

Pantheon Report

Generated at 2017-08-17 04:28:40 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

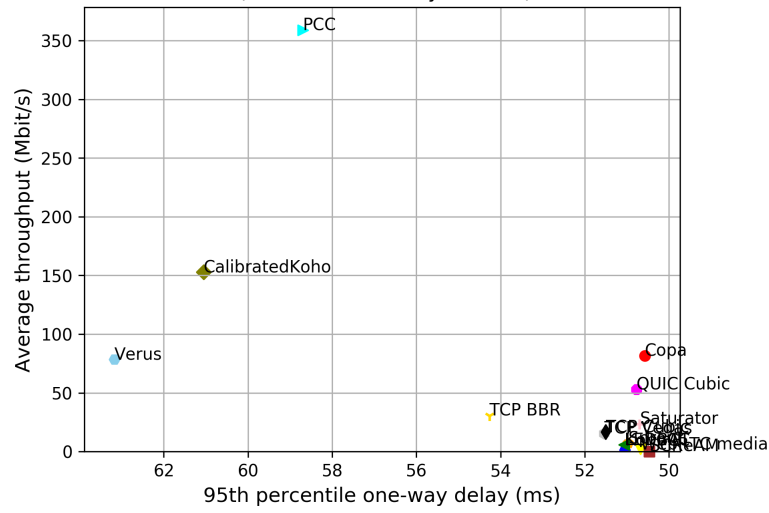
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

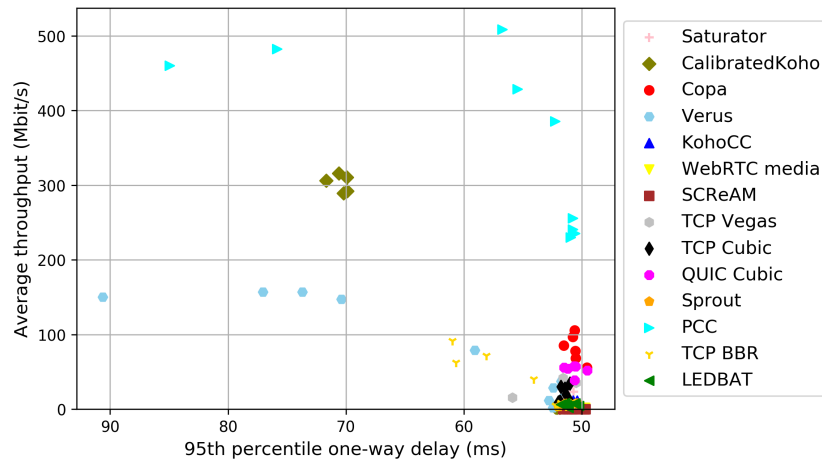
Git summary:

```
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-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from GCE Iowa Ethernet to GCE London 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	30.50	54.27	30.15
CalibratedKoho	10	152.90	61.05	36.01
Copa	6	81.70	50.57	0.36
TCP Cubic	10	16.68	51.50	1.46
KohoCC	10	5.53	51.05	50.46
LEDBAT	10	5.70	51.06	1.33
PCC	9	358.79	58.69	5.66
QUIC Cubic	7	53.08	50.78	0.00
Saturator	1	23.34	50.70	0.36
SCReAM	10	0.20	50.47	0.00
Sprout	9	7.06	50.97	3.89
TaoVA-100x	0	N/A	N/A	N/A
TCP Vegas	10	15.56	51.54	1.68
Verus	10	78.40	63.18	47.52
WebRTC media	10	2.02	50.67	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-08-17 01:20:31

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

Below is generated by plot.py at 2017-08-17 04:13:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.02 Mbit/s

95th percentile per-packet one-way delay: 51.766 ms

Loss rate: 38.46%

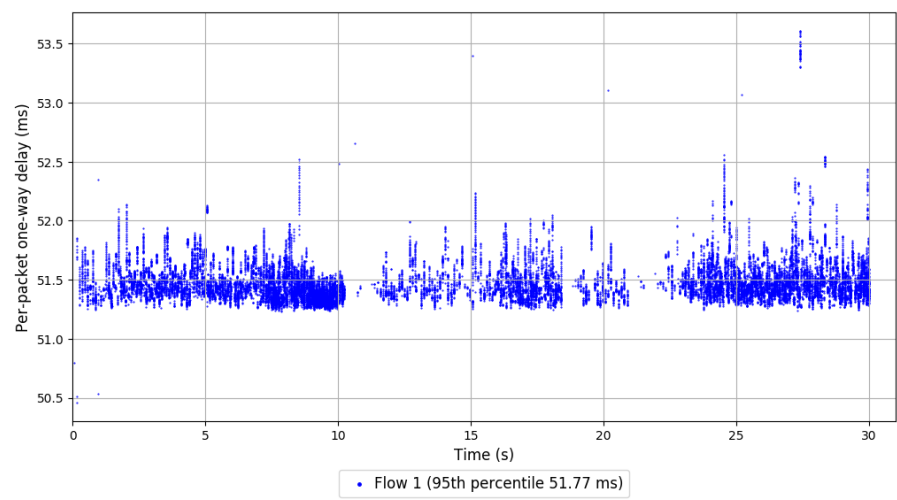
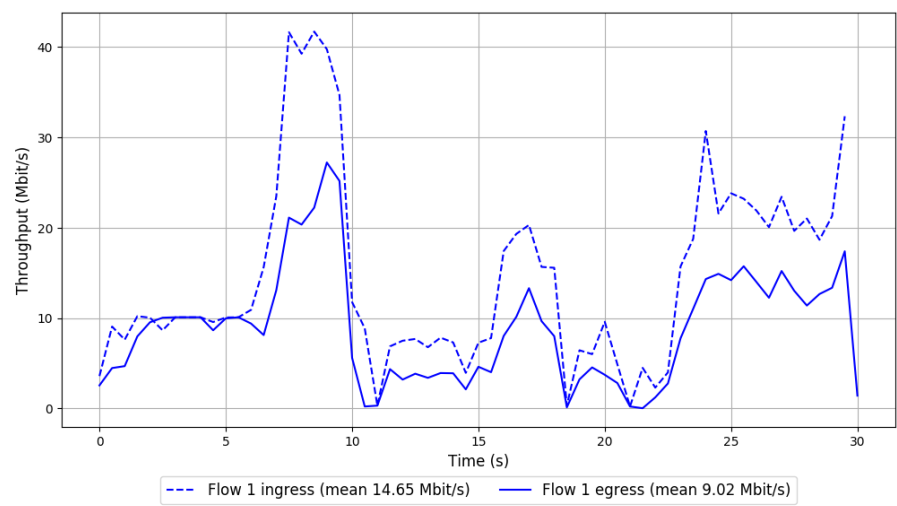
-- Flow 1:

Average throughput: 9.02 Mbit/s

95th percentile per-packet one-way delay: 51.766 ms

Loss rate: 38.46%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-17 01:30:17

End at: 2017-08-17 01:30:47

Below is generated by plot.py at 2017-08-17 04:13:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 51.343 ms

Loss rate: 36.05%

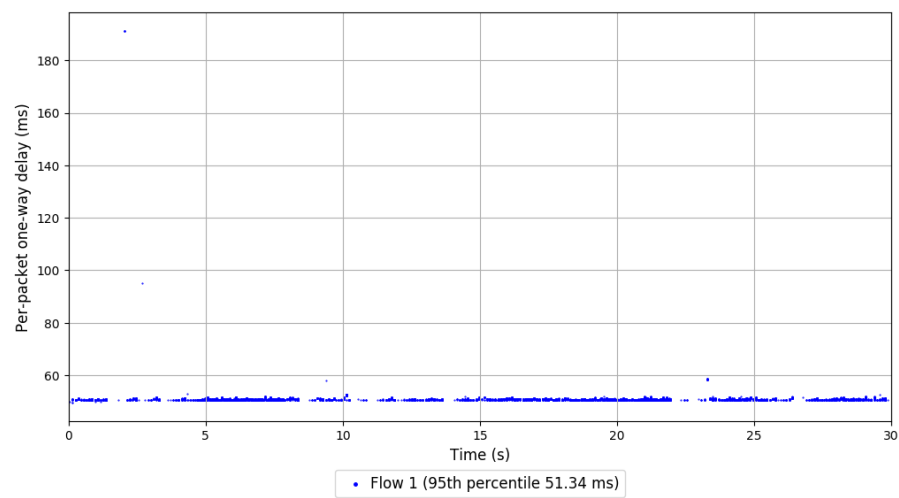
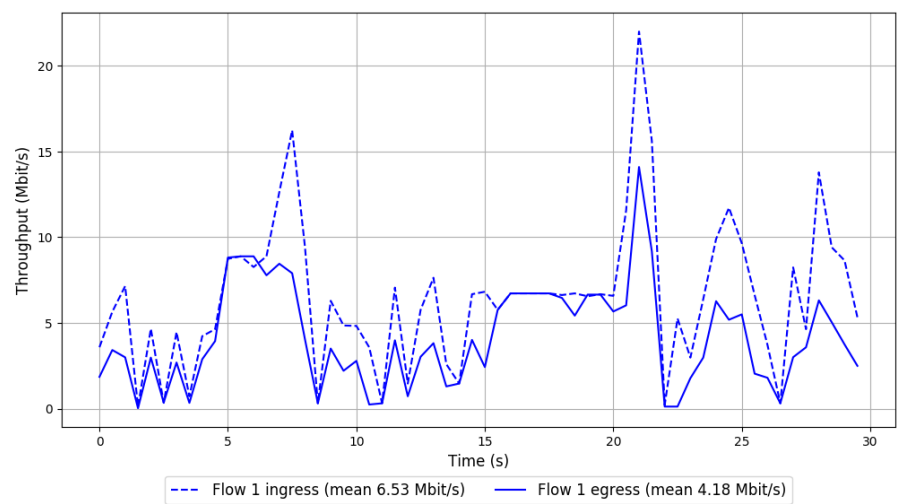
-- Flow 1:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 51.343 ms

Loss rate: 36.05%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-17 01:40:02

End at: 2017-08-17 01:40:32

Below is generated by plot.py at 2017-08-17 04:13:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 50.719 ms

Loss rate: 41.72%

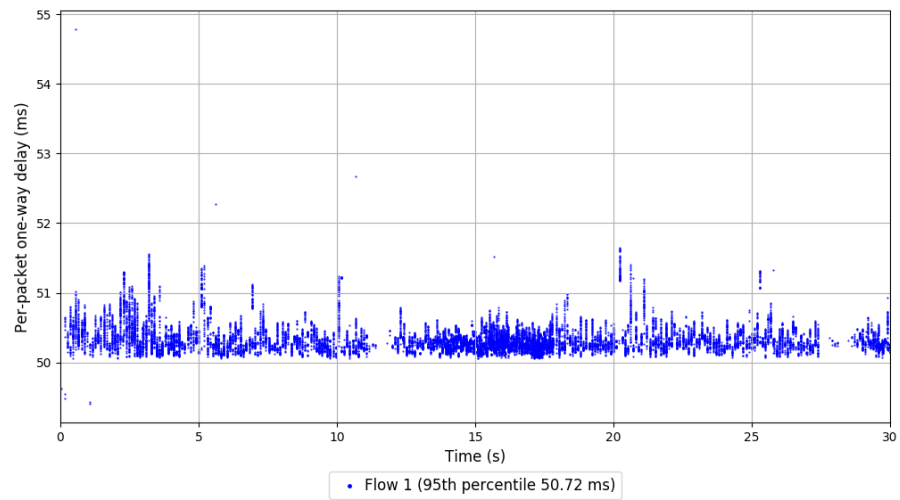
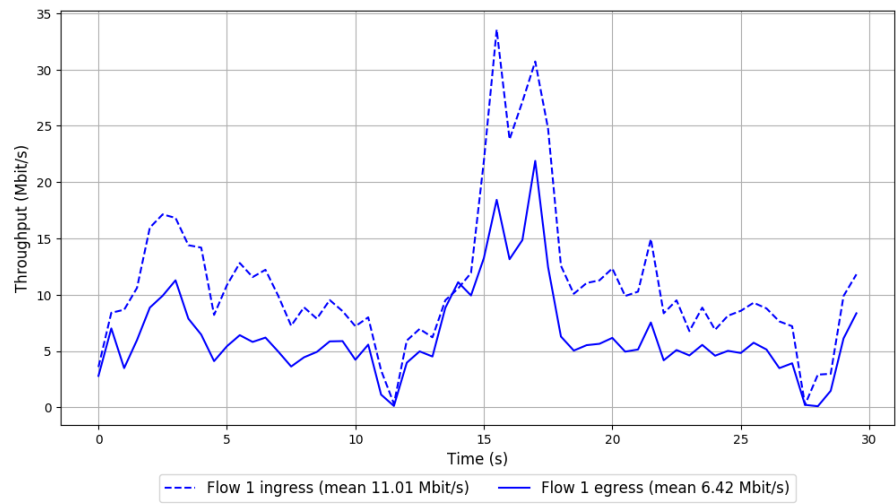
-- Flow 1:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 50.719 ms

Loss rate: 41.72%

Run 3: Report of TCP BBR — Data Link

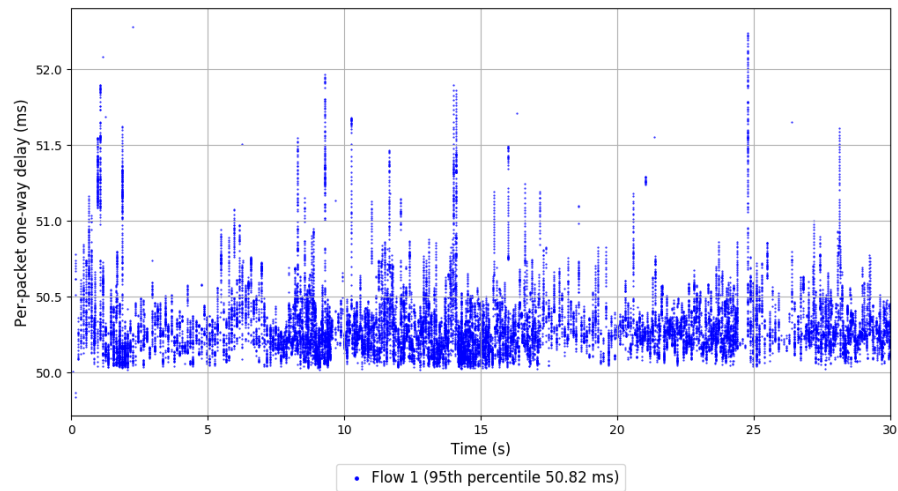
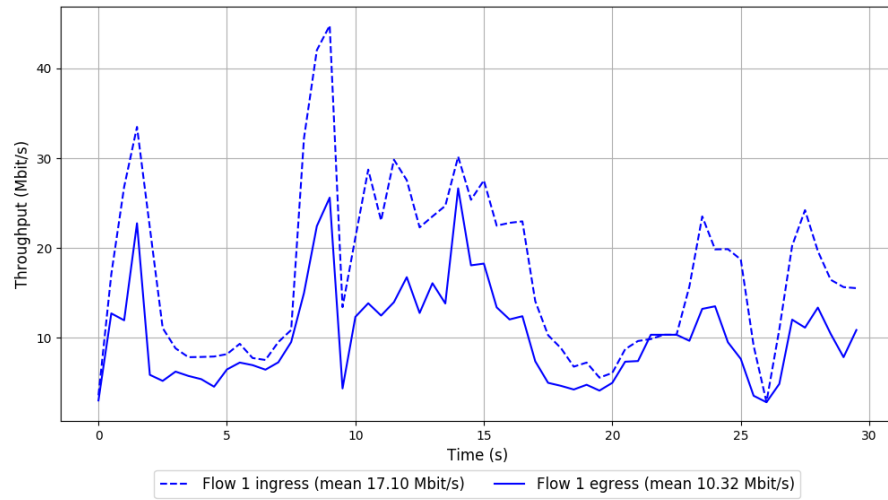


