

Pantheon Report

Generated at 2017-12-20 12:49:24 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

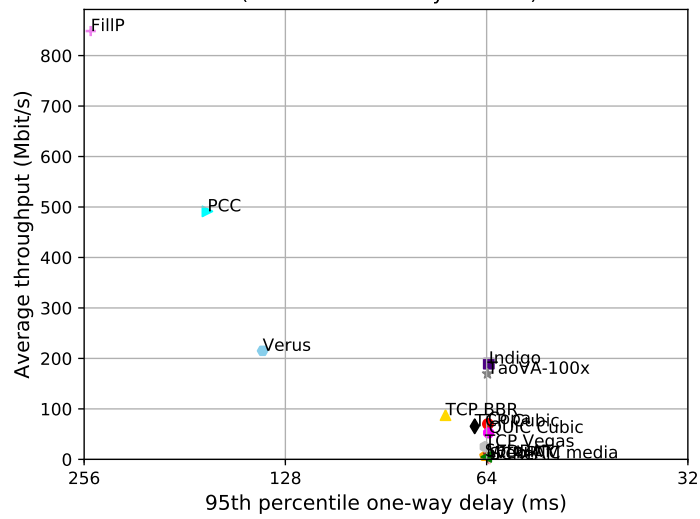
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

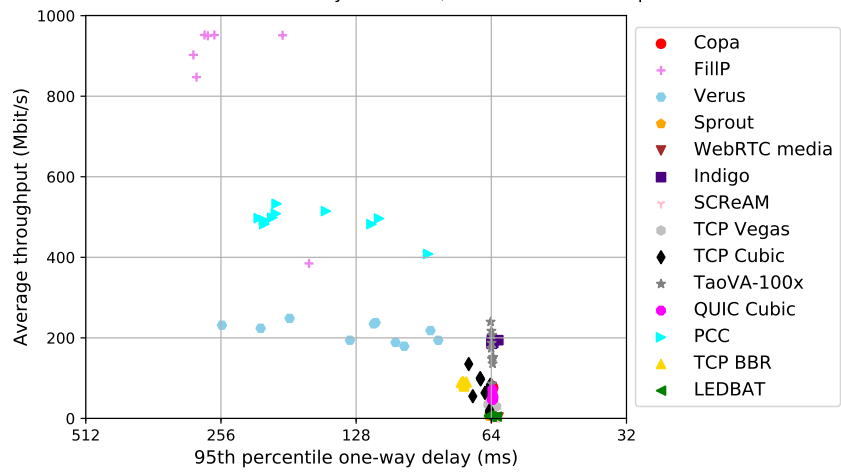
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from GCE Iowa Ethernet to GCE Tokyo 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	87.49	73.73	0.47
TCP Cubic	10	65.49	66.68	0.43
LEDBAT	7	4.89	64.09	0.39
PCC	10	491.35	167.42	0.78
QUIC Cubic	9	52.43	63.57	0.00
SCReAM	10	0.22	63.34	0.00
WebRTC media	10	2.25	63.55	0.00
Sprout	10	6.52	64.40	0.26
TaoVA-100x	10	169.52	63.81	0.02
TCP Vegas	10	24.97	64.39	0.30
Verus	10	215.04	138.45	0.84
Copa	10	70.08	63.71	0.03
FillP	7	848.58	250.26	2.15
Indigo	10	189.63	63.53	0.03

Run 1: Statistics of TCP BBR

Start at: 2017-12-20 09:16:44

End at: 2017-12-20 09:17:14

Below is generated by plot.py at 2017-12-20 12:01:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.69 Mbit/s

95th percentile per-packet one-way delay: 73.249 ms

Loss rate: 0.54%

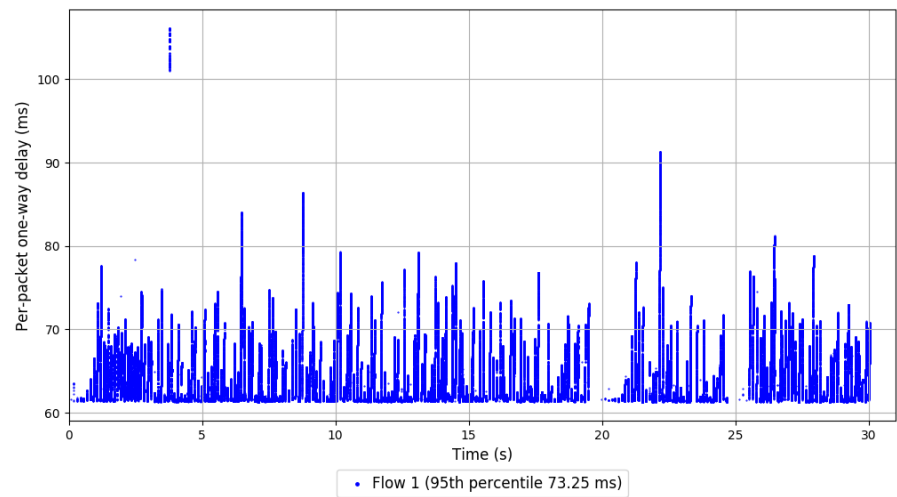
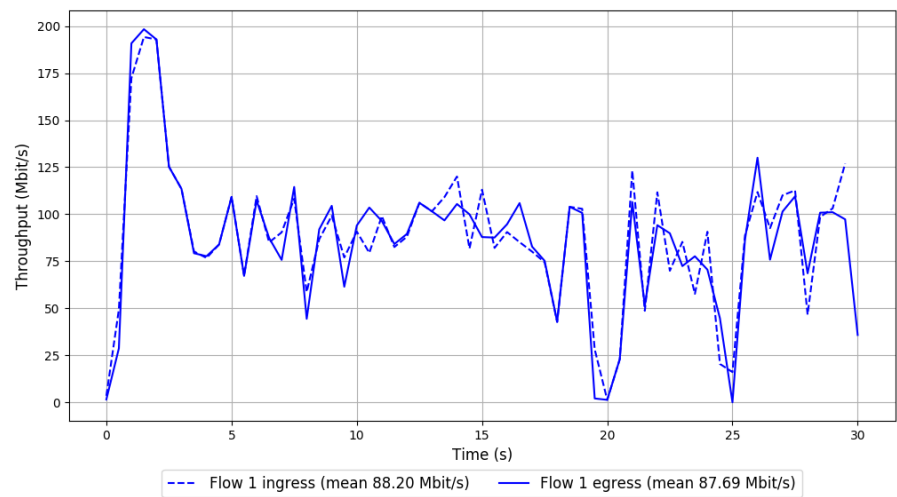
-- Flow 1:

Average throughput: 87.69 Mbit/s

95th percentile per-packet one-way delay: 73.249 ms

Loss rate: 0.54%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-20 09:27:40

End at: 2017-12-20 09:28:10

Below is generated by plot.py at 2017-12-20 12:01:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.98 Mbit/s

95th percentile per-packet one-way delay: 72.653 ms

Loss rate: 0.03%

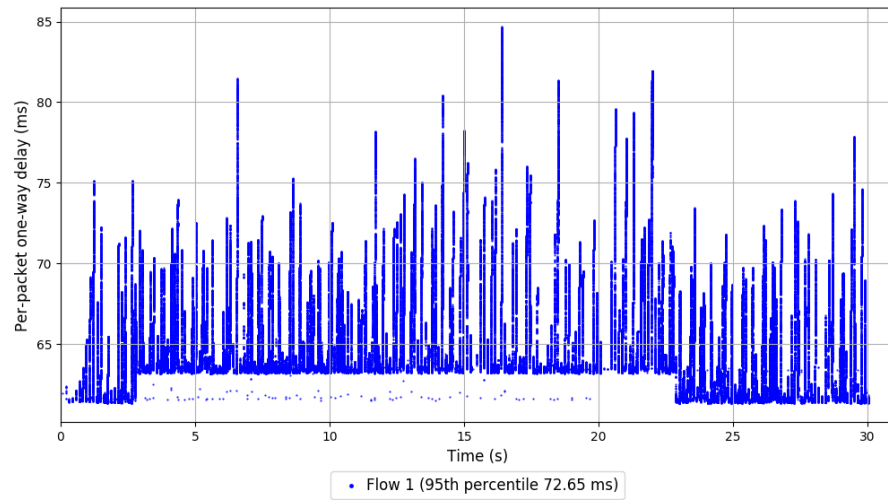
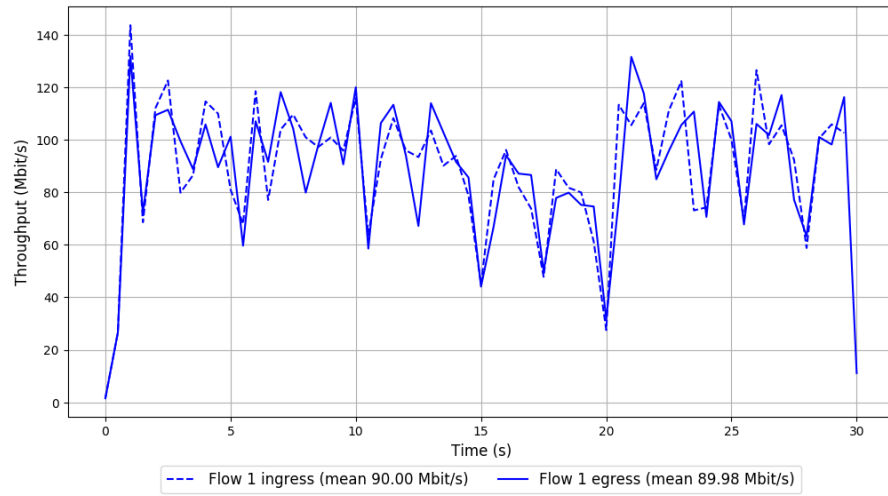
-- Flow 1:

Average throughput: 89.98 Mbit/s

95th percentile per-packet one-way delay: 72.653 ms

Loss rate: 0.03%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-20 09:39:19

End at: 2017-12-20 09:39:49

Below is generated by plot.py at 2017-12-20 12:01:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.49 Mbit/s

95th percentile per-packet one-way delay: 72.800 ms

Loss rate: 0.46%

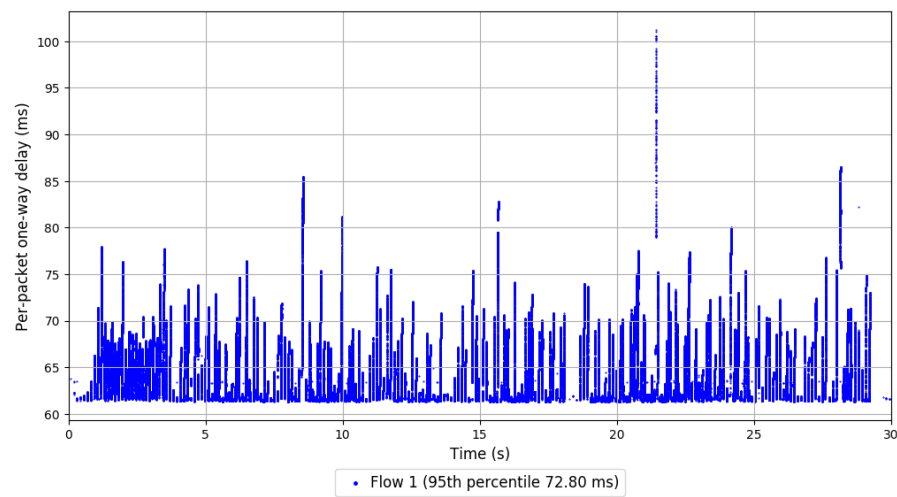
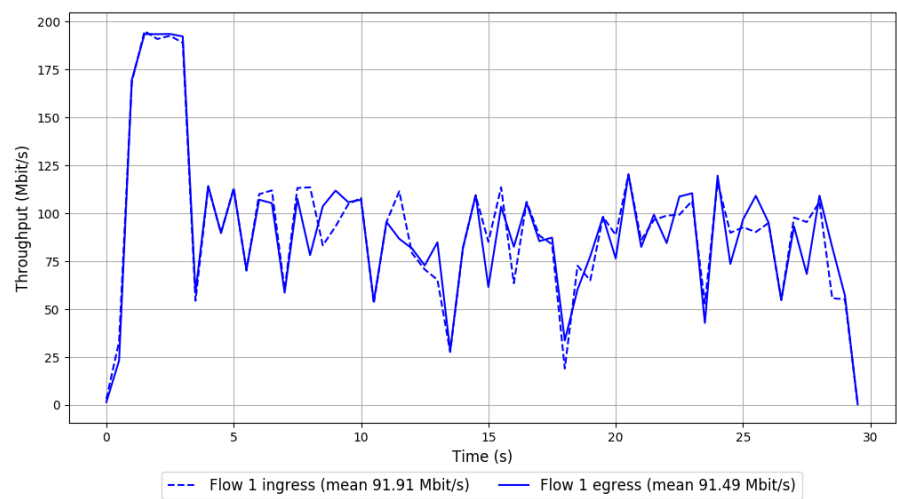
-- Flow 1:

Average throughput: 91.49 Mbit/s

95th percentile per-packet one-way delay: 72.800 ms

Loss rate: 0.46%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-20 09:50:15

End at: 2017-12-20 09:50:45

Below is generated by plot.py at 2017-12-20 12:01:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.94 Mbit/s

95th percentile per-packet one-way delay: 74.038 ms

Loss rate: 0.00%

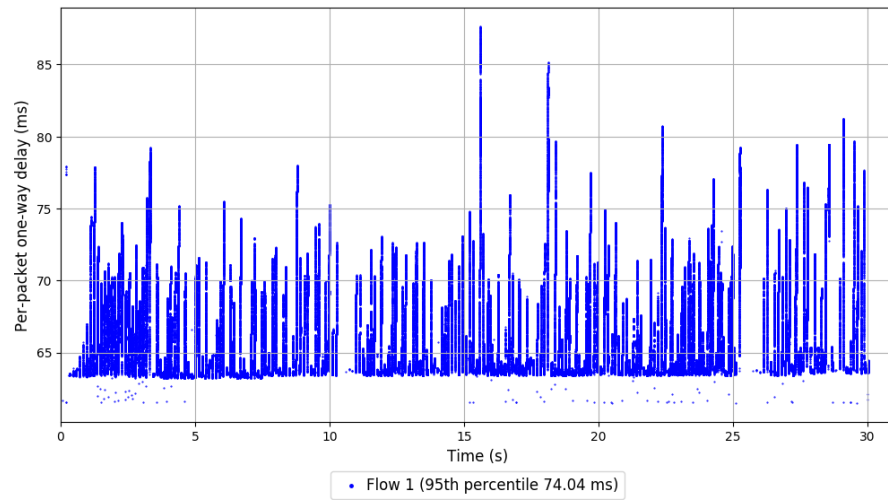
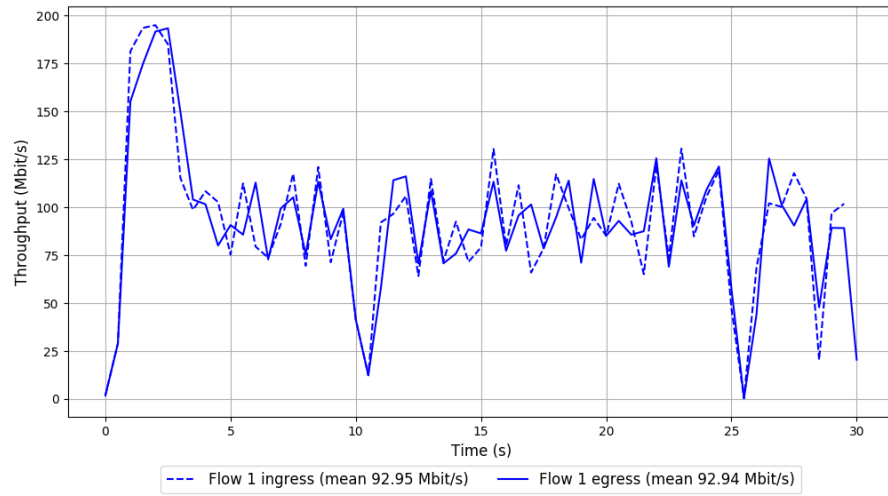
-- Flow 1:

Average throughput: 92.94 Mbit/s

95th percentile per-packet one-way delay: 74.038 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-20 10:02:07

End at: 2017-12-20 10:02:37

Below is generated by plot.py at 2017-12-20 12:01:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.36 Mbit/s

95th percentile per-packet one-way delay: 74.767 ms

Loss rate: 0.23%

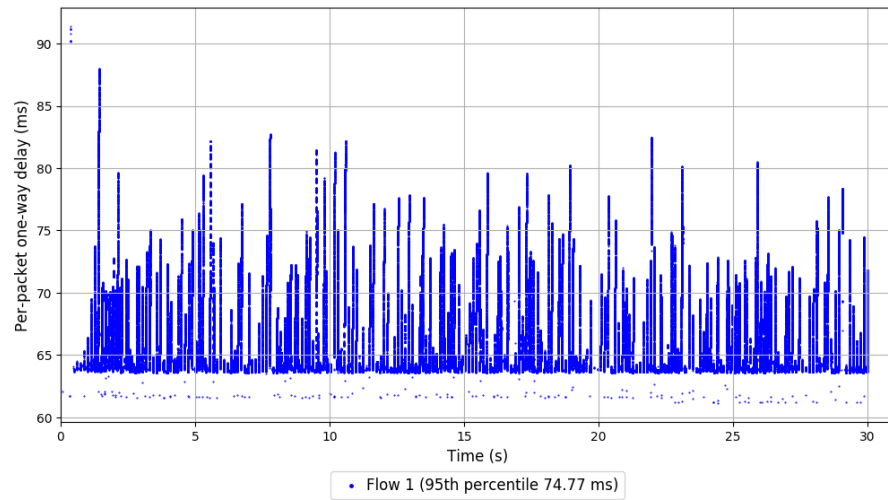
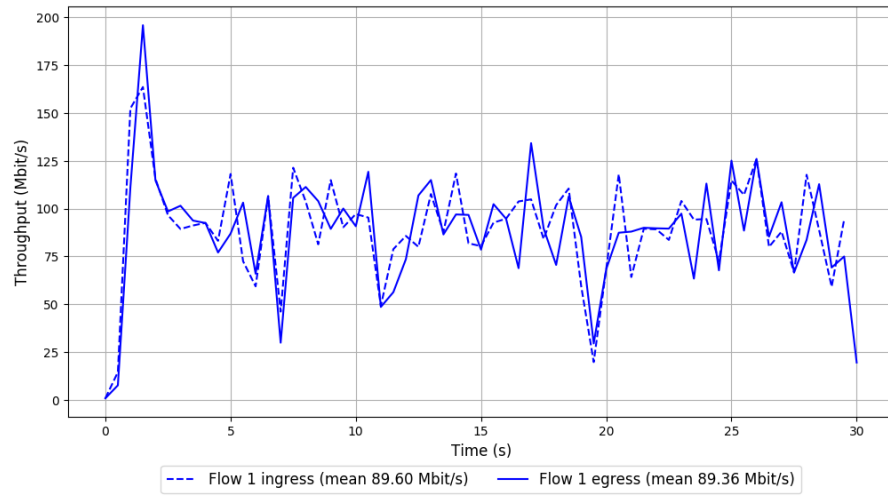
-- Flow 1:

Average throughput: 89.36 Mbit/s

95th percentile per-packet one-way delay: 74.767 ms

Loss rate: 0.23%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-20 10:13:26

End at: 2017-12-20 10:13:56

Below is generated by plot.py at 2017-12-20 12:01:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.32 Mbit/s

95th percentile per-packet one-way delay: 74.323 ms

Loss rate: 0.99%

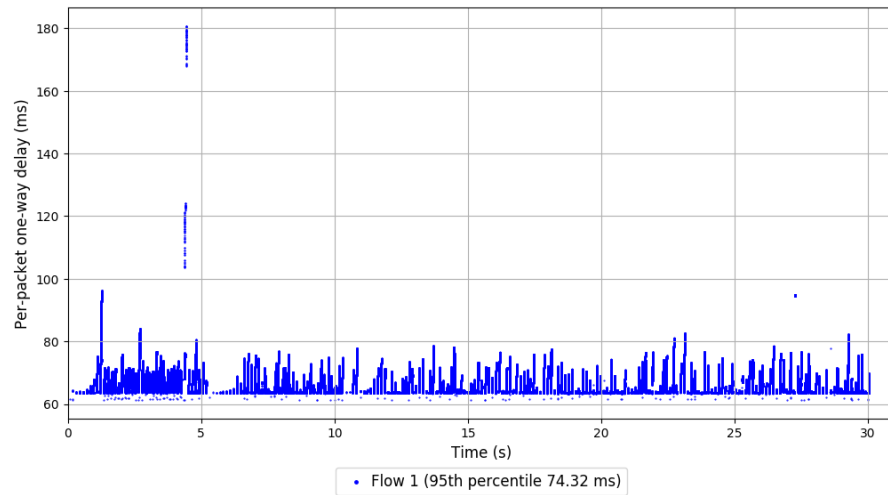
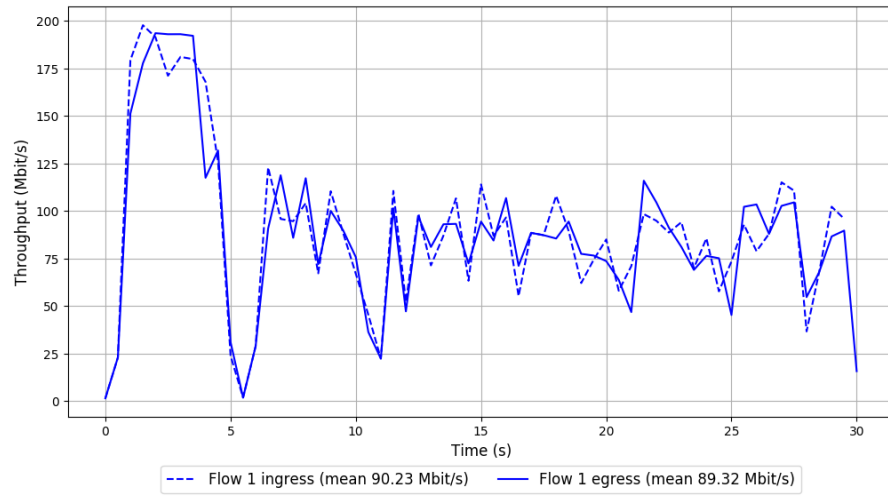
-- Flow 1:

Average throughput: 89.32 Mbit/s

95th percentile per-packet one-way delay: 74.323 ms

Loss rate: 0.99%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-20 10:24:49

End at: 2017-12-20 10:25:19

Below is generated by plot.py at 2017-12-20 12:01:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.45 Mbit/s

95th percentile per-packet one-way delay: 73.595 ms

Loss rate: 1.15%

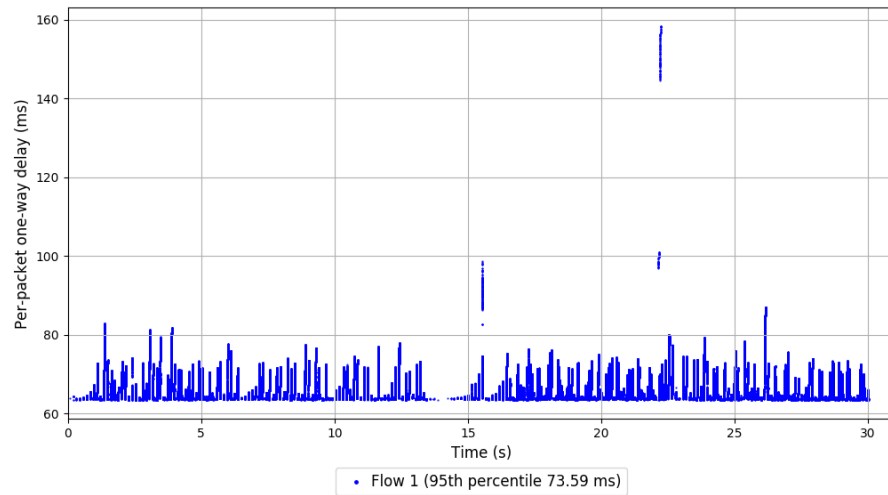
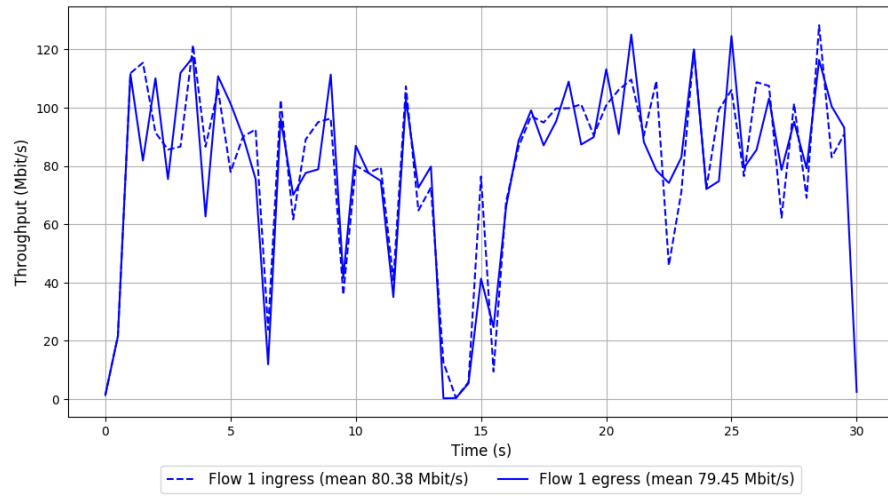
-- Flow 1:

Average throughput: 79.45 Mbit/s

95th percentile per-packet one-way delay: 73.595 ms

Loss rate: 1.15%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-20 10:36:28

End at: 2017-12-20 10:36:58

Below is generated by plot.py at 2017-12-20 12:01:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.66 Mbit/s

95th percentile per-packet one-way delay: 73.861 ms

Loss rate: 0.55%

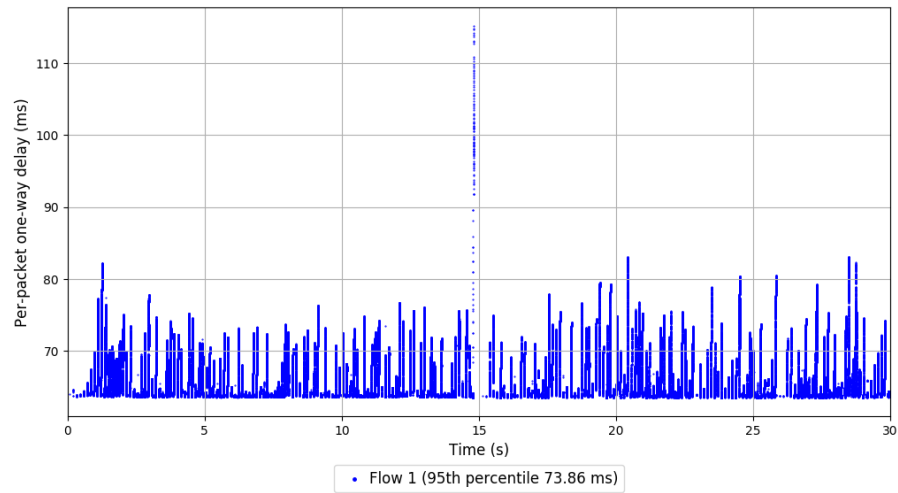
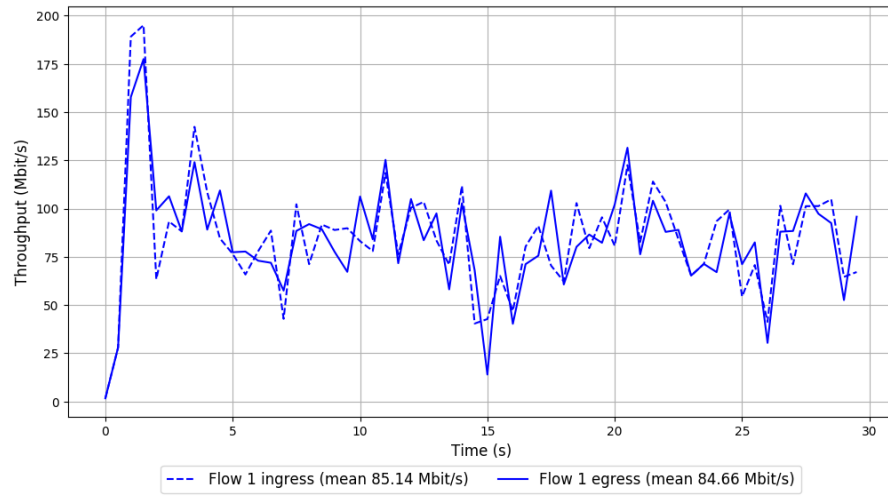
-- Flow 1:

Average throughput: 84.66 Mbit/s

95th percentile per-packet one-way delay: 73.861 ms

Loss rate: 0.55%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-20 10:47:54

End at: 2017-12-20 10:48:24

Below is generated by plot.py at 2017-12-20 12:02:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.65 Mbit/s

95th percentile per-packet one-way delay: 73.555 ms

Loss rate: 0.28%

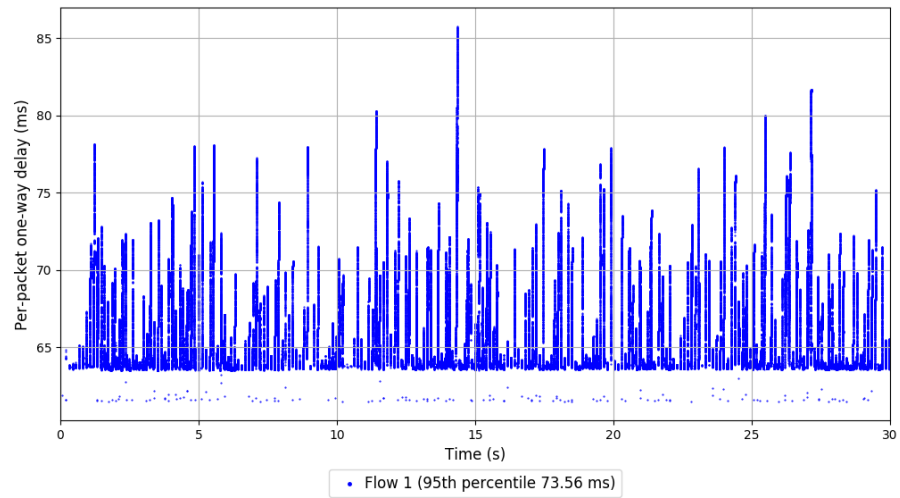
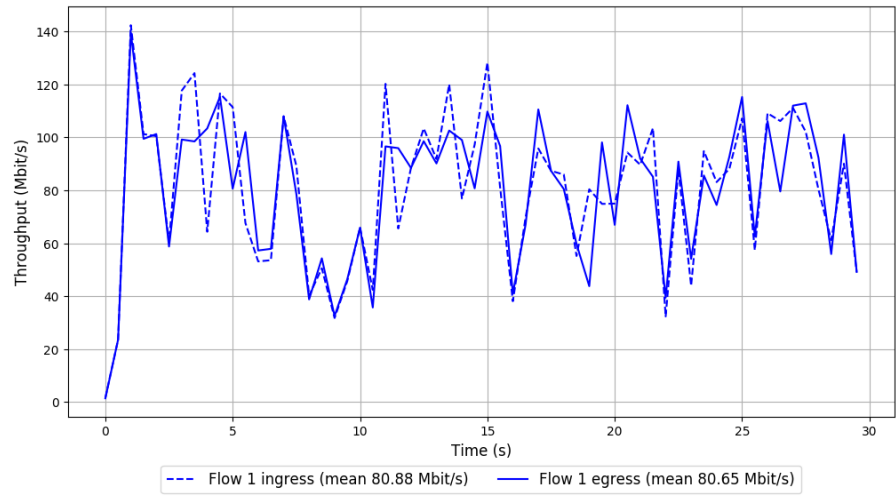
-- Flow 1:

Average throughput: 80.65 Mbit/s

95th percentile per-packet one-way delay: 73.555 ms

Loss rate: 0.28%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-20 10:59:19

End at: 2017-12-20 10:59:49

Below is generated by plot.py at 2017-12-20 12:02:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.34 Mbit/s

95th percentile per-packet one-way delay: 74.501 ms

Loss rate: 0.52%

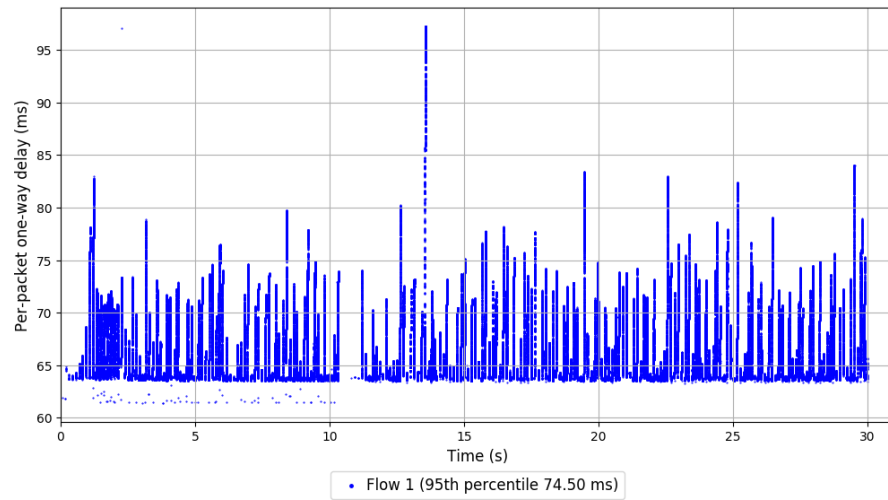
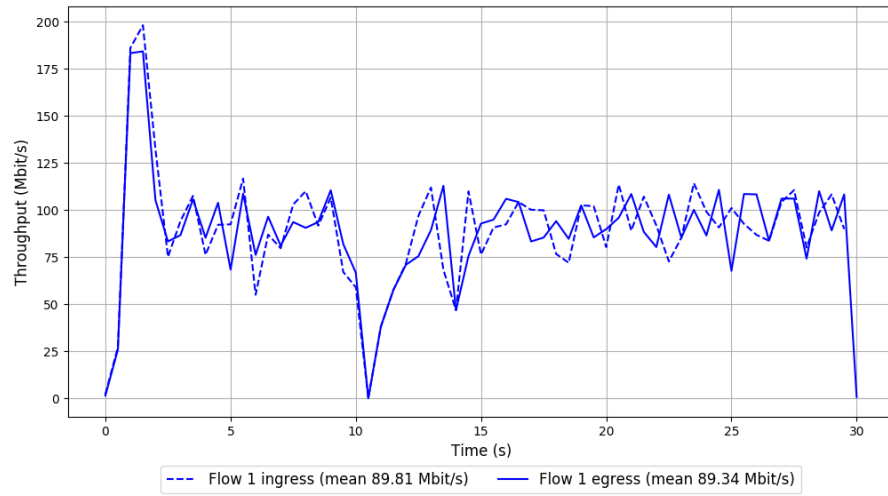
-- Flow 1:

Average throughput: 89.34 Mbit/s

95th percentile per-packet one-way delay: 74.501 ms

Loss rate: 0.52%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-20 09:15:24

End at: 2017-12-20 09:15:54

Below is generated by plot.py at 2017-12-20 12:02:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.49 Mbit/s

95th percentile per-packet one-way delay: 64.324 ms

Loss rate: 0.01%

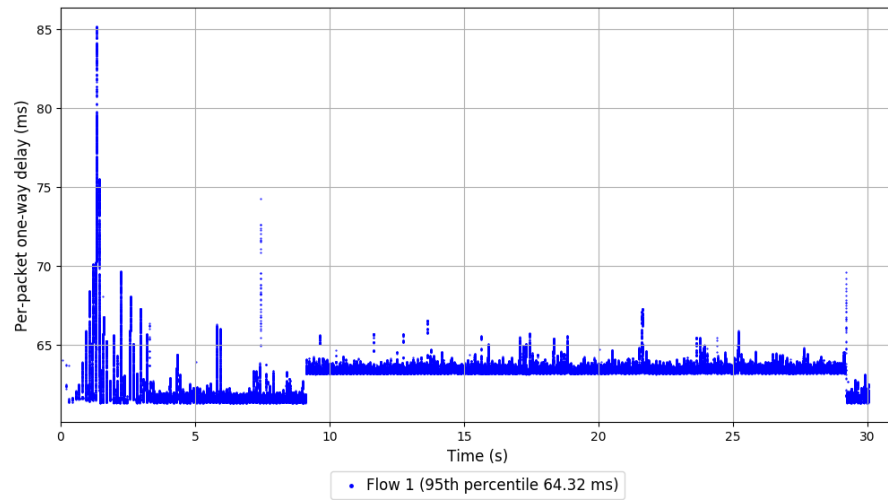
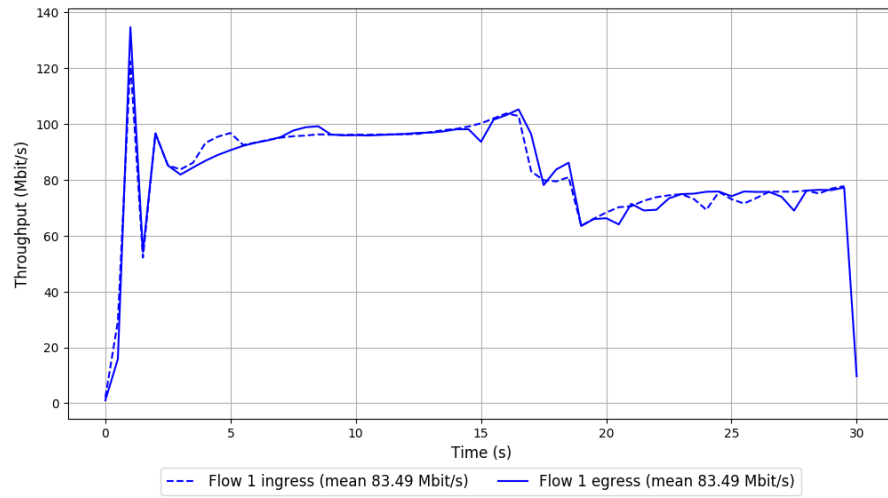
-- Flow 1:

Average throughput: 83.49 Mbit/s

95th percentile per-packet one-way delay: 64.324 ms

Loss rate: 0.01%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-20 09:26:21

End at: 2017-12-20 09:26:51

Below is generated by plot.py at 2017-12-20 12:02:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.93 Mbit/s

95th percentile per-packet one-way delay: 65.147 ms

Loss rate: 0.79%

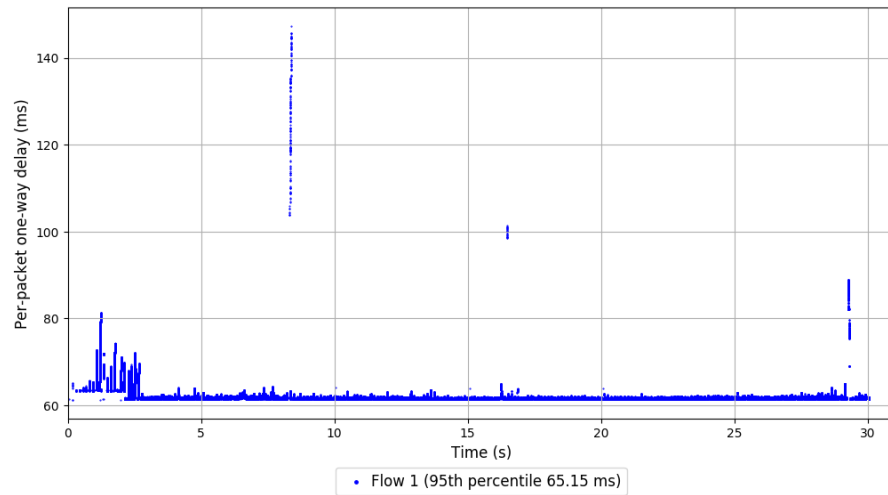
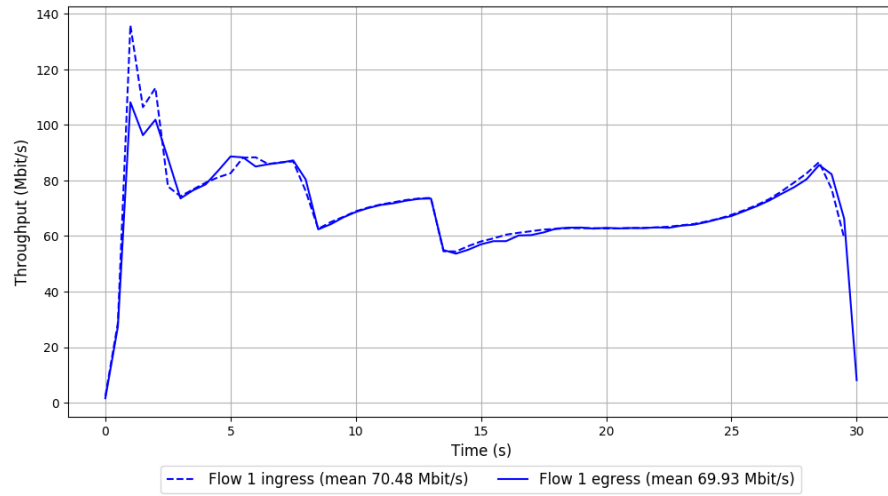
-- Flow 1:

Average throughput: 69.93 Mbit/s

95th percentile per-packet one-way delay: 65.147 ms

Loss rate: 0.79%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-20 09:37:58

End at: 2017-12-20 09:38:28

Below is generated by plot.py at 2017-12-20 12:03:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.95 Mbit/s

95th percentile per-packet one-way delay: 67.617 ms

Loss rate: 0.00%

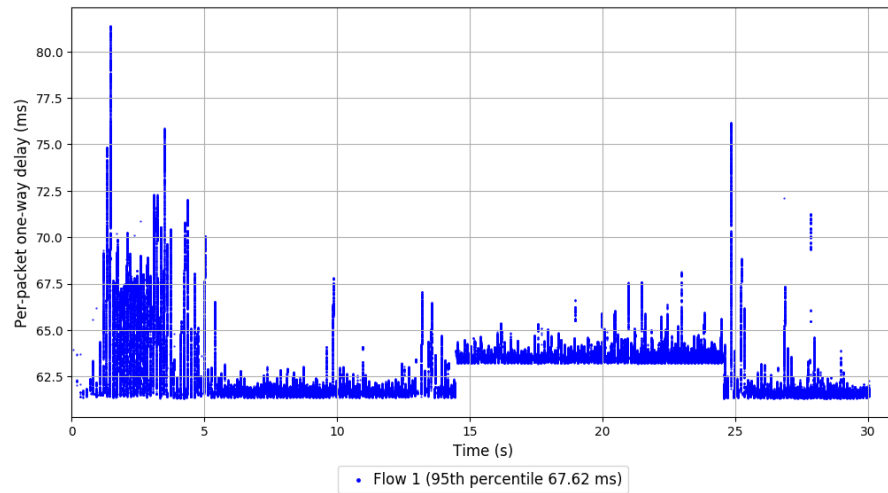
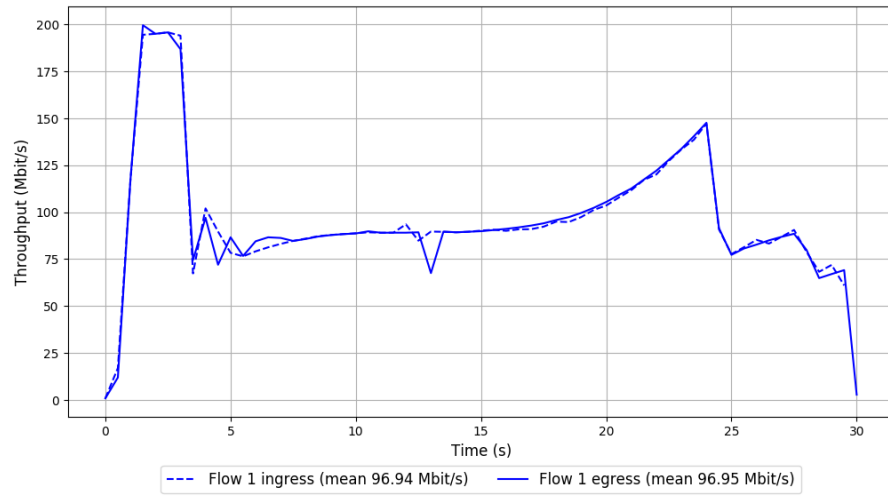
-- Flow 1:

Average throughput: 96.95 Mbit/s

95th percentile per-packet one-way delay: 67.617 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-20 09:48:54

End at: 2017-12-20 09:49:24

Below is generated by plot.py at 2017-12-20 12:03:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.11 Mbit/s

