

Pantheon Report

Generated at 2017-08-11 10:34:43 (UTC).

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

Repeated the test of 15 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

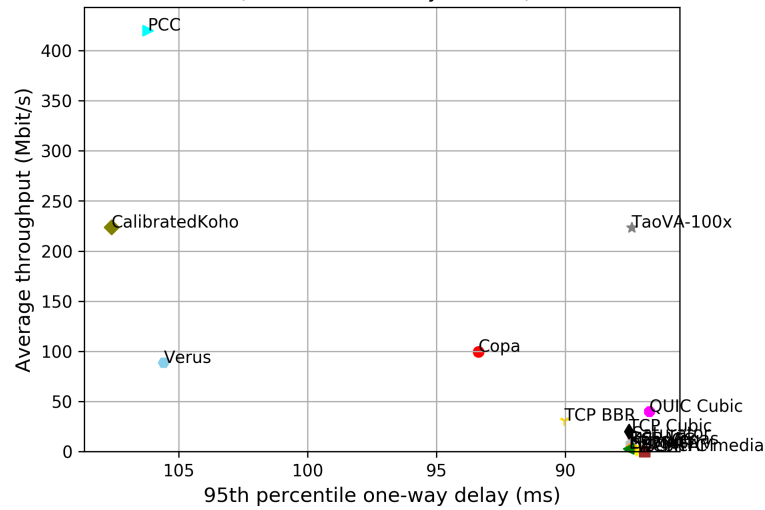
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

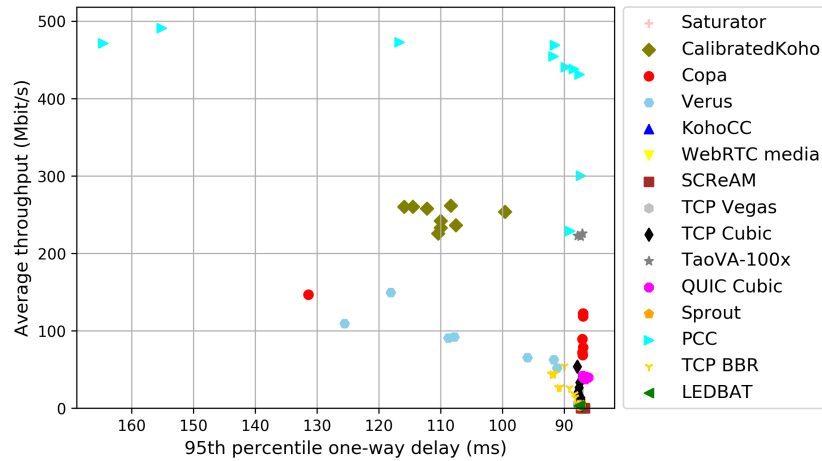
Git summary:

```
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 Sydney Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	30.75	90.04	22.77
CalibratedKoho	10	223.70	107.61	10.57
Copa	7	99.51	93.37	0.56
TCP Cubic	10	20.17	87.54	1.48
KohoCC	10	6.61	87.48	1.19
LEDBAT	4	3.05	87.54	0.61
PCC	10	419.73	106.20	3.71
QUIC Cubic	8	40.10	86.73	0.01
Saturator	4	12.79	87.42	2.60
SCReAM	10	0.22	86.93	0.00
Sprout	10	3.47	87.43	1.87
TaoVA-100x	3	223.46	87.43	0.88
TCP Vegas	10	7.46	87.47	1.48
Verus	7	88.83	105.58	22.39
WebRTC media	8	0.85	87.23	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-08-11 07:22:49

End at: 2017-08-11 07:23:19

Below is generated by plot.py at 2017-08-11 10:12:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.48 Mbit/s

95th percentile per-packet one-way delay: 88.342 ms

Loss rate: 35.75%

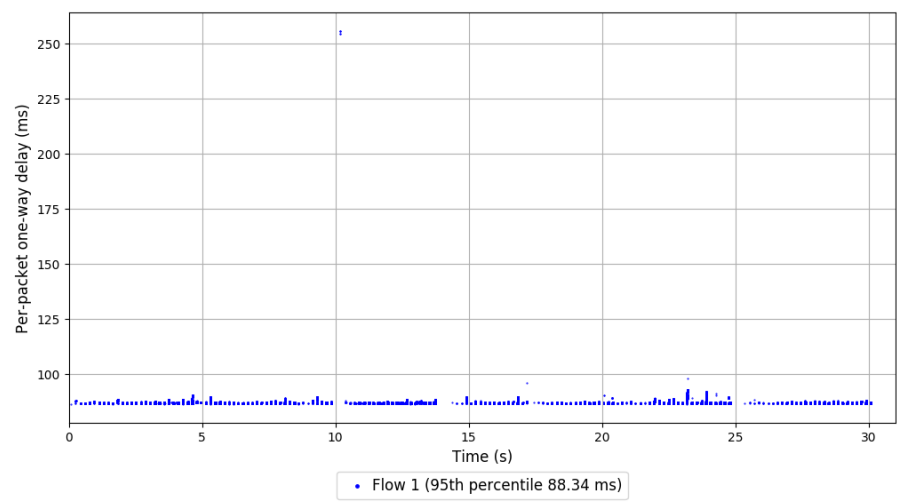
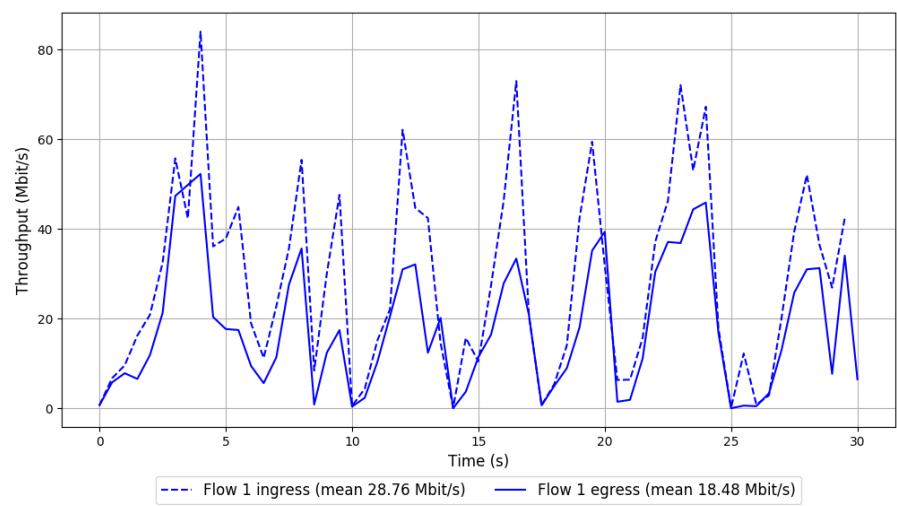
-- Flow 1:

Average throughput: 18.48 Mbit/s

95th percentile per-packet one-way delay: 88.342 ms

Loss rate: 35.75%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-11 07:33:46

End at: 2017-08-11 07:34:16

Below is generated by plot.py at 2017-08-11 10:12:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.89 Mbit/s

95th percentile per-packet one-way delay: 91.030 ms

Loss rate: 23.72%

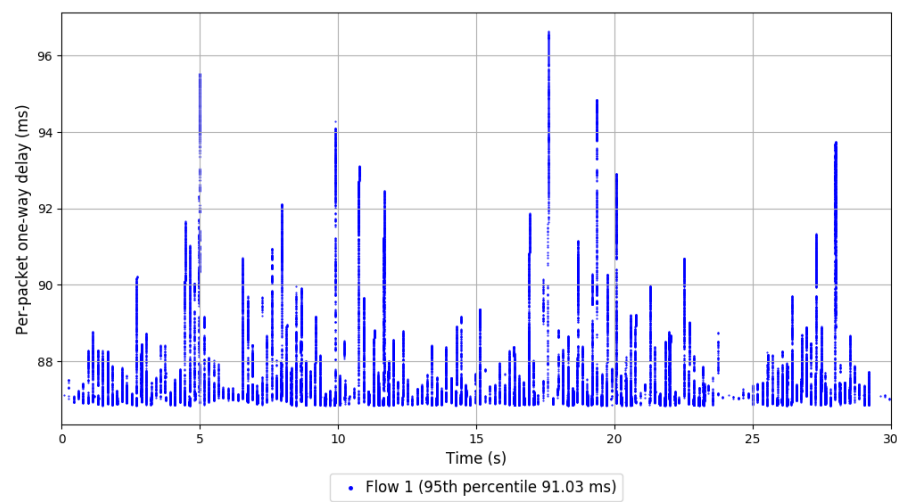
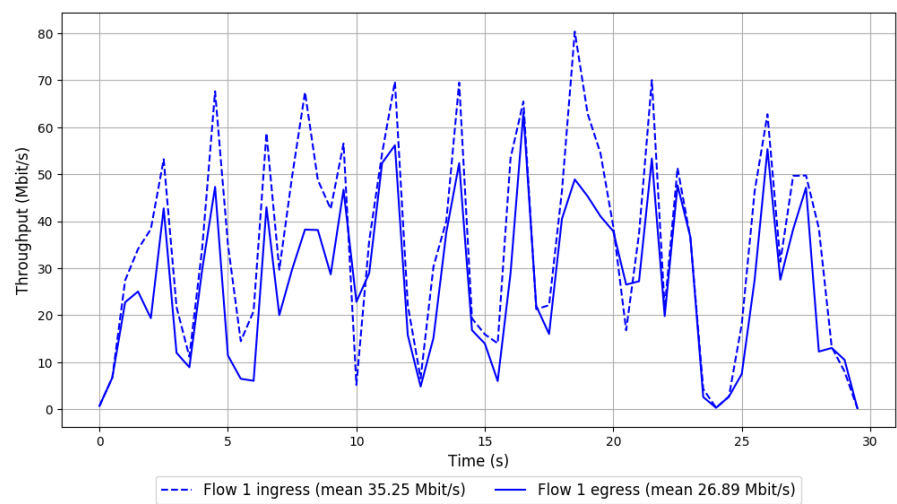
-- Flow 1:

Average throughput: 26.89 Mbit/s

95th percentile per-packet one-way delay: 91.030 ms

Loss rate: 23.72%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-11 07:44:35

End at: 2017-08-11 07:45:05

Below is generated by plot.py at 2017-08-11 10:12:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.36 Mbit/s

95th percentile per-packet one-way delay: 91.536 ms

Loss rate: 8.01%

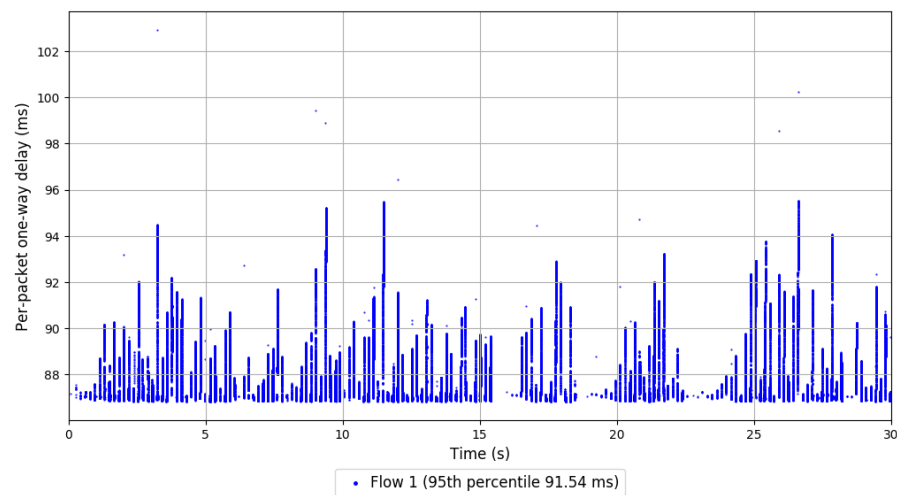
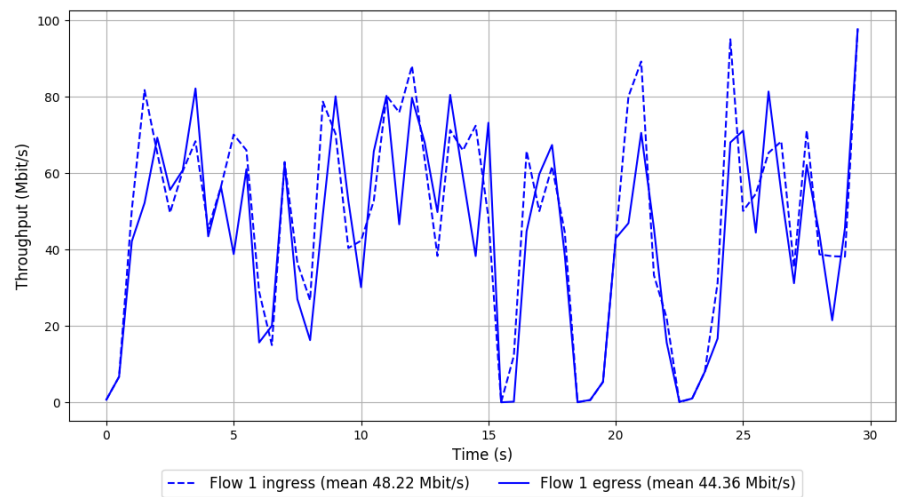
-- Flow 1:

Average throughput: 44.36 Mbit/s

95th percentile per-packet one-way delay: 91.536 ms

Loss rate: 8.01%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-11 07:55:31

End at: 2017-08-11 07:56:01

Below is generated by plot.py at 2017-08-11 10:12:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.29 Mbit/s

95th percentile per-packet one-way delay: 89.216 ms

Loss rate: 28.02%

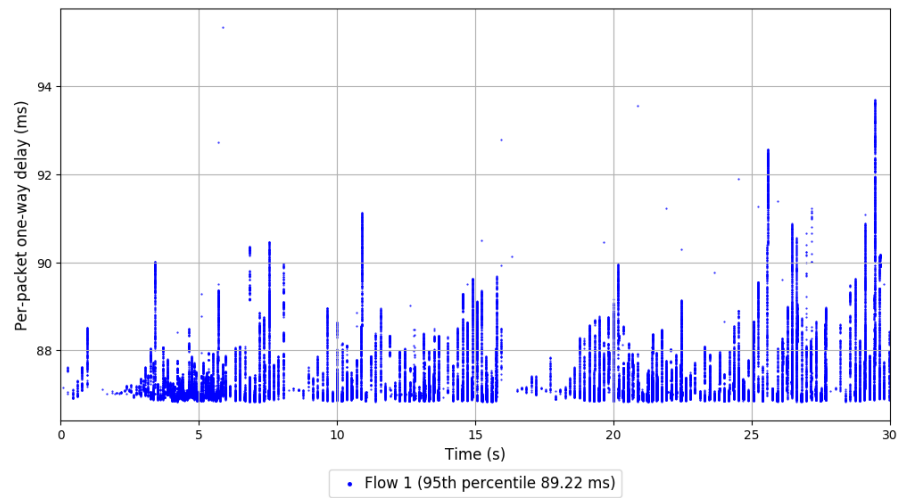
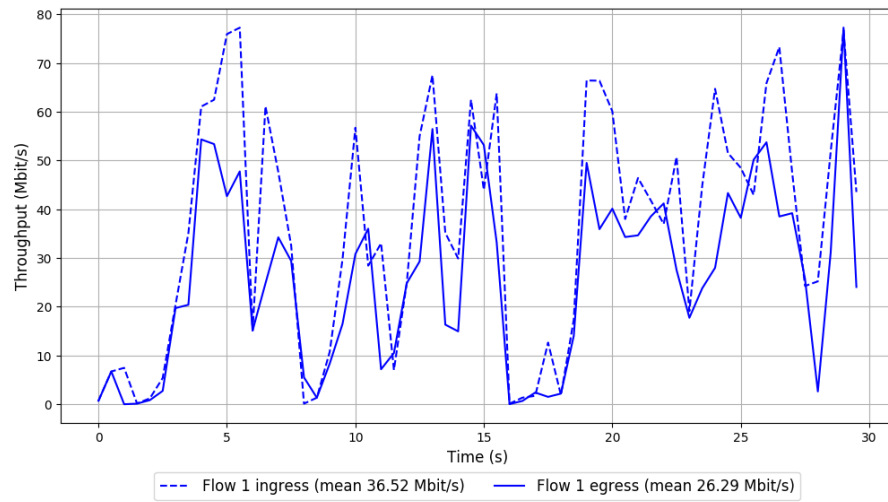
-- Flow 1:

Average throughput: 26.29 Mbit/s

95th percentile per-packet one-way delay: 89.216 ms

Loss rate: 28.02%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-08-11 08:06:33

End at: 2017-08-11 08:07:03

Below is generated by plot.py at 2017-08-11 10:12:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.15 Mbit/s

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

Loss rate: 21.83%

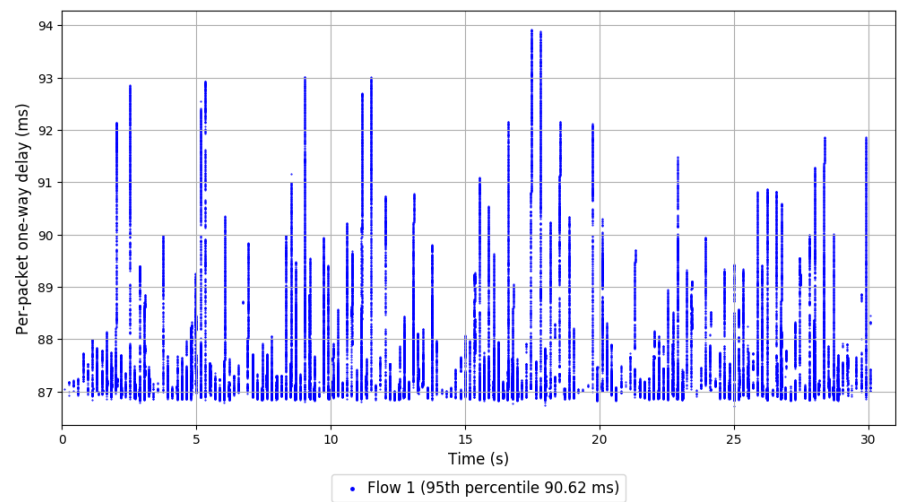
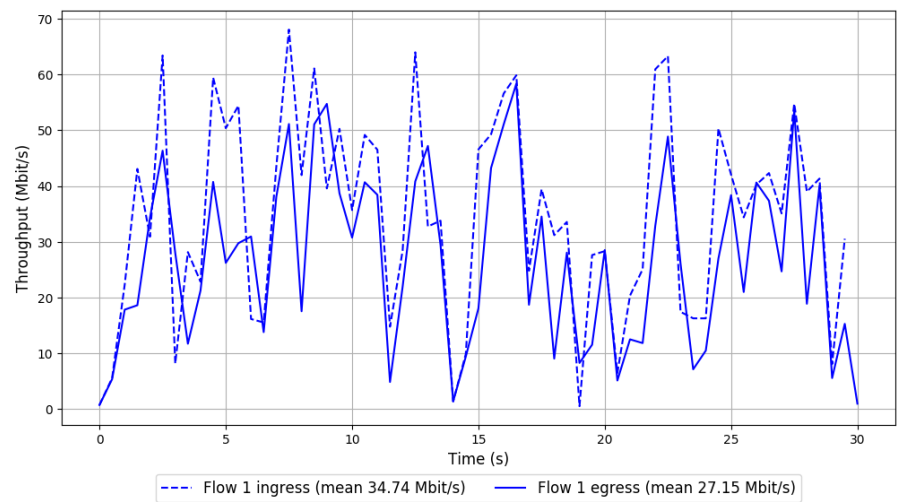
-- Flow 1:

Average throughput: 27.15 Mbit/s

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

Loss rate: 21.83%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-11 08:17:45

End at: 2017-08-11 08:18:15

Below is generated by plot.py at 2017-08-11 10:12:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.77 Mbit/s

95th percentile per-packet one-way delay: 91.803 ms

Loss rate: 13.23%

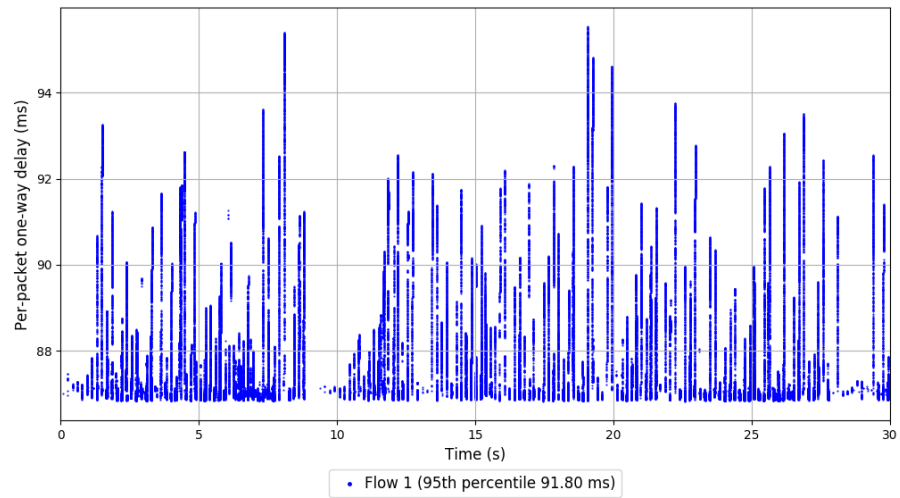
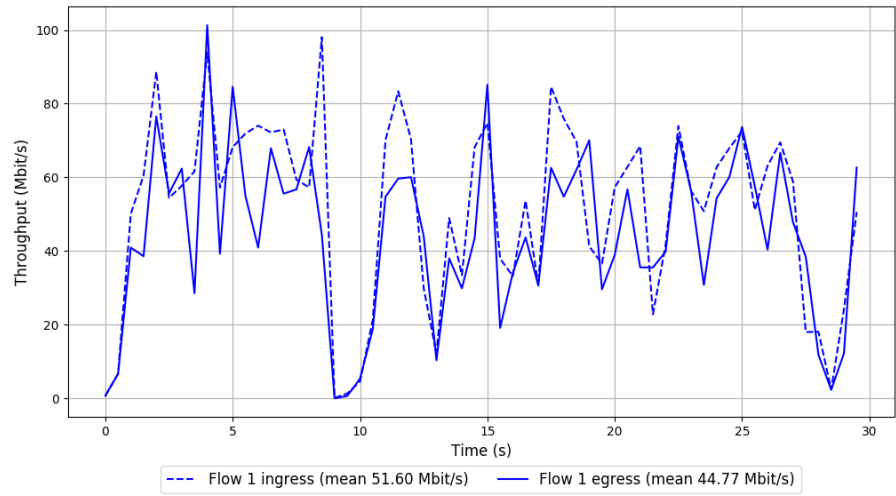
-- Flow 1:

Average throughput: 44.77 Mbit/s

95th percentile per-packet one-way delay: 91.803 ms

Loss rate: 13.23%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

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

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

Below is generated by plot.py at 2017-08-11 10:12:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.05 Mbit/s

95th percentile per-packet one-way delay: 92.179 ms

Loss rate: 13.09%

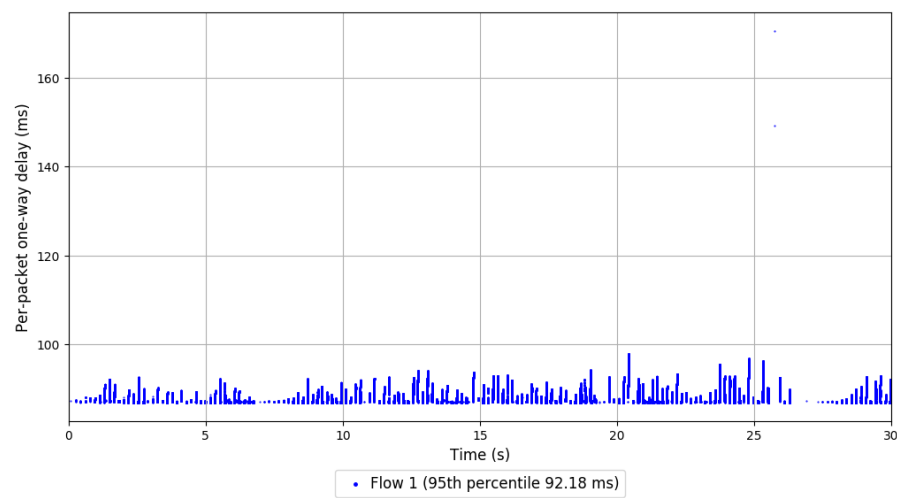
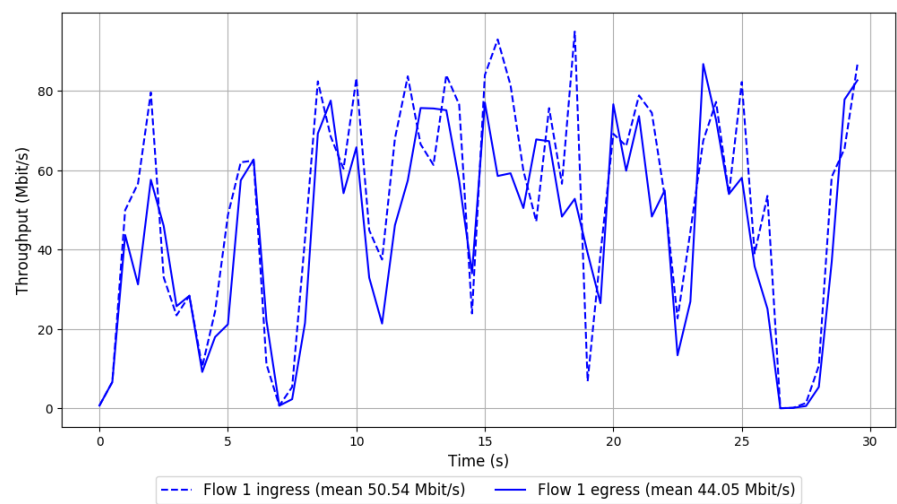
-- Flow 1:

Average throughput: 44.05 Mbit/s

95th percentile per-packet one-way delay: 92.179 ms

Loss rate: 13.09%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-11 08:39:22

End at: 2017-08-11 08:39:52

Below is generated by plot.py at 2017-08-11 10:12:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.03 Mbit/s

95th percentile per-packet one-way delay: 87.361 ms

Loss rate: 35.45%

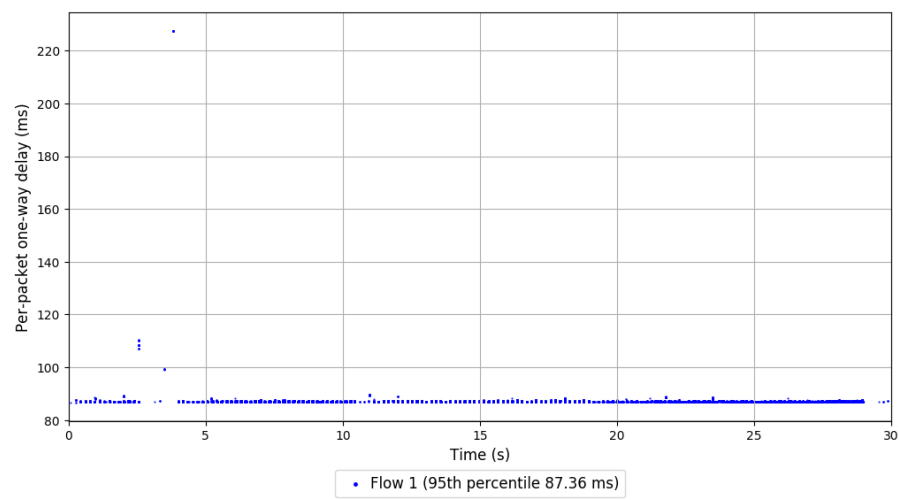
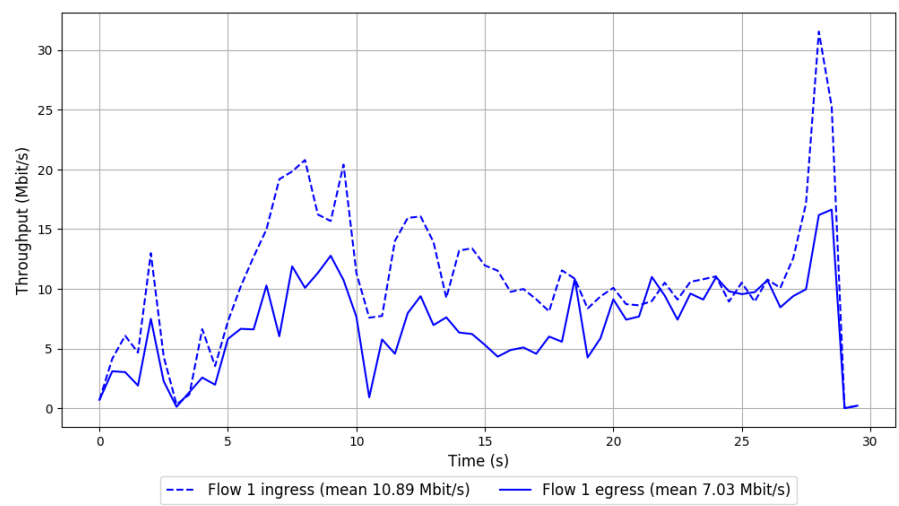
-- Flow 1:

Average throughput: 7.03 Mbit/s

95th percentile per-packet one-way delay: 87.361 ms

Loss rate: 35.45%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-11 08:50:35

End at: 2017-08-11 08:51:05

Below is generated by plot.py at 2017-08-11 10:13:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.49 Mbit/s

95th percentile per-packet one-way delay: 90.037 ms

Loss rate: 5.59%

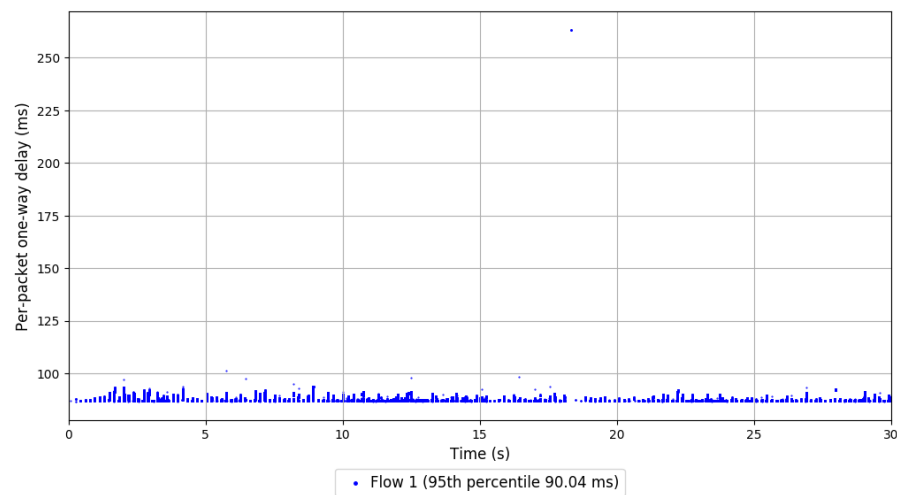
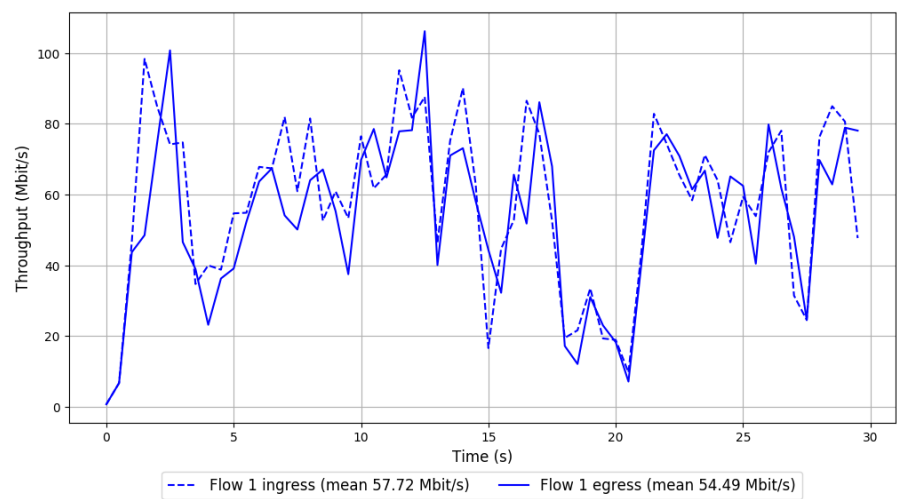
-- Flow 1:

Average throughput: 54.49 Mbit/s

95th percentile per-packet one-way delay: 90.037 ms

Loss rate: 5.59%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-11 09:01:39

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

Below is generated by plot.py at 2017-08-11 10:13:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.96 Mbit/s

95th percentile per-packet one-way delay: 88.234 ms

Loss rate: 42.98%

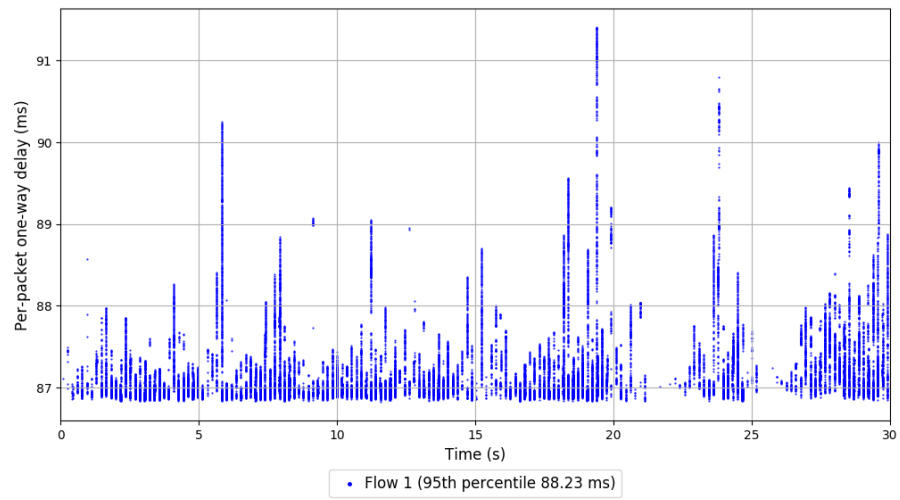
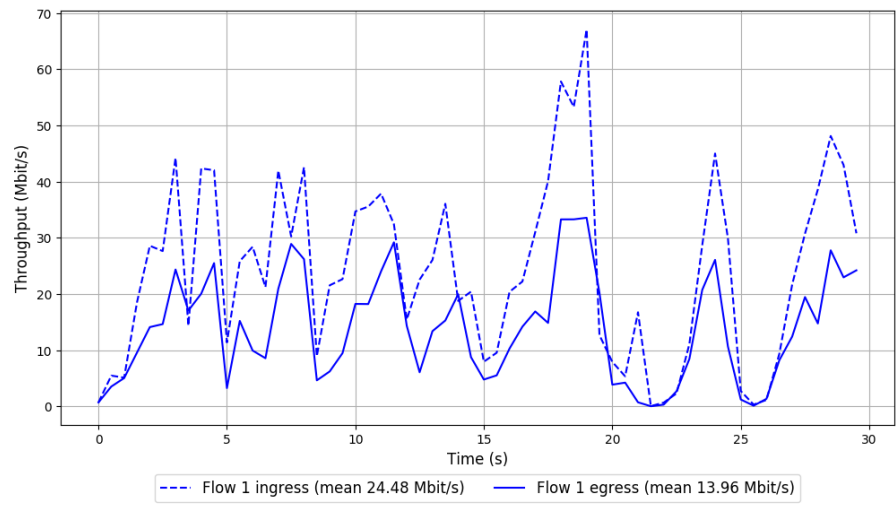
-- Flow 1:

Average throughput: 13.96 Mbit/s

95th percentile per-packet one-way delay: 88.234 ms

Loss rate: 42.98%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-11 07:32:11

End at: 2017-08-11 07:32:41

Below is generated by plot.py at 2017-08-11 10:13:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 225.45 Mbit/s

95th percentile per-packet one-way delay: 110.396 ms

Loss rate: 8.62%

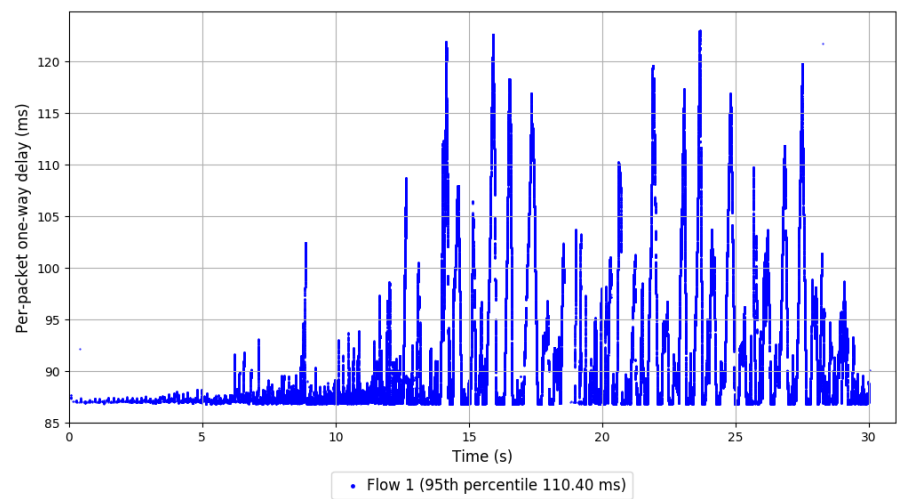
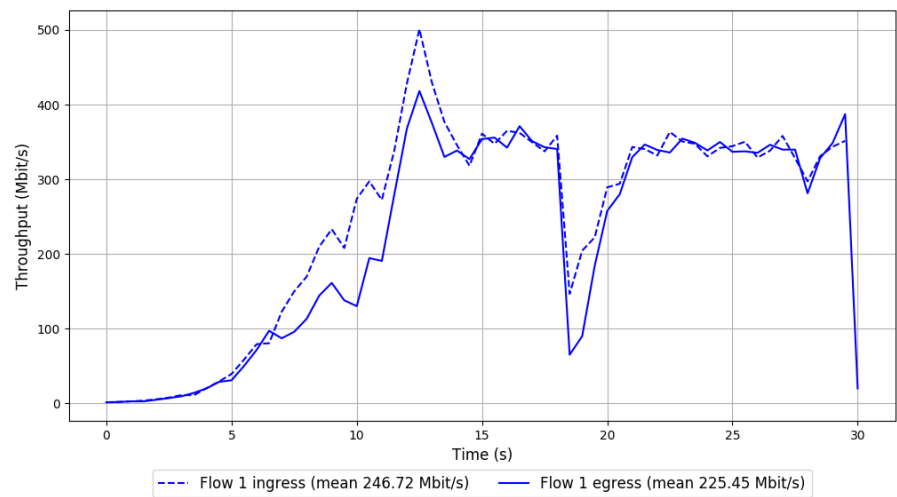
-- Flow 1:

Average throughput: 225.45 Mbit/s

95th percentile per-packet one-way delay: 110.396 ms

Loss rate: 8.62%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-11 07:42:50

End at: 2017-08-11 07:43:20

Below is generated by plot.py at 2017-08-11 10:13:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 253.89 Mbit/s

95th percentile per-packet one-way delay: 99.623 ms

Loss rate: 1.93%

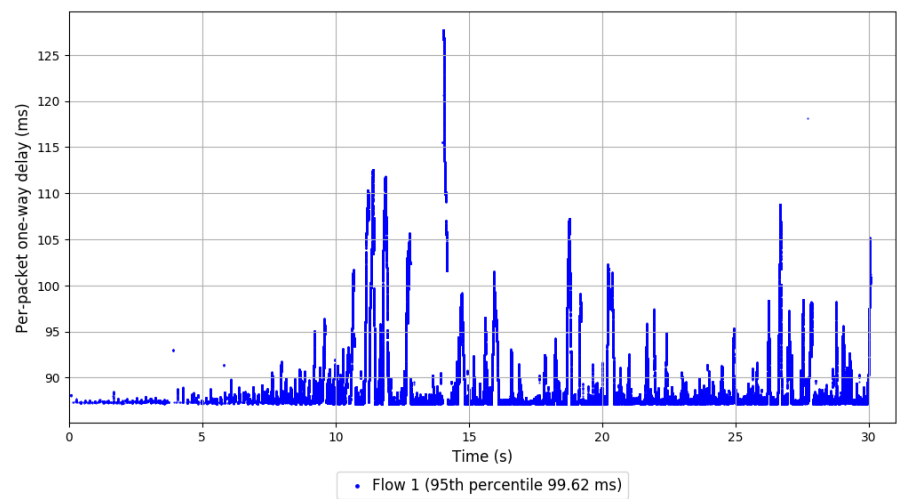
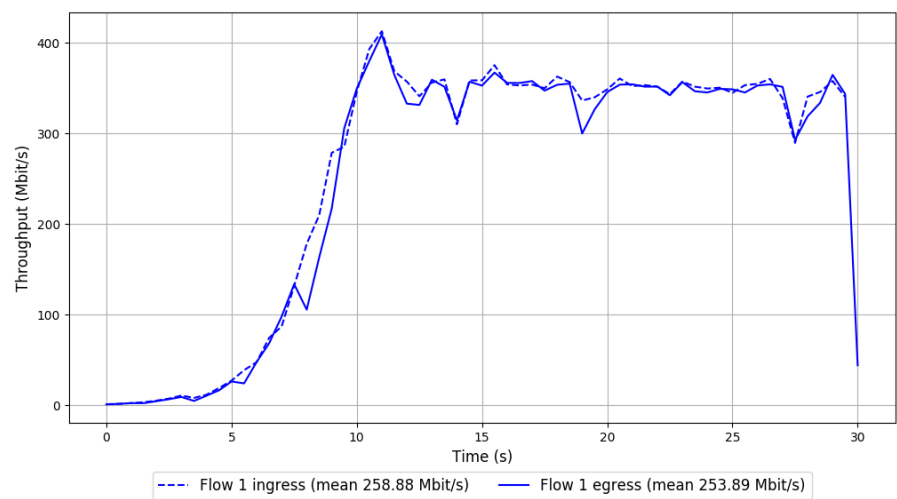
-- Flow 1:

Average throughput: 253.89 Mbit/s

95th percentile per-packet one-way delay: 99.623 ms

Loss rate: 1.93%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-11 07:53:48

End at: 2017-08-11 07:54:18

Below is generated by plot.py at 2017-08-11 10:14:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 260.44 Mbit/s

95th percentile per-packet one-way delay: 115.894 ms

Loss rate: 5.10%

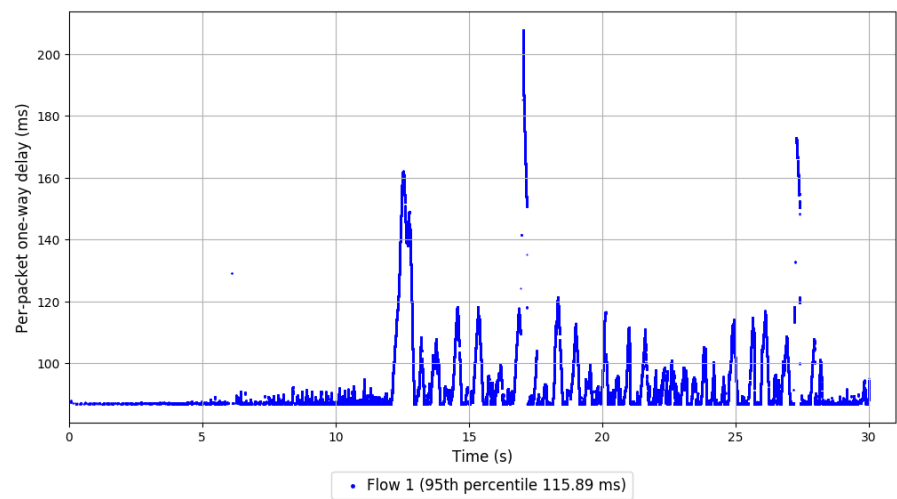
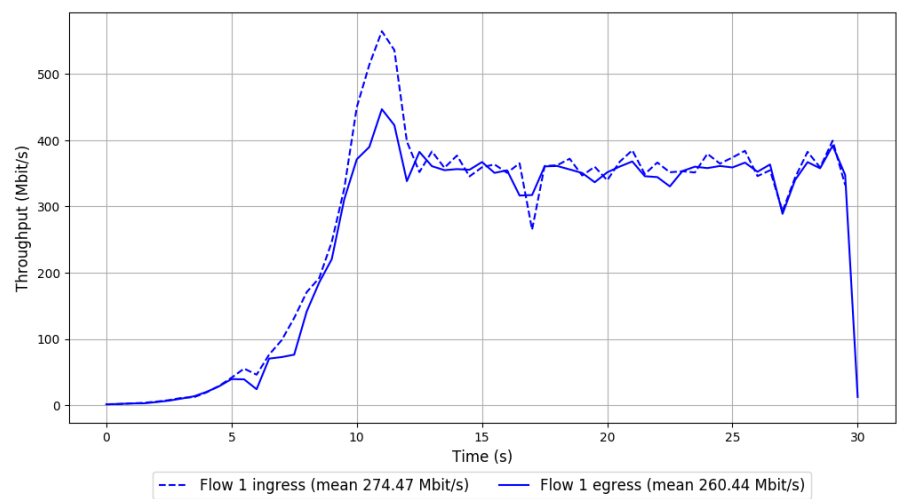
-- Flow 1:

Average throughput: 260.44 Mbit/s

95th percentile per-packet one-way delay: 115.894 ms

Loss rate: 5.10%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-11 08:04:55

End at: 2017-08-11 08:05:25

Below is generated by plot.py at 2017-08-11 10:14:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 260.07 Mbit/s

95th percentile per-packet one-way delay: 114.538 ms

Loss rate: 2.08%

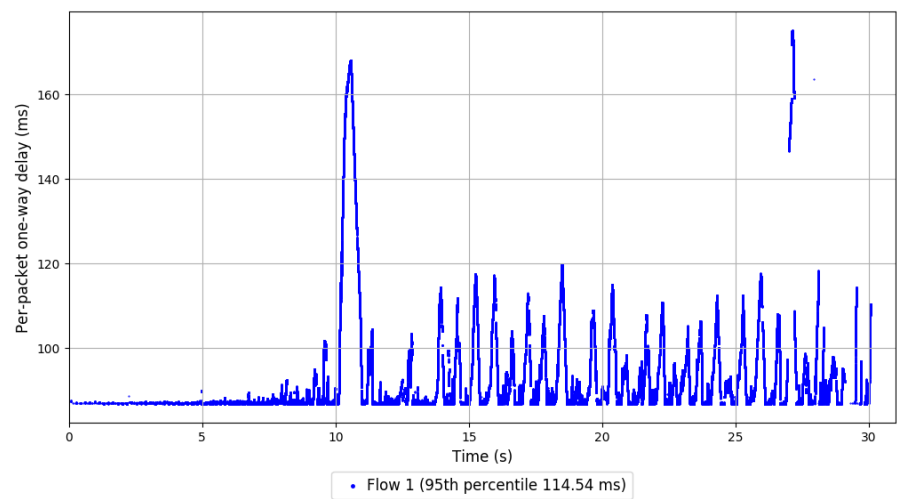
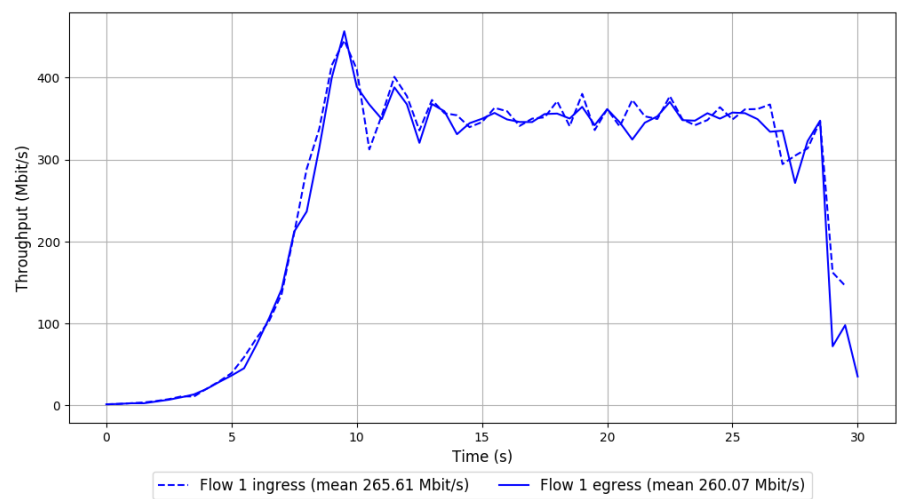
-- Flow 1:

Average throughput: 260.07 Mbit/s

95th percentile per-packet one-way delay: 114.538 ms

Loss rate: 2.08%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-11 08:16:07

End at: 2017-08-11 08:16:37

Below is generated by plot.py at 2017-08-11 10:15:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 233.29 Mbit/s

95th percentile per-packet one-way delay: 109.994 ms

Loss rate: 6.39%

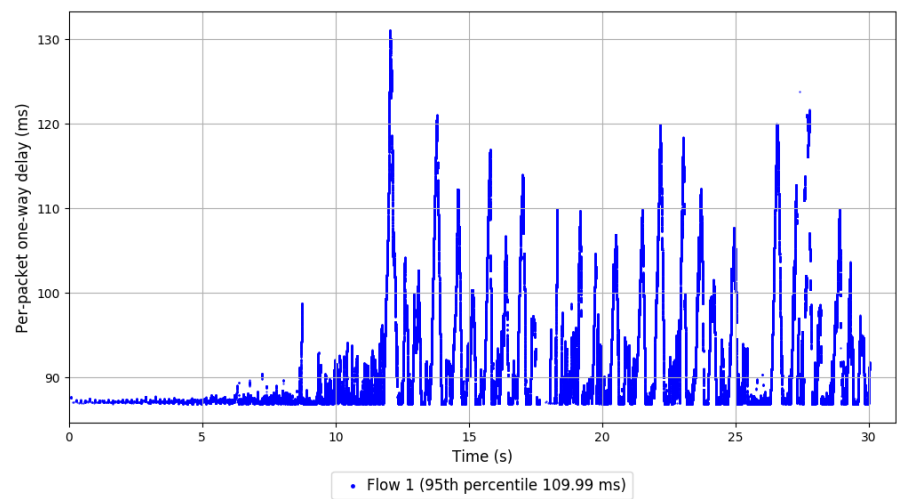
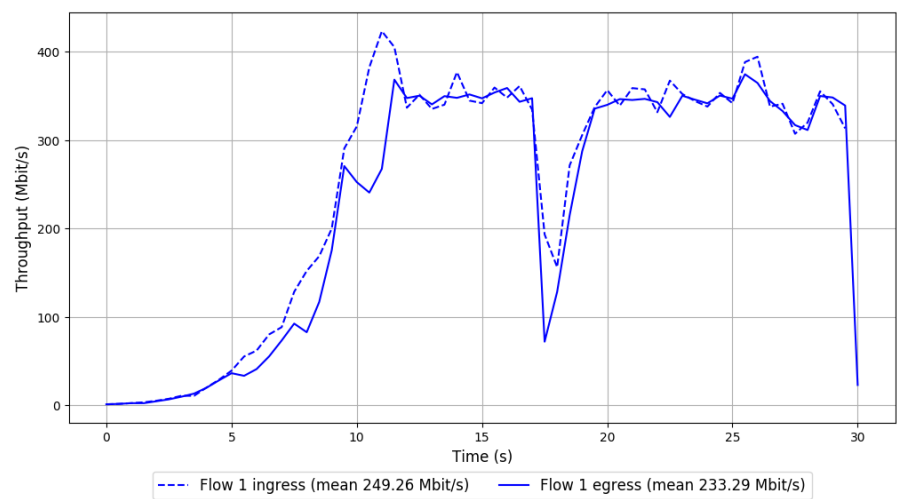
-- Flow 1:

Average throughput: 233.29 Mbit/s

95th percentile per-packet one-way delay: 109.994 ms

Loss rate: 6.39%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-11 08:26:42

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

Below is generated by plot.py at 2017-08-11 10:15:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 242.25 Mbit/s

95th percentile per-packet one-way delay: 109.982 ms

Loss rate: 5.48%

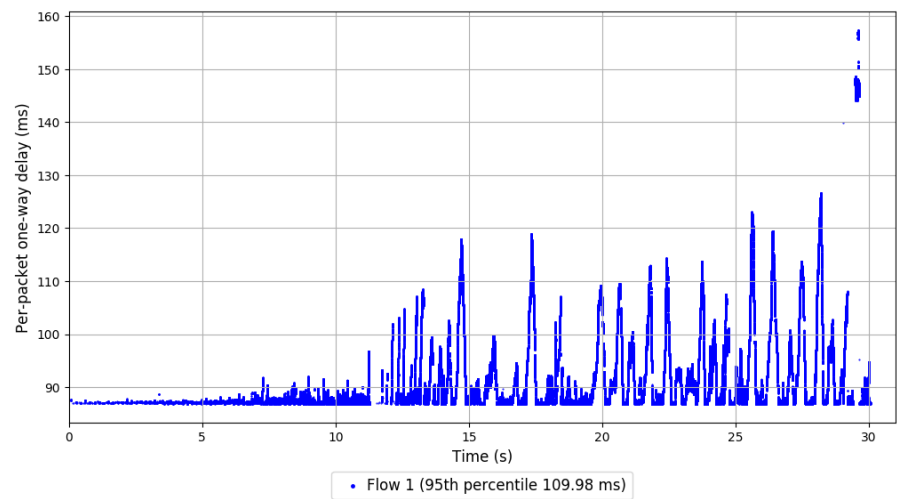
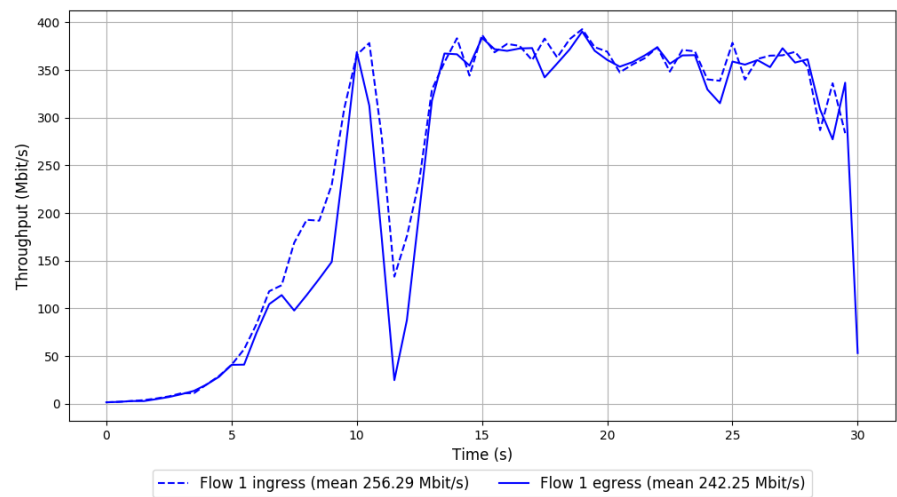
-- Flow 1:

Average throughput: 242.25 Mbit/s

95th percentile per-packet one-way delay: 109.982 ms

Loss rate: 5.48%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-11 08:37:51

End at: 2017-08-11 08:38:21

Below is generated by plot.py at 2017-08-11 10:15:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.68 Mbit/s

95th percentile per-packet one-way delay: 87.490 ms

Loss rate: 63.13%

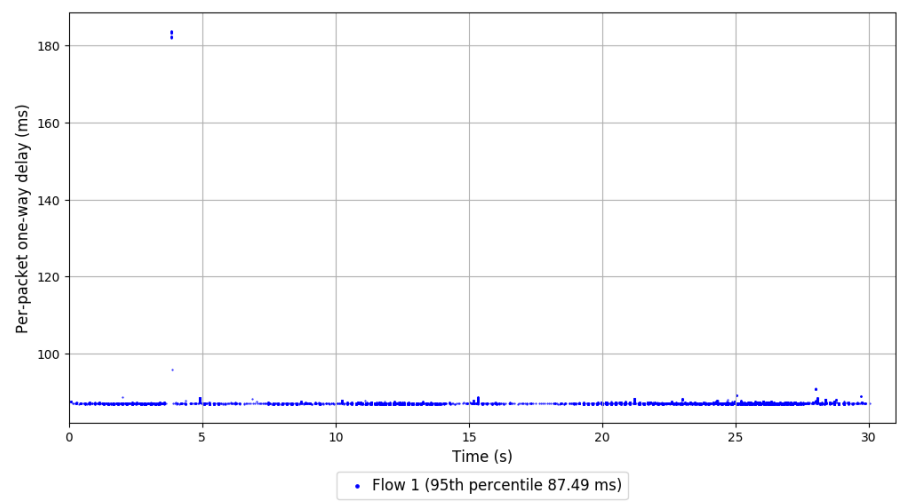
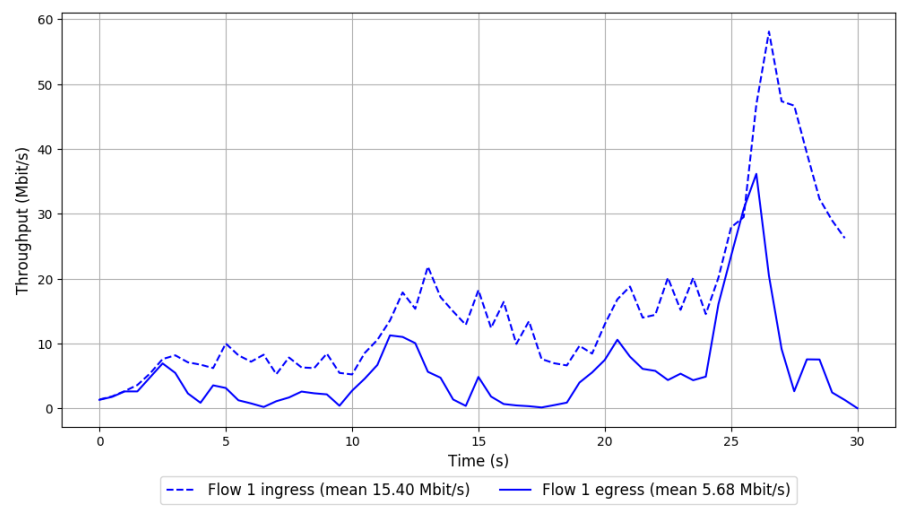
-- Flow 1:

Average throughput: 5.68 Mbit/s

95th percentile per-packet one-way delay: 87.490 ms

Loss rate: 63.13%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-11 08:48:52

End at: 2017-08-11 08:49:22

Below is generated by plot.py at 2017-08-11 10:16:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 236.23 Mbit/s

95th percentile per-packet one-way delay: 107.582 ms

Loss rate: 10.35%

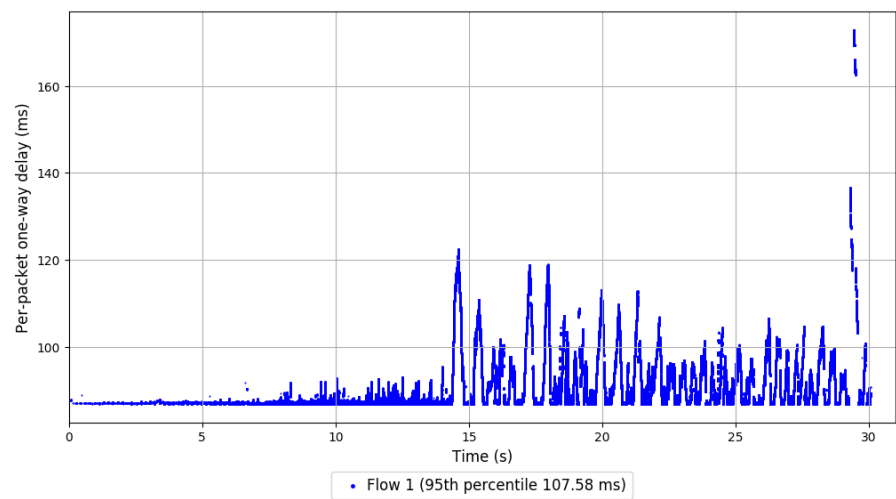
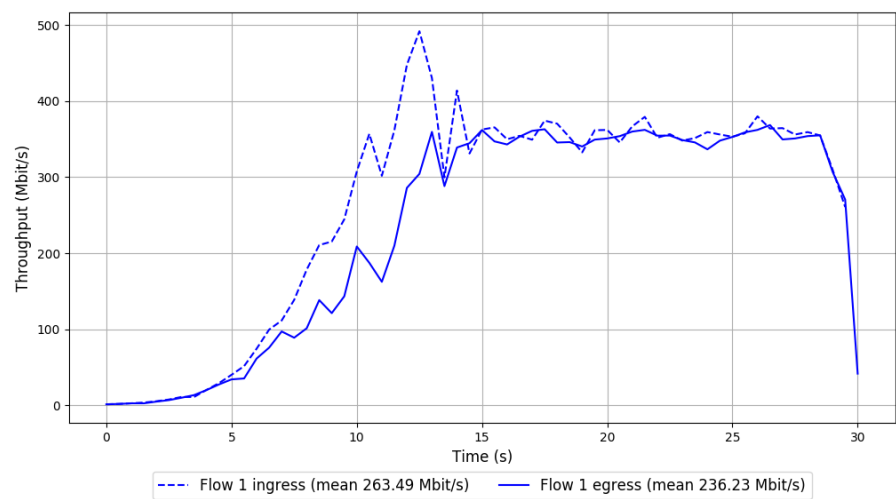
-- Flow 1:

Average throughput: 236.23 Mbit/s

95th percentile per-packet one-way delay: 107.582 ms

Loss rate: 10.35%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-11 08:59:53

End at: 2017-08-11 09:00:23

Below is generated by plot.py at 2017-08-11 10:16:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 257.93 Mbit/s

95th percentile per-packet one-way delay: 112.243 ms

Loss rate: 1.12%

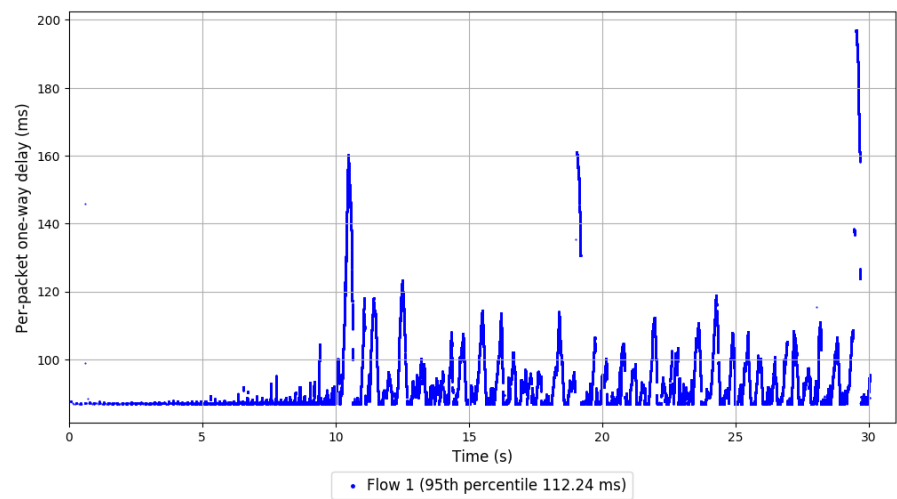
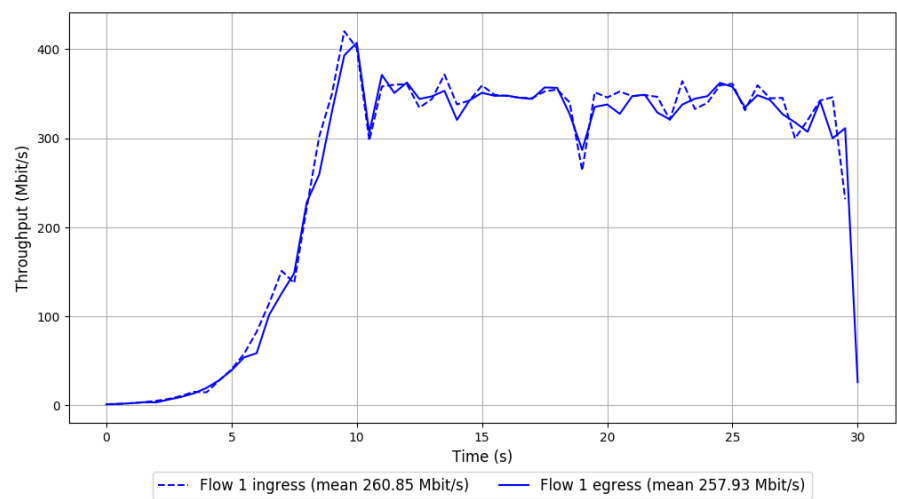
-- Flow 1:

Average throughput: 257.93 Mbit/s

95th percentile per-packet one-way delay: 112.243 ms

Loss rate: 1.12%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

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

End at: 2017-08-11 09:11:42

Below is generated by plot.py at 2017-08-11 10:17:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 261.81 Mbit/s

95th percentile per-packet one-way delay: 108.392 ms

Loss rate: 1.45%

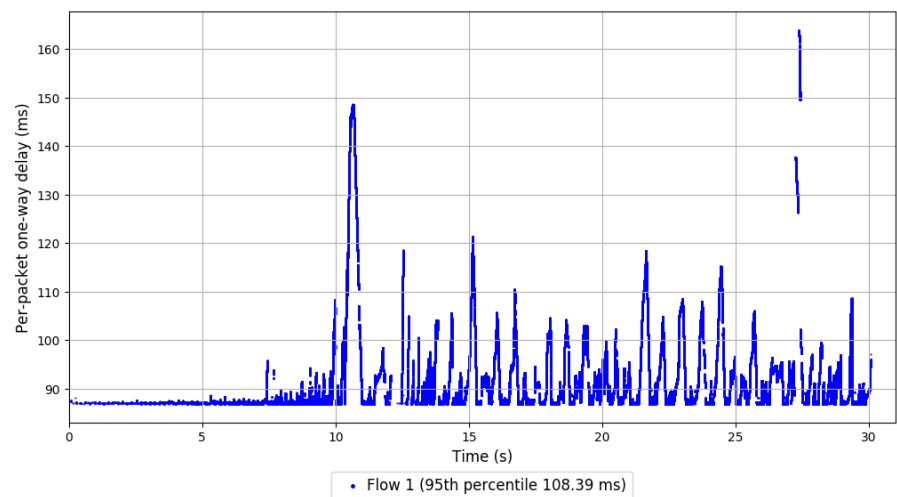
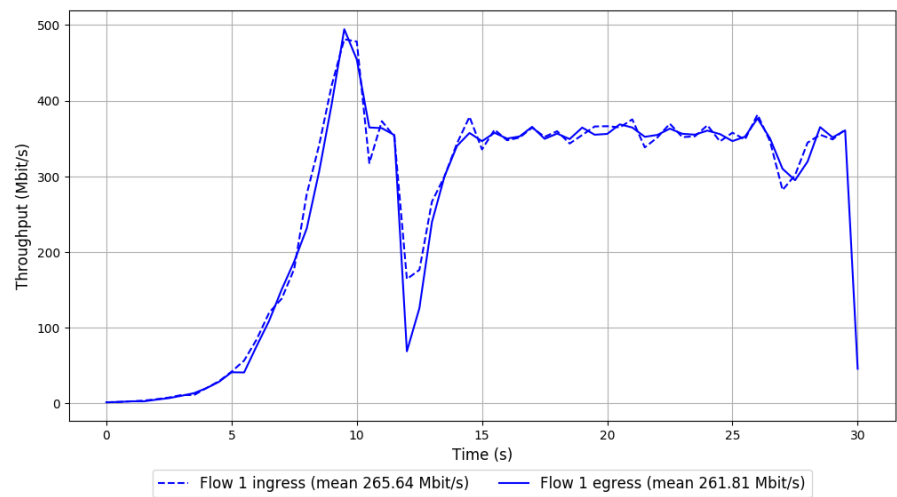
-- Flow 1:

Average throughput: 261.81 Mbit/s

95th percentile per-packet one-way delay: 108.392 ms

Loss rate: 1.45%

Run 10: Report of CalibratedKoho — Data Link

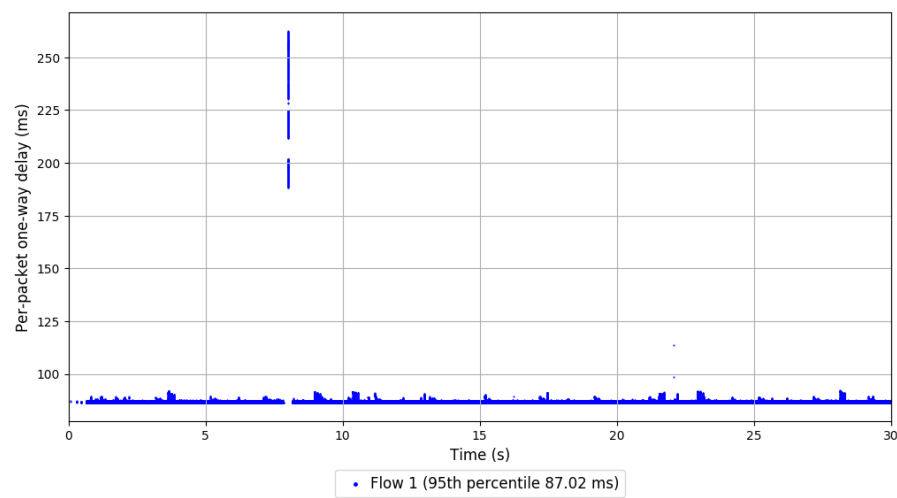
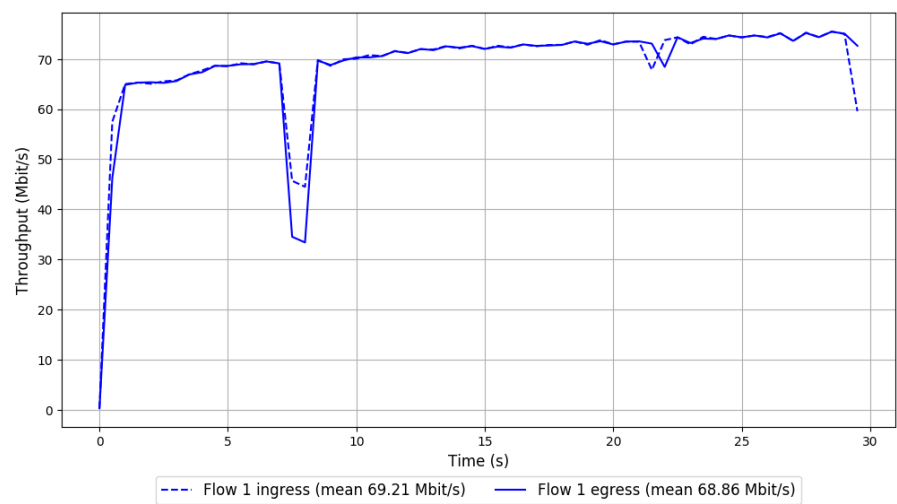


