

Pantheon Report

Generated at 2017-11-30 15:10:09 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

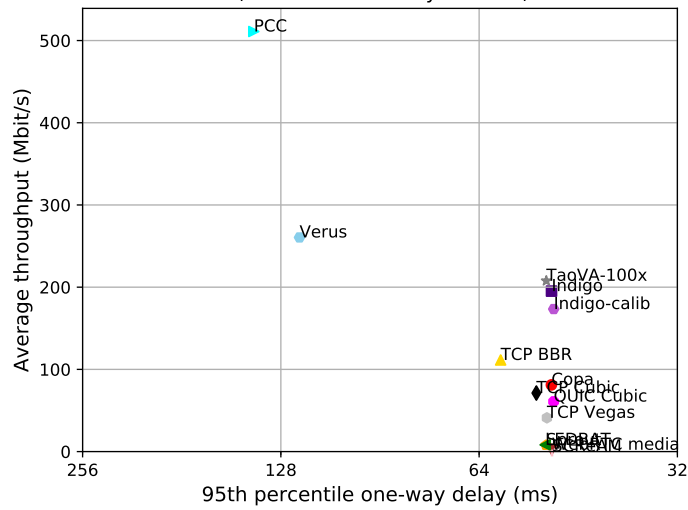
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

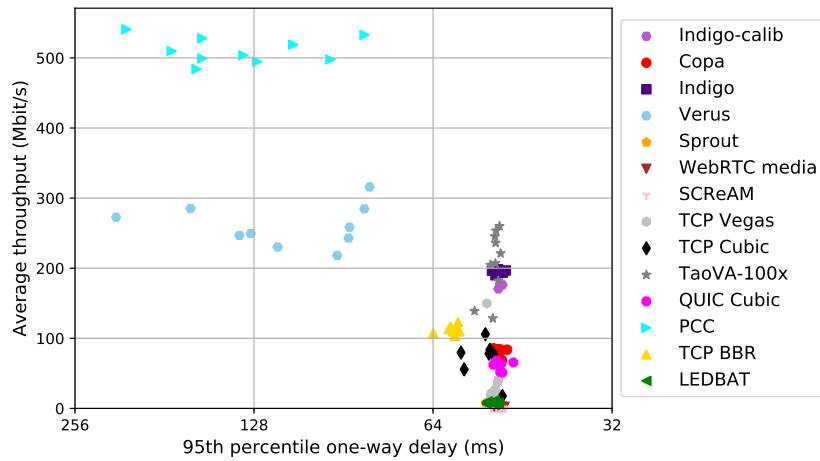
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	111.46	59.36	0.06
TCP Cubic	8	71.20	52.39	0.03
LEDBAT	10	8.17	50.82	0.38
PCC	10	511.00	140.69	1.10
QUIC Cubic	7	60.86	49.32	0.00
SCReAM	10	0.22	49.61	0.00
WebRTC media	10	2.23	49.64	0.01
Sprout	10	7.85	50.66	0.22
TaoVA-100x	10	207.75	50.60	0.00
TCP Vegas	10	41.07	50.50	0.07
Verus	10	260.49	119.93	0.82
Copa	10	81.13	49.71	0.00
Indigo	10	195.21	49.69	0.00
Indigo-calib	2	173.38	49.31	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-11-30 11:58:29

End at: 2017-11-30 11:58:59

Below is generated by plot.py at 2017-11-30 14:31:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.36 Mbit/s

95th percentile per-packet one-way delay: 59.261 ms

Loss rate: 0.01%

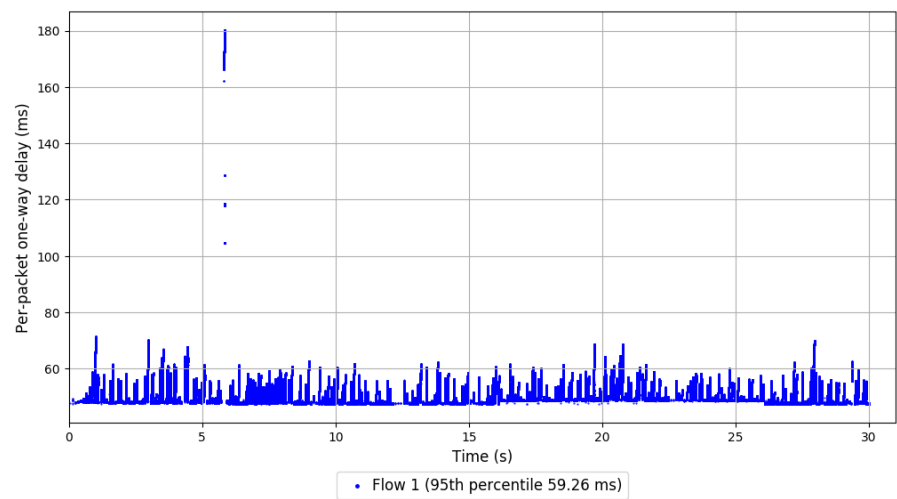
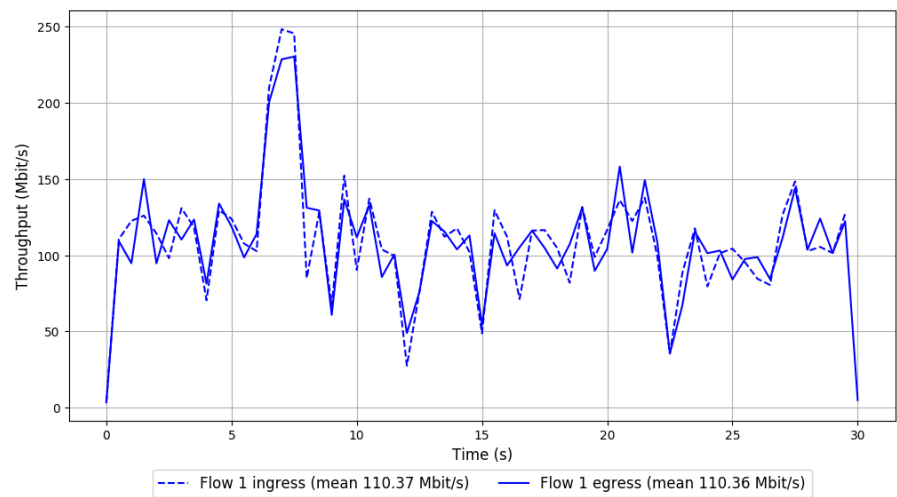
-- Flow 1:

Average throughput: 110.36 Mbit/s

95th percentile per-packet one-way delay: 59.261 ms

Loss rate: 0.01%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-30 12:08:49

End at: 2017-11-30 12:09:19

Below is generated by plot.py at 2017-11-30 14:31:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.35 Mbit/s

95th percentile per-packet one-way delay: 57.768 ms

Loss rate: 0.09%

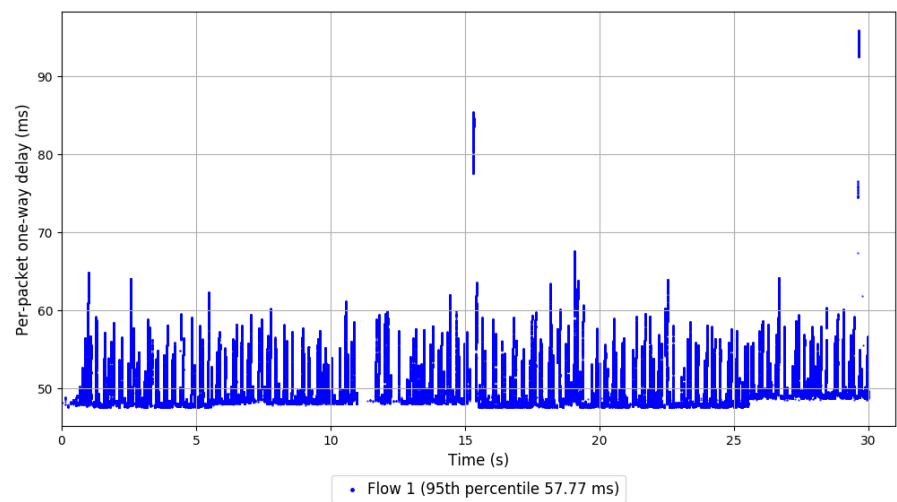
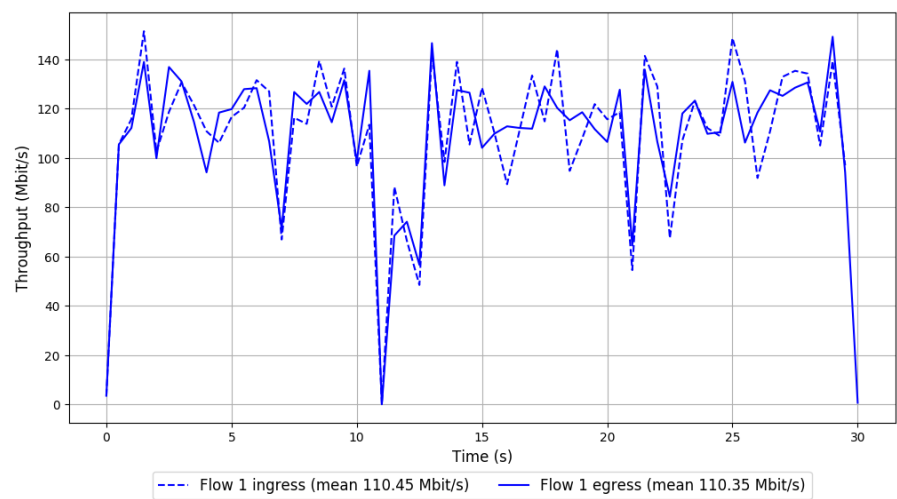
-- Flow 1:

Average throughput: 110.35 Mbit/s

95th percentile per-packet one-way delay: 57.768 ms

Loss rate: 0.09%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-30 12:19:00

End at: 2017-11-30 12:19:30

Below is generated by plot.py at 2017-11-30 14:32:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 113.38 Mbit/s

95th percentile per-packet one-way delay: 60.184 ms

Loss rate: 0.02%

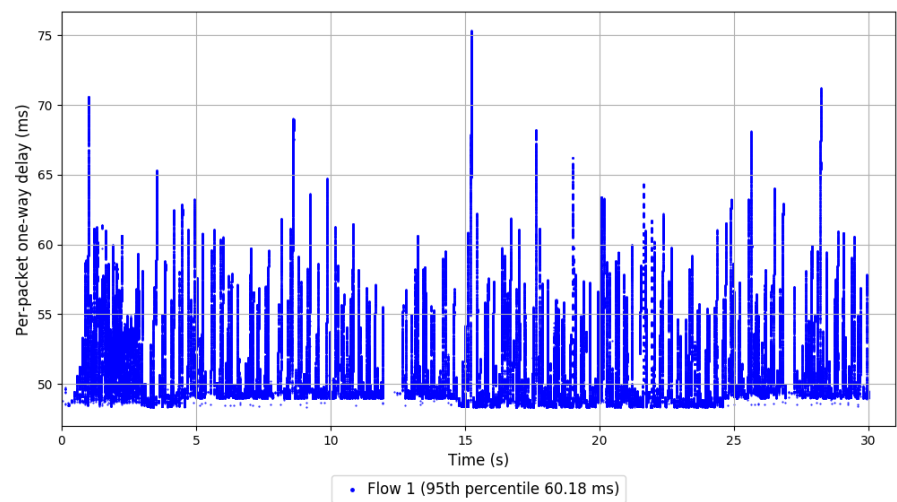
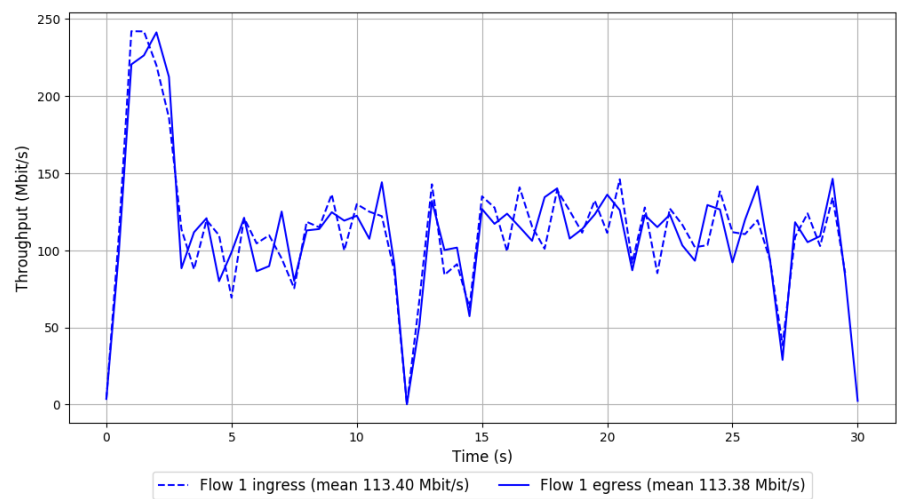
-- Flow 1:

Average throughput: 113.38 Mbit/s

95th percentile per-packet one-way delay: 60.184 ms

Loss rate: 0.02%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-30 12:29:23

End at: 2017-11-30 12:29:53

Below is generated by plot.py at 2017-11-30 14:32:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.30 Mbit/s

95th percentile per-packet one-way delay: 58.840 ms

Loss rate: 0.31%

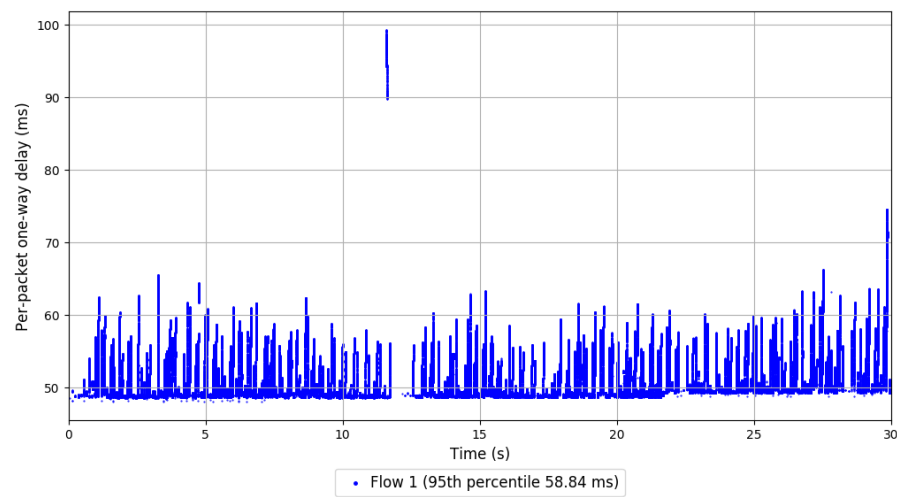
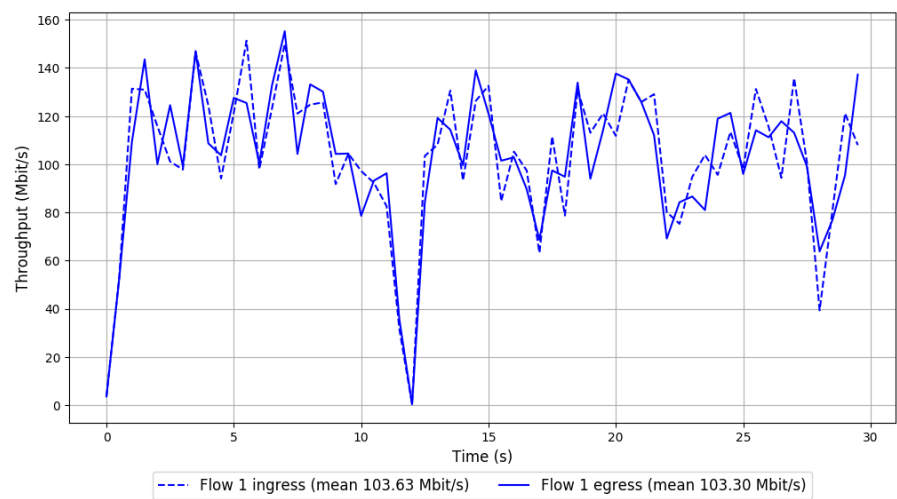
-- Flow 1:

Average throughput: 103.30 Mbit/s

95th percentile per-packet one-way delay: 58.840 ms

Loss rate: 0.31%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-30 12:39:38

End at: 2017-11-30 12:40:08

Below is generated by plot.py at 2017-11-30 14:32:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 123.09 Mbit/s

95th percentile per-packet one-way delay: 58.116 ms

Loss rate: 0.10%

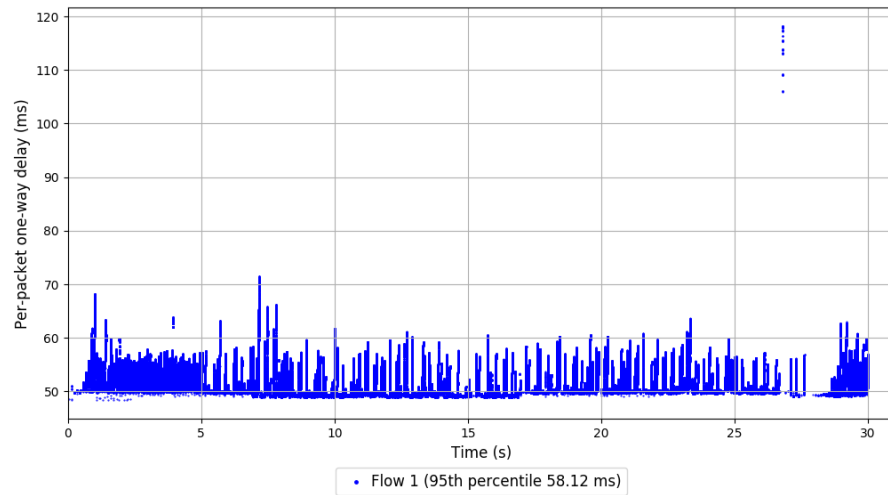
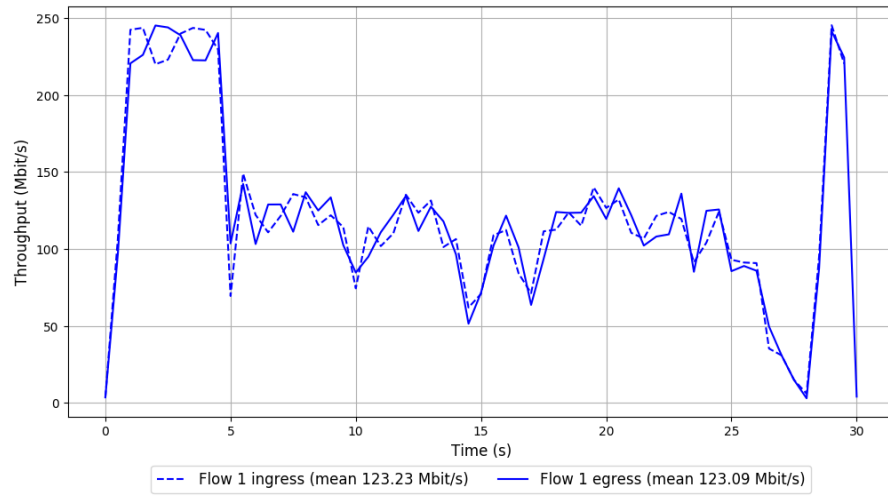
-- Flow 1:

Average throughput: 123.09 Mbit/s

95th percentile per-packet one-way delay: 58.116 ms

Loss rate: 0.10%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-30 12:49:46

End at: 2017-11-30 12:50:16

Below is generated by plot.py at 2017-11-30 14:32:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.42 Mbit/s

95th percentile per-packet one-way delay: 63.933 ms

Loss rate: 0.02%

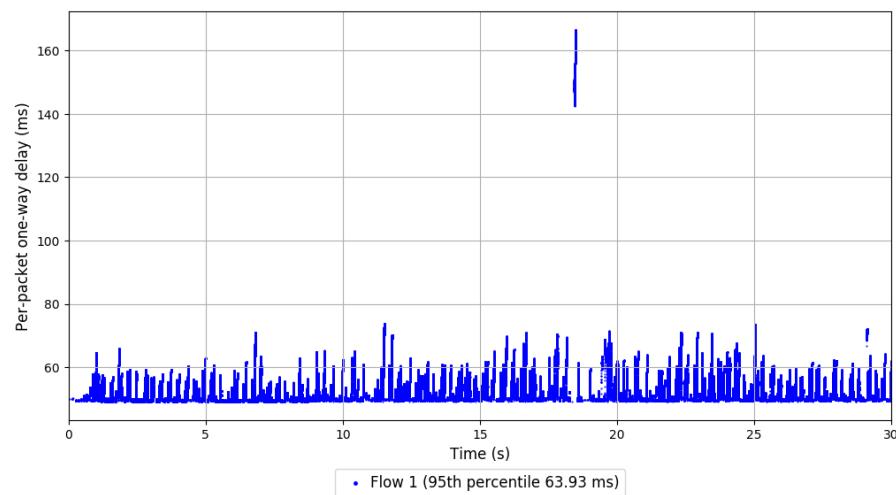
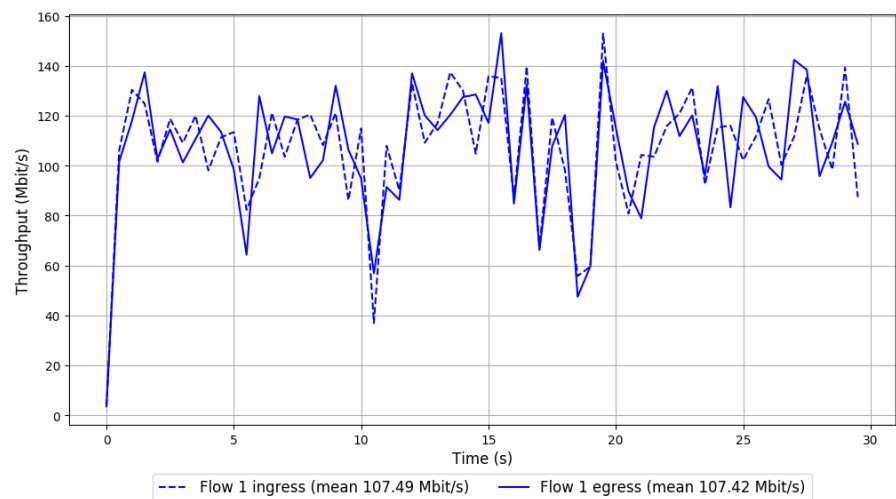
-- Flow 1:

Average throughput: 107.42 Mbit/s

95th percentile per-packet one-way delay: 63.933 ms

Loss rate: 0.02%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-30 13:00:00

End at: 2017-11-30 13:00:30

Below is generated by plot.py at 2017-11-30 14:32:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.12 Mbit/s

95th percentile per-packet one-way delay: 58.098 ms

Loss rate: 0.01%

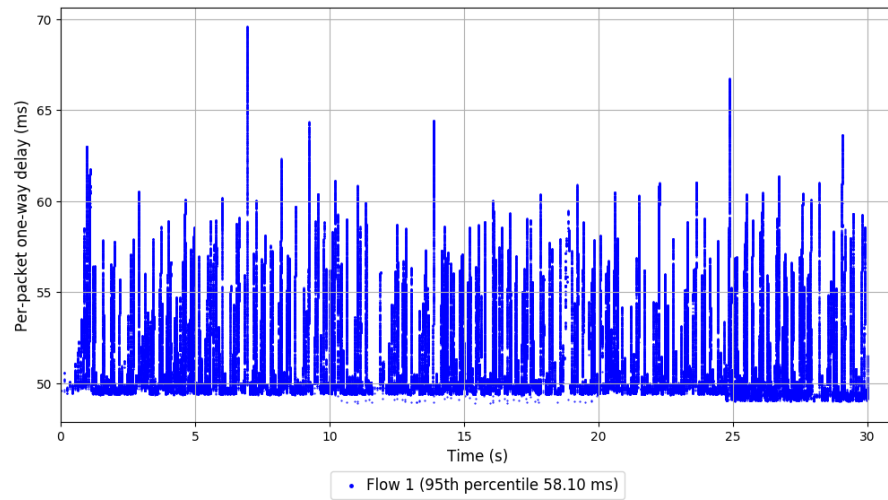
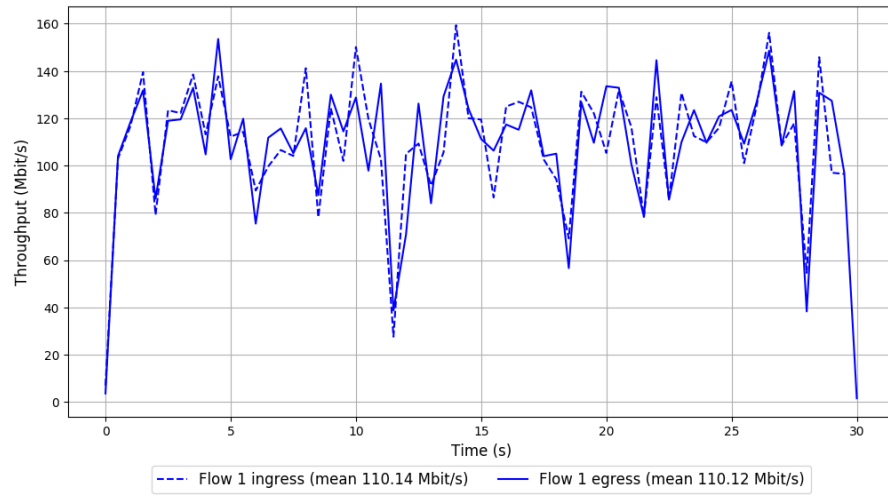
-- Flow 1:

Average throughput: 110.12 Mbit/s

95th percentile per-packet one-way delay: 58.098 ms

Loss rate: 0.01%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-30 13:10:17

End at: 2017-11-30 13:10:47

Below is generated by plot.py at 2017-11-30 14:32:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.59 Mbit/s

95th percentile per-packet one-way delay: 58.808 ms

Loss rate: 0.01%

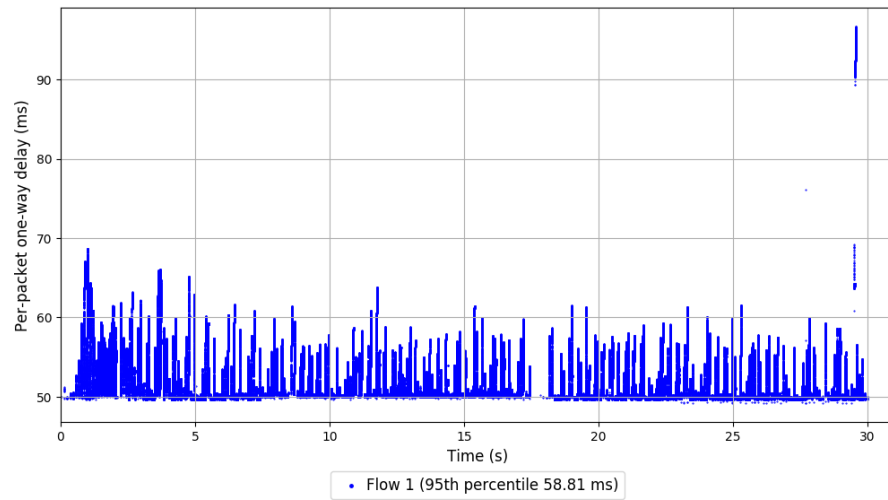
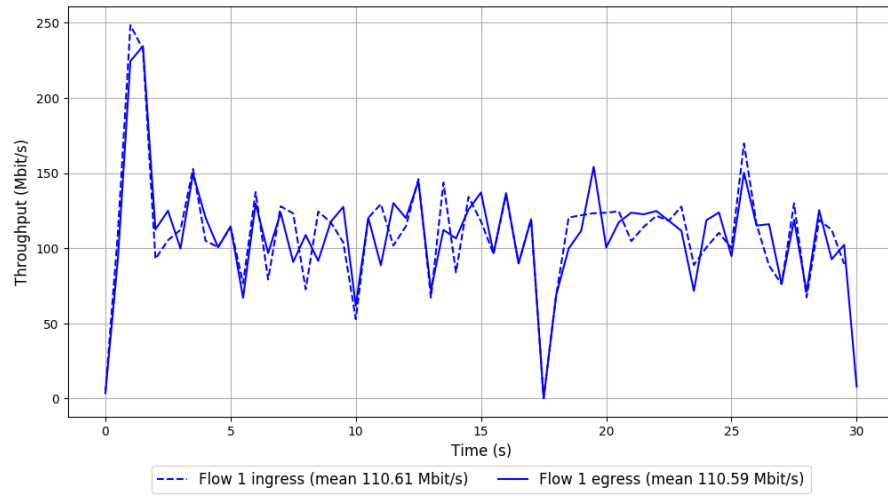
-- Flow 1:

Average throughput: 110.59 Mbit/s

95th percentile per-packet one-way delay: 58.808 ms

Loss rate: 0.01%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-30 13:20:28

End at: 2017-11-30 13:20:58

Below is generated by plot.py at 2017-11-30 14:33:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.56 Mbit/s

95th percentile per-packet one-way delay: 58.857 ms

Loss rate: 0.00%

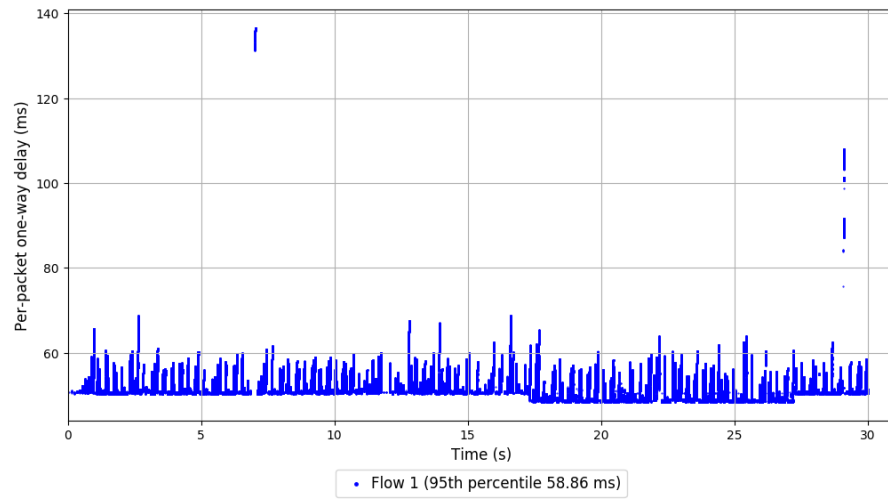
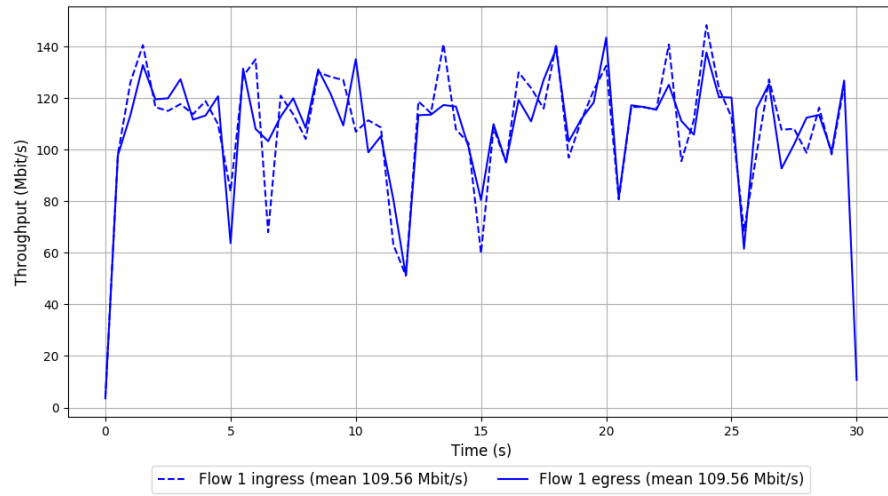
-- Flow 1:

Average throughput: 109.56 Mbit/s

95th percentile per-packet one-way delay: 58.857 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-30 13:30:31

End at: 2017-11-30 13:31:02

Below is generated by plot.py at 2017-11-30 14:33:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.47 Mbit/s

95th percentile per-packet one-way delay: 59.766 ms

Loss rate: 0.01%

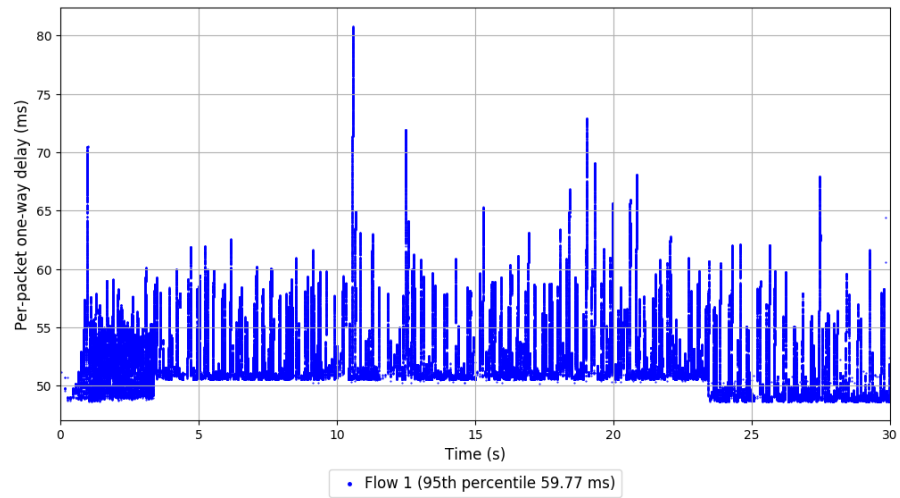
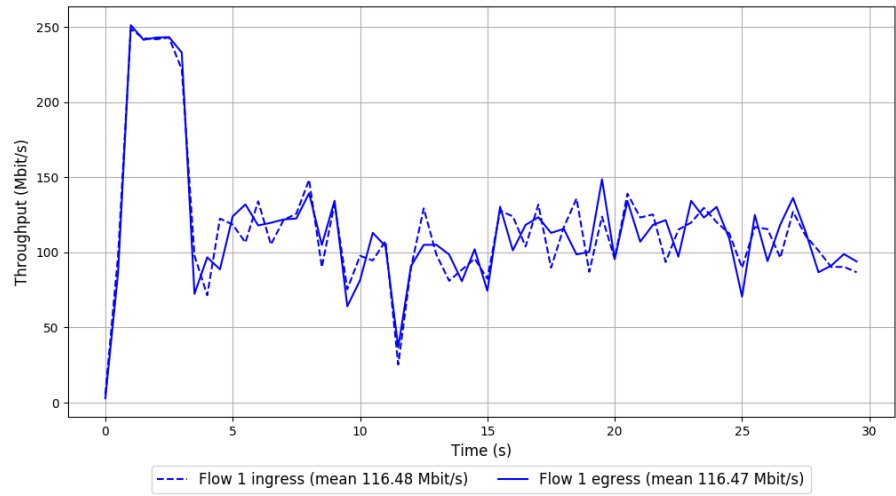
-- Flow 1:

Average throughput: 116.47 Mbit/s

95th percentile per-packet one-way delay: 59.766 ms

Loss rate: 0.01%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-30 12:03:50

End at: 2017-11-30 12:04:20

Below is generated by plot.py at 2017-11-30 14:33:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.56 Mbit/s

95th percentile per-packet one-way delay: 51.366 ms

Loss rate: 0.02%

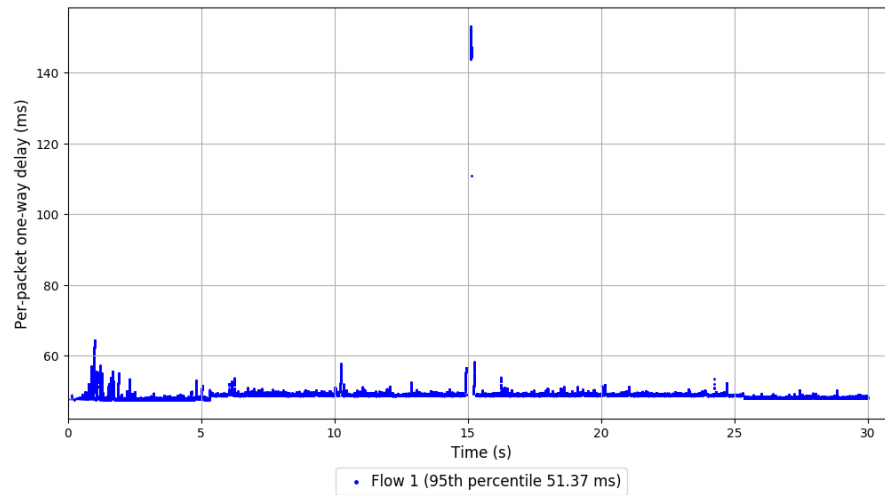
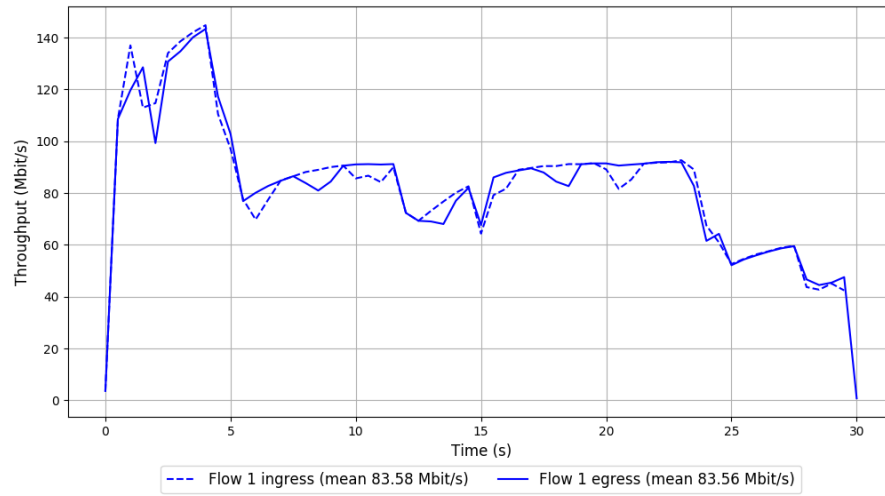
-- Flow 1:

Average throughput: 83.56 Mbit/s

95th percentile per-packet one-way delay: 51.366 ms

Loss rate: 0.02%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-30 12:14:04

End at: 2017-11-30 12:14:34

Below is generated by plot.py at 2017-11-30 14:33:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.64 Mbit/s

95th percentile per-packet one-way delay: 48.926 ms

Loss rate: 0.05%

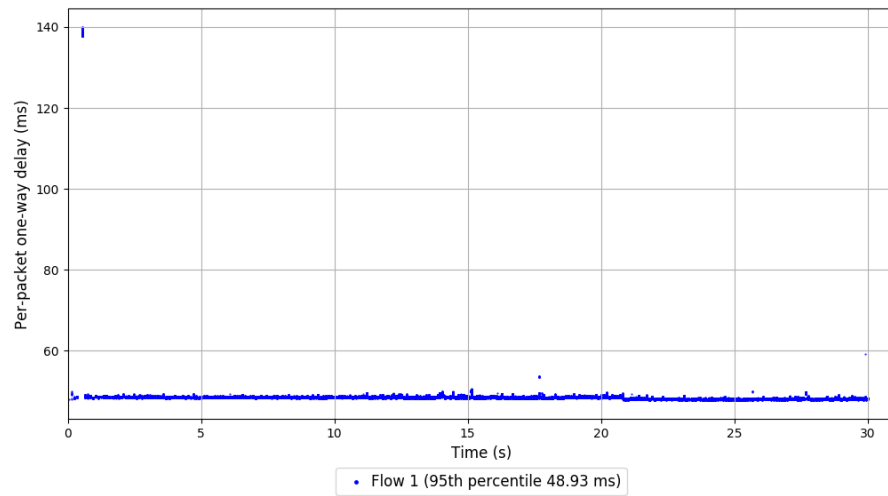
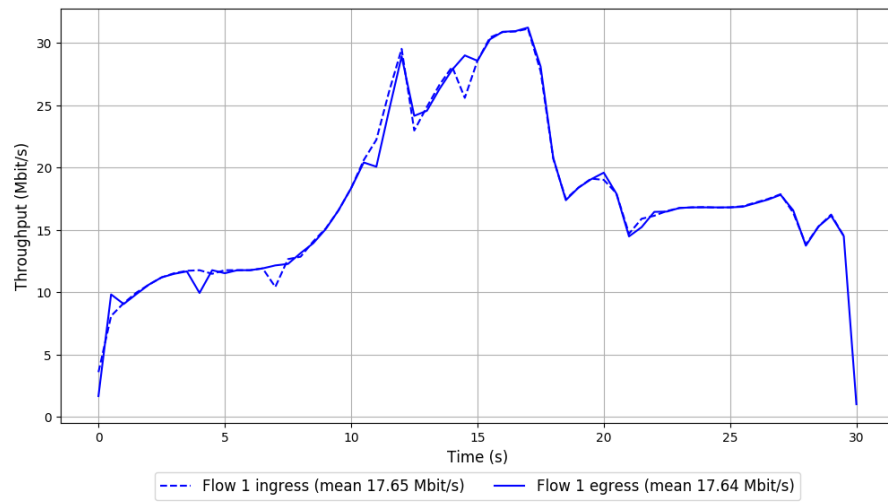
-- Flow 1:

Average throughput: 17.64 Mbit/s

95th percentile per-packet one-way delay: 48.926 ms

Loss rate: 0.05%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-30 12:24:17

End at: 2017-11-30 12:24:47

Below is generated by plot.py at 2017-11-30 14:33:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.15 Mbit/s

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

Loss rate: 0.03%

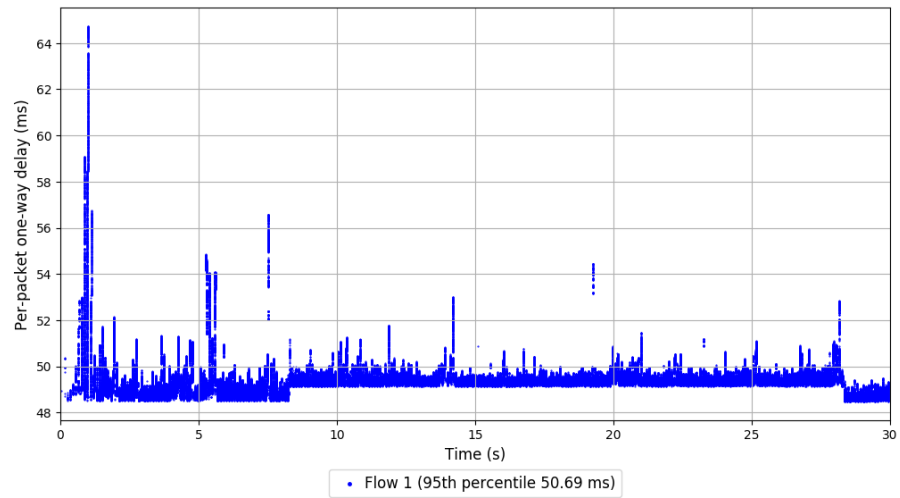
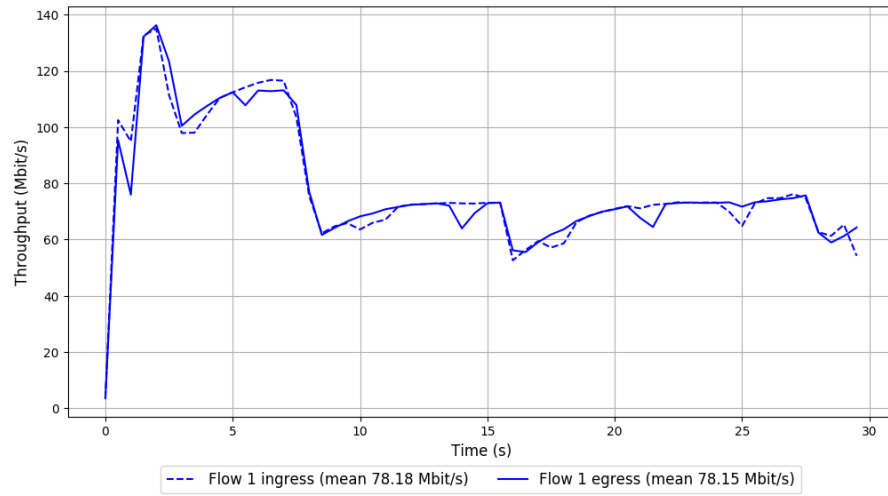
-- Flow 1:

Average throughput: 78.15 Mbit/s

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

Loss rate: 0.03%

Run 3: Report of TCP Cubic — Data Link

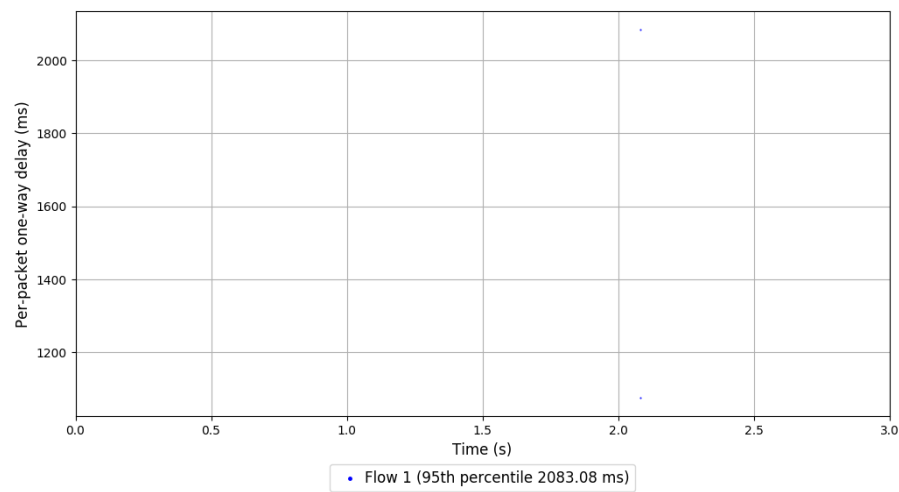
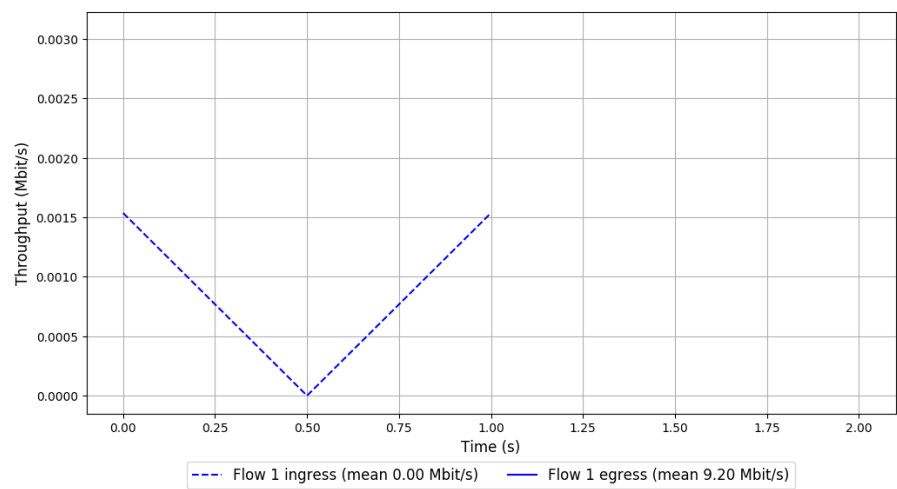


Run 4: Statistics of TCP Cubic

Start at: 2017-11-30 12:34:38

End at: 2017-11-30 12:35:08

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-30 12:44:53

End at: 2017-11-30 12:45:24

Below is generated by plot.py at 2017-11-30 14:33:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.12 Mbit/s

95th percentile per-packet one-way delay: 50.187 ms

Loss rate: 0.03%

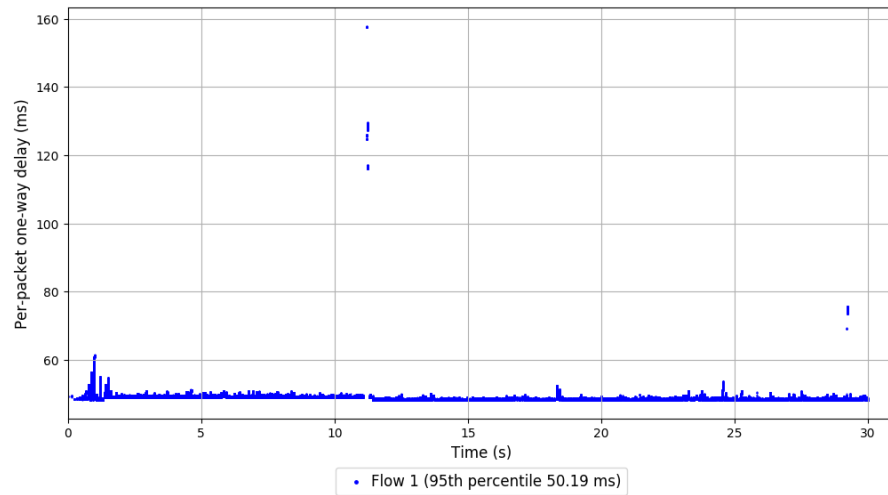
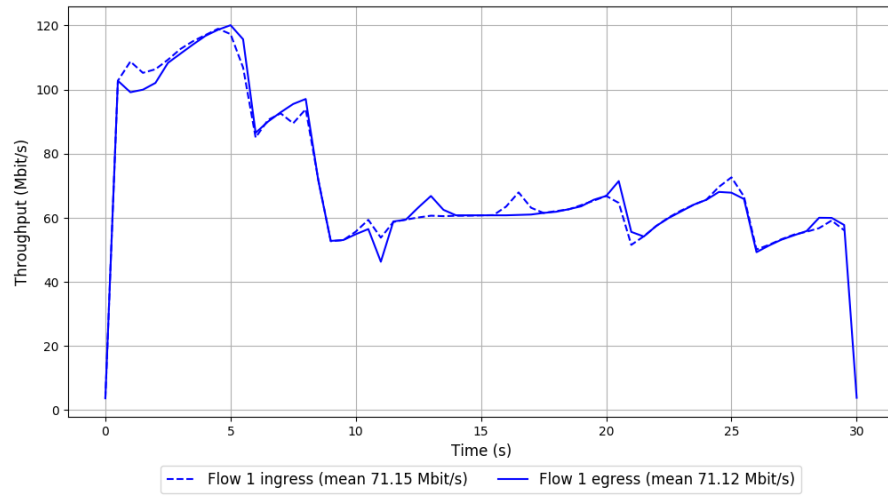
-- Flow 1:

Average throughput: 71.12 Mbit/s

95th percentile per-packet one-way delay: 50.187 ms

Loss rate: 0.03%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-30 12:55:00

End at: 2017-11-30 12:55:30

Below is generated by plot.py at 2017-11-30 14:33:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.70 Mbit/s

95th percentile per-packet one-way delay: 56.732 ms

Loss rate: 0.07%

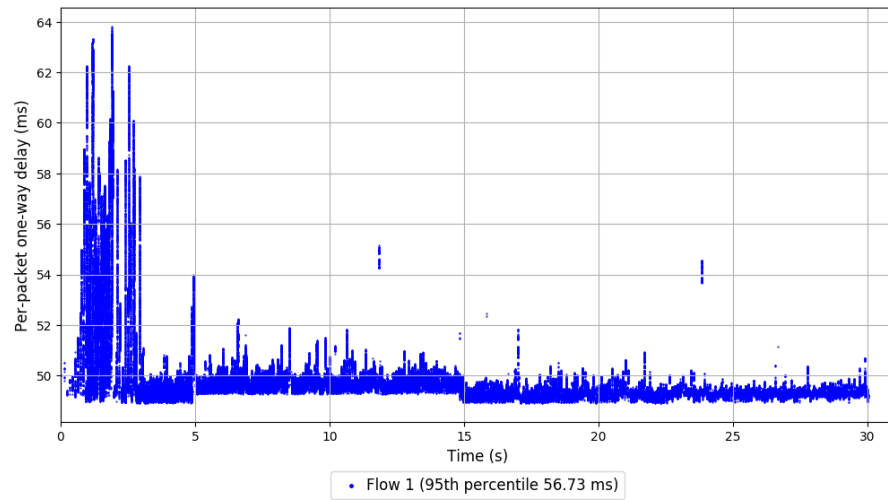
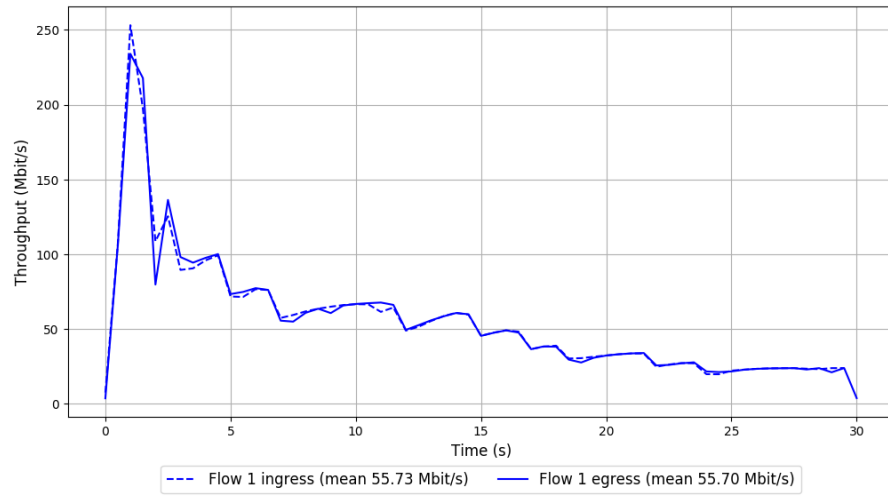
-- Flow 1:

Average throughput: 55.70 Mbit/s

95th percentile per-packet one-way delay: 56.732 ms

Loss rate: 0.07%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-30 13:05:18

End at: 2017-11-30 13:05:48

Below is generated by plot.py at 2017-11-30 14:34:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.88 Mbit/s

