

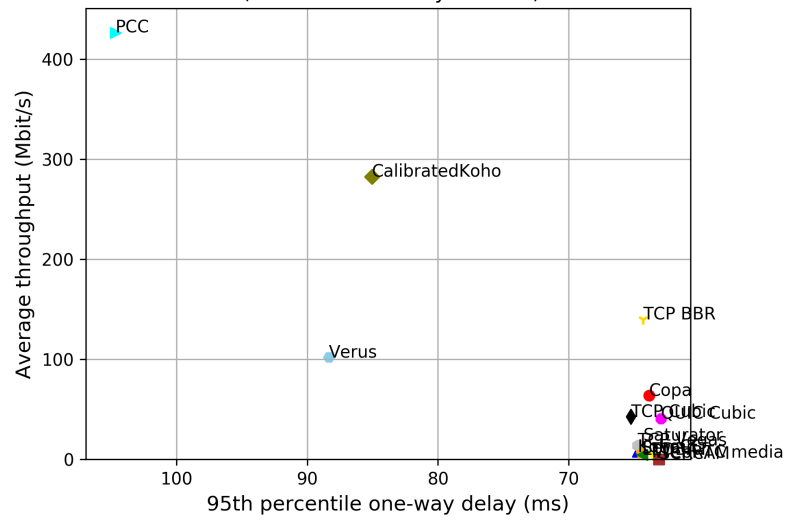
Pantheon Report

Generated at 2017-08-11 19:51:32 (UTC).
Data path: GCE Tokyo Ethernet (*remote*) → GCE Iowa Ethernet (*local*).
Repeated the test of 15 congestion control schemes 10 times.
Each test lasted for 30 seconds running 1 flow.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