```
Run 1: Statistics of Copa

Start at: 2017-08-11 07:29:46
End at: 2017-08-11 07:30:16

# Below is generated by plot.py at 2017-08-11 10:17:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.86 Mbit/s
95th percentile per-packet one-way delay: 87.015 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 68.86 Mbit/s
95th percentile per-packet one-way delay: 87.015 ms
Loss rate: 0.54%
```


Run 1: Report of Copa — Data Link

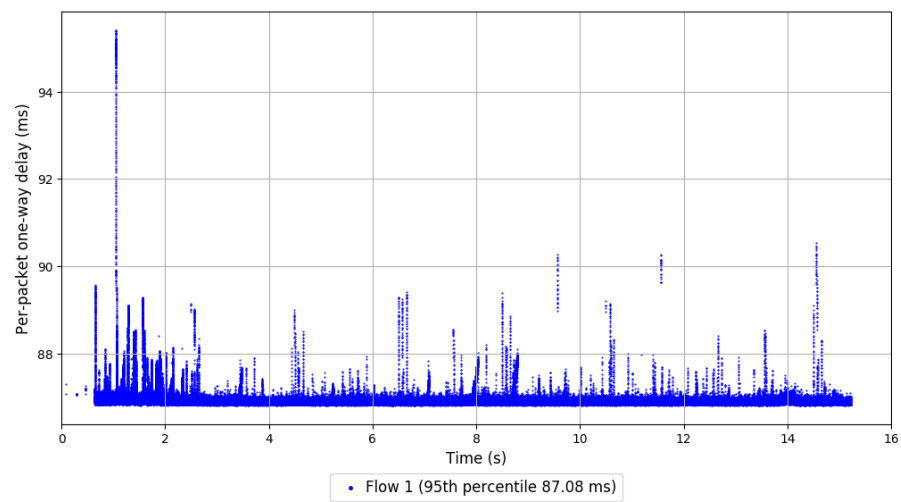
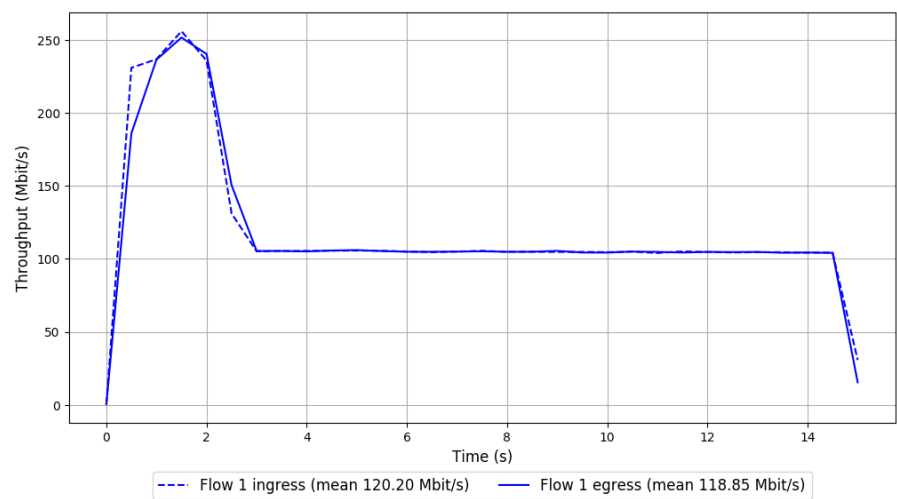


Run 2: Statistics of Copa

Start at: 2017-08-11 07:40:39

End at: 2017-08-11 07:41:09

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-08-11 07:51:36

End at: 2017-08-11 07:52:06

Below is generated by plot.py at 2017-08-11 10:17:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.87 Mbit/s

95th percentile per-packet one-way delay: 87.068 ms

Loss rate: 0.52%

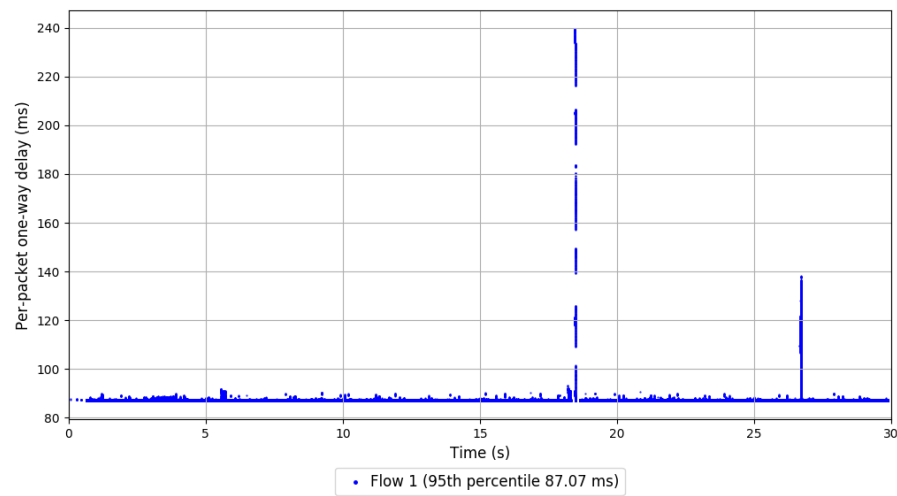
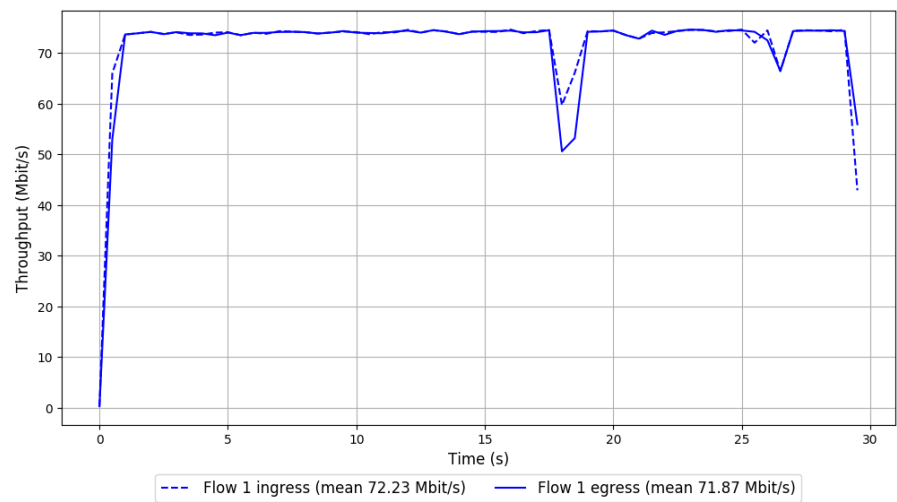
-- Flow 1:

Average throughput: 71.87 Mbit/s

95th percentile per-packet one-way delay: 87.068 ms

Loss rate: 0.52%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-08-11 08:02:30

End at: 2017-08-11 08:03:00

Below is generated by plot.py at 2017-08-11 10:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 146.66 Mbit/s

95th percentile per-packet one-way delay: 131.419 ms

Loss rate: 0.69%

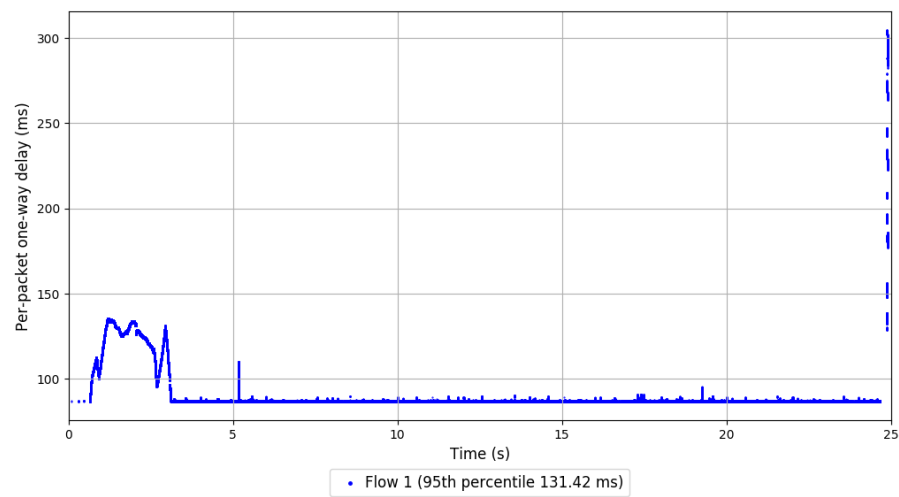
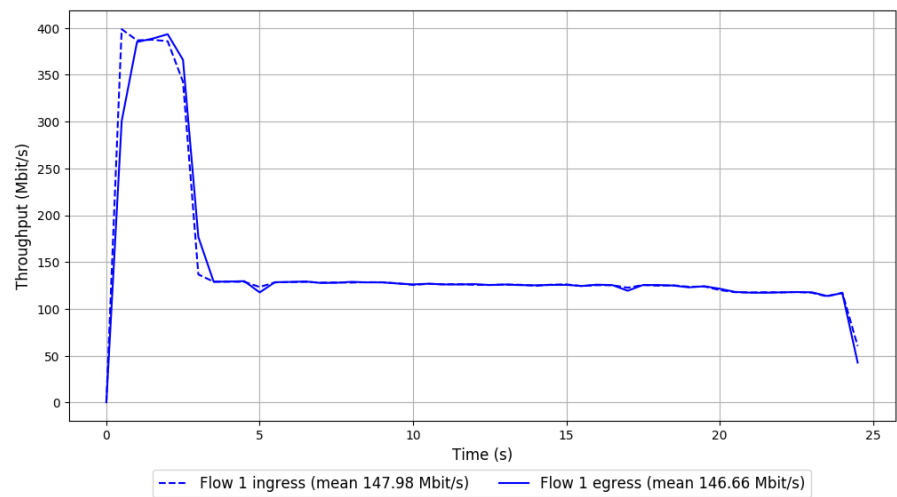
-- Flow 1:

Average throughput: 146.66 Mbit/s

95th percentile per-packet one-way delay: 131.419 ms

Loss rate: 0.69%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

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

End at: 2017-08-11 08:14:03

Below is generated by plot.py at 2017-08-11 10:18:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 118.62 Mbit/s

95th percentile per-packet one-way delay: 86.980 ms

Loss rate: 0.61%

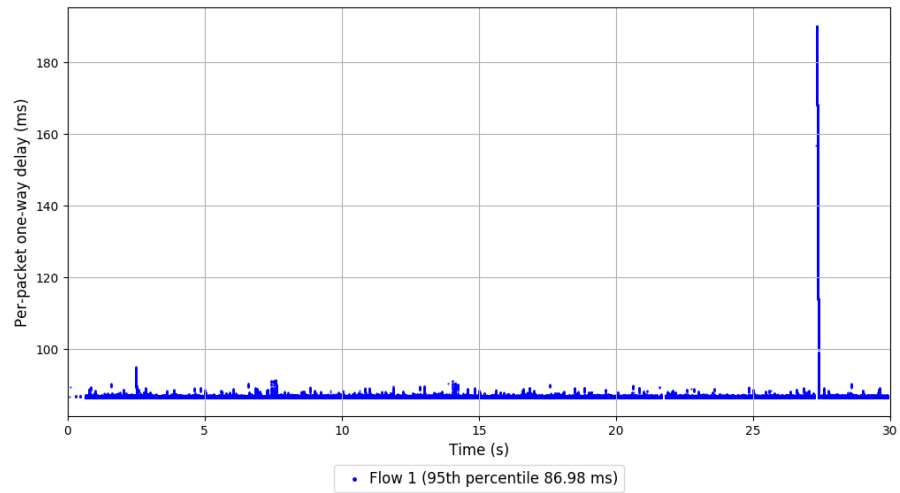
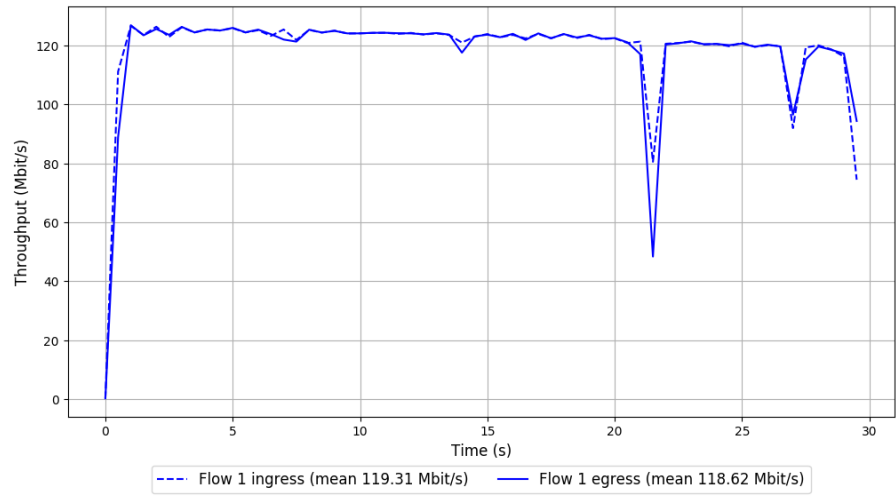
-- Flow 1:

Average throughput: 118.62 Mbit/s

95th percentile per-packet one-way delay: 86.980 ms

Loss rate: 0.61%

Run 5: Report of Copa — Data Link

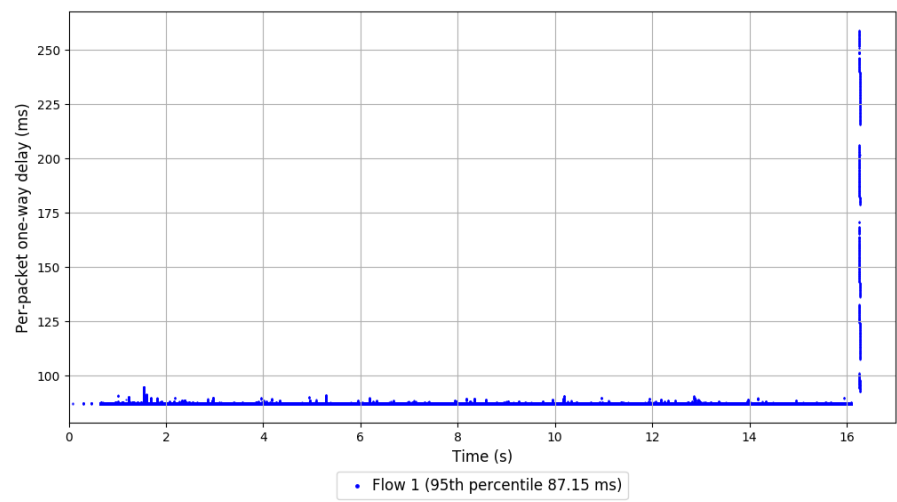
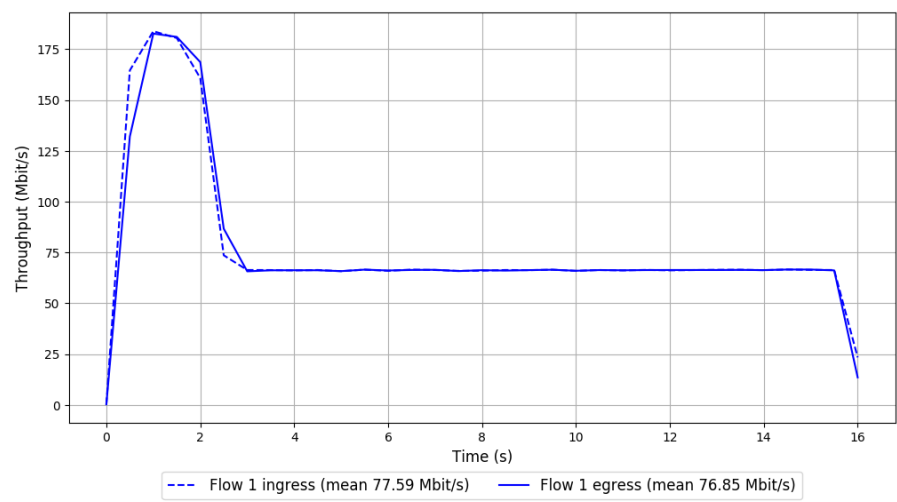


Run 6: Statistics of Copa

Start at: 2017-08-11 08:24:38

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

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-11 08:35:28

End at: 2017-08-11 08:35:58

Below is generated by plot.py at 2017-08-11 10:18:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.68 Mbit/s

95th percentile per-packet one-way delay: 86.987 ms

Loss rate: 0.63%

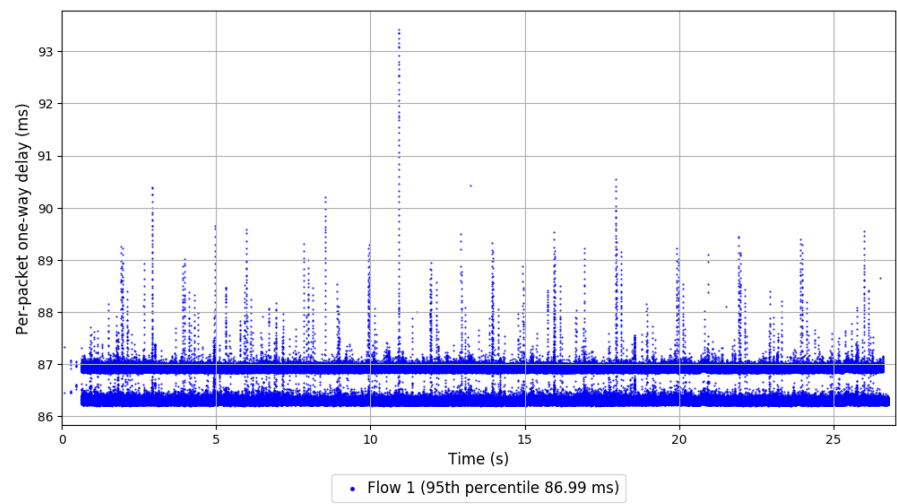
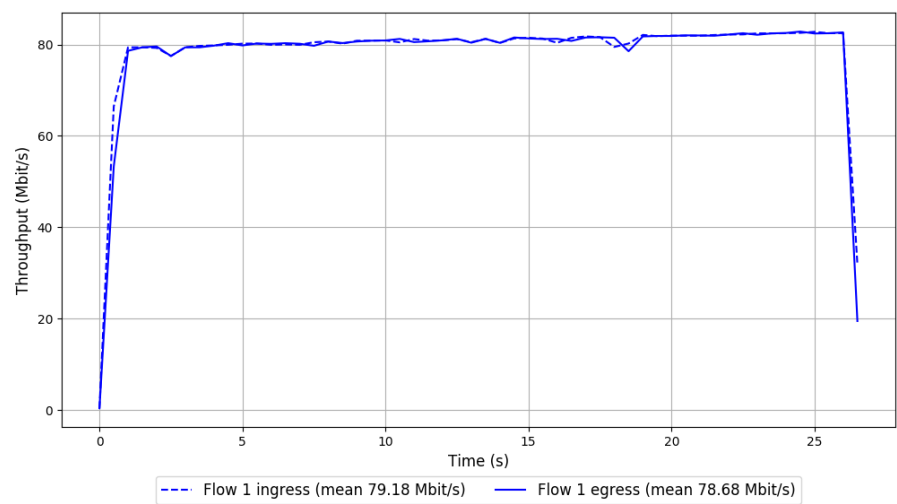
-- Flow 1:

Average throughput: 78.68 Mbit/s

95th percentile per-packet one-way delay: 86.987 ms

Loss rate: 0.63%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

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

End at: 2017-08-11 08:46:50

Below is generated by plot.py at 2017-08-11 10:19:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.34 Mbit/s

95th percentile per-packet one-way delay: 87.113 ms

Loss rate: 0.53%

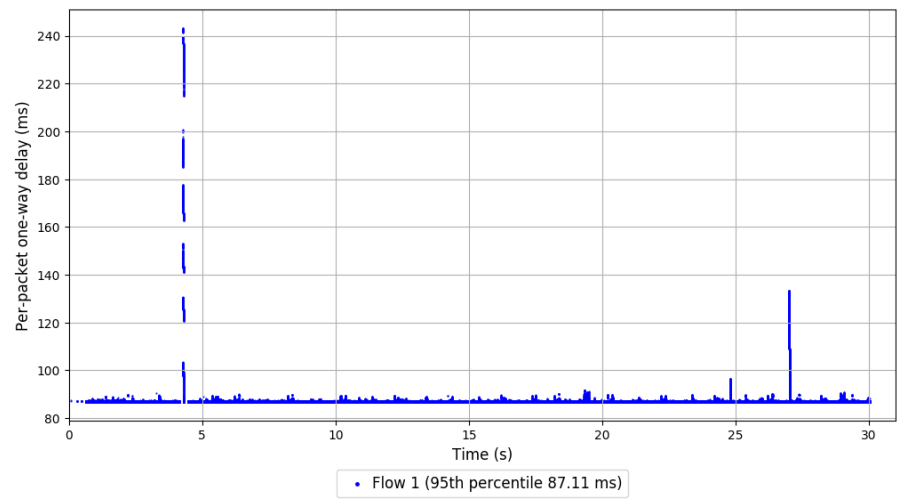
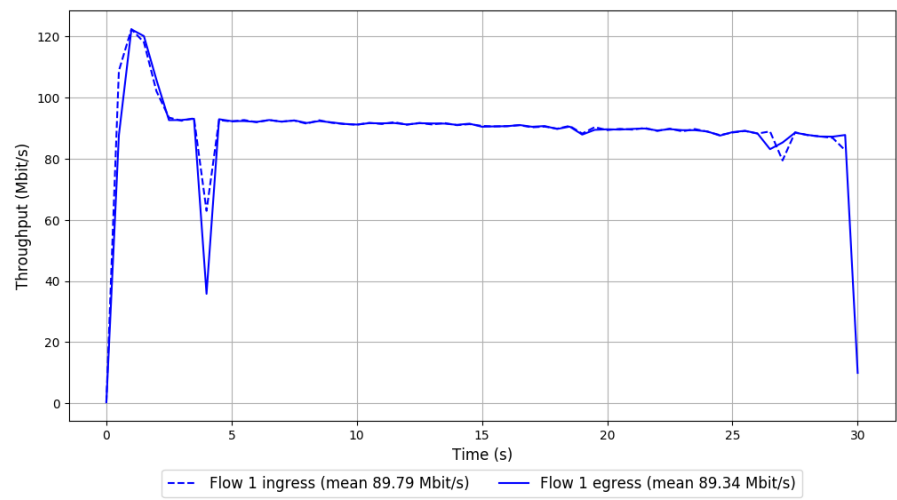
-- Flow 1:

Average throughput: 89.34 Mbit/s

95th percentile per-packet one-way delay: 87.113 ms

Loss rate: 0.53%

Run 8: Report of Copa — Data Link

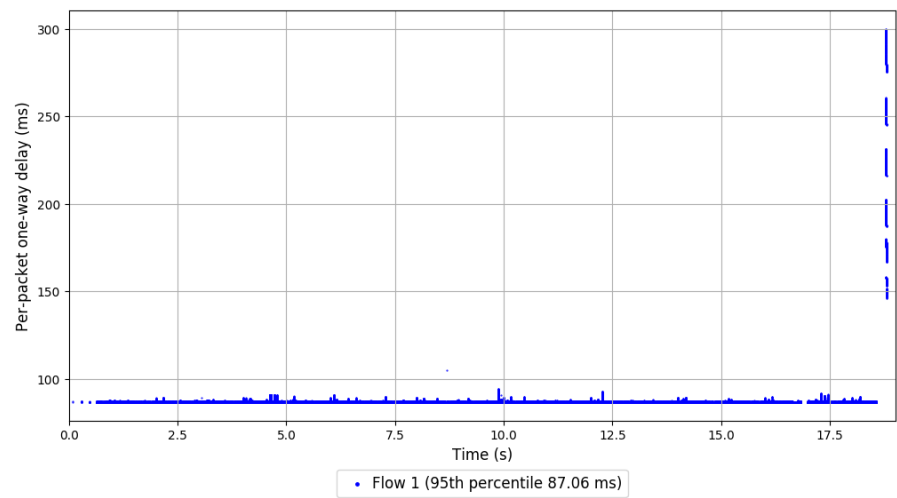
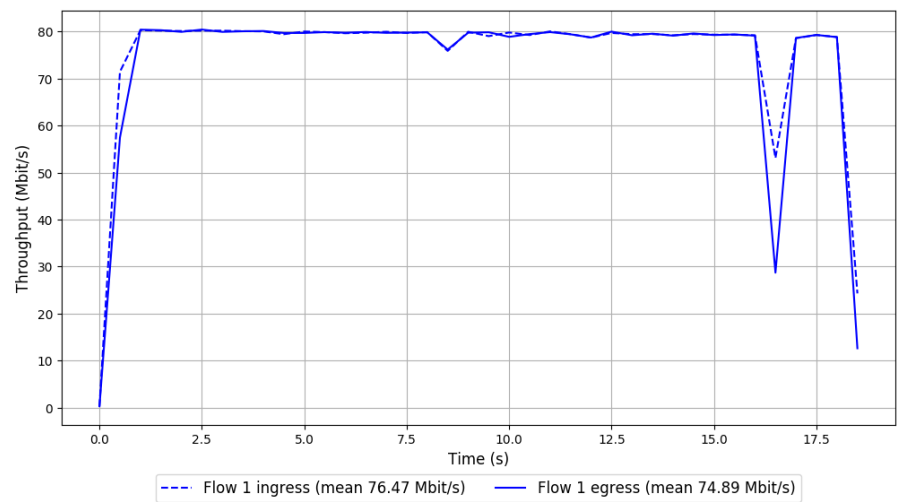


Run 9: Statistics of Copa

Start at: 2017-08-11 08:57:38

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

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-08-11 09:08:39

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

Below is generated by plot.py at 2017-08-11 10:19:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.52 Mbit/s

95th percentile per-packet one-way delay: 86.987 ms

Loss rate: 0.39%

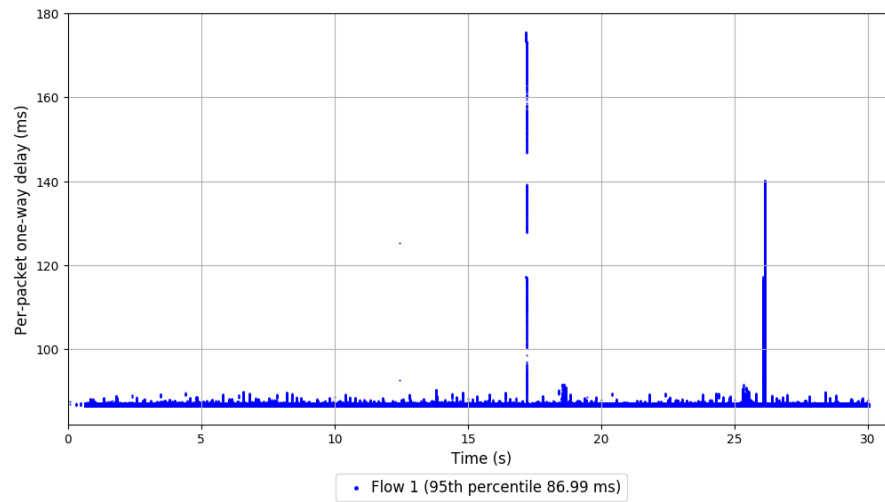
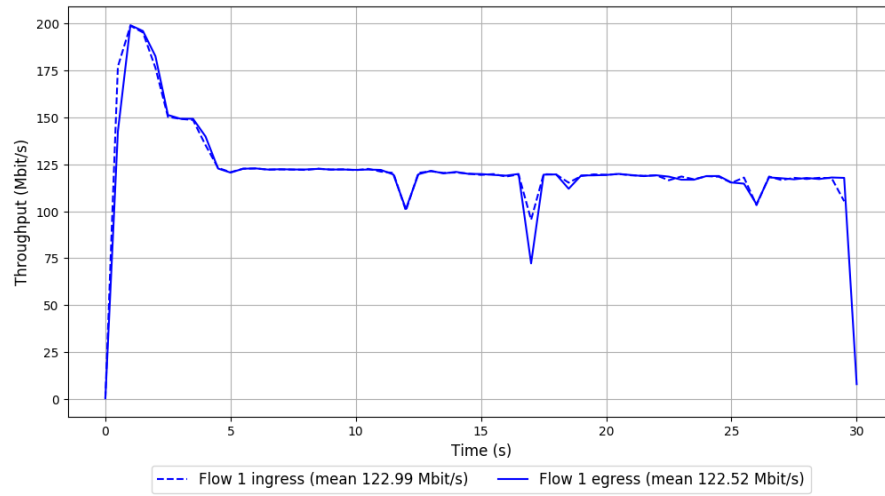
-- Flow 1:

Average throughput: 122.52 Mbit/s

95th percentile per-packet one-way delay: 86.987 ms

Loss rate: 0.39%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-11 07:29:05

End at: 2017-08-11 07:29:35

Below is generated by plot.py at 2017-08-11 10:19:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.91 Mbit/s

95th percentile per-packet one-way delay: 87.619 ms

Loss rate: 0.04%

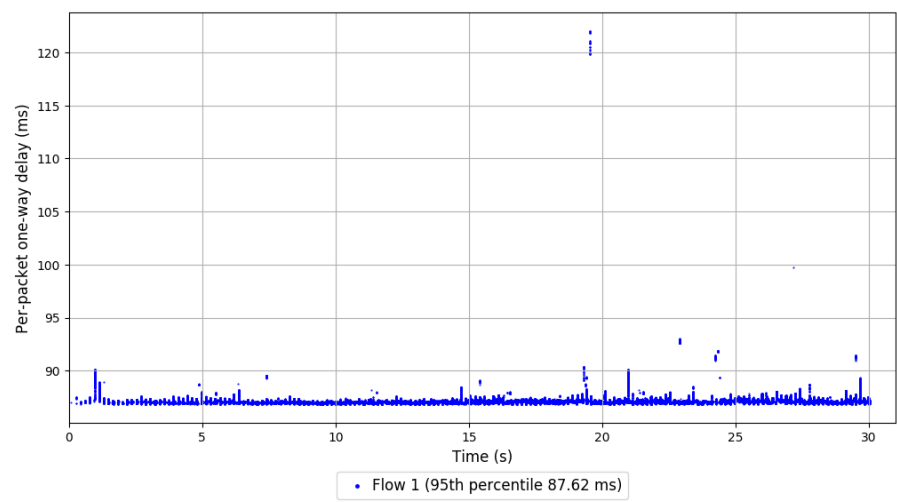
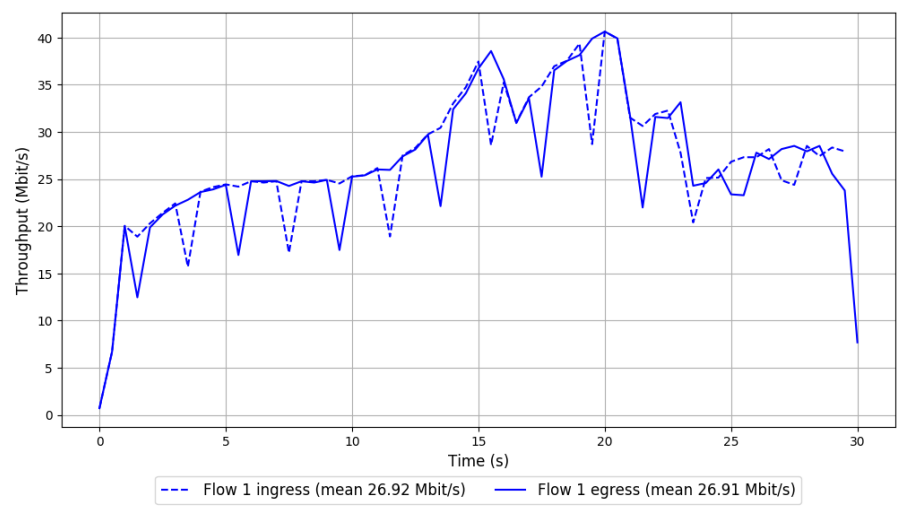
-- Flow 1:

Average throughput: 26.91 Mbit/s

95th percentile per-packet one-way delay: 87.619 ms

Loss rate: 0.04%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-11 07:39:58

End at: 2017-08-11 07:40:28

Below is generated by plot.py at 2017-08-11 10:19:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.79 Mbit/s

95th percentile per-packet one-way delay: 87.803 ms

Loss rate: 1.54%

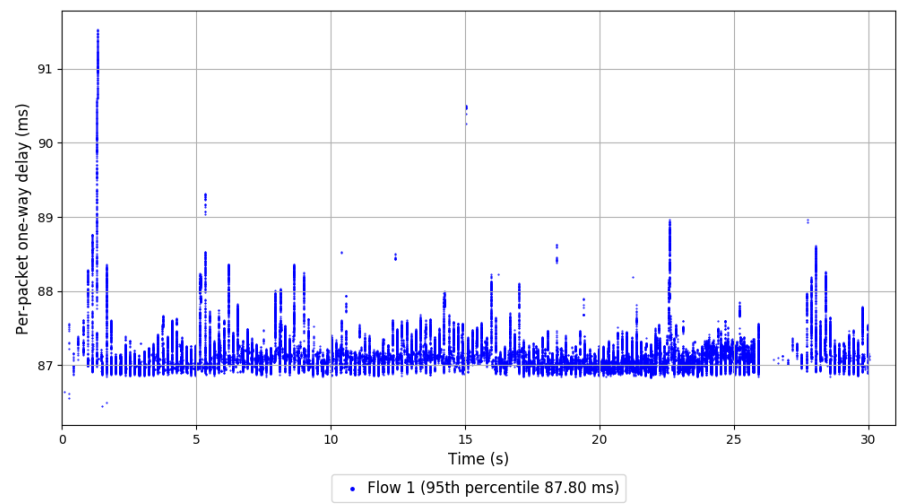
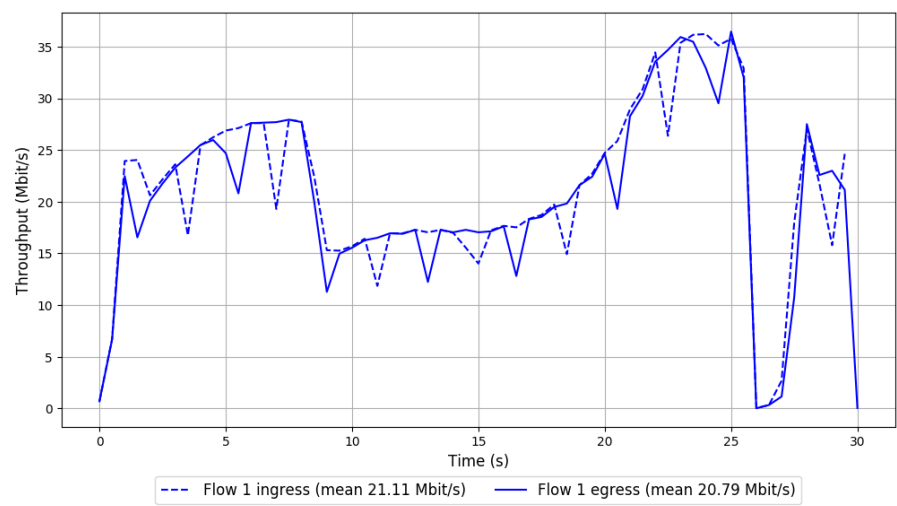
-- Flow 1:

Average throughput: 20.79 Mbit/s

95th percentile per-packet one-way delay: 87.803 ms

Loss rate: 1.54%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-11 07:50:55

End at: 2017-08-11 07:51:25

Below is generated by plot.py at 2017-08-11 10:19:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.62 Mbit/s

95th percentile per-packet one-way delay: 87.526 ms

Loss rate: 0.46%

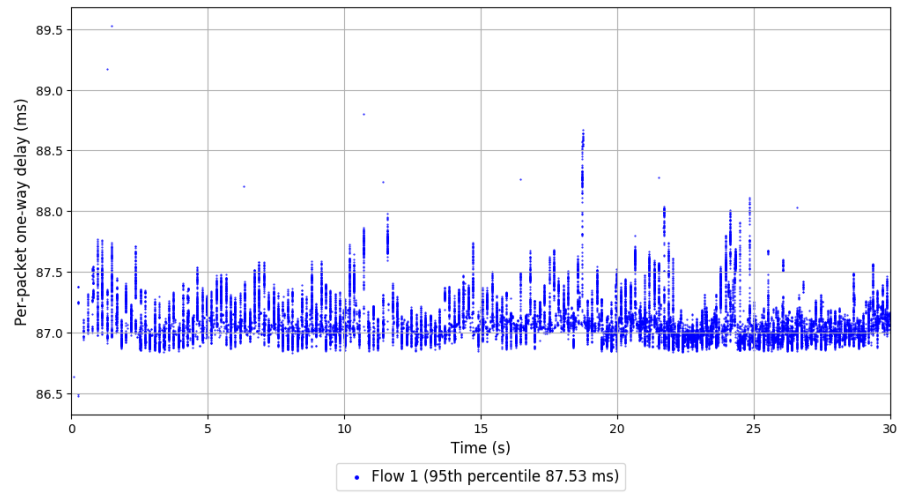
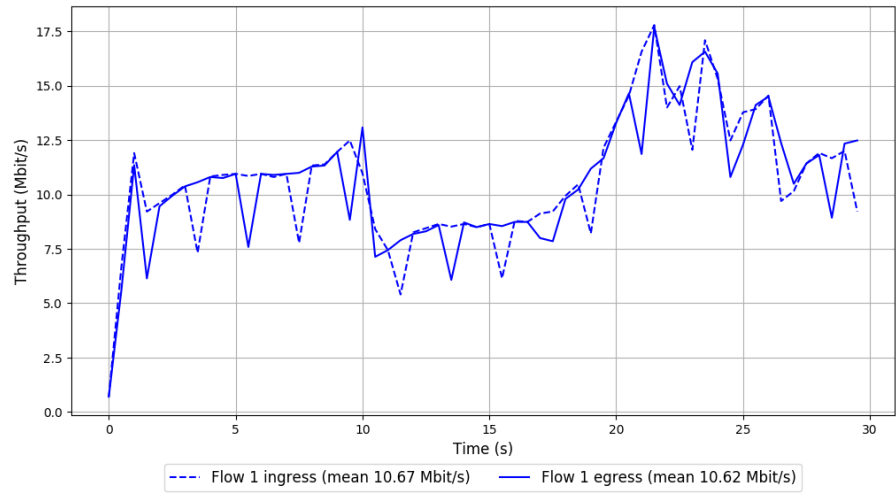
-- Flow 1:

Average throughput: 10.62 Mbit/s

95th percentile per-packet one-way delay: 87.526 ms

Loss rate: 0.46%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

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

End at: 2017-08-11 08:02:20

Below is generated by plot.py at 2017-08-11 10:19:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.02 Mbit/s

95th percentile per-packet one-way delay: 87.499 ms

Loss rate: 4.67%

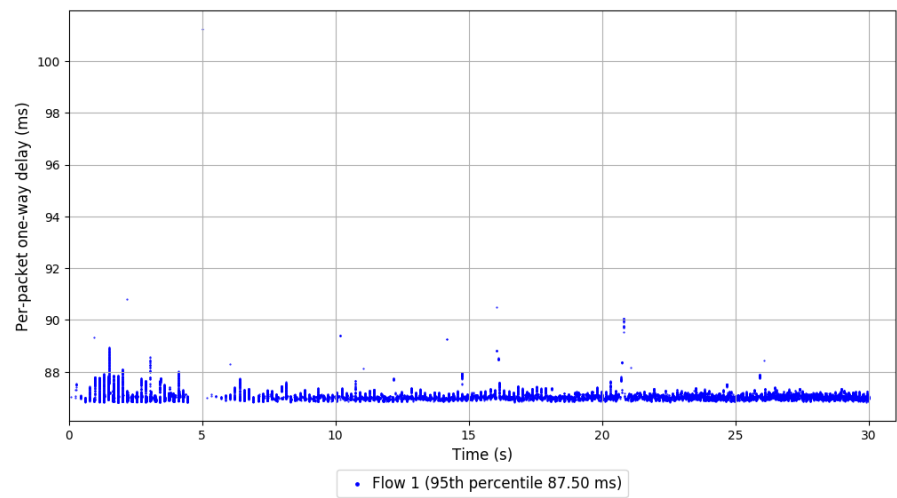
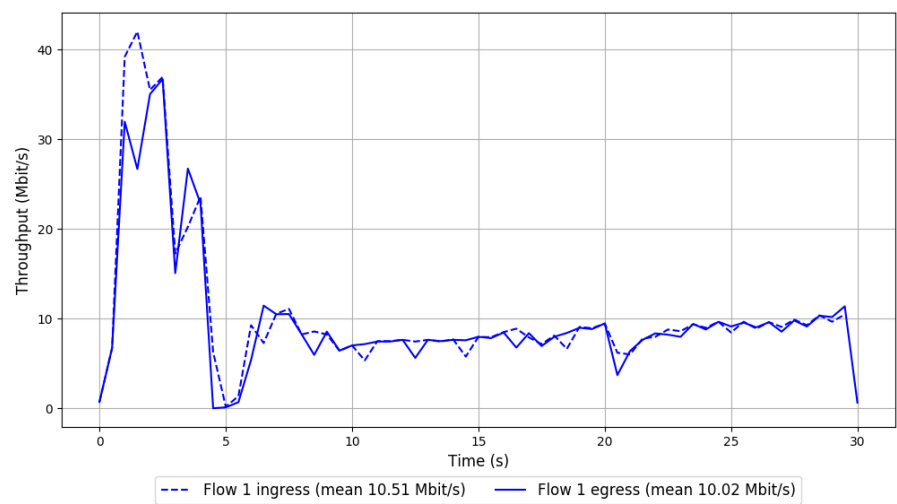
-- Flow 1:

Average throughput: 10.02 Mbit/s

95th percentile per-packet one-way delay: 87.499 ms

Loss rate: 4.67%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

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

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

Below is generated by plot.py at 2017-08-11 10:19:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.25 Mbit/s

95th percentile per-packet one-way delay: 87.639 ms

Loss rate: 1.32%

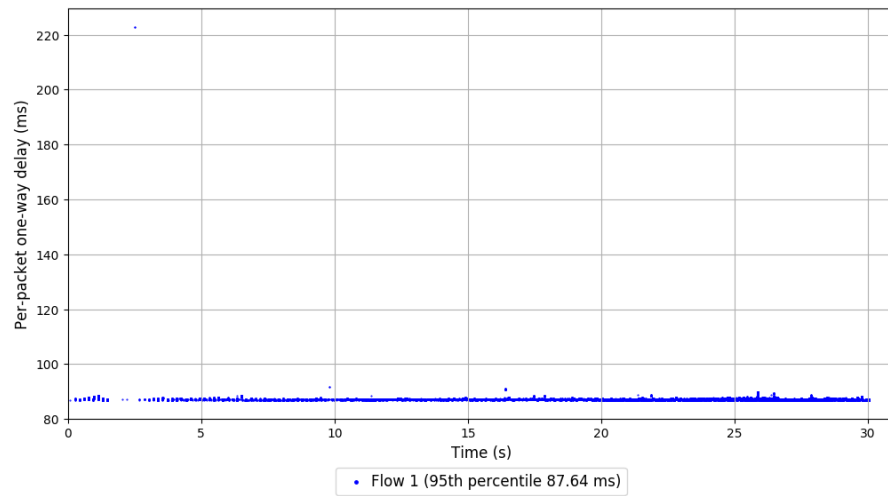
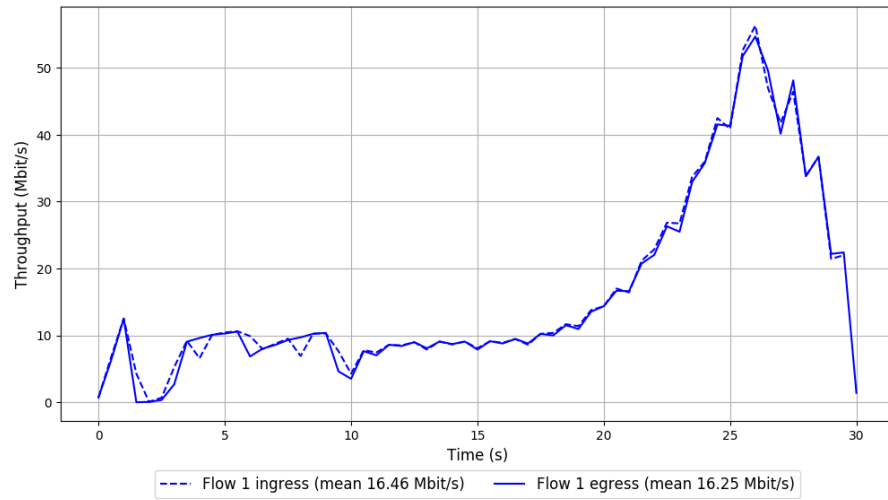
-- Flow 1:

Average throughput: 16.25 Mbit/s

95th percentile per-packet one-way delay: 87.639 ms

Loss rate: 1.32%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-11 08:23:57

End at: 2017-08-11 08:24:27

Below is generated by plot.py at 2017-08-11 10:19:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.84 Mbit/s

95th percentile per-packet one-way delay: 87.367 ms

Loss rate: 2.33%

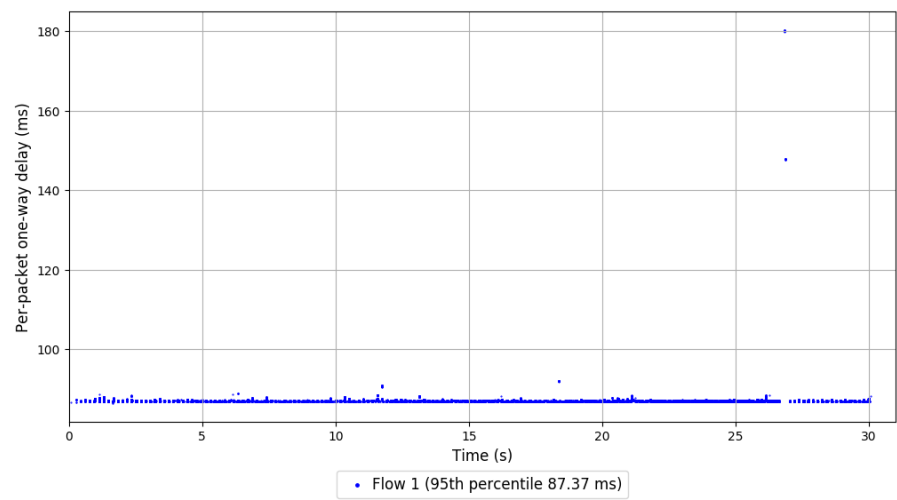
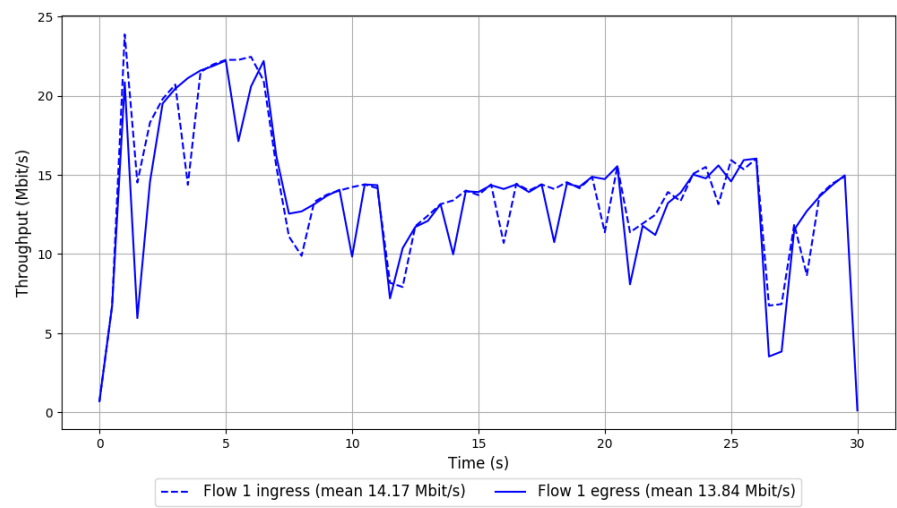
-- Flow 1:

Average throughput: 13.84 Mbit/s

95th percentile per-packet one-way delay: 87.367 ms

Loss rate: 2.33%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-11 08:34:47

End at: 2017-08-11 08:35:17

Below is generated by plot.py at 2017-08-11 10:19:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.29 Mbit/s

95th percentile per-packet one-way delay: 87.350 ms

Loss rate: 1.32%

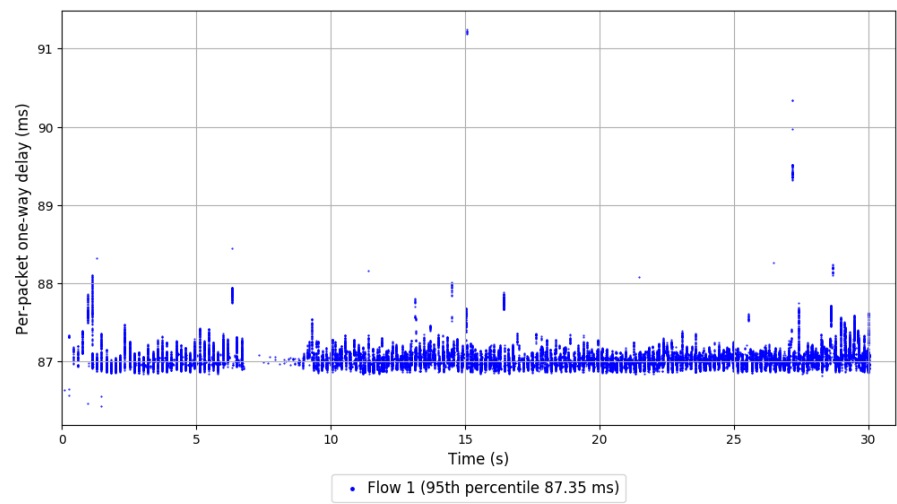
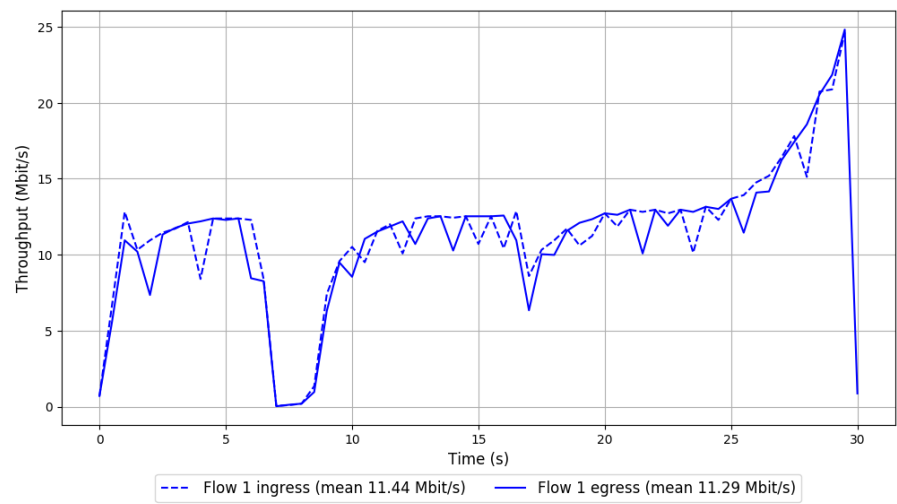
-- Flow 1:

Average throughput: 11.29 Mbit/s

95th percentile per-packet one-way delay: 87.350 ms

Loss rate: 1.32%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-11 08:45:38

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

Below is generated by plot.py at 2017-08-11 10:19:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.15 Mbit/s

95th percentile per-packet one-way delay: 87.493 ms

Loss rate: 0.66%

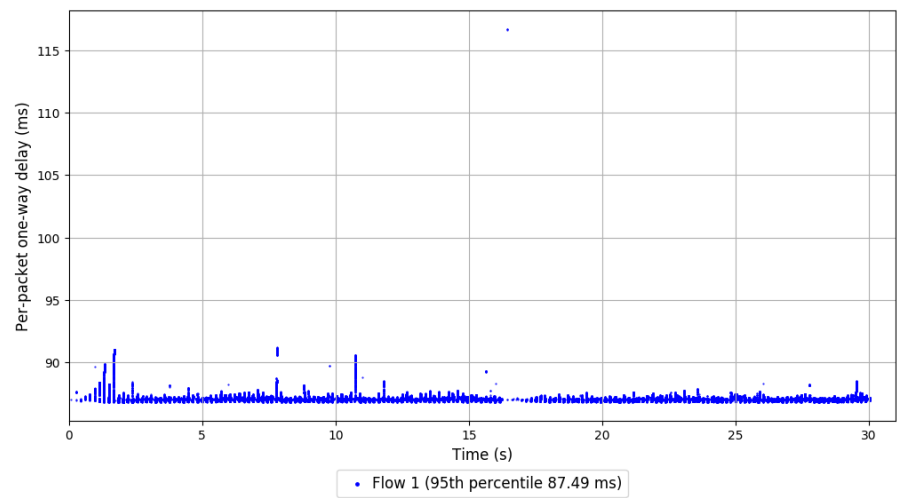
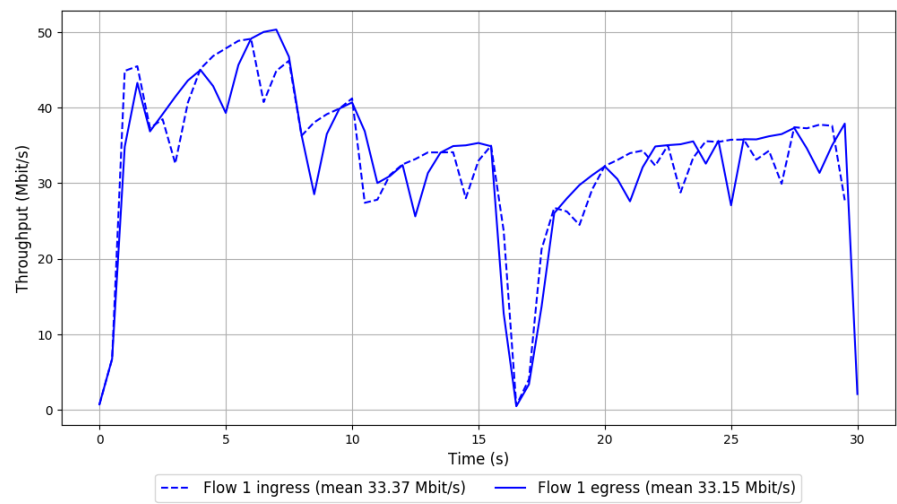
-- Flow 1:

Average throughput: 33.15 Mbit/s

95th percentile per-packet one-way delay: 87.493 ms

Loss rate: 0.66%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

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

End at: 2017-08-11 08:57:28

Below is generated by plot.py at 2017-08-11 10:19:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.87 Mbit/s

95th percentile per-packet one-way delay: 87.168 ms

Loss rate: 1.19%

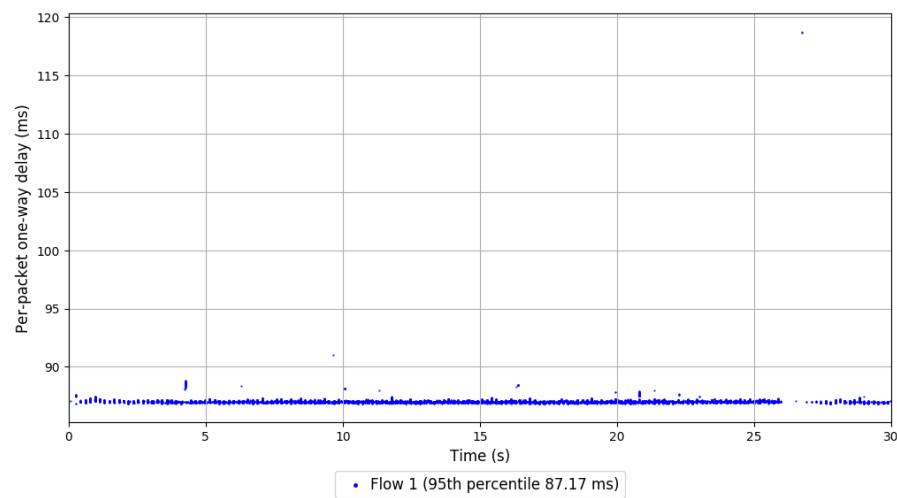
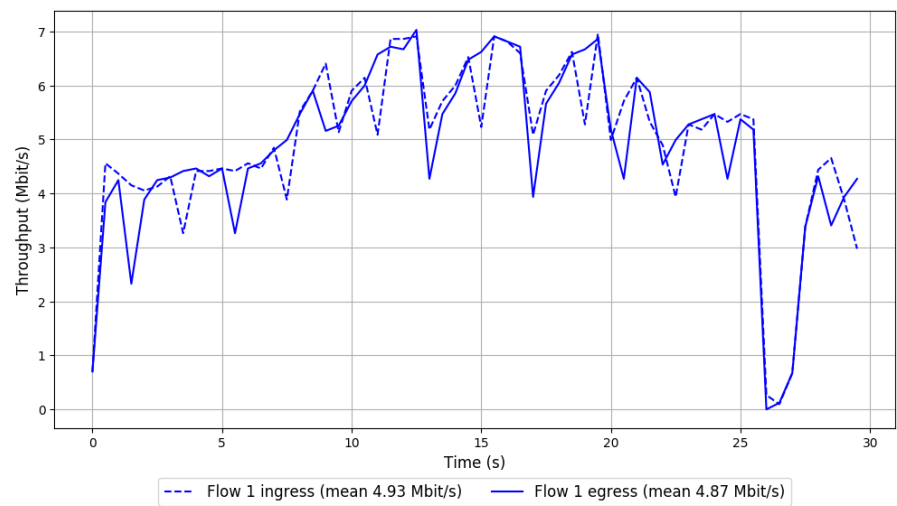
-- Flow 1:

Average throughput: 4.87 Mbit/s

95th percentile per-packet one-way delay: 87.168 ms

Loss rate: 1.19%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-11 09:07:57

End at: 2017-08-11 09:08:27

Below is generated by plot.py at 2017-08-11 10:20:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.96 Mbit/s

95th percentile per-packet one-way delay: 87.906 ms

Loss rate: 1.29%

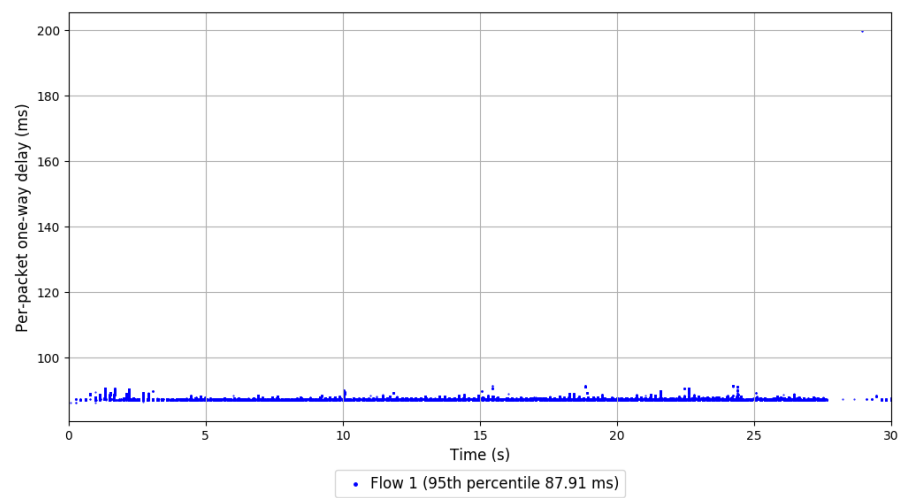
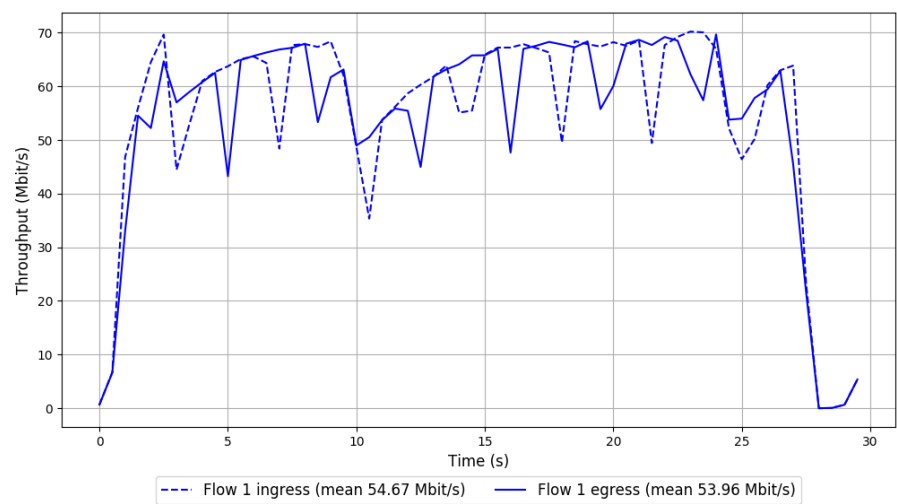
-- Flow 1:

Average throughput: 53.96 Mbit/s

95th percentile per-packet one-way delay: 87.906 ms

Loss rate: 1.29%

Run 10: Report of TCP Cubic — Data Link

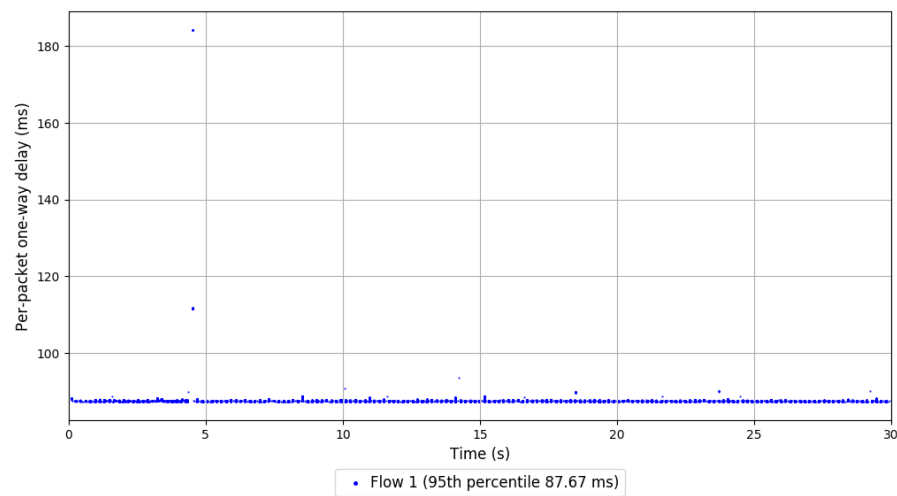
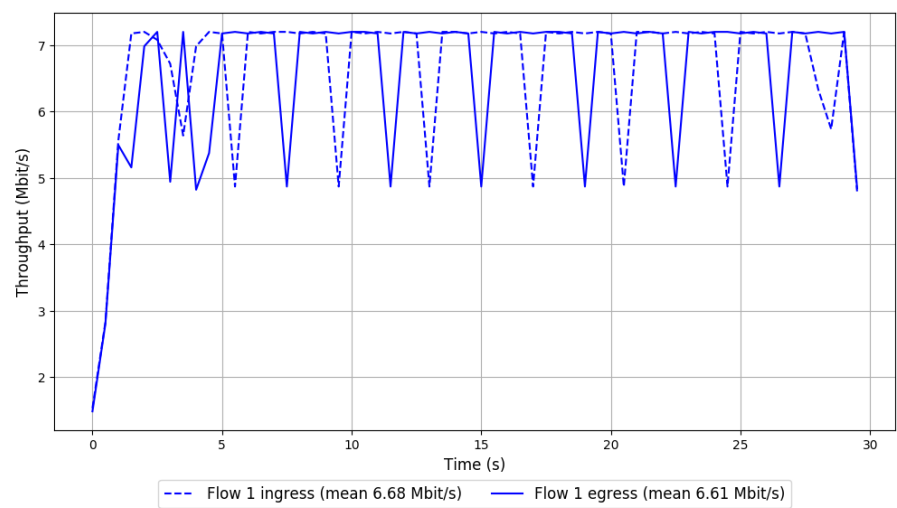


