

Pantheon Report

Generated at 2018-01-16 03:36:52 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

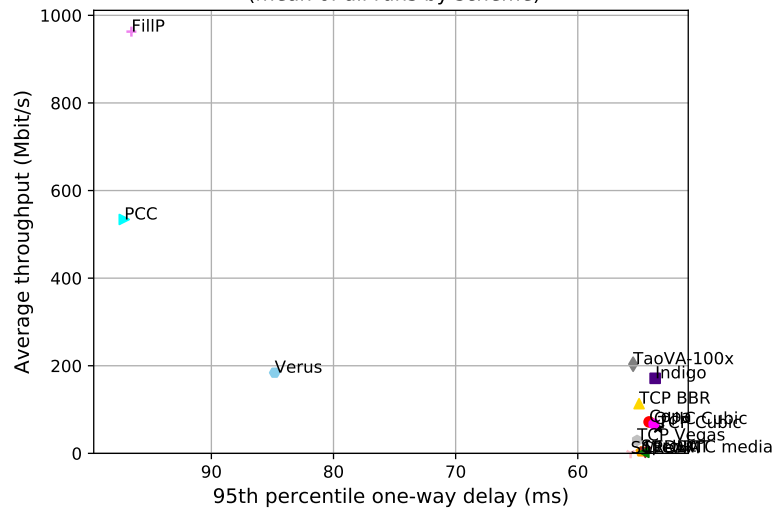
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

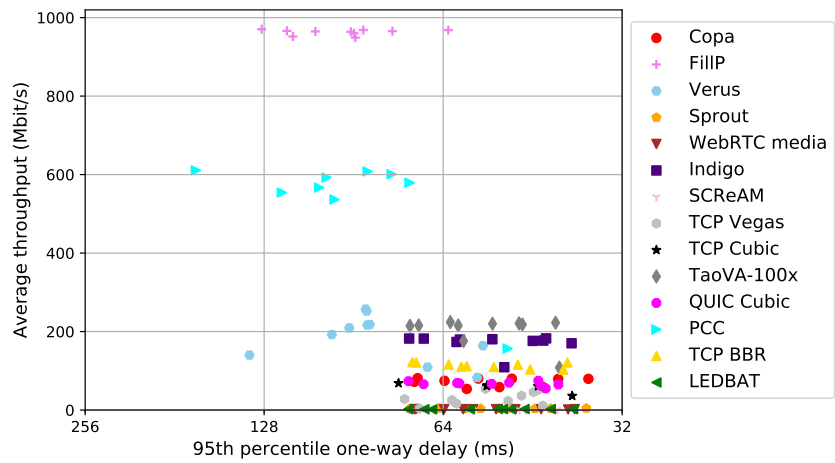
Git summary:

```
branch: master @ af8abdfba95588b0c5f2aeca9e856a1656b0c598
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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/vivace @ 423cbca3e8ea1d599e7b5cf725835e8a2b6bfac6
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from GCE Sydney 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	113.47	54.98	0.70
TCP Cubic	5	57.92	53.44	1.43
LEDBAT	10	2.29	54.59	1.31
PCC	9	533.96	97.13	1.61
QUIC Cubic	10	67.05	53.77	0.76
SCReAM	9	0.22	55.67	0.58
WebRTC media	10	2.12	54.47	0.80
Sprout	10	3.75	54.83	1.31
TaoVA-100x	10	203.49	55.47	0.60
TCP Vegas	10	29.47	55.14	0.51
Verus	10	184.16	84.82	0.99
Copa	10	71.73	54.16	0.65
FillP	10	962.84	96.55	0.94
Indigo	10	171.28	53.67	0.70

Run 1: Statistics of TCP BBR

Start at: 2018-01-15 22:46:02

End at: 2018-01-15 22:46:32

Below is generated by plot.py at 2018-01-16 02:45:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.85 Mbit/s

95th percentile per-packet one-way delay: 40.181 ms

Loss rate: 0.75%

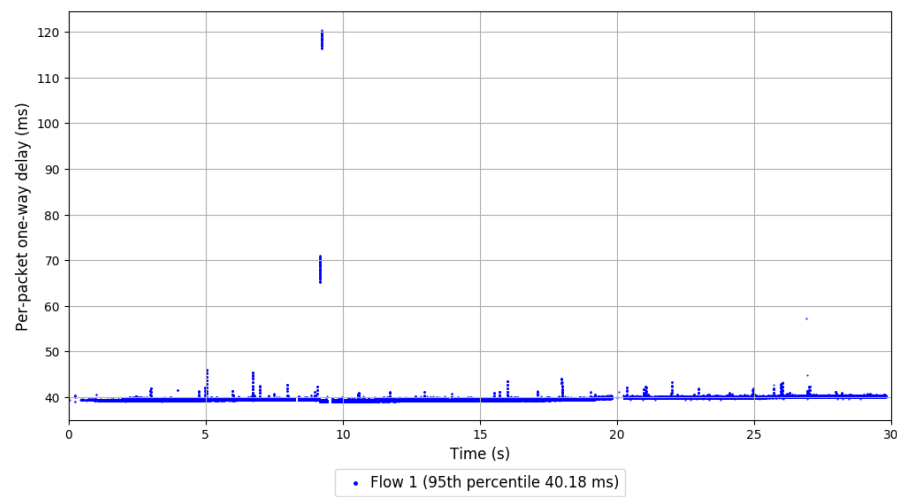
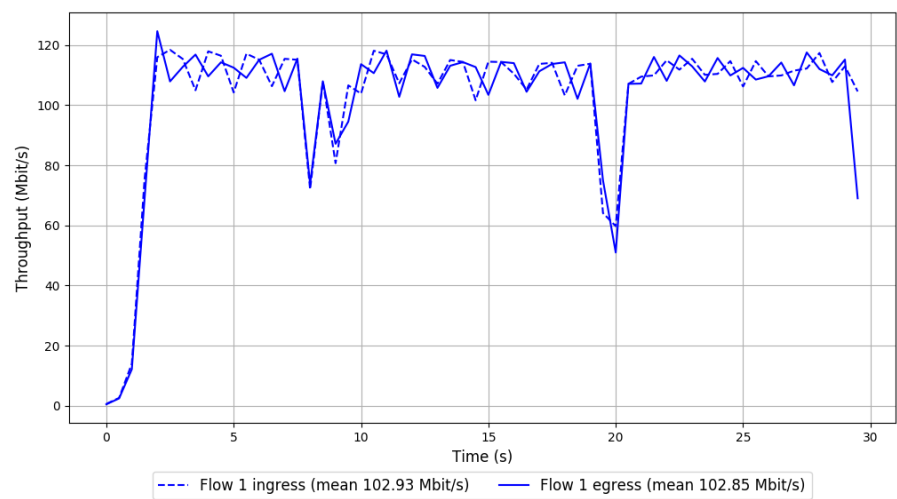
-- Flow 1:

Average throughput: 102.85 Mbit/s

95th percentile per-packet one-way delay: 40.181 ms

Loss rate: 0.75%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-15 22:58:29

End at: 2018-01-15 22:58:59

Below is generated by plot.py at 2018-01-16 02:45:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.30 Mbit/s

95th percentile per-packet one-way delay: 39.547 ms

Loss rate: 0.81%

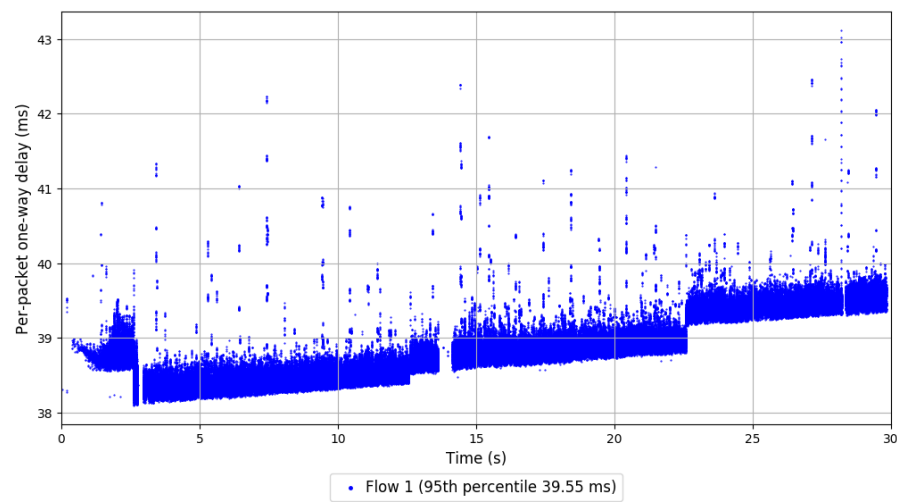
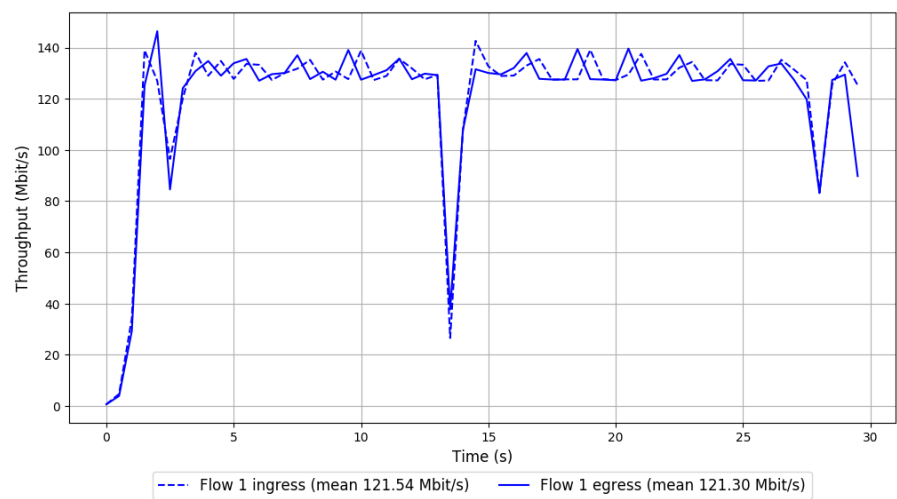
-- Flow 1:

Average throughput: 121.30 Mbit/s

95th percentile per-packet one-way delay: 39.547 ms

Loss rate: 0.81%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-15 23:10:38

End at: 2018-01-15 23:11:08

Below is generated by plot.py at 2018-01-16 02:45:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.52 Mbit/s

95th percentile per-packet one-way delay: 45.684 ms

Loss rate: 0.57%

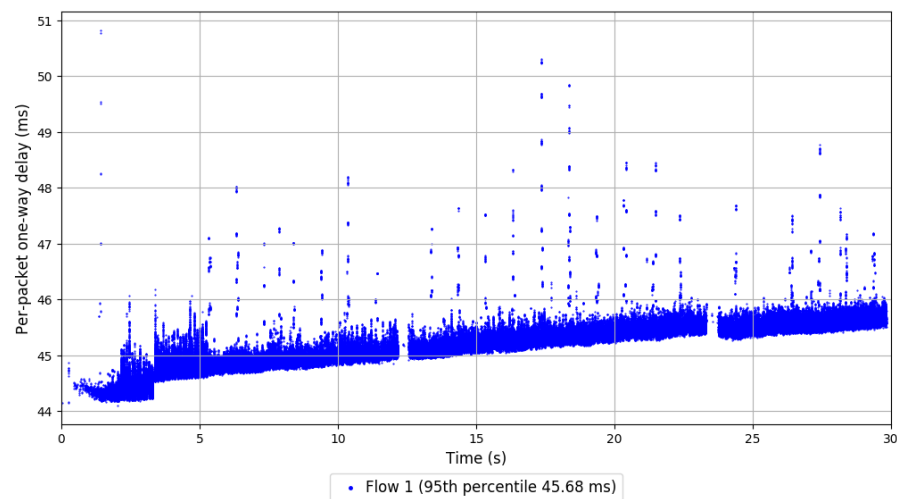
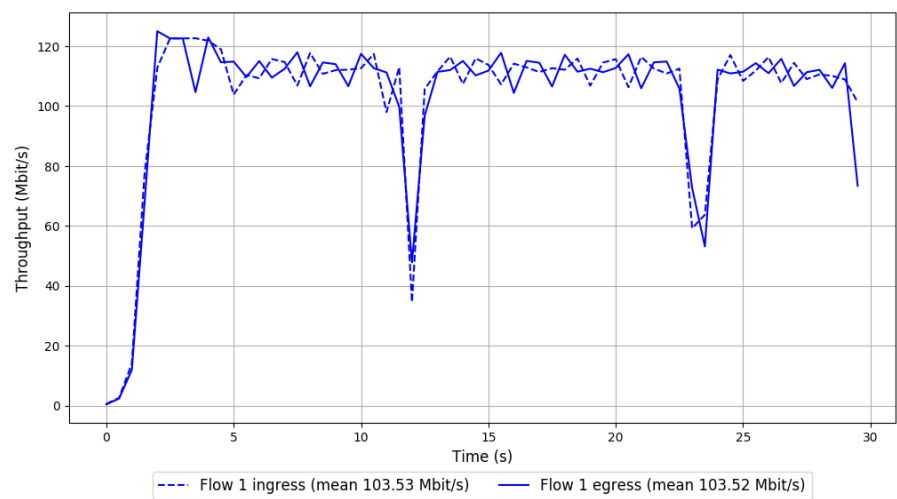
-- Flow 1:

Average throughput: 103.52 Mbit/s

95th percentile per-packet one-way delay: 45.684 ms

Loss rate: 0.57%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-15 23:22:26

End at: 2018-01-15 23:22:57

Below is generated by plot.py at 2018-01-16 02:45:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.56 Mbit/s

95th percentile per-packet one-way delay: 47.931 ms

Loss rate: 0.78%

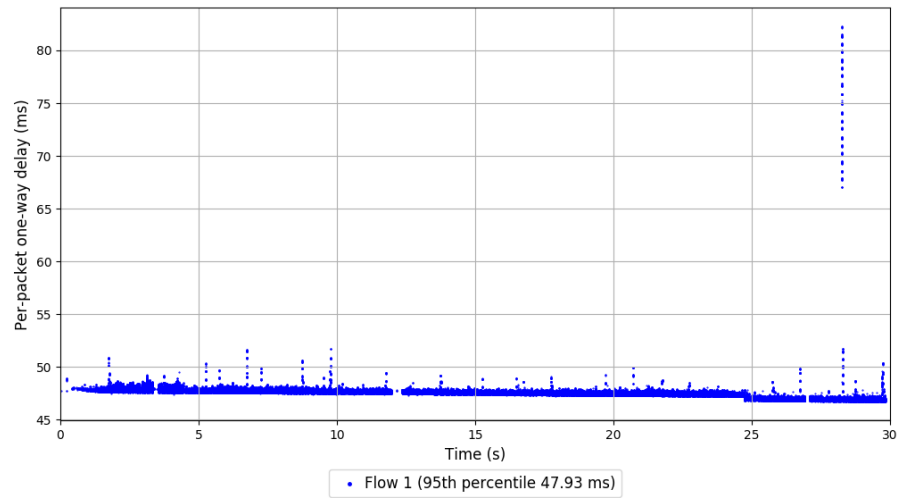
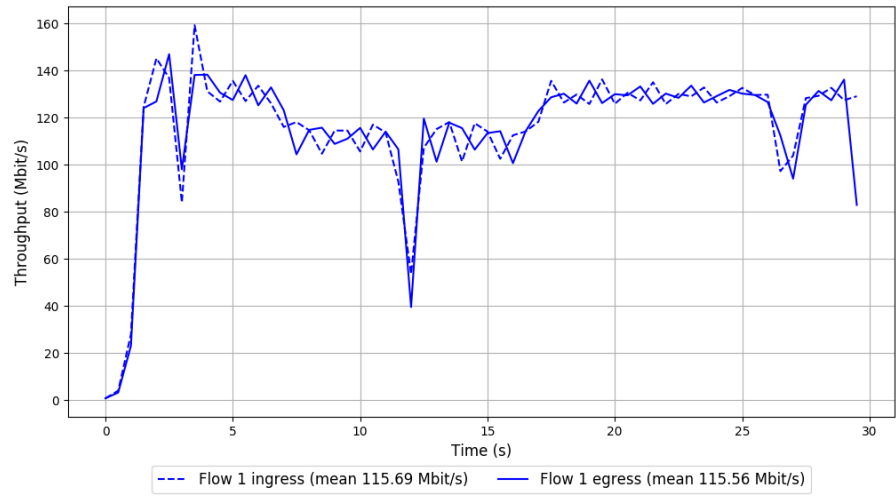
-- Flow 1:

Average throughput: 115.56 Mbit/s

95th percentile per-packet one-way delay: 47.931 ms

Loss rate: 0.78%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-15 23:34:24

End at: 2018-01-15 23:34:54

Below is generated by plot.py at 2018-01-16 02:45:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.72 Mbit/s

95th percentile per-packet one-way delay: 52.590 ms

Loss rate: 0.48%

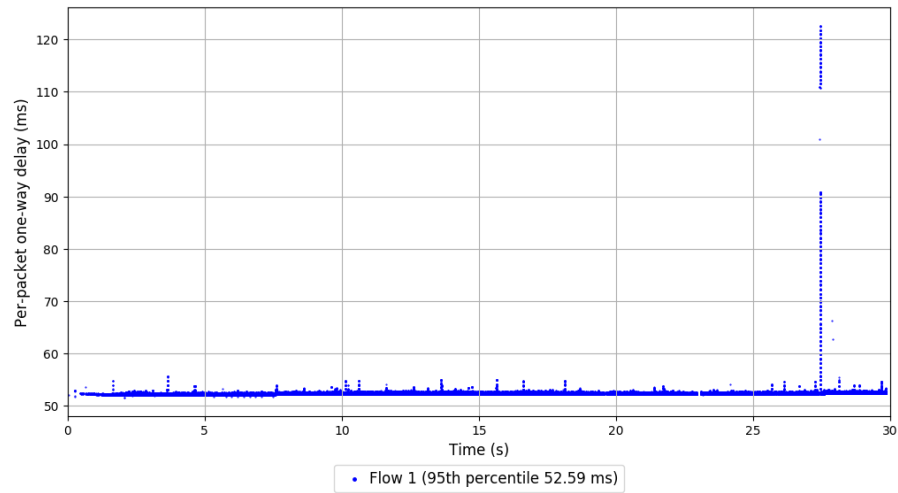
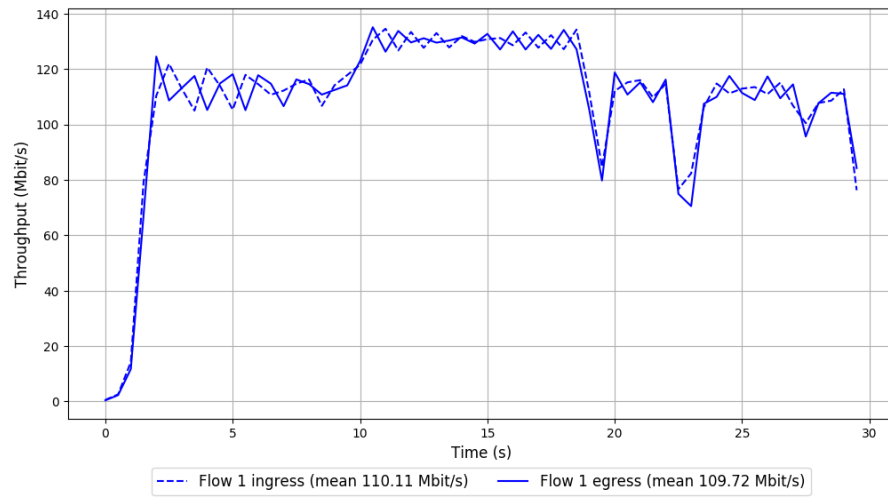
-- Flow 1:

Average throughput: 109.72 Mbit/s

95th percentile per-packet one-way delay: 52.590 ms

Loss rate: 0.48%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-15 23:46:51

End at: 2018-01-15 23:47:21

Below is generated by plot.py at 2018-01-16 02:45:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.85 Mbit/s

95th percentile per-packet one-way delay: 58.423 ms

Loss rate: 0.76%

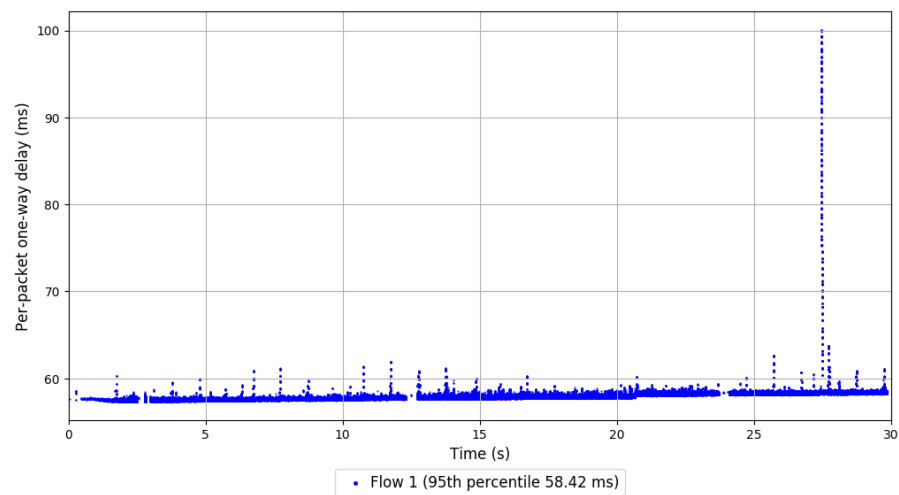
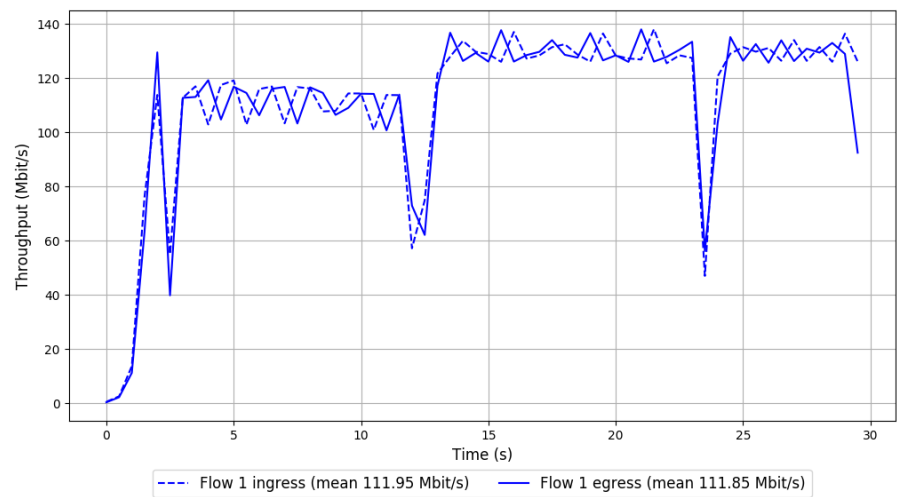
-- Flow 1:

Average throughput: 111.85 Mbit/s

95th percentile per-packet one-way delay: 58.423 ms

Loss rate: 0.76%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-15 23:59:07

End at: 2018-01-15 23:59:37

Below is generated by plot.py at 2018-01-16 02:45:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.15 Mbit/s

95th percentile per-packet one-way delay: 72.131 ms

Loss rate: 0.72%

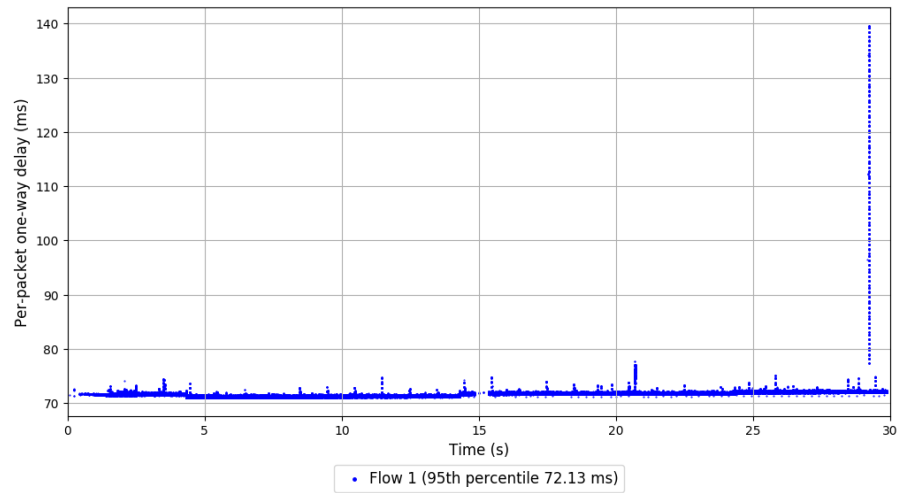
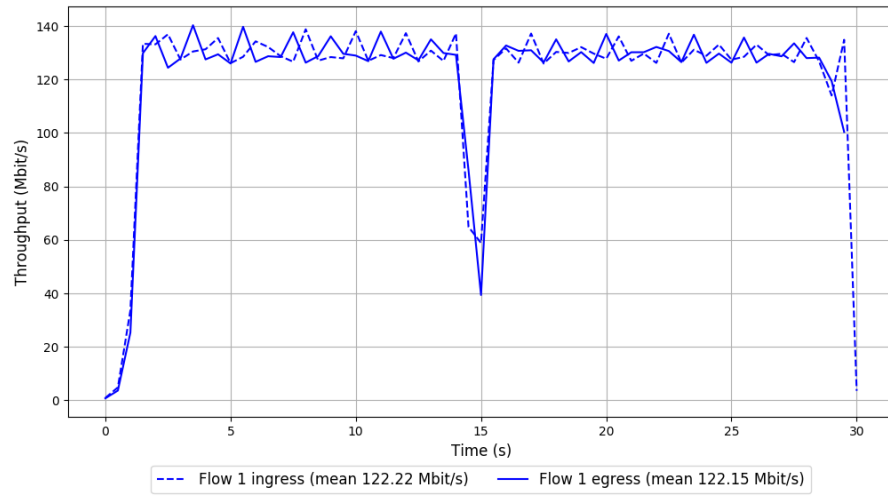
-- Flow 1:

Average throughput: 122.15 Mbit/s

95th percentile per-packet one-way delay: 72.131 ms

Loss rate: 0.72%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-16 00:11:25

End at: 2018-01-16 00:11:55

Below is generated by plot.py at 2018-01-16 02:45:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.18 Mbit/s

95th percentile per-packet one-way delay: 71.048 ms

Loss rate: 0.74%

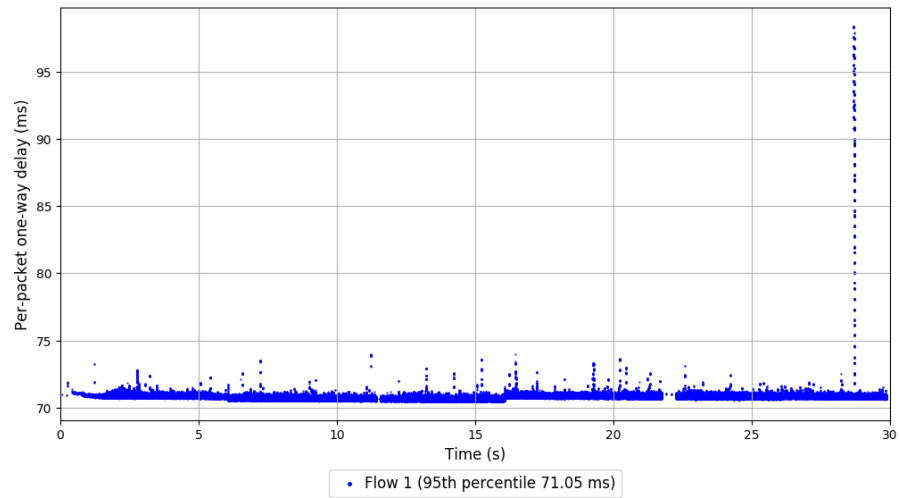
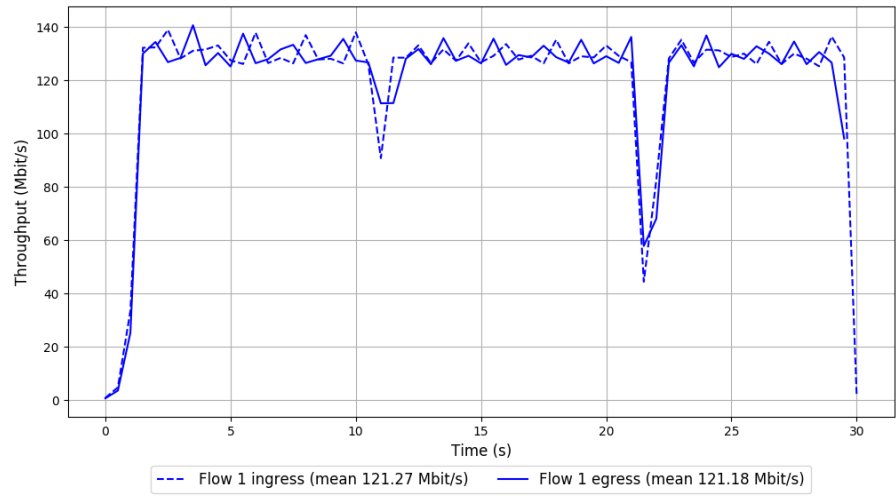
-- Flow 1:

Average throughput: 121.18 Mbit/s

95th percentile per-packet one-way delay: 71.048 ms

Loss rate: 0.74%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-16 00:23:45

End at: 2018-01-16 00:24:15

Below is generated by plot.py at 2018-01-16 02:47:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.07 Mbit/s

95th percentile per-packet one-way delay: 62.639 ms

Loss rate: 0.65%

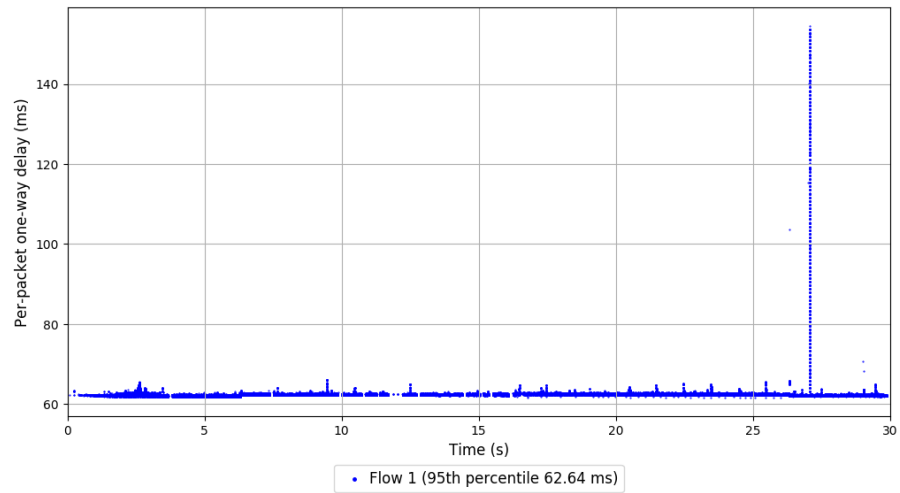
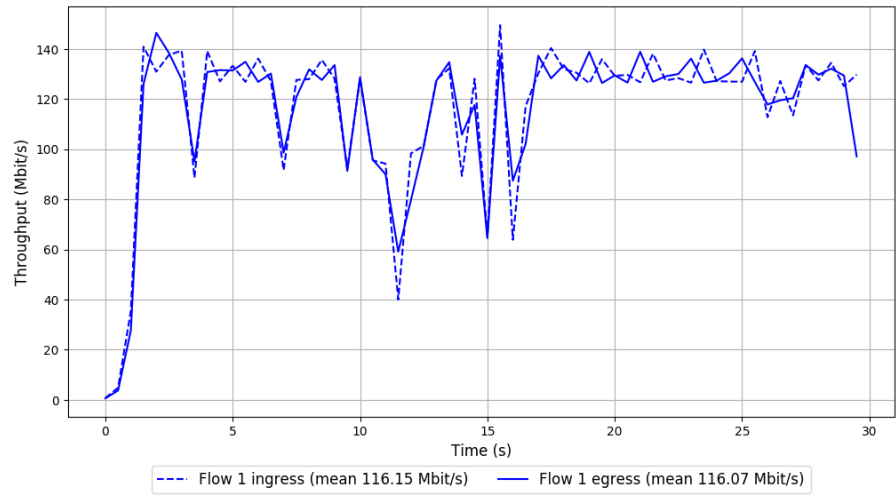
-- Flow 1:

Average throughput: 116.07 Mbit/s

95th percentile per-packet one-way delay: 62.639 ms

Loss rate: 0.65%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-16 00:36:09

End at: 2018-01-16 00:36:39

Below is generated by plot.py at 2018-01-16 02:47:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.53 Mbit/s

95th percentile per-packet one-way delay: 59.633 ms

Loss rate: 0.71%

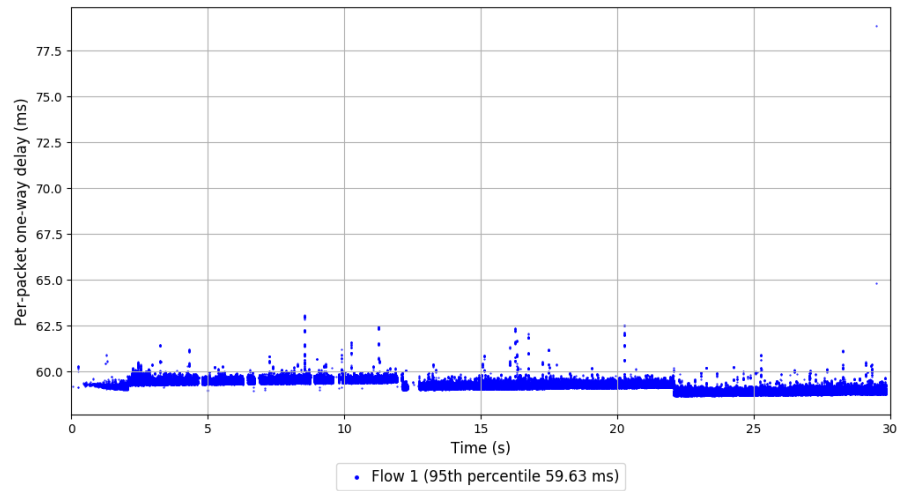
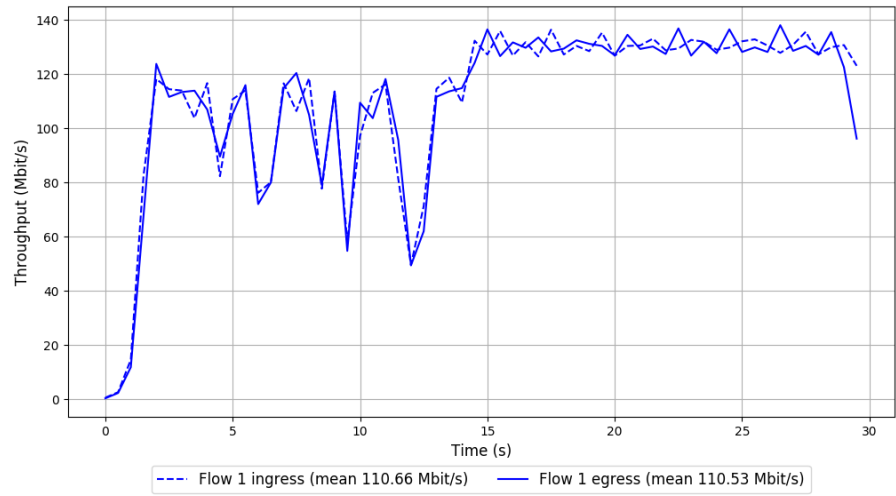
-- Flow 1:

Average throughput: 110.53 Mbit/s

95th percentile per-packet one-way delay: 59.633 ms

Loss rate: 0.71%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-15 22:37:39

End at: 2018-01-15 22:38:09

Below is generated by plot.py at 2018-01-16 02:47:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.06 Mbit/s

95th percentile per-packet one-way delay: 38.828 ms

Loss rate: 1.19%

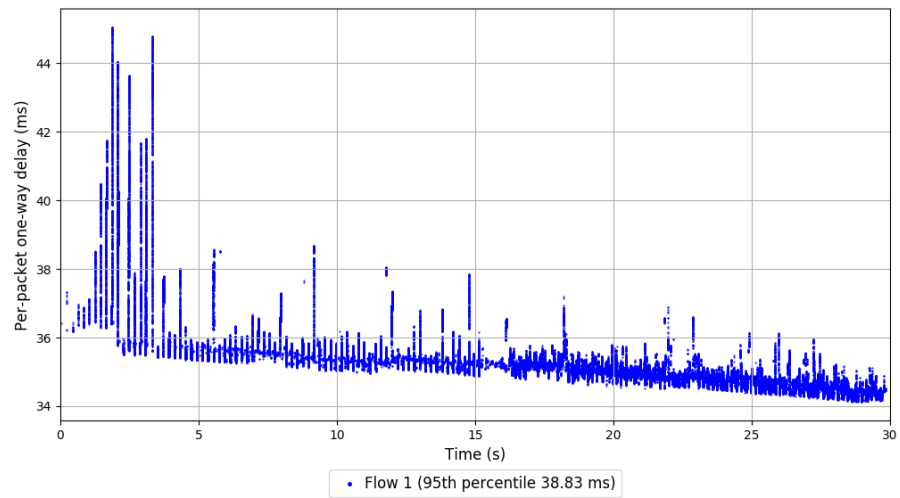
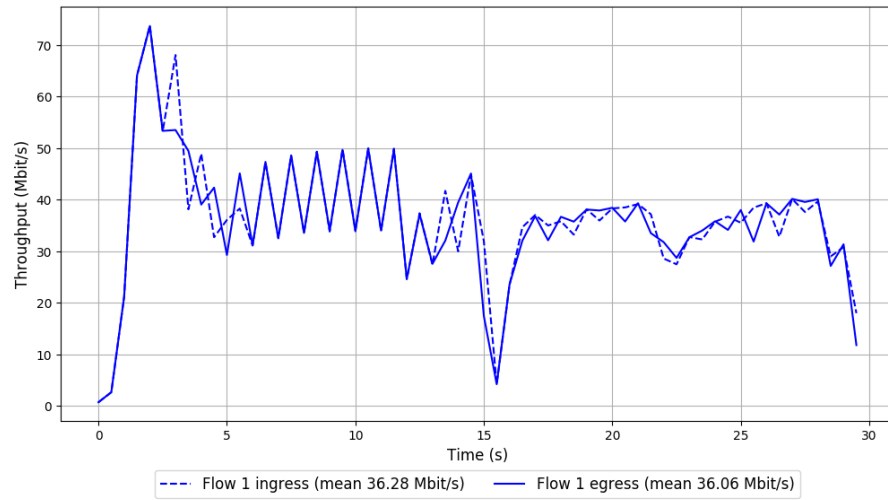
-- Flow 1:

Average throughput: 36.06 Mbit/s

95th percentile per-packet one-way delay: 38.828 ms

Loss rate: 1.19%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-15 22:50:07

End at: 2018-01-15 22:50:37

Below is generated by plot.py at 2018-01-16 02:47:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.74 Mbit/s

95th percentile per-packet one-way delay: 44.321 ms

Loss rate: 0.52%

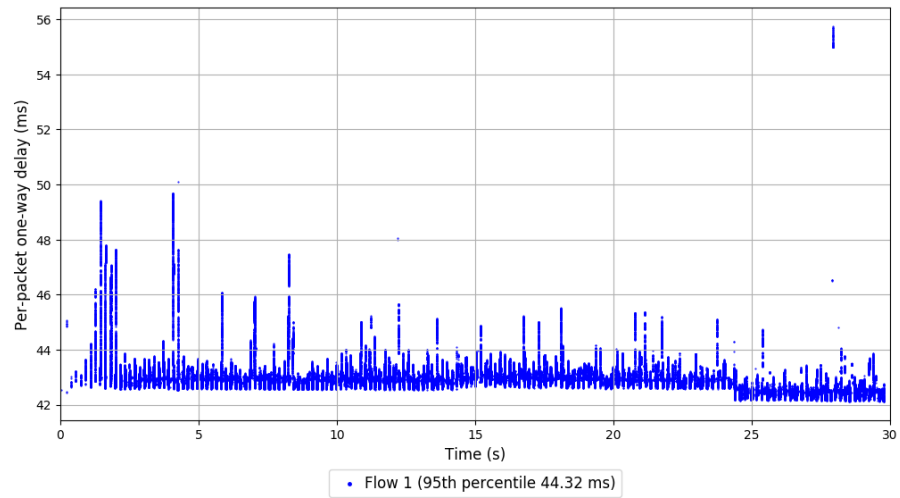
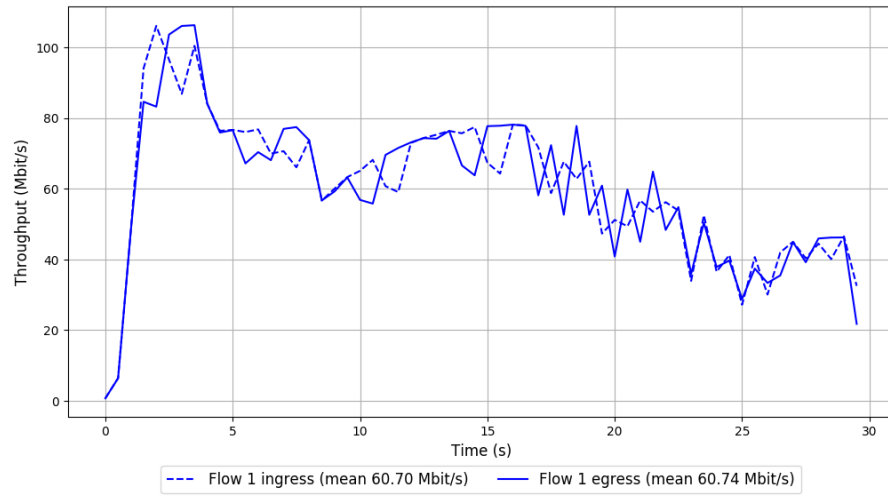
-- Flow 1:

Average throughput: 60.74 Mbit/s

95th percentile per-packet one-way delay: 44.321 ms

Loss rate: 0.52%

Run 2: Report of TCP Cubic — Data Link

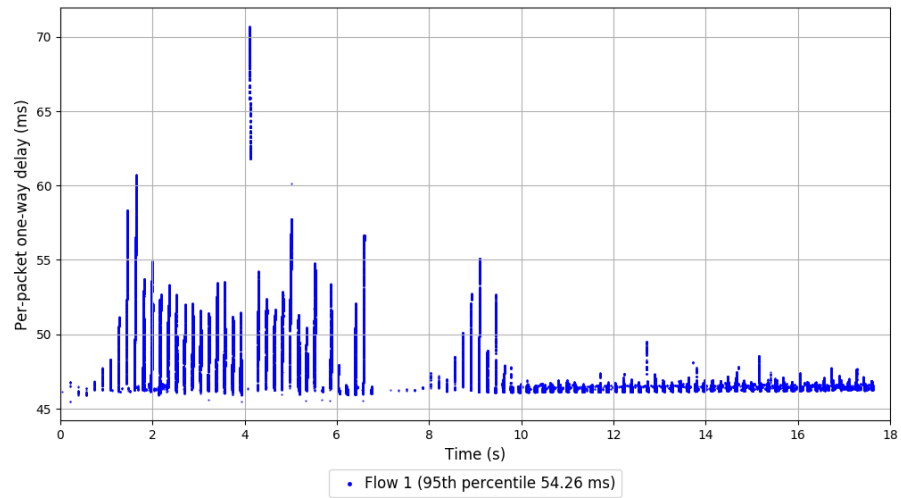
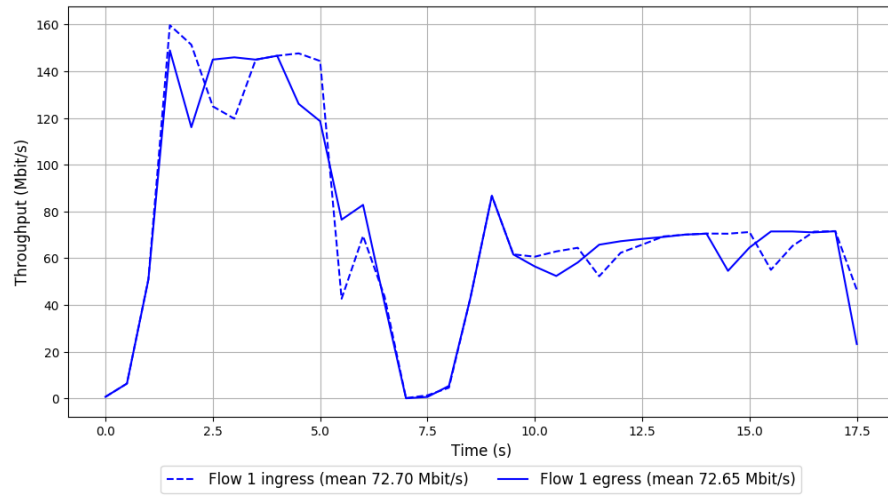


Run 3: Statistics of TCP Cubic

Start at: 2018-01-15 23:02:21

End at: 2018-01-15 23:02:51

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-15 23:14:38

End at: 2018-01-15 23:15:08

Below is generated by plot.py at 2018-01-16 02:47:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.34 Mbit/s

95th percentile per-packet one-way delay: 54.047 ms

Loss rate: 2.49%

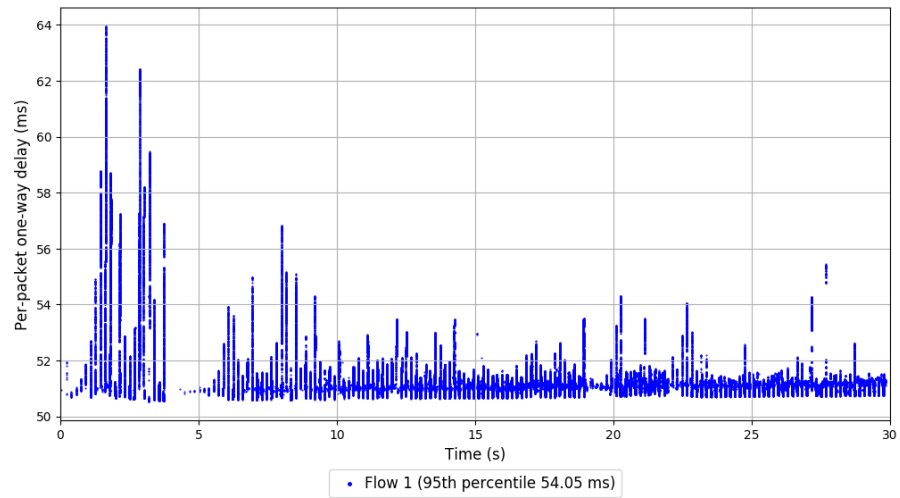
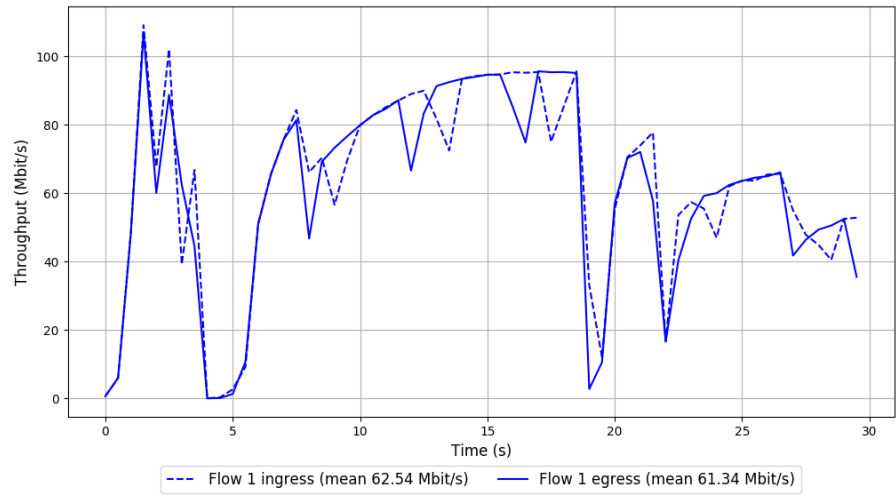
-- Flow 1:

Average throughput: 61.34 Mbit/s

95th percentile per-packet one-way delay: 54.047 ms

Loss rate: 2.49%

Run 4: Report of TCP Cubic — Data Link

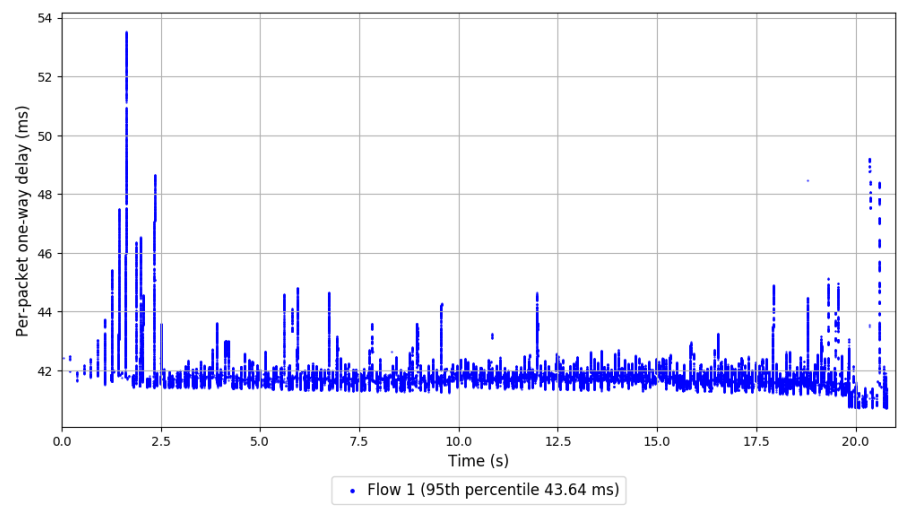
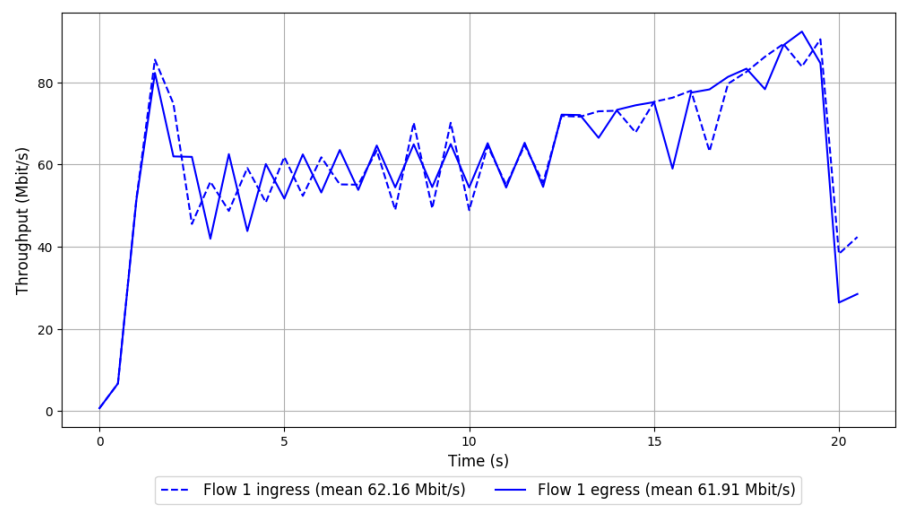


Run 5: Statistics of TCP Cubic

Start at: 2018-01-15 23:26:32

End at: 2018-01-15 23:27:02

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-15 23:38:32

End at: 2018-01-15 23:39:02

Below is generated by plot.py at 2018-01-16 02:47:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.91 Mbit/s

95th percentile per-packet one-way delay: 53.941 ms

Loss rate: 1.86%

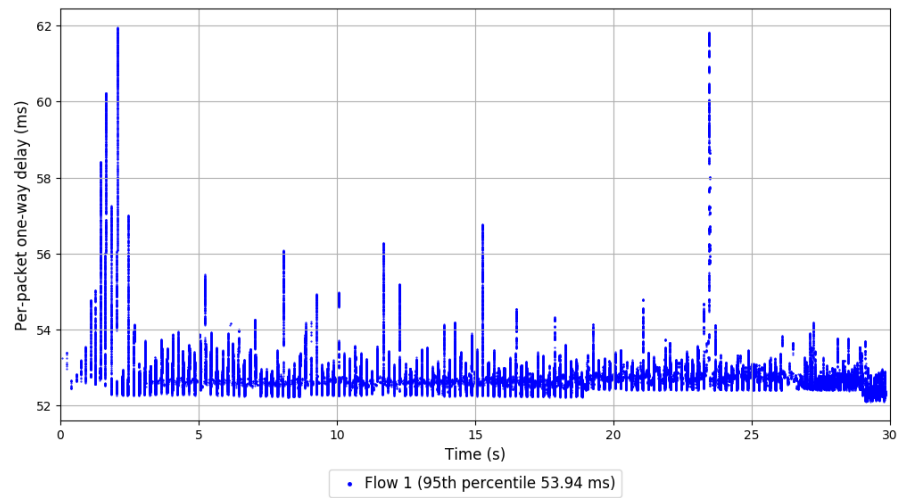
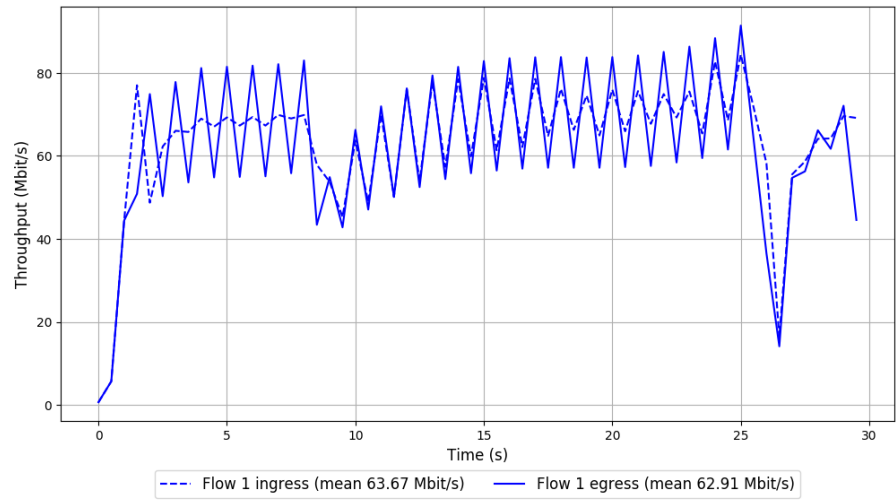
-- Flow 1:

Average throughput: 62.91 Mbit/s

95th percentile per-packet one-way delay: 53.941 ms

Loss rate: 1.86%

Run 6: Report of TCP Cubic — Data Link

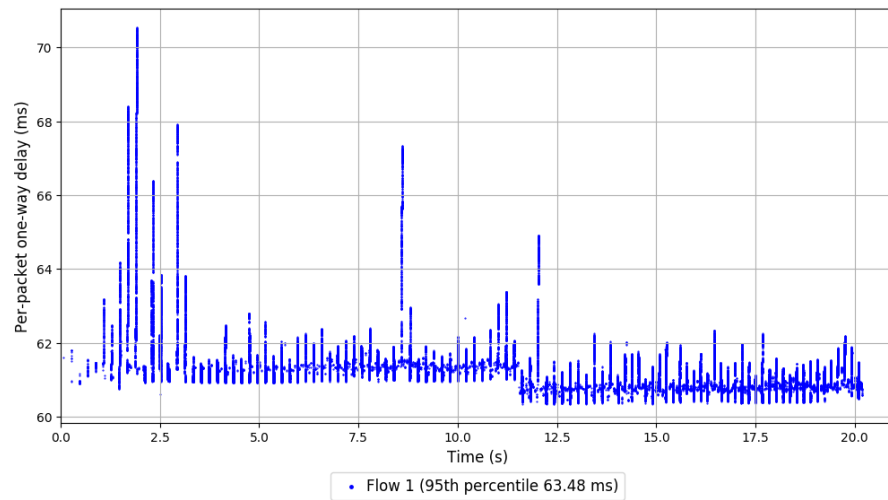
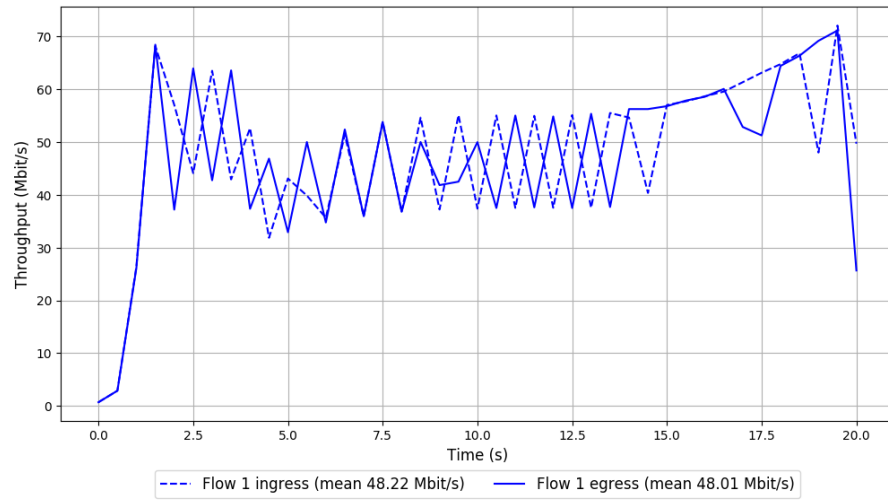


Run 7: Statistics of TCP Cubic

Start at: 2018-01-15 23:50:50

End at: 2018-01-15 23:51:20

Run 7: Report of TCP Cubic — Data Link

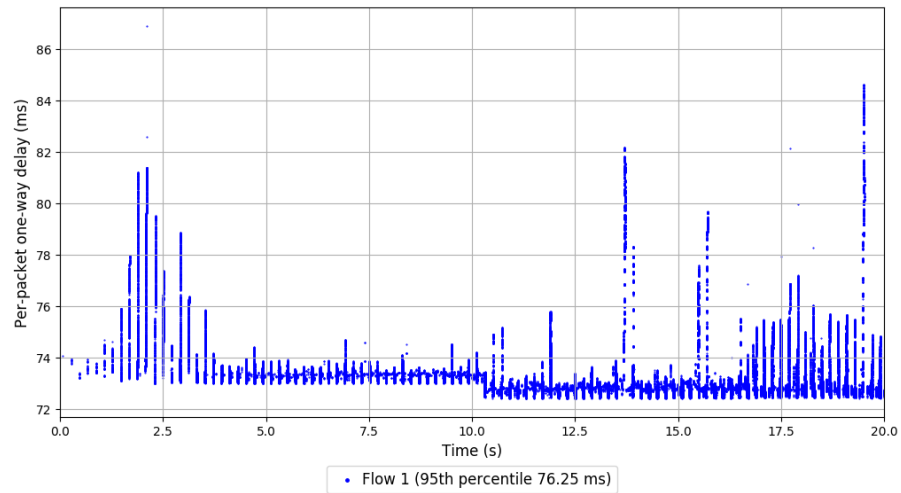
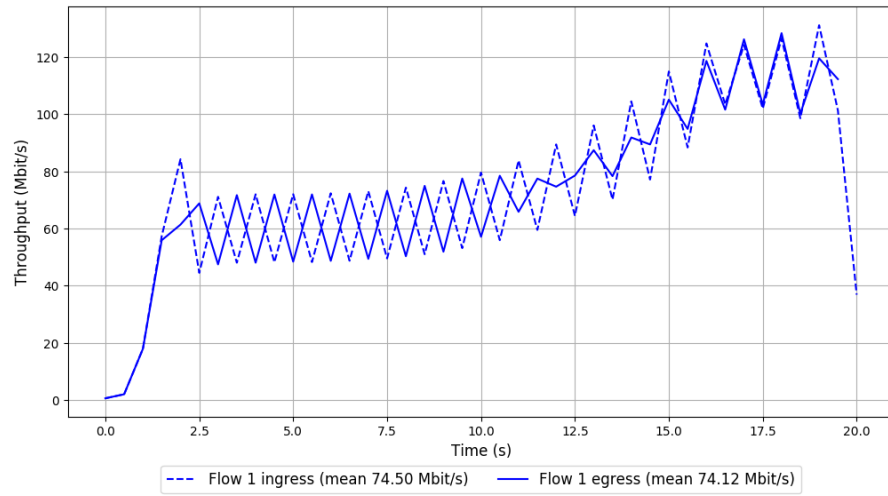


Run 8: Statistics of TCP Cubic

Start at: 2018-01-16 00:03:11

End at: 2018-01-16 00:03:41

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-16 00:15:30

End at: 2018-01-16 00:16:00

Below is generated by plot.py at 2018-01-16 02:47:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.54 Mbit/s

95th percentile per-packet one-way delay: 76.069 ms

Loss rate: 1.11%

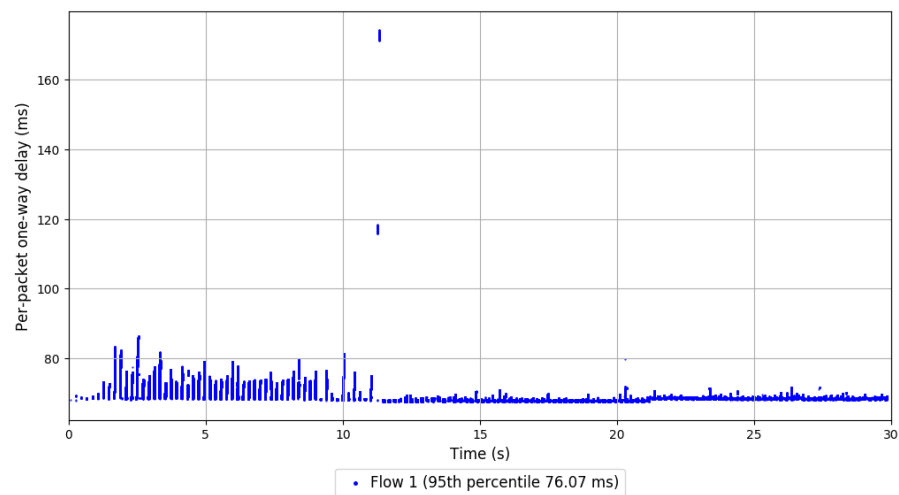
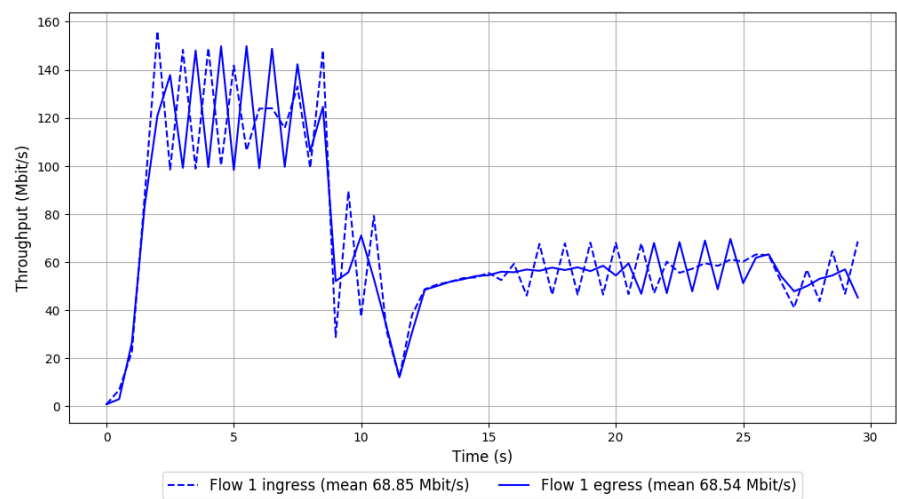
-- Flow 1:

Average throughput: 68.54 Mbit/s

95th percentile per-packet one-way delay: 76.069 ms

Loss rate: 1.11%

Run 9: Report of TCP Cubic — Data Link

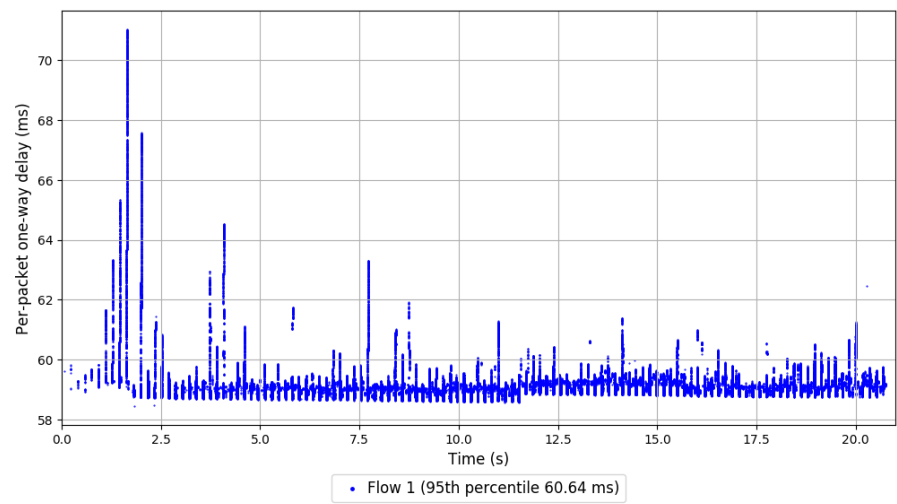
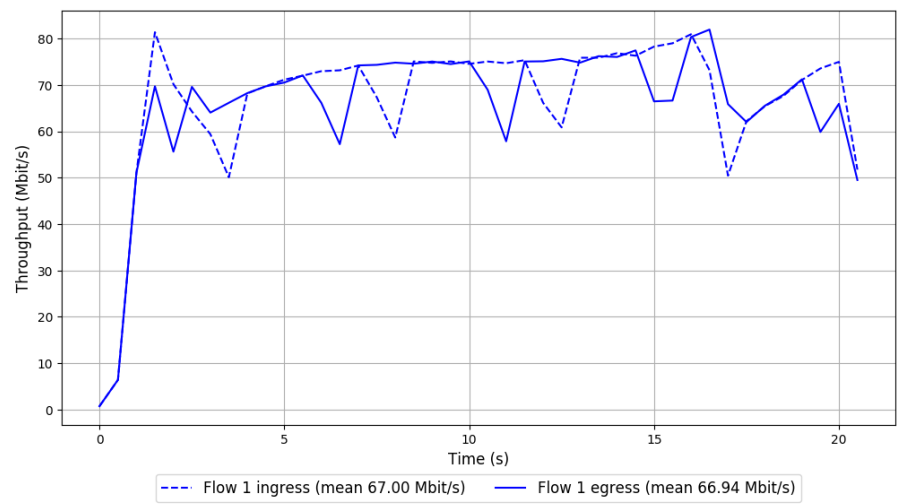


Run 10: Statistics of TCP Cubic

Start at: 2018-01-16 00:27:51

End at: 2018-01-16 00:28:21

Run 10: Report of TCP Cubic — Data Link

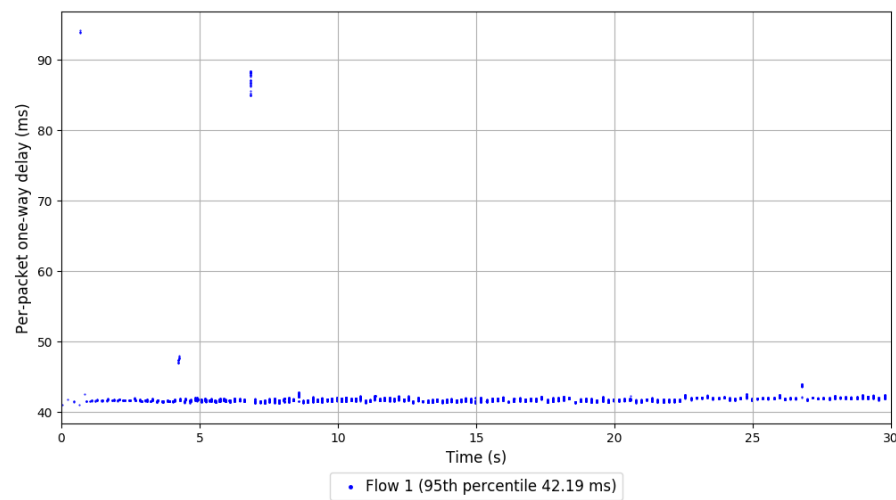
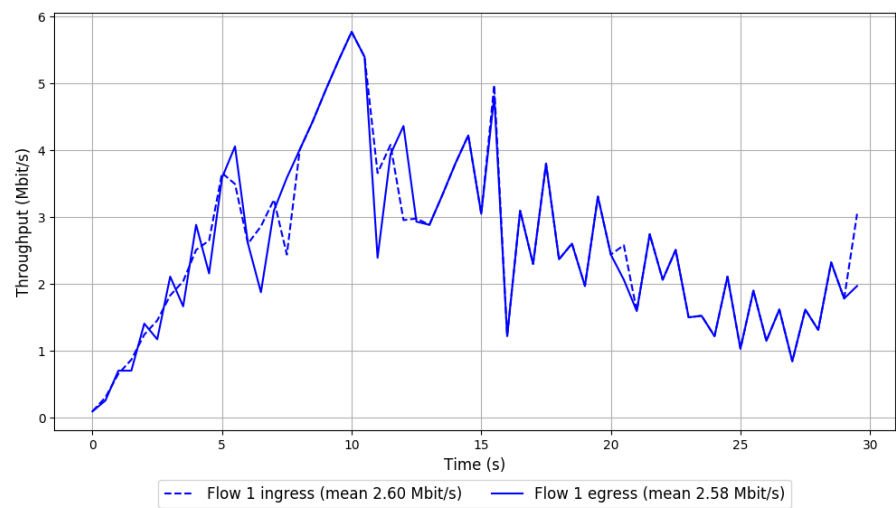


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-15 22:42:09
End at: 2018-01-15 22:42:39

# Below is generated by plot.py at 2018-01-16 02:47:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 42.193 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 42.193 ms
Loss rate: 1.16%
```

