

Pantheon Report

Generated at 2017-08-11 15:19:50 (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.

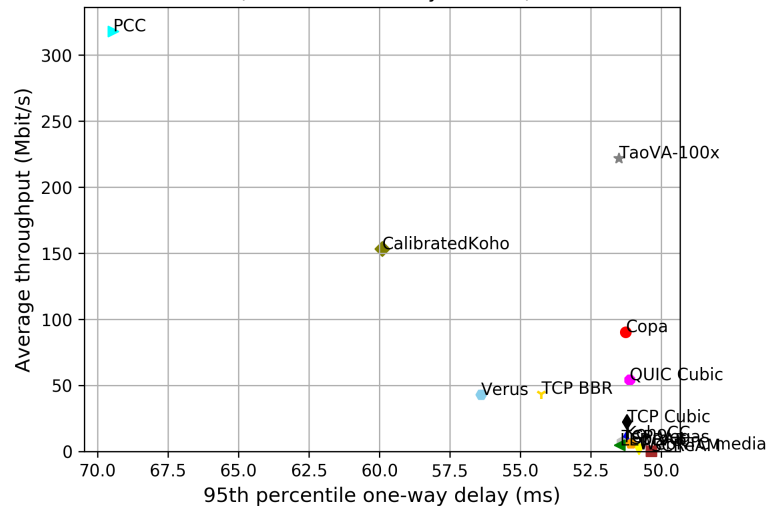
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

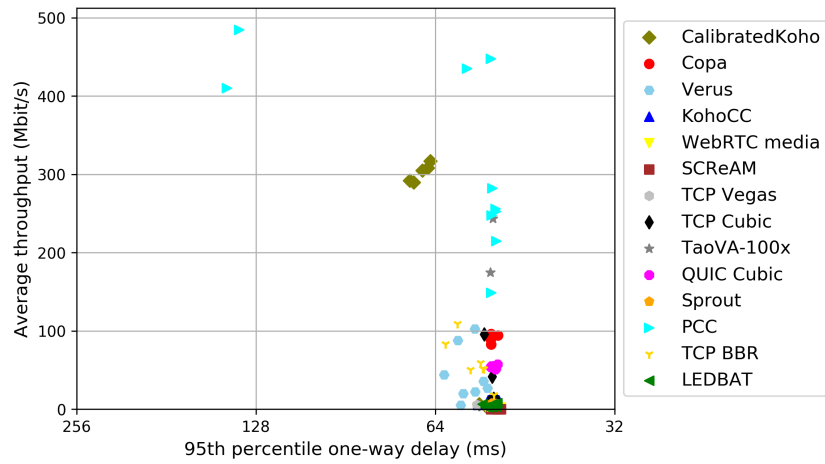
Git summary:

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

test from GCE 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	43.56	54.26	26.30
CalibratedKoho	10	153.30	59.91	35.56
Copa	4	90.43	51.27	0.36
TCP Cubic	10	22.44	51.22	0.86
KohoCC	10	10.39	51.27	9.50
LEDBAT	10	4.80	51.48	2.05
PCC	10	318.04	69.45	5.71
QUIC Cubic	9	54.30	51.13	0.00
Saturator	0	N/A	N/A	N/A
SCReAM	10	0.21	50.36	0.02
Sprout	10	6.01	51.08	9.19
TaoVA-100x	3	221.89	51.50	1.81
TCP Vegas	10	6.99	51.42	1.55
Verus	8	43.02	56.40	63.23
WebRTC media	10	1.81	50.80	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-08-11 12:26:57

End at: 2017-08-11 12:27:27

Below is generated by plot.py at 2017-08-11 15:02:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.53 Mbit/s

95th percentile per-packet one-way delay: 55.863 ms

Loss rate: 25.64%

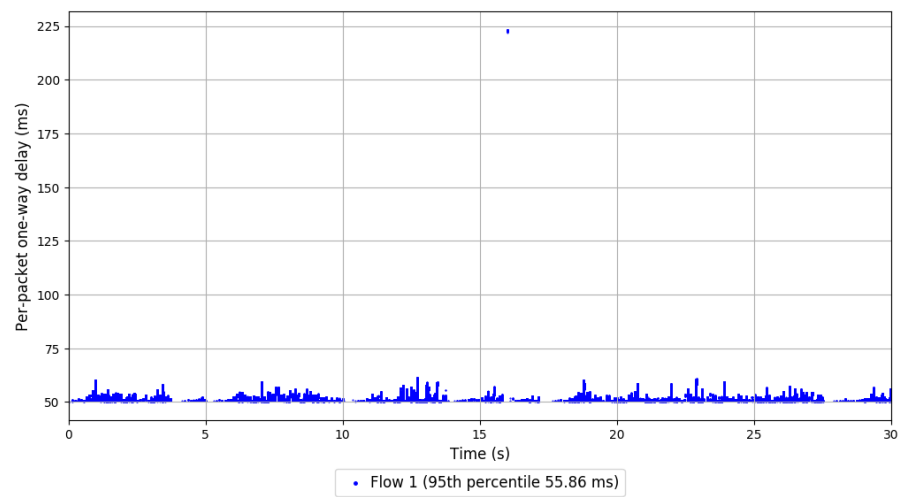
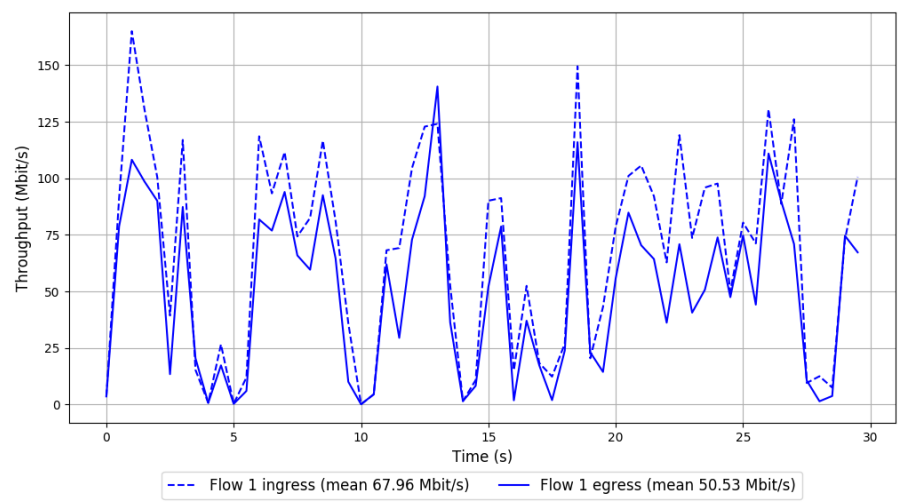
-- Flow 1:

Average throughput: 50.53 Mbit/s

95th percentile per-packet one-way delay: 55.863 ms

Loss rate: 25.64%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-11 12:36:49

End at: 2017-08-11 12:37:19

Below is generated by plot.py at 2017-08-11 15:02:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.09 Mbit/s

95th percentile per-packet one-way delay: 61.477 ms

Loss rate: 11.71%

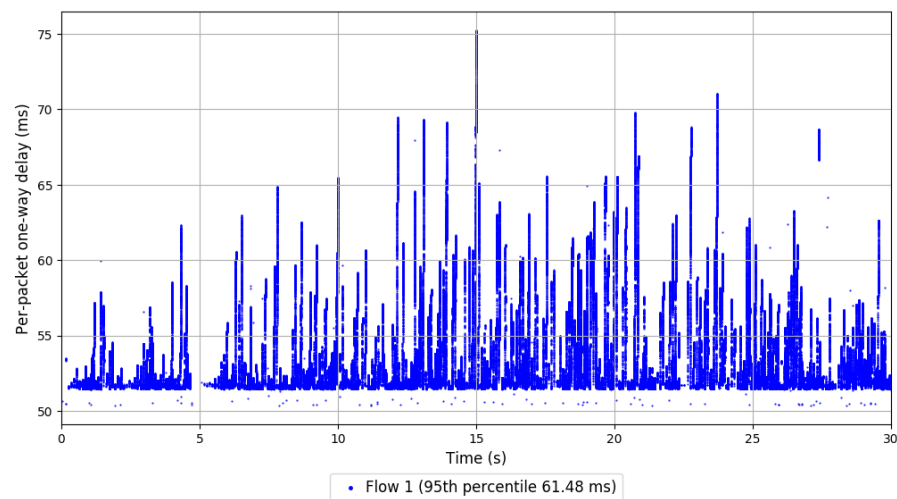
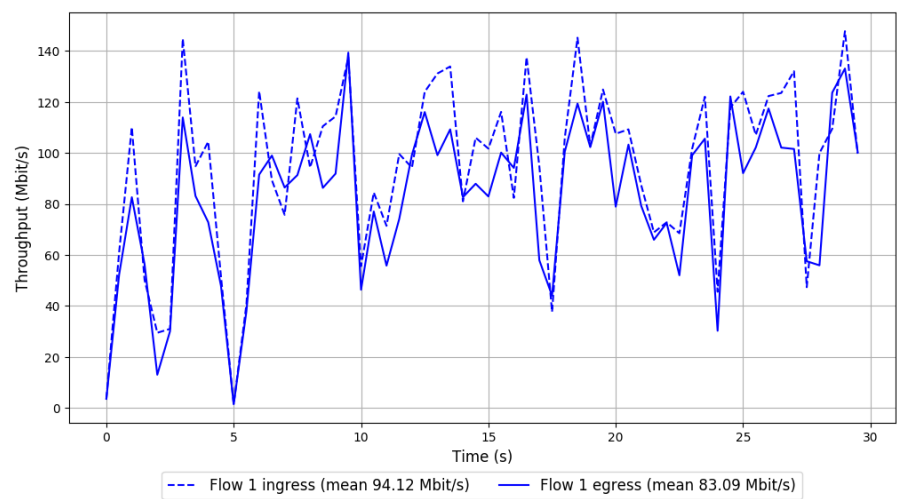
-- Flow 1:

Average throughput: 83.09 Mbit/s

95th percentile per-packet one-way delay: 61.477 ms

Loss rate: 11.71%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-11 12:47:26

End at: 2017-08-11 12:47:56

Below is generated by plot.py at 2017-08-11 15:02:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.10 Mbit/s

95th percentile per-packet one-way delay: 51.036 ms

Loss rate: 28.37%

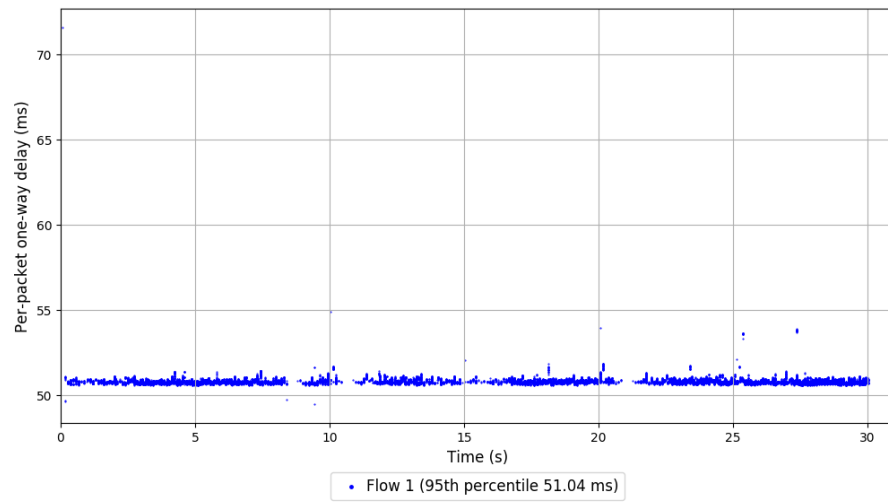
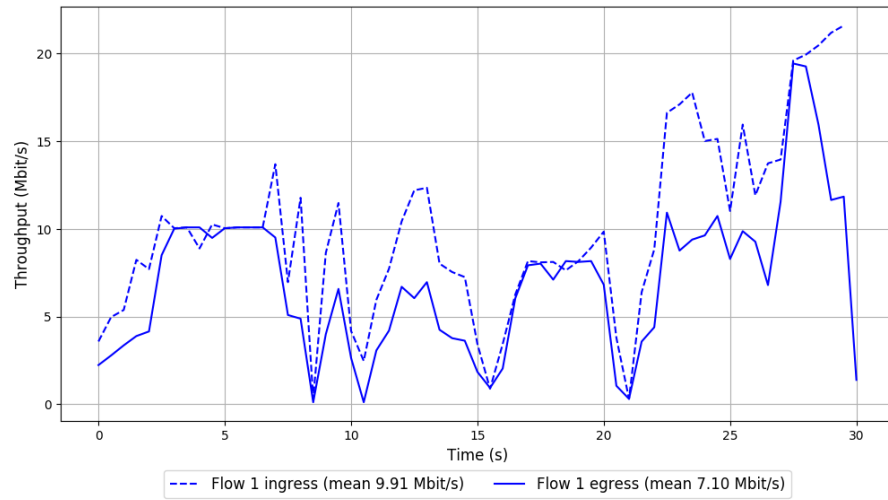
-- Flow 1:

Average throughput: 7.10 Mbit/s

95th percentile per-packet one-way delay: 51.036 ms

Loss rate: 28.37%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-11 12:57:11

End at: 2017-08-11 12:57:41

Below is generated by plot.py at 2017-08-11 15:02:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 52.255 ms

Loss rate: 40.98%

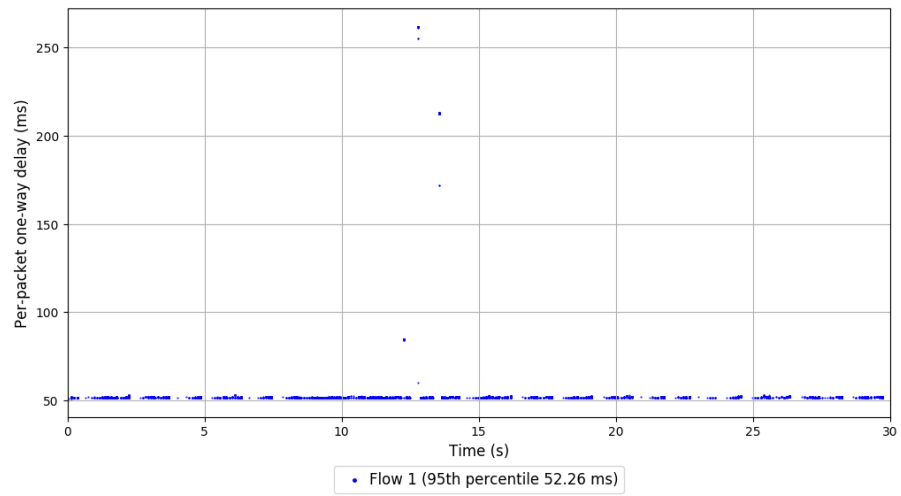
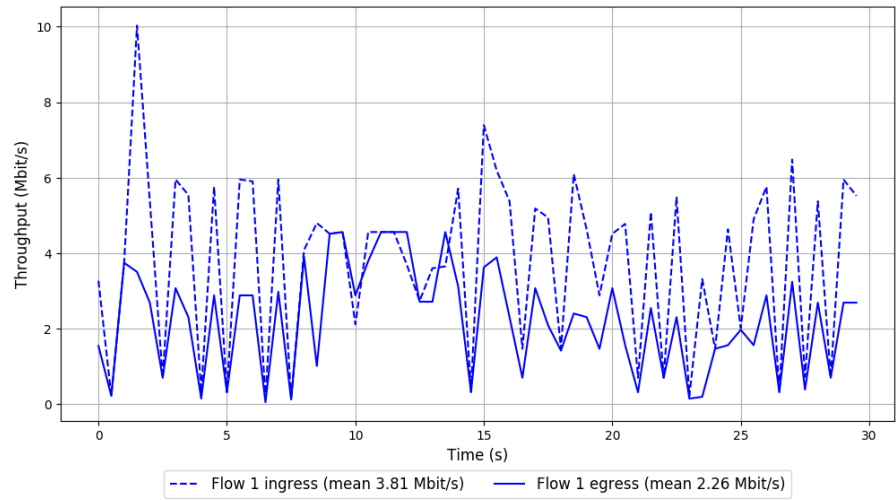
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 52.255 ms

Loss rate: 40.98%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-08-11 13:07:37

End at: 2017-08-11 13:08:07

Below is generated by plot.py at 2017-08-11 15:02:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.21 Mbit/s

95th percentile per-packet one-way delay: 50.984 ms

Loss rate: 39.54%

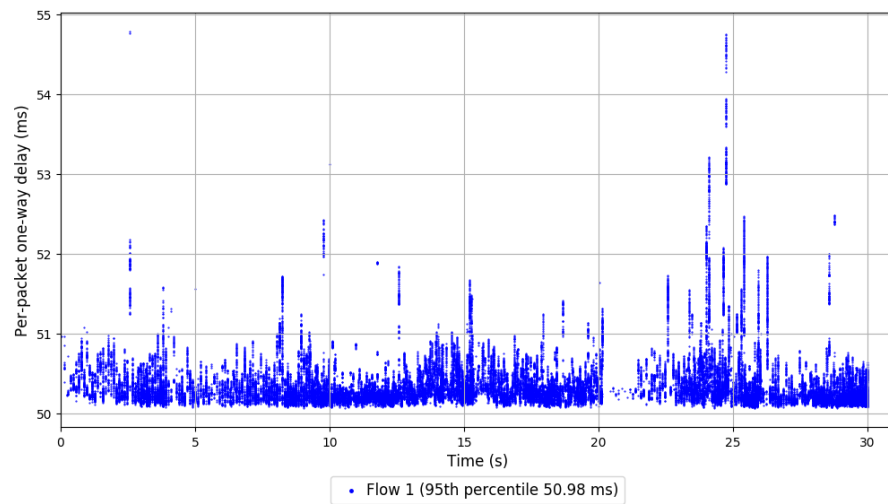
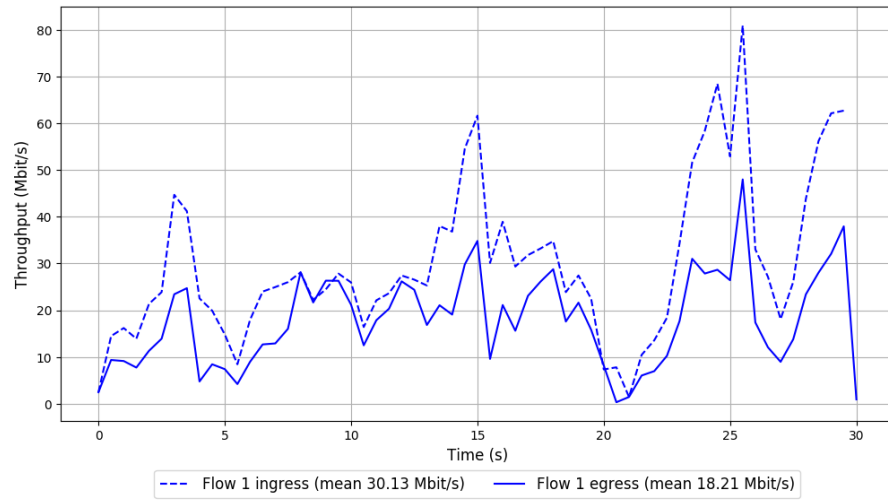
-- Flow 1:

Average throughput: 18.21 Mbit/s

95th percentile per-packet one-way delay: 50.984 ms

Loss rate: 39.54%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-11 13:17:44

End at: 2017-08-11 13:18:14

Below is generated by plot.py at 2017-08-11 15:02:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.94 Mbit/s

95th percentile per-packet one-way delay: 53.231 ms

Loss rate: 21.18%

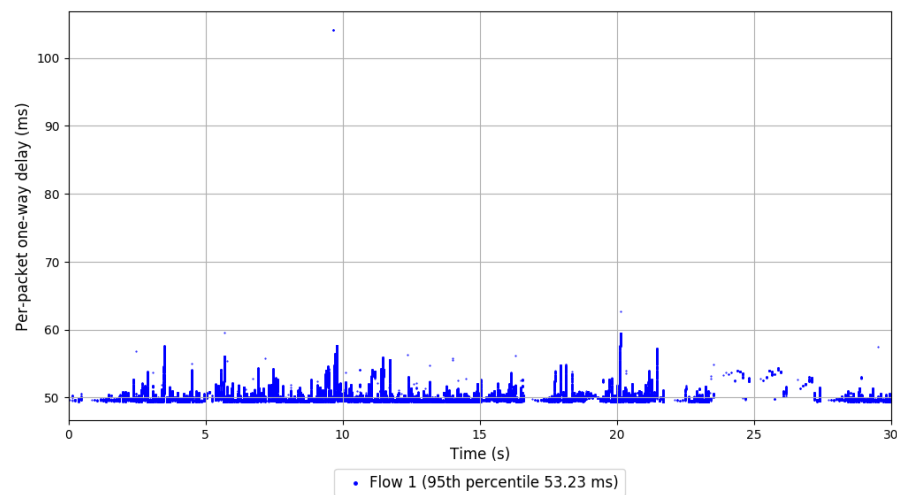
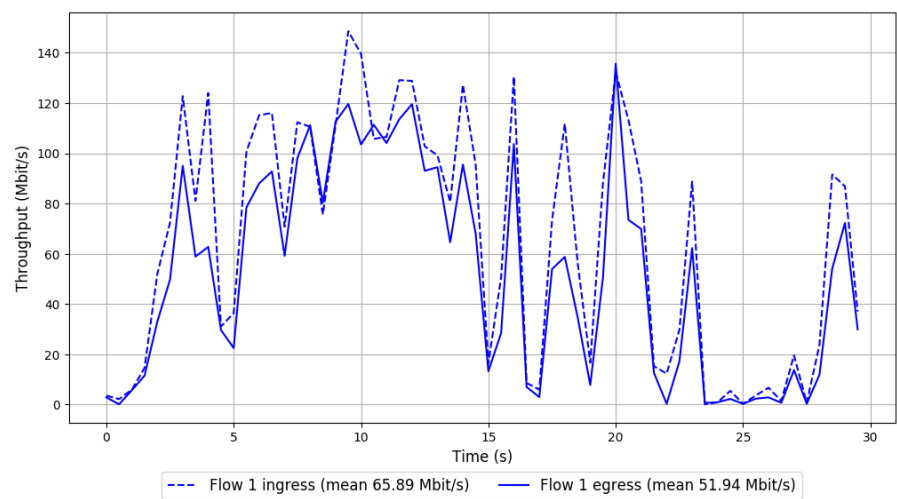
-- Flow 1:

Average throughput: 51.94 Mbit/s

95th percentile per-packet one-way delay: 53.231 ms

Loss rate: 21.18%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-11 13:27:47

End at: 2017-08-11 13:28:17

Below is generated by plot.py at 2017-08-11 15:02:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.46 Mbit/s

95th percentile per-packet one-way delay: 53.009 ms

Loss rate: 26.90%

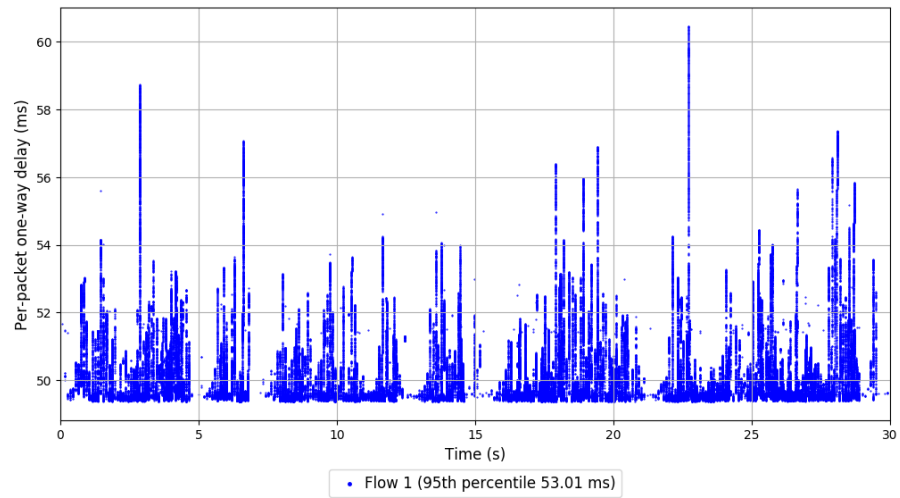
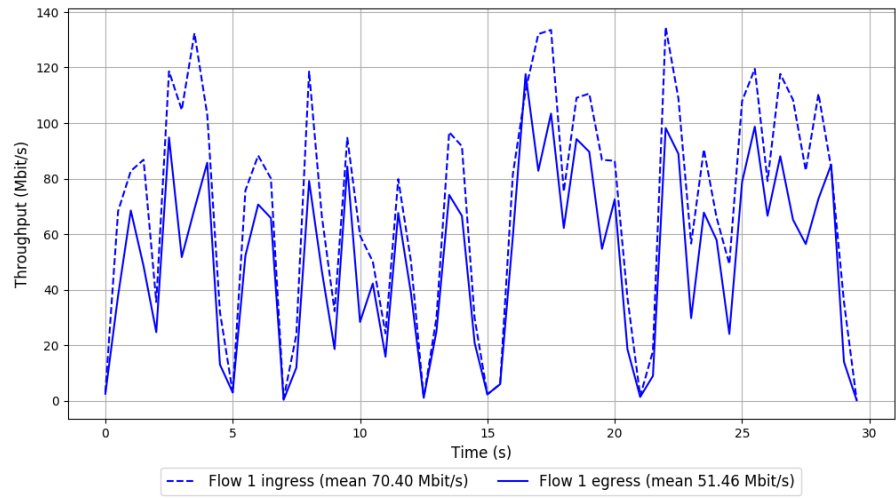
-- Flow 1:

Average throughput: 51.46 Mbit/s

95th percentile per-packet one-way delay: 53.009 ms

Loss rate: 26.90%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-11 13:38:00

End at: 2017-08-11 13:38:30

Below is generated by plot.py at 2017-08-11 15:03:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.04 Mbit/s

95th percentile per-packet one-way delay: 53.721 ms

Loss rate: 25.87%

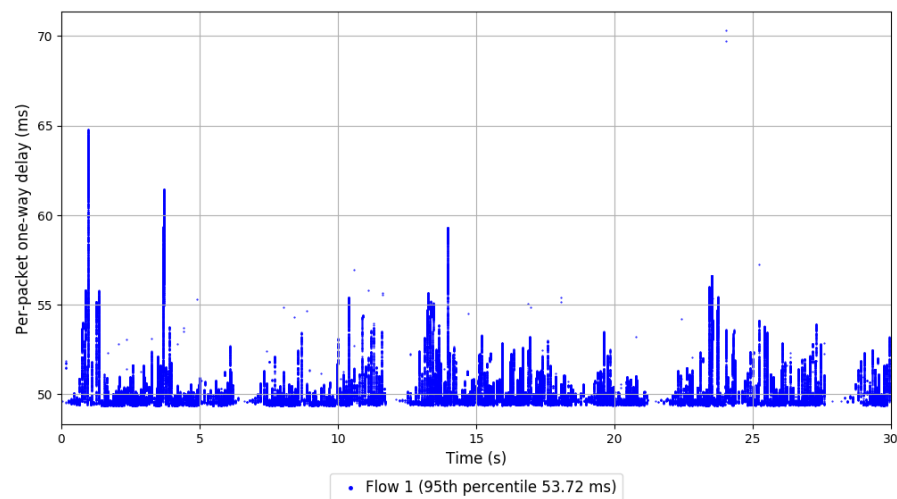
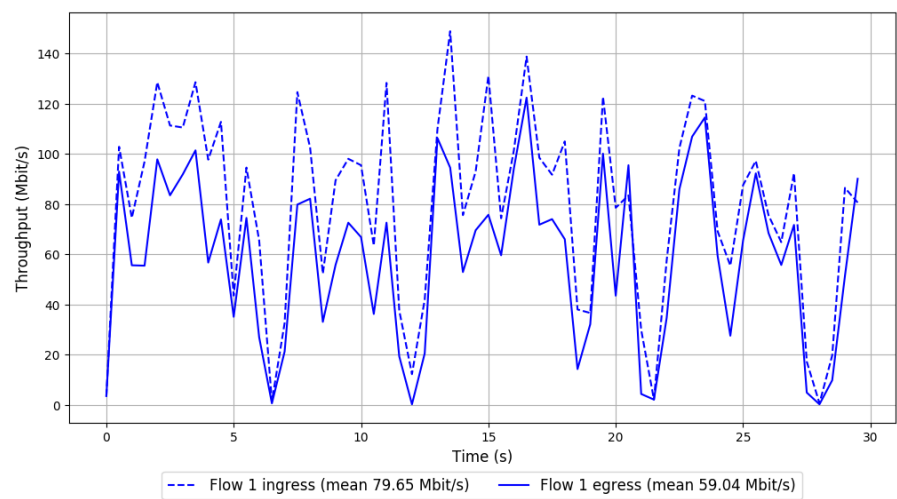
-- Flow 1:

Average throughput: 59.04 Mbit/s

95th percentile per-packet one-way delay: 53.721 ms

Loss rate: 25.87%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-11 13:48:10

End at: 2017-08-11 13:48:40

Below is generated by plot.py at 2017-08-11 15:03:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 52.243 ms

Loss rate: 40.08%

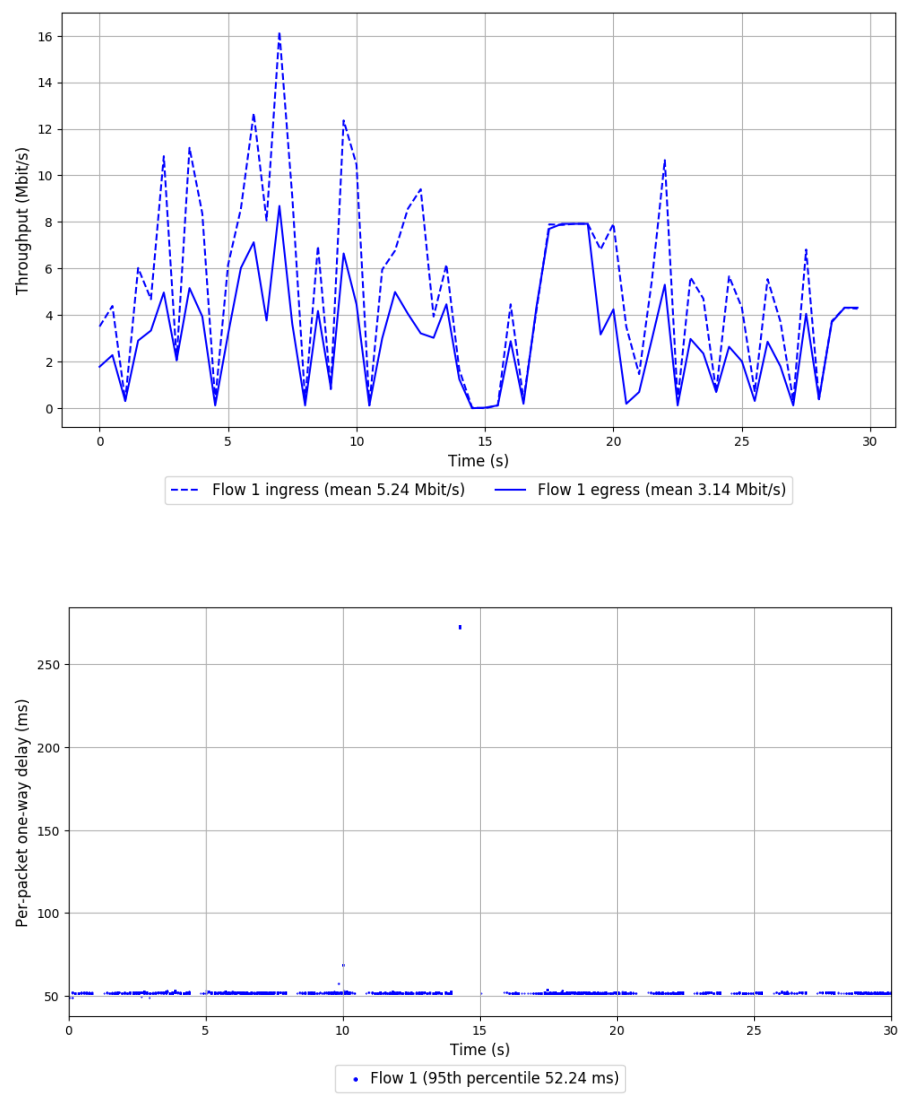
-- Flow 1:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 52.243 ms

Loss rate: 40.08%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-11 13:58:12

End at: 2017-08-11 13:58:42

Below is generated by plot.py at 2017-08-11 15:03:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.87 Mbit/s

95th percentile per-packet one-way delay: 58.761 ms

Loss rate: 2.69%

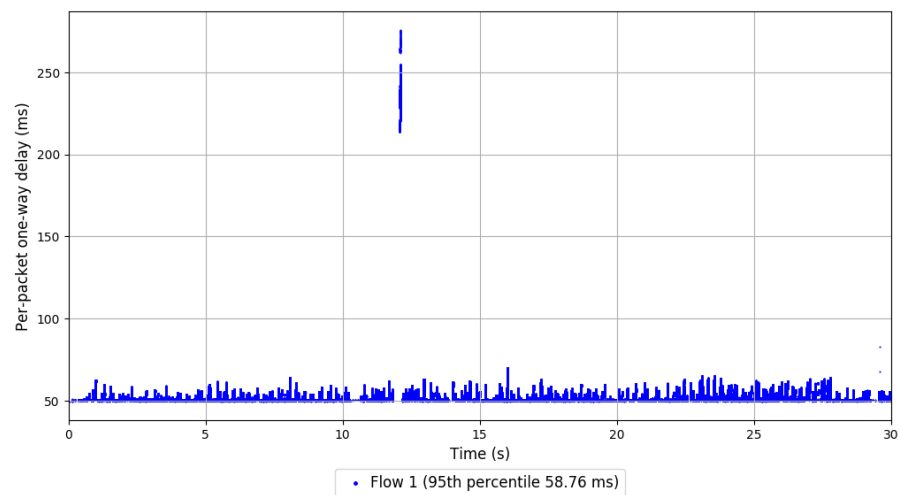
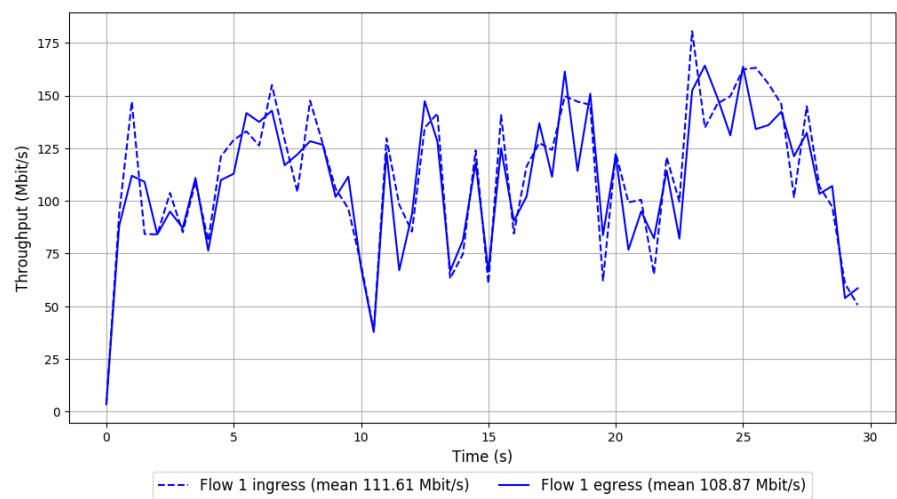
-- Flow 1:

Average throughput: 108.87 Mbit/s

95th percentile per-packet one-way delay: 58.761 ms

Loss rate: 2.69%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-11 12:25:41

End at: 2017-08-11 12:26:11

Below is generated by plot.py at 2017-08-11 15:03:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 52.194 ms

Loss rate: 69.50%

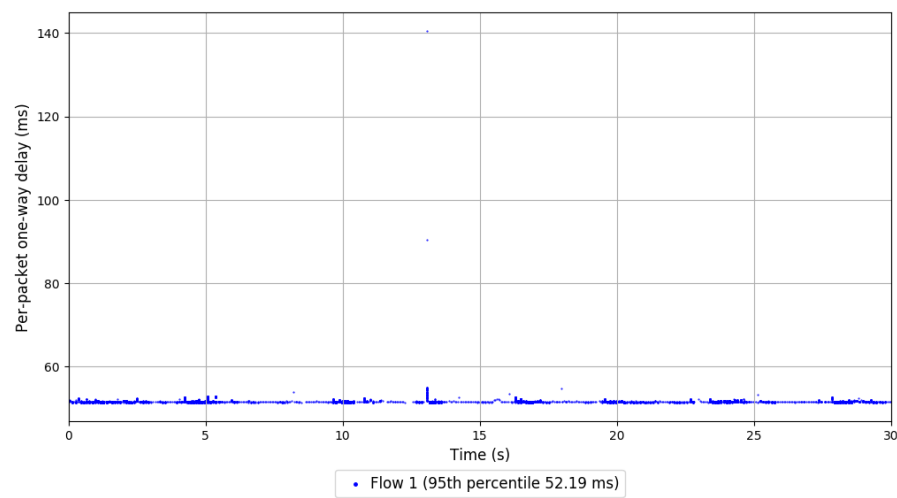
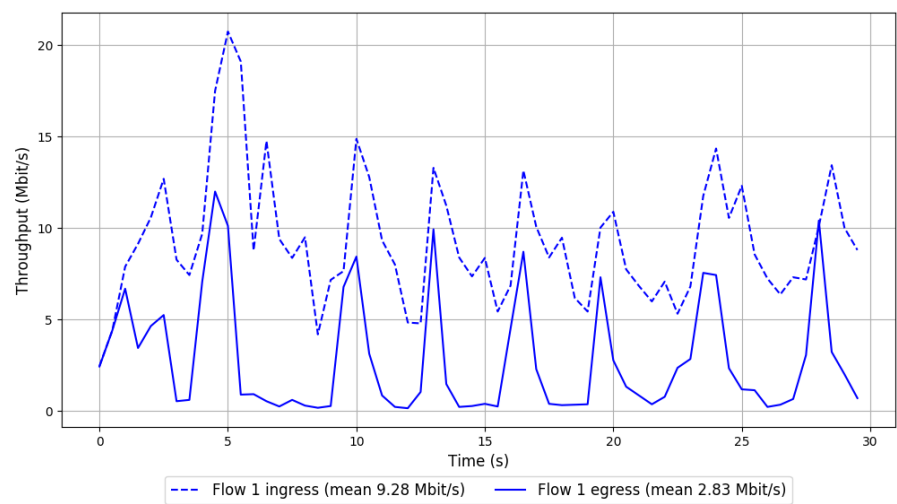
-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 52.194 ms

Loss rate: 69.50%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-11 12:35:34

End at: 2017-08-11 12:36:04

Below is generated by plot.py at 2017-08-11 15:03:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 54.028 ms

Loss rate: 69.48%

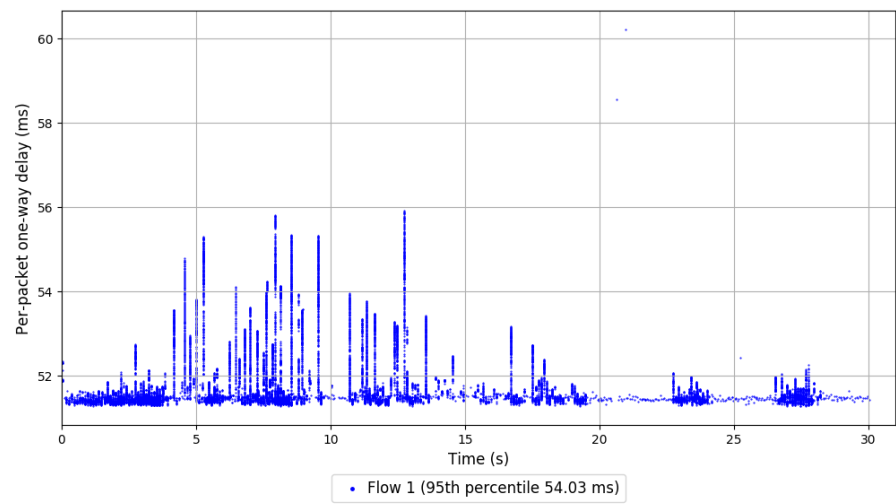
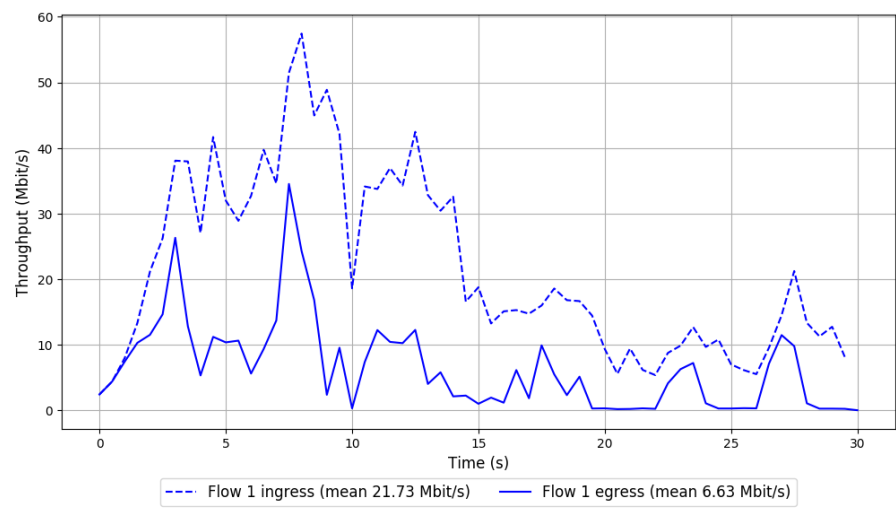
-- Flow 1:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 54.028 ms

Loss rate: 69.48%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-11 12:45:49

End at: 2017-08-11 12:46:19

Below is generated by plot.py at 2017-08-11 15:04:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 307.93 Mbit/s

95th percentile per-packet one-way delay: 65.862 ms

Loss rate: 0.19%

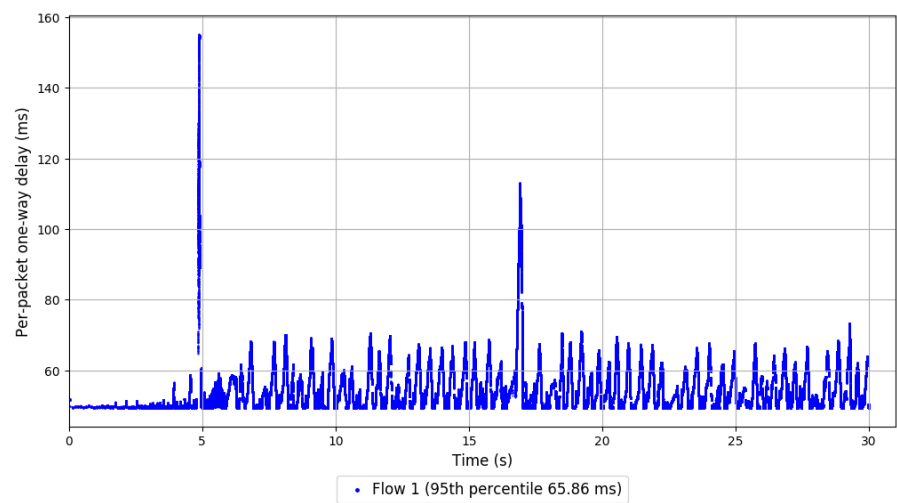
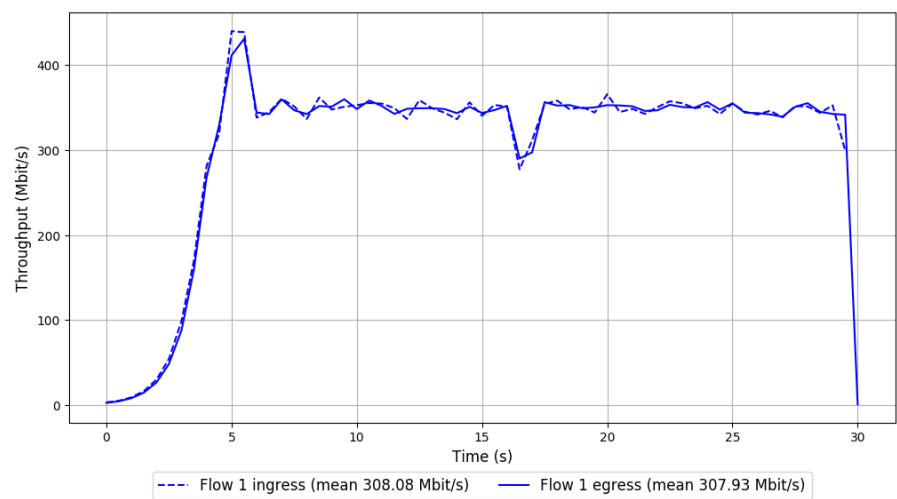
-- Flow 1:

Average throughput: 307.93 Mbit/s

95th percentile per-packet one-way delay: 65.862 ms

Loss rate: 0.19%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-11 12:55:56

End at: 2017-08-11 12:56:26

Below is generated by plot.py at 2017-08-11 15:04:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.36 Mbit/s

95th percentile per-packet one-way delay: 51.099 ms

Loss rate: 68.63%

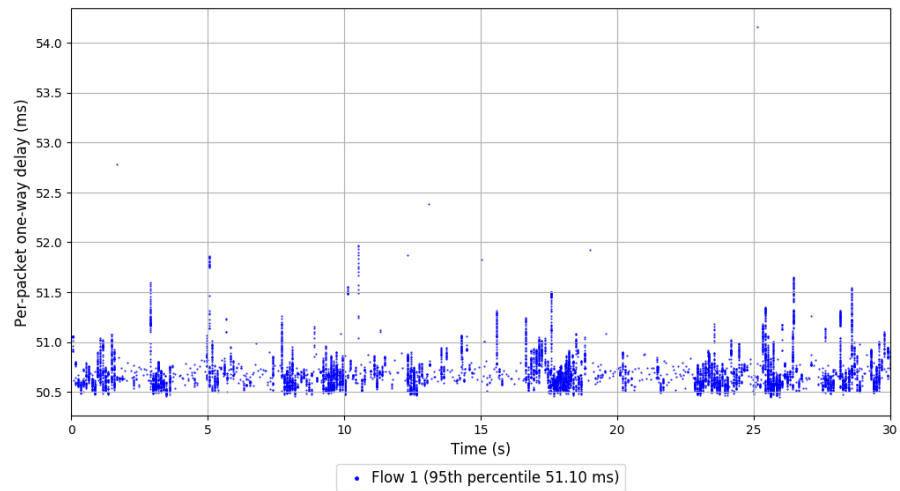
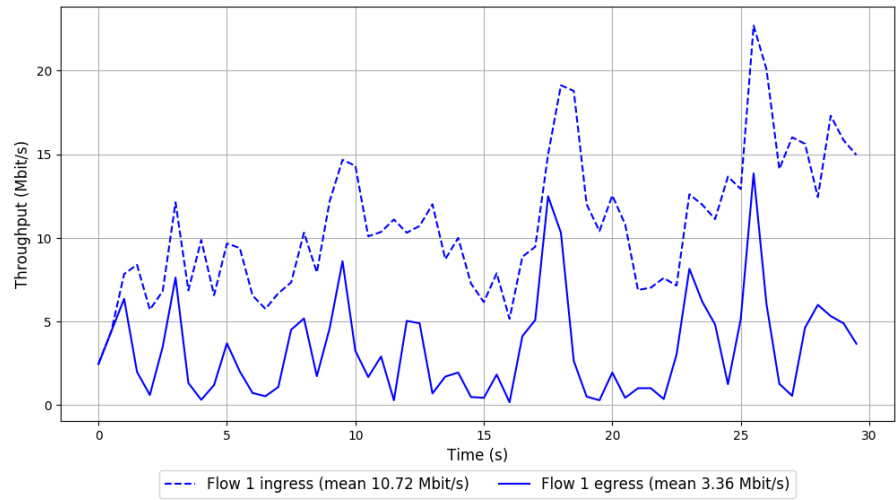
-- Flow 1:

Average throughput: 3.36 Mbit/s

95th percentile per-packet one-way delay: 51.099 ms

Loss rate: 68.63%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-11 13:06:02

End at: 2017-08-11 13:06:32

Below is generated by plot.py at 2017-08-11 15:04:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 289.59 Mbit/s

95th percentile per-packet one-way delay: 69.605 ms

Loss rate: 3.92%

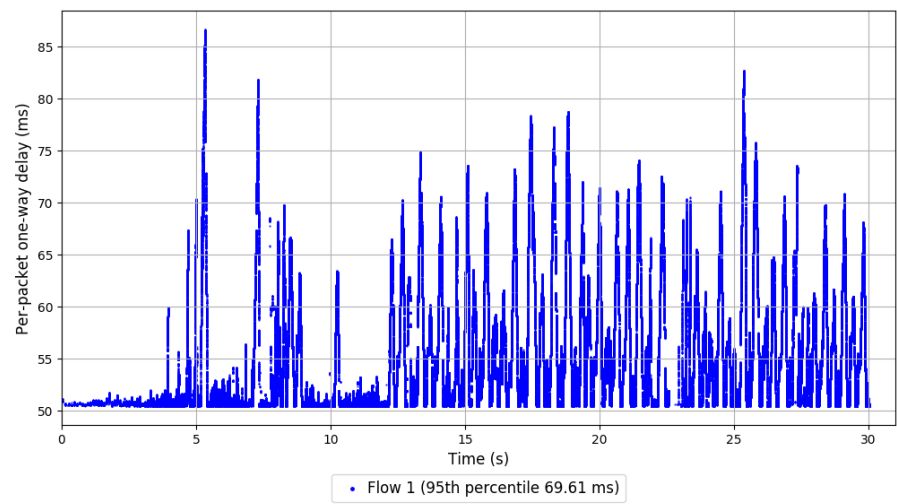
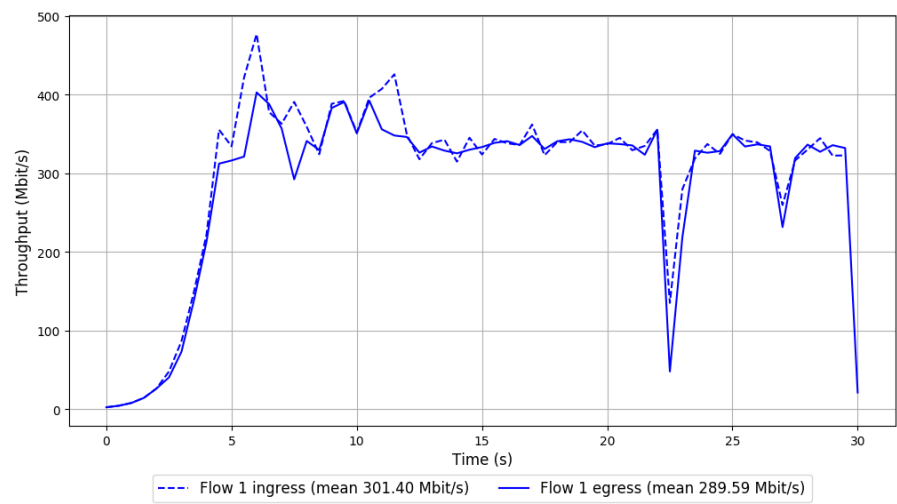
-- Flow 1:

Average throughput: 289.59 Mbit/s

95th percentile per-packet one-way delay: 69.605 ms

Loss rate: 3.92%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-11 13:16:09

End at: 2017-08-11 13:16:39

Below is generated by plot.py at 2017-08-11 15:05:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 304.96 Mbit/s

95th percentile per-packet one-way delay: 67.237 ms

Loss rate: 2.22%

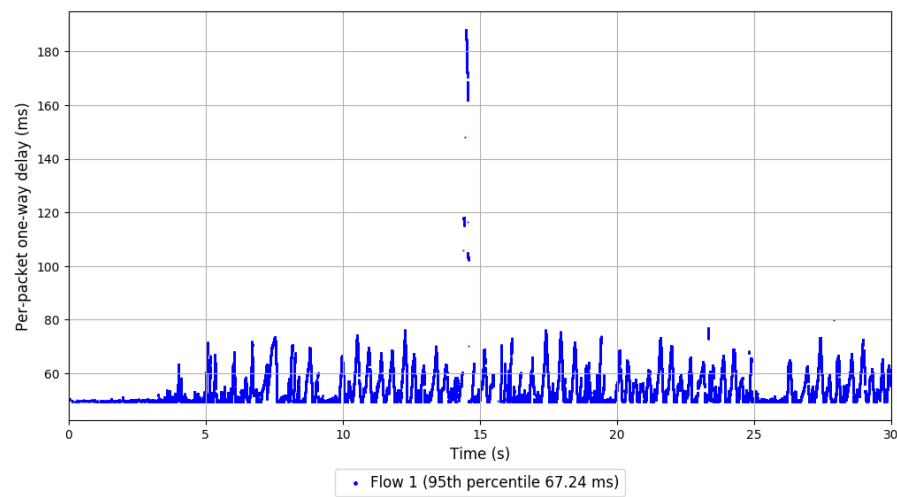
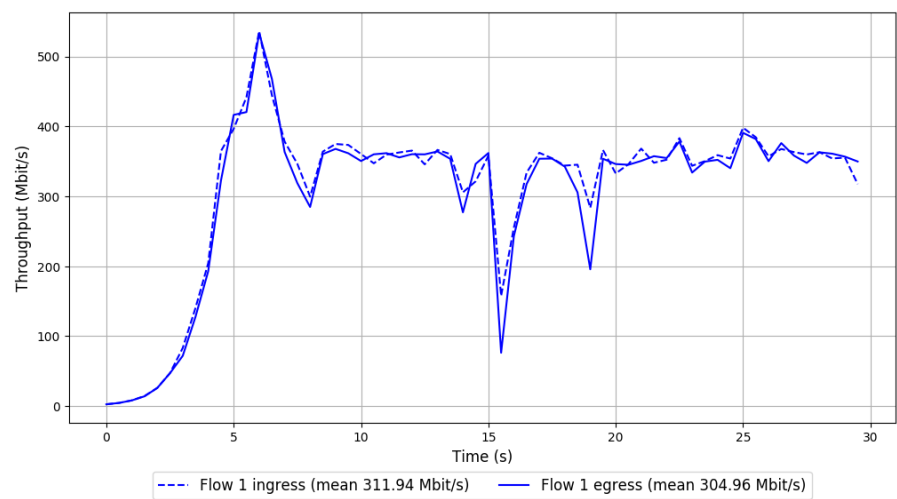
-- Flow 1:

Average throughput: 304.96 Mbit/s

95th percentile per-packet one-way delay: 67.237 ms

Loss rate: 2.22%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-11 13:26:12

End at: 2017-08-11 13:26:42

Below is generated by plot.py at 2017-08-11 15:05:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 291.93 Mbit/s

95th percentile per-packet one-way delay: 70.595 ms

Loss rate: 0.97%

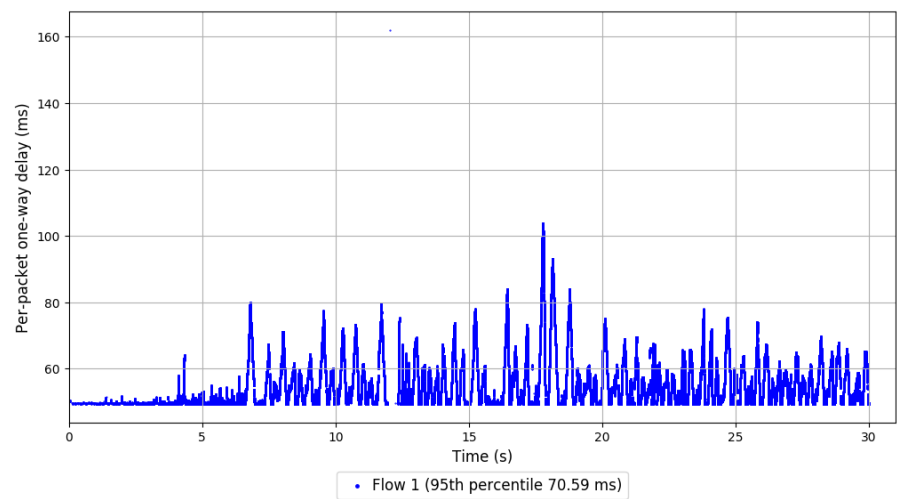
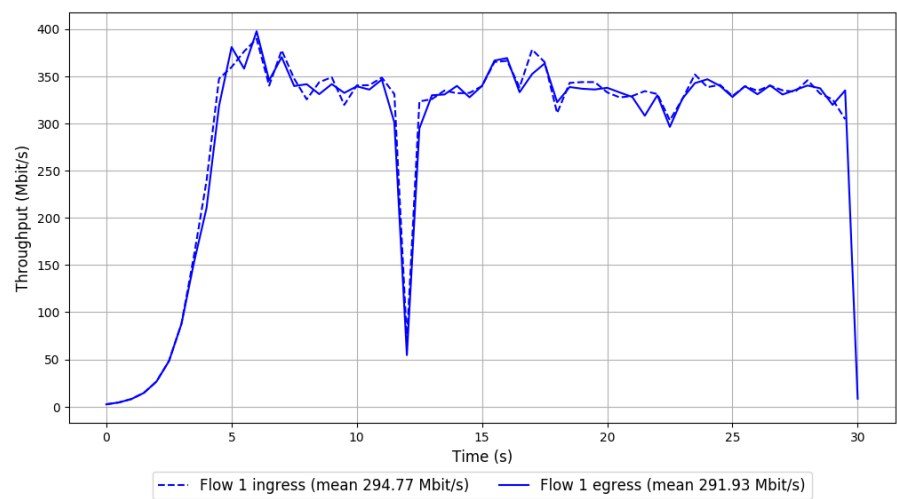
-- Flow 1:

Average throughput: 291.93 Mbit/s

95th percentile per-packet one-way delay: 70.595 ms

Loss rate: 0.97%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-11 13:36:23

End at: 2017-08-11 13:36:53

Below is generated by plot.py at 2017-08-11 15:06:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 317.03 Mbit/s