```
Run 1: Statistics of KohoCC

Start at: 2017-08-11 07:24:50
End at: 2017-08-11 07:25:20

# Below is generated by plot.py at 2017-08-11 10:20:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 87.675 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 87.675 ms
Loss rate: 1.03%
```


Run 1: Report of KohoCC — Data Link



Run 2: Statistics of KohoCC

Start at: 2017-08-11 07:35:48

End at: 2017-08-11 07:36:18

Below is generated by plot.py at 2017-08-11 10:20:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.67 Mbit/s

95th percentile per-packet one-way delay: 87.564 ms

Loss rate: 0.38%

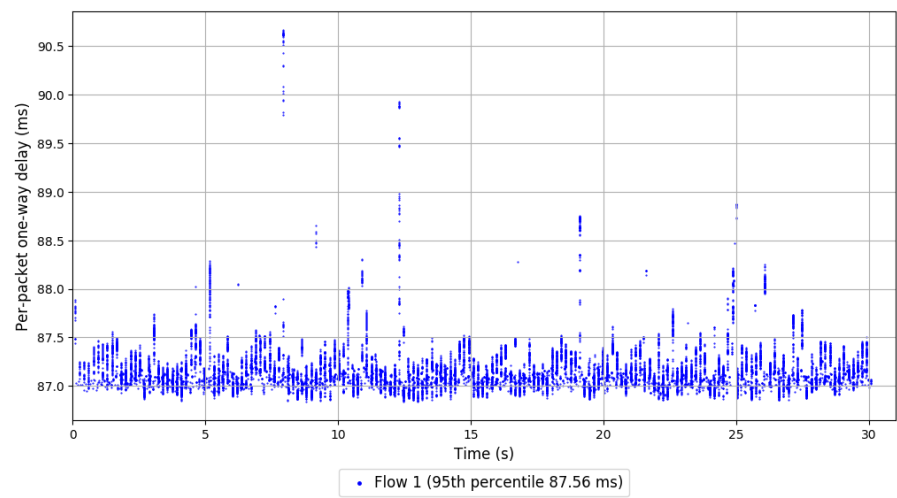
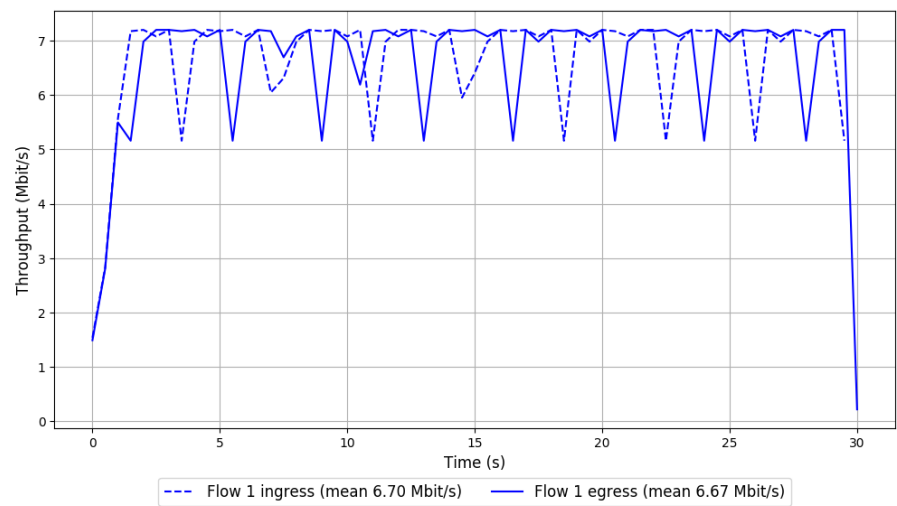
-- Flow 1:

Average throughput: 6.67 Mbit/s

95th percentile per-packet one-way delay: 87.564 ms

Loss rate: 0.38%

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-11 07:46:38

End at: 2017-08-11 07:47:08

Below is generated by plot.py at 2017-08-11 10:20:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.69 Mbit/s

95th percentile per-packet one-way delay: 87.375 ms

Loss rate: 0.64%

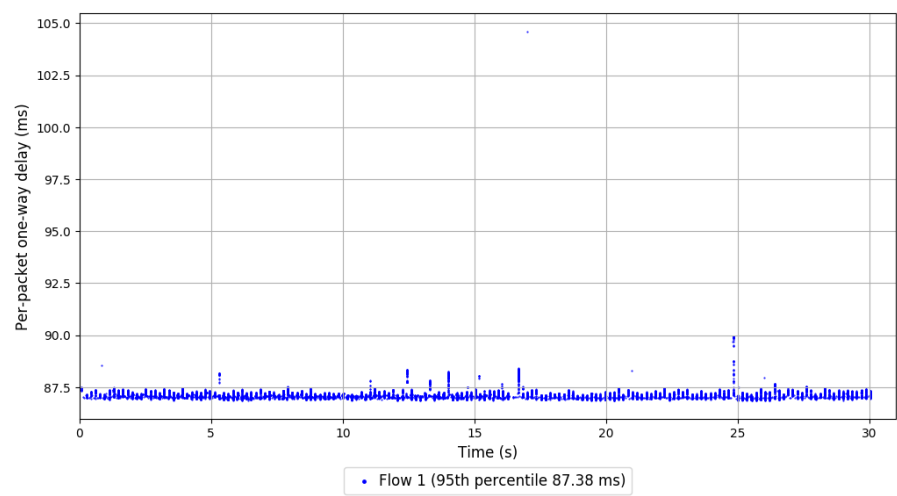
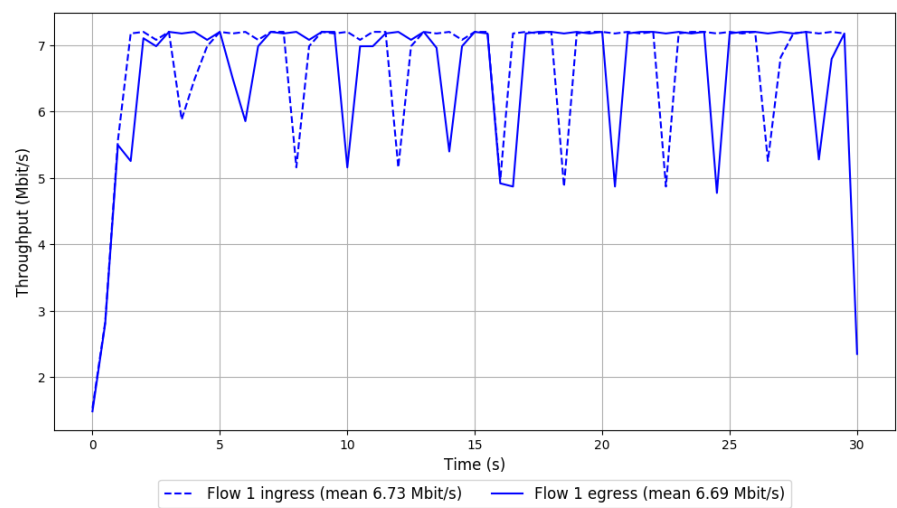
-- Flow 1:

Average throughput: 6.69 Mbit/s

95th percentile per-packet one-way delay: 87.375 ms

Loss rate: 0.64%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-08-11 07:57:32

End at: 2017-08-11 07:58:02

Below is generated by plot.py at 2017-08-11 10:20:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 87.552 ms

Loss rate: 0.14%

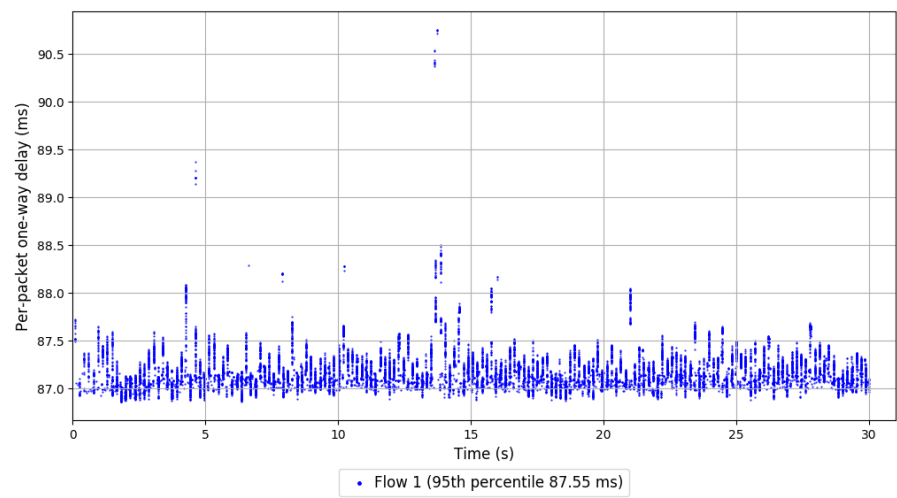
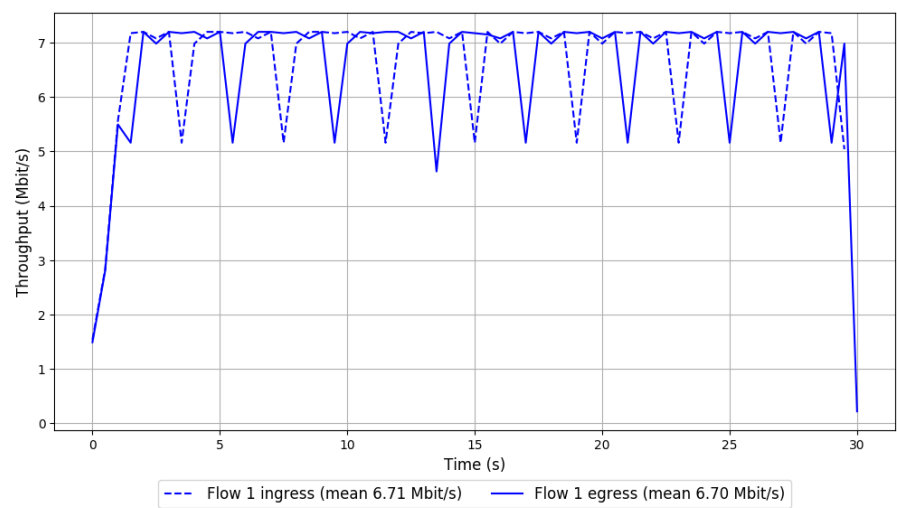
-- Flow 1:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 87.552 ms

Loss rate: 0.14%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

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

End at: 2017-08-11 08:09:05

Below is generated by plot.py at 2017-08-11 10:20:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 87.493 ms

Loss rate: 1.22%

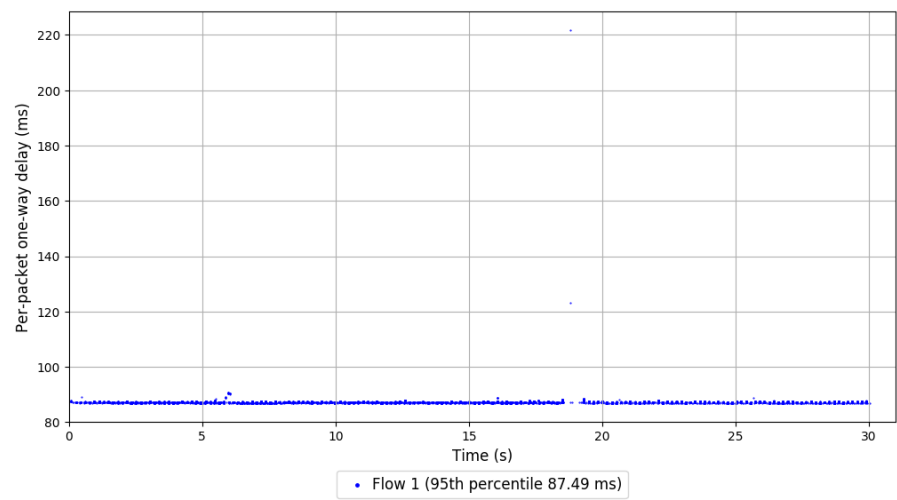
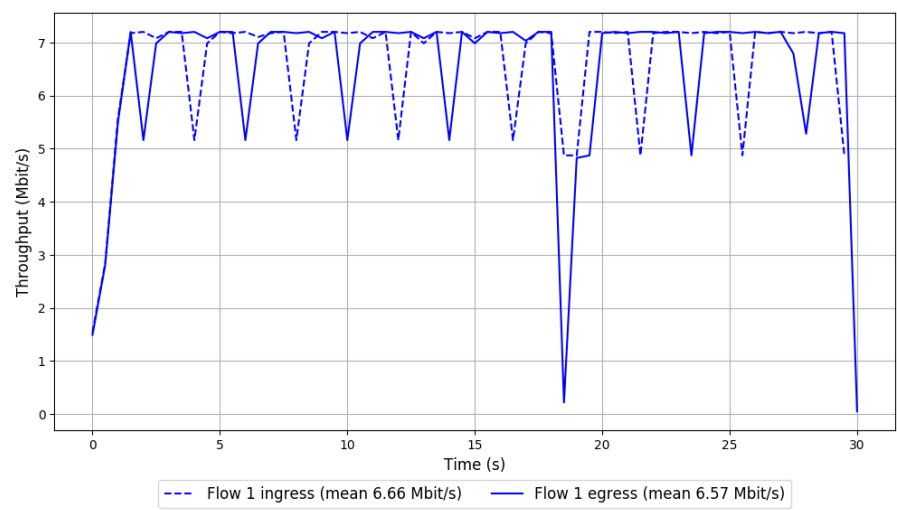
-- Flow 1:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 87.493 ms

Loss rate: 1.22%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-11 08:19:48

End at: 2017-08-11 08:20:18

Below is generated by plot.py at 2017-08-11 10:20:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.44 Mbit/s

95th percentile per-packet one-way delay: 87.569 ms

Loss rate: 2.42%

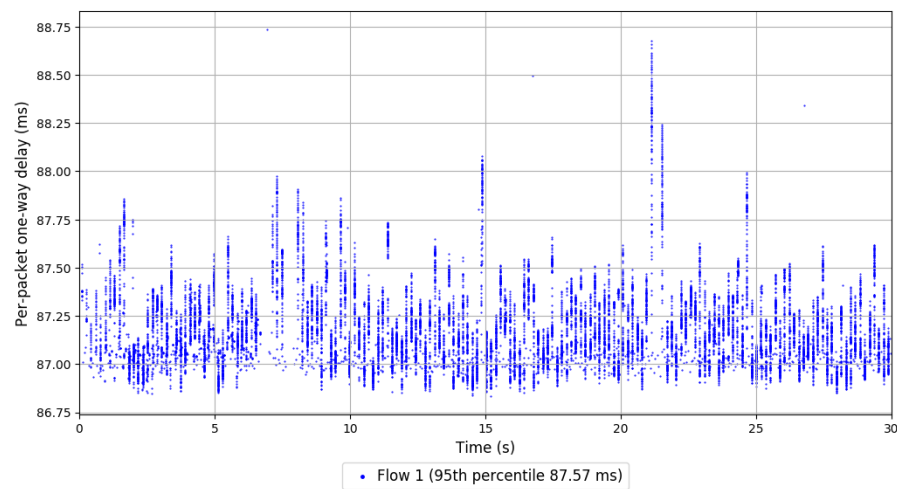
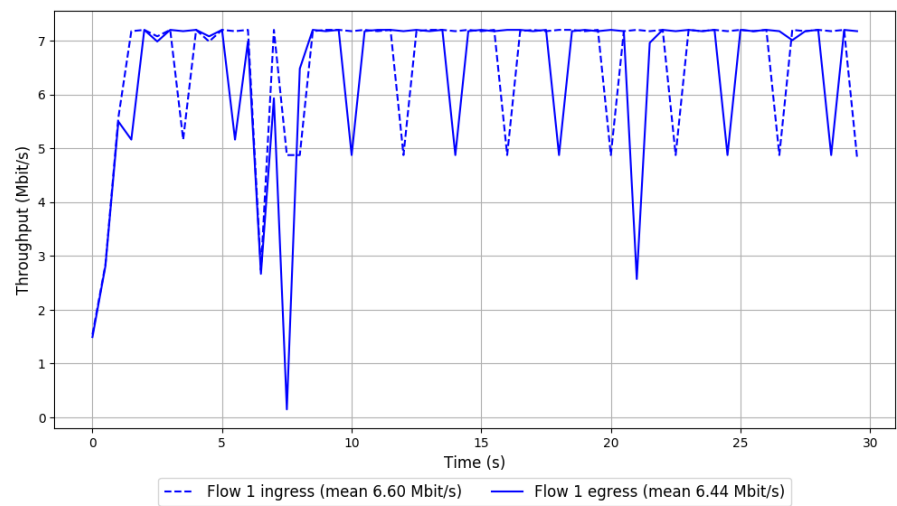
-- Flow 1:

Average throughput: 6.44 Mbit/s

95th percentile per-packet one-way delay: 87.569 ms

Loss rate: 2.42%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-11 08:30:31

End at: 2017-08-11 08:31:01

Below is generated by plot.py at 2017-08-11 10:20:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 87.369 ms

Loss rate: 1.46%

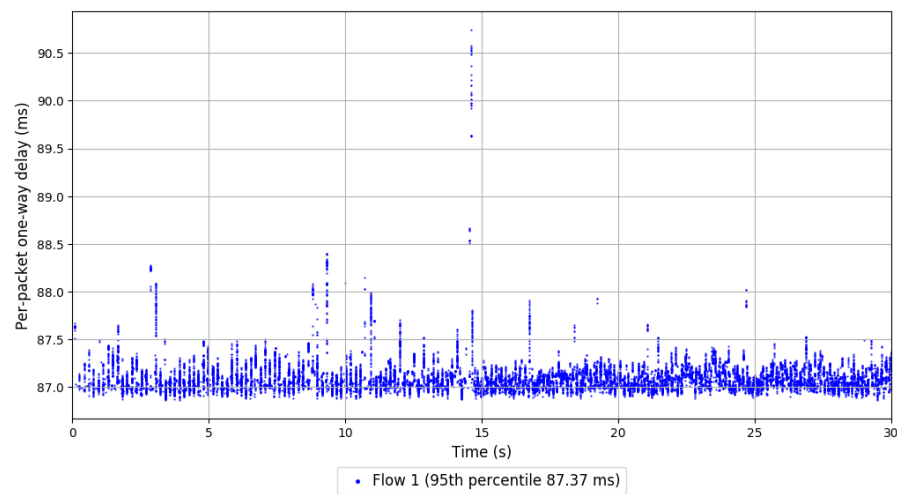
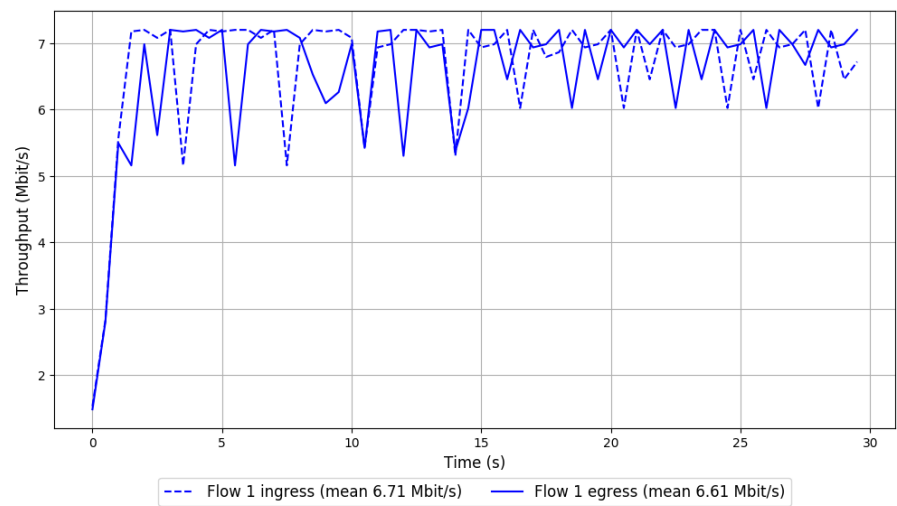
-- Flow 1:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 87.369 ms

Loss rate: 1.46%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-11 08:41:21

End at: 2017-08-11 08:41:51

Below is generated by plot.py at 2017-08-11 10:20:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 87.435 ms

Loss rate: 2.91%

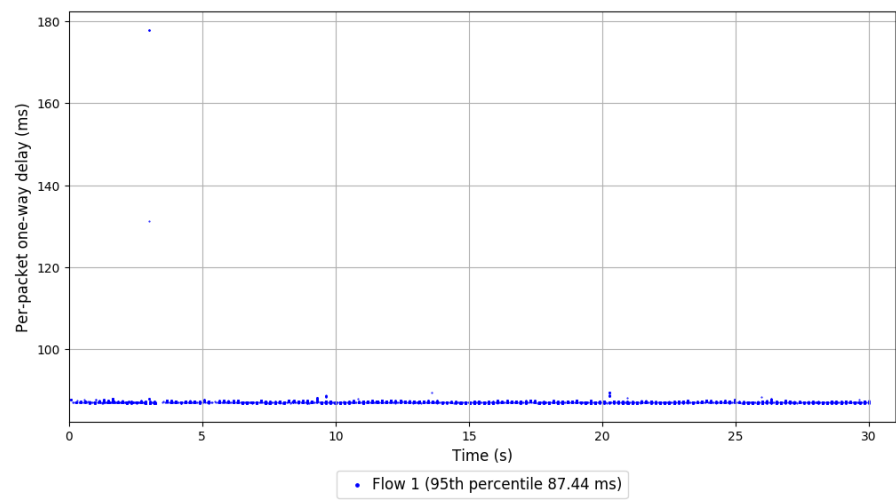
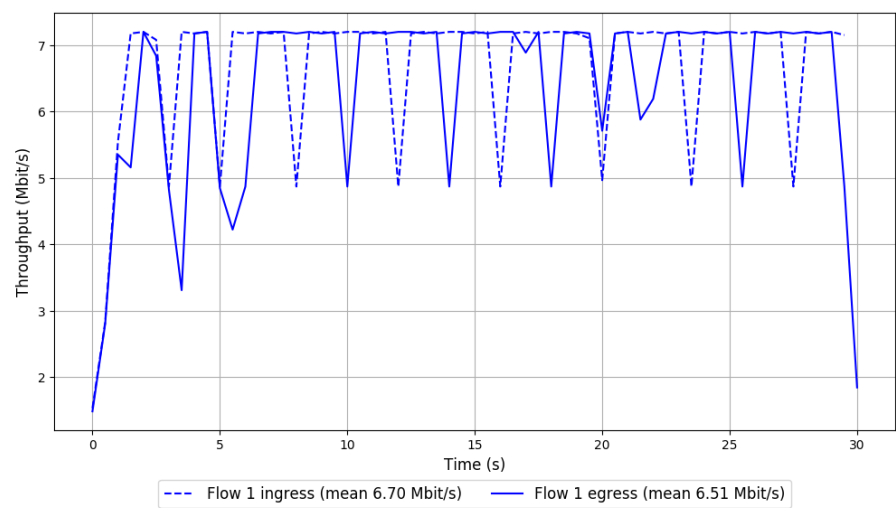
-- Flow 1:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 87.435 ms

Loss rate: 2.91%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-11 08:52:39

End at: 2017-08-11 08:53:09

Below is generated by plot.py at 2017-08-11 10:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.73 Mbit/s

95th percentile per-packet one-way delay: 87.308 ms

Loss rate: 0.03%

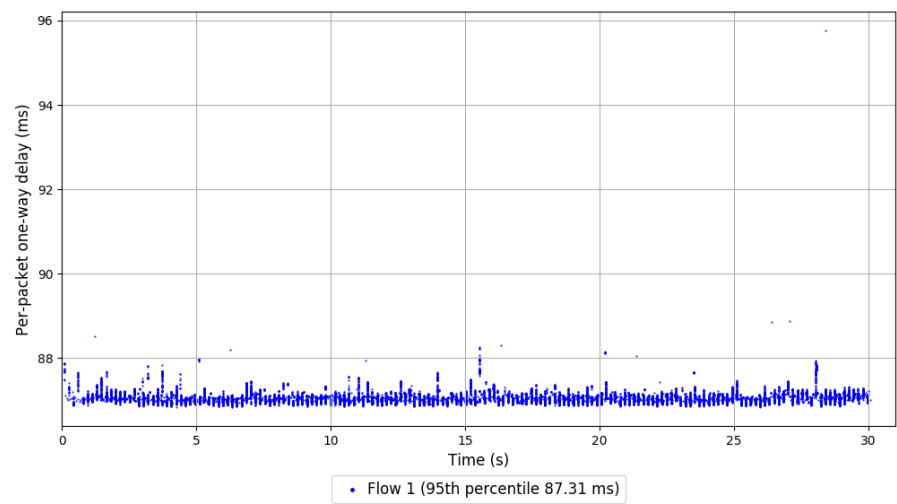
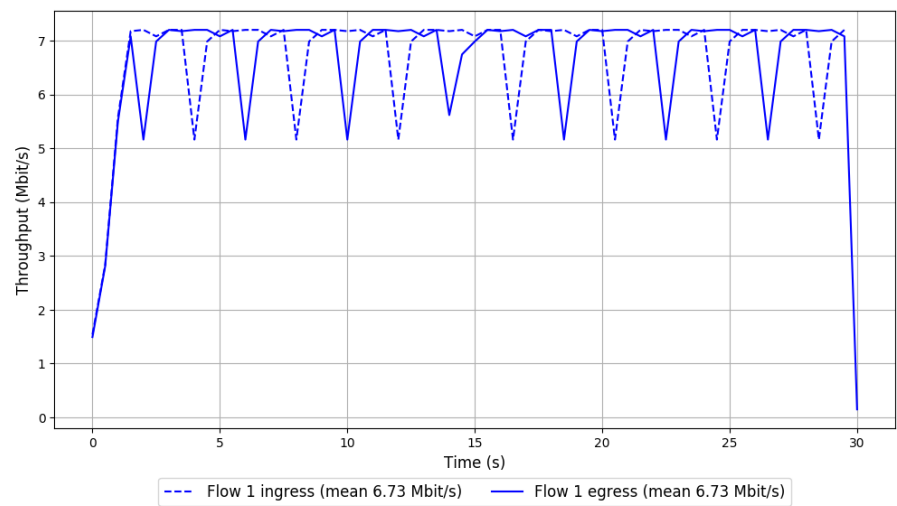
-- Flow 1:

Average throughput: 6.73 Mbit/s

95th percentile per-packet one-way delay: 87.308 ms

Loss rate: 0.03%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-08-11 09:03:39

End at: 2017-08-11 09:04:09

Below is generated by plot.py at 2017-08-11 10:20:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 87.476 ms

Loss rate: 1.71%

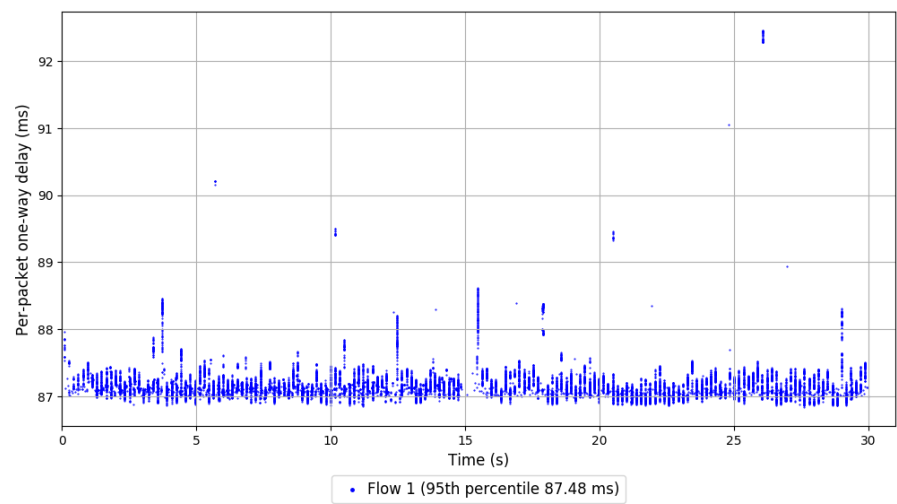
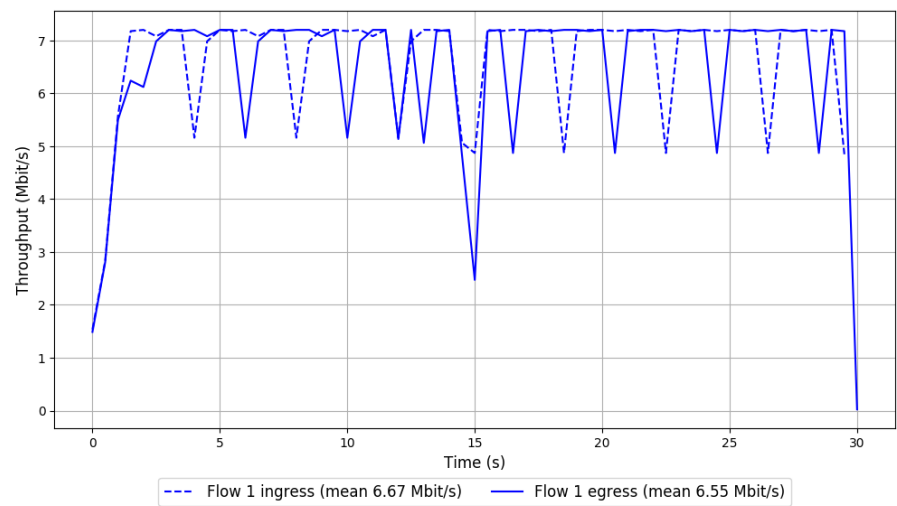
-- Flow 1:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 87.476 ms

Loss rate: 1.71%

Run 10: Report of KohoCC — Data Link

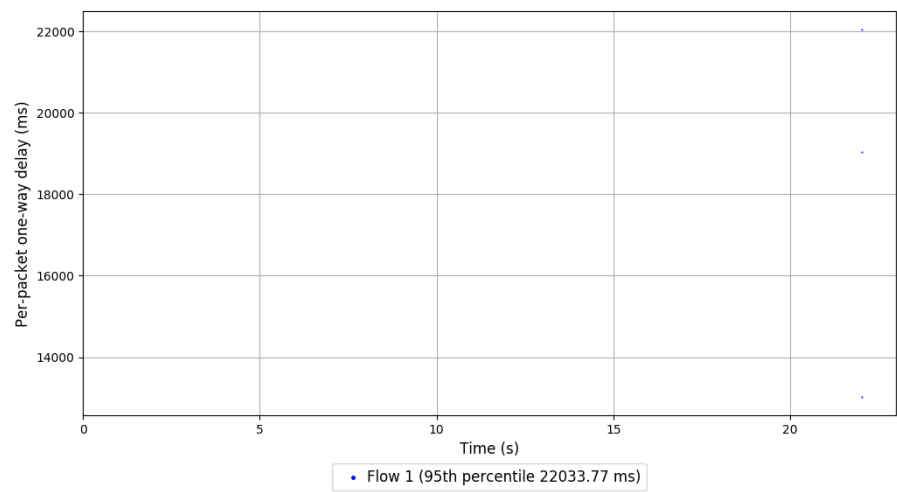
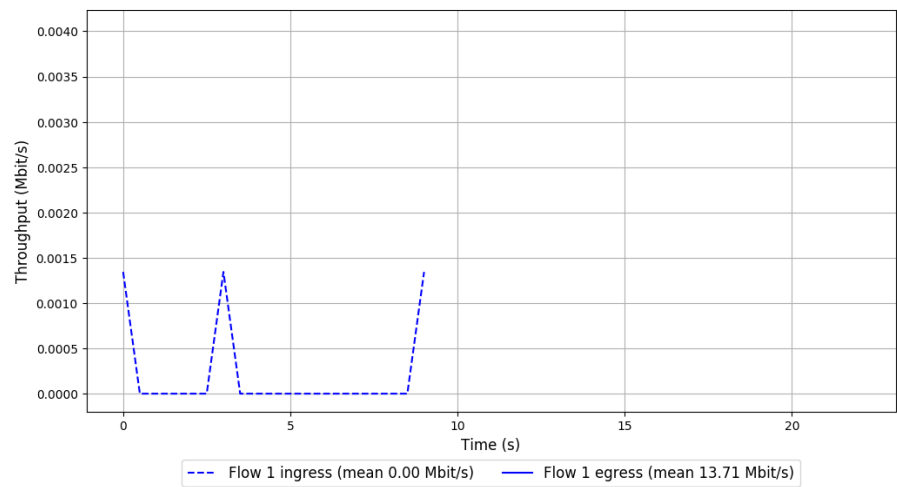


Run 1: Statistics of LEDBAT

Start at: 2017-08-11 07:27:09

End at: 2017-08-11 07:27:39

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-08-11 07:37:58

End at: 2017-08-11 07:38:28

Below is generated by plot.py at 2017-08-11 10:20:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.00 Mbit/s

95th percentile per-packet one-way delay: 87.520 ms

Loss rate: 0.14%

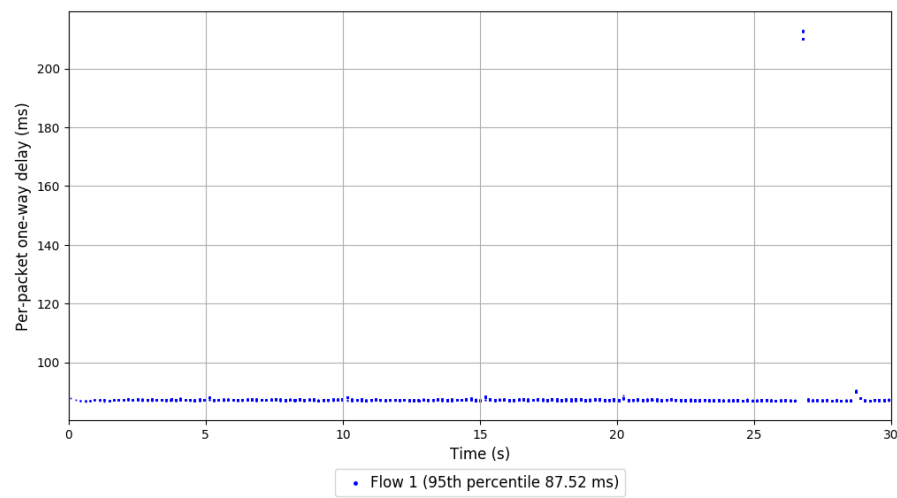
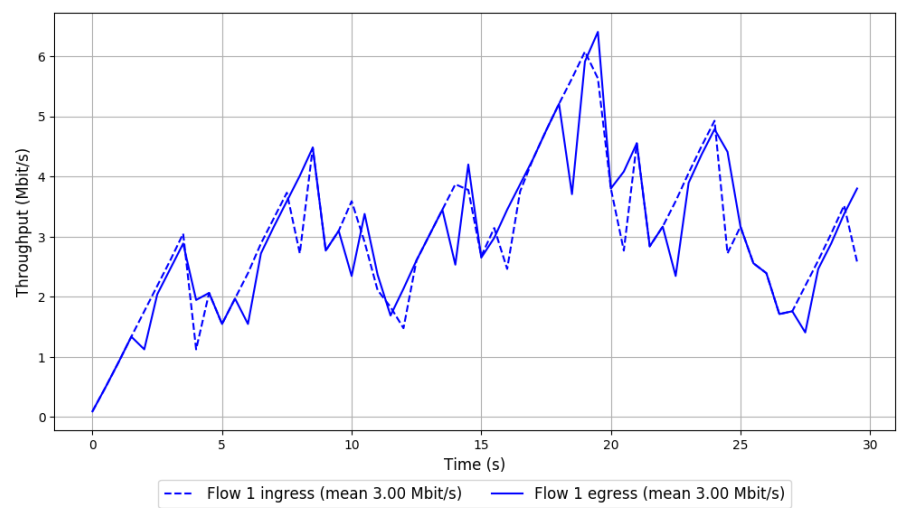
-- Flow 1:

Average throughput: 3.00 Mbit/s

95th percentile per-packet one-way delay: 87.520 ms

Loss rate: 0.14%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-11 07:48:55

End at: 2017-08-11 07:49:25

Below is generated by plot.py at 2017-08-11 10:20:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 87.480 ms

Loss rate: 0.98%

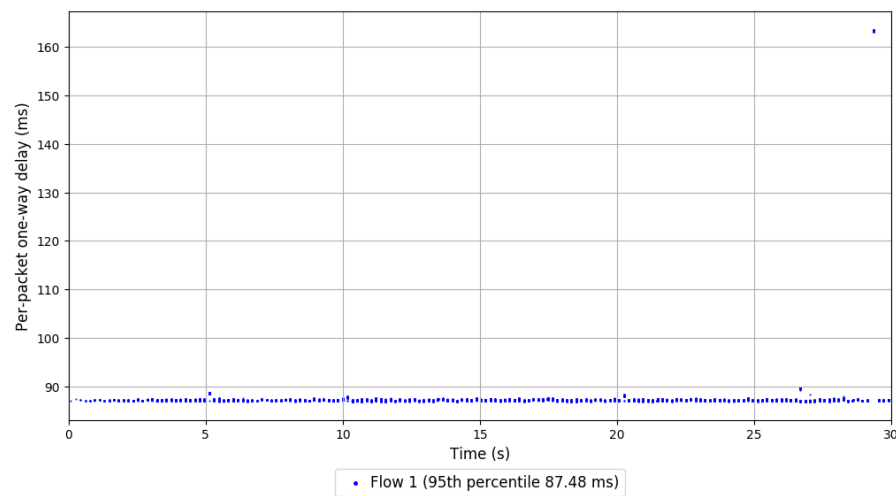
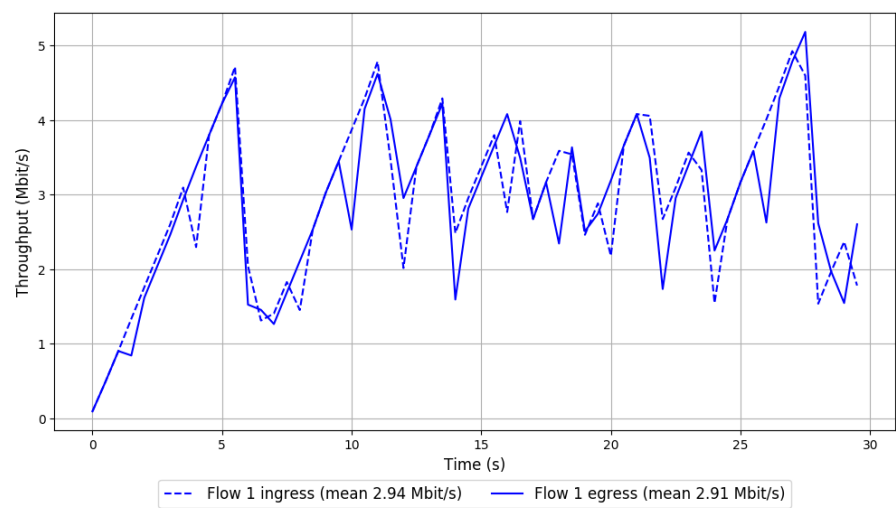
-- Flow 1:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 87.480 ms

Loss rate: 0.98%

Run 3: Report of LEDBAT — Data Link

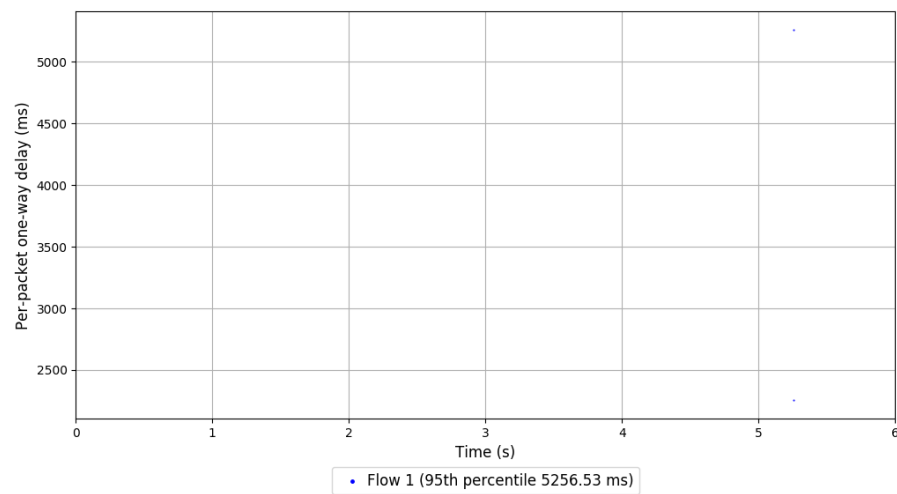
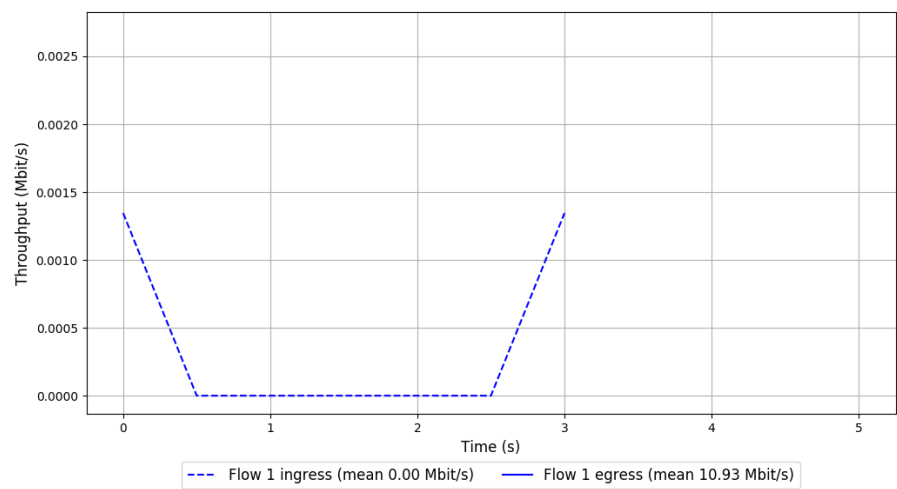


Run 4: Statistics of LEDBAT

Start at: 2017-08-11 07:59:49

End at: 2017-08-11 08:00:19

Run 4: Report of LEDBAT — Data Link

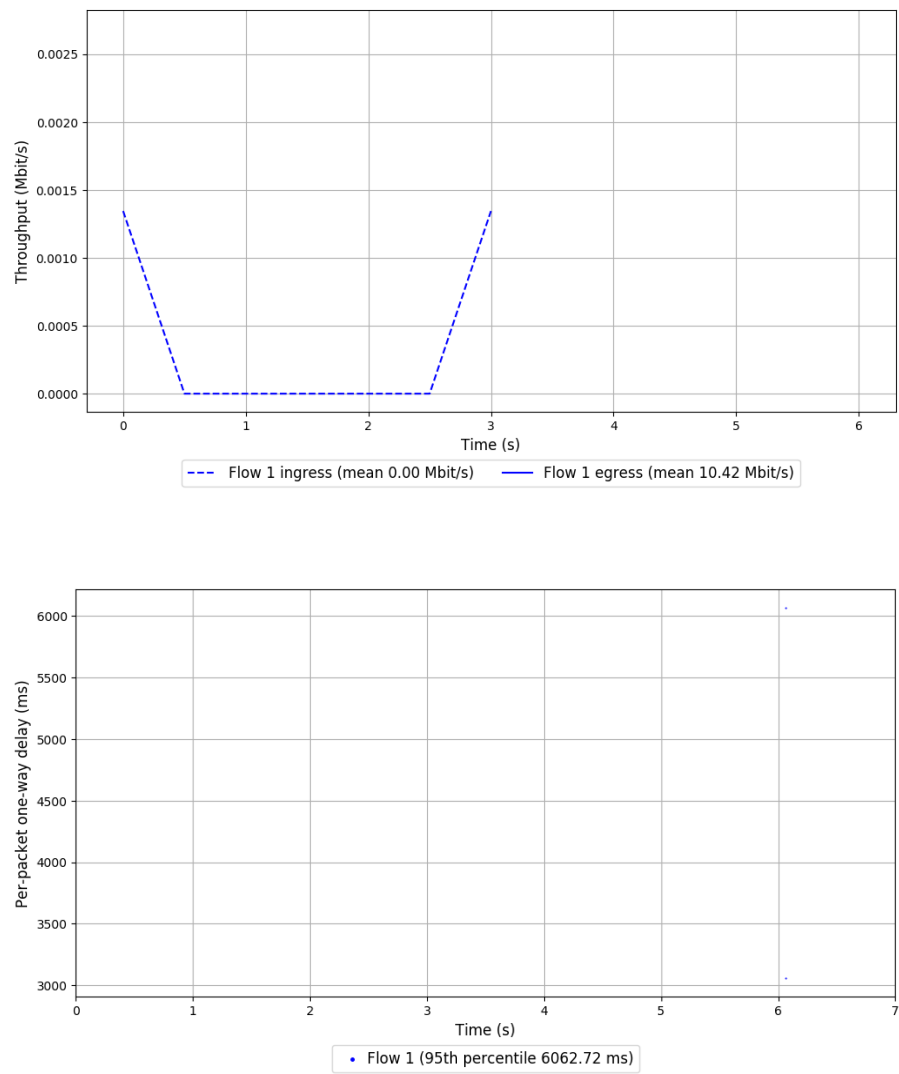


Run 5: Statistics of LEDBAT

Start at: 2017-08-11 08:10:52

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

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-11 08:21:56

End at: 2017-08-11 08:22:26

Below is generated by plot.py at 2017-08-11 10:20:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.31 Mbit/s

95th percentile per-packet one-way delay: 87.689 ms

Loss rate: 0.29%

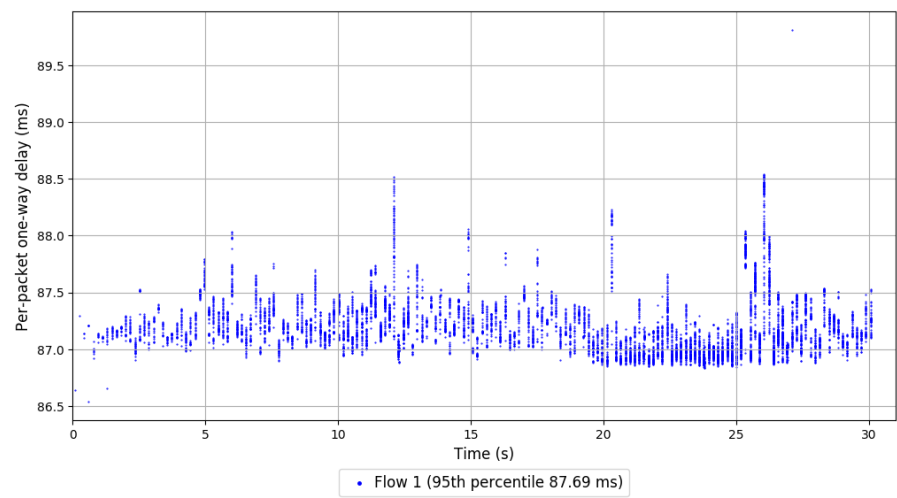
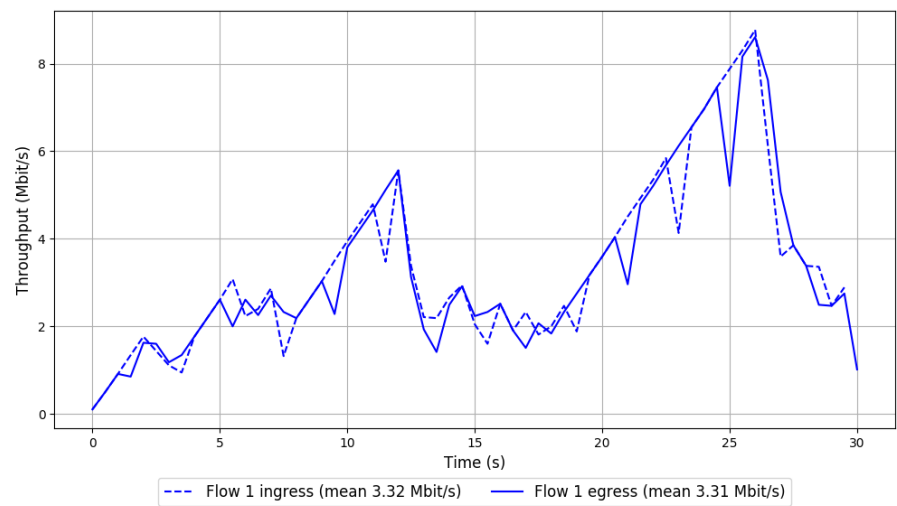
-- Flow 1:

Average throughput: 3.31 Mbit/s

95th percentile per-packet one-way delay: 87.689 ms

Loss rate: 0.29%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-11 08:32:46

End at: 2017-08-11 08:33:16

Below is generated by plot.py at 2017-08-11 10:20:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 87.466 ms

Loss rate: 1.02%

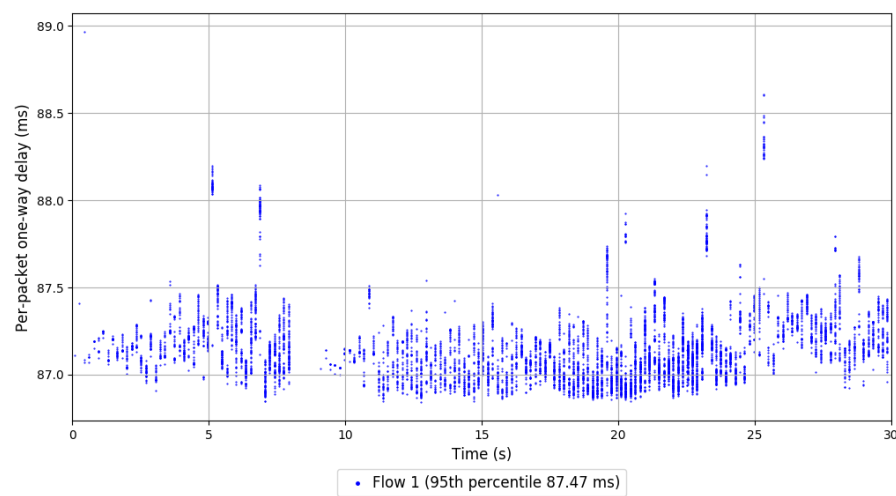
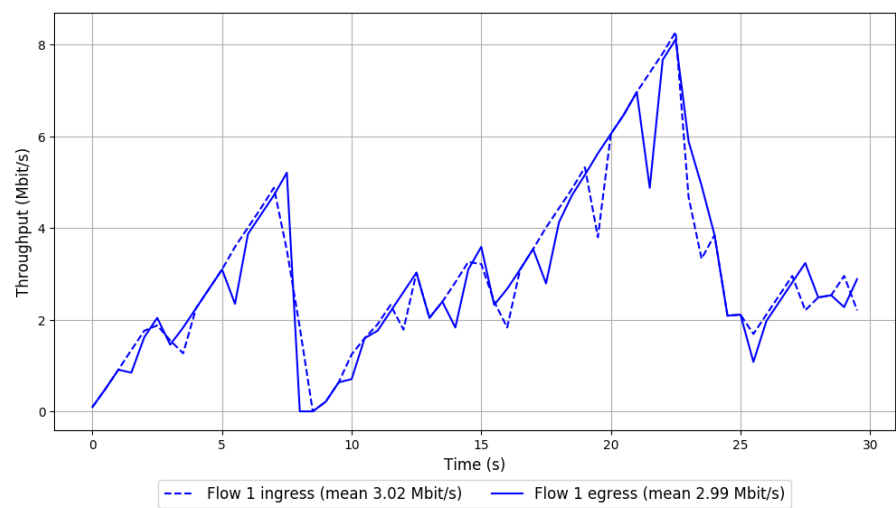
-- Flow 1:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 87.466 ms

Loss rate: 1.02%

Run 7: Report of LEDBAT — Data Link

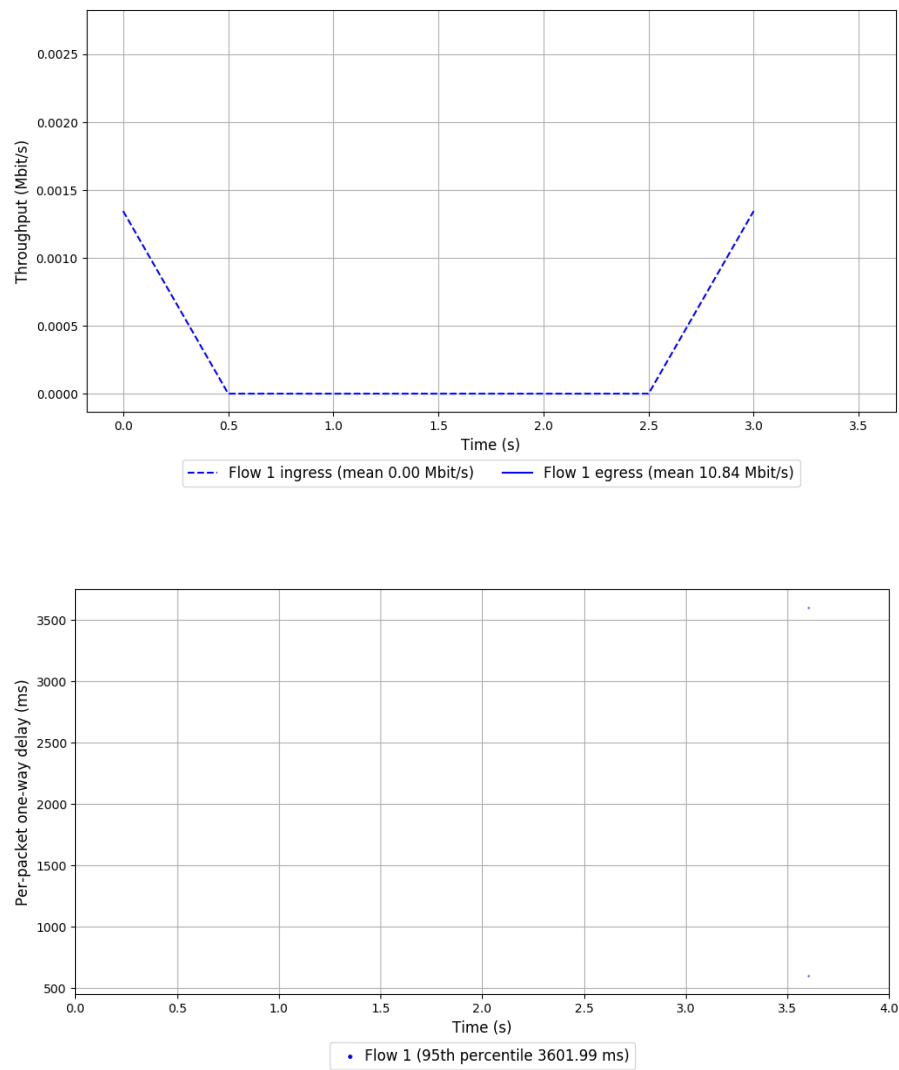


Run 8: Statistics of LEDBAT

Start at: 2017-08-11 08:43:40

End at: 2017-08-11 08:44:10

Run 8: Report of LEDBAT — Data Link

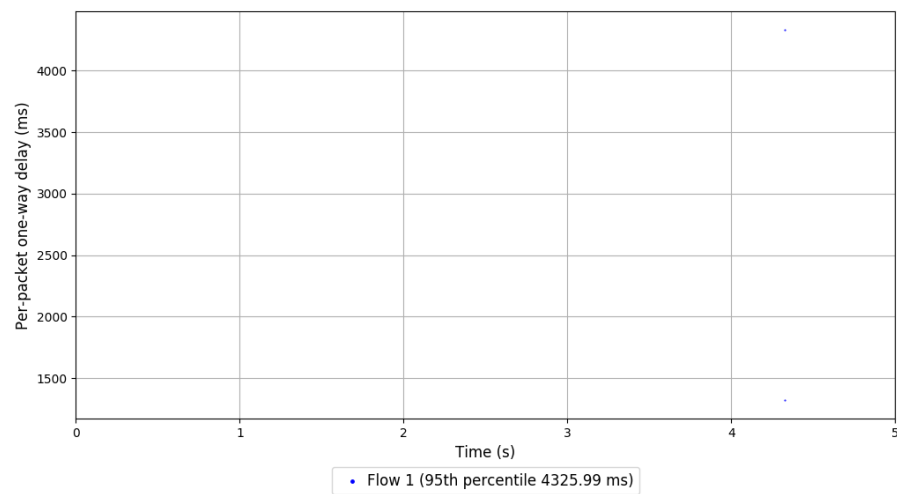
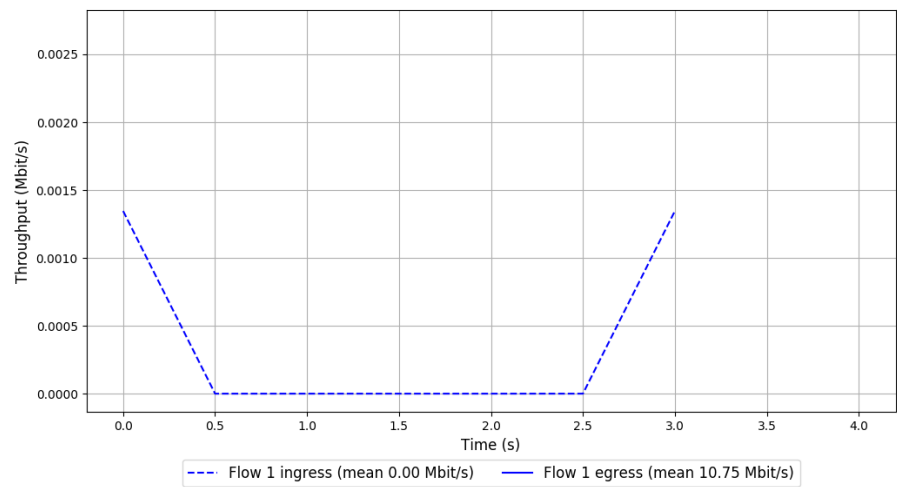


Run 9: Statistics of LEDBAT

Start at: 2017-08-11 08:54:57

End at: 2017-08-11 08:55:28

Run 9: Report of LEDBAT — Data Link

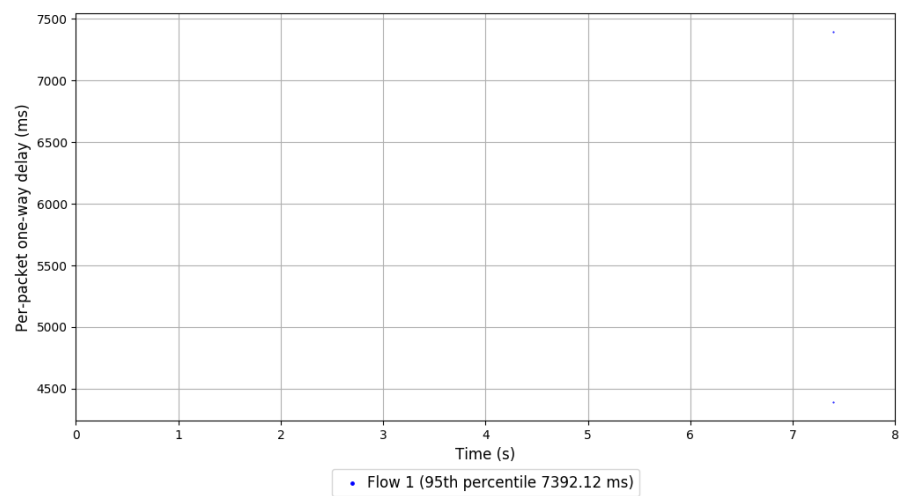
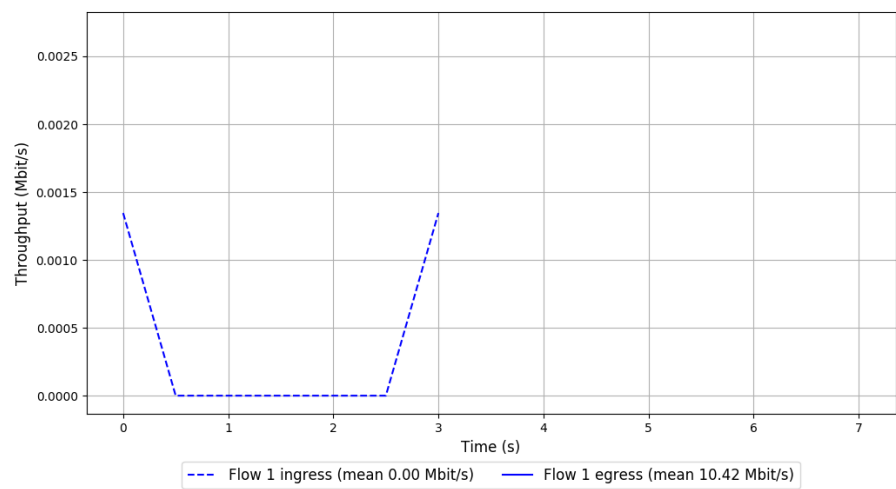


Run 10: Statistics of LEDBAT

Start at: 2017-08-11 09:05:56

End at: 2017-08-11 09:06:26

Run 10: Report of LEDBAT — Data Link

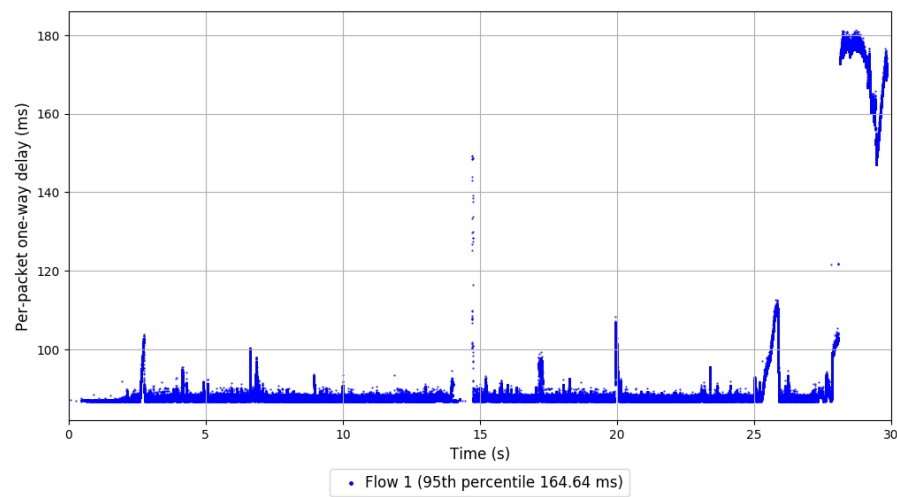
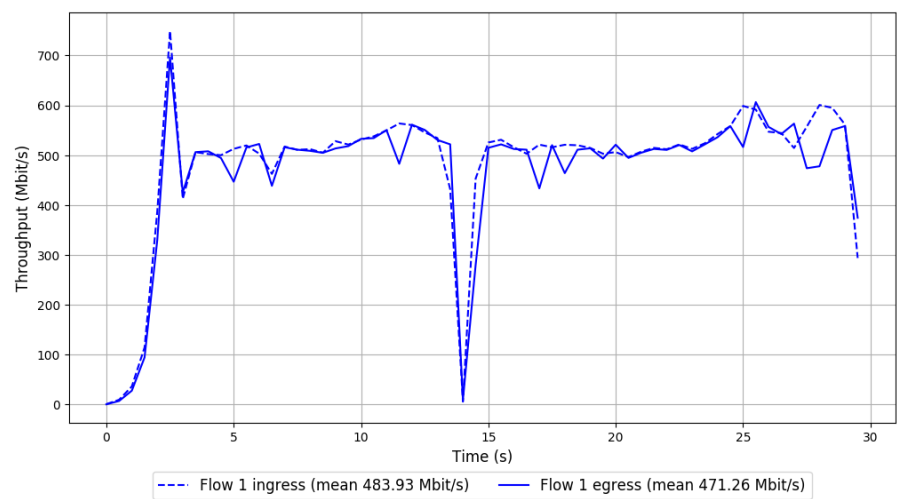