```
Run 4: Statistics of TCP BBR

Start at: 2017-08-17 01:49:55
End at: 2017-08-17 01:50:25

# Below is generated by plot.py at 2017-08-17 04:13:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.32 Mbit/s
95th percentile per-packet one-way delay: 50.824 ms
Loss rate: 39.64%
-- Flow 1:
Average throughput: 10.32 Mbit/s
95th percentile per-packet one-way delay: 50.824 ms
Loss rate: 39.64%
```

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-08-17 02:00:19

End at: 2017-08-17 02:00:49

Below is generated by plot.py at 2017-08-17 04:14:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.61 Mbit/s

95th percentile per-packet one-way delay: 60.975 ms

Loss rate: 9.74%

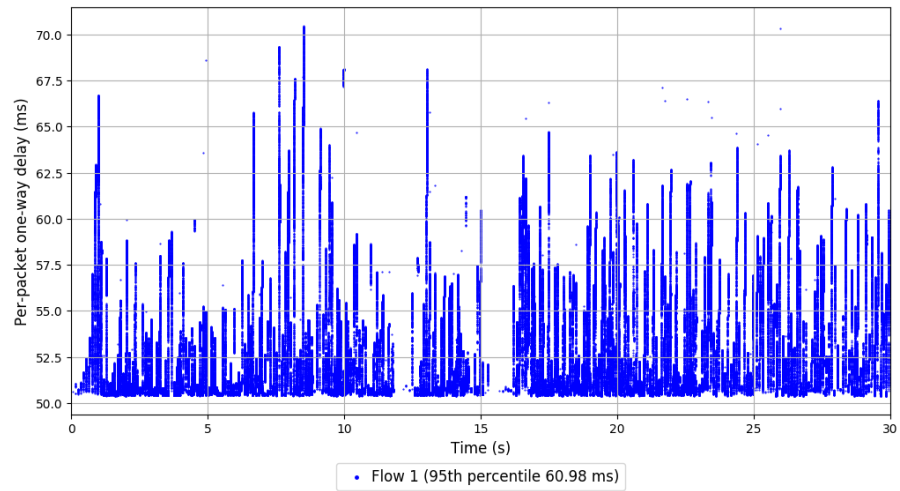
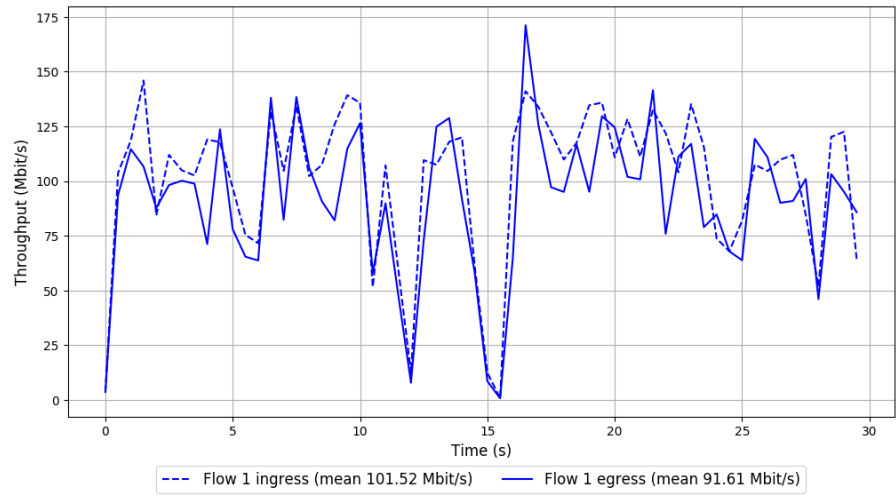
-- Flow 1:

Average throughput: 91.61 Mbit/s

95th percentile per-packet one-way delay: 60.975 ms

Loss rate: 9.74%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-17 02:10:40

End at: 2017-08-17 02:11:10

Below is generated by plot.py at 2017-08-17 04:14:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.42 Mbit/s

95th percentile per-packet one-way delay: 60.657 ms

Loss rate: 14.96%

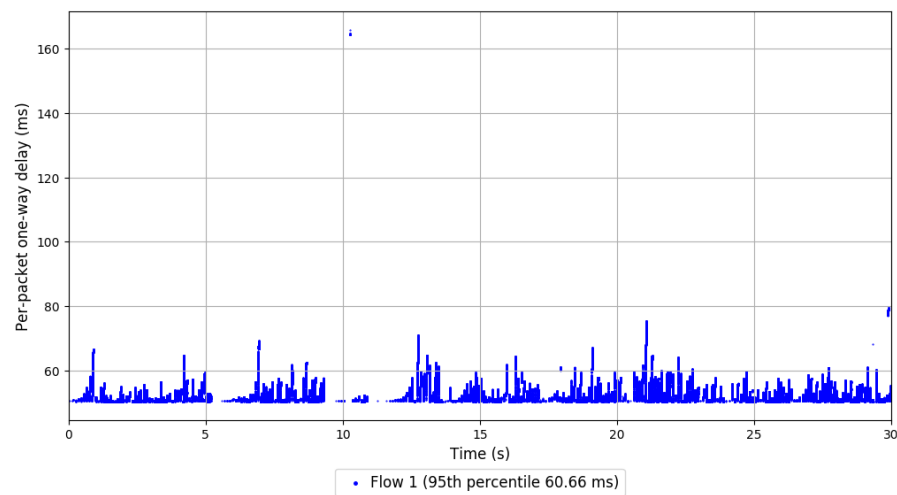
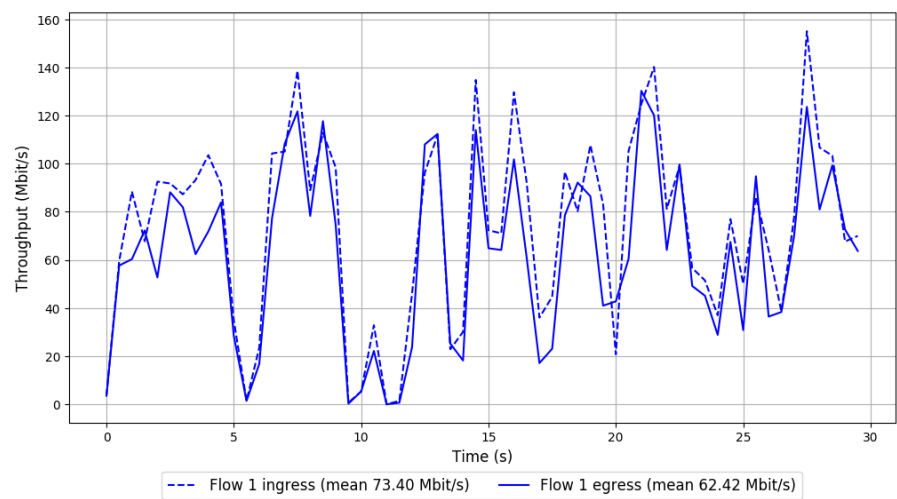
-- Flow 1:

Average throughput: 62.42 Mbit/s

95th percentile per-packet one-way delay: 60.657 ms

Loss rate: 14.96%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-17 02:20:50

End at: 2017-08-17 02:21:20

Below is generated by plot.py at 2017-08-17 04:14:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.06 Mbit/s

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

Loss rate: 41.07%

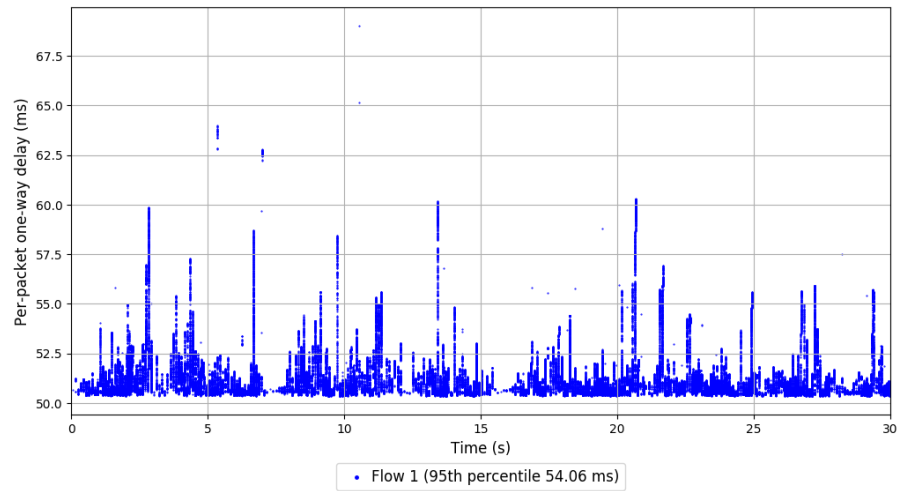
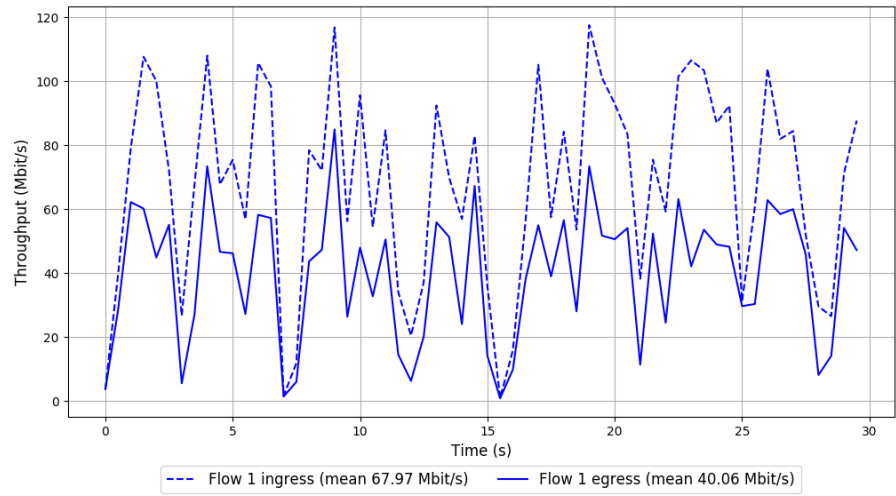
-- Flow 1:

Average throughput: 40.06 Mbit/s

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

Loss rate: 41.07%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-17 02:30:57

End at: 2017-08-17 02:31:27

Below is generated by plot.py at 2017-08-17 04:14:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 52.034 ms

Loss rate: 28.95%

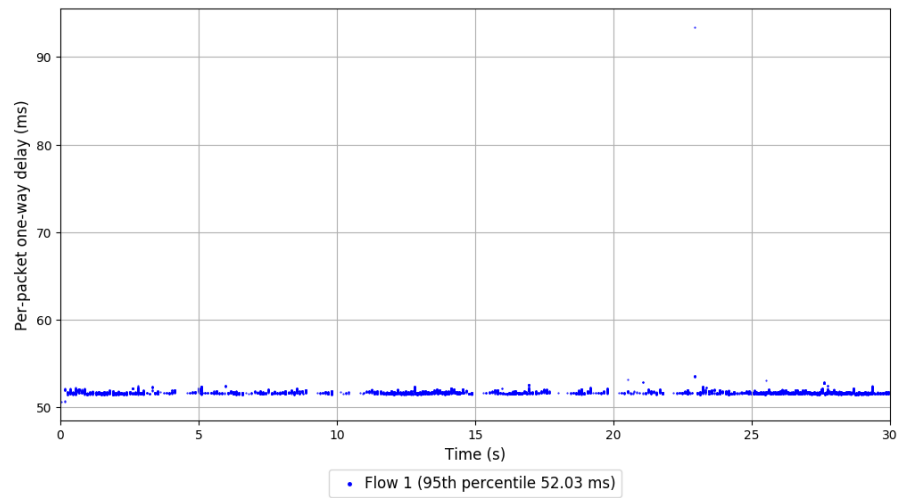
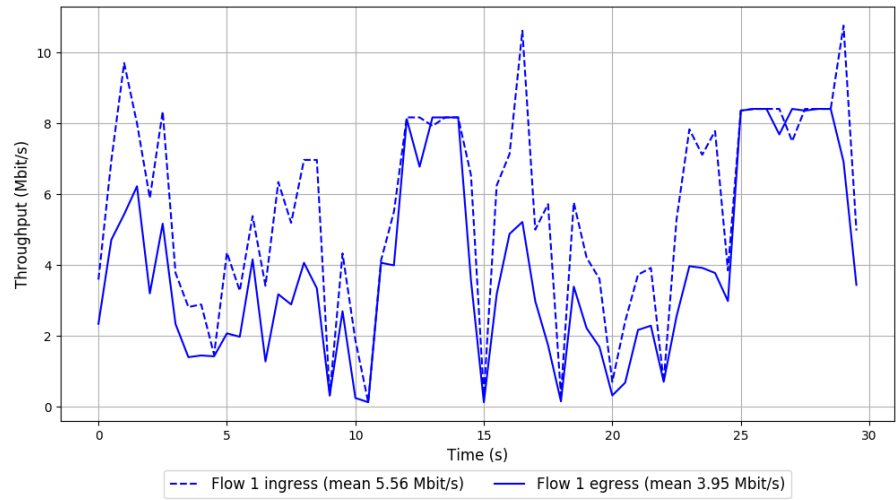
-- Flow 1:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 52.034 ms

Loss rate: 28.95%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-17 02:41:22

End at: 2017-08-17 02:41:52

Below is generated by plot.py at 2017-08-17 04:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.93 Mbit/s

95th percentile per-packet one-way delay: 58.074 ms

Loss rate: 10.10%

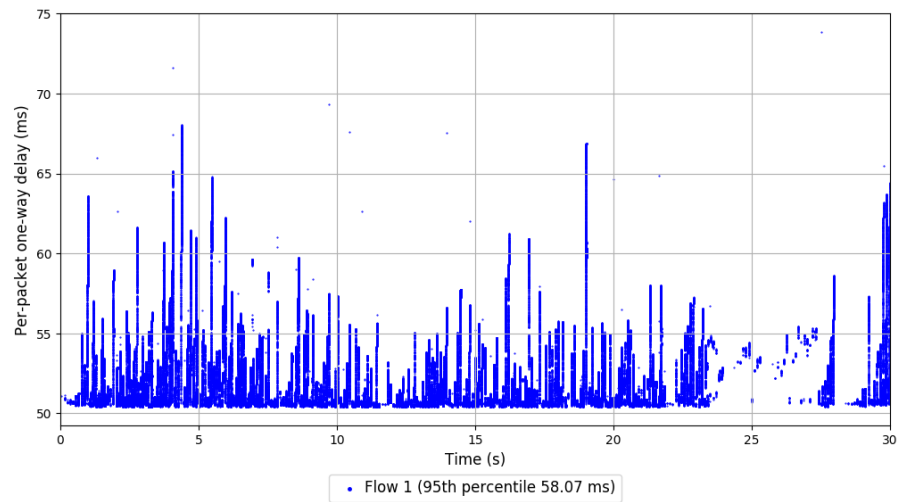
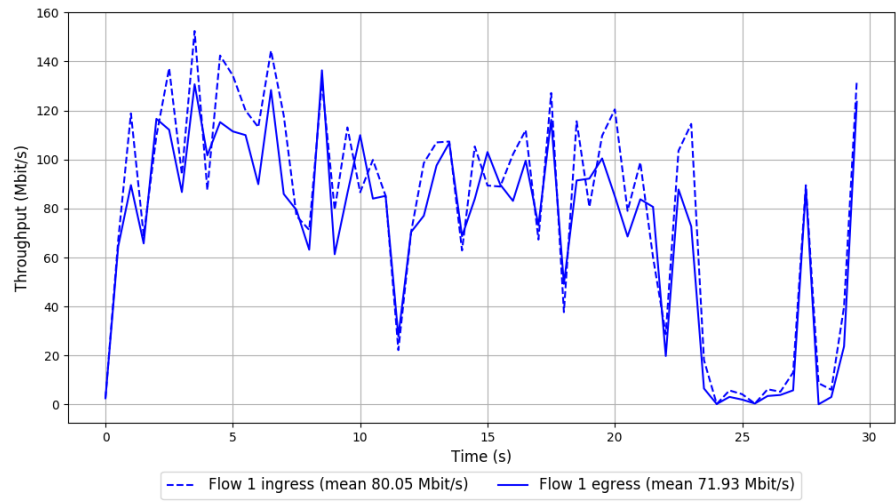
-- Flow 1:

Average throughput: 71.93 Mbit/s

95th percentile per-packet one-way delay: 58.074 ms

Loss rate: 10.10%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-17 02:51:19

End at: 2017-08-17 02:51:49

Below is generated by plot.py at 2017-08-17 04:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.11 Mbit/s

95th percentile per-packet one-way delay: 52.219 ms

Loss rate: 40.81%

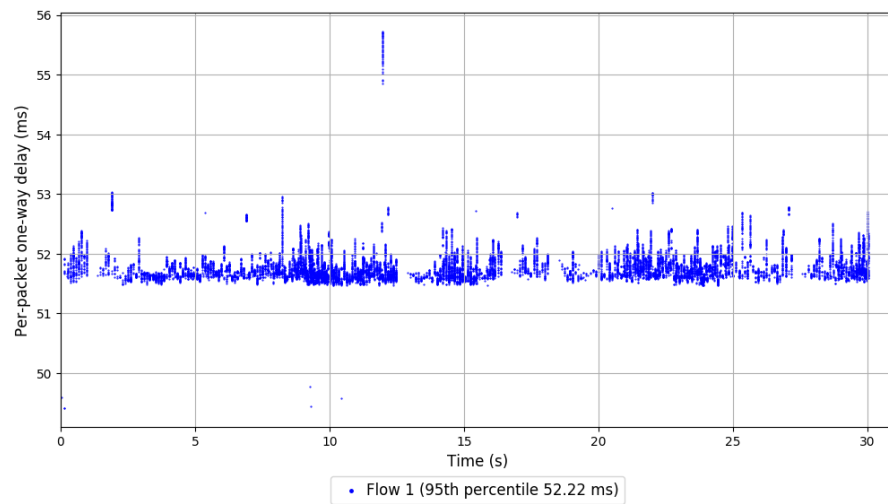
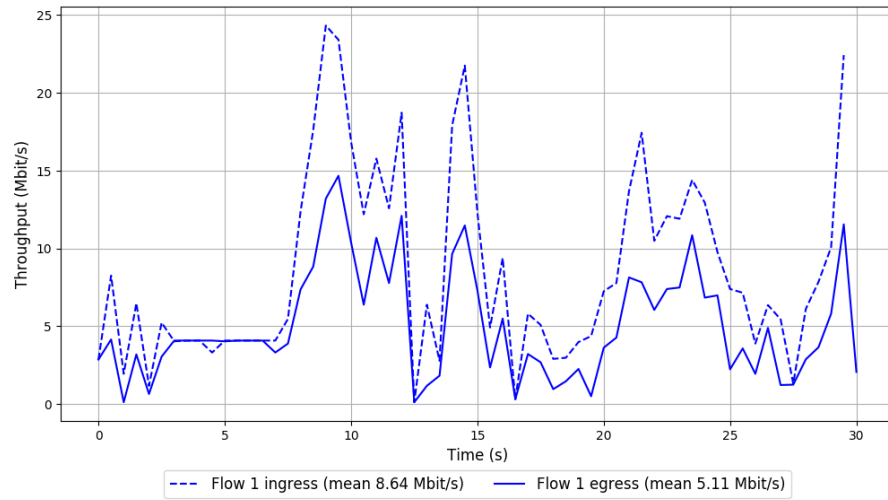
-- Flow 1:

Average throughput: 5.11 Mbit/s

95th percentile per-packet one-way delay: 52.219 ms

Loss rate: 40.81%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-17 01:29:03

End at: 2017-08-17 01:29:33

Below is generated by plot.py at 2017-08-17 04:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 51.212 ms

Loss rate: 70.10%

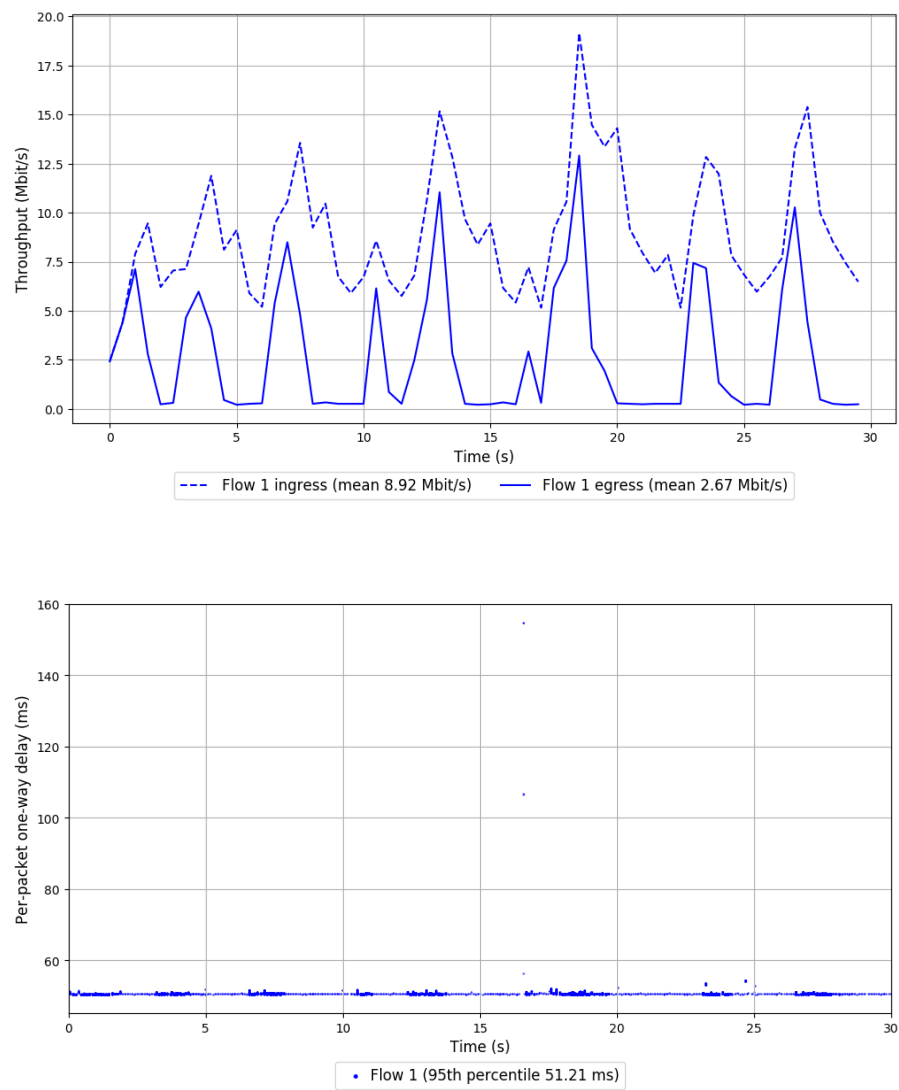
-- Flow 1:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 51.212 ms

Loss rate: 70.10%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-17 01:38:47

End at: 2017-08-17 01:39:17

Below is generated by plot.py at 2017-08-17 04:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 52.117 ms

Loss rate: 69.99%

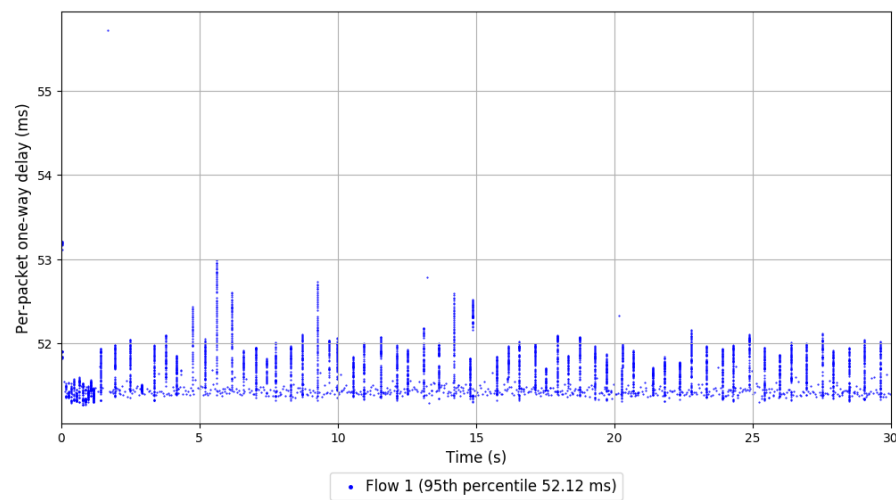
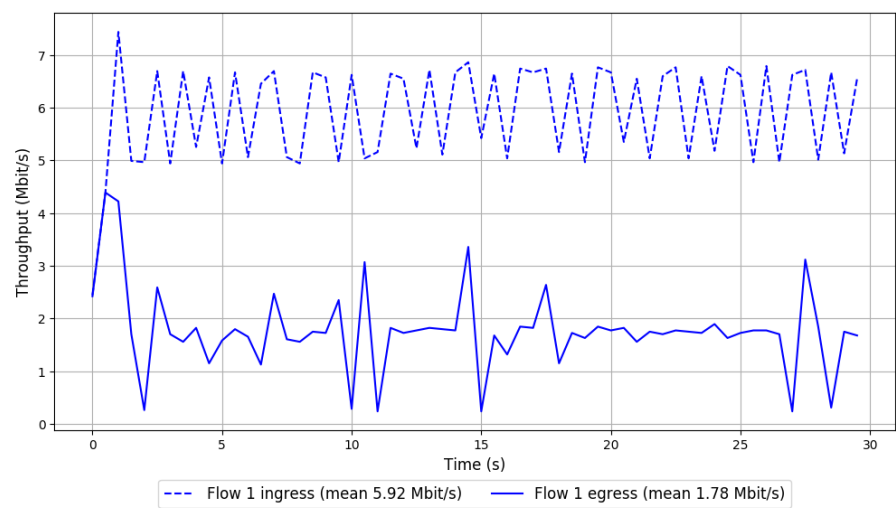
-- Flow 1:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 52.117 ms

Loss rate: 69.99%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-17 01:48:39

End at: 2017-08-17 01:49:09

Below is generated by plot.py at 2017-08-17 04:14:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.65 Mbit/s

95th percentile per-packet one-way delay: 50.774 ms

Loss rate: 70.87%

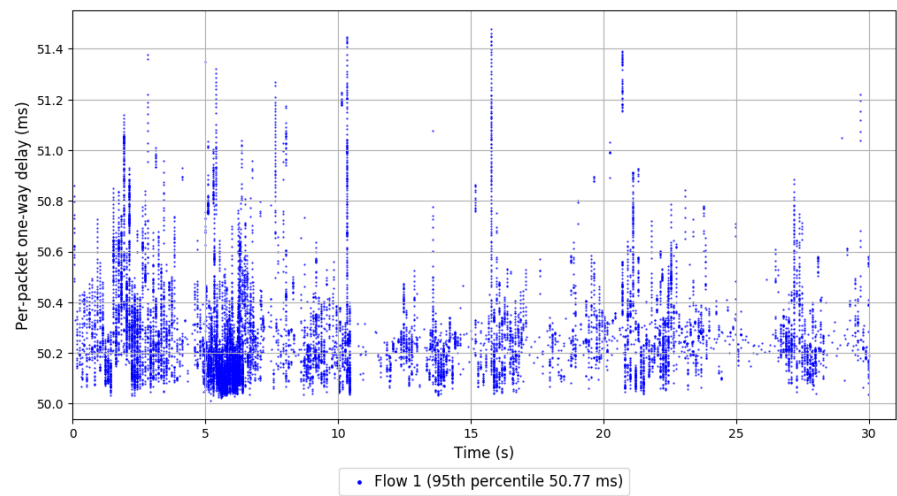
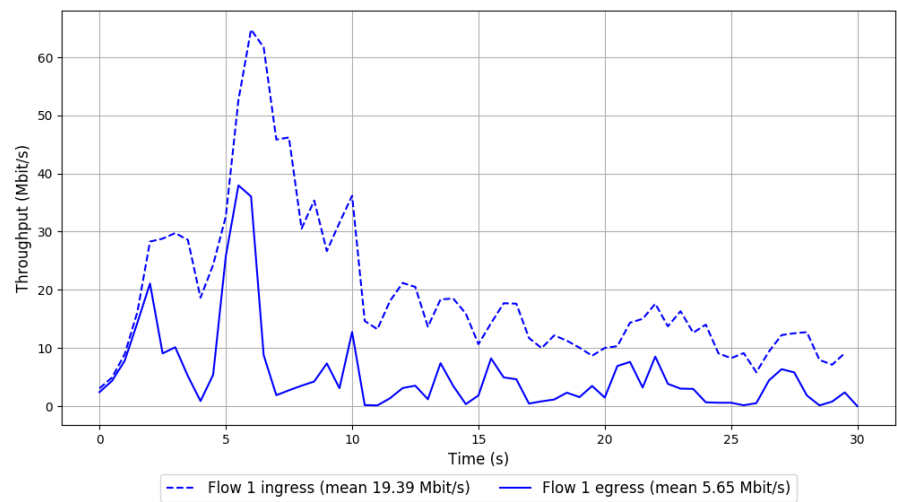
-- Flow 1:

Average throughput: 5.65 Mbit/s

95th percentile per-packet one-way delay: 50.774 ms

Loss rate: 70.87%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-17 01:58:43

End at: 2017-08-17 01:59:13

Below is generated by plot.py at 2017-08-17 04:15:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 289.06 Mbit/s

95th percentile per-packet one-way delay: 70.214 ms

Loss rate: 1.11%

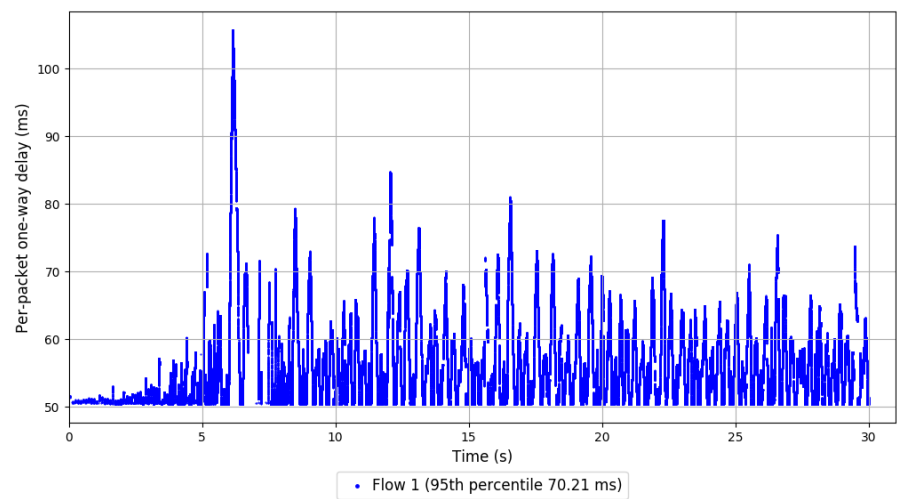
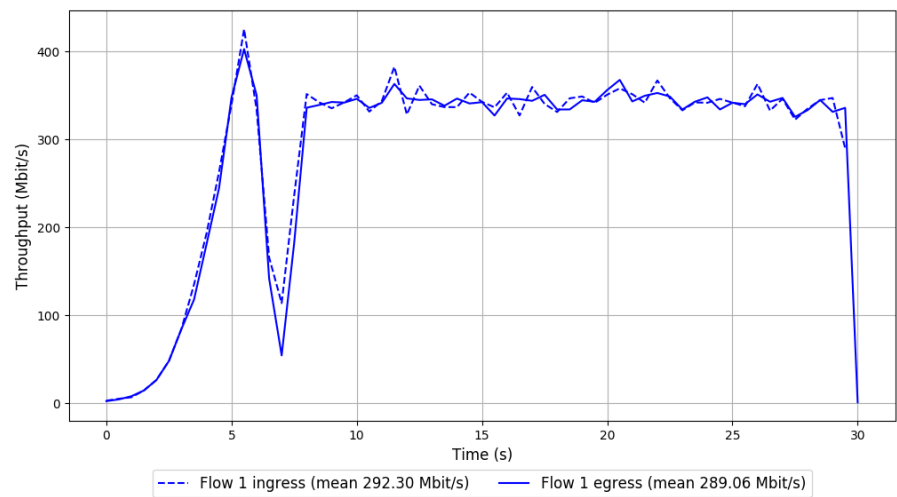
-- Flow 1:

Average throughput: 289.06 Mbit/s

95th percentile per-packet one-way delay: 70.214 ms

Loss rate: 1.11%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-17 02:09:03

End at: 2017-08-17 02:09:33

Below is generated by plot.py at 2017-08-17 04:15:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 310.83 Mbit/s

95th percentile per-packet one-way delay: 69.929 ms

Loss rate: 1.16%

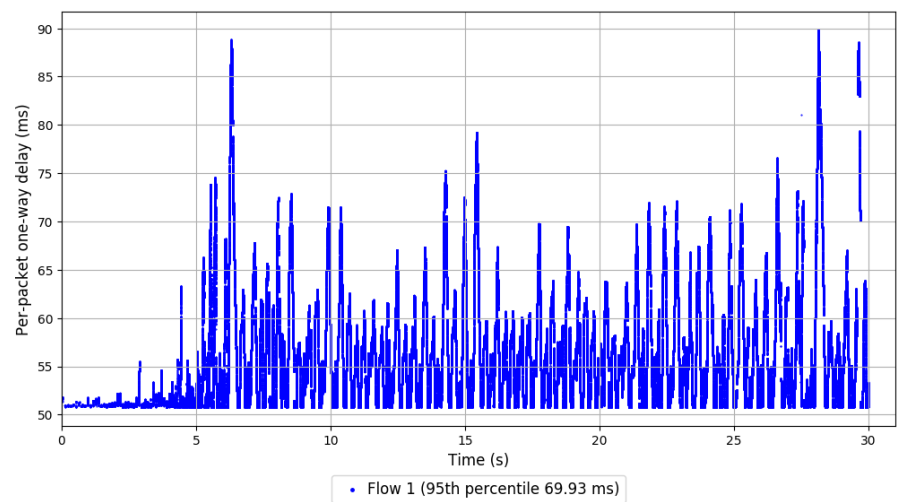
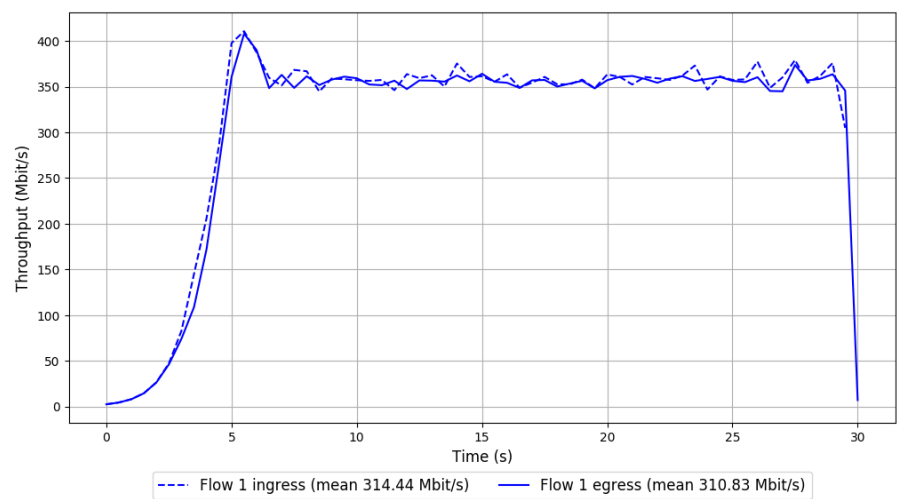
-- Flow 1:

Average throughput: 310.83 Mbit/s

95th percentile per-packet one-way delay: 69.929 ms

Loss rate: 1.16%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-17 02:19:13

End at: 2017-08-17 02:19:43

Below is generated by plot.py at 2017-08-17 04:15:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 315.89 Mbit/s

95th percentile per-packet one-way delay: 70.607 ms

Loss rate: 0.26%

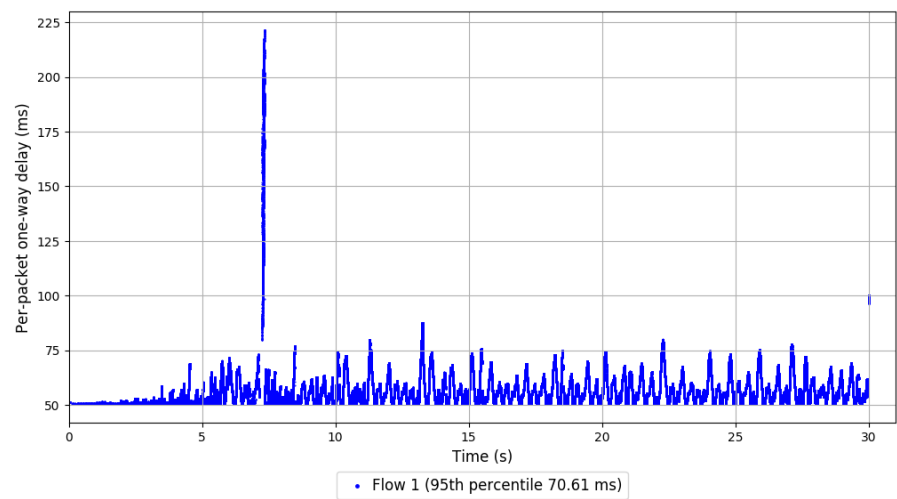
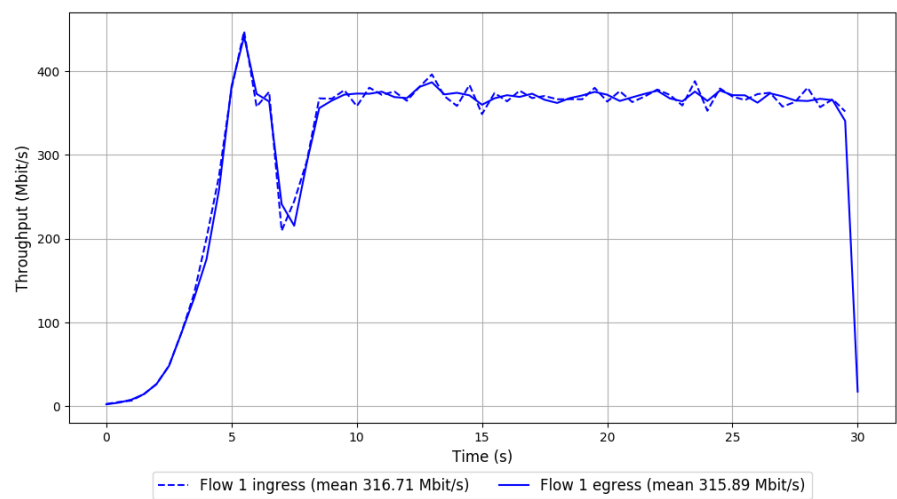
-- Flow 1:

Average throughput: 315.89 Mbit/s

95th percentile per-packet one-way delay: 70.607 ms

Loss rate: 0.26%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-17 02:29:19

End at: 2017-08-17 02:29:49

Below is generated by plot.py at 2017-08-17 04:16:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 306.06 Mbit/s

95th percentile per-packet one-way delay: 71.676 ms

Loss rate: 3.72%

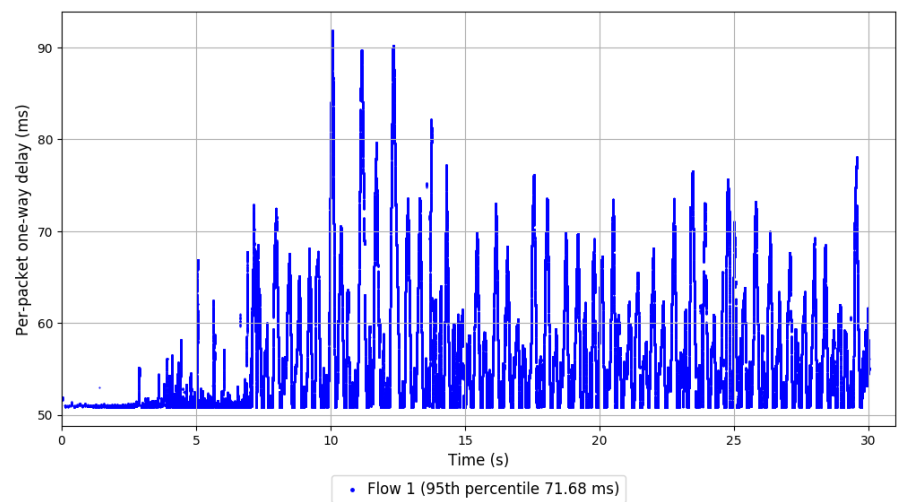
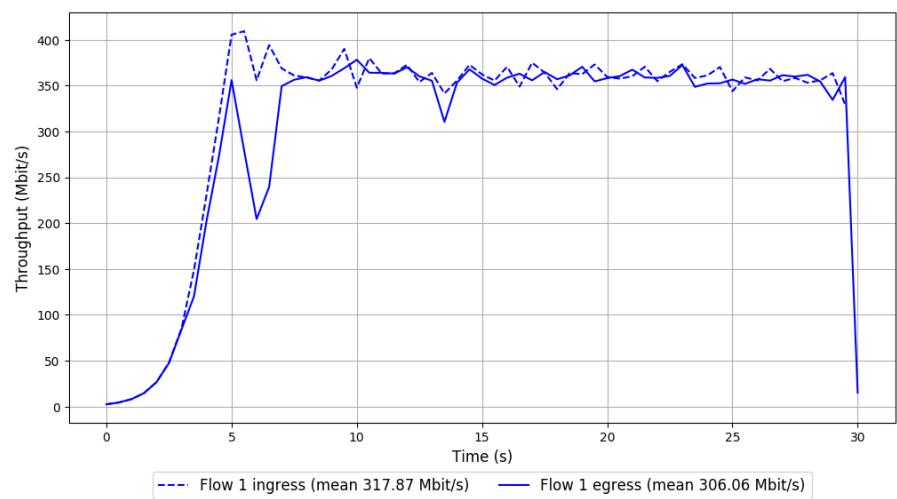
-- Flow 1:

Average throughput: 306.06 Mbit/s

95th percentile per-packet one-way delay: 71.676 ms

Loss rate: 3.72%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-17 02:39:44

End at: 2017-08-17 02:40:14

Below is generated by plot.py at 2017-08-17 04:16:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 292.25 Mbit/s

95th percentile per-packet one-way delay: 69.909 ms

Loss rate: 2.98%

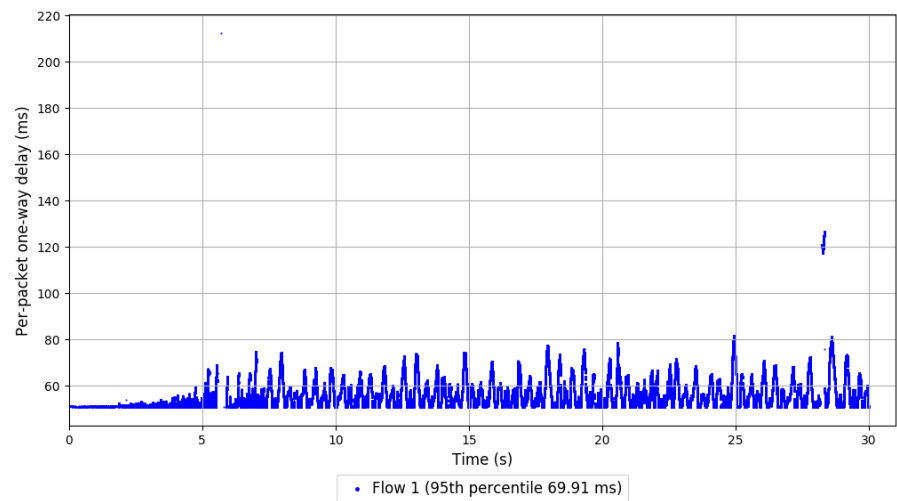
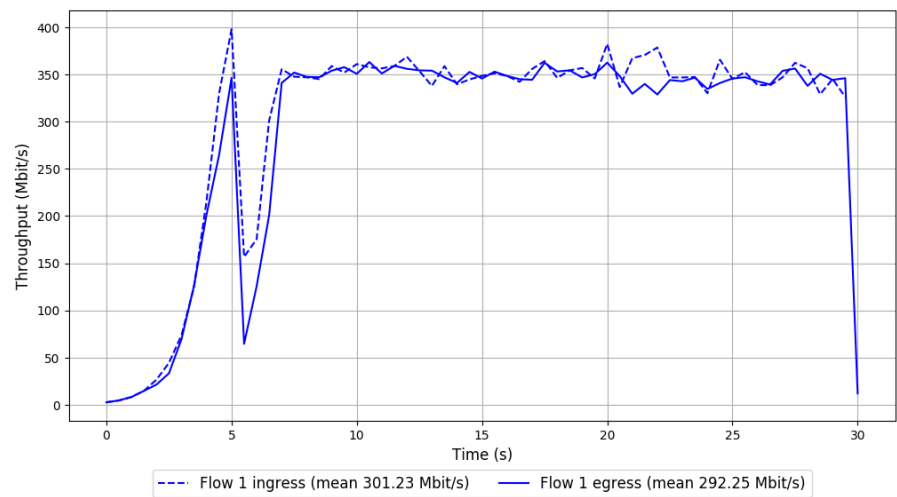
-- Flow 1:

Average throughput: 292.25 Mbit/s

95th percentile per-packet one-way delay: 69.909 ms

Loss rate: 2.98%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-17 02:50:02

End at: 2017-08-17 02:50:32

Below is generated by plot.py at 2017-08-17 04:16:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 52.232 ms

Loss rate: 70.38%

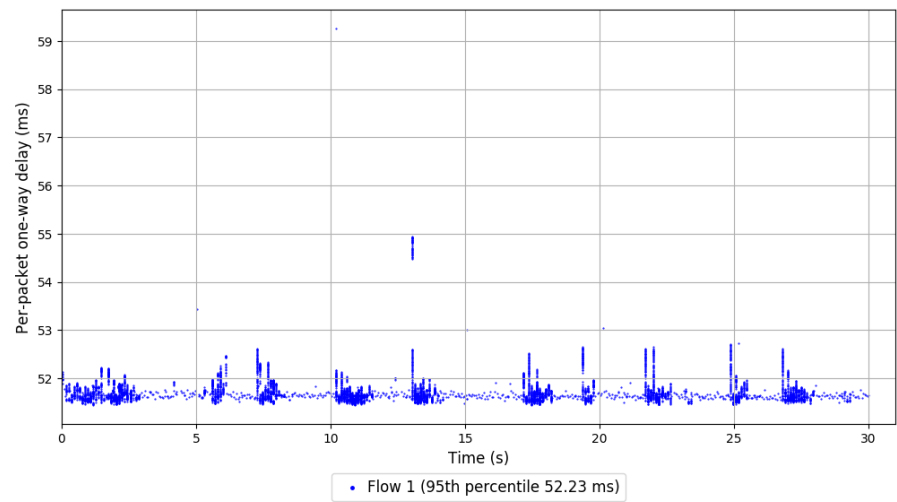
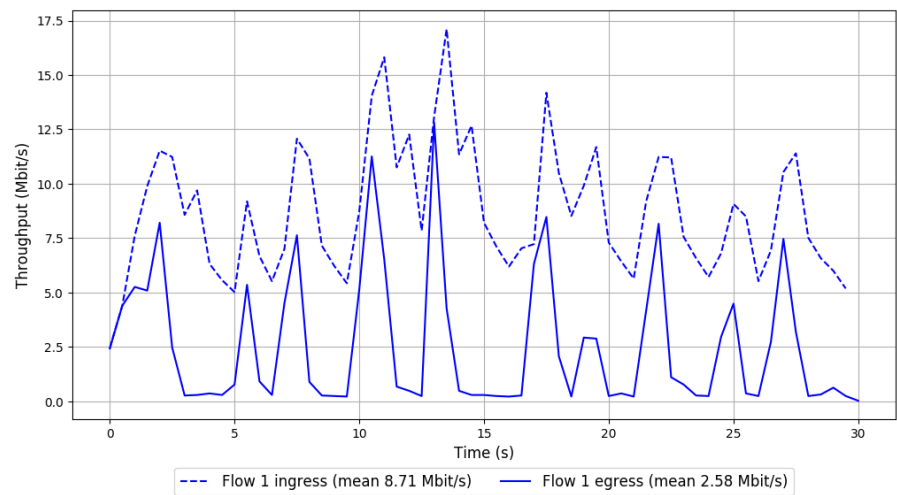
-- Flow 1:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 52.232 ms

Loss rate: 70.38%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-17 02:59:50

End at: 2017-08-17 03:00:20

Below is generated by plot.py at 2017-08-17 04:16:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 51.853 ms

Loss rate: 69.57%

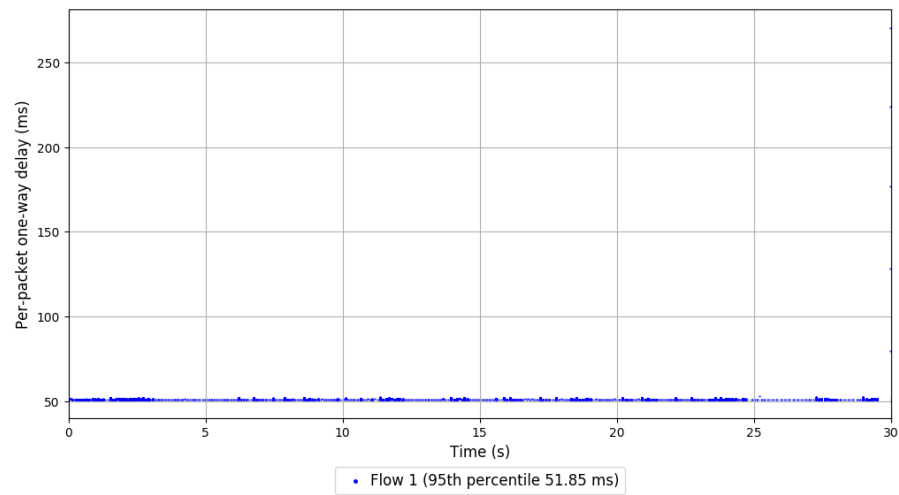
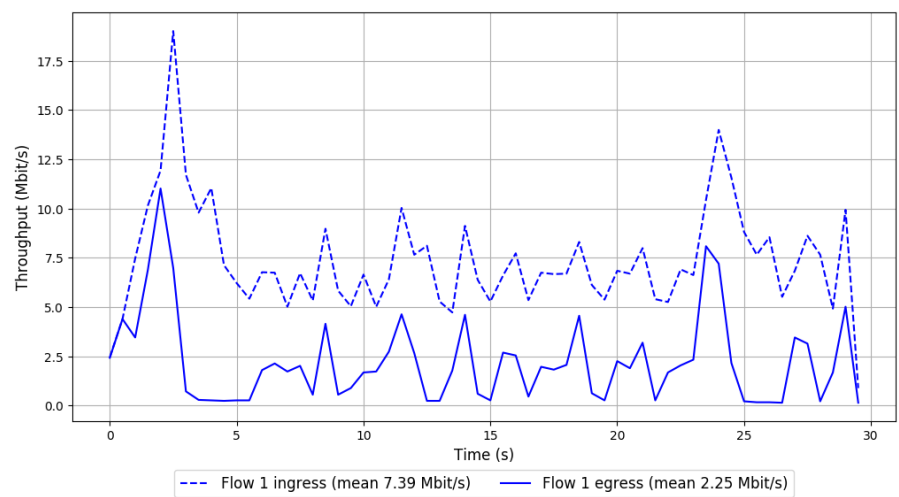
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 51.853 ms

Loss rate: 69.57%

Run 10: Report of CalibratedKoho — Data Link

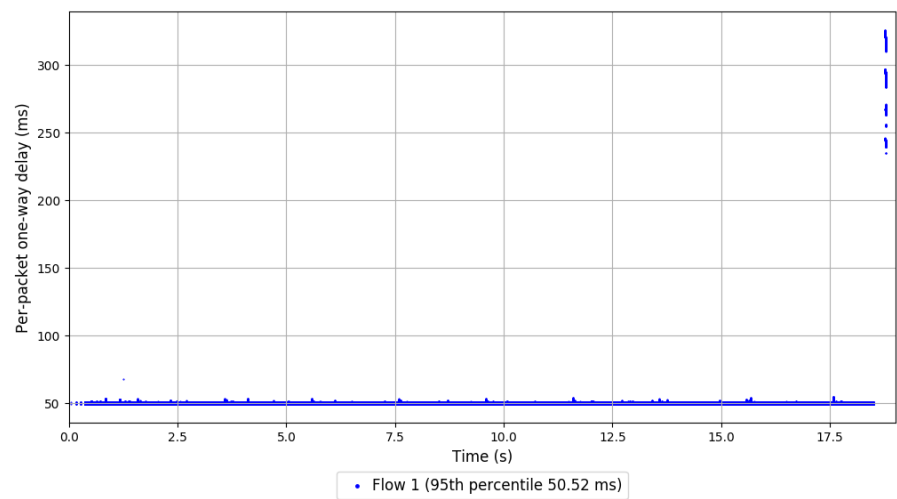
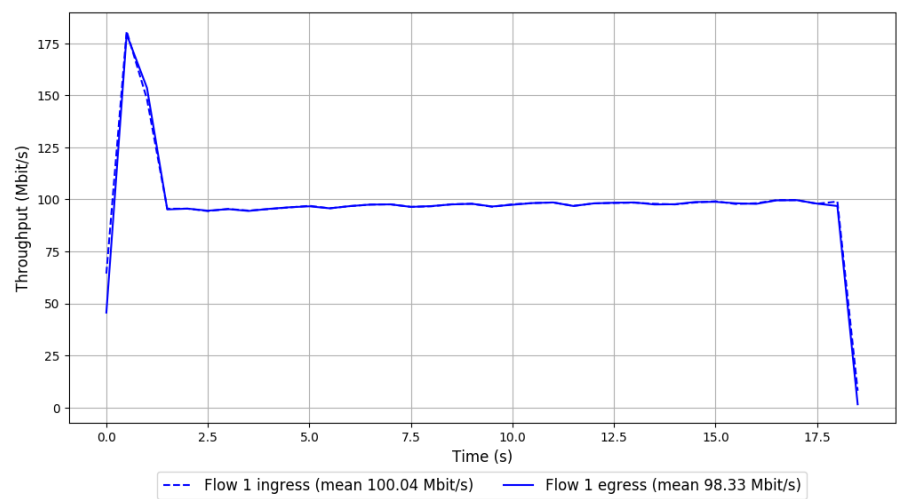


Run 1: Statistics of Copa

Start at: 2017-08-17 01:25:01

End at: 2017-08-17 01:25:31

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-17 01:34:38

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.01 Mbit/s

95th percentile per-packet one-way delay: 50.527 ms

Loss rate: 0.22%

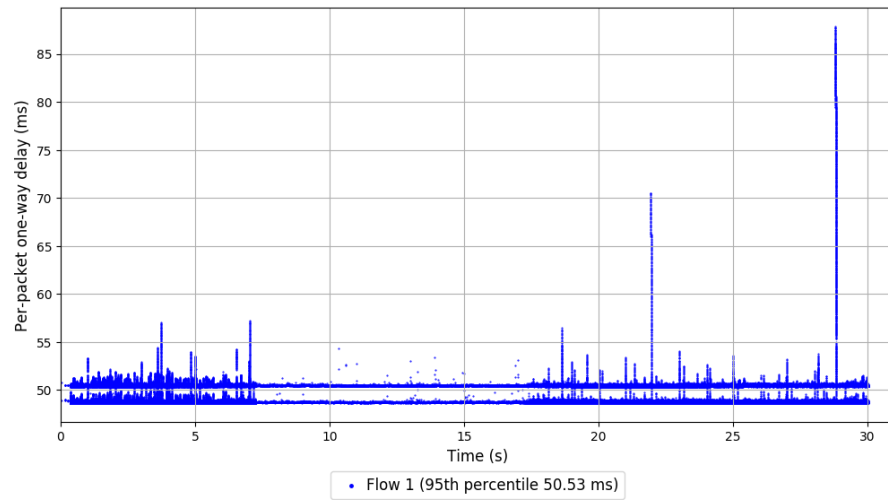
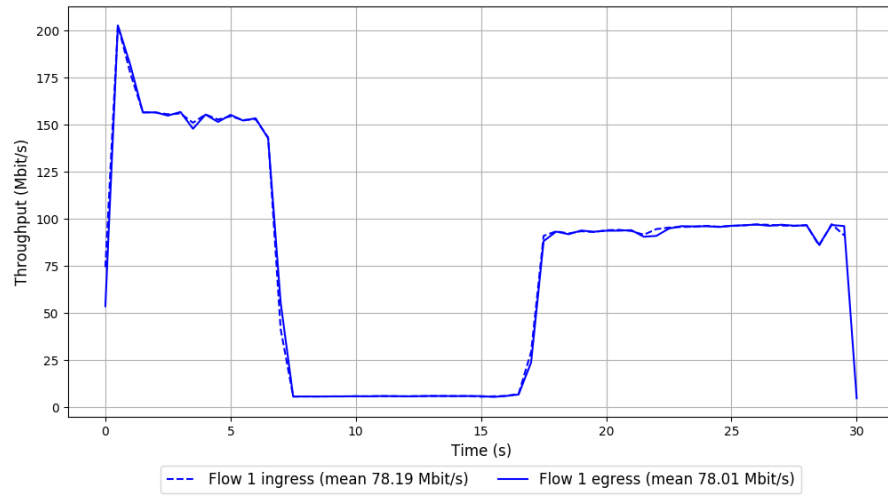
-- Flow 1:

Average throughput: 78.01 Mbit/s

95th percentile per-packet one-way delay: 50.527 ms

Loss rate: 0.22%

Run 2: Report of Copa — Data Link

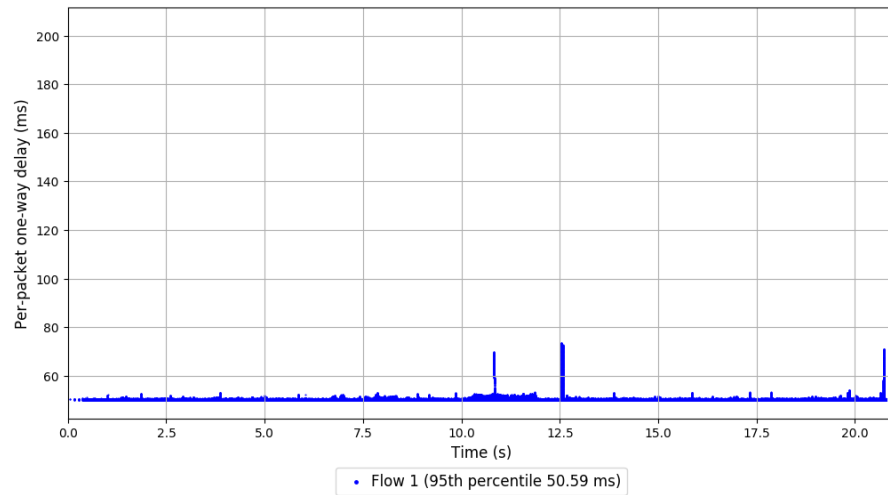
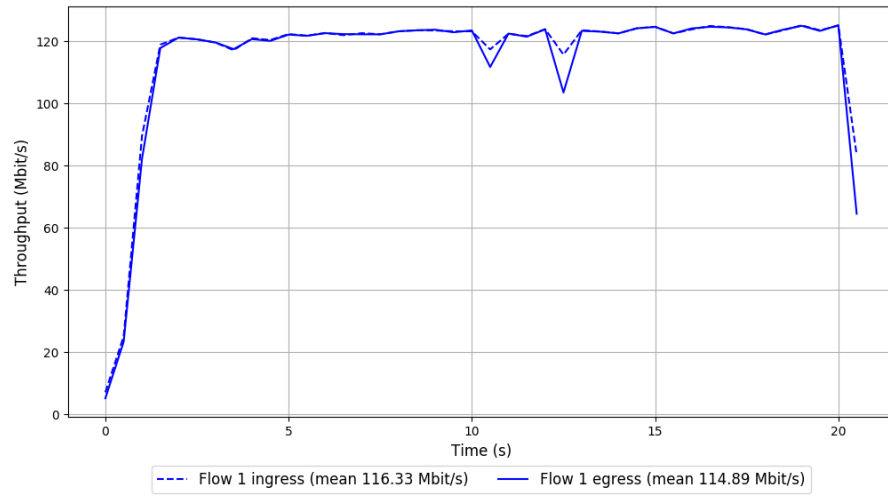


Run 3: Statistics of Copa

Start at: 2017-08-17 01:44:29

End at: 2017-08-17 01:44:59

Run 3: Report of Copa — Data Link

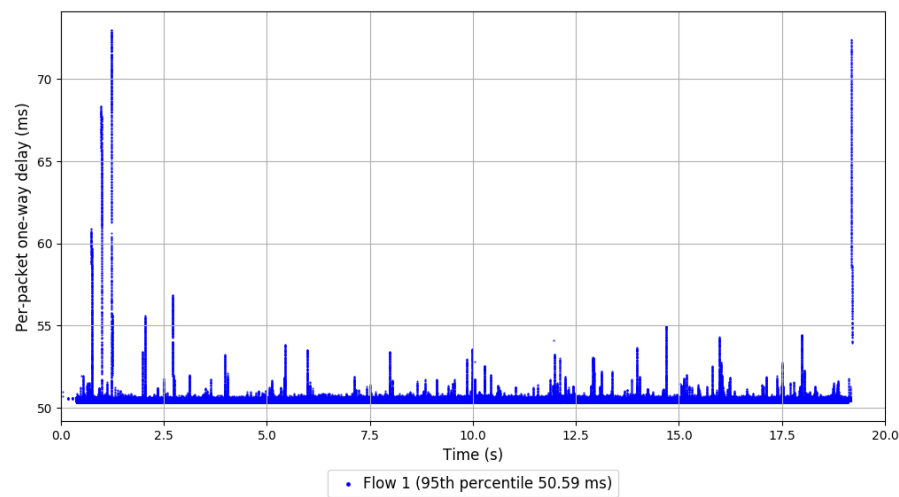
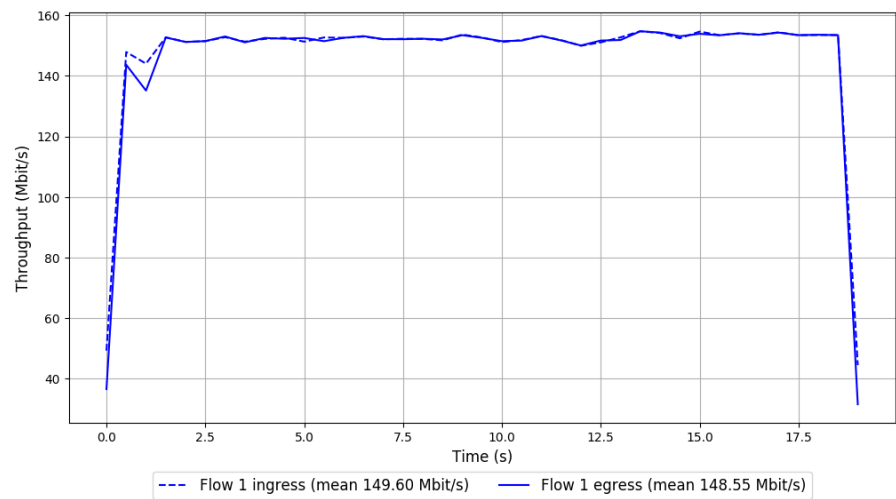


Run 4: Statistics of Copa

Start at: 2017-08-17 01:54:31

End at: 2017-08-17 01:55:01

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-17 02:04:45

End at: 2017-08-17 02:05:15

Below is generated by plot.py at 2017-08-17 04:17:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.17 Mbit/s

95th percentile per-packet one-way delay: 50.504 ms

Loss rate: 0.07%

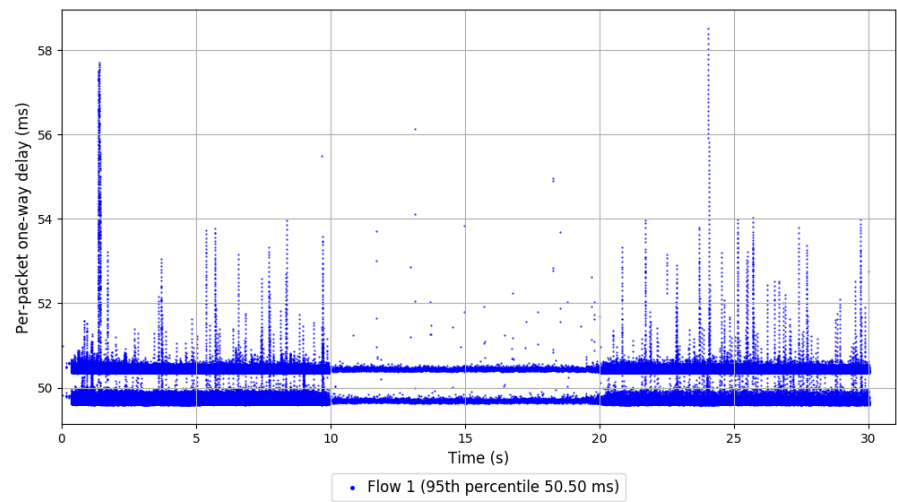
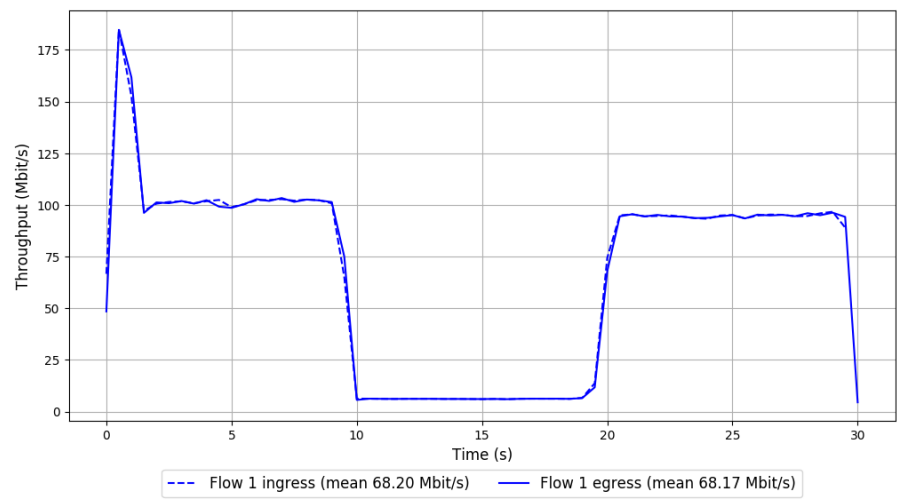
-- Flow 1:

Average throughput: 68.17 Mbit/s

95th percentile per-packet one-way delay: 50.504 ms

Loss rate: 0.07%

Run 5: Report of Copa — Data Link

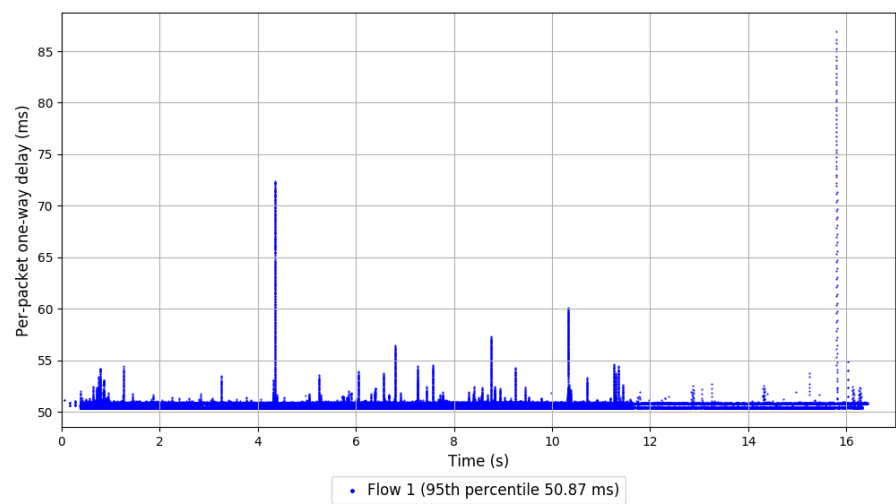
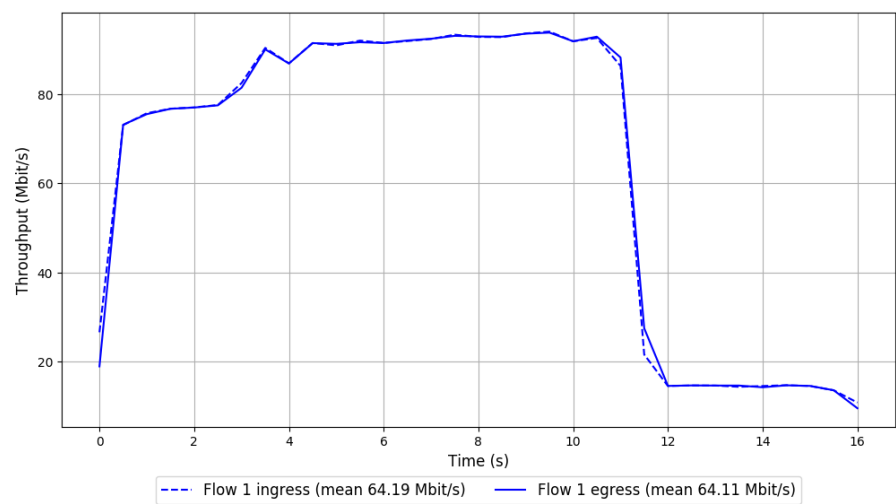


Run 6: Statistics of Copa

Start at: 2017-08-17 02:15:03

End at: 2017-08-17 02:15:33

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-17 02:25:25

End at: 2017-08-17 02:25:55

Below is generated by plot.py at 2017-08-17 04:18:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.76 Mbit/s

95th percentile per-packet one-way delay: 50.597 ms

Loss rate: 0.39%

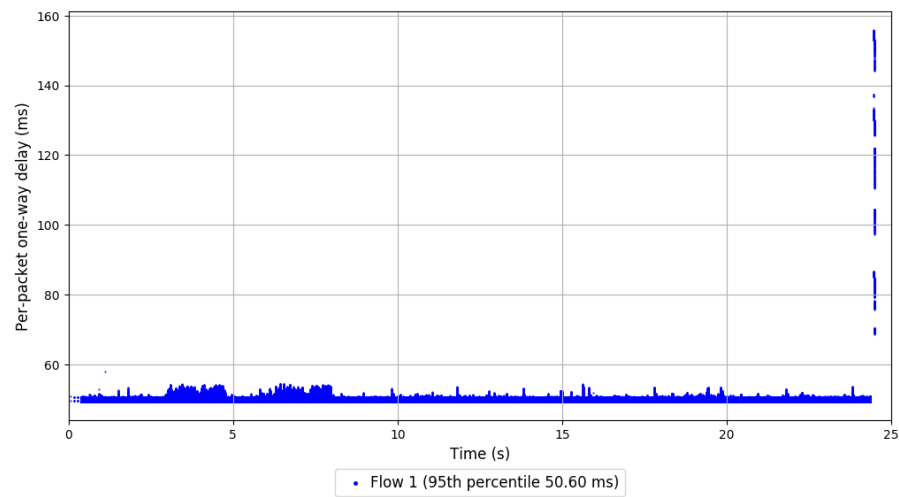
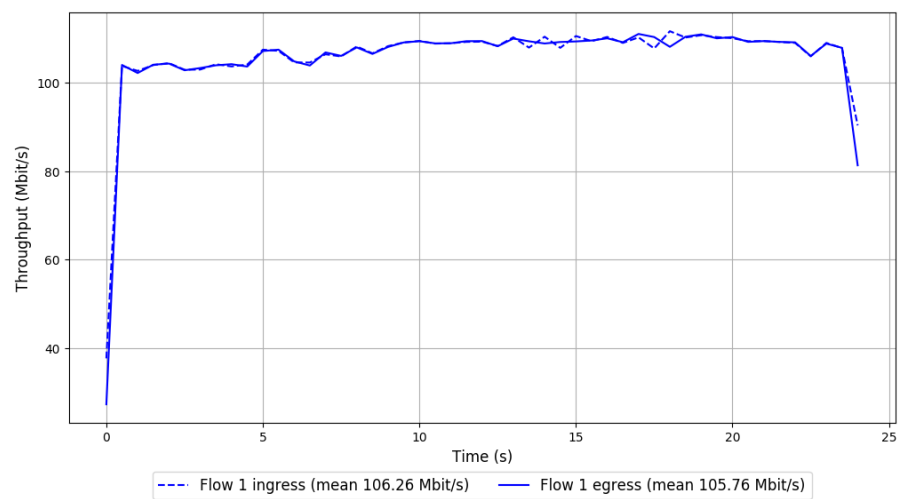
-- Flow 1:

Average throughput: 105.76 Mbit/s

95th percentile per-packet one-way delay: 50.597 ms

Loss rate: 0.39%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-08-17 02:35:26

End at: 2017-08-17 02:35:56

Below is generated by plot.py at 2017-08-17 04:18:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.41 Mbit/s

95th percentile per-packet one-way delay: 51.508 ms

Loss rate: 0.00%

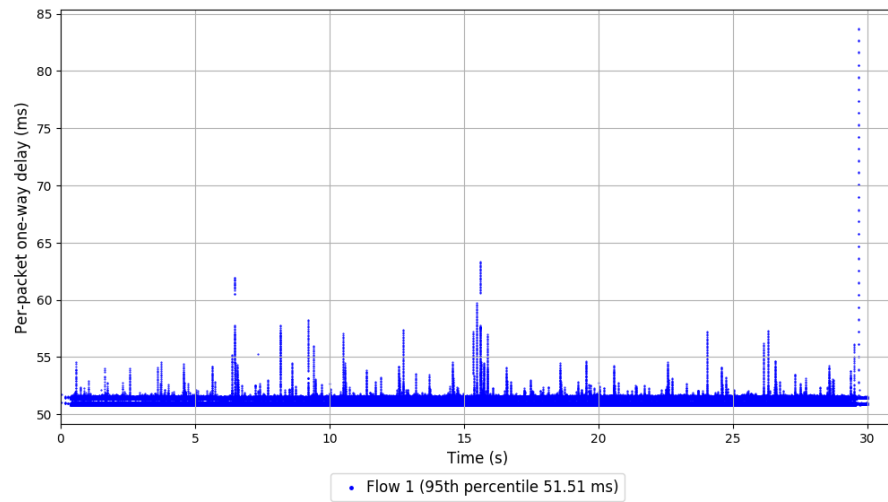
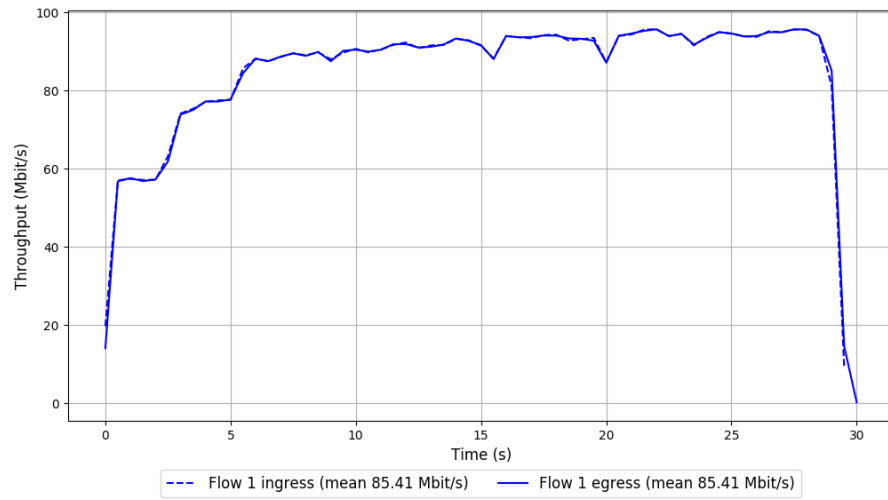
-- Flow 1:

Average throughput: 85.41 Mbit/s

95th percentile per-packet one-way delay: 51.508 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-08-17 02:45:50

End at: 2017-08-17 02:46:20

Below is generated by plot.py at 2017-08-17 04:18:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.83 Mbit/s

95th percentile per-packet one-way delay: 50.746 ms

Loss rate: 1.04%

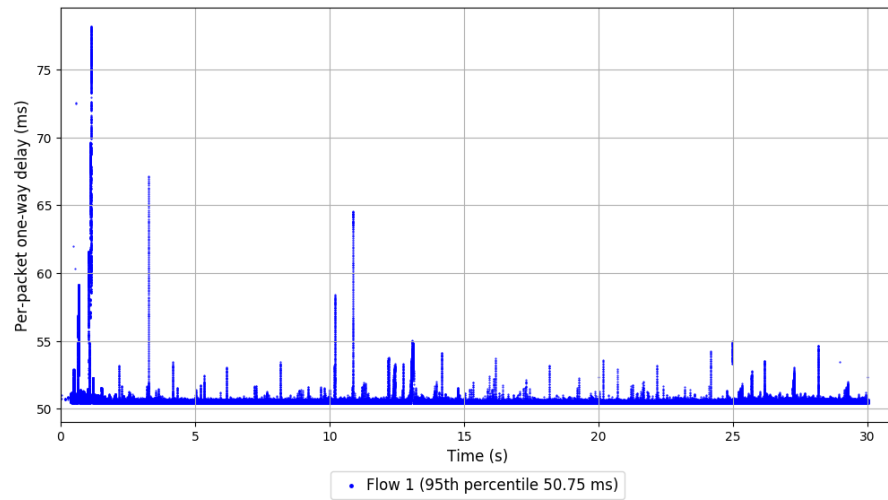
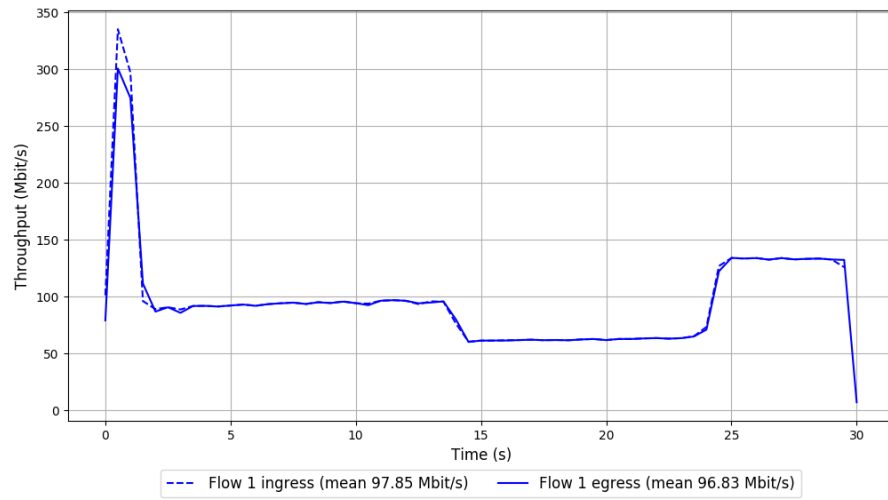
-- Flow 1:

Average throughput: 96.83 Mbit/s

95th percentile per-packet one-way delay: 50.746 ms

Loss rate: 1.04%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-08-17 02:55:52

End at: 2017-08-17 02:56:22

Below is generated by plot.py at 2017-08-17 04:18:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.01 Mbit/s

95th percentile per-packet one-way delay: 49.564 ms

Loss rate: 0.46%

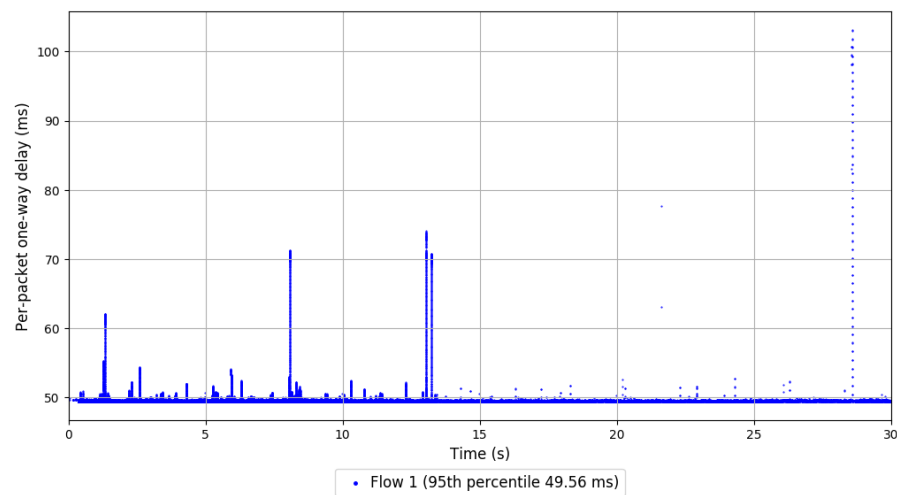
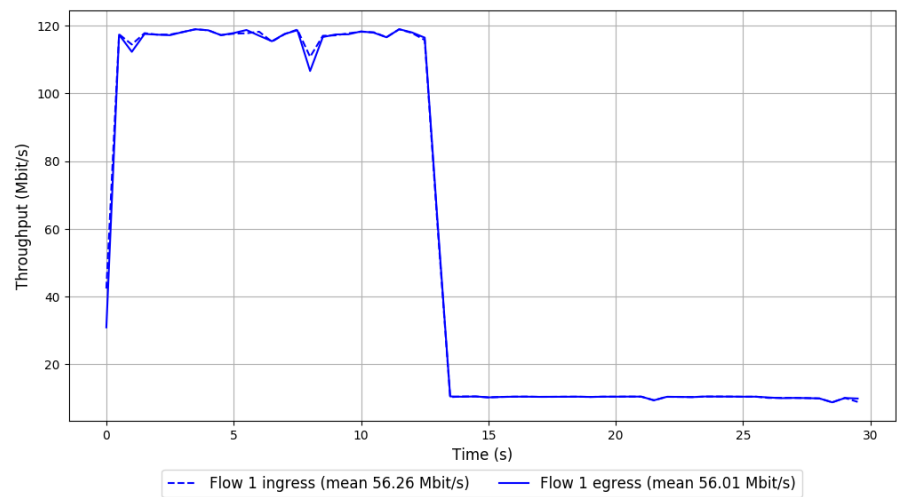
-- Flow 1:

Average throughput: 56.01 Mbit/s

95th percentile per-packet one-way delay: 49.564 ms

Loss rate: 0.46%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-17 01:26:21

End at: 2017-08-17 01:26:51

Below is generated by plot.py at 2017-08-17 04:18:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.60 Mbit/s

95th percentile per-packet one-way delay: 51.016 ms

Loss rate: 2.46%

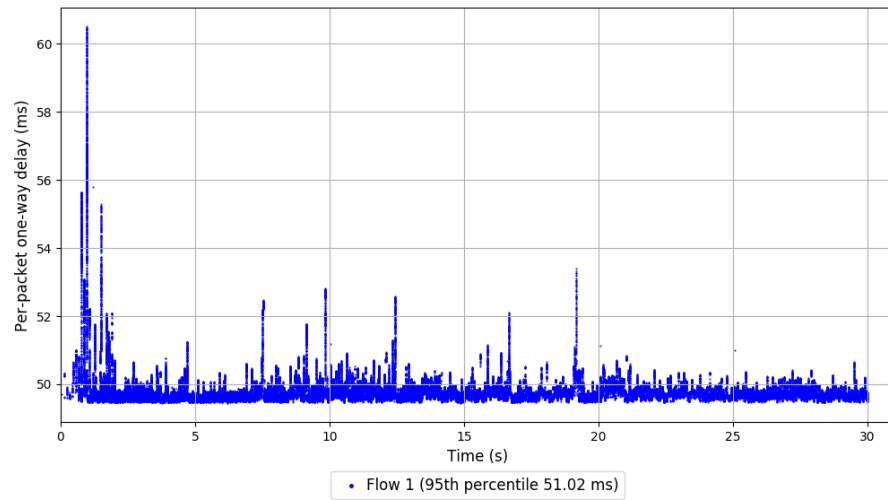
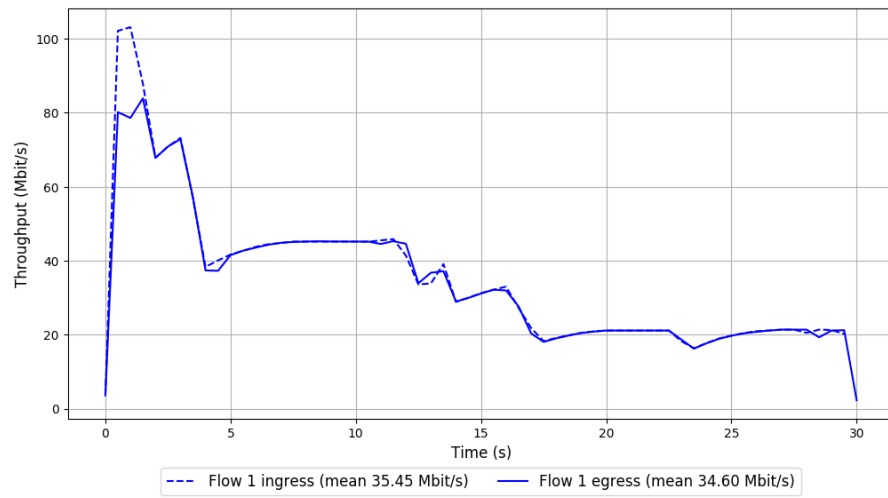
-- Flow 1:

Average throughput: 34.60 Mbit/s

95th percentile per-packet one-way delay: 51.016 ms

Loss rate: 2.46%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-17 01:36:00

End at: 2017-08-17 01:36:30

Below is generated by plot.py at 2017-08-17 04:18:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.43 Mbit/s

95th percentile per-packet one-way delay: 51.002 ms

Loss rate: 2.00%

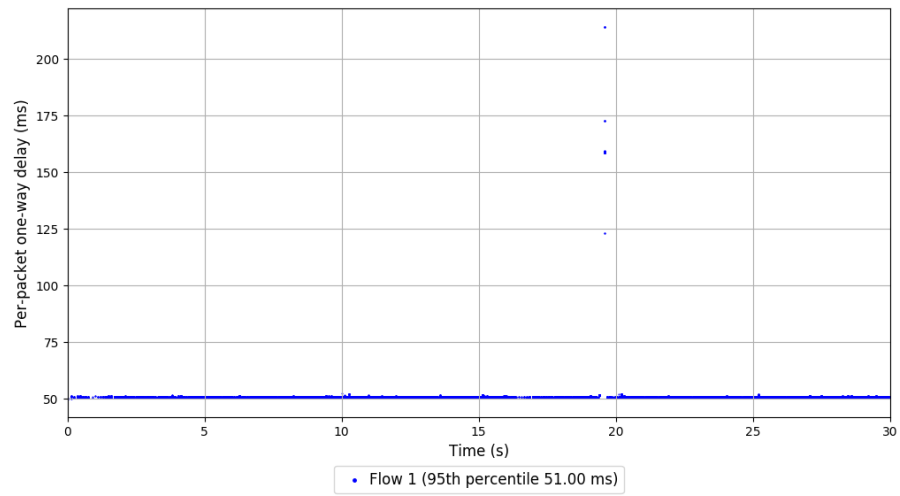
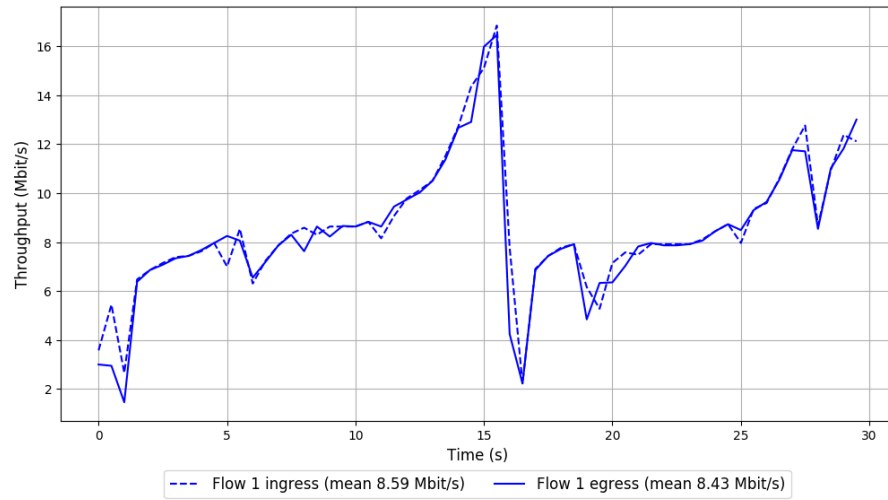
-- Flow 1:

Average throughput: 8.43 Mbit/s

95th percentile per-packet one-way delay: 51.002 ms

Loss rate: 2.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-17 01:45:51

End at: 2017-08-17 01:46:21

Below is generated by plot.py at 2017-08-17 04:18:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.88 Mbit/s

95th percentile per-packet one-way delay: 50.960 ms

Loss rate: 2.21%

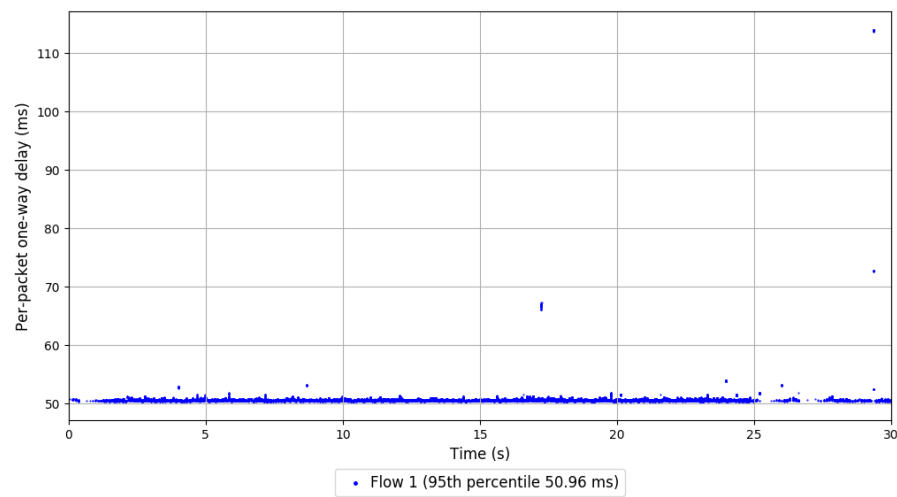
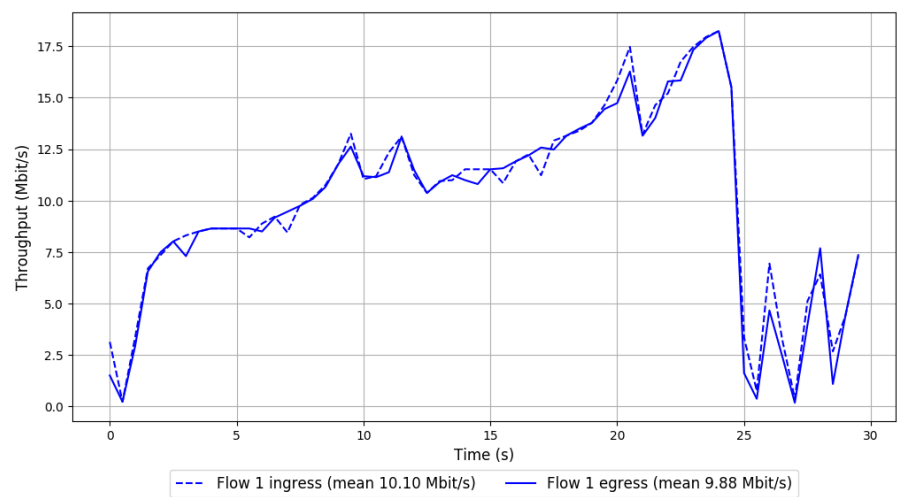
-- Flow 1:

Average throughput: 9.88 Mbit/s

95th percentile per-packet one-way delay: 50.960 ms

Loss rate: 2.21%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-08-17 01:55:53

End at: 2017-08-17 01:56:23

Below is generated by plot.py at 2017-08-17 04:18:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.75 Mbit/s

95th percentile per-packet one-way delay: 51.337 ms

Loss rate: 0.18%

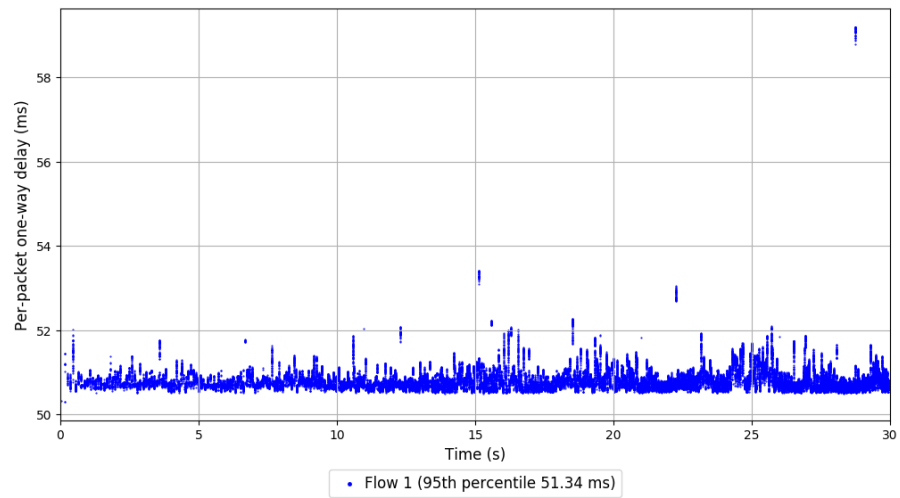
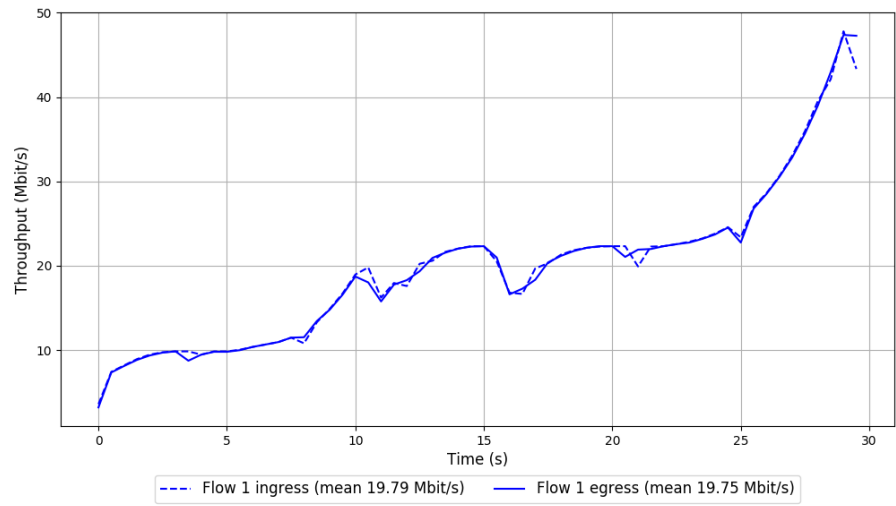
-- Flow 1:

Average throughput: 19.75 Mbit/s

95th percentile per-packet one-way delay: 51.337 ms

Loss rate: 0.18%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

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

End at: 2017-08-17 02:06:36

Below is generated by plot.py at 2017-08-17 04:18:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.89 Mbit/s

95th percentile per-packet one-way delay: 51.763 ms

Loss rate: 1.17%

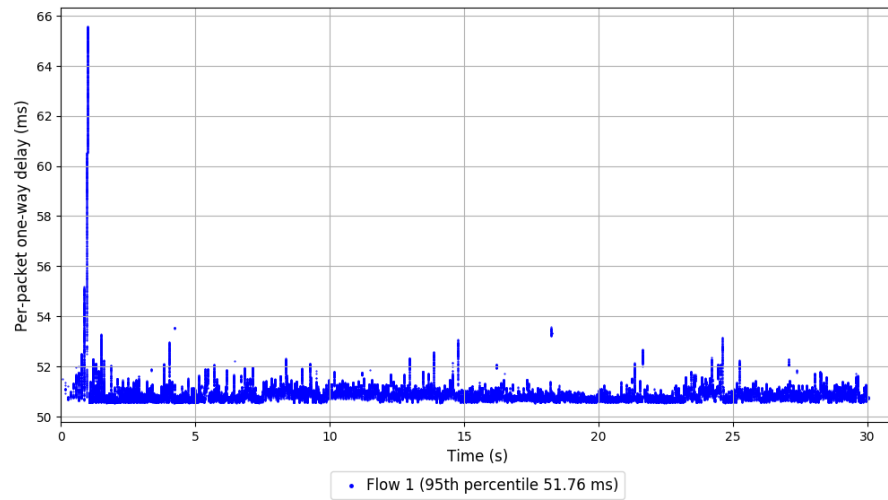
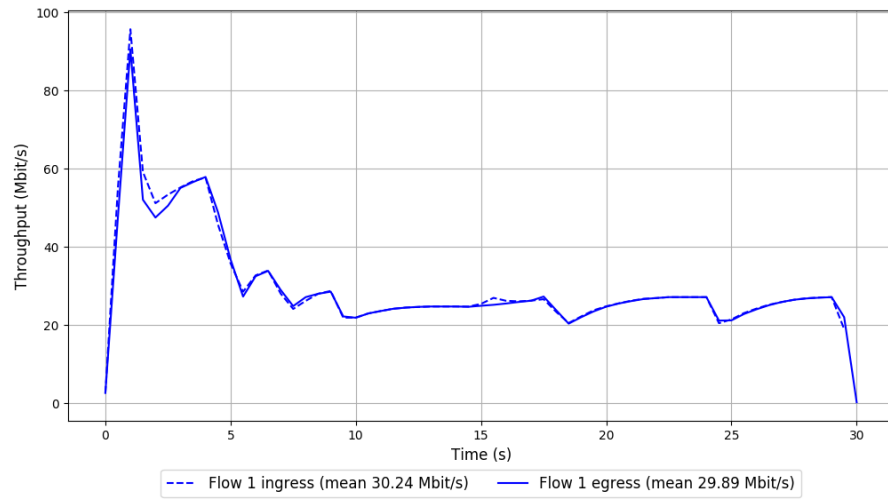
-- Flow 1:

Average throughput: 29.89 Mbit/s

95th percentile per-packet one-way delay: 51.763 ms

Loss rate: 1.17%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-17 02:16:20

End at: 2017-08-17 02:16:50

Below is generated by plot.py at 2017-08-17 04:18:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.18 Mbit/s

95th percentile per-packet one-way delay: 51.874 ms

Loss rate: 1.18%

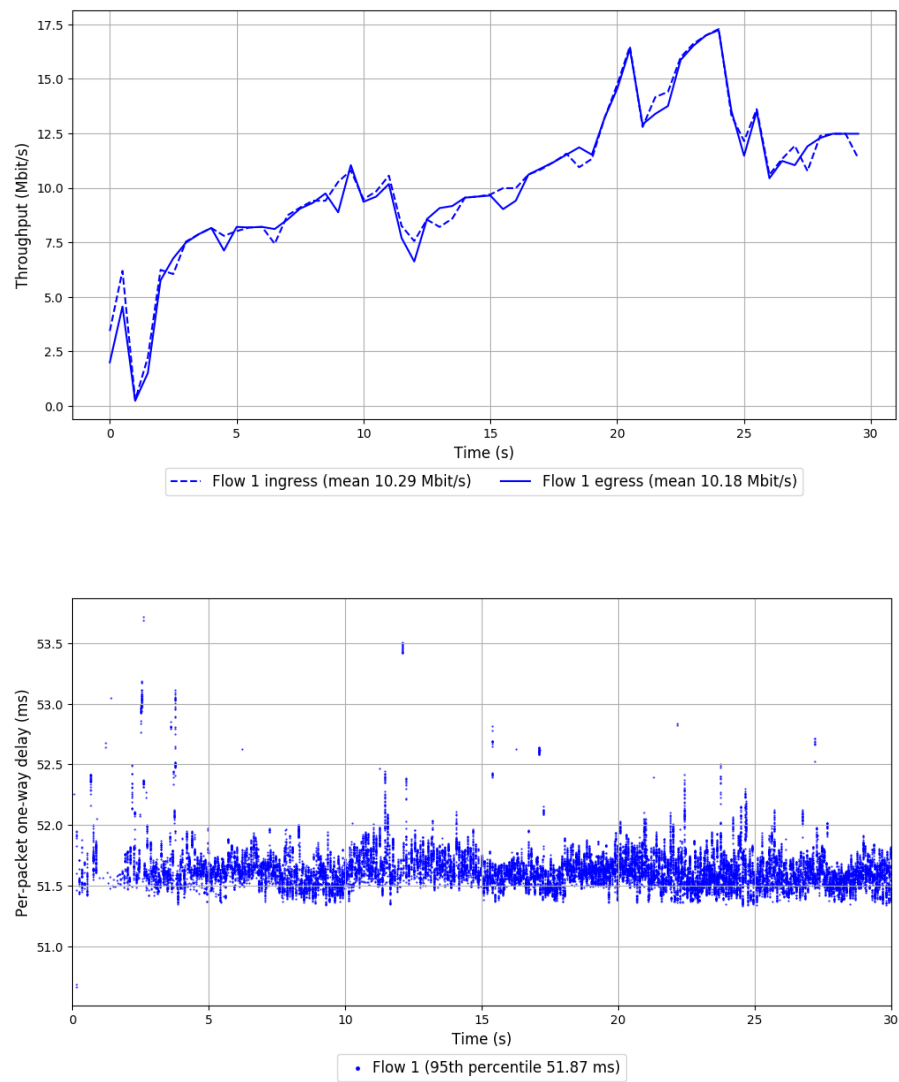
-- Flow 1:

Average throughput: 10.18 Mbit/s

95th percentile per-packet one-way delay: 51.874 ms

Loss rate: 1.18%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-17 02:26:46

End at: 2017-08-17 02:27:16

Below is generated by plot.py at 2017-08-17 04:18:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.88 Mbit/s

95th percentile per-packet one-way delay: 51.417 ms

Loss rate: 0.73%

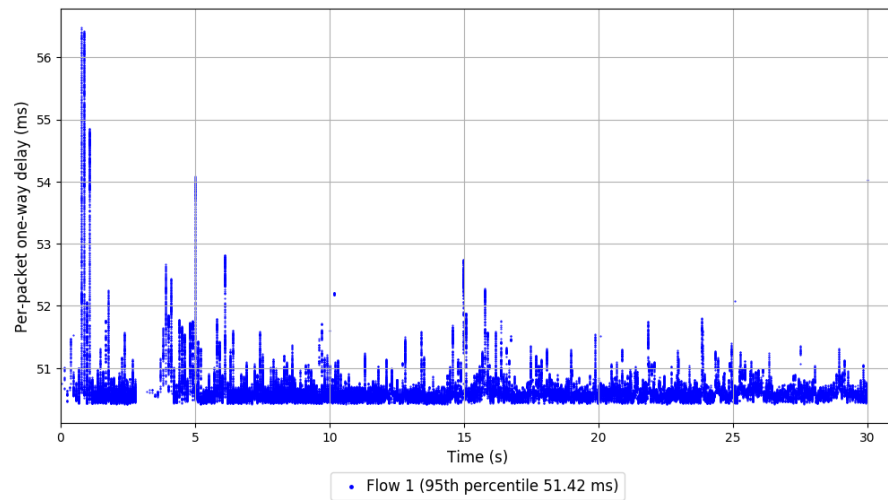
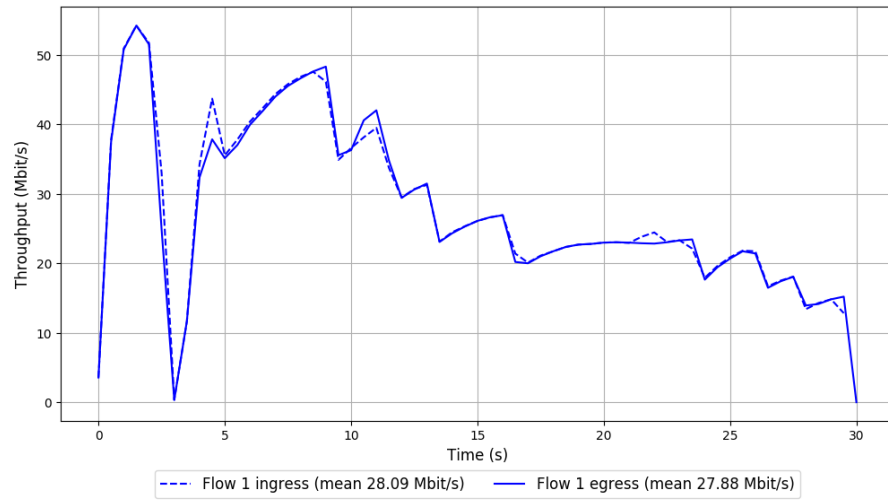
-- Flow 1:

Average throughput: 27.88 Mbit/s

95th percentile per-packet one-way delay: 51.417 ms

Loss rate: 0.73%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-17 02:36:49

End at: 2017-08-17 02:37:19

Below is generated by plot.py at 2017-08-17 04:18:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.02 Mbit/s

95th percentile per-packet one-way delay: 51.843 ms

Loss rate: 0.85%

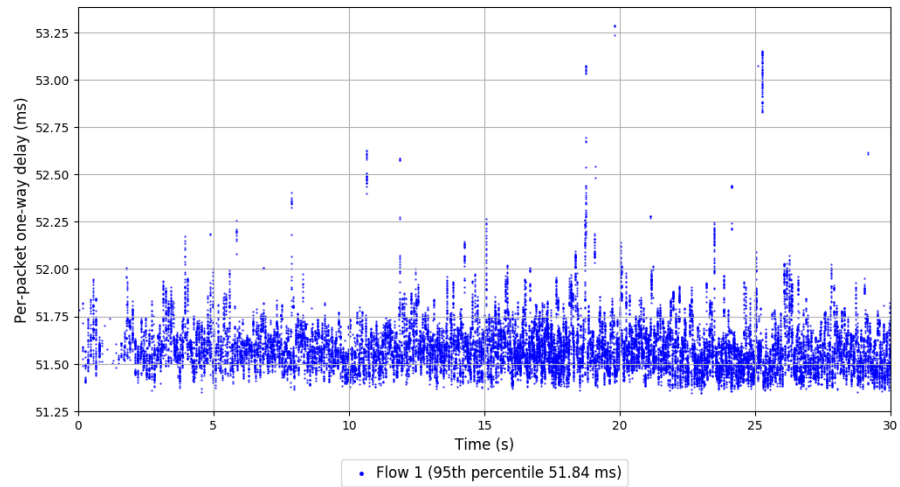
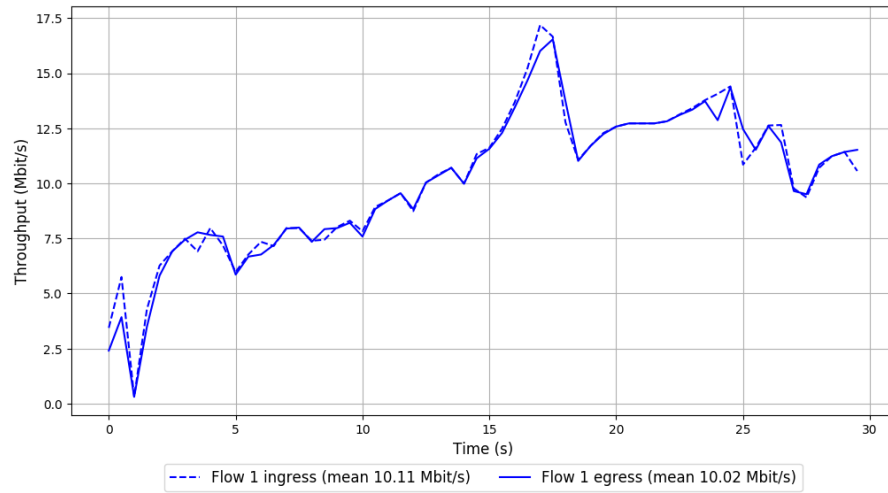
-- Flow 1:

Average throughput: 10.02 Mbit/s

95th percentile per-packet one-way delay: 51.843 ms

Loss rate: 0.85%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-17 02:47:13

End at: 2017-08-17 02:47:43

Below is generated by plot.py at 2017-08-17 04:18:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.16 Mbit/s

95th percentile per-packet one-way delay: 51.983 ms

Loss rate: 1.31%

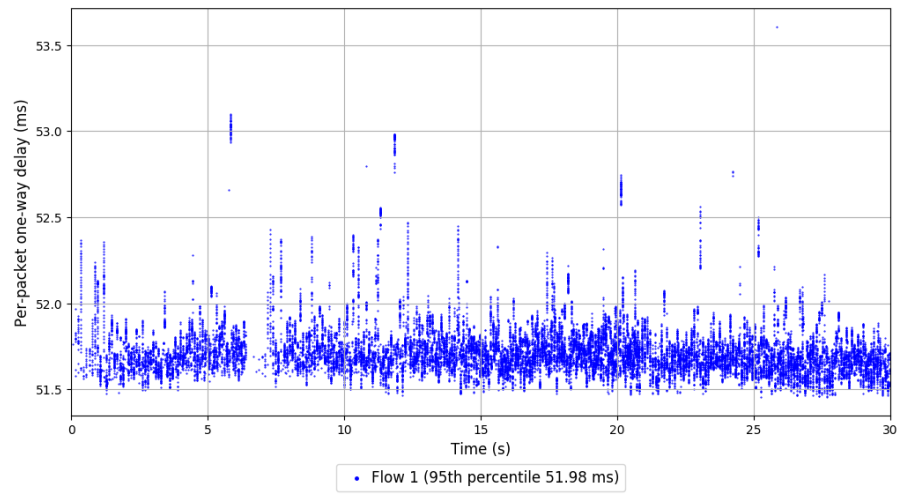
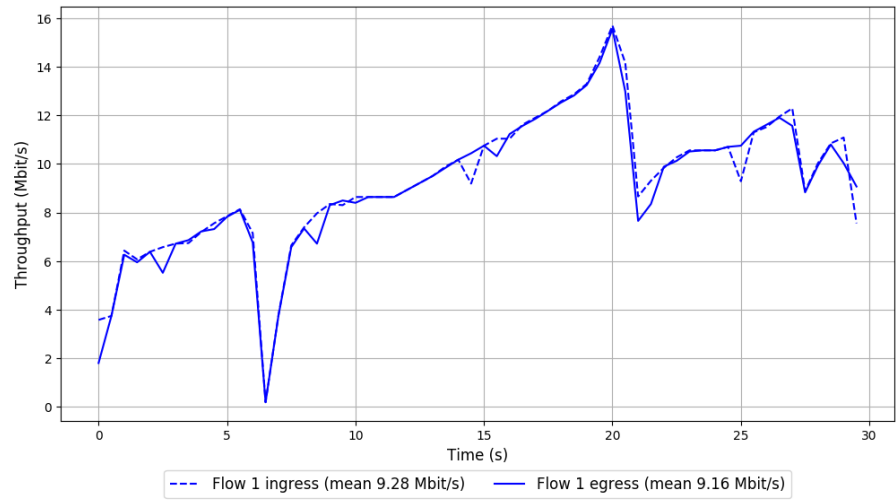
-- Flow 1:

Average throughput: 9.16 Mbit/s

95th percentile per-packet one-way delay: 51.983 ms

Loss rate: 1.31%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-17 02:57:11

End at: 2017-08-17 02:57:41

Below is generated by plot.py at 2017-08-17 04:18:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.03 Mbit/s

95th percentile per-packet one-way delay: 51.834 ms

Loss rate: 2.46%

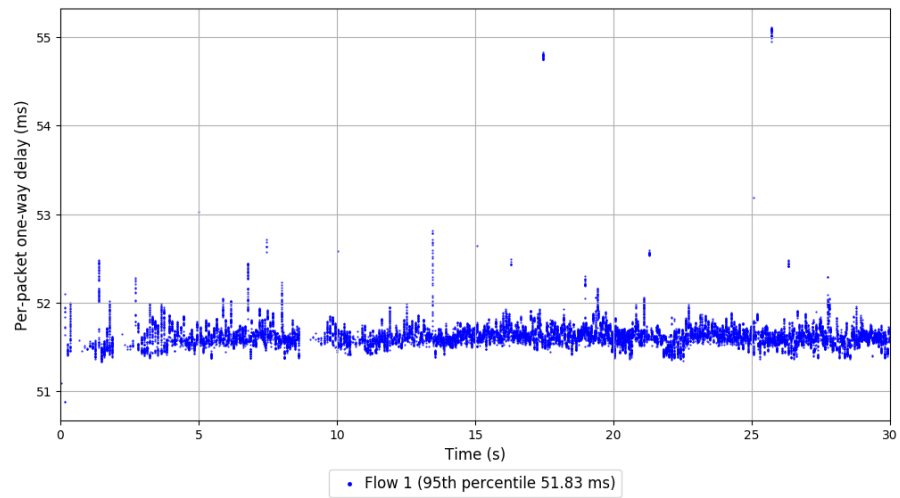
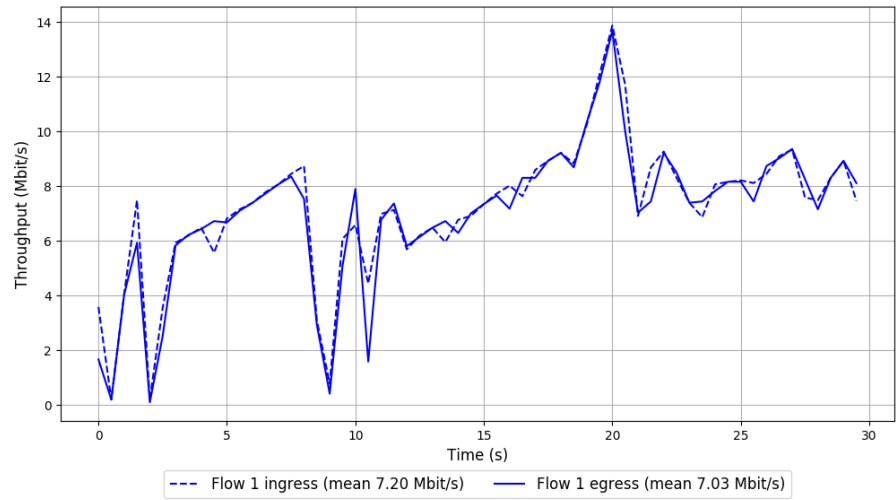
-- Flow 1:

Average throughput: 7.03 Mbit/s

95th percentile per-packet one-way delay: 51.834 ms

Loss rate: 2.46%

Run 10: Report of TCP Cubic — Data Link

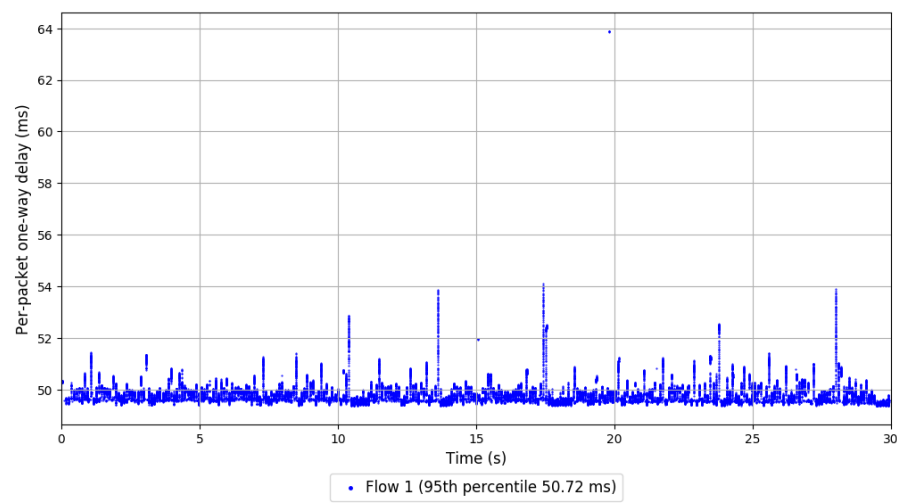
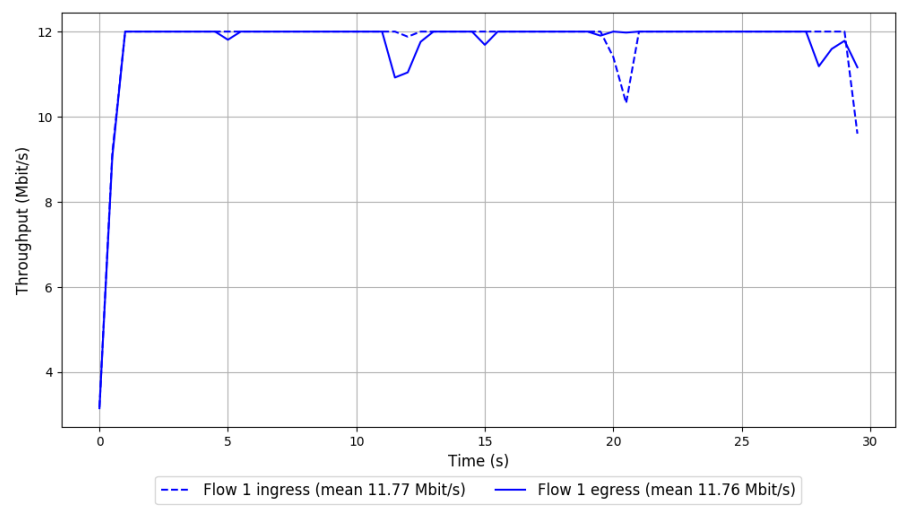