95th percentile per-packet one-way delay: 67.757 ms

Loss rate: 0.01%

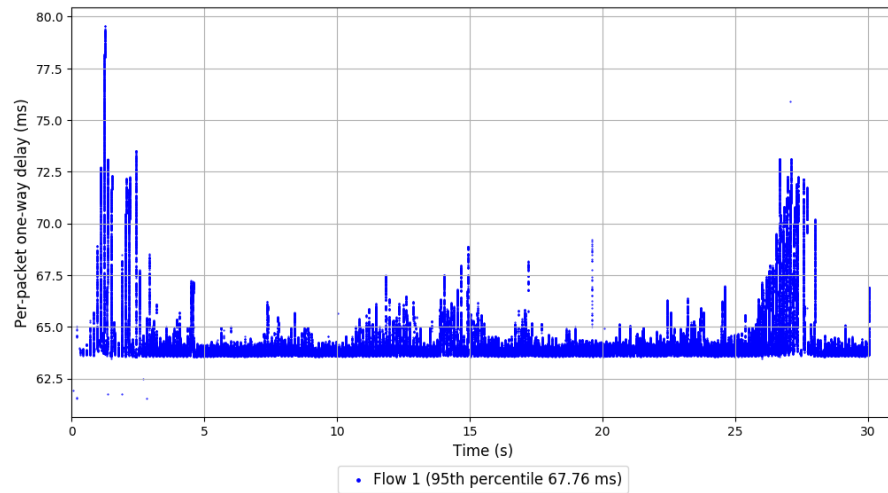
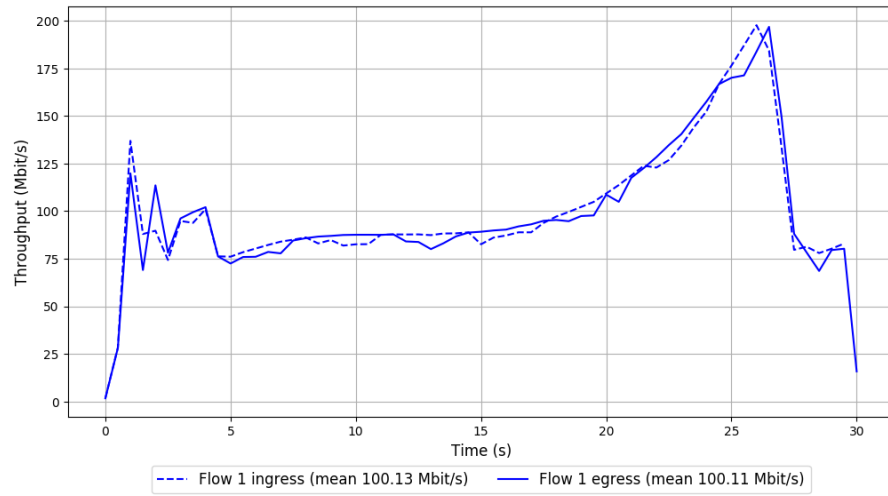
-- Flow 1:

Average throughput: 100.11 Mbit/s

95th percentile per-packet one-way delay: 67.757 ms

Loss rate: 0.01%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-20 10:00:45

End at: 2017-12-20 10:01:15

Below is generated by plot.py at 2017-12-20 12:03:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 134.95 Mbit/s

95th percentile per-packet one-way delay: 71.856 ms

Loss rate: 0.01%

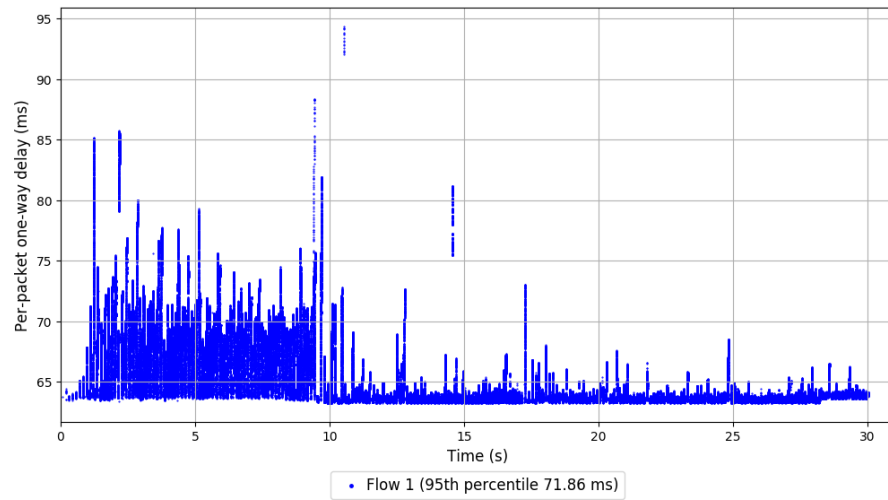
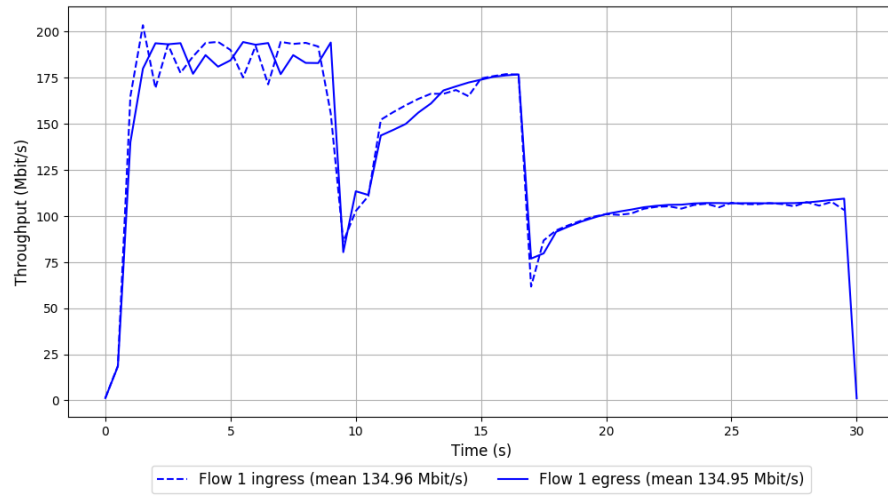
-- Flow 1:

Average throughput: 134.95 Mbit/s

95th percentile per-packet one-way delay: 71.856 ms

Loss rate: 0.01%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-20 10:12:10

End at: 2017-12-20 10:12:40

Below is generated by plot.py at 2017-12-20 12:03:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.64 Mbit/s

95th percentile per-packet one-way delay: 64.586 ms

Loss rate: 0.94%

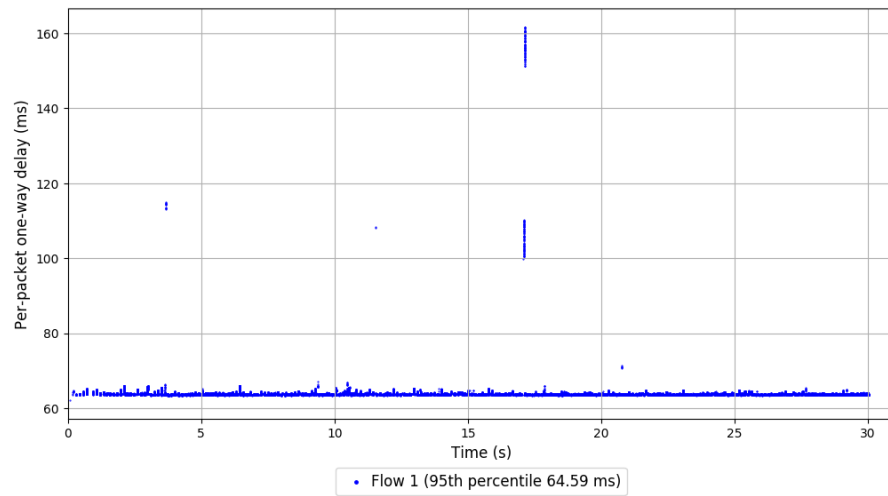
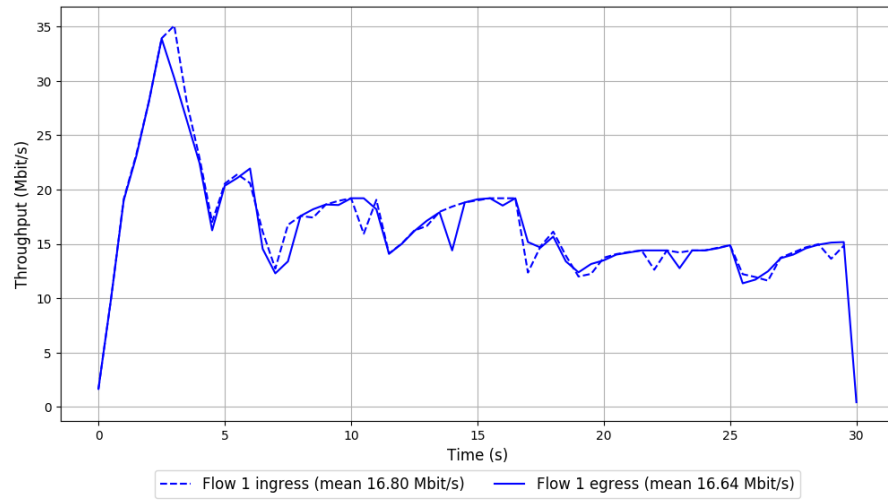
-- Flow 1:

Average throughput: 16.64 Mbit/s

95th percentile per-packet one-way delay: 64.586 ms

Loss rate: 0.94%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-20 10:23:31

End at: 2017-12-20 10:24:01

Below is generated by plot.py at 2017-12-20 12:03:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.31 Mbit/s

95th percentile per-packet one-way delay: 66.117 ms

Loss rate: 1.35%

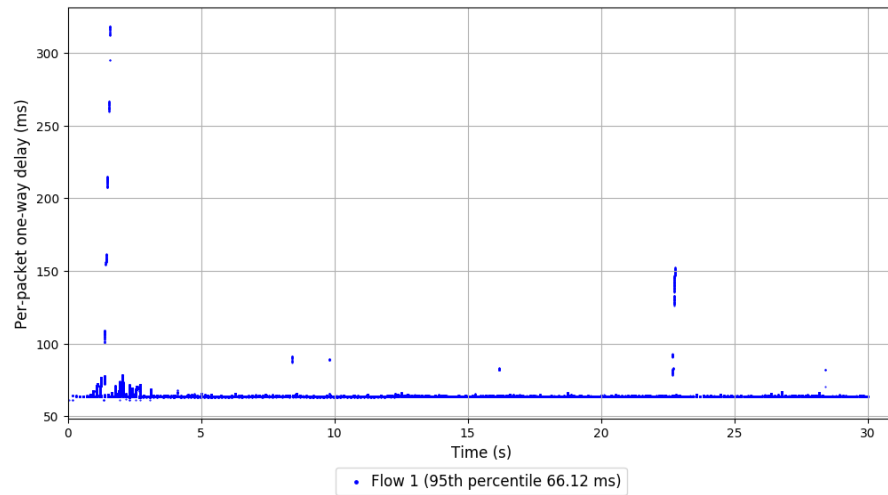
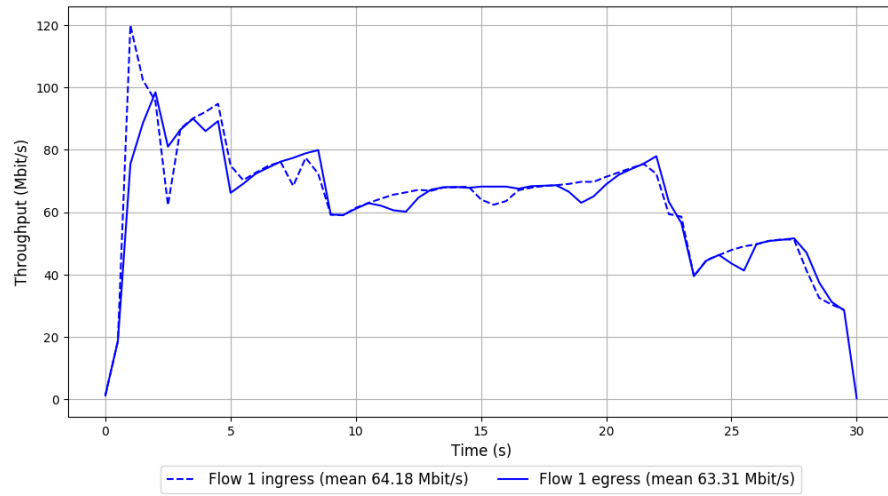
-- Flow 1:

Average throughput: 63.31 Mbit/s

95th percentile per-packet one-way delay: 66.117 ms

Loss rate: 1.35%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-20 10:35:10

End at: 2017-12-20 10:35:40

Below is generated by plot.py at 2017-12-20 12:03:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.09 Mbit/s

95th percentile per-packet one-way delay: 70.370 ms

Loss rate: 0.77%

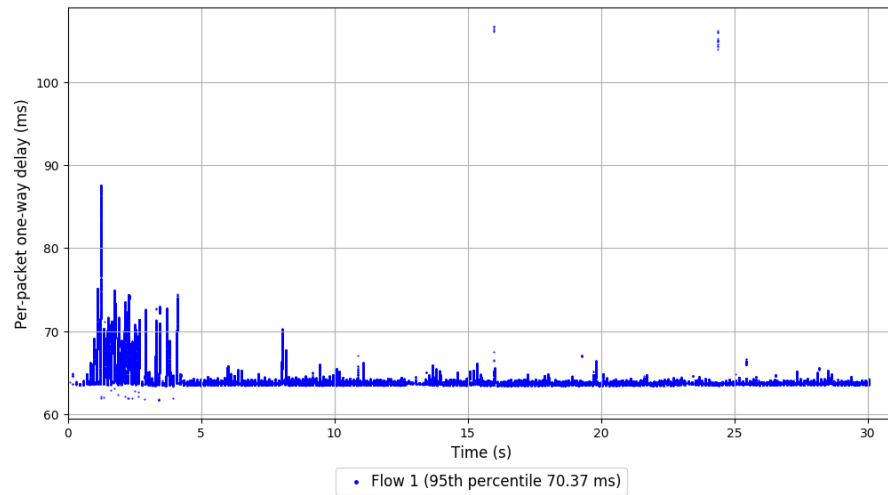
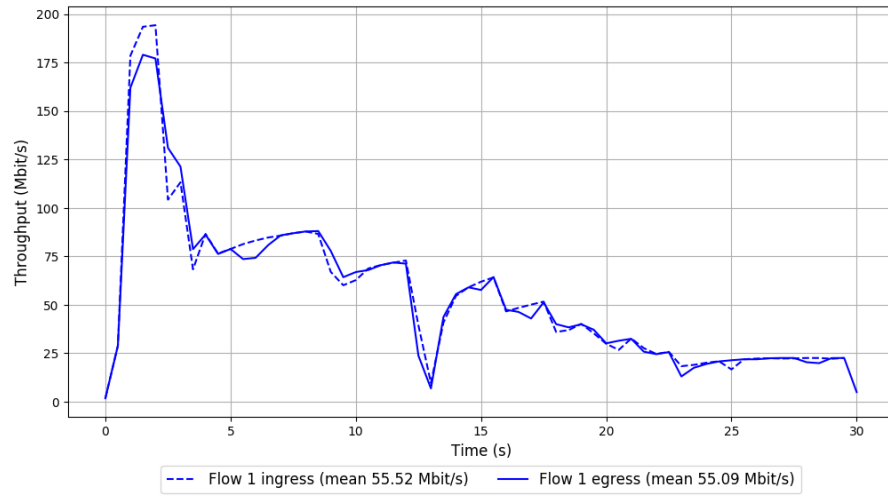
-- Flow 1:

Average throughput: 55.09 Mbit/s

95th percentile per-packet one-way delay: 70.370 ms

Loss rate: 0.77%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-20 10:46:38

End at: 2017-12-20 10:47:08

Below is generated by plot.py at 2017-12-20 12:03:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.56 Mbit/s

95th percentile per-packet one-way delay: 64.539 ms

Loss rate: 0.41%

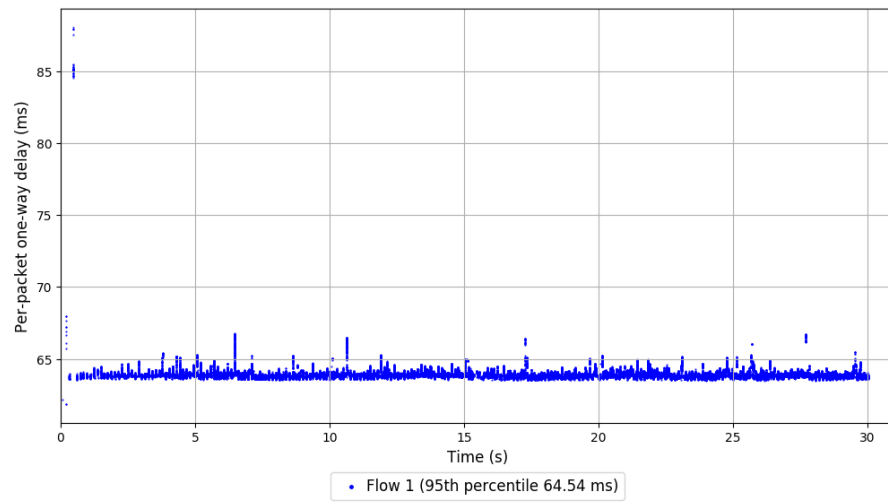
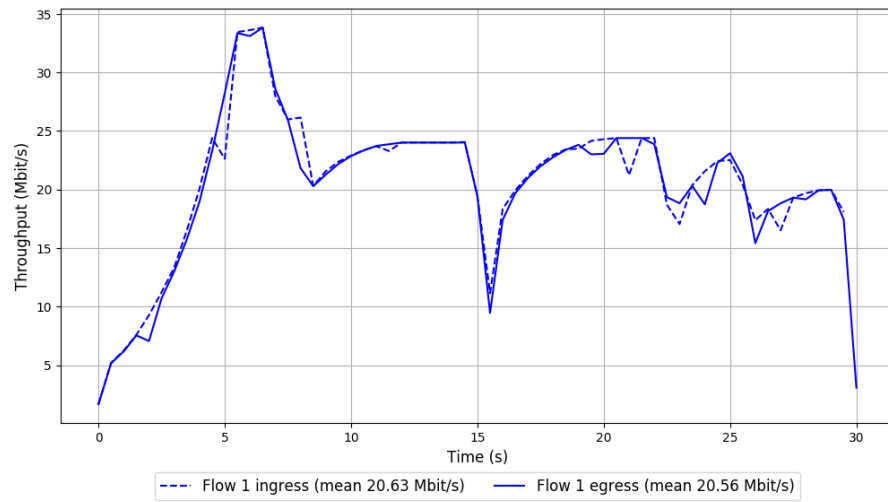
-- Flow 1:

Average throughput: 20.56 Mbit/s

95th percentile per-packet one-way delay: 64.539 ms

Loss rate: 0.41%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-20 10:58:03

End at: 2017-12-20 10:58:33

Below is generated by plot.py at 2017-12-20 12:03:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.85 Mbit/s

95th percentile per-packet one-way delay: 64.531 ms

Loss rate: 0.03%

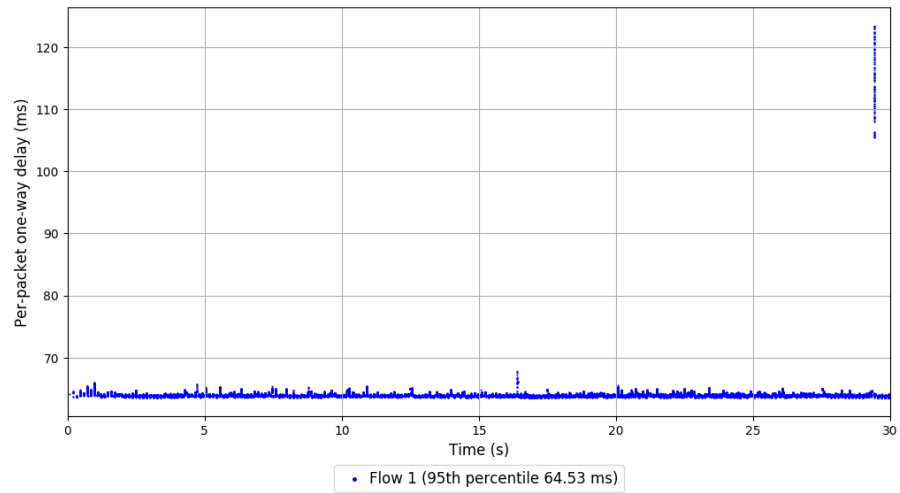
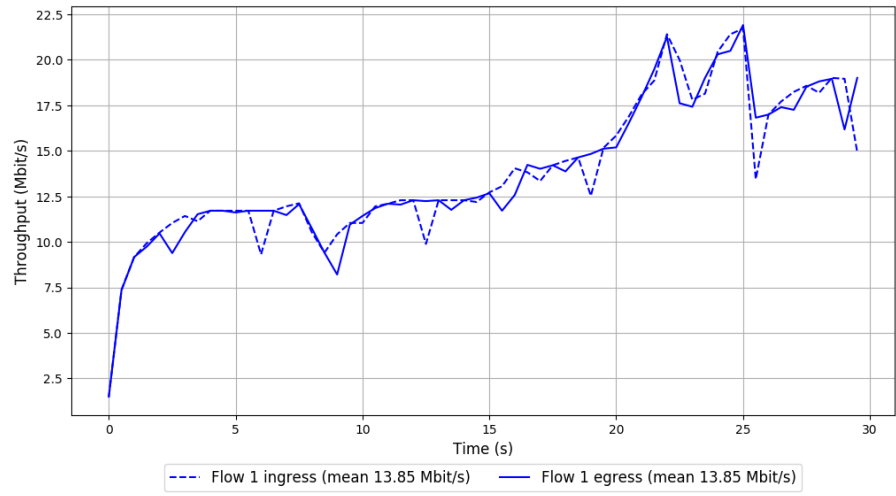
-- Flow 1:

Average throughput: 13.85 Mbit/s

95th percentile per-packet one-way delay: 64.531 ms

Loss rate: 0.03%

Run 10: Report of TCP Cubic — Data Link

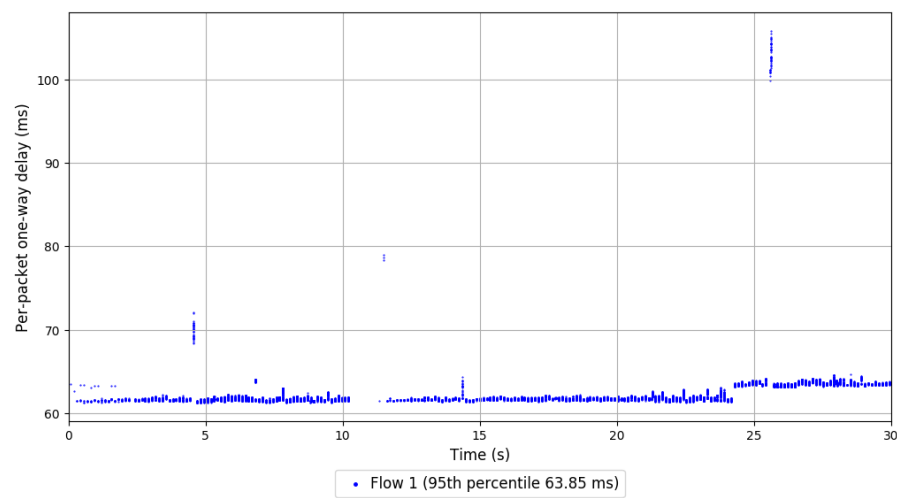
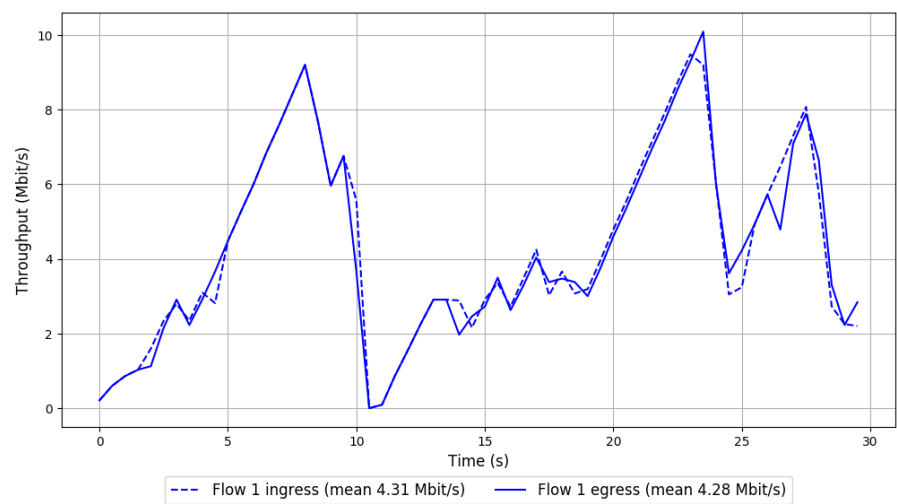


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-20 09:11:09
End at: 2017-12-20 09:11:39

# Below is generated by plot.py at 2017-12-20 12:03:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.28 Mbit/s
95th percentile per-packet one-way delay: 63.855 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 4.28 Mbit/s
95th percentile per-packet one-way delay: 63.855 ms
Loss rate: 0.76%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-12-20 09:22:45

End at: 2017-12-20 09:23:15

Below is generated by plot.py at 2017-12-20 12:03:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.45 Mbit/s

95th percentile per-packet one-way delay: 64.166 ms

Loss rate: 0.25%

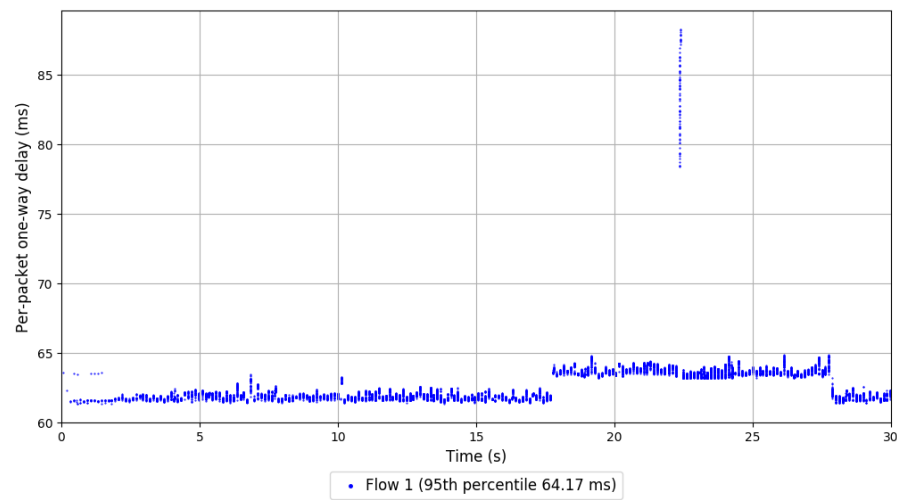
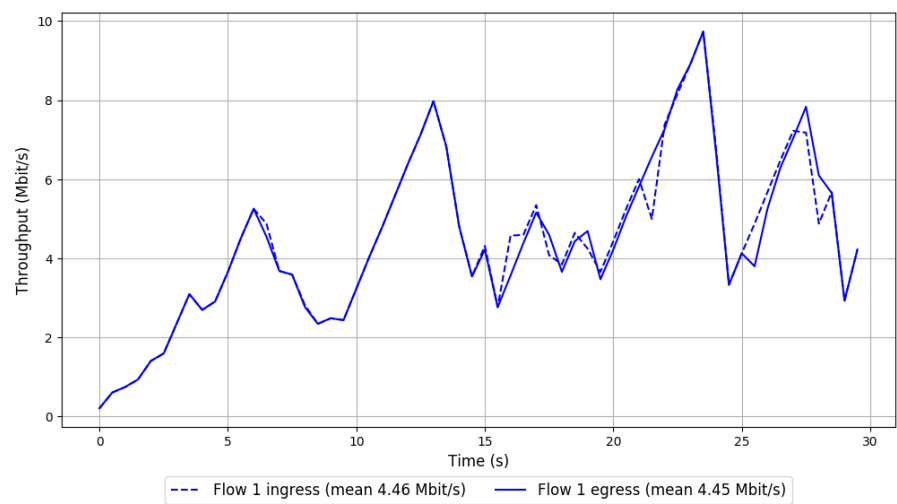
-- Flow 1:

Average throughput: 4.45 Mbit/s

95th percentile per-packet one-way delay: 64.166 ms

Loss rate: 0.25%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-20 09:33:43

End at: 2017-12-20 09:34:13

Below is generated by plot.py at 2017-12-20 12:03:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.50 Mbit/s

95th percentile per-packet one-way delay: 62.245 ms

Loss rate: 0.32%

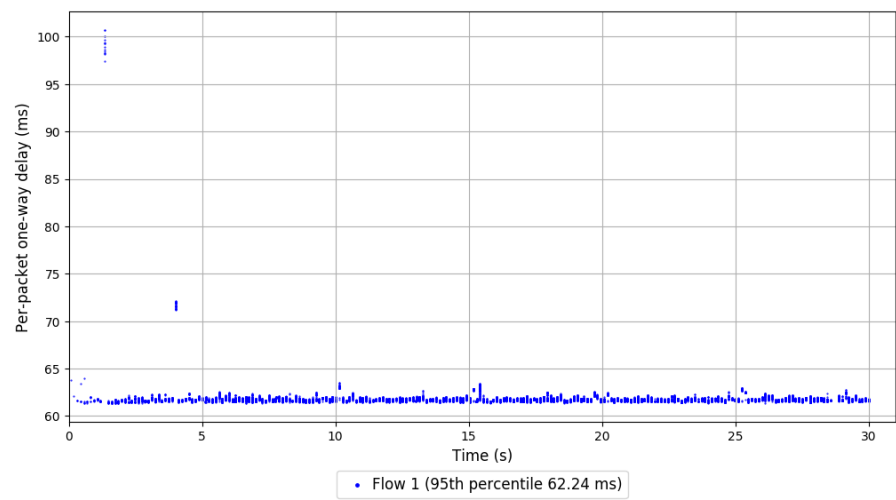
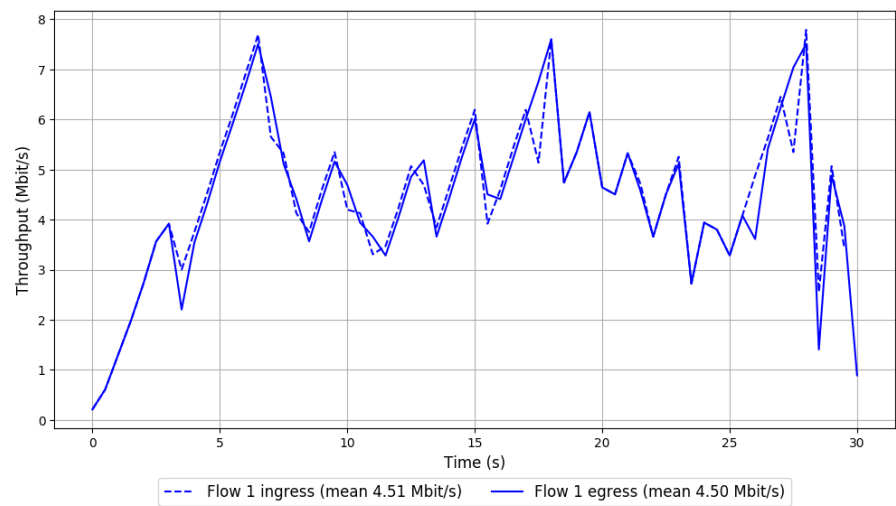
-- Flow 1:

Average throughput: 4.50 Mbit/s

95th percentile per-packet one-way delay: 62.245 ms

Loss rate: 0.32%

Run 3: Report of LEDBAT — Data Link

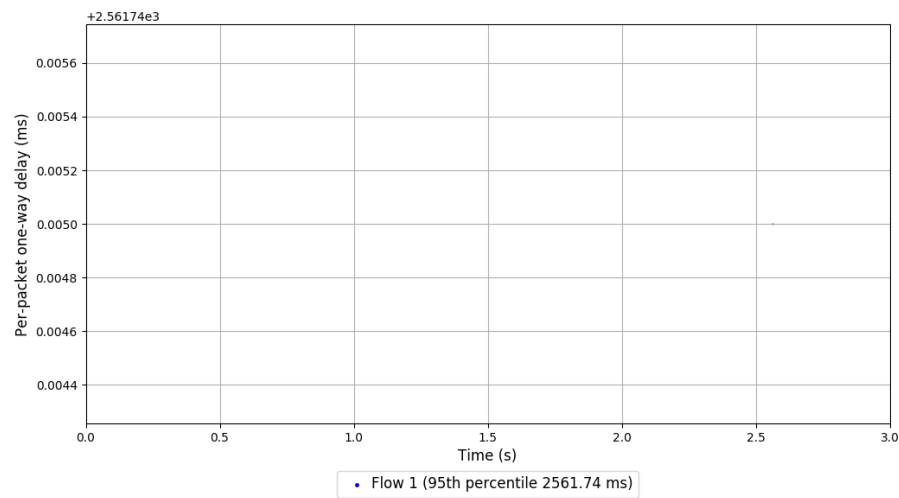
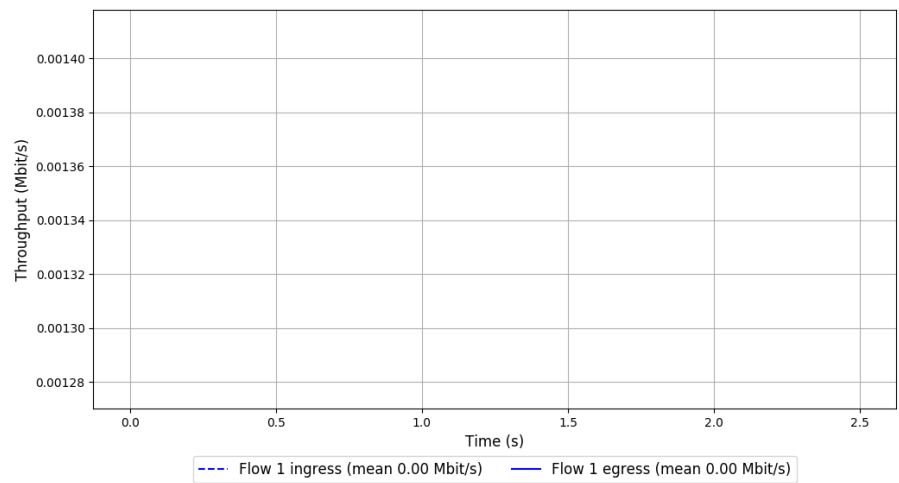


Run 4: Statistics of LEDBAT

Start at: 2017-12-20 09:45:16

End at: 2017-12-20 09:45:46

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-20 09:56:25

End at: 2017-12-20 09:56:55

Below is generated by plot.py at 2017-12-20 12:03:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 64.776 ms

Loss rate: 0.98%

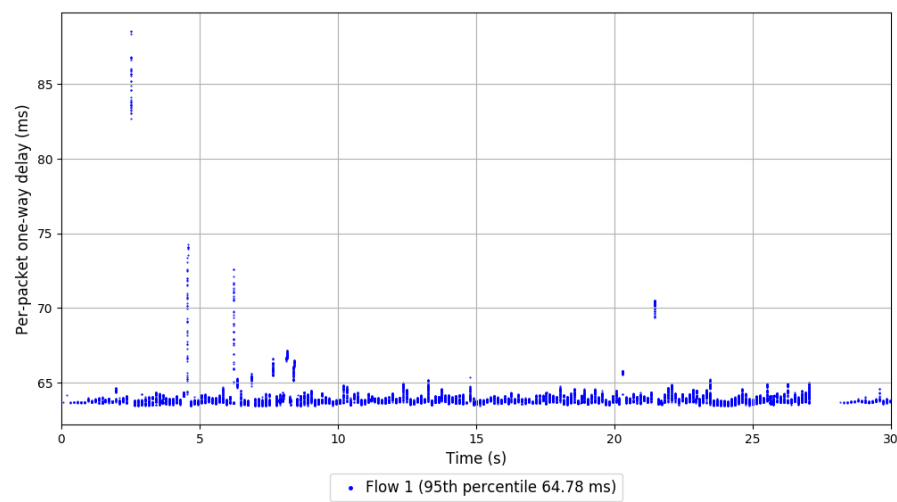
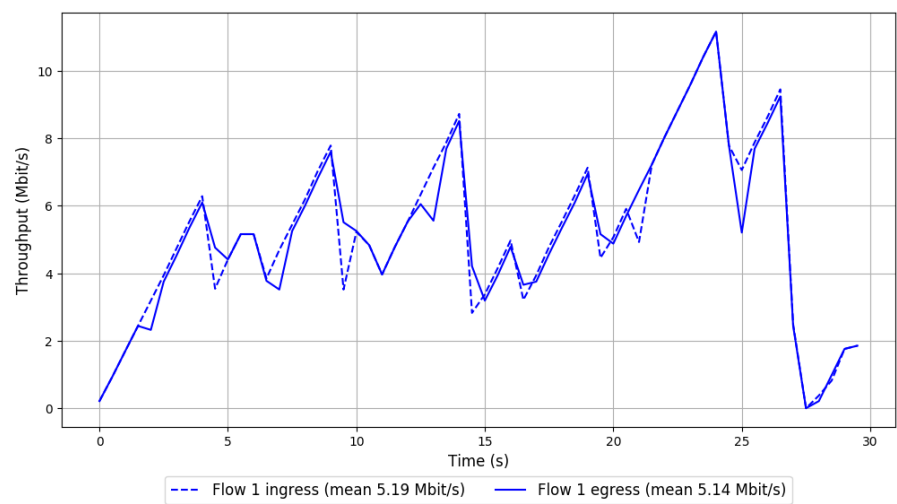
-- Flow 1:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 64.776 ms

Loss rate: 0.98%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-20 10:08:19

End at: 2017-12-20 10:08:49

Below is generated by plot.py at 2017-12-20 12:03:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.62 Mbit/s

95th percentile per-packet one-way delay: 64.469 ms

Loss rate: 0.09%

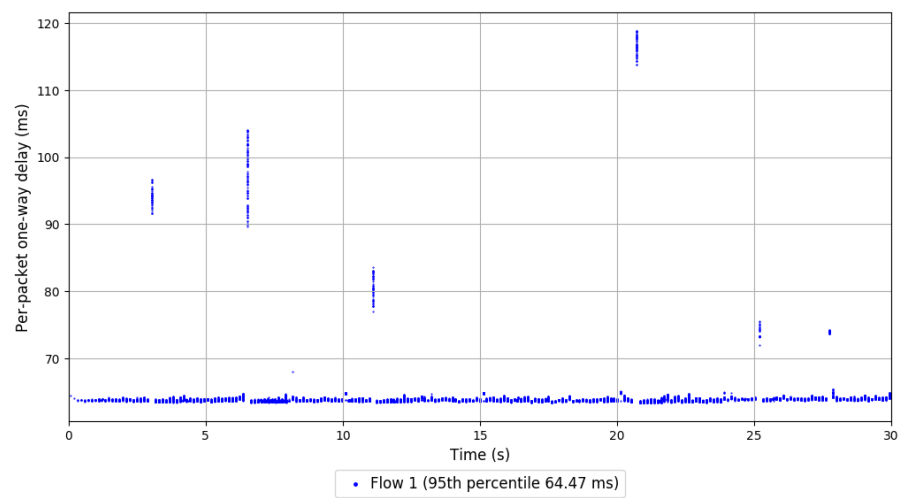
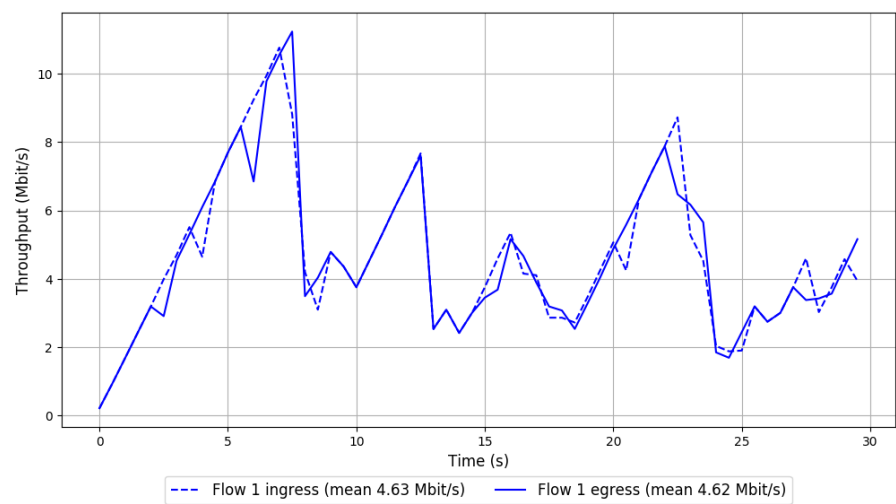
-- Flow 1:

Average throughput: 4.62 Mbit/s

95th percentile per-packet one-way delay: 64.469 ms

Loss rate: 0.09%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-20 10:19:15

End at: 2017-12-20 10:19:45

Below is generated by plot.py at 2017-12-20 12:03:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 64.374 ms

Loss rate: 0.19%

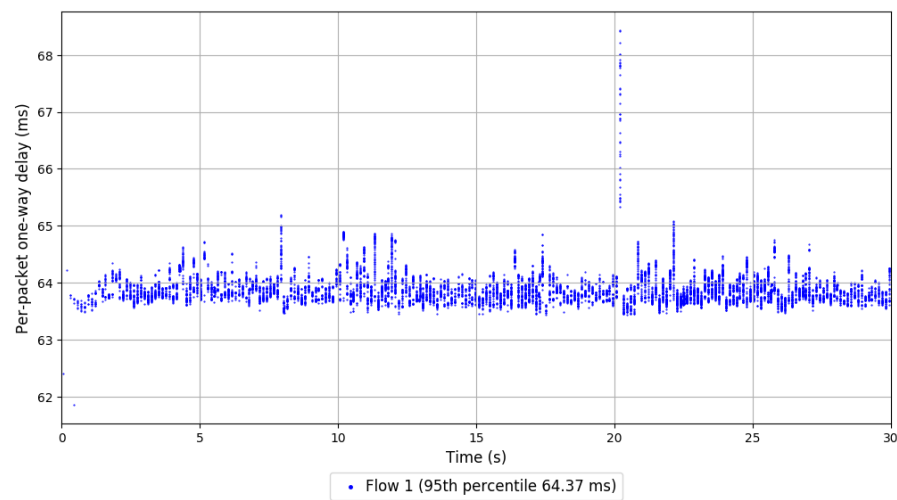
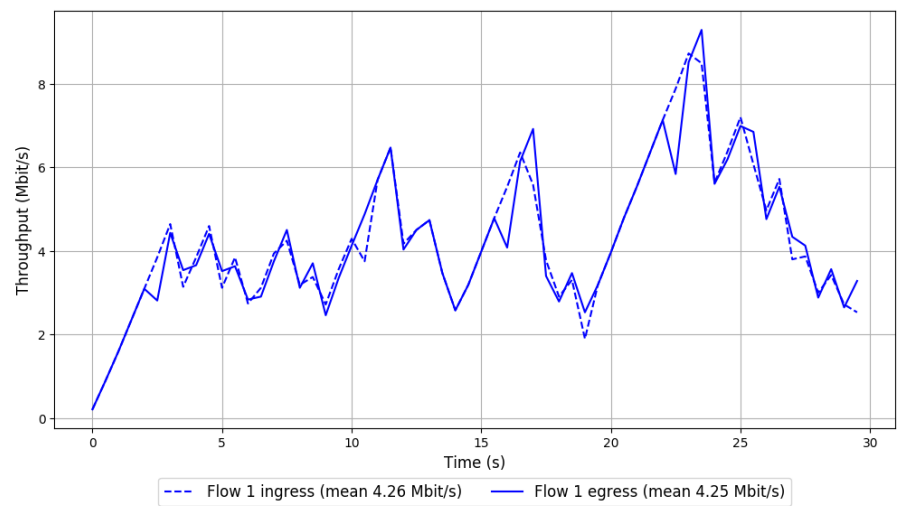
-- Flow 1:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 64.374 ms

Loss rate: 0.19%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-20 10:30:58

End at: 2017-12-20 10:31:28

Below is generated by plot.py at 2017-12-20 12:03:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.00 Mbit/s