Run 1: Report of LEDBAT — Data Link

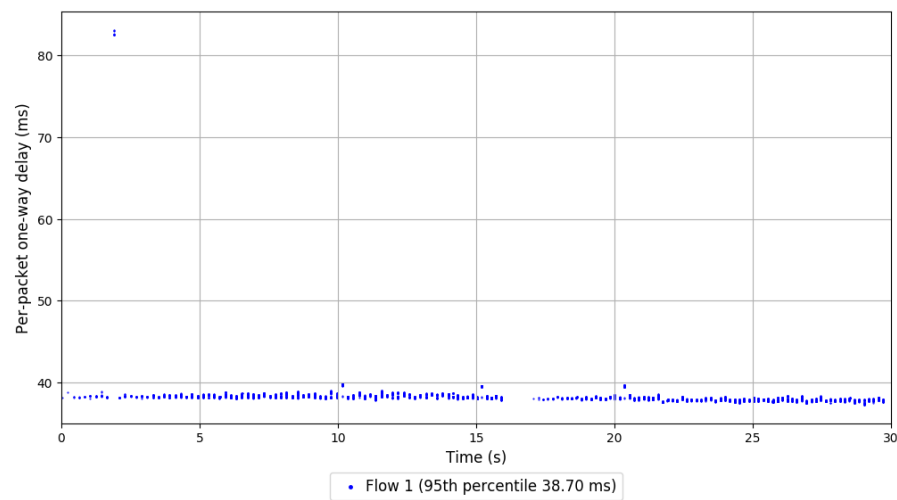
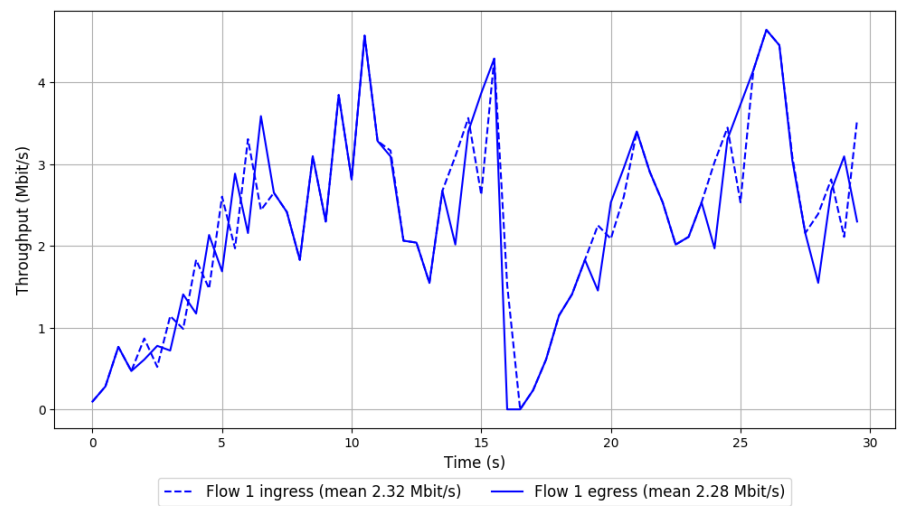


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-15 22:54:40
End at: 2018-01-15 22:55:10

# Below is generated by plot.py at 2018-01-16 02:47:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 38.697 ms
Loss rate: 2.09%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 38.697 ms
Loss rate: 2.09%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-15 23:06:49

End at: 2018-01-15 23:07:19

Below is generated by plot.py at 2018-01-16 02:47:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.59 Mbit/s

95th percentile per-packet one-way delay: 46.698 ms

Loss rate: 1.41%

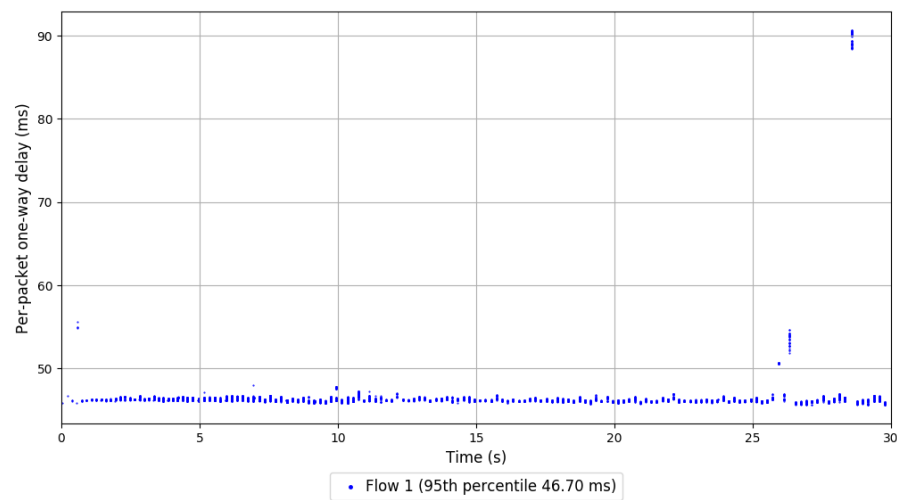
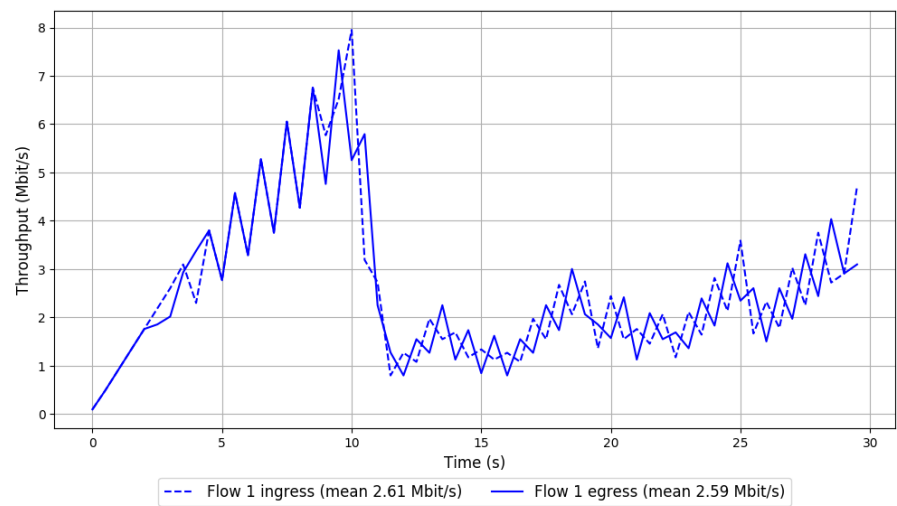
-- Flow 1:

Average throughput: 2.59 Mbit/s

95th percentile per-packet one-way delay: 46.698 ms

Loss rate: 1.41%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-15 23:19:01

End at: 2018-01-15 23:19:31

Below is generated by plot.py at 2018-01-16 02:47:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 50.795 ms

Loss rate: 0.89%

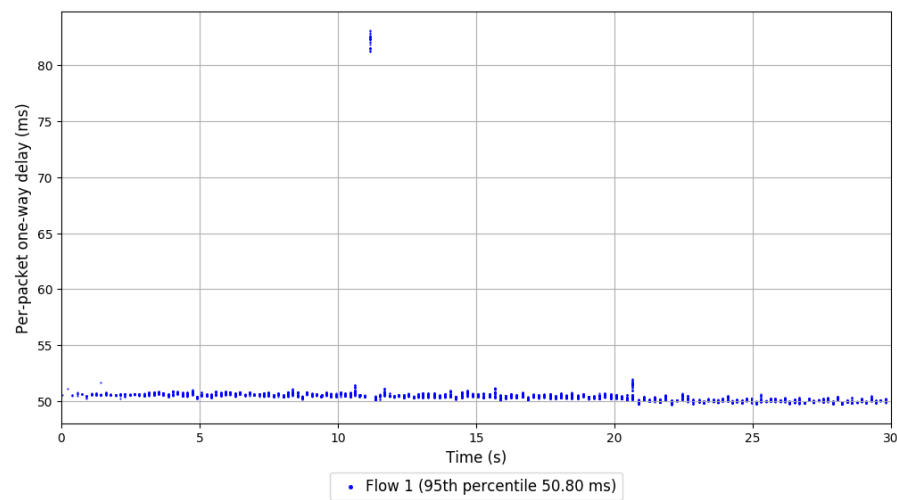
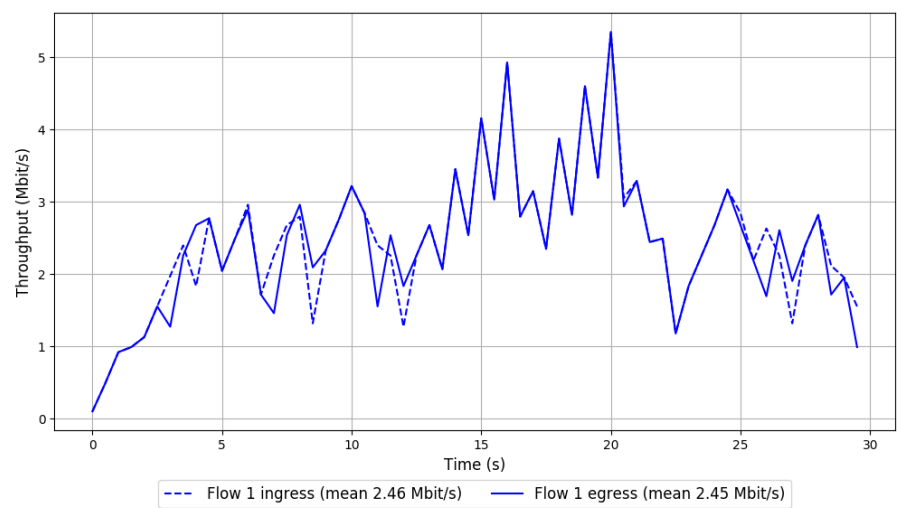
-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 50.795 ms

Loss rate: 0.89%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-15 23:30:52

End at: 2018-01-15 23:31:22

Below is generated by plot.py at 2018-01-16 02:47:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 49.181 ms

Loss rate: 1.25%

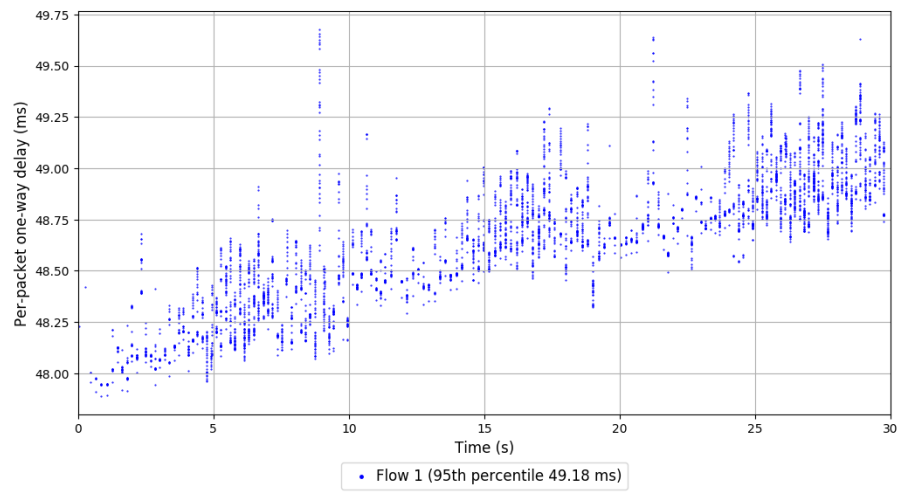
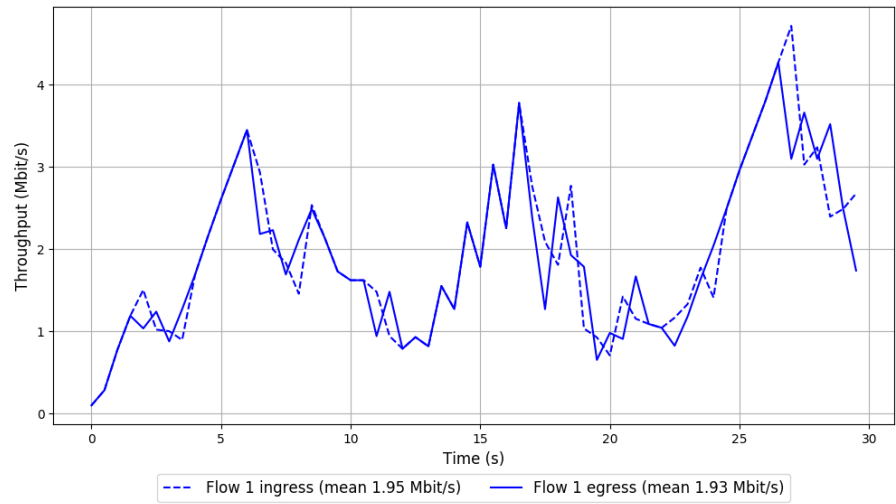
-- Flow 1:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 49.181 ms

Loss rate: 1.25%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-15 23:43:00

End at: 2018-01-15 23:43:30

Below is generated by plot.py at 2018-01-16 02:47:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 51.795 ms

Loss rate: 0.75%

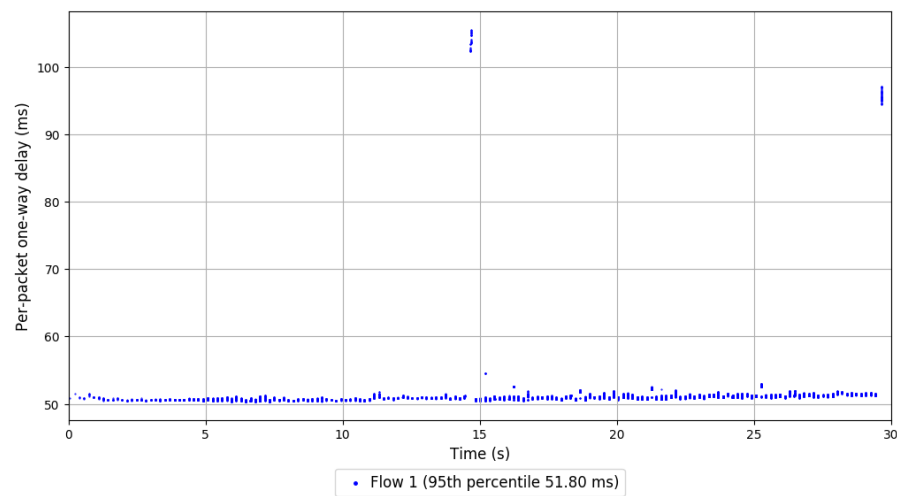
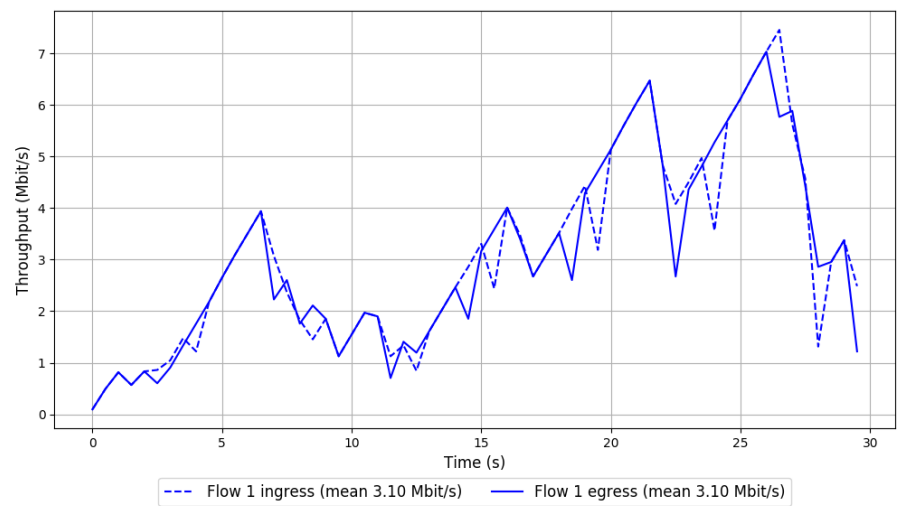
-- Flow 1:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 51.795 ms

Loss rate: 0.75%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-15 23:55:15

End at: 2018-01-15 23:55:45

Below is generated by plot.py at 2018-01-16 02:47:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 68.814 ms

Loss rate: 2.04%

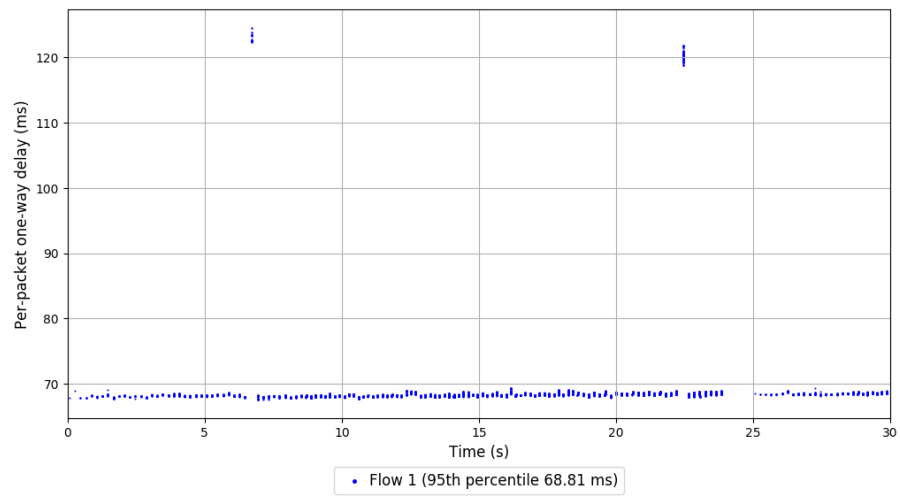
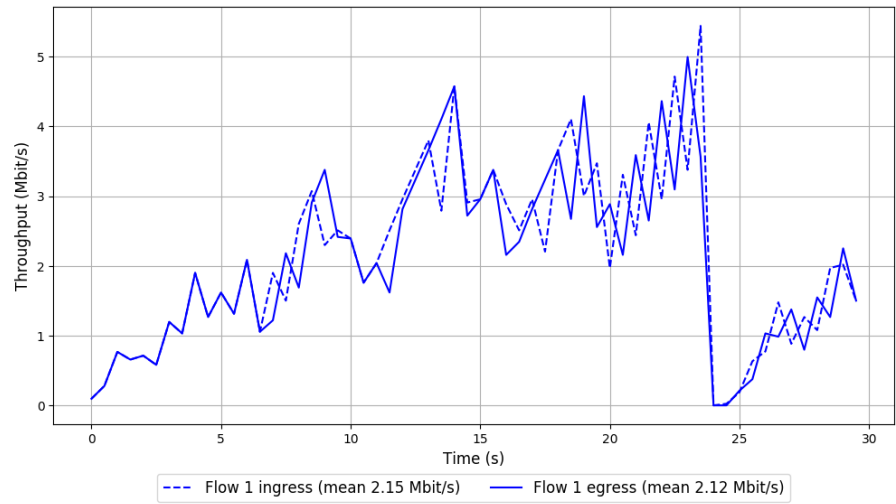
-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 68.814 ms

Loss rate: 2.04%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-16 00:07:37

End at: 2018-01-16 00:08:07

Below is generated by plot.py at 2018-01-16 02:47:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 73.261 ms

Loss rate: 0.97%

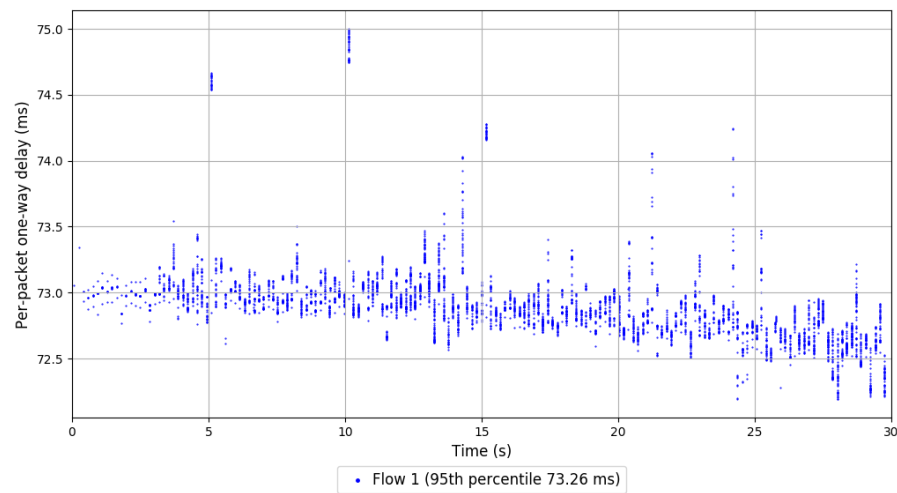
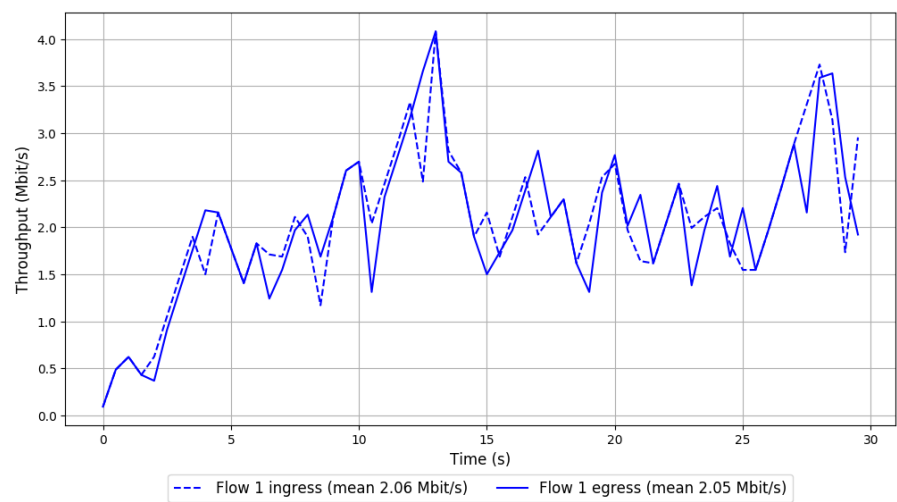
-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 73.261 ms

Loss rate: 0.97%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-16 00:19:54

End at: 2018-01-16 00:20:24

Below is generated by plot.py at 2018-01-16 02:47:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 66.783 ms

Loss rate: 1.28%

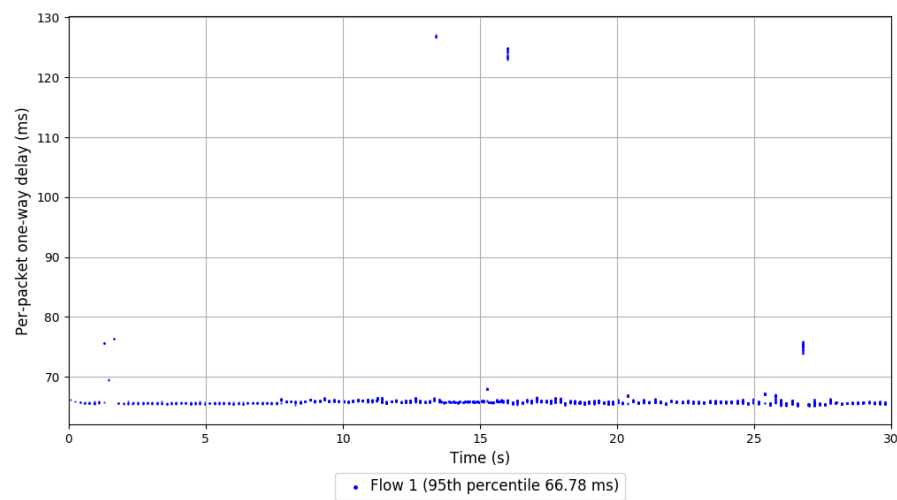
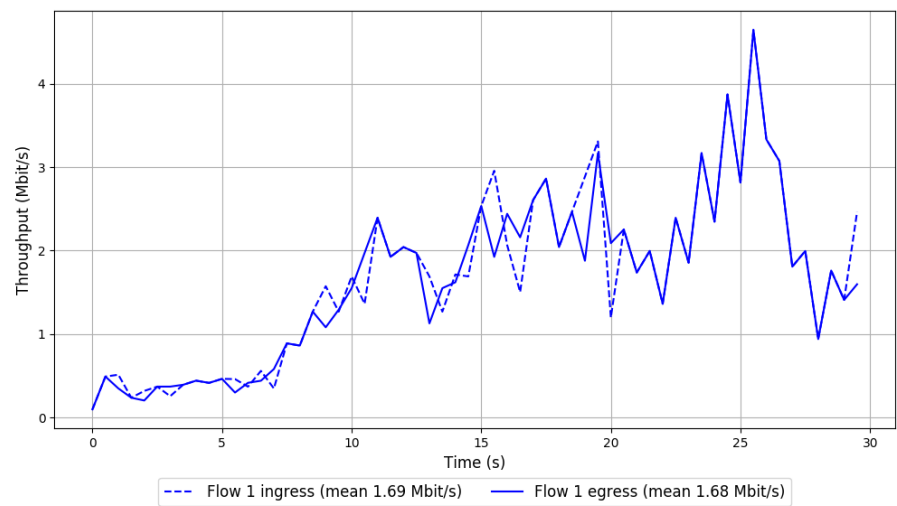
-- Flow 1:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 66.783 ms

Loss rate: 1.28%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-16 00:32:19

End at: 2018-01-16 00:32:49

Below is generated by plot.py at 2018-01-16 02:47:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 57.694 ms

Loss rate: 1.27%

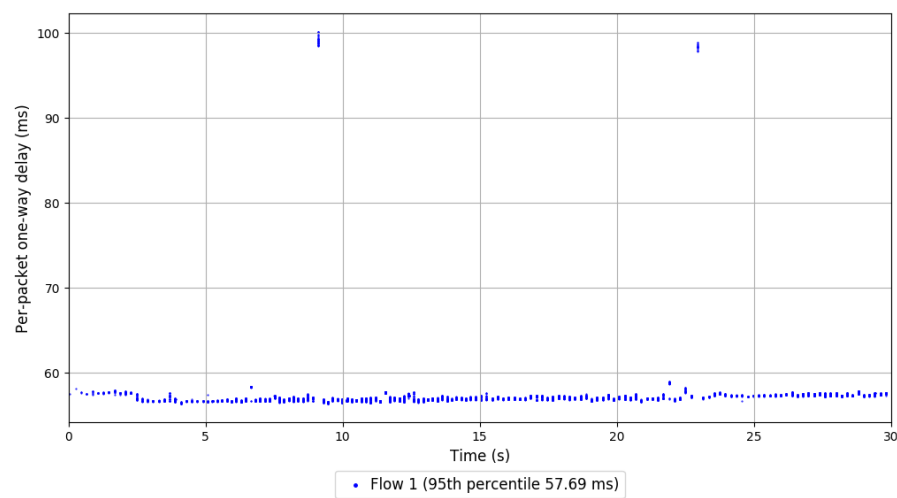
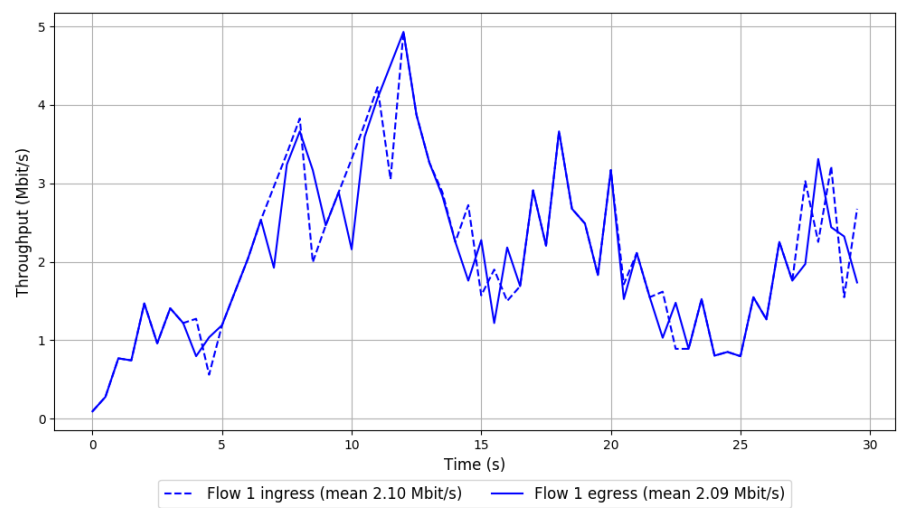
-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 57.694 ms