```
Run 1: Statistics of PCC

Start at: 2017-08-11 07:26:09
End at: 2017-08-11 07:26:39

# Below is generated by plot.py at 2017-08-11 10:21:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 471.26 Mbit/s
95th percentile per-packet one-way delay: 164.637 ms
Loss rate: 2.61%
-- Flow 1:
Average throughput: 471.26 Mbit/s
95th percentile per-packet one-way delay: 164.637 ms
Loss rate: 2.61%
```


Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

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

End at: 2017-08-11 07:37:37

Below is generated by plot.py at 2017-08-11 10:21:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 300.22 Mbit/s

95th percentile per-packet one-way delay: 87.297 ms

Loss rate: 2.37%

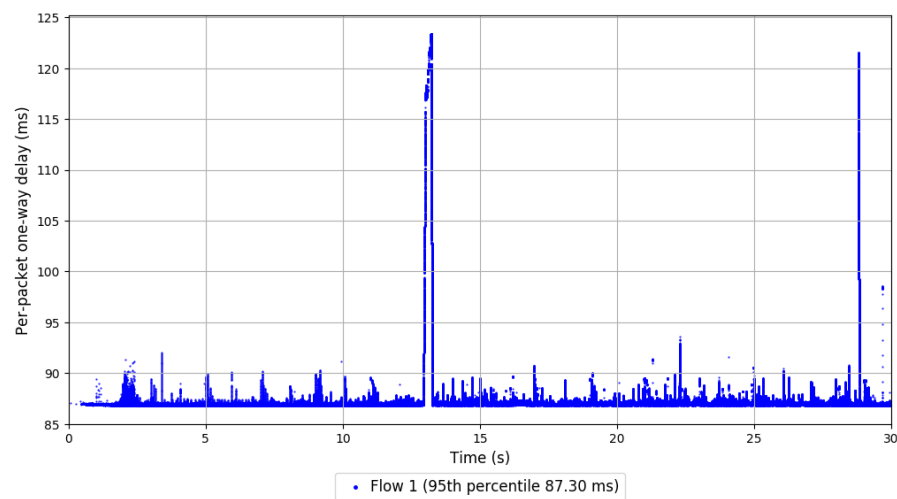
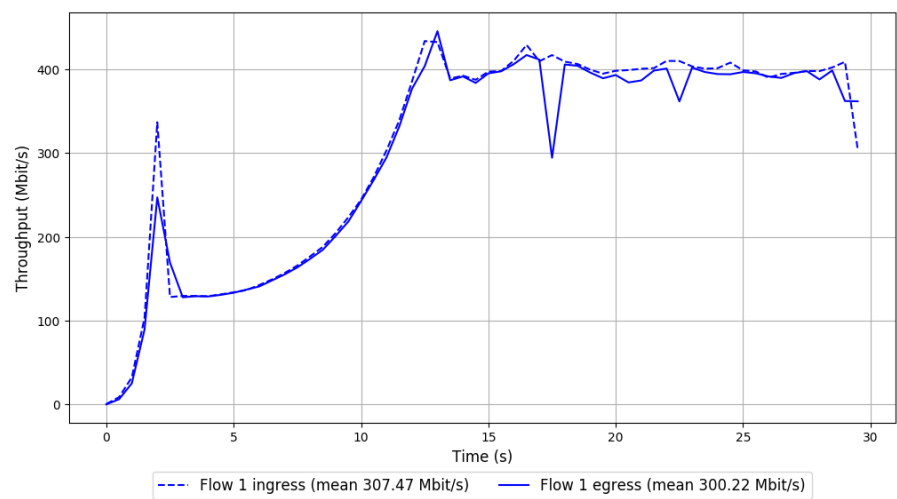
-- Flow 1:

Average throughput: 300.22 Mbit/s

95th percentile per-packet one-way delay: 87.297 ms

Loss rate: 2.37%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-11 07:47:57

End at: 2017-08-11 07:48:27

Below is generated by plot.py at 2017-08-11 10:22:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 454.70 Mbit/s

95th percentile per-packet one-way delay: 91.759 ms

Loss rate: 2.08%

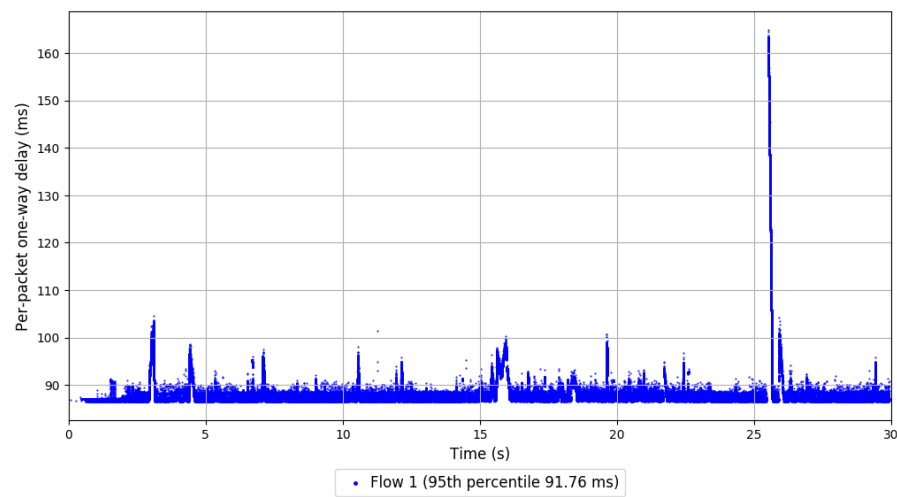
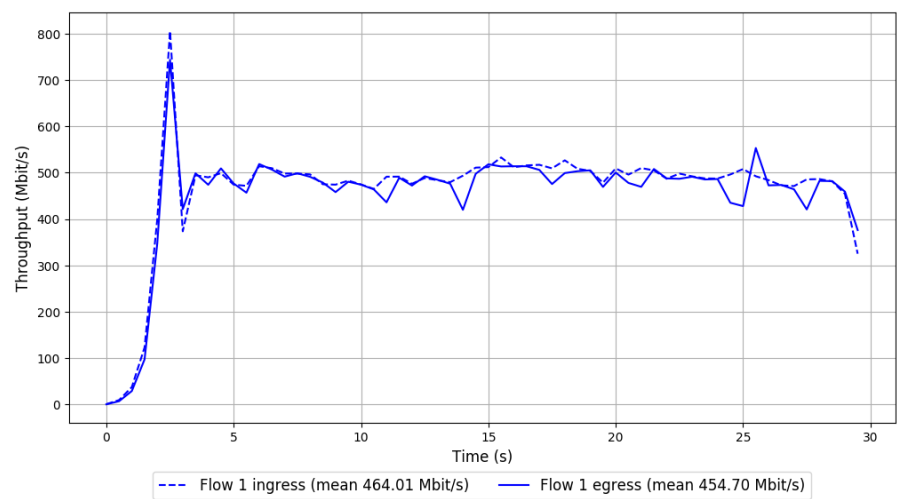
-- Flow 1:

Average throughput: 454.70 Mbit/s

95th percentile per-packet one-way delay: 91.759 ms

Loss rate: 2.08%

Run 3: Report of PCC — Data Link

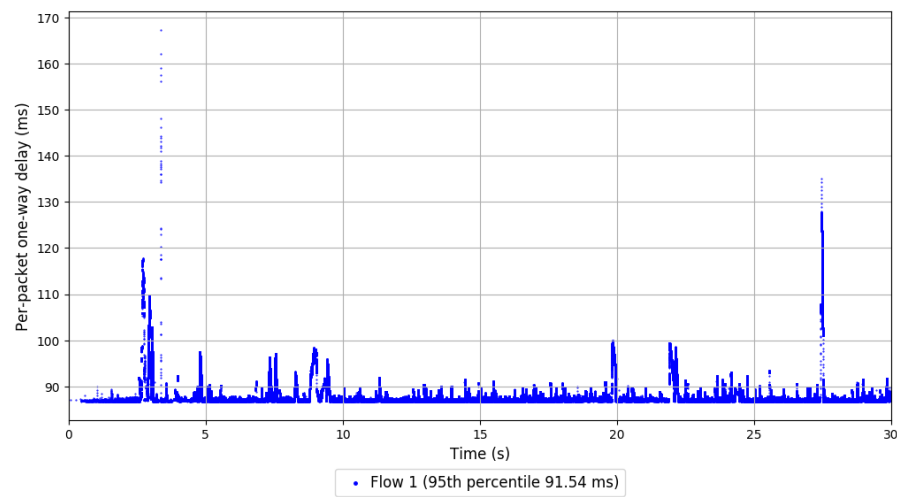
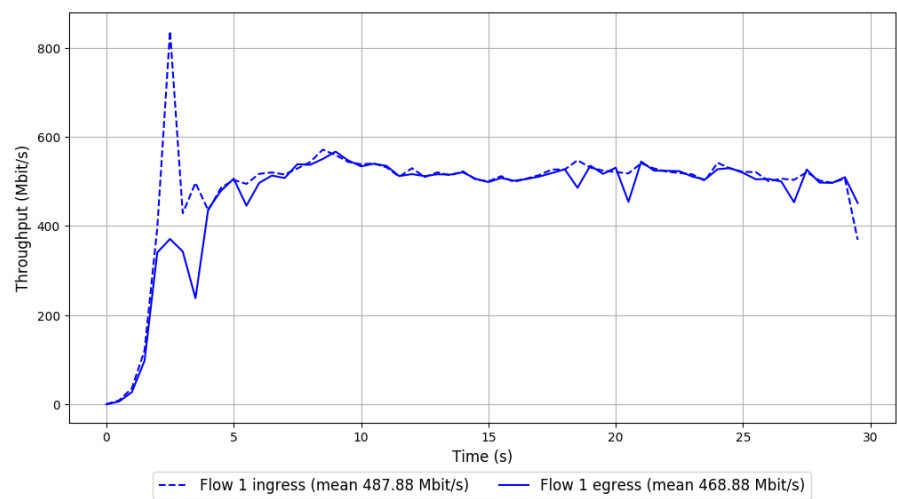