95th percentile per-packet one-way delay: 64.756 ms

Loss rate: 0.14%

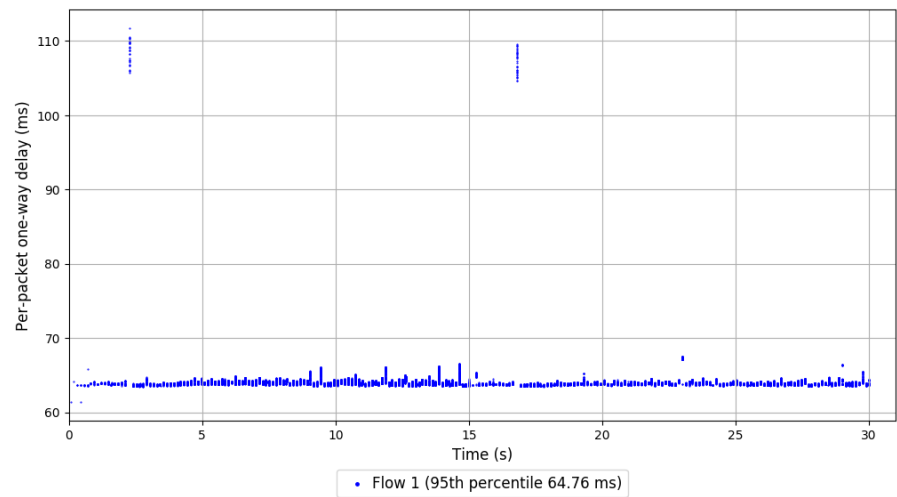
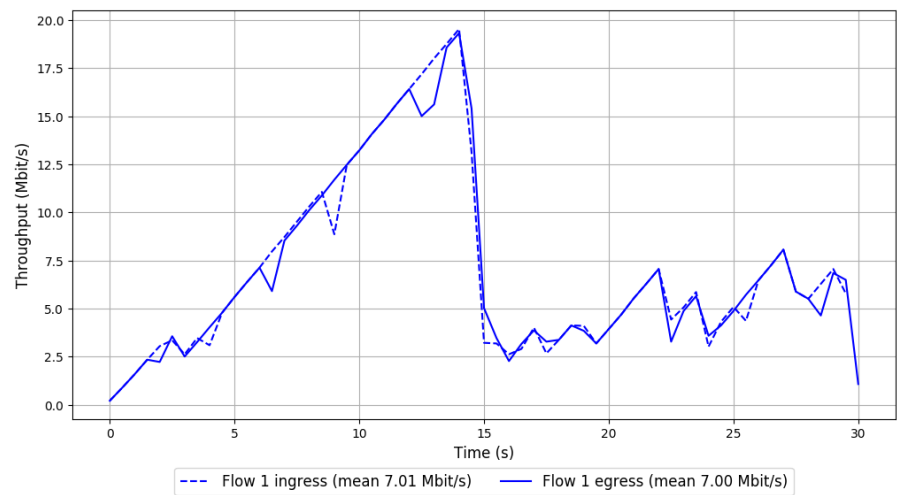
-- Flow 1:

Average throughput: 7.00 Mbit/s

95th percentile per-packet one-way delay: 64.756 ms

Loss rate: 0.14%

Run 8: Report of LEDBAT — Data Link

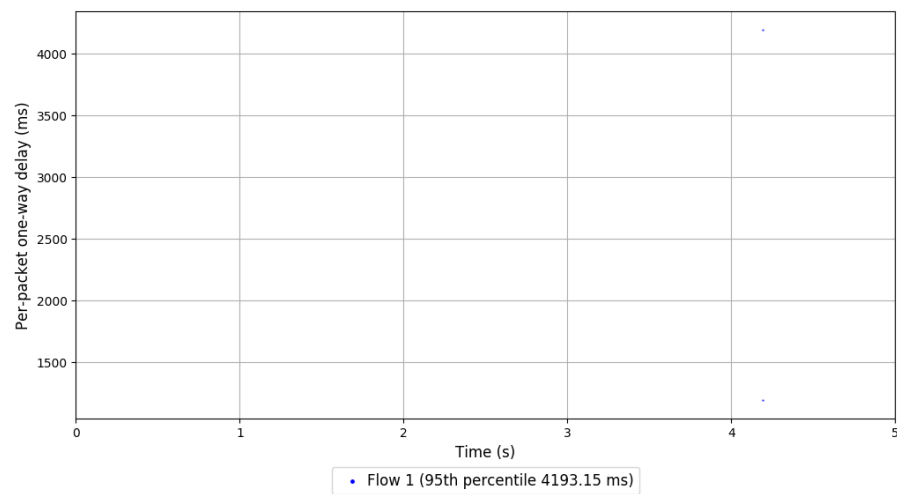
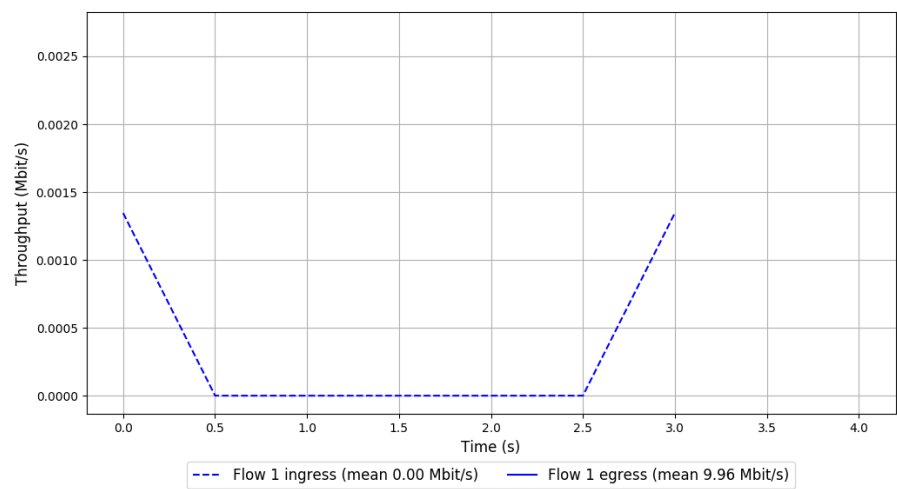


Run 9: Statistics of LEDBAT

Start at: 2017-12-20 10:42:25

End at: 2017-12-20 10:42:55

Run 9: Report of LEDBAT — Data Link

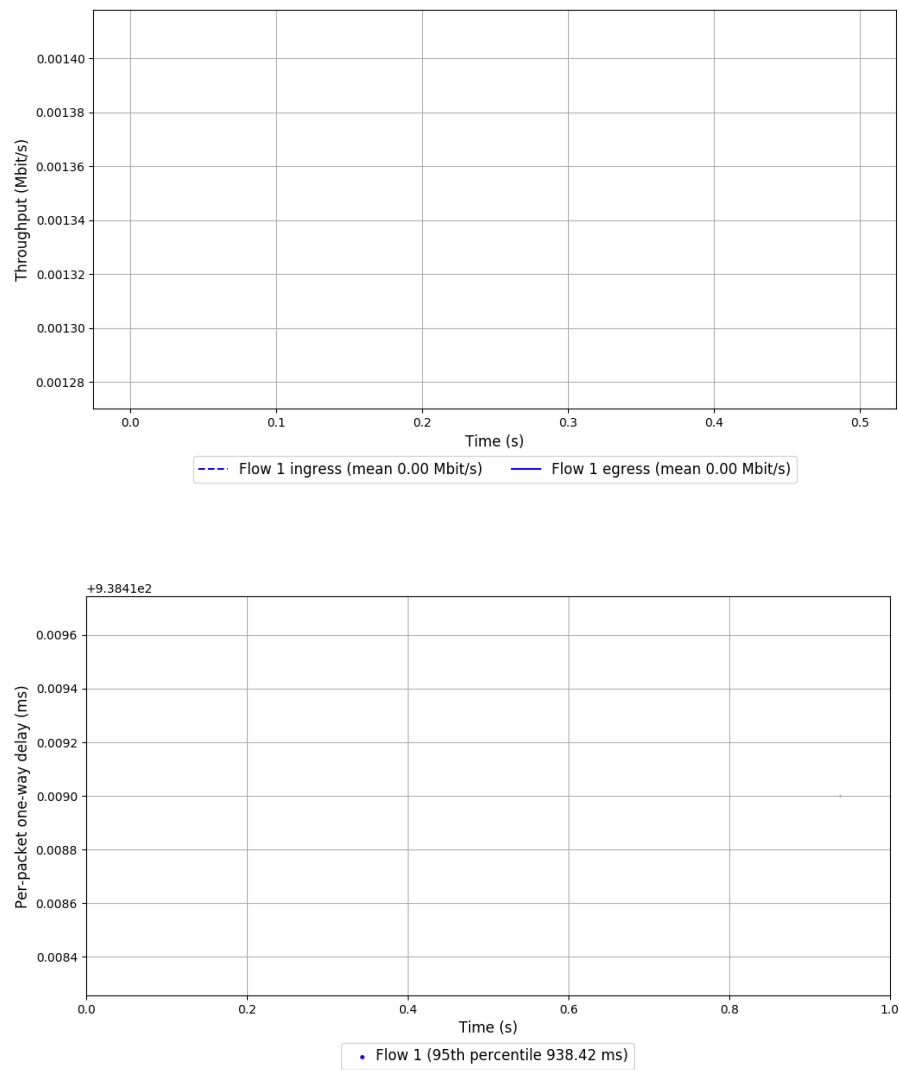


Run 10: Statistics of LEDBAT

Start at: 2017-12-20 10:53:59

End at: 2017-12-20 10:54:29

Run 10: Report of LEDBAT — Data Link

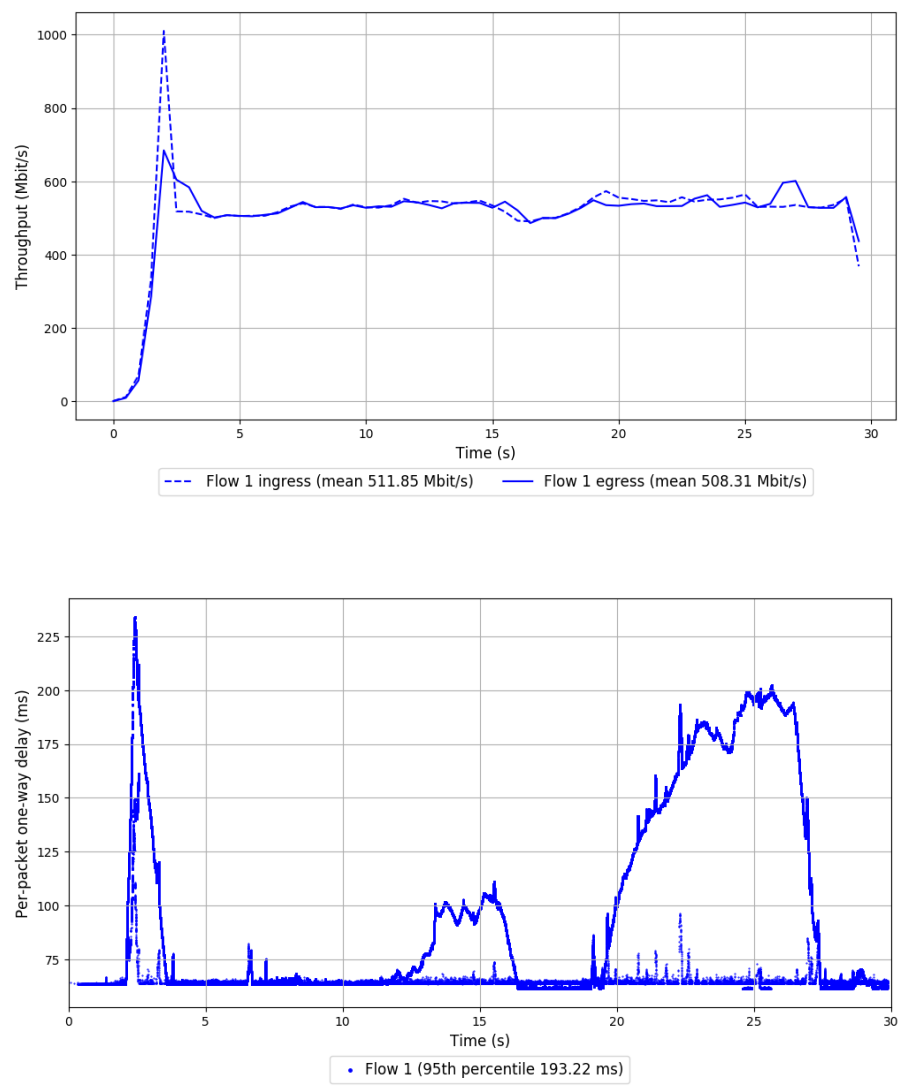


```
Run 1: Statistics of PCC

Start at: 2017-12-20 09:07:00
End at: 2017-12-20 09:07:30

# Below is generated by plot.py at 2017-12-20 12:11:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 508.31 Mbit/s
95th percentile per-packet one-way delay: 193.225 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 508.31 Mbit/s
95th percentile per-packet one-way delay: 193.225 ms
Loss rate: 0.70%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-20 09:18:45

End at: 2017-12-20 09:19:15

Below is generated by plot.py at 2017-12-20 12:11:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 498.34 Mbit/s

95th percentile per-packet one-way delay: 196.829 ms

Loss rate: 0.73%

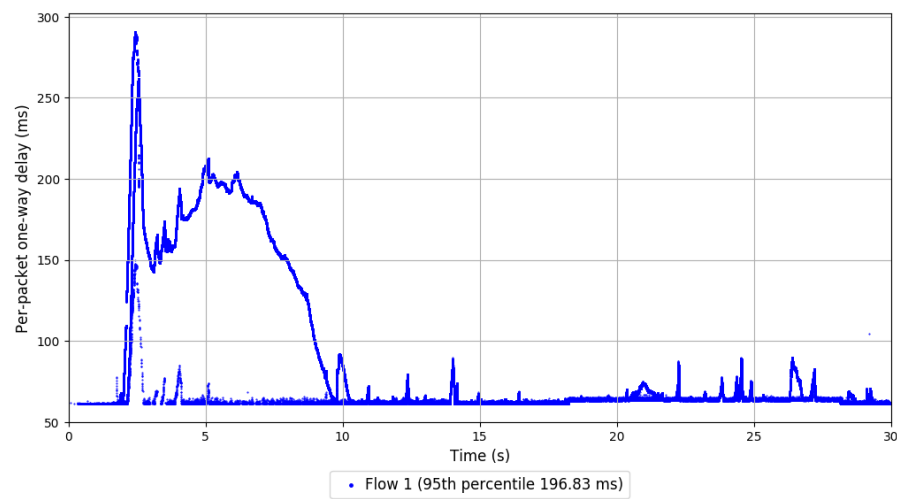
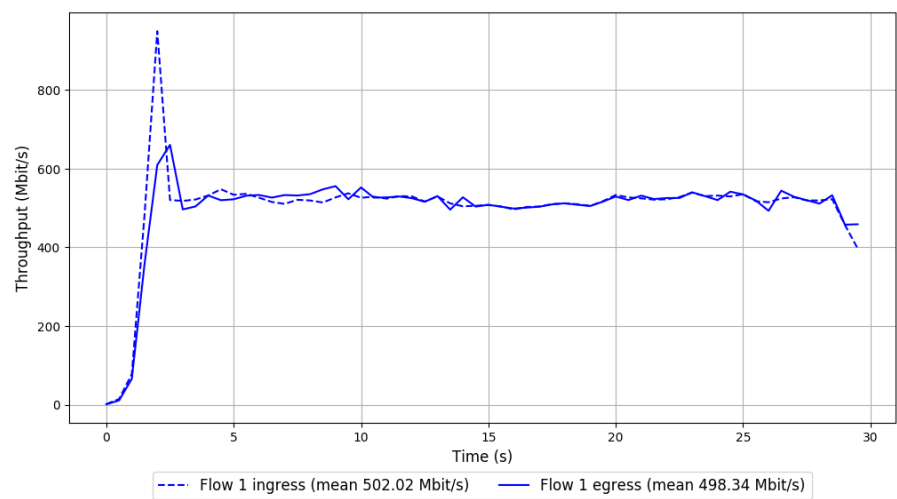
-- Flow 1:

Average throughput: 498.34 Mbit/s

95th percentile per-packet one-way delay: 196.829 ms

Loss rate: 0.73%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-20 09:29:41

End at: 2017-12-20 09:30:11

Below is generated by plot.py at 2017-12-20 12:11:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 514.70 Mbit/s

95th percentile per-packet one-way delay: 149.485 ms

Loss rate: 0.75%

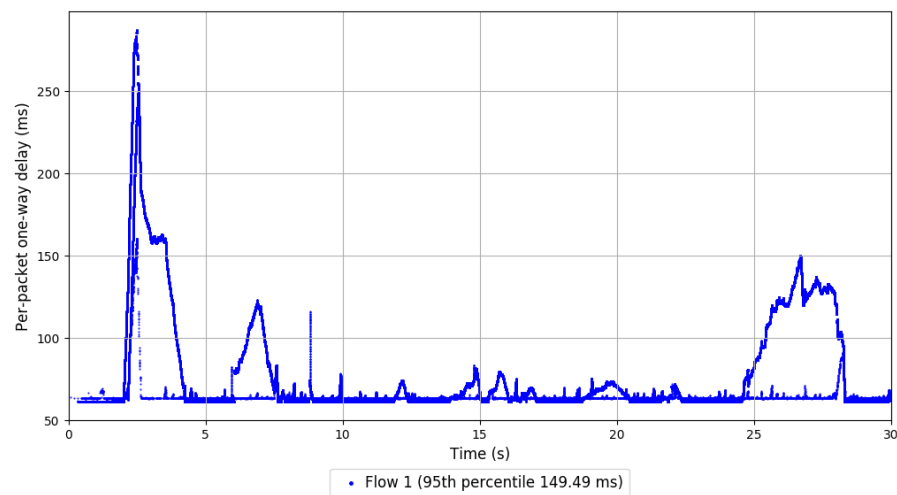
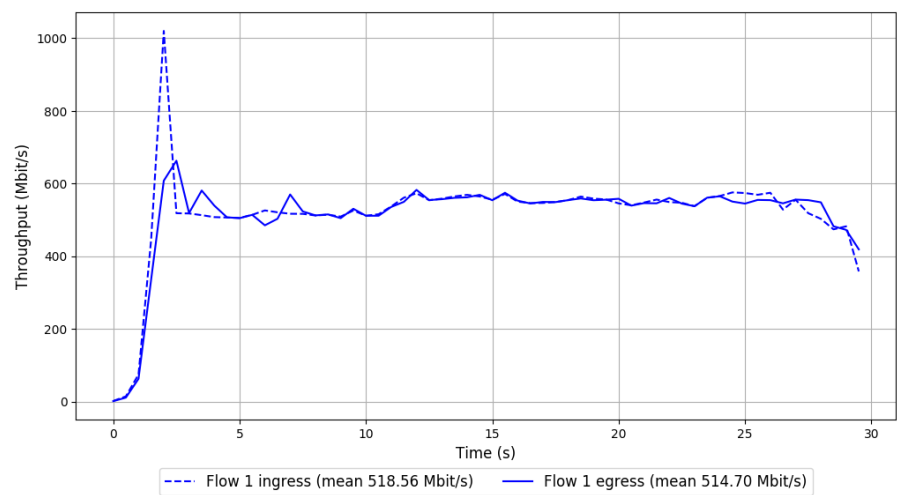
-- Flow 1:

Average throughput: 514.70 Mbit/s

95th percentile per-packet one-way delay: 149.485 ms

Loss rate: 0.75%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-20 09:41:20

End at: 2017-12-20 09:41:50

Below is generated by plot.py at 2017-12-20 12:11:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 492.37 Mbit/s

95th percentile per-packet one-way delay: 205.651 ms

Loss rate: 1.42%

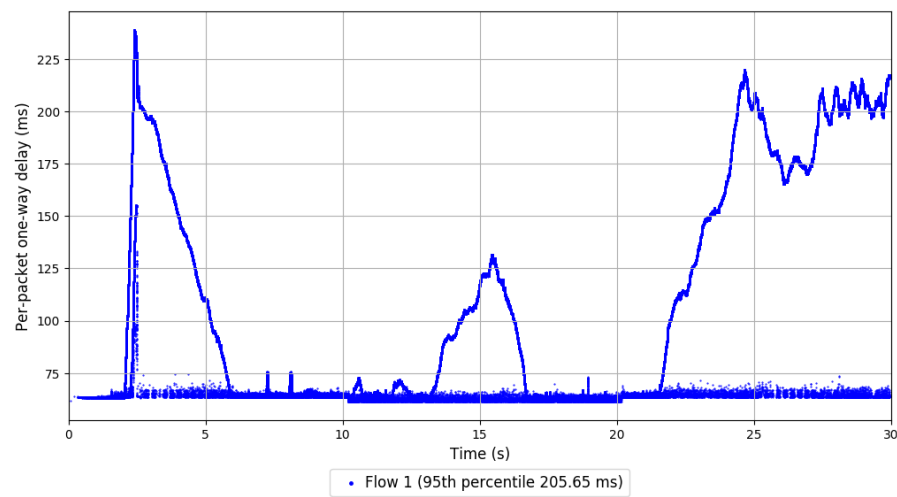
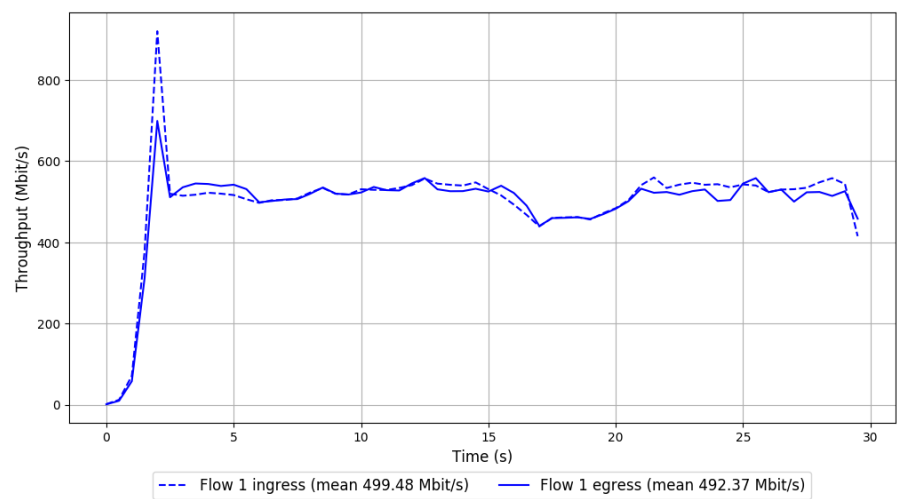
-- Flow 1:

Average throughput: 492.37 Mbit/s

95th percentile per-packet one-way delay: 205.651 ms

Loss rate: 1.42%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-20 09:52:16

End at: 2017-12-20 09:52:46

Below is generated by plot.py at 2017-12-20 12:12:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 532.95 Mbit/s

95th percentile per-packet one-way delay: 192.481 ms

Loss rate: 0.72%

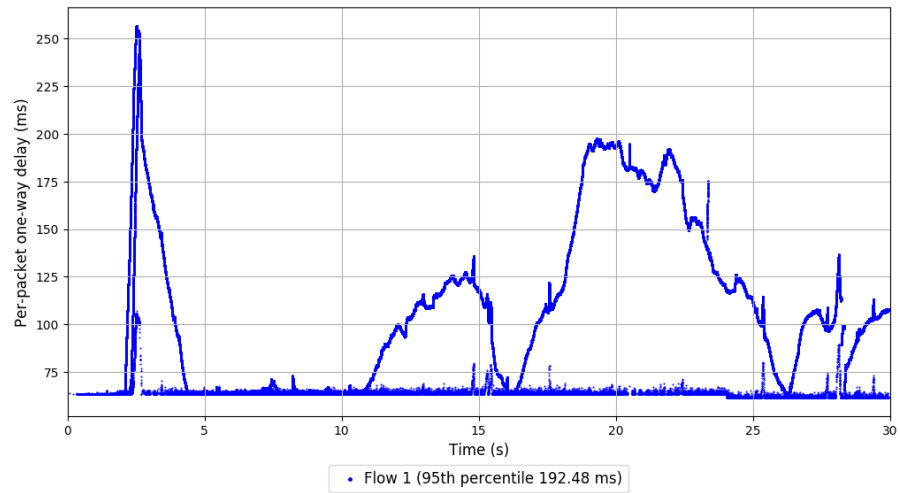
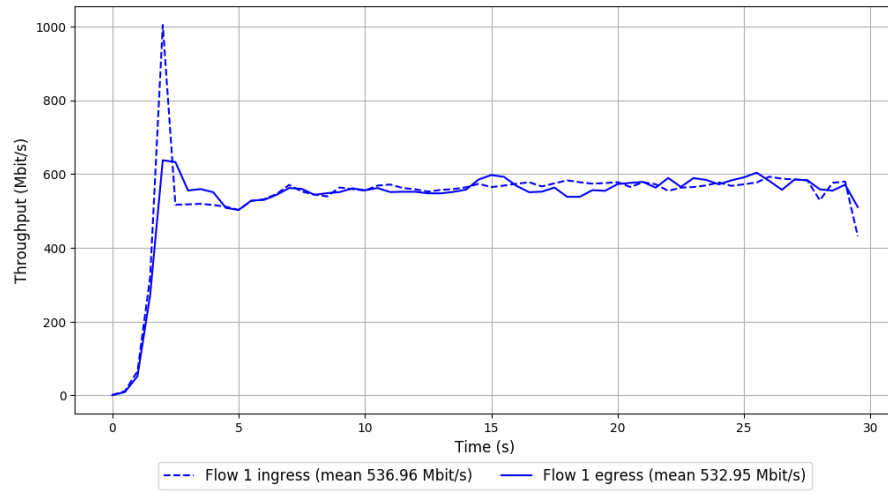
-- Flow 1:

Average throughput: 532.95 Mbit/s

95th percentile per-packet one-way delay: 192.481 ms

Loss rate: 0.72%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-20 10:04:08

End at: 2017-12-20 10:04:38

Below is generated by plot.py at 2017-12-20 12:12:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 482.35 Mbit/s

95th percentile per-packet one-way delay: 118.312 ms

Loss rate: 0.34%

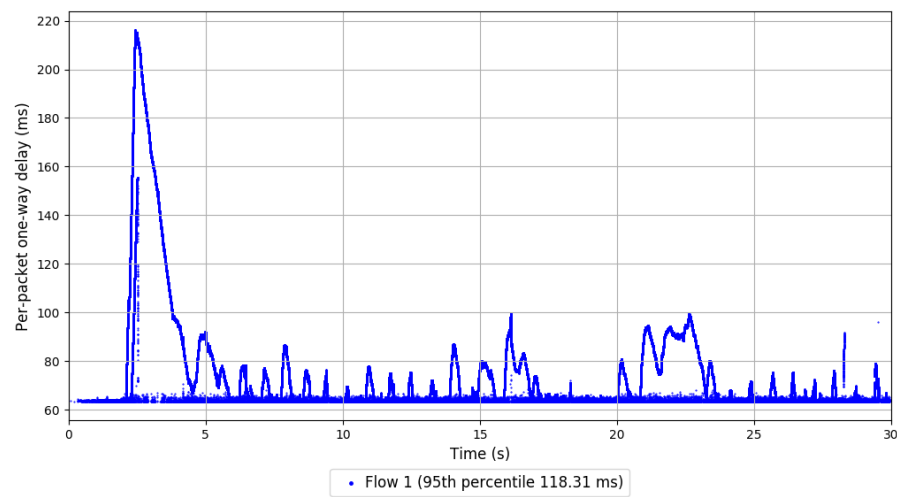
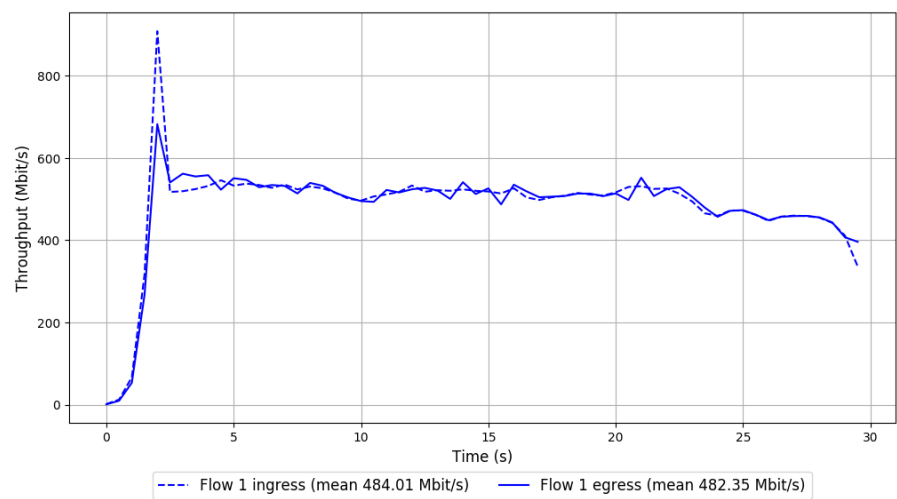
-- Flow 1:

Average throughput: 482.35 Mbit/s

95th percentile per-packet one-way delay: 118.312 ms

Loss rate: 0.34%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-20 10:15:26

End at: 2017-12-20 10:15:56

Below is generated by plot.py at 2017-12-20 12:12:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 408.31 Mbit/s

95th percentile per-packet one-way delay: 88.508 ms

Loss rate: 0.04%

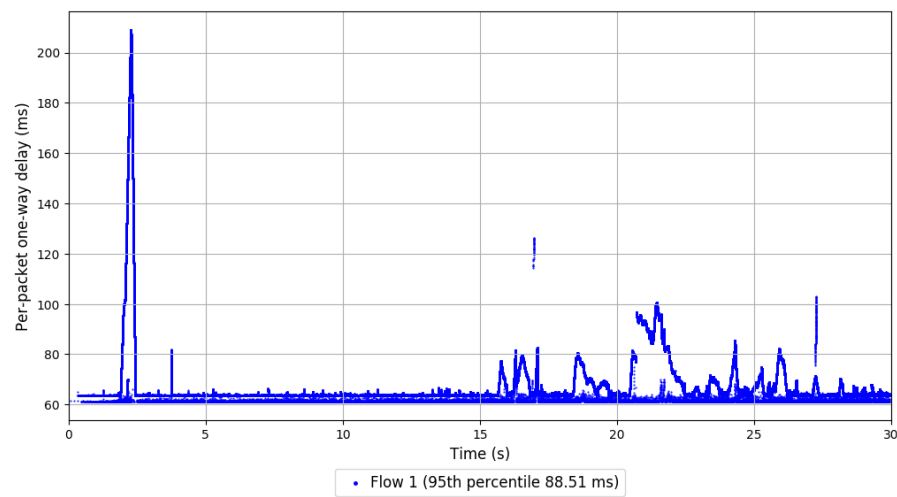
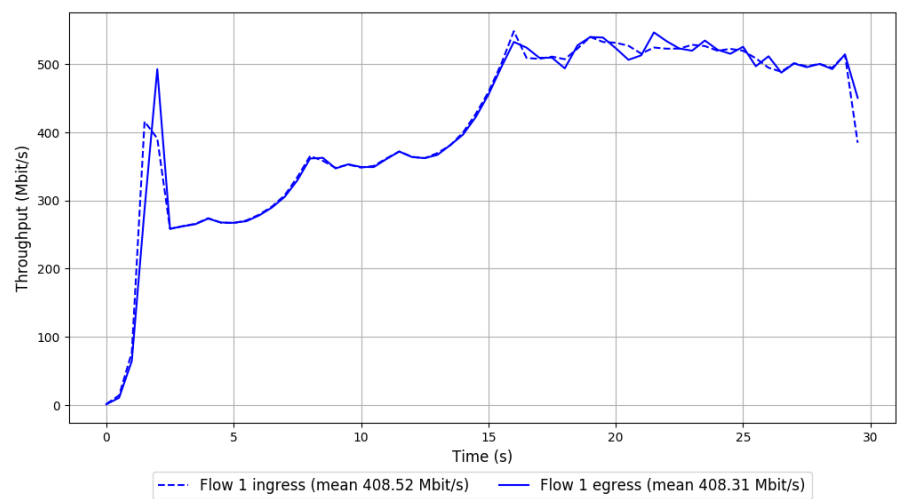
-- Flow 1:

Average throughput: 408.31 Mbit/s

95th percentile per-packet one-way delay: 88.508 ms

Loss rate: 0.04%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-20 10:26:51

End at: 2017-12-20 10:27:21

Below is generated by plot.py at 2017-12-20 12:12:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 496.38 Mbit/s

95th percentile per-packet one-way delay: 113.802 ms

Loss rate: 0.46%

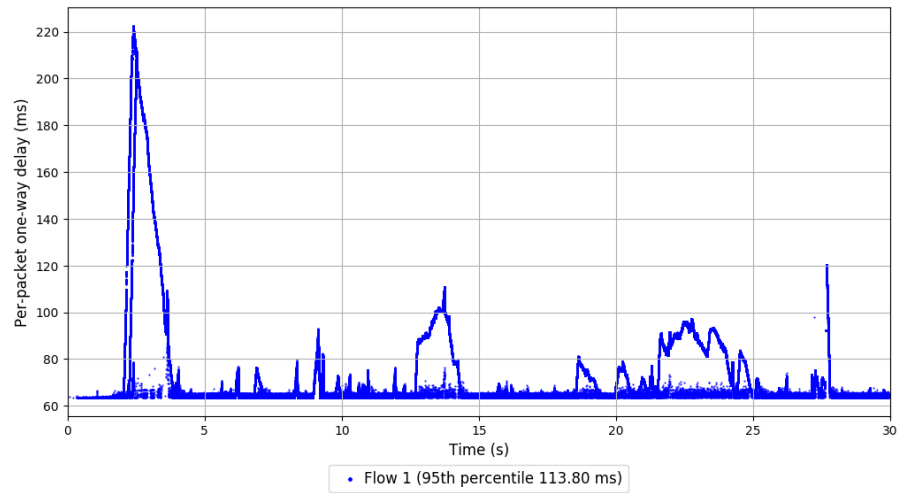
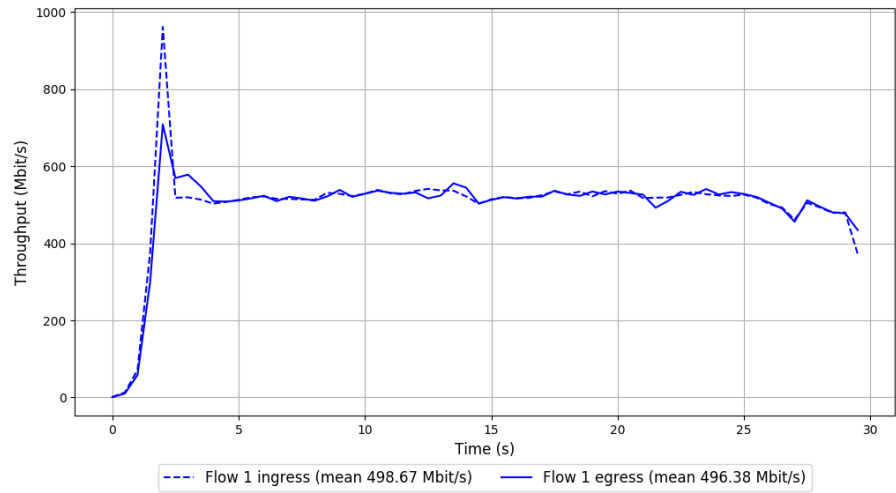
-- Flow 1:

Average throughput: 496.38 Mbit/s

95th percentile per-packet one-way delay: 113.802 ms

Loss rate: 0.46%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-20 10:38:28

End at: 2017-12-20 10:38:58

Below is generated by plot.py at 2017-12-20 12:19:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 482.56 Mbit/s

95th percentile per-packet one-way delay: 204.914 ms

Loss rate: 0.78%

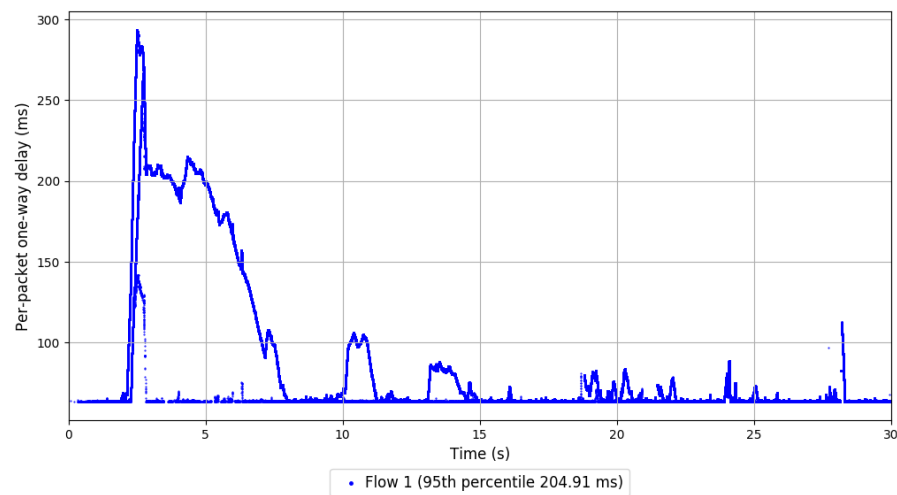
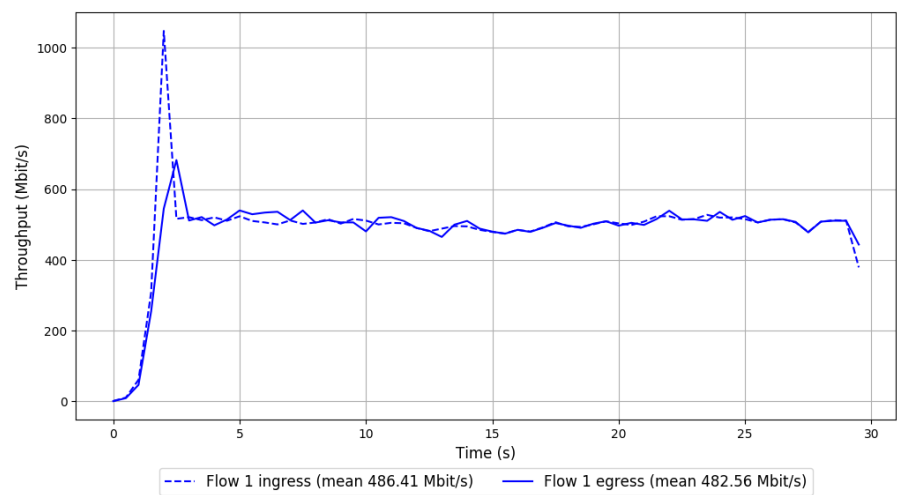
-- Flow 1:

Average throughput: 482.56 Mbit/s

95th percentile per-packet one-way delay: 204.914 ms

Loss rate: 0.78%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-20 10:49:55

End at: 2017-12-20 10:50:25

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 497.19 Mbit/s

95th percentile per-packet one-way delay: 210.953 ms

Loss rate: 1.84%

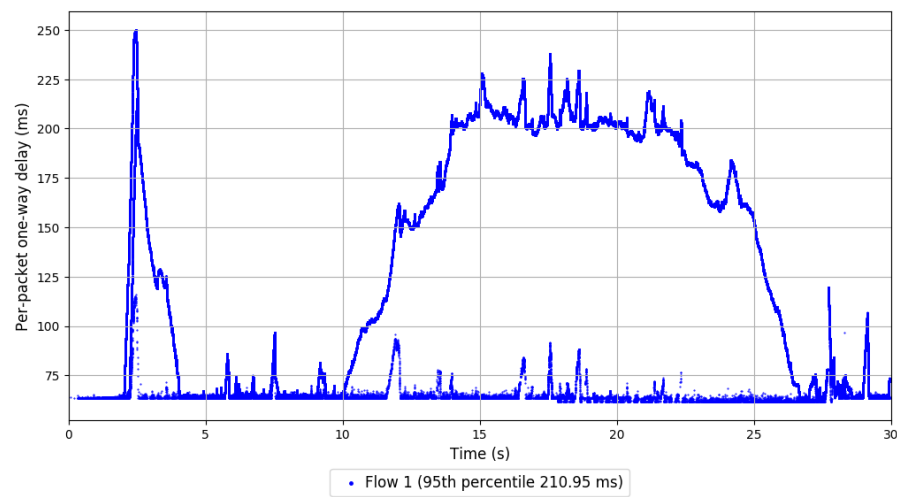
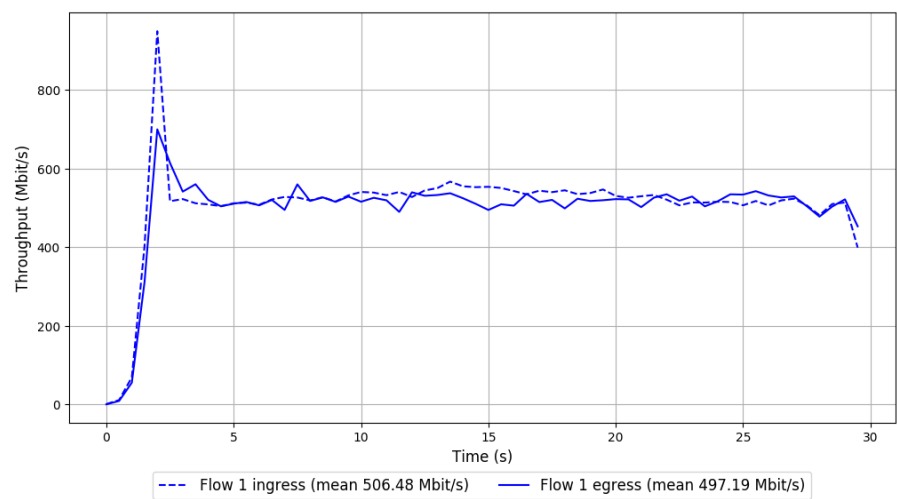
-- Flow 1:

Average throughput: 497.19 Mbit/s

95th percentile per-packet one-way delay: 210.953 ms

Loss rate: 1.84%

Run 10: Report of PCC — Data Link

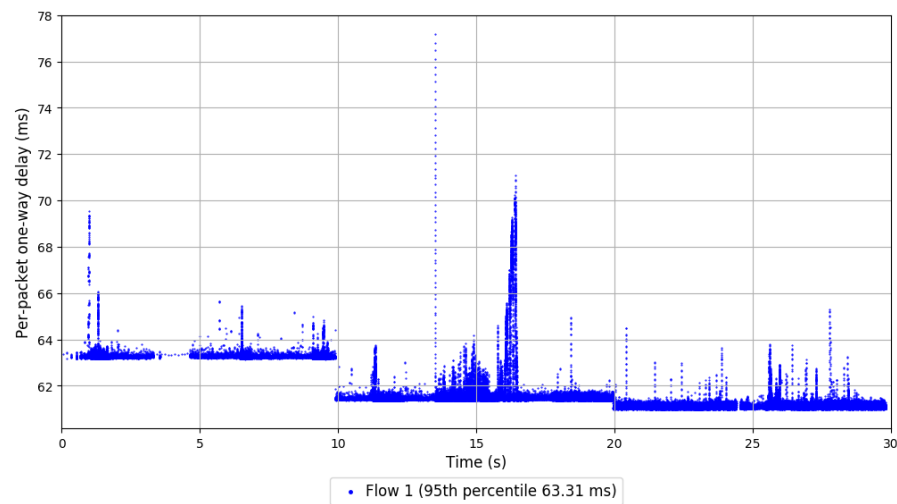
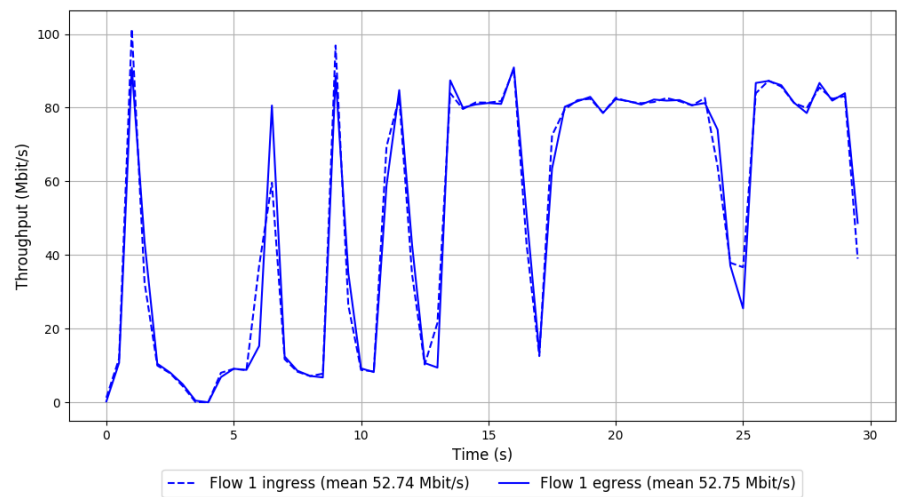


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-20 09:09:33
End at: 2017-12-20 09:10:03

# Below is generated by plot.py at 2017-12-20 12:20:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.75 Mbit/s
95th percentile per-packet one-way delay: 63.307 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.75 Mbit/s
95th percentile per-packet one-way delay: 63.307 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link

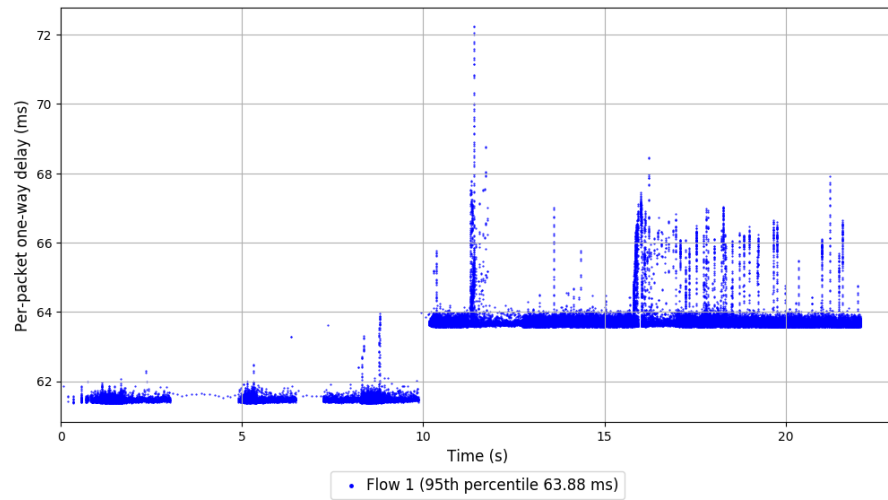
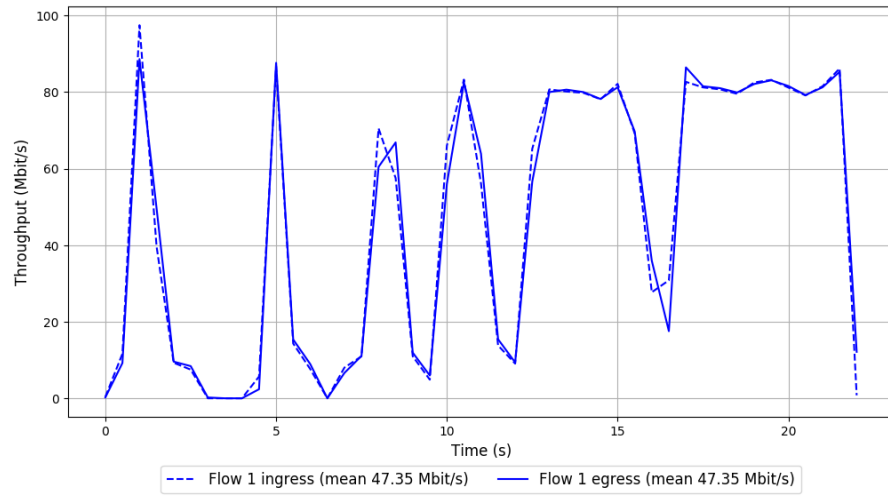


Run 2: Statistics of QUIC Cubic

Start at: 2017-12-20 09:21:15

End at: 2017-12-20 09:21:45

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-20 09:32:13

End at: 2017-12-20 09:32:43

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.29 Mbit/s

95th percentile per-packet one-way delay: 63.874 ms

Loss rate: 0.00%

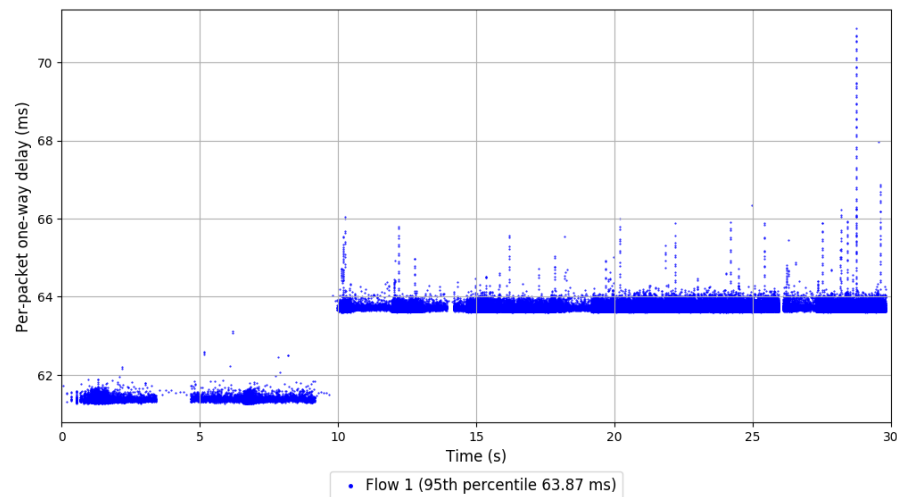
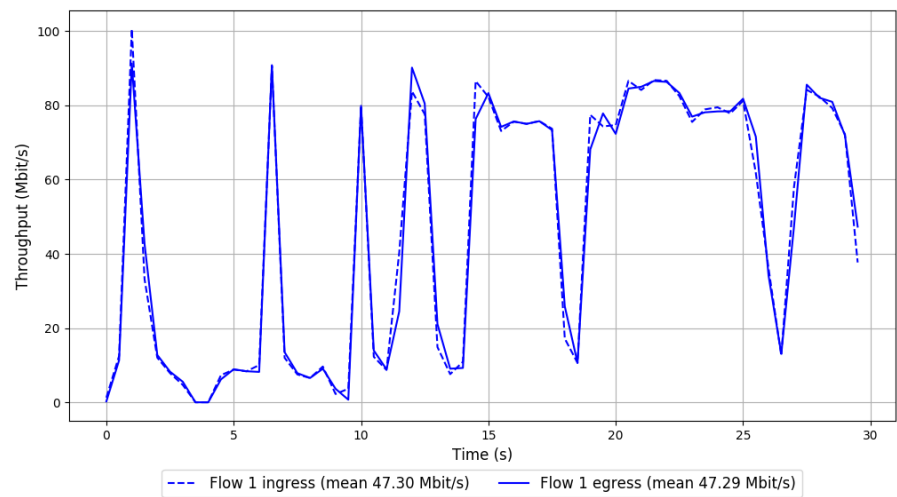
-- Flow 1:

Average throughput: 47.29 Mbit/s

95th percentile per-packet one-way delay: 63.874 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-20 09:43:46

End at: 2017-12-20 09:44:16

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.50 Mbit/s

95th percentile per-packet one-way delay: 63.519 ms

Loss rate: 0.01%

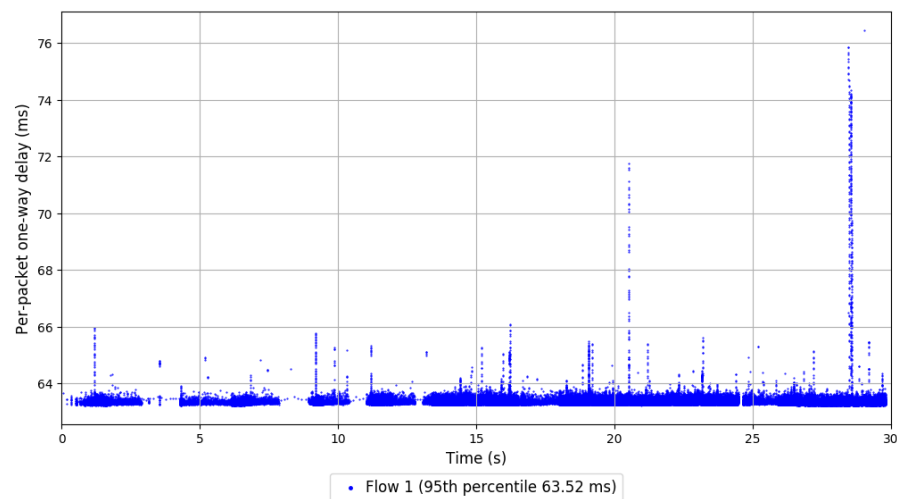
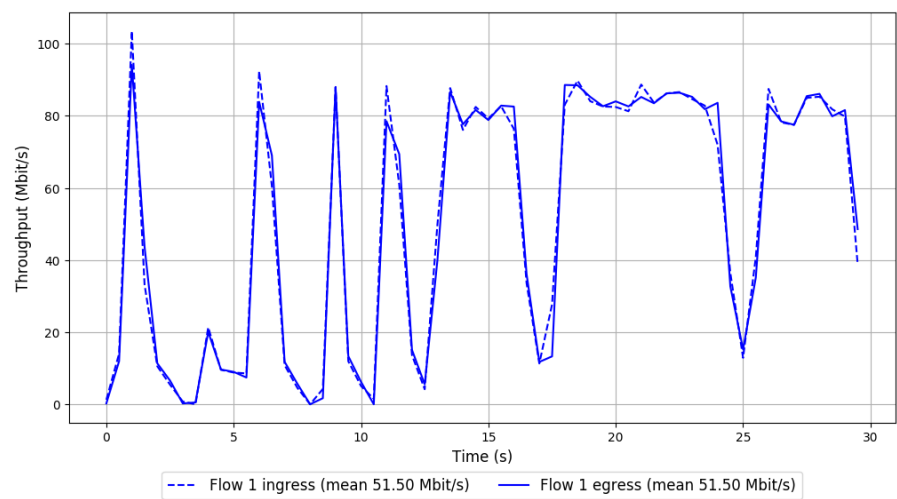
-- Flow 1:

Average throughput: 51.50 Mbit/s

95th percentile per-packet one-way delay: 63.519 ms

Loss rate: 0.01%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-20 09:54:51

End at: 2017-12-20 09:55:21

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.60 Mbit/s

95th percentile per-packet one-way delay: 63.460 ms

Loss rate: 0.01%

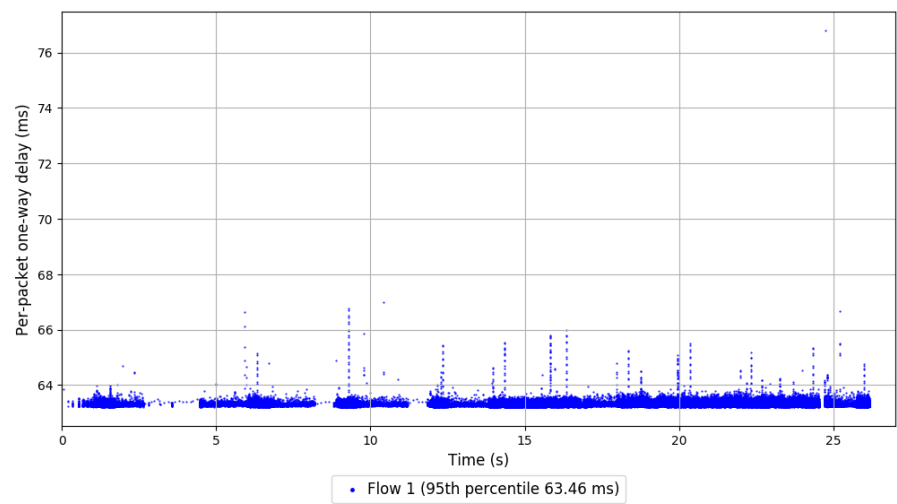
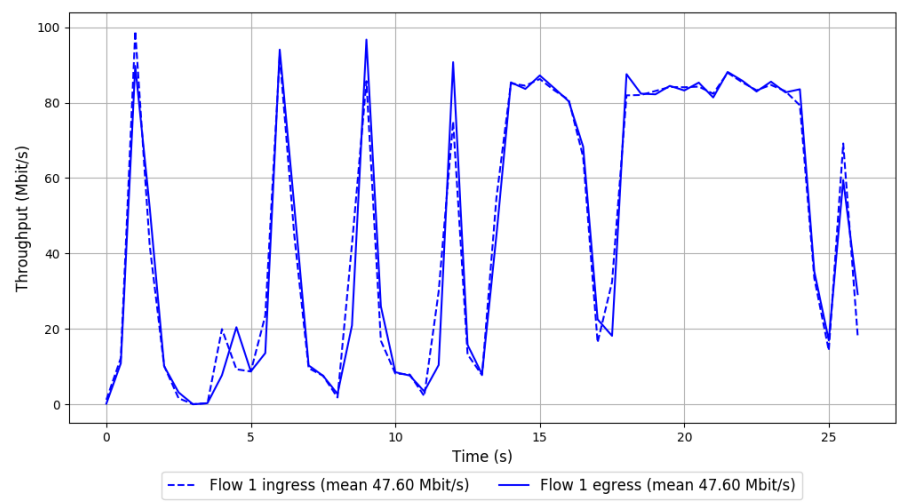
-- Flow 1:

Average throughput: 47.60 Mbit/s

95th percentile per-packet one-way delay: 63.460 ms

Loss rate: 0.01%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-20 10:06:39

End at: 2017-12-20 10:07:09

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.90 Mbit/s

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

Loss rate: 0.00%

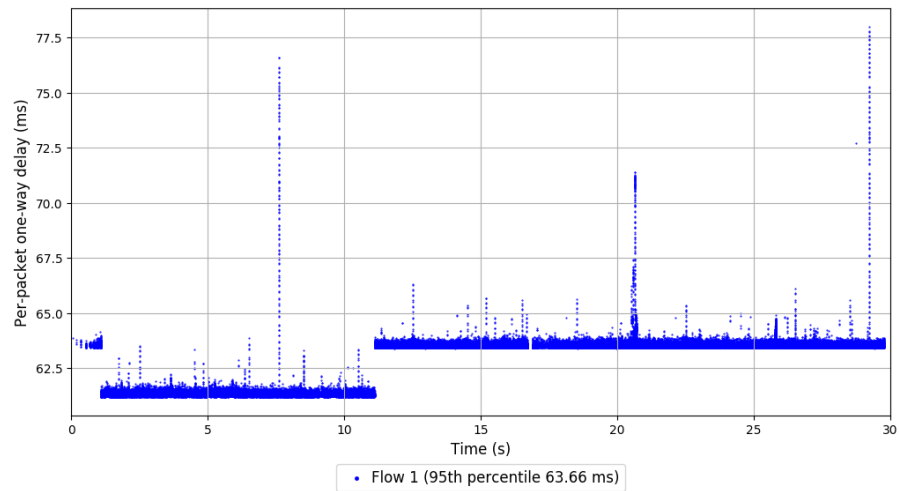
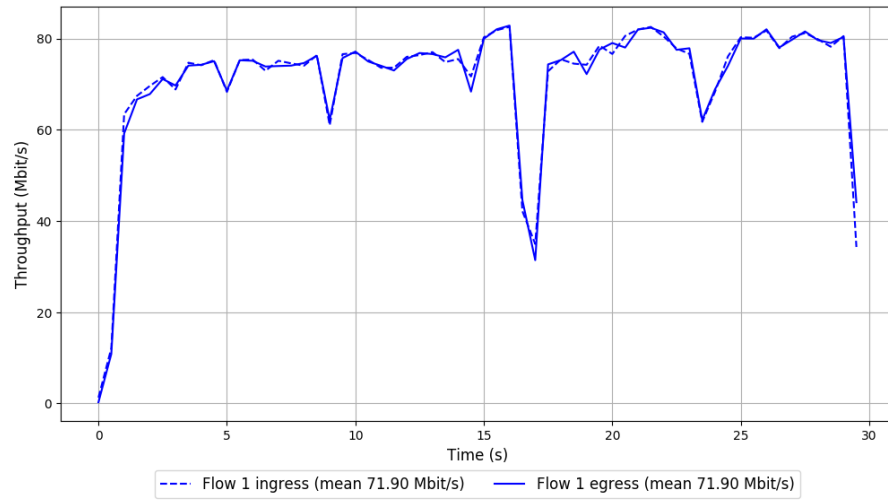
-- Flow 1:

Average throughput: 71.90 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-20 10:17:50

End at: 2017-12-20 10:18:20

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.24 Mbit/s

95th percentile per-packet one-way delay: 63.395 ms

Loss rate: 0.00%

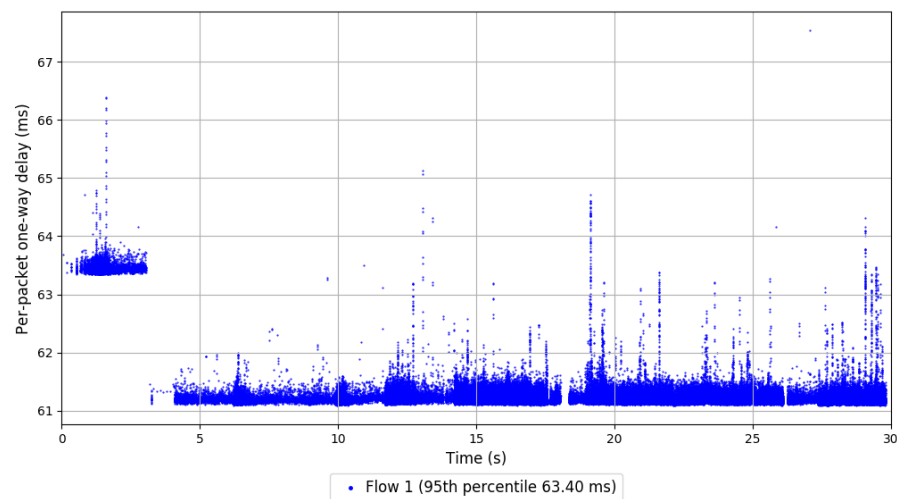
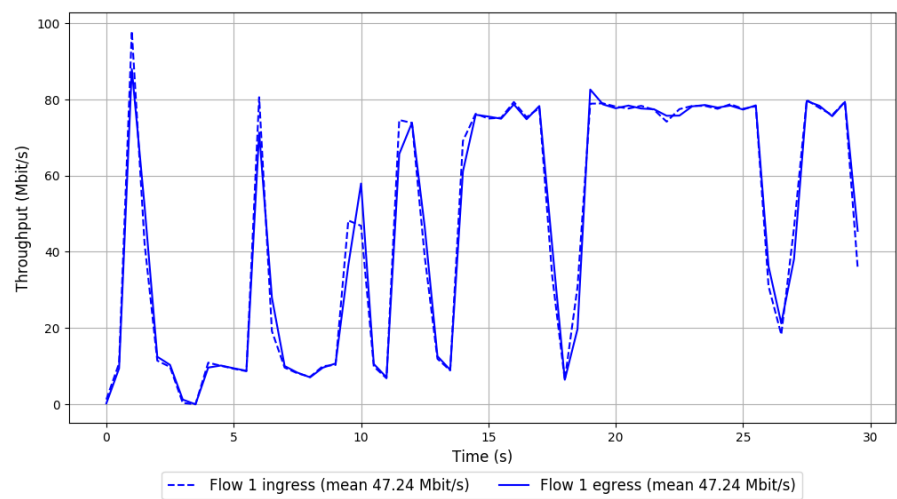
-- Flow 1:

Average throughput: 47.24 Mbit/s

95th percentile per-packet one-way delay: 63.395 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-20 10:29:21

End at: 2017-12-20 10:29:51

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.34 Mbit/s

95th percentile per-packet one-way delay: 63.631 ms

Loss rate: 0.01%

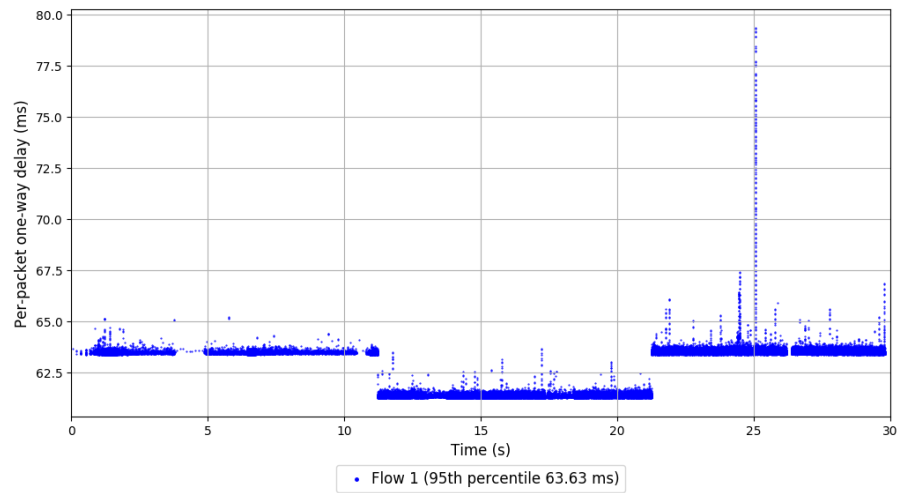
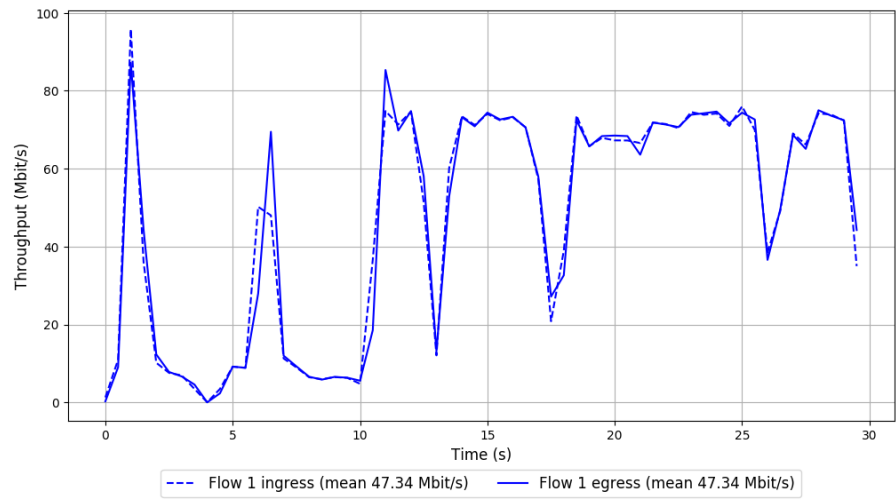
-- Flow 1:

Average throughput: 47.34 Mbit/s

95th percentile per-packet one-way delay: 63.631 ms

Loss rate: 0.01%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-20 10:40:55

End at: 2017-12-20 10:41:25

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.13 Mbit/s

95th percentile per-packet one-way delay: 63.633 ms

Loss rate: 0.00%

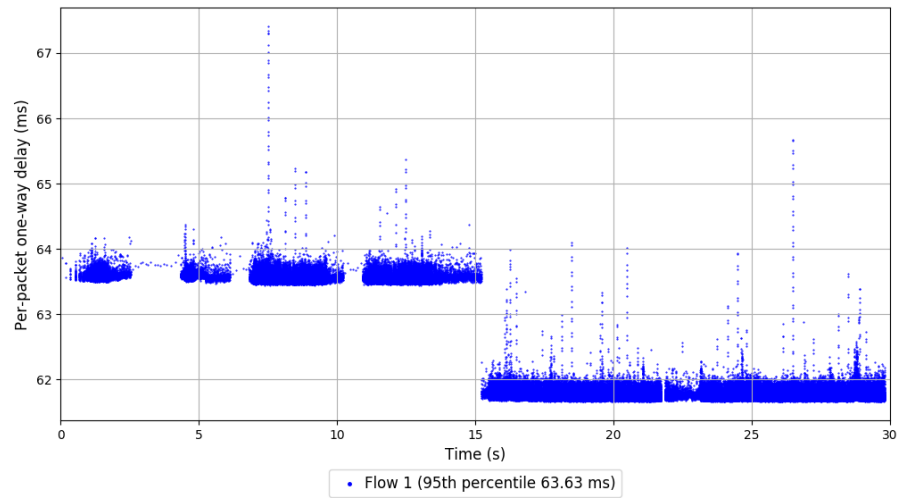
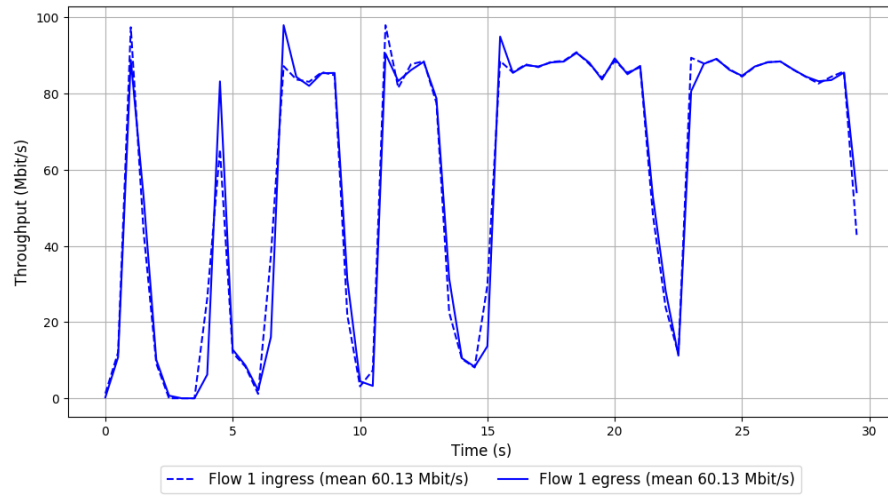
-- Flow 1:

Average throughput: 60.13 Mbit/s

95th percentile per-packet one-way delay: 63.633 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

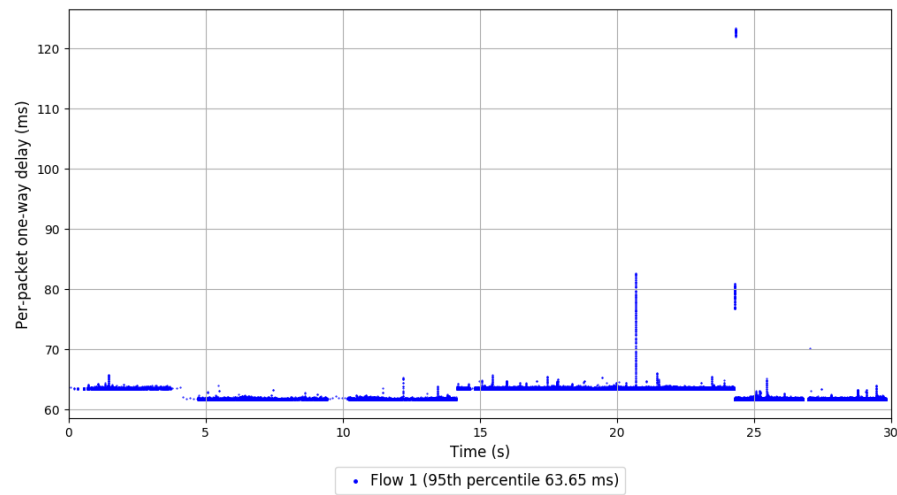
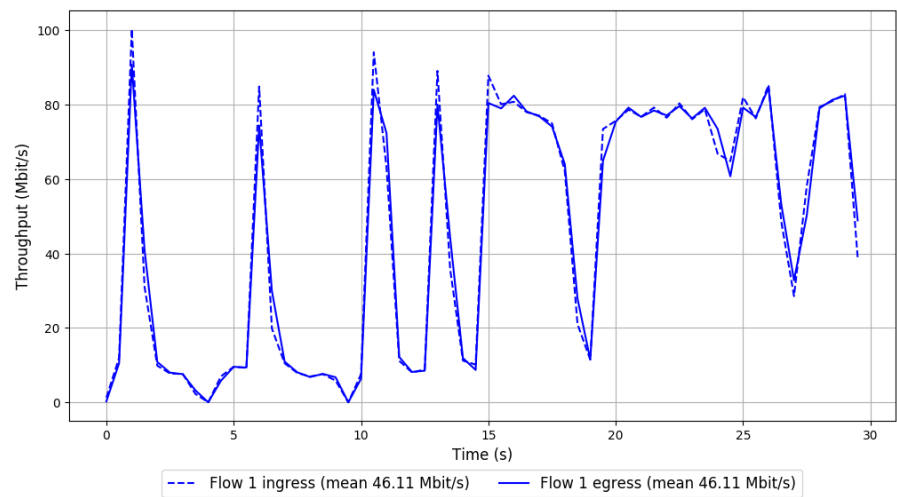


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-20 10:52:26
End at: 2017-12-20 10:52:56

# Below is generated by plot.py at 2017-12-20 12:20:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.11 Mbit/s
95th percentile per-packet one-way delay: 63.649 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.11 Mbit/s
95th percentile per-packet one-way delay: 63.649 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

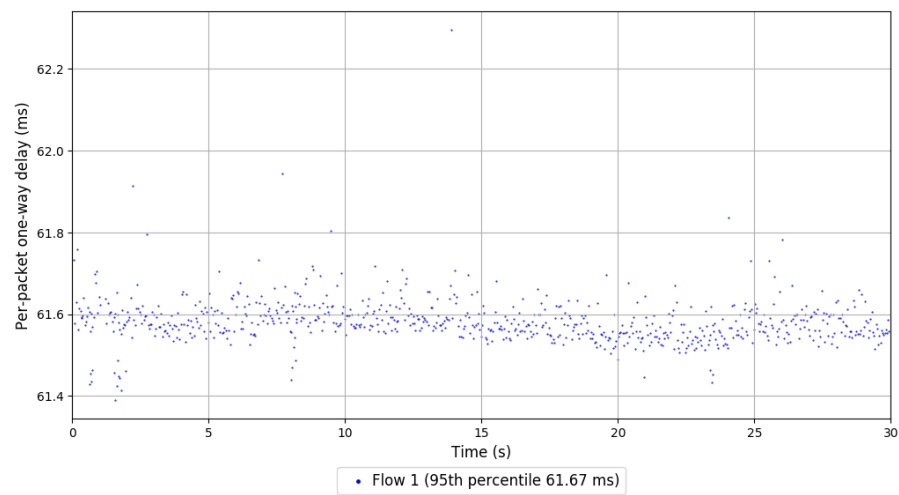
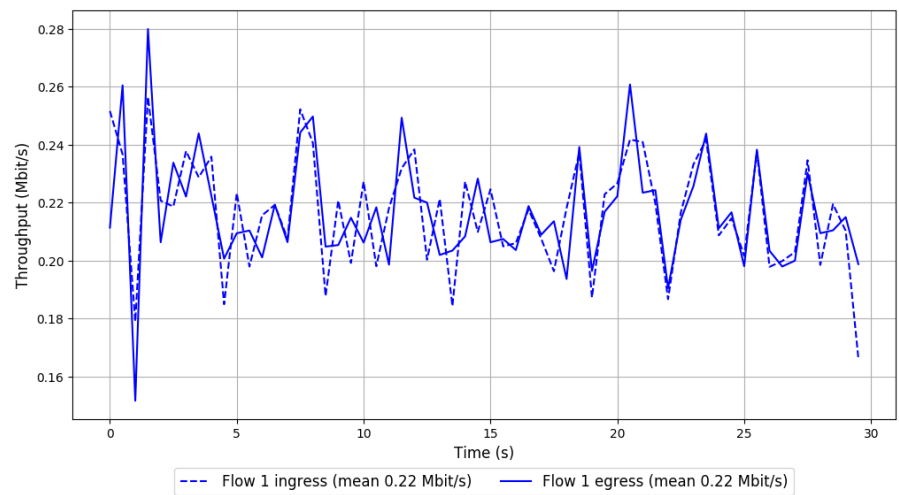