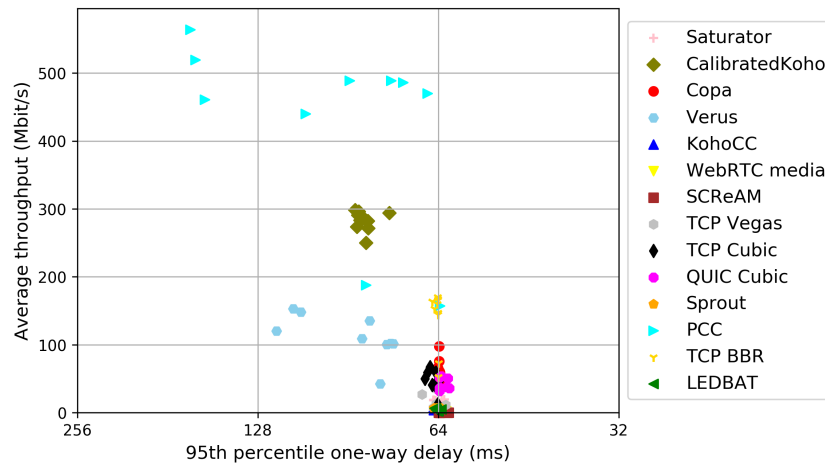
Git summary:

```
branch: master @ e43be7582298d552838afcf6382342bf187fbbd6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	139.64	64.30	3.91
CalibratedKoho	10	282.60	85.05	1.36
Copa	10	63.67	63.85	0.45
TCP Cubic	9	42.67	65.23	1.33
KohoCC	7	7.88	64.70	12.87
LEDBAT	10	4.52	64.36	2.08
PCC	10	426.34	104.68	9.15
QUIC Cubic	9	40.85	62.93	0.64
Saturator	6	18.75	64.28	0.70
SCReAM	10	0.22	63.09	0.38
Sprout	7	6.33	64.42	1.23
TaoVA-100x	0	N/A	N/A	N/A
TCP Vegas	10	13.81	64.72	1.08
Verus	10	101.83	88.35	17.89
WebRTC media	10	2.02	63.46	0.68

Run 1: Statistics of TCP BBR

Start at: 2017-08-11 15:23:03

End at: 2017-08-11 15:23:33

Below is generated by plot.py at 2017-08-11 19:29:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.73 Mbit/s

95th percentile per-packet one-way delay: 64.068 ms

Loss rate: 0.49%

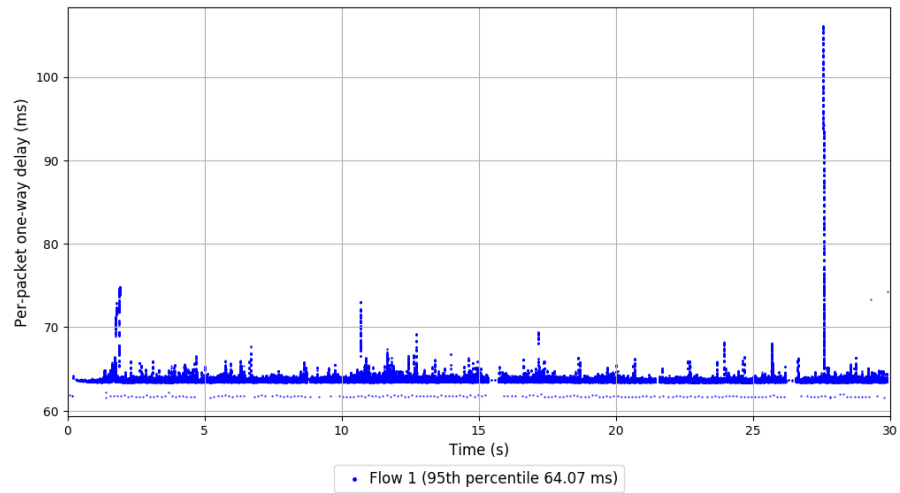
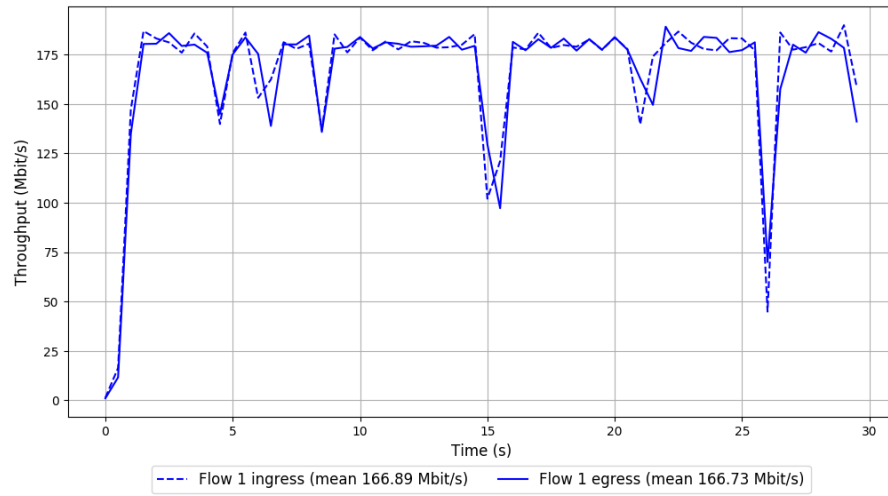
-- Flow 1:

Average throughput: 166.73 Mbit/s

95th percentile per-packet one-way delay: 64.068 ms

Loss rate: 0.49%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-11 15:33:42

End at: 2017-08-11 15:34:12

Below is generated by plot.py at 2017-08-11 19:29:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 159.87 Mbit/s

95th percentile per-packet one-way delay: 64.208 ms

Loss rate: 0.70%

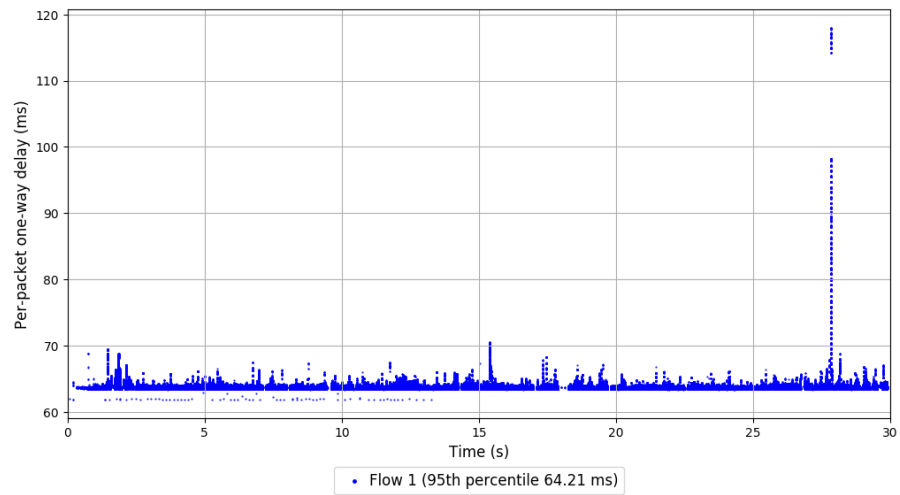
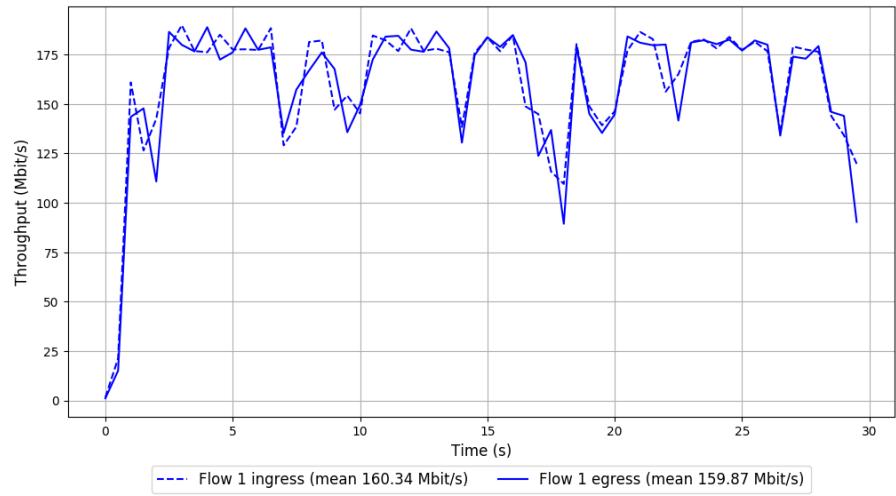
-- Flow 1:

Average throughput: 159.87 Mbit/s

95th percentile per-packet one-way delay: 64.208 ms

Loss rate: 0.70%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-11 15:44:33

End at: 2017-08-11 15:45:03

Below is generated by plot.py at 2017-08-11 19:29:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 165.59 Mbit/s

95th percentile per-packet one-way delay: 64.185 ms

Loss rate: 0.56%

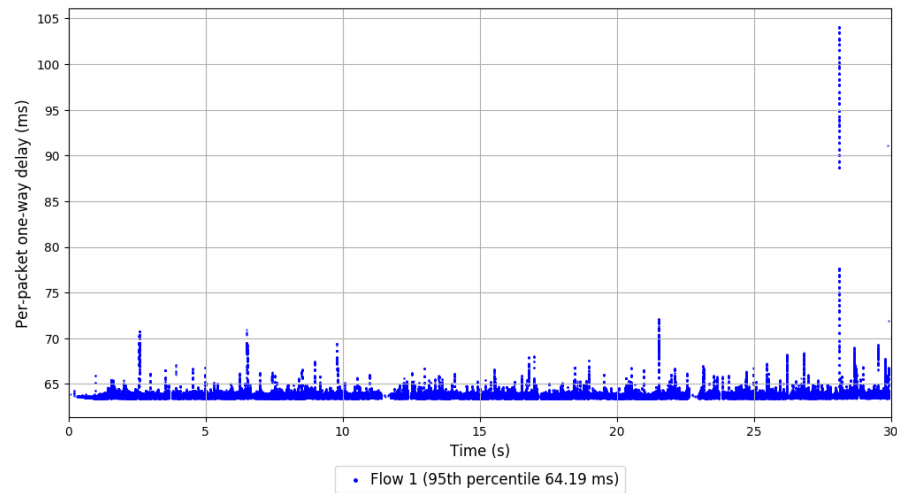
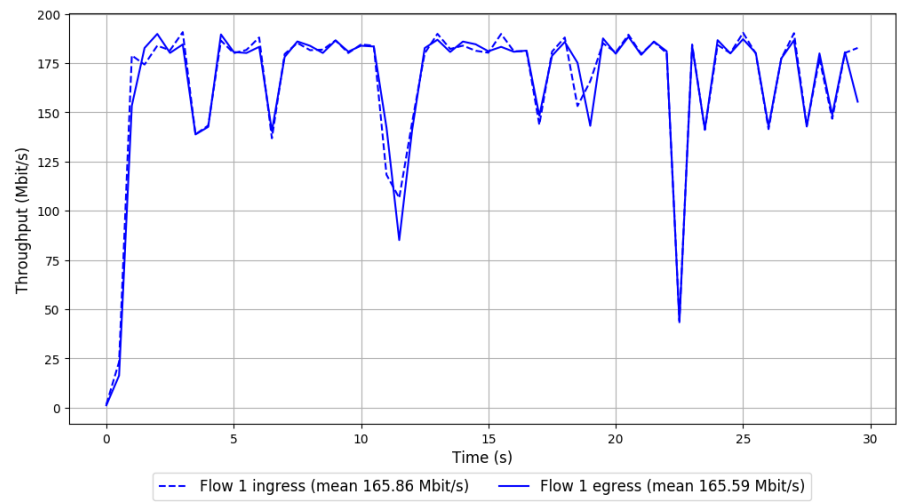
-- Flow 1:

Average throughput: 165.59 Mbit/s

95th percentile per-packet one-way delay: 64.185 ms

Loss rate: 0.56%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-11 15:55:15

End at: 2017-08-11 15:55:45

Below is generated by plot.py at 2017-08-11 19:29:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 163.82 Mbit/s

95th percentile per-packet one-way delay: 65.470 ms

Loss rate: 0.53%

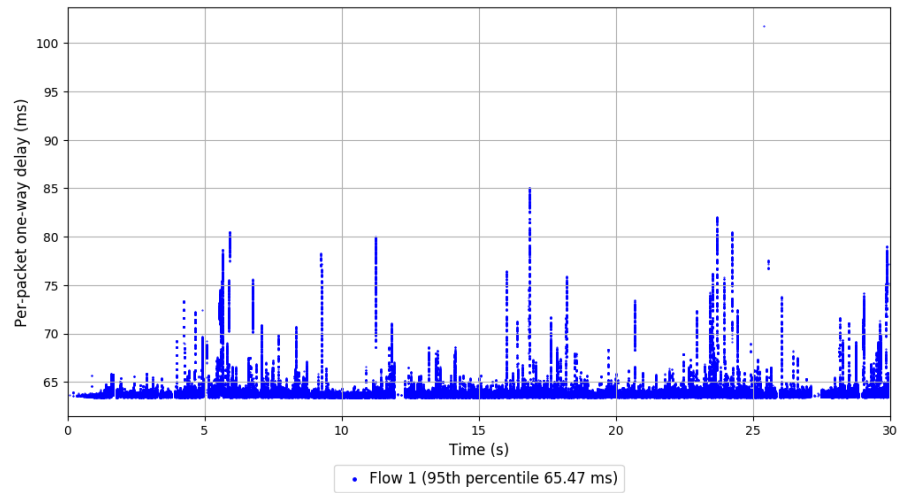
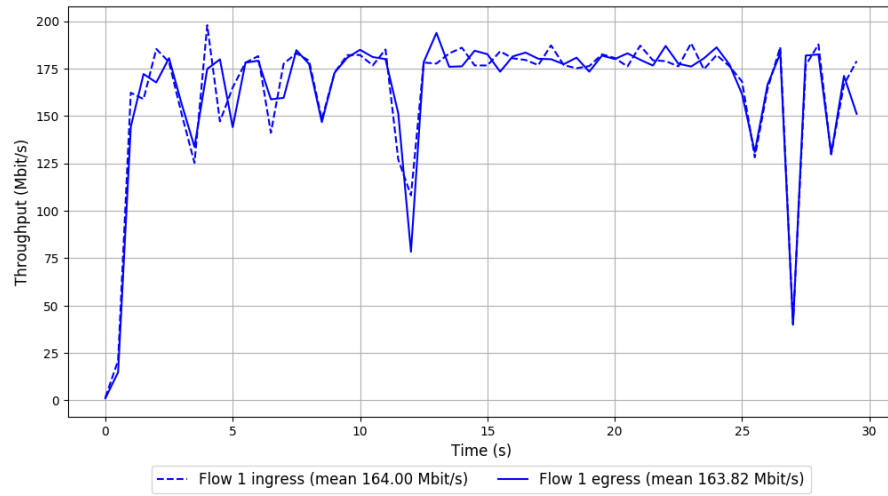
-- Flow 1:

Average throughput: 163.82 Mbit/s

95th percentile per-packet one-way delay: 65.470 ms

Loss rate: 0.53%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-08-11 16:06:00

End at: 2017-08-11 16:06:30

Below is generated by plot.py at 2017-08-11 19:30:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.04 Mbit/s

95th percentile per-packet one-way delay: 64.137 ms

Loss rate: 0.49%

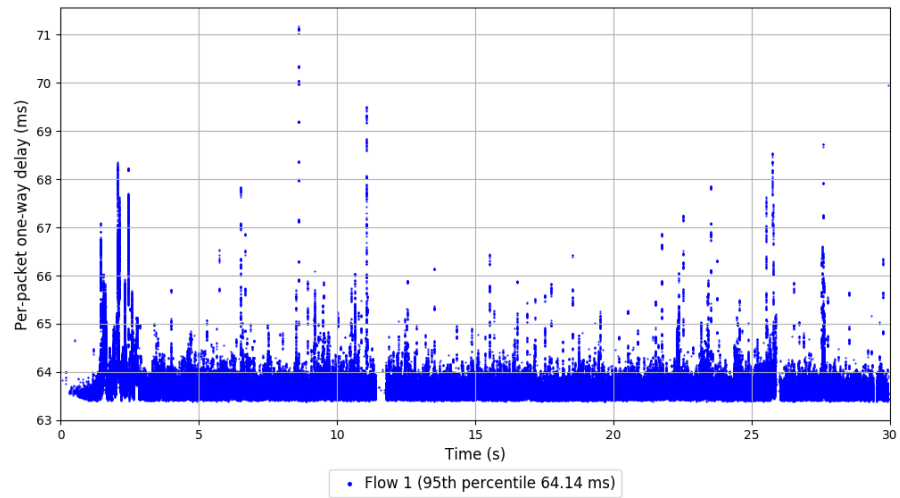
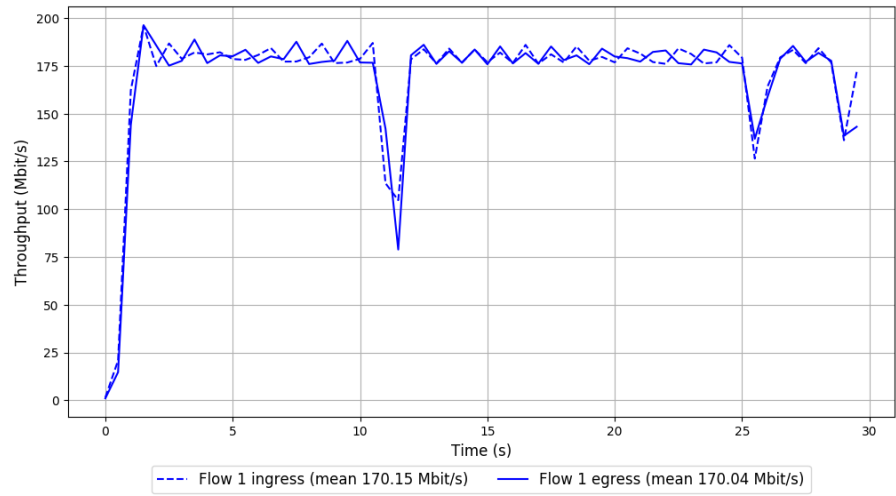
-- Flow 1:

Average throughput: 170.04 Mbit/s

95th percentile per-packet one-way delay: 64.137 ms

Loss rate: 0.49%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-11 16:16:35

End at: 2017-08-11 16:17:05

Below is generated by plot.py at 2017-08-11 19:30:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 146.96 Mbit/s

95th percentile per-packet one-way delay: 64.031 ms

Loss rate: 3.18%

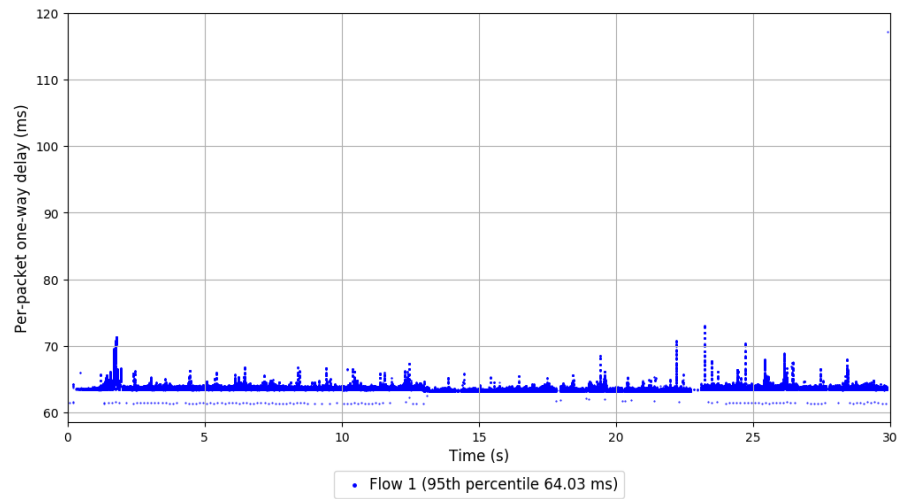
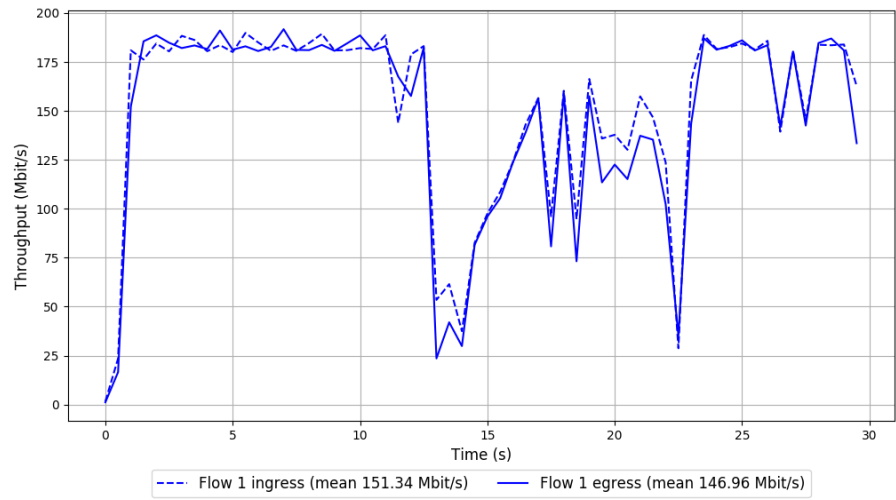
-- Flow 1:

Average throughput: 146.96 Mbit/s

95th percentile per-packet one-way delay: 64.031 ms

Loss rate: 3.18%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-11 16:27:11

End at: 2017-08-11 16:27:41

Below is generated by plot.py at 2017-08-11 19:30:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 144.53 Mbit/s

95th percentile per-packet one-way delay: 64.046 ms

Loss rate: 2.27%

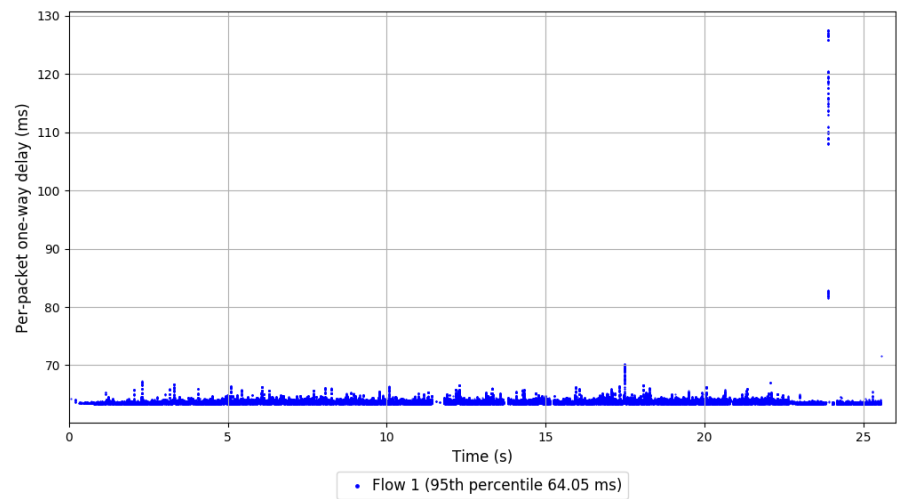
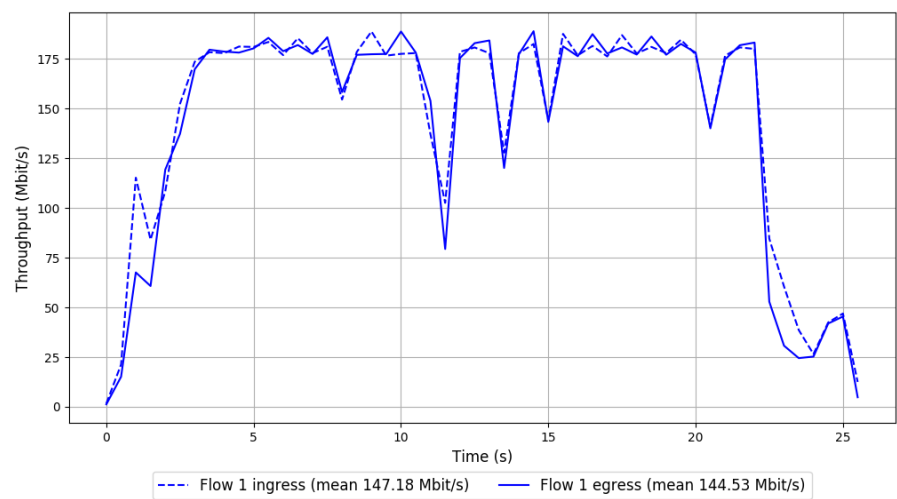
-- Flow 1:

Average throughput: 144.53 Mbit/s

95th percentile per-packet one-way delay: 64.046 ms

Loss rate: 2.27%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-11 16:37:55

End at: 2017-08-11 16:38:25

Below is generated by plot.py at 2017-08-11 19:31:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 153.04 Mbit/s

95th percentile per-packet one-way delay: 64.954 ms

Loss rate: 1.24%

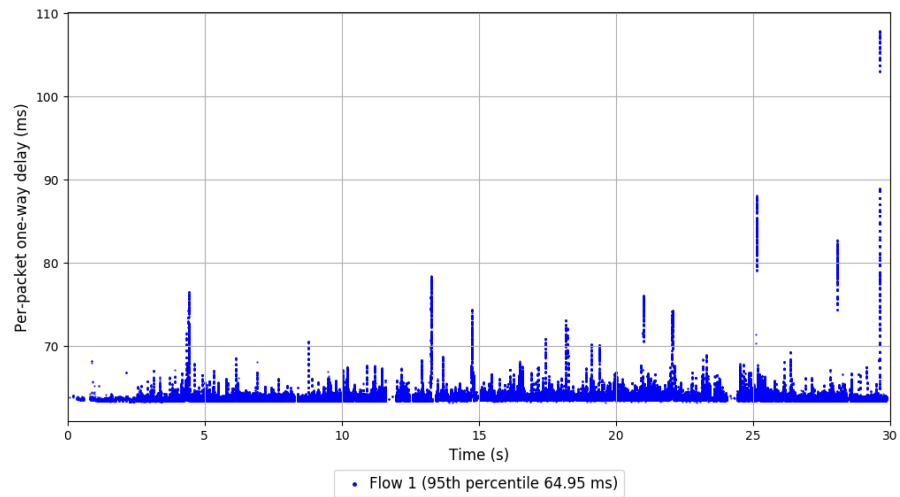
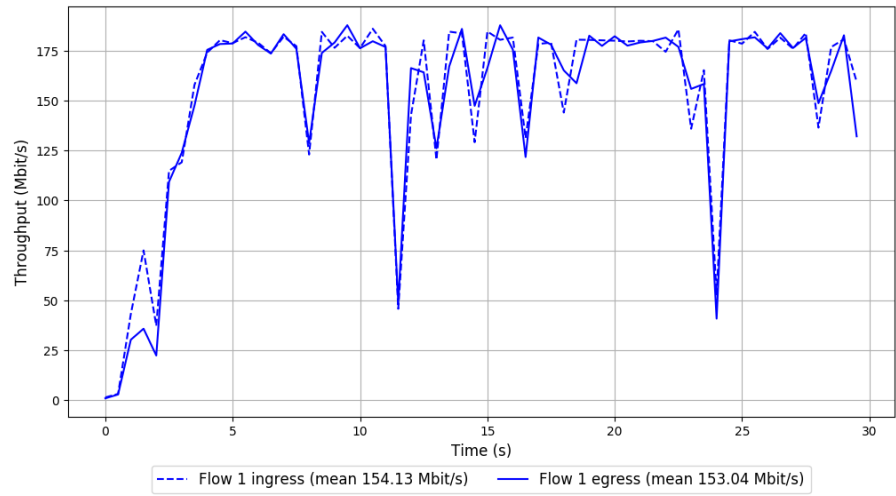
-- Flow 1:

Average throughput: 153.04 Mbit/s

95th percentile per-packet one-way delay: 64.954 ms

Loss rate: 1.24%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-11 16:48:26

End at: 2017-08-11 16:48:57

Below is generated by plot.py at 2017-08-11 19:31:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.83 Mbit/s

95th percentile per-packet one-way delay: 63.987 ms

Loss rate: 15.17%

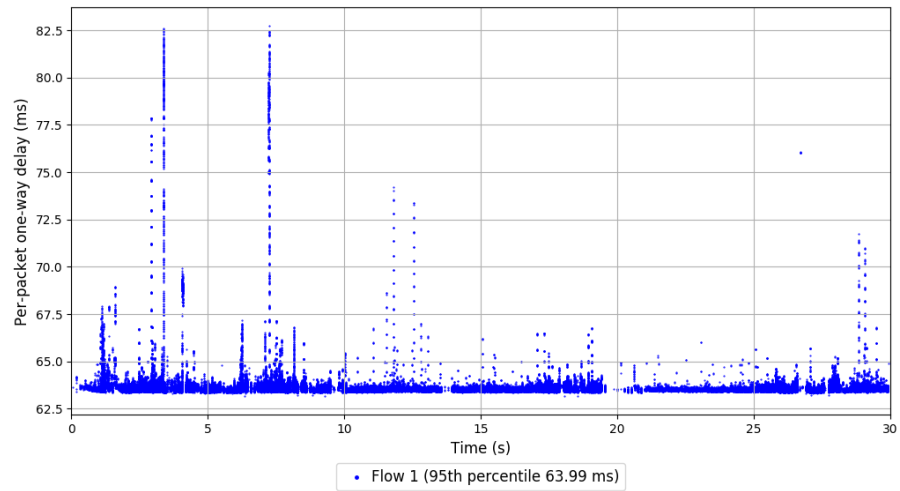
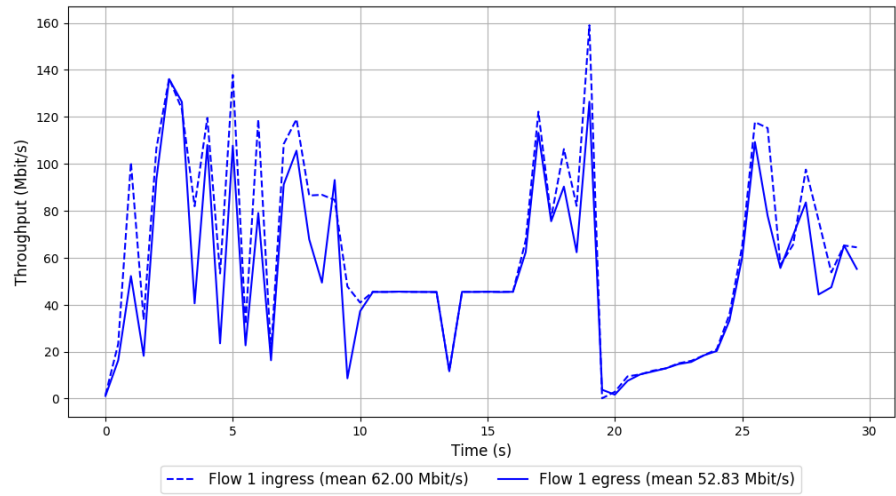
-- Flow 1:

Average throughput: 52.83 Mbit/s

95th percentile per-packet one-way delay: 63.987 ms

Loss rate: 15.17%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-11 16:58:51

End at: 2017-08-11 16:59:21

Below is generated by plot.py at 2017-08-11 19:31:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.96 Mbit/s

95th percentile per-packet one-way delay: 63.912 ms

Loss rate: 14.44%

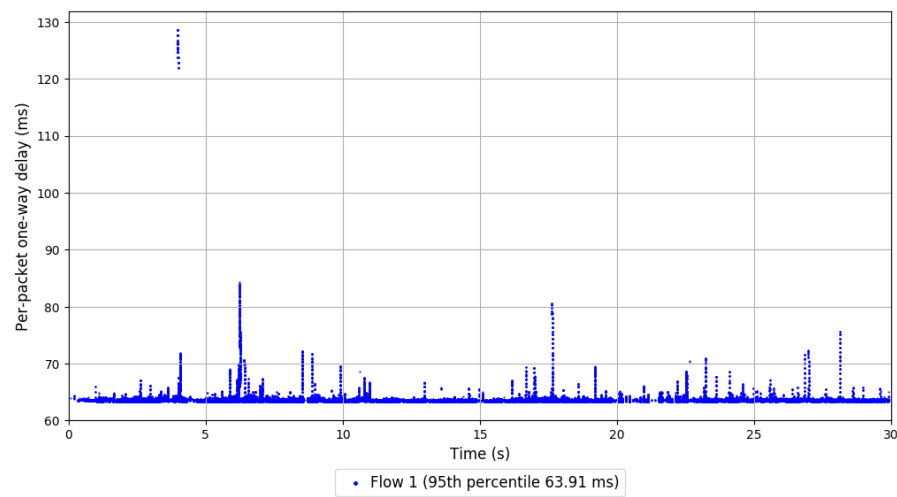
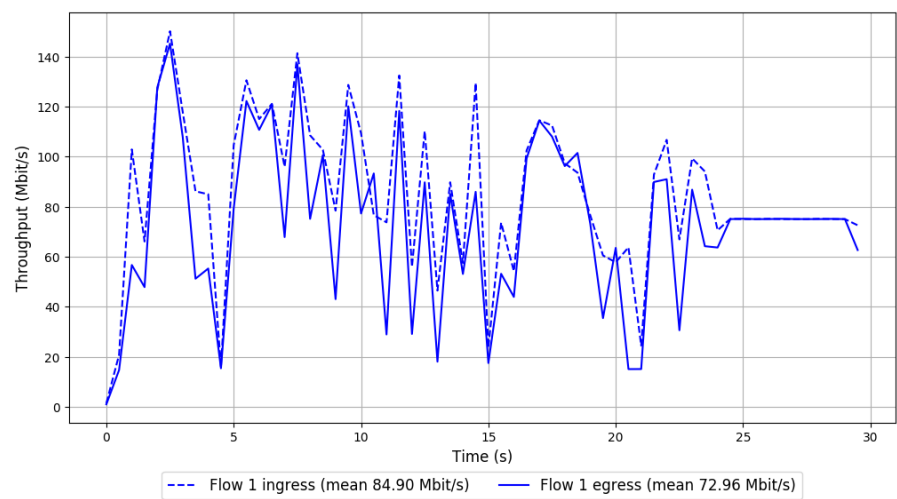
-- Flow 1:

Average throughput: 72.96 Mbit/s

95th percentile per-packet one-way delay: 63.912 ms

Loss rate: 14.44%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-11 15:27:09

End at: 2017-08-11 15:27:39

Below is generated by plot.py at 2017-08-11 19:32:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 290.66 Mbit/s

95th percentile per-packet one-way delay: 87.129 ms

Loss rate: 0.90%

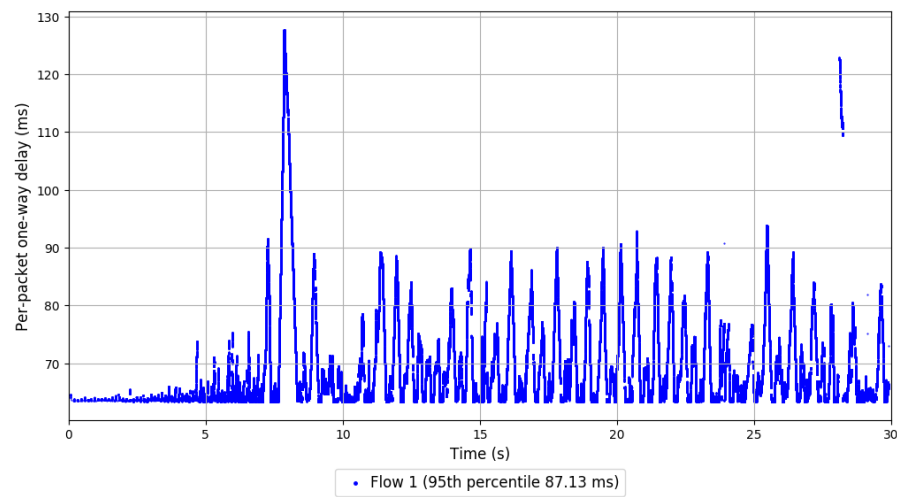
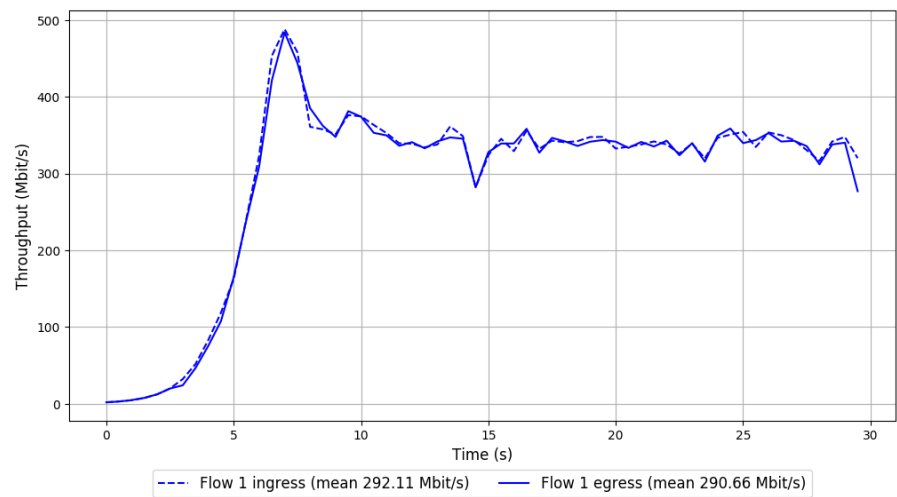
-- Flow 1:

Average throughput: 290.66 Mbit/s

95th percentile per-packet one-way delay: 87.129 ms

Loss rate: 0.90%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-11 15:37:54

End at: 2017-08-11 15:38:24

Below is generated by plot.py at 2017-08-11 19:32:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 273.68 Mbit/s

95th percentile per-packet one-way delay: 87.445 ms

Loss rate: 0.81%

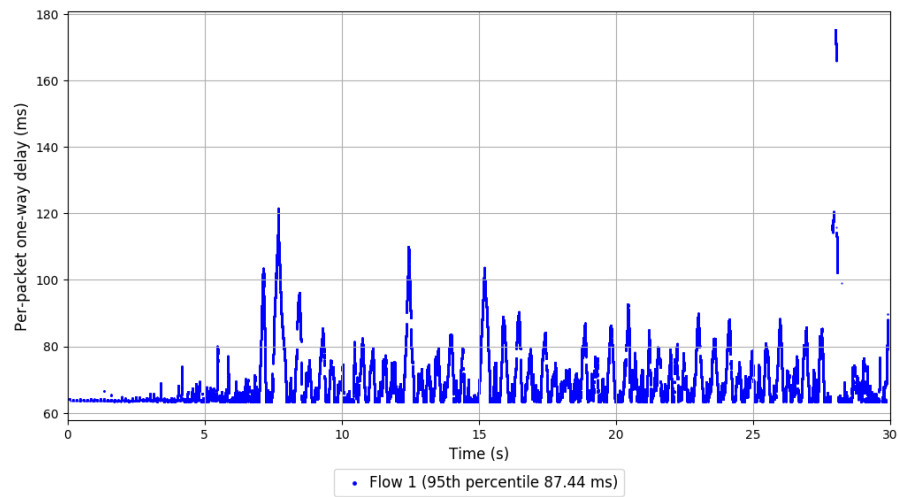
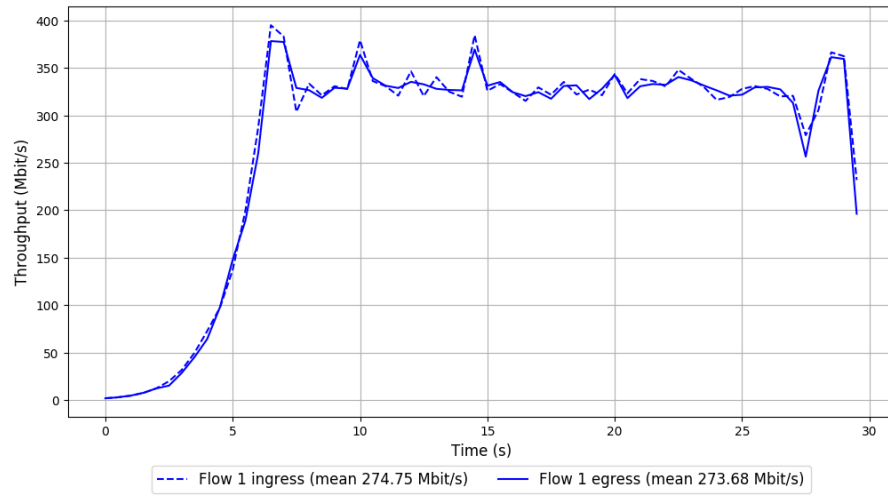
-- Flow 1:

Average throughput: 273.68 Mbit/s

95th percentile per-packet one-way delay: 87.445 ms

Loss rate: 0.81%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-11 15:48:37

End at: 2017-08-11 15:49:07

Below is generated by plot.py at 2017-08-11 19:33:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 283.13 Mbit/s

95th percentile per-packet one-way delay: 86.435 ms

Loss rate: 0.81%

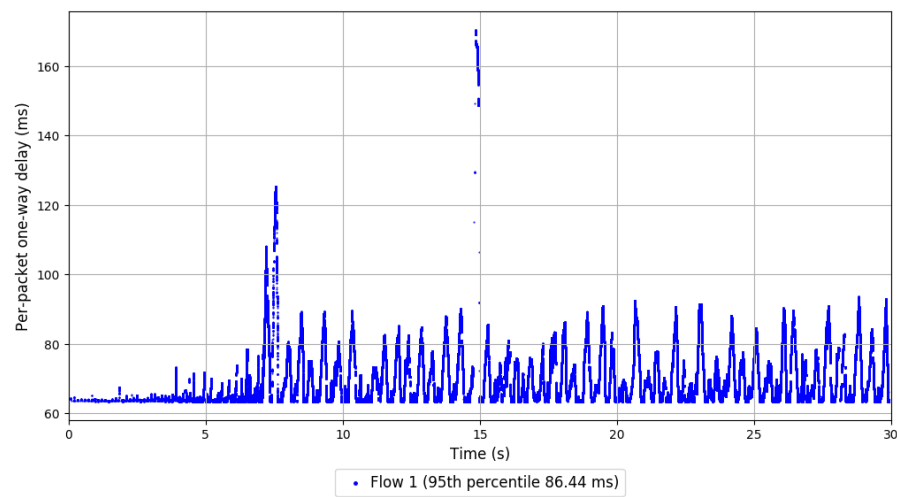
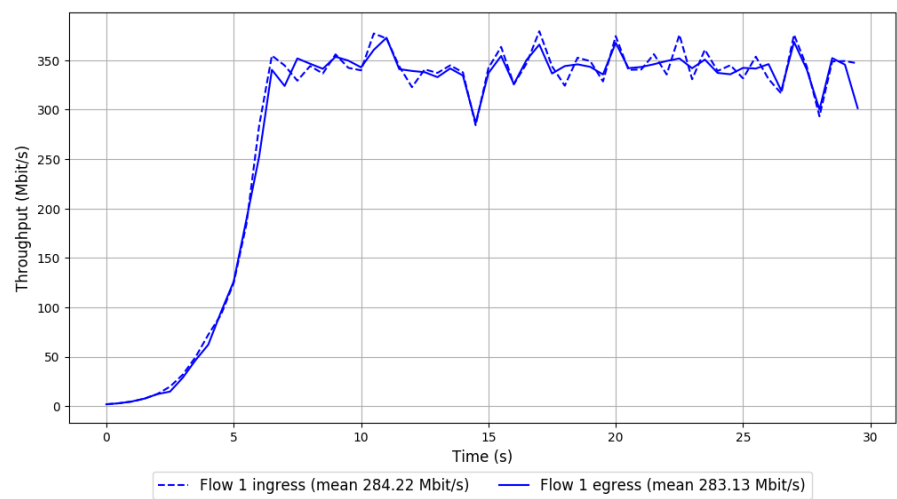
-- Flow 1:

Average throughput: 283.13 Mbit/s

95th percentile per-packet one-way delay: 86.435 ms

Loss rate: 0.81%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-11 15:59:20

End at: 2017-08-11 15:59:50

Below is generated by plot.py at 2017-08-11 19:33:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 285.29 Mbit/s

95th percentile per-packet one-way delay: 85.059 ms

Loss rate: 0.79%

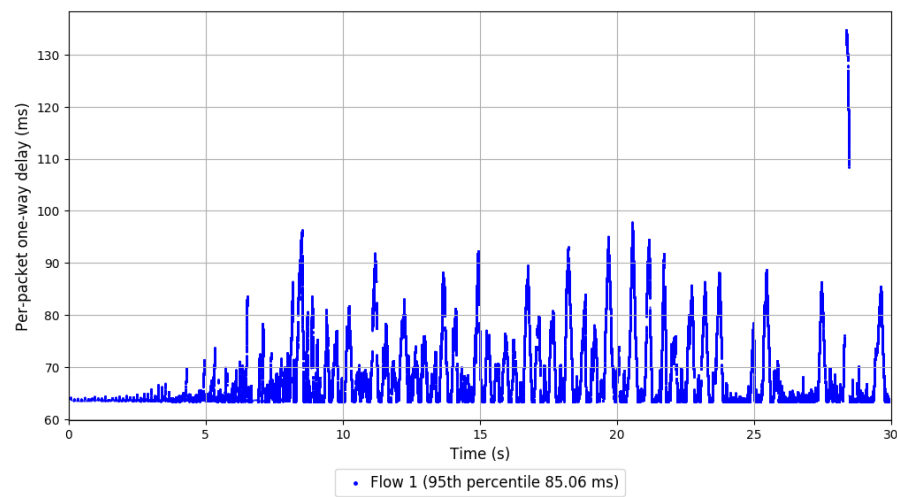
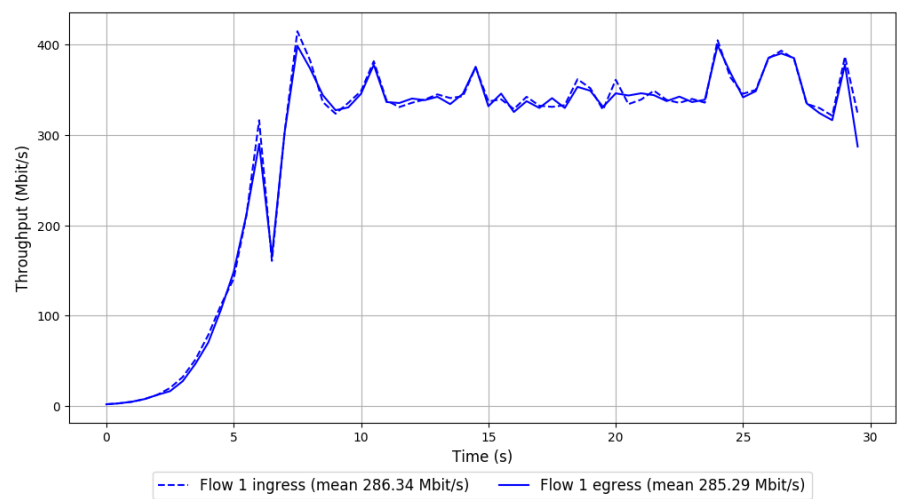
-- Flow 1:

Average throughput: 285.29 Mbit/s

95th percentile per-packet one-way delay: 85.059 ms

Loss rate: 0.79%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-11 16:10:08

End at: 2017-08-11 16:10:38

Below is generated by plot.py at 2017-08-11 19:34:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 282.21 Mbit/s

95th percentile per-packet one-way delay: 83.892 ms

Loss rate: 2.74%

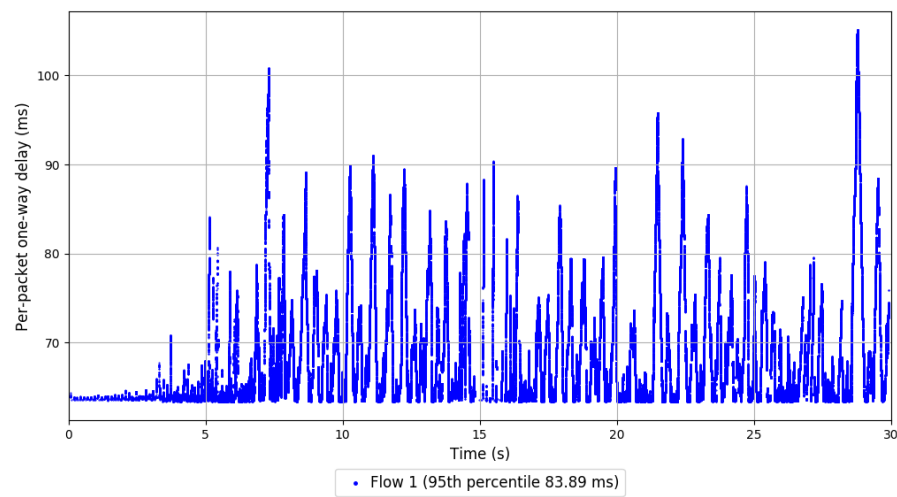
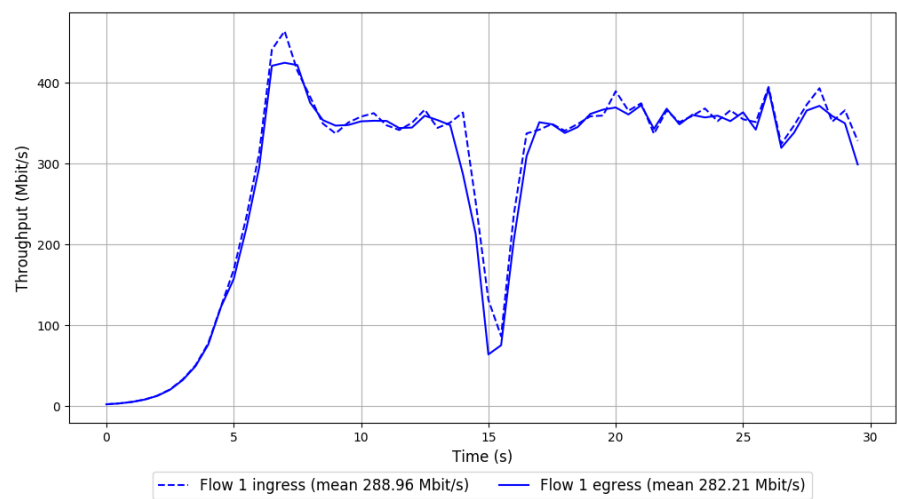
-- Flow 1:

Average throughput: 282.21 Mbit/s

95th percentile per-packet one-way delay: 83.892 ms

Loss rate: 2.74%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-11 16:20:40

End at: 2017-08-11 16:21:10

Below is generated by plot.py at 2017-08-11 19:34:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 250.20 Mbit/s

95th percentile per-packet one-way delay: 84.431 ms

Loss rate: 2.97%

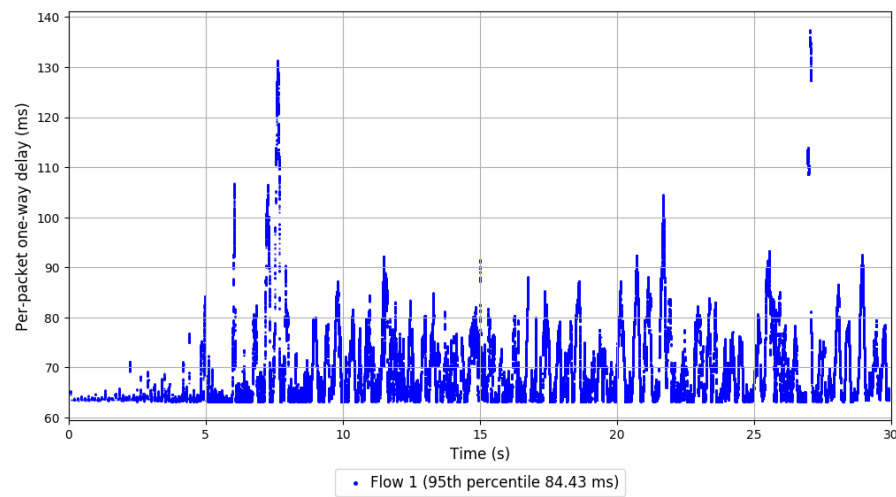
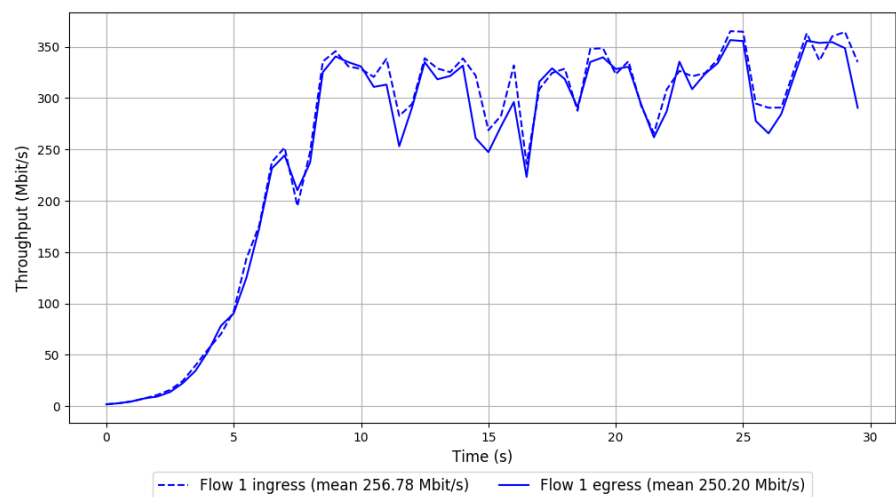
-- Flow 1:

Average throughput: 250.20 Mbit/s

95th percentile per-packet one-way delay: 84.431 ms

Loss rate: 2.97%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-11 16:31:16

End at: 2017-08-11 16:31:46

Below is generated by plot.py at 2017-08-11 19:35:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 294.22 Mbit/s

95th percentile per-packet one-way delay: 77.300 ms

Loss rate: 1.42%

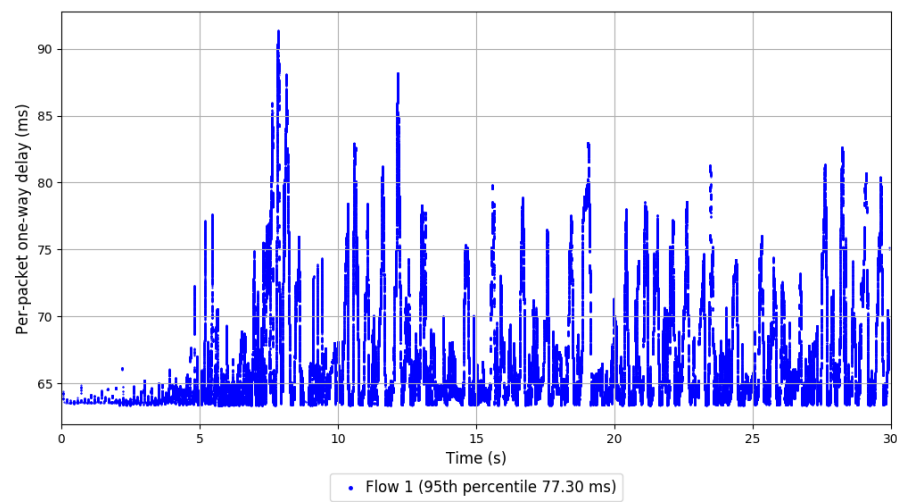
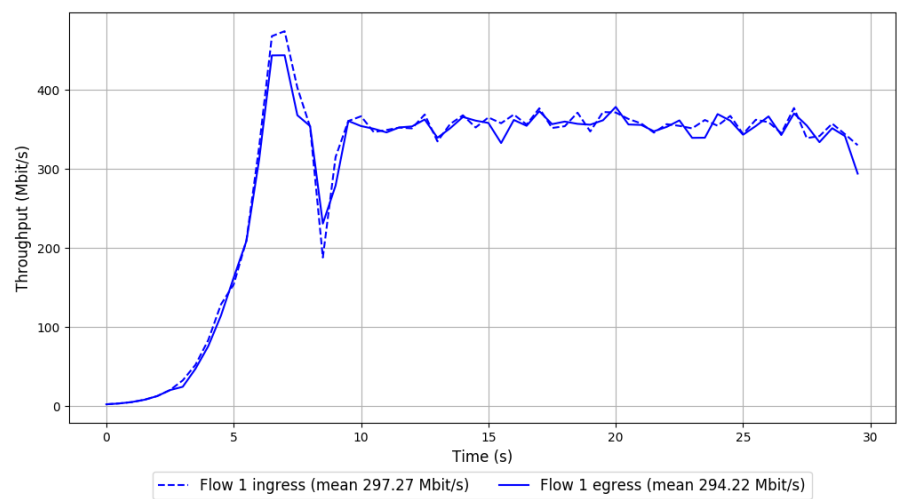
-- Flow 1:

Average throughput: 294.22 Mbit/s

95th percentile per-packet one-way delay: 77.300 ms

Loss rate: 1.42%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-11 16:41:55

End at: 2017-08-11 16:42:25

Below is generated by plot.py at 2017-08-11 19:35:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 271.82 Mbit/s

95th percentile per-packet one-way delay: 83.816 ms

Loss rate: 1.10%

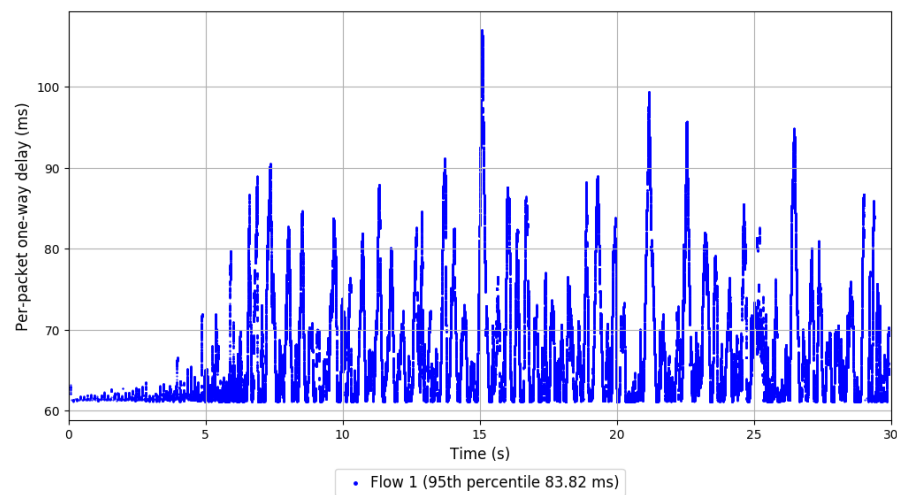
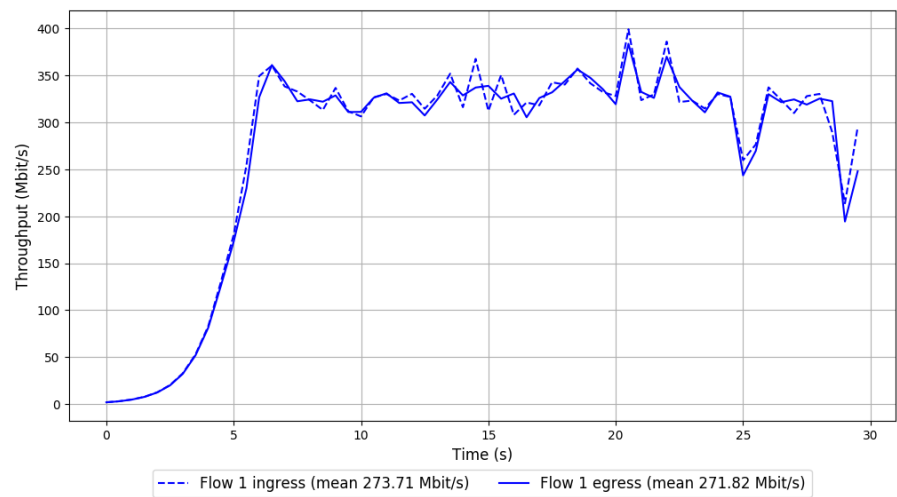
-- Flow 1:

Average throughput: 271.82 Mbit/s

95th percentile per-packet one-way delay: 83.816 ms

Loss rate: 1.10%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-11 16:52:32

End at: 2017-08-11 16:53:02

Below is generated by plot.py at 2017-08-11 19:36:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 296.29 Mbit/s

95th percentile per-packet one-way delay: 86.914 ms

Loss rate: 0.99%

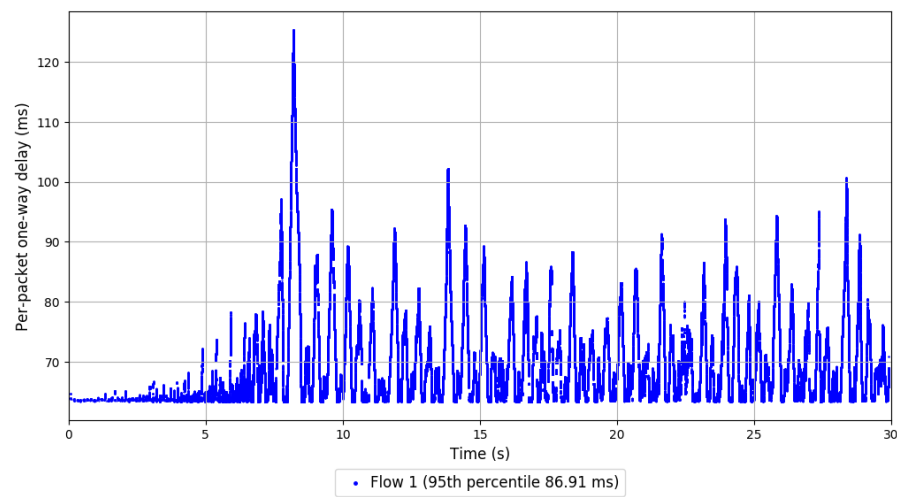
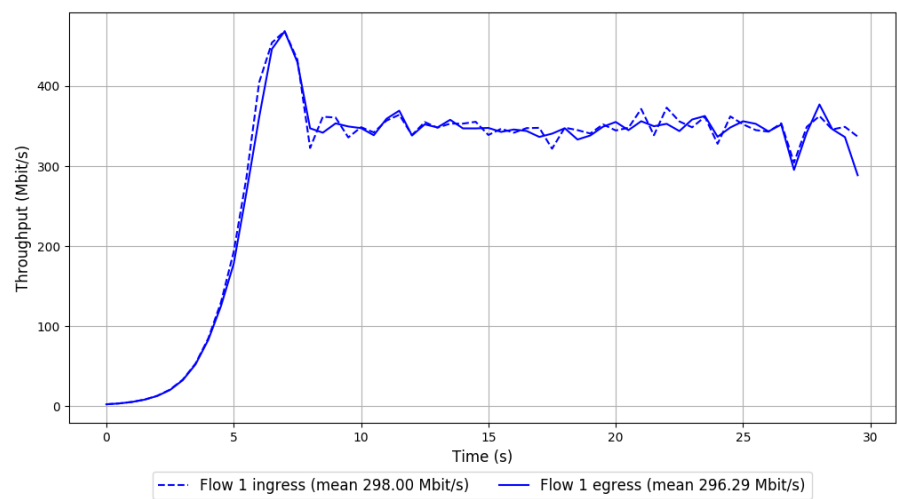
-- Flow 1:

Average throughput: 296.29 Mbit/s

95th percentile per-packet one-way delay: 86.914 ms

Loss rate: 0.99%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-11 17:03:01

End at: 2017-08-11 17:03:31

Below is generated by plot.py at 2017-08-11 19:36:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 298.52 Mbit/s

95th percentile per-packet one-way delay: 88.107 ms

Loss rate: 1.06%

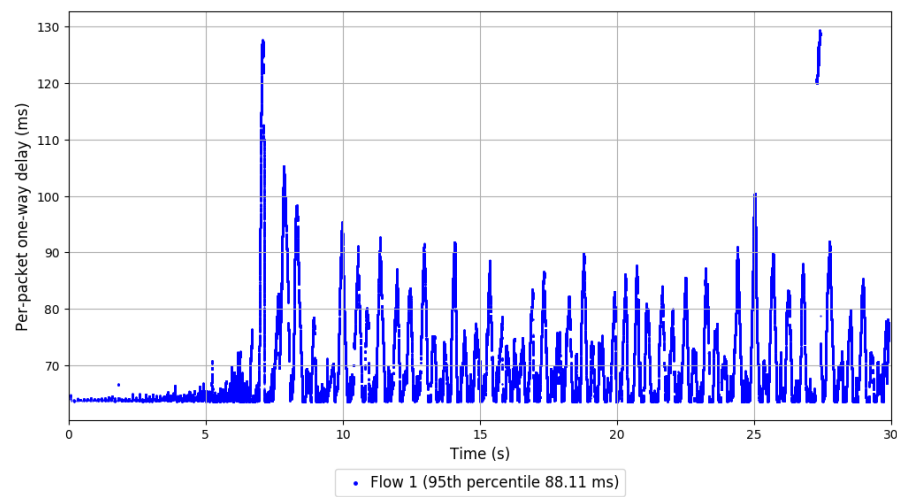
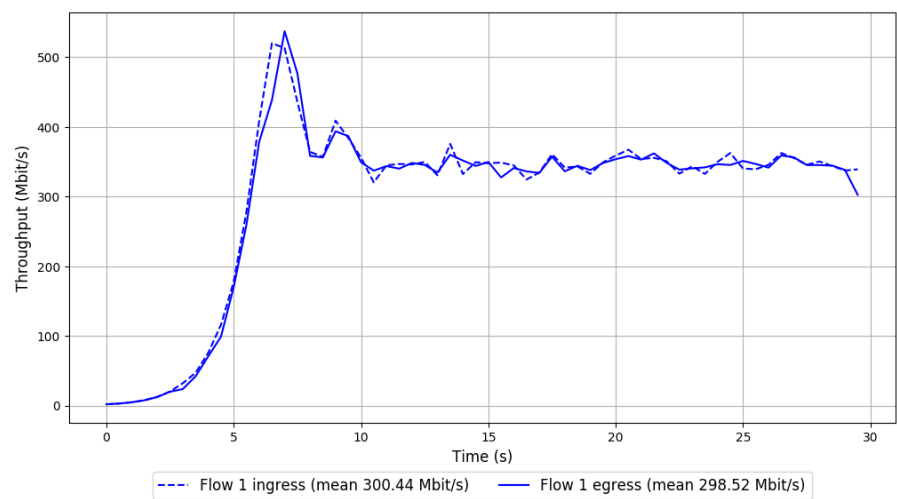
-- Flow 1:

Average throughput: 298.52 Mbit/s

95th percentile per-packet one-way delay: 88.107 ms

Loss rate: 1.06%

Run 10: Report of CalibratedKoho — Data Link



Run 1: Statistics of Copa

Start at: 2017-08-11 15:24:28

End at: 2017-08-11 15:24:58

Below is generated by plot.py at 2017-08-11 19:36:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.52 Mbit/s

95th percentile per-packet one-way delay: 64.056 ms

Loss rate: 0.37%

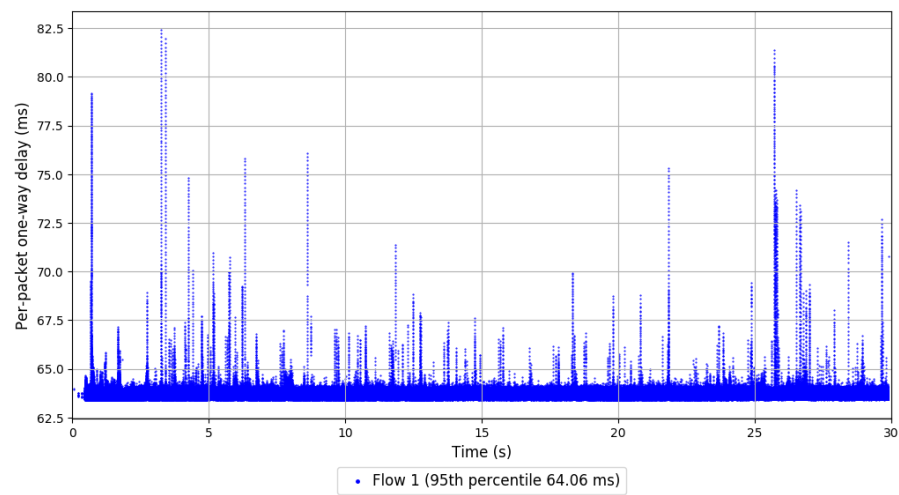
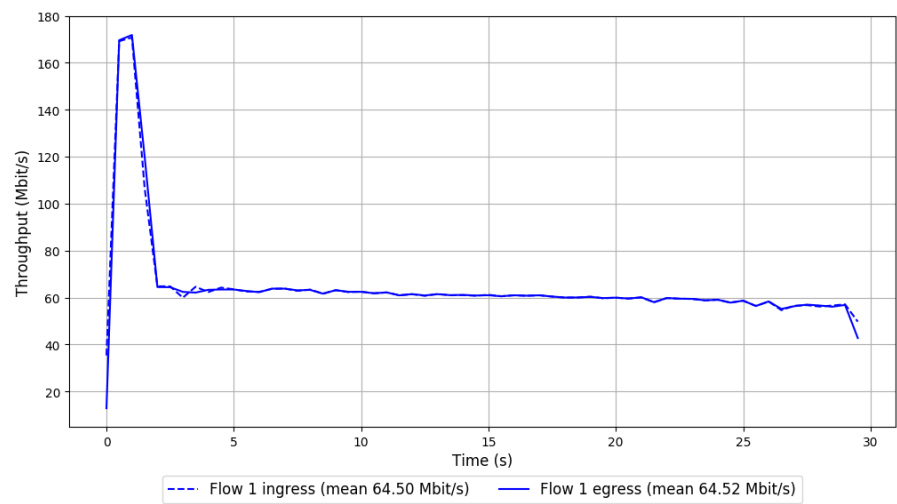
-- Flow 1:

Average throughput: 64.52 Mbit/s

95th percentile per-packet one-way delay: 64.056 ms

Loss rate: 0.37%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-11 15:35:08

End at: 2017-08-11 15:35:38

Below is generated by plot.py at 2017-08-11 19:36:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.70 Mbit/s

95th percentile per-packet one-way delay: 63.768 ms

Loss rate: 0.42%

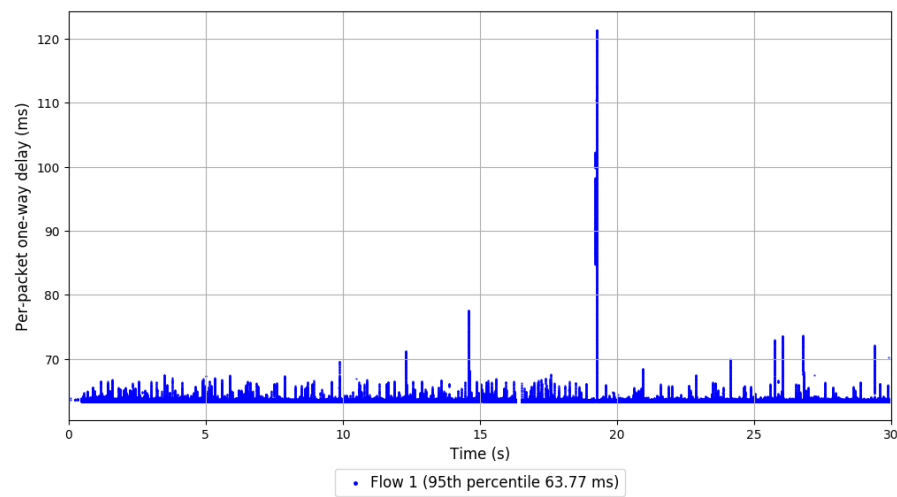
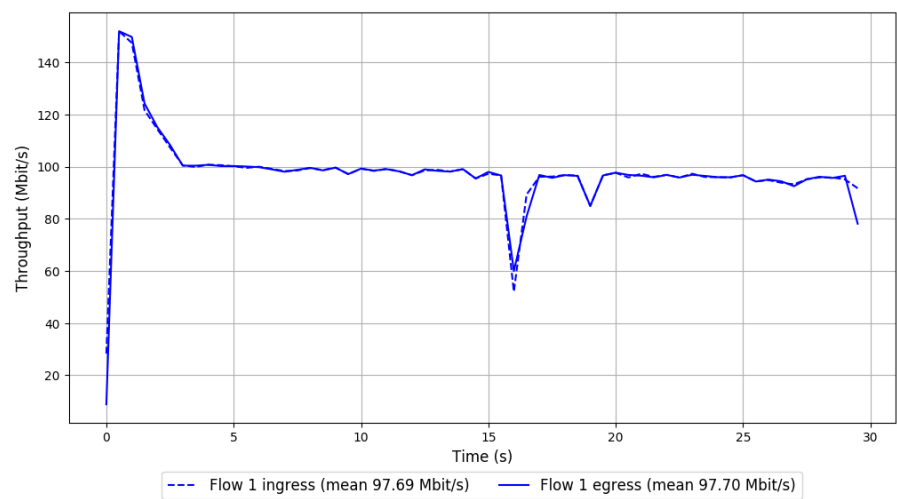
-- Flow 1:

Average throughput: 97.70 Mbit/s

95th percentile per-packet one-way delay: 63.768 ms

Loss rate: 0.42%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-08-11 15:45:58

End at: 2017-08-11 15:46:28

Below is generated by plot.py at 2017-08-11 19:36:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.75 Mbit/s

95th percentile per-packet one-way delay: 64.027 ms

Loss rate: 0.39%

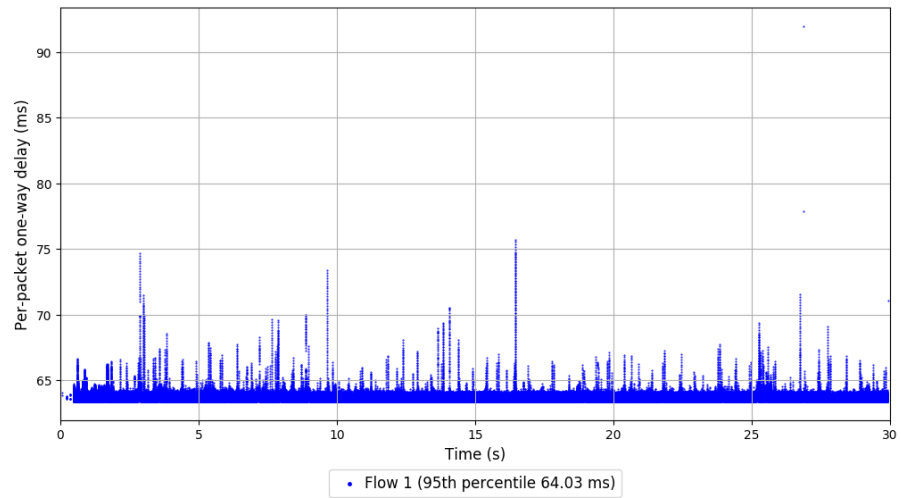
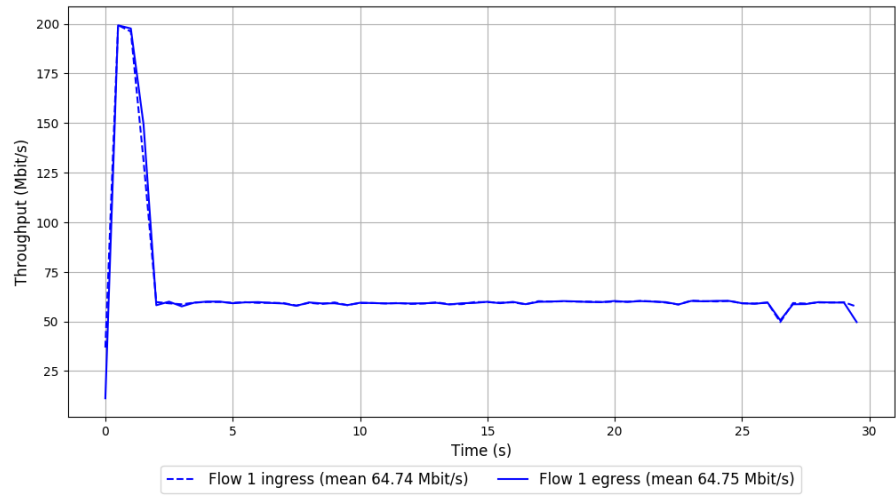
-- Flow 1:

Average throughput: 64.75 Mbit/s

95th percentile per-packet one-way delay: 64.027 ms

Loss rate: 0.39%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-08-11 15:56:40

End at: 2017-08-11 15:57:10

Below is generated by plot.py at 2017-08-11 19:37:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.11 Mbit/s

95th percentile per-packet one-way delay: 64.135 ms

Loss rate: 0.43%

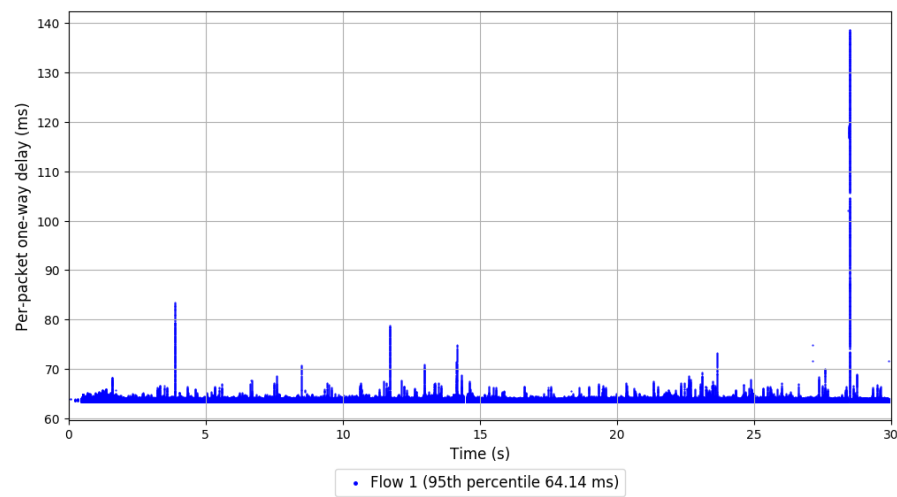