```
Run 4: Statistics of PCC

Start at: 2017-08-11 07:58:51
End at: 2017-08-11 07:59:21

# Below is generated by plot.py at 2017-08-11 10:23:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 468.88 Mbit/s
95th percentile per-packet one-way delay: 91.536 ms
Loss rate: 3.89%
-- Flow 1:
Average throughput: 468.88 Mbit/s
95th percentile per-packet one-way delay: 91.536 ms
Loss rate: 3.89%
```

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-11 08:09:54

End at: 2017-08-11 08:10:24

Below is generated by plot.py at 2017-08-11 10:24:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 440.33 Mbit/s

95th percentile per-packet one-way delay: 89.778 ms

Loss rate: 1.13%

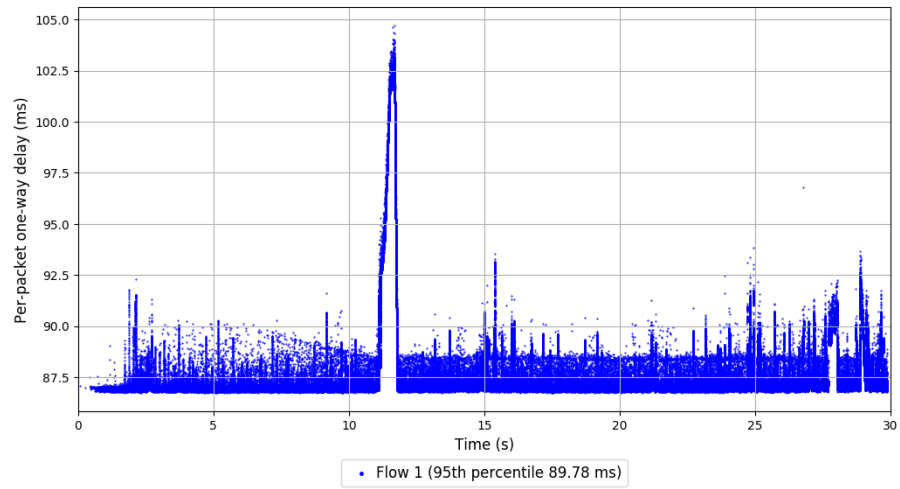
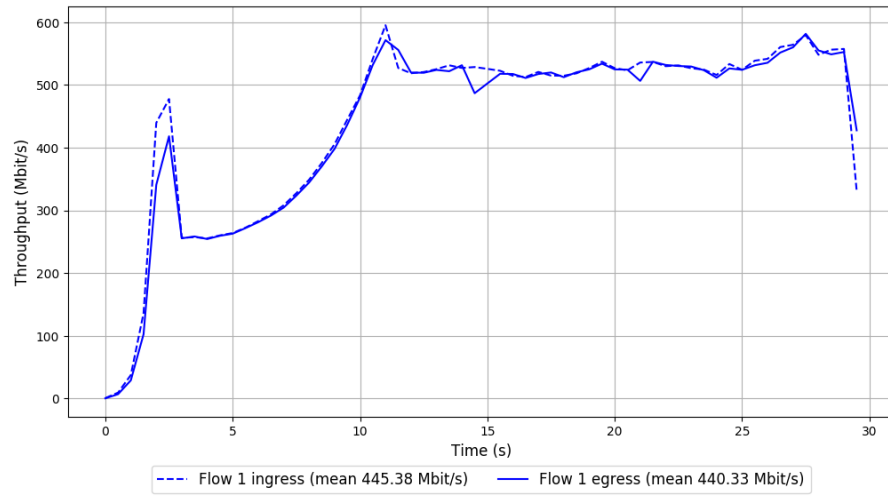
-- Flow 1:

Average throughput: 440.33 Mbit/s

95th percentile per-packet one-way delay: 89.778 ms

Loss rate: 1.13%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

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

End at: 2017-08-11 08:21:37

Below is generated by plot.py at 2017-08-11 10:24:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 229.07 Mbit/s

95th percentile per-packet one-way delay: 89.079 ms

Loss rate: 3.12%

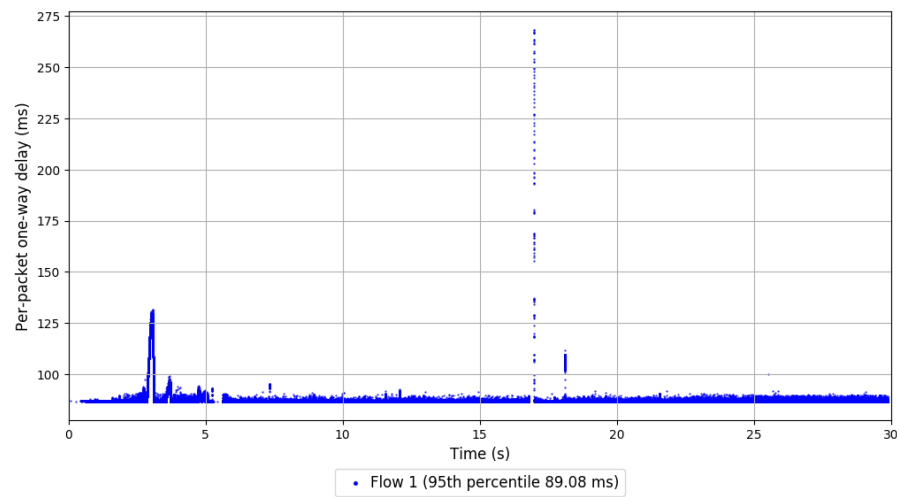
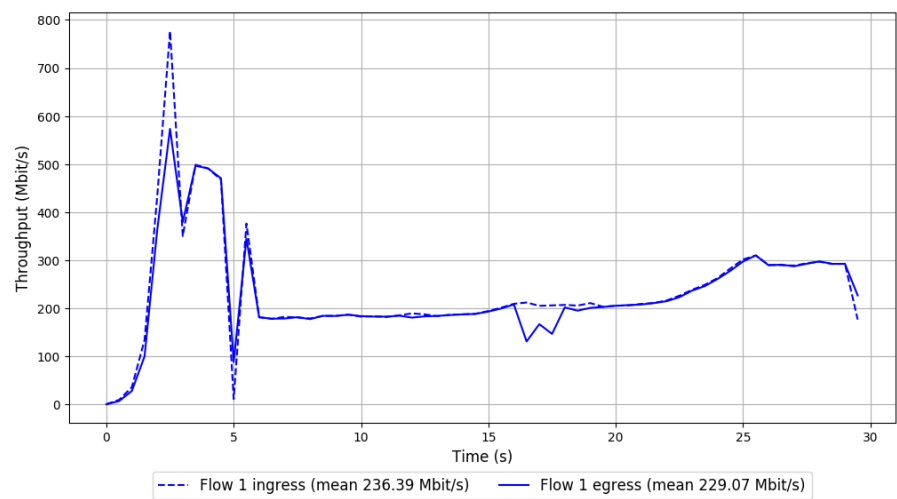
-- Flow 1:

Average throughput: 229.07 Mbit/s

95th percentile per-packet one-way delay: 89.079 ms

Loss rate: 3.12%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-11 08:31:50

End at: 2017-08-11 08:32:20

Below is generated by plot.py at 2017-08-11 10:25:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 431.12 Mbit/s

95th percentile per-packet one-way delay: 87.579 ms

Loss rate: 6.63%

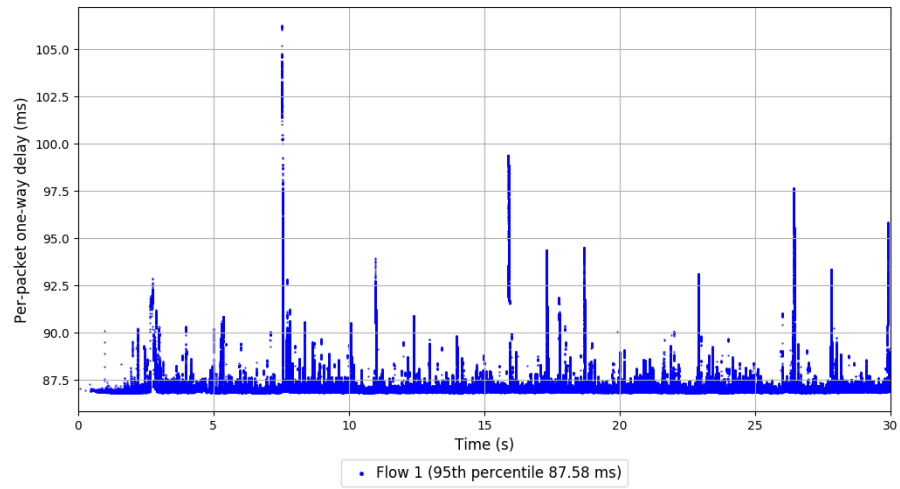
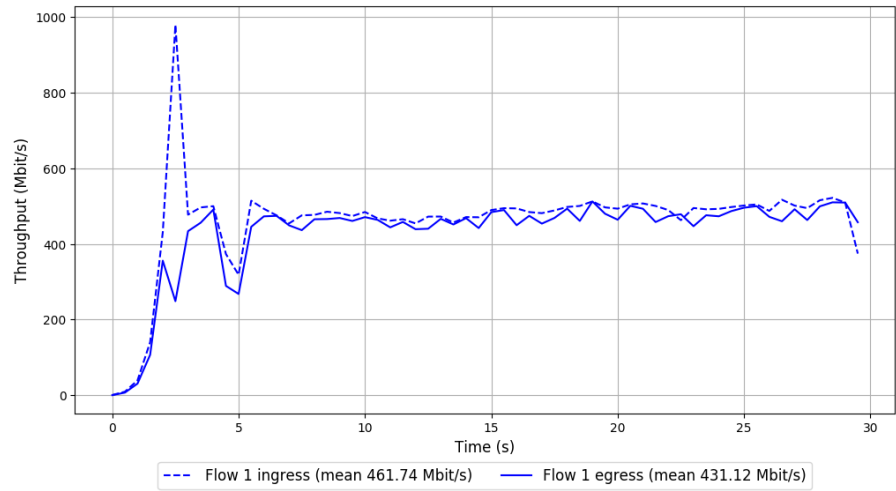
-- Flow 1:

Average throughput: 431.12 Mbit/s

95th percentile per-packet one-way delay: 87.579 ms

Loss rate: 6.63%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

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

End at: 2017-08-11 08:43:10

Below is generated by plot.py at 2017-08-11 10:26:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 472.63 Mbit/s

95th percentile per-packet one-way delay: 116.669 ms

Loss rate: 5.57%

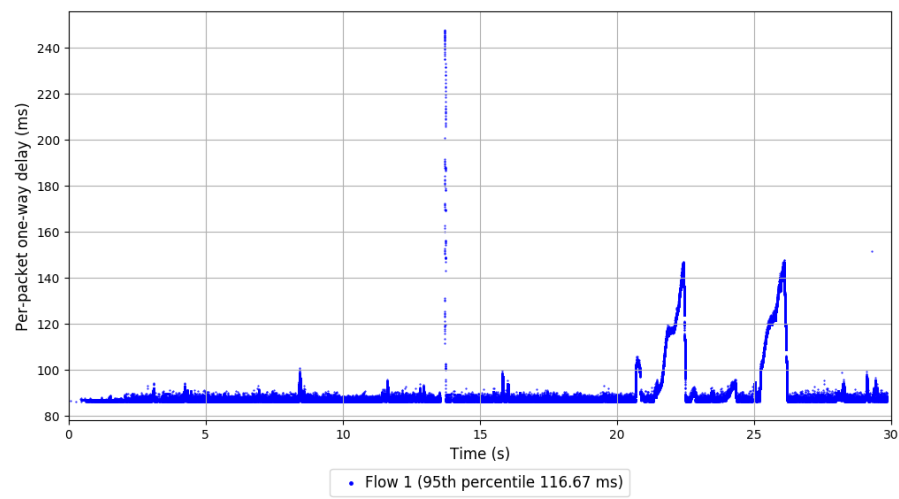
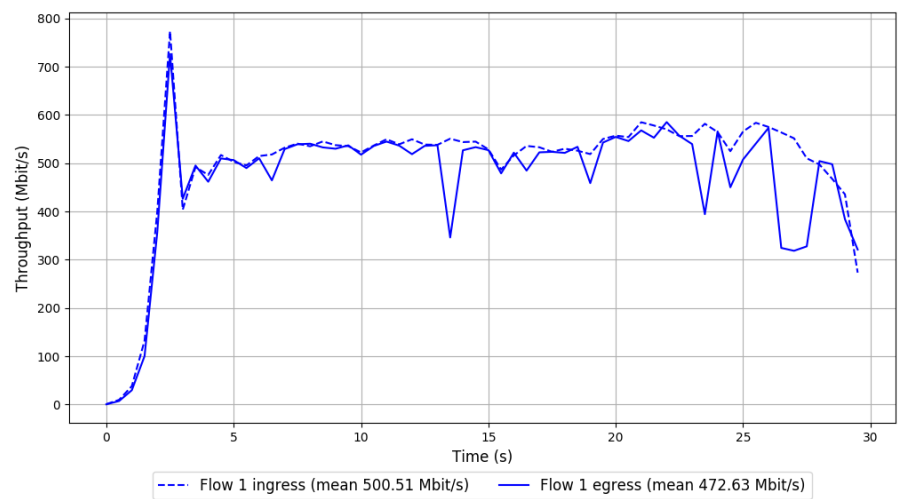
-- Flow 1:

Average throughput: 472.63 Mbit/s

95th percentile per-packet one-way delay: 116.669 ms

Loss rate: 5.57%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-11 08:53:58

End at: 2017-08-11 08:54:28

Below is generated by plot.py at 2017-08-11 10:27:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 490.76 Mbit/s

95th percentile per-packet one-way delay: 155.183 ms

Loss rate: 1.87%

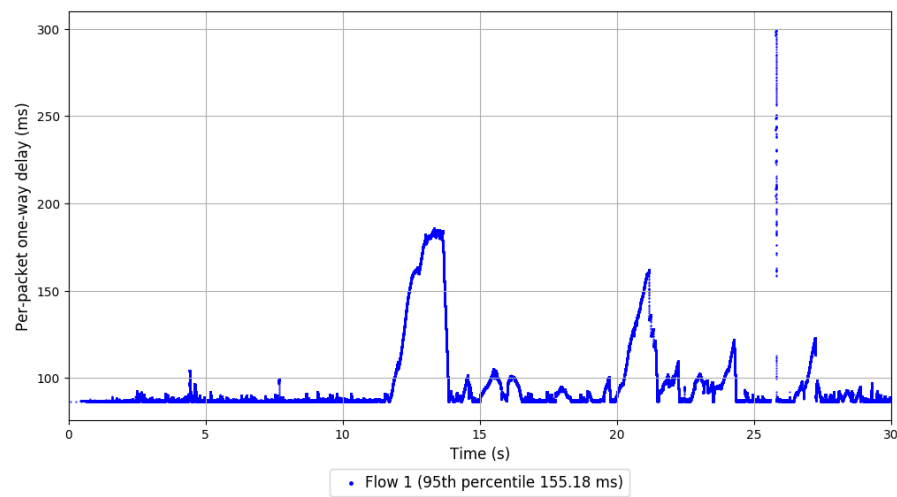
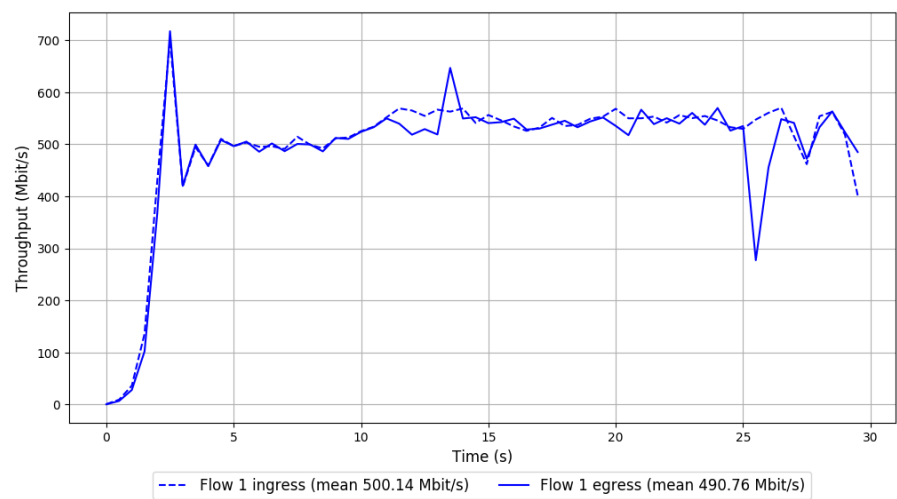
-- Flow 1:

Average throughput: 490.76 Mbit/s

95th percentile per-packet one-way delay: 155.183 ms

Loss rate: 1.87%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-11 09:04:58

End at: 2017-08-11 09:05:28

Below is generated by plot.py at 2017-08-11 10:27:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 438.32 Mbit/s

95th percentile per-packet one-way delay: 88.480 ms

Loss rate: 7.79%

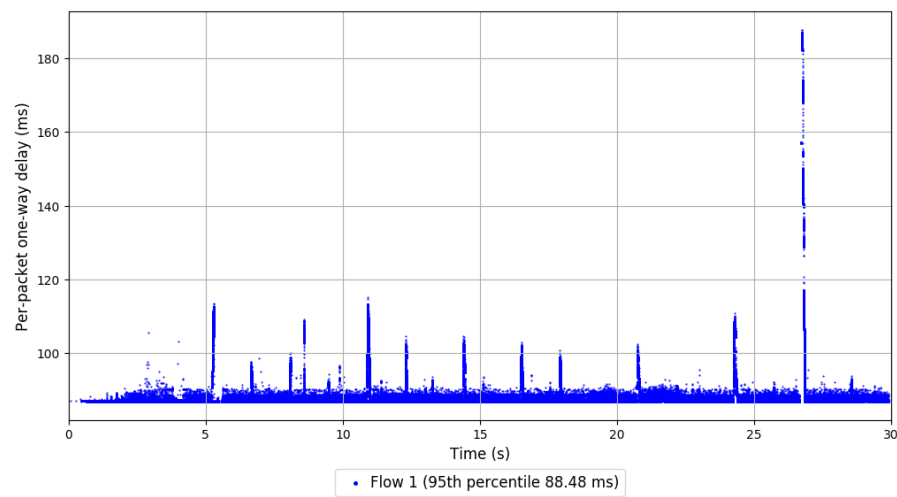
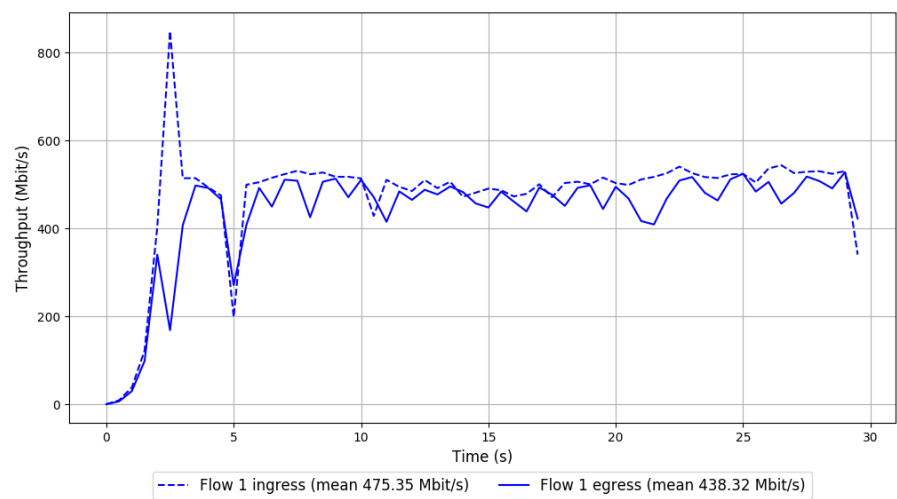
-- Flow 1:

Average throughput: 438.32 Mbit/s

95th percentile per-packet one-way delay: 88.480 ms

Loss rate: 7.79%

Run 10: Report of PCC — Data Link

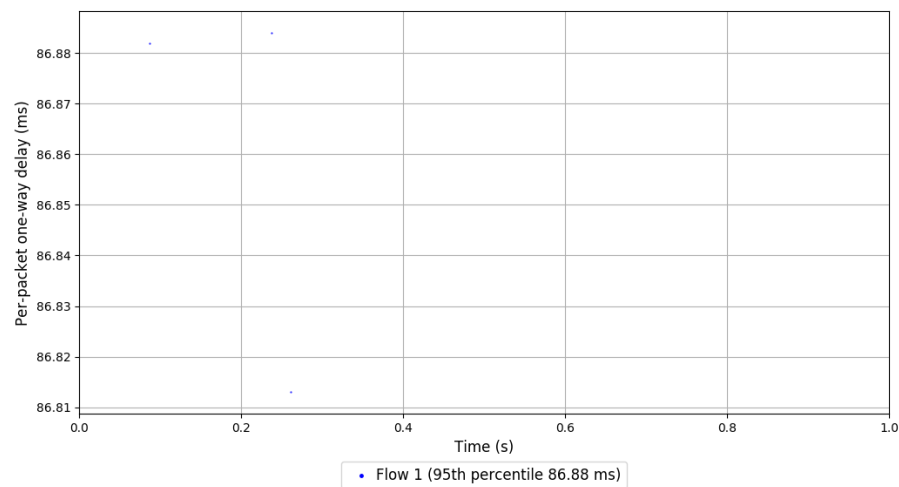
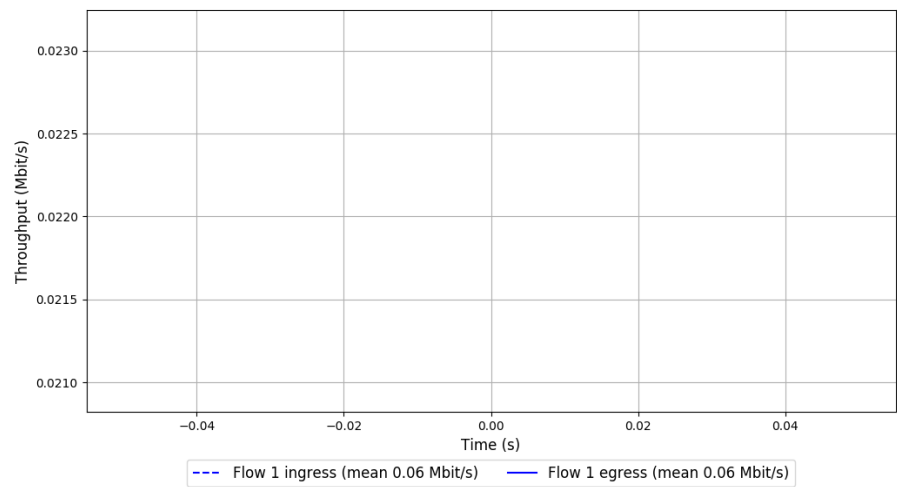


Run 1: Statistics of QUIC Cubic

Start at: 2017-08-11 07:27:48

End at: 2017-08-11 07:28:18

Run 1: Report of QUIC Cubic — Data Link

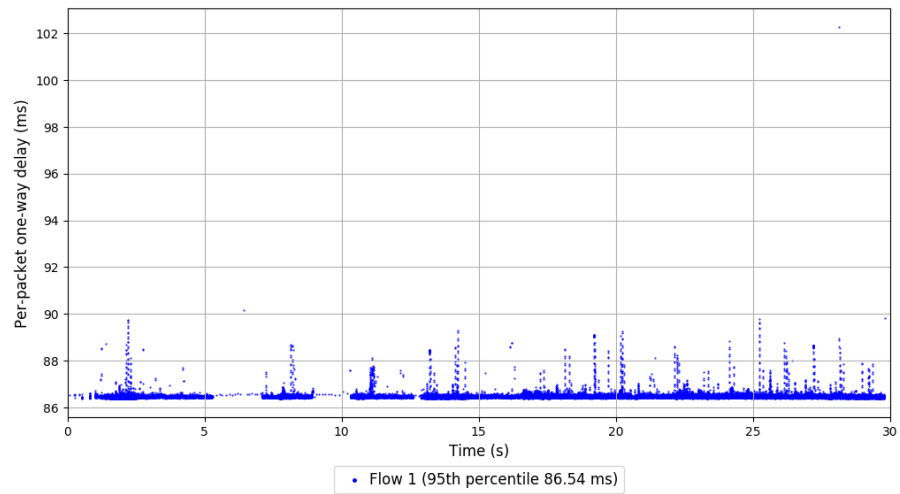
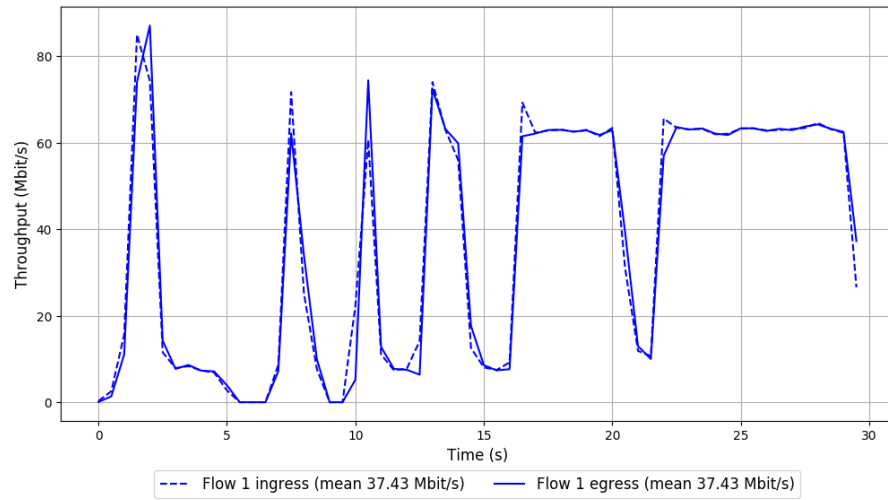


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-08-11 07:38:37
End at: 2017-08-11 07:39:07

# Below is generated by plot.py at 2017-08-11 10:27:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.43 Mbit/s
95th percentile per-packet one-way delay: 86.540 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 37.43 Mbit/s
95th percentile per-packet one-way delay: 86.540 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-11 07:49:34

End at: 2017-08-11 07:50:05

Below is generated by plot.py at 2017-08-11 10:27:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.71 Mbit/s

95th percentile per-packet one-way delay: 86.853 ms

Loss rate: 0.00%

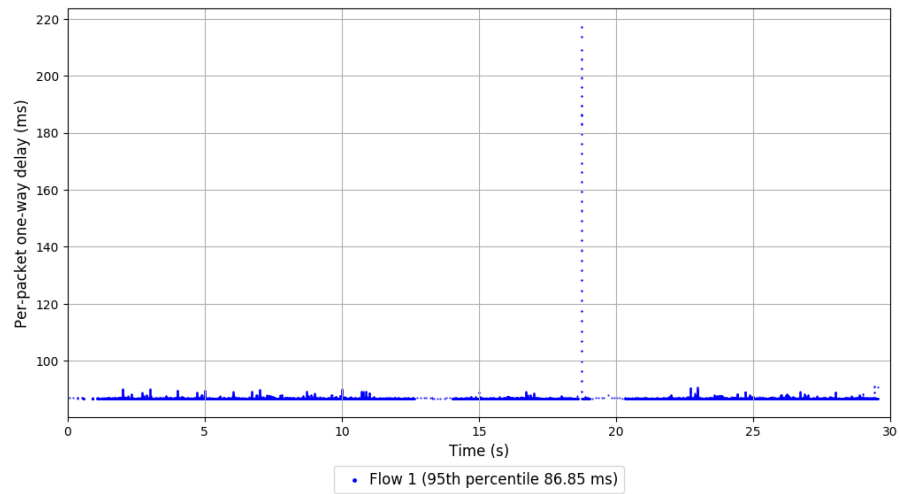
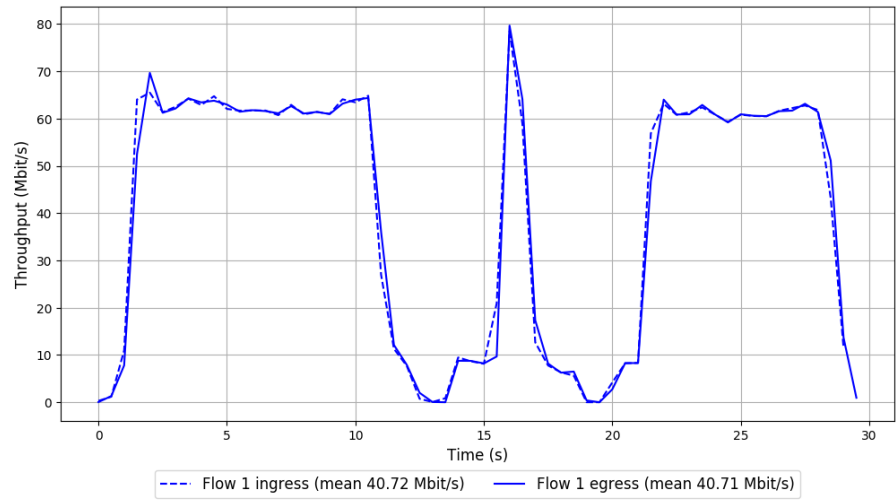
-- Flow 1:

Average throughput: 40.71 Mbit/s

95th percentile per-packet one-way delay: 86.853 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-11 08:00:28

End at: 2017-08-11 08:00:58

Below is generated by plot.py at 2017-08-11 10:27:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.20 Mbit/s

95th percentile per-packet one-way delay: 86.954 ms

Loss rate: 0.00%

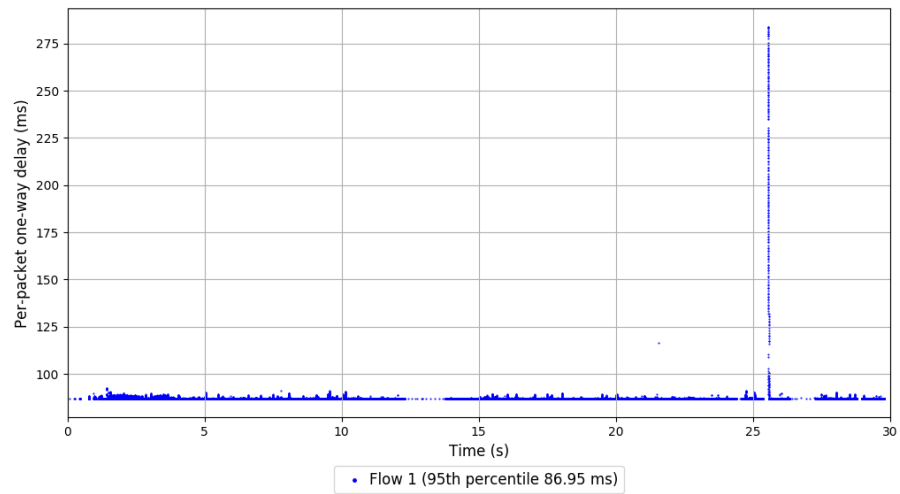
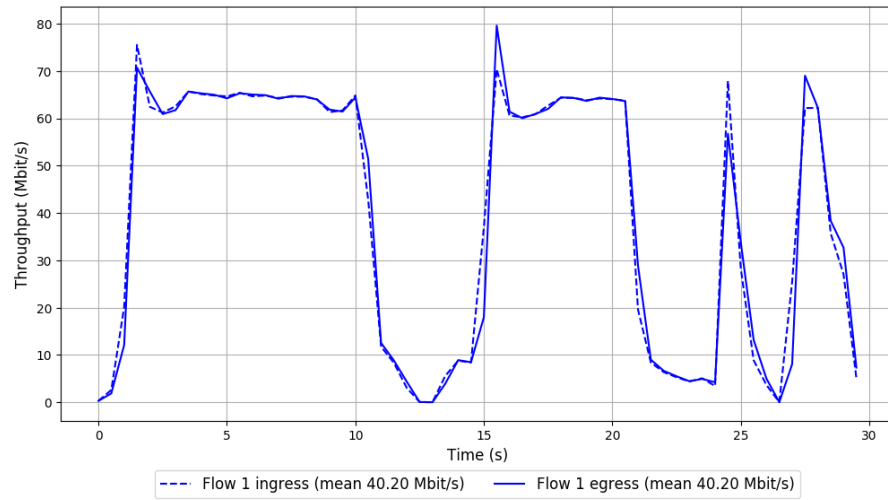
-- Flow 1:

Average throughput: 40.20 Mbit/s

95th percentile per-packet one-way delay: 86.954 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

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

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

Below is generated by plot.py at 2017-08-11 10:27:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.52 Mbit/s

95th percentile per-packet one-way delay: 86.485 ms

Loss rate: 0.00%

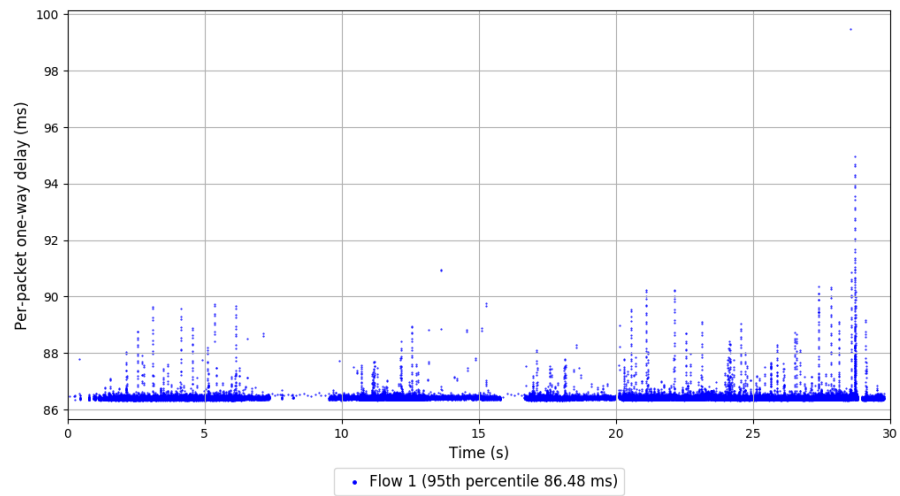
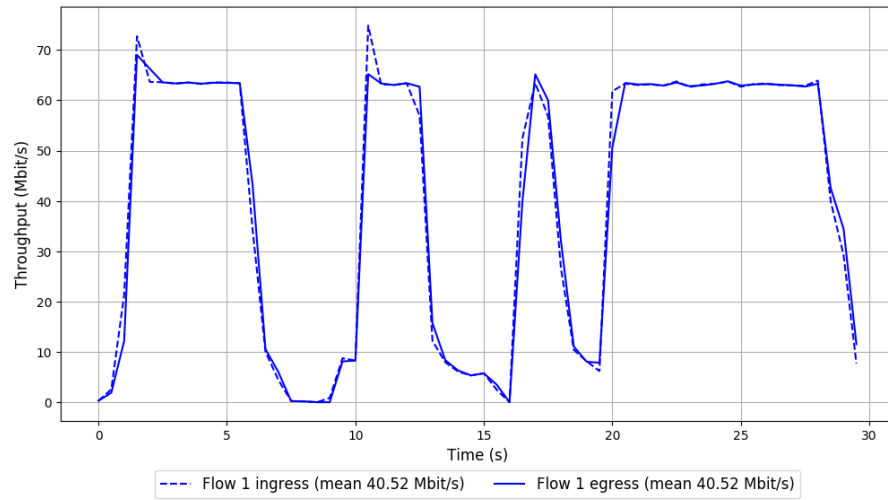
-- Flow 1:

Average throughput: 40.52 Mbit/s

95th percentile per-packet one-way delay: 86.485 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-11 08:22:35

End at: 2017-08-11 08:23:05

Below is generated by plot.py at 2017-08-11 10:27:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.18 Mbit/s

95th percentile per-packet one-way delay: 87.002 ms

Loss rate: 0.04%

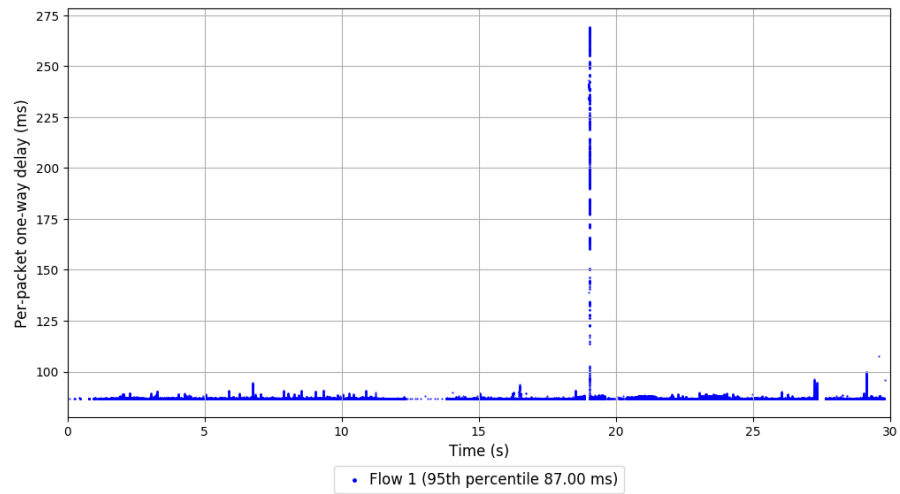
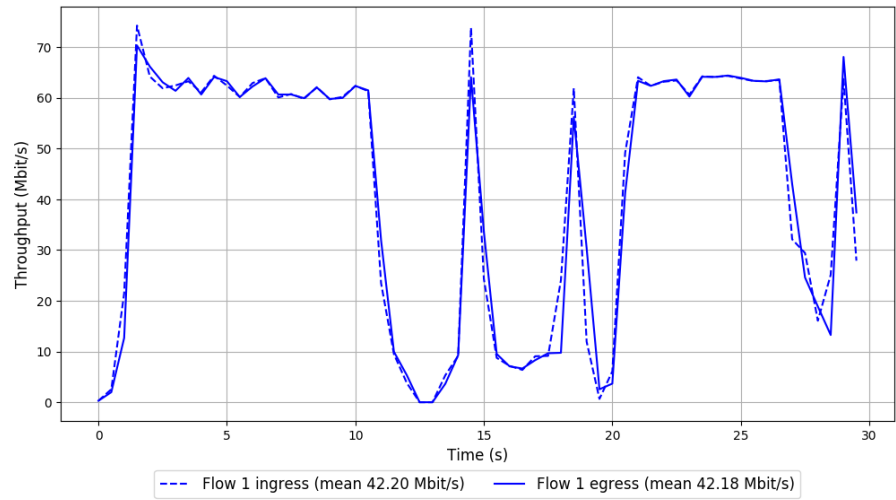
-- Flow 1:

Average throughput: 42.18 Mbit/s

95th percentile per-packet one-way delay: 87.002 ms

Loss rate: 0.04%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-11 08:33:26

End at: 2017-08-11 08:33:56

Below is generated by plot.py at 2017-08-11 10:28:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.25 Mbit/s

95th percentile per-packet one-way delay: 86.976 ms

Loss rate: 0.00%

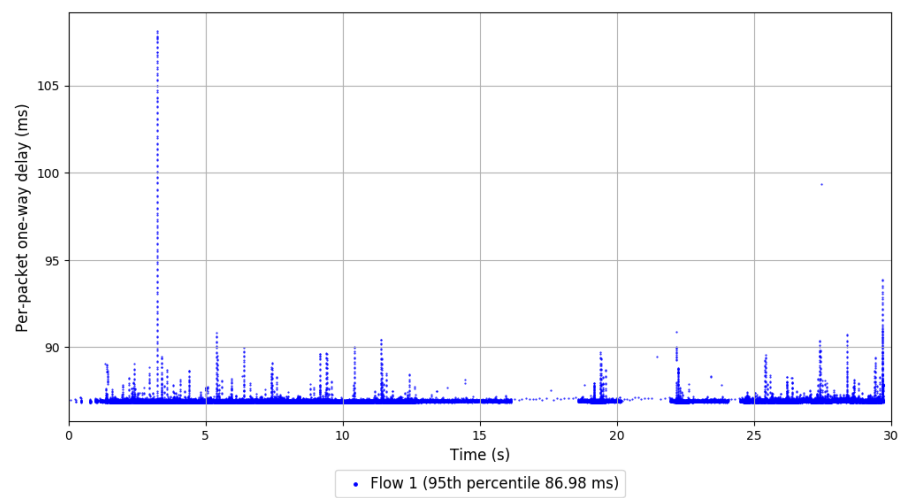
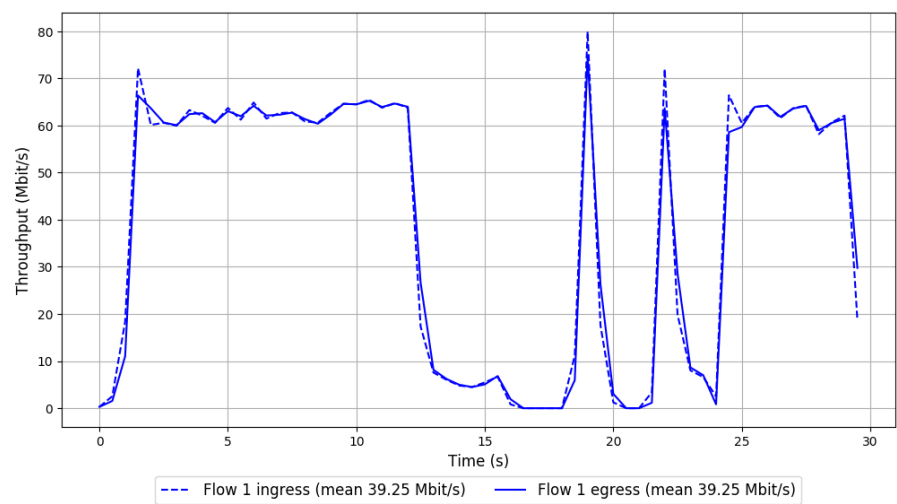
-- Flow 1:

Average throughput: 39.25 Mbit/s

95th percentile per-packet one-way delay: 86.976 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link

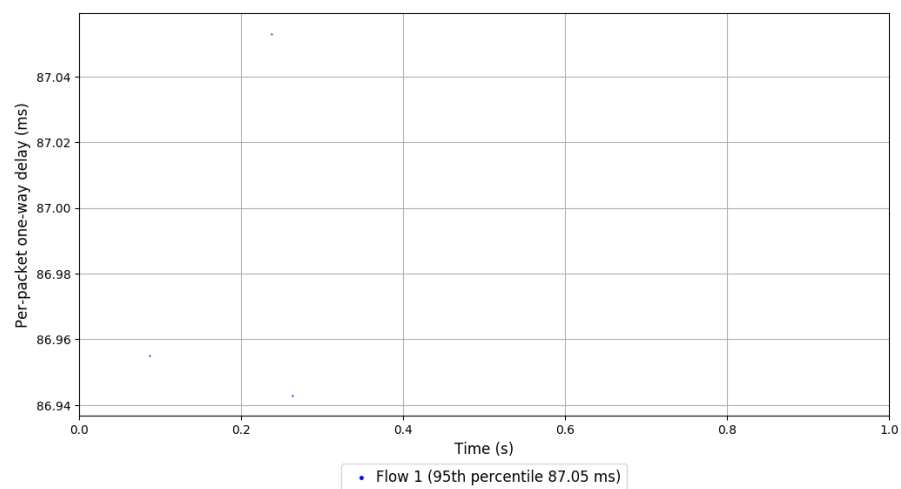
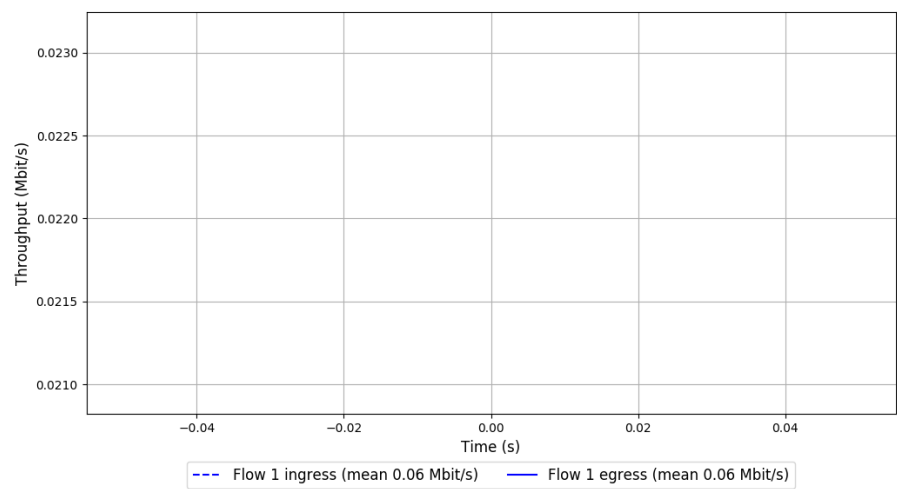


Run 8: Statistics of QUIC Cubic

Start at: 2017-08-11 08:44:19

End at: 2017-08-11 08:44:49

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-11 08:55:36

End at: 2017-08-11 08:56:06

Below is generated by plot.py at 2017-08-11 10:28:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.92 Mbit/s

95th percentile per-packet one-way delay: 86.110 ms

Loss rate: 0.00%

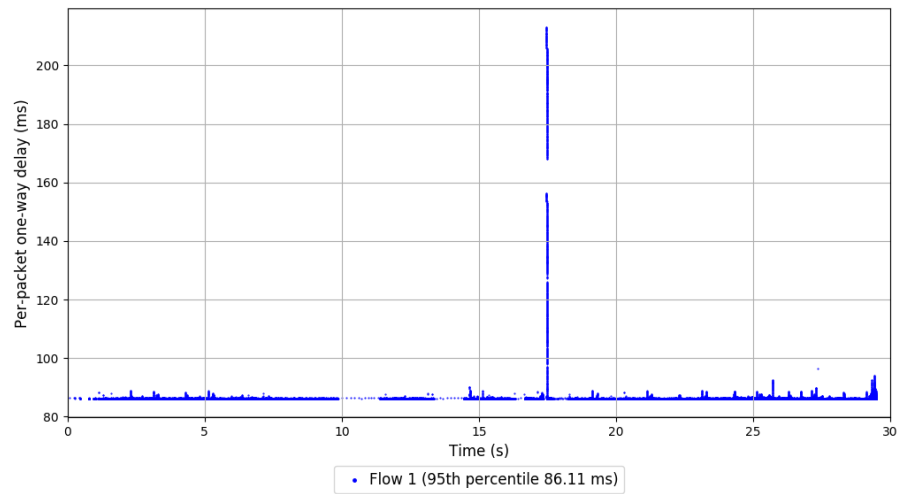
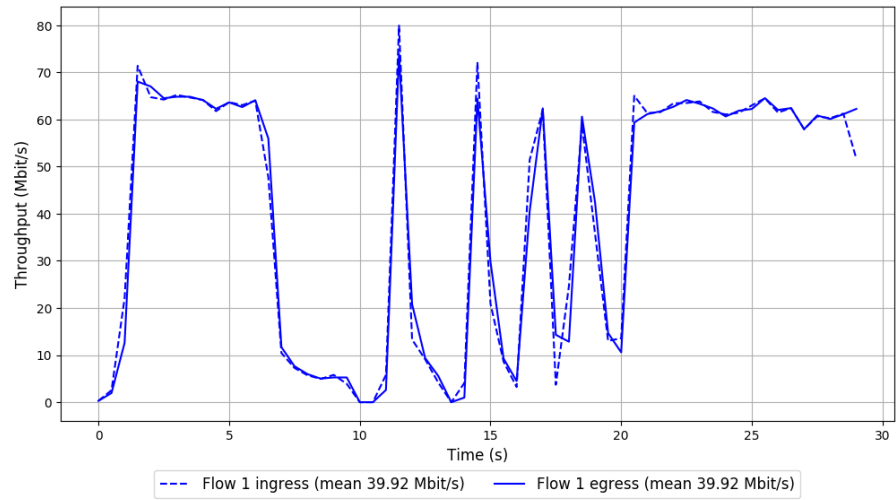
-- Flow 1:

Average throughput: 39.92 Mbit/s

95th percentile per-packet one-way delay: 86.110 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

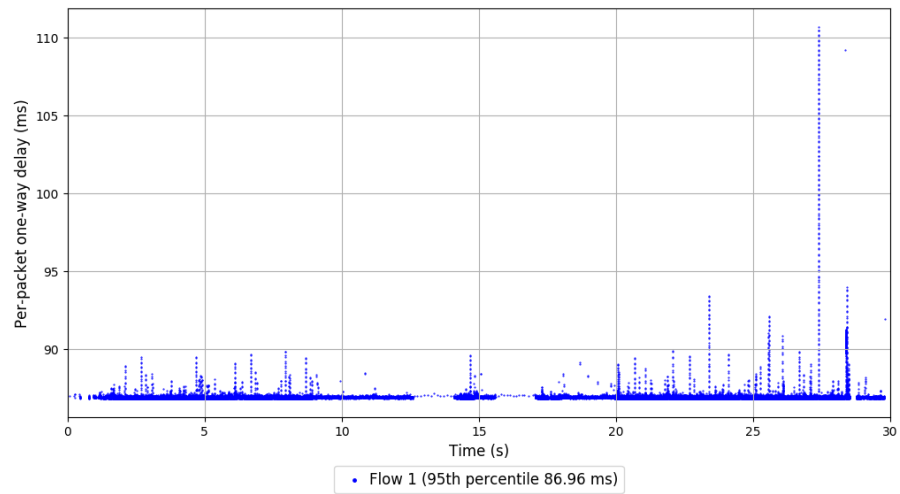
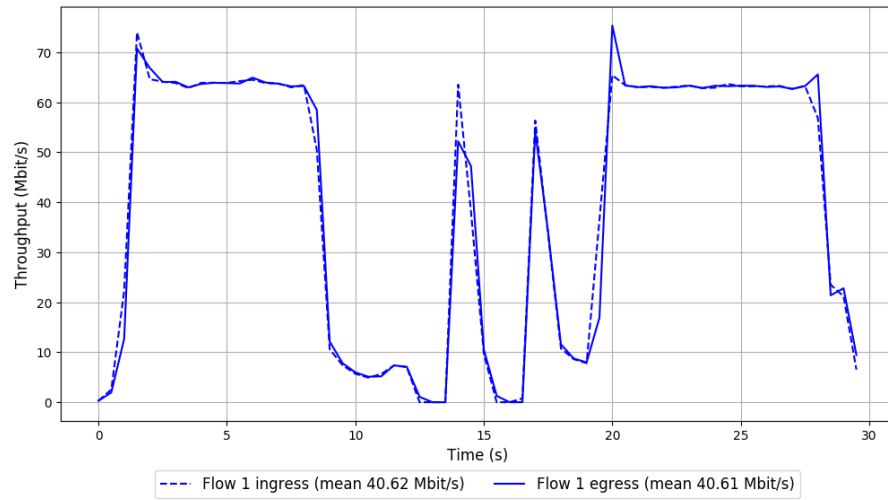


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-11 09:06:35
End at: 2017-08-11 09:07:05

# Below is generated by plot.py at 2017-08-11 10:28:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.61 Mbit/s
95th percentile per-packet one-way delay: 86.957 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.61 Mbit/s
95th percentile per-packet one-way delay: 86.957 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of Saturator

Start at: 2017-08-11 07:31:30

End at: 2017-08-11 07:32:00

Below is generated by plot.py at 2017-08-11 10:28:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.60 Mbit/s

95th percentile per-packet one-way delay: 87.322 ms

Loss rate: 2.92%

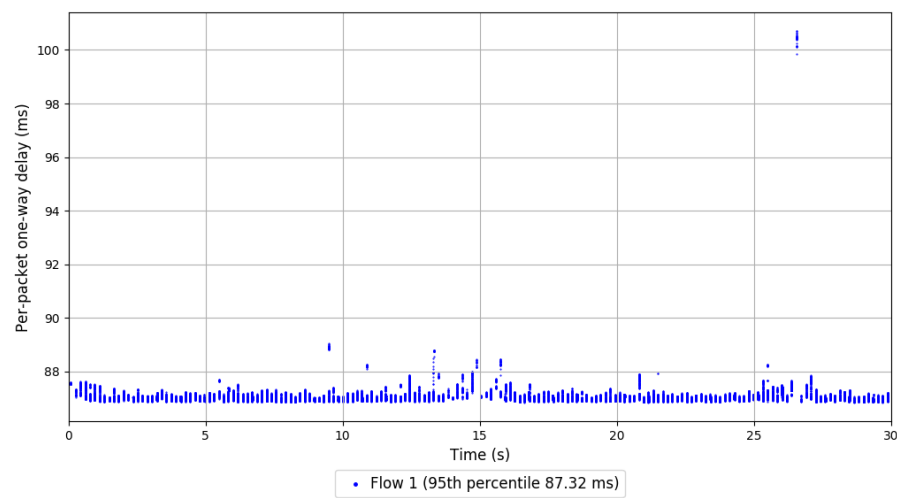
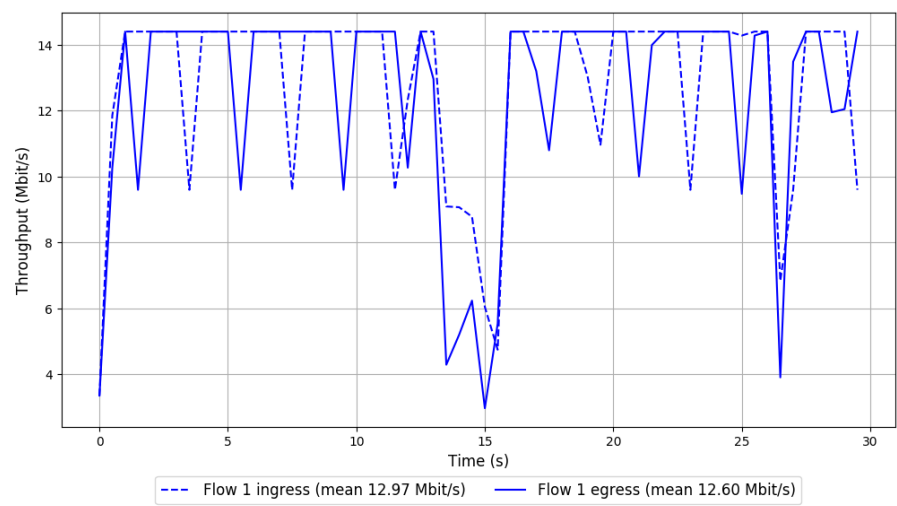
-- Flow 1:

Average throughput: 12.60 Mbit/s

95th percentile per-packet one-way delay: 87.322 ms

Loss rate: 2.92%

Run 1: Report of Saturator — Data Link

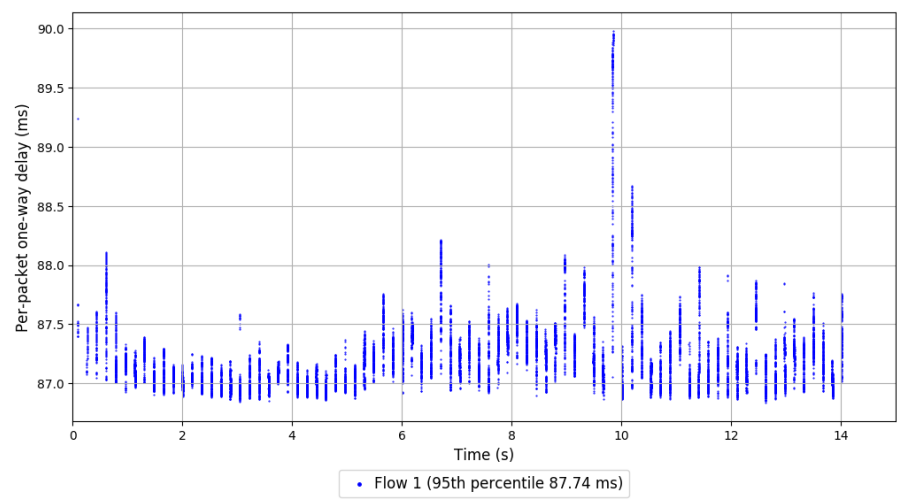
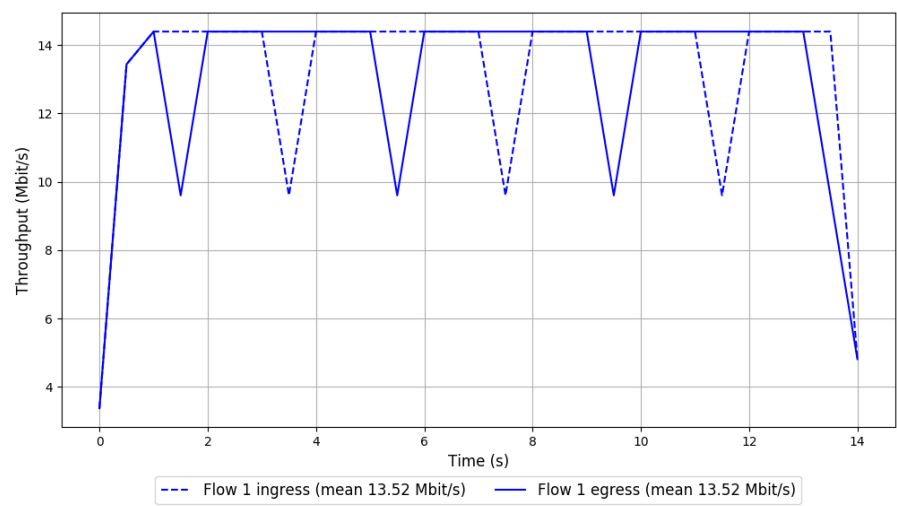


Run 2: Statistics of Saturator

Start at: 2017-08-11 07:42:10

End at: 2017-08-11 07:42:40

Run 2: Report of Saturator — Data Link

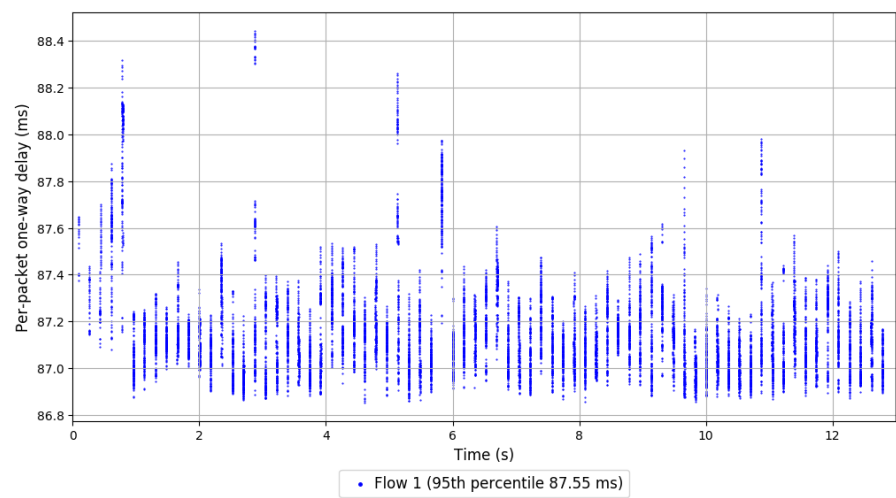
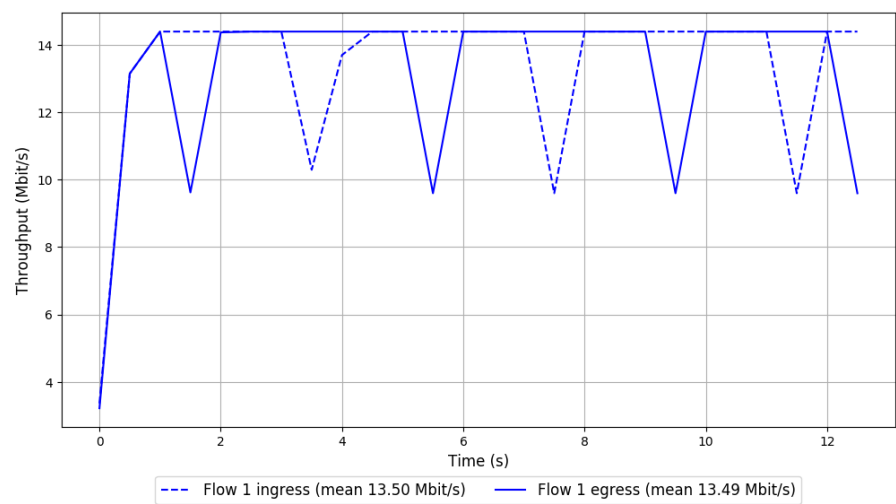


Run 3: Statistics of Saturator

Start at: 2017-08-11 07:53:08

End at: 2017-08-11 07:53:38

Run 3: Report of Saturator — Data Link

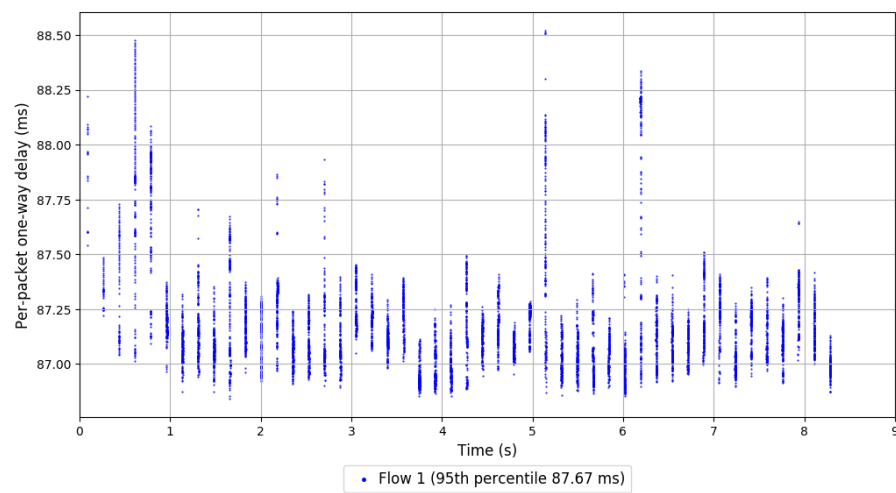
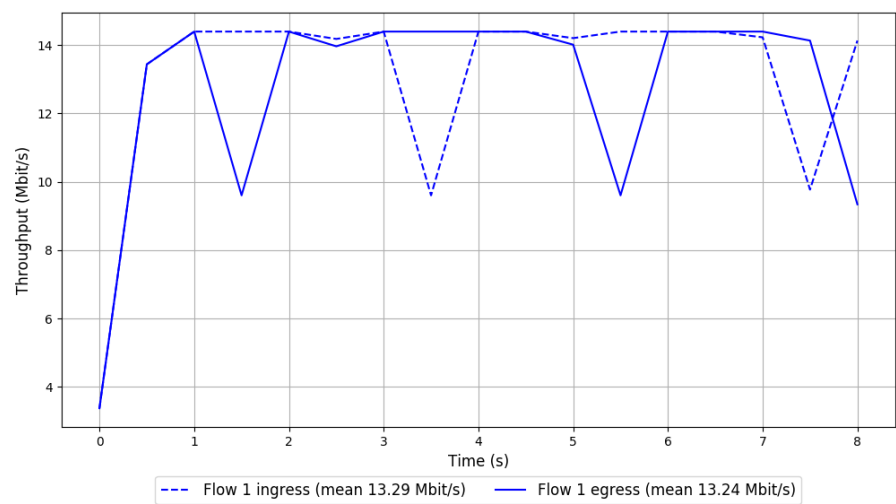


Run 4: Statistics of Saturator

Start at: 2017-08-11 08:04:16

End at: 2017-08-11 08:04:46

Run 4: Report of Saturator — Data Link



Run 5: Statistics of Saturator

Start at: 2017-08-11 08:15:26

End at: 2017-08-11 08:15:56

Below is generated by plot.py at 2017-08-11 10:28:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.65 Mbit/s

95th percentile per-packet one-way delay: 87.486 ms

Loss rate: 3.94%

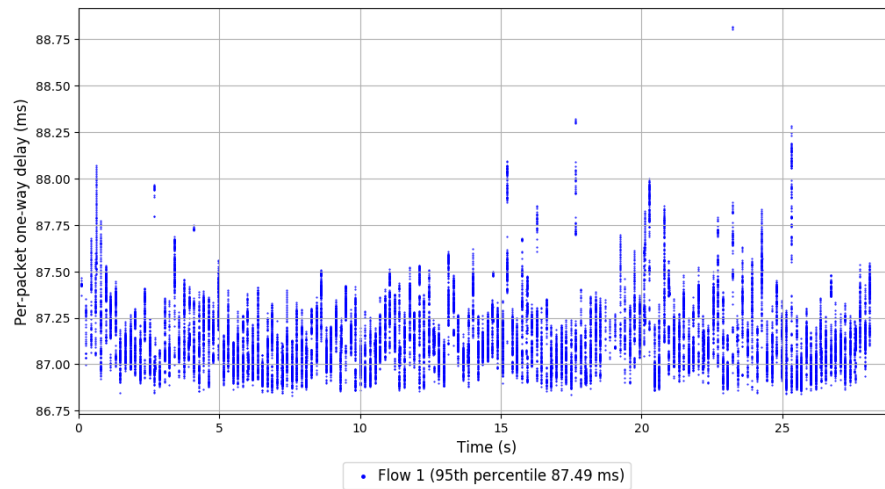
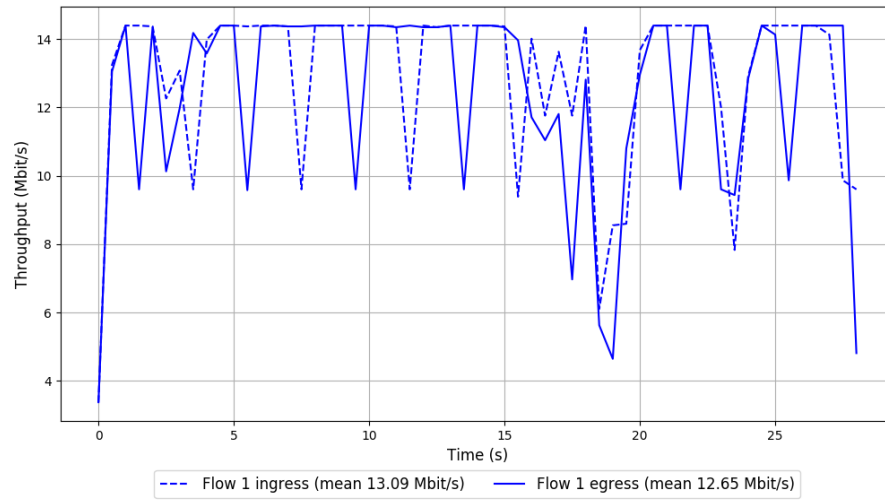
-- Flow 1:

Average throughput: 12.65 Mbit/s

95th percentile per-packet one-way delay: 87.486 ms

Loss rate: 3.94%

Run 5: Report of Saturator — Data Link

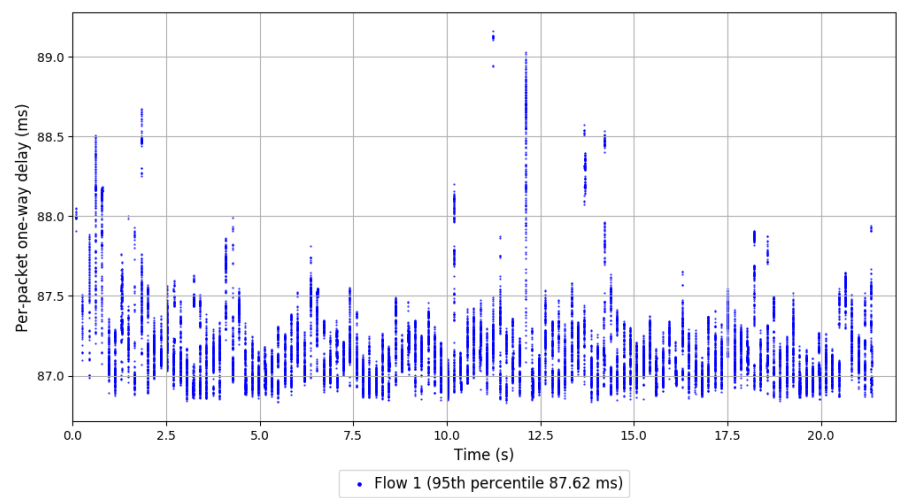
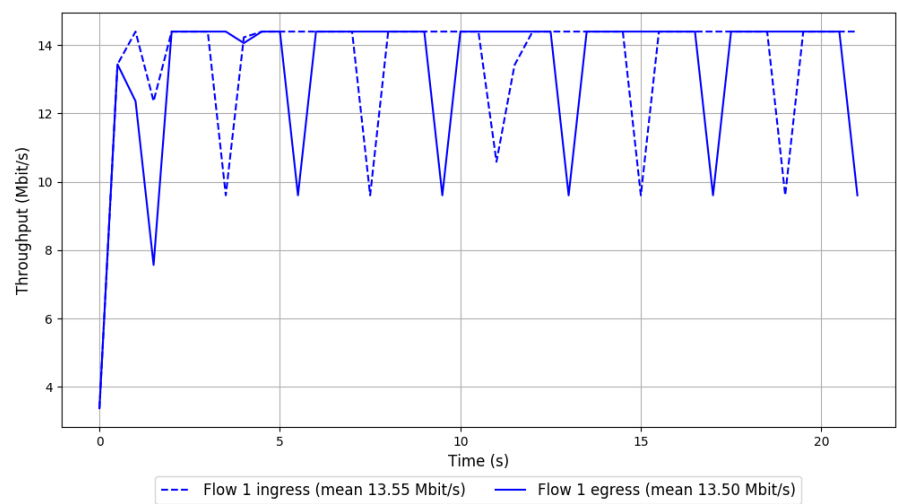


Run 6: Statistics of Saturator

Start at: 2017-08-11 08:26:02

End at: 2017-08-11 08:26:32

Run 6: Report of Saturator — Data Link

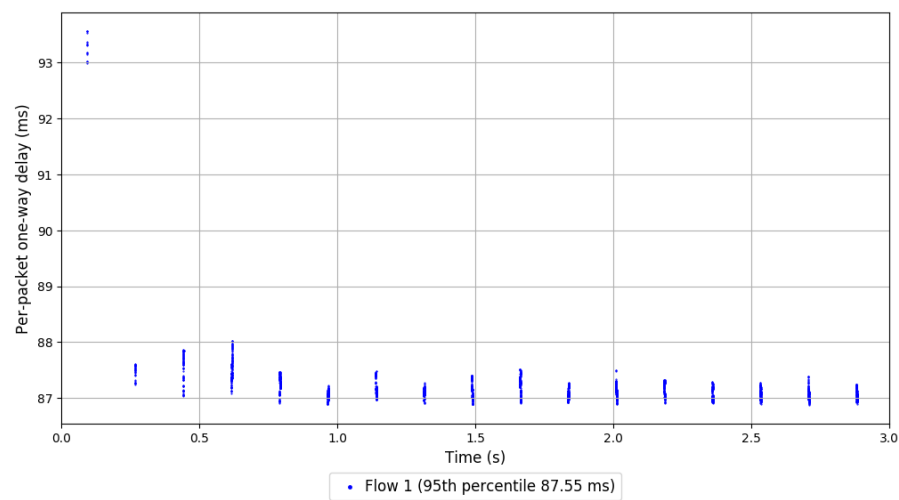
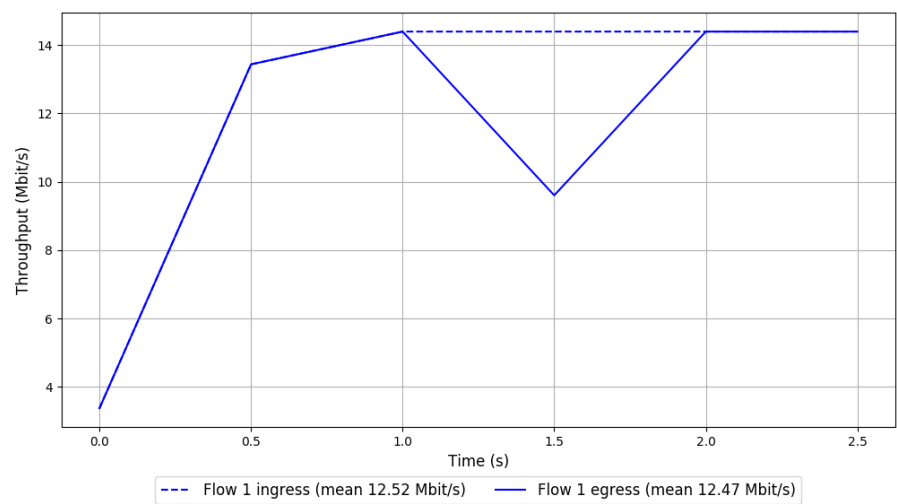


Run 7: Statistics of Saturator

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

End at: 2017-08-11 08:37:41

Run 7: Report of Saturator — Data Link



Run 8: Statistics of Saturator

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

End at: 2017-08-11 08:48:41

Below is generated by plot.py at 2017-08-11 10:28:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.18 Mbit/s

95th percentile per-packet one-way delay: 87.366 ms

Loss rate: 1.43%

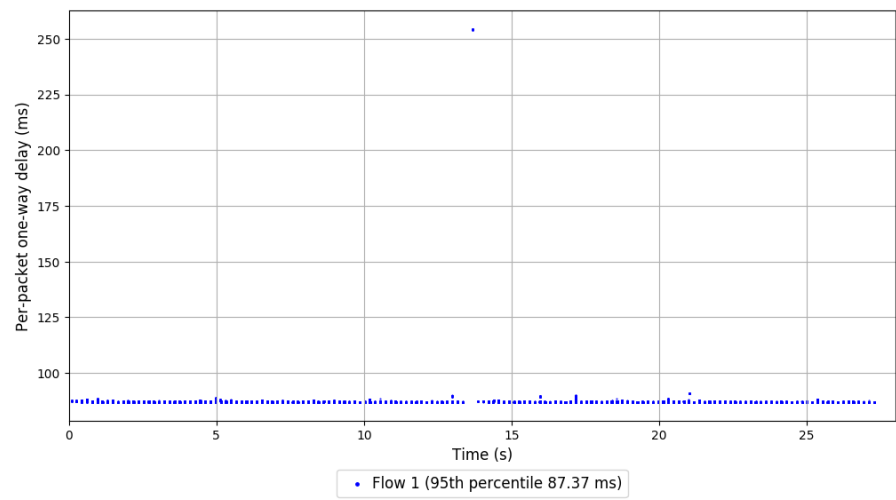
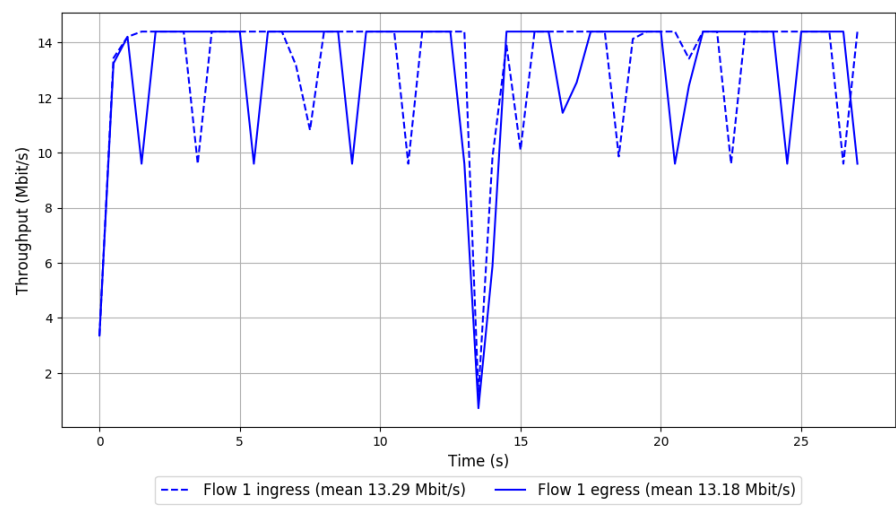
-- Flow 1:

Average throughput: 13.18 Mbit/s

95th percentile per-packet one-way delay: 87.366 ms

Loss rate: 1.43%

Run 8: Report of Saturator — Data Link



Run 9: Statistics of Saturator

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

End at: 2017-08-11 08:59:43

Below is generated by plot.py at 2017-08-11 10:28:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.72 Mbit/s

95th percentile per-packet one-way delay: 87.499 ms

Loss rate: 2.13%

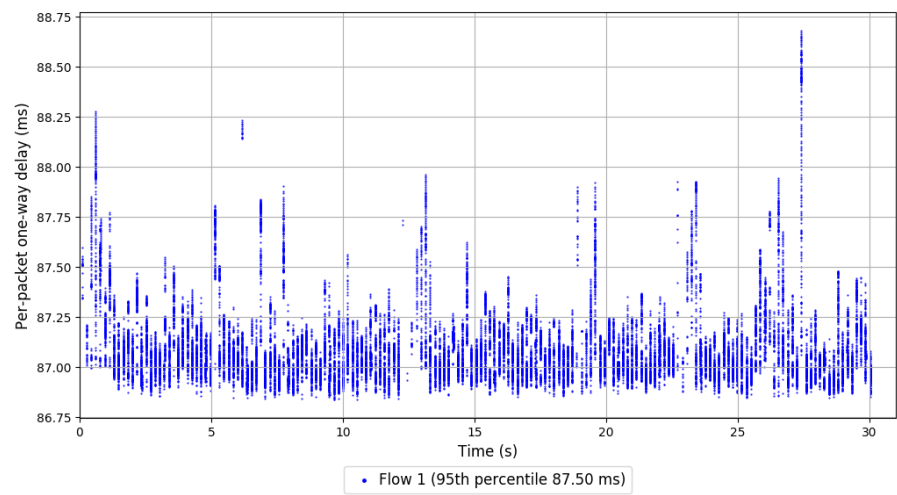
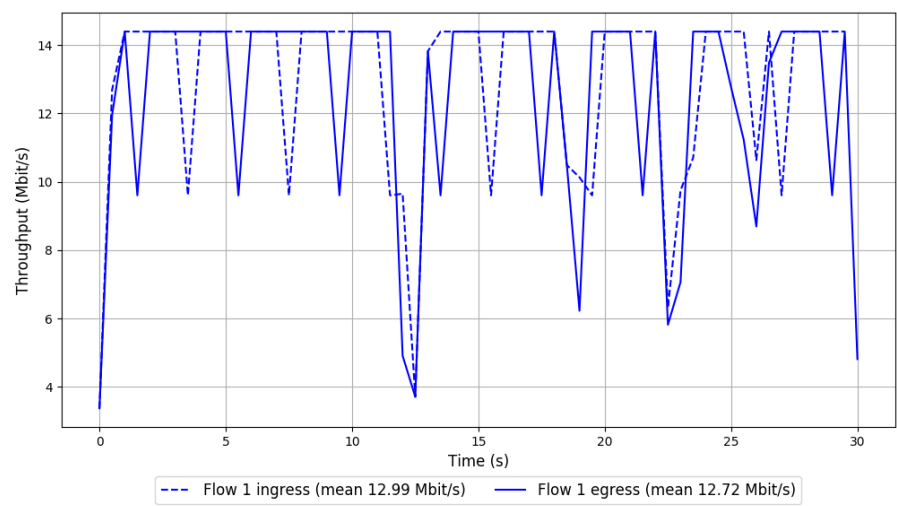
-- Flow 1:

Average throughput: 12.72 Mbit/s

95th percentile per-packet one-way delay: 87.499 ms

Loss rate: 2.13%

Run 9: Report of Saturator — Data Link

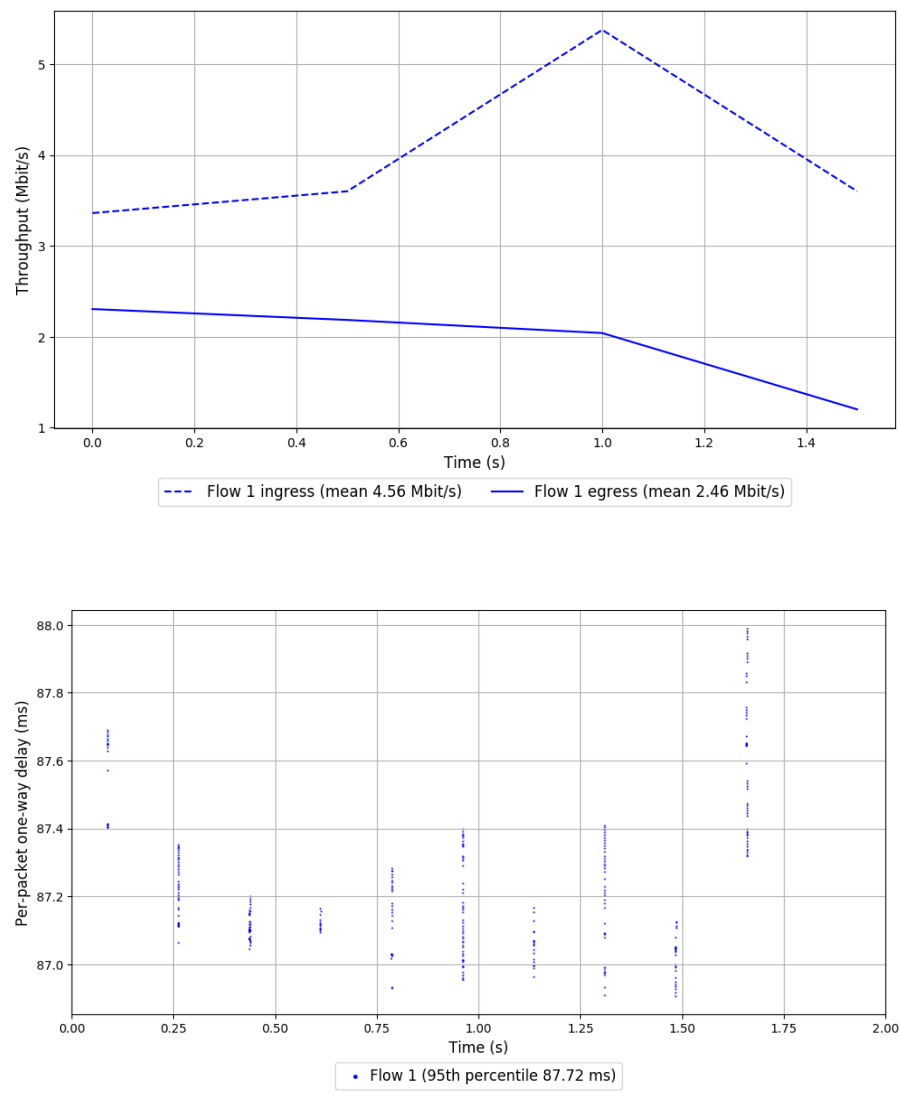


Run 10: Statistics of Saturator

Start at: 2017-08-11 09:10:33

End at: 2017-08-11 09:11:03

Run 10: Report of Saturator — Data Link

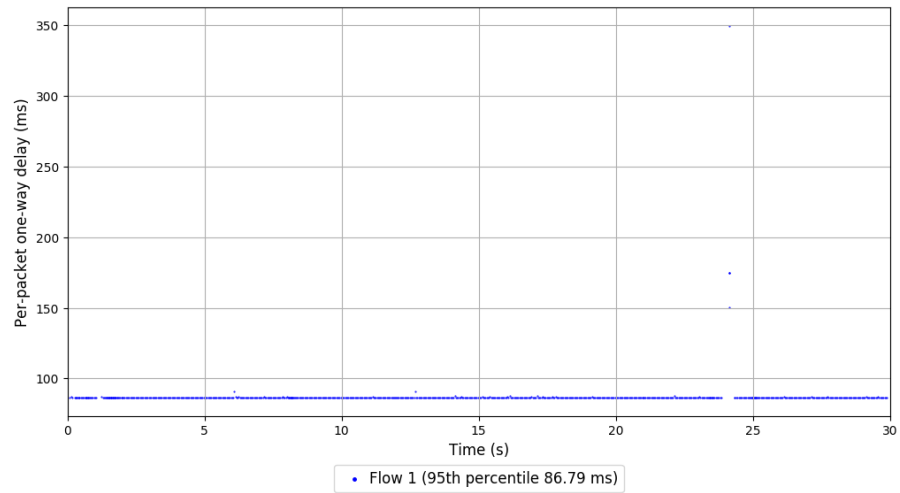
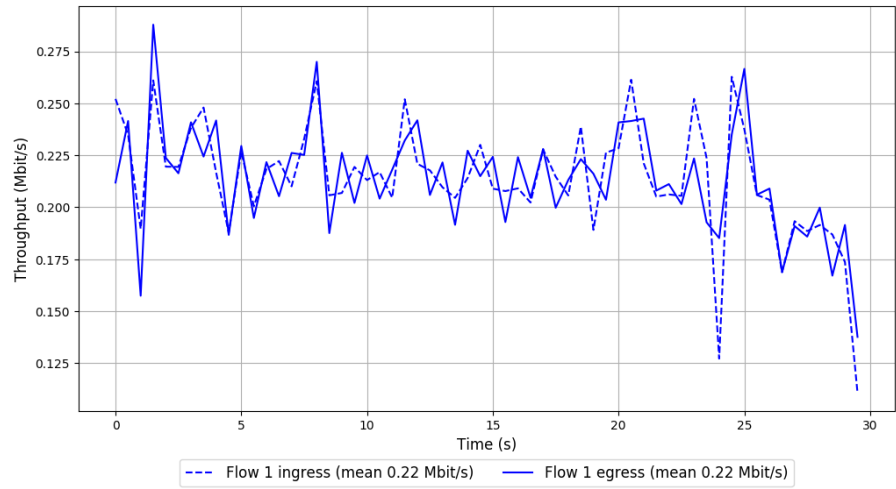