```
Run 1: Statistics of SCReAM

Start at: 2017-12-20 09:16:06
End at: 2017-12-20 09:16:36

# Below is generated by plot.py at 2017-12-20 12:20:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.670 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.670 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

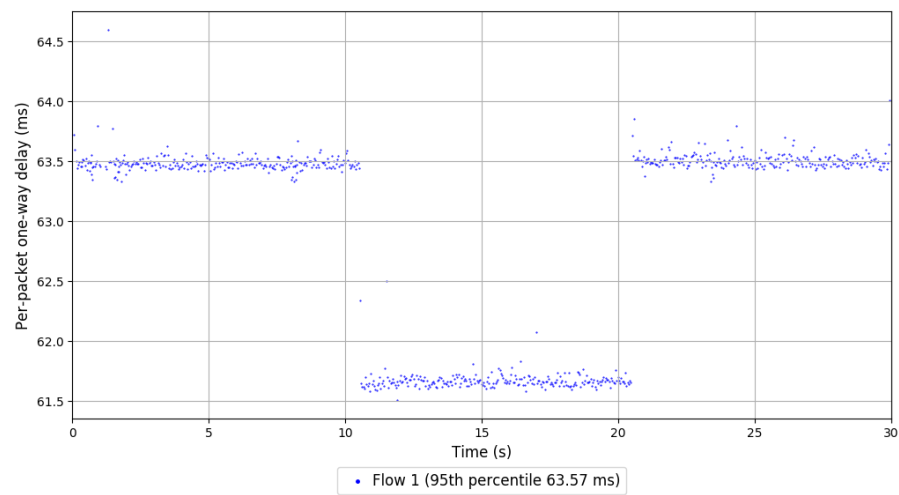
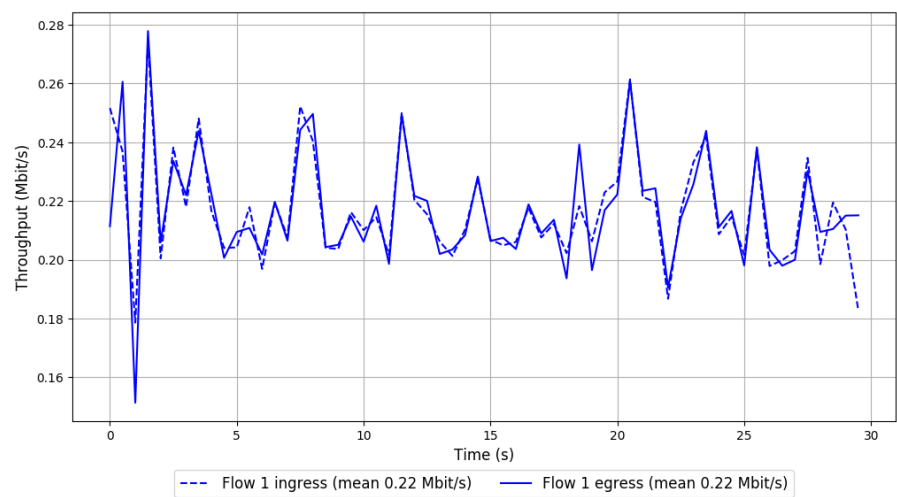


```
Run 2: Statistics of SCReAM

Start at: 2017-12-20 09:27:02
End at: 2017-12-20 09:27:32

# Below is generated by plot.py at 2017-12-20 12:20:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.569 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.569 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-20 09:38:41

End at: 2017-12-20 09:39:11

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.559 ms

Loss rate: 0.00%

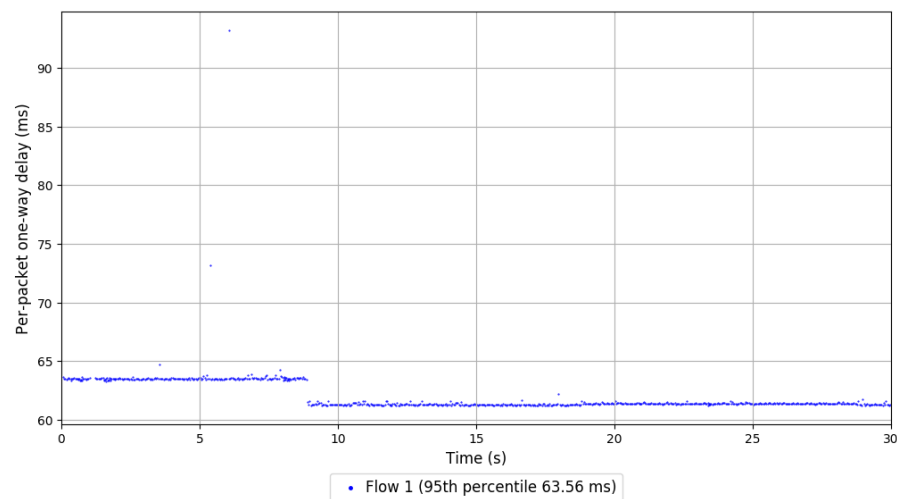
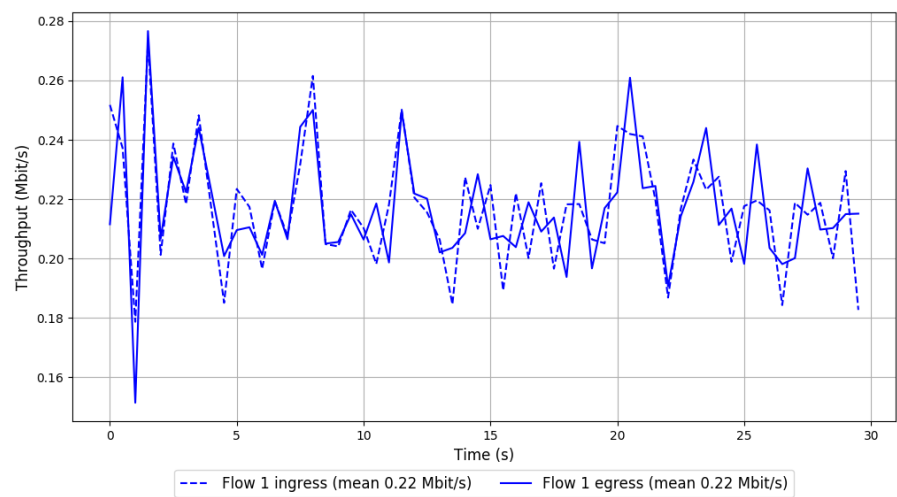
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.559 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-20 09:49:37

End at: 2017-12-20 09:50:07

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.705 ms

Loss rate: 0.00%

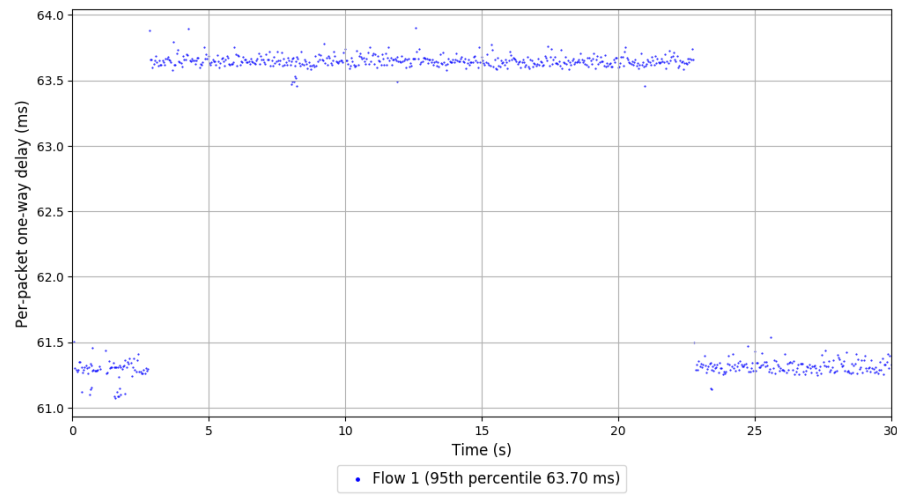
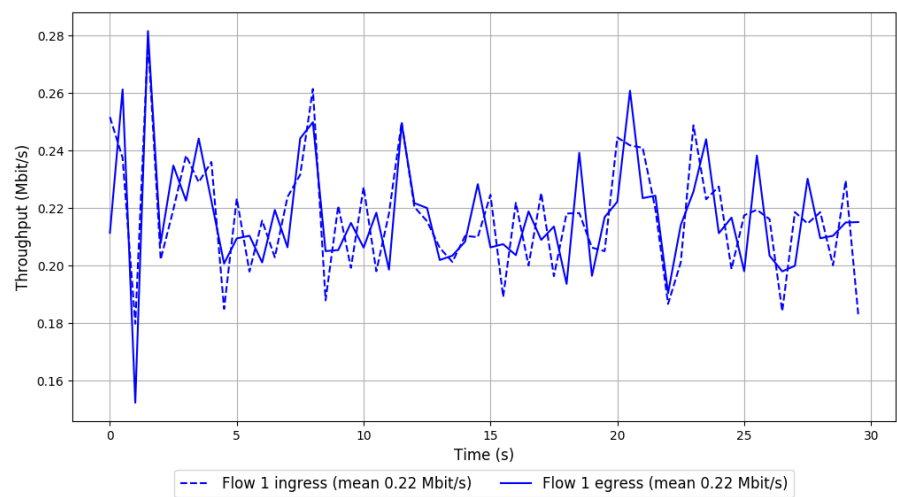
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.705 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-20 10:01:30

End at: 2017-12-20 10:02:00

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.856 ms

Loss rate: 0.00%

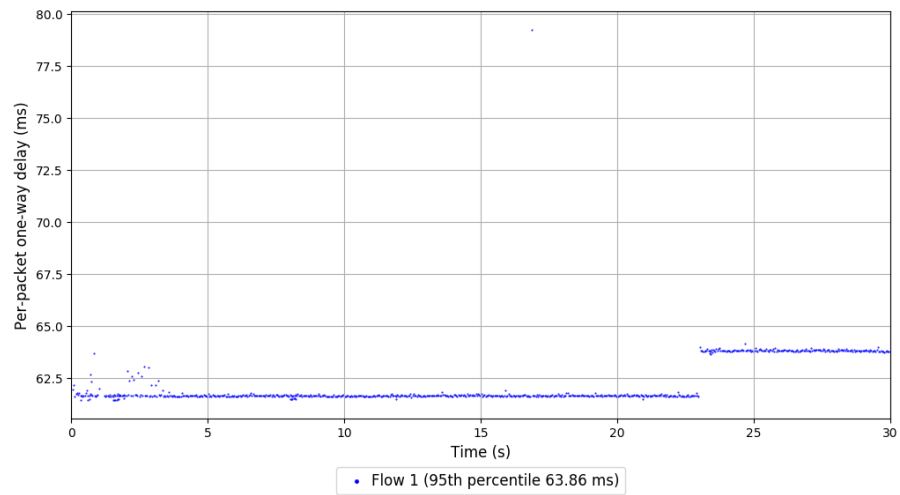
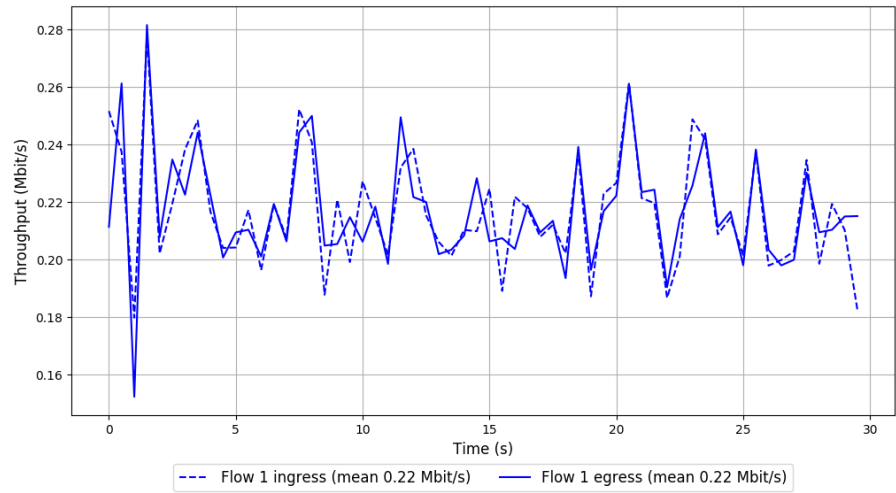
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.856 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-20 10:12:48

End at: 2017-12-20 10:13:18

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.647 ms

Loss rate: 0.00%

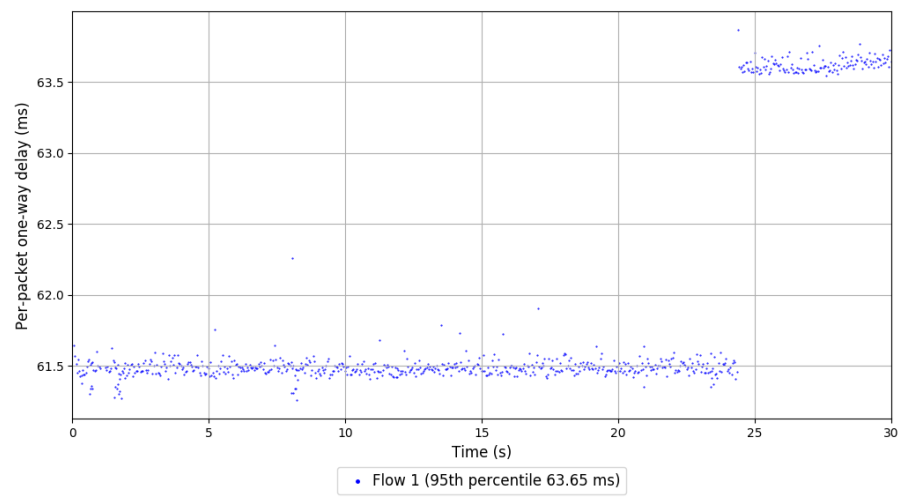
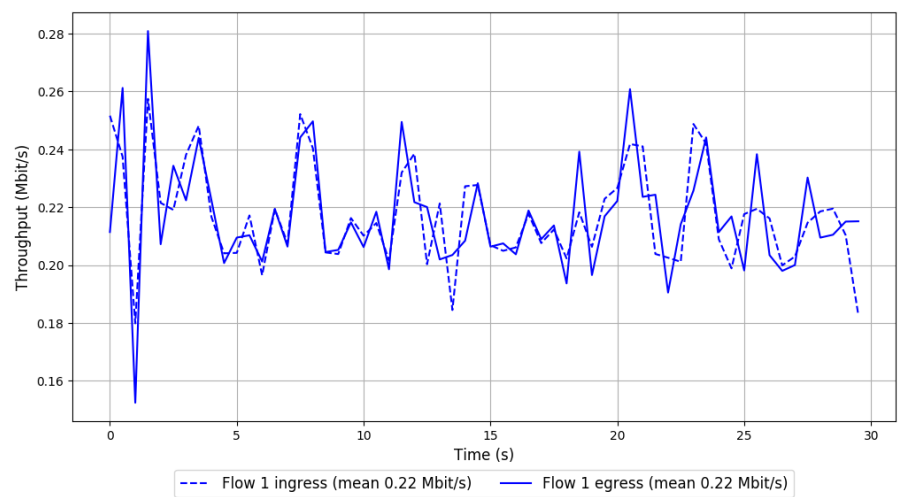
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.647 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-20 10:24:12

End at: 2017-12-20 10:24:42

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.817 ms

Loss rate: 0.00%

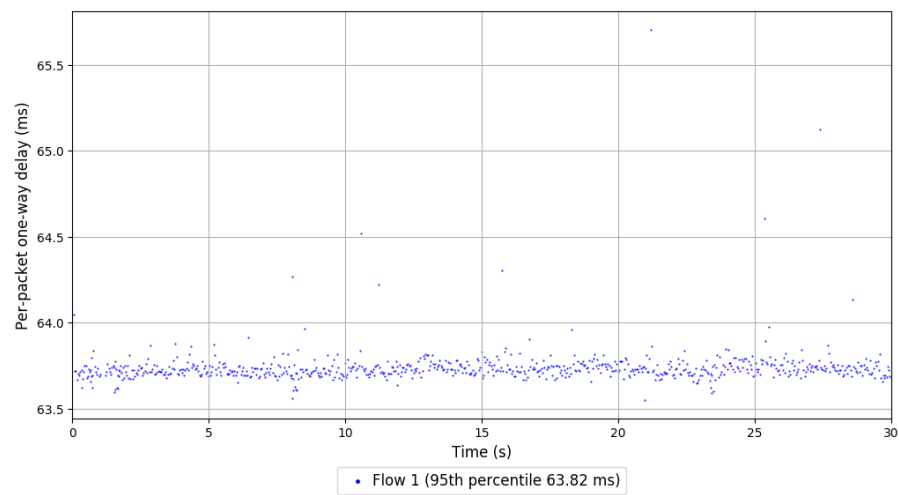
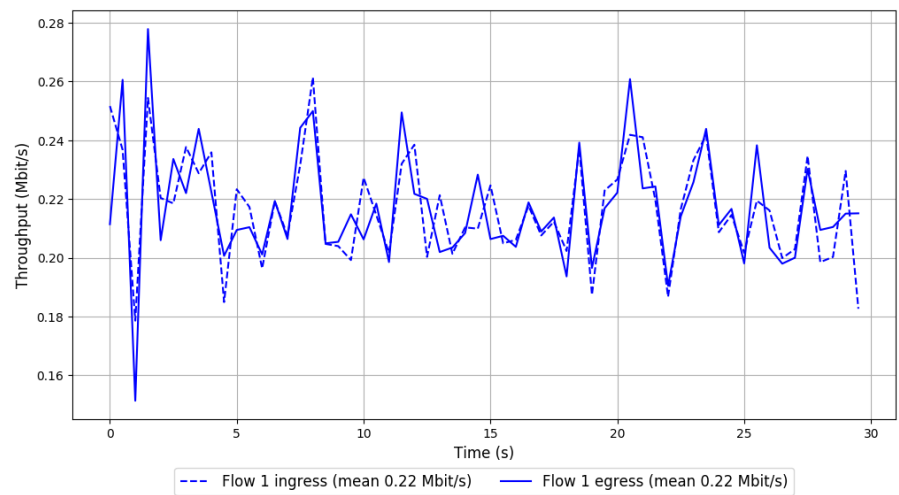
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.817 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-20 10:35:51

End at: 2017-12-20 10:36:21

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.785 ms

Loss rate: 0.00%

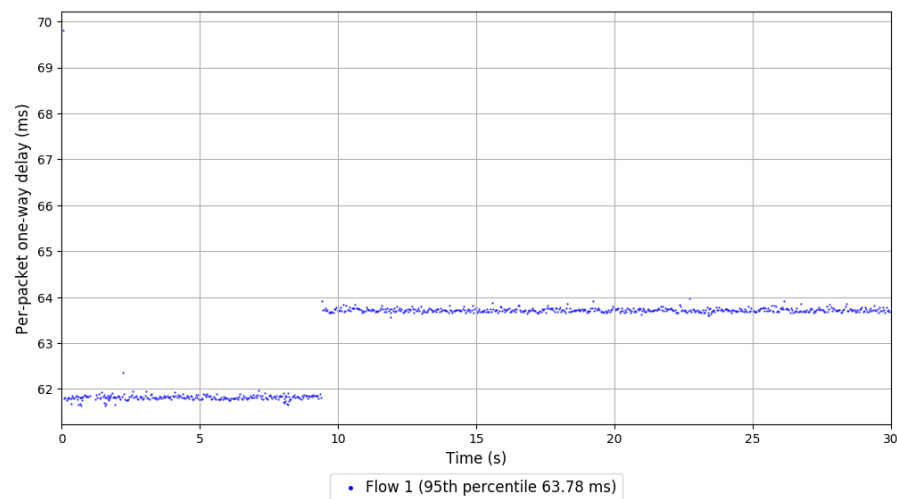
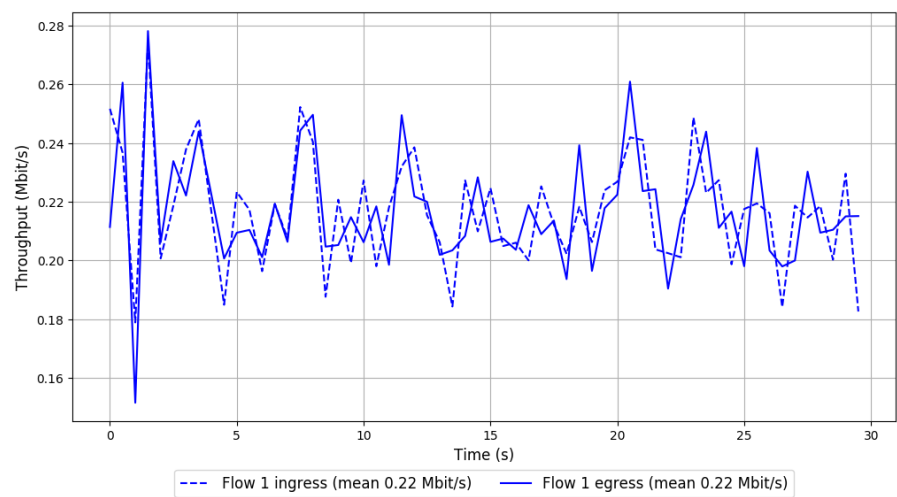
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.785 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-20 10:47:17

End at: 2017-12-20 10:47:47

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.837 ms

Loss rate: 0.00%

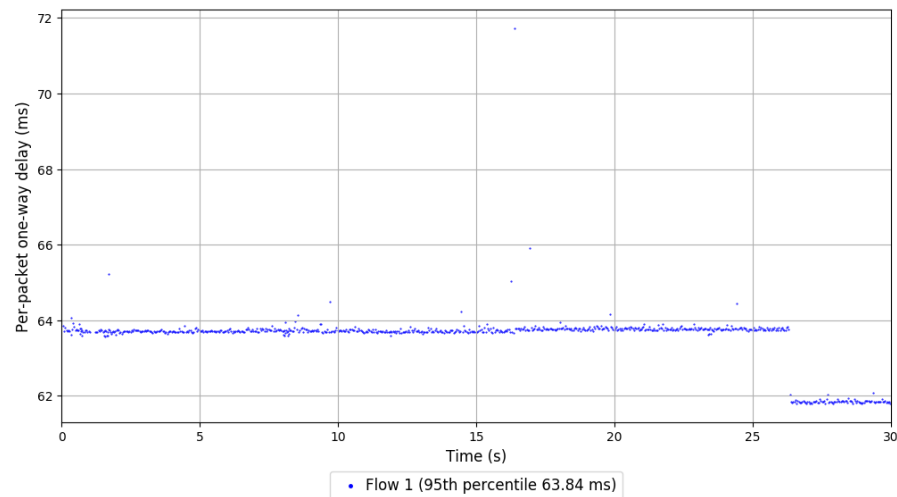
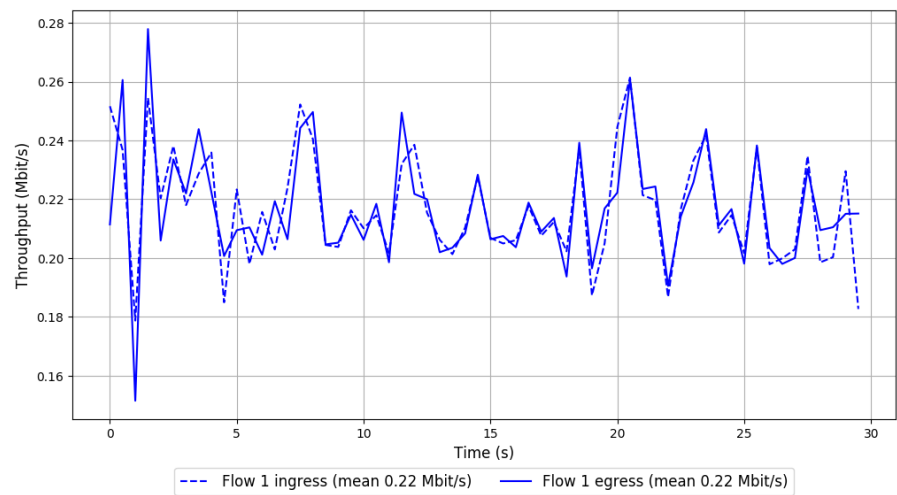
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.837 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

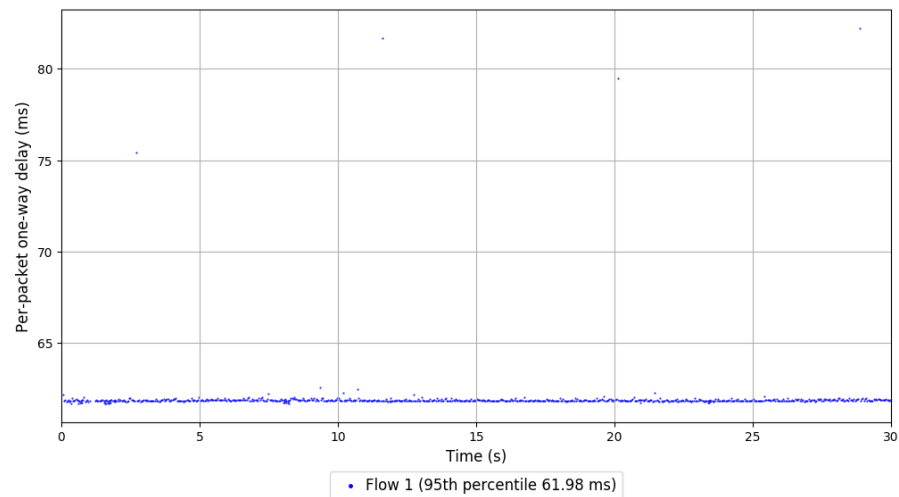
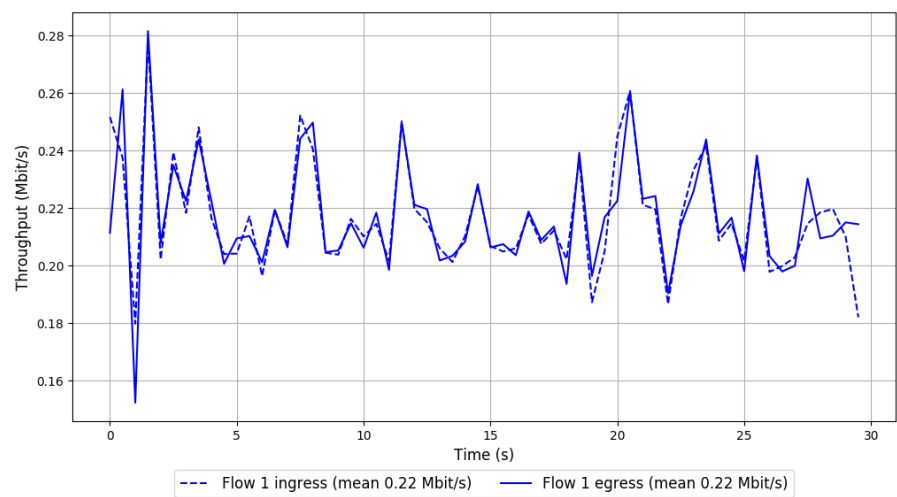