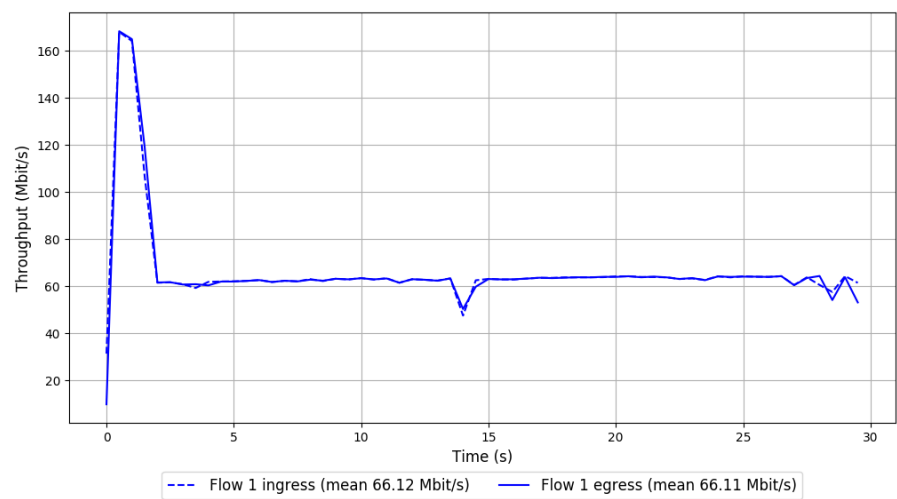
-- Flow 1:

Average throughput: 66.11 Mbit/s

95th percentile per-packet one-way delay: 64.135 ms

Loss rate: 0.43%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-11 16:07:26

End at: 2017-08-11 16:07:56

Below is generated by plot.py at 2017-08-11 19:37:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.27 Mbit/s

95th percentile per-packet one-way delay: 63.636 ms

Loss rate: 0.45%

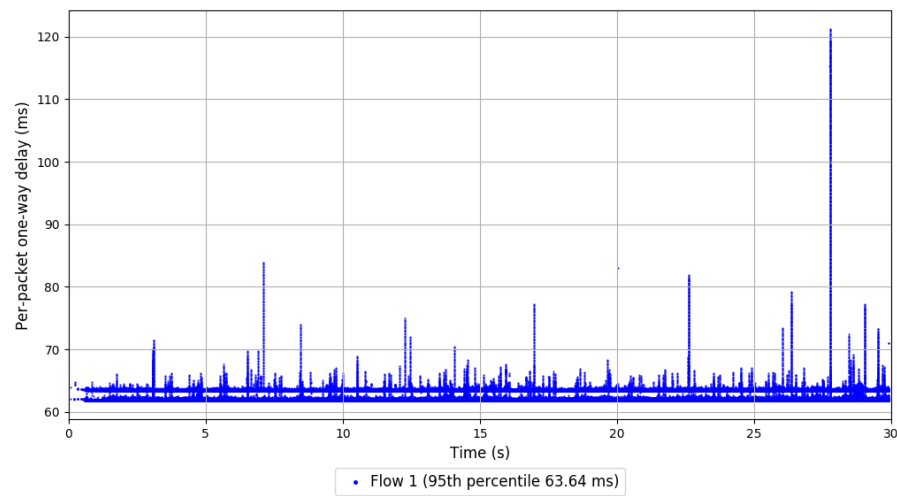
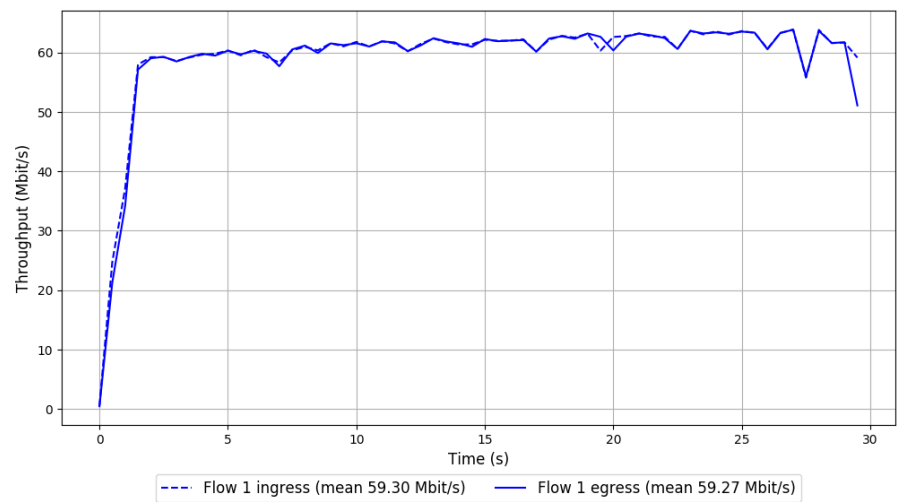
-- Flow 1:

Average throughput: 59.27 Mbit/s

95th percentile per-packet one-way delay: 63.636 ms

Loss rate: 0.45%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-08-11 16:17:59

End at: 2017-08-11 16:18:29

Below is generated by plot.py at 2017-08-11 19:37:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.88 Mbit/s

95th percentile per-packet one-way delay: 63.788 ms

Loss rate: 0.70%

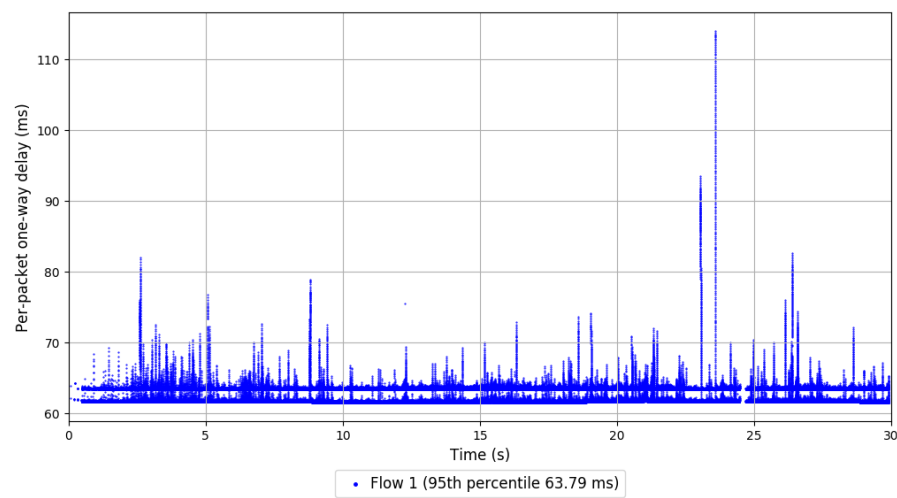
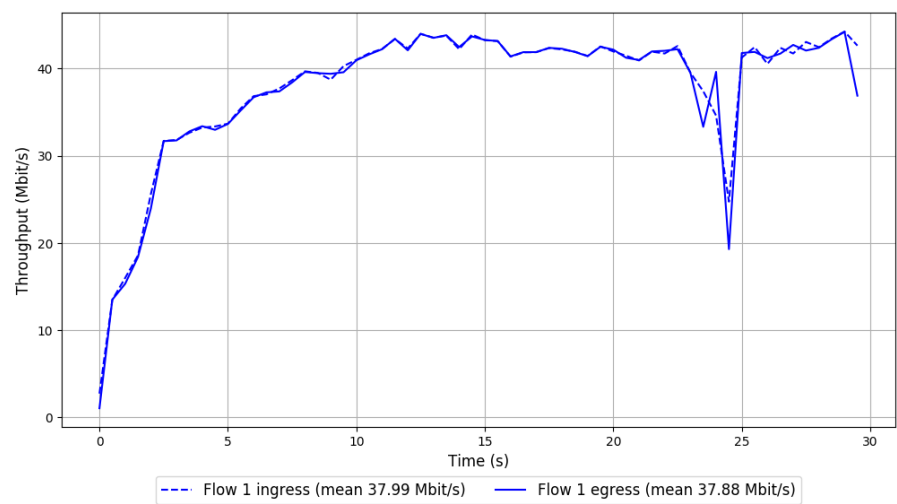
-- Flow 1:

Average throughput: 37.88 Mbit/s

95th percentile per-packet one-way delay: 63.788 ms

Loss rate: 0.70%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-11 16:28:34

End at: 2017-08-11 16:29:04

Below is generated by plot.py at 2017-08-11 19:37:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.53 Mbit/s

95th percentile per-packet one-way delay: 63.770 ms

Loss rate: 0.33%

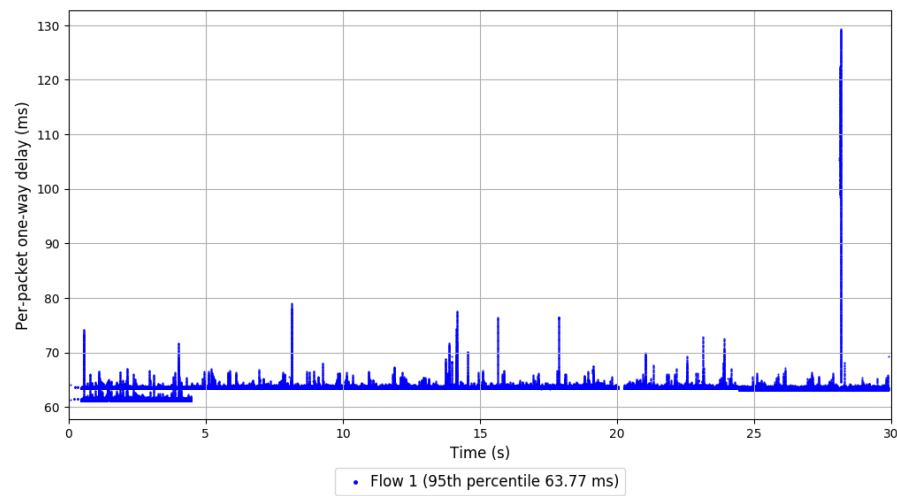
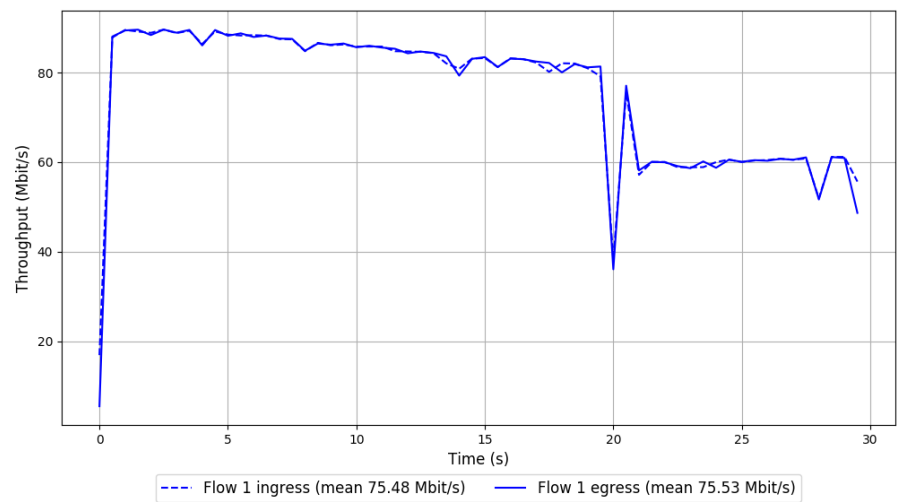
-- Flow 1:

Average throughput: 75.53 Mbit/s

95th percentile per-packet one-way delay: 63.770 ms

Loss rate: 0.33%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-08-11 16:39:19

End at: 2017-08-11 16:39:49

Below is generated by plot.py at 2017-08-11 19:37:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.52 Mbit/s

95th percentile per-packet one-way delay: 63.640 ms

Loss rate: 0.47%

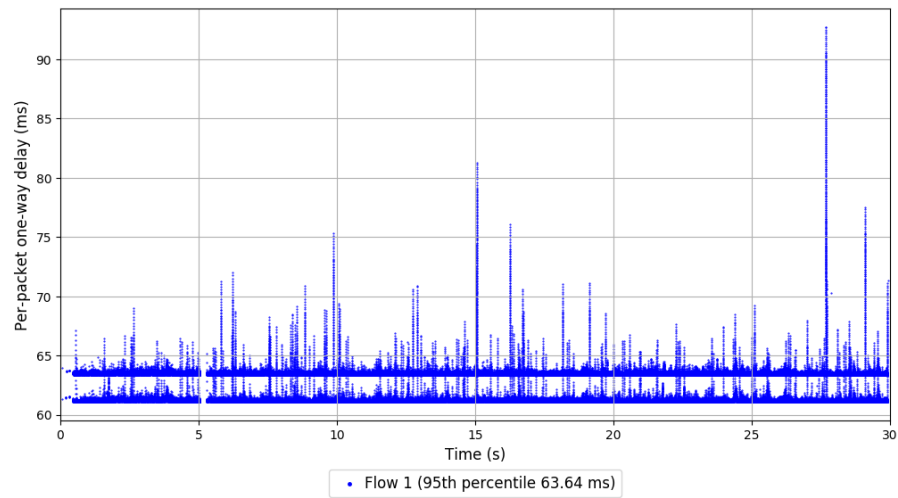
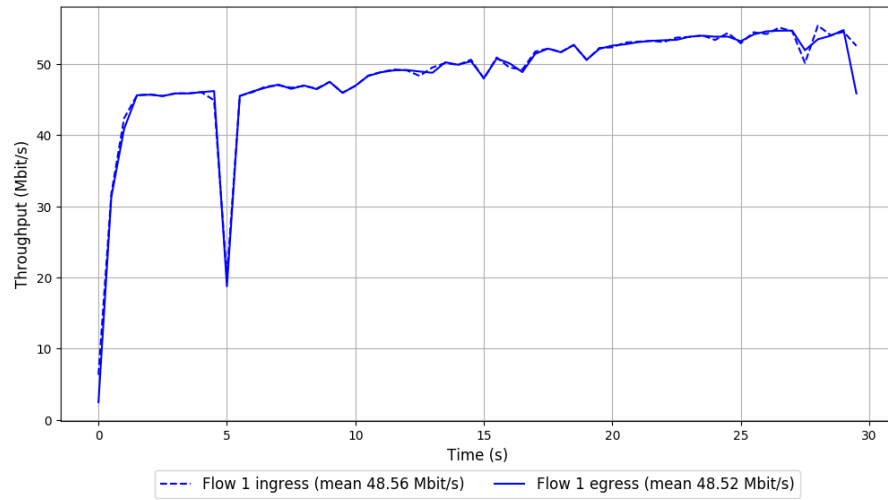
-- Flow 1:

Average throughput: 48.52 Mbit/s

95th percentile per-packet one-way delay: 63.640 ms

Loss rate: 0.47%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-08-11 16:49:46

End at: 2017-08-11 16:50:16

Below is generated by plot.py at 2017-08-11 19:38:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.63 Mbit/s

95th percentile per-packet one-way delay: 63.681 ms

Loss rate: 0.44%

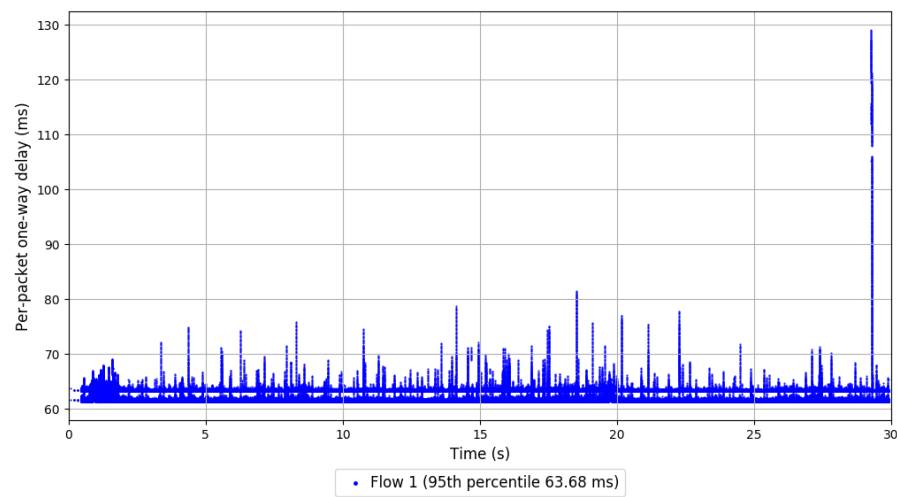
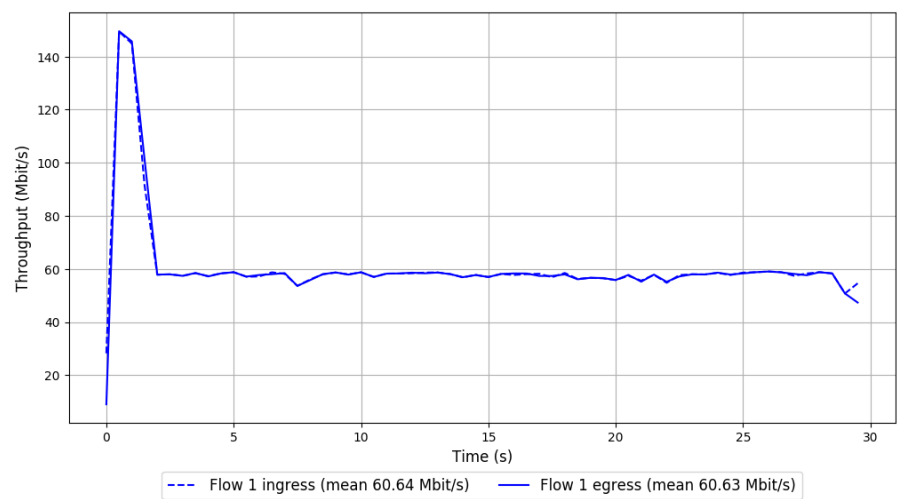
-- Flow 1:

Average throughput: 60.63 Mbit/s

95th percentile per-packet one-way delay: 63.681 ms

Loss rate: 0.44%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

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

End at: 2017-08-11 17:00:41

Below is generated by plot.py at 2017-08-11 19:38:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.74 Mbit/s

95th percentile per-packet one-way delay: 63.995 ms

Loss rate: 0.50%

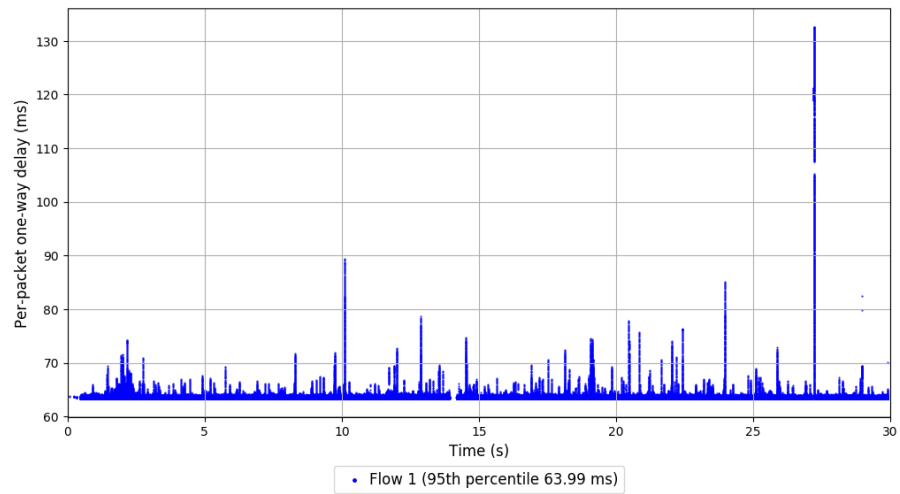
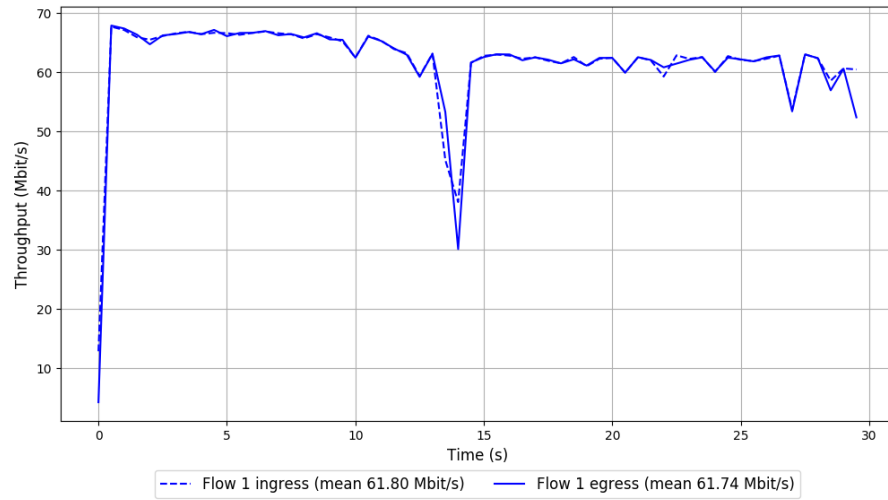
-- Flow 1:

Average throughput: 61.74 Mbit/s

95th percentile per-packet one-way delay: 63.995 ms

Loss rate: 0.50%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-08-11 15:21:42

End at: 2017-08-11 15:22:12

Below is generated by plot.py at 2017-08-11 19:38:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.90 Mbit/s

95th percentile per-packet one-way delay: 66.045 ms

Loss rate: 1.43%

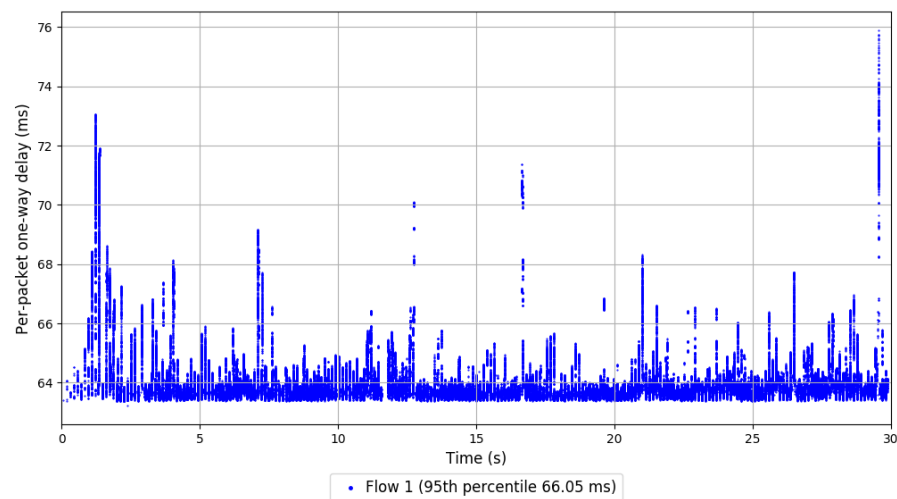
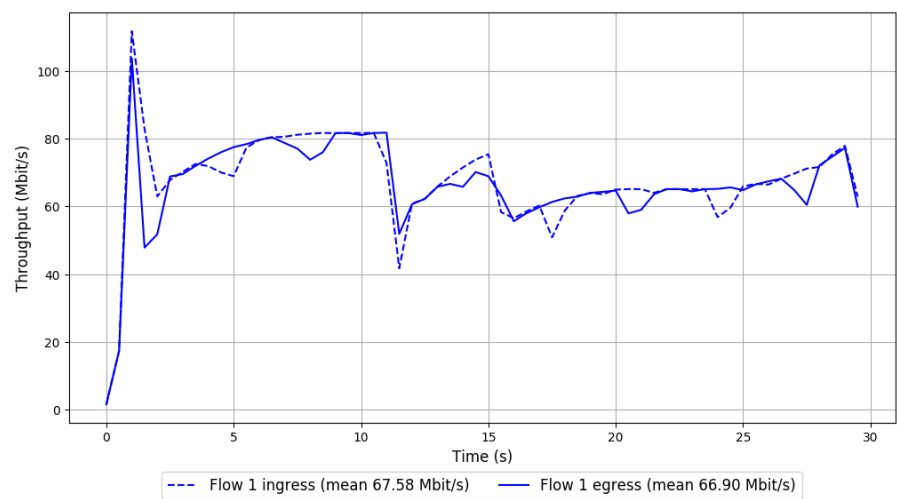
-- Flow 1:

Average throughput: 66.90 Mbit/s

95th percentile per-packet one-way delay: 66.045 ms

Loss rate: 1.43%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-11 15:32:23

End at: 2017-08-11 15:32:53

Below is generated by plot.py at 2017-08-11 19:38:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.91 Mbit/s

95th percentile per-packet one-way delay: 67.392 ms

Loss rate: 0.86%

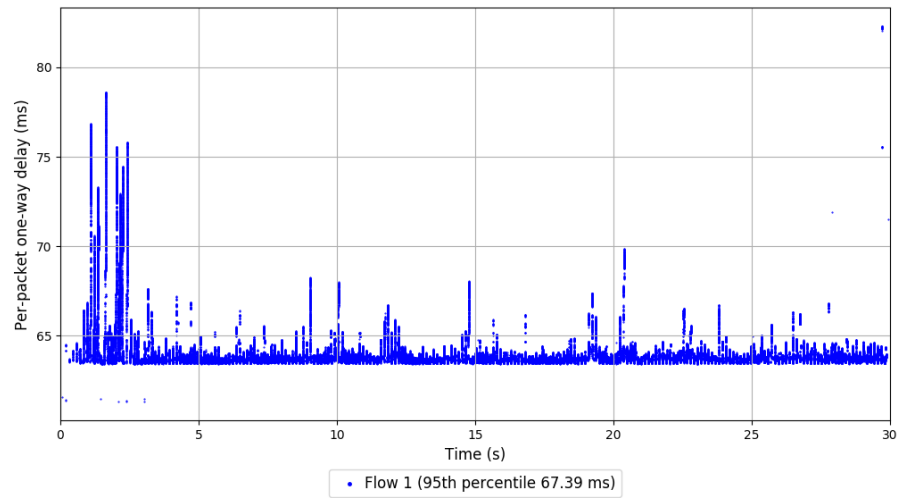
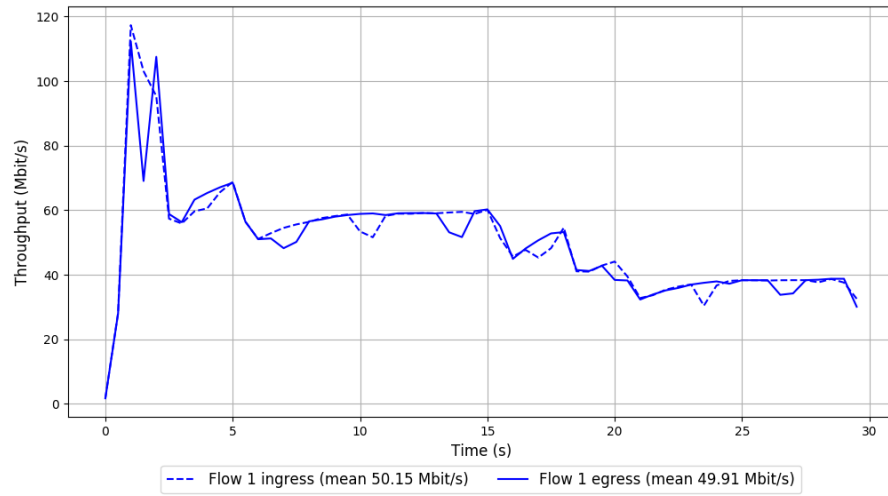
-- Flow 1:

Average throughput: 49.91 Mbit/s

95th percentile per-packet one-way delay: 67.392 ms

Loss rate: 0.86%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-11 15:43:14

End at: 2017-08-11 15:43:44

Below is generated by plot.py at 2017-08-11 19:38:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.02 Mbit/s

95th percentile per-packet one-way delay: 65.500 ms

Loss rate: 1.55%

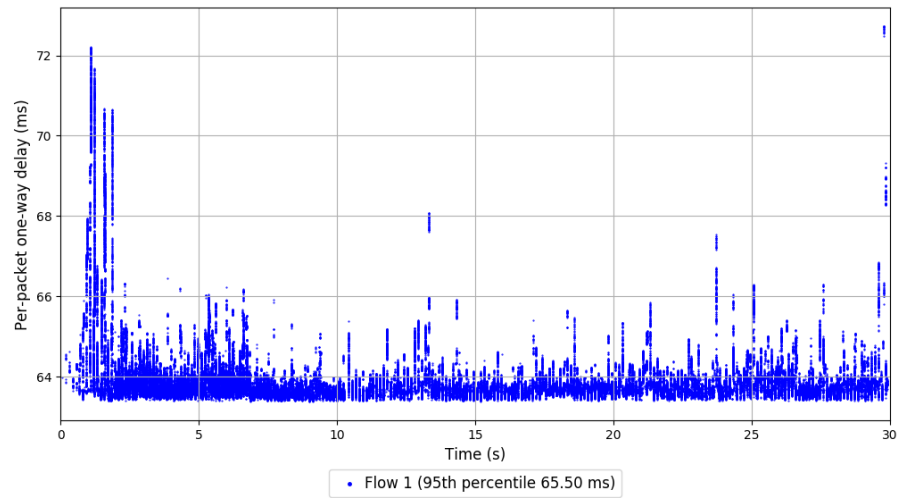
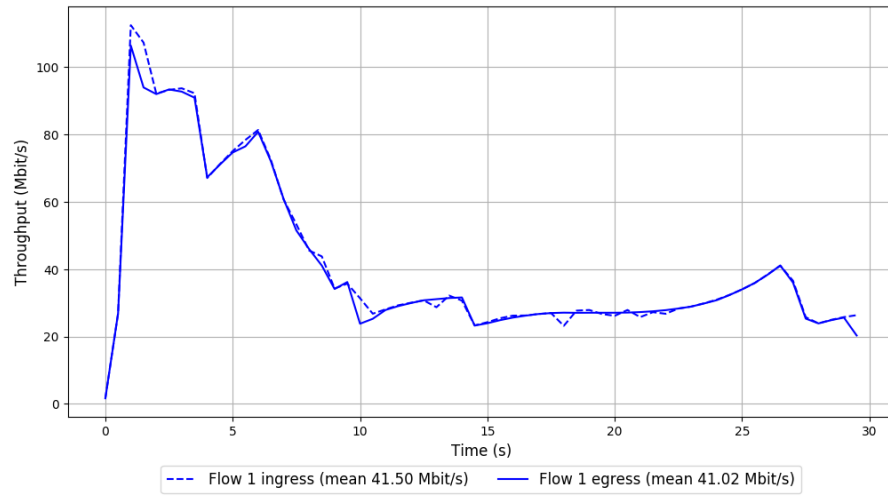
-- Flow 1:

Average throughput: 41.02 Mbit/s

95th percentile per-packet one-way delay: 65.500 ms

Loss rate: 1.55%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-08-11 15:53:55

End at: 2017-08-11 15:54:25

Below is generated by plot.py at 2017-08-11 19:38:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.28 Mbit/s

95th percentile per-packet one-way delay: 66.689 ms

Loss rate: 1.51%

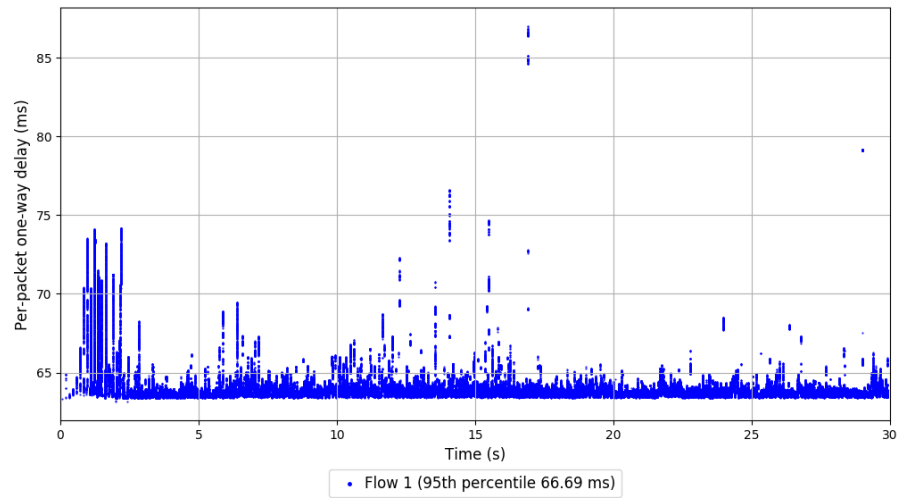
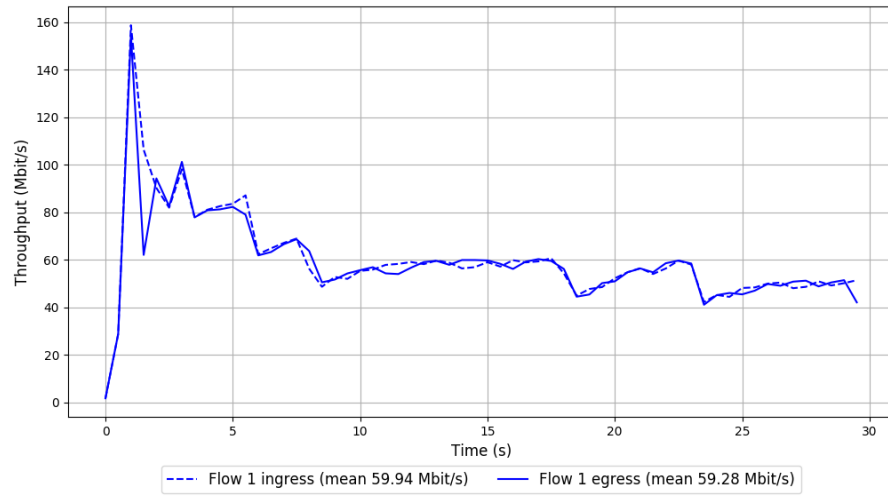
-- Flow 1:

Average throughput: 59.28 Mbit/s

95th percentile per-packet one-way delay: 66.689 ms

Loss rate: 1.51%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-11 16:04:40

End at: 2017-08-11 16:05:10

Below is generated by plot.py at 2017-08-11 19:38:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.01 Mbit/s

95th percentile per-packet one-way delay: 64.616 ms

Loss rate: 0.97%

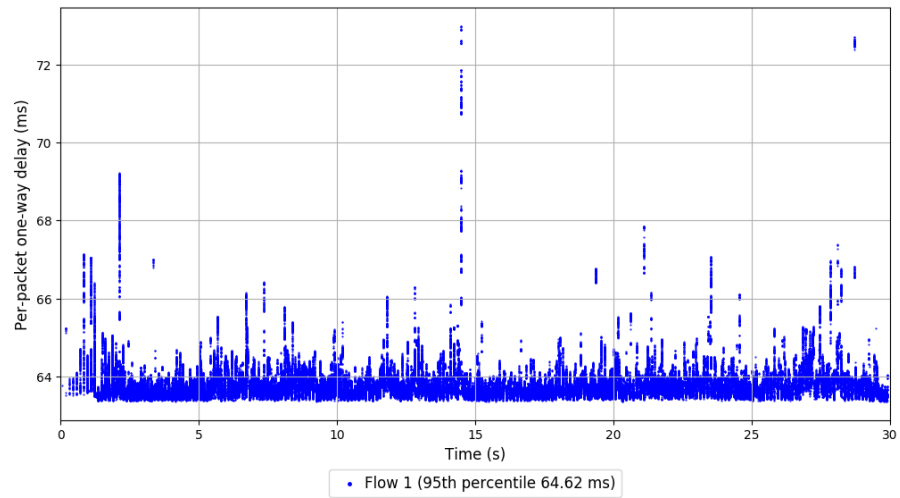
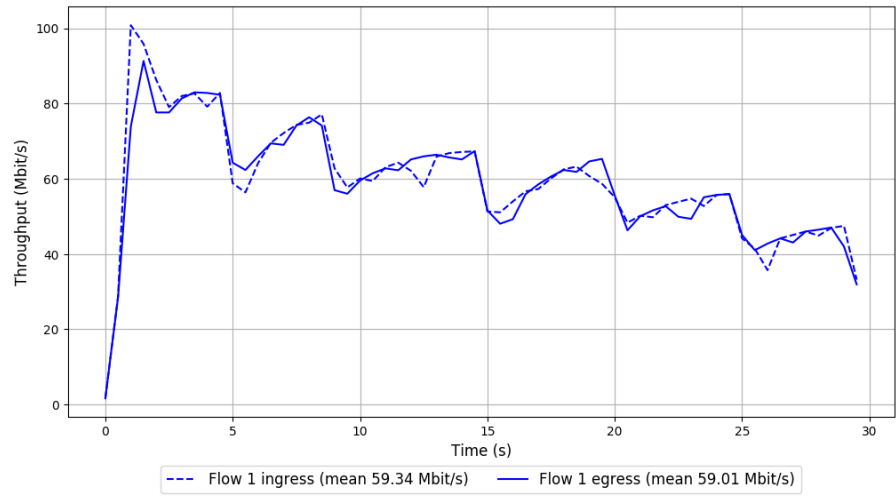
-- Flow 1:

Average throughput: 59.01 Mbit/s

95th percentile per-packet one-way delay: 64.616 ms

Loss rate: 0.97%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-11 16:15:18

End at: 2017-08-11 16:15:48

Below is generated by plot.py at 2017-08-11 19:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.21 Mbit/s

95th percentile per-packet one-way delay: 64.149 ms

Loss rate: 1.25%

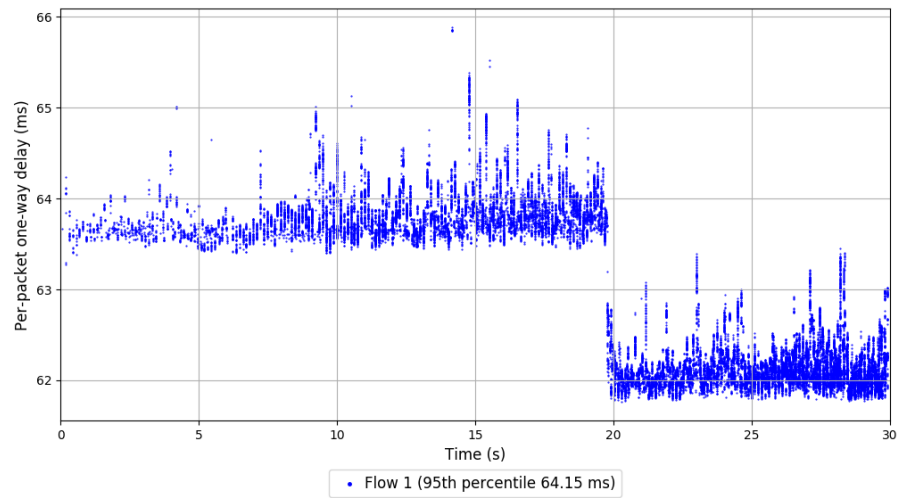
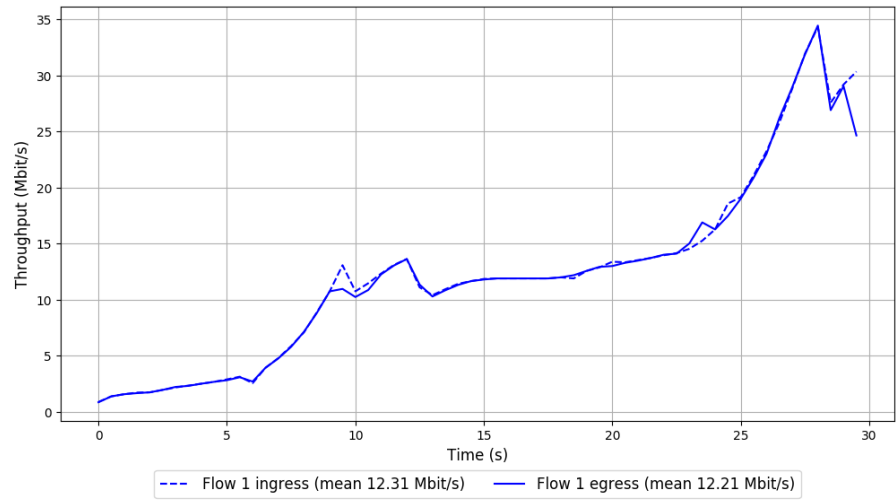
-- Flow 1:

Average throughput: 12.21 Mbit/s

95th percentile per-packet one-way delay: 64.149 ms

Loss rate: 1.25%

Run 6: Report of TCP Cubic — Data Link

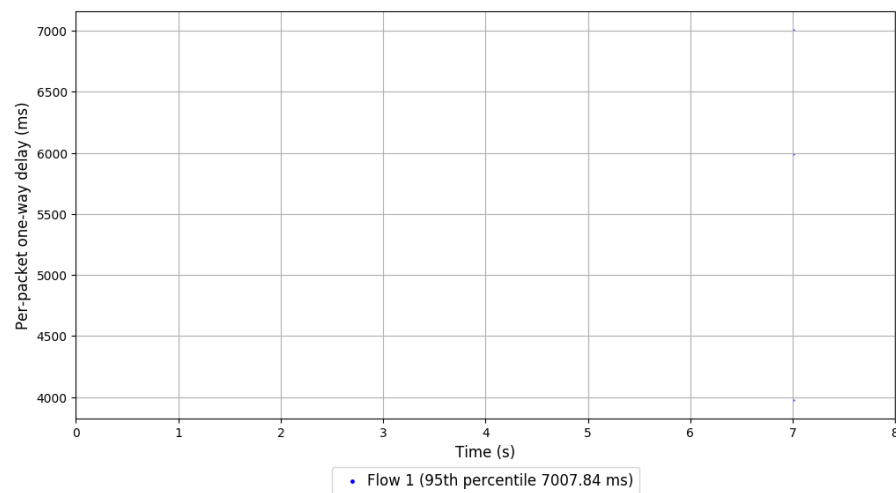
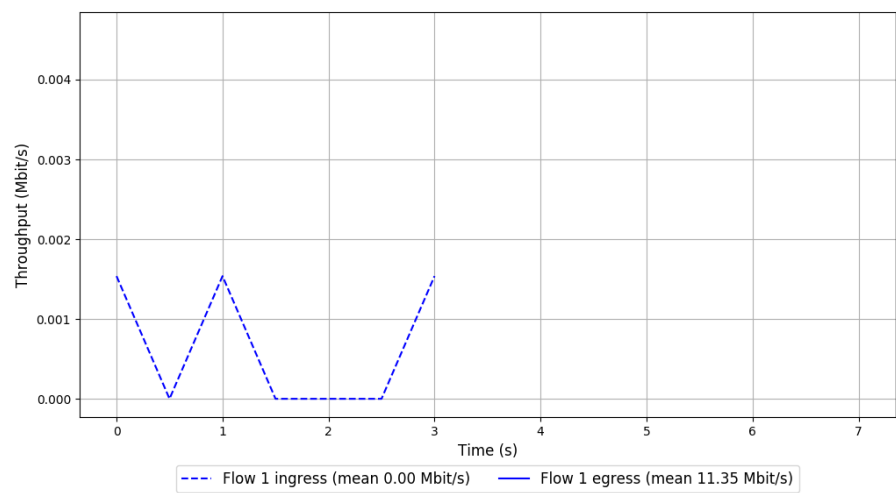


Run 7: Statistics of TCP Cubic

Start at: 2017-08-11 16:25:56

End at: 2017-08-11 16:26:26

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-11 16:36:35

End at: 2017-08-11 16:37:05

Below is generated by plot.py at 2017-08-11 19:38:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.71 Mbit/s

95th percentile per-packet one-way delay: 64.892 ms

Loss rate: 1.10%

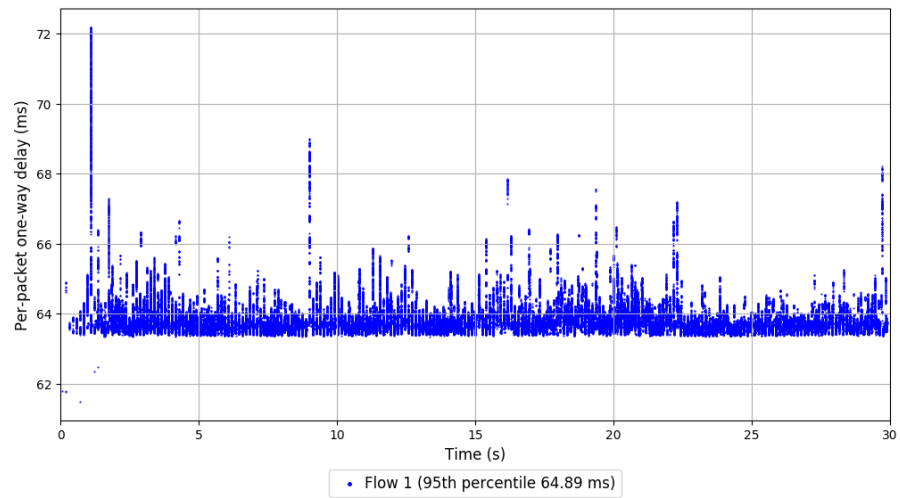
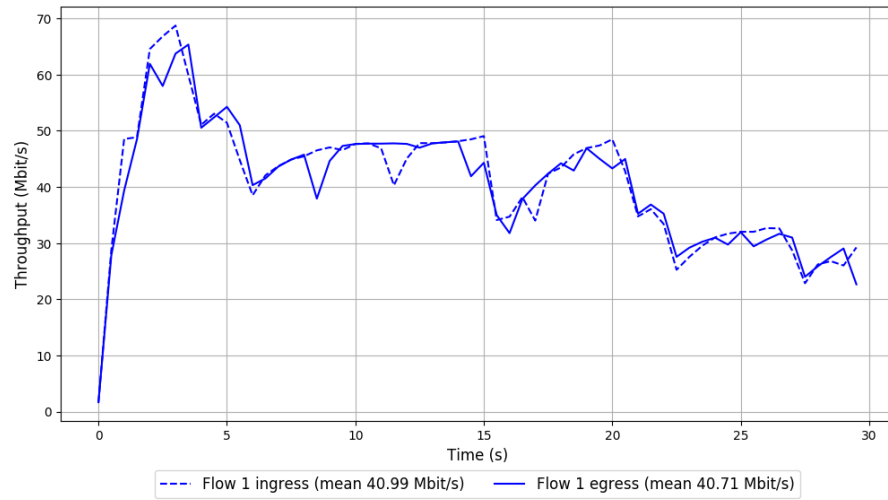
-- Flow 1:

Average throughput: 40.71 Mbit/s

95th percentile per-packet one-way delay: 64.892 ms

Loss rate: 1.10%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-11 16:47:07

End at: 2017-08-11 16:47:37

Below is generated by plot.py at 2017-08-11 19:38:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.79 Mbit/s

95th percentile per-packet one-way delay: 63.661 ms

Loss rate: 0.78%

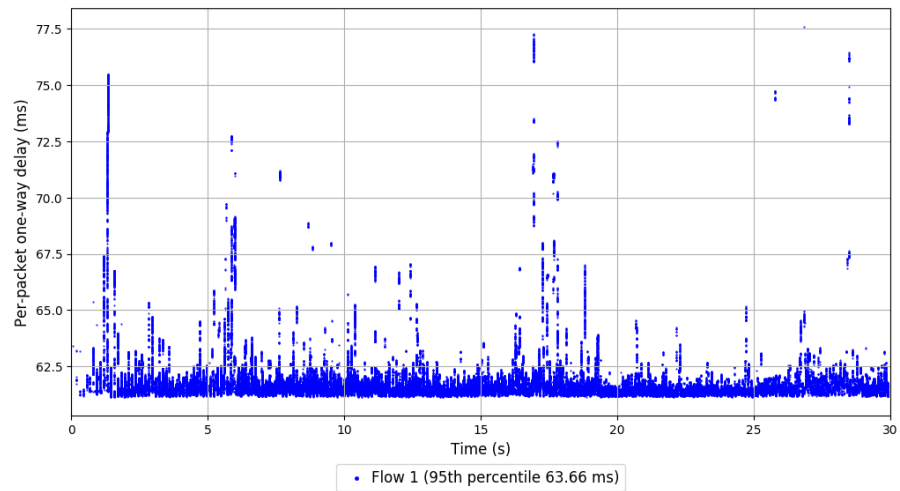
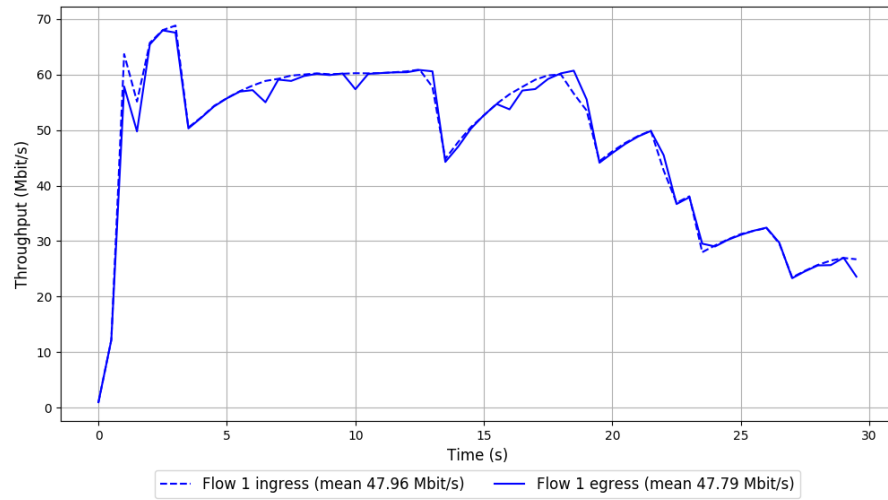
-- Flow 1:

Average throughput: 47.79 Mbit/s

95th percentile per-packet one-way delay: 63.661 ms

Loss rate: 0.78%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-11 16:57:34

End at: 2017-08-11 16:58:04

Below is generated by plot.py at 2017-08-11 19:38:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.21 Mbit/s

95th percentile per-packet one-way delay: 64.157 ms

Loss rate: 2.56%

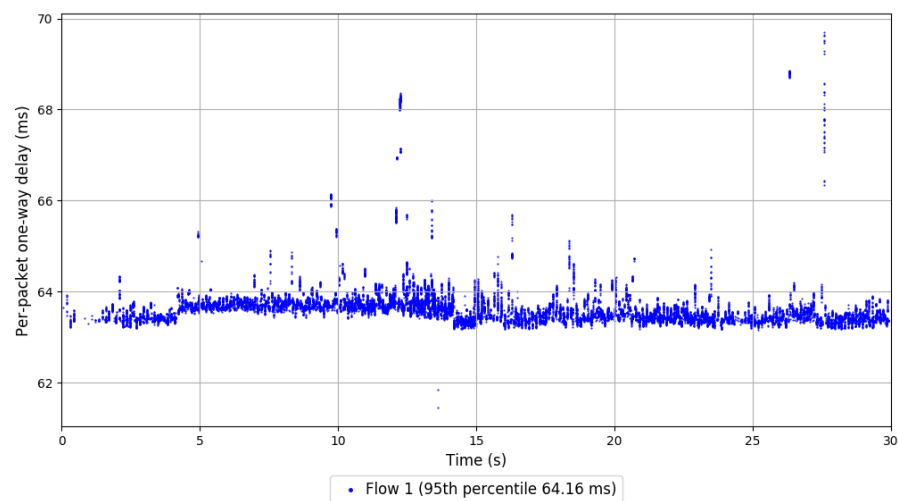
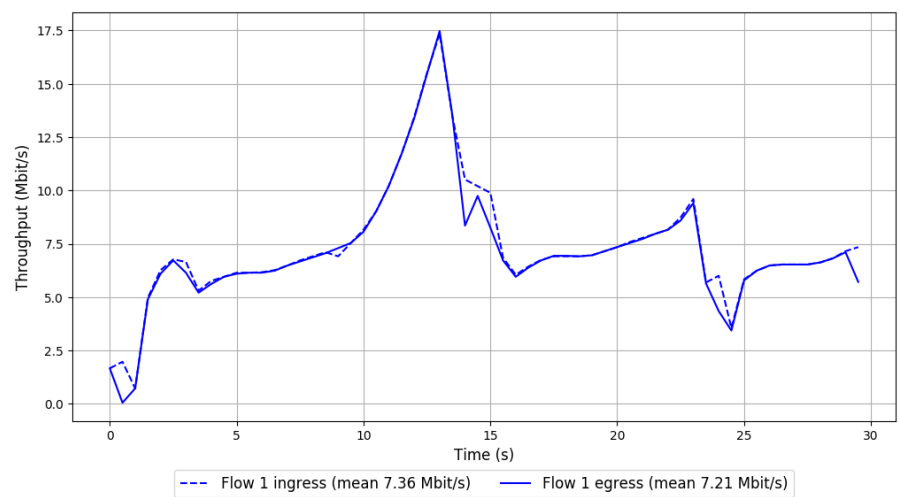
-- Flow 1:

Average throughput: 7.21 Mbit/s

95th percentile per-packet one-way delay: 64.157 ms

Loss rate: 2.56%

Run 10: Report of TCP Cubic — Data Link

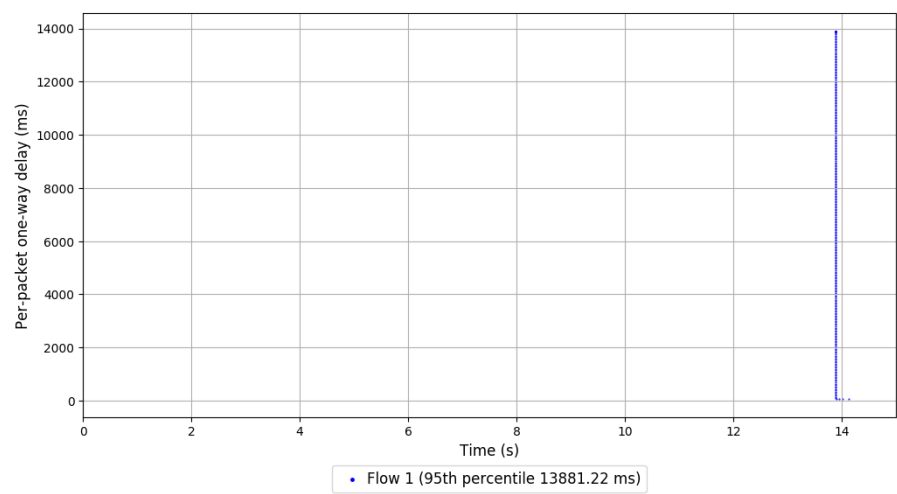
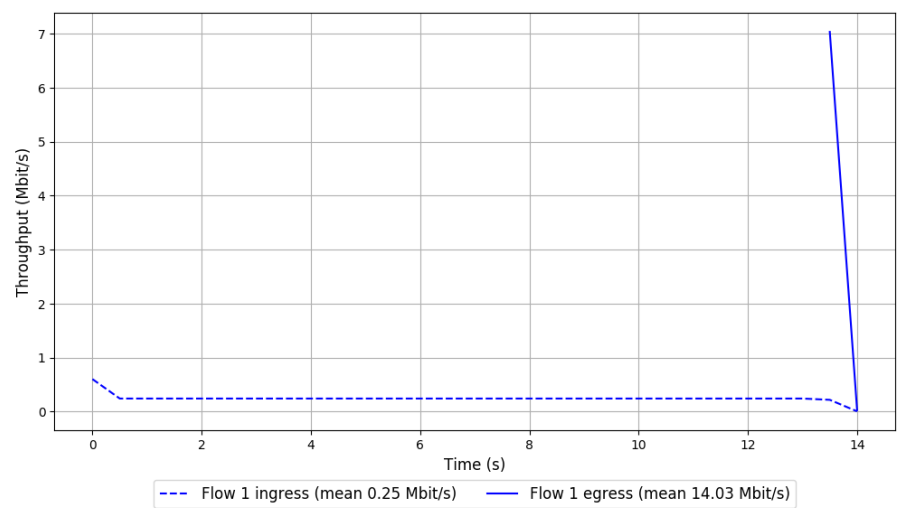


Run 1: Statistics of KohoCC

Start at: 2017-08-11 15:28:08

End at: 2017-08-11 15:28:38

Run 1: Report of KohoCC — Data Link



Run 2: Statistics of KohoCC

Start at: 2017-08-11 15:38:52

End at: 2017-08-11 15:39:22

Below is generated by plot.py at 2017-08-11 19:38:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.37 Mbit/s

95th percentile per-packet one-way delay: 64.636 ms

Loss rate: 0.45%

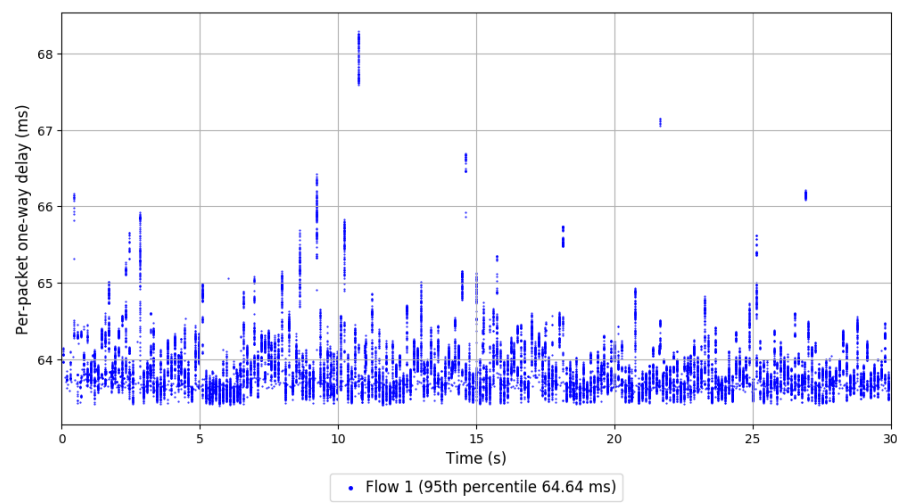
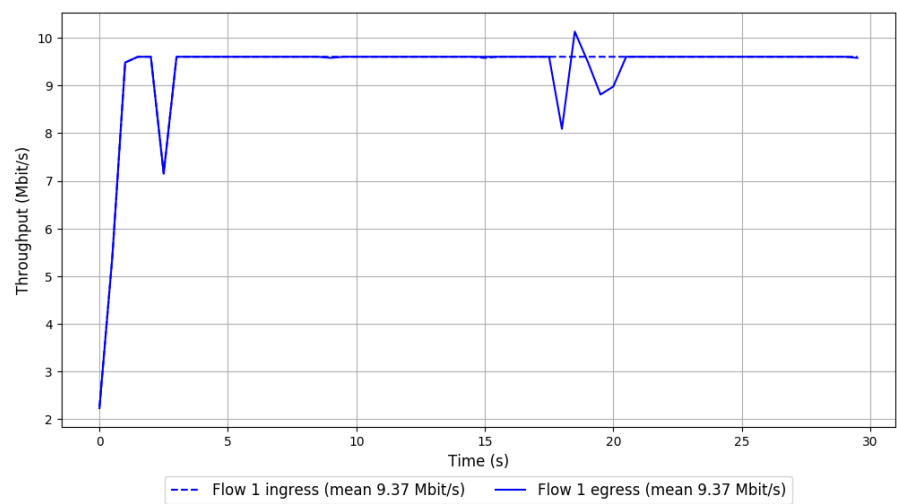
-- Flow 1:

Average throughput: 9.37 Mbit/s

95th percentile per-packet one-way delay: 64.636 ms

Loss rate: 0.45%

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-11 15:49:35

End at: 2017-08-11 15:50:06

Below is generated by plot.py at 2017-08-11 19:38:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.21 Mbit/s

95th percentile per-packet one-way delay: 64.654 ms

Loss rate: 0.54%

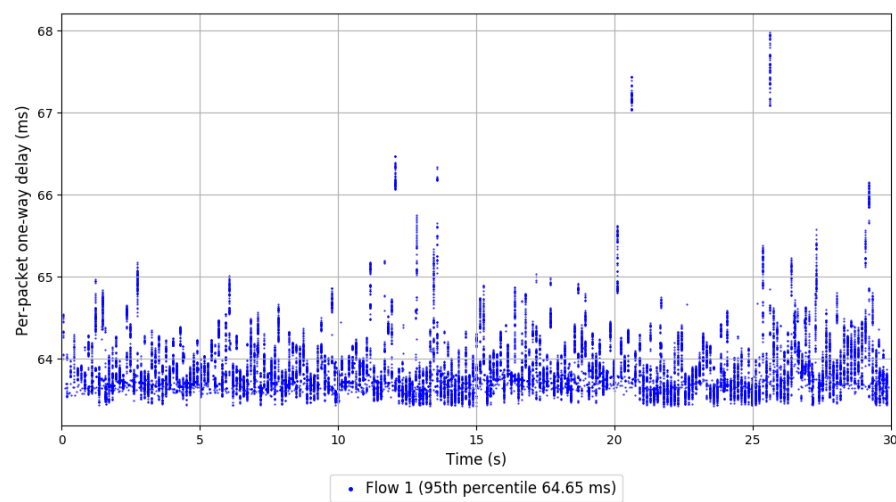
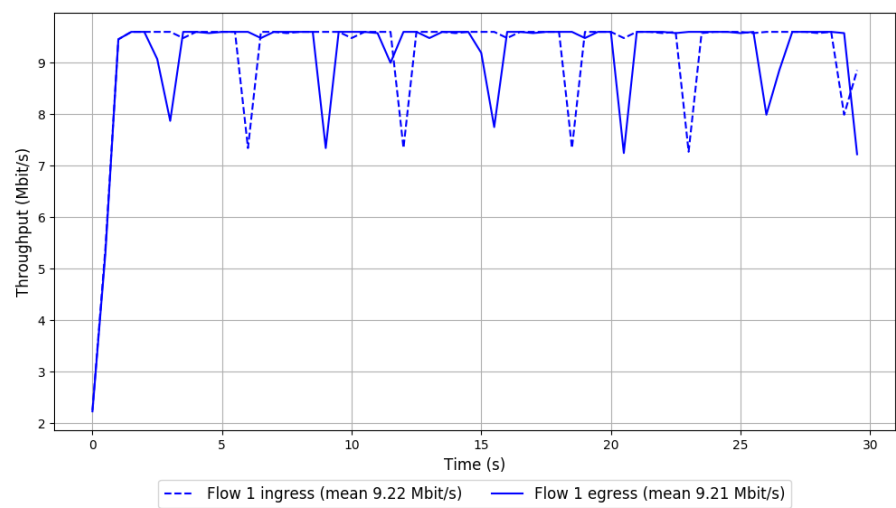
-- Flow 1:

Average throughput: 9.21 Mbit/s

95th percentile per-packet one-way delay: 64.654 ms

Loss rate: 0.54%

Run 3: Report of KohoCC — Data Link

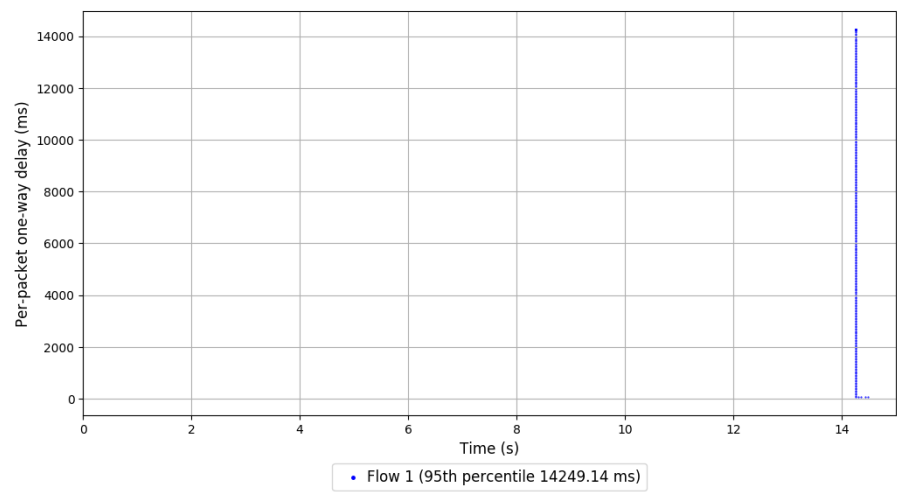
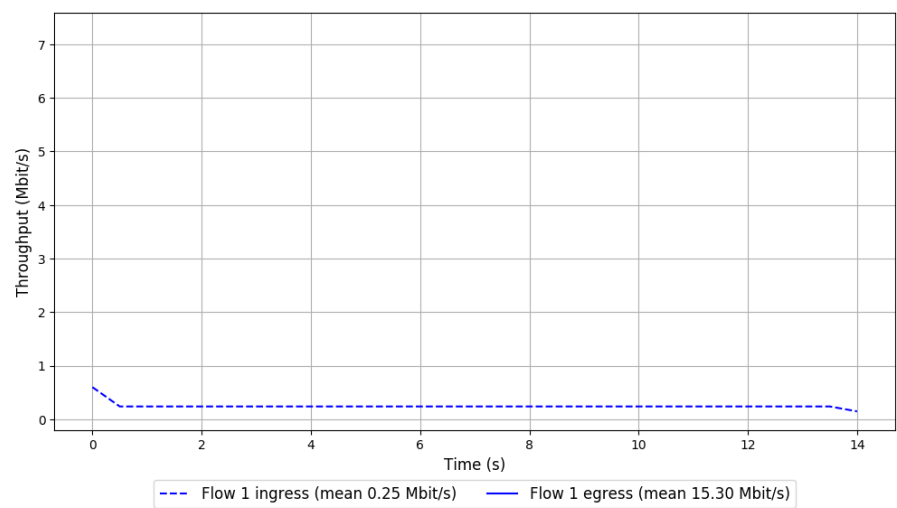


Run 4: Statistics of KohoCC

Start at: 2017-08-11 16:00:19

End at: 2017-08-11 16:00:49

Run 4: Report of KohoCC — Data Link

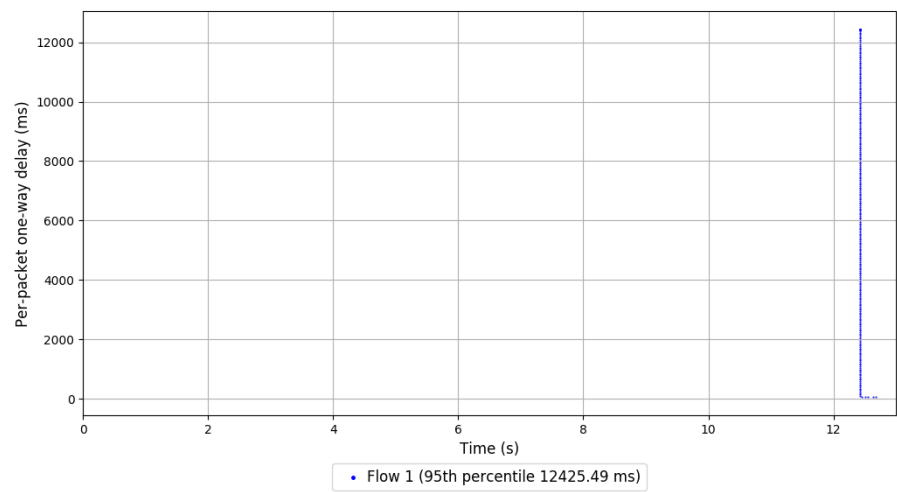
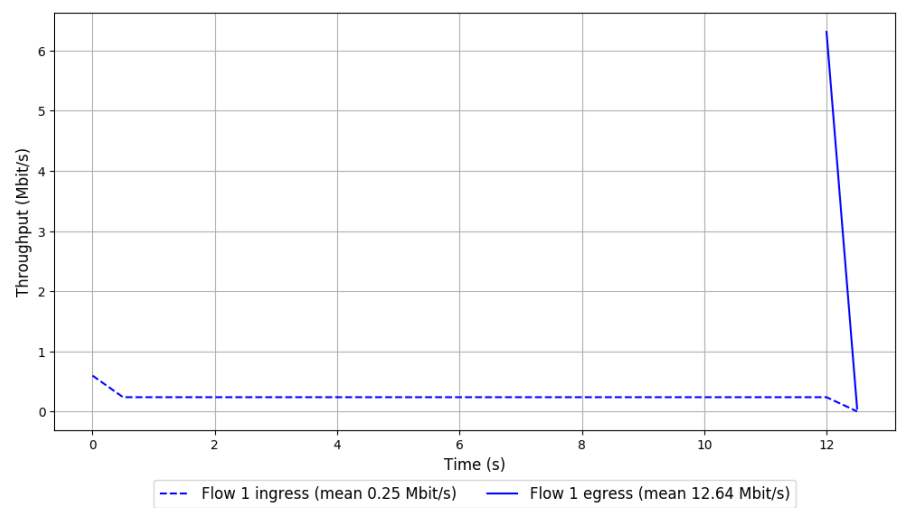


Run 5: Statistics of KohoCC

Start at: 2017-08-11 16:11:06

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

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-11 16:21:38

End at: 2017-08-11 16:22:08

Below is generated by plot.py at 2017-08-11 19:38:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.83 Mbit/s

95th percentile per-packet one-way delay: 65.258 ms

Loss rate: 21.32%

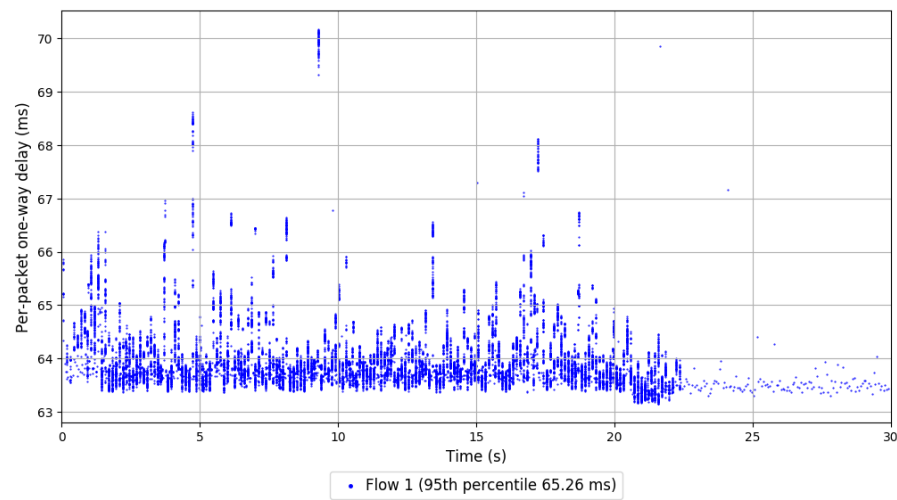
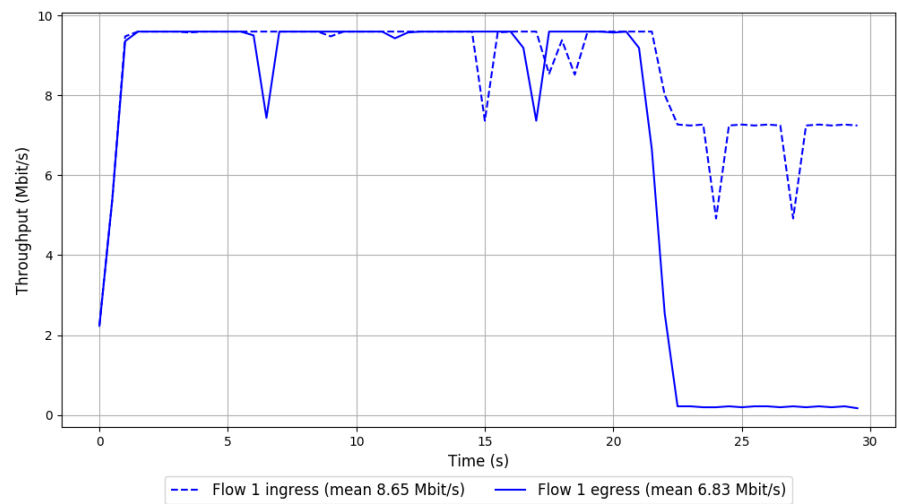
-- Flow 1:

Average throughput: 6.83 Mbit/s

95th percentile per-packet one-way delay: 65.258 ms

Loss rate: 21.32%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-11 16:32:16

End at: 2017-08-11 16:32:46

Below is generated by plot.py at 2017-08-11 19:39:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.24 Mbit/s

95th percentile per-packet one-way delay: 64.307 ms

Loss rate: 0.61%

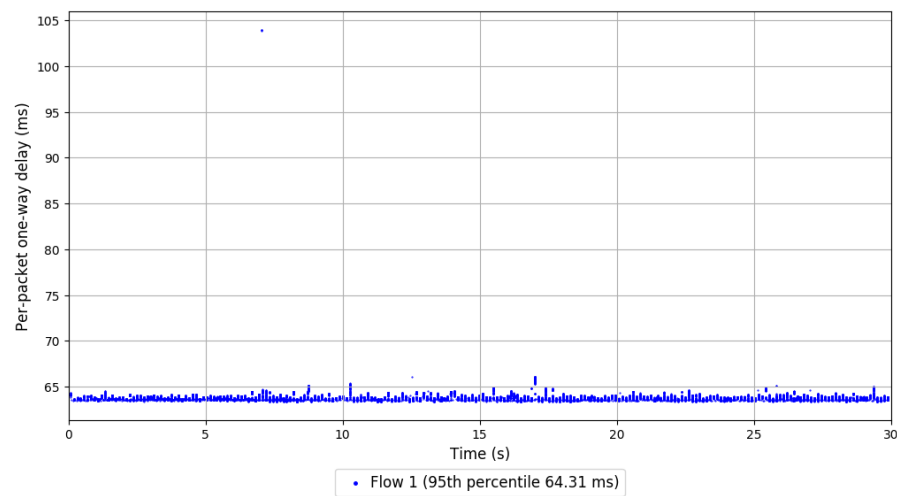
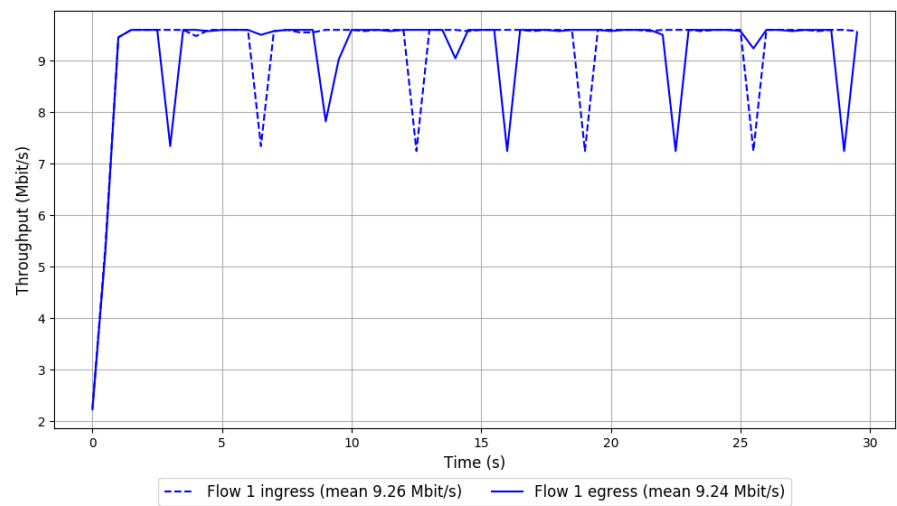
-- Flow 1:

Average throughput: 9.24 Mbit/s

95th percentile per-packet one-way delay: 64.307 ms

Loss rate: 0.61%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-11 16:42:54

End at: 2017-08-11 16:43:24

Below is generated by plot.py at 2017-08-11 19:39:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 65.170 ms

Loss rate: 52.78%

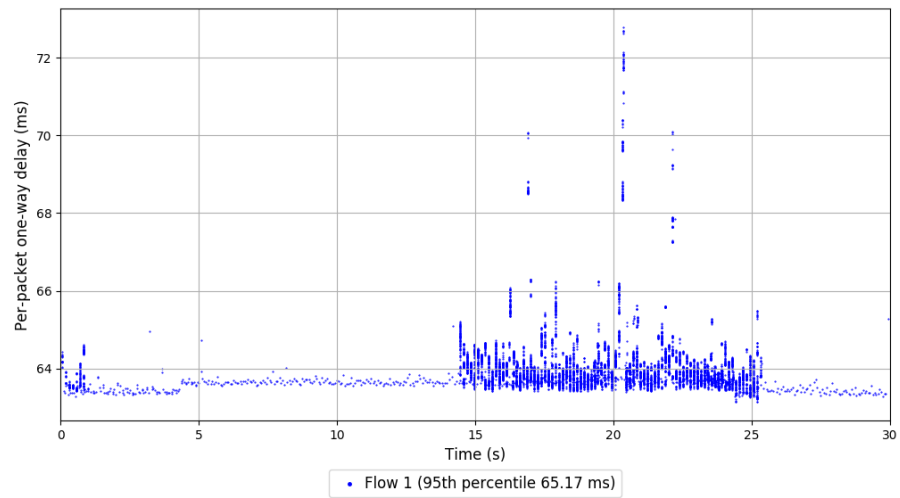
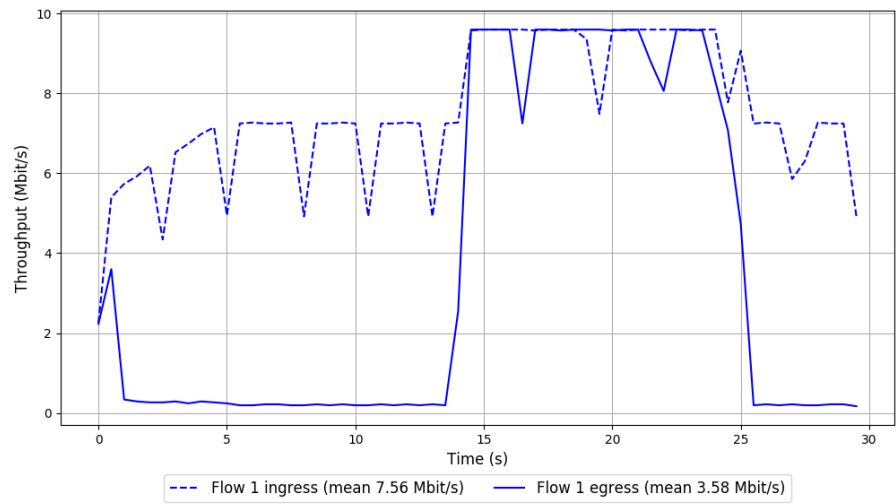
-- Flow 1:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 65.170 ms

Loss rate: 52.78%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-11 16:53:34

End at: 2017-08-11 16:54:04

Below is generated by plot.py at 2017-08-11 19:39:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 64.444 ms

Loss rate: 13.93%

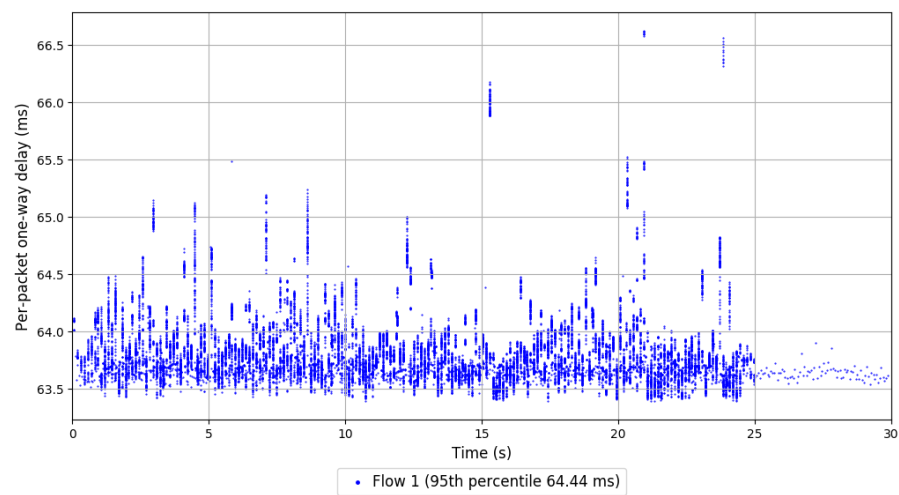
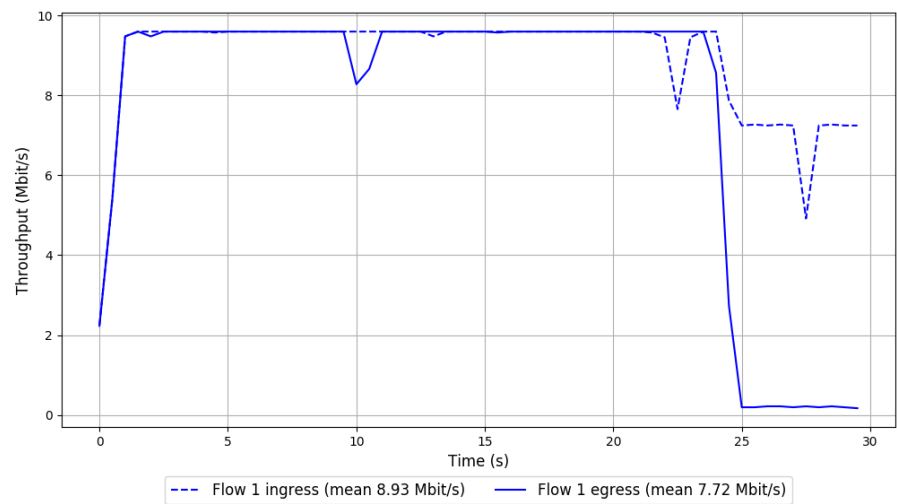
-- Flow 1:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 64.444 ms

Loss rate: 13.93%

Run 9: Report of KohoCC — Data Link



Run 10: Statistics of KohoCC

Start at: 2017-08-11 17:04:01

End at: 2017-08-11 17:04:31

Below is generated by plot.py at 2017-08-11 19:39:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.21 Mbit/s

95th percentile per-packet one-way delay: 64.454 ms

Loss rate: 0.49%

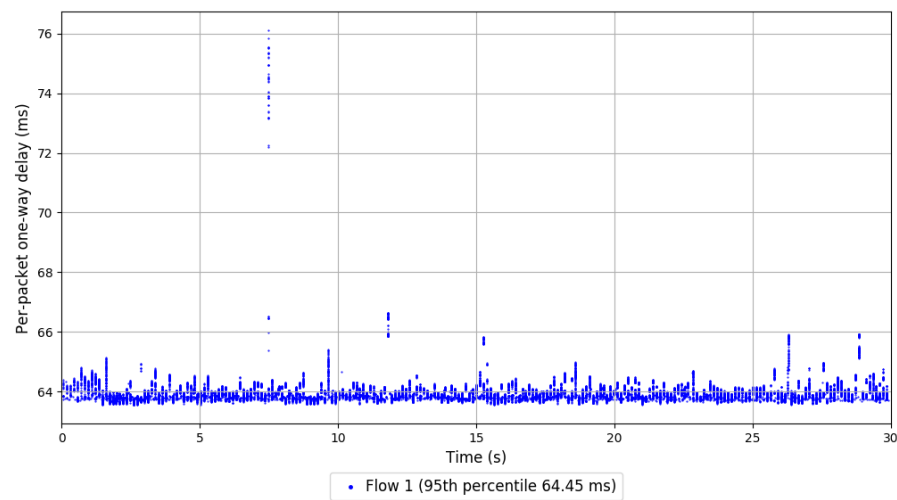
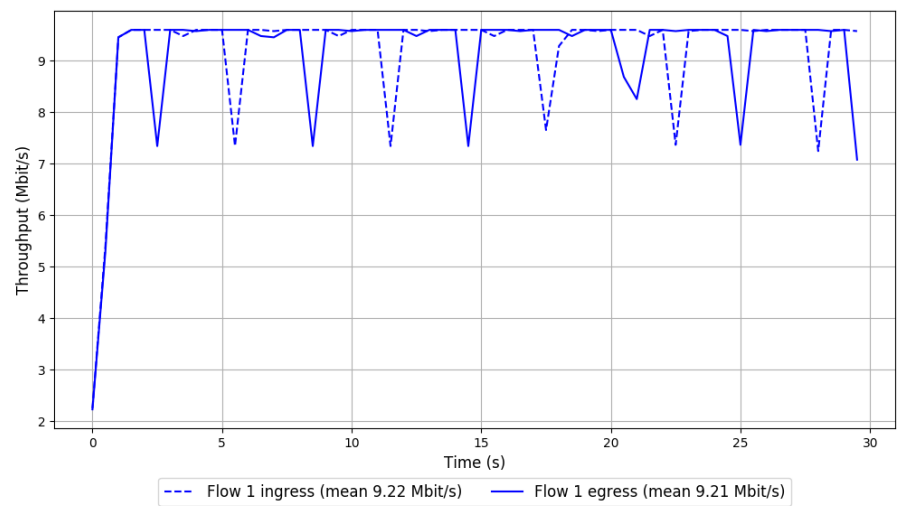
-- Flow 1:

Average throughput: 9.21 Mbit/s

95th percentile per-packet one-way delay: 64.454 ms

Loss rate: 0.49%

Run 10: Report of KohoCC — Data Link

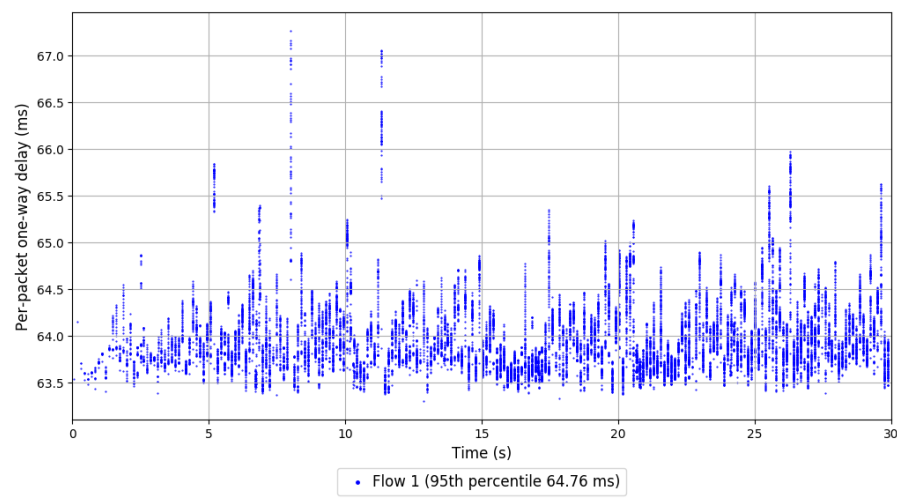
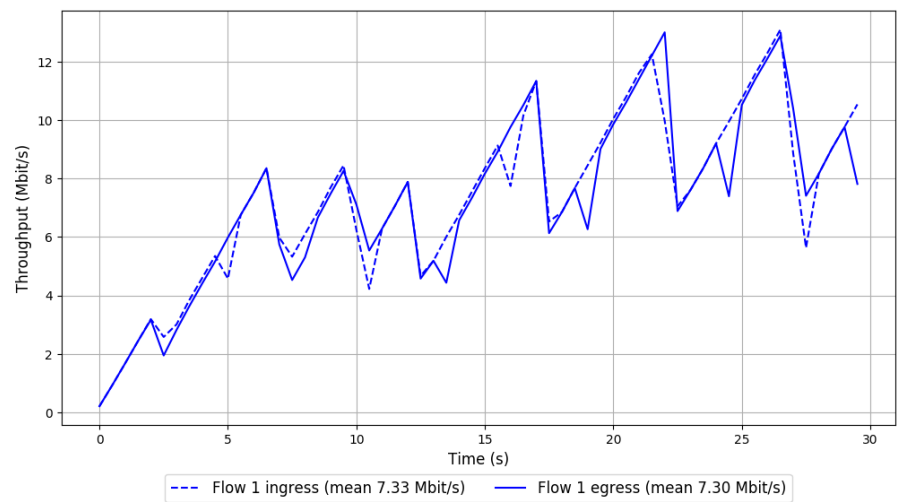


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-11 15:22:24
End at: 2017-08-11 15:22:54

# Below is generated by plot.py at 2017-08-11 19:39:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.30 Mbit/s
95th percentile per-packet one-way delay: 64.758 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 7.30 Mbit/s
95th percentile per-packet one-way delay: 64.758 ms
Loss rate: 0.84%
```