95th percentile per-packet one-way delay: 65.275 ms

Loss rate: 1.48%

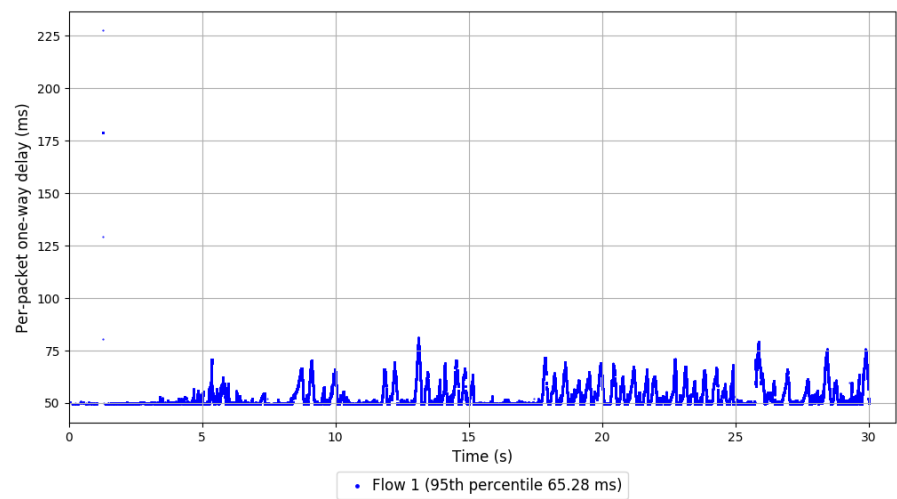
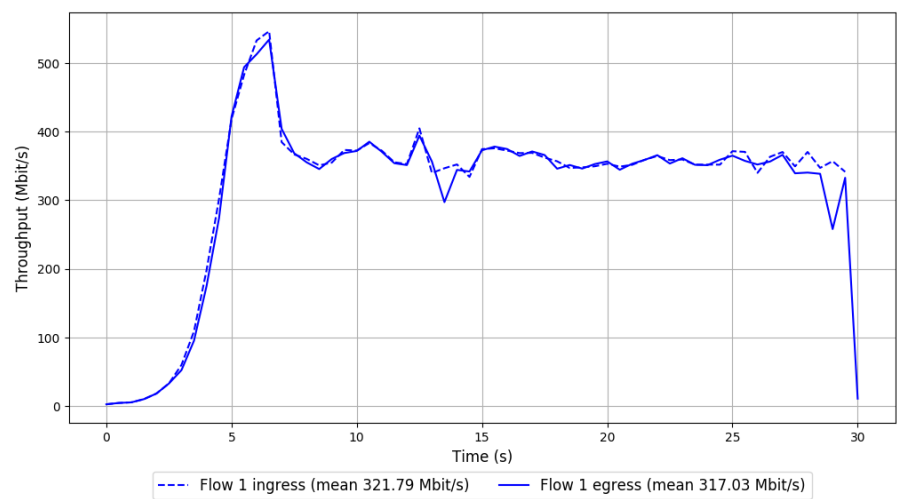
-- Flow 1:

Average throughput: 317.03 Mbit/s

95th percentile per-packet one-way delay: 65.275 ms

Loss rate: 1.48%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-11 13:46:55

End at: 2017-08-11 13:47:25

Below is generated by plot.py at 2017-08-11 15:06:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.48 Mbit/s

95th percentile per-packet one-way delay: 52.408 ms

Loss rate: 69.65%

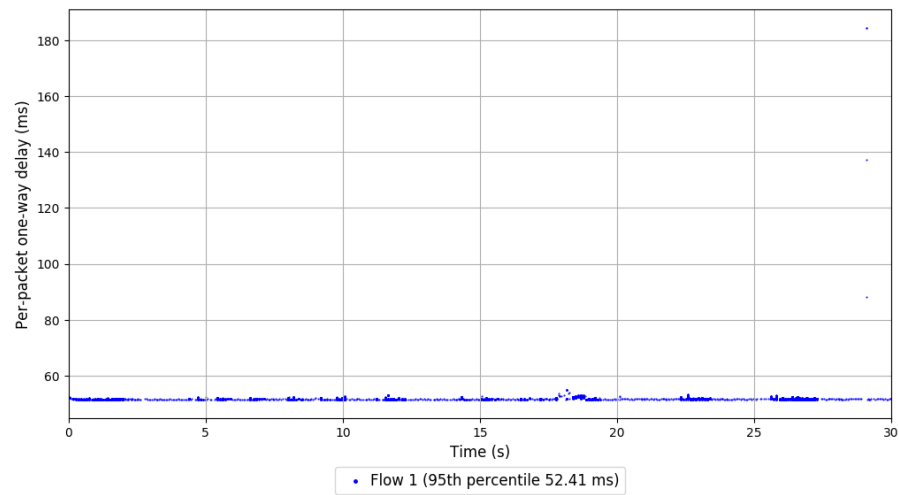
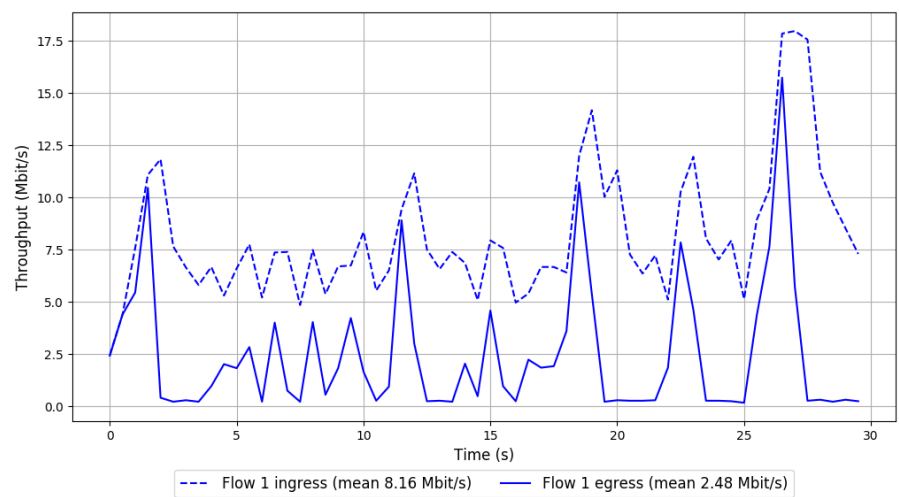
-- Flow 1:

Average throughput: 2.48 Mbit/s

95th percentile per-packet one-way delay: 52.408 ms

Loss rate: 69.65%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-11 13:56:57

End at: 2017-08-11 13:57:27

Below is generated by plot.py at 2017-08-11 15:06:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.30 Mbit/s

95th percentile per-packet one-way delay: 50.759 ms

Loss rate: 69.53%

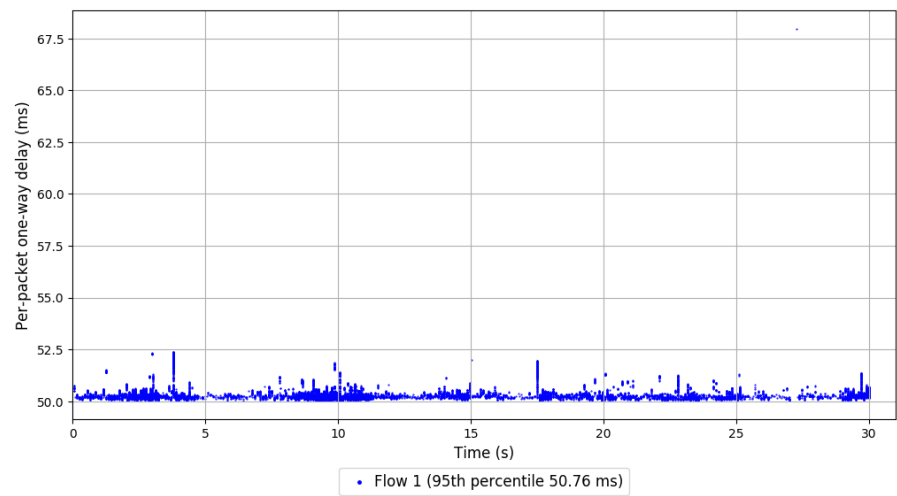
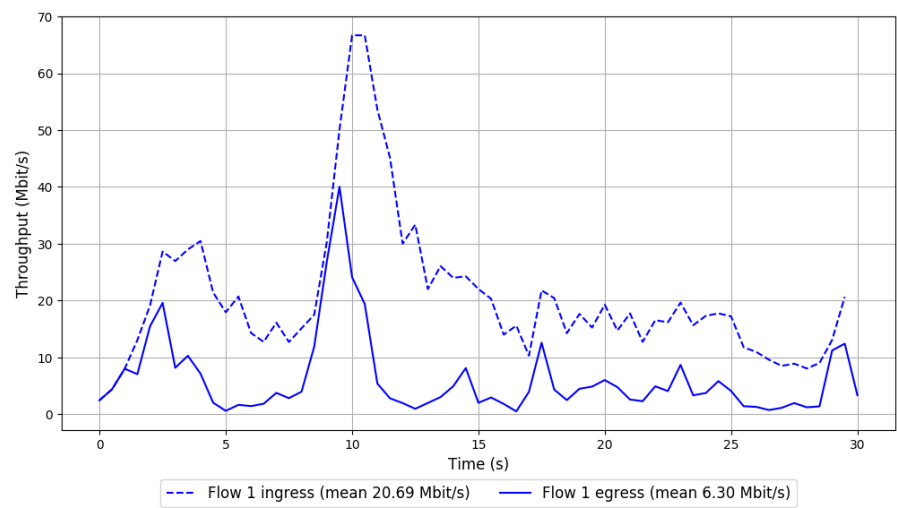
-- Flow 1:

Average throughput: 6.30 Mbit/s

95th percentile per-packet one-way delay: 50.759 ms

Loss rate: 69.53%

Run 10: Report of CalibratedKoho — Data Link



Run 1: Statistics of Copa

Start at: 2017-08-11 12:22:24

End at: 2017-08-11 12:22:54

Below is generated by plot.py at 2017-08-11 15:06:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.56 Mbit/s

95th percentile per-packet one-way delay: 51.584 ms

Loss rate: 0.00%

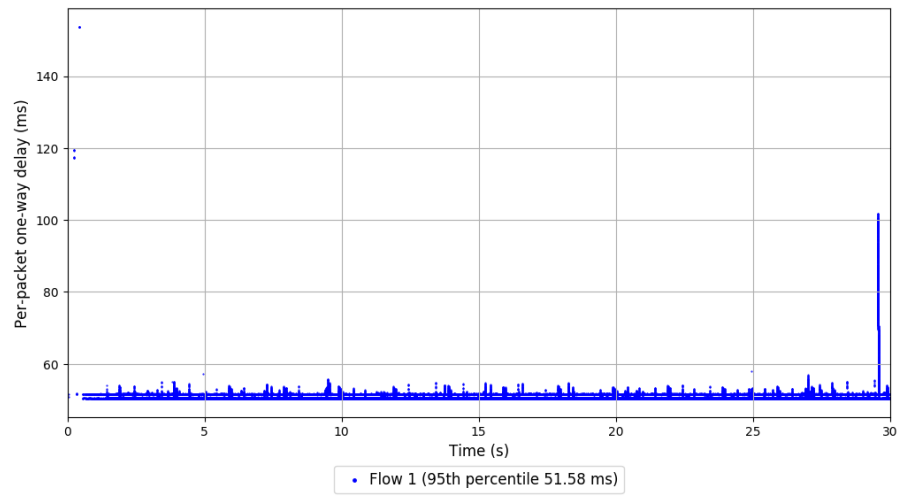
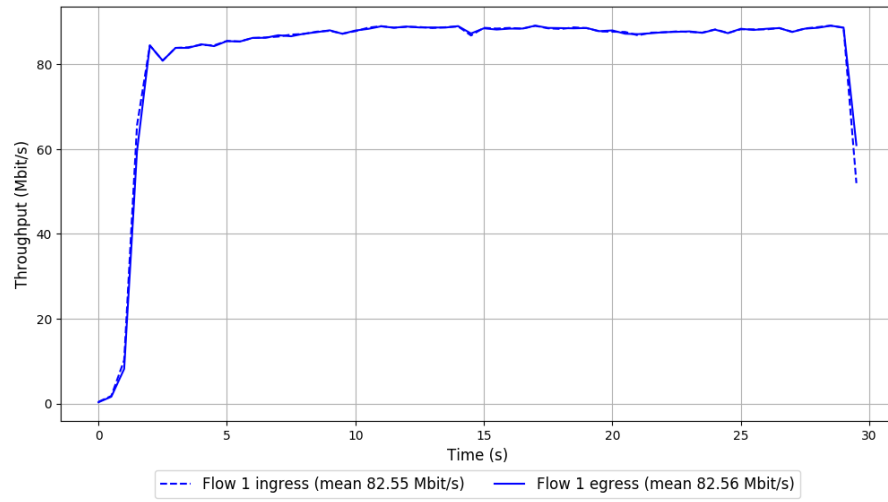
-- Flow 1:

Average throughput: 82.56 Mbit/s

95th percentile per-packet one-way delay: 51.584 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link

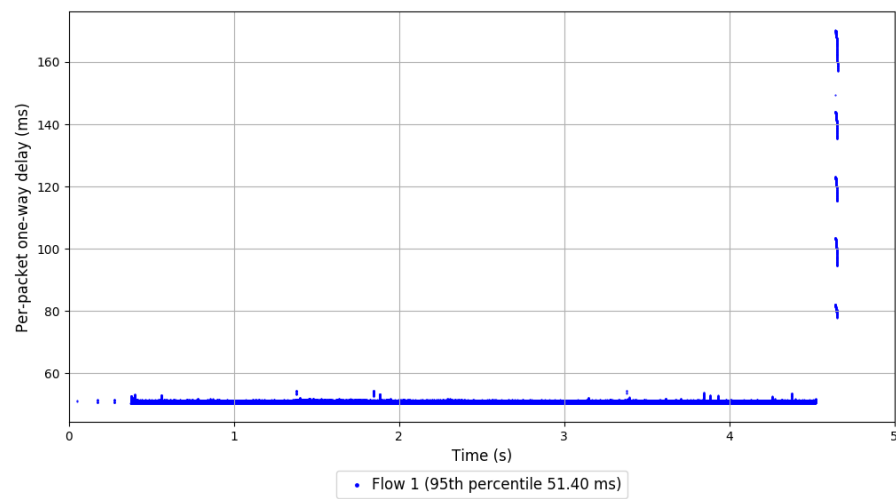
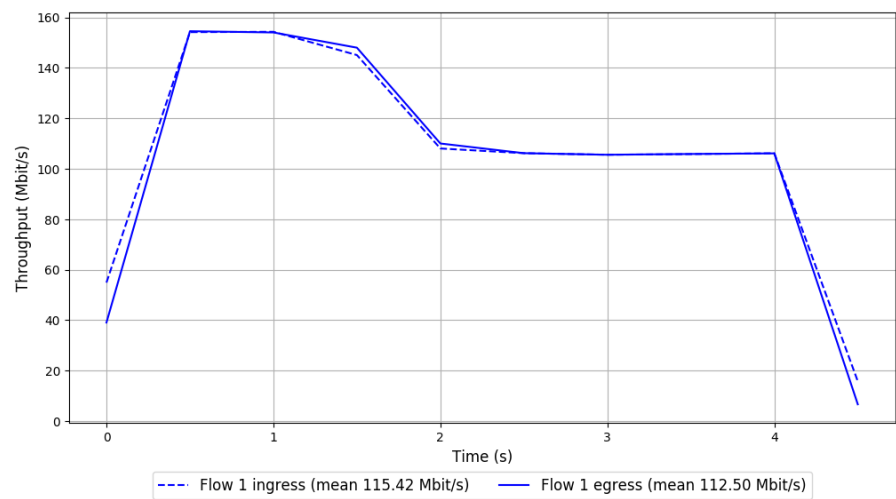


Run 2: Statistics of Copa

Start at: 2017-08-11 12:32:20

End at: 2017-08-11 12:32:50

Run 2: Report of Copa — Data Link

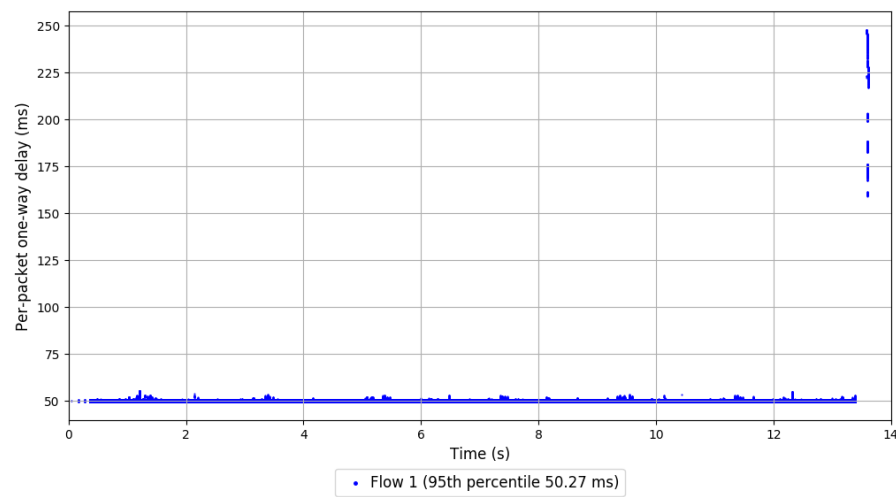
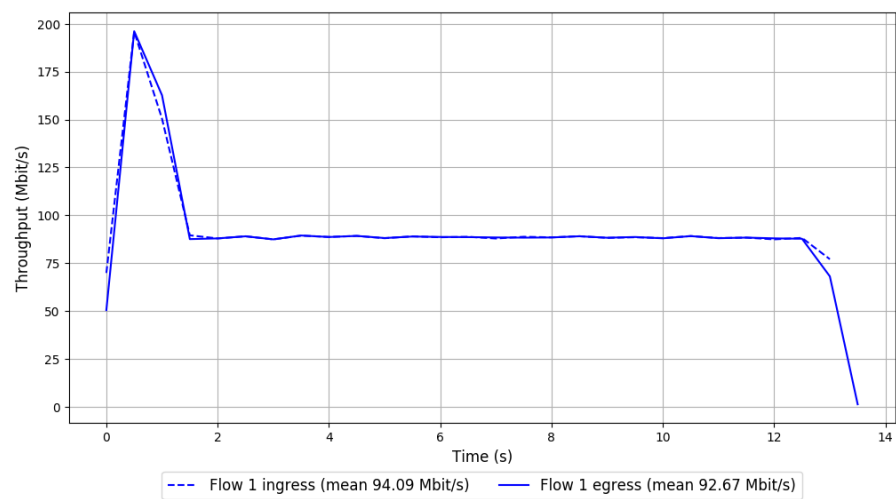


Run 3: Statistics of Copa

Start at: 2017-08-11 12:42:10

End at: 2017-08-11 12:42:40

Run 3: Report of Copa — Data Link

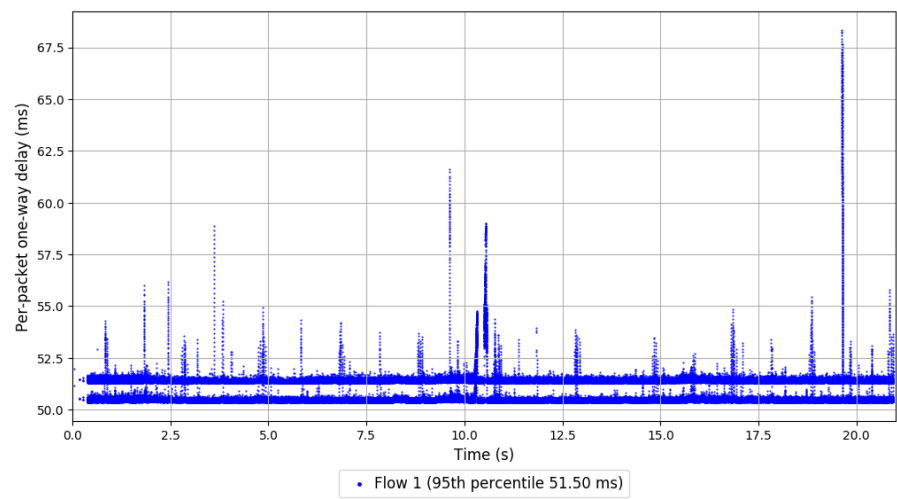
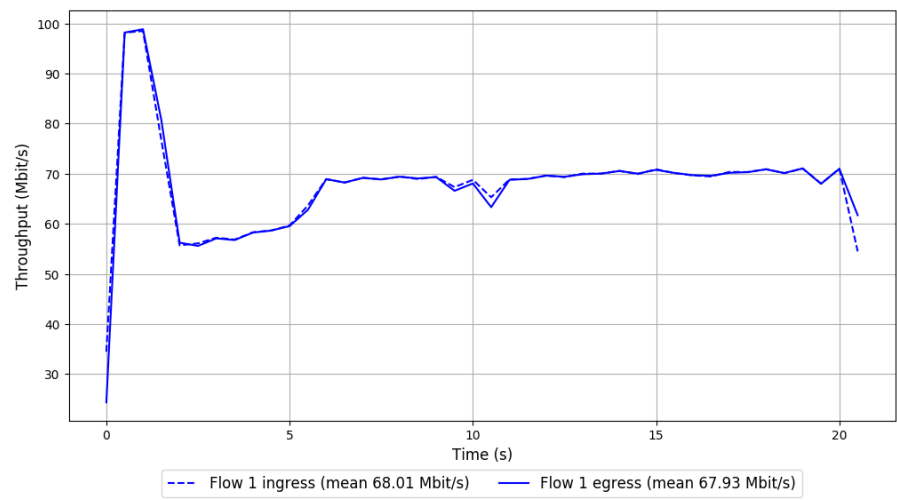


Run 4: Statistics of Copa

Start at: 2017-08-11 12:52:36

End at: 2017-08-11 12:53:06

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-11 13:02:27

End at: 2017-08-11 13:02:57

Below is generated by plot.py at 2017-08-11 15:06:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.07 Mbit/s

95th percentile per-packet one-way delay: 51.604 ms

Loss rate: 0.45%

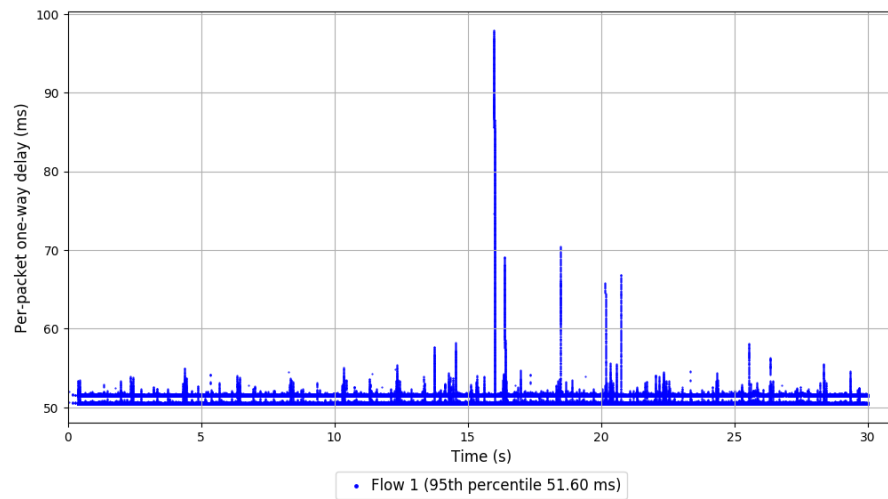
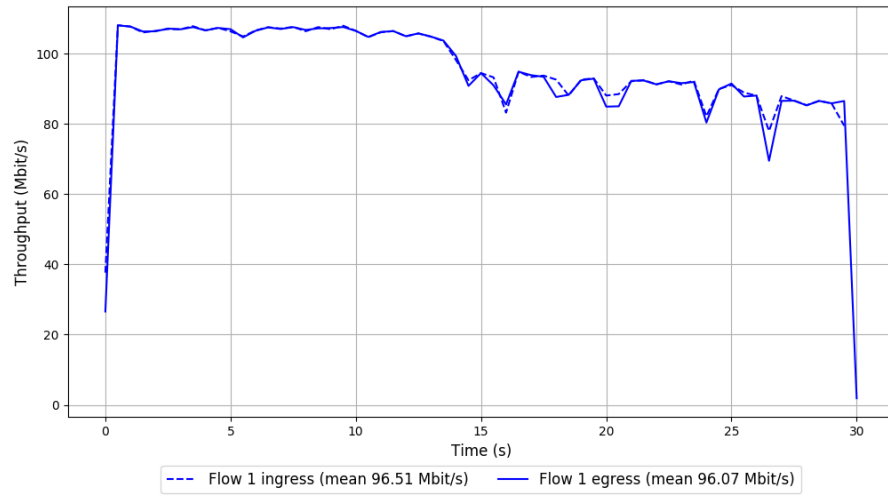
-- Flow 1:

Average throughput: 96.07 Mbit/s

95th percentile per-packet one-way delay: 51.604 ms

Loss rate: 0.45%

Run 5: Report of Copa — Data Link

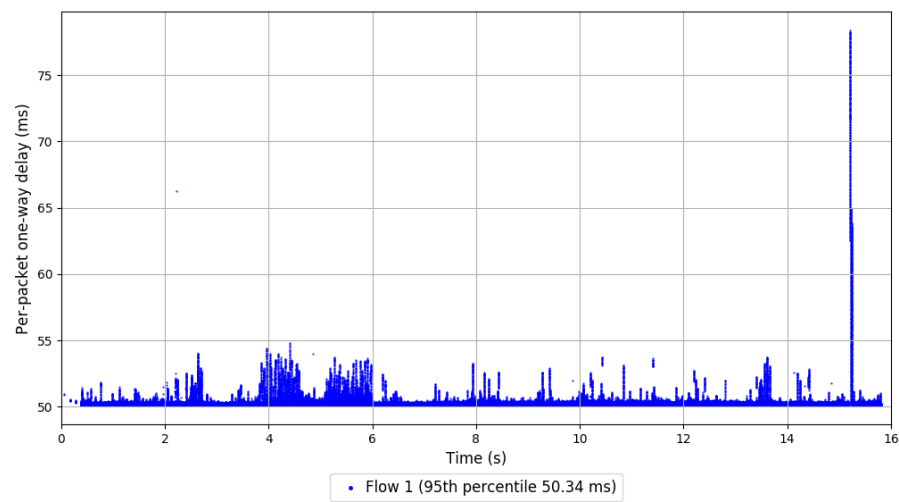
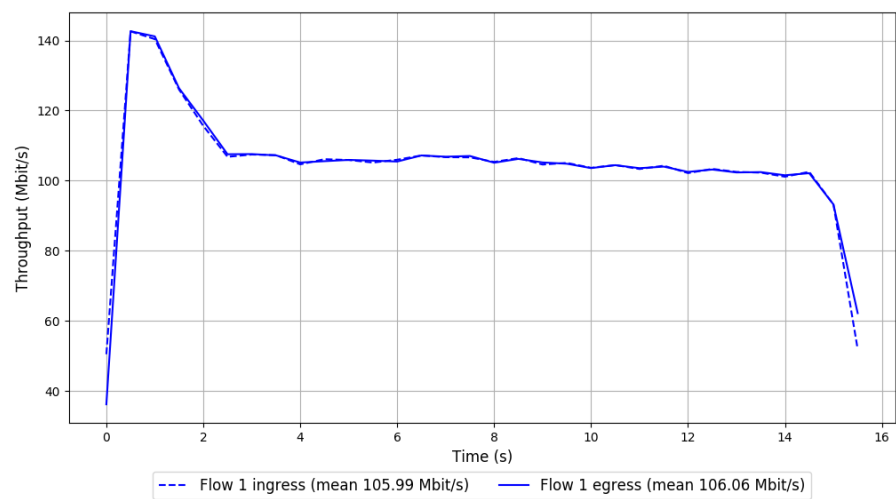


Run 6: Statistics of Copa

Start at: 2017-08-11 13:12:49

End at: 2017-08-11 13:13:19

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-11 13:22:54

End at: 2017-08-11 13:23:24

Below is generated by plot.py at 2017-08-11 15:07:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.95 Mbit/s

95th percentile per-packet one-way delay: 51.650 ms

Loss rate: 0.53%

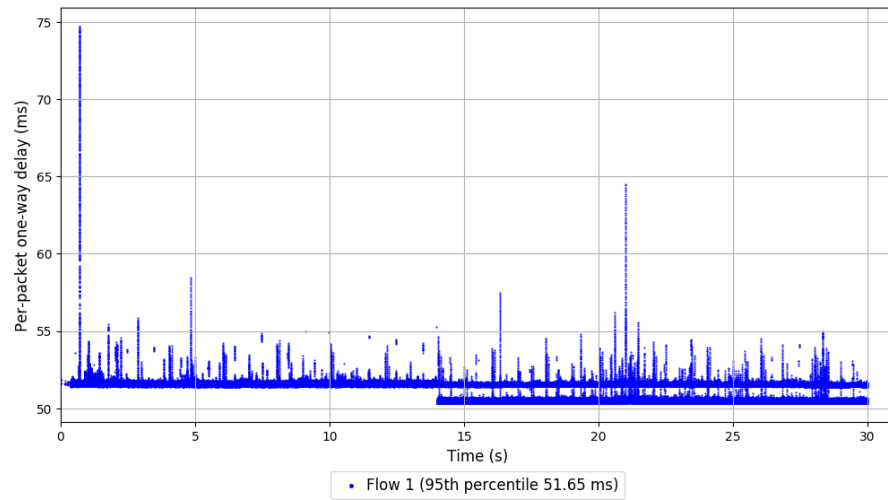
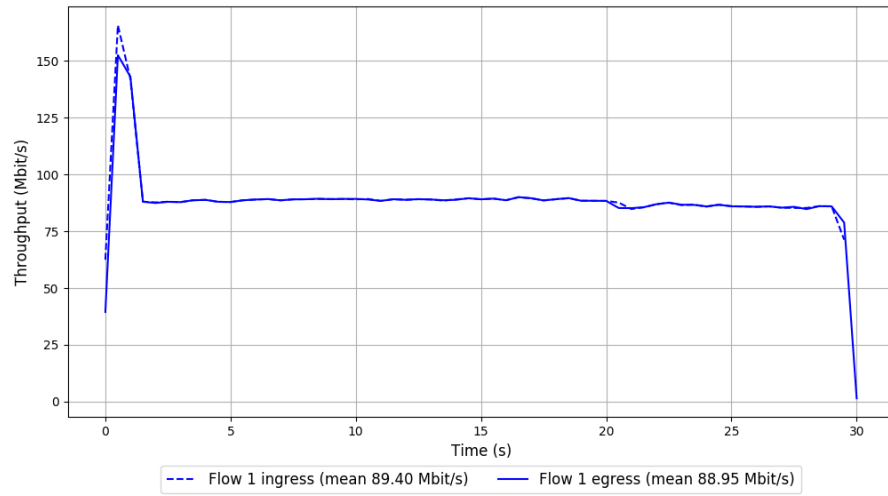
-- Flow 1:

Average throughput: 88.95 Mbit/s

95th percentile per-packet one-way delay: 51.650 ms

Loss rate: 0.53%

Run 7: Report of Copa — Data Link

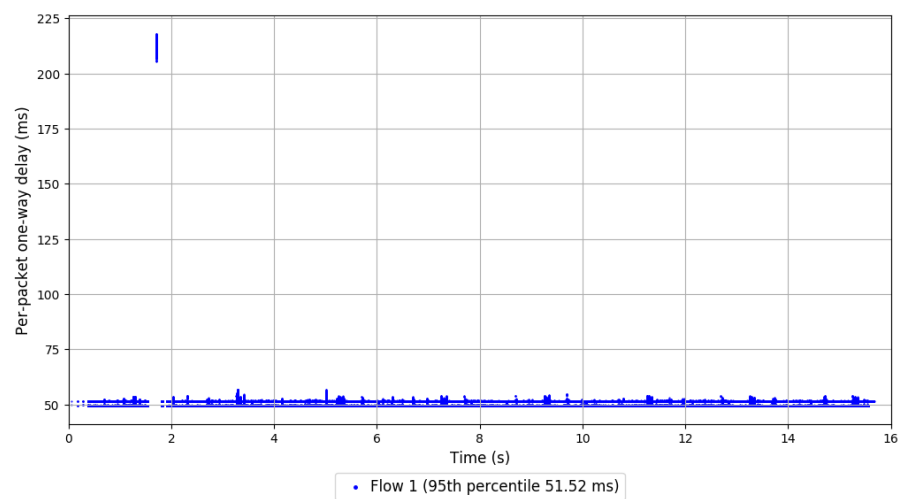
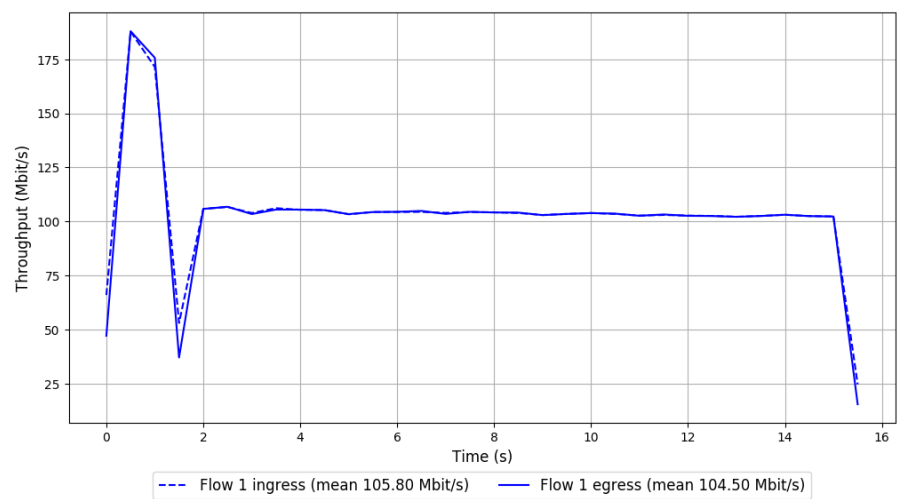


Run 8: Statistics of Copa

Start at: 2017-08-11 13:33:08

End at: 2017-08-11 13:33:38

Run 8: Report of Copa — Data Link

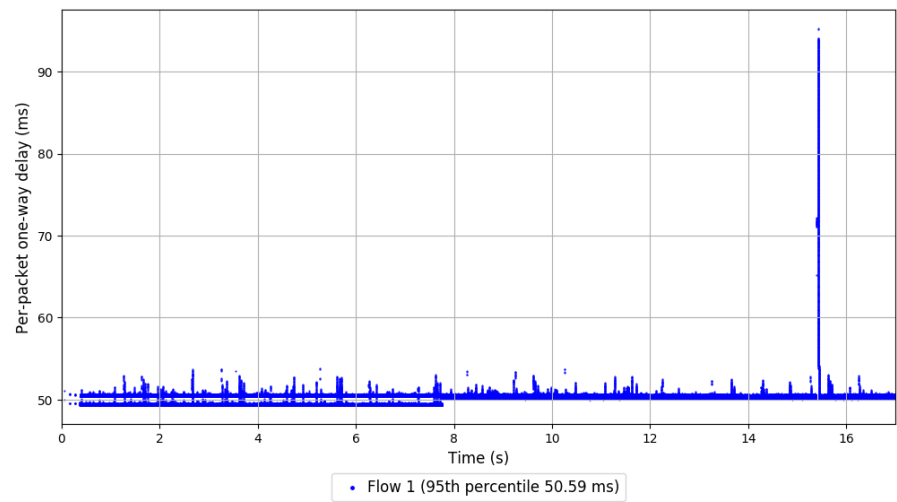
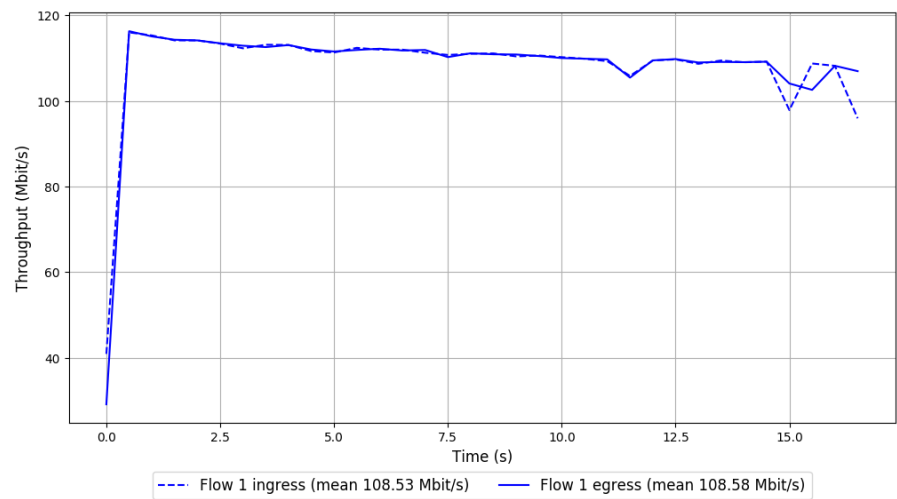


Run 9: Statistics of Copa

Start at: 2017-08-11 13:43:15

End at: 2017-08-11 13:43:45

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-08-11 13:53:26

End at: 2017-08-11 13:53:56

Below is generated by plot.py at 2017-08-11 15:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.13 Mbit/s

95th percentile per-packet one-way delay: 50.230 ms

Loss rate: 0.48%

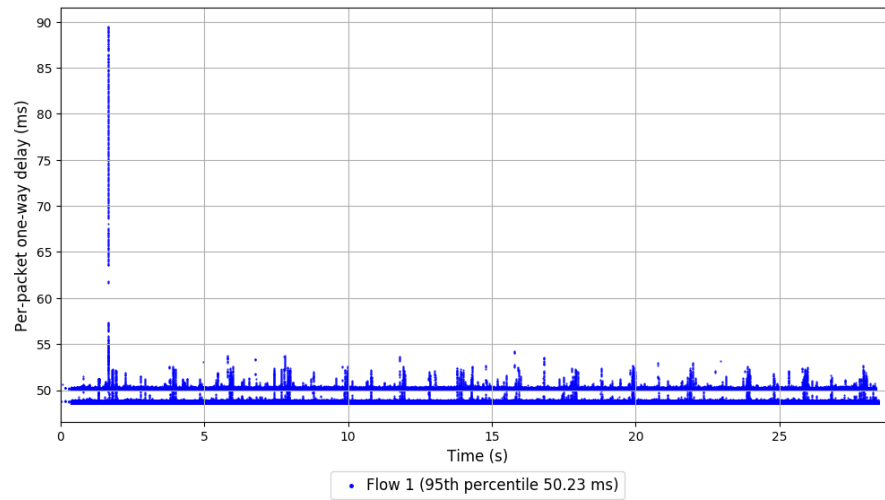
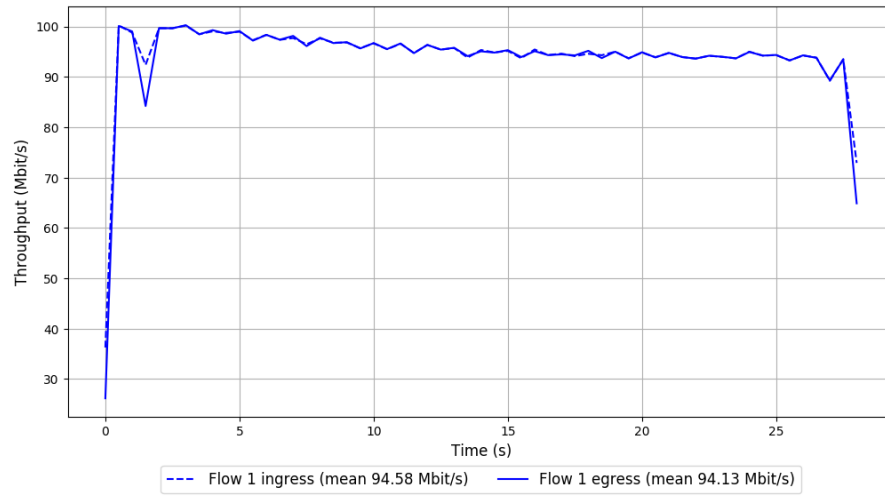
-- Flow 1:

Average throughput: 94.13 Mbit/s

95th percentile per-packet one-way delay: 50.230 ms

Loss rate: 0.48%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-11 12:27:37

End at: 2017-08-11 12:28:07

Below is generated by plot.py at 2017-08-11 15:07:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.66 Mbit/s

95th percentile per-packet one-way delay: 51.330 ms

Loss rate: 2.15%

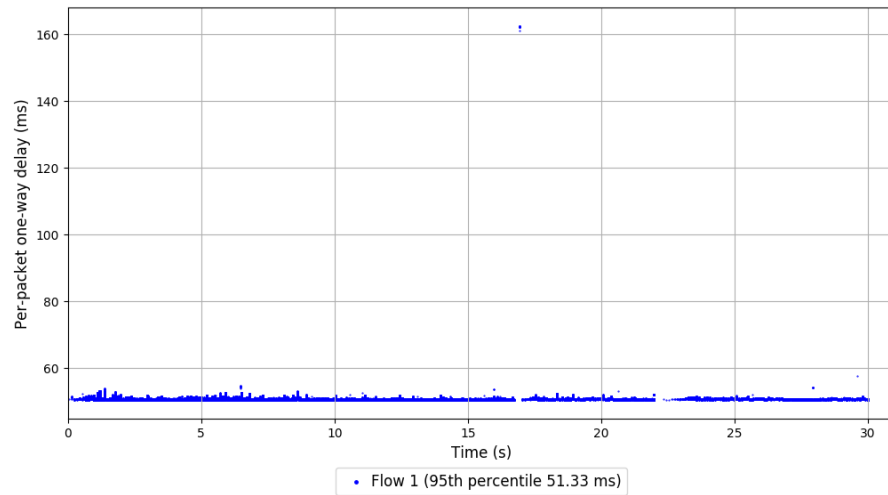
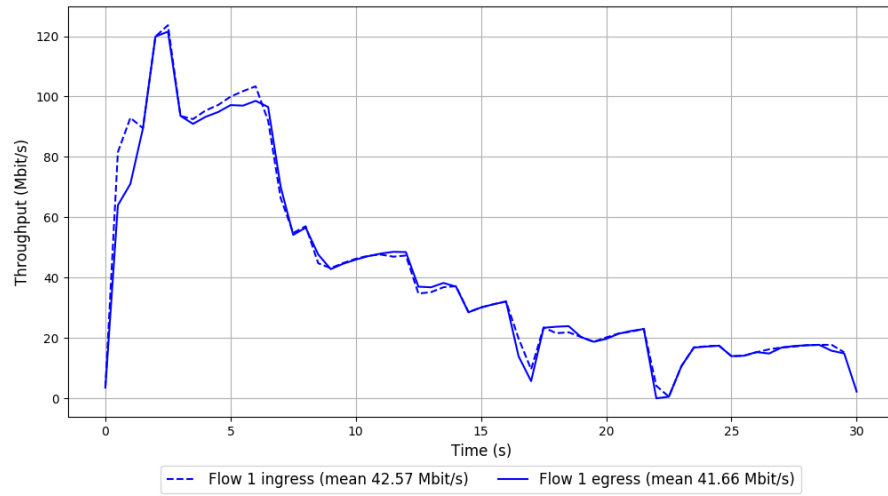
-- Flow 1:

Average throughput: 41.66 Mbit/s

95th percentile per-packet one-way delay: 51.330 ms

Loss rate: 2.15%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-11 12:37:32

End at: 2017-08-11 12:38:02

Below is generated by plot.py at 2017-08-11 15:08:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.57 Mbit/s

95th percentile per-packet one-way delay: 52.979 ms

Loss rate: 0.05%

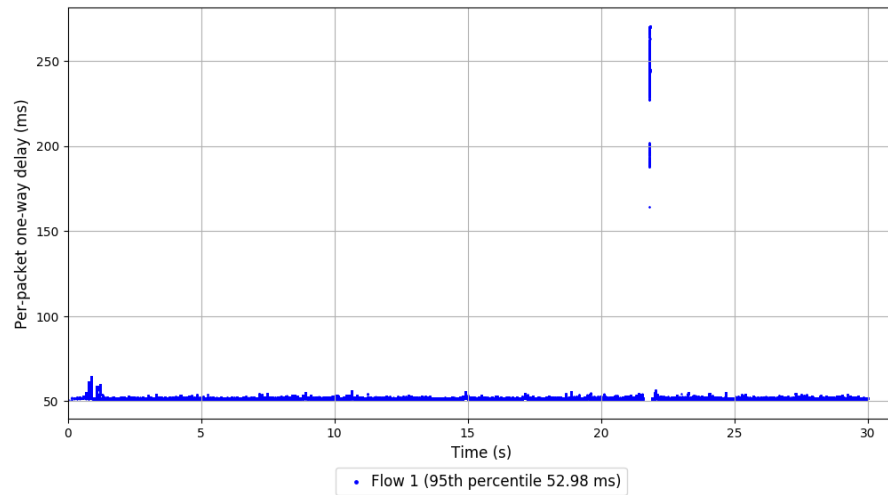
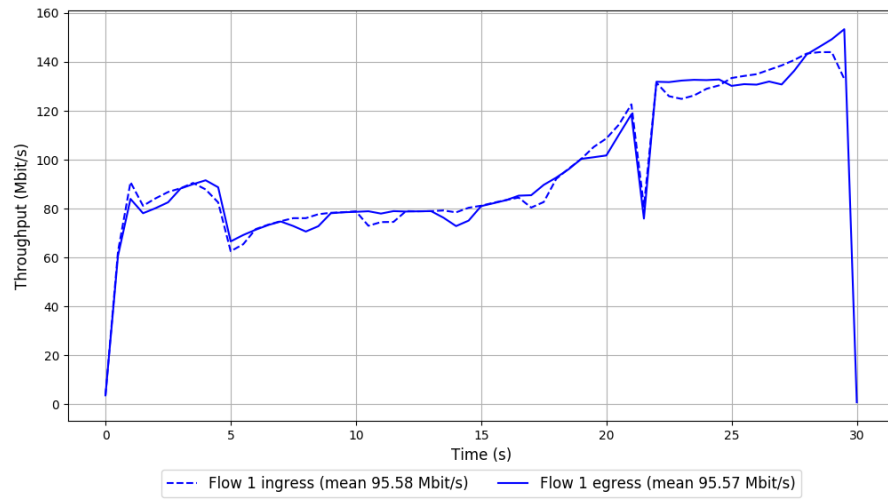
-- Flow 1:

Average throughput: 95.57 Mbit/s

95th percentile per-packet one-way delay: 52.979 ms

Loss rate: 0.05%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-11 12:48:04

End at: 2017-08-11 12:48:34

Below is generated by plot.py at 2017-08-11 15:08:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.36 Mbit/s

95th percentile per-packet one-way delay: 51.050 ms

Loss rate: 0.31%

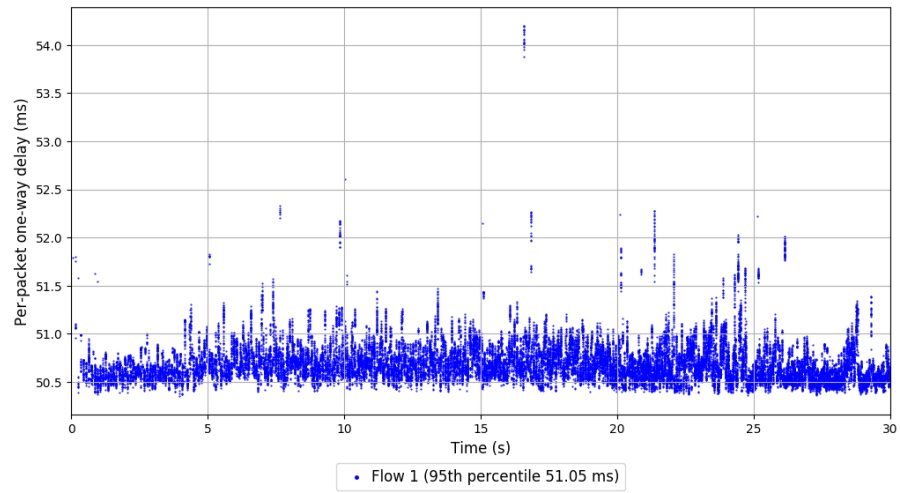
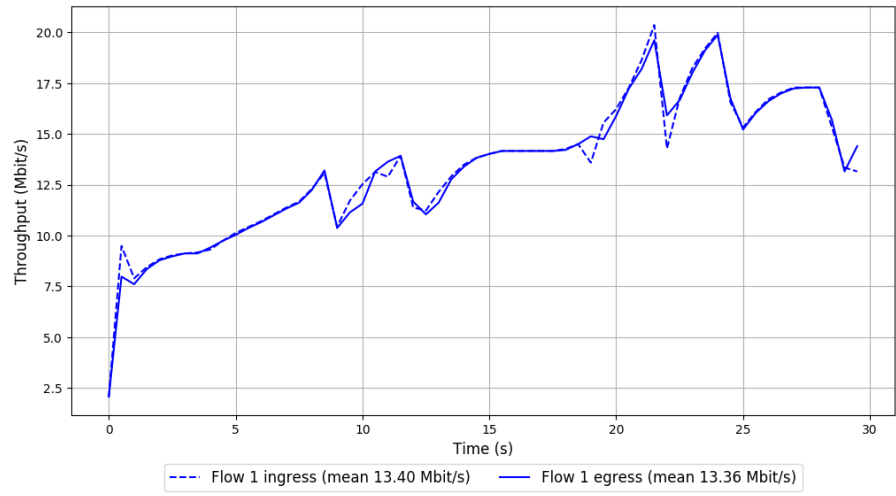
-- Flow 1:

Average throughput: 13.36 Mbit/s

95th percentile per-packet one-way delay: 51.050 ms

Loss rate: 0.31%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-08-11 12:57:48

End at: 2017-08-11 12:58:18

Below is generated by plot.py at 2017-08-11 15:08:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.57 Mbit/s

95th percentile per-packet one-way delay: 51.875 ms

Loss rate: 1.06%

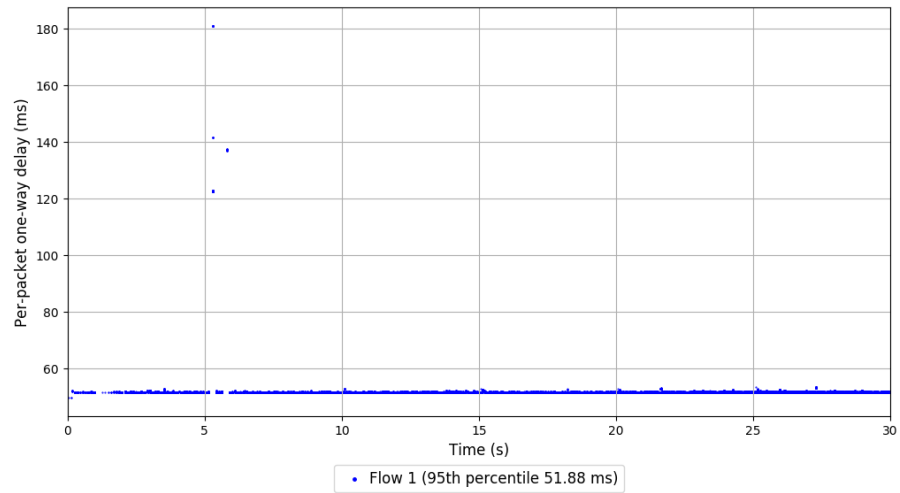
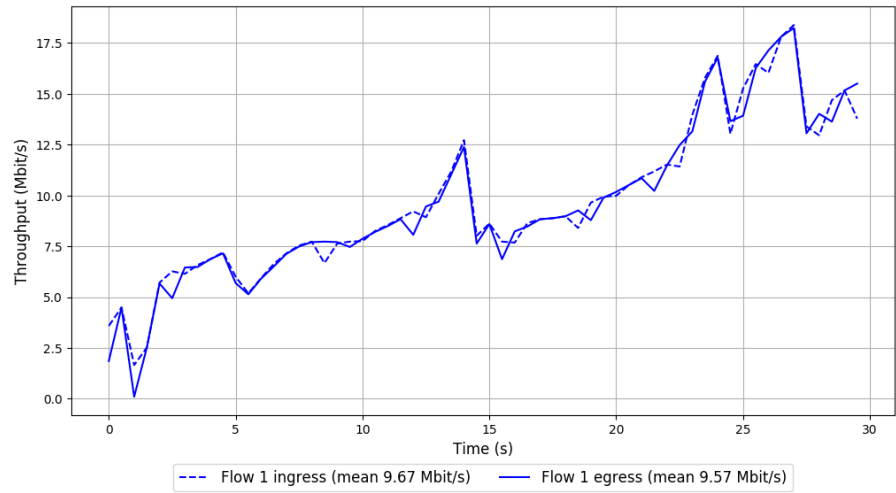
-- Flow 1:

Average throughput: 9.57 Mbit/s

95th percentile per-packet one-way delay: 51.875 ms

Loss rate: 1.06%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-11 13:08:16

End at: 2017-08-11 13:08:46

Below is generated by plot.py at 2017-08-11 15:08:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.00 Mbit/s

95th percentile per-packet one-way delay: 50.518 ms

Loss rate: 1.19%

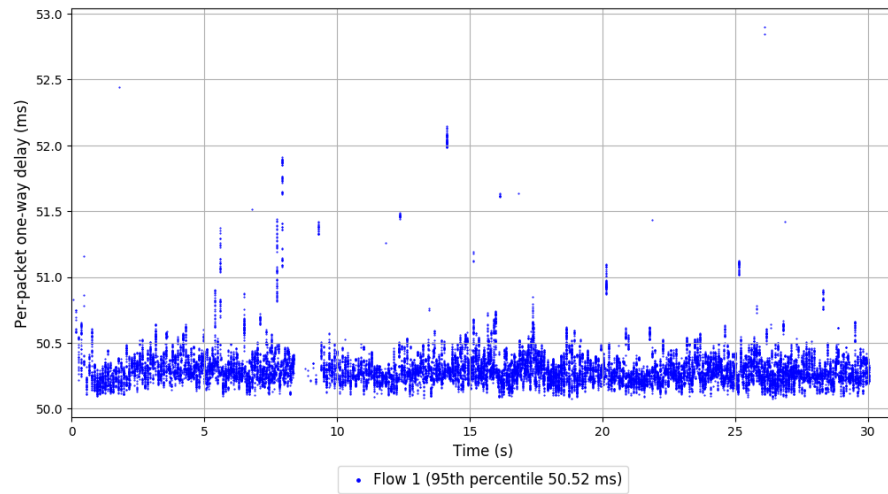
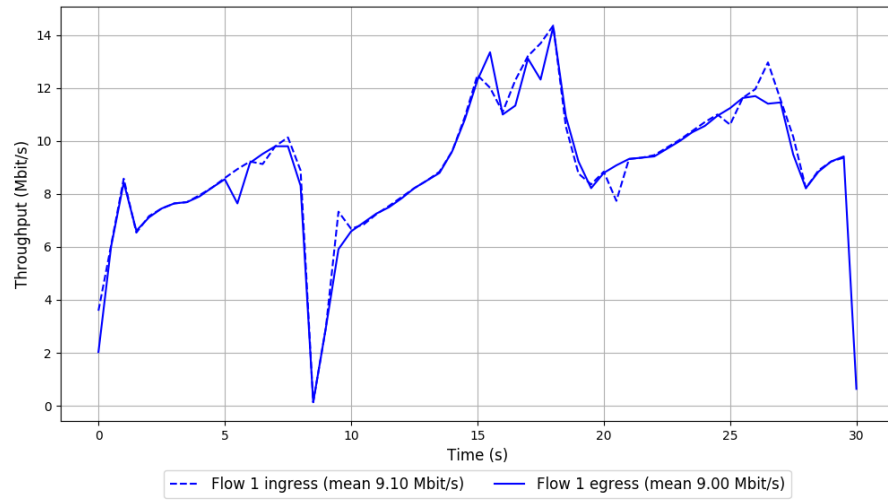
-- Flow 1:

Average throughput: 9.00 Mbit/s

95th percentile per-packet one-way delay: 50.518 ms

Loss rate: 1.19%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-11 13:18:25

End at: 2017-08-11 13:18:55

Below is generated by plot.py at 2017-08-11 15:08:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.62 Mbit/s

95th percentile per-packet one-way delay: 50.980 ms

Loss rate: 1.11%

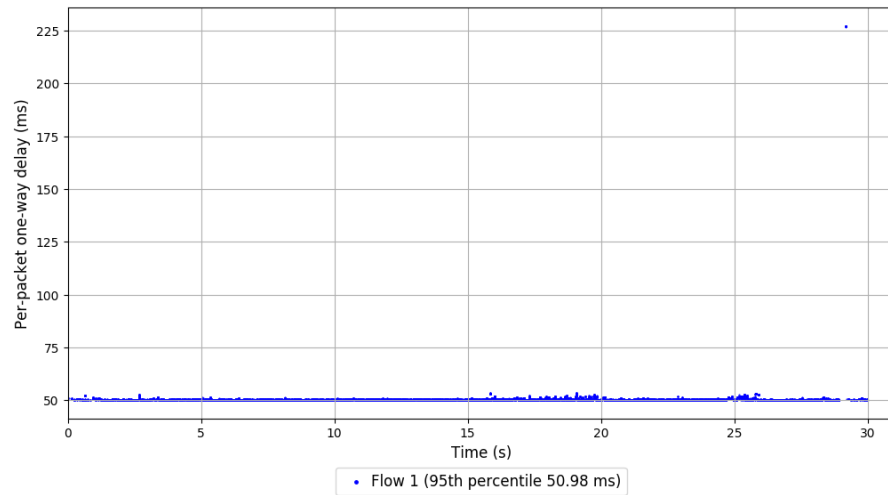
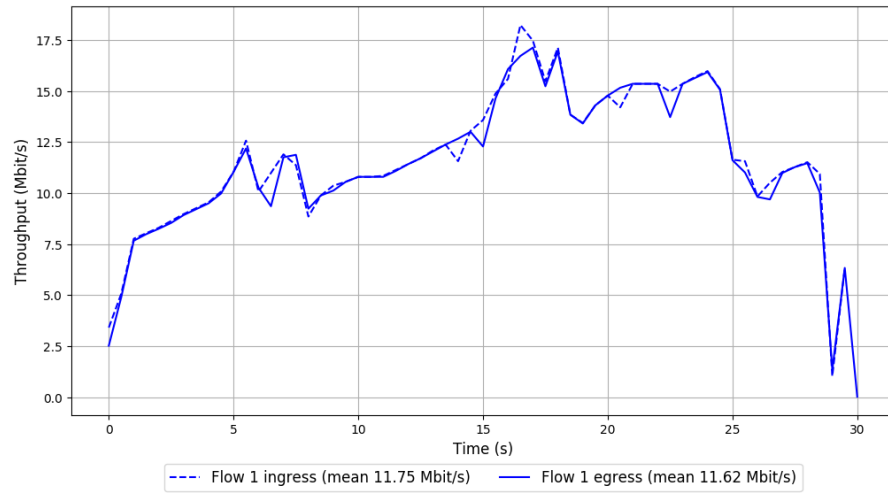
-- Flow 1:

Average throughput: 11.62 Mbit/s

95th percentile per-packet one-way delay: 50.980 ms

Loss rate: 1.11%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-11 13:28:28

End at: 2017-08-11 13:28:58

Below is generated by plot.py at 2017-08-11 15:08:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.43 Mbit/s