```
Run 1: Statistics of SCReAM

Start at: 2017-08-11 07:25:30
End at: 2017-08-11 07:26:00

# Below is generated by plot.py at 2017-08-11 10:28:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.793 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.793 ms
Loss rate: 0.00%
```

Run 1: Report of SCRaM — Data Link



Run 2: Statistics of SCReAM

Start at: 2017-08-11 07:36:28

End at: 2017-08-11 07:36:58

Below is generated by plot.py at 2017-08-11 10:28:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.662 ms

Loss rate: 0.00%

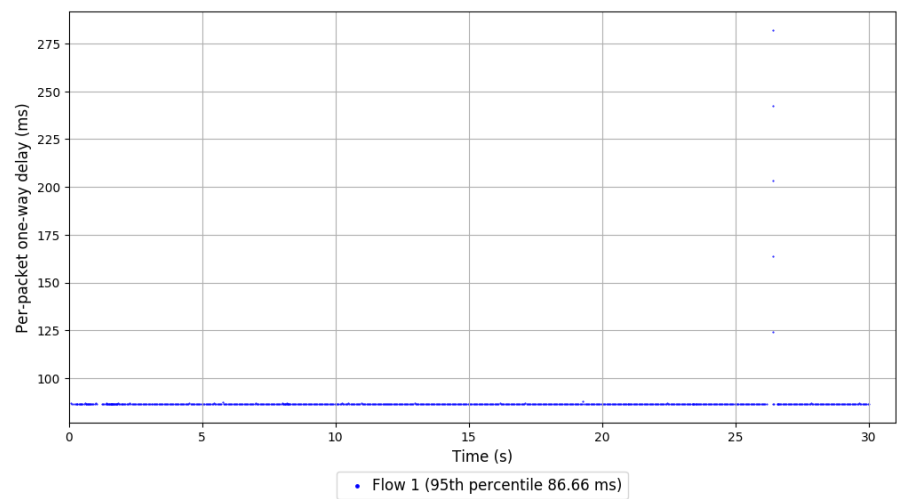
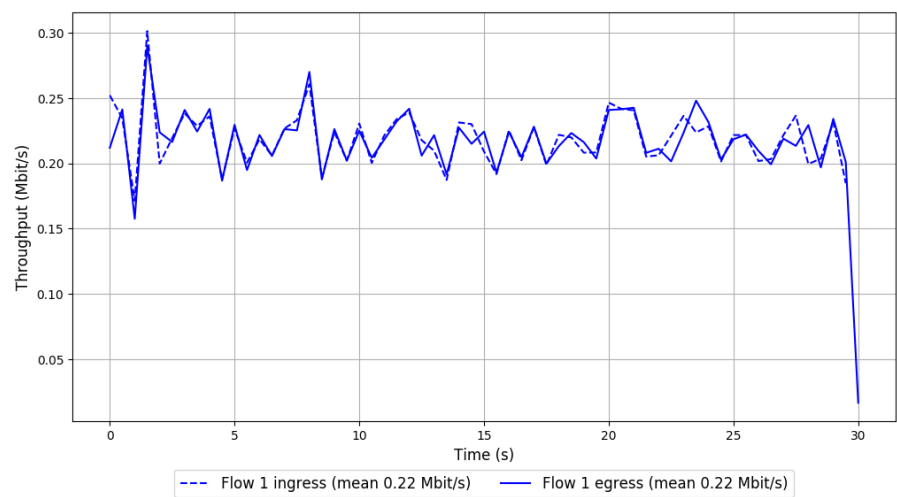
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.662 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-08-11 07:47:17

End at: 2017-08-11 07:47:48

Below is generated by plot.py at 2017-08-11 10:28:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.317 ms

Loss rate: 0.00%

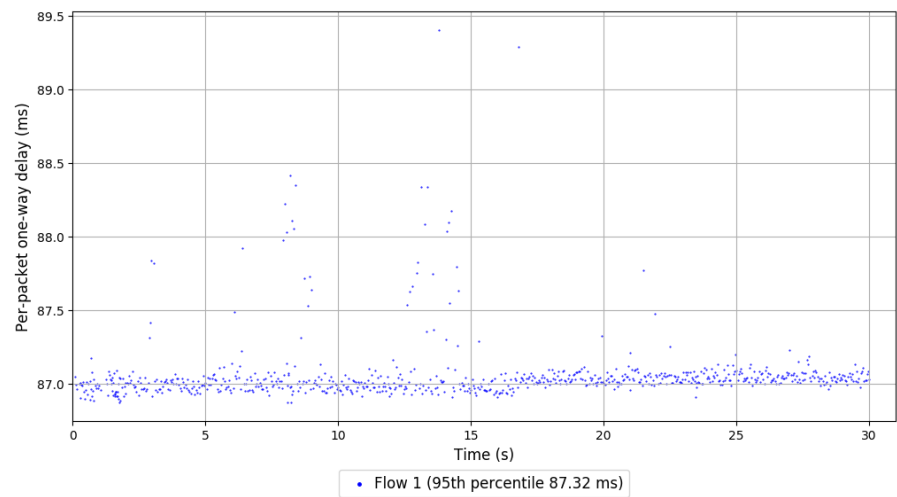
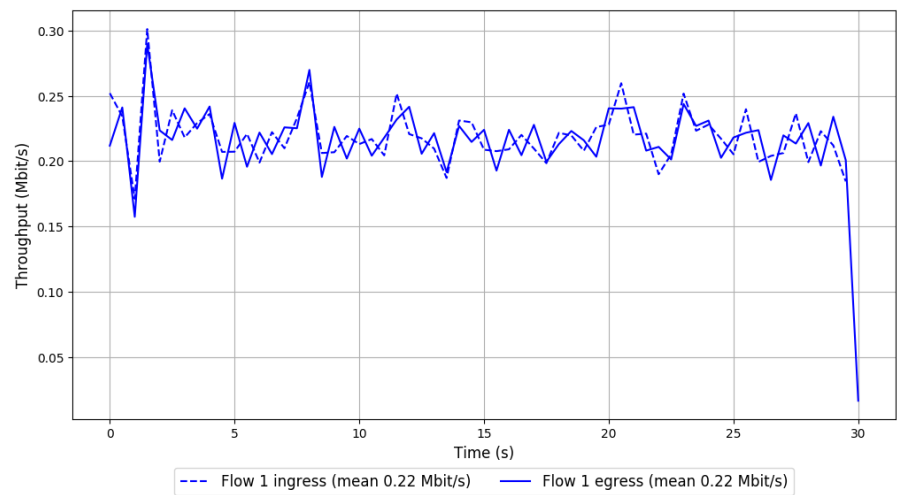
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.317 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-11 07:58:12

End at: 2017-08-11 07:58:42

Below is generated by plot.py at 2017-08-11 10:28:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 86.747 ms

Loss rate: 0.00%

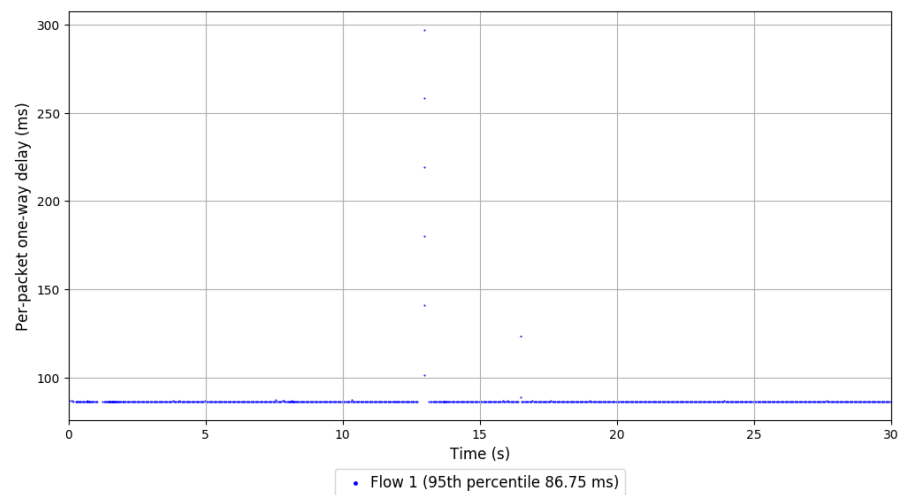
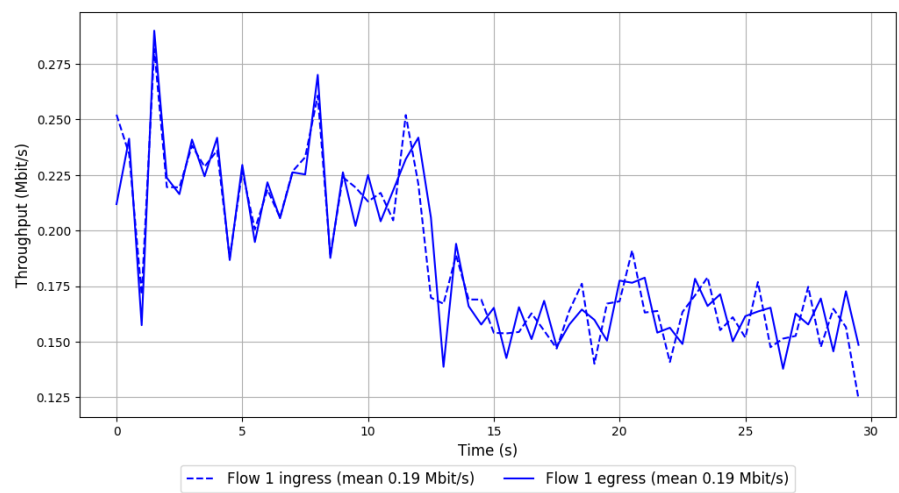
-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 86.747 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-08-11 08:09:15

End at: 2017-08-11 08:09:45

Below is generated by plot.py at 2017-08-11 10:28:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.085 ms

Loss rate: 0.00%

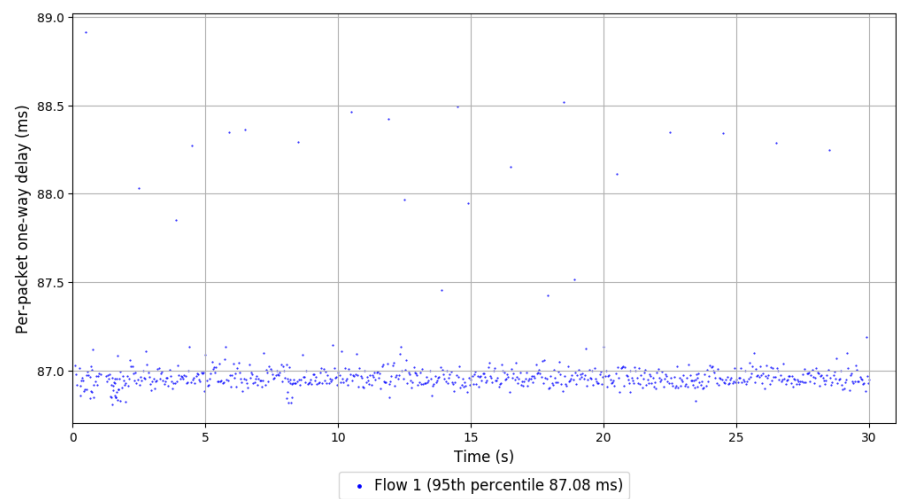
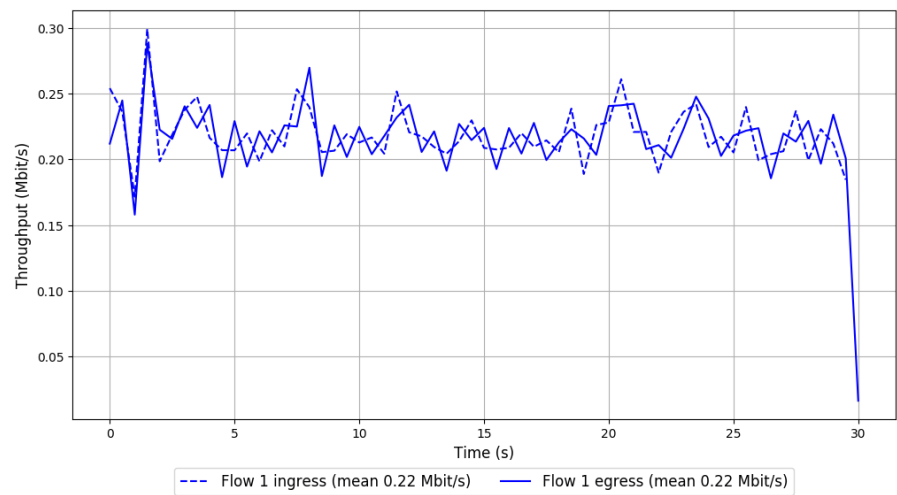
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.085 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-11 08:20:28

End at: 2017-08-11 08:20:58

Below is generated by plot.py at 2017-08-11 10:28:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.684 ms

Loss rate: 0.00%

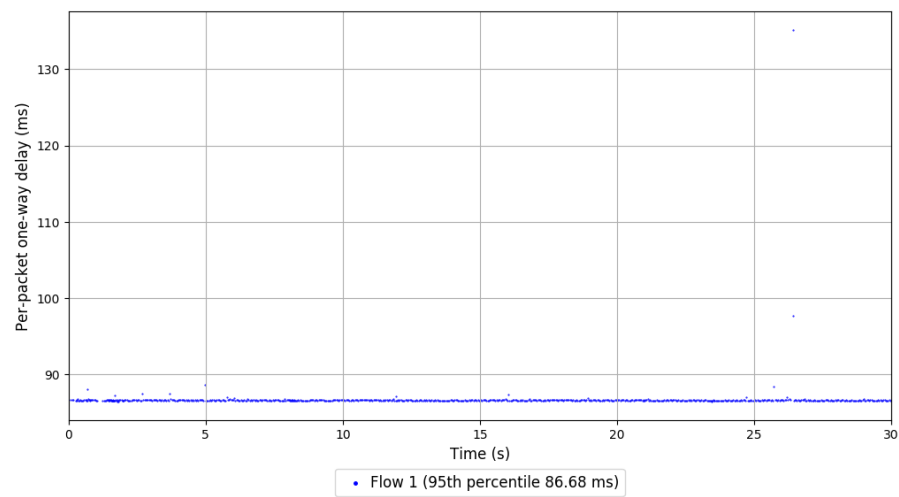
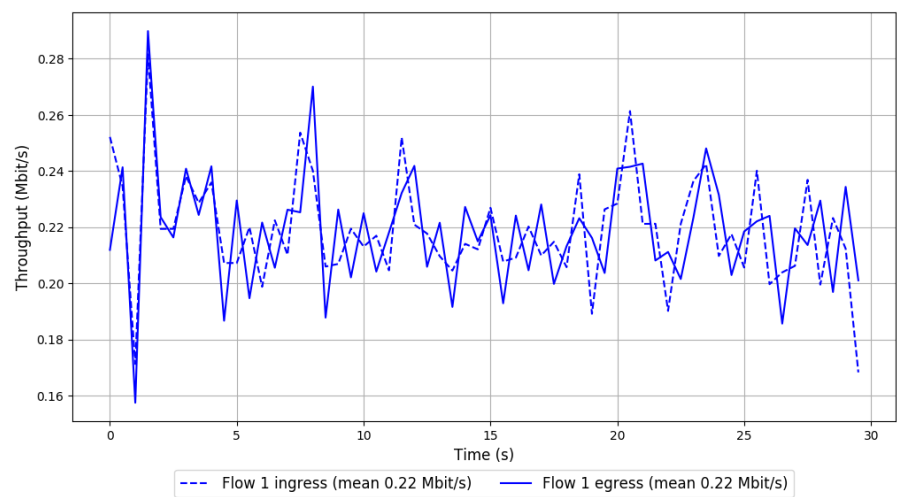
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.684 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

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

End at: 2017-08-11 08:31:41

Below is generated by plot.py at 2017-08-11 10:28:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.730 ms

Loss rate: 0.00%

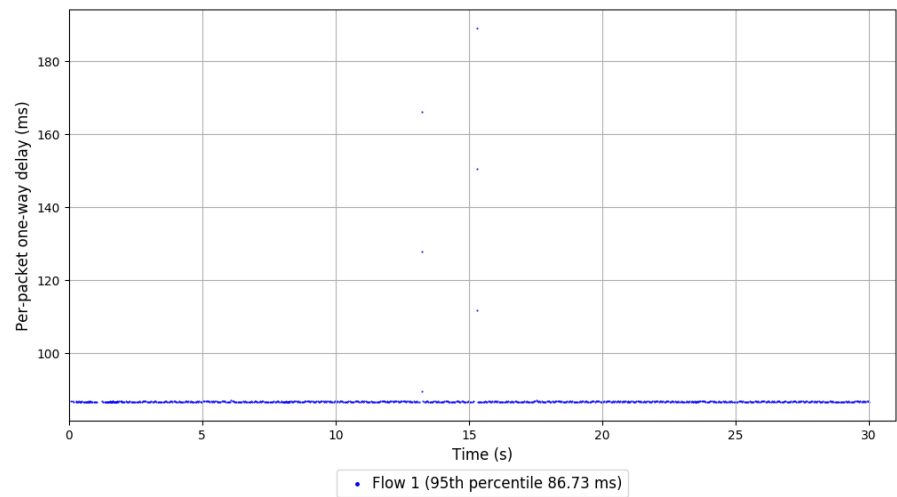
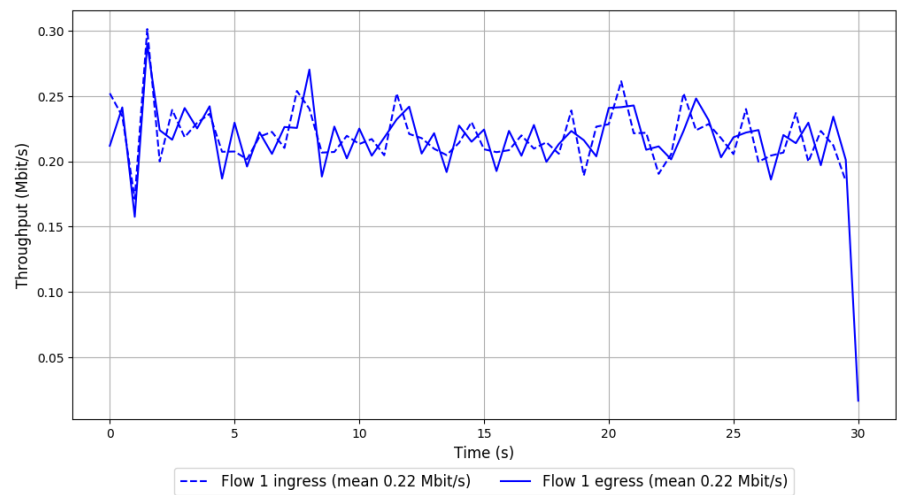
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.730 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-11 08:42:01

End at: 2017-08-11 08:42:31

Below is generated by plot.py at 2017-08-11 10:28:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.054 ms

Loss rate: 0.00%

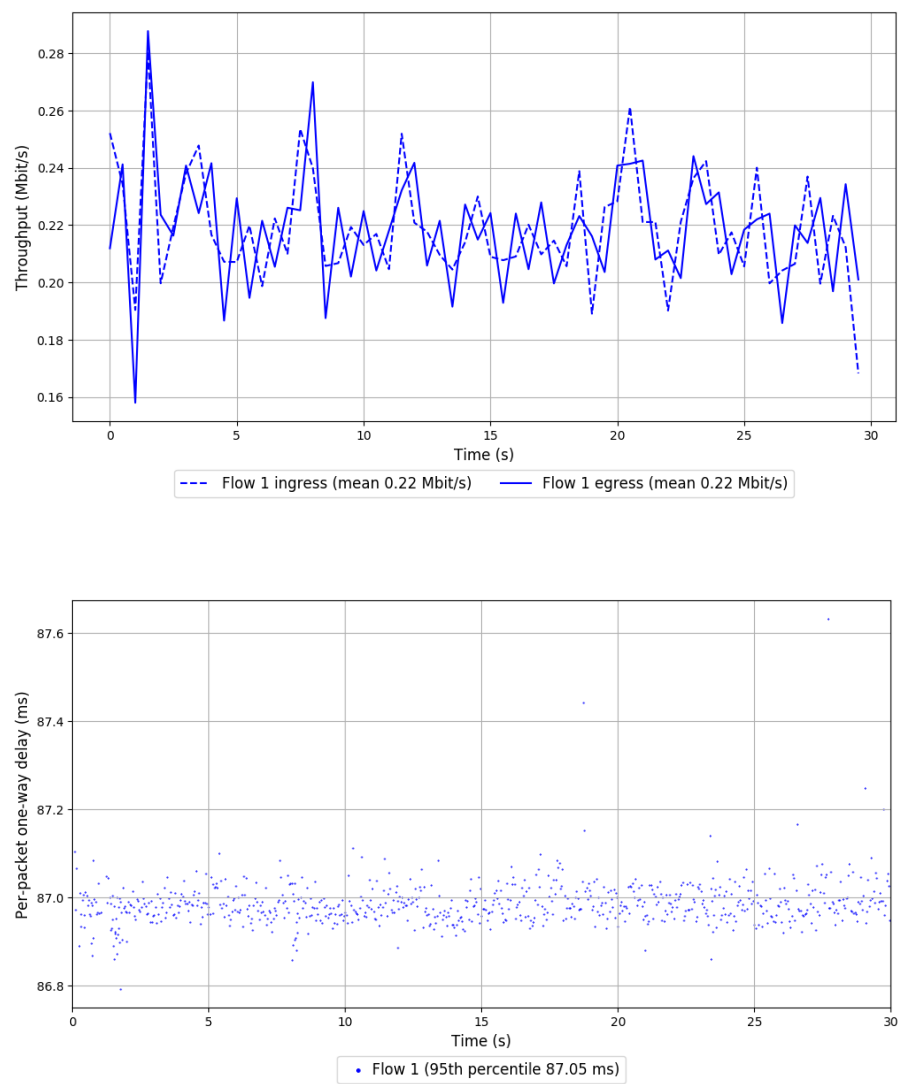
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.054 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-08-11 08:53:19

End at: 2017-08-11 08:53:49

Below is generated by plot.py at 2017-08-11 10:28:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.057 ms

Loss rate: 0.00%

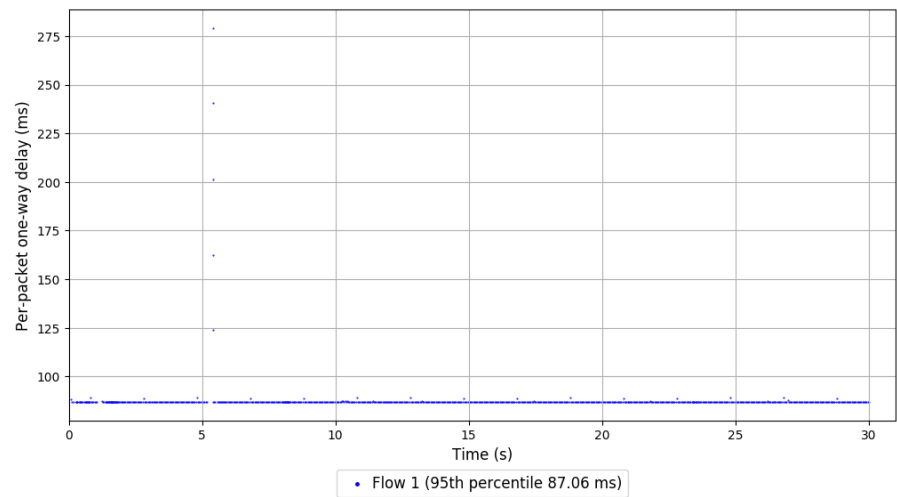
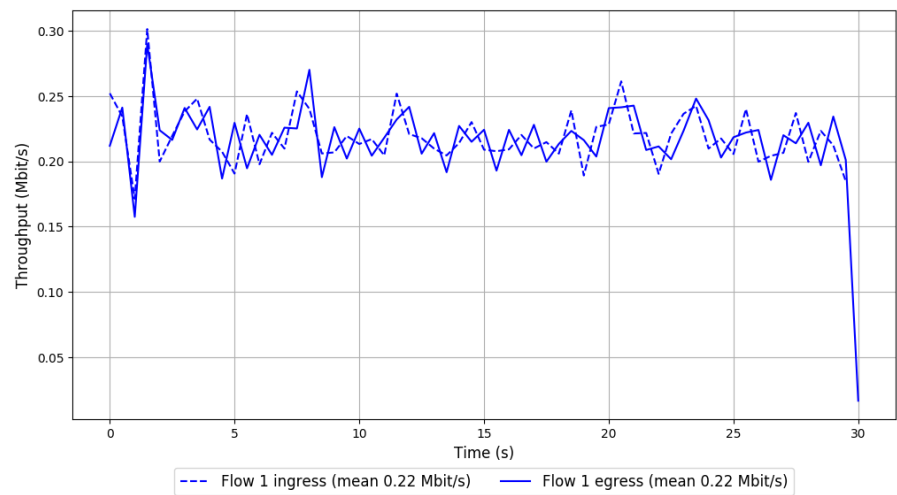
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.057 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-08-11 09:04:19

End at: 2017-08-11 09:04:49

Below is generated by plot.py at 2017-08-11 10:28:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.147 ms

Loss rate: 0.00%

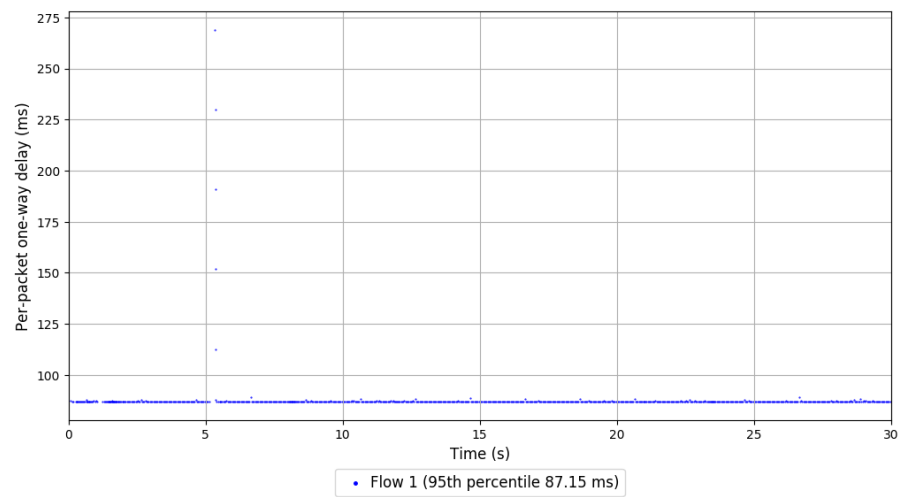
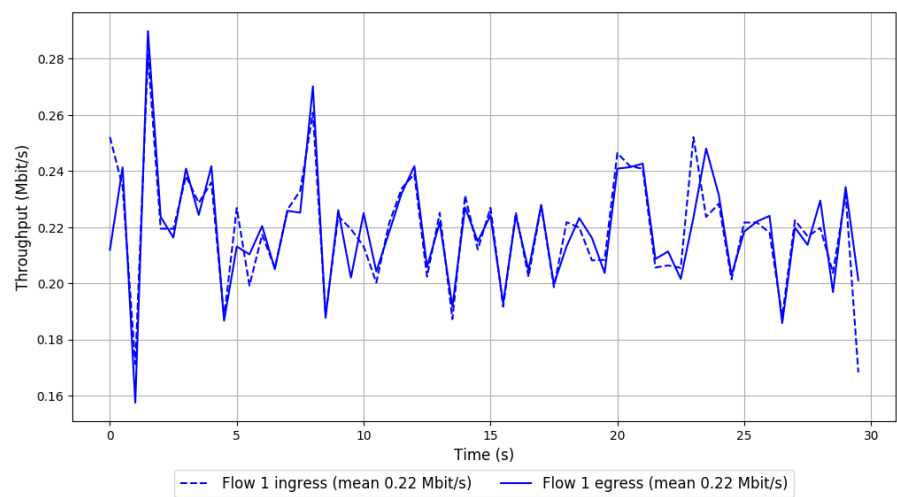
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.147 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2017-08-11 07:23:30

End at: 2017-08-11 07:24:00

Below is generated by plot.py at 2017-08-11 10:28:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.76 Mbit/s

95th percentile per-packet one-way delay: 87.487 ms

Loss rate: 1.71%

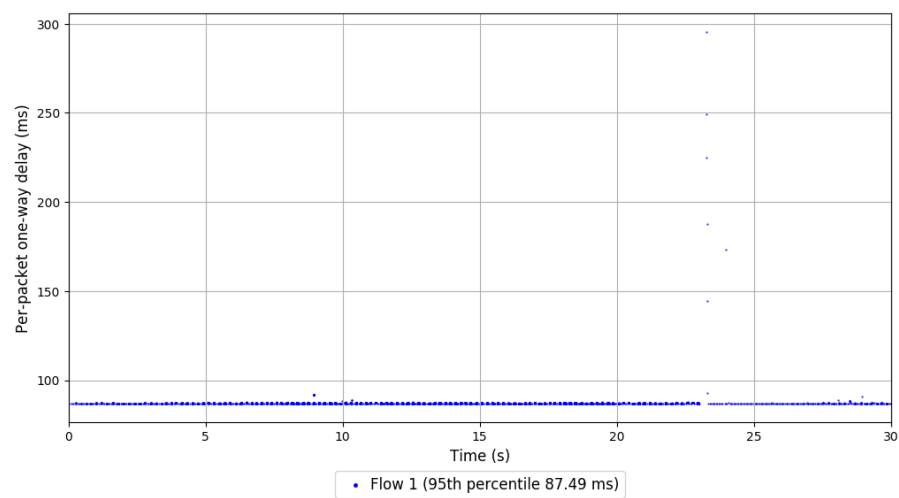
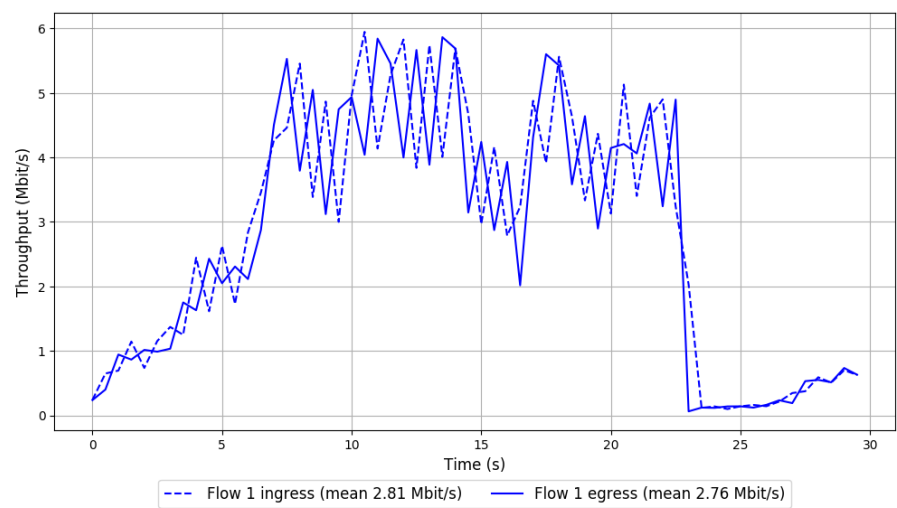
-- Flow 1:

Average throughput: 2.76 Mbit/s

95th percentile per-packet one-way delay: 87.487 ms

Loss rate: 1.71%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-11 07:34:28

End at: 2017-08-11 07:34:58

Below is generated by plot.py at 2017-08-11 10:28:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 87.518 ms

Loss rate: 1.26%

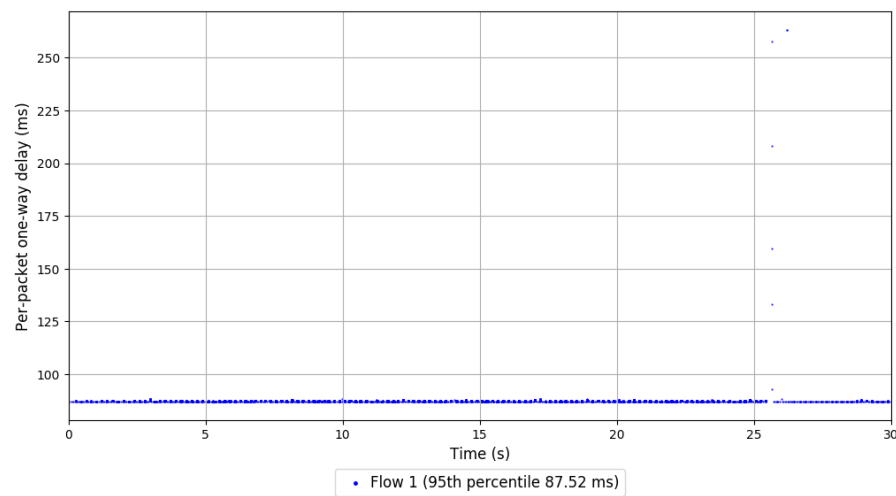
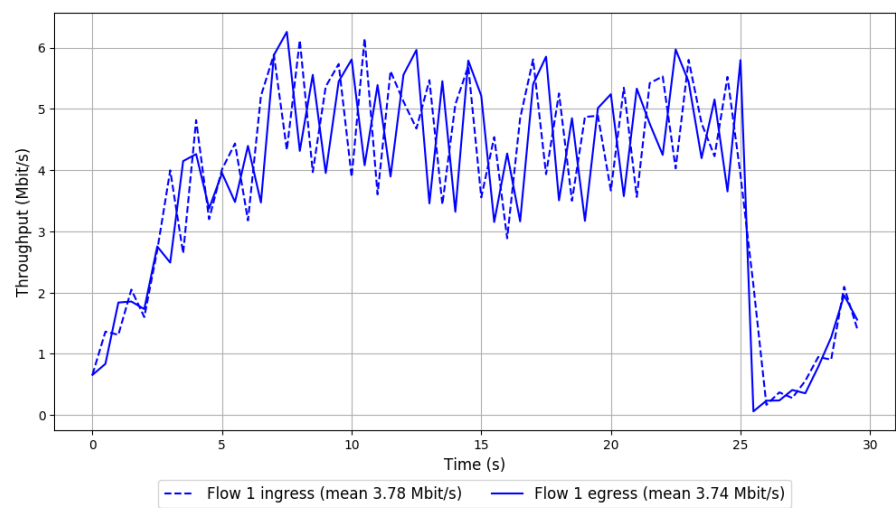
-- Flow 1:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 87.518 ms

Loss rate: 1.26%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-11 07:45:18

End at: 2017-08-11 07:45:48

Below is generated by plot.py at 2017-08-11 10:28:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 87.462 ms

Loss rate: 1.18%

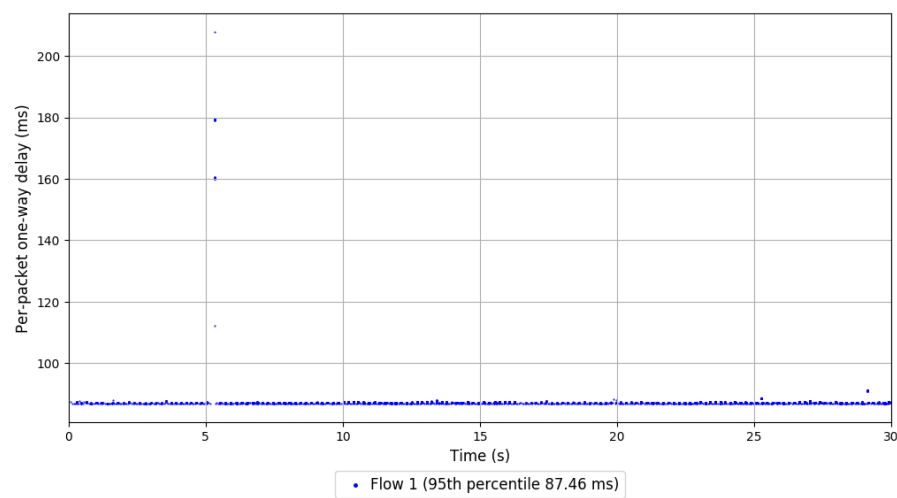
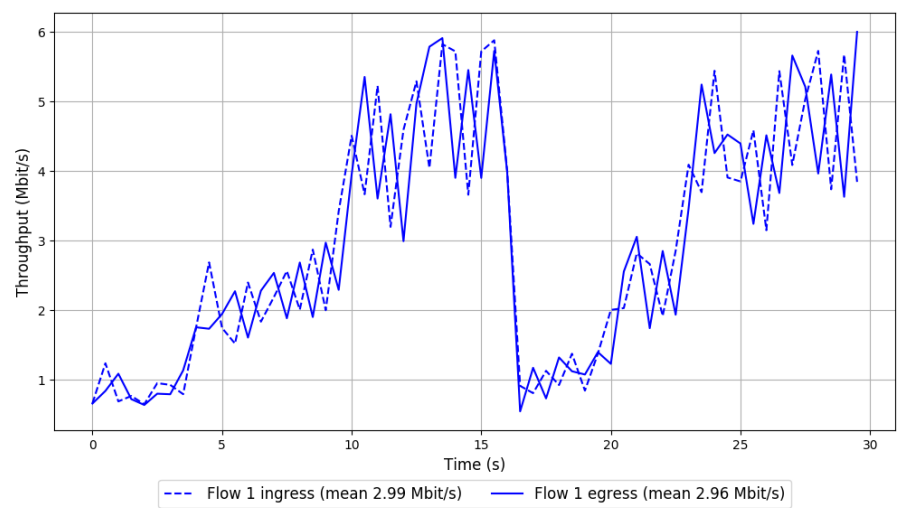
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 87.462 ms

Loss rate: 1.18%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-08-11 07:56:12

End at: 2017-08-11 07:56:42

Below is generated by plot.py at 2017-08-11 10:28:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.29 Mbit/s

95th percentile per-packet one-way delay: 87.425 ms

Loss rate: 3.80%

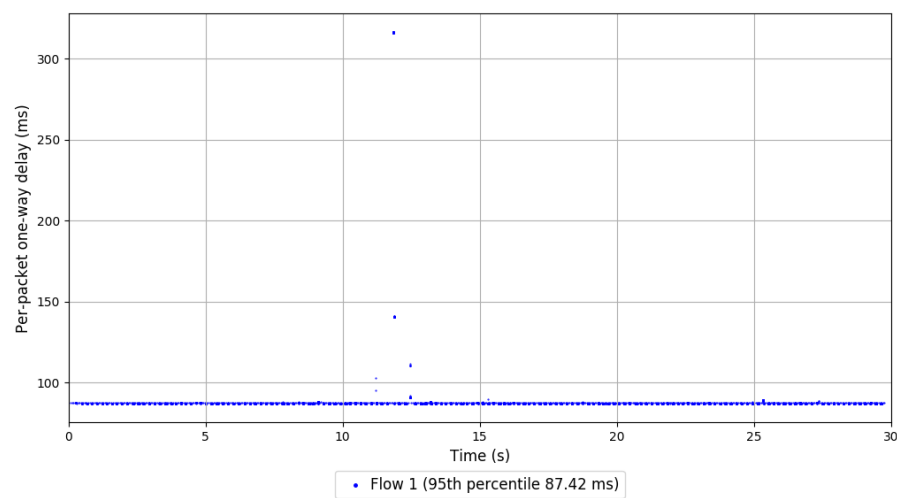
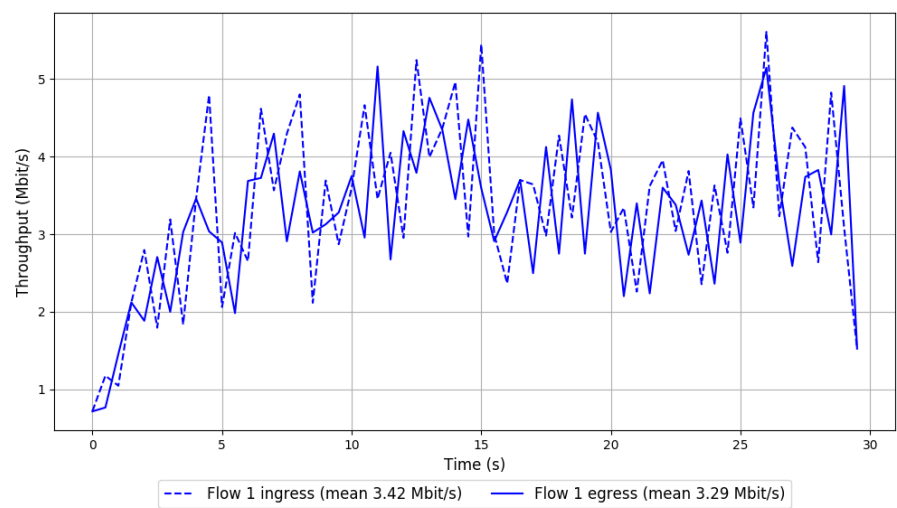
-- Flow 1:

Average throughput: 3.29 Mbit/s

95th percentile per-packet one-way delay: 87.425 ms

Loss rate: 3.80%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-11 08:07:15

End at: 2017-08-11 08:07:45

Below is generated by plot.py at 2017-08-11 10:28:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.62 Mbit/s

95th percentile per-packet one-way delay: 87.496 ms

Loss rate: 0.38%

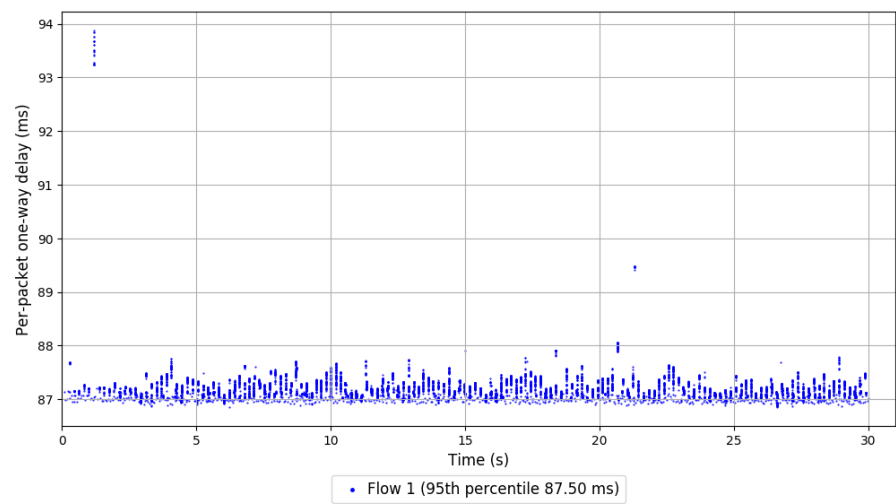
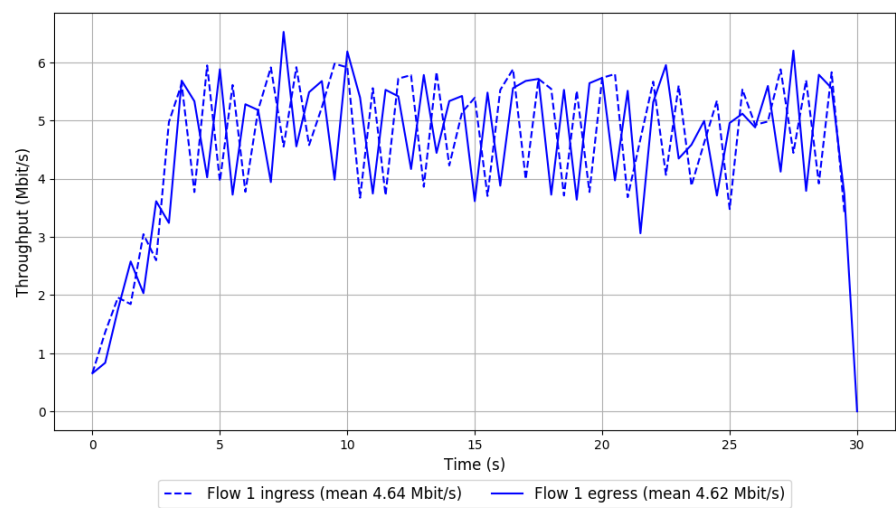
-- Flow 1:

Average throughput: 4.62 Mbit/s

95th percentile per-packet one-way delay: 87.496 ms

Loss rate: 0.38%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-11 08:18:28

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

Below is generated by plot.py at 2017-08-11 10:28:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.63 Mbit/s

95th percentile per-packet one-way delay: 87.374 ms

Loss rate: 0.74%

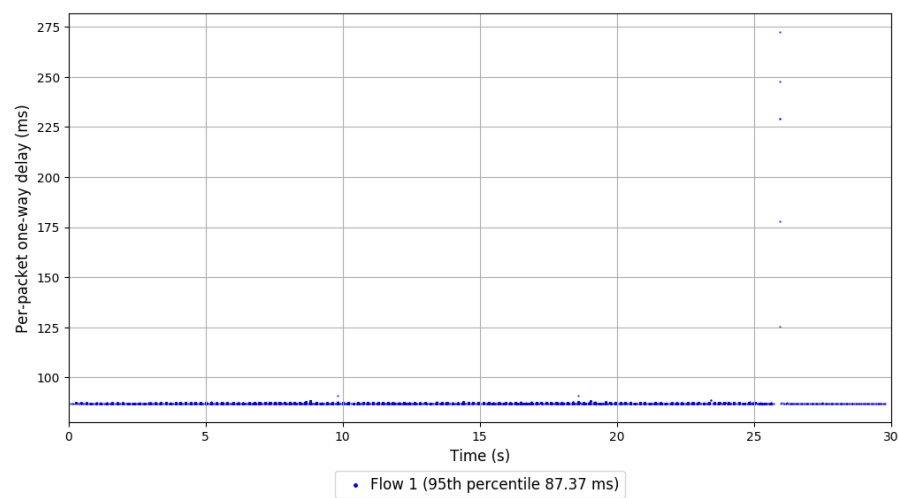
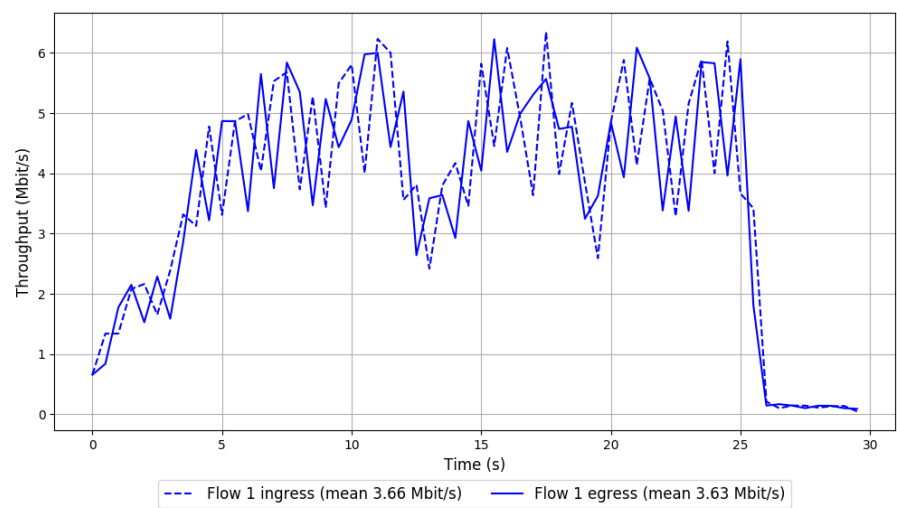
-- Flow 1:

Average throughput: 3.63 Mbit/s

95th percentile per-packet one-way delay: 87.374 ms

Loss rate: 0.74%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

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

End at: 2017-08-11 08:29:41

Below is generated by plot.py at 2017-08-11 10:28:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 87.400 ms

Loss rate: 1.71%

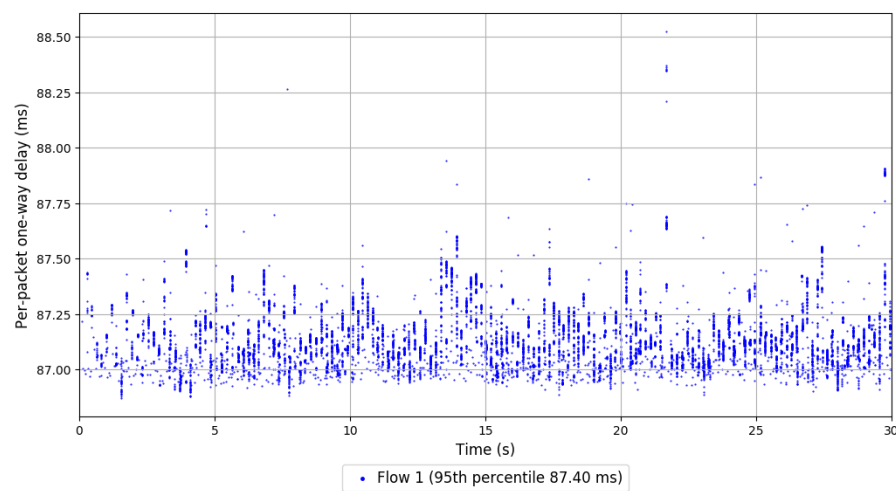
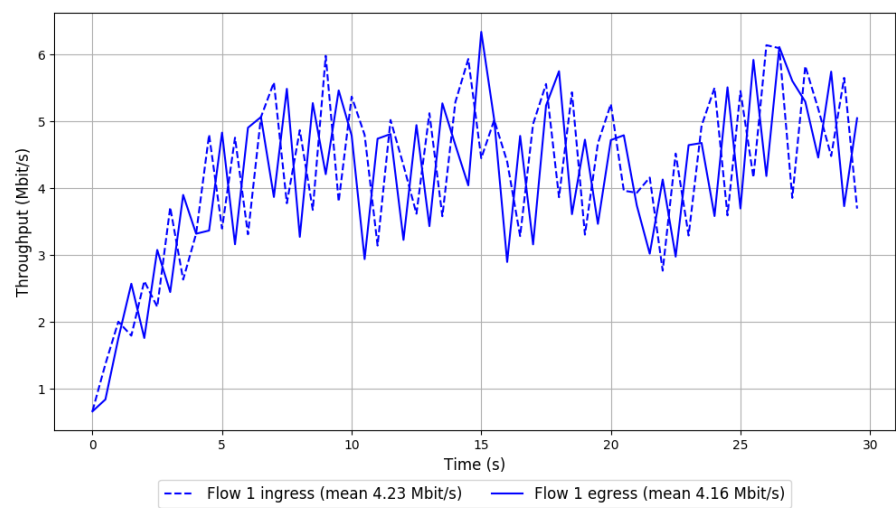
-- Flow 1:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 87.400 ms

Loss rate: 1.71%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-11 08:40:02

End at: 2017-08-11 08:40:32

Below is generated by plot.py at 2017-08-11 10:28:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 87.330 ms

Loss rate: 4.79%

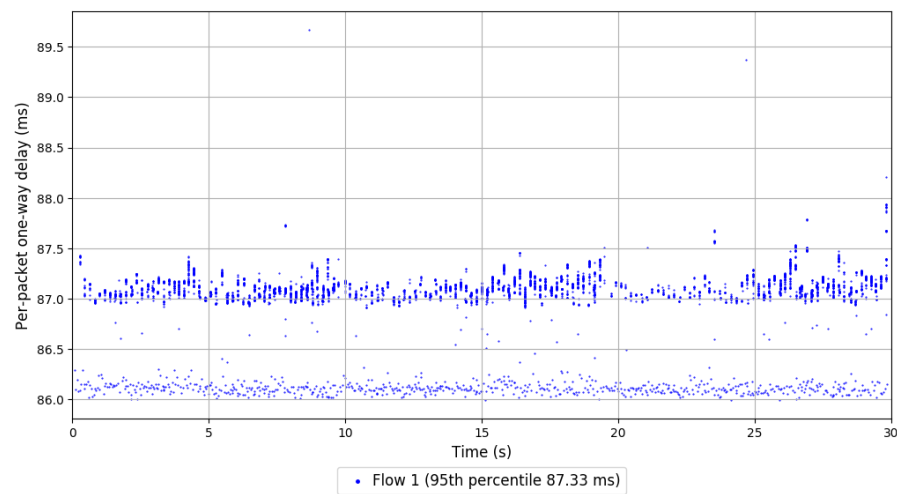
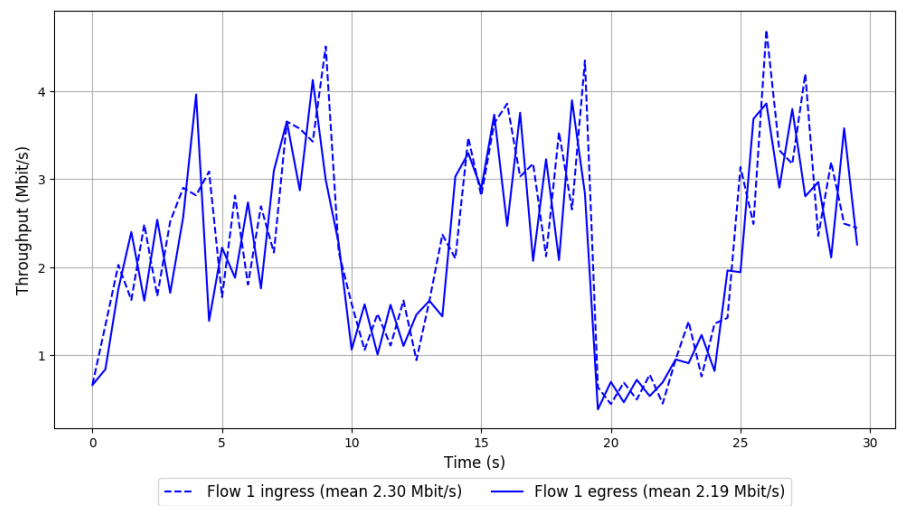
-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 87.330 ms

Loss rate: 4.79%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-11 08:51:19

End at: 2017-08-11 08:51:49

Below is generated by plot.py at 2017-08-11 10:28:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 87.327 ms

Loss rate: 2.49%

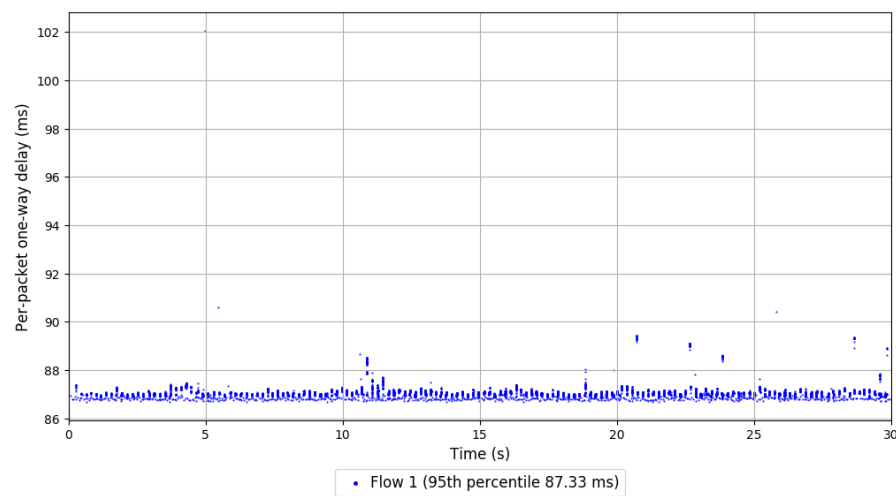
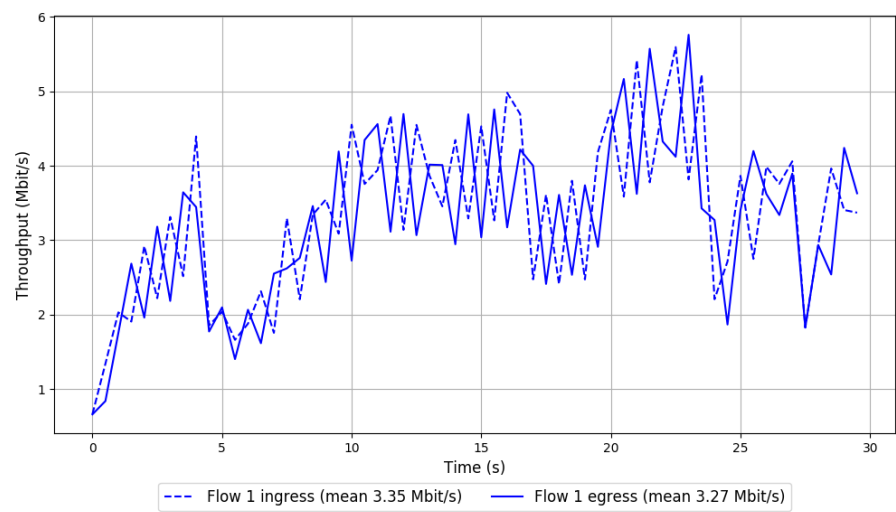
-- Flow 1:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 87.327 ms

Loss rate: 2.49%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-11 09:02:20

End at: 2017-08-11 09:02:50

Below is generated by plot.py at 2017-08-11 10:28:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 87.518 ms