Run 1: Report of LEDBAT — Data Link

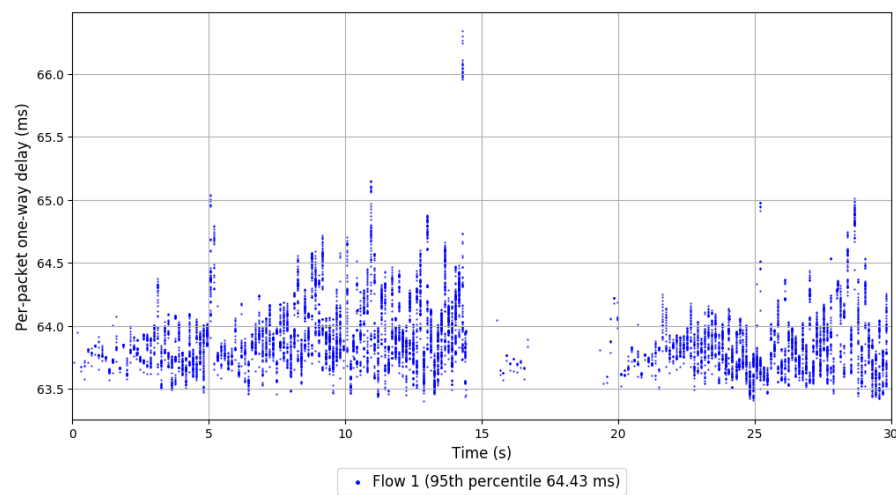
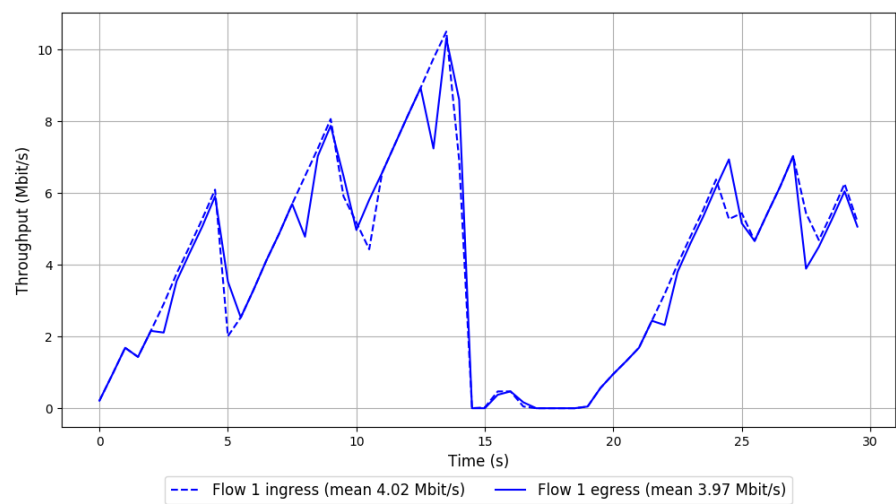


```
Run 2: Statistics of LEDBAT

Start at: 2017-08-11 15:33:04
End at: 2017-08-11 15:33:34

# Below is generated by plot.py at 2017-08-11 19:39:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.97 Mbit/s
95th percentile per-packet one-way delay: 64.431 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 3.97 Mbit/s
95th percentile per-packet one-way delay: 64.431 ms
Loss rate: 1.66%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-11 15:43:54

End at: 2017-08-11 15:44:24

Below is generated by plot.py at 2017-08-11 19:39:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.84 Mbit/s

95th percentile per-packet one-way delay: 64.563 ms

Loss rate: 1.06%

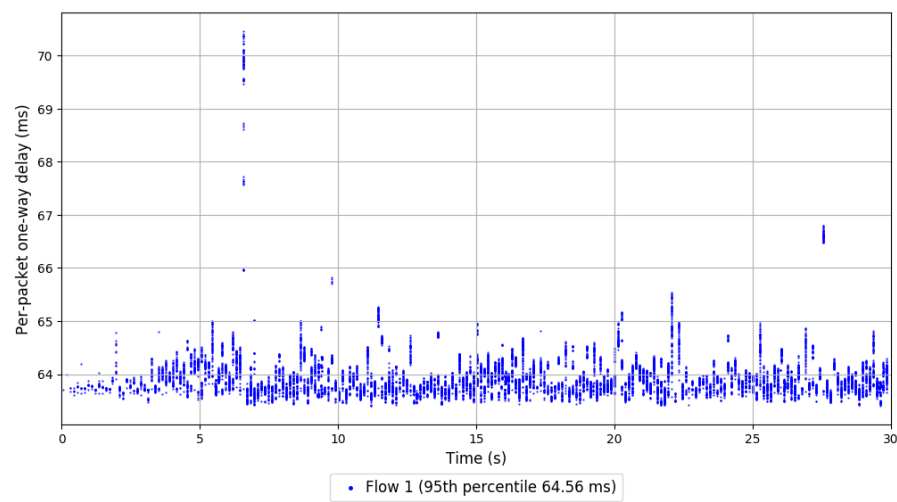
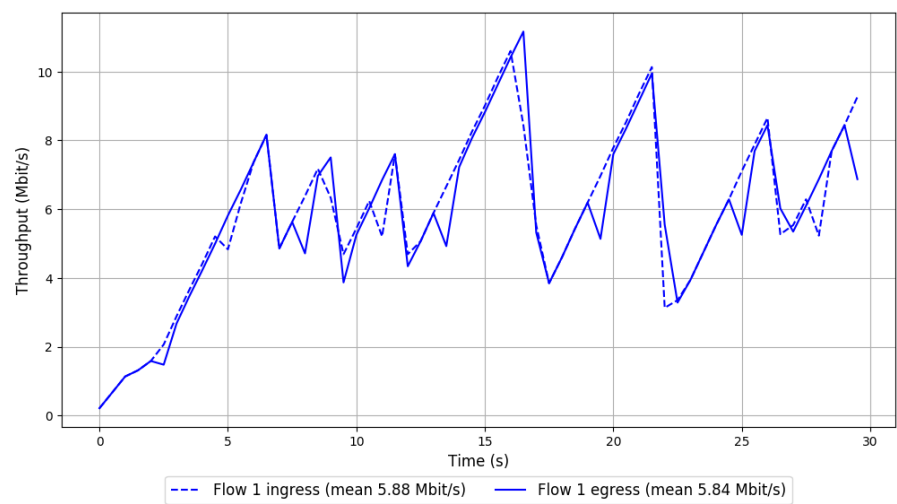
-- Flow 1:

Average throughput: 5.84 Mbit/s

95th percentile per-packet one-way delay: 64.563 ms

Loss rate: 1.06%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-08-11 15:54:36

End at: 2017-08-11 15:55:06

Below is generated by plot.py at 2017-08-11 19:39:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 64.397 ms

Loss rate: 1.46%

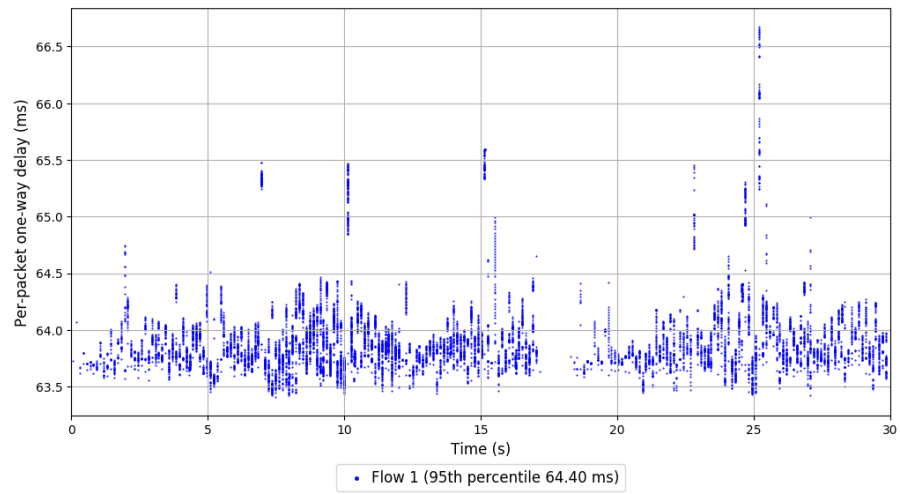
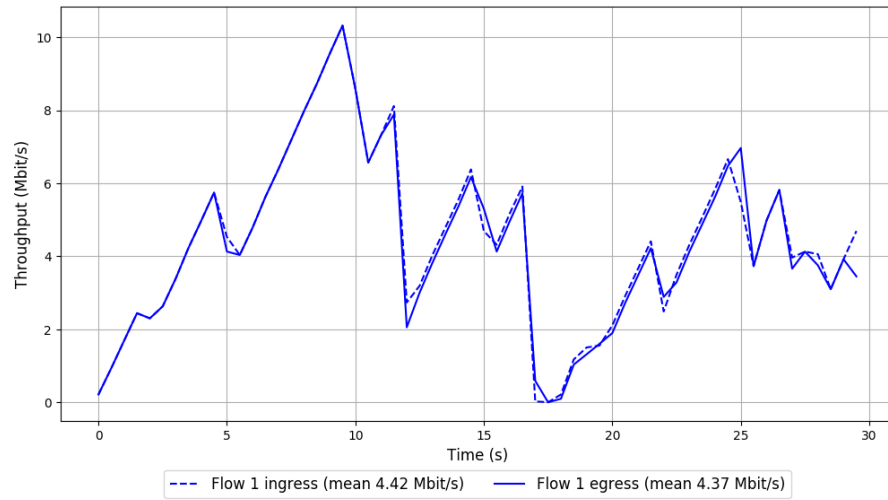
-- Flow 1:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 64.397 ms

Loss rate: 1.46%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-08-11 16:05:21

End at: 2017-08-11 16:05:51

Below is generated by plot.py at 2017-08-11 19:39:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 64.520 ms

Loss rate: 1.13%

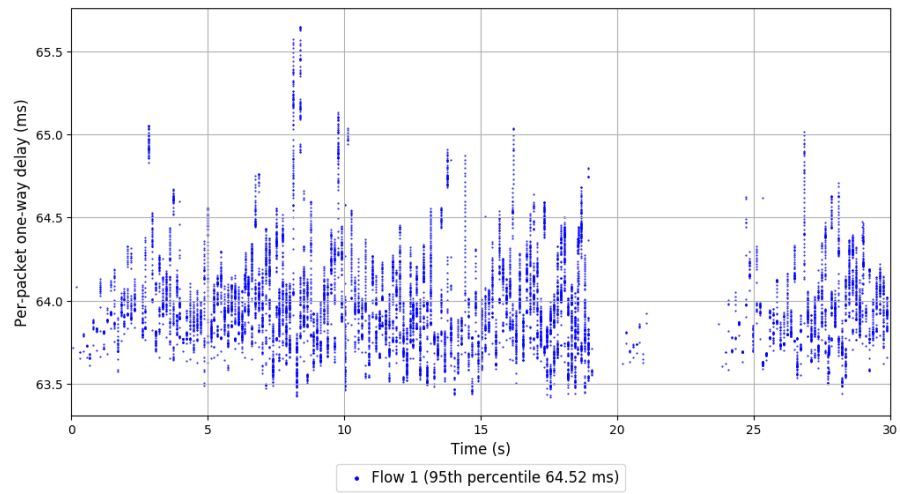
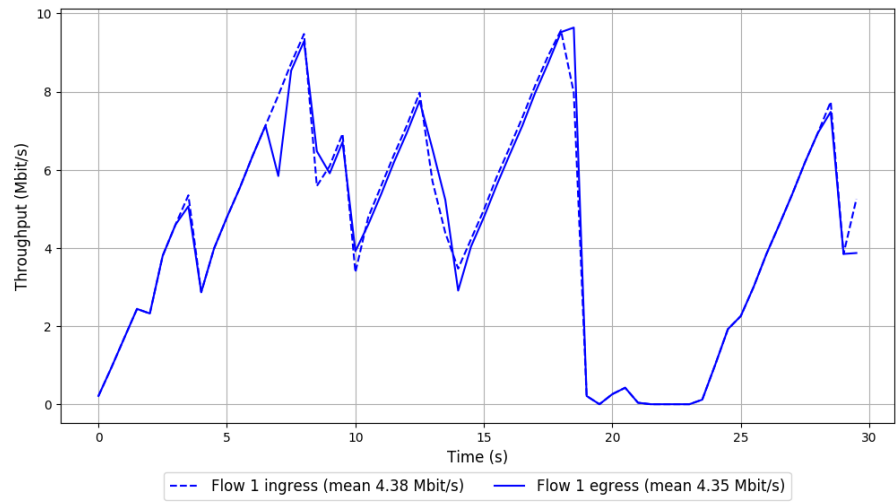
-- Flow 1:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 64.520 ms

Loss rate: 1.13%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-11 16:15:57

End at: 2017-08-11 16:16:27

Below is generated by plot.py at 2017-08-11 19:39:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 64.209 ms

Loss rate: 5.38%

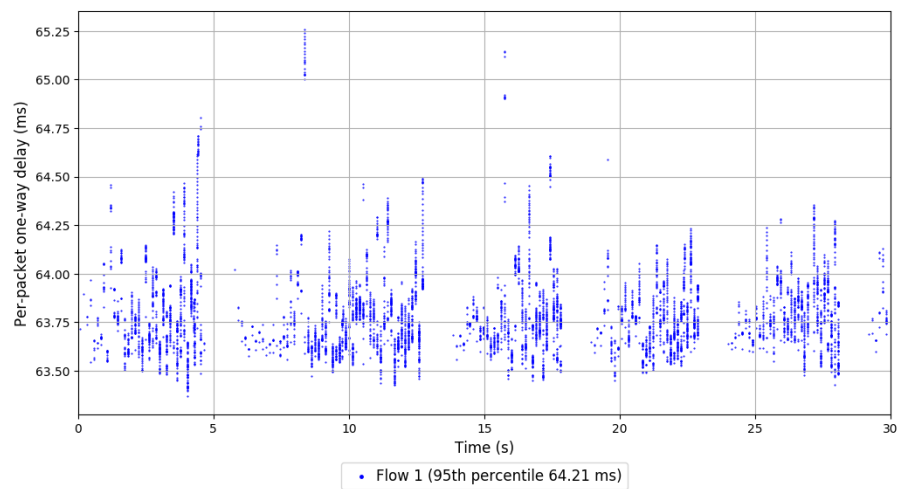
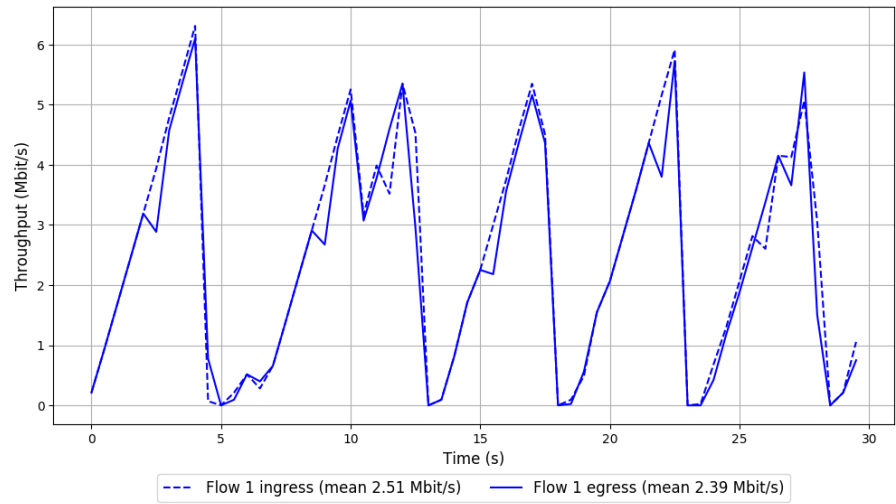
-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 64.209 ms

Loss rate: 5.38%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-11 16:26:33

End at: 2017-08-11 16:27:03

Below is generated by plot.py at 2017-08-11 19:39:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 64.487 ms

Loss rate: 2.12%

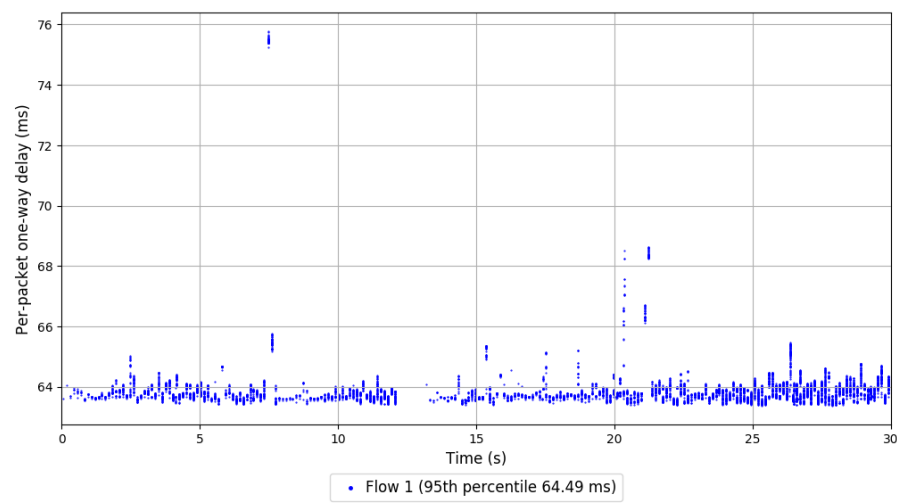
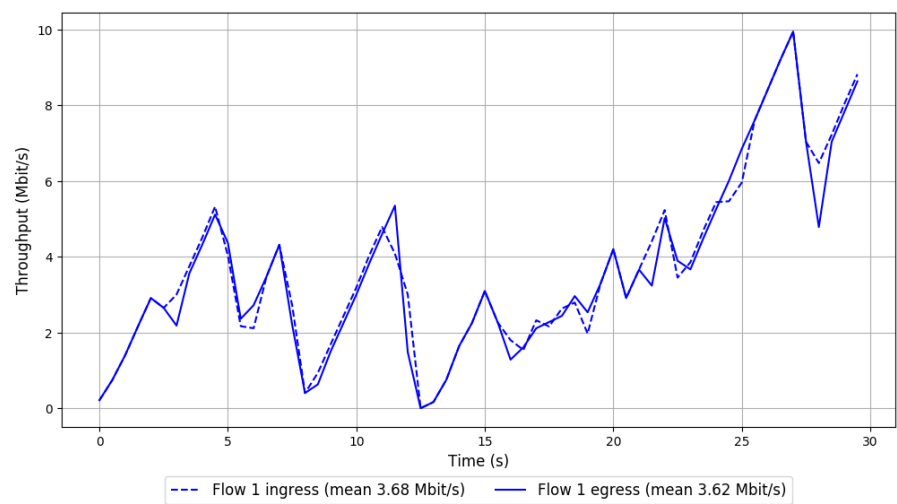
-- Flow 1:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 64.487 ms

Loss rate: 2.12%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

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

End at: 2017-08-11 16:37:46

Below is generated by plot.py at 2017-08-11 19:39:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.49 Mbit/s

95th percentile per-packet one-way delay: 64.937 ms

Loss rate: 0.98%

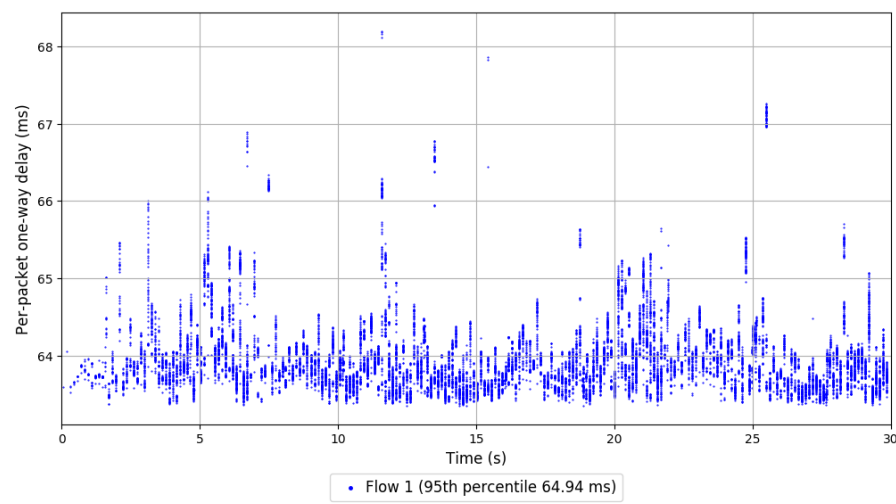
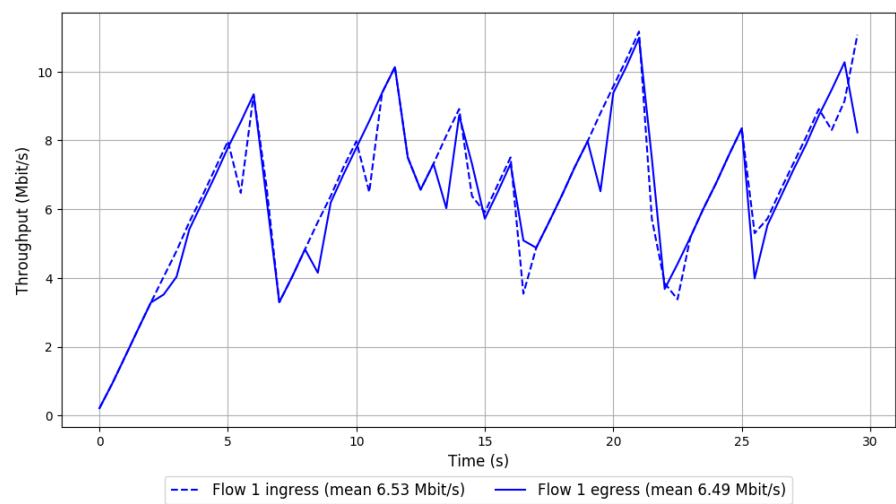
-- Flow 1:

Average throughput: 6.49 Mbit/s

95th percentile per-packet one-way delay: 64.937 ms

Loss rate: 0.98%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-11 16:47:48

End at: 2017-08-11 16:48:18

Below is generated by plot.py at 2017-08-11 19:39:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.72 Mbit/s

95th percentile per-packet one-way delay: 63.278 ms

Loss rate: 0.80%

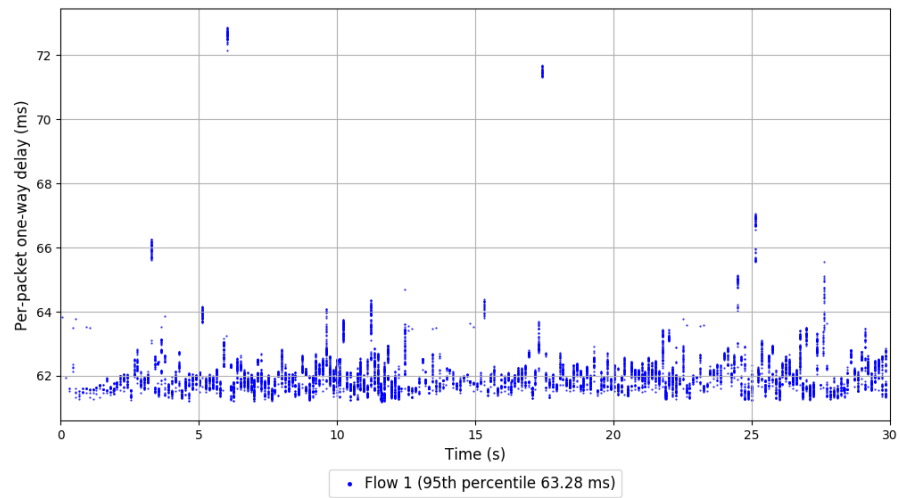
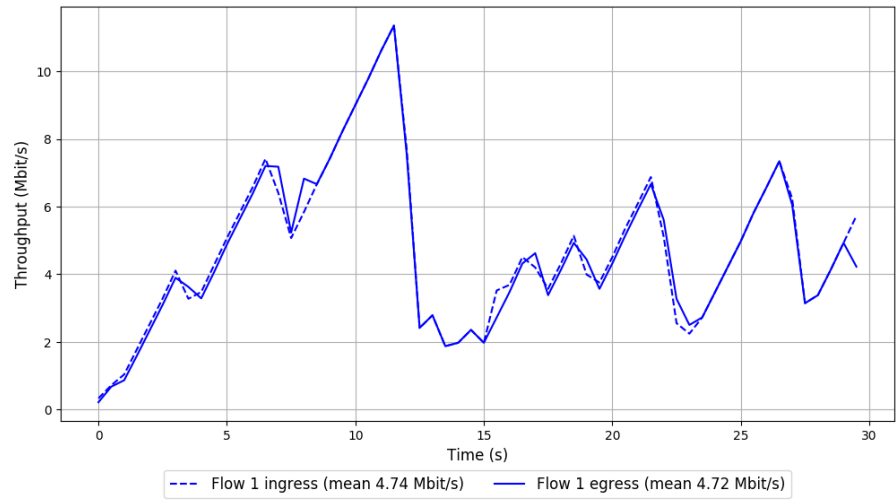
-- Flow 1:

Average throughput: 4.72 Mbit/s

95th percentile per-packet one-way delay: 63.278 ms

Loss rate: 0.80%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-08-11 16:58:12

End at: 2017-08-11 16:58:42

Below is generated by plot.py at 2017-08-11 19:39:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 63.984 ms

Loss rate: 5.34%

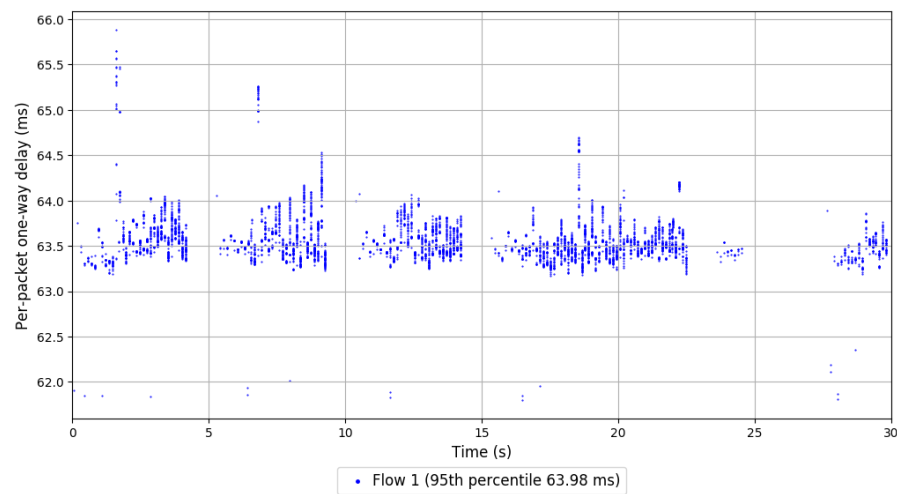
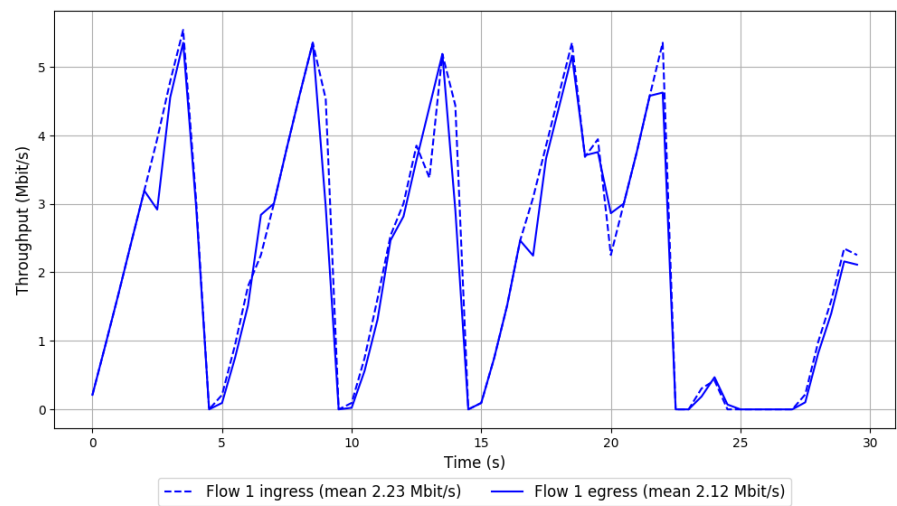
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 63.984 ms

Loss rate: 5.34%

Run 10: Report of LEDBAT — Data Link

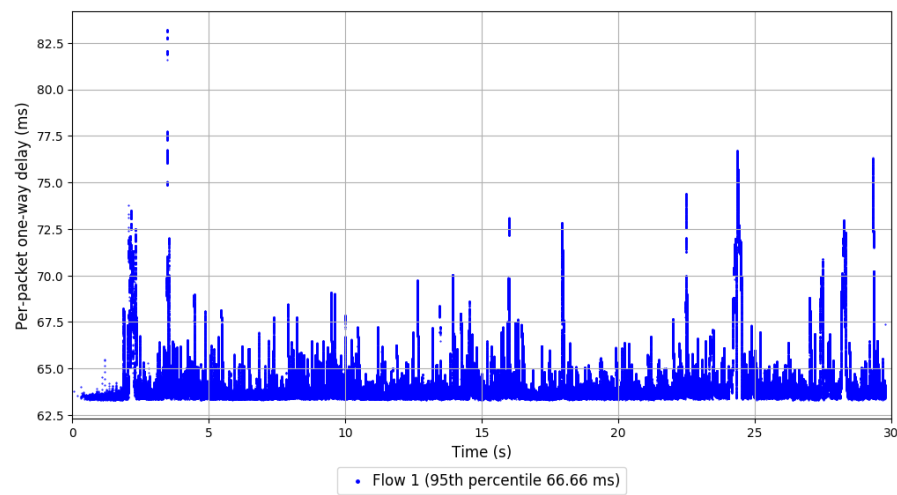
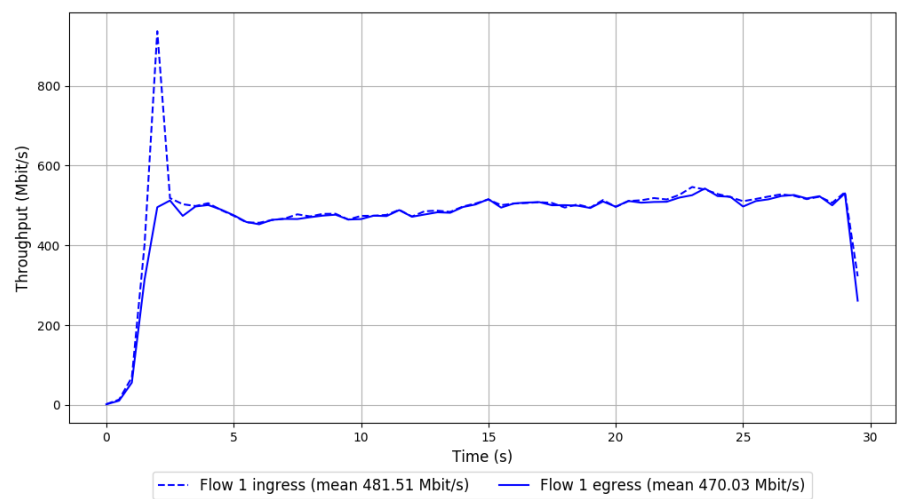


```
Run 1: Statistics of PCC

Start at: 2017-08-11 15:30:38
End at: 2017-08-11 15:31:08

# Below is generated by plot.py at 2017-08-11 19:40:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 470.03 Mbit/s
95th percentile per-packet one-way delay: 66.664 ms
Loss rate: 2.76%
-- Flow 1:
Average throughput: 470.03 Mbit/s
95th percentile per-packet one-way delay: 66.664 ms
Loss rate: 2.76%
```


Run 1: Report of PCC — Data Link

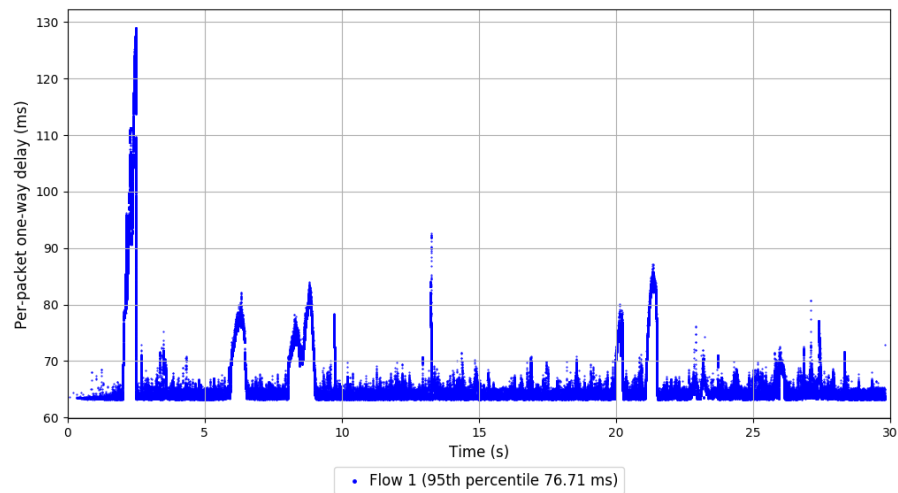
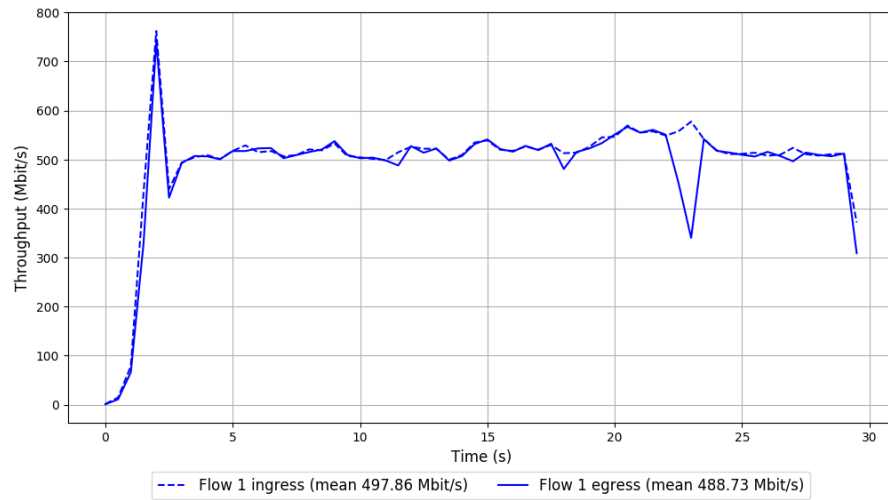


```
Run 2: Statistics of PCC

Start at: 2017-08-11 15:41:27
End at: 2017-08-11 15:41:57

# Below is generated by plot.py at 2017-08-11 19:41:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 488.73 Mbit/s
95th percentile per-packet one-way delay: 76.709 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 488.73 Mbit/s
95th percentile per-packet one-way delay: 76.709 ms
Loss rate: 2.24%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-11 15:52:11

End at: 2017-08-11 15:52:41

Below is generated by plot.py at 2017-08-11 19:42:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 519.45 Mbit/s

95th percentile per-packet one-way delay: 162.773 ms

Loss rate: 6.56%

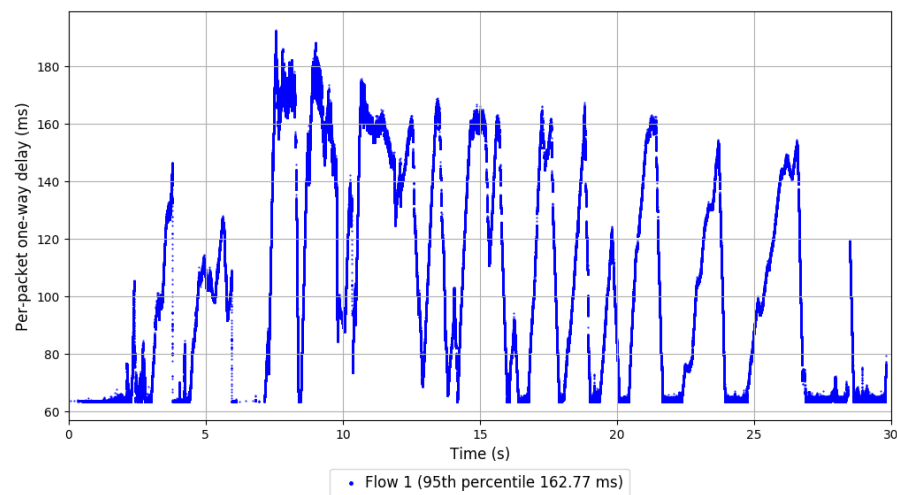
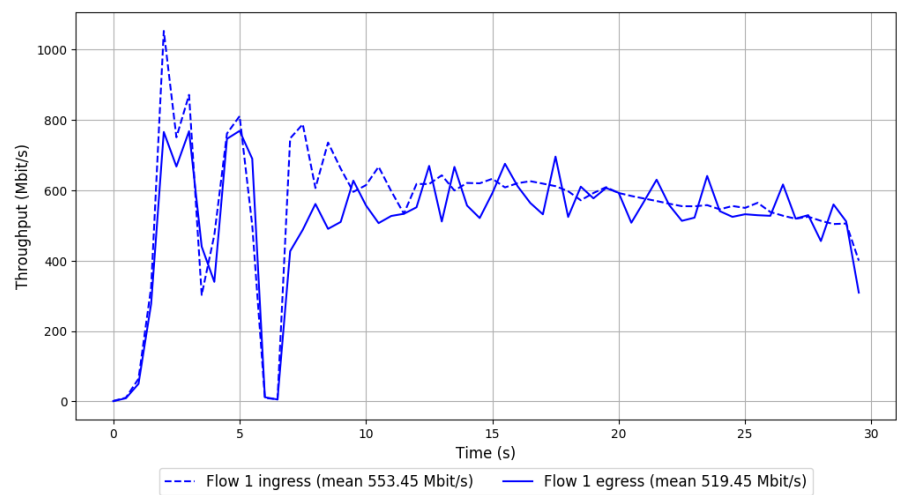
-- Flow 1:

Average throughput: 519.45 Mbit/s

95th percentile per-packet one-way delay: 162.773 ms

Loss rate: 6.56%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-08-11 16:02:52

End at: 2017-08-11 16:03:22

Below is generated by plot.py at 2017-08-11 19:42:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 563.72 Mbit/s

95th percentile per-packet one-way delay: 165.864 ms

Loss rate: 12.23%

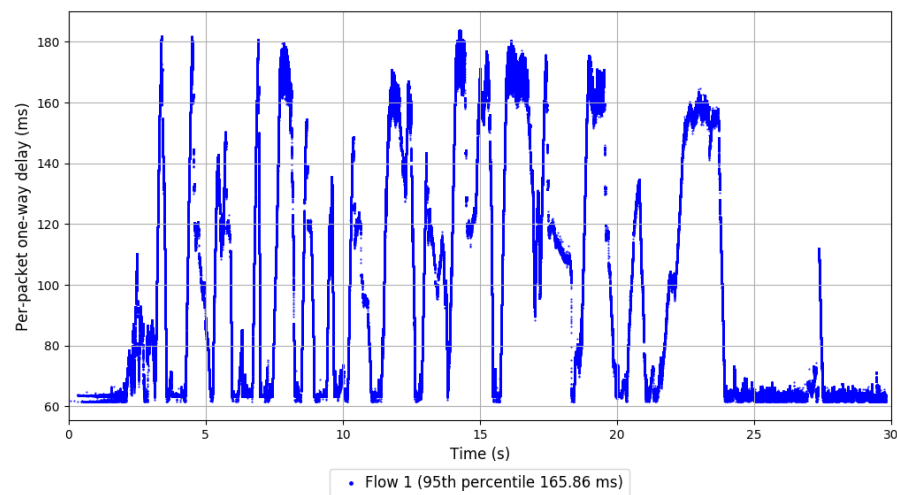
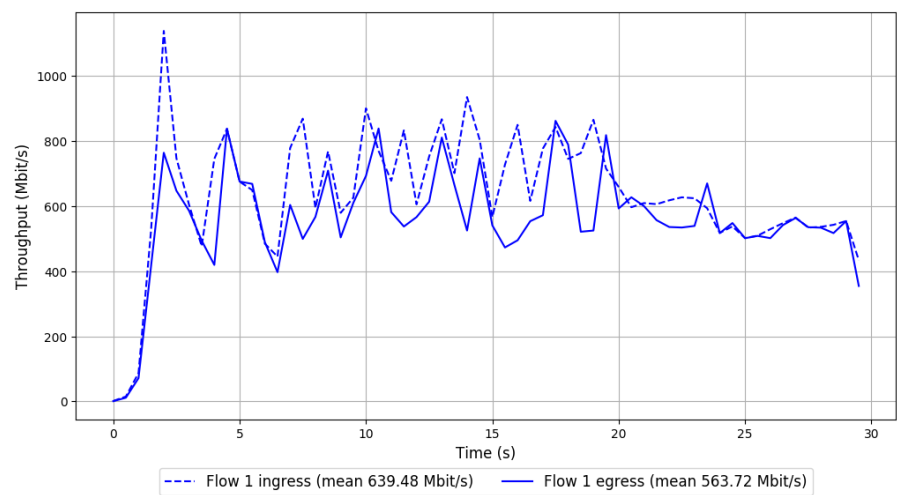
-- Flow 1:

Average throughput: 563.72 Mbit/s

95th percentile per-packet one-way delay: 165.864 ms

Loss rate: 12.23%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-11 16:13:41

End at: 2017-08-11 16:14:11

Below is generated by plot.py at 2017-08-11 19:44:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 440.23 Mbit/s

95th percentile per-packet one-way delay: 106.537 ms

Loss rate: 1.87%

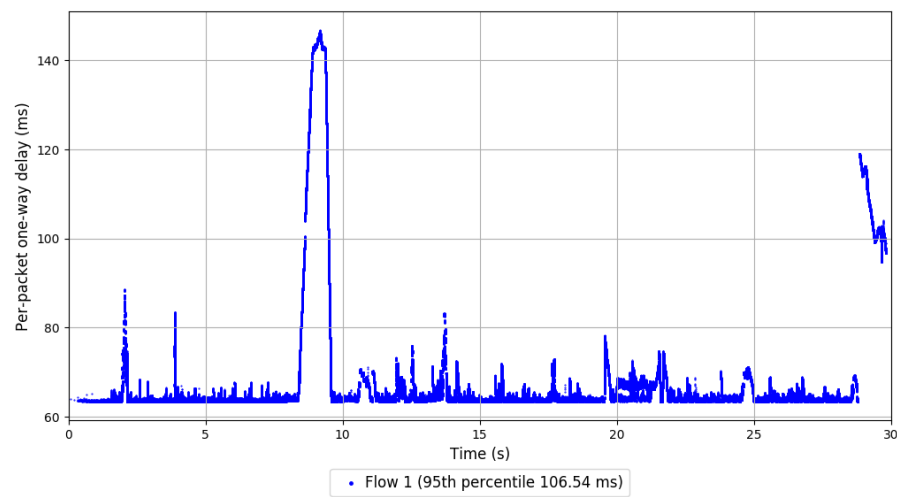
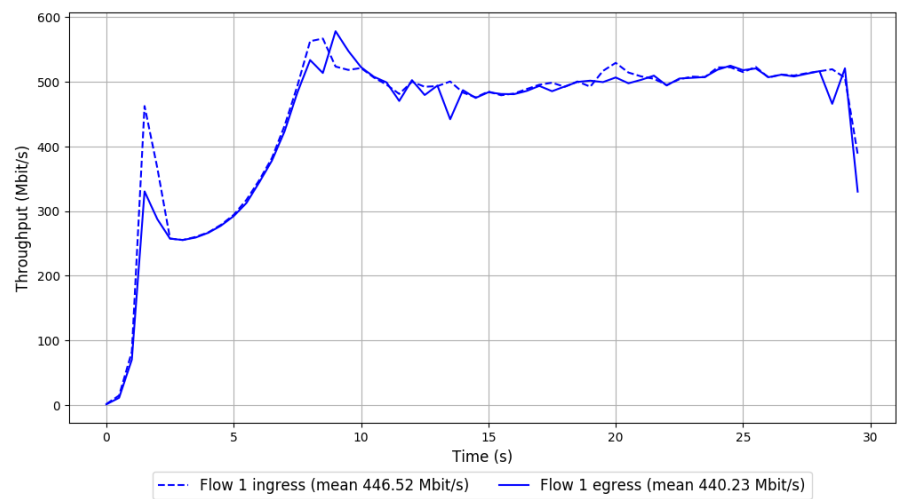
-- Flow 1:

Average throughput: 440.23 Mbit/s

95th percentile per-packet one-way delay: 106.537 ms

Loss rate: 1.87%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-11 16:24:12

End at: 2017-08-11 16:24:42

Below is generated by plot.py at 2017-08-11 19:44:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 486.17 Mbit/s

95th percentile per-packet one-way delay: 73.284 ms

Loss rate: 2.22%

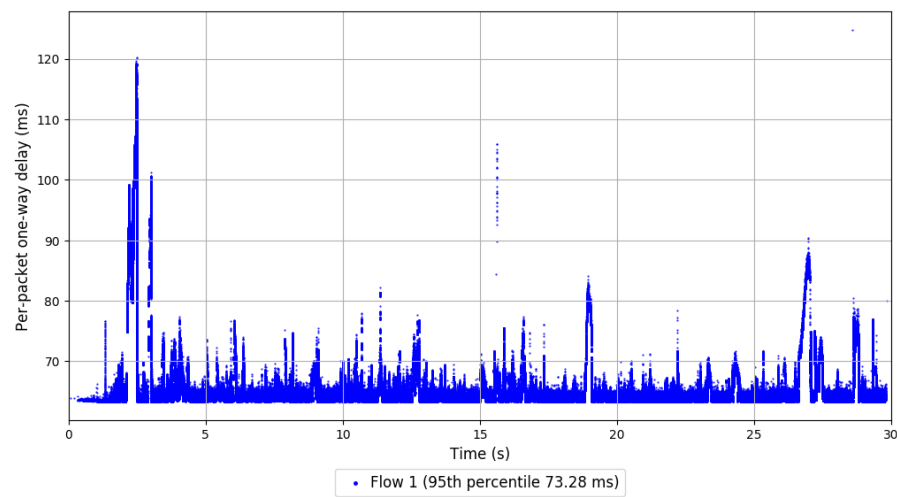
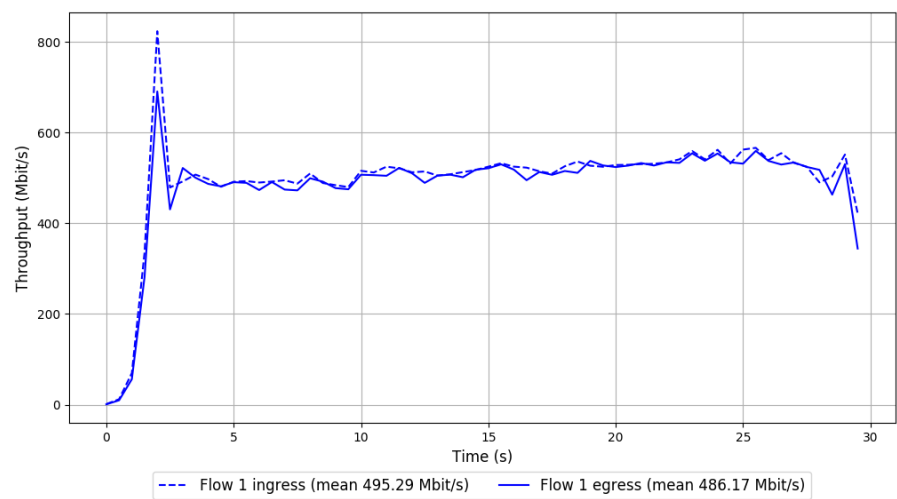
-- Flow 1:

Average throughput: 486.17 Mbit/s

95th percentile per-packet one-way delay: 73.284 ms

Loss rate: 2.22%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-11 16:34:50

End at: 2017-08-11 16:35:20

Below is generated by plot.py at 2017-08-11 19:45:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 460.85 Mbit/s

95th percentile per-packet one-way delay: 156.877 ms

Loss rate: 2.66%

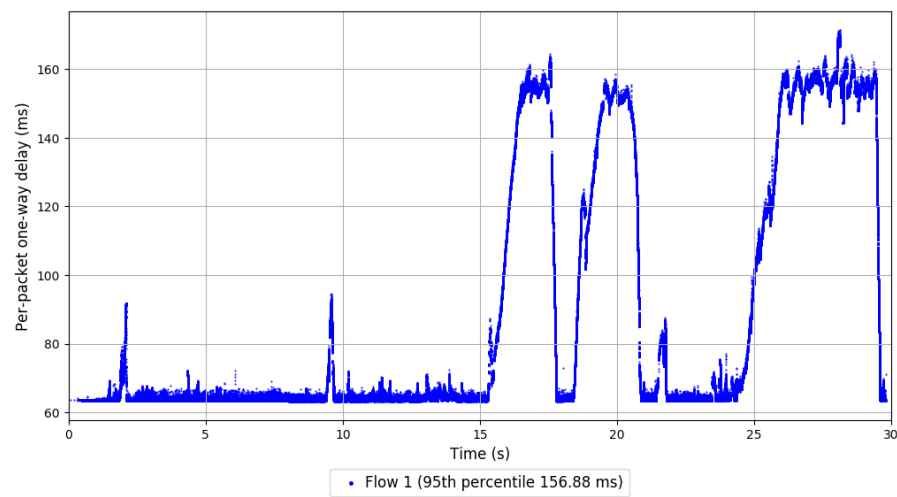
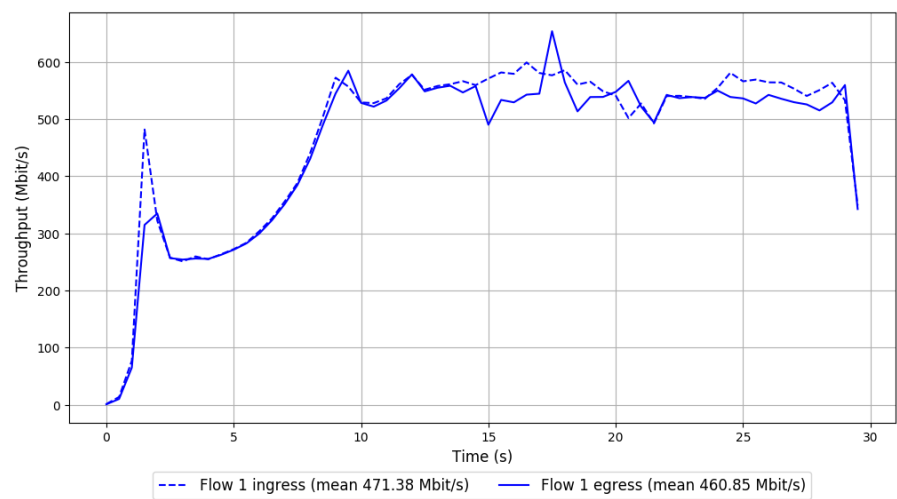
-- Flow 1:

Average throughput: 460.85 Mbit/s

95th percentile per-packet one-way delay: 156.877 ms

Loss rate: 2.66%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-11 16:45:29

End at: 2017-08-11 16:45:59

Below is generated by plot.py at 2017-08-11 19:45:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.03 Mbit/s

95th percentile per-packet one-way delay: 84.510 ms

Loss rate: 53.55%

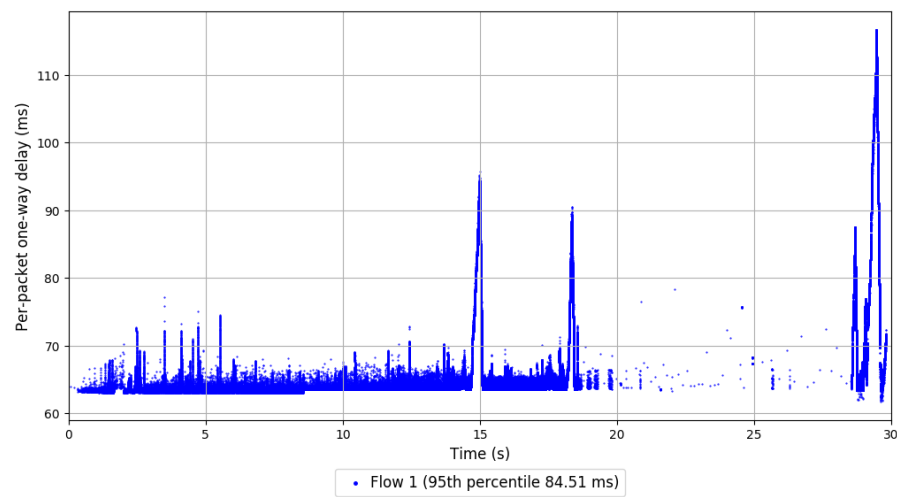
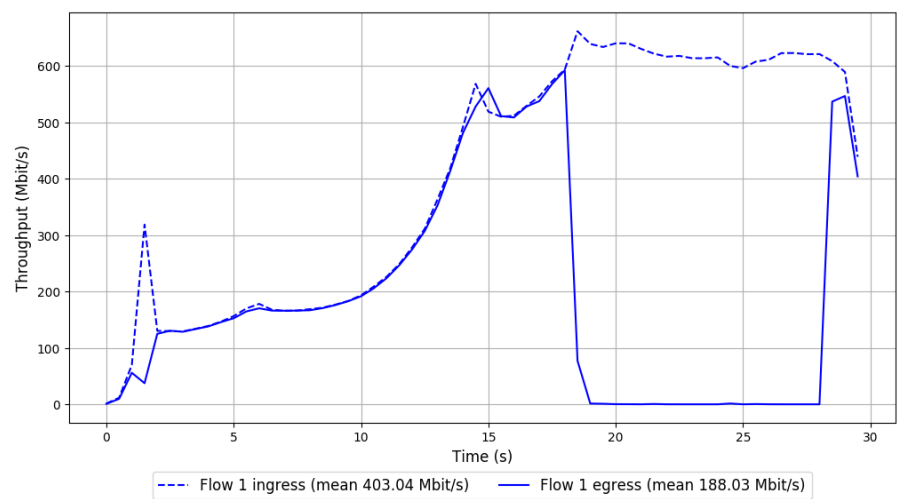
-- Flow 1:

Average throughput: 188.03 Mbit/s

95th percentile per-packet one-way delay: 84.510 ms

Loss rate: 53.55%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-11 16:56:09

End at: 2017-08-11 16:56:39

Below is generated by plot.py at 2017-08-11 19:45:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 157.25 Mbit/s

95th percentile per-packet one-way delay: 63.579 ms

Loss rate: 5.74%

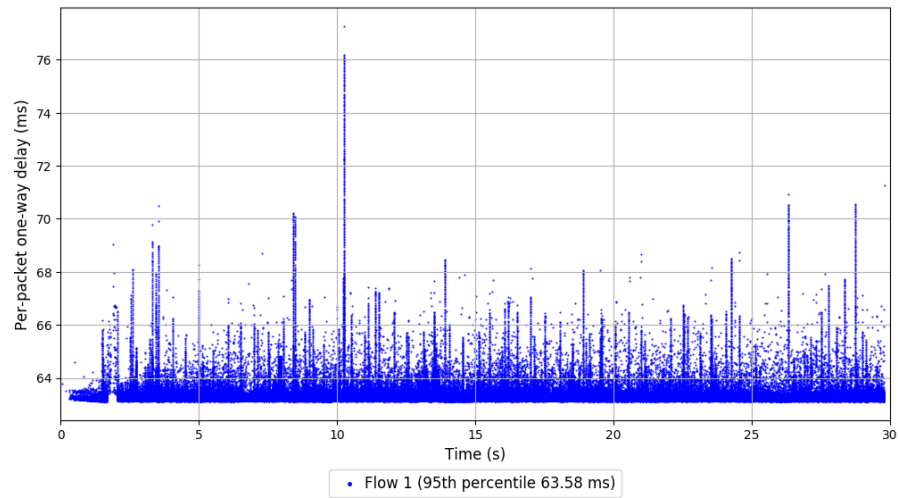
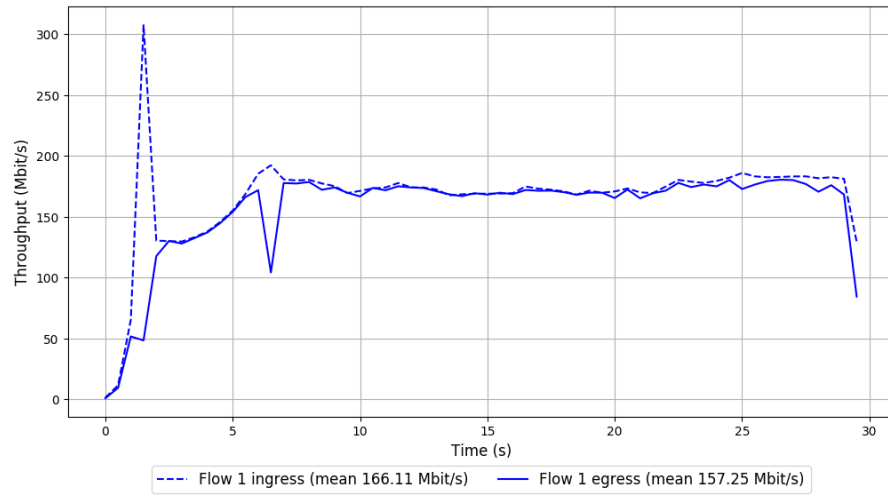
-- Flow 1:

Average throughput: 157.25 Mbit/s

95th percentile per-packet one-way delay: 63.579 ms

Loss rate: 5.74%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-11 17:06:37

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

Below is generated by plot.py at 2017-08-11 19:47:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 488.93 Mbit/s

95th percentile per-packet one-way delay: 89.963 ms

Loss rate: 1.63%

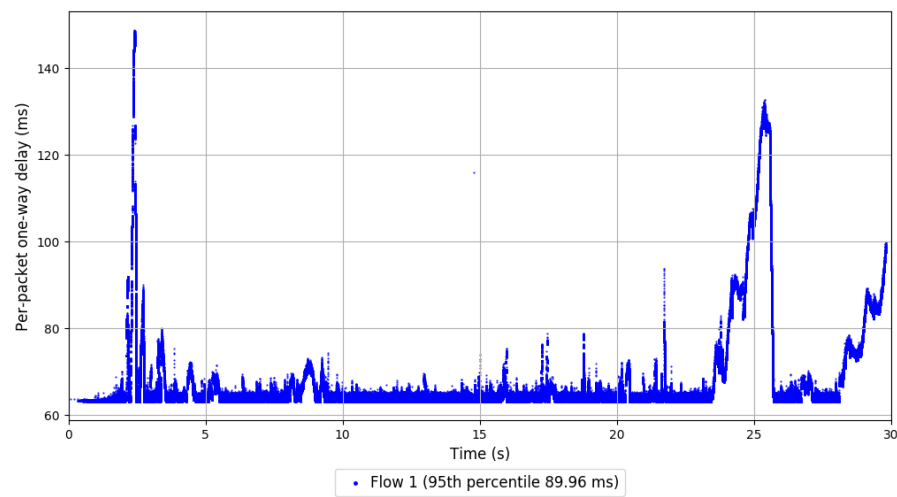
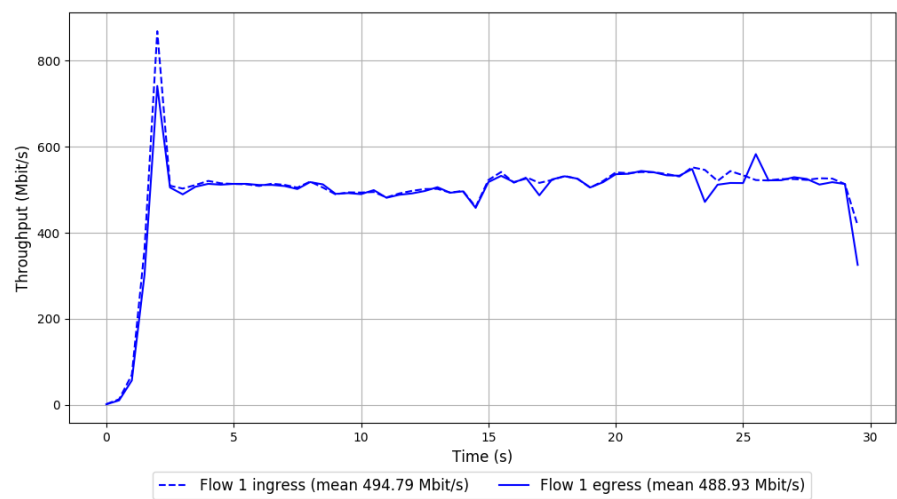
-- Flow 1:

Average throughput: 488.93 Mbit/s

95th percentile per-packet one-way delay: 89.963 ms

Loss rate: 1.63%

Run 10: Report of PCC — Data Link

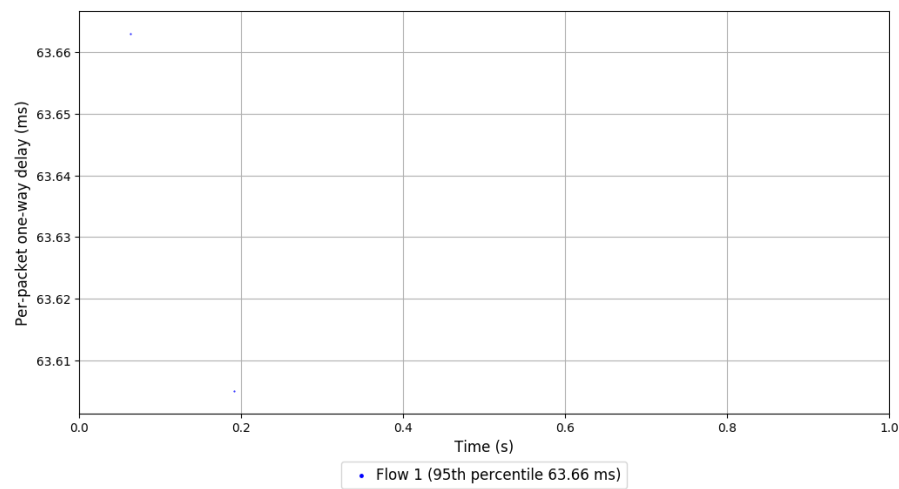
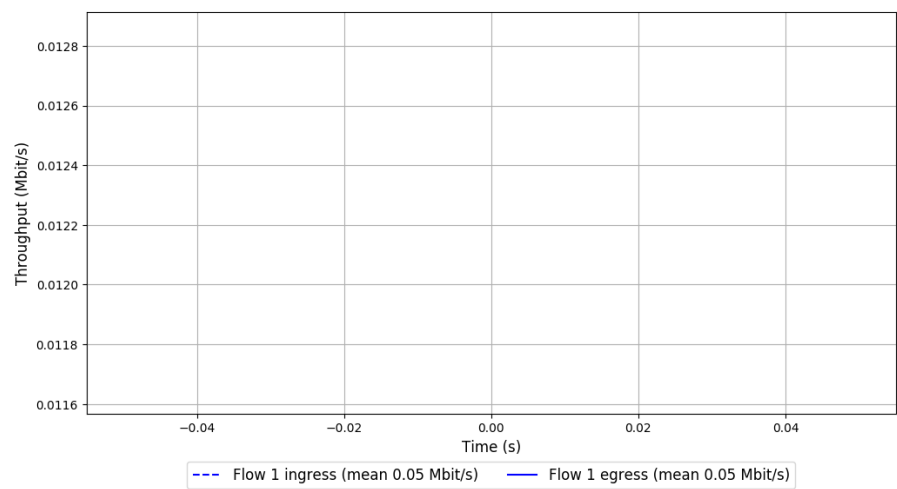


Run 1: Statistics of QUIC Cubic

Start at: 2017-08-11 15:28:45

End at: 2017-08-11 15:29:15

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-08-11 15:39:31

End at: 2017-08-11 15:40:01

Below is generated by plot.py at 2017-08-11 19:47:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.74 Mbit/s

95th percentile per-packet one-way delay: 63.597 ms

Loss rate: 0.24%

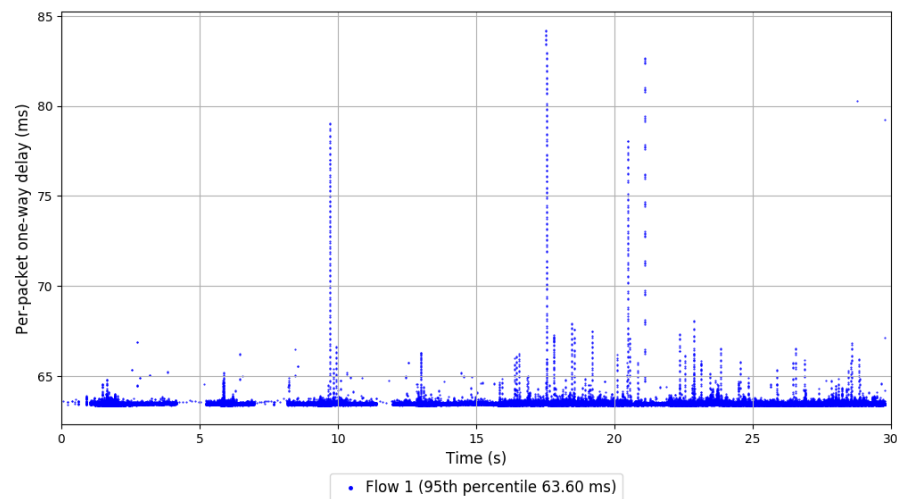
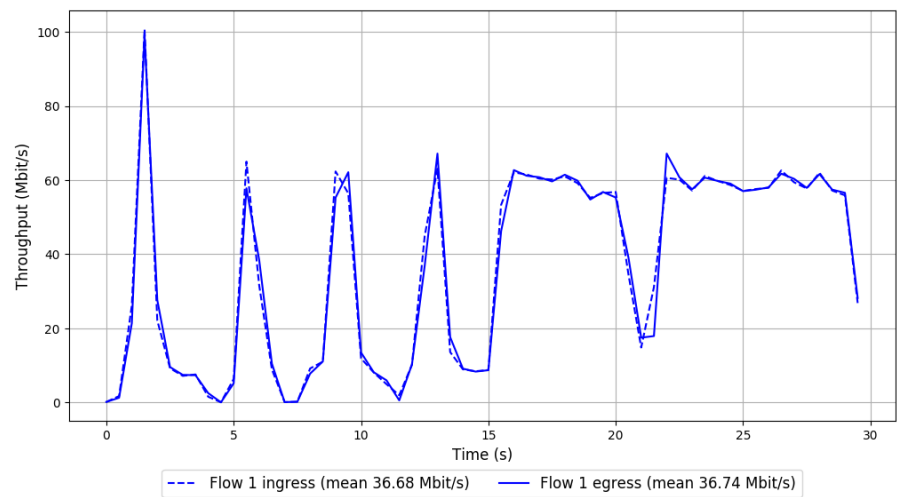
-- Flow 1:

Average throughput: 36.74 Mbit/s

95th percentile per-packet one-way delay: 63.597 ms

Loss rate: 0.24%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-11 15:50:14

End at: 2017-08-11 15:50:44

Below is generated by plot.py at 2017-08-11 19:47:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.26 Mbit/s

95th percentile per-packet one-way delay: 61.690 ms

Loss rate: 0.52%

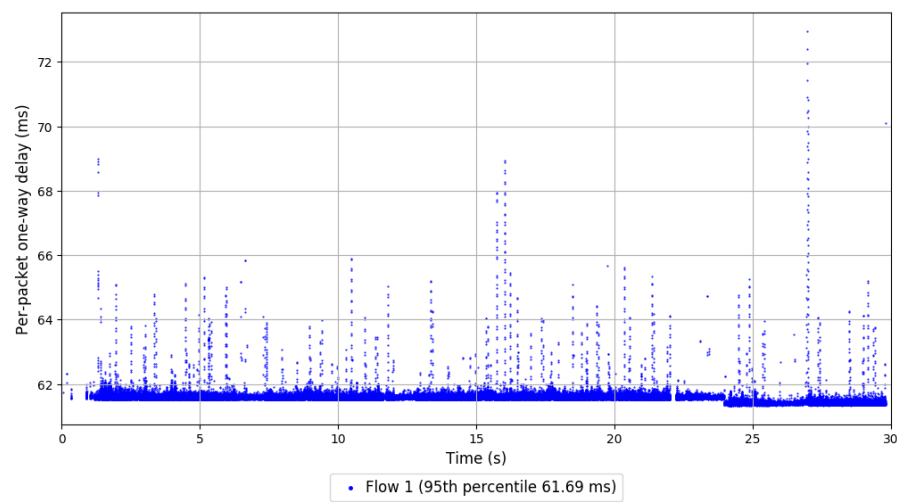
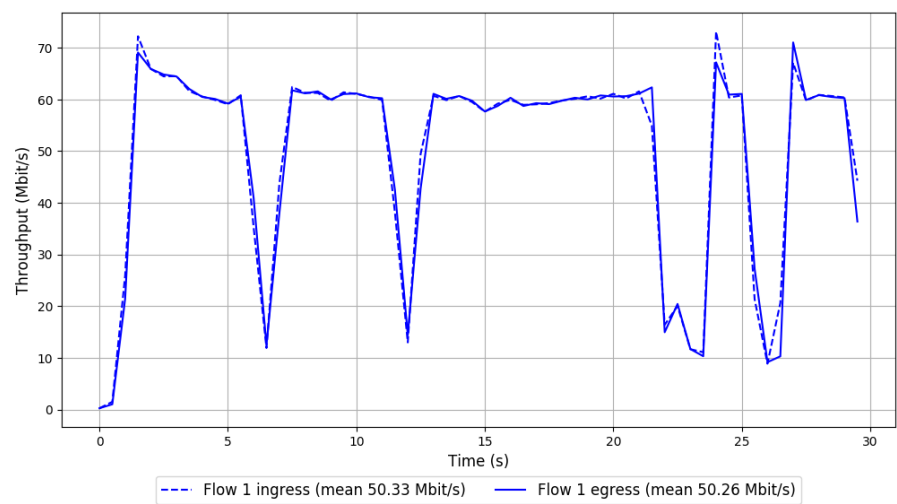
-- Flow 1:

Average throughput: 50.26 Mbit/s

95th percentile per-packet one-way delay: 61.690 ms

Loss rate: 0.52%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-11 16:00:56

End at: 2017-08-11 16:01:26

Below is generated by plot.py at 2017-08-11 19:47:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.04 Mbit/s