95th percentile per-packet one-way delay: 51.750 ms

Loss rate: 0.79%

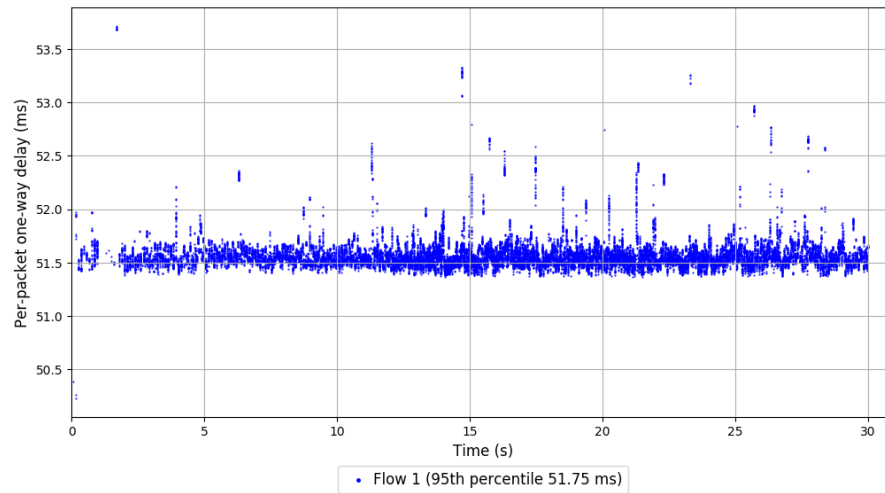
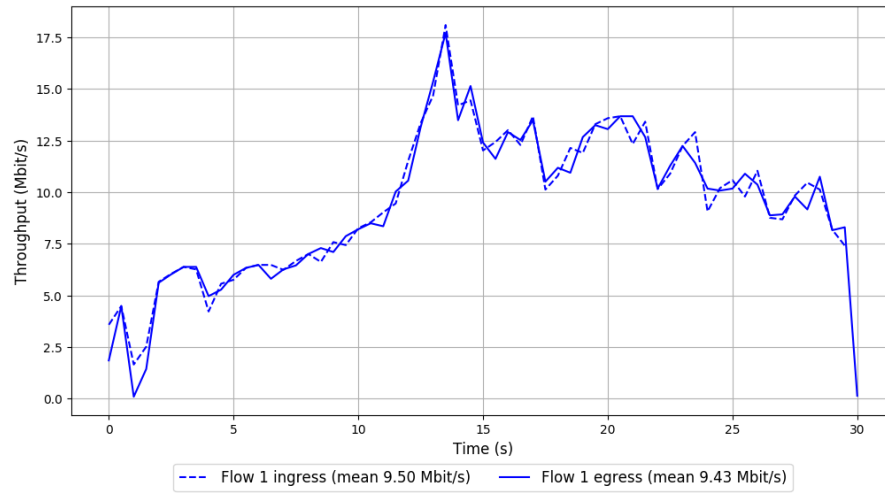
-- Flow 1:

Average throughput: 9.43 Mbit/s

95th percentile per-packet one-way delay: 51.750 ms

Loss rate: 0.79%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-11 13:38:41

End at: 2017-08-11 13:39:11

Below is generated by plot.py at 2017-08-11 15:08:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.20 Mbit/s

95th percentile per-packet one-way delay: 50.667 ms

Loss rate: 0.34%

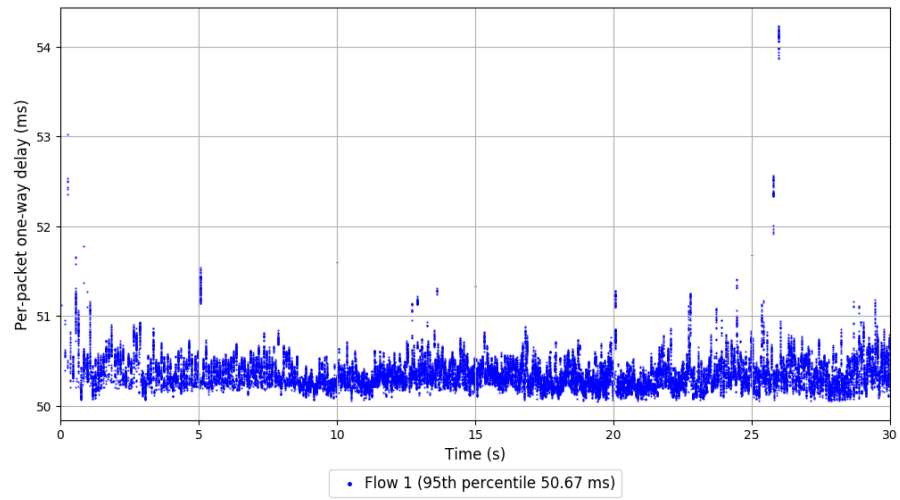
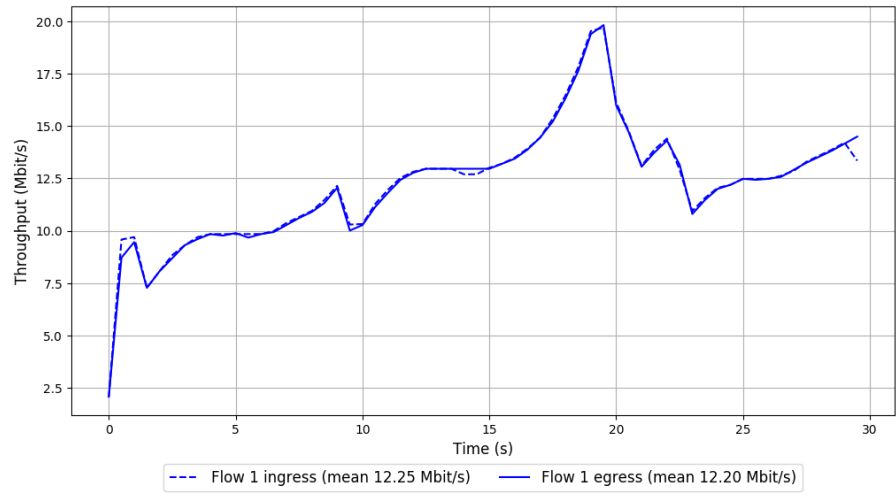
-- Flow 1:

Average throughput: 12.20 Mbit/s

95th percentile per-packet one-way delay: 50.667 ms

Loss rate: 0.34%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-11 13:48:47

End at: 2017-08-11 13:49:17

Below is generated by plot.py at 2017-08-11 15:08:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.68 Mbit/s

95th percentile per-packet one-way delay: 50.565 ms

Loss rate: 0.92%

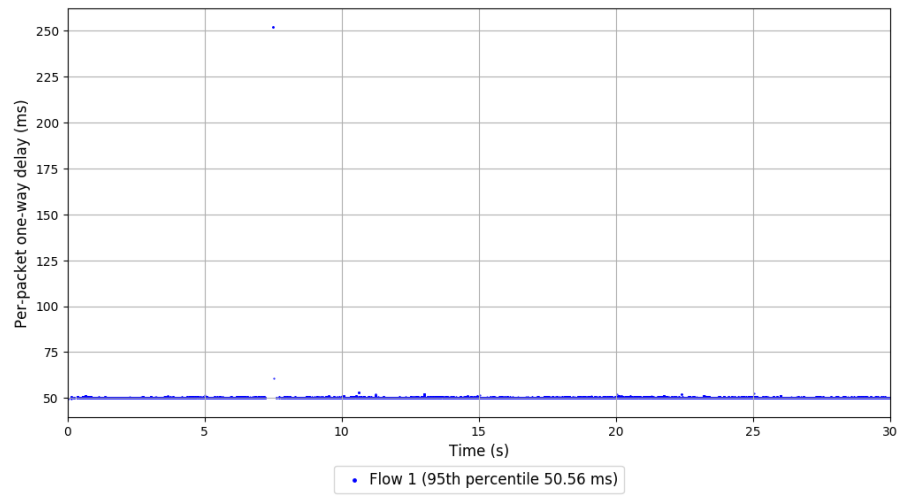
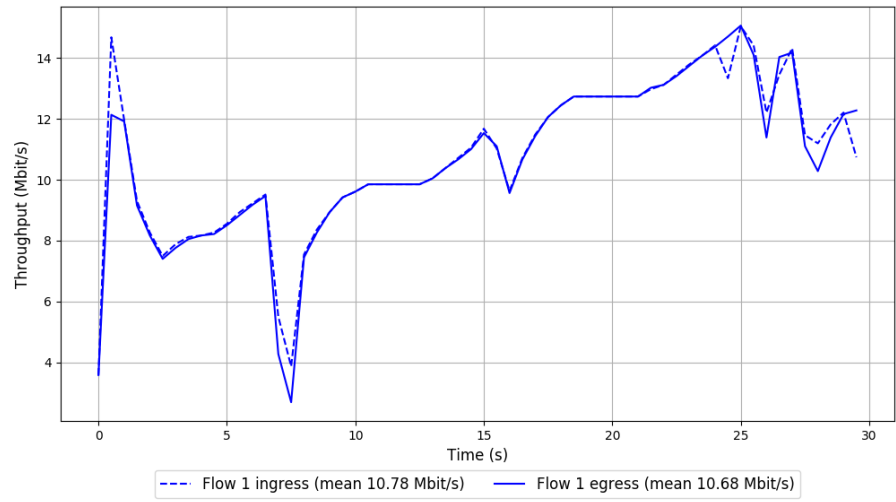
-- Flow 1:

Average throughput: 10.68 Mbit/s

95th percentile per-packet one-way delay: 50.565 ms

Loss rate: 0.92%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-11 13:58:56

End at: 2017-08-11 13:59:26

Below is generated by plot.py at 2017-08-11 15:08:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.34 Mbit/s

95th percentile per-packet one-way delay: 50.496 ms

Loss rate: 0.73%

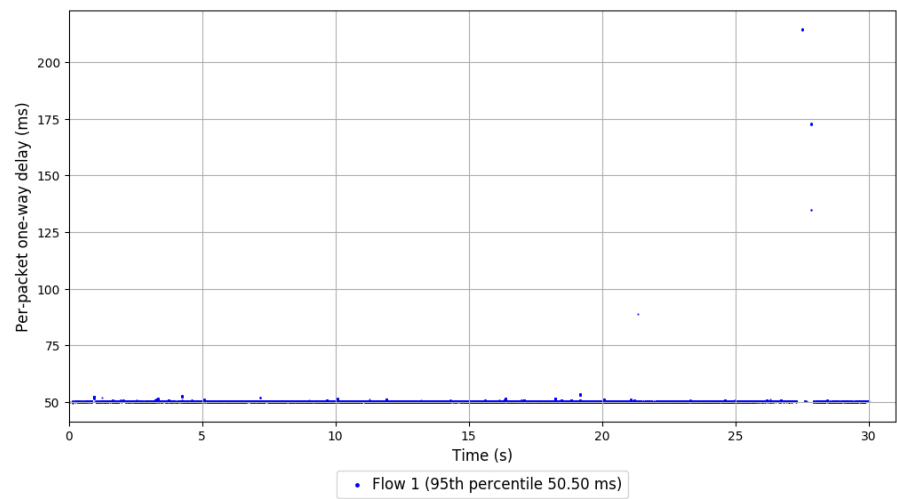
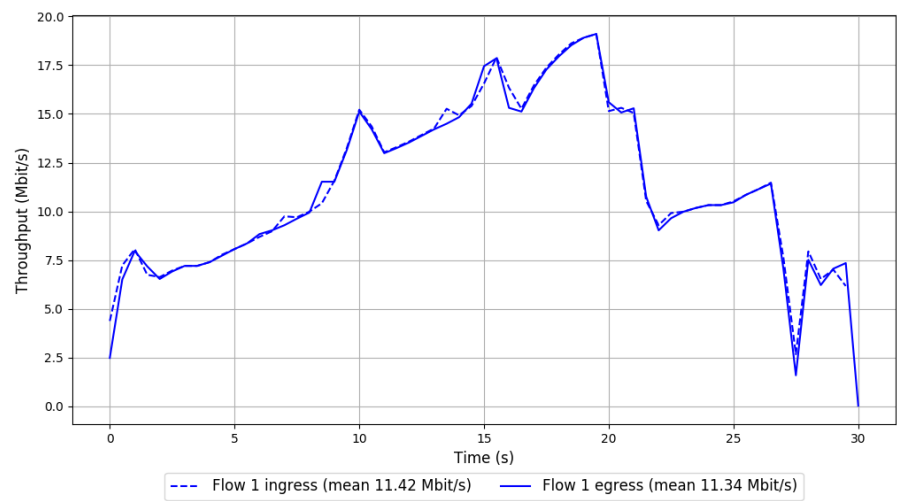
-- Flow 1:

Average throughput: 11.34 Mbit/s

95th percentile per-packet one-way delay: 50.496 ms

Loss rate: 0.73%

Run 10: Report of TCP Cubic — Data Link

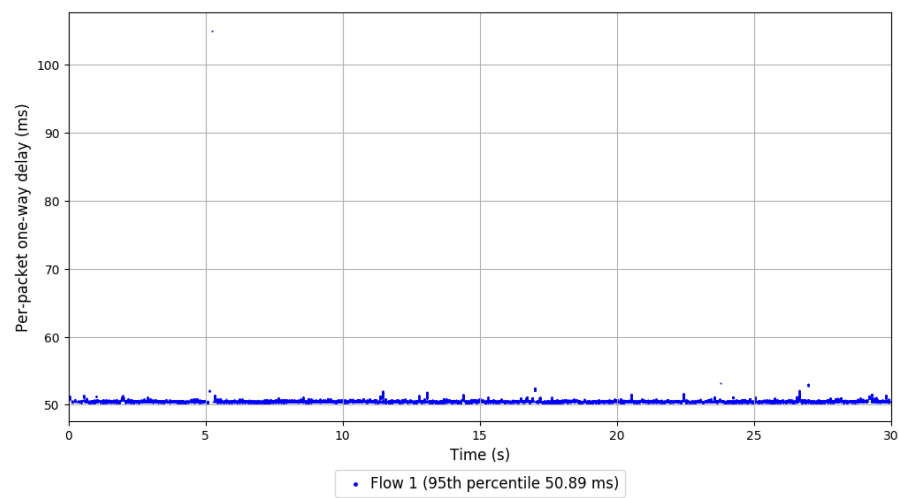
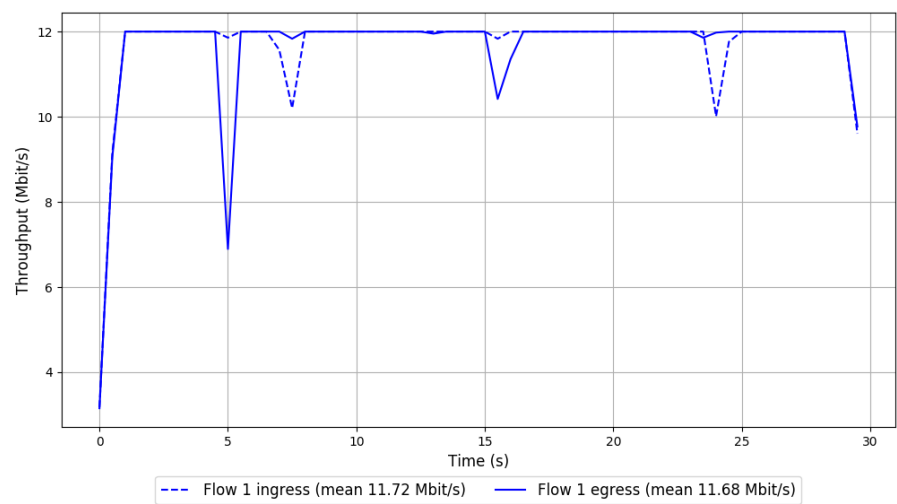


```
Run 1: Statistics of KohoCC

Start at: 2017-08-11 12:26:19
End at: 2017-08-11 12:26:49

# Below is generated by plot.py at 2017-08-11 15:08:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.68 Mbit/s
95th percentile per-packet one-way delay: 50.886 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 11.68 Mbit/s
95th percentile per-packet one-way delay: 50.886 ms
Loss rate: 0.41%
```


Run 1: Report of KohoCC — Data Link



Run 2: Statistics of KohoCC

Start at: 2017-08-11 12:36:11

End at: 2017-08-11 12:36:41

Below is generated by plot.py at 2017-08-11 15:08:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.46 Mbit/s

95th percentile per-packet one-way delay: 52.185 ms

Loss rate: 1.03%

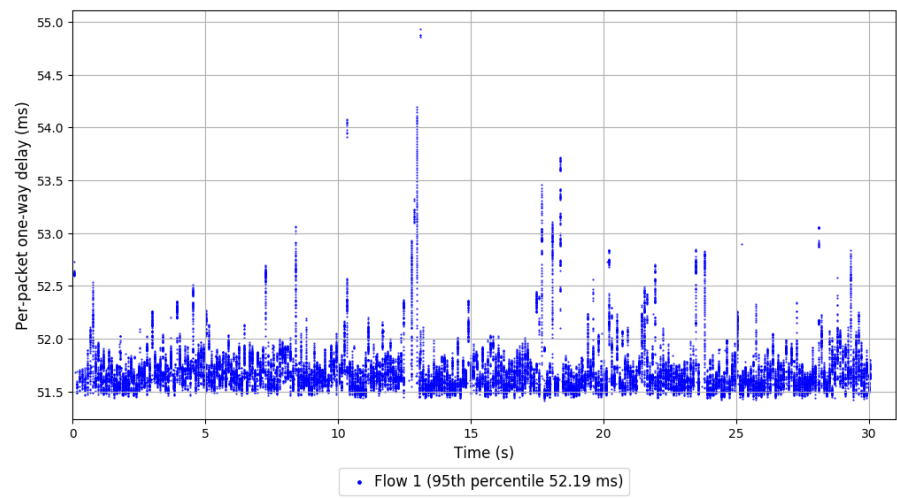
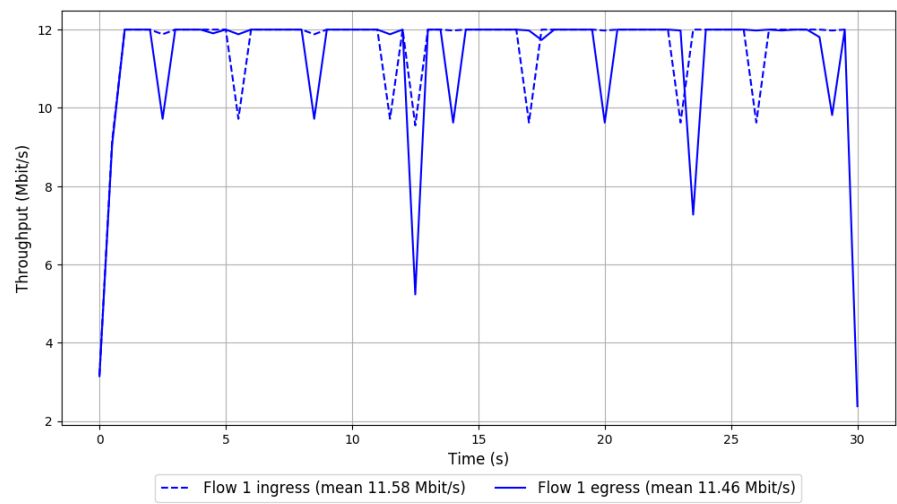
-- Flow 1:

Average throughput: 11.46 Mbit/s

95th percentile per-packet one-way delay: 52.185 ms

Loss rate: 1.03%

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-11 12:46:48

End at: 2017-08-11 12:47:18

Below is generated by plot.py at 2017-08-11 15:08:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.67 Mbit/s

95th percentile per-packet one-way delay: 50.123 ms

Loss rate: 0.35%

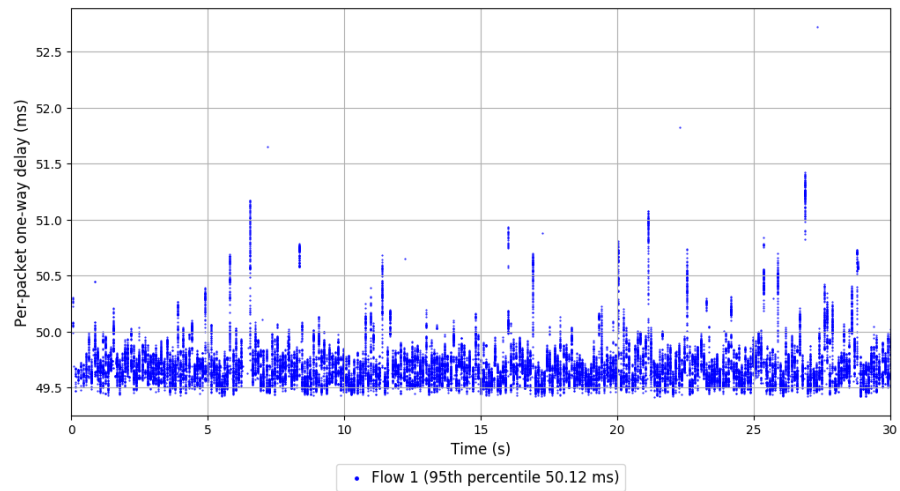
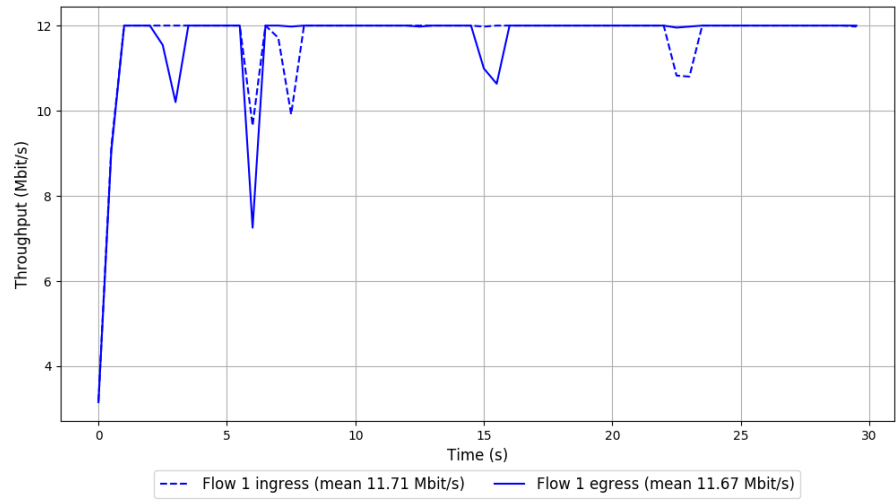
-- Flow 1:

Average throughput: 11.67 Mbit/s

95th percentile per-packet one-way delay: 50.123 ms

Loss rate: 0.35%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-08-11 12:56:33

End at: 2017-08-11 12:57:03

Below is generated by plot.py at 2017-08-11 15:08:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.06 Mbit/s

95th percentile per-packet one-way delay: 50.740 ms

Loss rate: 20.47%

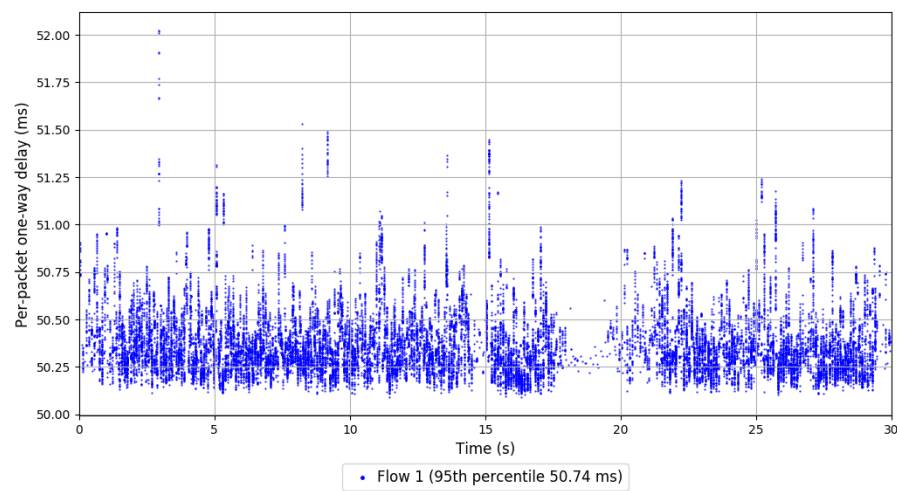
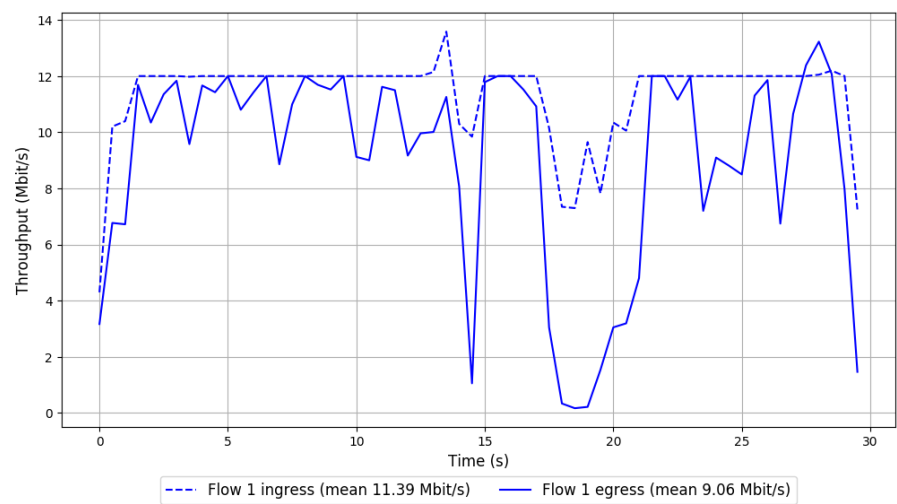
-- Flow 1:

Average throughput: 9.06 Mbit/s

95th percentile per-packet one-way delay: 50.740 ms

Loss rate: 20.47%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-08-11 13:06:59

End at: 2017-08-11 13:07:29

Below is generated by plot.py at 2017-08-11 15:08:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.52 Mbit/s

95th percentile per-packet one-way delay: 51.149 ms

Loss rate: 1.30%

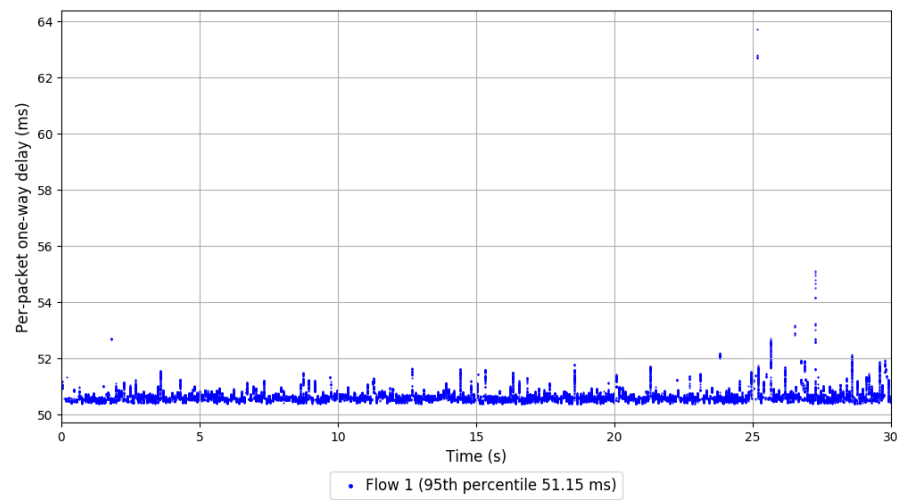
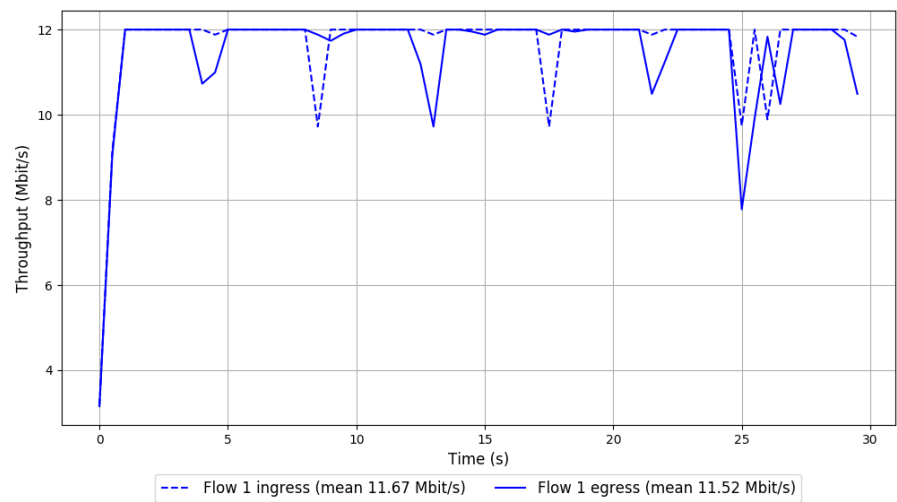
-- Flow 1:

Average throughput: 11.52 Mbit/s

95th percentile per-packet one-way delay: 51.149 ms

Loss rate: 1.30%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-11 13:17:06

End at: 2017-08-11 13:17:36

Below is generated by plot.py at 2017-08-11 15:08:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.41 Mbit/s

95th percentile per-packet one-way delay: 50.713 ms

Loss rate: 16.89%

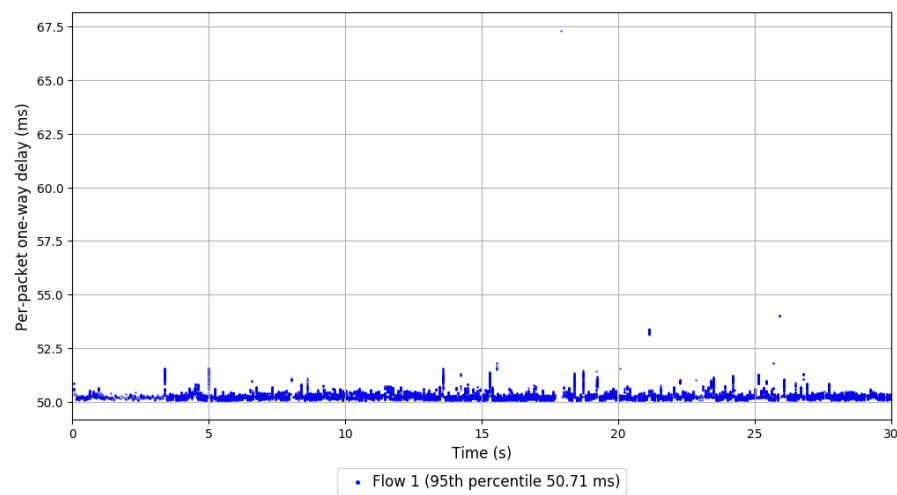
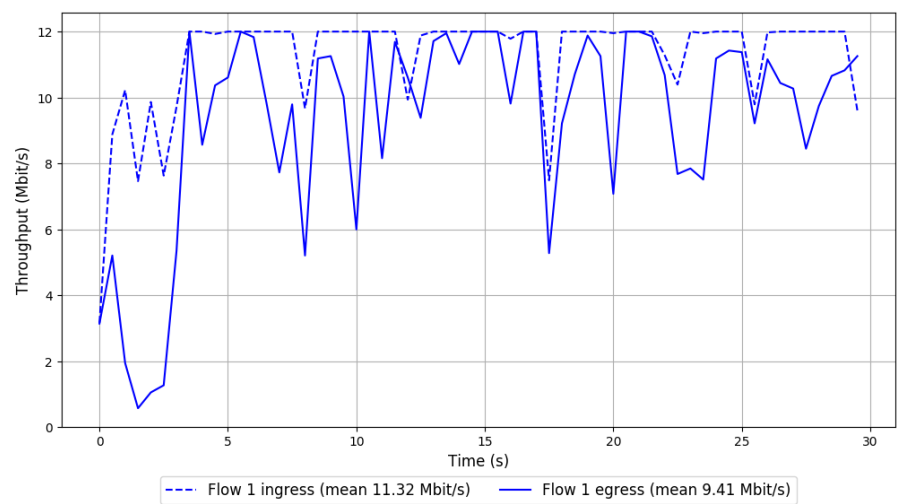
-- Flow 1:

Average throughput: 9.41 Mbit/s

95th percentile per-packet one-way delay: 50.713 ms

Loss rate: 16.89%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-11 13:27:09

End at: 2017-08-11 13:27:39

Below is generated by plot.py at 2017-08-11 15:08:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.17 Mbit/s

95th percentile per-packet one-way delay: 50.665 ms

Loss rate: 3.72%

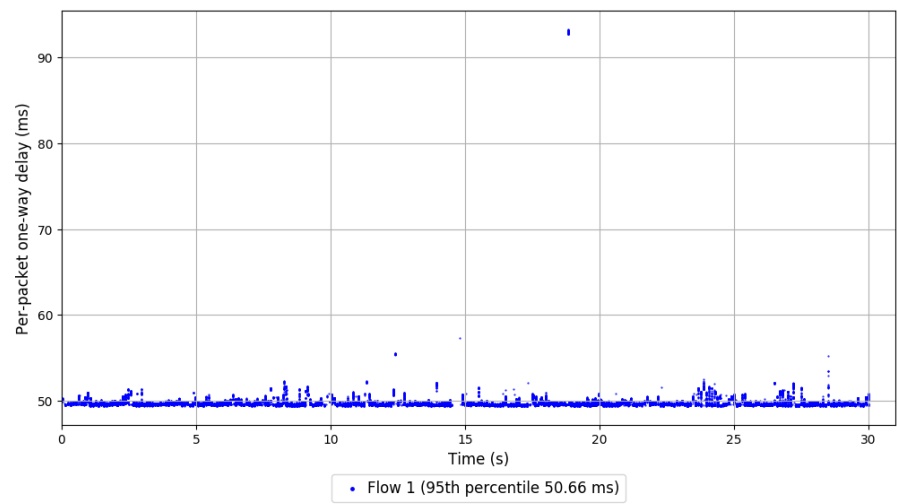
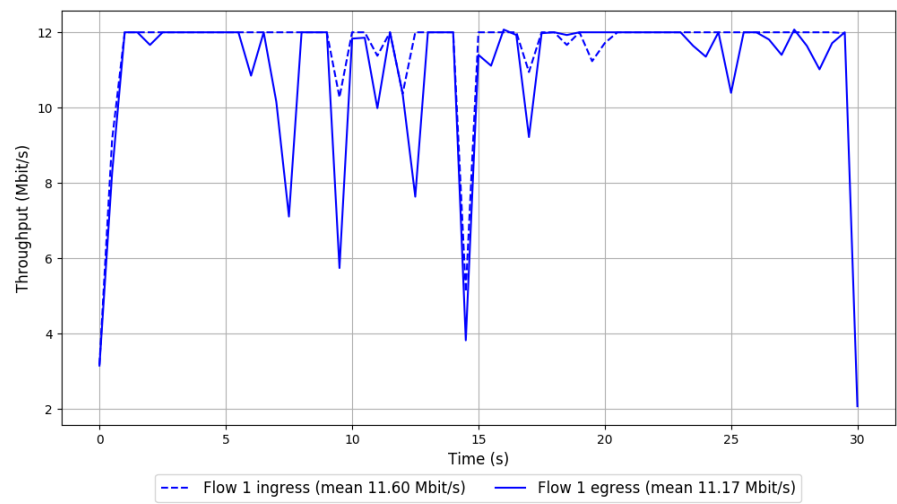
-- Flow 1:

Average throughput: 11.17 Mbit/s

95th percentile per-packet one-way delay: 50.665 ms

Loss rate: 3.72%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-11 13:37:23

End at: 2017-08-11 13:37:53

Below is generated by plot.py at 2017-08-11 15:08:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.67 Mbit/s

95th percentile per-packet one-way delay: 54.319 ms

Loss rate: 41.92%

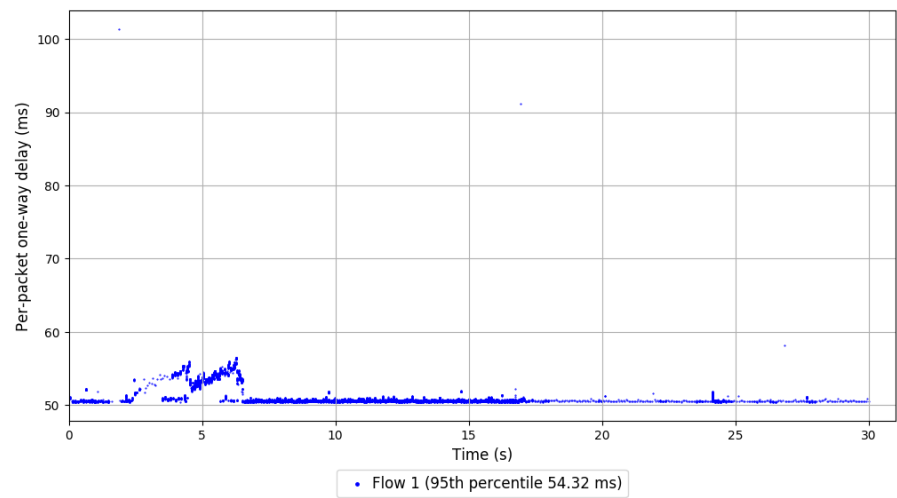
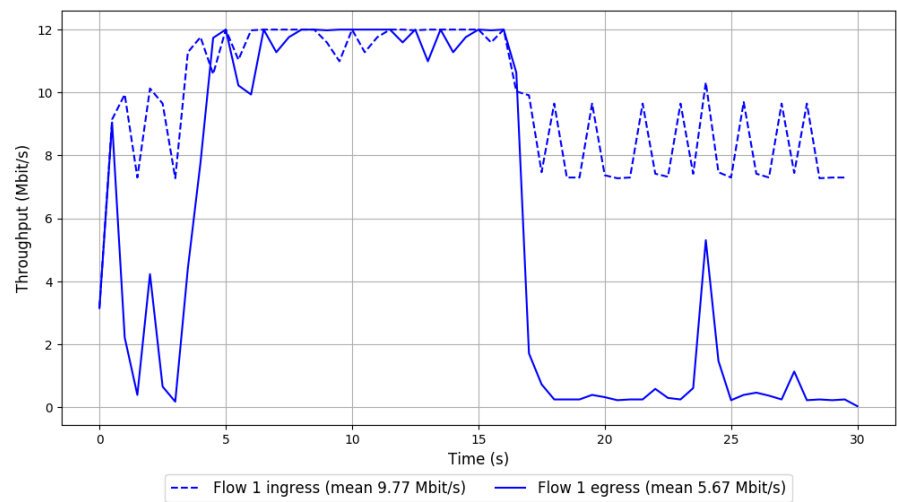
-- Flow 1:

Average throughput: 5.67 Mbit/s

95th percentile per-packet one-way delay: 54.319 ms

Loss rate: 41.92%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-11 13:47:32

End at: 2017-08-11 13:48:02

Below is generated by plot.py at 2017-08-11 15:08:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.51 Mbit/s

95th percentile per-packet one-way delay: 51.254 ms

Loss rate: 0.94%

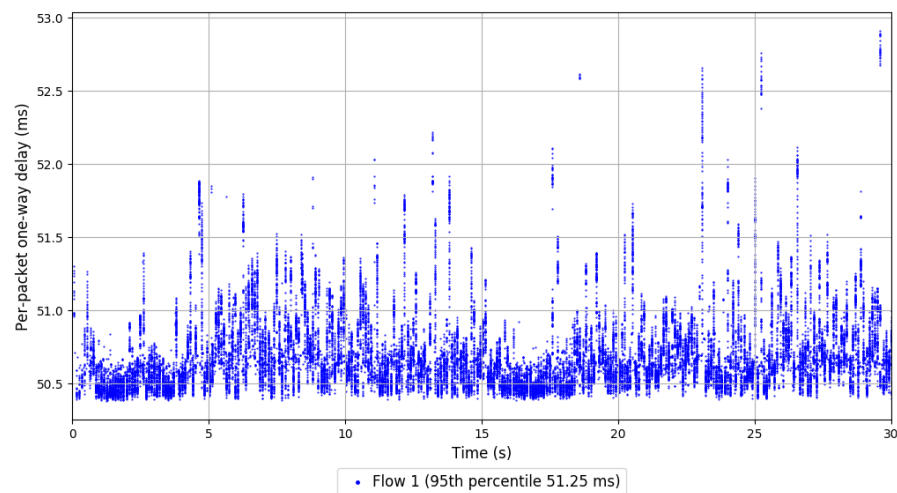
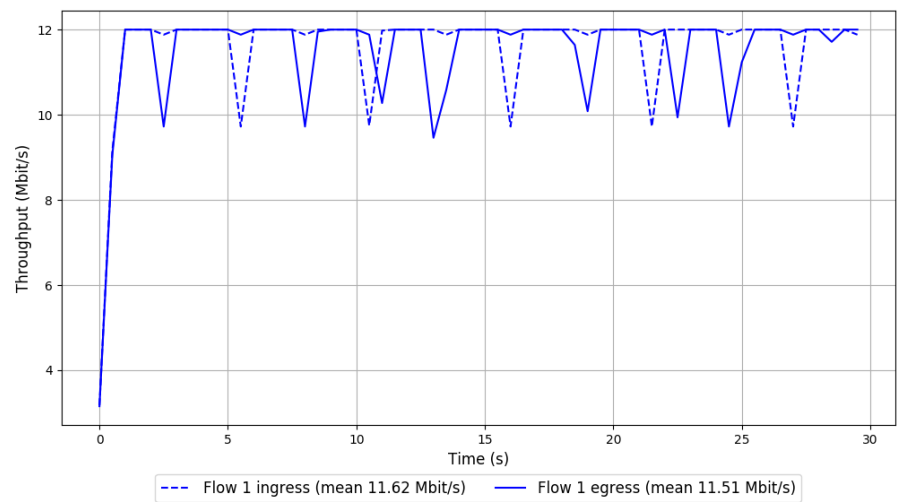
-- Flow 1:

Average throughput: 11.51 Mbit/s

95th percentile per-packet one-way delay: 51.254 ms

Loss rate: 0.94%

Run 9: Report of KohoCC — Data Link

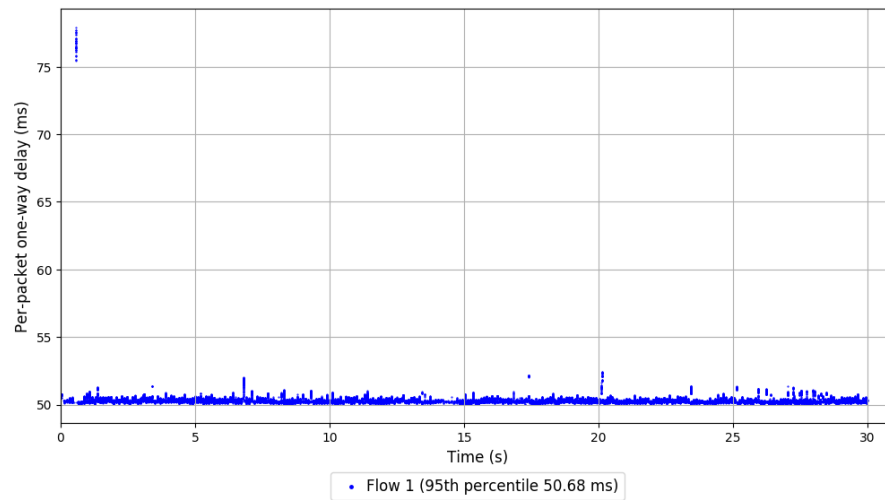
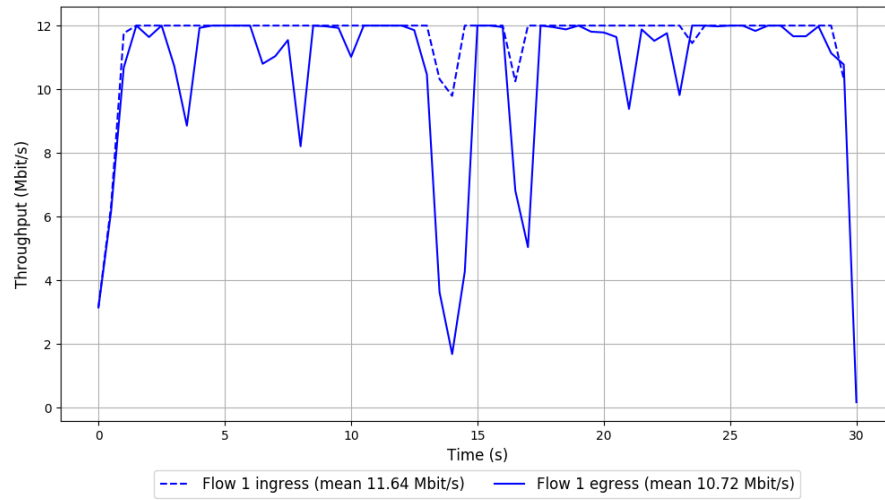


```
Run 10: Statistics of KohoCC

Start at: 2017-08-11 13:57:34
End at: 2017-08-11 13:58:04

# Below is generated by plot.py at 2017-08-11 15:08:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.72 Mbit/s
95th percentile per-packet one-way delay: 50.682 ms
Loss rate: 7.95%
-- Flow 1:
Average throughput: 10.72 Mbit/s
95th percentile per-packet one-way delay: 50.682 ms
Loss rate: 7.95%
```

Run 10: Report of KohoCC — Data Link

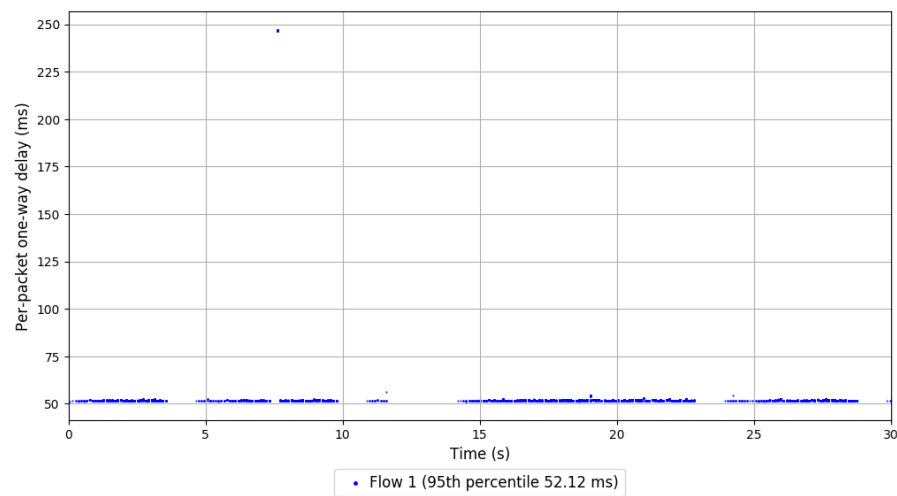
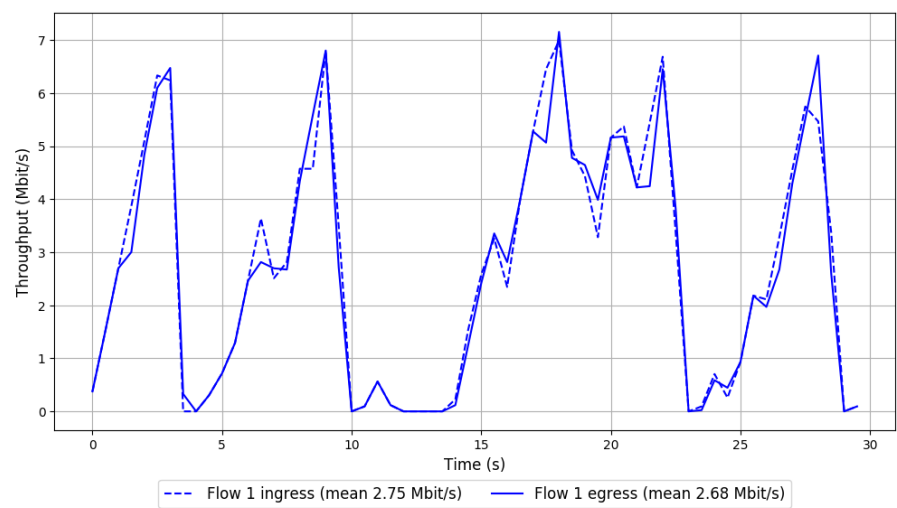


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-11 12:28:17
End at: 2017-08-11 12:28:47

# Below is generated by plot.py at 2017-08-11 15:08:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.68 Mbit/s
95th percentile per-packet one-way delay: 52.120 ms
Loss rate: 2.41%
-- Flow 1:
Average throughput: 2.68 Mbit/s
95th percentile per-packet one-way delay: 52.120 ms
Loss rate: 2.41%
```

Run 1: Report of LEDBAT — Data Link

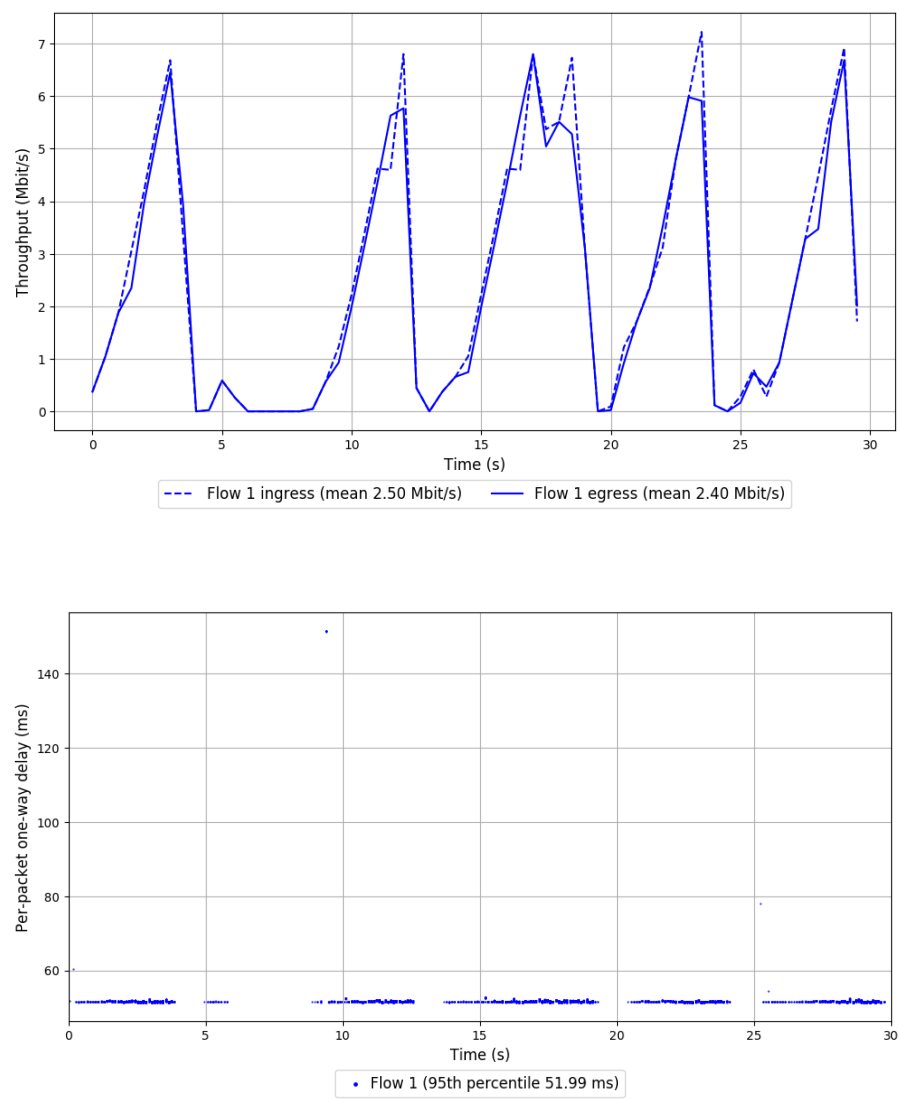


```
Run 2: Statistics of LEDBAT

Start at: 2017-08-11 12:38:14
End at: 2017-08-11 12:38:44

# Below is generated by plot.py at 2017-08-11 15:08:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 51.986 ms
Loss rate: 4.14%
-- Flow 1:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 51.986 ms
Loss rate: 4.14%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-11 12:48:41

End at: 2017-08-11 12:49:11

Below is generated by plot.py at 2017-08-11 15:08:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.77 Mbit/s

95th percentile per-packet one-way delay: 50.578 ms

Loss rate: 1.09%

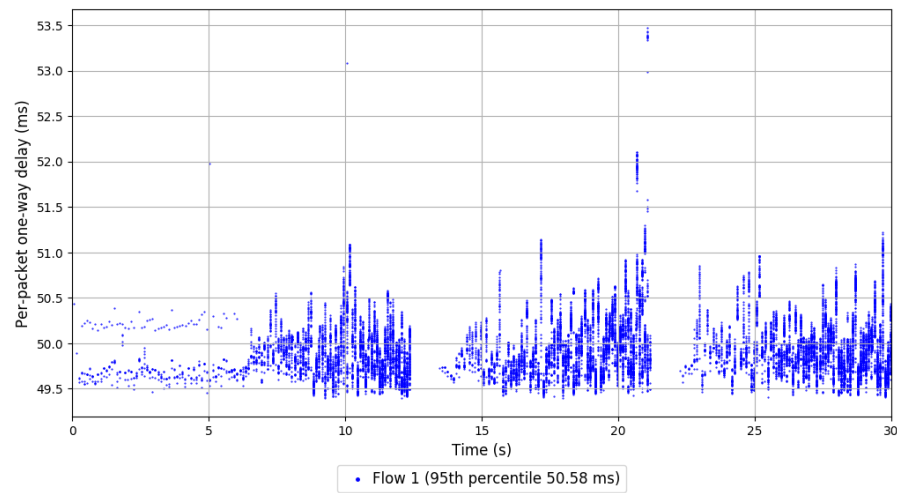
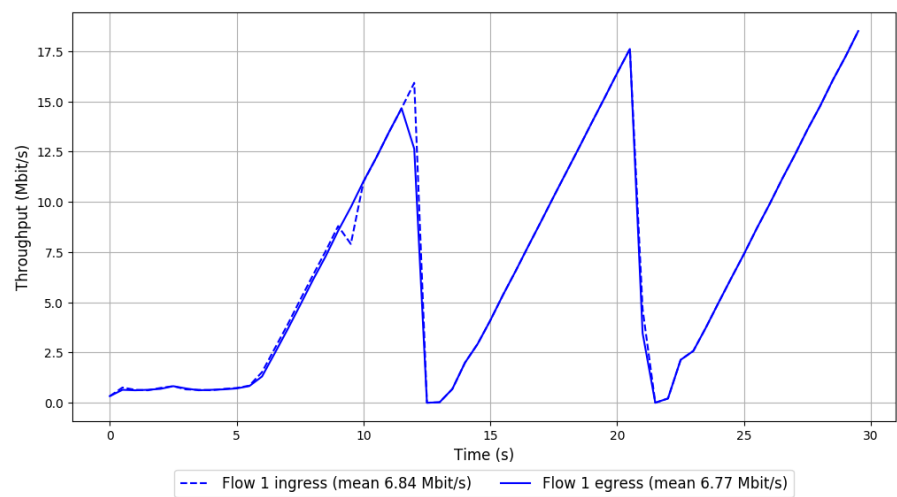
-- Flow 1:

Average throughput: 6.77 Mbit/s

95th percentile per-packet one-way delay: 50.578 ms

Loss rate: 1.09%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-11 12:58:26

End at: 2017-08-11 12:58:56

Below is generated by plot.py at 2017-08-11 15:08:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.56 Mbit/s

95th percentile per-packet one-way delay: 53.349 ms

Loss rate: 0.41%

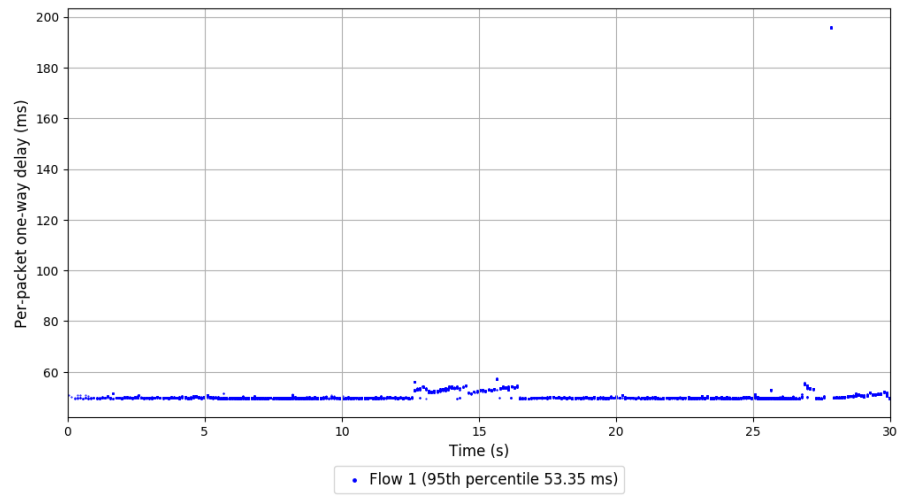
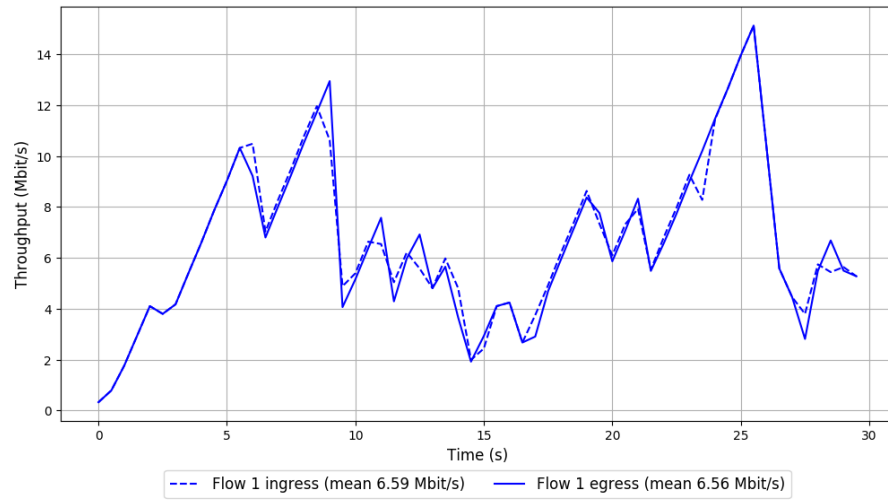
-- Flow 1:

Average throughput: 6.56 Mbit/s

95th percentile per-packet one-way delay: 53.349 ms

Loss rate: 0.41%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-08-11 13:08:53

End at: 2017-08-11 13:09:23

Below is generated by plot.py at 2017-08-11 15:08:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 51.266 ms

Loss rate: 1.37%

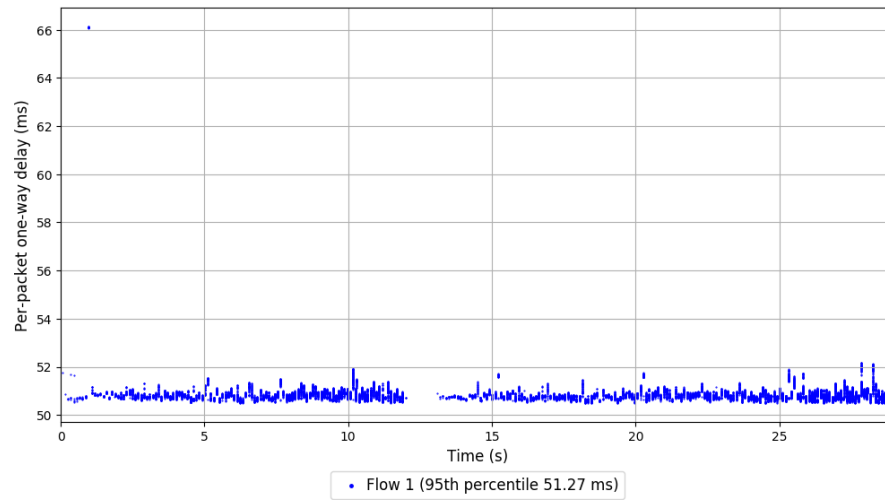
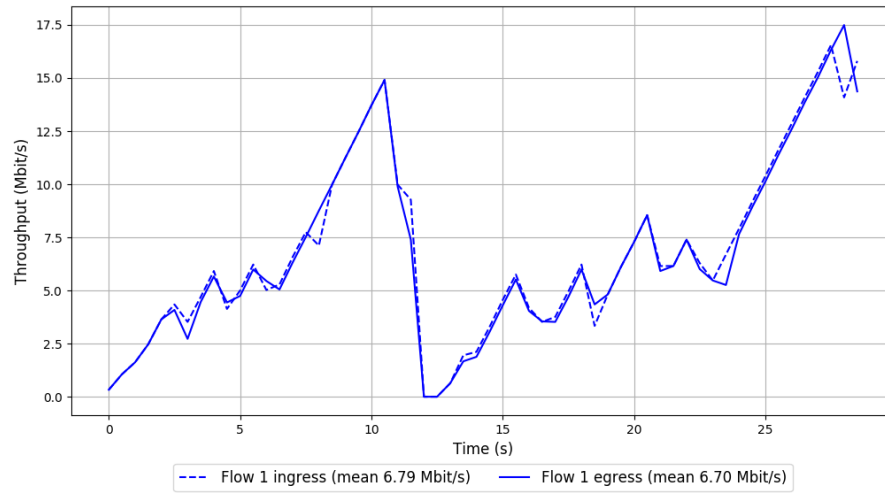
-- Flow 1:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 51.266 ms

