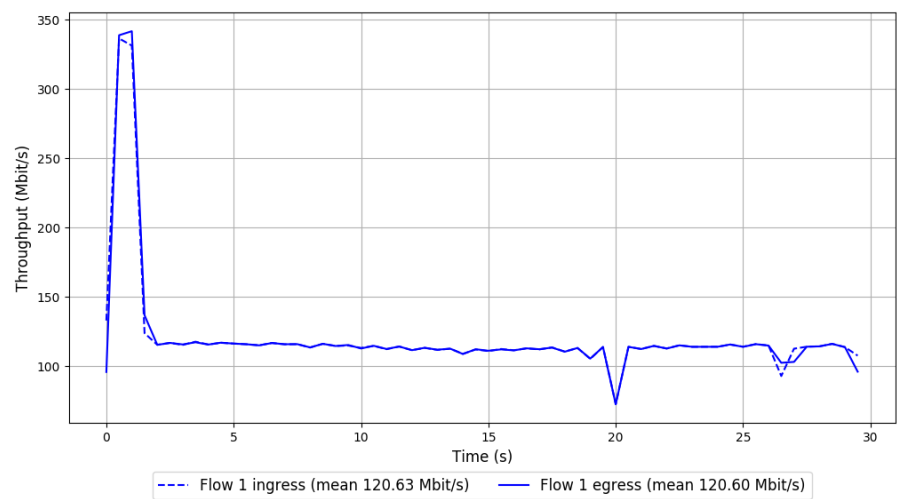
-- Flow 1:

Average throughput: 120.60 Mbit/s

95th percentile per-packet one-way delay: 50.216 ms

Loss rate: 0.32%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-08-17 00:54:52

End at: 2017-08-17 00:55:22

Below is generated by plot.py at 2017-08-17 03:58:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.75 Mbit/s

95th percentile per-packet one-way delay: 50.153 ms

Loss rate: 0.88%

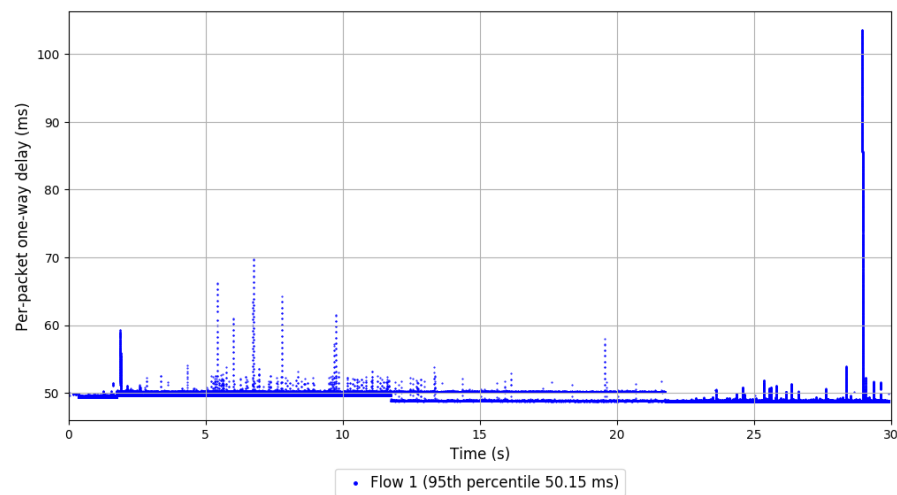
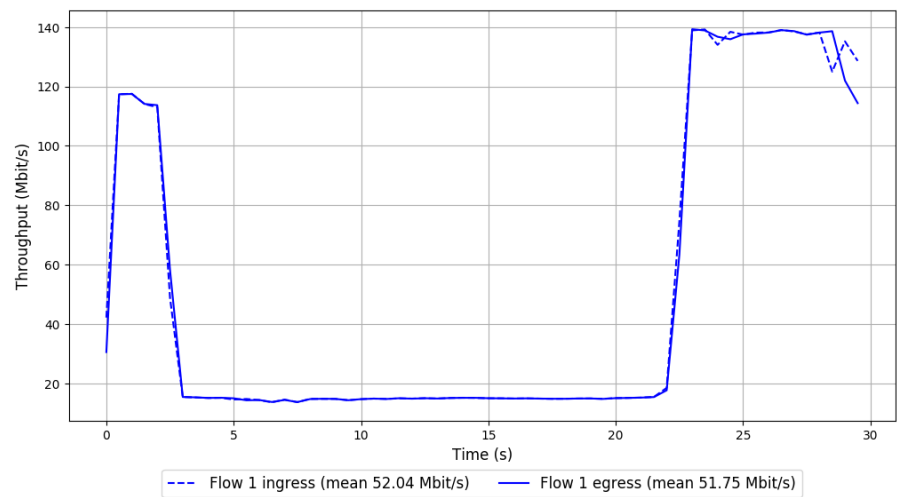
-- Flow 1:

Average throughput: 51.75 Mbit/s

95th percentile per-packet one-way delay: 50.153 ms

Loss rate: 0.88%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-08-17 01:05:33

End at: 2017-08-17 01:06:03

Below is generated by plot.py at 2017-08-17 03:58:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.94 Mbit/s

95th percentile per-packet one-way delay: 50.265 ms

Loss rate: 0.10%

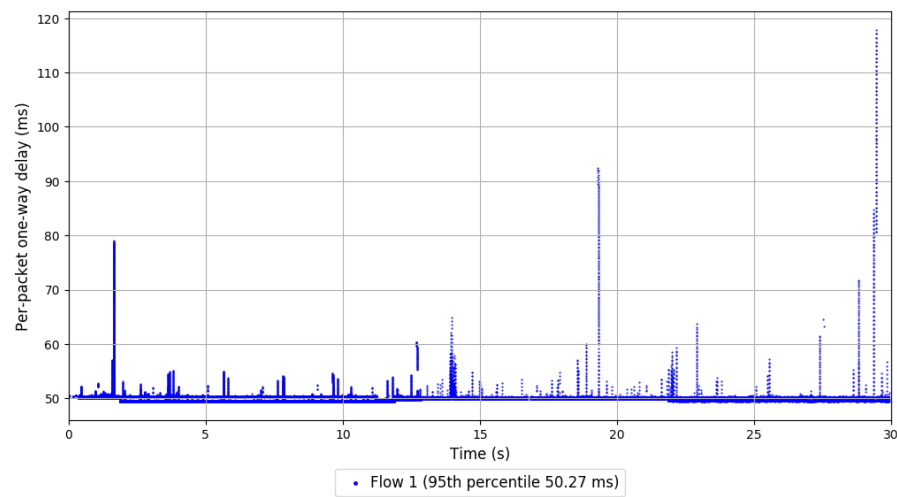
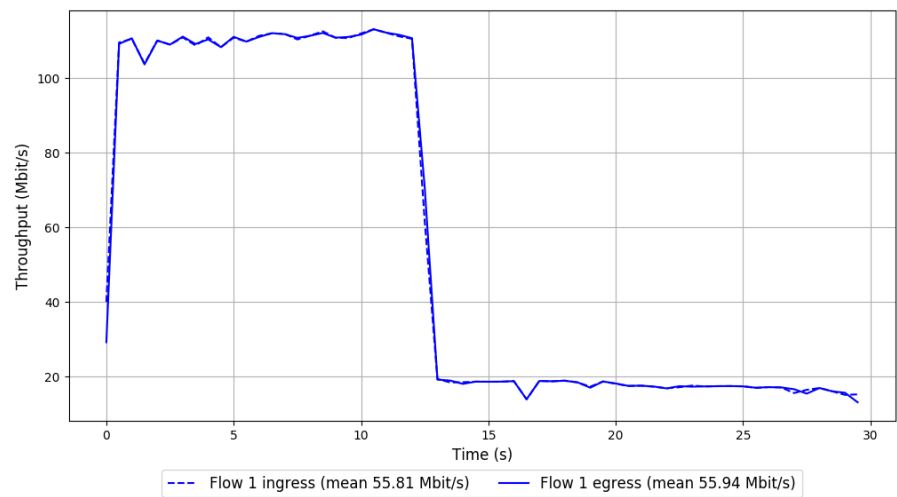
-- Flow 1:

Average throughput: 55.94 Mbit/s

95th percentile per-packet one-way delay: 50.265 ms

Loss rate: 0.10%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-08-17 01:16:18

End at: 2017-08-17 01:16:48

Below is generated by plot.py at 2017-08-17 03:59:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.63 Mbit/s

95th percentile per-packet one-way delay: 50.768 ms

Loss rate: 0.11%

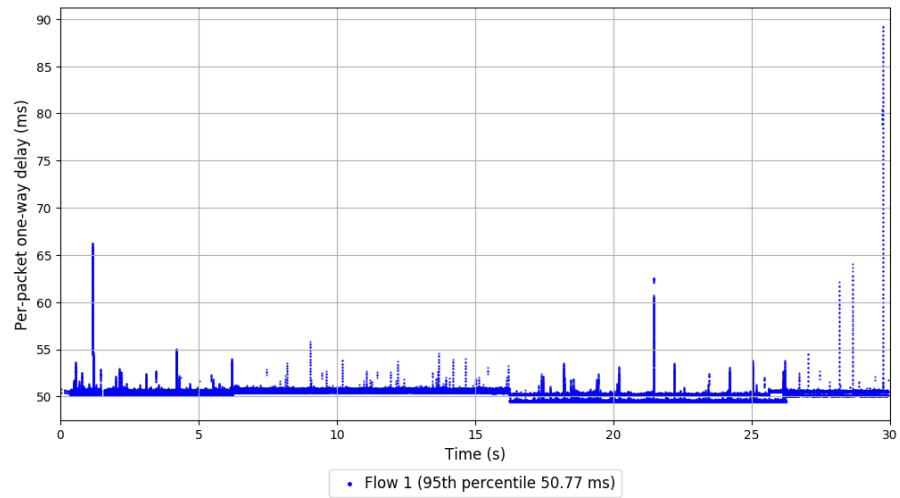
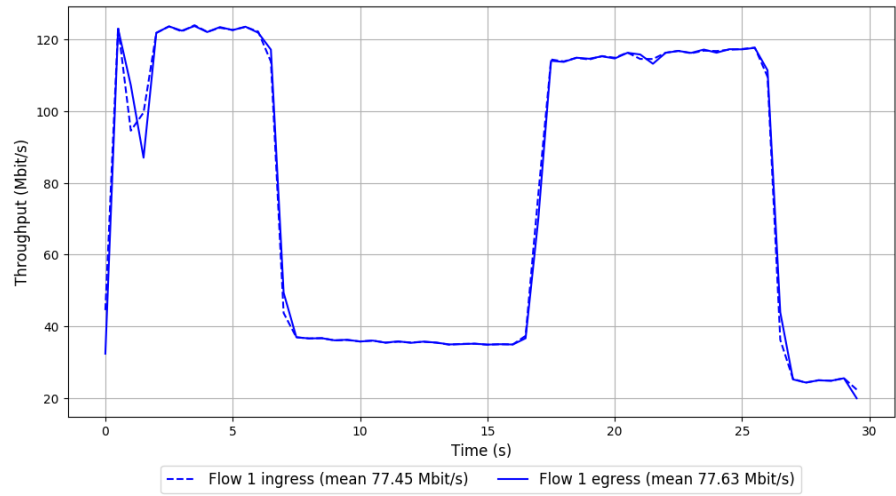
-- Flow 1:

Average throughput: 77.63 Mbit/s

95th percentile per-packet one-way delay: 50.768 ms

Loss rate: 0.11%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-16 23:42:20

End at: 2017-08-16 23:42:50

Below is generated by plot.py at 2017-08-17 03:59:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.80 Mbit/s

95th percentile per-packet one-way delay: 52.879 ms

Loss rate: 4.23%

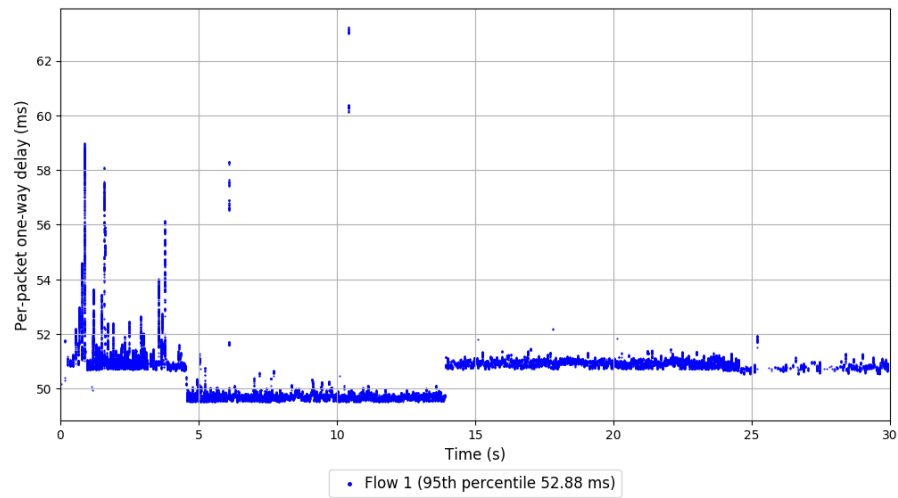
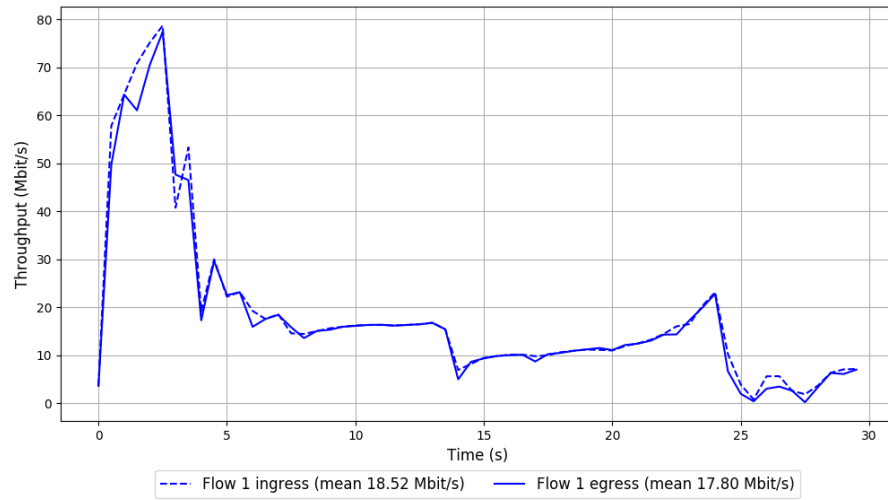
-- Flow 1:

Average throughput: 17.80 Mbit/s

95th percentile per-packet one-way delay: 52.879 ms

Loss rate: 4.23%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-16 23:52:36

End at: 2017-08-16 23:53:06

Below is generated by plot.py at 2017-08-17 03:59:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.97 Mbit/s

95th percentile per-packet one-way delay: 51.274 ms

Loss rate: 1.10%

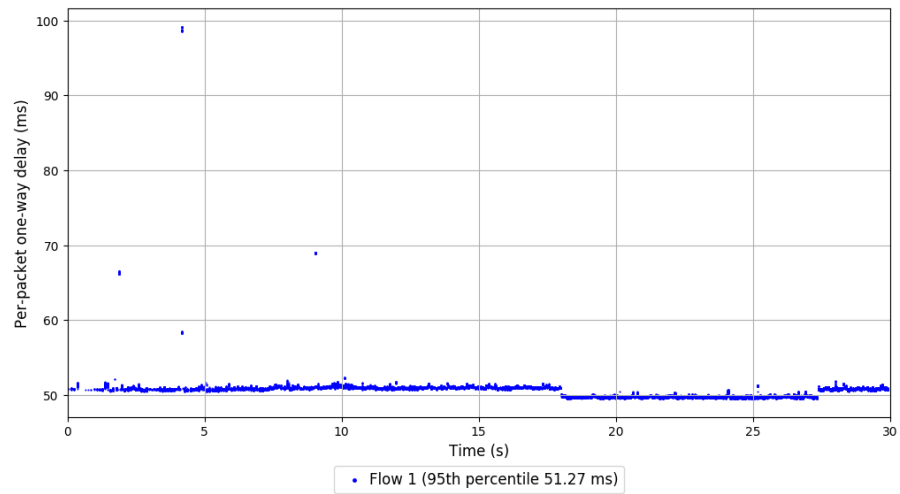
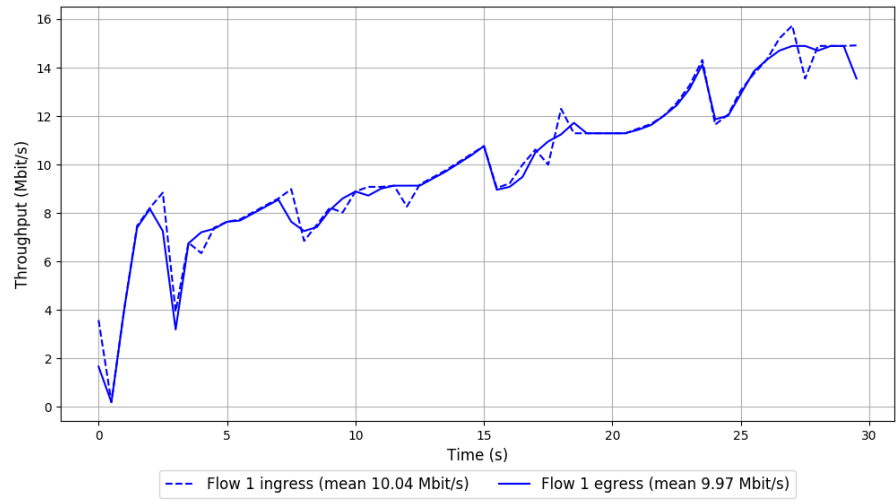
-- Flow 1:

Average throughput: 9.97 Mbit/s

95th percentile per-packet one-way delay: 51.274 ms

Loss rate: 1.10%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-17 00:02:53

End at: 2017-08-17 00:03:23

Below is generated by plot.py at 2017-08-17 03:59:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.49 Mbit/s

95th percentile per-packet one-way delay: 51.357 ms

Loss rate: 0.80%

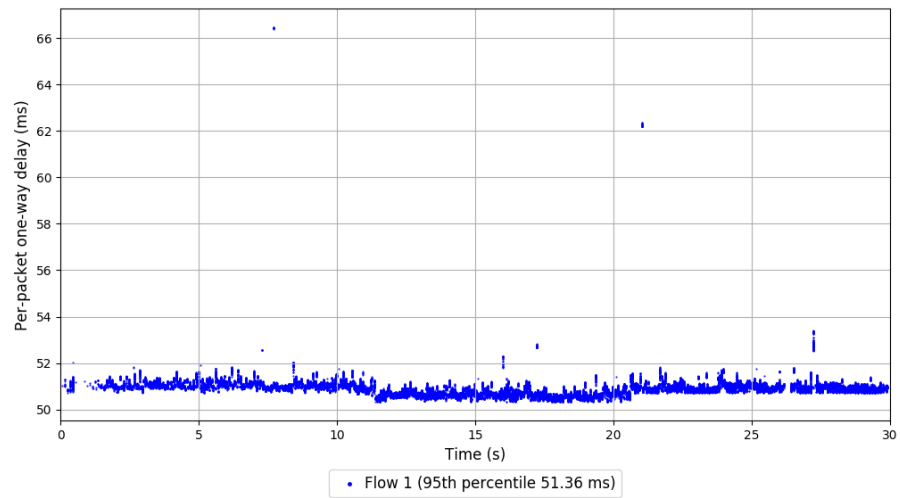
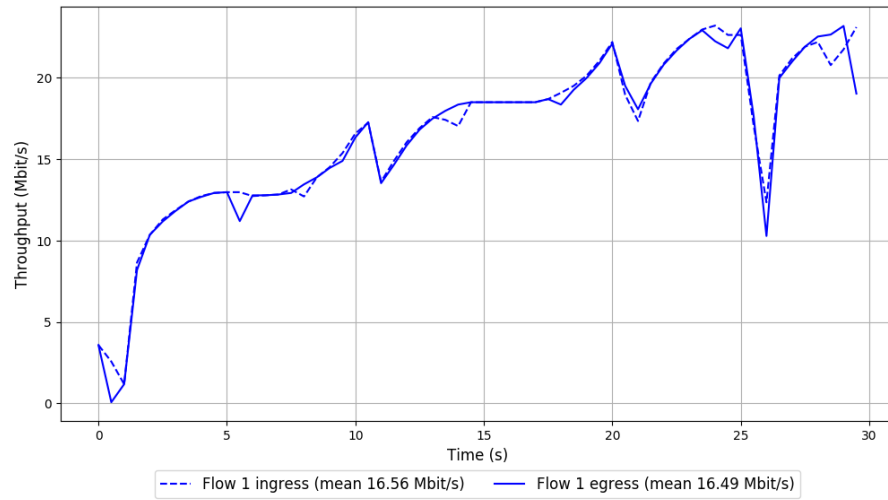
-- Flow 1:

Average throughput: 16.49 Mbit/s

95th percentile per-packet one-way delay: 51.357 ms

Loss rate: 0.80%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-08-17 00:13:37

End at: 2017-08-17 00:14:07

Below is generated by plot.py at 2017-08-17 03:59:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.65 Mbit/s

95th percentile per-packet one-way delay: 51.131 ms

Loss rate: 0.28%

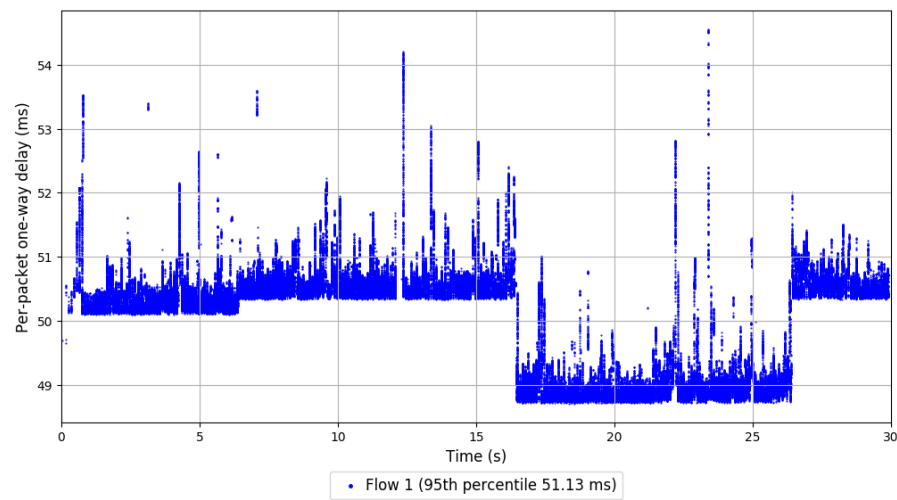
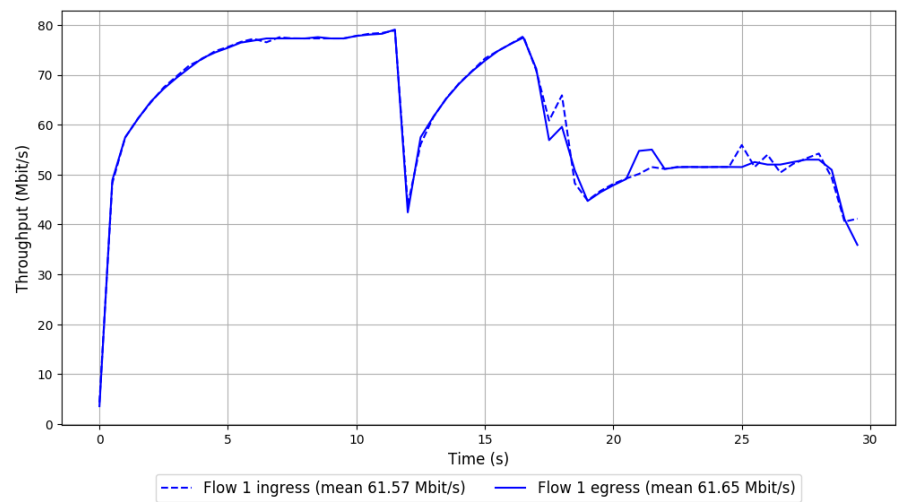
-- Flow 1:

Average throughput: 61.65 Mbit/s

95th percentile per-packet one-way delay: 51.131 ms

Loss rate: 0.28%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-17 00:24:02

End at: 2017-08-17 00:24:32

Below is generated by plot.py at 2017-08-17 03:59:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.65 Mbit/s

95th percentile per-packet one-way delay: 52.290 ms

Loss rate: 0.52%

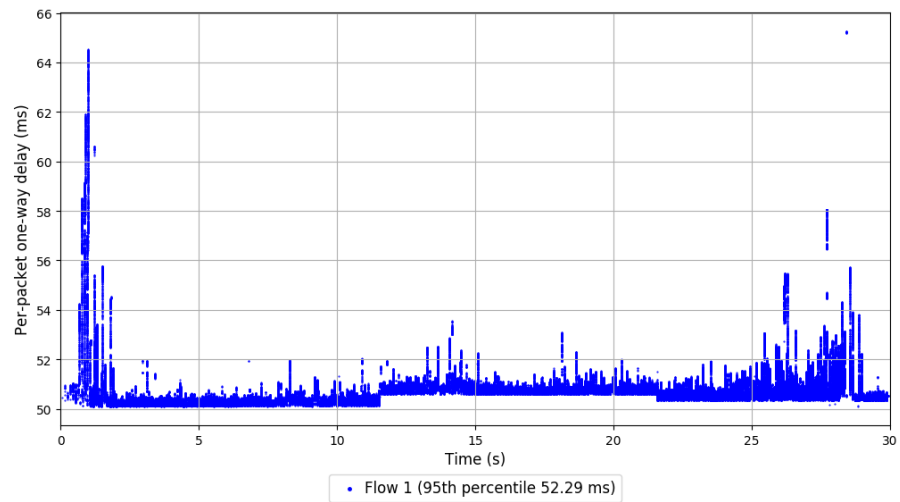
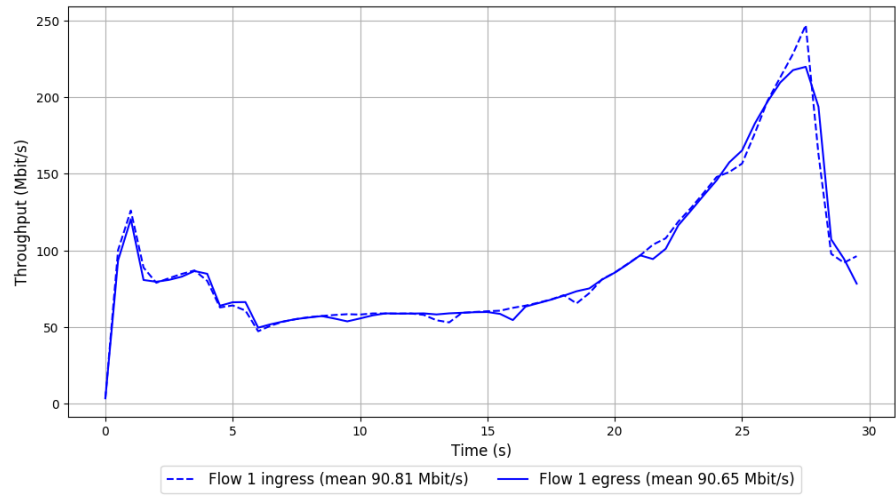
-- Flow 1:

Average throughput: 90.65 Mbit/s

95th percentile per-packet one-way delay: 52.290 ms

Loss rate: 0.52%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-17 00:34:36

End at: 2017-08-17 00:35:06

Below is generated by plot.py at 2017-08-17 03:59:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.07 Mbit/s

95th percentile per-packet one-way delay: 51.008 ms

Loss rate: 1.23%

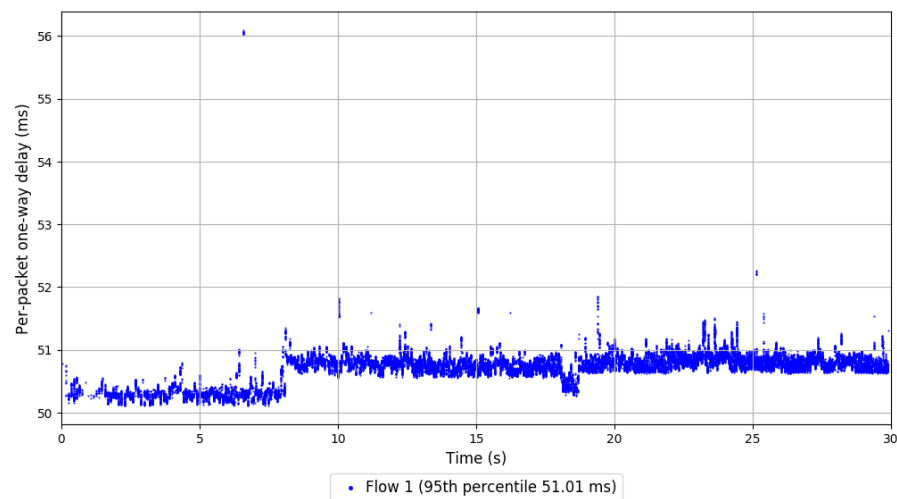
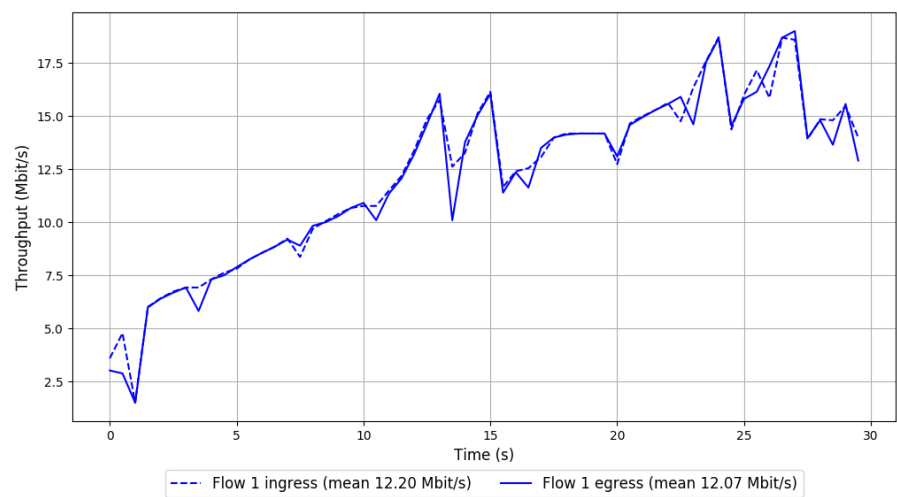
-- Flow 1:

Average throughput: 12.07 Mbit/s

95th percentile per-packet one-way delay: 51.008 ms

Loss rate: 1.23%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-17 00:45:17

End at: 2017-08-17 00:45:47

Below is generated by plot.py at 2017-08-17 03:59:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.75 Mbit/s

95th percentile per-packet one-way delay: 51.601 ms

Loss rate: 0.79%

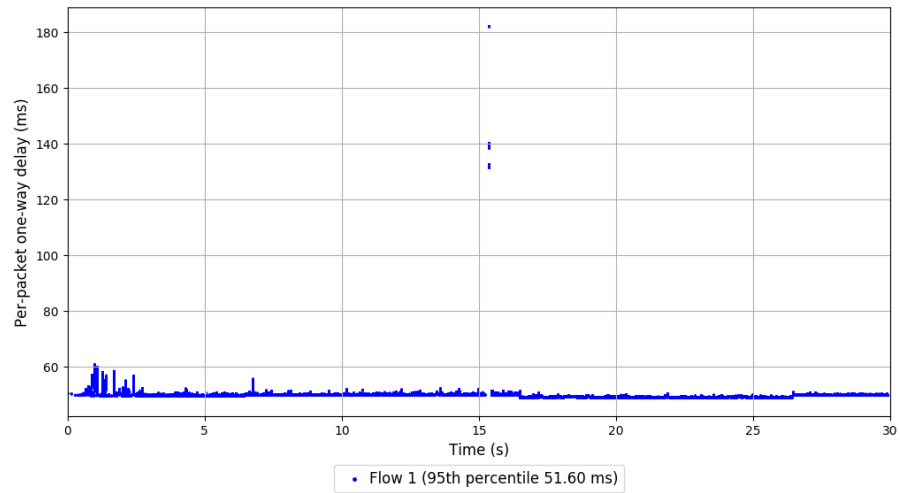
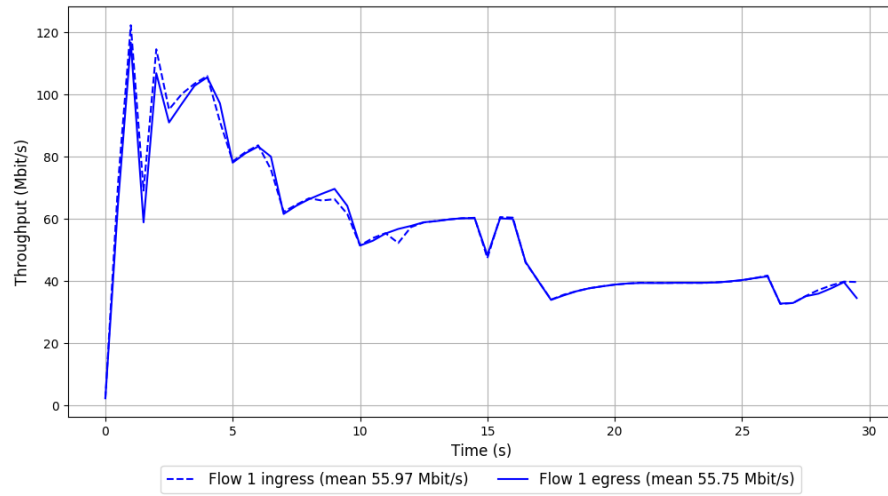
-- Flow 1:

Average throughput: 55.75 Mbit/s

95th percentile per-packet one-way delay: 51.601 ms

Loss rate: 0.79%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-17 00:55:34

End at: 2017-08-17 00:56:04

Below is generated by plot.py at 2017-08-17 03:59:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.67 Mbit/s

95th percentile per-packet one-way delay: 50.129 ms

Loss rate: 0.35%

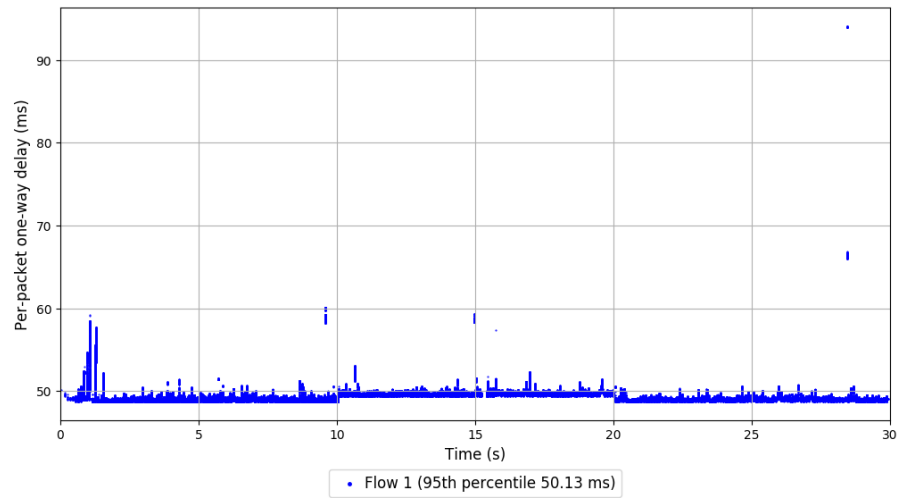
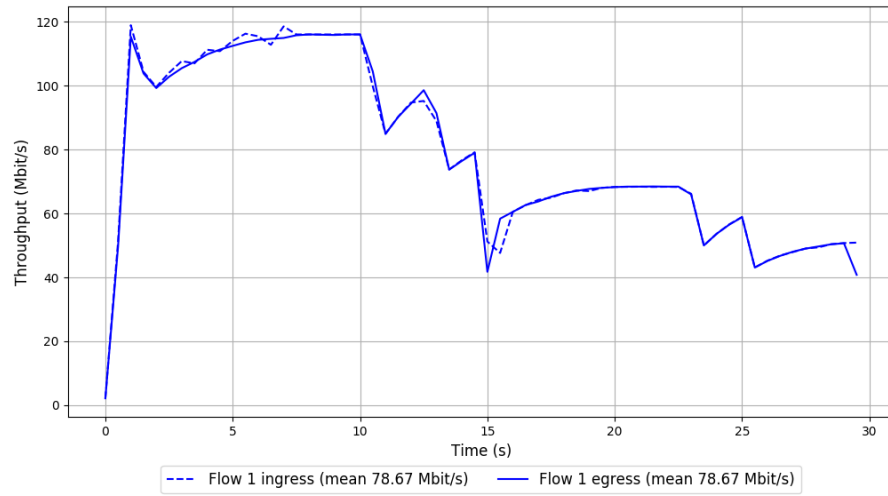
-- Flow 1:

Average throughput: 78.67 Mbit/s

95th percentile per-packet one-way delay: 50.129 ms

Loss rate: 0.35%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-17 01:06:15

End at: 2017-08-17 01:06:45

Below is generated by plot.py at 2017-08-17 03:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.43 Mbit/s

95th percentile per-packet one-way delay: 52.112 ms

Loss rate: 0.50%

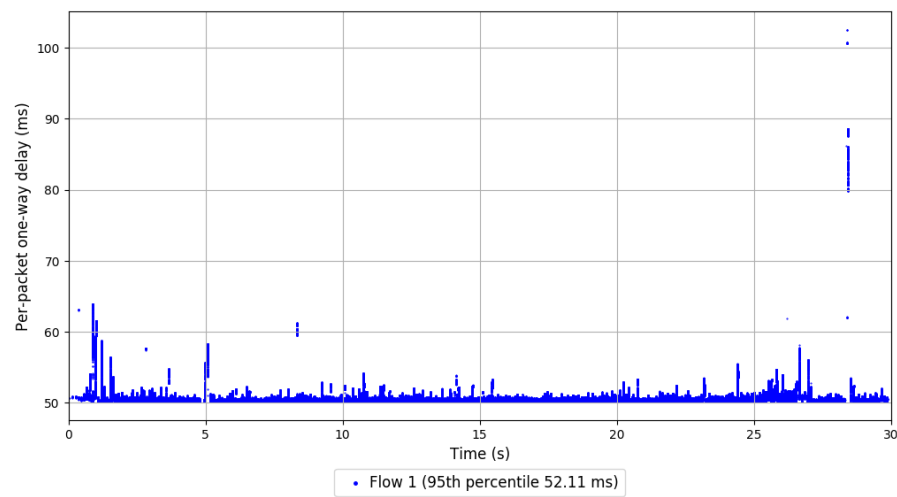
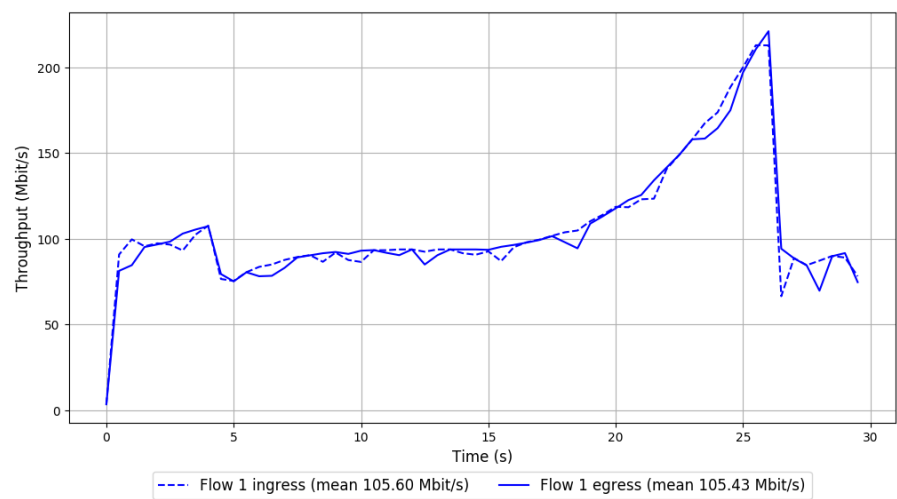
-- Flow 1:

Average throughput: 105.43 Mbit/s

95th percentile per-packet one-way delay: 52.112 ms

Loss rate: 0.50%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-17 01:17:02

End at: 2017-08-17 01:17:32

Below is generated by plot.py at 2017-08-17 03:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.48 Mbit/s

95th percentile per-packet one-way delay: 50.928 ms

Loss rate: 1.13%

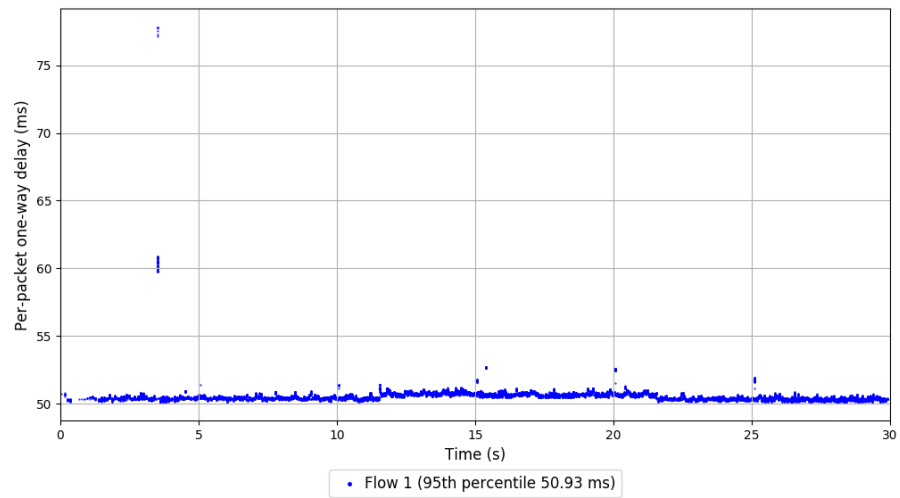
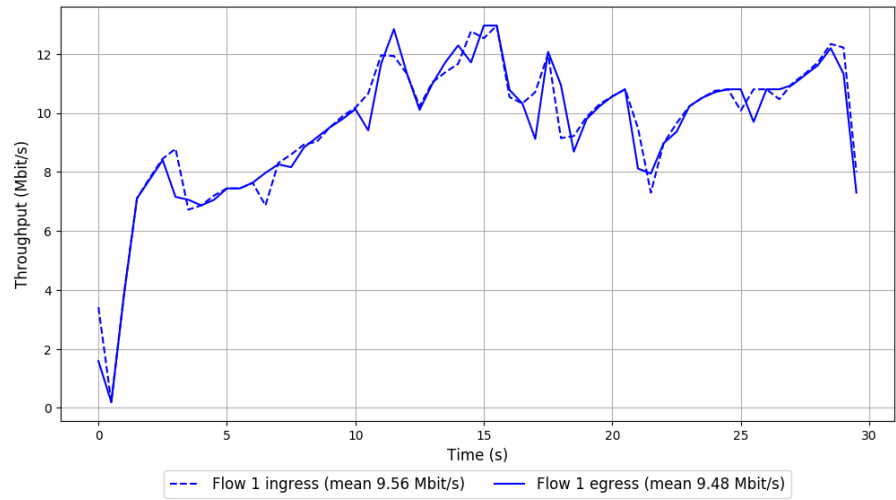
-- Flow 1:

Average throughput: 9.48 Mbit/s

95th percentile per-packet one-way delay: 50.928 ms

Loss rate: 1.13%

Run 10: Report of TCP Cubic — Data Link

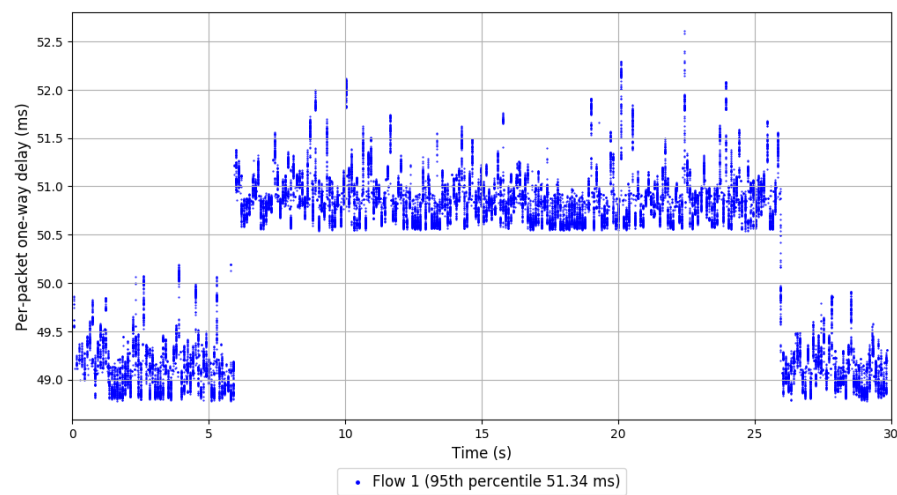
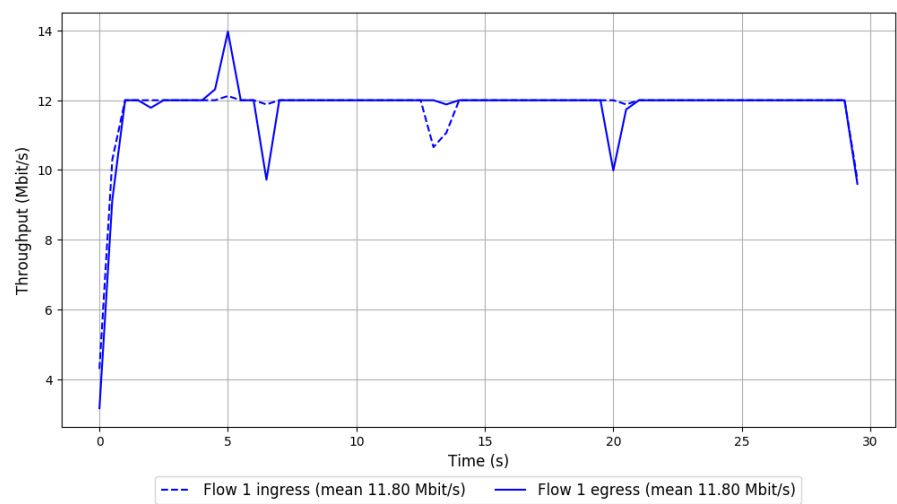


```
Run 1: Statistics of KohoCC

Start at: 2017-08-16 23:42:58
End at: 2017-08-16 23:43:28

# Below is generated by plot.py at 2017-08-17 03:59:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 51.344 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 51.344 ms
Loss rate: 0.37%
```