95th percentile per-packet one-way delay: 61.345 ms

Loss rate: 0.75%

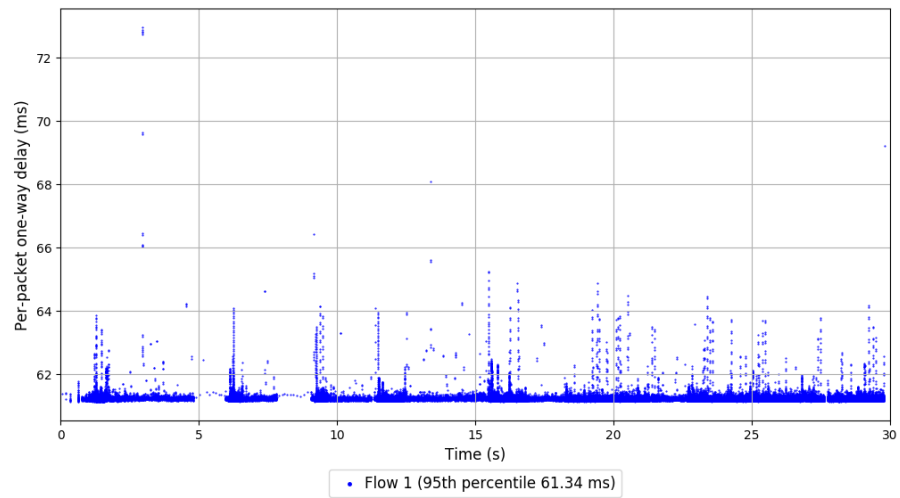
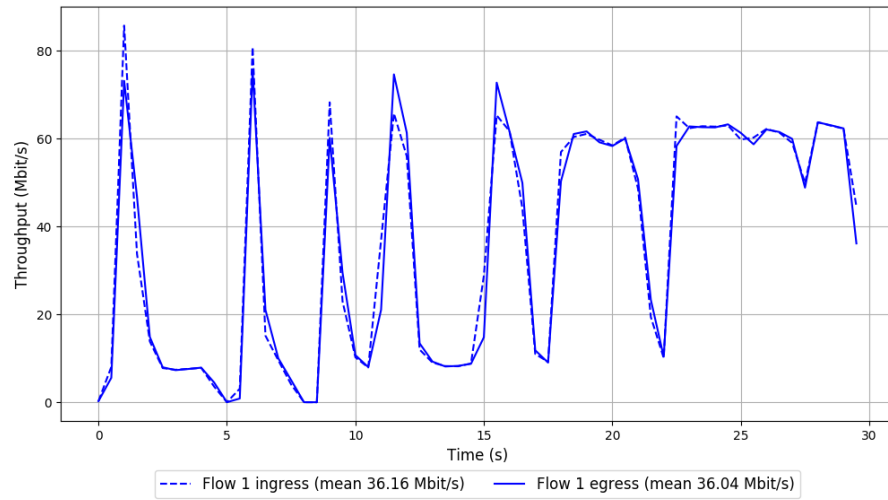
-- Flow 1:

Average throughput: 36.04 Mbit/s

95th percentile per-packet one-way delay: 61.345 ms

Loss rate: 0.75%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-08-11 16:11:43

End at: 2017-08-11 16:12:13

Below is generated by plot.py at 2017-08-11 19:47:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.39 Mbit/s

95th percentile per-packet one-way delay: 63.696 ms

Loss rate: 0.71%

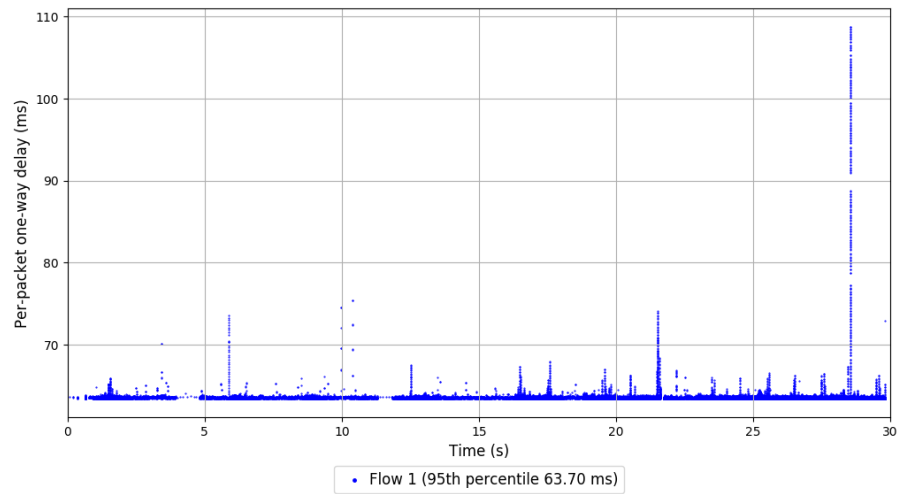
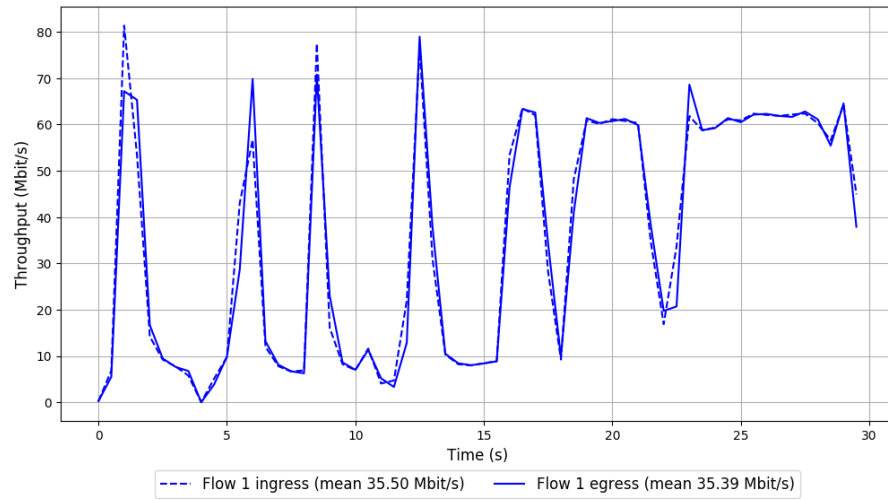
-- Flow 1:

Average throughput: 35.39 Mbit/s

95th percentile per-packet one-way delay: 63.696 ms

Loss rate: 0.71%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-11 16:22:16

End at: 2017-08-11 16:22:46

Below is generated by plot.py at 2017-08-11 19:47:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.67 Mbit/s

95th percentile per-packet one-way delay: 63.659 ms

Loss rate: 0.82%

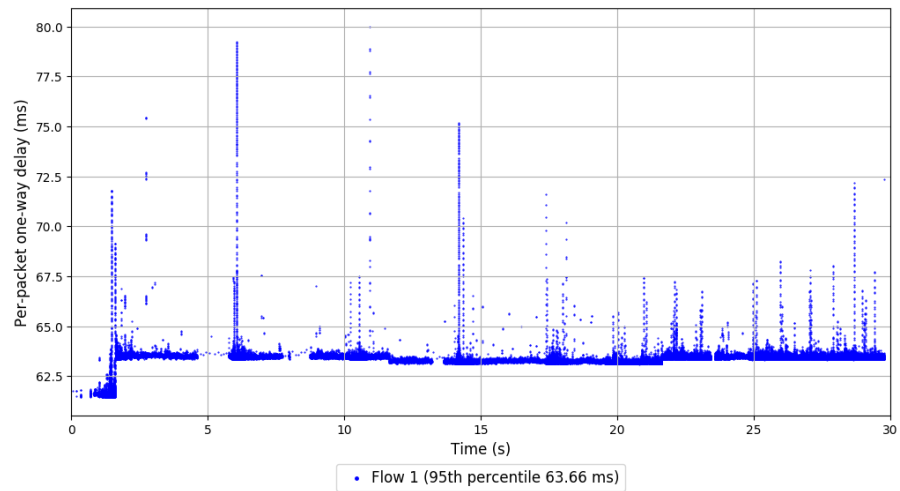
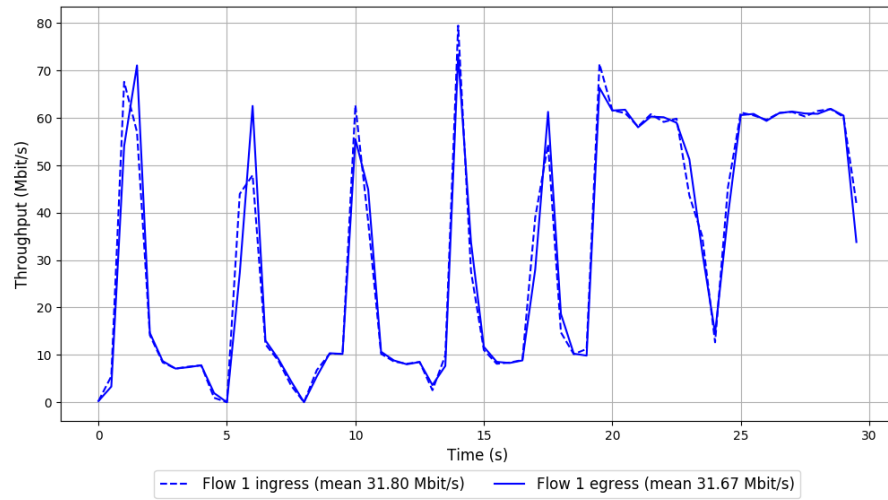
-- Flow 1:

Average throughput: 31.67 Mbit/s

95th percentile per-packet one-way delay: 63.659 ms

Loss rate: 0.82%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-11 16:32:54

End at: 2017-08-11 16:33:24

Below is generated by plot.py at 2017-08-11 19:47:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.07 Mbit/s

95th percentile per-packet one-way delay: 63.566 ms

Loss rate: 1.07%

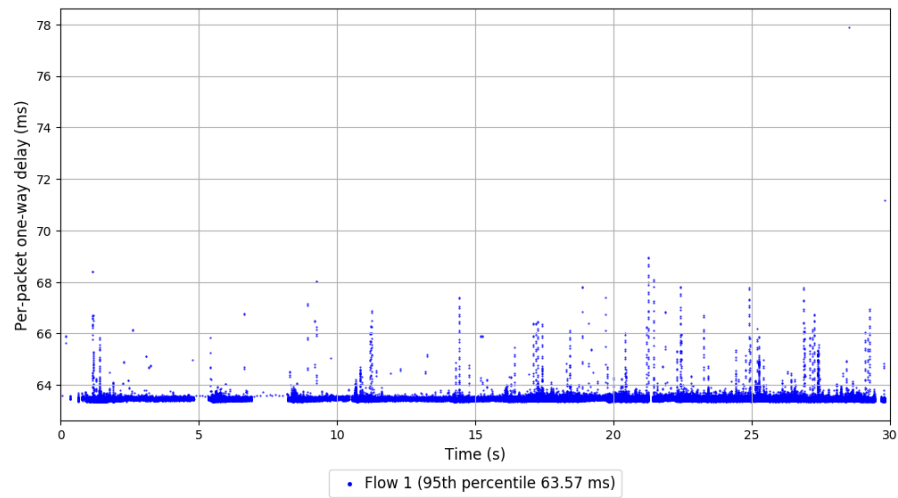
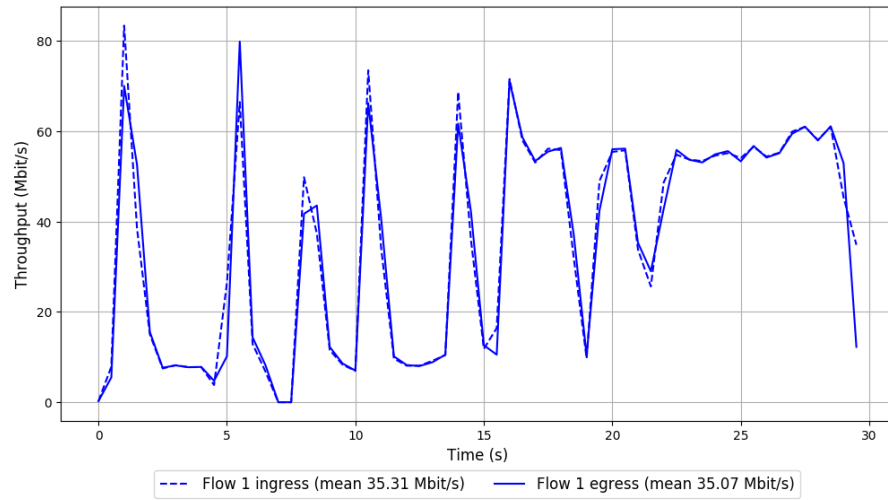
-- Flow 1:

Average throughput: 35.07 Mbit/s

95th percentile per-packet one-way delay: 63.566 ms

Loss rate: 1.07%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-08-11 16:43:32

End at: 2017-08-11 16:44:02

Below is generated by plot.py at 2017-08-11 19:47:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.45 Mbit/s

95th percentile per-packet one-way delay: 63.690 ms

Loss rate: 0.47%

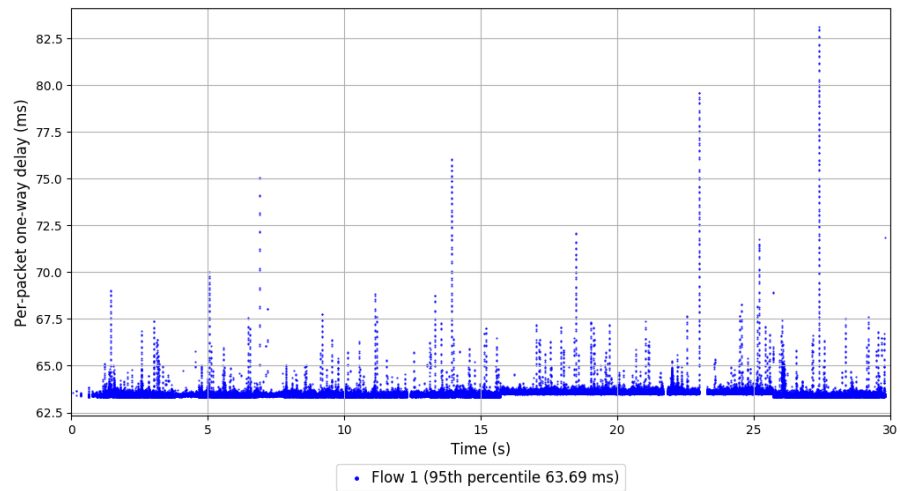
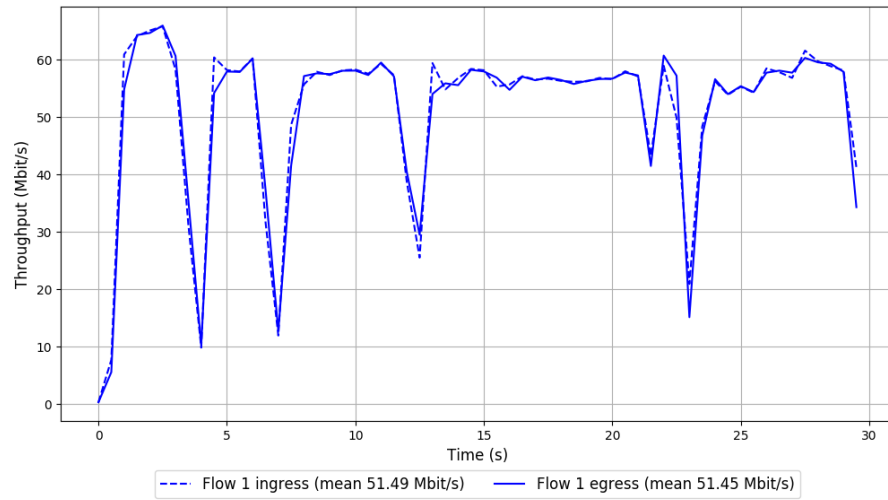
-- Flow 1:

Average throughput: 51.45 Mbit/s

95th percentile per-packet one-way delay: 63.690 ms

Loss rate: 0.47%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-11 16:54:12

End at: 2017-08-11 16:54:42

Below is generated by plot.py at 2017-08-11 19:47:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.65 Mbit/s

95th percentile per-packet one-way delay: 63.249 ms

Loss rate: 0.46%

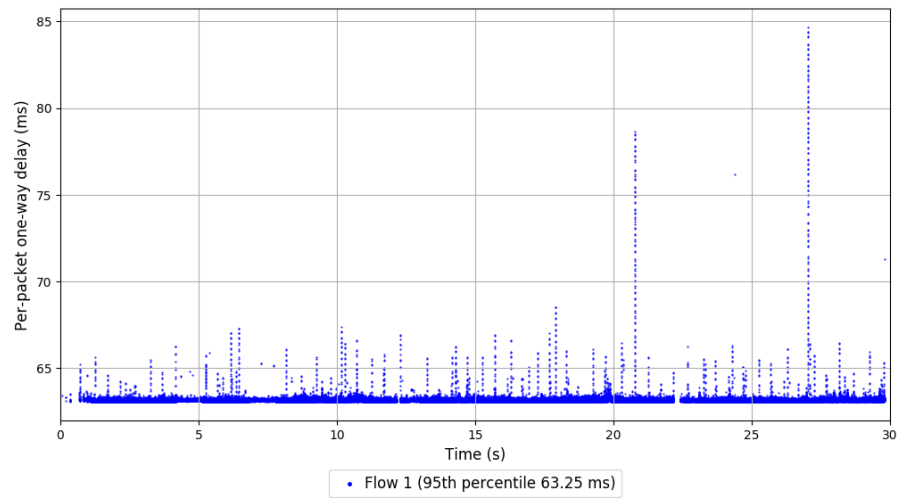
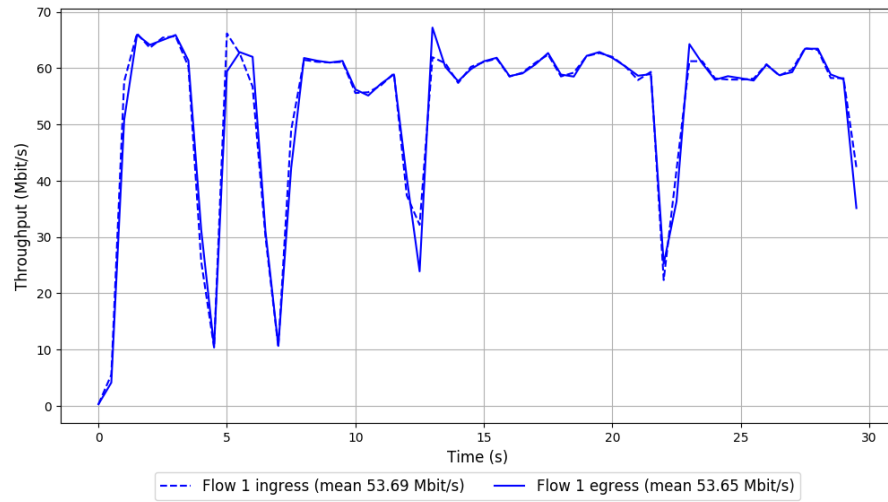
-- Flow 1:

Average throughput: 53.65 Mbit/s

95th percentile per-packet one-way delay: 63.249 ms

Loss rate: 0.46%

Run 9: Report of QUIC Cubic — Data Link

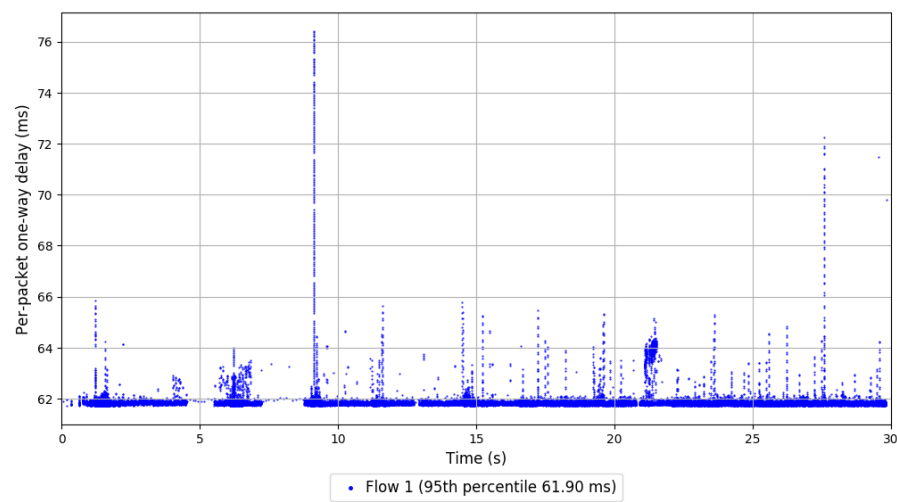
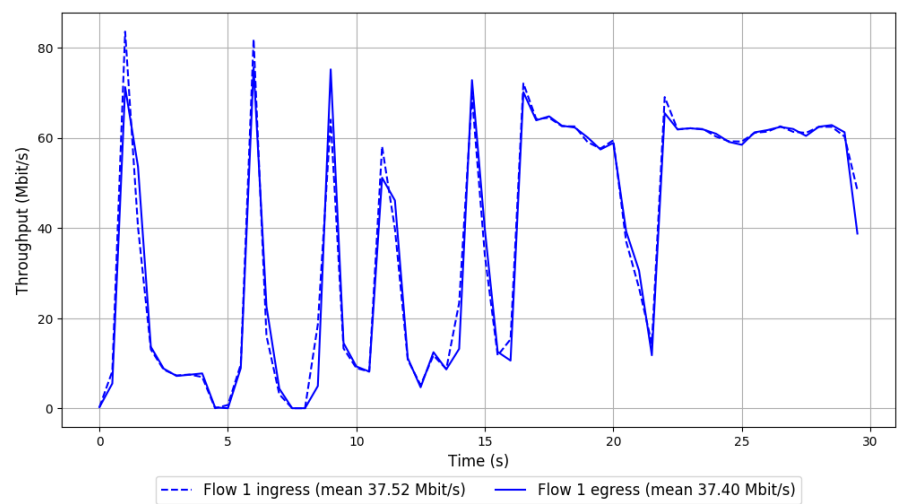


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-11 17:04:40
End at: 2017-08-11 17:05:10

# Below is generated by plot.py at 2017-08-11 19:47:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.40 Mbit/s
95th percentile per-packet one-way delay: 61.904 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 37.40 Mbit/s
95th percentile per-packet one-way delay: 61.904 ms
Loss rate: 0.71%
```

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of Saturator

Start at: 2017-08-11 15:25:12

End at: 2017-08-11 15:25:42

Below is generated by plot.py at 2017-08-11 19:47:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.52 Mbit/s

95th percentile per-packet one-way delay: 64.688 ms

Loss rate: 0.57%

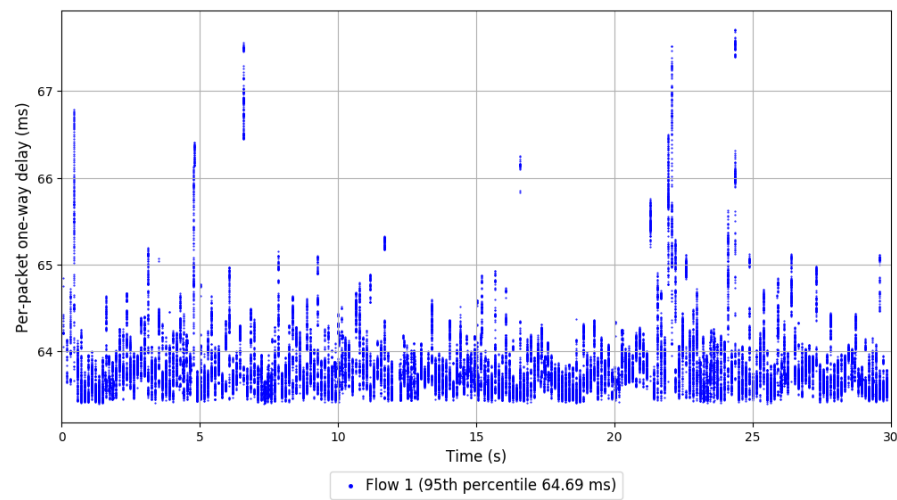
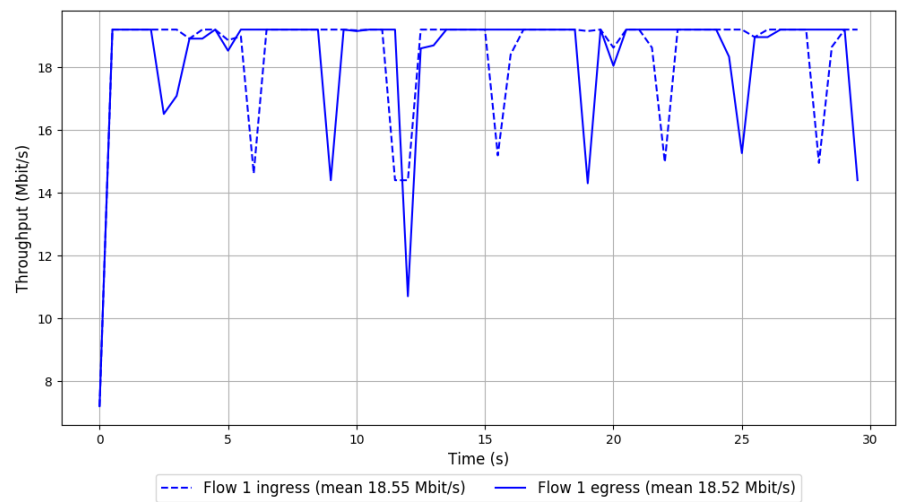
-- Flow 1:

Average throughput: 18.52 Mbit/s

95th percentile per-packet one-way delay: 64.688 ms

Loss rate: 0.57%

Run 1: Report of Saturator — Data Link

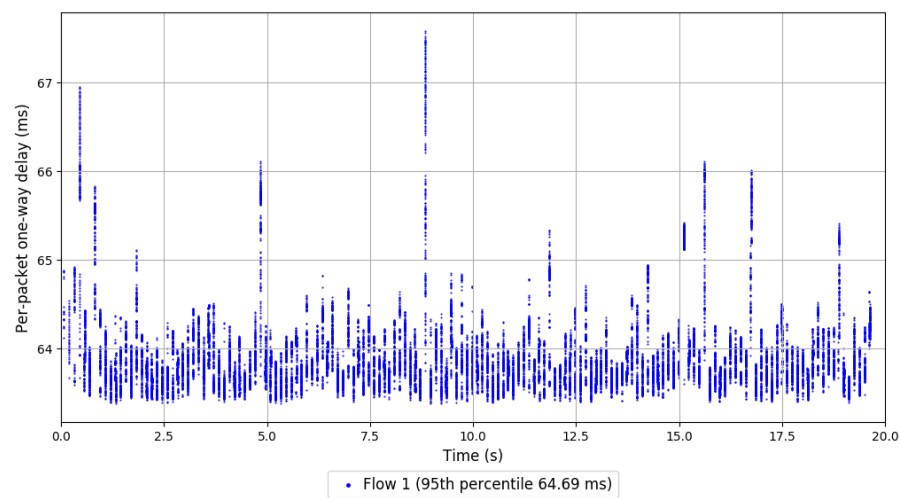
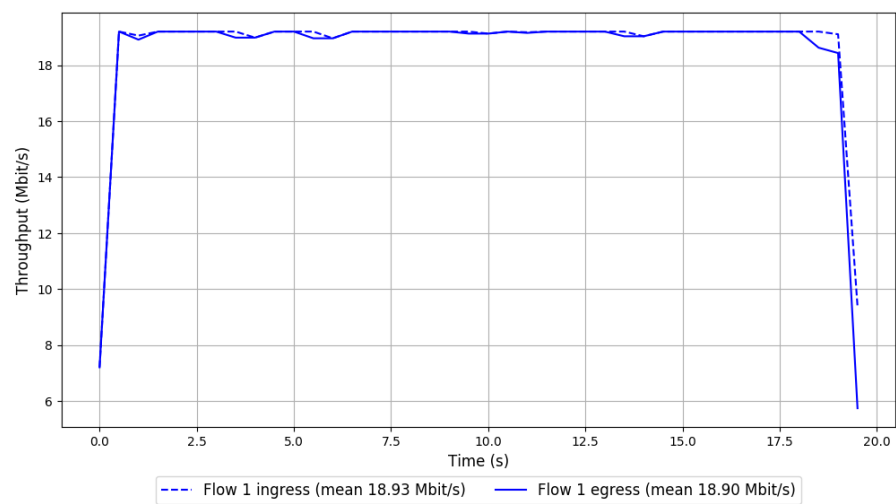


Run 2: Statistics of Saturator

Start at: 2017-08-11 15:35:55

End at: 2017-08-11 15:36:25

Run 2: Report of Saturator — Data Link

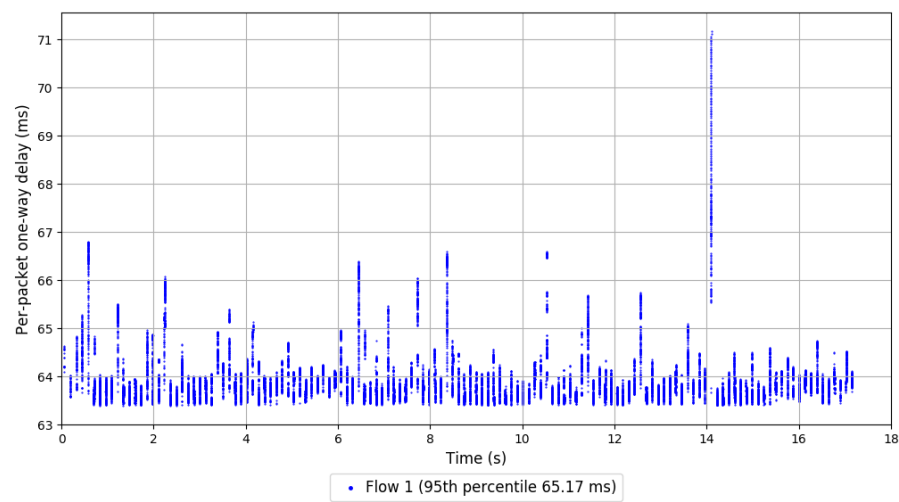
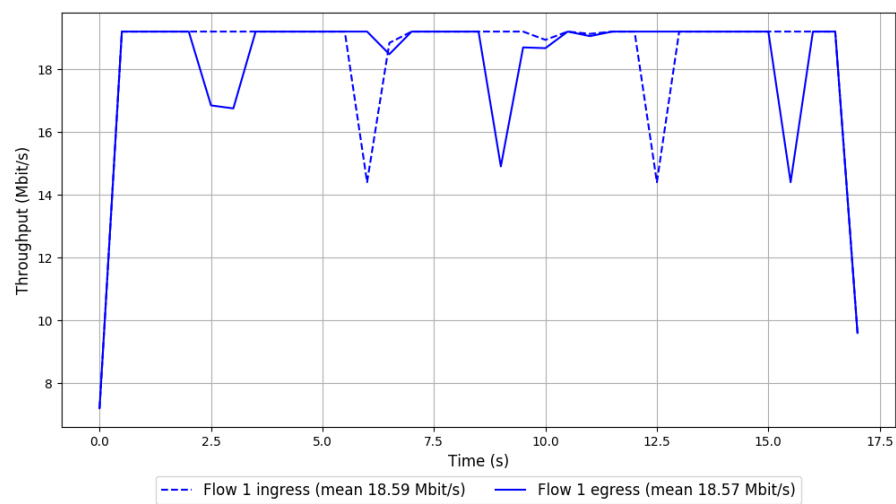


Run 3: Statistics of Saturator

Start at: 2017-08-11 15:46:42

End at: 2017-08-11 15:47:12

Run 3: Report of Saturator — Data Link

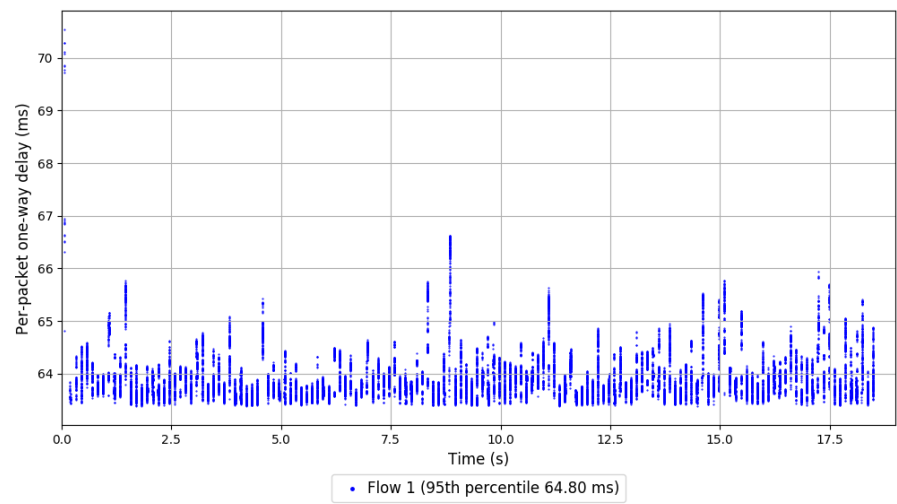
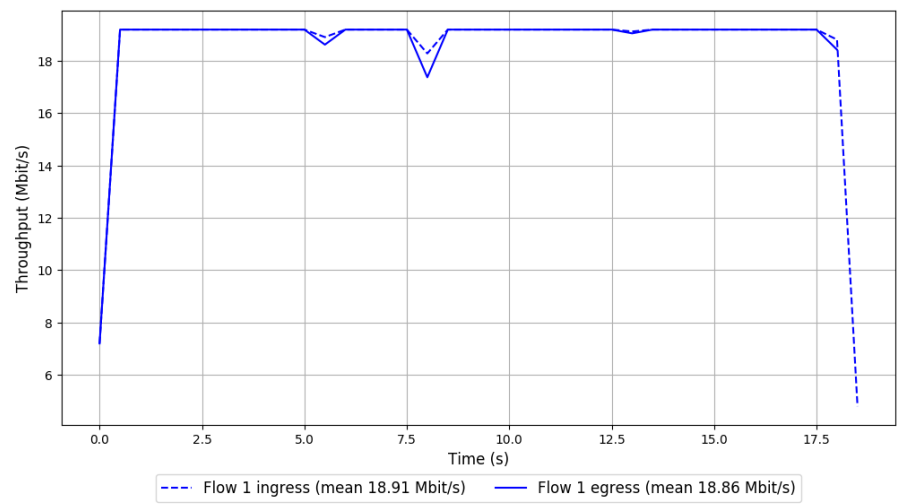


Run 4: Statistics of Saturator

Start at: 2017-08-11 15:57:24

End at: 2017-08-11 15:57:54

Run 4: Report of Saturator — Data Link



Run 5: Statistics of Saturator

Start at: 2017-08-11 16:08:10

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

Below is generated by plot.py at 2017-08-11 19:47:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.58 Mbit/s

95th percentile per-packet one-way delay: 65.257 ms

Loss rate: 0.62%

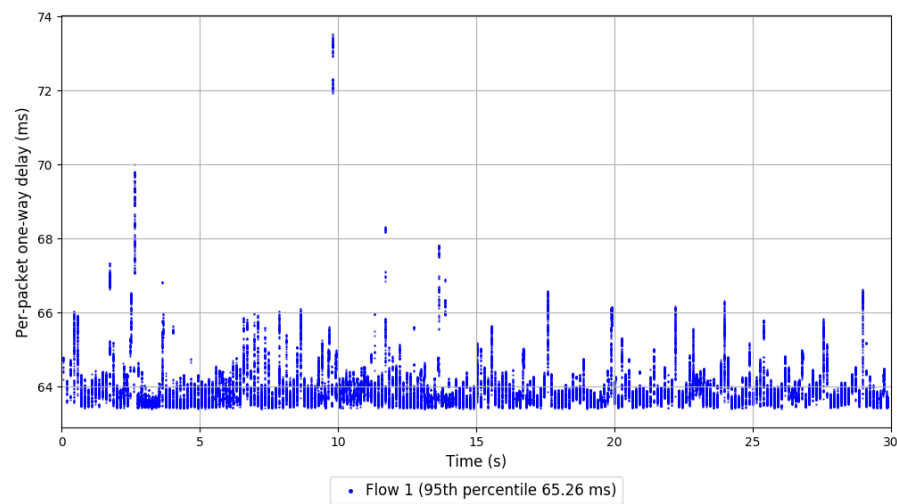
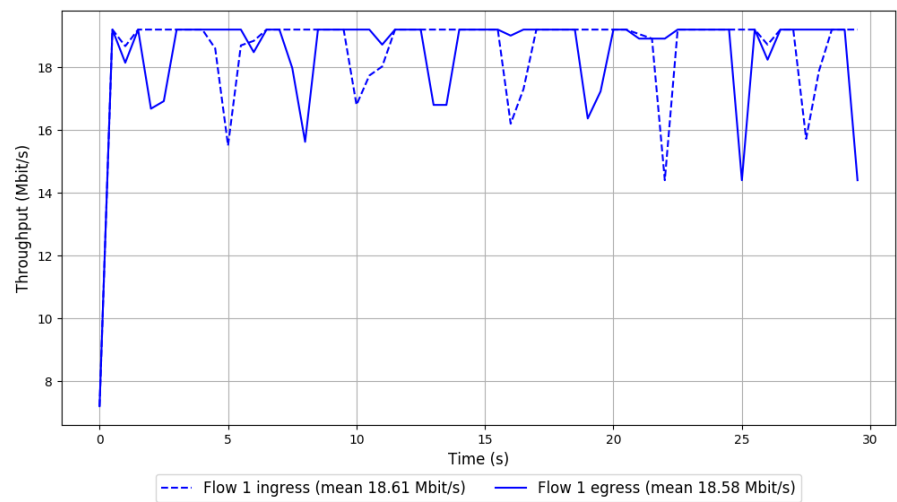
-- Flow 1:

Average throughput: 18.58 Mbit/s

95th percentile per-packet one-way delay: 65.257 ms

Loss rate: 0.62%

Run 5: Report of Saturator — Data Link



Run 6: Statistics of Saturator

Start at: 2017-08-11 16:18:41

End at: 2017-08-11 16:19:11

Below is generated by plot.py at 2017-08-11 19:47:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.64 Mbit/s

95th percentile per-packet one-way delay: 65.148 ms

Loss rate: 0.58%

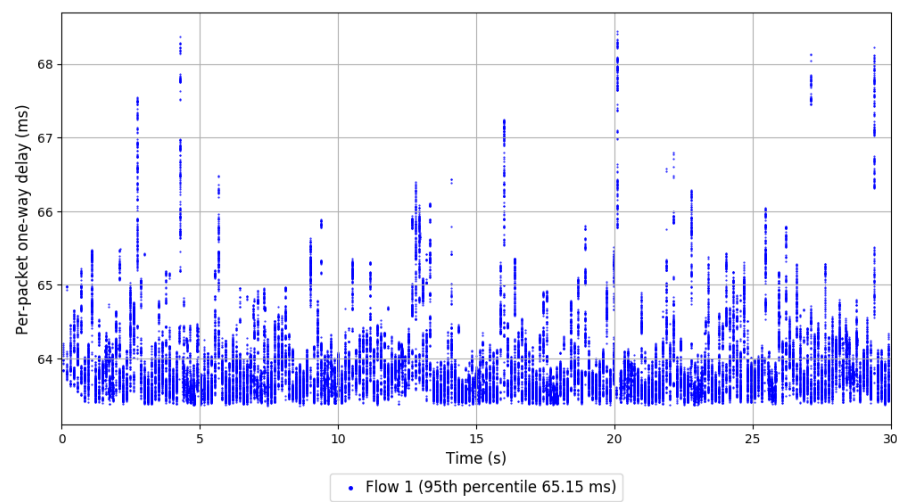
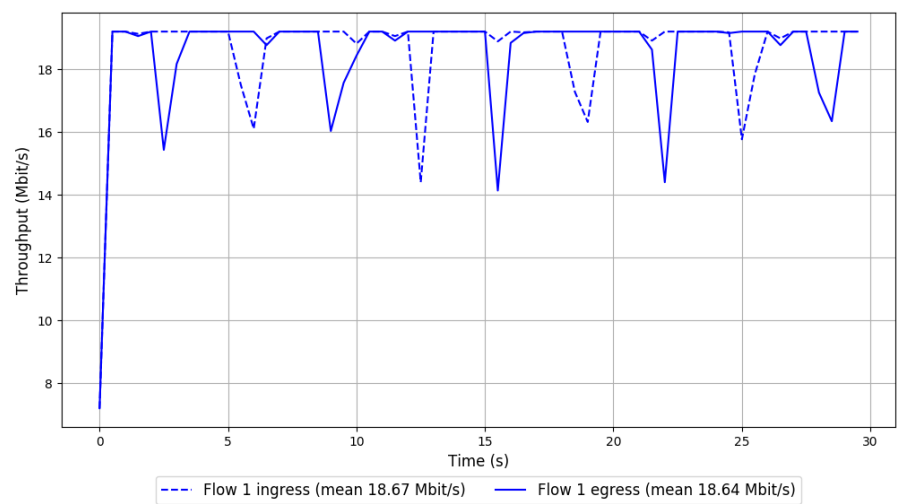
-- Flow 1:

Average throughput: 18.64 Mbit/s

95th percentile per-packet one-way delay: 65.148 ms

Loss rate: 0.58%

Run 6: Report of Saturator — Data Link



Run 7: Statistics of Saturator

Start at: 2017-08-11 16:29:19

End at: 2017-08-11 16:29:49

Below is generated by plot.py at 2017-08-11 19:47:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.51 Mbit/s

95th percentile per-packet one-way delay: 64.811 ms

Loss rate: 1.42%

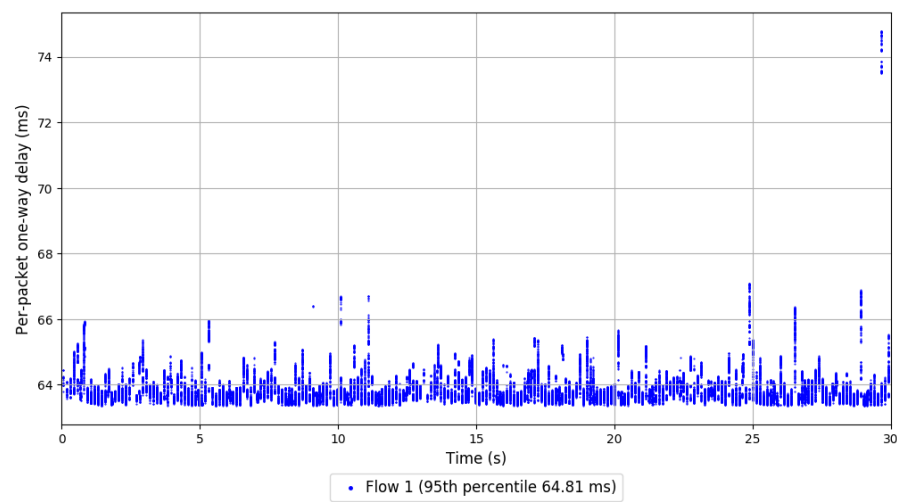
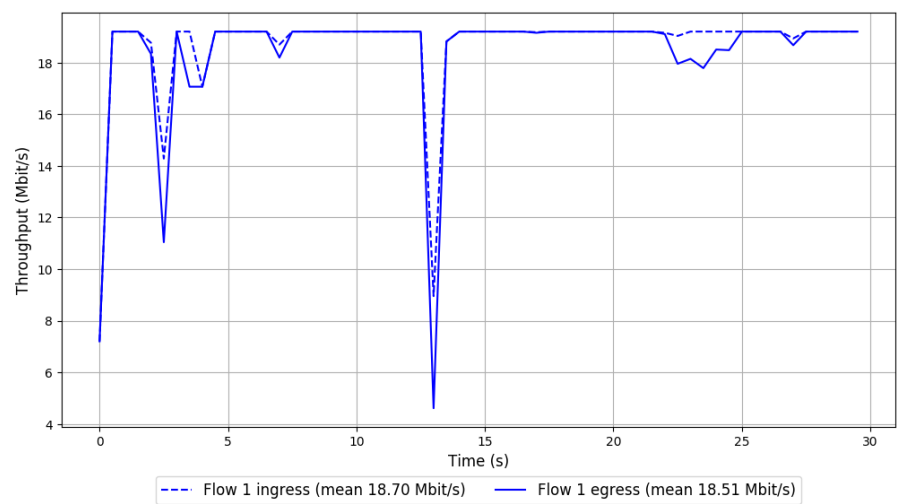
-- Flow 1:

Average throughput: 18.51 Mbit/s

95th percentile per-packet one-way delay: 64.811 ms

Loss rate: 1.42%

Run 7: Report of Saturator — Data Link

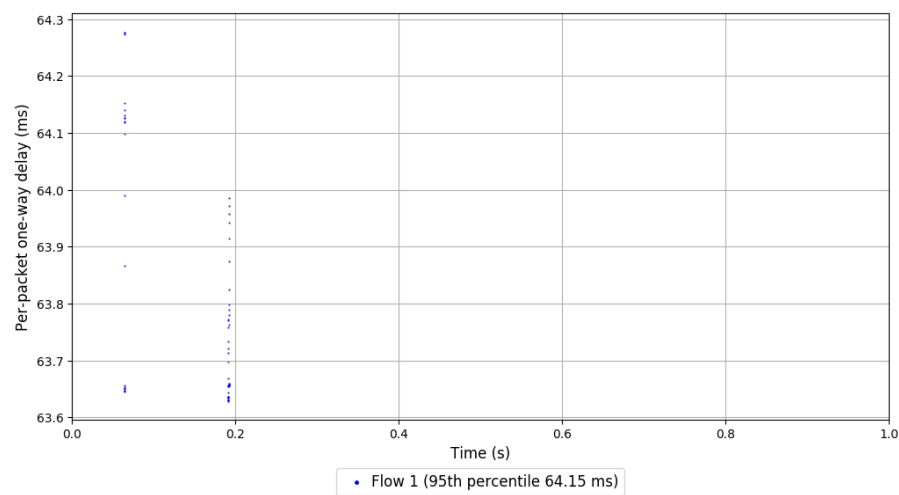
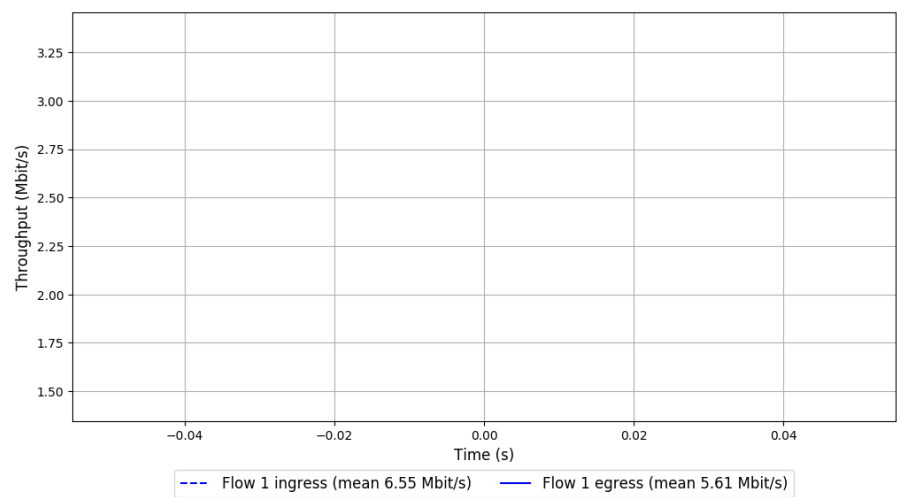


Run 8: Statistics of Saturator

Start at: 2017-08-11 16:40:02

End at: 2017-08-11 16:40:32

Run 8: Report of Saturator — Data Link



Run 9: Statistics of Saturator

Start at: 2017-08-11 16:50:31

End at: 2017-08-11 16:51:01

Below is generated by plot.py at 2017-08-11 19:47:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.98 Mbit/s

95th percentile per-packet one-way delay: 63.198 ms

Loss rate: 0.42%

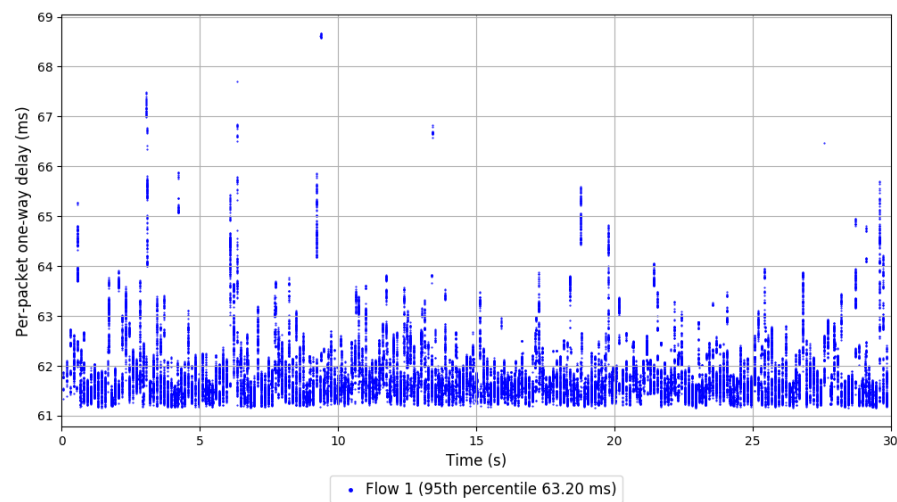
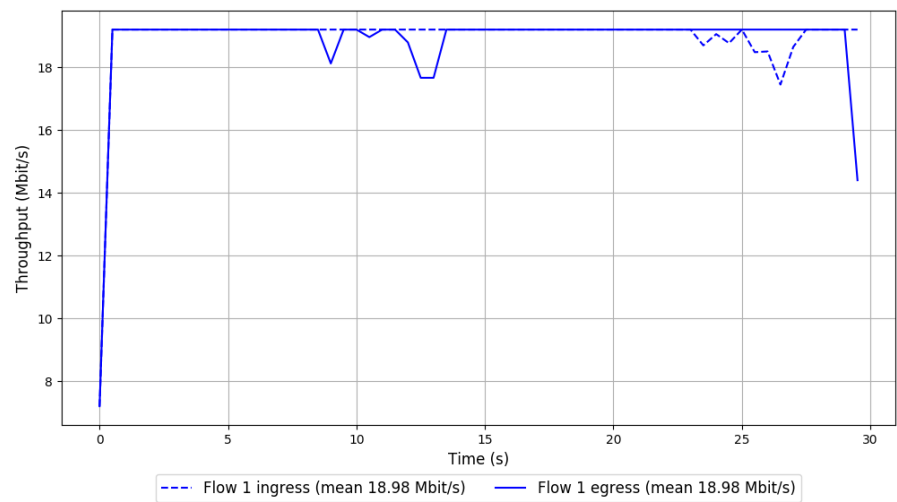
-- Flow 1:

Average throughput: 18.98 Mbit/s

95th percentile per-packet one-way delay: 63.198 ms

Loss rate: 0.42%

Run 9: Report of Saturator — Data Link



Run 10: Statistics of Saturator

Start at: 2017-08-11 17:00:55

End at: 2017-08-11 17:01:25

Below is generated by plot.py at 2017-08-11 19:47:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.26 Mbit/s

95th percentile per-packet one-way delay: 62.570 ms

Loss rate: 0.61%

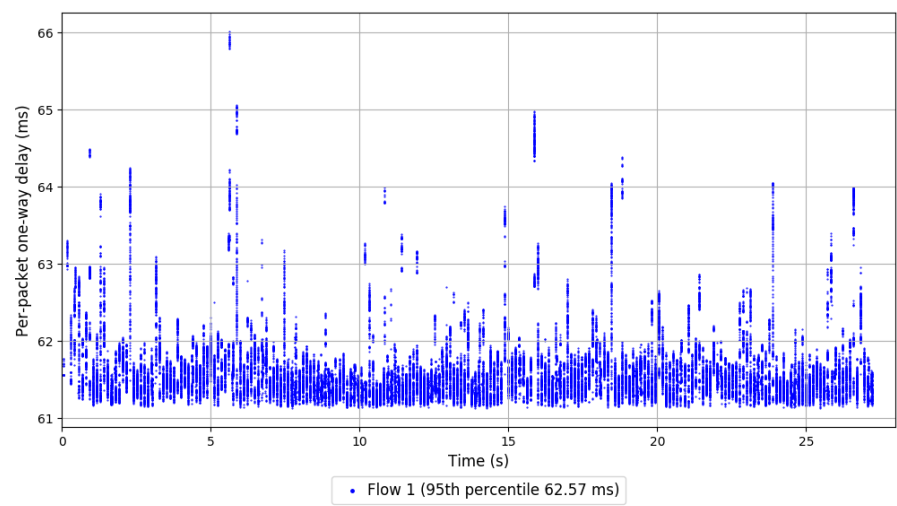
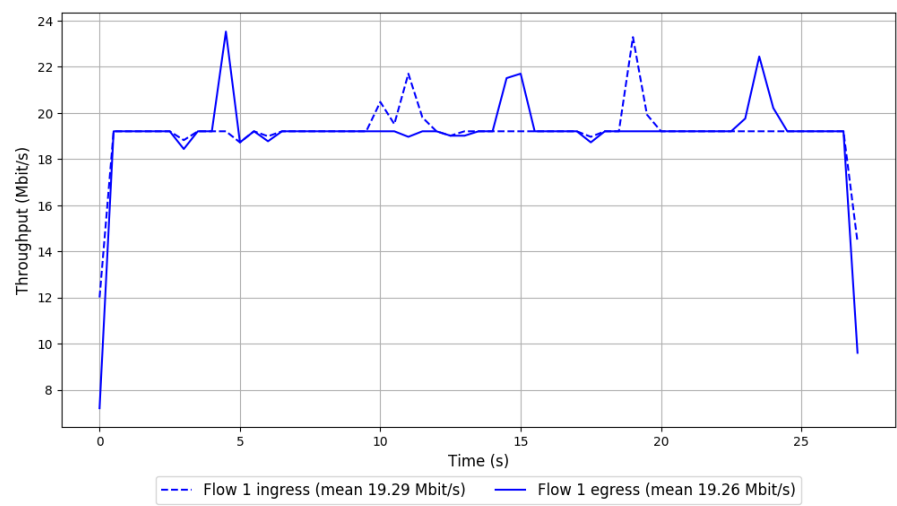
-- Flow 1:

Average throughput: 19.26 Mbit/s

95th percentile per-packet one-way delay: 62.570 ms

Loss rate: 0.61%

Run 10: Report of Saturator — Data Link

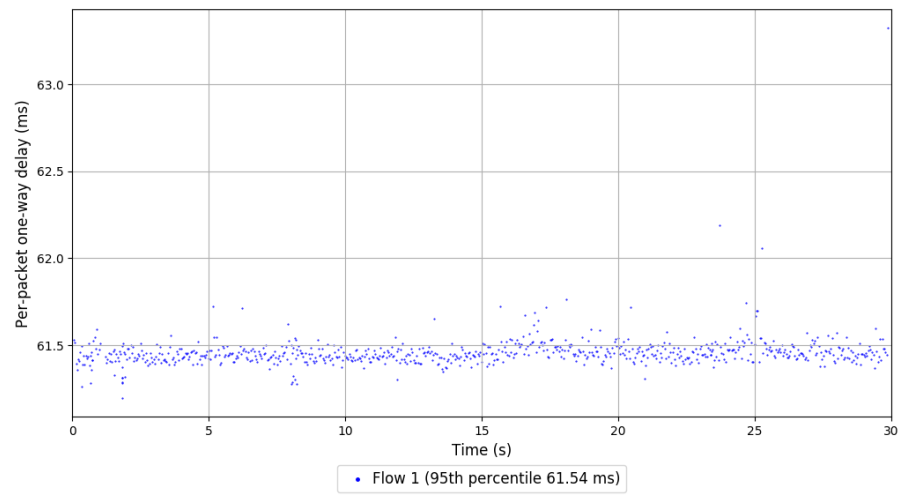
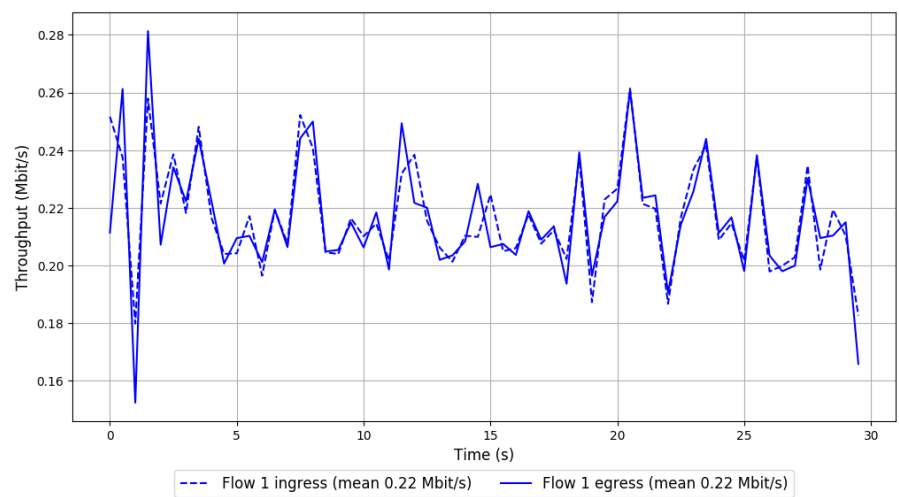


```
Run 1: Statistics of SCReAM

Start at: 2017-08-11 15:29:22
End at: 2017-08-11 15:29:52

# Below is generated by plot.py at 2017-08-11 19:47:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.544 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.544 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link