95th percentile per-packet one-way delay: 52.257 ms

Loss rate: 0.01%

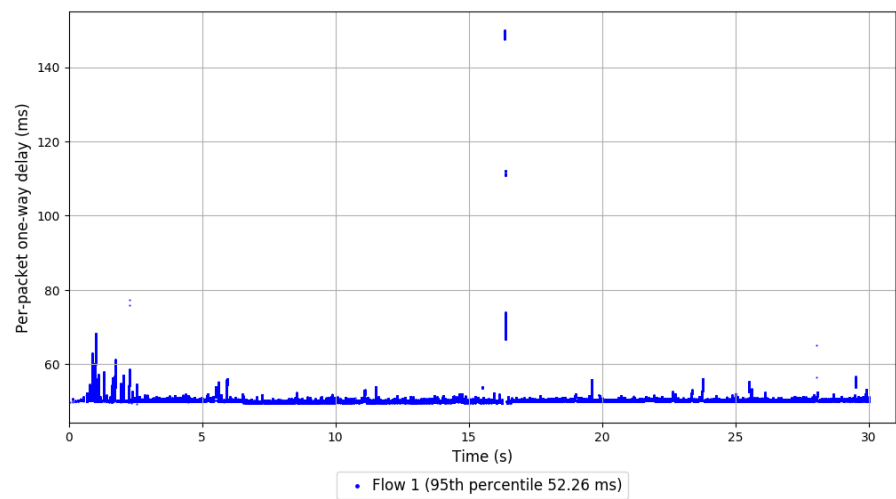
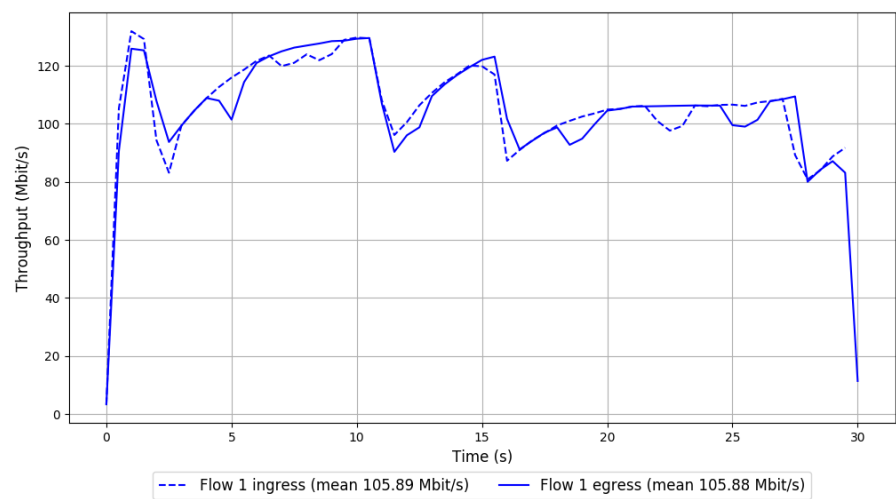
-- Flow 1:

Average throughput: 105.88 Mbit/s

95th percentile per-packet one-way delay: 52.257 ms

Loss rate: 0.01%

Run 7: Report of TCP Cubic — Data Link

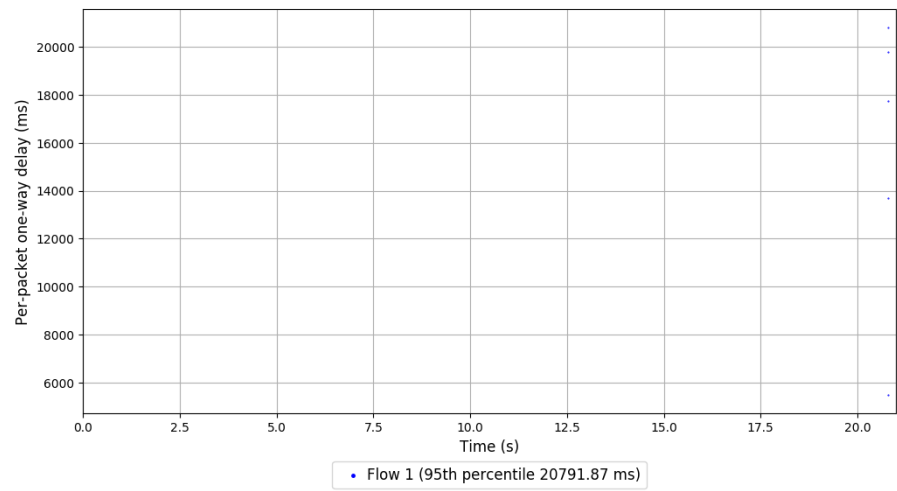
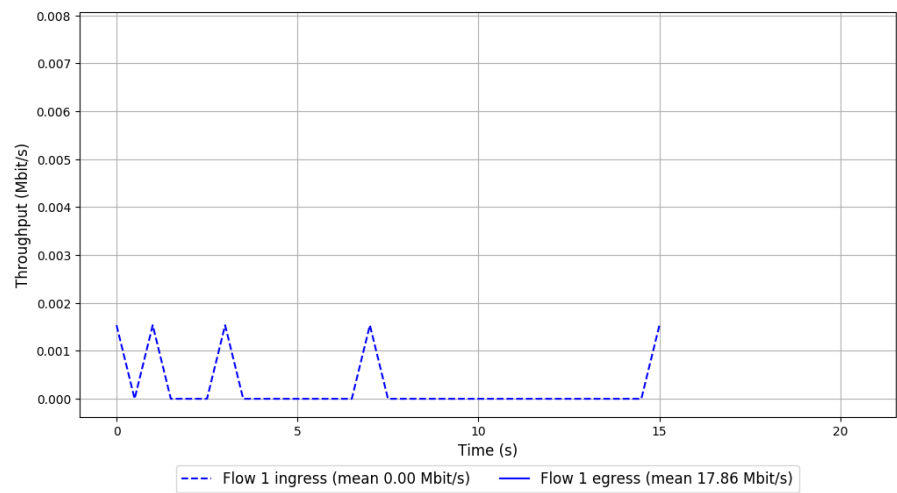


Run 8: Statistics of TCP Cubic

Start at: 2017-11-30 13:15:34

End at: 2017-11-30 13:16:04

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-30 13:25:44

End at: 2017-11-30 13:26:14

Below is generated by plot.py at 2017-11-30 14:34:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.02 Mbit/s

95th percentile per-packet one-way delay: 51.551 ms

Loss rate: 0.02%

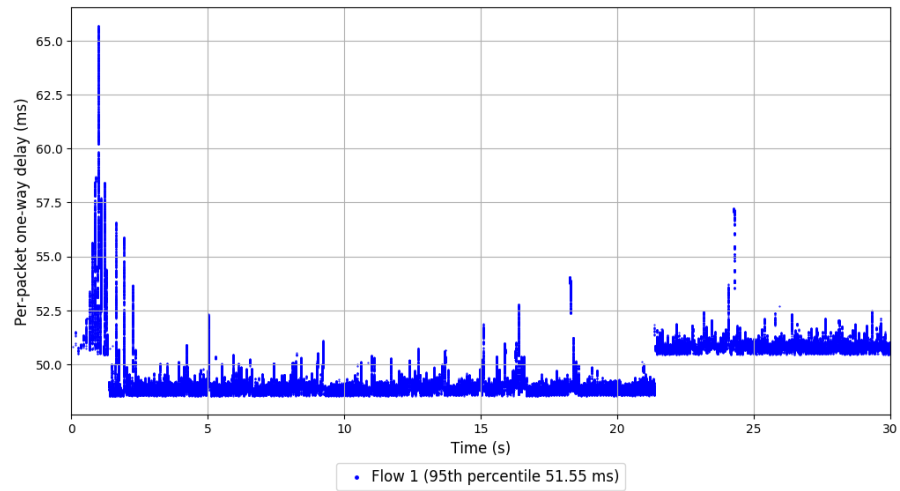
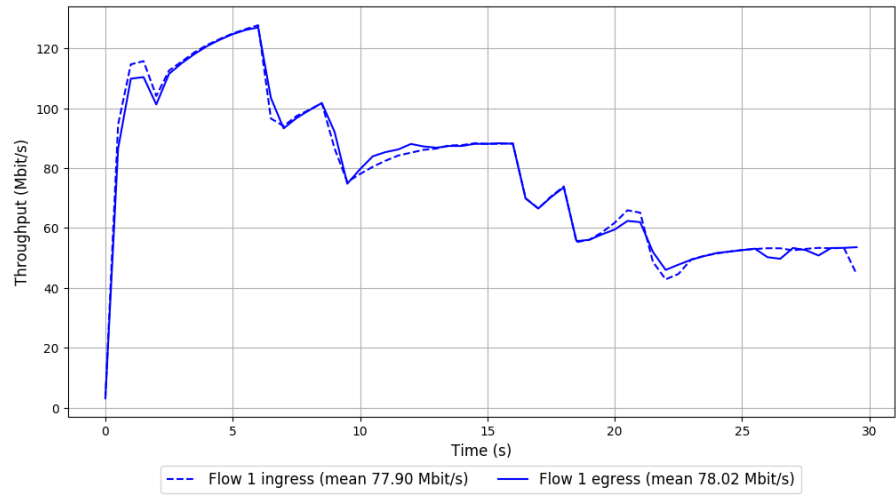
-- Flow 1:

Average throughput: 78.02 Mbit/s

95th percentile per-packet one-way delay: 51.551 ms

Loss rate: 0.02%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-30 13:35:48

End at: 2017-11-30 13:36:18

Below is generated by plot.py at 2017-11-30 14:34:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.57 Mbit/s

95th percentile per-packet one-way delay: 57.433 ms

Loss rate: 0.03%

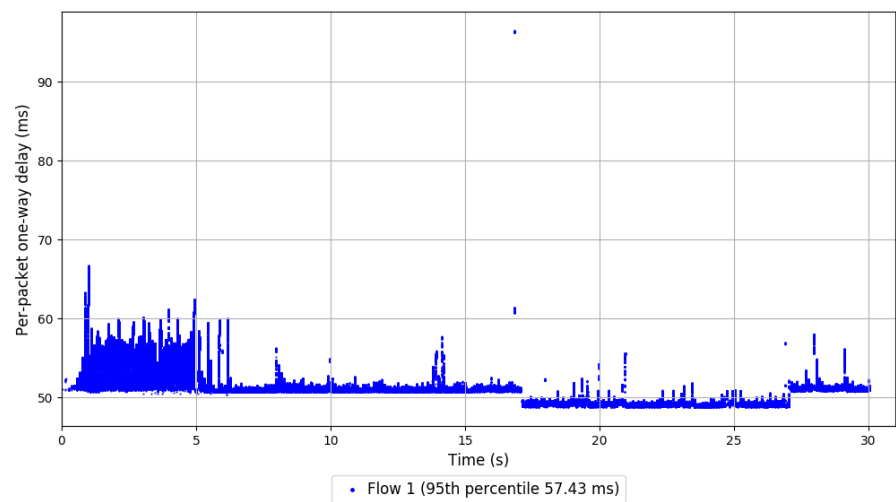
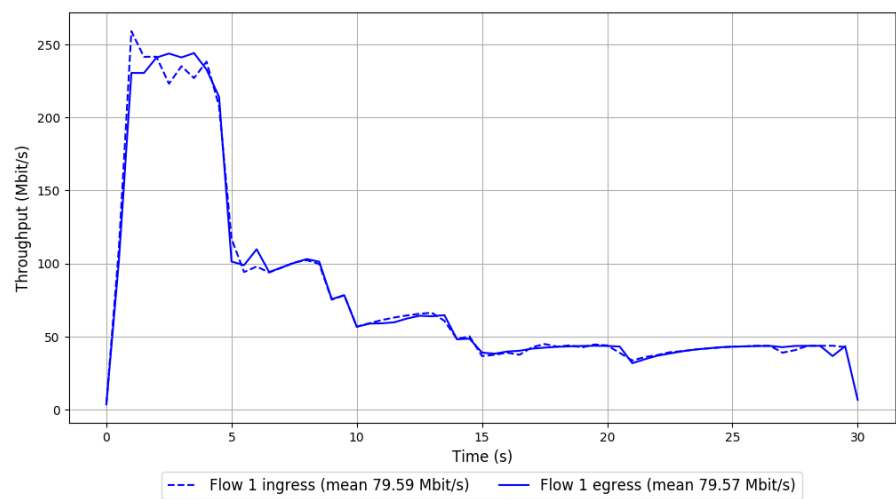
-- Flow 1:

Average throughput: 79.57 Mbit/s

95th percentile per-packet one-way delay: 57.433 ms

Loss rate: 0.03%

Run 10: Report of TCP Cubic — Data Link

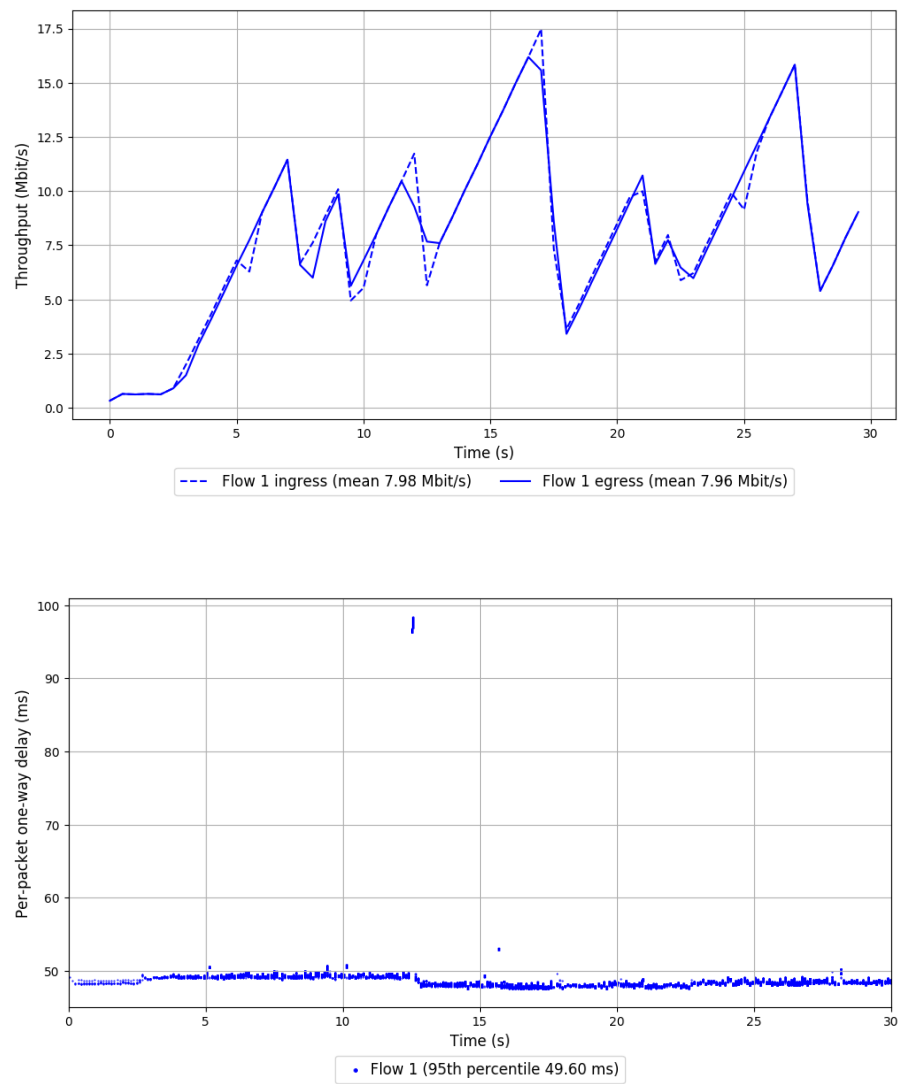


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-30 12:05:52
End at: 2017-11-30 12:06:22

# Below is generated by plot.py at 2017-11-30 14:34:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 49.599 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 49.599 ms
Loss rate: 0.17%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-11-30 12:16:02

End at: 2017-11-30 12:16:32

Below is generated by plot.py at 2017-11-30 14:34:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.57 Mbit/s

95th percentile per-packet one-way delay: 49.916 ms

Loss rate: 0.29%

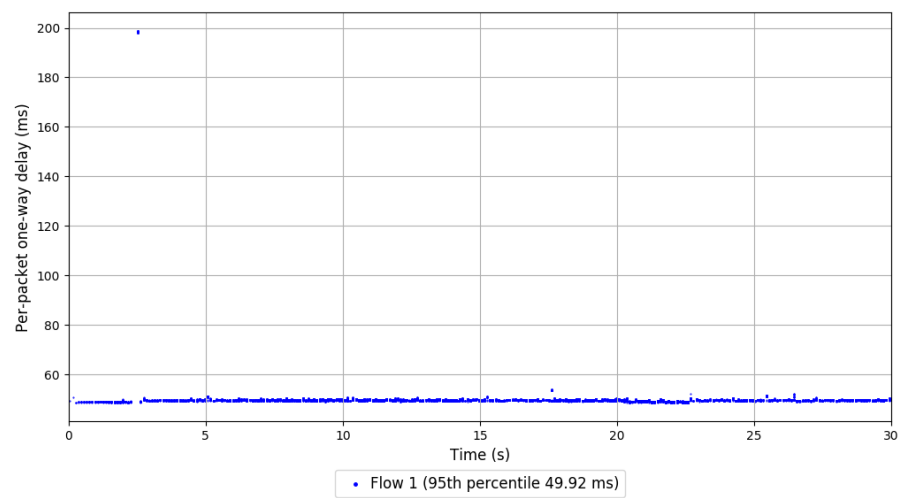
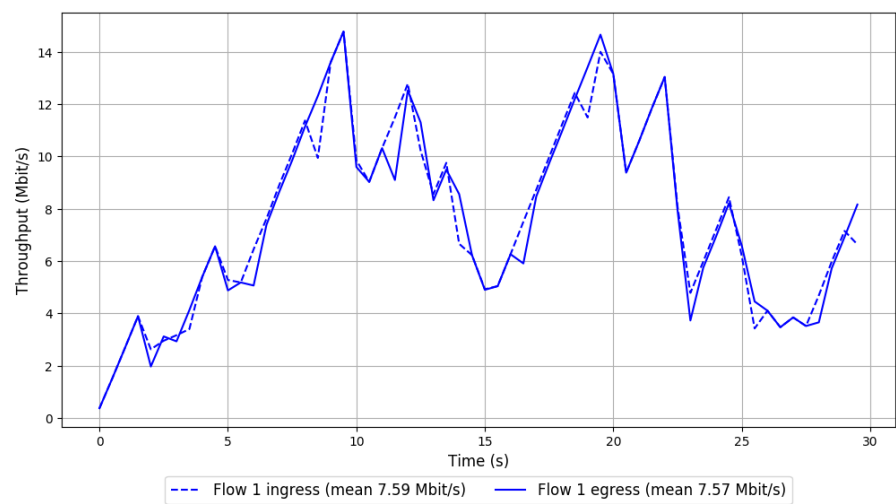
-- Flow 1:

Average throughput: 7.57 Mbit/s

95th percentile per-packet one-way delay: 49.916 ms

Loss rate: 0.29%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-30 12:26:19

End at: 2017-11-30 12:26:49

Below is generated by plot.py at 2017-11-30 14:34:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.78 Mbit/s

95th percentile per-packet one-way delay: 50.408 ms

Loss rate: 0.03%

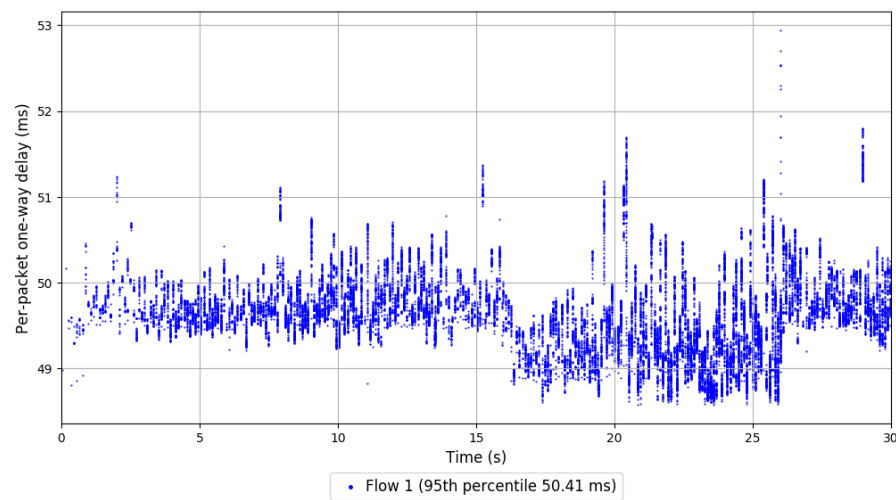
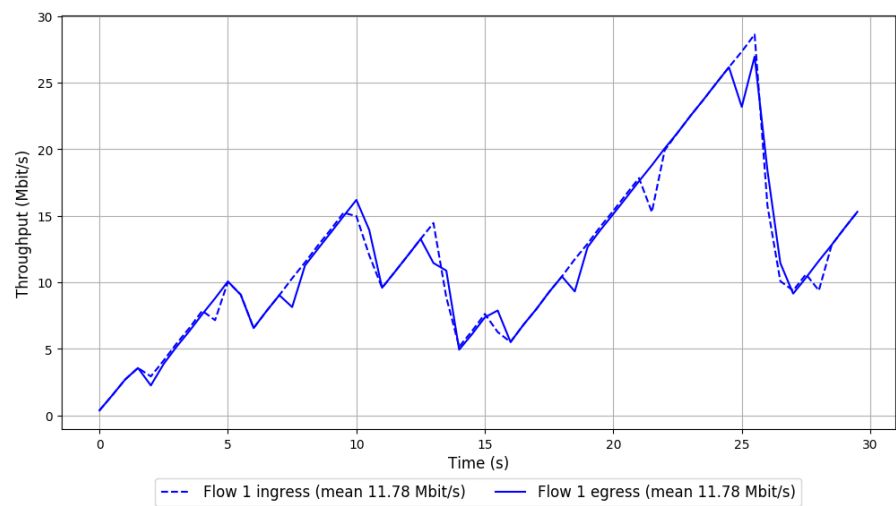
-- Flow 1:

Average throughput: 11.78 Mbit/s

95th percentile per-packet one-way delay: 50.408 ms

Loss rate: 0.03%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-30 12:36:35

End at: 2017-11-30 12:37:06

Below is generated by plot.py at 2017-11-30 14:34:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.05 Mbit/s

95th percentile per-packet one-way delay: 50.379 ms

Loss rate: 0.39%

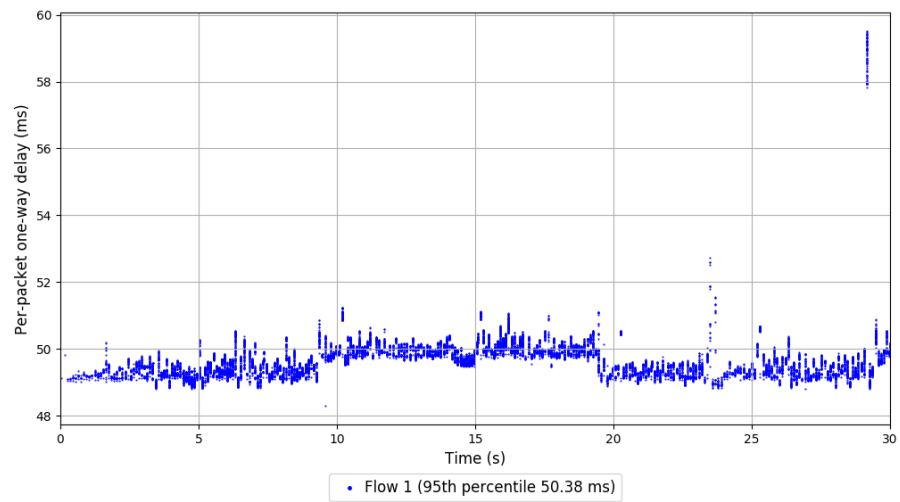
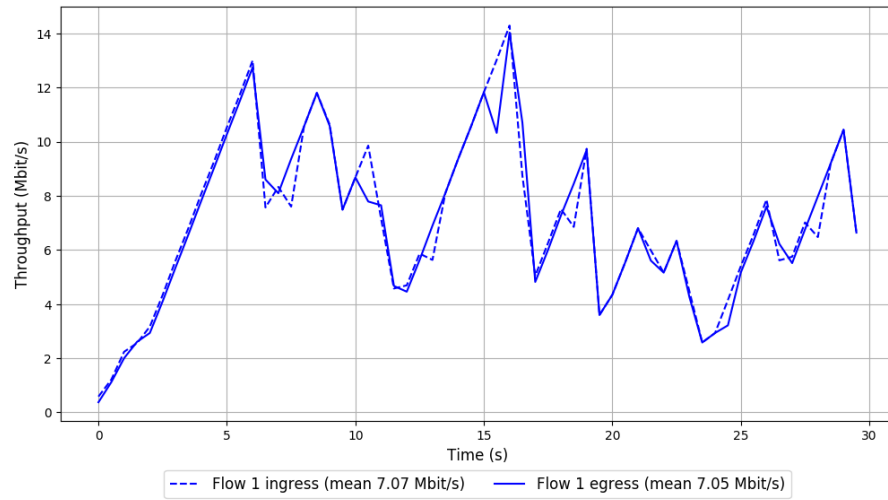
-- Flow 1:

Average throughput: 7.05 Mbit/s

95th percentile per-packet one-way delay: 50.379 ms

Loss rate: 0.39%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-30 12:46:55

End at: 2017-11-30 12:47:25

Below is generated by plot.py at 2017-11-30 14:34:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 50.391 ms

Loss rate: 0.73%

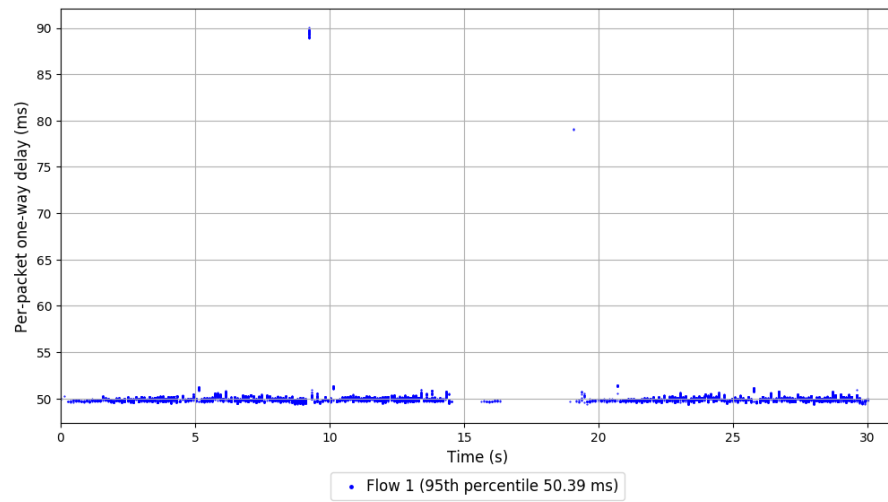
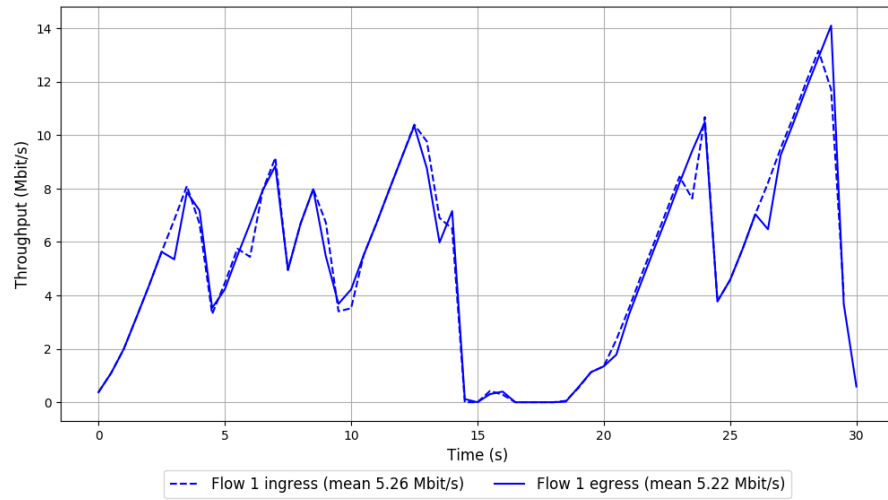
-- Flow 1:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 50.391 ms

Loss rate: 0.73%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-30 12:57:01

End at: 2017-11-30 12:57:31

Below is generated by plot.py at 2017-11-30 14:34:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.61 Mbit/s

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

Loss rate: 0.78%

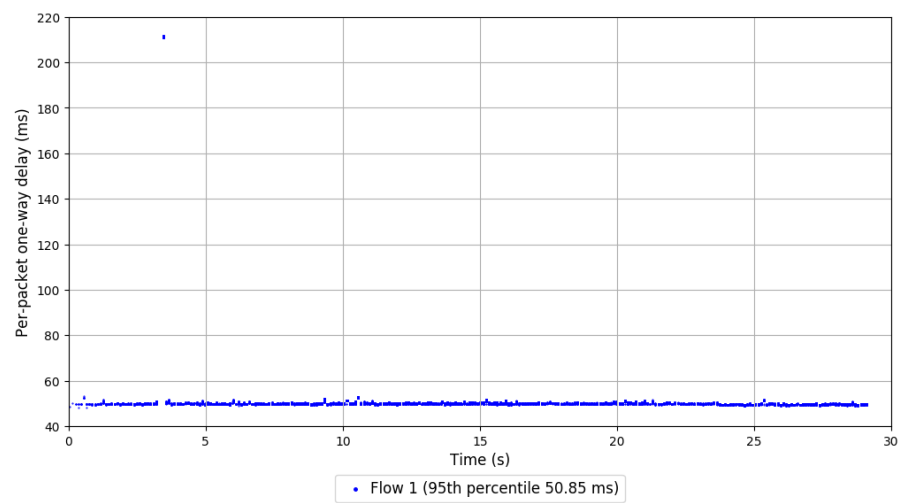
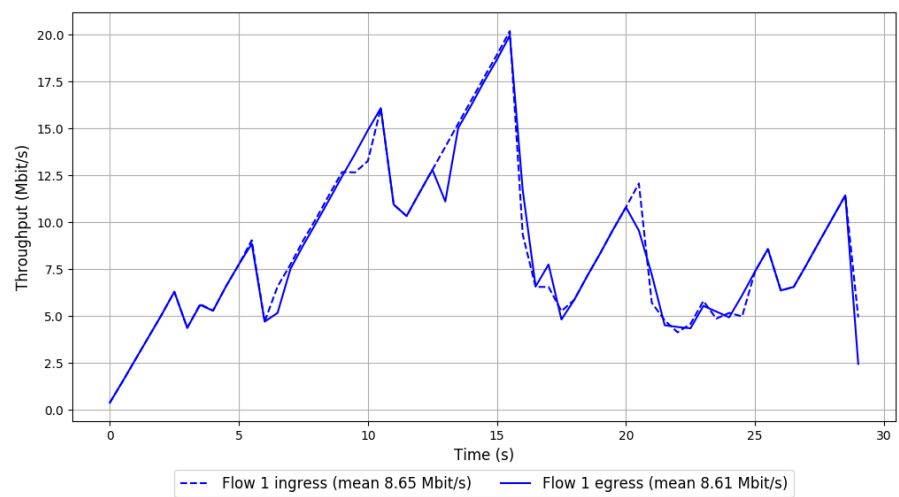
-- Flow 1:

Average throughput: 8.61 Mbit/s

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

Loss rate: 0.78%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-30 13:07:21

End at: 2017-11-30 13:07:51

Below is generated by plot.py at 2017-11-30 14:34:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.37 Mbit/s

95th percentile per-packet one-way delay: 50.868 ms

Loss rate: 0.12%

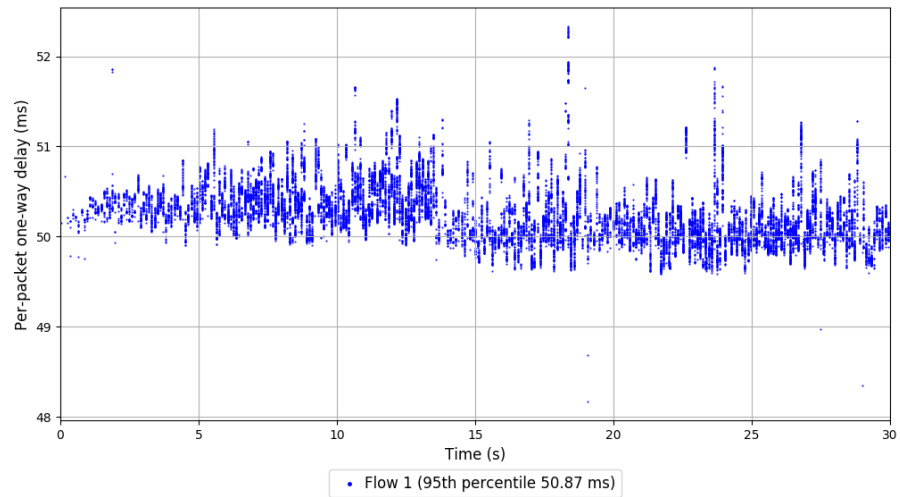
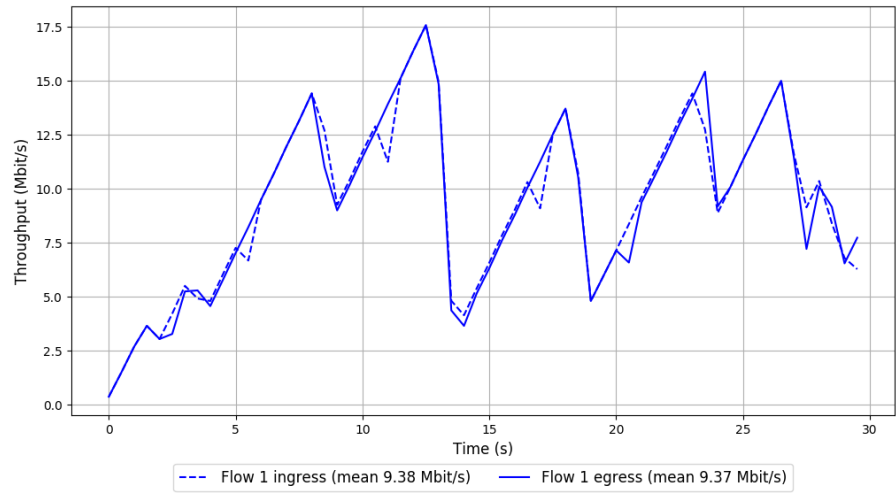
-- Flow 1:

Average throughput: 9.37 Mbit/s

95th percentile per-packet one-way delay: 50.868 ms

Loss rate: 0.12%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-30 13:17:32

End at: 2017-11-30 13:18:02

Below is generated by plot.py at 2017-11-30 14:34:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.05 Mbit/s

95th percentile per-packet one-way delay: 51.830 ms

Loss rate: 0.33%

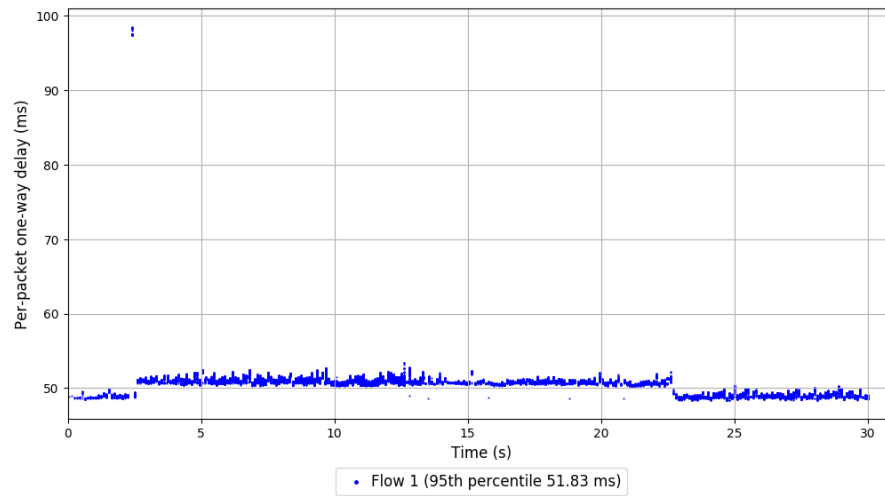
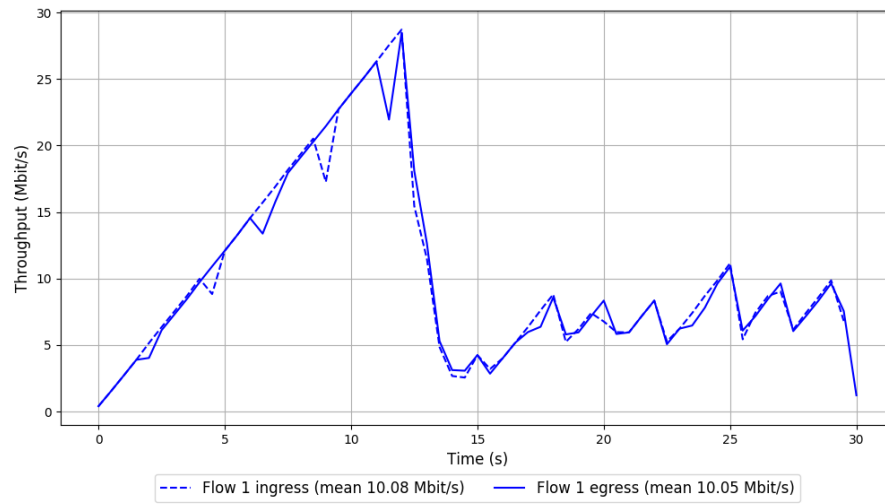
-- Flow 1:

Average throughput: 10.05 Mbit/s

95th percentile per-packet one-way delay: 51.830 ms

Loss rate: 0.33%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-30 13:27:46

End at: 2017-11-30 13:28:16

Below is generated by plot.py at 2017-11-30 14:34:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 52.022 ms

Loss rate: 0.46%

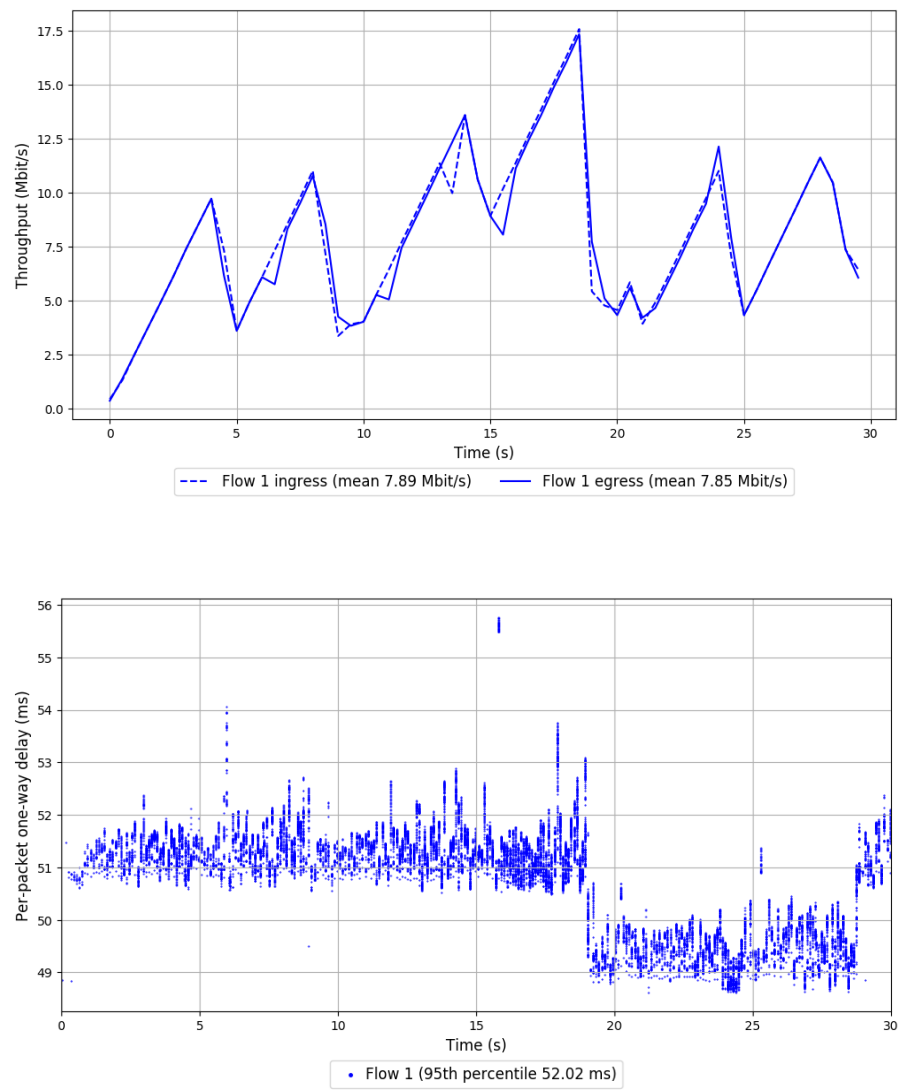
-- Flow 1:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 52.022 ms

Loss rate: 0.46%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-30 13:37:50

End at: 2017-11-30 13:38:20

Below is generated by plot.py at 2017-11-30 14:34:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.25 Mbit/s

95th percentile per-packet one-way delay: 51.941 ms

Loss rate: 0.52%

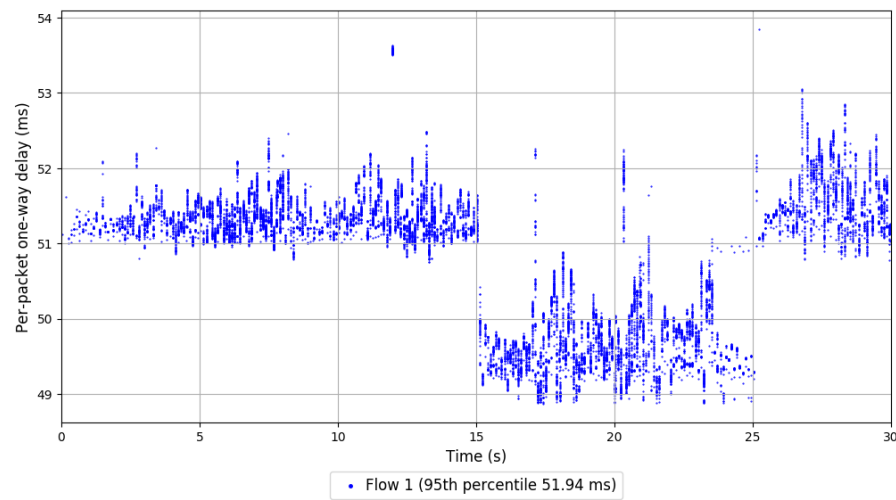
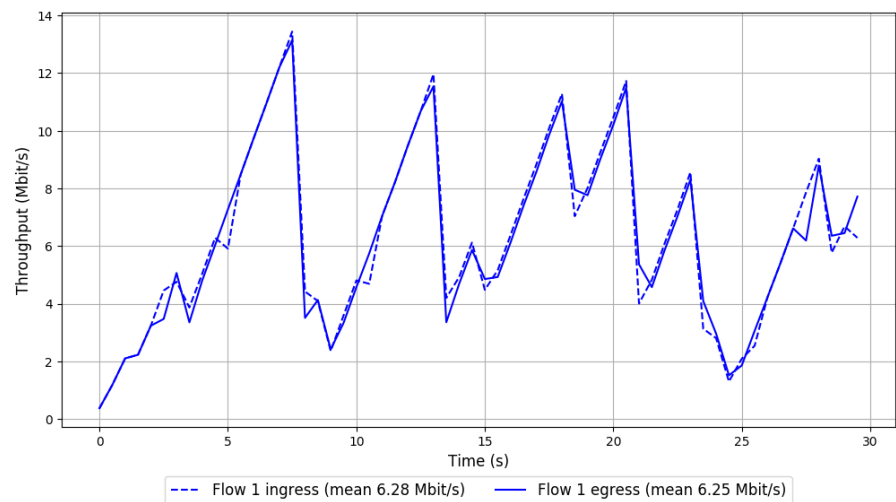
-- Flow 1:

Average throughput: 6.25 Mbit/s

95th percentile per-packet one-way delay: 51.941 ms

Loss rate: 0.52%

Run 10: Report of LEDBAT — Data Link

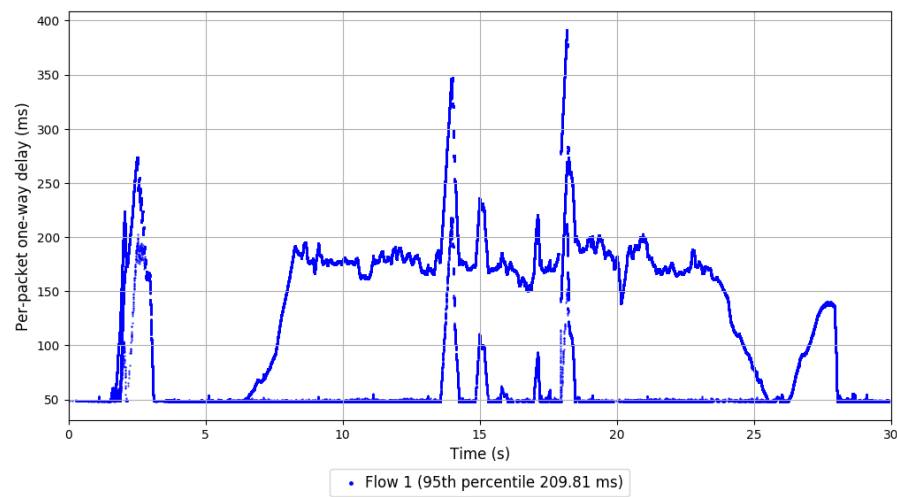
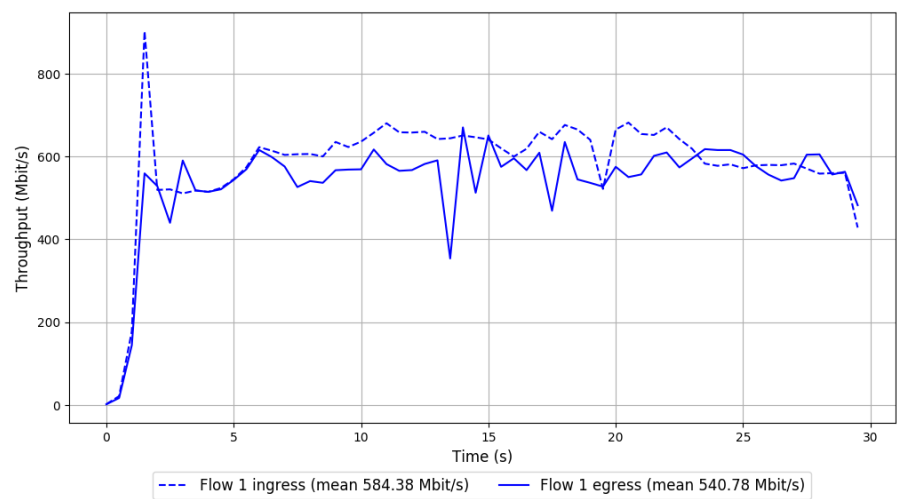


```
Run 1: Statistics of PCC

Start at: 2017-11-30 12:00:47
End at: 2017-11-30 12:01:17

# Below is generated by plot.py at 2017-11-30 14:42:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 540.78 Mbit/s
95th percentile per-packet one-way delay: 209.805 ms
Loss rate: 7.46%
-- Flow 1:
Average throughput: 540.78 Mbit/s
95th percentile per-packet one-way delay: 209.805 ms
Loss rate: 7.46%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-30 12:11:01

End at: 2017-11-30 12:11:31

Below is generated by plot.py at 2017-11-30 14:42:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 532.96 Mbit/s

95th percentile per-packet one-way delay: 83.439 ms

Loss rate: 0.29%

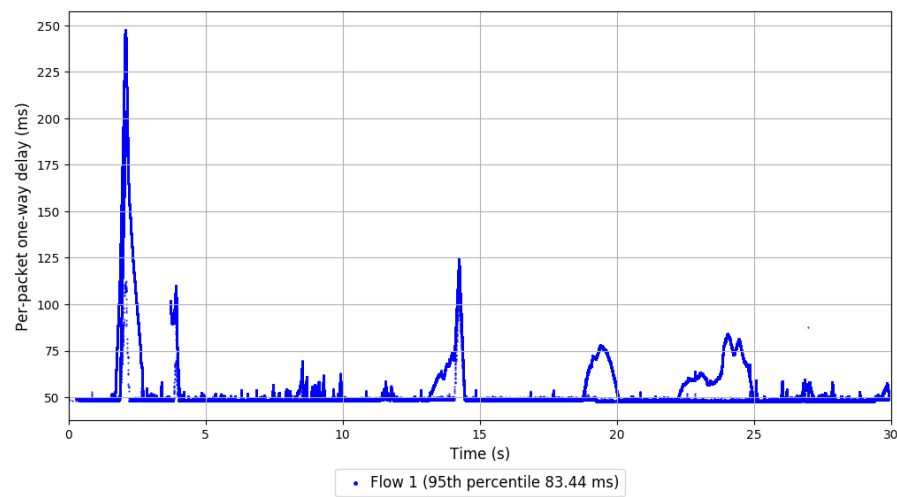
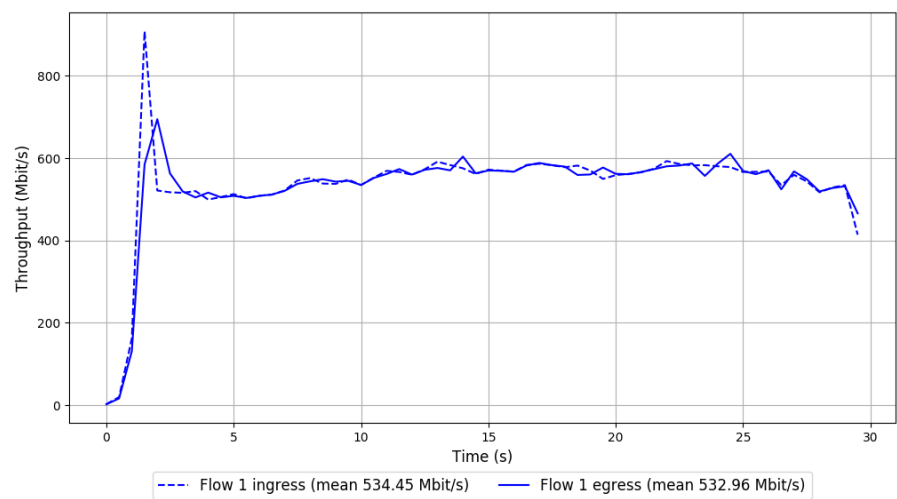
-- Flow 1:

Average throughput: 532.96 Mbit/s

95th percentile per-packet one-way delay: 83.439 ms

Loss rate: 0.29%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-30 12:21:15

End at: 2017-11-30 12:21:45

Below is generated by plot.py at 2017-11-30 14:42:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 527.86 Mbit/s

95th percentile per-packet one-way delay: 156.396 ms

Loss rate: 0.43%

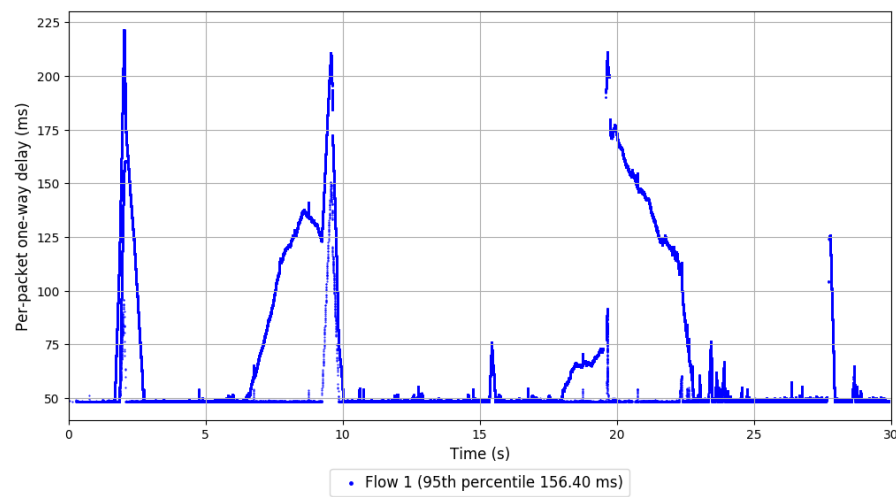
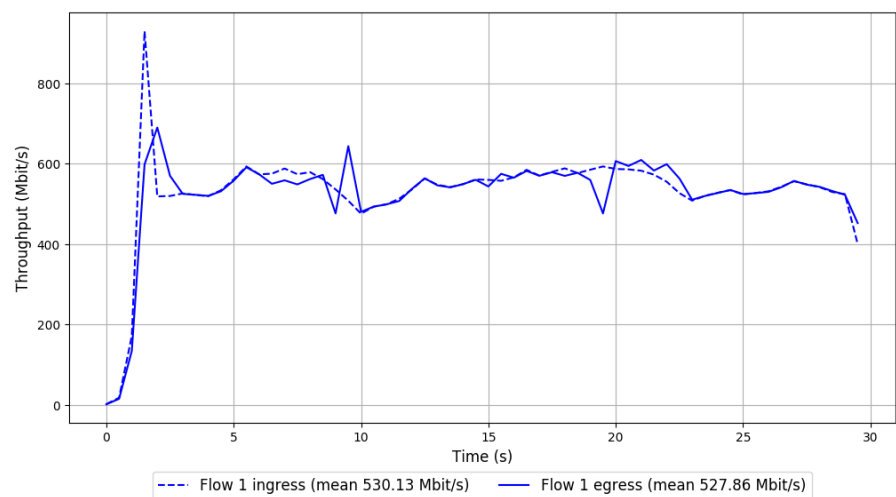
-- Flow 1:

Average throughput: 527.86 Mbit/s

95th percentile per-packet one-way delay: 156.396 ms

Loss rate: 0.43%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-30 12:31:36

End at: 2017-11-30 12:32:06

Below is generated by plot.py at 2017-11-30 14:42:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 509.76 Mbit/s

95th percentile per-packet one-way delay: 176.062 ms

Loss rate: 0.47%

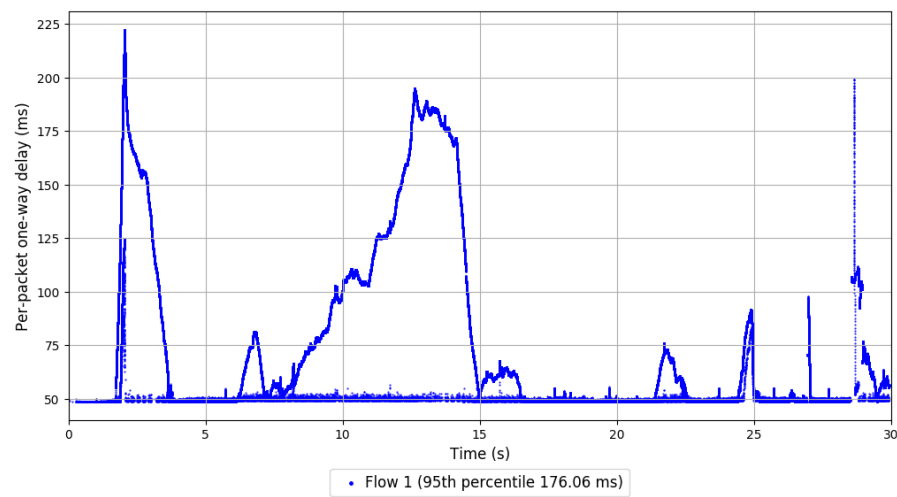
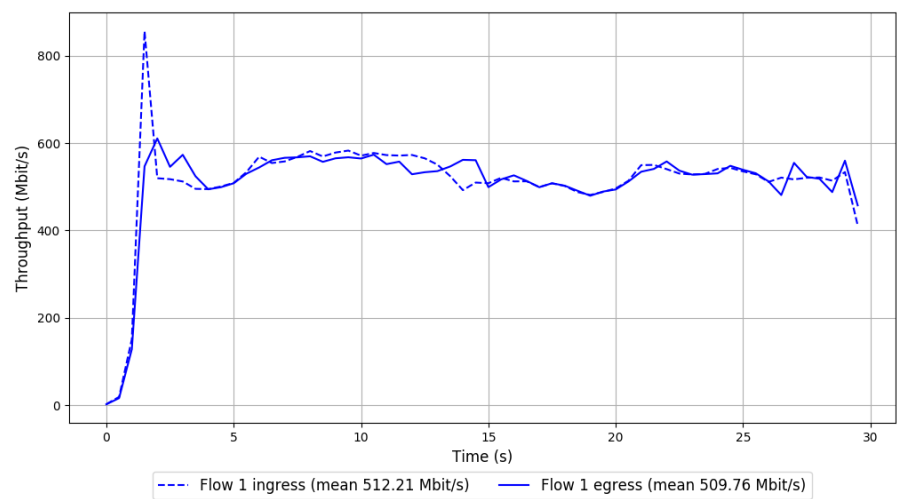
-- Flow 1:

Average throughput: 509.76 Mbit/s

95th percentile per-packet one-way delay: 176.062 ms

Loss rate: 0.47%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-30 12:41:52

End at: 2017-11-30 12:42:22

Below is generated by plot.py at 2017-11-30 14:42:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 484.09 Mbit/s

95th percentile per-packet one-way delay: 159.905 ms

Loss rate: 0.22%

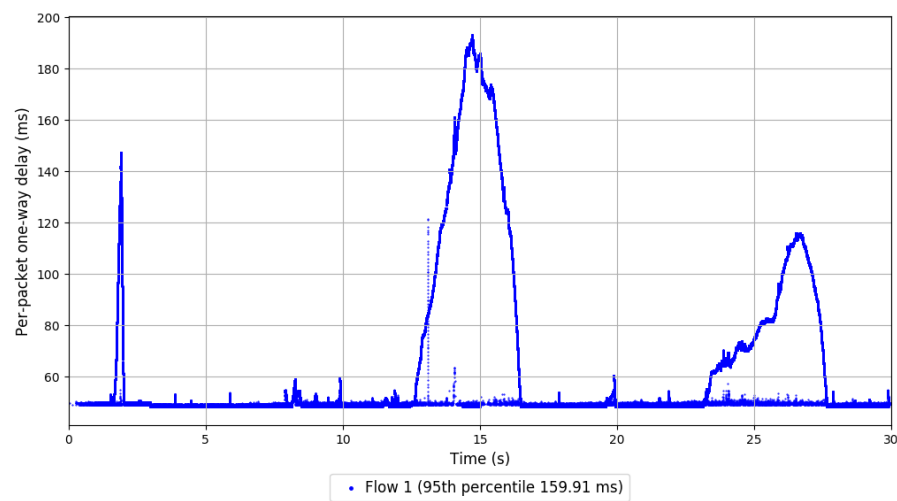
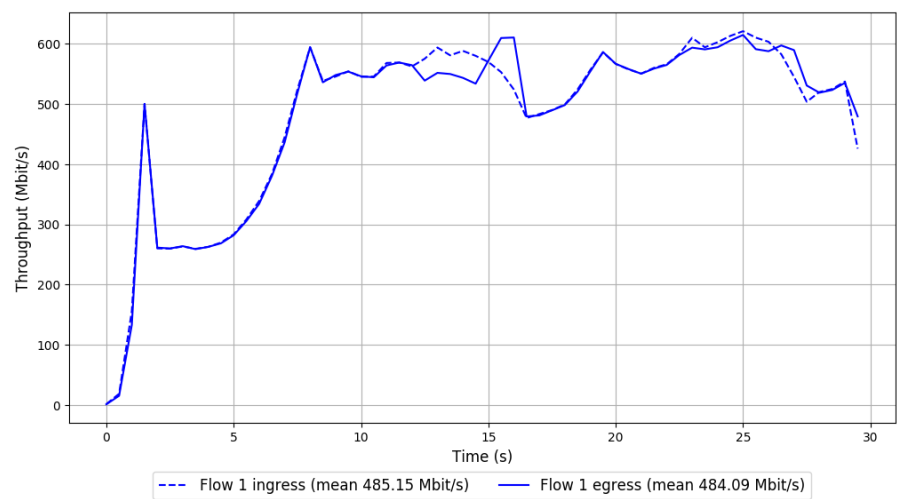
-- Flow 1:

Average throughput: 484.09 Mbit/s

95th percentile per-packet one-way delay: 159.905 ms

Loss rate: 0.22%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-30 12:51:58

End at: 2017-11-30 12:52:28

Below is generated by plot.py at 2017-11-30 14:42:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 519.00 Mbit/s

95th percentile per-packet one-way delay: 109.974 ms

Loss rate: 0.35%

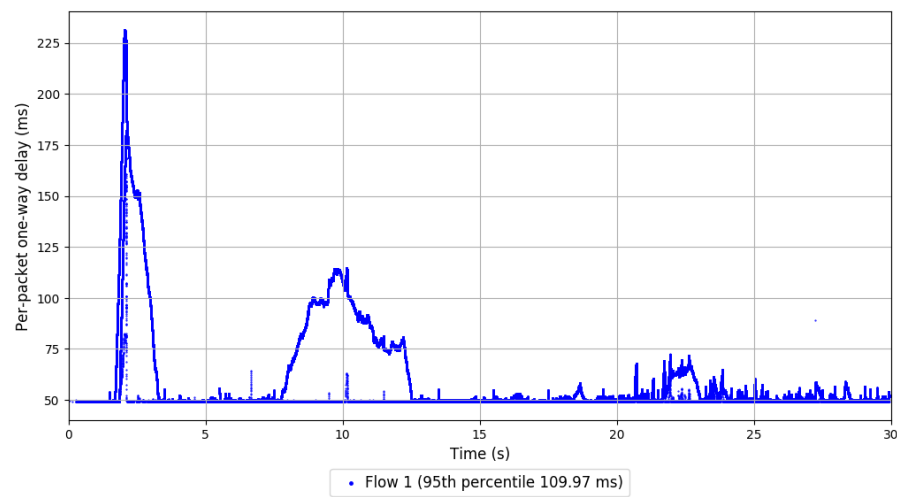
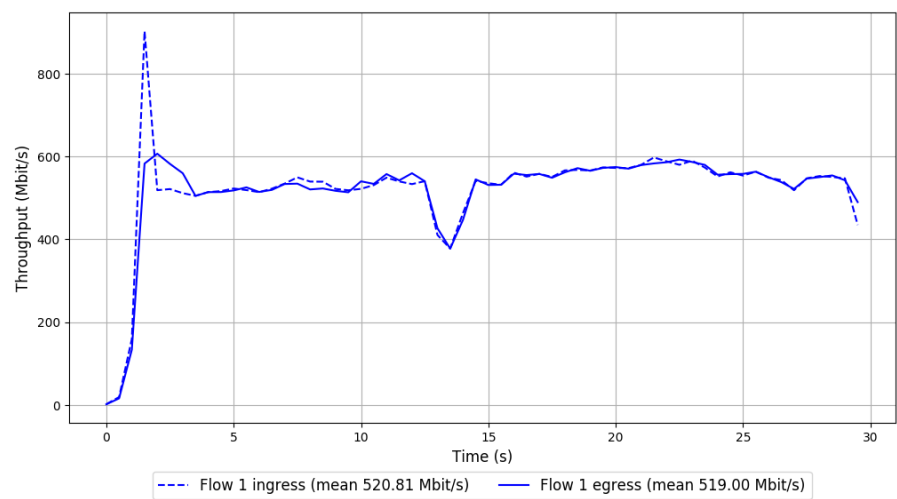
-- Flow 1:

Average throughput: 519.00 Mbit/s

95th percentile per-packet one-way delay: 109.974 ms

Loss rate: 0.35%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-30 13:02:16

End at: 2017-11-30 13:02:46

Below is generated by plot.py at 2017-11-30 14:42:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 503.70 Mbit/s

95th percentile per-packet one-way delay: 133.379 ms

Loss rate: 0.73%

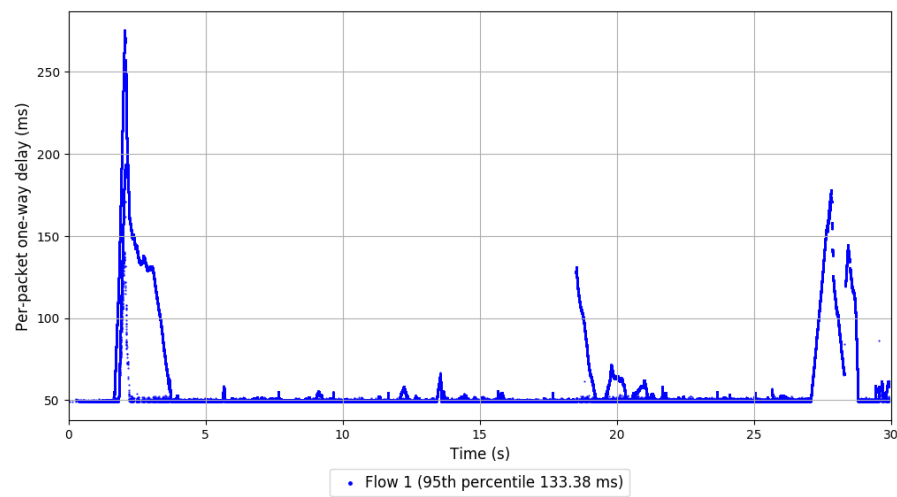
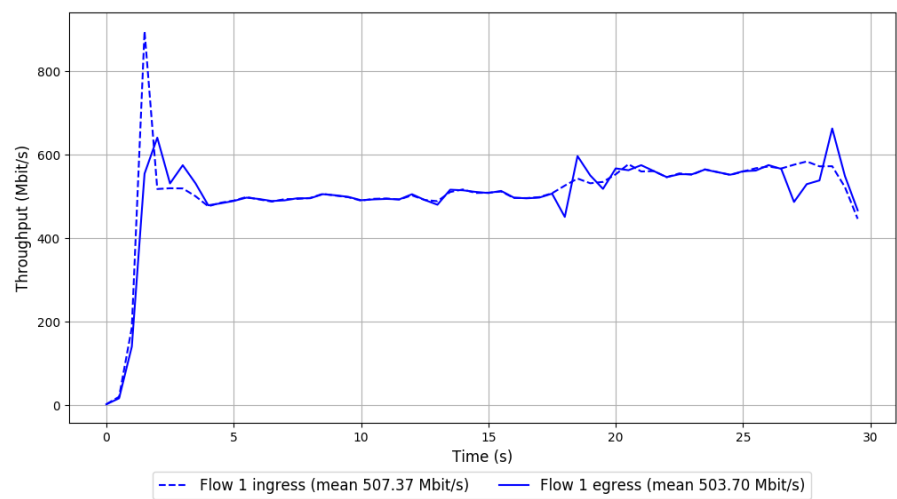
-- Flow 1:

Average throughput: 503.70 Mbit/s

95th percentile per-packet one-way delay: 133.379 ms

Loss rate: 0.73%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-30 13:12:33

End at: 2017-11-30 13:13:03

Below is generated by plot.py at 2017-11-30 14:42:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 497.93 Mbit/s

95th percentile per-packet one-way delay: 95.214 ms

Loss rate: 0.29%

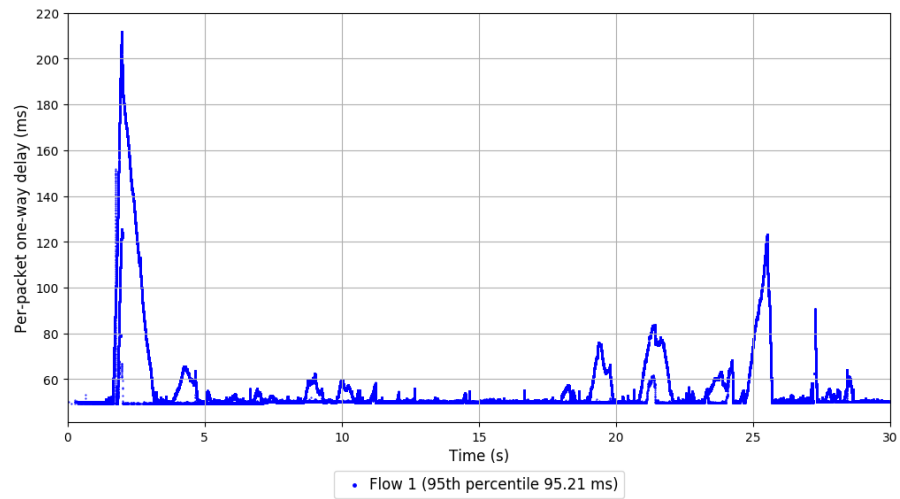
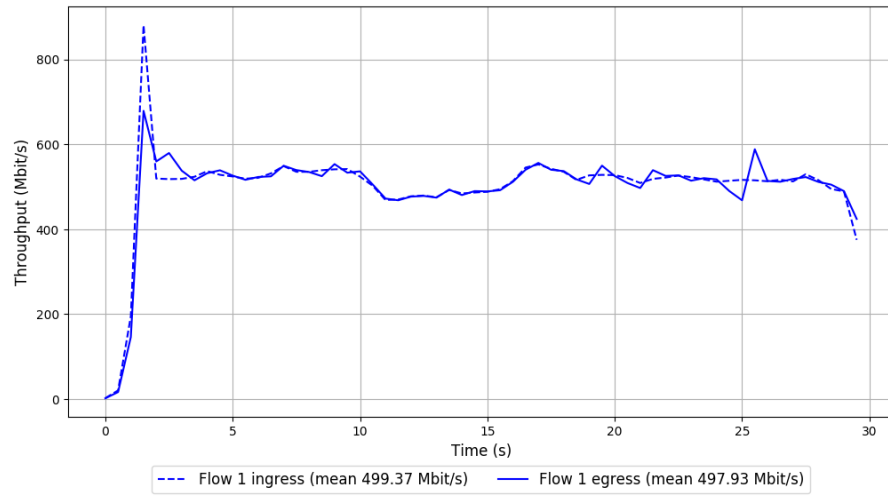
-- Flow 1:

Average throughput: 497.93 Mbit/s

95th percentile per-packet one-way delay: 95.214 ms

Loss rate: 0.29%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-30 13:22:42

End at: 2017-11-30 13:23:12

Below is generated by plot.py at 2017-11-30 14:51:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 499.33 Mbit/s

95th percentile per-packet one-way delay: 156.373 ms

Loss rate: 0.31%

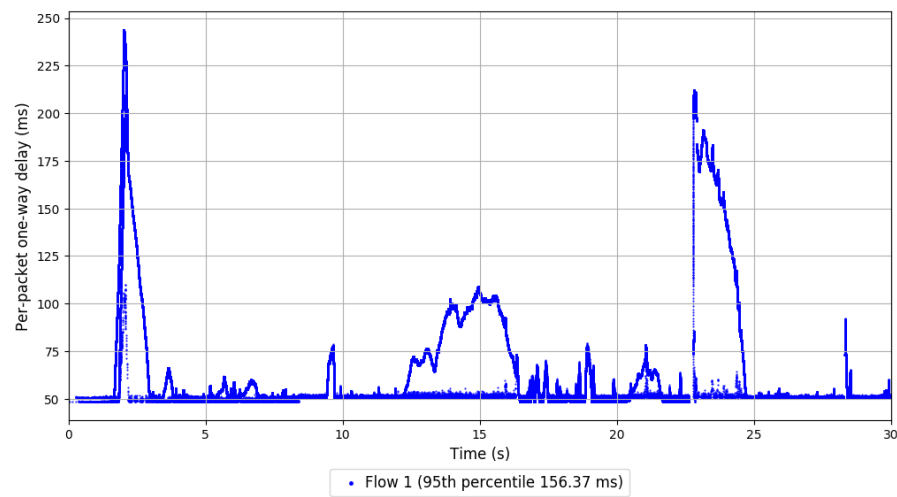
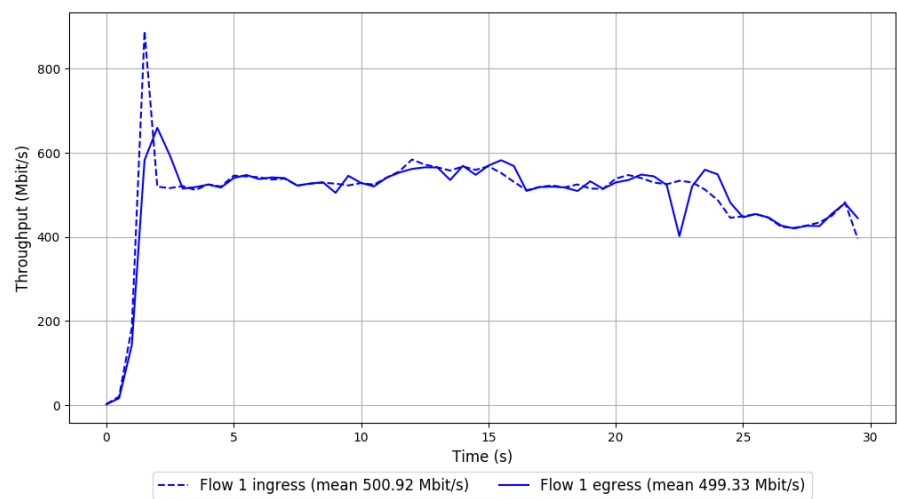
-- Flow 1:

Average throughput: 499.33 Mbit/s

95th percentile per-packet one-way delay: 156.373 ms

Loss rate: 0.31%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-30 13:32:47

End at: 2017-11-30 13:33:17

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 494.62 Mbit/s

95th percentile per-packet one-way delay: 126.385 ms

Loss rate: 0.49%

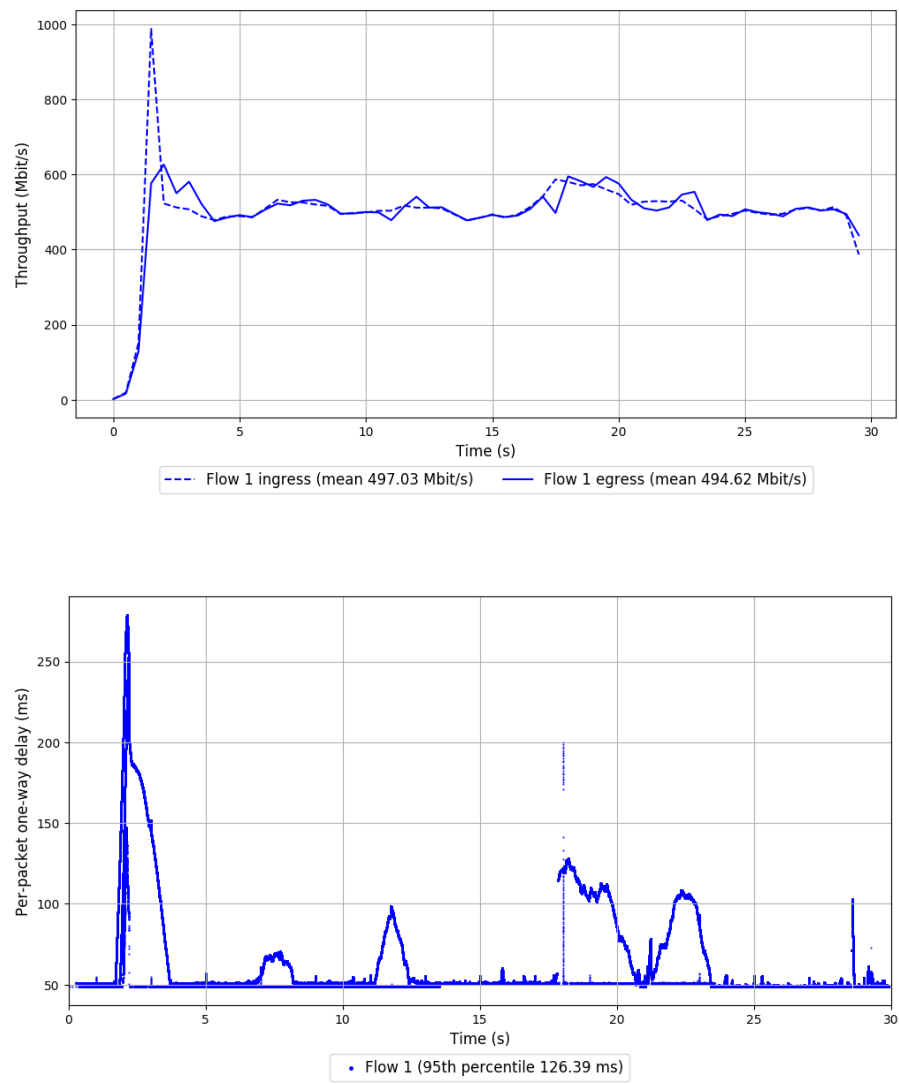
-- Flow 1:

Average throughput: 494.62 Mbit/s

95th percentile per-packet one-way delay: 126.385 ms

Loss rate: 0.49%

Run 10: Report of PCC — Data Link

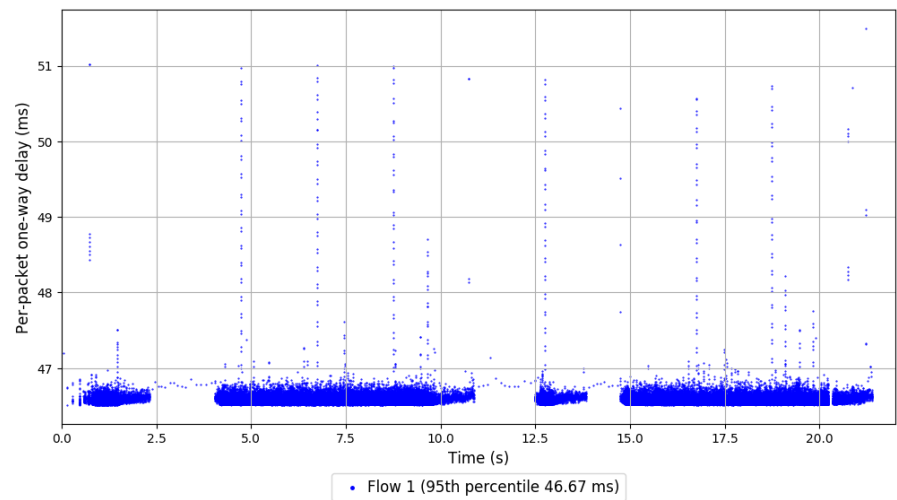
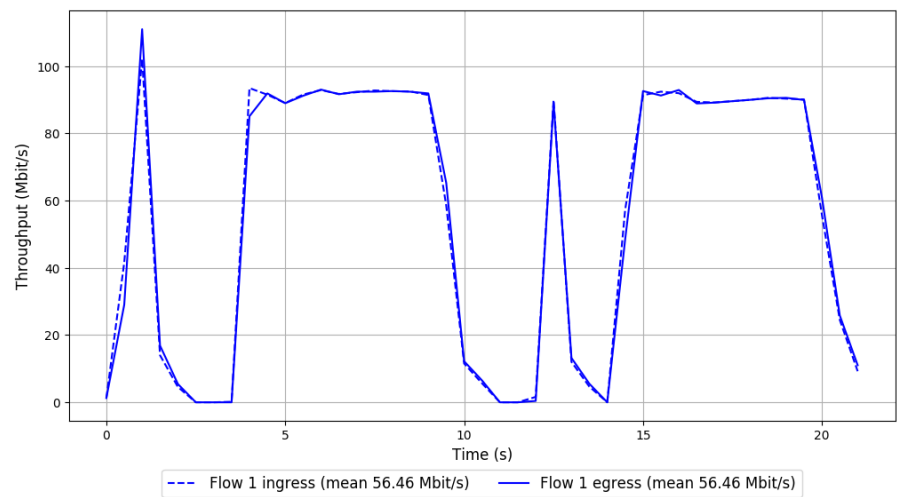


Run 1: Statistics of QUIC Cubic

Start at: 2017-11-30 12:03:10

End at: 2017-11-30 12:03:40

Run 1: Report of QUIC Cubic — Data Link

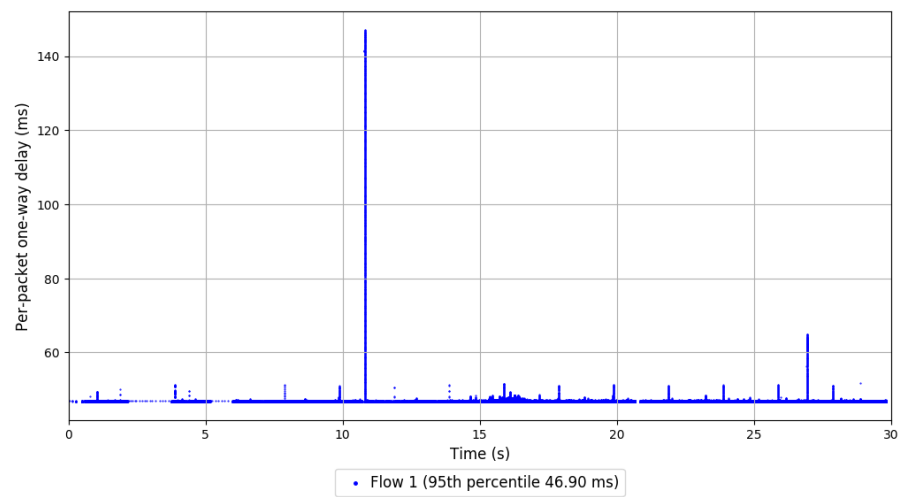
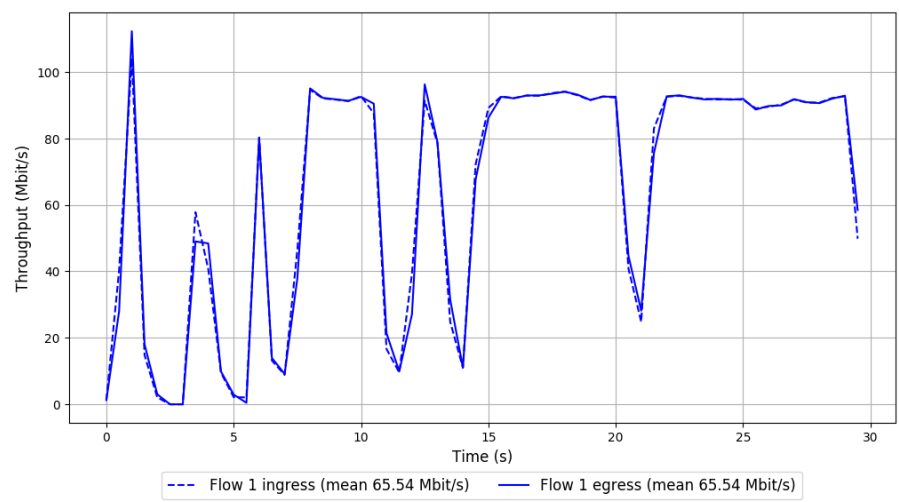


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-11-30 12:13:24
End at: 2017-11-30 12:13:54

# Below is generated by plot.py at 2017-11-30 14:51:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.54 Mbit/s
95th percentile per-packet one-way delay: 46.899 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.54 Mbit/s
95th percentile per-packet one-way delay: 46.899 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link

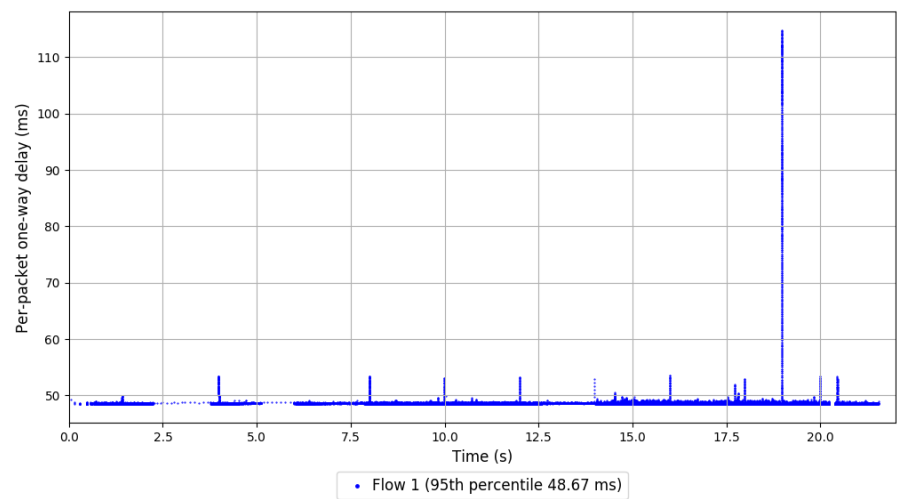
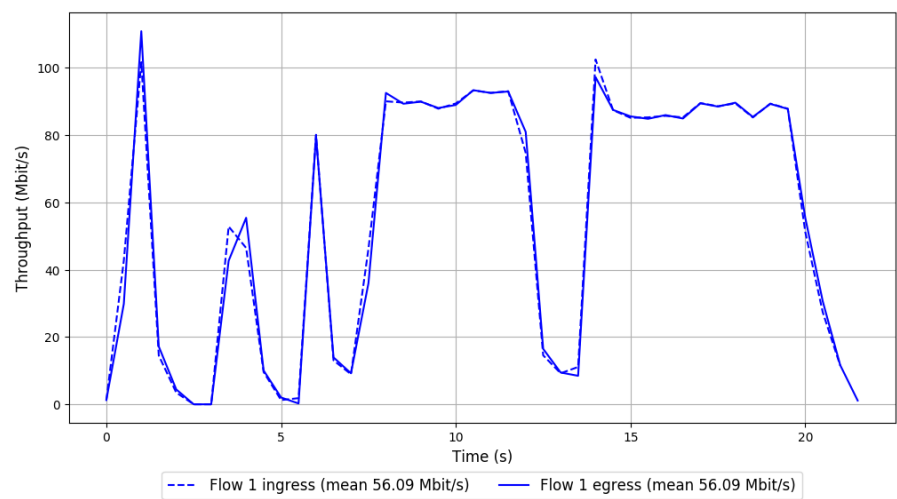


Run 3: Statistics of QUIC Cubic

Start at: 2017-11-30 12:23:37

End at: 2017-11-30 12:24:07

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-30 12:33:58

End at: 2017-11-30 12:34:28

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.00 Mbit/s

95th percentile per-packet one-way delay: 48.927 ms

Loss rate: 0.00%

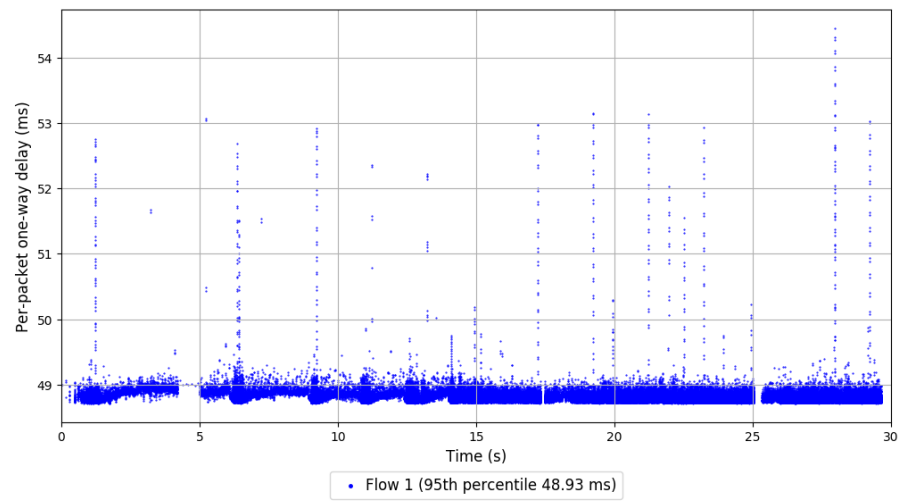
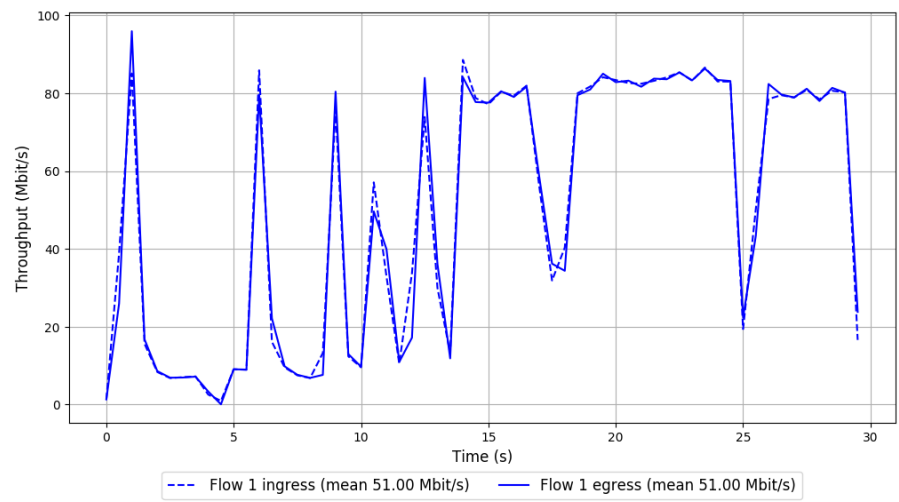
-- Flow 1:

Average throughput: 51.00 Mbit/s

95th percentile per-packet one-way delay: 48.927 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-30 12:44:13

End at: 2017-11-30 12:44:43

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.39 Mbit/s

95th percentile per-packet one-way delay: 49.166 ms

Loss rate: 0.00%

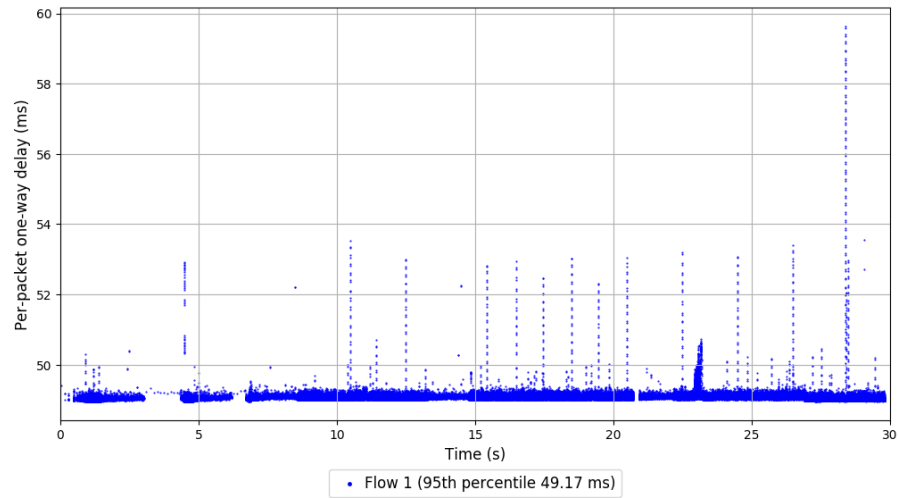
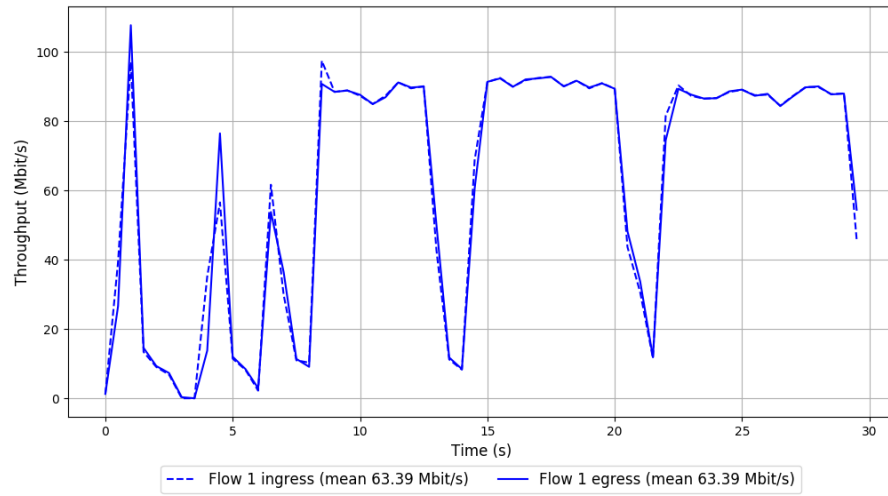
-- Flow 1:

Average throughput: 63.39 Mbit/s

95th percentile per-packet one-way delay: 49.166 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-30 12:54:20

End at: 2017-11-30 12:54:50

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.83 Mbit/s

95th percentile per-packet one-way delay: 49.355 ms

Loss rate: 0.00%

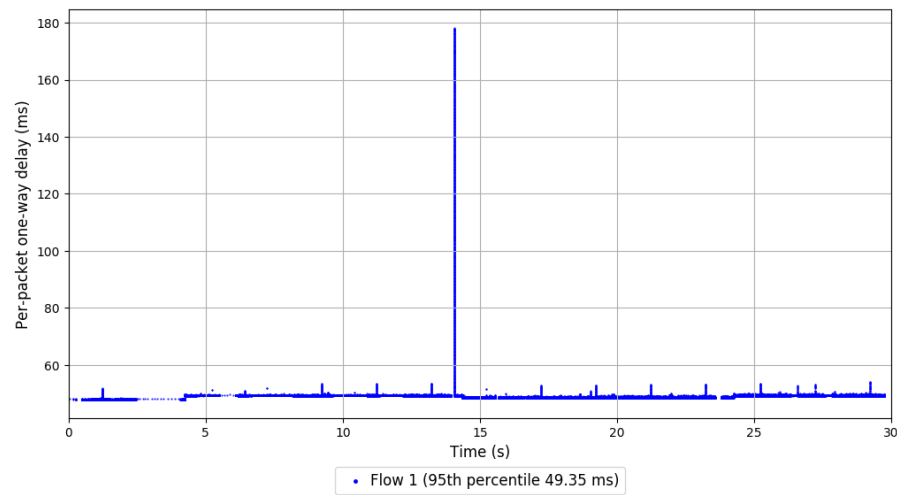
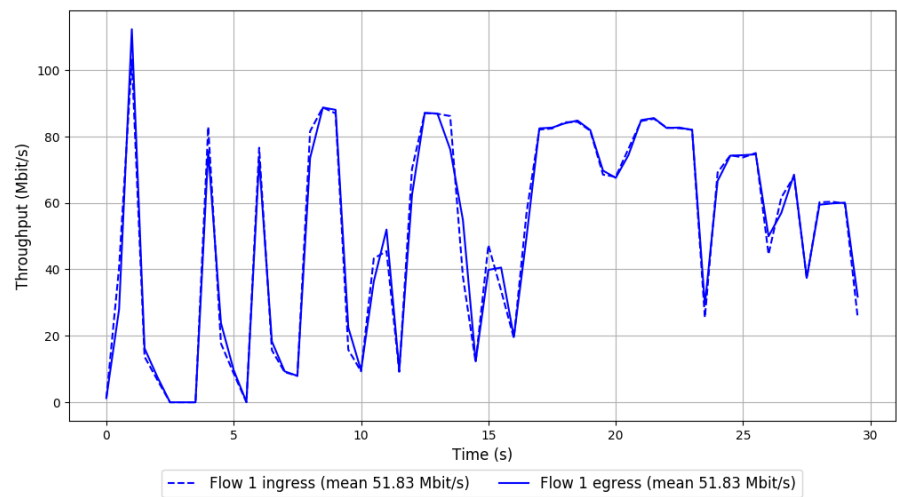
-- Flow 1:

Average throughput: 51.83 Mbit/s

95th percentile per-packet one-way delay: 49.355 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-30 13:04:38

End at: 2017-11-30 13:05:08

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.41 Mbit/s

95th percentile per-packet one-way delay: 50.035 ms

Loss rate: 0.00%

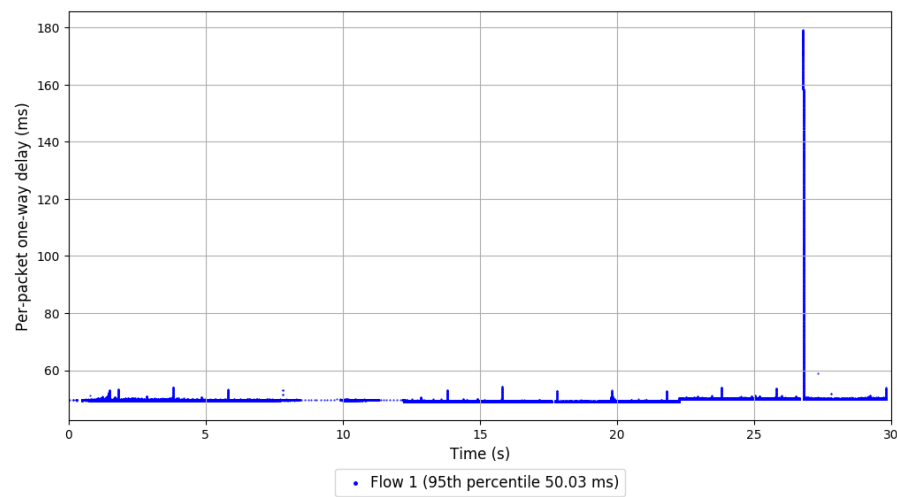
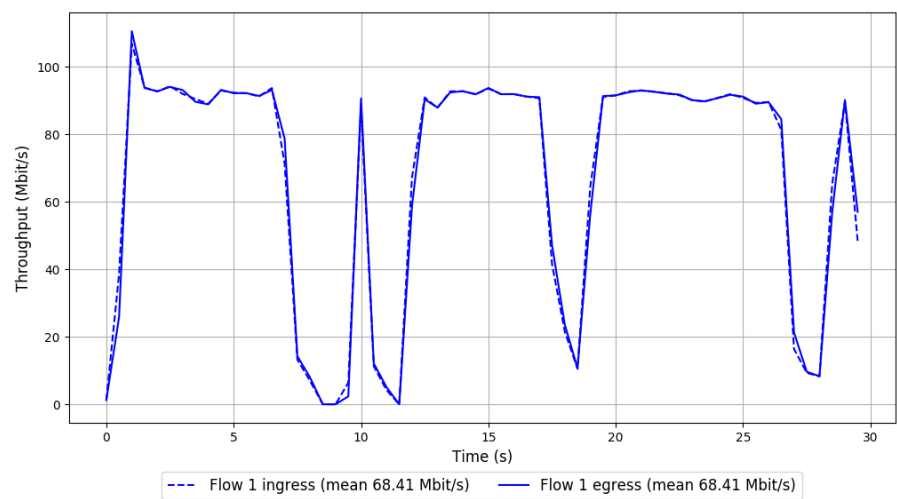
-- Flow 1:

Average throughput: 68.41 Mbit/s

95th percentile per-packet one-way delay: 50.035 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-30 13:14:54

End at: 2017-11-30 13:15:24

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.52 Mbit/s

95th percentile per-packet one-way delay: 50.216 ms

Loss rate: 0.00%

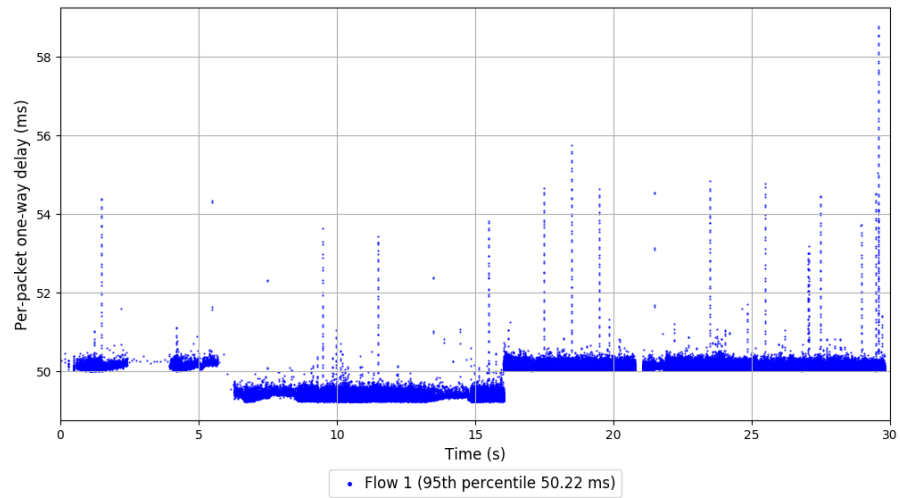
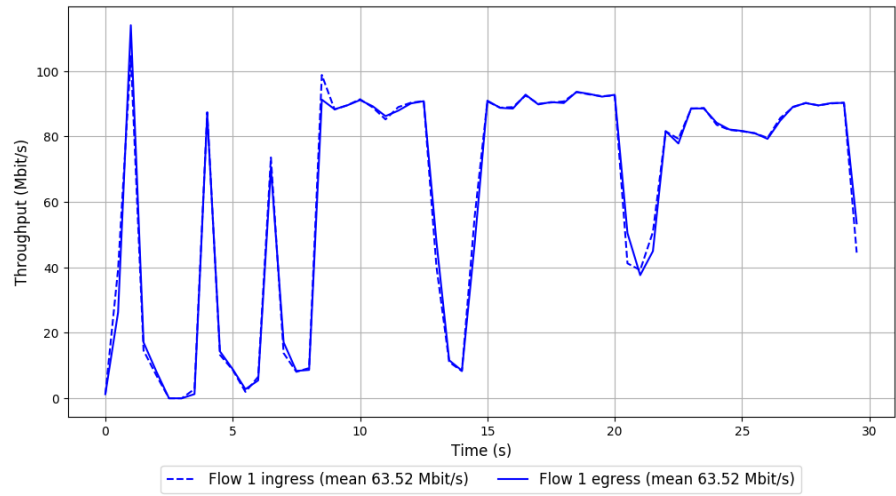
-- Flow 1:

Average throughput: 63.52 Mbit/s

95th percentile per-packet one-way delay: 50.216 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-30 13:25:03

End at: 2017-11-30 13:25:33

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.33 Mbit/s

95th percentile per-packet one-way delay: 50.675 ms

Loss rate: 0.00%

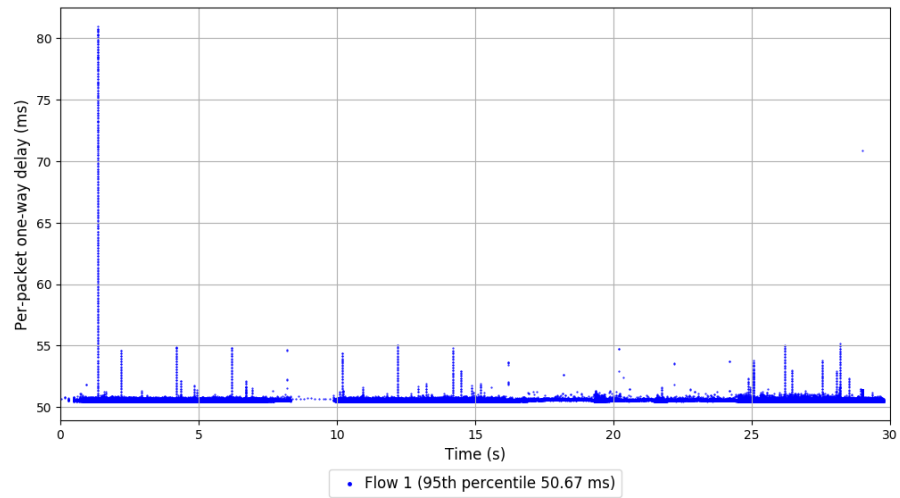
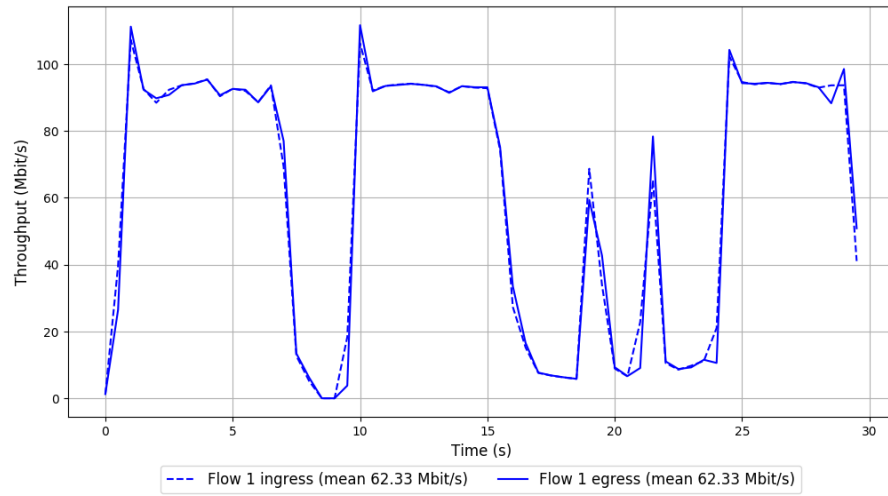
-- Flow 1:

Average throughput: 62.33 Mbit/s

95th percentile per-packet one-way delay: 50.675 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

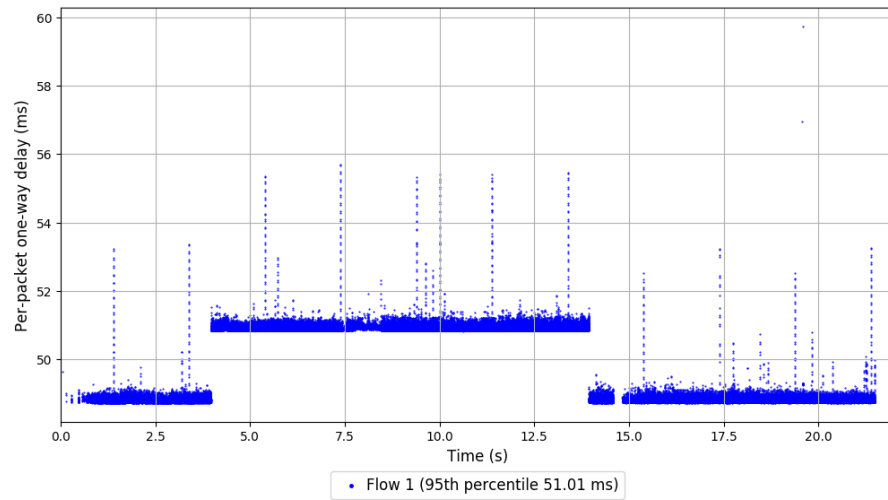
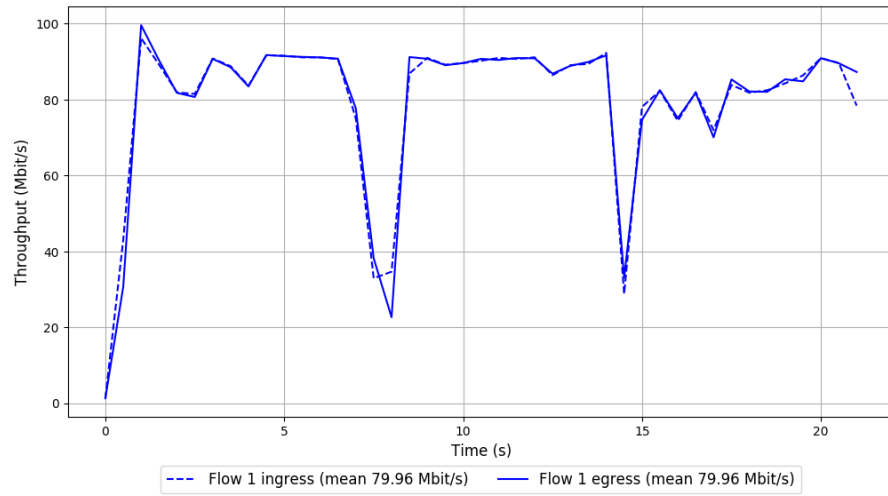


Run 10: Statistics of QUIC Cubic

Start at: 2017-11-30 13:35:08

End at: 2017-11-30 13:35:38

Run 10: Report of QUIC Cubic — Data Link

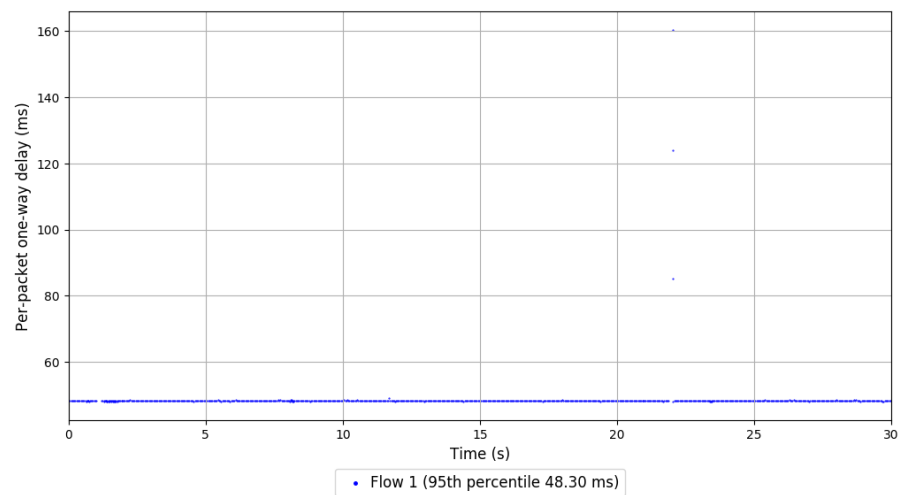
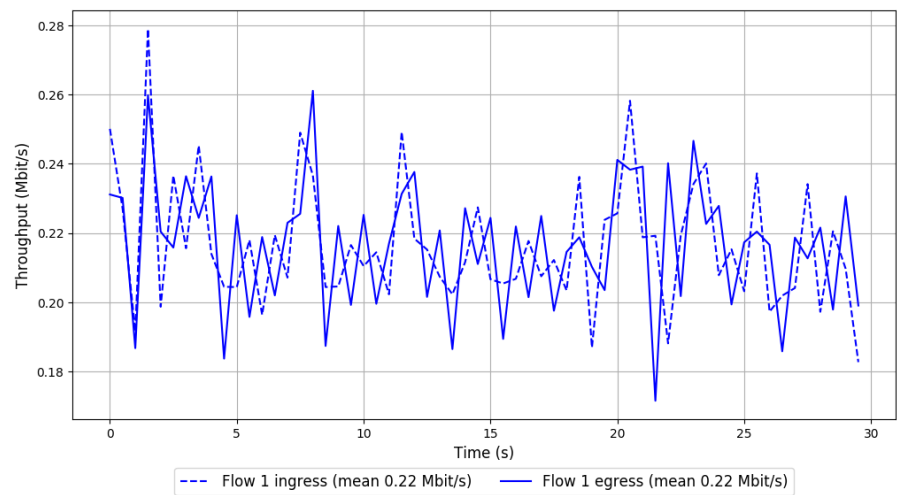


```
Run 1: Statistics of SCReAM

Start at: 2017-11-30 11:59:12
End at: 2017-11-30 11:59:42

# Below is generated by plot.py at 2017-11-30 14:51:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.297 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.297 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