Loss rate: 1.27%

Run 10: Report of LEDBAT — Data Link

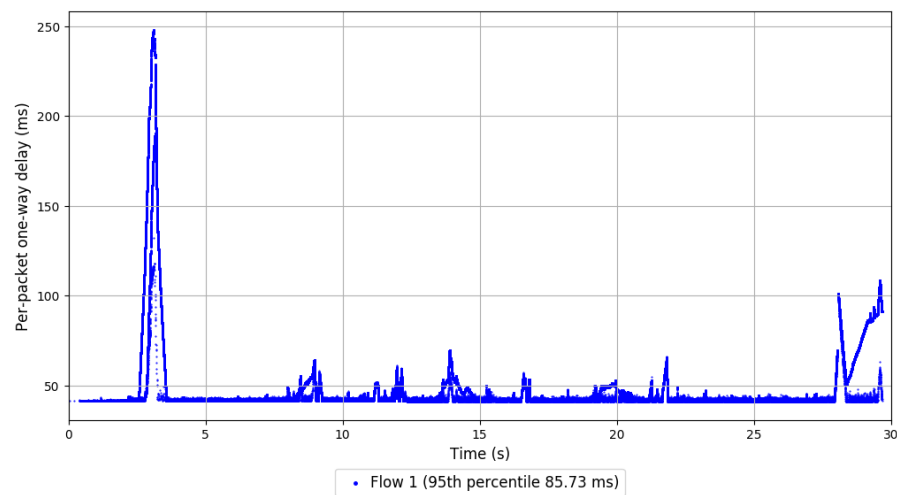
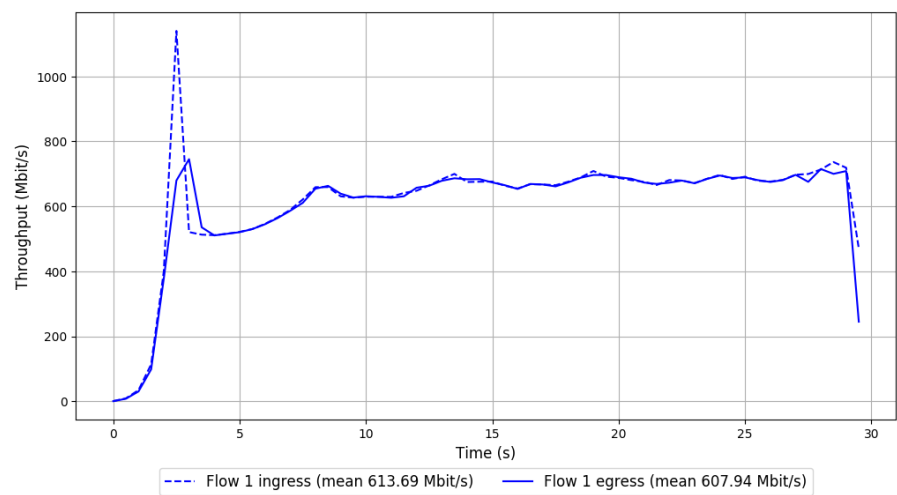


```
Run 1: Statistics of PCC

Start at: 2018-01-15 22:42:49
End at: 2018-01-15 22:43:19

# Below is generated by plot.py at 2018-01-16 02:56:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 607.94 Mbit/s
95th percentile per-packet one-way delay: 85.732 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 607.94 Mbit/s
95th percentile per-packet one-way delay: 85.732 ms
Loss rate: 1.60%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-15 22:55:20

End at: 2018-01-15 22:55:50

Below is generated by plot.py at 2018-01-16 02:56:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 579.28 Mbit/s

95th percentile per-packet one-way delay: 72.884 ms

Loss rate: 1.23%

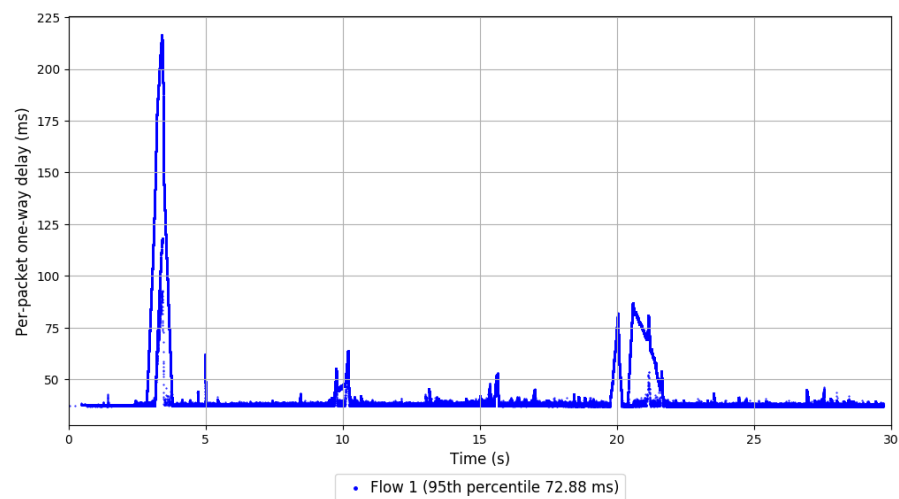
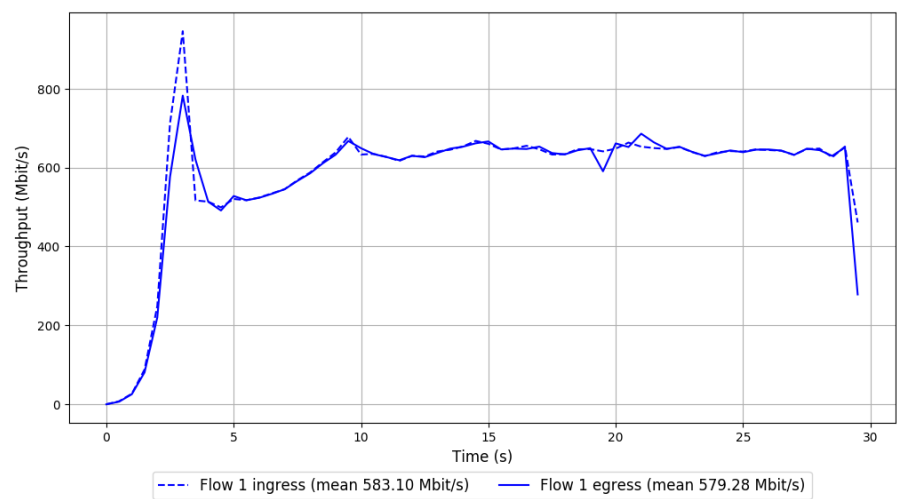
-- Flow 1:

Average throughput: 579.28 Mbit/s

95th percentile per-packet one-way delay: 72.884 ms

Loss rate: 1.23%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-15 23:07:29

End at: 2018-01-15 23:07:59

Below is generated by plot.py at 2018-01-16 02:56:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 592.53 Mbit/s

95th percentile per-packet one-way delay: 100.479 ms

Loss rate: 1.41%

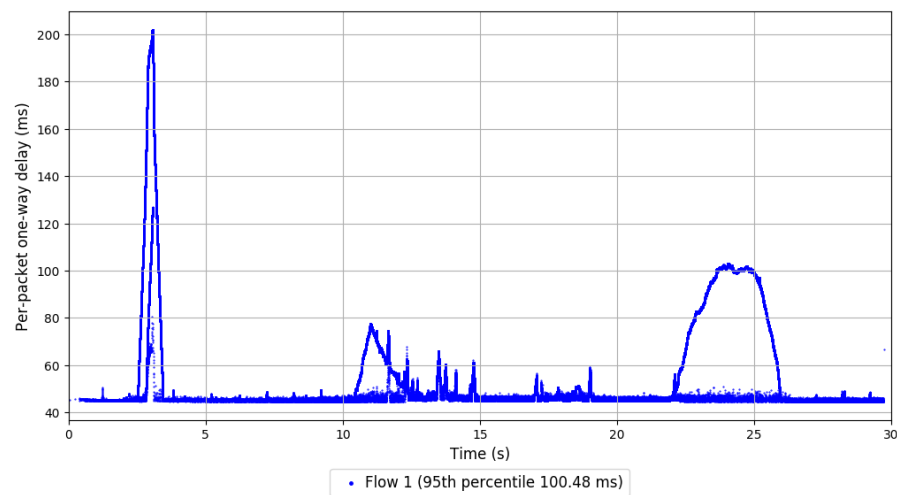
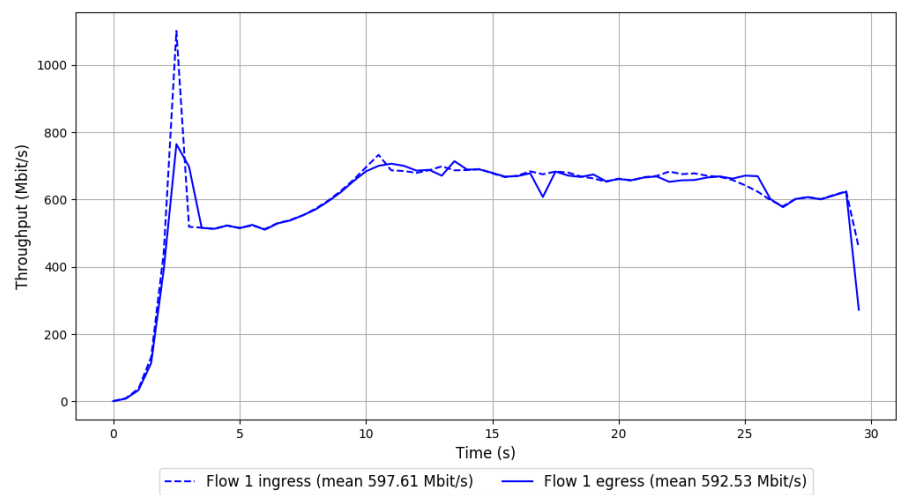
-- Flow 1:

Average throughput: 592.53 Mbit/s

95th percentile per-packet one-way delay: 100.479 ms

Loss rate: 1.41%

Run 3: Report of PCC — Data Link

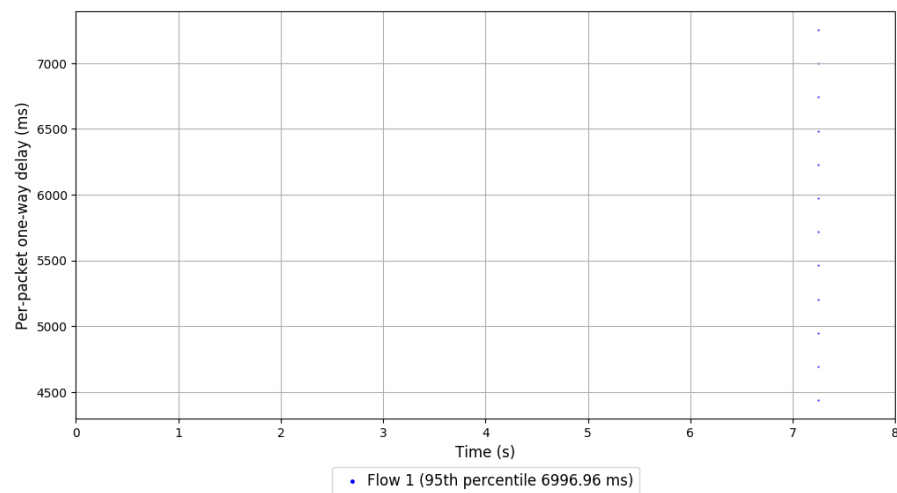
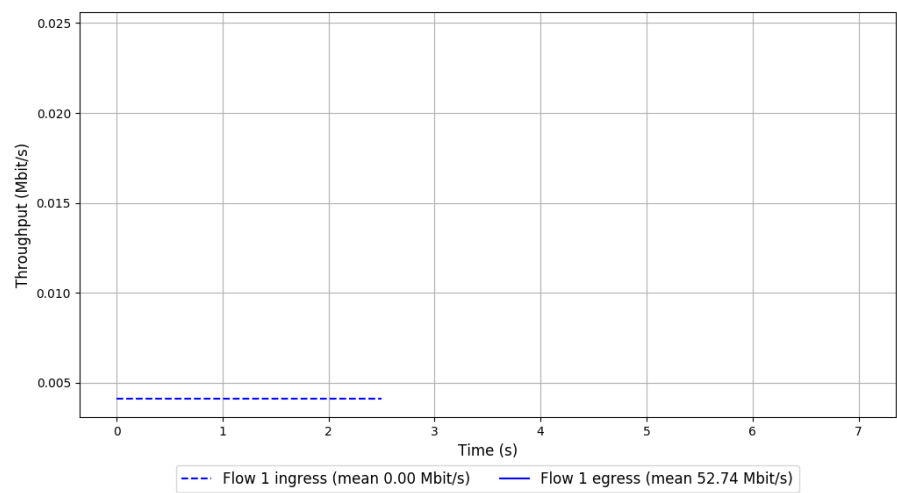


Run 4: Statistics of PCC

Start at: 2018-01-15 23:19:41

End at: 2018-01-15 23:20:11

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-15 23:31:33

End at: 2018-01-15 23:32:03

Below is generated by plot.py at 2018-01-16 02:56:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 156.72 Mbit/s

95th percentile per-packet one-way delay: 49.835 ms

Loss rate: 2.25%

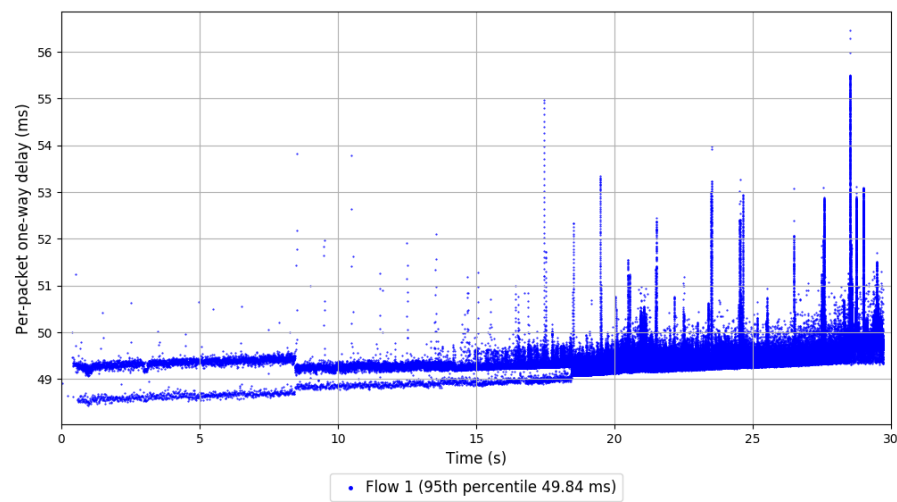
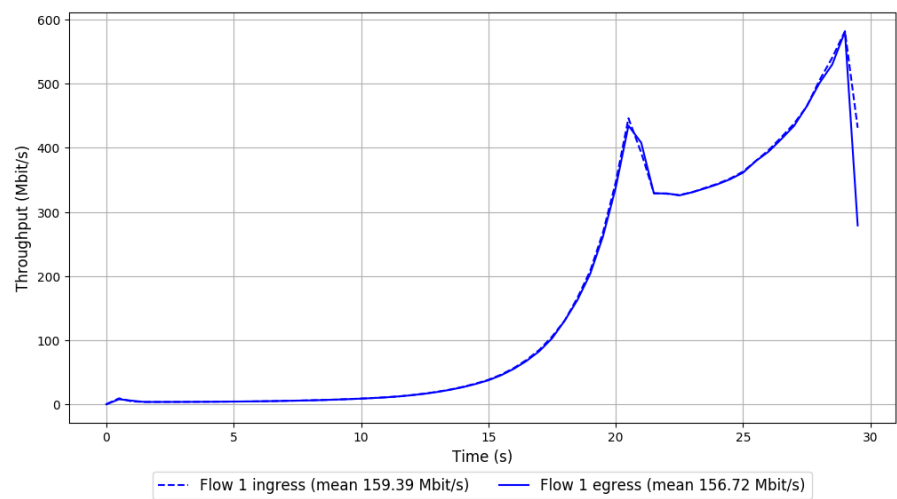
-- Flow 1:

Average throughput: 156.72 Mbit/s

95th percentile per-packet one-way delay: 49.835 ms

Loss rate: 2.25%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-15 23:43:40

End at: 2018-01-15 23:44:10

Below is generated by plot.py at 2018-01-16 02:56:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 566.91 Mbit/s

95th percentile per-packet one-way delay: 103.436 ms

Loss rate: 1.21%

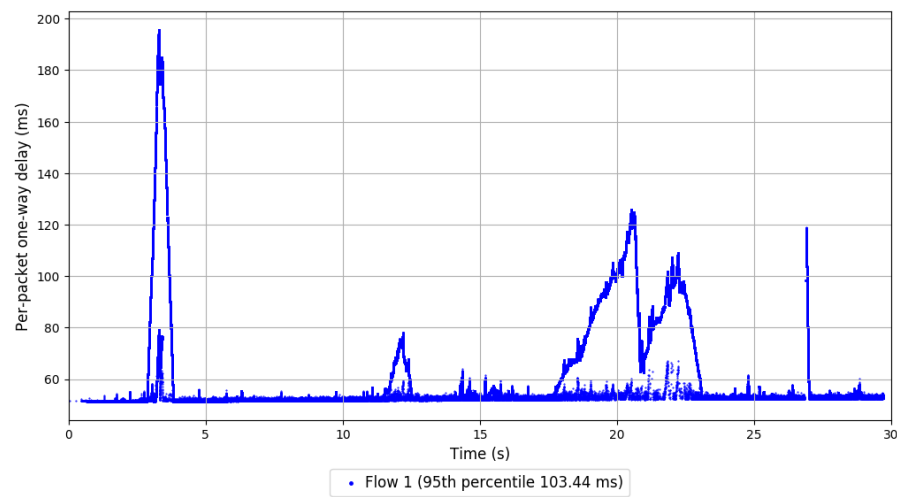
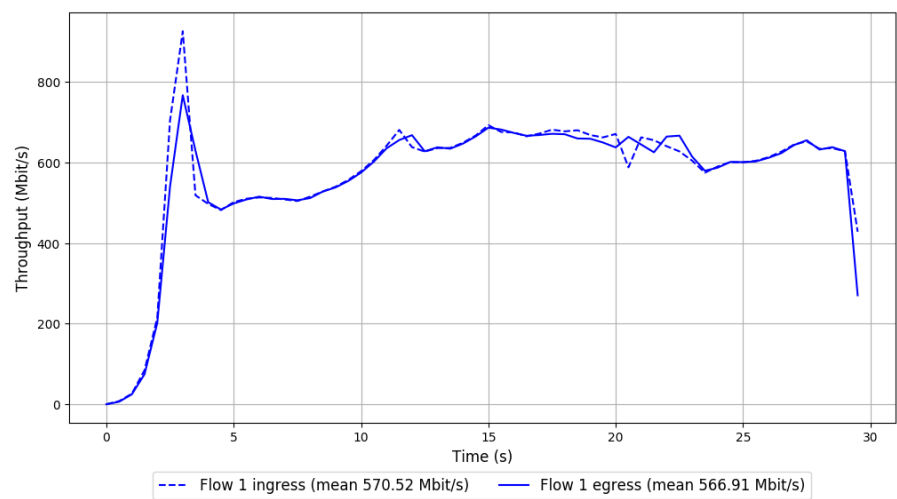
-- Flow 1:

Average throughput: 566.91 Mbit/s

95th percentile per-packet one-way delay: 103.436 ms

Loss rate: 1.21%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-15 23:55:55

End at: 2018-01-15 23:56:25

Below is generated by plot.py at 2018-01-16 02:57:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 600.84 Mbit/s

95th percentile per-packet one-way delay: 78.116 ms

Loss rate: 1.35%

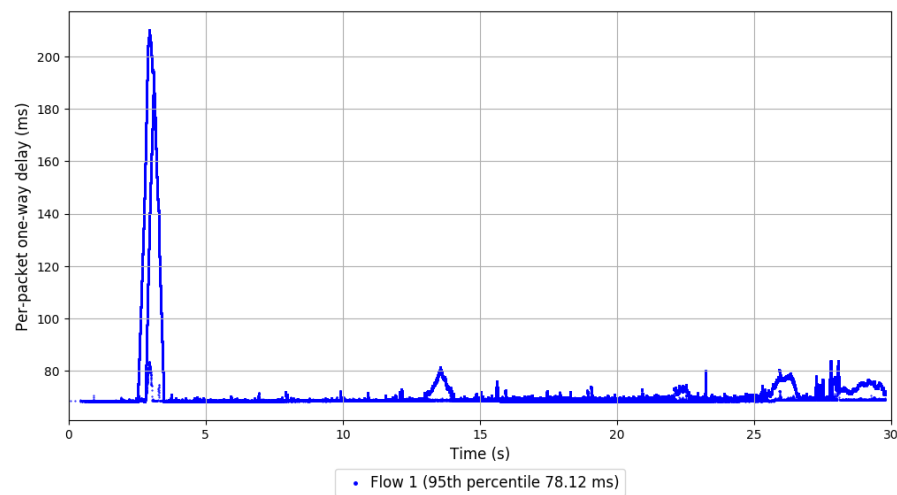
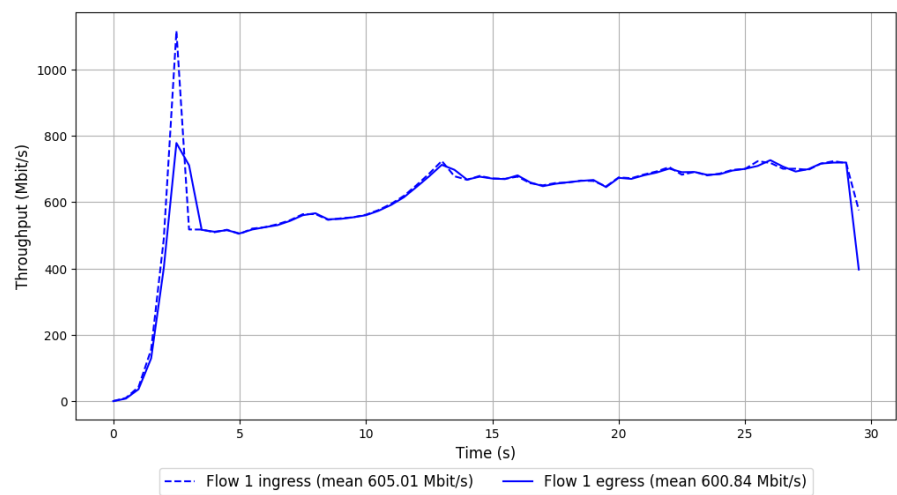
-- Flow 1:

Average throughput: 600.84 Mbit/s

95th percentile per-packet one-way delay: 78.116 ms

Loss rate: 1.35%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-16 00:08:16

End at: 2018-01-16 00:08:47

Below is generated by plot.py at 2018-01-16 02:57:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 554.10 Mbit/s

95th percentile per-packet one-way delay: 119.533 ms

Loss rate: 2.11%

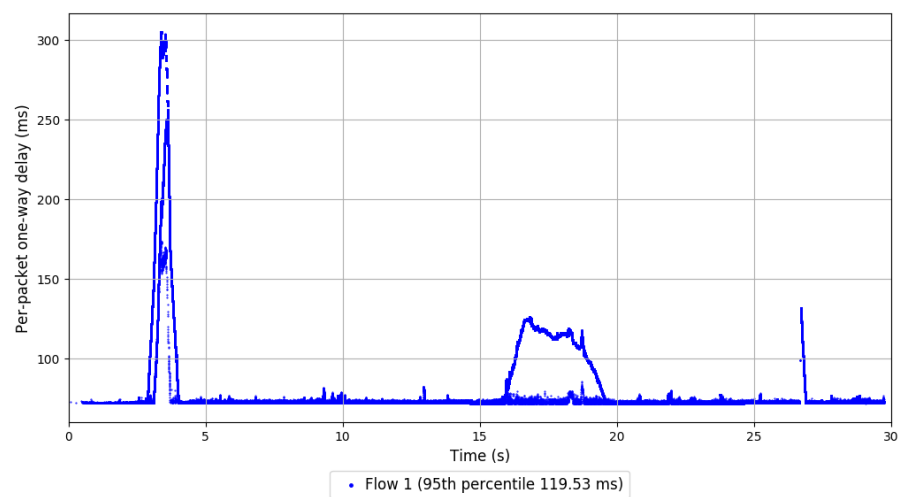
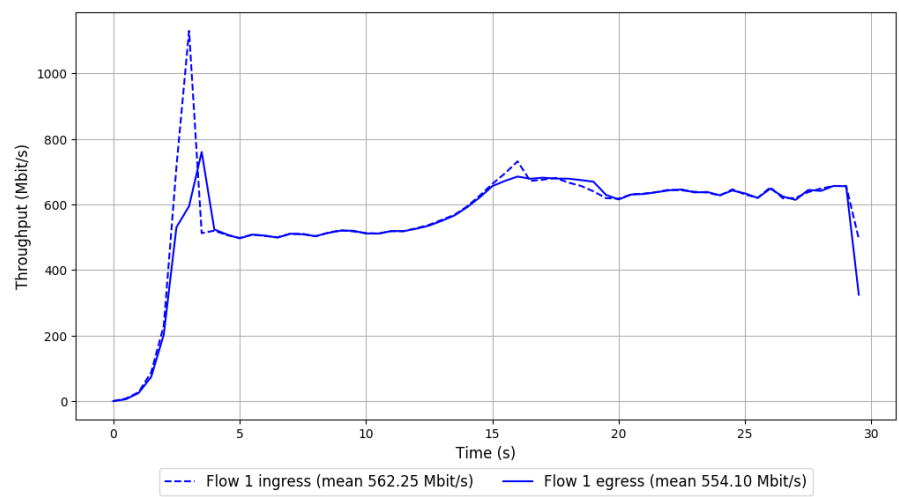
-- Flow 1:

Average throughput: 554.10 Mbit/s

95th percentile per-packet one-way delay: 119.533 ms

Loss rate: 2.11%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-16 00:20:34

End at: 2018-01-16 00:21:04

Below is generated by plot.py at 2018-01-16 02:57:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 610.68 Mbit/s

95th percentile per-packet one-way delay: 166.706 ms

Loss rate: 1.88%

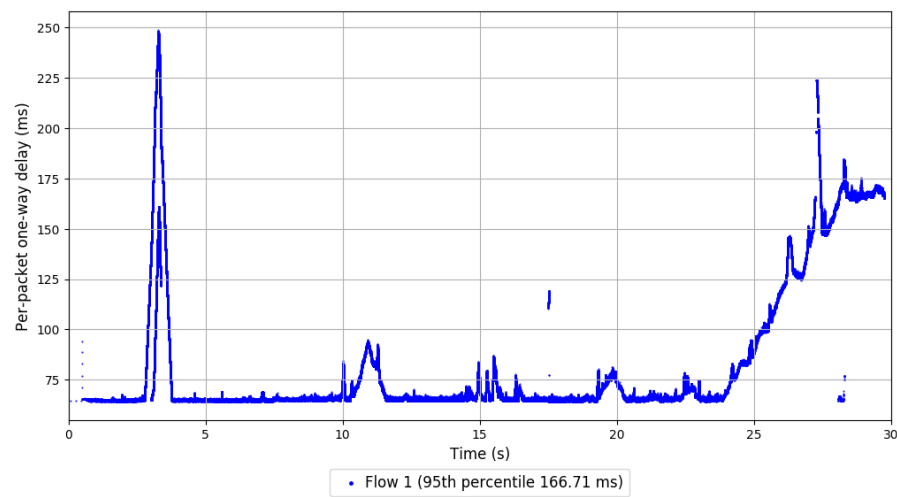
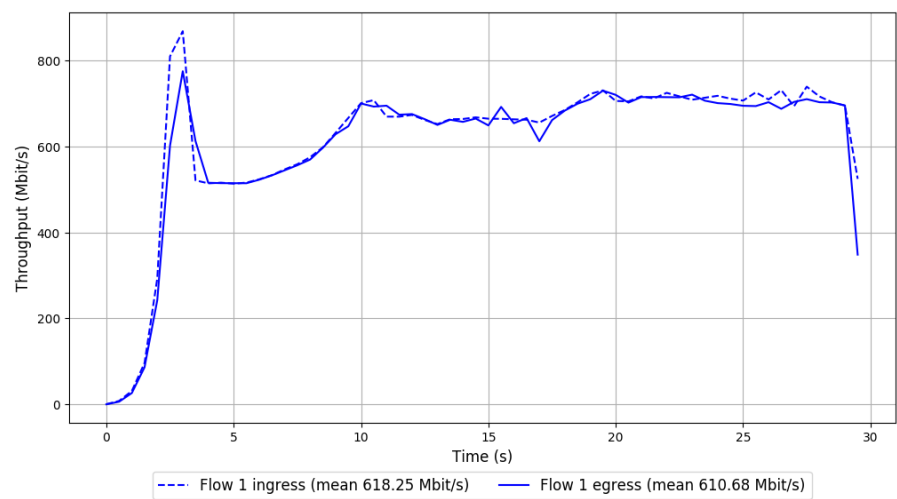
-- Flow 1:

Average throughput: 610.68 Mbit/s

95th percentile per-packet one-way delay: 166.706 ms

Loss rate: 1.88%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-16 00:32:59

End at: 2018-01-16 00:33:29

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 536.64 Mbit/s

95th percentile per-packet one-way delay: 97.458 ms

Loss rate: 1.49%

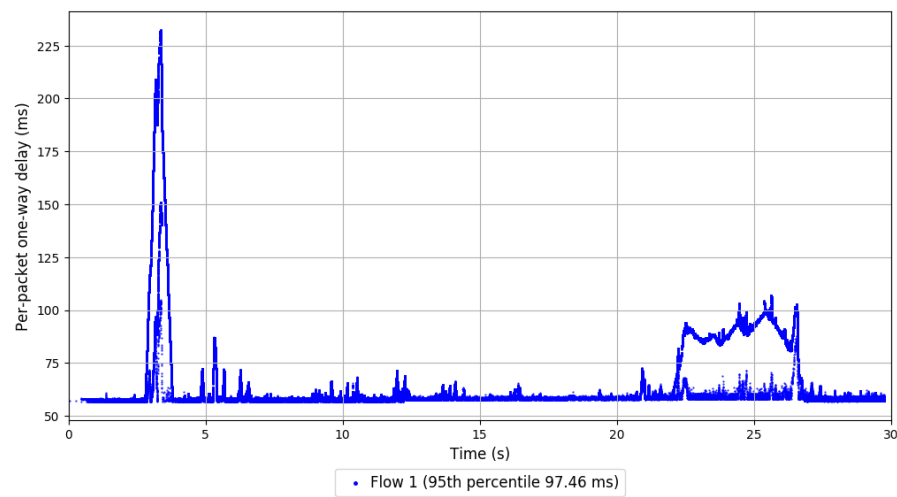
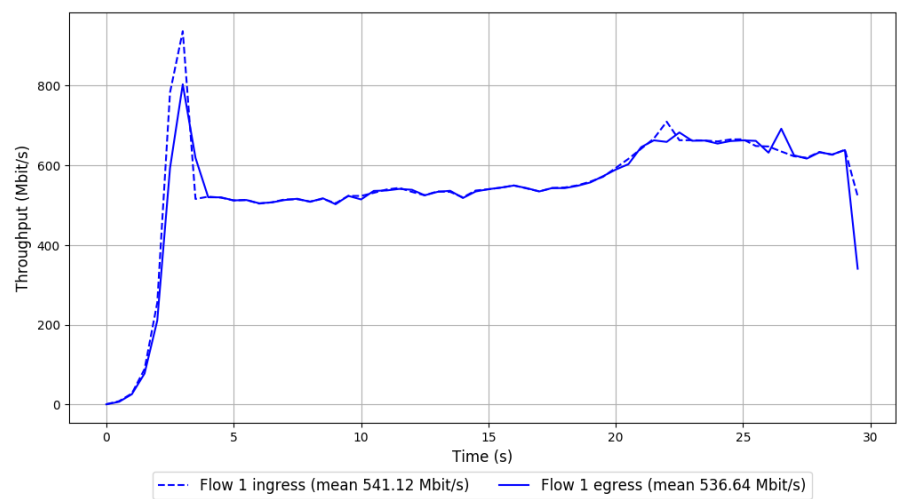
-- Flow 1:

Average throughput: 536.64 Mbit/s

95th percentile per-packet one-way delay: 97.458 ms

Loss rate: 1.49%

Run 10: Report of PCC — Data Link

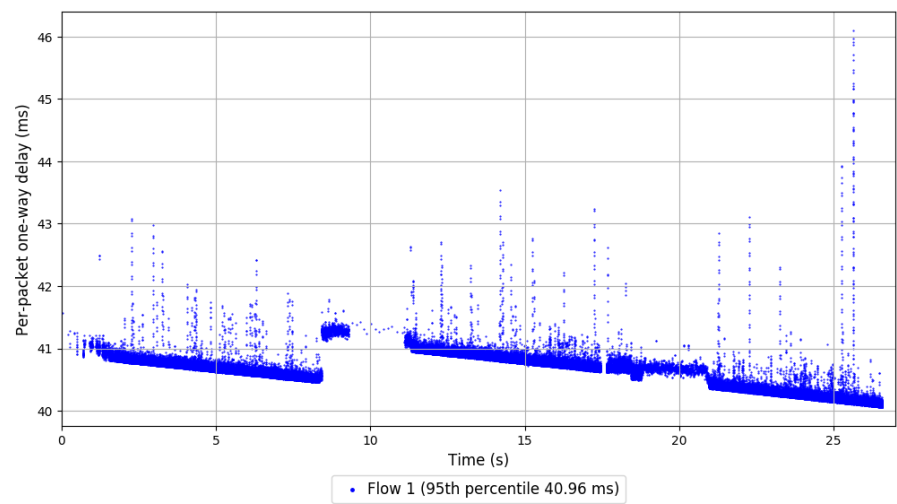
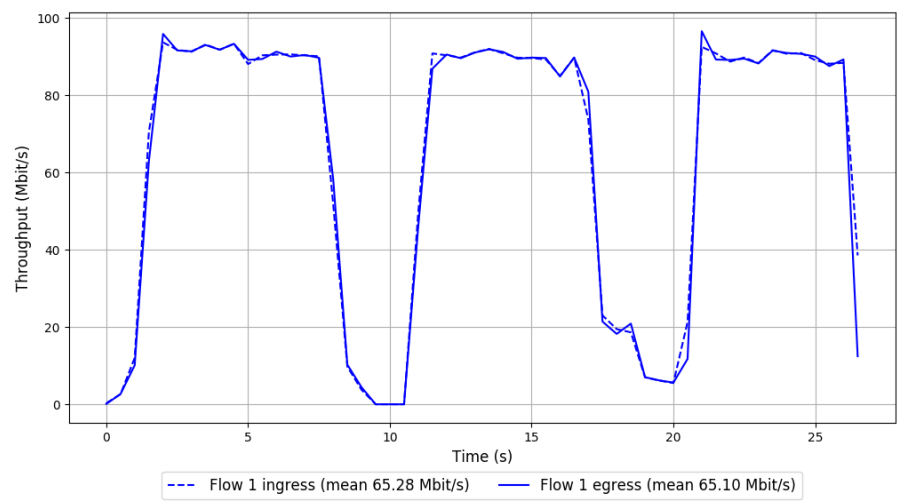


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-15 22:36:00
End at: 2018-01-15 22:36:30

# Below is generated by plot.py at 2018-01-16 02:59:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.10 Mbit/s
95th percentile per-packet one-way delay: 40.963 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 65.10 Mbit/s
95th percentile per-packet one-way delay: 40.963 ms
Loss rate: 0.93%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-15 22:48:31

End at: 2018-01-15 22:49:01

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.11 Mbit/s

95th percentile per-packet one-way delay: 43.021 ms

Loss rate: 1.00%

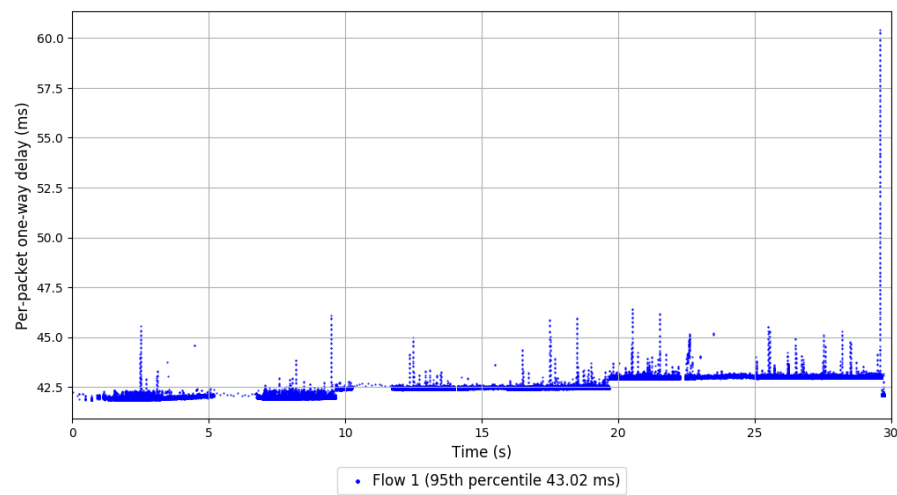
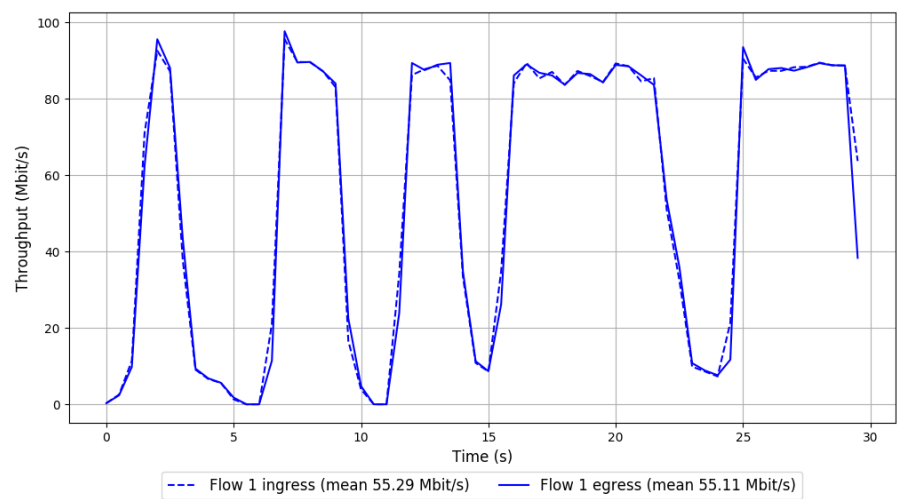
-- Flow 1:

Average throughput: 55.11 Mbit/s

95th percentile per-packet one-way delay: 43.021 ms

Loss rate: 1.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-15 23:00:45

End at: 2018-01-15 23:01:15

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.74 Mbit/s

95th percentile per-packet one-way delay: 43.897 ms

Loss rate: 0.81%

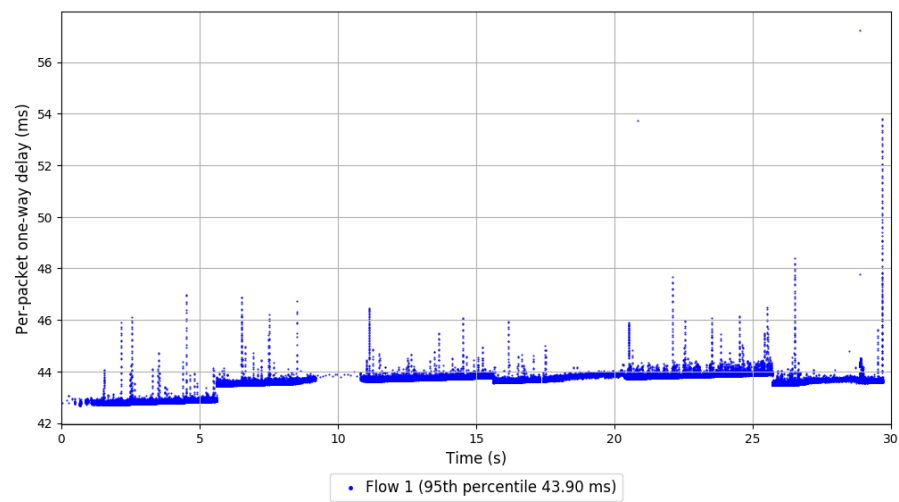
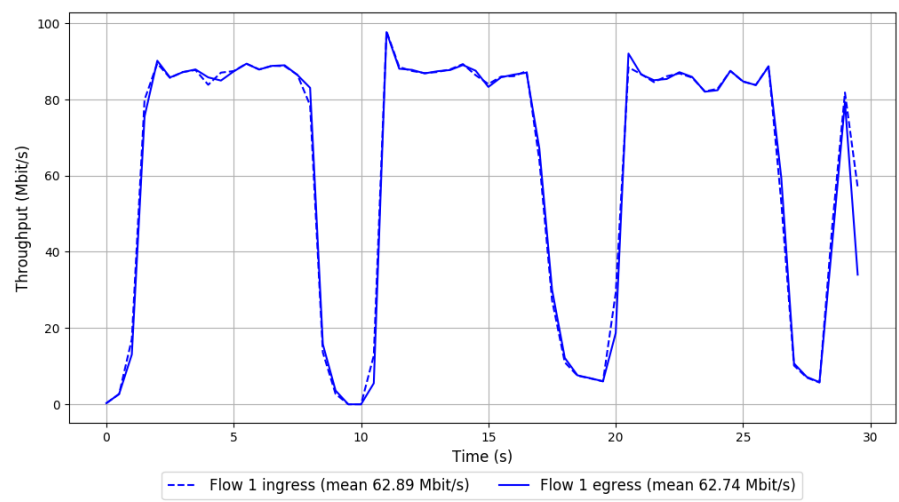
-- Flow 1:

Average throughput: 62.74 Mbit/s

95th percentile per-packet one-way delay: 43.897 ms

Loss rate: 0.81%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-15 23:13:05

End at: 2018-01-15 23:13:35

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.86 Mbit/s

95th percentile per-packet one-way delay: 49.563 ms

Loss rate: 0.90%

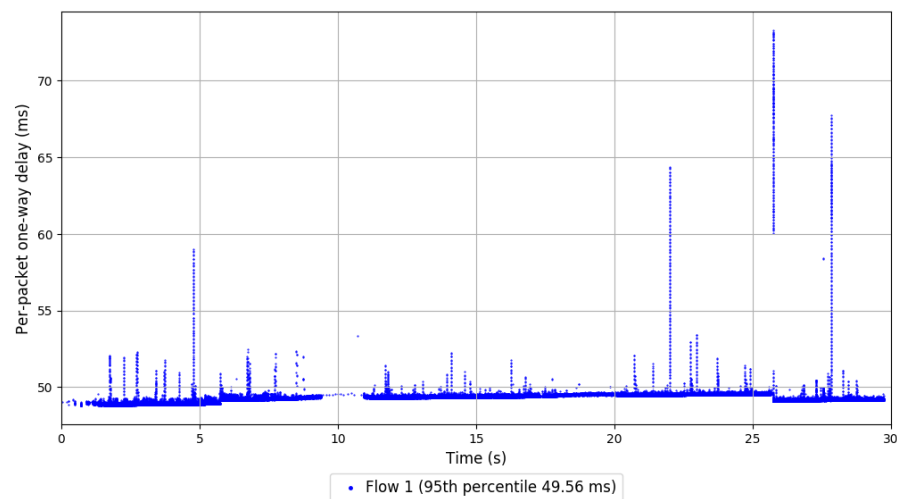
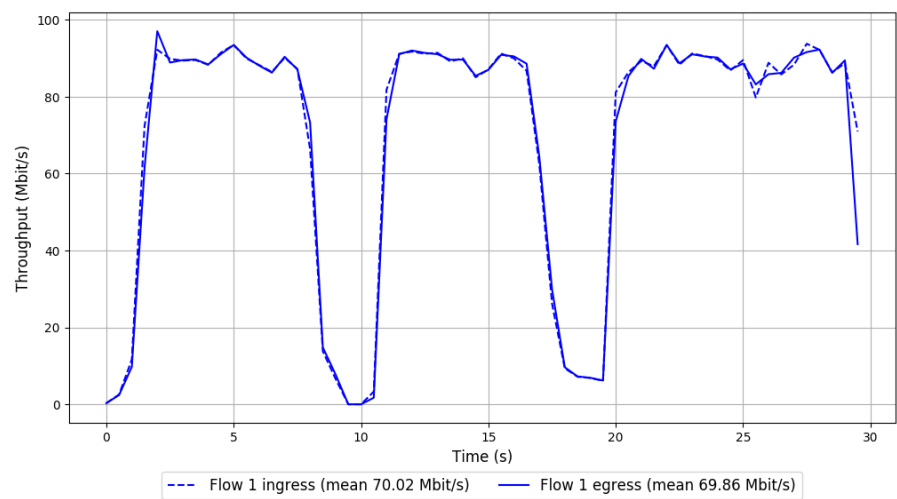
-- Flow 1:

Average throughput: 69.86 Mbit/s

95th percentile per-packet one-way delay: 49.563 ms

Loss rate: 0.90%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-15 23:24:55

End at: 2018-01-15 23:25:25

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.62 Mbit/s

95th percentile per-packet one-way delay: 44.278 ms

Loss rate: 0.67%

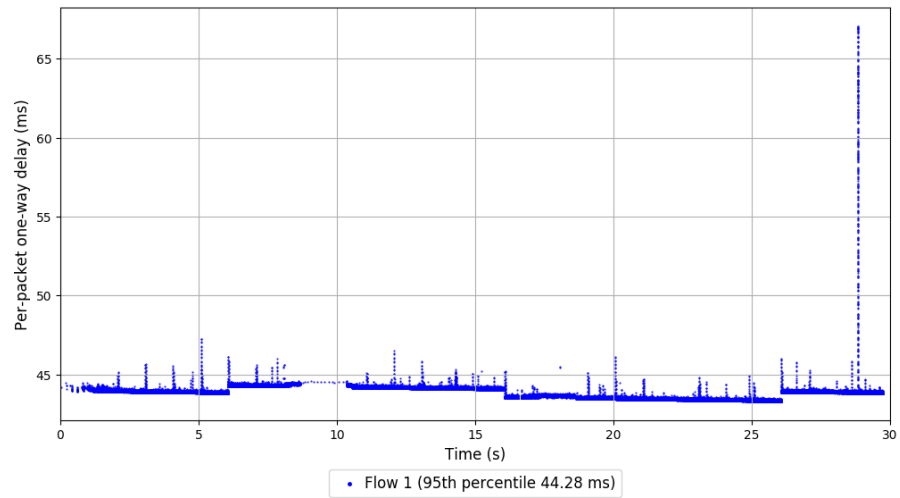
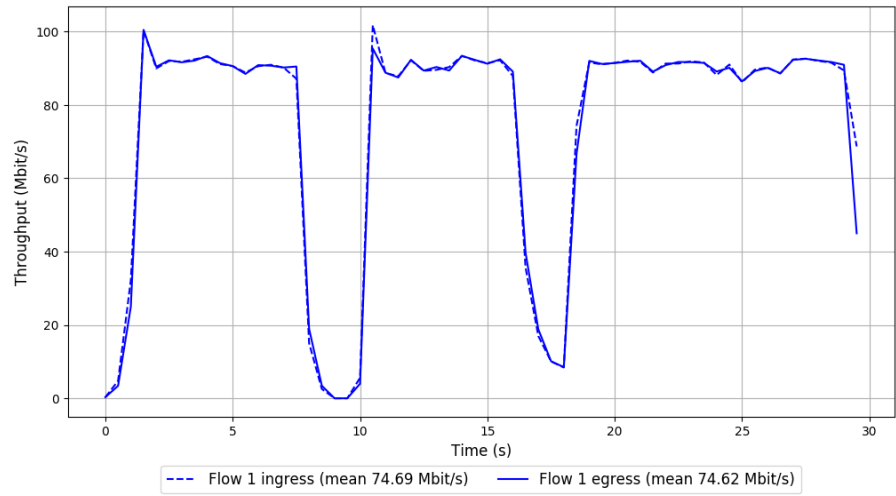
-- Flow 1:

Average throughput: 74.62 Mbit/s

95th percentile per-packet one-way delay: 44.278 ms

Loss rate: 0.67%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-15 23:36:54

End at: 2018-01-15 23:37:24

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.80 Mbit/s

95th percentile per-packet one-way delay: 53.043 ms

Loss rate: 0.03%

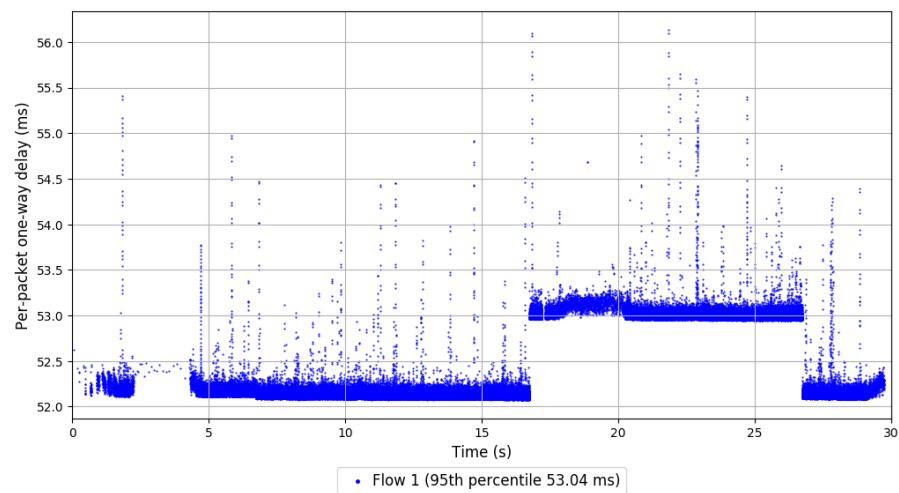
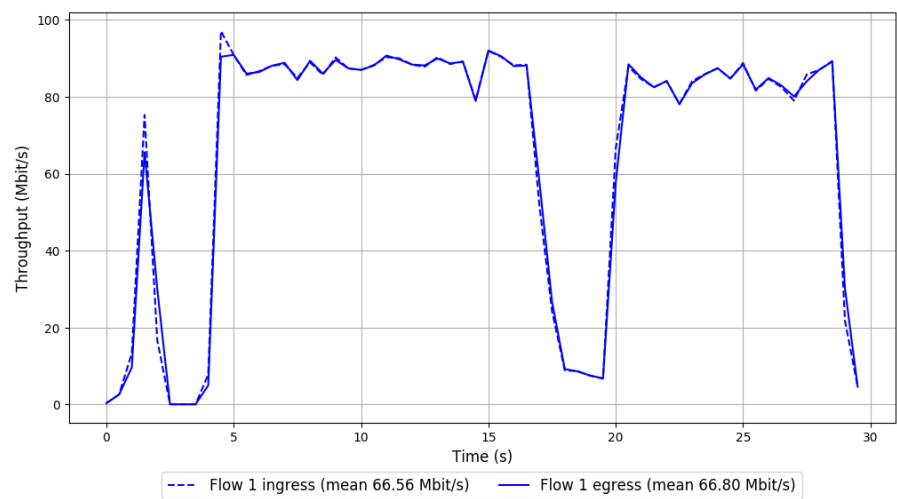
-- Flow 1:

Average throughput: 66.80 Mbit/s

95th percentile per-packet one-way delay: 53.043 ms

Loss rate: 0.03%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-15 23:49:14

End at: 2018-01-15 23:49:44

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.87 Mbit/s

95th percentile per-packet one-way delay: 60.091 ms

Loss rate: 0.80%

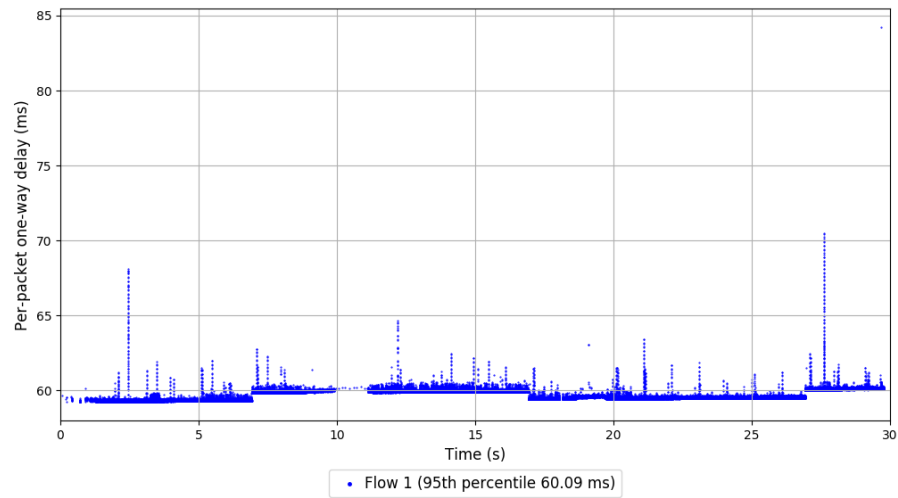
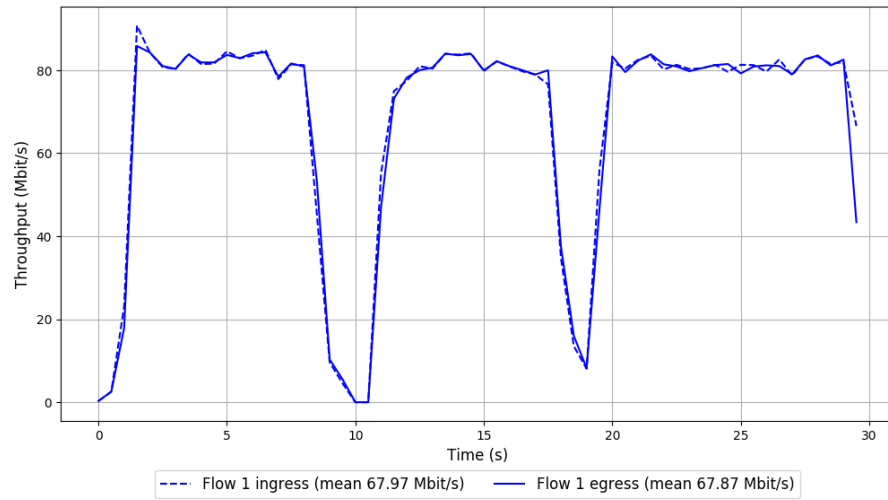
-- Flow 1:

Average throughput: 67.87 Mbit/s

95th percentile per-packet one-way delay: 60.091 ms

Loss rate: 0.80%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-16 00:01:35

End at: 2018-01-16 00:02:05

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.57 Mbit/s

95th percentile per-packet one-way delay: 73.178 ms

Loss rate: 0.74%

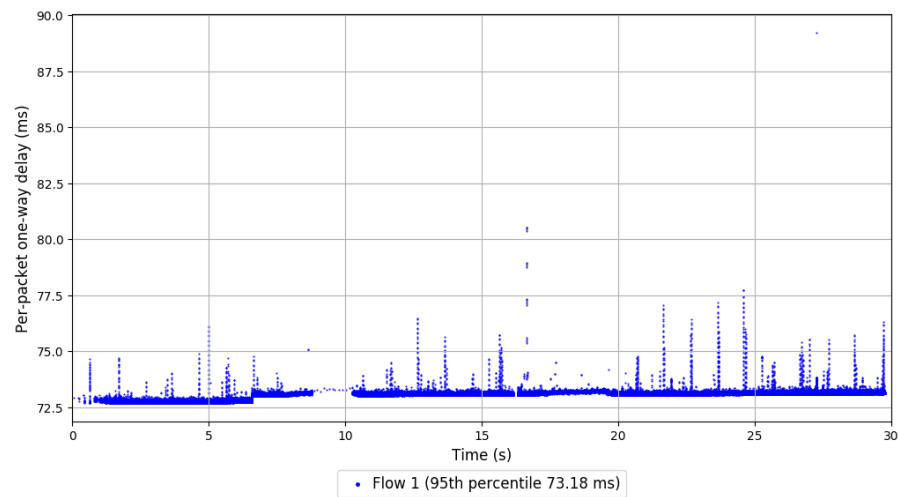
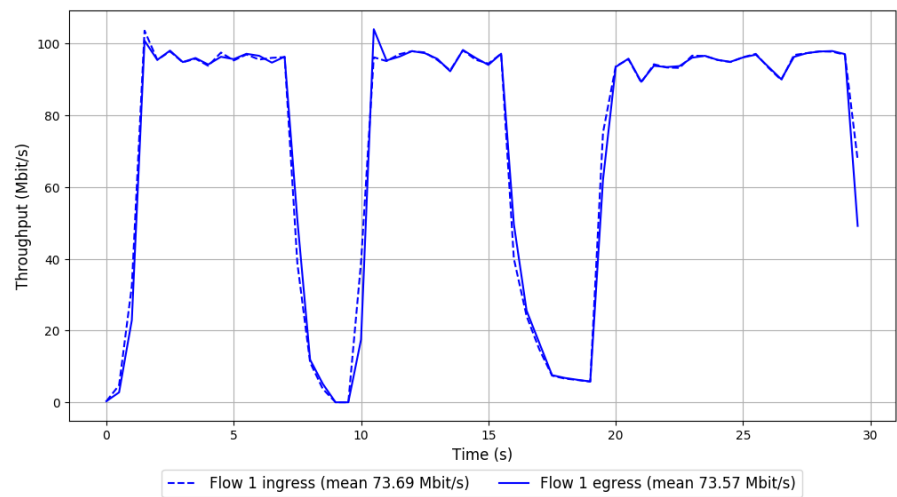
-- Flow 1:

Average throughput: 73.57 Mbit/s

95th percentile per-packet one-way delay: 73.178 ms

Loss rate: 0.74%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-16 00:13:54

End at: 2018-01-16 00:14:24

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.81 Mbit/s

95th percentile per-packet one-way delay: 69.036 ms

Loss rate: 0.88%

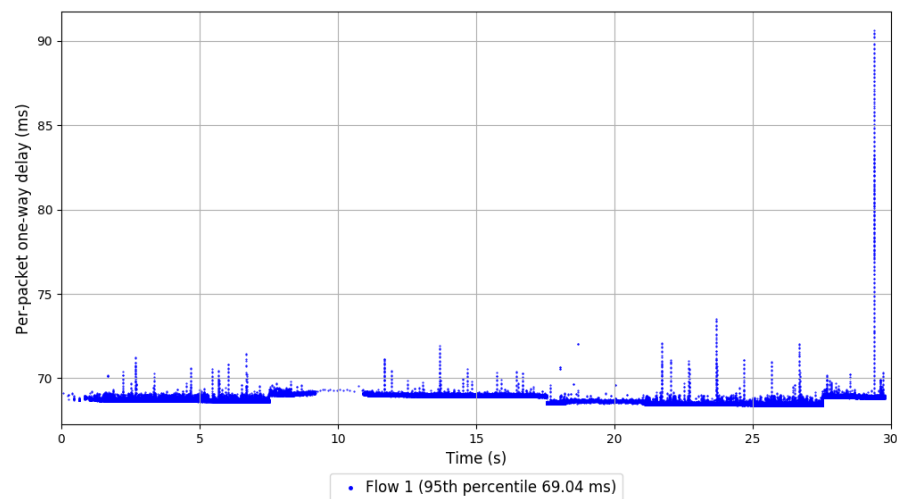
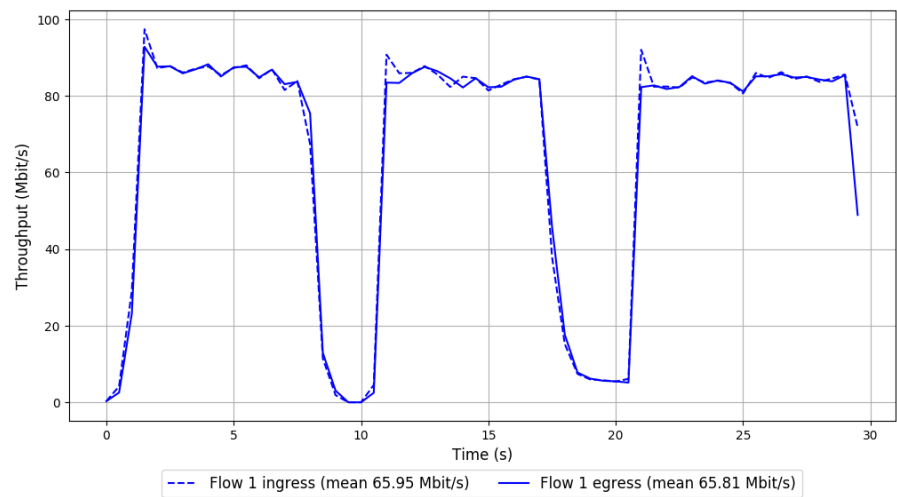
-- Flow 1:

Average throughput: 65.81 Mbit/s

95th percentile per-packet one-way delay: 69.036 ms

Loss rate: 0.88%

Run 9: Report of QUIC Cubic — Data Link

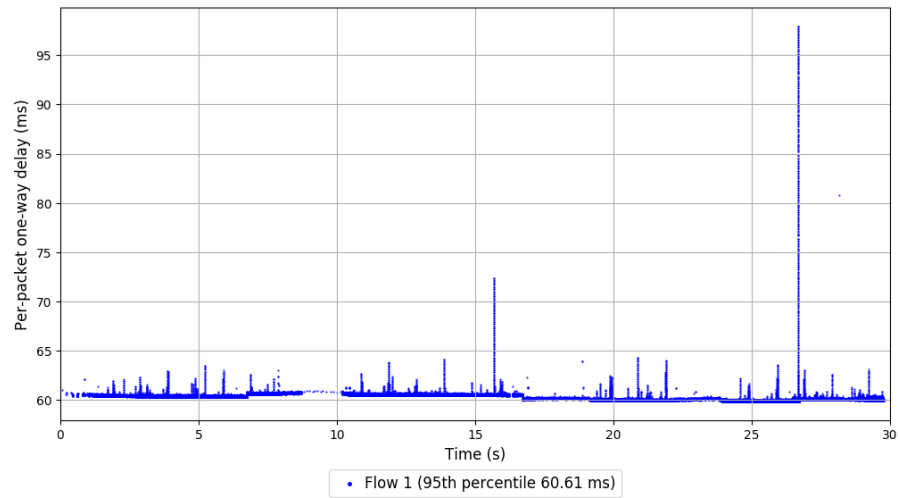
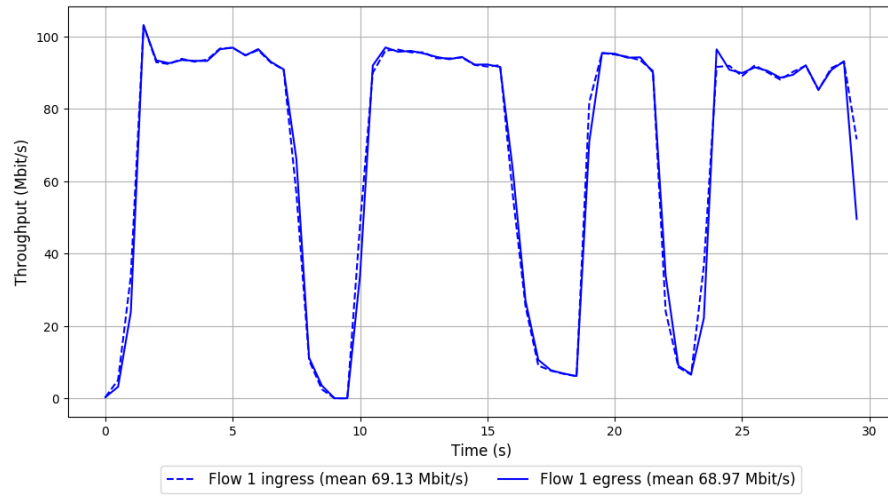


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-16 00:26:14
End at: 2018-01-16 00:26:44

# Below is generated by plot.py at 2018-01-16 02:59:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.97 Mbit/s
95th percentile per-packet one-way delay: 60.609 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 68.97 Mbit/s
95th percentile per-packet one-way delay: 60.609 ms
Loss rate: 0.81%
```

Run 10: Report of QUIC Cubic — Data Link

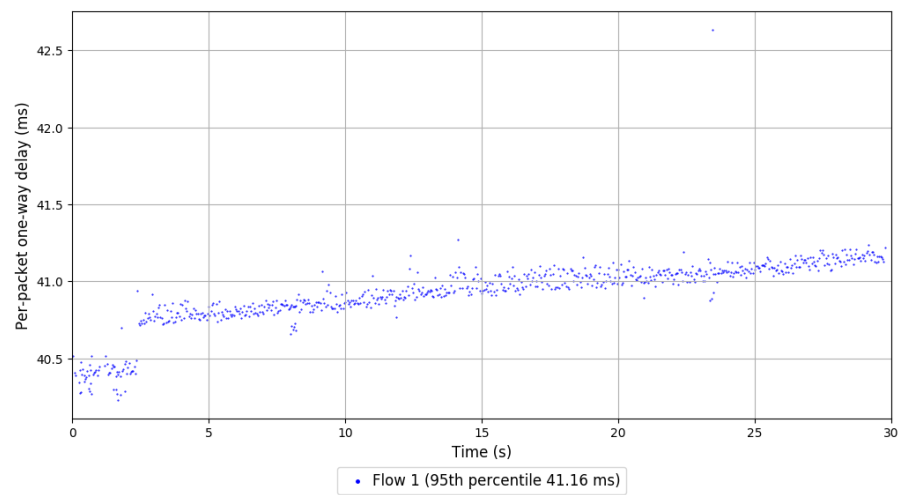
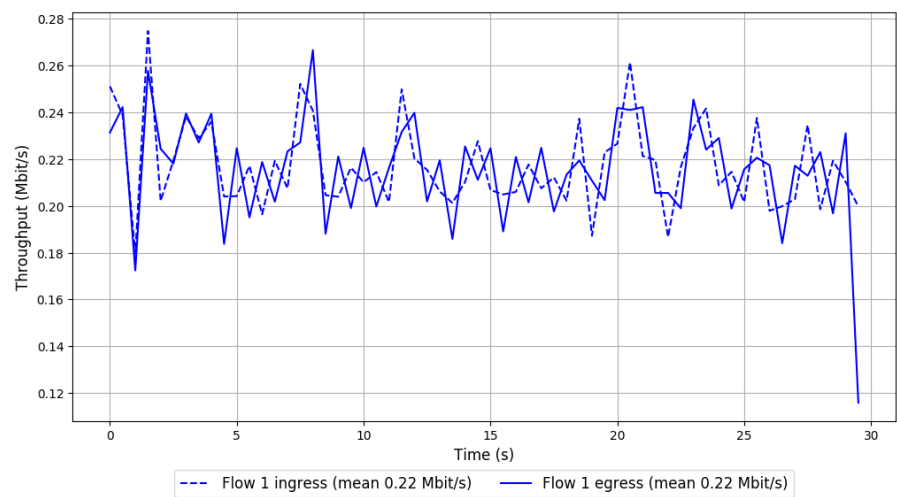


```
Run 1: Statistics of SCReAM

Start at: 2018-01-15 22:41:29
End at: 2018-01-15 22:41:59

# Below is generated by plot.py at 2018-01-16 02:59:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 41.158 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 41.158 ms
Loss rate: 0.77%
```