```
Run 1: Statistics of KohoCC

Start at: 2017-08-17 01:26:59
End at: 2017-08-17 01:27:30

# Below is generated by plot.py at 2017-08-17 04:18:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.76 Mbit/s
95th percentile per-packet one-way delay: 50.715 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 11.76 Mbit/s
95th percentile per-packet one-way delay: 50.715 ms
Loss rate: 0.07%
```


Run 1: Report of KohoCC — Data Link

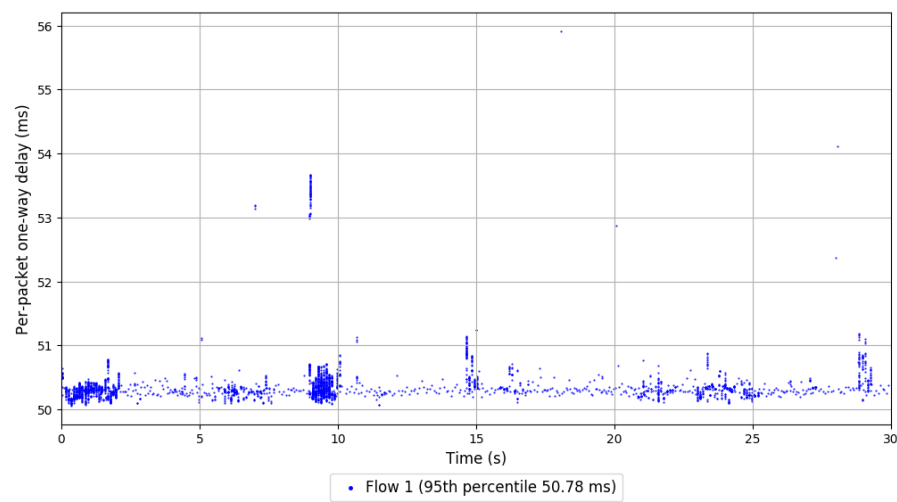
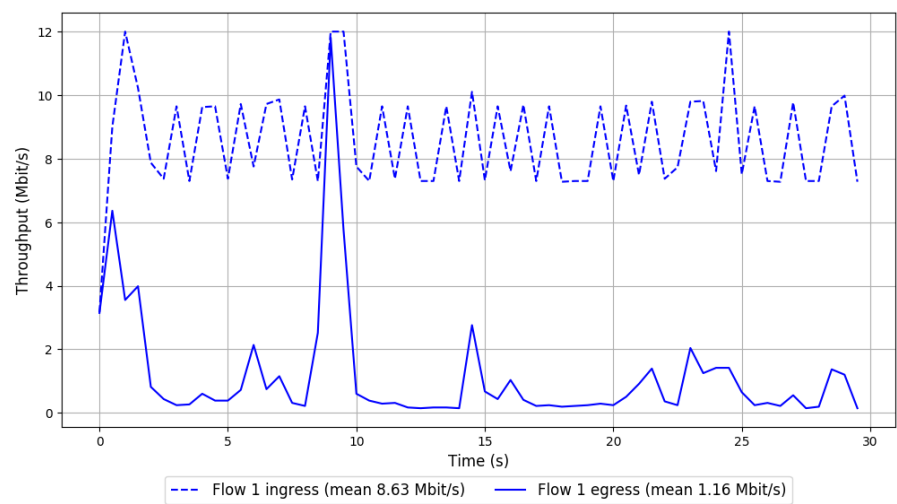


```
Run 2: Statistics of KohoCC

Start at: 2017-08-17 01:36:38
End at: 2017-08-17 01:37:08

# Below is generated by plot.py at 2017-08-17 04:18:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 50.784 ms
Loss rate: 86.56%
-- Flow 1:
Average throughput: 1.16 Mbit/s
95th percentile per-packet one-way delay: 50.784 ms
Loss rate: 86.56%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-17 01:46:28

End at: 2017-08-17 01:46:58

Below is generated by plot.py at 2017-08-17 04:18:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 50.906 ms

Loss rate: 84.51%

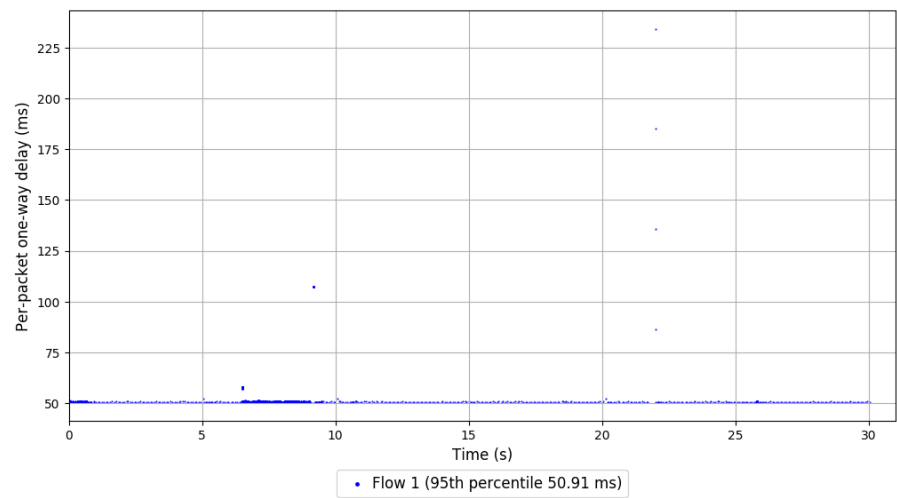
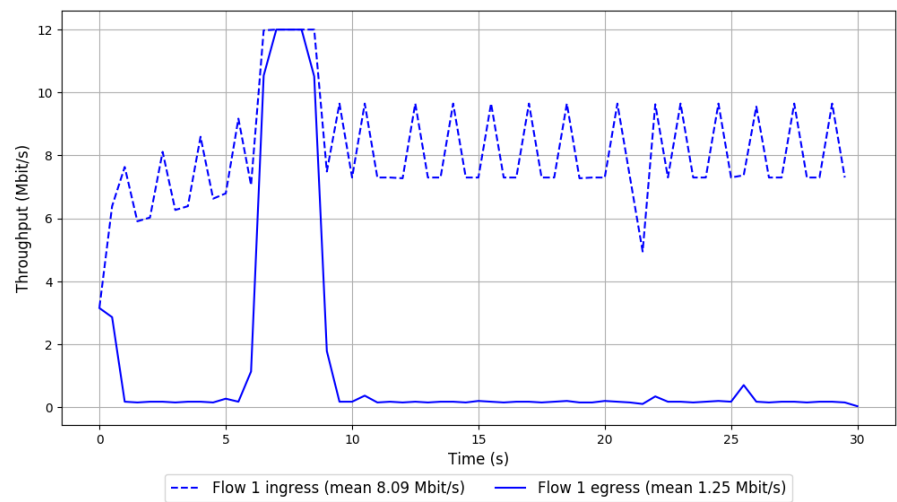
-- Flow 1:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 50.906 ms

Loss rate: 84.51%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-08-17 01:56:31

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

Below is generated by plot.py at 2017-08-17 04:18:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.39 Mbit/s

95th percentile per-packet one-way delay: 50.992 ms

Loss rate: 65.42%

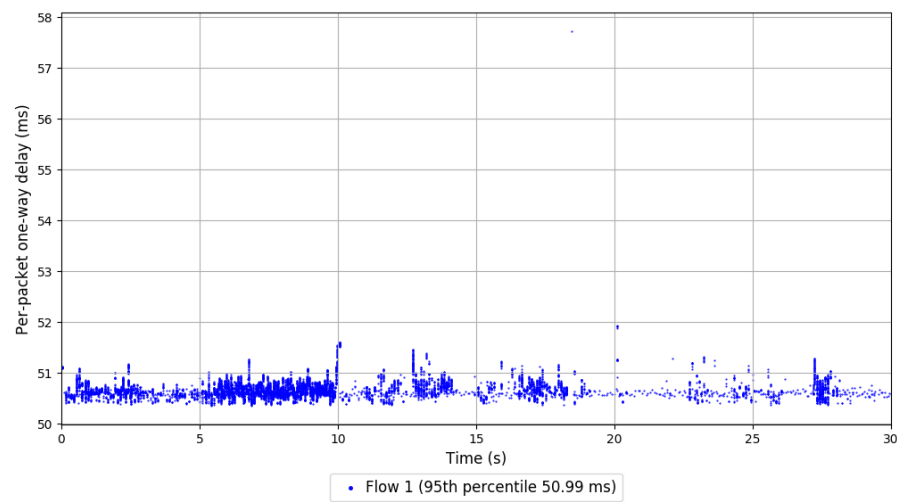
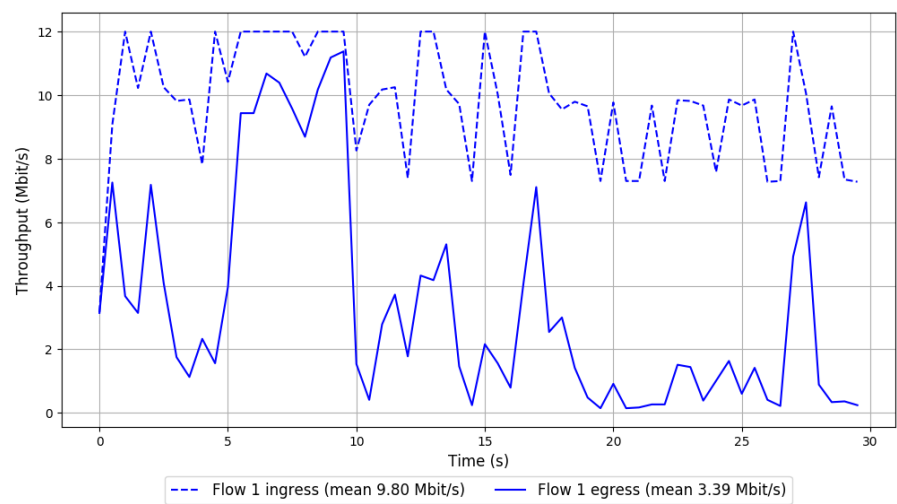
-- Flow 1:

Average throughput: 3.39 Mbit/s

95th percentile per-packet one-way delay: 50.992 ms

Loss rate: 65.42%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-08-17 02:06:45

End at: 2017-08-17 02:07:15

Below is generated by plot.py at 2017-08-17 04:18:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.73 Mbit/s

95th percentile per-packet one-way delay: 51.448 ms

Loss rate: 0.00%

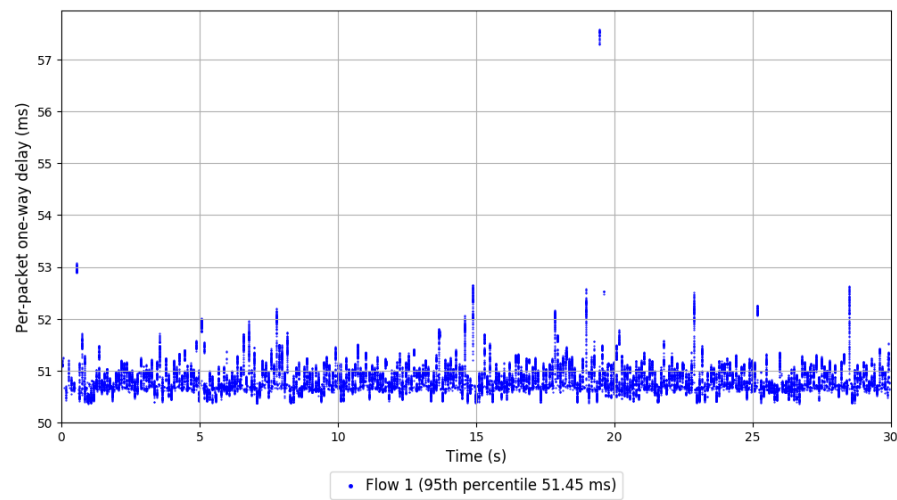
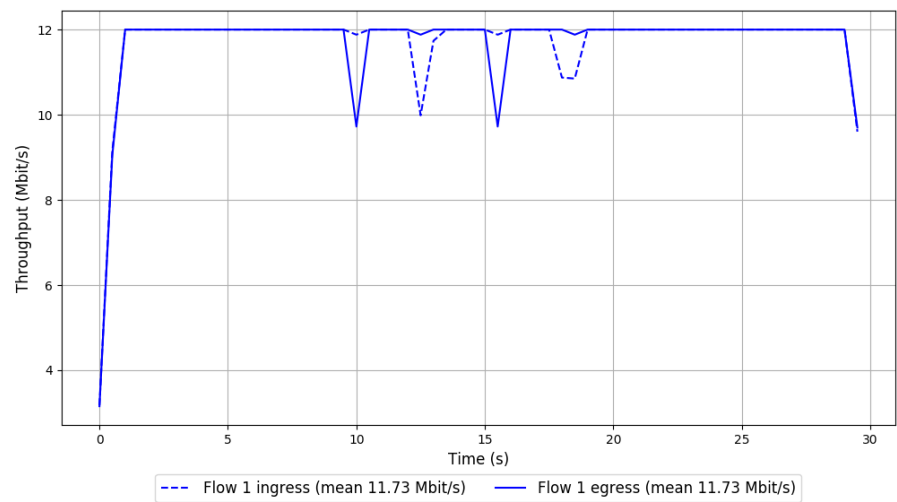
-- Flow 1:

Average throughput: 11.73 Mbit/s

95th percentile per-packet one-way delay: 51.448 ms

Loss rate: 0.00%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-17 02:16:58

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

Below is generated by plot.py at 2017-08-17 04:18:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 51.332 ms

Loss rate: 77.42%

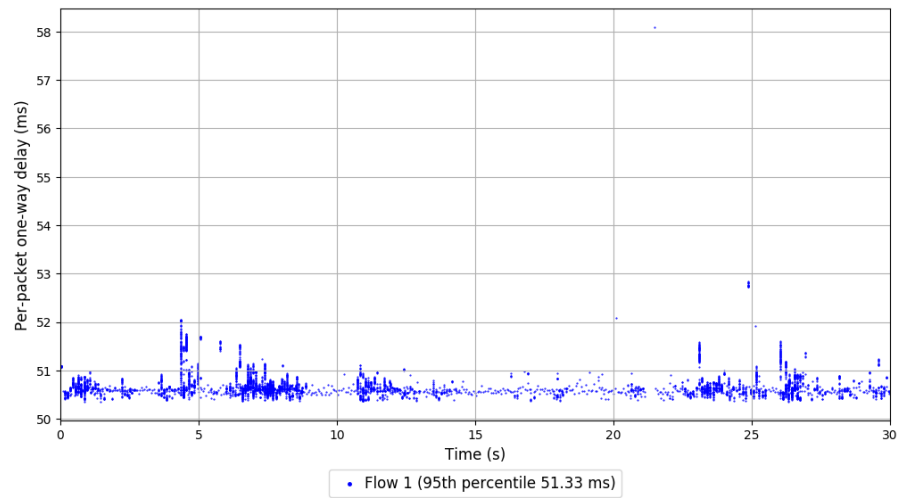
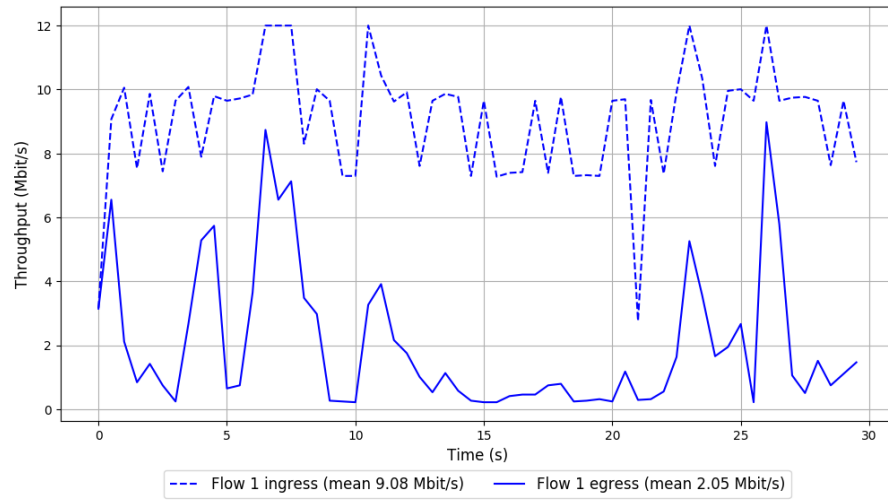
-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 51.332 ms

Loss rate: 77.42%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-17 02:27:25

End at: 2017-08-17 02:27:55

Below is generated by plot.py at 2017-08-17 04:18:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 51.043 ms

Loss rate: 95.50%

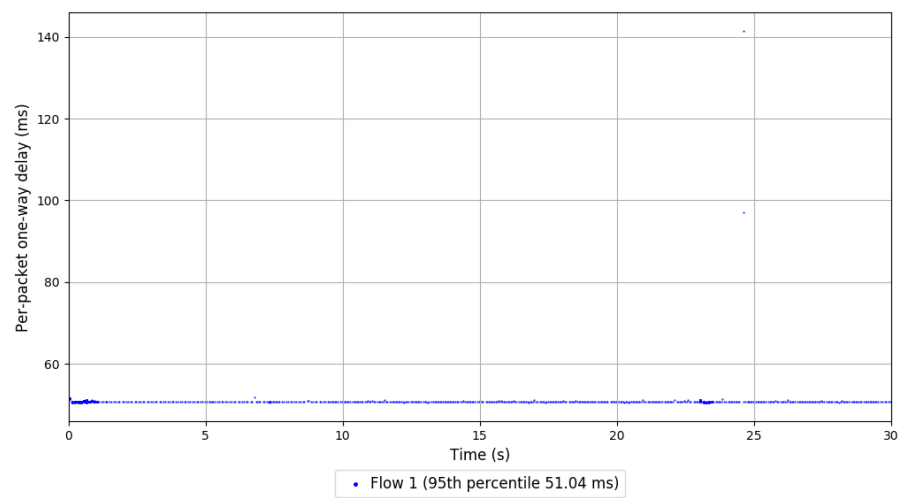
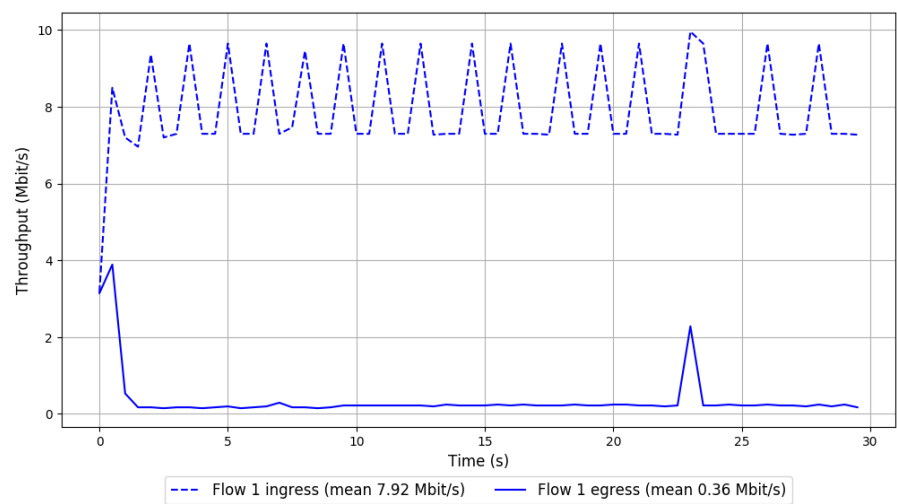
-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 51.043 ms

Loss rate: 95.50%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-17 02:37:26

End at: 2017-08-17 02:37:56

Below is generated by plot.py at 2017-08-17 04:18:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 51.440 ms

Loss rate: 94.41%

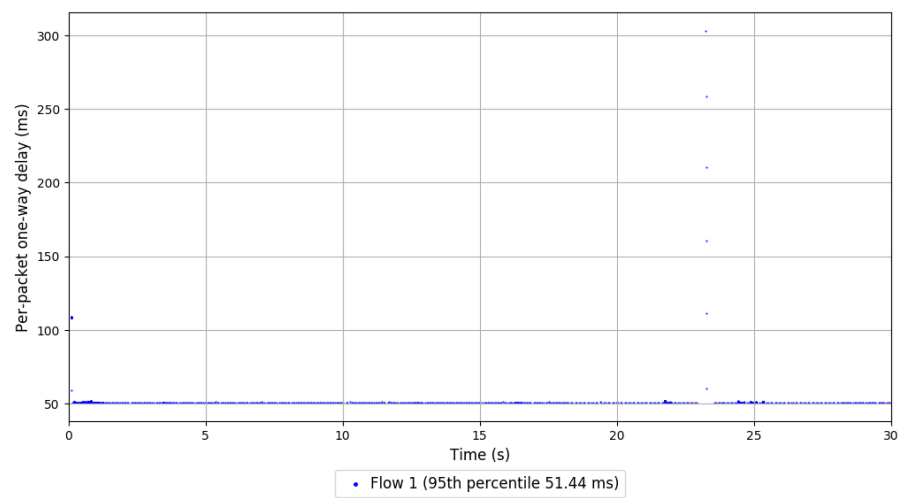
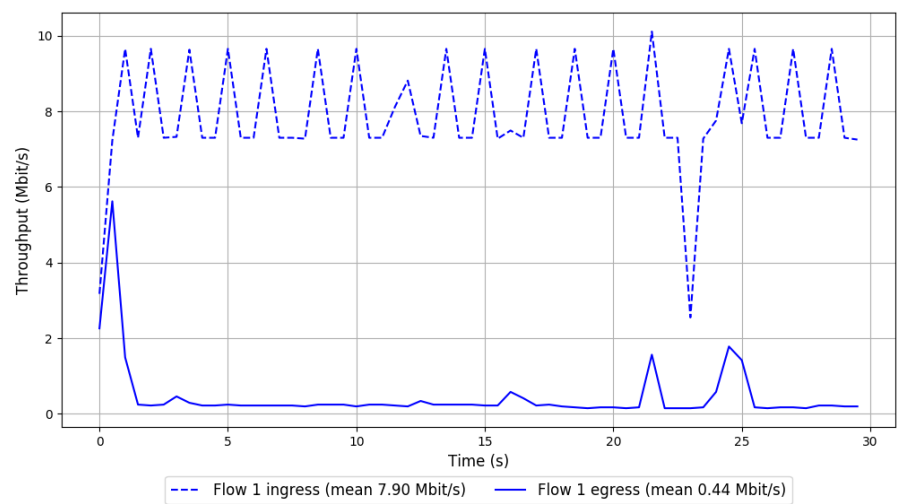
-- Flow 1:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 51.440 ms

Loss rate: 94.41%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-17 02:47:50

End at: 2017-08-17 02:48:20

Below is generated by plot.py at 2017-08-17 04:18:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.57 Mbit/s

95th percentile per-packet one-way delay: 51.408 ms

Loss rate: 0.02%

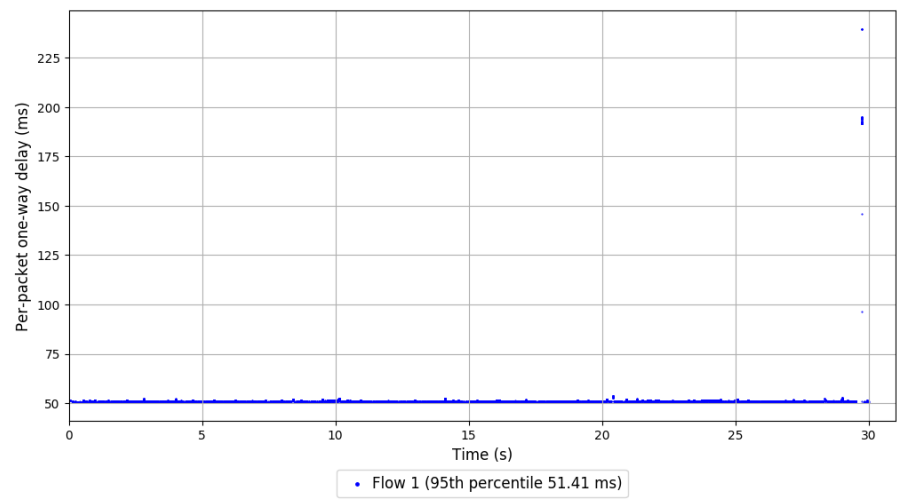
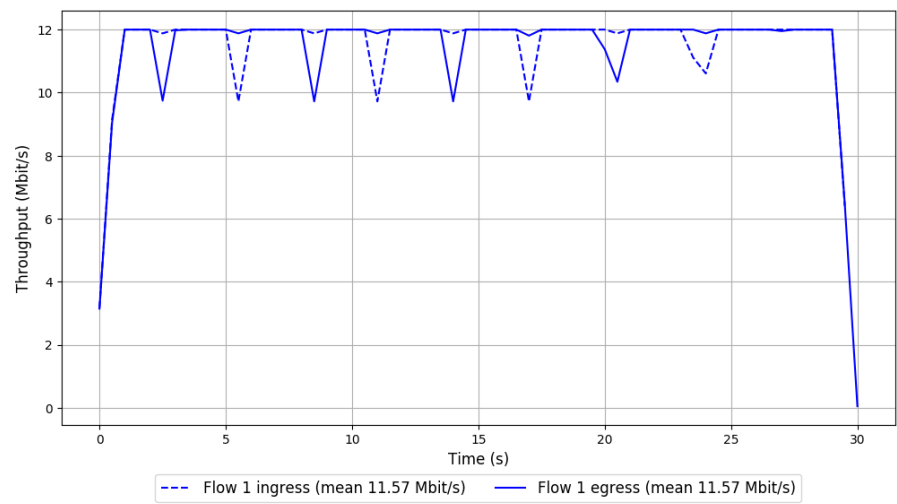
-- Flow 1:

Average throughput: 11.57 Mbit/s

95th percentile per-packet one-way delay: 51.408 ms

Loss rate: 0.02%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-08-17 02:57:48

End at: 2017-08-17 02:58:18

Below is generated by plot.py at 2017-08-17 04:18:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.62 Mbit/s

95th percentile per-packet one-way delay: 50.388 ms

Loss rate: 0.65%

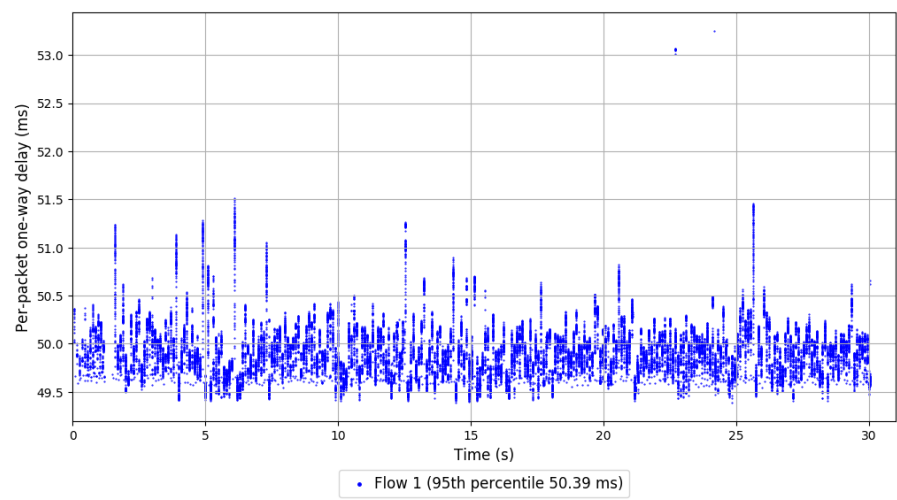
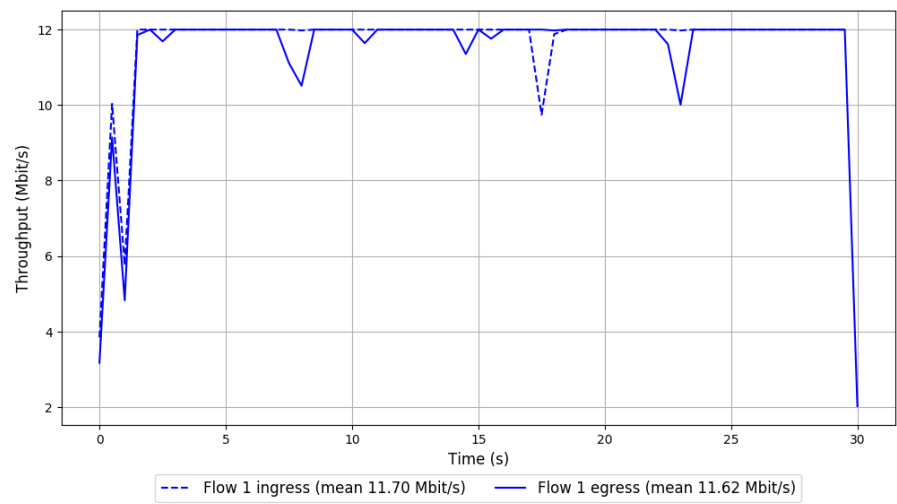
-- Flow 1:

Average throughput: 11.62 Mbit/s

95th percentile per-packet one-way delay: 50.388 ms

Loss rate: 0.65%

Run 10: Report of KohoCC — Data Link

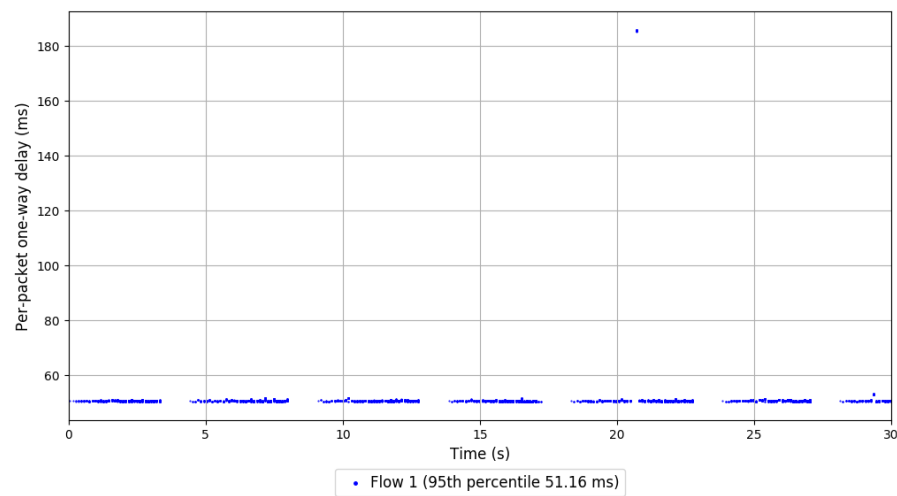
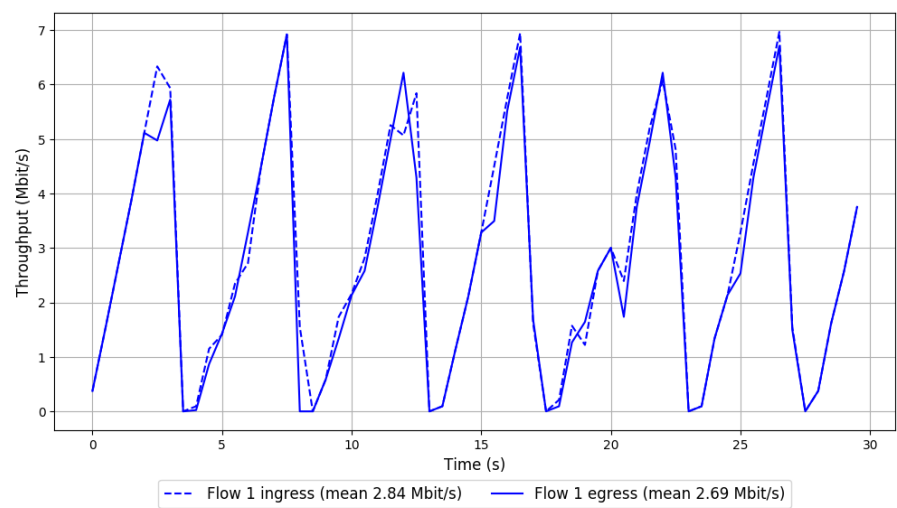


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-17 01:22:59
End at: 2017-08-17 01:23:29

# Below is generated by plot.py at 2017-08-17 04:19:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.69 Mbit/s
95th percentile per-packet one-way delay: 51.162 ms
Loss rate: 5.39%
-- Flow 1:
Average throughput: 2.69 Mbit/s
95th percentile per-packet one-way delay: 51.162 ms
Loss rate: 5.39%
```

Run 1: Report of LEDBAT — Data Link

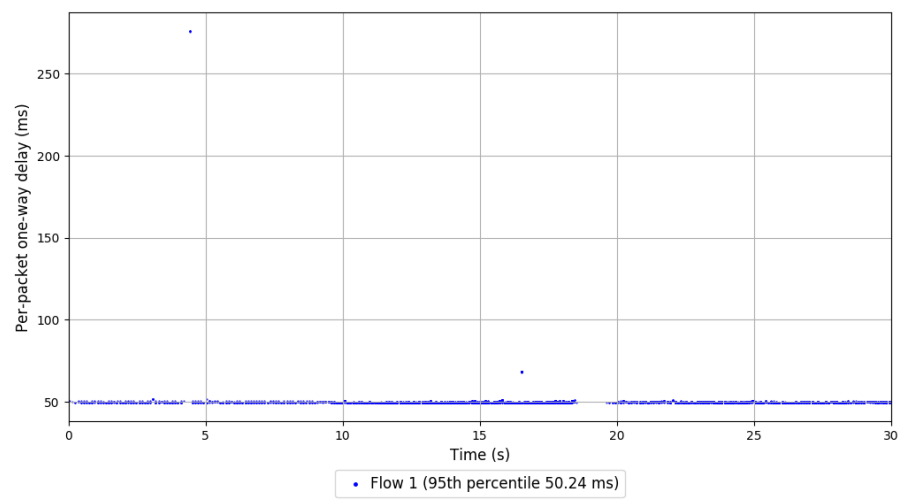
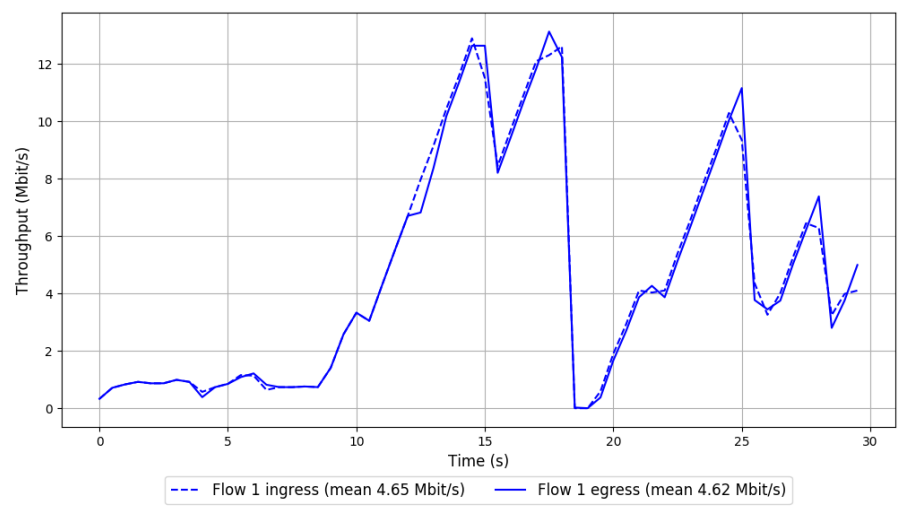


```
Run 2: Statistics of LEDBAT

Start at: 2017-08-17 01:32:45
End at: 2017-08-17 01:33:16

# Below is generated by plot.py at 2017-08-17 04:19:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.62 Mbit/s
95th percentile per-packet one-way delay: 50.240 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 4.62 Mbit/s
95th percentile per-packet one-way delay: 50.240 ms
Loss rate: 0.80%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-17 01:42:30

End at: 2017-08-17 01:43:00

Below is generated by plot.py at 2017-08-17 04:19:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 50.562 ms

Loss rate: 0.13%

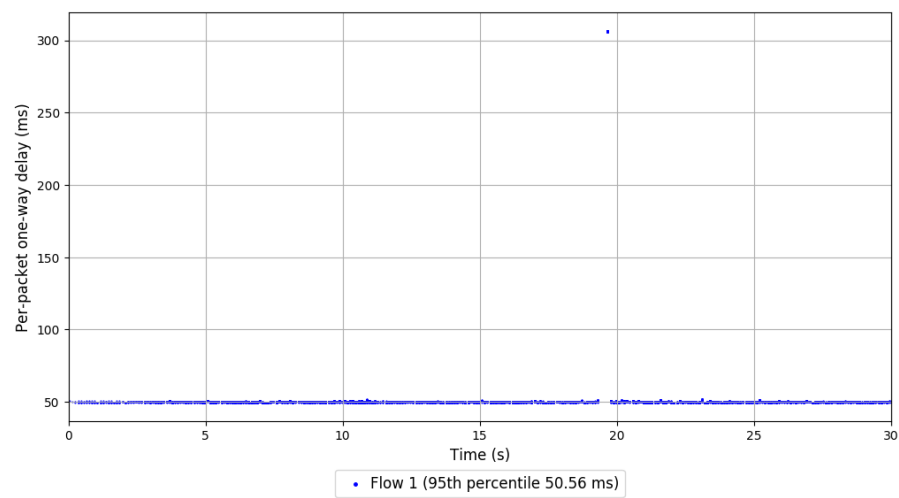
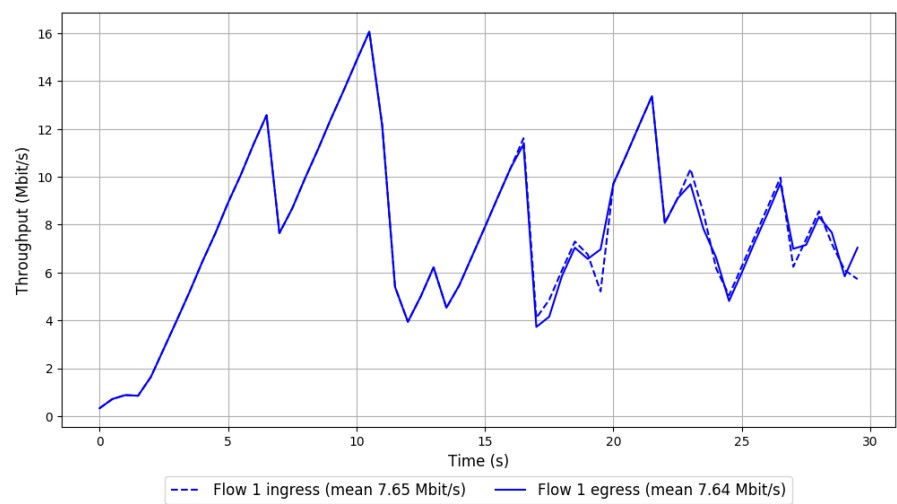
-- Flow 1:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 50.562 ms

Loss rate: 0.13%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-17 01:52:24

End at: 2017-08-17 01:52:54

Below is generated by plot.py at 2017-08-17 04:19:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 51.118 ms

Loss rate: 2.43%

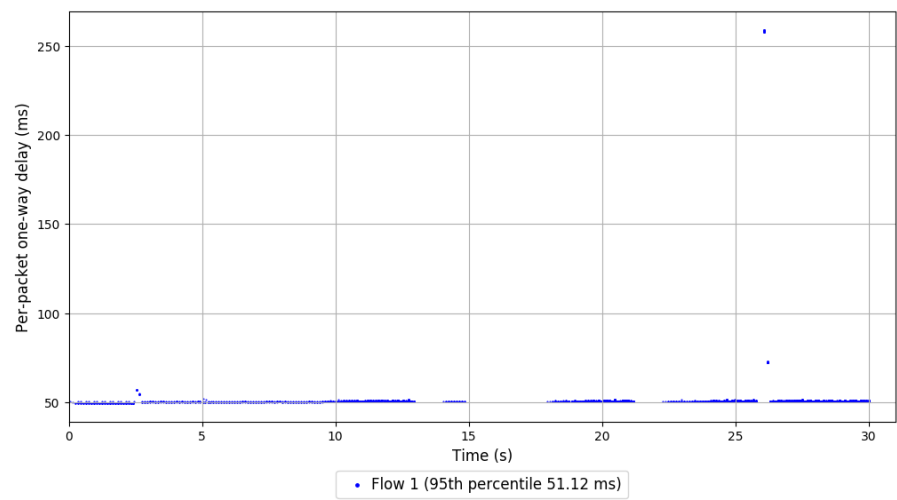
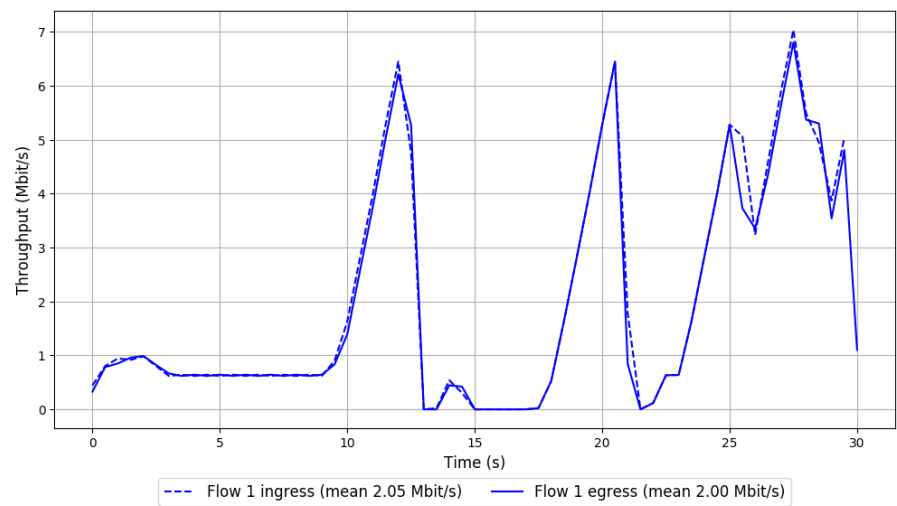
-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 51.118 ms

Loss rate: 2.43%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-08-17 02:02:52

End at: 2017-08-17 02:03:22

Below is generated by plot.py at 2017-08-17 04:19:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 51.122 ms

Loss rate: 1.92%

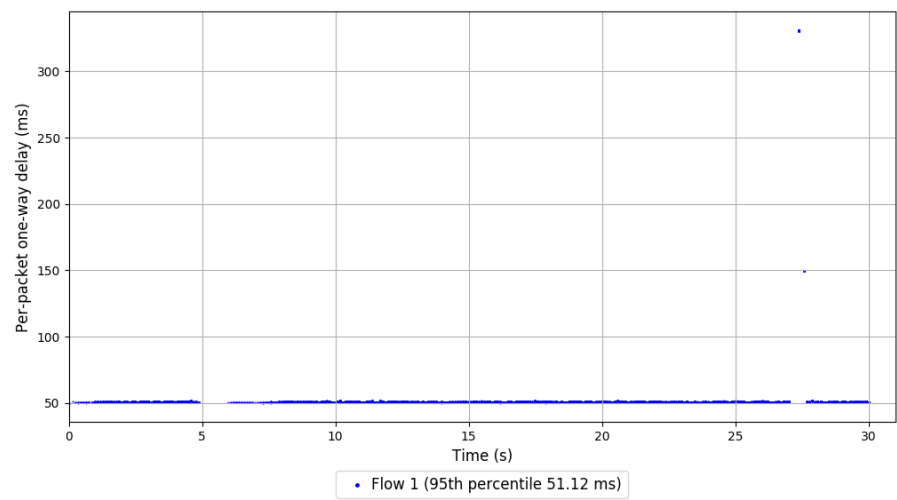
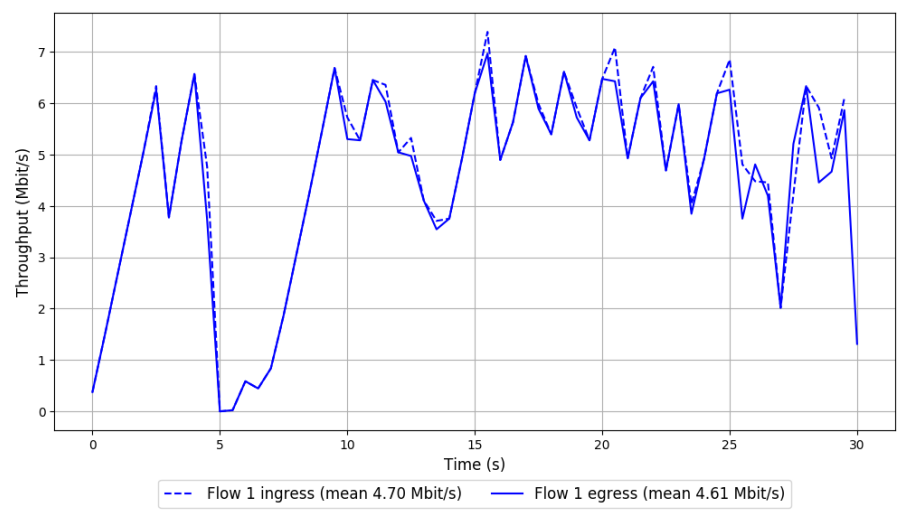
-- Flow 1:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 51.122 ms