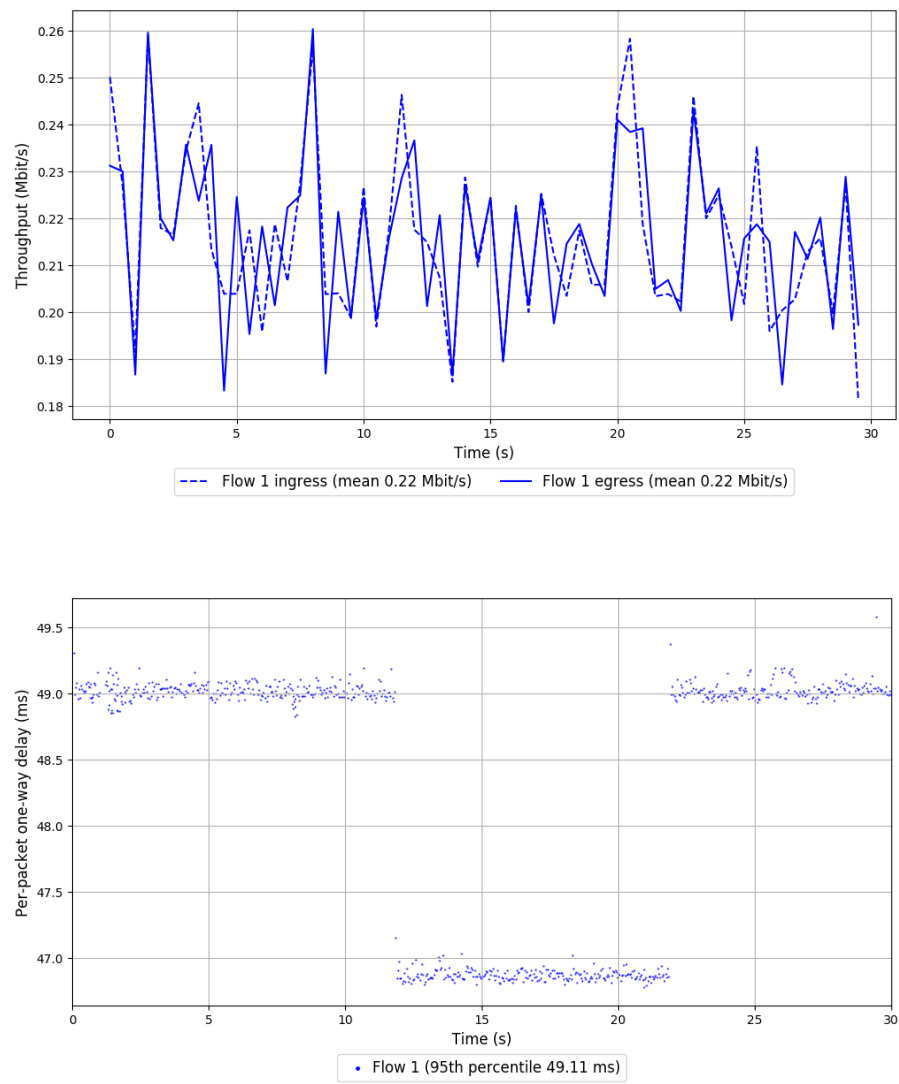


```
Run 2: Statistics of SCReAM

Start at: 2017-11-30 12:09:33
End at: 2017-11-30 12:10:03

# Below is generated by plot.py at 2017-11-30 14:51:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.107 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.107 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-11-30 12:19:44

End at: 2017-11-30 12:20:14

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.700 ms

Loss rate: 0.00%

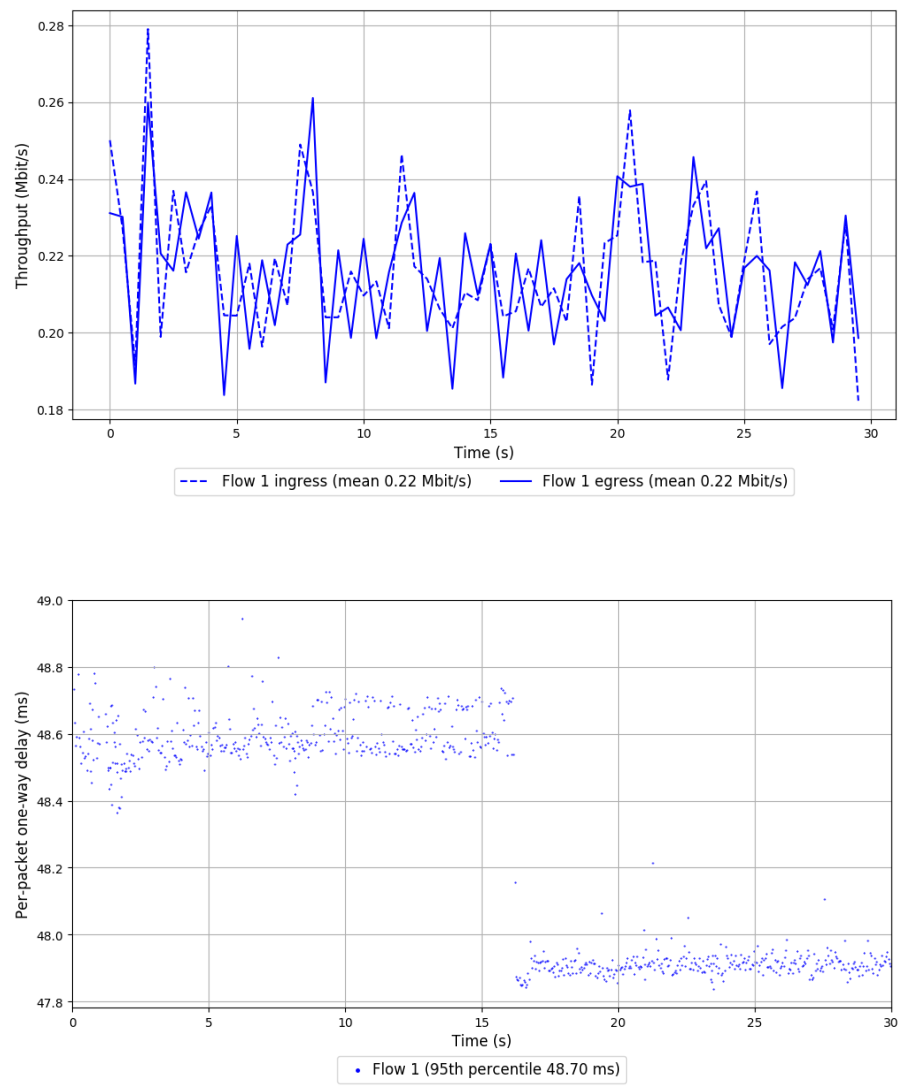
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.700 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-11-30 12:30:06

End at: 2017-11-30 12:30:36

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.473 ms

Loss rate: 0.00%

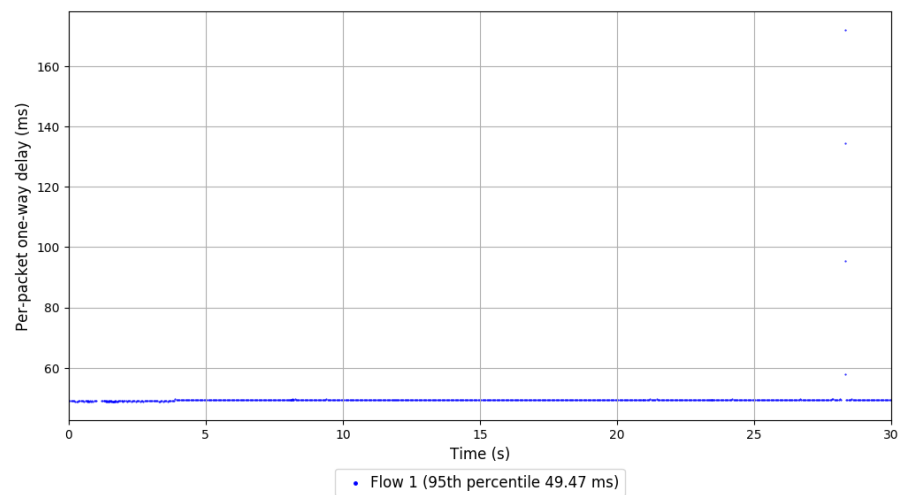
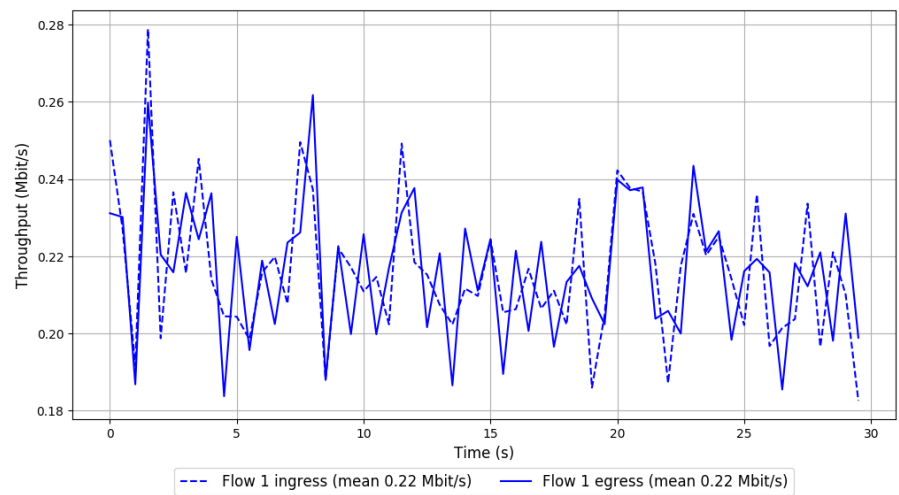
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.473 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-11-30 12:40:22

End at: 2017-11-30 12:40:52

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.310 ms

Loss rate: 0.00%

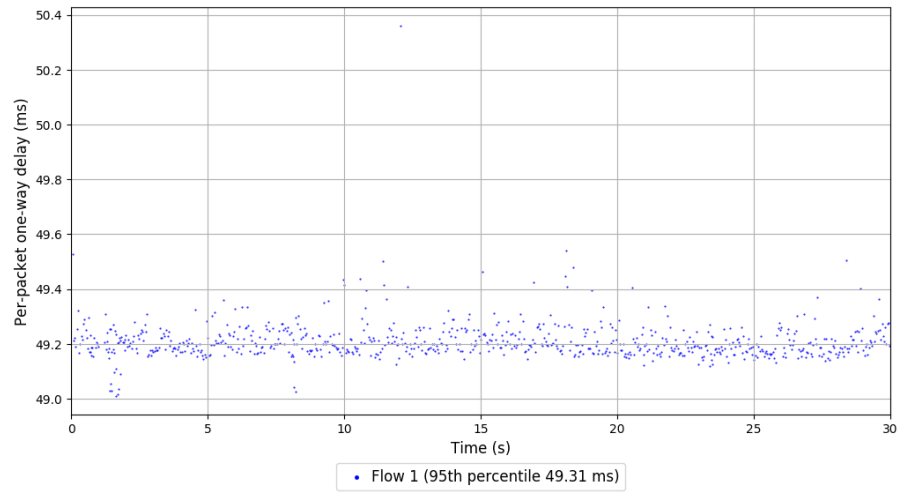
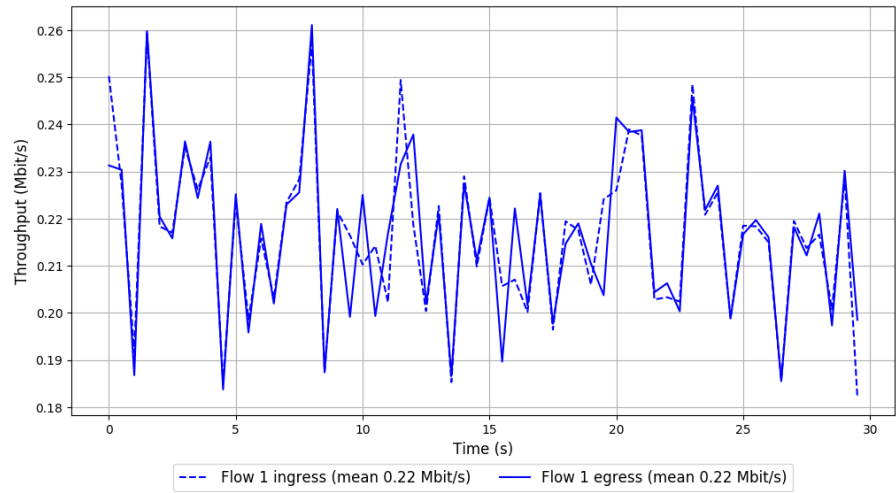
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.310 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-30 12:50:30

End at: 2017-11-30 12:51:00

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.469 ms

Loss rate: 0.00%

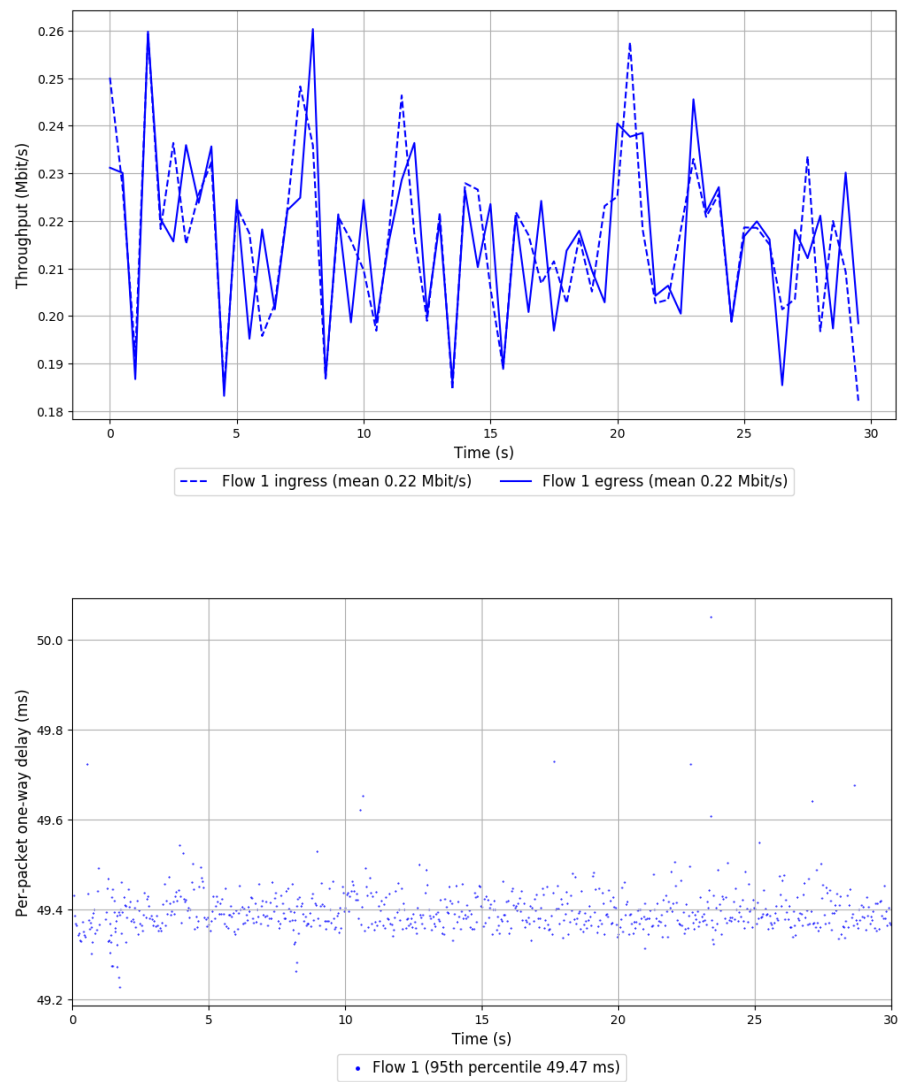
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.469 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-11-30 13:00:44

End at: 2017-11-30 13:01:14

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.097 ms

Loss rate: 0.00%

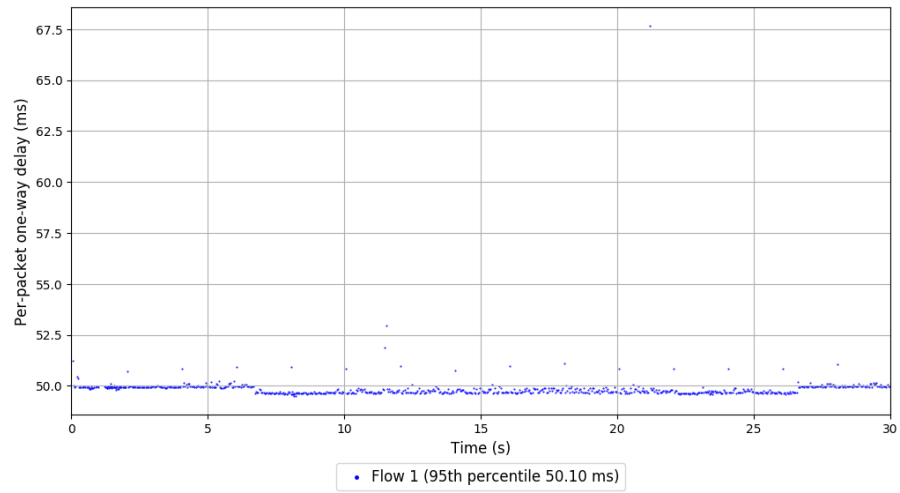
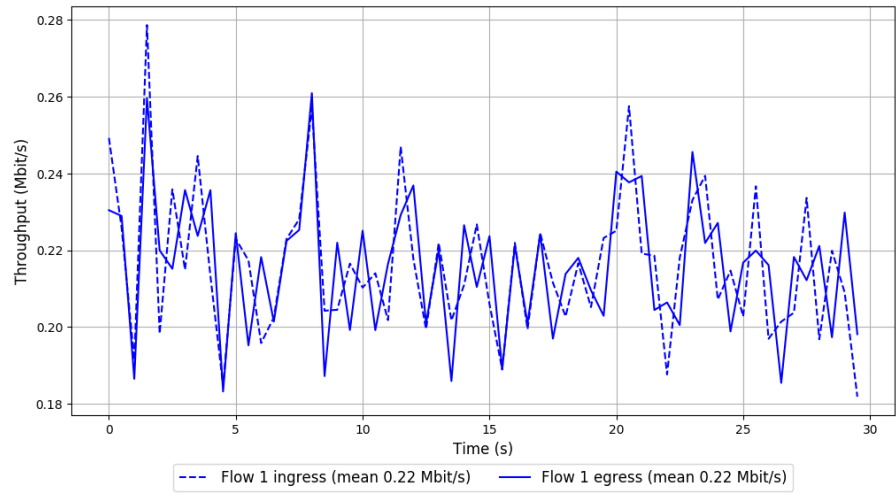
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.097 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-11-30 13:11:01

End at: 2017-11-30 13:11:31

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.583 ms

Loss rate: 0.00%

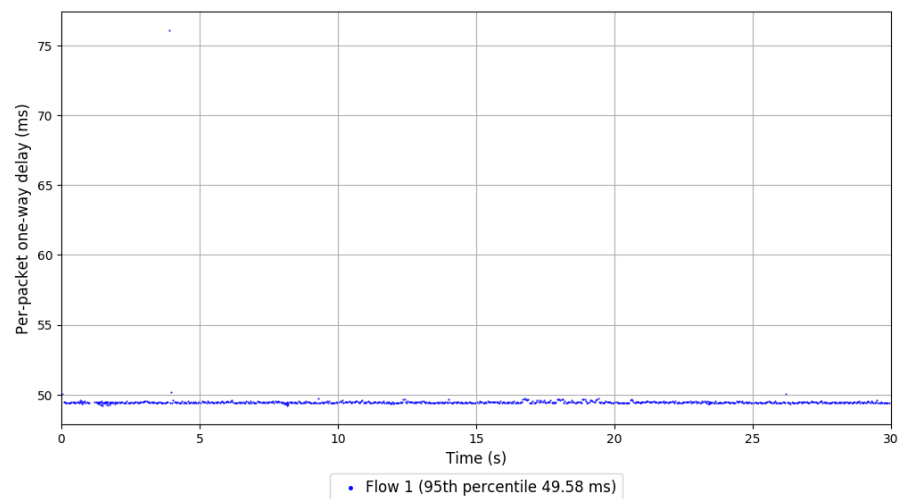
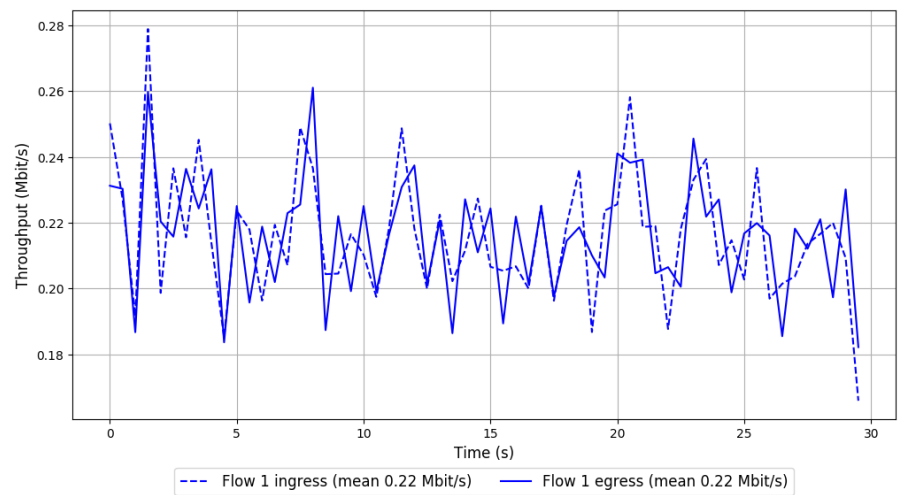
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.583 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-11-30 13:21:11

End at: 2017-11-30 13:21:41

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.053 ms

Loss rate: 0.00%

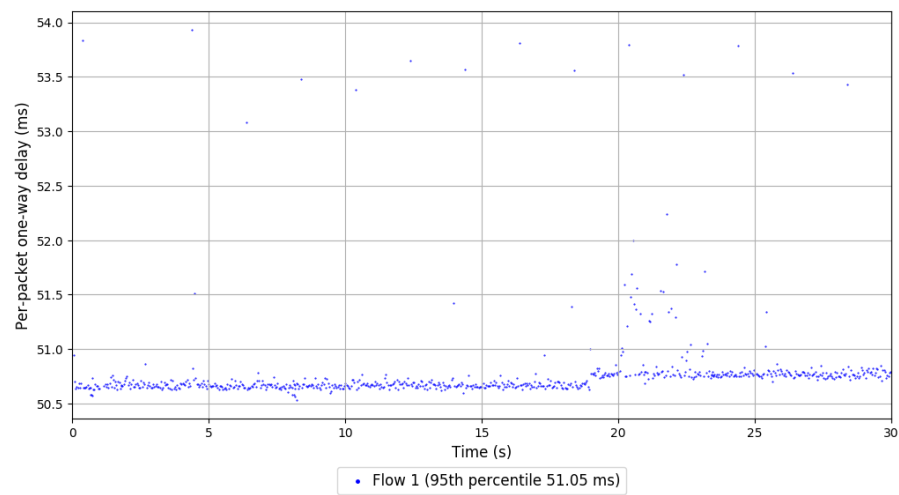
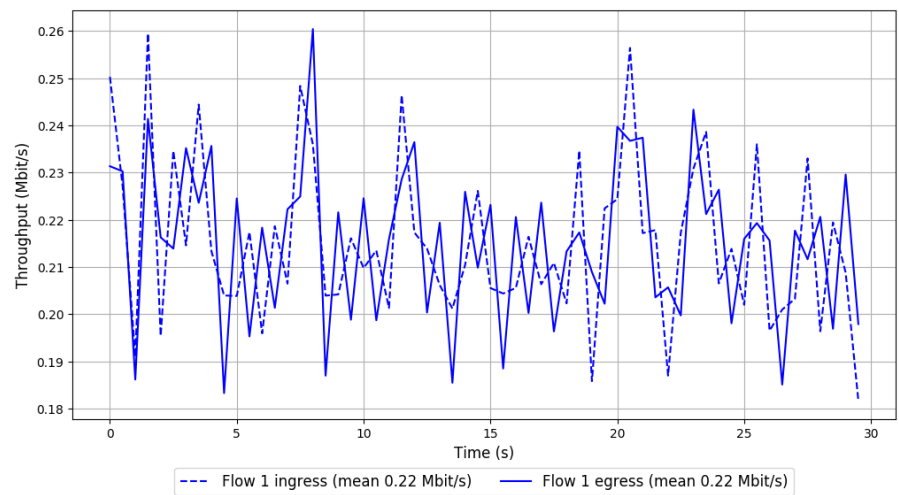
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.053 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-11-30 13:31:15

End at: 2017-11-30 13:31:45

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.968 ms

Loss rate: 0.00%

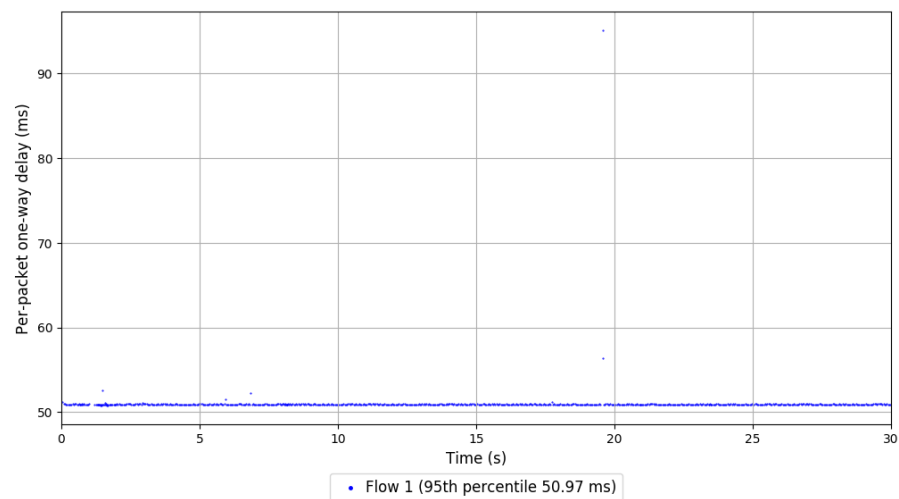
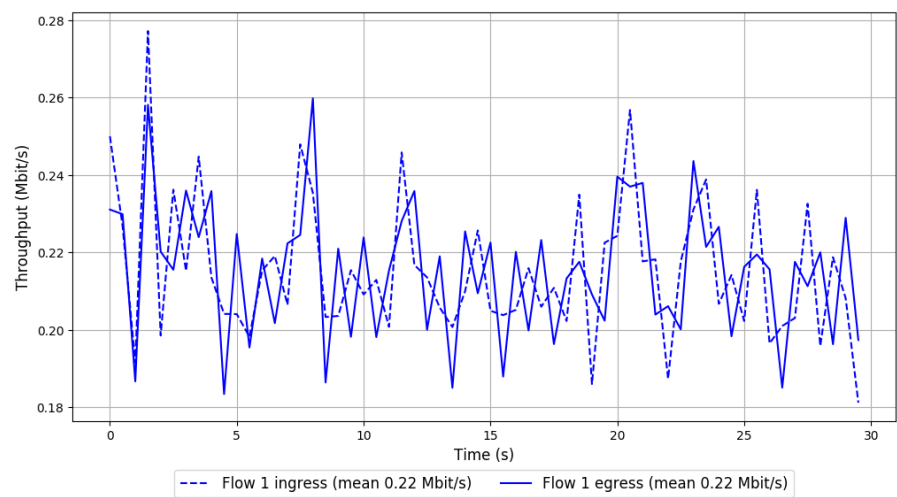
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.968 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

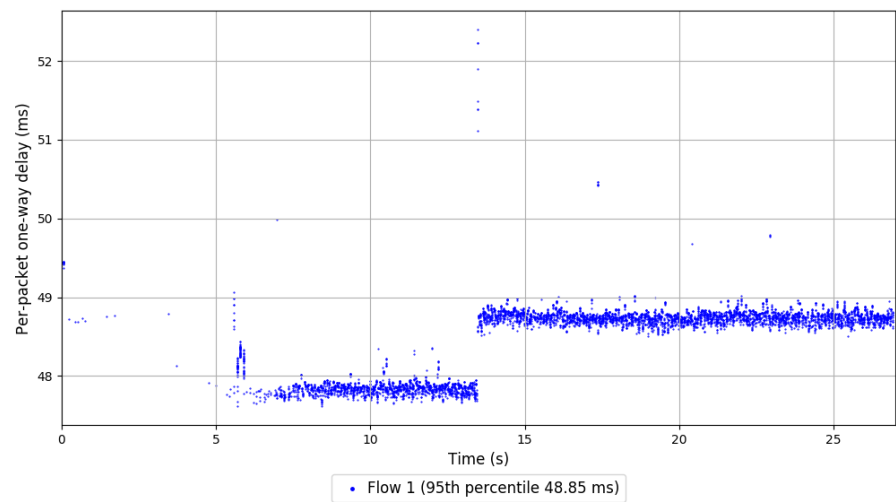
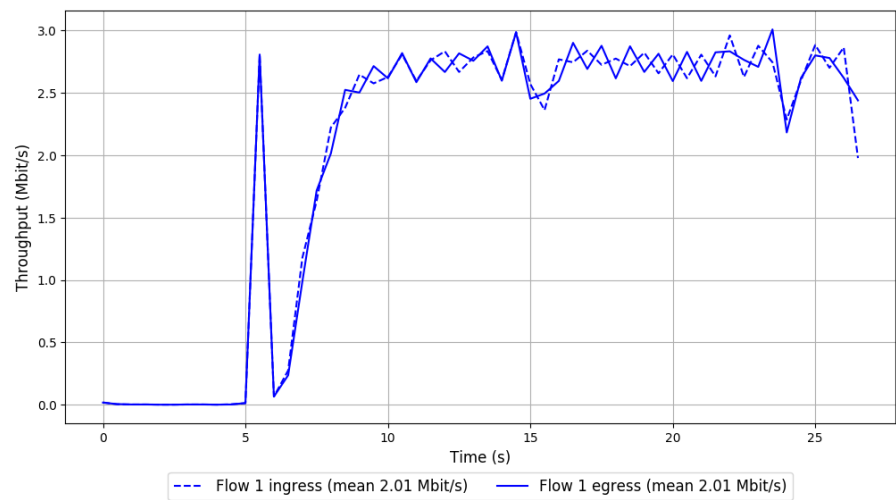


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-30 12:01:44
End at: 2017-11-30 12:02:14

# Below is generated by plot.py at 2017-11-30 14:51:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 48.849 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 48.849 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-30 12:11:57

End at: 2017-11-30 12:12:27

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 48.529 ms

Loss rate: 0.00%

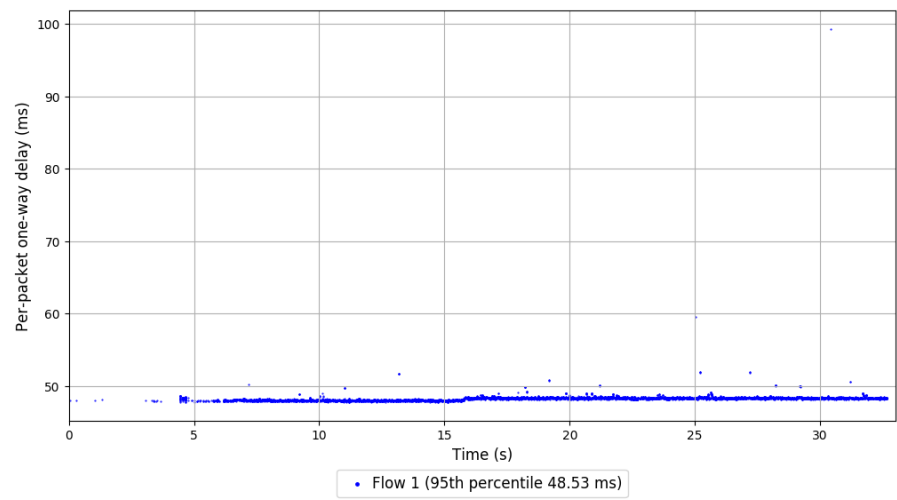
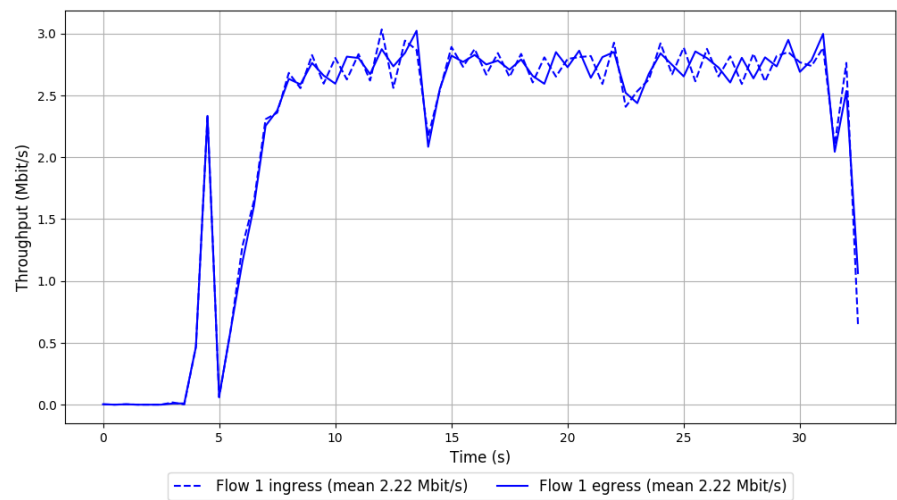
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 48.529 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-30 12:22:11

End at: 2017-11-30 12:22:41

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 49.426 ms

Loss rate: 0.00%

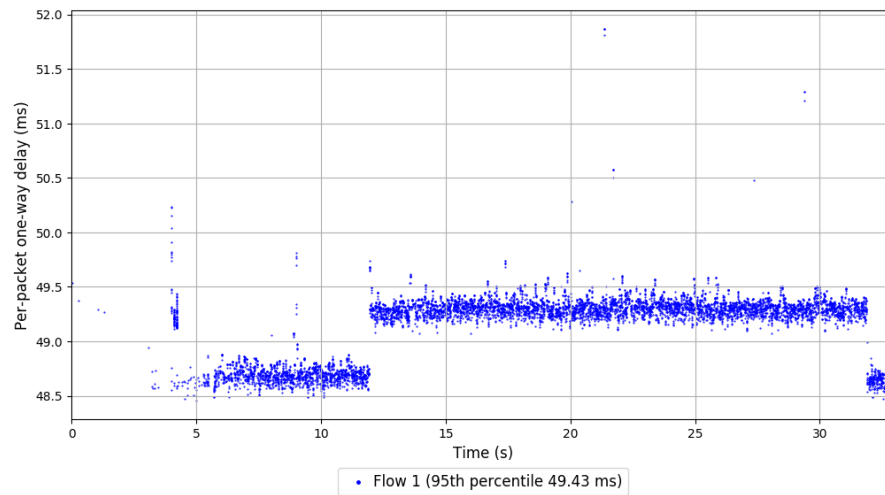
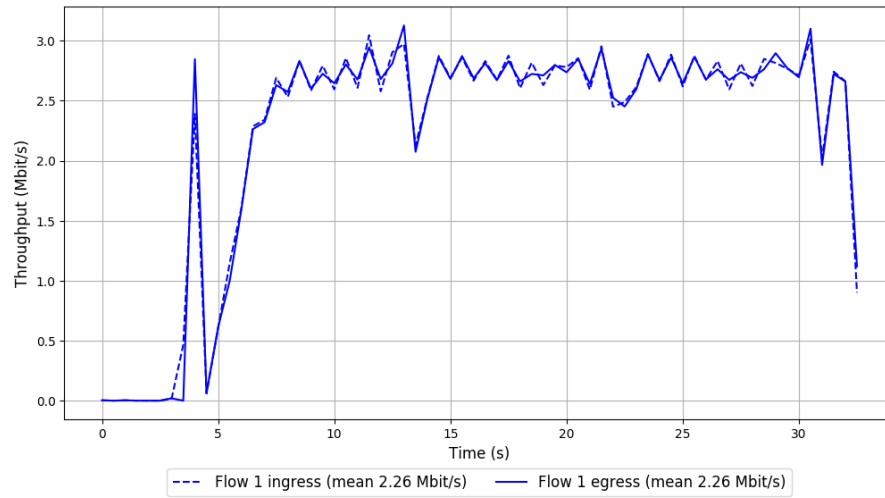
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 49.426 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-30 12:32:31

End at: 2017-11-30 12:33:01

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 49.132 ms

Loss rate: 0.00%

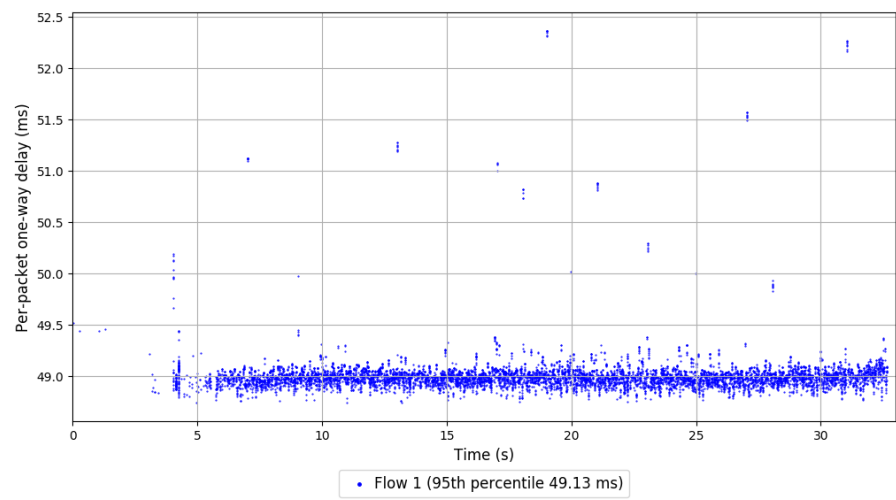
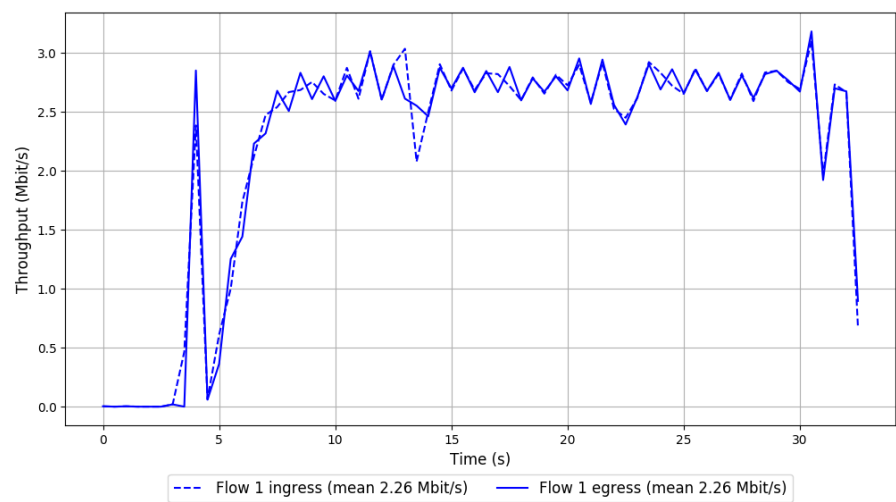
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 49.132 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-30 12:42:46

End at: 2017-11-30 12:43:16

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 49.751 ms

Loss rate: 0.00%

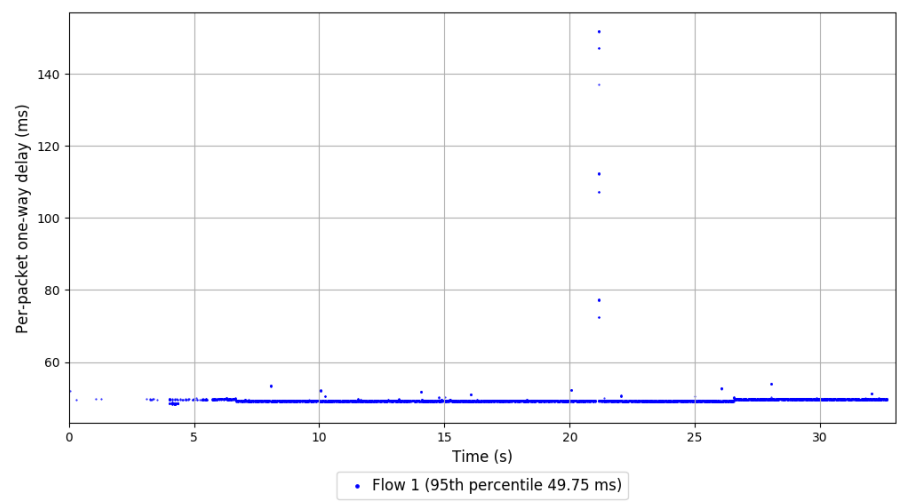
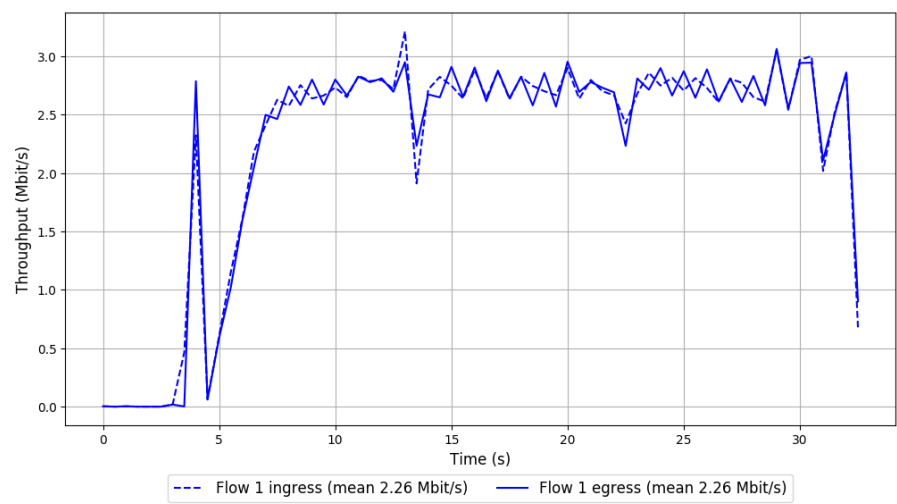
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 49.751 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-30 12:52:54

End at: 2017-11-30 12:53:24

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 49.484 ms

Loss rate: 0.00%

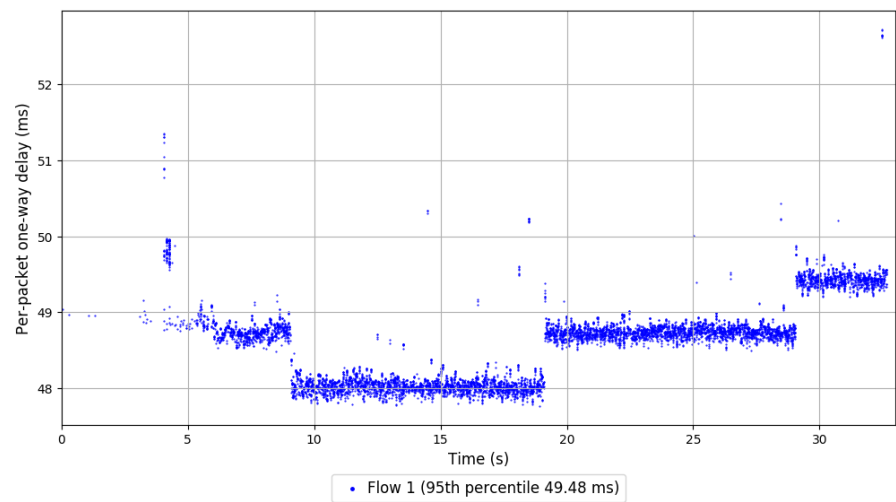
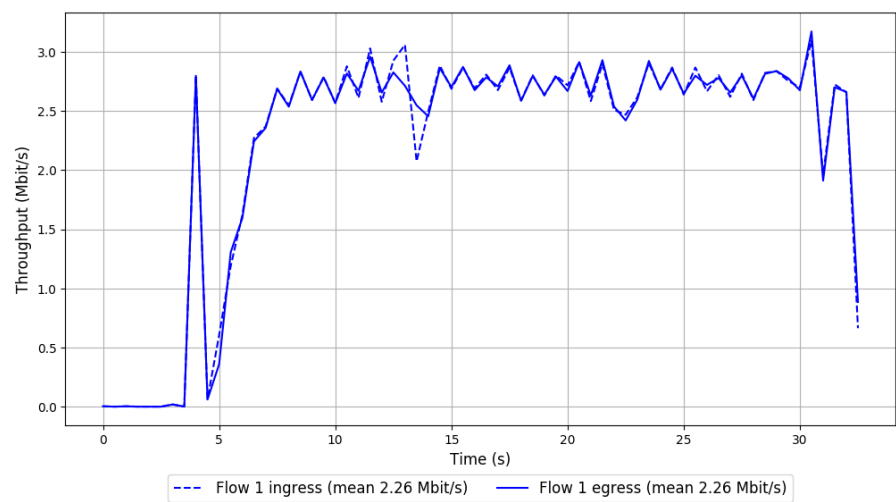
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 49.484 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-30 13:03:11

End at: 2017-11-30 13:03:41

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 49.826 ms

Loss rate: 0.00%

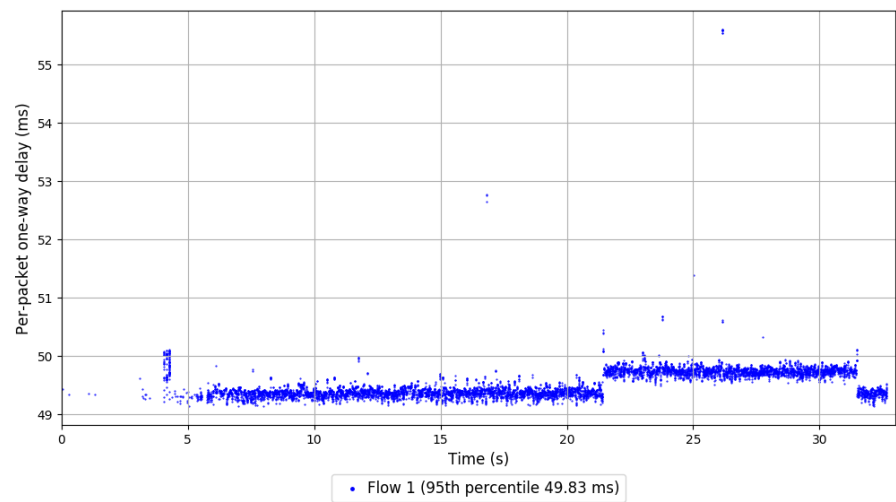
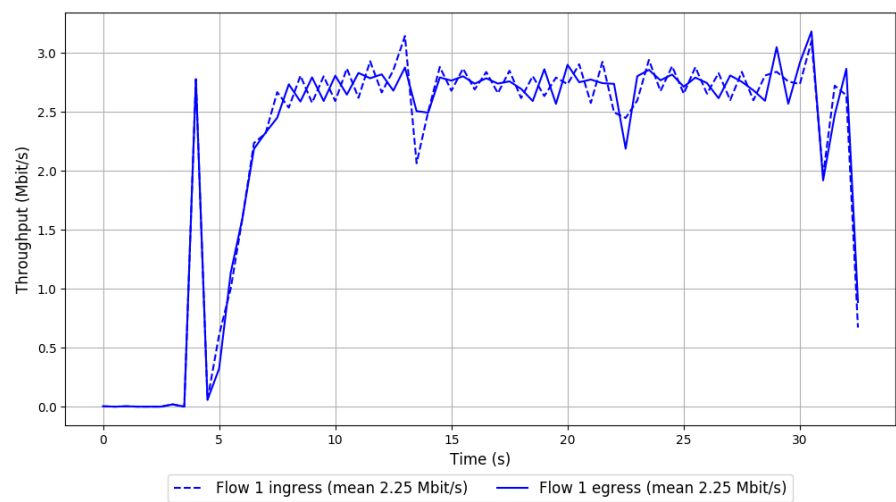
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 49.826 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-30 13:13:28

End at: 2017-11-30 13:13:58

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.182 ms

Loss rate: 0.00%

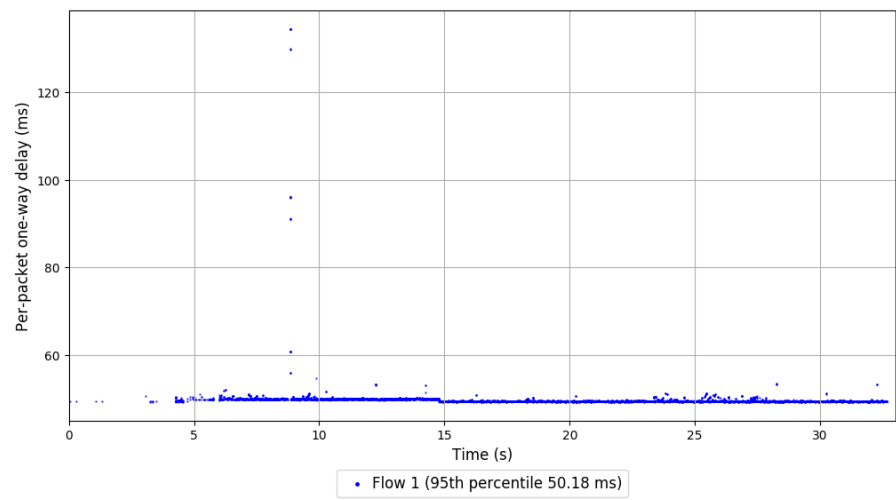
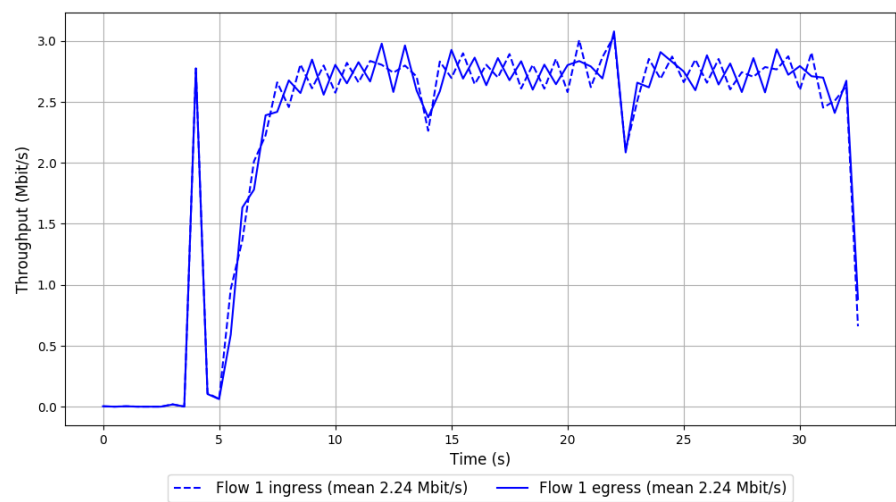
-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.182 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-30 13:23:37

End at: 2017-11-30 13:24:07

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.406 ms

Loss rate: 0.07%

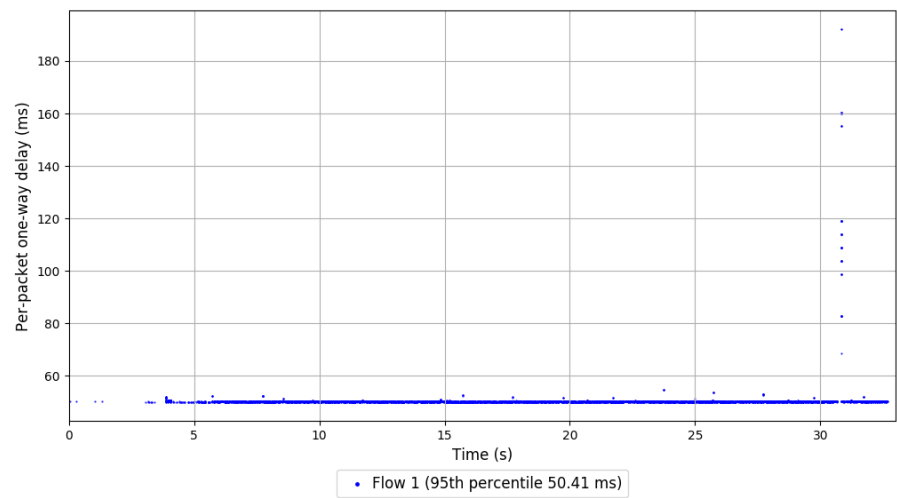
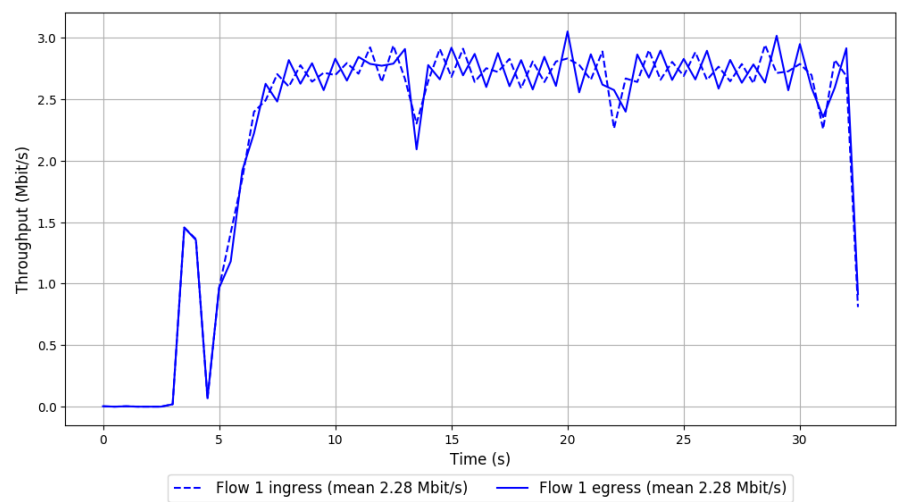
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.406 ms

Loss rate: 0.07%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-30 13:33:41

End at: 2017-11-30 13:34:11

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.858 ms

Loss rate: 0.00%

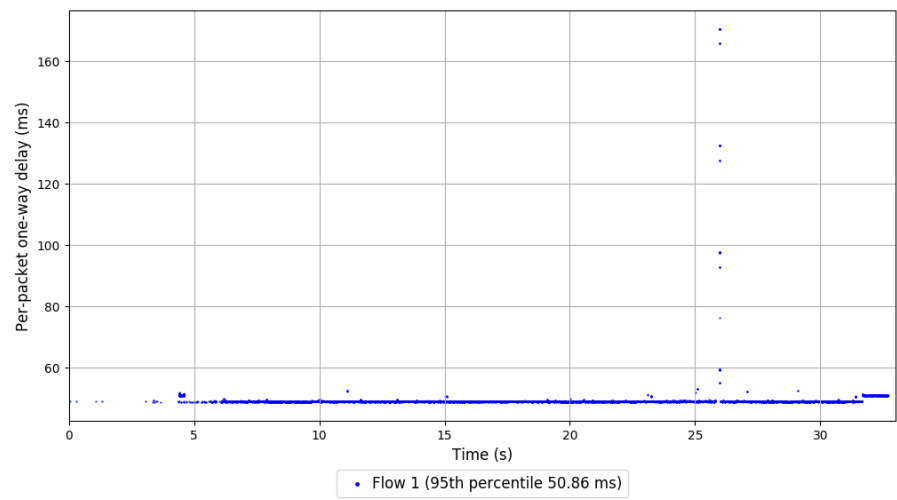
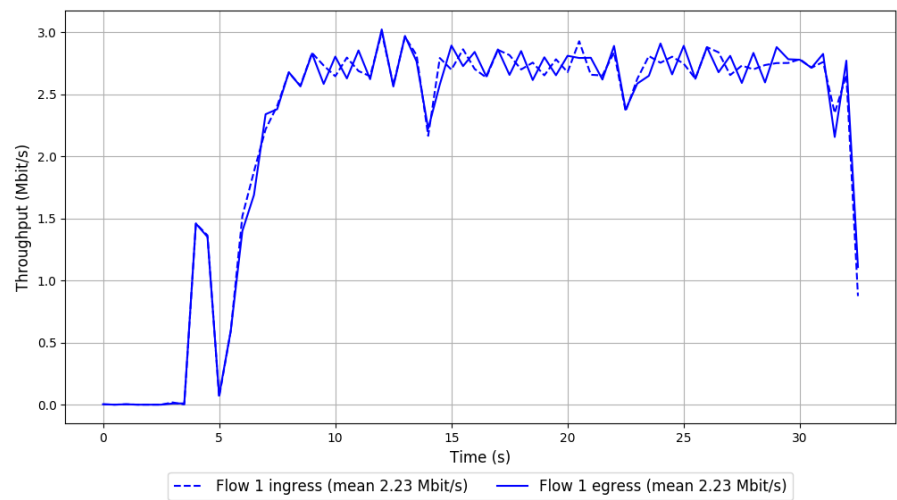
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 50.858 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-11-30 12:05:15

End at: 2017-11-30 12:05:45

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 49.316 ms

Loss rate: 0.00%

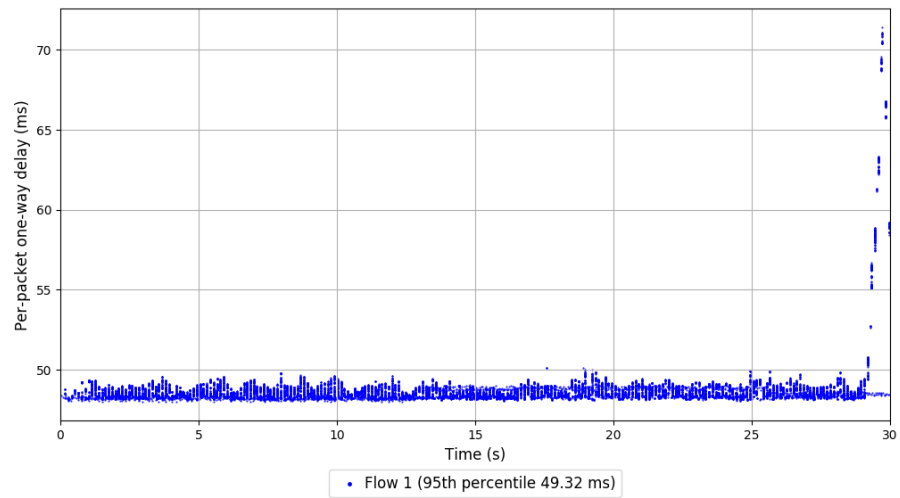
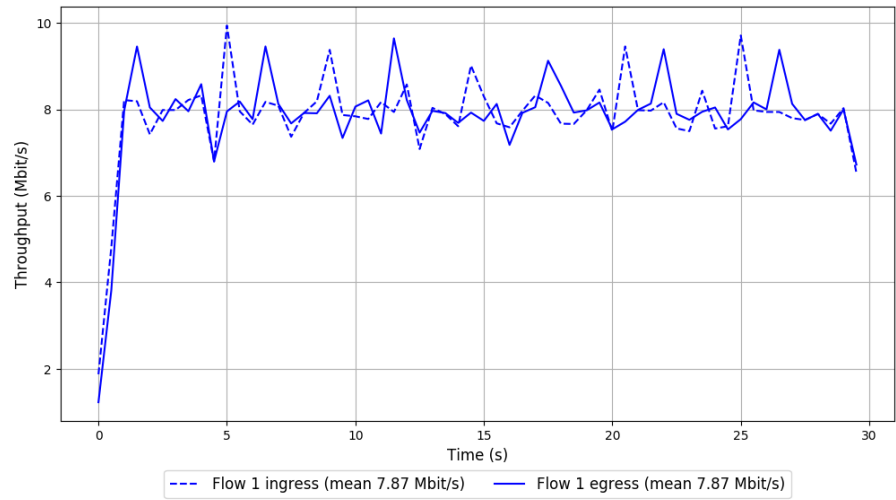
-- Flow 1:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 49.316 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-30 12:15:25

End at: 2017-11-30 12:15:55

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 49.870 ms

Loss rate: 0.19%

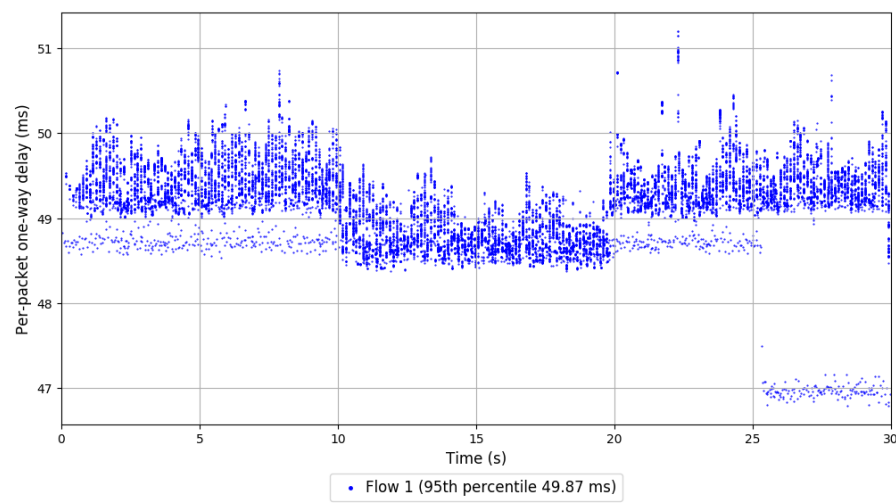
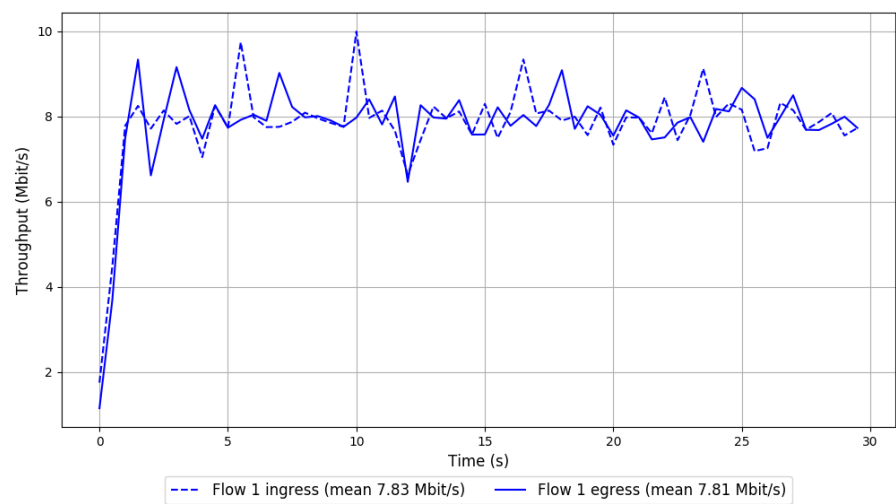
-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 49.870 ms

Loss rate: 0.19%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-30 12:25:42

End at: 2017-11-30 12:26:12

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 50.090 ms

Loss rate: 0.28%

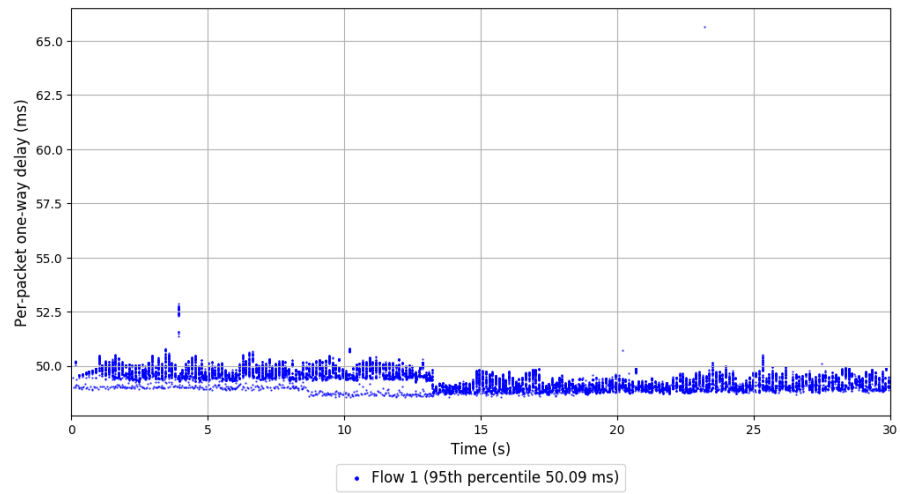
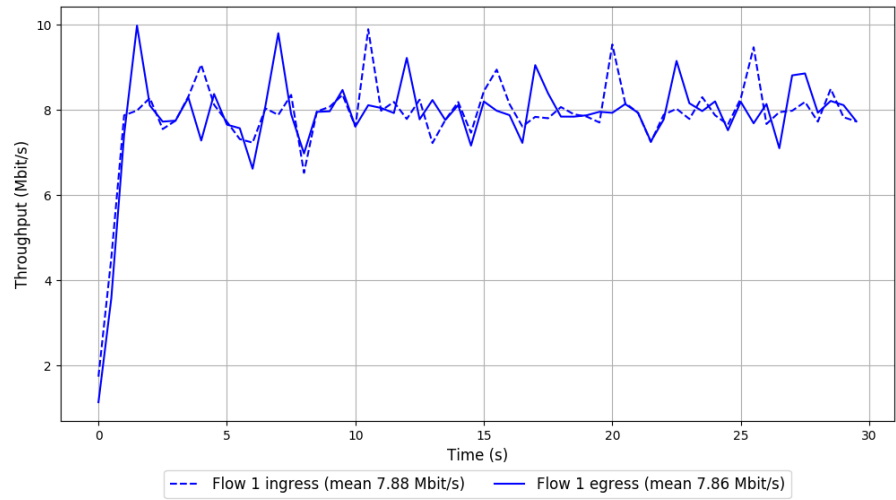
-- Flow 1:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 50.090 ms

Loss rate: 0.28%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-30 12:35:58

End at: 2017-11-30 12:36:28

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.83 Mbit/s

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

Loss rate: 0.30%

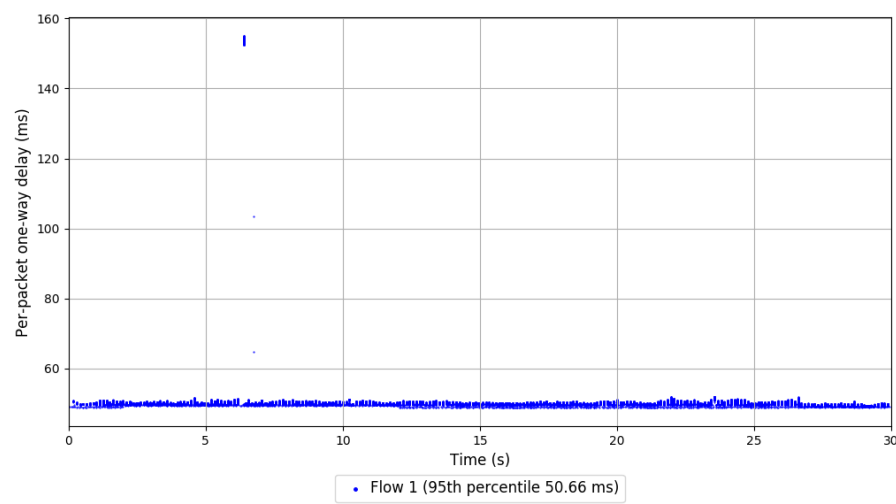
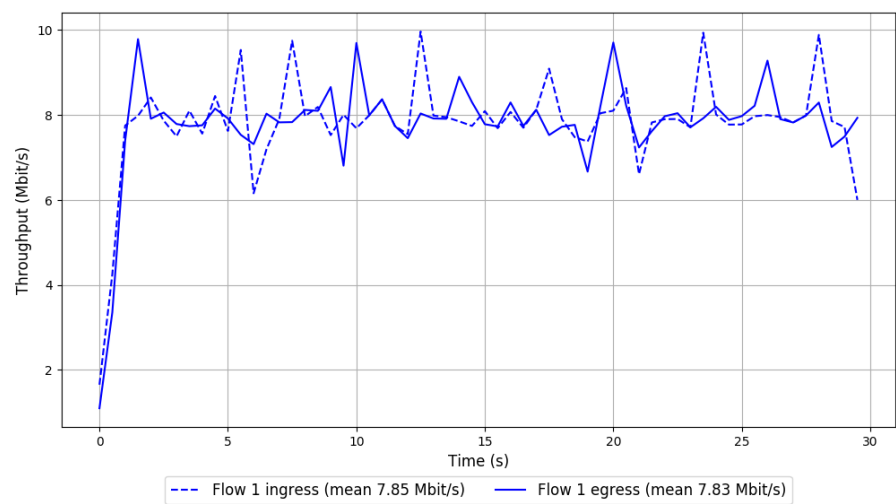
-- Flow 1:

Average throughput: 7.83 Mbit/s

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

Loss rate: 0.30%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-30 12:46:18

End at: 2017-11-30 12:46:48

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 50.284 ms

Loss rate: 0.24%

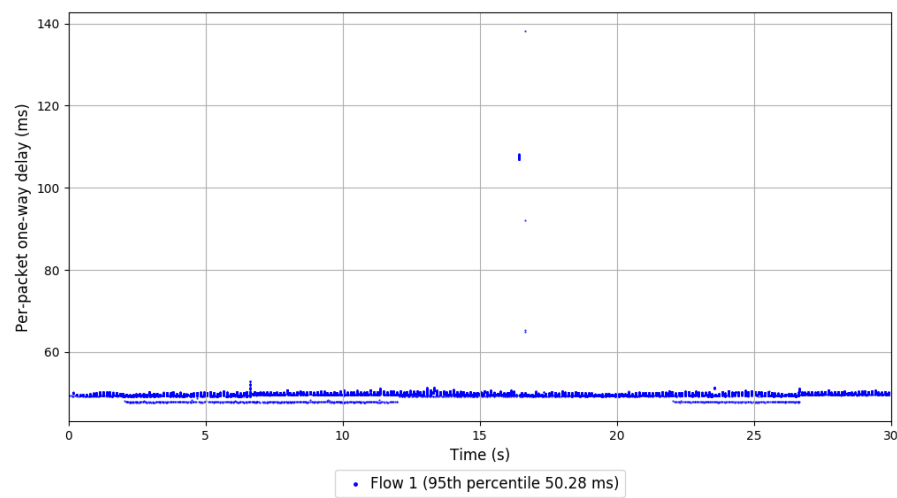
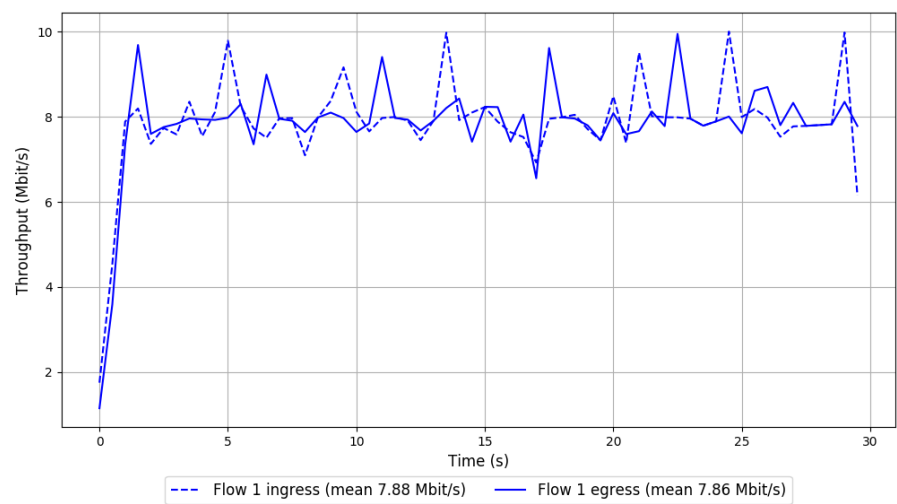
-- Flow 1:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 50.284 ms

Loss rate: 0.24%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-30 12:56:24

End at: 2017-11-30 12:56:54

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 50.321 ms

Loss rate: 0.15%

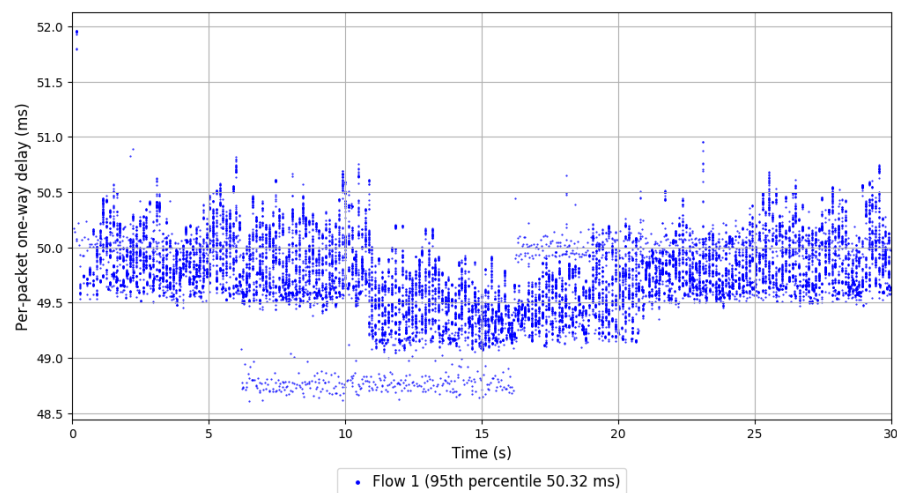
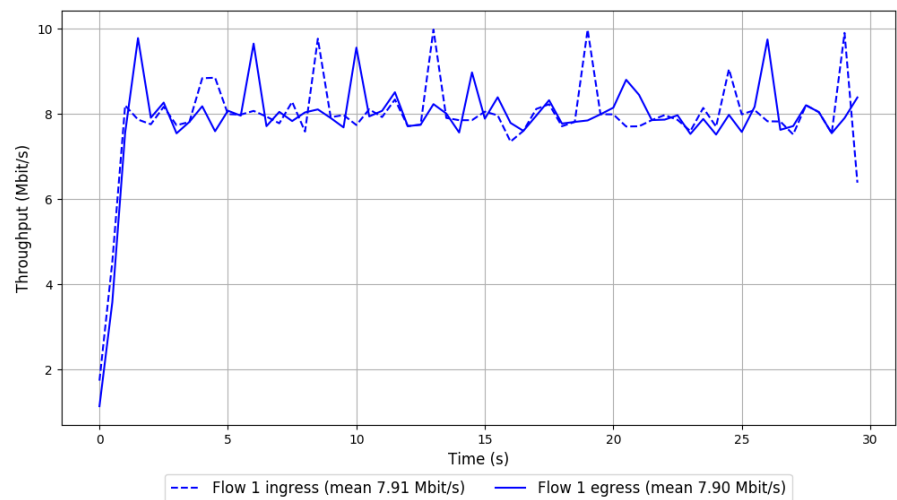
-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 50.321 ms

Loss rate: 0.15%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-30 13:06:44

End at: 2017-11-30 13:07:14

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 50.673 ms

Loss rate: 0.35%

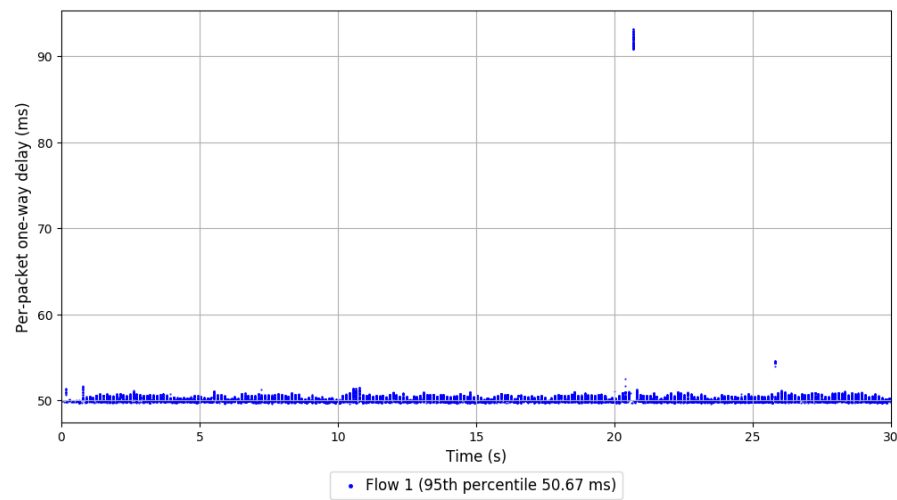
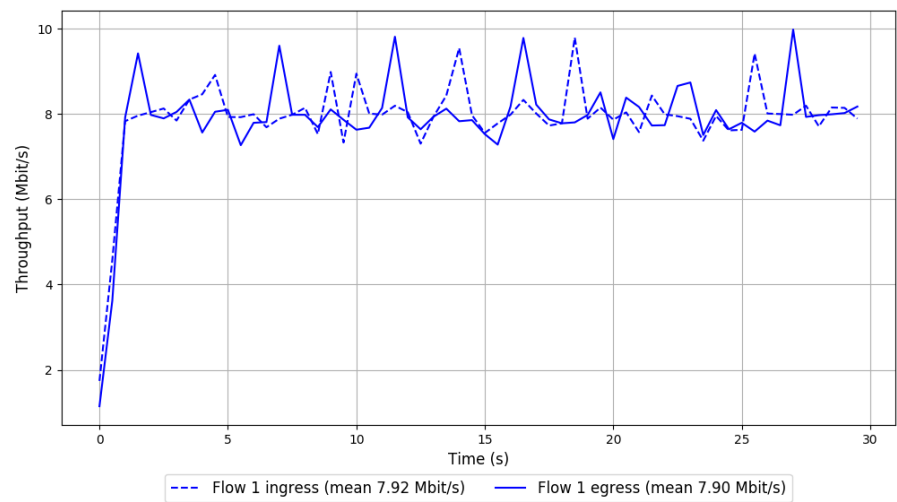
-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 50.673 ms

Loss rate: 0.35%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-30 13:16:55

End at: 2017-11-30 13:17:25

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 51.316 ms

Loss rate: 0.38%

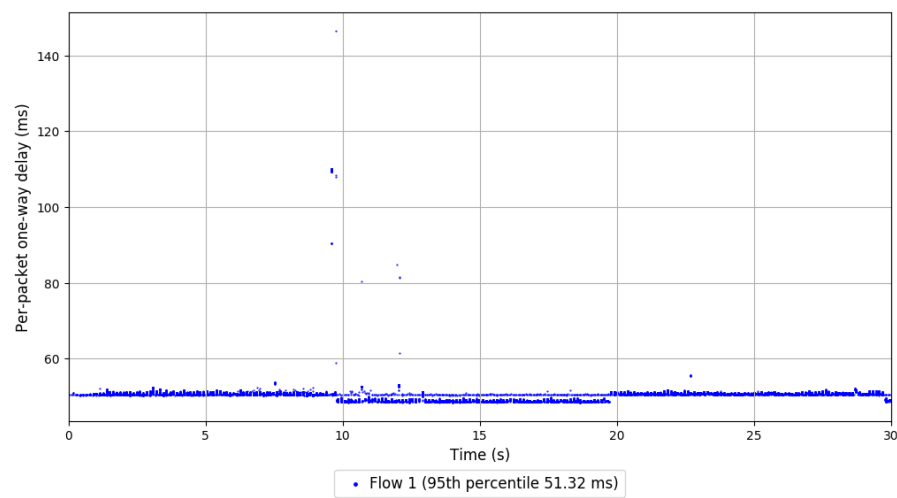
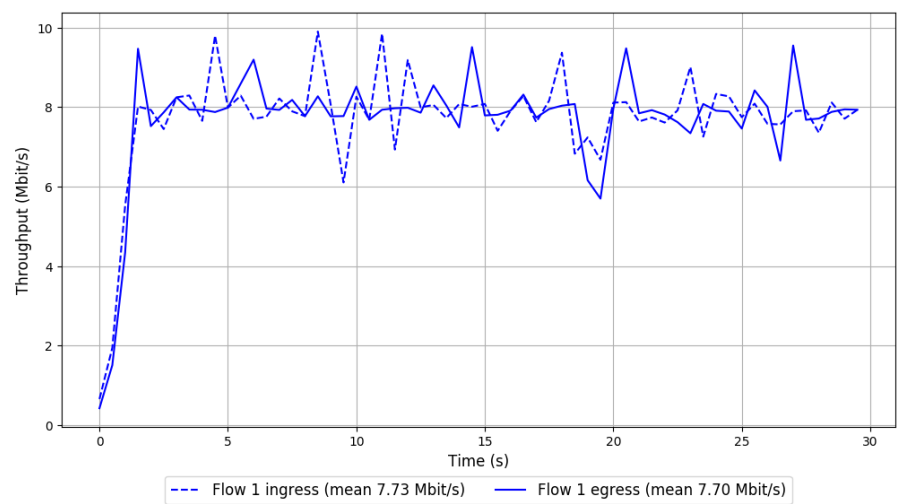
-- Flow 1:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 51.316 ms

Loss rate: 0.38%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-30 13:27:09

End at: 2017-11-30 13:27:39

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 52.204 ms

Loss rate: 0.06%

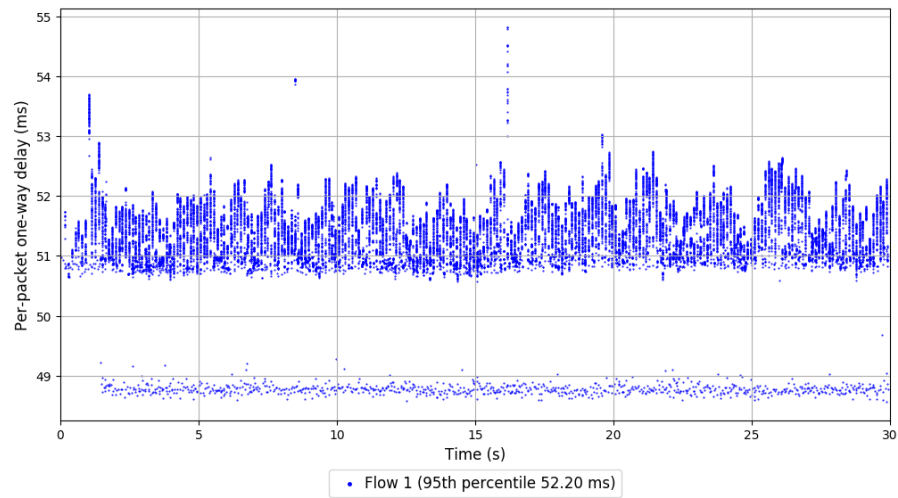
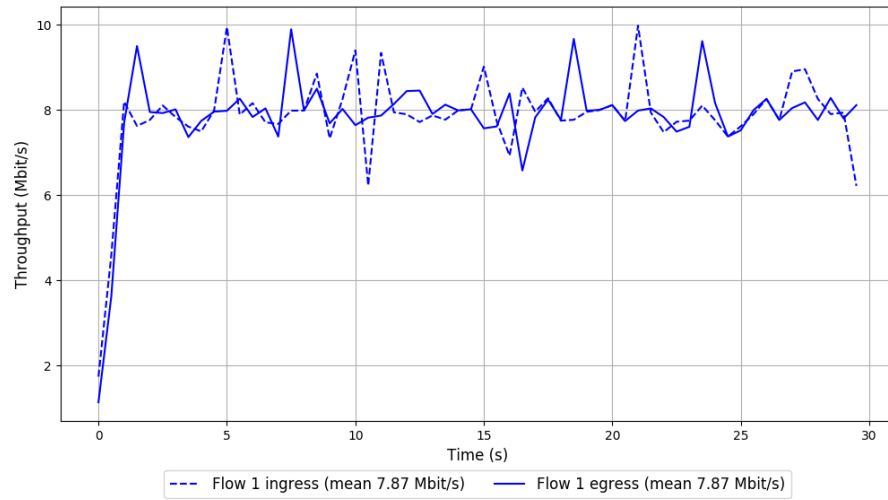
-- Flow 1:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 52.204 ms

Loss rate: 0.06%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-30 13:37:13

End at: 2017-11-30 13:37:43

Below is generated by plot.py at 2017-11-30 14:51:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 51.840 ms

Loss rate: 0.27%

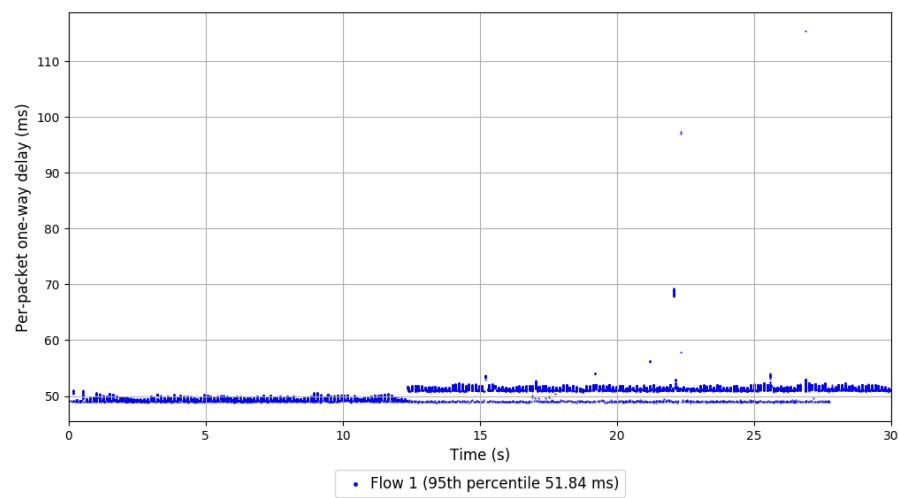
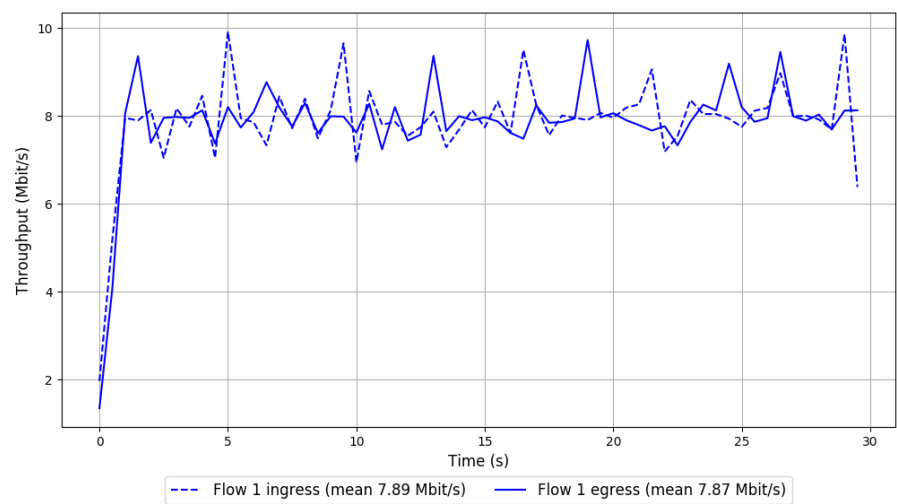
-- Flow 1:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 51.840 ms

Loss rate: 0.27%

Run 10: Report of Sprout — Data Link

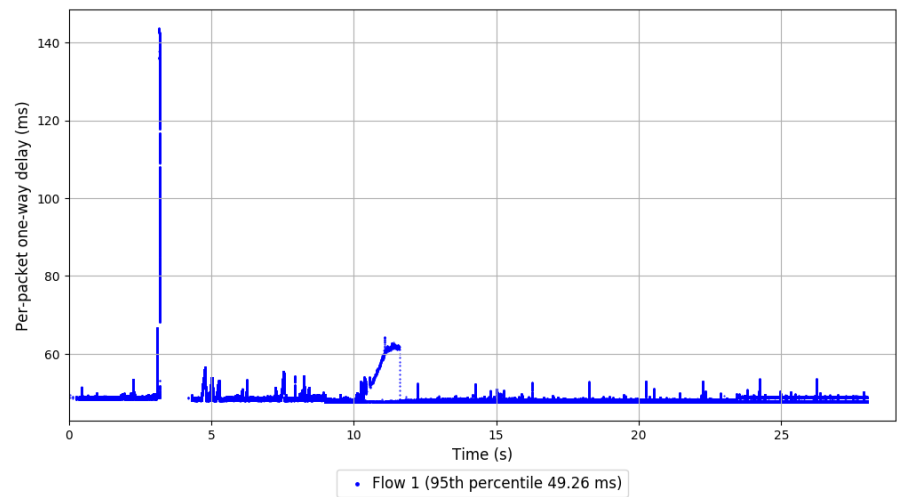
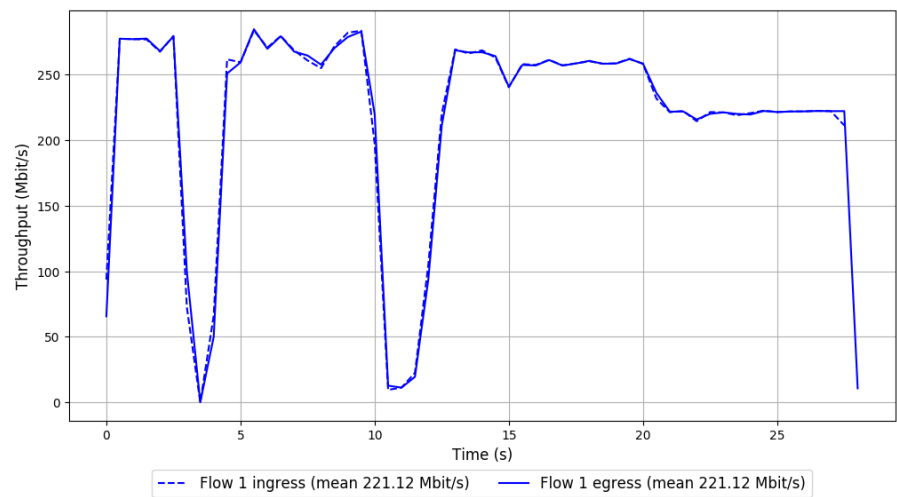


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-30 12:06:30
End at: 2017-11-30 12:07:00

# Below is generated by plot.py at 2017-11-30 14:51:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.12 Mbit/s
95th percentile per-packet one-way delay: 49.262 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 221.12 Mbit/s
95th percentile per-packet one-way delay: 49.262 ms
Loss rate: 0.00%
```