Run 1: Report of SReAM — Data Link

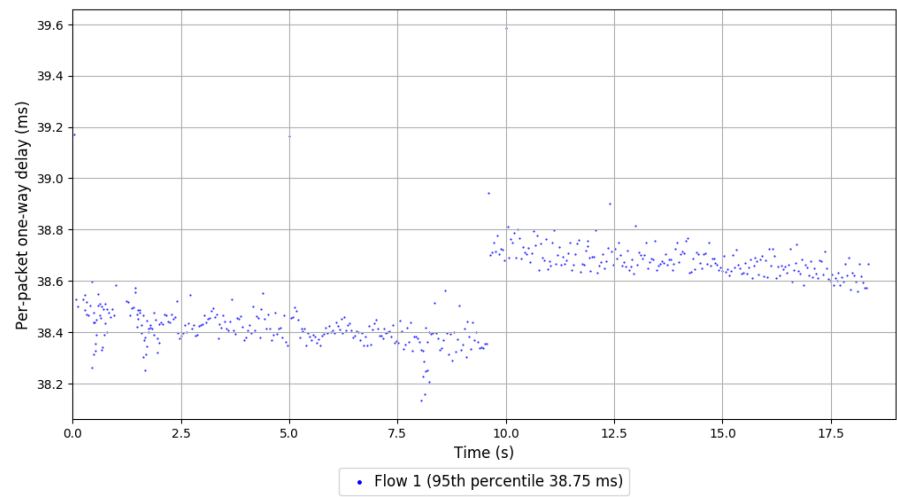
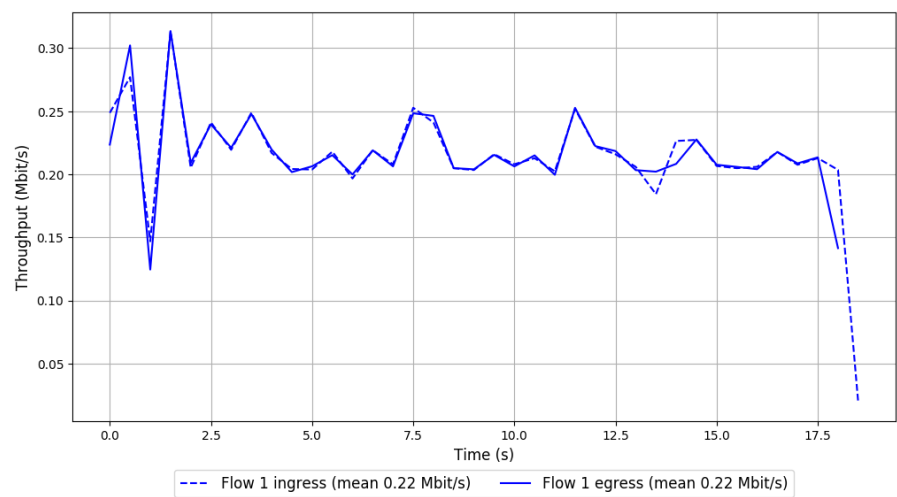


Run 2: Statistics of SReAM

Start at: 2018-01-15 22:54:00

End at: 2018-01-15 22:54:30

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-15 23:06:10

End at: 2018-01-15 23:06:40

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 46.414 ms

Loss rate: 0.51%

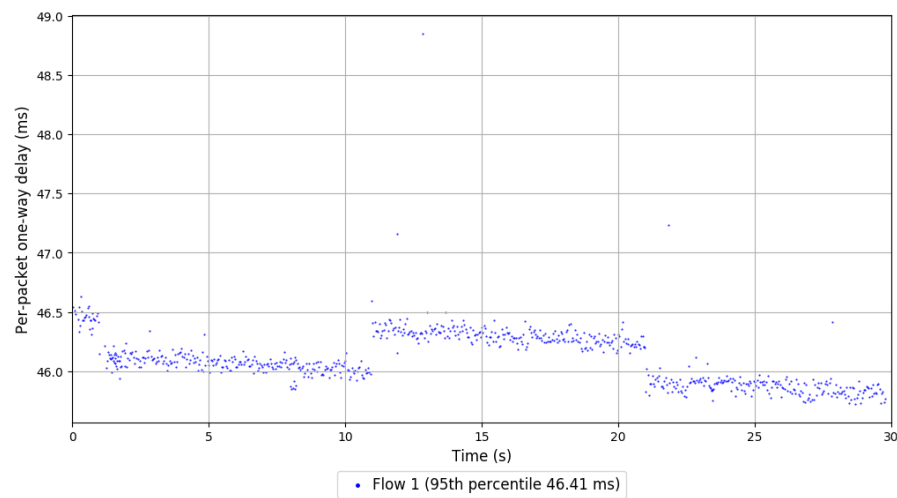
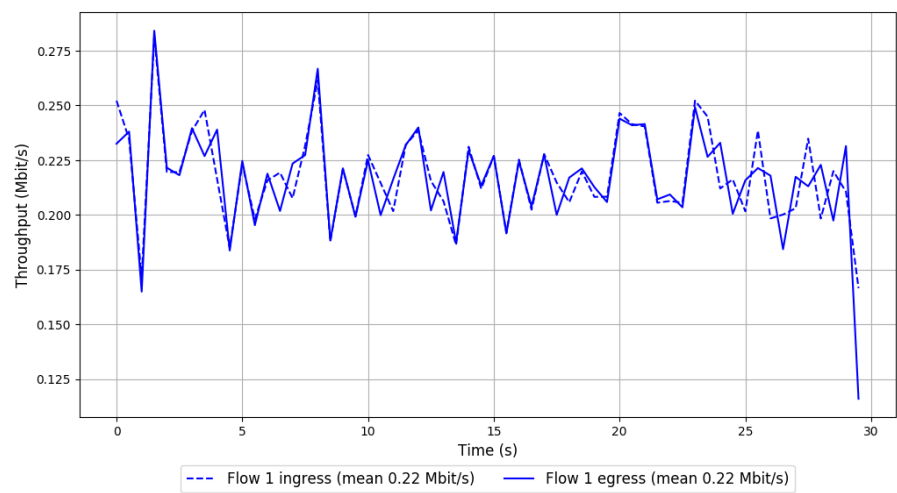
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 46.414 ms

Loss rate: 0.51%

Run 3: Report of SReAM — Data Link

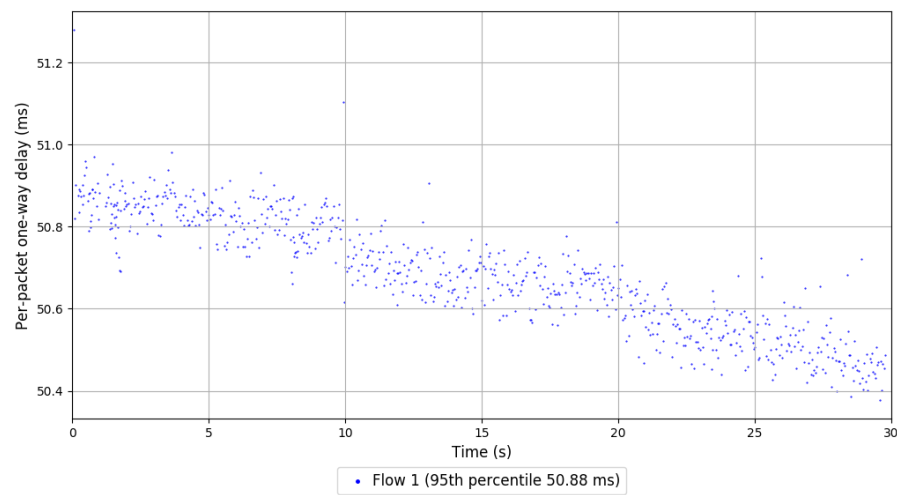
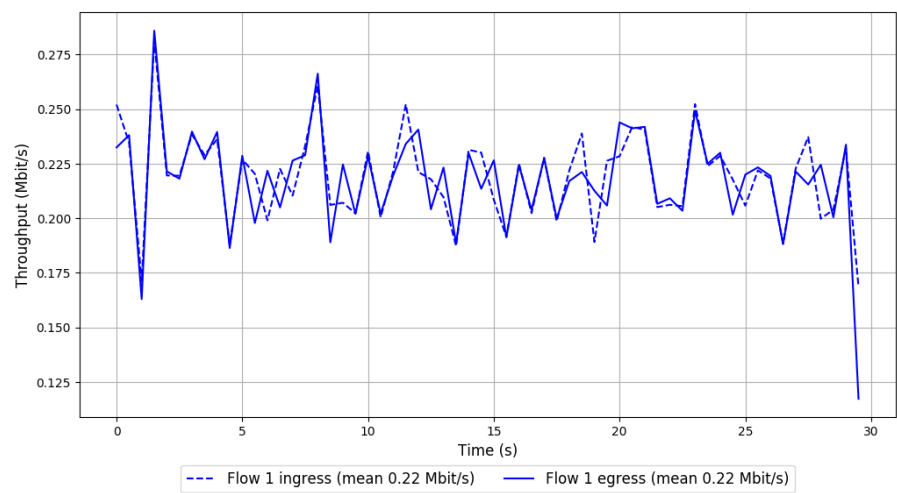


```
Run 4: Statistics of SCReAM

Start at: 2018-01-15 23:18:21
End at: 2018-01-15 23:18:51

# Below is generated by plot.py at 2018-01-16 02:59:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.884 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.884 ms
Loss rate: 0.52%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-01-15 23:30:13

End at: 2018-01-15 23:30:43

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 47.587 ms

Loss rate: 0.64%

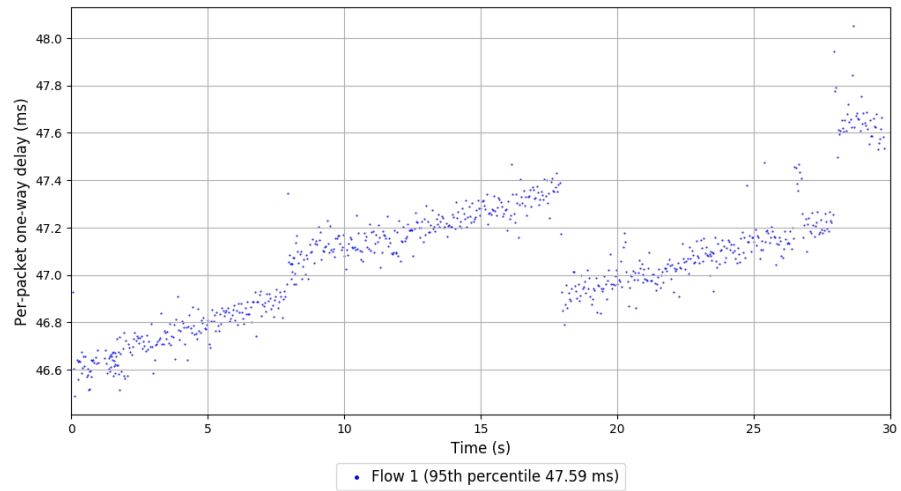
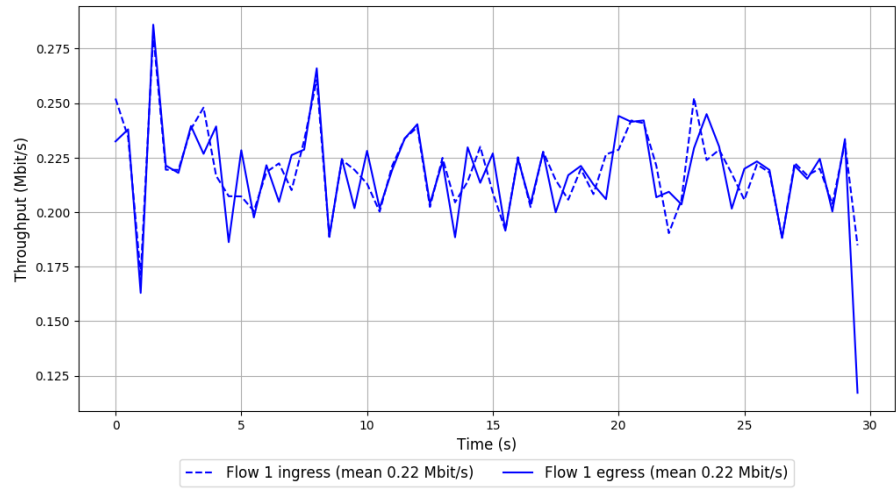
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 47.587 ms

Loss rate: 0.64%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-15 23:42:21

End at: 2018-01-15 23:42:51

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.076 ms

Loss rate: 0.51%

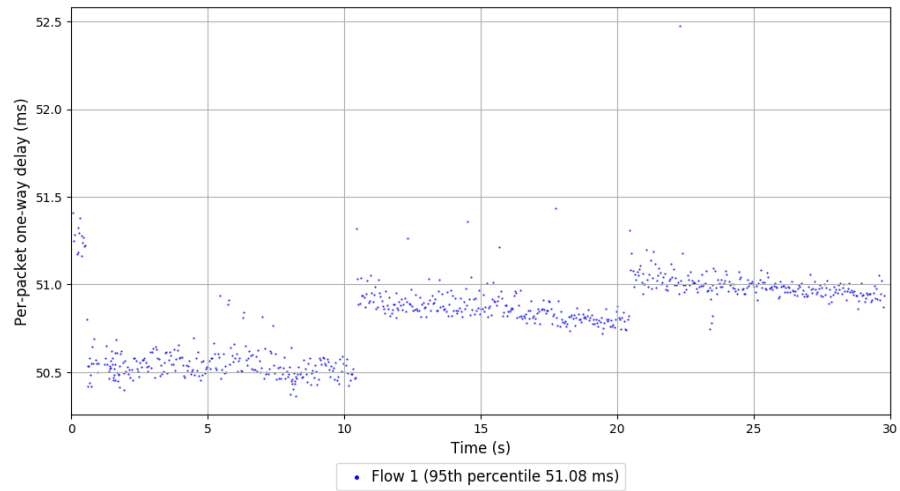
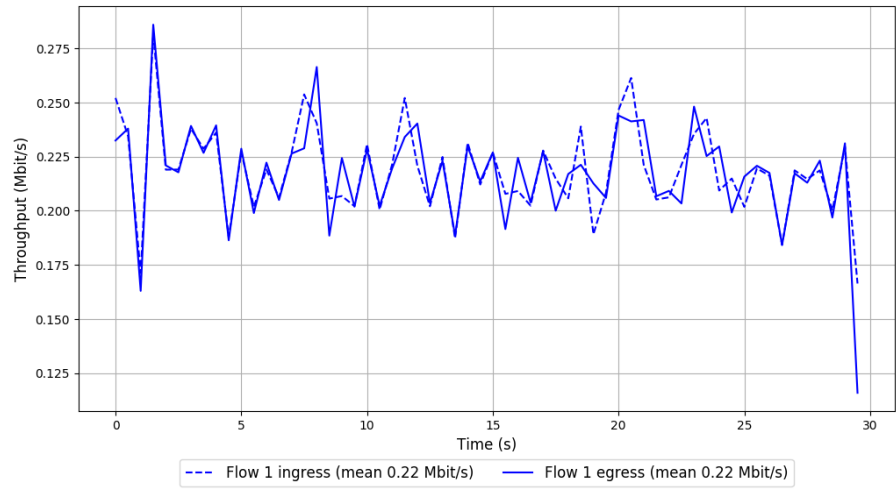
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.076 ms

Loss rate: 0.51%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-01-15 23:54:35

End at: 2018-01-15 23:55:05

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 67.741 ms

Loss rate: 0.51%

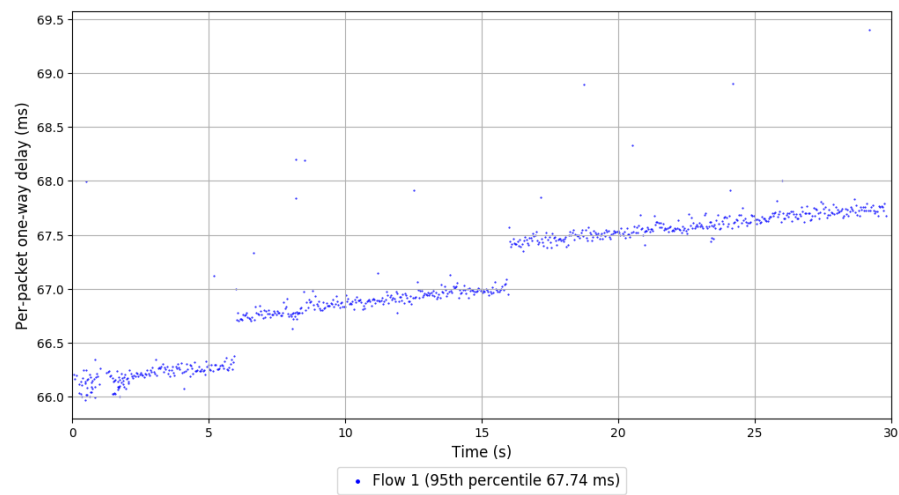
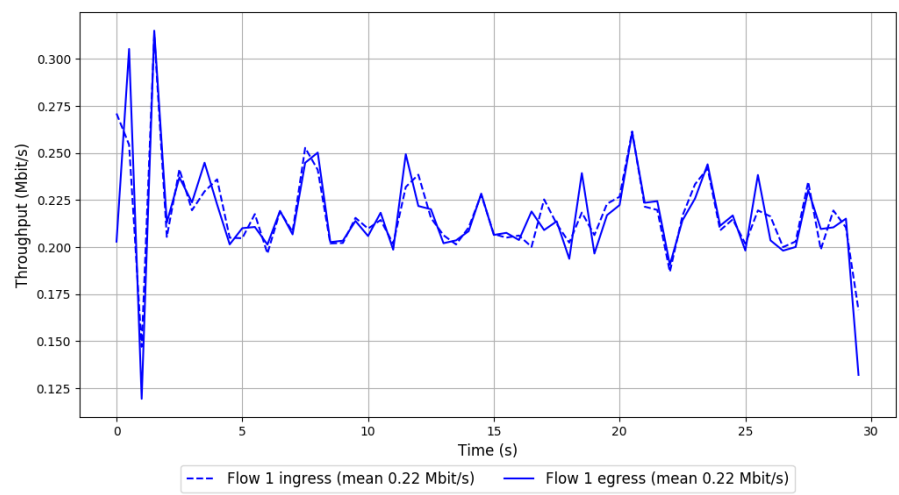
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 67.741 ms

Loss rate: 0.51%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-16 00:06:57

End at: 2018-01-16 00:07:27

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 72.813 ms

Loss rate: 0.63%

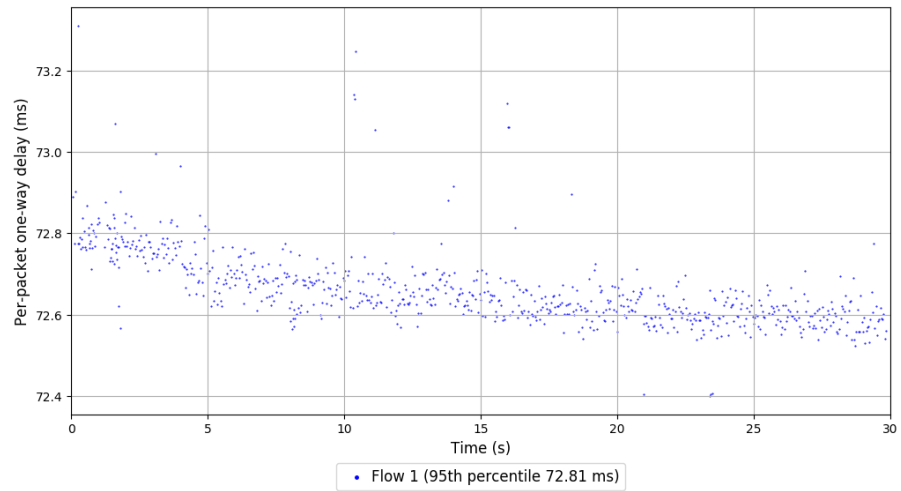
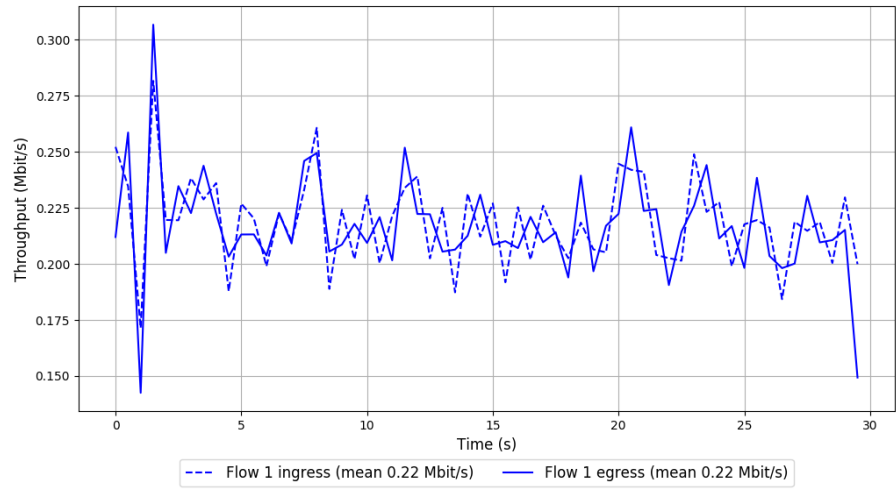
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 72.813 ms

Loss rate: 0.63%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-16 00:19:14

End at: 2018-01-16 00:19:44

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 66.321 ms

Loss rate: 0.64%

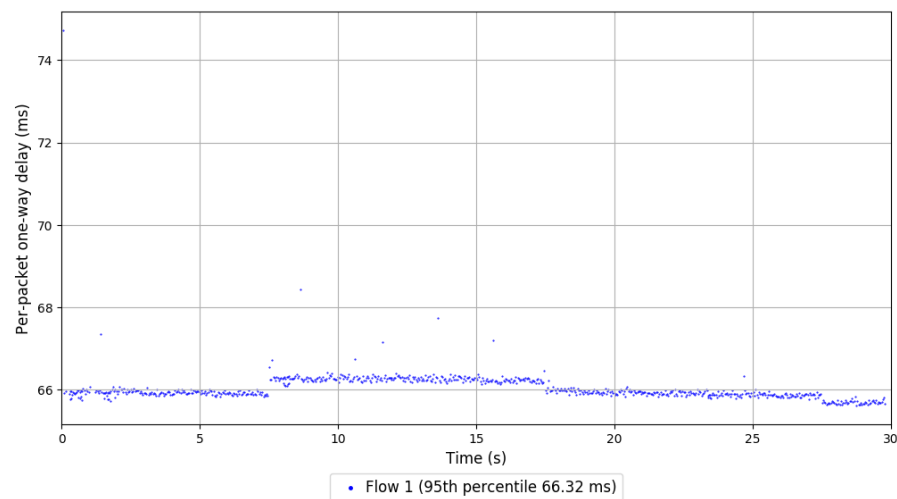
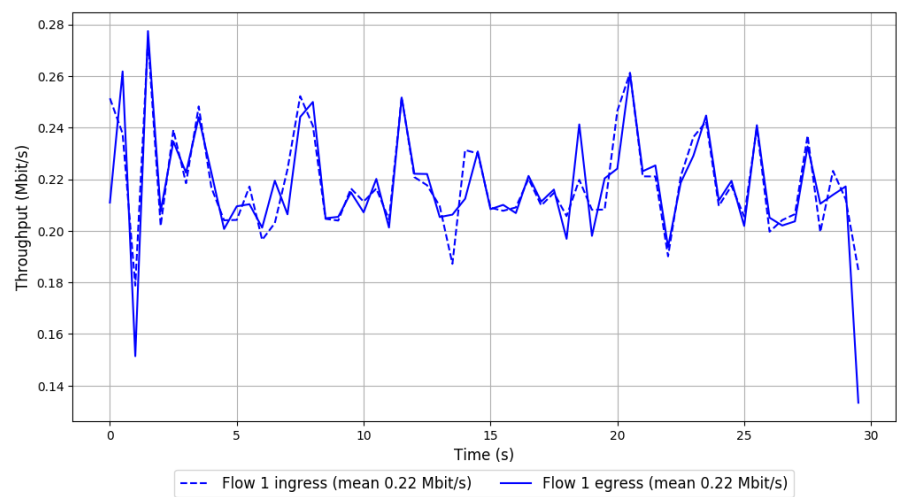
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 66.321 ms

Loss rate: 0.64%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-01-16 00:31:40

End at: 2018-01-16 00:32:10

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 57.071 ms

Loss rate: 0.51%

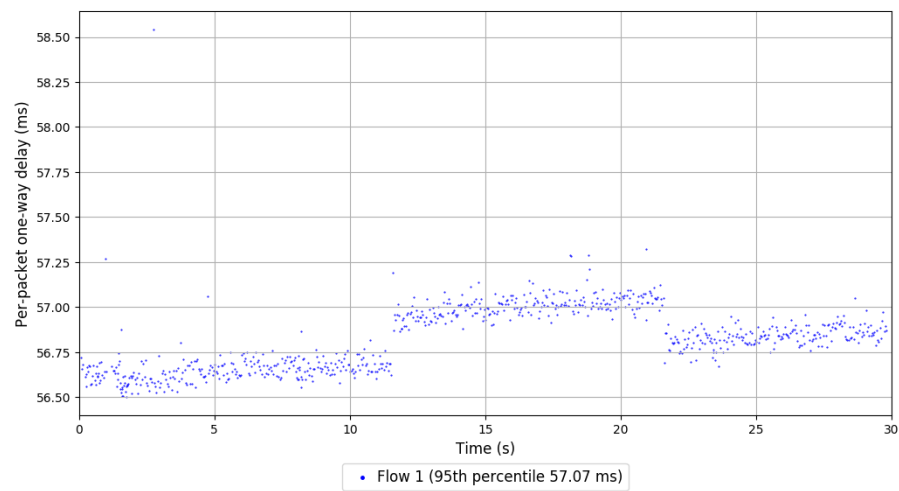
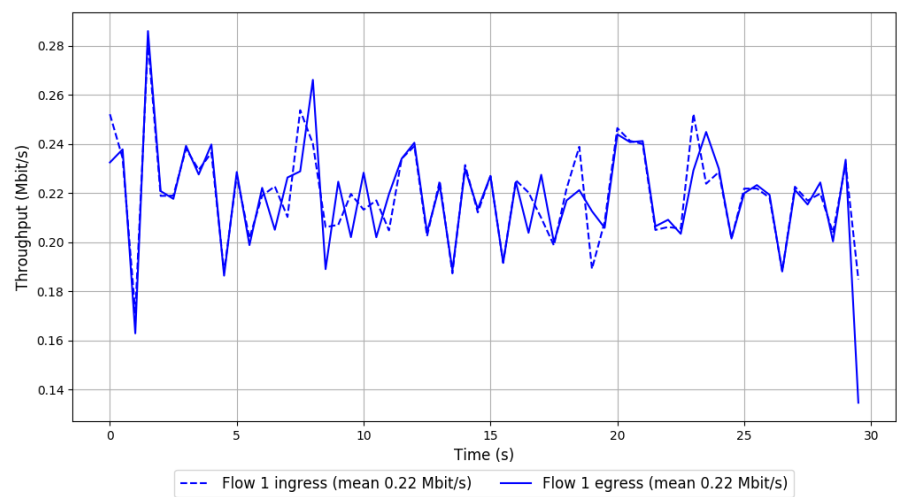
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 57.071 ms

Loss rate: 0.51%

Run 10: Report of SReAM — Data Link

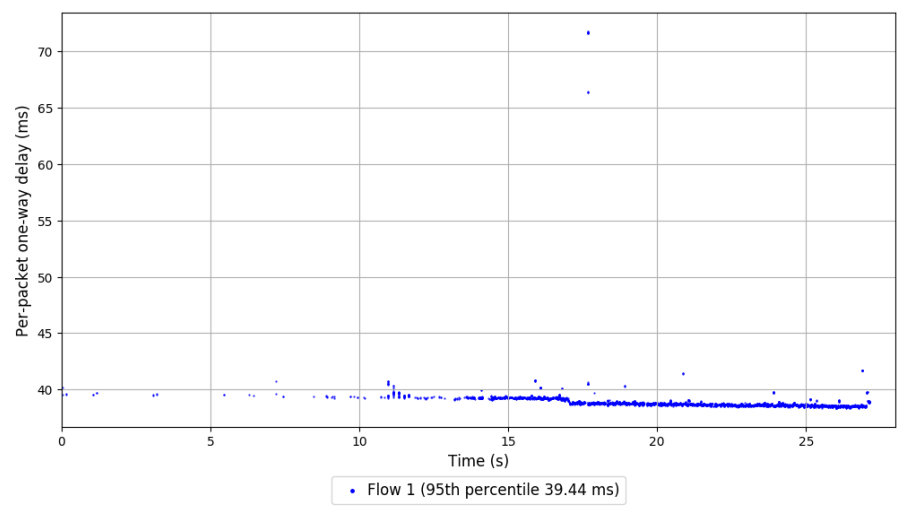
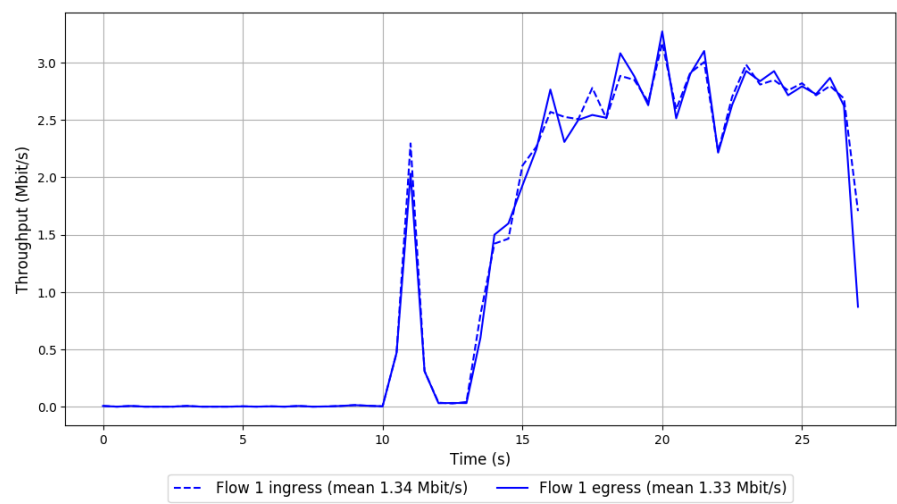


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-15 22:45:21
End at: 2018-01-15 22:45:52

# Below is generated by plot.py at 2018-01-16 02:59:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 39.442 ms
Loss rate: 1.81%
-- Flow 1:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 39.442 ms
Loss rate: 1.81%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-15 22:57:49

End at: 2018-01-15 22:58:19

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 38.446 ms

Loss rate: 0.63%

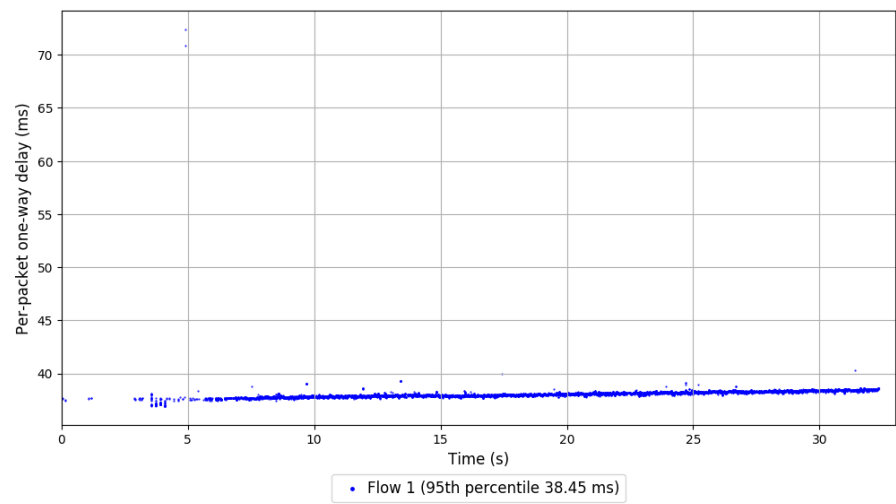
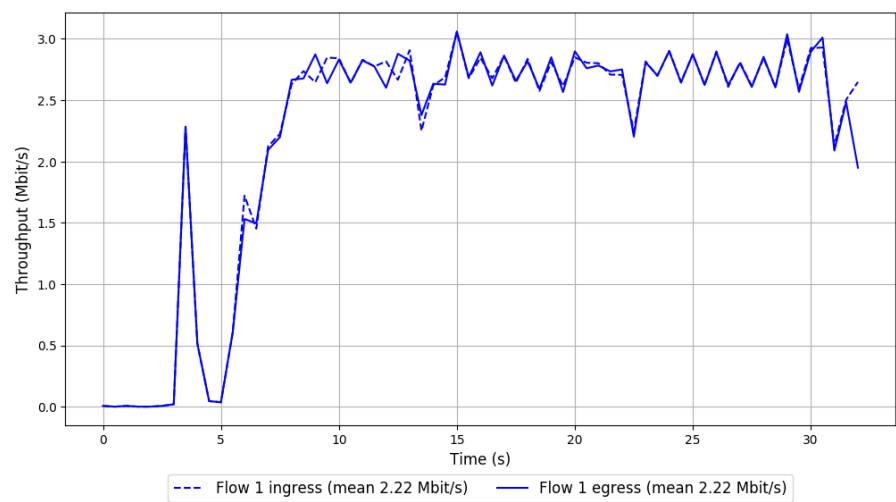
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 38.446 ms

Loss rate: 0.63%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-15 23:09:57

End at: 2018-01-15 23:10:27

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 43.775 ms

Loss rate: 0.78%

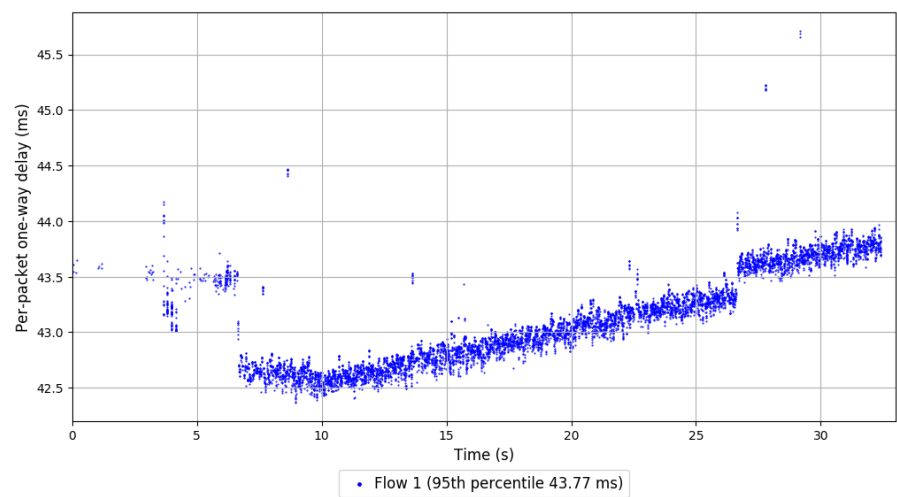
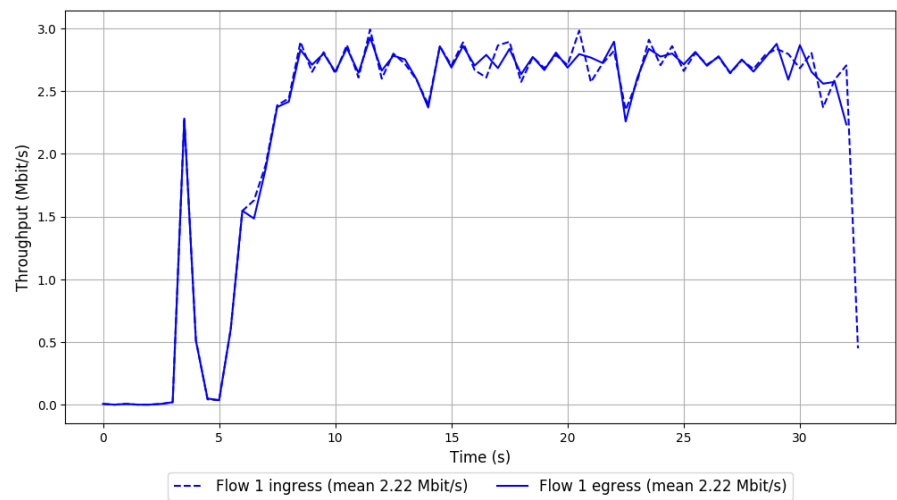
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 43.775 ms

Loss rate: 0.78%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-15 23:21:47

End at: 2018-01-15 23:22:17

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 48.365 ms

Loss rate: 0.78%

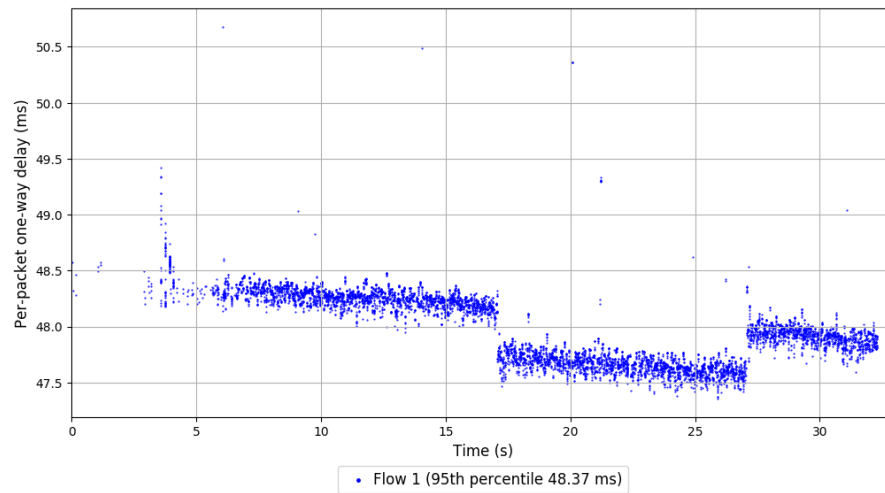
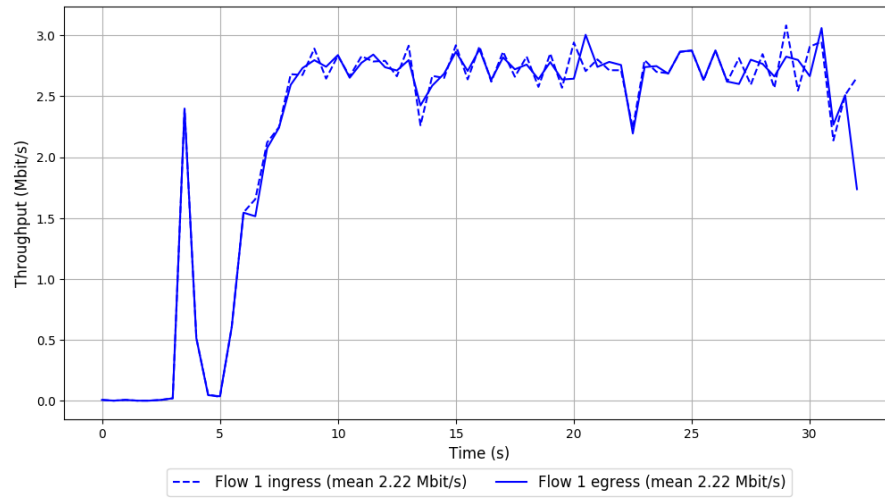
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 48.365 ms

Loss rate: 0.78%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-15 23:33:44

End at: 2018-01-15 23:34:14

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 52.122 ms

Loss rate: 0.68%

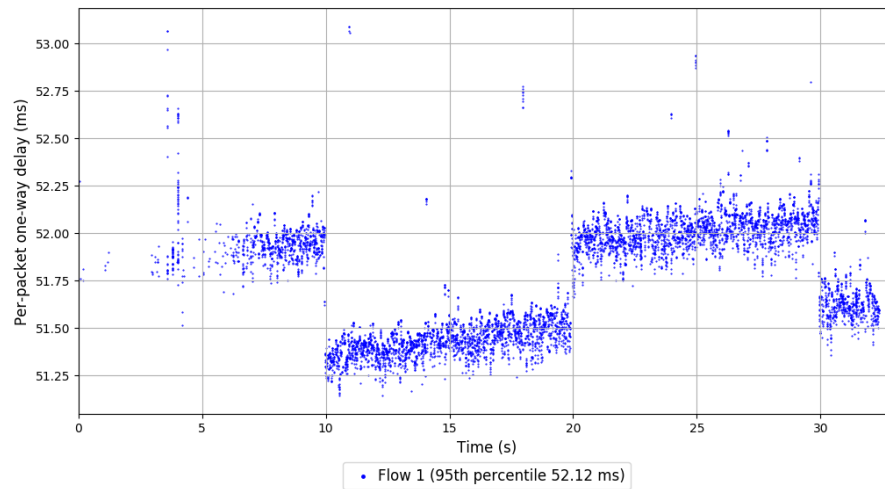
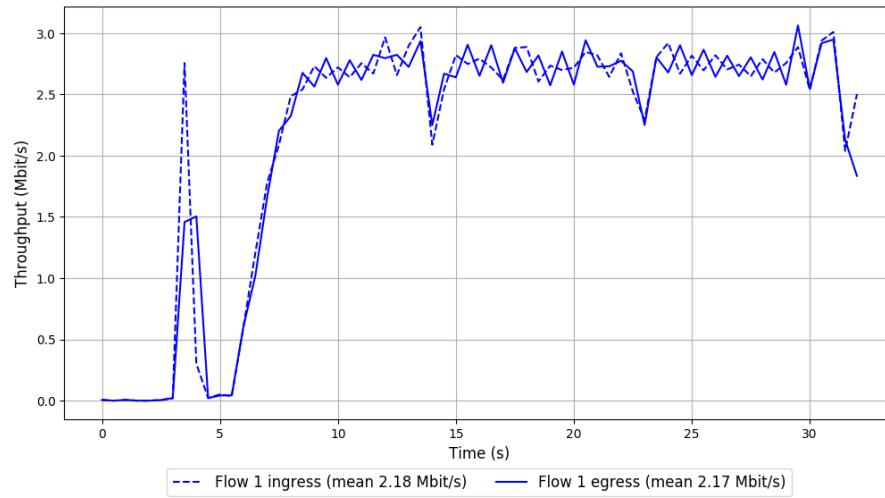
-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 52.122 ms

Loss rate: 0.68%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-15 23:46:11

End at: 2018-01-15 23:46:41

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 57.007 ms

Loss rate: 0.61%

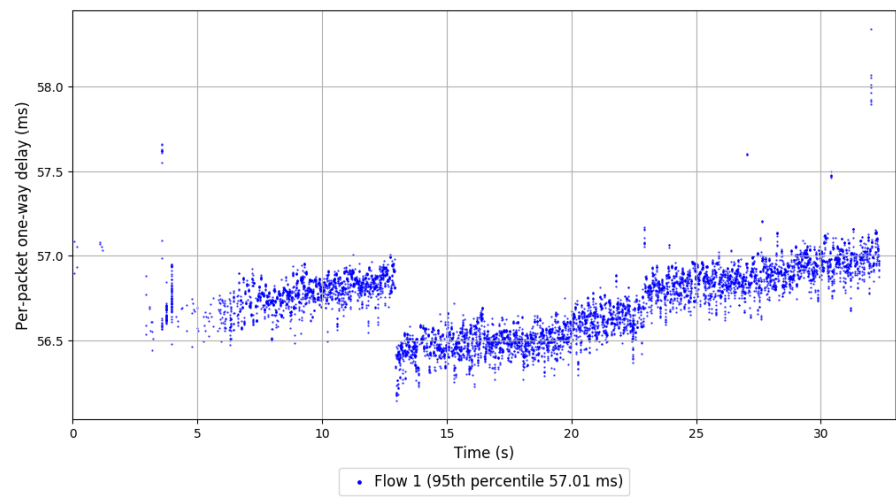
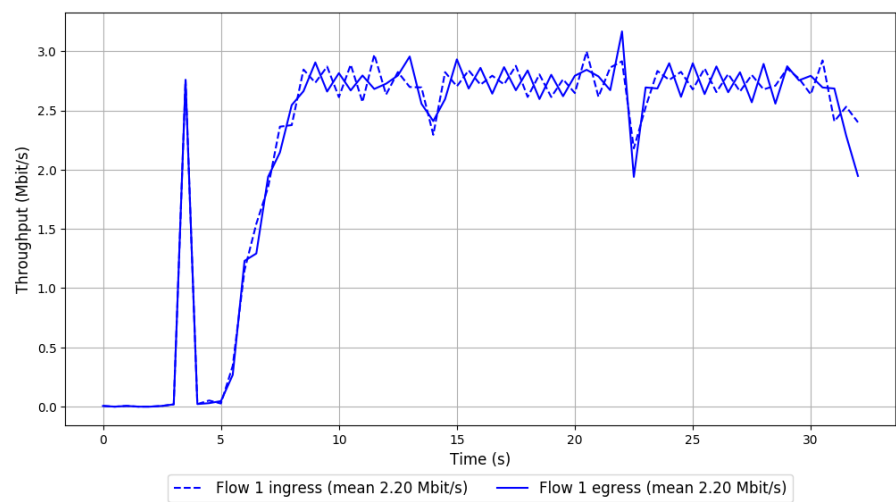
-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 57.007 ms

Loss rate: 0.61%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-15 23:58:27

End at: 2018-01-15 23:58:57

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 71.479 ms

Loss rate: 0.63%

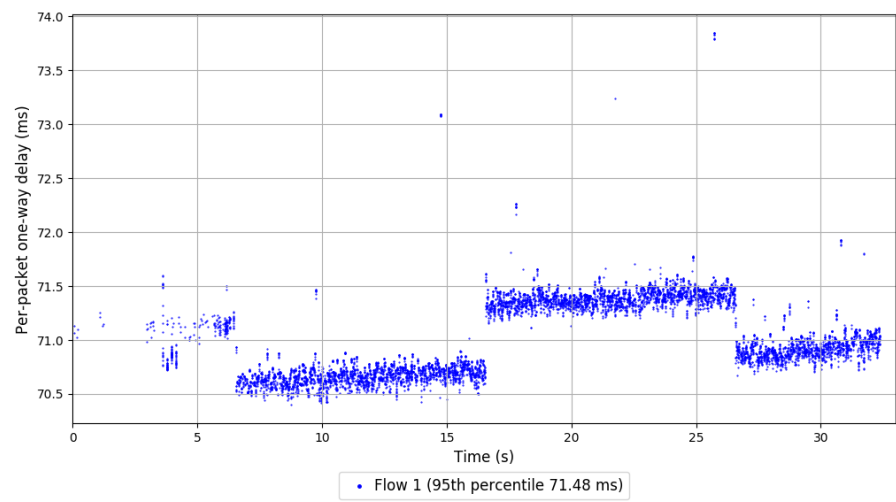
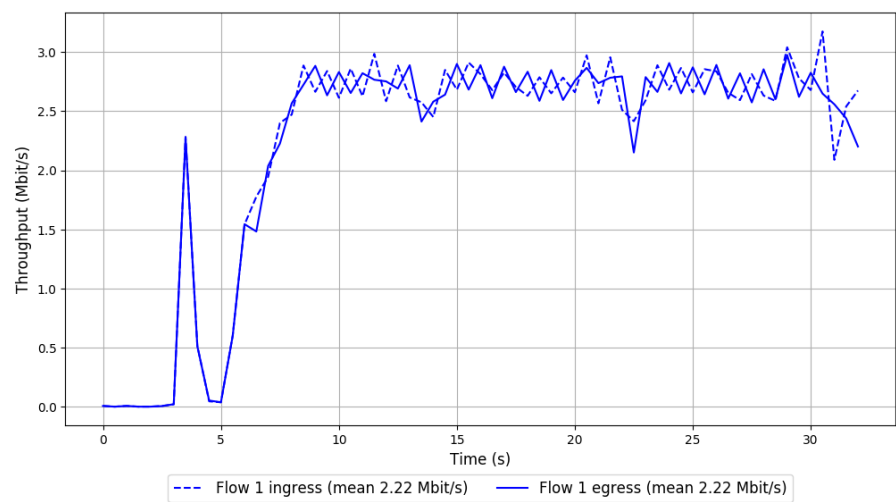
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 71.479 ms

Loss rate: 0.63%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-16 00:10:45

End at: 2018-01-16 00:11:15

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 71.129 ms

Loss rate: 0.73%

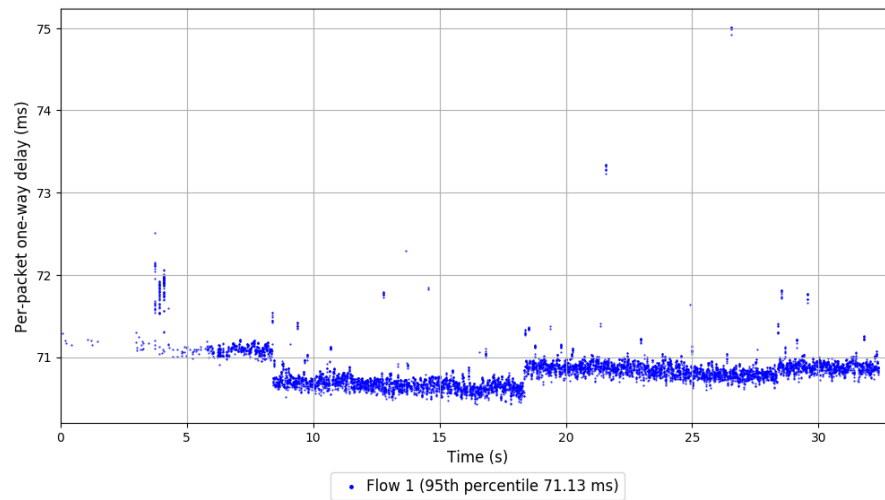
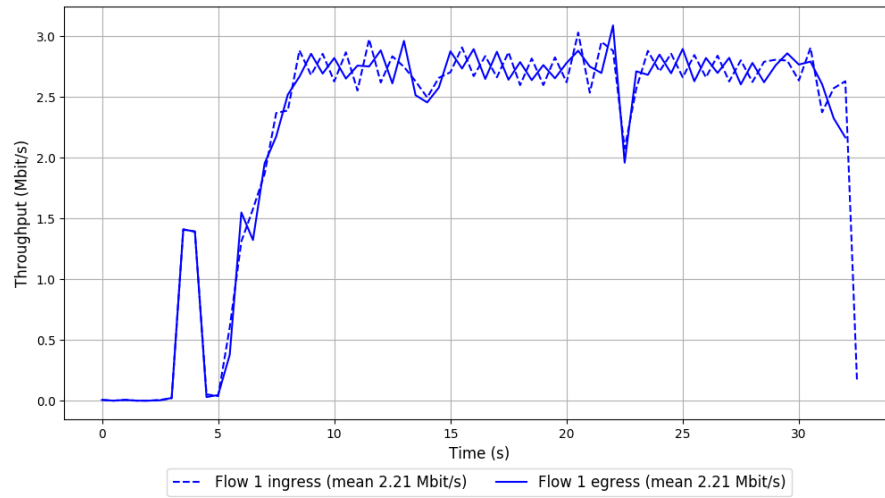
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 71.129 ms

Loss rate: 0.73%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-16 00:23:05

End at: 2018-01-16 00:23:35

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.767 ms

Loss rate: 0.76%

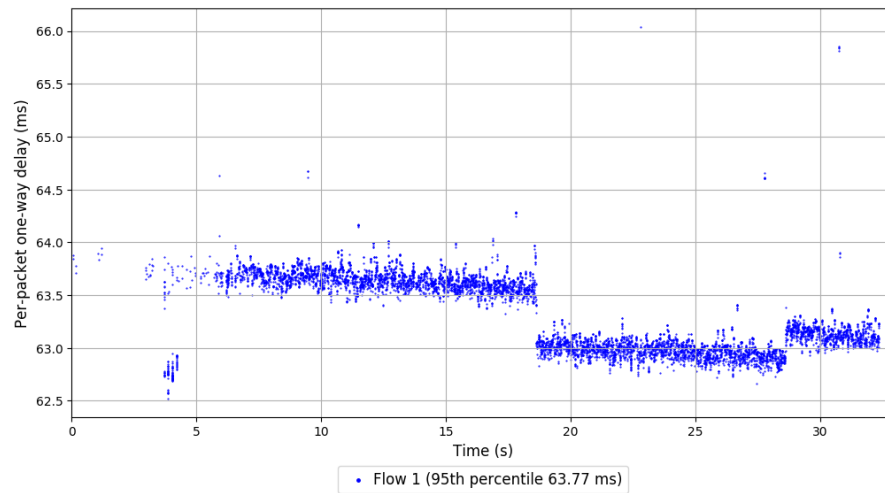
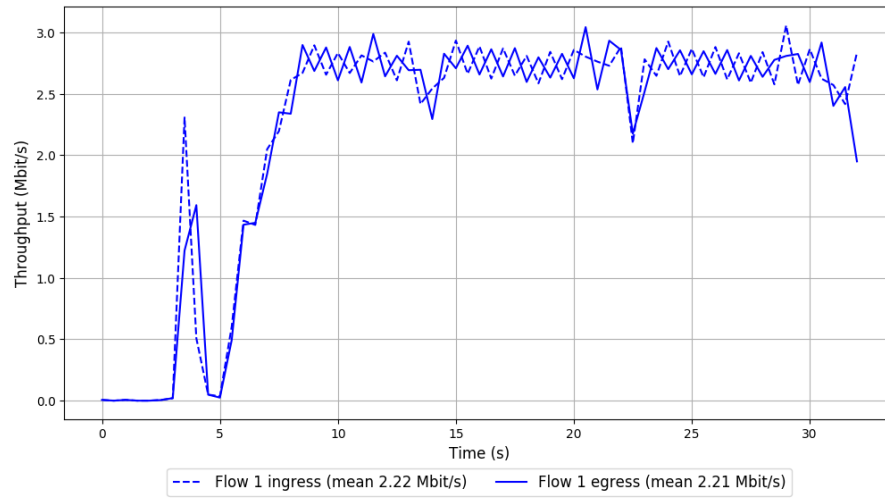
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.767 ms

Loss rate: 0.76%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-16 00:35:29

End at: 2018-01-16 00:35:59

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 59.199 ms

Loss rate: 0.62%

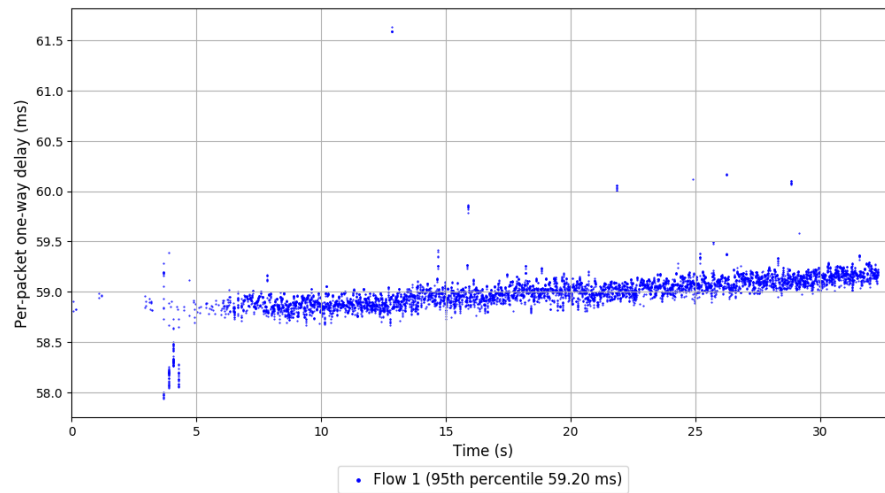
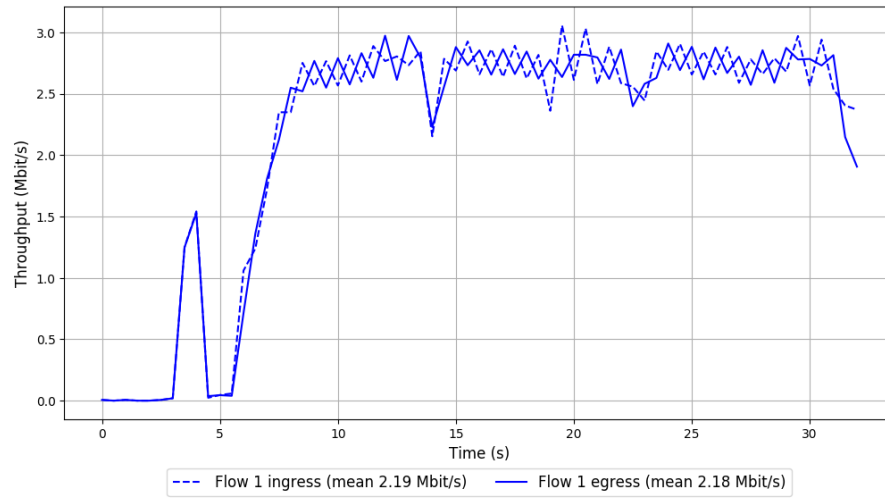
-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 59.199 ms

Loss rate: 0.62%

Run 10: Report of WebRTC media — Data Link

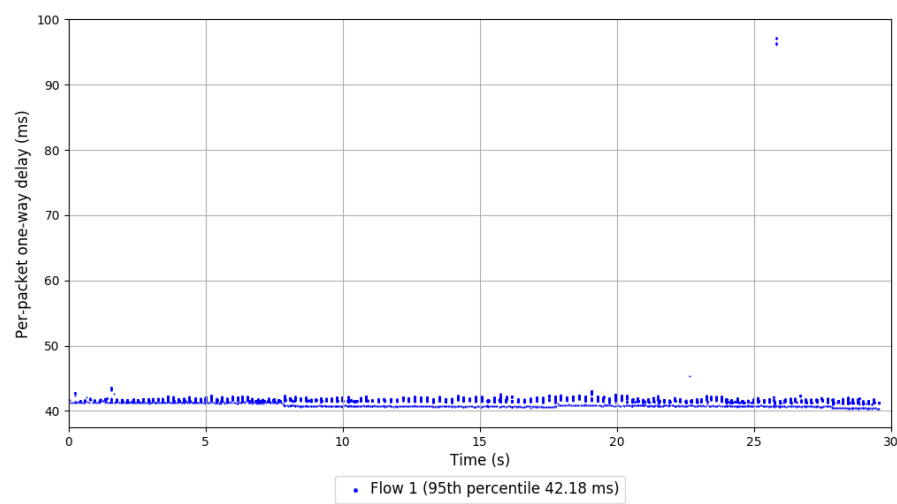
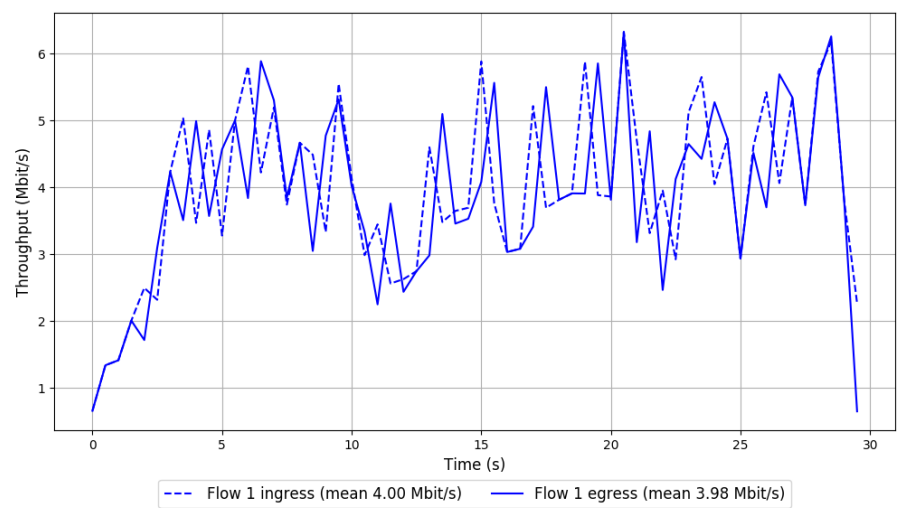