```
Run 10: Statistics of SCReAM

Start at: 2017-12-20 10:58:41
End at: 2017-12-20 10:59:11

# Below is generated by plot.py at 2017-12-20 12:20:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.985 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.985 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

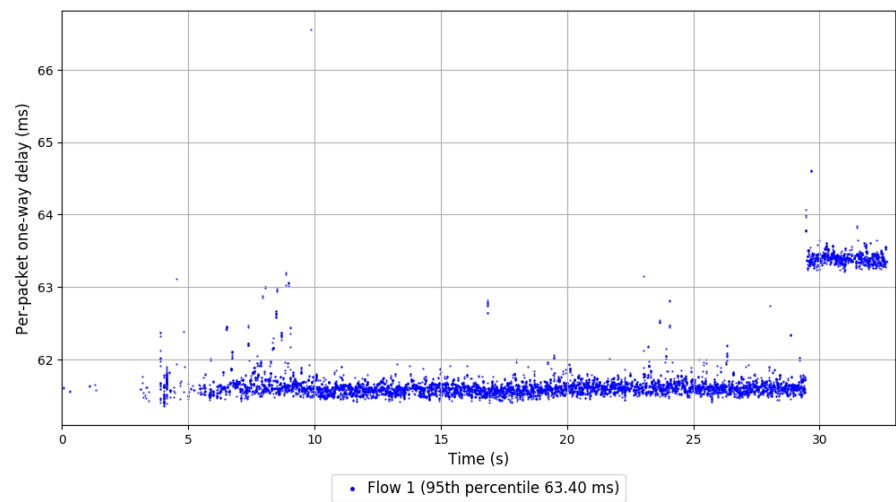
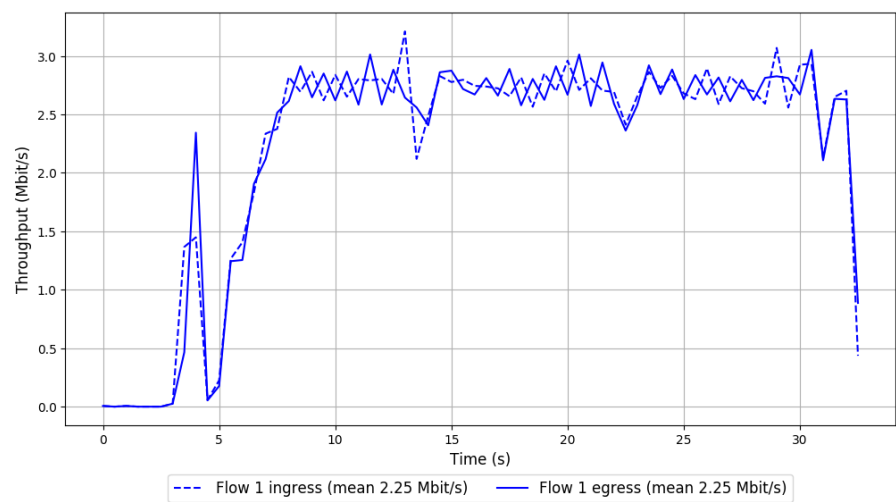


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-20 09:14:46
End at: 2017-12-20 09:15:16

# Below is generated by plot.py at 2017-12-20 12:20:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 63.404 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 63.404 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-20 09:25:43

End at: 2017-12-20 09:26:13

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 61.675 ms

Loss rate: 0.00%

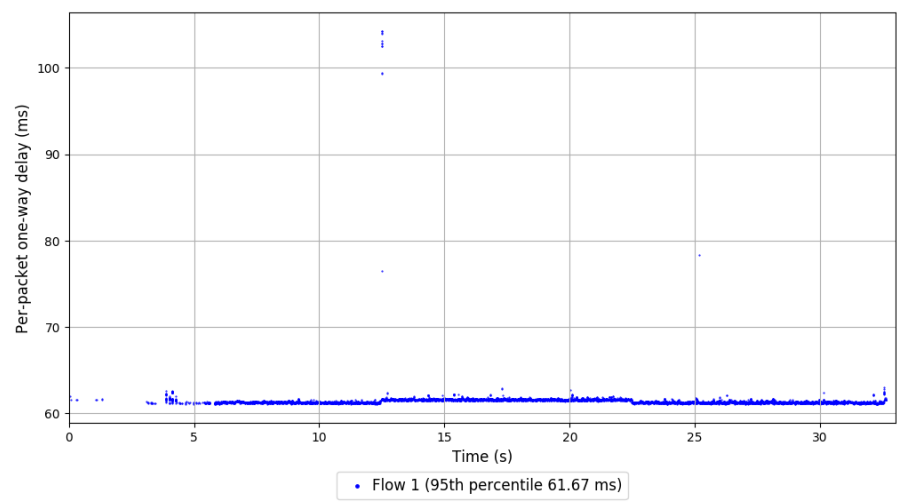
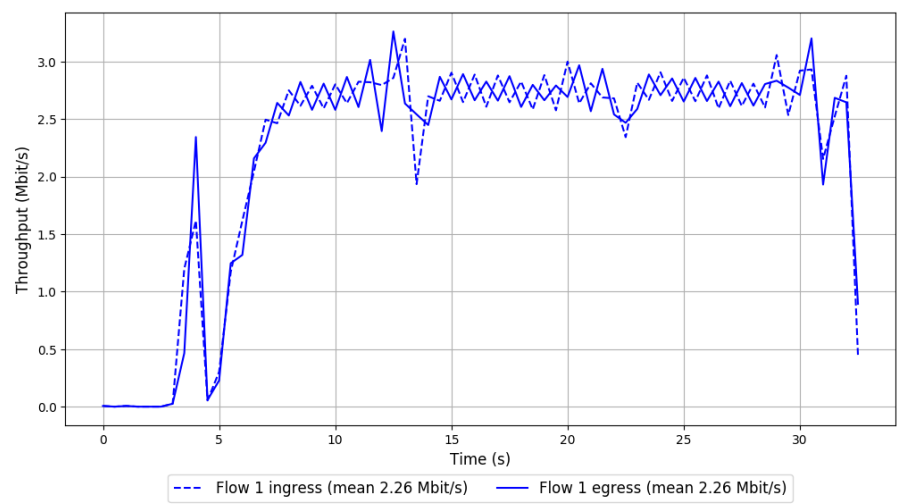
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 61.675 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-20 09:37:21

End at: 2017-12-20 09:37:51

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.635 ms

Loss rate: 0.00%

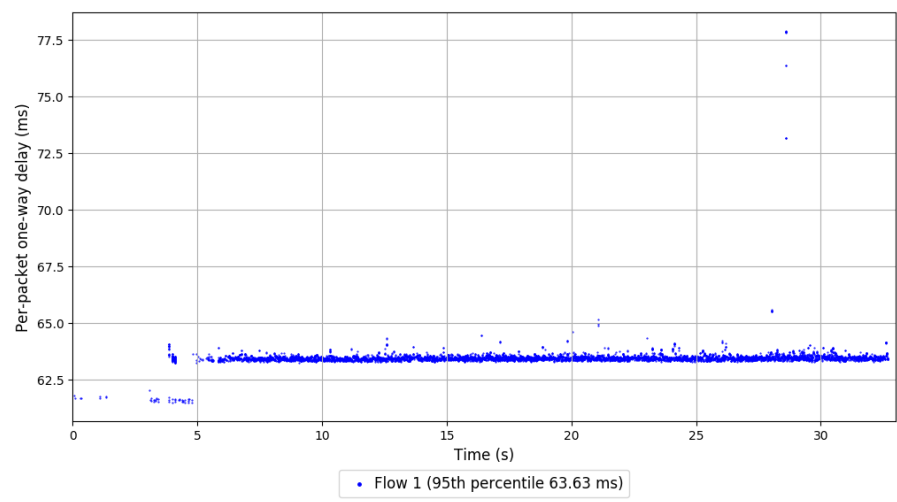
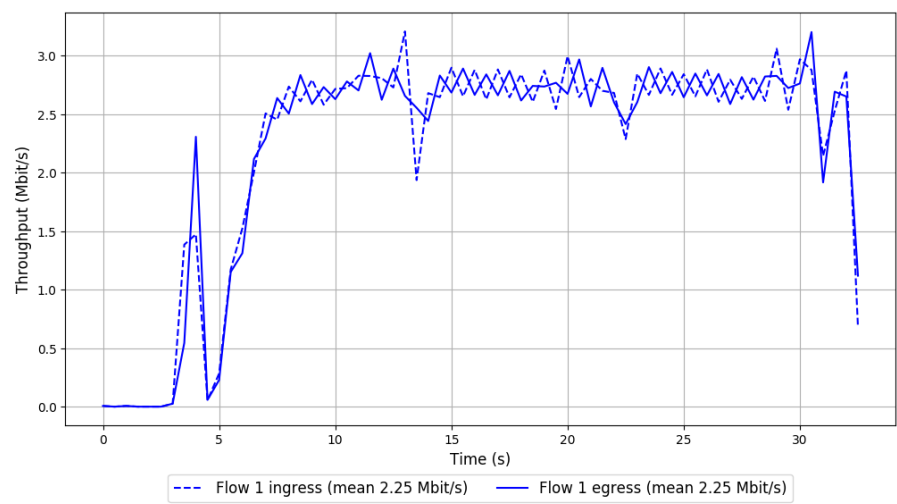
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.635 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-20 09:48:16

End at: 2017-12-20 09:48:47

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.761 ms

Loss rate: 0.00%

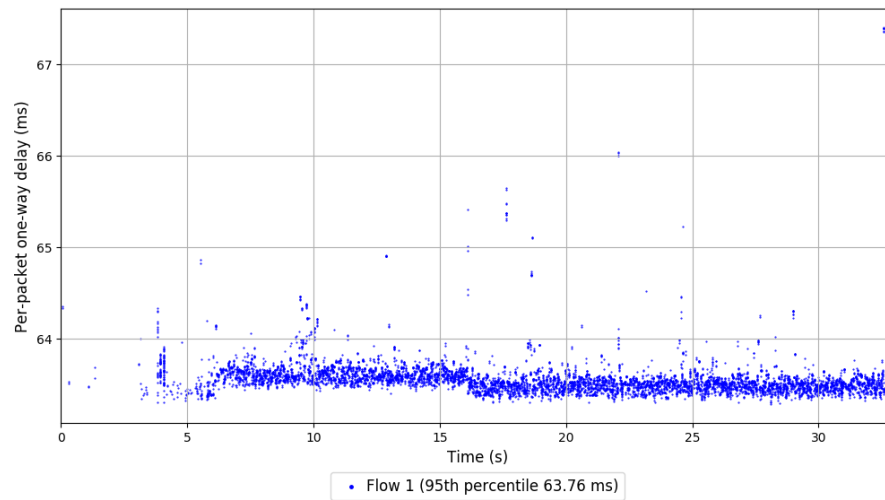
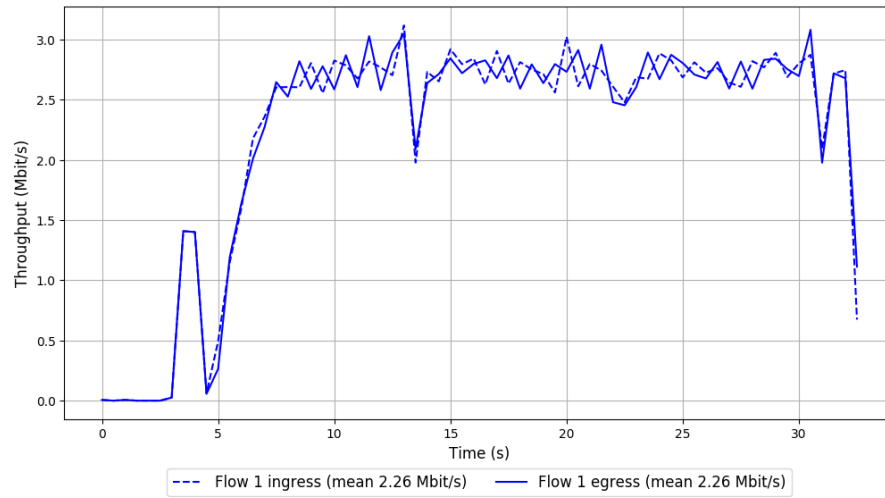
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.761 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-20 10:00:07

End at: 2017-12-20 10:00:37

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.920 ms

Loss rate: 0.00%

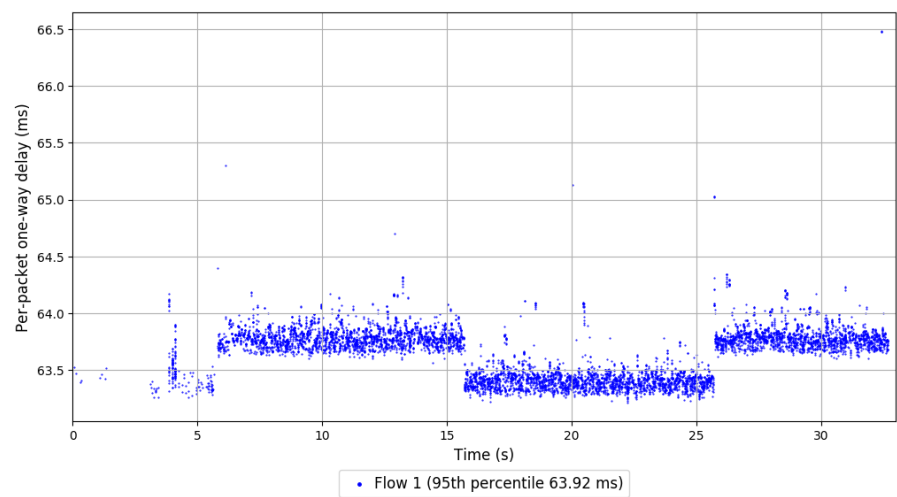
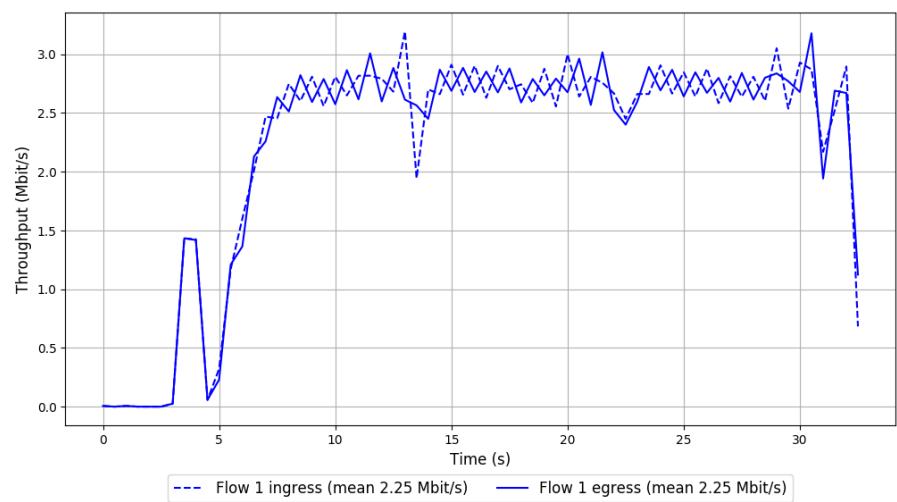
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.920 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-20 10:11:32

End at: 2017-12-20 10:12:02

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.808 ms

Loss rate: 0.00%

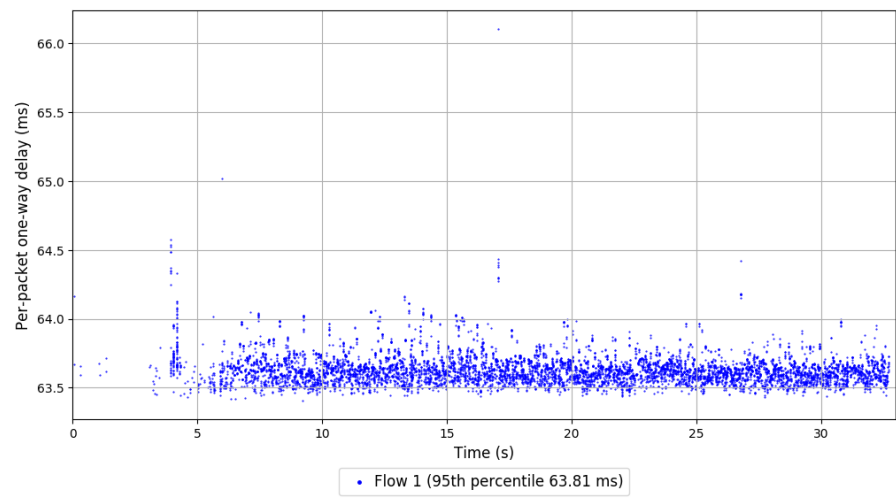
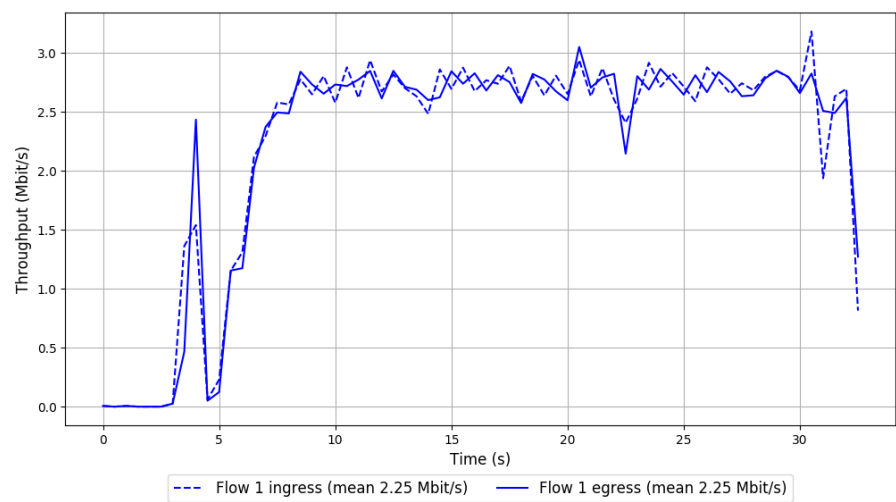
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.808 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-20 10:22:53

End at: 2017-12-20 10:23:23

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.794 ms

Loss rate: 0.00%

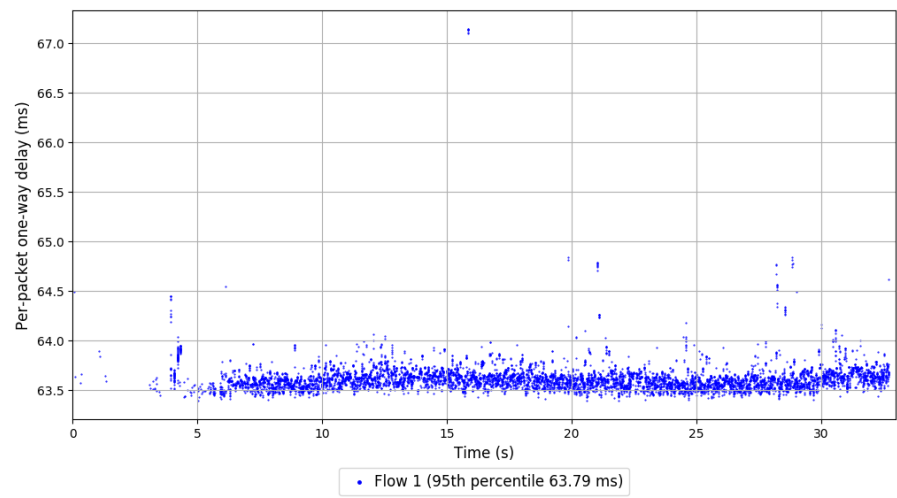
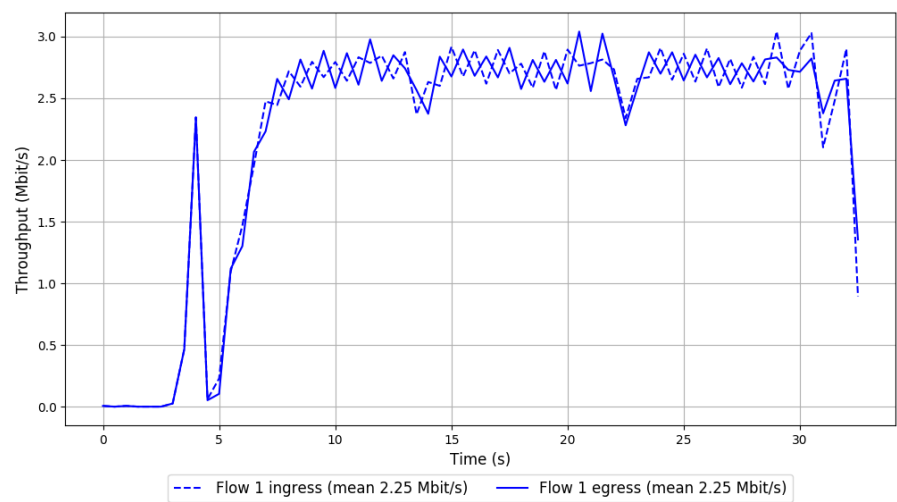
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.794 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-20 10:34:32

End at: 2017-12-20 10:35:02

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.844 ms

Loss rate: 0.00%

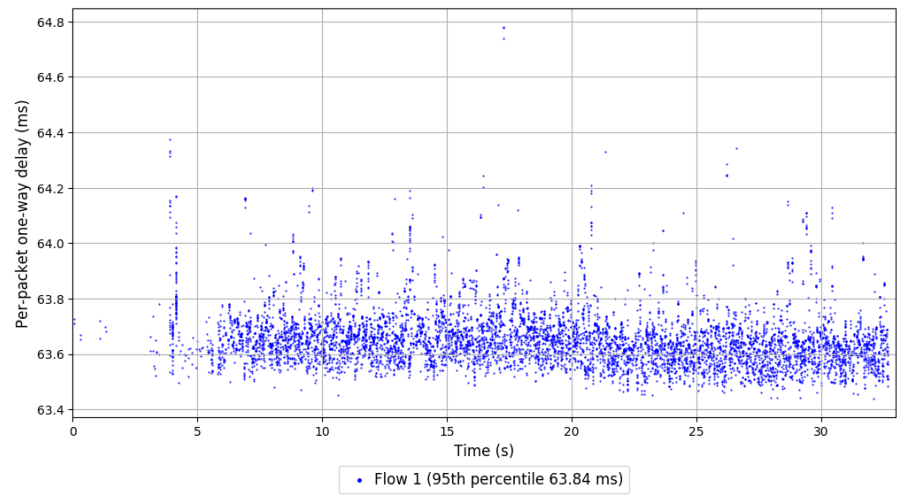
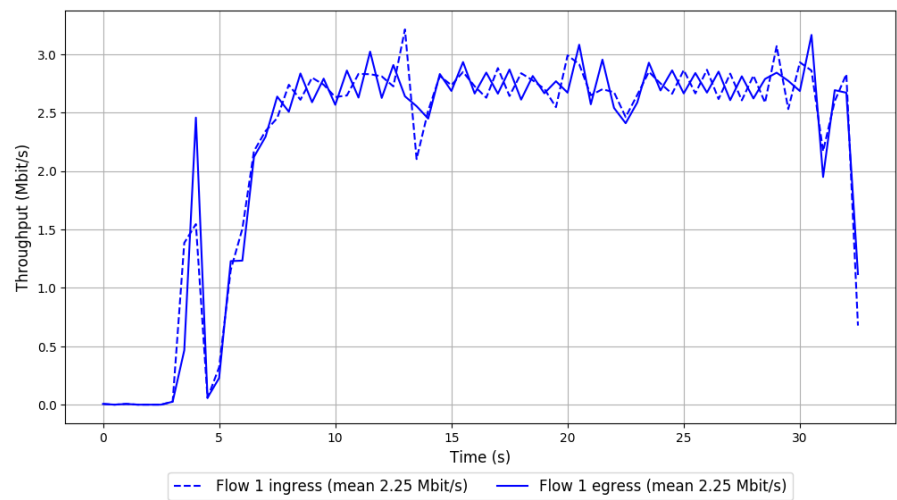
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.844 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-20 10:46:00

End at: 2017-12-20 10:46:30

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.792 ms

Loss rate: 0.00%

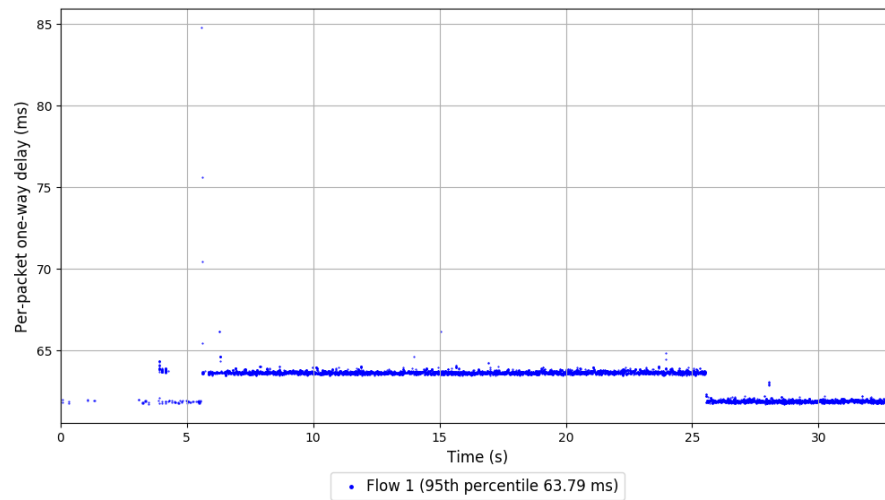
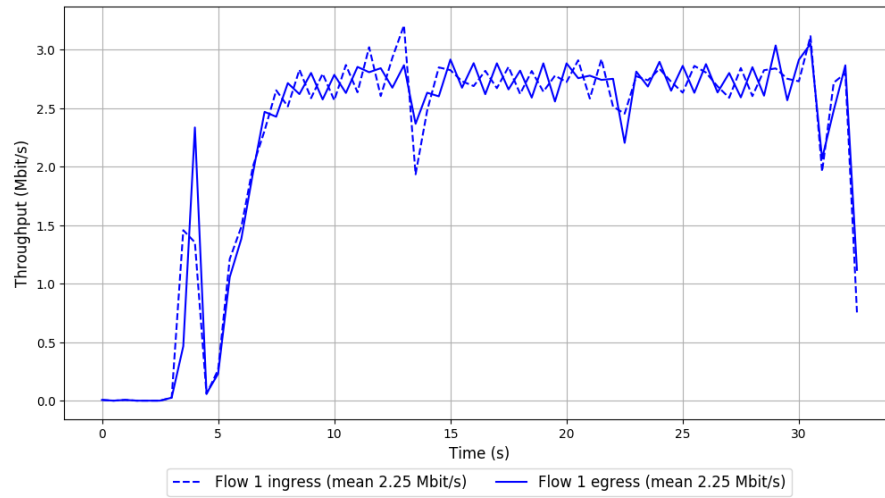
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.792 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-20 10:57:25

End at: 2017-12-20 10:57:55

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.863 ms

Loss rate: 0.00%

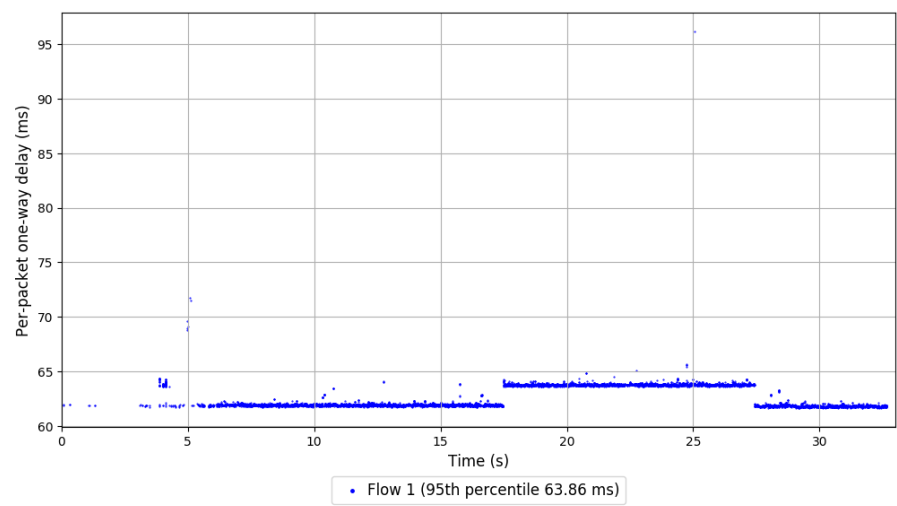
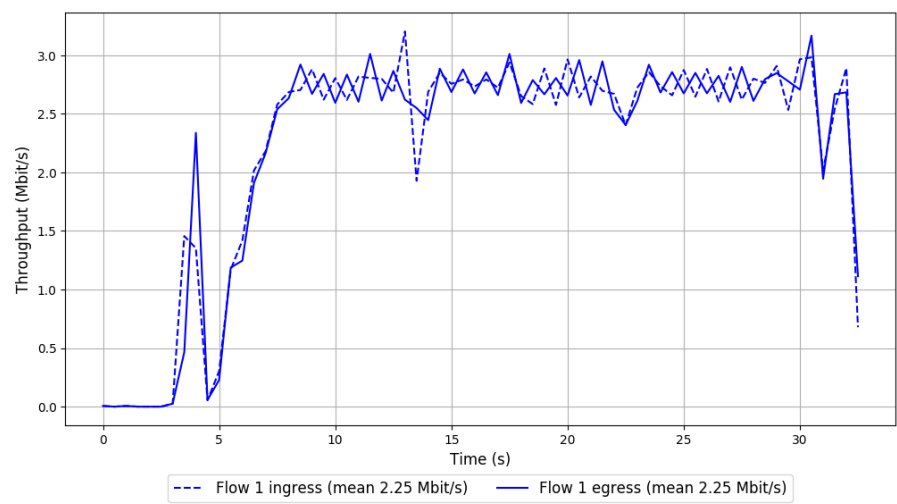
-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 63.863 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-20 09:06:22

End at: 2017-12-20 09:06:52

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 64.039 ms

Loss rate: 0.00%

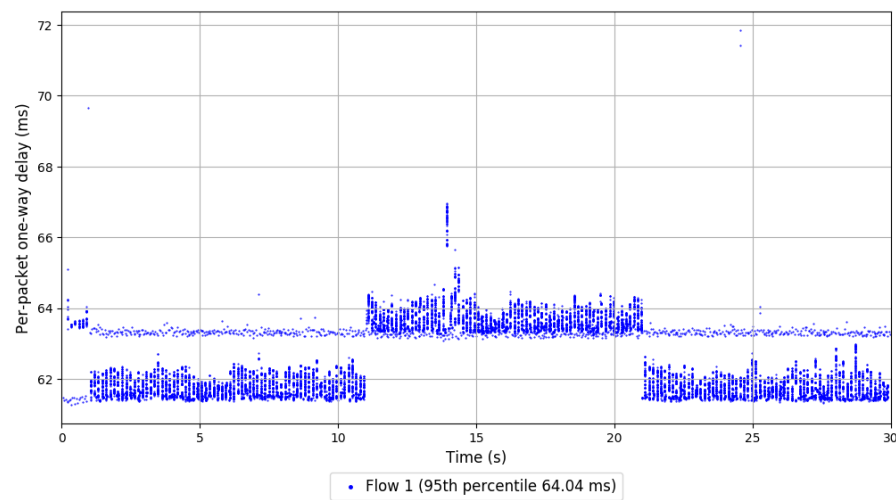
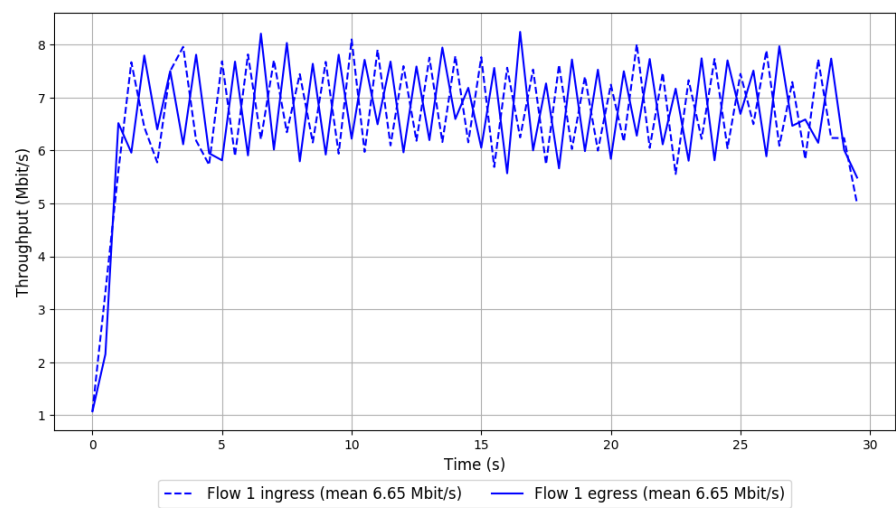
-- Flow 1:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 64.039 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-20 09:18:07