Loss rate: 1.92%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-17 02:13:12

End at: 2017-08-17 02:13:42

Below is generated by plot.py at 2017-08-17 04:19:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.98 Mbit/s

95th percentile per-packet one-way delay: 51.466 ms

Loss rate: 0.09%

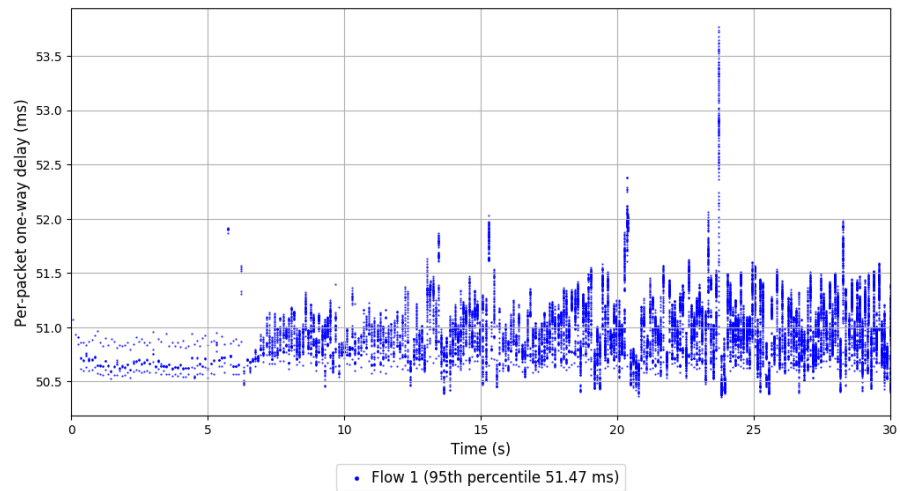
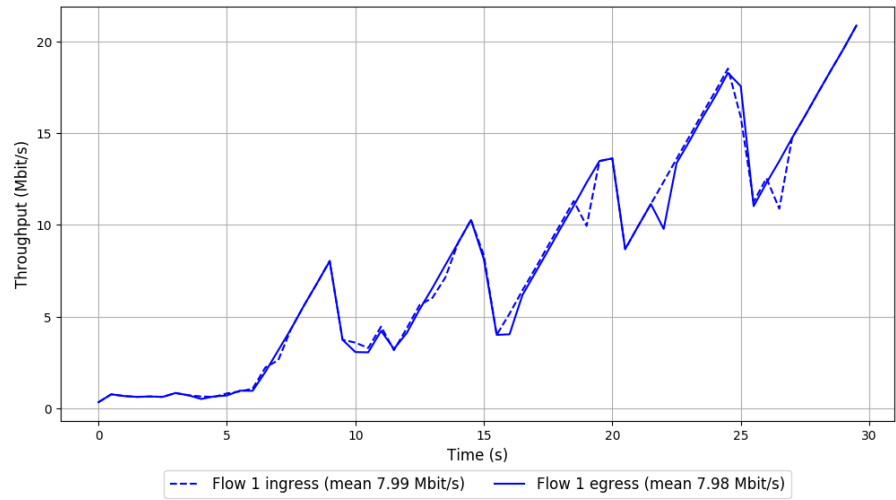
-- Flow 1:

Average throughput: 7.98 Mbit/s

95th percentile per-packet one-way delay: 51.466 ms

Loss rate: 0.09%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-17 02:23:21

End at: 2017-08-17 02:23:51

Below is generated by plot.py at 2017-08-17 04:19:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.49 Mbit/s

95th percentile per-packet one-way delay: 51.275 ms

Loss rate: 0.94%

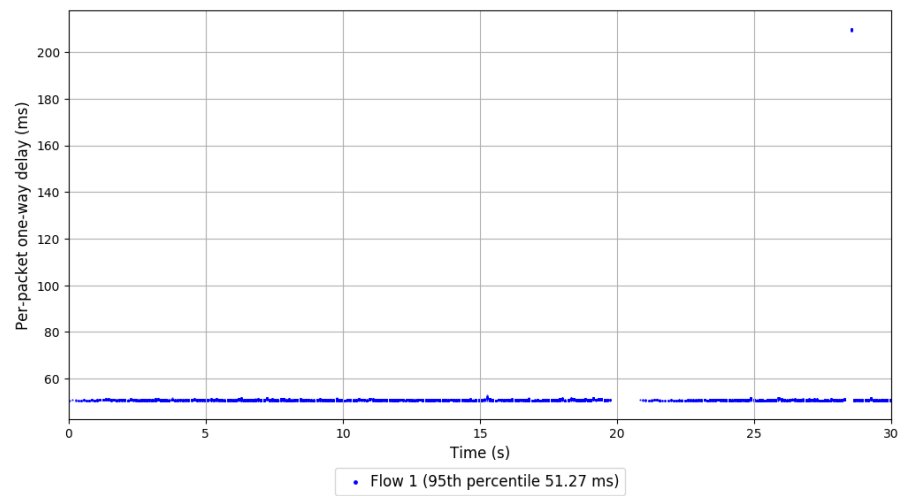
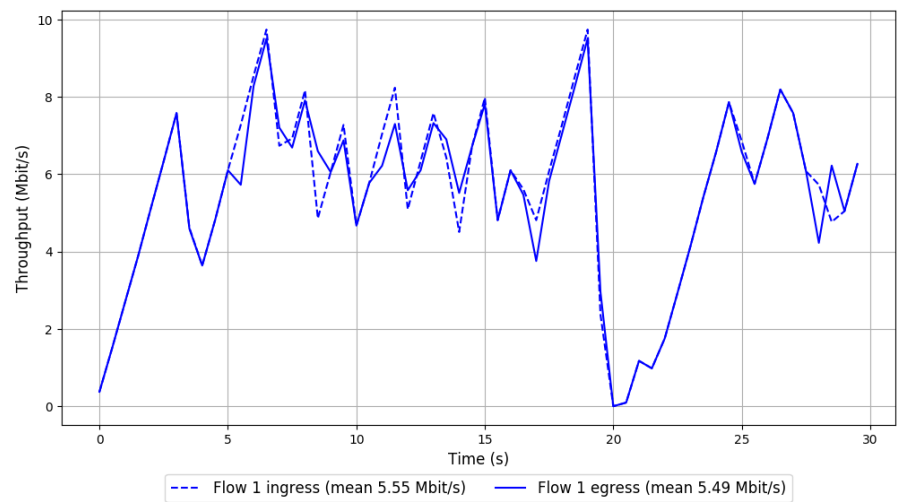
-- Flow 1:

Average throughput: 5.49 Mbit/s

95th percentile per-packet one-way delay: 51.275 ms

Loss rate: 0.94%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-08-17 02:33:25

End at: 2017-08-17 02:33:55

Below is generated by plot.py at 2017-08-17 04:19:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.08 Mbit/s

95th percentile per-packet one-way delay: 51.395 ms

Loss rate: 0.41%

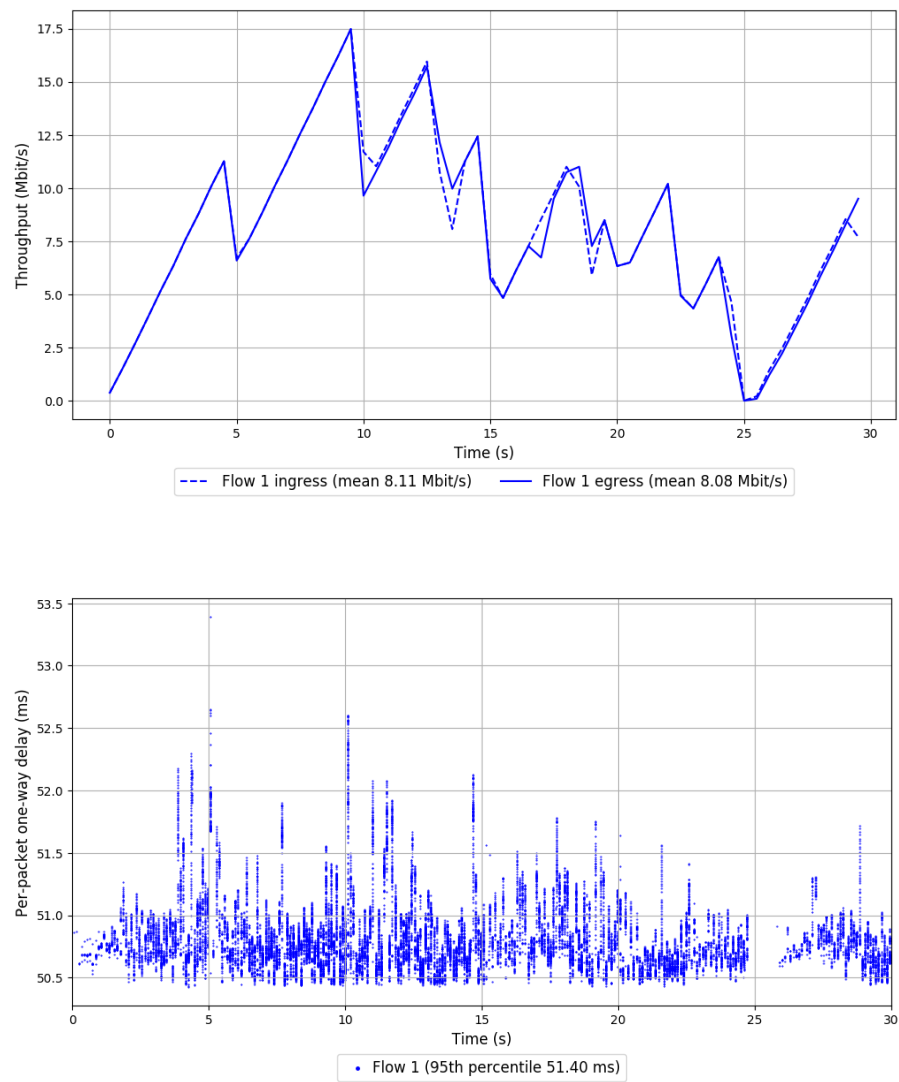
-- Flow 1:

Average throughput: 8.08 Mbit/s

95th percentile per-packet one-way delay: 51.395 ms

Loss rate: 0.41%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-17 02:43:54

End at: 2017-08-17 02:44:24

Below is generated by plot.py at 2017-08-17 04:19:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.28 Mbit/s

95th percentile per-packet one-way delay: 51.768 ms

Loss rate: 1.13%

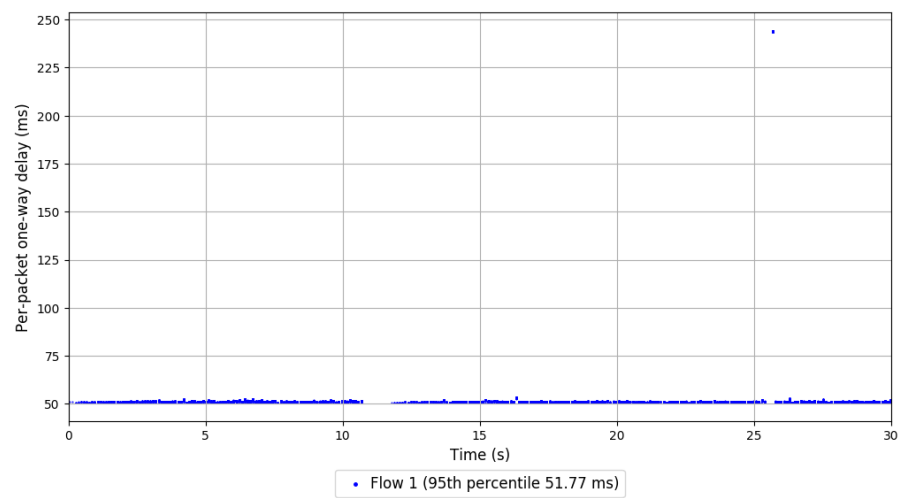
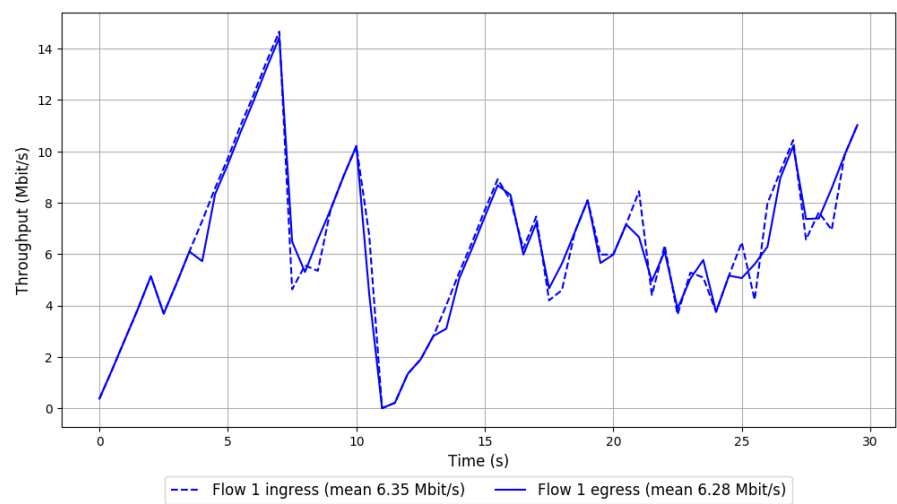
-- Flow 1:

Average throughput: 6.28 Mbit/s

95th percentile per-packet one-way delay: 51.768 ms

Loss rate: 1.13%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-08-17 02:53:47

End at: 2017-08-17 02:54:17

Below is generated by plot.py at 2017-08-17 04:19:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.61 Mbit/s

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

Loss rate: 0.09%

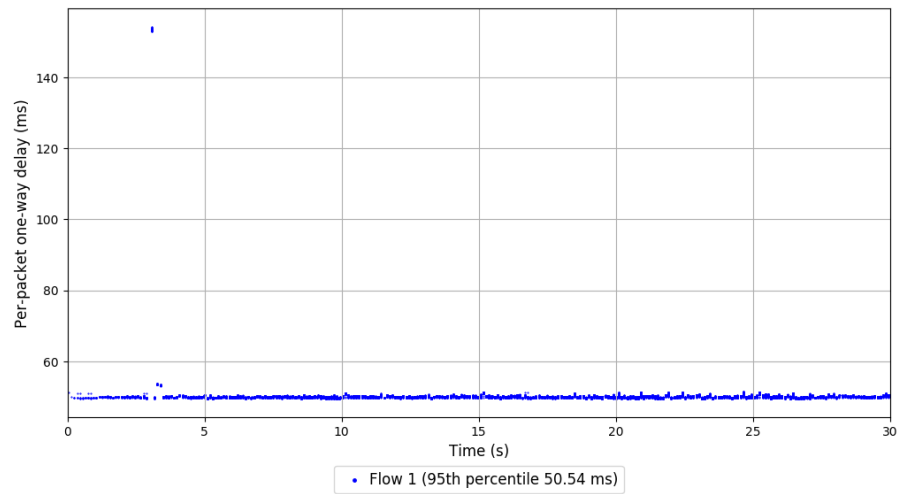
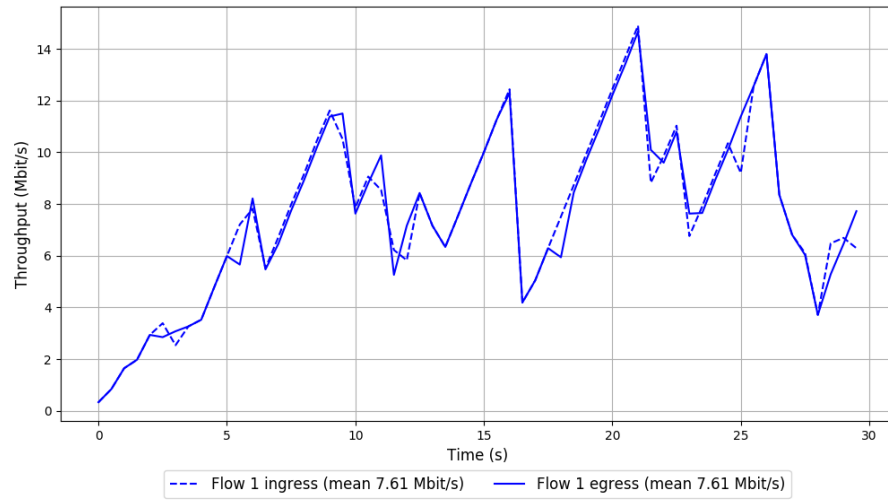
-- Flow 1:

Average throughput: 7.61 Mbit/s

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

Loss rate: 0.09%

Run 10: Report of LEDBAT — Data Link

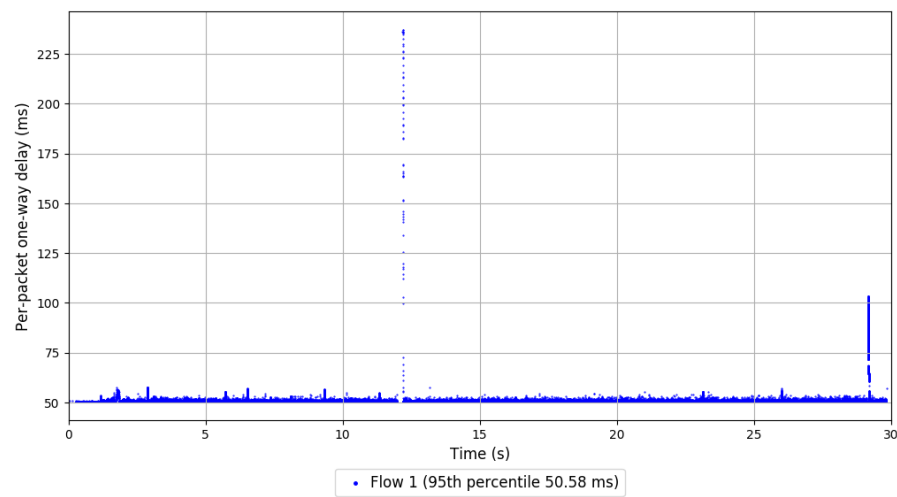
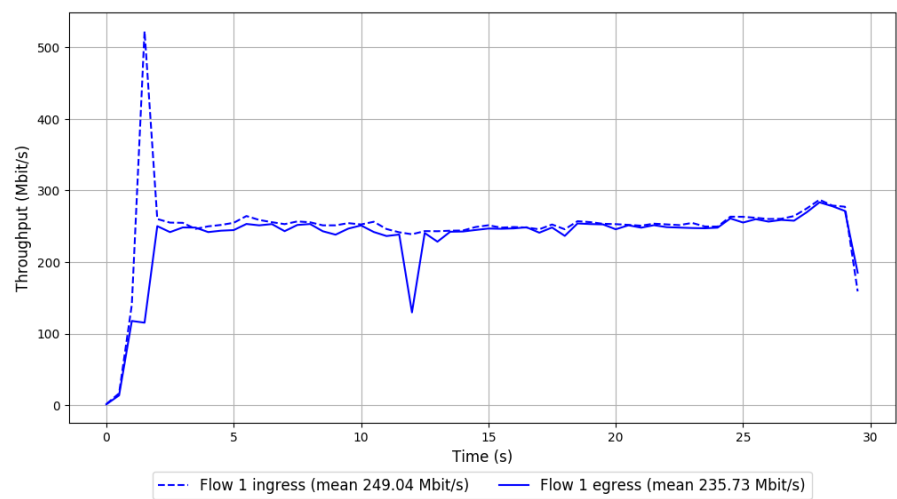


```
Run 1: Statistics of PCC

Start at: 2017-08-17 01:27:37
End at: 2017-08-17 01:28:07

# Below is generated by plot.py at 2017-08-17 04:19:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 235.73 Mbit/s
95th percentile per-packet one-way delay: 50.582 ms
Loss rate: 5.35%
-- Flow 1:
Average throughput: 235.73 Mbit/s
95th percentile per-packet one-way delay: 50.582 ms
Loss rate: 5.35%
```