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

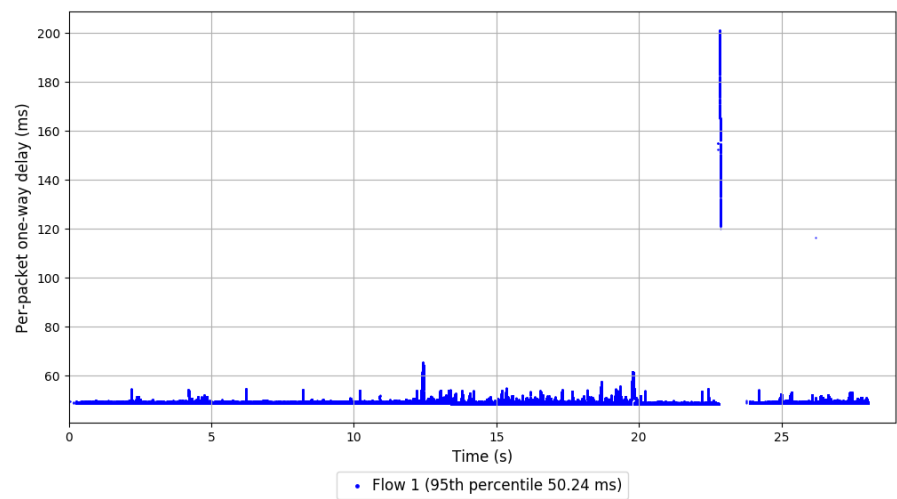
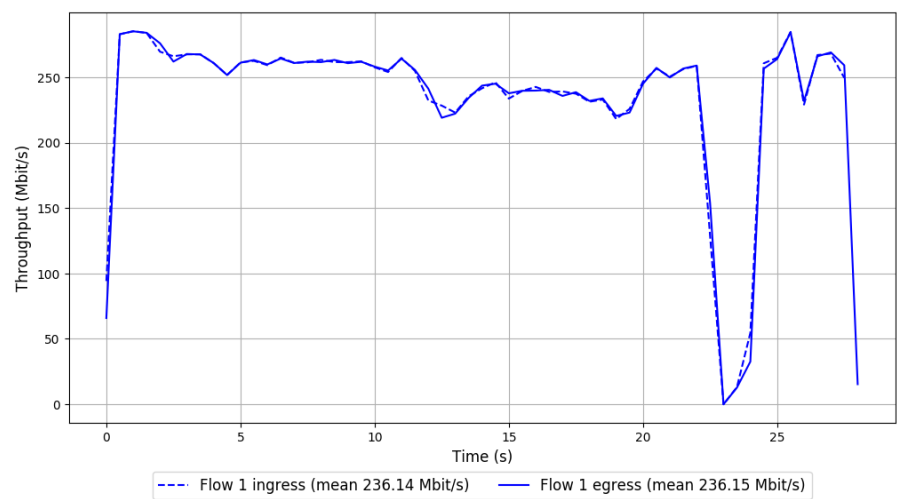


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-30 12:16:40
End at: 2017-11-30 12:17:10

# Below is generated by plot.py at 2017-11-30 14:51:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 236.15 Mbit/s
95th percentile per-packet one-way delay: 50.236 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 236.15 Mbit/s
95th percentile per-packet one-way delay: 50.236 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-30 12:26:56

End at: 2017-11-30 12:27:26

Below is generated by plot.py at 2017-11-30 14:52:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 260.07 Mbit/s

95th percentile per-packet one-way delay: 49.483 ms

Loss rate: 0.00%

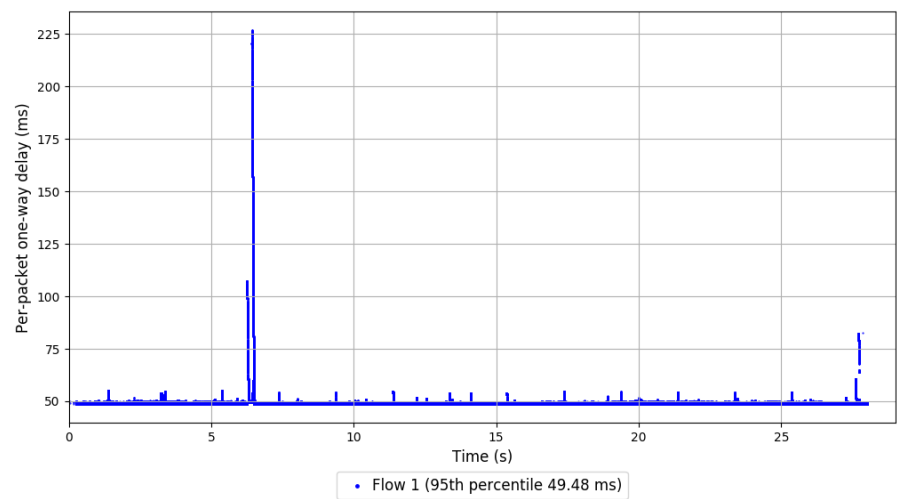
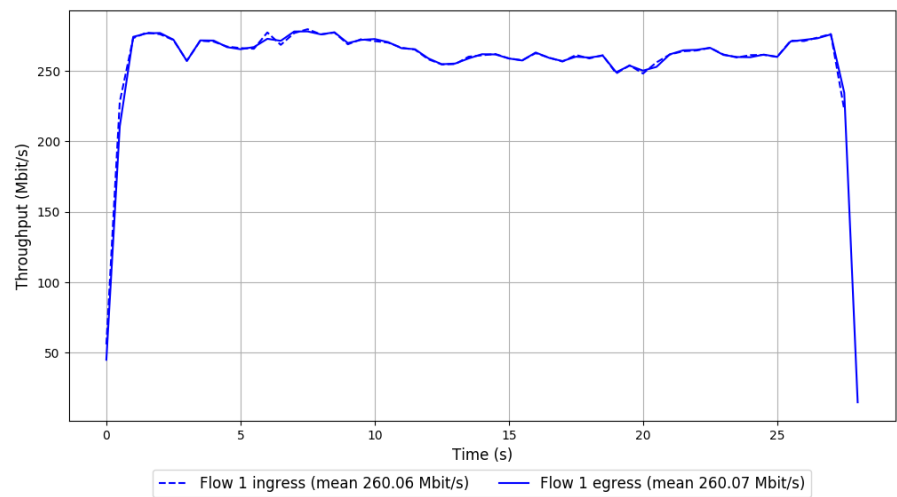
-- Flow 1:

Average throughput: 260.07 Mbit/s

95th percentile per-packet one-way delay: 49.483 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-11-30 12:37:13

End at: 2017-11-30 12:37:43

Below is generated by plot.py at 2017-11-30 14:52:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 253.61 Mbit/s

95th percentile per-packet one-way delay: 50.155 ms

Loss rate: 0.00%

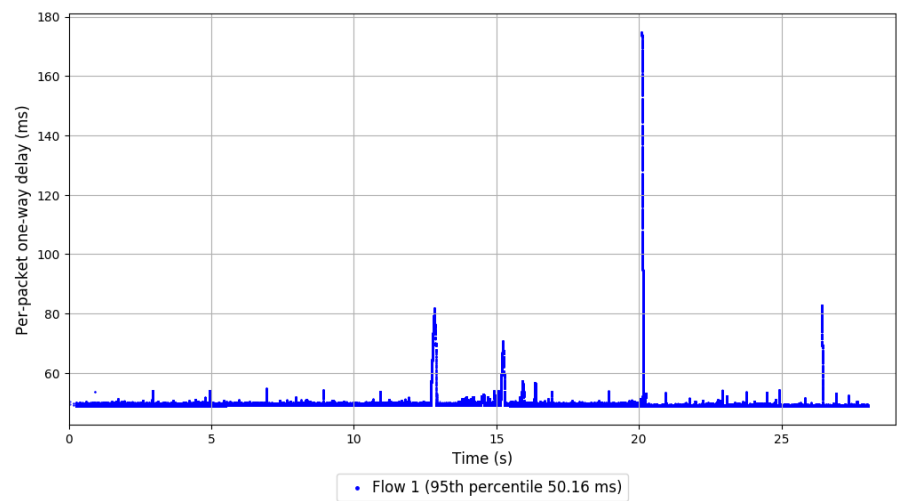
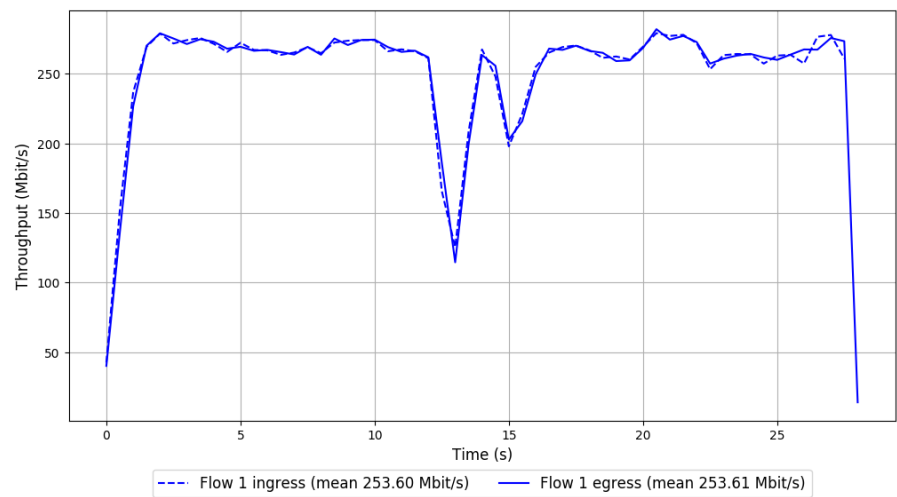
-- Flow 1:

Average throughput: 253.61 Mbit/s

95th percentile per-packet one-way delay: 50.155 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-30 12:47:33

End at: 2017-11-30 12:48:03

Below is generated by plot.py at 2017-11-30 14:52:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.21 Mbit/s

95th percentile per-packet one-way delay: 49.708 ms

Loss rate: 0.00%

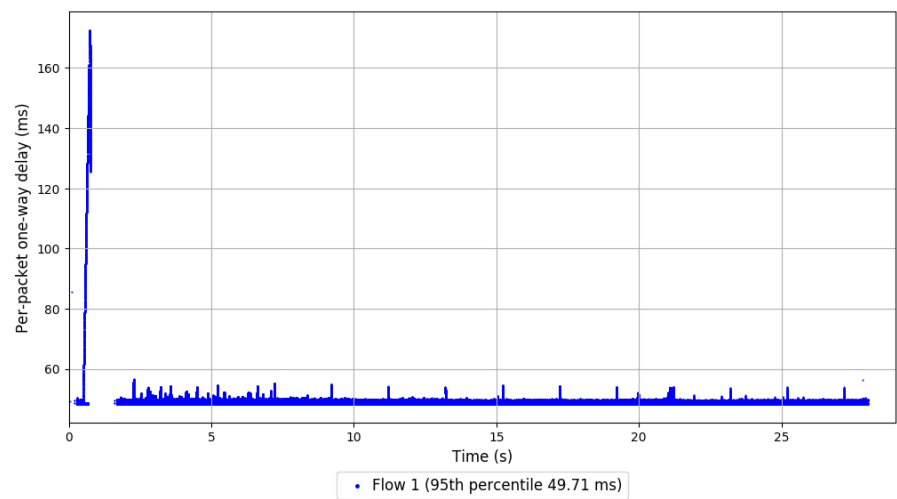
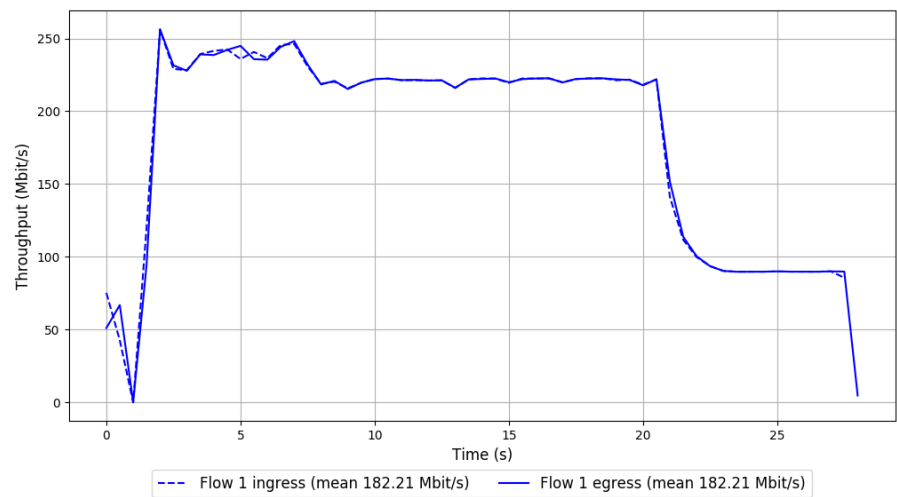
-- Flow 1:

Average throughput: 182.21 Mbit/s

95th percentile per-packet one-way delay: 49.708 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-30 12:57:39

End at: 2017-11-30 12:58:09

Below is generated by plot.py at 2017-11-30 14:52:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 245.33 Mbit/s

95th percentile per-packet one-way delay: 50.360 ms

Loss rate: 0.00%

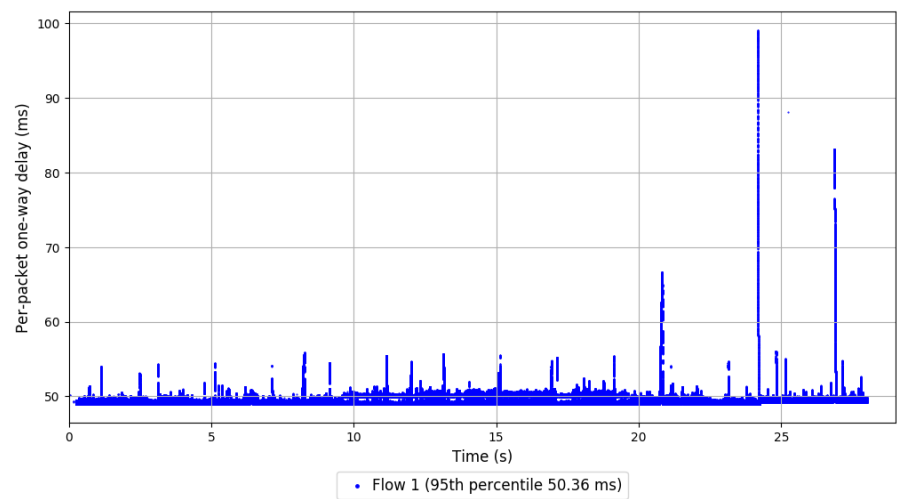
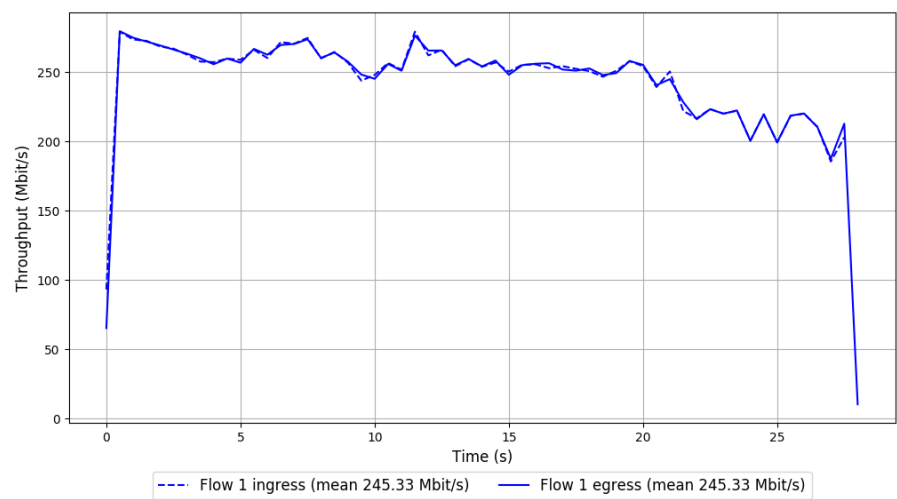
-- Flow 1:

Average throughput: 245.33 Mbit/s

95th percentile per-packet one-way delay: 50.360 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-30 13:07:59

End at: 2017-11-30 13:08:29

Below is generated by plot.py at 2017-11-30 14:56:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 207.00 Mbit/s

95th percentile per-packet one-way delay: 50.259 ms

Loss rate: 0.00%

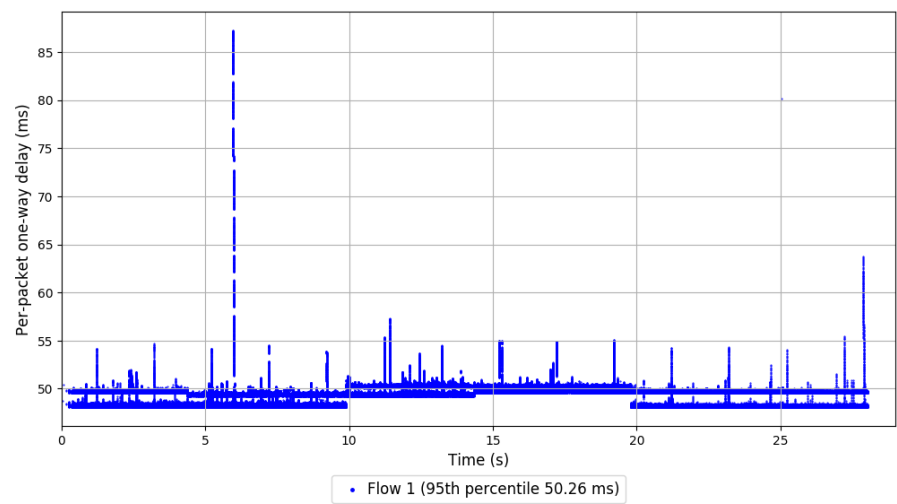
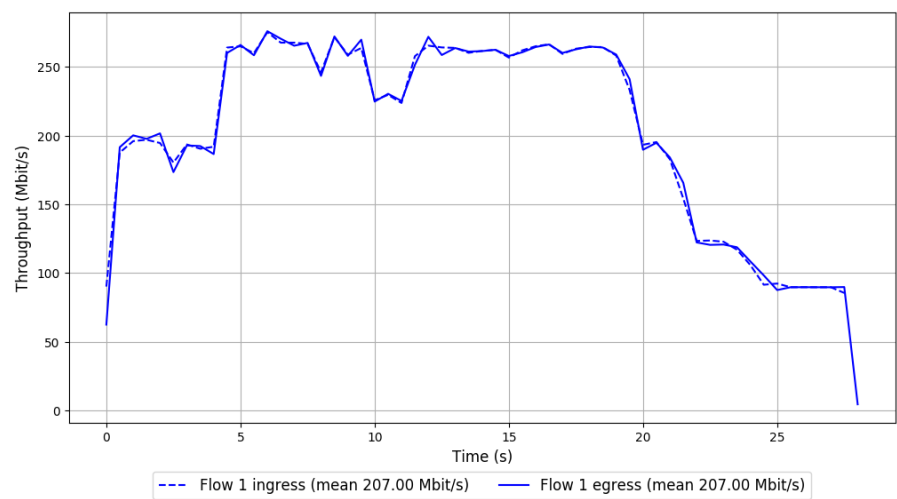
-- Flow 1:

Average throughput: 207.00 Mbit/s

95th percentile per-packet one-way delay: 50.259 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-30 13:18:10

End at: 2017-11-30 13:18:40

Below is generated by plot.py at 2017-11-30 14:56:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 138.92 Mbit/s