Loss rate: 0.60%

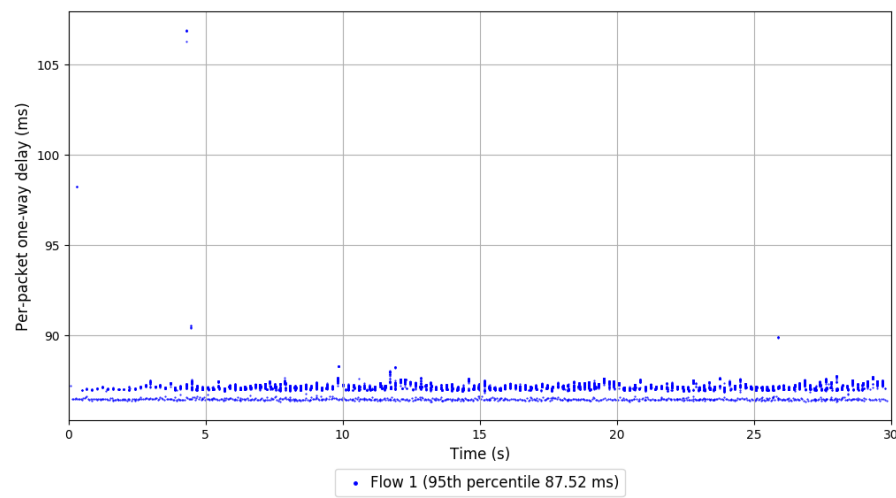
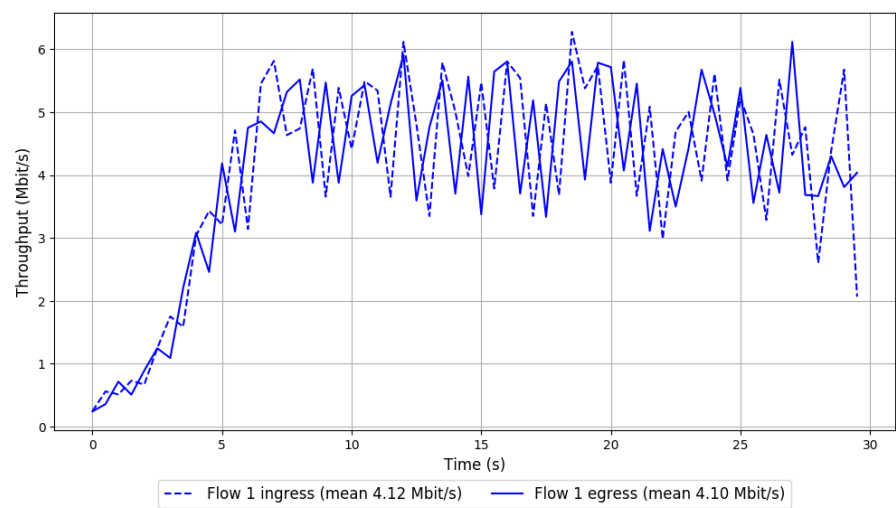
-- Flow 1:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 87.518 ms

Loss rate: 0.60%

Run 10: Report of Sprout — Data Link

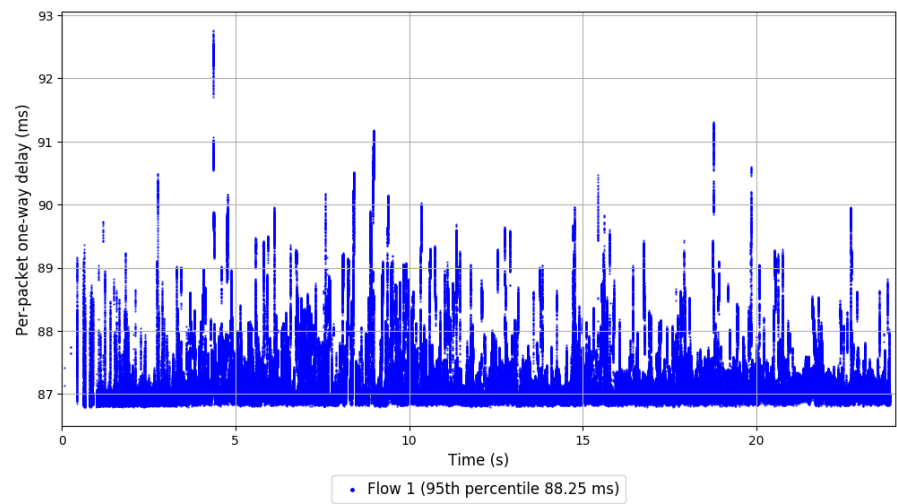
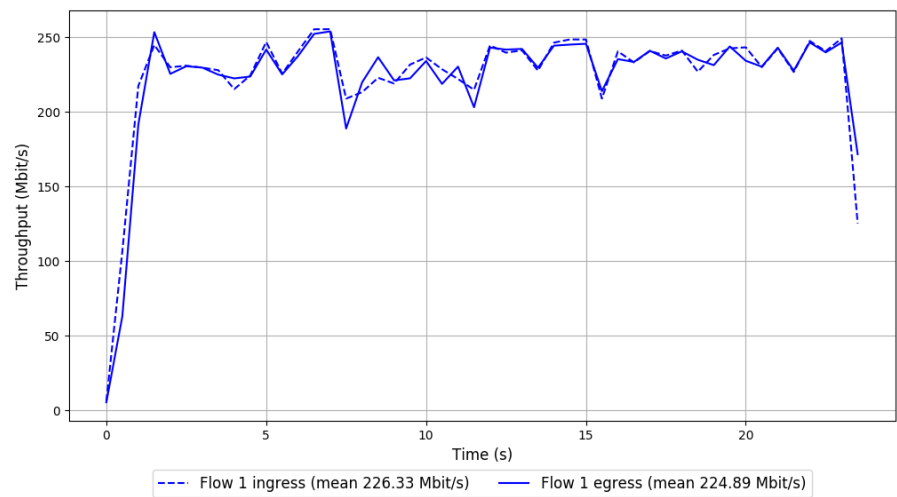


Run 1: Statistics of TaoVA-100x

Start at: 2017-08-11 07:30:33

End at: 2017-08-11 07:31:03

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

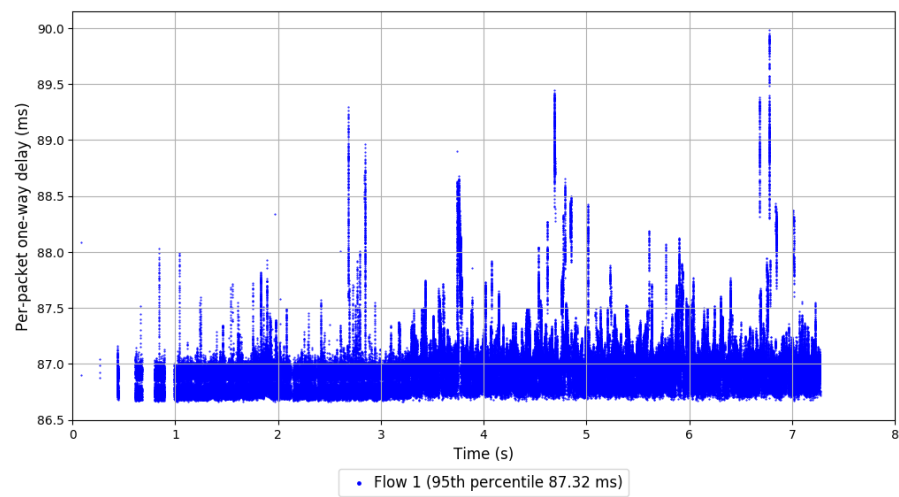
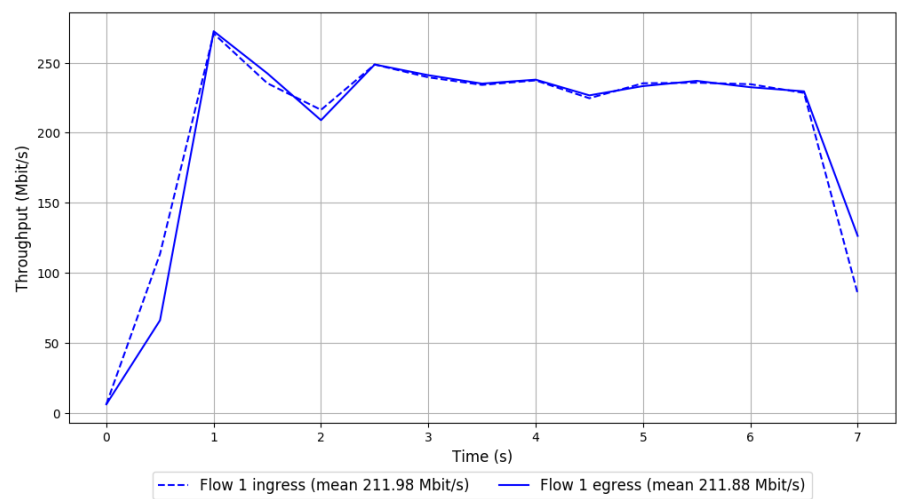


Run 2: Statistics of TaoVA-100x

Start at: 2017-08-11 07:41:25

End at: 2017-08-11 07:41:55

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

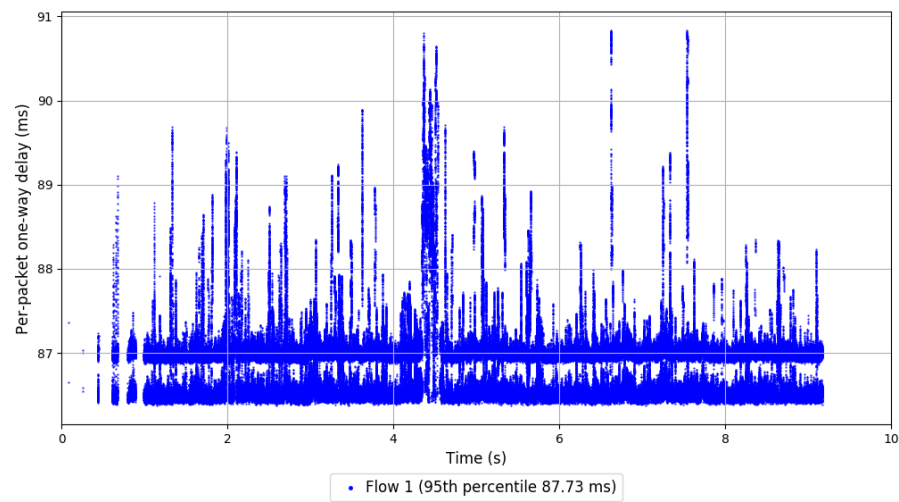
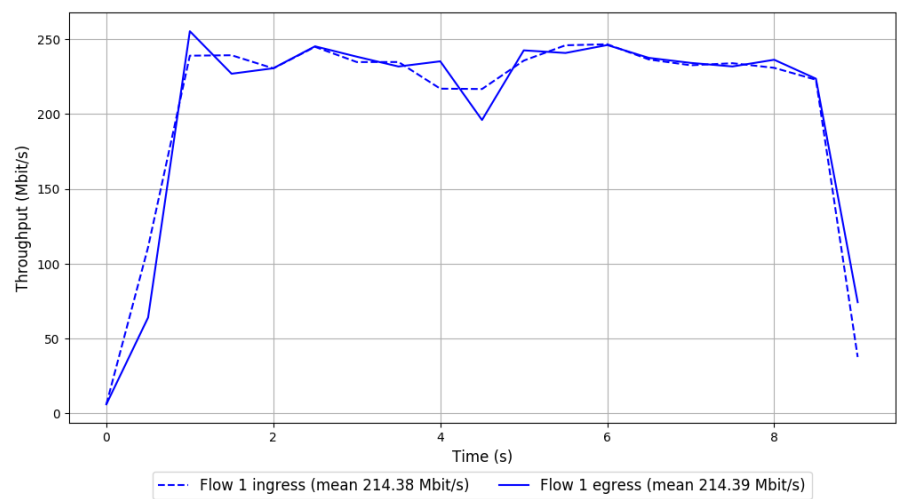


Run 3: Statistics of TaoVA-100x

Start at: 2017-08-11 07:52:22

End at: 2017-08-11 07:52:52

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

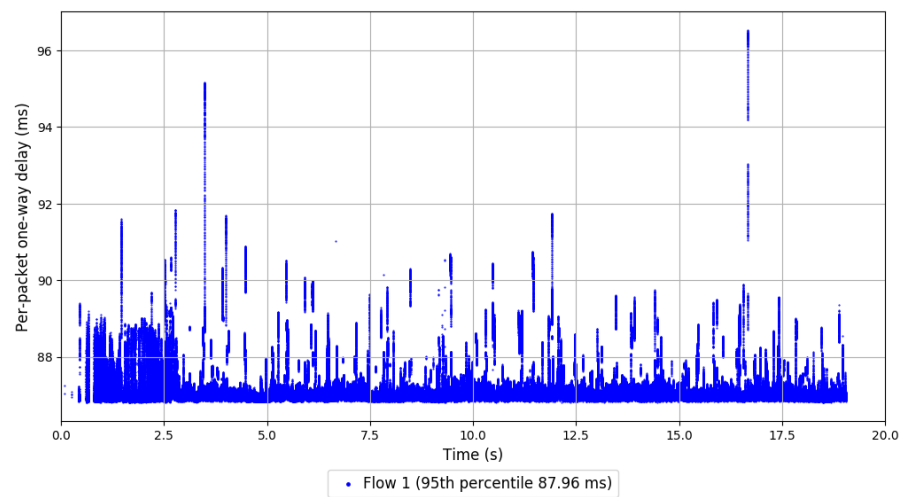
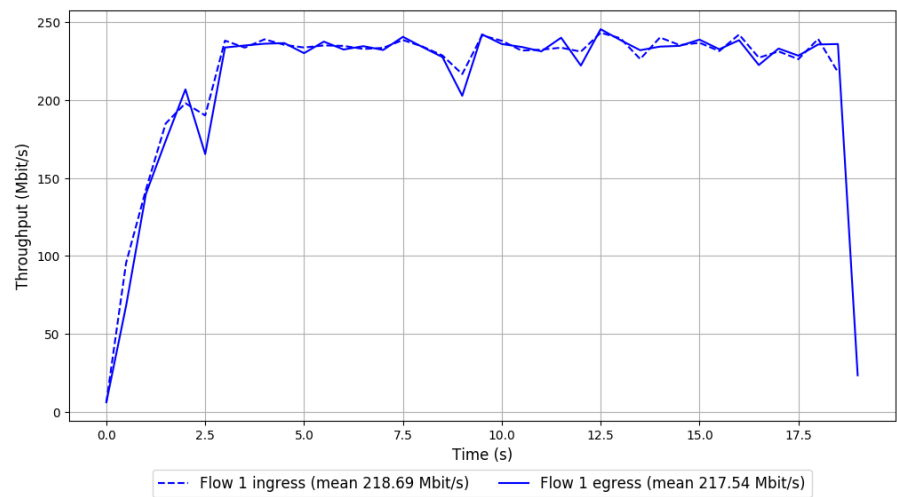


Run 4: Statistics of TaoVA-100x

Start at: 2017-08-11 08:03:22

End at: 2017-08-11 08:03:52

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-08-11 08:14:24

End at: 2017-08-11 08:14:54

Below is generated by plot.py at 2017-08-11 10:31:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.00 Mbit/s

95th percentile per-packet one-way delay: 87.383 ms

Loss rate: 0.96%

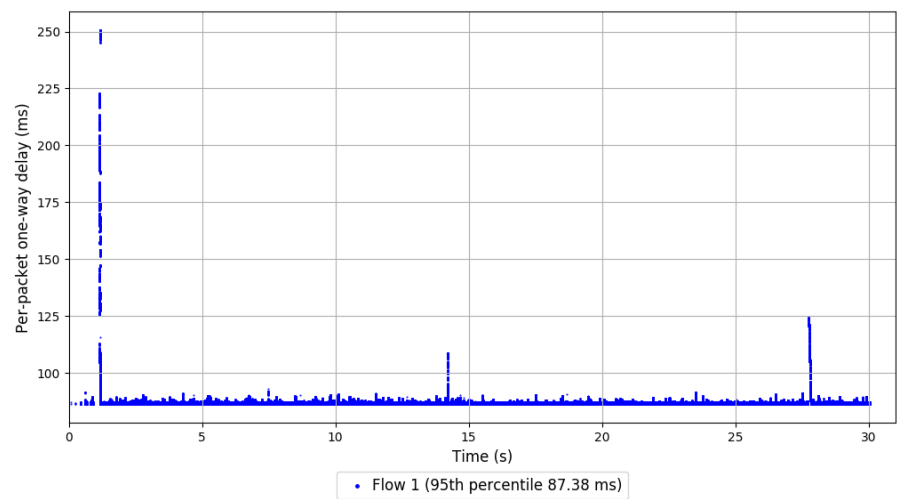
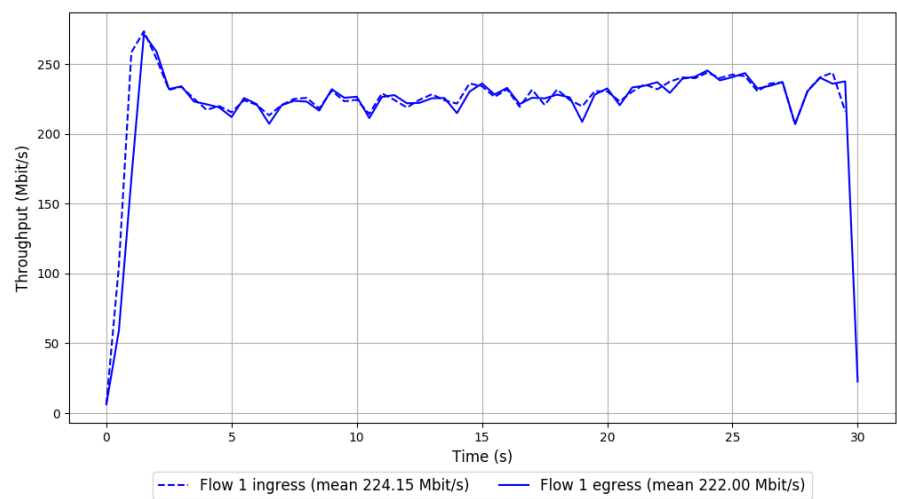
-- Flow 1:

Average throughput: 222.00 Mbit/s

95th percentile per-packet one-way delay: 87.383 ms

Loss rate: 0.96%

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

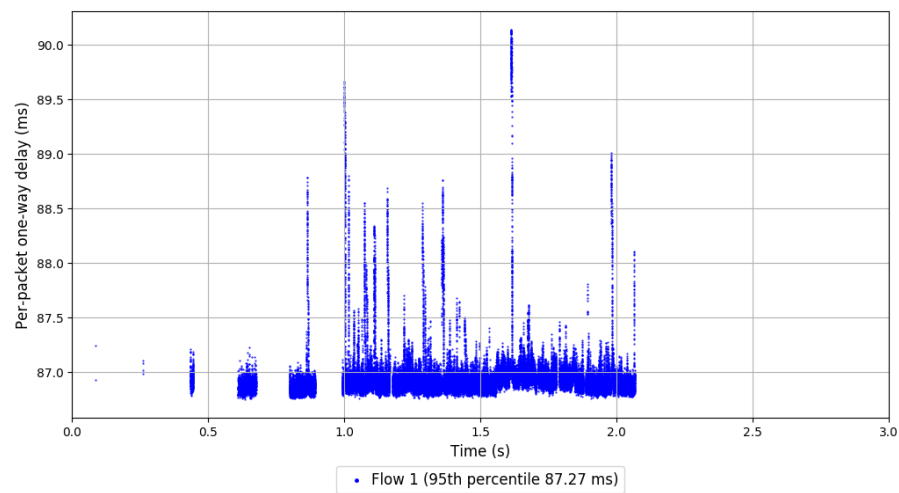
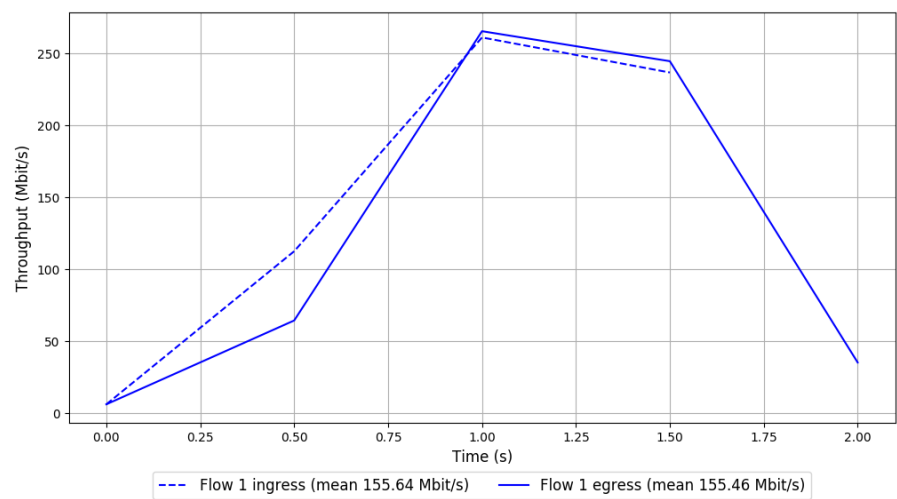


Run 6: Statistics of TaoVA-100x

Start at: 2017-08-11 08:25:21

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

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

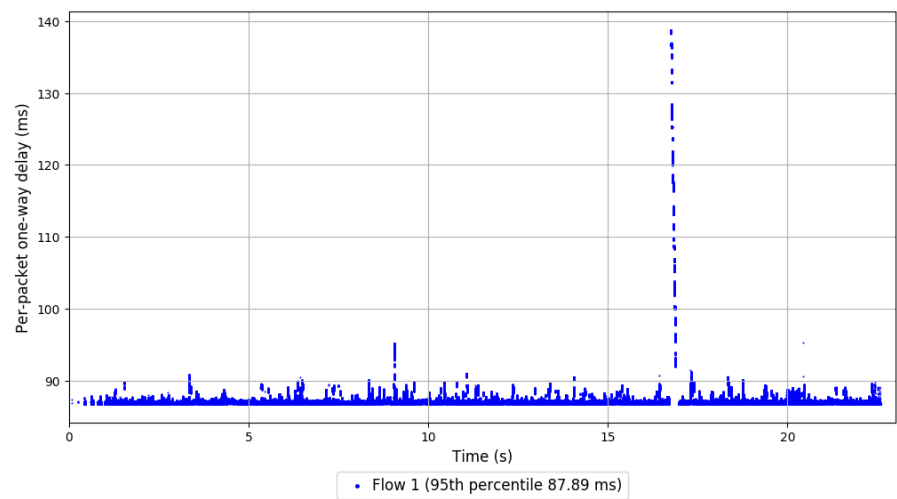
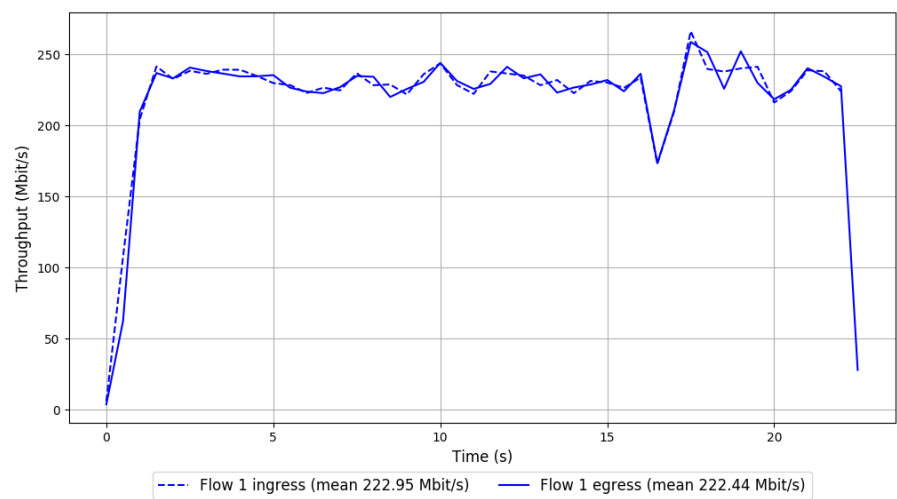


Run 7: Statistics of TaoVA-100x

Start at: 2017-08-11 08:36:14

End at: 2017-08-11 08:36:44

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



Run 8: Statistics of TaoVA-100x

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

End at: 2017-08-11 08:47:38

Below is generated by plot.py at 2017-08-11 10:32:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.78 Mbit/s

95th percentile per-packet one-way delay: 87.833 ms

Loss rate: 0.20%

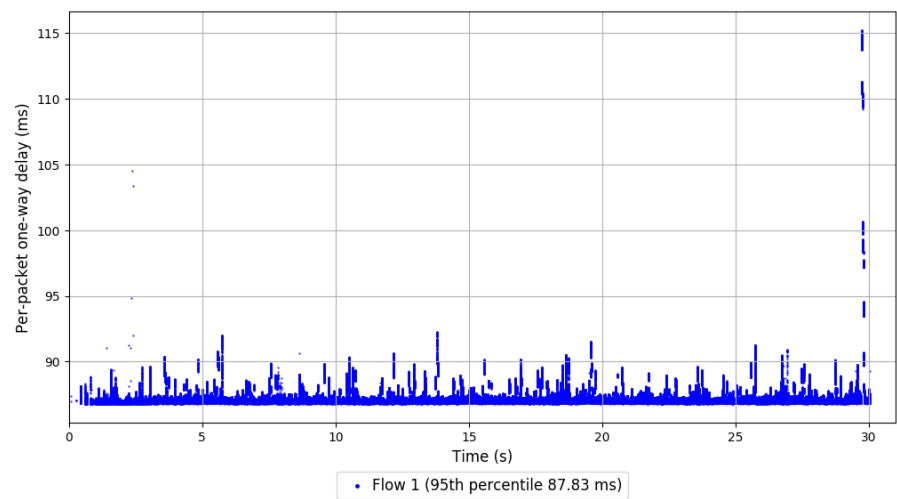
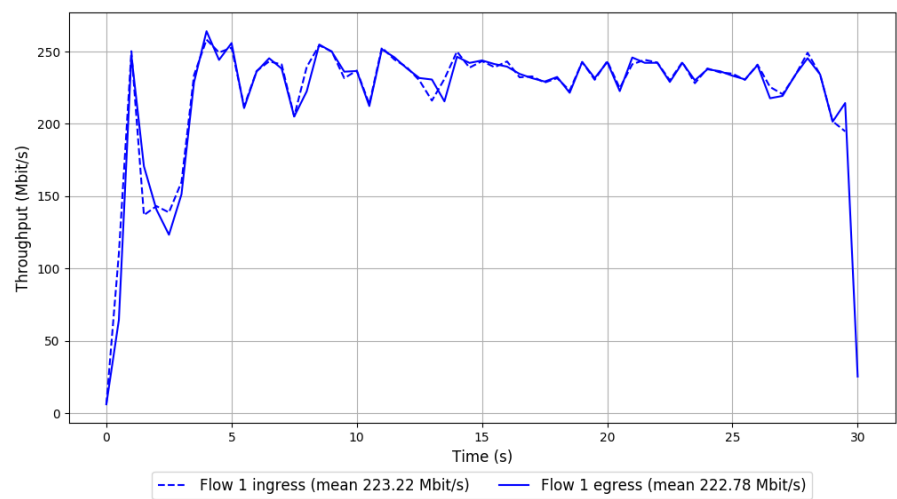
-- Flow 1:

Average throughput: 222.78 Mbit/s

95th percentile per-packet one-way delay: 87.833 ms

Loss rate: 0.20%

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

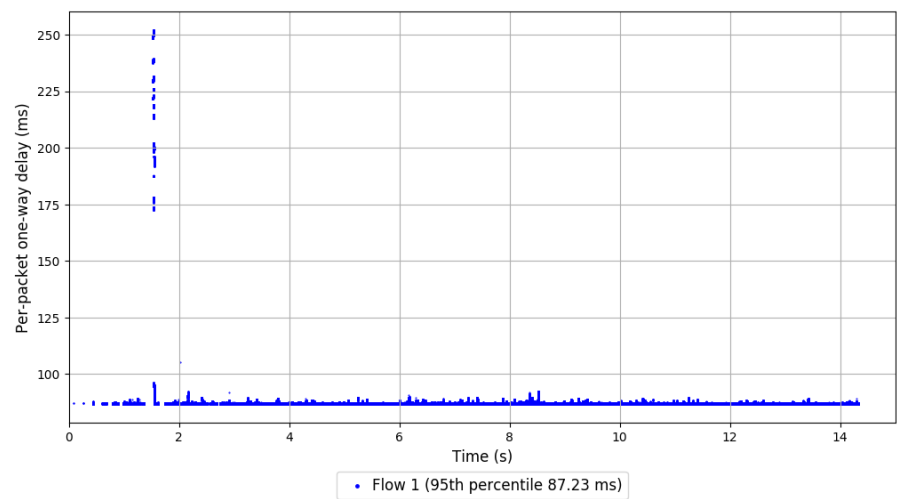
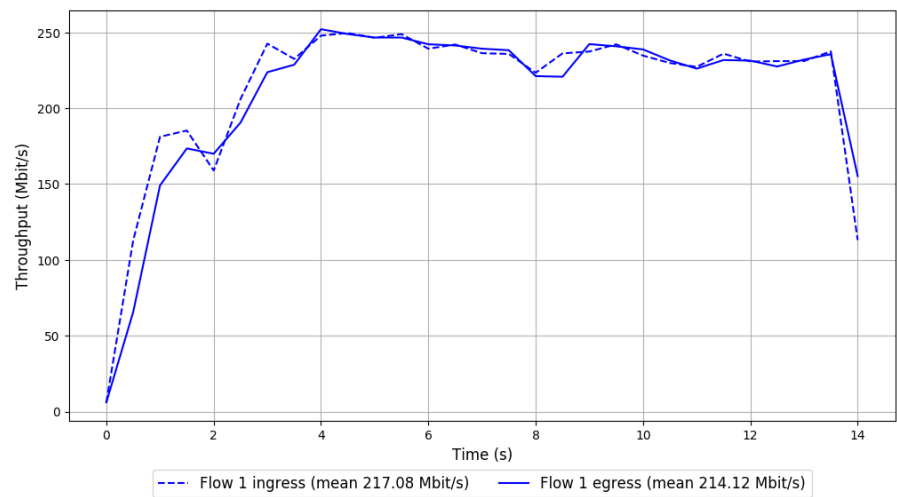


Run 9: Statistics of TaoVA-100x

Start at: 2017-08-11 08:58:22

End at: 2017-08-11 08:58:52

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

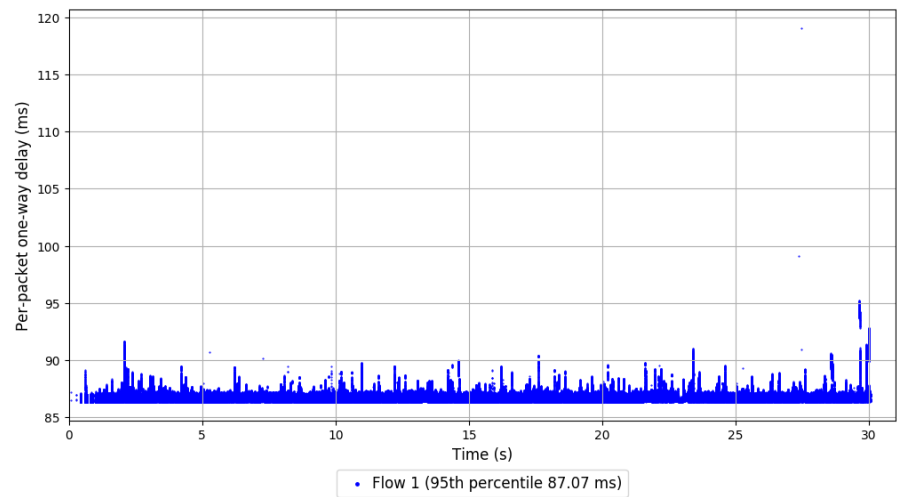
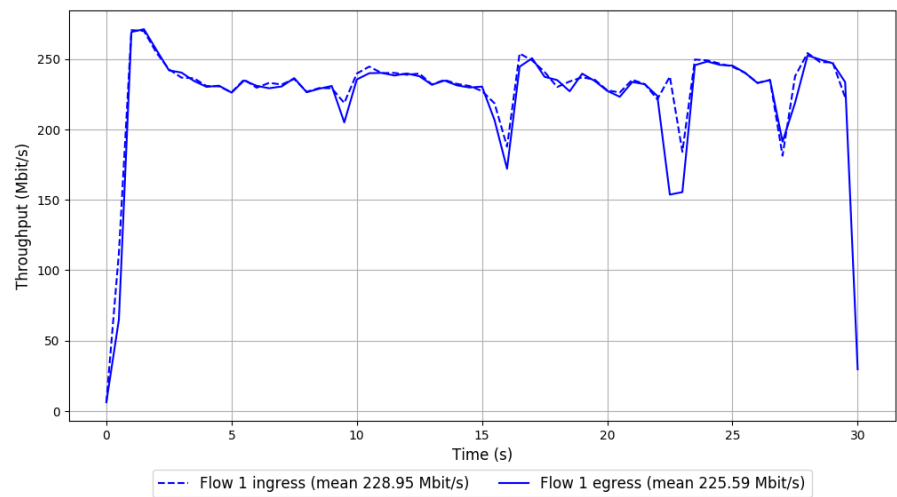


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-08-11 09:09:31
End at: 2017-08-11 09:10:02

# Below is generated by plot.py at 2017-08-11 10:33:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.59 Mbit/s
95th percentile per-packet one-way delay: 87.066 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 225.59 Mbit/s
95th percentile per-packet one-way delay: 87.066 ms
Loss rate: 1.47%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-11 07:24:10

End at: 2017-08-11 07:24:40

Below is generated by plot.py at 2017-08-11 10:33:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.64 Mbit/s

95th percentile per-packet one-way delay: 87.848 ms

Loss rate: 1.98%

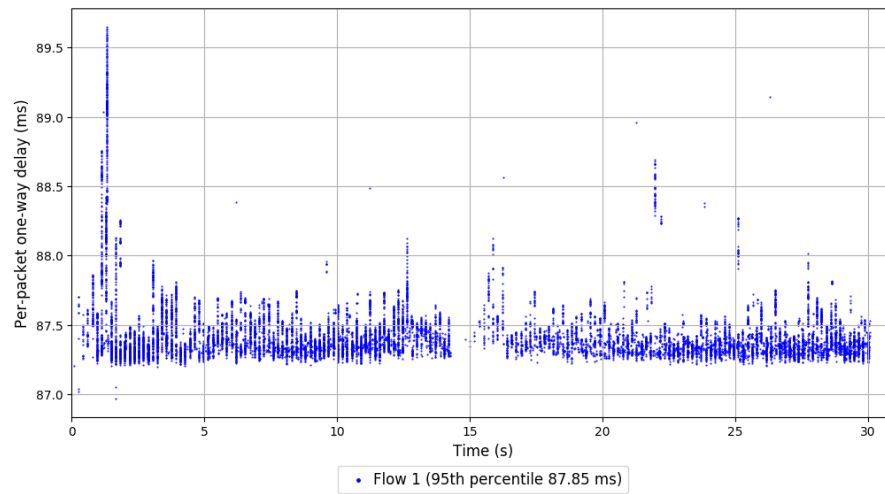
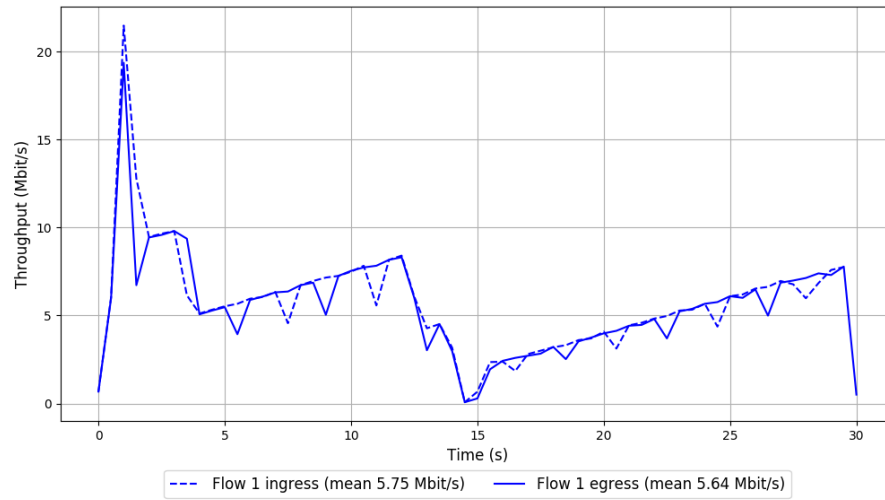
-- Flow 1:

Average throughput: 5.64 Mbit/s

95th percentile per-packet one-way delay: 87.848 ms

Loss rate: 1.98%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-11 07:35:08

End at: 2017-08-11 07:35:38

Below is generated by plot.py at 2017-08-11 10:33:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 87.460 ms

Loss rate: 0.18%

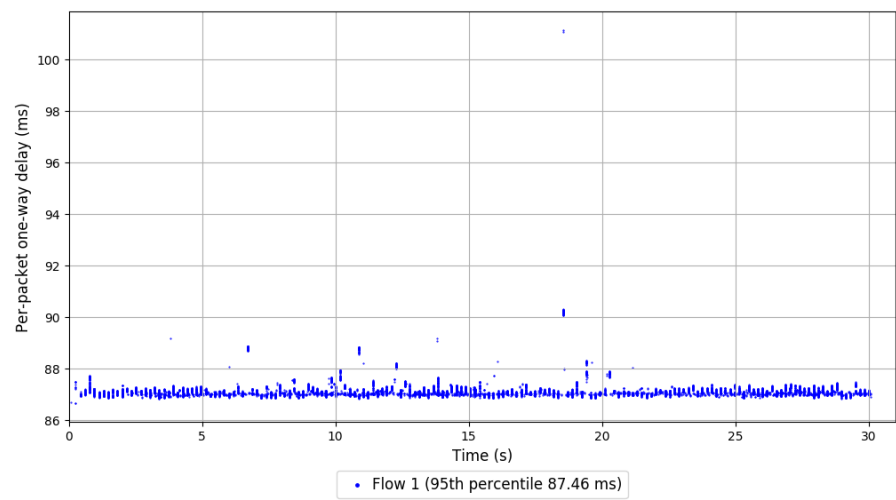
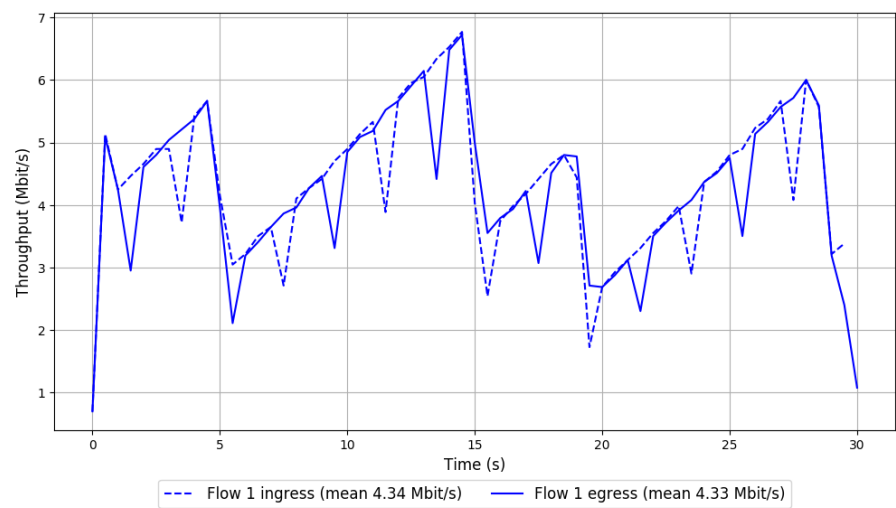
-- Flow 1:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 87.460 ms

Loss rate: 0.18%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-11 07:45:58

End at: 2017-08-11 07:46:28

Below is generated by plot.py at 2017-08-11 10:33:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.97 Mbit/s

95th percentile per-packet one-way delay: 87.300 ms

Loss rate: 0.96%

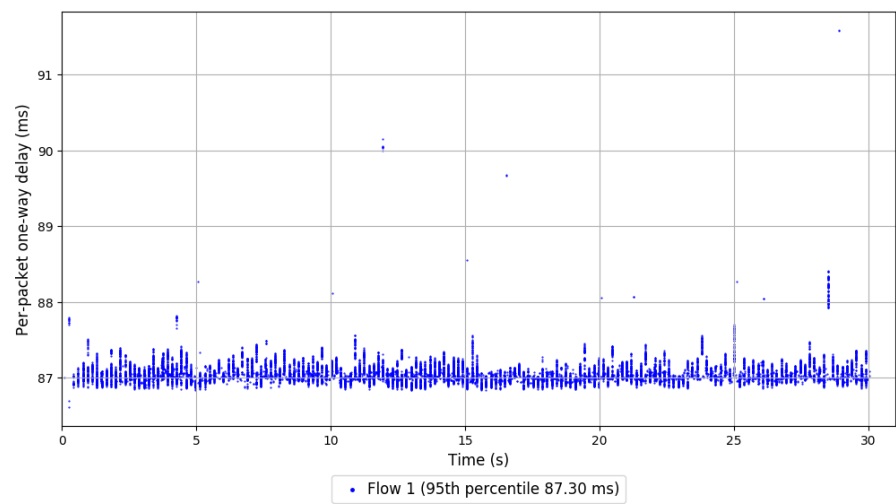
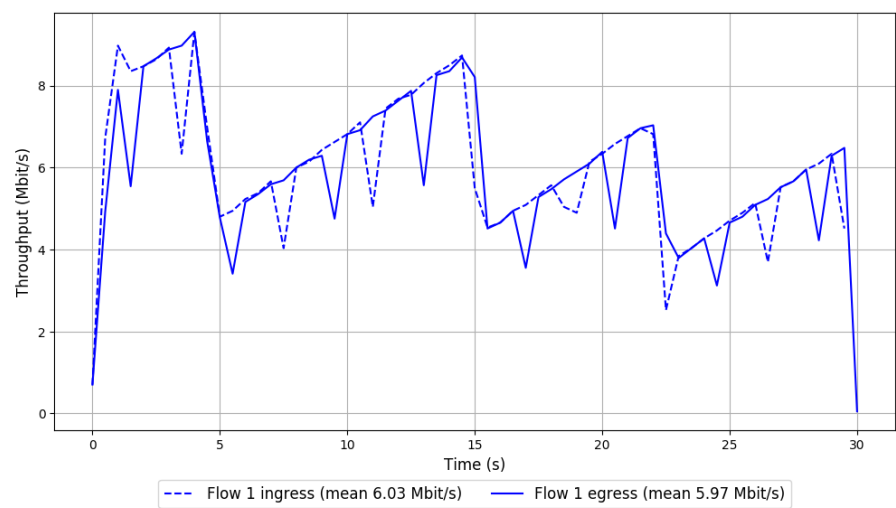
-- Flow 1:

Average throughput: 5.97 Mbit/s

95th percentile per-packet one-way delay: 87.300 ms

Loss rate: 0.96%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-11 07:56:52

End at: 2017-08-11 07:57:22

Below is generated by plot.py at 2017-08-11 10:33:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 87.292 ms

Loss rate: 1.76%

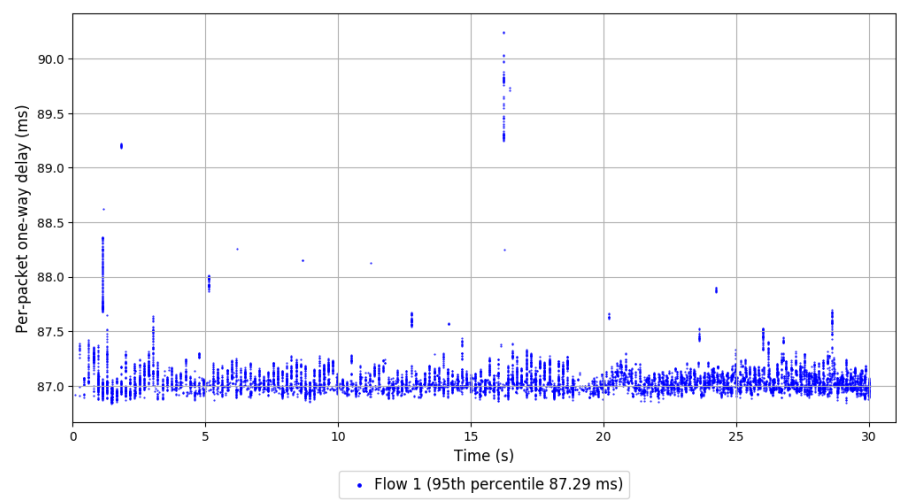
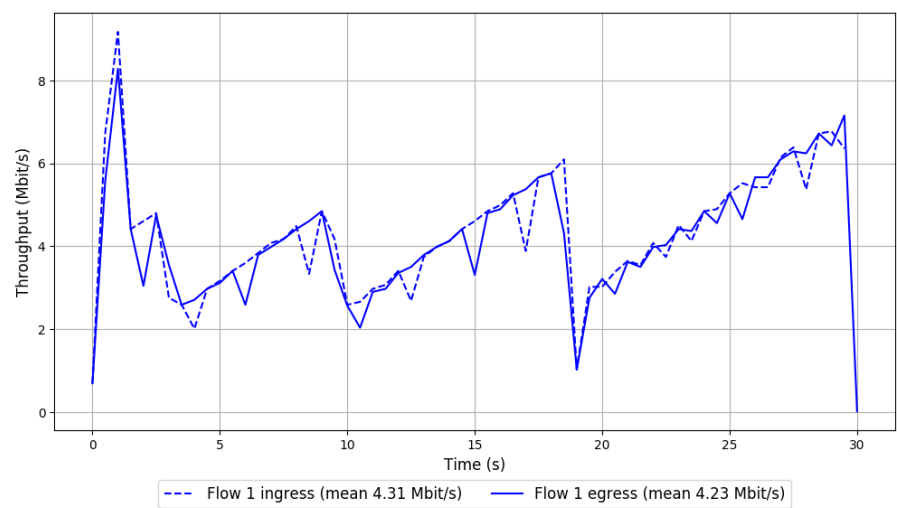
-- Flow 1:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 87.292 ms

Loss rate: 1.76%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-08-11 08:07:55

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

Below is generated by plot.py at 2017-08-11 10:33:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.94 Mbit/s

95th percentile per-packet one-way delay: 87.626 ms

Loss rate: 0.83%

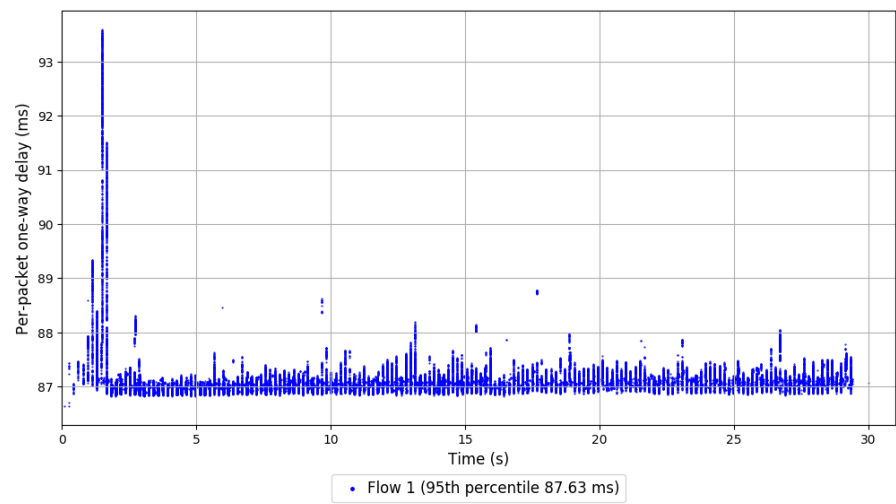
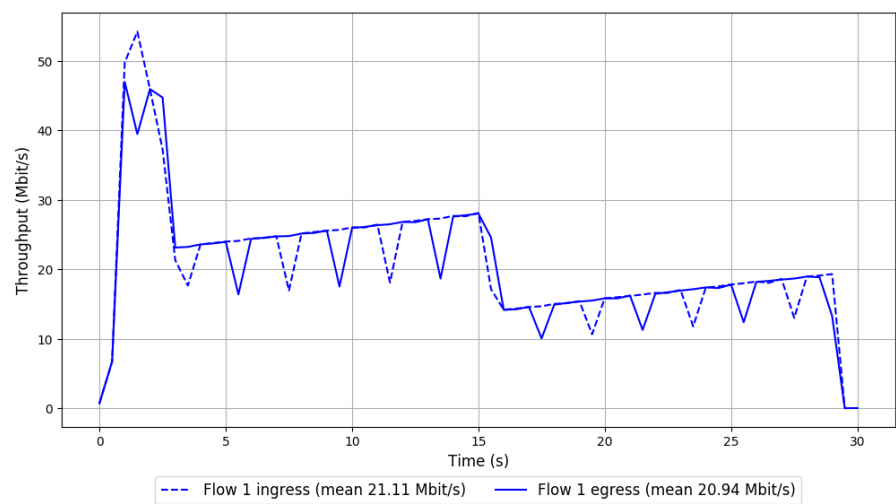
-- Flow 1:

Average throughput: 20.94 Mbit/s

95th percentile per-packet one-way delay: 87.626 ms

Loss rate: 0.83%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

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

End at: 2017-08-11 08:19:38

Below is generated by plot.py at 2017-08-11 10:33:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.10 Mbit/s

95th percentile per-packet one-way delay: 87.402 ms

Loss rate: 1.11%

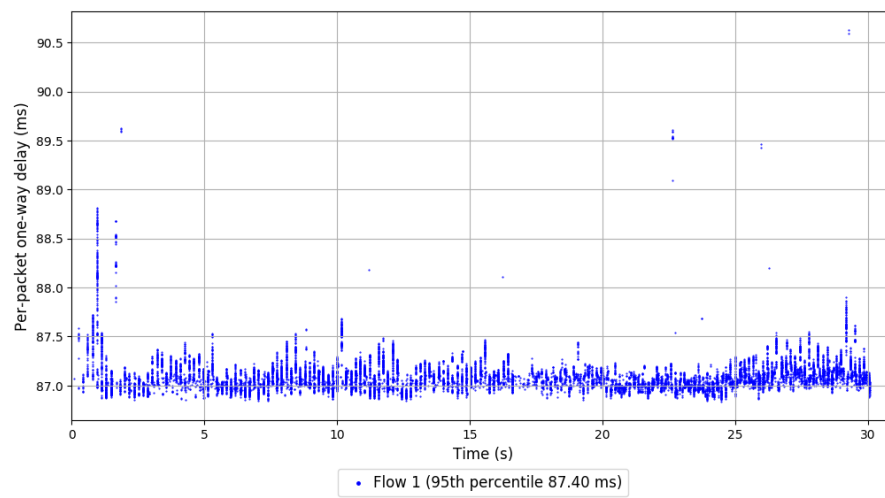
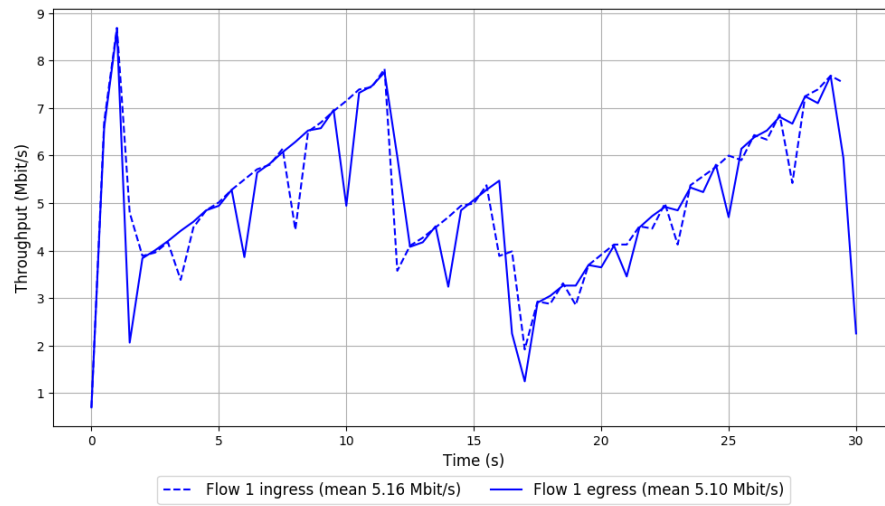
-- Flow 1:

Average throughput: 5.10 Mbit/s

95th percentile per-packet one-way delay: 87.402 ms

Loss rate: 1.11%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-11 08:29:51

End at: 2017-08-11 08:30:21

Below is generated by plot.py at 2017-08-11 10:33:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.33 Mbit/s

95th percentile per-packet one-way delay: 87.486 ms

Loss rate: 1.68%

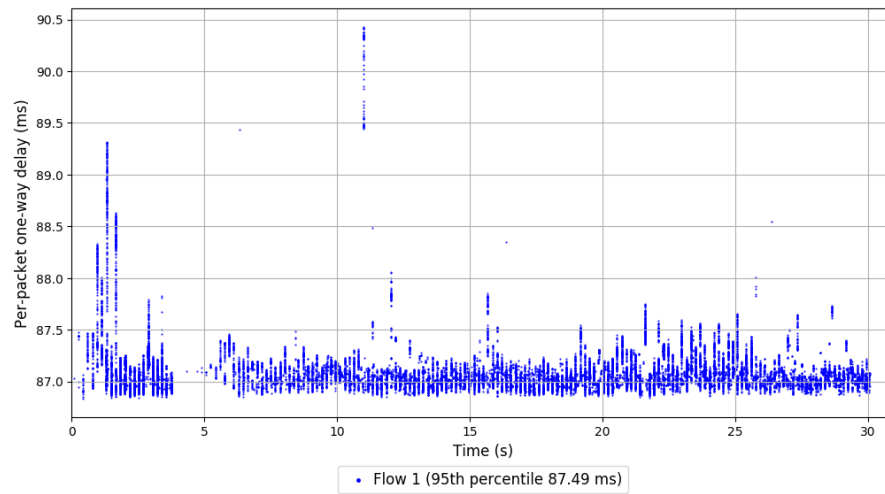
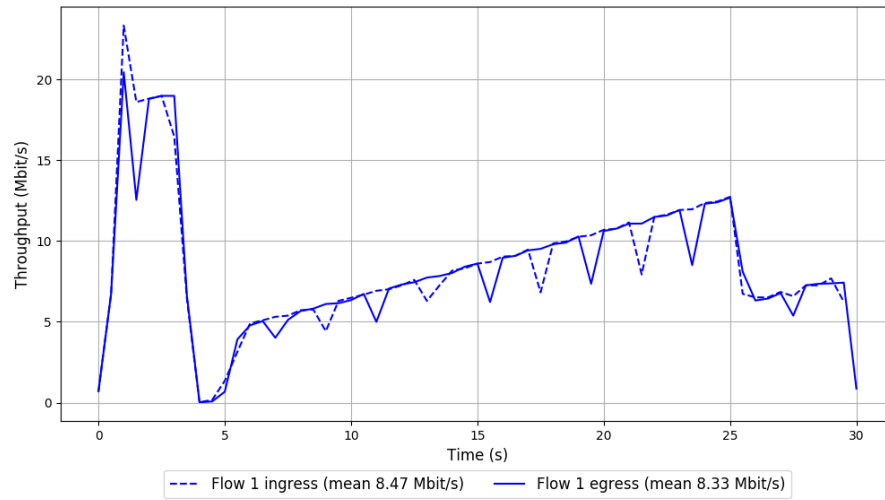
-- Flow 1:

Average throughput: 8.33 Mbit/s

95th percentile per-packet one-way delay: 87.486 ms

Loss rate: 1.68%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-11 08:40:41

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

Below is generated by plot.py at 2017-08-11 10:33:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.19 Mbit/s

95th percentile per-packet one-way delay: 87.594 ms

Loss rate: 2.65%

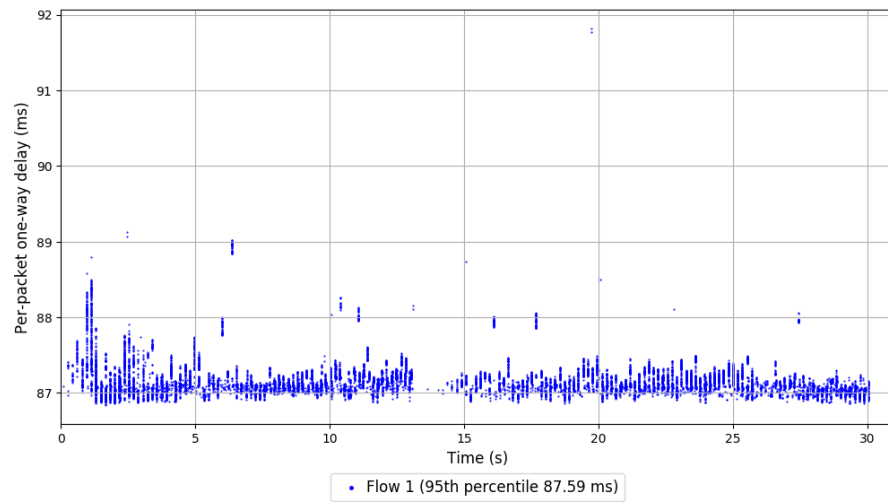
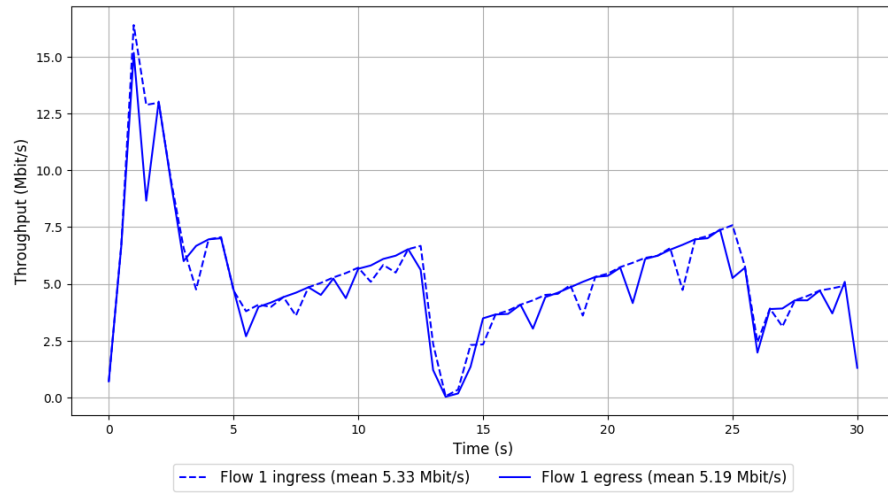
-- Flow 1:

Average throughput: 5.19 Mbit/s

95th percentile per-packet one-way delay: 87.594 ms

Loss rate: 2.65%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-11 08:51:58

End at: 2017-08-11 08:52:28

Below is generated by plot.py at 2017-08-11 10:33:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.84 Mbit/s

95th percentile per-packet one-way delay: 87.329 ms

Loss rate: 1.46%

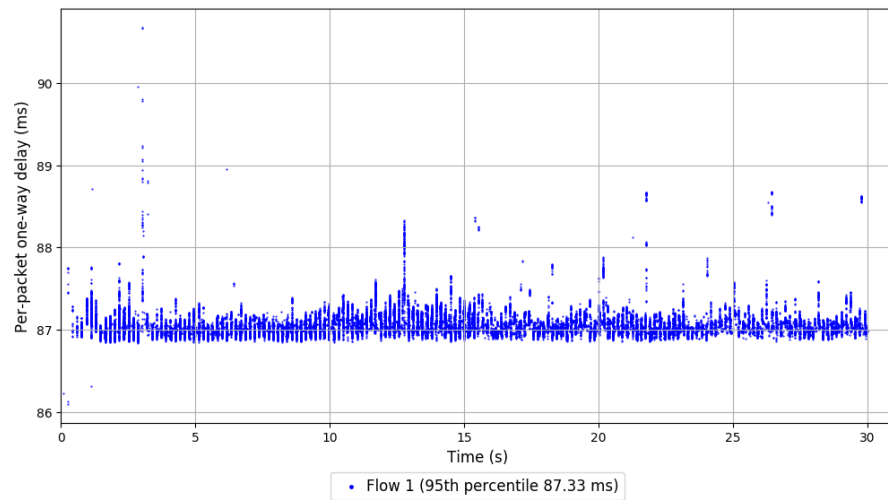
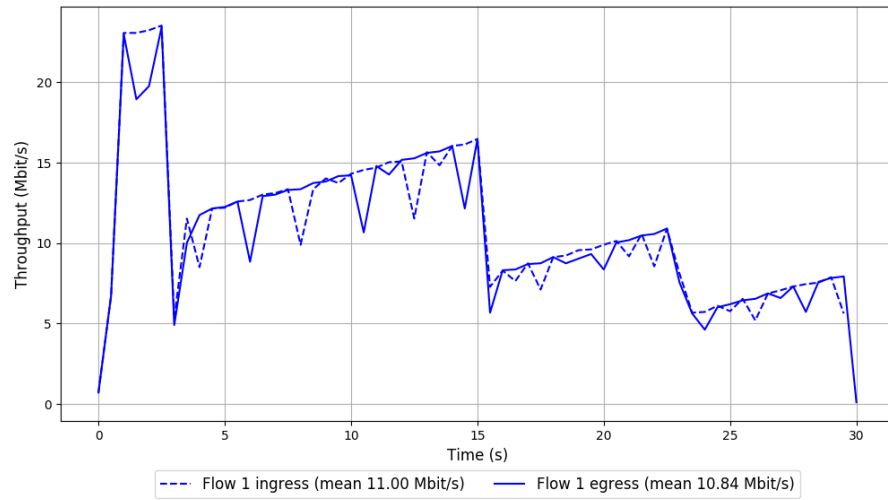
-- Flow 1:

Average throughput: 10.84 Mbit/s

95th percentile per-packet one-way delay: 87.329 ms

Loss rate: 1.46%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-11 09:02:59

End at: 2017-08-11 09:03:29