End at: 2017-12-20 09:18:37

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.71 Mbit/s

95th percentile per-packet one-way delay: 64.214 ms

Loss rate: 0.13%

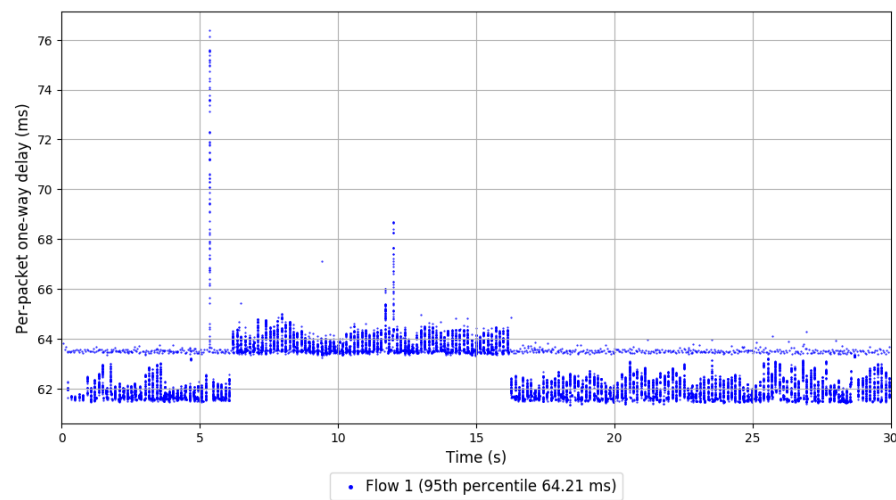
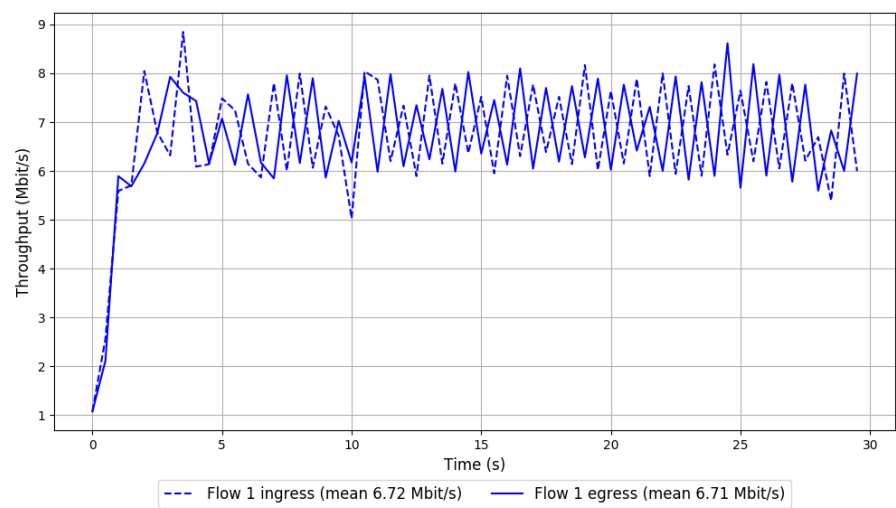
-- Flow 1:

Average throughput: 6.71 Mbit/s

95th percentile per-packet one-way delay: 64.214 ms

Loss rate: 0.13%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-20 09:29:03

End at: 2017-12-20 09:29:33

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 63.075 ms

Loss rate: 0.11%

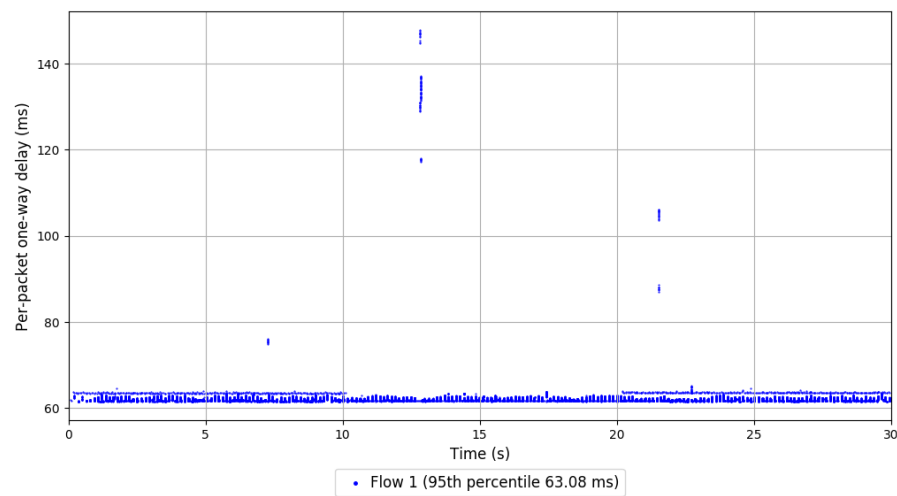
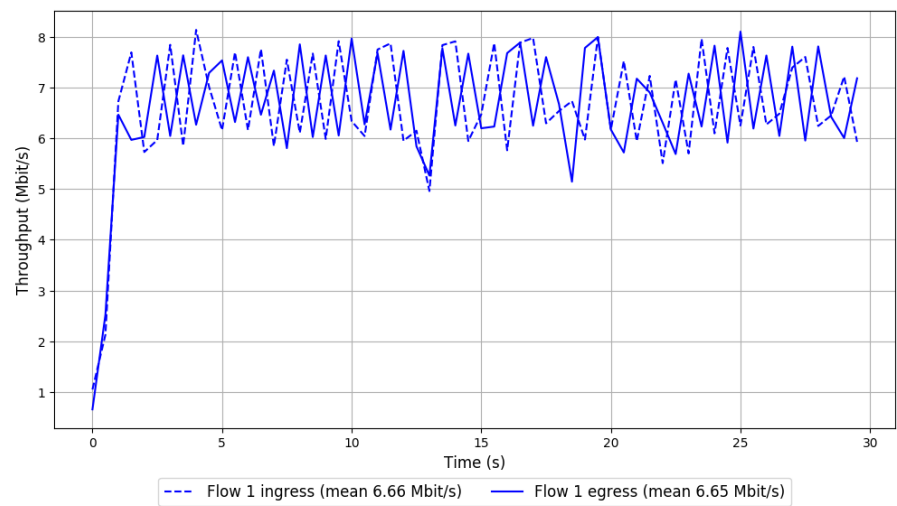
-- Flow 1:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 63.075 ms

Loss rate: 0.11%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-20 09:40:42

End at: 2017-12-20 09:41:12

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.36 Mbit/s

95th percentile per-packet one-way delay: 64.592 ms

Loss rate: 0.15%

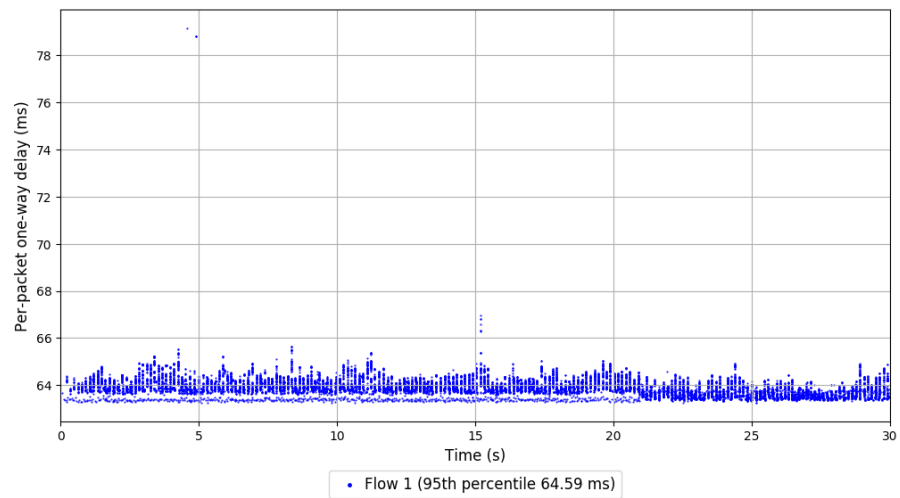
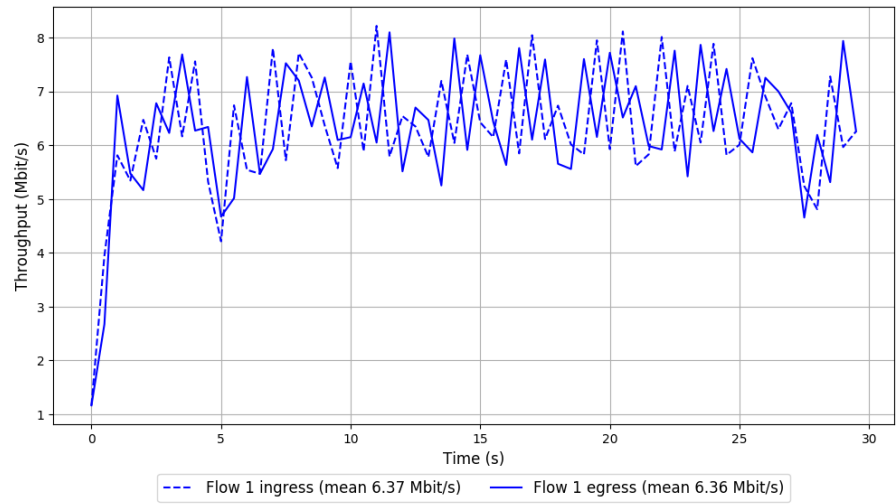
-- Flow 1:

Average throughput: 6.36 Mbit/s

95th percentile per-packet one-way delay: 64.592 ms

Loss rate: 0.15%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-20 09:51:38

End at: 2017-12-20 09:52:08

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.58 Mbit/s

95th percentile per-packet one-way delay: 64.630 ms

Loss rate: 0.26%

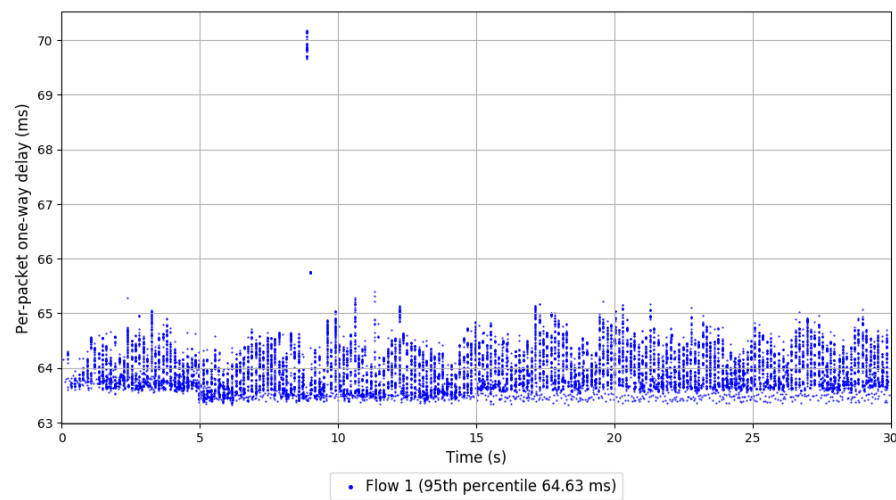
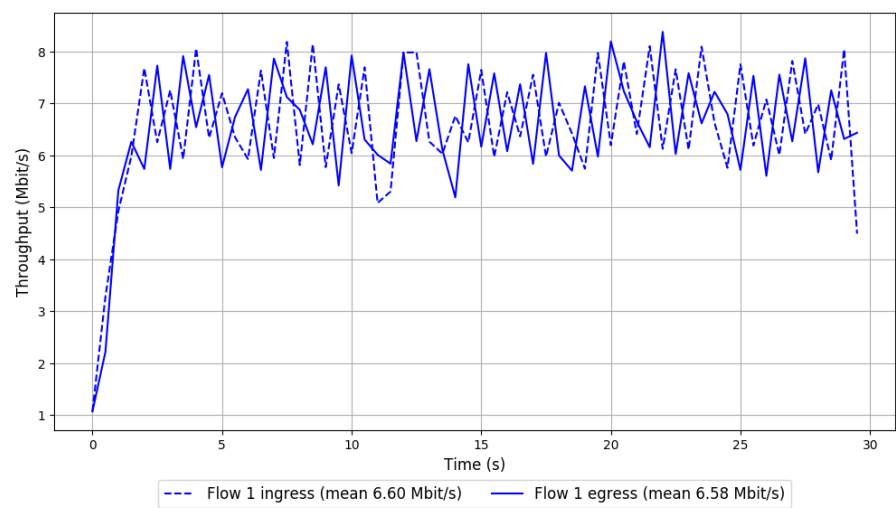
-- Flow 1:

Average throughput: 6.58 Mbit/s

95th percentile per-packet one-way delay: 64.630 ms

Loss rate: 0.26%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-20 10:03:30

End at: 2017-12-20 10:04:00

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 64.740 ms

Loss rate: 0.00%

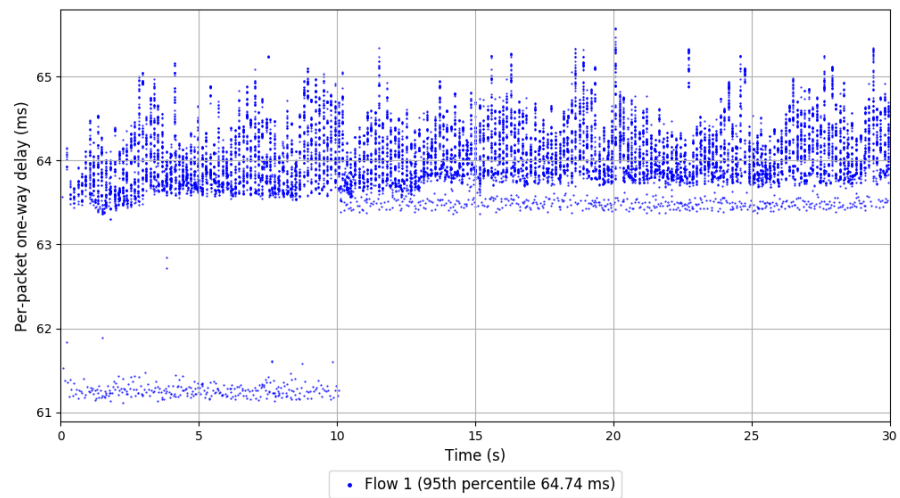
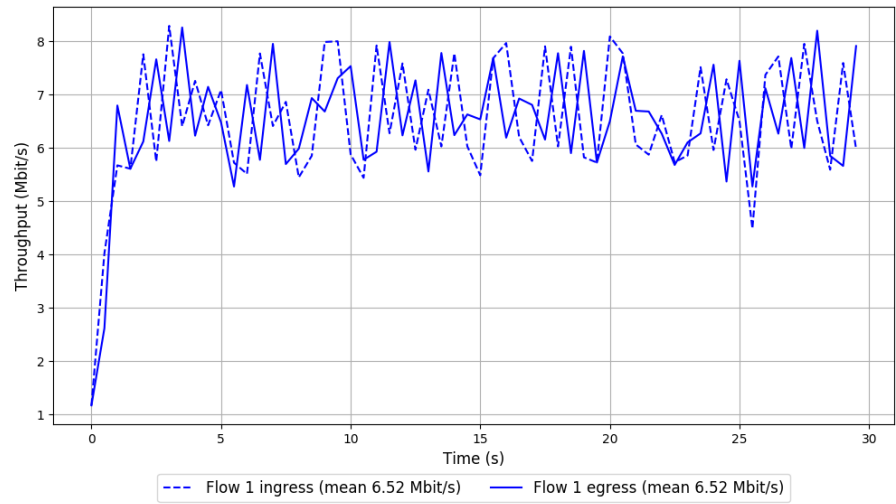
-- Flow 1:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 64.740 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-20 10:14:48

End at: 2017-12-20 10:15:18

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.20 Mbit/s

95th percentile per-packet one-way delay: 64.690 ms

Loss rate: 0.94%

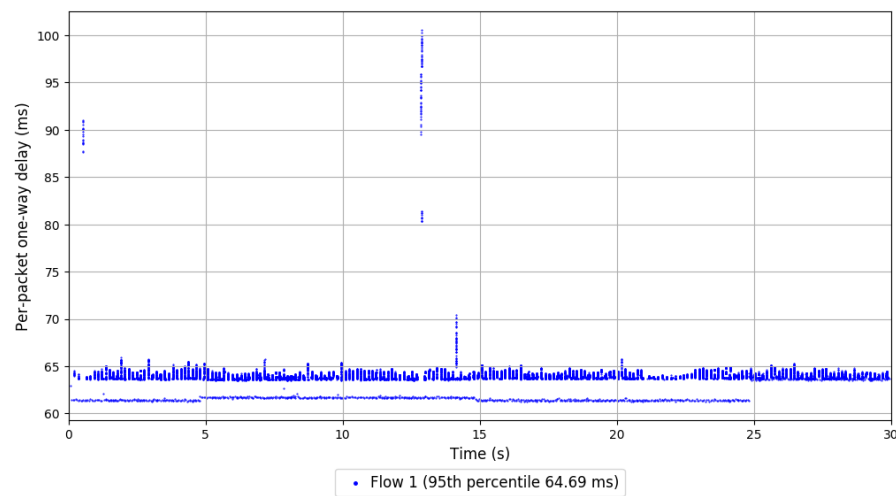
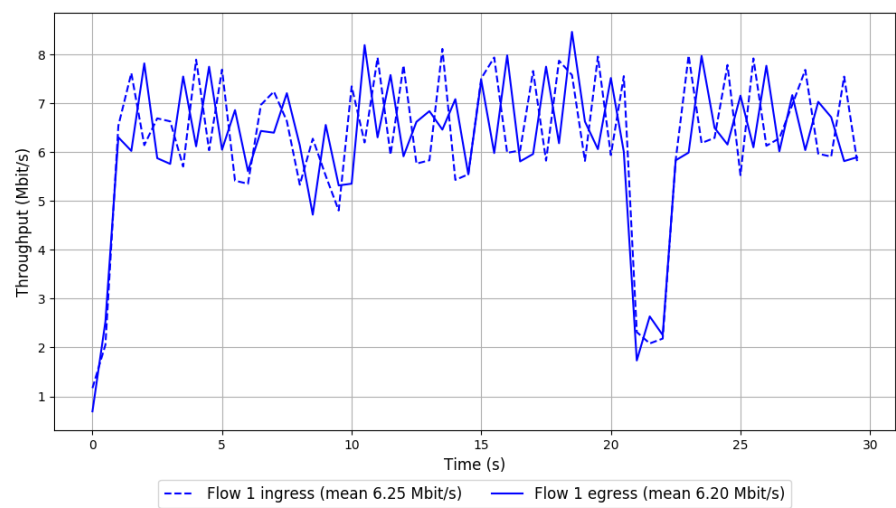
-- Flow 1:

Average throughput: 6.20 Mbit/s

95th percentile per-packet one-way delay: 64.690 ms

Loss rate: 0.94%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-20 10:26:13

End at: 2017-12-20 10:26:43

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.550 ms

Loss rate: 0.16%

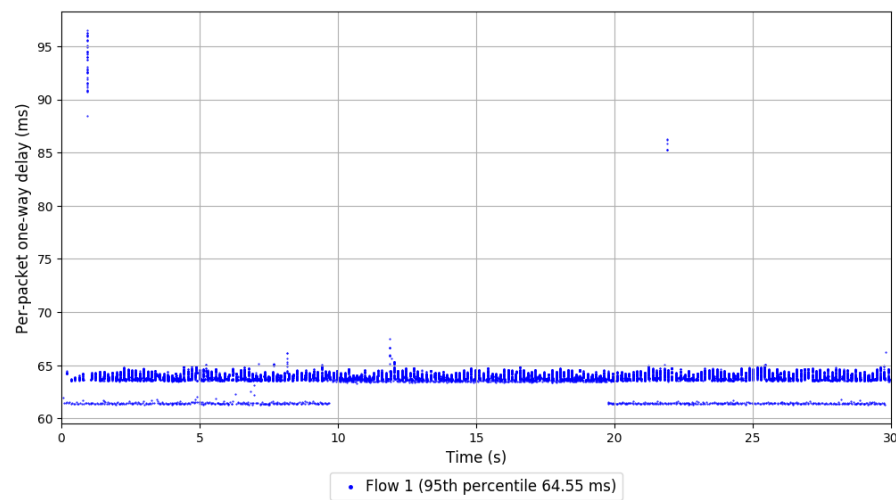
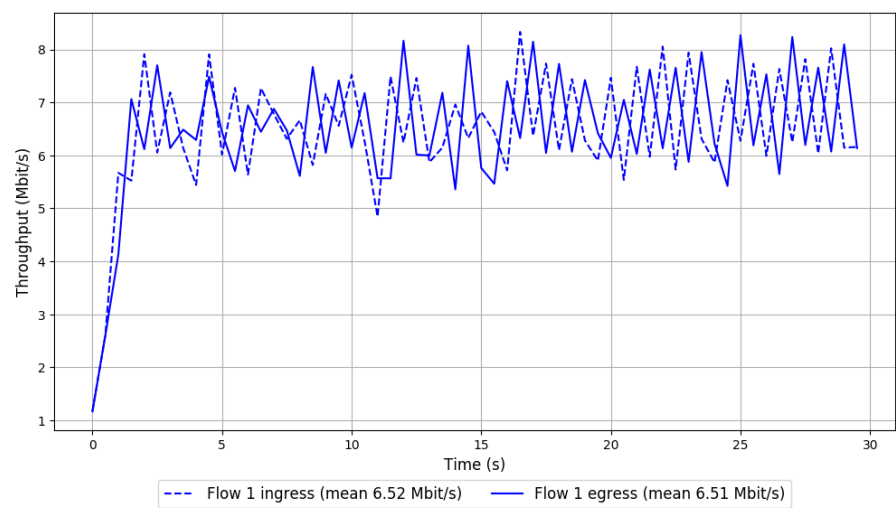
-- Flow 1:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.550 ms

Loss rate: 0.16%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-20 10:37:50

End at: 2017-12-20 10:38:20

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.59 Mbit/s

95th percentile per-packet one-way delay: 64.730 ms

Loss rate: 0.13%

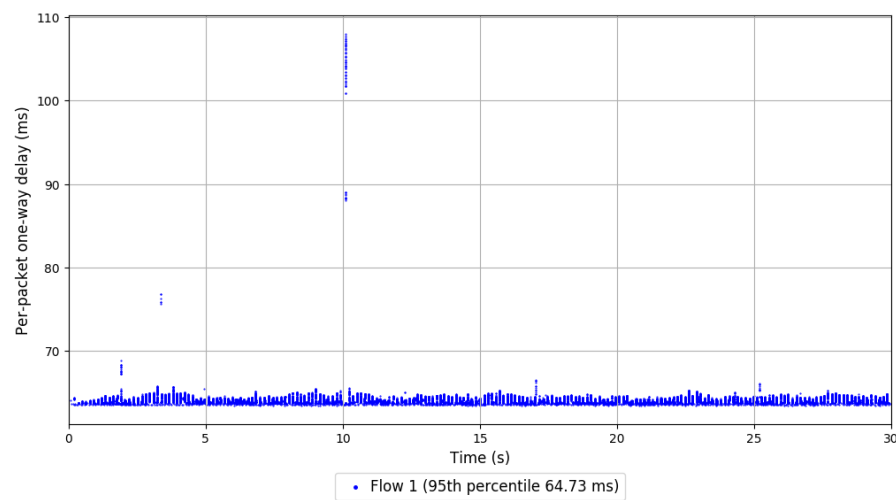
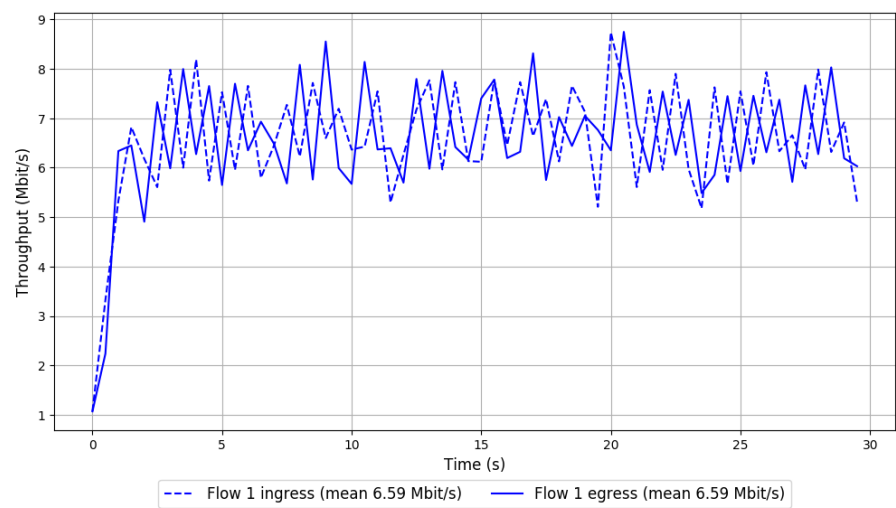
-- Flow 1:

Average throughput: 6.59 Mbit/s

95th percentile per-packet one-way delay: 64.730 ms

Loss rate: 0.13%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-20 10:49:17

End at: 2017-12-20 10:49:47

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 64.780 ms

Loss rate: 0.67%

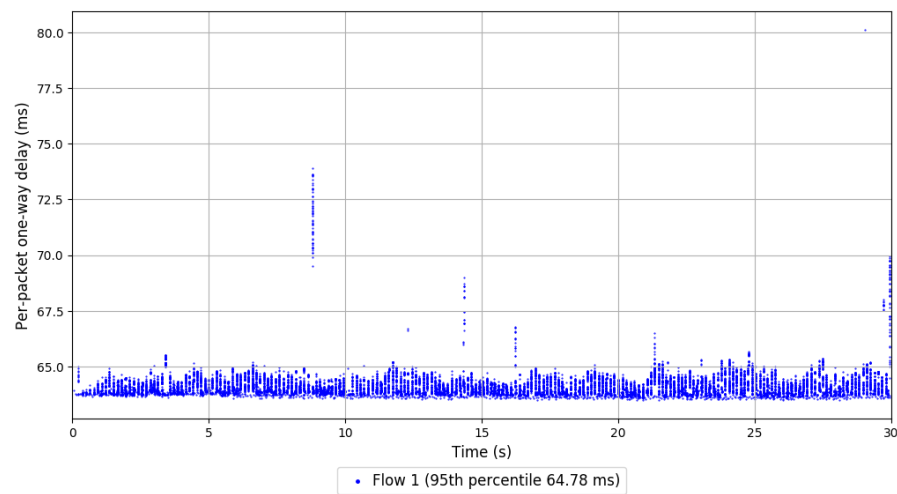
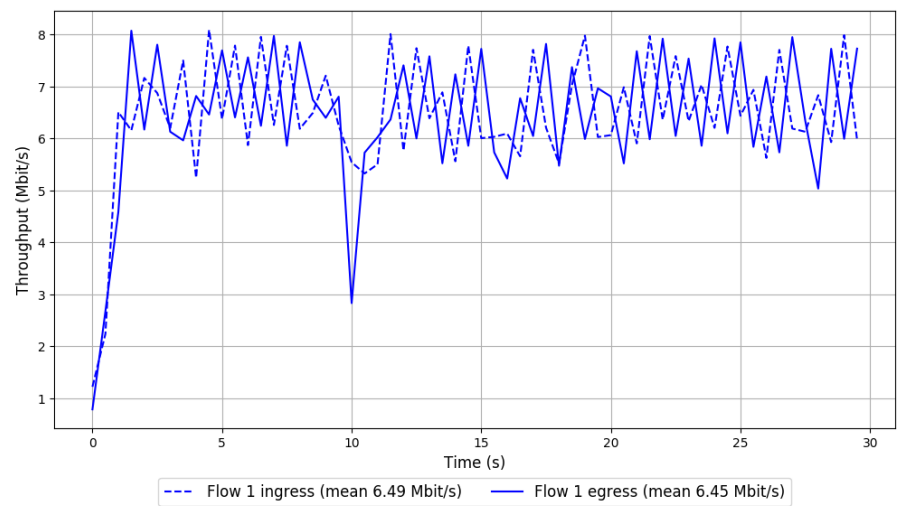
-- Flow 1:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 64.780 ms

Loss rate: 0.67%

Run 10: Report of Sprout — Data Link

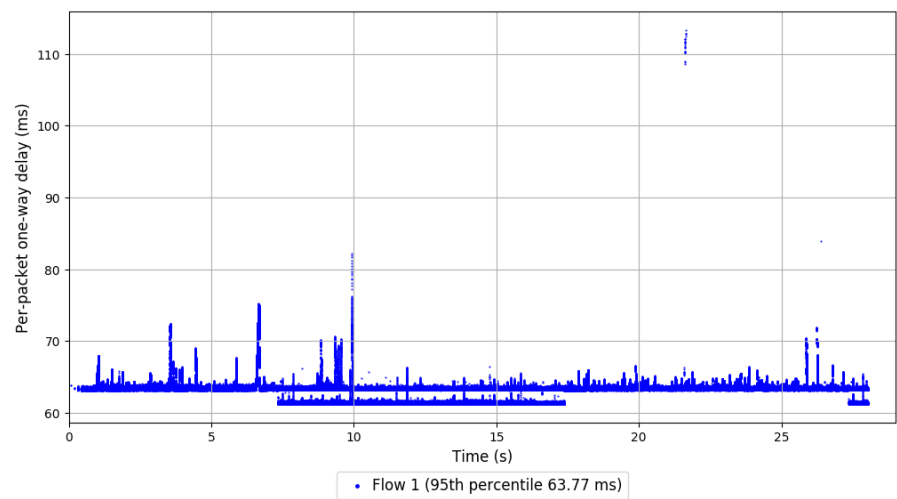
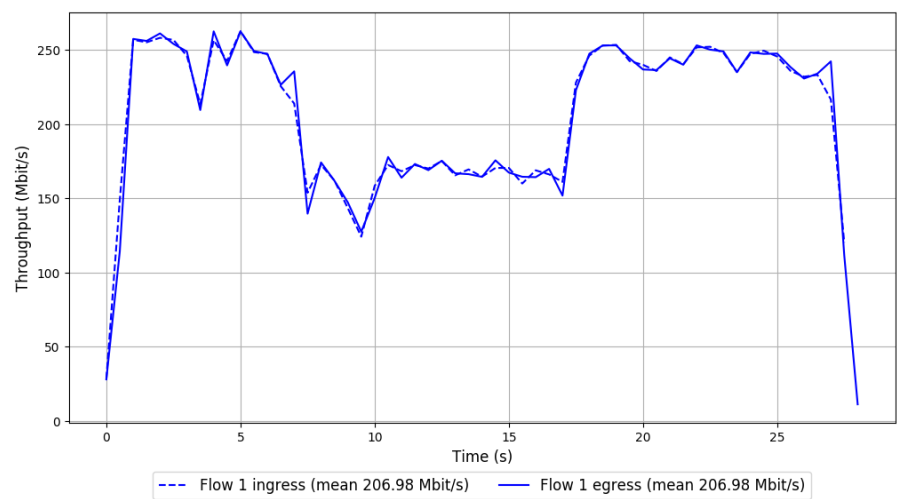


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-20 09:10:14
End at: 2017-12-20 09:10:44