95th percentile per-packet one-way delay: 54.499 ms

Loss rate: 0.00%

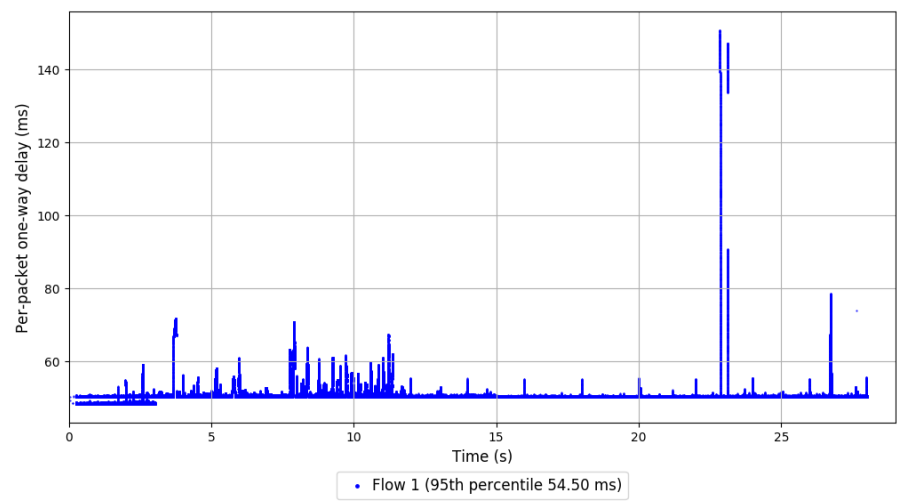
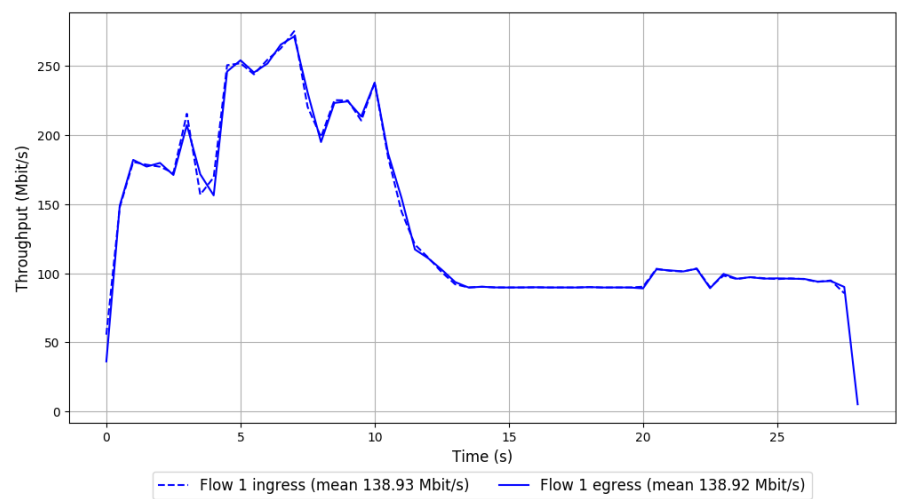
-- Flow 1:

Average throughput: 138.92 Mbit/s

95th percentile per-packet one-way delay: 54.499 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-30 13:28:23

End at: 2017-11-30 13:28:53

Below is generated by plot.py at 2017-11-30 14:56:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 128.42 Mbit/s

95th percentile per-packet one-way delay: 50.781 ms

Loss rate: 0.00%

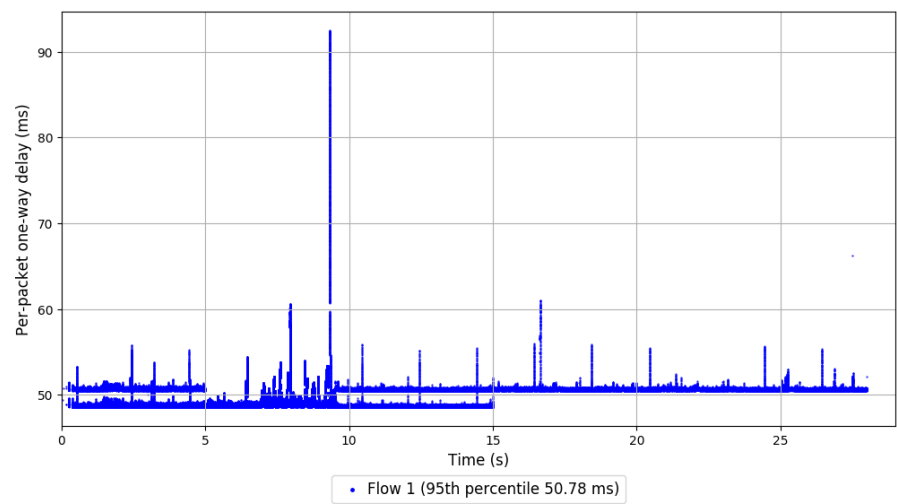
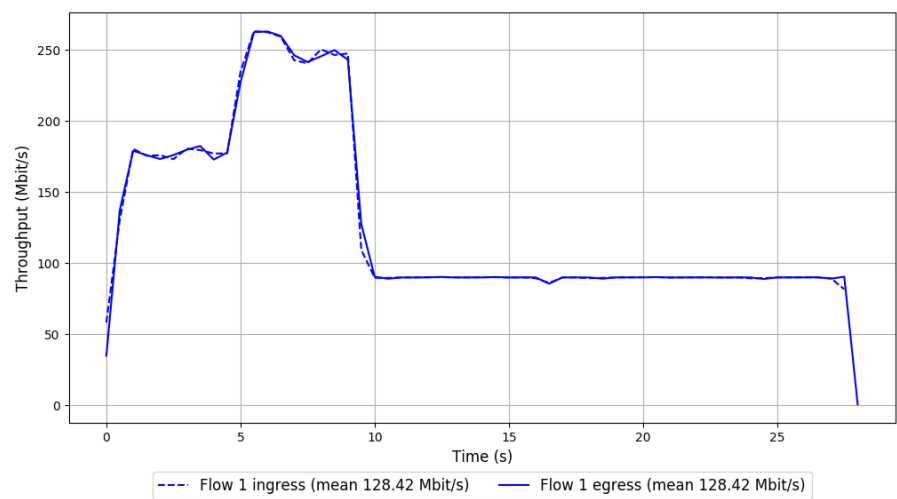
-- Flow 1:

Average throughput: 128.42 Mbit/s

95th percentile per-packet one-way delay: 50.781 ms

Loss rate: 0.00%

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

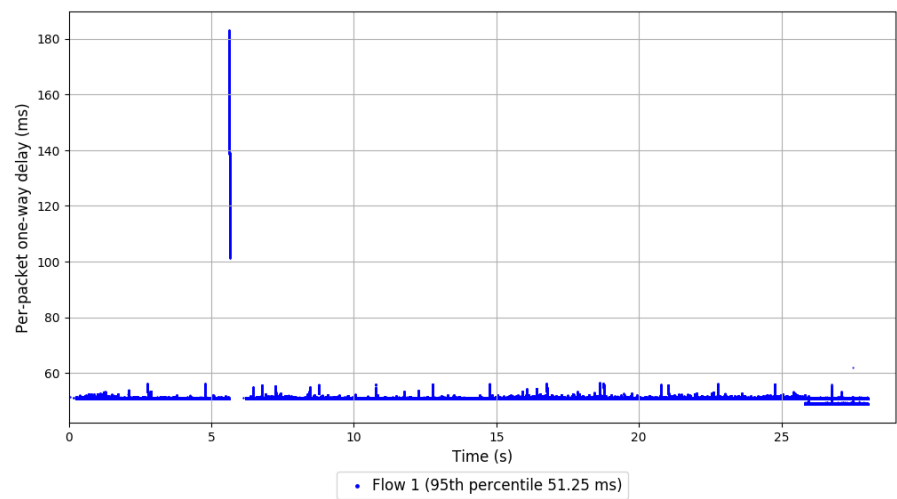
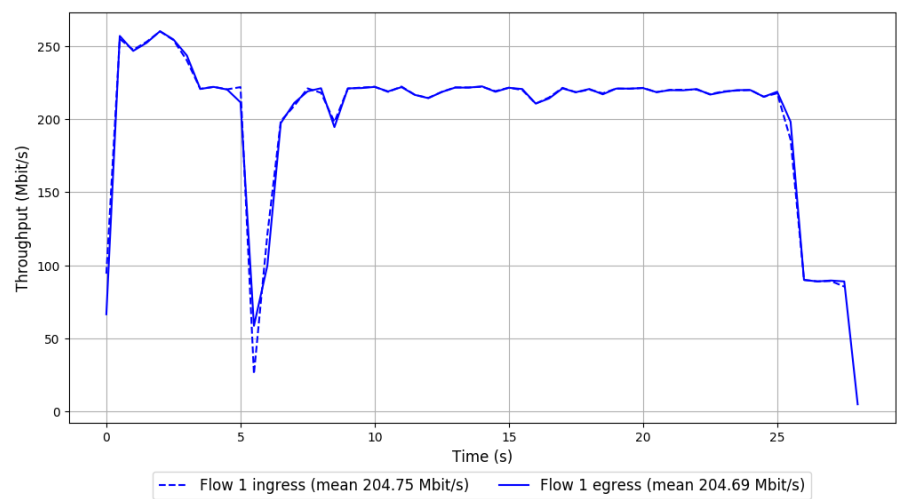


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-30 13:38:27
End at: 2017-11-30 13:38:57

# Below is generated by plot.py at 2017-11-30 14:57:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 204.69 Mbit/s
95th percentile per-packet one-way delay: 51.247 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 204.69 Mbit/s
95th percentile per-packet one-way delay: 51.247 ms
Loss rate: 0.04%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-30 11:57:50

End at: 2017-11-30 11:58:20

Below is generated by plot.py at 2017-11-30 14:57:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.51 Mbit/s

95th percentile per-packet one-way delay: 49.883 ms

Loss rate: 0.02%

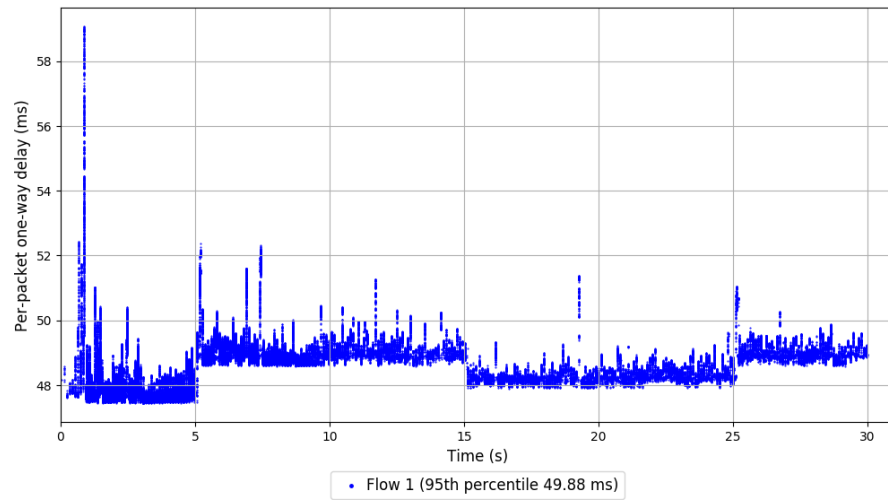
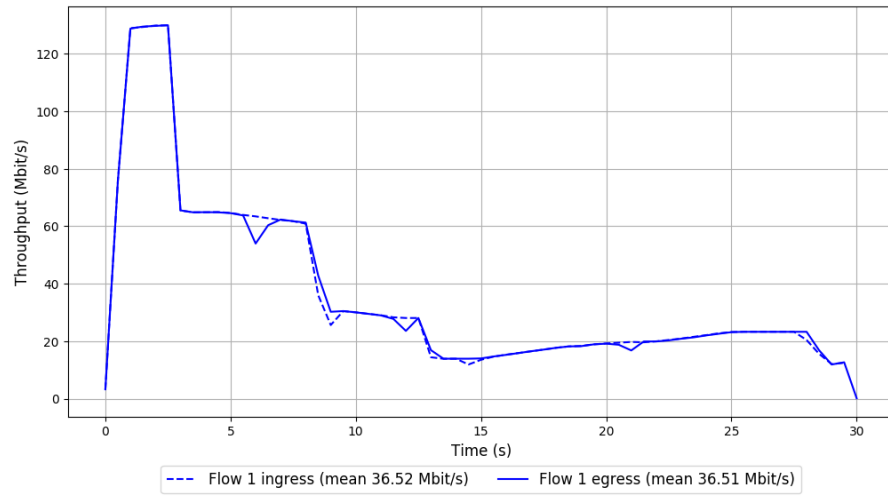
-- Flow 1:

Average throughput: 36.51 Mbit/s

95th percentile per-packet one-way delay: 49.883 ms

Loss rate: 0.02%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-30 12:08:10

End at: 2017-11-30 12:08:40

Below is generated by plot.py at 2017-11-30 14:57:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.38 Mbit/s

95th percentile per-packet one-way delay: 49.668 ms

Loss rate: 0.03%

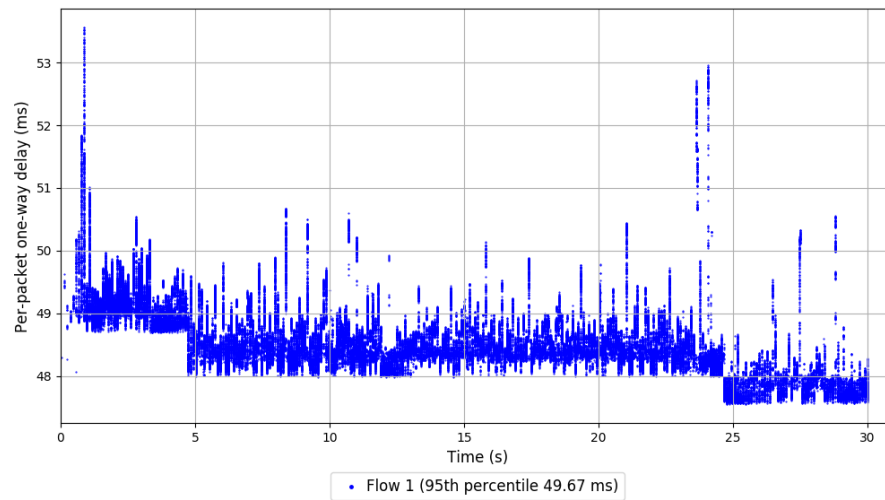
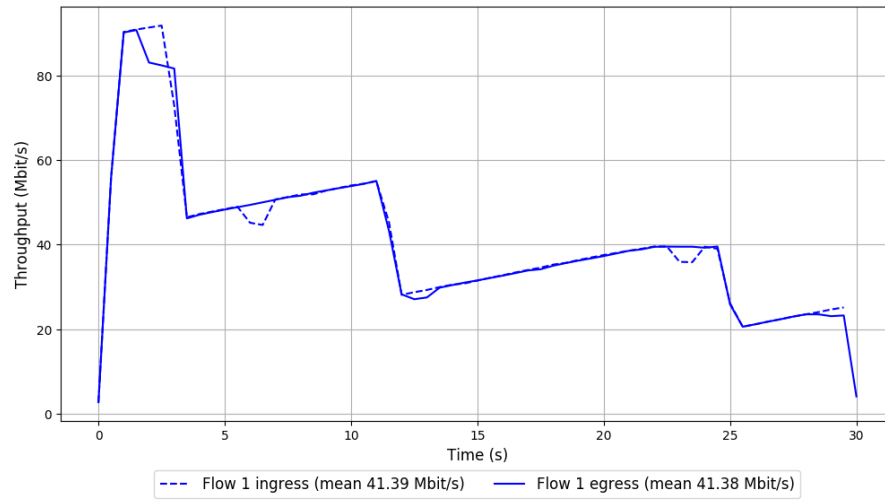
-- Flow 1:

Average throughput: 41.38 Mbit/s

95th percentile per-packet one-way delay: 49.668 ms

Loss rate: 0.03%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-30 12:18:22

End at: 2017-11-30 12:18:52

Below is generated by plot.py at 2017-11-30 14:57:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.39 Mbit/s

95th percentile per-packet one-way delay: 49.732 ms

Loss rate: 0.04%

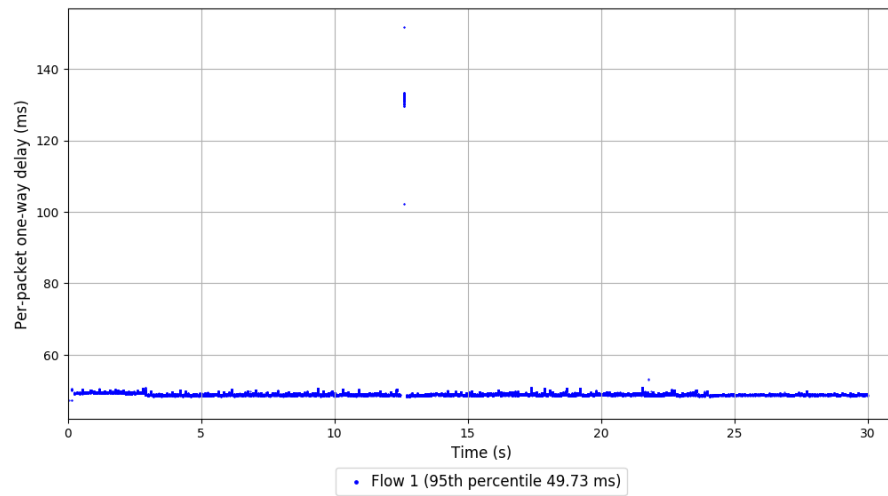
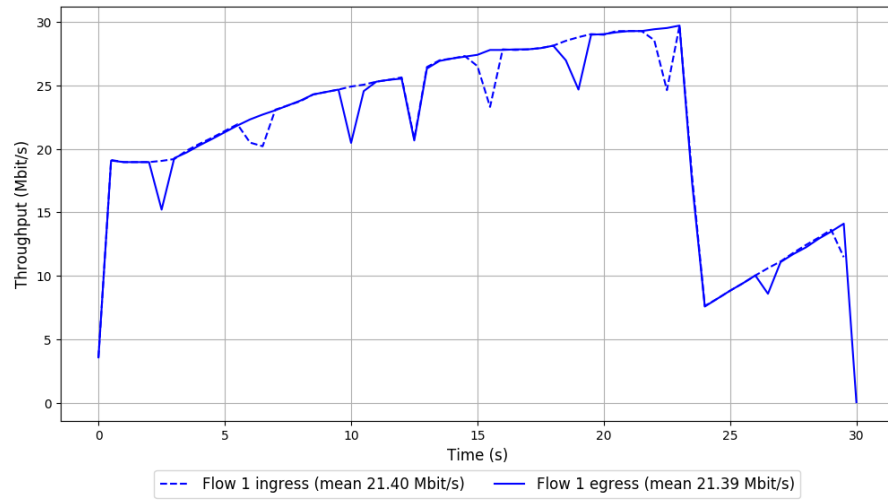
-- Flow 1:

Average throughput: 21.39 Mbit/s

95th percentile per-packet one-way delay: 49.732 ms

Loss rate: 0.04%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-30 12:28:42

End at: 2017-11-30 12:29:12

Below is generated by plot.py at 2017-11-30 14:57:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.47 Mbit/s

95th percentile per-packet one-way delay: 50.307 ms

Loss rate: 0.01%

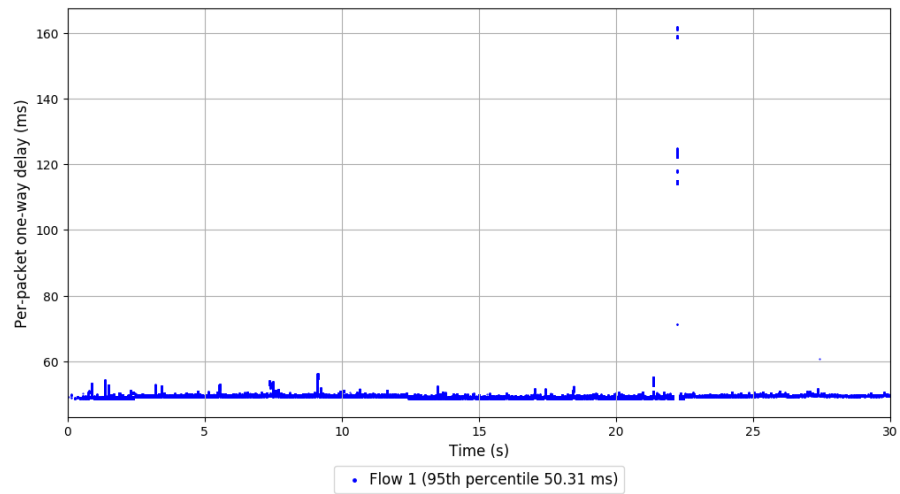
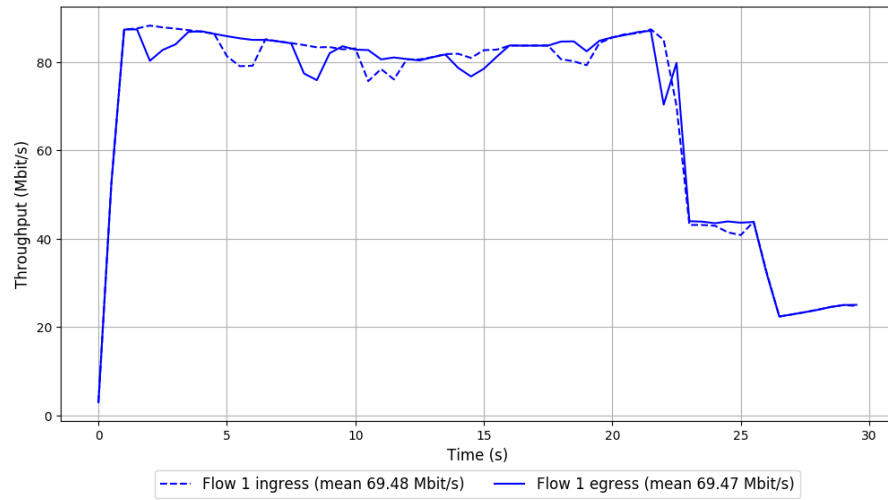
-- Flow 1:

Average throughput: 69.47 Mbit/s

95th percentile per-packet one-way delay: 50.307 ms

Loss rate: 0.01%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-30 12:38:59

End at: 2017-11-30 12:39:29

Below is generated by plot.py at 2017-11-30 14:57:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.74 Mbit/s

95th percentile per-packet one-way delay: 50.320 ms

Loss rate: 0.03%

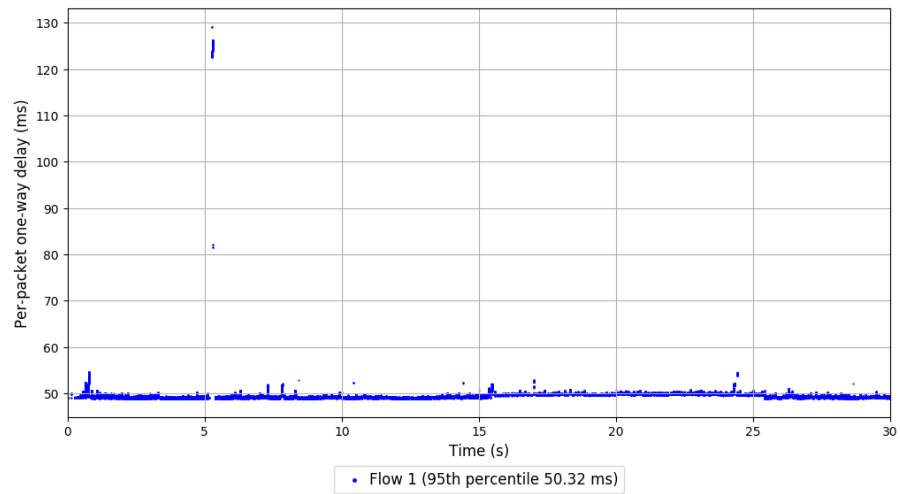
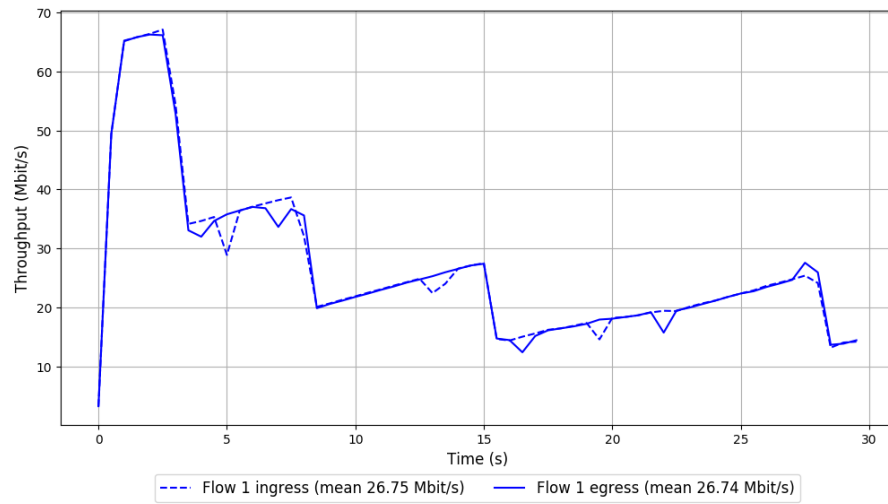
-- Flow 1:

Average throughput: 26.74 Mbit/s

95th percentile per-packet one-way delay: 50.320 ms

Loss rate: 0.03%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-30 12:49:08

End at: 2017-11-30 12:49:38

Below is generated by plot.py at 2017-11-30 14:57:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.37 Mbit/s

95th percentile per-packet one-way delay: 50.631 ms

Loss rate: 0.03%

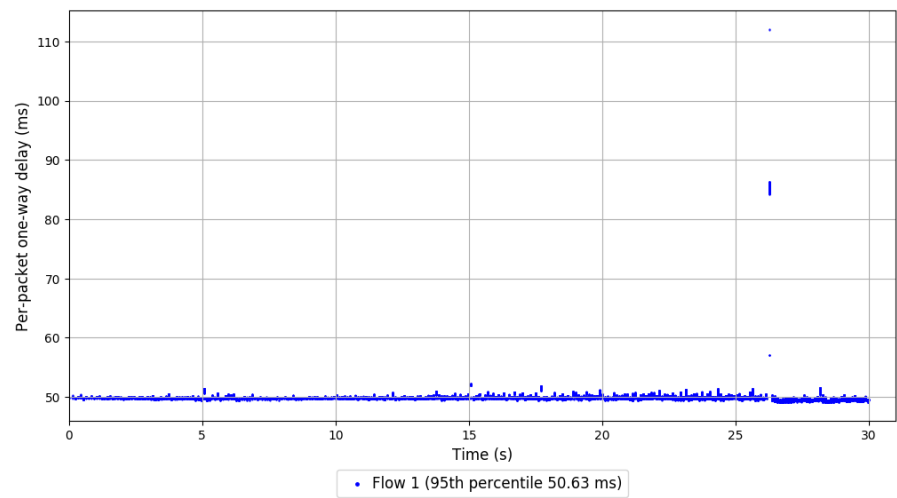
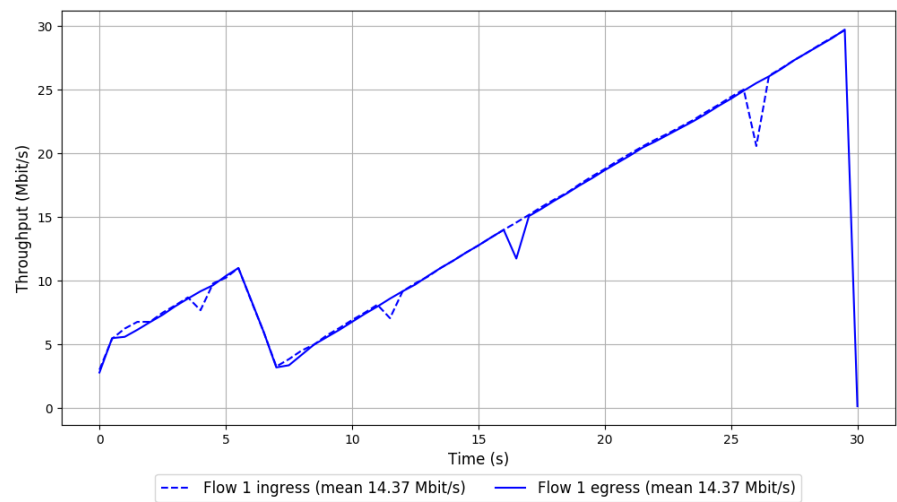
-- Flow 1:

Average throughput: 14.37 Mbit/s

95th percentile per-packet one-way delay: 50.631 ms

Loss rate: 0.03%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-30 12:59:22

End at: 2017-11-30 12:59:52

Below is generated by plot.py at 2017-11-30 14:57:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.66 Mbit/s

95th percentile per-packet one-way delay: 50.182 ms

Loss rate: 0.41%

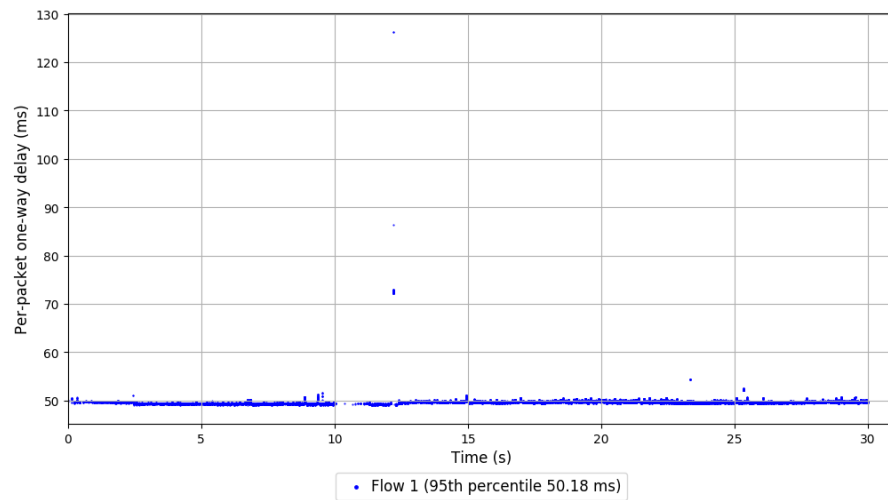
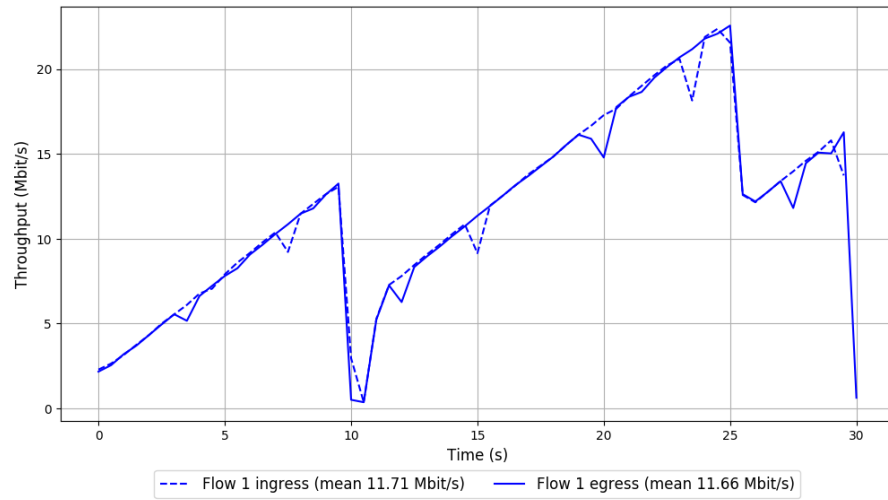
-- Flow 1:

Average throughput: 11.66 Mbit/s

95th percentile per-packet one-way delay: 50.182 ms

Loss rate: 0.41%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-30 13:09:39

End at: 2017-11-30 13:10:09

Below is generated by plot.py at 2017-11-30 14:57:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.56 Mbit/s

95th percentile per-packet one-way delay: 51.216 ms

Loss rate: 0.11%

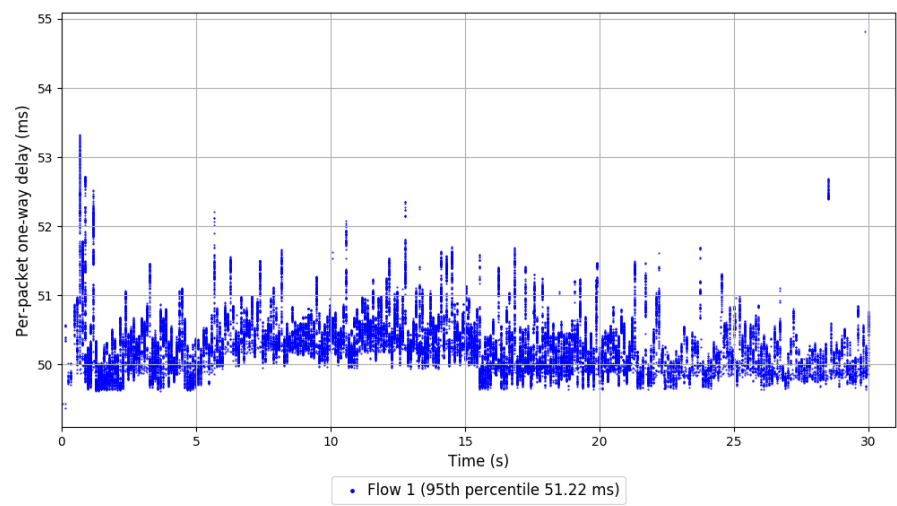
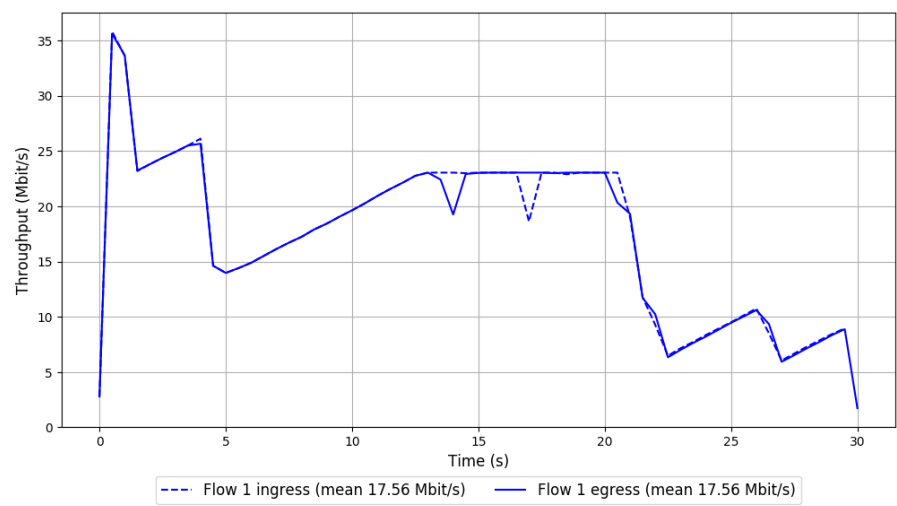
-- Flow 1:

Average throughput: 17.56 Mbit/s

95th percentile per-packet one-way delay: 51.216 ms

Loss rate: 0.11%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-30 13:19:43

End at: 2017-11-30 13:20:13

Below is generated by plot.py at 2017-11-30 14:57:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 149.84 Mbit/s

95th percentile per-packet one-way delay: 51.952 ms

Loss rate: 0.00%

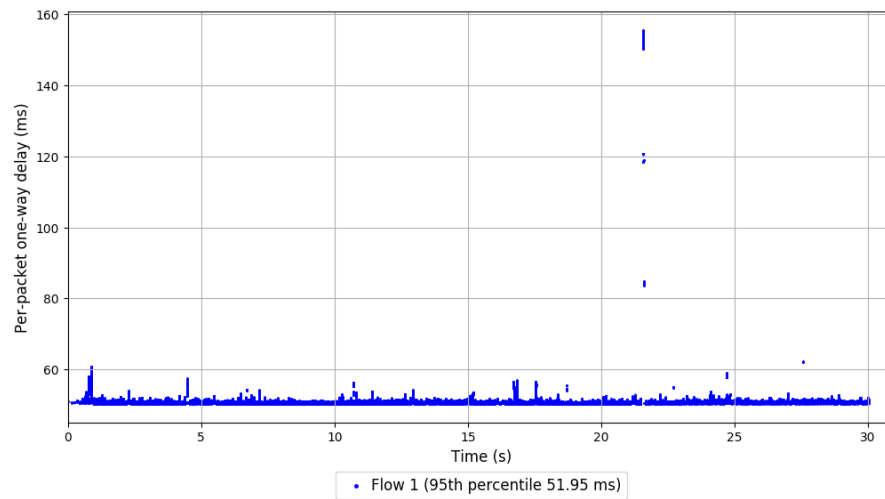
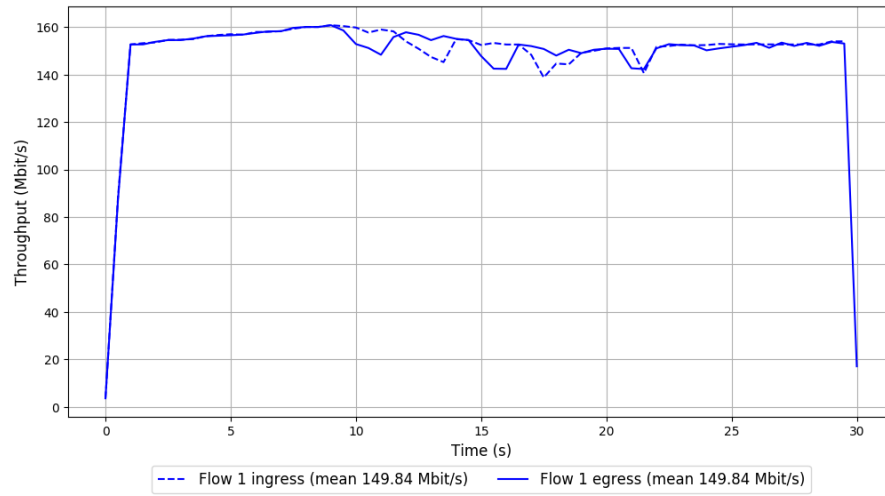
-- Flow 1:

Average throughput: 149.84 Mbit/s

95th percentile per-packet one-way delay: 51.952 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-30 13:29:53

End at: 2017-11-30 13:30:23

Below is generated by plot.py at 2017-11-30 14:57:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.78 Mbit/s

95th percentile per-packet one-way delay: 51.080 ms

Loss rate: 0.02%

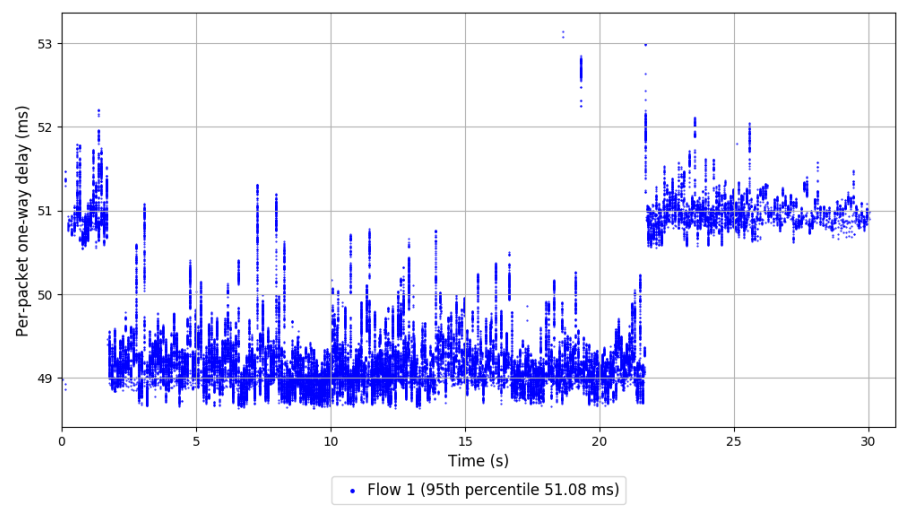
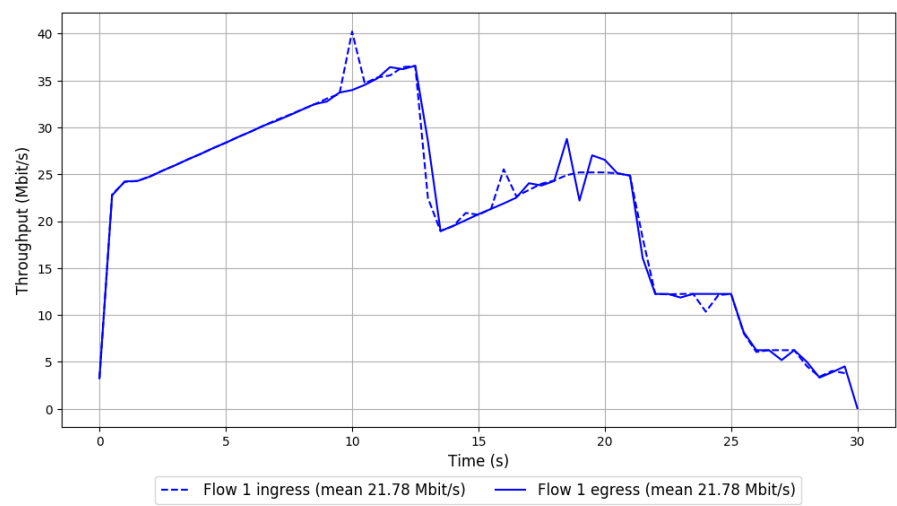
-- Flow 1:

Average throughput: 21.78 Mbit/s

95th percentile per-packet one-way delay: 51.080 ms

Loss rate: 0.02%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-11-30 11:59:49

End at: 2017-11-30 12:00:19

Below is generated by plot.py at 2017-11-30 14:58:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 315.98 Mbit/s

95th percentile per-packet one-way delay: 81.807 ms

Loss rate: 0.01%

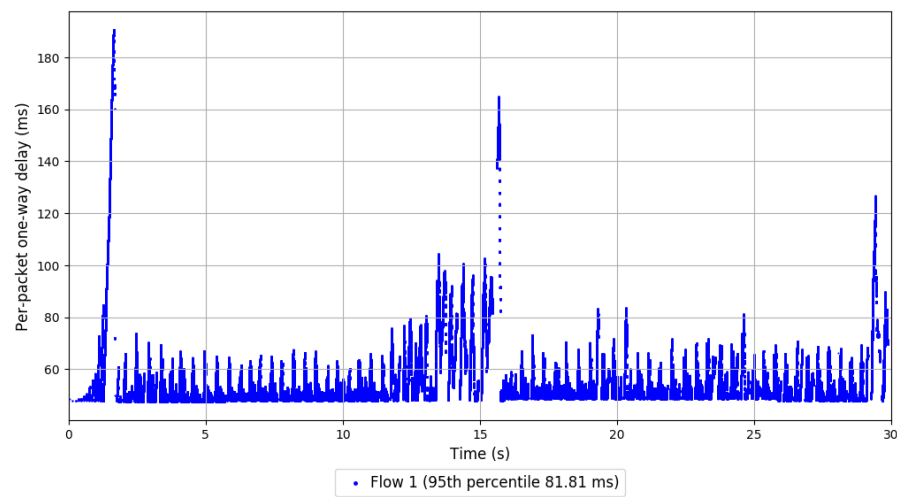
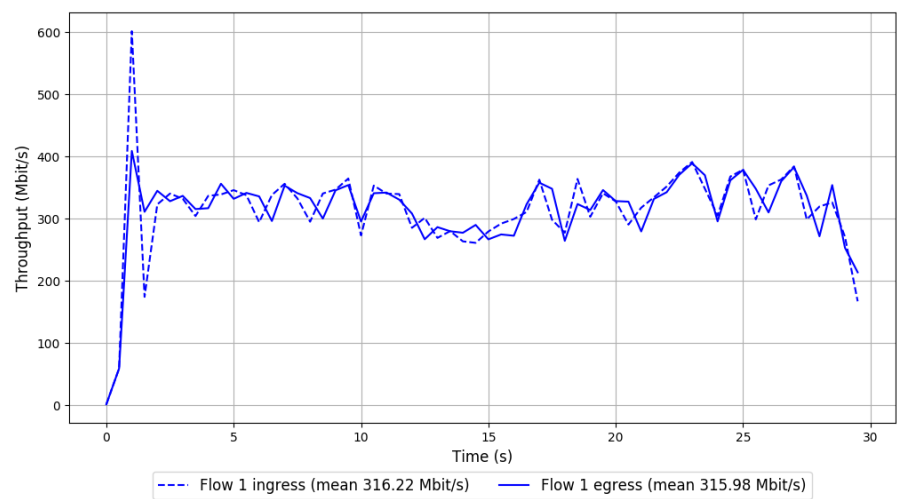
-- Flow 1:

Average throughput: 315.98 Mbit/s

95th percentile per-packet one-way delay: 81.807 ms

Loss rate: 0.01%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-30 12:10:10

End at: 2017-11-30 12:10:40

Below is generated by plot.py at 2017-11-30 14:58:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.21 Mbit/s

95th percentile per-packet one-way delay: 92.735 ms

Loss rate: 2.39%

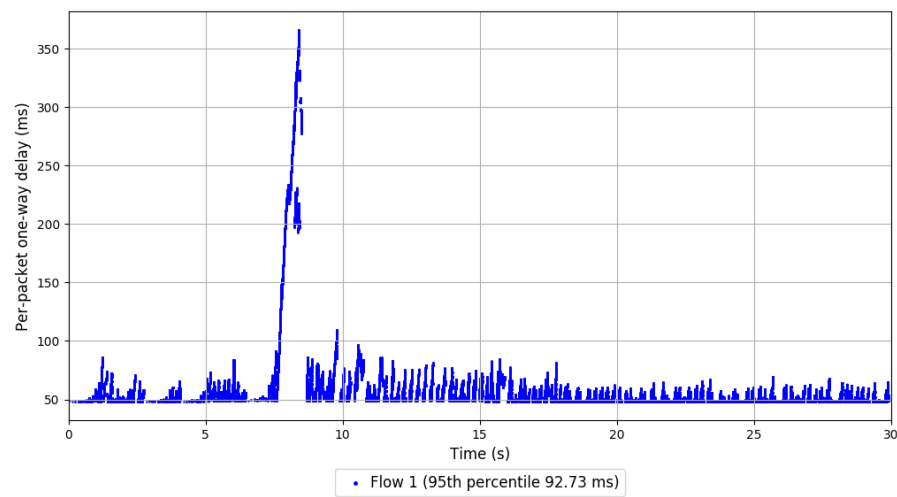
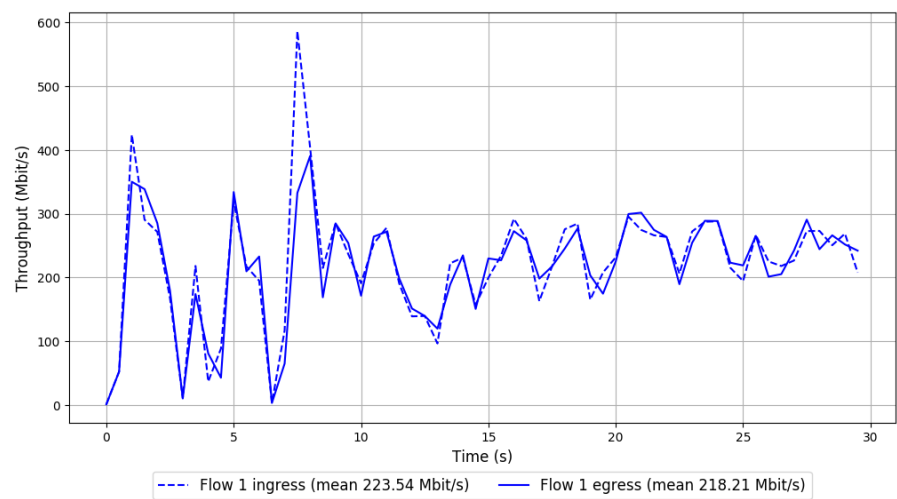
-- Flow 1:

Average throughput: 218.21 Mbit/s

95th percentile per-packet one-way delay: 92.735 ms

Loss rate: 2.39%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-30 12:20:21

End at: 2017-11-30 12:20:51

Below is generated by plot.py at 2017-11-30 14:58:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 249.50 Mbit/s

95th percentile per-packet one-way delay: 129.682 ms

Loss rate: 0.21%

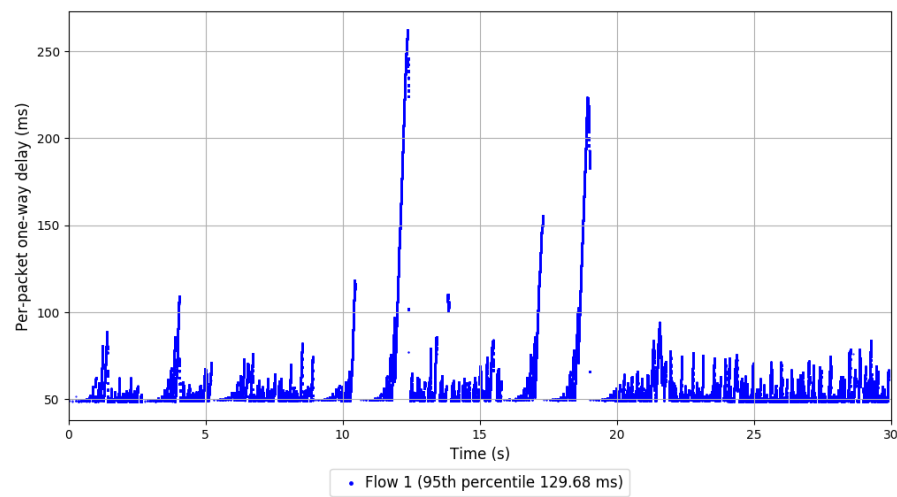
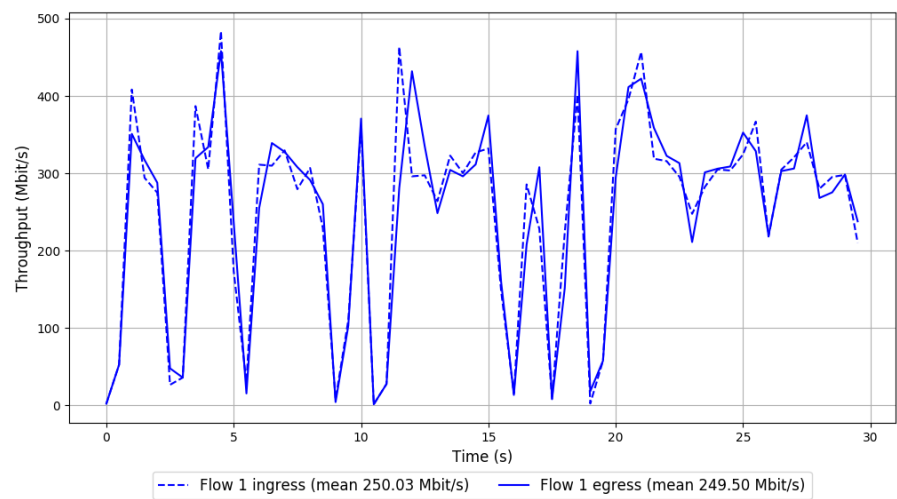
-- Flow 1:

Average throughput: 249.50 Mbit/s

95th percentile per-packet one-way delay: 129.682 ms

Loss rate: 0.21%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-30 12:30:43

End at: 2017-11-30 12:31:13

Below is generated by plot.py at 2017-11-30 14:58:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 242.96 Mbit/s

95th percentile per-packet one-way delay: 88.777 ms

Loss rate: 0.17%

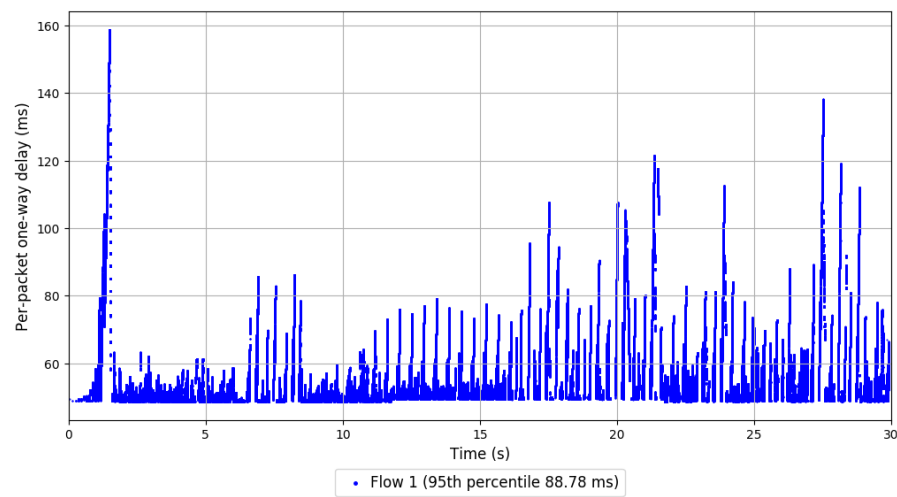
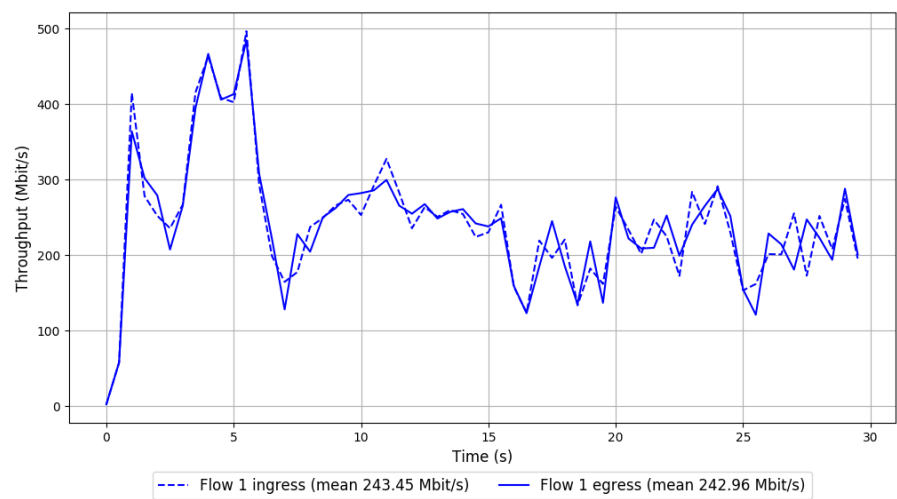
-- Flow 1:

Average throughput: 242.96 Mbit/s

95th percentile per-packet one-way delay: 88.777 ms

Loss rate: 0.17%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-30 12:40:59

End at: 2017-11-30 12:41:29

Below is generated by plot.py at 2017-11-30 14:59:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 246.84 Mbit/s