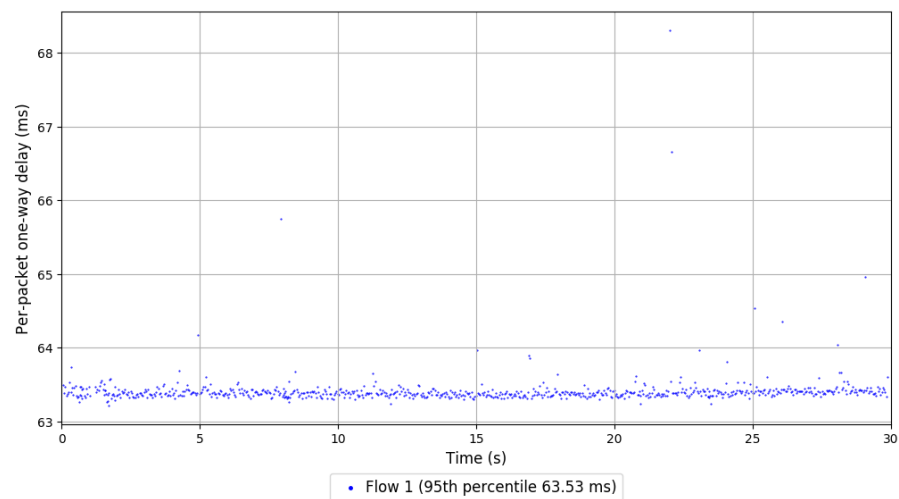
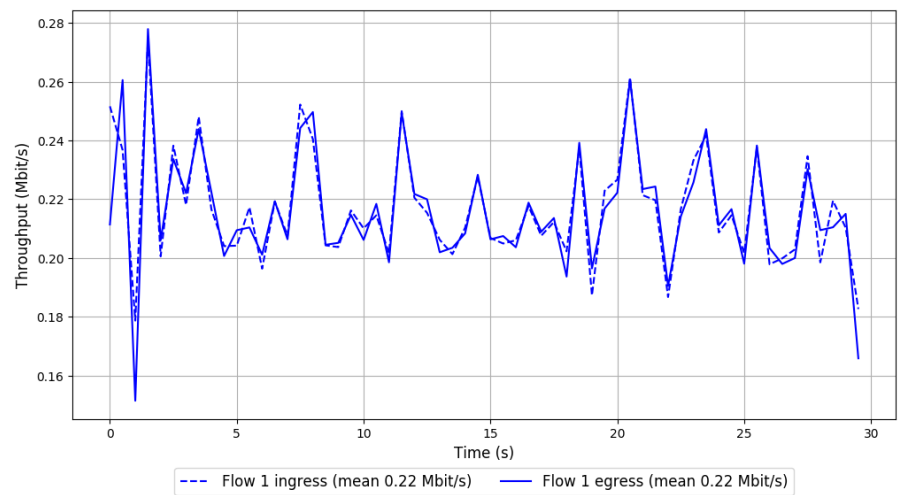


```
Run 2: Statistics of SCReAM

Start at: 2017-08-11 15:40:11
End at: 2017-08-11 15:40:41

# Below is generated by plot.py at 2017-08-11 19:47:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.530 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.530 ms
Loss rate: 0.38%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-08-11 15:50:55

End at: 2017-08-11 15:51:25

Below is generated by plot.py at 2017-08-11 19:47:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.851 ms

Loss rate: 0.38%

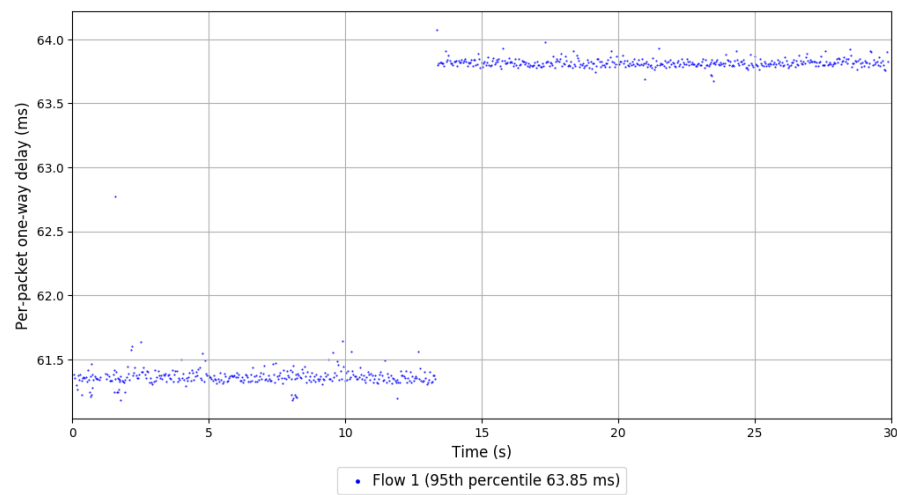
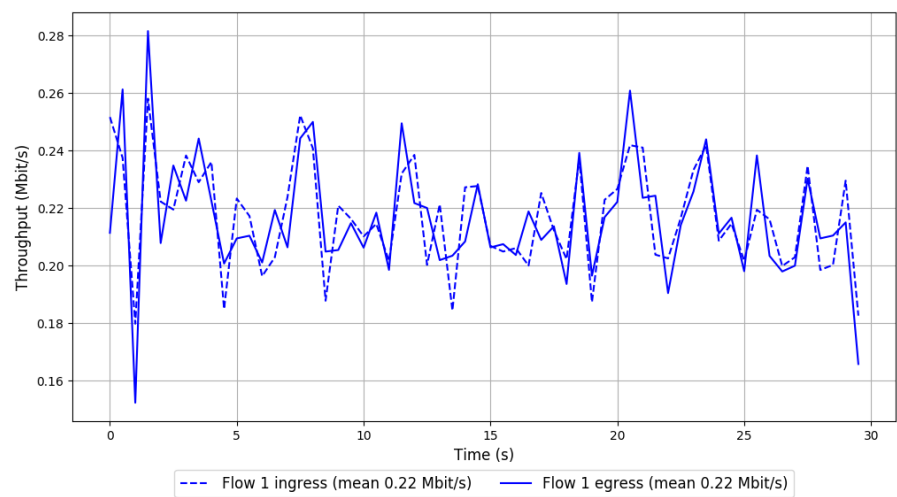
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.851 ms

Loss rate: 0.38%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-11 16:01:36

End at: 2017-08-11 16:02:06

Below is generated by plot.py at 2017-08-11 19:47:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.668 ms

Loss rate: 0.38%

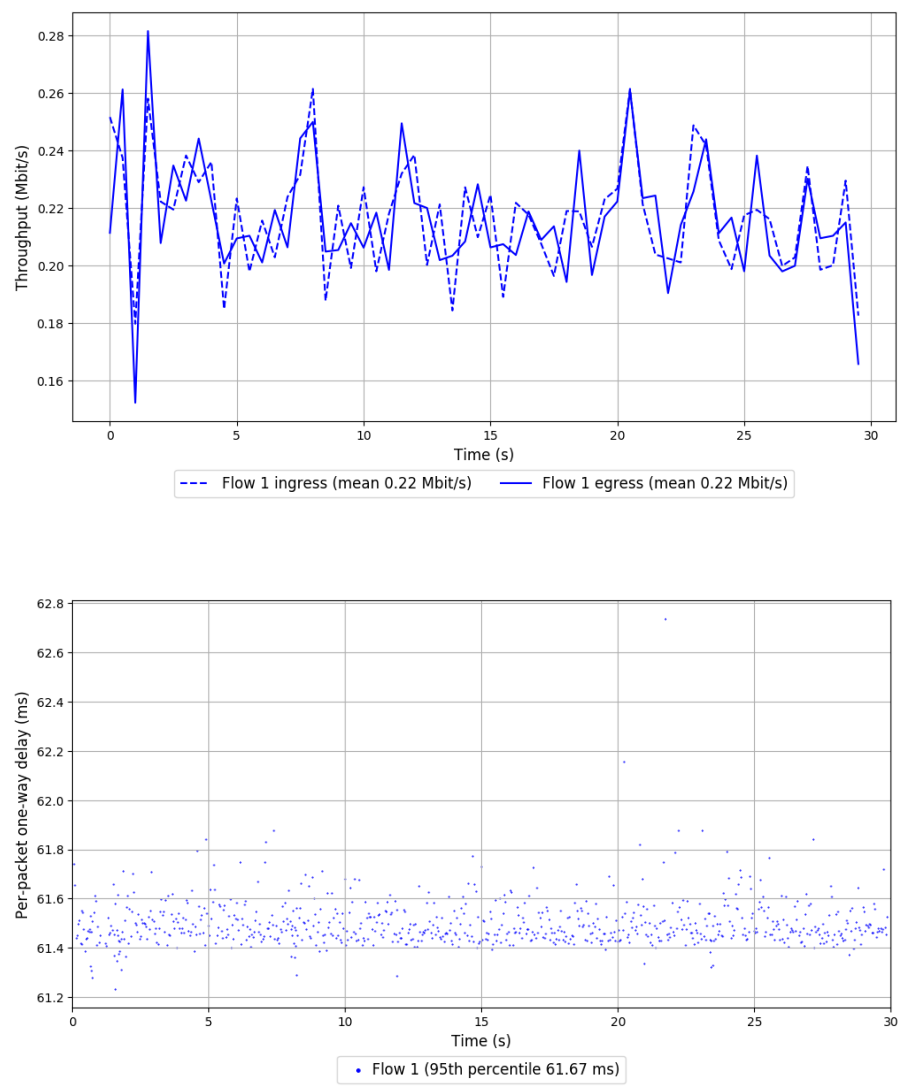
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.668 ms

Loss rate: 0.38%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-08-11 16:12:23

End at: 2017-08-11 16:12:53

Below is generated by plot.py at 2017-08-11 19:47:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.807 ms

Loss rate: 0.38%

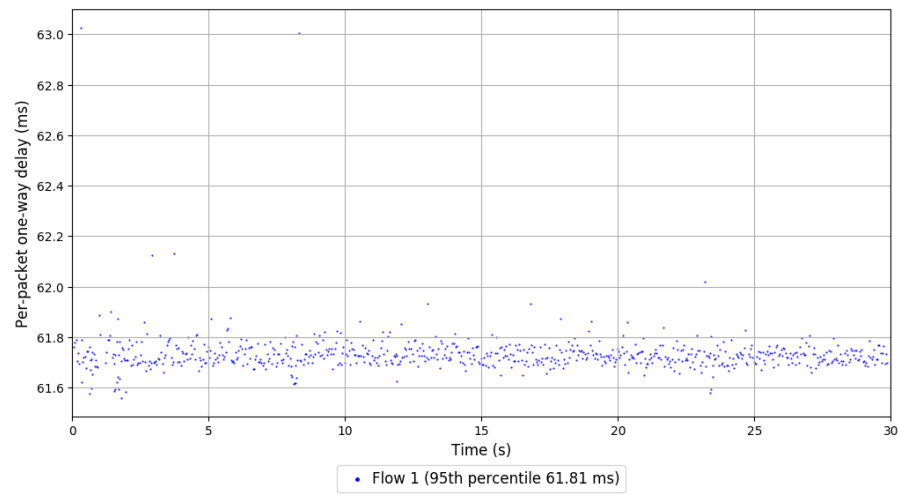
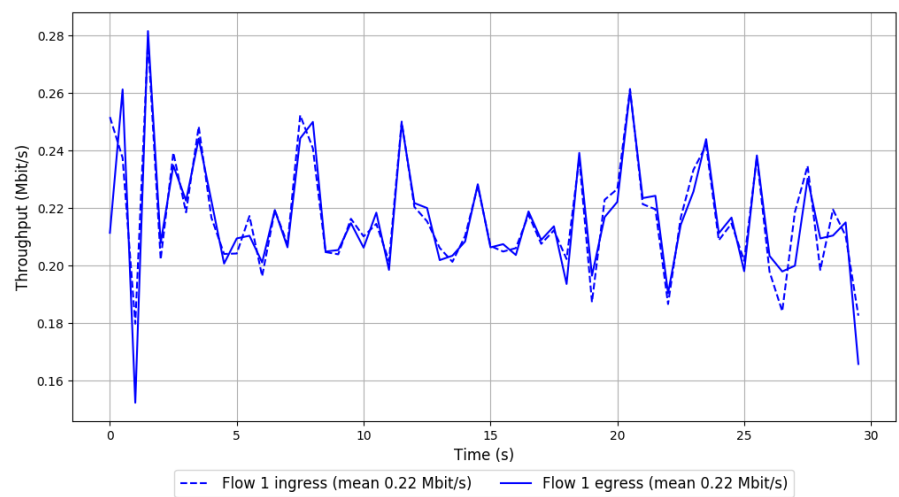
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.807 ms

Loss rate: 0.38%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-08-11 16:22:56

End at: 2017-08-11 16:23:26

Below is generated by plot.py at 2017-08-11 19:47:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.865 ms

Loss rate: 0.38%

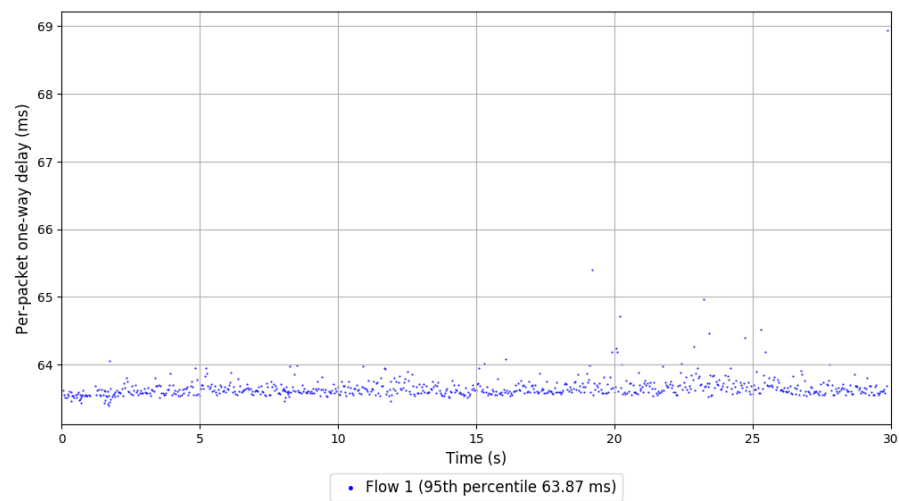
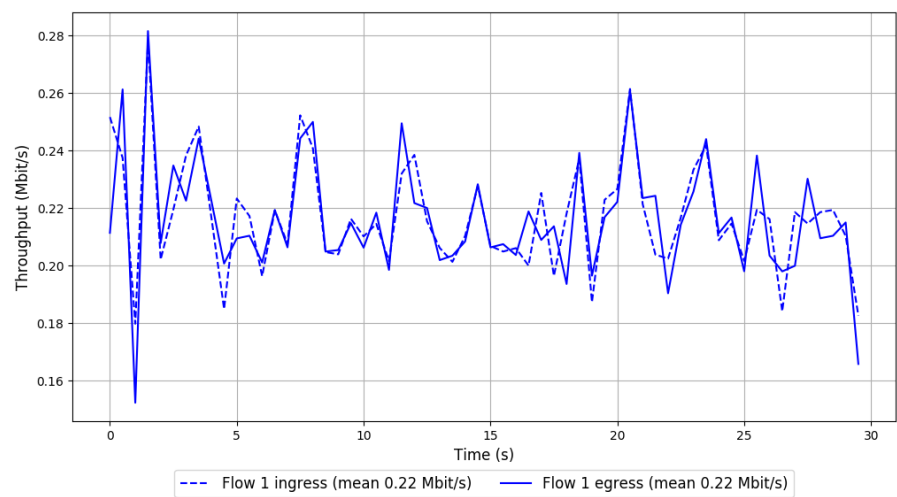
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.865 ms

Loss rate: 0.38%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-08-11 16:33:34

End at: 2017-08-11 16:34:04

Below is generated by plot.py at 2017-08-11 19:47:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.760 ms

Loss rate: 0.38%

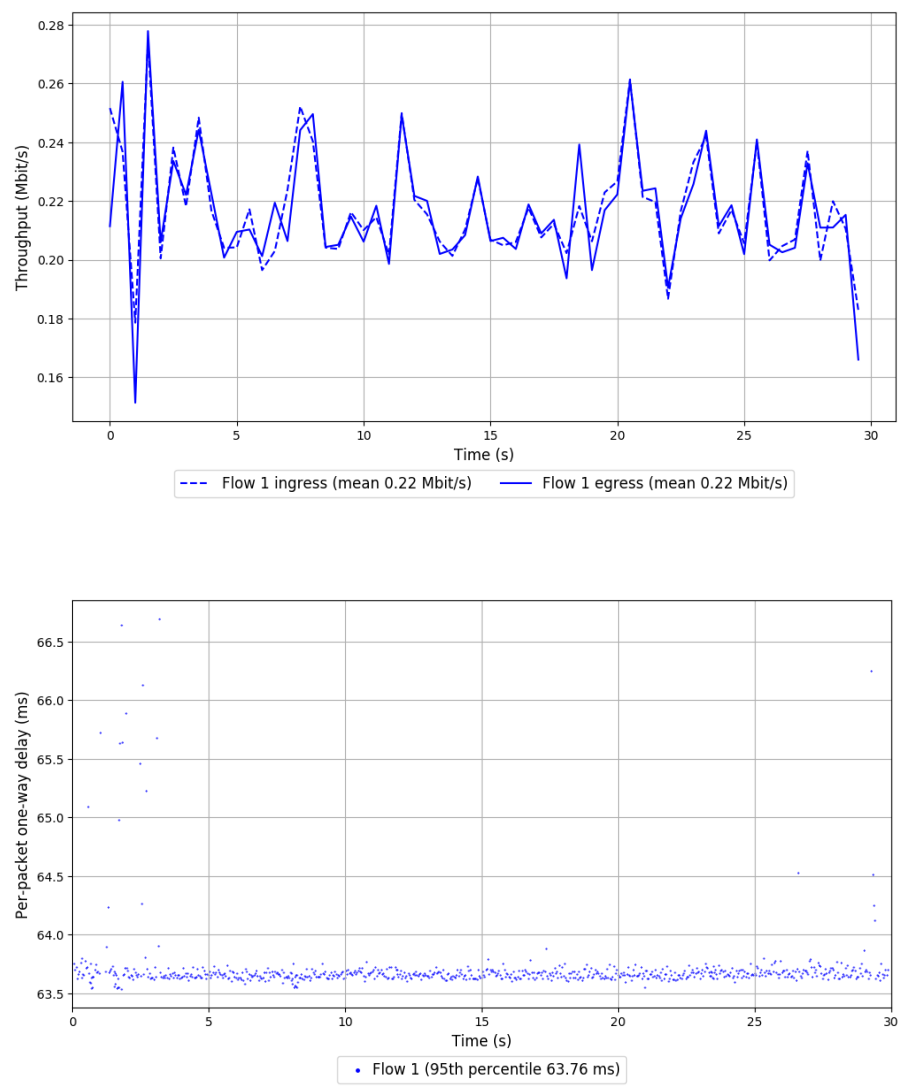
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.760 ms

Loss rate: 0.38%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-11 16:44:13

End at: 2017-08-11 16:44:43

Below is generated by plot.py at 2017-08-11 19:47:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.832 ms

Loss rate: 0.38%

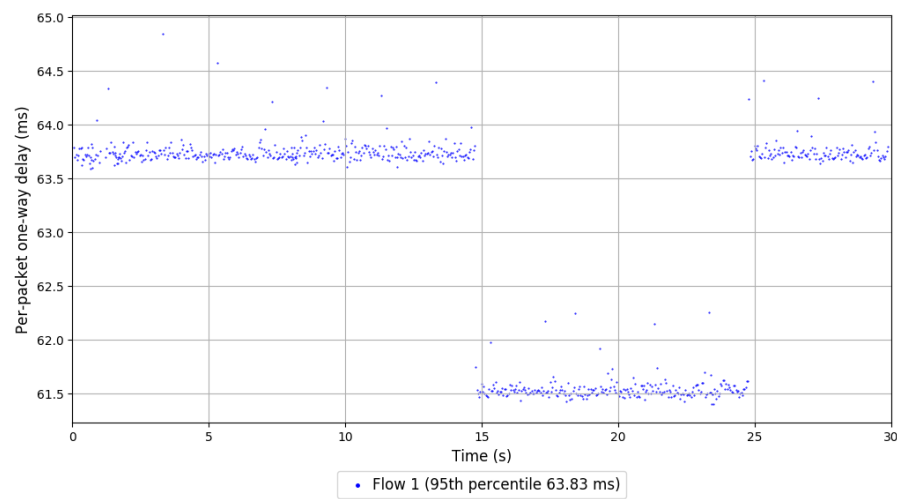
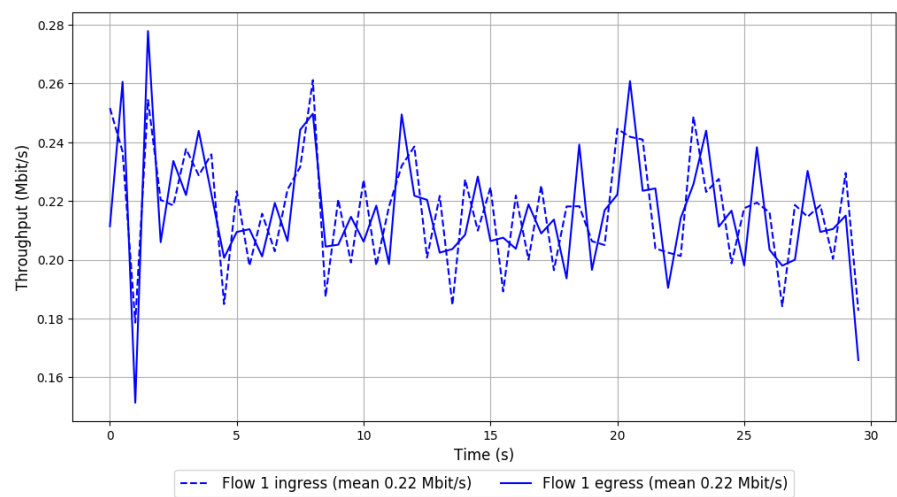
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.832 ms

Loss rate: 0.38%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-08-11 16:54:53

End at: 2017-08-11 16:55:23

Below is generated by plot.py at 2017-08-11 19:47:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.610 ms

Loss rate: 0.38%

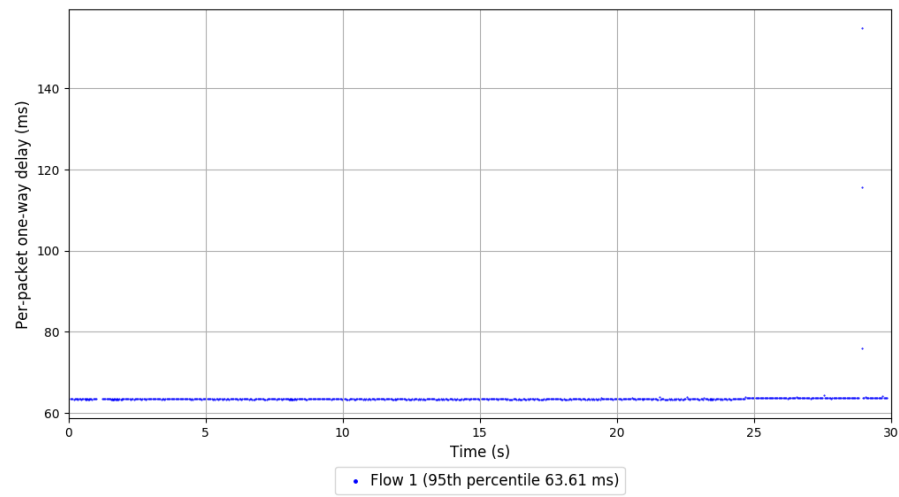
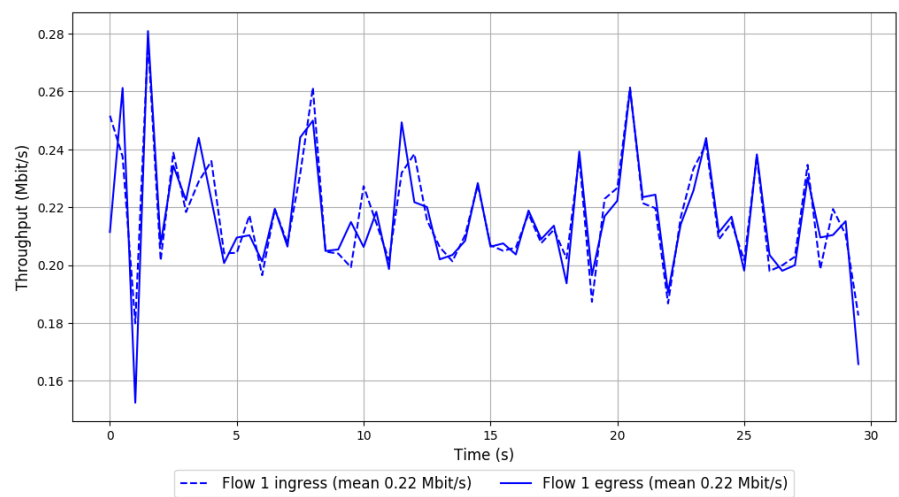
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.610 ms

Loss rate: 0.38%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-08-11 17:05:20

End at: 2017-08-11 17:05:50

Below is generated by plot.py at 2017-08-11 19:47:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.436 ms

Loss rate: 0.38%

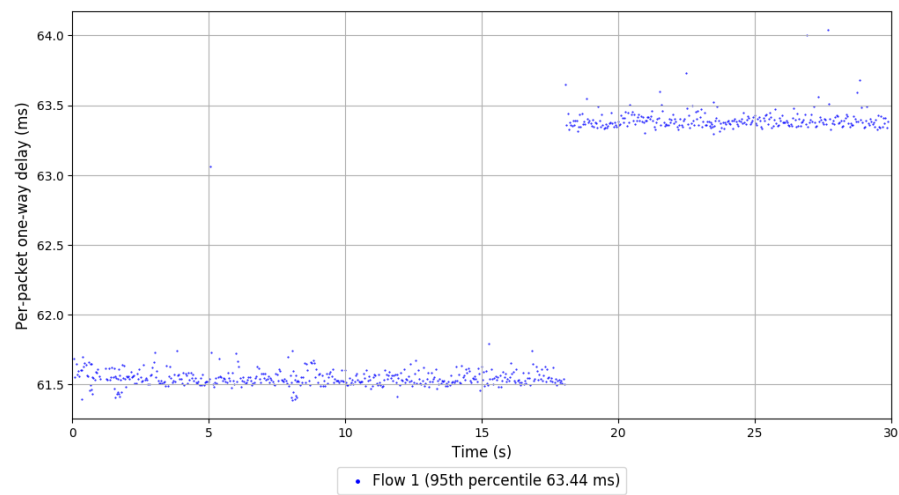
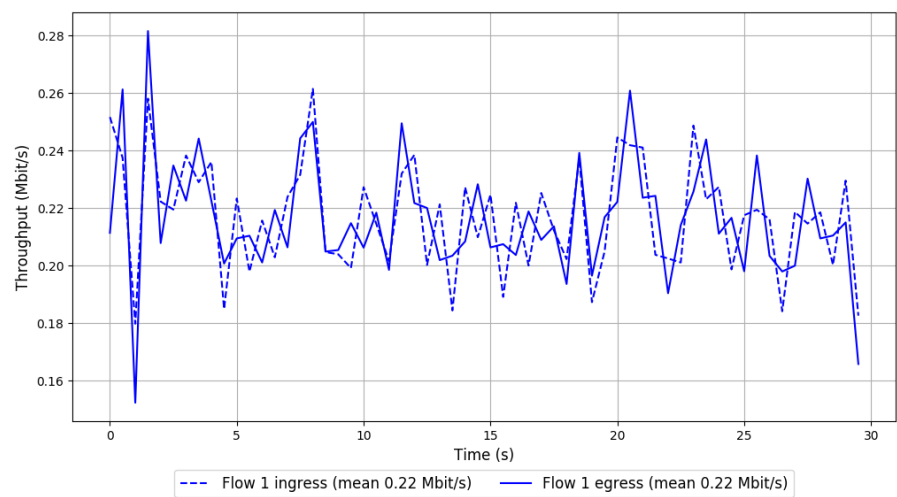
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.436 ms

Loss rate: 0.38%

Run 10: Report of SReAM — Data Link

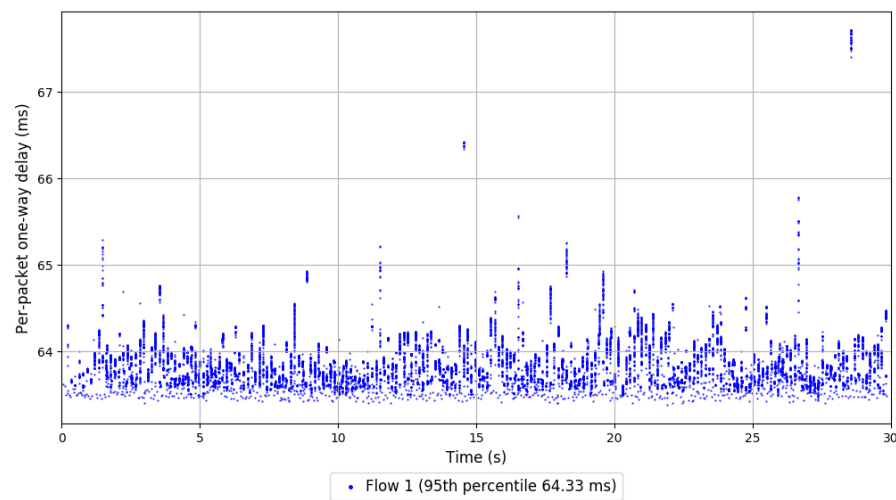
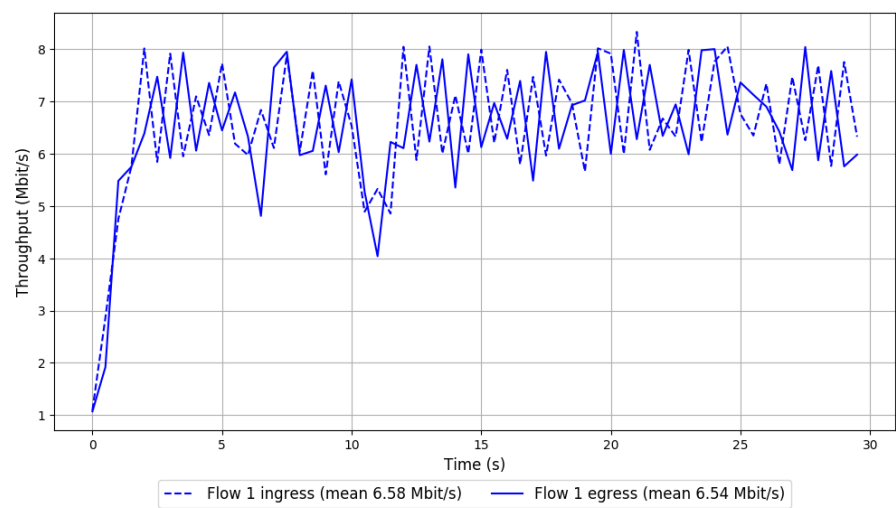