Run 1: Report of PCC — Data Link

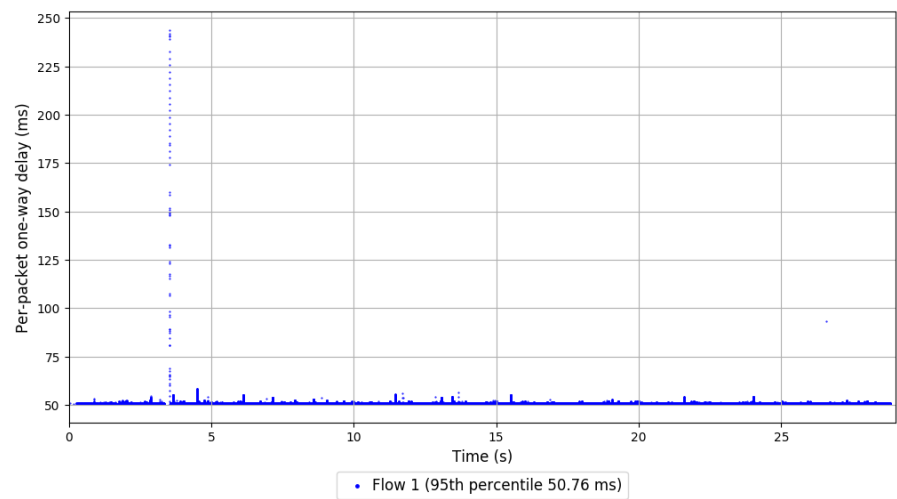
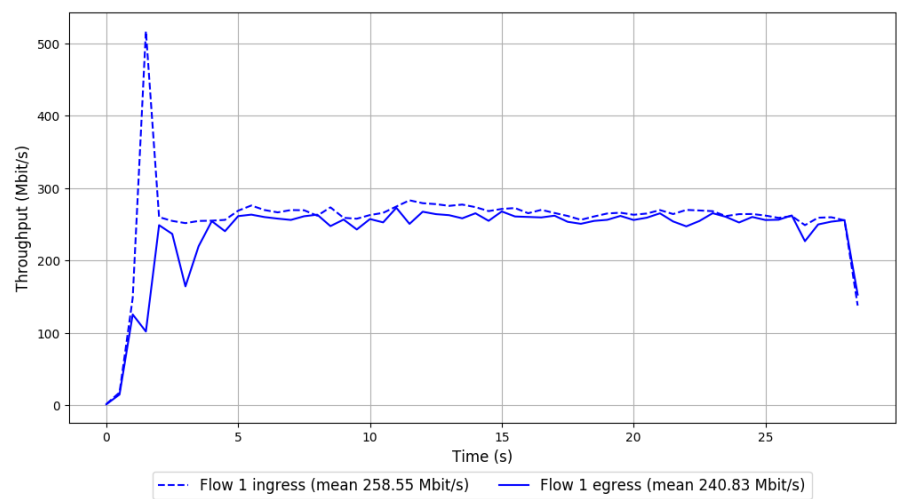


```
Run 2: Statistics of PCC

Start at: 2017-08-17 01:37:14
End at: 2017-08-17 01:37:45

# Below is generated by plot.py at 2017-08-17 04:19:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 240.83 Mbit/s
95th percentile per-packet one-way delay: 50.756 ms
Loss rate: 6.89%
-- Flow 1:
Average throughput: 240.83 Mbit/s
95th percentile per-packet one-way delay: 50.756 ms
Loss rate: 6.89%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-17 01:47:05

End at: 2017-08-17 01:47:35

Below is generated by plot.py at 2017-08-17 04:21:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 482.62 Mbit/s

95th percentile per-packet one-way delay: 75.835 ms

Loss rate: 3.44%

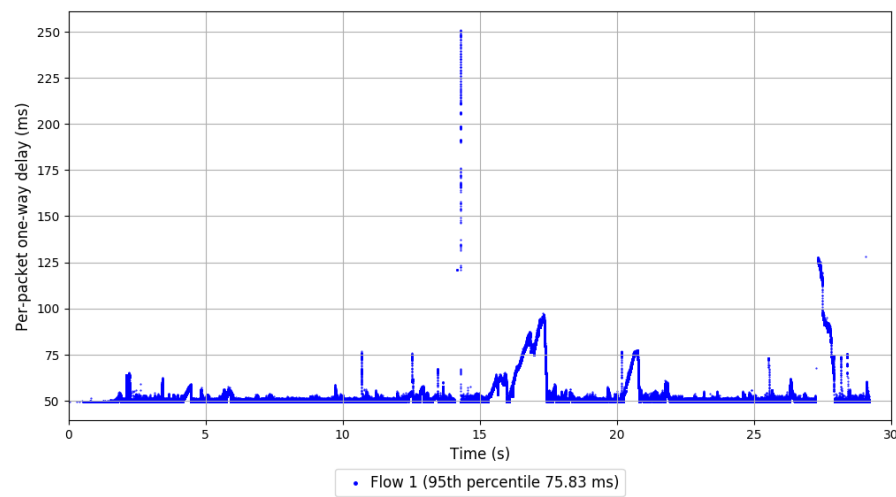
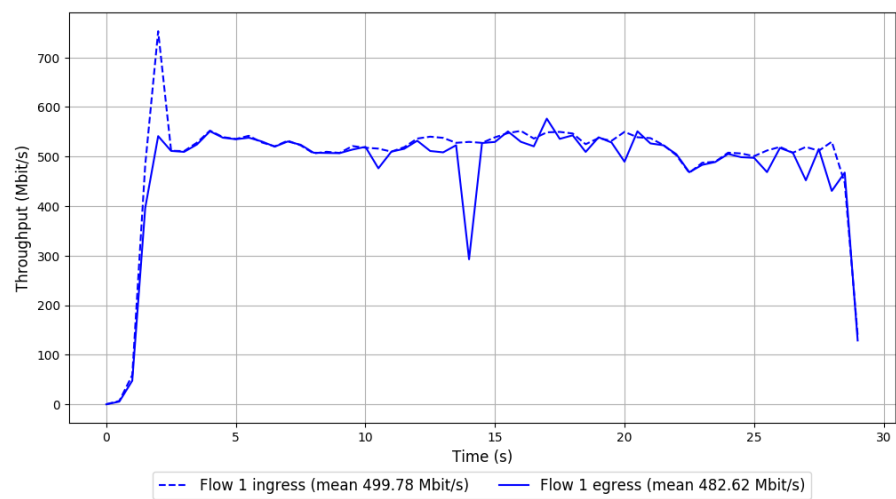
-- Flow 1:

Average throughput: 482.62 Mbit/s

95th percentile per-packet one-way delay: 75.835 ms

Loss rate: 3.44%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-08-17 01:57:09

End at: 2017-08-17 01:57:39

Below is generated by plot.py at 2017-08-17 04:21:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 460.47 Mbit/s

95th percentile per-packet one-way delay: 84.944 ms

Loss rate: 8.78%

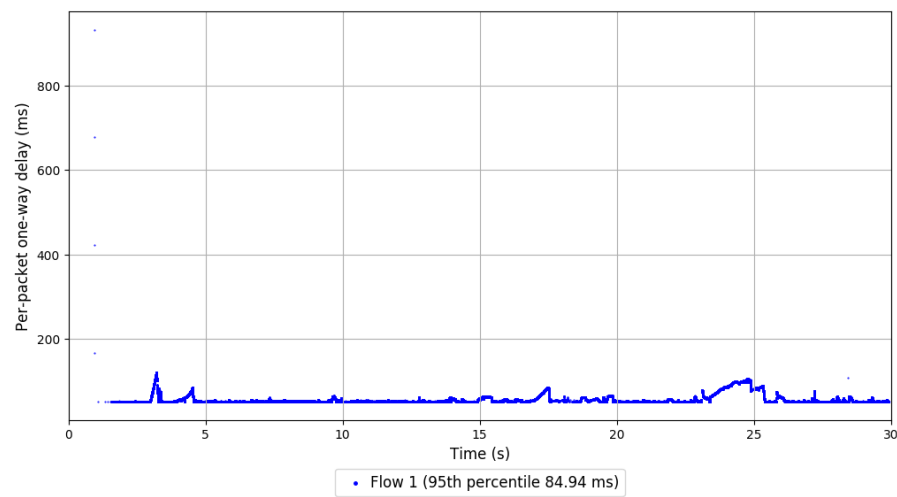
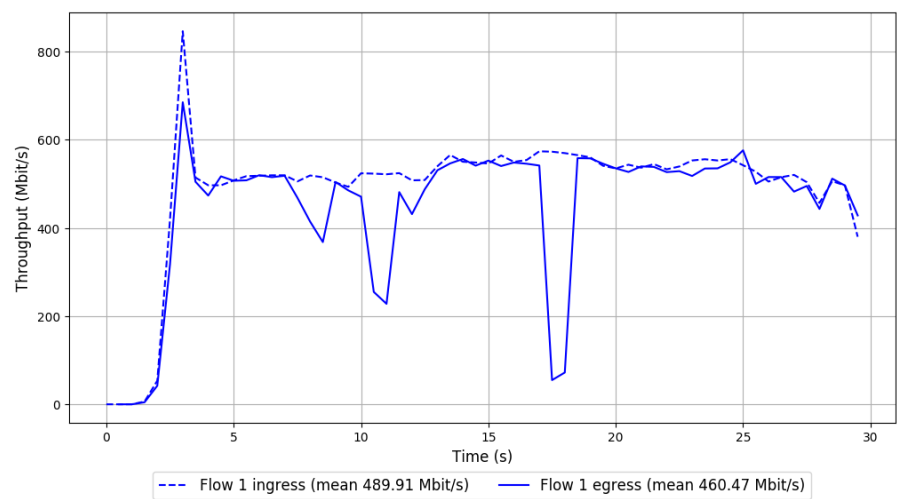
-- Flow 1:

Average throughput: 460.47 Mbit/s

95th percentile per-packet one-way delay: 84.944 ms

Loss rate: 8.78%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-17 02:07:23

End at: 2017-08-17 02:07:53

Below is generated by plot.py at 2017-08-17 04:22:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 428.87 Mbit/s

95th percentile per-packet one-way delay: 55.436 ms

Loss rate: 2.68%

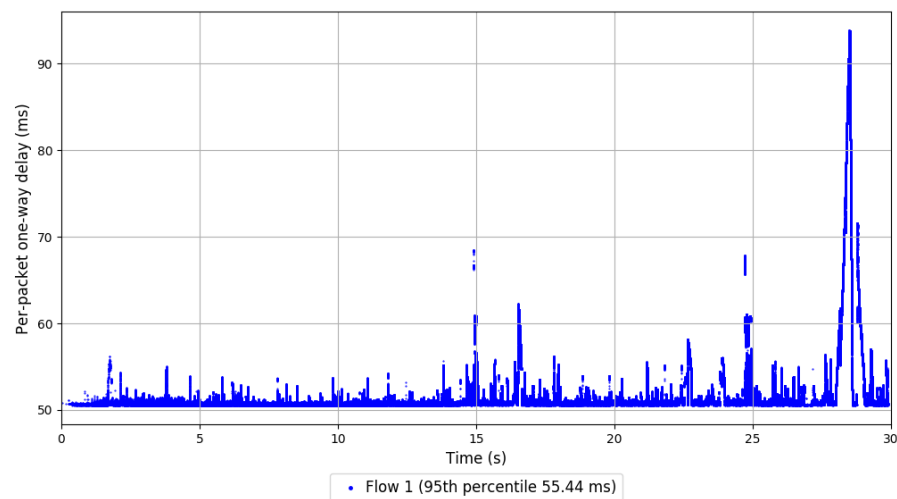
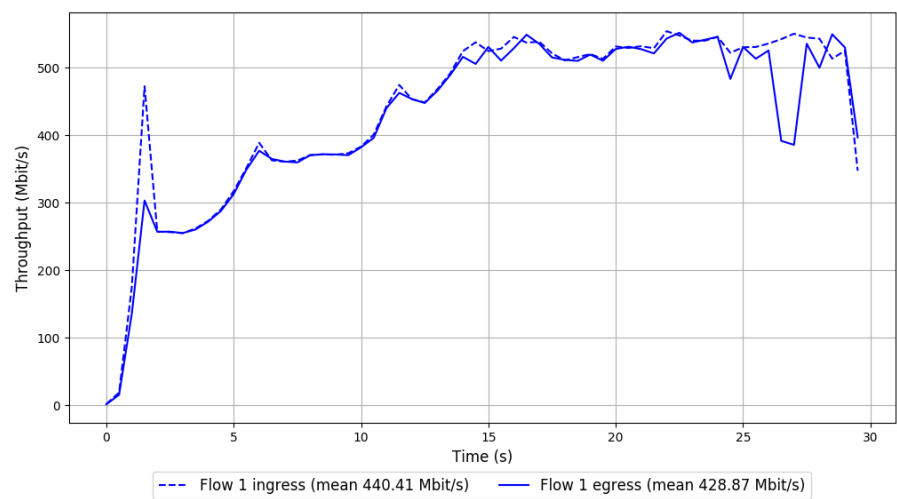
-- Flow 1:

Average throughput: 428.87 Mbit/s

95th percentile per-packet one-way delay: 55.436 ms

Loss rate: 2.68%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-17 02:17:35

End at: 2017-08-17 02:18:05

Below is generated by plot.py at 2017-08-17 04:22:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 385.60 Mbit/s

95th percentile per-packet one-way delay: 52.251 ms

Loss rate: 5.31%

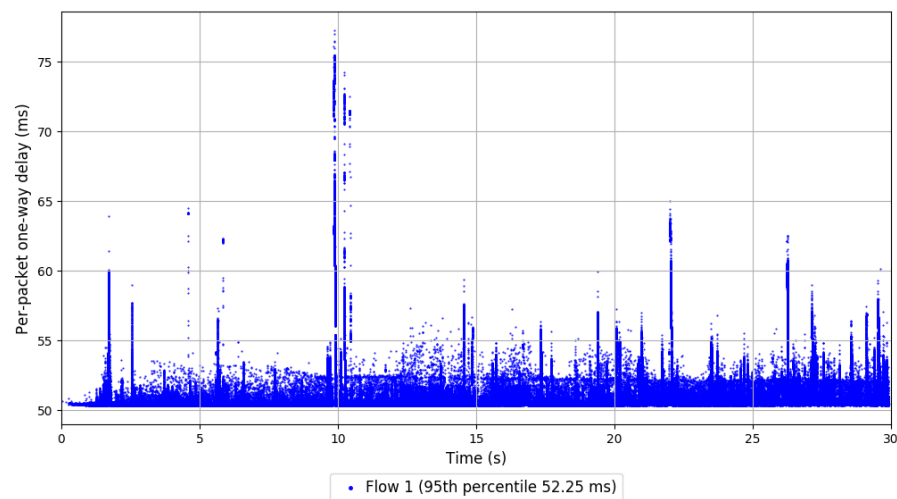
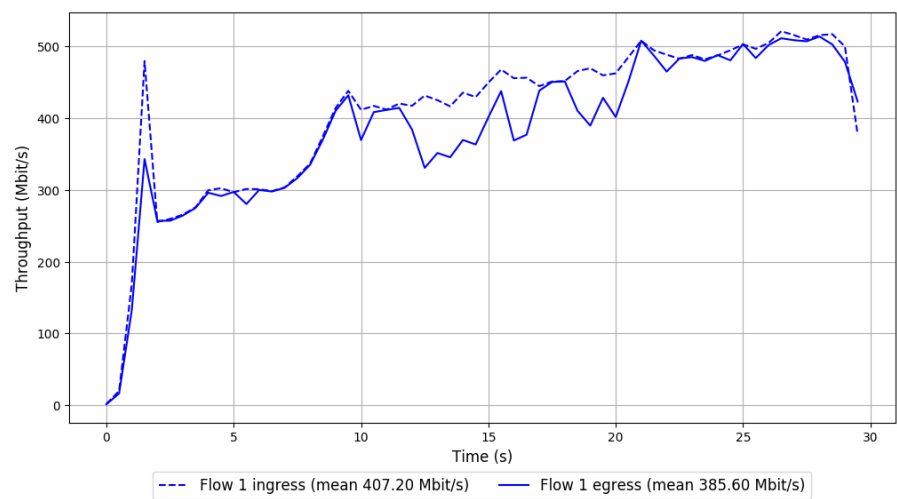
-- Flow 1:

Average throughput: 385.60 Mbit/s

95th percentile per-packet one-way delay: 52.251 ms

Loss rate: 5.31%

Run 6: Report of PCC — Data Link

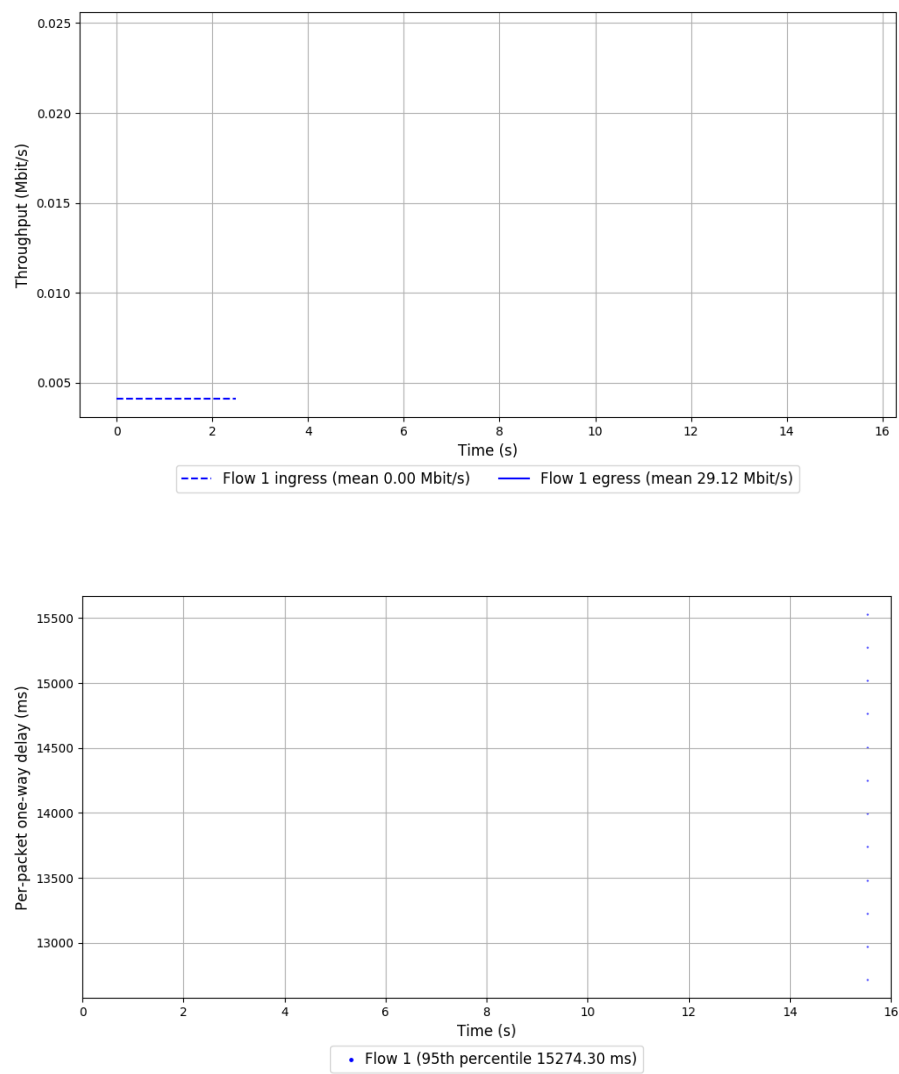


Run 7: Statistics of PCC

Start at: 2017-08-17 02:28:02

End at: 2017-08-17 02:28:32

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-17 02:38:03

End at: 2017-08-17 02:38:33

Below is generated by plot.py at 2017-08-17 04:23:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 508.57 Mbit/s

95th percentile per-packet one-way delay: 56.725 ms

Loss rate: 4.02%

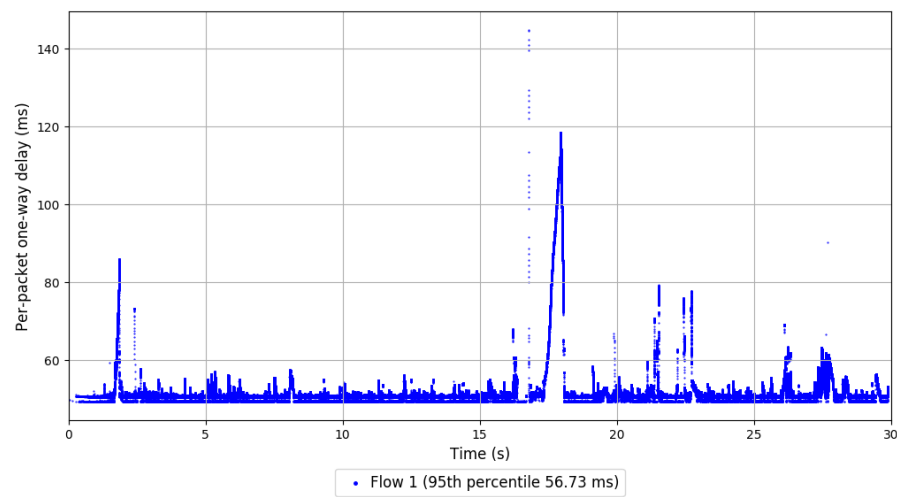
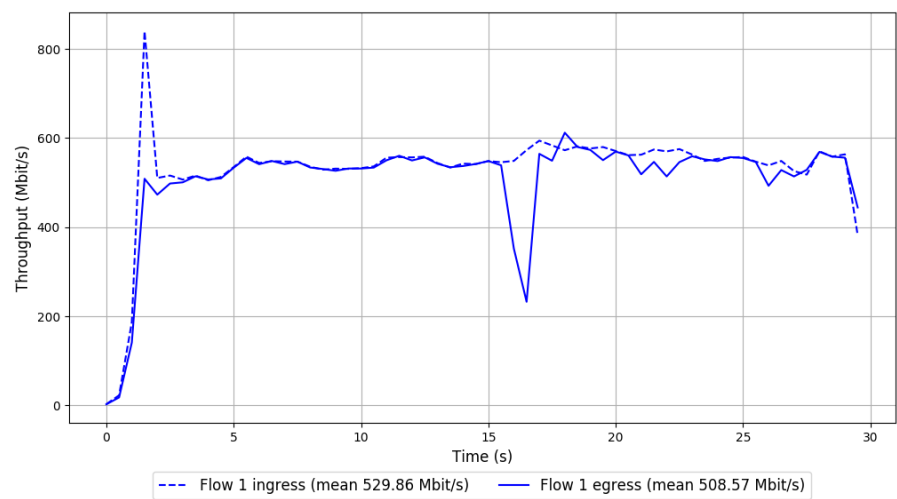
-- Flow 1:

Average throughput: 508.57 Mbit/s

95th percentile per-packet one-way delay: 56.725 ms

Loss rate: 4.02%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-17 02:48:28

End at: 2017-08-17 02:48:58

Below is generated by plot.py at 2017-08-17 04:23:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 256.03 Mbit/s

95th percentile per-packet one-way delay: 50.767 ms

Loss rate: 6.71%

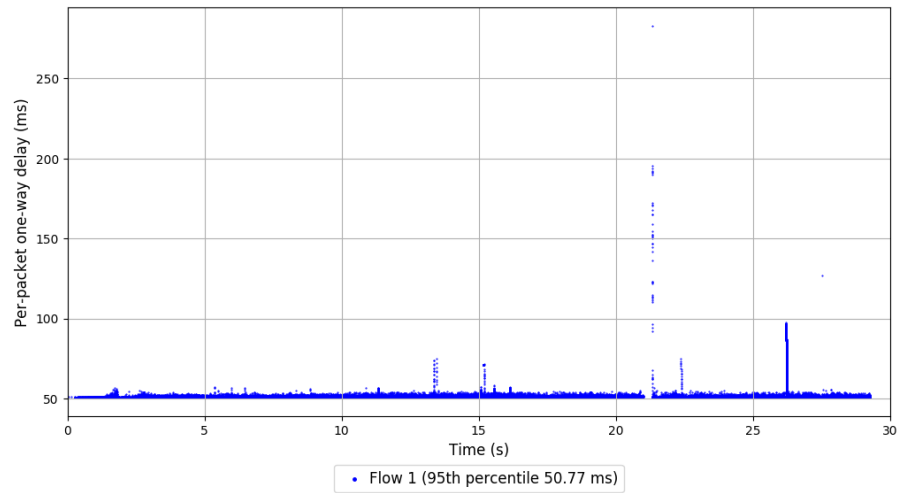
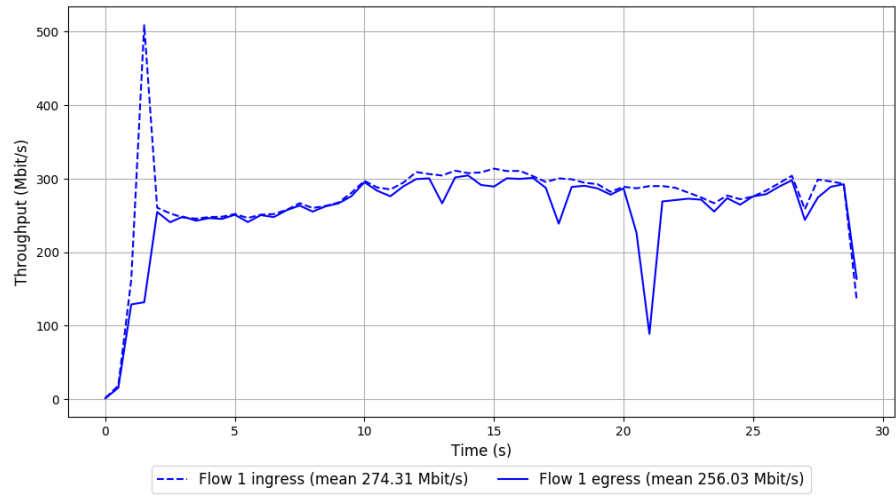
-- Flow 1:

Average throughput: 256.03 Mbit/s

95th percentile per-packet one-way delay: 50.767 ms

Loss rate: 6.71%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-17 02:58:26

End at: 2017-08-17 02:58:56

Below is generated by plot.py at 2017-08-17 04:23:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.37 Mbit/s

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

Loss rate: 7.79%

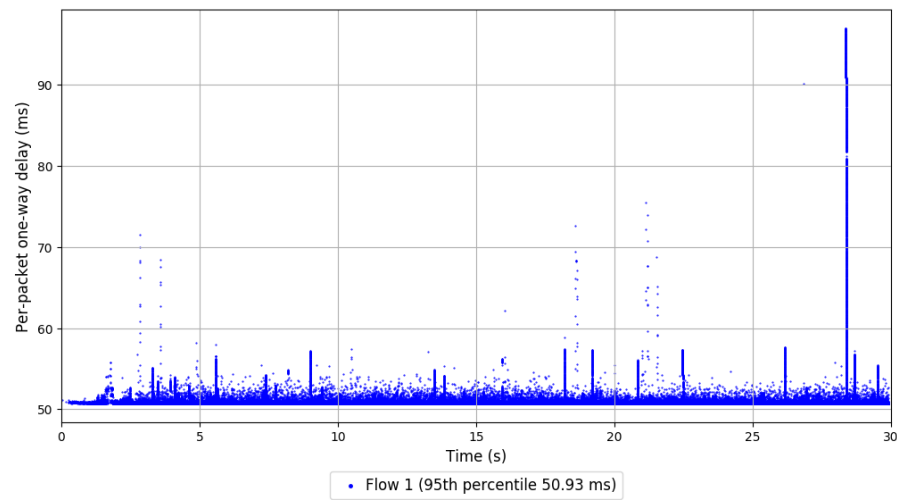
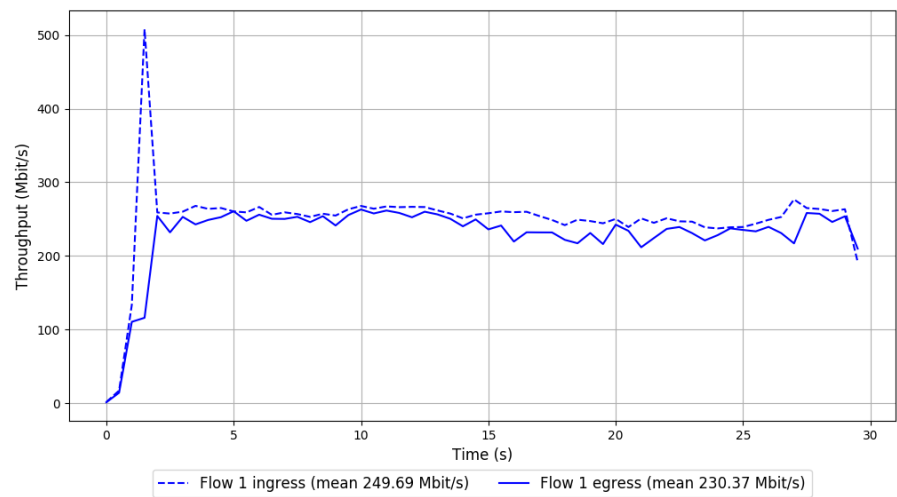
-- Flow 1:

Average throughput: 230.37 Mbit/s

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

Loss rate: 7.79%

Run 10: Report of PCC — Data Link

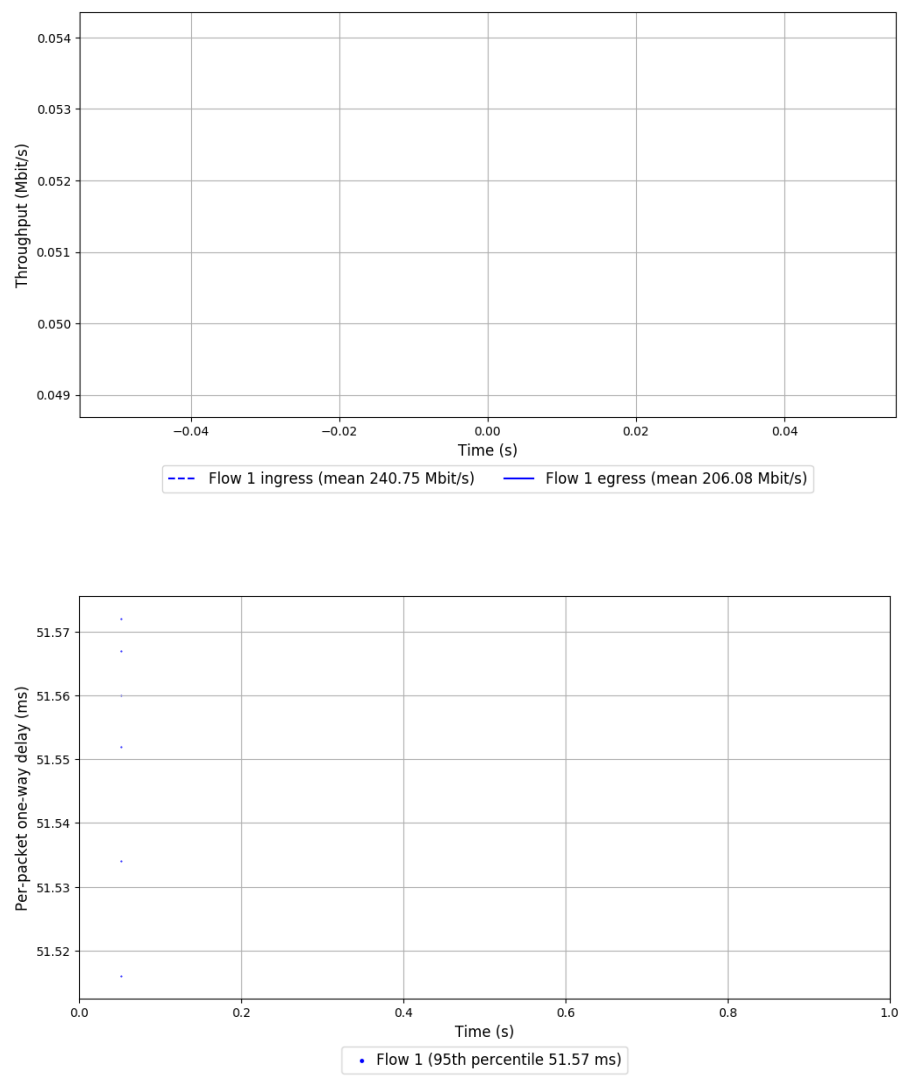


Run 1: Statistics of QUIC Cubic

Start at: 2017-08-17 01:29:40

End at: 2017-08-17 01:30:10

Run 1: Report of QUIC Cubic — Data Link

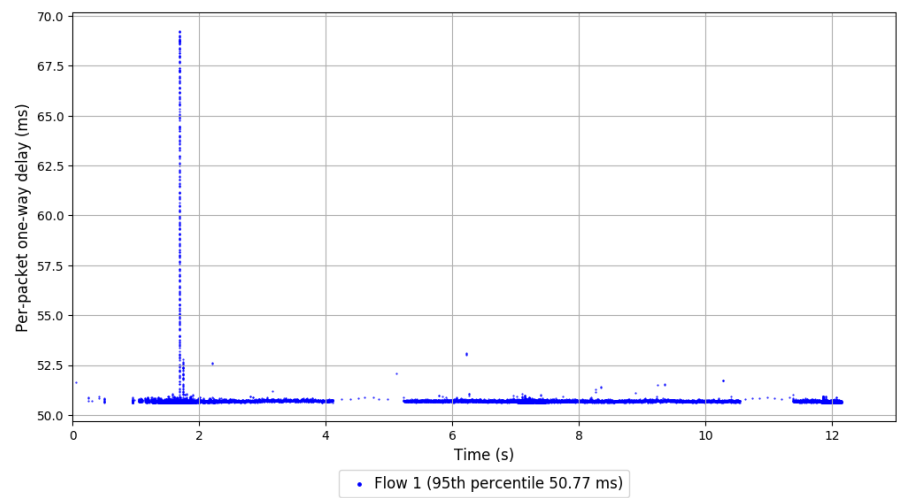
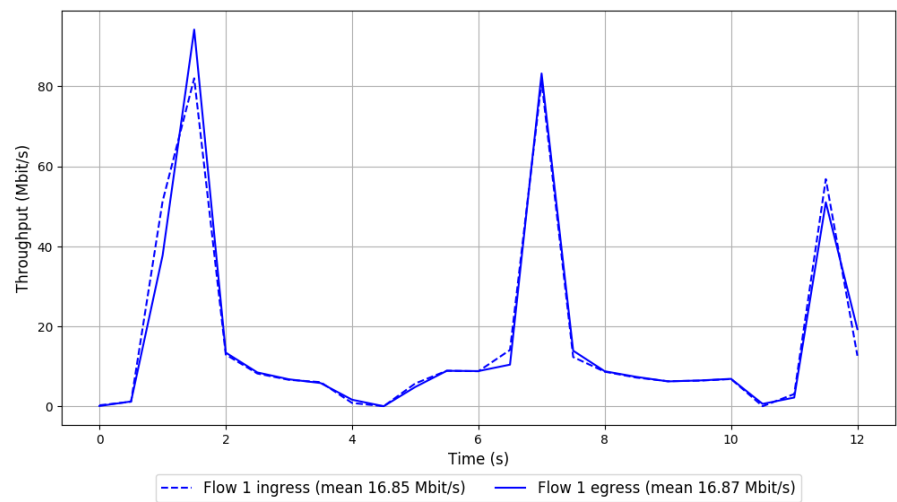


Run 2: Statistics of QUIC Cubic

Start at: 2017-08-17 01:39:24

End at: 2017-08-17 01:39:55

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-17 01:49:16

End at: 2017-08-17 01:49:46

Below is generated by plot.py at 2017-08-17 04:23:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.05 Mbit/s

95th percentile per-packet one-way delay: 50.598 ms

Loss rate: 0.00%

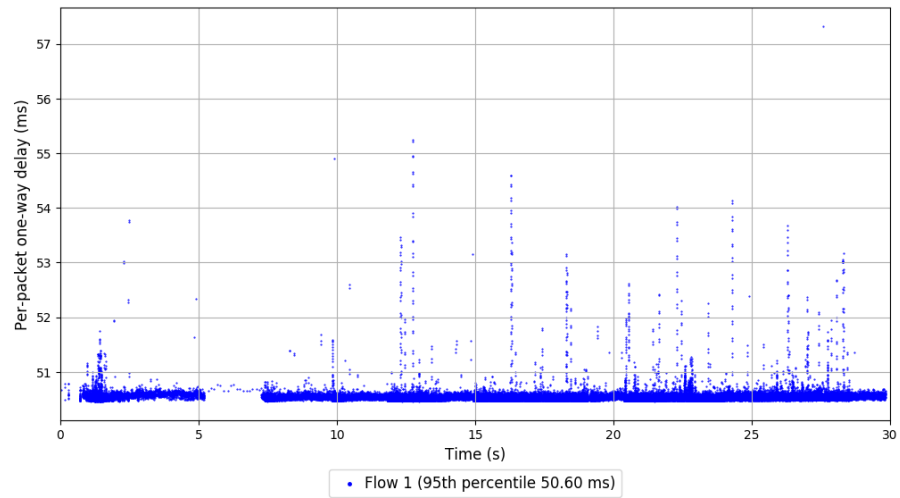
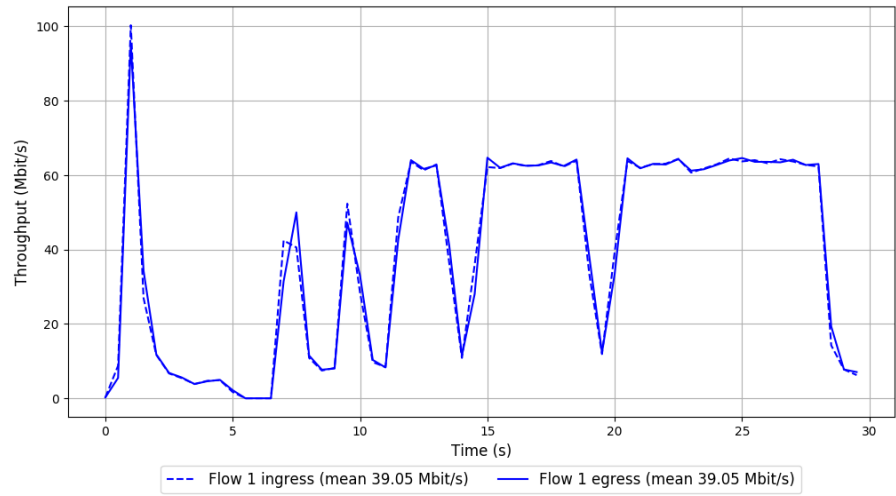
-- Flow 1:

Average throughput: 39.05 Mbit/s

95th percentile per-packet one-way delay: 50.598 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-17 01:59:38

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

Below is generated by plot.py at 2017-08-17 04:23:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.90 Mbit/s

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

Loss rate: 0.00%

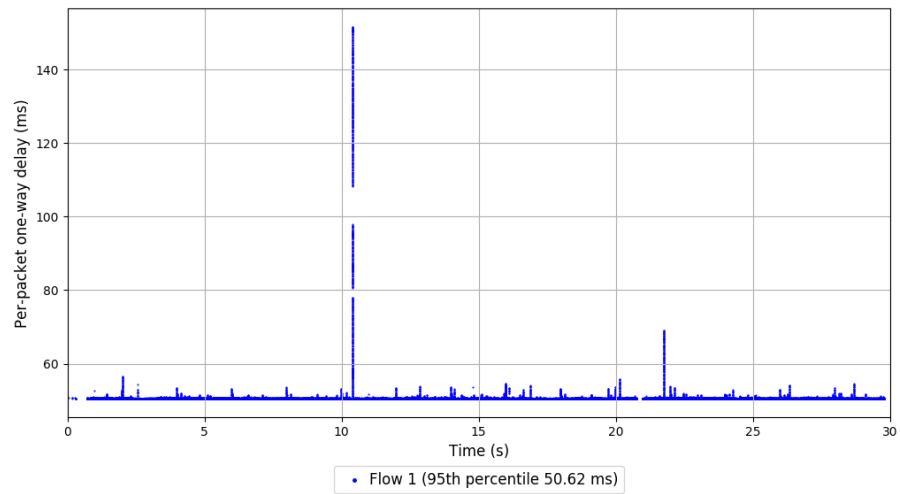
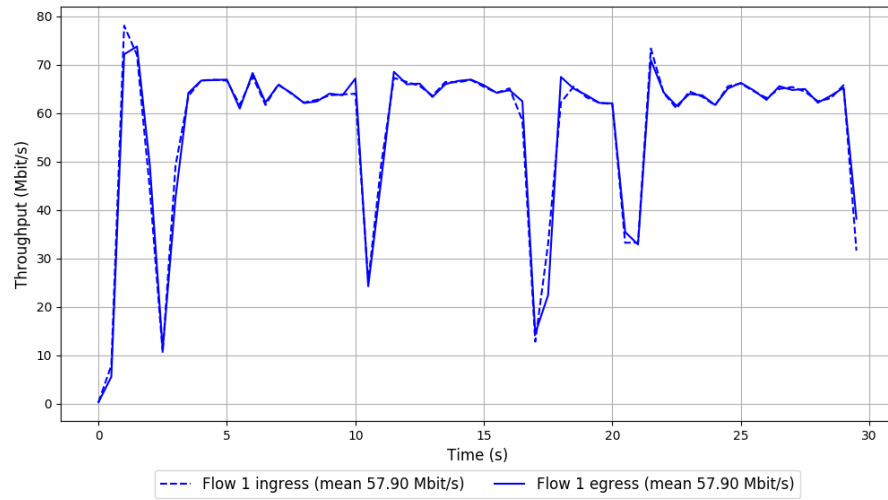
-- Flow 1:

Average throughput: 57.90 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-08-17 02:09:59

End at: 2017-08-17 02:10:29

Below is generated by plot.py at 2017-08-17 04:24:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.16 Mbit/s

95th percentile per-packet one-way delay: 50.497 ms

Loss rate: 0.00%

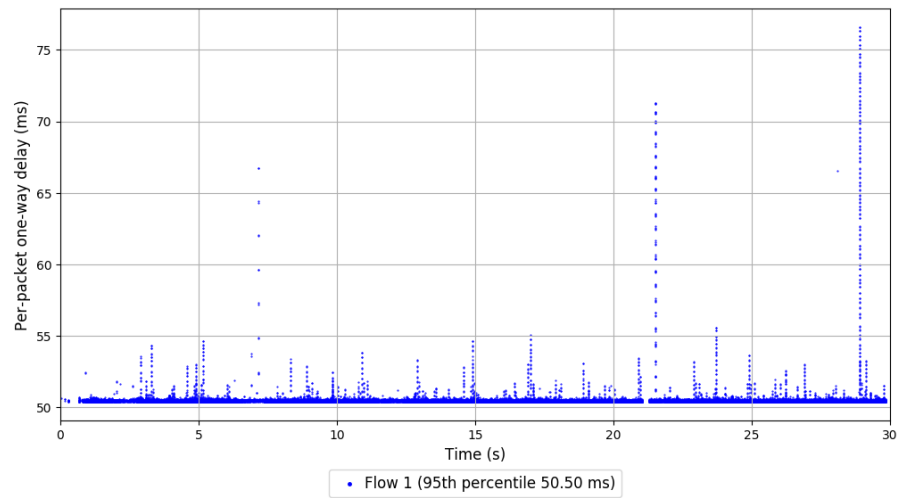
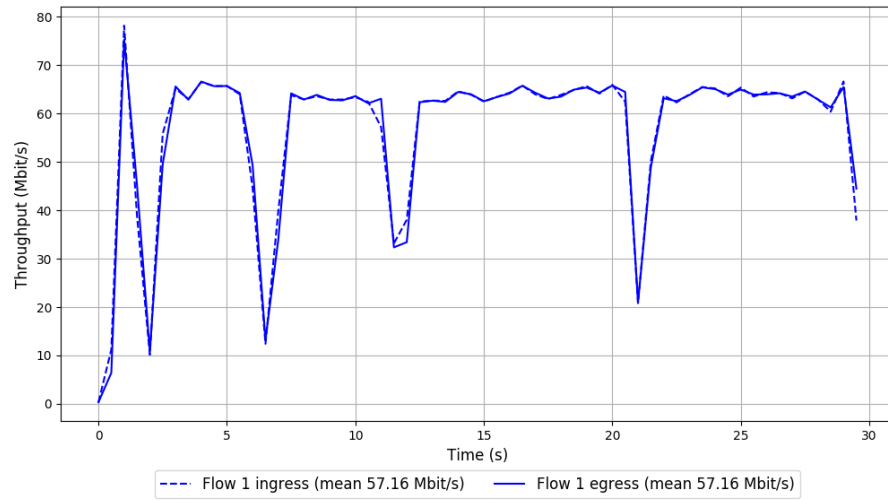
-- Flow 1:

Average throughput: 57.16 Mbit/s

95th percentile per-packet one-way delay: 50.497 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-17 02:20:10

End at: 2017-08-17 02:20:40

Below is generated by plot.py at 2017-08-17 04:24:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.18 Mbit/s

95th percentile per-packet one-way delay: 51.194 ms

Loss rate: 0.00%

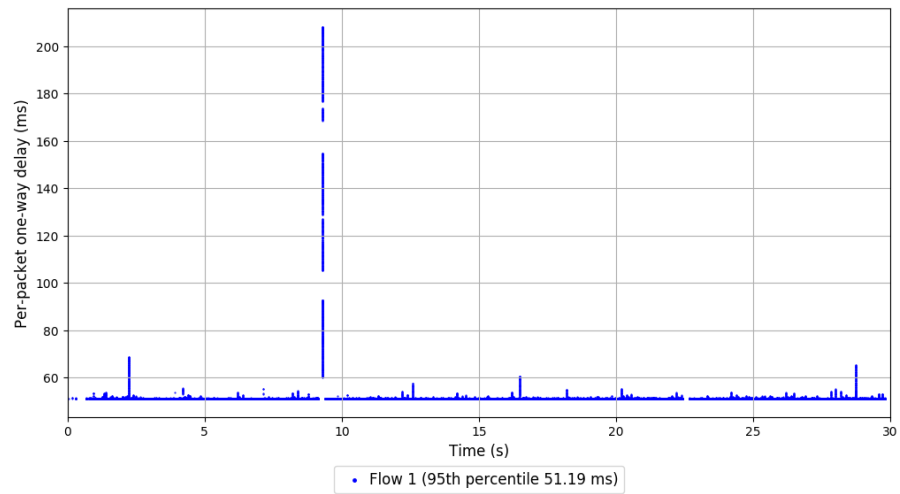
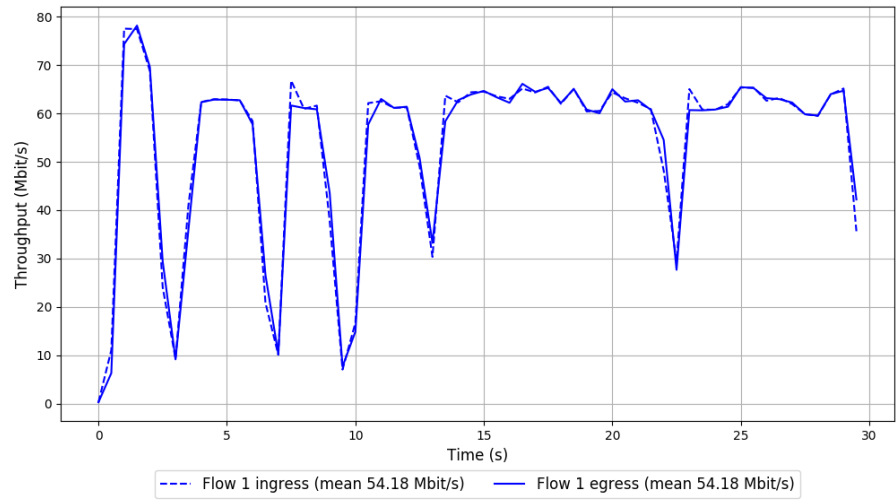
-- Flow 1:

Average throughput: 54.18 Mbit/s

95th percentile per-packet one-way delay: 51.194 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-17 02:30:17

End at: 2017-08-17 02:30:47

Below is generated by plot.py at 2017-08-17 04:24:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.56 Mbit/s

95th percentile per-packet one-way delay: 51.502 ms

Loss rate: 0.00%

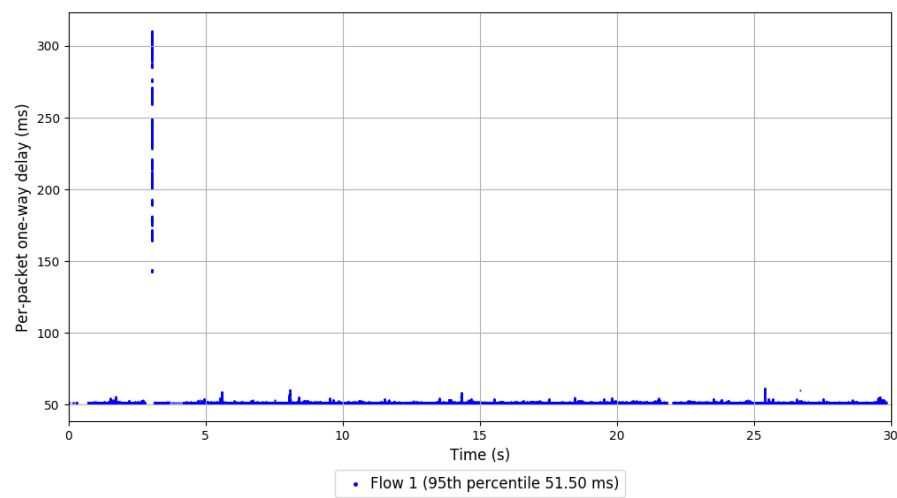
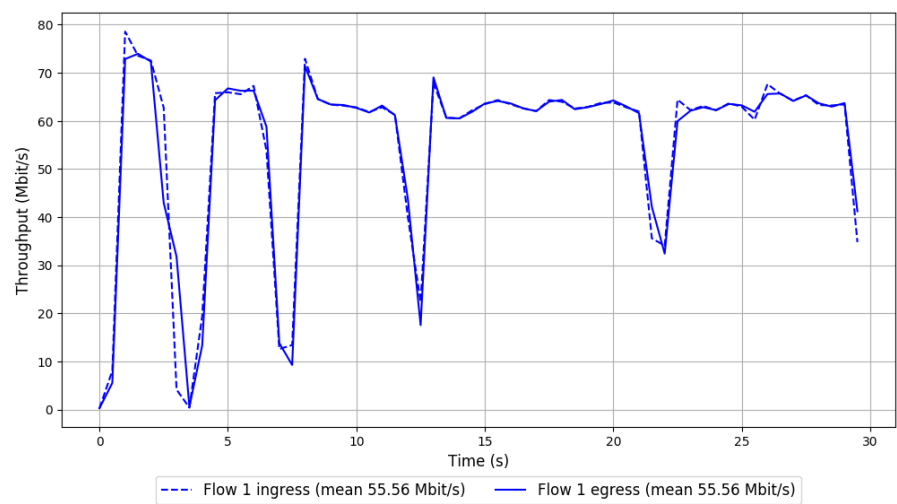
-- Flow 1:

Average throughput: 55.56 Mbit/s

95th percentile per-packet one-way delay: 51.502 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-08-17 02:40:41

End at: 2017-08-17 02:41:11

Below is generated by plot.py at 2017-08-17 04:24:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.67 Mbit/s

95th percentile per-packet one-way delay: 51.483 ms

Loss rate: 0.00%

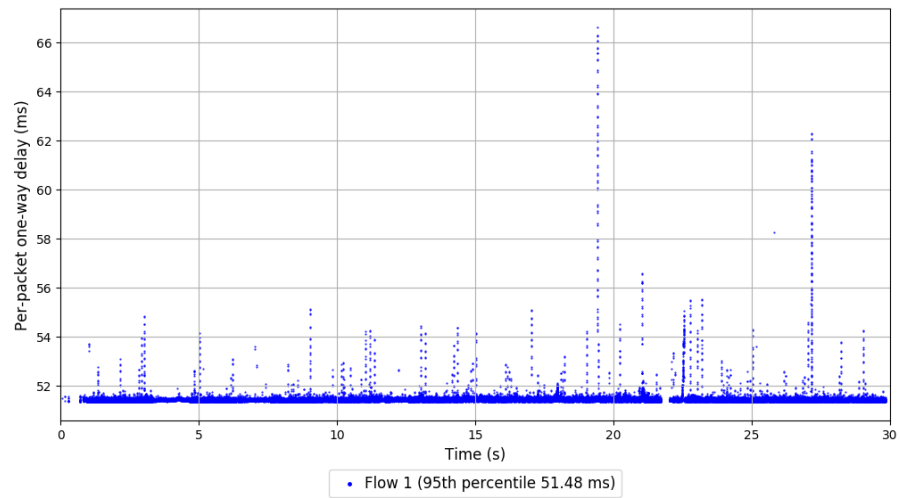
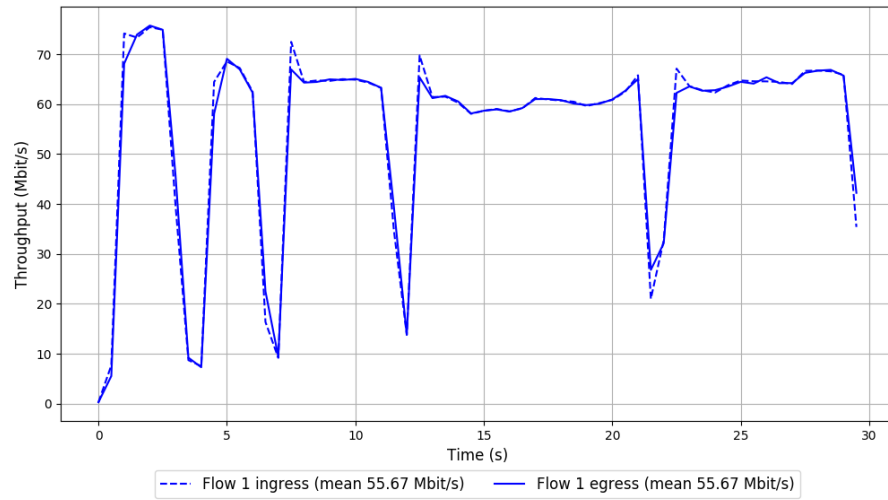
-- Flow 1:

Average throughput: 55.67 Mbit/s

95th percentile per-packet one-way delay: 51.483 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-17 02:50:39

End at: 2017-08-17 02:51:09

Below is generated by plot.py at 2017-08-17 04:24:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.04 Mbit/s

95th percentile per-packet one-way delay: 49.539 ms

Loss rate: 0.00%

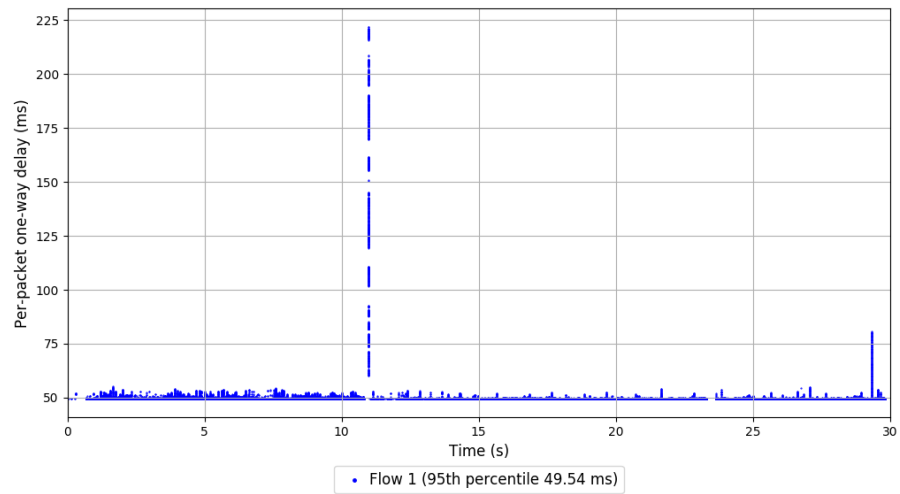
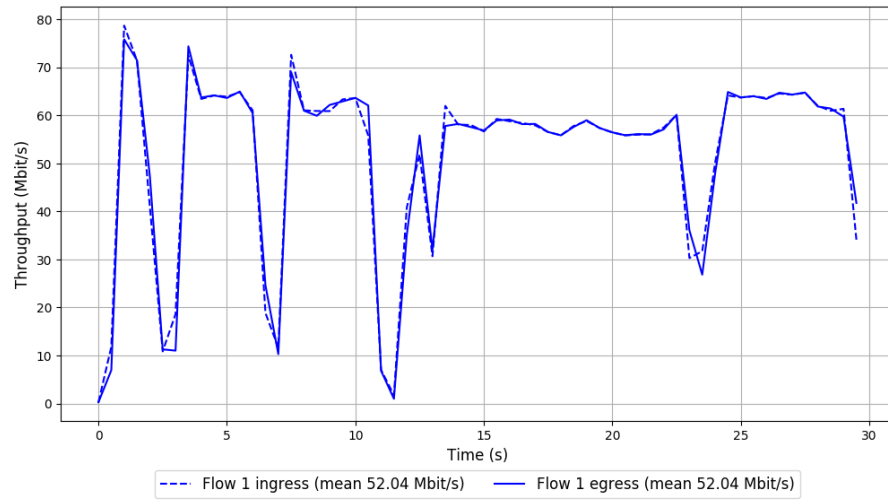
-- Flow 1:

Average throughput: 52.04 Mbit/s

95th percentile per-packet one-way delay: 49.539 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

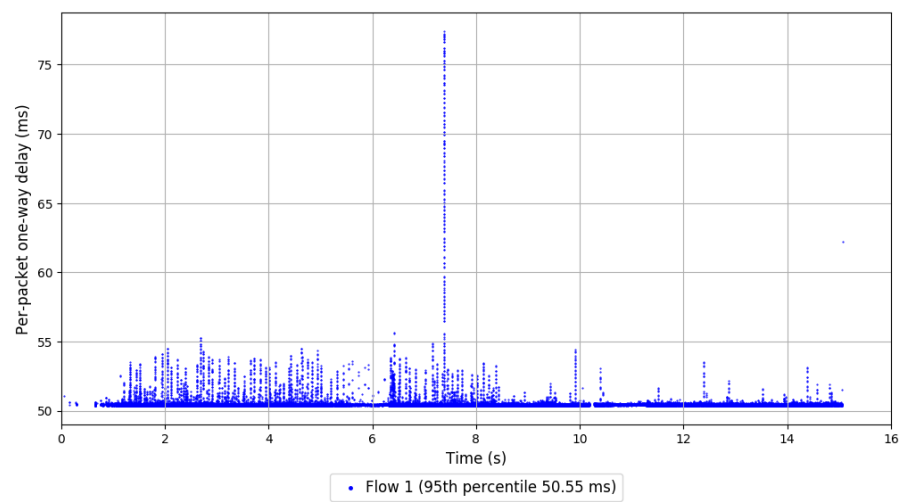
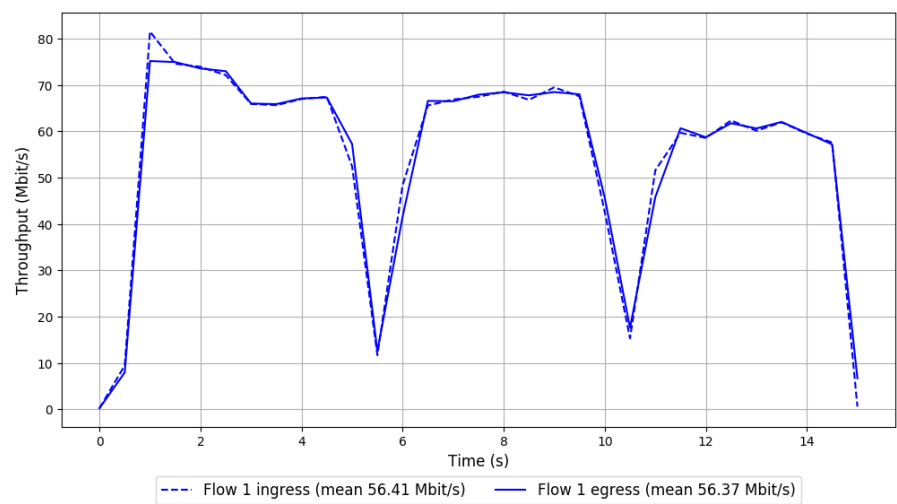


Run 10: Statistics of QUIC Cubic

Start at: 2017-08-17 03:00:27

End at: 2017-08-17 03:00:57

Run 10: Report of QUIC Cubic — Data Link

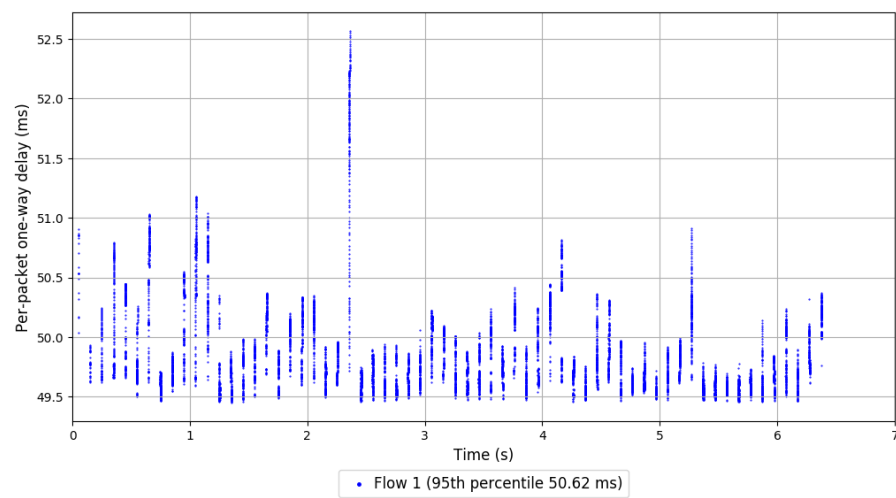
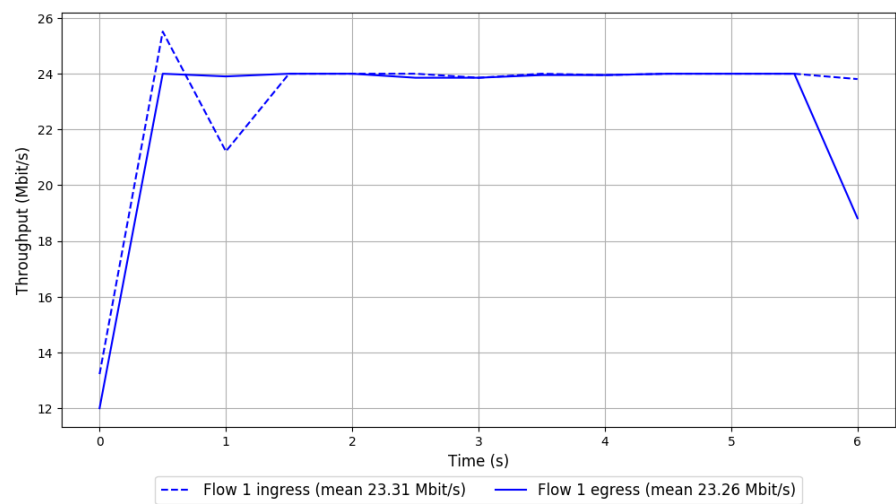


Run 1: Statistics of Saturator

Start at: 2017-08-17 01:25:43

End at: 2017-08-17 01:26:13

Run 1: Report of Saturator — Data Link



Run 2: Statistics of Saturator

Start at: 2017-08-17 01:35:22

End at: 2017-08-17 01:35:52

Below is generated by plot.py at 2017-08-17 04:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.34 Mbit/s

95th percentile per-packet one-way delay: 50.697 ms

Loss rate: 0.36%

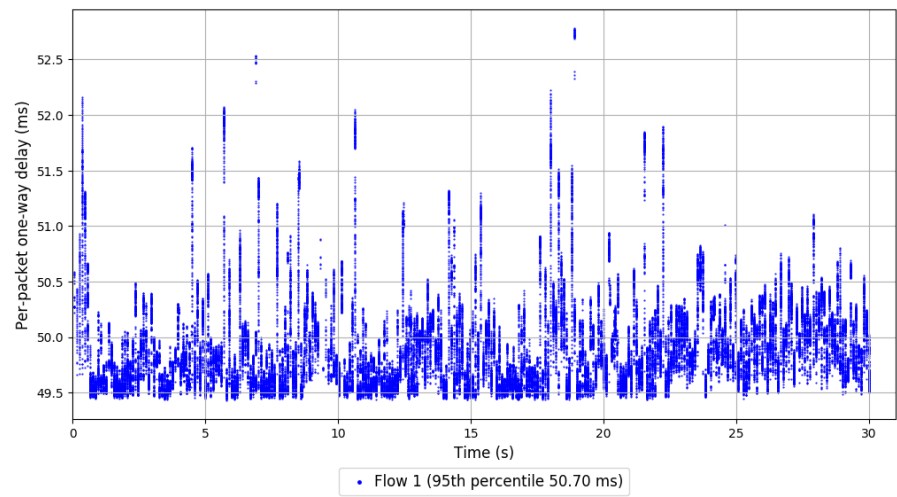
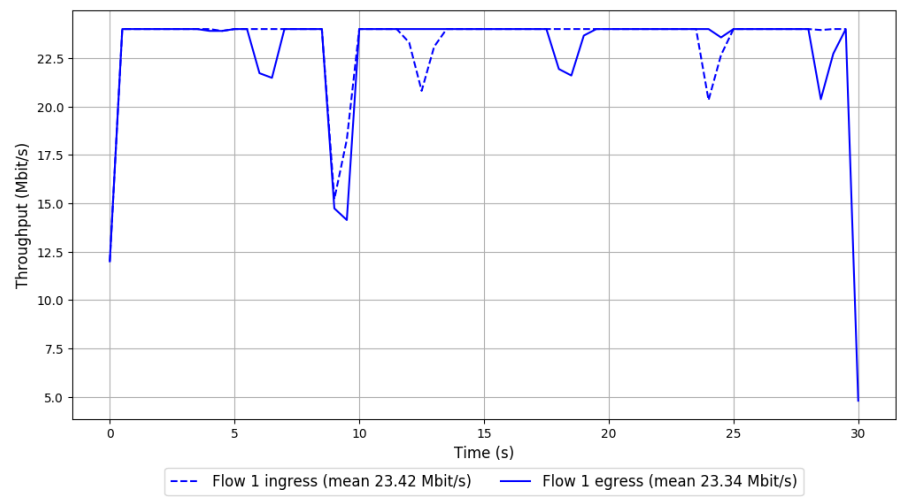
-- Flow 1:

Average throughput: 23.34 Mbit/s

95th percentile per-packet one-way delay: 50.697 ms

Loss rate: 0.36%

Run 2: Report of Saturator — Data Link

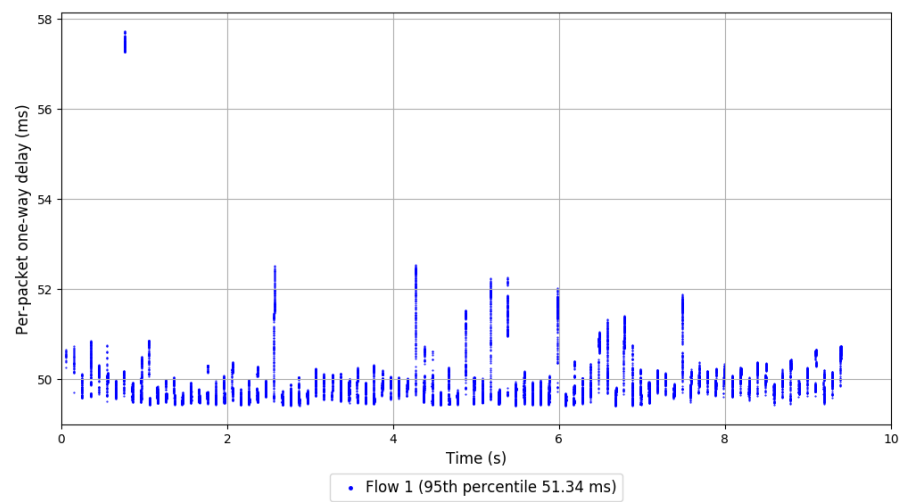
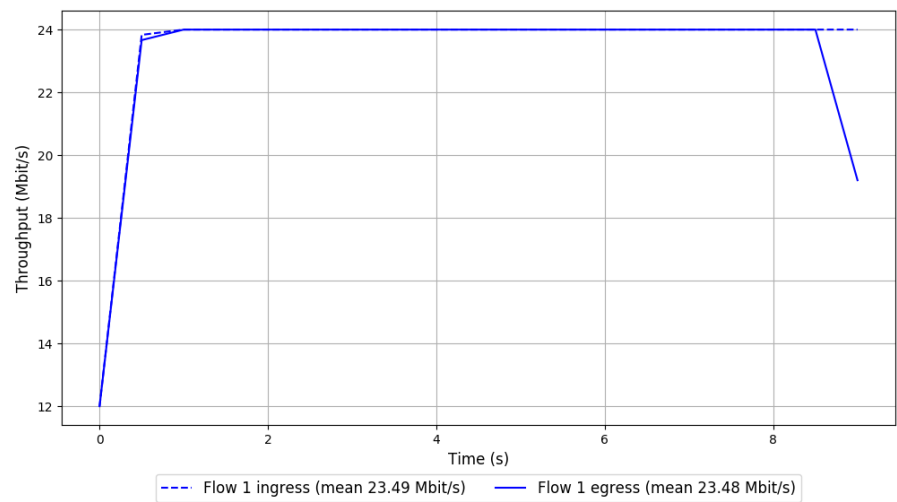


Run 3: Statistics of Saturator

Start at: 2017-08-17 01:45:13

End at: 2017-08-17 01:45:43

Run 3: Report of Saturator — Data Link

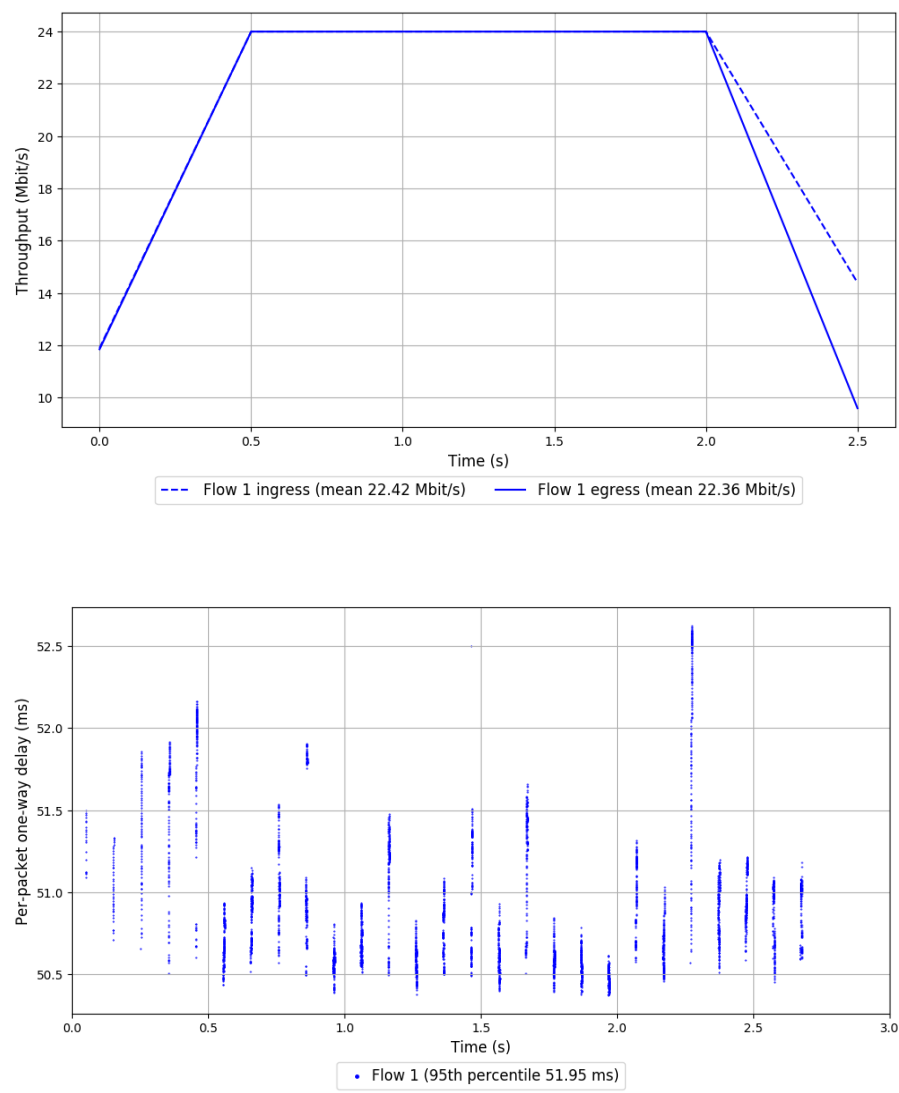


Run 4: Statistics of Saturator

Start at: 2017-08-17 01:55:16

End at: 2017-08-17 01:55:46

Run 4: Report of Saturator — Data Link

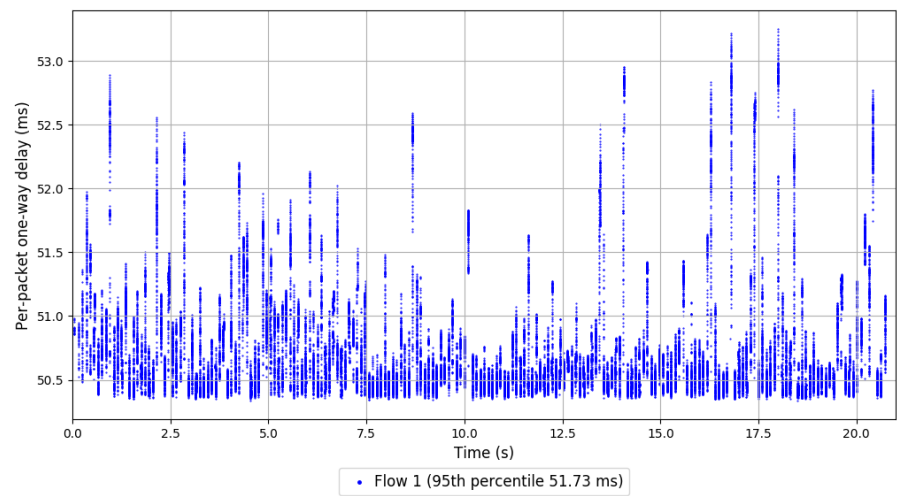
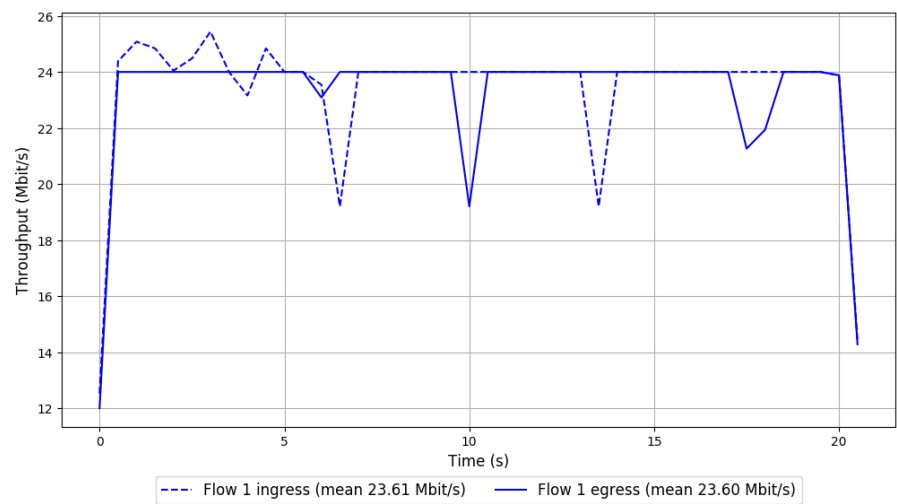


Run 5: Statistics of Saturator

Start at: 2017-08-17 02:05:28

End at: 2017-08-17 02:05:58

Run 5: Report of Saturator — Data Link

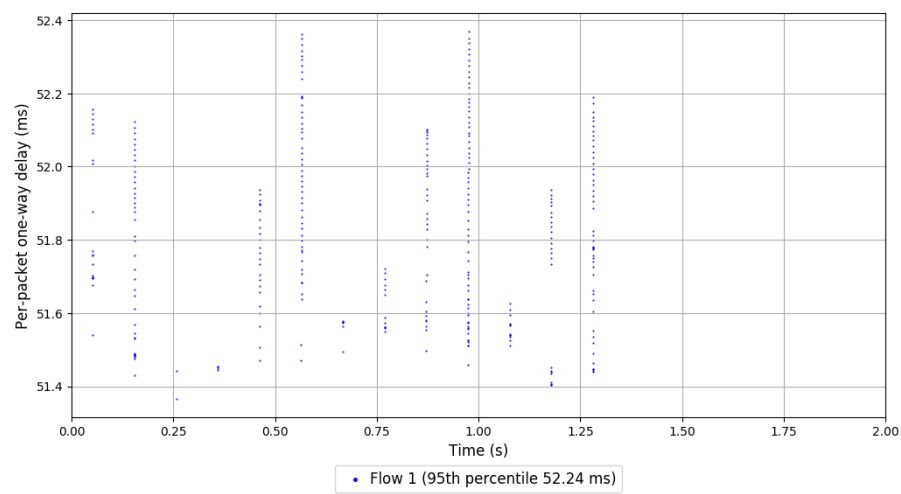
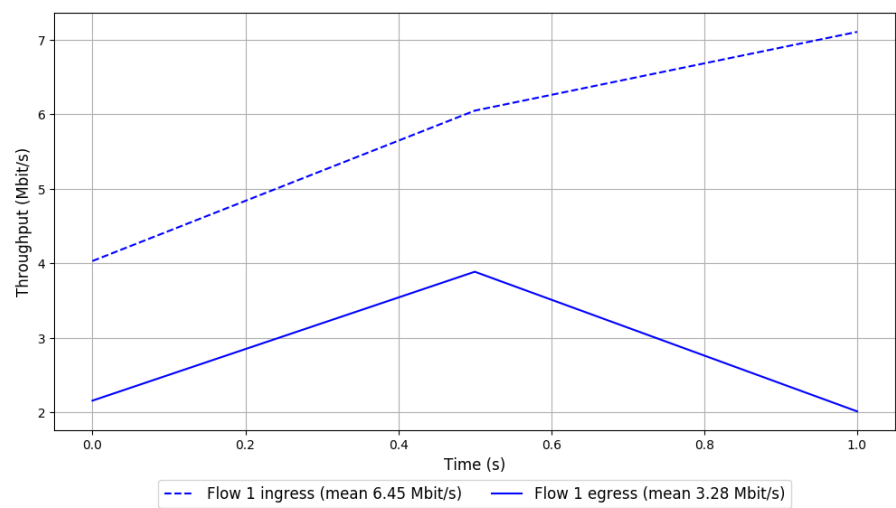


Run 6: Statistics of Saturator

Start at: 2017-08-17 02:15:44

End at: 2017-08-17 02:16:14

Run 6: Report of Saturator — Data Link

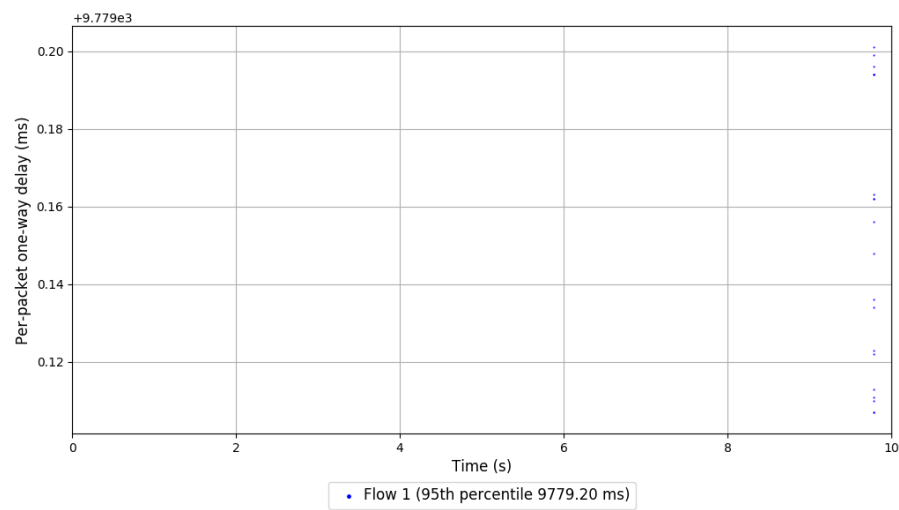
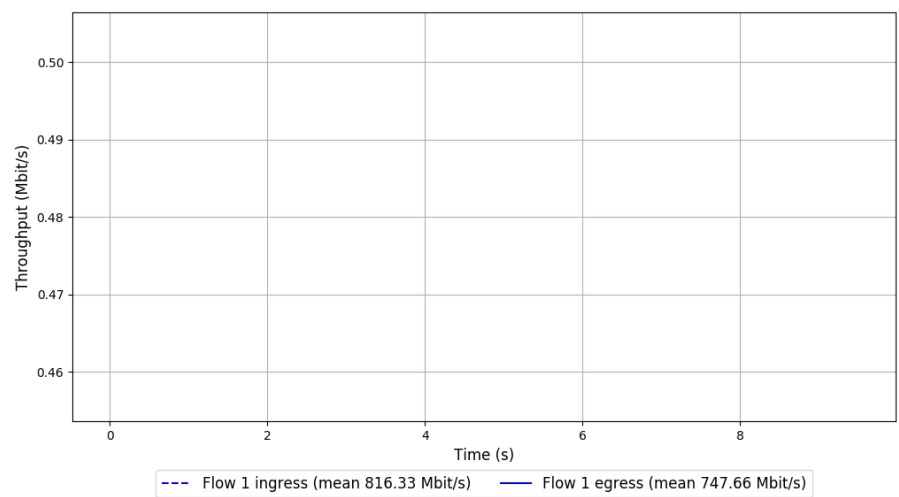


Run 7: Statistics of Saturator

Start at: 2017-08-17 02:26:10

End at: 2017-08-17 02:26:40

Run 7: Report of Saturator — Data Link

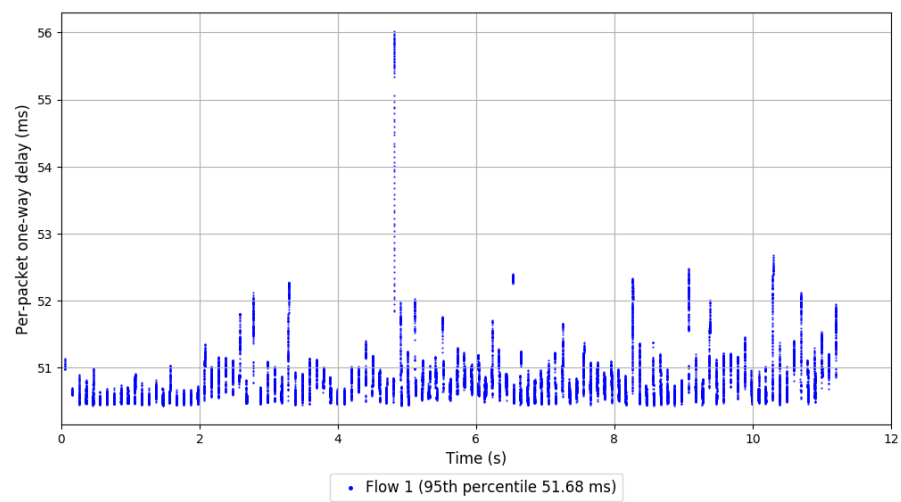
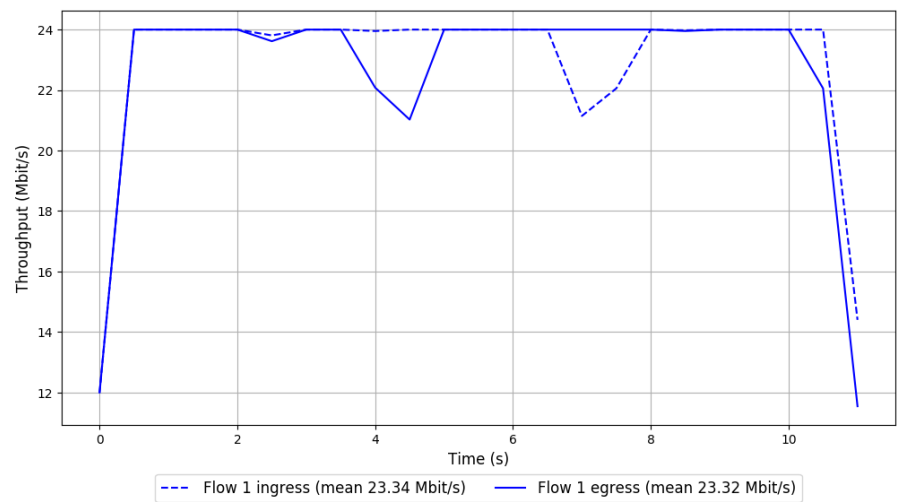


Run 8: Statistics of Saturator

Start at: 2017-08-17 02:36:11

End at: 2017-08-17 02:36:41

Run 8: Report of Saturator — Data Link

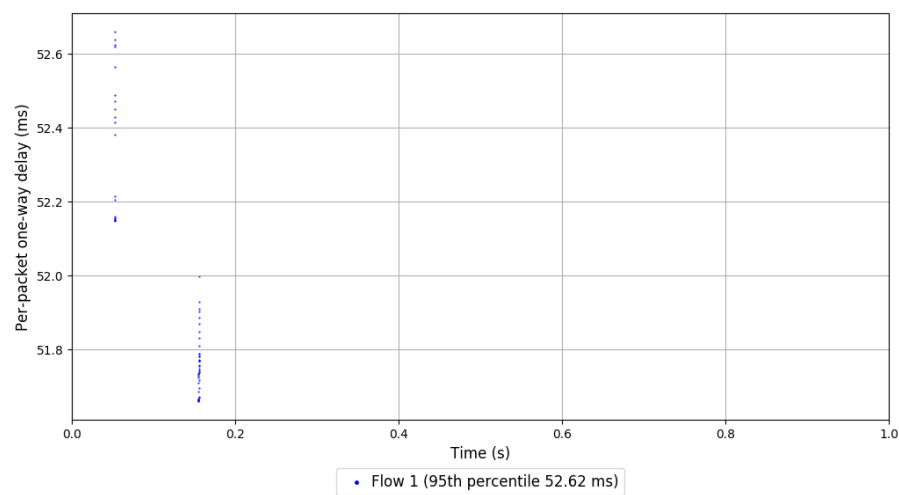
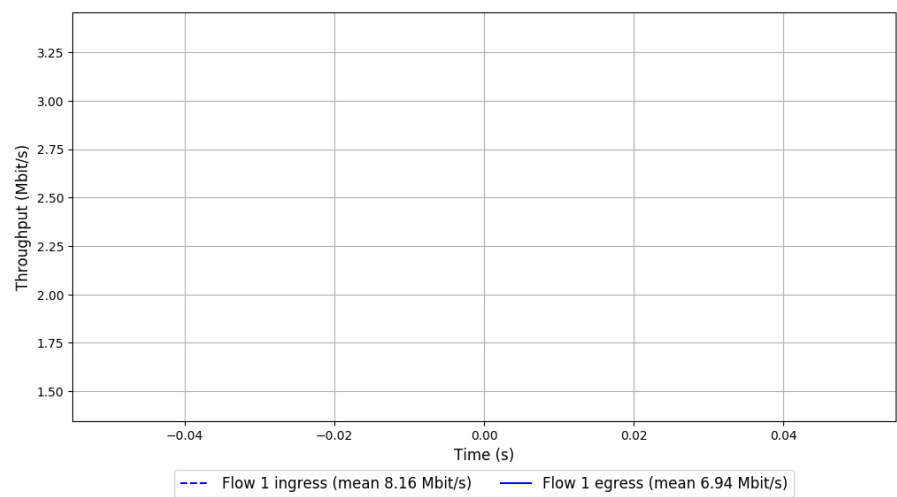


Run 9: Statistics of Saturator

Start at: 2017-08-17 02:46:36

End at: 2017-08-17 02:47:06

Run 9: Report of Saturator — Data Link

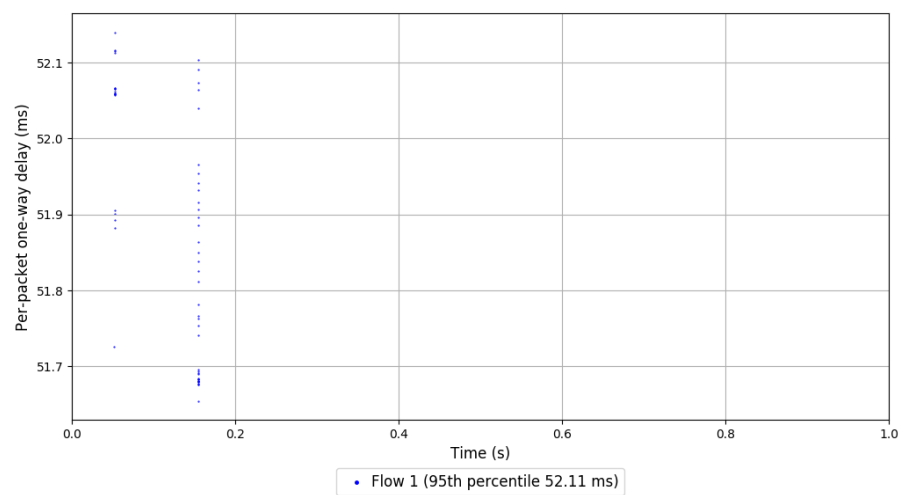
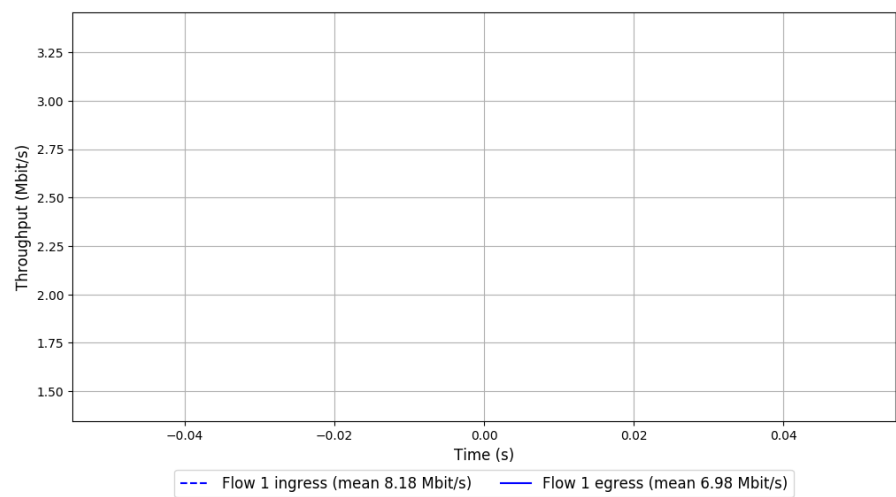


Run 10: Statistics of Saturator

Start at: 2017-08-17 02:56:34

End at: 2017-08-17 02:57:05

Run 10: Report of Saturator — Data Link

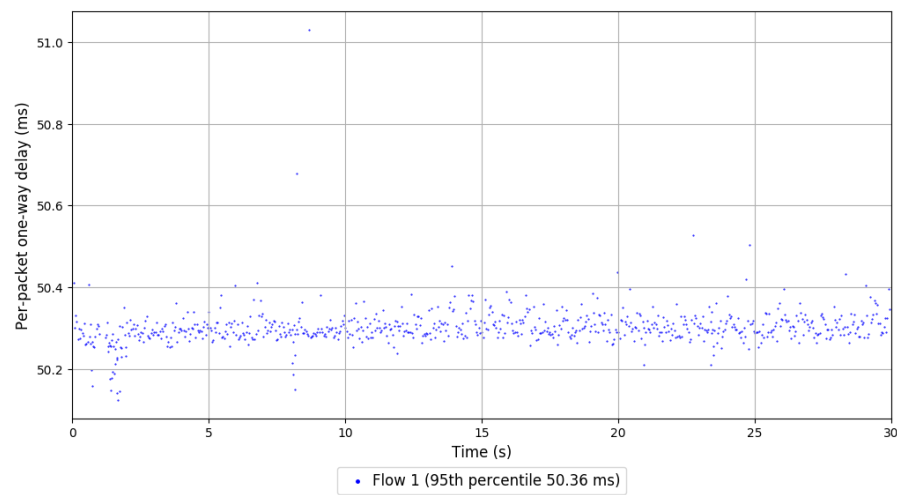
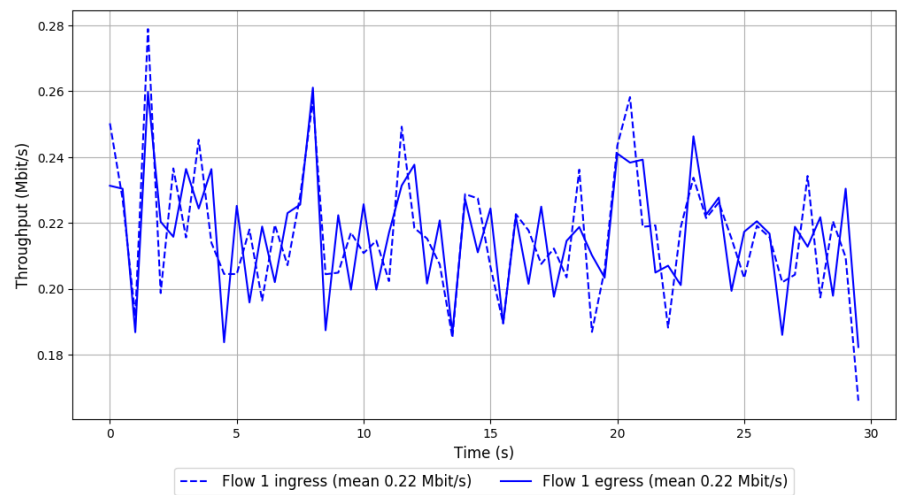


```
Run 1: Statistics of SCReAM

Start at: 2017-08-17 01:21:45
End at: 2017-08-17 01:22:15

# Below is generated by plot.py at 2017-08-17 04:24:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.363 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.363 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