Below is generated by plot.py at 2017-08-11 10:33:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 87.354 ms

Loss rate: 2.20%

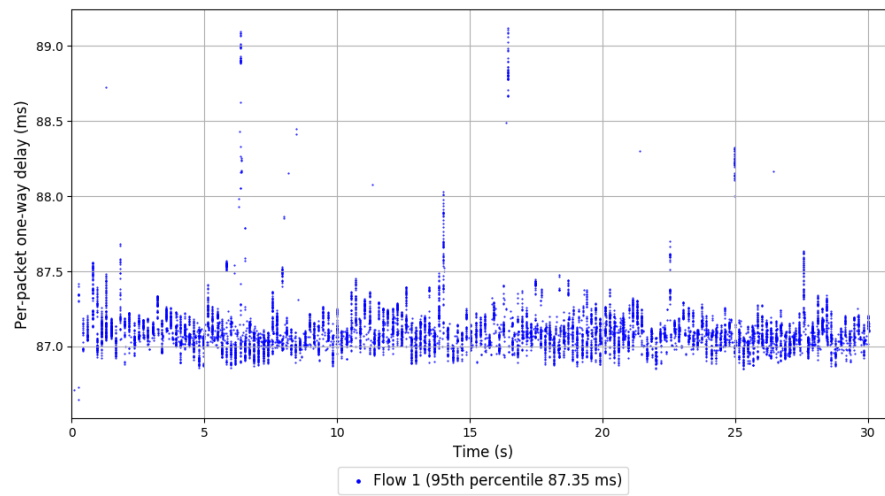
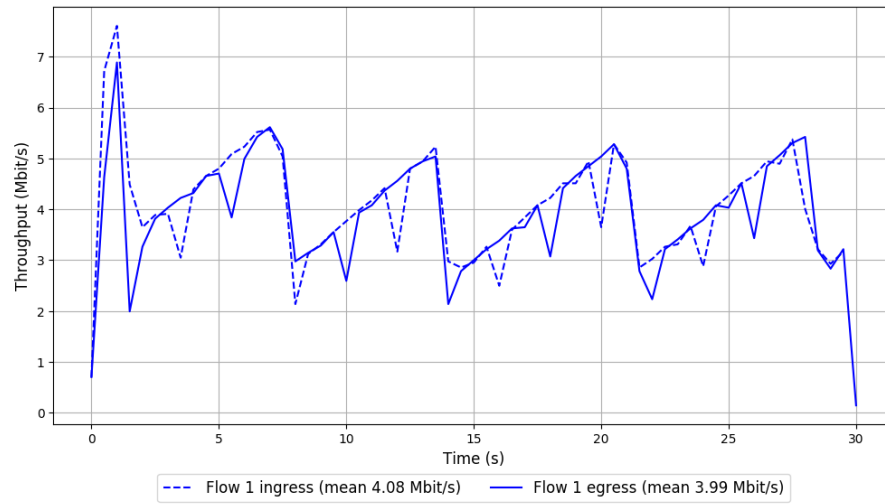
-- Flow 1:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 87.354 ms

Loss rate: 2.20%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-08-11 07:22:03

End at: 2017-08-11 07:22:33

Below is generated by plot.py at 2017-08-11 10:33:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.68 Mbit/s

95th percentile per-packet one-way delay: 91.709 ms

Loss rate: 52.17%

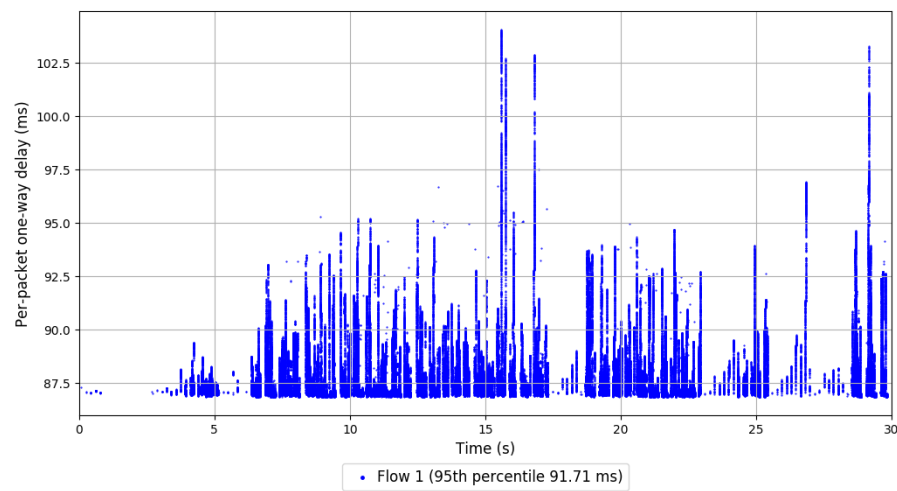
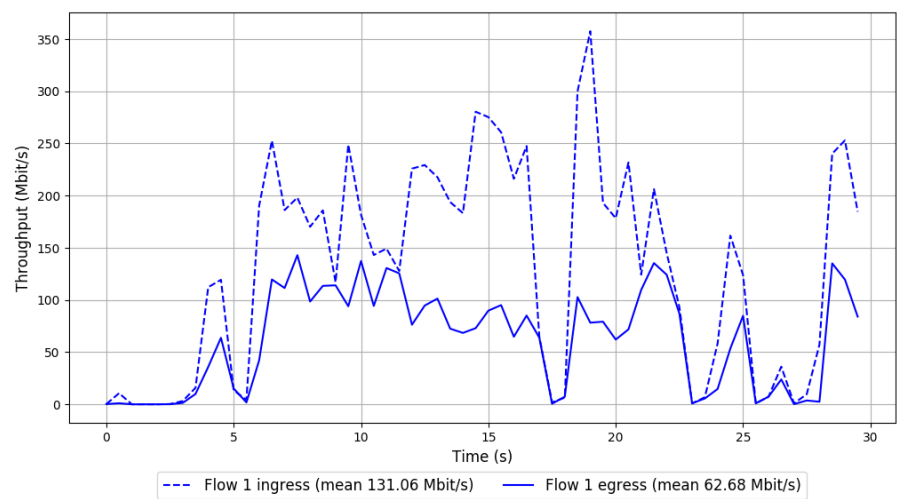
-- Flow 1:

Average throughput: 62.68 Mbit/s

95th percentile per-packet one-way delay: 91.709 ms

Loss rate: 52.17%

Run 1: Report of Verus — Data Link

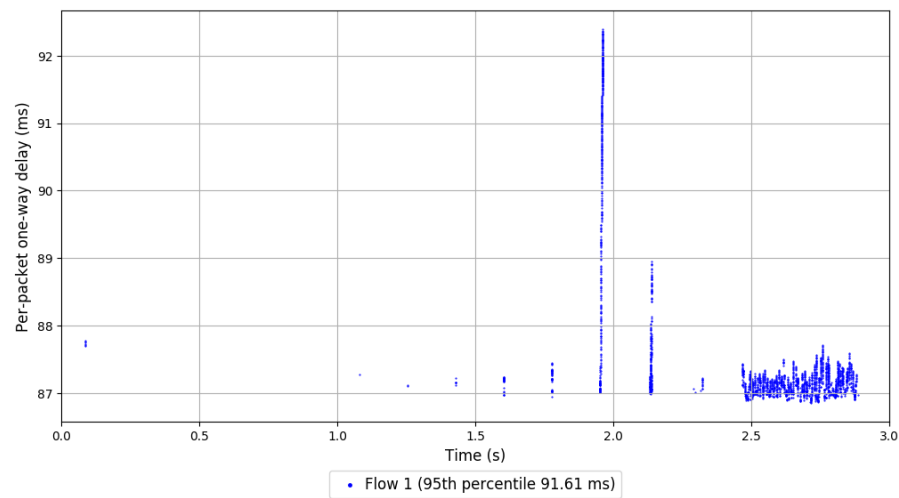
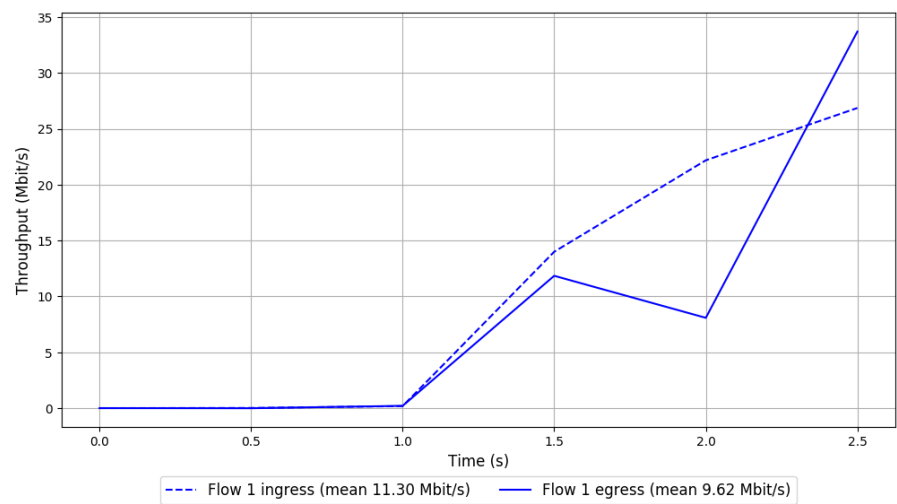


Run 2: Statistics of Verus

Start at: 2017-08-11 07:33:07

End at: 2017-08-11 07:33:37

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-11 07:43:49

End at: 2017-08-11 07:44:19

Below is generated by plot.py at 2017-08-11 10:33:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.90 Mbit/s

95th percentile per-packet one-way delay: 107.795 ms

Loss rate: 2.34%

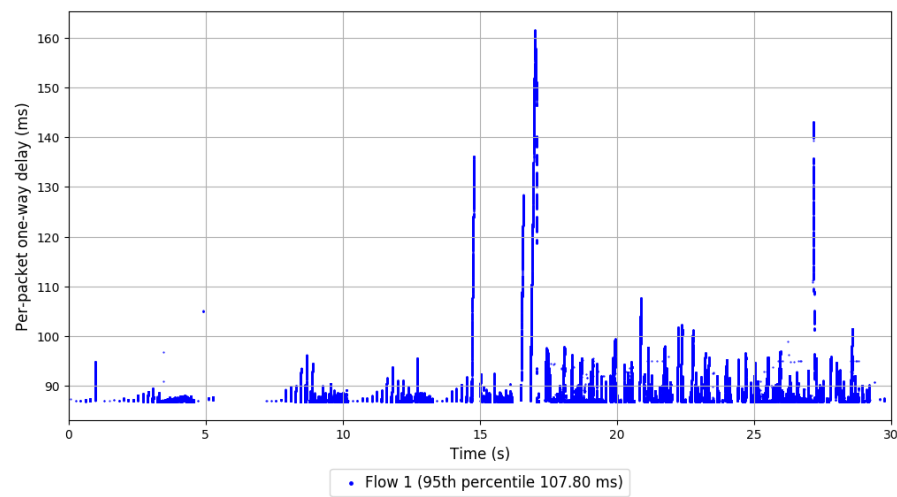
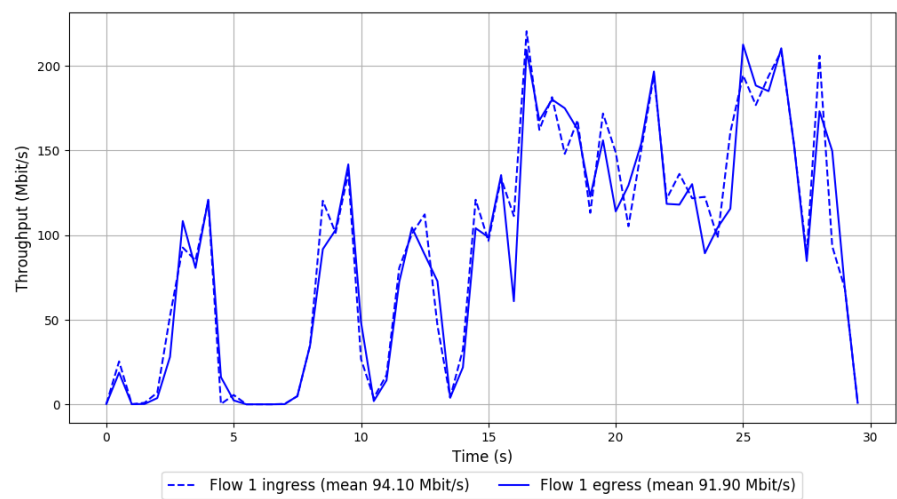
-- Flow 1:

Average throughput: 91.90 Mbit/s

95th percentile per-packet one-way delay: 107.795 ms

Loss rate: 2.34%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-11 07:54:47

End at: 2017-08-11 07:55:17

Below is generated by plot.py at 2017-08-11 10:33:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.88 Mbit/s

95th percentile per-packet one-way delay: 91.181 ms

Loss rate: 35.13%

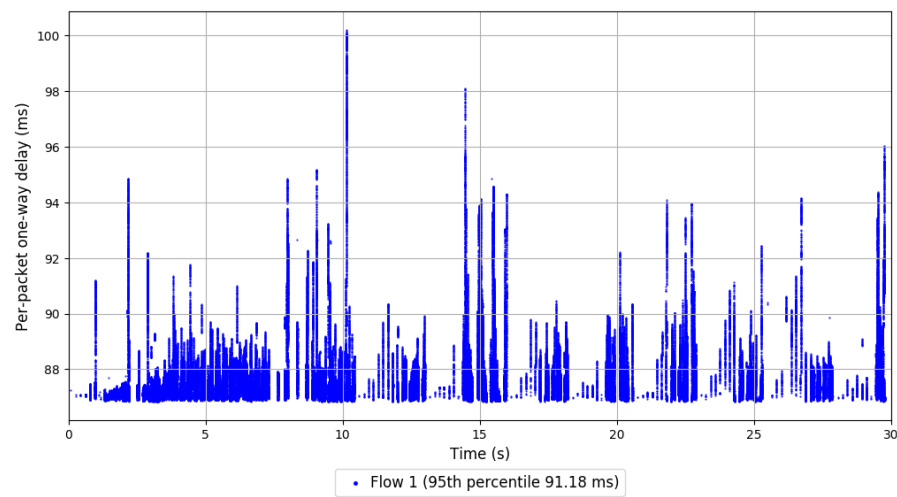
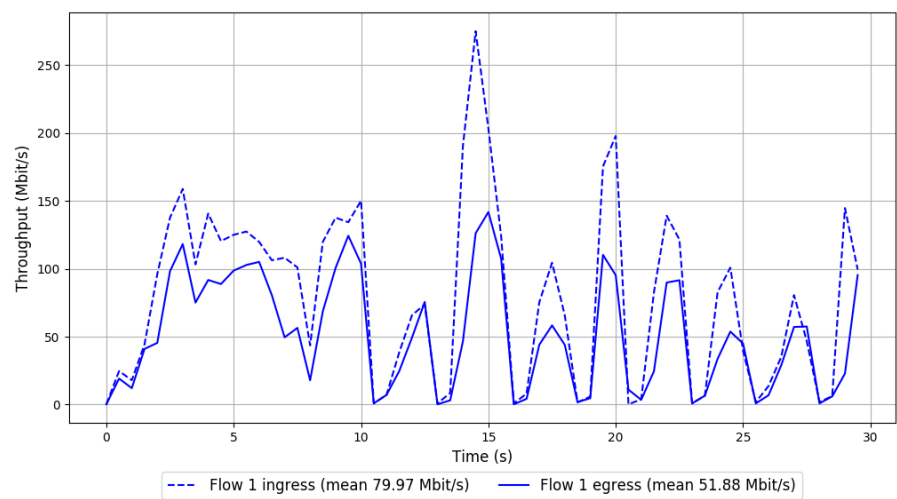
-- Flow 1:

Average throughput: 51.88 Mbit/s

95th percentile per-packet one-way delay: 91.181 ms

Loss rate: 35.13%

Run 4: Report of Verus — Data Link

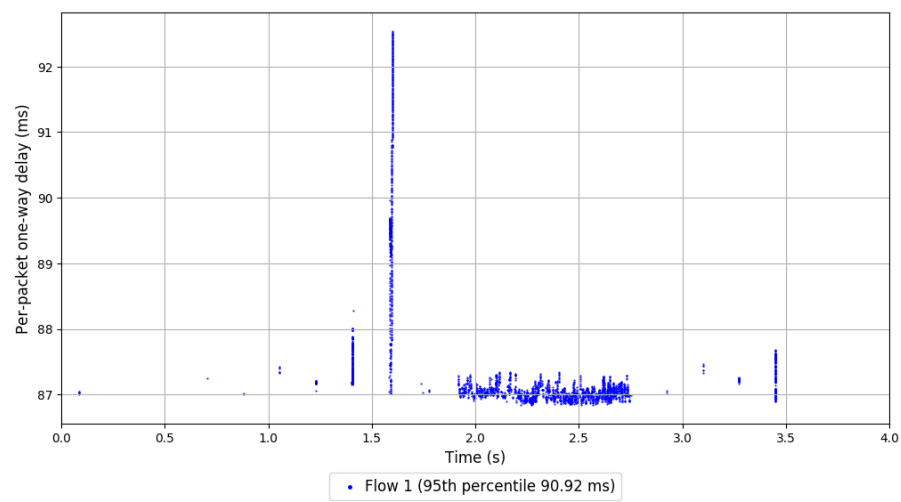
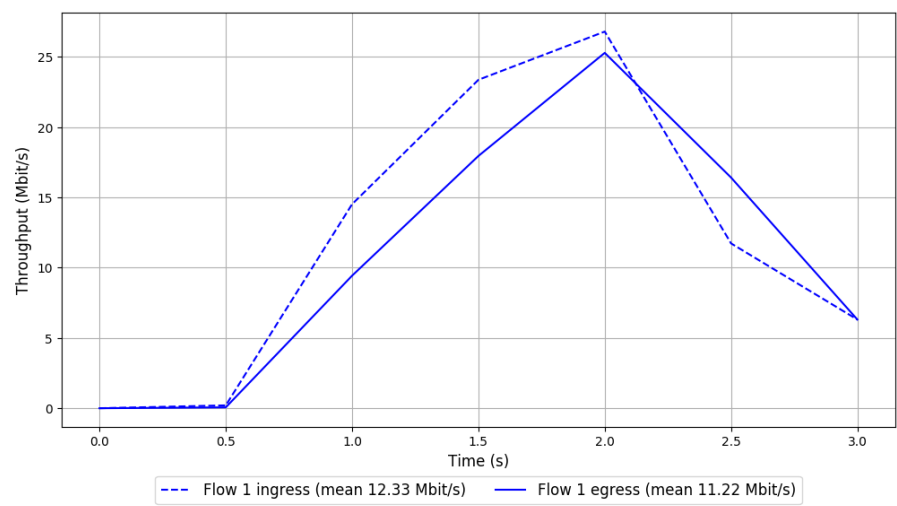


Run 5: Statistics of Verus

Start at: 2017-08-11 08:05:54

End at: 2017-08-11 08:06:24

Run 5: Report of Verus — Data Link

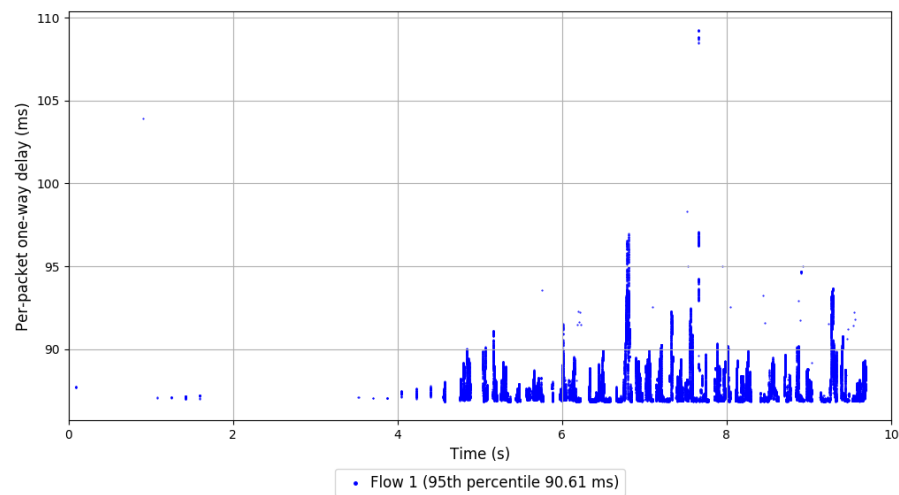
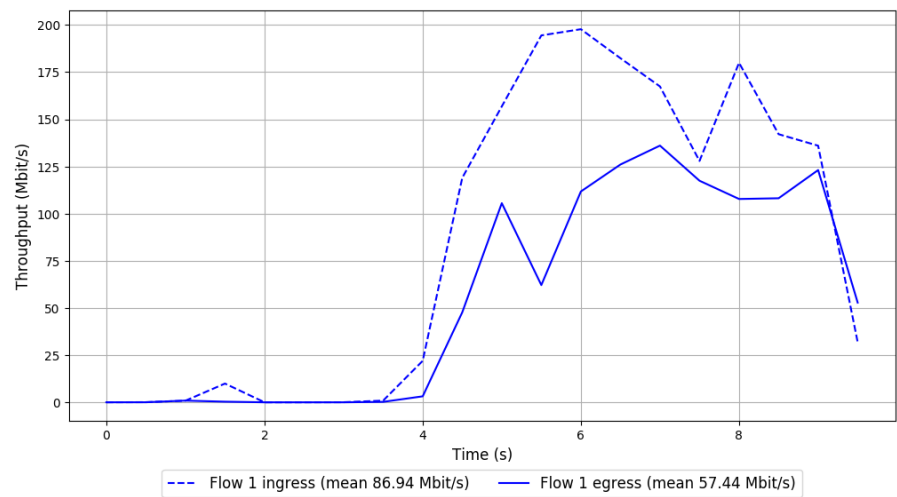


Run 6: Statistics of Verus

Start at: 2017-08-11 08:17:03

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

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-11 08:27:40

End at: 2017-08-11 08:28:10

Below is generated by plot.py at 2017-08-11 10:34:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.49 Mbit/s

95th percentile per-packet one-way delay: 125.543 ms

Loss rate: 4.18%

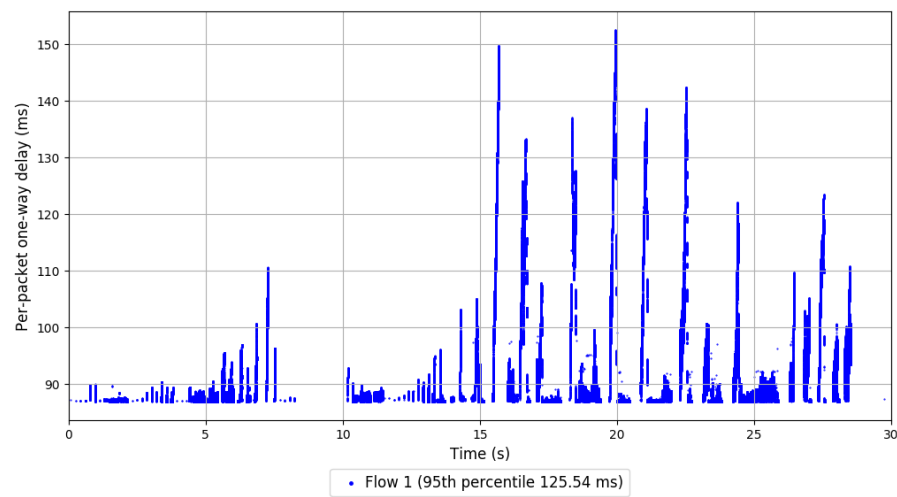
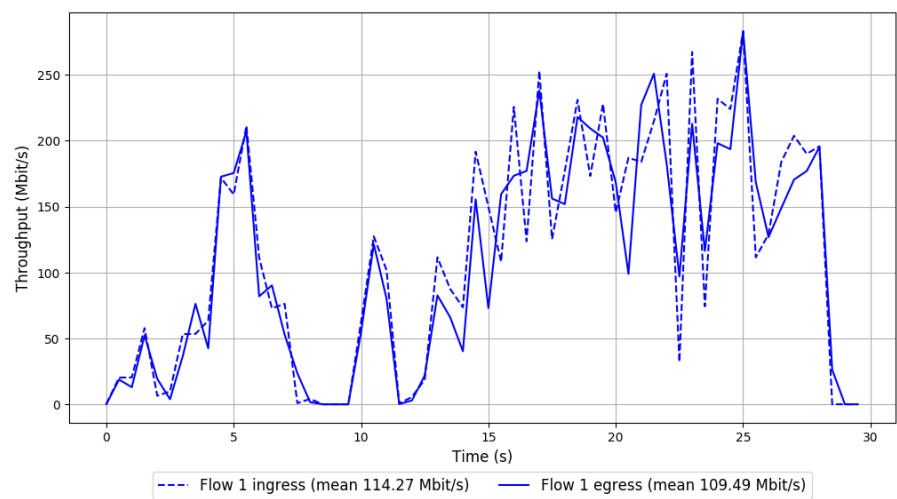
-- Flow 1:

Average throughput: 109.49 Mbit/s

95th percentile per-packet one-way delay: 125.543 ms

Loss rate: 4.18%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-11 08:38:31

End at: 2017-08-11 08:39:01

Below is generated by plot.py at 2017-08-11 10:34:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 149.74 Mbit/s

95th percentile per-packet one-way delay: 118.086 ms

Loss rate: 7.20%

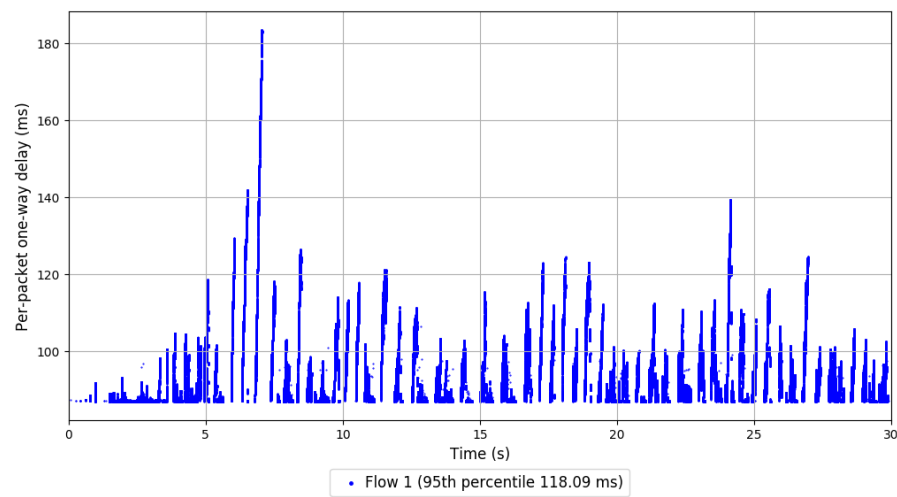
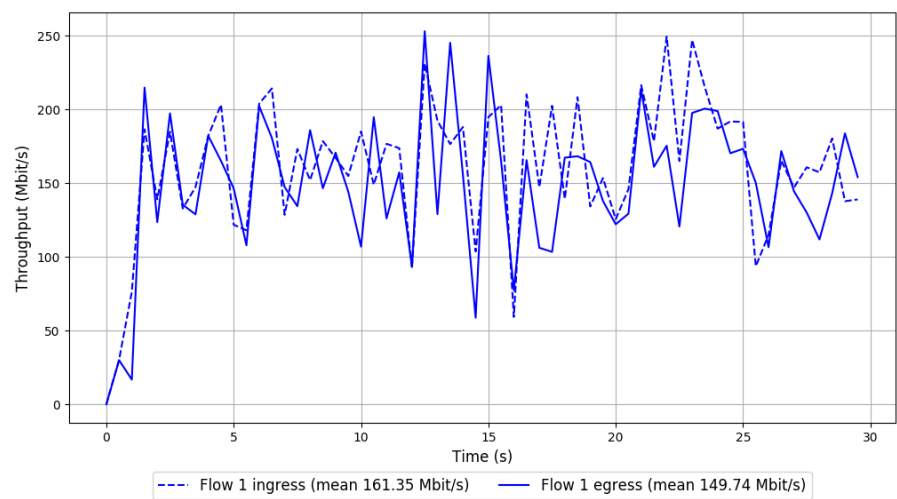
-- Flow 1:

Average throughput: 149.74 Mbit/s

95th percentile per-packet one-way delay: 118.086 ms

Loss rate: 7.20%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

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

End at: 2017-08-11 08:50:19

Below is generated by plot.py at 2017-08-11 10:34:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.64 Mbit/s

95th percentile per-packet one-way delay: 108.785 ms

Loss rate: 2.15%

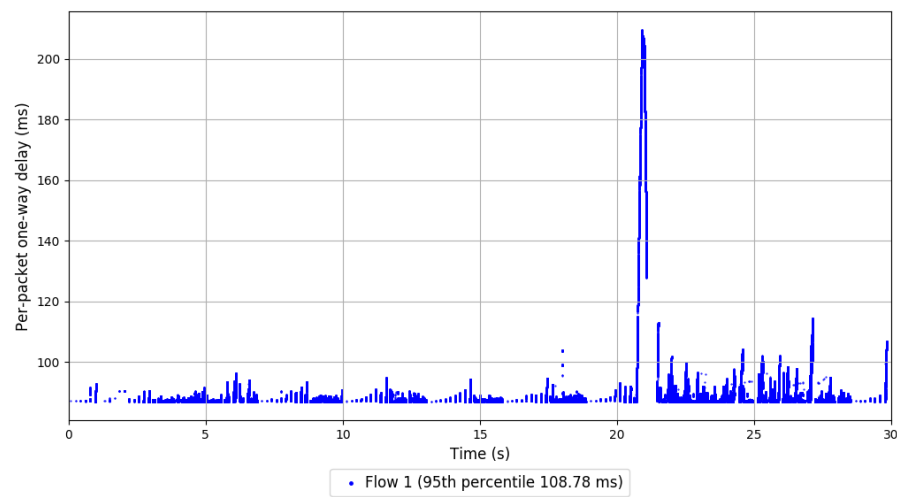
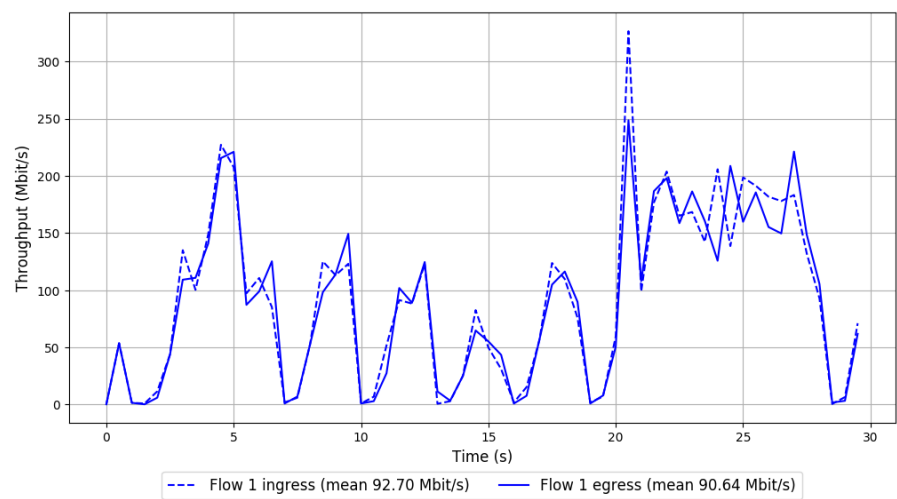
-- Flow 1:

Average throughput: 90.64 Mbit/s

95th percentile per-packet one-way delay: 108.785 ms

Loss rate: 2.15%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-08-11 09:00:53

End at: 2017-08-11 09:01:23

Below is generated by plot.py at 2017-08-11 10:34:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.49 Mbit/s

95th percentile per-packet one-way delay: 95.988 ms

Loss rate: 53.53%

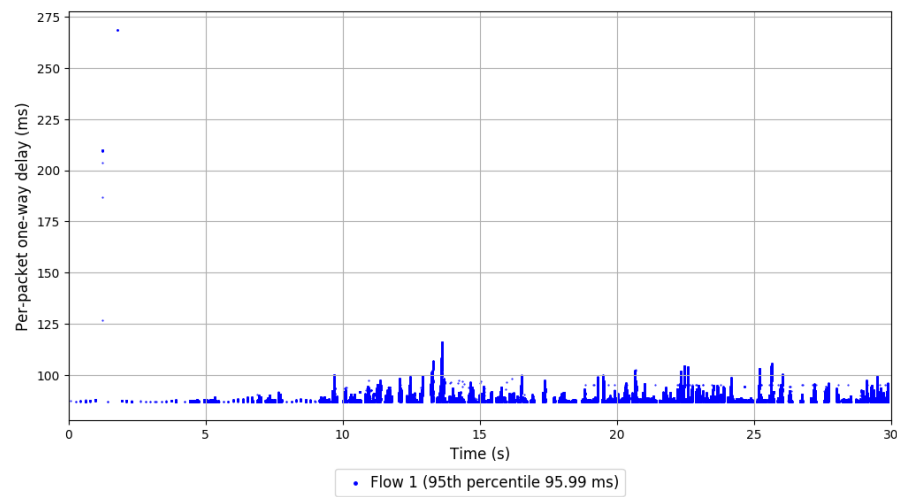
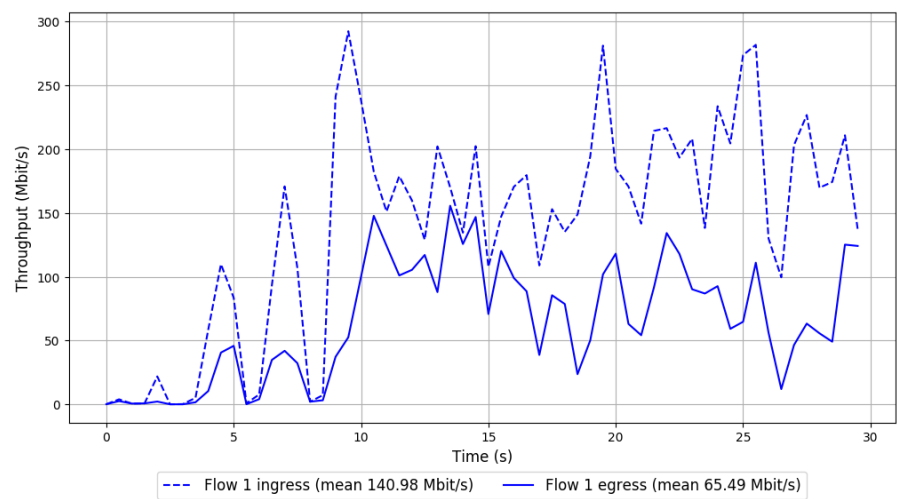
-- Flow 1:

Average throughput: 65.49 Mbit/s

95th percentile per-packet one-way delay: 95.988 ms

Loss rate: 53.53%

Run 10: Report of Verus — Data Link

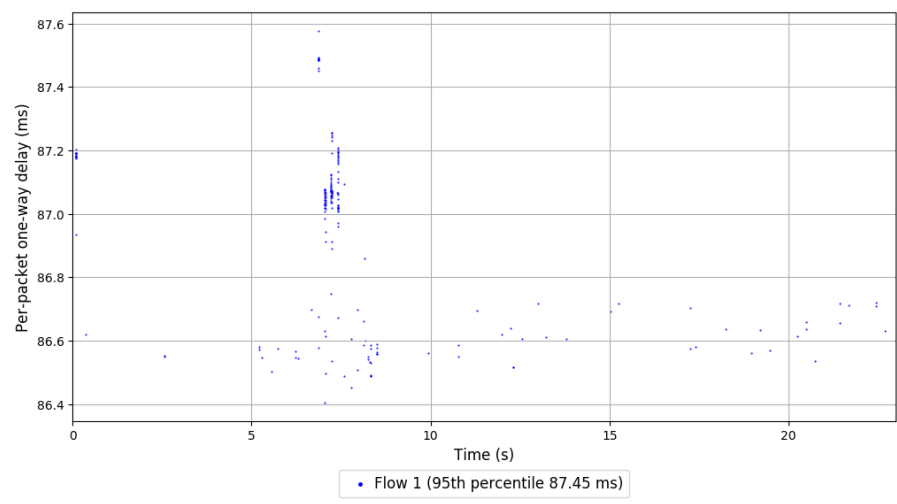
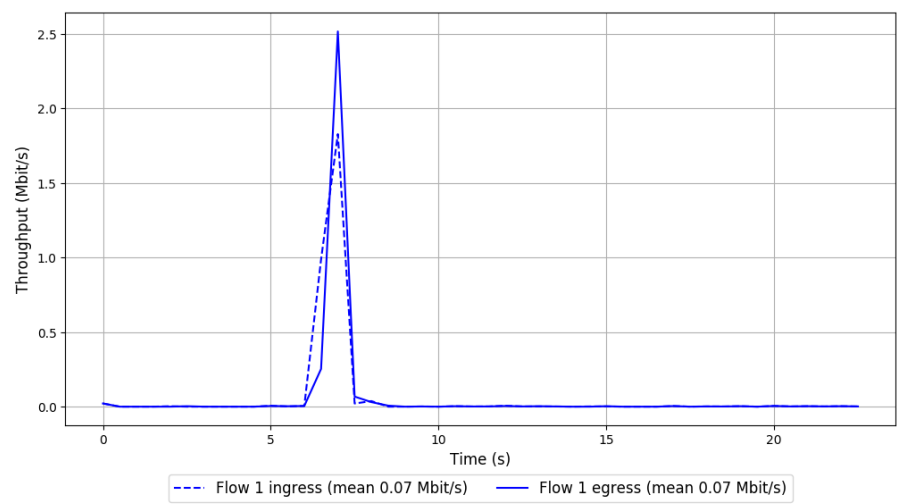


Run 1: Statistics of WebRTC media

Start at: 2017-08-11 07:28:26

End at: 2017-08-11 07:28:56

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-08-11 07:39:19

End at: 2017-08-11 07:39:49

Below is generated by plot.py at 2017-08-11 10:34:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 86.983 ms

Loss rate: 0.00%

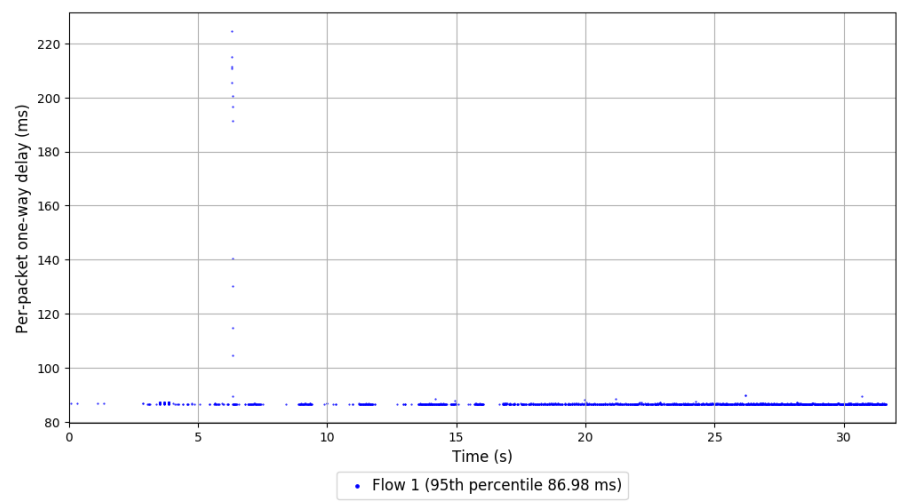
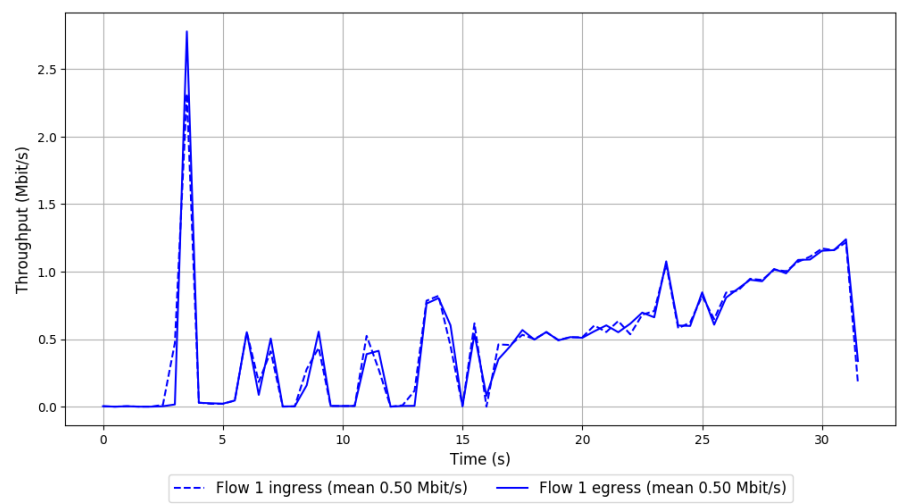
-- Flow 1:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 86.983 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-11 07:50:17

End at: 2017-08-11 07:50:47

Below is generated by plot.py at 2017-08-11 10:34:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 87.259 ms

Loss rate: 0.00%

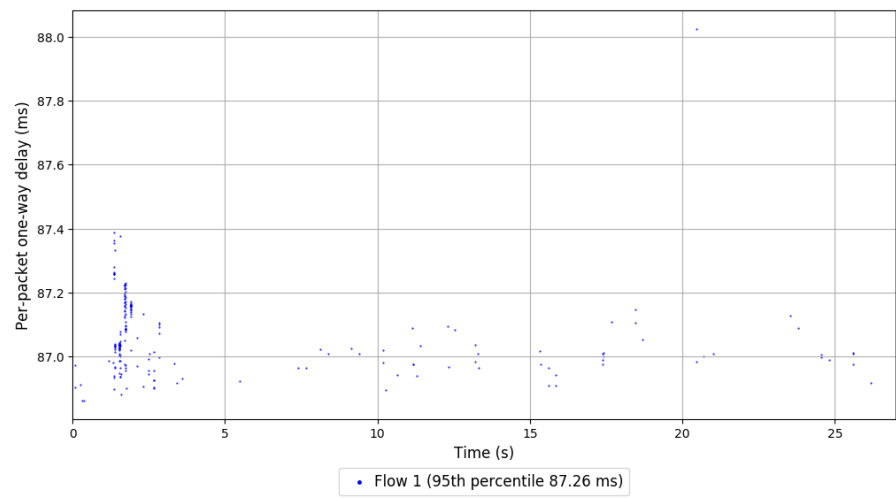
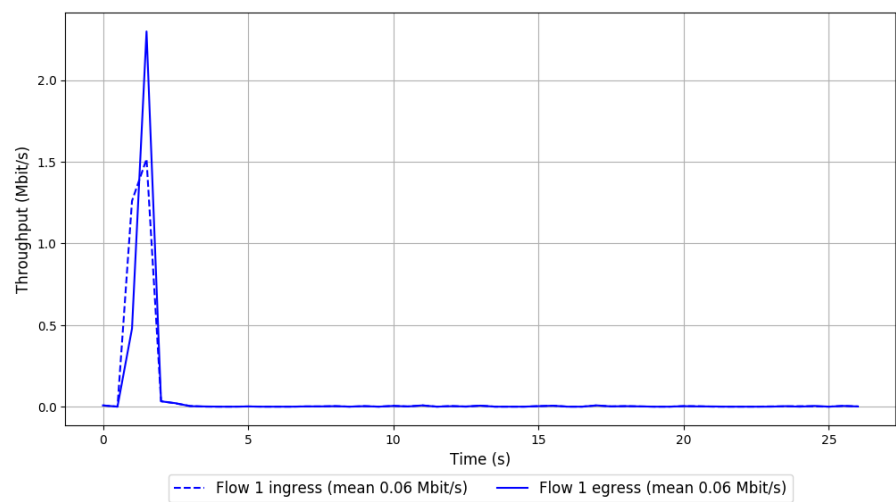
-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 87.259 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-11 08:01:10

End at: 2017-08-11 08:01:40

Below is generated by plot.py at 2017-08-11 10:34:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 87.089 ms

Loss rate: 0.00%

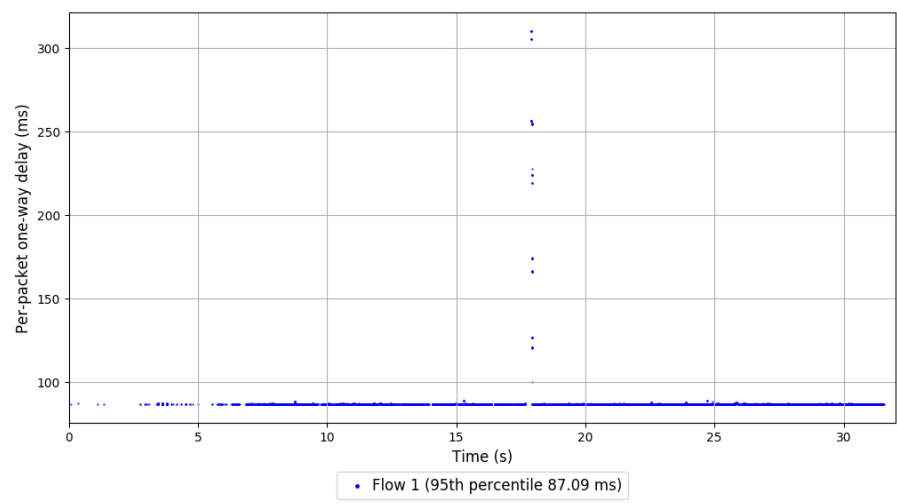
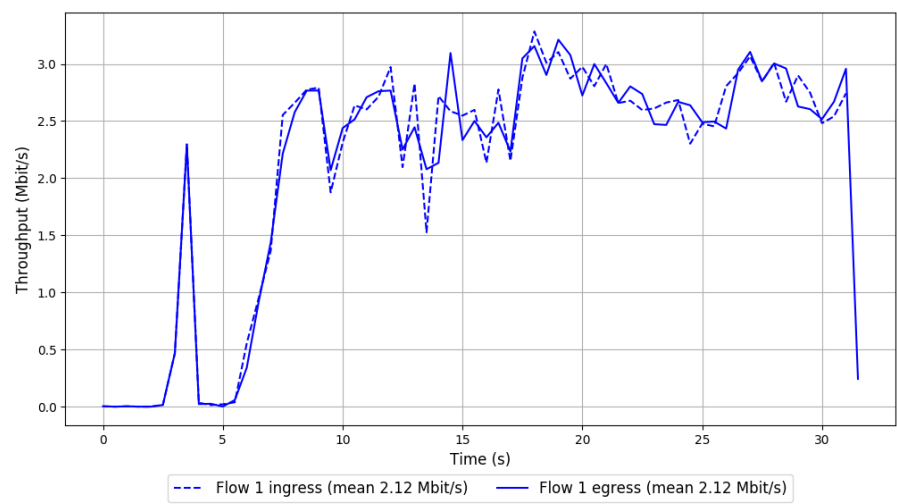
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 87.089 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

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

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

Below is generated by plot.py at 2017-08-11 10:34:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 87.405 ms

Loss rate: 0.00%

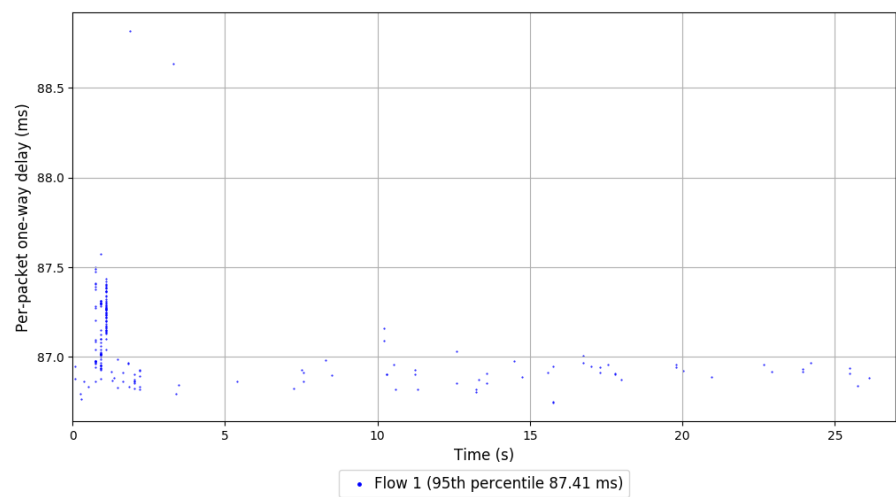
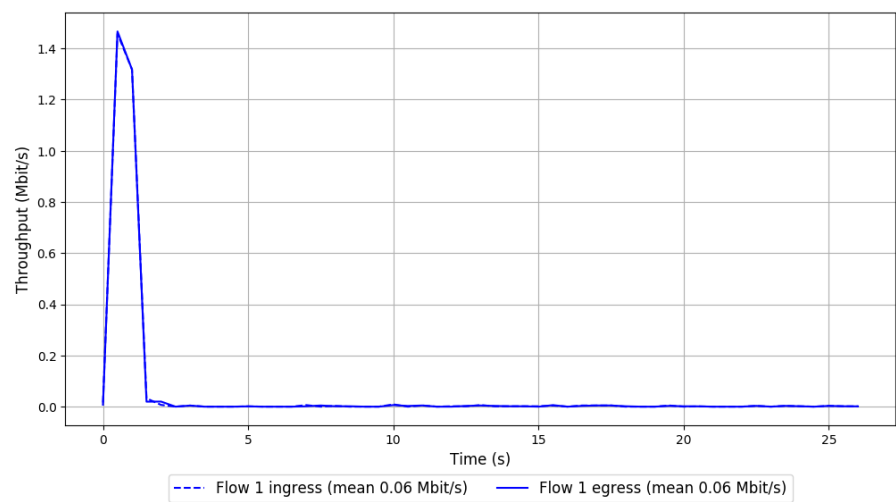
-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 87.405 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

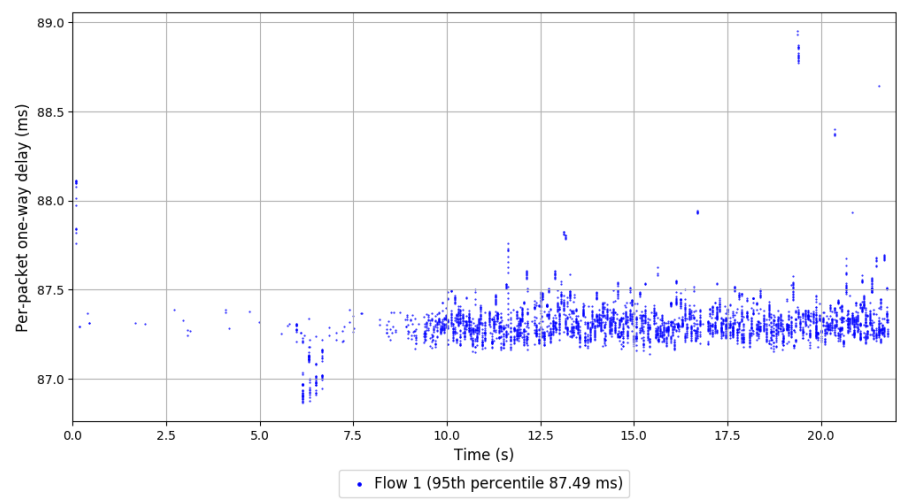
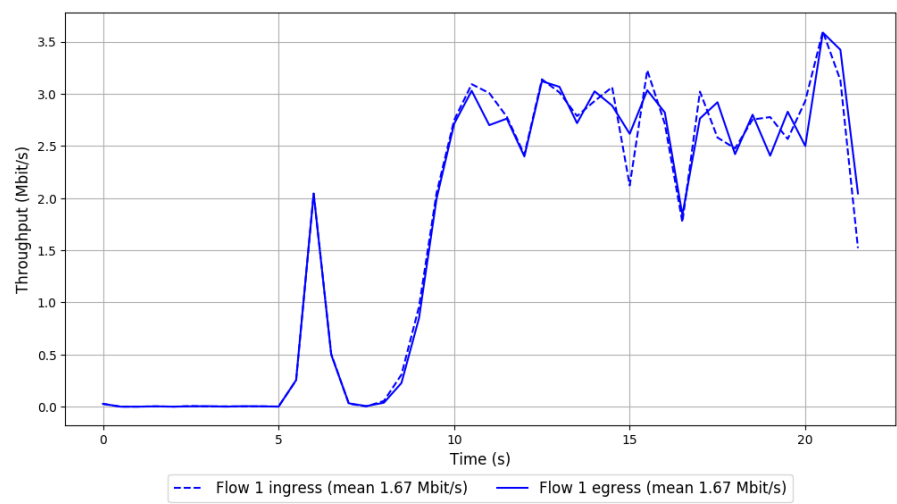


Run 6: Statistics of WebRTC media

Start at: 2017-08-11 08:23:18

End at: 2017-08-11 08:23:48

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

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

End at: 2017-08-11 08:34:38

Below is generated by plot.py at 2017-08-11 10:34:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 87.608 ms

Loss rate: 0.00%

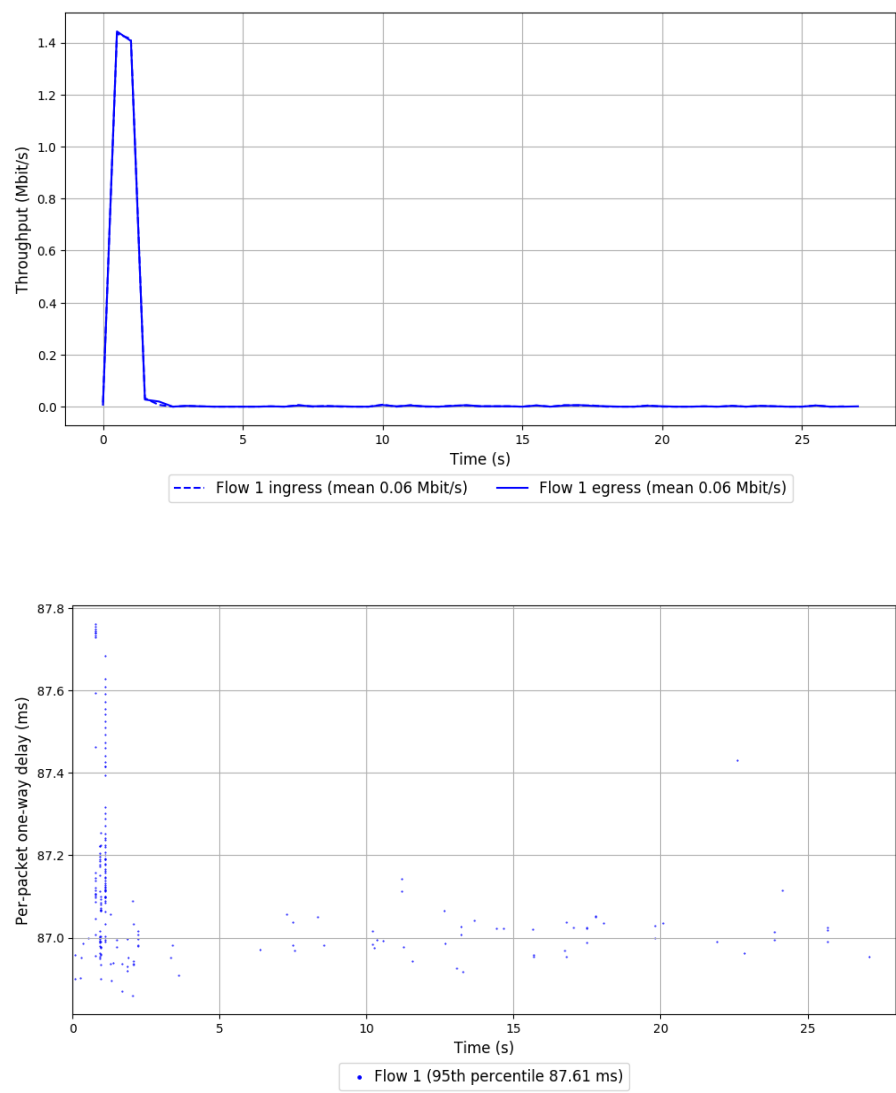
-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 87.608 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-11 08:44:59

End at: 2017-08-11 08:45:29

Below is generated by plot.py at 2017-08-11 10:34:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 87.194 ms

Loss rate: 0.00%

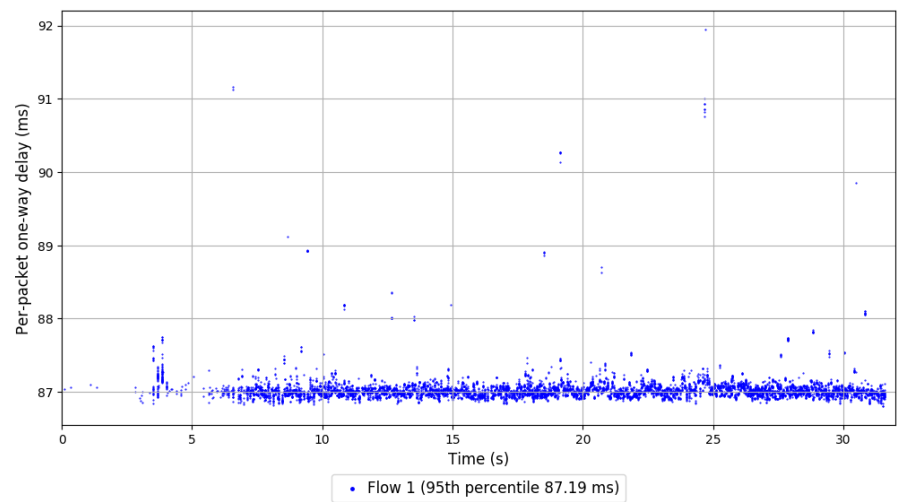
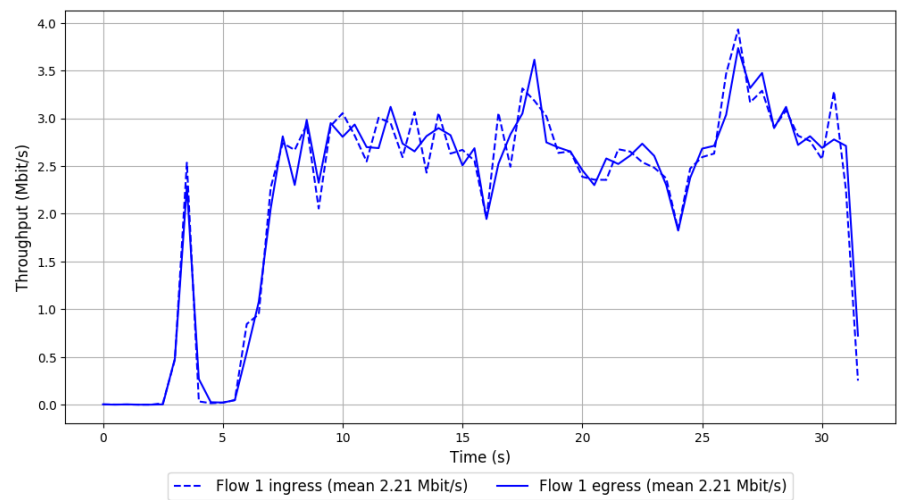
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 87.194 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-11 08:56:19

End at: 2017-08-11 08:56:49

Below is generated by plot.py at 2017-08-11 10:34:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 87.222 ms

Loss rate: 0.00%

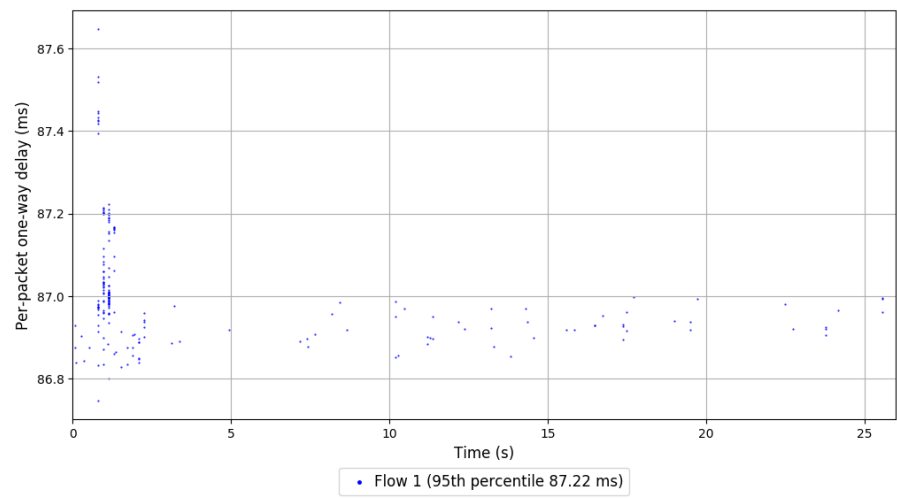
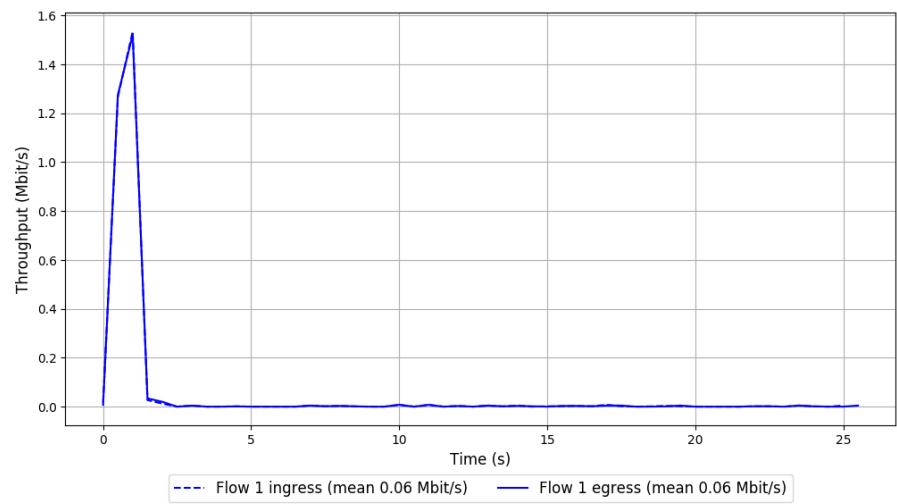
-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 87.222 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-11 09:07:17

End at: 2017-08-11 09:07:47

Below is generated by plot.py at 2017-08-11 10:34:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 87.098 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 87.098 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