Loss rate: 1.37%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-11 13:19:03

End at: 2017-08-11 13:19:33

Below is generated by plot.py at 2017-08-11 15:08:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.01 Mbit/s

95th percentile per-packet one-way delay: 50.479 ms

Loss rate: 1.26%

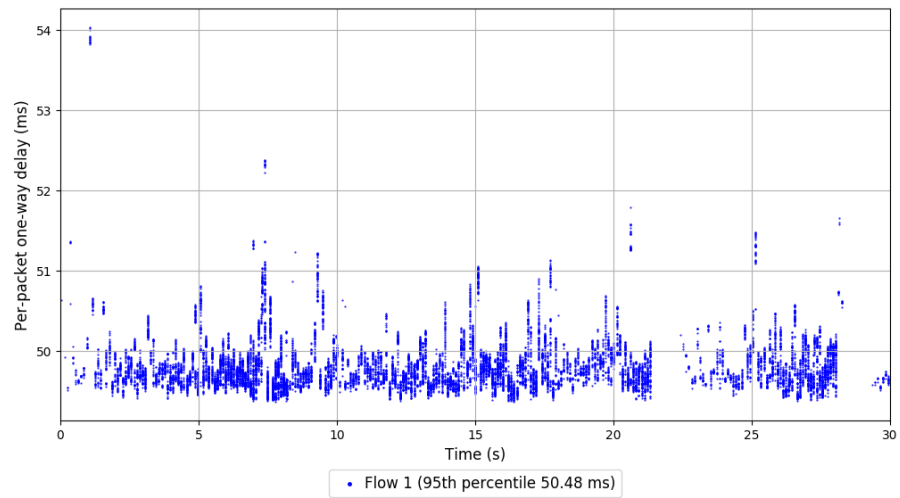
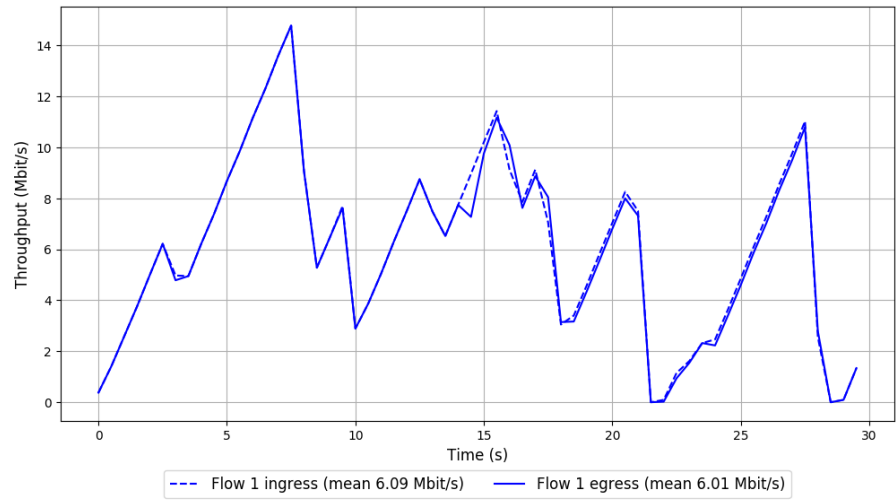
-- Flow 1:

Average throughput: 6.01 Mbit/s

95th percentile per-packet one-way delay: 50.479 ms

Loss rate: 1.26%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-11 13:29:06

End at: 2017-08-11 13:29:36

Below is generated by plot.py at 2017-08-11 15:08:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 51.289 ms

Loss rate: 4.29%

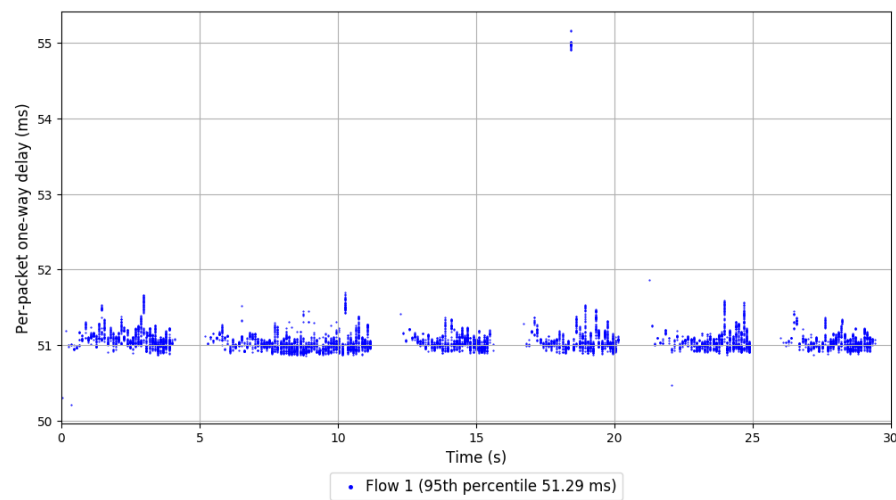
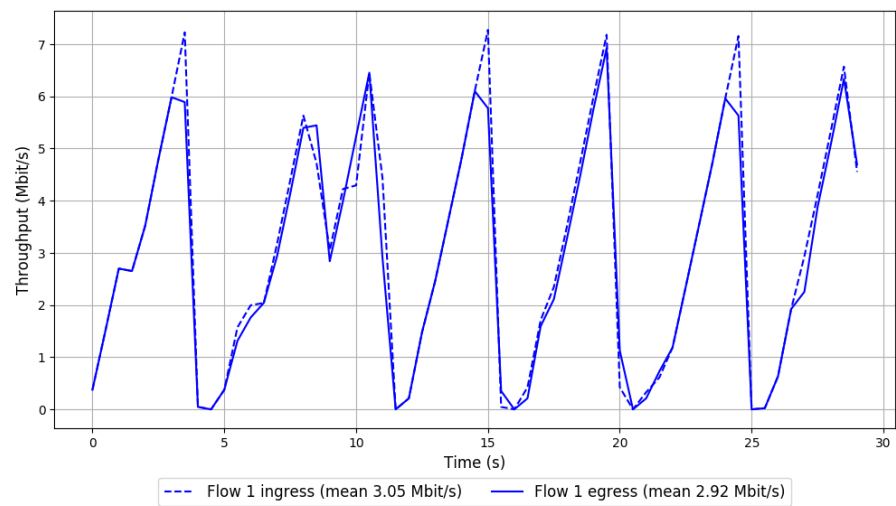
-- Flow 1:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 51.289 ms

Loss rate: 4.29%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-08-11 13:39:20

End at: 2017-08-11 13:39:50

Below is generated by plot.py at 2017-08-11 15:08:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 50.364 ms

Loss rate: 0.36%

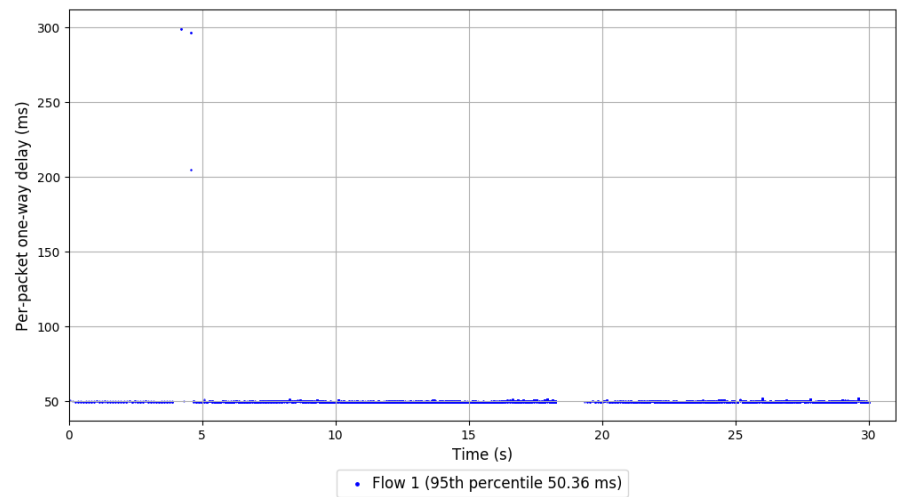
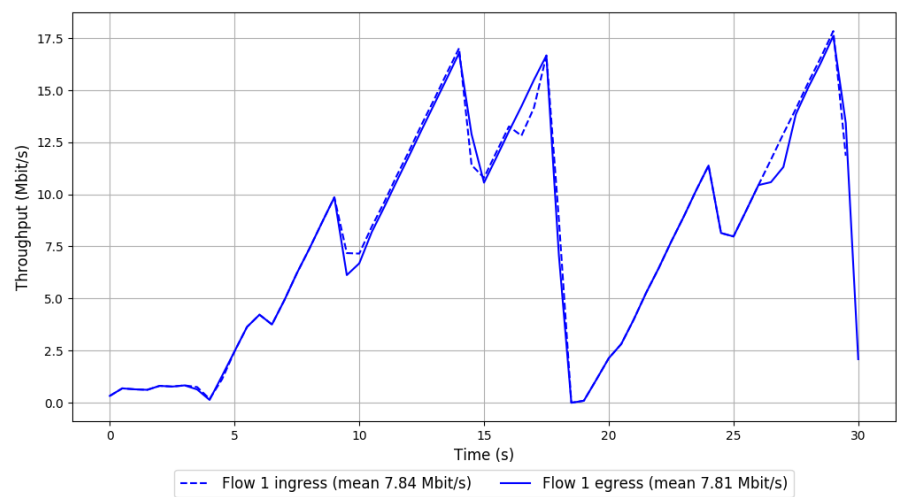
-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 50.364 ms

Loss rate: 0.36%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-11 13:49:24

End at: 2017-08-11 13:49:54

Below is generated by plot.py at 2017-08-11 15:08:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 52.760 ms

Loss rate: 3.17%

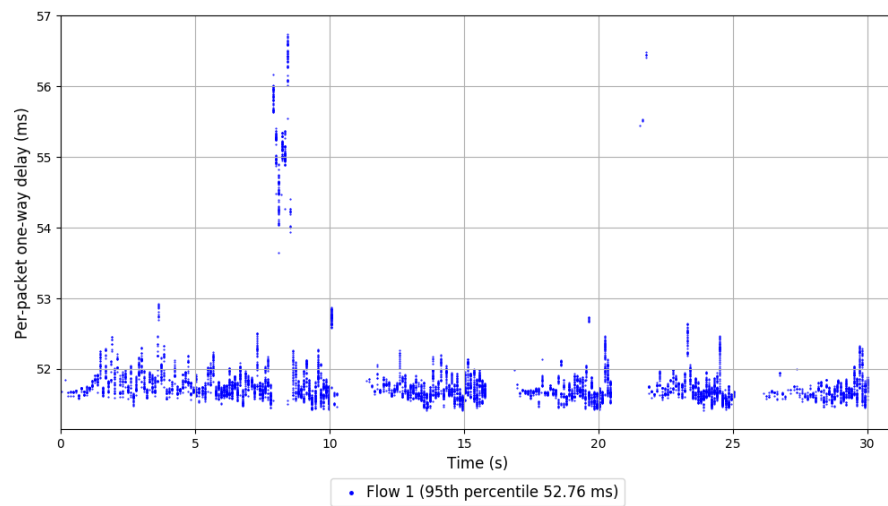
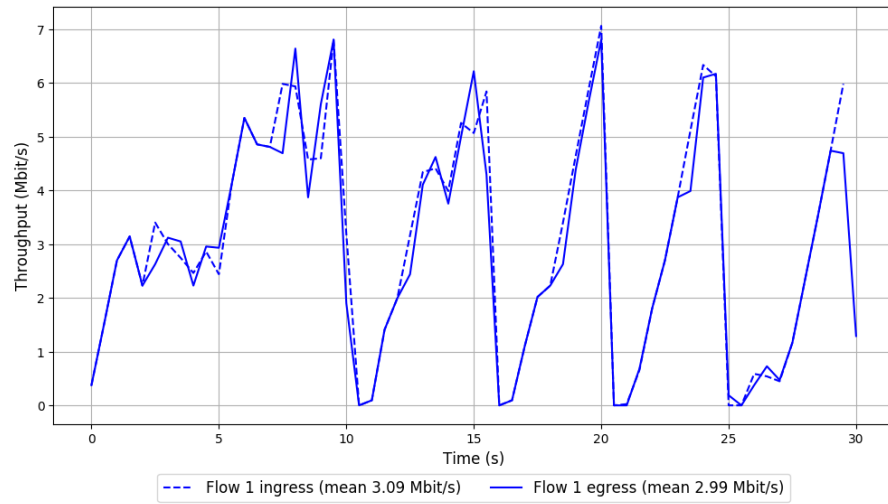
-- Flow 1:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 52.760 ms

Loss rate: 3.17%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-08-11 13:59:34

End at: 2017-08-11 14:00:04

Below is generated by plot.py at 2017-08-11 15:08:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.13 Mbit/s

95th percentile per-packet one-way delay: 50.571 ms

Loss rate: 2.03%

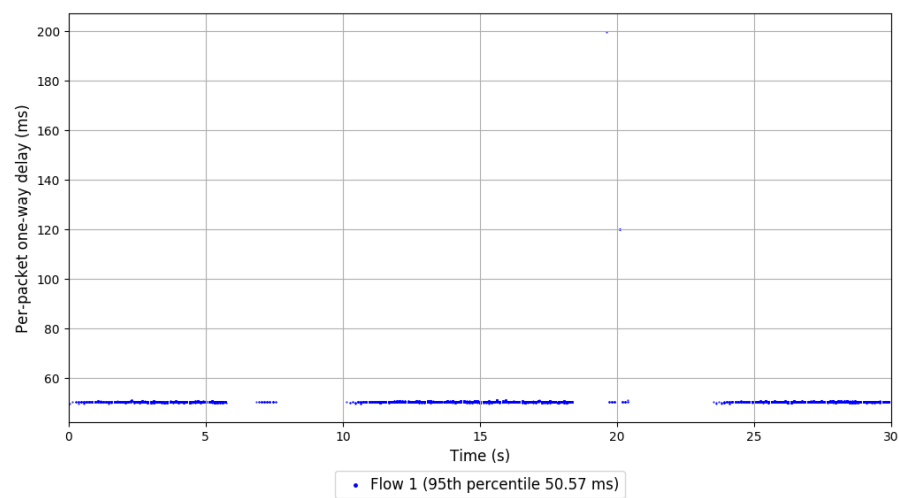
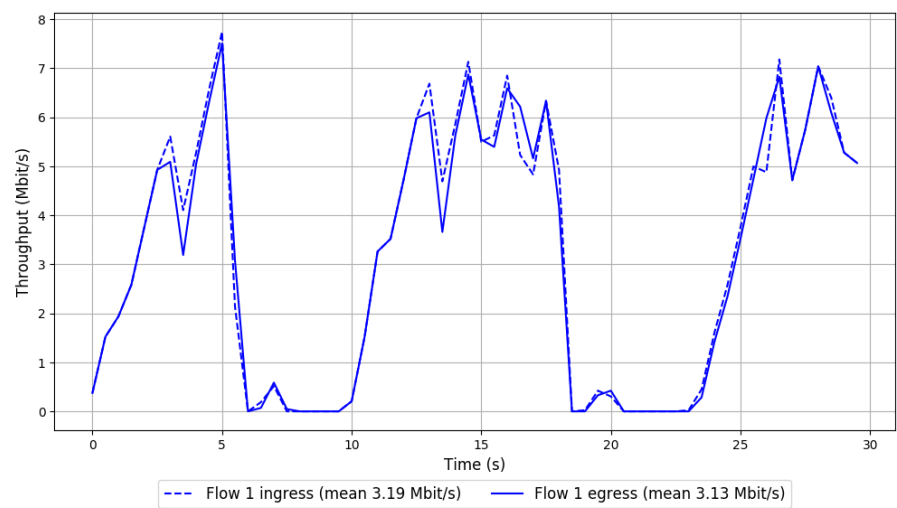
-- Flow 1:

Average throughput: 3.13 Mbit/s

95th percentile per-packet one-way delay: 50.571 ms

Loss rate: 2.03%

Run 10: Report of LEDBAT — Data Link

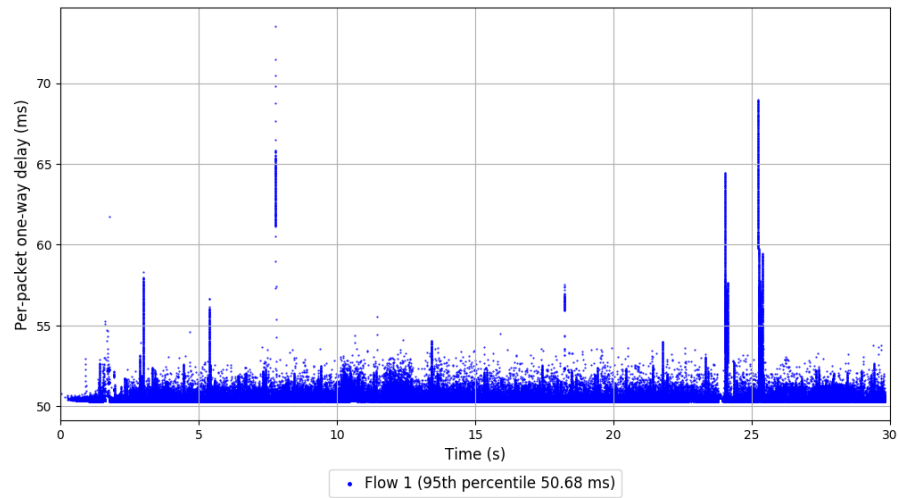
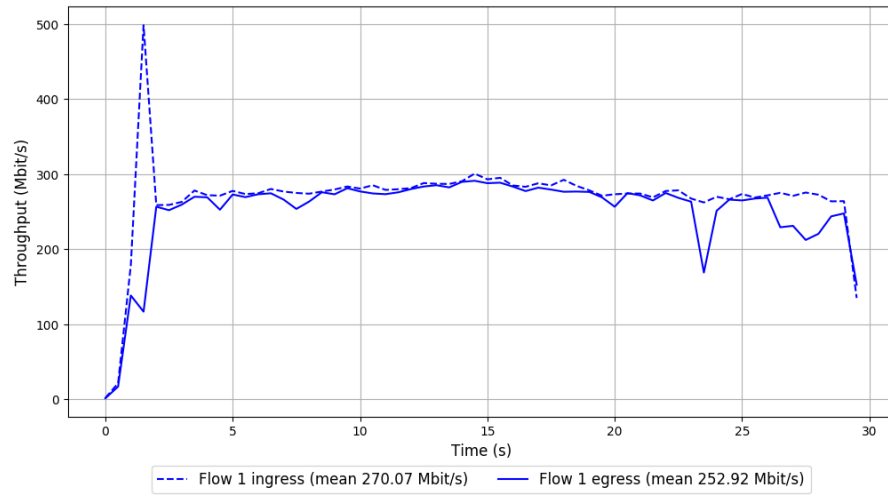


```
Run 1: Statistics of PCC

Start at: 2017-08-11 12:21:00
End at: 2017-08-11 12:21:30

# Below is generated by plot.py at 2017-08-11 15:09:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 252.92 Mbit/s
95th percentile per-packet one-way delay: 50.679 ms
Loss rate: 6.39%
-- Flow 1:
Average throughput: 252.92 Mbit/s
95th percentile per-packet one-way delay: 50.679 ms
Loss rate: 6.39%
```


Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-08-11 12:30:45

End at: 2017-08-11 12:31:15

Below is generated by plot.py at 2017-08-11 15:10:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 484.75 Mbit/s

95th percentile per-packet one-way delay: 136.524 ms

Loss rate: 1.76%

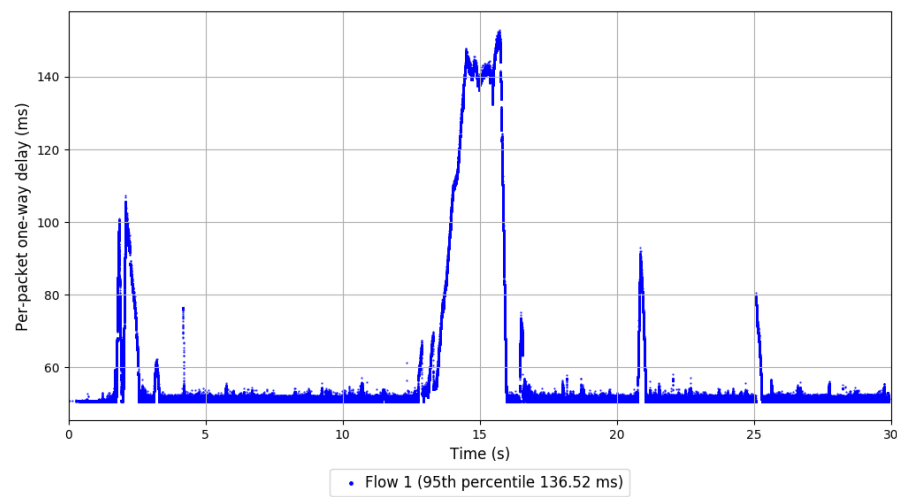
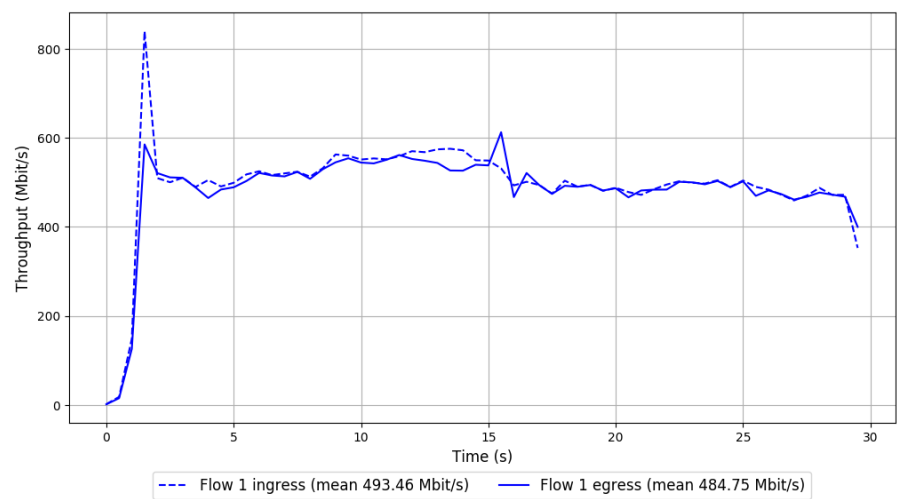
-- Flow 1:

Average throughput: 484.75 Mbit/s

95th percentile per-packet one-way delay: 136.524 ms

Loss rate: 1.76%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-11 12:40:42

End at: 2017-08-11 12:41:13

Below is generated by plot.py at 2017-08-11 15:10:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 247.82 Mbit/s

95th percentile per-packet one-way delay: 51.517 ms

Loss rate: 17.52%

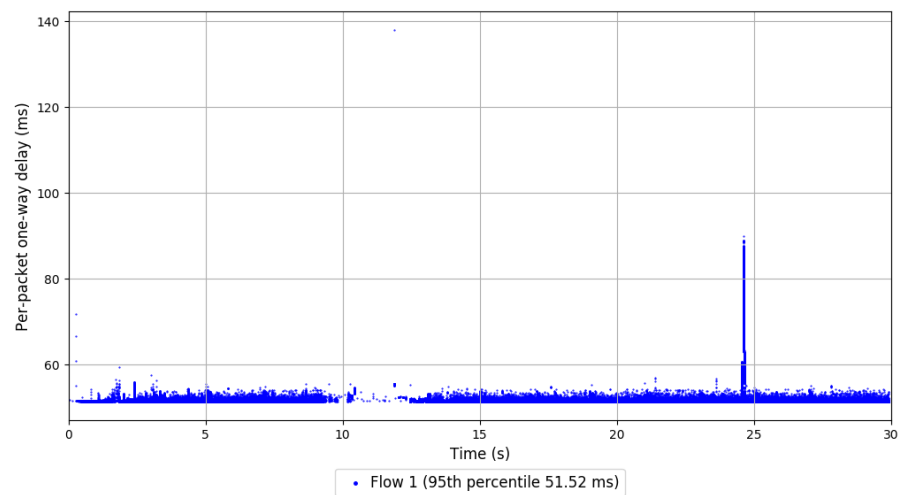
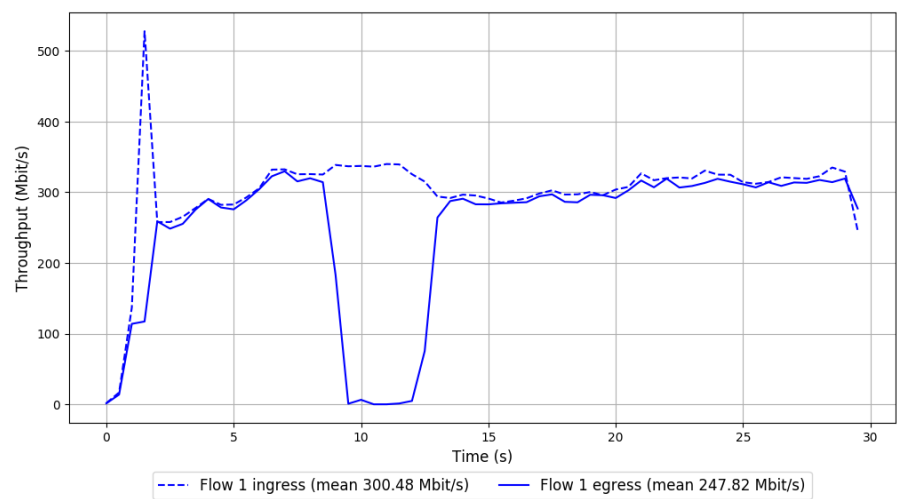
-- Flow 1:

Average throughput: 247.82 Mbit/s

95th percentile per-packet one-way delay: 51.517 ms

Loss rate: 17.52%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-08-11 12:51:10

End at: 2017-08-11 12:51:40

Below is generated by plot.py at 2017-08-11 15:11:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.07 Mbit/s

95th percentile per-packet one-way delay: 50.568 ms

Loss rate: 3.41%

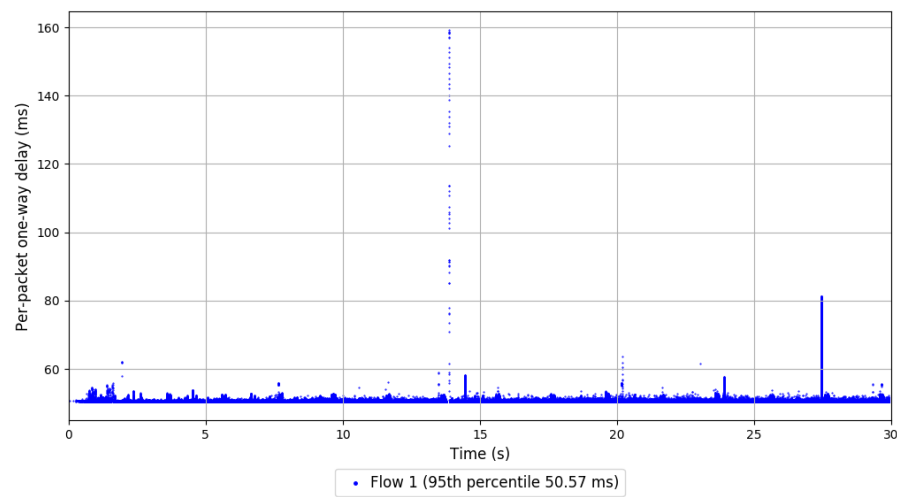
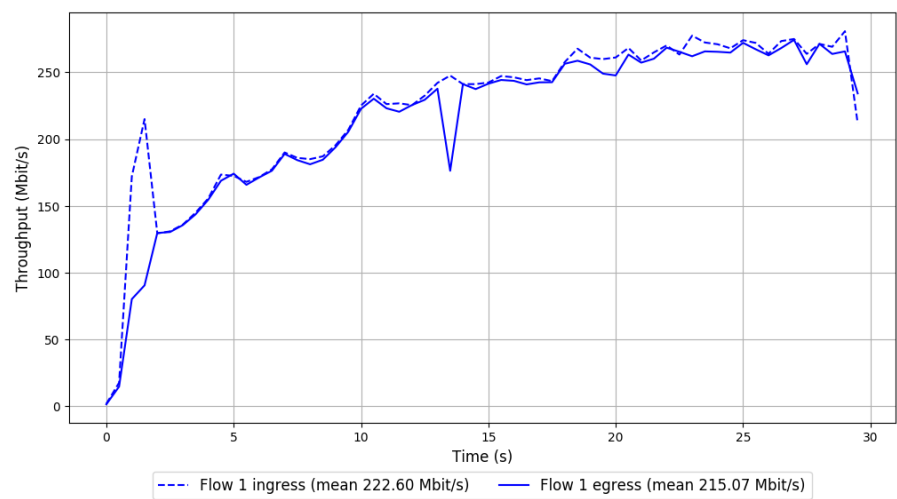
-- Flow 1:

Average throughput: 215.07 Mbit/s

95th percentile per-packet one-way delay: 50.568 ms

Loss rate: 3.41%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-11 13:00:54

End at: 2017-08-11 13:01:24

Below is generated by plot.py at 2017-08-11 15:11:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 410.05 Mbit/s

95th percentile per-packet one-way delay: 143.247 ms

Loss rate: 4.55%

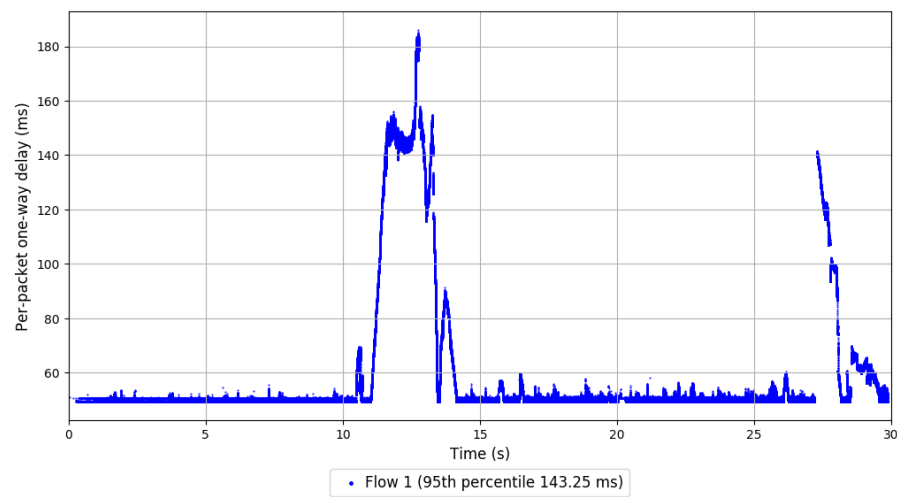
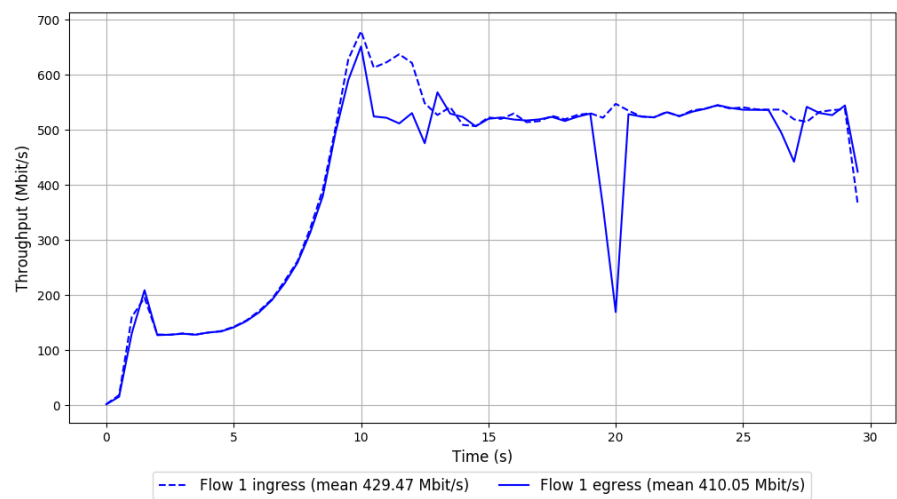
-- Flow 1:

Average throughput: 410.05 Mbit/s

95th percentile per-packet one-way delay: 143.247 ms

Loss rate: 4.55%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-11 13:11:21

End at: 2017-08-11 13:11:52

Below is generated by plot.py at 2017-08-11 15:11:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 282.29 Mbit/s

95th percentile per-packet one-way delay: 51.367 ms

Loss rate: 4.43%

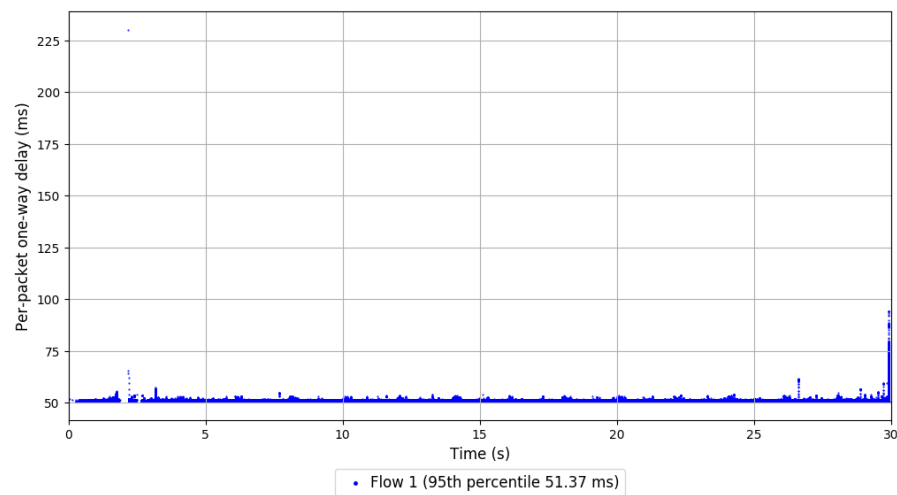
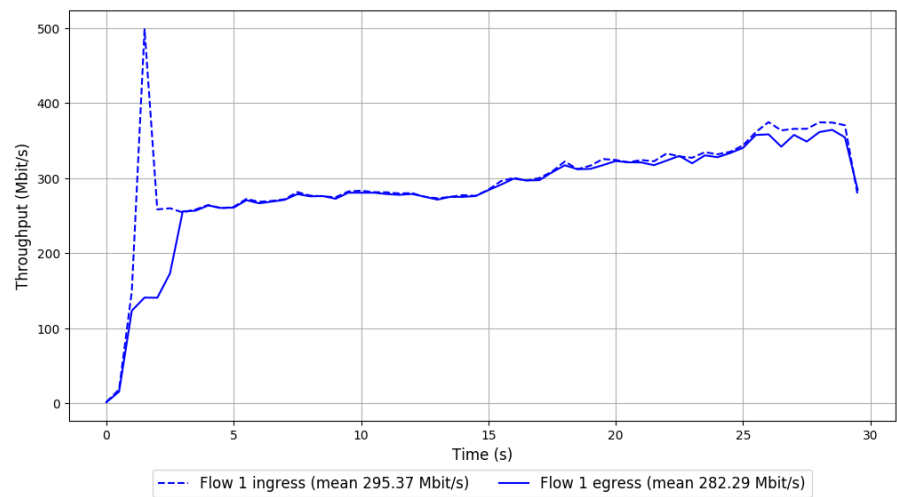
-- Flow 1:

Average throughput: 282.29 Mbit/s

95th percentile per-packet one-way delay: 51.367 ms

Loss rate: 4.43%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-11 13:21:31

End at: 2017-08-11 13:22:01

Below is generated by plot.py at 2017-08-11 15:12:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 148.57 Mbit/s

95th percentile per-packet one-way delay: 51.574 ms

Loss rate: 5.99%

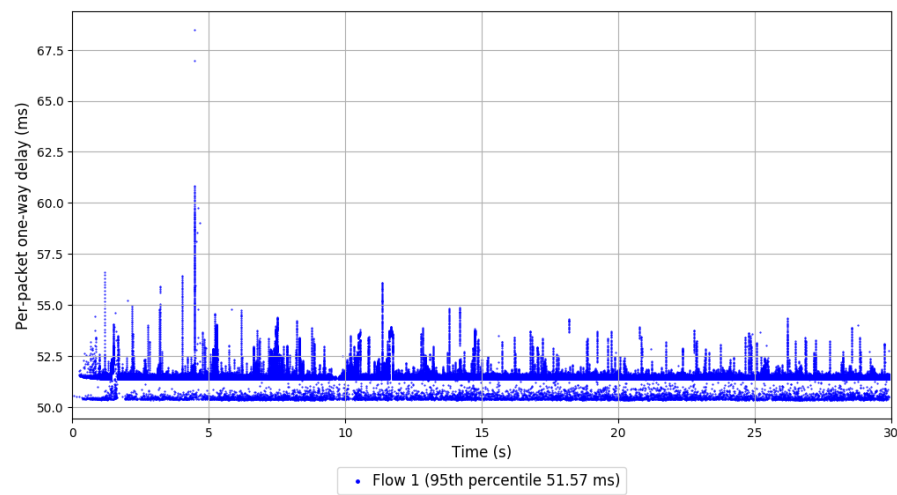
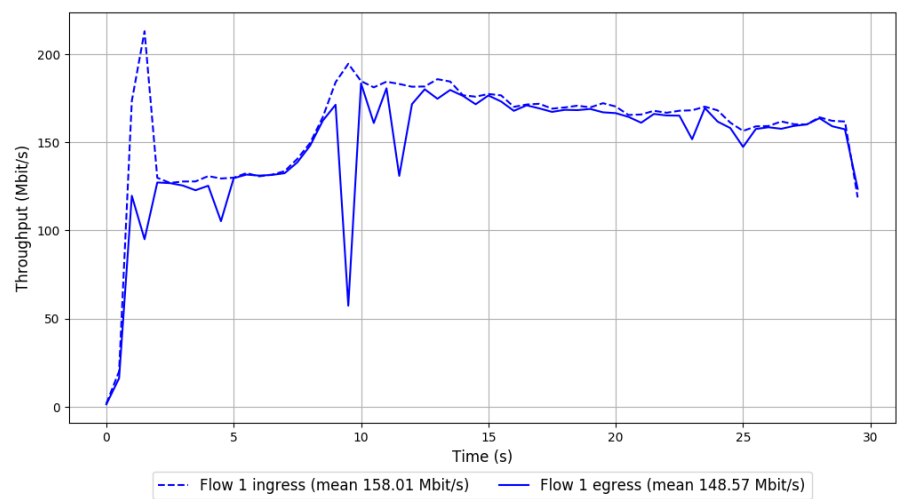
-- Flow 1:

Average throughput: 148.57 Mbit/s

95th percentile per-packet one-way delay: 51.574 ms

Loss rate: 5.99%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-11 13:31:34

End at: 2017-08-11 13:32:04

Below is generated by plot.py at 2017-08-11 15:13:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 435.38 Mbit/s

95th percentile per-packet one-way delay: 56.652 ms

Loss rate: 0.44%

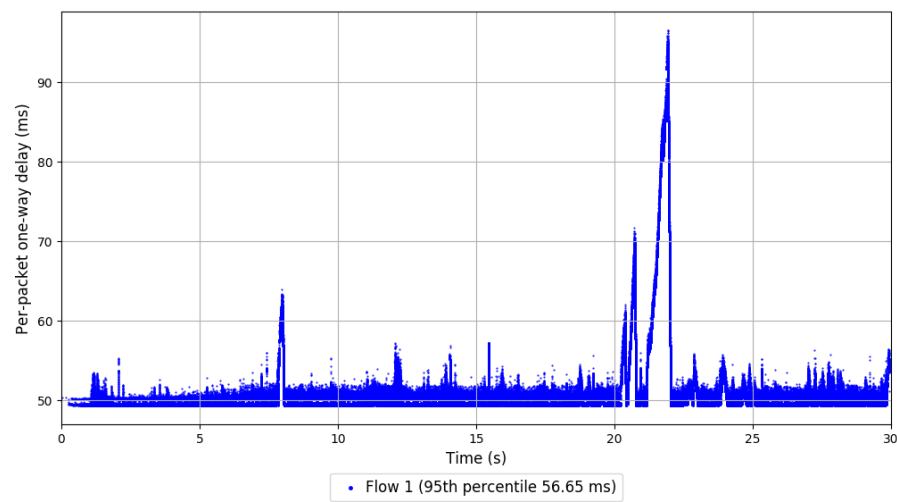
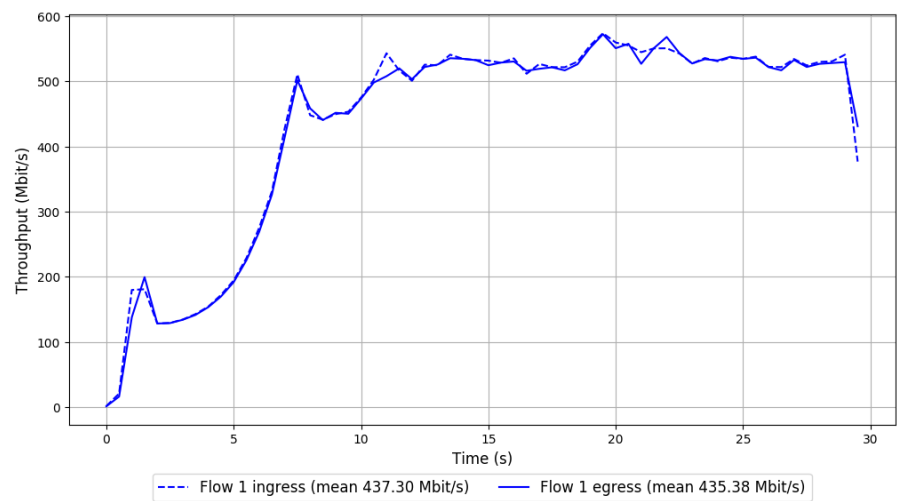
-- Flow 1:

Average throughput: 435.38 Mbit/s

95th percentile per-packet one-way delay: 56.652 ms

Loss rate: 0.44%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-11 13:41:48

End at: 2017-08-11 13:42:18

Below is generated by plot.py at 2017-08-11 15:13:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 255.87 Mbit/s

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

Loss rate: 7.97%

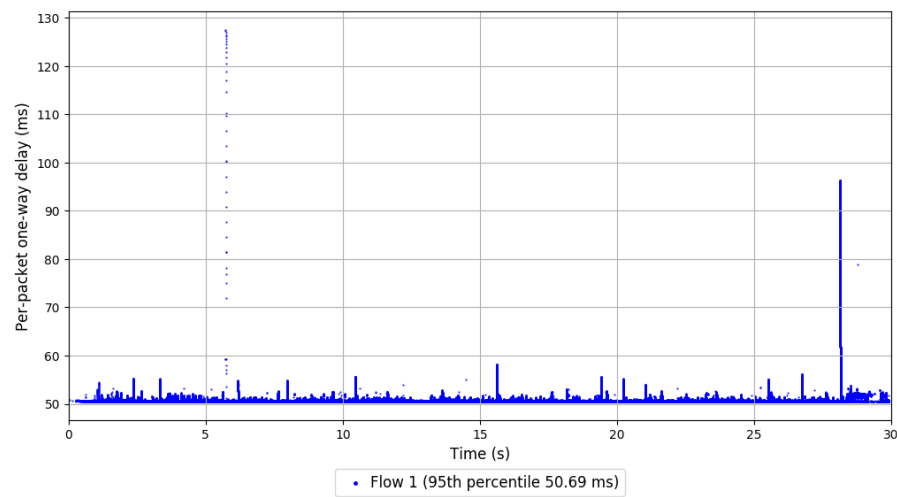
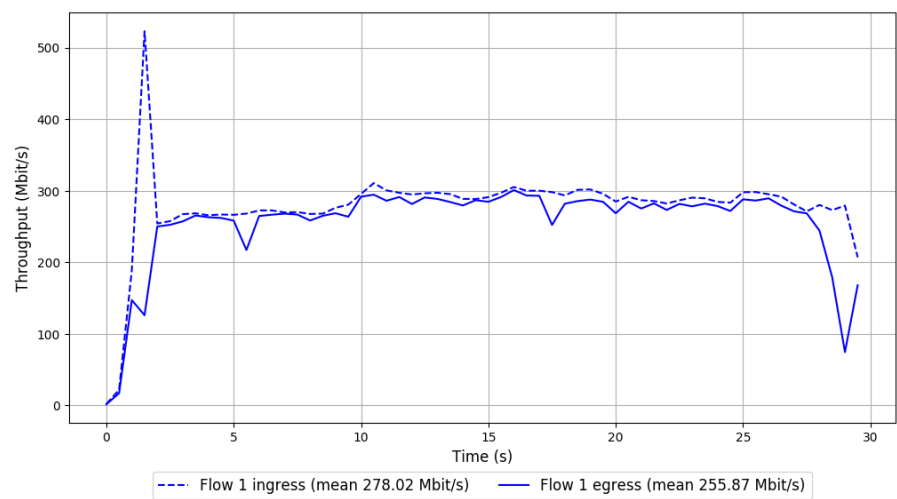
-- Flow 1:

Average throughput: 255.87 Mbit/s

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

Loss rate: 7.97%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-11 13:51:52

End at: 2017-08-11 13:52:22

Below is generated by plot.py at 2017-08-11 15:14:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 447.71 Mbit/s

95th percentile per-packet one-way delay: 51.662 ms

Loss rate: 4.62%

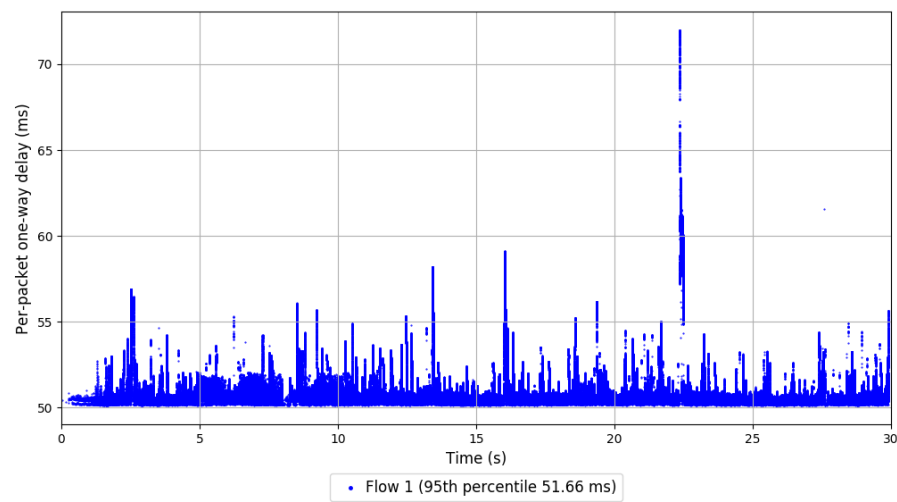
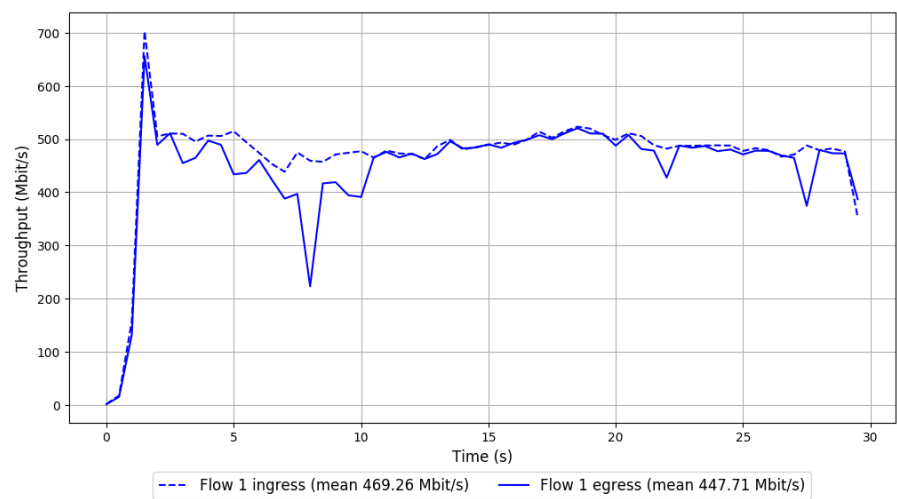
-- Flow 1:

Average throughput: 447.71 Mbit/s

95th percentile per-packet one-way delay: 51.662 ms

Loss rate: 4.62%

Run 10: Report of PCC — Data Link

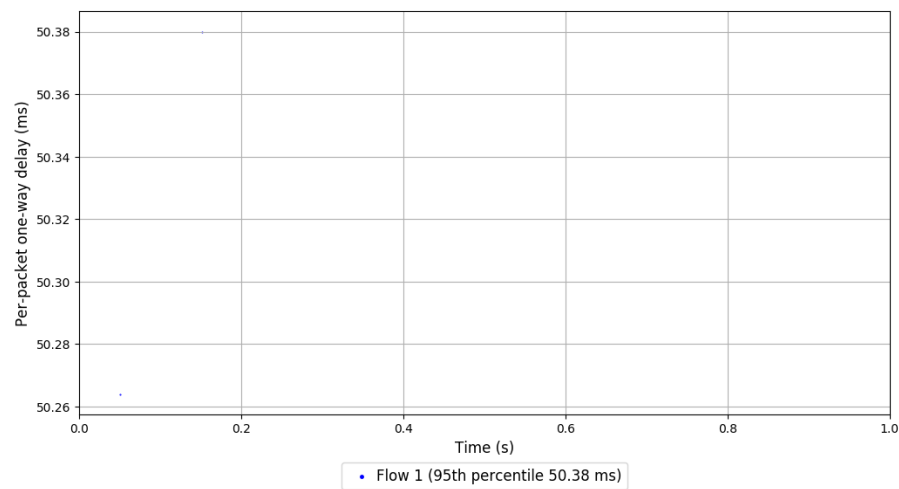
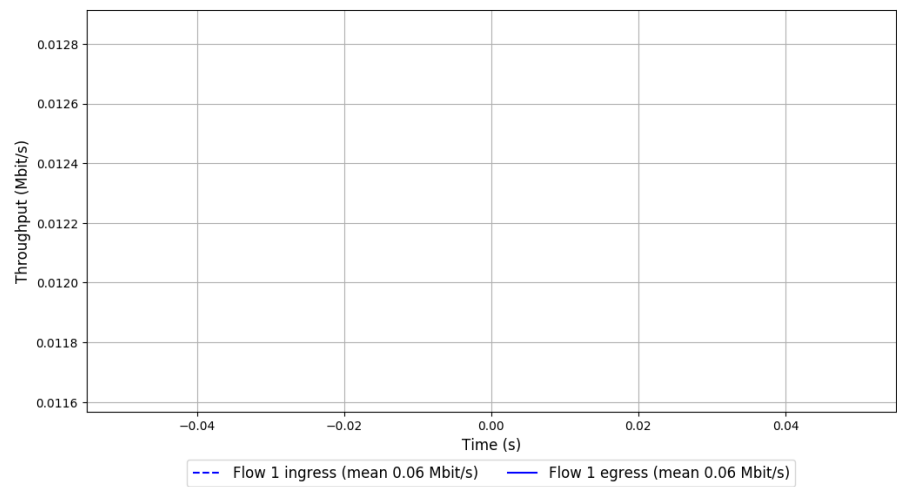


Run 1: Statistics of QUIC Cubic

Start at: 2017-08-11 12:21:47

End at: 2017-08-11 12:22:17

Run 1: Report of QUIC Cubic — Data Link

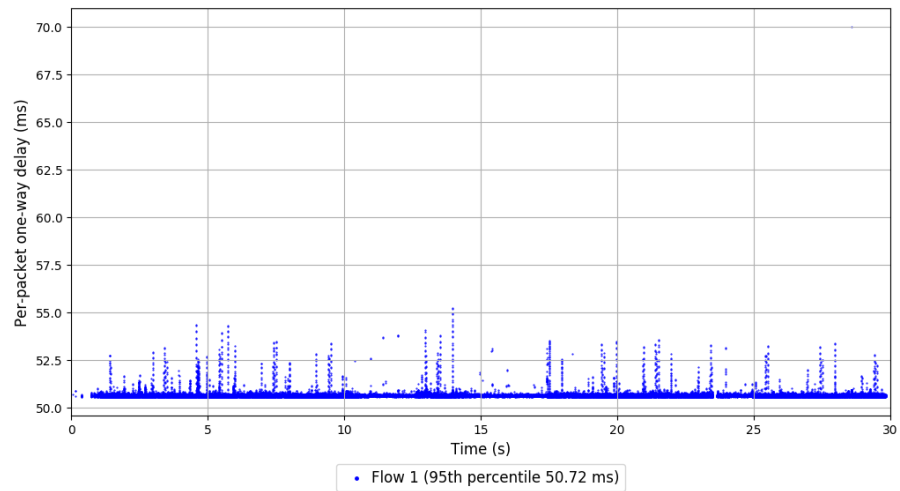
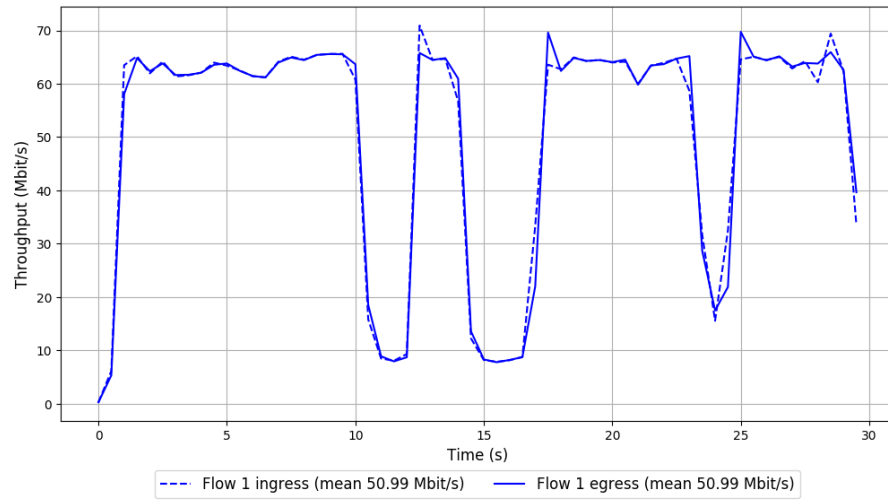


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-08-11 12:31:40
End at: 2017-08-11 12:32:10

# Below is generated by plot.py at 2017-08-11 15:14:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.99 Mbit/s
95th percentile per-packet one-way delay: 50.715 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.99 Mbit/s
95th percentile per-packet one-way delay: 50.715 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-11 12:41:30

End at: 2017-08-11 12:42:00

Below is generated by plot.py at 2017-08-11 15:14:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.23 Mbit/s

95th percentile per-packet one-way delay: 51.496 ms

Loss rate: 0.00%

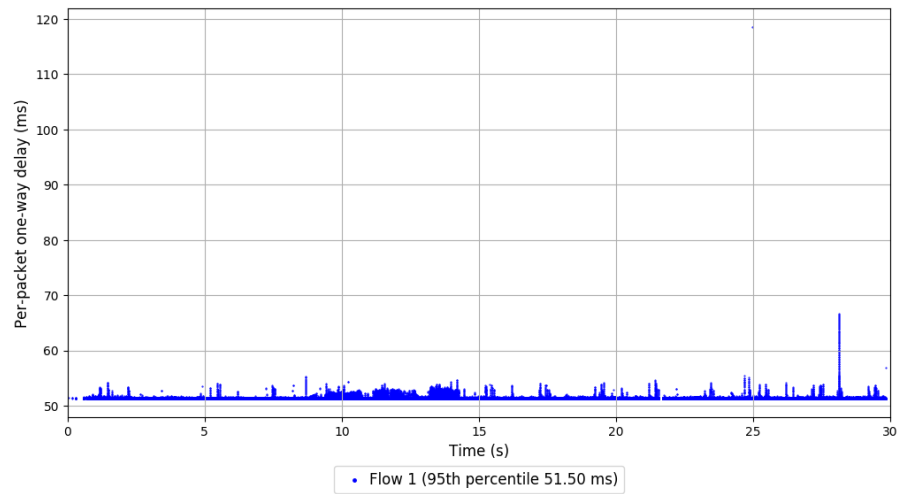
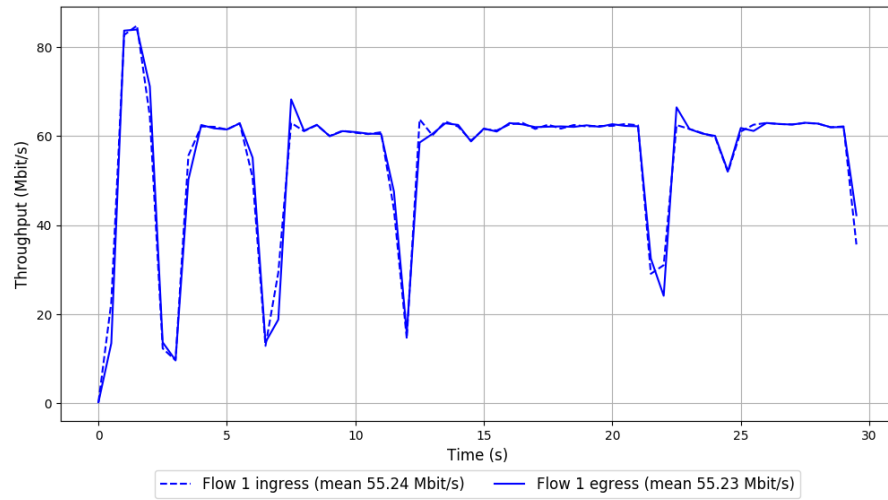
-- Flow 1:

Average throughput: 55.23 Mbit/s

95th percentile per-packet one-way delay: 51.496 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-11 12:51:55

End at: 2017-08-11 12:52:25

Below is generated by plot.py at 2017-08-11 15:14:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.58 Mbit/s