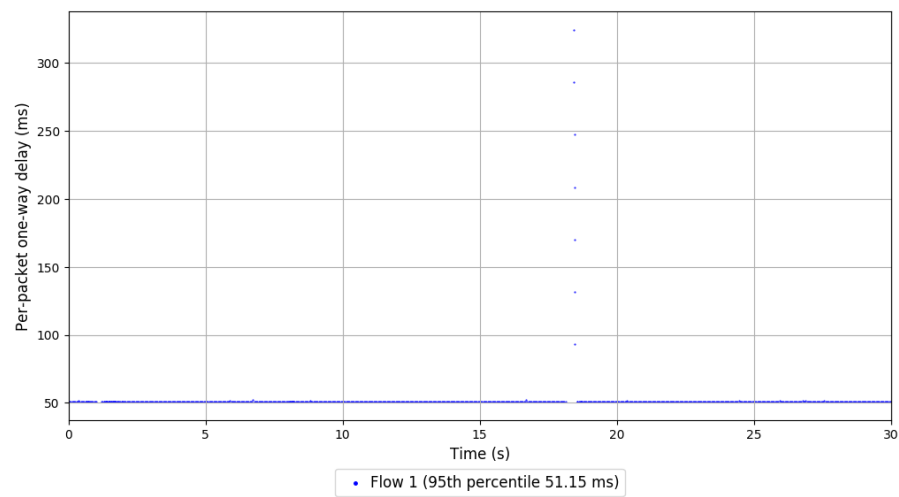
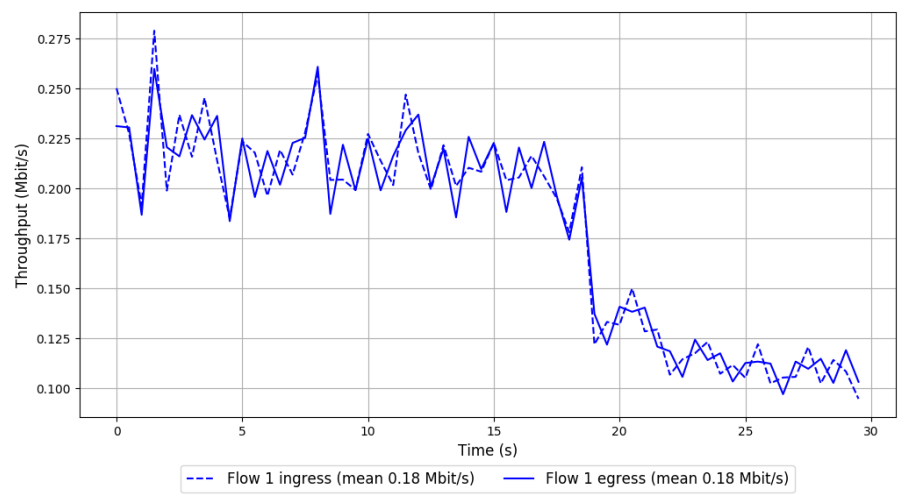


```
Run 2: Statistics of SCReAM

Start at: 2017-08-17 01:31:32
End at: 2017-08-17 01:32:02

# Below is generated by plot.py at 2017-08-17 04:24:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 51.153 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 51.153 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-08-17 01:41:16

End at: 2017-08-17 01:41:46

Below is generated by plot.py at 2017-08-17 04:24:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.674 ms

Loss rate: 0.00%

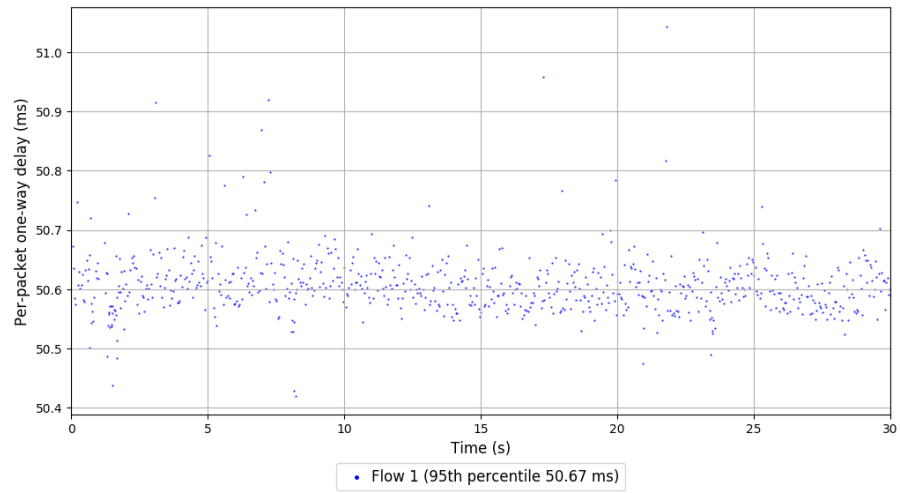
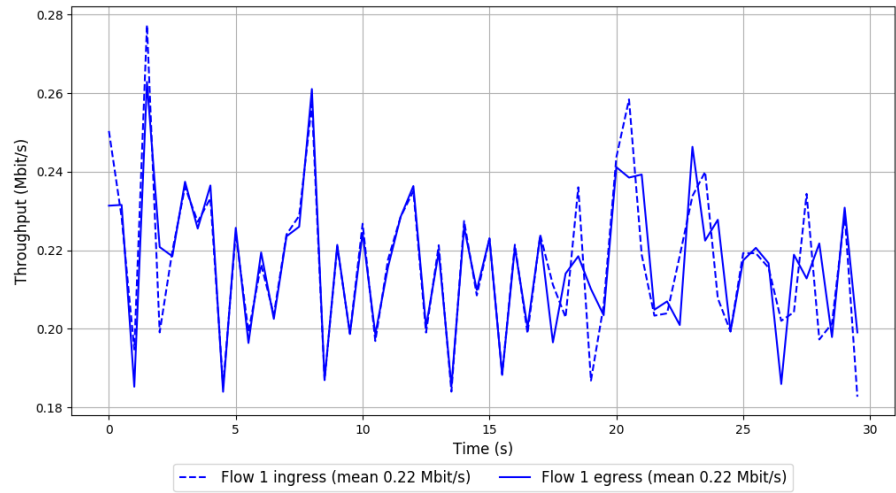
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.674 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-17 01:51:10

End at: 2017-08-17 01:51:40

Below is generated by plot.py at 2017-08-17 04:24:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 49.743 ms

Loss rate: 0.00%

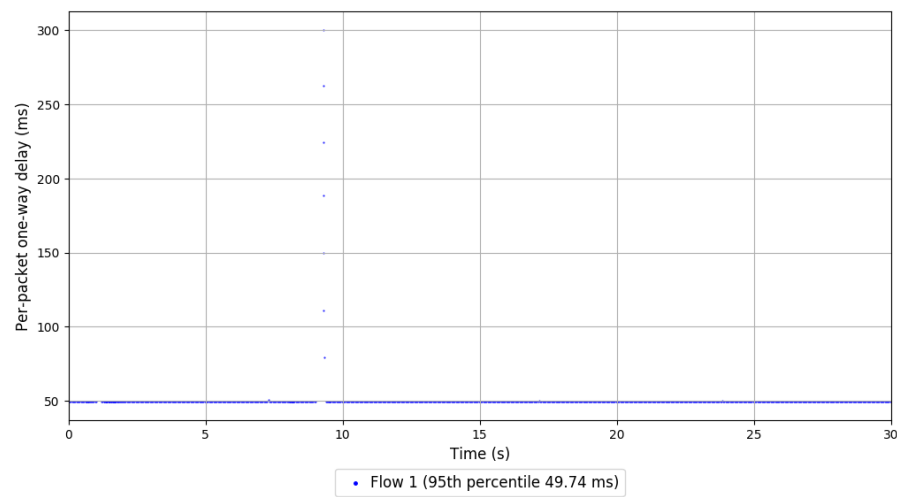
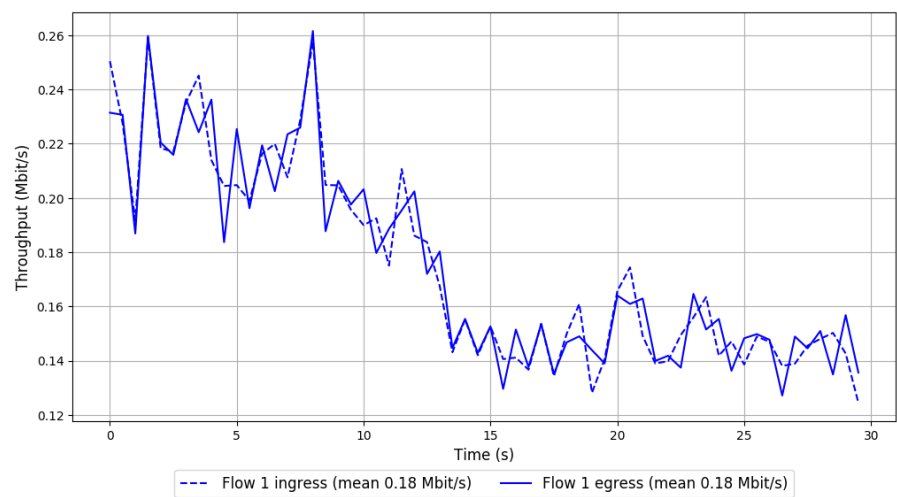
-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 49.743 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-08-17 02:01:38

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

Below is generated by plot.py at 2017-08-17 04:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.776 ms

Loss rate: 0.00%

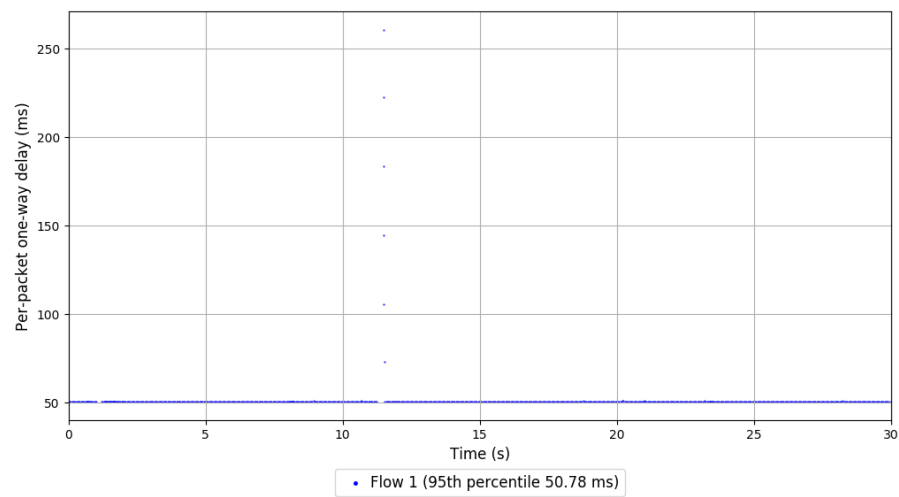
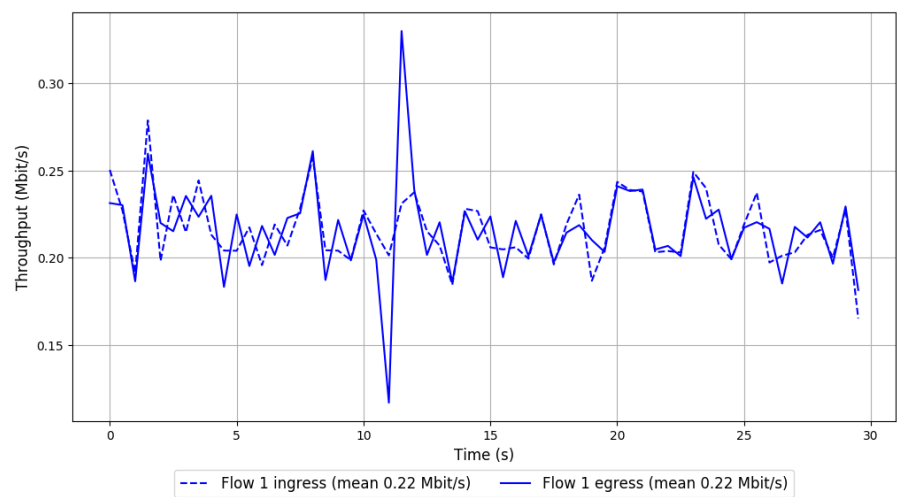
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.776 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-17 02:11:58

End at: 2017-08-17 02:12:28

Below is generated by plot.py at 2017-08-17 04:24:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.697 ms

Loss rate: 0.00%

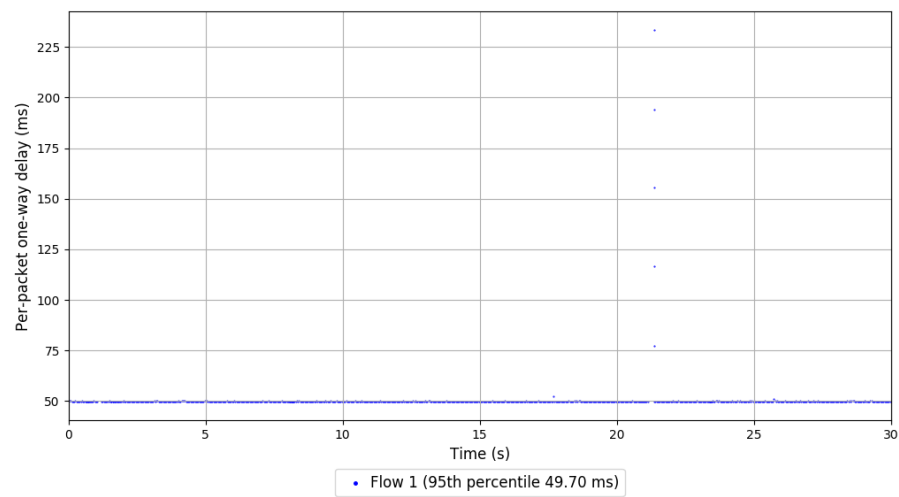
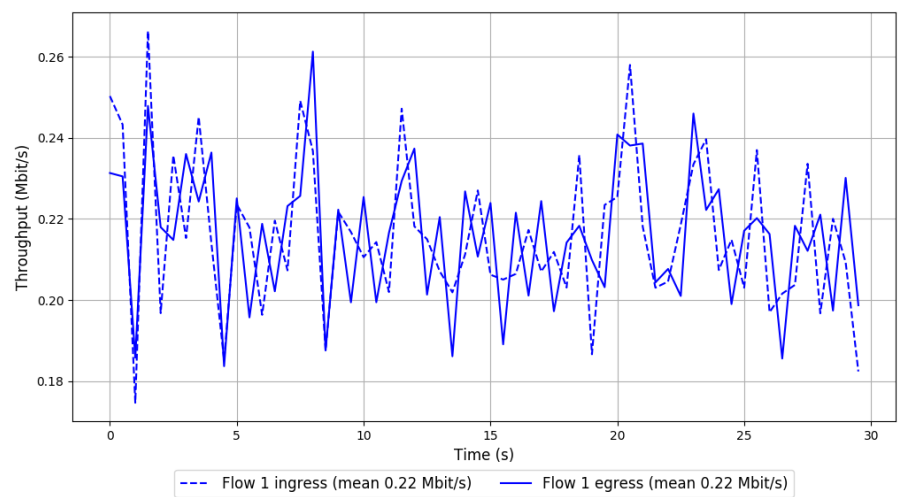
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.697 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-08-17 02:22:07

End at: 2017-08-17 02:22:37

Below is generated by plot.py at 2017-08-17 04:24:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.741 ms

Loss rate: 0.00%

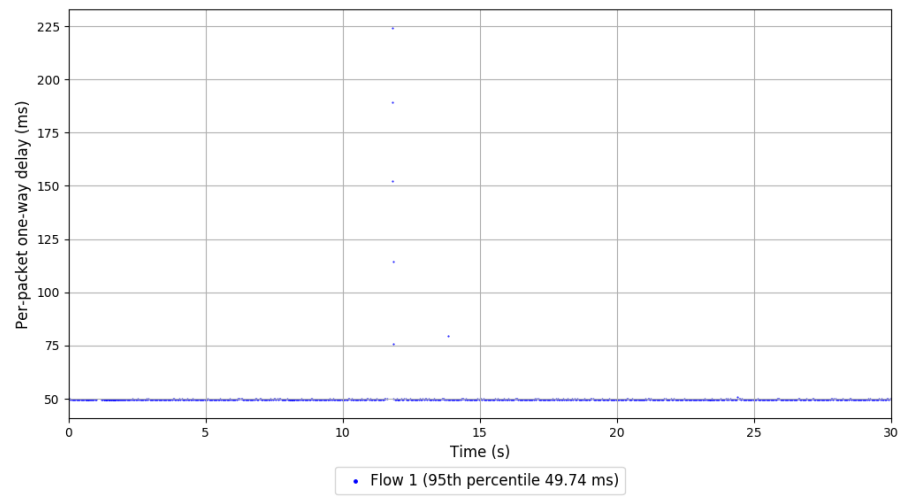
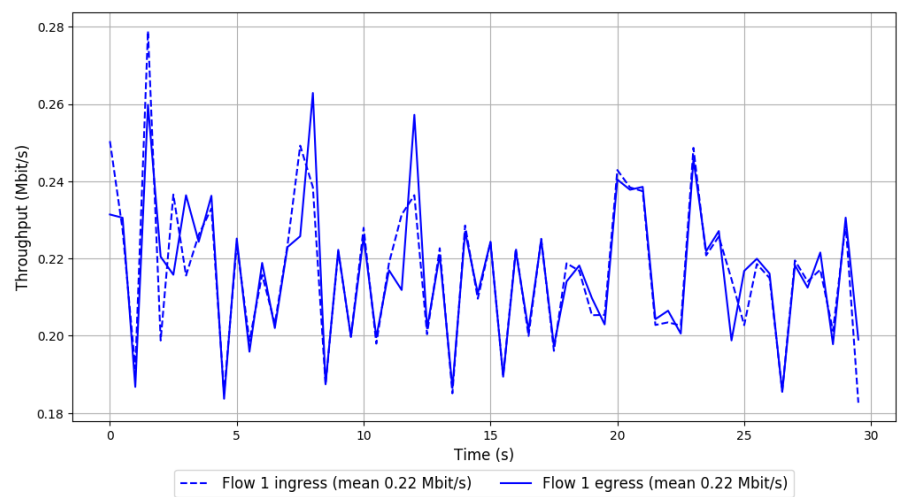
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.741 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-17 02:32:11

End at: 2017-08-17 02:32:41

Below is generated by plot.py at 2017-08-17 04:24:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 51.201 ms

Loss rate: 0.00%

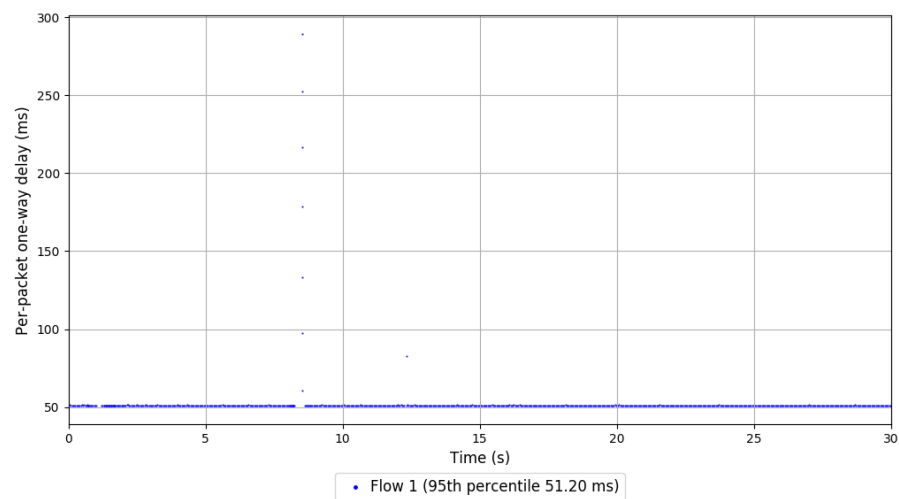
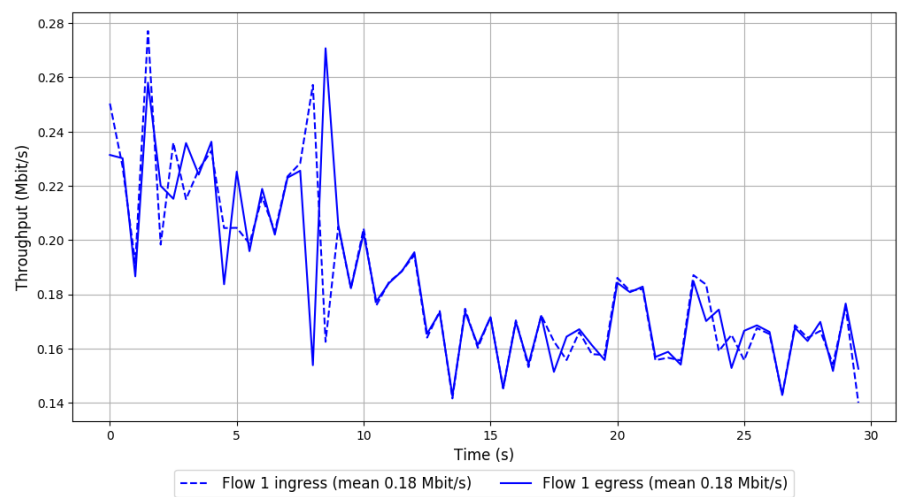
-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 51.201 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-08-17 02:42:40

End at: 2017-08-17 02:43:11

Below is generated by plot.py at 2017-08-17 04:24:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 51.577 ms

Loss rate: 0.00%

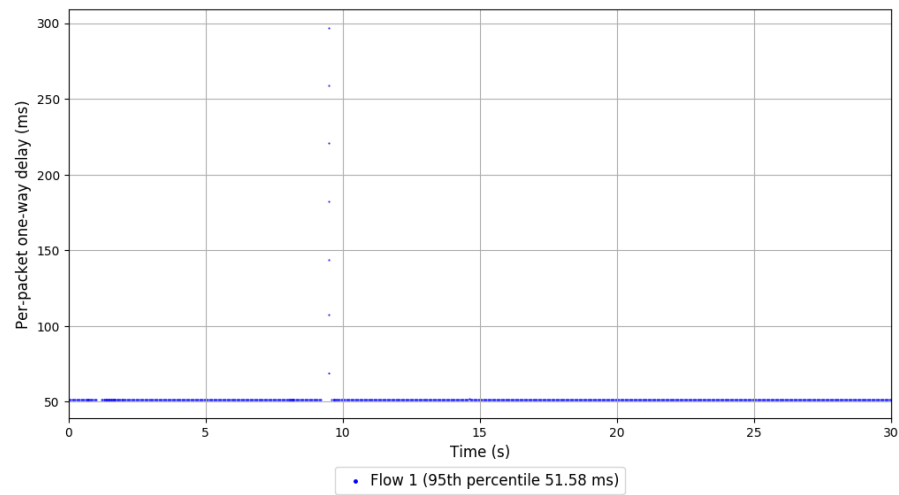
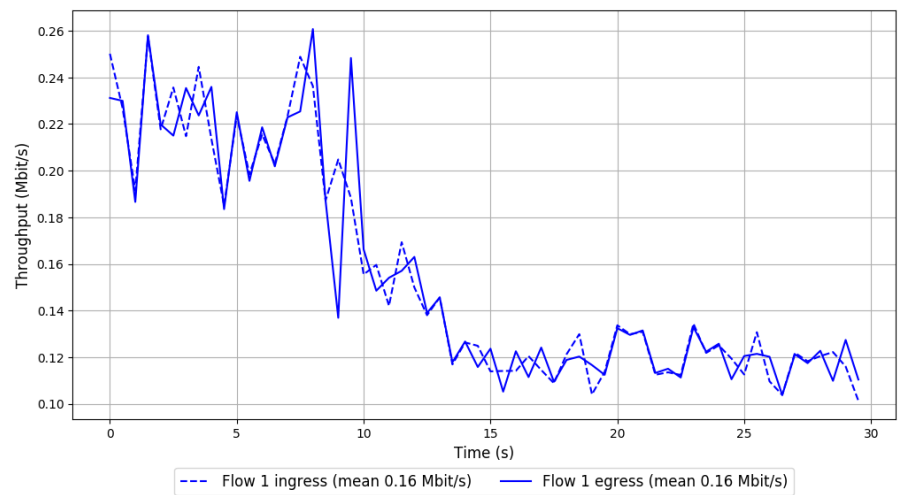
-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 51.577 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

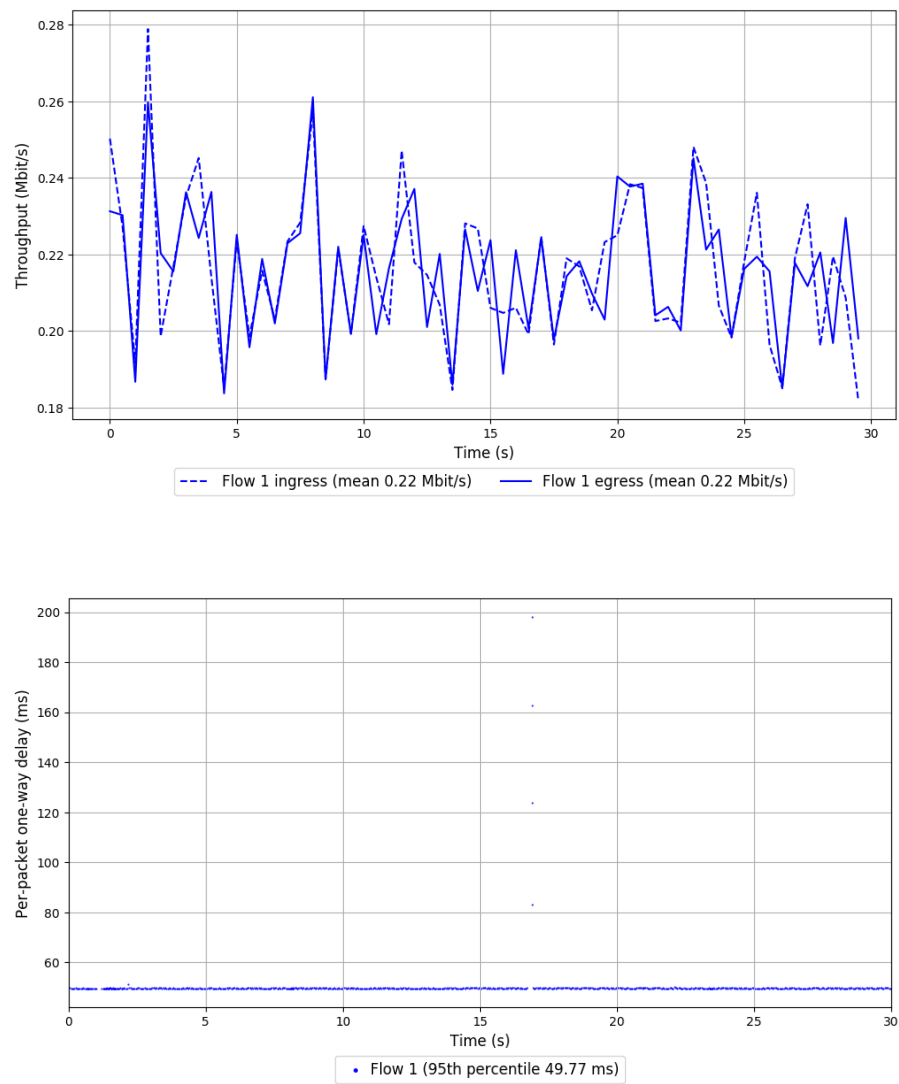


```
Run 10: Statistics of SReAM

Start at: 2017-08-17 02:52:33
End at: 2017-08-17 02:53:03

# Below is generated by plot.py at 2017-08-17 04:24:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.769 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.769 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

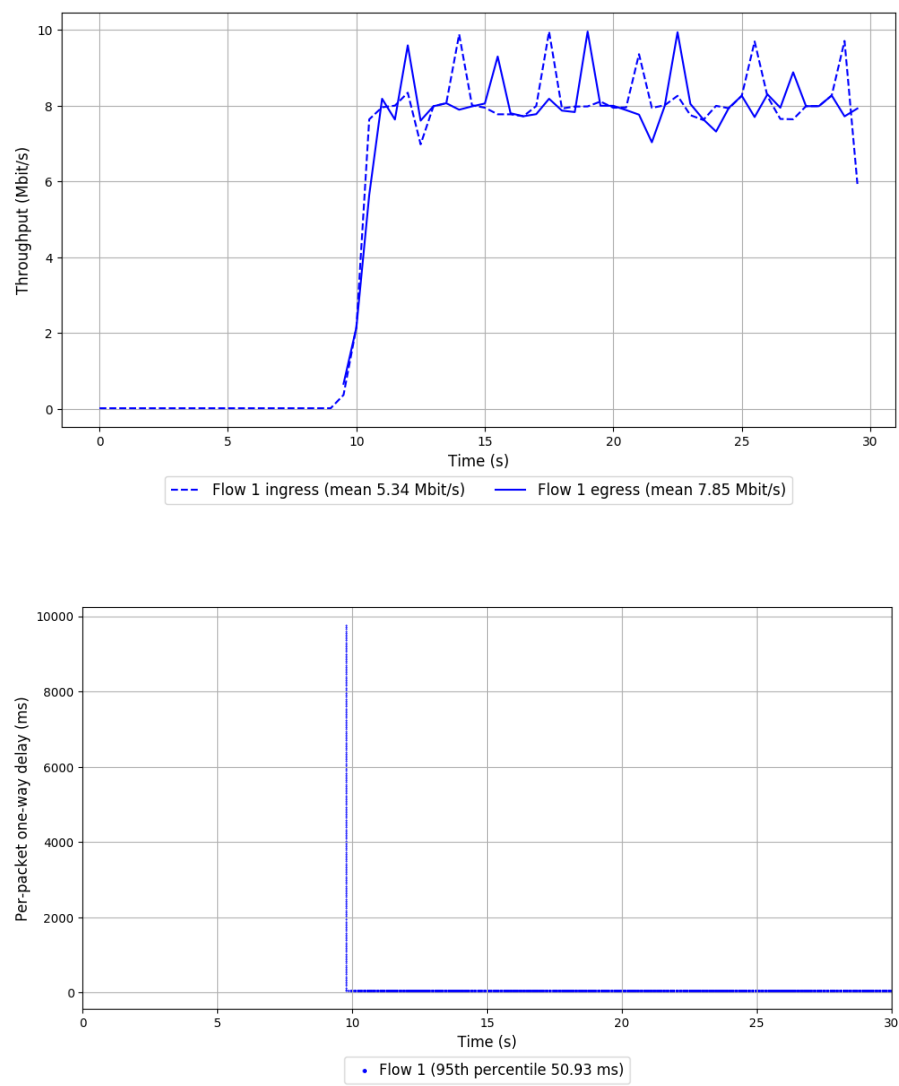


Run 1: Statistics of Sprout

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

End at: 2017-08-17 01:22:52

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

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

End at: 2017-08-17 01:32:38

Below is generated by plot.py at 2017-08-17 04:24:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.68 Mbit/s

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

Loss rate: 0.83%

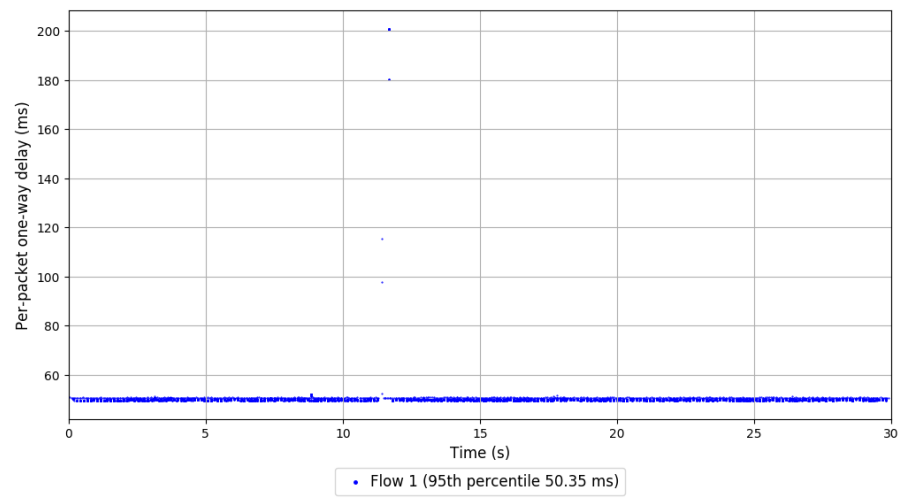
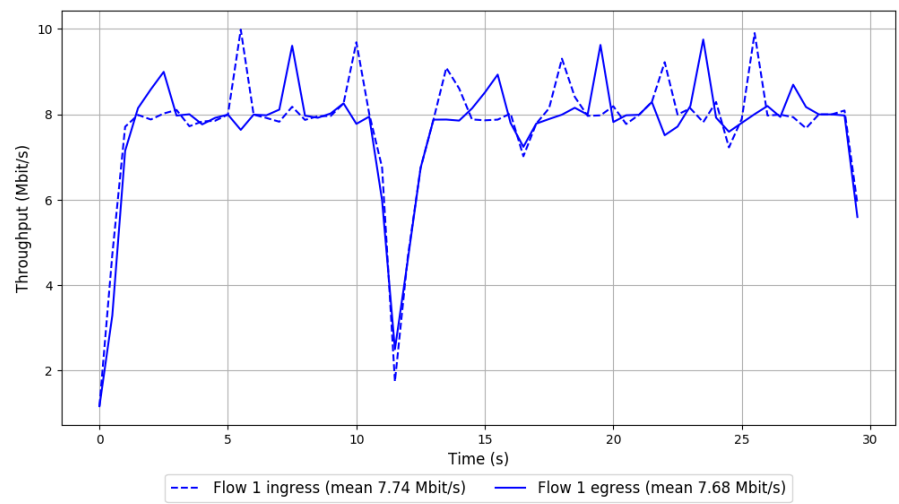
-- Flow 1:

Average throughput: 7.68 Mbit/s

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

Loss rate: 0.83%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-17 01:41:53

End at: 2017-08-17 01:42:23

Below is generated by plot.py at 2017-08-17 04:24:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 50.523 ms

Loss rate: 0.05%

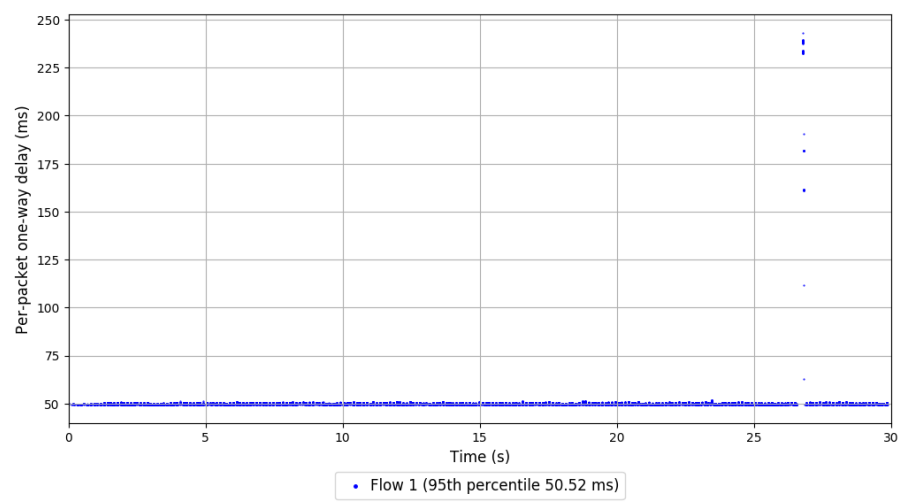
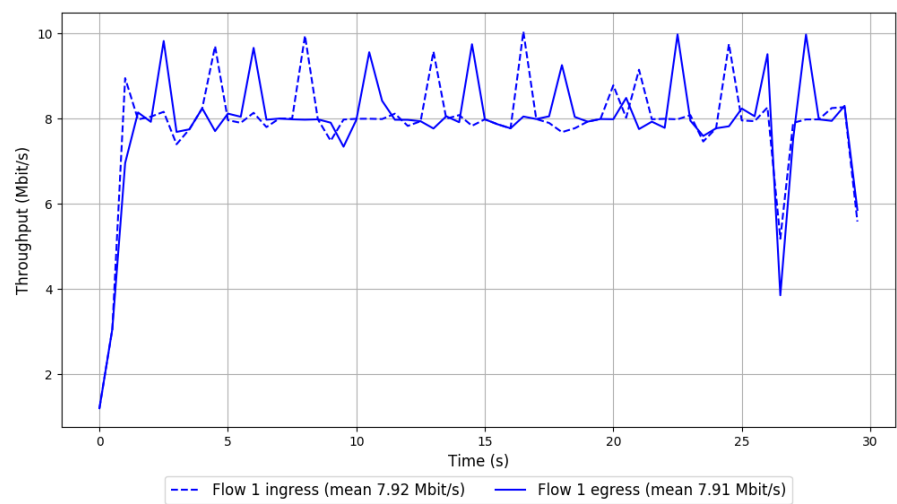
-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 50.523 ms

Loss rate: 0.05%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-08-17 01:51:47

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

Below is generated by plot.py at 2017-08-17 04:24:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.40 Mbit/s

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

Loss rate: 3.71%

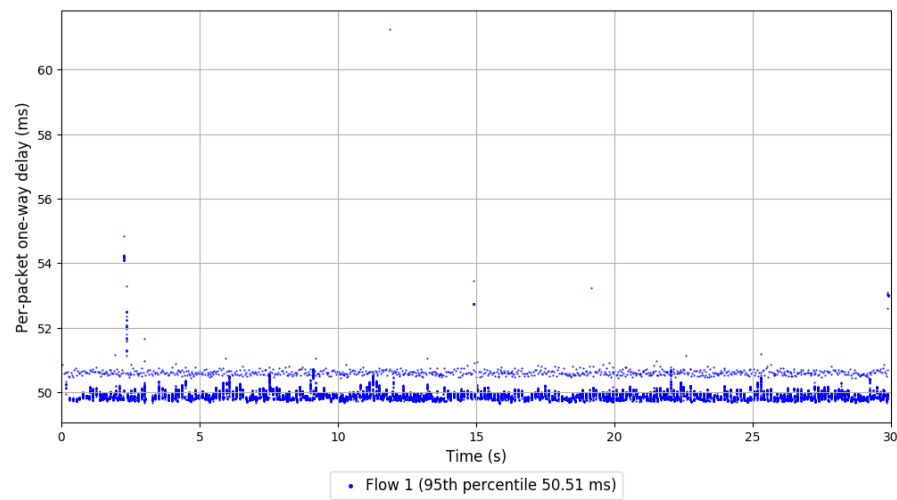
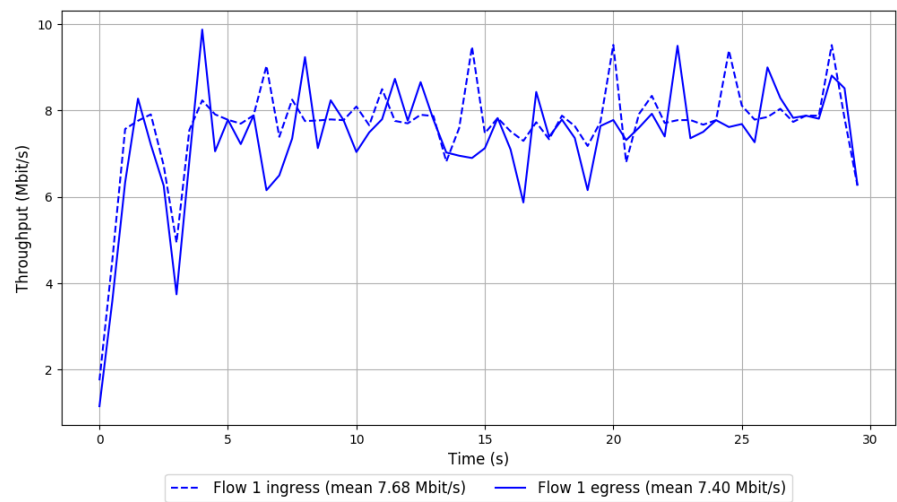
-- Flow 1:

Average throughput: 7.40 Mbit/s

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

Loss rate: 3.71%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-17 02:02:15

End at: 2017-08-17 02:02:45

Below is generated by plot.py at 2017-08-17 04:24:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.42 Mbit/s

95th percentile per-packet one-way delay: 51.271 ms

Loss rate: 2.86%

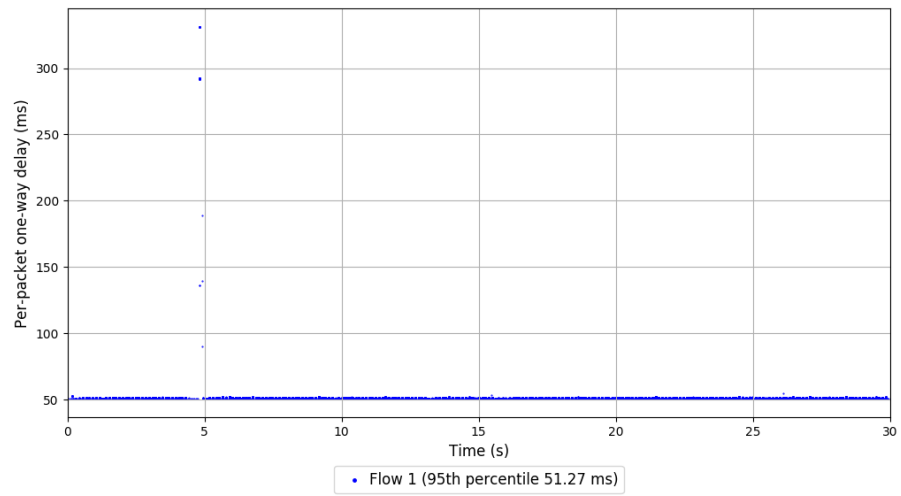
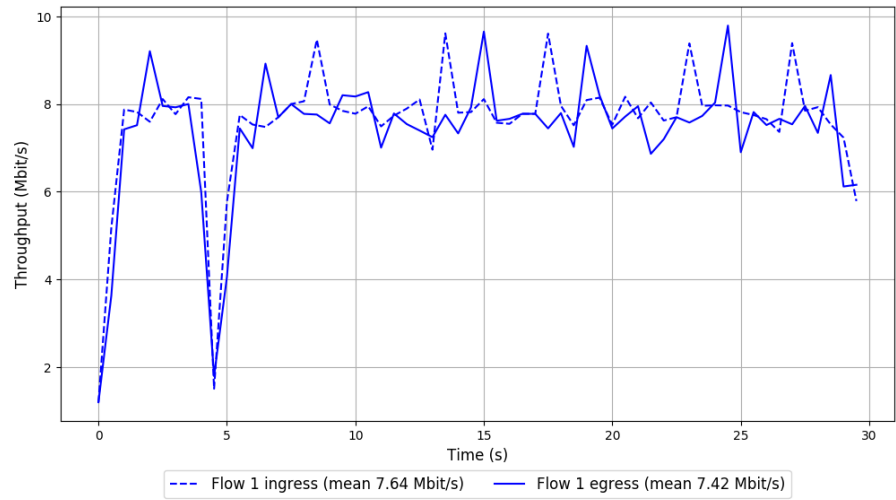
-- Flow 1:

Average throughput: 7.42 Mbit/s

95th percentile per-packet one-way delay: 51.271 ms

Loss rate: 2.86%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-17 02:12:34

End at: 2017-08-17 02:13:04

Below is generated by plot.py at 2017-08-17 04:24:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 51.017 ms

Loss rate: 2.48%

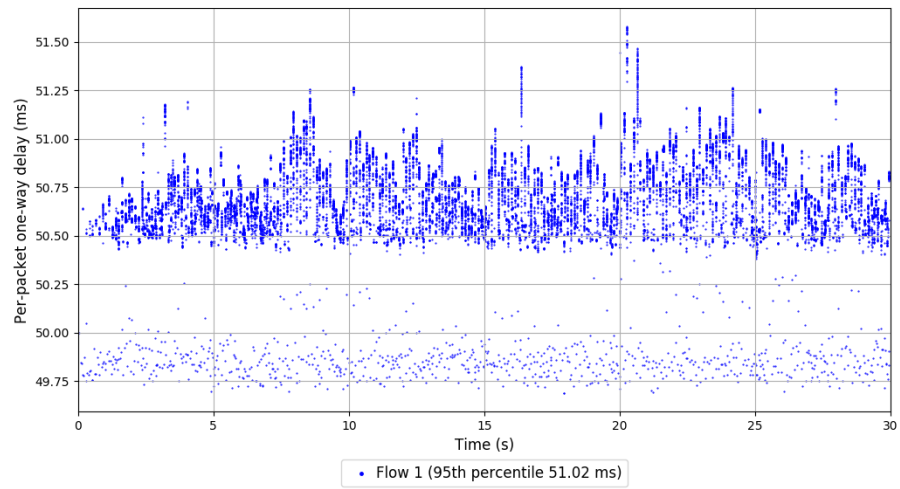
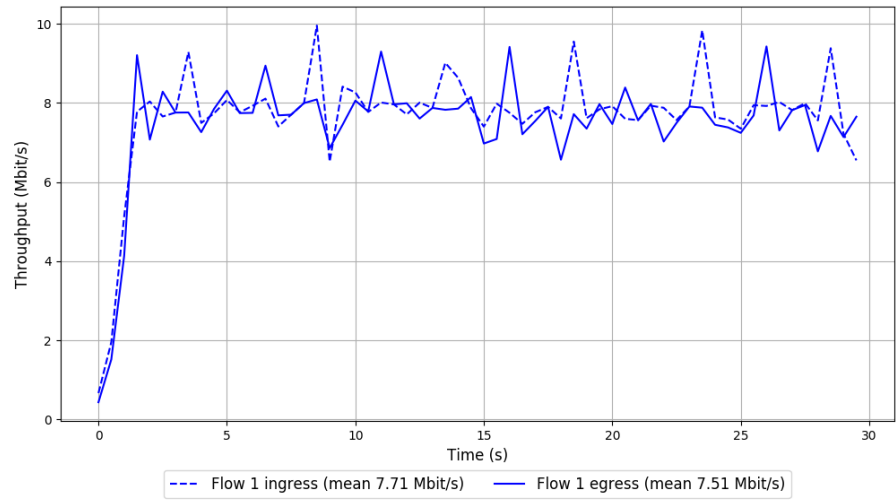
-- Flow 1:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 51.017 ms

Loss rate: 2.48%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-17 02:22:44

End at: 2017-08-17 02:23:14

Below is generated by plot.py at 2017-08-17 04:24:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.47 Mbit/s

95th percentile per-packet one-way delay: 51.333 ms

Loss rate: 0.74%

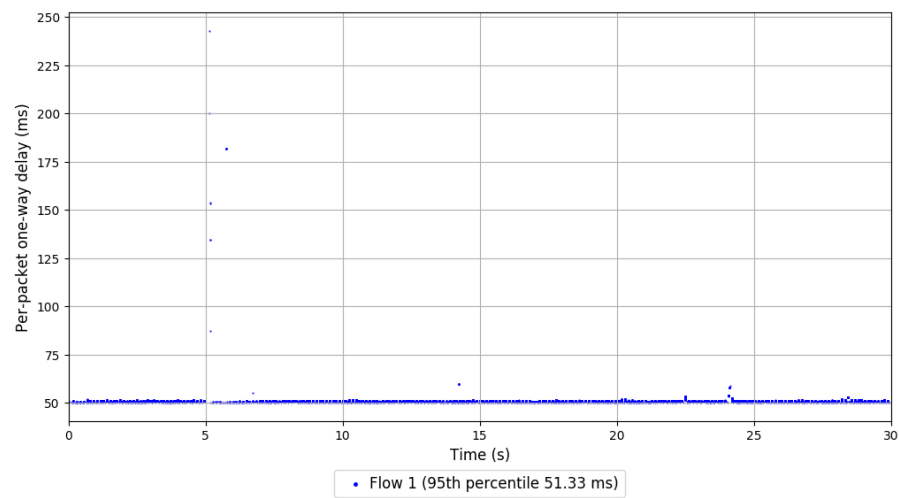
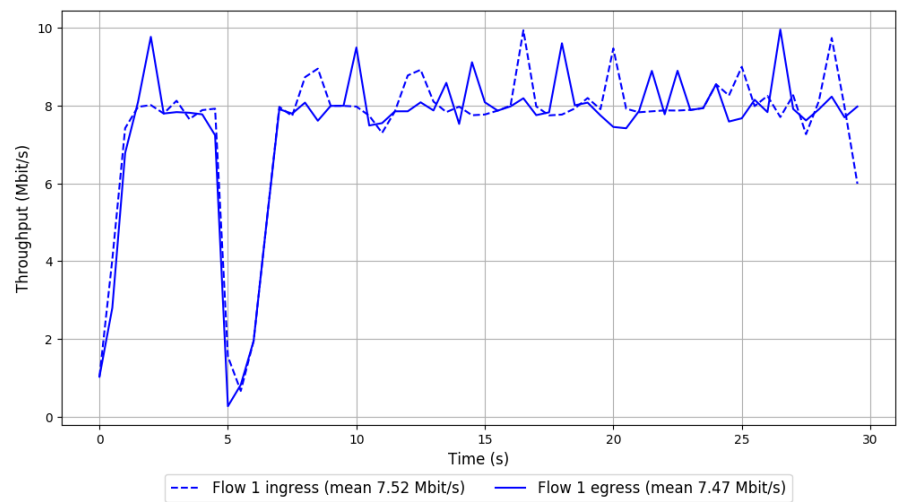
-- Flow 1:

Average throughput: 7.47 Mbit/s

95th percentile per-packet one-way delay: 51.333 ms

Loss rate: 0.74%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-17 02:32:48

End at: 2017-08-17 02:33:18

Below is generated by plot.py at 2017-08-17 04:24:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.17 Mbit/s

95th percentile per-packet one-way delay: 51.474 ms

Loss rate: 1.19%

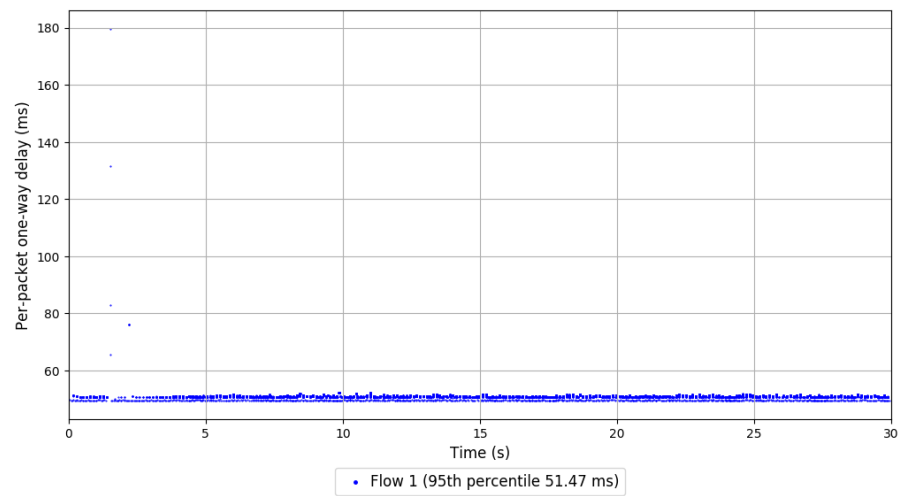
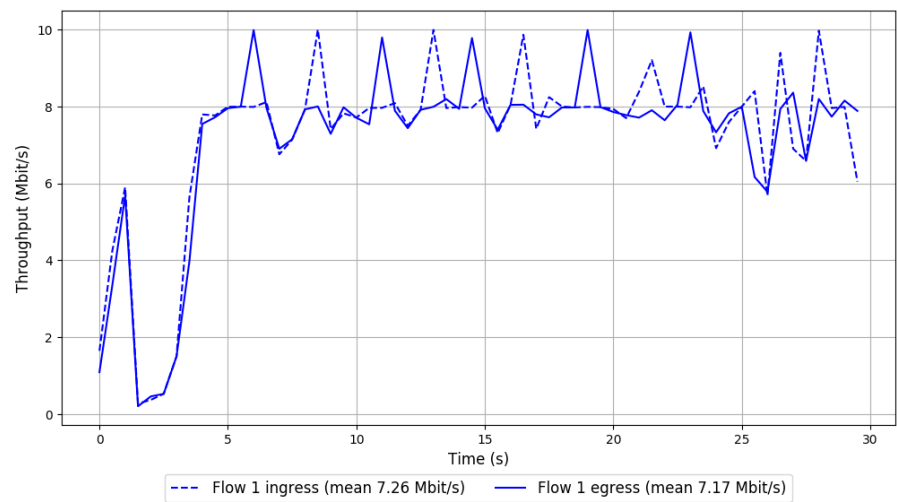
-- Flow 1:

Average throughput: 7.17 Mbit/s

95th percentile per-packet one-way delay: 51.474 ms

Loss rate: 1.19%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-17 02:43:17

End at: 2017-08-17 02:43:47

Below is generated by plot.py at 2017-08-17 04:24:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.40 Mbit/s

95th percentile per-packet one-way delay: 51.971 ms

Loss rate: 20.59%

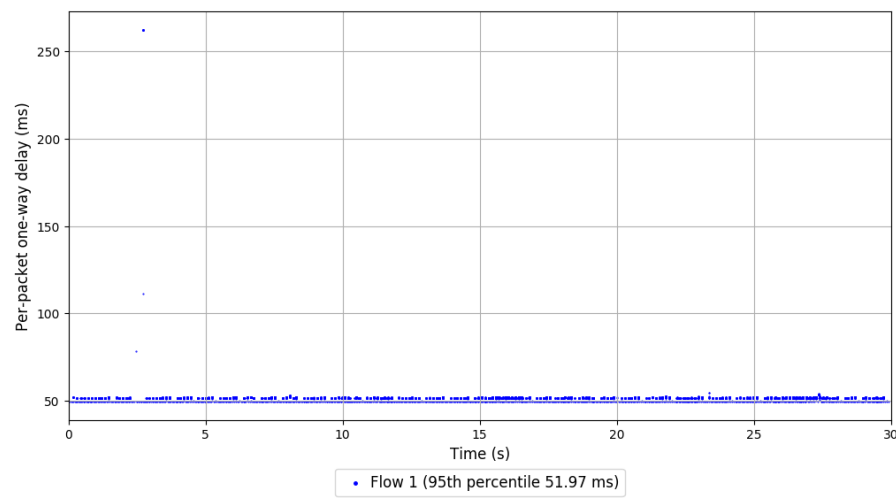
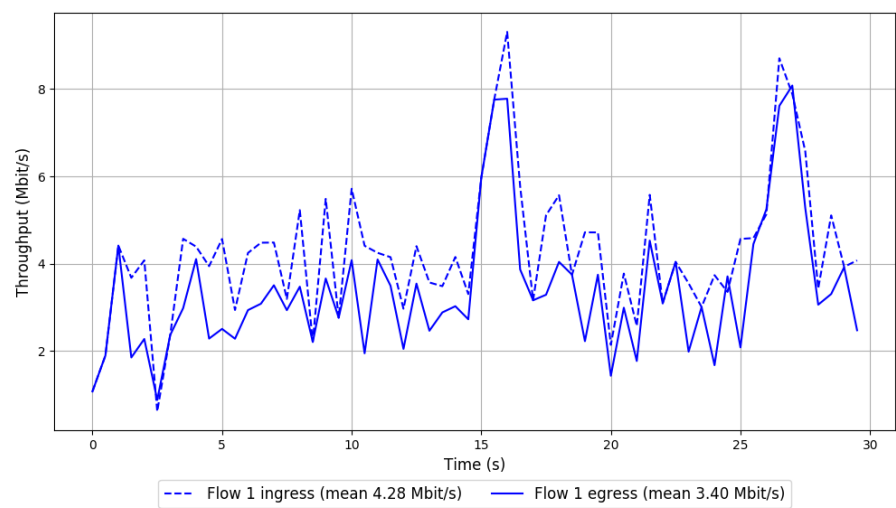
-- Flow 1:

Average throughput: 3.40 Mbit/s

95th percentile per-packet one-way delay: 51.971 ms

Loss rate: 20.59%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-17 02:53:10

End at: 2017-08-17 02:53:40

Below is generated by plot.py at 2017-08-17 04:24:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 50.289 ms

Loss rate: 2.60%

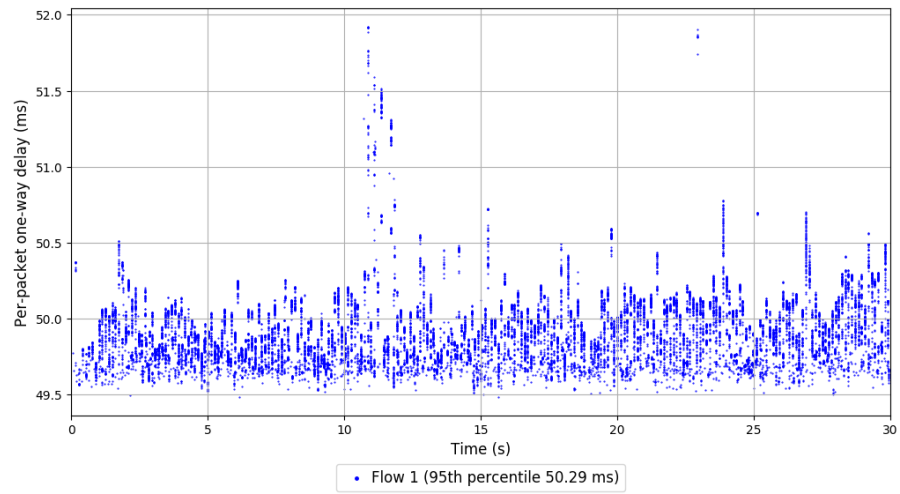
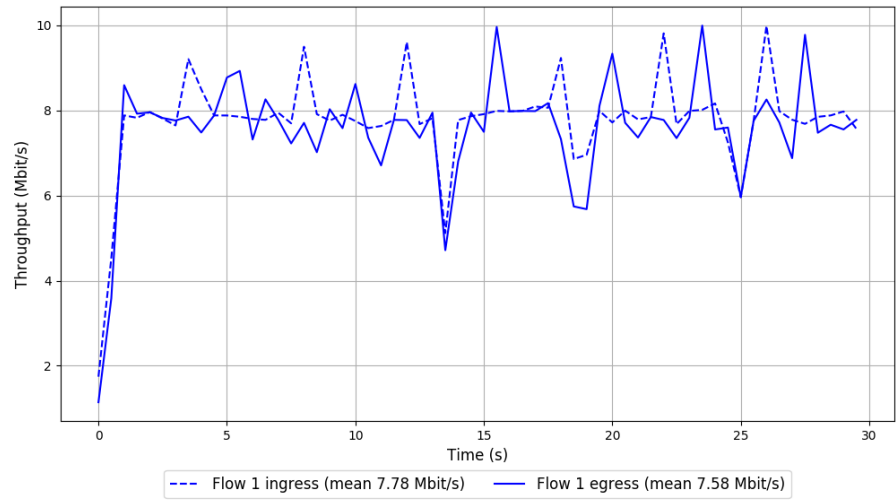
-- Flow 1:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 50.289 ms

Loss rate: 2.60%

Run 10: Report of Sprout — Data Link

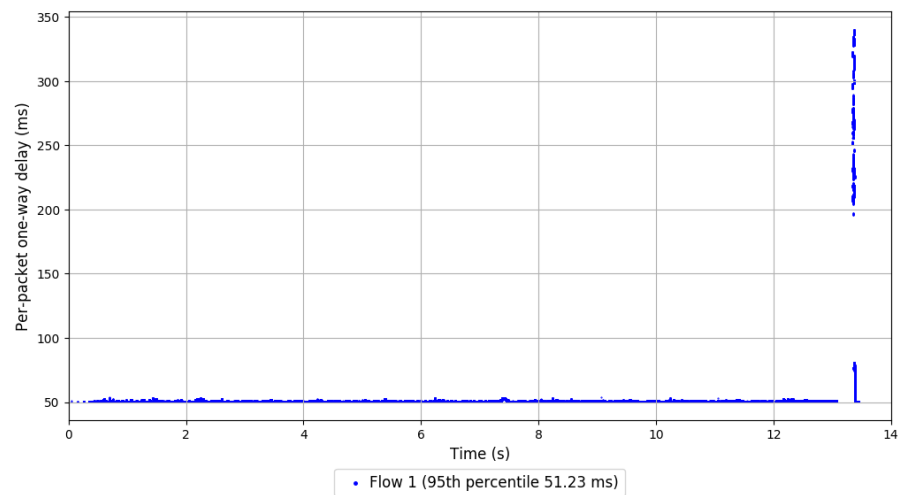
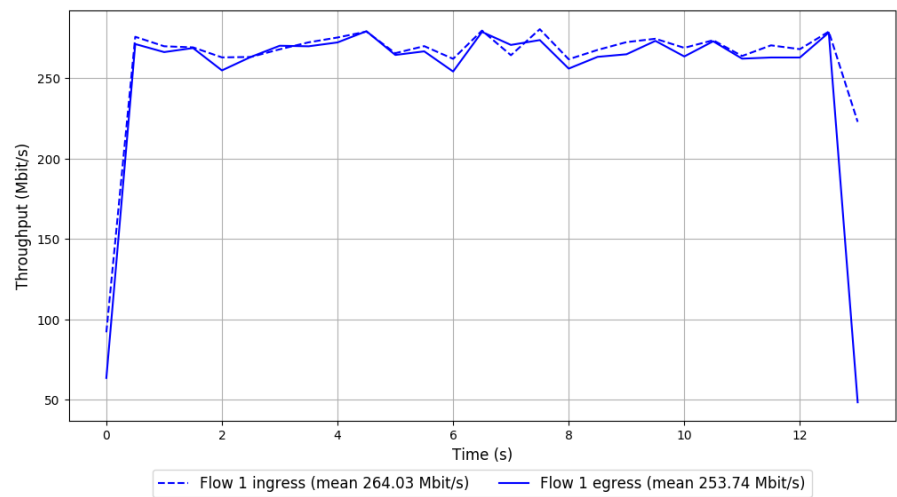