Run 1: Report of KohoCC — Data Link

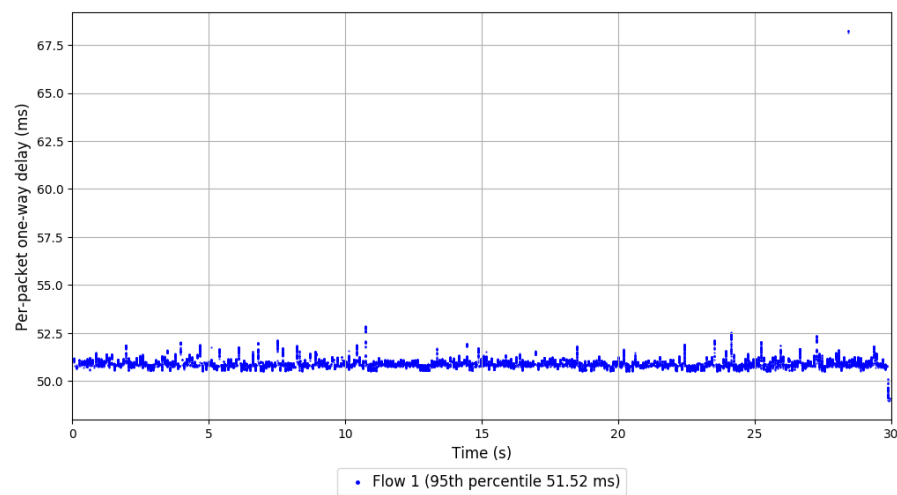
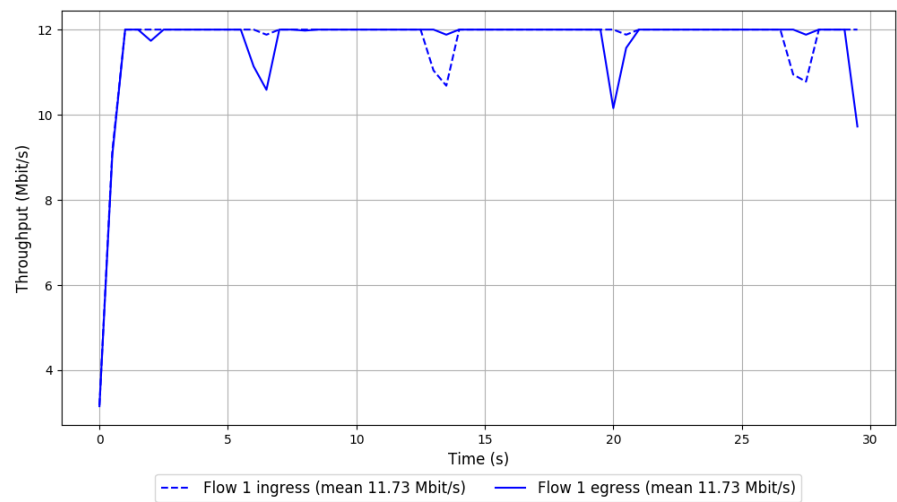


```
Run 2: Statistics of KohoCC

Start at: 2017-08-16 23:53:14
End at: 2017-08-16 23:53:44

# Below is generated by plot.py at 2017-08-17 03:59:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.73 Mbit/s
95th percentile per-packet one-way delay: 51.518 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 11.73 Mbit/s
95th percentile per-packet one-way delay: 51.518 ms
Loss rate: 0.38%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-17 00:03:31

End at: 2017-08-17 00:04:01

Below is generated by plot.py at 2017-08-17 03:59:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.06 Mbit/s

95th percentile per-packet one-way delay: 51.586 ms

Loss rate: 17.00%

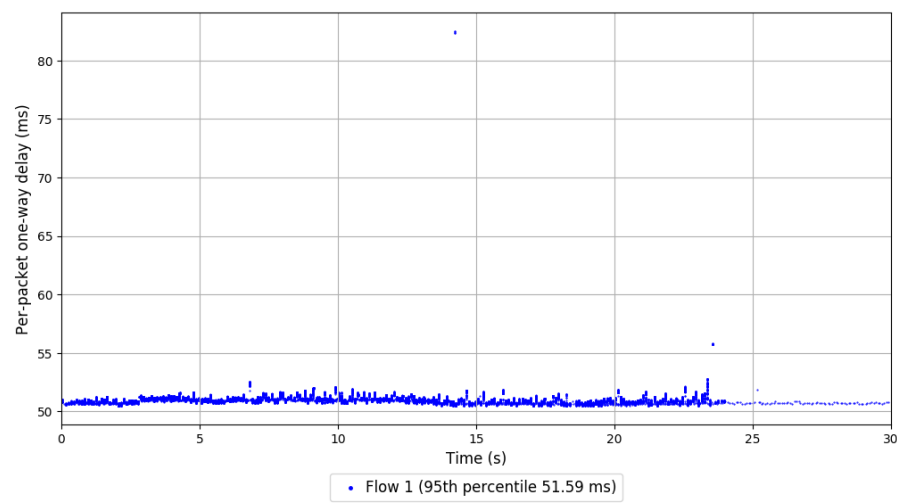
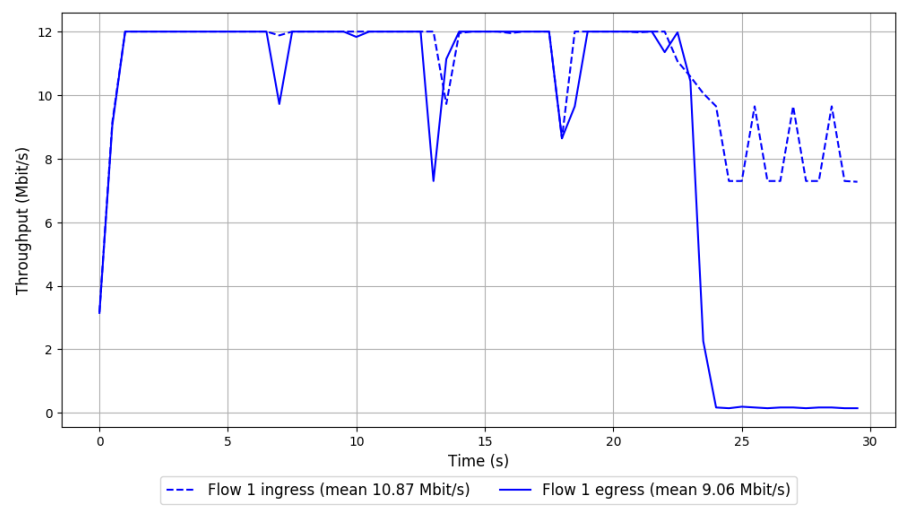
-- Flow 1:

Average throughput: 9.06 Mbit/s

95th percentile per-packet one-way delay: 51.586 ms

Loss rate: 17.00%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-08-17 00:14:18

End at: 2017-08-17 00:14:48

Below is generated by plot.py at 2017-08-17 03:59:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 51.462 ms

Loss rate: 24.52%

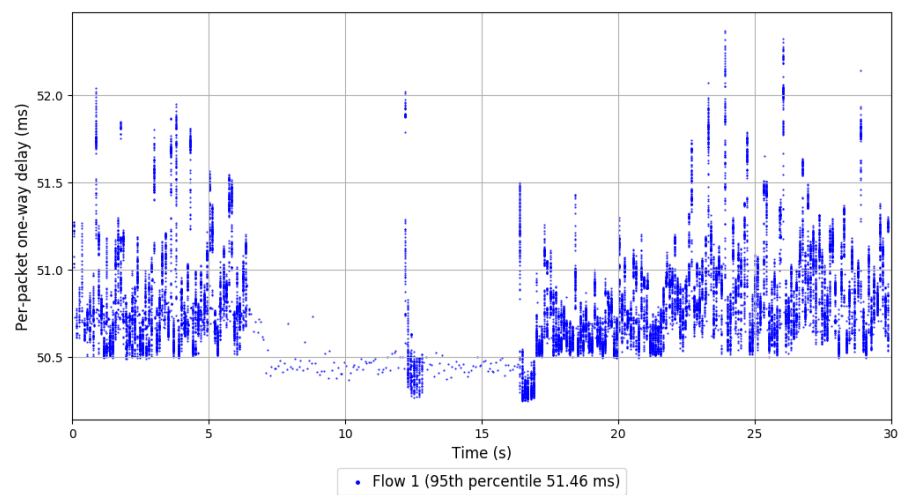
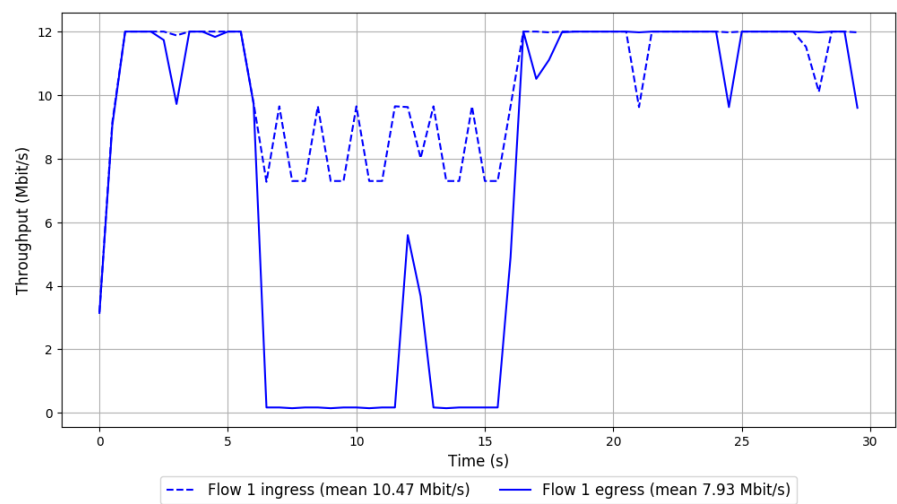
-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 51.462 ms

Loss rate: 24.52%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-08-17 00:24:44

End at: 2017-08-17 00:25:14

Below is generated by plot.py at 2017-08-17 04:00:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.82 Mbit/s

95th percentile per-packet one-way delay: 50.903 ms

Loss rate: 0.35%

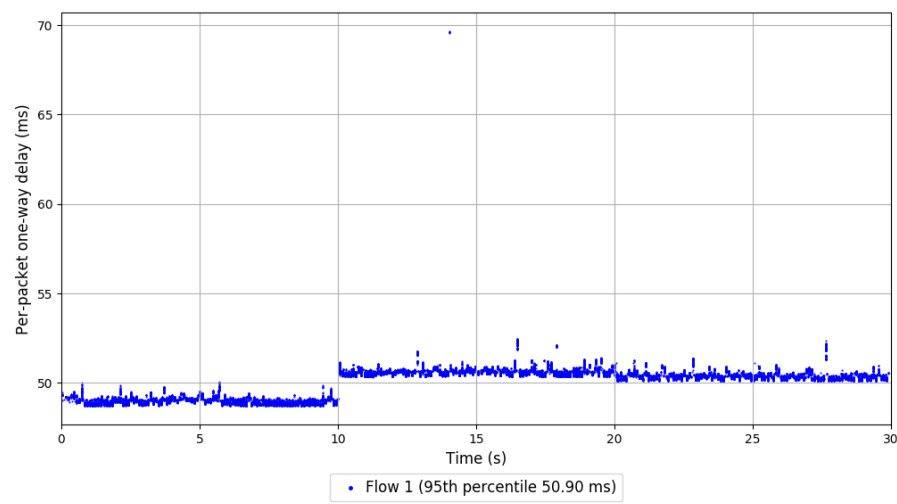
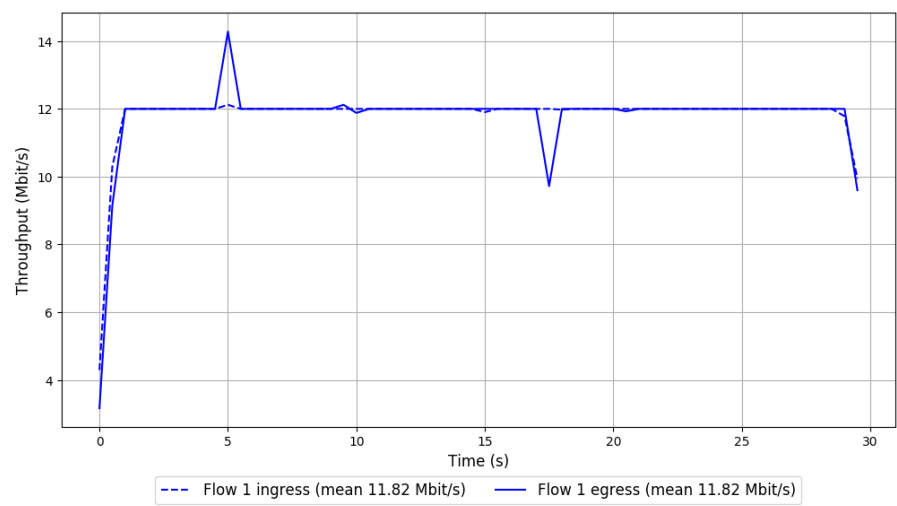
-- Flow 1:

Average throughput: 11.82 Mbit/s

95th percentile per-packet one-way delay: 50.903 ms

Loss rate: 0.35%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-17 00:35:13

End at: 2017-08-17 00:35:43

Below is generated by plot.py at 2017-08-17 04:00:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 51.136 ms

Loss rate: 55.15%

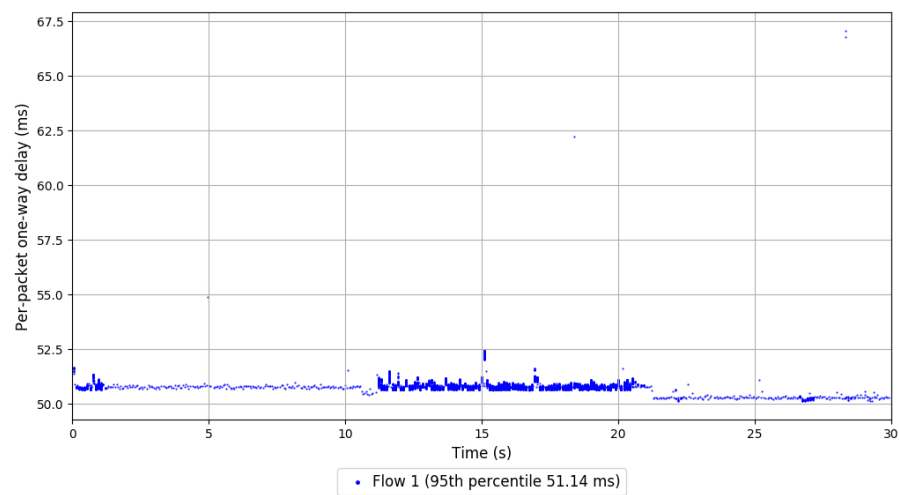
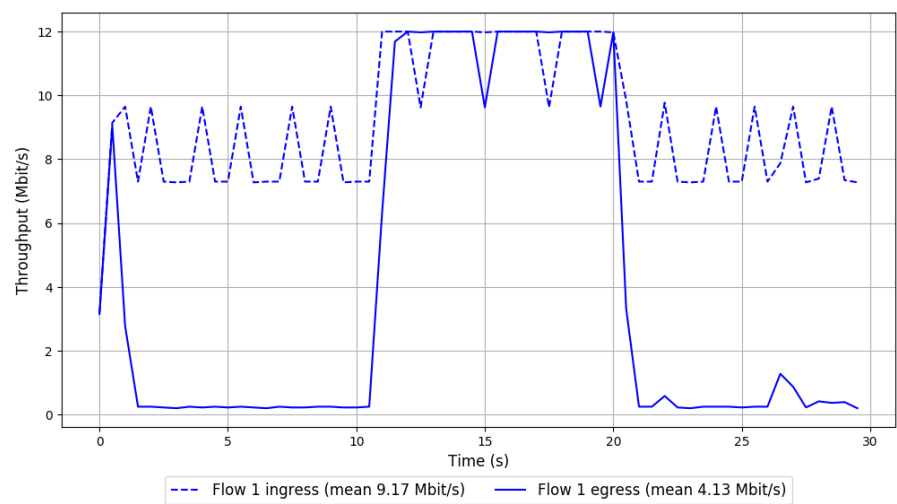
-- Flow 1:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 51.136 ms

Loss rate: 55.15%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-17 00:45:57

End at: 2017-08-17 00:46:27

Below is generated by plot.py at 2017-08-17 04:00:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.31 Mbit/s

95th percentile per-packet one-way delay: 50.359 ms

Loss rate: 45.70%

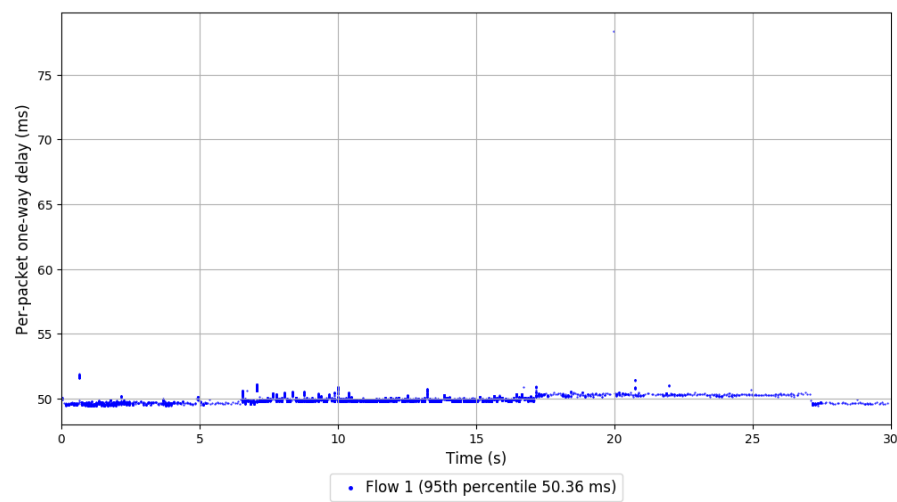
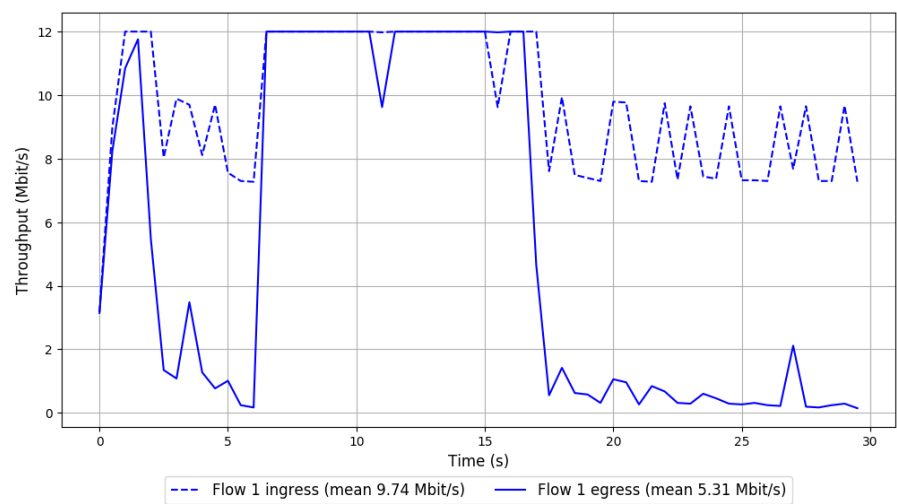
-- Flow 1:

Average throughput: 5.31 Mbit/s

95th percentile per-packet one-way delay: 50.359 ms

Loss rate: 45.70%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-17 00:56:15

End at: 2017-08-17 00:56:45

Below is generated by plot.py at 2017-08-17 04:00:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.59 Mbit/s

95th percentile per-packet one-way delay: 50.333 ms

Loss rate: 26.57%

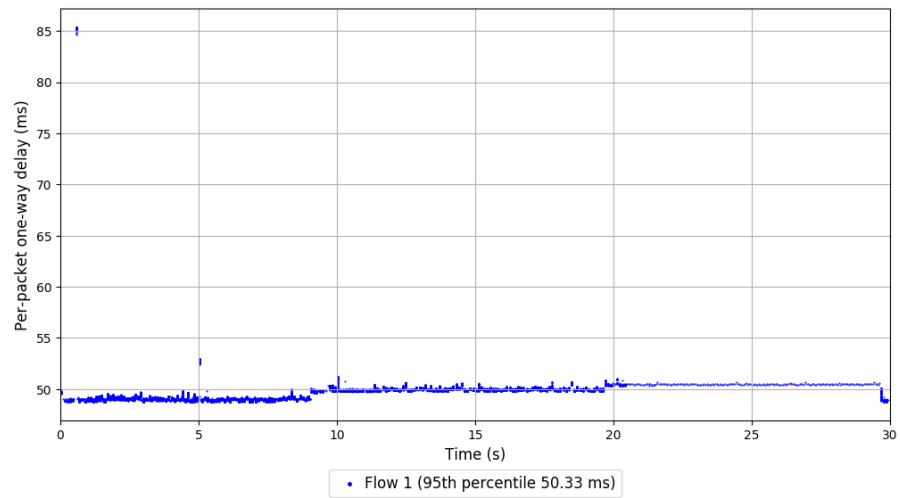
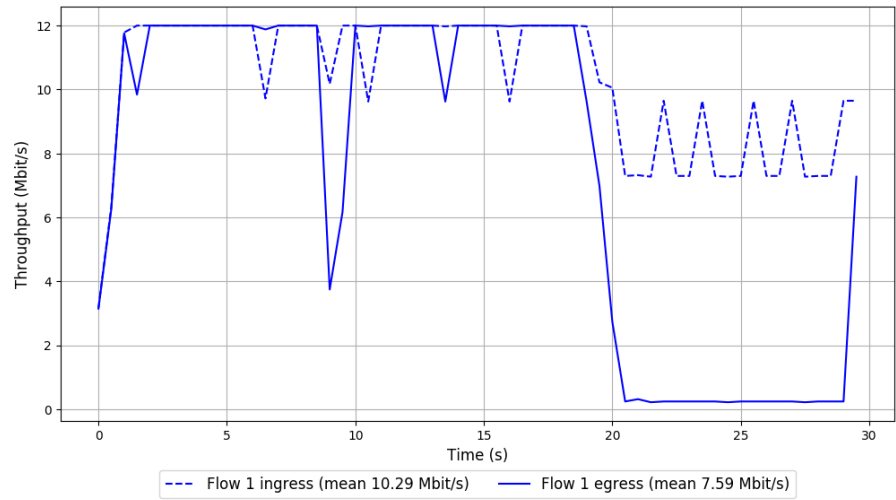
-- Flow 1:

Average throughput: 7.59 Mbit/s

95th percentile per-packet one-way delay: 50.333 ms

Loss rate: 26.57%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-17 01:06:57

End at: 2017-08-17 01:07:27

Below is generated by plot.py at 2017-08-17 04:00:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.12 Mbit/s

95th percentile per-packet one-way delay: 50.569 ms

Loss rate: 39.54%

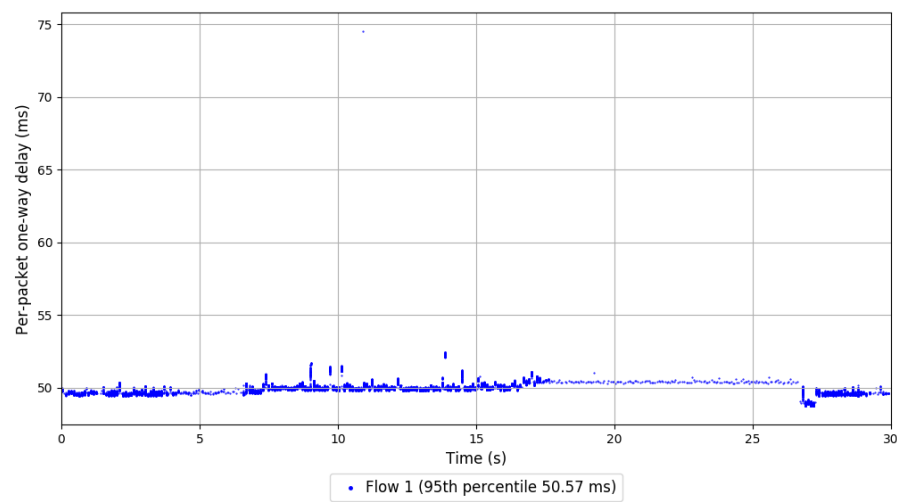
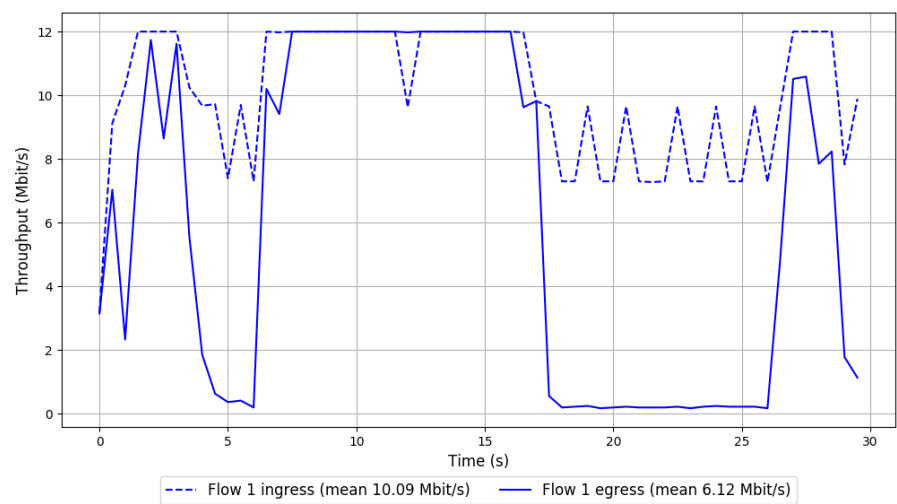
-- Flow 1:

Average throughput: 6.12 Mbit/s

95th percentile per-packet one-way delay: 50.569 ms

Loss rate: 39.54%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-08-17 01:17:40

End at: 2017-08-17 01:18:10

Below is generated by plot.py at 2017-08-17 04:00:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 51.364 ms

Loss rate: 76.67%

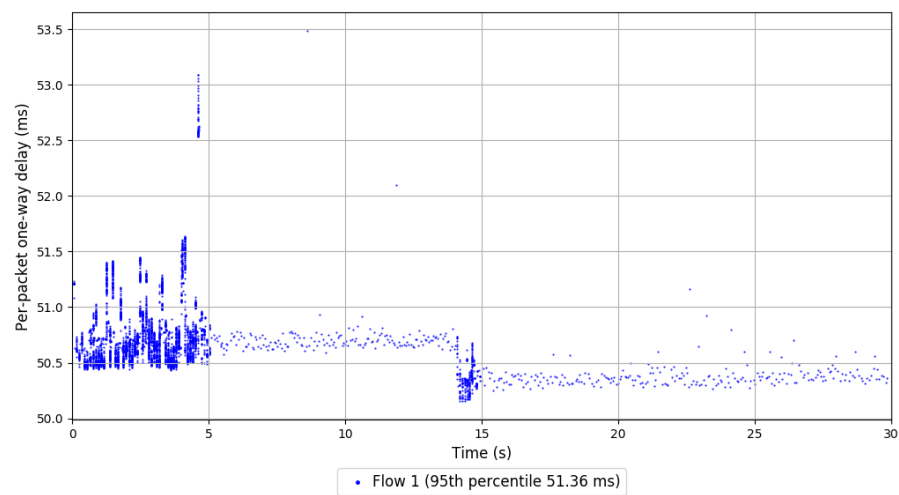
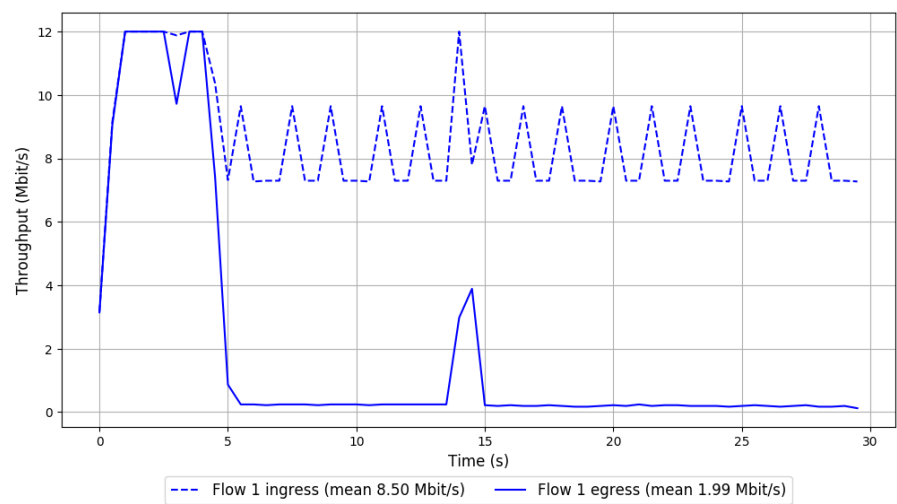
-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 51.364 ms

Loss rate: 76.67%

Run 10: Report of KohoCC — Data Link

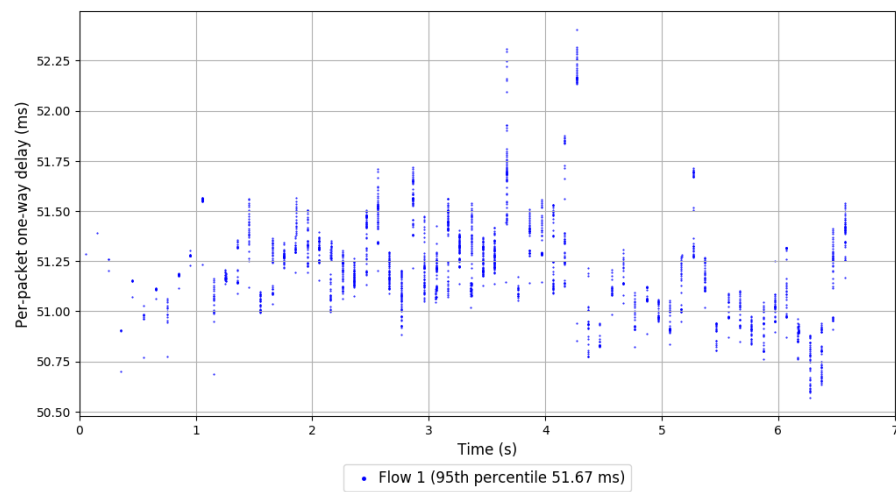
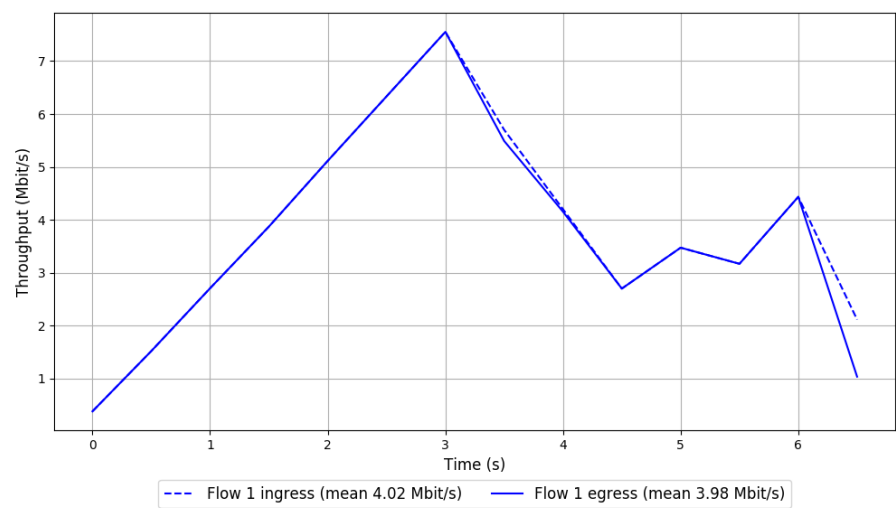


Run 1: Statistics of LEDBAT

Start at: 2017-08-16 23:40:56

End at: 2017-08-16 23:41:26

Run 1: Report of LEDBAT — Data Link

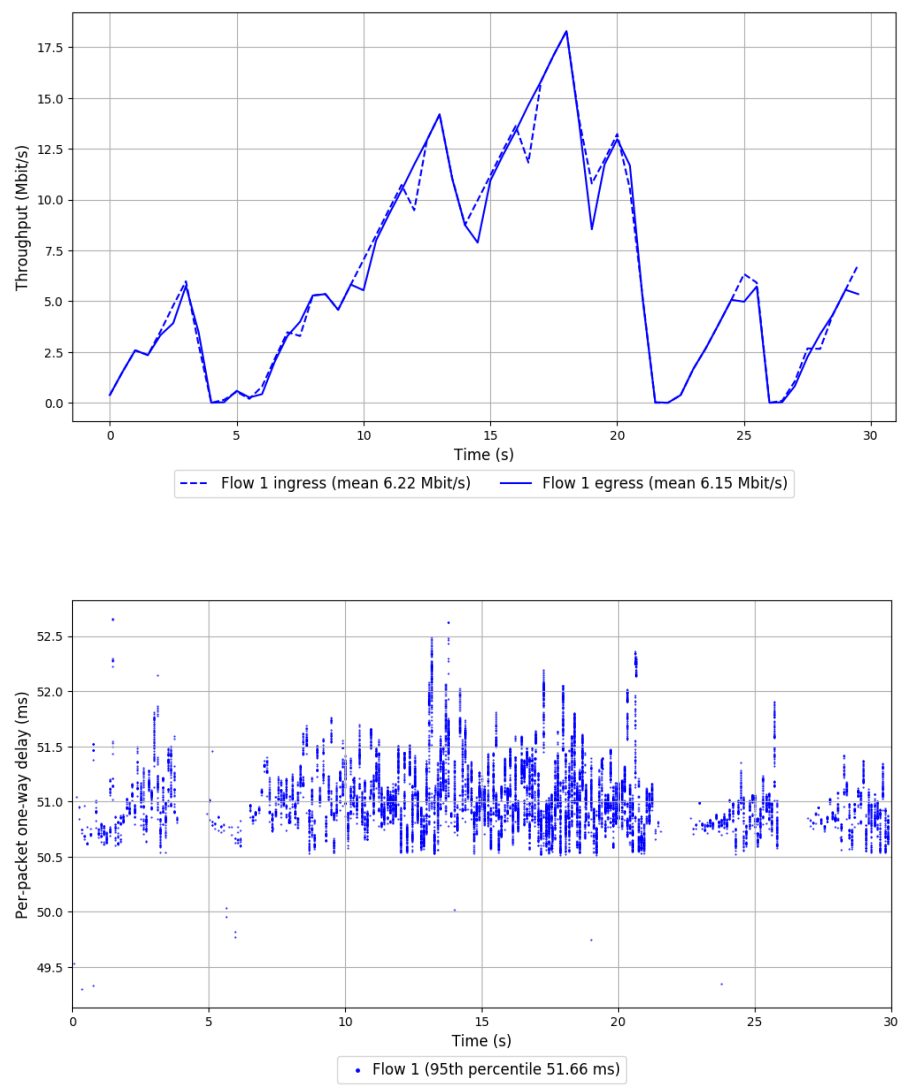


```
Run 2: Statistics of LEDBAT

Start at: 2017-08-16 23:51:13
End at: 2017-08-16 23:51:43

# Below is generated by plot.py at 2017-08-17 04:00:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.15 Mbit/s
95th percentile per-packet one-way delay: 51.663 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 6.15 Mbit/s
95th percentile per-packet one-way delay: 51.663 ms
Loss rate: 1.49%
```

Run 2: Report of LEDBAT — Data Link

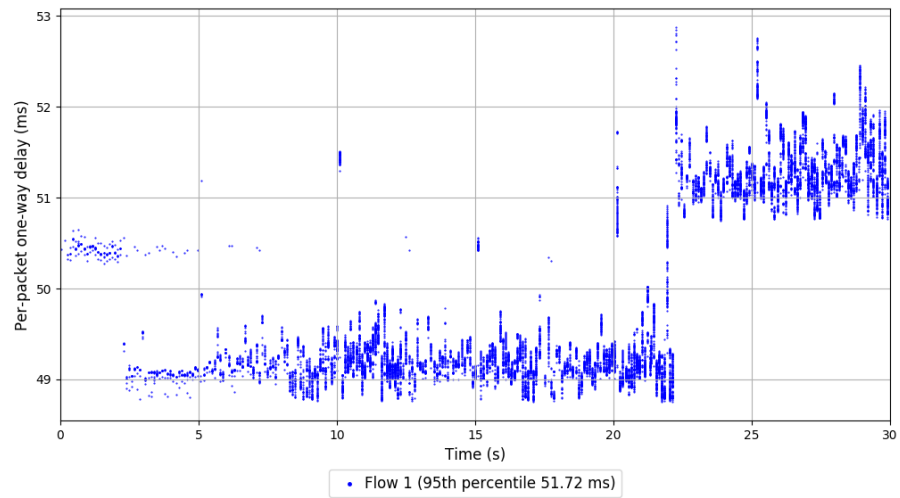
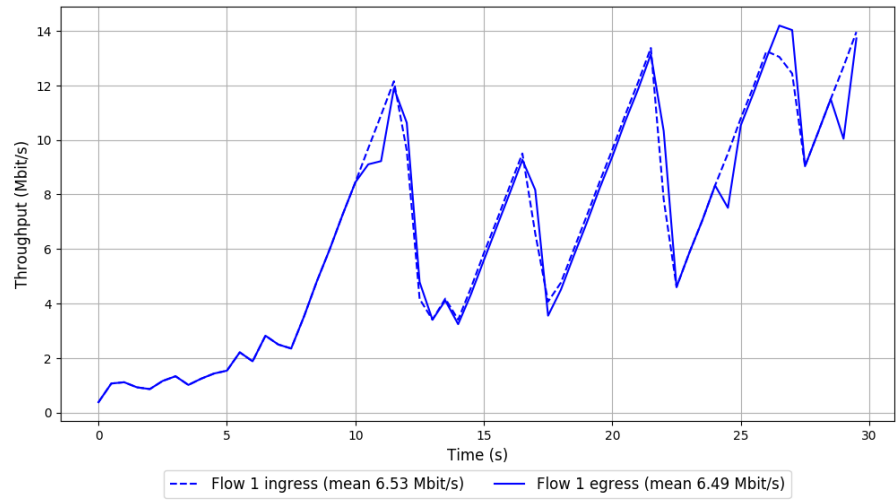