```
Run 1: Statistics of Sprout

Start at: 2018-01-15 22:43:53
End at: 2018-01-15 22:44:23

# Below is generated by plot.py at 2018-01-16 02:59:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.98 Mbit/s
95th percentile per-packet one-way delay: 42.181 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 3.98 Mbit/s
95th percentile per-packet one-way delay: 42.181 ms
Loss rate: 1.37%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-15 22:56:22

End at: 2018-01-15 22:56:52

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 36.762 ms

Loss rate: 0.85%

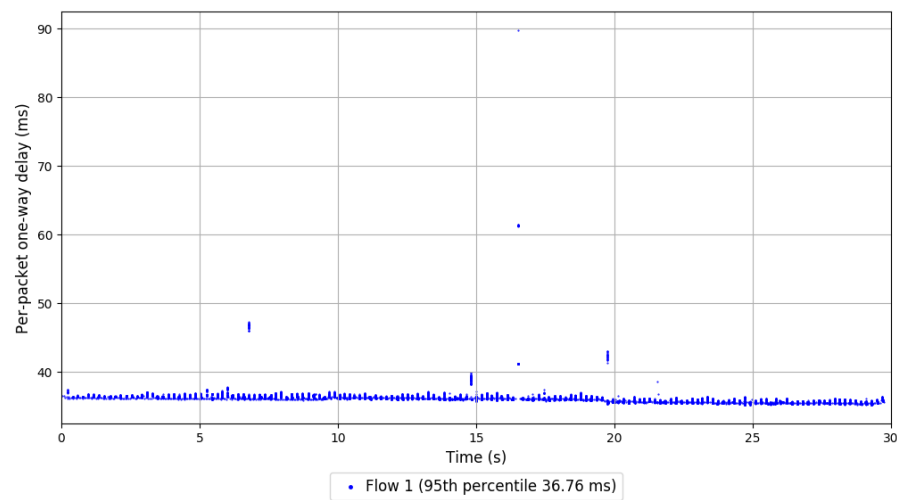
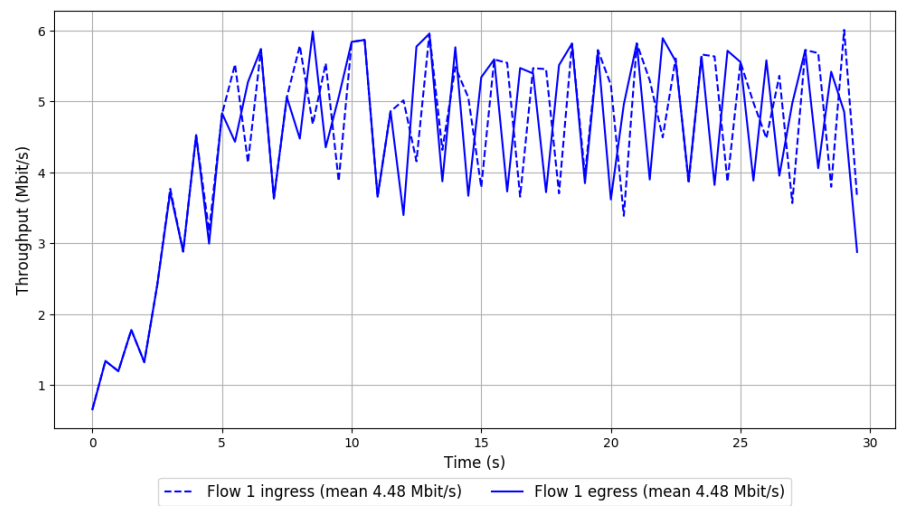
-- Flow 1:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 36.762 ms

Loss rate: 0.85%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-15 23:08:32

End at: 2018-01-15 23:09:02

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 44.835 ms

Loss rate: 1.26%

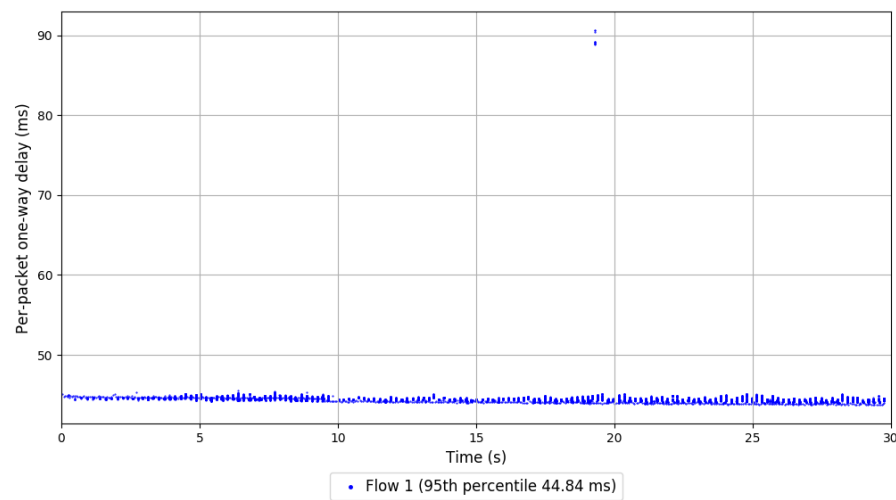
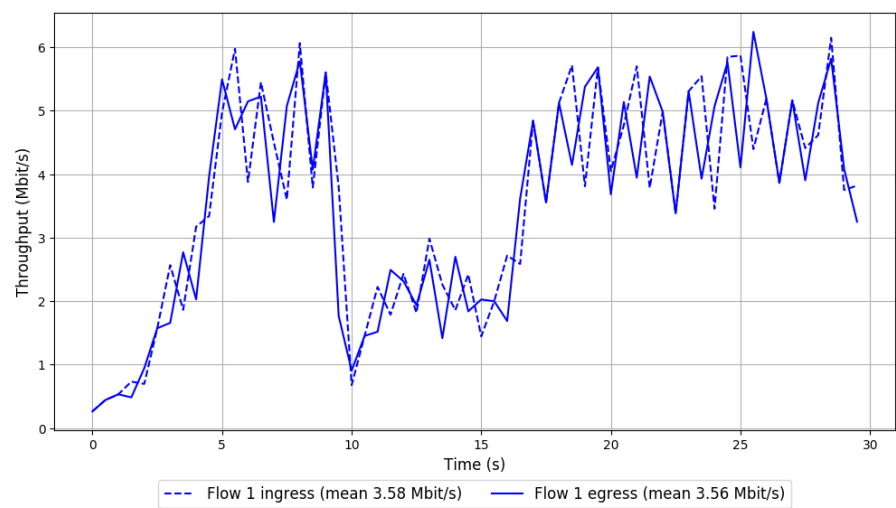
-- Flow 1:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 44.835 ms

Loss rate: 1.26%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-15 23:20:20

End at: 2018-01-15 23:20:50

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 49.972 ms

Loss rate: 1.43%

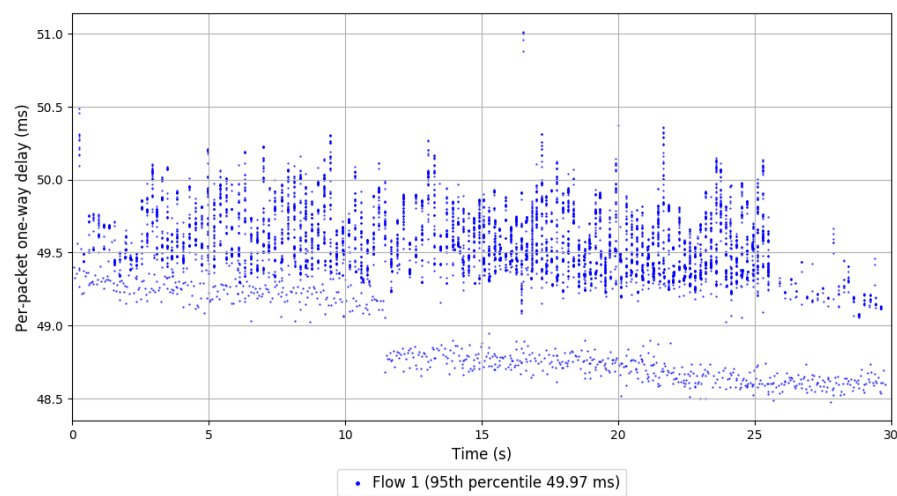
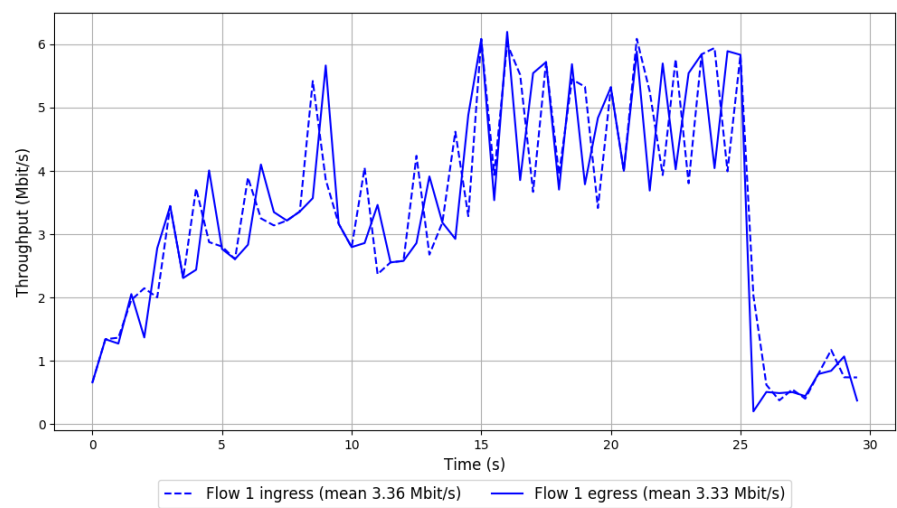
-- Flow 1:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 49.972 ms

Loss rate: 1.43%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-15 23:32:19

End at: 2018-01-15 23:32:49

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 51.491 ms

Loss rate: 0.92%

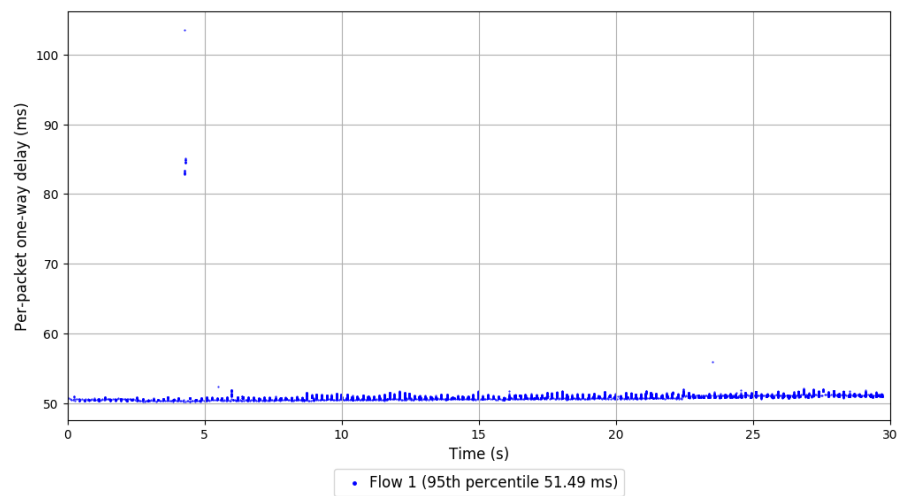
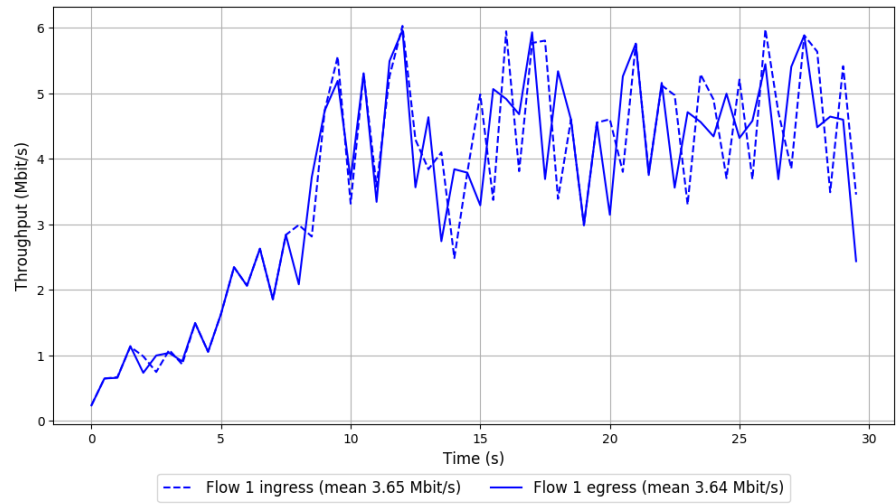
-- Flow 1:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 51.491 ms

Loss rate: 0.92%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-15 23:44:43

End at: 2018-01-15 23:45:14

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 55.364 ms

Loss rate: 1.29%

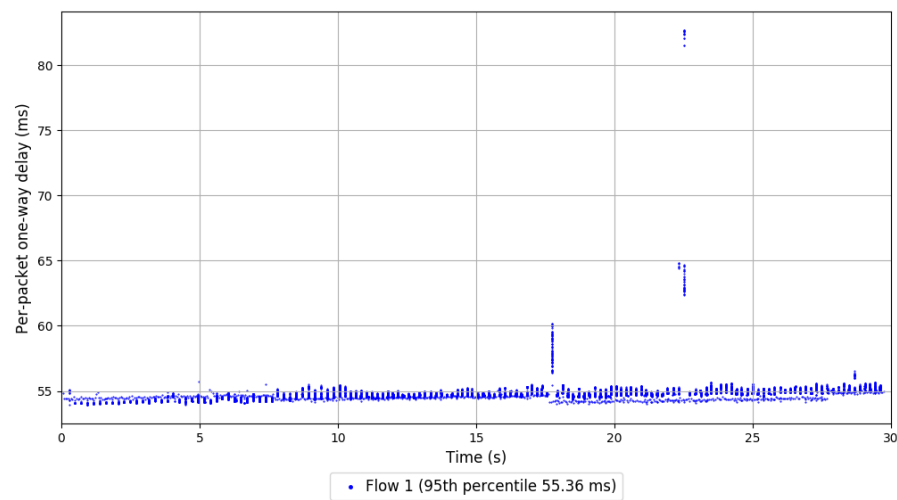
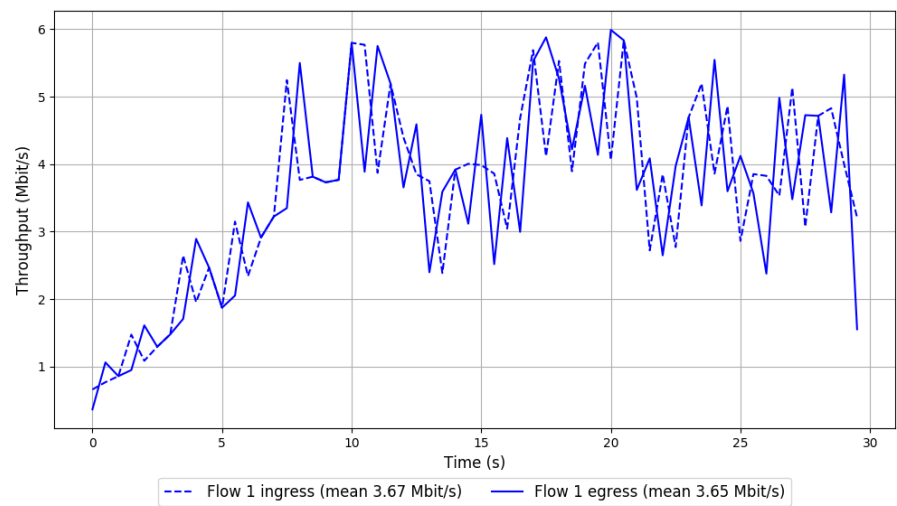
-- Flow 1:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 55.364 ms

Loss rate: 1.29%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-15 23:57:00

End at: 2018-01-15 23:57:30

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 70.800 ms

Loss rate: 2.25%

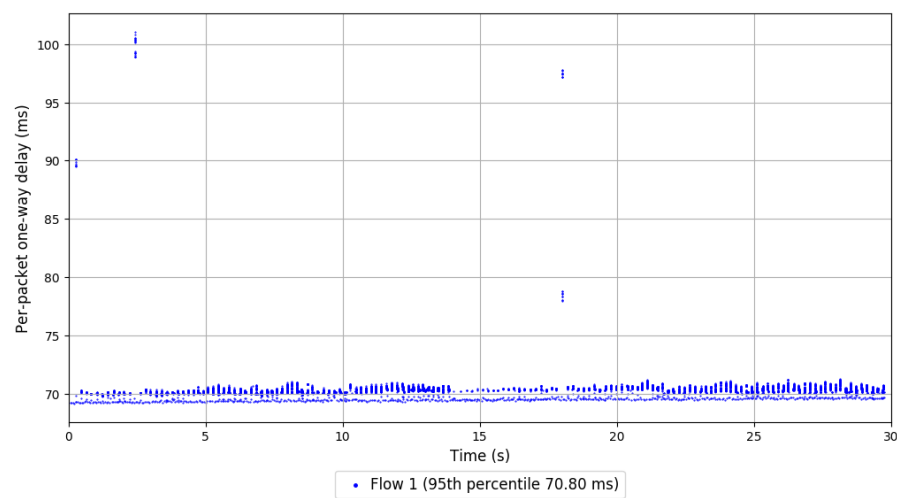
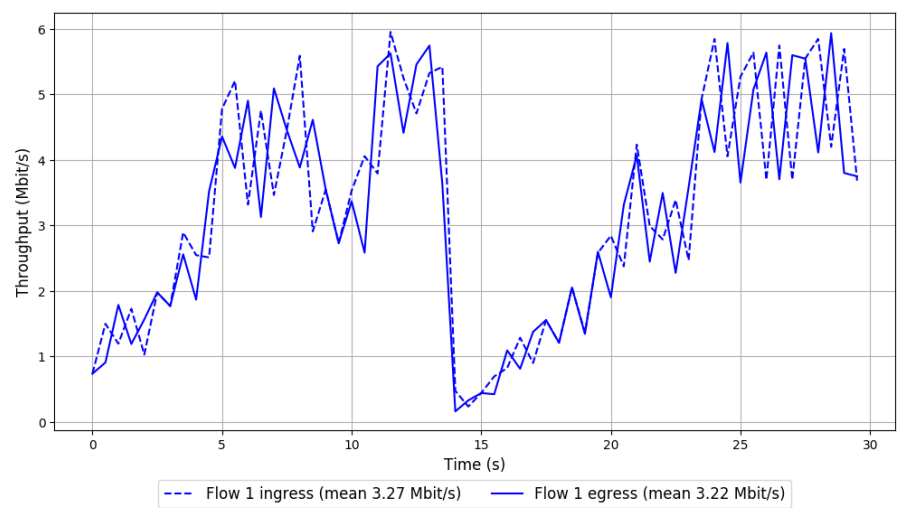
-- Flow 1:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 70.800 ms

Loss rate: 2.25%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-16 00:09:19

End at: 2018-01-16 00:09:49

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 72.803 ms

Loss rate: 1.25%

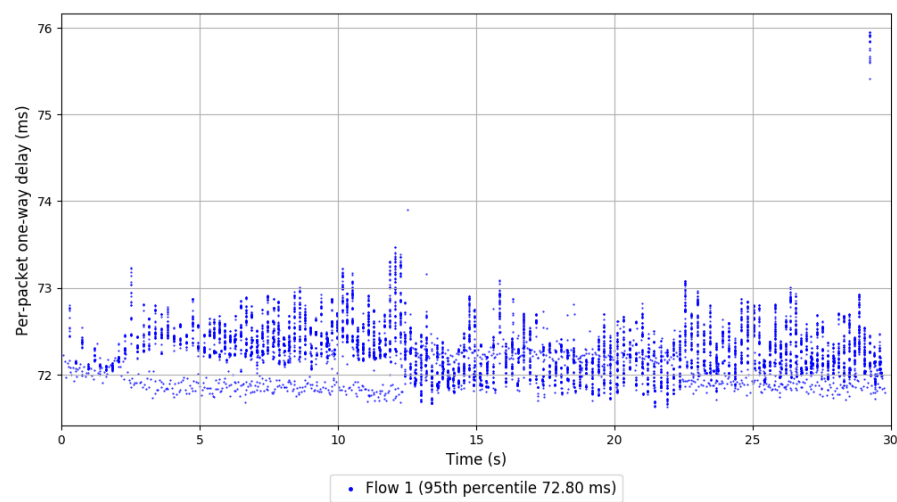
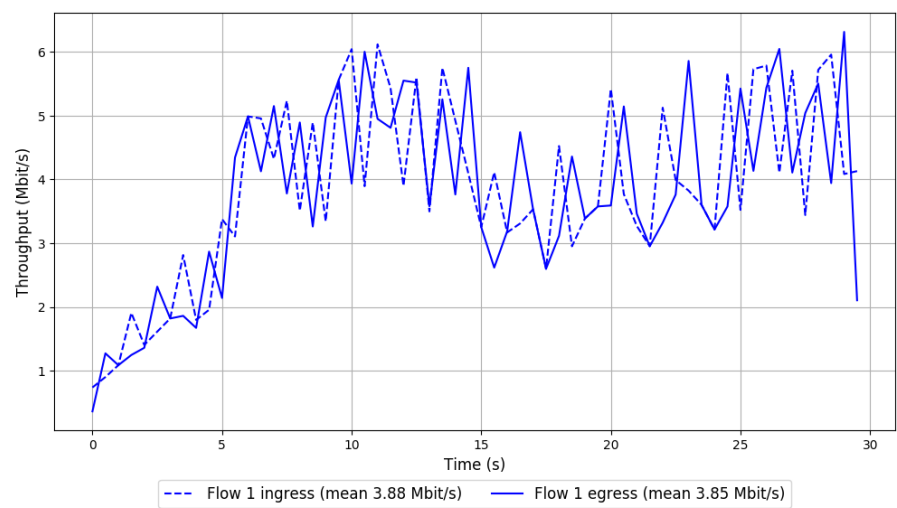
-- Flow 1:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 72.803 ms

Loss rate: 1.25%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-16 00:21:38

End at: 2018-01-16 00:22:08

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 65.106 ms

Loss rate: 0.83%

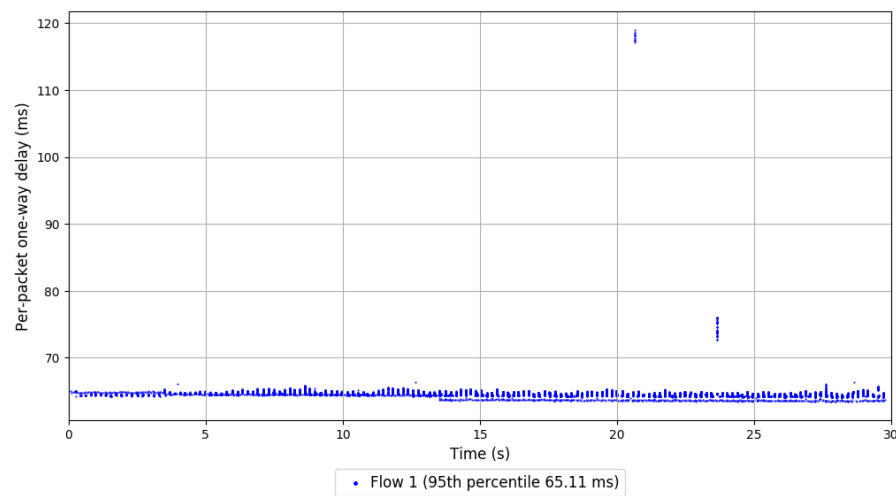
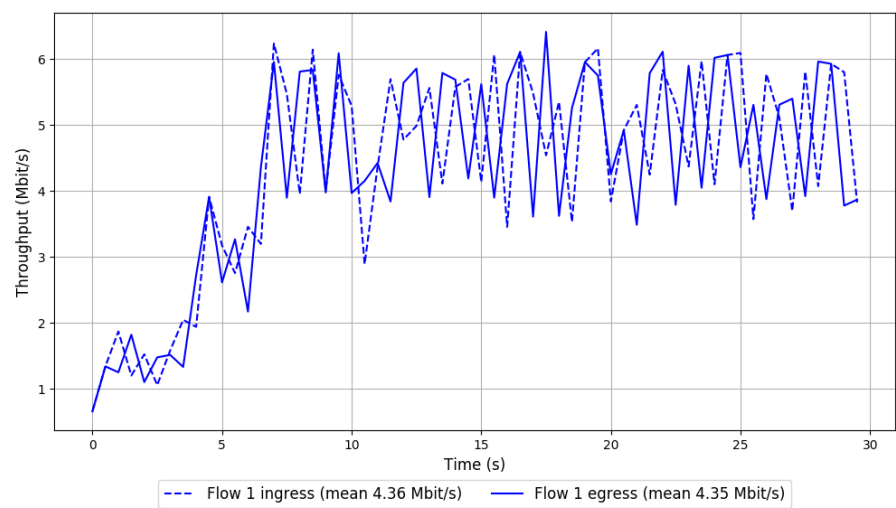
-- Flow 1:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 65.106 ms

Loss rate: 0.83%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-16 00:34:03

End at: 2018-01-16 00:34:33

Below is generated by plot.py at 2018-01-16 02:59:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.46 Mbit/s

95th percentile per-packet one-way delay: 58.941 ms

Loss rate: 1.60%

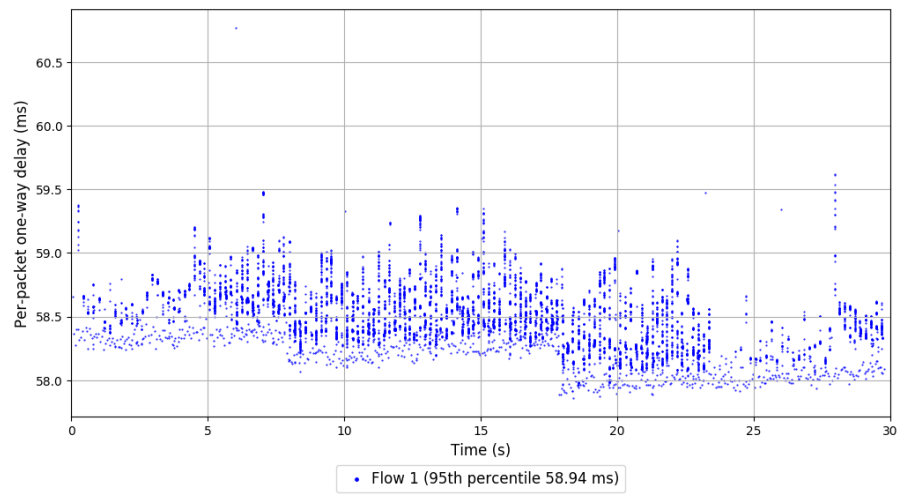
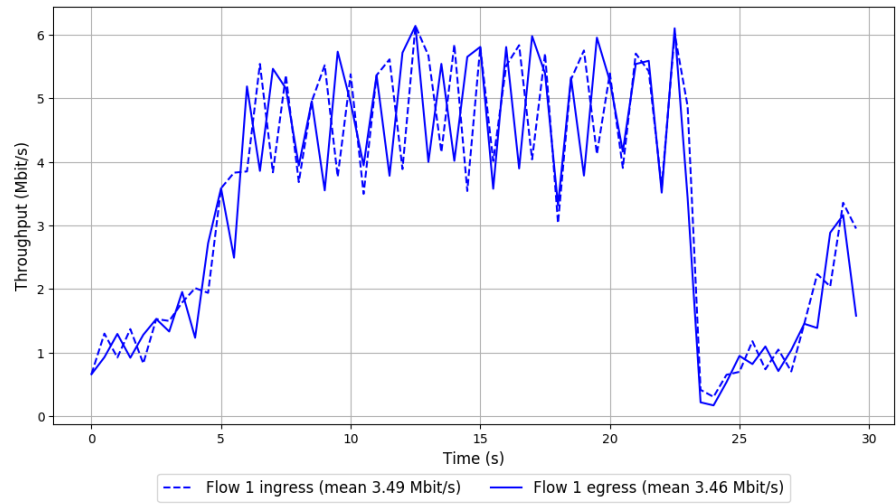
-- Flow 1:

Average throughput: 3.46 Mbit/s

95th percentile per-packet one-way delay: 58.941 ms

Loss rate: 1.60%

Run 10: Report of Sprout — Data Link

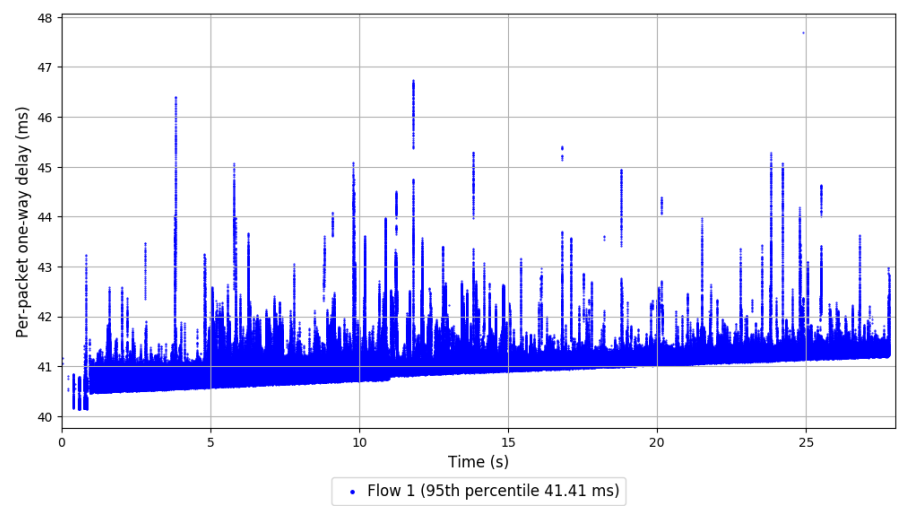
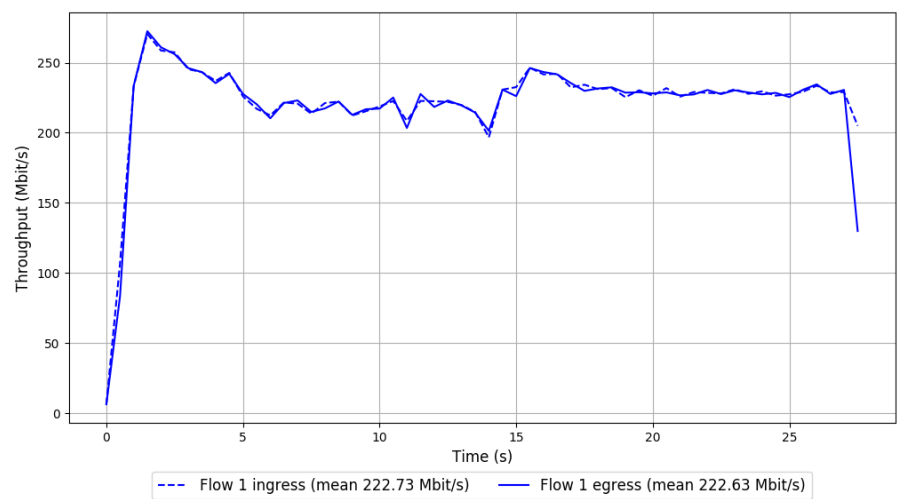


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-15 22:46:48
End at: 2018-01-15 22:47:18

# Below is generated by plot.py at 2018-01-16 03:04:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.63 Mbit/s
95th percentile per-packet one-way delay: 41.408 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 222.63 Mbit/s
95th percentile per-packet one-way delay: 41.408 ms
Loss rate: 0.76%
```

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

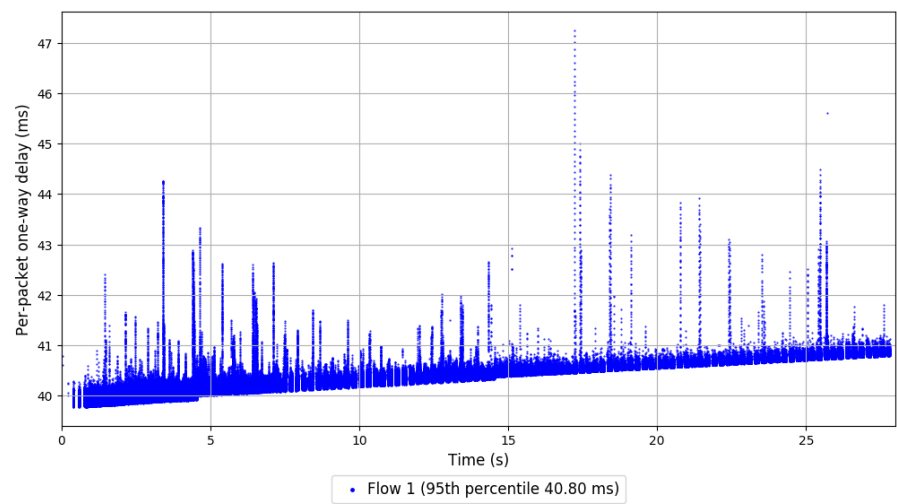
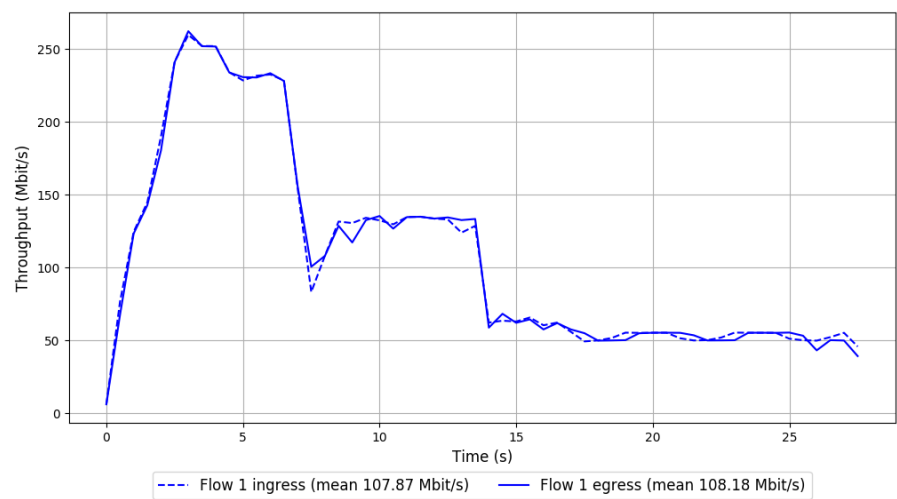


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-15 22:59:15
End at: 2018-01-15 22:59:45

# Below is generated by plot.py at 2018-01-16 03:04:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 108.18 Mbit/s
95th percentile per-packet one-way delay: 40.800 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 108.18 Mbit/s
95th percentile per-packet one-way delay: 40.800 ms
Loss rate: 0.34%
```

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

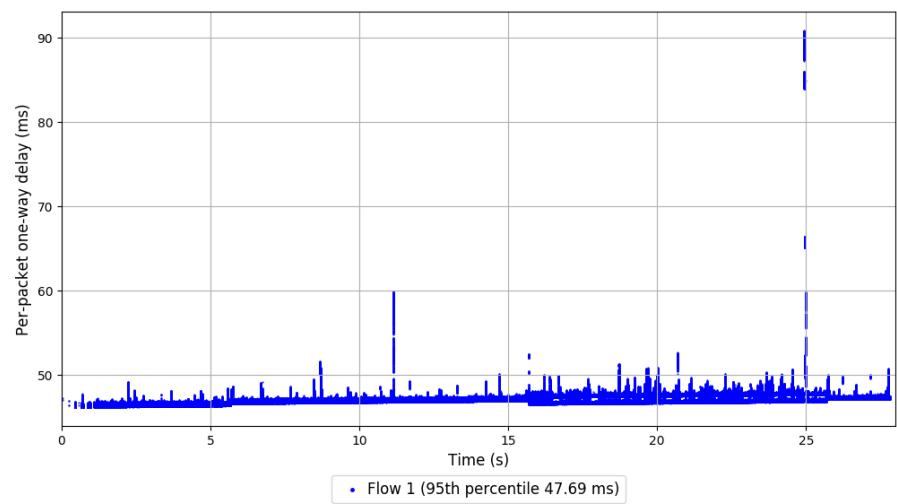
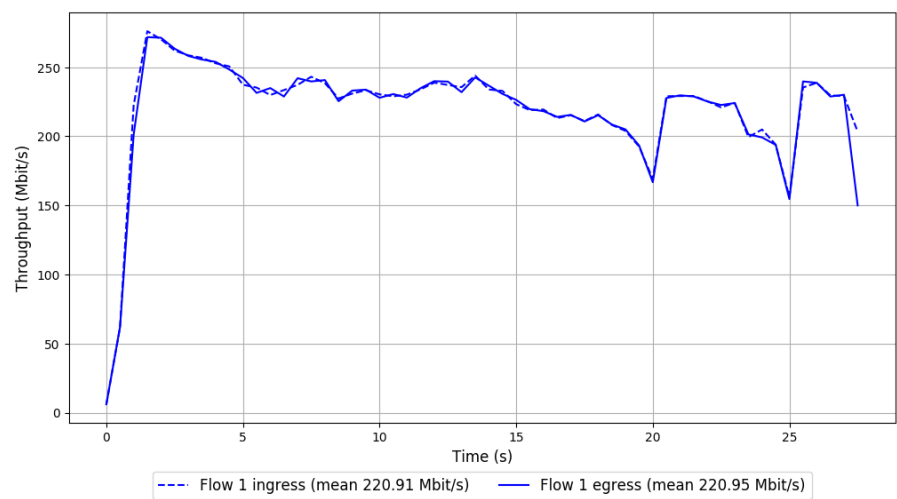


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-15 23:11:24
End at: 2018-01-15 23:11:54

# Below is generated by plot.py at 2018-01-16 03:04:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.95 Mbit/s
95th percentile per-packet one-way delay: 47.694 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 220.95 Mbit/s
95th percentile per-packet one-way delay: 47.694 ms
Loss rate: 0.60%
```

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

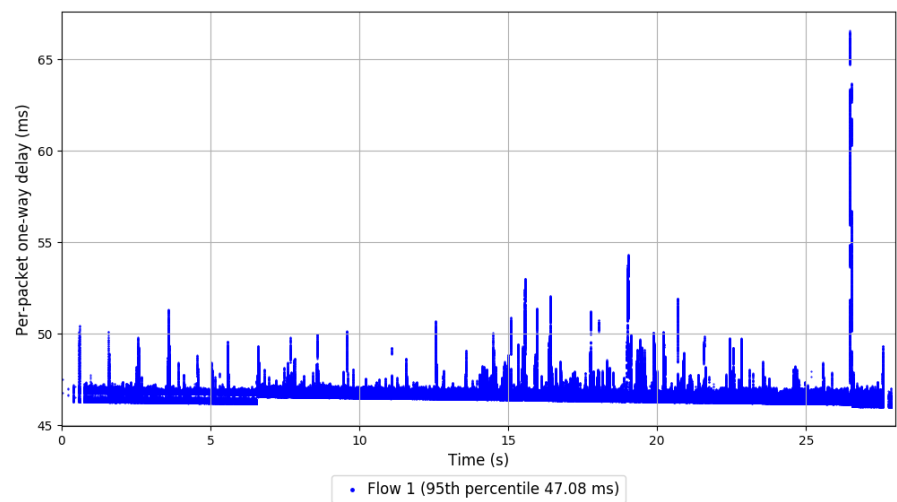
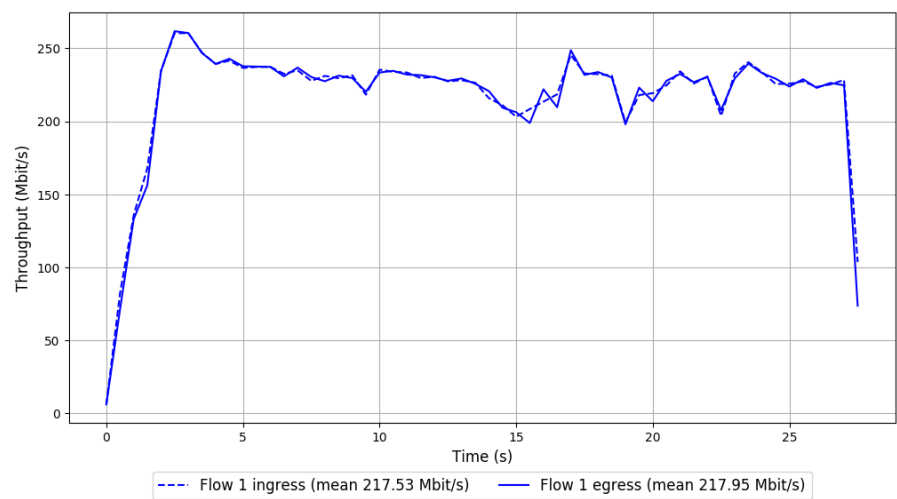


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-15 23:23:13
End at: 2018-01-15 23:23:43

# Below is generated by plot.py at 2018-01-16 03:04:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.95 Mbit/s
95th percentile per-packet one-way delay: 47.081 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 217.95 Mbit/s
95th percentile per-packet one-way delay: 47.081 ms
Loss rate: 0.44%
```

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

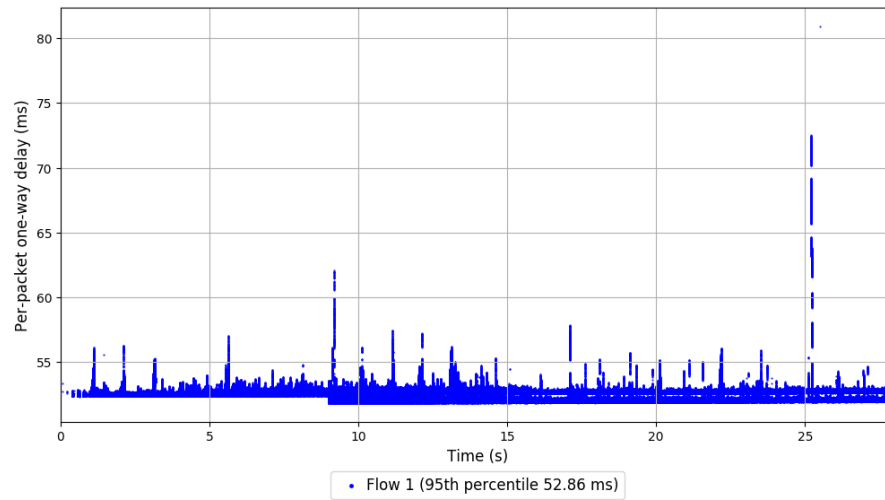
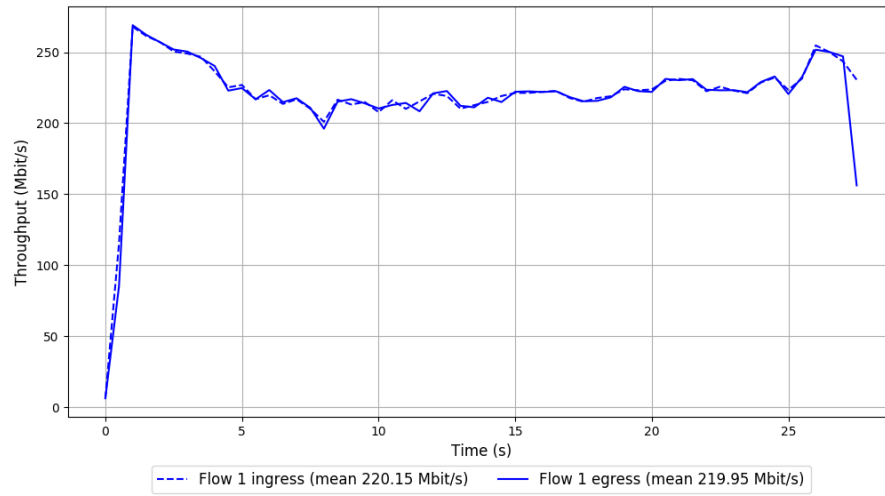


```
Run 5: Statistics of TaoVA-100x

Start at: 2018-01-15 23:35:10
End at: 2018-01-15 23:35:40

# Below is generated by plot.py at 2018-01-16 03:05:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 219.95 Mbit/s
95th percentile per-packet one-way delay: 52.863 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 219.95 Mbit/s
95th percentile per-packet one-way delay: 52.863 ms
Loss rate: 0.81%
```

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

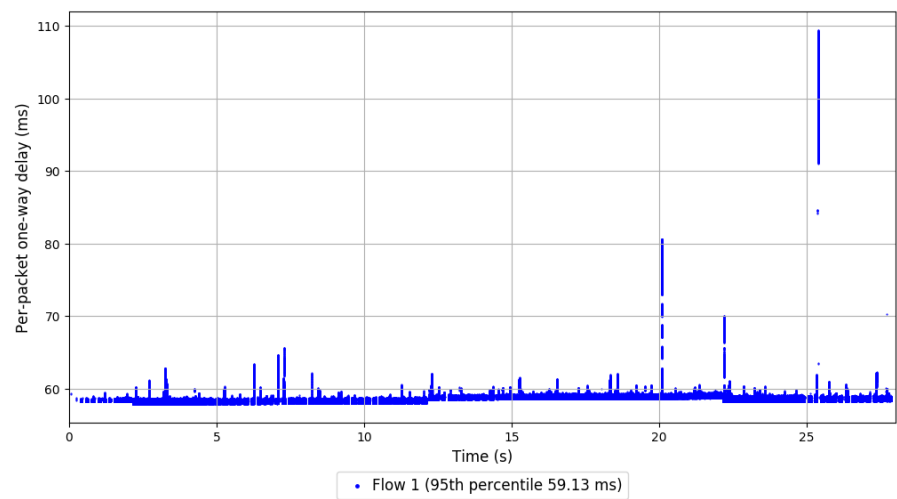
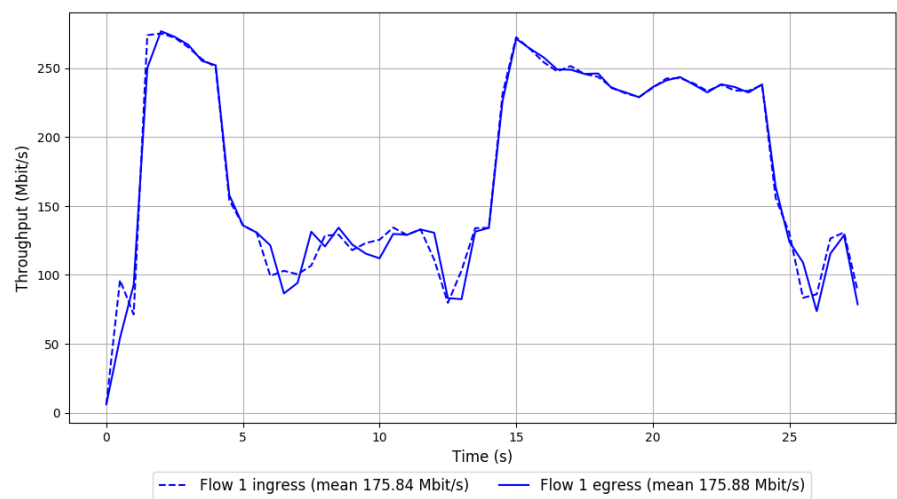


```
Run 6: Statistics of TaoVA-100x

Start at: 2018-01-15 23:47:37
End at: 2018-01-15 23:48:07

# Below is generated by plot.py at 2018-01-16 03:05:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 175.88 Mbit/s
95th percentile per-packet one-way delay: 59.133 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 175.88 Mbit/s
95th percentile per-packet one-way delay: 59.133 ms
Loss rate: 0.47%
```

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-15 23:59:54

End at: 2018-01-16 00:00:24

Below is generated by plot.py at 2018-01-16 03:05:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.42 Mbit/s

95th percentile per-packet one-way delay: 72.769 ms

Loss rate: 0.70%

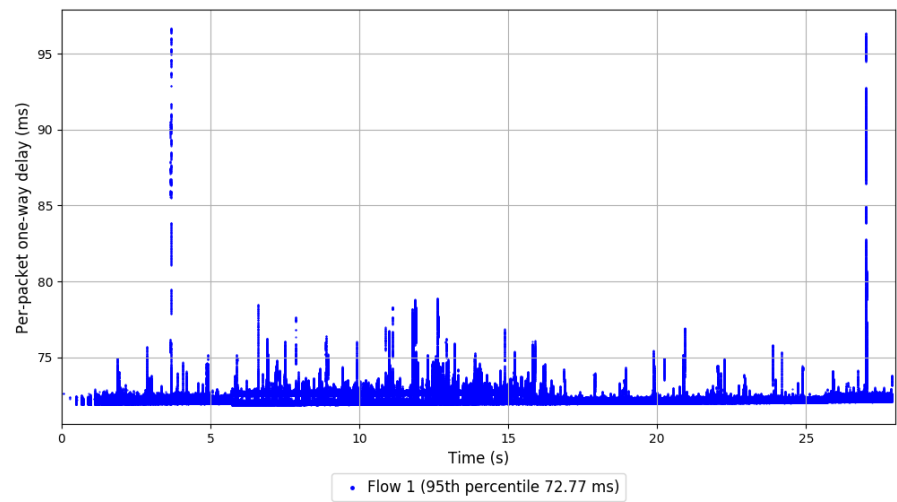
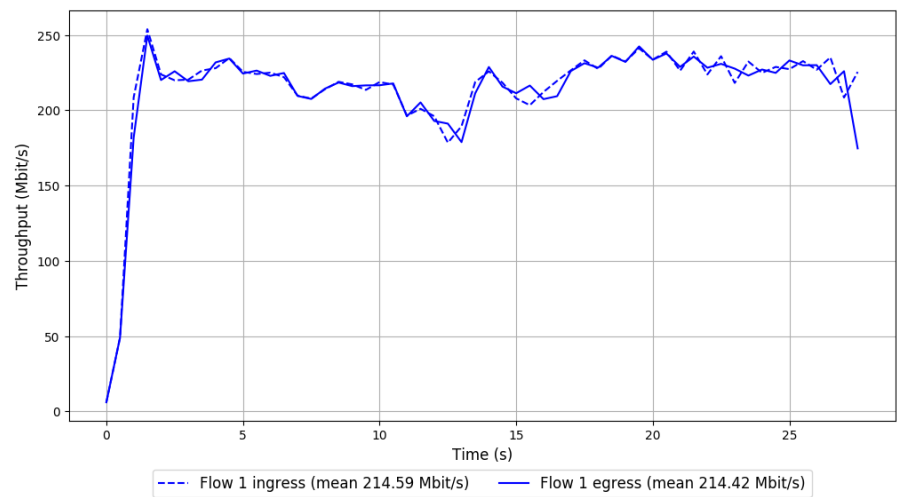
-- Flow 1:

Average throughput: 214.42 Mbit/s

95th percentile per-packet one-way delay: 72.769 ms

Loss rate: 0.70%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-16 00:12:12

End at: 2018-01-16 00:12:42

Below is generated by plot.py at 2018-01-16 03:06:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.47 Mbit/s