Run 1: Statistics of TaoVA-100x

Start at: 2017-08-17 01:23:36

End at: 2017-08-17 01:24:06

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

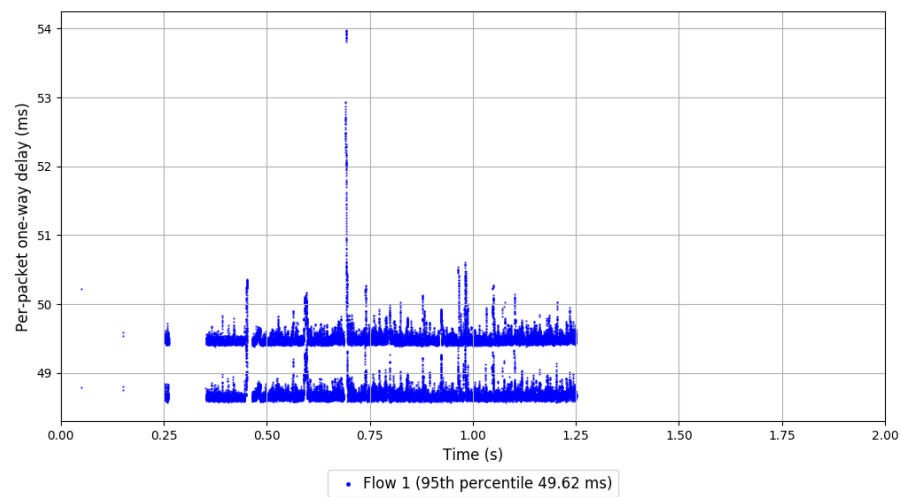
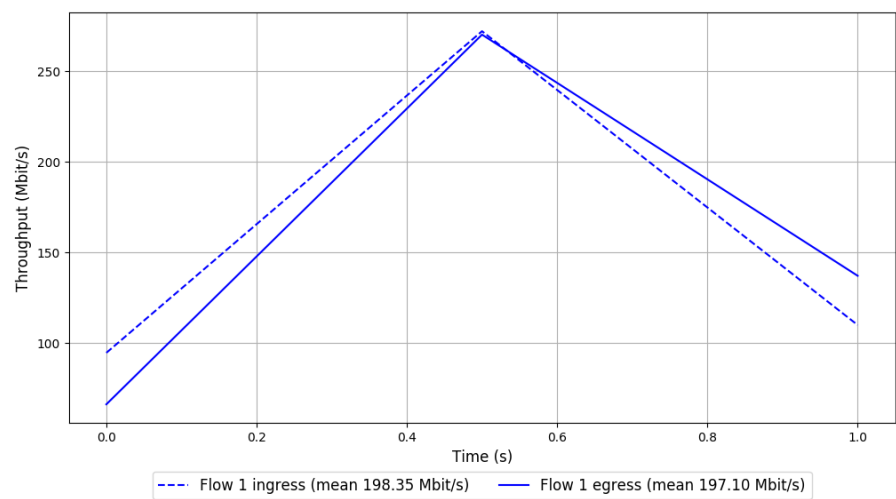


Run 2: Statistics of TaoVA-100x

Start at: 2017-08-17 01:33:23

End at: 2017-08-17 01:33:53

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

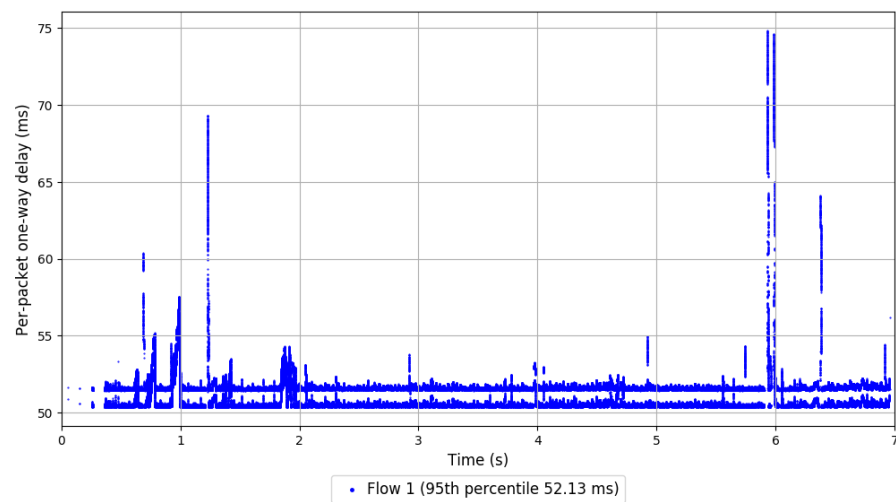
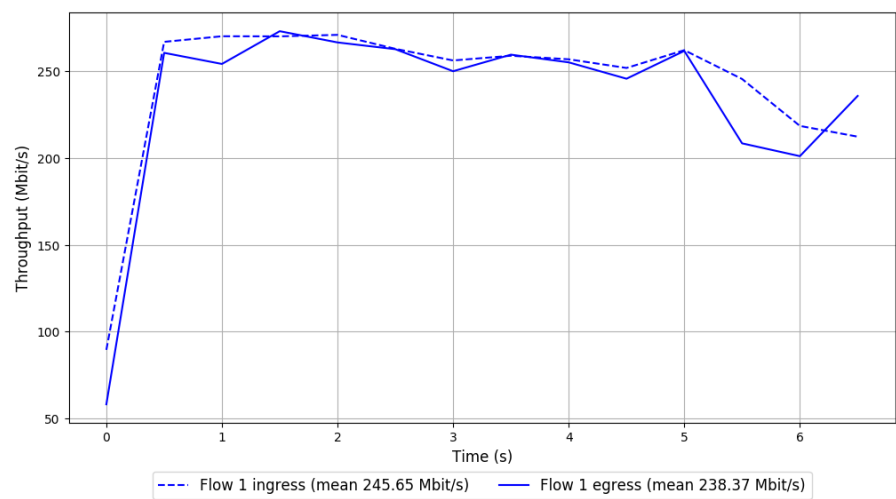


Run 3: Statistics of TaoVA-100x

Start at: 2017-08-17 01:43:08

End at: 2017-08-17 01:43:38

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

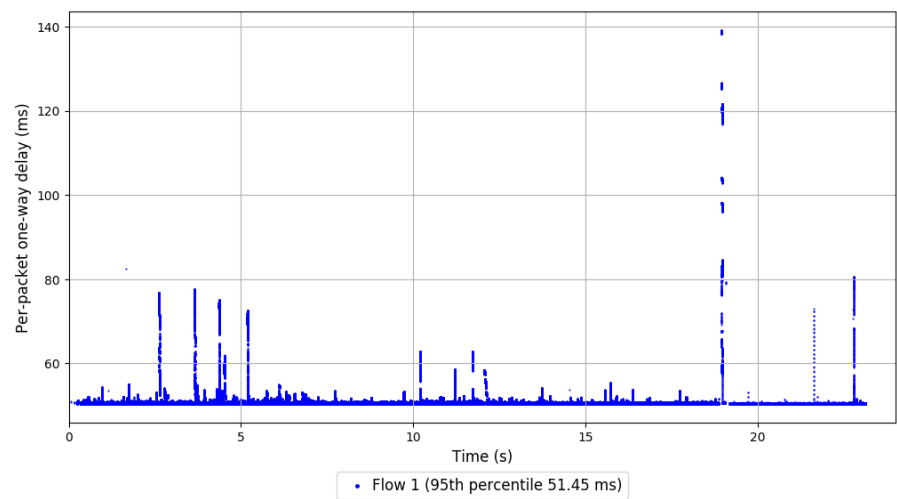
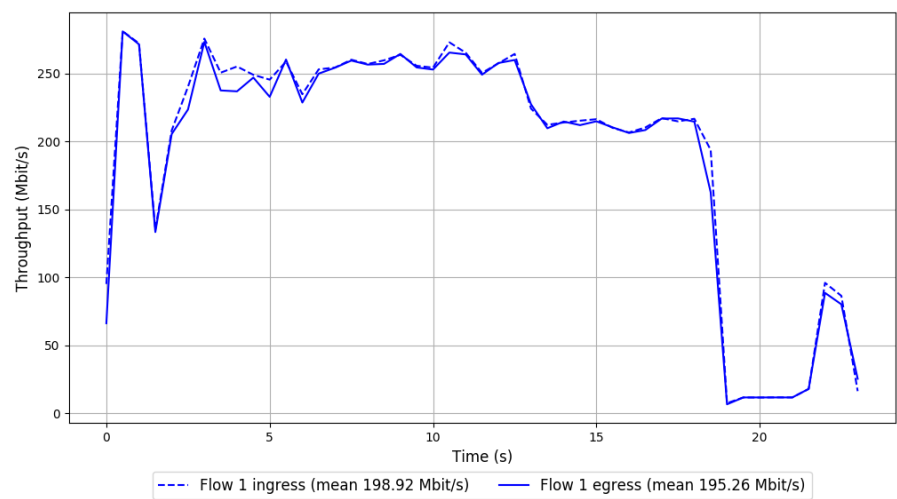


Run 4: Statistics of TaoVA-100x

Start at: 2017-08-17 01:53:01

End at: 2017-08-17 01:53:31

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

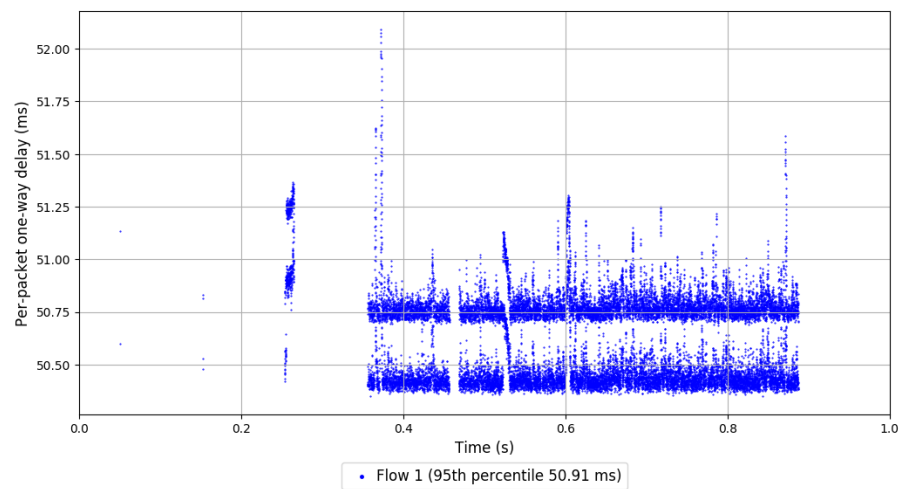
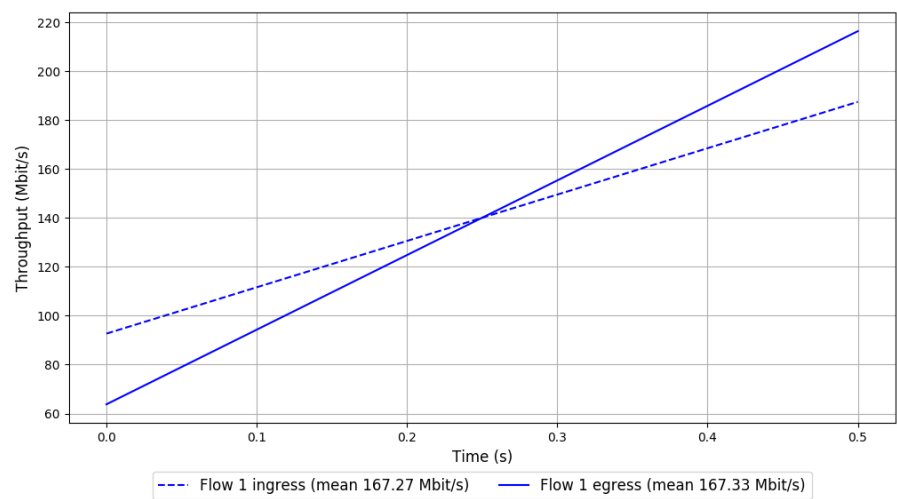


Run 5: Statistics of TaoVA-100x

Start at: 2017-08-17 02:03:30

End at: 2017-08-17 02:04:00

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

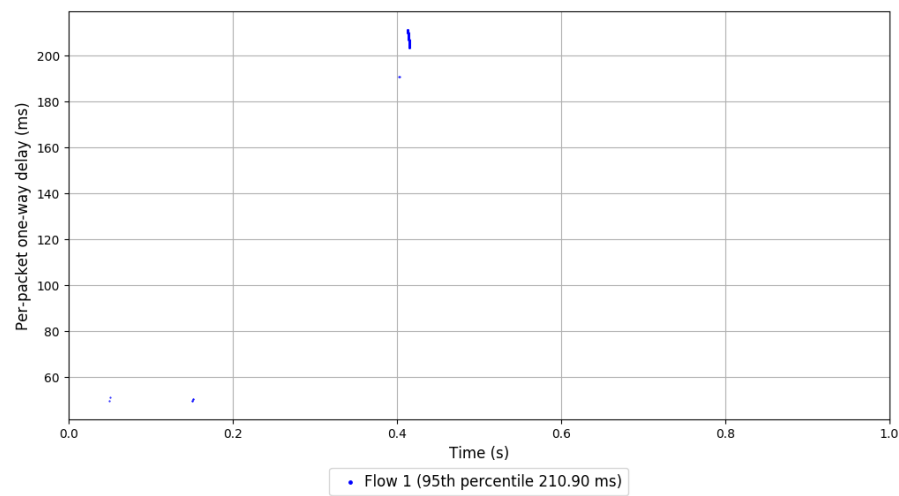
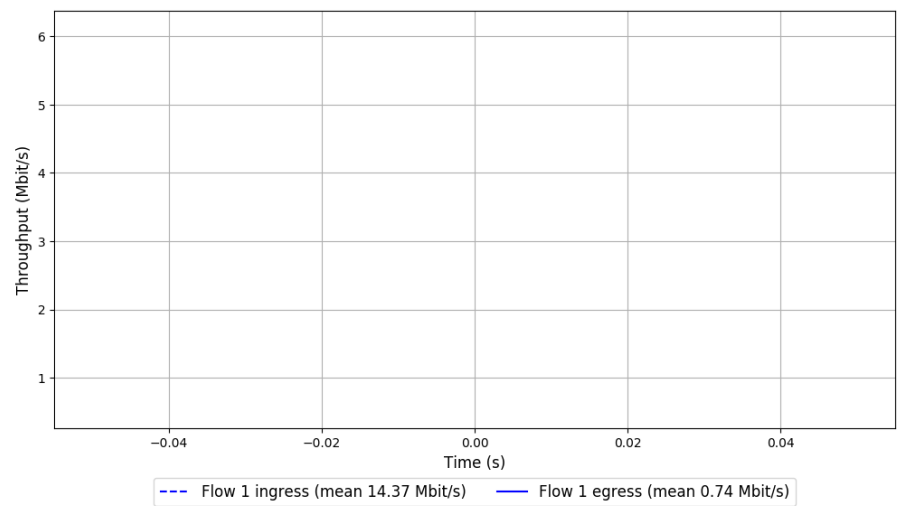


Run 6: Statistics of TaoVA-100x

Start at: 2017-08-17 02:13:49

End at: 2017-08-17 02:14:19

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

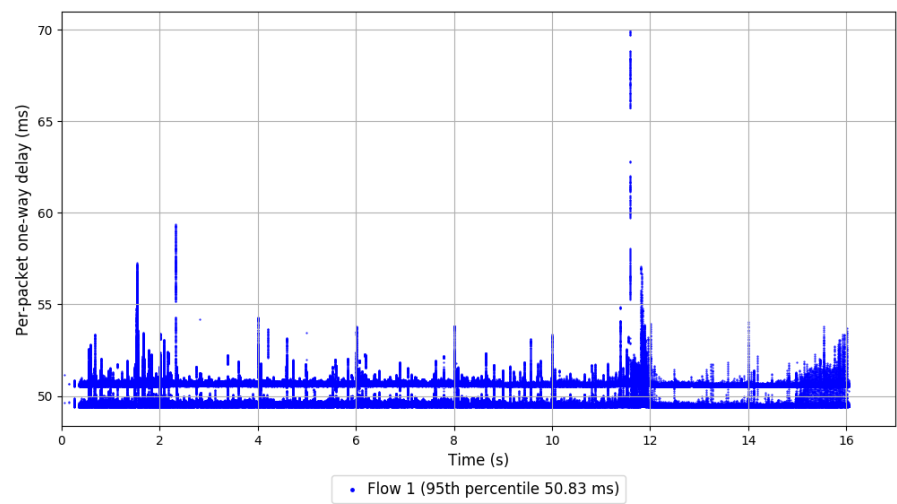
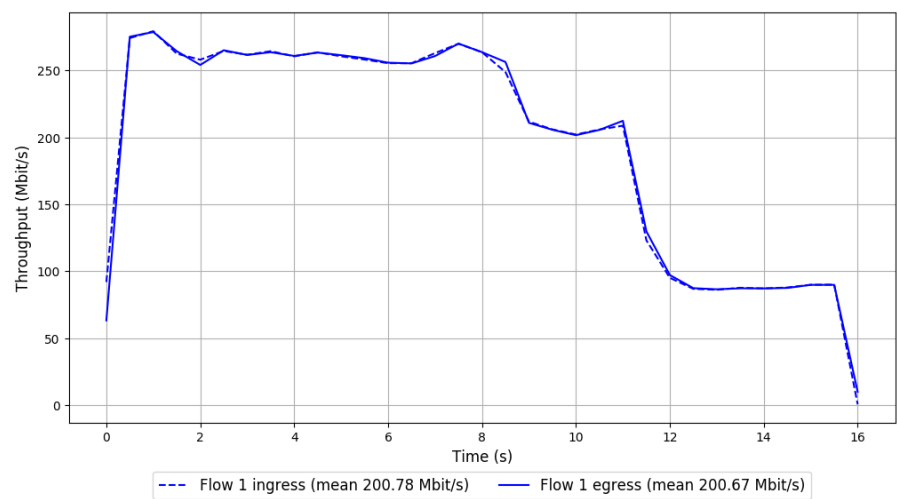


Run 7: Statistics of TaoVA-100x

Start at: 2017-08-17 02:23:59

End at: 2017-08-17 02:24:29

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

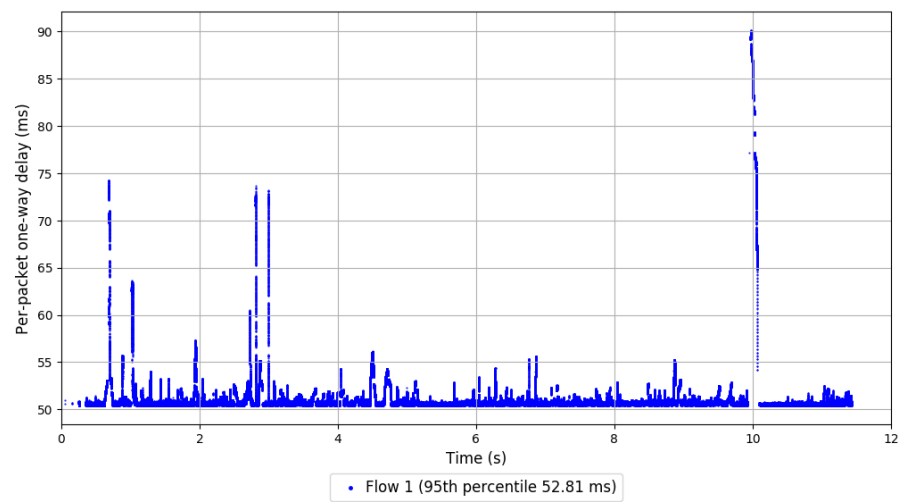
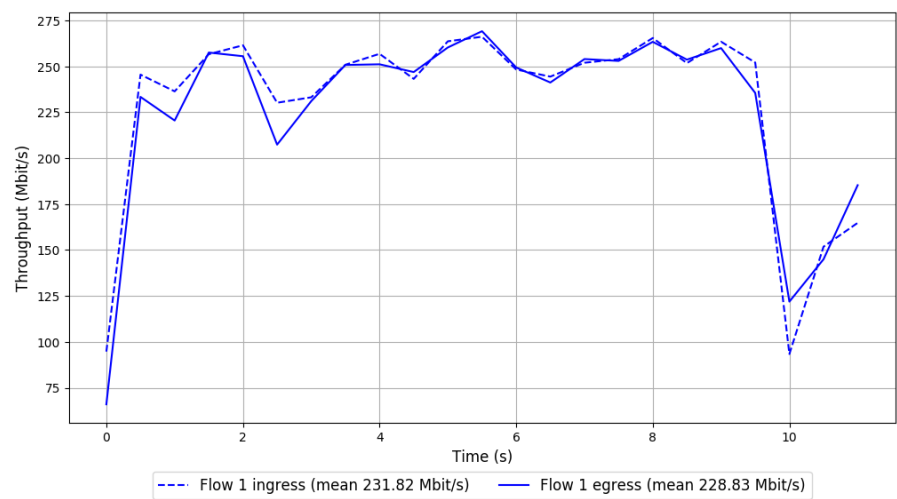


Run 8: Statistics of TaoVA-100x

Start at: 2017-08-17 02:34:03

End at: 2017-08-17 02:34:33

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

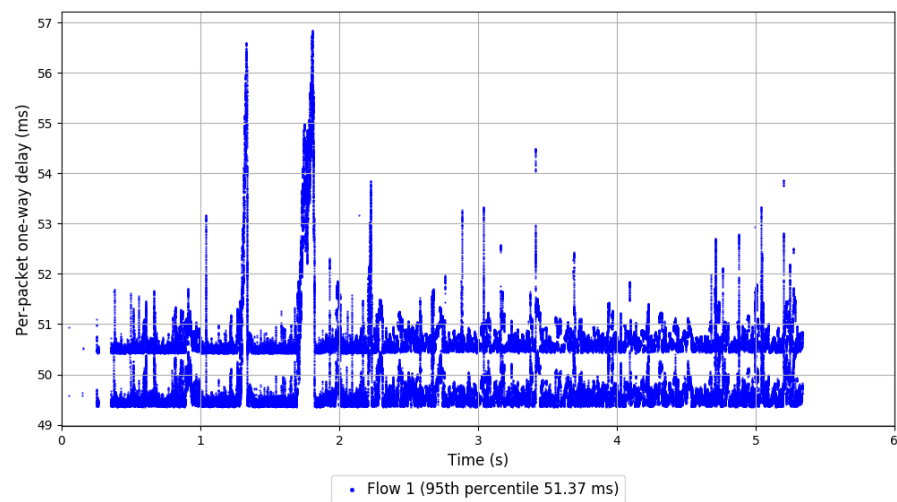
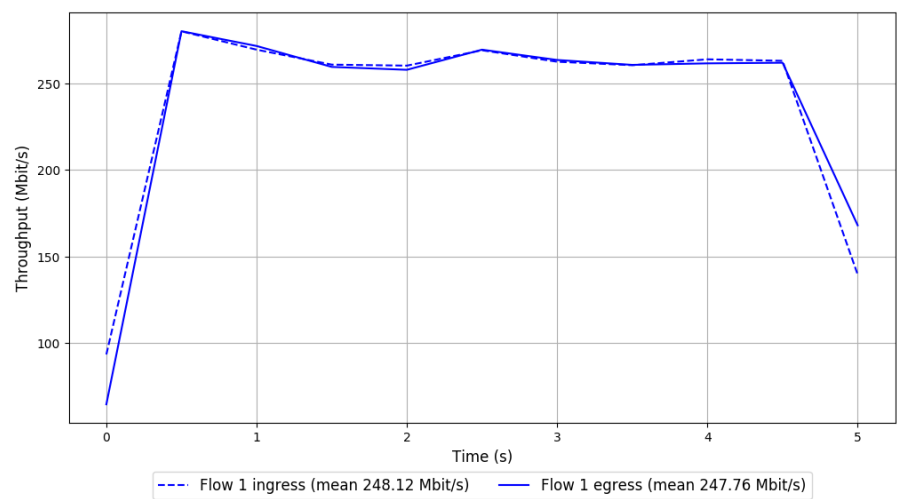


Run 9: Statistics of TaoVA-100x

Start at: 2017-08-17 02:44:32

End at: 2017-08-17 02:45:02

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

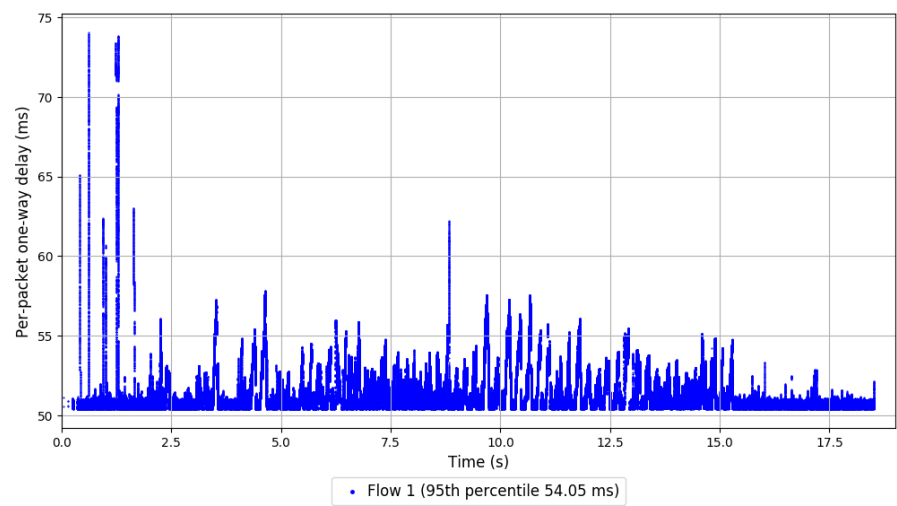
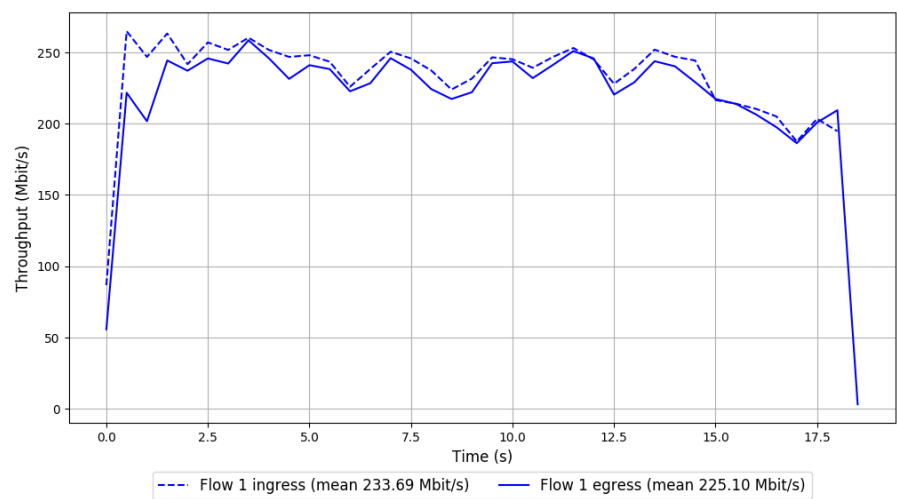


Run 10: Statistics of TaoVA-100x

Start at: 2017-08-17 02:54:25

End at: 2017-08-17 02:54:55

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-17 01:24:24

End at: 2017-08-17 01:24:54

Below is generated by plot.py at 2017-08-17 04:27:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.67 Mbit/s

95th percentile per-packet one-way delay: 50.757 ms

Loss rate: 2.21%

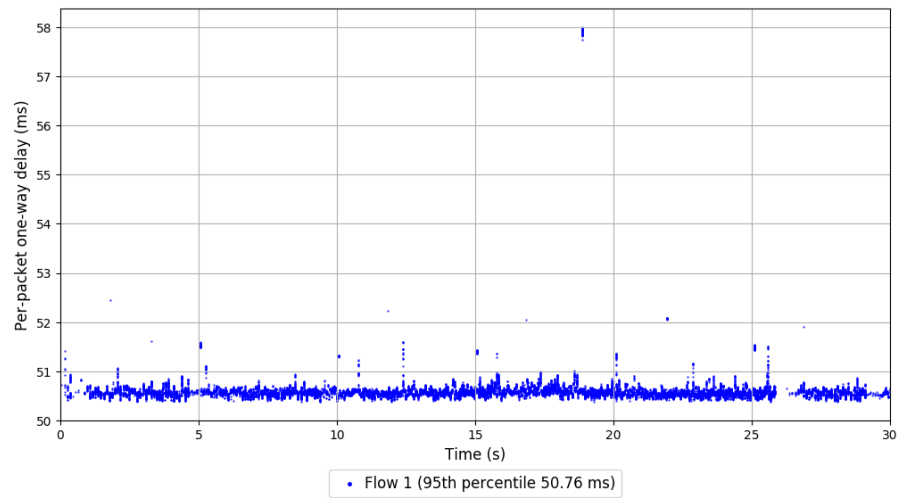
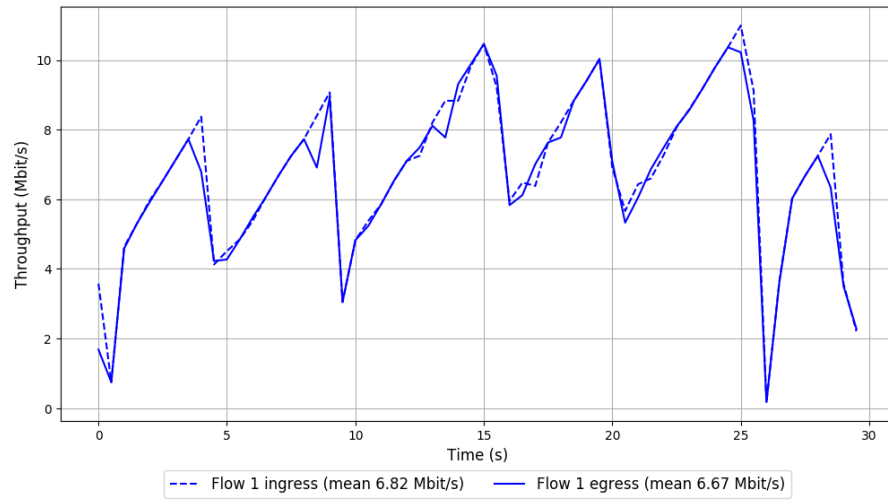
-- Flow 1:

Average throughput: 6.67 Mbit/s

95th percentile per-packet one-way delay: 50.757 ms

Loss rate: 2.21%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-17 01:34:00

End at: 2017-08-17 01:34:30

Below is generated by plot.py at 2017-08-17 04:27:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.28 Mbit/s

95th percentile per-packet one-way delay: 50.912 ms

Loss rate: 2.76%

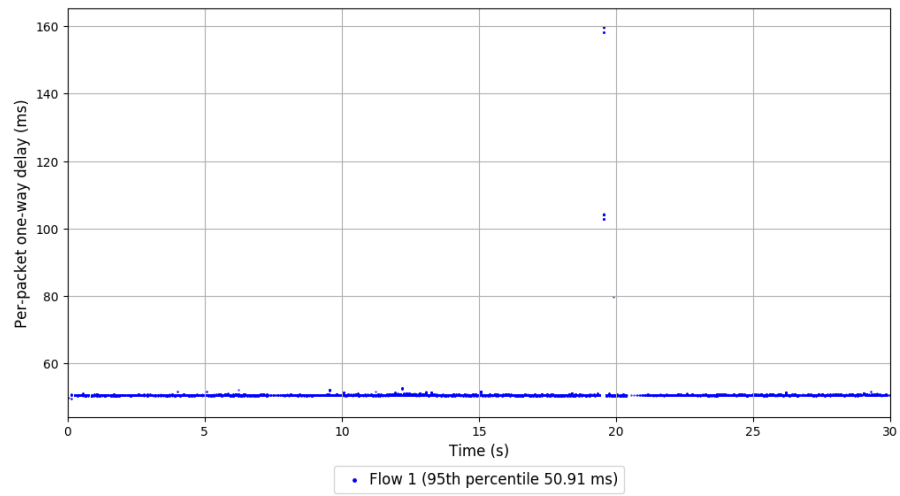
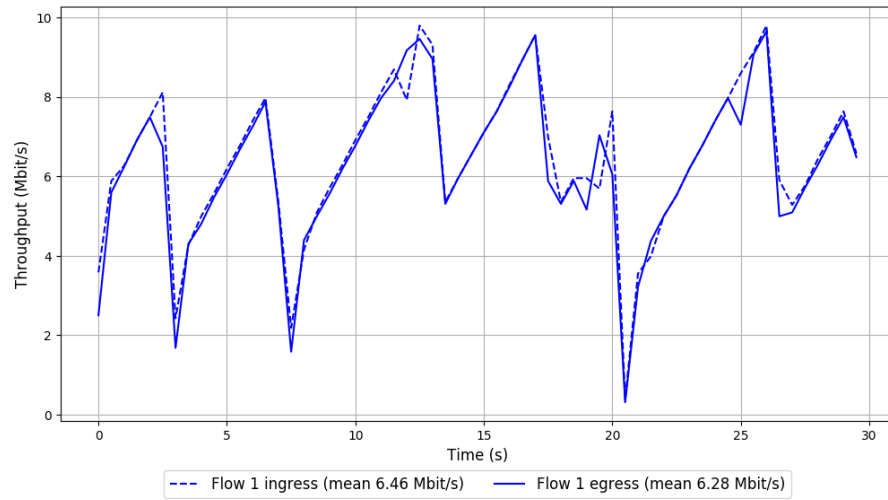
-- Flow 1:

Average throughput: 6.28 Mbit/s

95th percentile per-packet one-way delay: 50.912 ms

Loss rate: 2.76%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-17 01:43:50

End at: 2017-08-17 01:44:20

Below is generated by plot.py at 2017-08-17 04:27:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.44 Mbit/s

95th percentile per-packet one-way delay: 50.489 ms

Loss rate: 0.19%

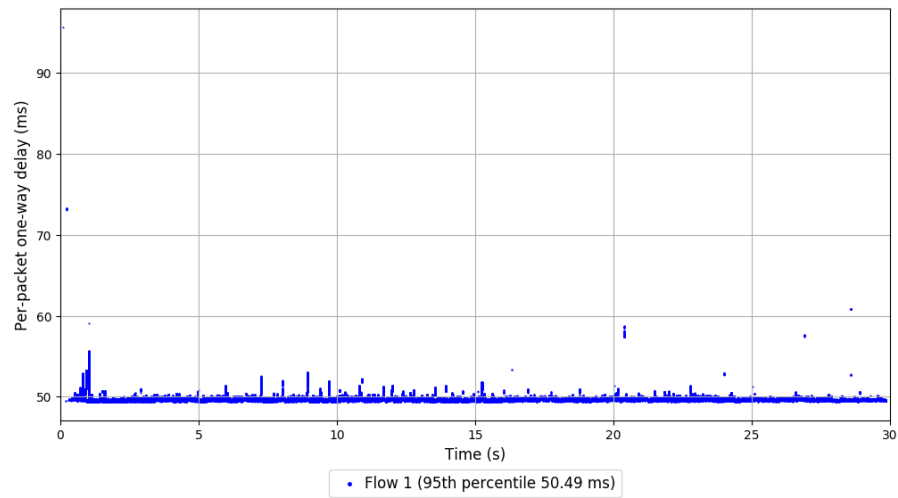
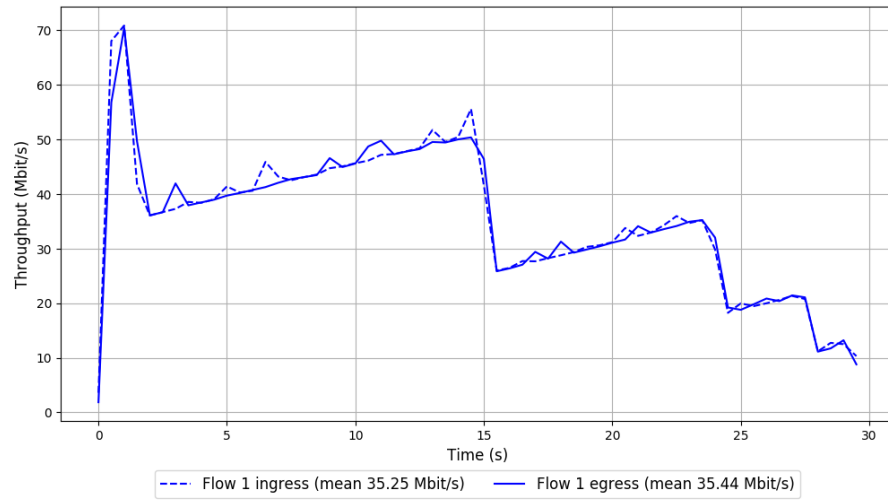
-- Flow 1:

Average throughput: 35.44 Mbit/s

95th percentile per-packet one-way delay: 50.489 ms

Loss rate: 0.19%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-17 01:53:53

End at: 2017-08-17 01:54:23

Below is generated by plot.py at 2017-08-17 04:27:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 50.846 ms

Loss rate: 1.83%

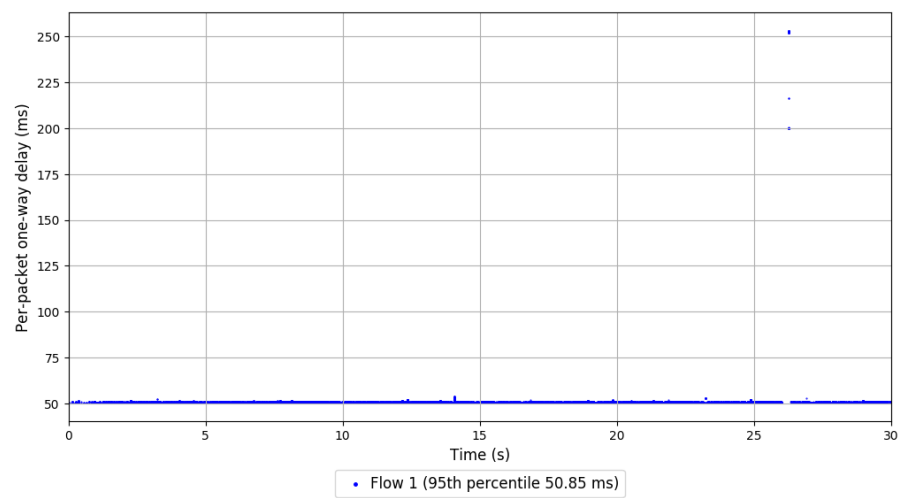
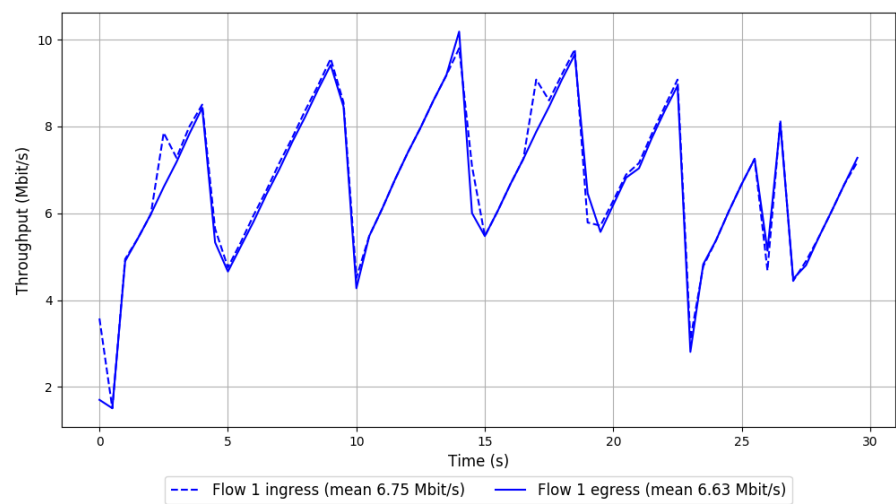
-- Flow 1:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 50.846 ms

Loss rate: 1.83%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-08-17 02:04:07

End at: 2017-08-17 02:04:37

Below is generated by plot.py at 2017-08-17 04:27:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.84 Mbit/s

95th percentile per-packet one-way delay: 51.380 ms

Loss rate: 2.12%

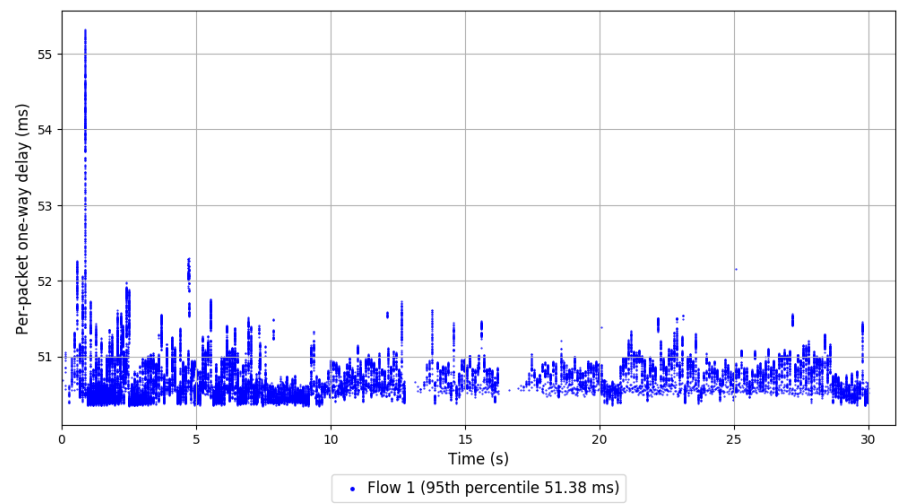
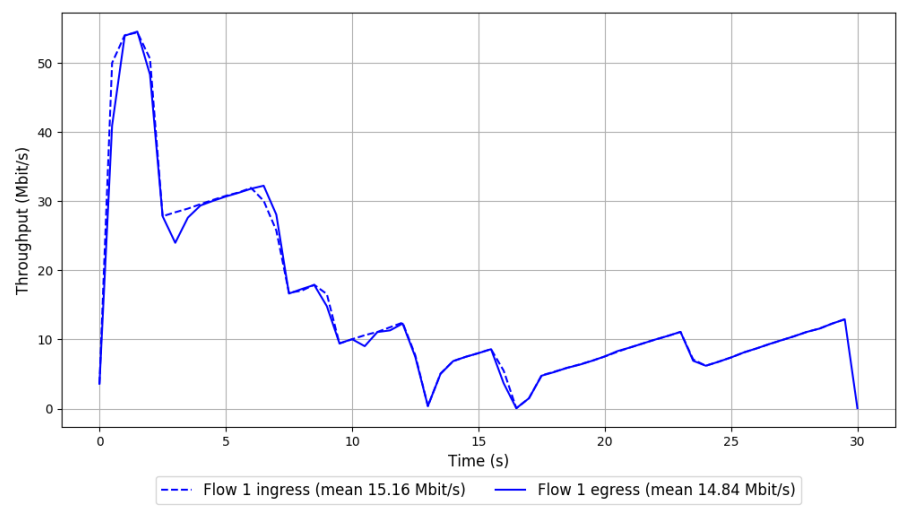
-- Flow 1:

Average throughput: 14.84 Mbit/s

95th percentile per-packet one-way delay: 51.380 ms

Loss rate: 2.12%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-17 02:14:26

End at: 2017-08-17 02:14:56

Below is generated by plot.py at 2017-08-17 04:27:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.85 Mbit/s

95th percentile per-packet one-way delay: 51.241 ms

Loss rate: 1.21%

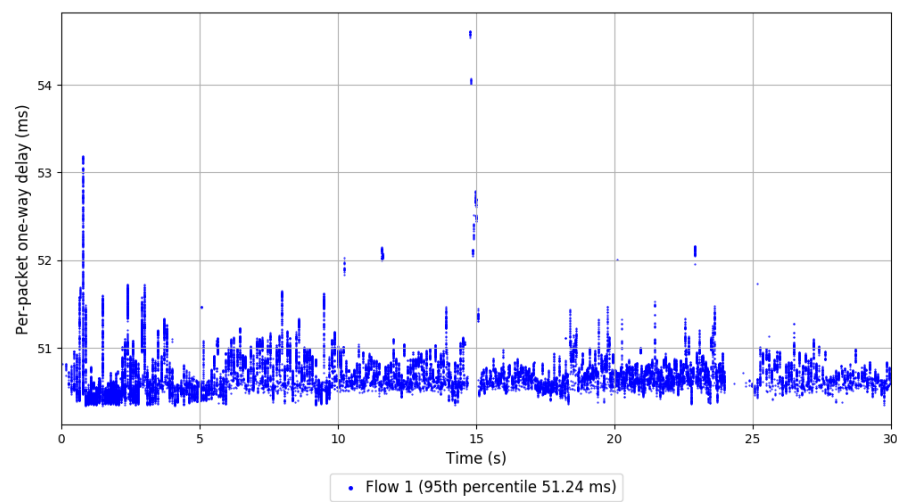
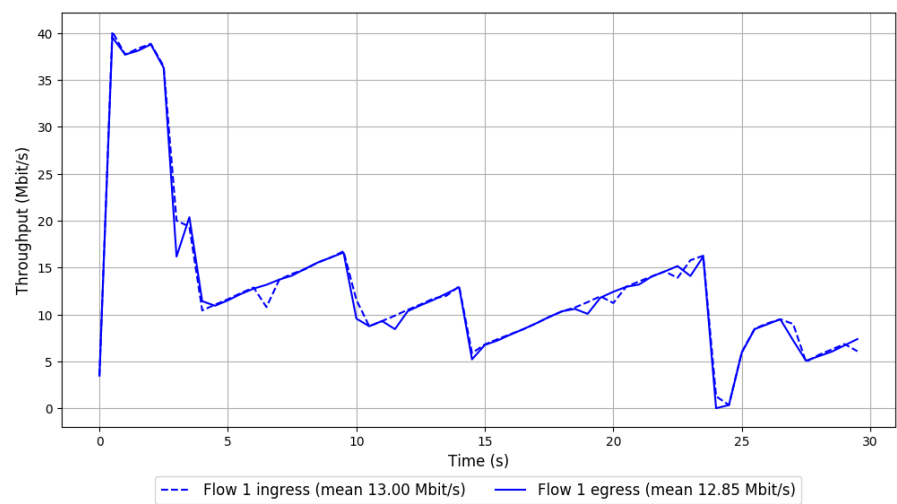
-- Flow 1:

Average throughput: 12.85 Mbit/s

95th percentile per-packet one-way delay: 51.241 ms

Loss rate: 1.21%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-17 02:24:46

End at: 2017-08-17 02:25:16

Below is generated by plot.py at 2017-08-17 04:27:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.62 Mbit/s

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

Loss rate: 0.28%

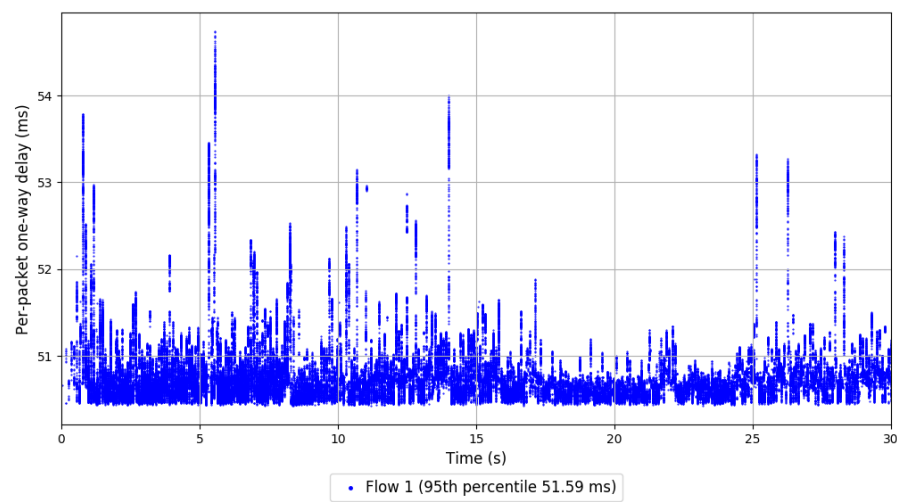
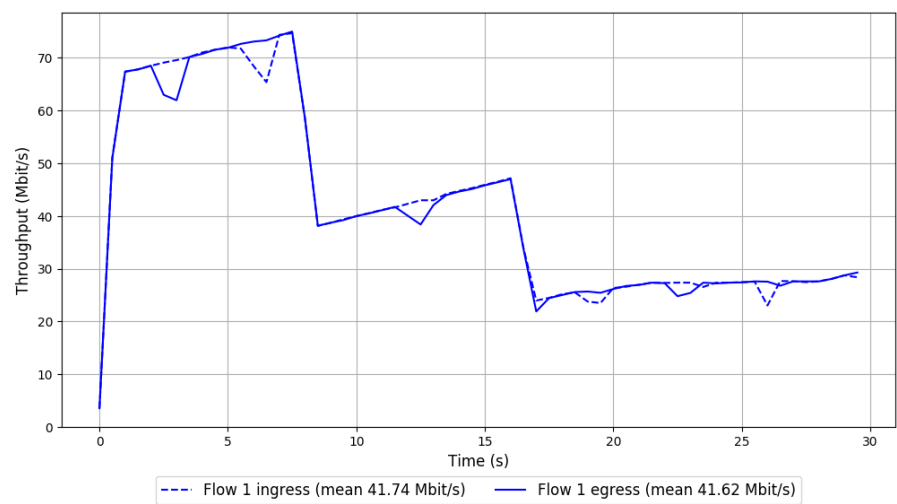
-- Flow 1:

Average throughput: 41.62 Mbit/s

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

Loss rate: 0.28%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-17 02:34:48

End at: 2017-08-17 02:35:18

Below is generated by plot.py at 2017-08-17 04:27:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.12 Mbit/s

95th percentile per-packet one-way delay: 51.374 ms

Loss rate: 0.63%

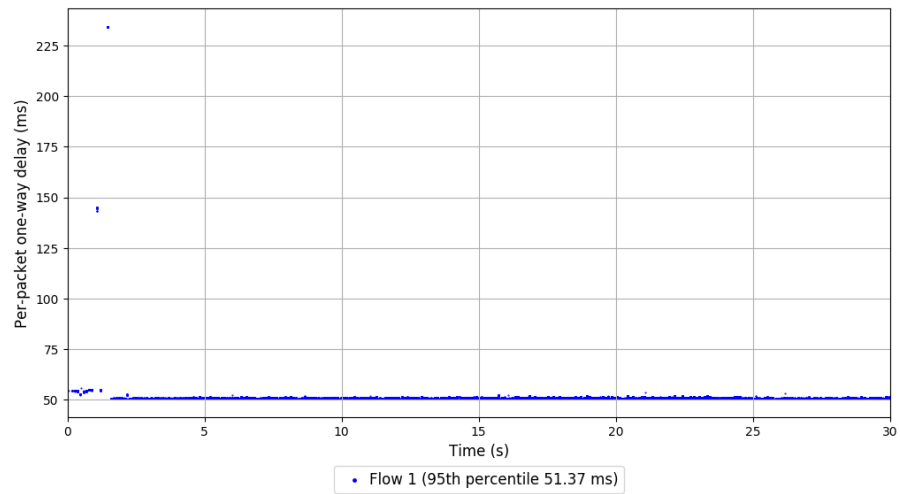
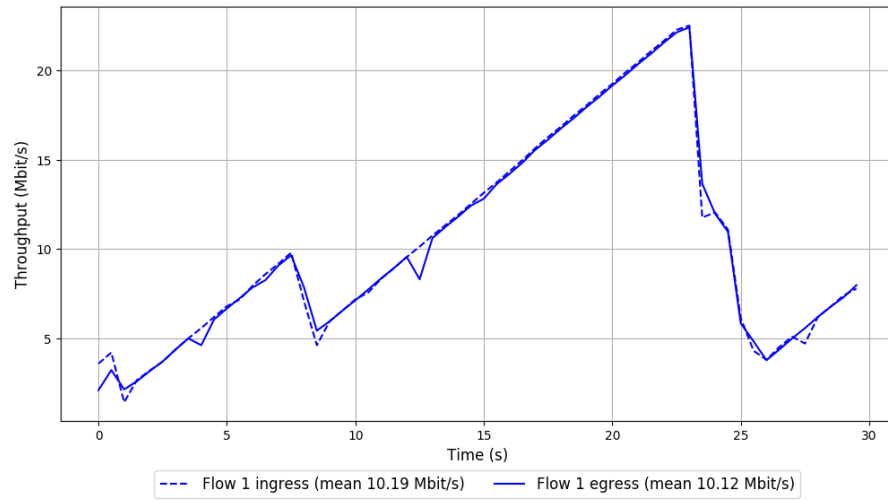
-- Flow 1:

Average throughput: 10.12 Mbit/s

95th percentile per-packet one-way delay: 51.374 ms

Loss rate: 0.63%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-17 02:45:13

End at: 2017-08-17 02:45:43

Below is generated by plot.py at 2017-08-17 04:27:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.46 Mbit/s

95th percentile per-packet one-way delay: 55.876 ms

Loss rate: 3.07%

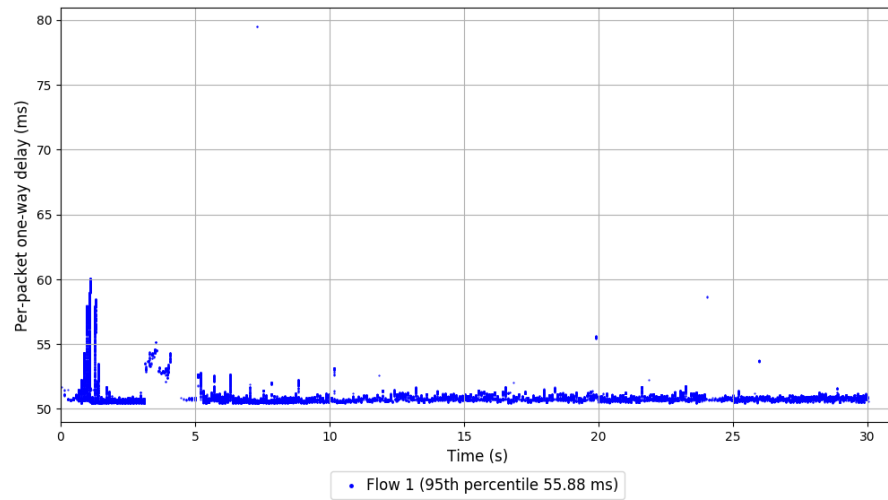
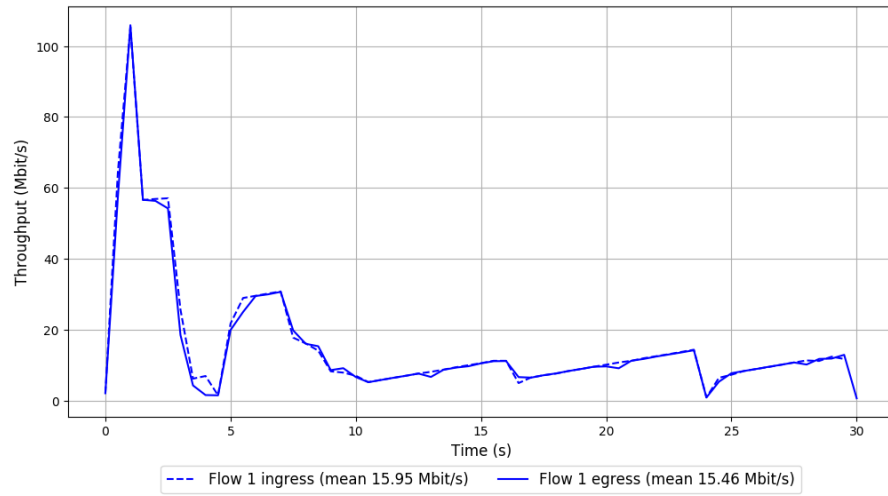
-- Flow 1:

Average throughput: 15.46 Mbit/s

95th percentile per-packet one-way delay: 55.876 ms

Loss rate: 3.07%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-17 02:55:15

End at: 2017-08-17 02:55:45

Below is generated by plot.py at 2017-08-17 04:27:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.67 Mbit/s

95th percentile per-packet one-way delay: 50.932 ms

Loss rate: 2.51%

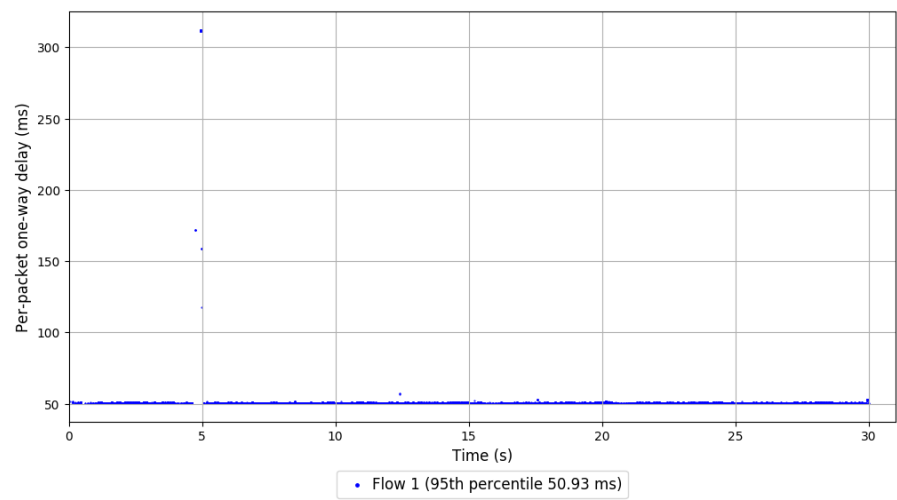
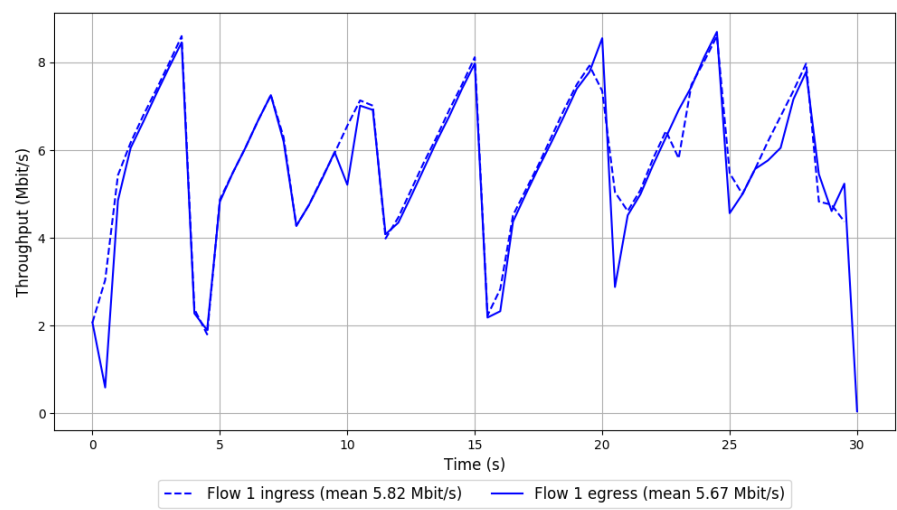
-- Flow 1:

Average throughput: 5.67 Mbit/s

95th percentile per-packet one-way delay: 50.932 ms

Loss rate: 2.51%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-08-17 01:28:23

End at: 2017-08-17 01:28:53

Below is generated by plot.py at 2017-08-17 04:27:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.26 Mbit/s