```
Run 3: Statistics of LEDBAT

Start at: 2017-08-17 00:01:32
End at: 2017-08-17 00:02:02

# Below is generated by plot.py at 2017-08-17 04:00:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.49 Mbit/s
95th percentile per-packet one-way delay: 51.722 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 6.49 Mbit/s
95th percentile per-packet one-way delay: 51.722 ms
Loss rate: 0.92%
```


Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-17 00:12:16

End at: 2017-08-17 00:12:46

Below is generated by plot.py at 2017-08-17 04:00:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.65 Mbit/s

95th percentile per-packet one-way delay: 51.109 ms

Loss rate: 0.77%

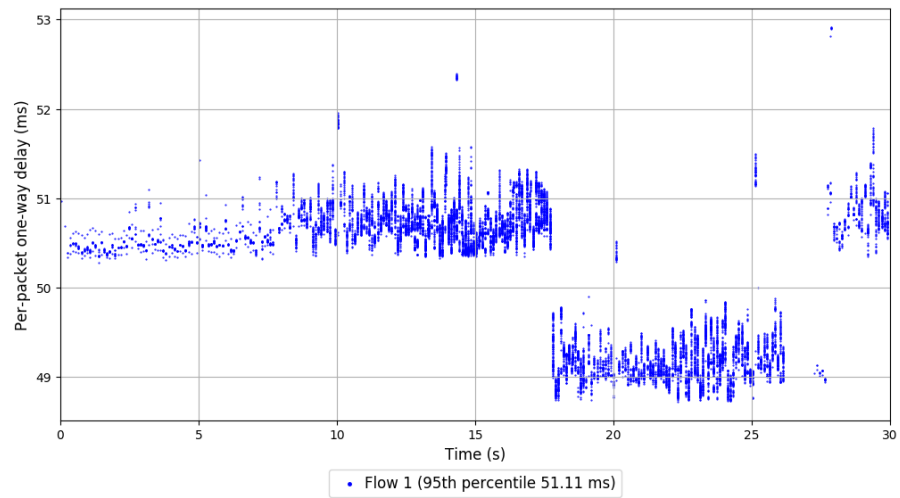
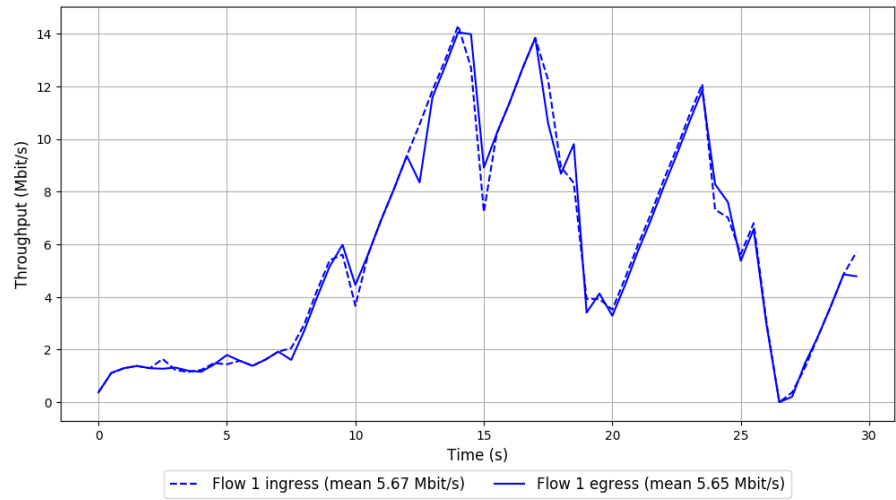
-- Flow 1:

Average throughput: 5.65 Mbit/s

95th percentile per-packet one-way delay: 51.109 ms

Loss rate: 0.77%

Run 4: Report of LEDBAT — Data Link

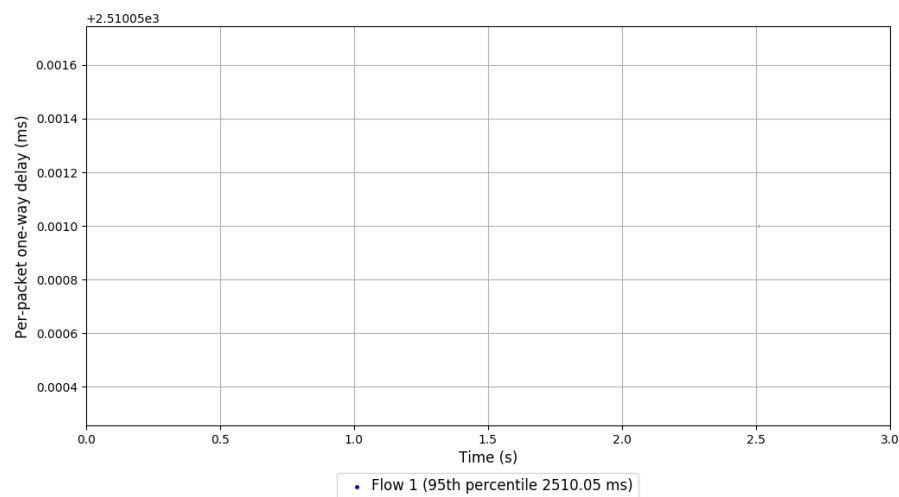
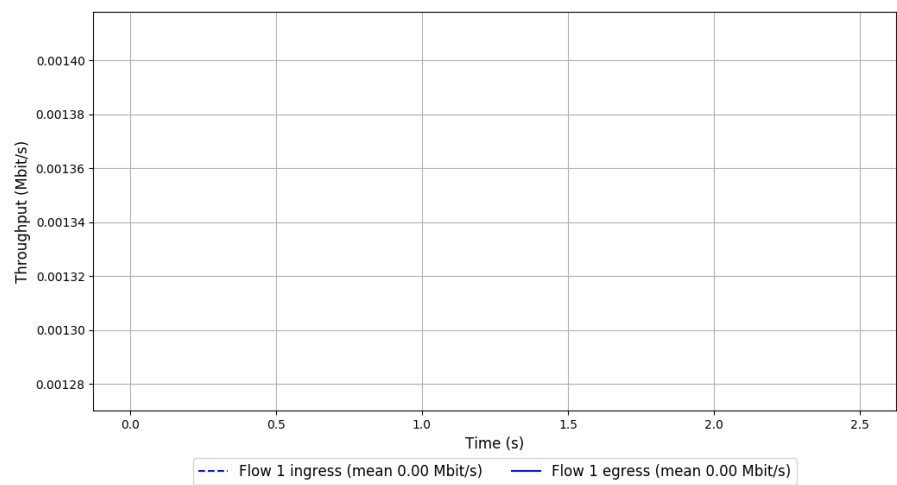


Run 5: Statistics of LEDBAT

Start at: 2017-08-17 00:22:42

End at: 2017-08-17 00:23:12

Run 5: Report of LEDBAT — Data Link

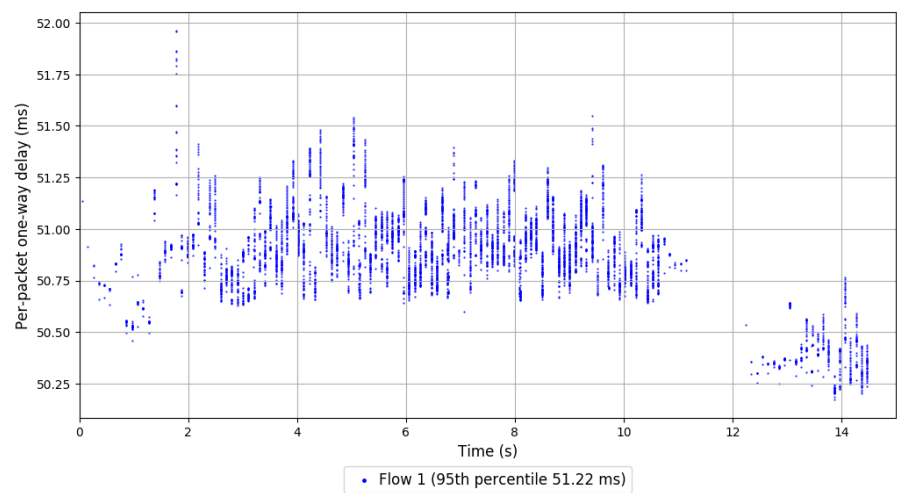
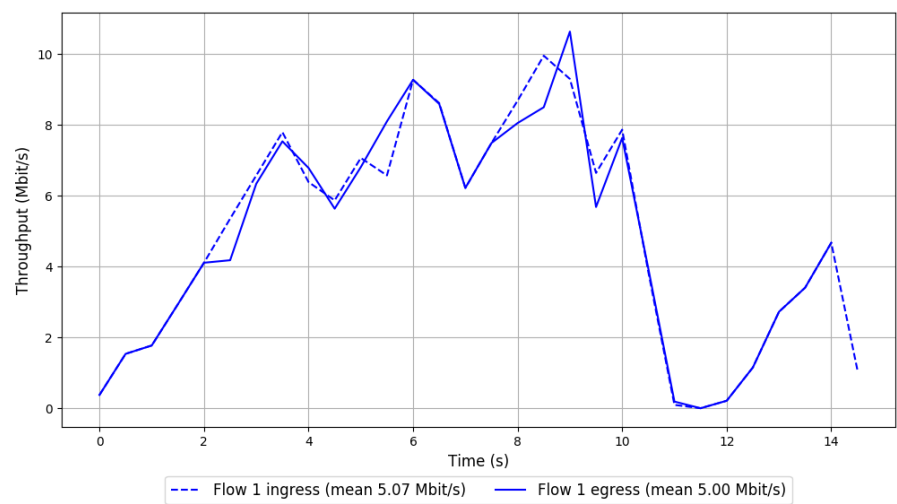


Run 6: Statistics of LEDBAT

Start at: 2017-08-17 00:33:18

End at: 2017-08-17 00:33:48

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-17 00:43:52

End at: 2017-08-17 00:44:22

Below is generated by plot.py at 2017-08-17 04:00:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.04 Mbit/s

95th percentile per-packet one-way delay: 50.687 ms

Loss rate: 1.03%

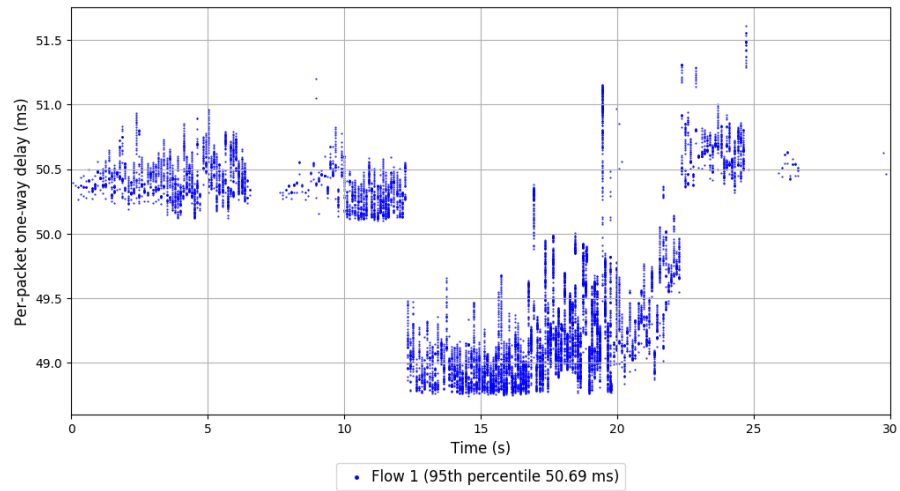
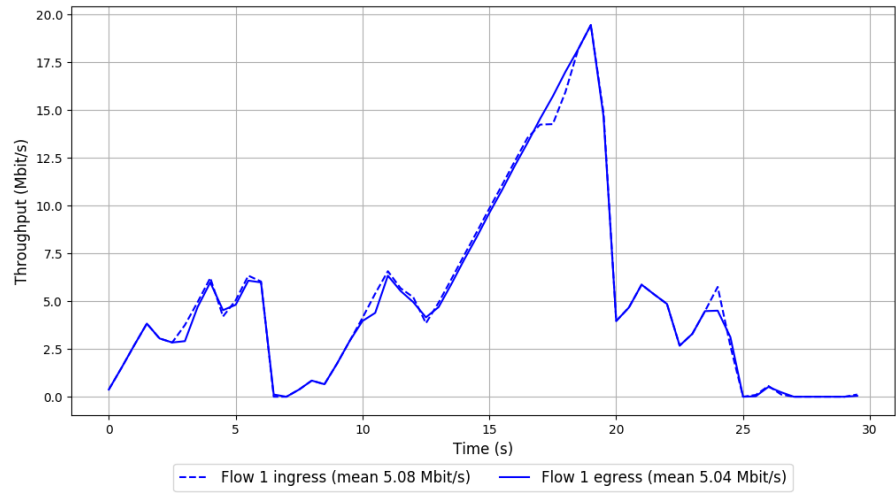
-- Flow 1:

Average throughput: 5.04 Mbit/s

95th percentile per-packet one-way delay: 50.687 ms

Loss rate: 1.03%

Run 7: Report of LEDBAT — Data Link

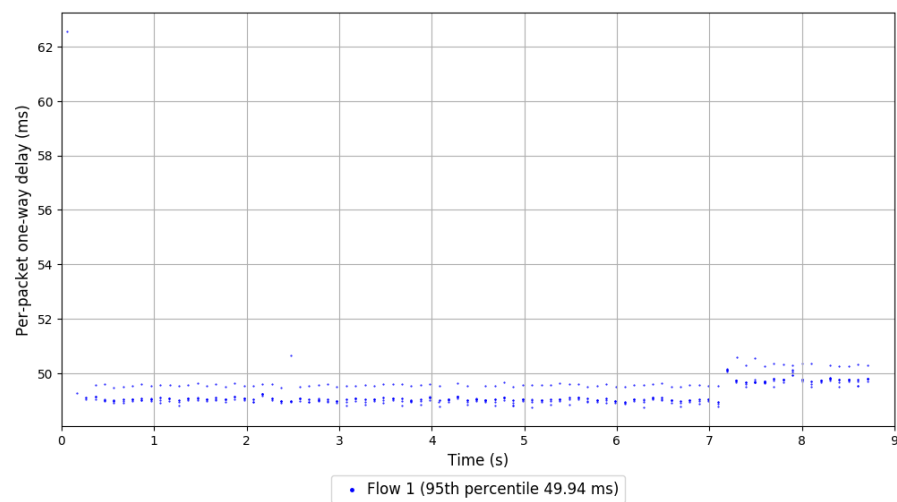
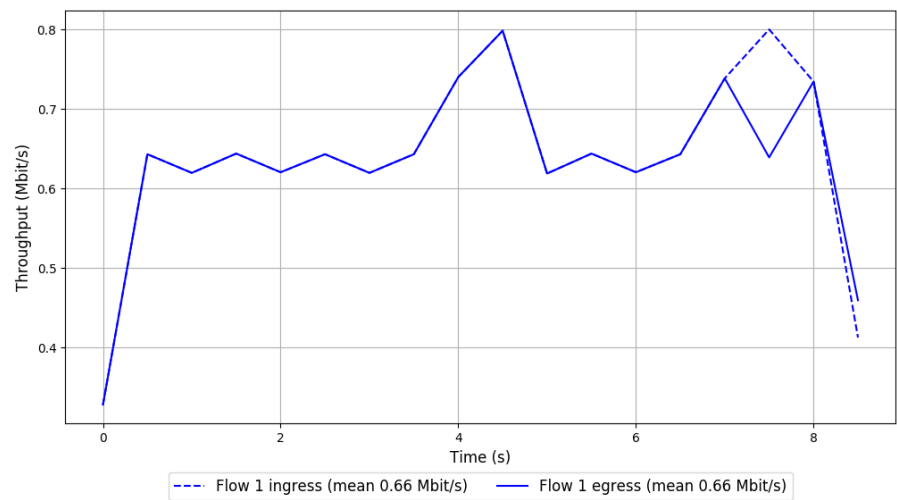


Run 8: Statistics of LEDBAT

Start at: 2017-08-17 00:54:16

End at: 2017-08-17 00:54:46

Run 8: Report of LEDBAT — Data Link

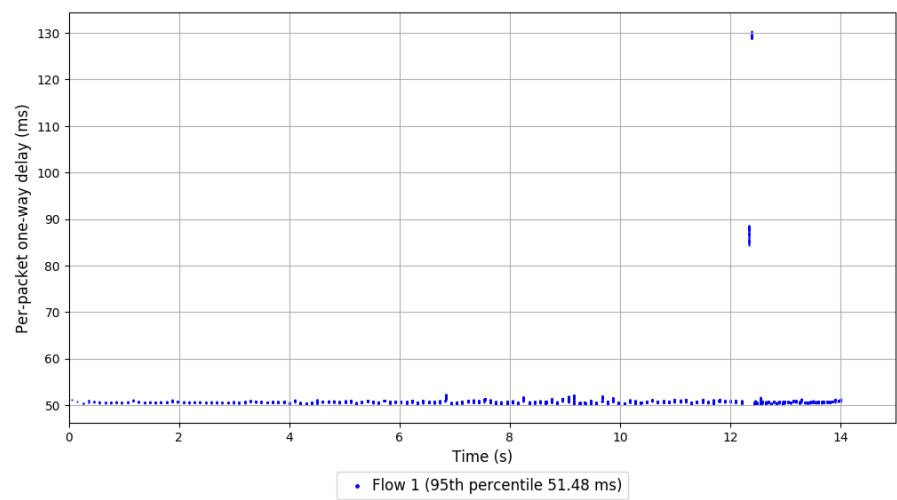
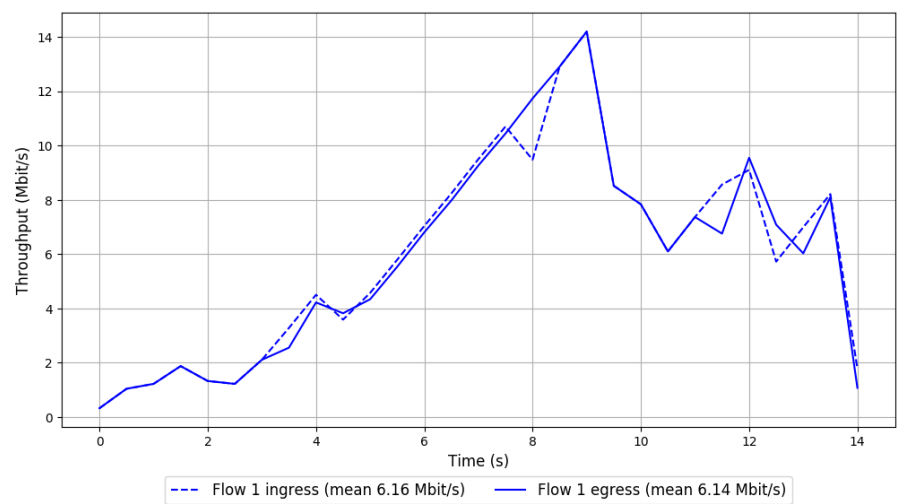


Run 9: Statistics of LEDBAT

Start at: 2017-08-17 01:04:56

End at: 2017-08-17 01:05:26

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-08-17 01:15:41

End at: 2017-08-17 01:16:11

Below is generated by plot.py at 2017-08-17 04:00:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.69 Mbit/s

95th percentile per-packet one-way delay: 51.298 ms

Loss rate: 0.49%

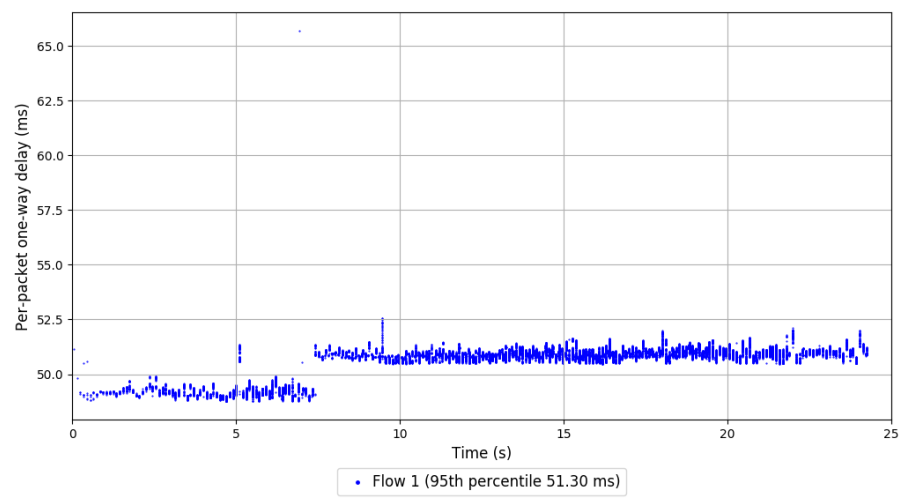
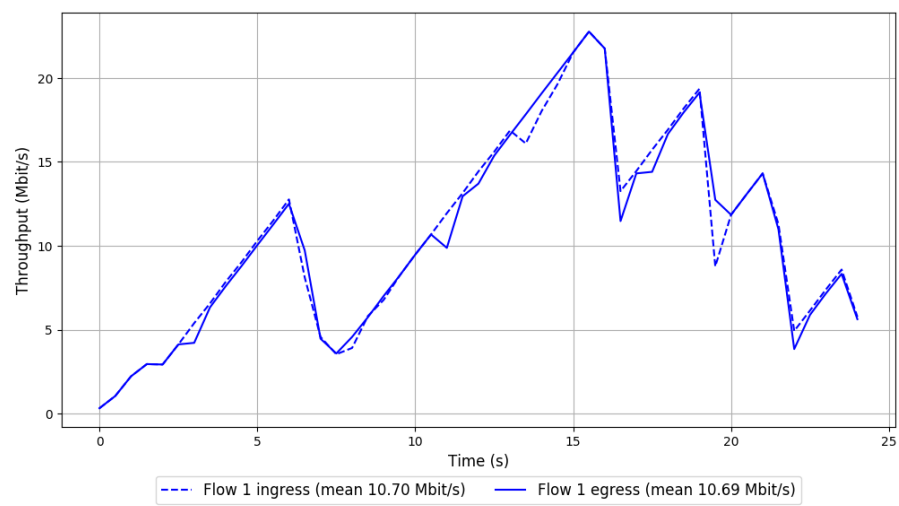
-- Flow 1:

Average throughput: 10.69 Mbit/s

95th percentile per-packet one-way delay: 51.298 ms

Loss rate: 0.49%

Run 10: Report of LEDBAT — Data Link

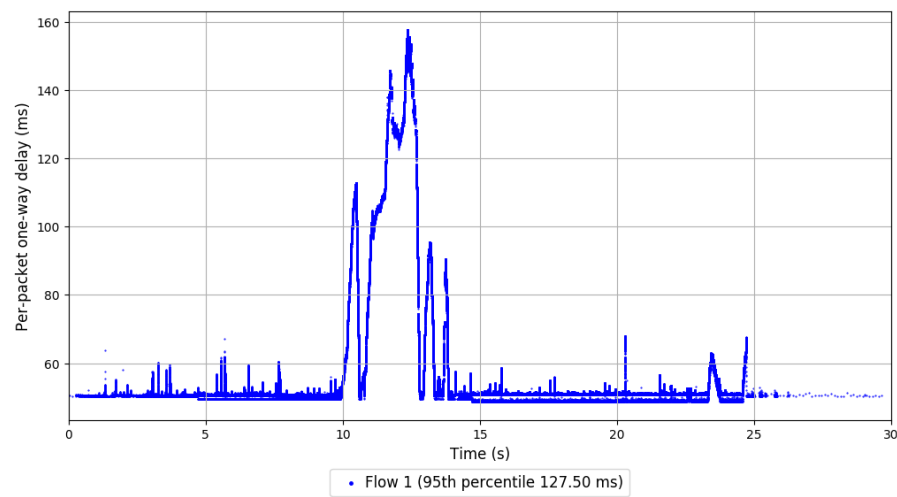
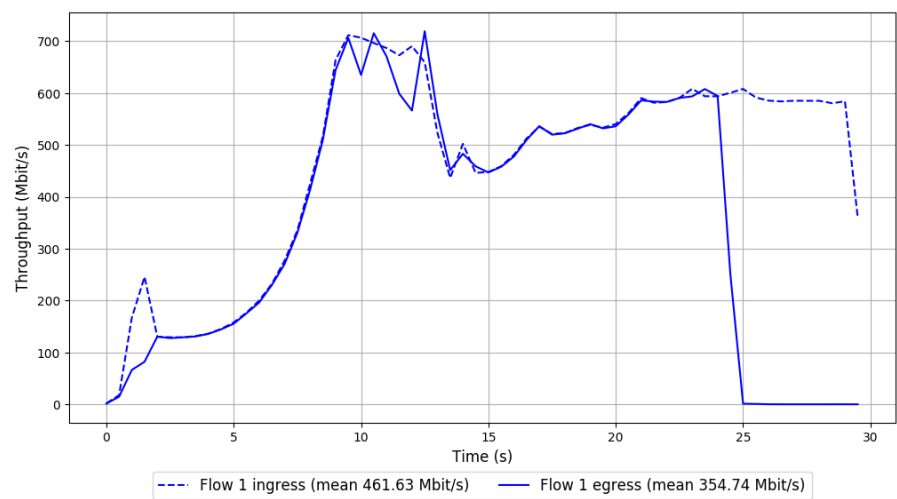


```
Run 1: Statistics of PCC

Start at: 2017-08-16 23:38:50
End at: 2017-08-16 23:39:20

# Below is generated by plot.py at 2017-08-17 04:01:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 354.74 Mbit/s
95th percentile per-packet one-way delay: 127.502 ms
Loss rate: 23.66%
-- Flow 1:
Average throughput: 354.74 Mbit/s
95th percentile per-packet one-way delay: 127.502 ms
Loss rate: 23.66%
```


Run 1: Report of PCC — Data Link

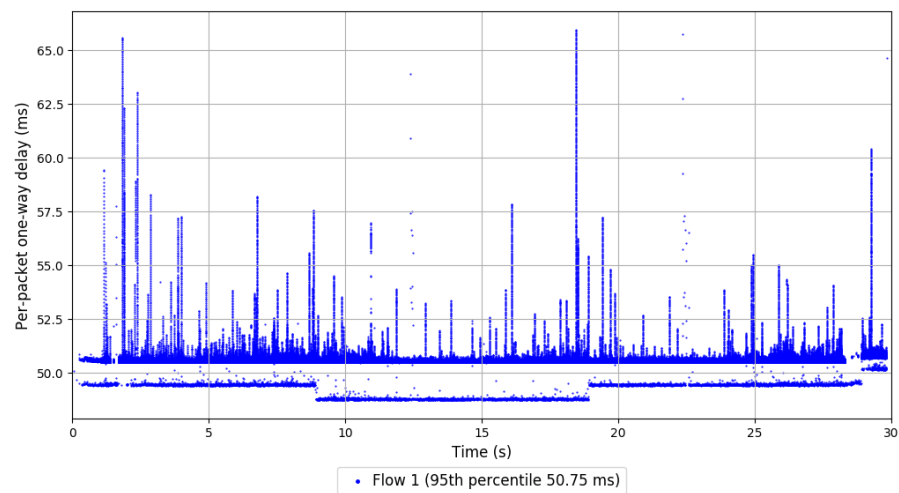
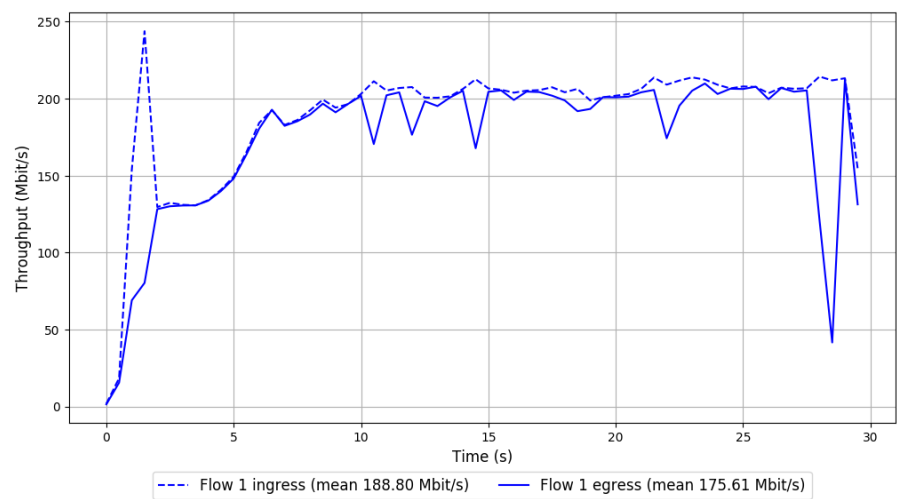


```
Run 2: Statistics of PCC

Start at: 2017-08-16 23:49:15
End at: 2017-08-16 23:49:45

# Below is generated by plot.py at 2017-08-17 04:01:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 175.61 Mbit/s
95th percentile per-packet one-way delay: 50.749 ms
Loss rate: 7.30%
-- Flow 1:
Average throughput: 175.61 Mbit/s
95th percentile per-packet one-way delay: 50.749 ms
Loss rate: 7.30%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-16 23:59:24

End at: 2017-08-16 23:59:54

Below is generated by plot.py at 2017-08-17 04:01:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 440.63 Mbit/s

95th percentile per-packet one-way delay: 59.764 ms

Loss rate: 0.68%

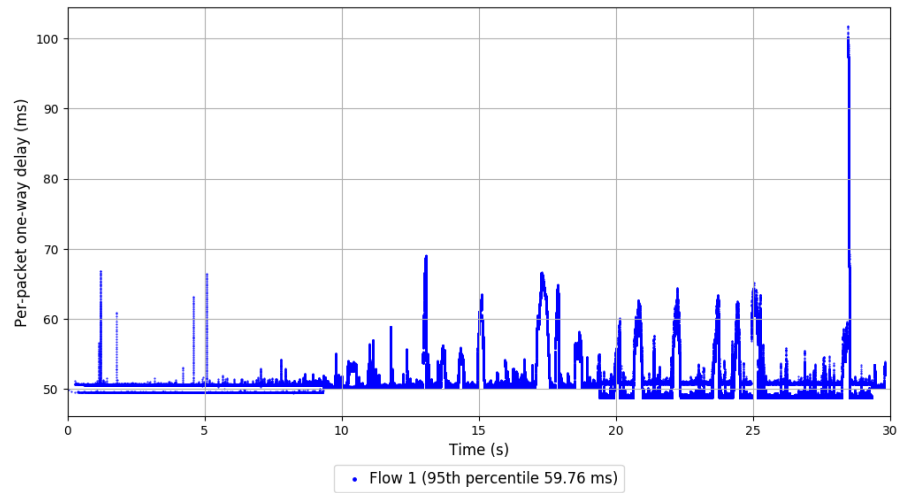
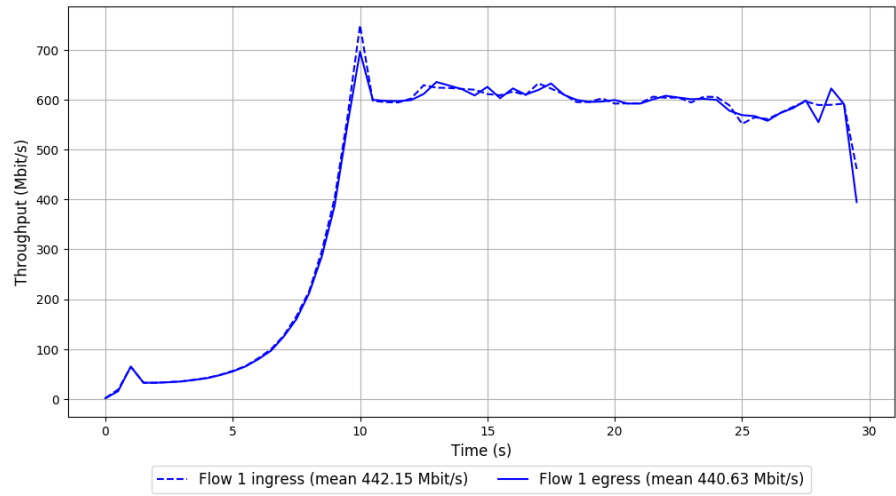
-- Flow 1:

Average throughput: 440.63 Mbit/s

95th percentile per-packet one-way delay: 59.764 ms

Loss rate: 0.68%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-08-17 00:10:05

End at: 2017-08-17 00:10:35

Below is generated by plot.py at 2017-08-17 04:02:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 561.73 Mbit/s

95th percentile per-packet one-way delay: 52.593 ms

Loss rate: 0.84%

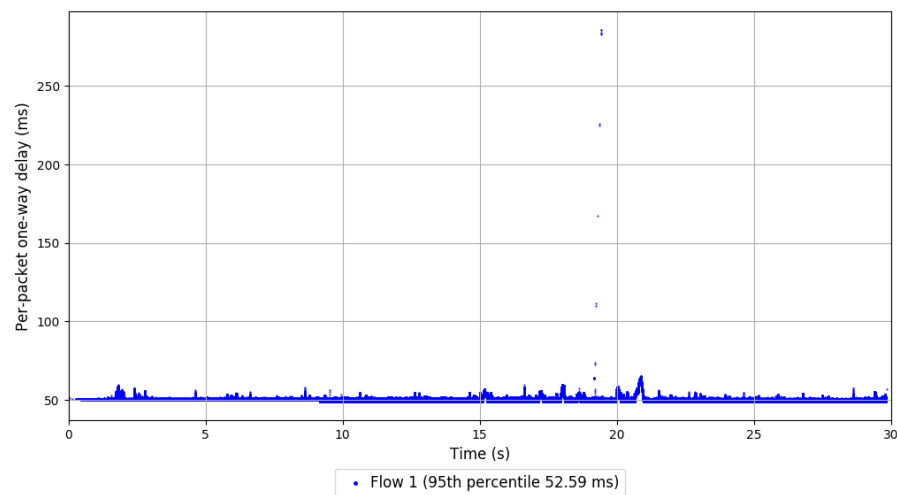
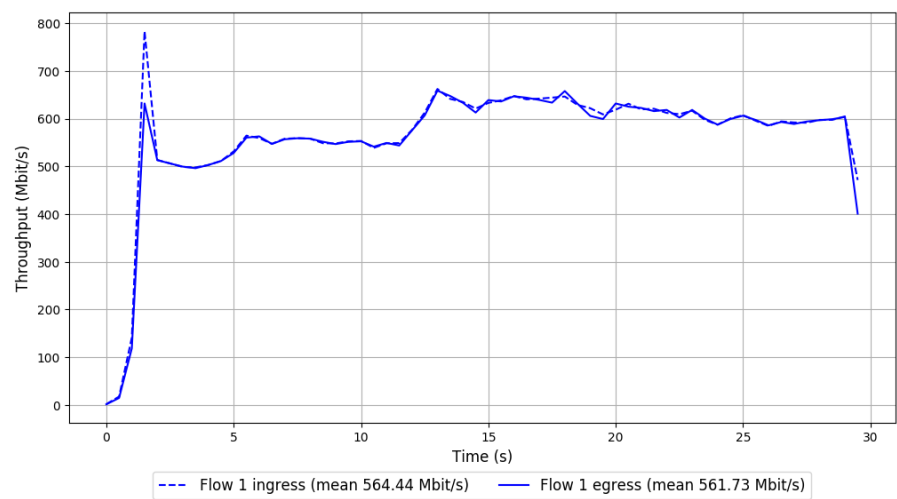
-- Flow 1:

Average throughput: 561.73 Mbit/s

95th percentile per-packet one-way delay: 52.593 ms

Loss rate: 0.84%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-17 00:20:34

End at: 2017-08-17 00:21:04

Below is generated by plot.py at 2017-08-17 04:03:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 342.46 Mbit/s

95th percentile per-packet one-way delay: 50.903 ms

Loss rate: 35.49%

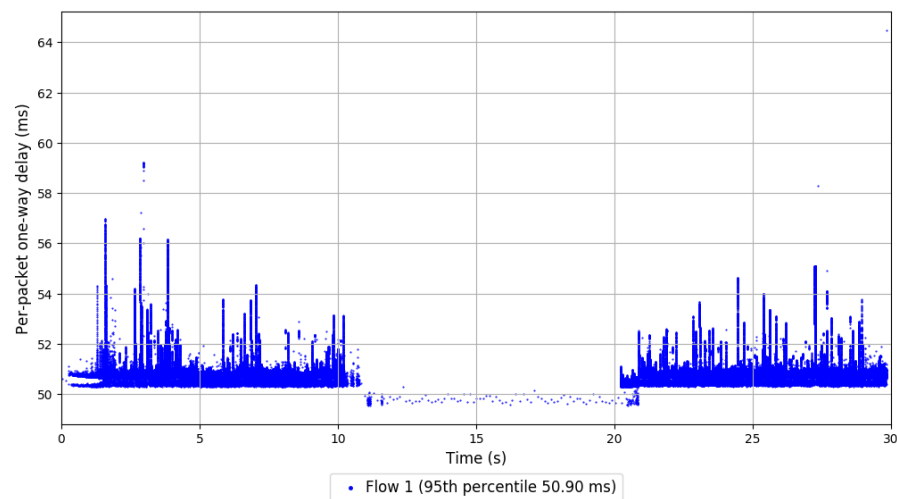
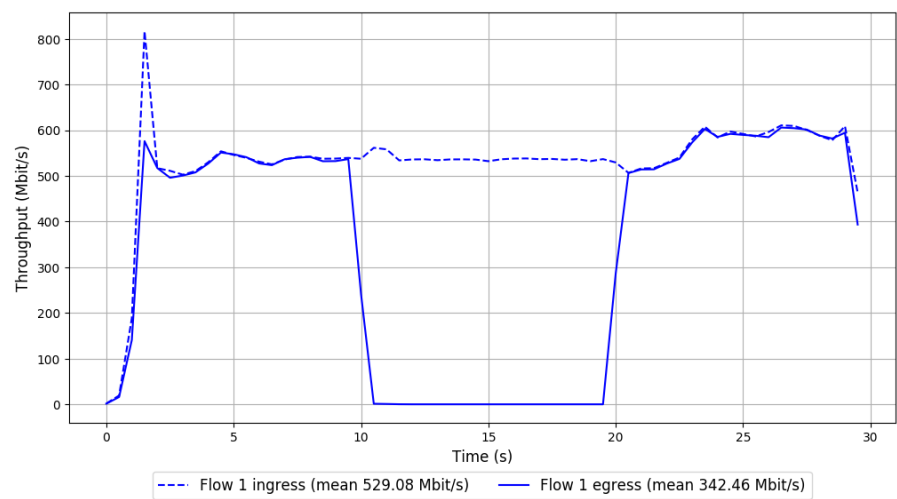
-- Flow 1:

Average throughput: 342.46 Mbit/s

95th percentile per-packet one-way delay: 50.903 ms

Loss rate: 35.49%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-17 00:31:06

End at: 2017-08-17 00:31:36

Below is generated by plot.py at 2017-08-17 04:04:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 575.84 Mbit/s

95th percentile per-packet one-way delay: 72.849 ms

Loss rate: 0.85%

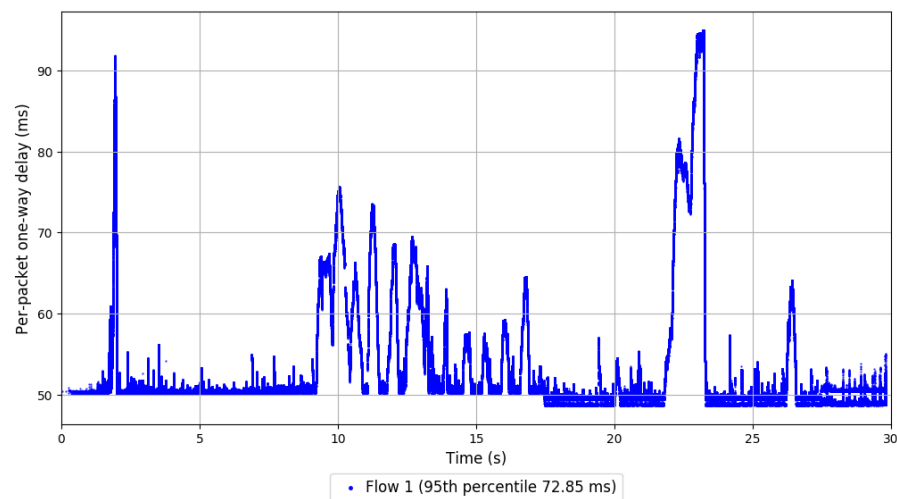
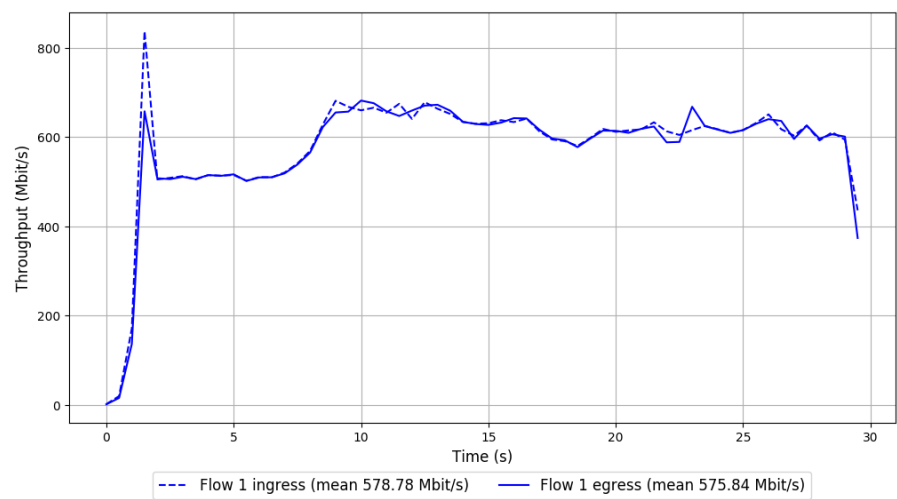
-- Flow 1:

Average throughput: 575.84 Mbit/s

95th percentile per-packet one-way delay: 72.849 ms

Loss rate: 0.85%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-17 00:41:39

End at: 2017-08-17 00:42:09

Below is generated by plot.py at 2017-08-17 04:04:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 560.65 Mbit/s

95th percentile per-packet one-way delay: 50.484 ms

Loss rate: 0.80%

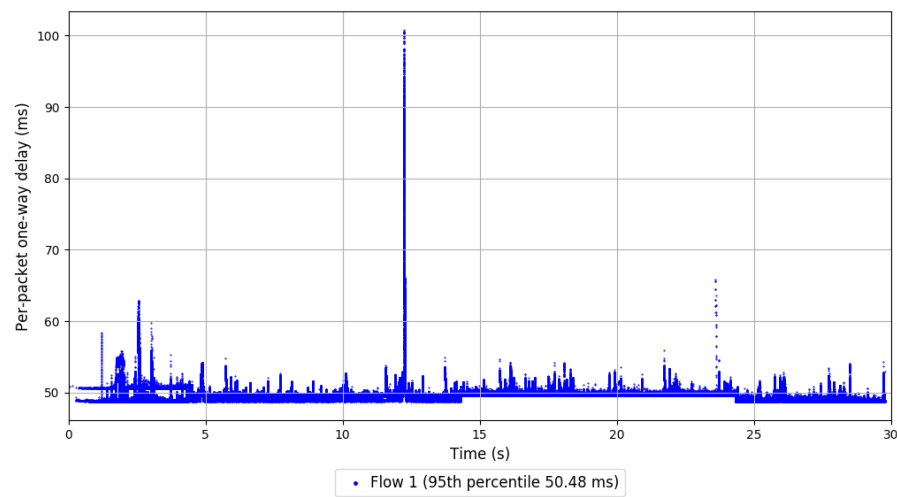
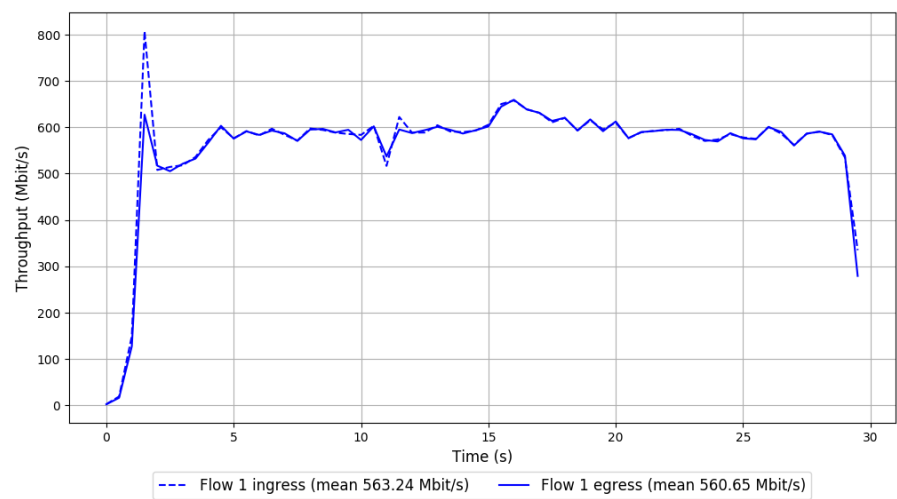
-- Flow 1:

Average throughput: 560.65 Mbit/s

95th percentile per-packet one-way delay: 50.484 ms

Loss rate: 0.80%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-17 00:52:07

End at: 2017-08-17 00:52:37

Below is generated by plot.py at 2017-08-17 04:05:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 415.03 Mbit/s

95th percentile per-packet one-way delay: 75.846 ms

Loss rate: 13.63%

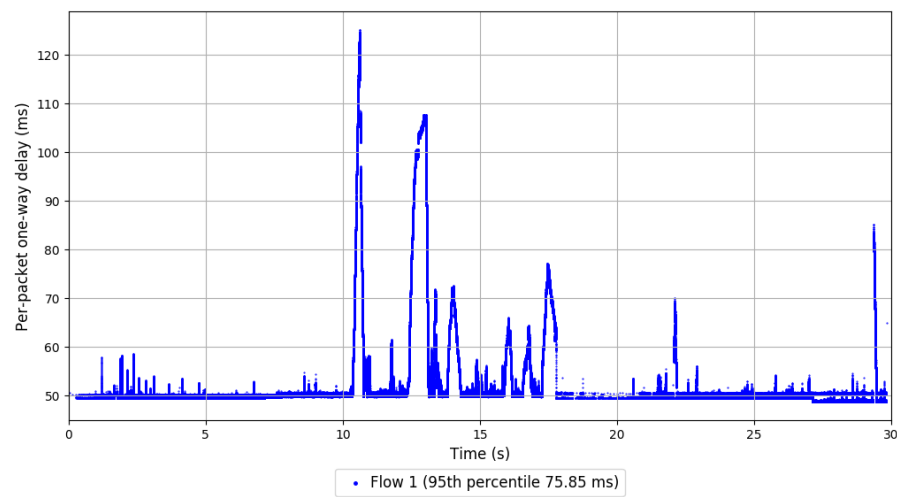
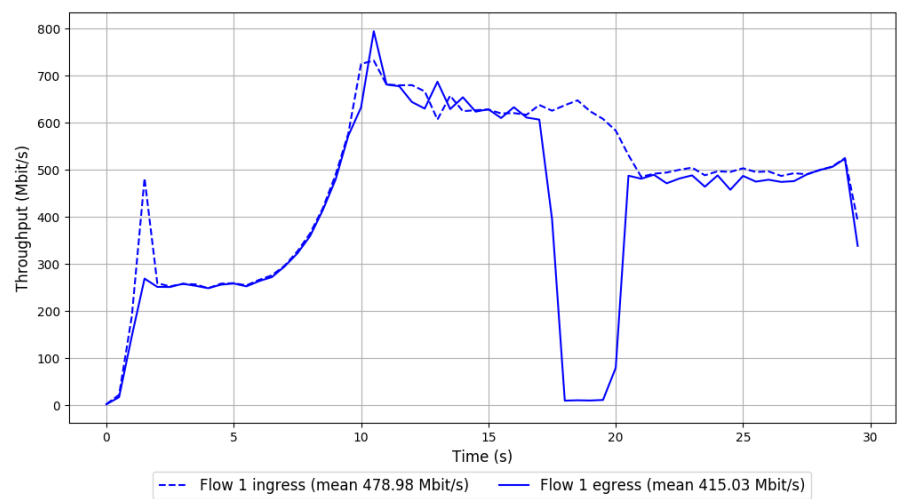
-- Flow 1:

Average throughput: 415.03 Mbit/s

95th percentile per-packet one-way delay: 75.846 ms

Loss rate: 13.63%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-17 01:02:42

End at: 2017-08-17 01:03:12

Below is generated by plot.py at 2017-08-17 04:06:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 562.03 Mbit/s

95th percentile per-packet one-way delay: 58.987 ms

Loss rate: 0.79%

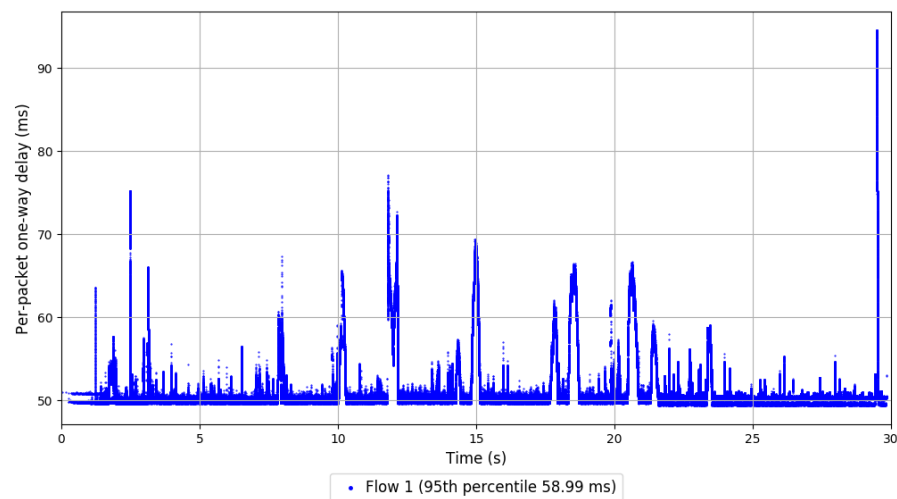
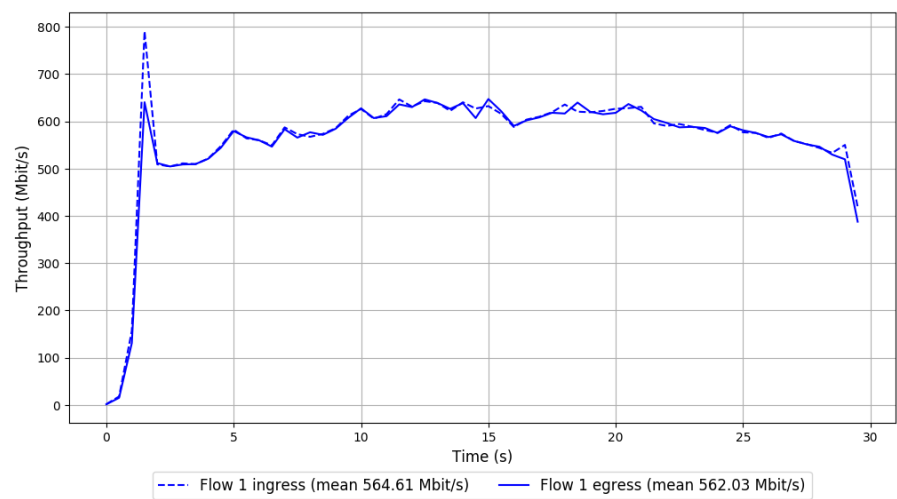
-- Flow 1:

Average throughput: 562.03 Mbit/s

95th percentile per-packet one-way delay: 58.987 ms

Loss rate: 0.79%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-17 01:13:33

End at: 2017-08-17 01:14:03

Below is generated by plot.py at 2017-08-17 04:07:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 403.92 Mbit/s

95th percentile per-packet one-way delay: 129.144 ms

Loss rate: 24.67%

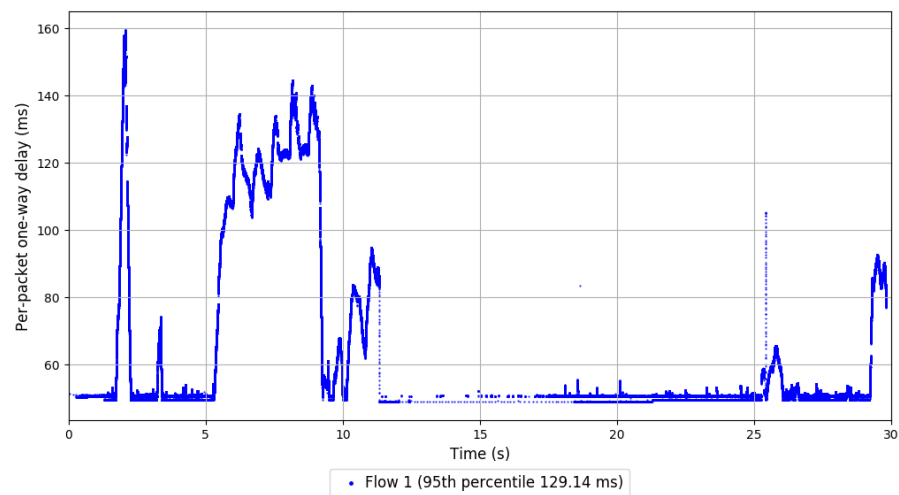
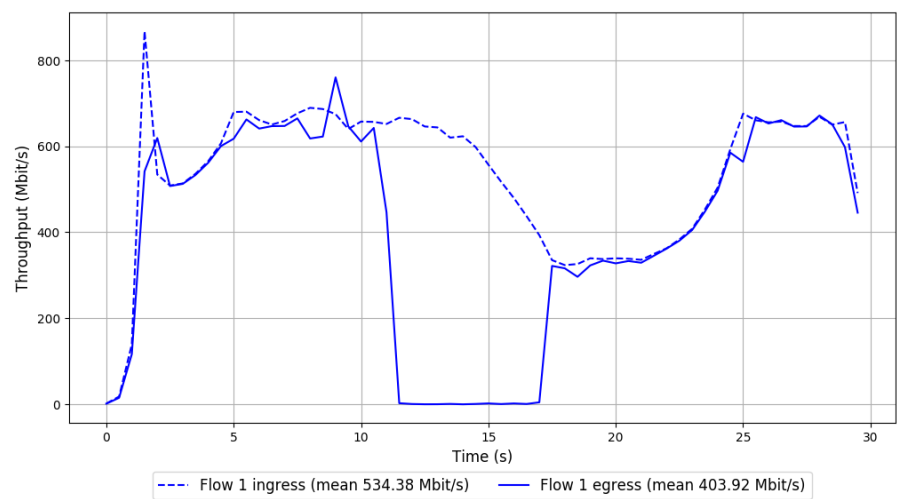
-- Flow 1:

Average throughput: 403.92 Mbit/s

95th percentile per-packet one-way delay: 129.144 ms

Loss rate: 24.67%

Run 10: Report of PCC — Data Link

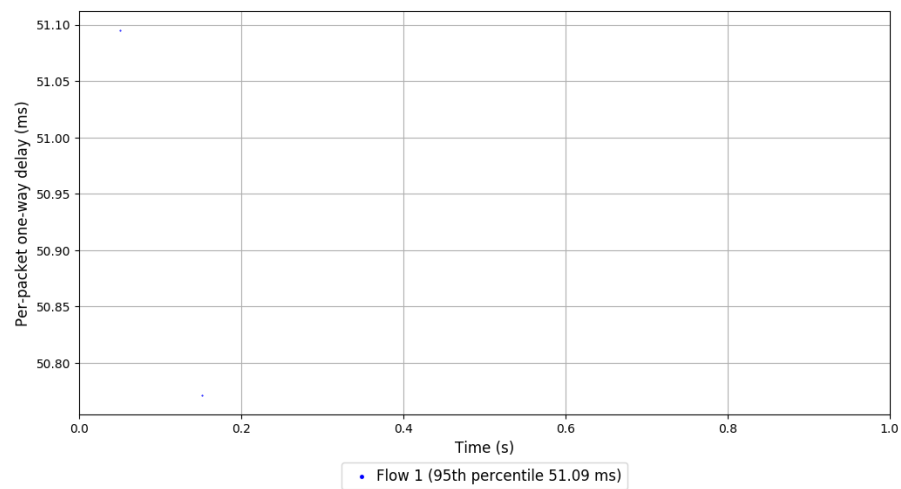
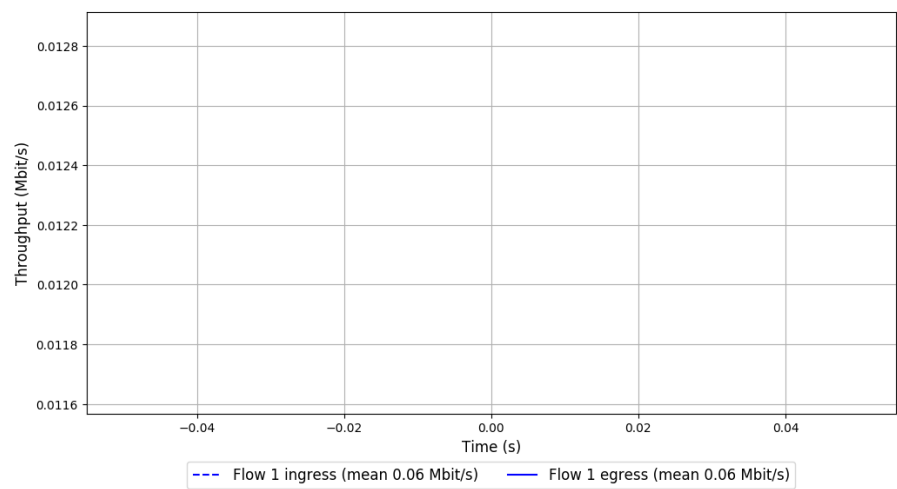


Run 1: Statistics of QUIC Cubic

Start at: 2017-08-16 23:35:21

End at: 2017-08-16 23:35:51

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-08-16 23:45:43

End at: 2017-08-16 23:46:13

Below is generated by plot.py at 2017-08-17 04:07:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.49 Mbit/s

95th percentile per-packet one-way delay: 49.785 ms

Loss rate: 0.40%

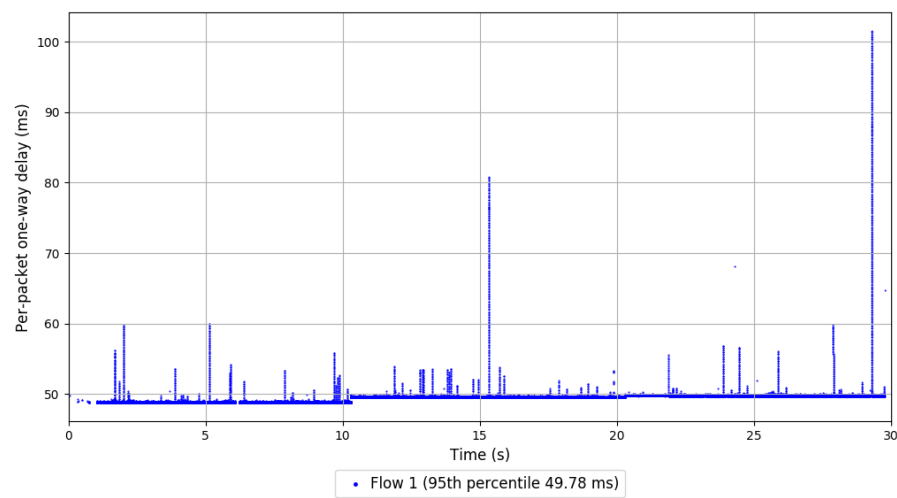
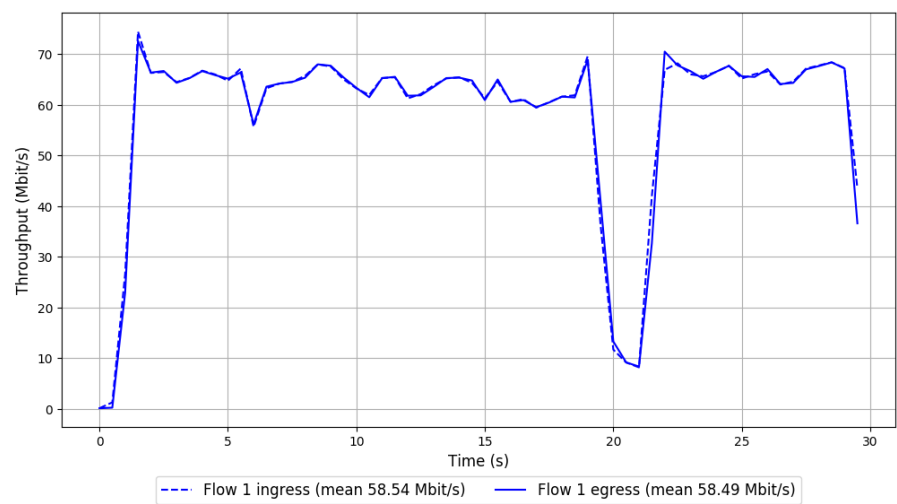
-- Flow 1:

Average throughput: 58.49 Mbit/s

95th percentile per-packet one-way delay: 49.785 ms

Loss rate: 0.40%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-16 23:56:02

End at: 2017-08-16 23:56:32

Below is generated by plot.py at 2017-08-17 04:07:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.17 Mbit/s

95th percentile per-packet one-way delay: 50.669 ms

Loss rate: 0.38%

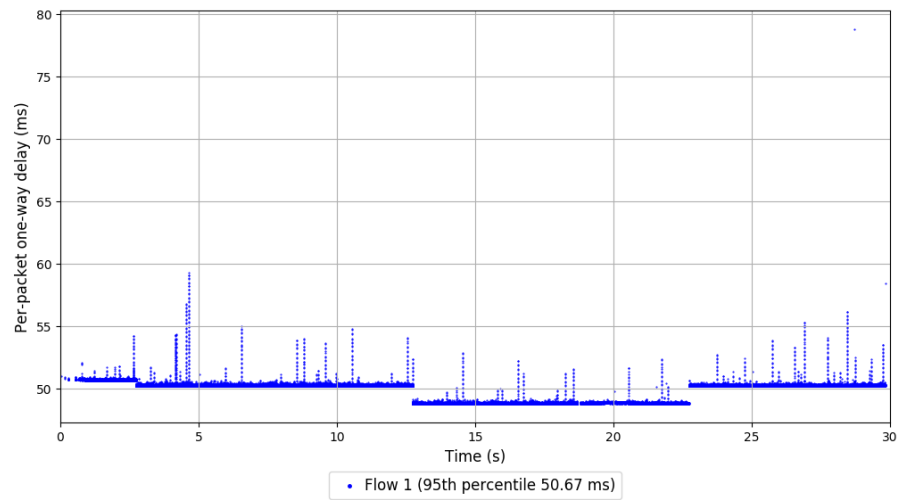
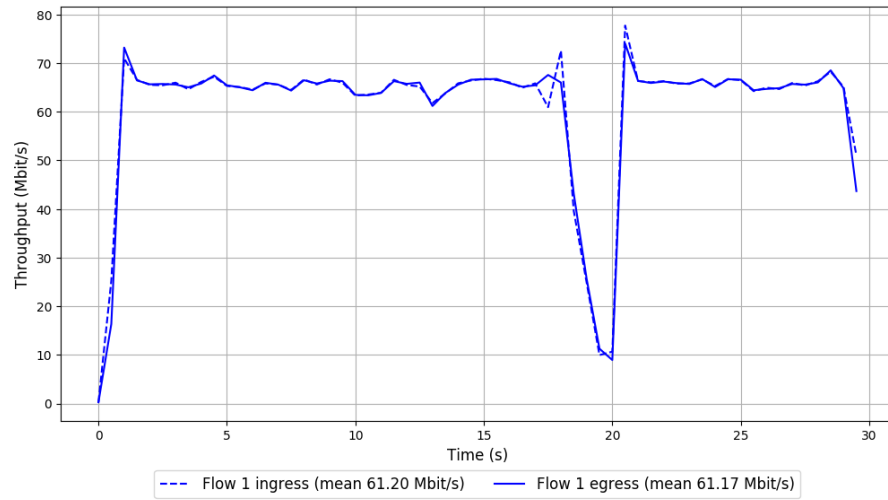
-- Flow 1:

Average throughput: 61.17 Mbit/s

95th percentile per-packet one-way delay: 50.669 ms

Loss rate: 0.38%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-17 00:06:14

End at: 2017-08-17 00:06:44

Below is generated by plot.py at 2017-08-17 04:07:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.38 Mbit/s

95th percentile per-packet one-way delay: 49.554 ms

Loss rate: 0.38%

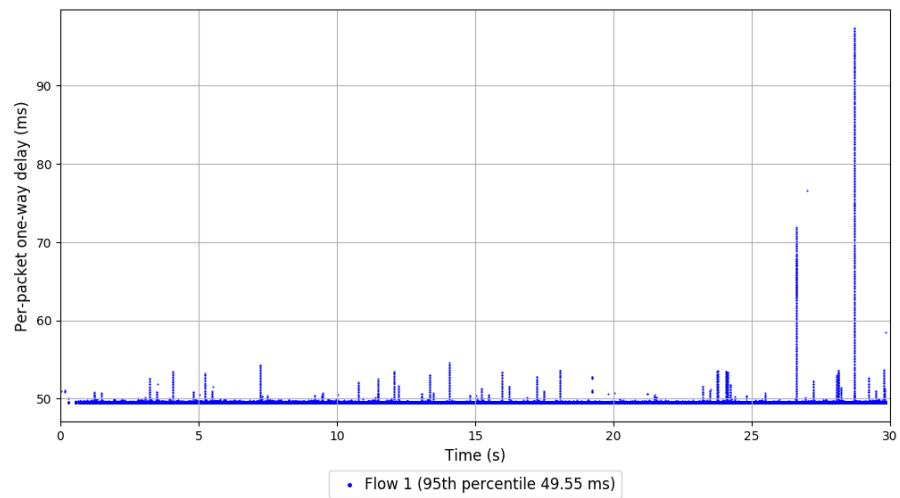
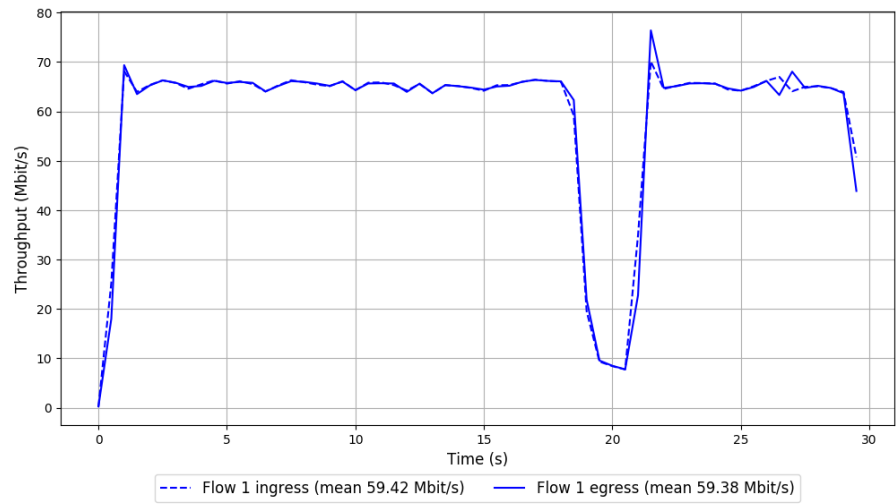
-- Flow 1:

Average throughput: 59.38 Mbit/s

95th percentile per-packet one-way delay: 49.554 ms

Loss rate: 0.38%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-08-17 00:17:07

End at: 2017-08-17 00:17:37

Below is generated by plot.py at 2017-08-17 04:07:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.26 Mbit/s

95th percentile per-packet one-way delay: 49.472 ms

Loss rate: 0.36%

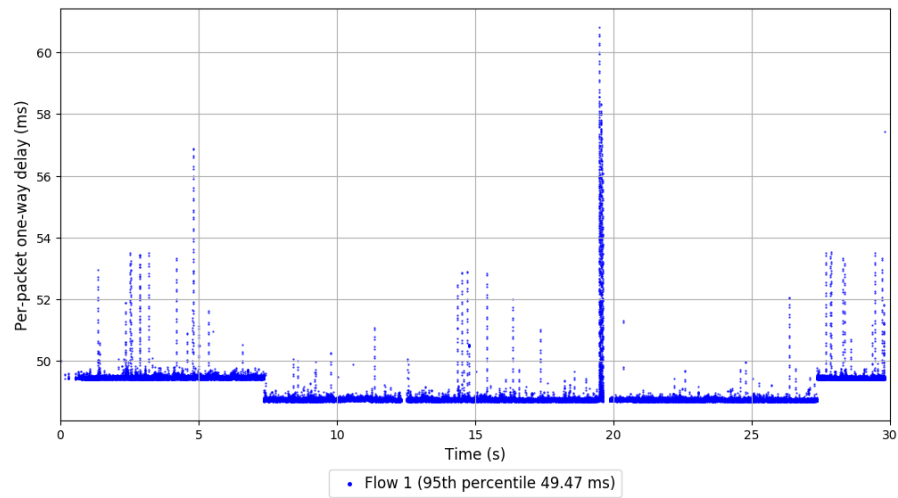
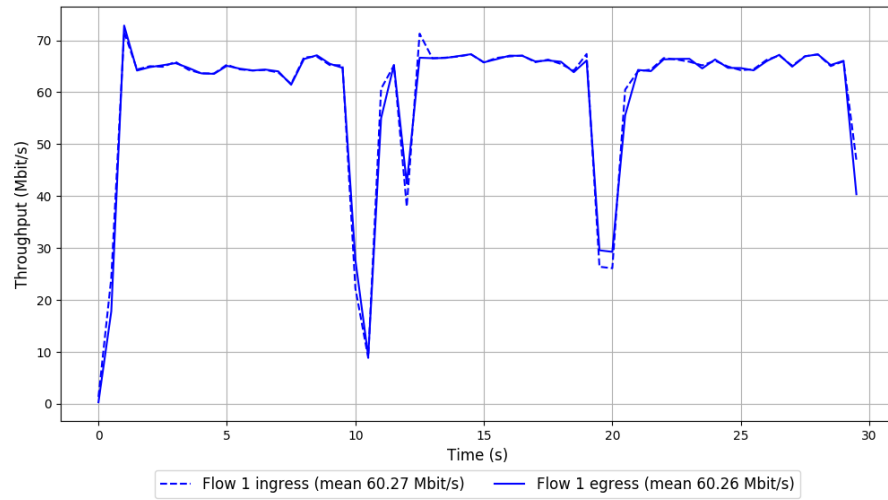
-- Flow 1:

Average throughput: 60.26 Mbit/s

95th percentile per-packet one-way delay: 49.472 ms

Loss rate: 0.36%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-17 00:27:32

End at: 2017-08-17 00:28:02

Below is generated by plot.py at 2017-08-17 04:07:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.99 Mbit/s

95th percentile per-packet one-way delay: 50.508 ms

Loss rate: 0.37%

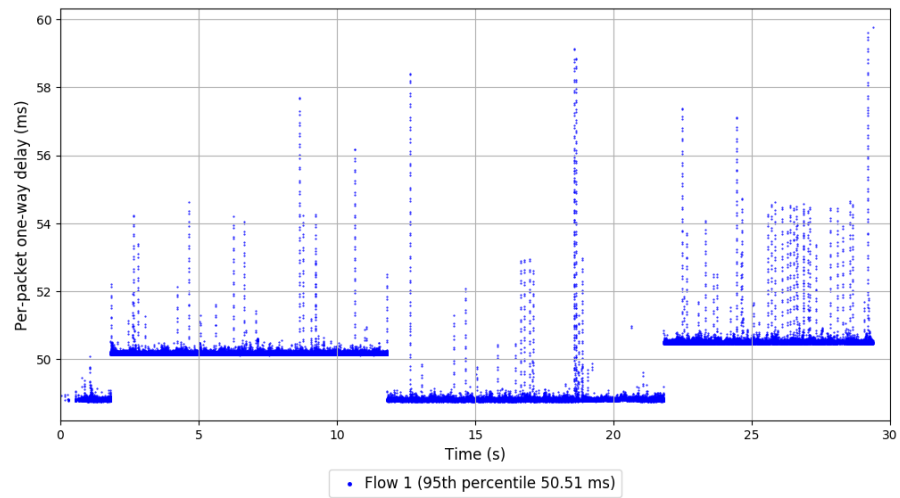
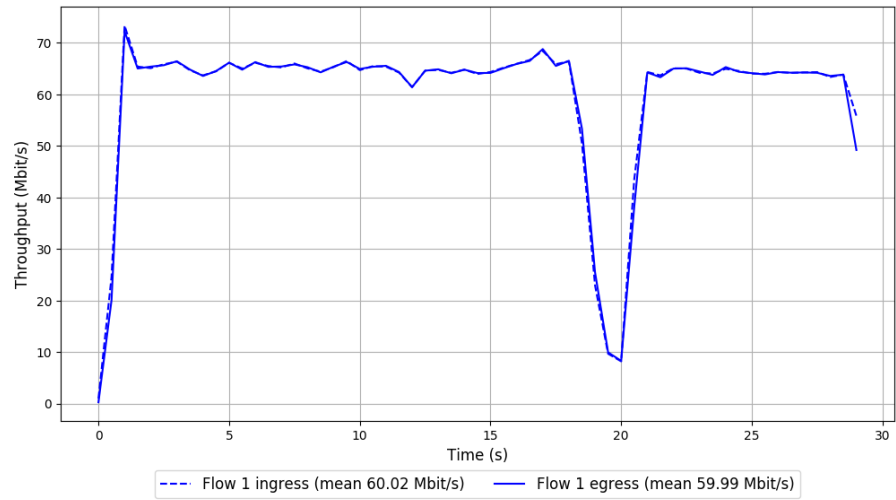
-- Flow 1:

Average throughput: 59.99 Mbit/s

95th percentile per-packet one-way delay: 50.508 ms

Loss rate: 0.37%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-17 00:37:57

End at: 2017-08-17 00:38:27

Below is generated by plot.py at 2017-08-17 04:07:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.18 Mbit/s

95th percentile per-packet one-way delay: 50.189 ms

Loss rate: 0.38%

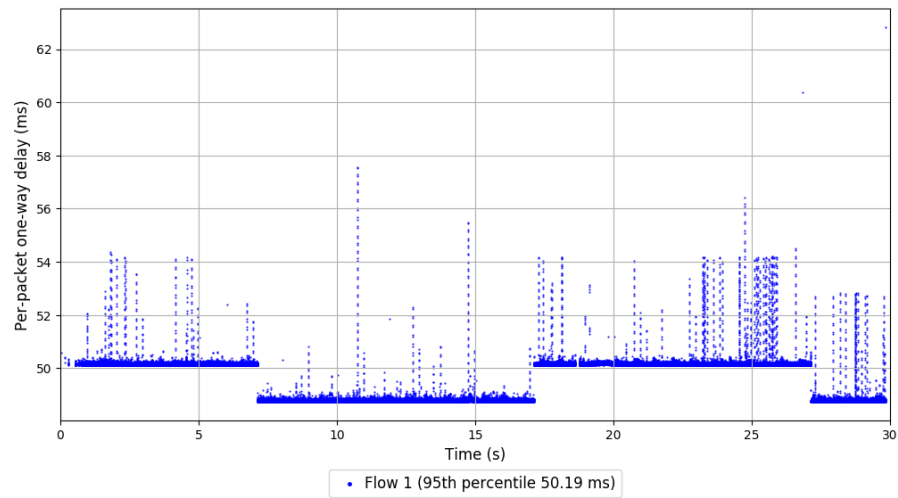
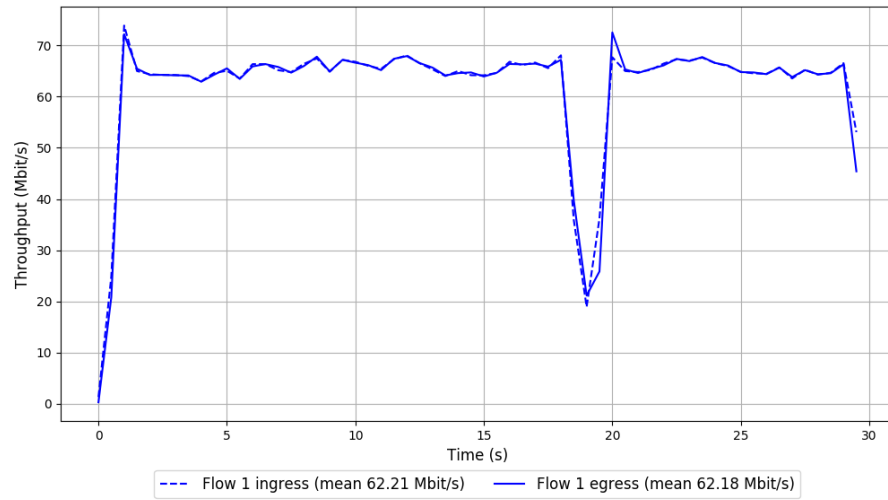
-- Flow 1:

Average throughput: 62.18 Mbit/s

95th percentile per-packet one-way delay: 50.189 ms

Loss rate: 0.38%

Run 7: Report of QUIC Cubic — Data Link

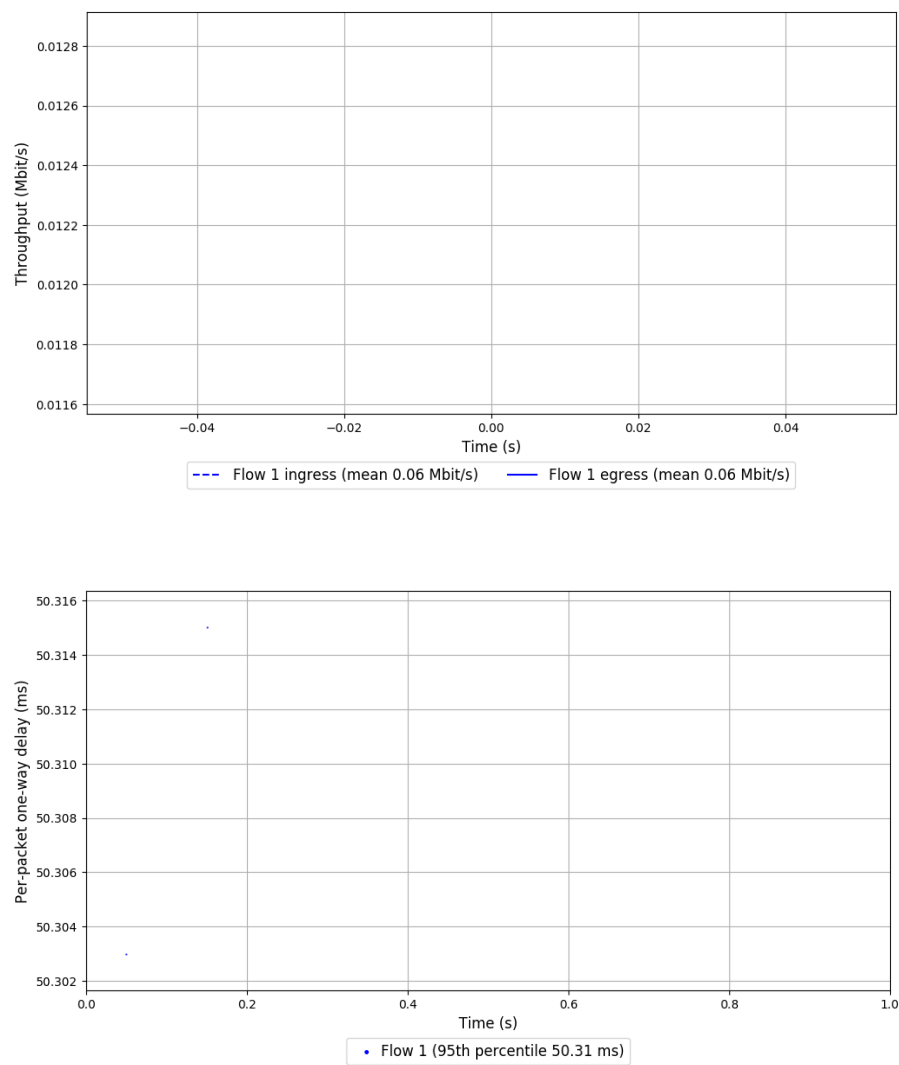


Run 8: Statistics of QUIC Cubic

Start at: 2017-08-17 00:48:45

End at: 2017-08-17 00:49:15

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-17 00:59:03

End at: 2017-08-17 00:59:33

Below is generated by plot.py at 2017-08-17 04:07:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.20 Mbit/s

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

Loss rate: 0.72%

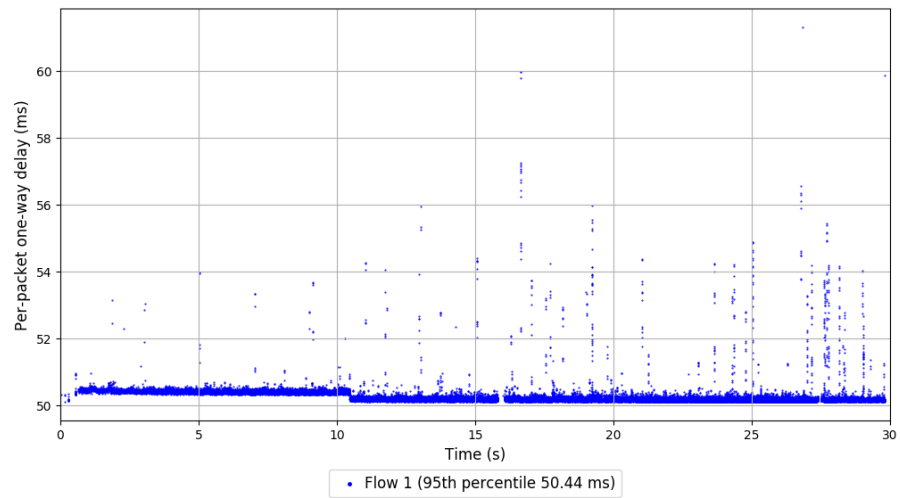
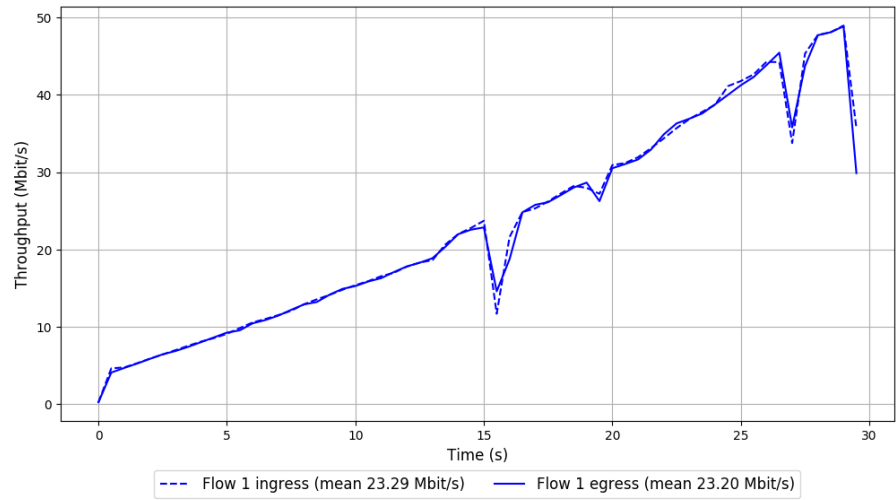
-- Flow 1:

Average throughput: 23.20 Mbit/s

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

Loss rate: 0.72%

Run 9: Report of QUIC Cubic — Data Link

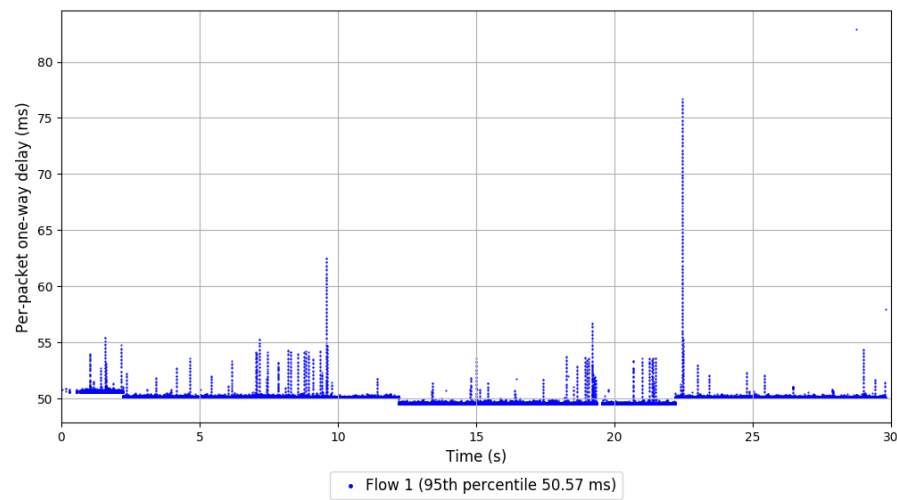
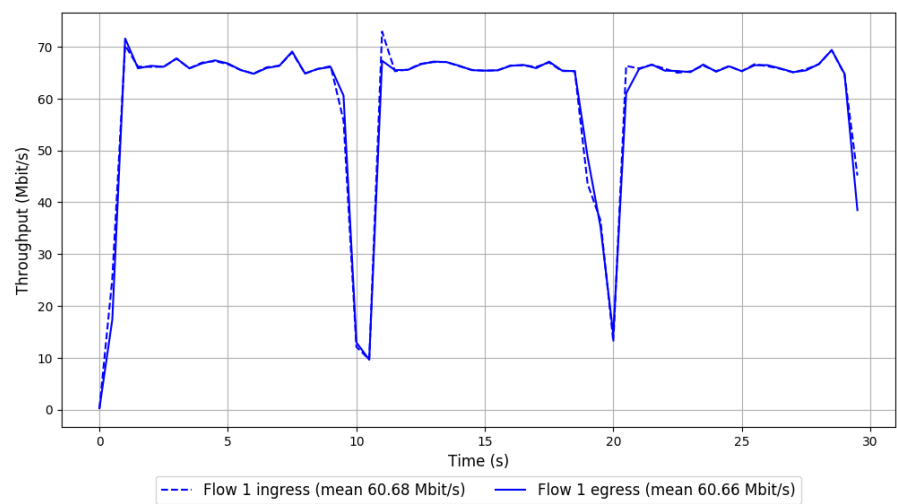


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-17 01:09:42
End at: 2017-08-17 01:10:12

# Below is generated by plot.py at 2017-08-17 04:07:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.66 Mbit/s
95th percentile per-packet one-way delay: 50.568 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 60.66 Mbit/s
95th percentile per-packet one-way delay: 50.568 ms
Loss rate: 0.37%
```

Run 10: Report of QUIC Cubic — Data Link

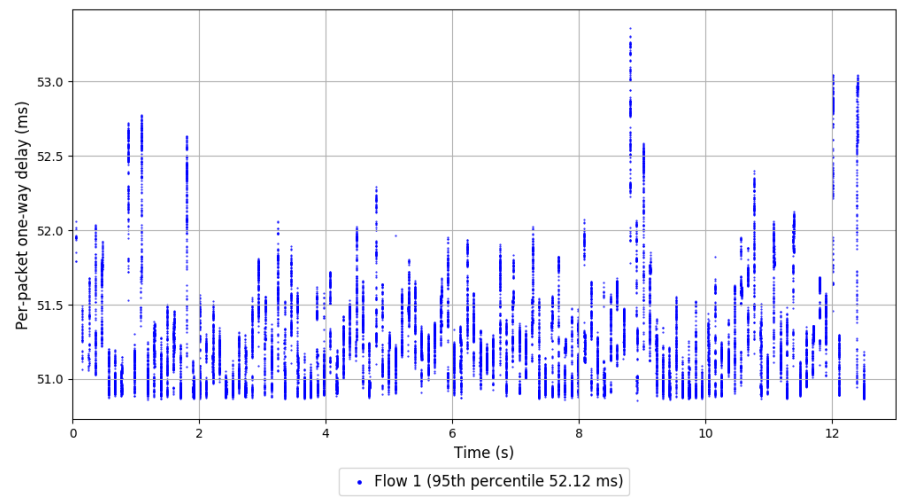
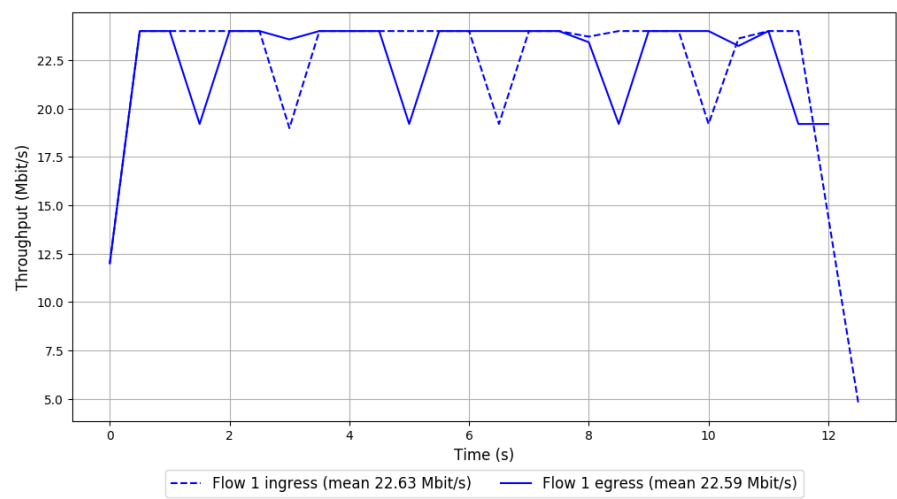


Run 1: Statistics of Saturator

Start at: 2017-08-16 23:39:41

End at: 2017-08-16 23:40:11

Run 1: Report of Saturator — Data Link

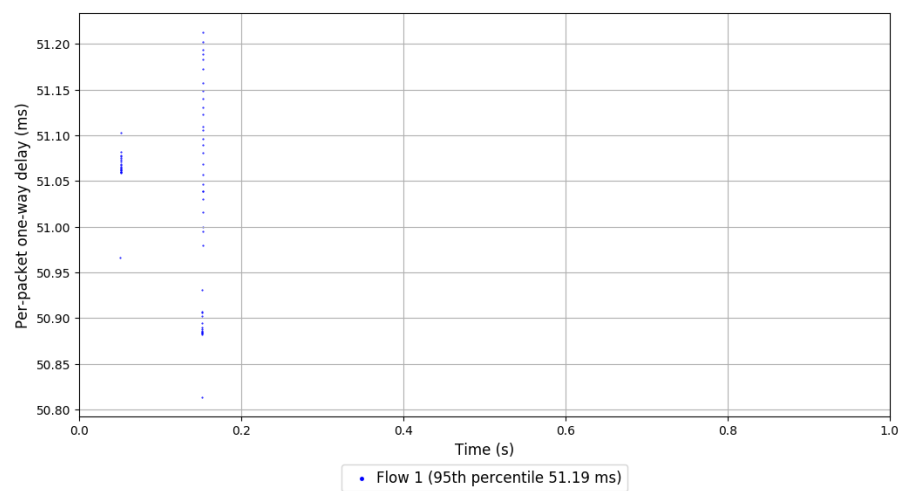
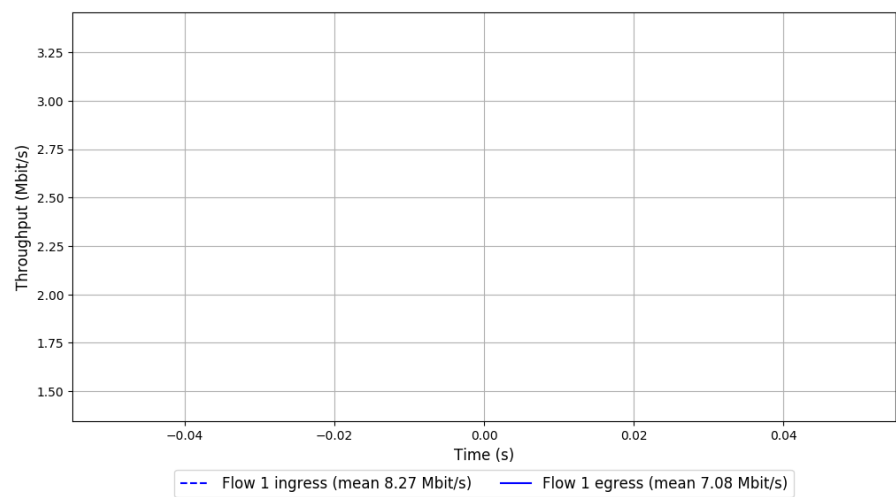


Run 2: Statistics of Saturator

Start at: 2017-08-16 23:49:59

End at: 2017-08-16 23:50:29

Run 2: Report of Saturator — Data Link

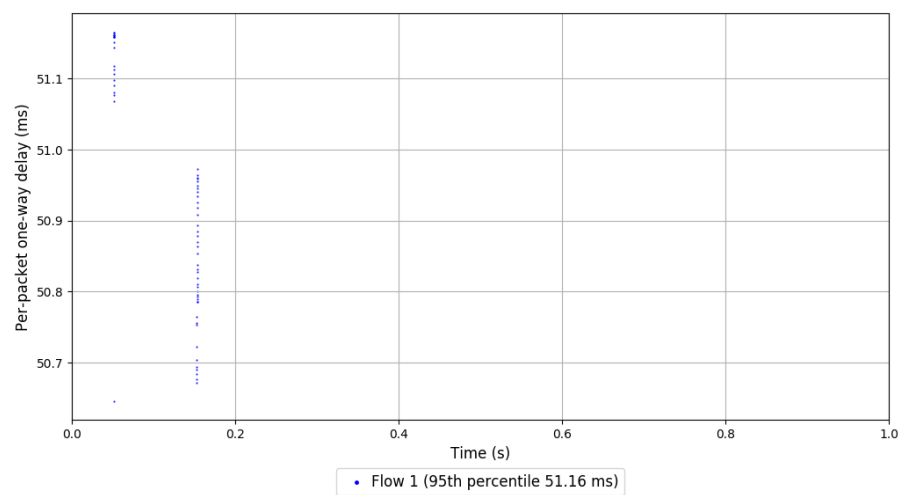
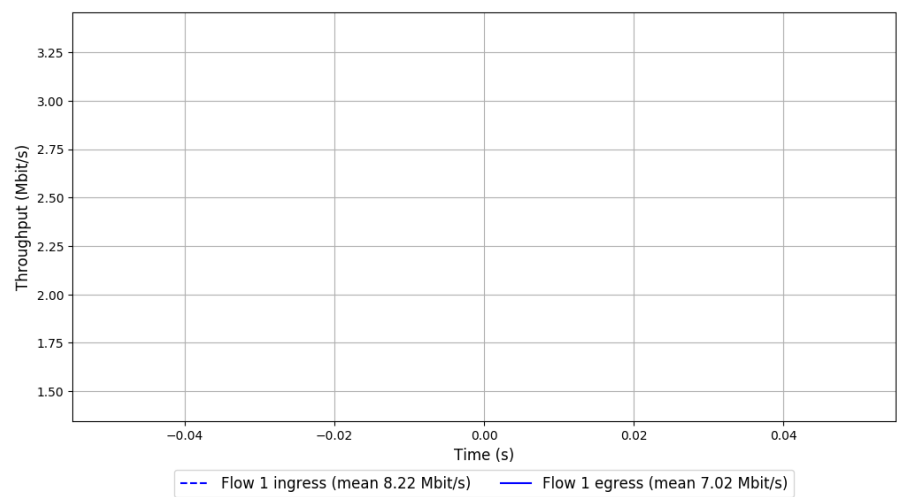


Run 3: Statistics of Saturator

Start at: 2017-08-17 00:00:18

End at: 2017-08-17 00:00:48

Run 3: Report of Saturator — Data Link

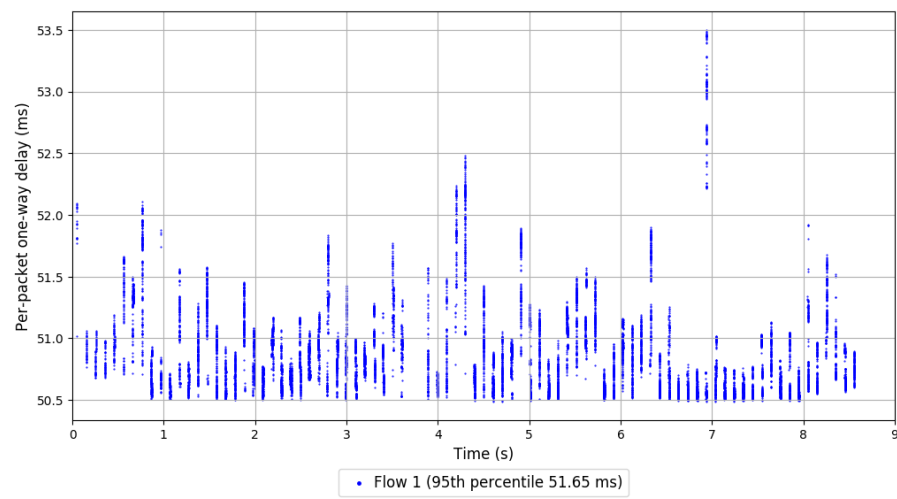
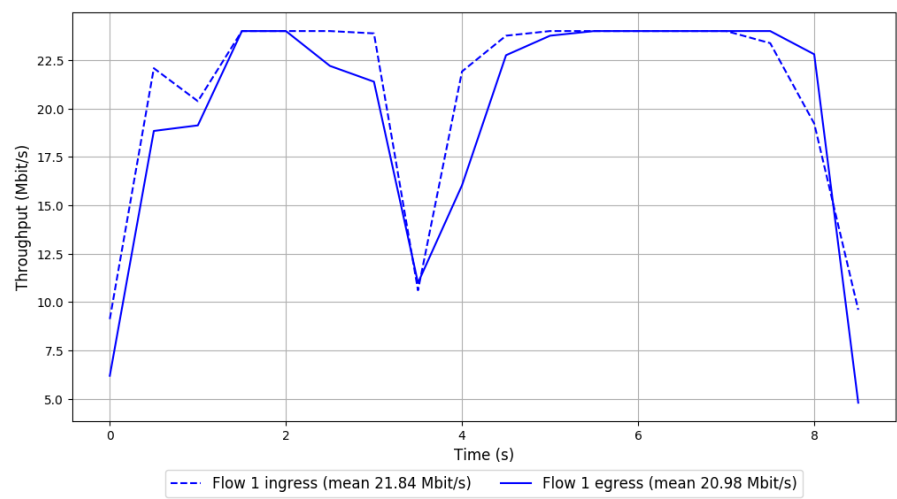


Run 4: Statistics of Saturator

Start at: 2017-08-17 00:11:02

End at: 2017-08-17 00:11:32

Run 4: Report of Saturator — Data Link



Run 5: Statistics of Saturator

Start at: 2017-08-17 00:21:26

End at: 2017-08-17 00:21:56

Below is generated by plot.py at 2017-08-17 04:07:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.48 Mbit/s

95th percentile per-packet one-way delay: 51.592 ms

Loss rate: 0.36%

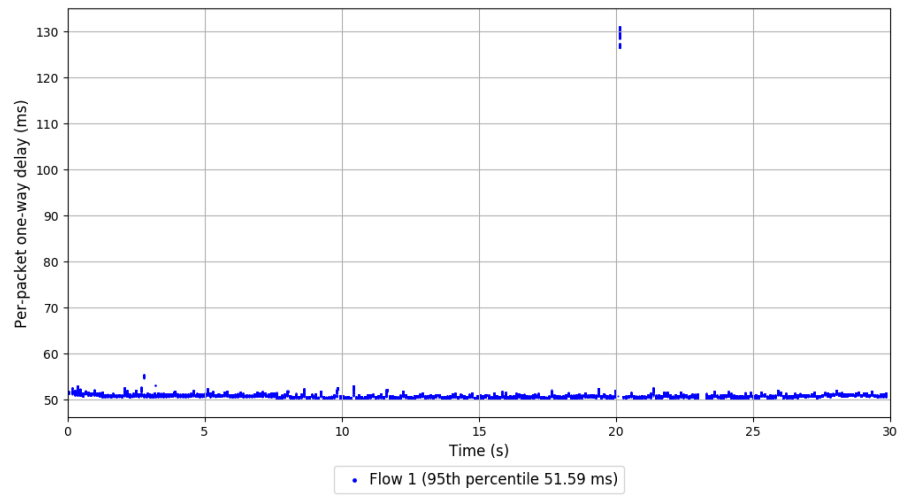
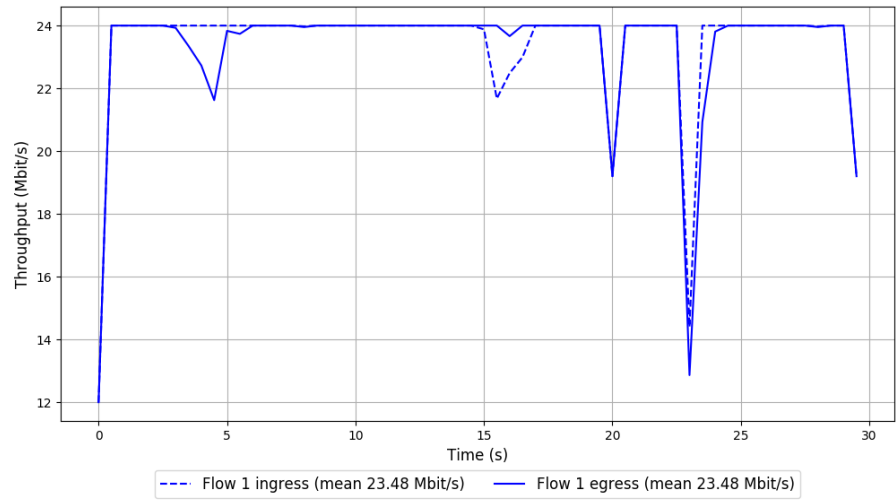
-- Flow 1:

Average throughput: 23.48 Mbit/s

95th percentile per-packet one-way delay: 51.592 ms

Loss rate: 0.36%

Run 5: Report of Saturator — Data Link

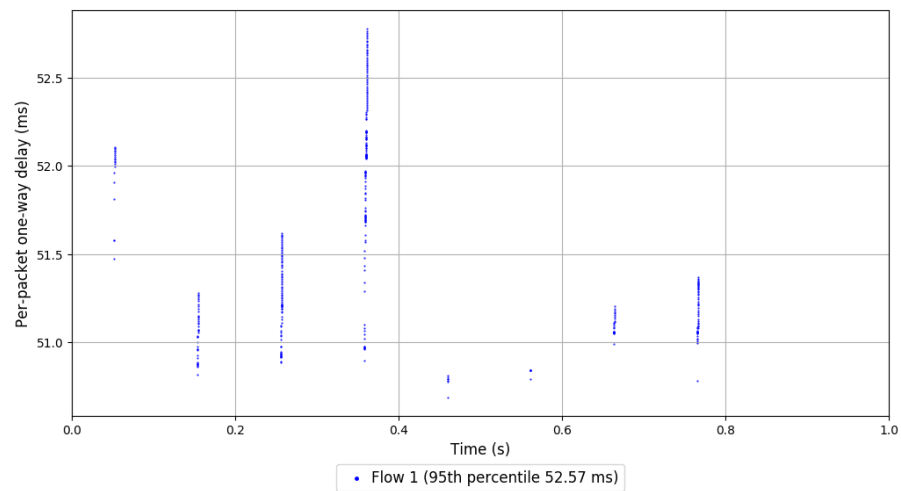
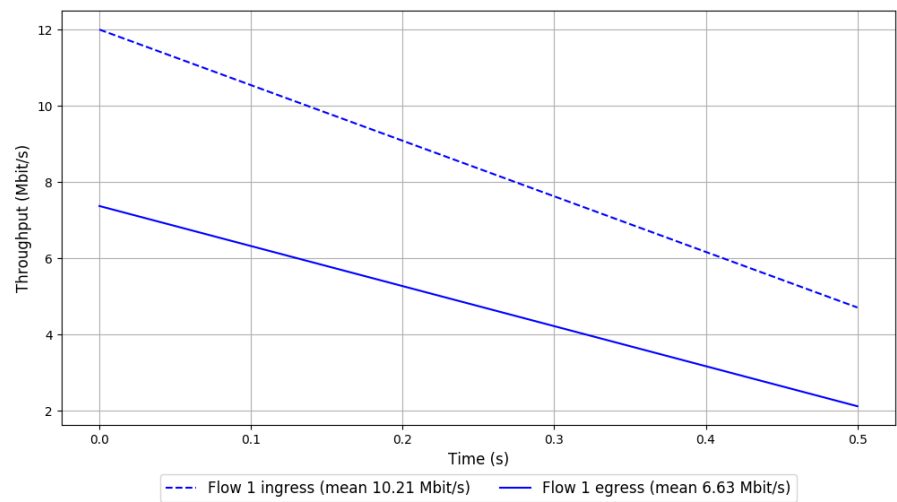


Run 6: Statistics of Saturator

Start at: 2017-08-17 00:32:04

End at: 2017-08-17 00:32:34

Run 6: Report of Saturator — Data Link

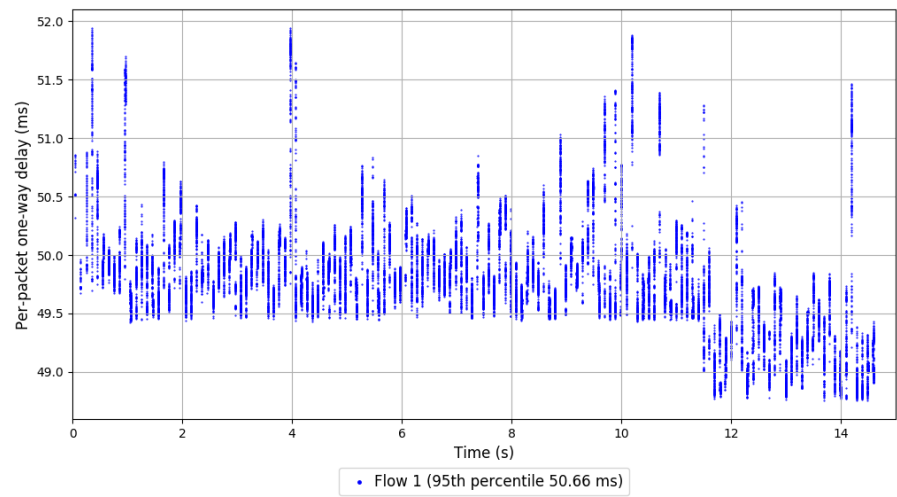
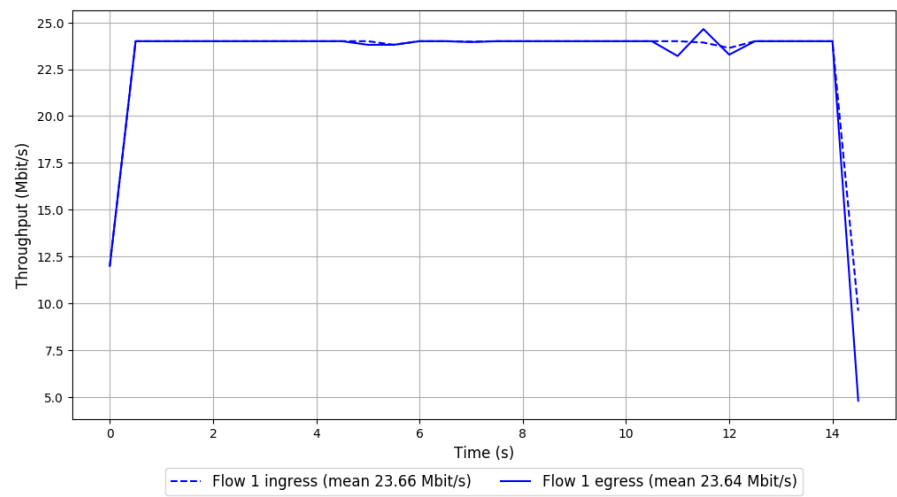


Run 7: Statistics of Saturator

Start at: 2017-08-17 00:42:37

End at: 2017-08-17 00:43:07

Run 7: Report of Saturator — Data Link



Run 8: Statistics of Saturator

Start at: 2017-08-17 00:53:00

End at: 2017-08-17 00:53:30

Below is generated by plot.py at 2017-08-17 04:07:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.56 Mbit/s

95th percentile per-packet one-way delay: 50.451 ms

Loss rate: 0.52%

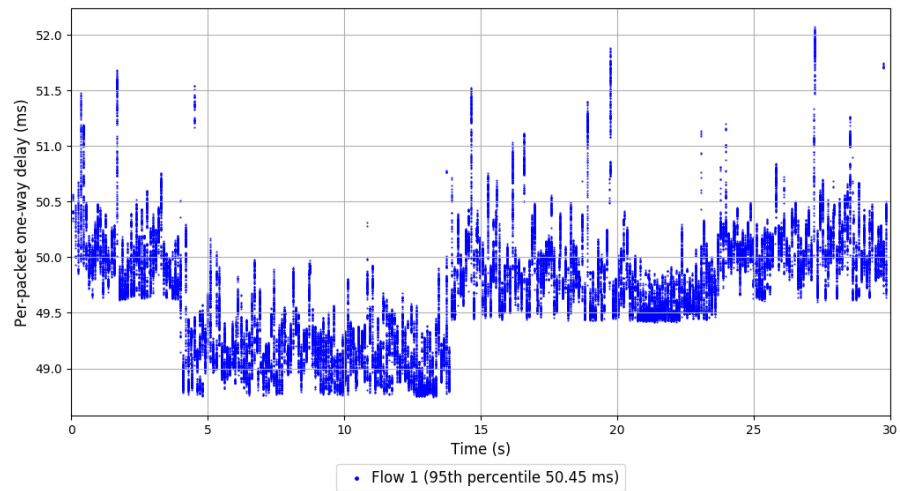
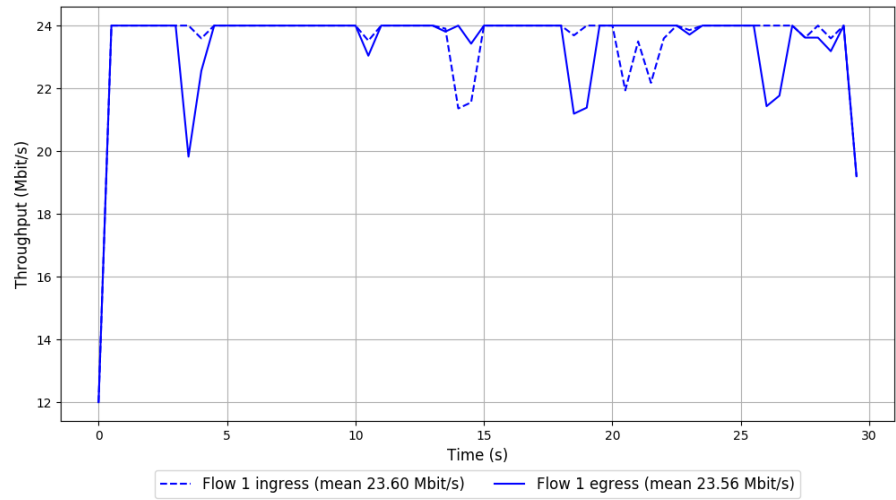
-- Flow 1:

Average throughput: 23.56 Mbit/s

95th percentile per-packet one-way delay: 50.451 ms

Loss rate: 0.52%

Run 8: Report of Saturator — Data Link

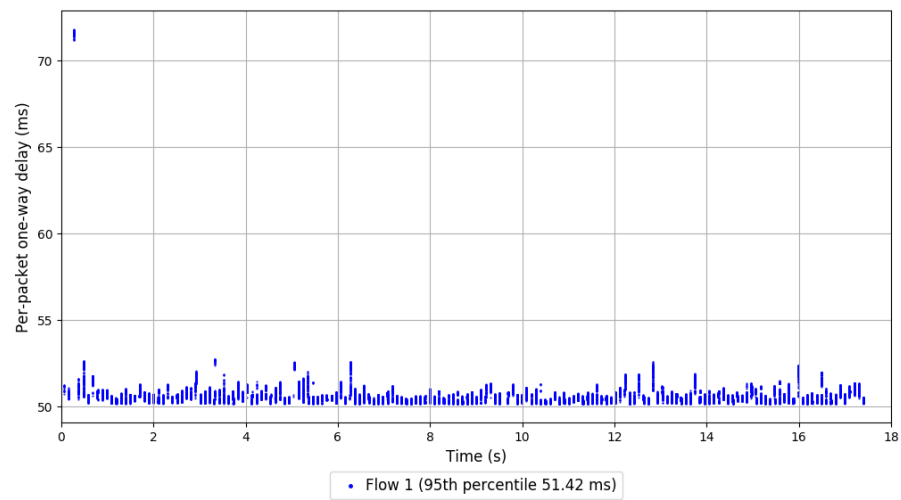
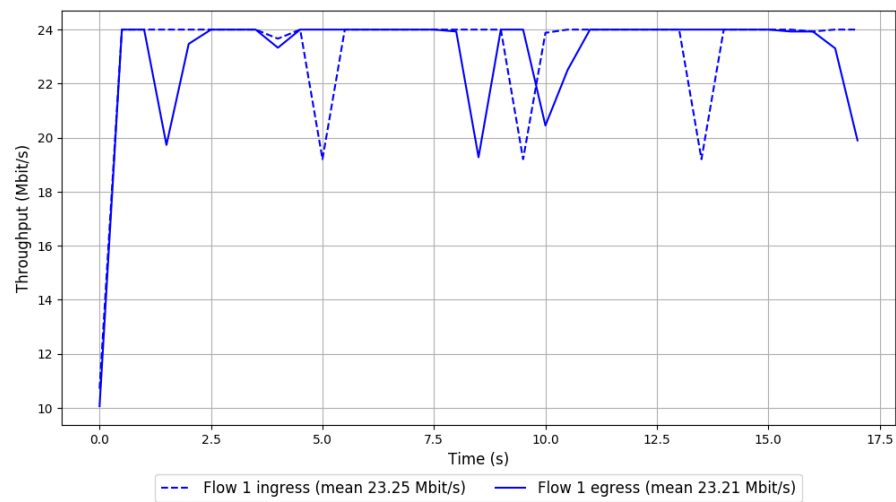


Run 9: Statistics of Saturator

Start at: 2017-08-17 01:03:40

End at: 2017-08-17 01:04:10

Run 9: Report of Saturator — Data Link

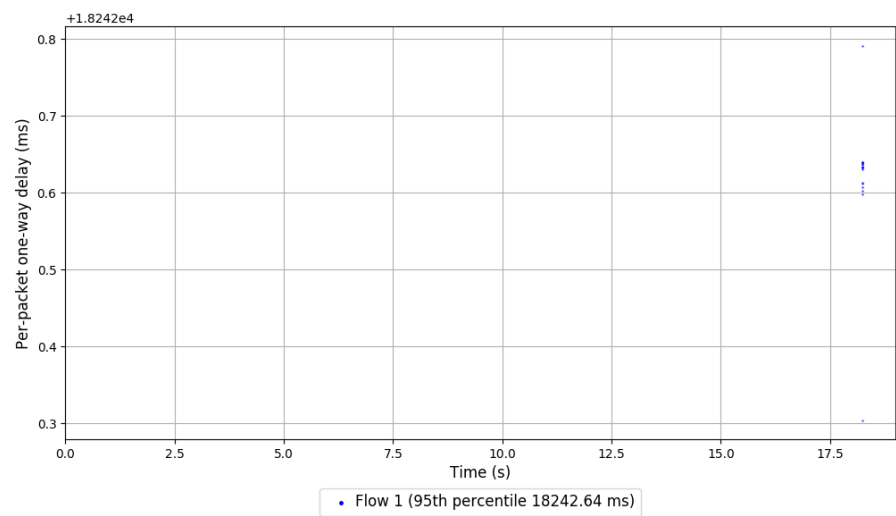
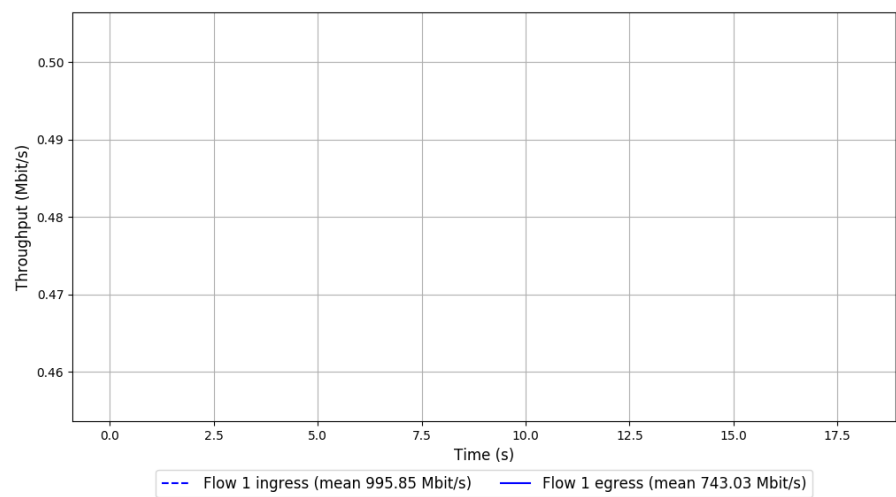


Run 10: Statistics of Saturator

Start at: 2017-08-17 01:14:27

End at: 2017-08-17 01:14:57

Run 10: Report of Saturator — Data Link

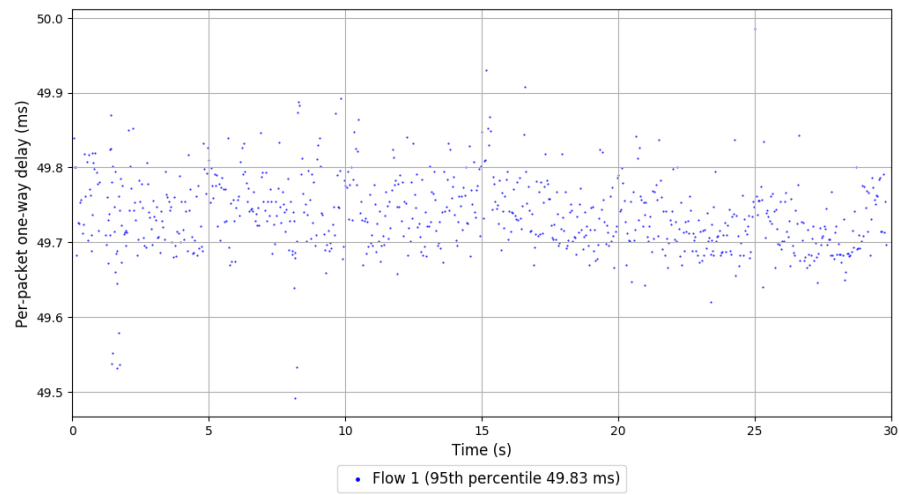
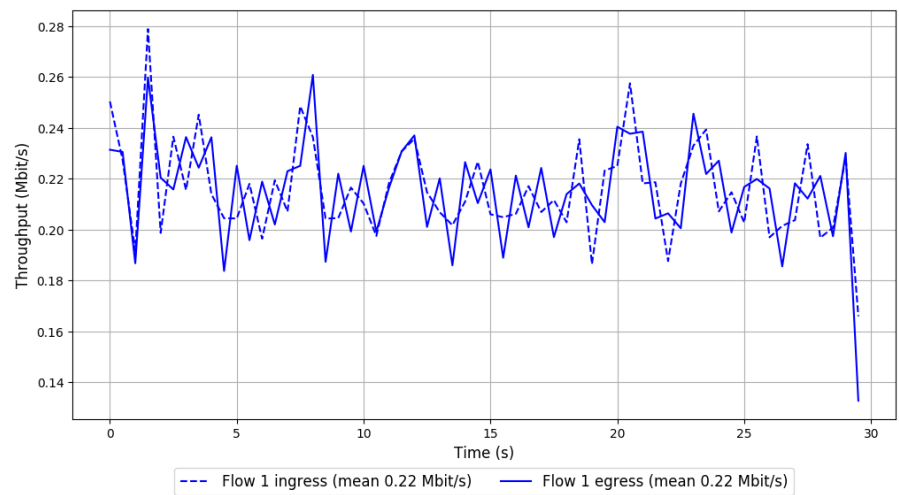