```
Run 1: Statistics of Sprout

Start at: 2017-08-11 15:26:31
End at: 2017-08-11 15:27:01

# Below is generated by plot.py at 2017-08-11 19:47:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: 64.333 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: 64.333 ms
Loss rate: 1.02%
```


Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-11 15:37:16

End at: 2017-08-11 15:37:46

Below is generated by plot.py at 2017-08-11 19:47:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 64.394 ms

Loss rate: 0.78%

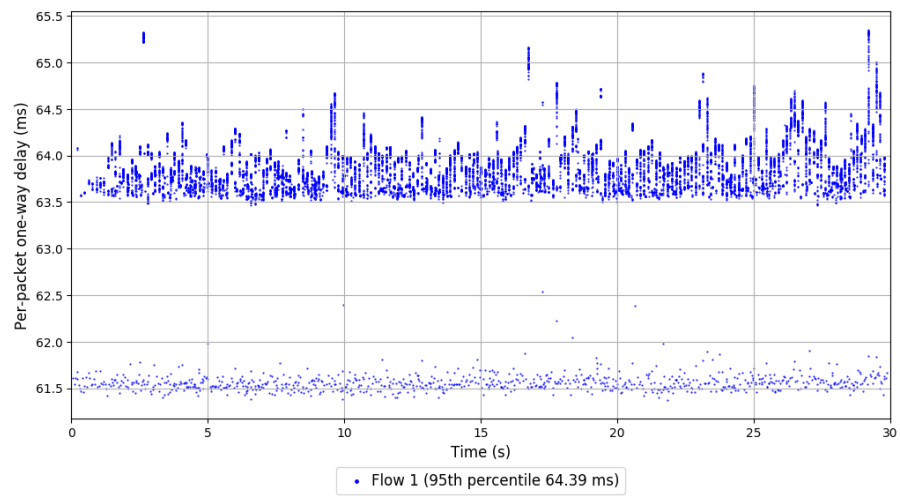
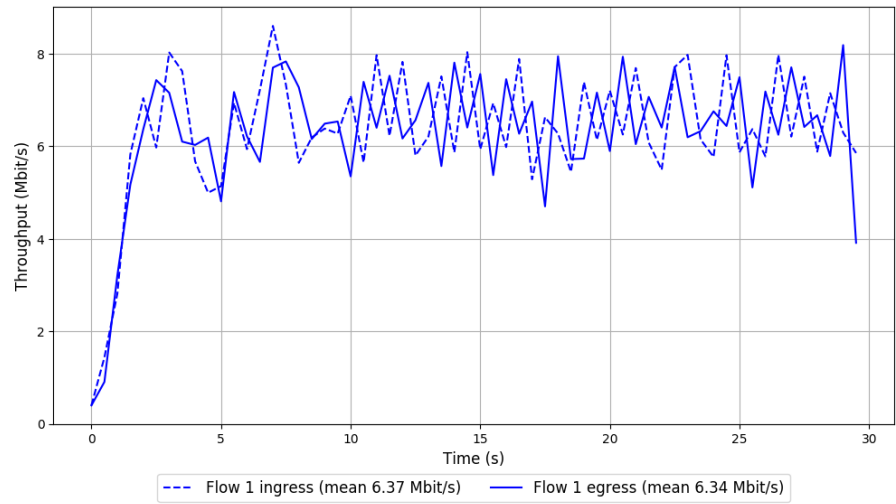
-- Flow 1:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 64.394 ms

Loss rate: 0.78%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-11 15:47:59

End at: 2017-08-11 15:48:29

Below is generated by plot.py at 2017-08-11 19:48:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 64.879 ms

Loss rate: 0.65%

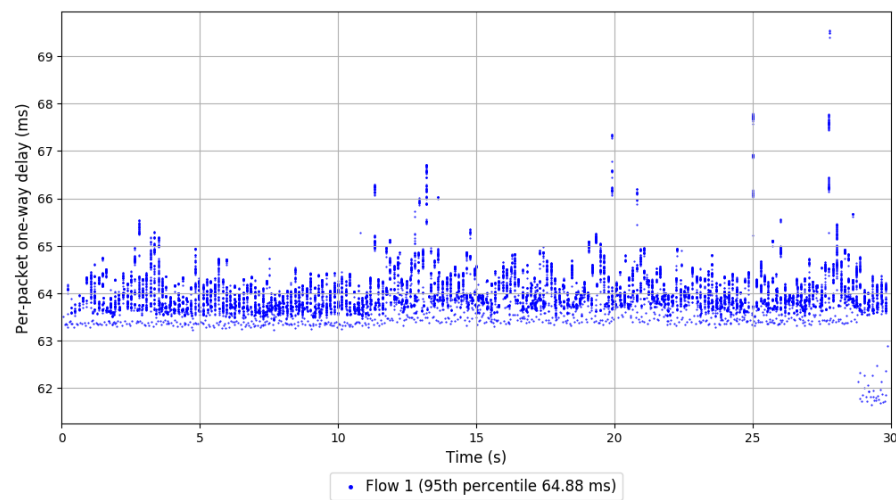
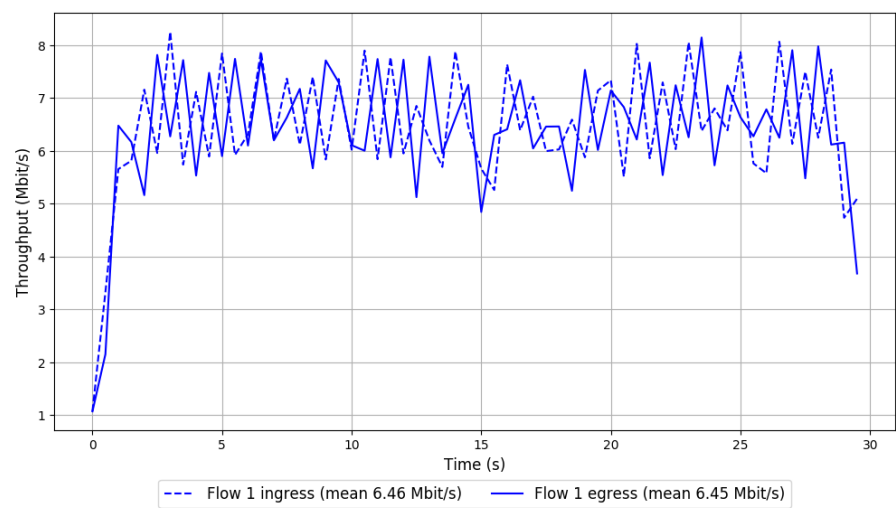
-- Flow 1:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 64.879 ms

Loss rate: 0.65%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-08-11 15:58:41

End at: 2017-08-11 15:59:11

Below is generated by plot.py at 2017-08-11 19:48:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.10 Mbit/s

95th percentile per-packet one-way delay: 64.568 ms

Loss rate: 1.07%

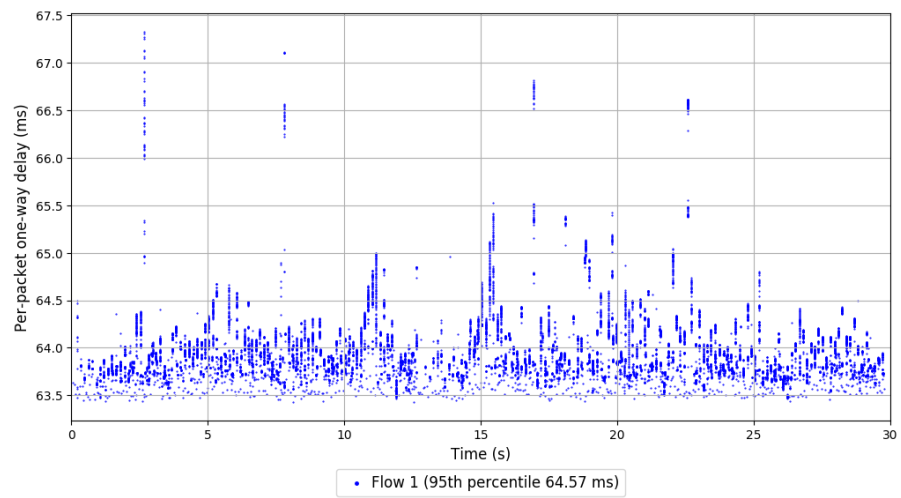
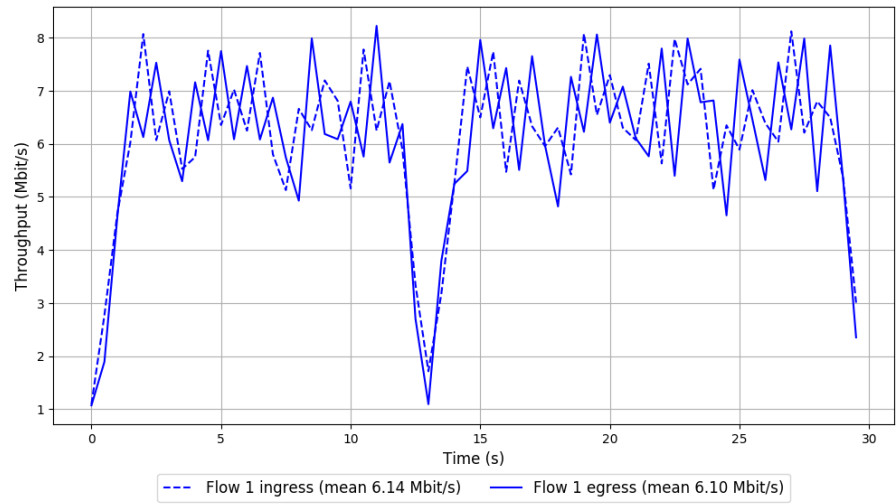
-- Flow 1:

Average throughput: 6.10 Mbit/s

95th percentile per-packet one-way delay: 64.568 ms

Loss rate: 1.07%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-11 16:09:30

End at: 2017-08-11 16:10:00

Below is generated by plot.py at 2017-08-11 19:48:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.32 Mbit/s

95th percentile per-packet one-way delay: 64.331 ms

Loss rate: 1.64%

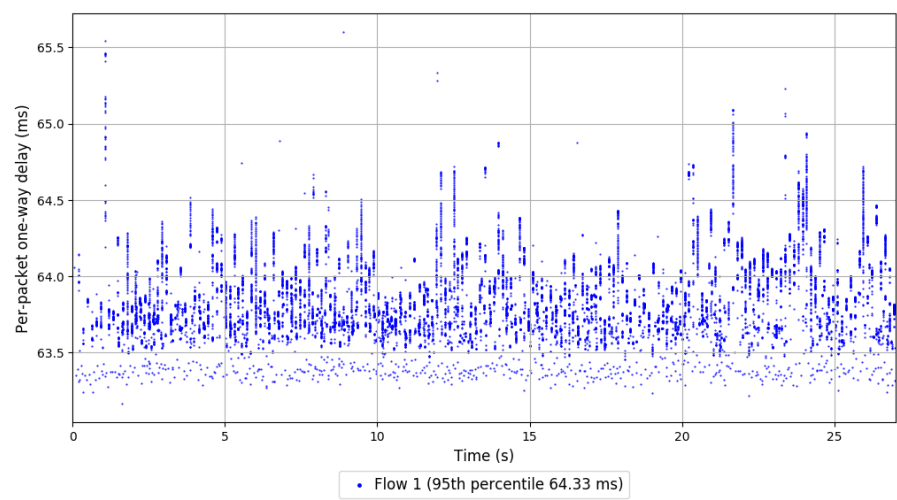
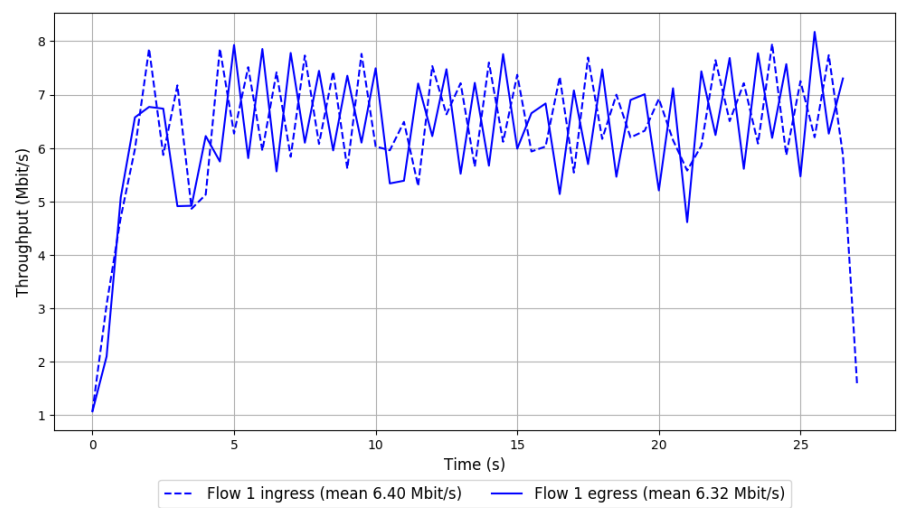
-- Flow 1:

Average throughput: 6.32 Mbit/s

95th percentile per-packet one-way delay: 64.331 ms

Loss rate: 1.64%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-11 16:20:01

End at: 2017-08-11 16:20:31

Below is generated by plot.py at 2017-08-11 19:48:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.28 Mbit/s

95th percentile per-packet one-way delay: 65.183 ms

Loss rate: 1.46%

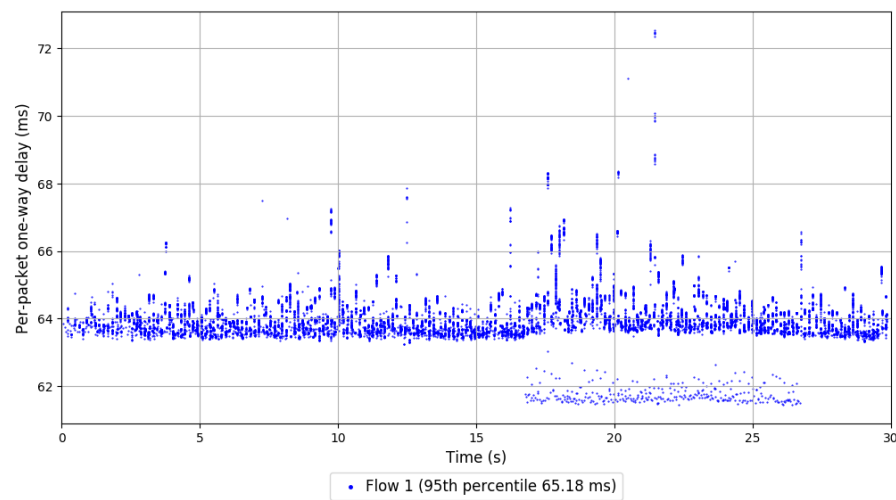
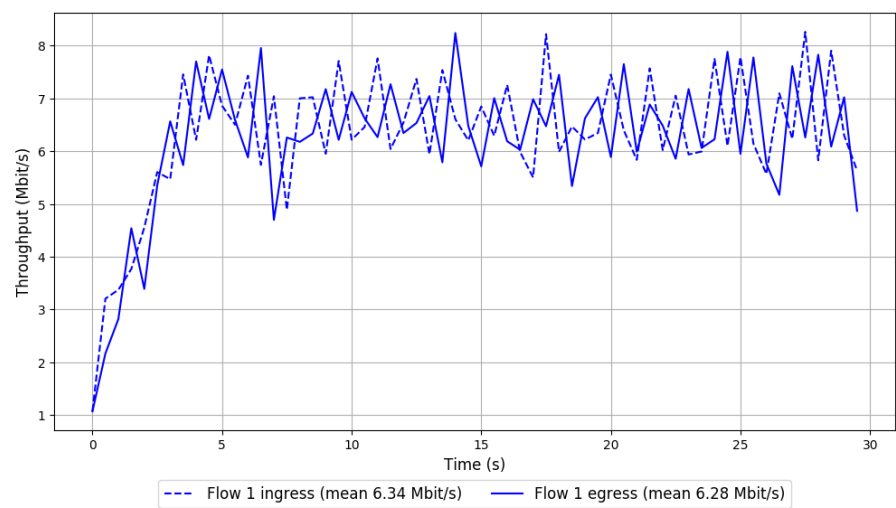
-- Flow 1:

Average throughput: 6.28 Mbit/s

95th percentile per-packet one-way delay: 65.183 ms

Loss rate: 1.46%

Run 6: Report of Sprout — Data Link

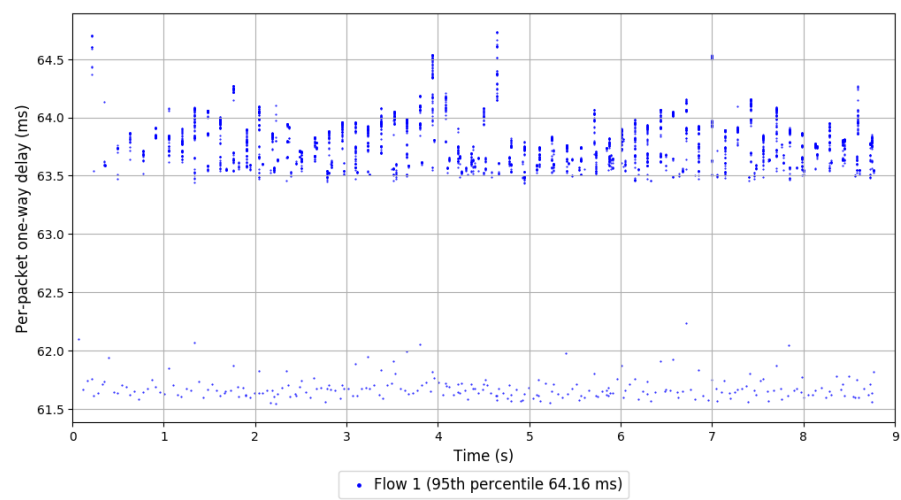
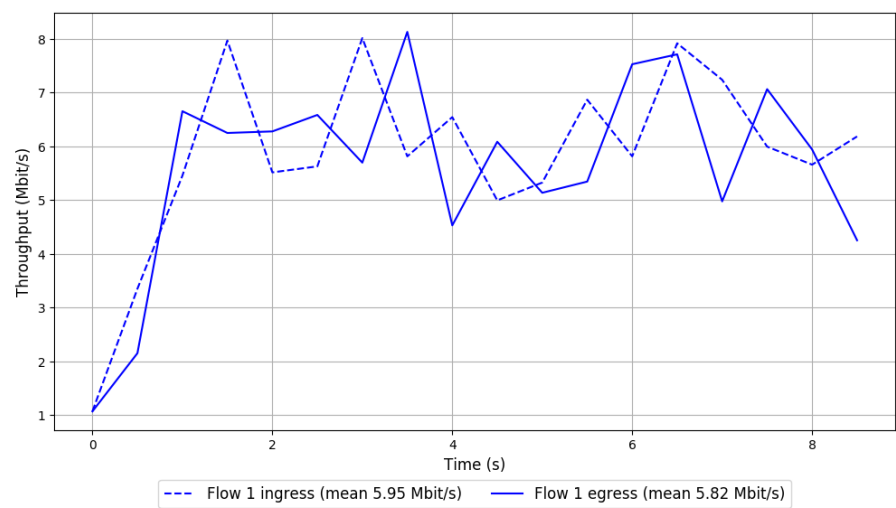


Run 7: Statistics of Sprout

Start at: 2017-08-11 16:30:38

End at: 2017-08-11 16:31:08

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-11 16:41:17

End at: 2017-08-11 16:41:47

Below is generated by plot.py at 2017-08-11 19:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.26 Mbit/s

95th percentile per-packet one-way delay: 63.273 ms

Loss rate: 1.98%

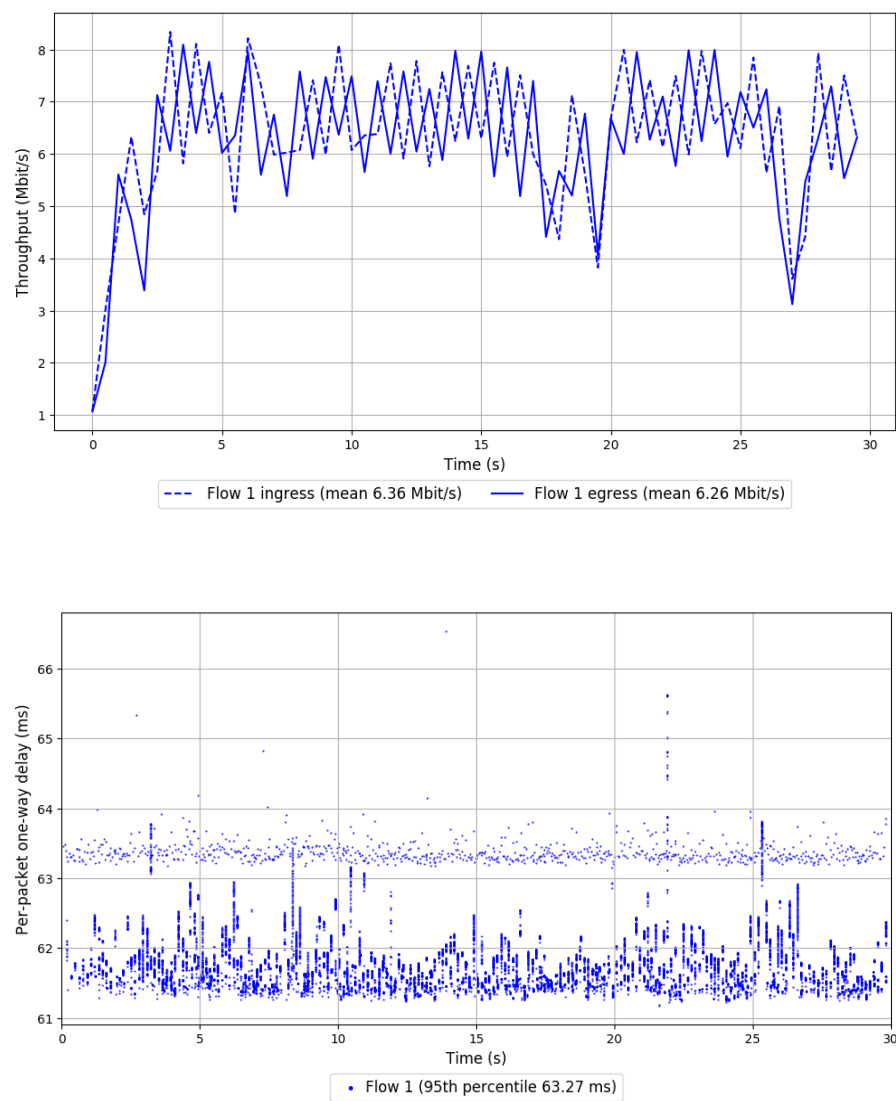
-- Flow 1:

Average throughput: 6.26 Mbit/s

95th percentile per-packet one-way delay: 63.273 ms

Loss rate: 1.98%

Run 8: Report of Sprout — Data Link

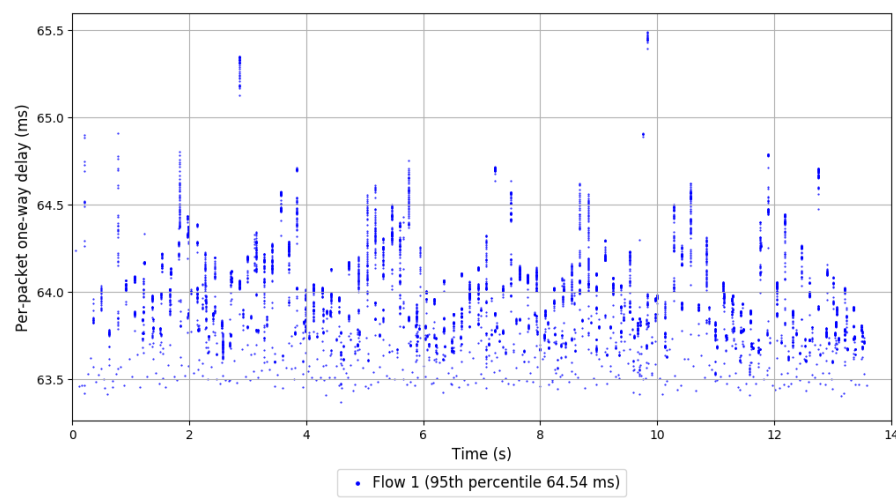
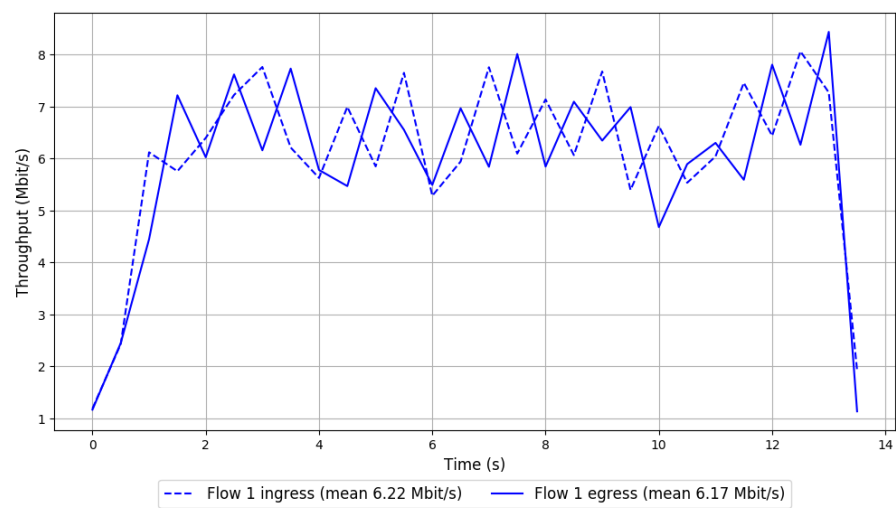


Run 9: Statistics of Sprout

Start at: 2017-08-11 16:51:54

End at: 2017-08-11 16:52:24

Run 9: Report of Sprout — Data Link

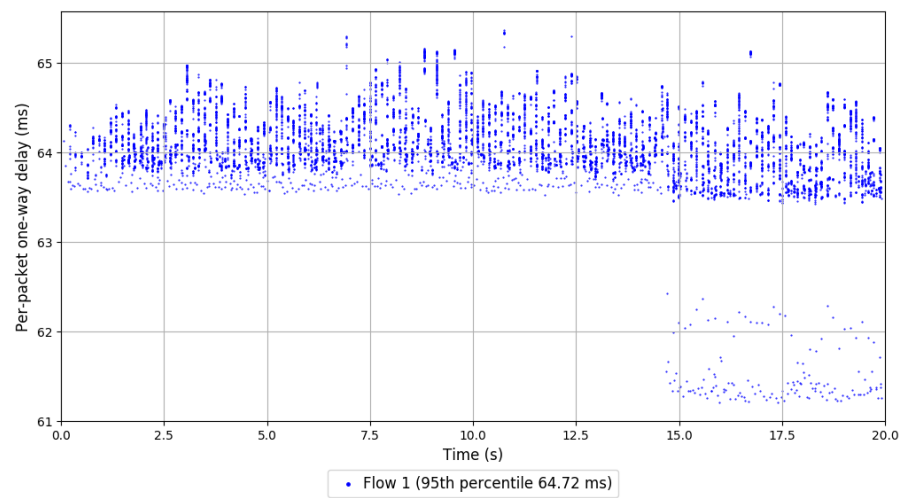
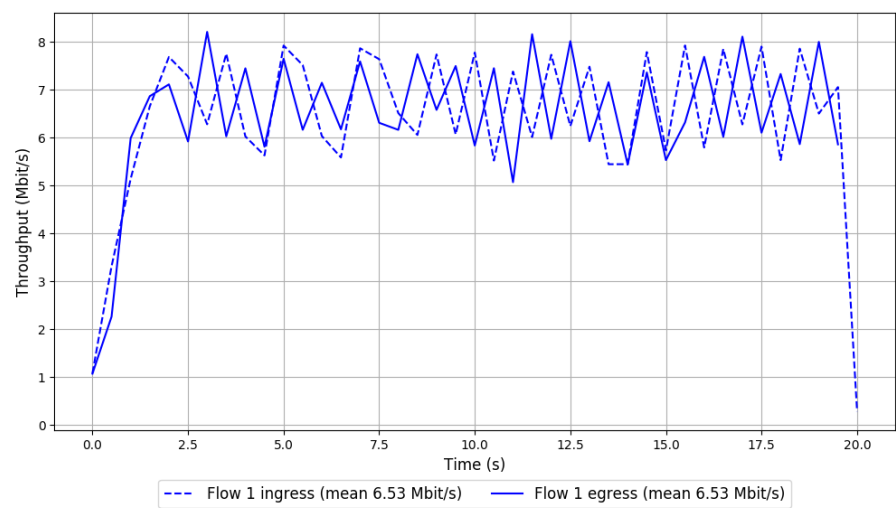


Run 10: Statistics of Sprout

Start at: 2017-08-11 17:02:23

End at: 2017-08-11 17:02:53

Run 10: Report of Sprout — Data Link

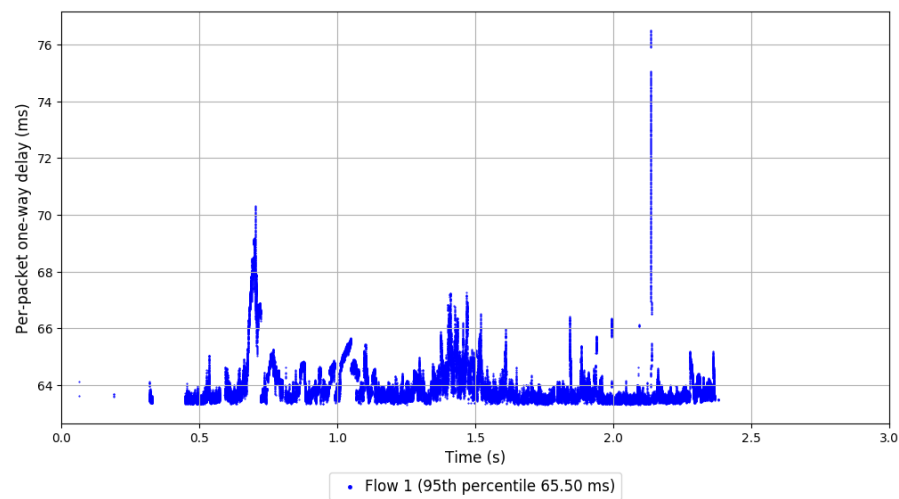
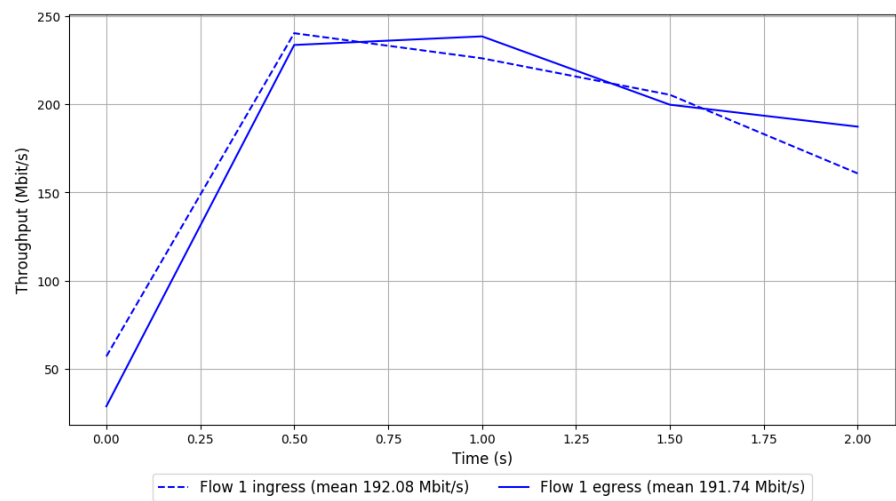


Run 1: Statistics of TaoVA-100x

Start at: 2017-08-11 15:25:52

End at: 2017-08-11 15:26:22

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

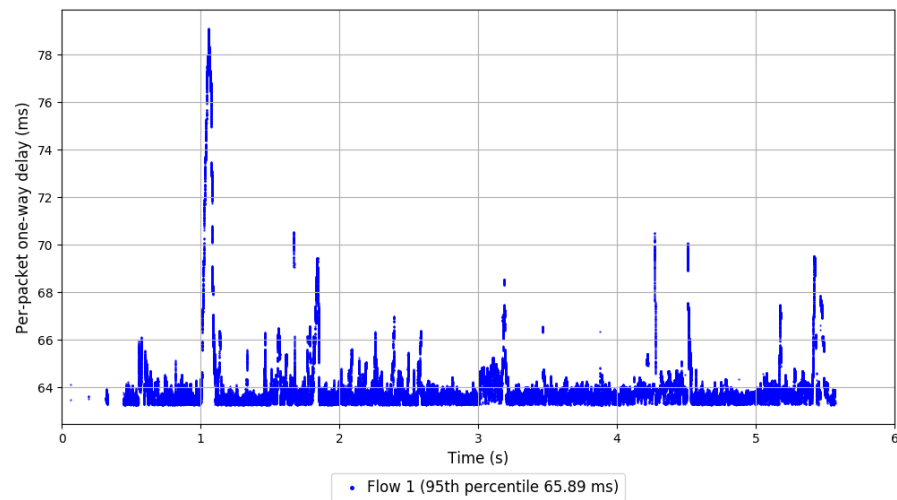
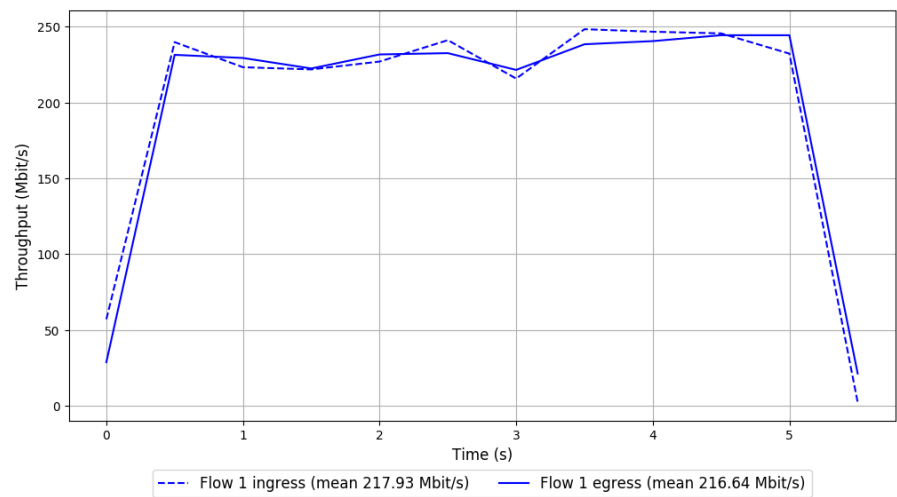


Run 2: Statistics of TaoVA-100x

Start at: 2017-08-11 15:36:34

End at: 2017-08-11 15:37:04

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

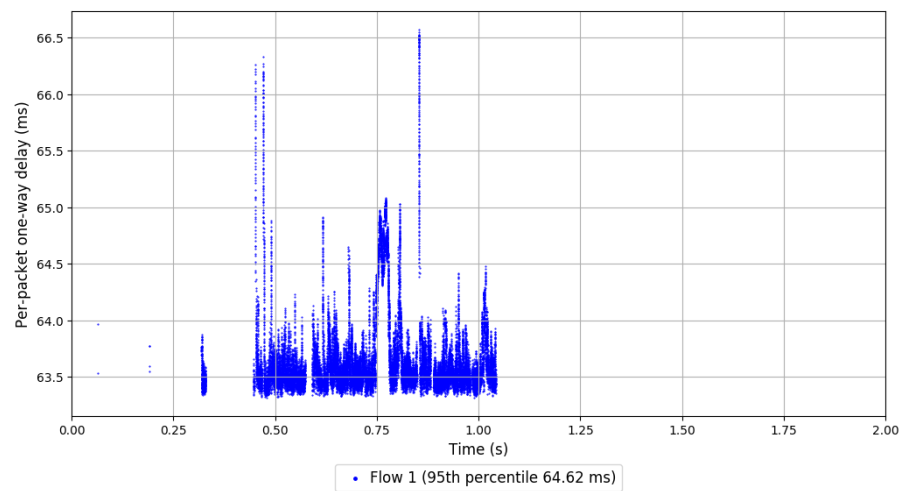
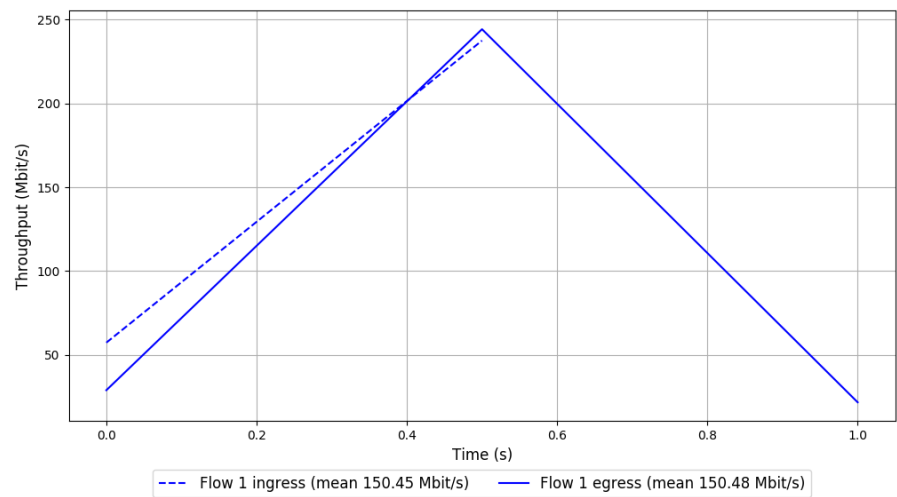


Run 3: Statistics of TaoVA-100x

Start at: 2017-08-11 15:47:21

End at: 2017-08-11 15:47:51

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

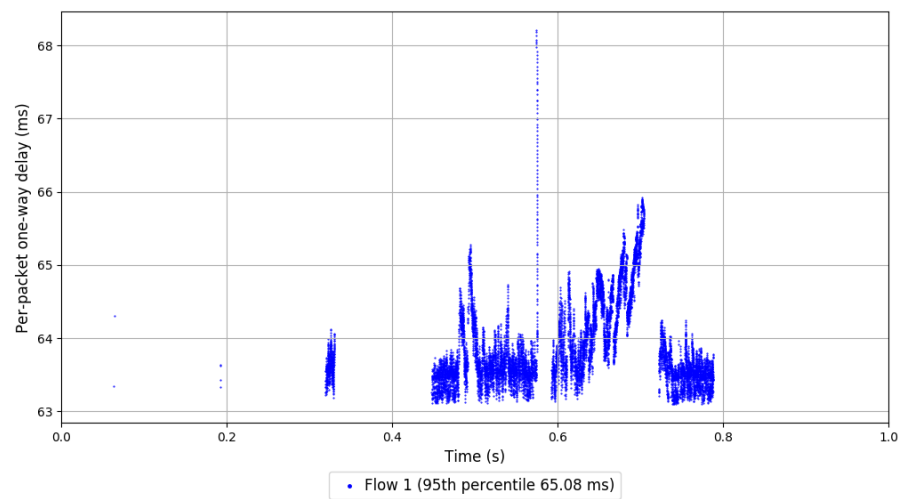
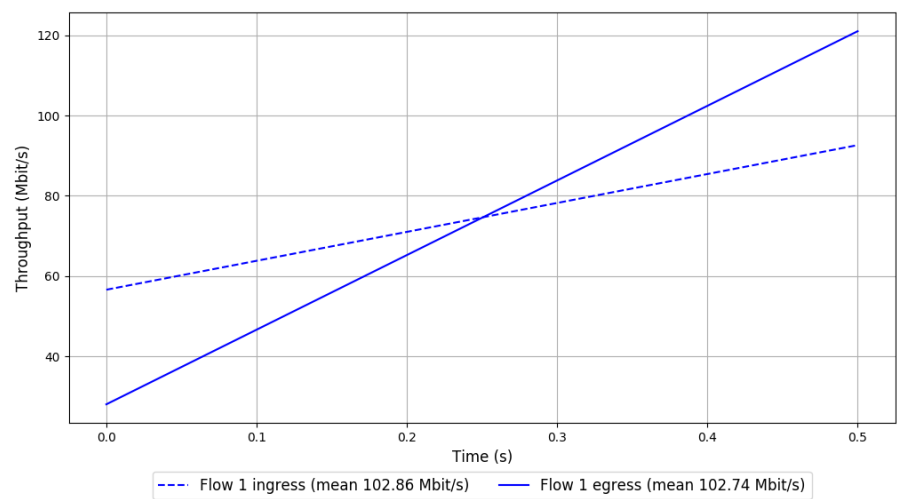


Run 4: Statistics of TaoVA-100x

Start at: 2017-08-11 15:58:03

End at: 2017-08-11 15:58:33

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

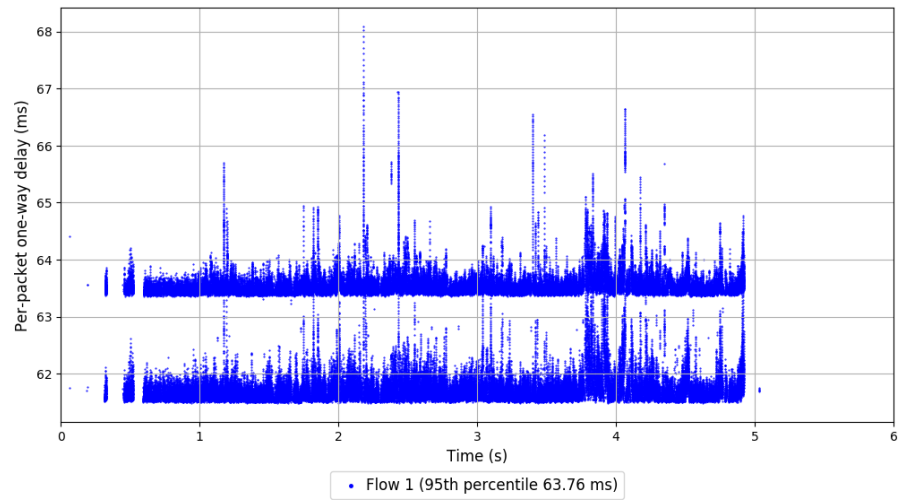
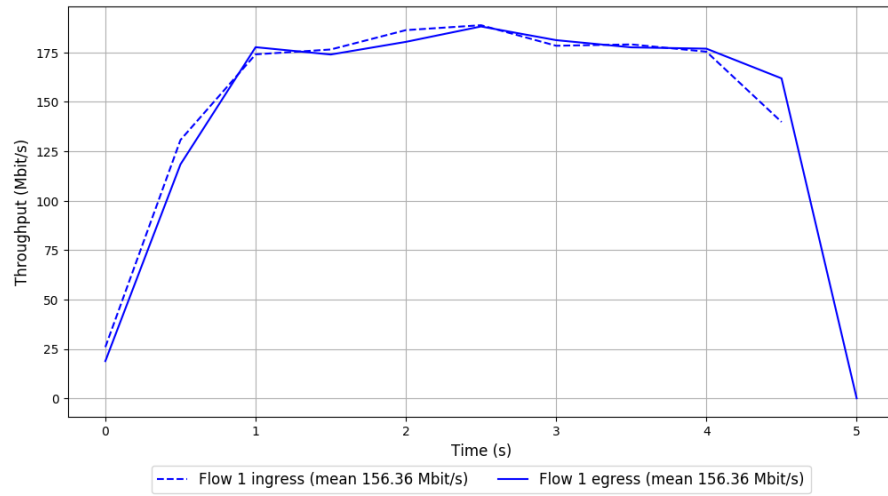


Run 5: Statistics of TaoVA-100x

Start at: 2017-08-11 16:08:49

End at: 2017-08-11 16:09:19

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

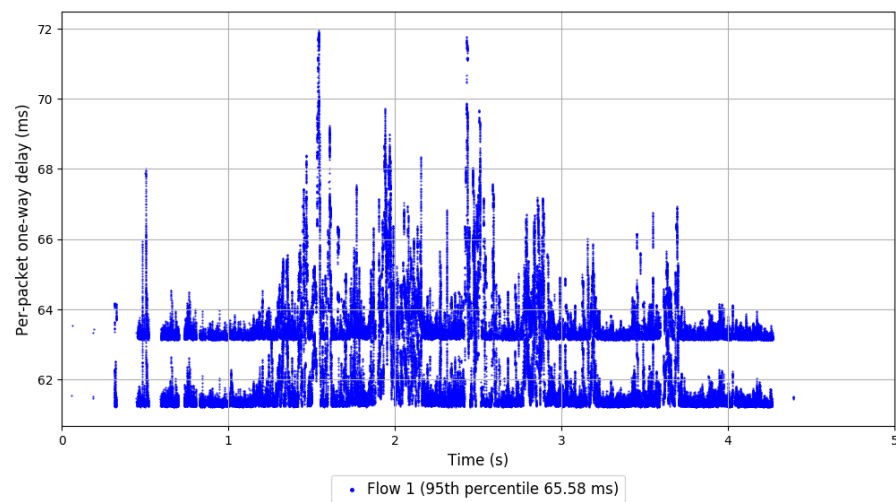
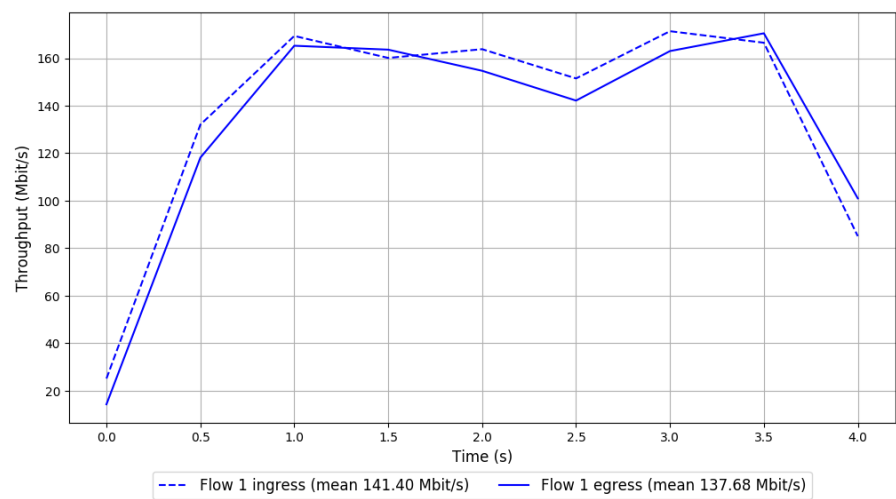


Run 6: Statistics of TaoVA-100x

Start at: 2017-08-11 16:19:21

End at: 2017-08-11 16:19:51

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

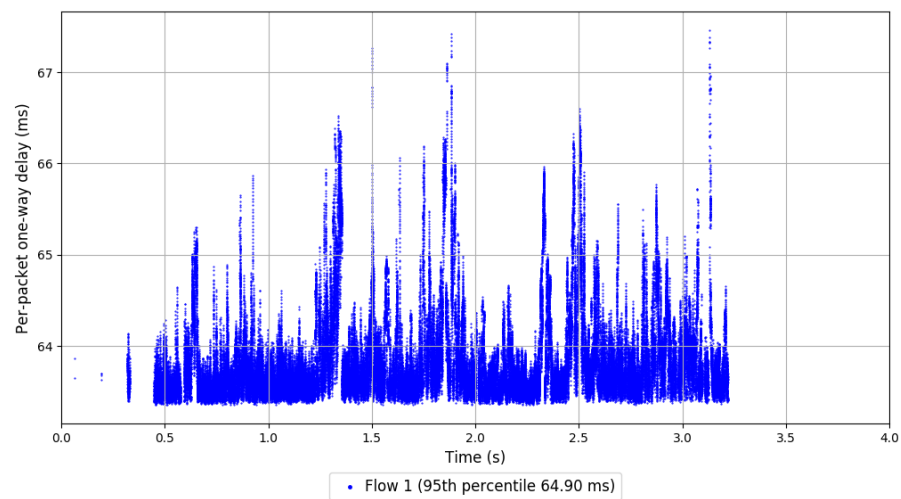
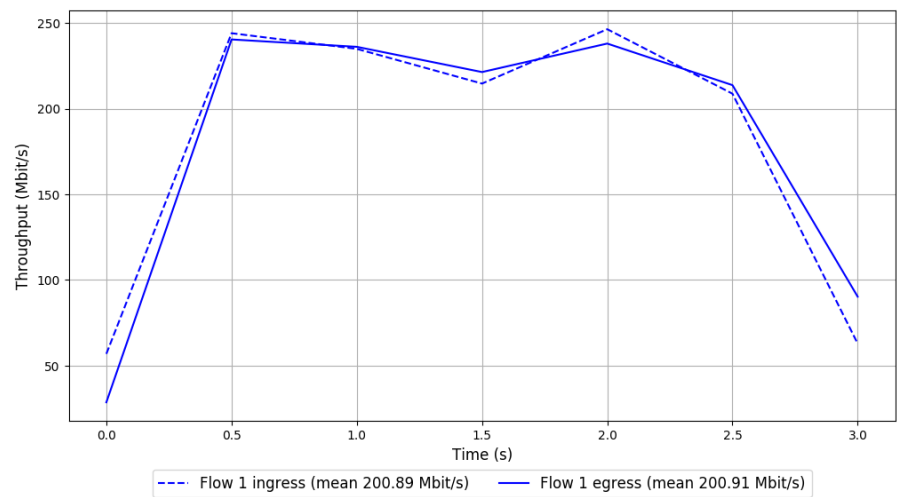


Run 7: Statistics of TaoVA-100x

Start at: 2017-08-11 16:29:58

End at: 2017-08-11 16:30:28

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

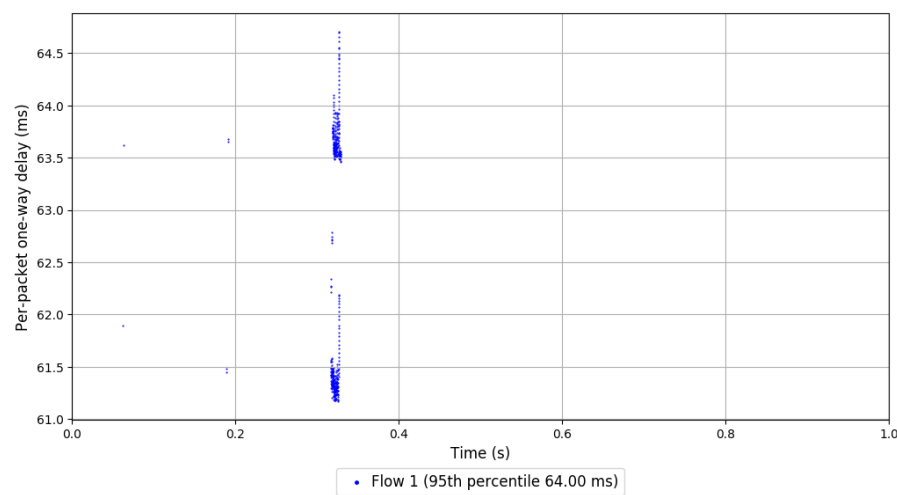
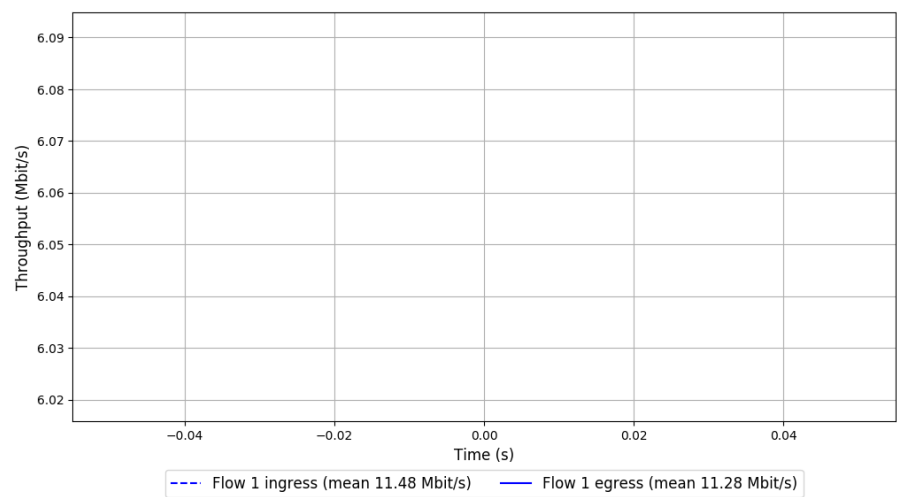


Run 8: Statistics of TaoVA-100x

Start at: 2017-08-11 16:40:39

End at: 2017-08-11 16:41:09

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

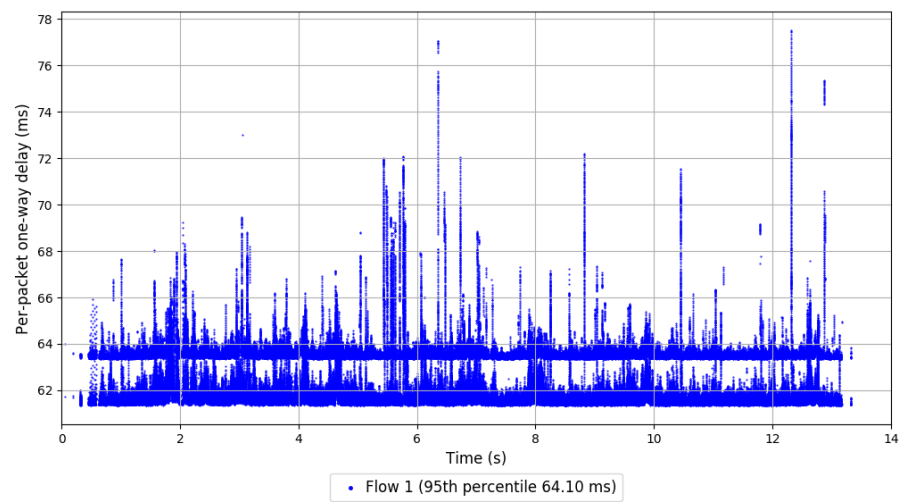
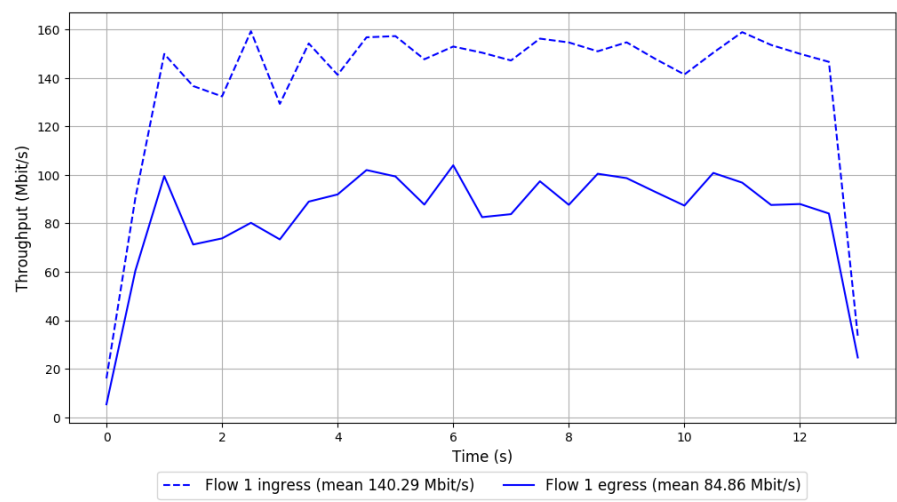


Run 9: Statistics of TaoVA-100x

Start at: 2017-08-11 16:51:10

End at: 2017-08-11 16:51:40

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

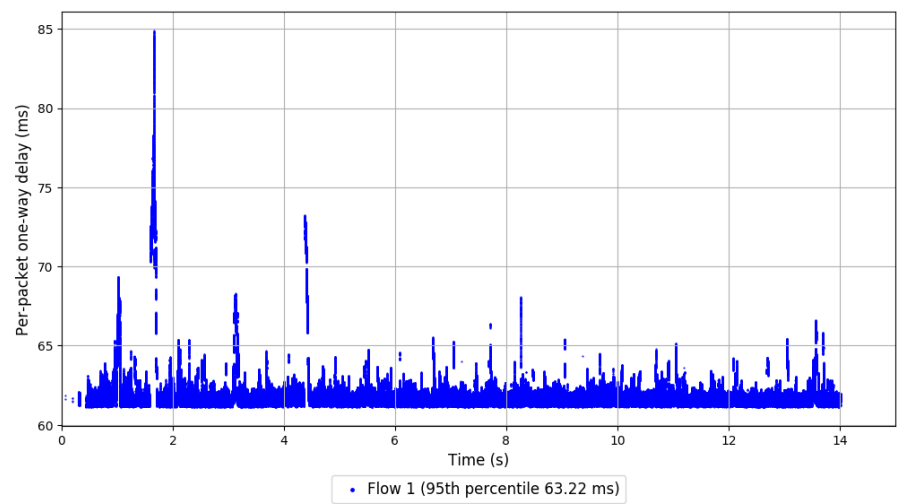
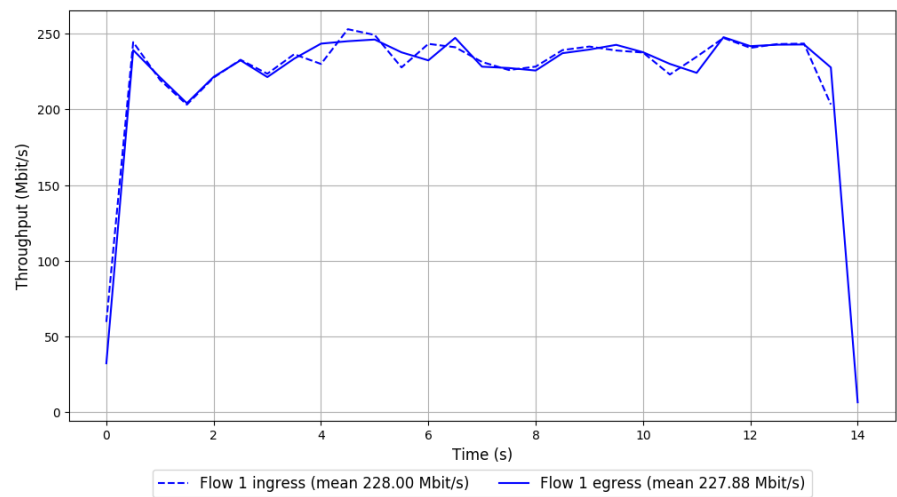


Run 10: Statistics of TaoVA-100x

Start at: 2017-08-11 17:01:35

End at: 2017-08-11 17:02:05

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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-11 15:30:00

End at: 2017-08-11 15:30:30

Below is generated by plot.py at 2017-08-11 19:49:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.04 Mbit/s

95th percentile per-packet one-way delay: 64.389 ms

Loss rate: 0.66%

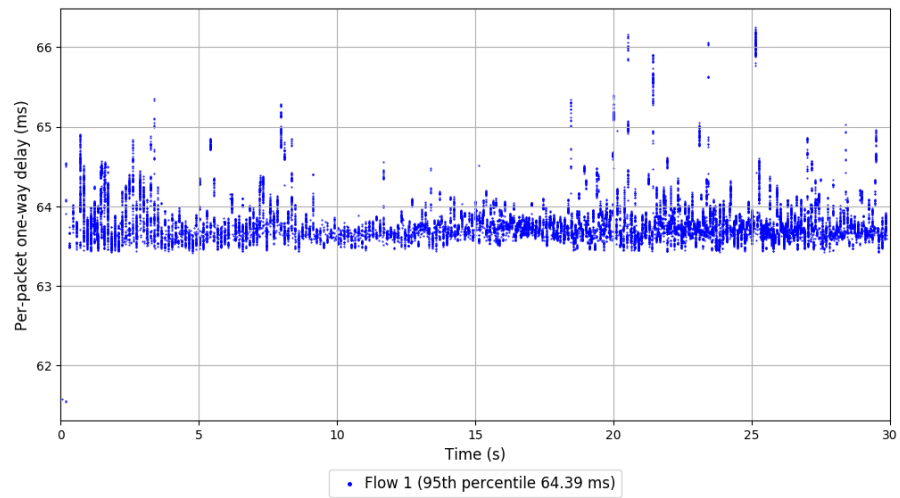
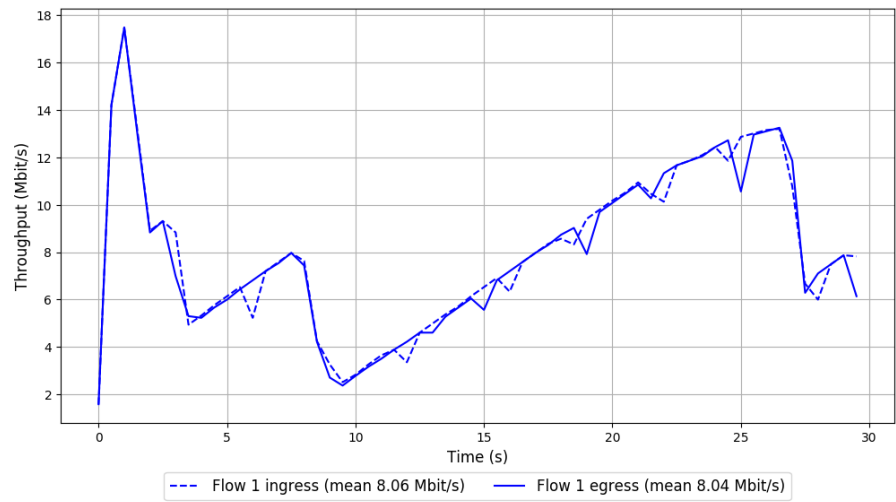
-- Flow 1:

Average throughput: 8.04 Mbit/s

95th percentile per-packet one-way delay: 64.389 ms

Loss rate: 0.66%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-11 15:40:49

End at: 2017-08-11 15:41:19

Below is generated by plot.py at 2017-08-11 19:49:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.09 Mbit/s

95th percentile per-packet one-way delay: 64.487 ms

Loss rate: 0.52%

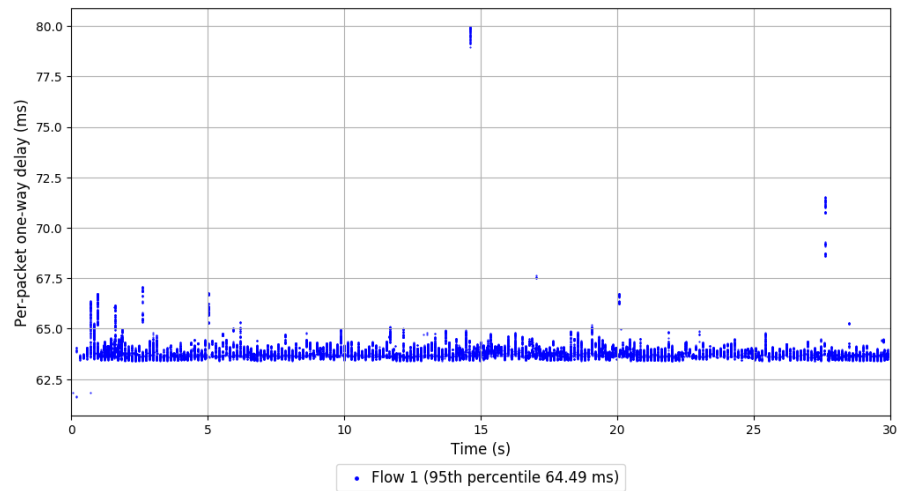
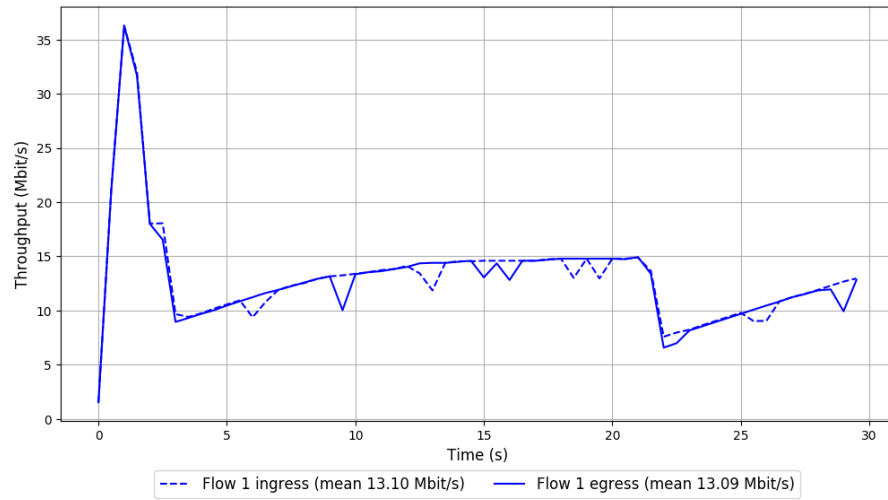
-- Flow 1:

Average throughput: 13.09 Mbit/s

95th percentile per-packet one-way delay: 64.487 ms

Loss rate: 0.52%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-11 15:51:32

End at: 2017-08-11 15:52:02

Below is generated by plot.py at 2017-08-11 19:49:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.84 Mbit/s

95th percentile per-packet one-way delay: 64.545 ms

Loss rate: 1.80%

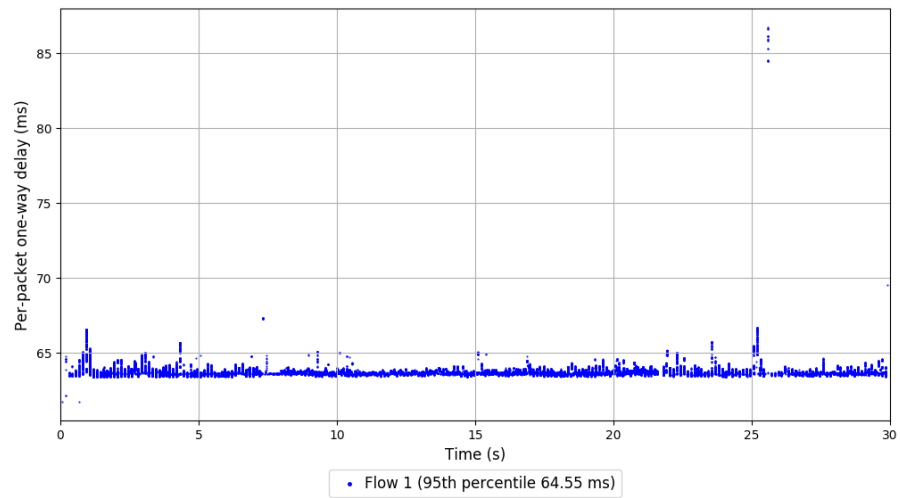
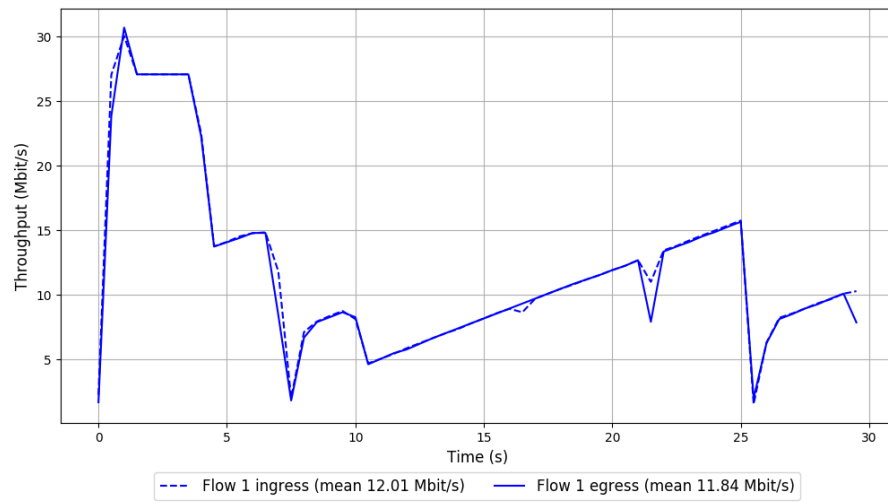
-- Flow 1:

Average throughput: 11.84 Mbit/s

95th percentile per-packet one-way delay: 64.545 ms

Loss rate: 1.80%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-11 16:02:13

End at: 2017-08-11 16:02:43

Below is generated by plot.py at 2017-08-11 19:49:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.59 Mbit/s

95th percentile per-packet one-way delay: 64.518 ms

Loss rate: 0.49%

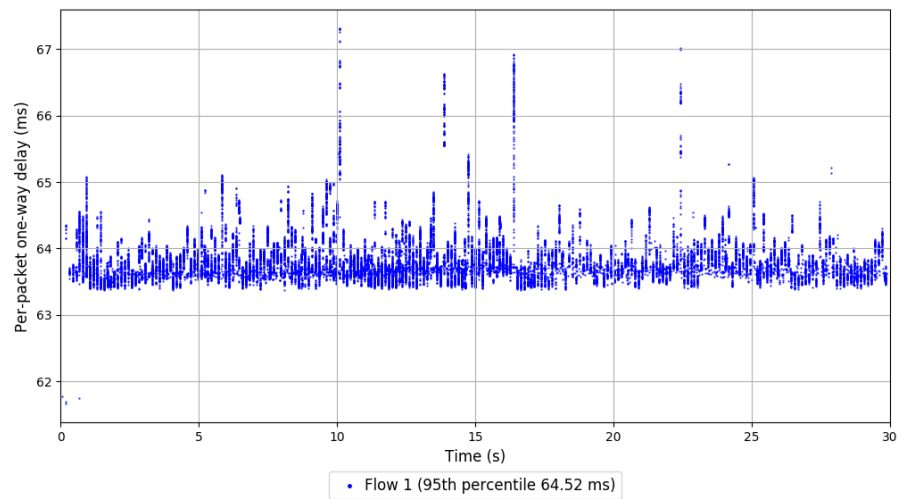
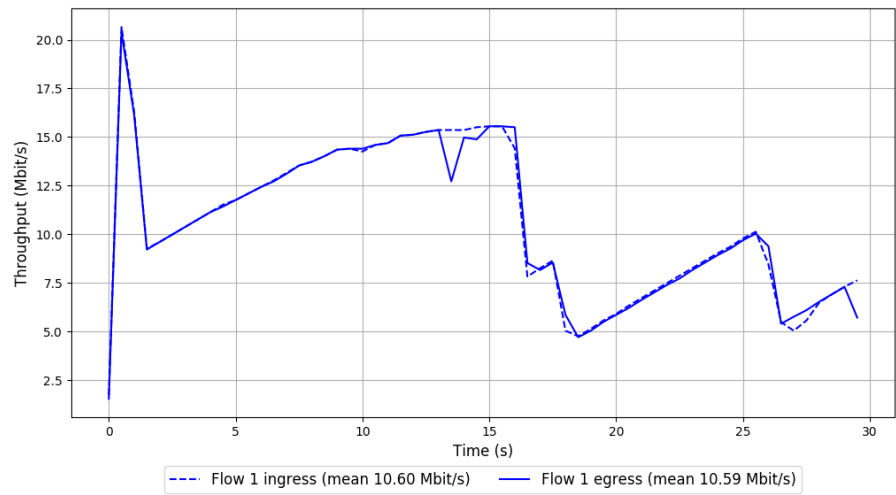
-- Flow 1:

Average throughput: 10.59 Mbit/s

95th percentile per-packet one-way delay: 64.518 ms

Loss rate: 0.49%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

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

End at: 2017-08-11 16:13:31

Below is generated by plot.py at 2017-08-11 19:49:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.87 Mbit/s

95th percentile per-packet one-way delay: 64.743 ms

Loss rate: 0.73%

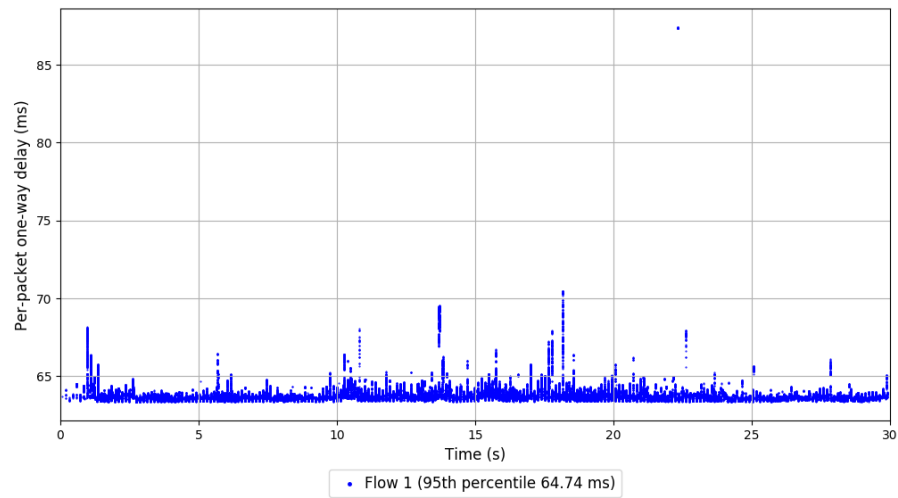
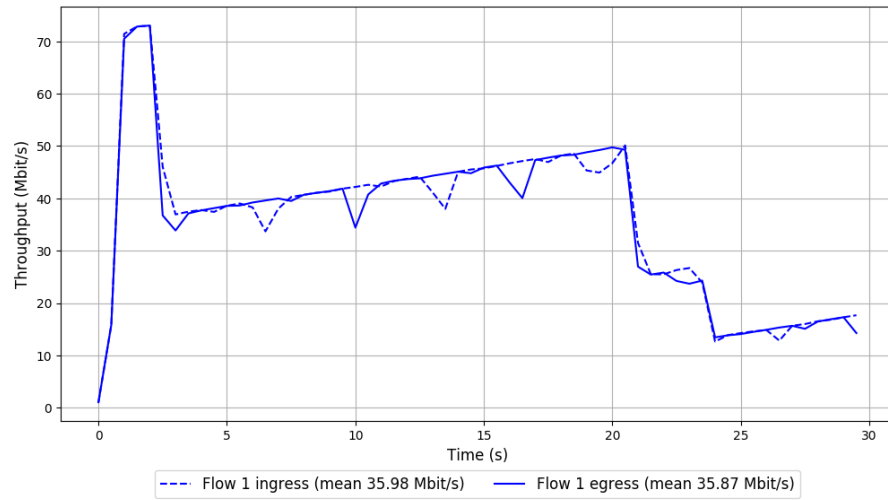
-- Flow 1:

Average throughput: 35.87 Mbit/s

95th percentile per-packet one-way delay: 64.743 ms

Loss rate: 0.73%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-11 16:23:34

End at: 2017-08-11 16:24:04

Below is generated by plot.py at 2017-08-11 19:49:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.11 Mbit/s

95th percentile per-packet one-way delay: 65.214 ms

Loss rate: 2.19%

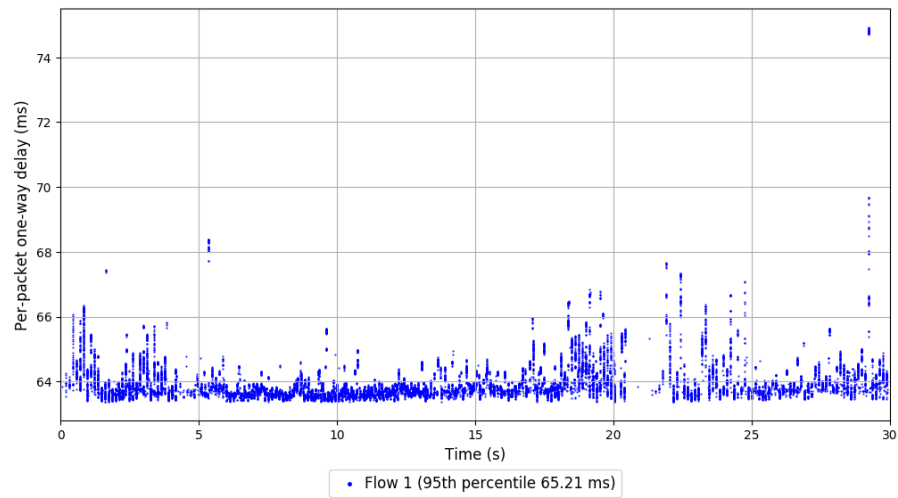
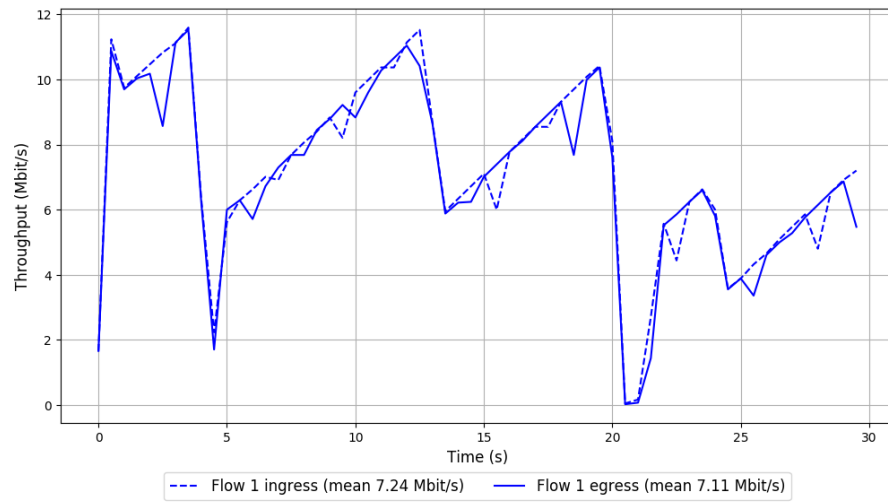
-- Flow 1:

Average throughput: 7.11 Mbit/s

95th percentile per-packet one-way delay: 65.214 ms

Loss rate: 2.19%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-11 16:34:12

End at: 2017-08-11 16:34:42

Below is generated by plot.py at 2017-08-11 19:49:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 64.534 ms

Loss rate: 1.00%

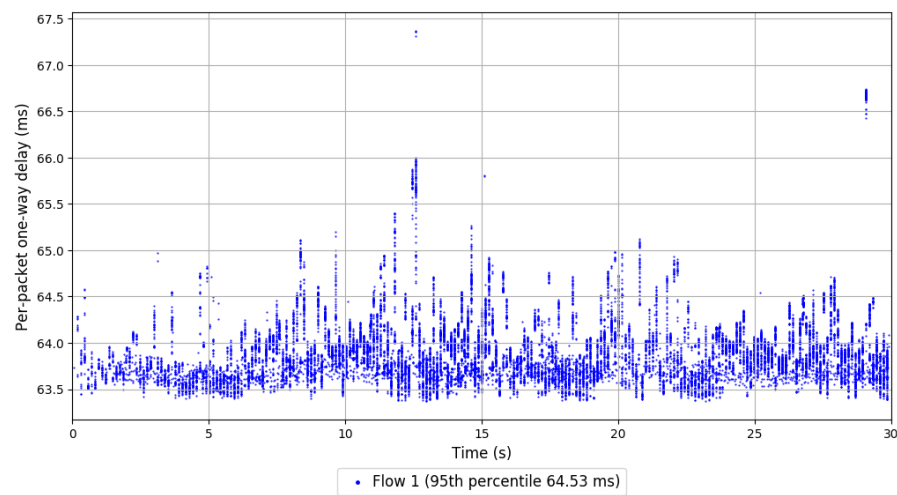
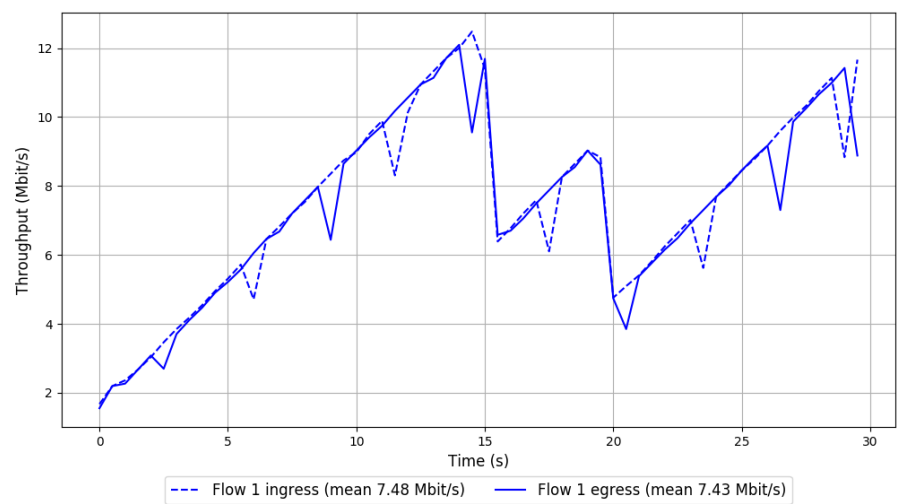
-- Flow 1:

Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 64.534 ms

Loss rate: 1.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-11 16:44:51

End at: 2017-08-11 16:45:21

Below is generated by plot.py at 2017-08-11 19:49:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.12 Mbit/s

95th percentile per-packet one-way delay: 64.521 ms

Loss rate: 1.18%

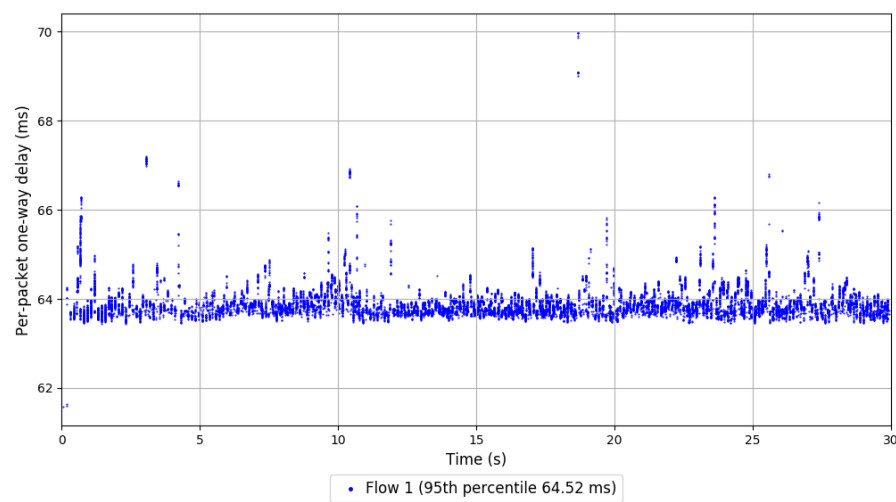
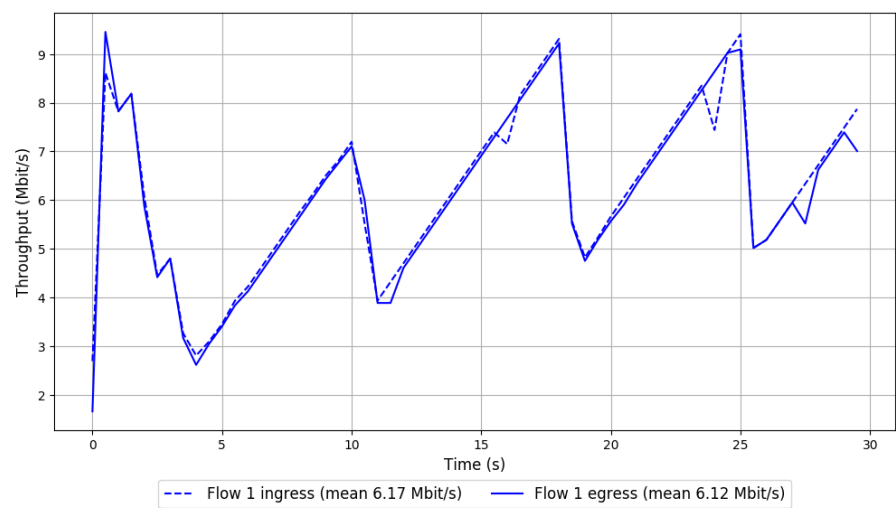
-- Flow 1:

Average throughput: 6.12 Mbit/s

95th percentile per-packet one-way delay: 64.521 ms