95th percentile per-packet one-way delay: 70.341 ms

Loss rate: 0.79%

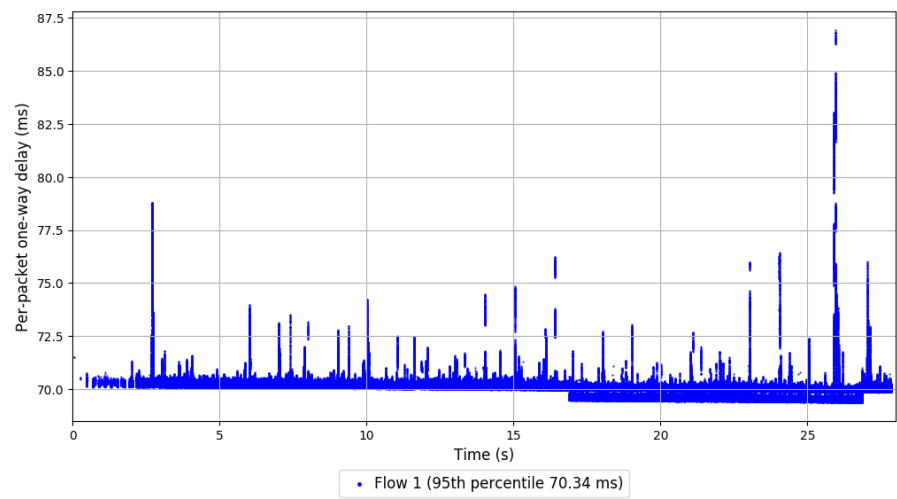
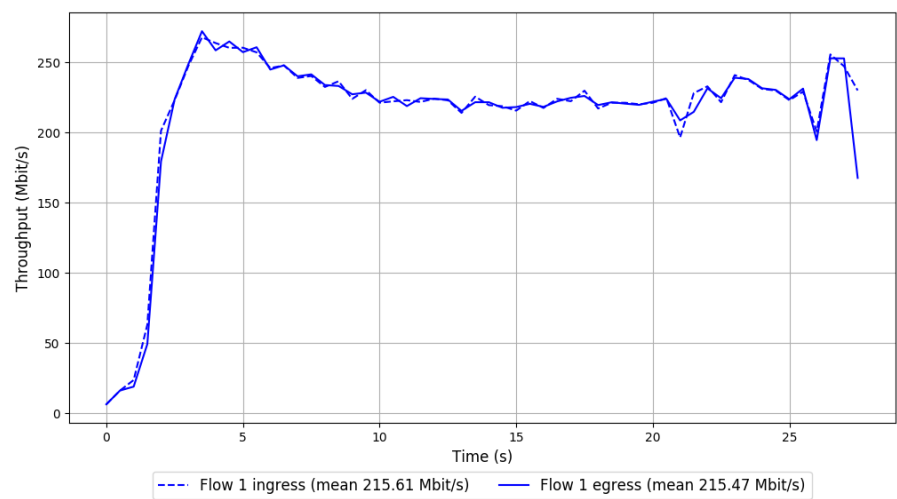
-- Flow 1:

Average throughput: 215.47 Mbit/s

95th percentile per-packet one-way delay: 70.341 ms

Loss rate: 0.79%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-16 00:24:32

End at: 2018-01-16 00:25:02

Below is generated by plot.py at 2018-01-16 03:09:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 224.03 Mbit/s

95th percentile per-packet one-way delay: 62.243 ms

Loss rate: 0.81%

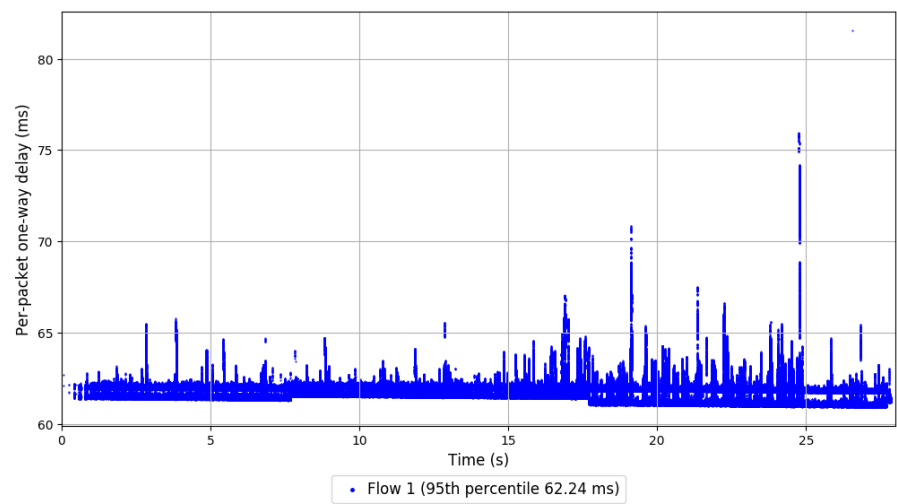
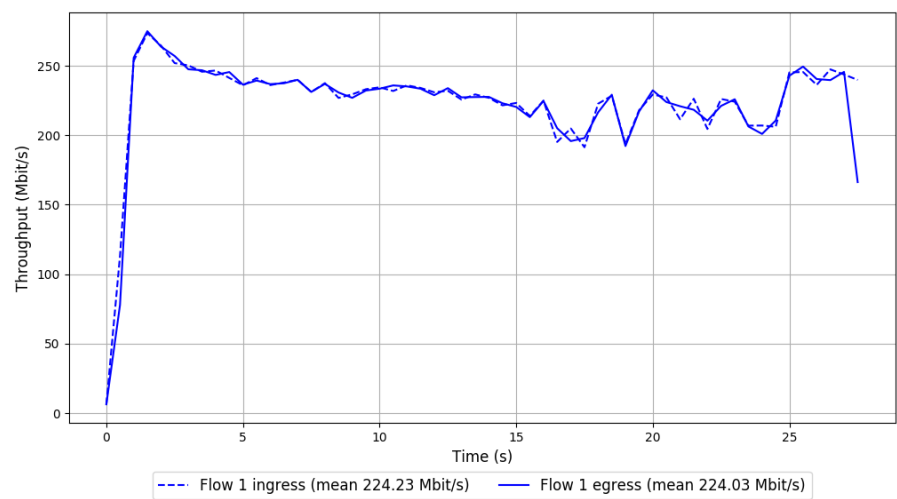
-- Flow 1:

Average throughput: 224.03 Mbit/s

95th percentile per-packet one-way delay: 62.243 ms

Loss rate: 0.81%

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

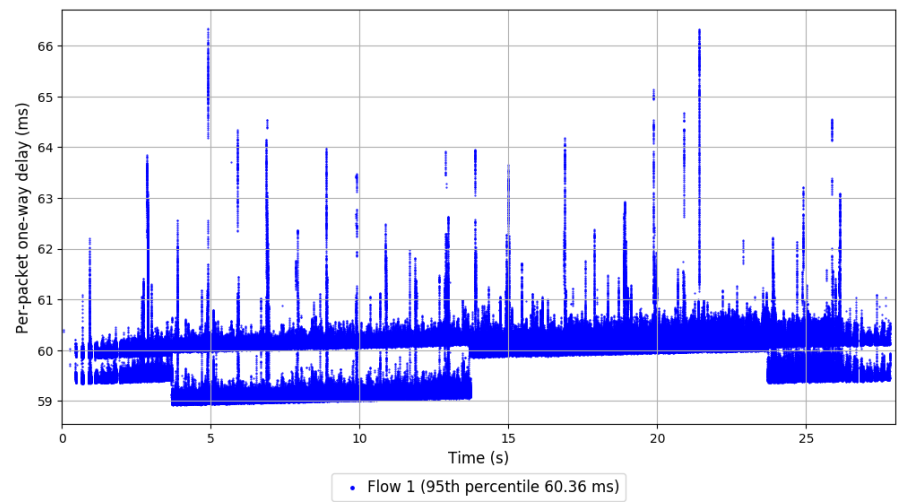
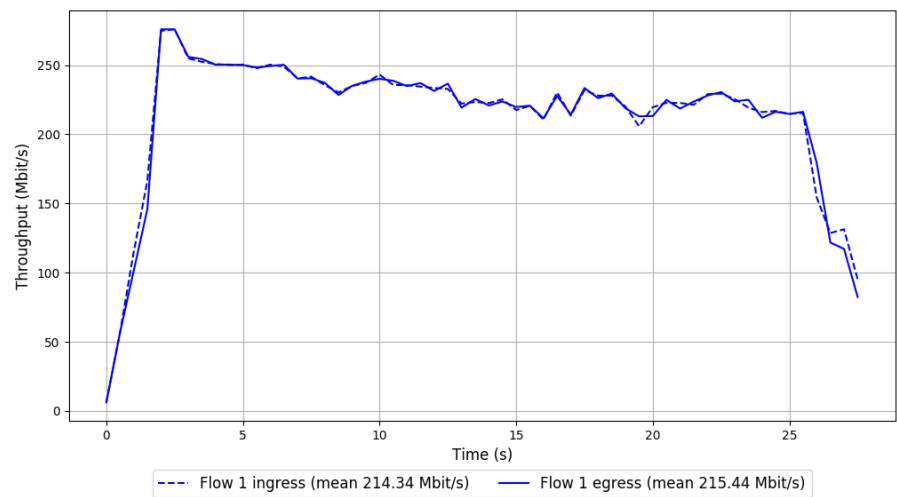


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-16 00:36:56
End at: 2018-01-16 00:37:26

# Below is generated by plot.py at 2018-01-16 03:10:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.44 Mbit/s
95th percentile per-packet one-way delay: 60.360 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 215.44 Mbit/s
95th percentile per-packet one-way delay: 60.360 ms
Loss rate: 0.30%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-15 22:35:15

End at: 2018-01-15 22:35:45

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.63 Mbit/s

95th percentile per-packet one-way delay: 44.404 ms

Loss rate: 0.31%

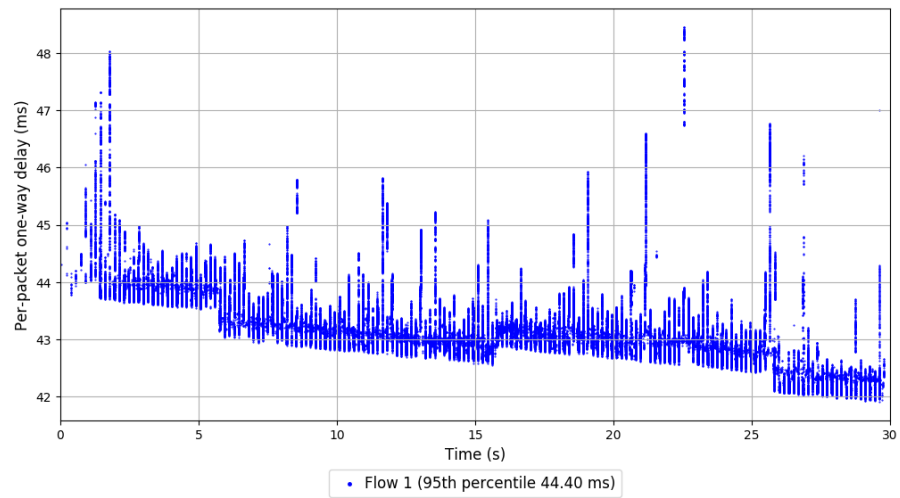
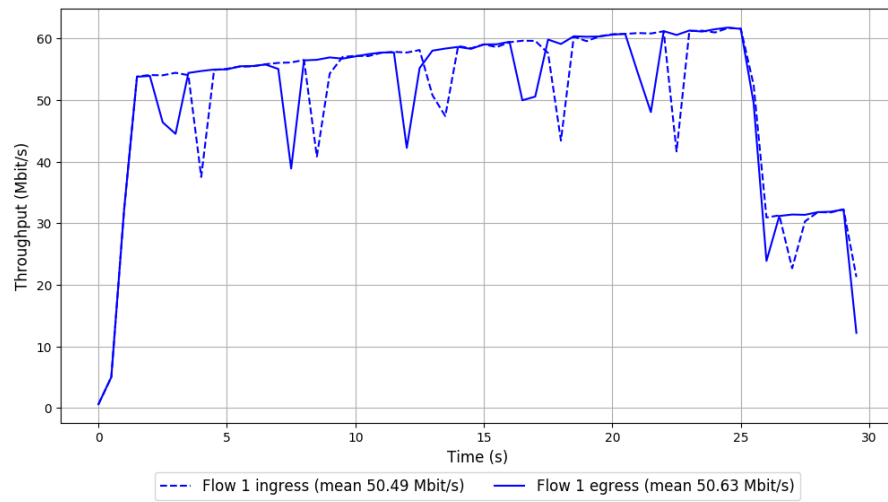
-- Flow 1:

Average throughput: 50.63 Mbit/s

95th percentile per-packet one-way delay: 44.404 ms

Loss rate: 0.31%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-15 22:47:49

End at: 2018-01-15 22:48:19

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.78 Mbit/s

95th percentile per-packet one-way delay: 45.113 ms

Loss rate: 0.41%

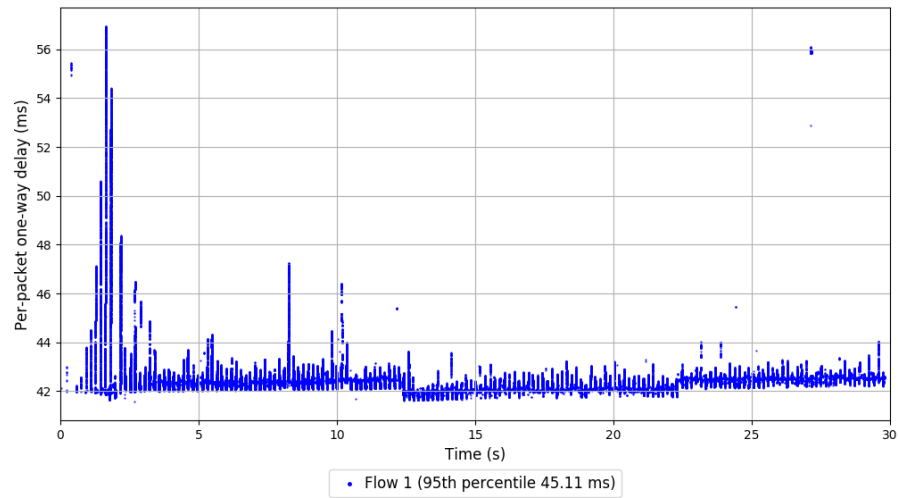
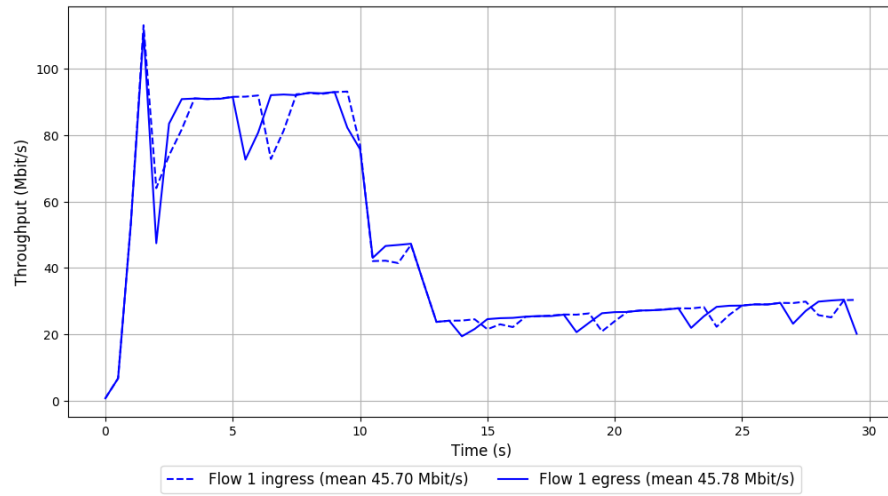
-- Flow 1:

Average throughput: 45.78 Mbit/s

95th percentile per-packet one-way delay: 45.113 ms

Loss rate: 0.41%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-15 23:00:04

End at: 2018-01-15 23:00:34

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.16 Mbit/s

95th percentile per-packet one-way delay: 43.498 ms

Loss rate: 1.47%

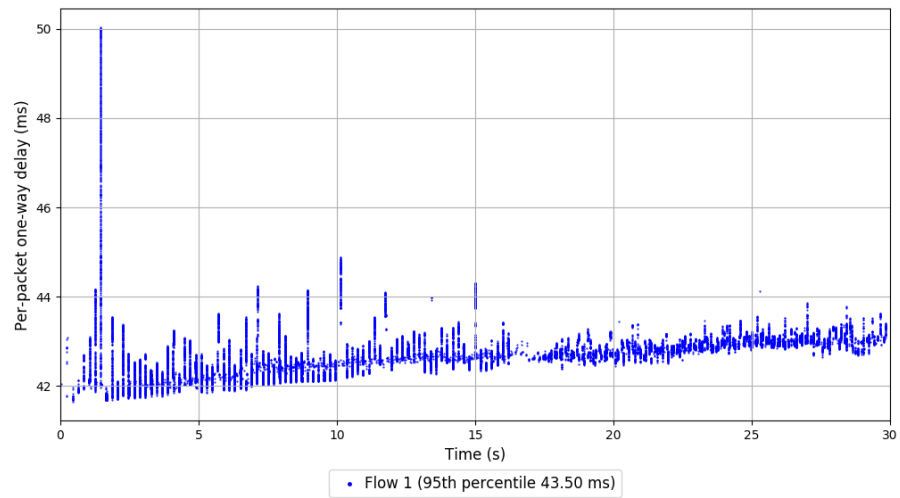
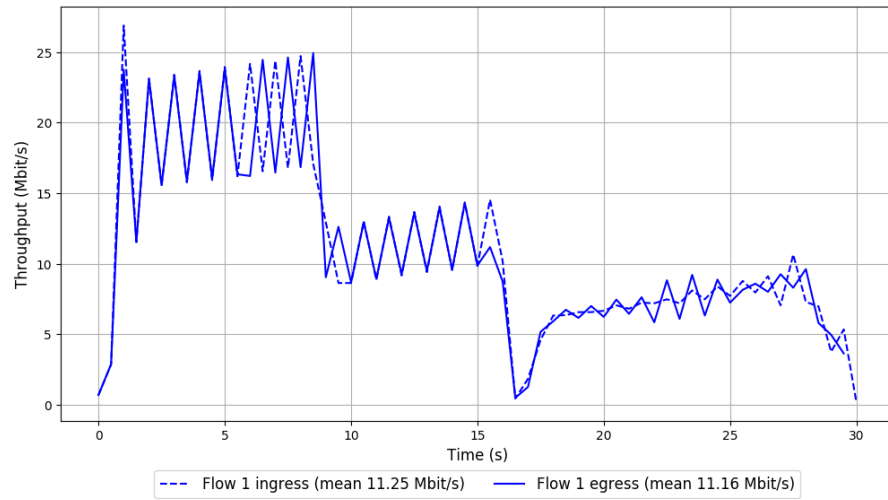
-- Flow 1:

Average throughput: 11.16 Mbit/s

95th percentile per-packet one-way delay: 43.498 ms

Loss rate: 1.47%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-15 23:12:24

End at: 2018-01-15 23:12:54

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.02 Mbit/s

95th percentile per-packet one-way delay: 49.761 ms

Loss rate: 0.69%

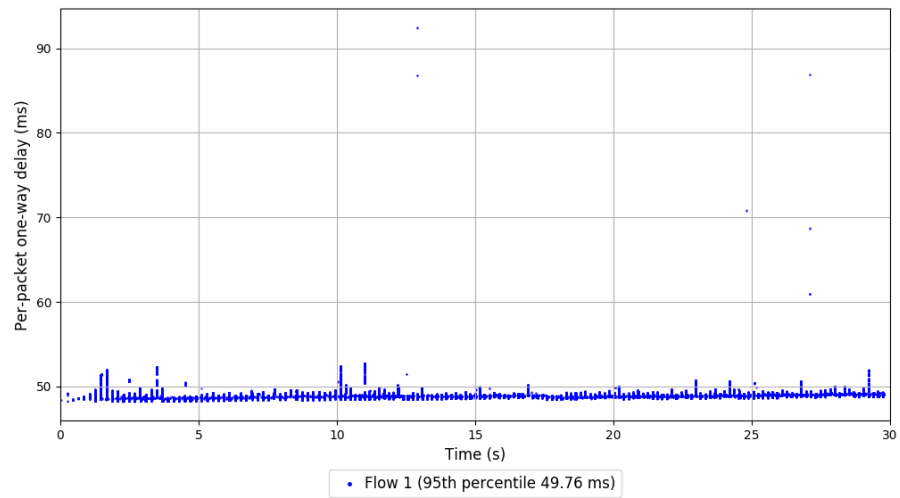
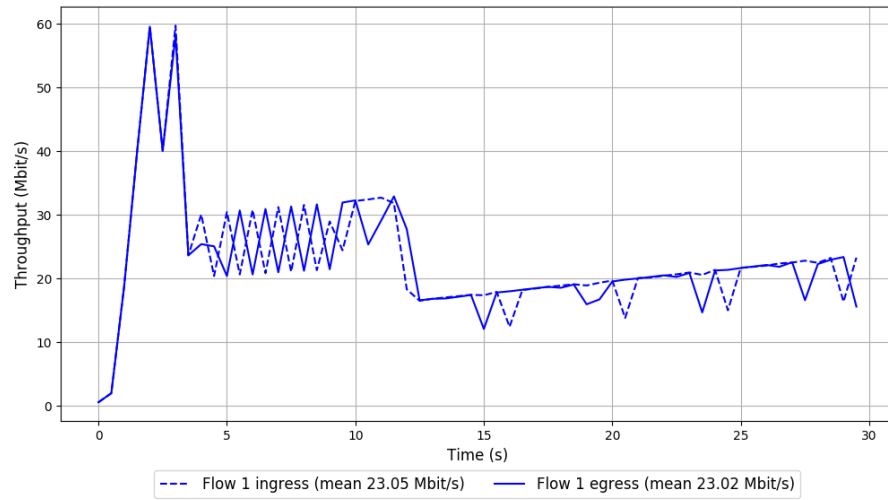
-- Flow 1:

Average throughput: 23.02 Mbit/s

95th percentile per-packet one-way delay: 49.761 ms

Loss rate: 0.69%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-15 23:24:13

End at: 2018-01-15 23:24:43

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.53 Mbit/s

95th percentile per-packet one-way delay: 47.238 ms

Loss rate: 0.56%

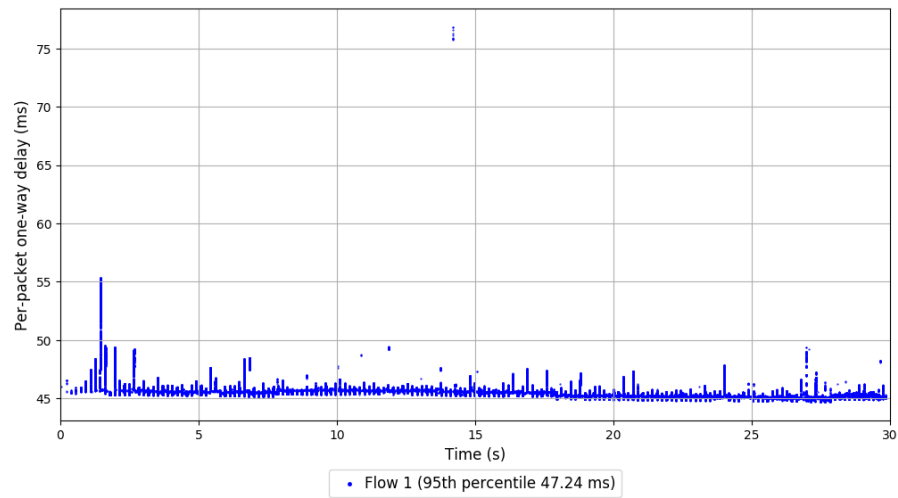
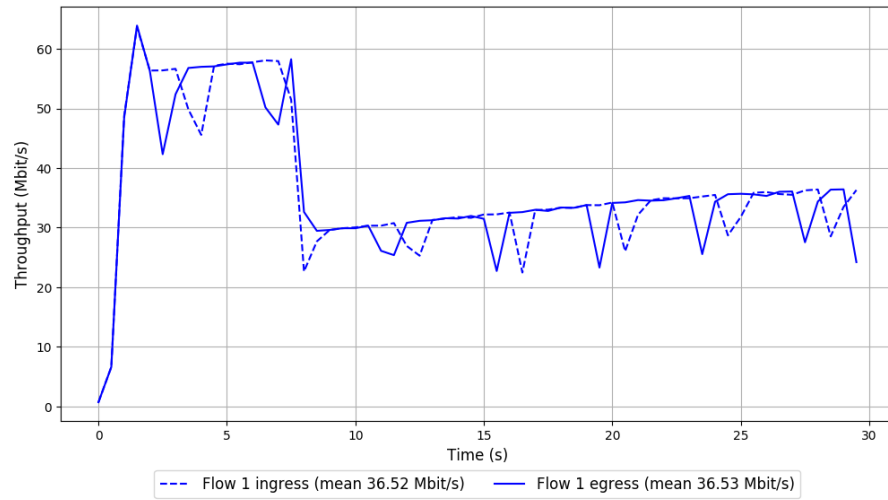
-- Flow 1:

Average throughput: 36.53 Mbit/s

95th percentile per-packet one-way delay: 47.238 ms

Loss rate: 0.56%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-15 23:36:11

End at: 2018-01-15 23:36:41

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.90 Mbit/s

95th percentile per-packet one-way delay: 54.321 ms

Loss rate: 0.19%

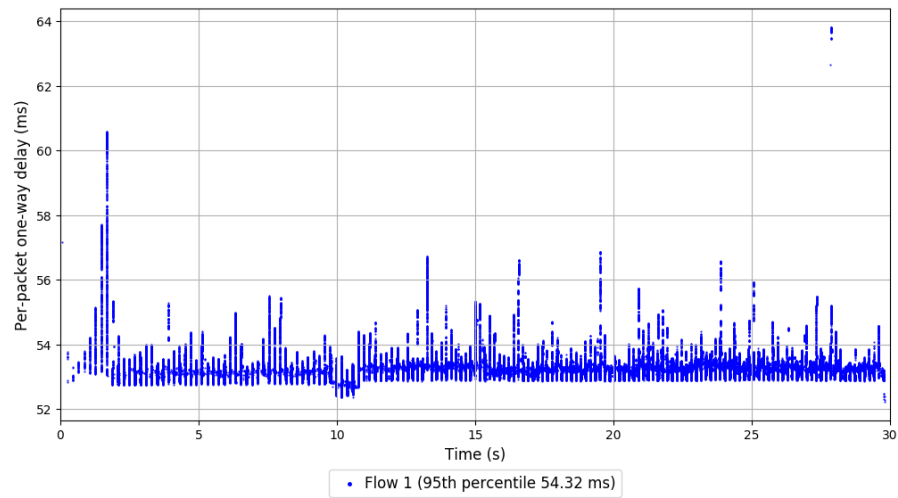
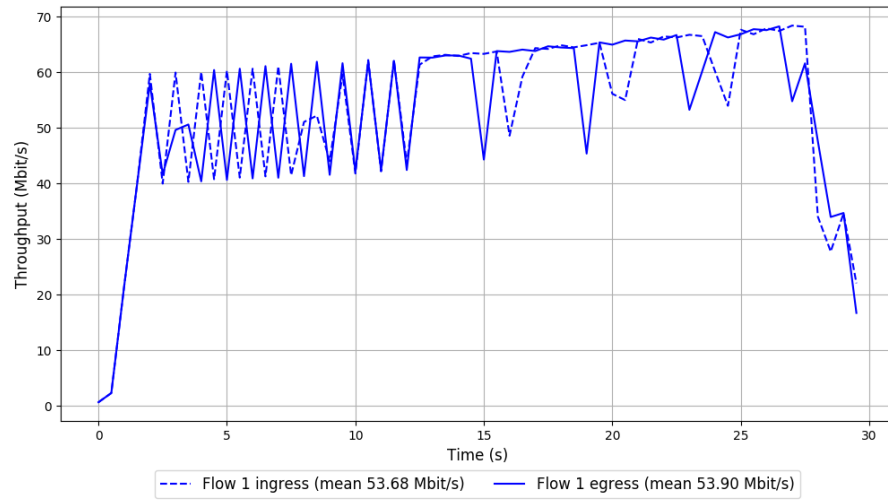
-- Flow 1:

Average throughput: 53.90 Mbit/s

95th percentile per-packet one-way delay: 54.321 ms

Loss rate: 0.19%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-15 23:48:34

End at: 2018-01-15 23:49:04

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.65 Mbit/s

95th percentile per-packet one-way delay: 60.798 ms

Loss rate: 0.39%

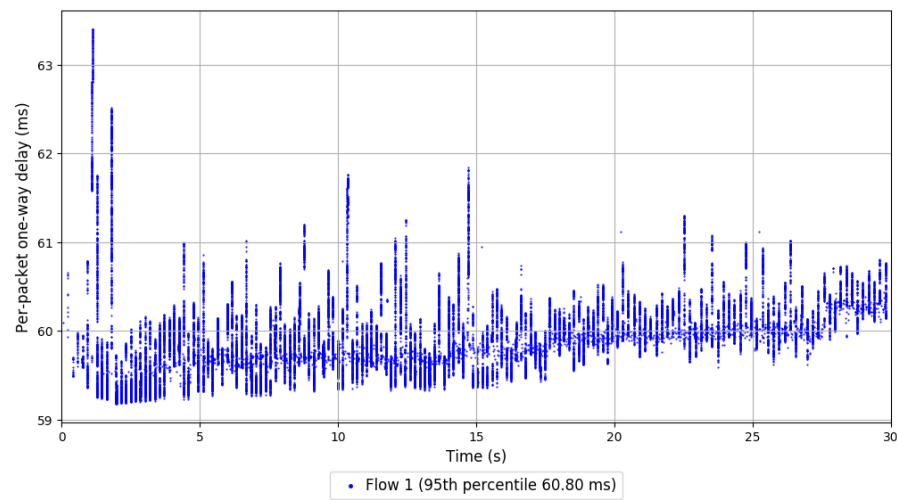
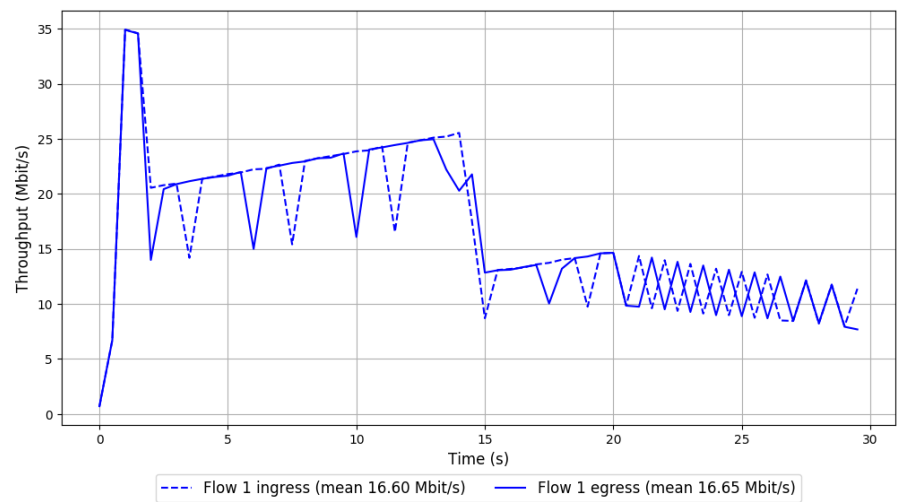
-- Flow 1:

Average throughput: 16.65 Mbit/s

95th percentile per-packet one-way delay: 60.798 ms

Loss rate: 0.39%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-16 00:00:53

End at: 2018-01-16 00:01:23

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.96 Mbit/s

95th percentile per-packet one-way delay: 74.294 ms

Loss rate: 0.56%

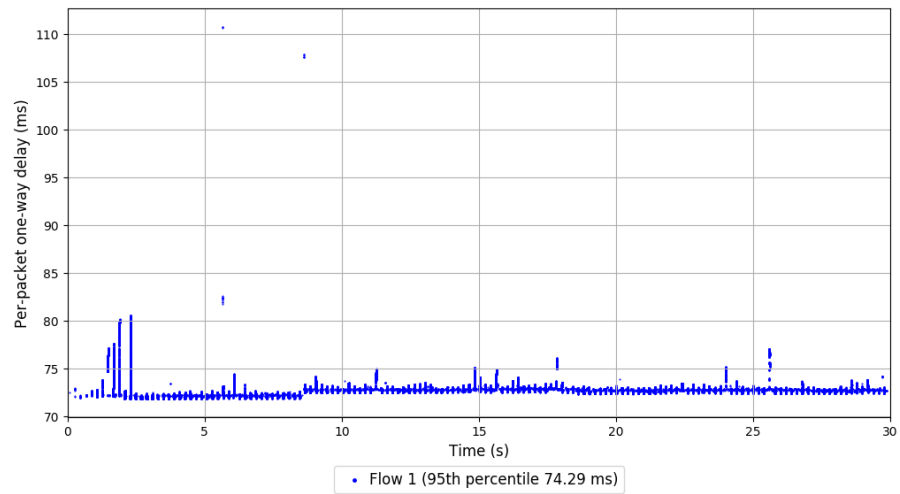
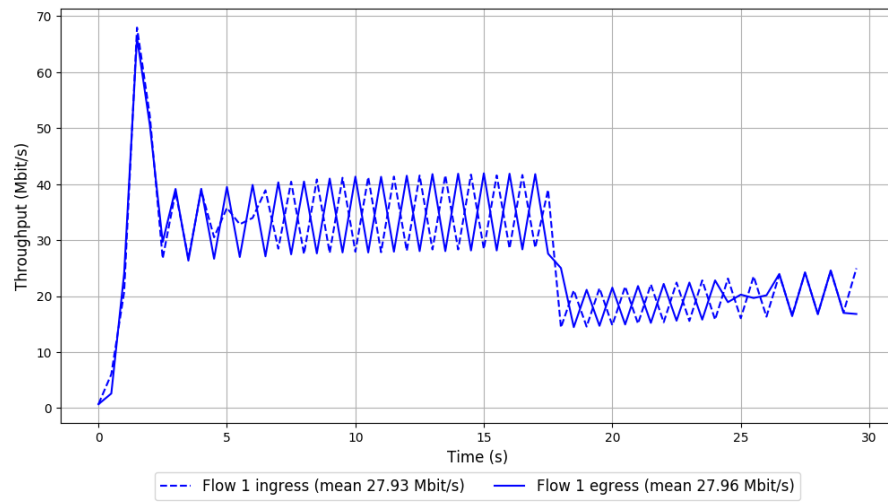
-- Flow 1:

Average throughput: 27.96 Mbit/s

95th percentile per-packet one-way delay: 74.294 ms

Loss rate: 0.56%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-16 00:13:13

End at: 2018-01-16 00:13:43

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 70.138 ms

Loss rate: 0.30%

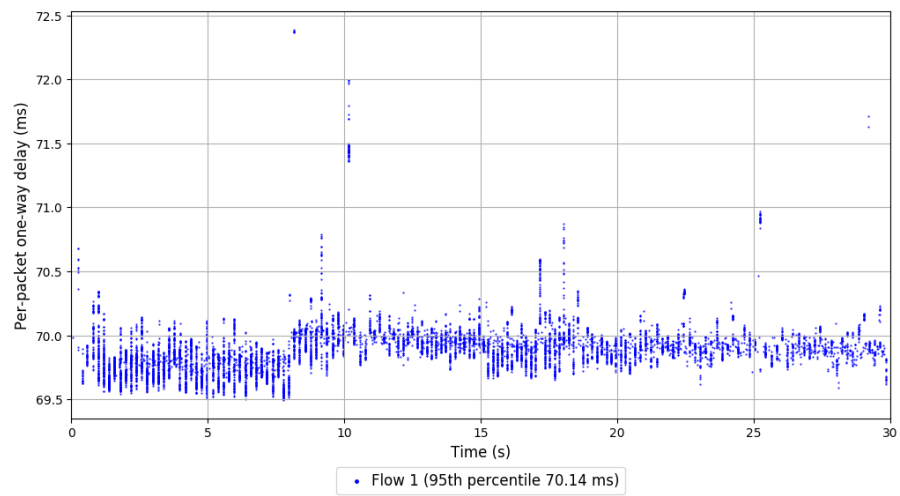
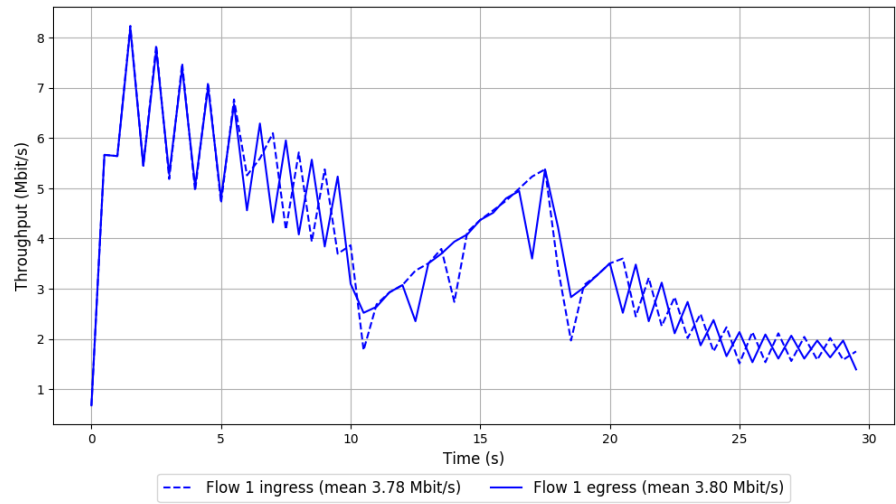
-- Flow 1:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 70.138 ms

Loss rate: 0.30%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-16 00:25:33

End at: 2018-01-16 00:26:03

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.28 Mbit/s

95th percentile per-packet one-way delay: 61.858 ms

Loss rate: 0.24%

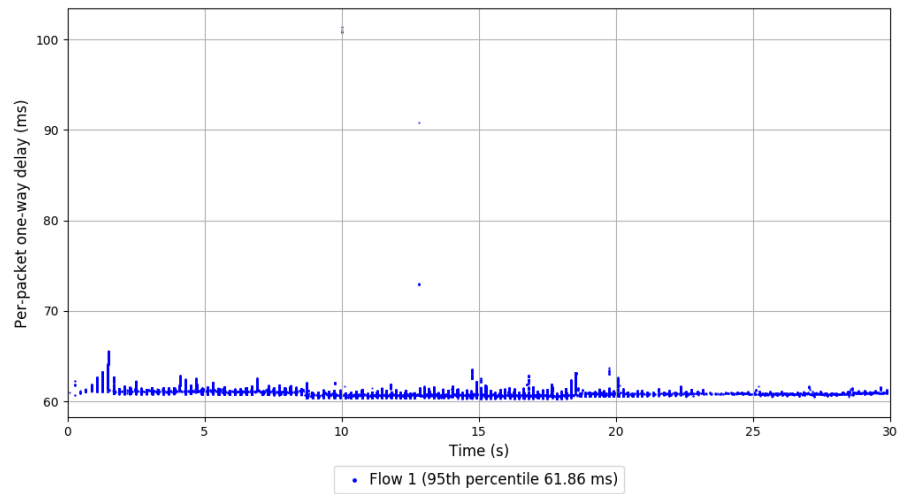
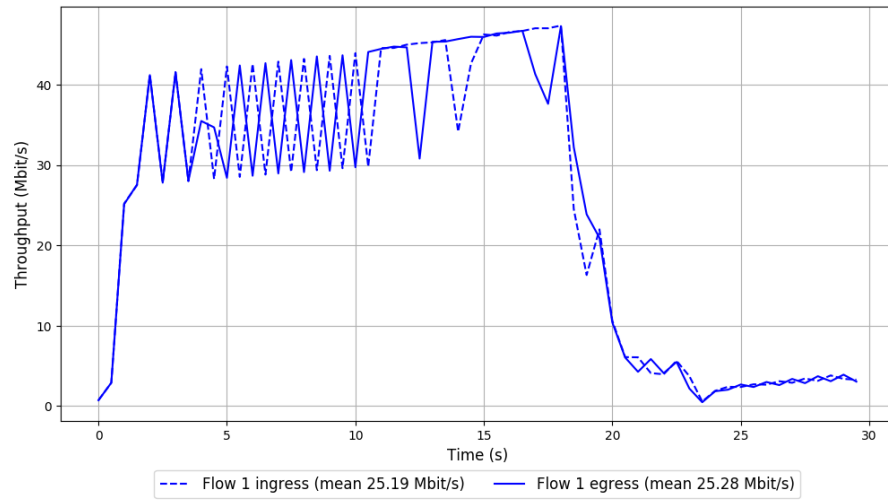
-- Flow 1:

Average throughput: 25.28 Mbit/s

95th percentile per-packet one-way delay: 61.858 ms

Loss rate: 0.24%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-15 22:40:38

End at: 2018-01-15 22:41:08

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 163.96 Mbit/s

95th percentile per-packet one-way delay: 54.856 ms

Loss rate: 0.82%

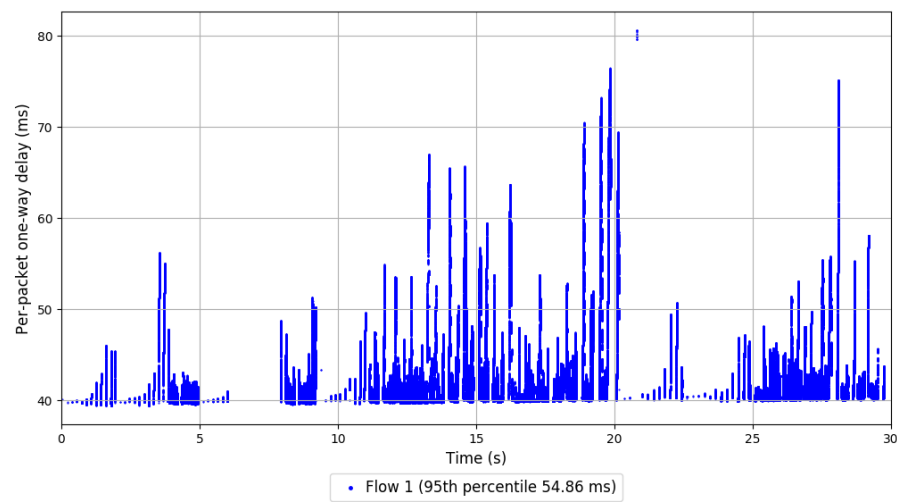
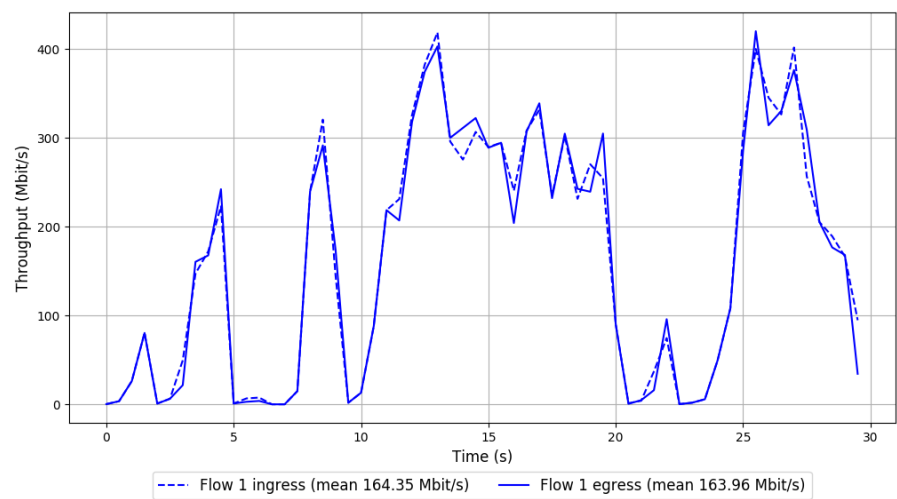
-- Flow 1:

Average throughput: 163.96 Mbit/s

95th percentile per-packet one-way delay: 54.856 ms

Loss rate: 0.82%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-15 22:53:02

End at: 2018-01-15 22:53:32

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 257.26 Mbit/s

95th percentile per-packet one-way delay: 86.379 ms

Loss rate: 0.66%

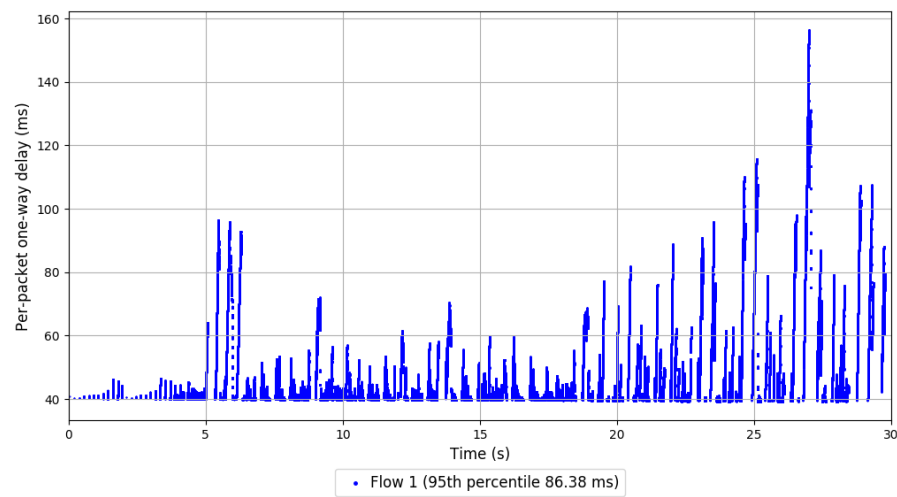
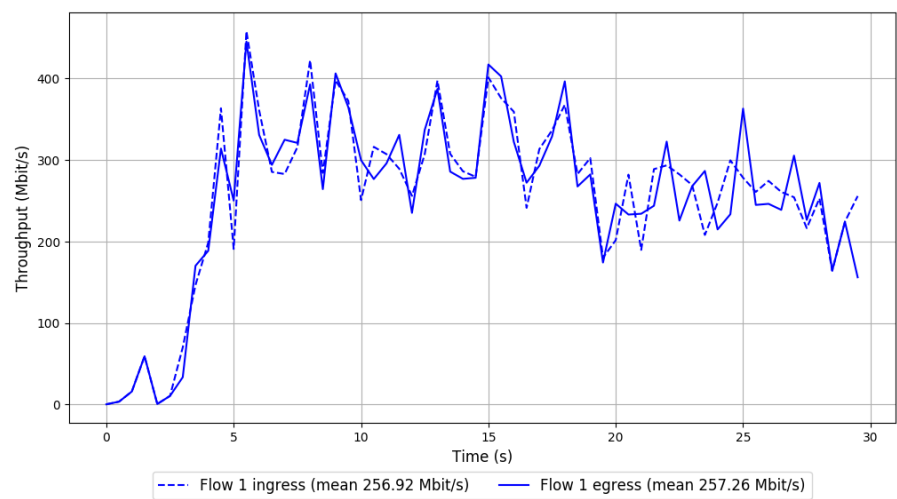
-- Flow 1:

Average throughput: 257.26 Mbit/s

95th percentile per-packet one-way delay: 86.379 ms

Loss rate: 0.66%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-15 23:05:15

End at: 2018-01-15 23:05:45

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.75 Mbit/s

95th percentile per-packet one-way delay: 85.014 ms

Loss rate: 0.88%

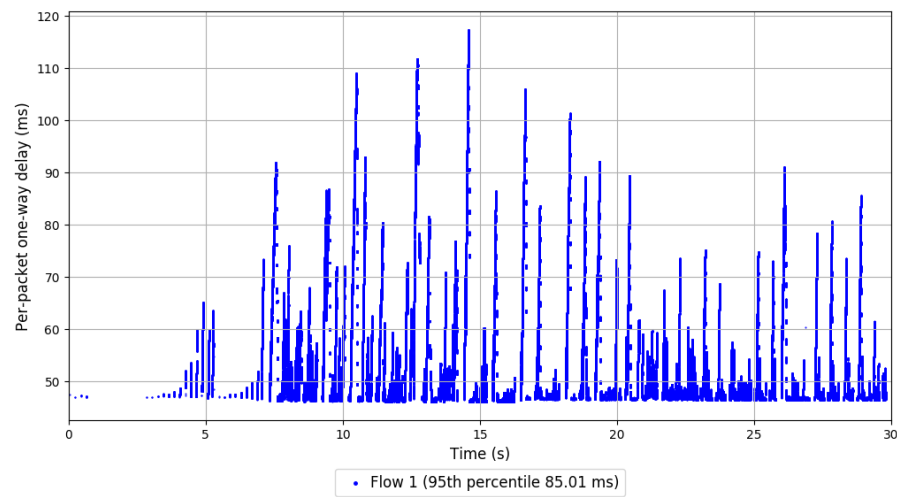
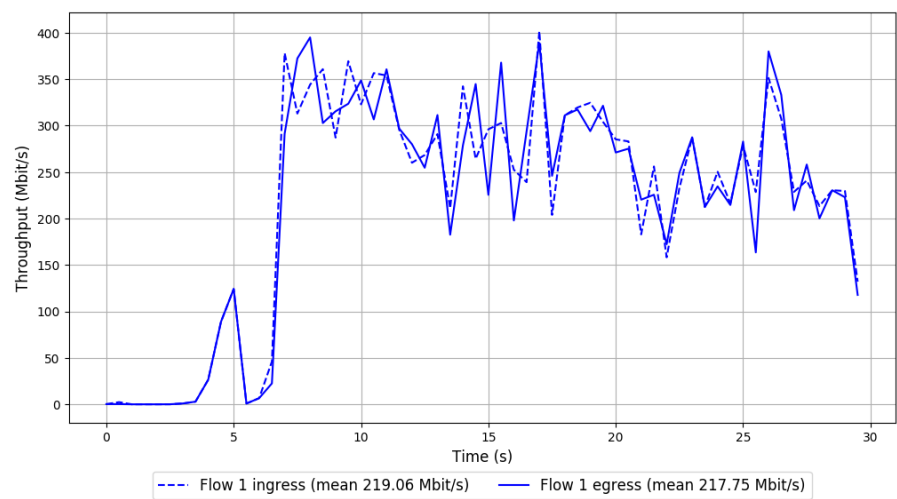
-- Flow 1:

Average throughput: 217.75 Mbit/s

95th percentile per-packet one-way delay: 85.014 ms

Loss rate: 0.88%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-15 23:17:33

End at: 2018-01-15 23:18:03

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.22 Mbit/s

95th percentile per-packet one-way delay: 67.972 ms

Loss rate: 1.80%

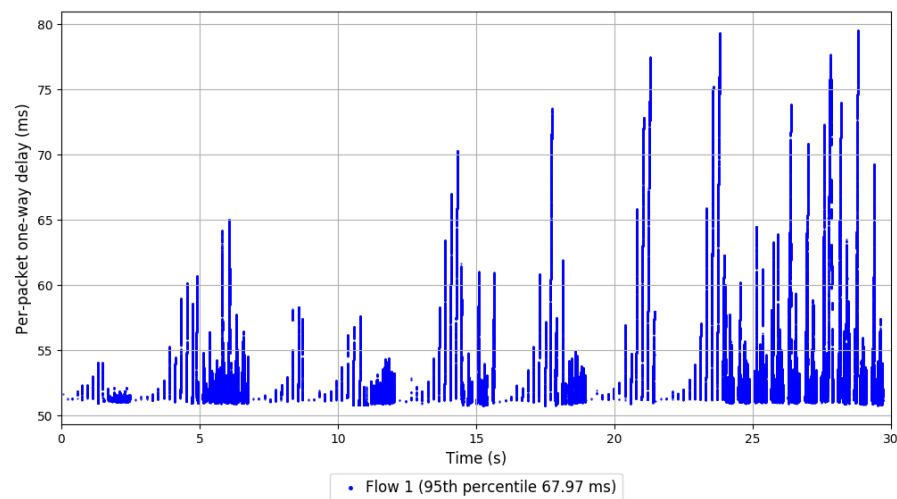
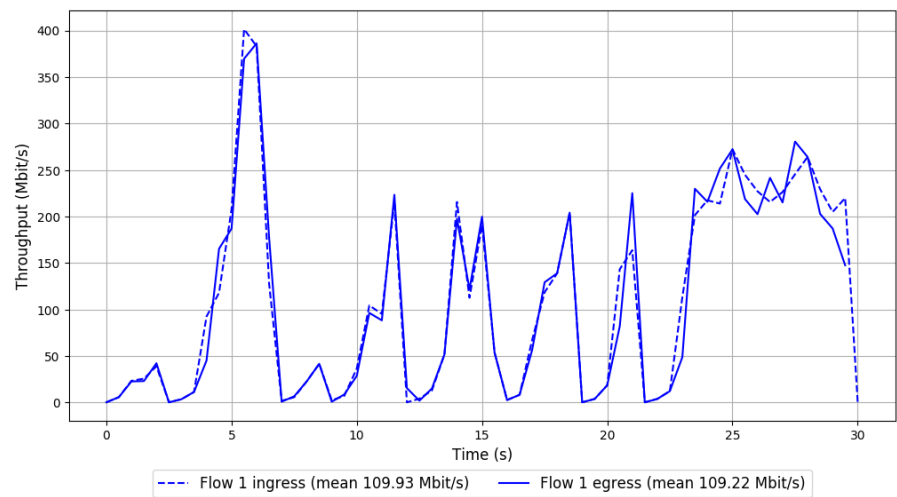
-- Flow 1:

Average throughput: 109.22 Mbit/s

95th percentile per-packet one-way delay: 67.972 ms

Loss rate: 1.80%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-15 23:29:26

End at: 2018-01-15 23:29:56

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.98 Mbit/s

95th percentile per-packet one-way delay: 56.081 ms

Loss rate: 0.35%

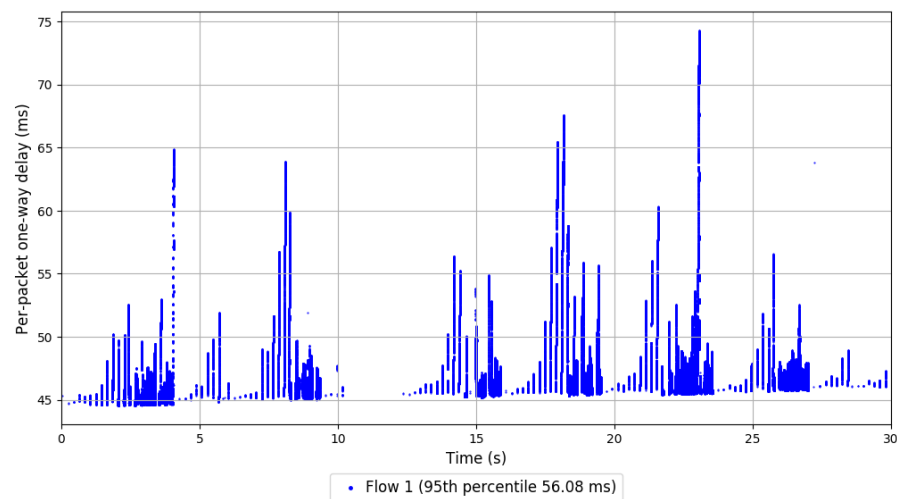
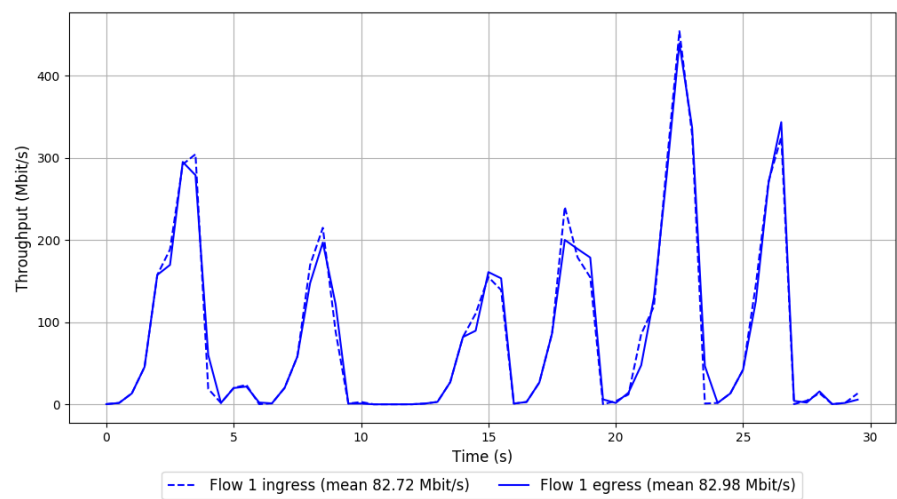
-- Flow 1:

Average throughput: 82.98 Mbit/s

95th percentile per-packet one-way delay: 56.081 ms

Loss rate: 0.35%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-15 23:41:28

End at: 2018-01-15 23:41:58

Below is generated by plot.py at 2018-01-16 03:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.23 Mbit/s

95th percentile per-packet one-way delay: 98.479 ms

Loss rate: 0.78%

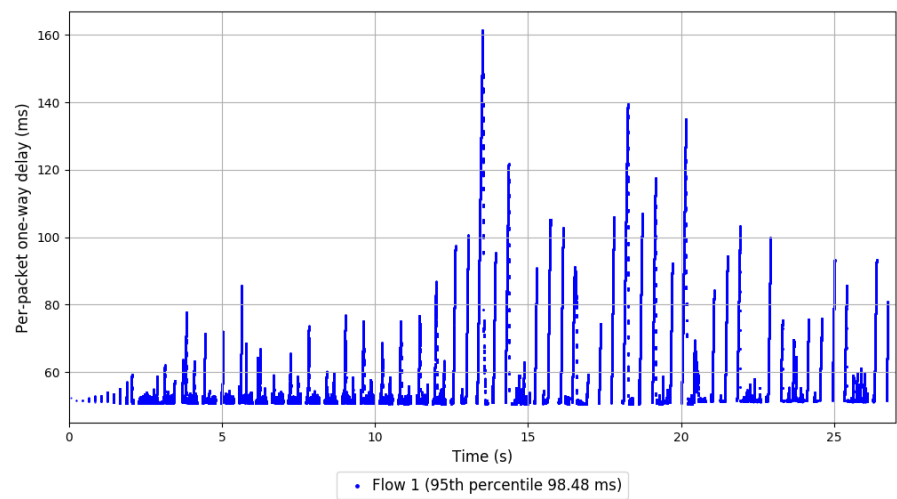
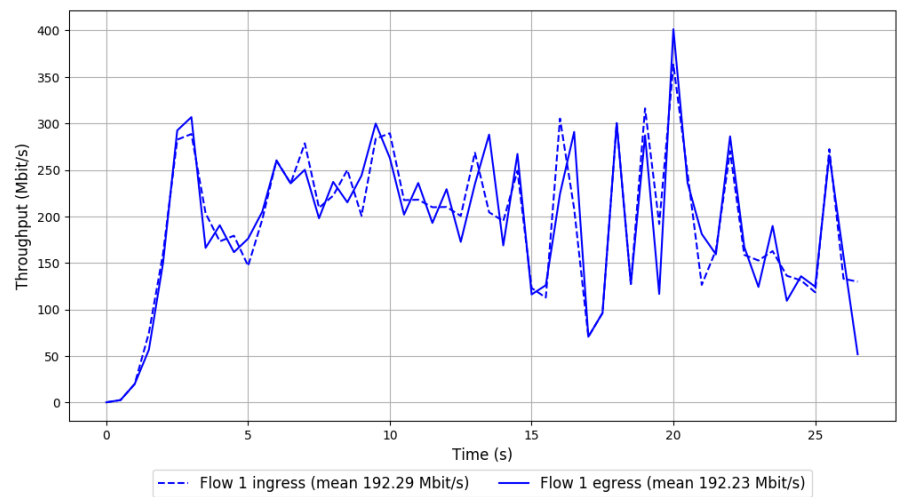
-- Flow 1:

Average throughput: 192.23 Mbit/s

95th percentile per-packet one-way delay: 98.479 ms

Loss rate: 0.78%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-15 23:53:40

End at: 2018-01-15 23:54:10

Below is generated by plot.py at 2018-01-16 03:11:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 216.68 Mbit/s

95th percentile per-packet one-way delay: 85.845 ms

Loss rate: 0.82%

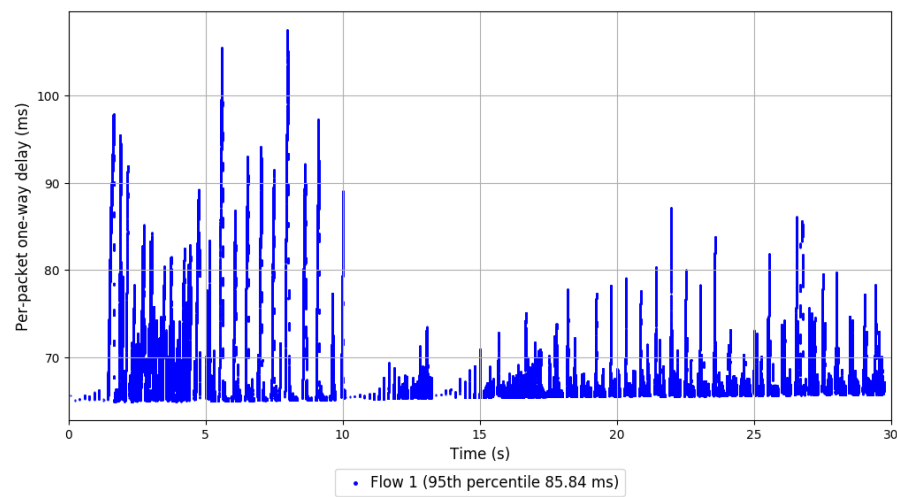
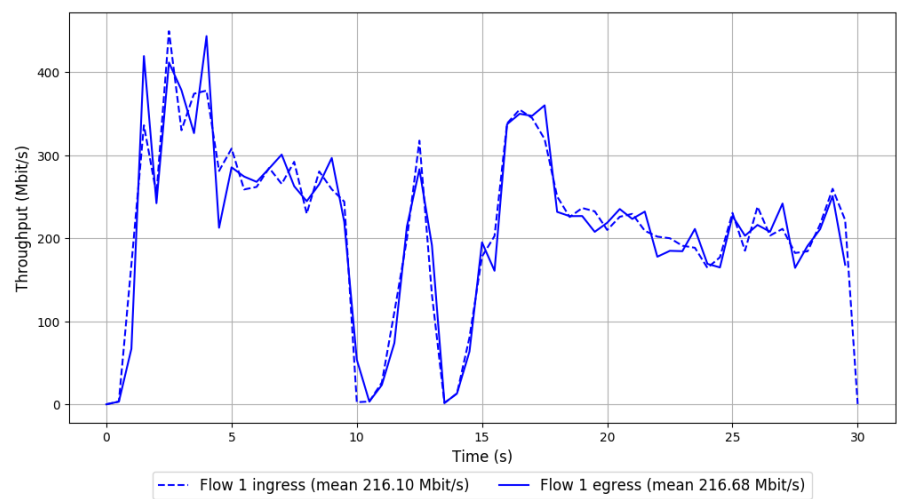
-- Flow 1:

Average throughput: 216.68 Mbit/s

95th percentile per-packet one-way delay: 85.845 ms

Loss rate: 0.82%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-16 00:06:01

End at: 2018-01-16 00:06:31

Below is generated by plot.py at 2018-01-16 03:11:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.38 Mbit/s

95th percentile per-packet one-way delay: 92.041 ms

Loss rate: 1.13%

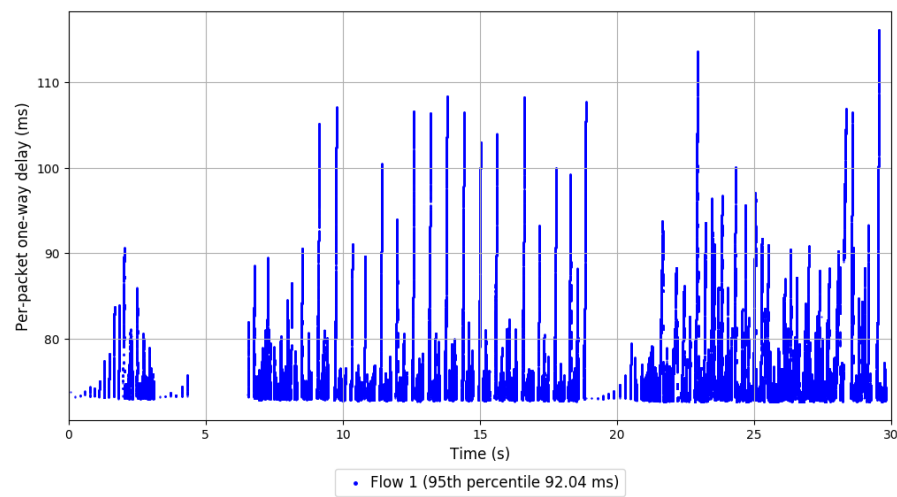
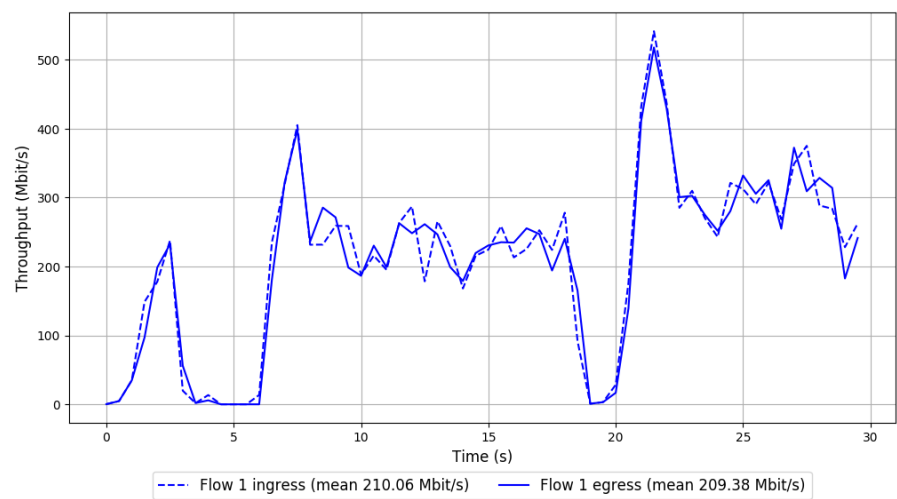
-- Flow 1:

Average throughput: 209.38 Mbit/s

95th percentile per-packet one-way delay: 92.041 ms

Loss rate: 1.13%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-16 00:18:24

End at: 2018-01-16 00:18:54

Below is generated by plot.py at 2018-01-16 03:11:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 139.92 Mbit/s

95th percentile per-packet one-way delay: 135.480 ms

Loss rate: 1.80%

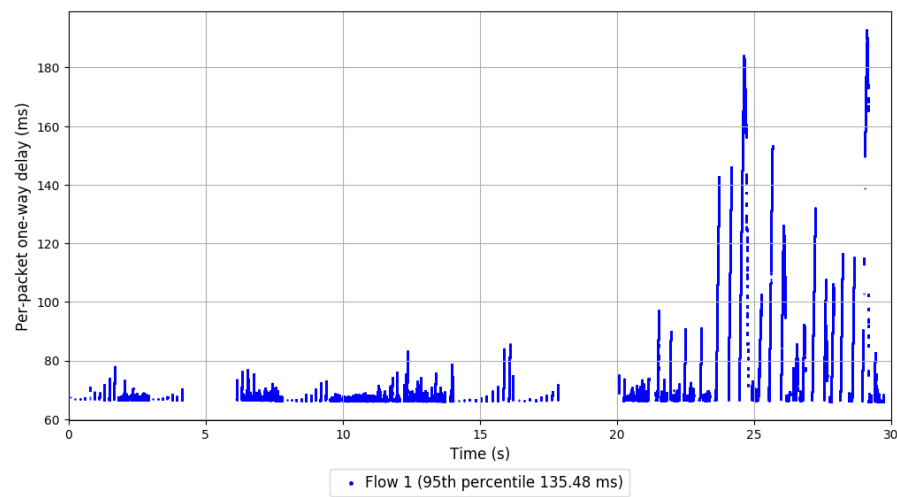
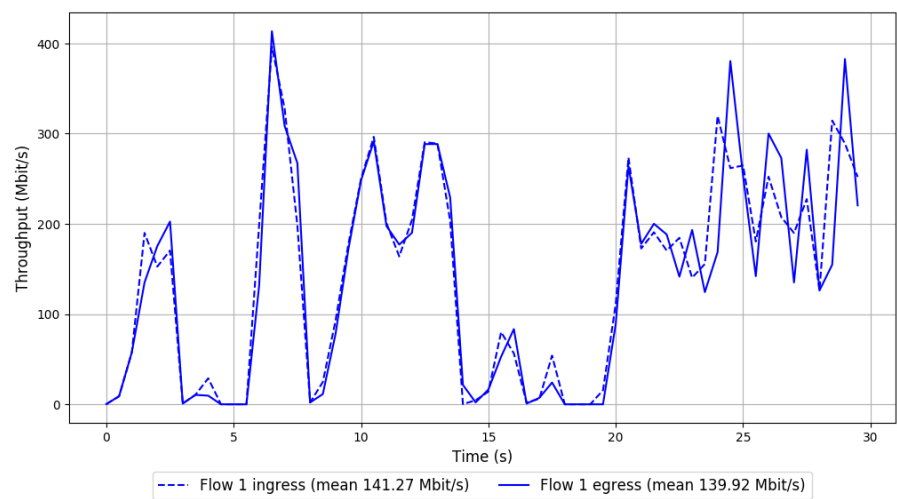
-- Flow 1:

Average throughput: 139.92 Mbit/s

95th percentile per-packet one-way delay: 135.480 ms

Loss rate: 1.80%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-16 00:30:41

End at: 2018-01-16 00:31:11

Below is generated by plot.py at 2018-01-16 03:13:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 252.23 Mbit/s

95th percentile per-packet one-way delay: 86.053 ms

Loss rate: 0.88%

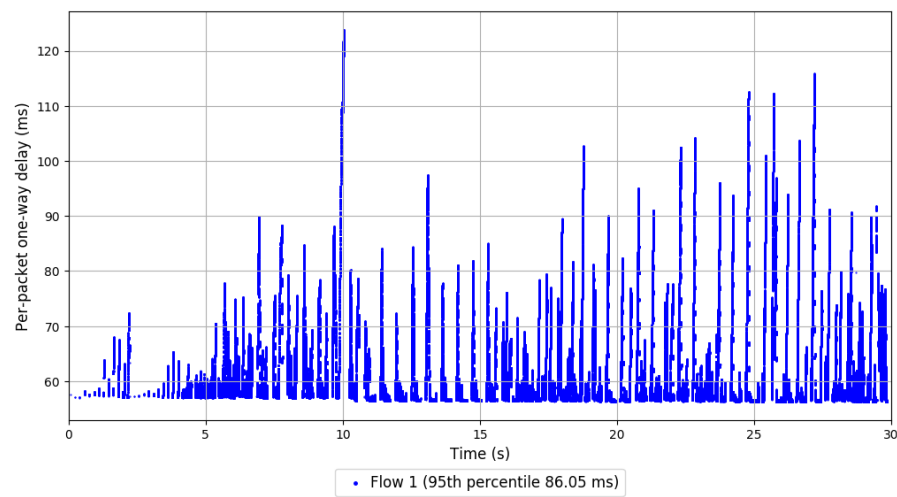
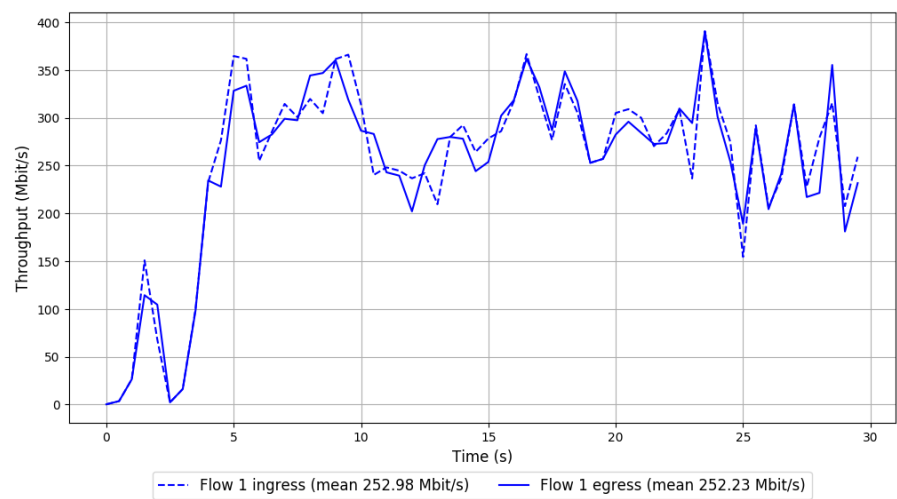
-- Flow 1:

Average throughput: 252.23 Mbit/s

95th percentile per-packet one-way delay: 86.053 ms

Loss rate: 0.88%

Run 10: Report of Verus — Data Link

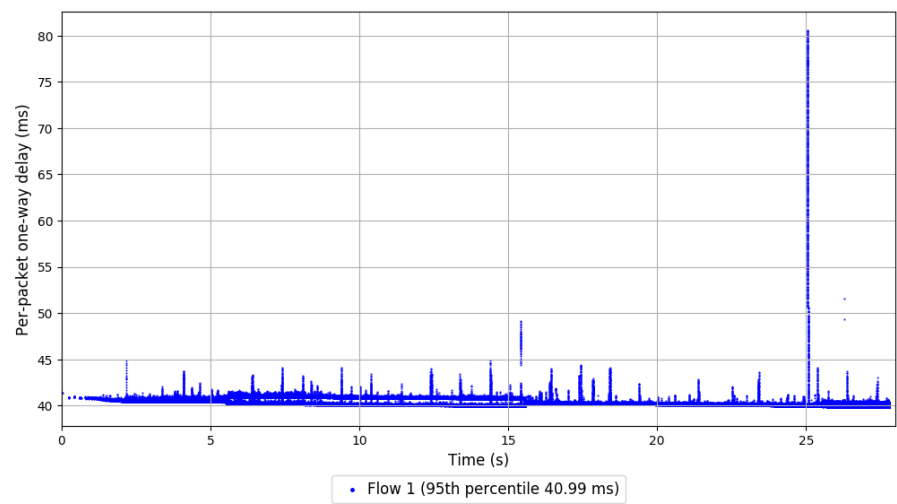
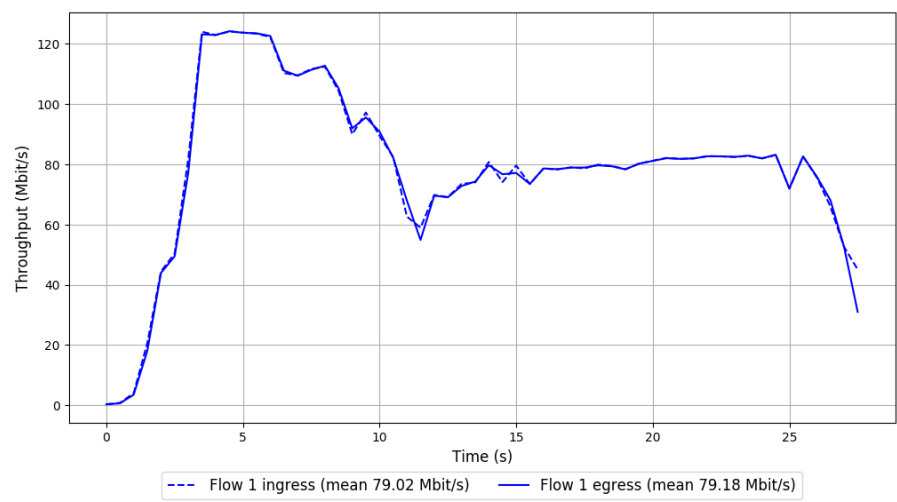


```
Run 1: Statistics of Copa

Start at: 2018-01-15 22:44:34
End at: 2018-01-15 22:45:04

# Below is generated by plot.py at 2018-01-16 03:13:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.18 Mbit/s
95th percentile per-packet one-way delay: 40.990 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 79.18 Mbit/s
95th percentile per-packet one-way delay: 40.990 ms
Loss rate: 0.43%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-15 22:57:02

End at: 2018-01-15 22:57:32

Below is generated by plot.py at 2018-01-16 03:13:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.45 Mbit/s

95th percentile per-packet one-way delay: 36.464 ms

Loss rate: 0.65%

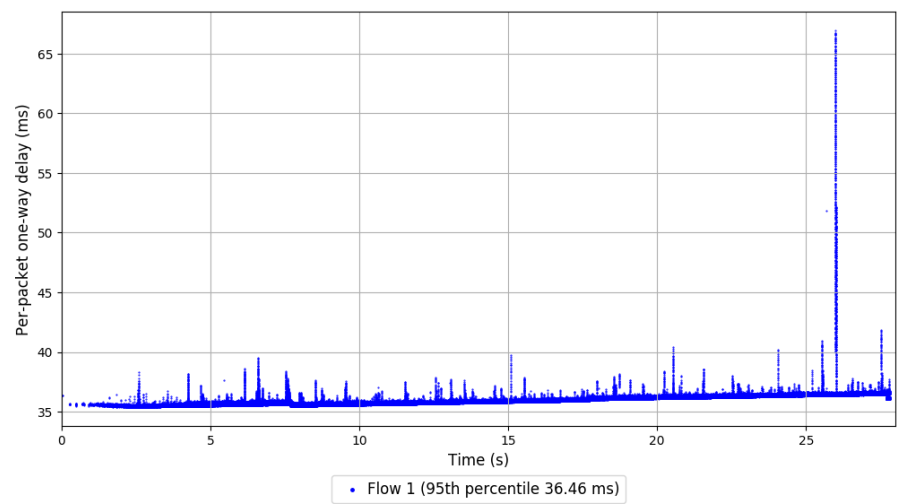
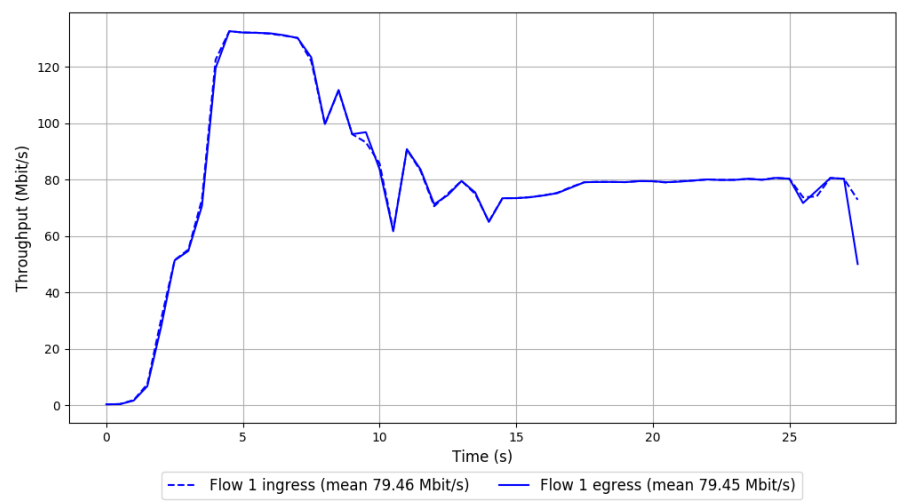
-- Flow 1:

Average throughput: 79.45 Mbit/s

95th percentile per-packet one-way delay: 36.464 ms

Loss rate: 0.65%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-15 23:09:12

End at: 2018-01-15 23:09:42

Below is generated by plot.py at 2018-01-16 03:13:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.91 Mbit/s

95th percentile per-packet one-way delay: 43.537 ms

Loss rate: 1.21%

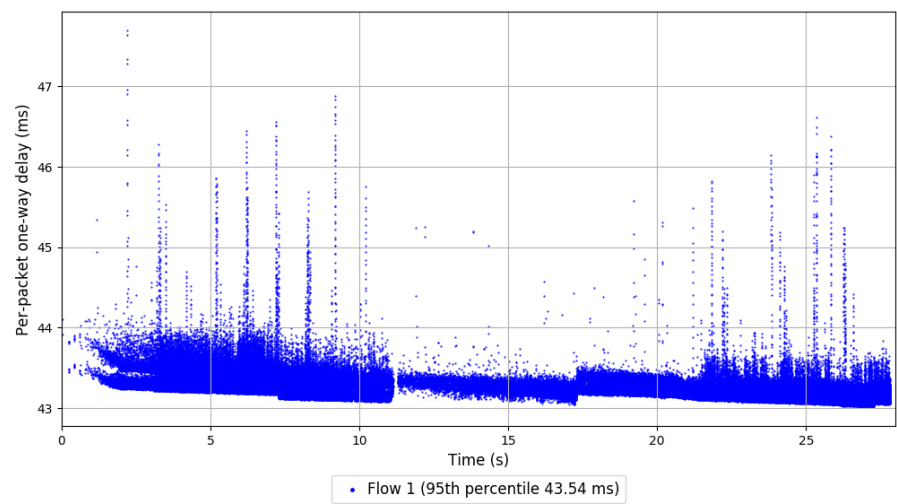
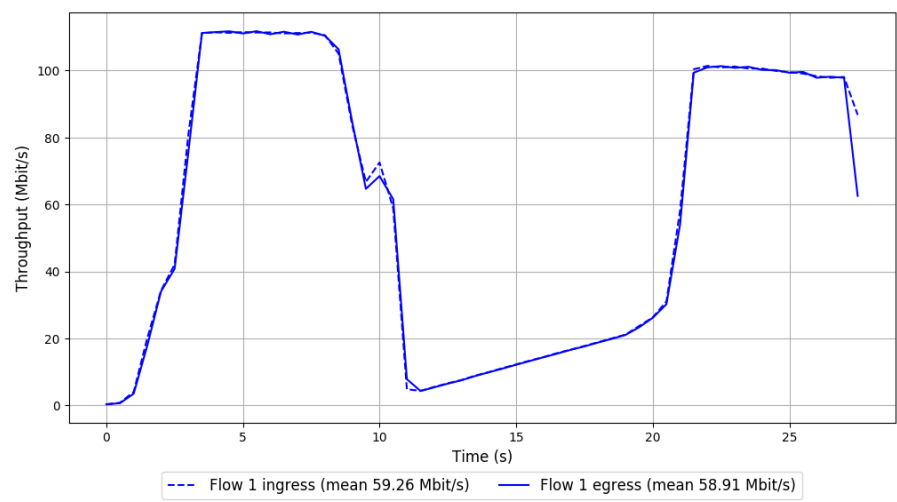
-- Flow 1:

Average throughput: 58.91 Mbit/s

95th percentile per-packet one-way delay: 43.537 ms

Loss rate: 1.21%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-15 23:20:59

End at: 2018-01-15 23:21:29

Below is generated by plot.py at 2018-01-16 03:13:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.88 Mbit/s

95th percentile per-packet one-way delay: 49.052 ms

Loss rate: 0.66%

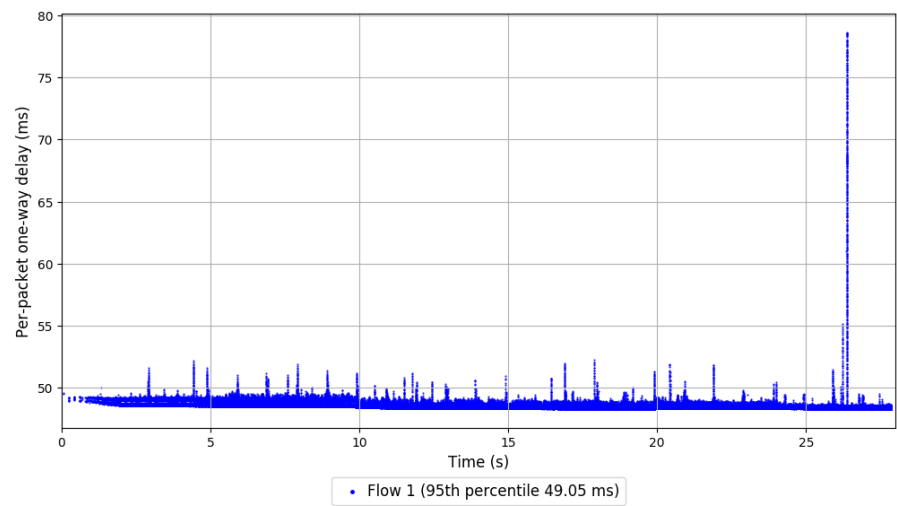
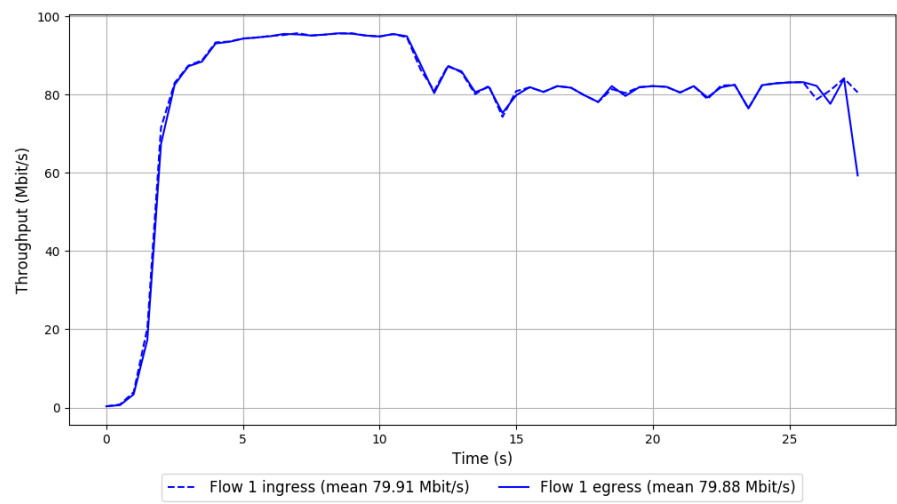
-- Flow 1:

Average throughput: 79.88 Mbit/s

95th percentile per-packet one-way delay: 49.052 ms

Loss rate: 0.66%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-15 23:32:59

End at: 2018-01-15 23:33:29

Below is generated by plot.py at 2018-01-16 03:13:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.33 Mbit/s

95th percentile per-packet one-way delay: 51.470 ms

Loss rate: 1.25%

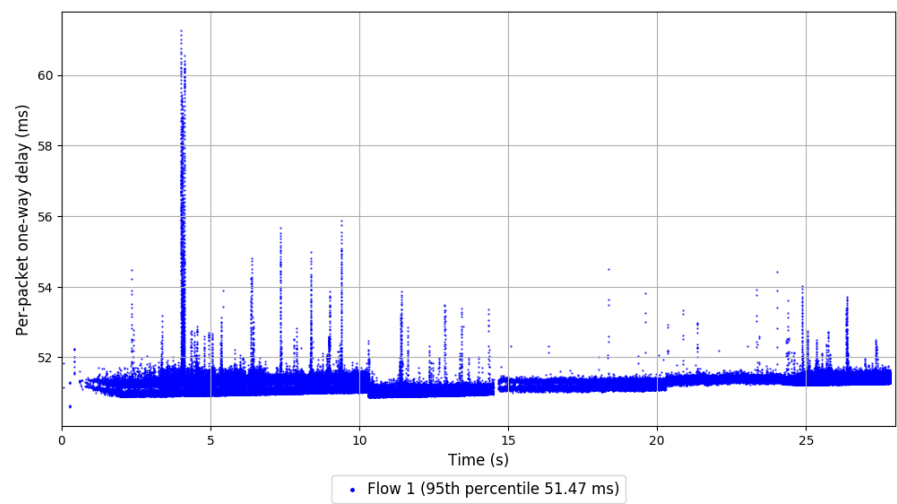
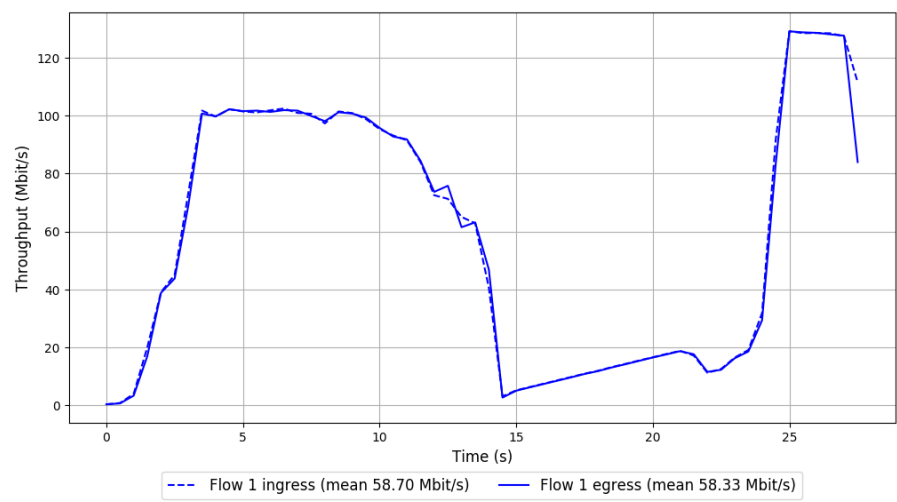
-- Flow 1:

Average throughput: 58.33 Mbit/s

95th percentile per-packet one-way delay: 51.470 ms

Loss rate: 1.25%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-15 23:45:23

End at: 2018-01-15 23:45:53

Below is generated by plot.py at 2018-01-16 03:13:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.26 Mbit/s

95th percentile per-packet one-way delay: 55.862 ms

Loss rate: 0.76%

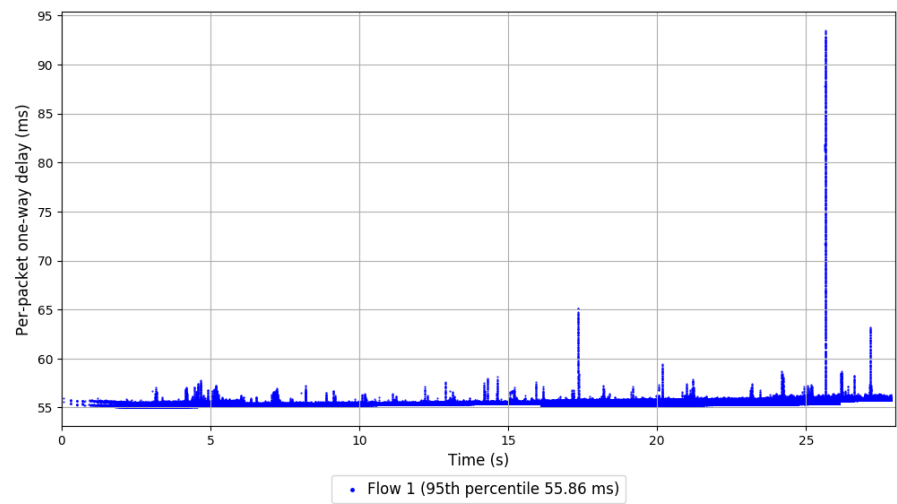
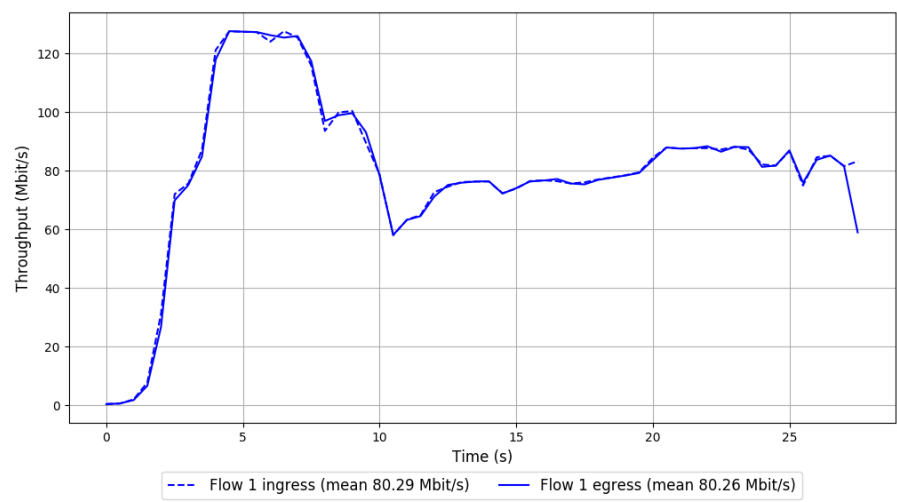
-- Flow 1:

Average throughput: 80.26 Mbit/s

95th percentile per-packet one-way delay: 55.862 ms

Loss rate: 0.76%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-15 23:57:40

End at: 2018-01-15 23:58:10

Below is generated by plot.py at 2018-01-16 03:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.08 Mbit/s

95th percentile per-packet one-way delay: 70.632 ms

Loss rate: 0.62%

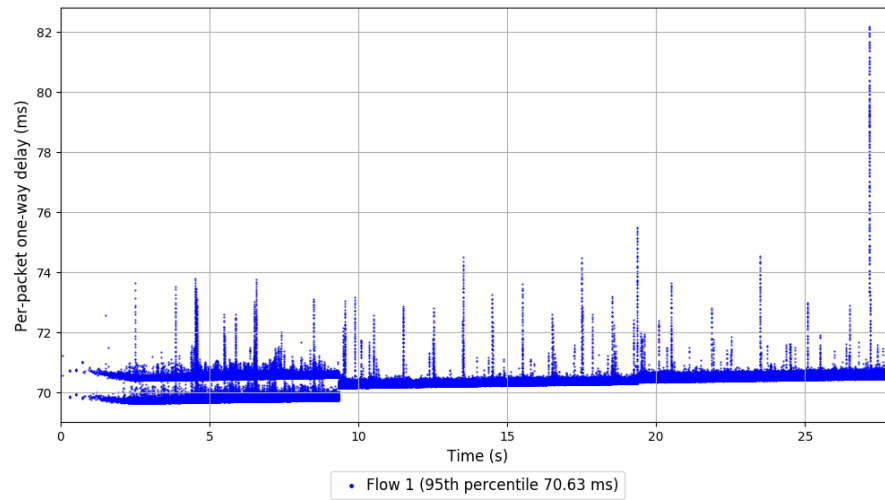
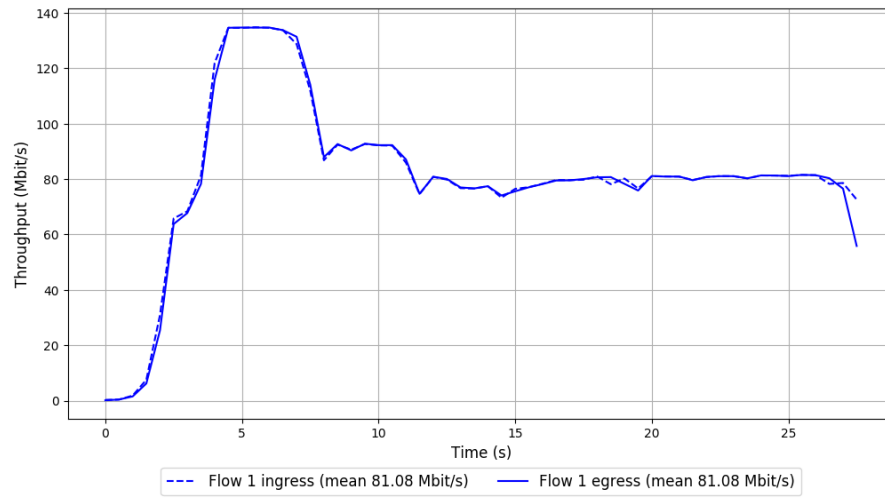
-- Flow 1:

Average throughput: 81.08 Mbit/s

95th percentile per-packet one-way delay: 70.632 ms

Loss rate: 0.62%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-16 00:09:59

End at: 2018-01-16 00:10:29

Below is generated by plot.py at 2018-01-16 03:13:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.96 Mbit/s

95th percentile per-packet one-way delay: 71.517 ms

Loss rate: 0.60%

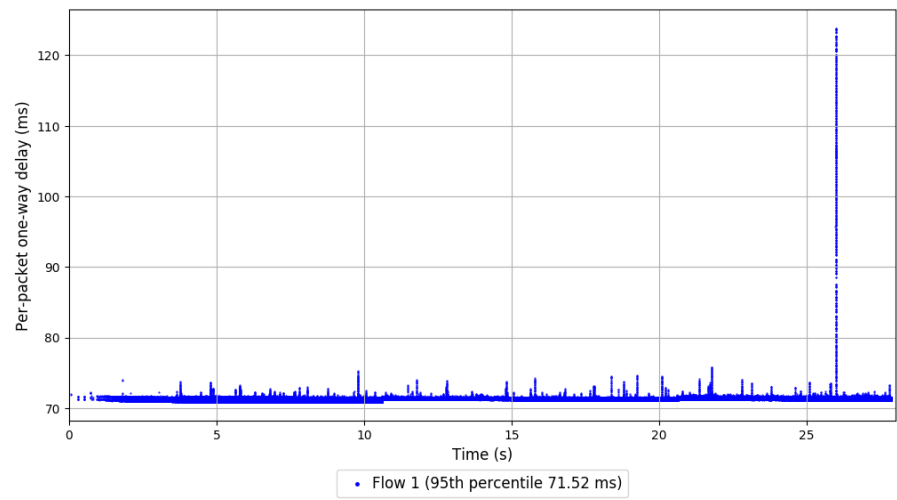
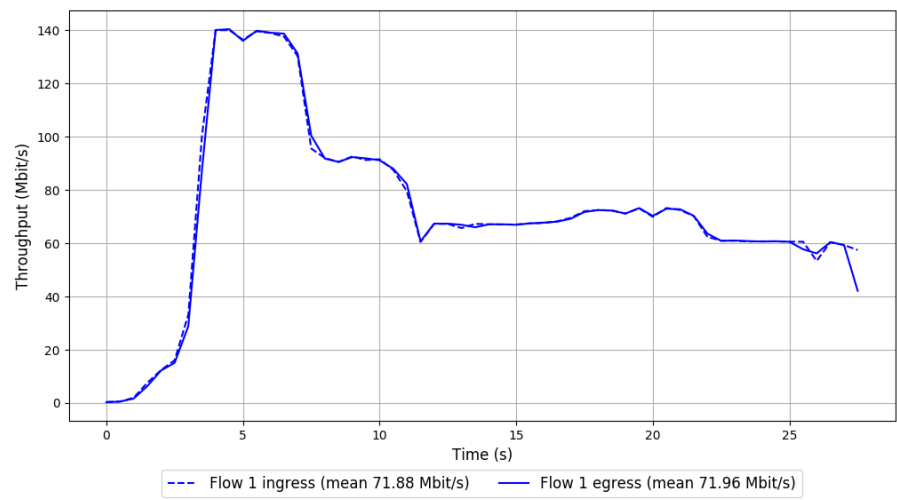
-- Flow 1:

Average throughput: 71.96 Mbit/s

95th percentile per-packet one-way delay: 71.517 ms

Loss rate: 0.60%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-16 00:22:18

End at: 2018-01-16 00:22:48

Below is generated by plot.py at 2018-01-16 03:14:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.42 Mbit/s

95th percentile per-packet one-way delay: 63.660 ms

Loss rate: 0.06%

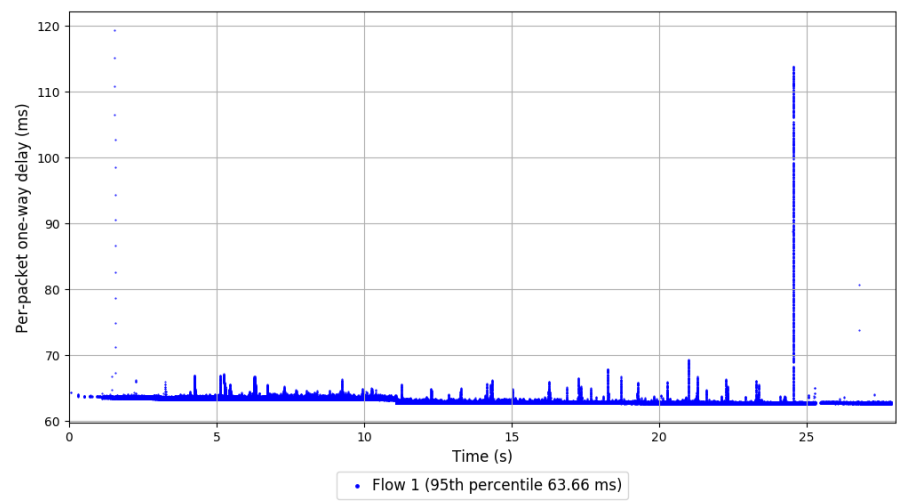
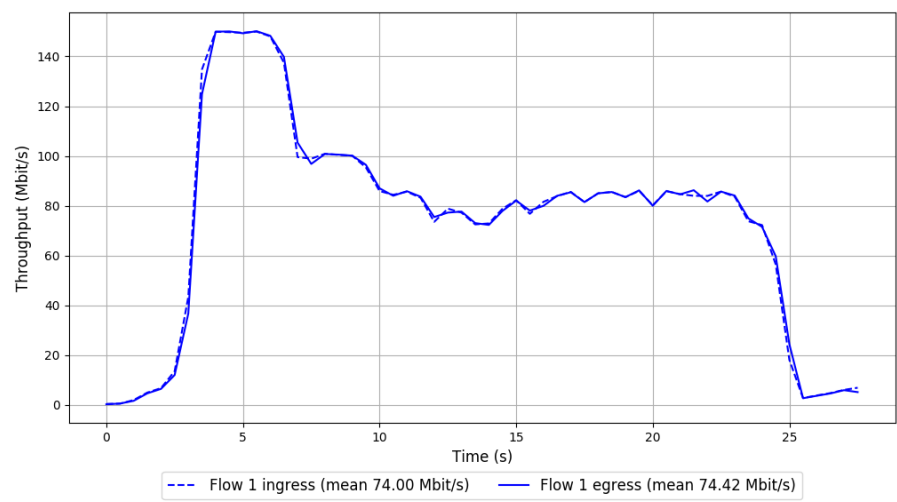
-- Flow 1:

Average throughput: 74.42 Mbit/s

95th percentile per-packet one-way delay: 63.660 ms

Loss rate: 0.06%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-16 00:34:44

End at: 2018-01-16 00:35:14

Below is generated by plot.py at 2018-01-16 03:14:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.81 Mbit/s

95th percentile per-packet one-way delay: 58.401 ms

Loss rate: 0.29%

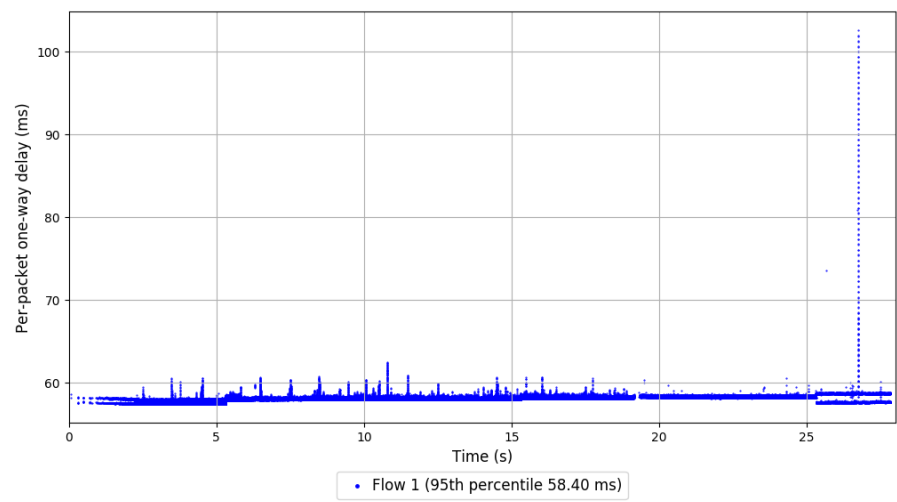
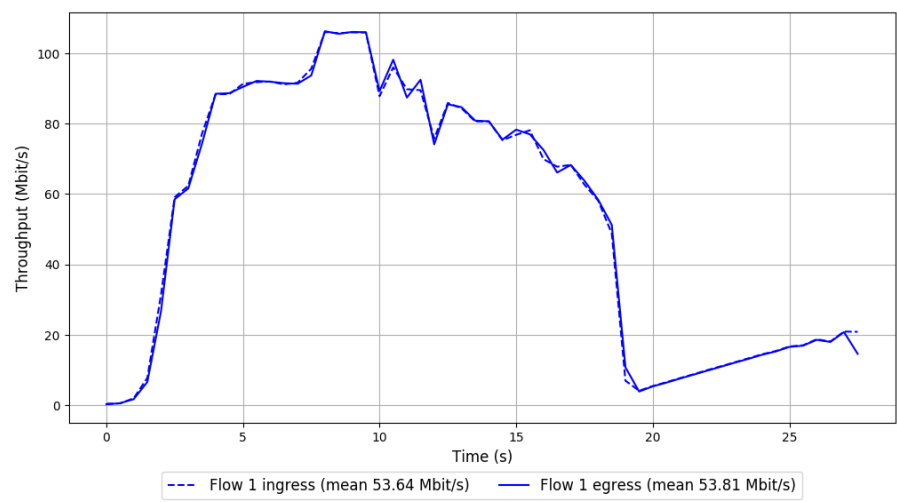
-- Flow 1:

Average throughput: 53.81 Mbit/s

95th percentile per-packet one-way delay: 58.401 ms

Loss rate: 0.29%

Run 10: Report of Copa — Data Link

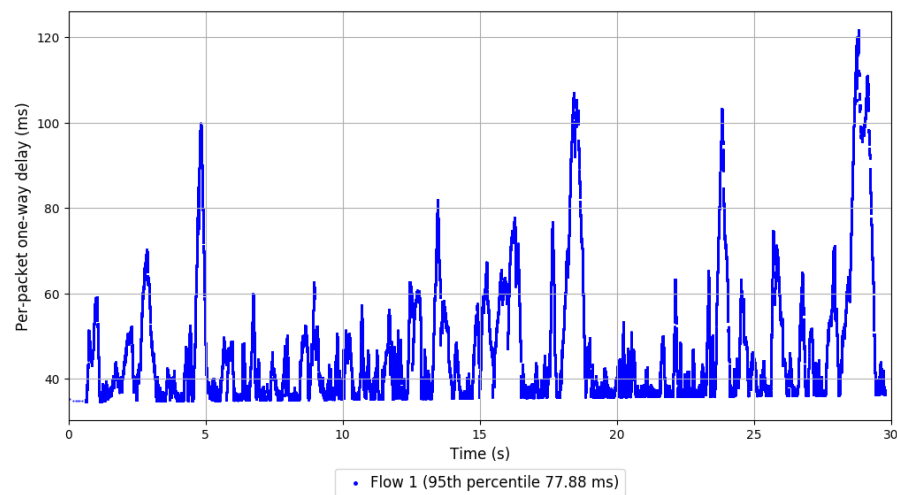
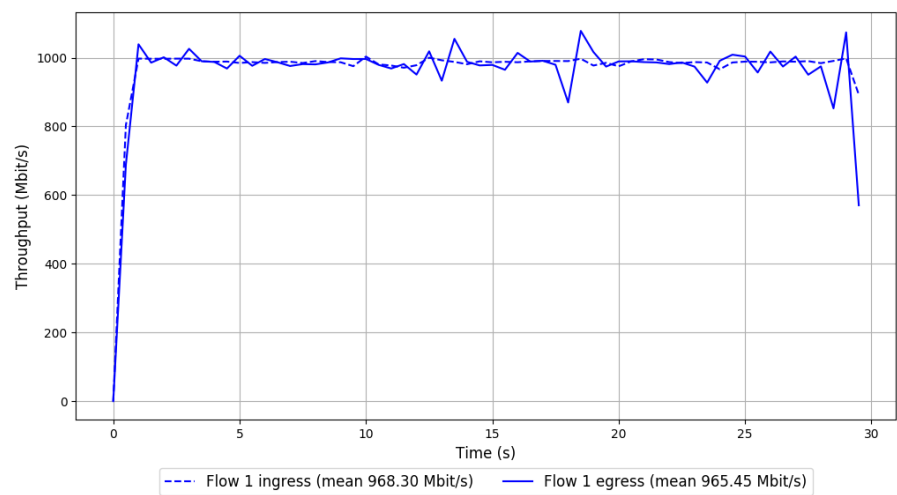