```
Run 1: Statistics of SCReAM

Start at: 2017-08-16 23:38:13
End at: 2017-08-16 23:38:43

# Below is generated by plot.py at 2017-08-17 04:07:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.826 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.826 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link

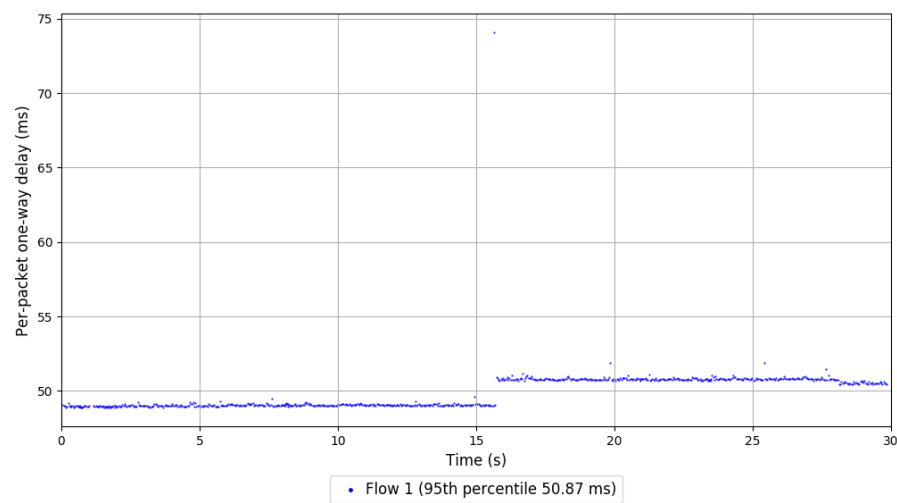
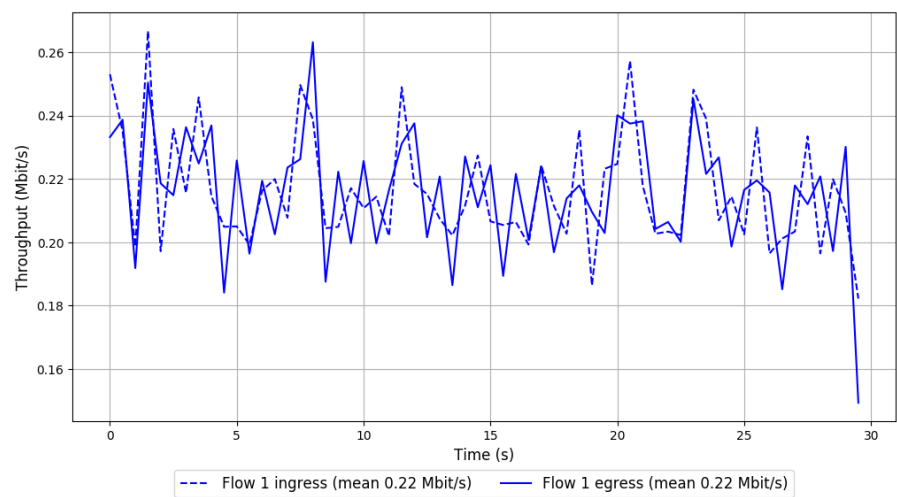


```
Run 2: Statistics of SCReAM

Start at: 2017-08-16 23:48:39
End at: 2017-08-16 23:49:09

# Below is generated by plot.py at 2017-08-17 04:07:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.872 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.872 ms
Loss rate: 0.38%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-08-16 23:58:48

End at: 2017-08-16 23:59:18

Below is generated by plot.py at 2017-08-17 04:07:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.804 ms

Loss rate: 0.26%

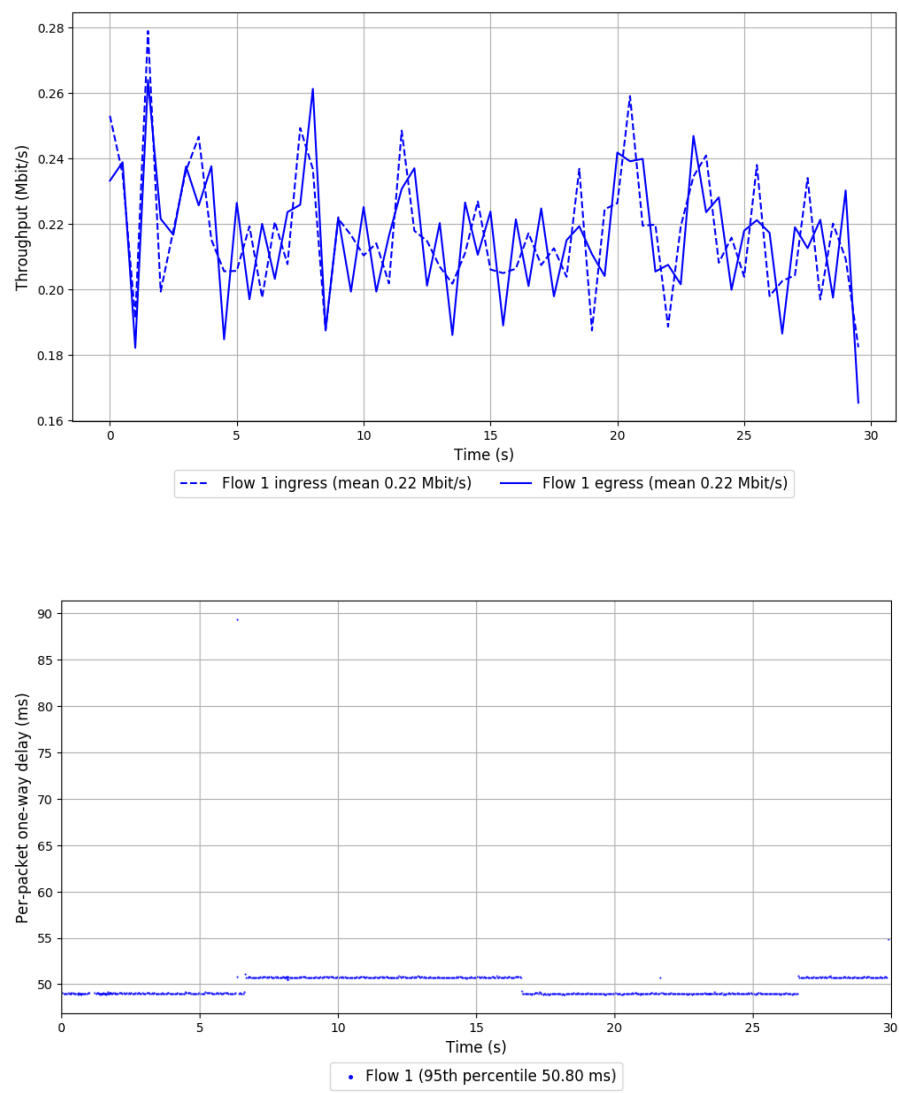
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.804 ms

Loss rate: 0.26%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-17 00:09:28

End at: 2017-08-17 00:09:58

Below is generated by plot.py at 2017-08-17 04:07:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.925 ms

Loss rate: 0.38%

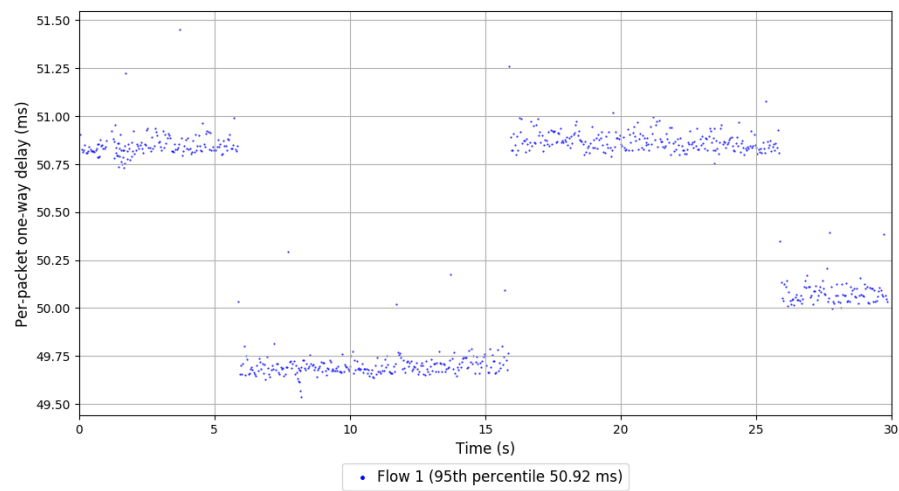
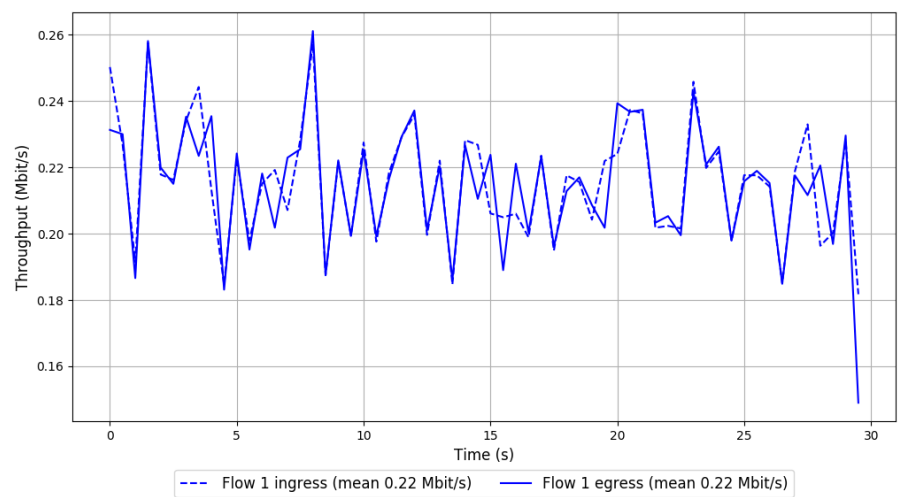
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.925 ms

Loss rate: 0.38%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-08-17 00:19:57

End at: 2017-08-17 00:20:27

Below is generated by plot.py at 2017-08-17 04:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.911 ms

Loss rate: 0.26%

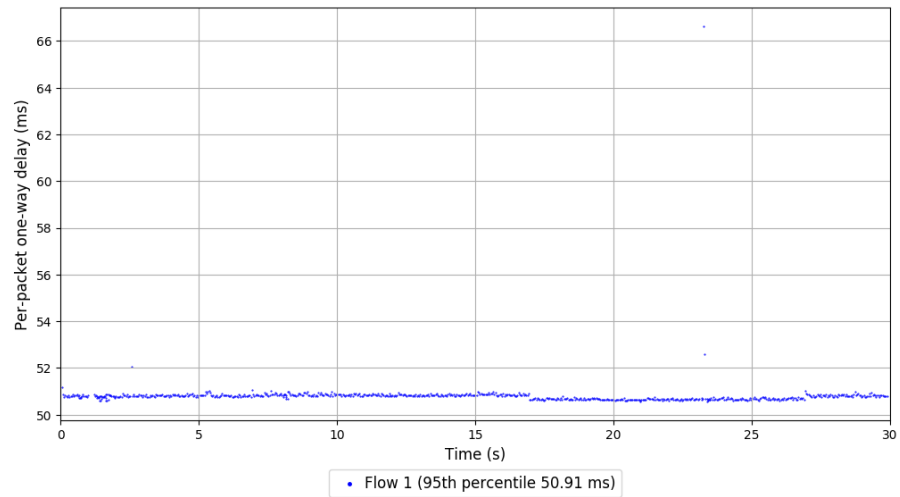
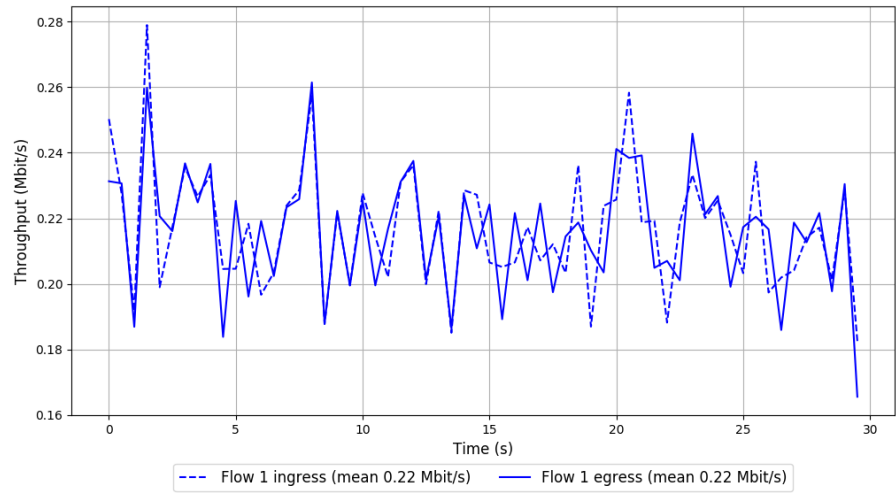
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.911 ms

Loss rate: 0.26%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-17 00:30:30

End at: 2017-08-17 00:31:00

Below is generated by plot.py at 2017-08-17 04:07:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.451 ms

Loss rate: 0.26%

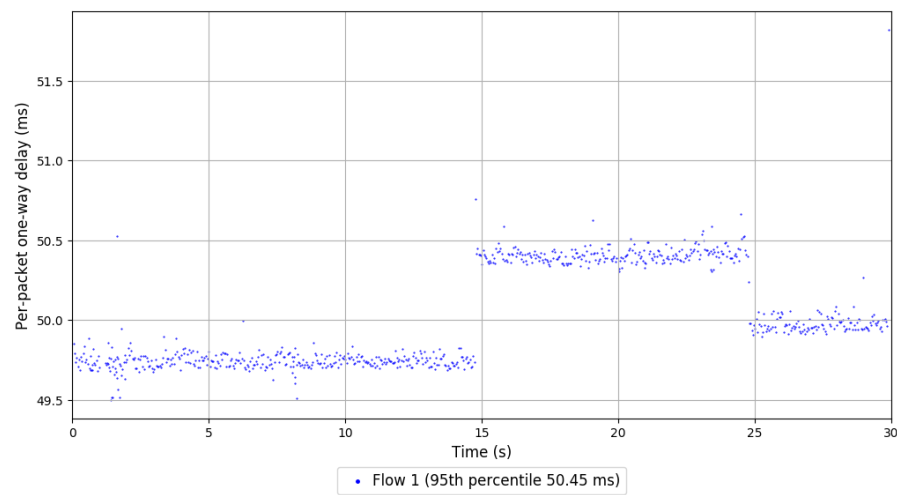
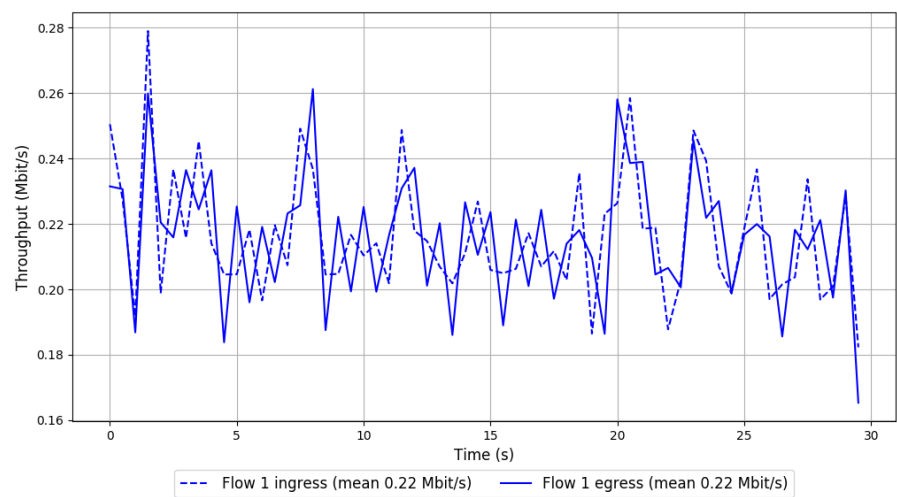
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.451 ms

Loss rate: 0.26%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-08-17 00:41:03

End at: 2017-08-17 00:41:33

Below is generated by plot.py at 2017-08-17 04:07:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.488 ms

Loss rate: 0.38%

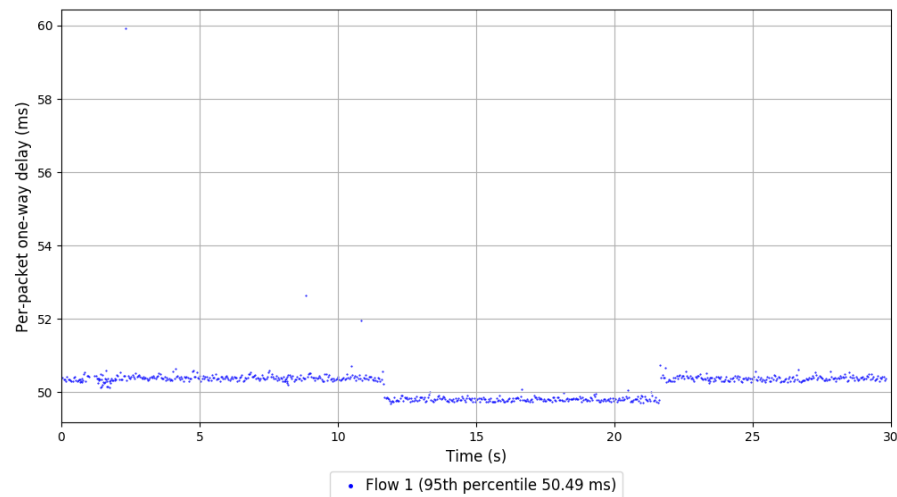
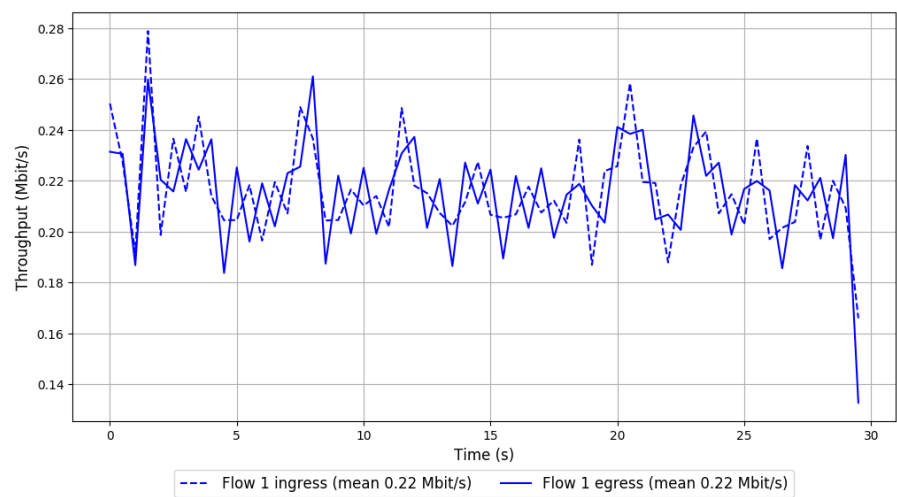
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.488 ms

Loss rate: 0.38%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-17 00:51:30

End at: 2017-08-17 00:52:00

Below is generated by plot.py at 2017-08-17 04:07:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.163 ms

Loss rate: 0.38%

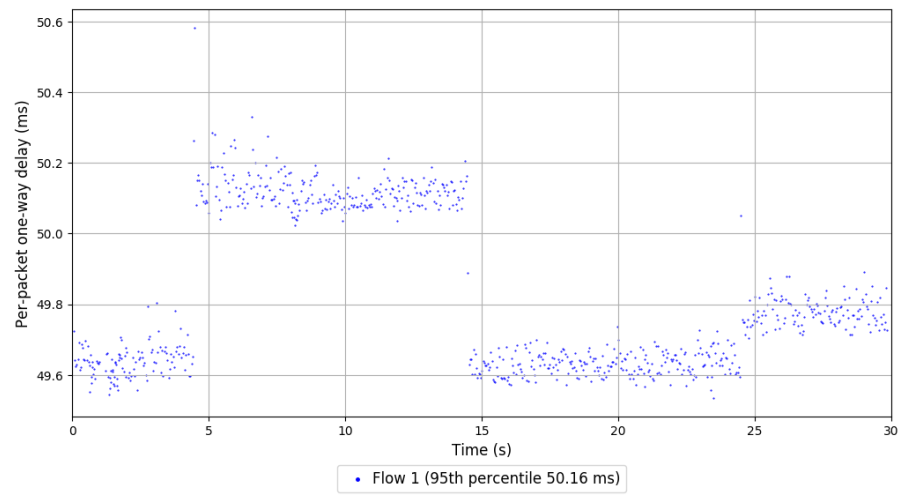
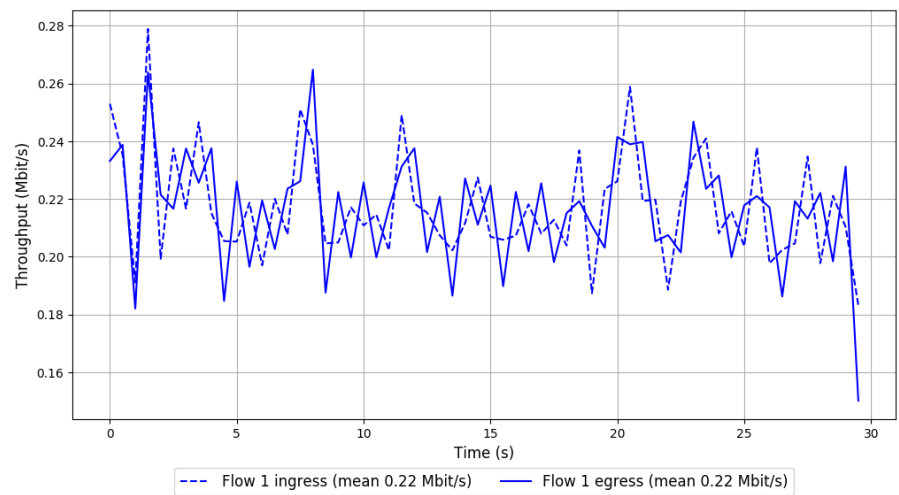
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.163 ms

Loss rate: 0.38%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-08-17 01:02:06

End at: 2017-08-17 01:02:36

Below is generated by plot.py at 2017-08-17 04:07:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.454 ms

Loss rate: 0.38%

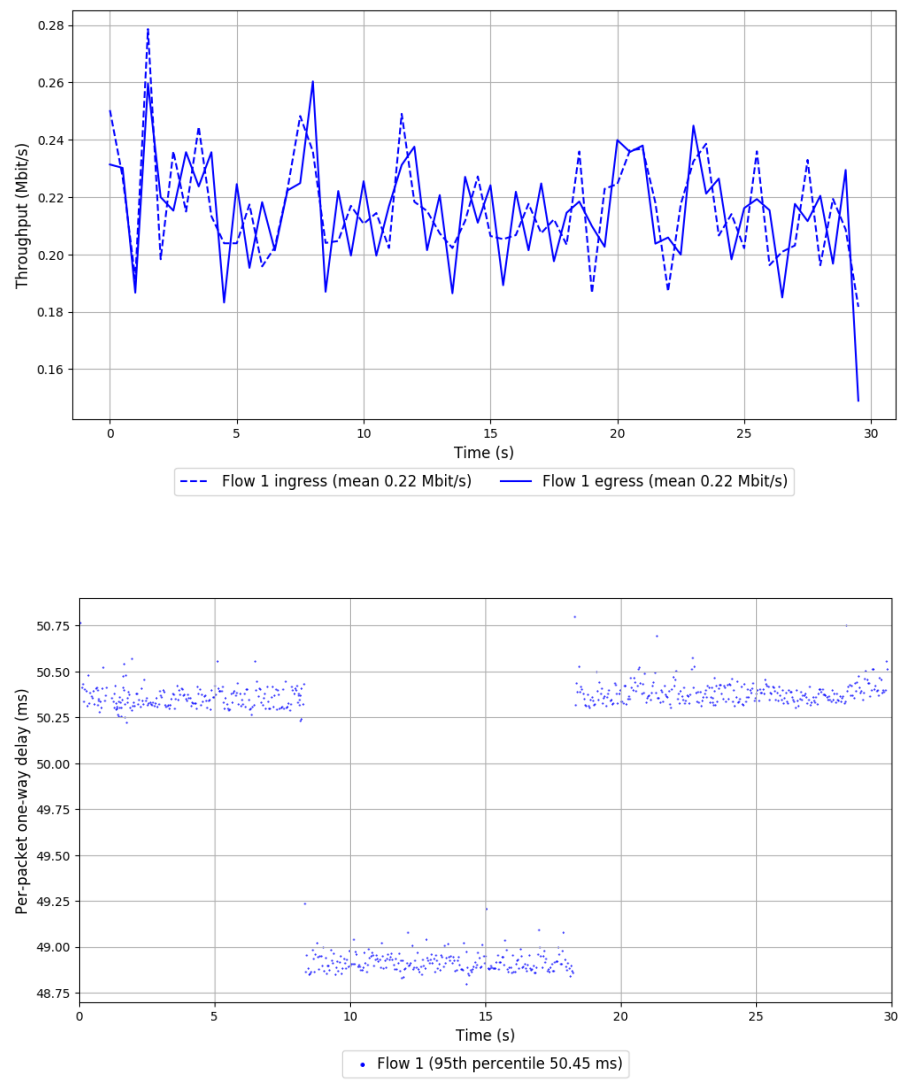
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.454 ms

Loss rate: 0.38%

Run 9: Report of SReAM — Data Link

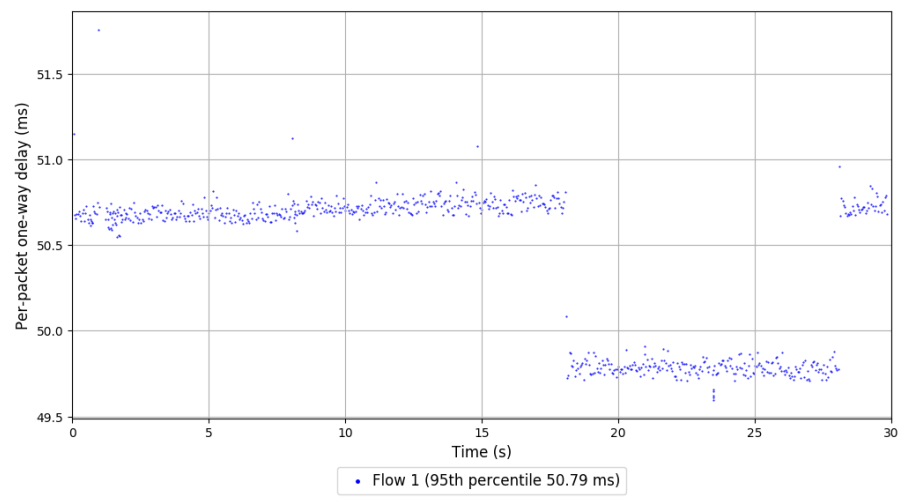
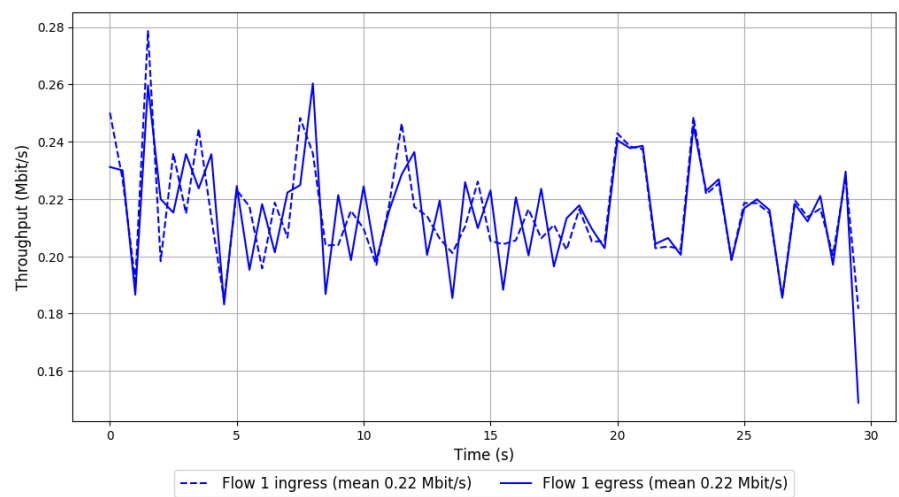