95th percentile per-packet one-way delay: 135.452 ms

Loss rate: 0.48%

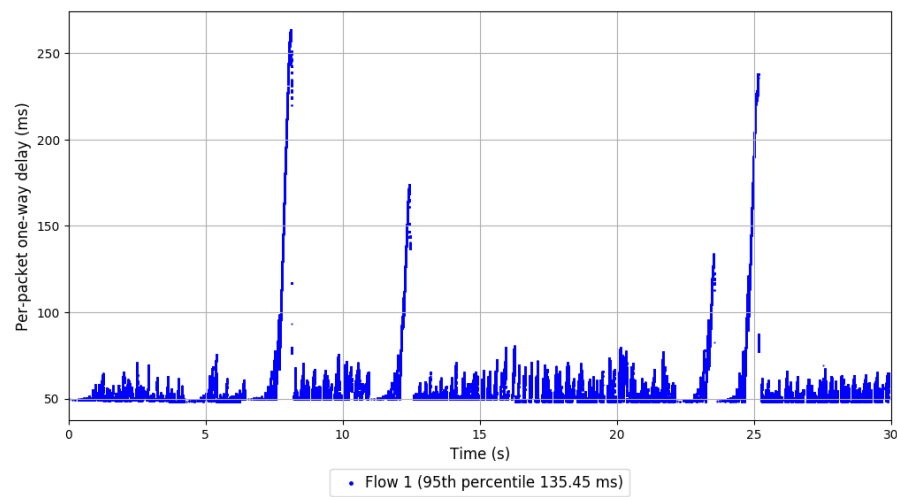
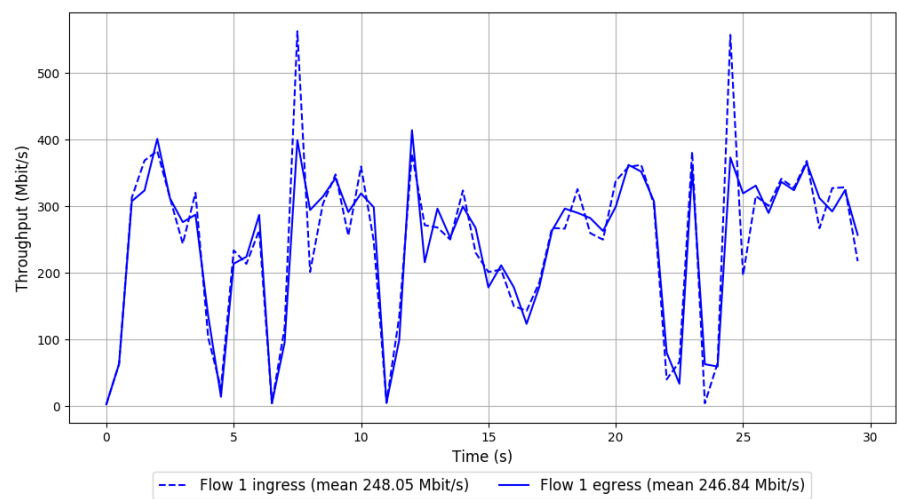
-- Flow 1:

Average throughput: 246.84 Mbit/s

95th percentile per-packet one-way delay: 135.452 ms

Loss rate: 0.48%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-30 12:51:06

End at: 2017-11-30 12:51:36

Below is generated by plot.py at 2017-11-30 14:59:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.25 Mbit/s

95th percentile per-packet one-way delay: 116.859 ms

Loss rate: 3.00%

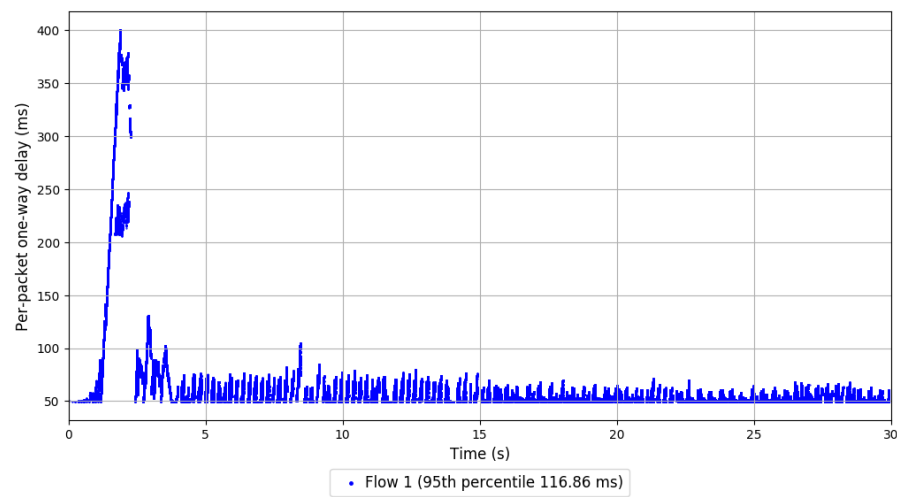
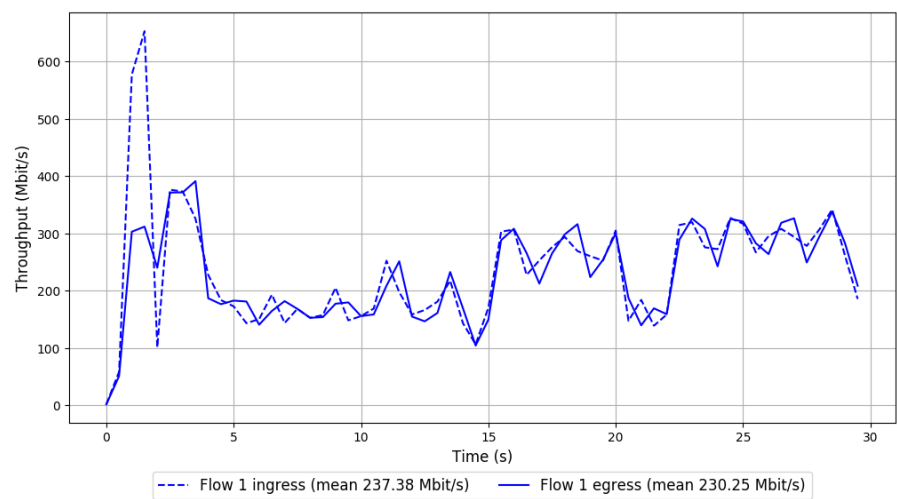
-- Flow 1:

Average throughput: 230.25 Mbit/s

95th percentile per-packet one-way delay: 116.859 ms

Loss rate: 3.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-30 13:01:20

End at: 2017-11-30 13:01:50

Below is generated by plot.py at 2017-11-30 15:01:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 284.67 Mbit/s

95th percentile per-packet one-way delay: 83.496 ms

Loss rate: 0.02%

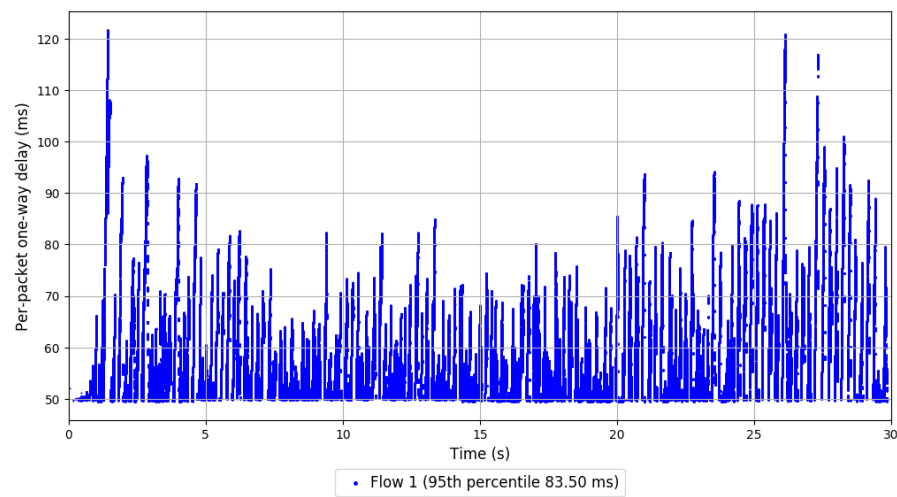
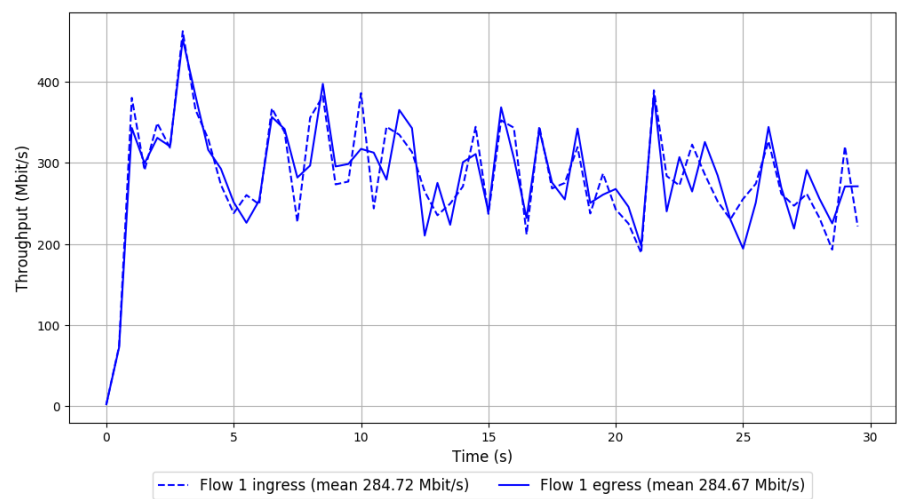
-- Flow 1:

Average throughput: 284.67 Mbit/s

95th percentile per-packet one-way delay: 83.496 ms

Loss rate: 0.02%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-30 13:11:37

End at: 2017-11-30 13:12:07

Below is generated by plot.py at 2017-11-30 15:01:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 285.17 Mbit/s

95th percentile per-packet one-way delay: 163.727 ms

Loss rate: 0.03%

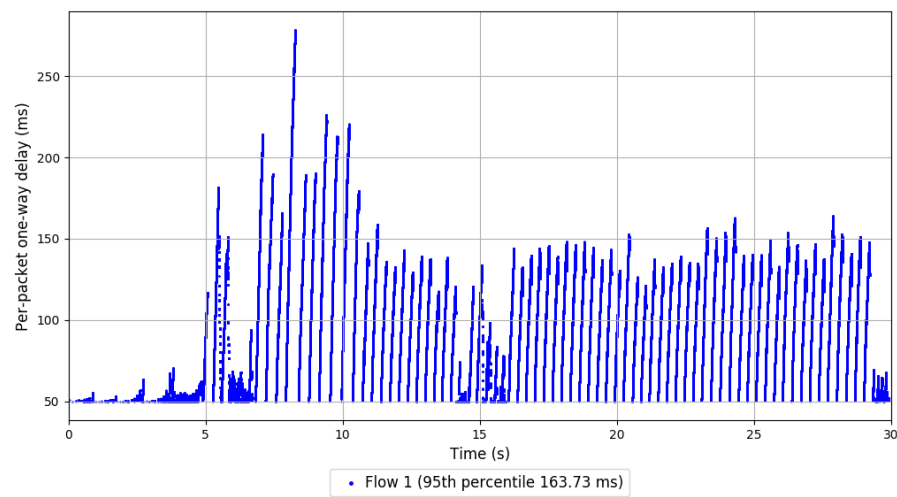
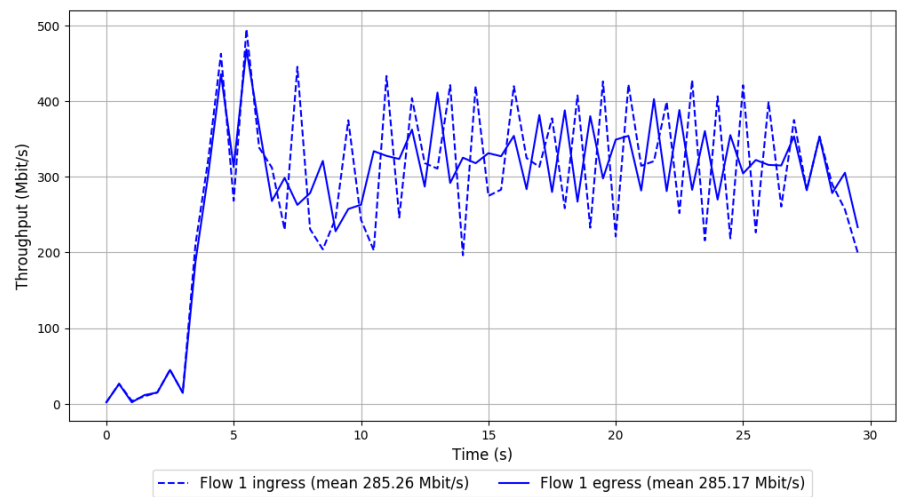
-- Flow 1:

Average throughput: 285.17 Mbit/s

95th percentile per-packet one-way delay: 163.727 ms

Loss rate: 0.03%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-30 13:21:48

End at: 2017-11-30 13:22:18

Below is generated by plot.py at 2017-11-30 15:01:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 258.56 Mbit/s

95th percentile per-packet one-way delay: 88.439 ms

Loss rate: 0.02%

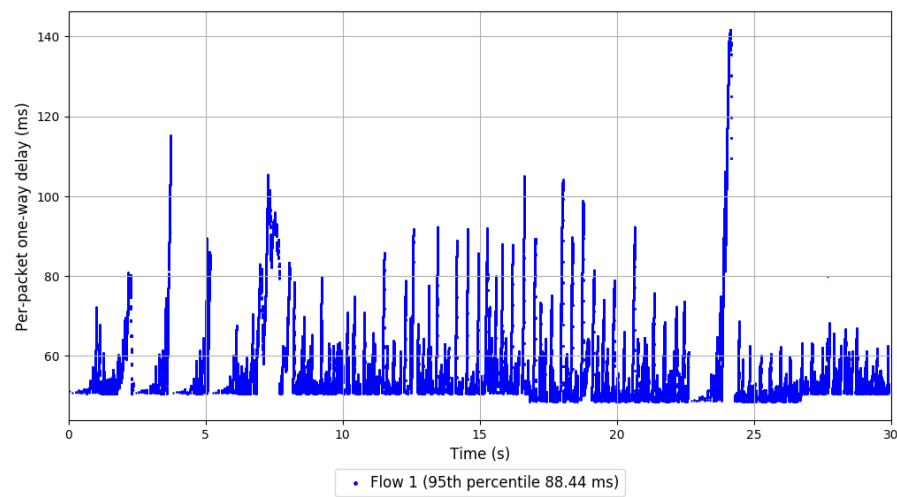
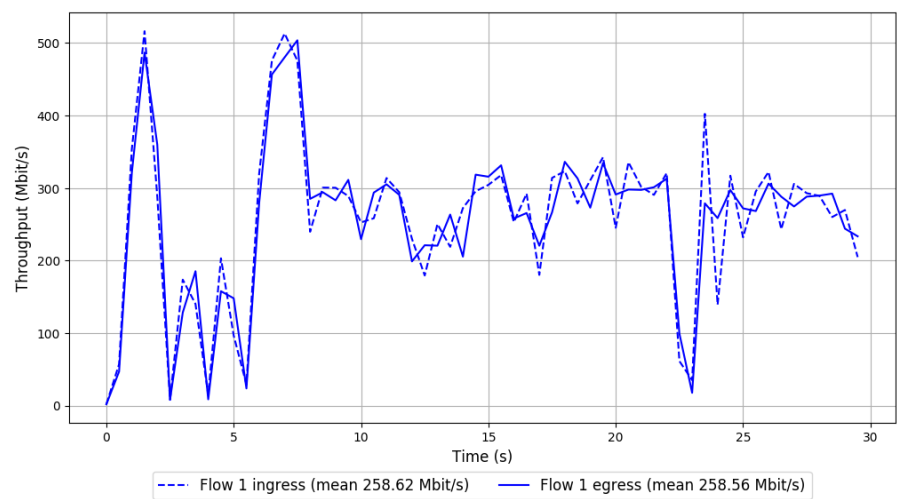
-- Flow 1:

Average throughput: 258.56 Mbit/s

95th percentile per-packet one-way delay: 88.439 ms

Loss rate: 0.02%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-30 13:31:52

End at: 2017-11-30 13:32:22

Below is generated by plot.py at 2017-11-30 15:02:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 272.71 Mbit/s

95th percentile per-packet one-way delay: 218.307 ms

Loss rate: 1.85%

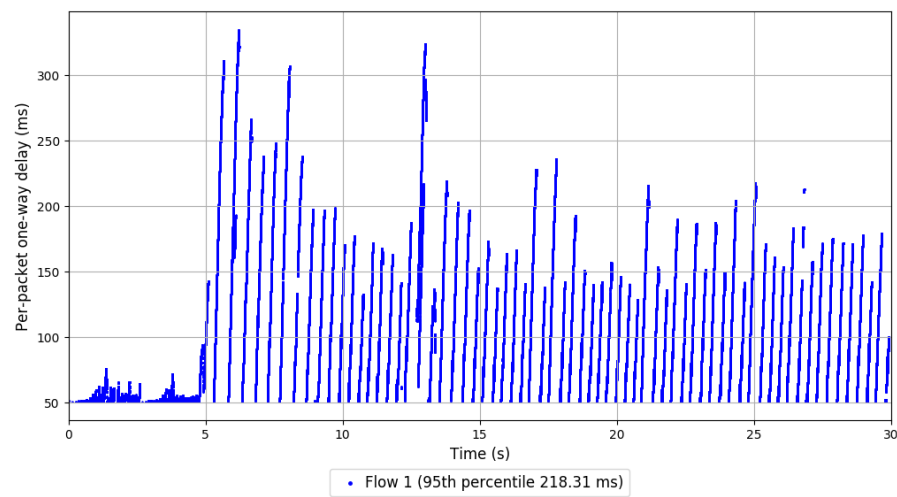
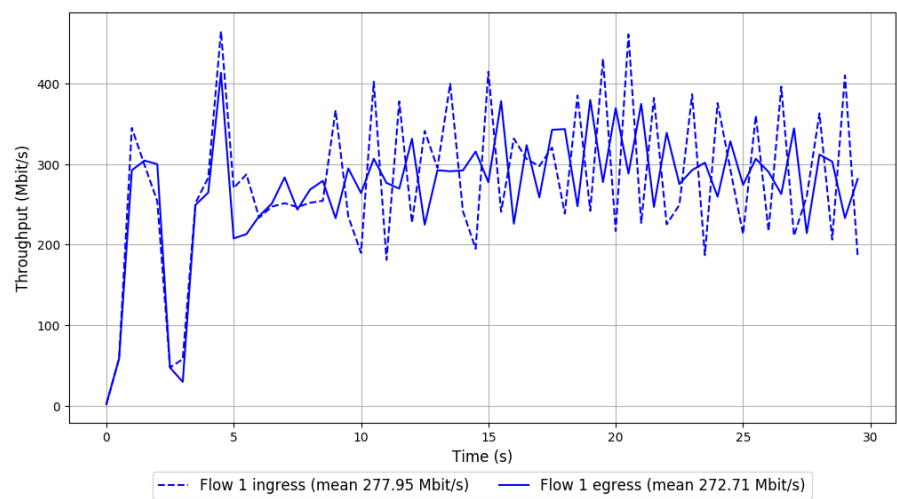
-- Flow 1:

Average throughput: 272.71 Mbit/s

95th percentile per-packet one-way delay: 218.307 ms

Loss rate: 1.85%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-11-30 12:04:31

End at: 2017-11-30 12:05:01

Below is generated by plot.py at 2017-11-30 15:02:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.85 Mbit/s

95th percentile per-packet one-way delay: 48.040 ms

Loss rate: 0.00%

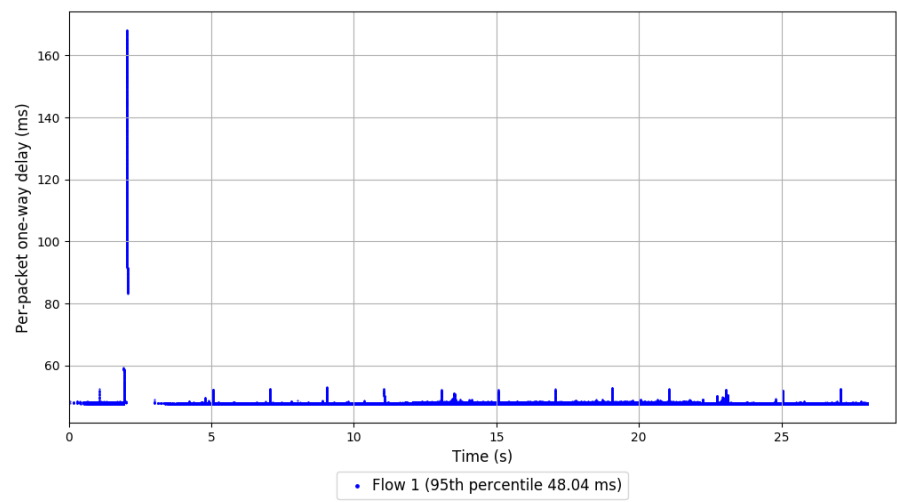
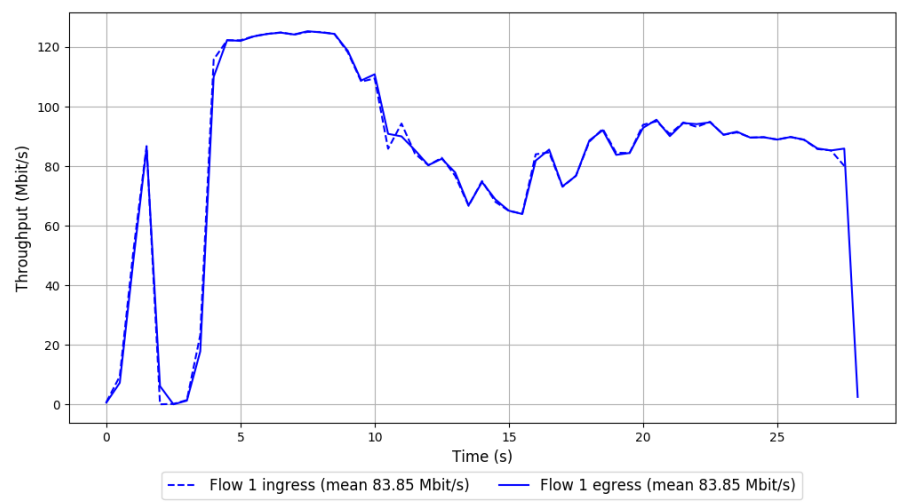
-- Flow 1:

Average throughput: 83.85 Mbit/s

95th percentile per-packet one-way delay: 48.040 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-30 12:14:42

End at: 2017-11-30 12:15:12

Below is generated by plot.py at 2017-11-30 15:02:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.50 Mbit/s

95th percentile per-packet one-way delay: 48.984 ms

Loss rate: 0.00%

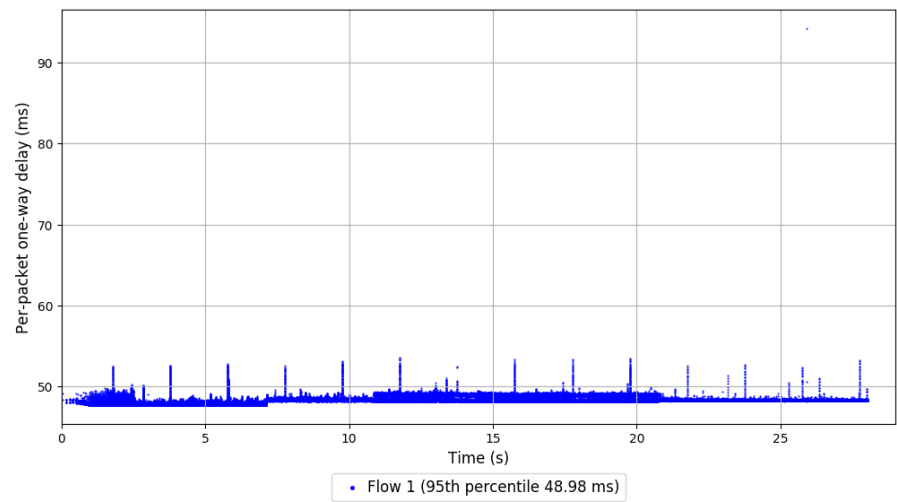
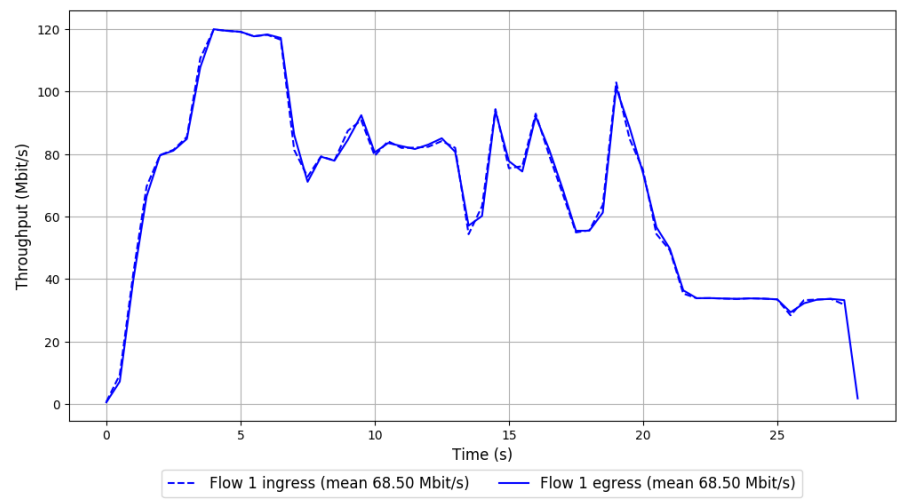
-- Flow 1:

Average throughput: 68.50 Mbit/s

95th percentile per-packet one-way delay: 48.984 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-30 12:24:57

End at: 2017-11-30 12:25:27

Below is generated by plot.py at 2017-11-30 15:02:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.15 Mbit/s

95th percentile per-packet one-way delay: 49.317 ms

Loss rate: 0.00%

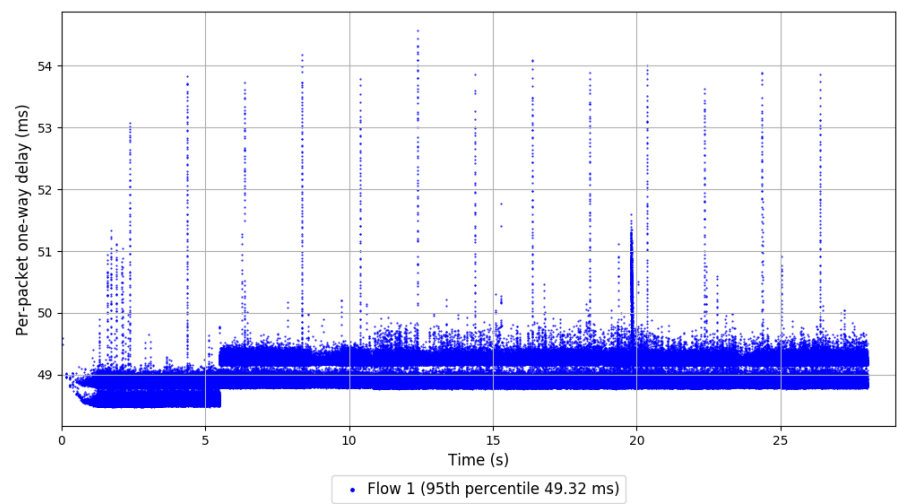
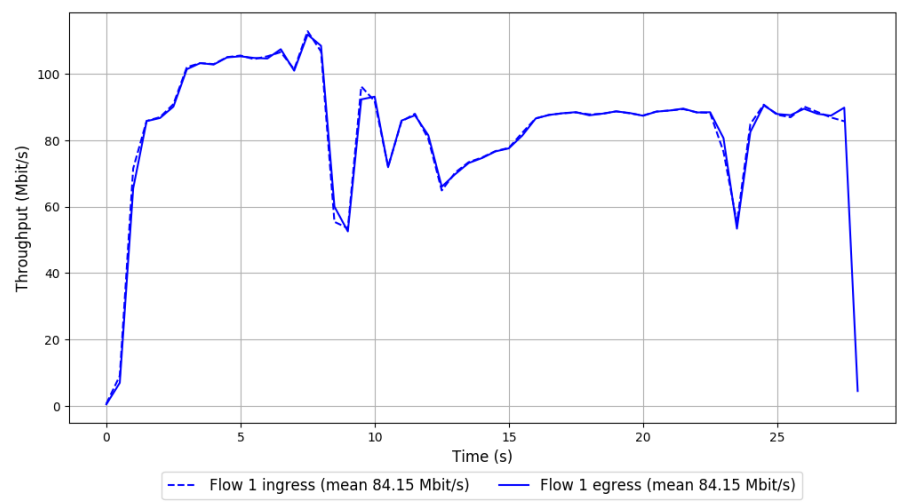
-- Flow 1:

Average throughput: 84.15 Mbit/s

95th percentile per-packet one-way delay: 49.317 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-30 12:35:14

End at: 2017-11-30 12:35:44

Below is generated by plot.py at 2017-11-30 15:02:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.32 Mbit/s

95th percentile per-packet one-way delay: 49.544 ms

Loss rate: 0.00%

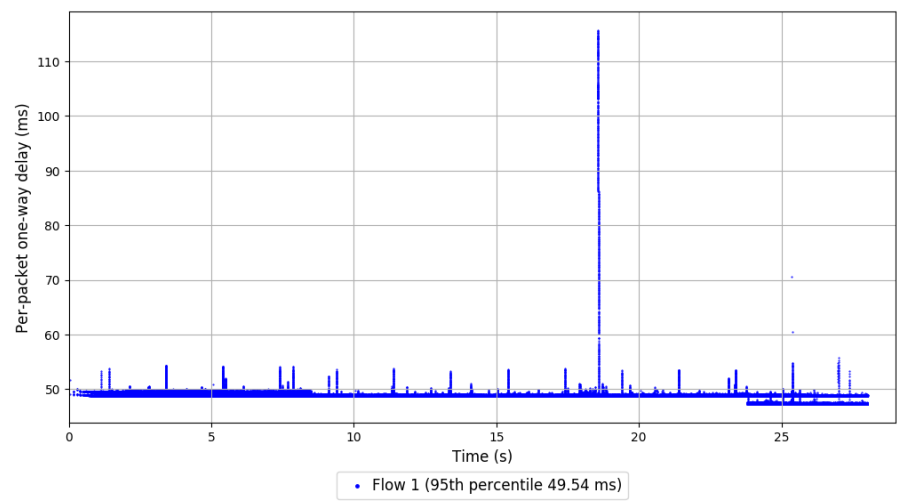
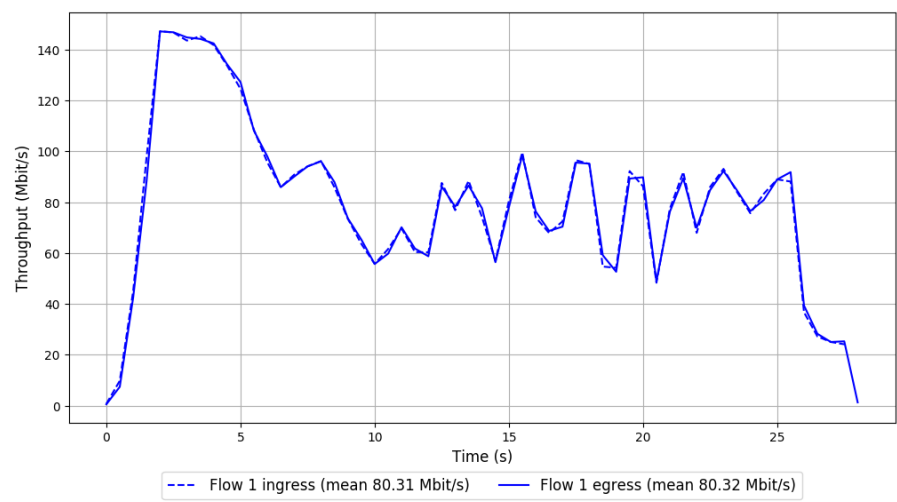
-- Flow 1:

Average throughput: 80.32 Mbit/s

95th percentile per-packet one-way delay: 49.544 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-30 12:45:34

End at: 2017-11-30 12:46:04

Below is generated by plot.py at 2017-11-30 15:03:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.74 Mbit/s

95th percentile per-packet one-way delay: 49.157 ms

Loss rate: 0.00%

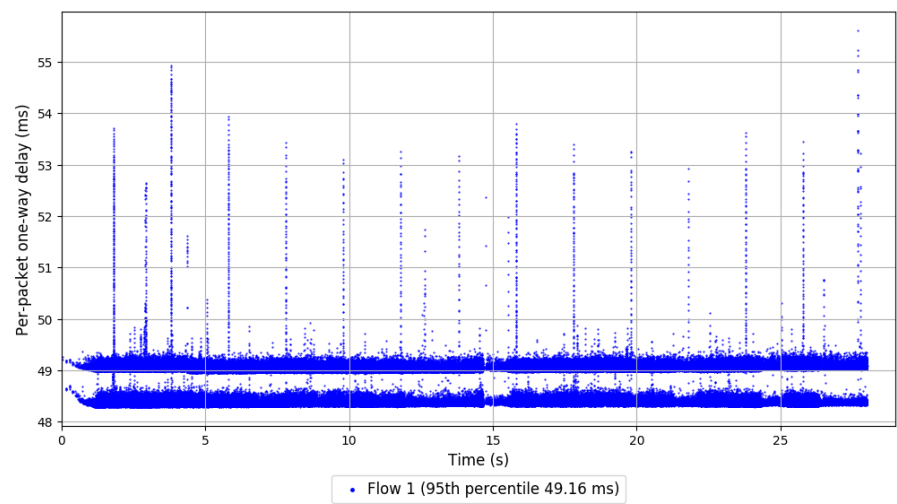
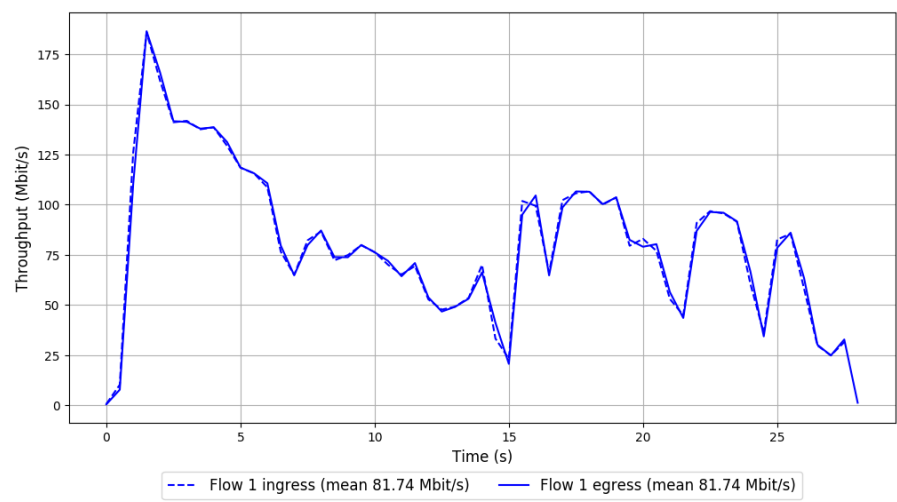
-- Flow 1:

Average throughput: 81.74 Mbit/s

95th percentile per-packet one-way delay: 49.157 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-30 12:55:40

End at: 2017-11-30 12:56:10

Below is generated by plot.py at 2017-11-30 15:03:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.68 Mbit/s

95th percentile per-packet one-way delay: 49.831 ms

Loss rate: 0.00%

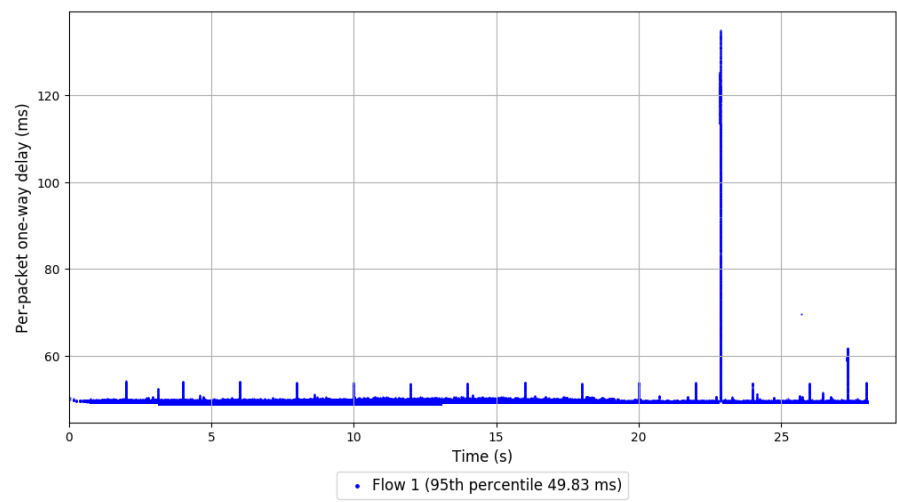
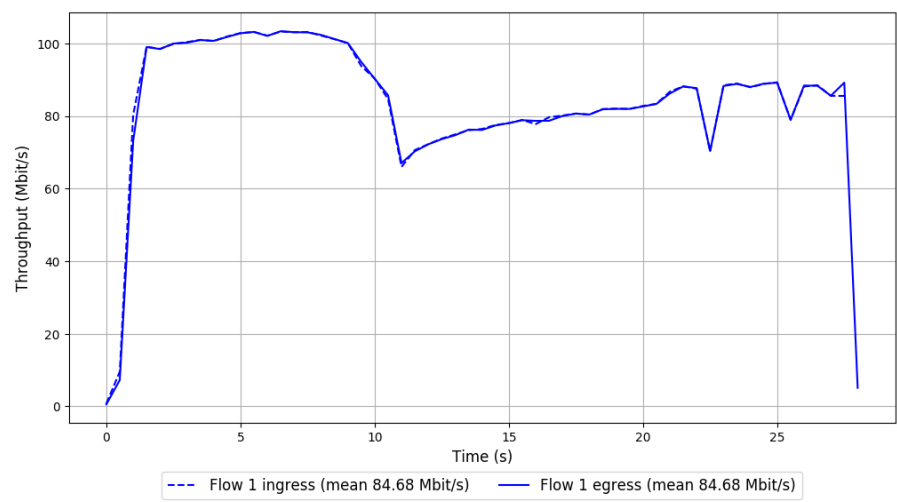
-- Flow 1:

Average throughput: 84.68 Mbit/s

95th percentile per-packet one-way delay: 49.831 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-30 13:06:00

End at: 2017-11-30 13:06:30

Below is generated by plot.py at 2017-11-30 15:03:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.58 Mbit/s

95th percentile per-packet one-way delay: 50.122 ms

Loss rate: 0.00%

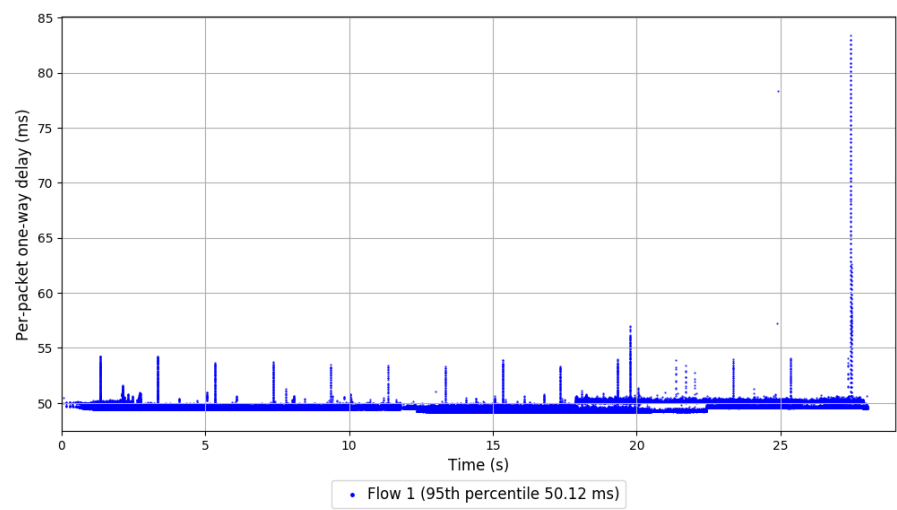
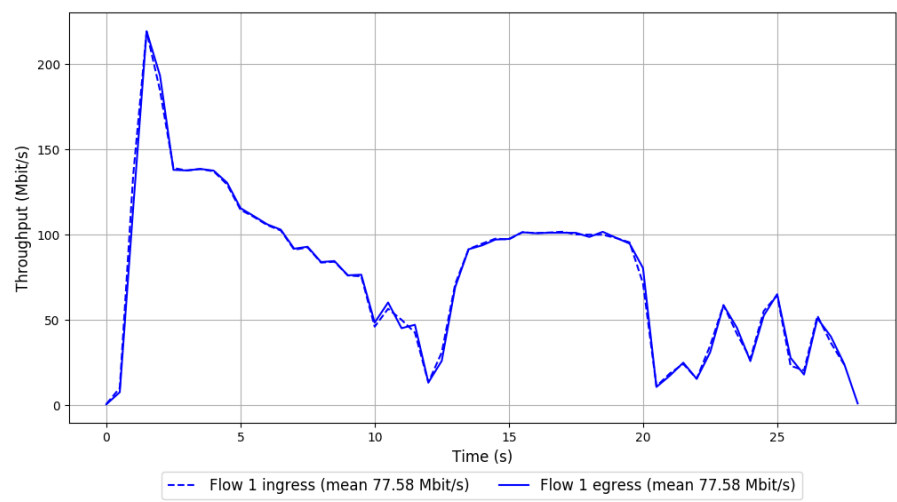
-- Flow 1:

Average throughput: 77.58 Mbit/s

95th percentile per-packet one-way delay: 50.122 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-30 13:16:11

End at: 2017-11-30 13:16:41

Below is generated by plot.py at 2017-11-30 15:03:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.04 Mbit/s

95th percentile per-packet one-way delay: 50.448 ms

Loss rate: 0.00%

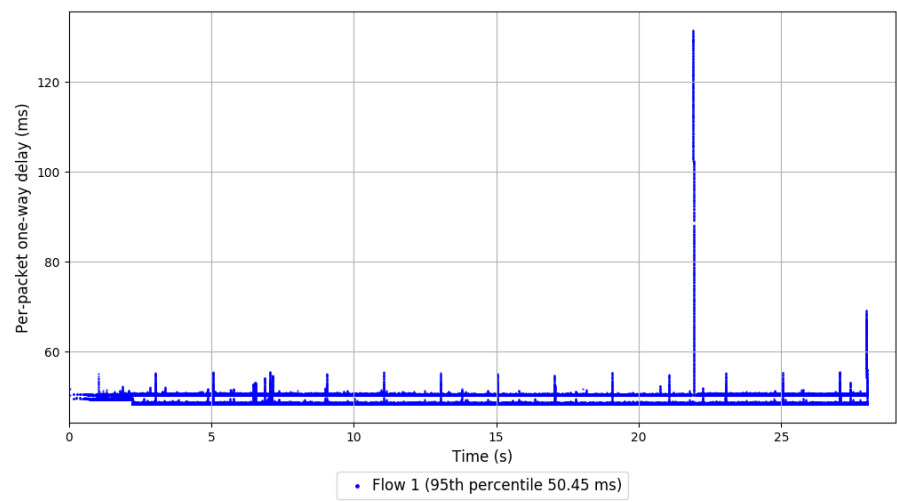
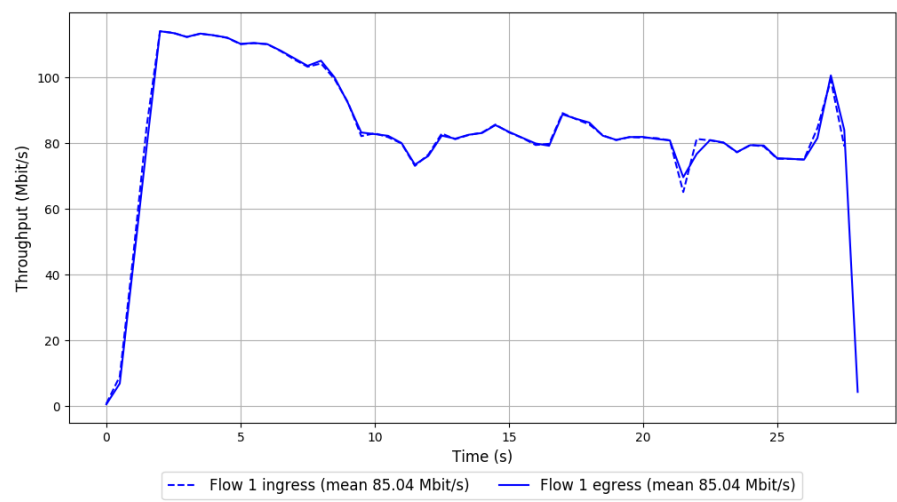
-- Flow 1:

Average throughput: 85.04 Mbit/s

95th percentile per-packet one-way delay: 50.448 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-30 13:26:25

End at: 2017-11-30 13:26:55

Below is generated by plot.py at 2017-11-30 15:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.66 Mbit/s

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

Loss rate: 0.00%

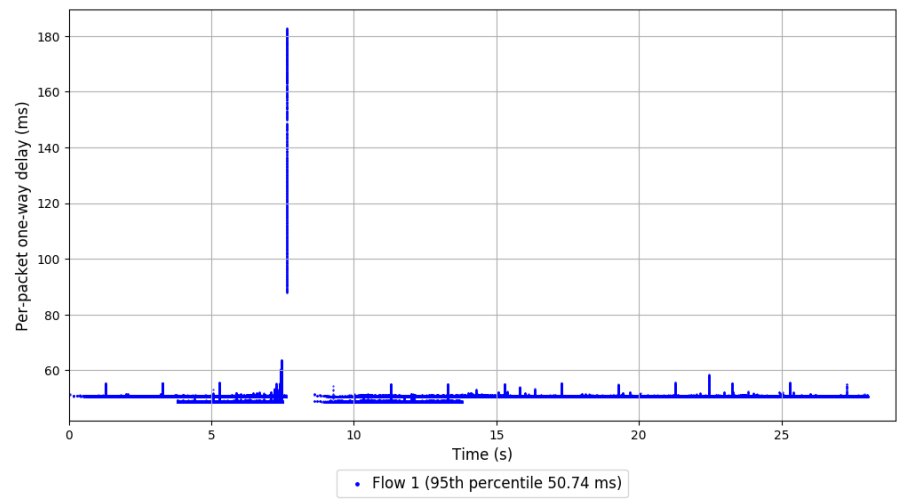
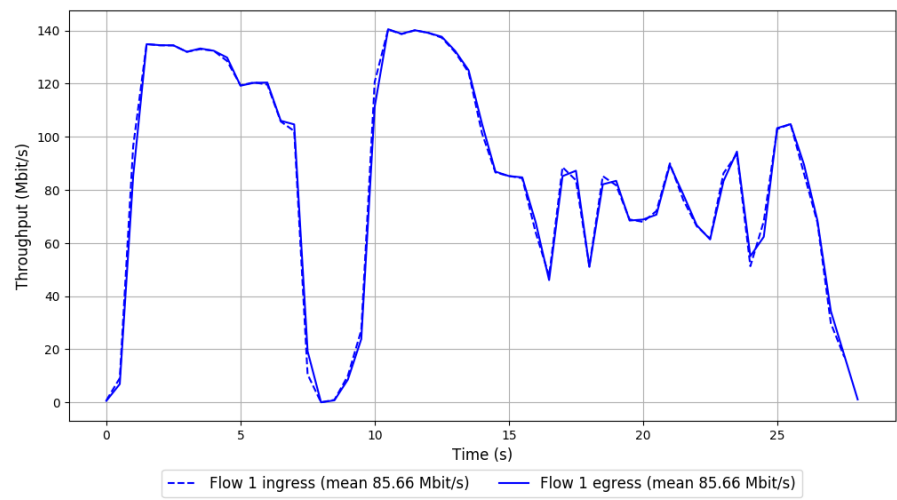
-- Flow 1:

Average throughput: 85.66 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-30 13:36:29

End at: 2017-11-30 13:36:59

Below is generated by plot.py at 2017-11-30 15:04:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.74 Mbit/s

95th percentile per-packet one-way delay: 50.940 ms

Loss rate: 0.00%

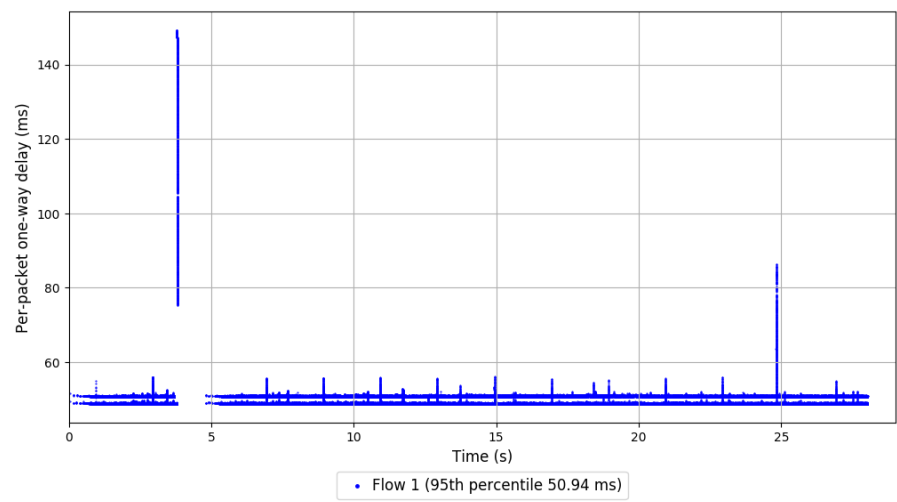
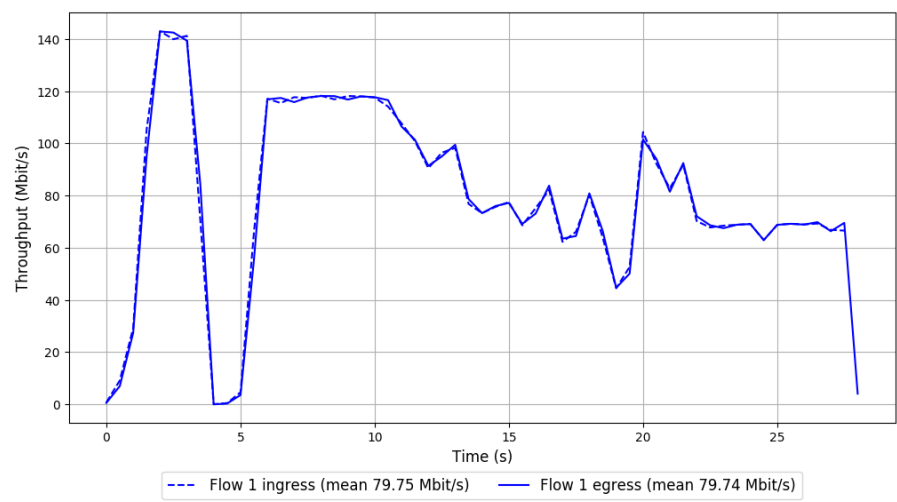
-- Flow 1:

Average throughput: 79.74 Mbit/s

95th percentile per-packet one-way delay: 50.940 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