95th percentile per-packet one-way delay: 51.651 ms

Loss rate: 0.00%

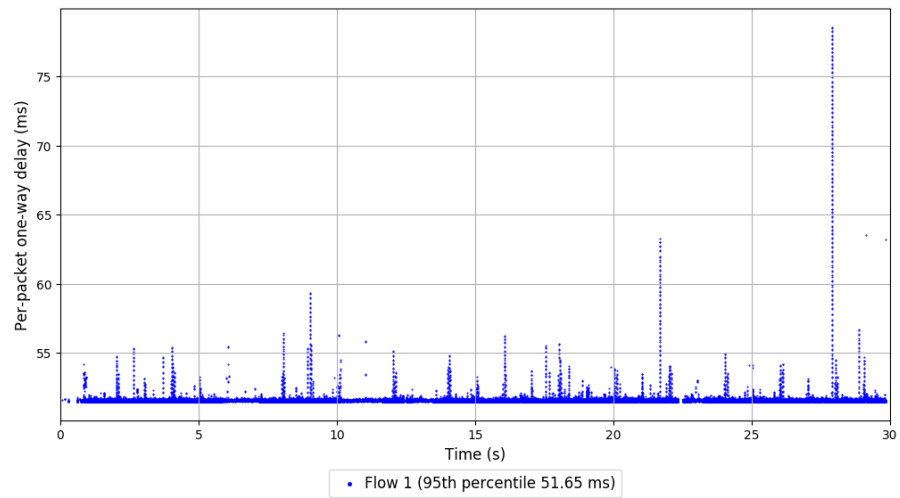
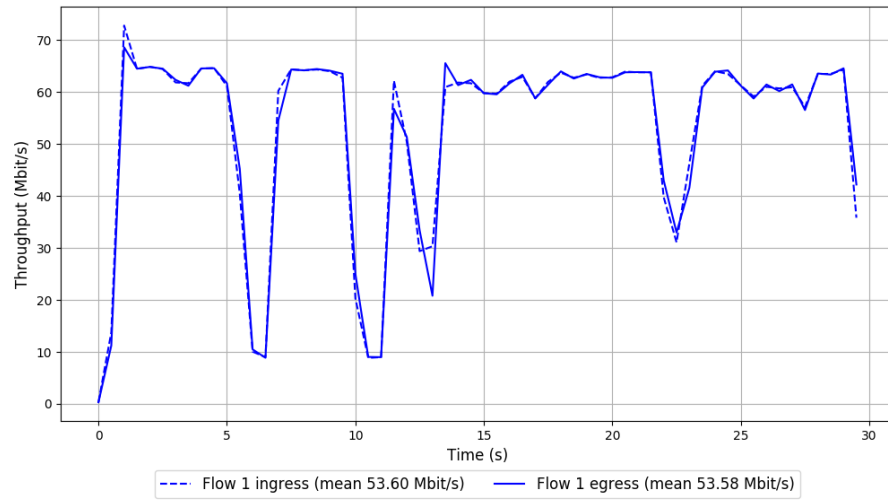
-- Flow 1:

Average throughput: 53.58 Mbit/s

95th percentile per-packet one-way delay: 51.651 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-08-11 13:01:47

End at: 2017-08-11 13:02:17

Below is generated by plot.py at 2017-08-11 15:14:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.70 Mbit/s

95th percentile per-packet one-way delay: 50.830 ms

Loss rate: 0.00%

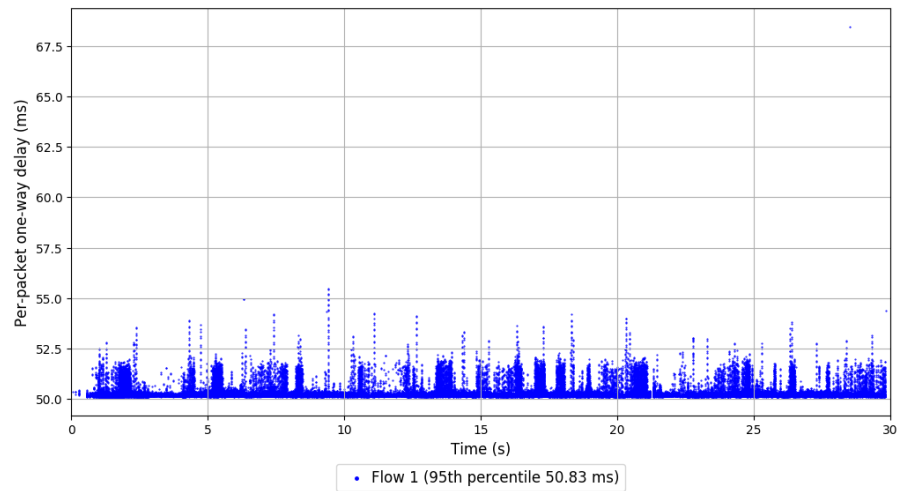
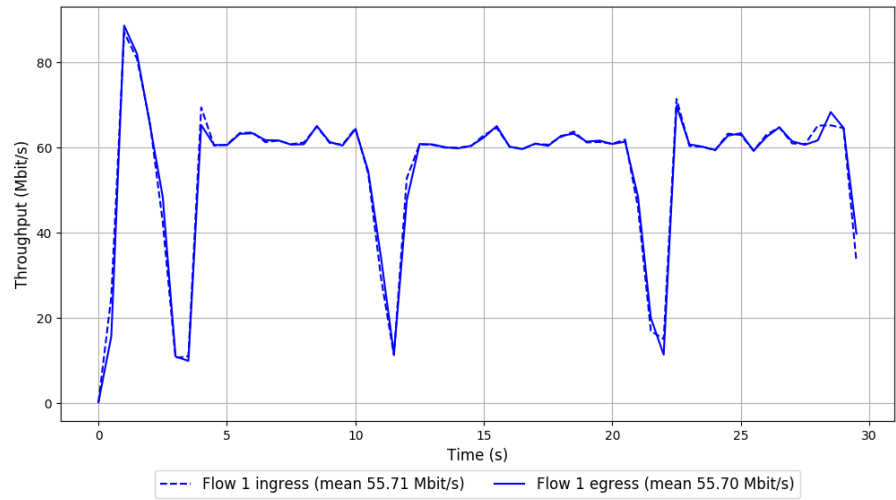
-- Flow 1:

Average throughput: 55.70 Mbit/s

95th percentile per-packet one-way delay: 50.830 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-11 13:12:09

End at: 2017-08-11 13:12:39

Below is generated by plot.py at 2017-08-11 15:14:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.58 Mbit/s

95th percentile per-packet one-way delay: 51.547 ms

Loss rate: 0.00%

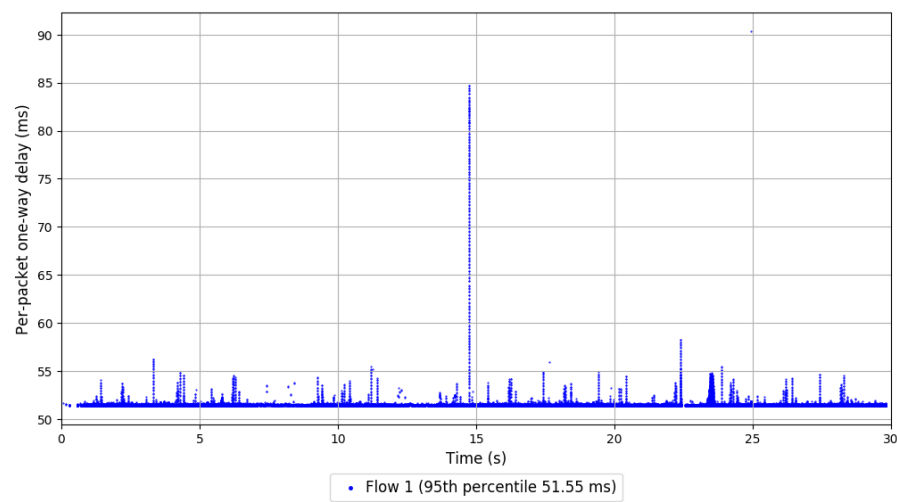
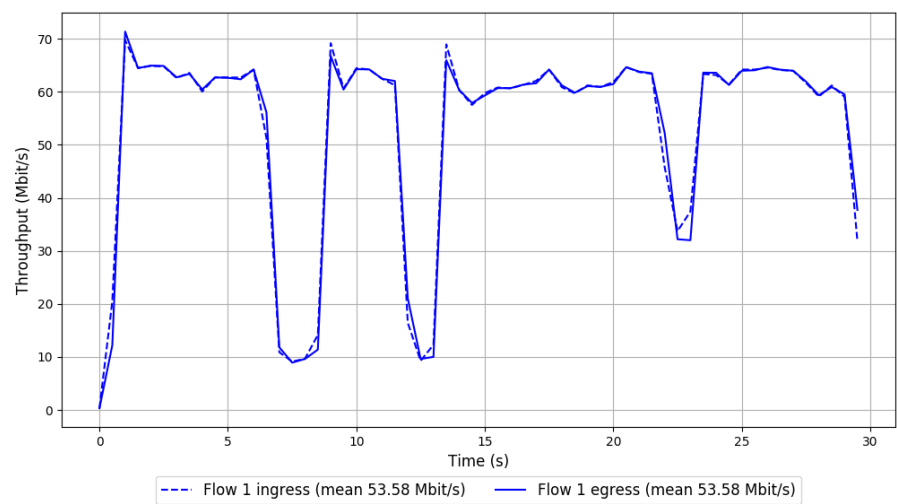
-- Flow 1:

Average throughput: 53.58 Mbit/s

95th percentile per-packet one-way delay: 51.547 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-11 13:22:14

End at: 2017-08-11 13:22:44

Below is generated by plot.py at 2017-08-11 15:14:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.82 Mbit/s

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

Loss rate: 0.00%

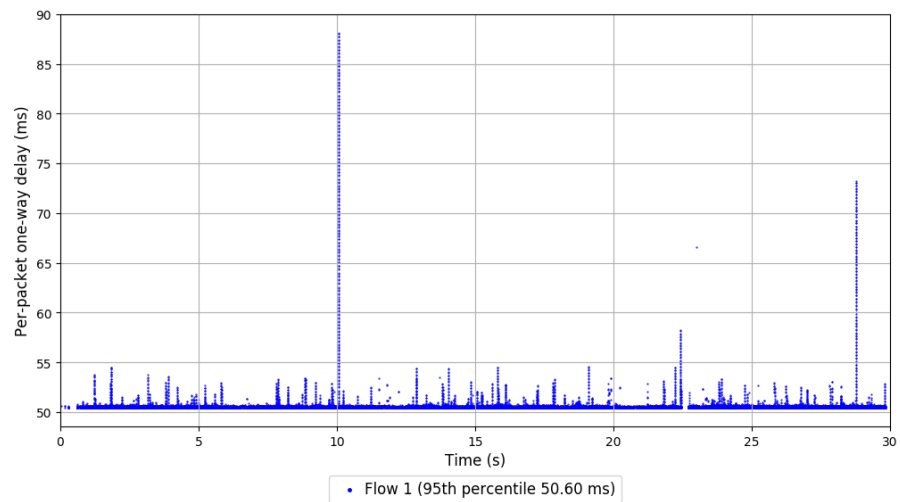
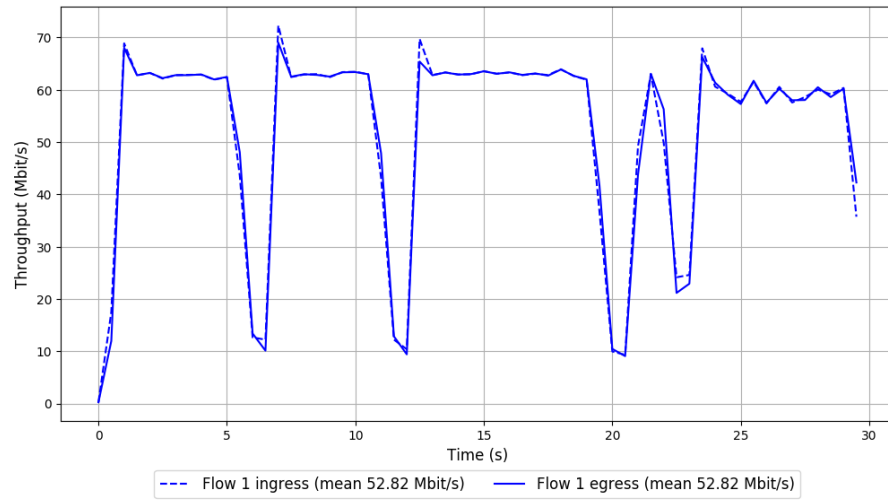
-- Flow 1:

Average throughput: 52.82 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-08-11 13:32:28

End at: 2017-08-11 13:32:58

Below is generated by plot.py at 2017-08-11 15:14:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.46 Mbit/s

95th percentile per-packet one-way delay: 50.331 ms

Loss rate: 0.00%

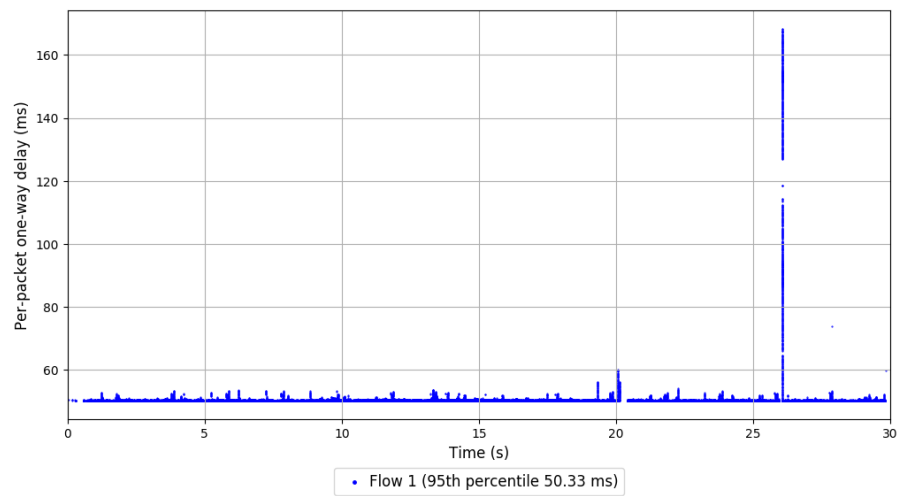
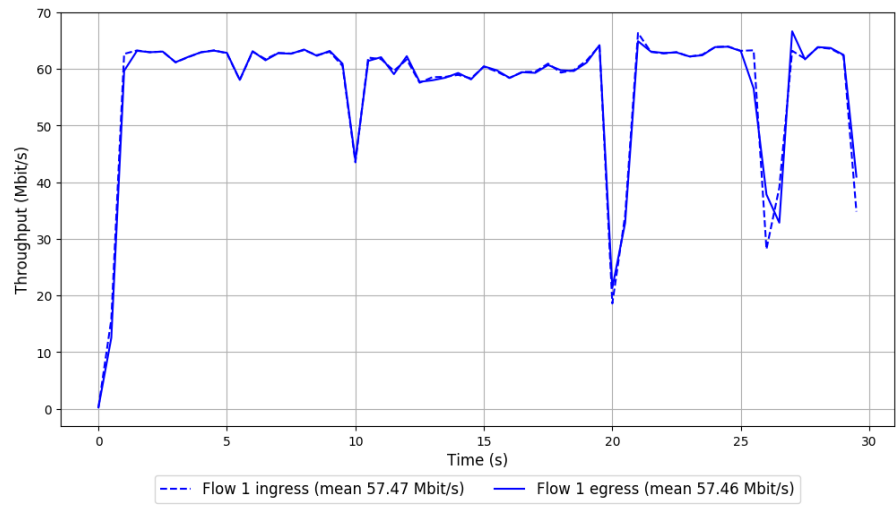
-- Flow 1:

Average throughput: 57.46 Mbit/s

95th percentile per-packet one-way delay: 50.331 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-11 13:42:35

End at: 2017-08-11 13:43:05

Below is generated by plot.py at 2017-08-11 15:14:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.16 Mbit/s

95th percentile per-packet one-way delay: 51.512 ms

Loss rate: 0.00%

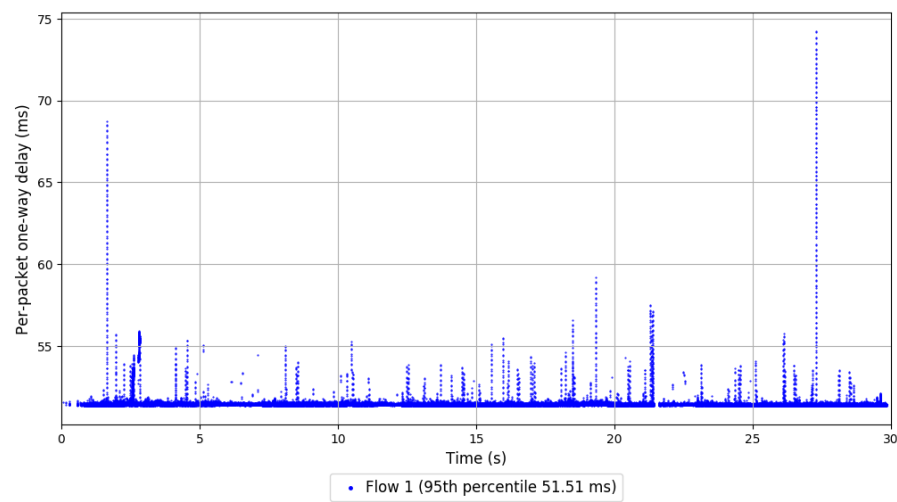
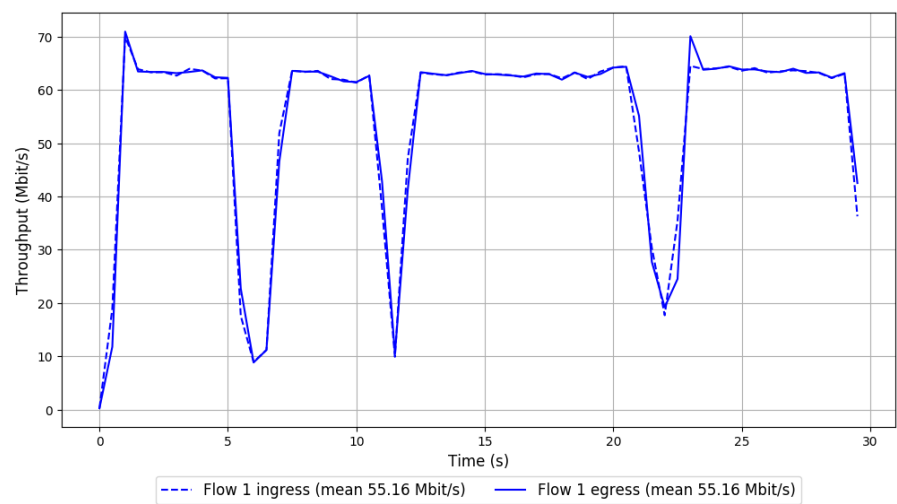
-- Flow 1:

Average throughput: 55.16 Mbit/s

95th percentile per-packet one-way delay: 51.512 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

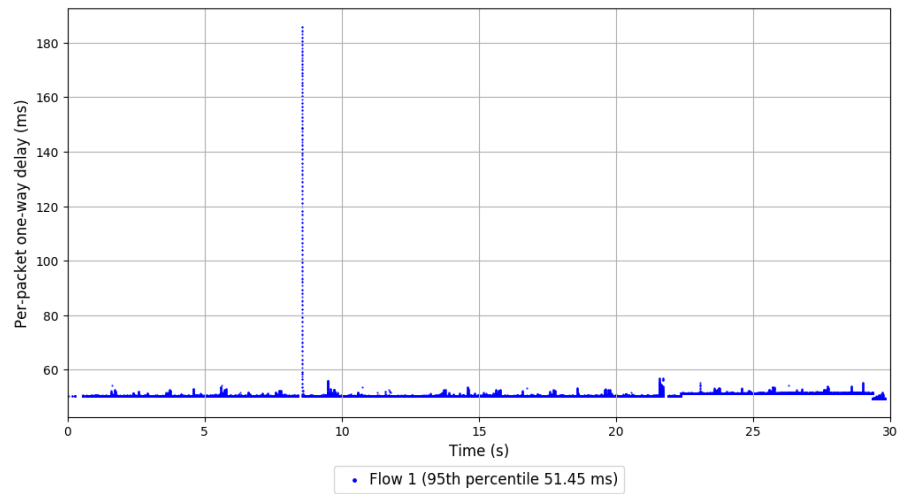
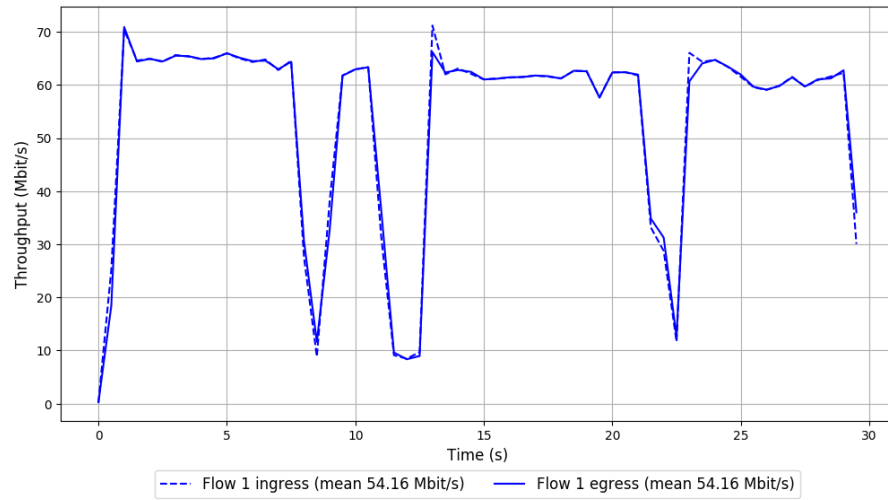


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-11 13:52:46
End at: 2017-08-11 13:53:16

# Below is generated by plot.py at 2017-08-11 15:15:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.16 Mbit/s
95th percentile per-packet one-way delay: 51.451 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.16 Mbit/s
95th percentile per-packet one-way delay: 51.451 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

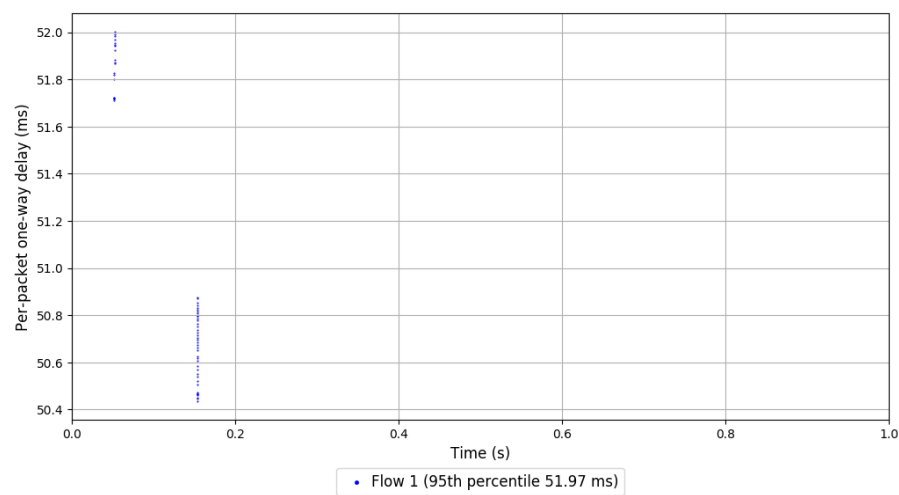
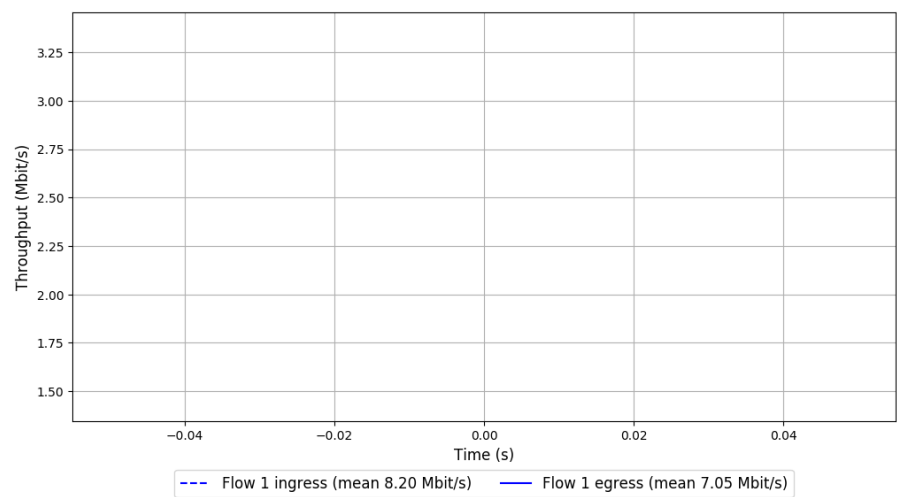


Run 1: Statistics of Saturator

Start at: 2017-08-11 12:24:28

End at: 2017-08-11 12:24:58

Run 1: Report of Saturator — Data Link

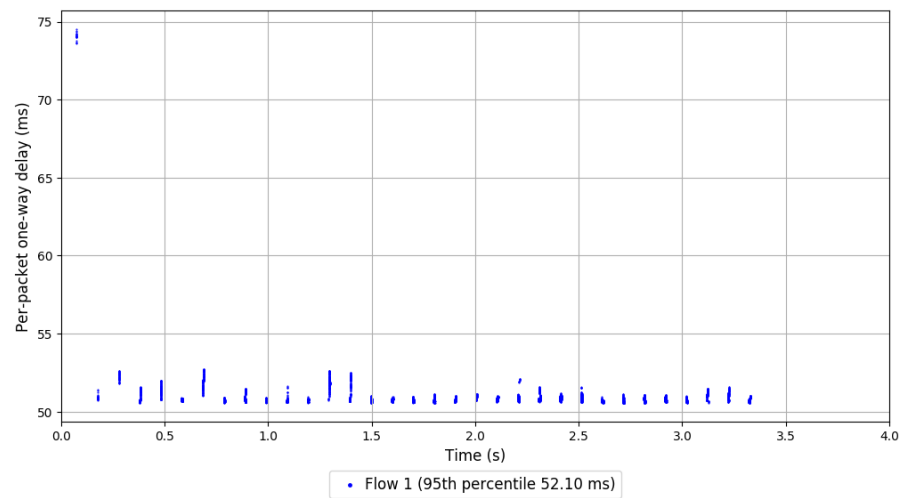
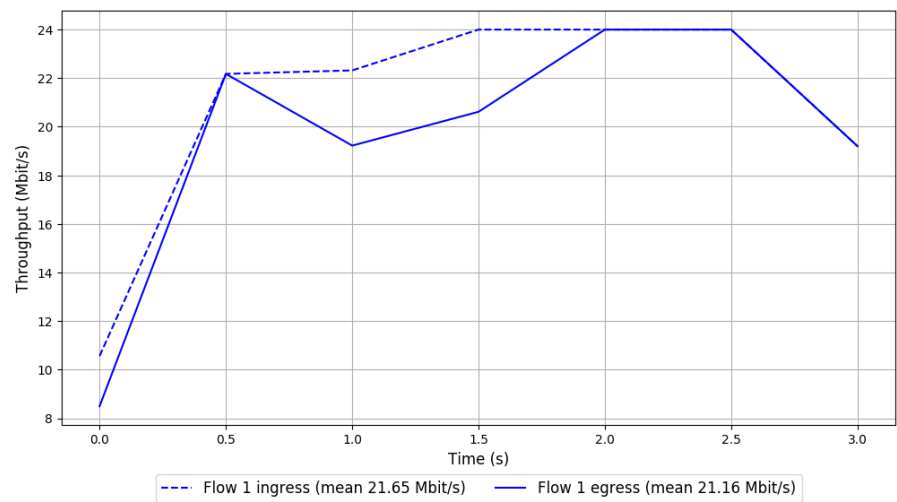


Run 2: Statistics of Saturator

Start at: 2017-08-11 12:34:19

End at: 2017-08-11 12:34:49

Run 2: Report of Saturator — Data Link

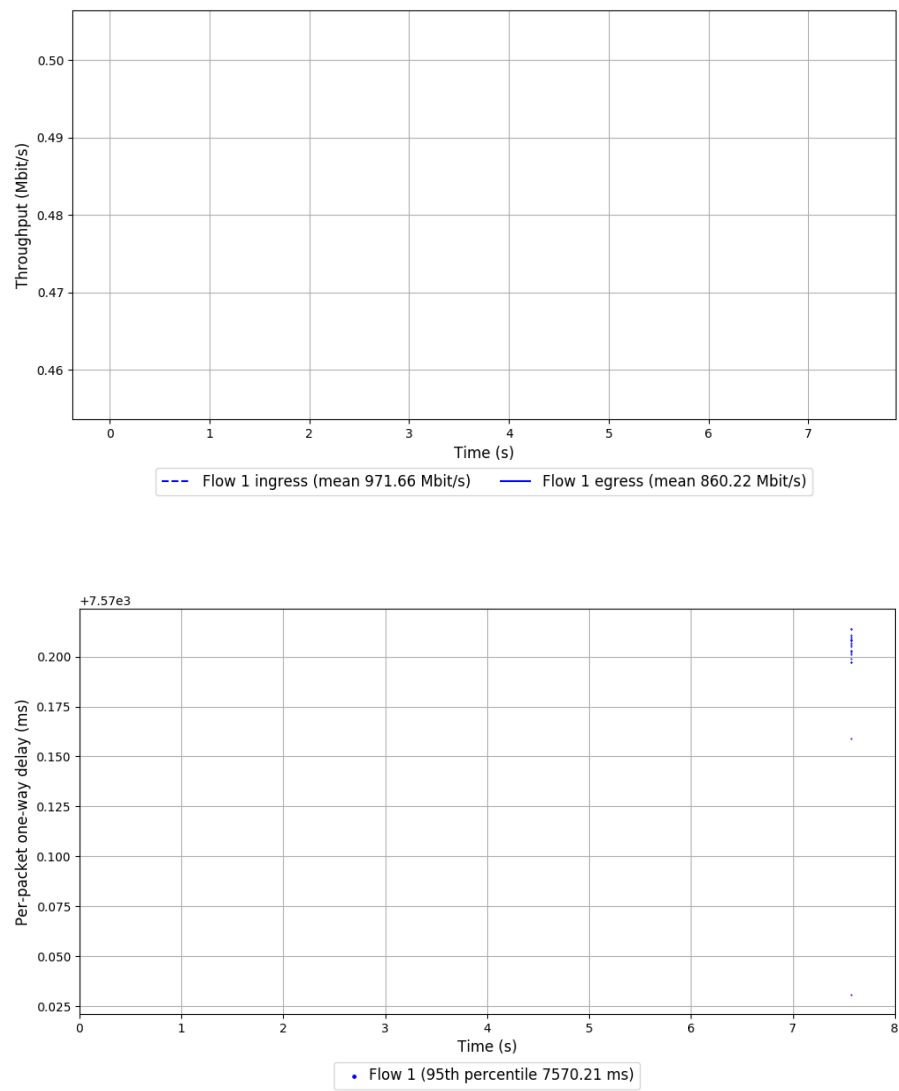


Run 3: Statistics of Saturator

Start at: 2017-08-11 12:44:36

End at: 2017-08-11 12:45:06

Run 3: Report of Saturator — Data Link

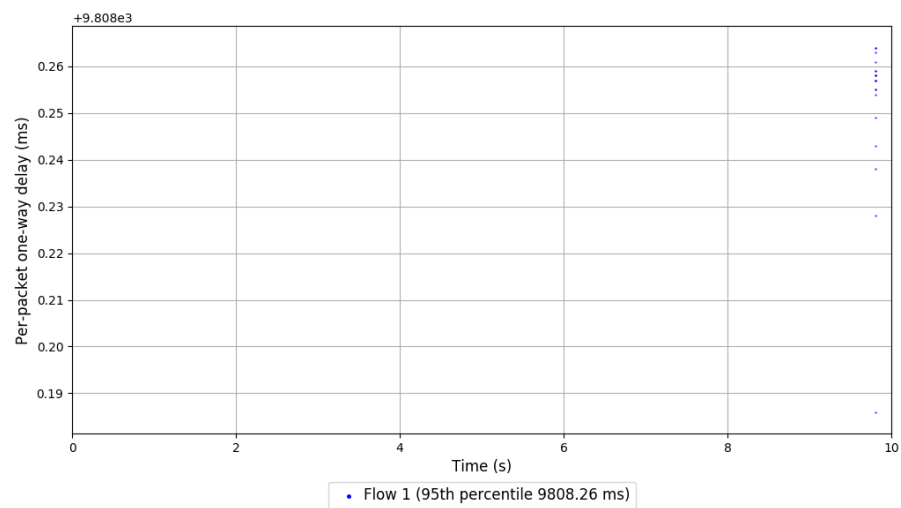
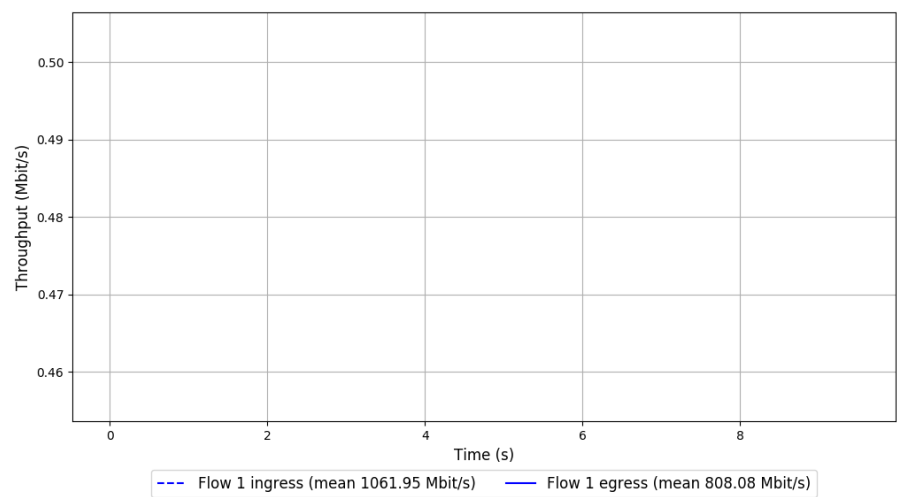


Run 4: Statistics of Saturator

Start at: 2017-08-11 12:54:42

End at: 2017-08-11 12:55:12

Run 4: Report of Saturator — Data Link

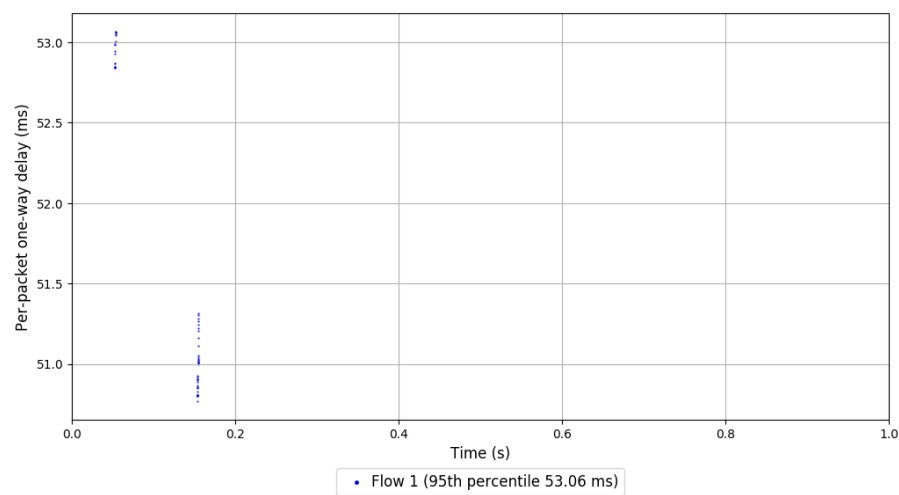
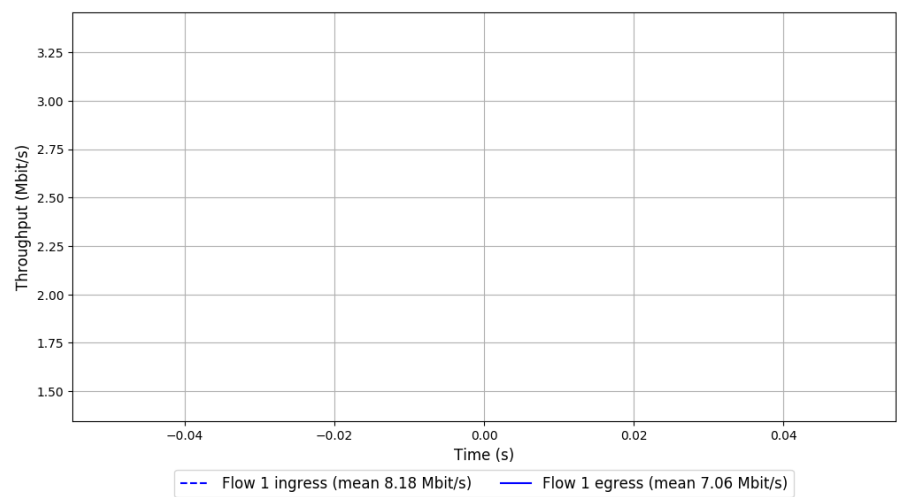


Run 5: Statistics of Saturator

Start at: 2017-08-11 13:04:48

End at: 2017-08-11 13:05:18

Run 5: Report of Saturator — Data Link

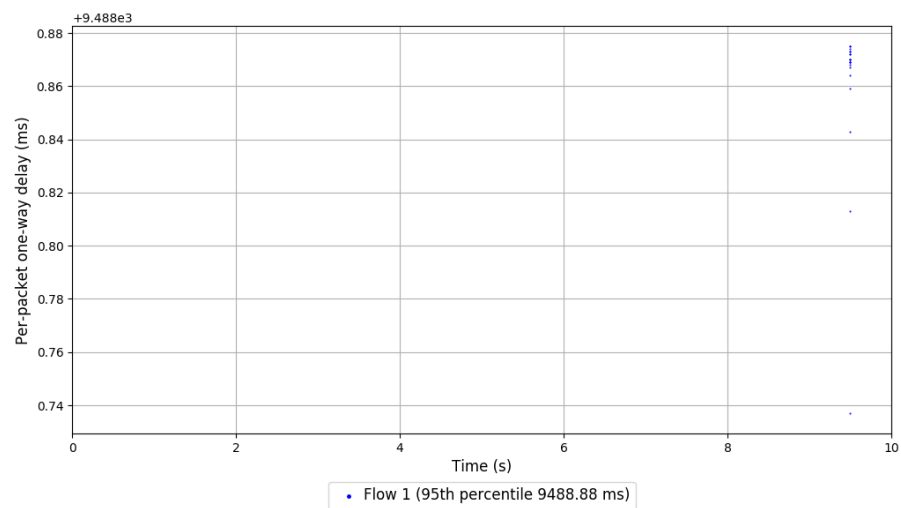
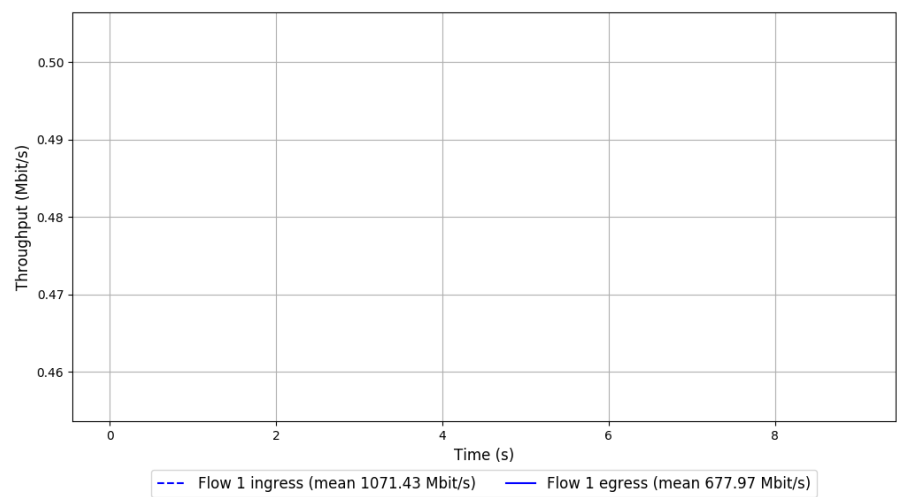


Run 6: Statistics of Saturator

Start at: 2017-08-11 13:14:55

End at: 2017-08-11 13:15:25

Run 6: Report of Saturator — Data Link

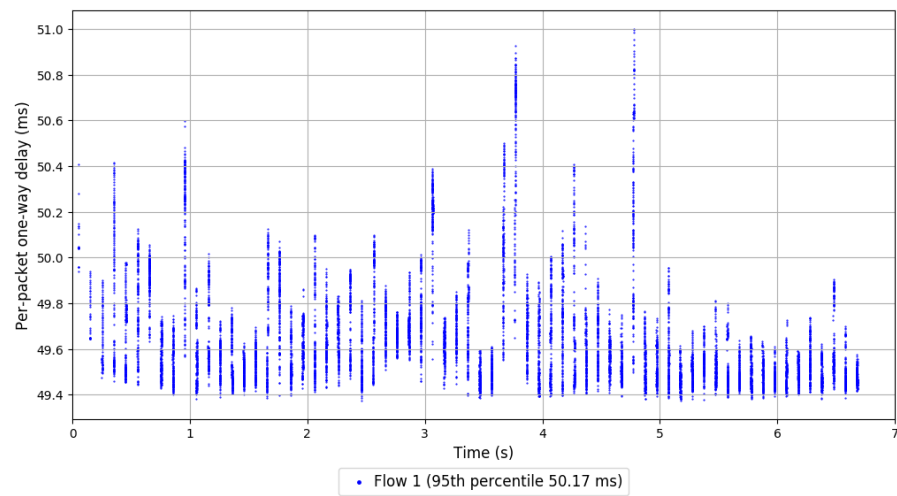
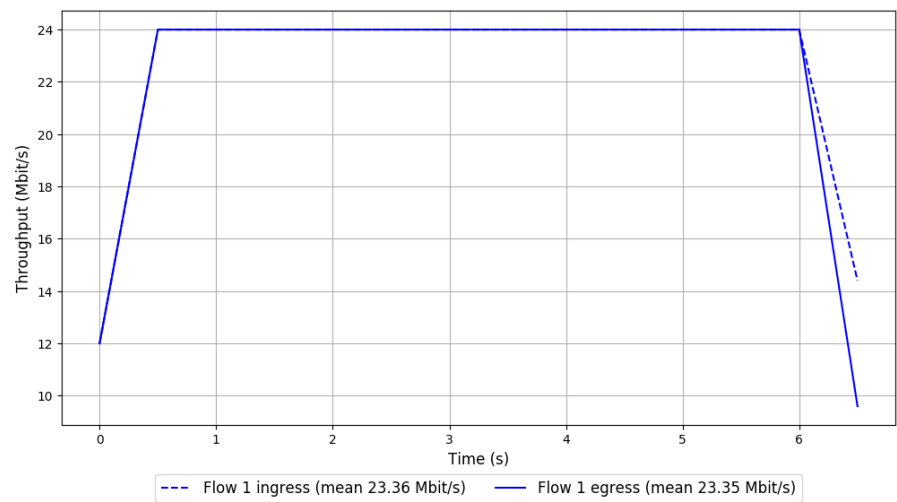


Run 7: Statistics of Saturator

Start at: 2017-08-11 13:24:57

End at: 2017-08-11 13:25:27

Run 7: Report of Saturator — Data Link

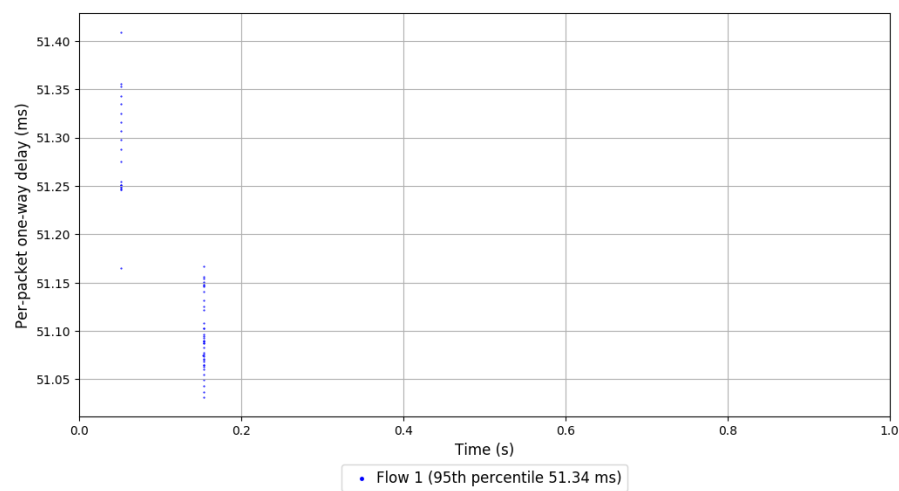
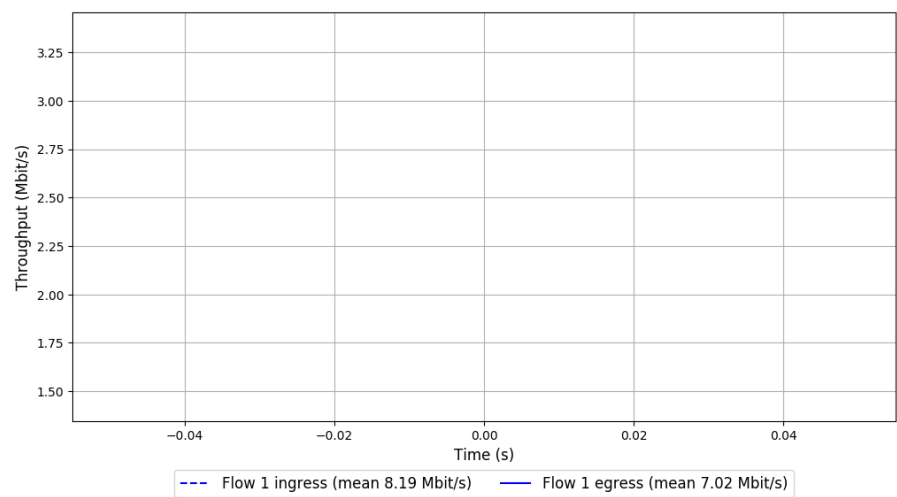


Run 8: Statistics of Saturator

Start at: 2017-08-11 13:35:10

End at: 2017-08-11 13:35:40

Run 8: Report of Saturator — Data Link

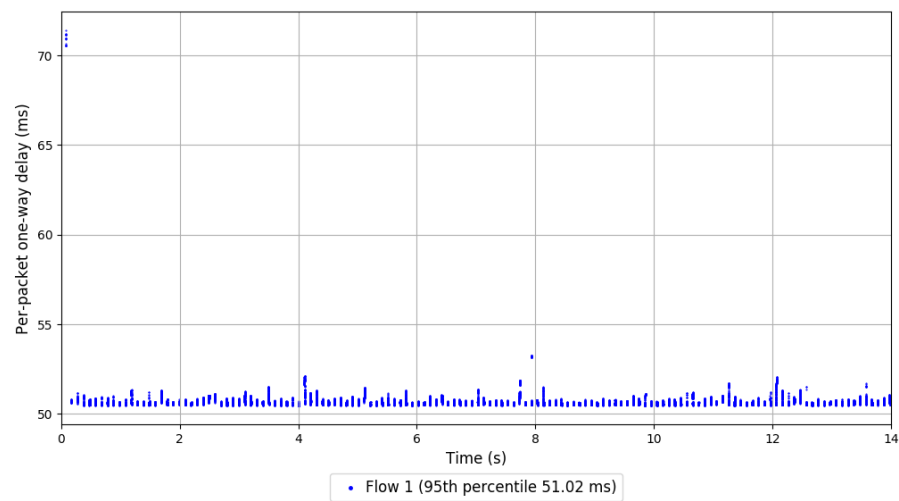
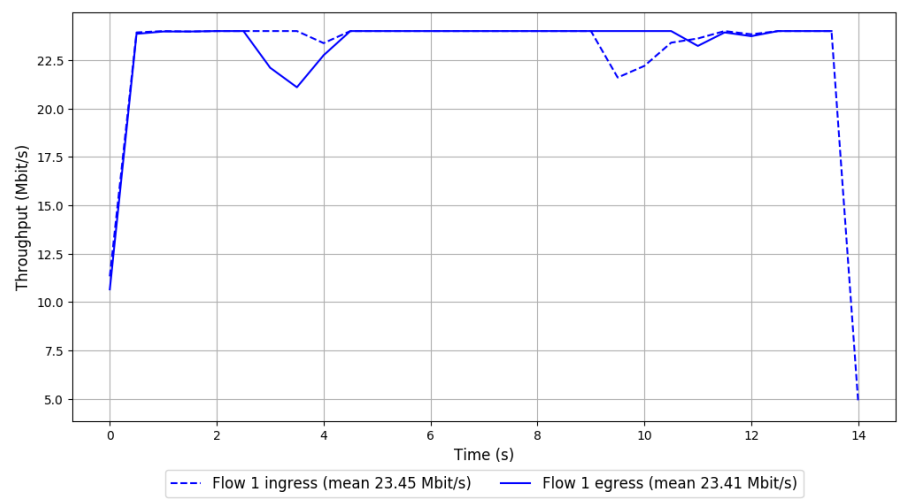


Run 9: Statistics of Saturator

Start at: 2017-08-11 13:45:40

End at: 2017-08-11 13:46:10

Run 9: Report of Saturator — Data Link

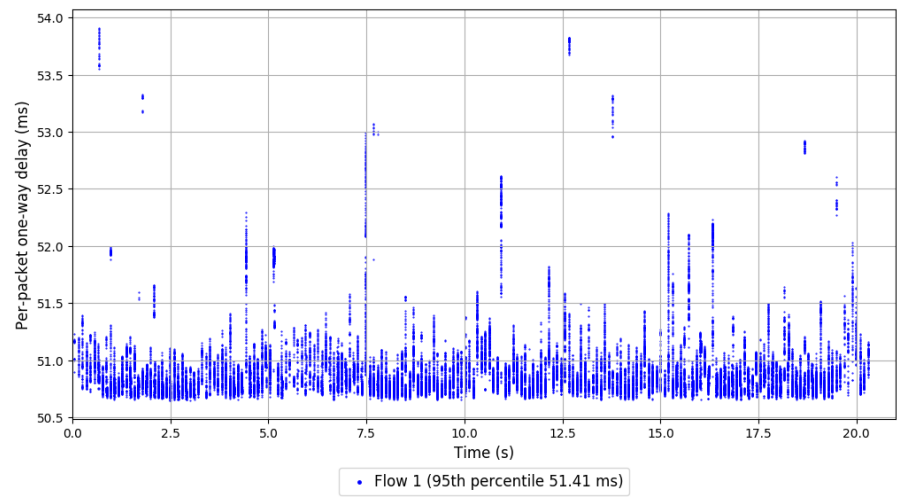
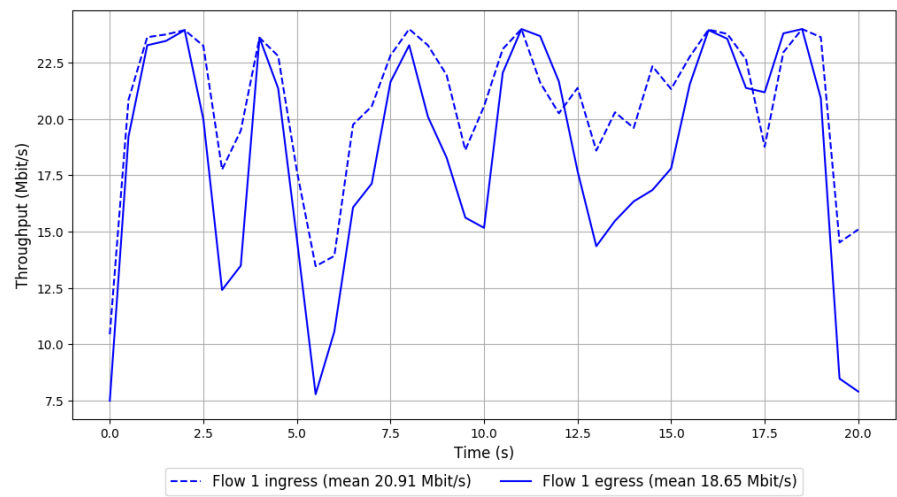


Run 10: Statistics of Saturator

Start at: 2017-08-11 13:55:42

End at: 2017-08-11 13:56:12

Run 10: Report of Saturator — Data Link

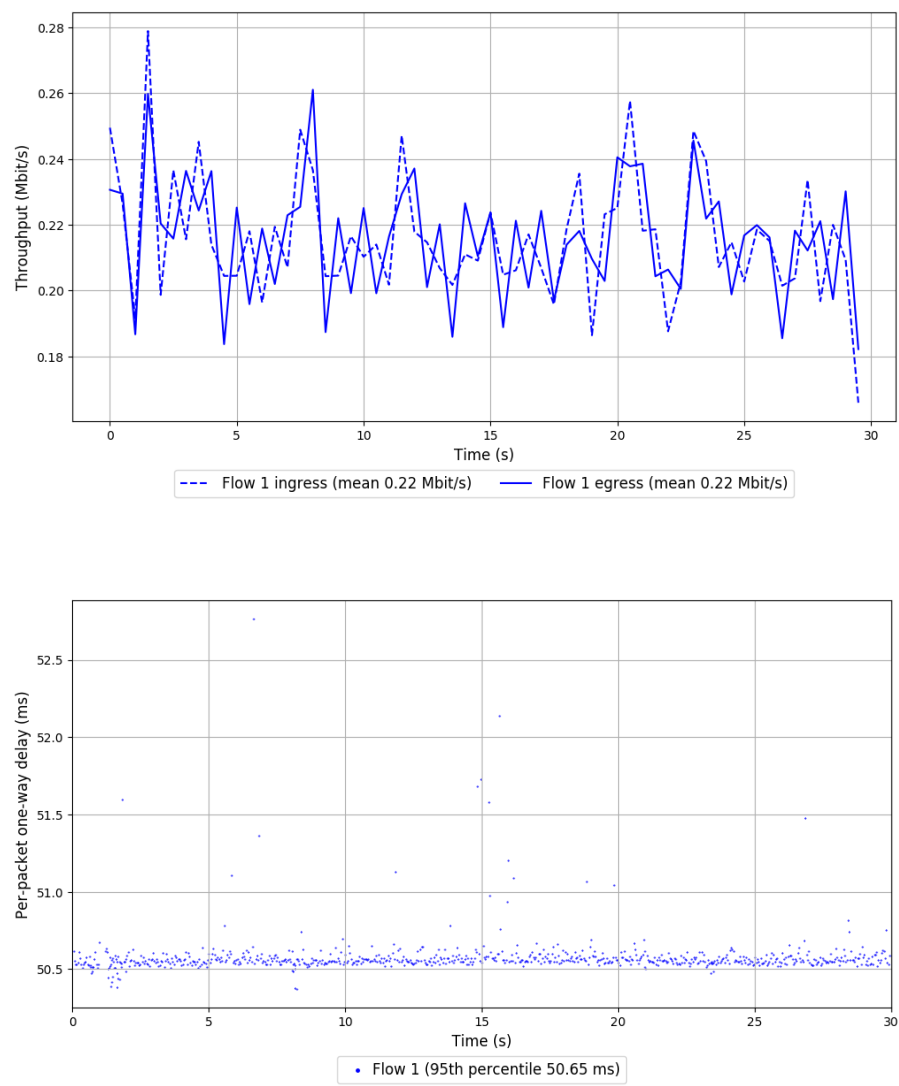


```
Run 1: Statistics of SCReAM

Start at: 2017-08-11 12:20:23
End at: 2017-08-11 12:20:53

# Below is generated by plot.py at 2017-08-11 15:15:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.647 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.647 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

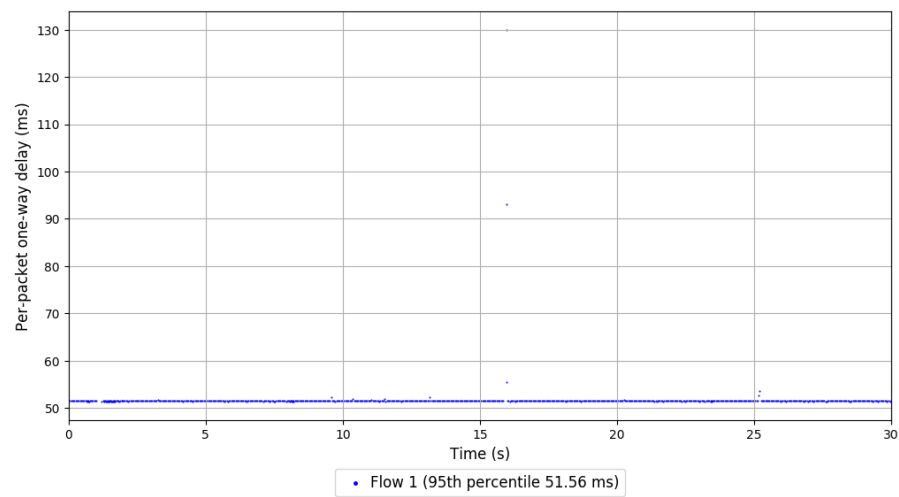
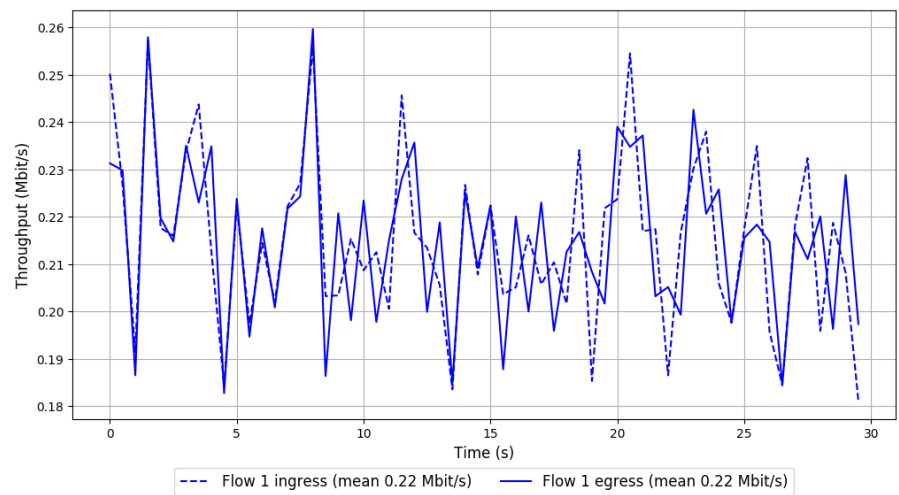


```
Run 2: Statistics of SCReAM

Start at: 2017-08-11 12:30:08
End at: 2017-08-11 12:30:38

# Below is generated by plot.py at 2017-08-11 15:15:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.558 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.558 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-08-11 12:40:06

End at: 2017-08-11 12:40:36

Below is generated by plot.py at 2017-08-11 15:15:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.362 ms