```
Run 10: Statistics of SReAM

Start at: 2017-08-17 01:12:56
End at: 2017-08-17 01:13:26

# Below is generated by plot.py at 2017-08-17 04:07:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.787 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.787 ms
Loss rate: 0.38%
```

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2017-08-16 23:40:19

End at: 2017-08-16 23:40:49

Below is generated by plot.py at 2017-08-17 04:07:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.22 Mbit/s

95th percentile per-packet one-way delay: 51.611 ms

Loss rate: 6.84%

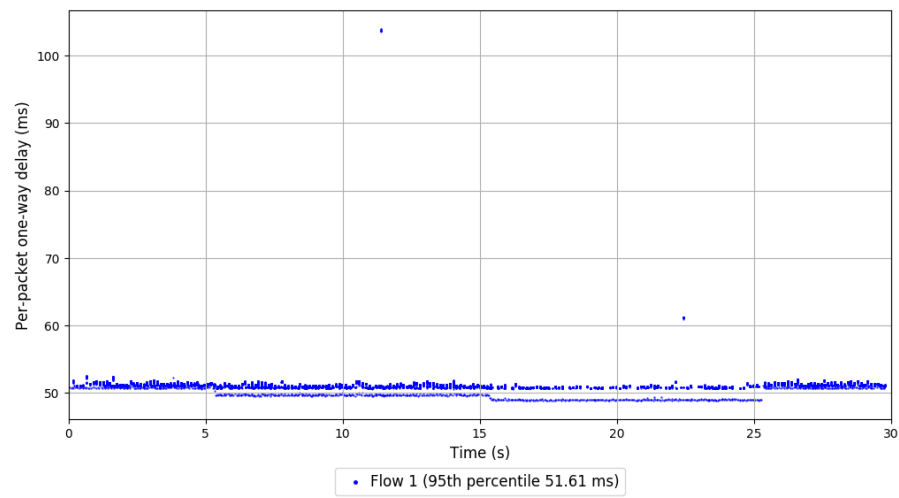
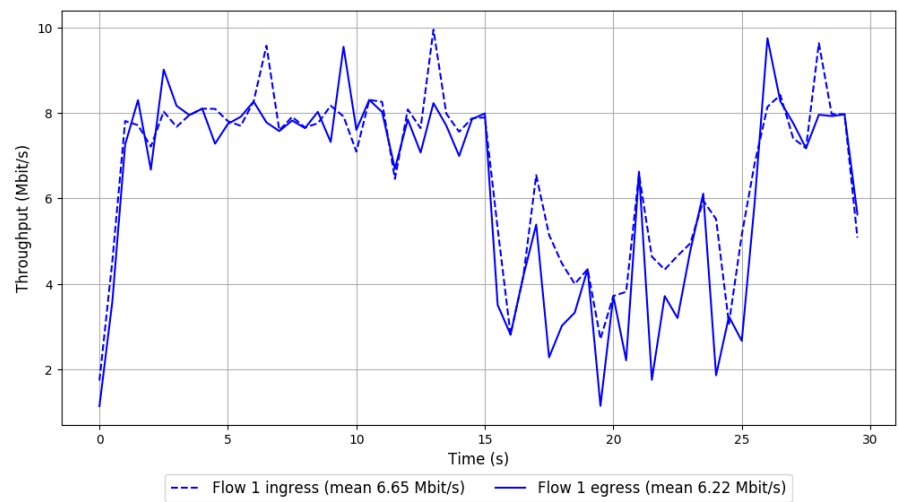
-- Flow 1:

Average throughput: 6.22 Mbit/s

95th percentile per-packet one-way delay: 51.611 ms

Loss rate: 6.84%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-16 23:50:36

End at: 2017-08-16 23:51:06

Below is generated by plot.py at 2017-08-17 04:07:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.35 Mbit/s

95th percentile per-packet one-way delay: 51.454 ms

Loss rate: 5.59%

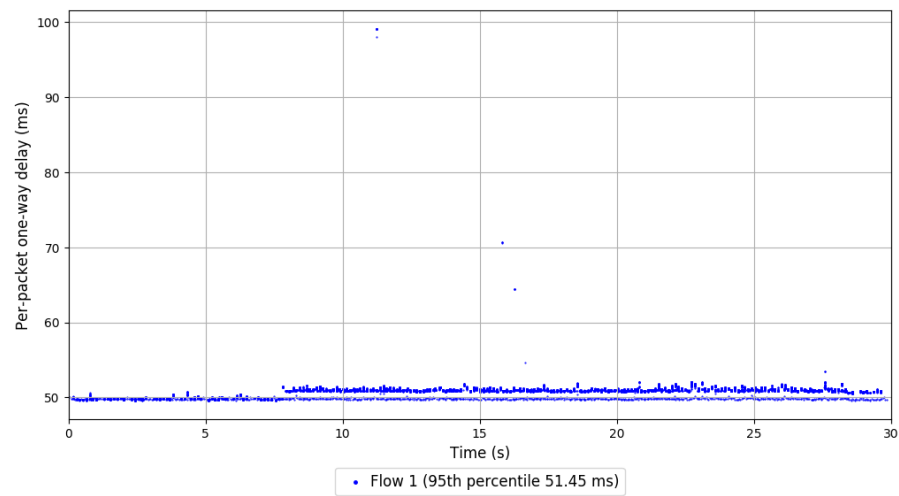
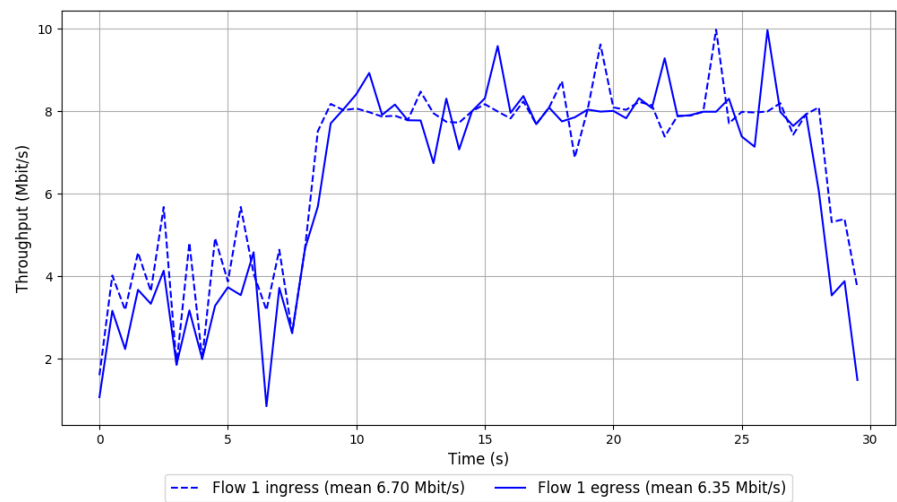
-- Flow 1:

Average throughput: 6.35 Mbit/s

95th percentile per-packet one-way delay: 51.454 ms

Loss rate: 5.59%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-17 00:00:54

End at: 2017-08-17 00:01:24

Below is generated by plot.py at 2017-08-17 04:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 51.605 ms

Loss rate: 0.46%

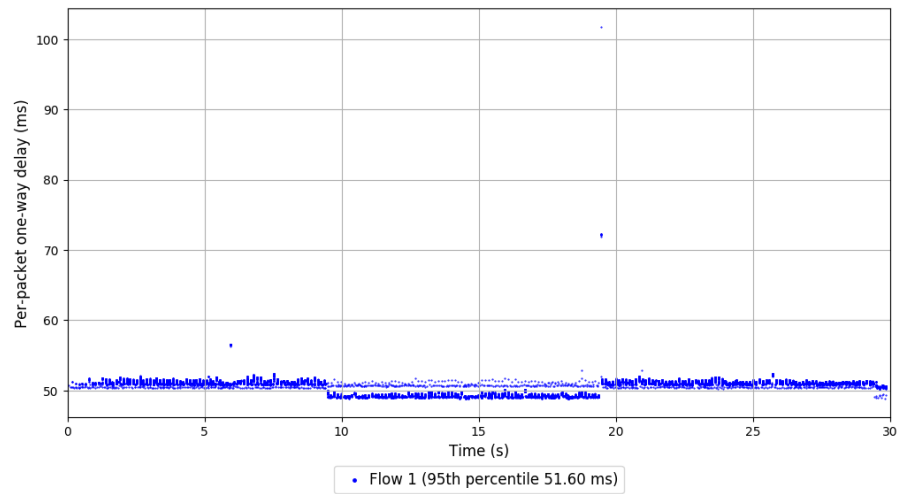
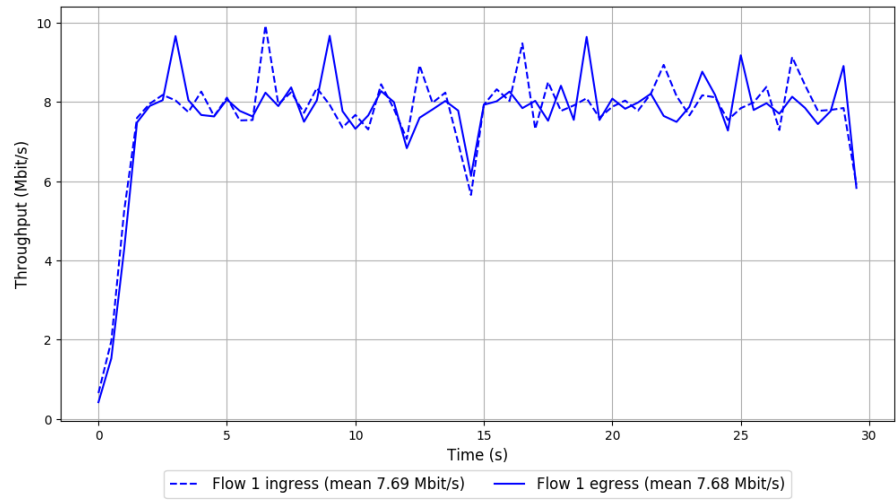
-- Flow 1:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 51.605 ms

Loss rate: 0.46%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-08-17 00:11:39

End at: 2017-08-17 00:12:09

Below is generated by plot.py at 2017-08-17 04:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 51.210 ms

Loss rate: 15.33%

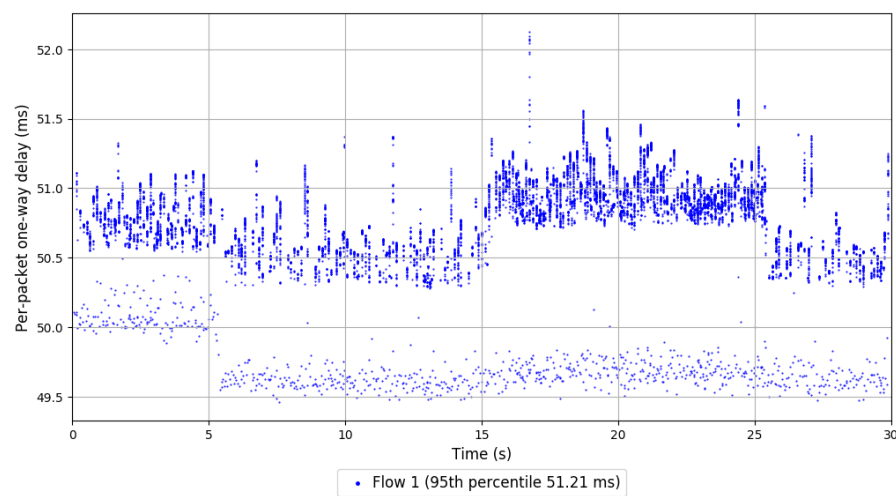
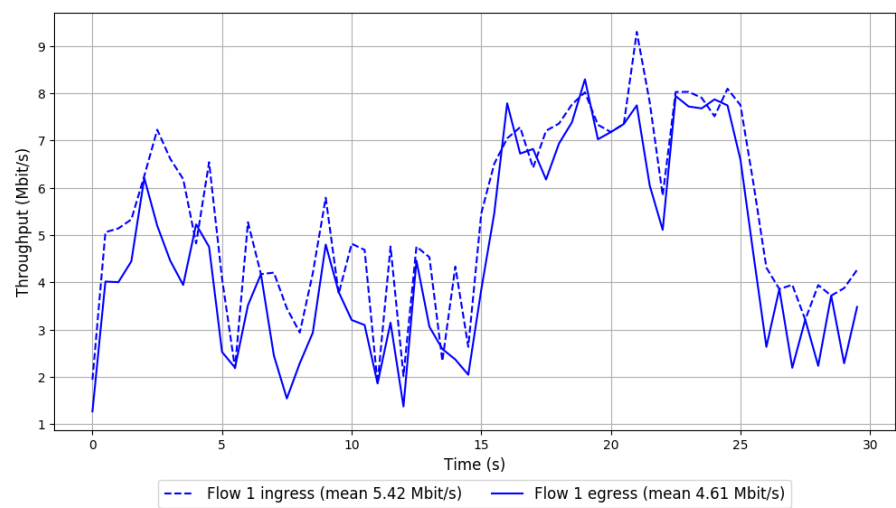
-- Flow 1:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 51.210 ms

Loss rate: 15.33%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-17 00:22:05

End at: 2017-08-17 00:22:35

Below is generated by plot.py at 2017-08-17 04:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 51.255 ms

Loss rate: 0.78%

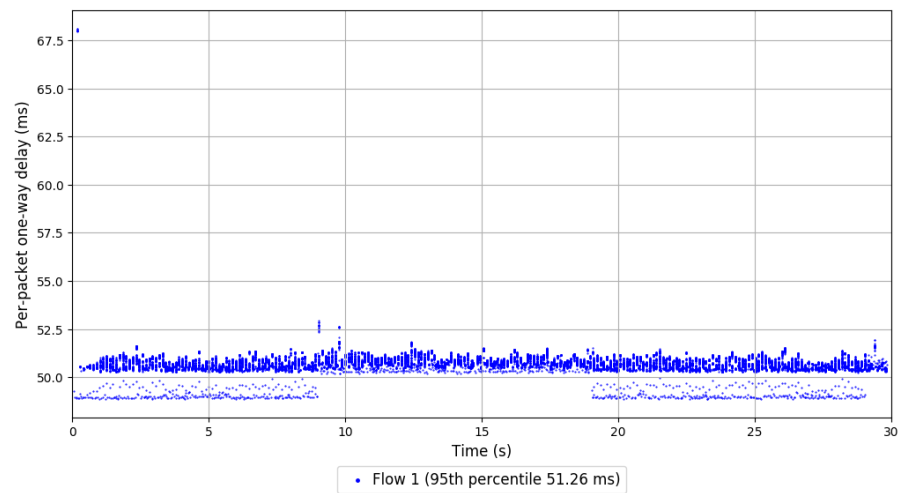
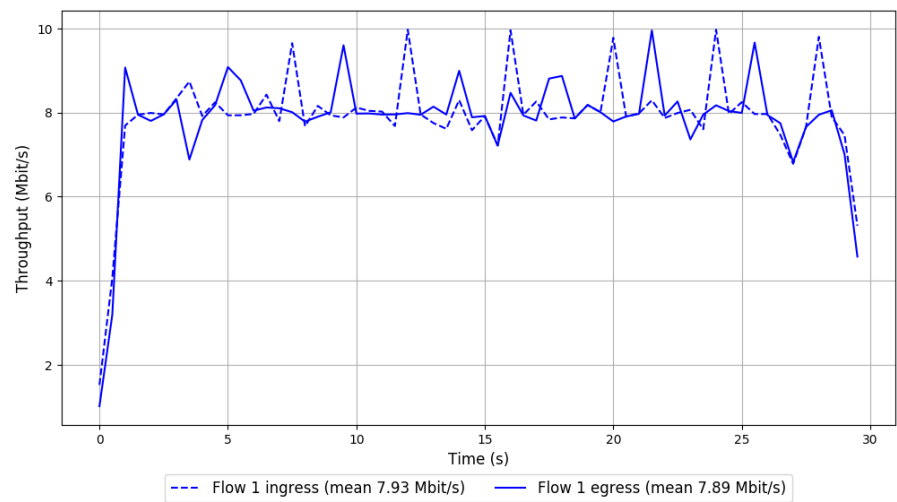
-- Flow 1:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 51.255 ms

Loss rate: 0.78%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-17 00:32:41

End at: 2017-08-17 00:33:11

Below is generated by plot.py at 2017-08-17 04:07:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.24 Mbit/s

95th percentile per-packet one-way delay: 51.115 ms

Loss rate: 11.60%

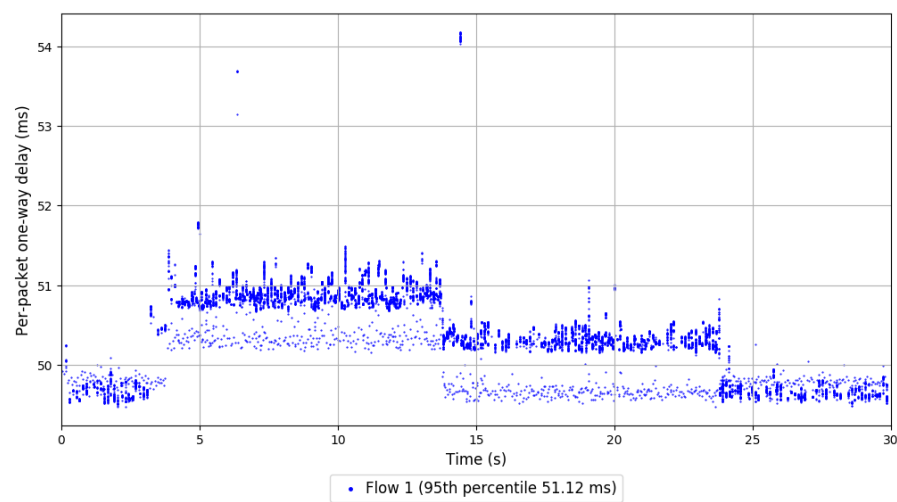
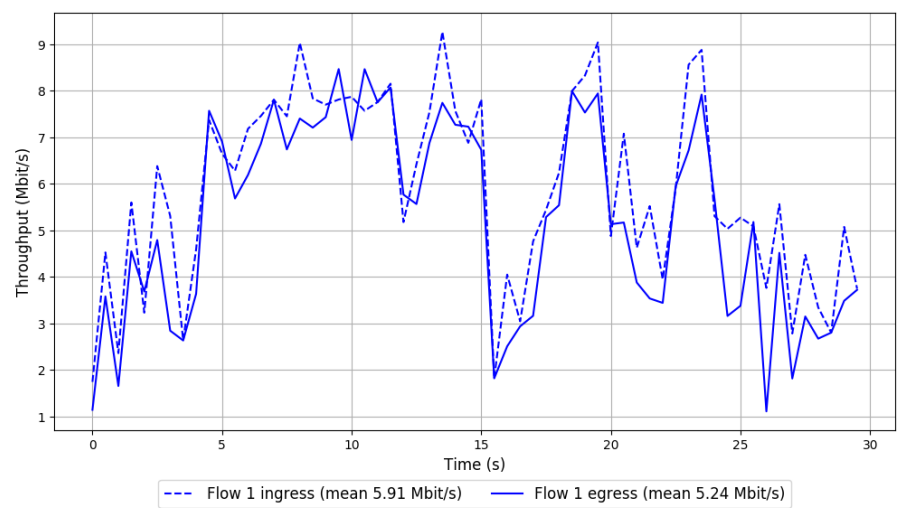
-- Flow 1:

Average throughput: 5.24 Mbit/s

95th percentile per-packet one-way delay: 51.115 ms

Loss rate: 11.60%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-17 00:43:15

End at: 2017-08-17 00:43:45

Below is generated by plot.py at 2017-08-17 04:07:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 50.437 ms

Loss rate: 1.11%

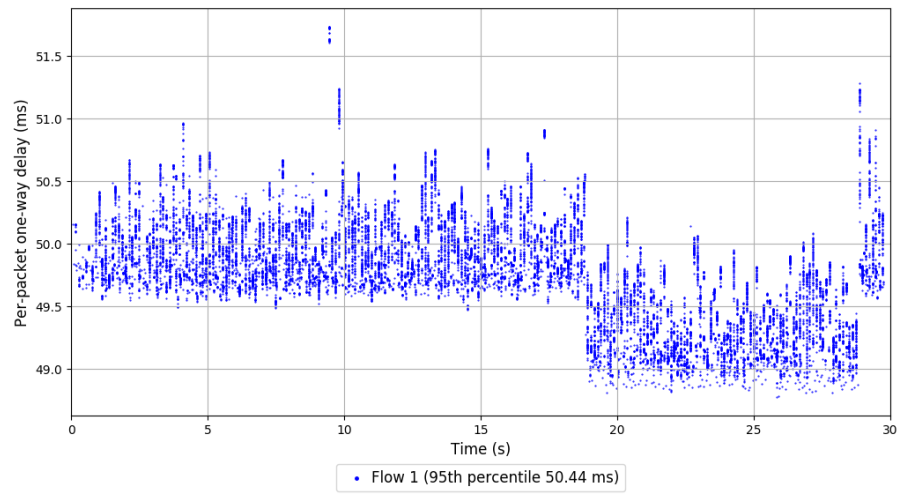
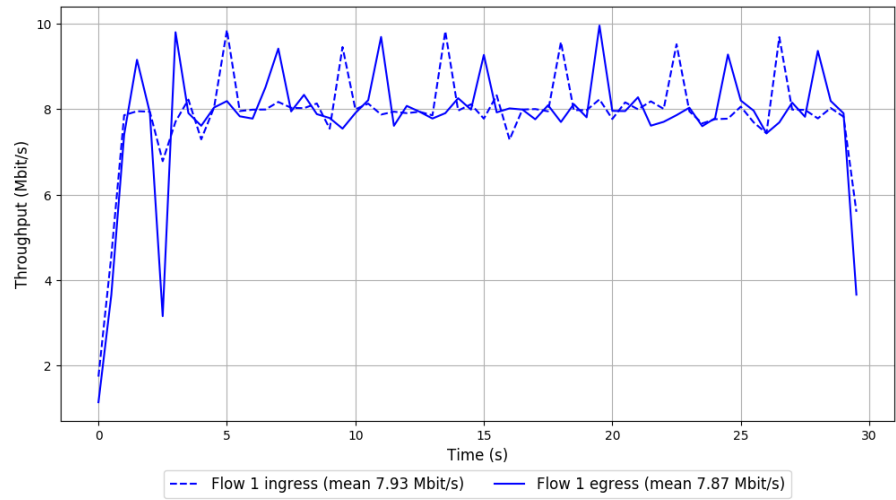
-- Flow 1:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 50.437 ms

Loss rate: 1.11%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-17 00:53:39

End at: 2017-08-17 00:54:09

Below is generated by plot.py at 2017-08-17 04:07:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.14 Mbit/s

95th percentile per-packet one-way delay: 50.112 ms

Loss rate: 21.15%

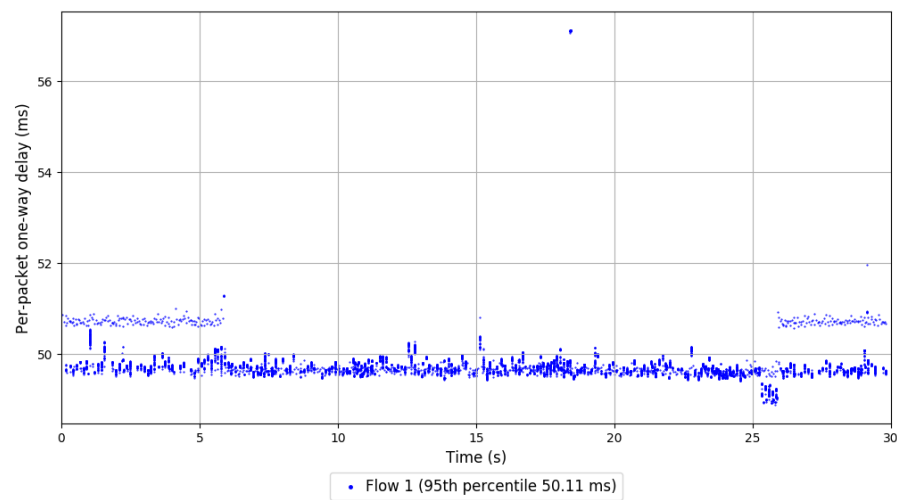
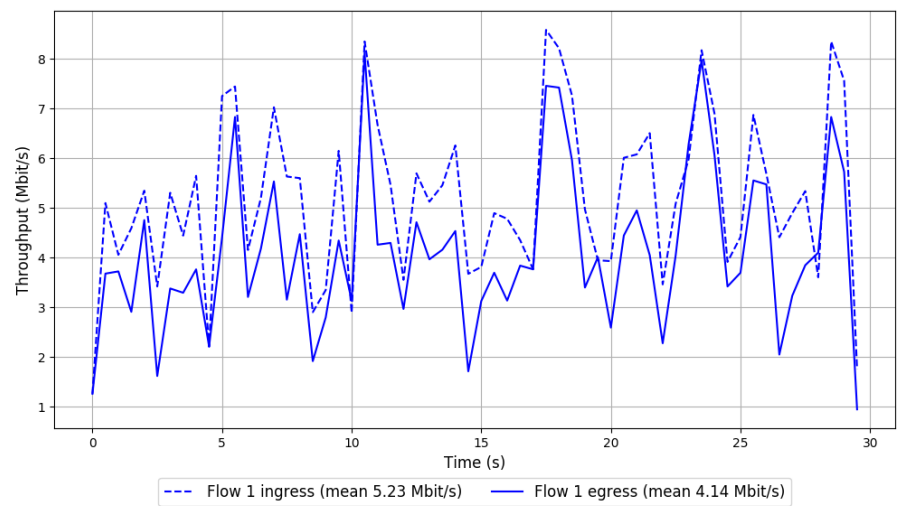
-- Flow 1:

Average throughput: 4.14 Mbit/s

95th percentile per-packet one-way delay: 50.112 ms

Loss rate: 21.15%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-17 01:04:19

End at: 2017-08-17 01:04:49

Below is generated by plot.py at 2017-08-17 04:07:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.09 Mbit/s

95th percentile per-packet one-way delay: 50.621 ms

Loss rate: 17.52%

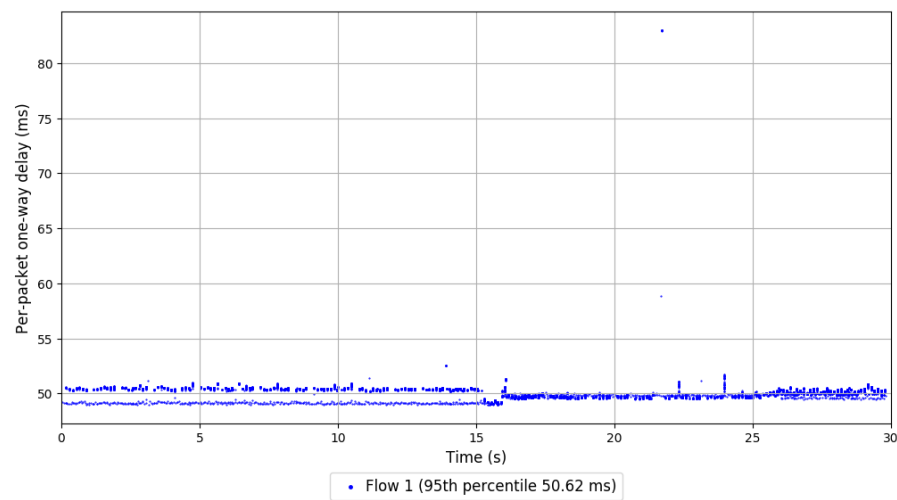
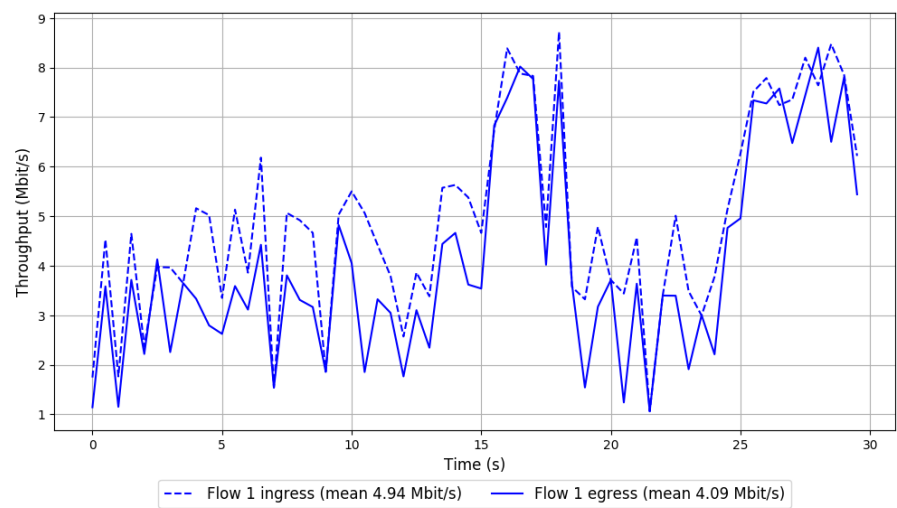
-- Flow 1:

Average throughput: 4.09 Mbit/s

95th percentile per-packet one-way delay: 50.621 ms

Loss rate: 17.52%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-17 01:15:04

End at: 2017-08-17 01:15:34

Below is generated by plot.py at 2017-08-17 04:07:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 51.360 ms

Loss rate: 0.84%

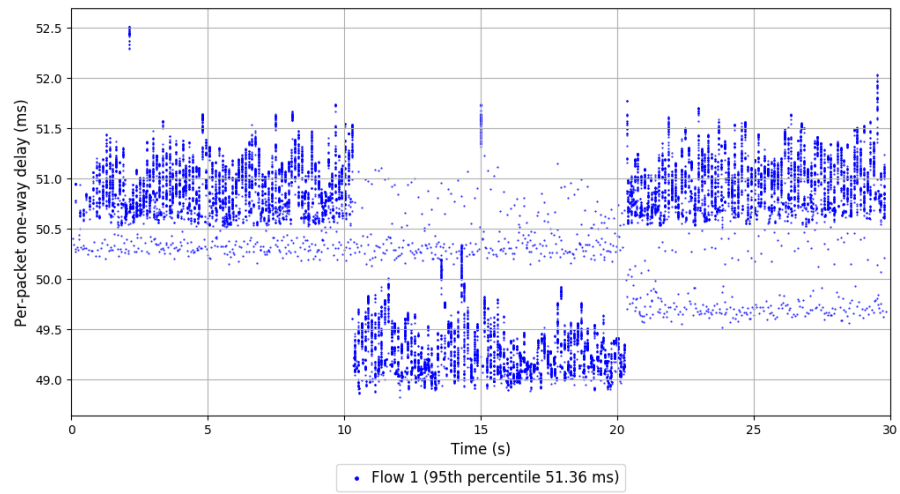
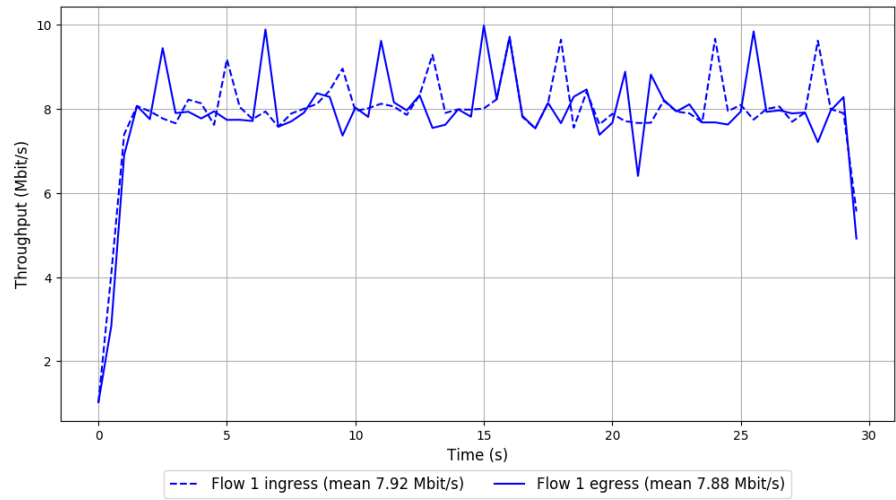
-- Flow 1:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 51.360 ms

Loss rate: 0.84%

Run 10: Report of Sprout — Data Link

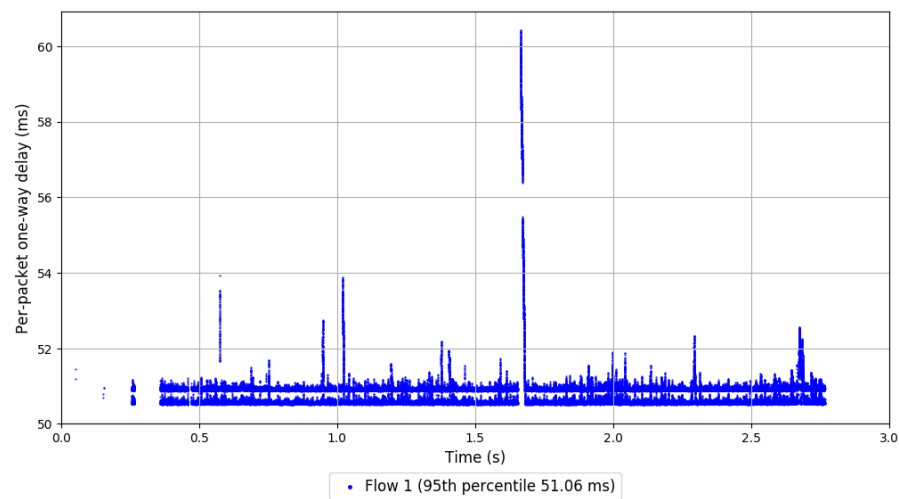
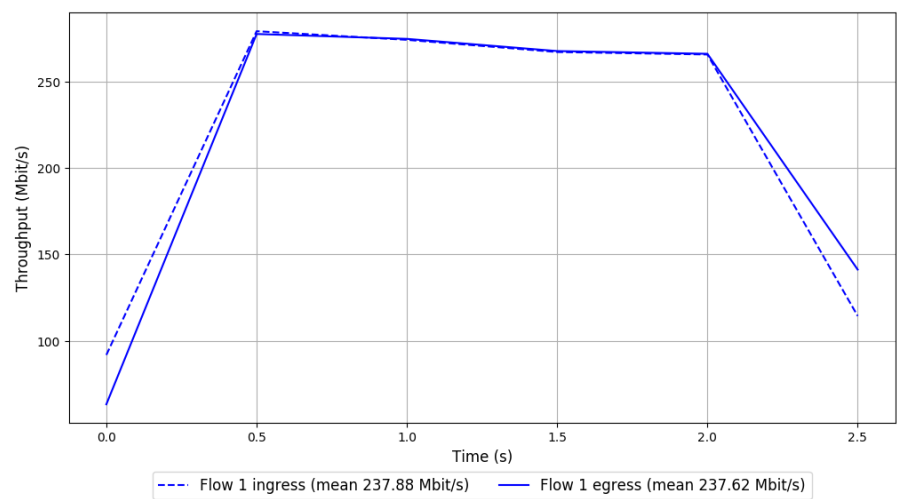


Run 1: Statistics of TaoVA-100x

Start at: 2017-08-16 23:36:56

End at: 2017-08-16 23:37:26

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

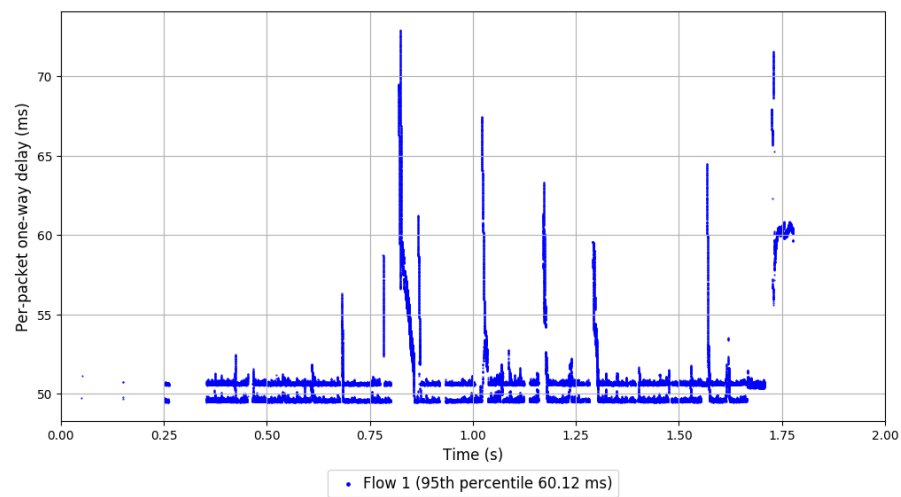
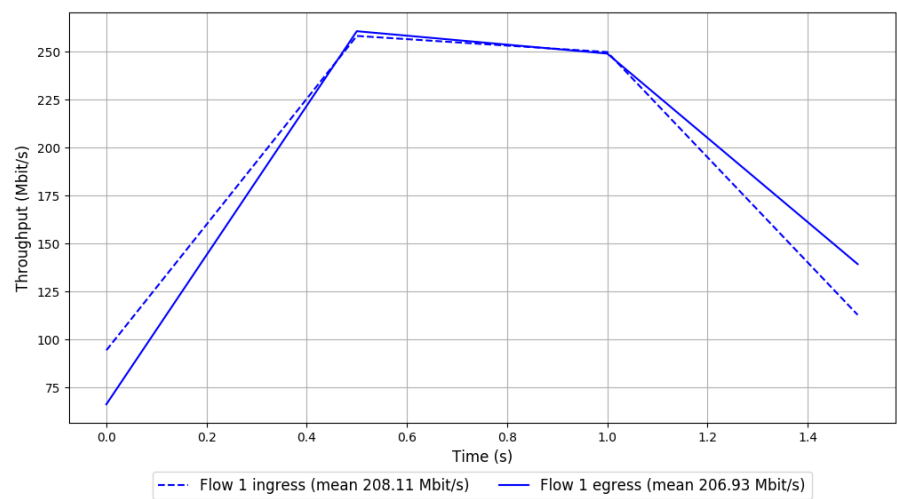


Run 2: Statistics of TaoVA-100x

Start at: 2017-08-16 23:47:22

End at: 2017-08-16 23:47:52

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

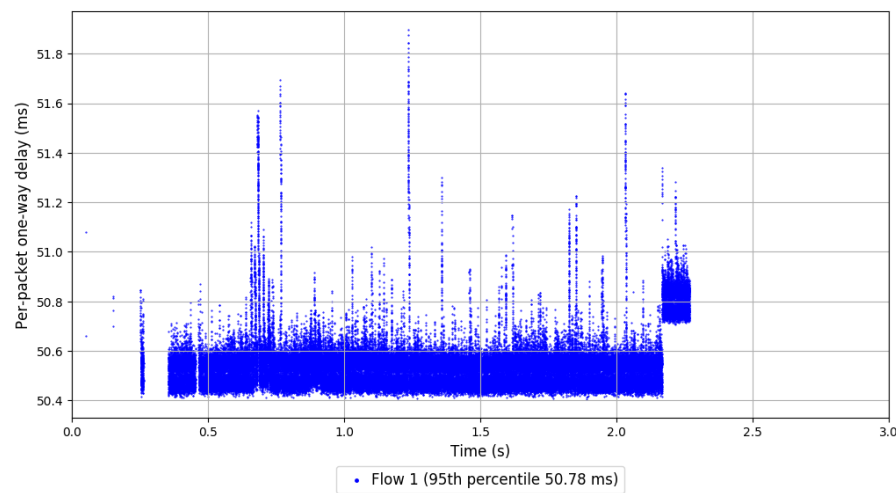
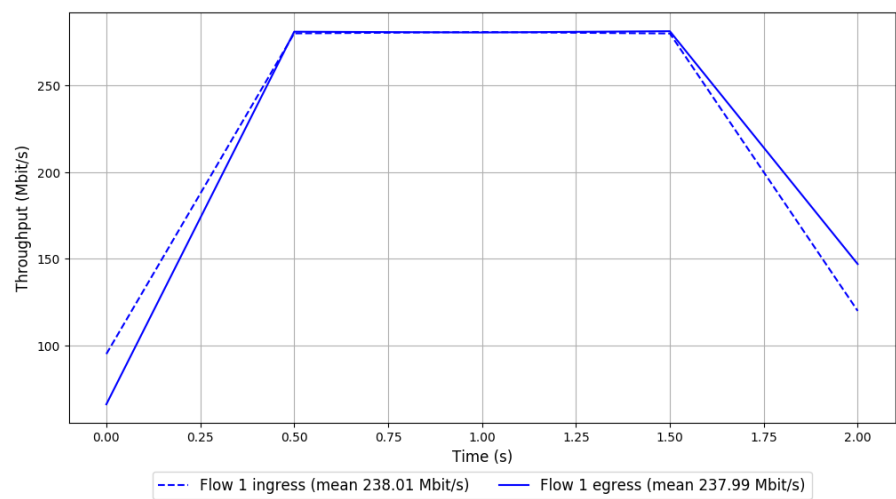


Run 3: Statistics of TaoVA-100x

Start at: 2017-08-16 23:57:32

End at: 2017-08-16 23:58:02

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

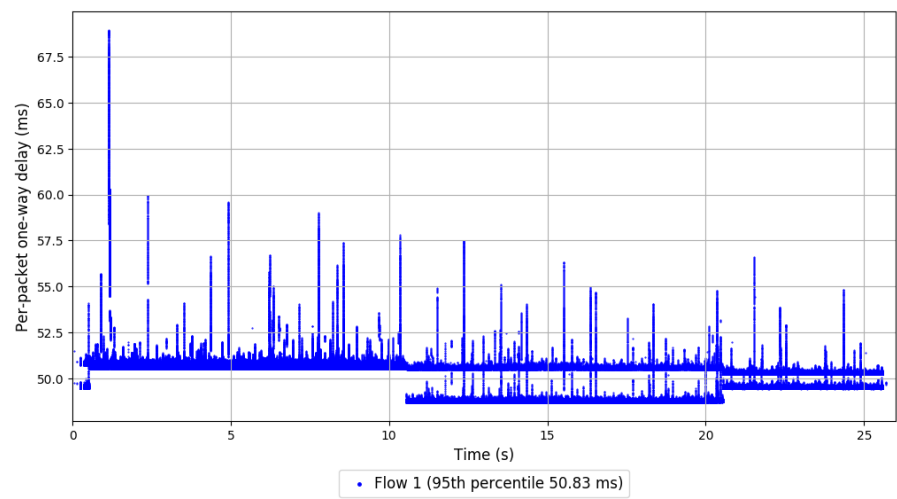
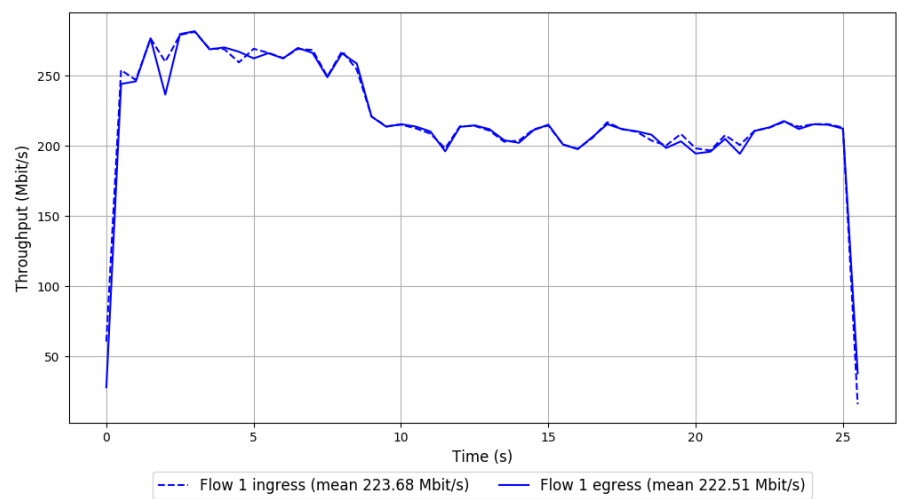


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-08-17 00:07:54
End at: 2017-08-17 00:08:24

# Below is generated by plot.py at 2017-08-17 04:09:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.51 Mbit/s
95th percentile per-packet one-way delay: 50.828 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 222.51 Mbit/s
95th percentile per-packet one-way delay: 50.828 ms
Loss rate: 0.52%
```

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

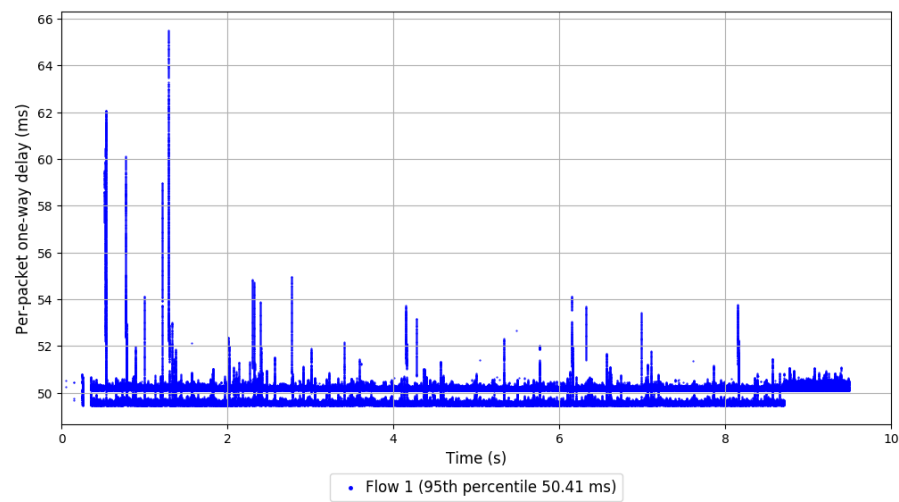
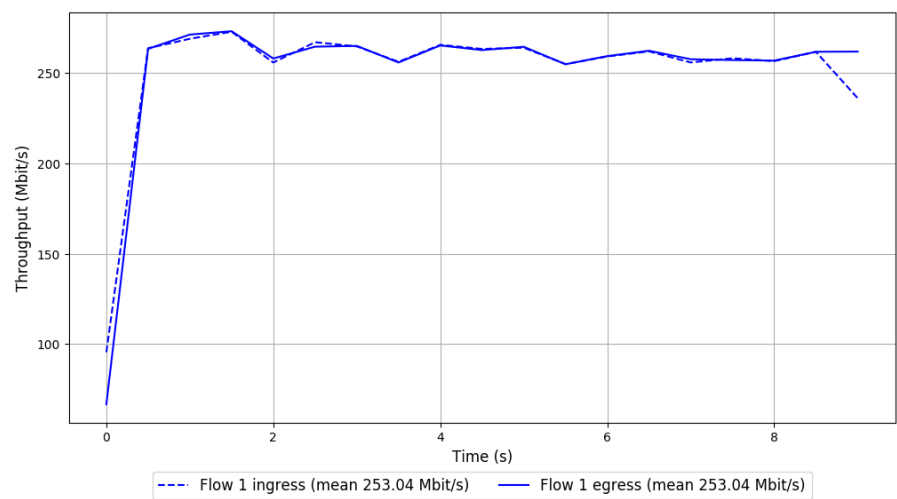


Run 5: Statistics of TaoVA-100x

Start at: 2017-08-17 00:18:35

End at: 2017-08-17 00:19:05

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

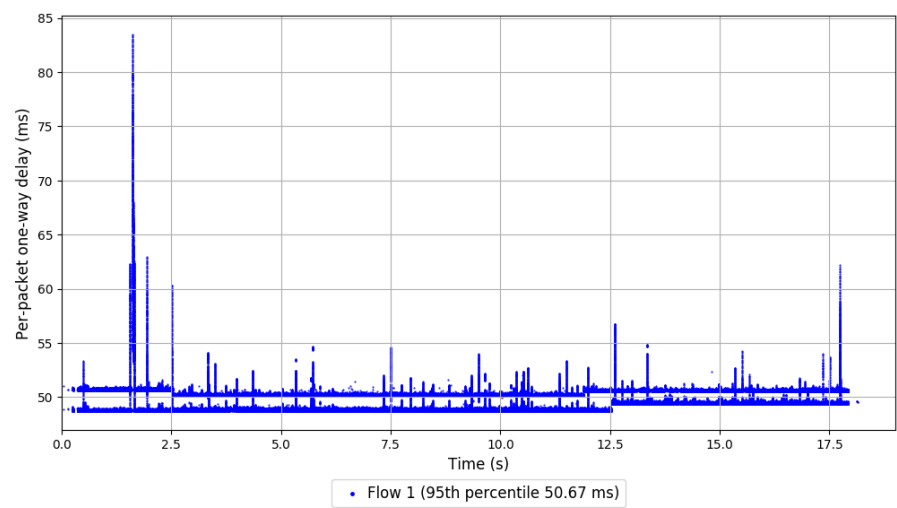
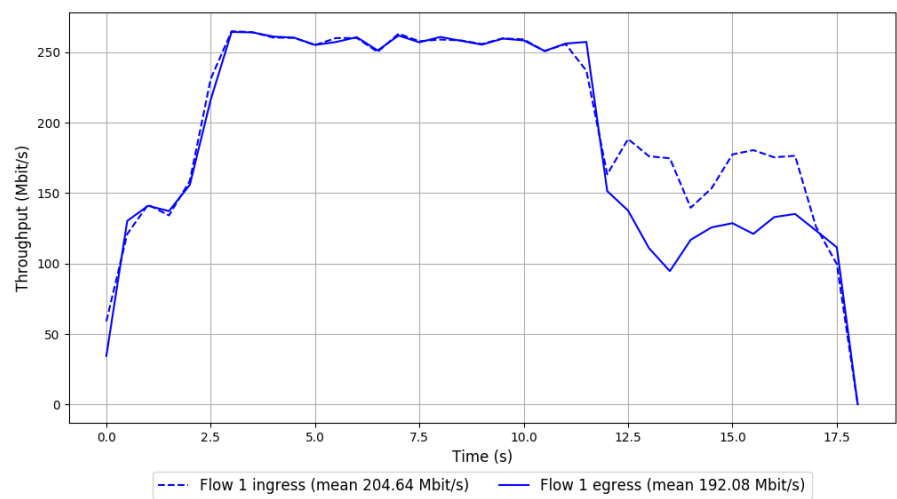


Run 6: Statistics of TaoVA-100x

Start at: 2017-08-17 00:29:02

End at: 2017-08-17 00:29:32

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

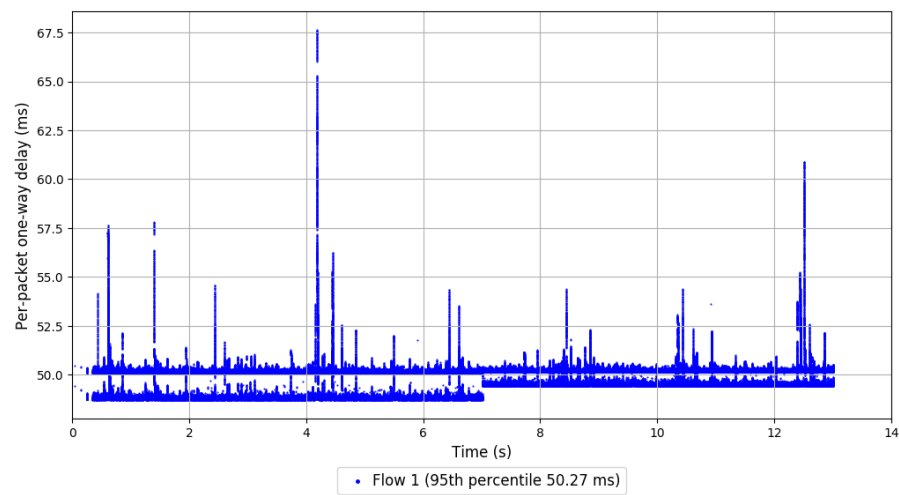
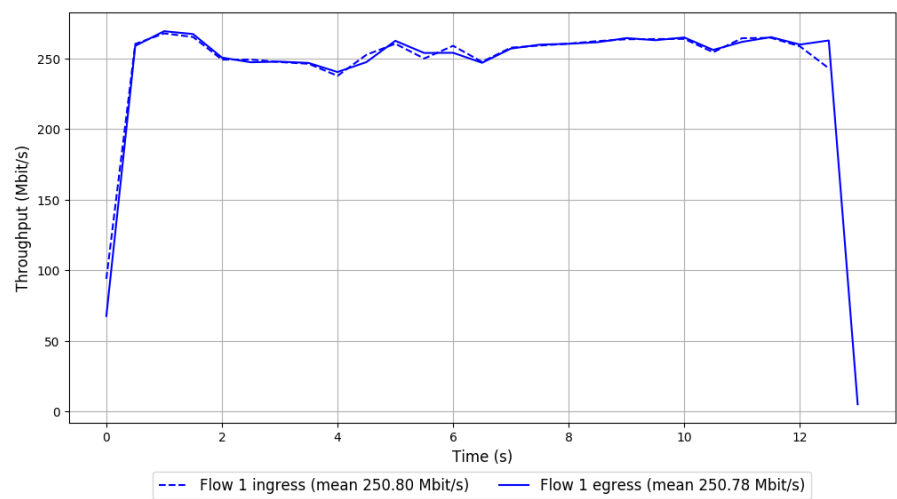


Run 7: Statistics of TaoVA-100x

Start at: 2017-08-17 00:39:37

End at: 2017-08-17 00:40:07

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

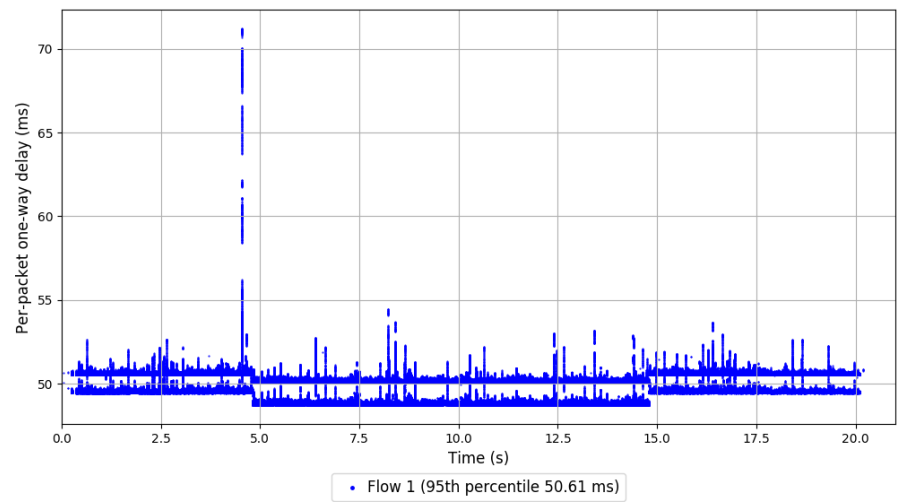
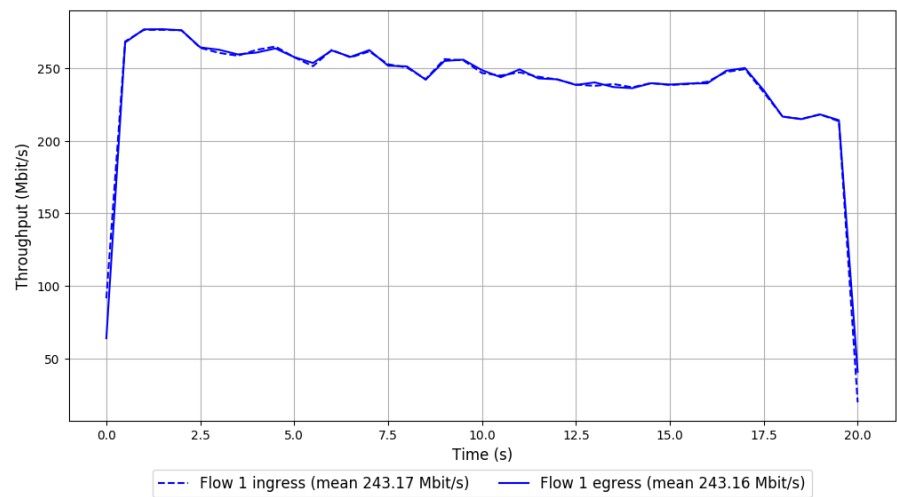


Run 8: Statistics of TaoVA-100x

Start at: 2017-08-17 00:49:59

End at: 2017-08-17 00:50:29

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

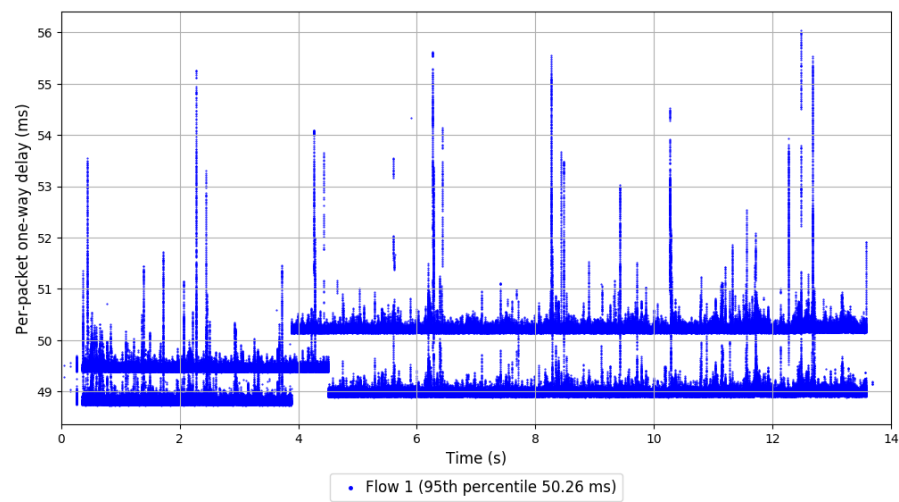
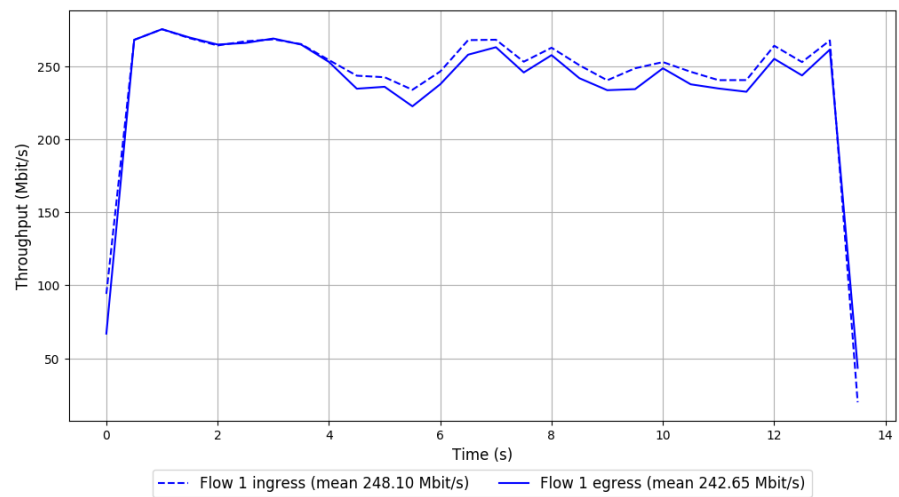