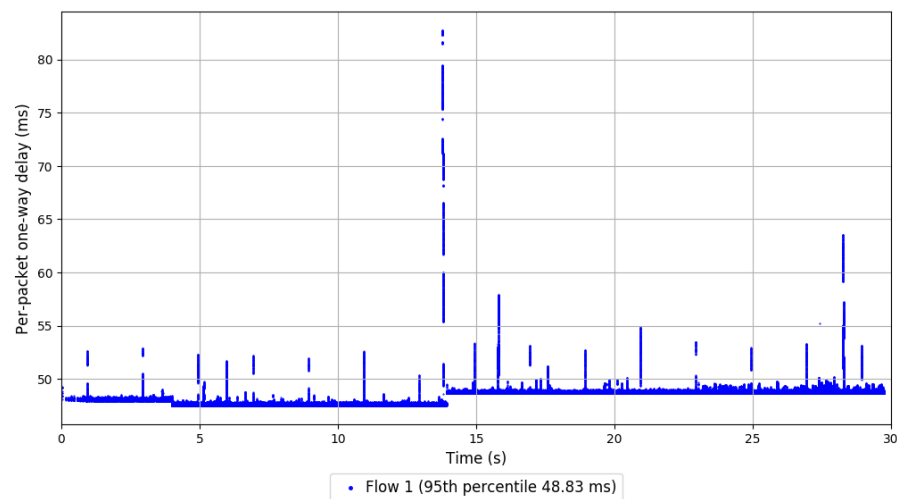
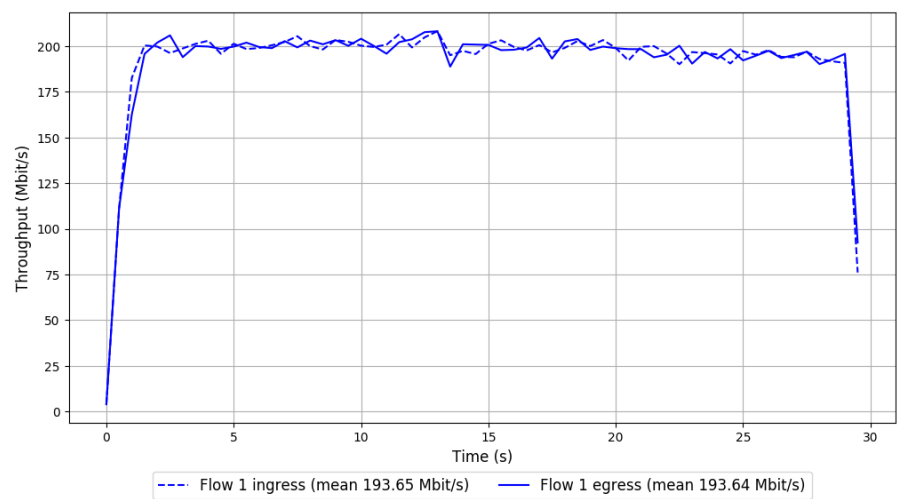


```
Run 1: Statistics of Indigo

Start at: 2017-11-30 12:02:21
End at: 2017-11-30 12:02:51

# Below is generated by plot.py at 2017-11-30 15:05:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 193.64 Mbit/s
95th percentile per-packet one-way delay: 48.831 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 193.64 Mbit/s
95th percentile per-packet one-way delay: 48.831 ms
Loss rate: 0.00%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-11-30 12:12:34

End at: 2017-11-30 12:13:04

Below is generated by plot.py at 2017-11-30 15:05:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.71 Mbit/s

95th percentile per-packet one-way delay: 48.293 ms

Loss rate: 0.00%

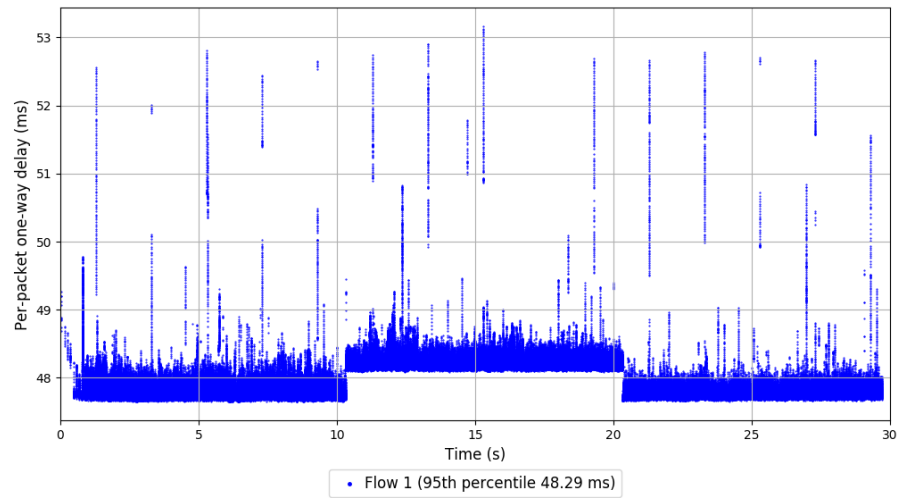
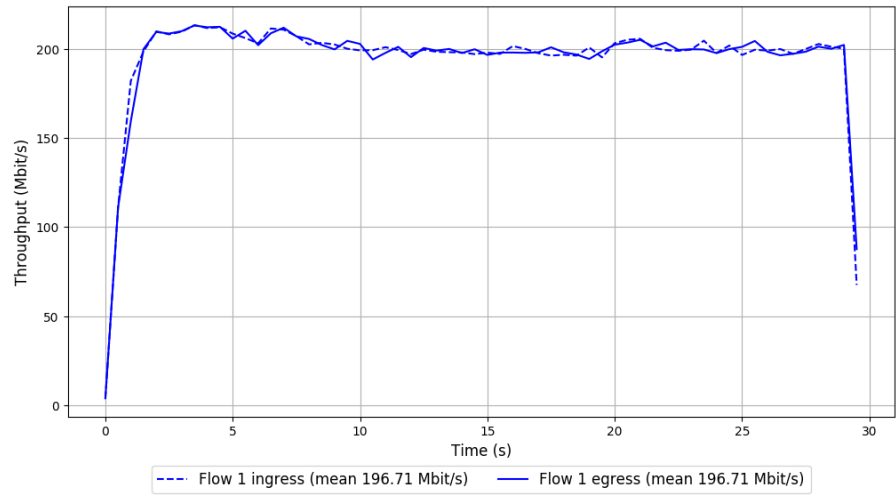
-- Flow 1:

Average throughput: 196.71 Mbit/s

95th percentile per-packet one-way delay: 48.293 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-30 12:22:48

End at: 2017-11-30 12:23:18

Below is generated by plot.py at 2017-11-30 15:06:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.28 Mbit/s

95th percentile per-packet one-way delay: 49.414 ms

Loss rate: 0.00%

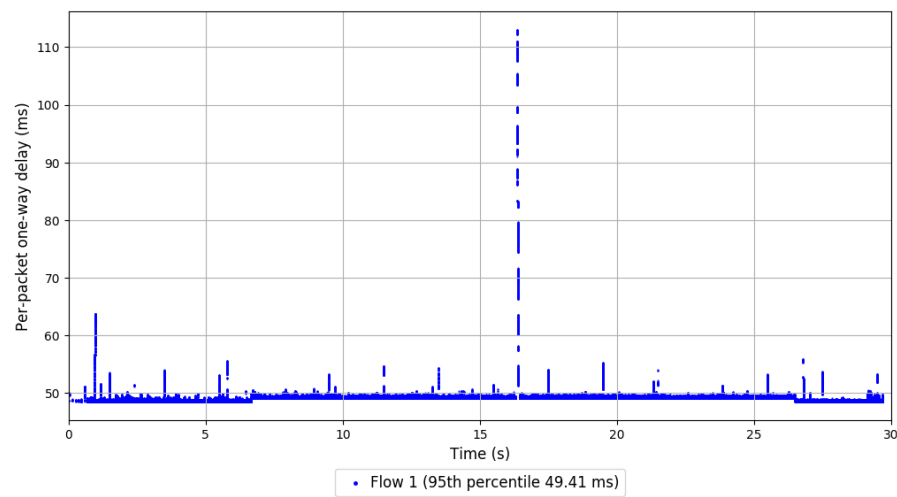
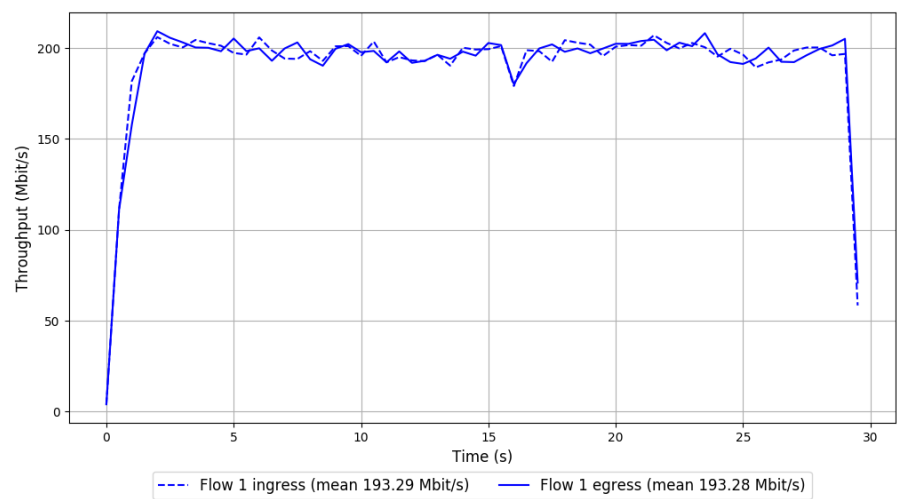
-- Flow 1:

Average throughput: 193.28 Mbit/s

95th percentile per-packet one-way delay: 49.414 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-30 12:33:08

End at: 2017-11-30 12:33:38

Below is generated by plot.py at 2017-11-30 15:06:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.40 Mbit/s

95th percentile per-packet one-way delay: 49.503 ms

Loss rate: 0.00%

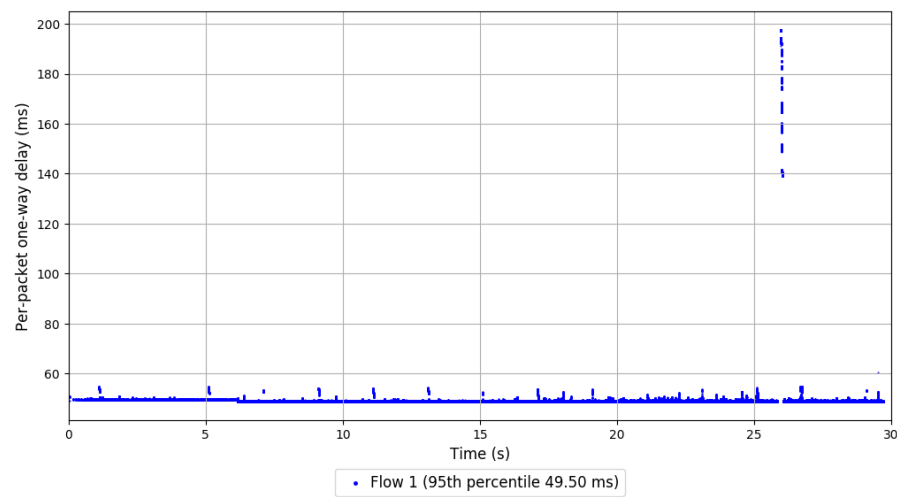
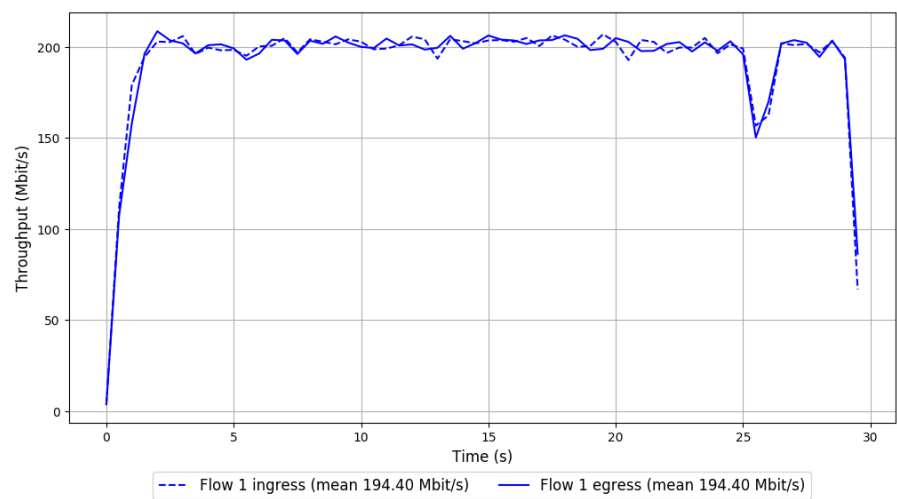
-- Flow 1:

Average throughput: 194.40 Mbit/s

95th percentile per-packet one-way delay: 49.503 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-30 12:43:23

End at: 2017-11-30 12:43:53

Below is generated by plot.py at 2017-11-30 15:06:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 198.37 Mbit/s

95th percentile per-packet one-way delay: 49.754 ms

Loss rate: 0.00%

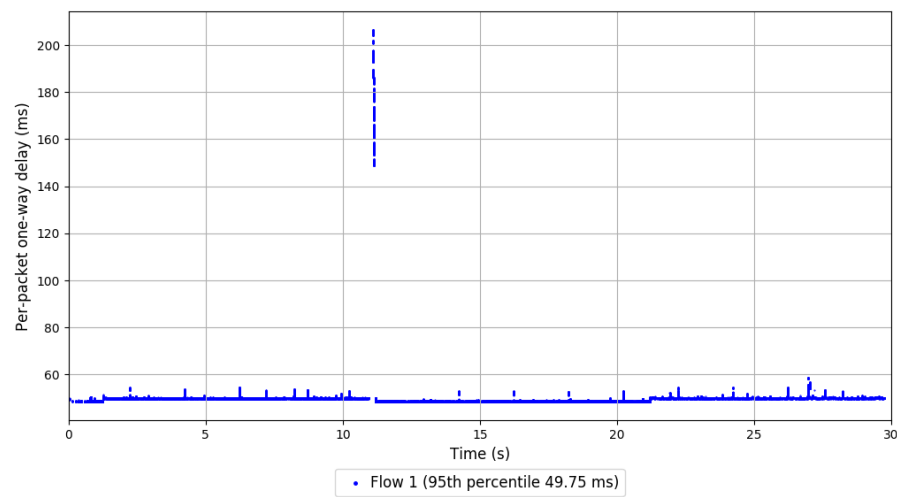
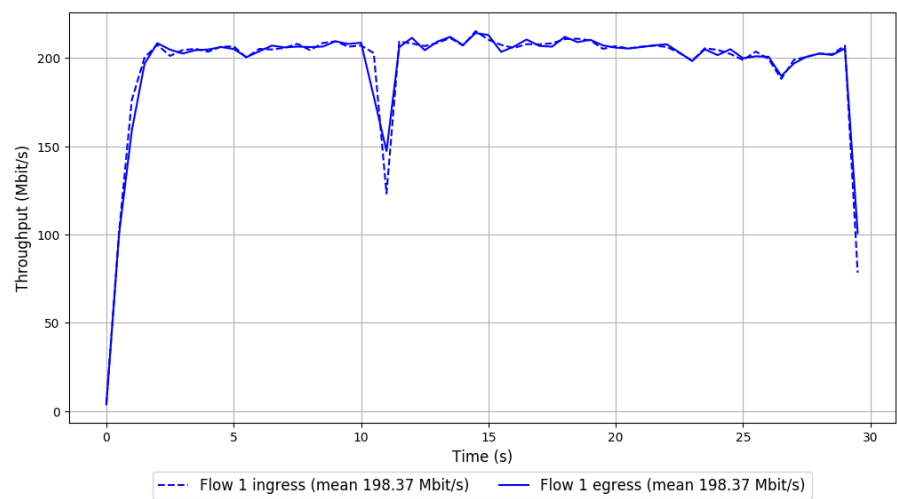
-- Flow 1:

Average throughput: 198.37 Mbit/s

95th percentile per-packet one-way delay: 49.754 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-30 12:53:31

End at: 2017-11-30 12:54:01

Below is generated by plot.py at 2017-11-30 15:07:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.92 Mbit/s

95th percentile per-packet one-way delay: 49.520 ms

Loss rate: 0.00%

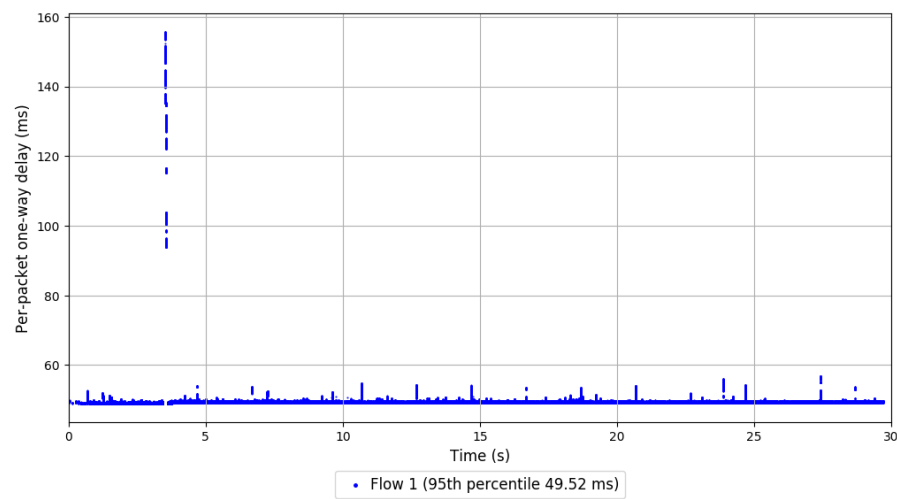
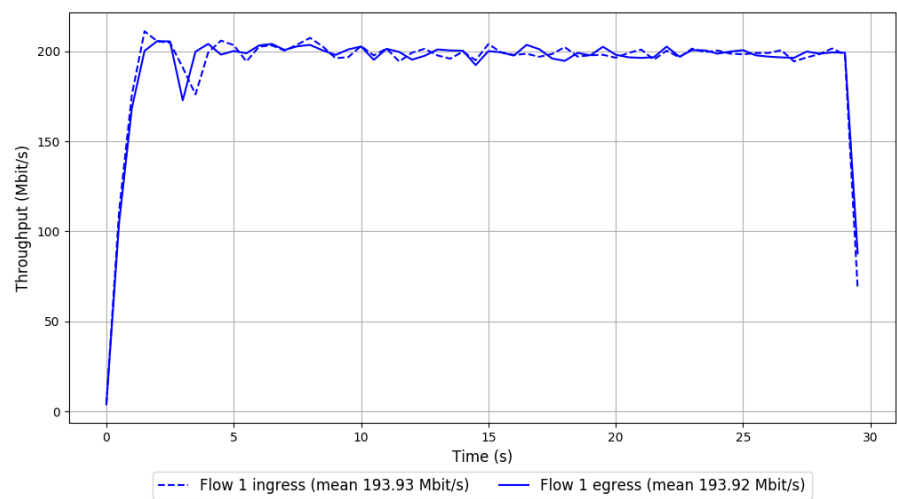
-- Flow 1:

Average throughput: 193.92 Mbit/s

95th percentile per-packet one-way delay: 49.520 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-30 13:03:48

End at: 2017-11-30 13:04:18

Below is generated by plot.py at 2017-11-30 15:07:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.32 Mbit/s

95th percentile per-packet one-way delay: 49.787 ms

Loss rate: 0.00%

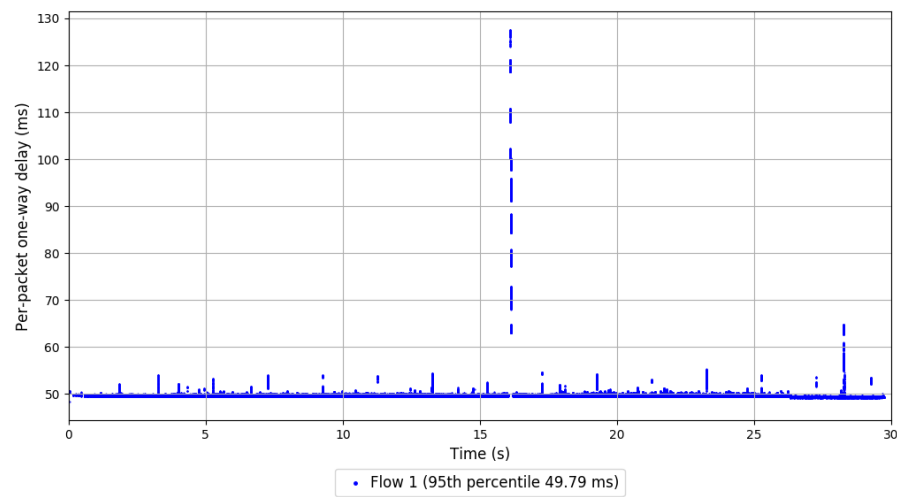
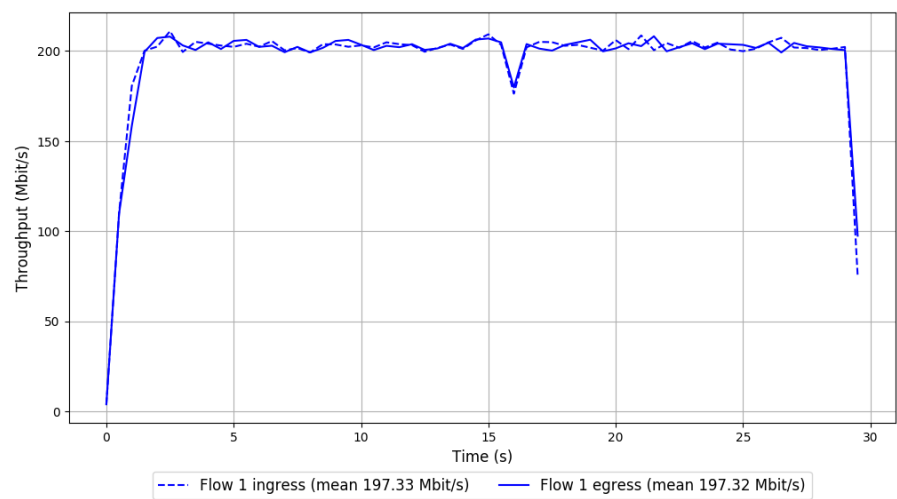
-- Flow 1:

Average throughput: 197.32 Mbit/s

95th percentile per-packet one-way delay: 49.787 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-30 13:14:05

End at: 2017-11-30 13:14:35

Below is generated by plot.py at 2017-11-30 15:07:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.00 Mbit/s

95th percentile per-packet one-way delay: 50.257 ms

Loss rate: 0.00%

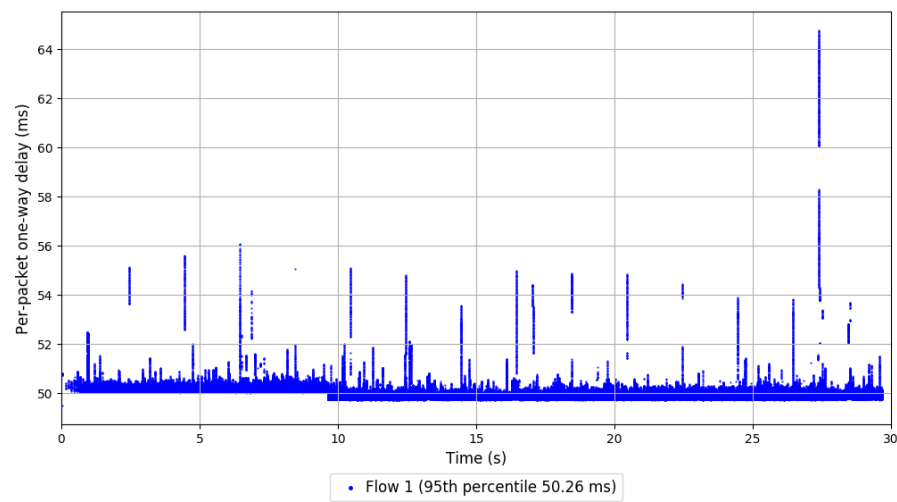
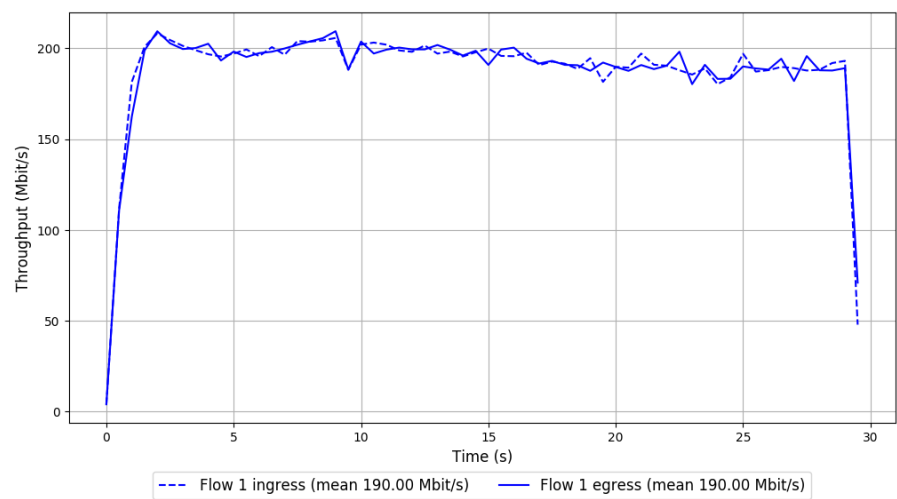
-- Flow 1:

Average throughput: 190.00 Mbit/s

95th percentile per-packet one-way delay: 50.257 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-30 13:24:14

End at: 2017-11-30 13:24:44

Below is generated by plot.py at 2017-11-30 15:08:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.97 Mbit/s

95th percentile per-packet one-way delay: 50.611 ms

Loss rate: 0.00%

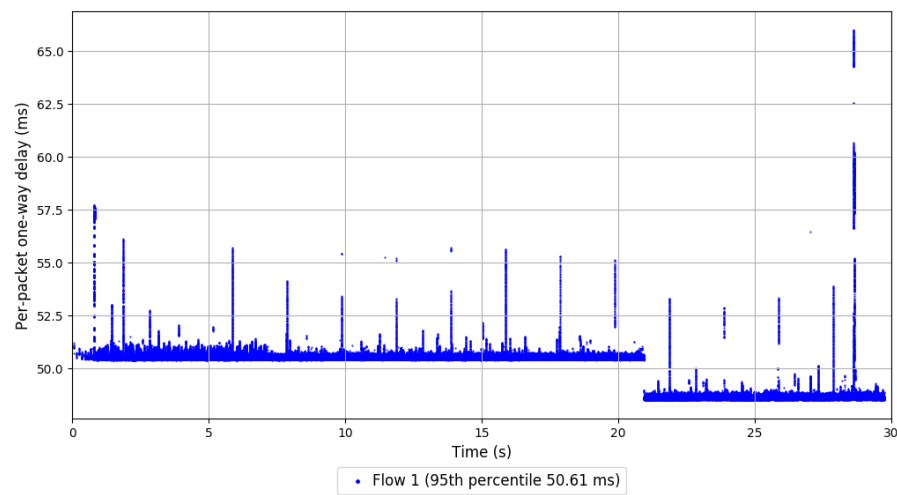
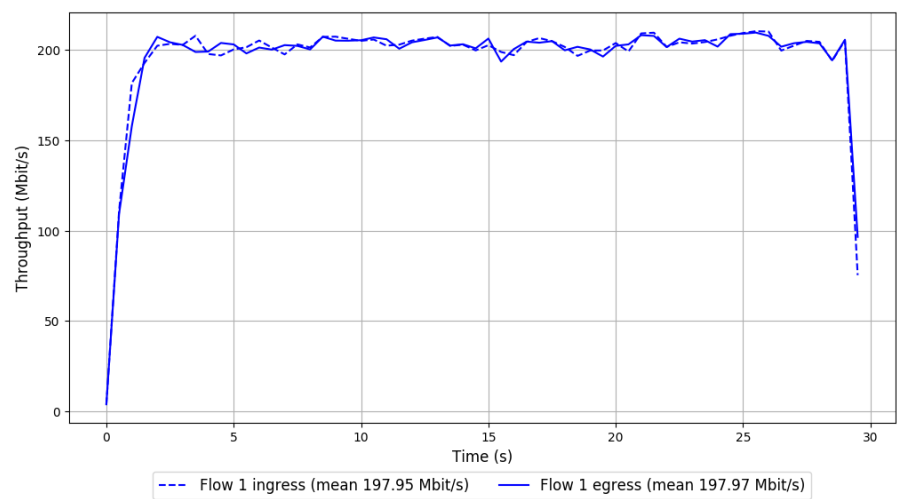
-- Flow 1:

Average throughput: 197.97 Mbit/s

95th percentile per-packet one-way delay: 50.611 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-30 13:34:18

End at: 2017-11-30 13:34:48

Below is generated by plot.py at 2017-11-30 15:09:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.47 Mbit/s

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

Loss rate: 0.00%

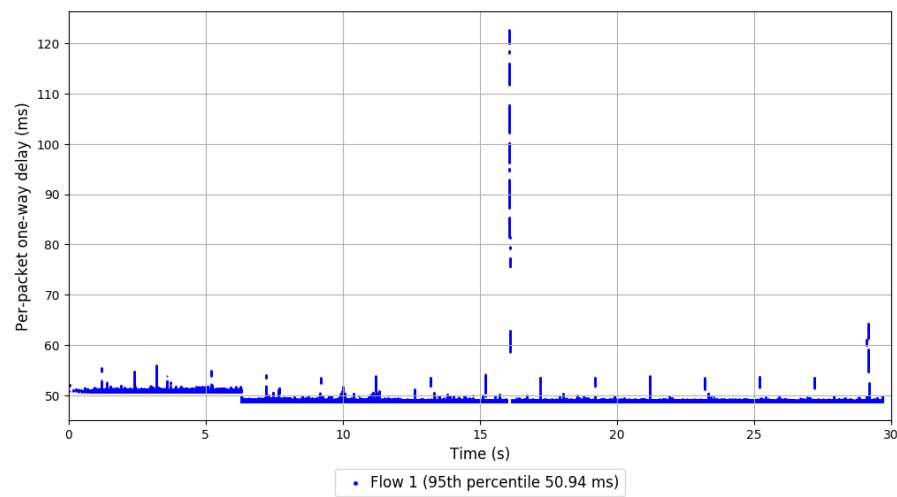
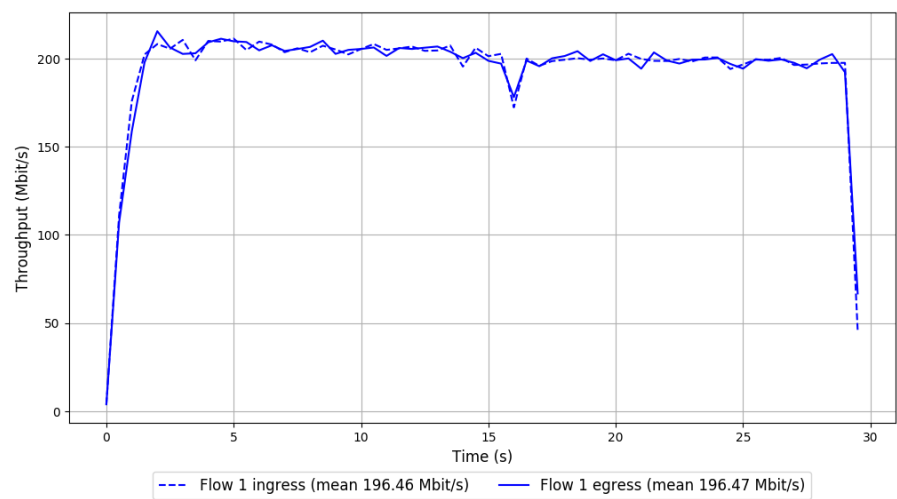
-- Flow 1:

Average throughput: 196.47 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

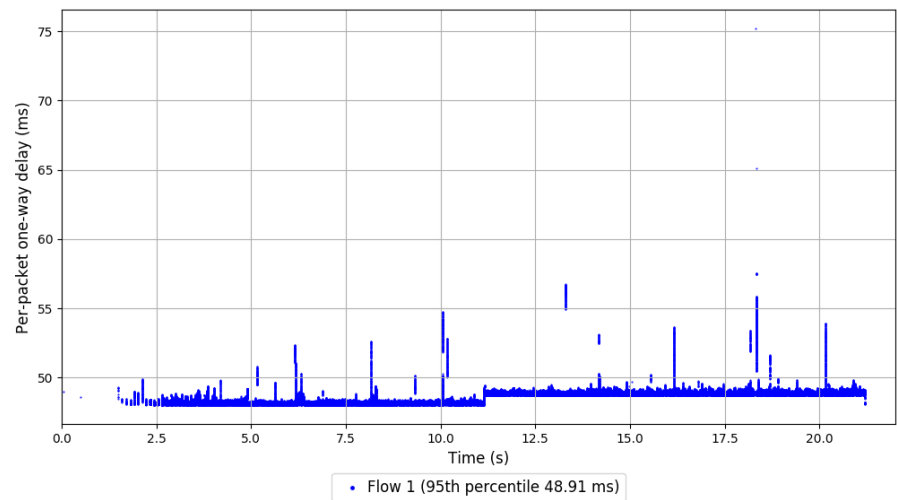
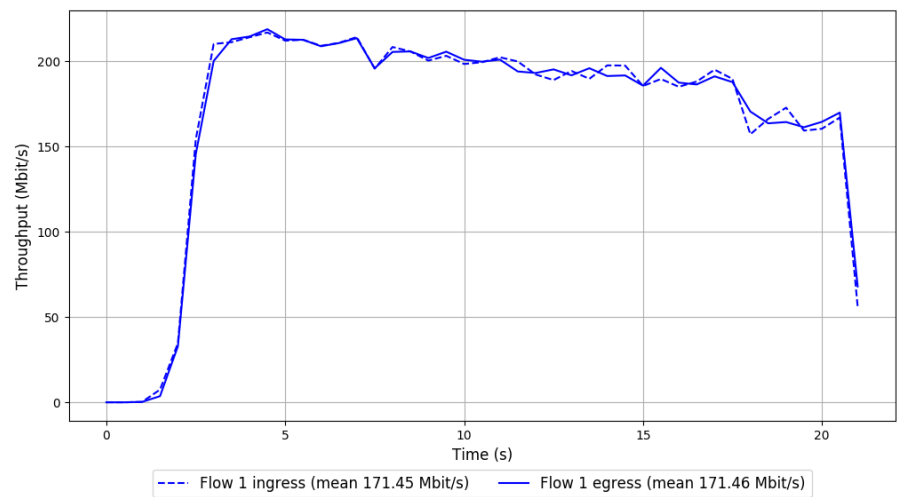


Run 1: Statistics of Indigo-calib

Start at: 2017-11-30 12:07:25

End at: 2017-11-30 12:07:55

Run 1: Report of Indigo-calib — Data Link

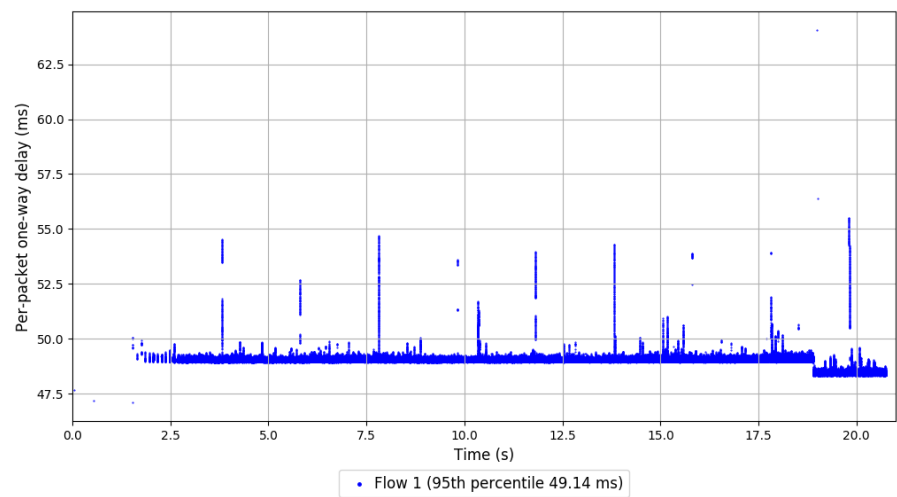
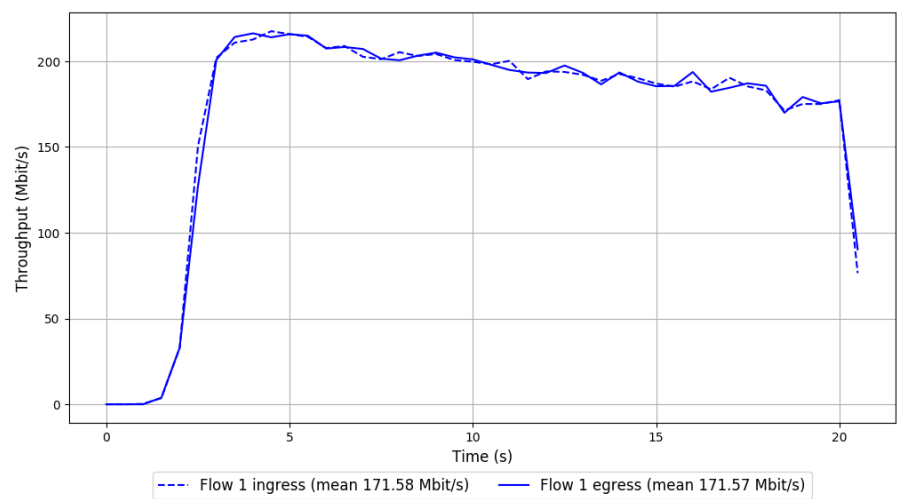


Run 2: Statistics of Indigo-calib

Start at: 2017-11-30 12:17:37

End at: 2017-11-30 12:18:07

Run 2: Report of Indigo-calib — Data Link

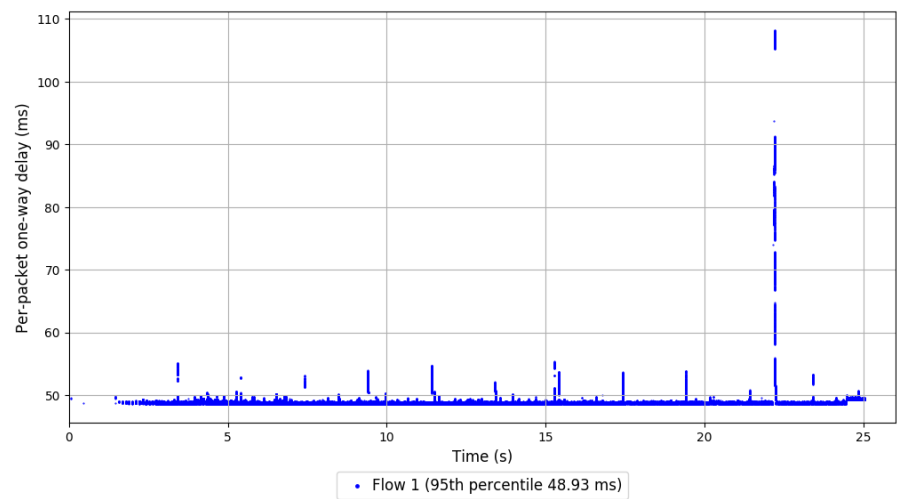
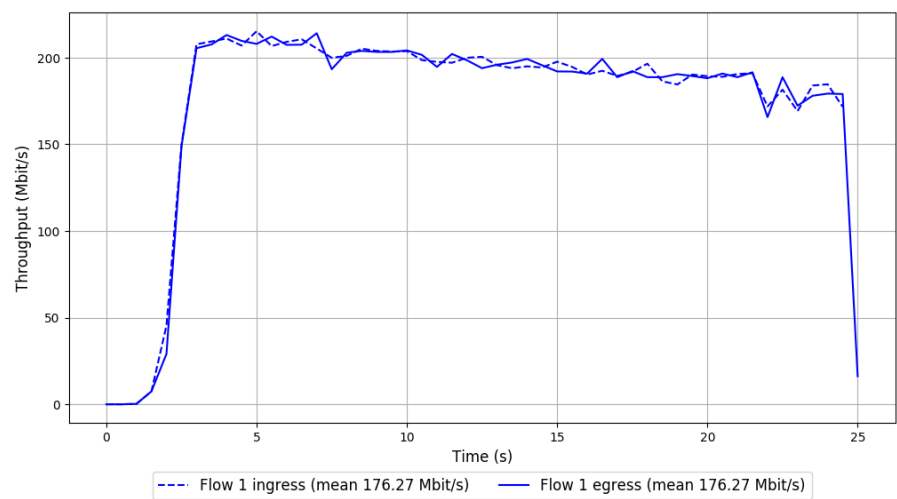


```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-30 12:27:55
End at: 2017-11-30 12:28:25

# Below is generated by plot.py at 2017-11-30 15:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 176.27 Mbit/s
95th percentile per-packet one-way delay: 48.926 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 176.27 Mbit/s
95th percentile per-packet one-way delay: 48.926 ms
Loss rate: 0.00%
```


Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

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

End at: 2017-11-30 12:38:41

Below is generated by plot.py at 2017-11-30 15:09:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.50 Mbit/s

95th percentile per-packet one-way delay: 49.693 ms

Loss rate: 0.00%

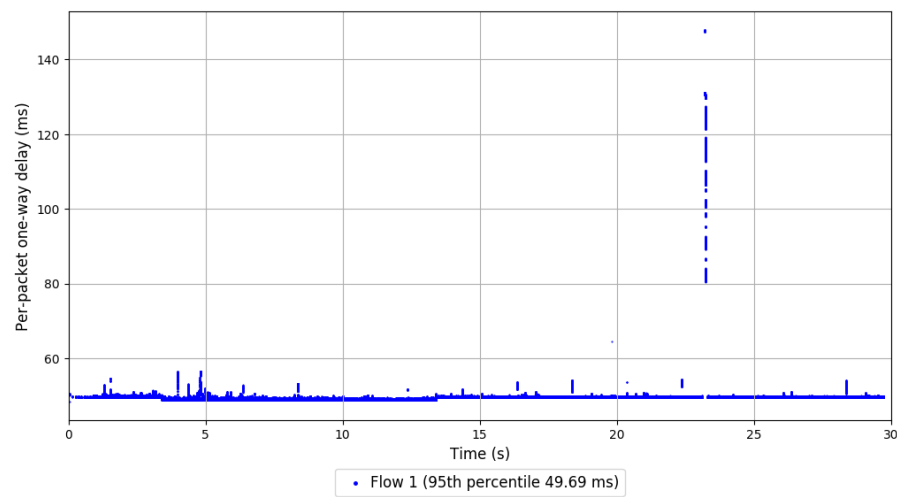
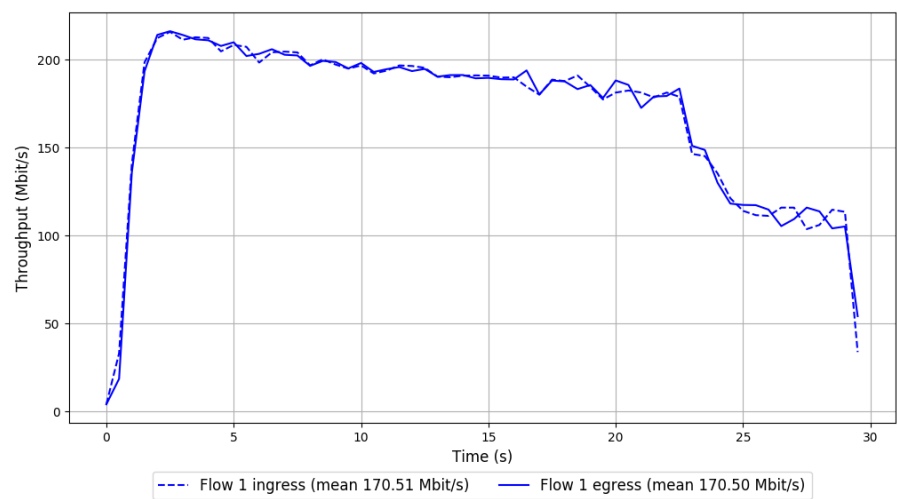
-- Flow 1:

Average throughput: 170.50 Mbit/s

95th percentile per-packet one-way delay: 49.693 ms

Loss rate: 0.00%

Run 4: Report of Indigo-calib — Data Link

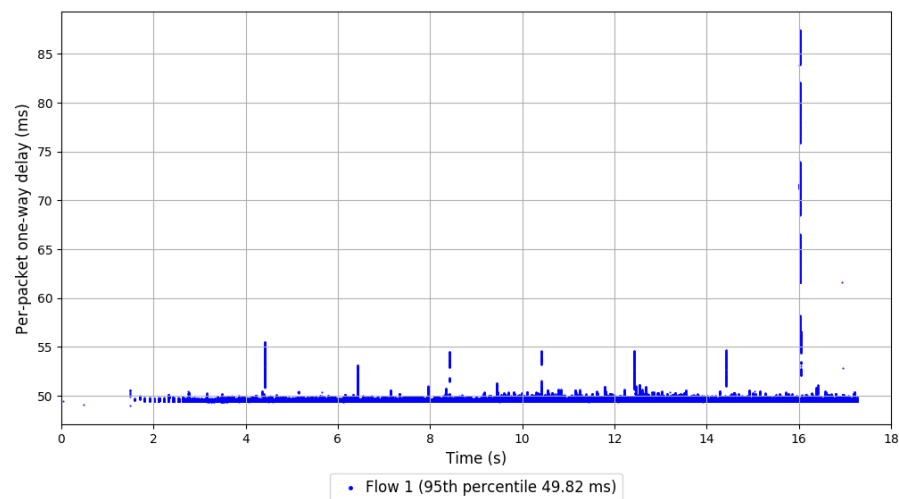
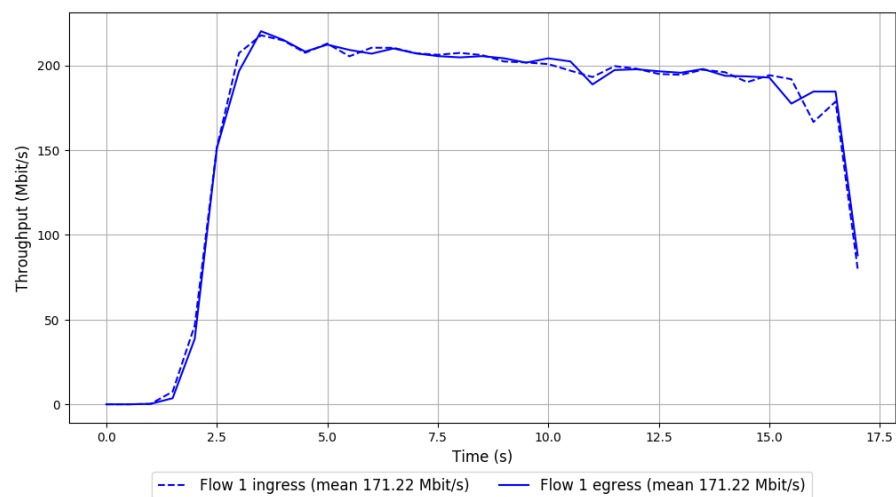


Run 5: Statistics of Indigo-calib

Start at: 2017-11-30 12:48:25

End at: 2017-11-30 12:48:55

Run 5: Report of Indigo-calib — Data Link

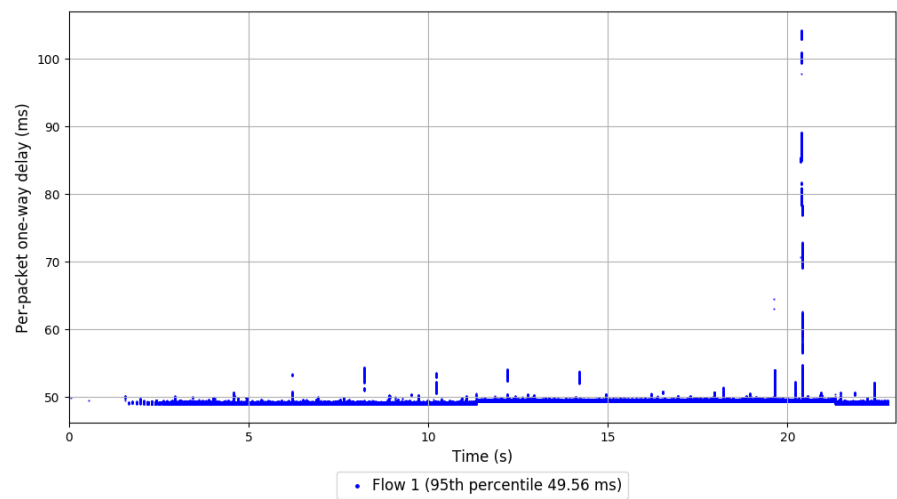
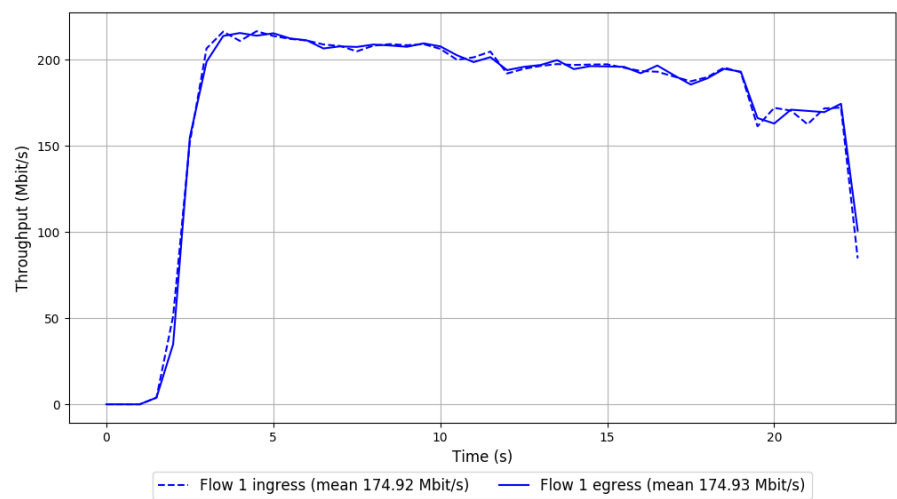


Run 6: Statistics of Indigo-calib

Start at: 2017-11-30 12:58:36

End at: 2017-11-30 12:59:06

Run 6: Report of Indigo-calib — Data Link

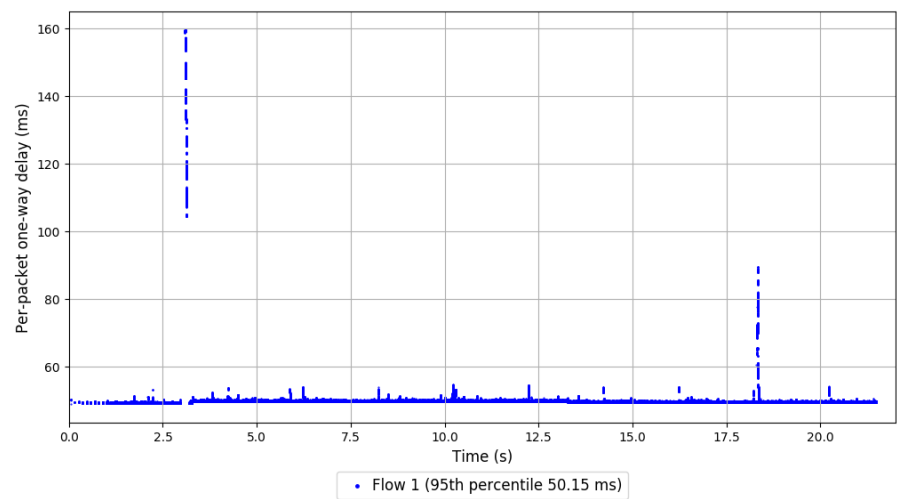
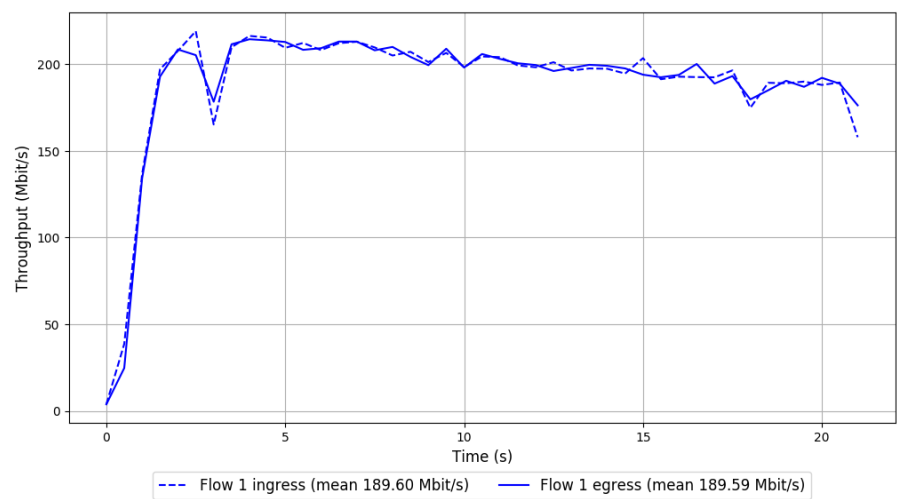


Run 7: Statistics of Indigo-calib

Start at: 2017-11-30 13:08:53

End at: 2017-11-30 13:09:23

Run 7: Report of Indigo-calib — Data Link

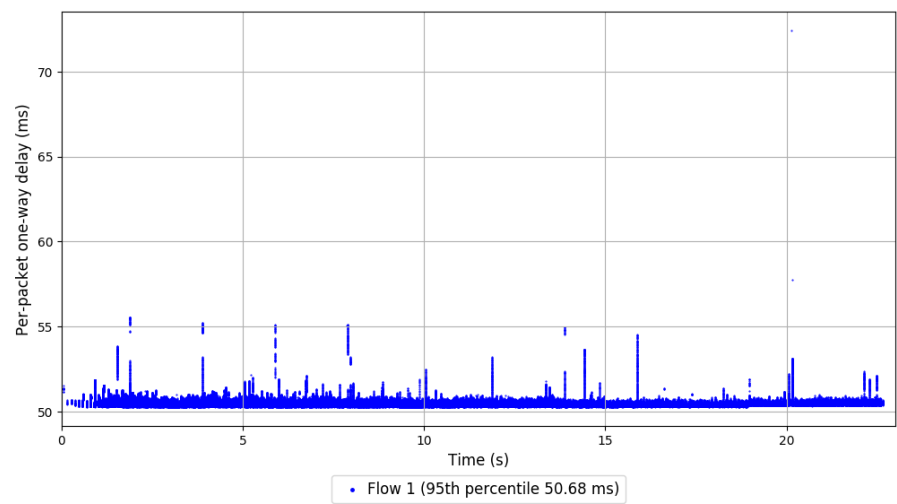
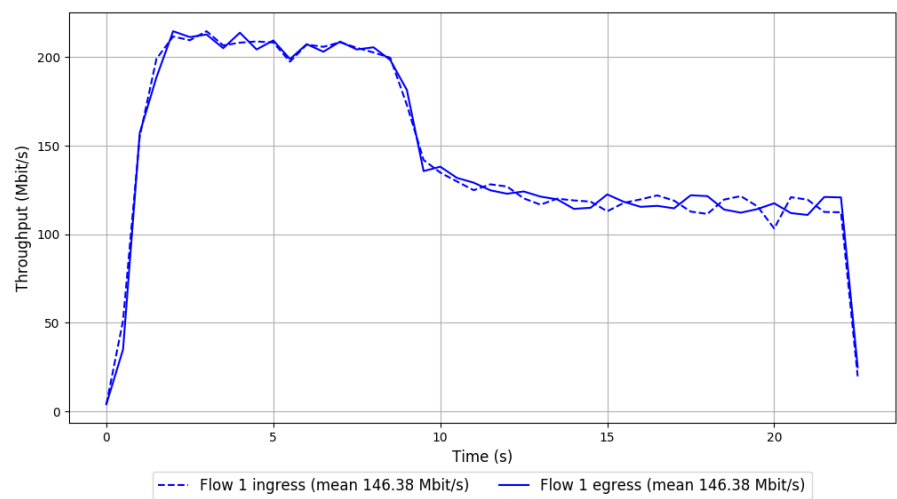


Run 8: Statistics of Indigo-calib

Start at: 2017-11-30 13:18:59

End at: 2017-11-30 13:19:29

Run 8: Report of Indigo-calib — Data Link

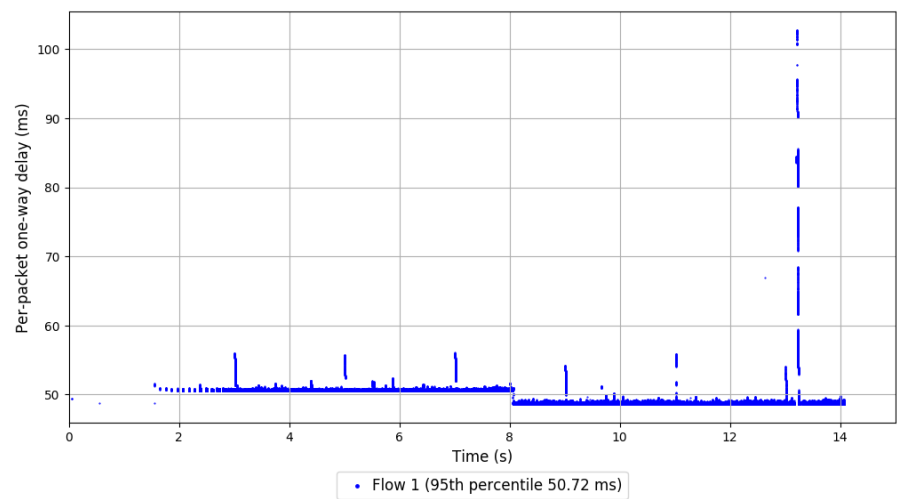
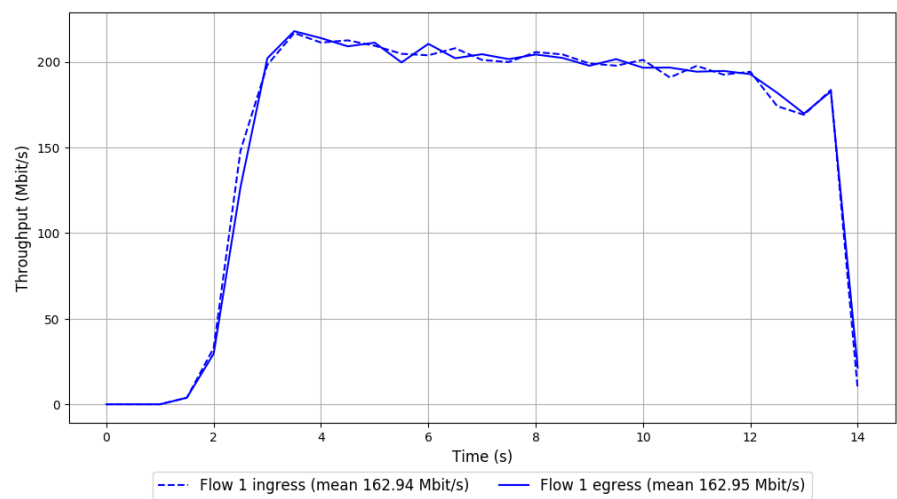


Run 9: Statistics of Indigo-calib

Start at: 2017-11-30 13:29:11

End at: 2017-11-30 13:29:41

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-30 13:39:21

End at: 2017-11-30 13:39:51

Run 10: Report of Indigo-calib — Data Link