# Below is generated by plot.py at 2017-12-20 12:20:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 206.98 Mbit/s
95th percentile per-packet one-way delay: 63.772 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 206.98 Mbit/s
95th percentile per-packet one-way delay: 63.772 ms
Loss rate: 0.00%
```


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

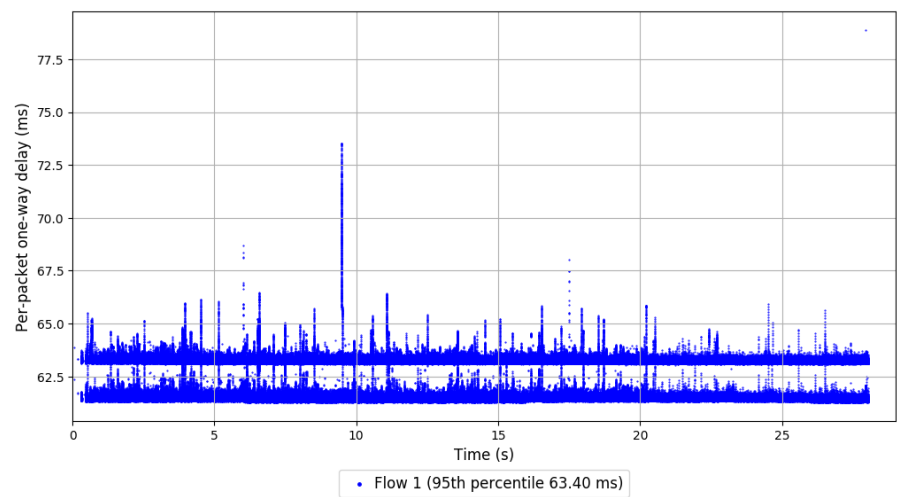
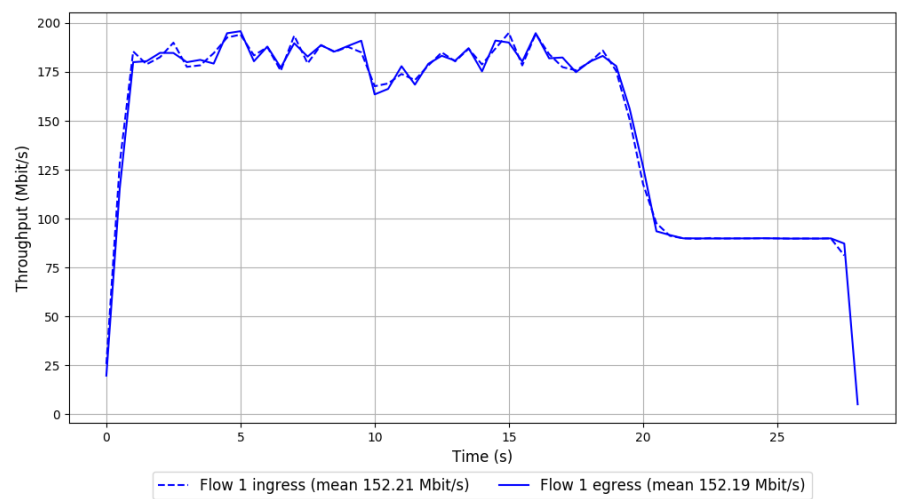


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-20 09:21:55
End at: 2017-12-20 09:22:25

# Below is generated by plot.py at 2017-12-20 12:20:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 152.19 Mbit/s
95th percentile per-packet one-way delay: 63.398 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 152.19 Mbit/s
95th percentile per-packet one-way delay: 63.398 ms
Loss rate: 0.01%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-20 09:32:53

End at: 2017-12-20 09:33:23

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 135.76 Mbit/s

95th percentile per-packet one-way delay: 63.569 ms

Loss rate: 0.00%

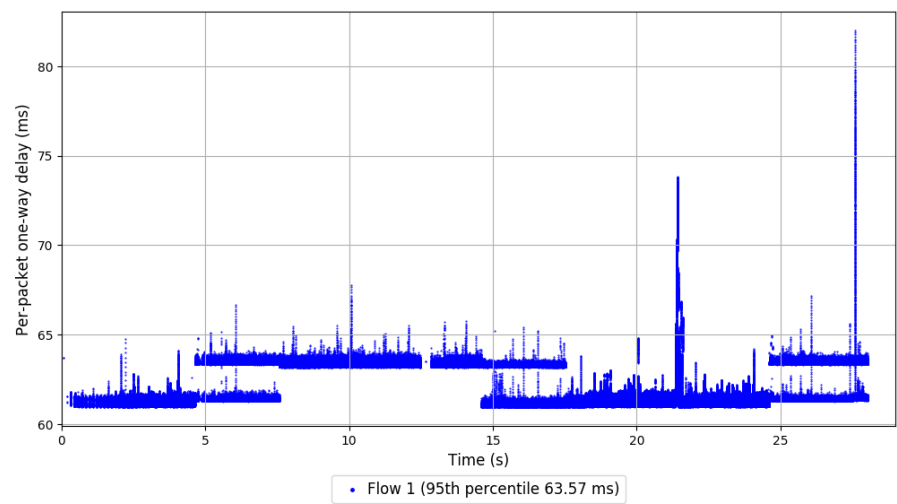
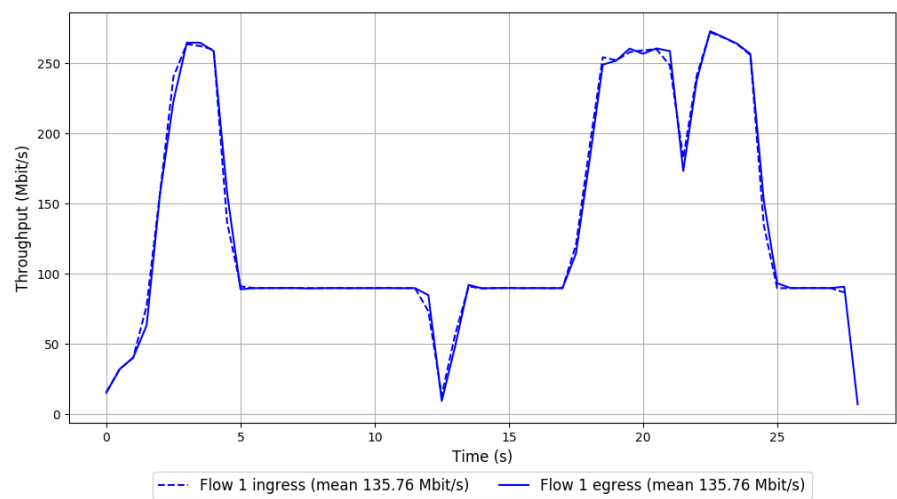
-- Flow 1:

Average throughput: 135.76 Mbit/s

95th percentile per-packet one-way delay: 63.569 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-20 09:44:26

End at: 2017-12-20 09:44:57

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 148.40 Mbit/s

95th percentile per-packet one-way delay: 63.762 ms

Loss rate: 0.00%

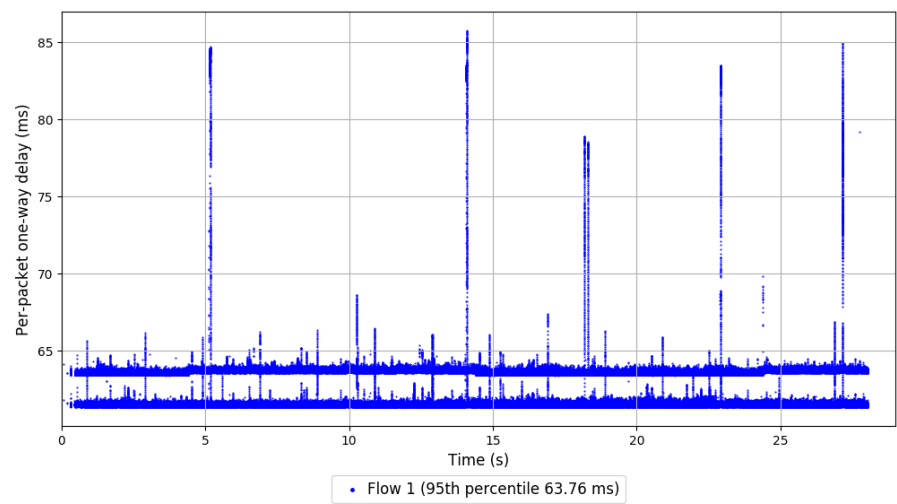
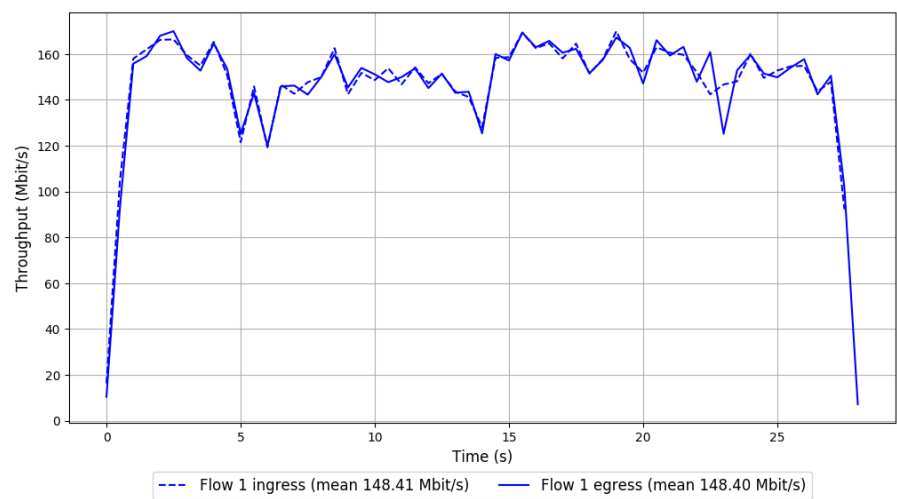
-- Flow 1:

Average throughput: 148.40 Mbit/s

95th percentile per-packet one-way delay: 63.762 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-20 09:55:31

End at: 2017-12-20 09:56:01

Below is generated by plot.py at 2017-12-20 12:20:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.49 Mbit/s

95th percentile per-packet one-way delay: 63.898 ms

Loss rate: 0.03%

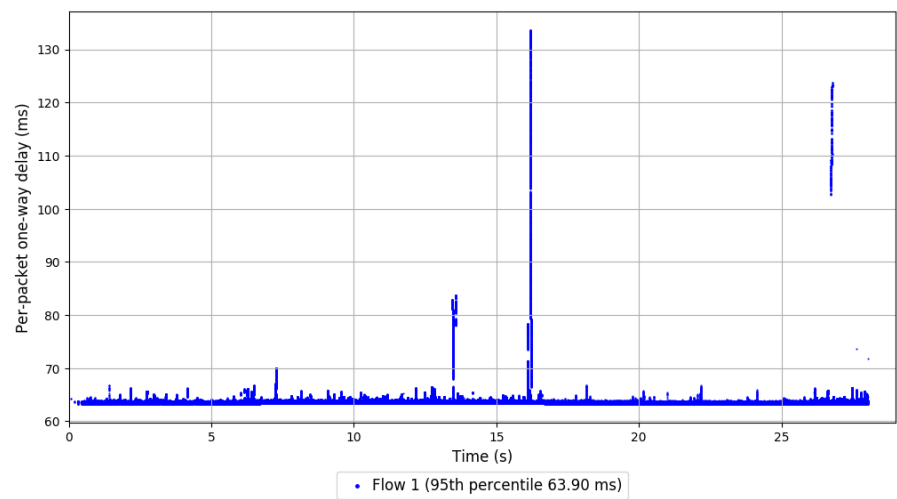
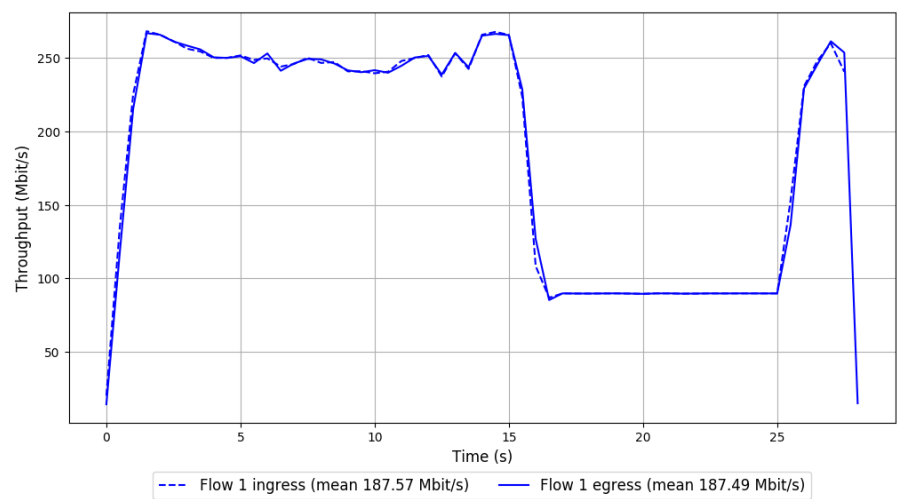
-- Flow 1:

Average throughput: 187.49 Mbit/s

95th percentile per-packet one-way delay: 63.898 ms

Loss rate: 0.03%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-20 10:07:20

End at: 2017-12-20 10:07:50

Below is generated by plot.py at 2017-12-20 12:21:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 239.71 Mbit/s

95th percentile per-packet one-way delay: 64.239 ms

Loss rate: 0.09%

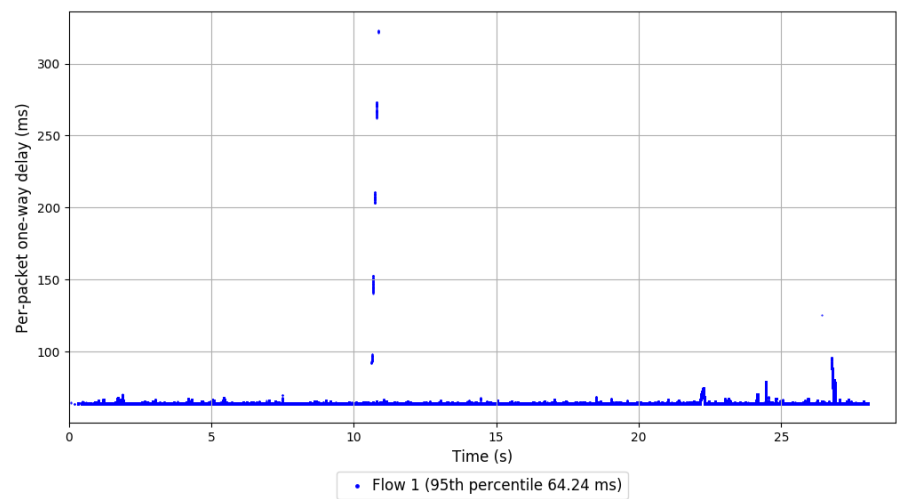
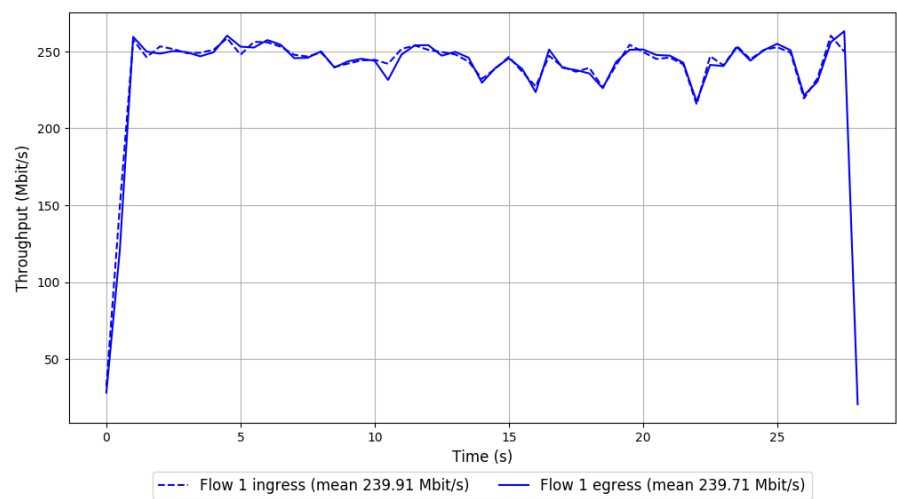
-- Flow 1:

Average throughput: 239.71 Mbit/s

95th percentile per-packet one-way delay: 64.239 ms

Loss rate: 0.09%

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

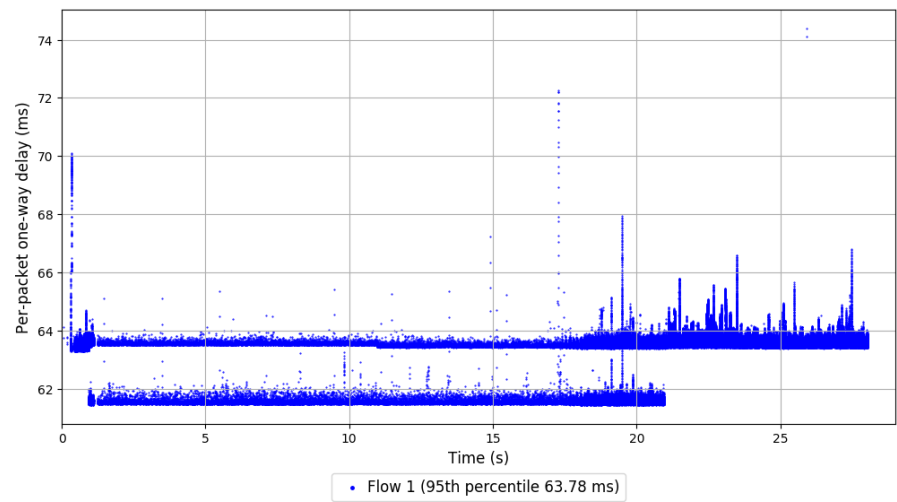
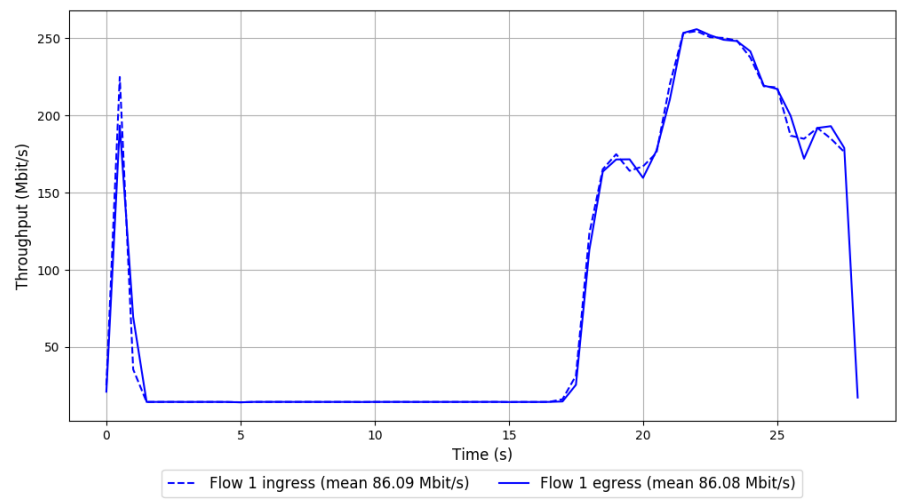


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-12-20 10:18:30
End at: 2017-12-20 10:19:00

# Below is generated by plot.py at 2017-12-20 12:21:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.08 Mbit/s
95th percentile per-packet one-way delay: 63.779 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 86.08 Mbit/s
95th percentile per-packet one-way delay: 63.779 ms
Loss rate: 0.02%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-20 10:30:02

End at: 2017-12-20 10:30:32

Below is generated by plot.py at 2017-12-20 12:25:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.24 Mbit/s

95th percentile per-packet one-way delay: 63.975 ms

Loss rate: 0.03%

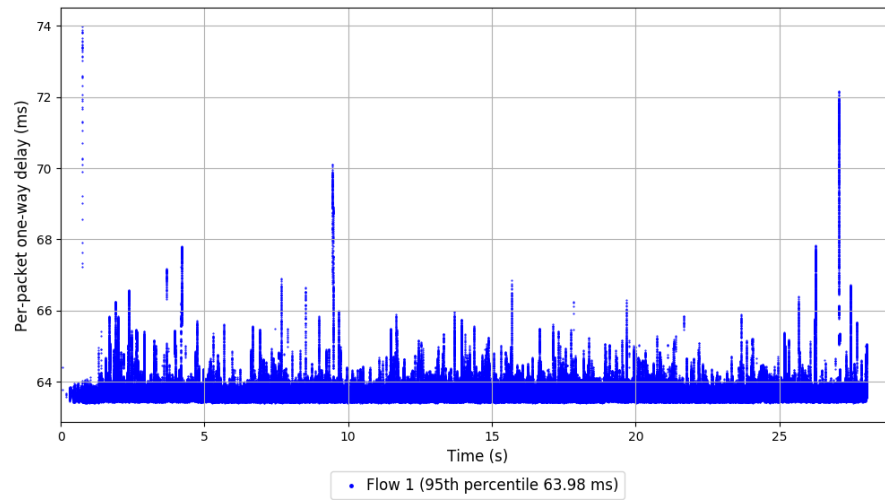
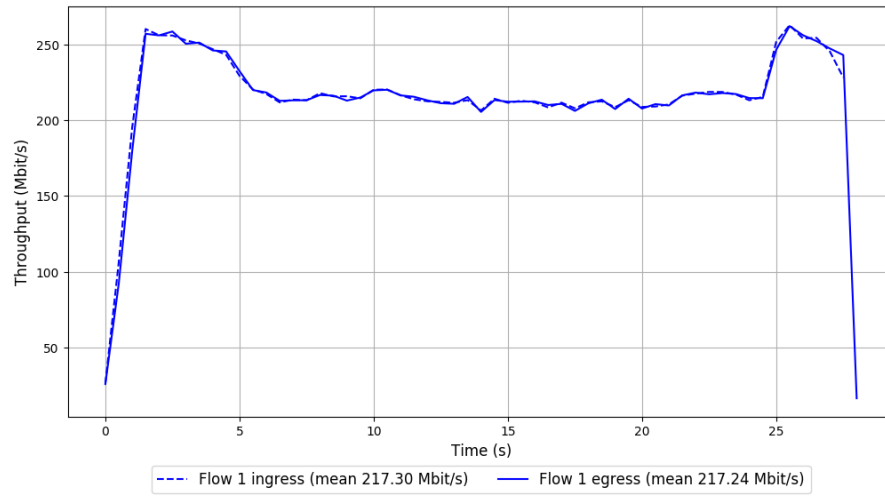
-- Flow 1:

Average throughput: 217.24 Mbit/s

95th percentile per-packet one-way delay: 63.975 ms

Loss rate: 0.03%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-20 10:41:36

End at: 2017-12-20 10:42:06

Below is generated by plot.py at 2017-12-20 12:25:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 147.12 Mbit/s

95th percentile per-packet one-way delay: 63.719 ms

Loss rate: 0.01%

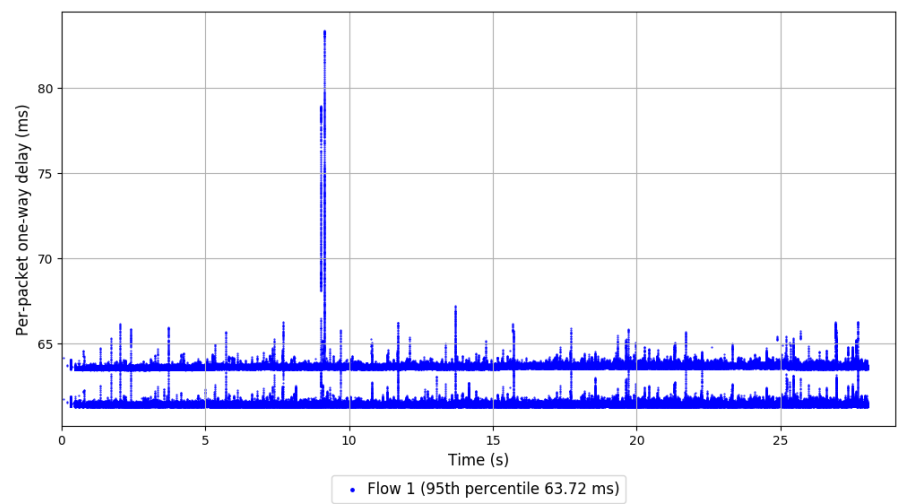
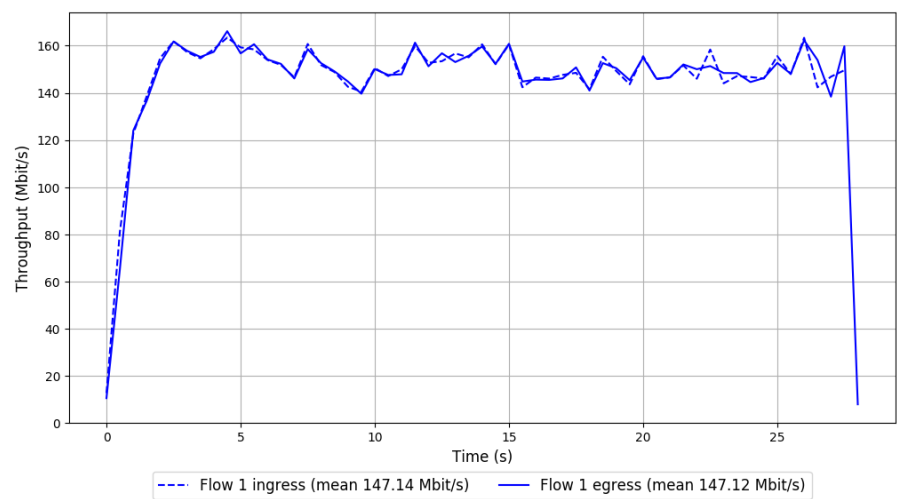
-- Flow 1:

Average throughput: 147.12 Mbit/s

95th percentile per-packet one-way delay: 63.719 ms

Loss rate: 0.01%

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

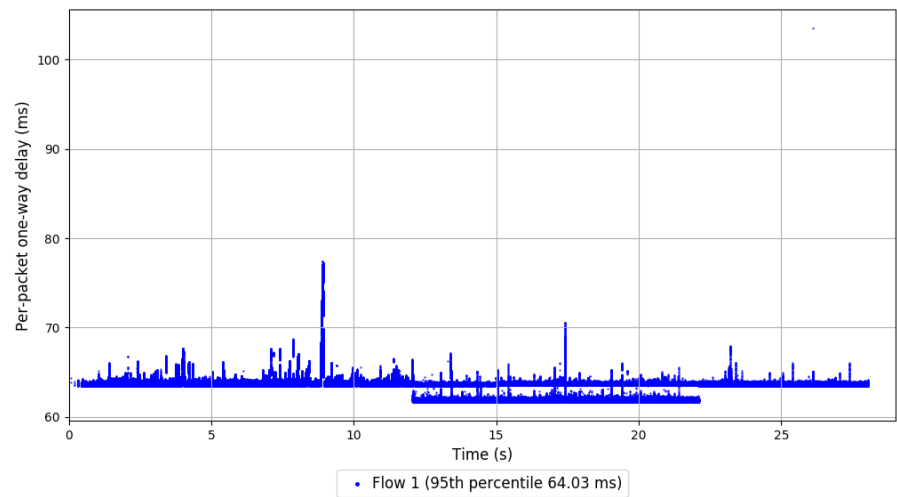
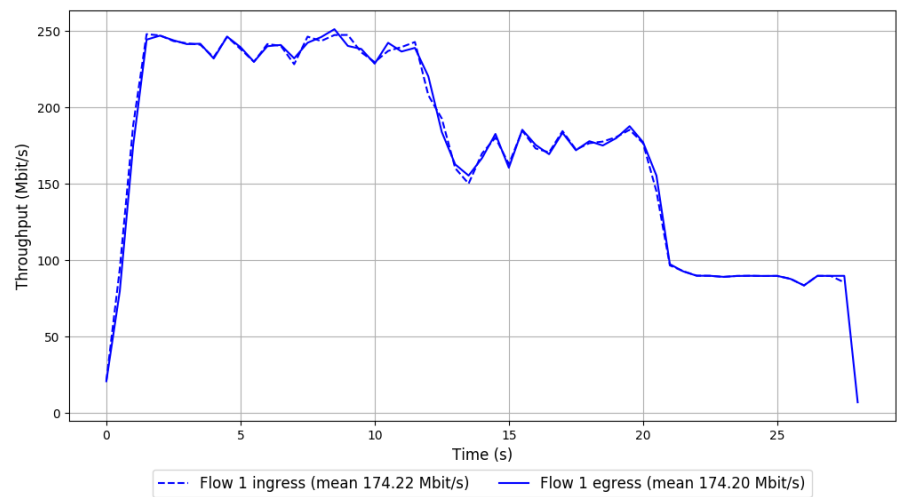


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-20 10:53:06
End at: 2017-12-20 10:53:36

# Below is generated by plot.py at 2017-12-20 12:25:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 174.20 Mbit/s
95th percentile per-packet one-way delay: 64.034 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 174.20 Mbit/s
95th percentile per-packet one-way delay: 64.034 ms
Loss rate: 0.01%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-20 09:05:42

End at: 2017-12-20 09:06:12

Below is generated by plot.py at 2017-12-20 12:25:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.80 Mbit/s

95th percentile per-packet one-way delay: 64.524 ms

Loss rate: 0.00%

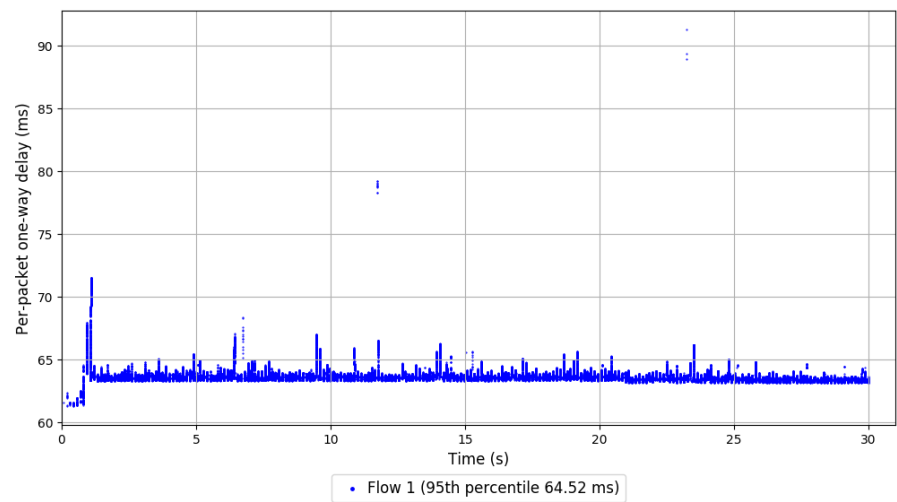
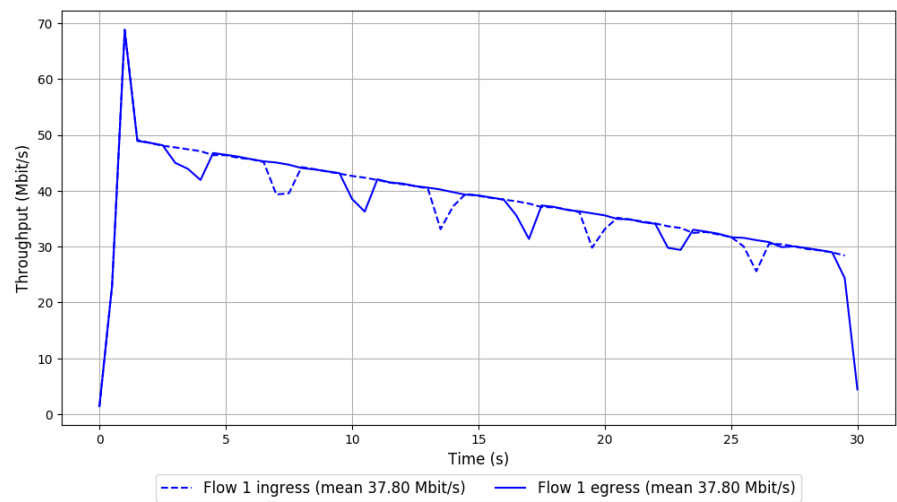
-- Flow 1:

Average throughput: 37.80 Mbit/s

95th percentile per-packet one-way delay: 64.524 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-20 09:17:27

End at: 2017-12-20 09:17:57

Below is generated by plot.py at 2017-12-20 12:25:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.44 Mbit/s

95th percentile per-packet one-way delay: 62.327 ms

Loss rate: 0.01%

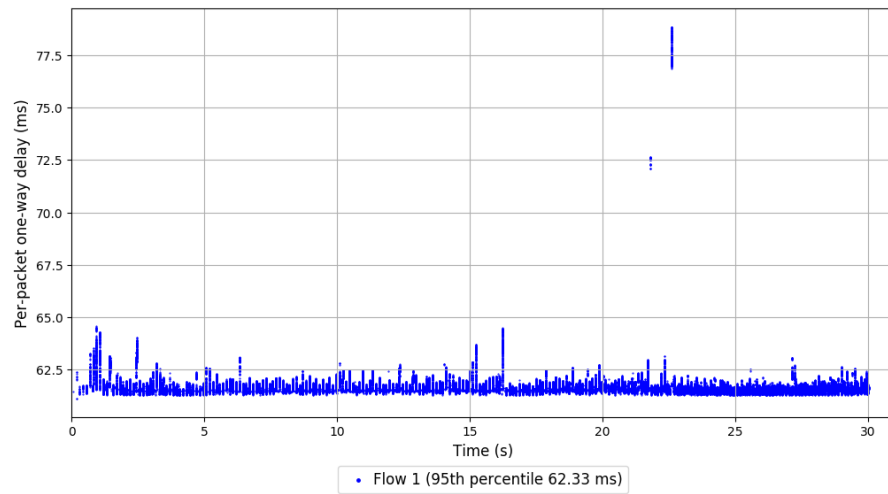
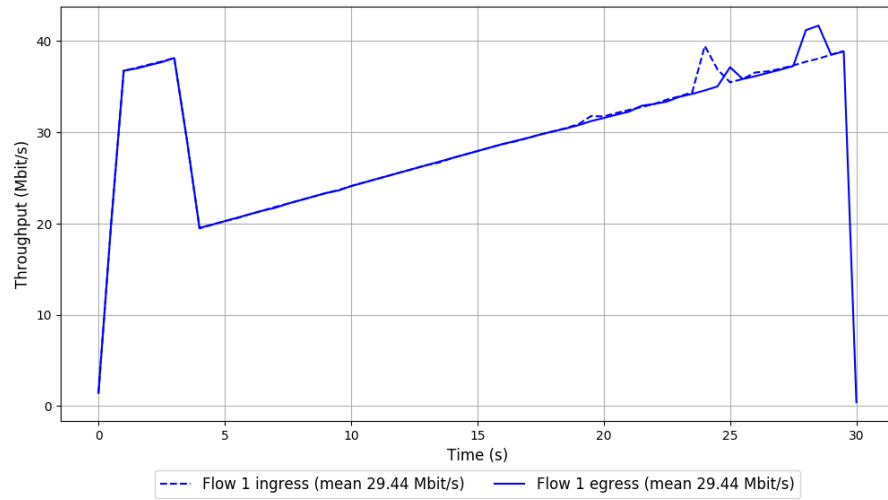
-- Flow 1:

Average throughput: 29.44 Mbit/s

95th percentile per-packet one-way delay: 62.327 ms

Loss rate: 0.01%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-20 09:28:24

End at: 2017-12-20 09:28:54

Below is generated by plot.py at 2017-12-20 12:25:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.63 Mbit/s

95th percentile per-packet one-way delay: 64.572 ms

Loss rate: 0.10%

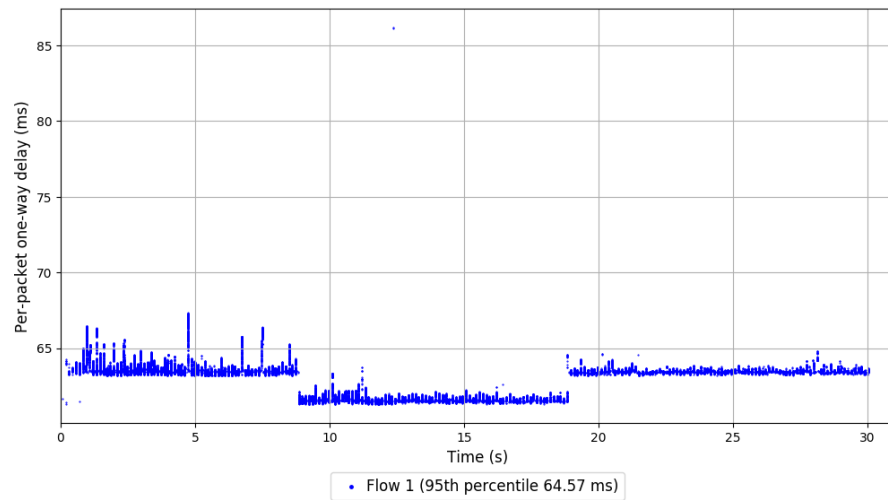
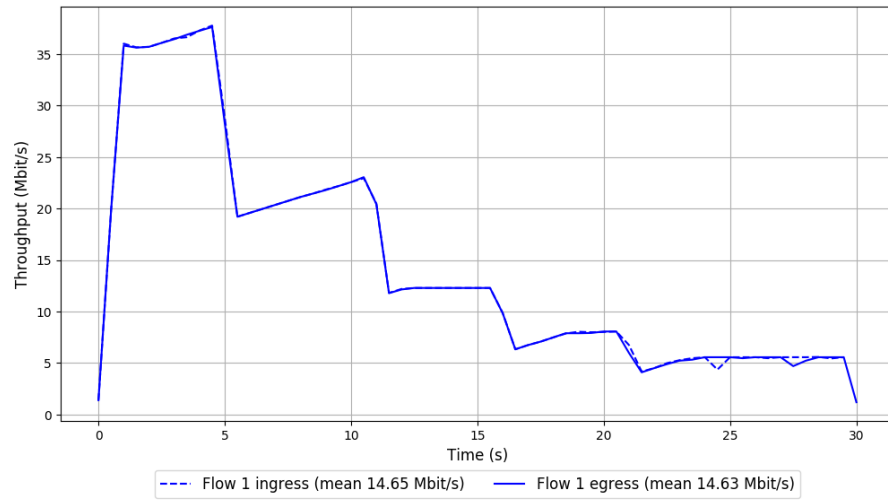
-- Flow 1:

Average throughput: 14.63 Mbit/s

95th percentile per-packet one-way delay: 64.572 ms

Loss rate: 0.10%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-20 09:40:02

End at: 2017-12-20 09:40:32

Below is generated by plot.py at 2017-12-20 12:25:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.09 Mbit/s

95th percentile per-packet one-way delay: 64.817 ms

Loss rate: 0.00%

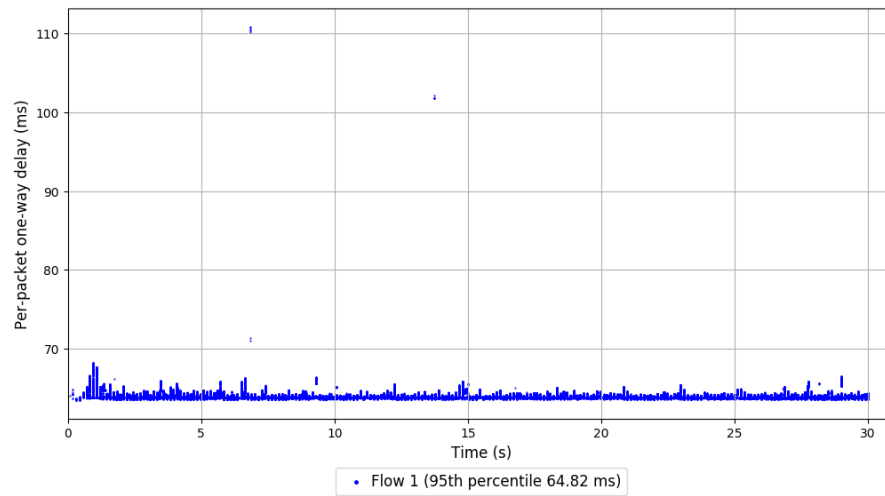
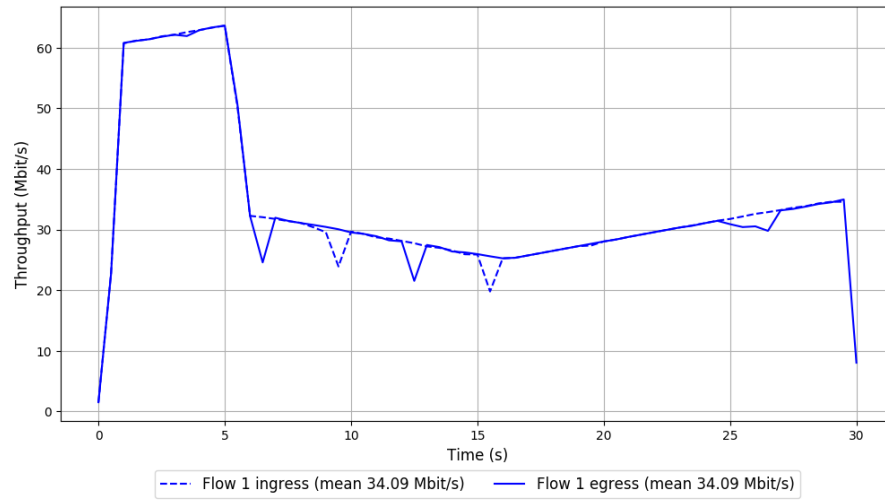
-- Flow 1:

Average throughput: 34.09 Mbit/s

95th percentile per-packet one-way delay: 64.817 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-20 09:50:59

End at: 2017-12-20 09:51:29

Below is generated by plot.py at 2017-12-20 12:25:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.90 Mbit/s

95th percentile per-packet one-way delay: 64.334 ms

Loss rate: 0.52%

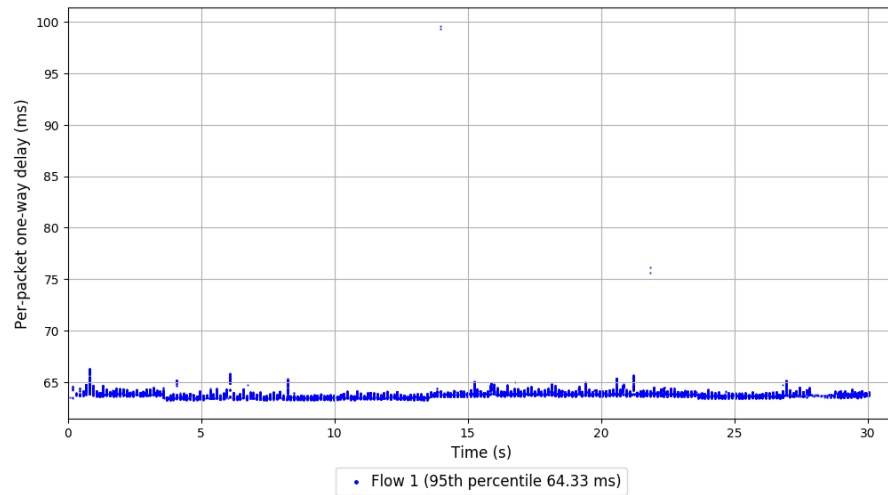
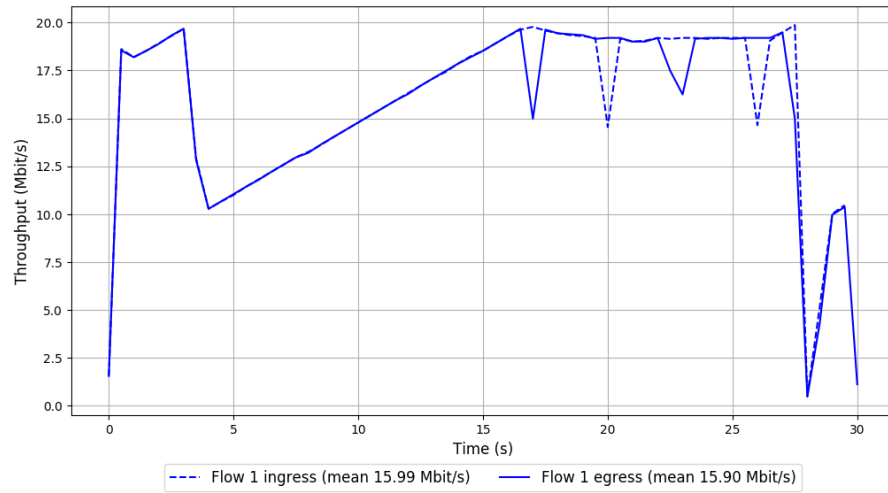
-- Flow 1:

Average throughput: 15.90 Mbit/s

95th percentile per-packet one-way delay: 64.334 ms

Loss rate: 0.52%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-20 10:02:51

End at: 2017-12-20 10:03:21

Below is generated by plot.py at 2017-12-20 12:25:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.79 Mbit/s

95th percentile per-packet one-way delay: 64.591 ms

Loss rate: 1.22%

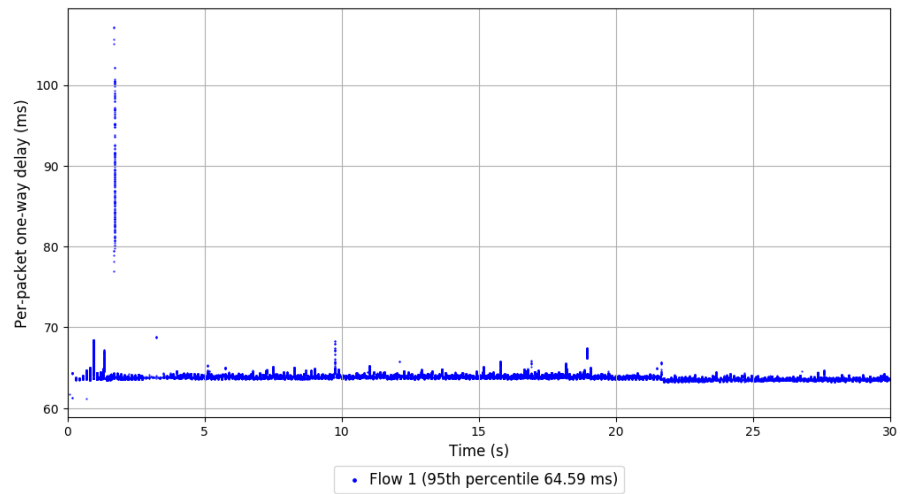
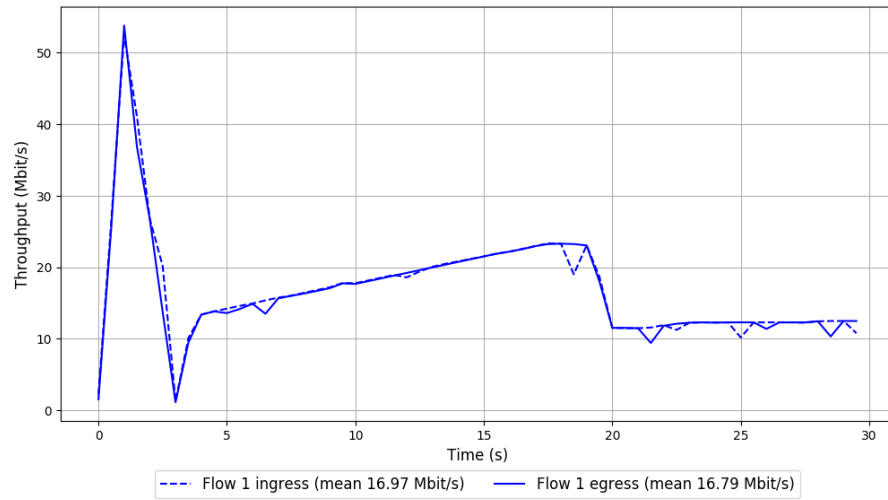
-- Flow 1:

Average throughput: 16.79 Mbit/s

95th percentile per-packet one-way delay: 64.591 ms

Loss rate: 1.22%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-20 10:14:10

End at: 2017-12-20 10:14:40

Below is generated by plot.py at 2017-12-20 12:25:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.11 Mbit/s

95th percentile per-packet one-way delay: 64.581 ms

Loss rate: 0.23%

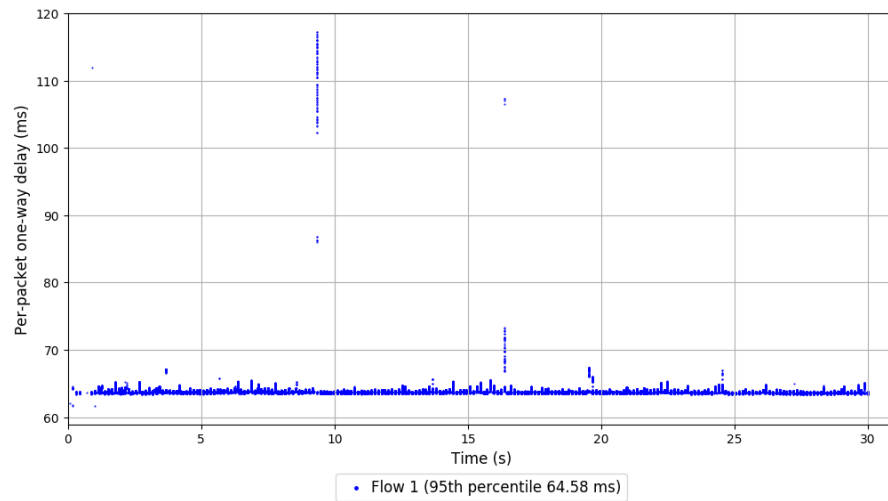
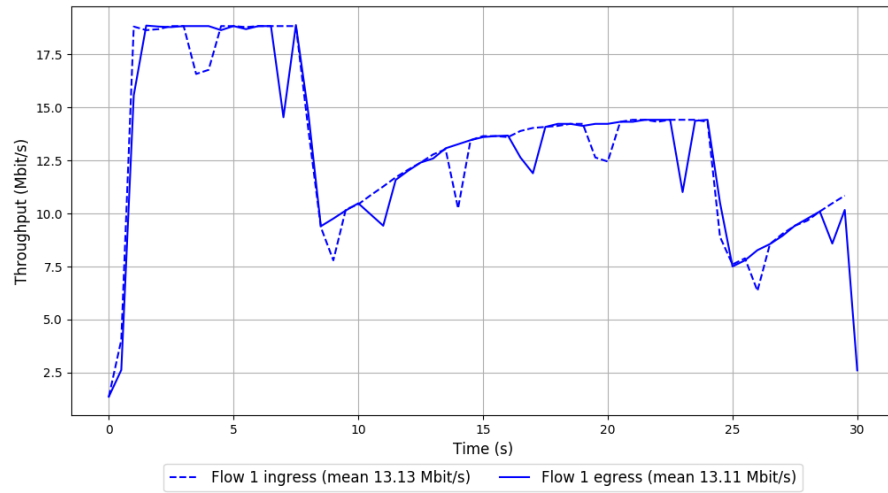
-- Flow 1:

Average throughput: 13.11 Mbit/s

95th percentile per-packet one-way delay: 64.581 ms