Run 9: Statistics of TaoVA-100x

Start at: 2017-08-17 01:00:40

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

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

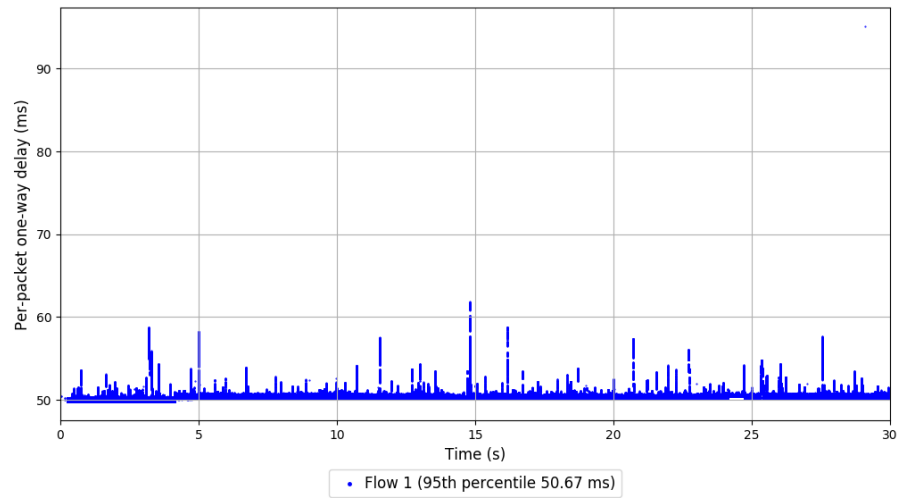
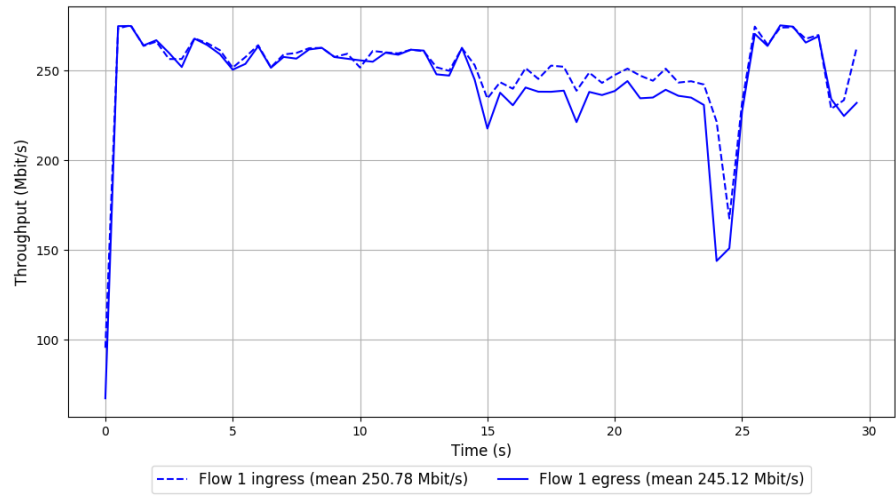


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-08-17 01:11:20
End at: 2017-08-17 01:11:50

# Below is generated by plot.py at 2017-08-17 04:11:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 245.12 Mbit/s
95th percentile per-packet one-way delay: 50.666 ms
Loss rate: 2.60%
-- Flow 1:
Average throughput: 245.12 Mbit/s
95th percentile per-packet one-way delay: 50.666 ms
Loss rate: 2.60%
```

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

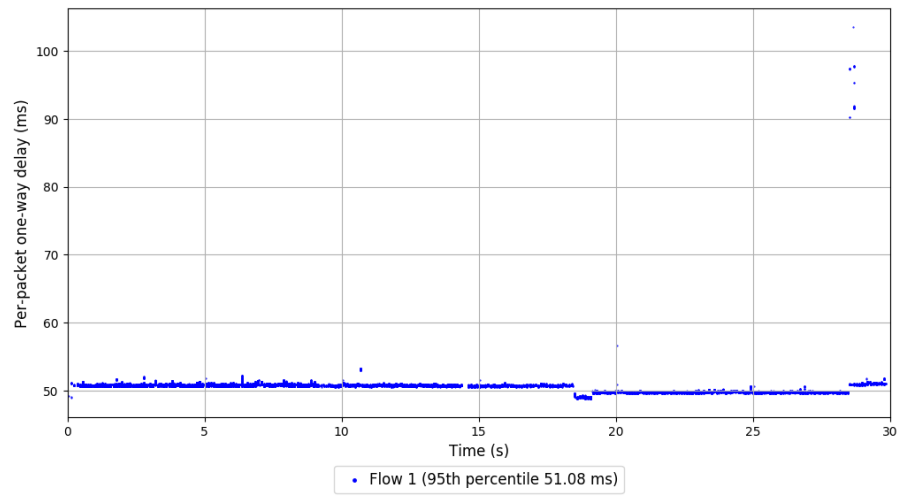
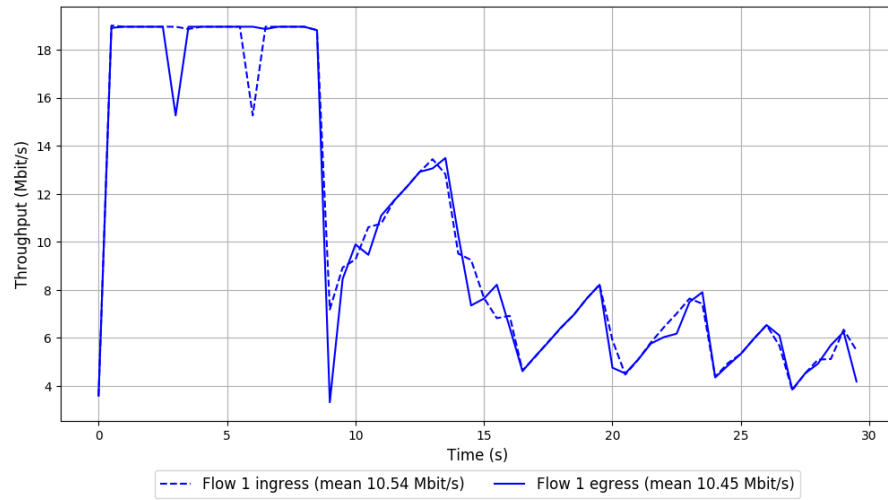


```
Run 1: Statistics of TCP Vegas

Start at: 2017-08-16 23:37:35
End at: 2017-08-16 23:38:05

# Below is generated by plot.py at 2017-08-17 04:11:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.45 Mbit/s
95th percentile per-packet one-way delay: 51.076 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 10.45 Mbit/s
95th percentile per-packet one-way delay: 51.076 ms
Loss rate: 1.16%
```


Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-16 23:48:00

End at: 2017-08-16 23:48:30

Below is generated by plot.py at 2017-08-17 04:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 24.94 Mbit/s

95th percentile per-packet one-way delay: 51.614 ms

Loss rate: 0.40%

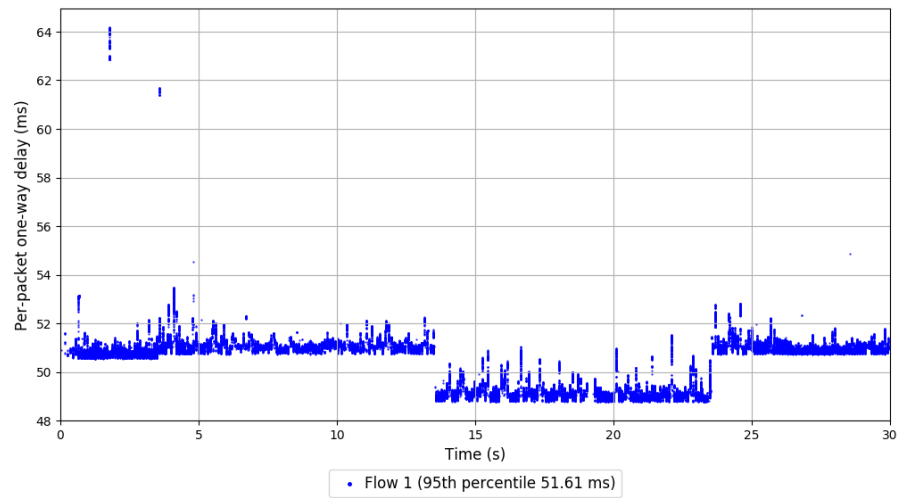
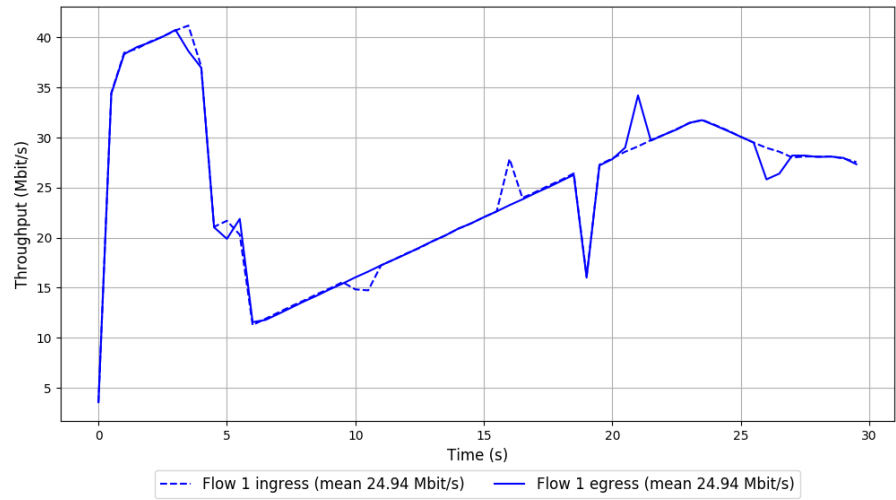
-- Flow 1:

Average throughput: 24.94 Mbit/s

95th percentile per-packet one-way delay: 51.614 ms

Loss rate: 0.40%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-16 23:58:10

End at: 2017-08-16 23:58:40

Below is generated by plot.py at 2017-08-17 04:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.55 Mbit/s

95th percentile per-packet one-way delay: 51.258 ms

Loss rate: 1.28%

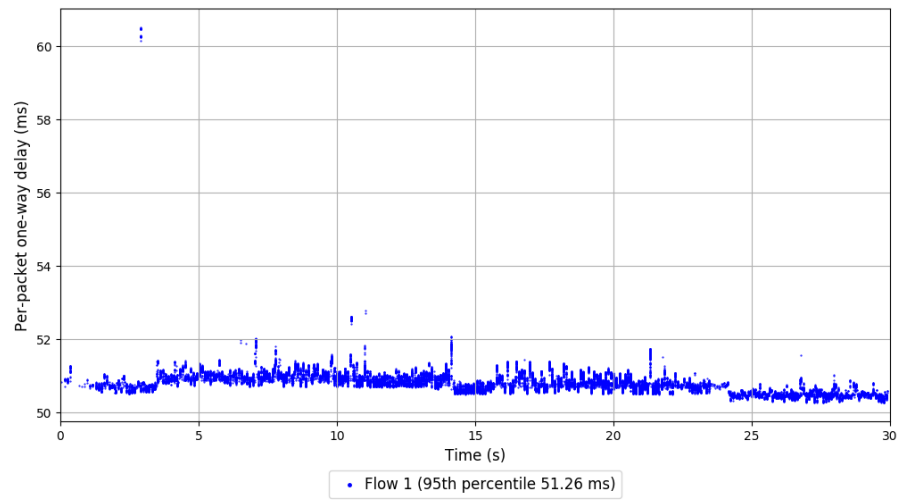
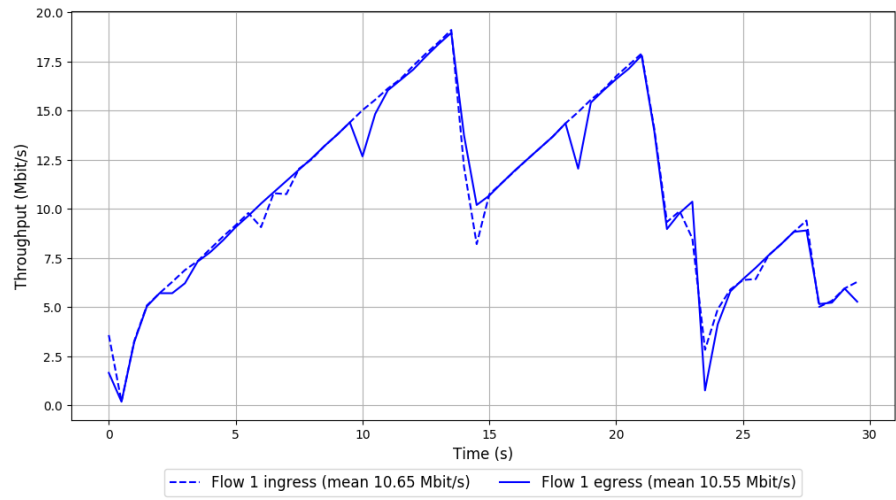
-- Flow 1:

Average throughput: 10.55 Mbit/s

95th percentile per-packet one-way delay: 51.258 ms

Loss rate: 1.28%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-17 00:08:48

End at: 2017-08-17 00:09:18

Below is generated by plot.py at 2017-08-17 04:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.14 Mbit/s

95th percentile per-packet one-way delay: 51.784 ms

Loss rate: 0.38%

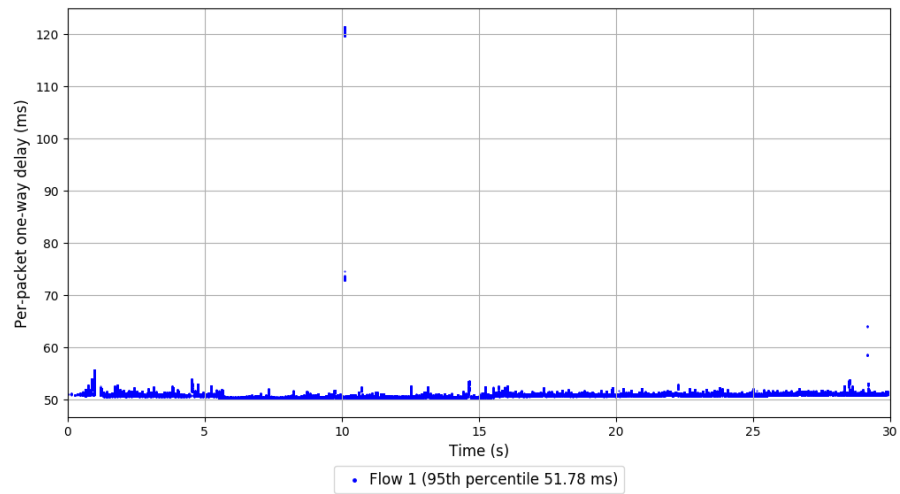
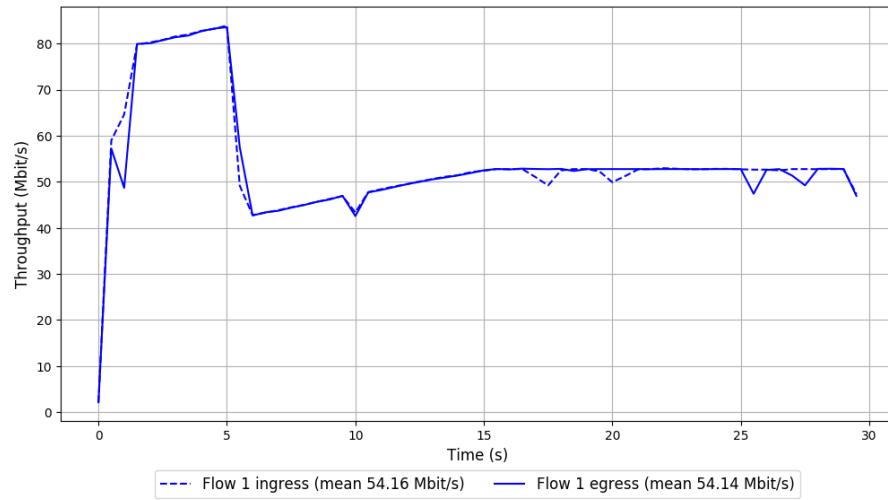
-- Flow 1:

Average throughput: 54.14 Mbit/s

95th percentile per-packet one-way delay: 51.784 ms

Loss rate: 0.38%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-08-17 00:19:19

End at: 2017-08-17 00:19:49

Below is generated by plot.py at 2017-08-17 04:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.17 Mbit/s

95th percentile per-packet one-way delay: 51.195 ms

Loss rate: 2.77%

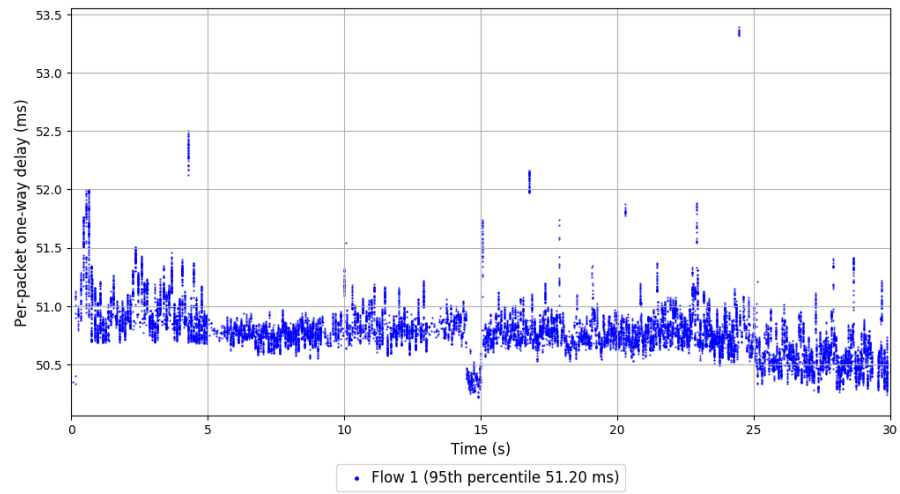
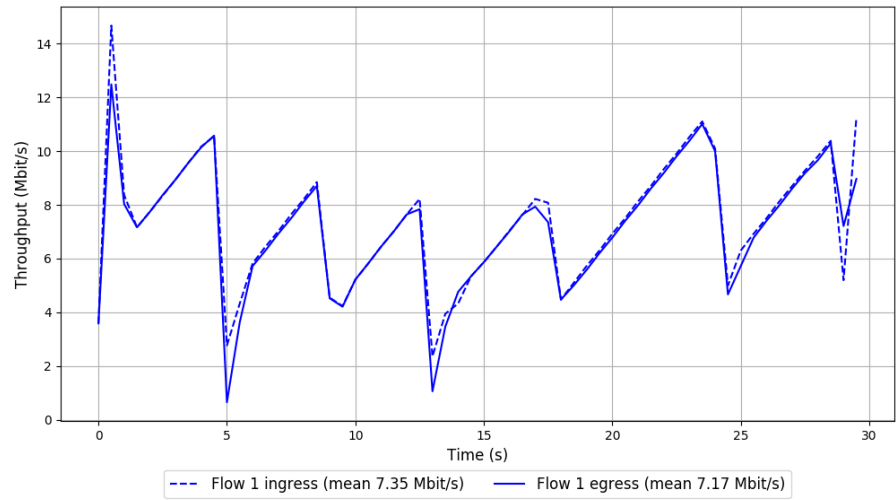
-- Flow 1:

Average throughput: 7.17 Mbit/s

95th percentile per-packet one-way delay: 51.195 ms

Loss rate: 2.77%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-17 00:29:50

End at: 2017-08-17 00:30:20

Below is generated by plot.py at 2017-08-17 04:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.65 Mbit/s

95th percentile per-packet one-way delay: 51.044 ms

Loss rate: 0.17%

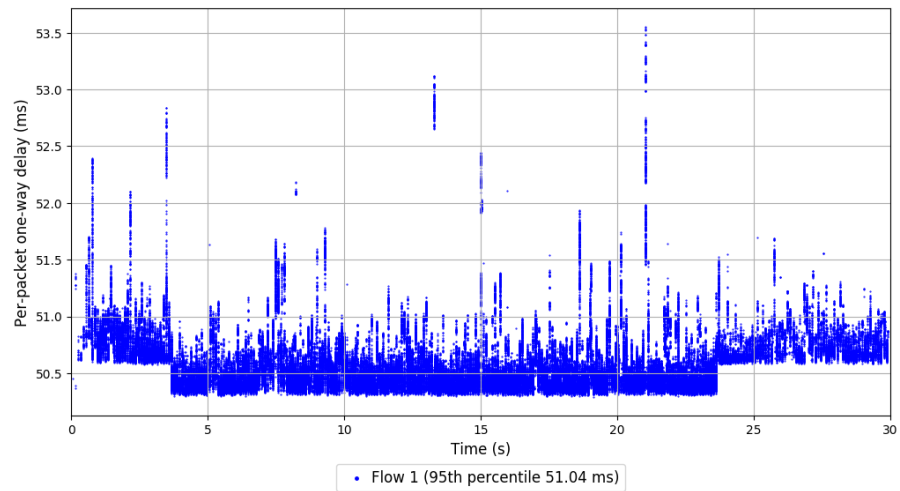
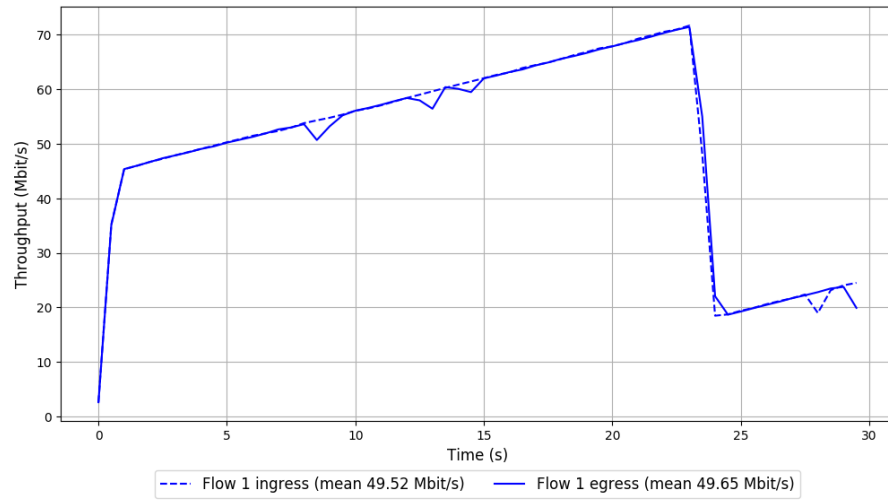
-- Flow 1:

Average throughput: 49.65 Mbit/s

95th percentile per-packet one-way delay: 51.044 ms

Loss rate: 0.17%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-17 00:40:23

End at: 2017-08-17 00:40:53

Below is generated by plot.py at 2017-08-17 04:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.55 Mbit/s

95th percentile per-packet one-way delay: 51.318 ms

Loss rate: 0.13%

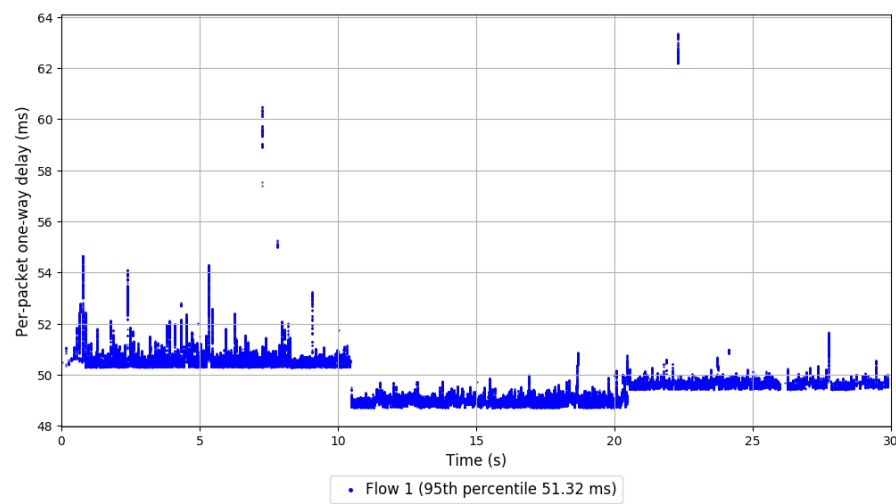
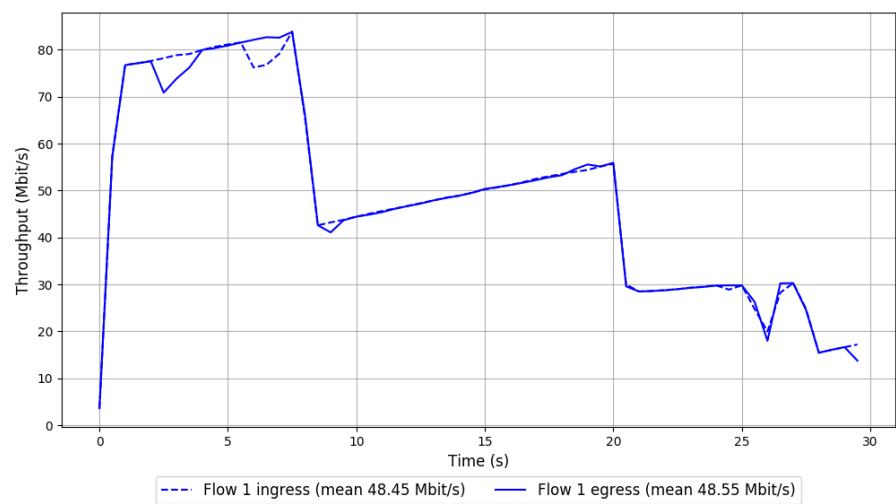
-- Flow 1:

Average throughput: 48.55 Mbit/s

95th percentile per-packet one-way delay: 51.318 ms

Loss rate: 0.13%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-17 00:50:52

End at: 2017-08-17 00:51:22

Below is generated by plot.py at 2017-08-17 04:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.18 Mbit/s

95th percentile per-packet one-way delay: 50.572 ms

Loss rate: 0.51%

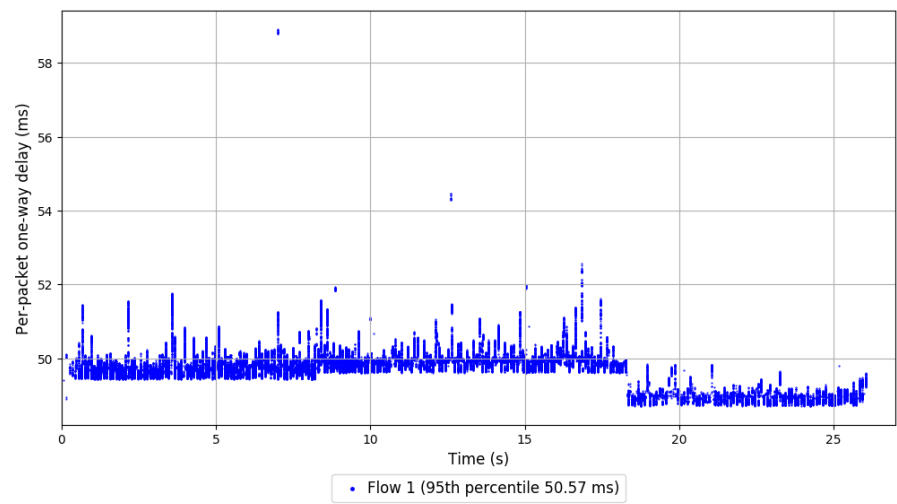
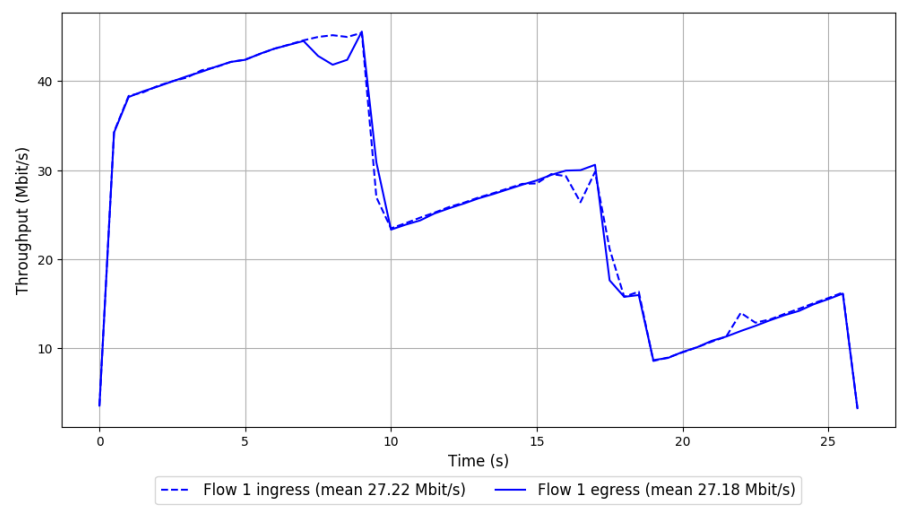
-- Flow 1:

Average throughput: 27.18 Mbit/s

95th percentile per-packet one-way delay: 50.572 ms

Loss rate: 0.51%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-17 01:01:28

End at: 2017-08-17 01:01:58

Below is generated by plot.py at 2017-08-17 04:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.86 Mbit/s

95th percentile per-packet one-way delay: 50.726 ms

Loss rate: 1.68%

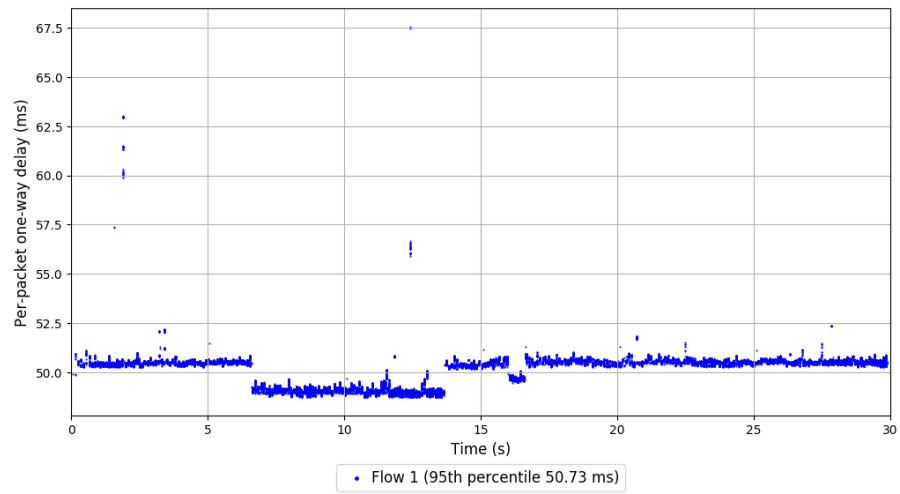
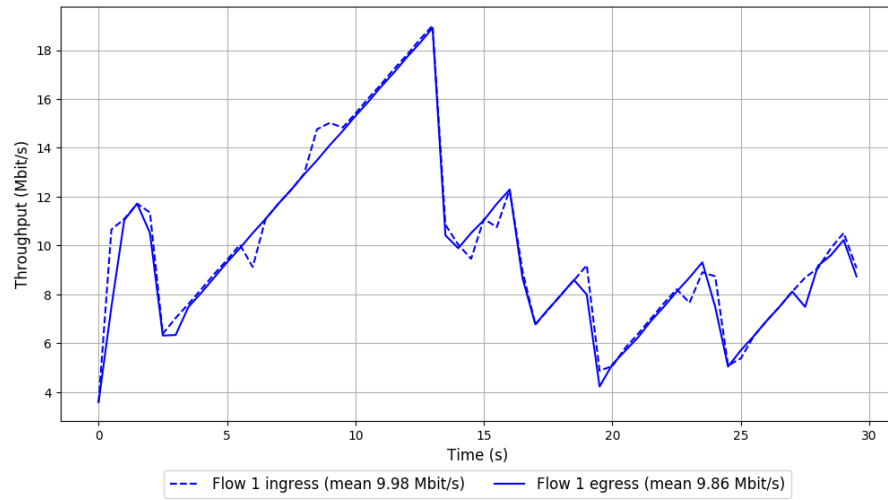
-- Flow 1:

Average throughput: 9.86 Mbit/s

95th percentile per-packet one-way delay: 50.726 ms

Loss rate: 1.68%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-17 01:12:19

End at: 2017-08-17 01:12:49

Below is generated by plot.py at 2017-08-17 04:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.05 Mbit/s

95th percentile per-packet one-way delay: 51.045 ms

Loss rate: 2.29%

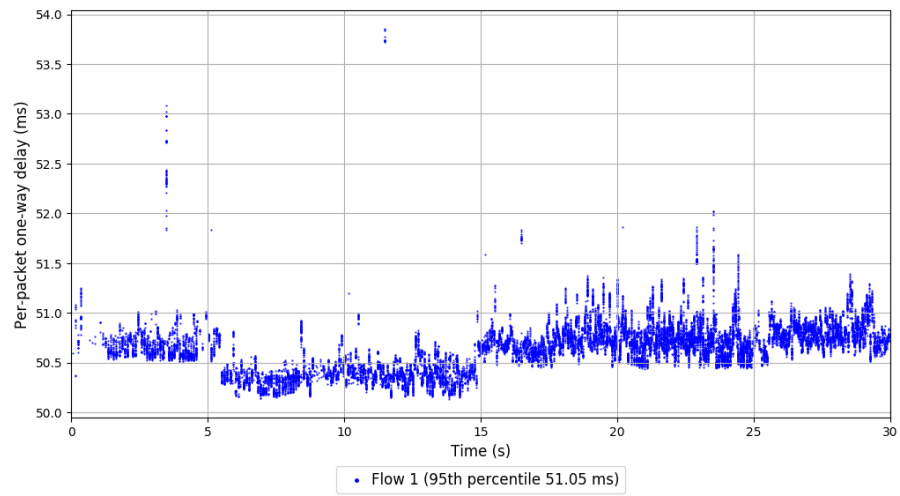
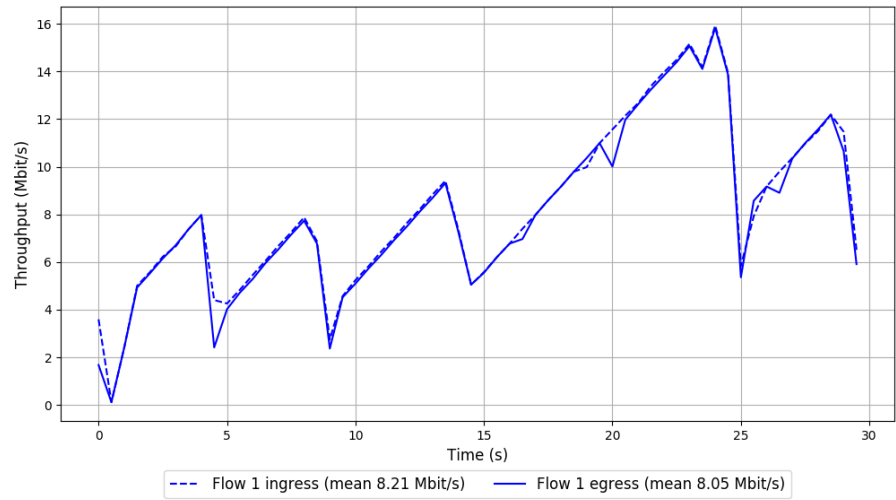
-- Flow 1:

Average throughput: 8.05 Mbit/s

95th percentile per-packet one-way delay: 51.045 ms

Loss rate: 2.29%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-08-16 23:43:36

End at: 2017-08-16 23:44:06

Below is generated by plot.py at 2017-08-17 04:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.82 Mbit/s

95th percentile per-packet one-way delay: 94.941 ms

Loss rate: 29.69%

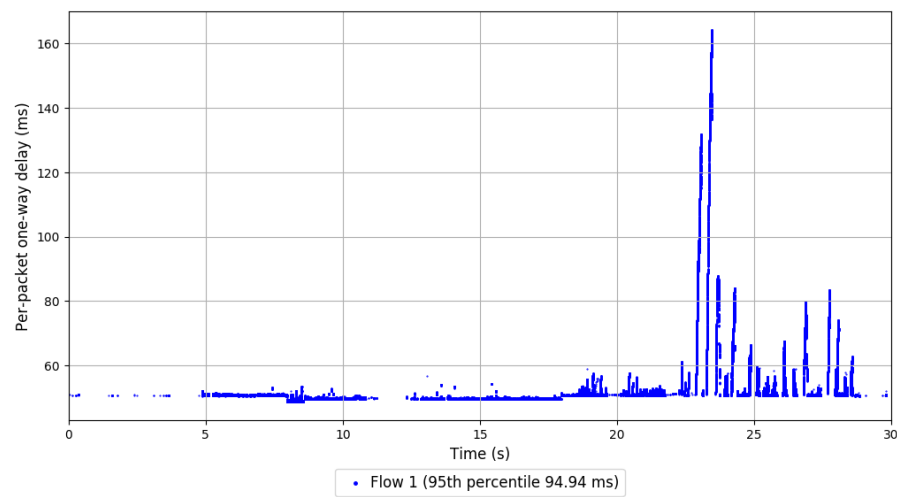
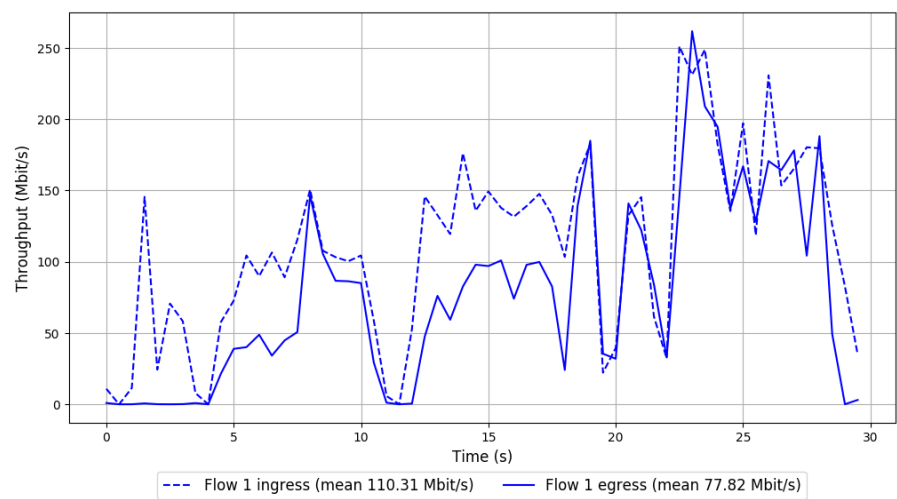
-- Flow 1:

Average throughput: 77.82 Mbit/s

95th percentile per-packet one-way delay: 94.941 ms

Loss rate: 29.69%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-16 23:53:52

End at: 2017-08-16 23:54:22

Below is generated by plot.py at 2017-08-17 04:11:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.66 Mbit/s

95th percentile per-packet one-way delay: 53.922 ms

Loss rate: 15.77%

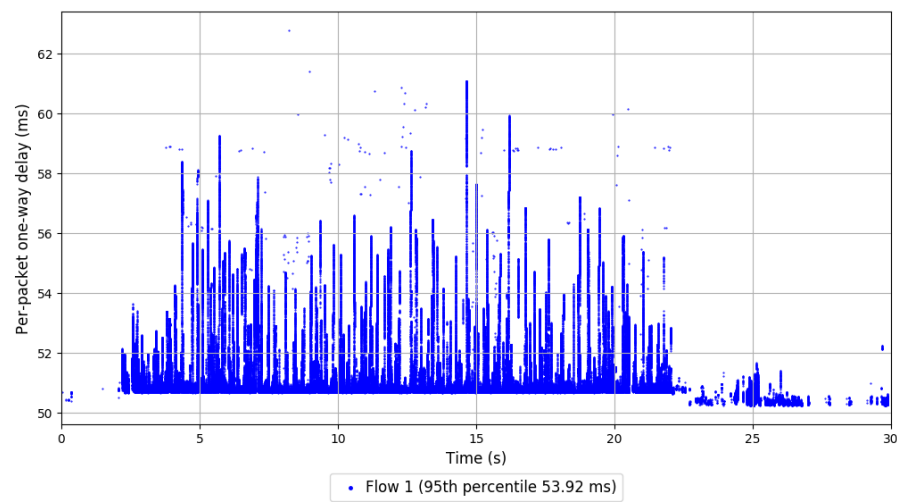
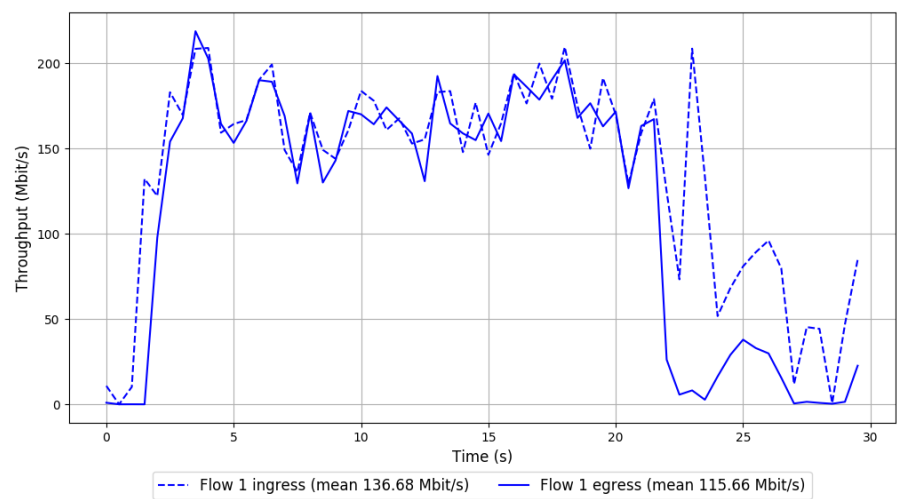
-- Flow 1:

Average throughput: 115.66 Mbit/s

95th percentile per-packet one-way delay: 53.922 ms

Loss rate: 15.77%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-17 00:04:09

End at: 2017-08-17 00:04:39

Below is generated by plot.py at 2017-08-17 04:11:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.41 Mbit/s

95th percentile per-packet one-way delay: 78.878 ms

Loss rate: 39.58%

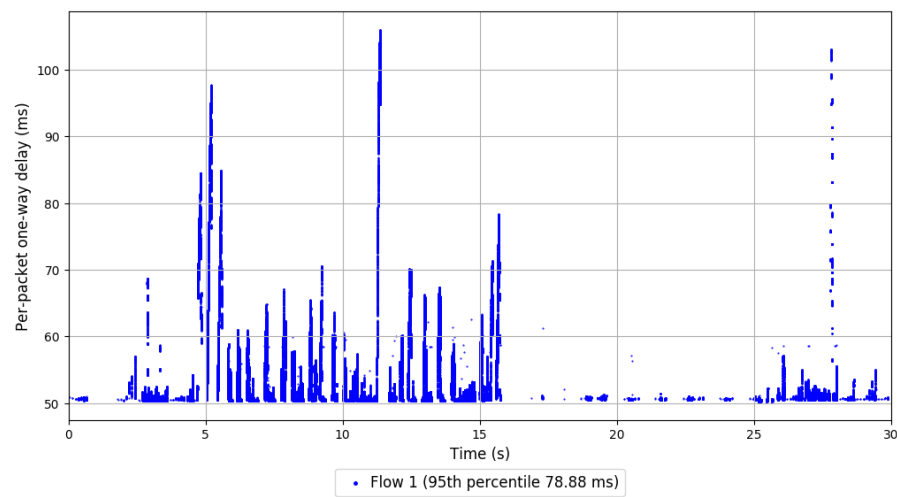
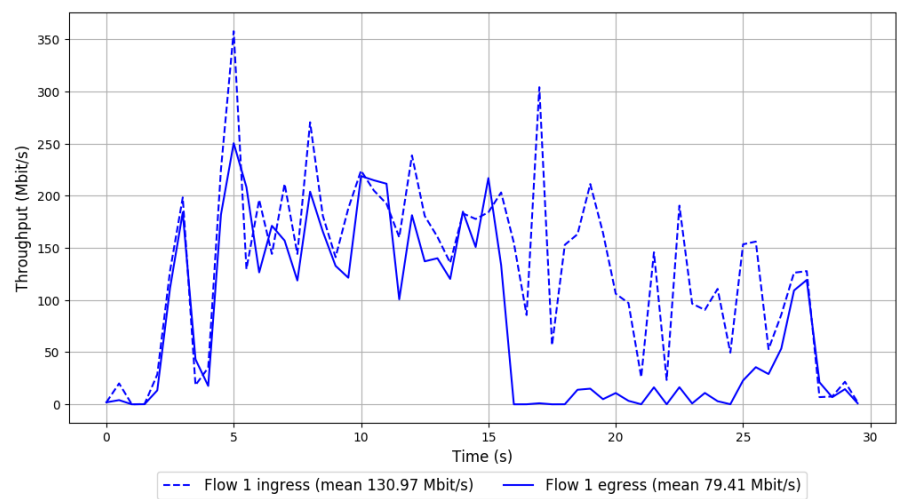
-- Flow 1:

Average throughput: 79.41 Mbit/s

95th percentile per-packet one-way delay: 78.878 ms

Loss rate: 39.58%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-17 00:14:55

End at: 2017-08-17 00:15:25

Below is generated by plot.py at 2017-08-17 04:12:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 154.92 Mbit/s

95th percentile per-packet one-way delay: 64.720 ms

Loss rate: 3.42%

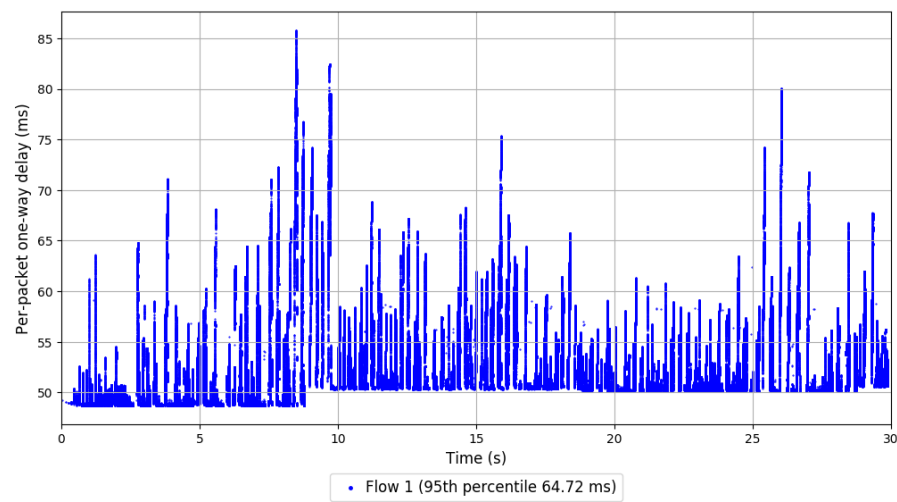
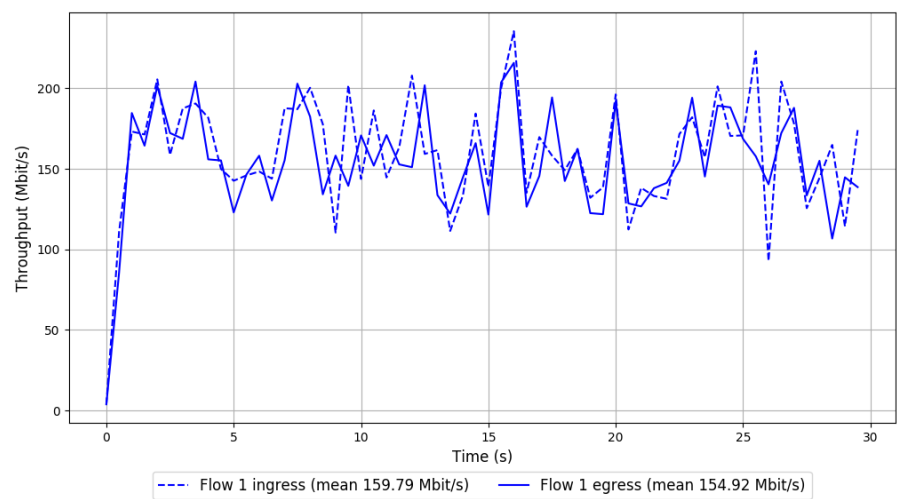
-- Flow 1:

Average throughput: 154.92 Mbit/s

95th percentile per-packet one-way delay: 64.720 ms

Loss rate: 3.42%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-17 00:25:22

End at: 2017-08-17 00:25:52

Below is generated by plot.py at 2017-08-17 04:12:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 131.46 Mbit/s

95th percentile per-packet one-way delay: 63.020 ms

Loss rate: 2.17%

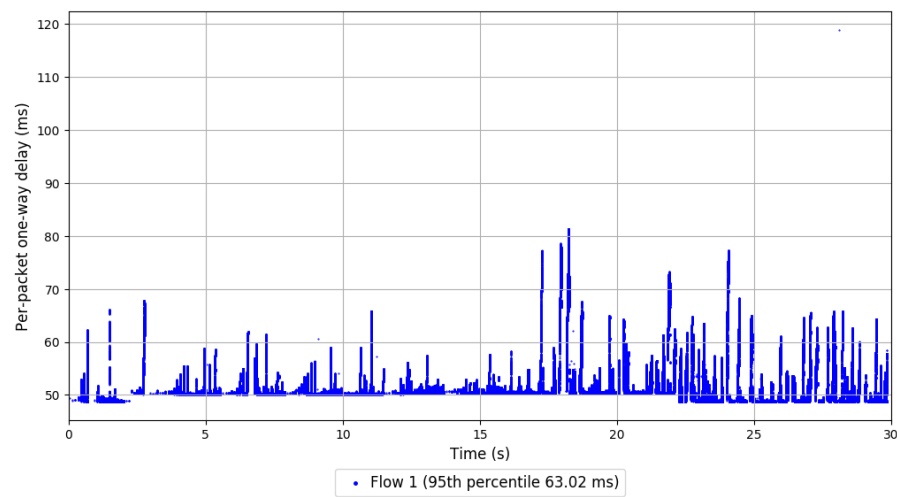
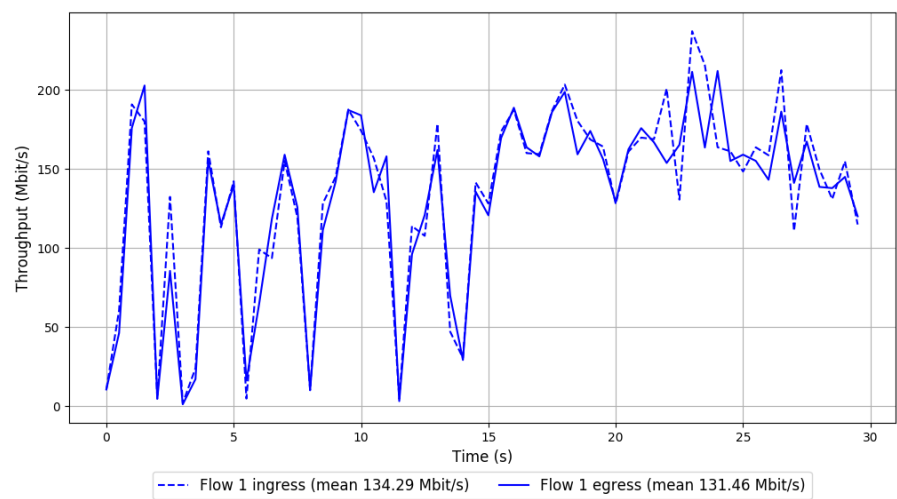
-- Flow 1:

Average throughput: 131.46 Mbit/s

95th percentile per-packet one-way delay: 63.020 ms

Loss rate: 2.17%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-17 00:35:51

End at: 2017-08-17 00:36:21

Below is generated by plot.py at 2017-08-17 04:12:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.53 Mbit/s

95th percentile per-packet one-way delay: 53.818 ms

Loss rate: 86.30%

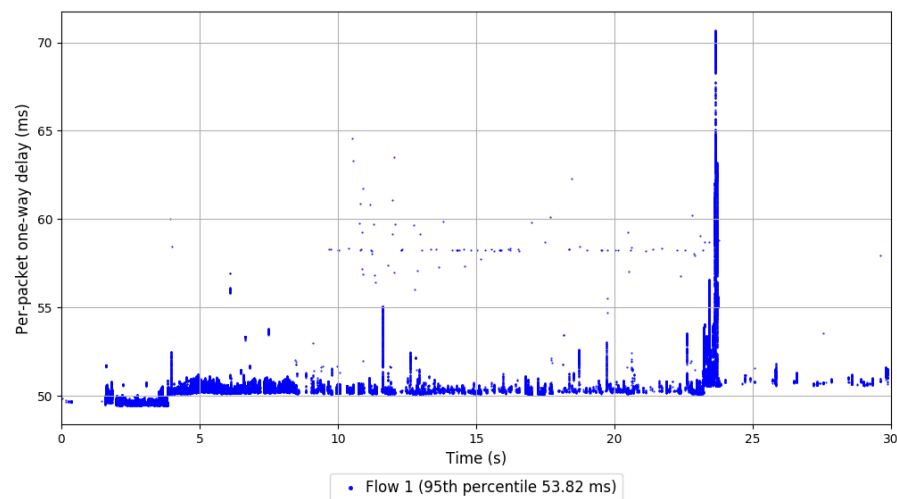
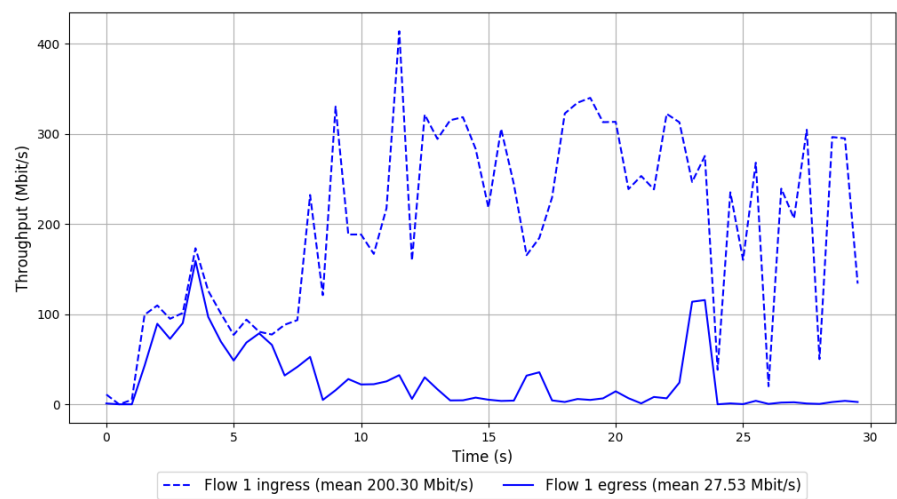
-- Flow 1:

Average throughput: 27.53 Mbit/s

95th percentile per-packet one-way delay: 53.818 ms

Loss rate: 86.30%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-17 00:46:35

End at: 2017-08-17 00:47:05

Below is generated by plot.py at 2017-08-17 04:12:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 129.55 Mbit/s

95th percentile per-packet one-way delay: 63.596 ms

Loss rate: 1.10%

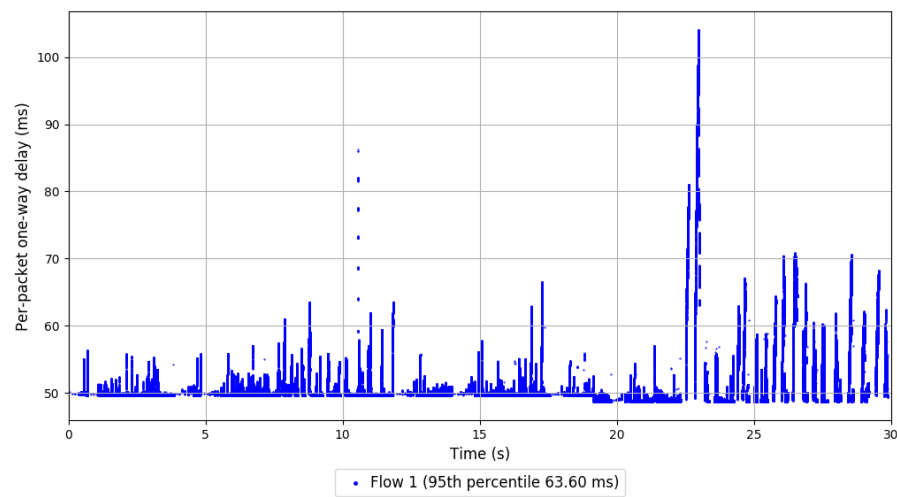
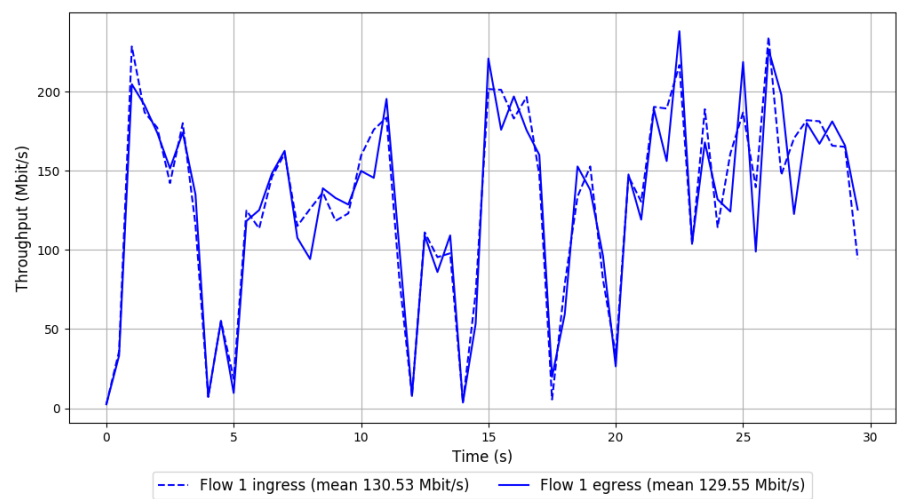
-- Flow 1:

Average throughput: 129.55 Mbit/s

95th percentile per-packet one-way delay: 63.596 ms

Loss rate: 1.10%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-17 00:56:52

End at: 2017-08-17 00:57:22

Below is generated by plot.py at 2017-08-17 04:12:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 136.86 Mbit/s

95th percentile per-packet one-way delay: 61.395 ms

Loss rate: 0.78%

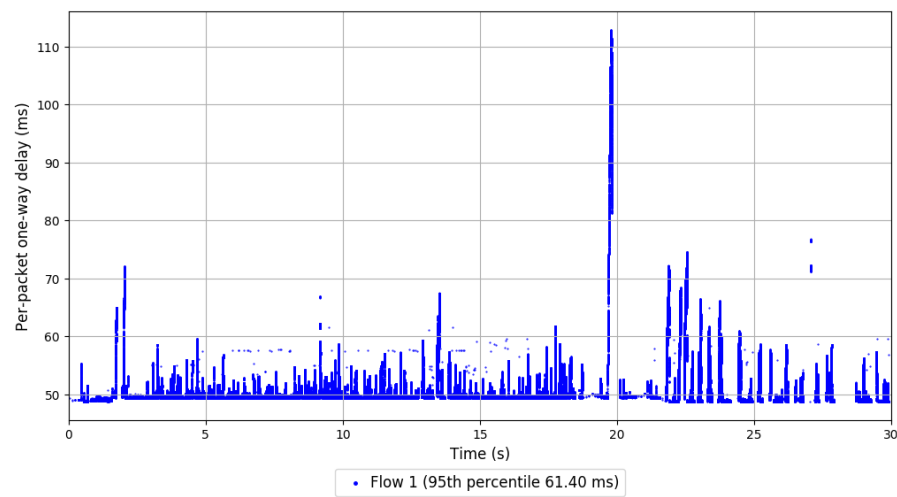
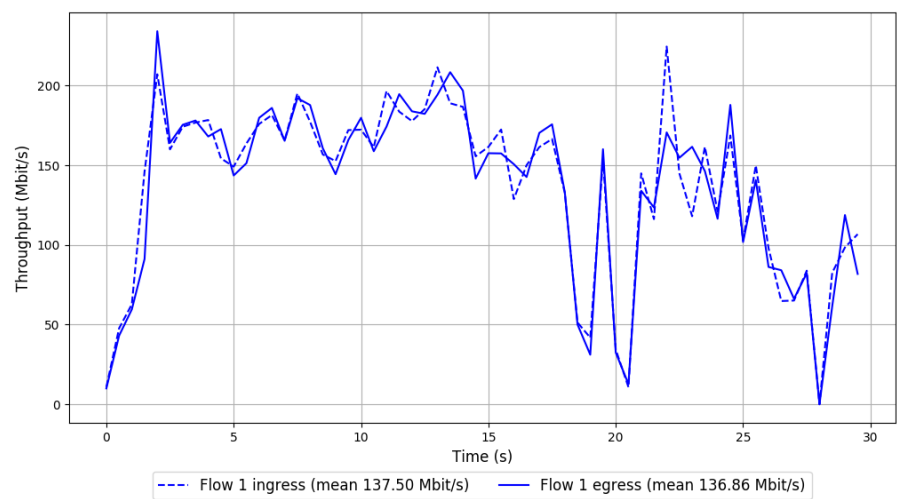
-- Flow 1:

Average throughput: 136.86 Mbit/s

95th percentile per-packet one-way delay: 61.395 ms

Loss rate: 0.78%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-08-17 01:07:35

End at: 2017-08-17 01:08:05

Below is generated by plot.py at 2017-08-17 04:12:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 114.98 Mbit/s

95th percentile per-packet one-way delay: 62.658 ms

Loss rate: 2.39%

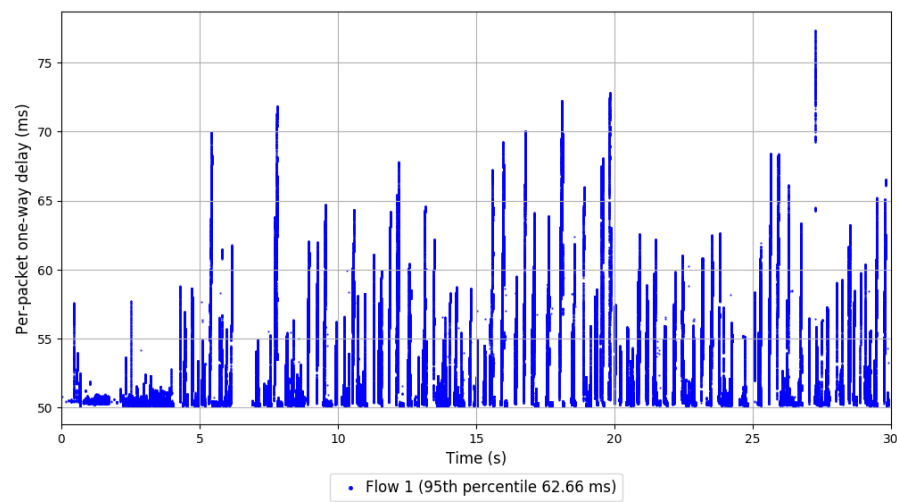
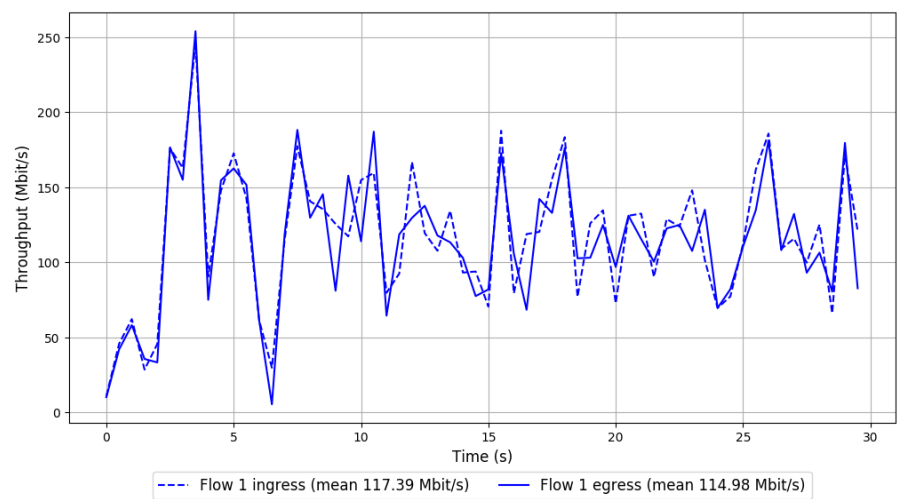
-- Flow 1:

Average throughput: 114.98 Mbit/s

95th percentile per-packet one-way delay: 62.658 ms

Loss rate: 2.39%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-08-17 01:18:17

End at: 2017-08-17 01:18:47

Below is generated by plot.py at 2017-08-17 04:12:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.11 Mbit/s

95th percentile per-packet one-way delay: 58.344 ms

Loss rate: 1.65%

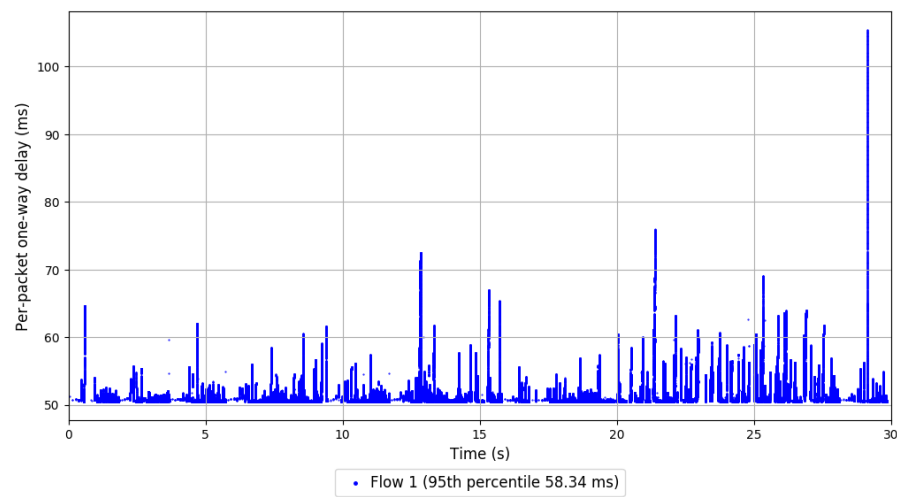
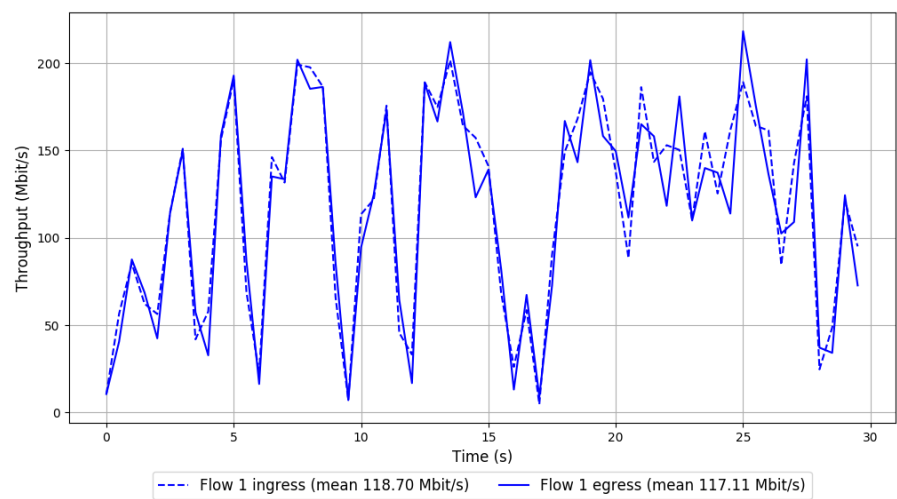
-- Flow 1:

Average throughput: 117.11 Mbit/s

95th percentile per-packet one-way delay: 58.344 ms

Loss rate: 1.65%

Run 10: Report of Verus — Data Link

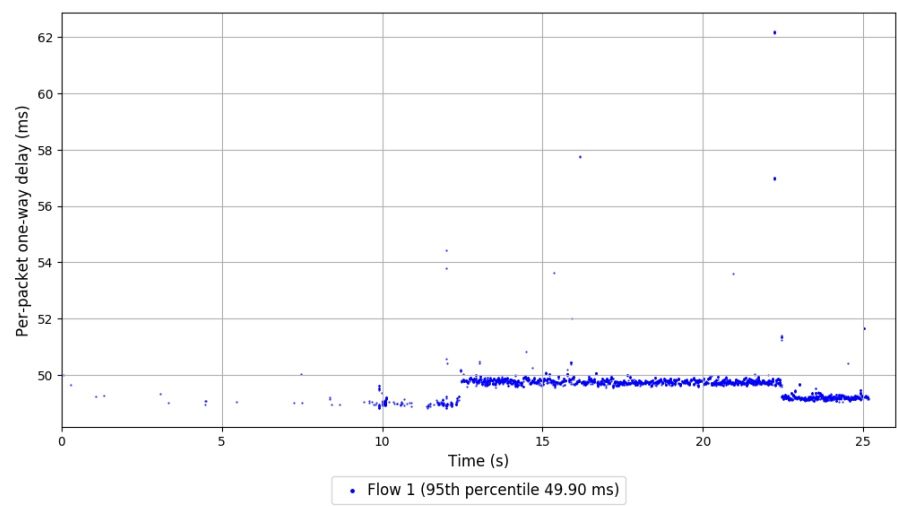
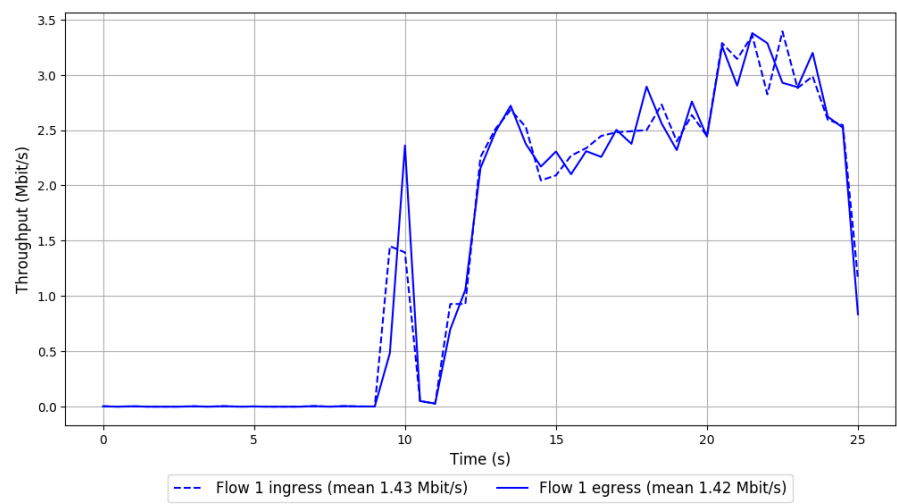


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-16 23:45:07
End at: 2017-08-16 23:45:37

# Below is generated by plot.py at 2017-08-17 04:13:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 49.896 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 49.896 ms
Loss rate: 0.78%
```