95th percentile per-packet one-way delay: 51.727 ms

Loss rate: 61.39%

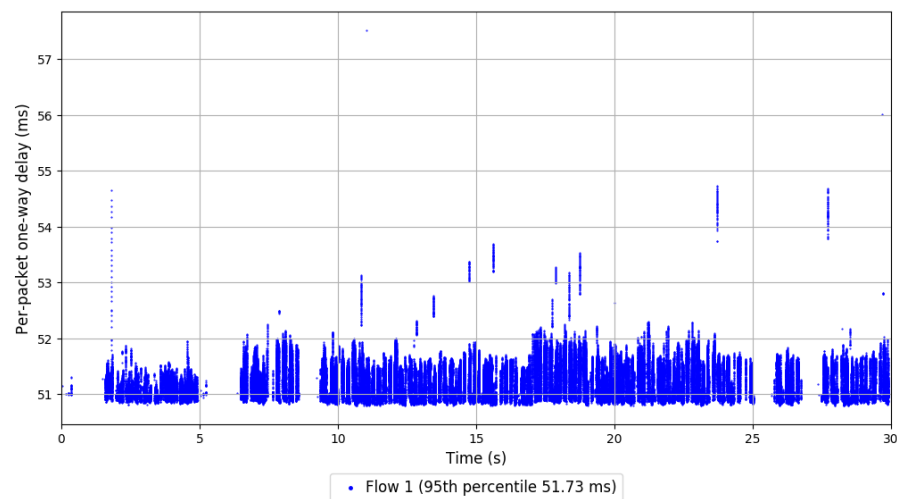
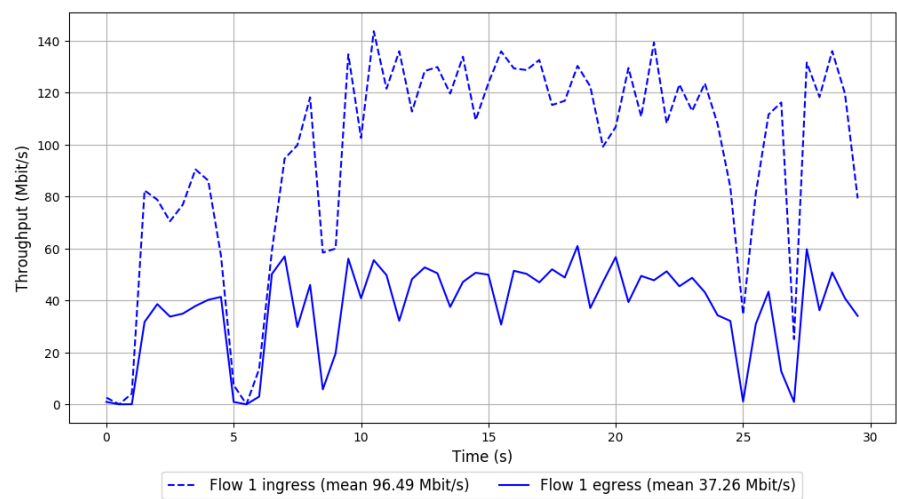
-- Flow 1:

Average throughput: 37.26 Mbit/s

95th percentile per-packet one-way delay: 51.727 ms

Loss rate: 61.39%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-17 01:38:00

End at: 2017-08-17 01:38:30

Below is generated by plot.py at 2017-08-17 04:27:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 156.91 Mbit/s

95th percentile per-packet one-way delay: 77.030 ms

Loss rate: 5.05%

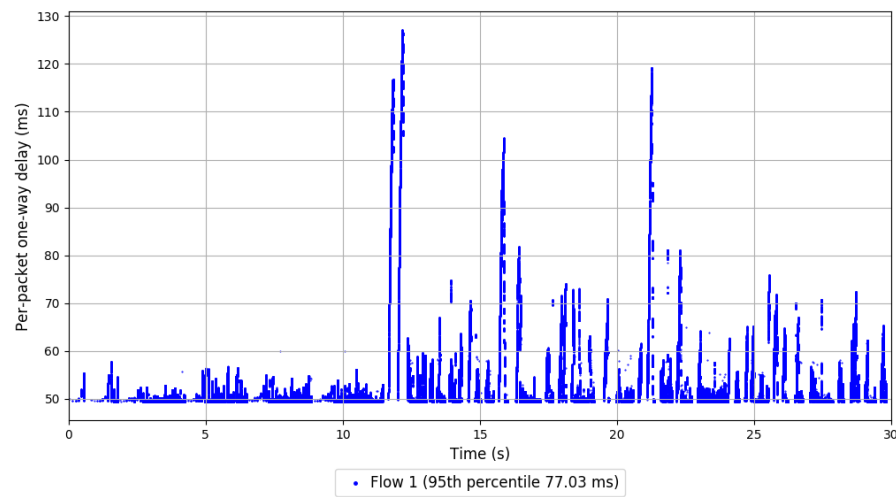
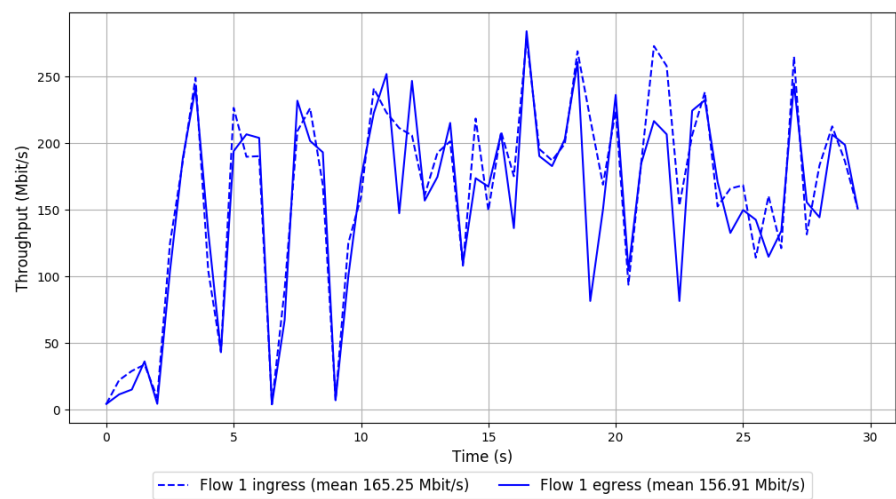
-- Flow 1:

Average throughput: 156.91 Mbit/s

95th percentile per-packet one-way delay: 77.030 ms

Loss rate: 5.05%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-17 01:47:59

End at: 2017-08-17 01:48:29

Below is generated by plot.py at 2017-08-17 04:27:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.40 Mbit/s

95th percentile per-packet one-way delay: 51.615 ms

Loss rate: 83.42%

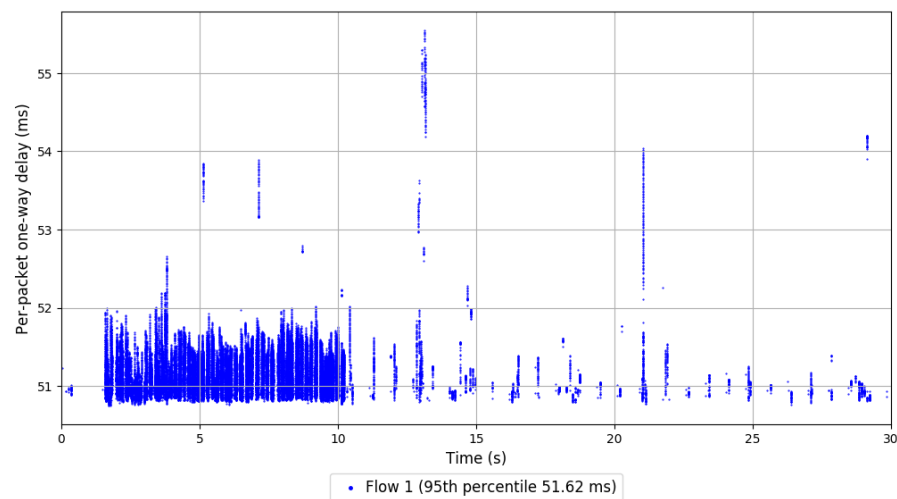
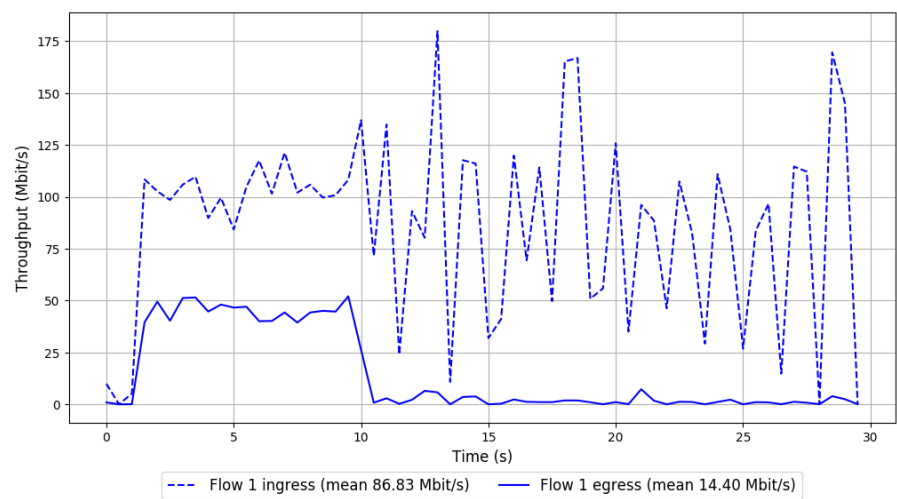
-- Flow 1:

Average throughput: 14.40 Mbit/s

95th percentile per-packet one-way delay: 51.615 ms

Loss rate: 83.42%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-17 01:58:02

End at: 2017-08-17 01:58:32

Below is generated by plot.py at 2017-08-17 04:27:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 28.68 Mbit/s

95th percentile per-packet one-way delay: 52.405 ms

Loss rate: 72.28%

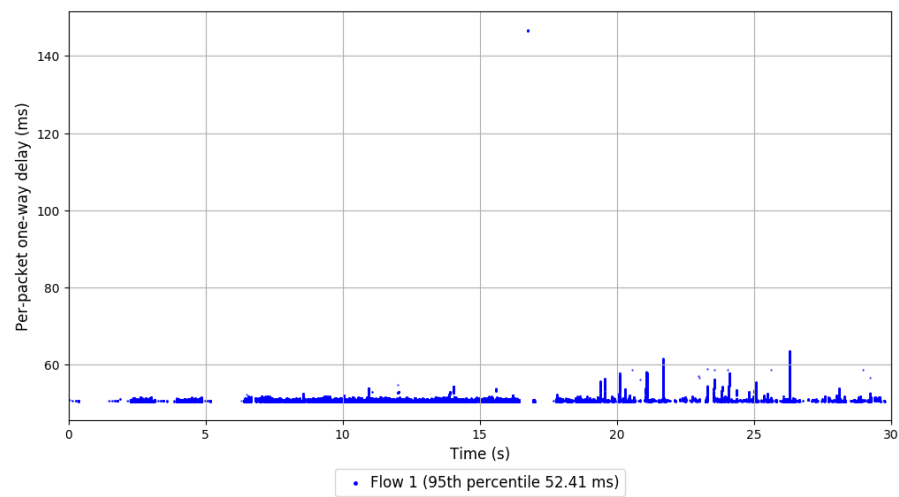
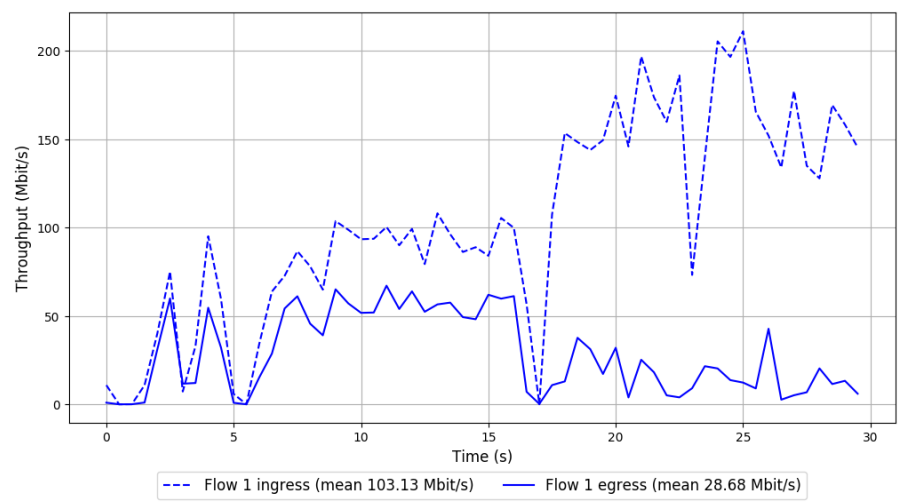
-- Flow 1:

Average throughput: 28.68 Mbit/s

95th percentile per-packet one-way delay: 52.405 ms

Loss rate: 72.28%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-17 02:08:15

End at: 2017-08-17 02:08:45

Below is generated by plot.py at 2017-08-17 04:28:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 156.89 Mbit/s

95th percentile per-packet one-way delay: 73.692 ms

Loss rate: 7.97%

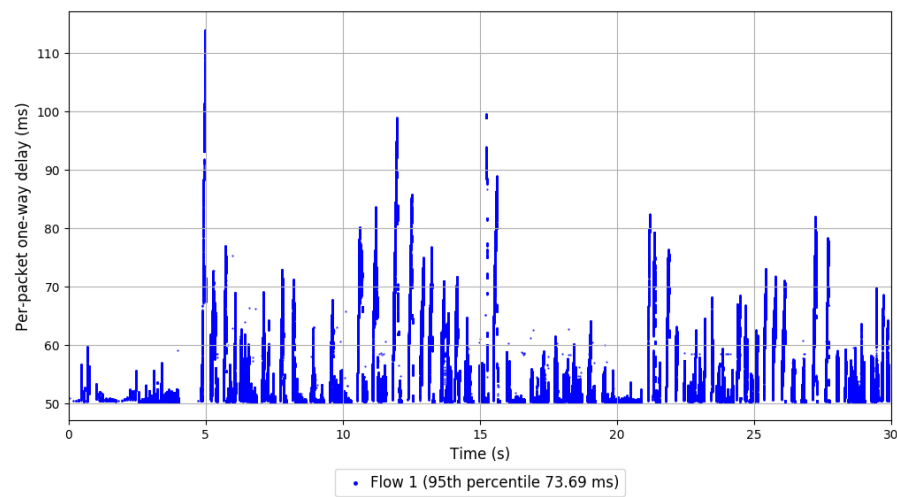
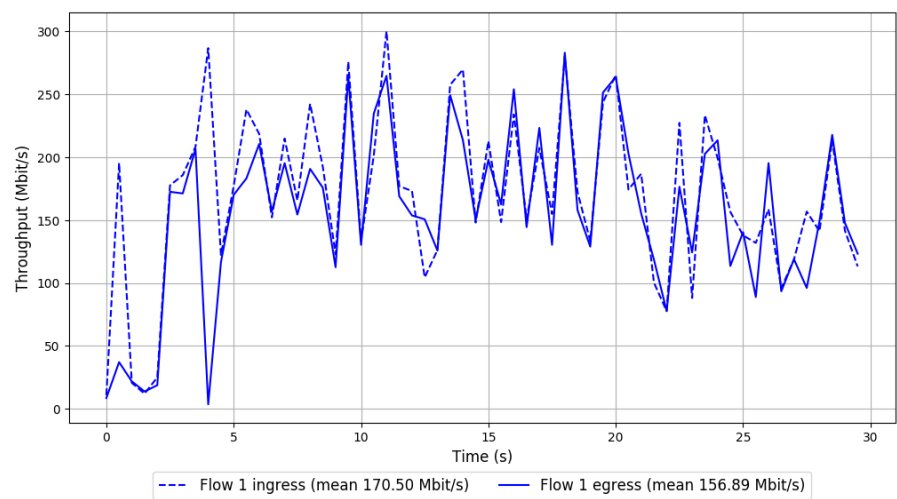
-- Flow 1:

Average throughput: 156.89 Mbit/s

95th percentile per-packet one-way delay: 73.692 ms

Loss rate: 7.97%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-17 02:18:26

End at: 2017-08-17 02:18:56

Below is generated by plot.py at 2017-08-17 04:28:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 147.13 Mbit/s

95th percentile per-packet one-way delay: 70.394 ms

Loss rate: 0.86%

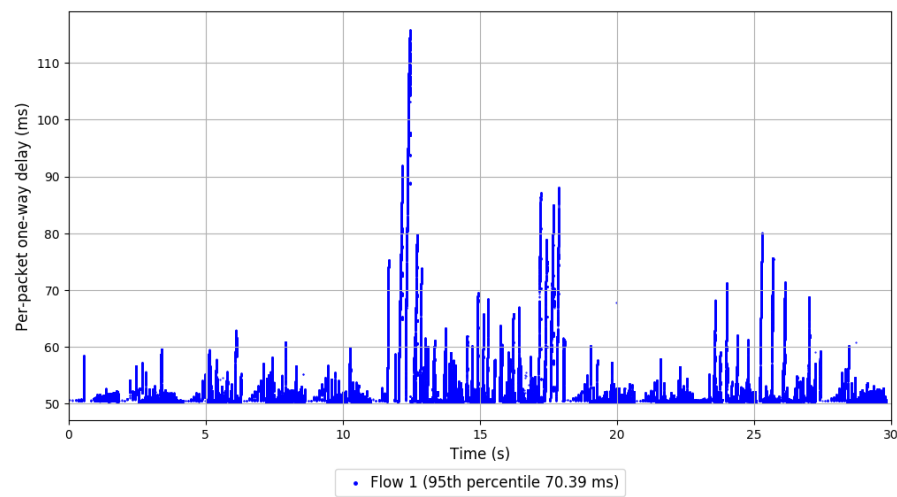
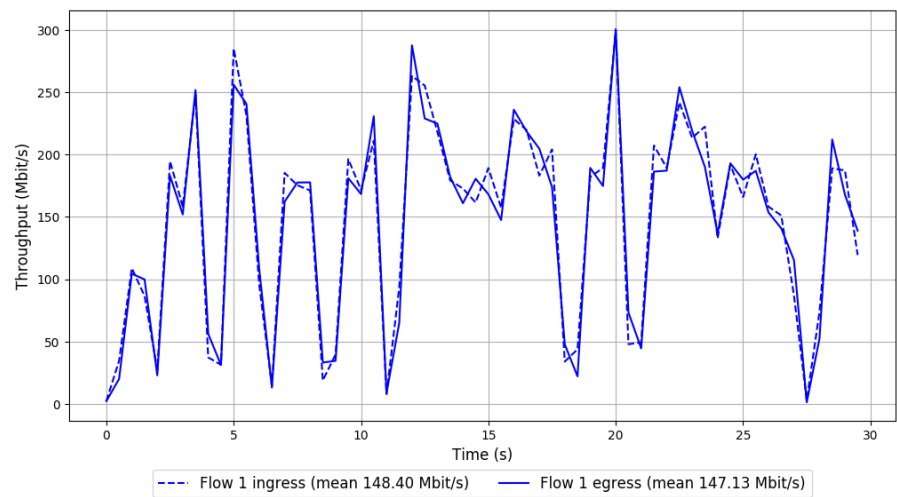
-- Flow 1:

Average throughput: 147.13 Mbit/s

95th percentile per-packet one-way delay: 70.394 ms

Loss rate: 0.86%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-17 02:28:38

End at: 2017-08-17 02:29:08

Below is generated by plot.py at 2017-08-17 04:28:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.62 Mbit/s

95th percentile per-packet one-way delay: 52.777 ms

Loss rate: 93.10%

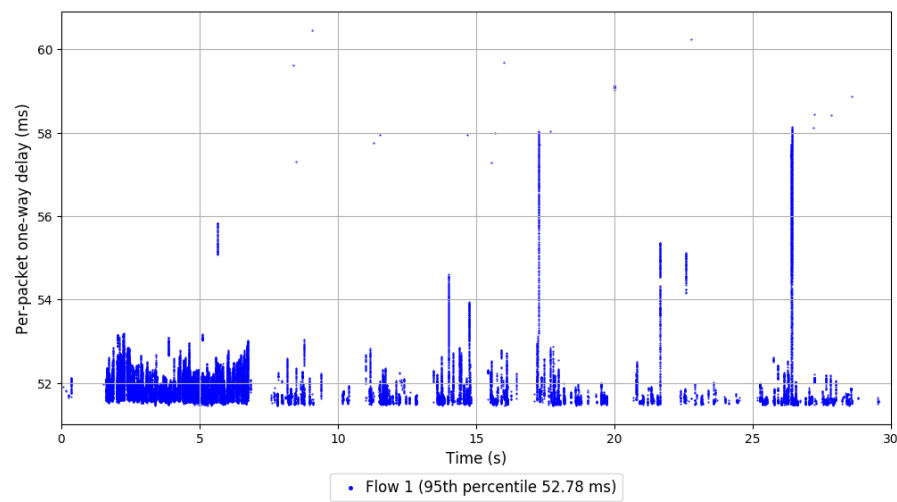
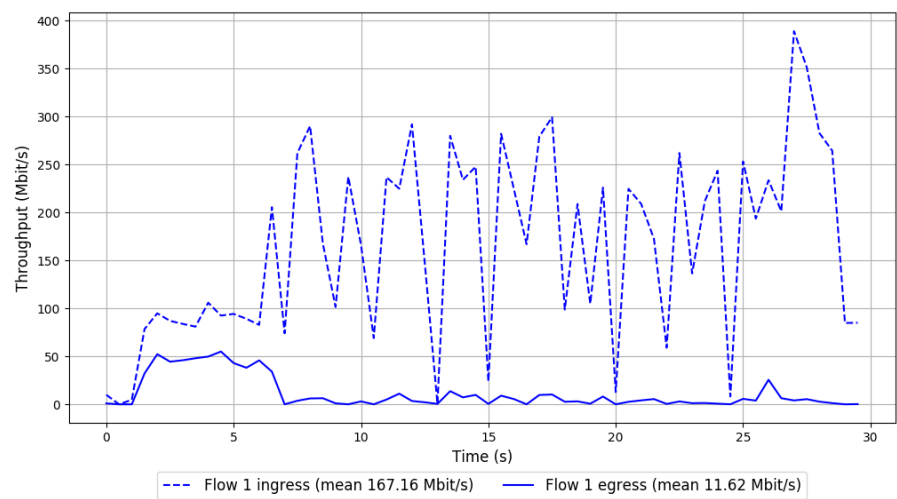
-- Flow 1:

Average throughput: 11.62 Mbit/s

95th percentile per-packet one-way delay: 52.777 ms

Loss rate: 93.10%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-17 02:39:01

End at: 2017-08-17 02:39:31

Below is generated by plot.py at 2017-08-17 04:28:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.00 Mbit/s

95th percentile per-packet one-way delay: 59.055 ms

Loss rate: 49.82%

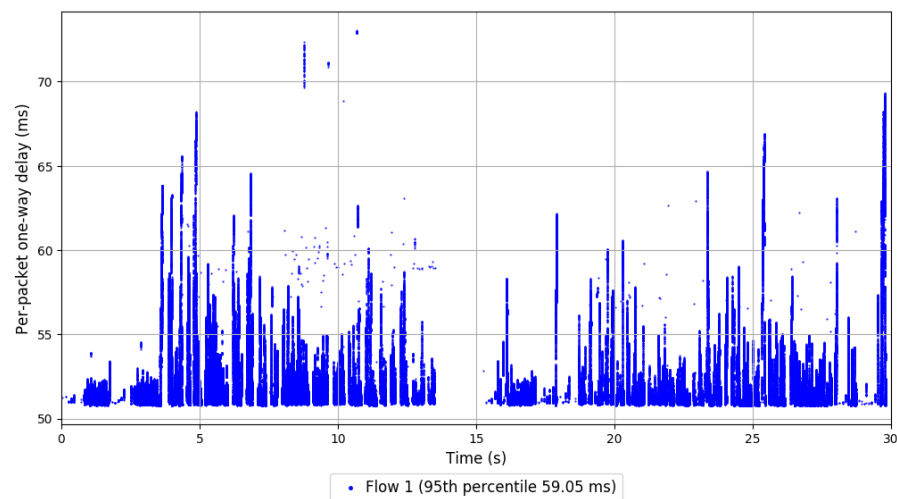
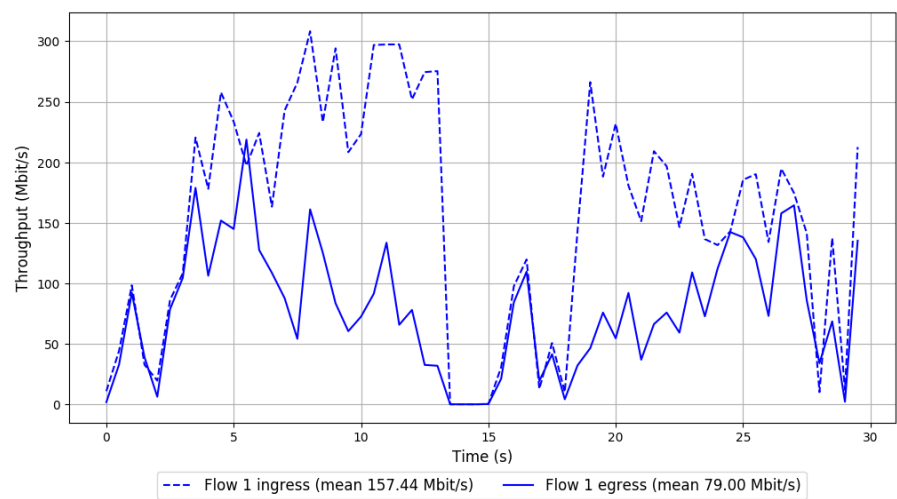
-- Flow 1:

Average throughput: 79.00 Mbit/s

95th percentile per-packet one-way delay: 59.055 ms

Loss rate: 49.82%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-08-17 02:49:14

End at: 2017-08-17 02:49:44

Below is generated by plot.py at 2017-08-17 04:28:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 150.27 Mbit/s

95th percentile per-packet one-way delay: 90.625 ms

Loss rate: 4.37%

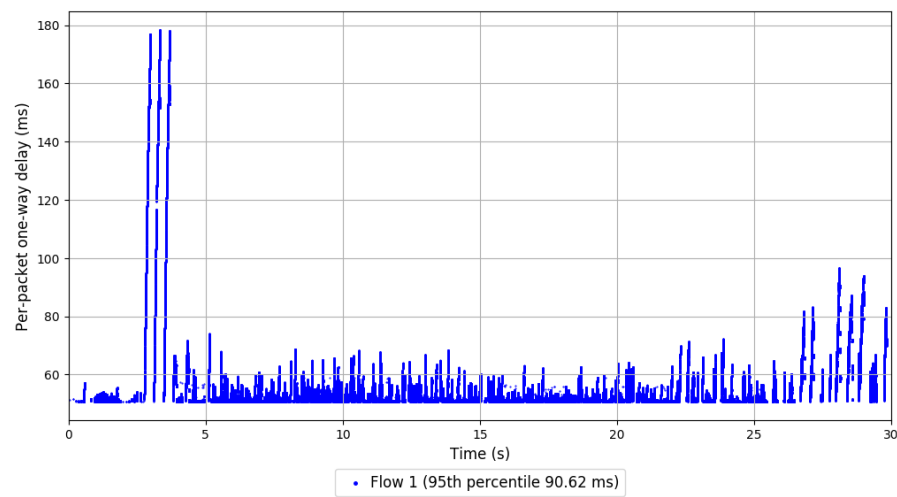
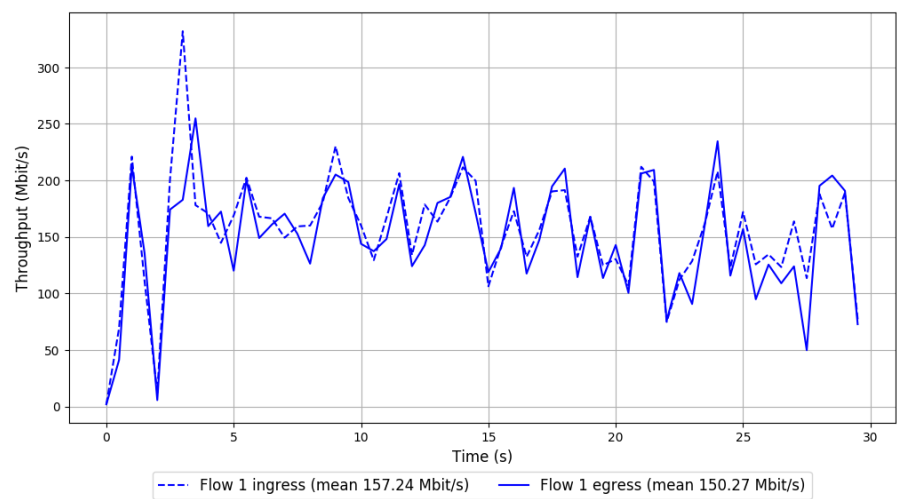
-- Flow 1:

Average throughput: 150.27 Mbit/s

95th percentile per-packet one-way delay: 90.625 ms

Loss rate: 4.37%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-08-17 02:59:12

End at: 2017-08-17 02:59:42

Below is generated by plot.py at 2017-08-17 04:28:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 52.448 ms

Loss rate: 96.99%

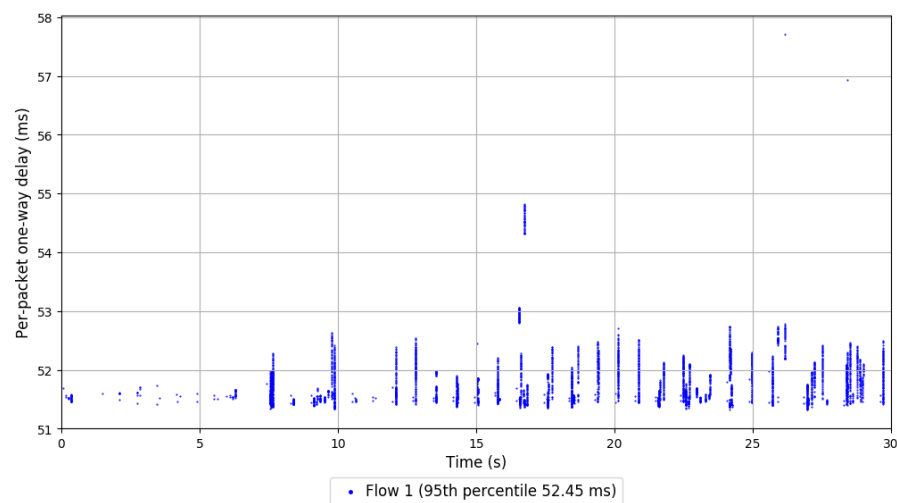
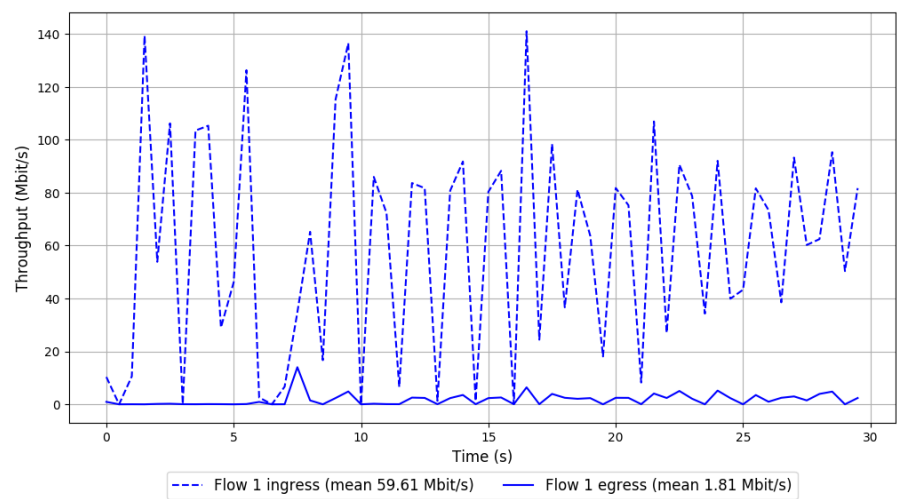
-- Flow 1:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 52.448 ms

Loss rate: 96.99%

Run 10: Report of Verus — Data Link

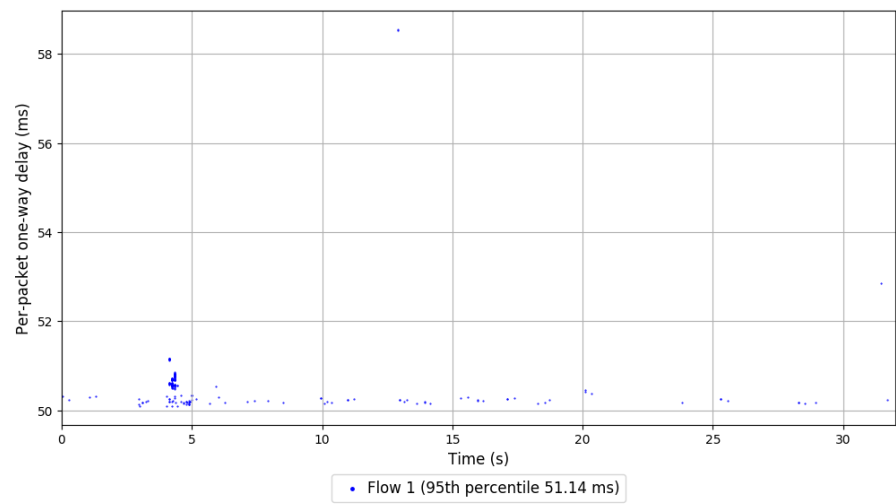
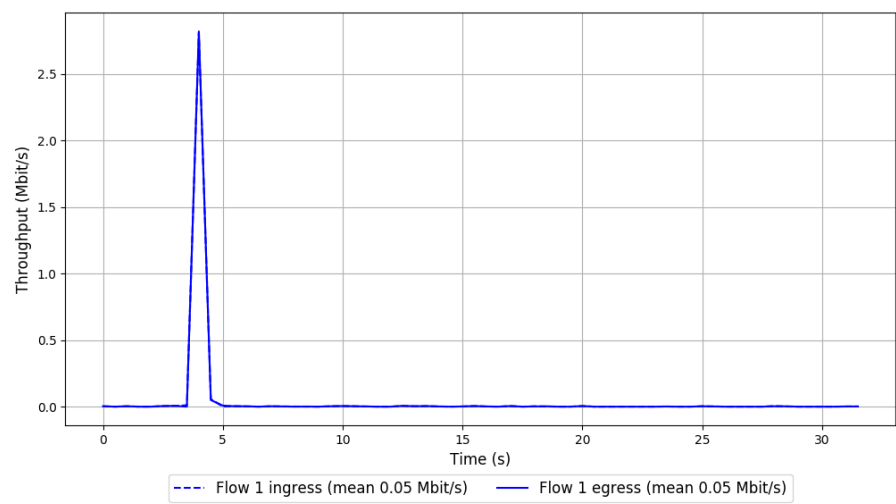


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-17 01:21:09
End at: 2017-08-17 01:21:39

# Below is generated by plot.py at 2017-08-17 04:28:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 51.140 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 51.140 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

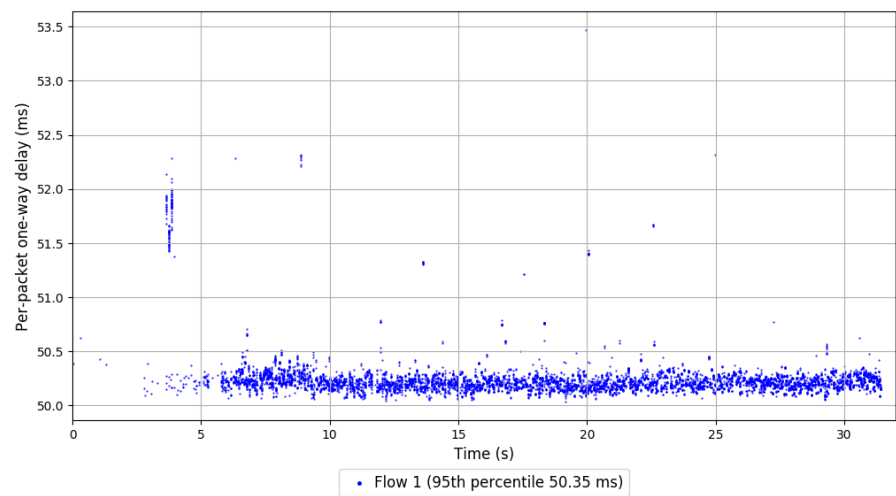
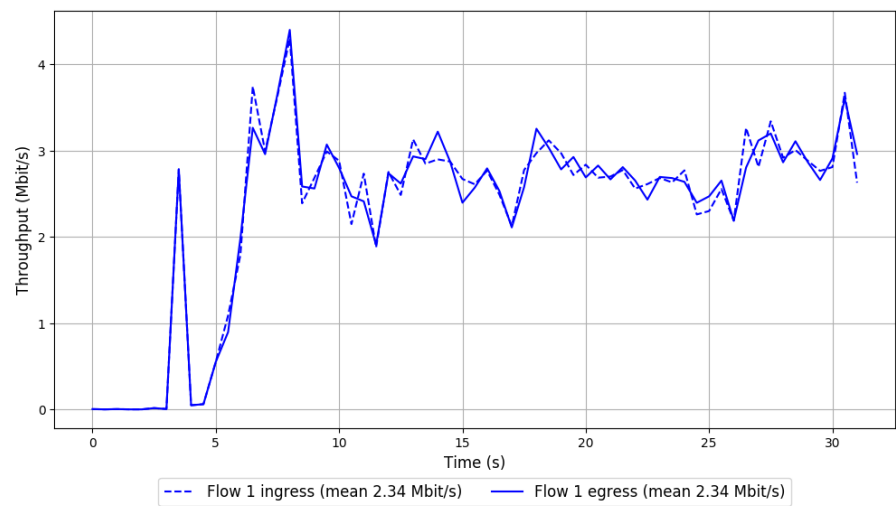


```
Run 2: Statistics of WebRTC media

Start at: 2017-08-17 01:30:55
End at: 2017-08-17 01:31:25

# Below is generated by plot.py at 2017-08-17 04:28:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 50.351 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 50.351 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-17 01:40:39

End at: 2017-08-17 01:41:09

Below is generated by plot.py at 2017-08-17 04:28:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 49.795 ms

Loss rate: 0.00%

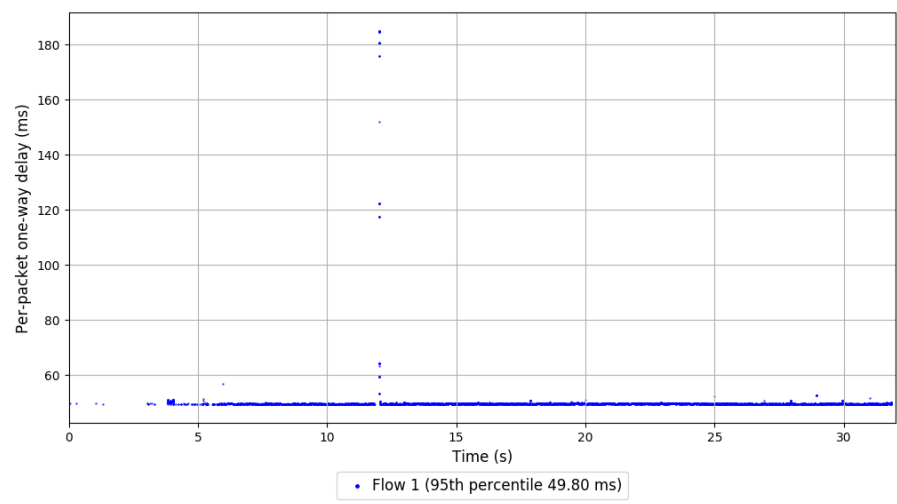
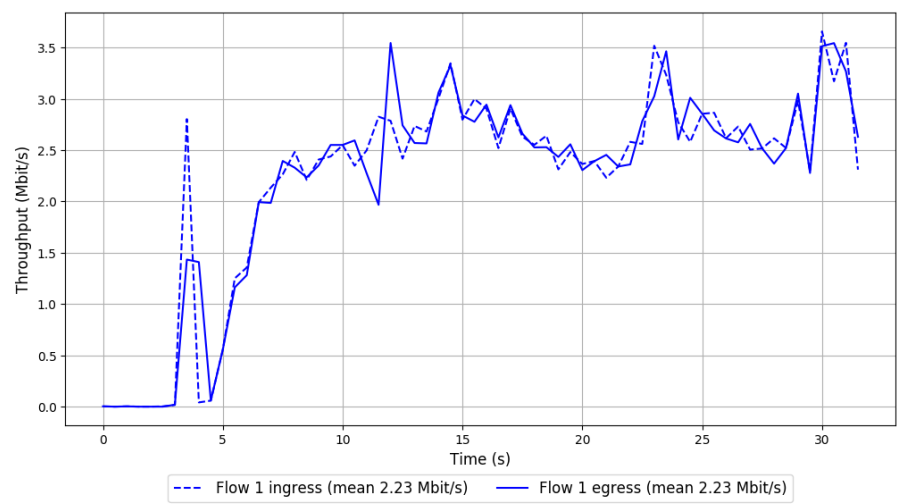
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 49.795 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-17 01:50:33

End at: 2017-08-17 01:51:03

Below is generated by plot.py at 2017-08-17 04:28:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 49.729 ms

Loss rate: 0.00%

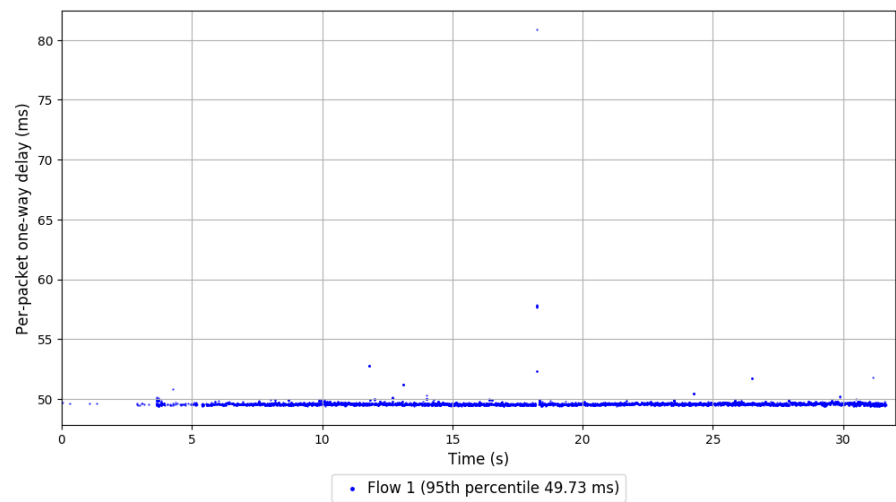
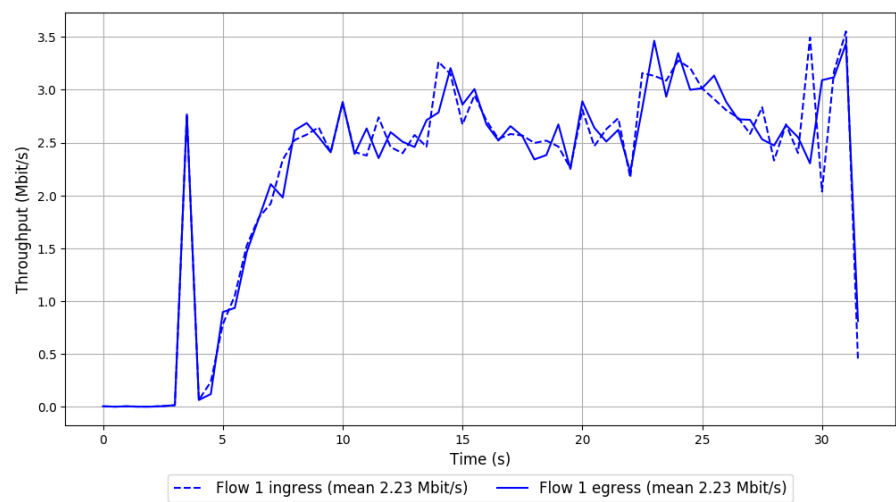
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 49.729 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

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

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

Below is generated by plot.py at 2017-08-17 04:28:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 51.610 ms

Loss rate: 0.00%

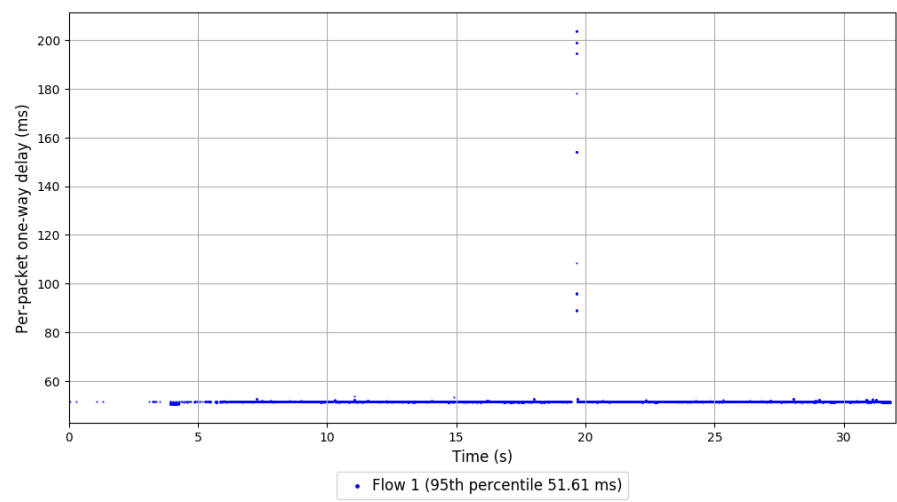
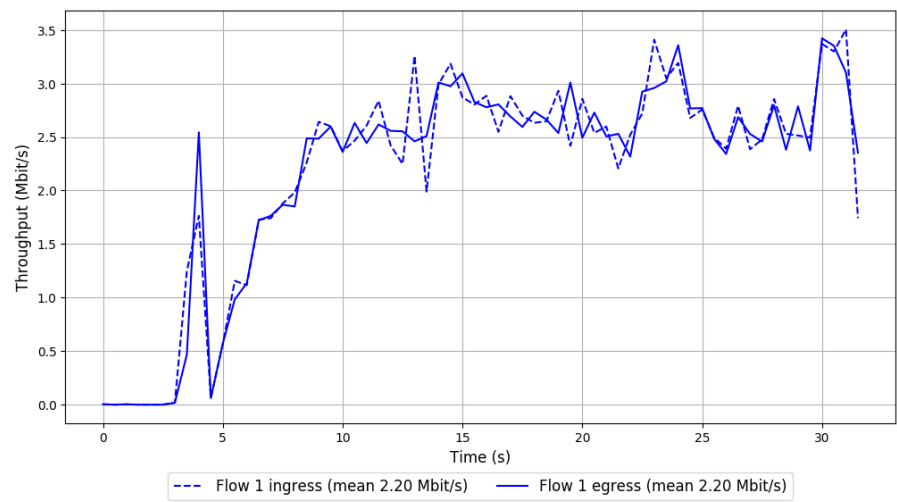
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 51.610 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-17 02:11:21

End at: 2017-08-17 02:11:51

Below is generated by plot.py at 2017-08-17 04:28:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 51.583 ms

Loss rate: 0.00%

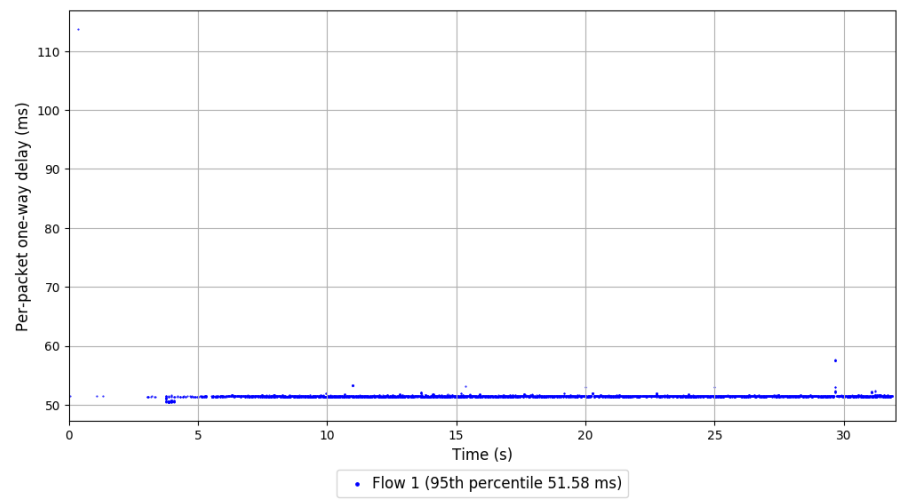
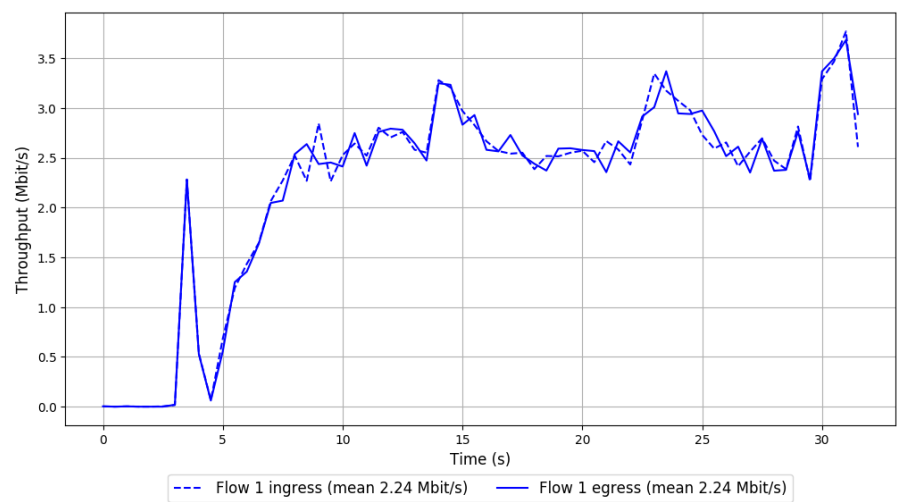
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 51.583 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-17 02:21:30

End at: 2017-08-17 02:22:00

Below is generated by plot.py at 2017-08-17 04:28:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 51.617 ms

Loss rate: 0.00%

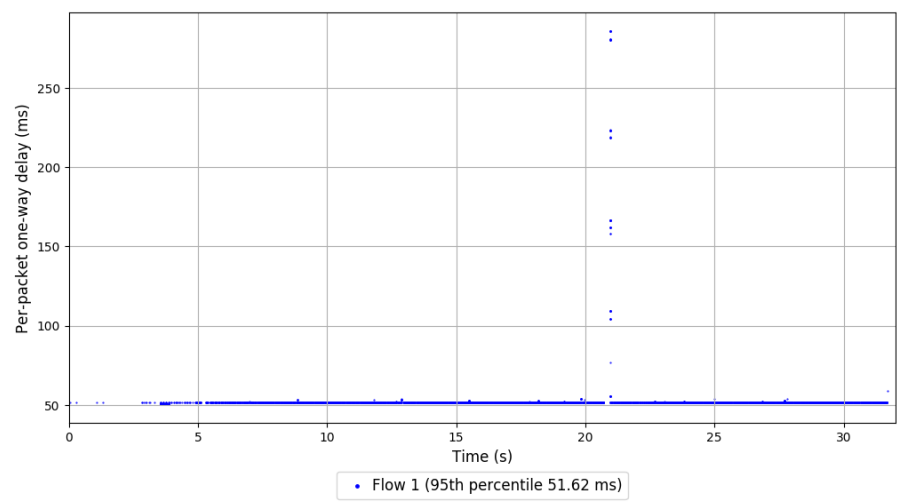
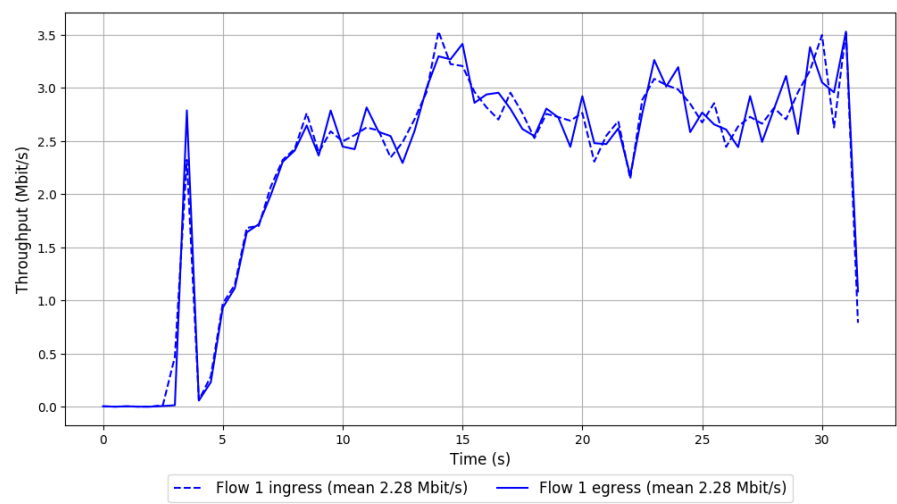
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 51.617 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-17 02:31:34

End at: 2017-08-17 02:32:04

Below is generated by plot.py at 2017-08-17 04:28:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 49.818 ms

Loss rate: 0.01%

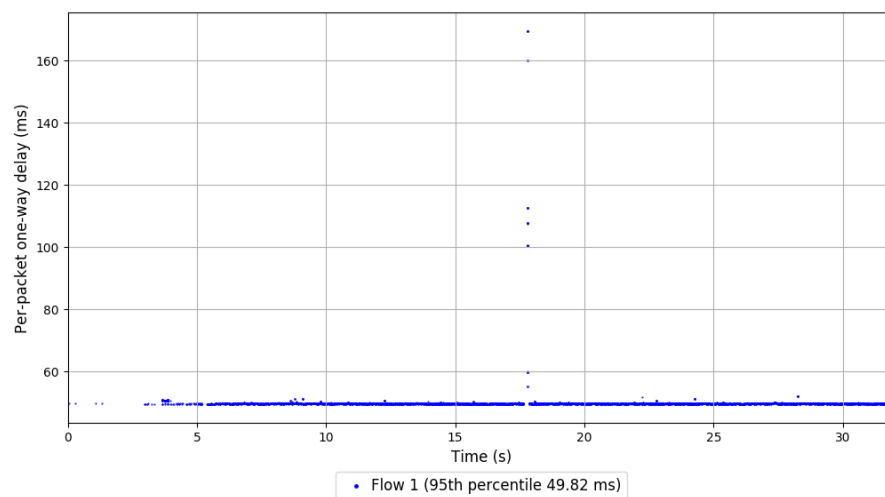
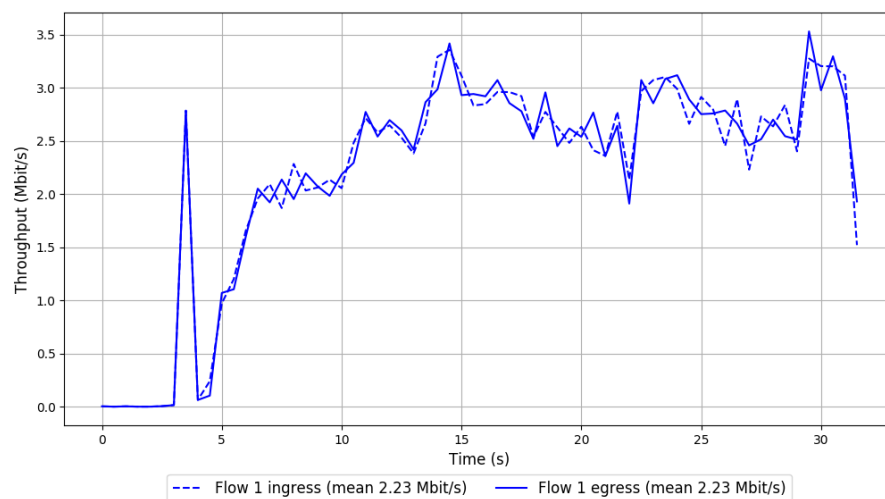
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 49.818 ms

Loss rate: 0.01%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-17 02:42:03

End at: 2017-08-17 02:42:34

Below is generated by plot.py at 2017-08-17 04:28:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 49.702 ms

Loss rate: 0.00%

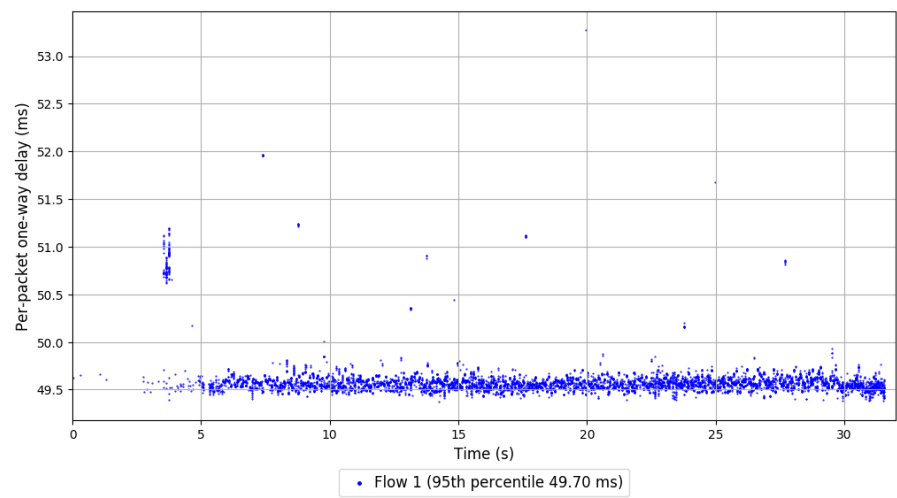
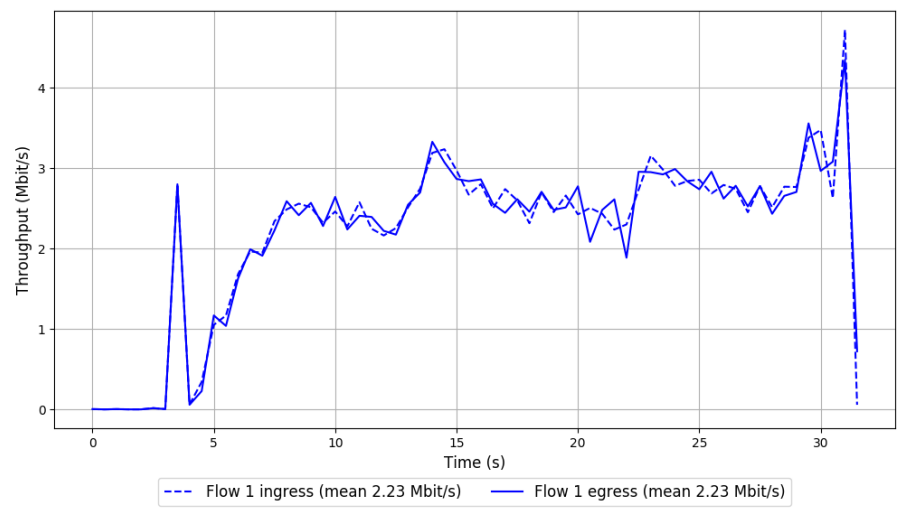
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 49.702 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-17 02:51:56

End at: 2017-08-17 02:52:26

Below is generated by plot.py at 2017-08-17 04:28:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 51.402 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 51.402 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