Loss rate: 1.18%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-11 16:55:31

End at: 2017-08-11 16:56:01

Below is generated by plot.py at 2017-08-11 19:49:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.21 Mbit/s

95th percentile per-packet one-way delay: 62.175 ms

Loss rate: 0.98%

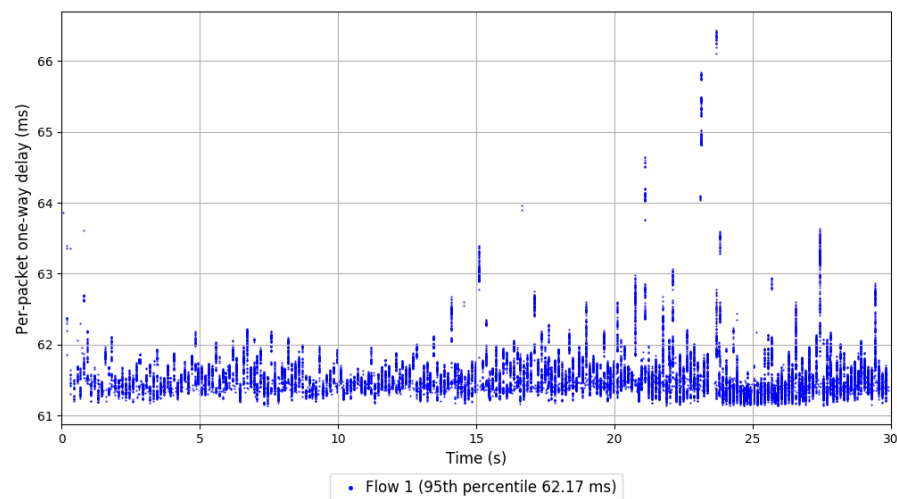
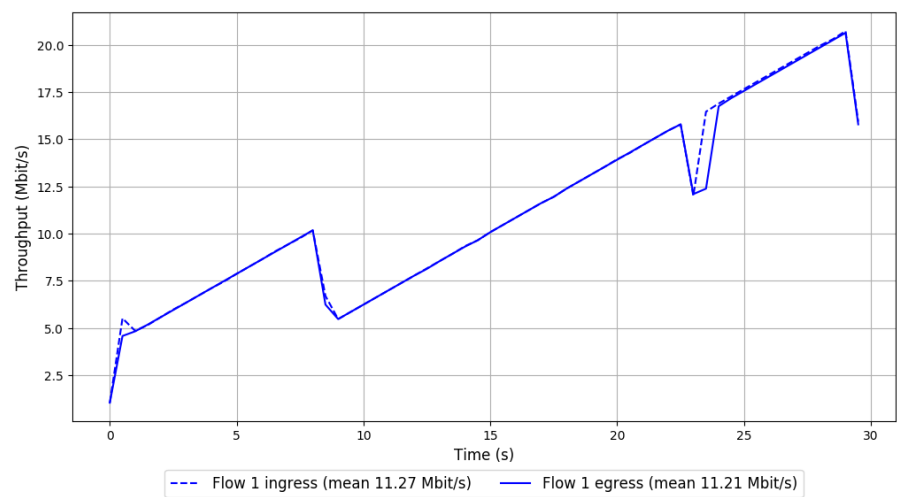
-- Flow 1:

Average throughput: 11.21 Mbit/s

95th percentile per-packet one-way delay: 62.175 ms

Loss rate: 0.98%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-11 17:05:58

End at: 2017-08-11 17:06:28

Below is generated by plot.py at 2017-08-11 19:49:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.79 Mbit/s

95th percentile per-packet one-way delay: 68.116 ms

Loss rate: 1.28%

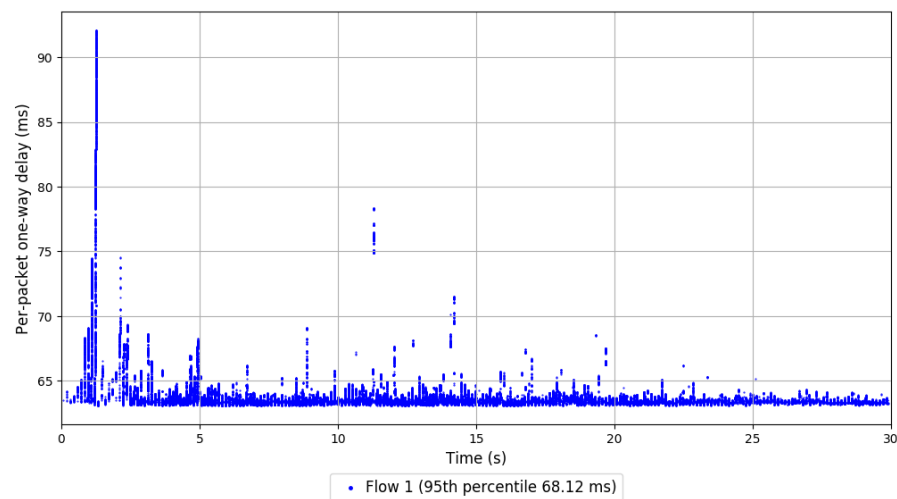
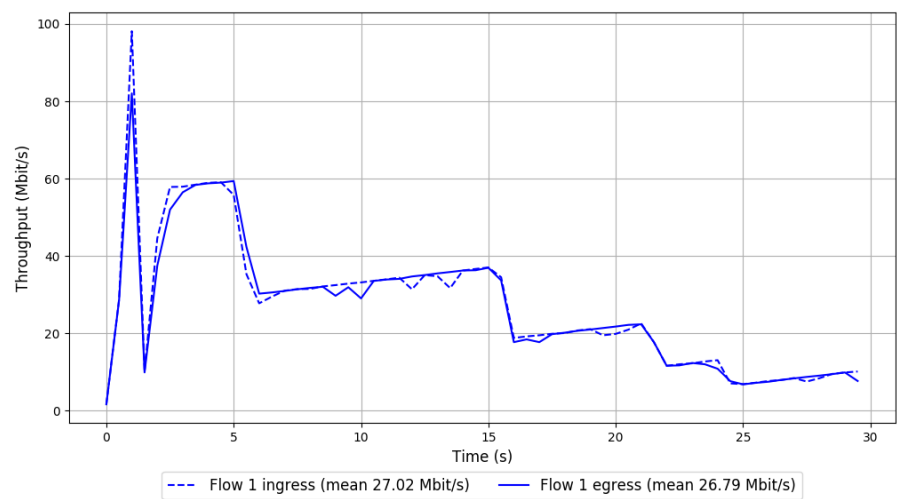
-- Flow 1:

Average throughput: 26.79 Mbit/s

95th percentile per-packet one-way delay: 68.116 ms

Loss rate: 1.28%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-08-11 15:20:53

End at: 2017-08-11 15:21:23

Below is generated by plot.py at 2017-08-11 19:49:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 153.10 Mbit/s

95th percentile per-packet one-way delay: 111.744 ms

Loss rate: 4.09%

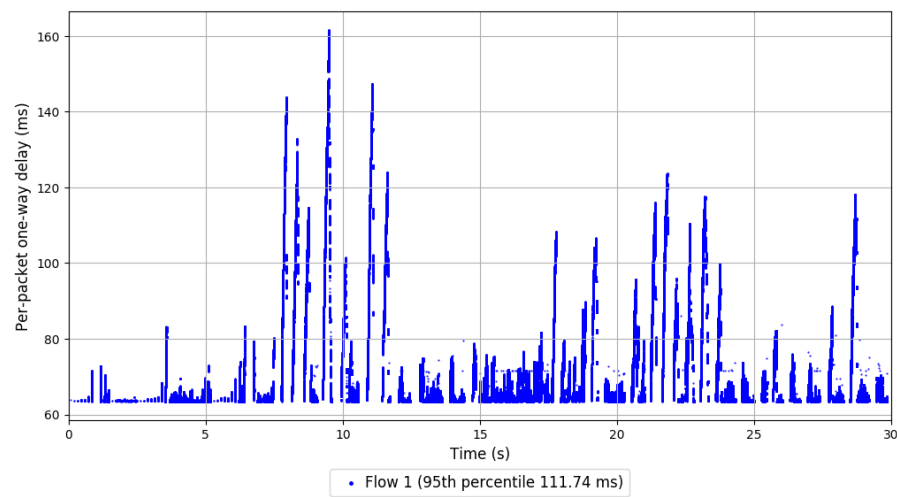
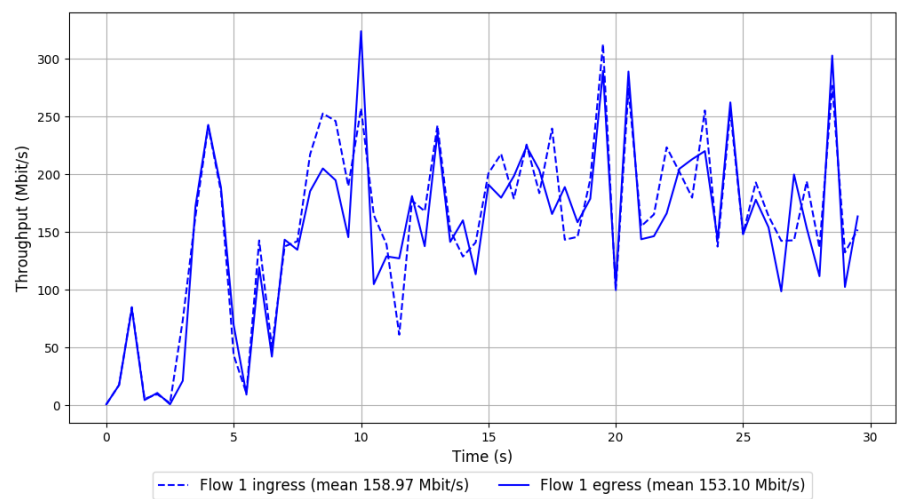
-- Flow 1:

Average throughput: 153.10 Mbit/s

95th percentile per-packet one-way delay: 111.744 ms

Loss rate: 4.09%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-11 15:31:35

End at: 2017-08-11 15:32:05

Below is generated by plot.py at 2017-08-11 19:49:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 135.41 Mbit/s

95th percentile per-packet one-way delay: 83.258 ms

Loss rate: 3.48%

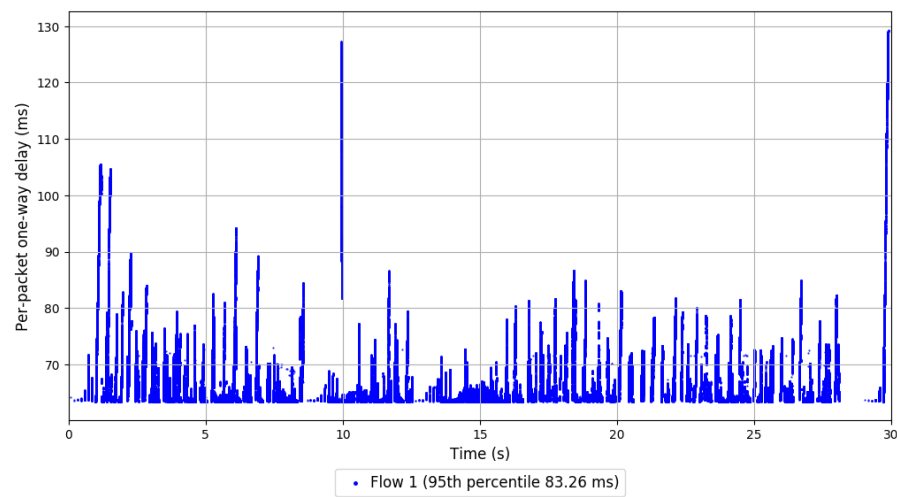
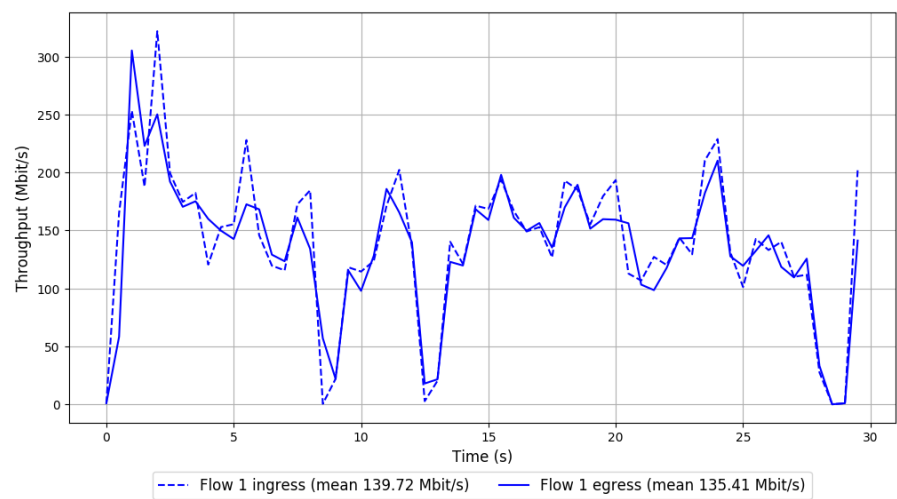
-- Flow 1:

Average throughput: 135.41 Mbit/s

95th percentile per-packet one-way delay: 83.258 ms

Loss rate: 3.48%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-11 15:42:25

End at: 2017-08-11 15:42:55

Below is generated by plot.py at 2017-08-11 19:50:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 148.20 Mbit/s

95th percentile per-packet one-way delay: 108.559 ms

Loss rate: 3.59%

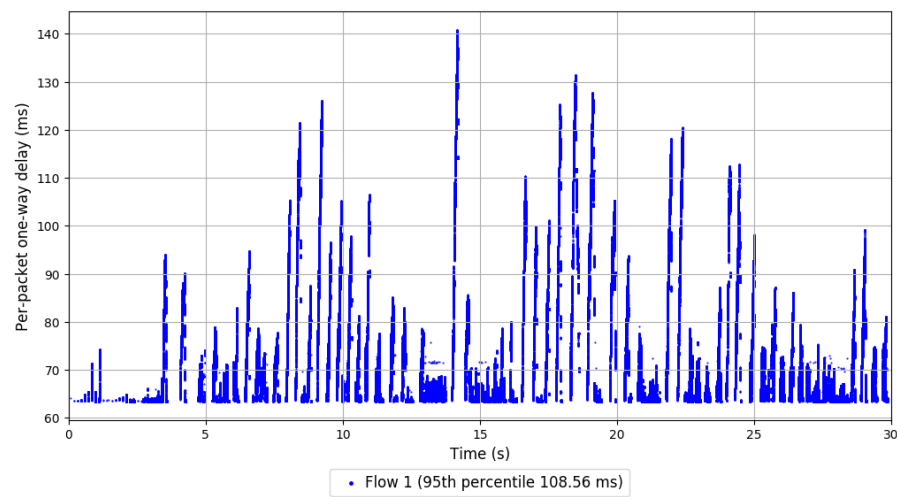
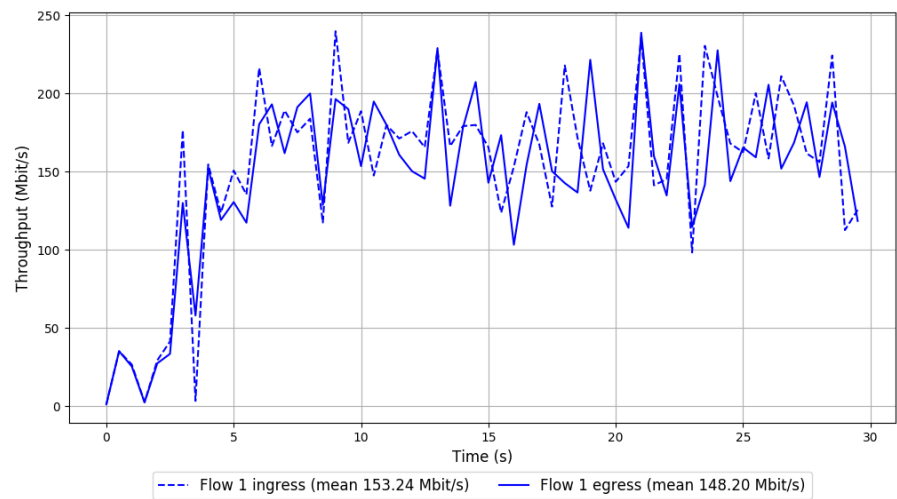
-- Flow 1:

Average throughput: 148.20 Mbit/s

95th percentile per-packet one-way delay: 108.559 ms

Loss rate: 3.59%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-08-11 15:53:09

End at: 2017-08-11 15:53:39

Below is generated by plot.py at 2017-08-11 19:50:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.54 Mbit/s

95th percentile per-packet one-way delay: 77.961 ms

Loss rate: 2.21%

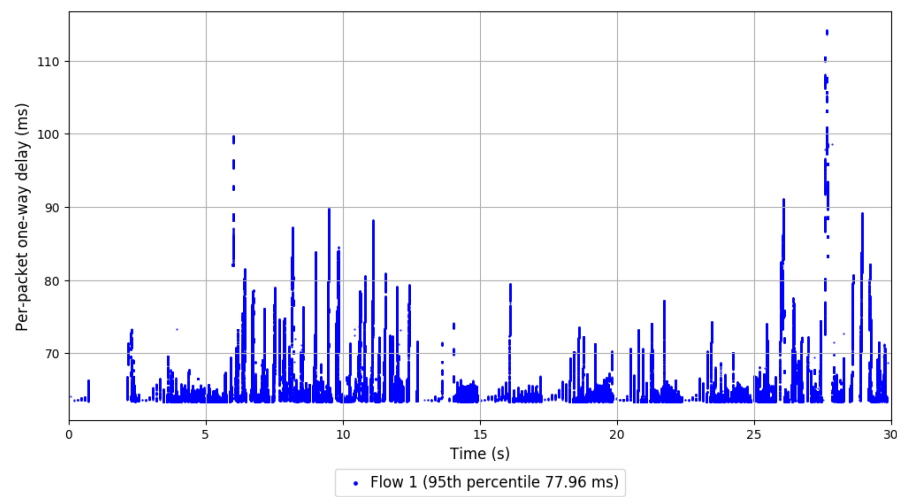
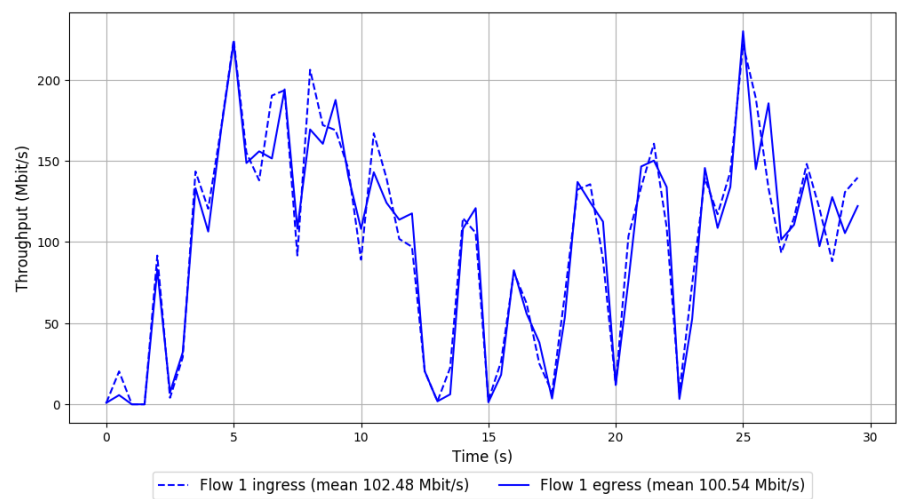
-- Flow 1:

Average throughput: 100.54 Mbit/s

95th percentile per-packet one-way delay: 77.961 ms

Loss rate: 2.21%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-11 16:03:53

End at: 2017-08-11 16:04:23

Below is generated by plot.py at 2017-08-11 19:50:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.44 Mbit/s

95th percentile per-packet one-way delay: 119.114 ms

Loss rate: 4.88%

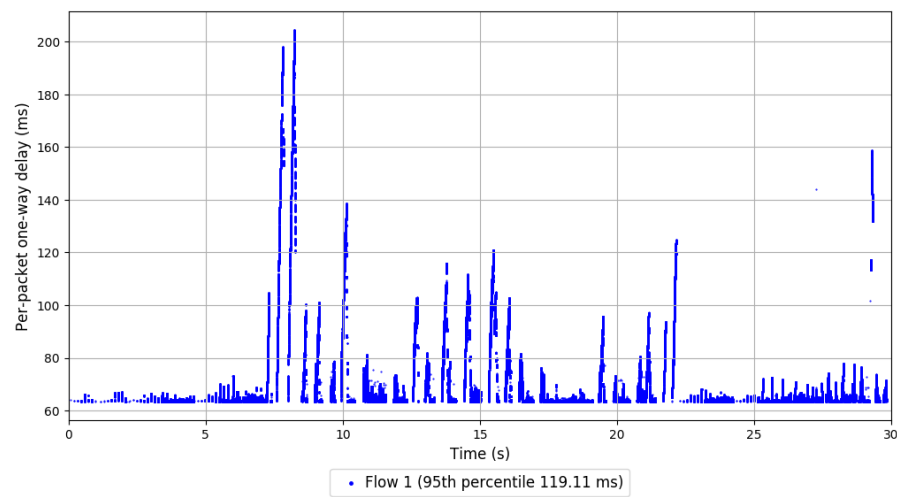
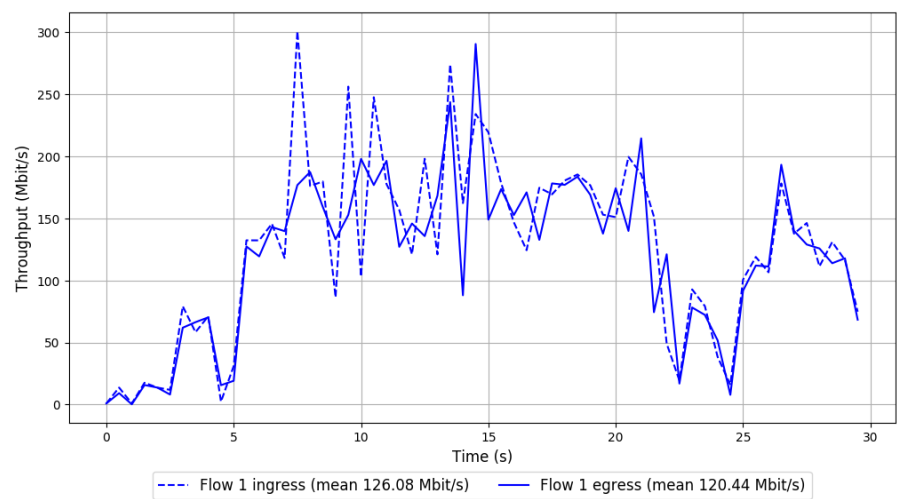
-- Flow 1:

Average throughput: 120.44 Mbit/s

95th percentile per-packet one-way delay: 119.114 ms

Loss rate: 4.88%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-11 16:14:37

End at: 2017-08-11 16:15:07

Below is generated by plot.py at 2017-08-11 19:50:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.24 Mbit/s

95th percentile per-packet one-way delay: 79.990 ms

Loss rate: 43.62%

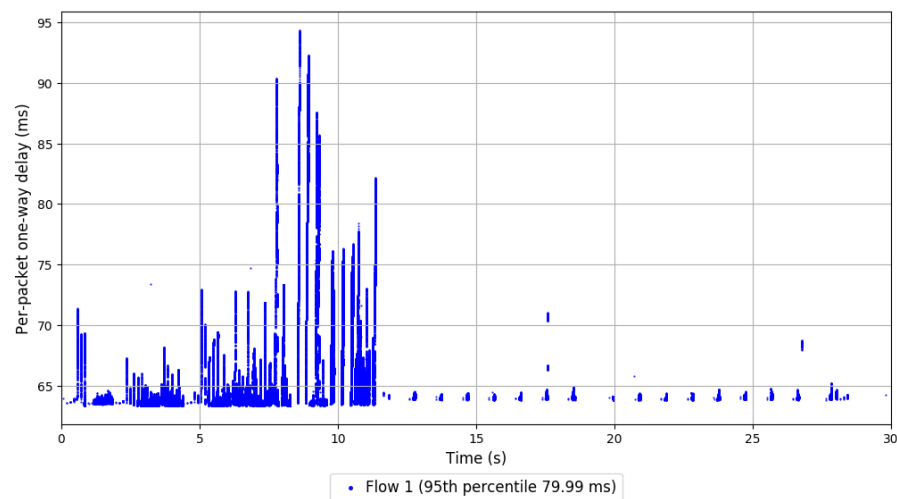
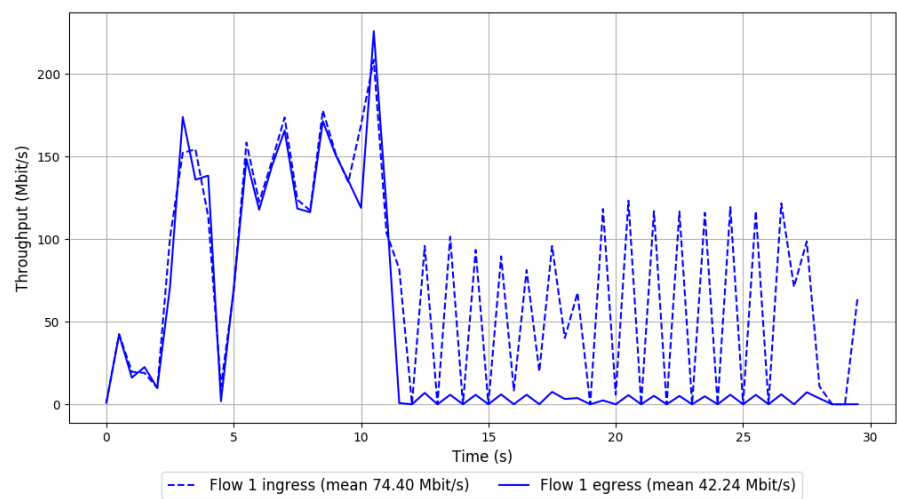
-- Flow 1:

Average throughput: 42.24 Mbit/s

95th percentile per-packet one-way delay: 79.990 ms

Loss rate: 43.62%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-11 16:25:10

End at: 2017-08-11 16:25:40

Below is generated by plot.py at 2017-08-11 19:51:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.05 Mbit/s

95th percentile per-packet one-way delay: 85.835 ms

Loss rate: 6.52%

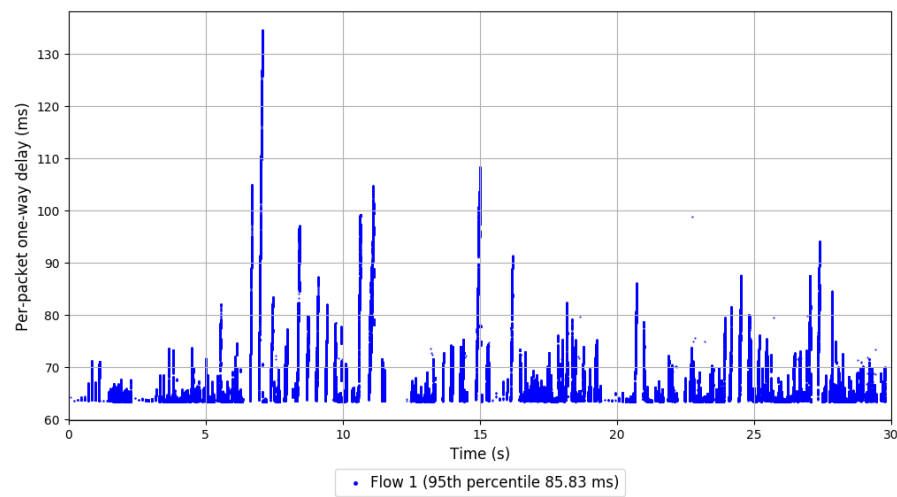
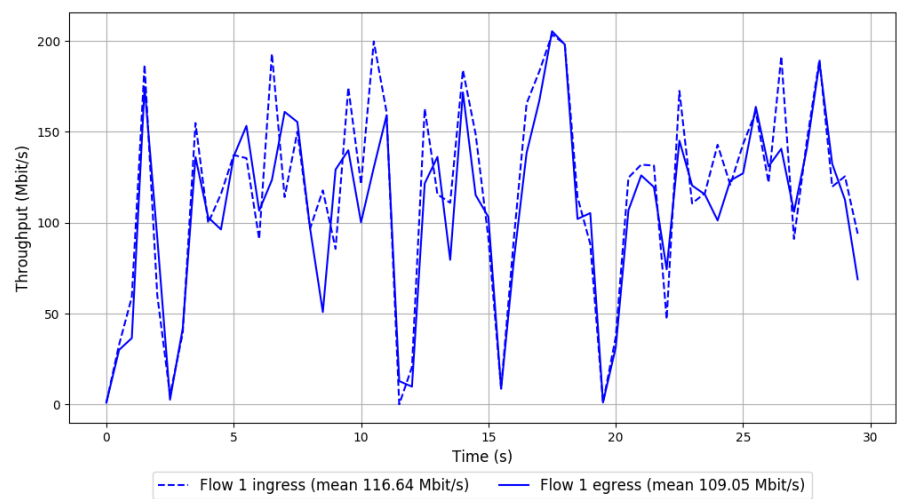
-- Flow 1:

Average throughput: 109.05 Mbit/s

95th percentile per-packet one-way delay: 85.835 ms

Loss rate: 6.52%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-08-11 16:35:49

End at: 2017-08-11 16:36:19

Below is generated by plot.py at 2017-08-11 19:51:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.00 Mbit/s

95th percentile per-packet one-way delay: 76.839 ms

Loss rate: 14.13%

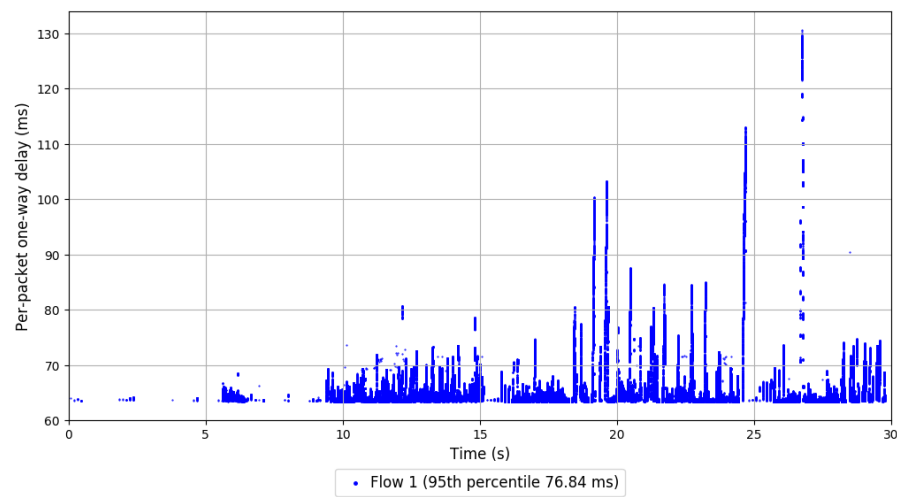
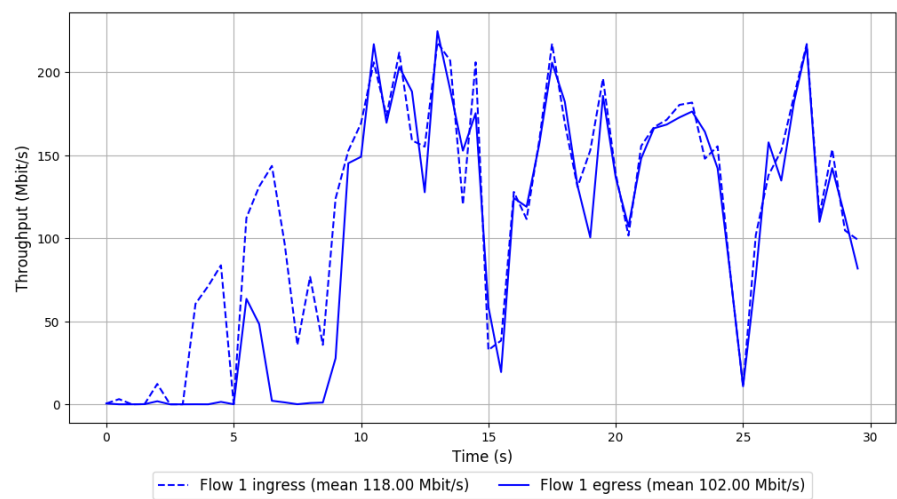
-- Flow 1:

Average throughput: 102.00 Mbit/s

95th percentile per-packet one-way delay: 76.839 ms

Loss rate: 14.13%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-08-11 16:46:21

End at: 2017-08-11 16:46:51

Below is generated by plot.py at 2017-08-11 19:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.48 Mbit/s

95th percentile per-packet one-way delay: 76.100 ms

Loss rate: 2.71%

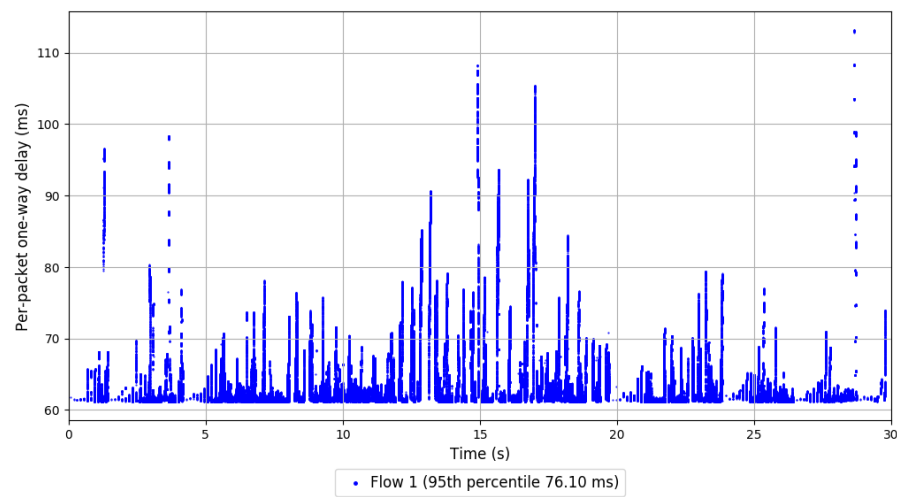
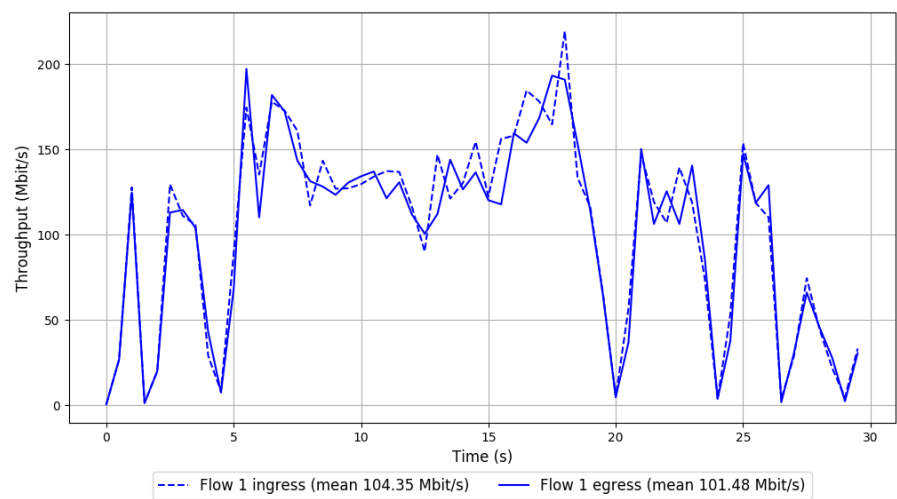
-- Flow 1:

Average throughput: 101.48 Mbit/s

95th percentile per-packet one-way delay: 76.100 ms

Loss rate: 2.71%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-08-11 16:56:54

End at: 2017-08-11 16:57:24

Below is generated by plot.py at 2017-08-11 19:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.86 Mbit/s

95th percentile per-packet one-way delay: 64.052 ms

Loss rate: 93.68%

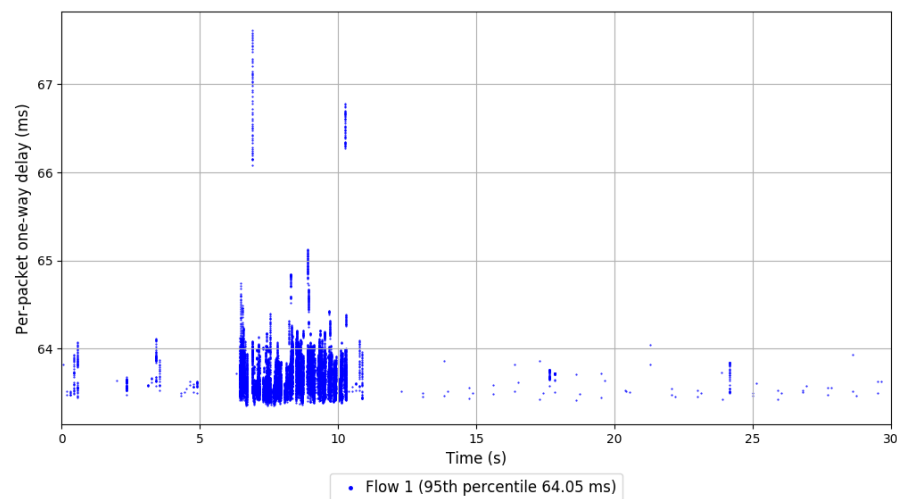
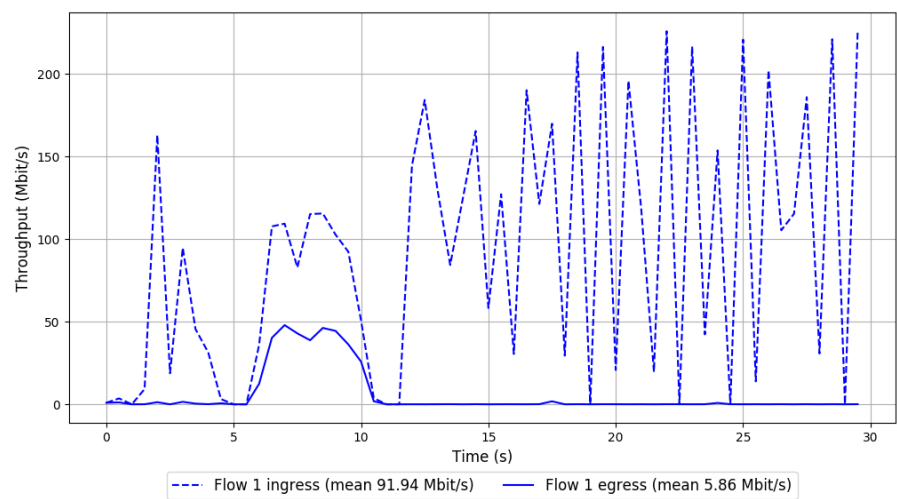
-- Flow 1:

Average throughput: 5.86 Mbit/s

95th percentile per-packet one-way delay: 64.052 ms

Loss rate: 93.68%

Run 10: Report of Verus — Data Link

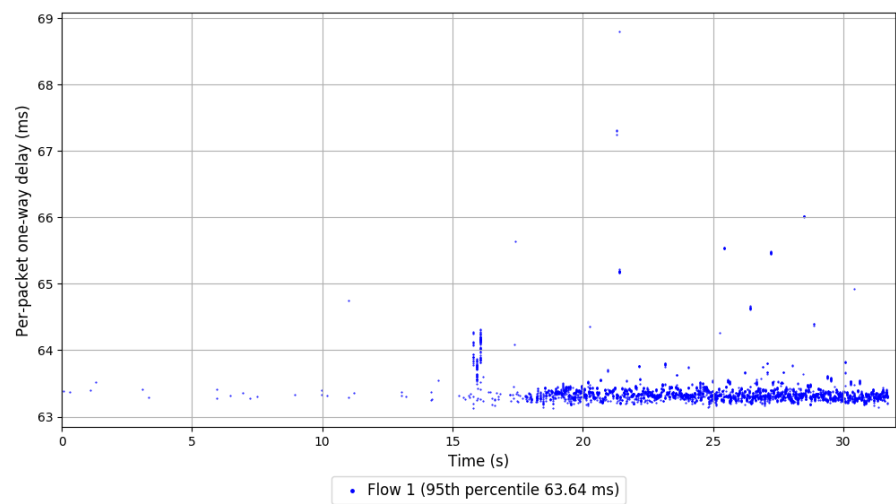
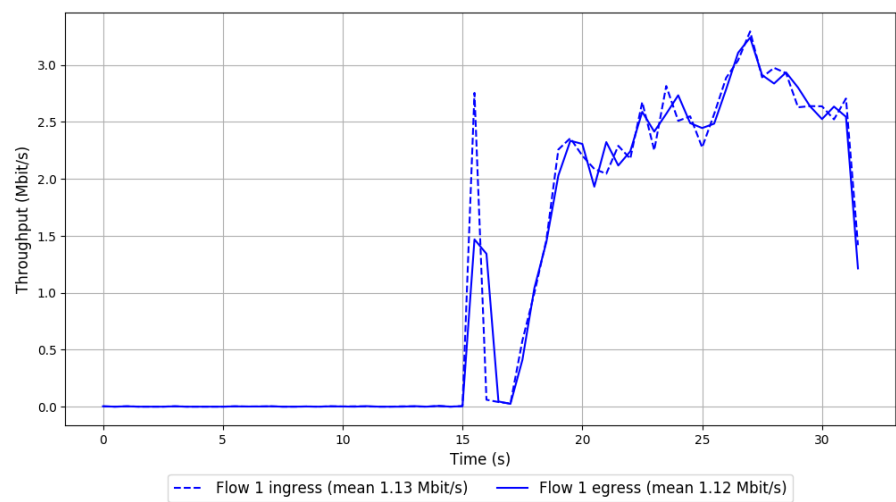


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-11 15:23:50
End at: 2017-08-11 15:24:20

# Below is generated by plot.py at 2017-08-11 19:51:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 63.643 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 63.643 ms
Loss rate: 0.83%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-08-11 15:34:30

End at: 2017-08-11 15:35:00

Below is generated by plot.py at 2017-08-11 19:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 63.850 ms

Loss rate: 0.69%

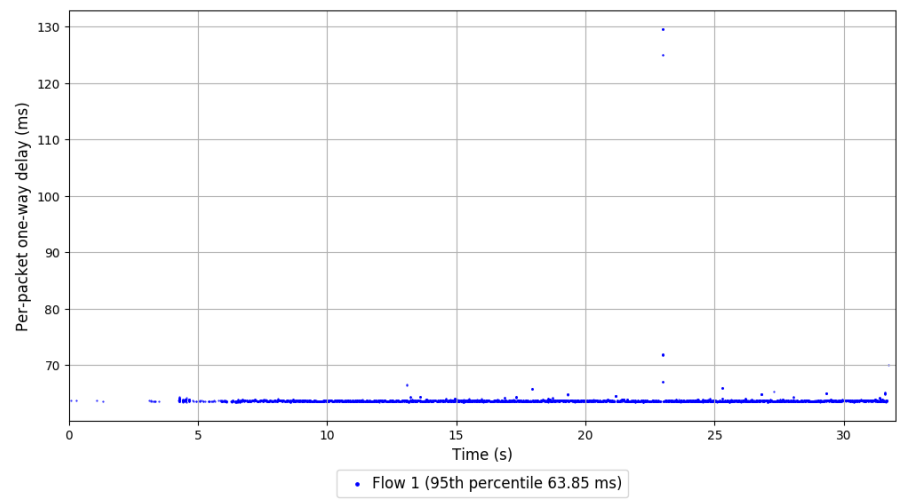
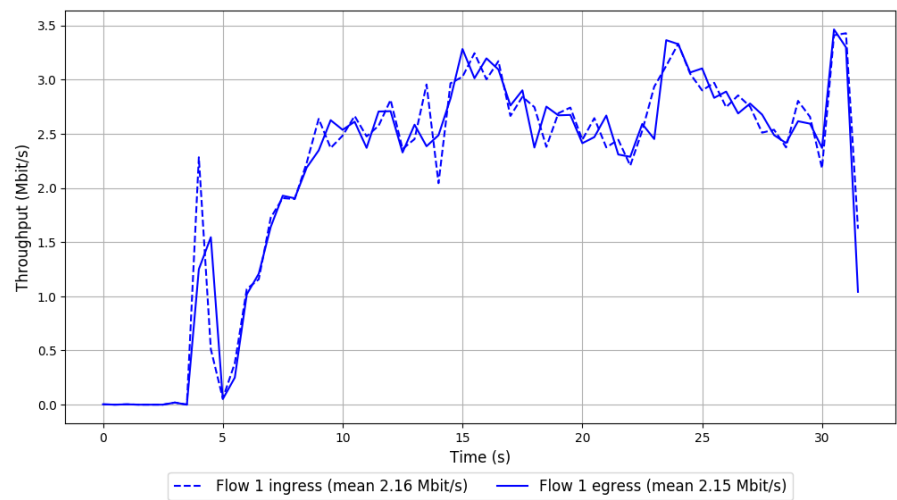
-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 63.850 ms

Loss rate: 0.69%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-11 15:45:20

End at: 2017-08-11 15:45:50

Below is generated by plot.py at 2017-08-11 19:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 63.791 ms

Loss rate: 0.80%

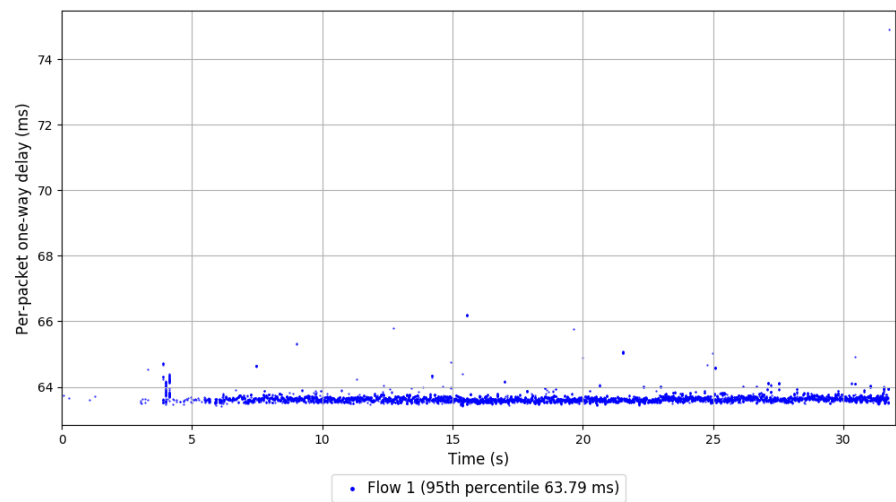
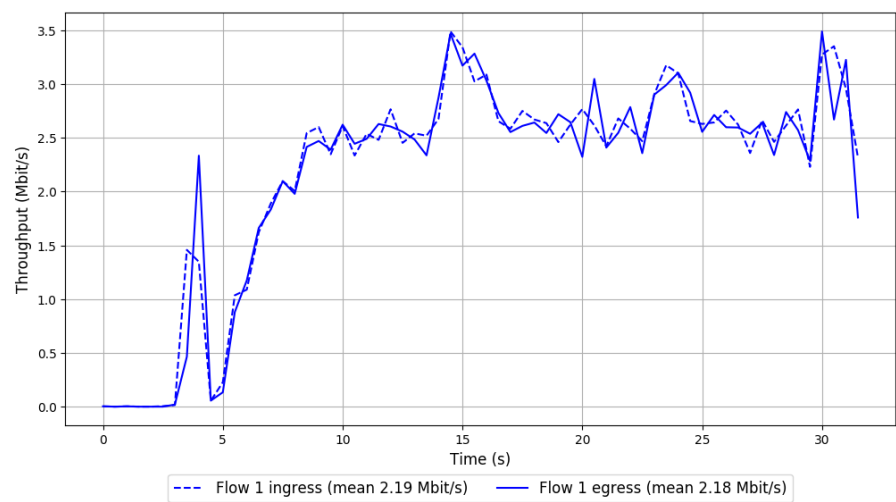
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 63.791 ms

Loss rate: 0.80%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-11 15:56:02

End at: 2017-08-11 15:56:32

Below is generated by plot.py at 2017-08-11 19:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 63.891 ms

Loss rate: 0.68%

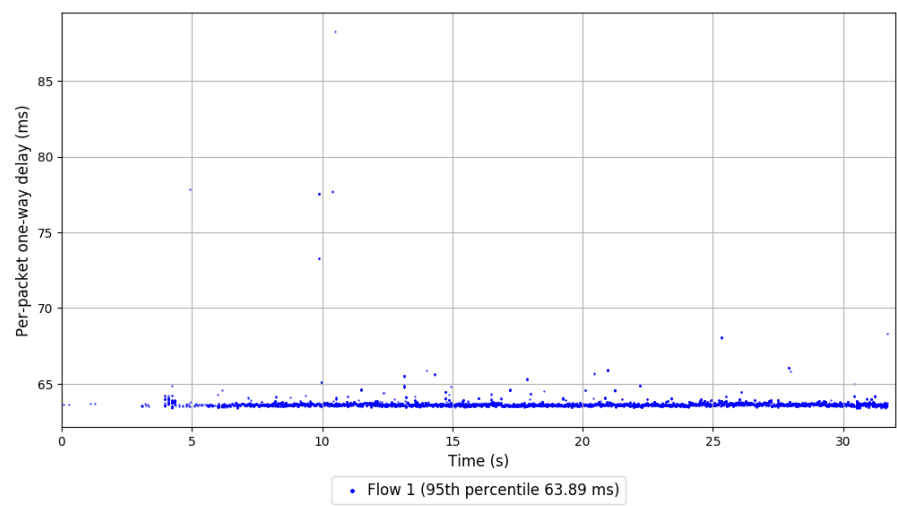
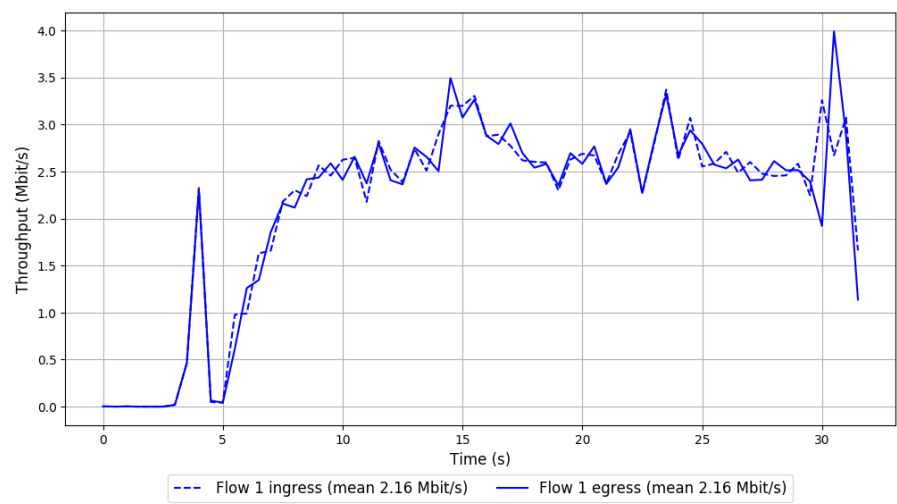
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 63.891 ms

Loss rate: 0.68%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-08-11 16:06:47

End at: 2017-08-11 16:07:18

Below is generated by plot.py at 2017-08-11 19:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 63.759 ms

Loss rate: 0.66%

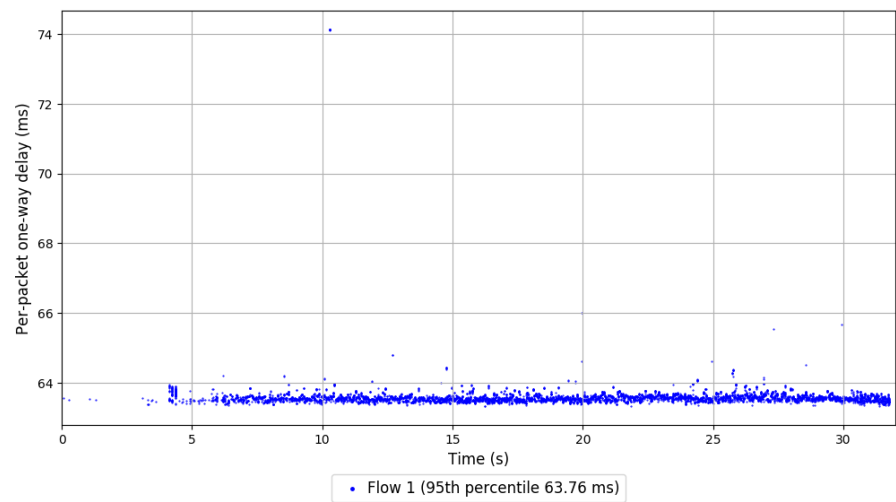
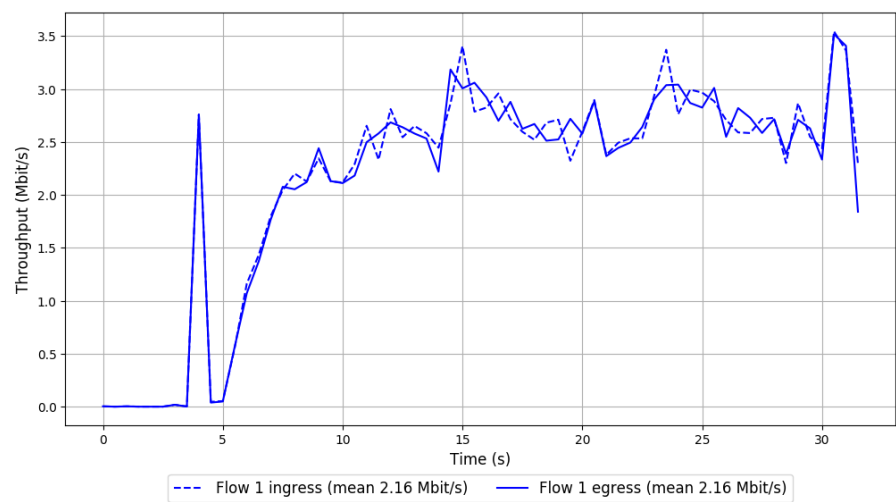
-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 63.759 ms

Loss rate: 0.66%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-11 16:17:21

End at: 2017-08-11 16:17:51

Below is generated by plot.py at 2017-08-11 19:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 63.666 ms

Loss rate: 0.97%

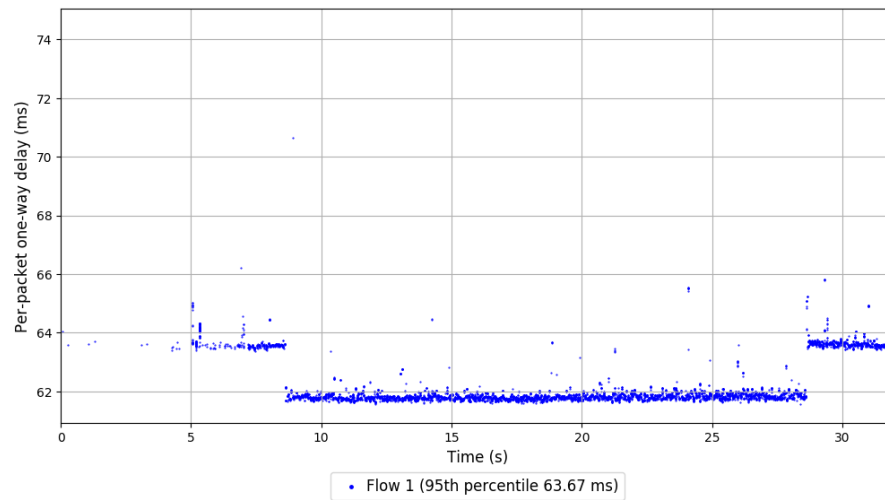
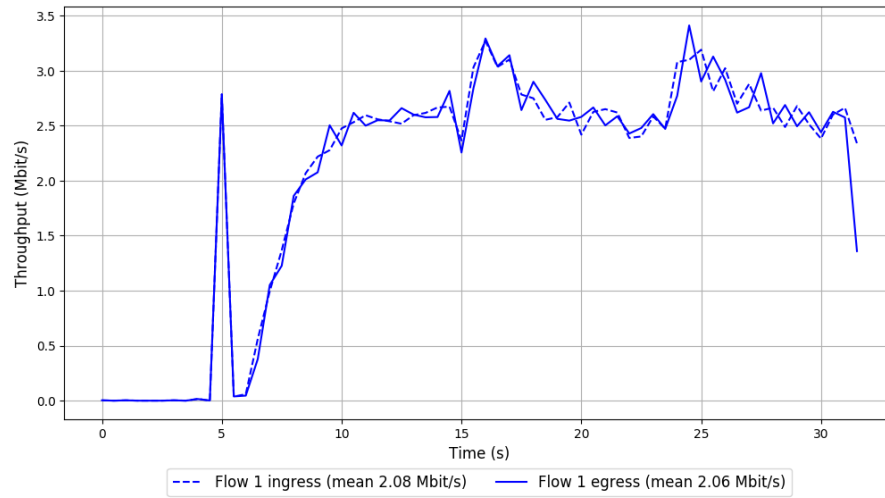
-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 63.666 ms

Loss rate: 0.97%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-11 16:27:56

End at: 2017-08-11 16:28:26

Below is generated by plot.py at 2017-08-11 19:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 63.662 ms

Loss rate: 0.60%

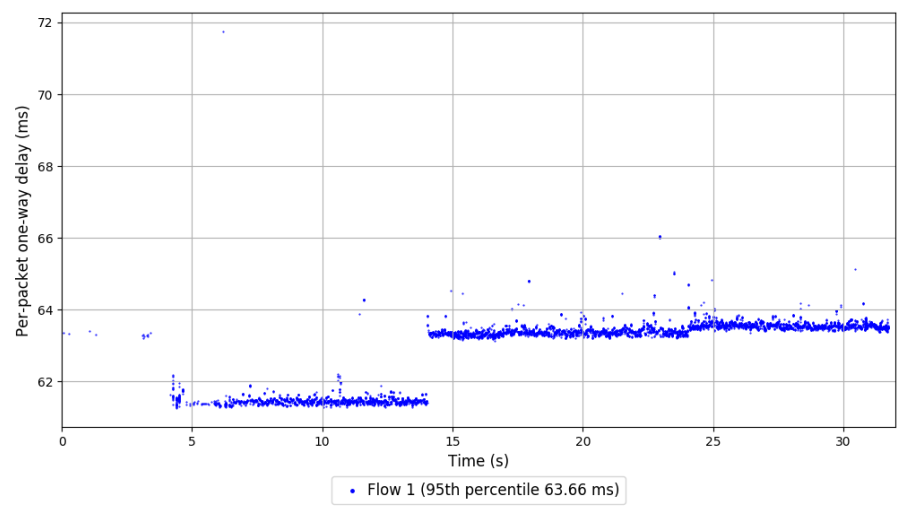
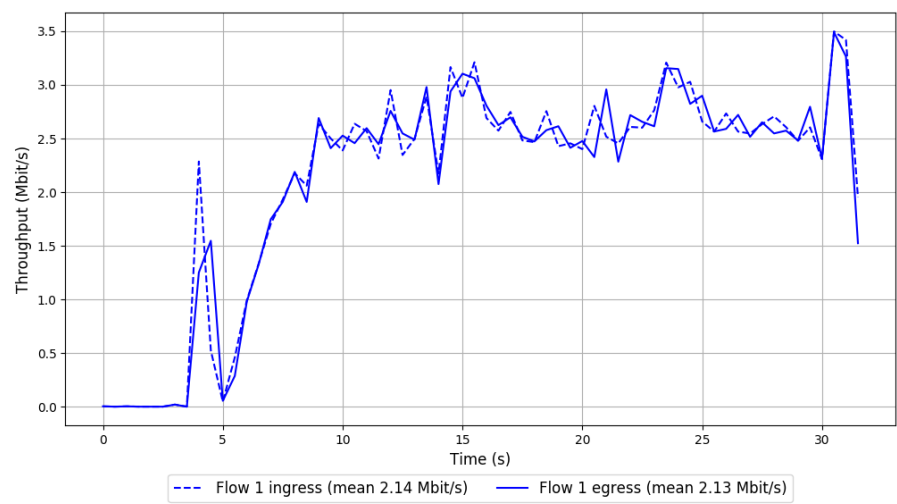
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 63.662 ms

Loss rate: 0.60%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-11 16:38:41

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

Below is generated by plot.py at 2017-08-11 19:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 62.086 ms

Loss rate: 0.67%

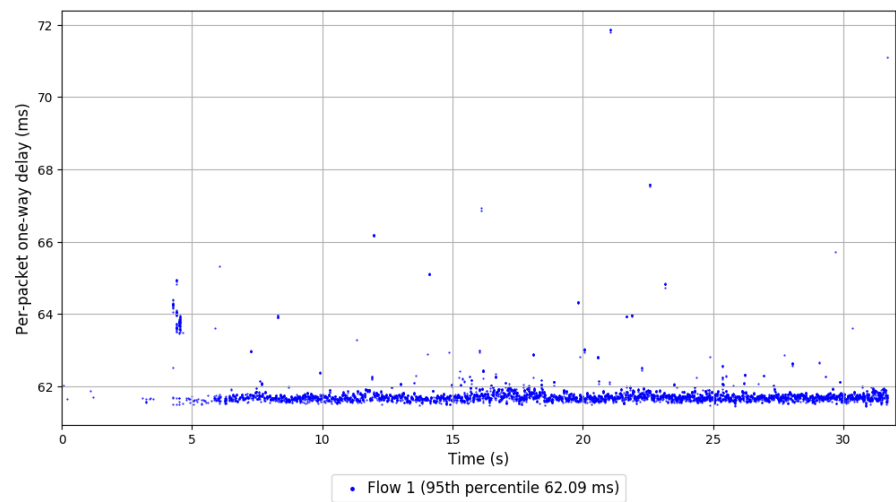
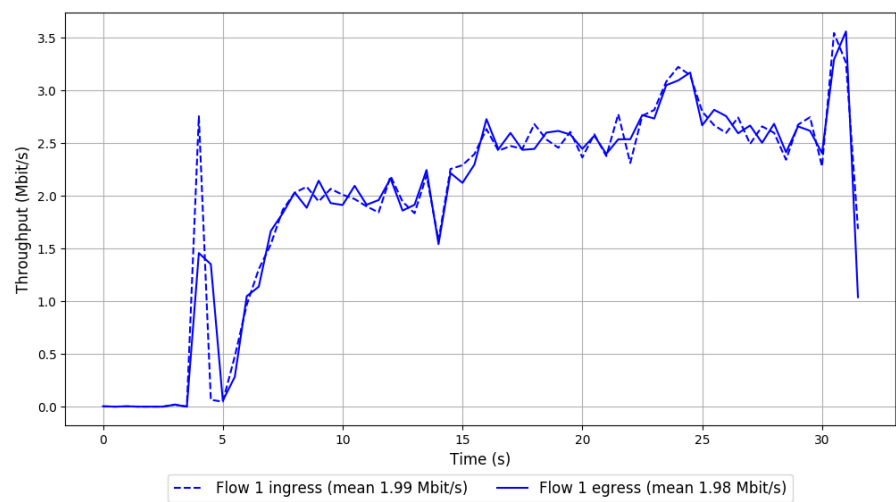
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 62.086 ms

Loss rate: 0.67%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-11 16:49:08

End at: 2017-08-11 16:49:38

Below is generated by plot.py at 2017-08-11 19:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 62.260 ms

Loss rate: 0.42%

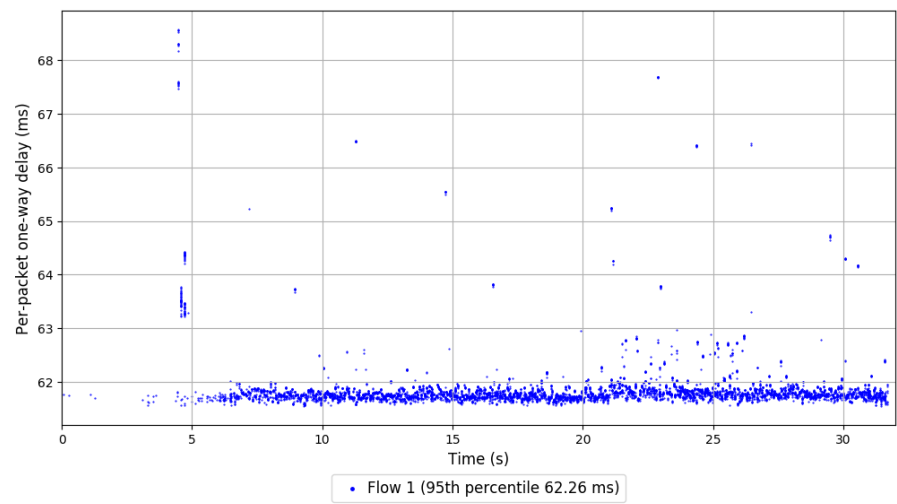
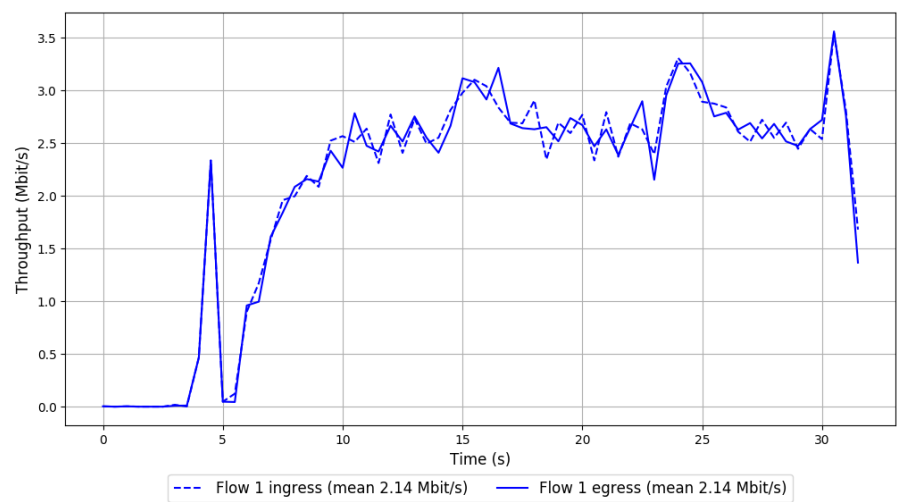
-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 62.260 ms

Loss rate: 0.42%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-11 16:59:33

End at: 2017-08-11 17:00:03

Below is generated by plot.py at 2017-08-11 19:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 63.960 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 63.960 ms

Loss rate: 0.48%

Run 10: Report of WebRTC media — Data Link