Loss rate: 0.00%

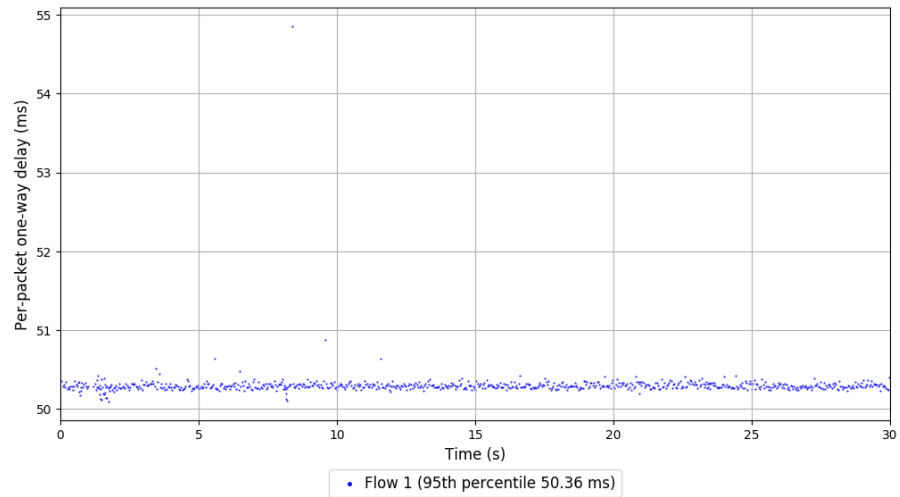
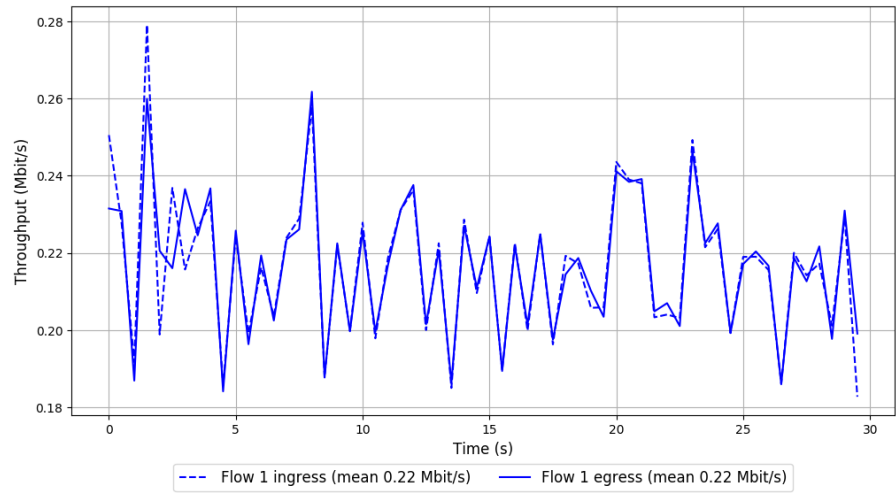
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.362 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-11 12:50:33

End at: 2017-08-11 12:51:03

Below is generated by plot.py at 2017-08-11 15:15:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.719 ms

Loss rate: 0.00%

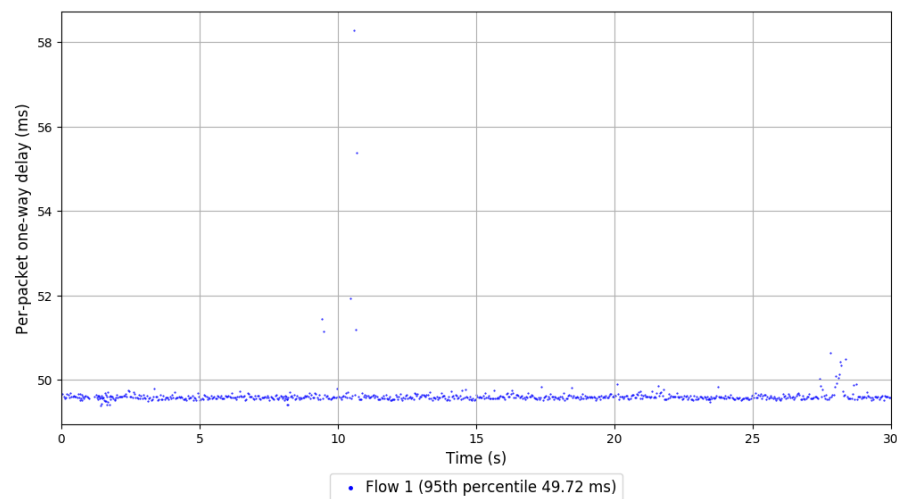
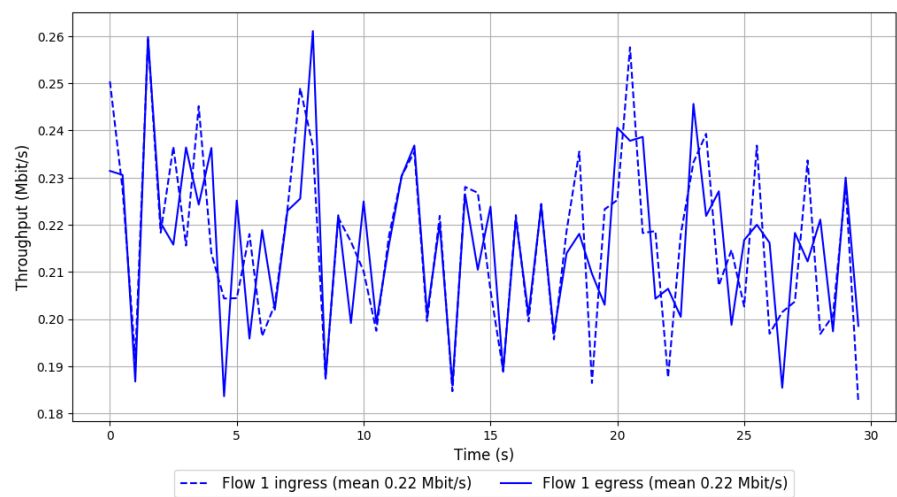
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.719 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-08-11 13:00:17

End at: 2017-08-11 13:00:47

Below is generated by plot.py at 2017-08-11 15:15:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 49.813 ms

Loss rate: 0.00%

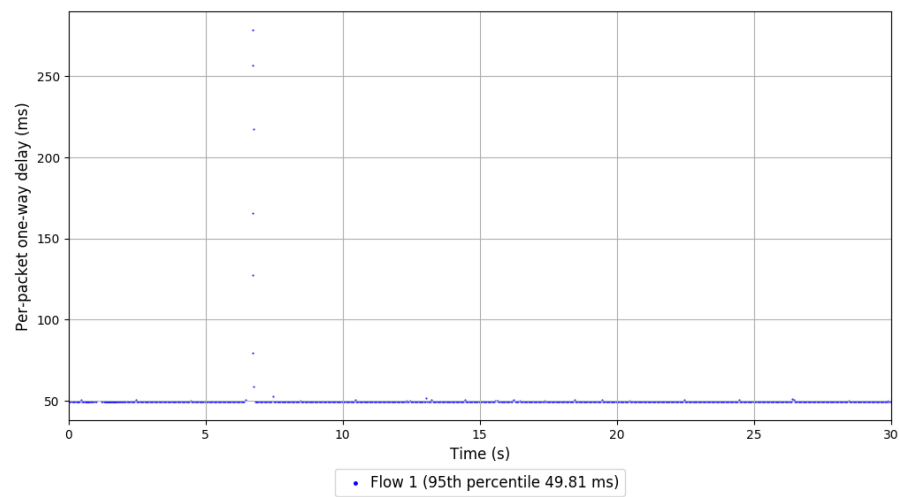
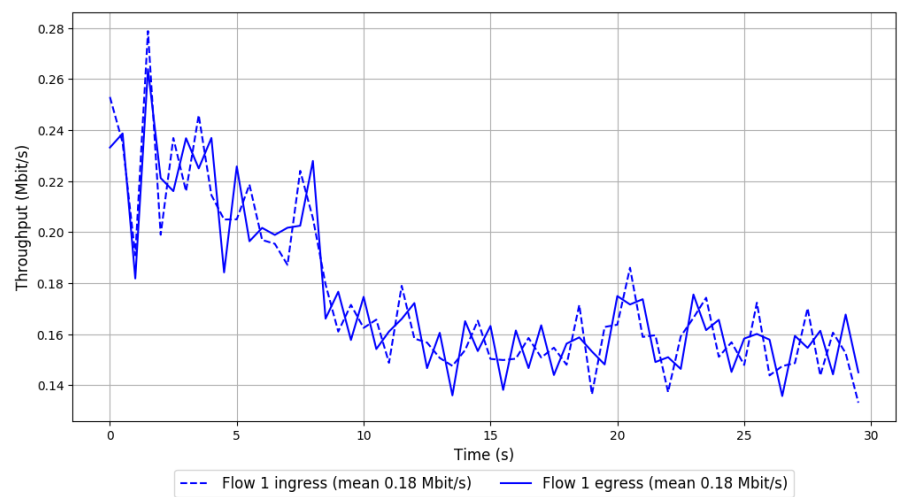
-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 49.813 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-11 13:10:45

End at: 2017-08-11 13:11:15

Below is generated by plot.py at 2017-08-11 15:15:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 49.710 ms

Loss rate: 0.16%

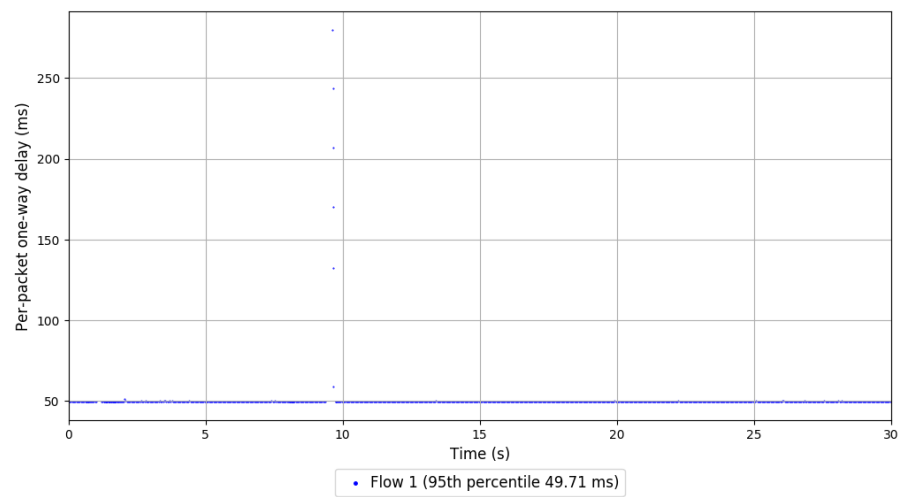
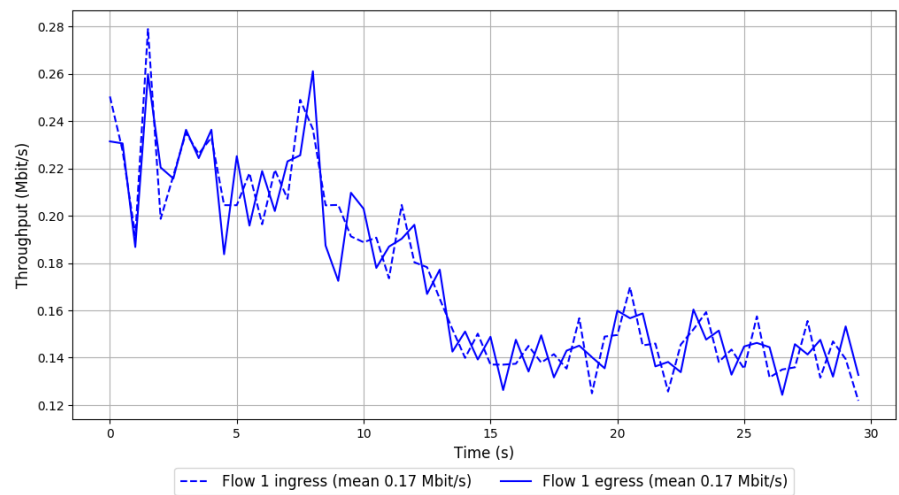
-- Flow 1:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 49.710 ms

Loss rate: 0.16%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-08-11 13:20:54

End at: 2017-08-11 13:21:24

Below is generated by plot.py at 2017-08-11 15:15:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.788 ms

Loss rate: 0.00%

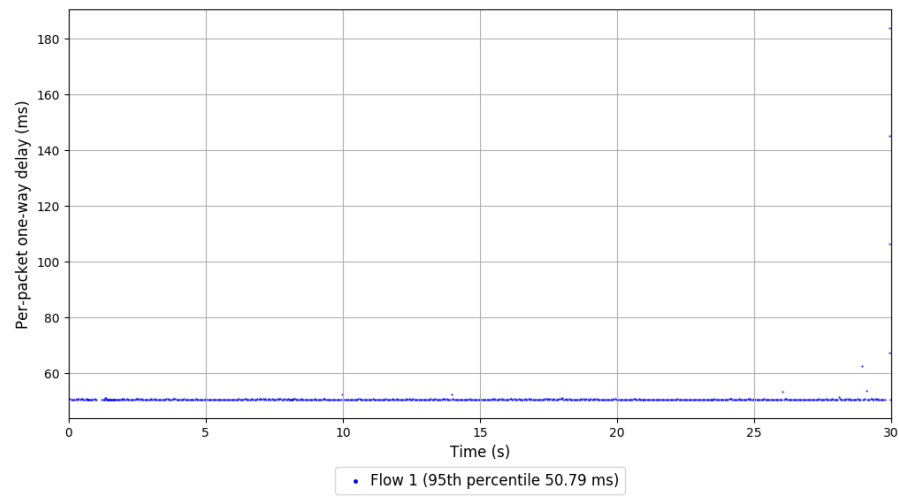
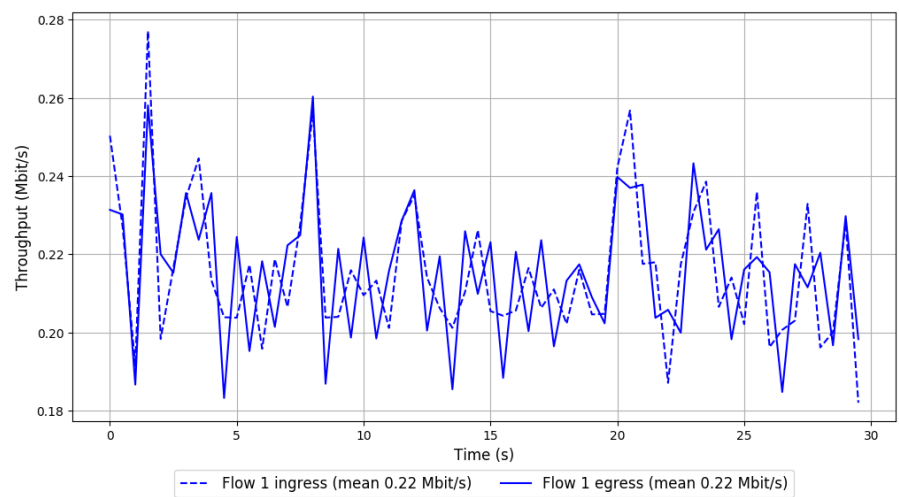
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.788 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-11 13:30:57

End at: 2017-08-11 13:31:27

Below is generated by plot.py at 2017-08-11 15:15:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.904 ms

Loss rate: 0.00%

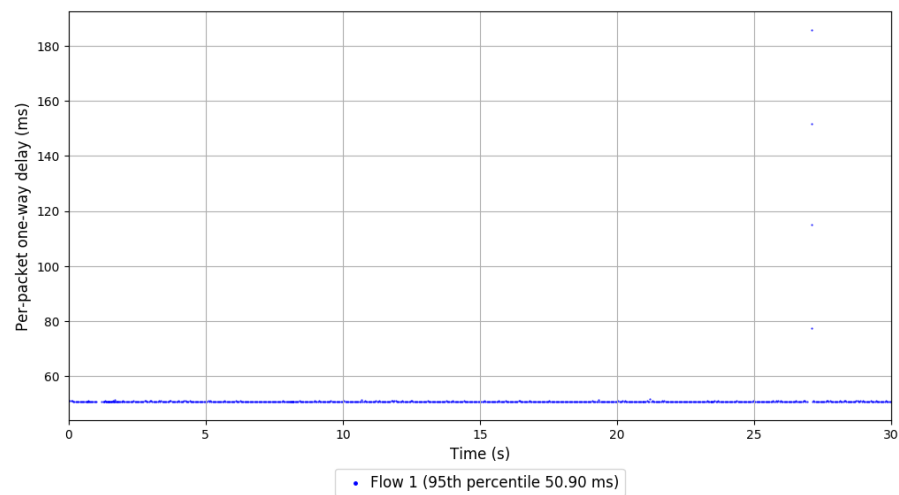
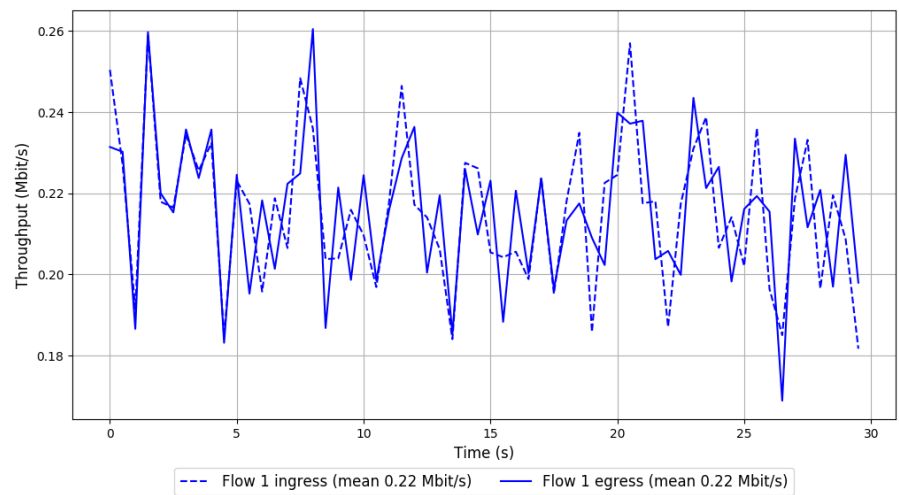
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.904 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-08-11 13:41:11

End at: 2017-08-11 13:41:41

Below is generated by plot.py at 2017-08-11 15:15:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.500 ms

Loss rate: 0.00%

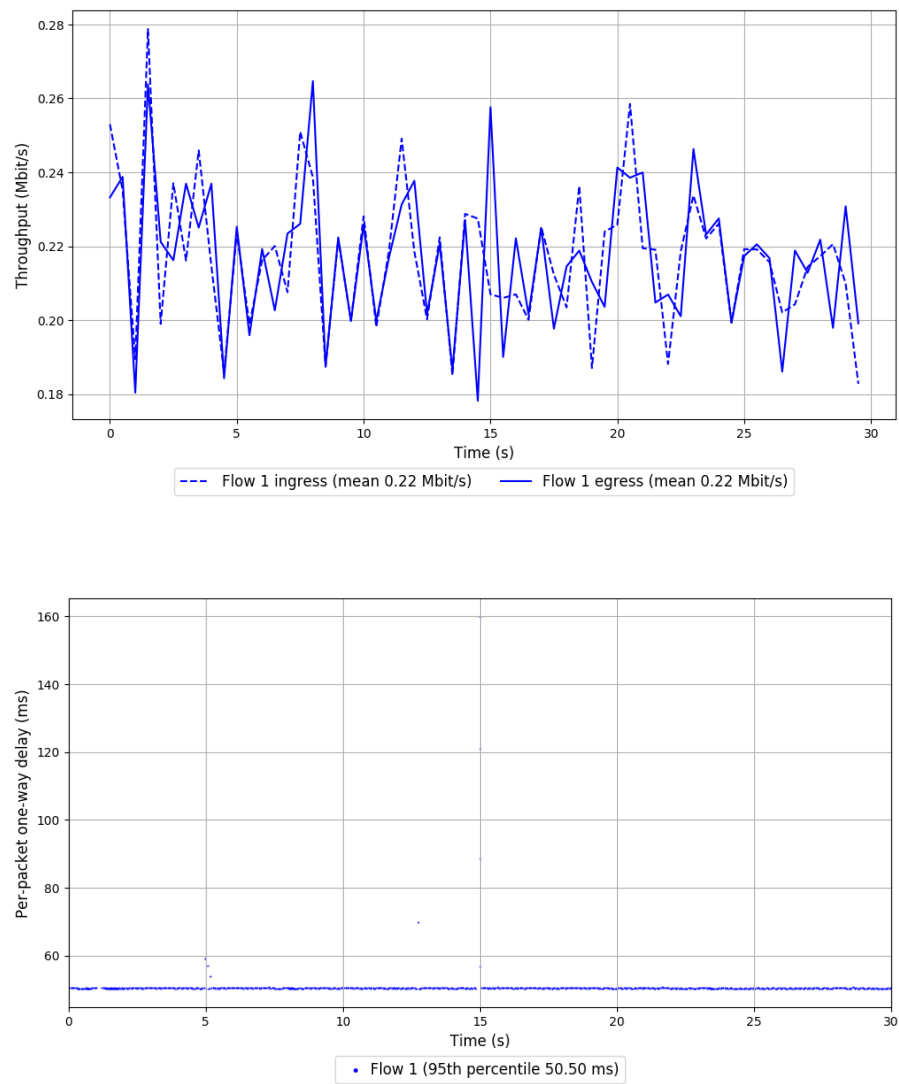
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.500 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-08-11 13:51:15

End at: 2017-08-11 13:51:45

Below is generated by plot.py at 2017-08-11 15:15:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 49.645 ms

Loss rate: 0.00%

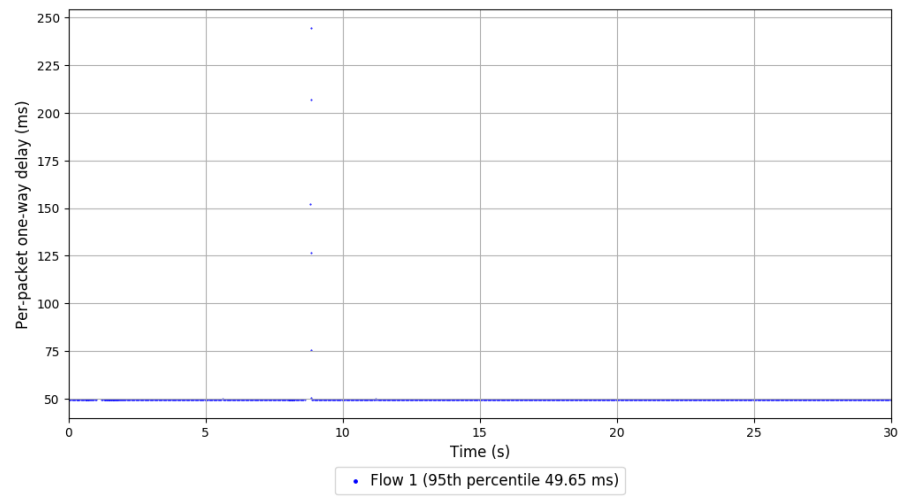
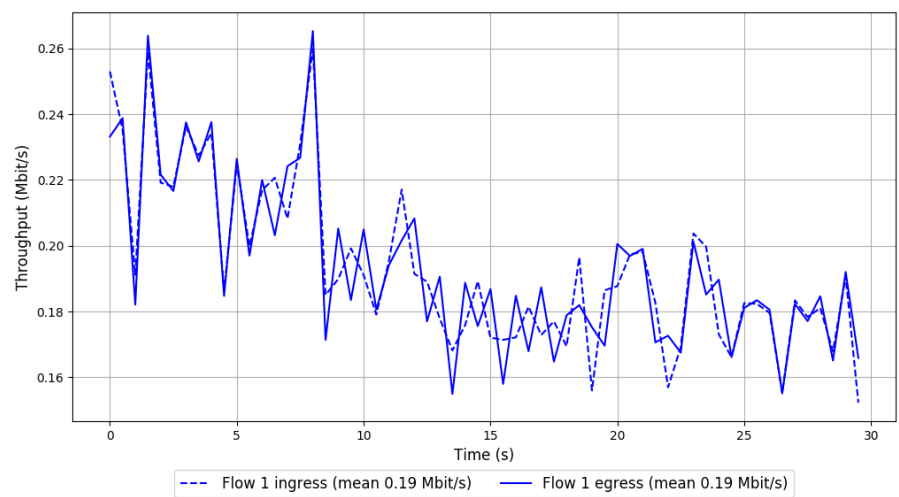
-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 49.645 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2017-08-11 12:25:04

End at: 2017-08-11 12:25:34

Below is generated by plot.py at 2017-08-11 15:15:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.44 Mbit/s

95th percentile per-packet one-way delay: 51.905 ms

Loss rate: 22.71%

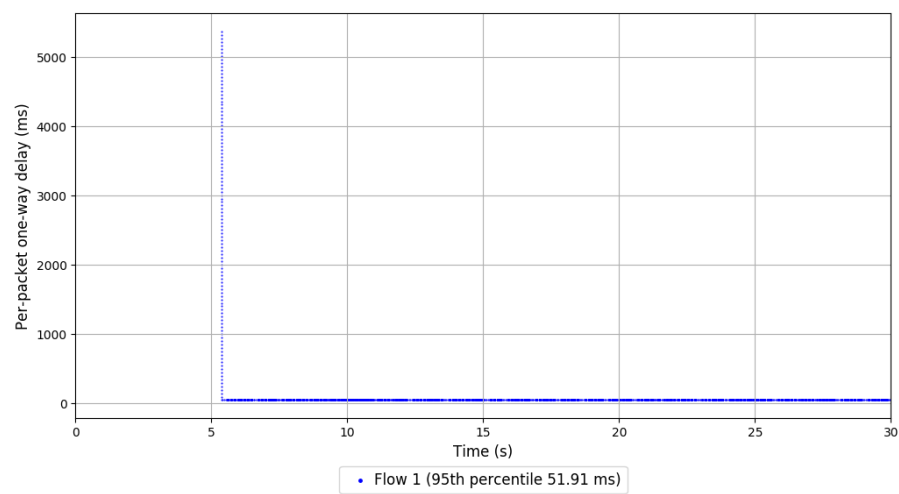
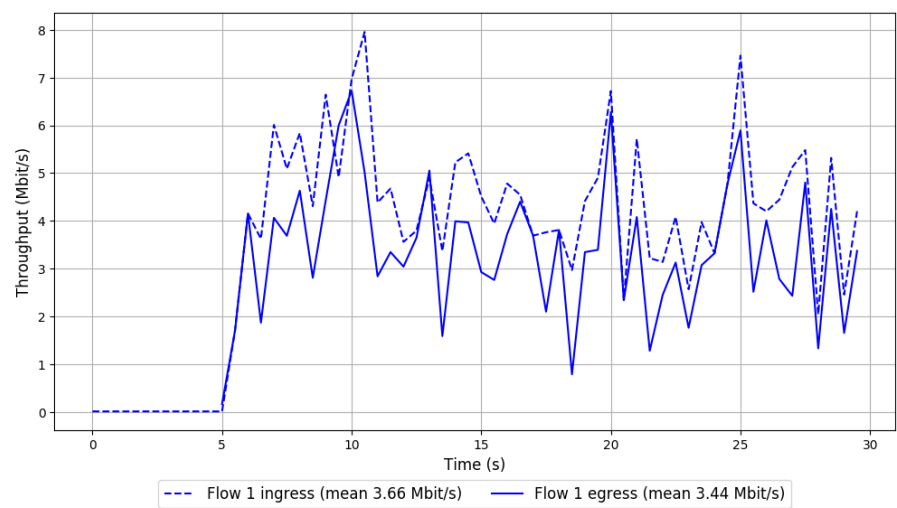
-- Flow 1:

Average throughput: 3.44 Mbit/s

95th percentile per-packet one-way delay: 51.905 ms

Loss rate: 22.71%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-11 12:34:56

End at: 2017-08-11 12:35:26

Below is generated by plot.py at 2017-08-11 15:15:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.00 Mbit/s

95th percentile per-packet one-way delay: 51.379 ms

Loss rate: 3.85%

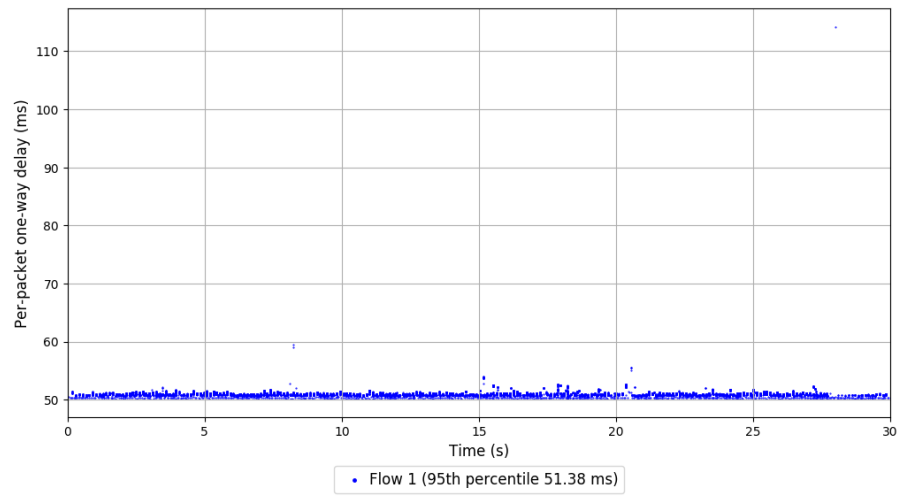
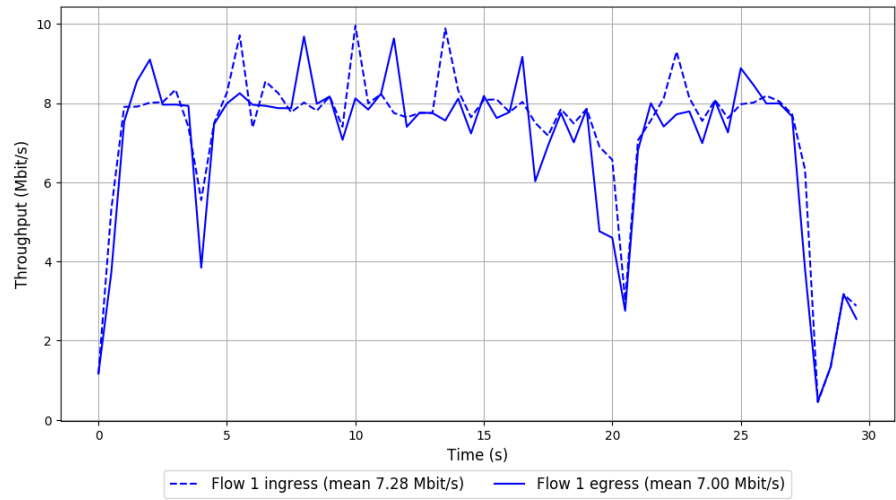
-- Flow 1:

Average throughput: 7.00 Mbit/s

95th percentile per-packet one-way delay: 51.379 ms

Loss rate: 3.85%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-11 12:45:12

End at: 2017-08-11 12:45:42

Below is generated by plot.py at 2017-08-11 15:15:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 50.873 ms

Loss rate: 16.42%

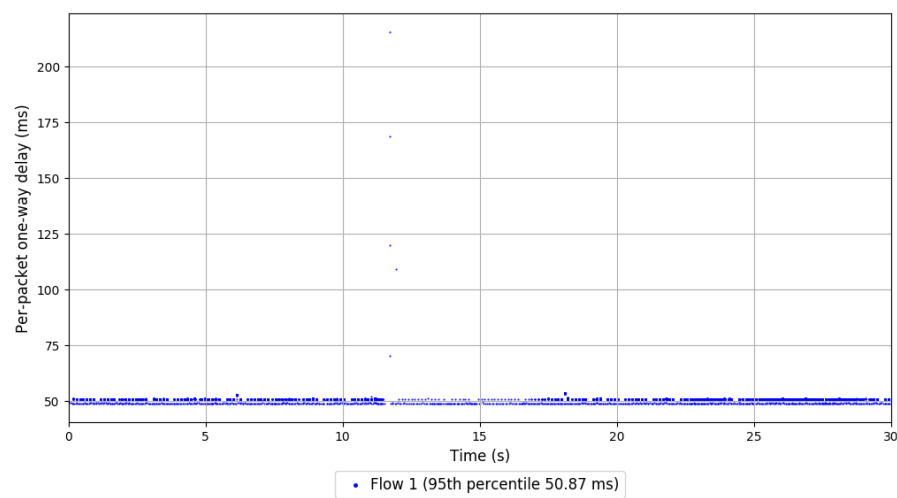
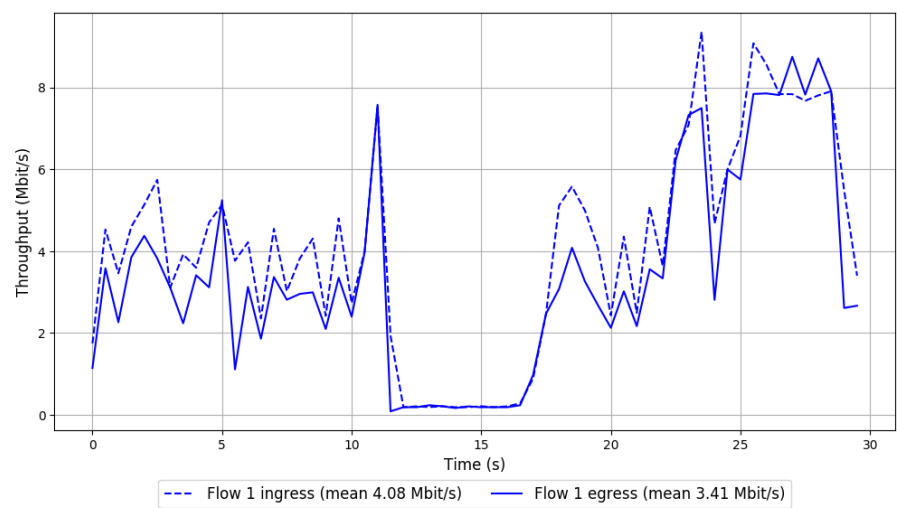
-- Flow 1:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 50.873 ms

Loss rate: 16.42%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-08-11 12:55:19

End at: 2017-08-11 12:55:49

Below is generated by plot.py at 2017-08-11 15:15:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.33 Mbit/s

95th percentile per-packet one-way delay: 51.160 ms

Loss rate: 2.40%

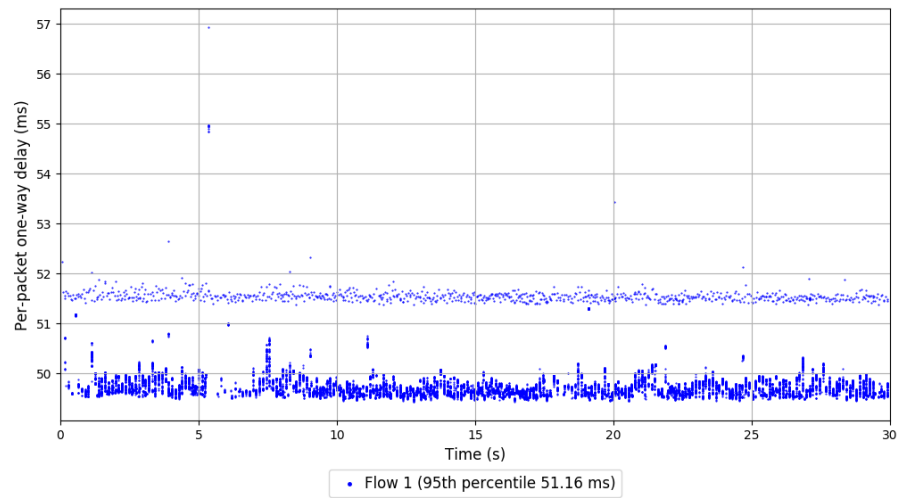
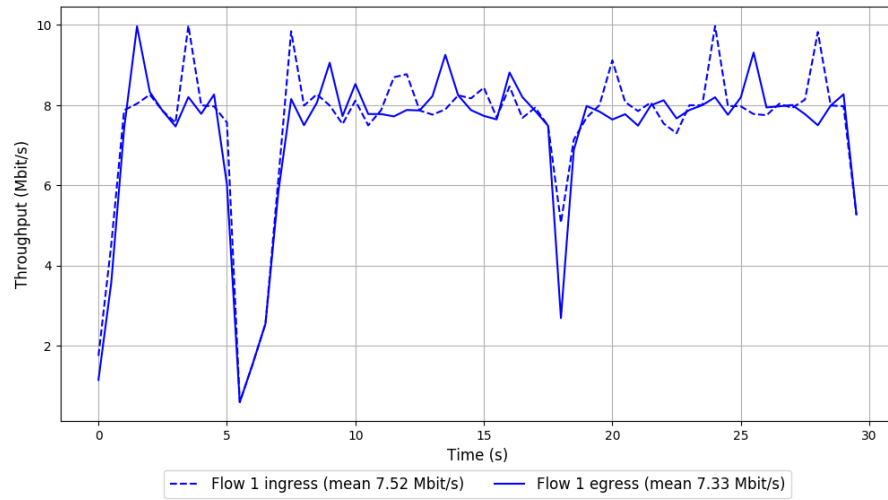
-- Flow 1:

Average throughput: 7.33 Mbit/s

95th percentile per-packet one-way delay: 51.160 ms

Loss rate: 2.40%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-11 13:05:24

End at: 2017-08-11 13:05:54

Below is generated by plot.py at 2017-08-11 15:15:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.74 Mbit/s

95th percentile per-packet one-way delay: 50.633 ms

Loss rate: 17.54%

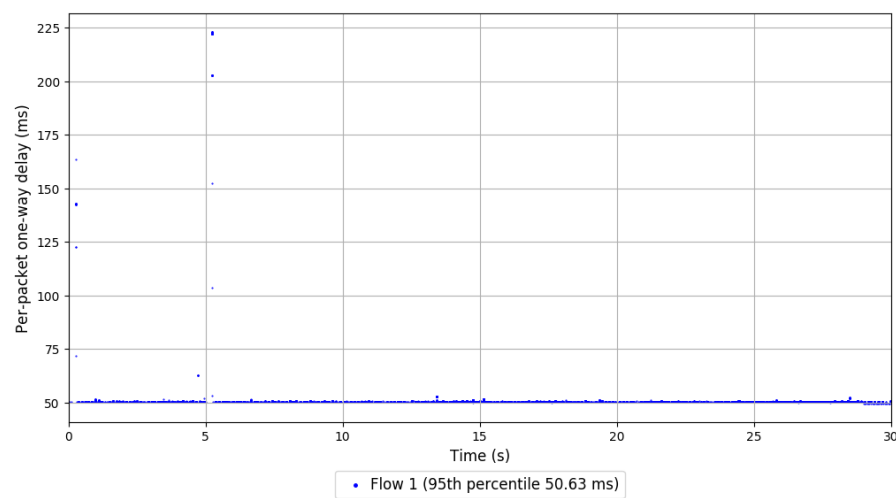
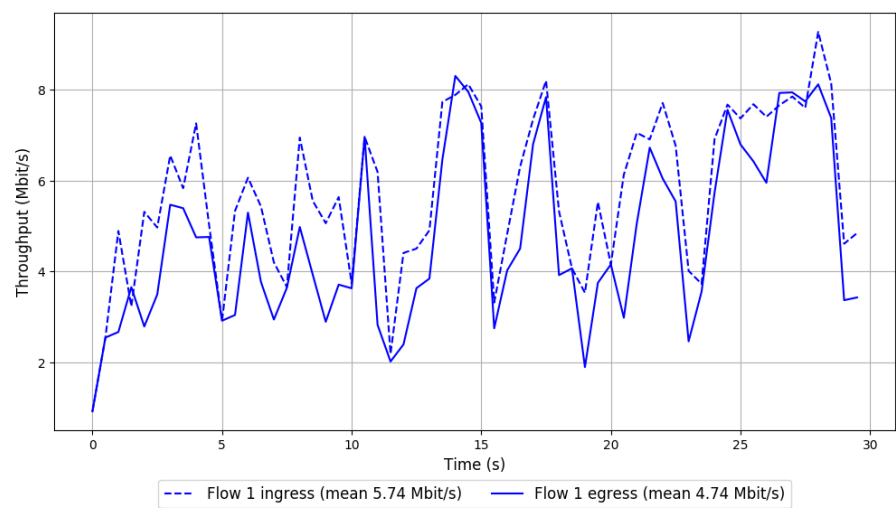
-- Flow 1:

Average throughput: 4.74 Mbit/s

95th percentile per-packet one-way delay: 50.633 ms

Loss rate: 17.54%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-11 13:15:31

End at: 2017-08-11 13:16:01

Below is generated by plot.py at 2017-08-11 15:15:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.61 Mbit/s

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

Loss rate: 1.65%

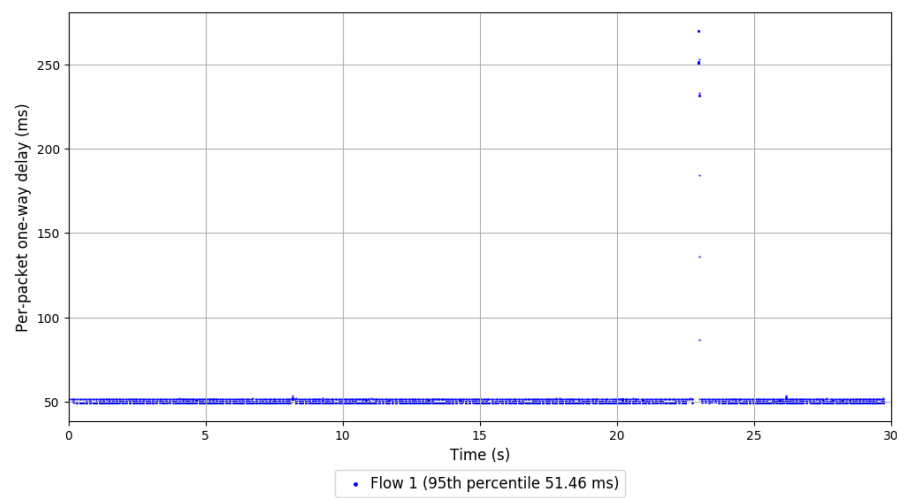
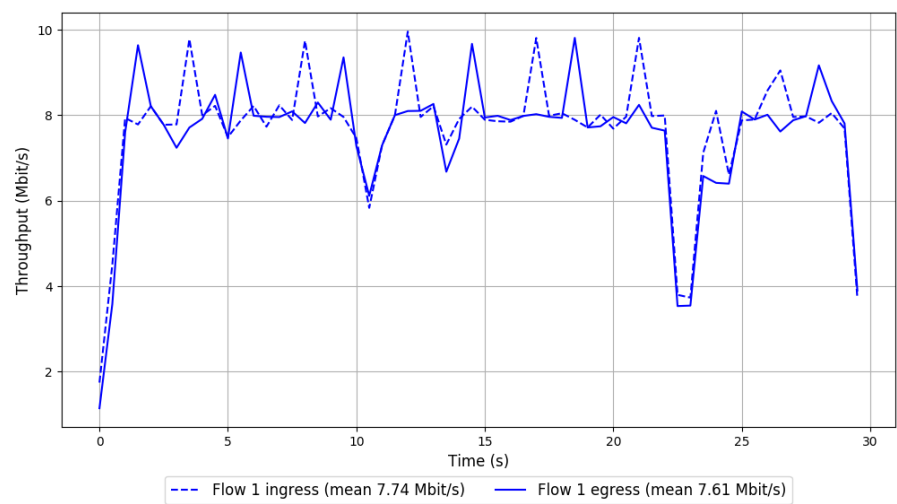
-- Flow 1:

Average throughput: 7.61 Mbit/s

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

Loss rate: 1.65%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-11 13:25:35

End at: 2017-08-11 13:26:05

Below is generated by plot.py at 2017-08-11 15:15:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 50.288 ms

Loss rate: 5.75%

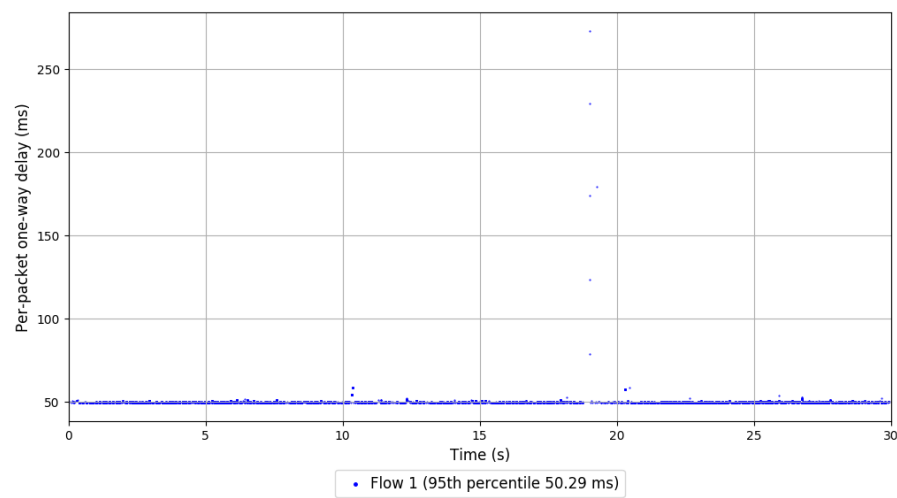
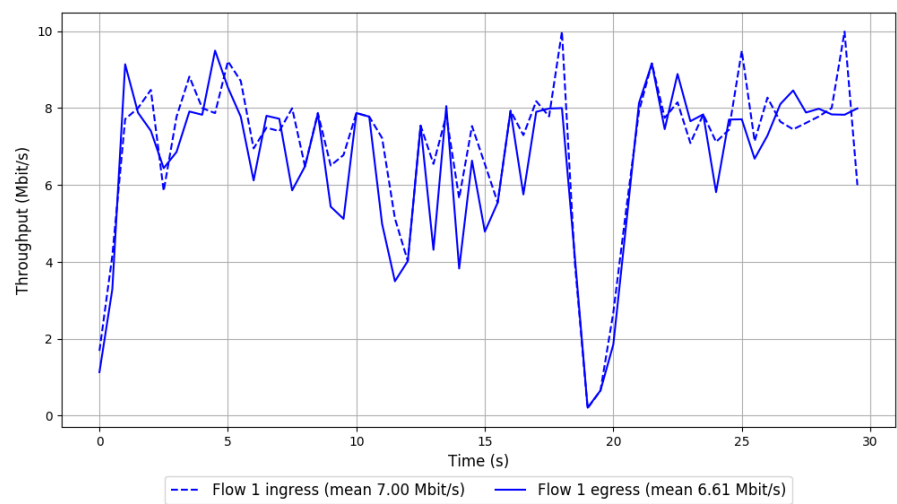
-- Flow 1:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 50.288 ms

Loss rate: 5.75%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-11 13:35:46

End at: 2017-08-11 13:36:16

Below is generated by plot.py at 2017-08-11 15:15:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.37 Mbit/s

95th percentile per-packet one-way delay: 51.563 ms

Loss rate: 3.38%

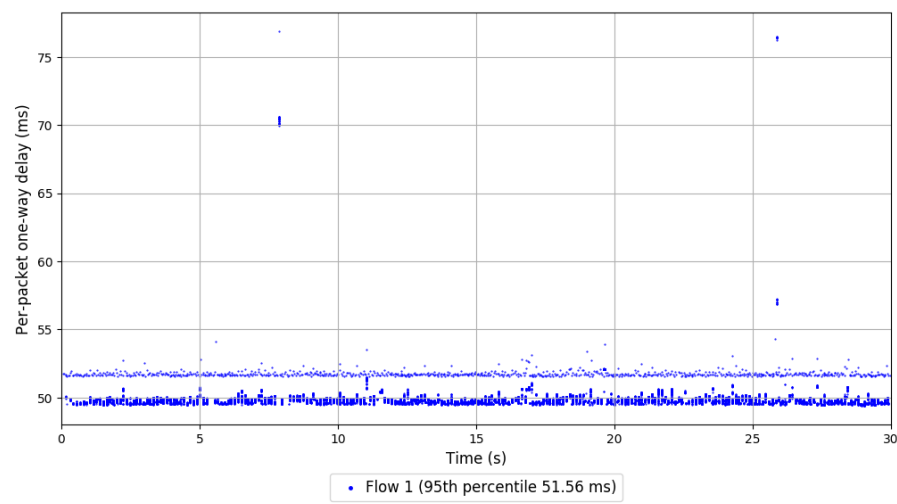
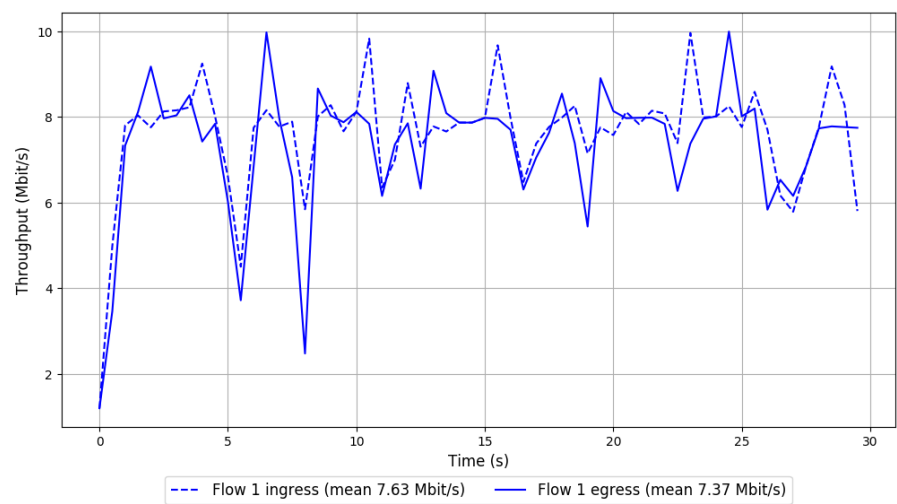
-- Flow 1:

Average throughput: 7.37 Mbit/s

95th percentile per-packet one-way delay: 51.563 ms

Loss rate: 3.38%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-11 13:46:17

End at: 2017-08-11 13:46:47

Below is generated by plot.py at 2017-08-11 15:15:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.09 Mbit/s

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

Loss rate: 5.70%

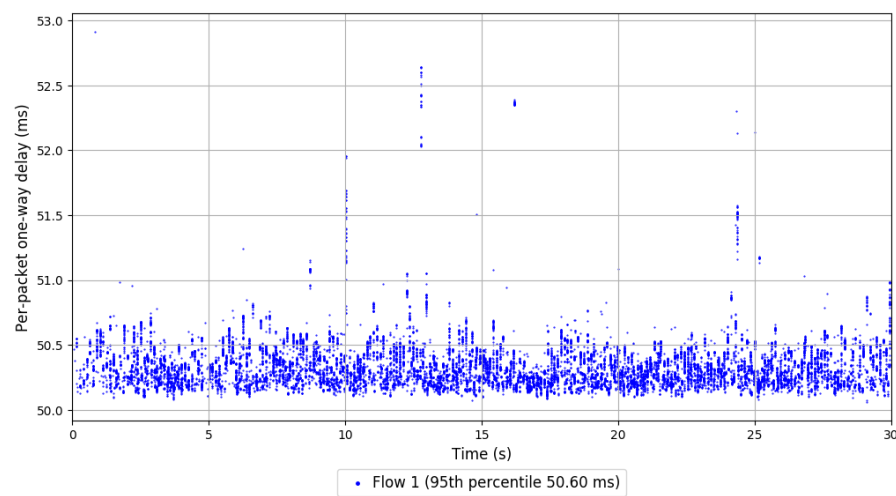
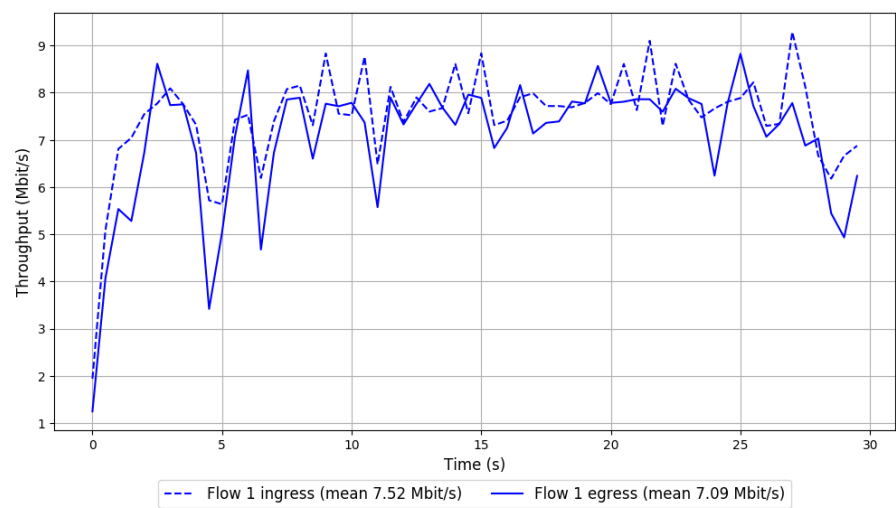
-- Flow 1:

Average throughput: 7.09 Mbit/s

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

Loss rate: 5.70%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-11 13:56:20

End at: 2017-08-11 13:56:50

Below is generated by plot.py at 2017-08-11 15:15:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.48 Mbit/s

95th percentile per-packet one-way delay: 50.958 ms

Loss rate: 12.45%

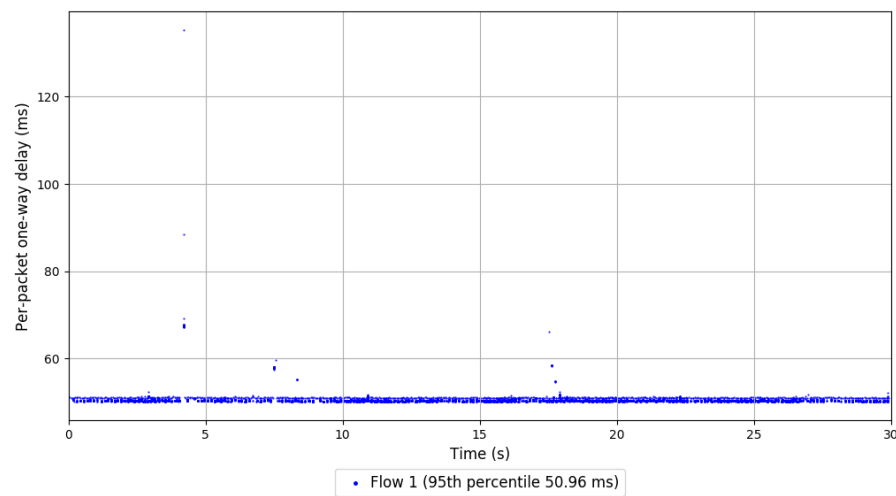
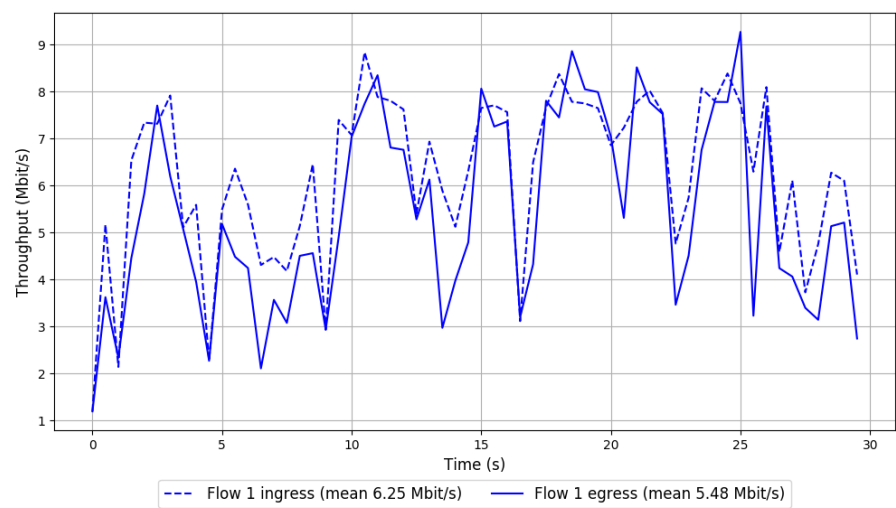
-- Flow 1:

Average throughput: 5.48 Mbit/s

95th percentile per-packet one-way delay: 50.958 ms

Loss rate: 12.45%

Run 10: Report of Sprout — Data Link

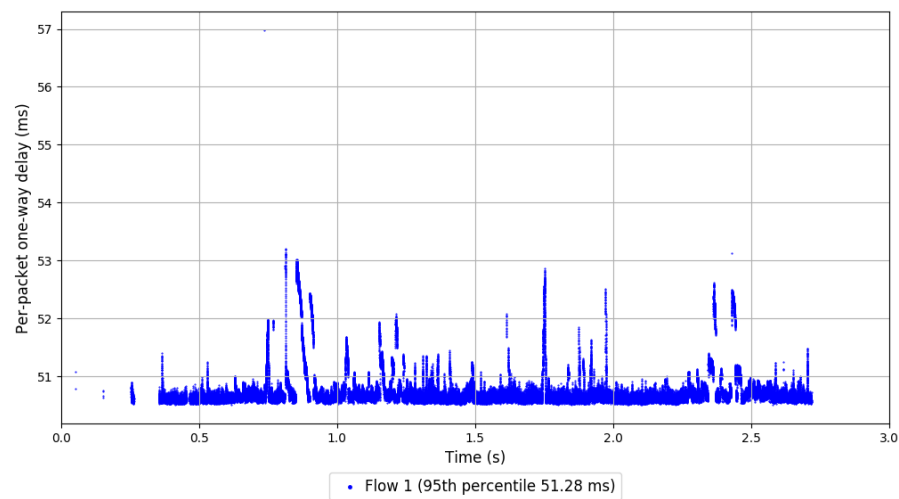
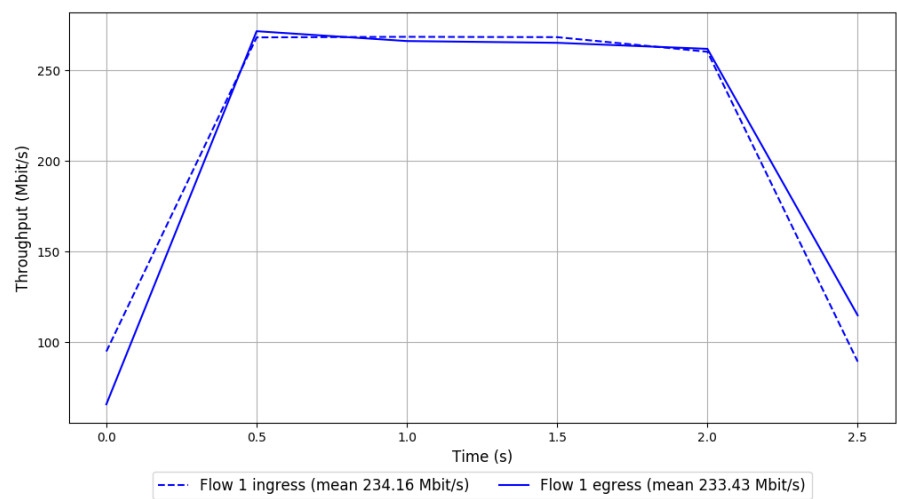