Run 1: Report of WebRTC media — Data Link

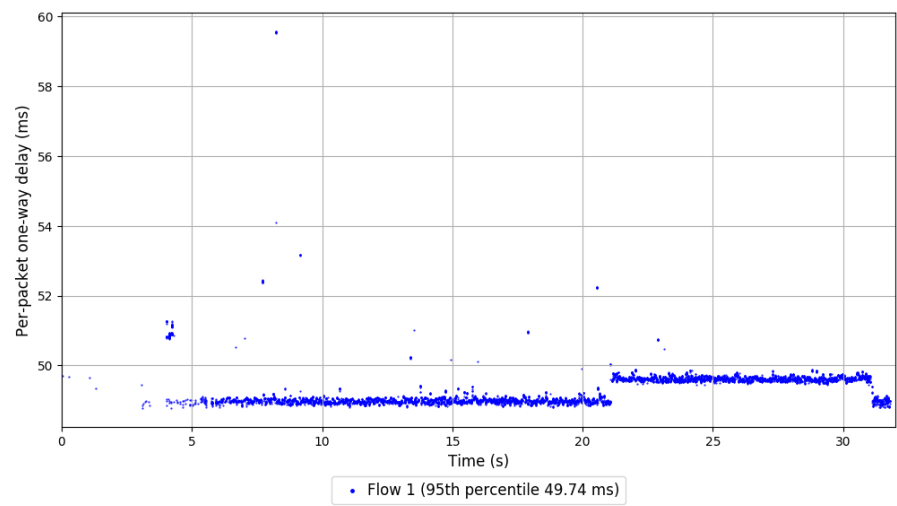
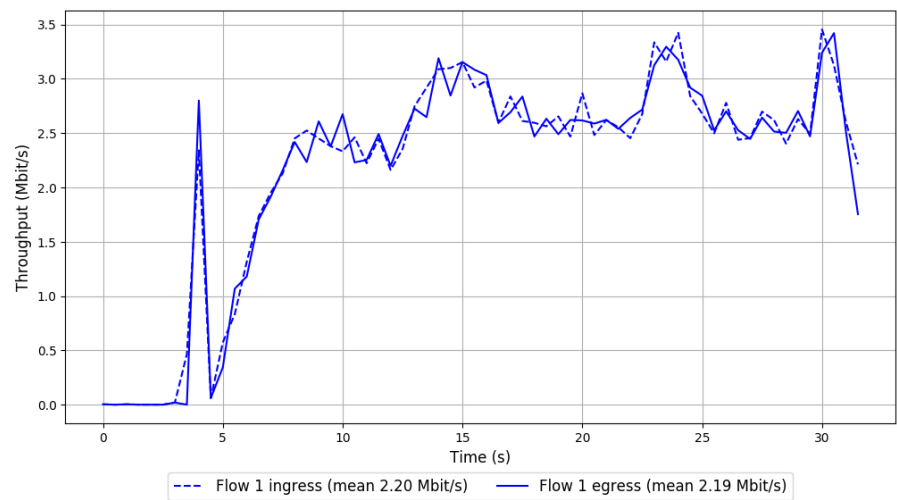


```
Run 2: Statistics of WebRTC media

Start at: 2017-08-16 23:55:25
End at: 2017-08-16 23:55:55

# Below is generated by plot.py at 2017-08-17 04:13:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 49.742 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 49.742 ms
Loss rate: 0.49%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-17 00:05:37

End at: 2017-08-17 00:06:07

Below is generated by plot.py at 2017-08-17 04:13:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.510 ms

Loss rate: 0.46%

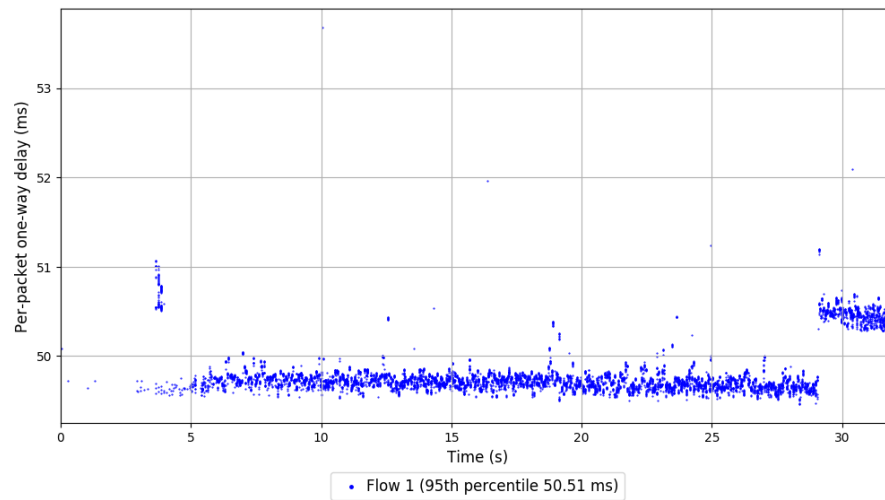
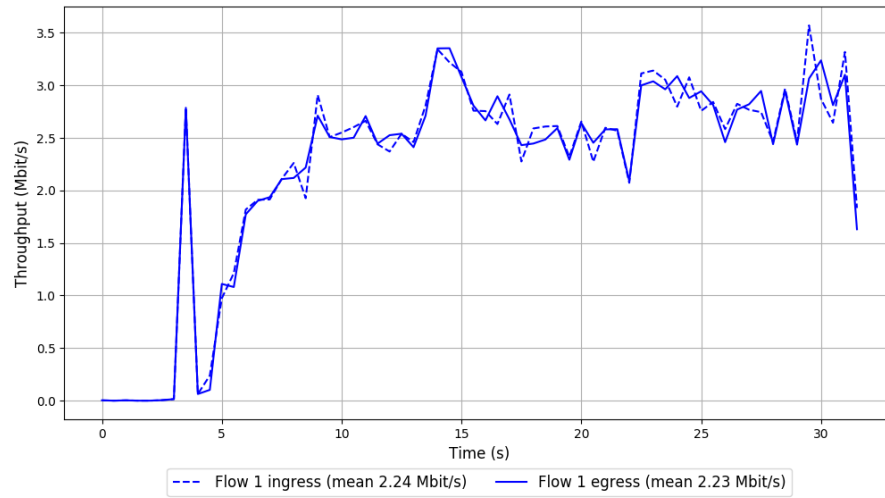
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.510 ms

Loss rate: 0.46%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-17 00:16:30

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

Below is generated by plot.py at 2017-08-17 04:13:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.539 ms

Loss rate: 0.34%

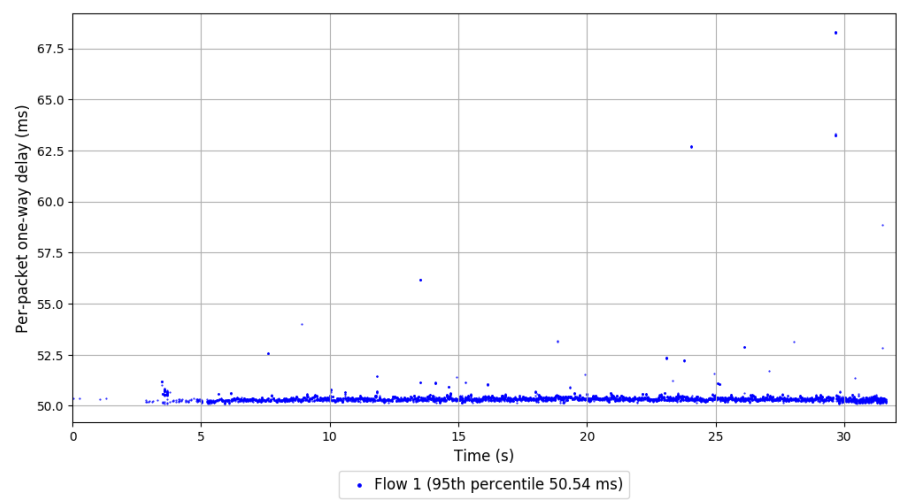
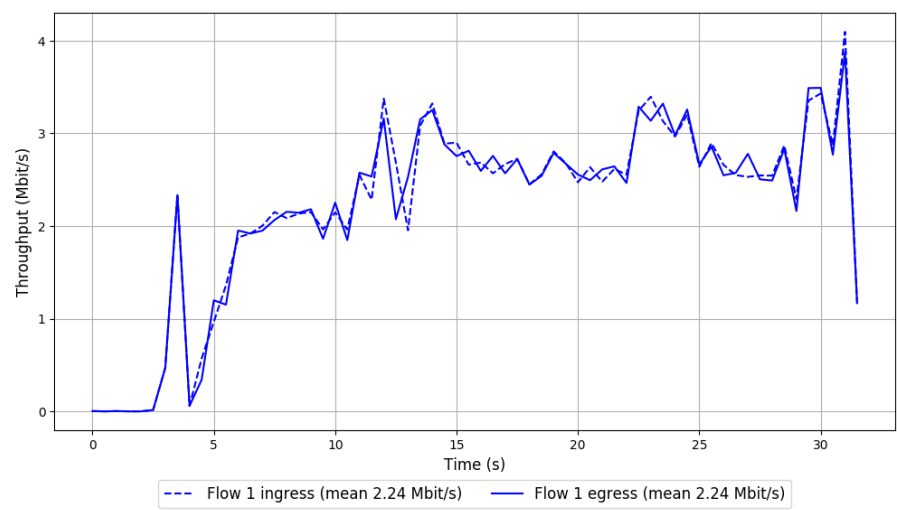
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.539 ms

Loss rate: 0.34%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-08-17 00:26:55

End at: 2017-08-17 00:27:25

Below is generated by plot.py at 2017-08-17 04:13:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 50.585 ms

Loss rate: 0.48%

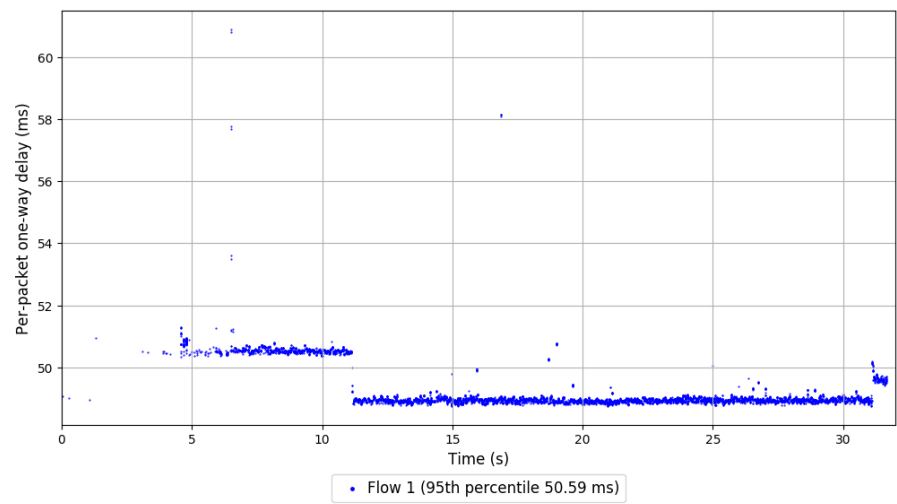
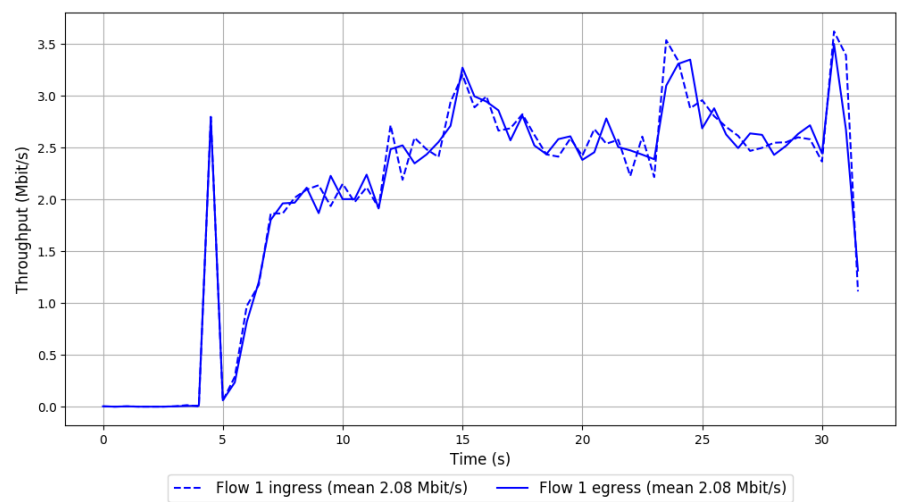
-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 50.585 ms

Loss rate: 0.48%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-17 00:37:20

End at: 2017-08-17 00:37:50

Below is generated by plot.py at 2017-08-17 04:13:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 49.712 ms

Loss rate: 0.53%

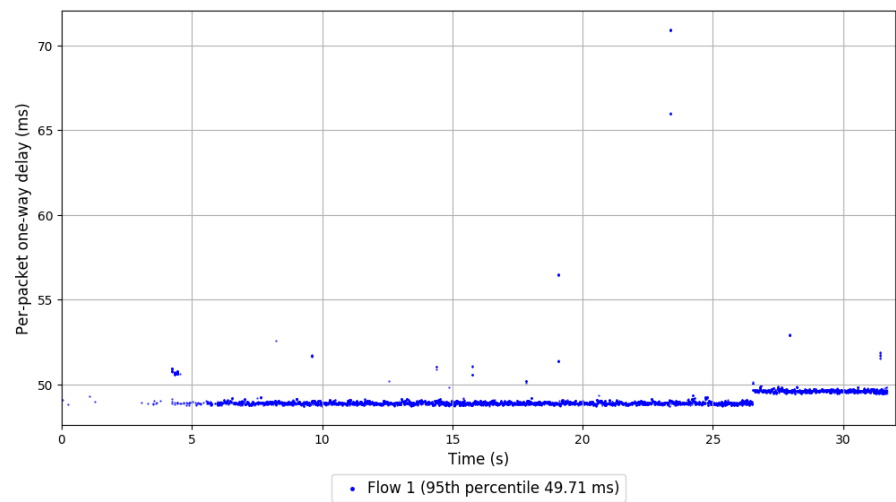
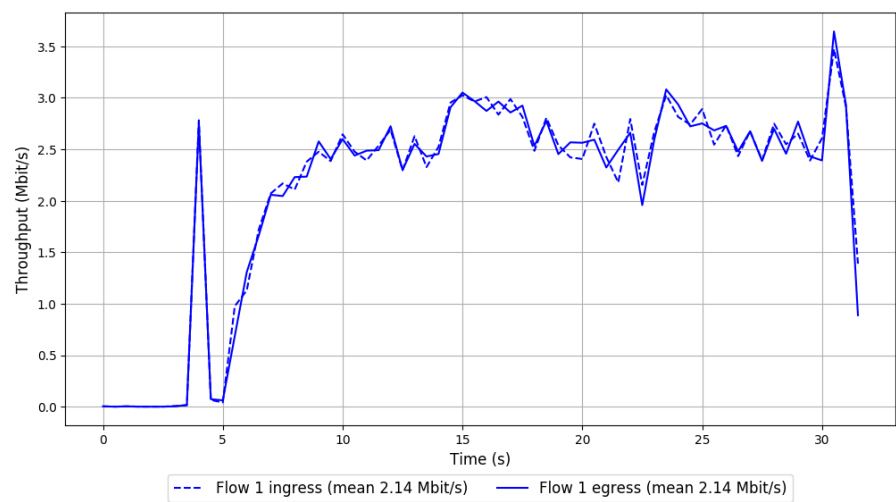
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 49.712 ms

Loss rate: 0.53%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-17 00:48:08

End at: 2017-08-17 00:48:38

Below is generated by plot.py at 2017-08-17 04:13:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 50.710 ms

Loss rate: 0.54%

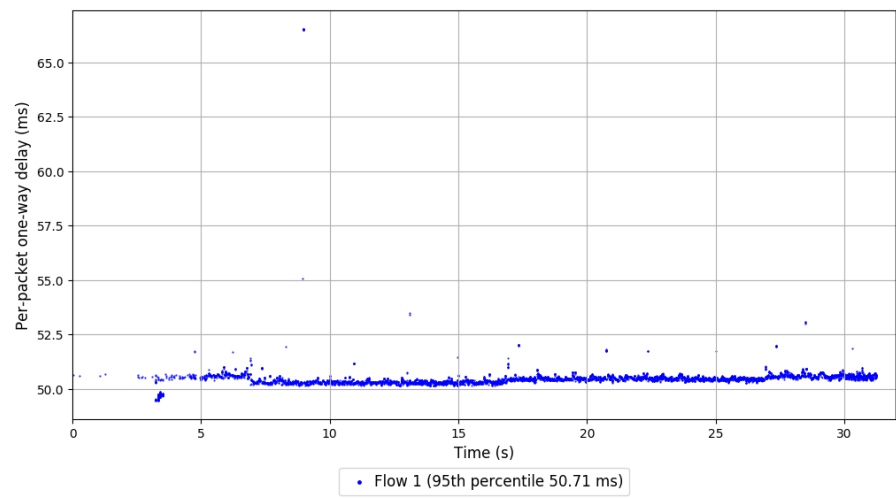
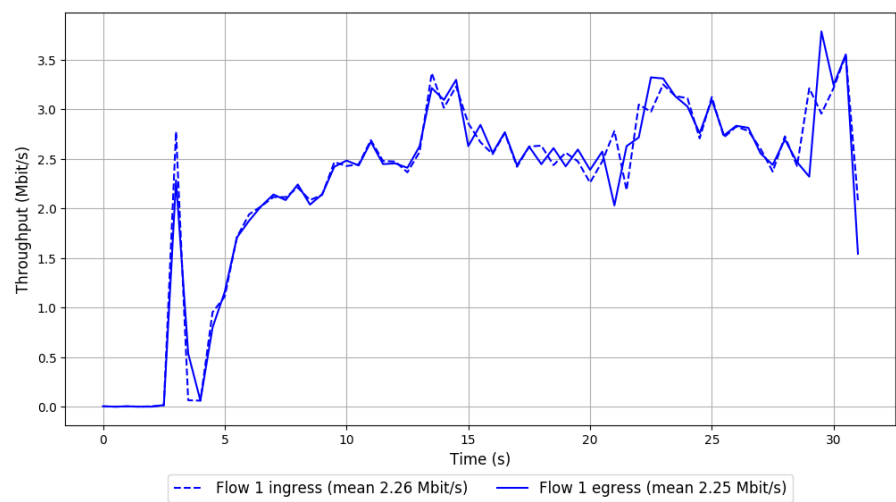
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 50.710 ms

Loss rate: 0.54%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-17 00:58:26

End at: 2017-08-17 00:58:56

Below is generated by plot.py at 2017-08-17 04:13:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 50.792 ms

Loss rate: 0.36%

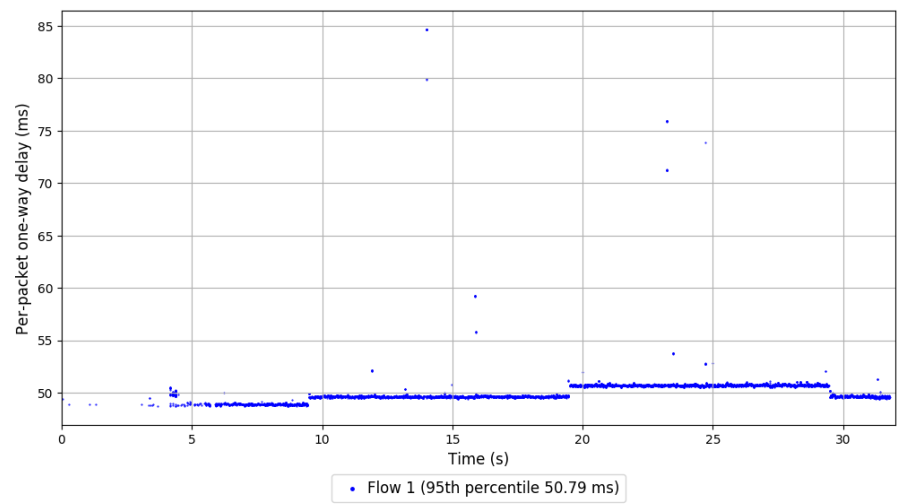
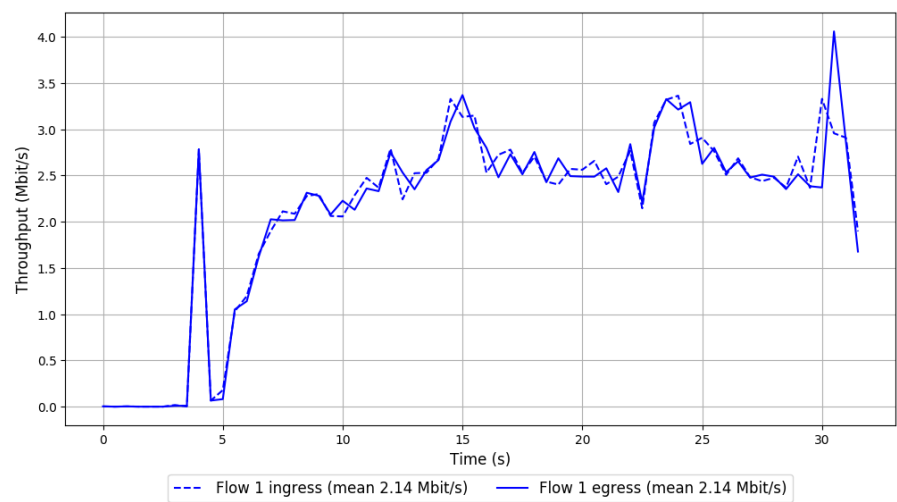
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 50.792 ms

Loss rate: 0.36%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-17 01:09:05

End at: 2017-08-17 01:09:35

Below is generated by plot.py at 2017-08-17 04:13:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 50.051 ms

Loss rate: 0.52%

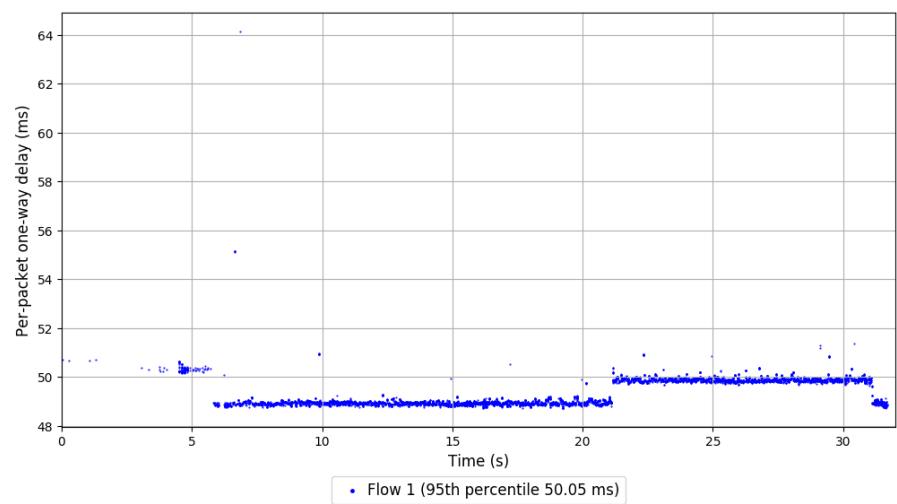
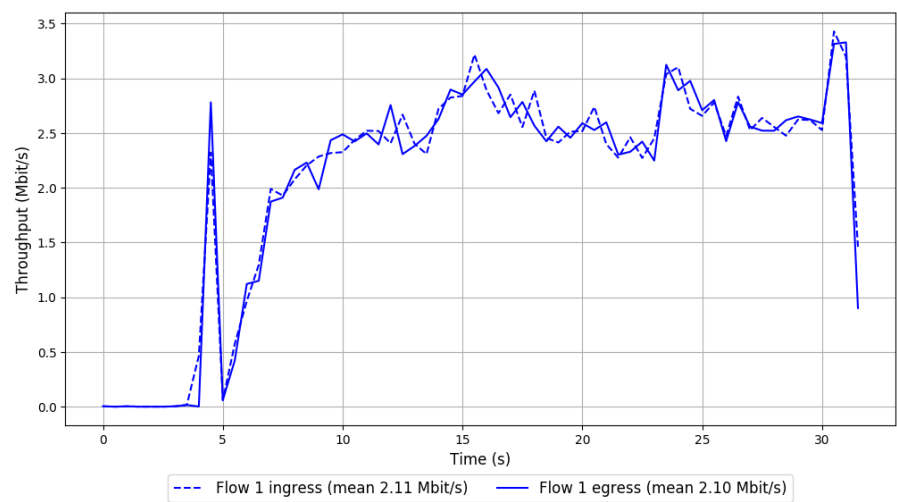
-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 50.051 ms

Loss rate: 0.52%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-17 01:19:50

End at: 2017-08-17 01:20:20

Below is generated by plot.py at 2017-08-17 04:13:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 50.820 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 50.820 ms

Loss rate: 0.48%

Run 10: Report of WebRTC media — Data Link