```
Run 1: Statistics of FillP

Start at: 2018-01-15 22:38:22
End at: 2018-01-15 22:38:52

# Below is generated by plot.py at 2018-01-16 03:29:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 965.45 Mbit/s
95th percentile per-packet one-way delay: 77.879 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 965.45 Mbit/s
95th percentile per-packet one-way delay: 77.879 ms
Loss rate: 0.95%
```

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-15 22:50:51

End at: 2018-01-15 22:51:21

Below is generated by plot.py at 2018-01-16 03:29:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 963.89 Mbit/s

95th percentile per-packet one-way delay: 91.486 ms

Loss rate: 0.68%

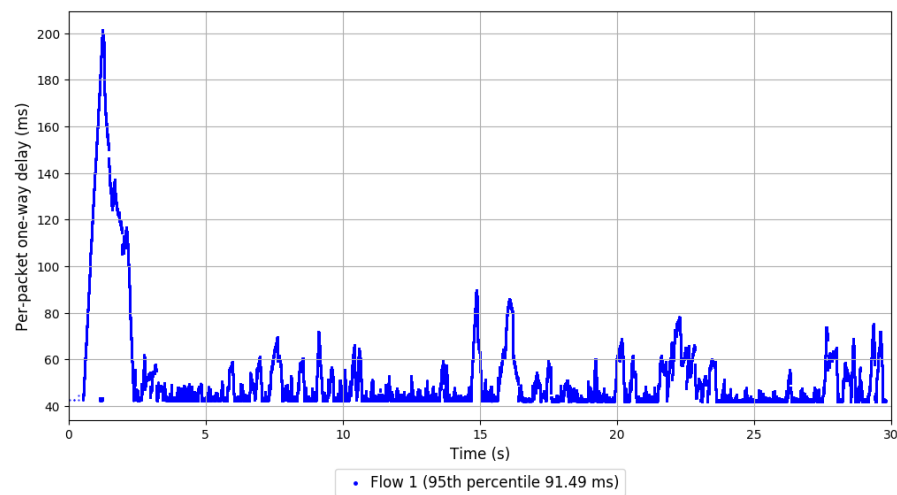
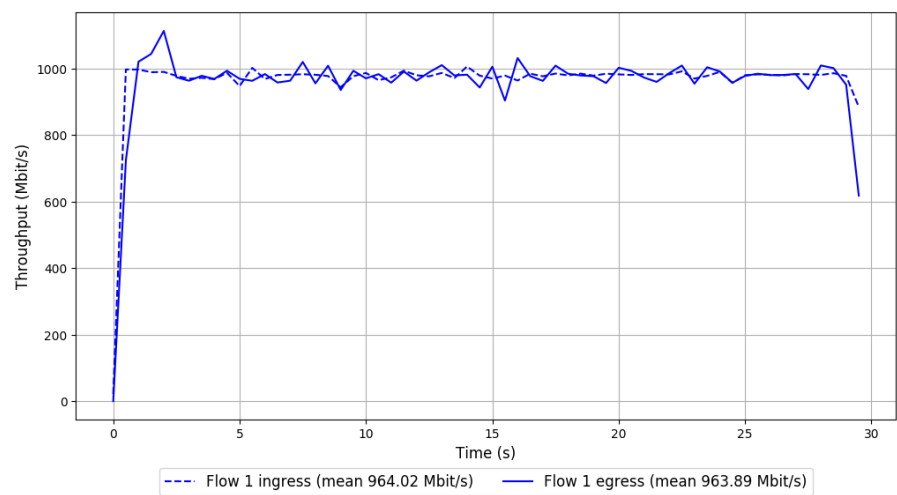
-- Flow 1:

Average throughput: 963.89 Mbit/s

95th percentile per-packet one-way delay: 91.486 ms

Loss rate: 0.68%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-15 23:03:03

End at: 2018-01-15 23:03:33

Below is generated by plot.py at 2018-01-16 03:30:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 964.71 Mbit/s

95th percentile per-packet one-way delay: 104.965 ms

Loss rate: 1.11%

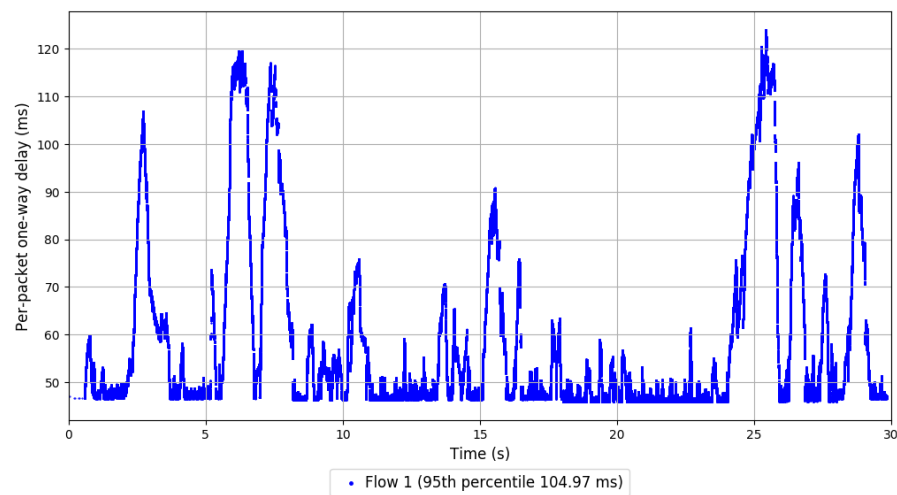
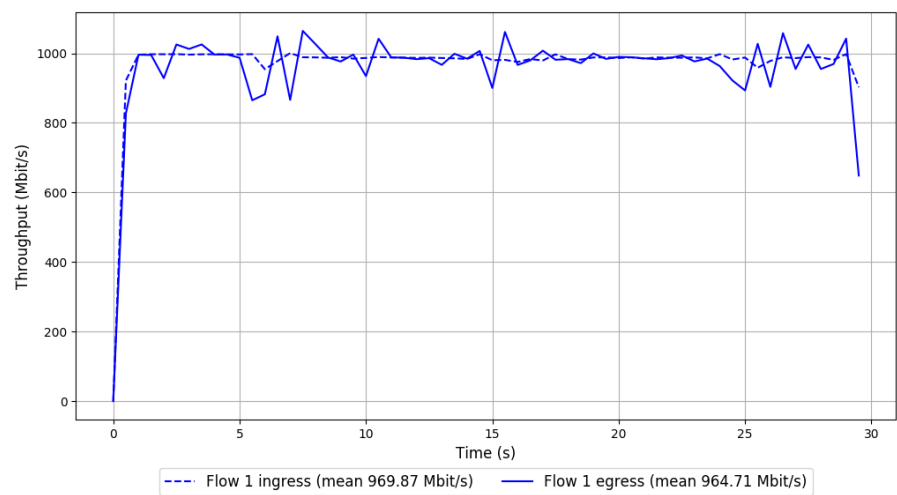
-- Flow 1:

Average throughput: 964.71 Mbit/s

95th percentile per-packet one-way delay: 104.965 ms

Loss rate: 1.11%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-15 23:15:22

End at: 2018-01-15 23:15:52

Below is generated by plot.py at 2018-01-16 03:30:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 968.46 Mbit/s

95th percentile per-packet one-way delay: 87.184 ms

Loss rate: 0.67%

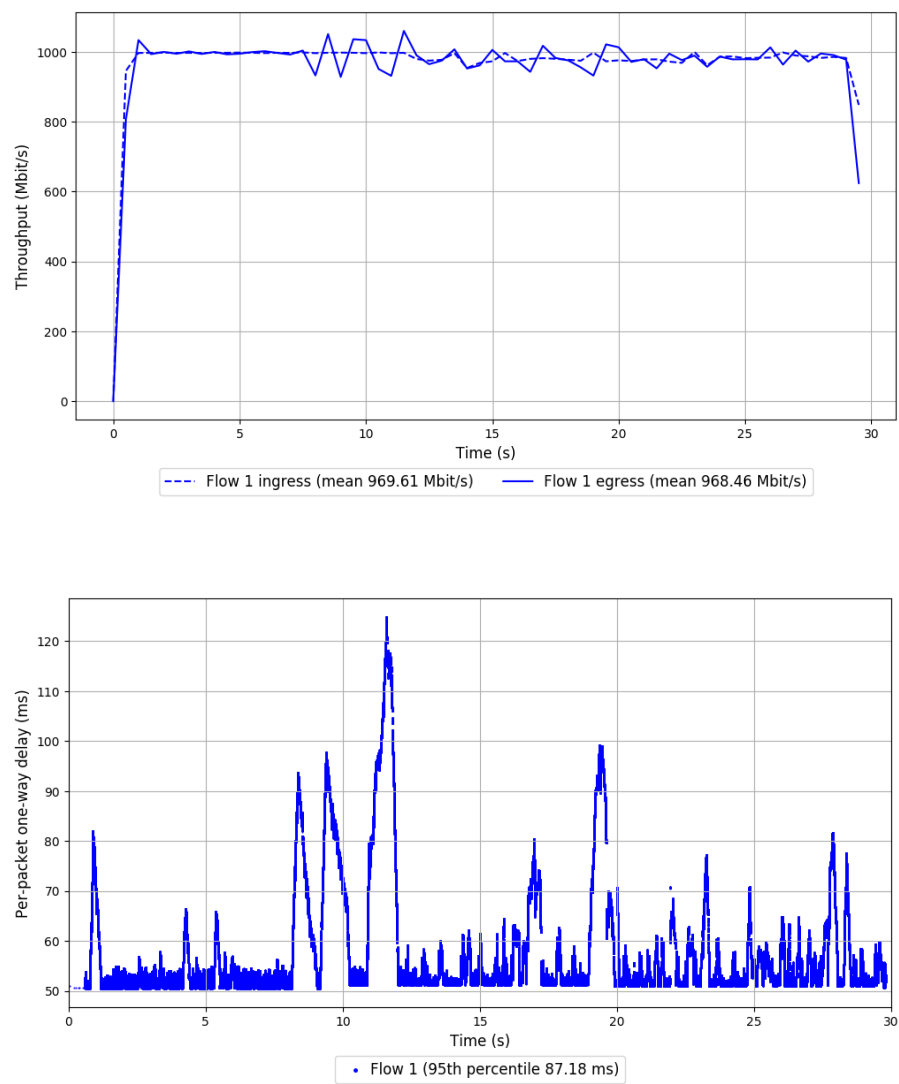
-- Flow 1:

Average throughput: 968.46 Mbit/s

95th percentile per-packet one-way delay: 87.184 ms

Loss rate: 0.67%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-15 23:27:14

End at: 2018-01-15 23:27:44

Below is generated by plot.py at 2018-01-16 03:30:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 968.28 Mbit/s

95th percentile per-packet one-way delay: 62.738 ms

Loss rate: 0.78%

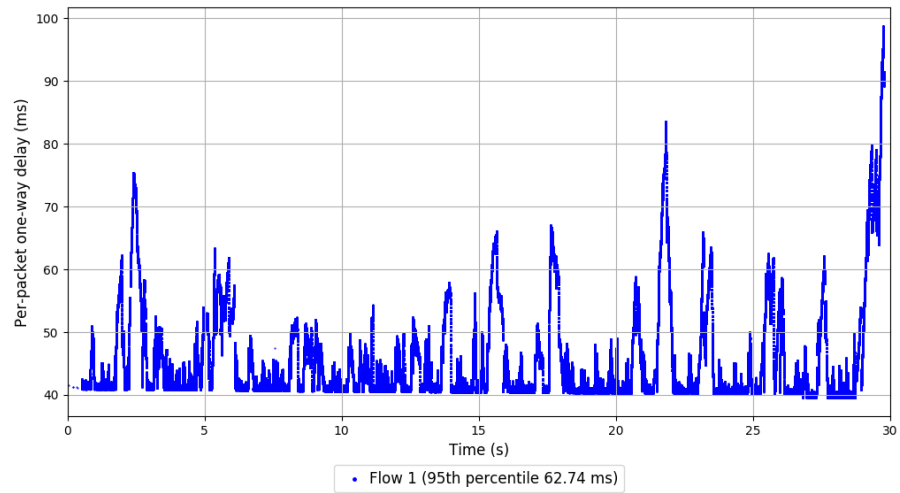
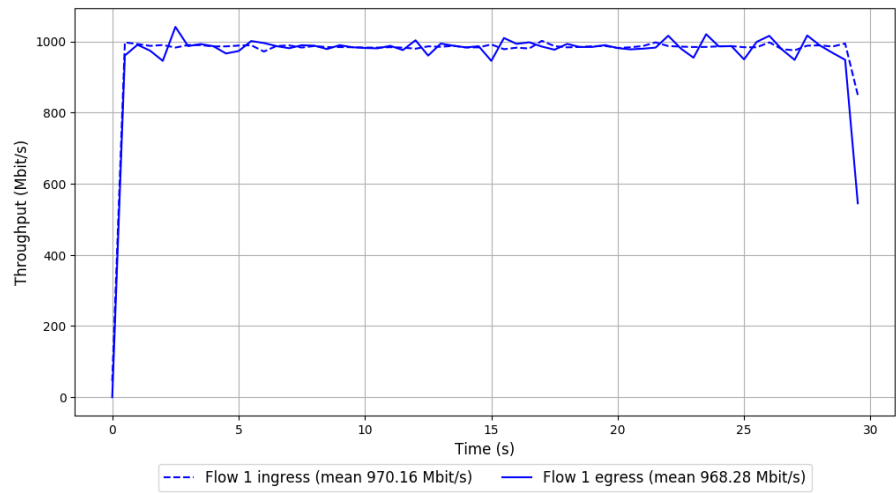
-- Flow 1:

Average throughput: 968.28 Mbit/s

95th percentile per-packet one-way delay: 62.738 ms

Loss rate: 0.78%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-15 23:39:16

End at: 2018-01-15 23:39:46

Below is generated by plot.py at 2018-01-16 03:30:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 951.91 Mbit/s

95th percentile per-packet one-way delay: 114.494 ms

Loss rate: 1.32%

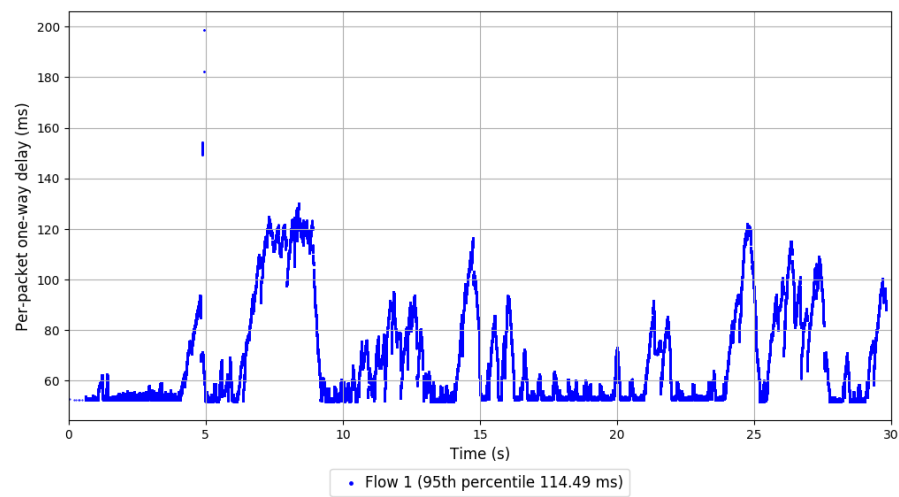
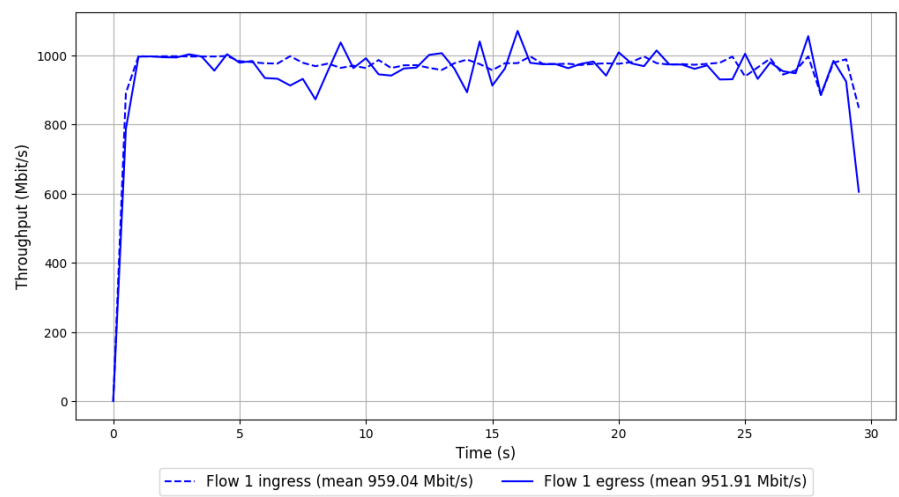
-- Flow 1:

Average throughput: 951.91 Mbit/s

95th percentile per-packet one-way delay: 114.494 ms

Loss rate: 1.32%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-15 23:51:32

End at: 2018-01-15 23:52:02

Below is generated by plot.py at 2018-01-16 03:30:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 948.93 Mbit/s

95th percentile per-packet one-way delay: 89.927 ms

Loss rate: 0.86%

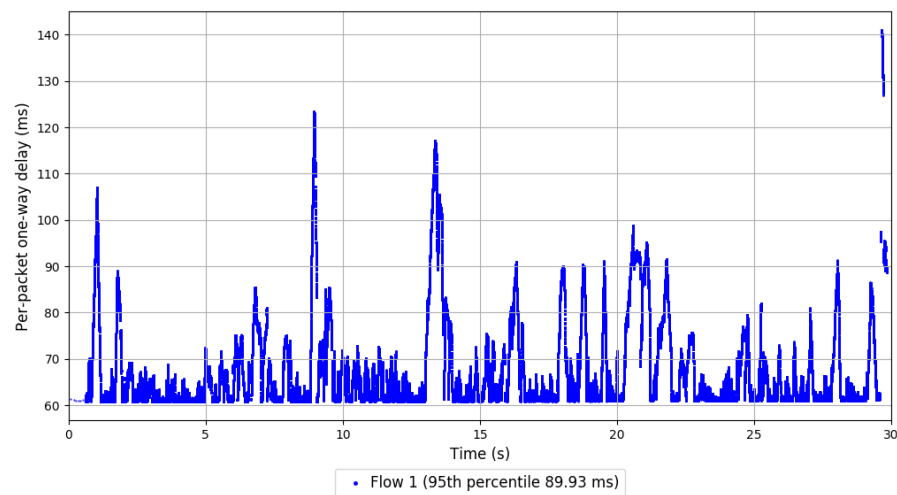
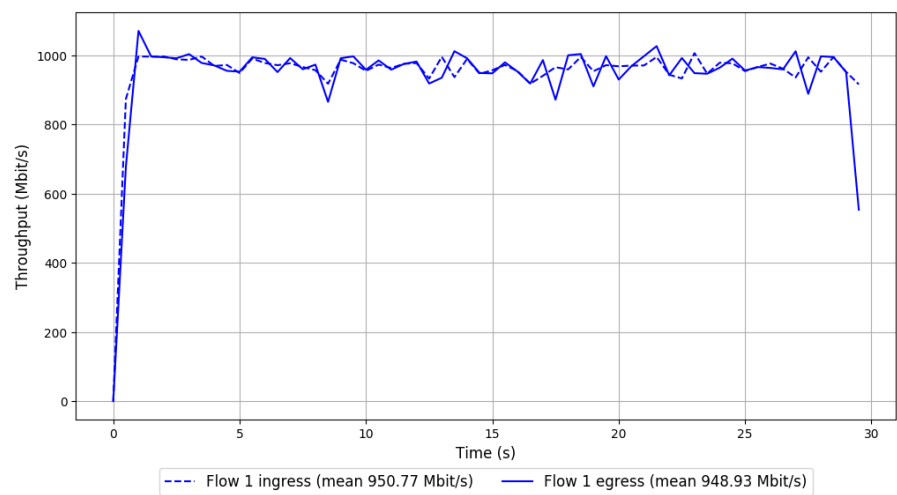
-- Flow 1:

Average throughput: 948.93 Mbit/s

95th percentile per-packet one-way delay: 89.927 ms

Loss rate: 0.86%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-16 00:03:54

End at: 2018-01-16 00:04:24

Below is generated by plot.py at 2018-01-16 03:31:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 970.41 Mbit/s

95th percentile per-packet one-way delay: 129.216 ms

Loss rate: 0.95%

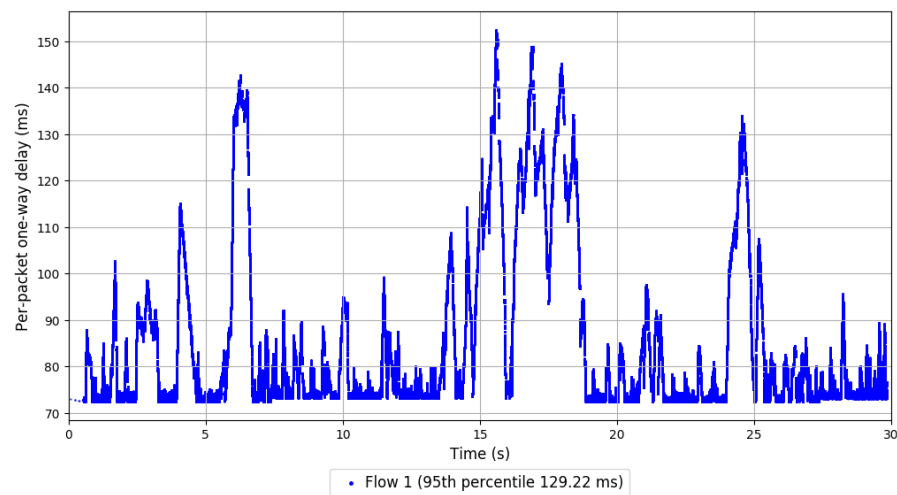
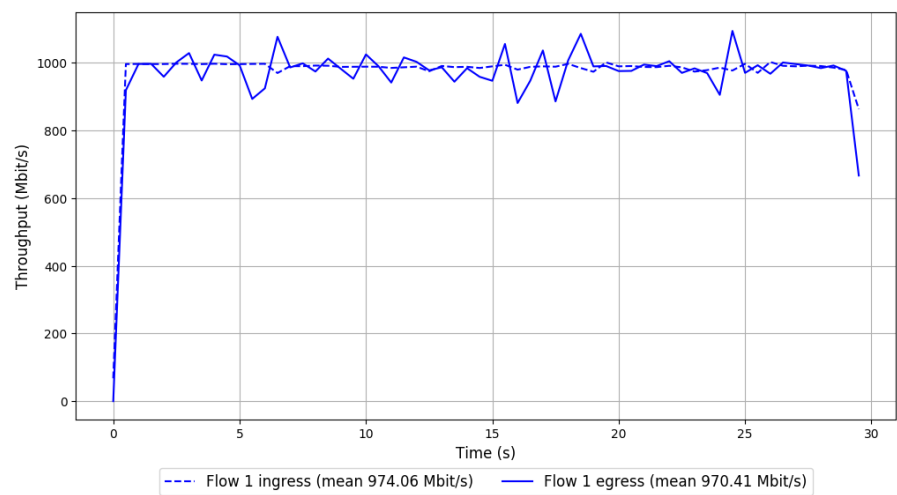
-- Flow 1:

Average throughput: 970.41 Mbit/s

95th percentile per-packet one-way delay: 129.216 ms

Loss rate: 0.95%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-16 00:16:14

End at: 2018-01-16 00:16:44

Below is generated by plot.py at 2018-01-16 03:36:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 966.16 Mbit/s

95th percentile per-packet one-way delay: 117.195 ms

Loss rate: 0.78%

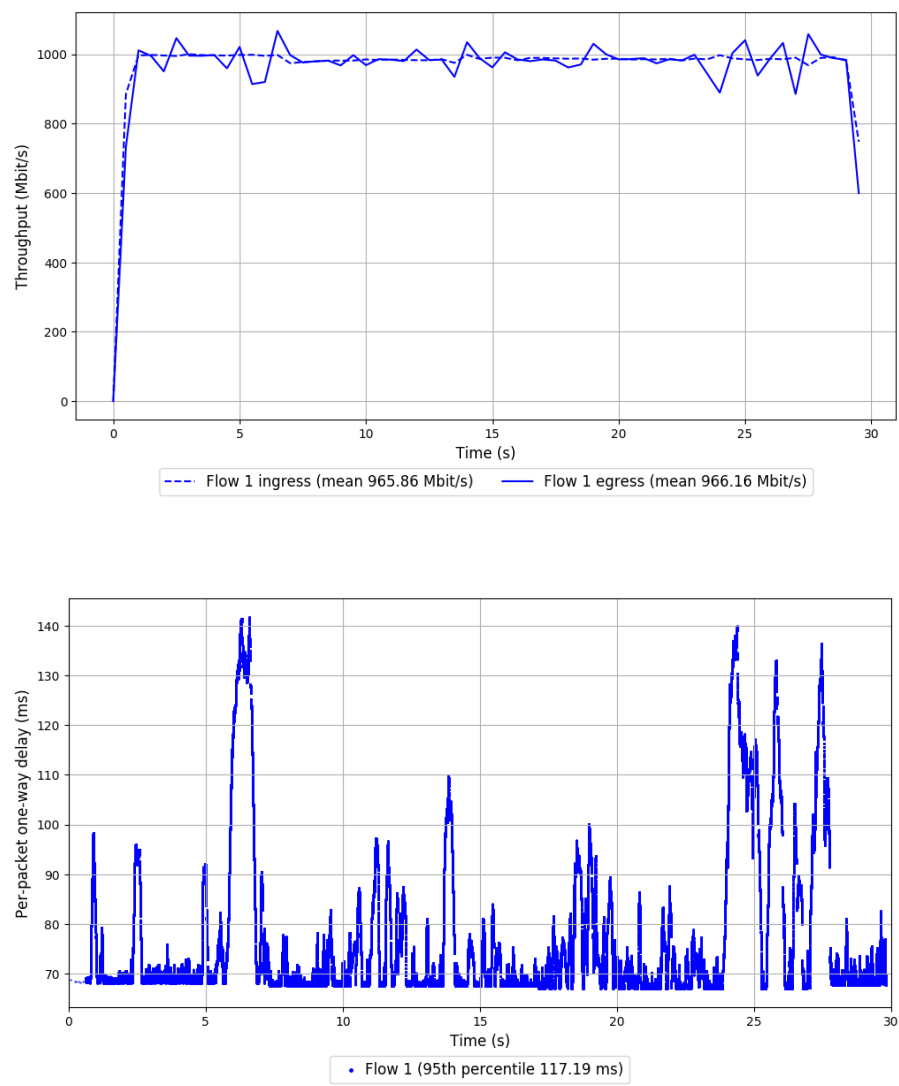
-- Flow 1:

Average throughput: 966.16 Mbit/s

95th percentile per-packet one-way delay: 117.195 ms

Loss rate: 0.78%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-16 00:28:33

End at: 2018-01-16 00:29:03

Below is generated by plot.py at 2018-01-16 03:36:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 960.17 Mbit/s

95th percentile per-packet one-way delay: 90.397 ms

Loss rate: 1.33%

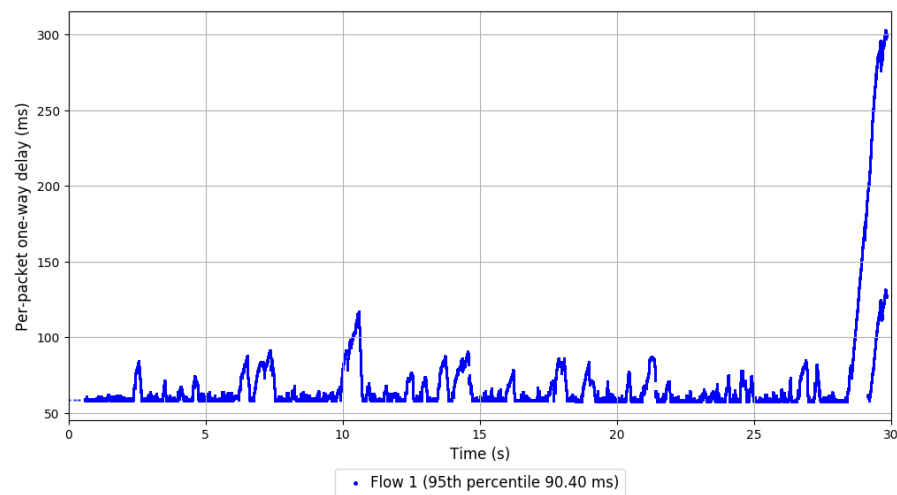
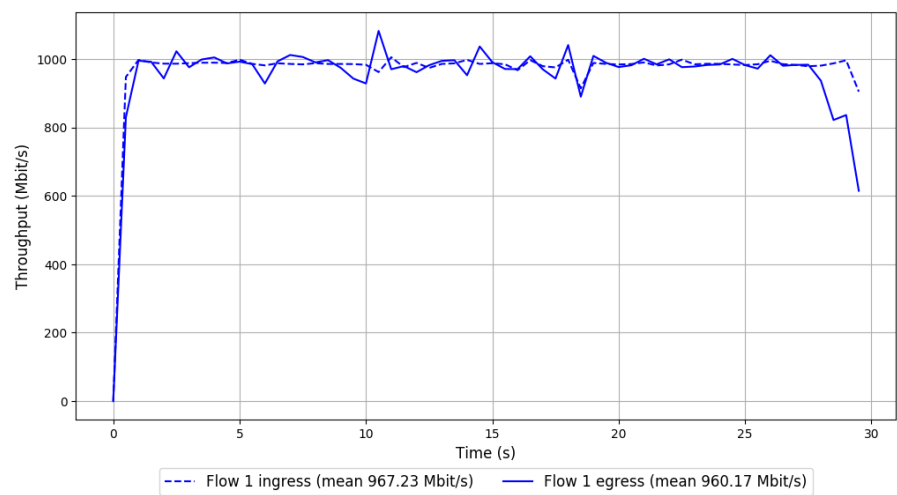
-- Flow 1:

Average throughput: 960.17 Mbit/s

95th percentile per-packet one-way delay: 90.397 ms

Loss rate: 1.33%

Run 10: Report of FillP — Data Link

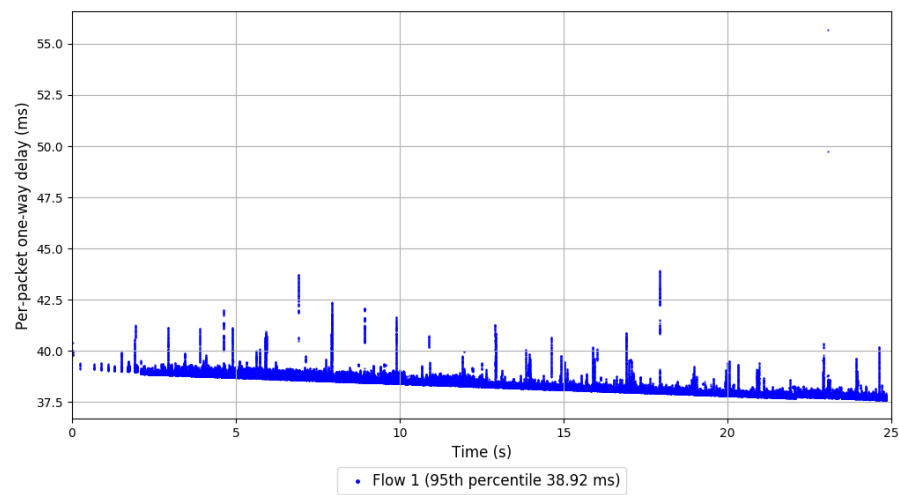
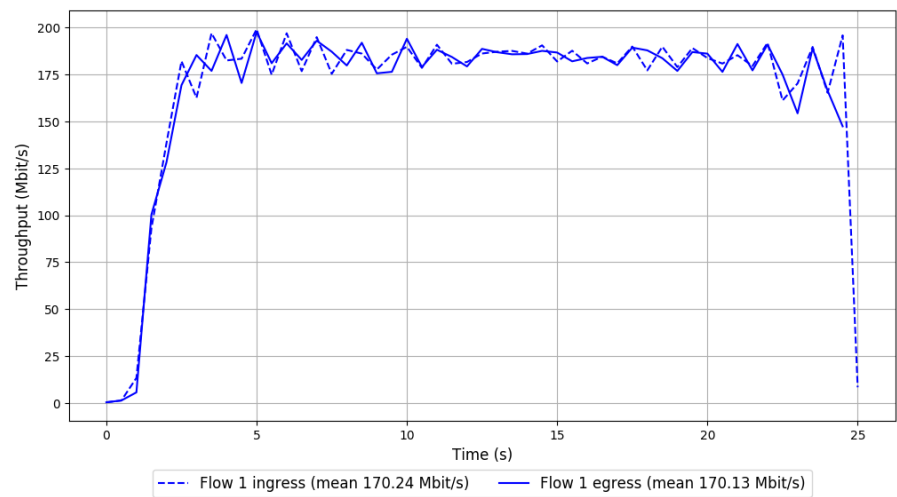


```
Run 1: Statistics of Indigo

Start at: 2018-01-15 22:36:44
End at: 2018-01-15 22:37:14

# Below is generated by plot.py at 2018-01-16 03:36:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 170.13 Mbit/s
95th percentile per-packet one-way delay: 38.921 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 170.13 Mbit/s
95th percentile per-packet one-way delay: 38.921 ms
Loss rate: 0.88%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-01-15 22:49:15

End at: 2018-01-15 22:49:45

Below is generated by plot.py at 2018-01-16 03:36:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.57 Mbit/s

95th percentile per-packet one-way delay: 42.951 ms

Loss rate: 0.62%

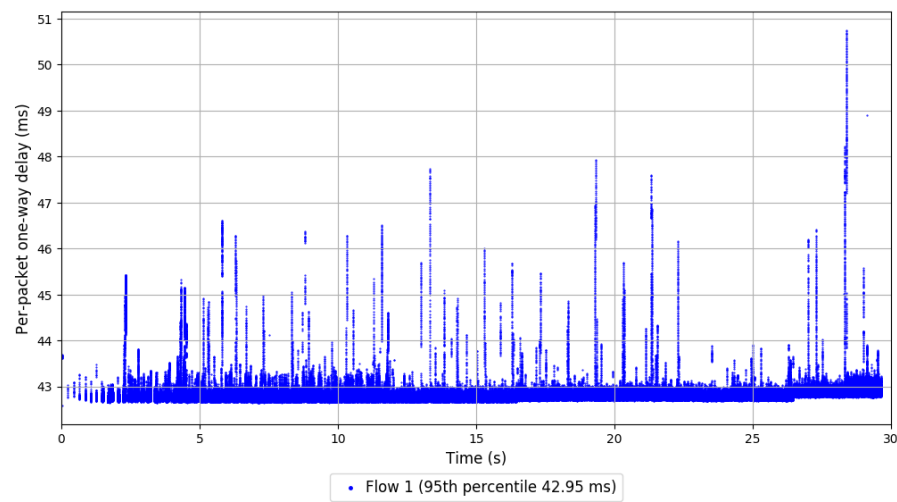
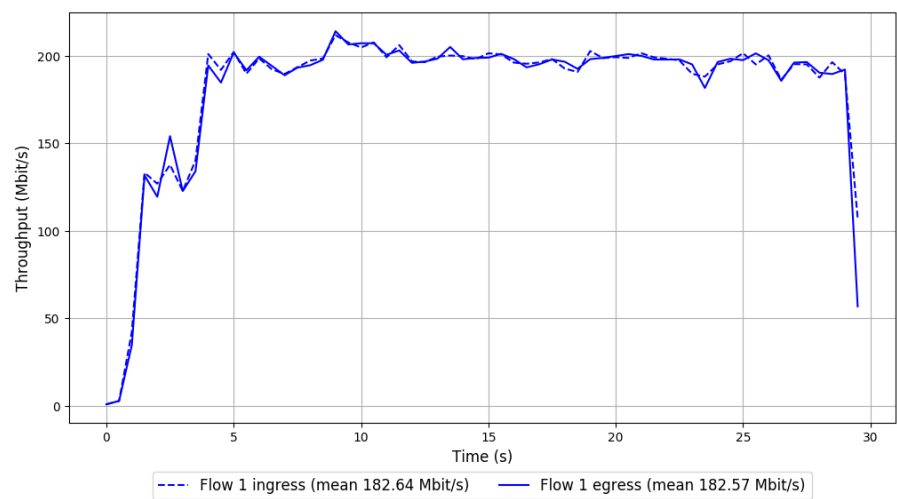
-- Flow 1:

Average throughput: 182.57 Mbit/s

95th percentile per-packet one-way delay: 42.951 ms

Loss rate: 0.62%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-15 23:01:29

End at: 2018-01-15 23:01:59

Below is generated by plot.py at 2018-01-16 03:36:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.23 Mbit/s

95th percentile per-packet one-way delay: 45.232 ms

Loss rate: 0.99%

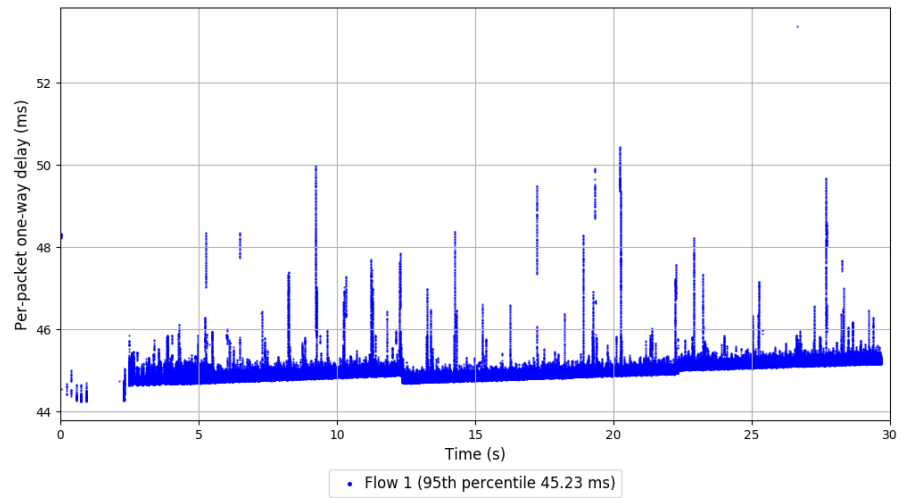
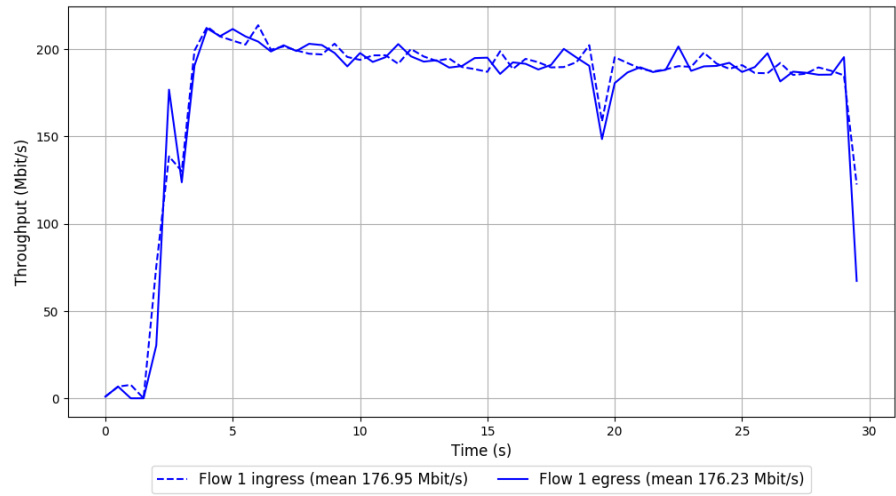
-- Flow 1:

Average throughput: 176.23 Mbit/s

95th percentile per-packet one-way delay: 45.232 ms

Loss rate: 0.99%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-15 23:13:50

End at: 2018-01-15 23:14:20

Below is generated by plot.py at 2018-01-16 03:36:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.16 Mbit/s

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

Loss rate: 0.49%

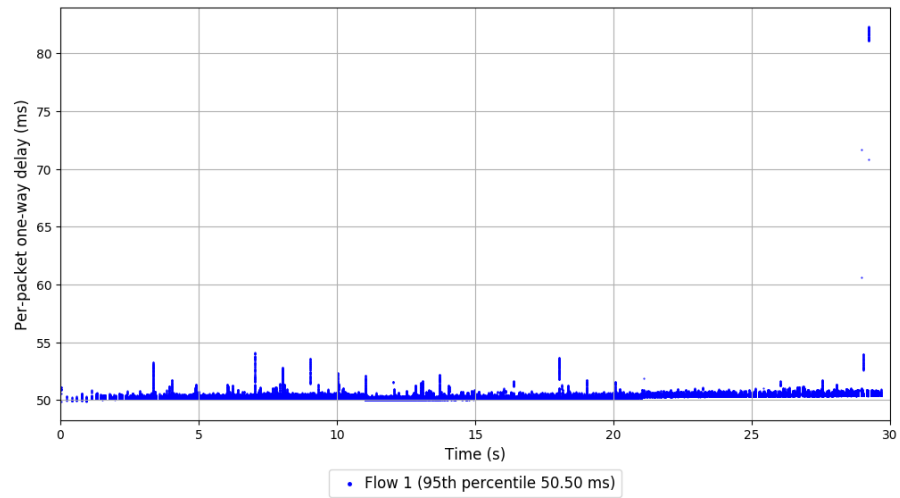
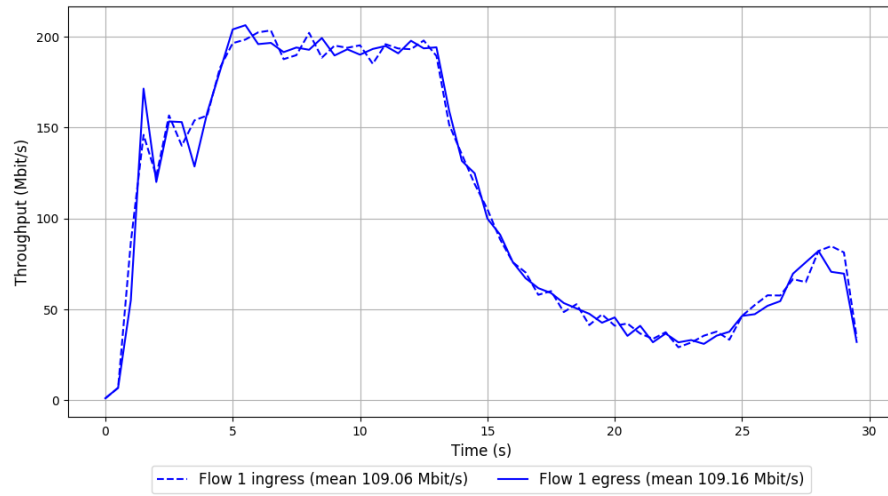
-- Flow 1:

Average throughput: 109.16 Mbit/s

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

Loss rate: 0.49%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-15 23:25:39

End at: 2018-01-15 23:26:09

Below is generated by plot.py at 2018-01-16 03:36:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.99 Mbit/s

95th percentile per-packet one-way delay: 43.426 ms

Loss rate: 0.64%

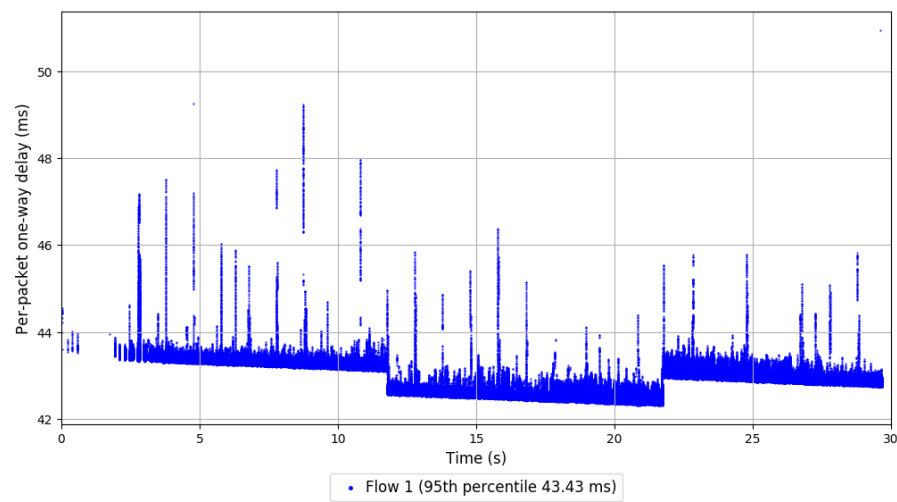
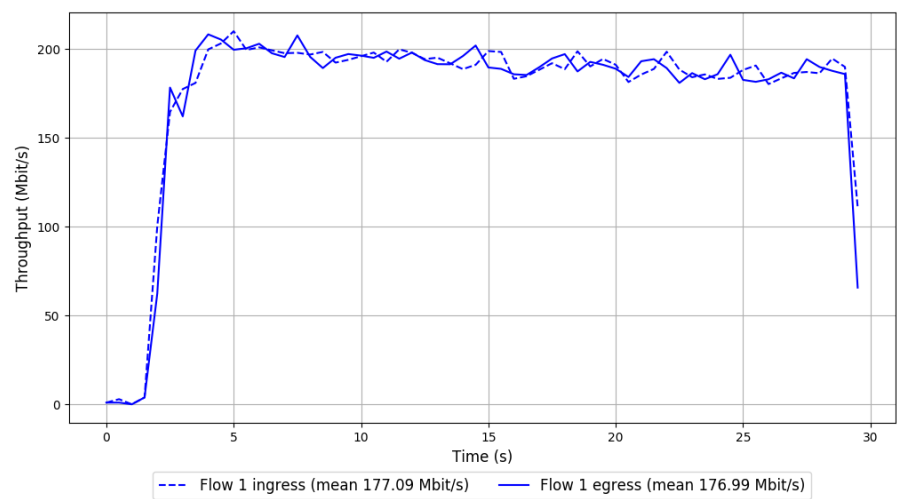
-- Flow 1:

Average throughput: 176.99 Mbit/s

95th percentile per-packet one-way delay: 43.426 ms

Loss rate: 0.64%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-15 23:37:39

End at: 2018-01-15 23:38:09

Below is generated by plot.py at 2018-01-16 03:36:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.41 Mbit/s

95th percentile per-packet one-way delay: 52.893 ms

Loss rate: 0.63%

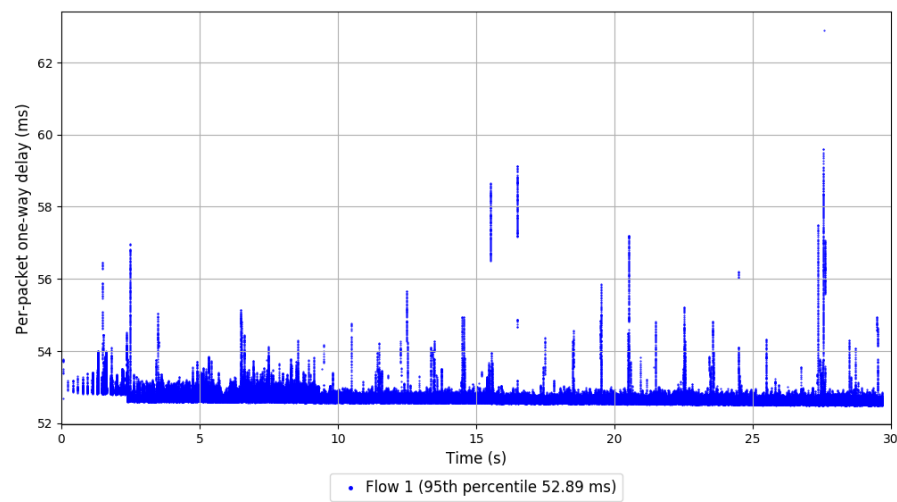
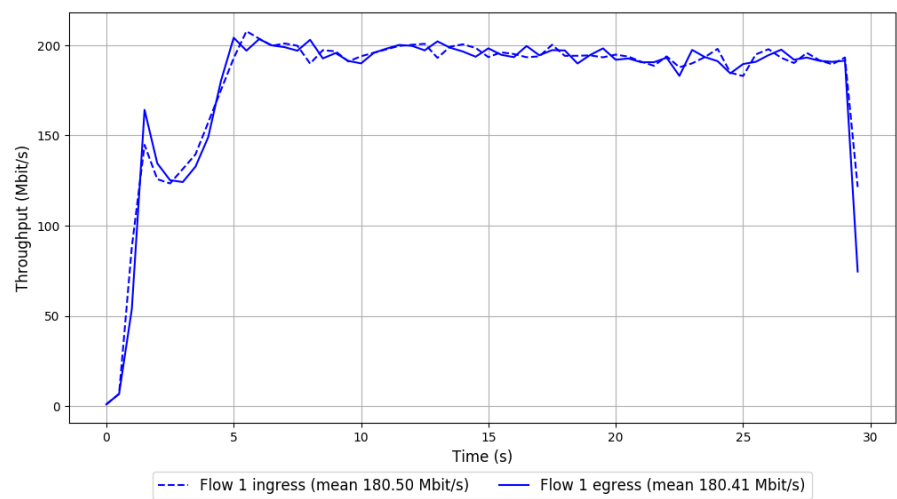
-- Flow 1:

Average throughput: 180.41 Mbit/s

95th percentile per-packet one-way delay: 52.893 ms

Loss rate: 0.63%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-15 23:49:59

End at: 2018-01-15 23:50:29

Below is generated by plot.py at 2018-01-16 03:36:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.46 Mbit/s

95th percentile per-packet one-way delay: 60.770 ms

Loss rate: 0.73%

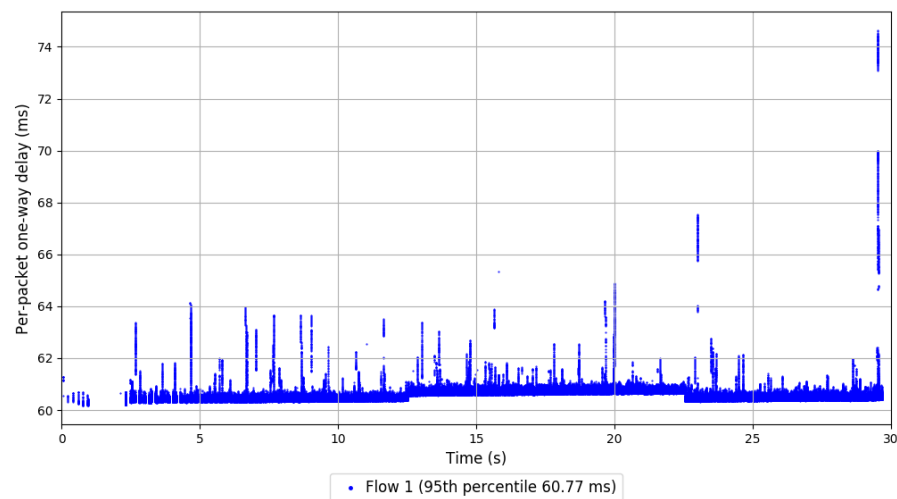
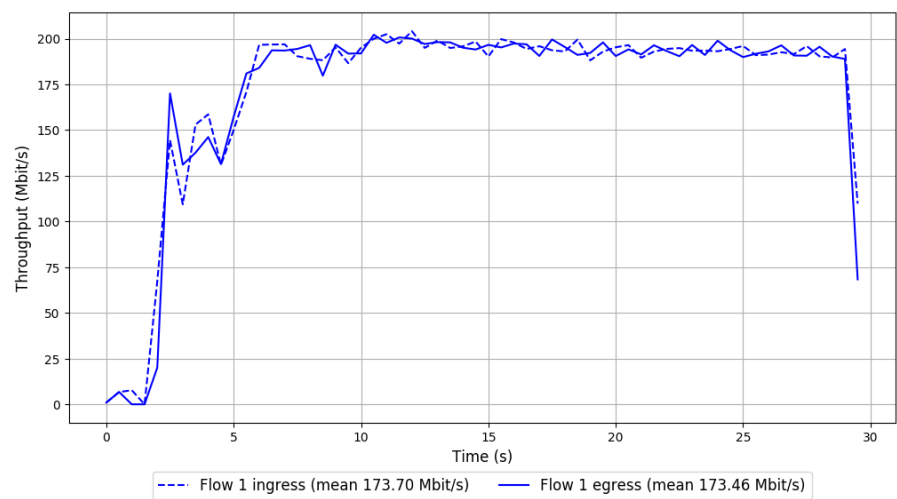
-- Flow 1:

Average throughput: 173.46 Mbit/s

95th percentile per-packet one-way delay: 60.770 ms

Loss rate: 0.73%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-16 00:02:19

End at: 2018-01-16 00:02:49

Below is generated by plot.py at 2018-01-16 03:36:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.19 Mbit/s

95th percentile per-packet one-way delay: 72.996 ms

Loss rate: 0.80%

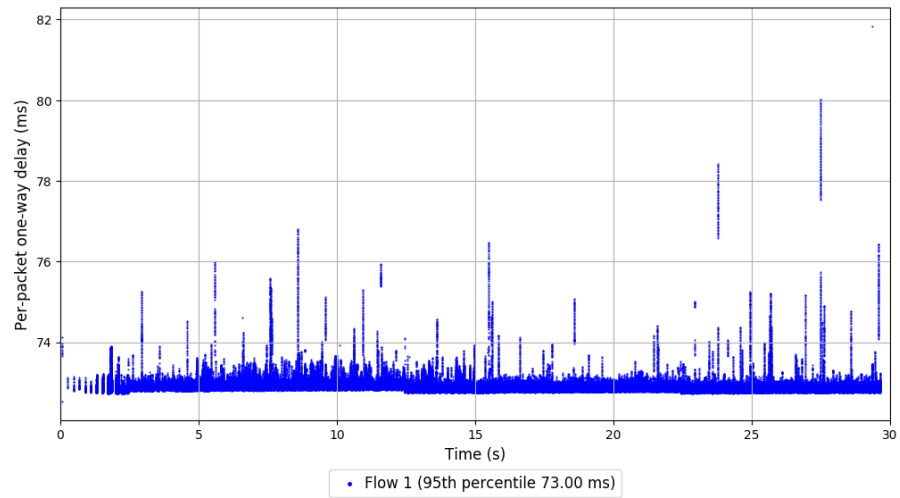
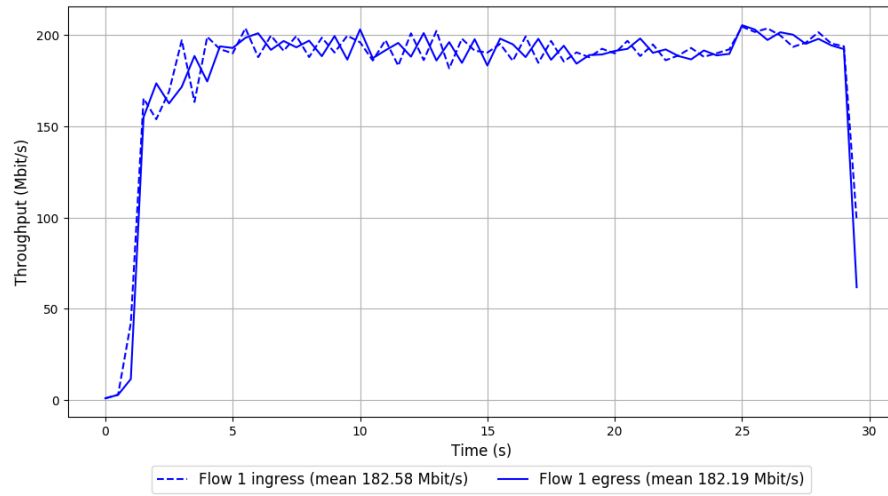
-- Flow 1:

Average throughput: 182.19 Mbit/s

95th percentile per-packet one-way delay: 72.996 ms

Loss rate: 0.80%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-16 00:14:37

End at: 2018-01-16 00:15:07

Below is generated by plot.py at 2018-01-16 03:36:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.11 Mbit/s

95th percentile per-packet one-way delay: 68.983 ms

Loss rate: 0.61%

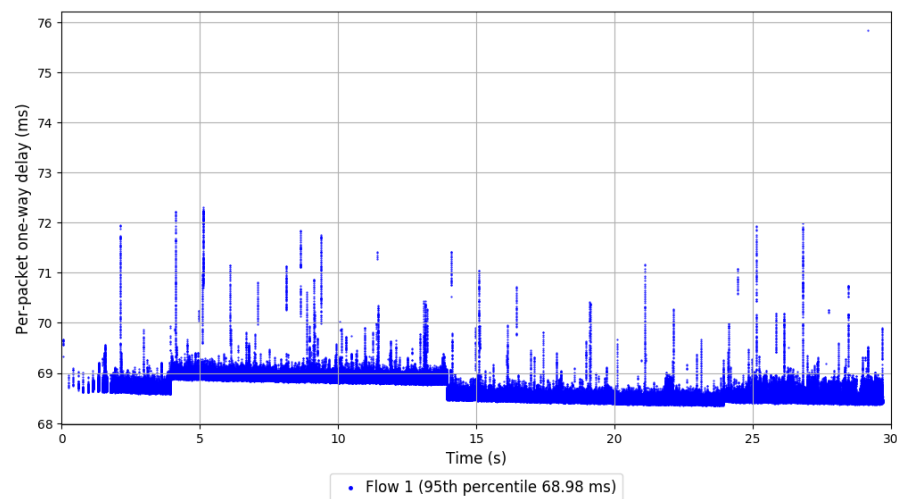
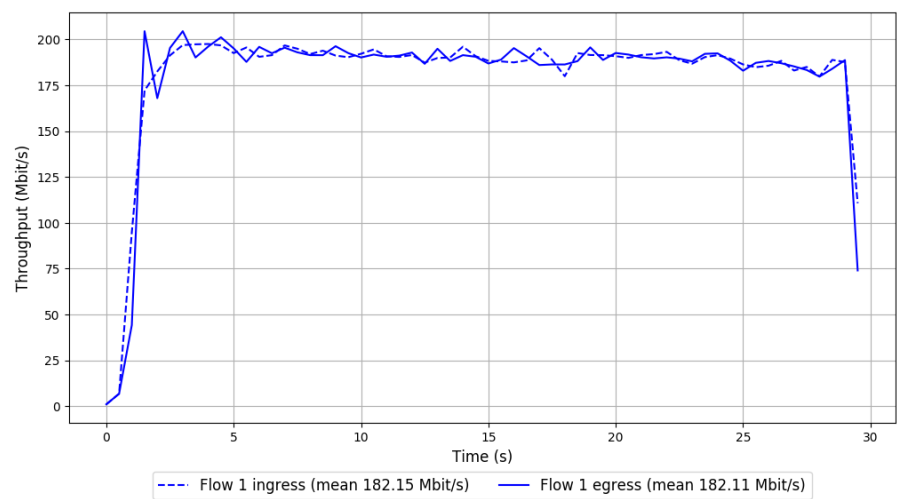
-- Flow 1:

Average throughput: 182.11 Mbit/s

95th percentile per-packet one-way delay: 68.983 ms

Loss rate: 0.61%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-16 00:26:58

End at: 2018-01-16 00:27:28

Below is generated by plot.py at 2018-01-16 03:36:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.59 Mbit/s

95th percentile per-packet one-way delay: 59.981 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 179.59 Mbit/s

95th percentile per-packet one-way delay: 59.981 ms

Loss rate: 0.58%

Run 10: Report of Indigo — Data Link