Run 1: Statistics of TaoVA-100x

Start at: 2017-08-11 12:23:49

End at: 2017-08-11 12:24:19

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

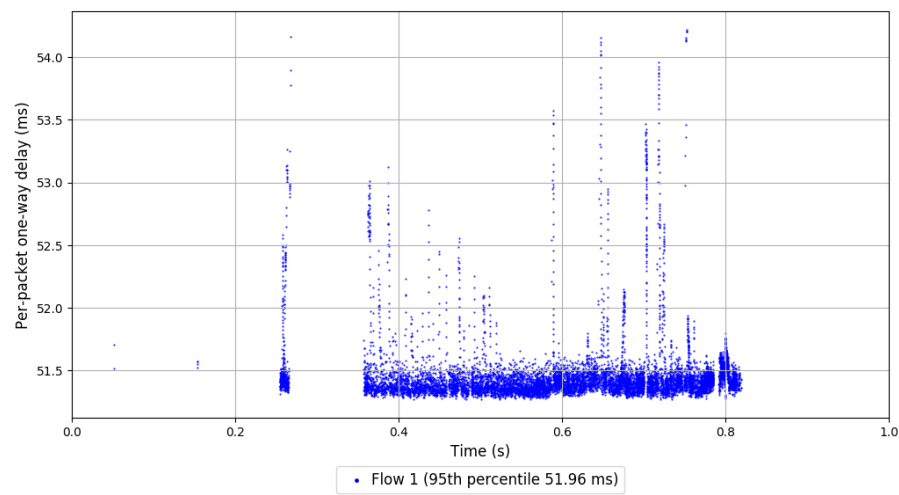
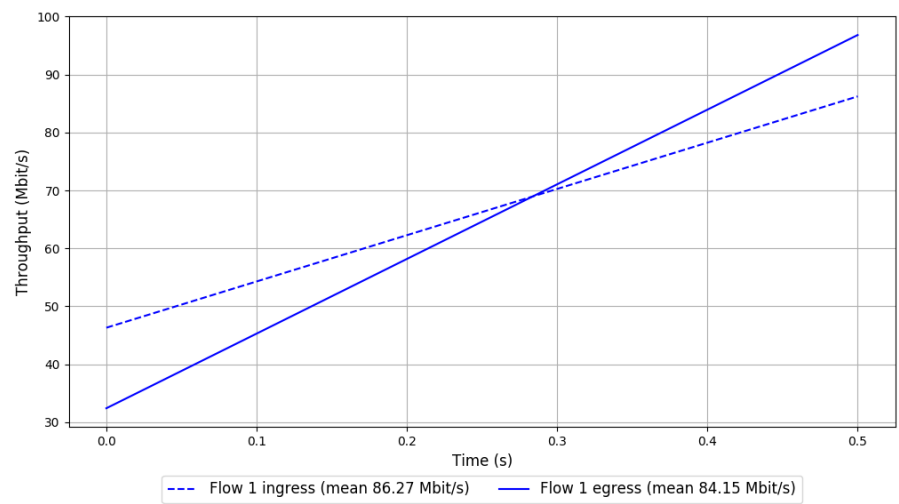


Run 2: Statistics of TaoVA-100x

Start at: 2017-08-11 12:33:42

End at: 2017-08-11 12:34:12

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

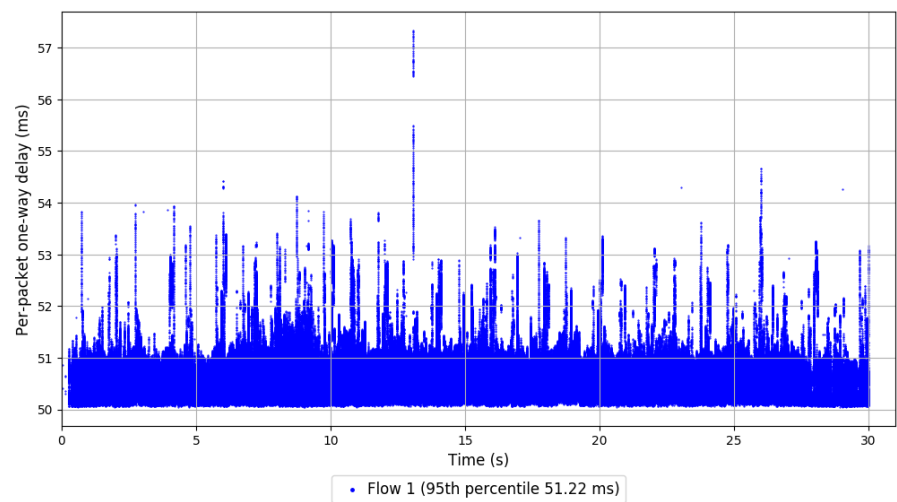
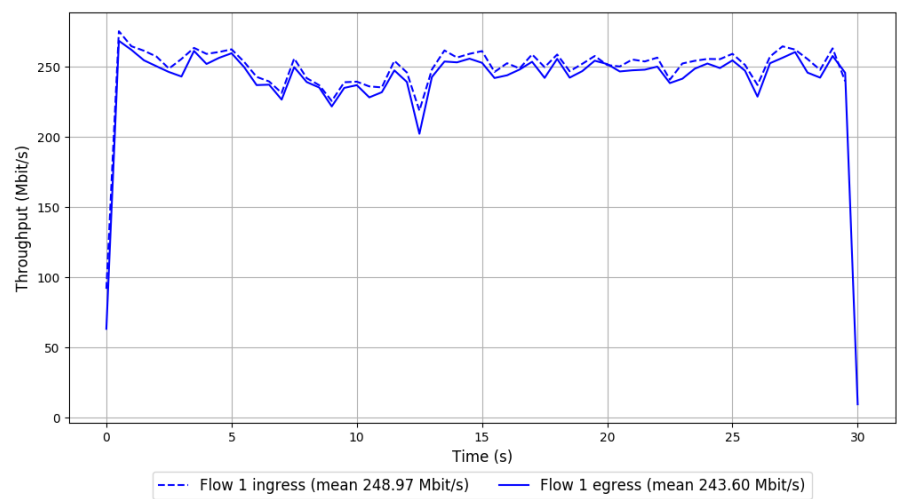


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-08-11 12:43:36
End at: 2017-08-11 12:44:06

# Below is generated by plot.py at 2017-08-11 15:16:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 243.60 Mbit/s
95th percentile per-packet one-way delay: 51.223 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 243.60 Mbit/s
95th percentile per-packet one-way delay: 51.223 ms
Loss rate: 2.15%
```


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

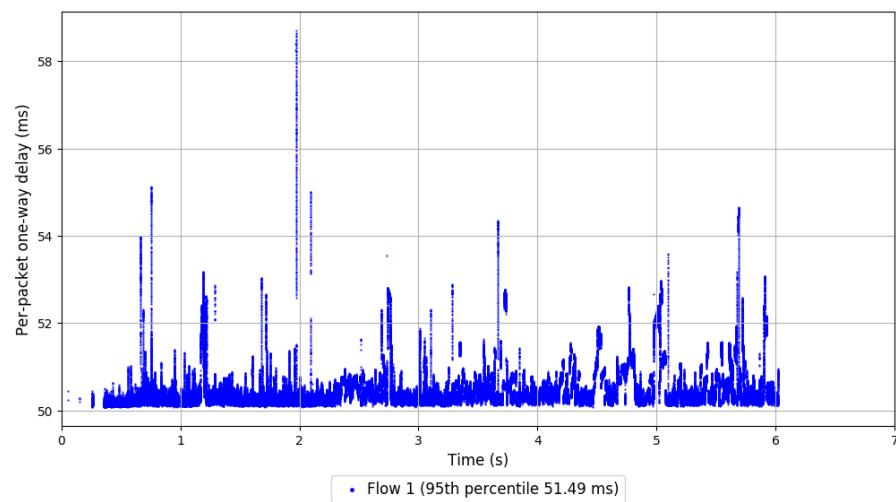
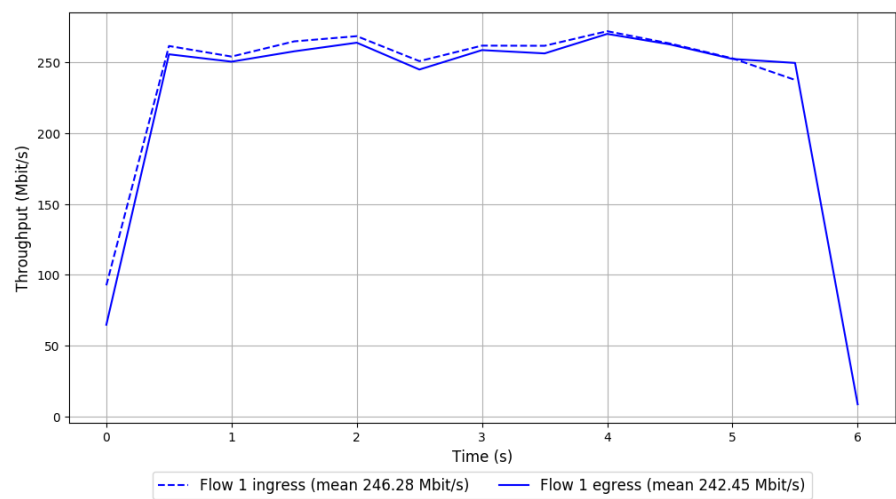


Run 4: Statistics of TaoVA-100x

Start at: 2017-08-11 12:54:00

End at: 2017-08-11 12:54:30

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-08-11 13:03:54

End at: 2017-08-11 13:04:24

Below is generated by plot.py at 2017-08-11 15:16:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.67 Mbit/s

95th percentile per-packet one-way delay: 51.732 ms

Loss rate: 2.46%

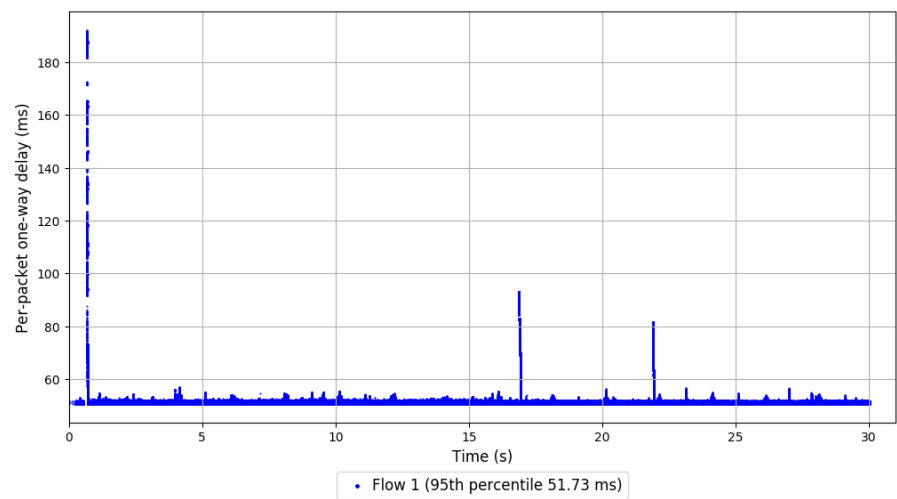
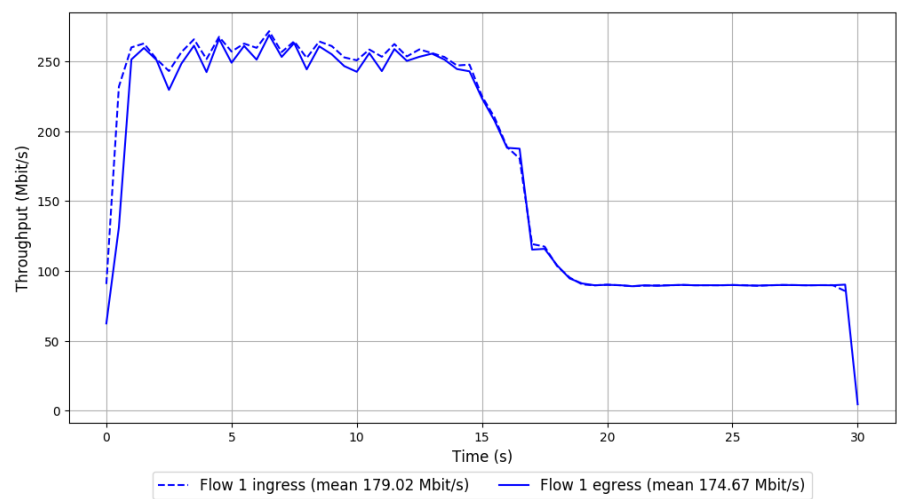
-- Flow 1:

Average throughput: 174.67 Mbit/s

95th percentile per-packet one-way delay: 51.732 ms

Loss rate: 2.46%

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

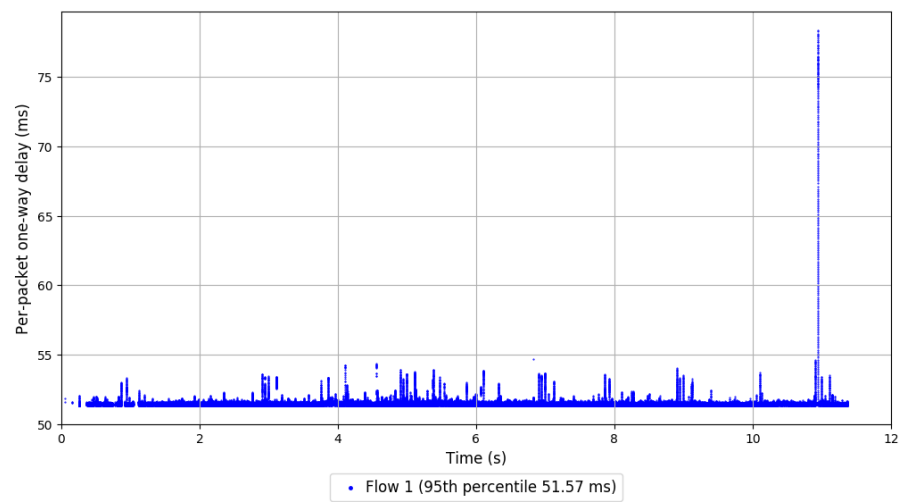
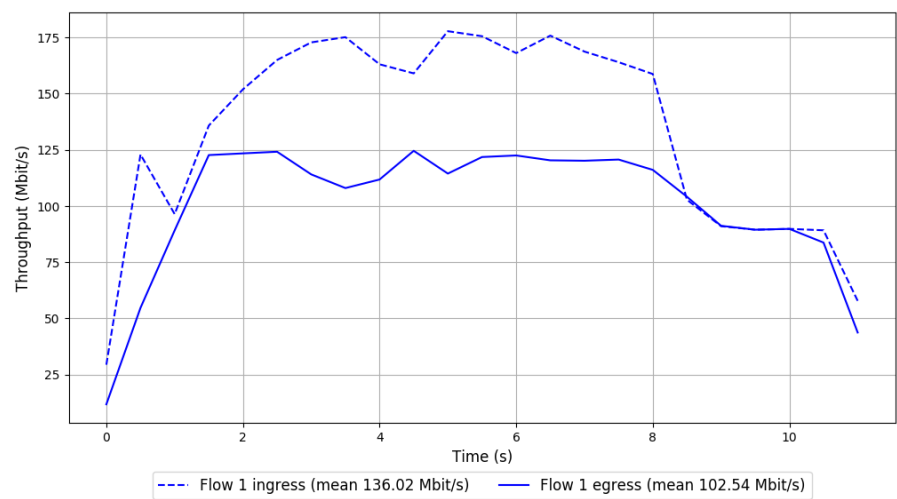


Run 6: Statistics of TaoVA-100x

Start at: 2017-08-11 13:14:13

End at: 2017-08-11 13:14:43

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

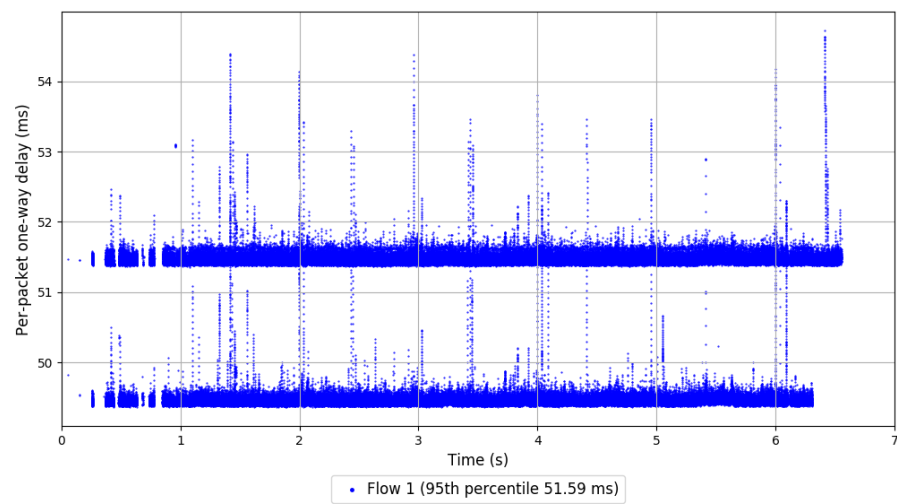
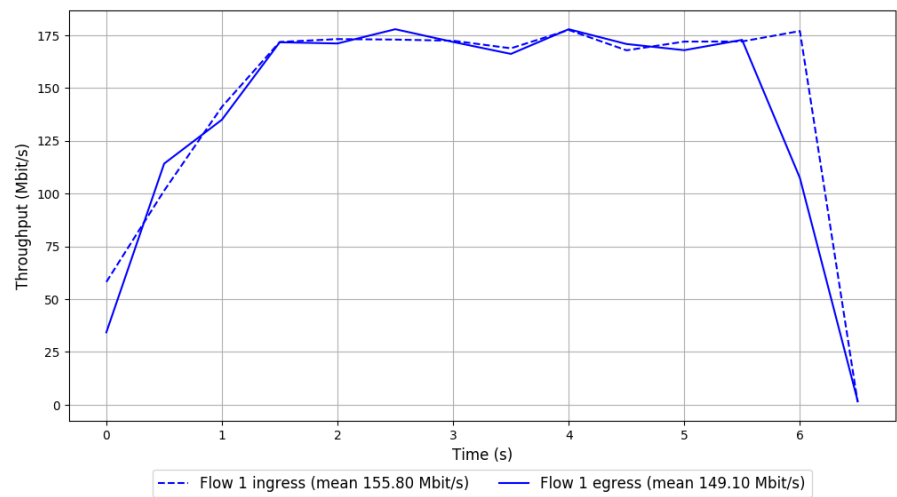


Run 7: Statistics of TaoVA-100x

Start at: 2017-08-11 13:24:18

End at: 2017-08-11 13:24:48

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

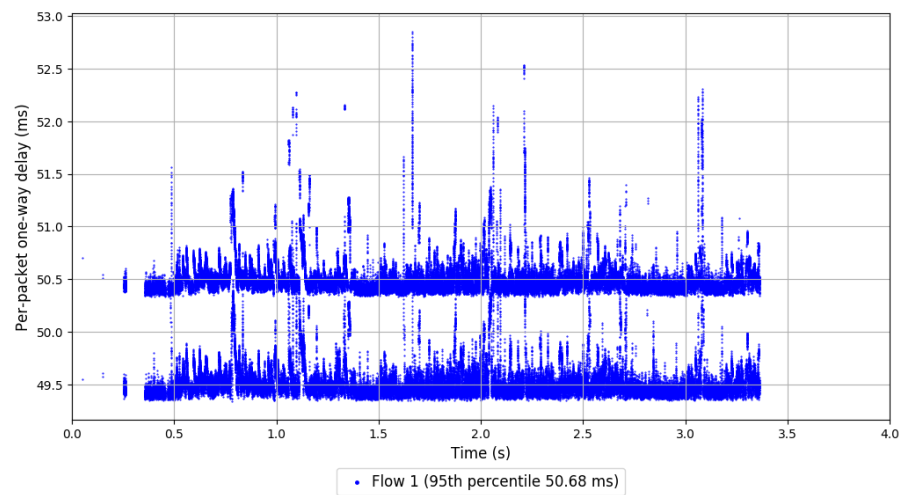
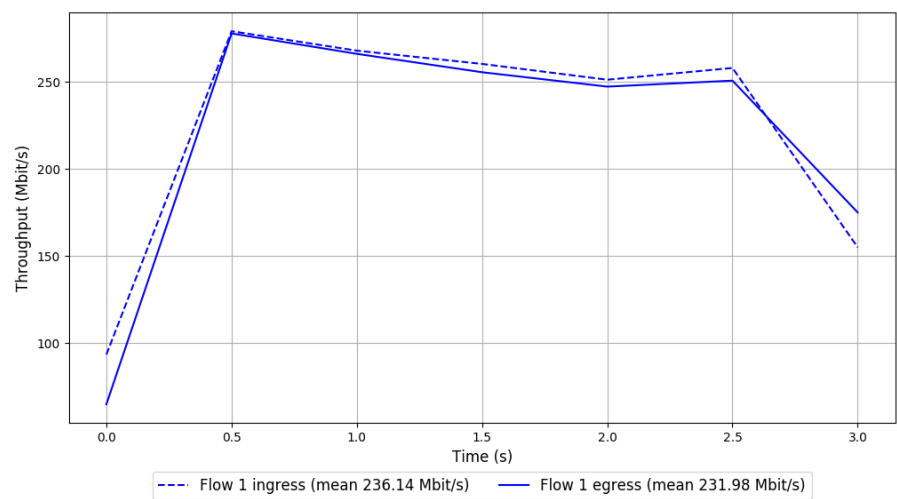


Run 8: Statistics of TaoVA-100x

Start at: 2017-08-11 13:34:30

End at: 2017-08-11 13:35:00

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-08-11 13:44:40

End at: 2017-08-11 13:45:10

Below is generated by plot.py at 2017-08-11 15:18:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 247.41 Mbit/s

95th percentile per-packet one-way delay: 51.558 ms

Loss rate: 0.82%

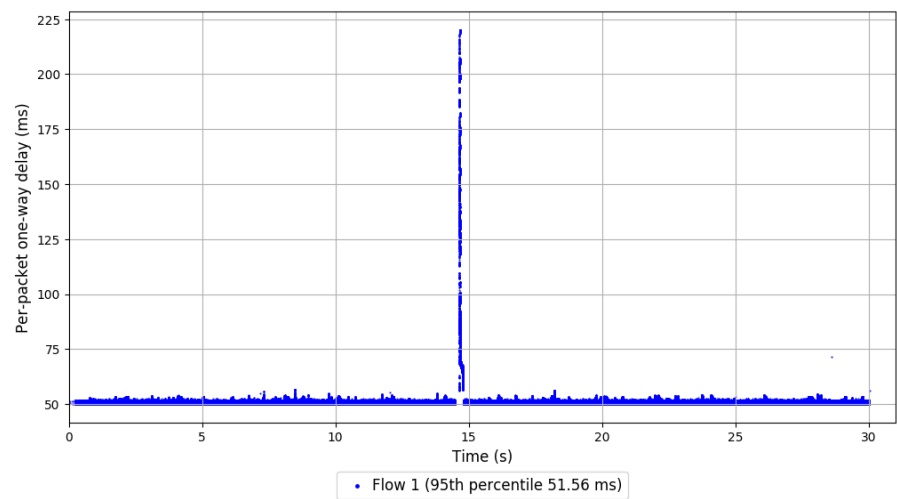
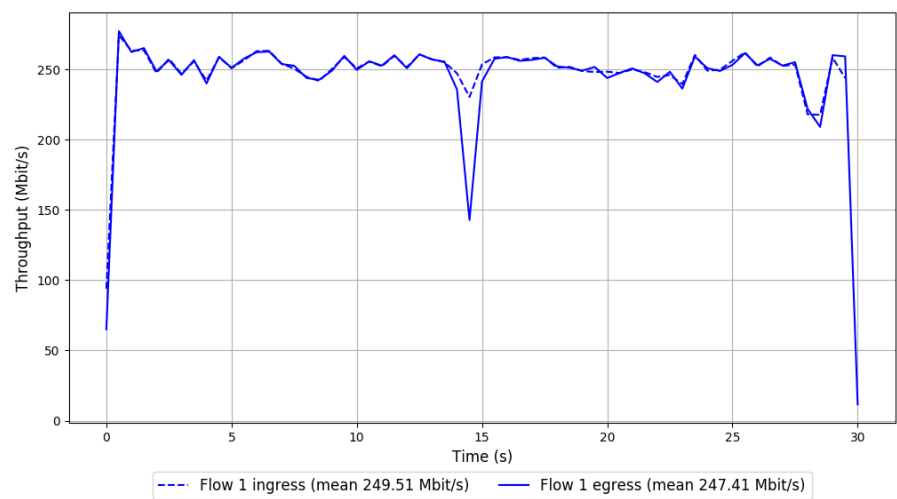
-- Flow 1:

Average throughput: 247.41 Mbit/s

95th percentile per-packet one-way delay: 51.558 ms

Loss rate: 0.82%

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

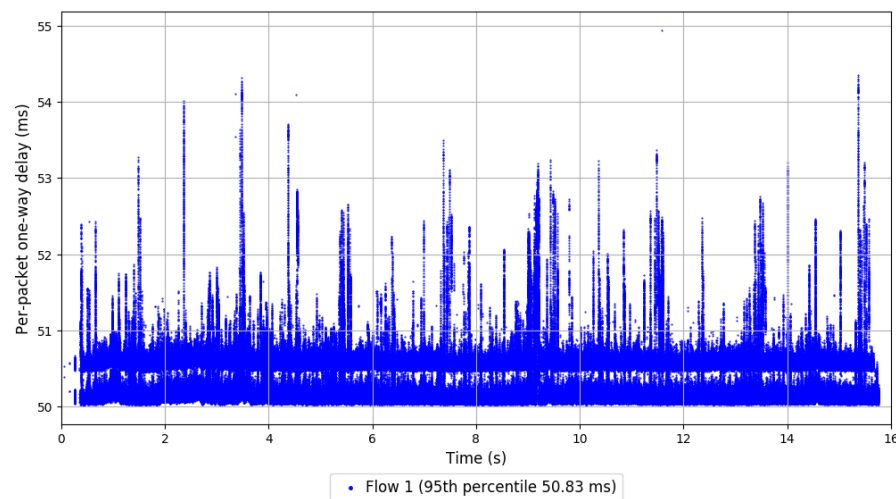
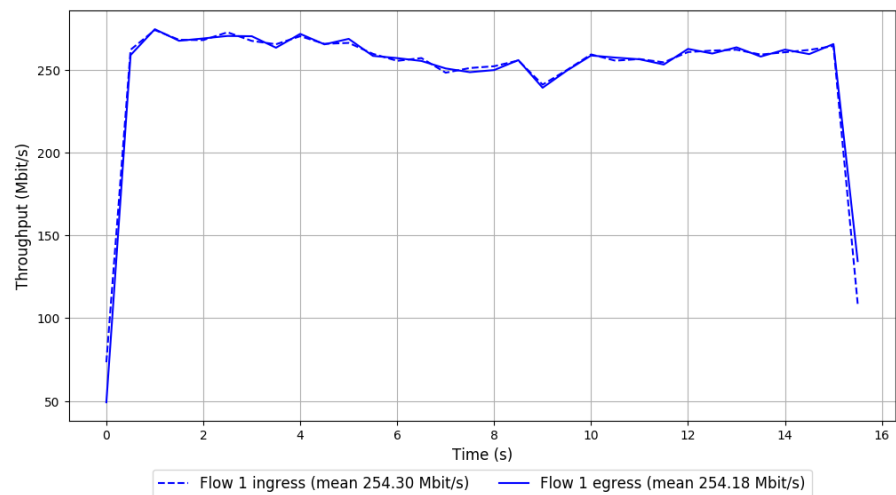


Run 10: Statistics of TaoVA-100x

Start at: 2017-08-11 13:54:52

End at: 2017-08-11 13:55:22

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-11 12:19:46

End at: 2017-08-11 12:20:16

Below is generated by plot.py at 2017-08-11 15:18:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.14 Mbit/s

95th percentile per-packet one-way delay: 51.668 ms

Loss rate: 1.75%

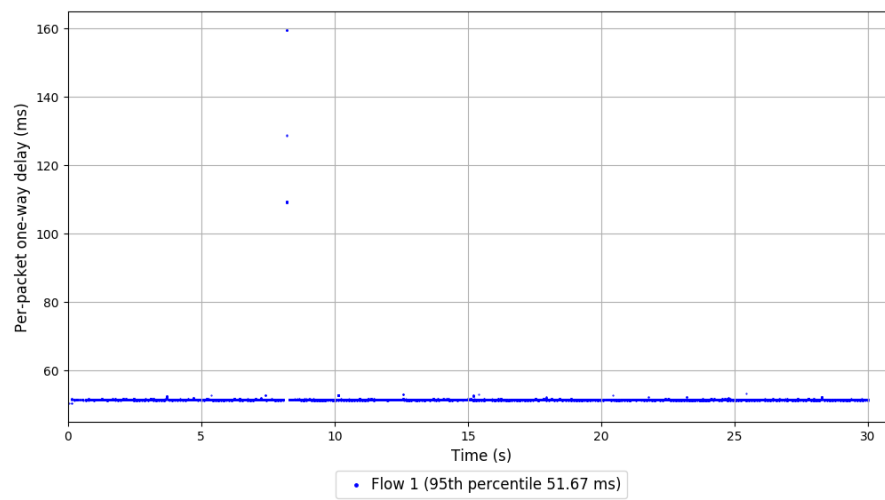
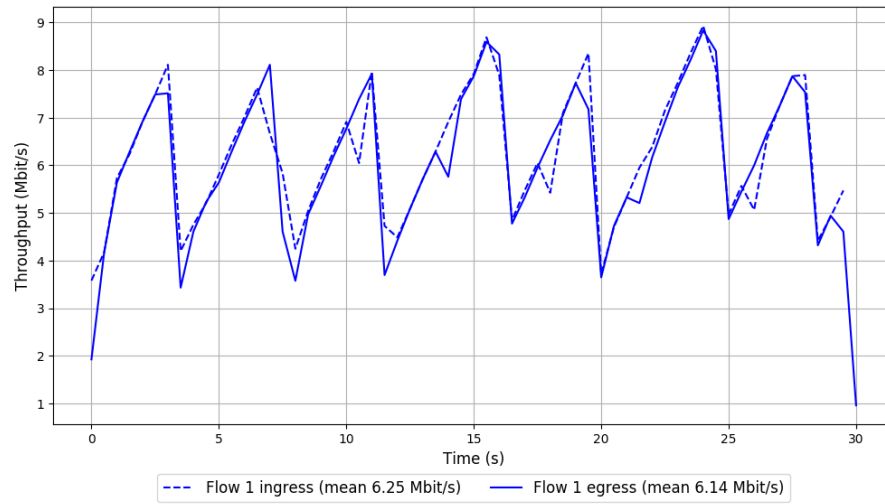
-- Flow 1:

Average throughput: 6.14 Mbit/s

95th percentile per-packet one-way delay: 51.668 ms

Loss rate: 1.75%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-11 12:29:31

End at: 2017-08-11 12:30:01

Below is generated by plot.py at 2017-08-11 15:18:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.63 Mbit/s

95th percentile per-packet one-way delay: 51.218 ms

Loss rate: 1.50%

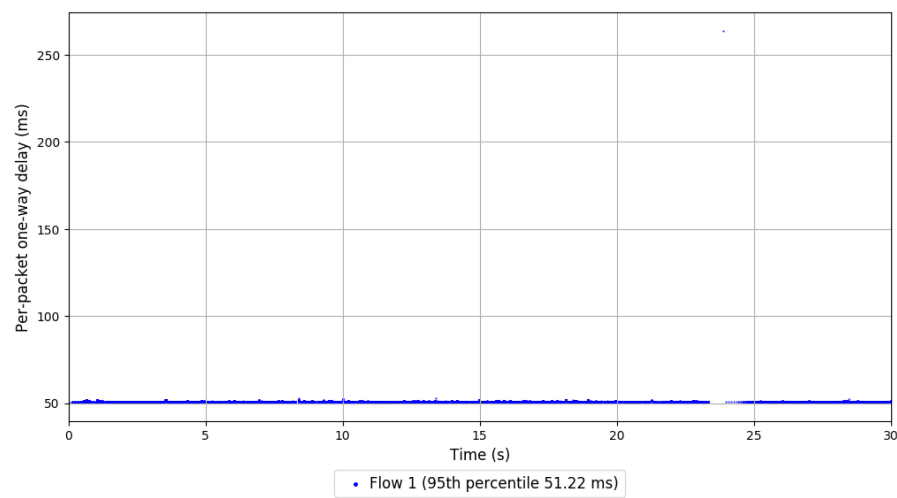
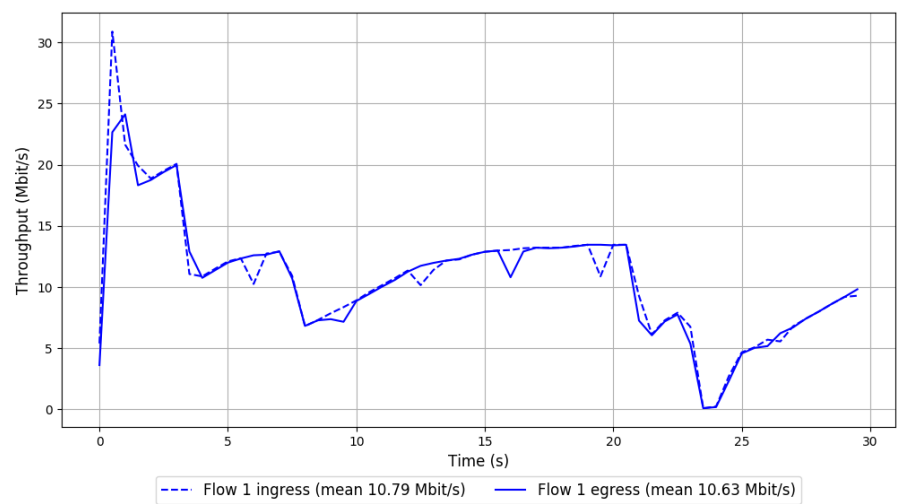
-- Flow 1:

Average throughput: 10.63 Mbit/s

95th percentile per-packet one-way delay: 51.218 ms

Loss rate: 1.50%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-11 12:39:29

End at: 2017-08-11 12:39:59

Below is generated by plot.py at 2017-08-11 15:18:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.32 Mbit/s

95th percentile per-packet one-way delay: 51.659 ms

Loss rate: 2.27%

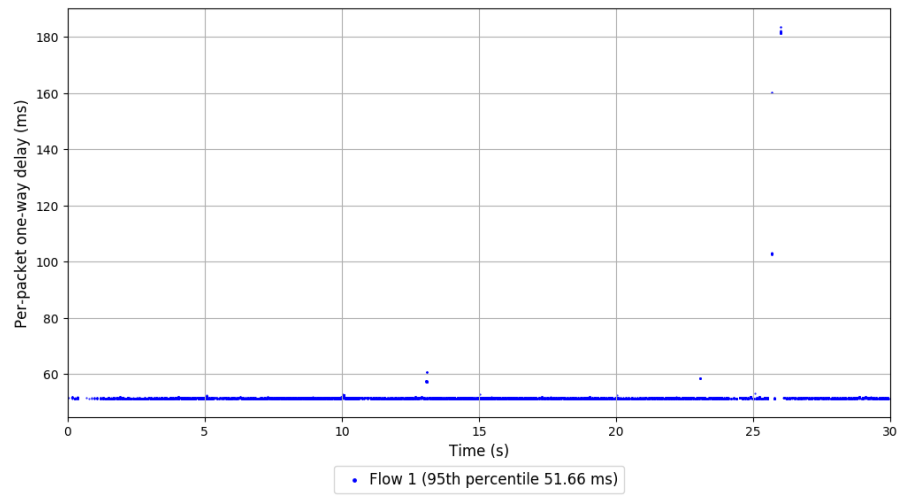
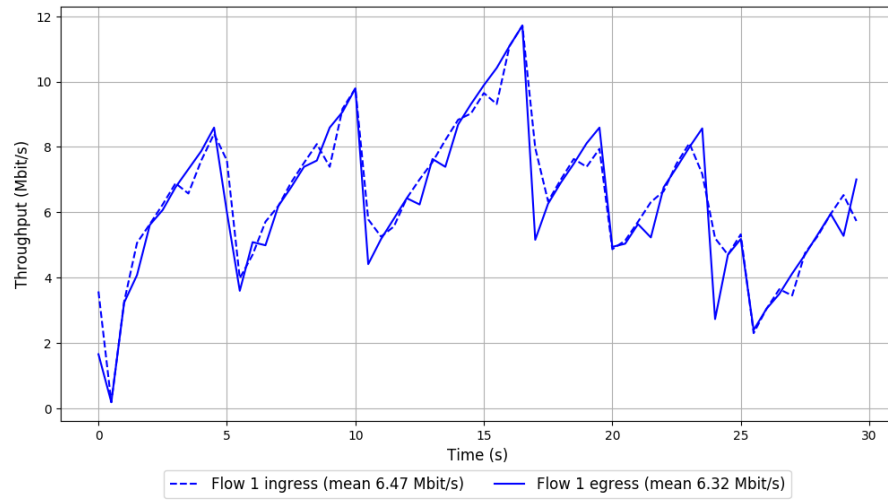
-- Flow 1:

Average throughput: 6.32 Mbit/s

95th percentile per-packet one-way delay: 51.659 ms

Loss rate: 2.27%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-11 12:49:56

End at: 2017-08-11 12:50:26

Below is generated by plot.py at 2017-08-11 15:18:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.28 Mbit/s

95th percentile per-packet one-way delay: 50.818 ms

Loss rate: 1.09%

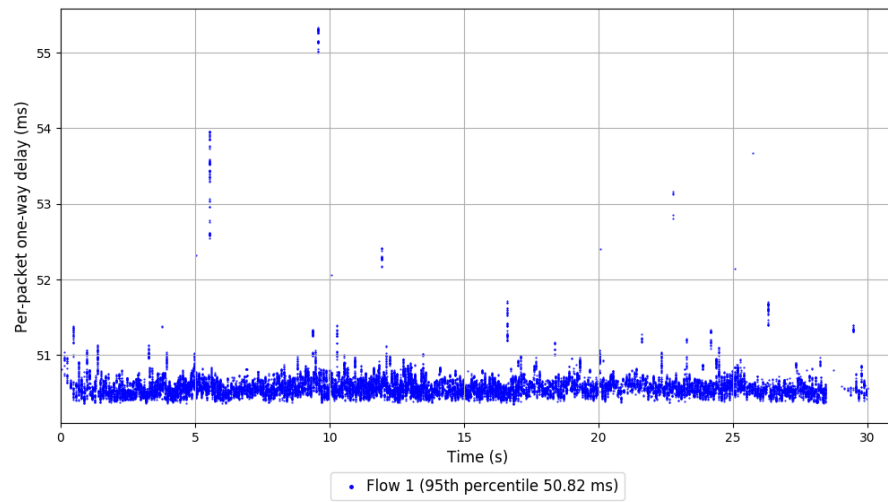
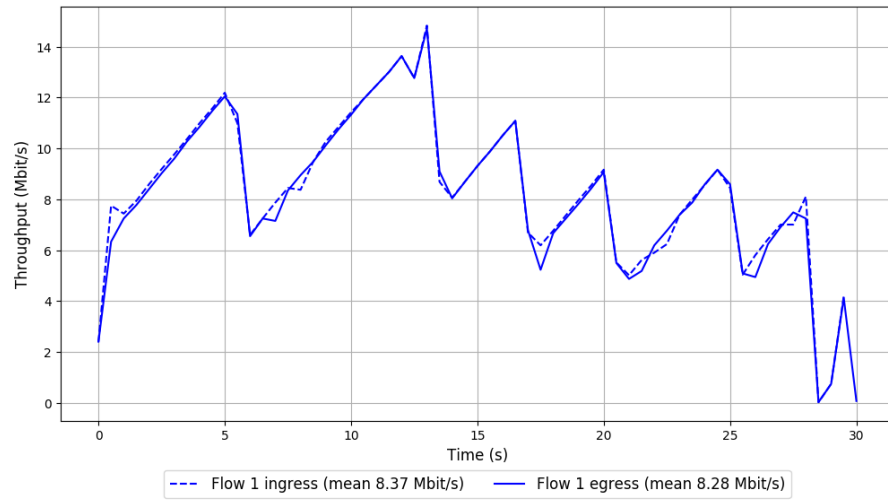
-- Flow 1:

Average throughput: 8.28 Mbit/s

95th percentile per-packet one-way delay: 50.818 ms

Loss rate: 1.09%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-08-11 12:59:40

End at: 2017-08-11 13:00:10

Below is generated by plot.py at 2017-08-11 15:18:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.83 Mbit/s

95th percentile per-packet one-way delay: 50.938 ms

Loss rate: 1.95%

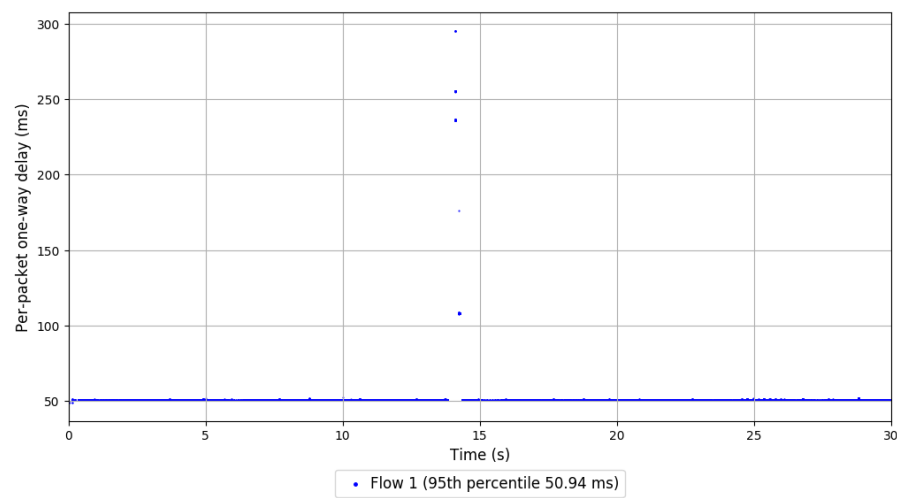
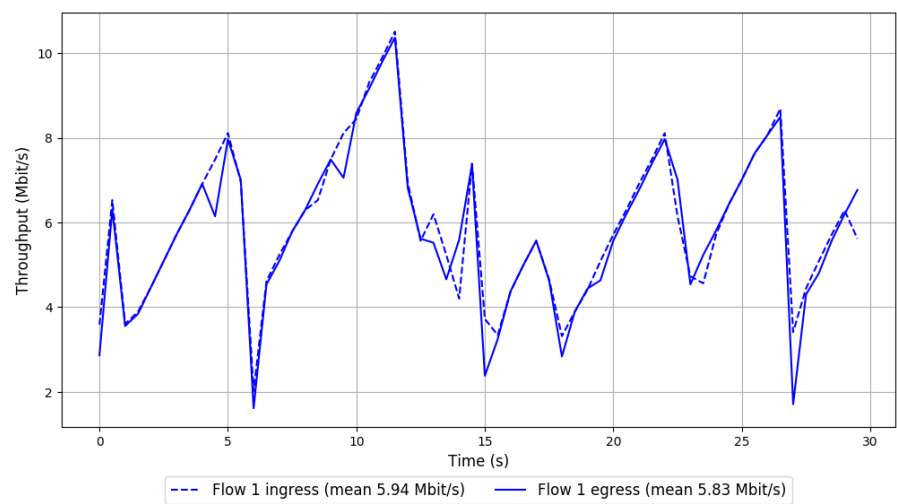
-- Flow 1:

Average throughput: 5.83 Mbit/s

95th percentile per-packet one-way delay: 50.938 ms

Loss rate: 1.95%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-11 13:10:08

End at: 2017-08-11 13:10:38

Below is generated by plot.py at 2017-08-11 15:18:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.11 Mbit/s

95th percentile per-packet one-way delay: 50.750 ms

Loss rate: 2.68%

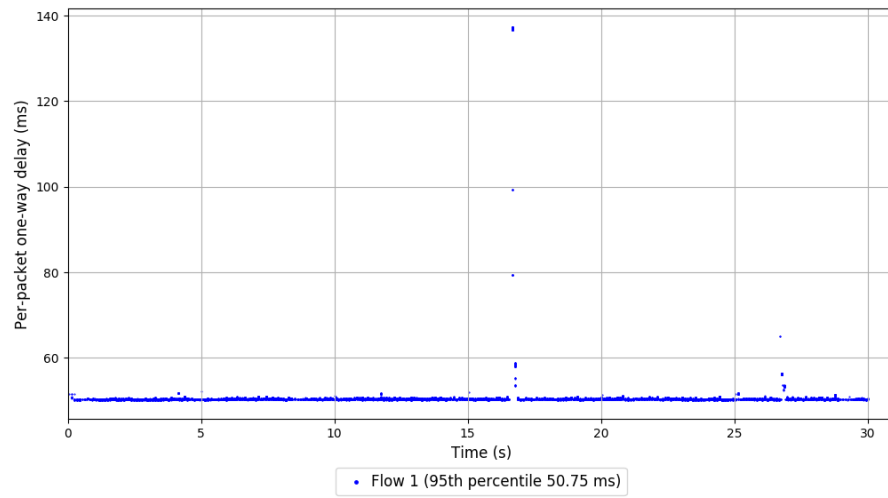
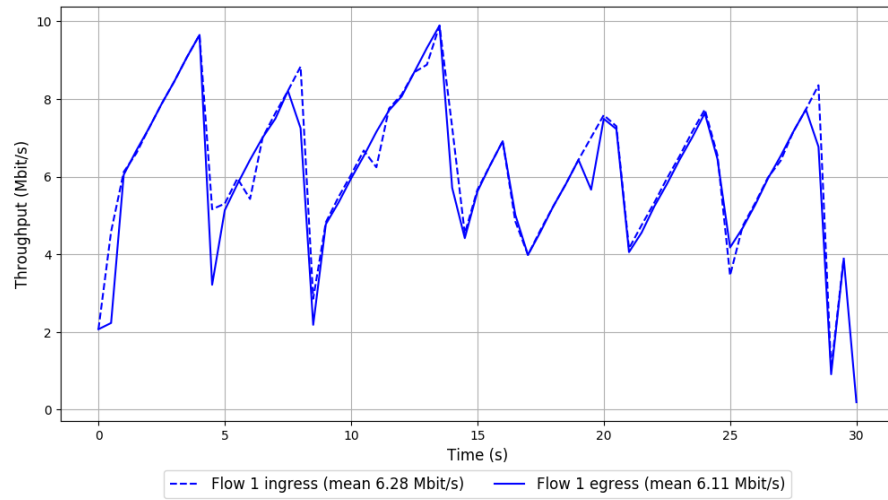
-- Flow 1:

Average throughput: 6.11 Mbit/s

95th percentile per-packet one-way delay: 50.750 ms

Loss rate: 2.68%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-11 13:20:17

End at: 2017-08-11 13:20:47

Below is generated by plot.py at 2017-08-11 15:18:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.56 Mbit/s

95th percentile per-packet one-way delay: 54.478 ms

Loss rate: 1.57%

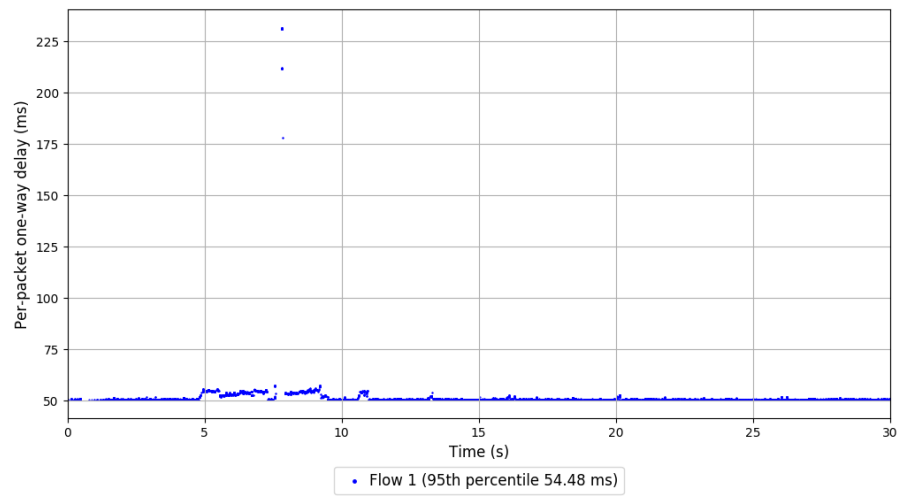
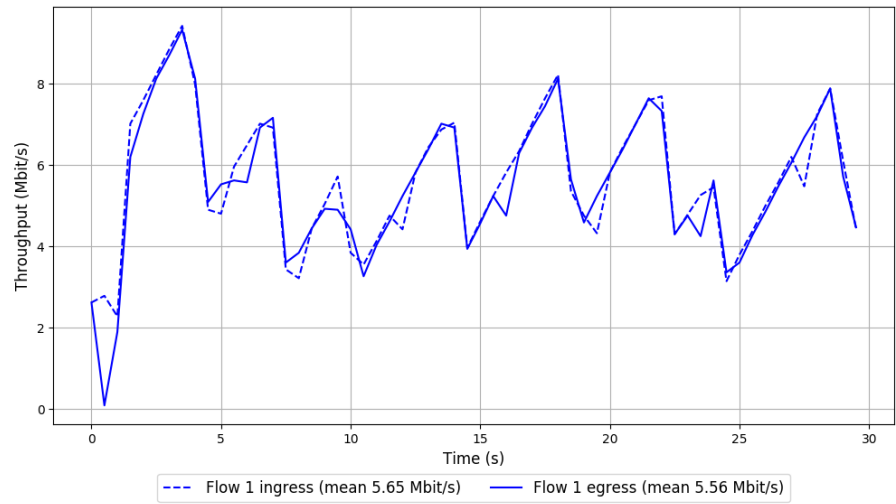
-- Flow 1:

Average throughput: 5.56 Mbit/s

95th percentile per-packet one-way delay: 54.478 ms

Loss rate: 1.57%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-11 13:30:20

End at: 2017-08-11 13:30:50

Below is generated by plot.py at 2017-08-11 15:18:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 50.877 ms

Loss rate: 0.66%

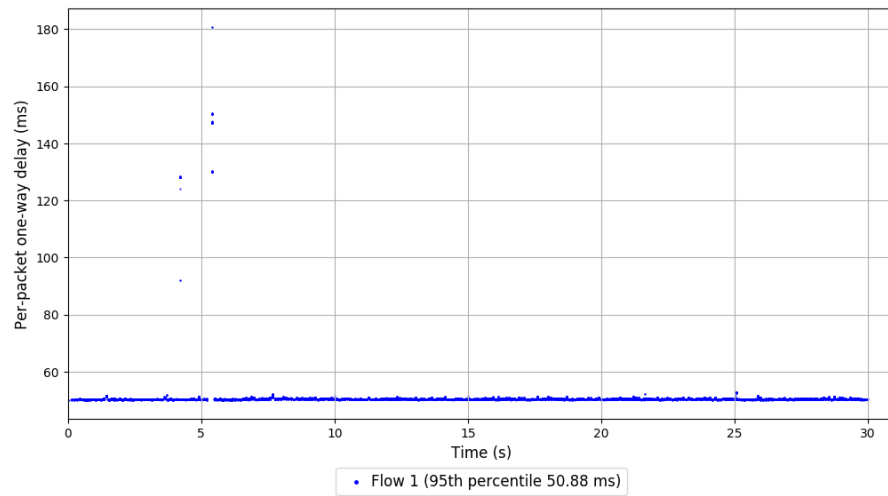
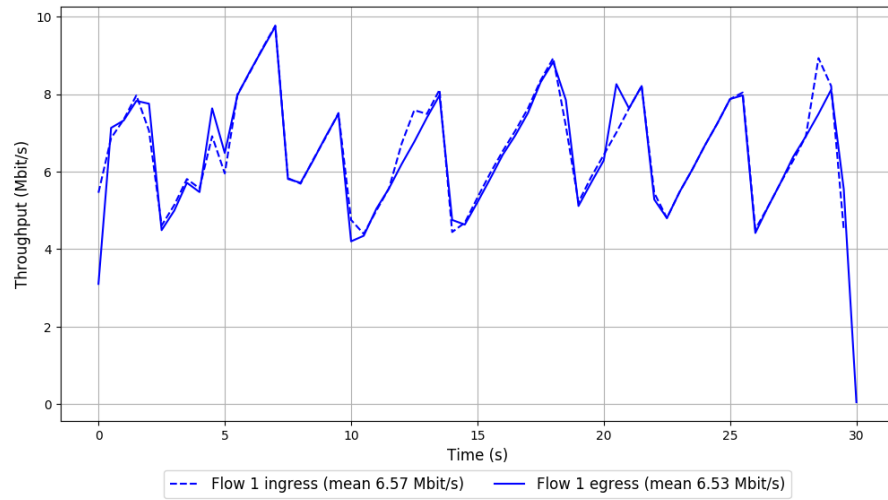
-- Flow 1:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 50.877 ms

Loss rate: 0.66%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-11 13:40:34

End at: 2017-08-11 13:41:04

Below is generated by plot.py at 2017-08-11 15:18:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.09 Mbit/s

95th percentile per-packet one-way delay: 50.875 ms

Loss rate: 1.33%

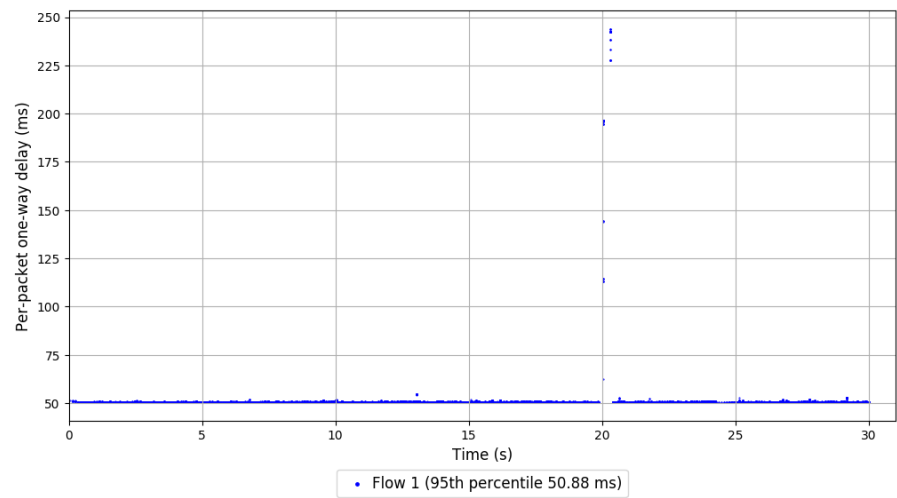
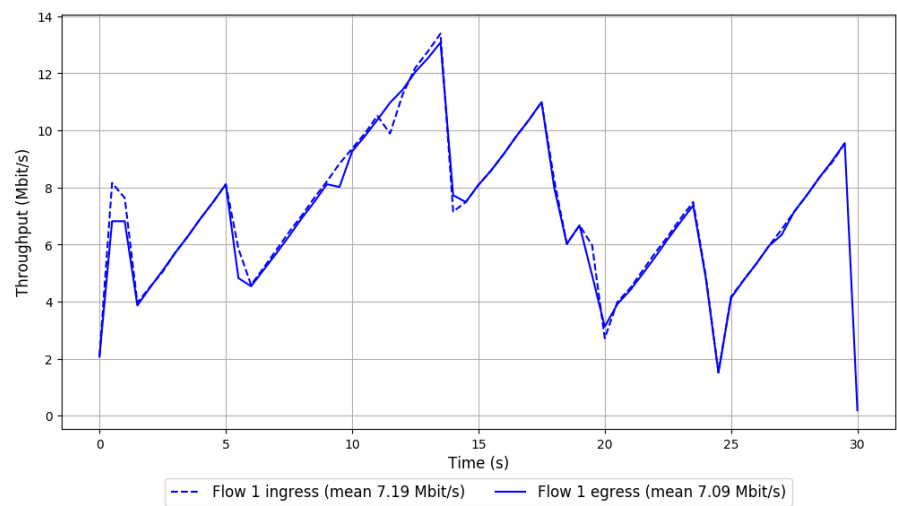
-- Flow 1:

Average throughput: 7.09 Mbit/s

95th percentile per-packet one-way delay: 50.875 ms

Loss rate: 1.33%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-11 13:50:38

End at: 2017-08-11 13:51:08

Below is generated by plot.py at 2017-08-11 15:18:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.41 Mbit/s

95th percentile per-packet one-way delay: 50.887 ms

Loss rate: 0.73%

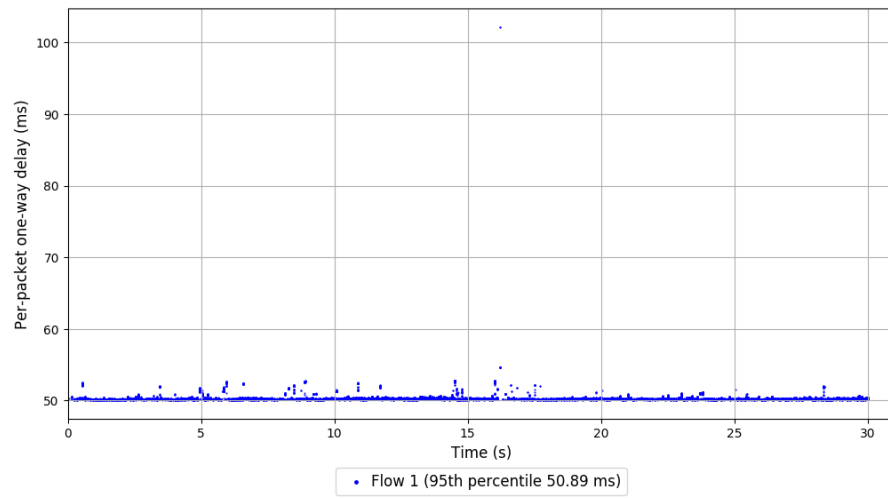
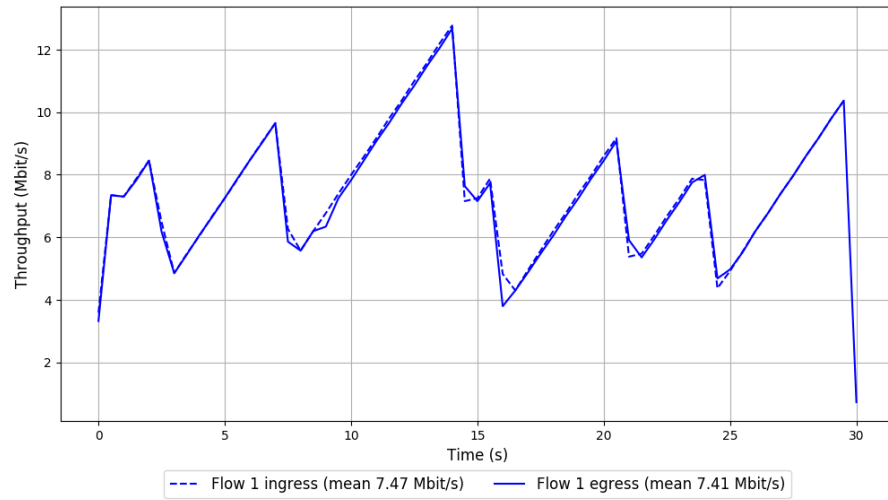
-- Flow 1:

Average throughput: 7.41 Mbit/s

95th percentile per-packet one-way delay: 50.887 ms

Loss rate: 0.73%

Run 10: Report of TCP Vegas — Data Link

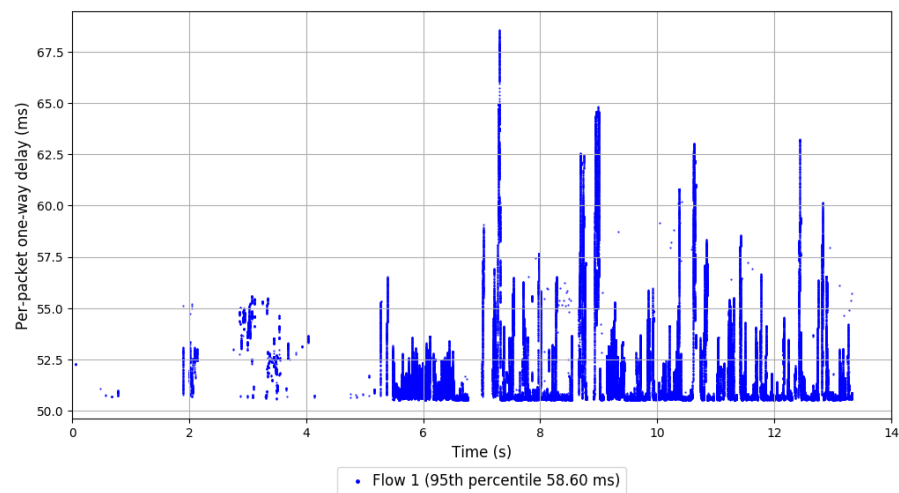
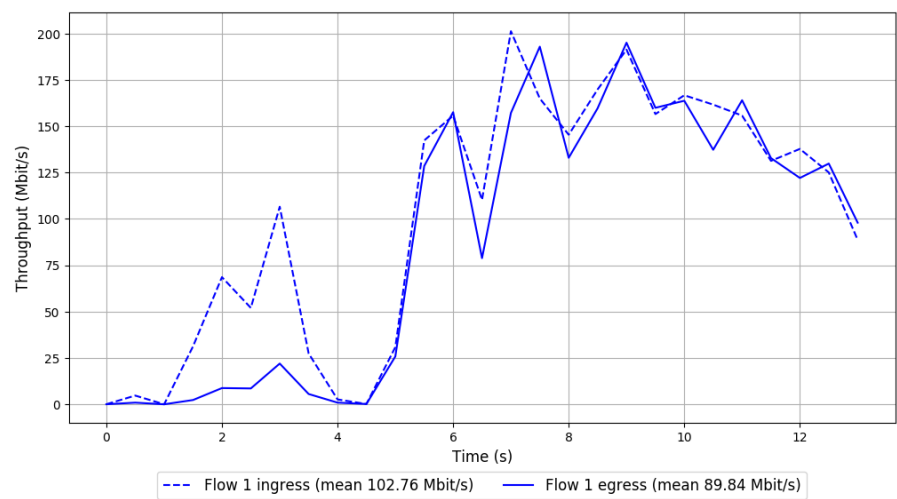


Run 1: Statistics of Verus

Start at: 2017-08-11 12:23:09

End at: 2017-08-11 12:23:39

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-11 12:32:59

End at: 2017-08-11 12:33:29

Below is generated by plot.py at 2017-08-11 15:18:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.81 Mbit/s

95th percentile per-packet one-way delay: 58.661 ms

Loss rate: 8.77%

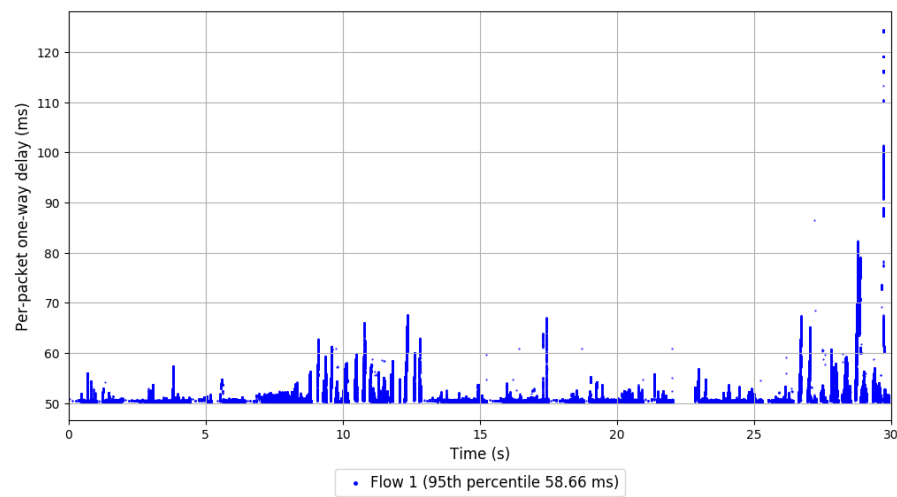
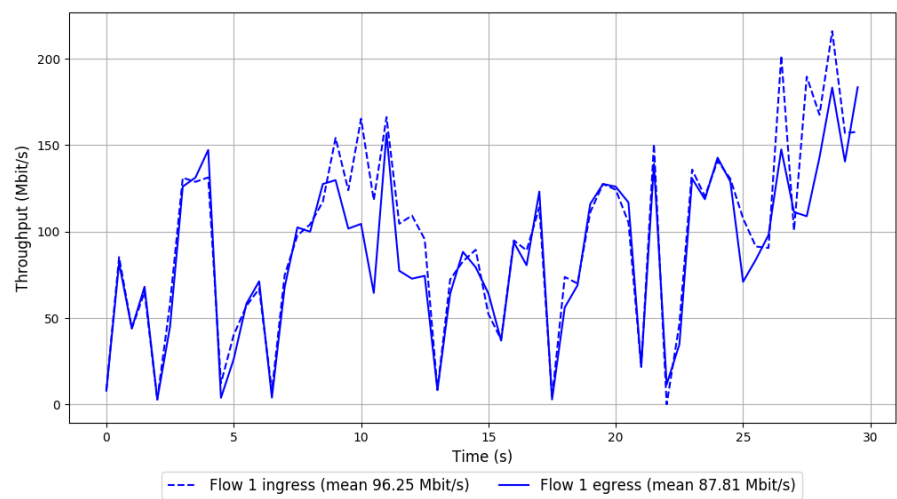
-- Flow 1:

Average throughput: 87.81 Mbit/s

95th percentile per-packet one-way delay: 58.661 ms

Loss rate: 8.77%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-11 12:42:52

End at: 2017-08-11 12:43:22

Below is generated by plot.py at 2017-08-11 15:19:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.57 Mbit/s

95th percentile per-packet one-way delay: 54.939 ms

Loss rate: 3.87%

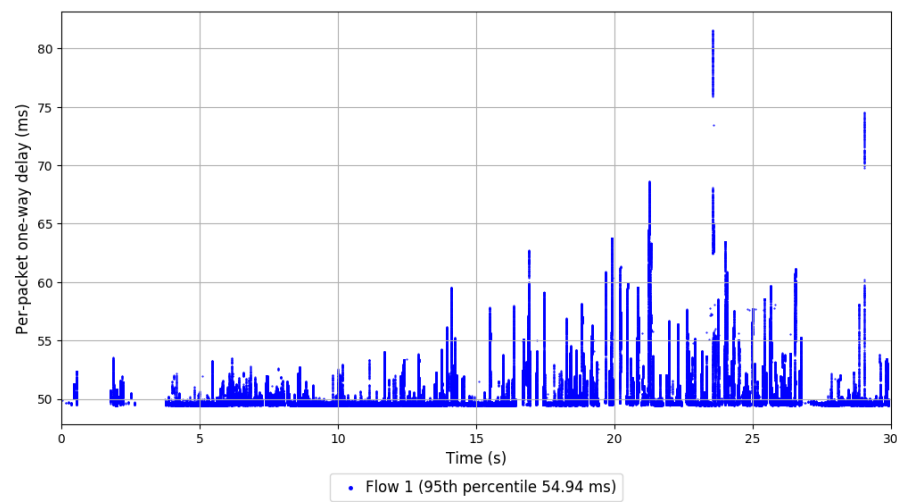
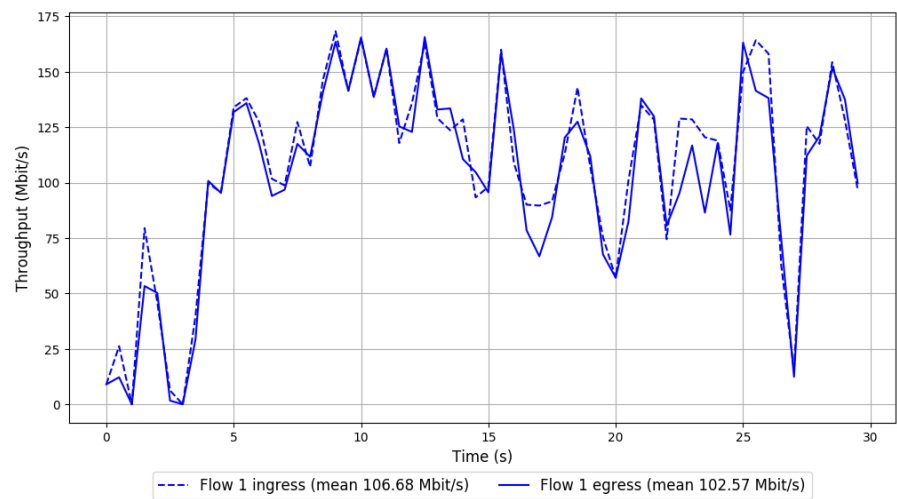
-- Flow 1:

Average throughput: 102.57 Mbit/s

95th percentile per-packet one-way delay: 54.939 ms

Loss rate: 3.87%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-11 12:53:17

End at: 2017-08-11 12:53:48

Below is generated by plot.py at 2017-08-11 15:19:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.16 Mbit/s

95th percentile per-packet one-way delay: 61.891 ms

Loss rate: 76.38%

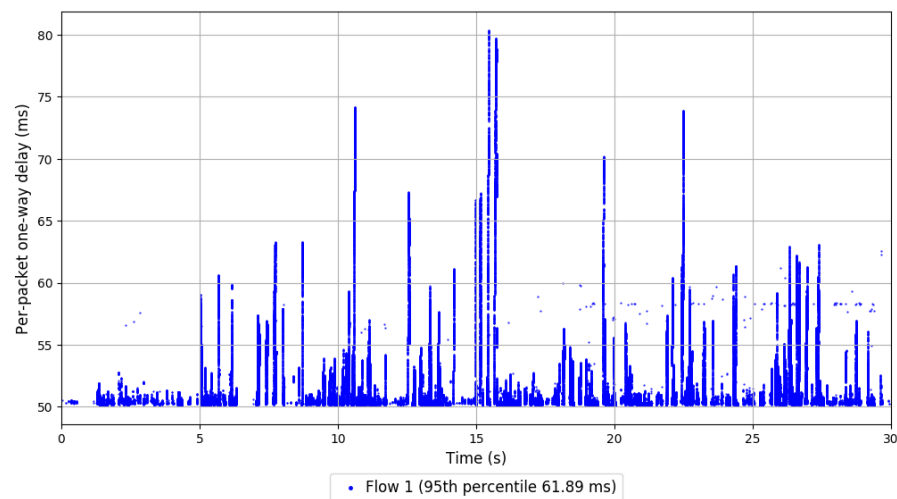
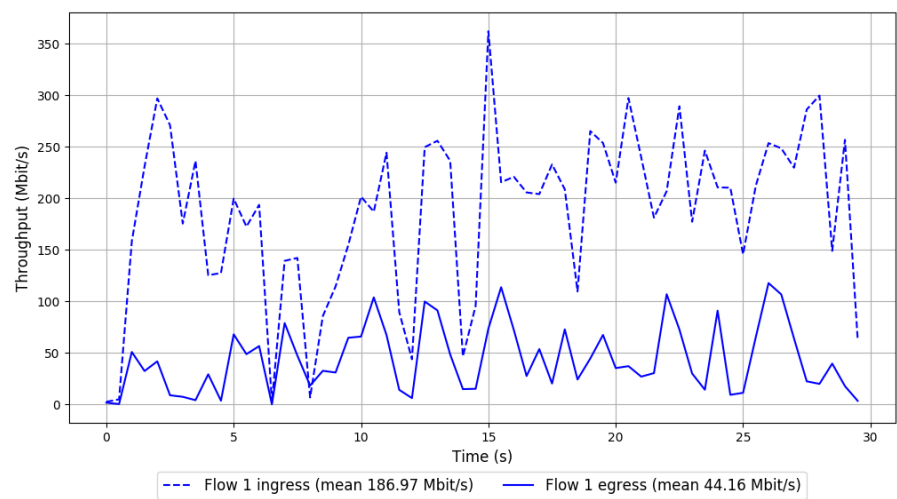
-- Flow 1:

Average throughput: 44.16 Mbit/s

95th percentile per-packet one-way delay: 61.891 ms

Loss rate: 76.38%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-11 13:03:14

End at: 2017-08-11 13:03:44

Below is generated by plot.py at 2017-08-11 15:19:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.67 Mbit/s

95th percentile per-packet one-way delay: 52.316 ms

Loss rate: 66.68%

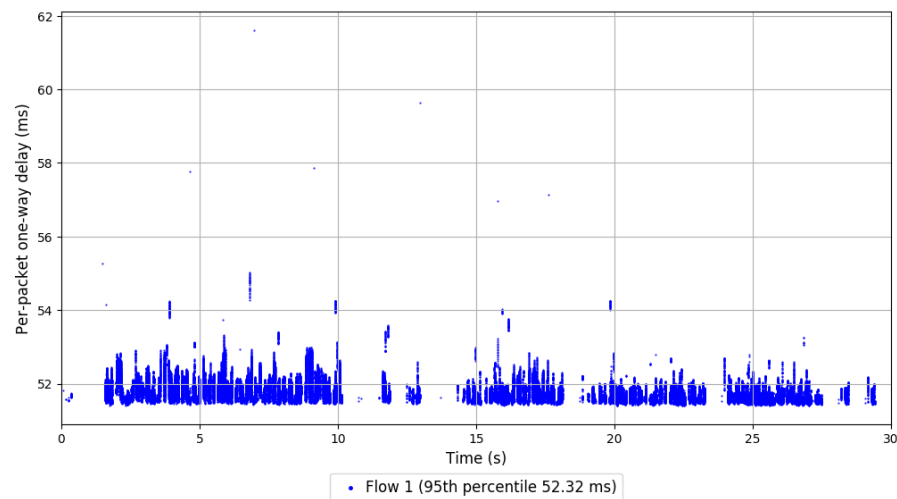
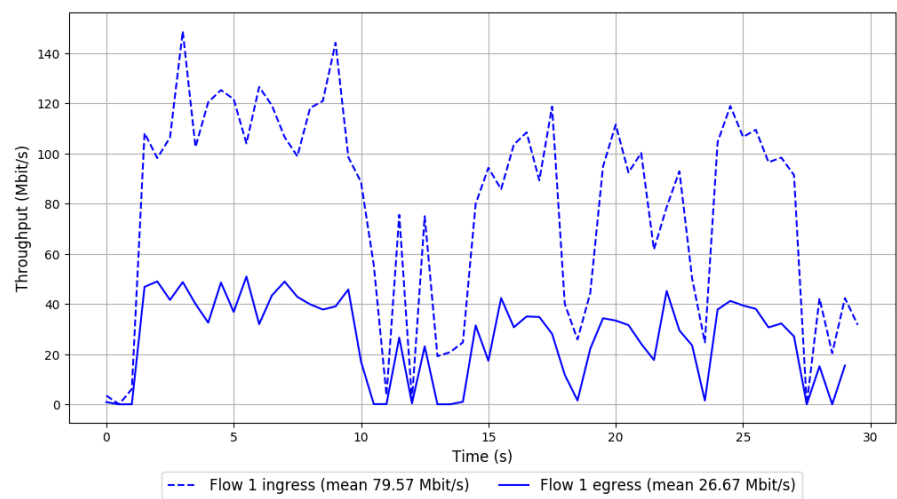
-- Flow 1:

Average throughput: 26.67 Mbit/s

95th percentile per-packet one-way delay: 52.316 ms

Loss rate: 66.68%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-11 13:13:32

End at: 2017-08-11 13:14:02

Below is generated by plot.py at 2017-08-11 15:19:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.98 Mbit/s

95th percentile per-packet one-way delay: 57.416 ms

Loss rate: 89.15%

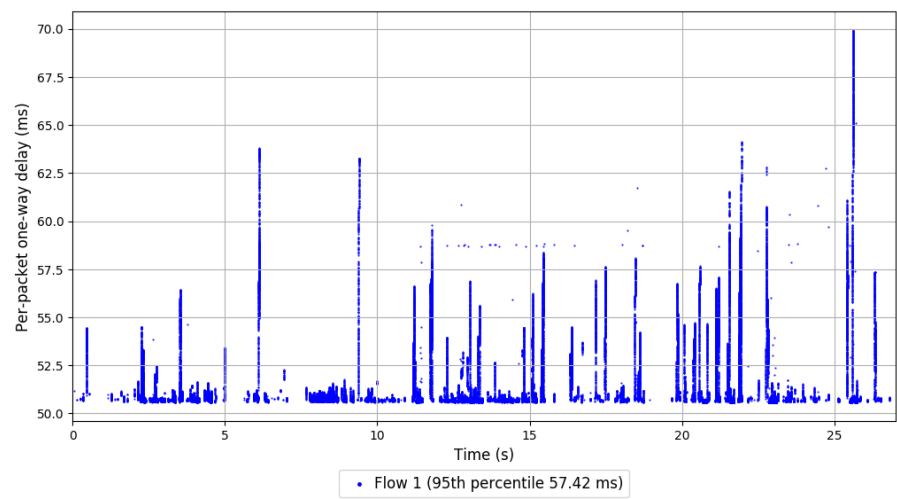
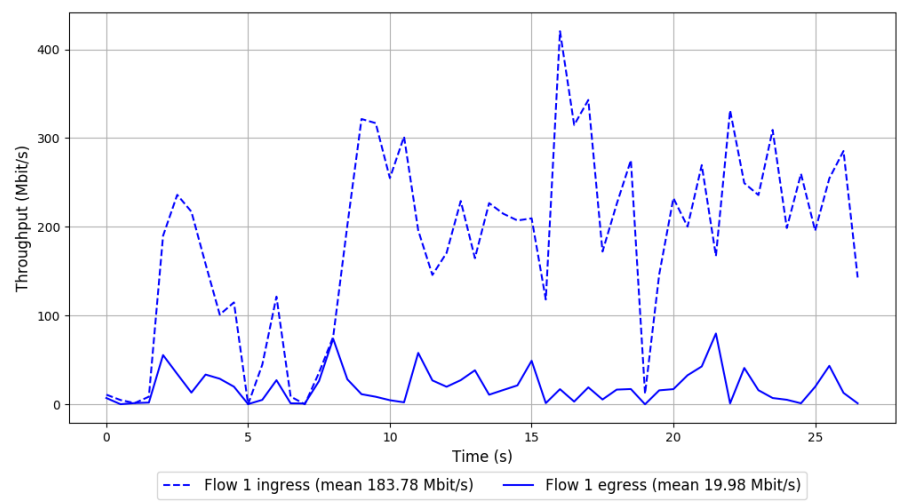
-- Flow 1:

Average throughput: 19.98 Mbit/s

95th percentile per-packet one-way delay: 57.416 ms

Loss rate: 89.15%

Run 6: Report of Verus — Data Link

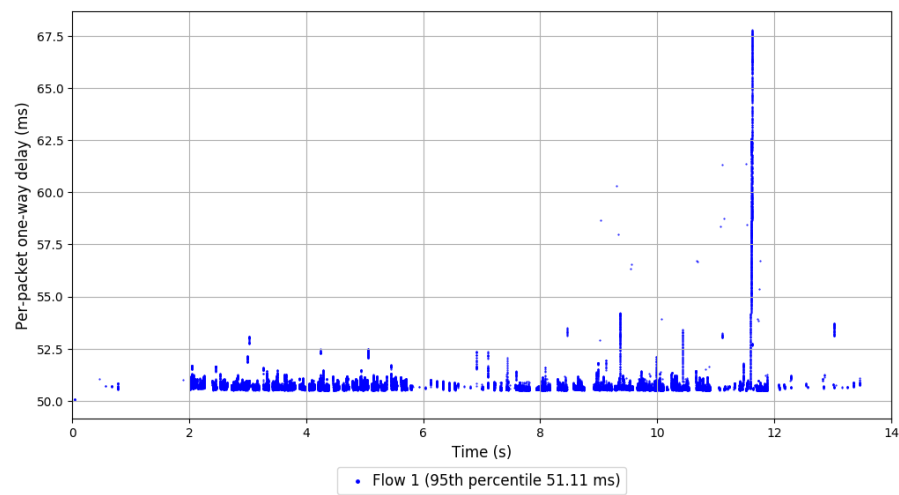
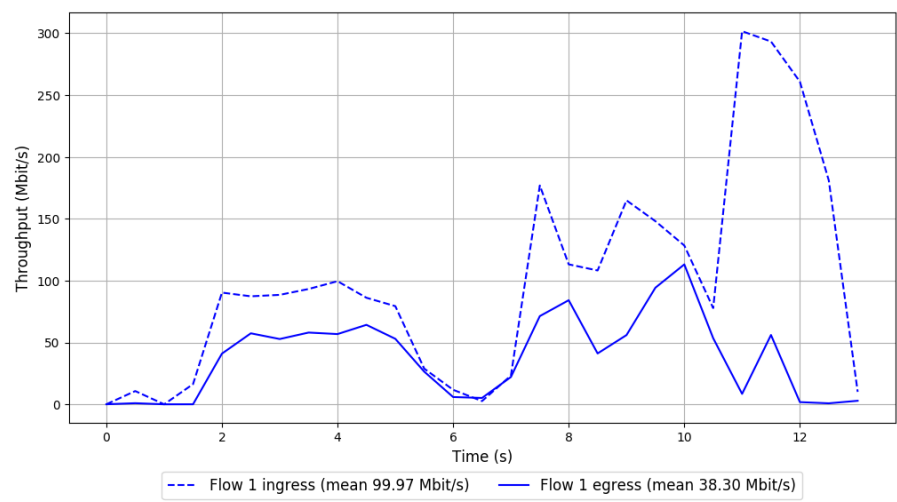


Run 7: Statistics of Verus

Start at: 2017-08-11 13:23:39

End at: 2017-08-11 13:24:09

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-11 13:33:51

End at: 2017-08-11 13:34:21

Below is generated by plot.py at 2017-08-11 15:19:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.26 Mbit/s

95th percentile per-packet one-way delay: 57.996 ms

Loss rate: 96.29%

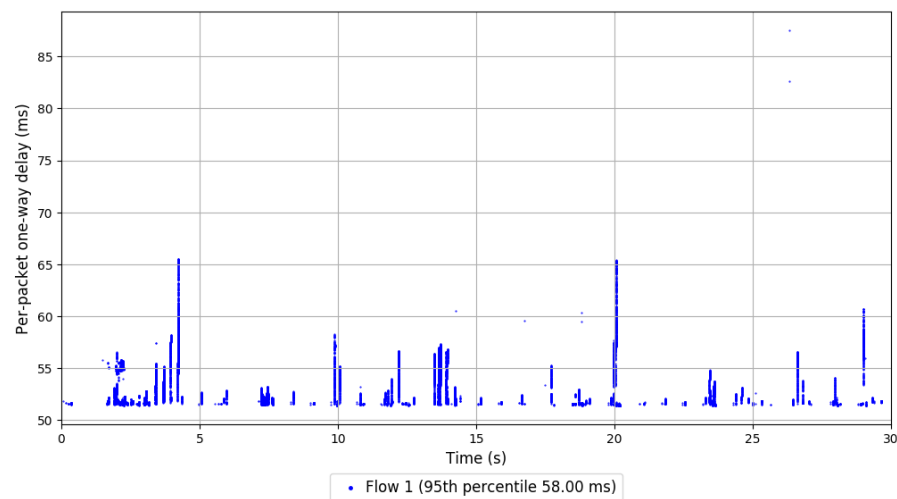
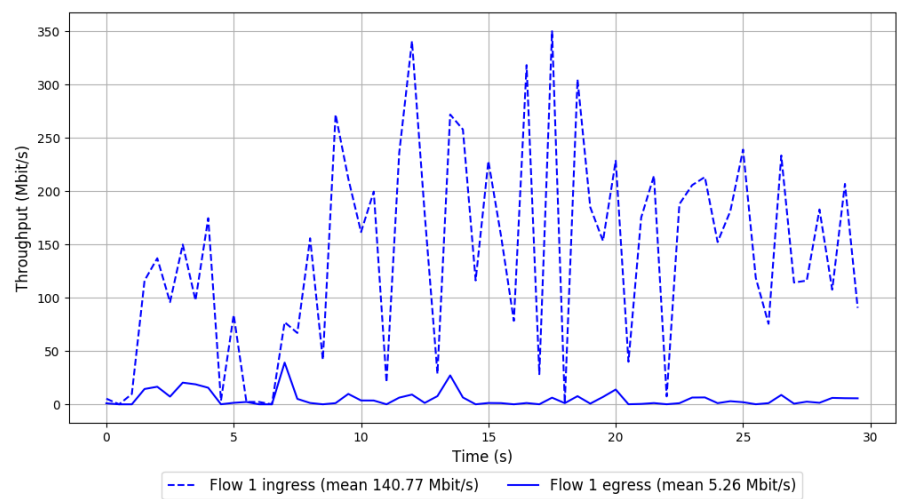
-- Flow 1:

Average throughput: 5.26 Mbit/s

95th percentile per-packet one-way delay: 57.996 ms

Loss rate: 96.29%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-08-11 13:43:58

End at: 2017-08-11 13:44:28

Below is generated by plot.py at 2017-08-11 15:19:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.58 Mbit/s

95th percentile per-packet one-way delay: 53.147 ms

Loss rate: 79.68%

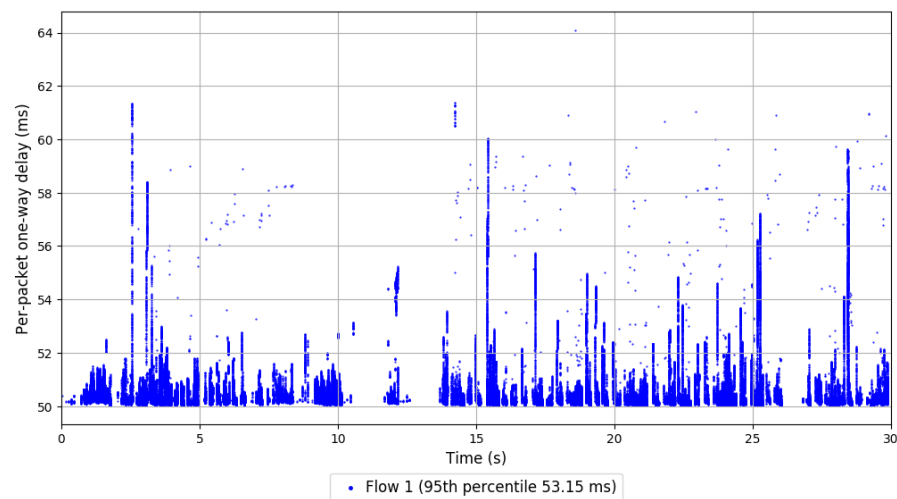
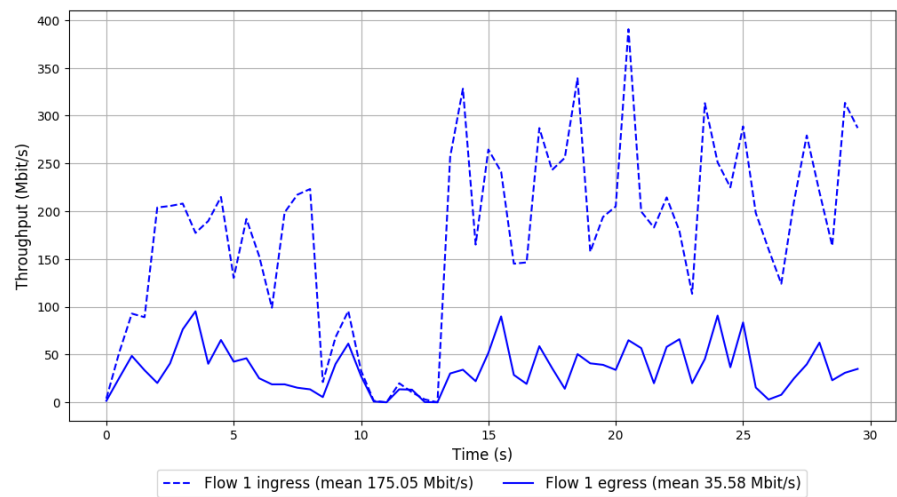
-- Flow 1:

Average throughput: 35.58 Mbit/s

95th percentile per-packet one-way delay: 53.147 ms

Loss rate: 79.68%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-08-11 13:54:12

End at: 2017-08-11 13:54:42

Below is generated by plot.py at 2017-08-11 15:19:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.12 Mbit/s

95th percentile per-packet one-way delay: 54.831 ms

Loss rate: 85.00%

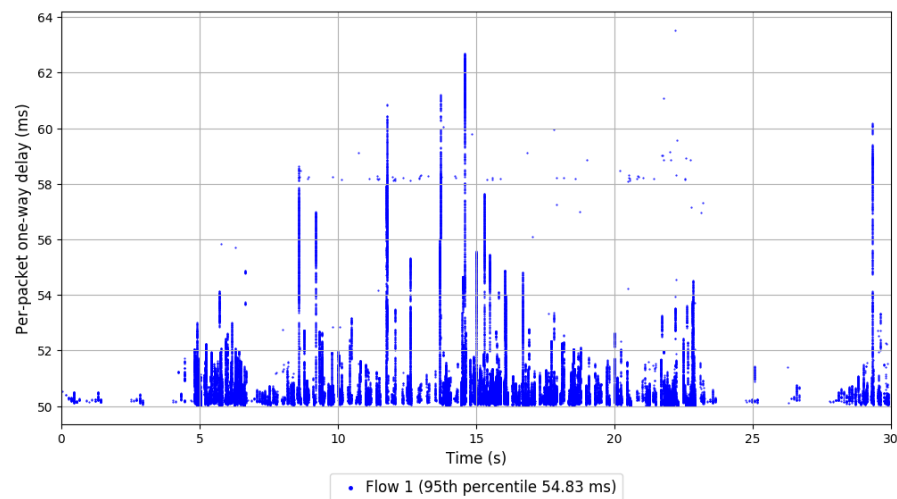
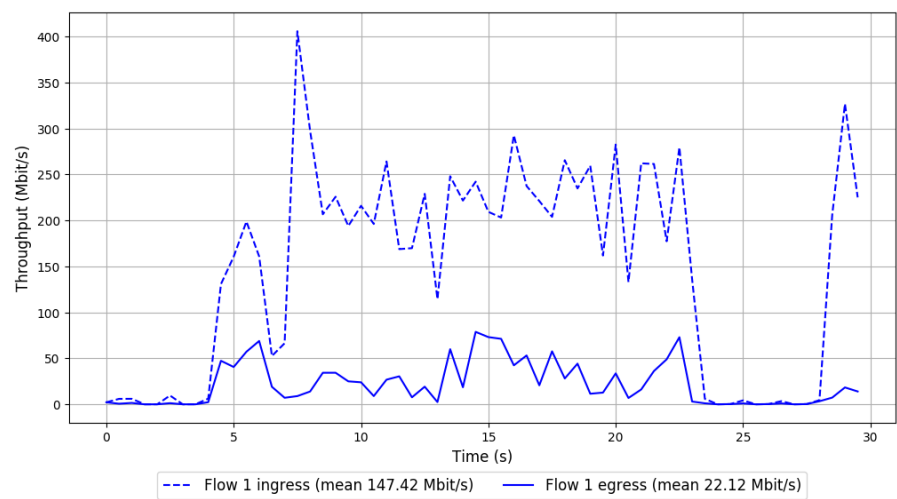
-- Flow 1:

Average throughput: 22.12 Mbit/s

95th percentile per-packet one-way delay: 54.831 ms

Loss rate: 85.00%

Run 10: Report of Verus — Data Link

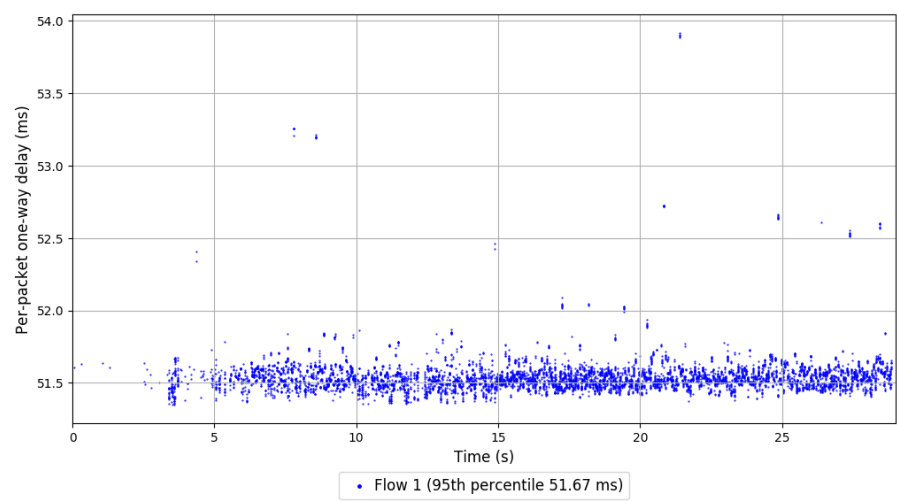
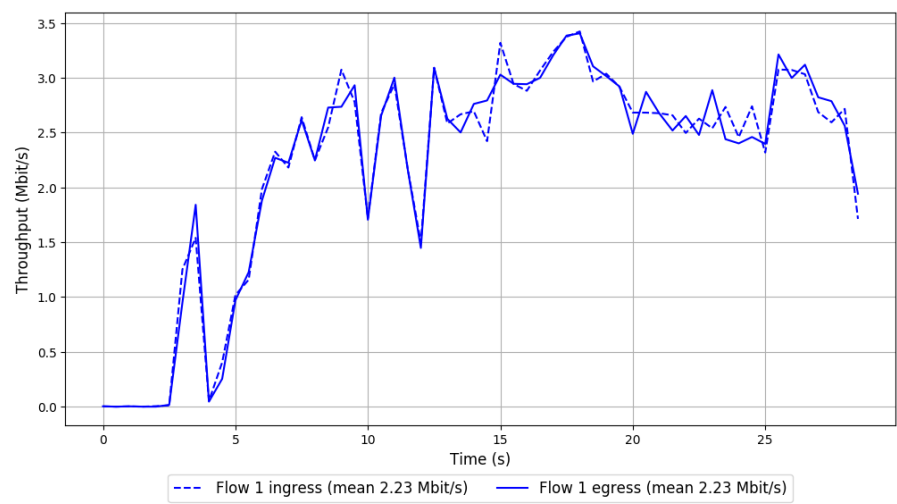


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-11 12:28:54
End at: 2017-08-11 12:29:24

# Below is generated by plot.py at 2017-08-11 15:19:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 51.668 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 51.668 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

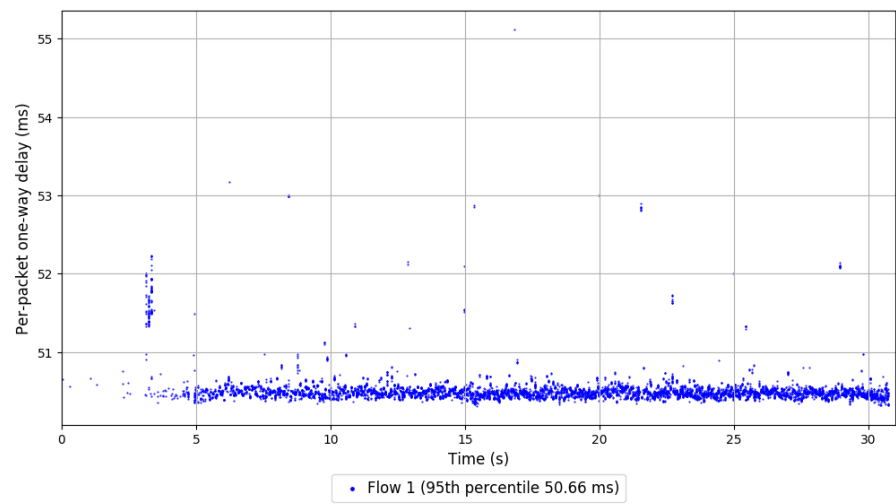
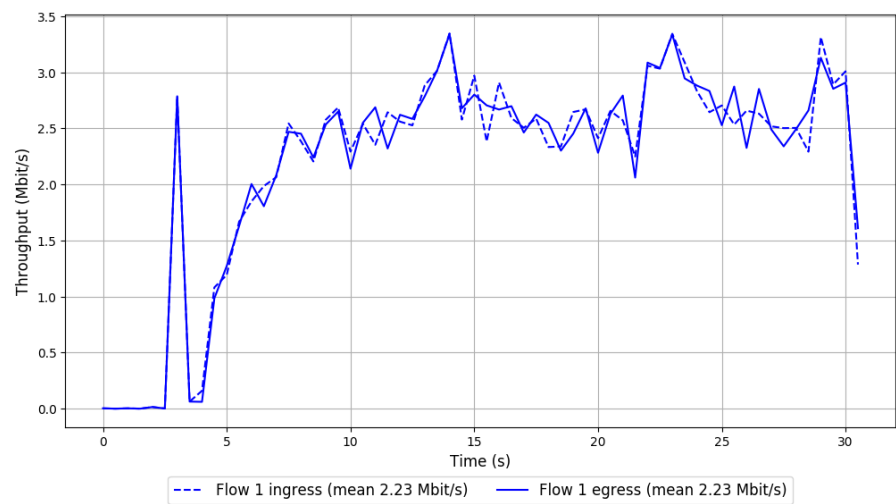


```
Run 2: Statistics of WebRTC media

Start at: 2017-08-11 12:38:52
End at: 2017-08-11 12:39:22

# Below is generated by plot.py at 2017-08-11 15:19:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 50.659 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 50.659 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-11 12:49:19

End at: 2017-08-11 12:49:49

Below is generated by plot.py at 2017-08-11 15:19:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

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

Loss rate: 0.00%

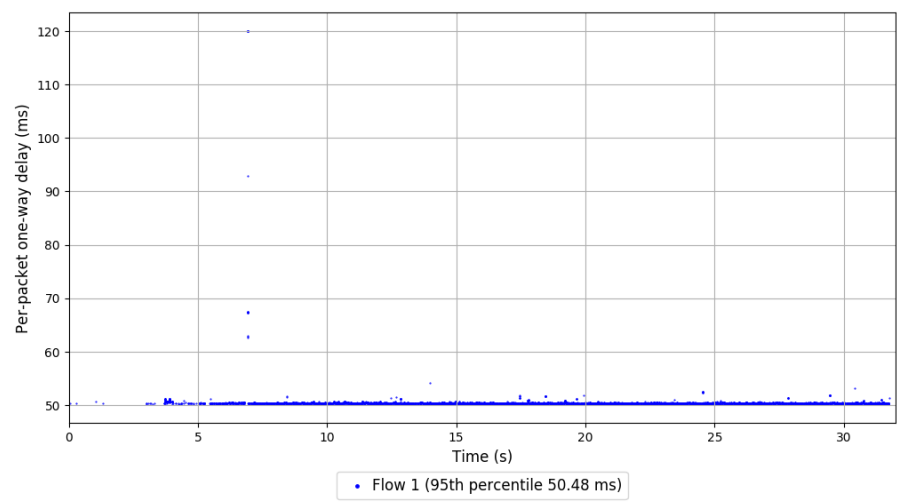
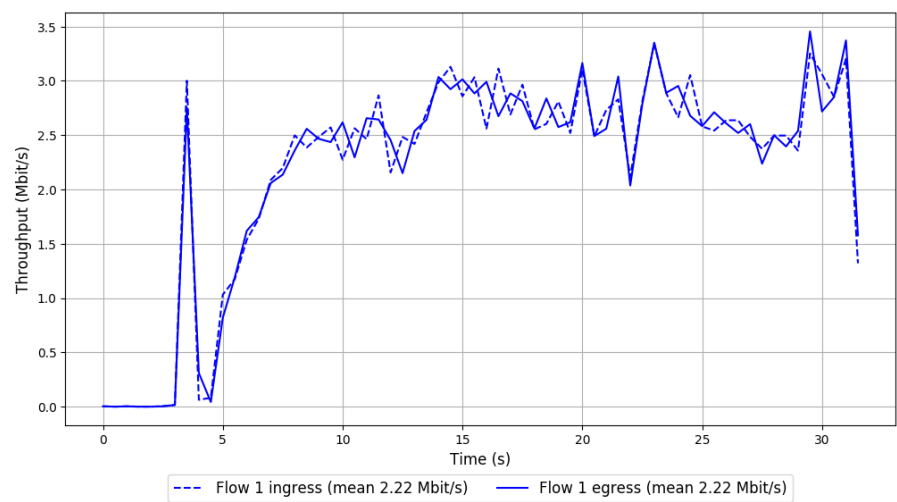
-- Flow 1:

Average throughput: 2.22 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-11 12:59:03

End at: 2017-08-11 12:59:33

Below is generated by plot.py at 2017-08-11 15:19:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 50.682 ms

Loss rate: 0.00%

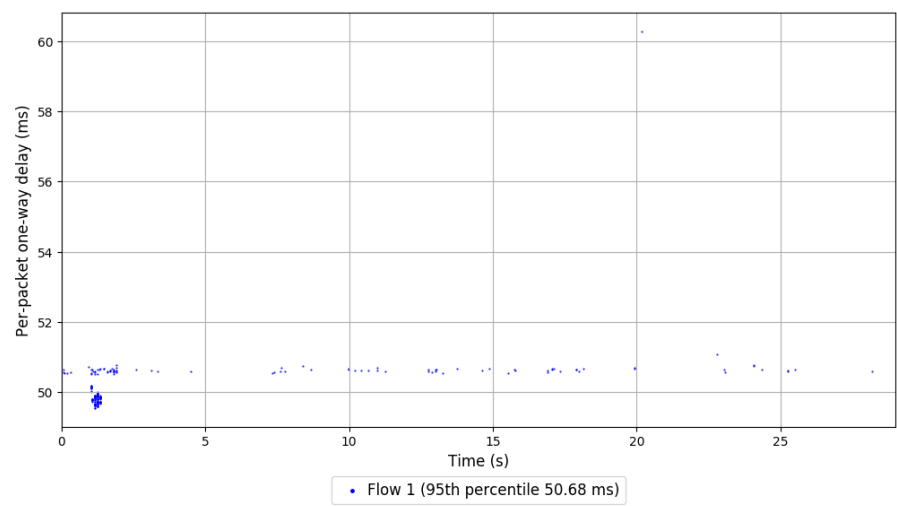
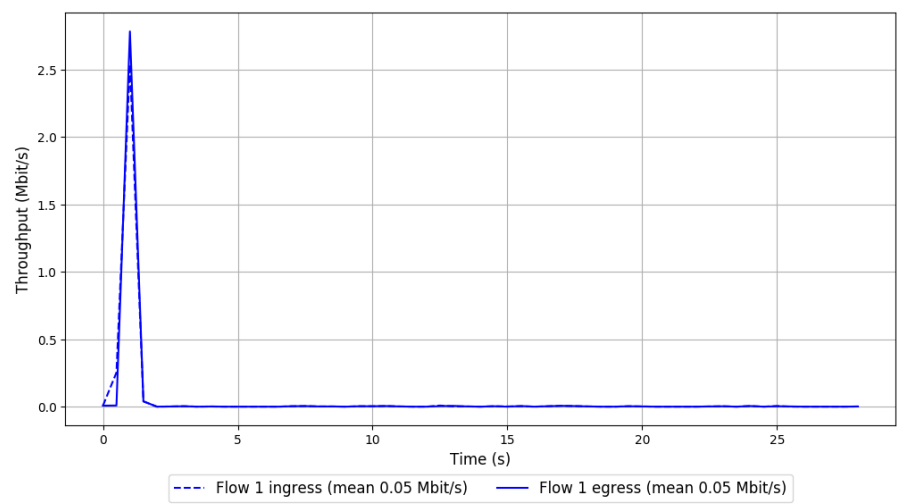
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 50.682 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-08-11 13:09:31

End at: 2017-08-11 13:10:01

Below is generated by plot.py at 2017-08-11 15:19:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 49.756 ms

Loss rate: 0.00%

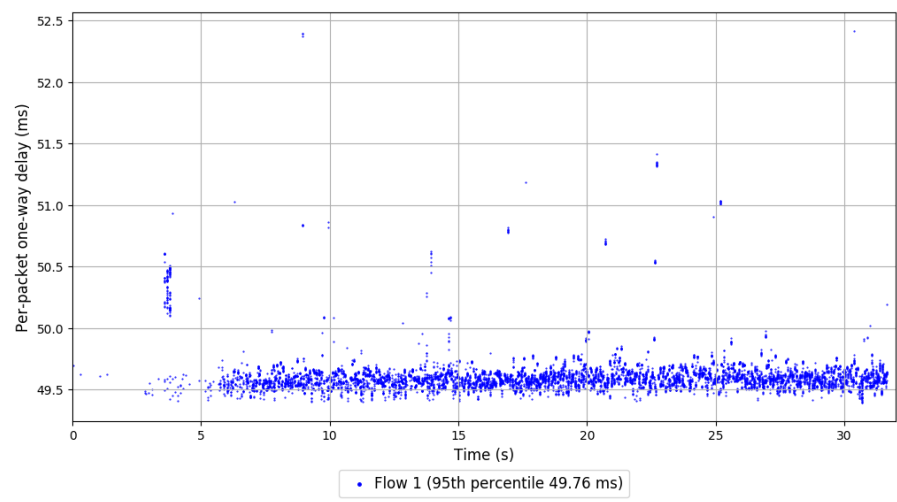
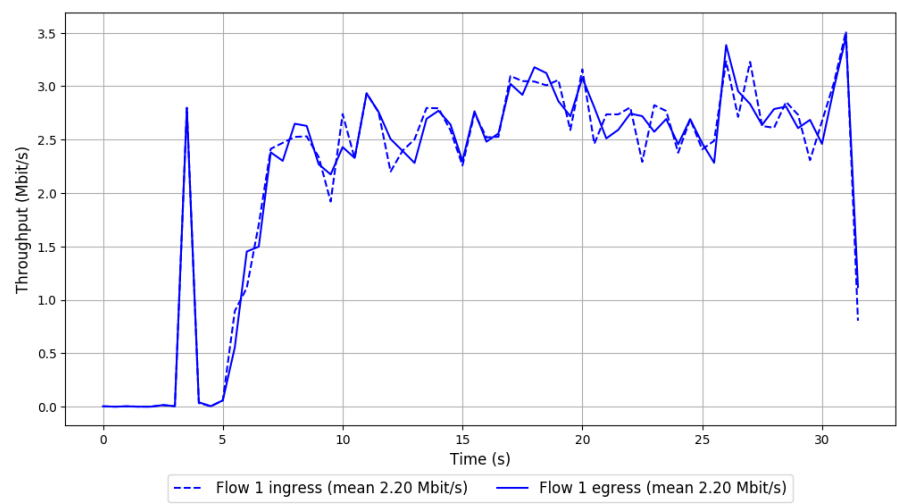
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 49.756 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-11 13:19:40

End at: 2017-08-11 13:20:10

Below is generated by plot.py at 2017-08-11 15:19:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 50.851 ms

Loss rate: 0.00%

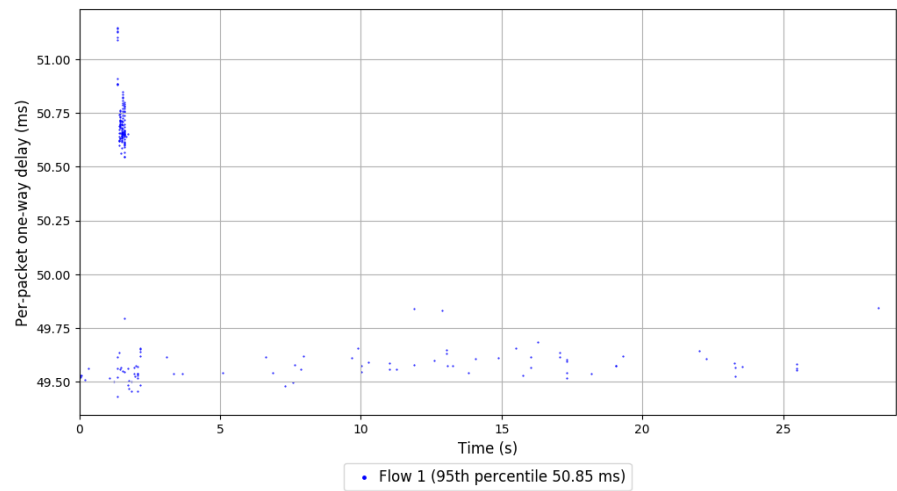
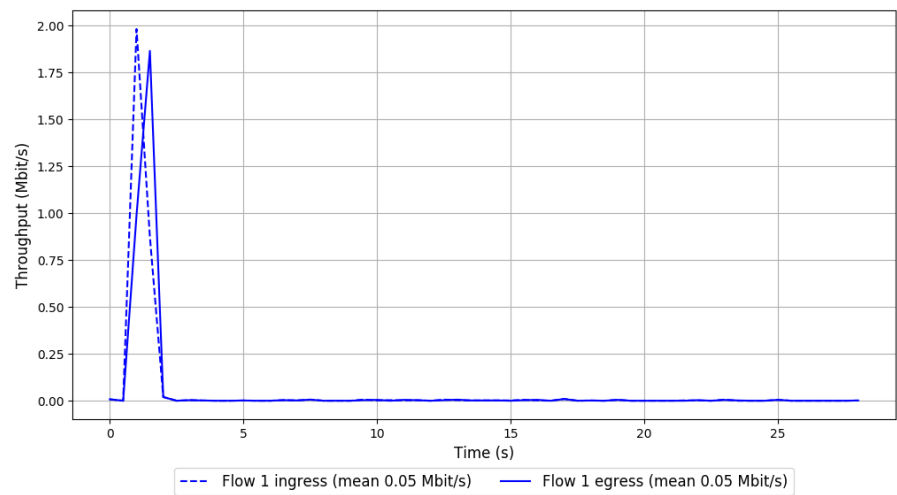
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 50.851 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-11 13:29:43

End at: 2017-08-11 13:30:13

Below is generated by plot.py at 2017-08-11 15:19:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 52.525 ms

Loss rate: 0.00%

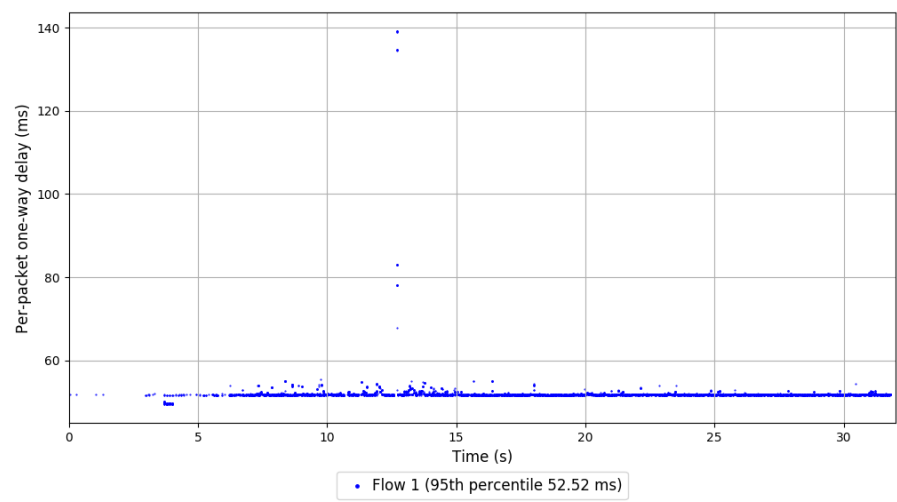
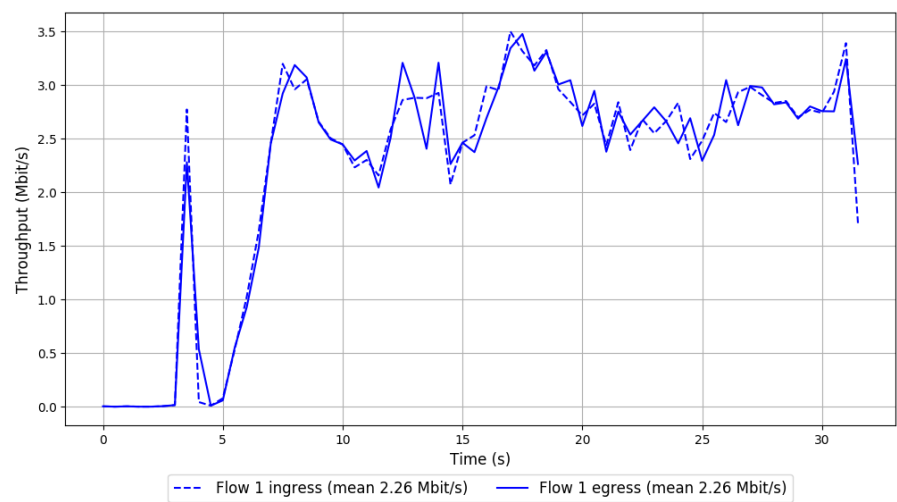
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 52.525 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-11 13:39:57

End at: 2017-08-11 13:40:27

Below is generated by plot.py at 2017-08-11 15:19:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

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

Loss rate: 0.00%

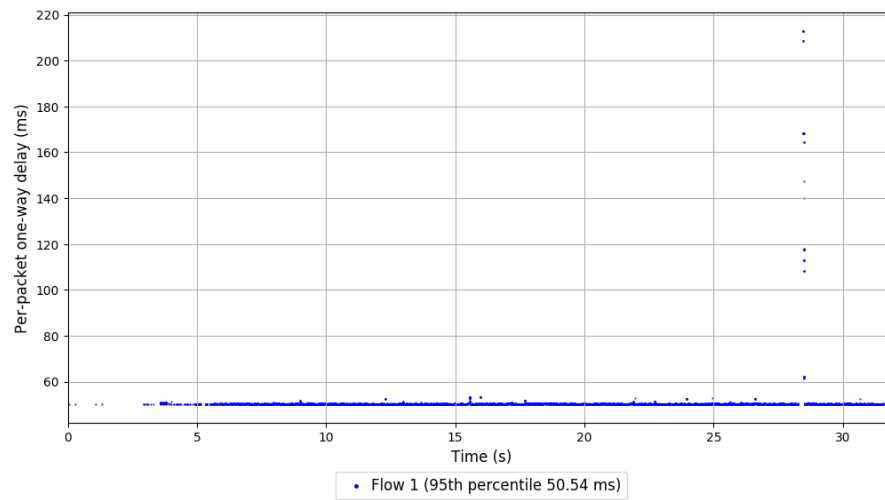
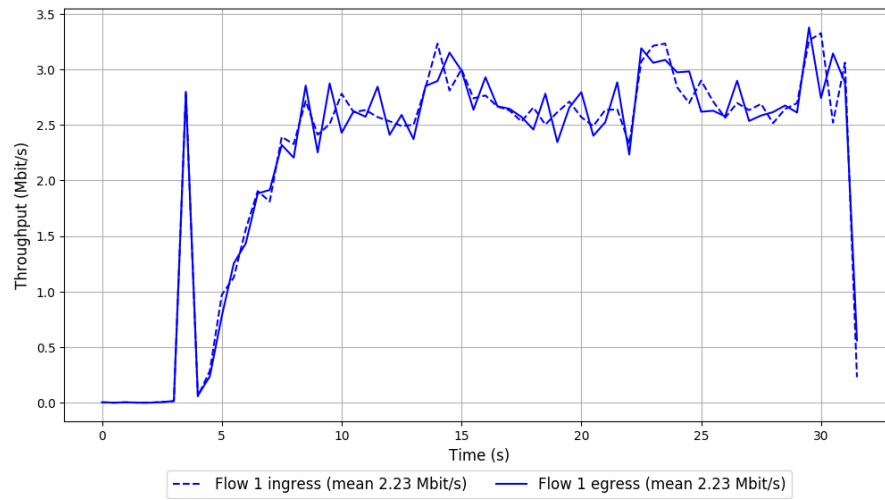
-- Flow 1:

Average throughput: 2.23 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-11 13:50:01

End at: 2017-08-11 13:50:31

Below is generated by plot.py at 2017-08-11 15:19:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 49.698 ms

Loss rate: 0.00%

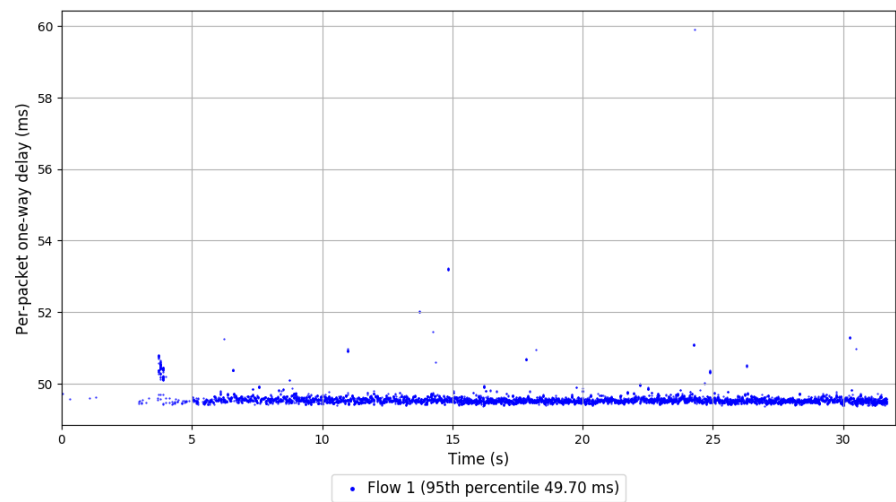
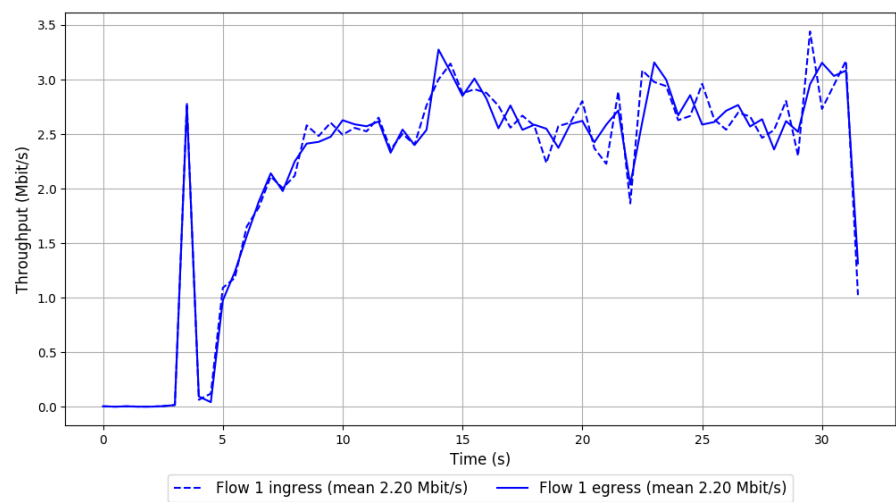
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 49.698 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-11 14:00:11

End at: 2017-08-11 14:00:41

Below is generated by plot.py at 2017-08-11 15:19:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 51.164 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 51.164 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