Loss rate: 0.23%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-20 10:25:33

End at: 2017-12-20 10:26:03

Below is generated by plot.py at 2017-12-20 12:25:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.26 Mbit/s

95th percentile per-packet one-way delay: 64.477 ms

Loss rate: 0.04%

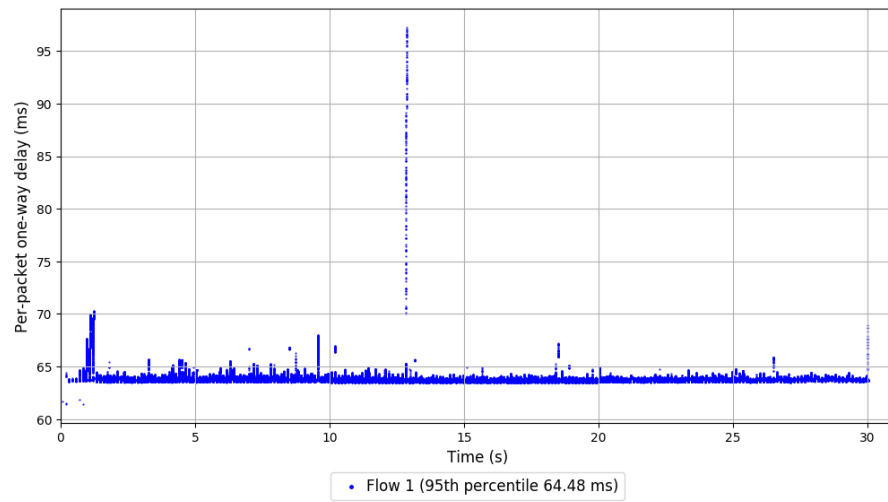
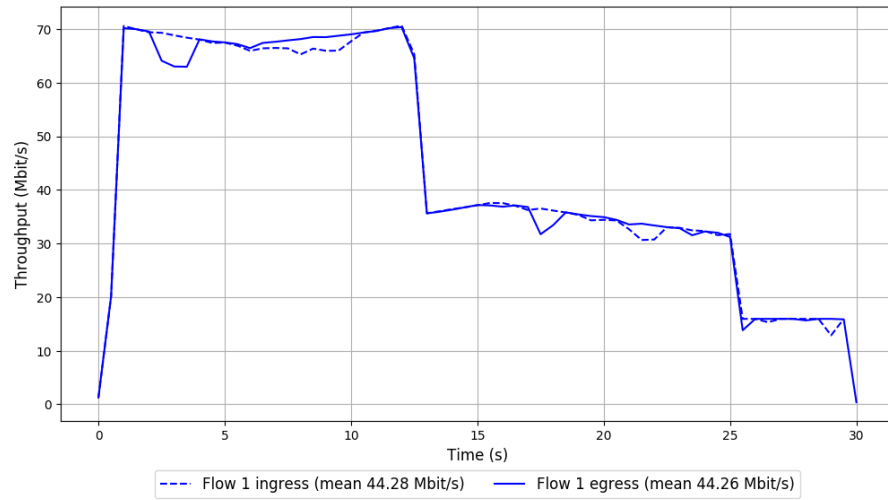
-- Flow 1:

Average throughput: 44.26 Mbit/s

95th percentile per-packet one-way delay: 64.477 ms

Loss rate: 0.04%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-20 10:37:12

End at: 2017-12-20 10:37:42

Below is generated by plot.py at 2017-12-20 12:25:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.79 Mbit/s

95th percentile per-packet one-way delay: 64.621 ms

Loss rate: 0.49%

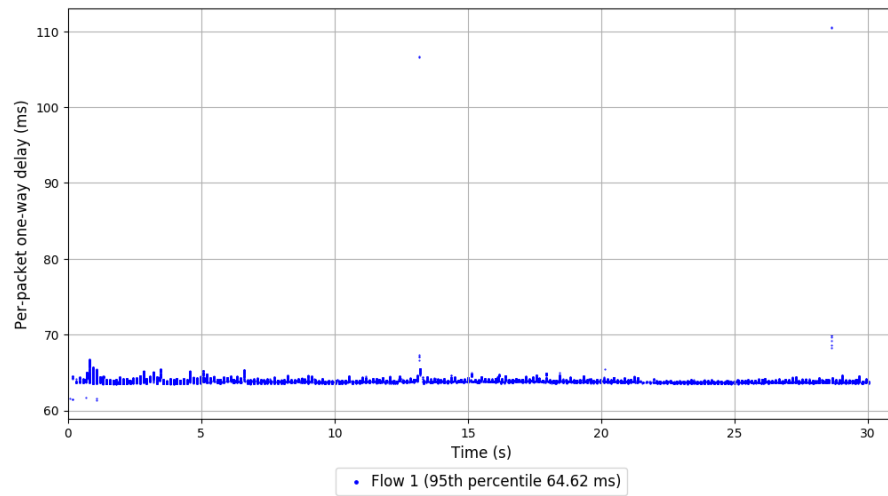
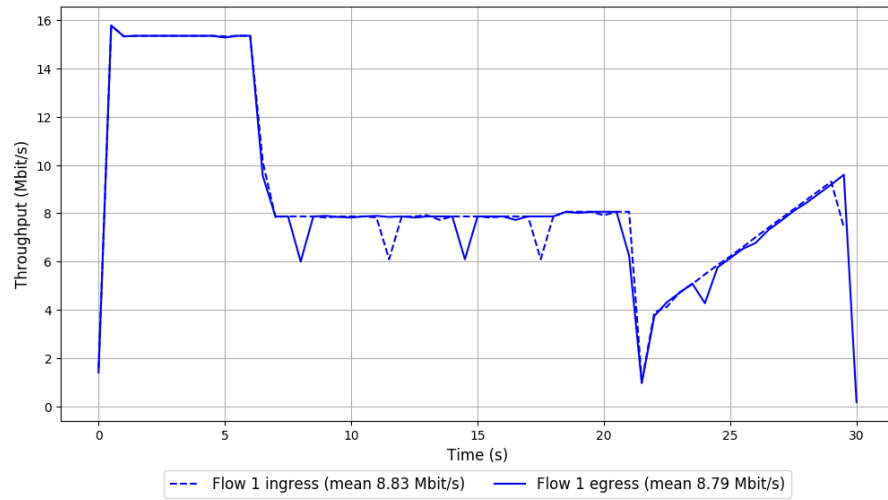
-- Flow 1:

Average throughput: 8.79 Mbit/s

95th percentile per-packet one-way delay: 64.621 ms

Loss rate: 0.49%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-20 10:48:37

End at: 2017-12-20 10:49:07

Below is generated by plot.py at 2017-12-20 12:25:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.90 Mbit/s

95th percentile per-packet one-way delay: 65.065 ms

Loss rate: 0.35%

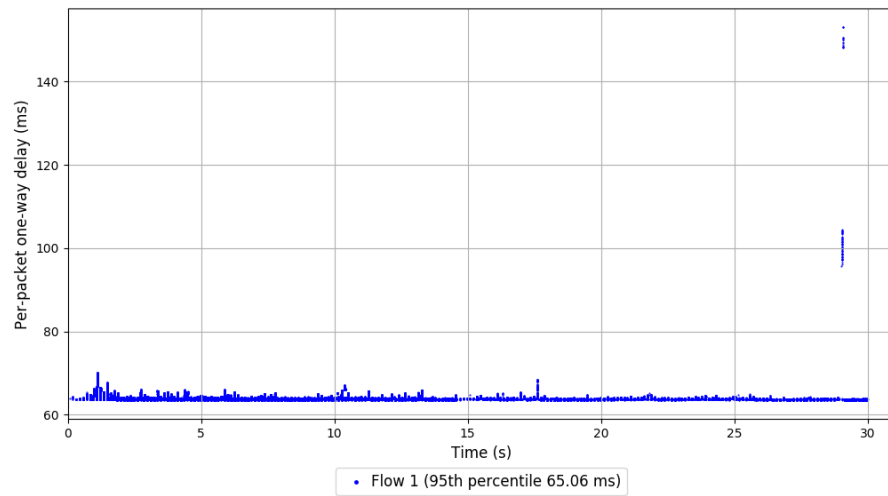
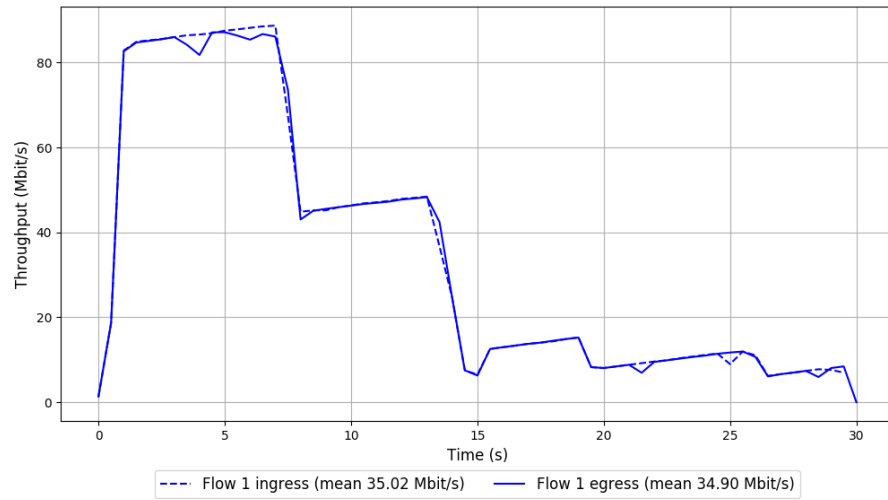
-- Flow 1:

Average throughput: 34.90 Mbit/s

95th percentile per-packet one-way delay: 65.065 ms

Loss rate: 0.35%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-20 09:13:53

End at: 2017-12-20 09:14:23

Below is generated by plot.py at 2017-12-20 12:25:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 234.78 Mbit/s

95th percentile per-packet one-way delay: 116.925 ms

Loss rate: 0.21%

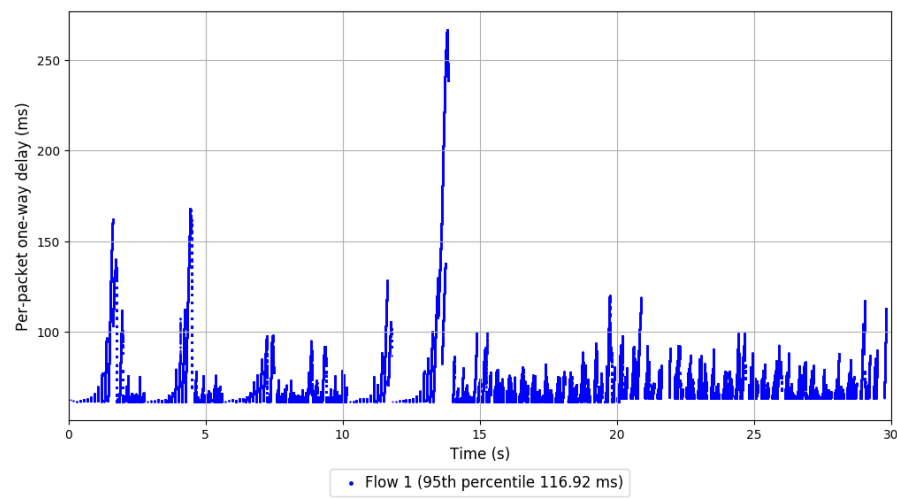
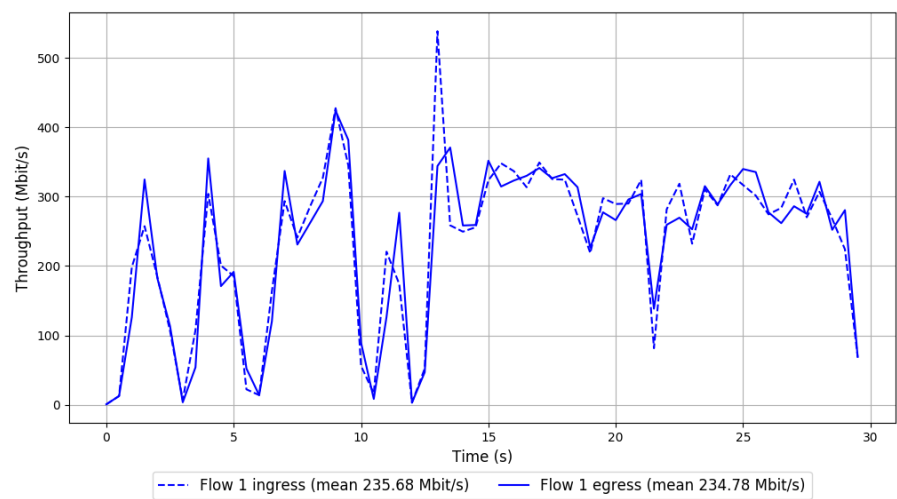
-- Flow 1:

Average throughput: 234.78 Mbit/s

95th percentile per-packet one-way delay: 116.925 ms

Loss rate: 0.21%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-20 09:24:52

End at: 2017-12-20 09:25:22

Below is generated by plot.py at 2017-12-20 12:25:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.78 Mbit/s

95th percentile per-packet one-way delay: 104.606 ms

Loss rate: 0.01%

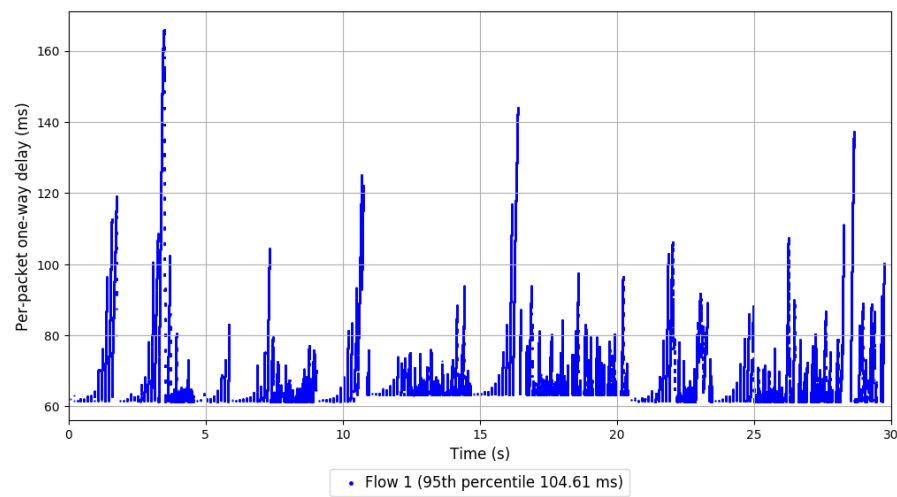
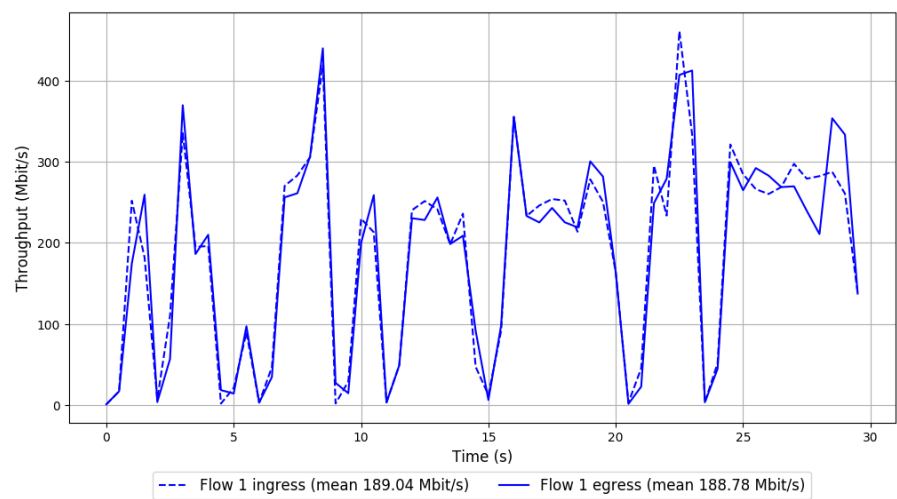
-- Flow 1:

Average throughput: 188.78 Mbit/s

95th percentile per-packet one-way delay: 104.606 ms

Loss rate: 0.01%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-20 09:36:28

End at: 2017-12-20 09:36:58

Below is generated by plot.py at 2017-12-20 12:25:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 223.76 Mbit/s

95th percentile per-packet one-way delay: 208.819 ms

Loss rate: 1.85%

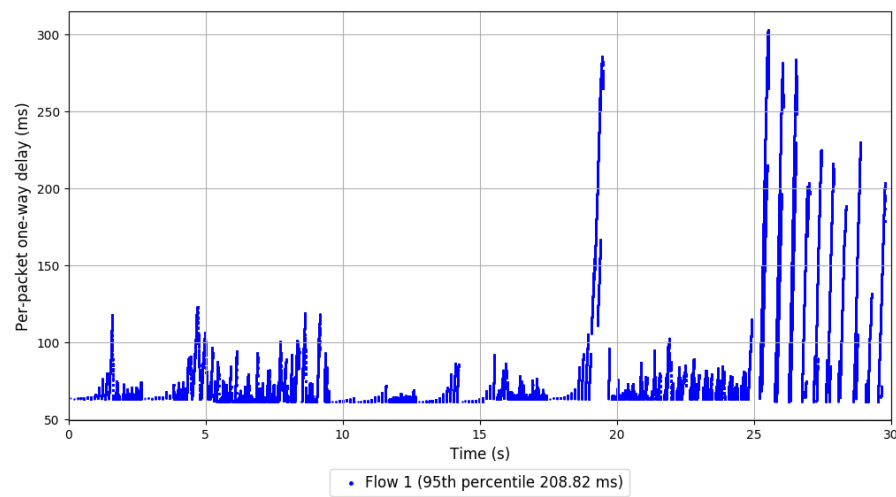
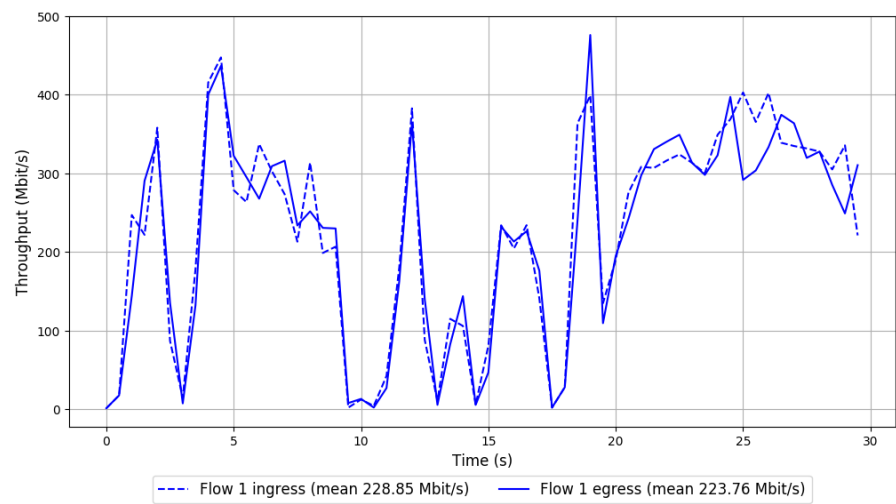
-- Flow 1:

Average throughput: 223.76 Mbit/s

95th percentile per-packet one-way delay: 208.819 ms

Loss rate: 1.85%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-20 09:47:22

End at: 2017-12-20 09:47:52

Below is generated by plot.py at 2017-12-20 12:25:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 231.45 Mbit/s

95th percentile per-packet one-way delay: 254.697 ms

Loss rate: 2.44%

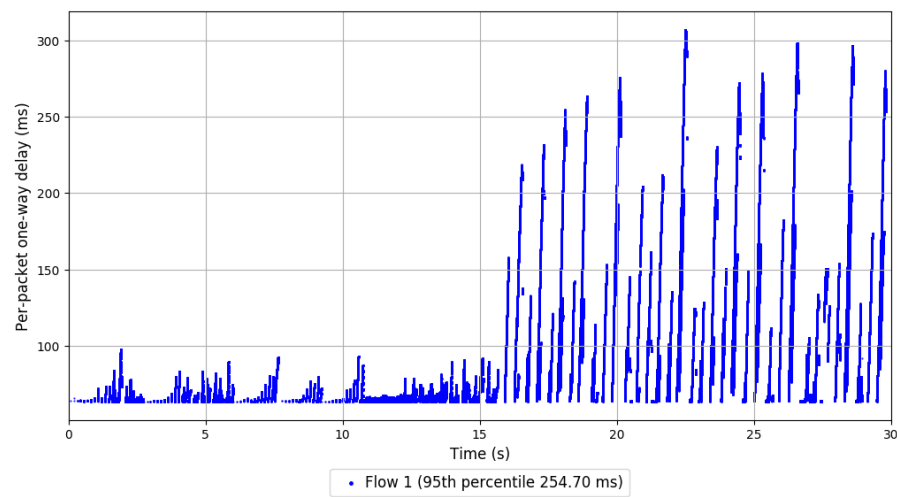
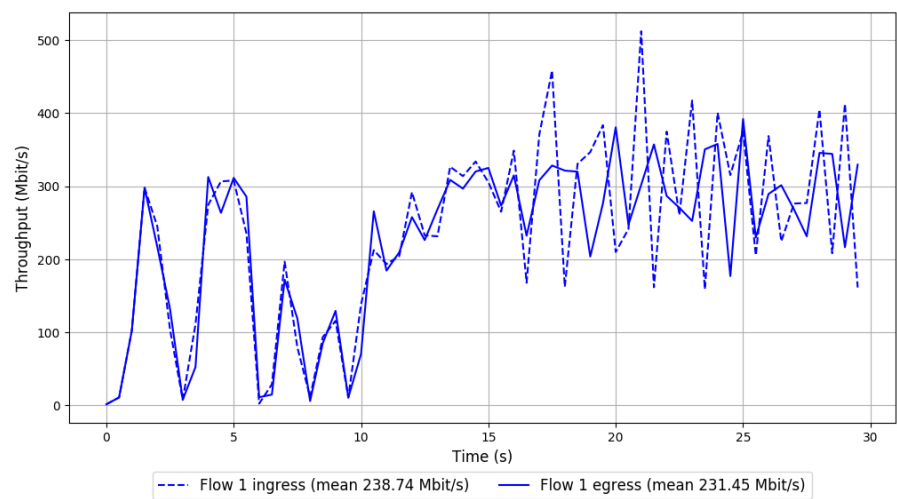
-- Flow 1:

Average throughput: 231.45 Mbit/s

95th percentile per-packet one-way delay: 254.697 ms

Loss rate: 2.44%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-20 09:59:13

End at: 2017-12-20 09:59:43

Below is generated by plot.py at 2017-12-20 12:25:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 237.90 Mbit/s

95th percentile per-packet one-way delay: 115.848 ms

Loss rate: 1.13%

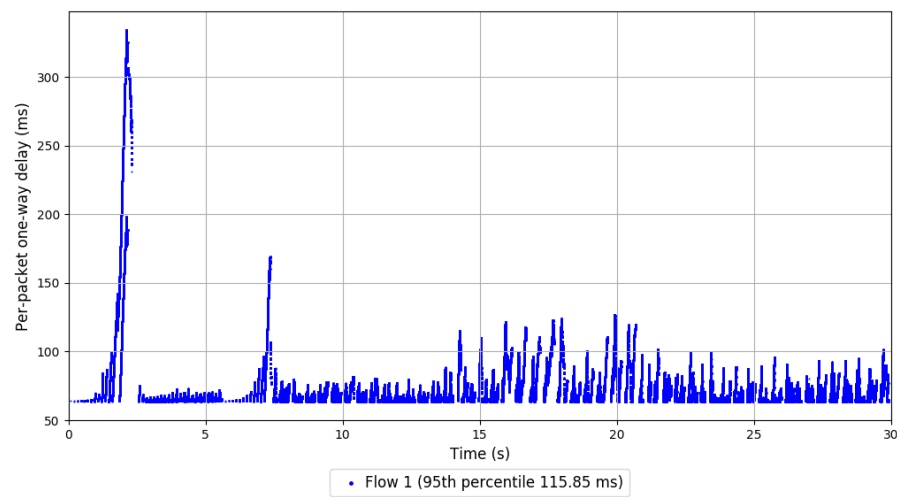
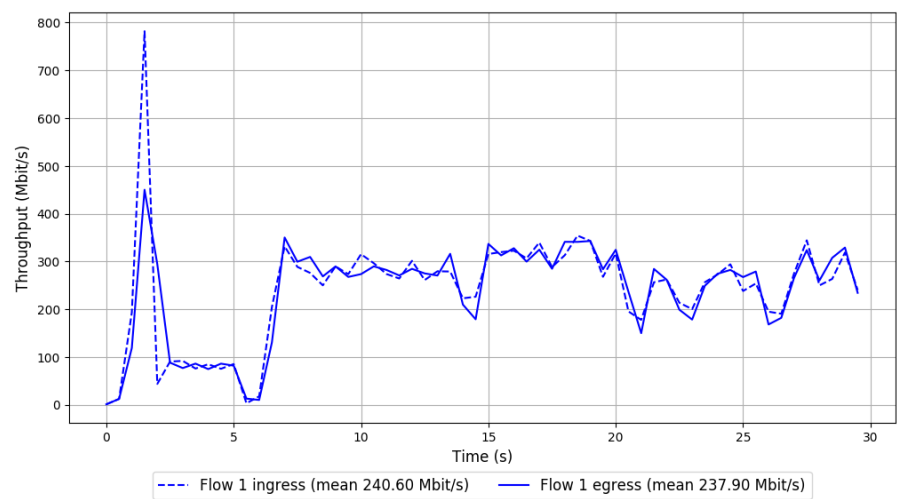
-- Flow 1:

Average throughput: 237.90 Mbit/s

95th percentile per-packet one-way delay: 115.848 ms

Loss rate: 1.13%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-20 10:10:41

End at: 2017-12-20 10:11:11

Below is generated by plot.py at 2017-12-20 12:27:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.99 Mbit/s

95th percentile per-packet one-way delay: 84.013 ms

Loss rate: 0.20%

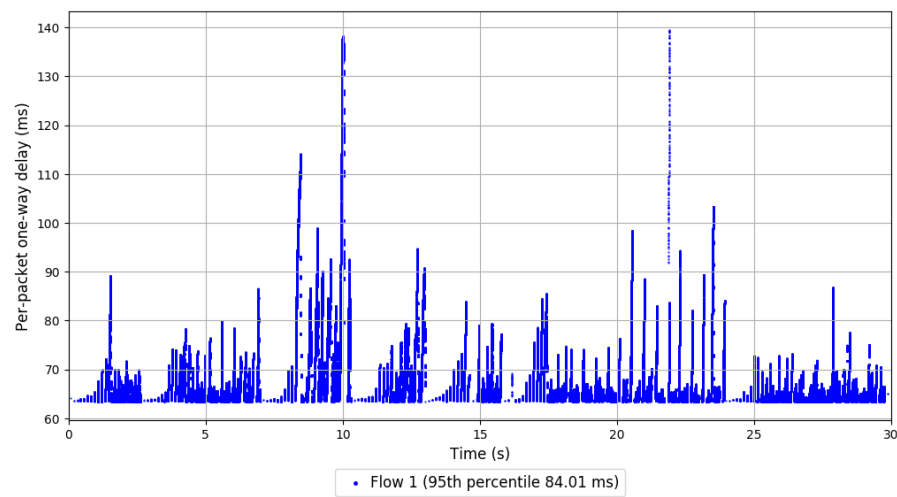
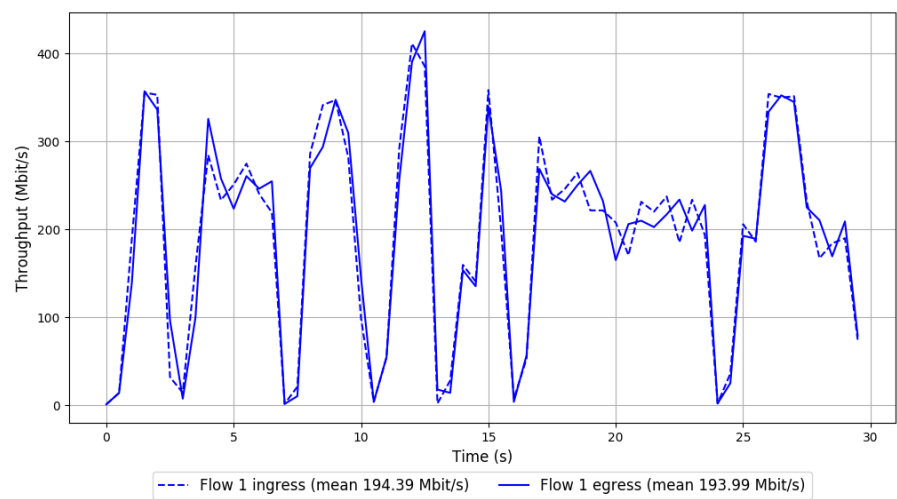
-- Flow 1:

Average throughput: 193.99 Mbit/s

95th percentile per-packet one-way delay: 84.013 ms

Loss rate: 0.20%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-20 10:21:58

End at: 2017-12-20 10:22:28

Below is generated by plot.py at 2017-12-20 12:28:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 248.29 Mbit/s

95th percentile per-packet one-way delay: 180.029 ms

Loss rate: 1.13%

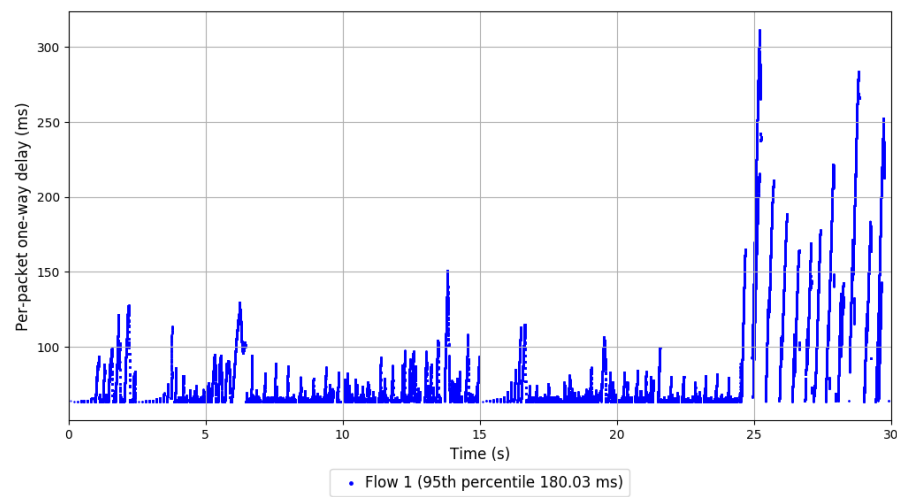
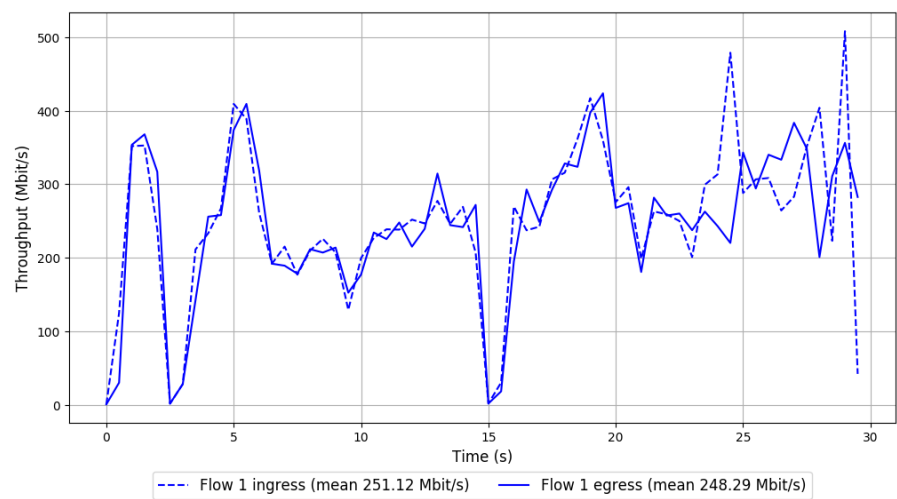
-- Flow 1:

Average throughput: 248.29 Mbit/s

95th percentile per-packet one-way delay: 180.029 ms

Loss rate: 1.13%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-20 10:33:42

End at: 2017-12-20 10:34:12

Below is generated by plot.py at 2017-12-20 12:28:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.05 Mbit/s

95th percentile per-packet one-way delay: 132.120 ms

Loss rate: 0.79%

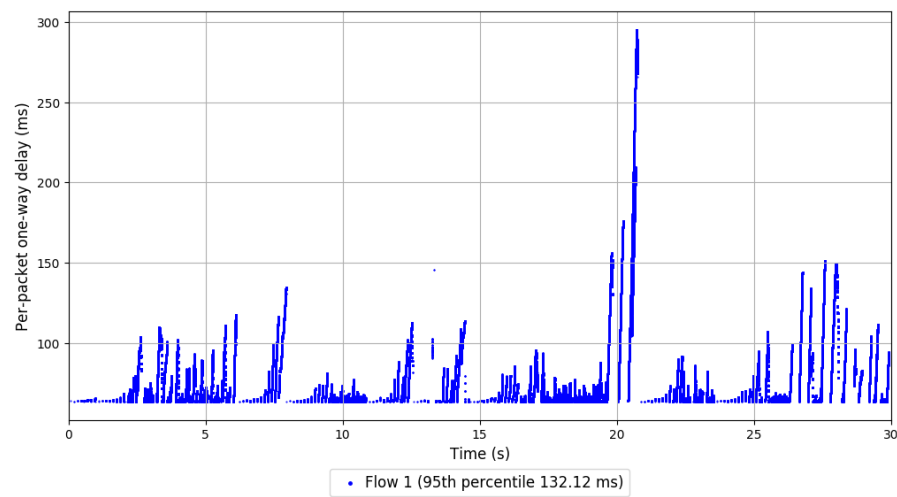
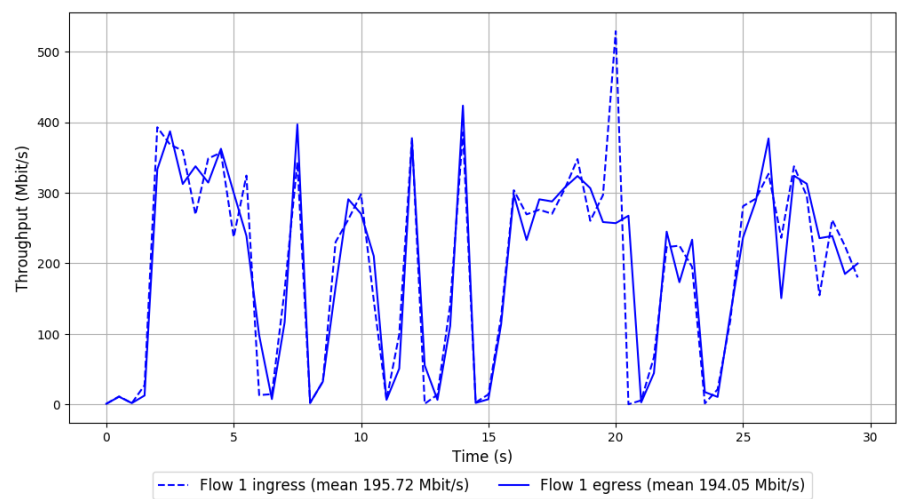
-- Flow 1:

Average throughput: 194.05 Mbit/s

95th percentile per-packet one-way delay: 132.120 ms

Loss rate: 0.79%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-20 10:45:10

End at: 2017-12-20 10:45:40

Below is generated by plot.py at 2017-12-20 12:28:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.27 Mbit/s

95th percentile per-packet one-way delay: 100.006 ms

Loss rate: 0.46%

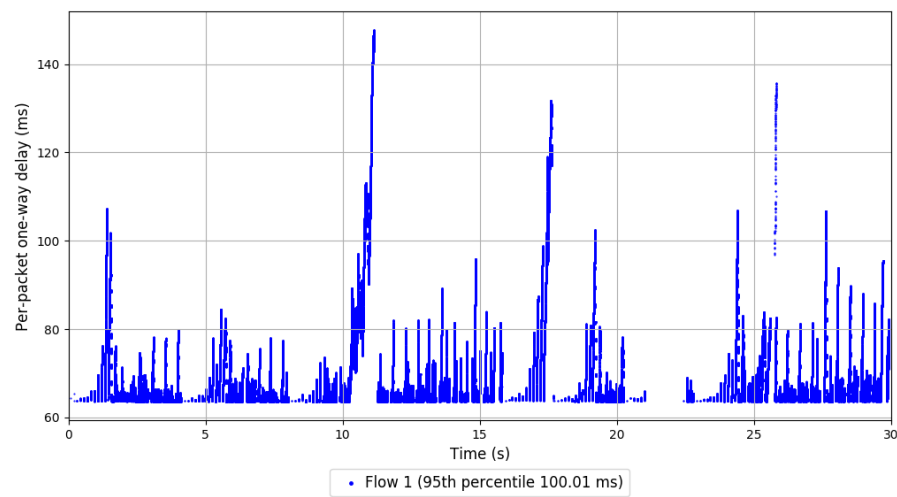
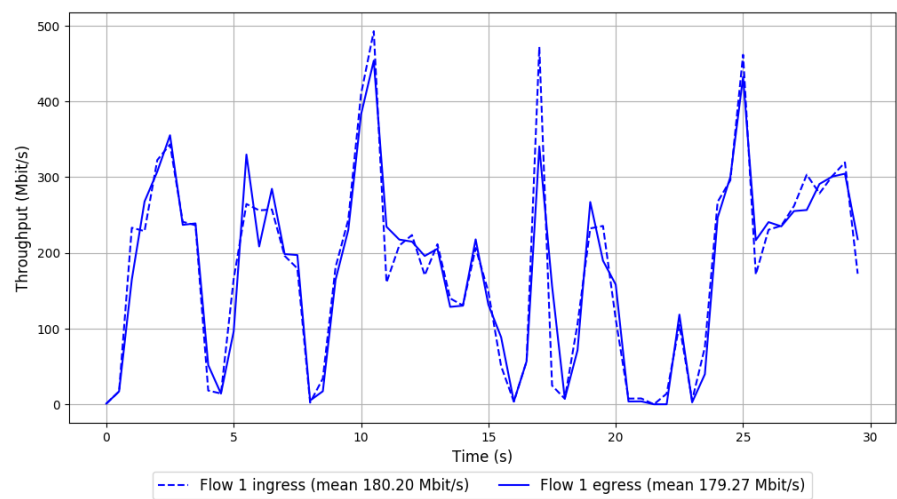
-- Flow 1:

Average throughput: 179.27 Mbit/s

95th percentile per-packet one-way delay: 100.006 ms

Loss rate: 0.46%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-20 10:56:32

End at: 2017-12-20 10:57:02

Below is generated by plot.py at 2017-12-20 12:28:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.17 Mbit/s

95th percentile per-packet one-way delay: 87.434 ms

Loss rate: 0.16%

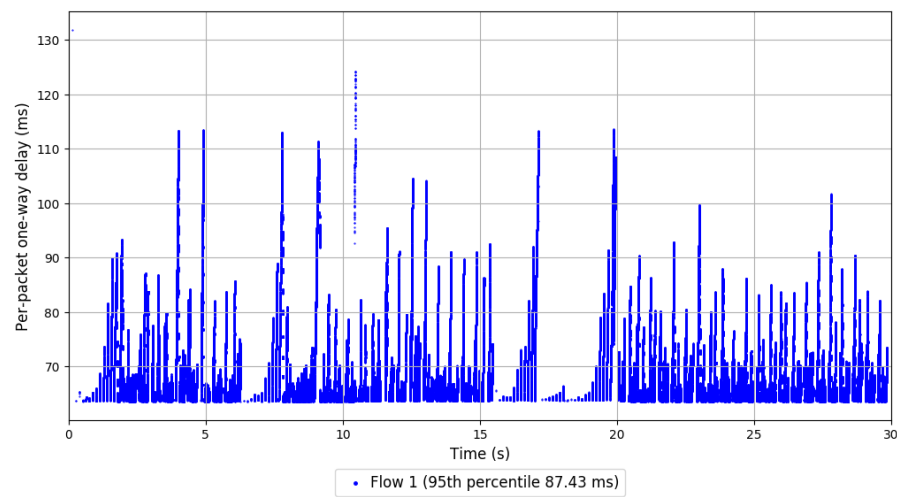
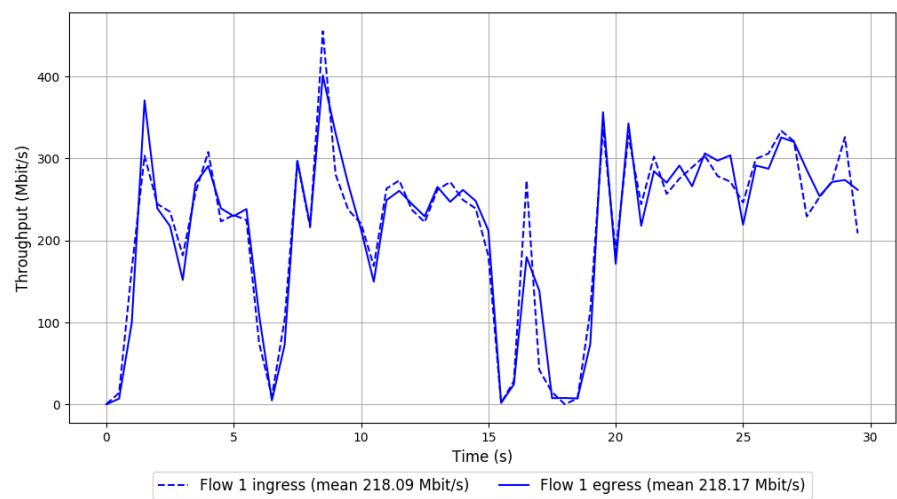
-- Flow 1:

Average throughput: 218.17 Mbit/s

95th percentile per-packet one-way delay: 87.434 ms

Loss rate: 0.16%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-20 09:07:56

End at: 2017-12-20 09:08:26

Below is generated by plot.py at 2017-12-20 12:28:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.40 Mbit/s

95th percentile per-packet one-way delay: 63.417 ms

Loss rate: 0.00%

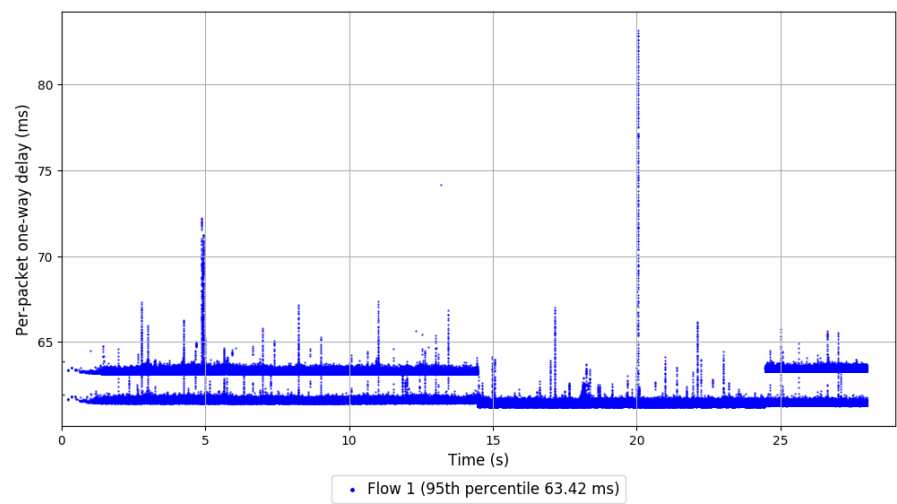
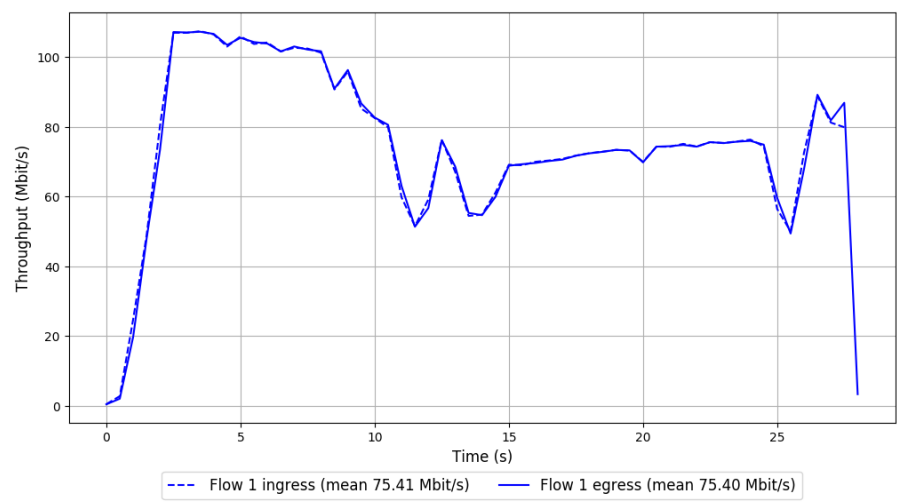
-- Flow 1:

Average throughput: 75.40 Mbit/s

95th percentile per-packet one-way delay: 63.417 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-20 09:19:41

End at: 2017-12-20 09:20:11

Below is generated by plot.py at 2017-12-20 12:28:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.06 Mbit/s

95th percentile per-packet one-way delay: 63.682 ms

Loss rate: 0.00%

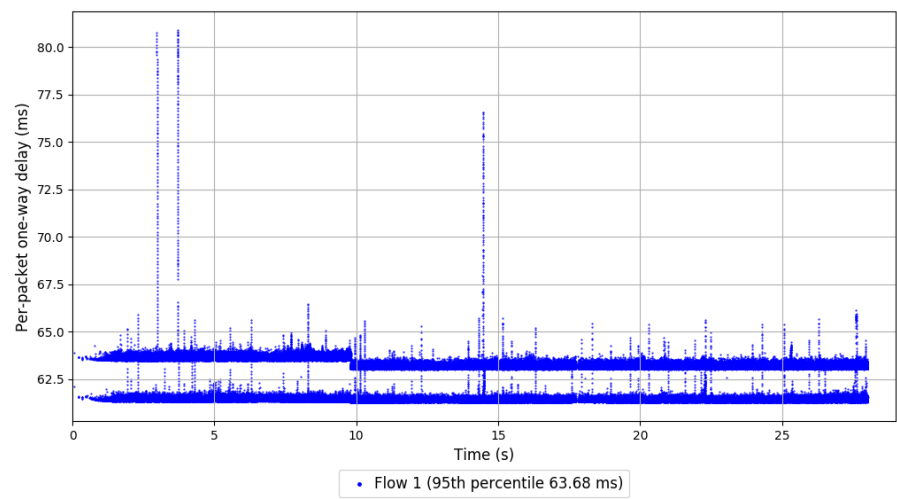
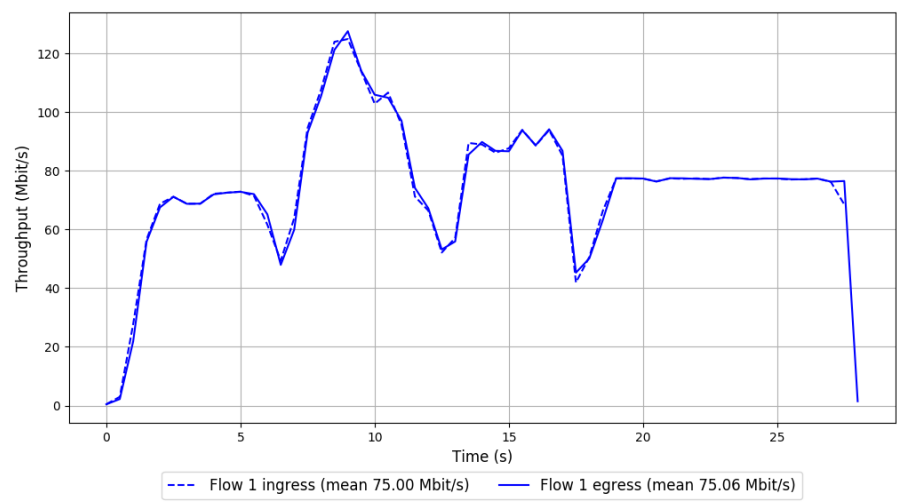
-- Flow 1:

Average throughput: 75.06 Mbit/s

95th percentile per-packet one-way delay: 63.682 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-20 09:30:38

End at: 2017-12-20 09:31:08

Below is generated by plot.py at 2017-12-20 12:28:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.27 Mbit/s

95th percentile per-packet one-way delay: 63.491 ms

Loss rate: 0.00%

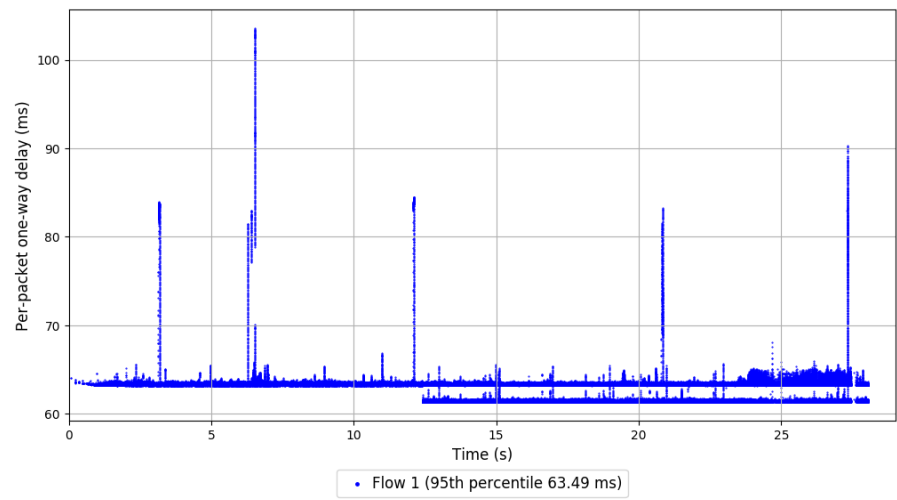
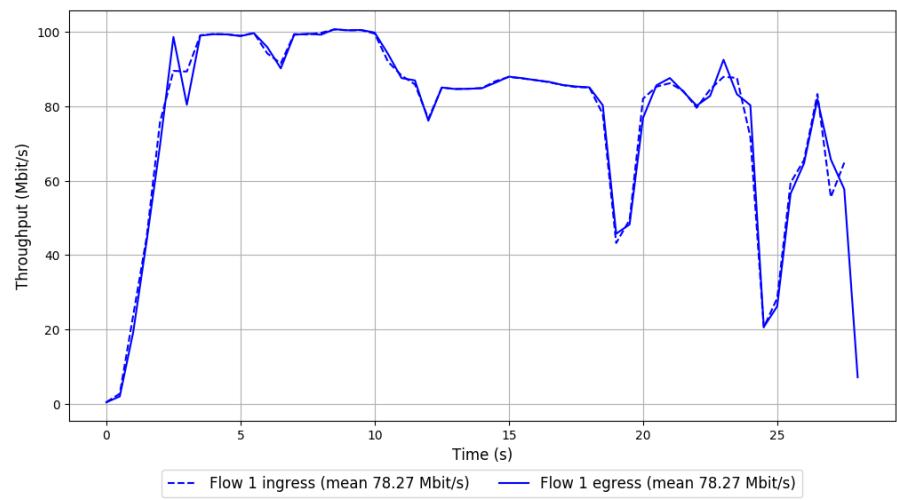
-- Flow 1:

Average throughput: 78.27 Mbit/s

95th percentile per-packet one-way delay: 63.491 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-20 09:42:16

End at: 2017-12-20 09:42:46

Below is generated by plot.py at 2017-12-20 12:28:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.61 Mbit/s

95th percentile per-packet one-way delay: 63.837 ms

Loss rate: 0.00%

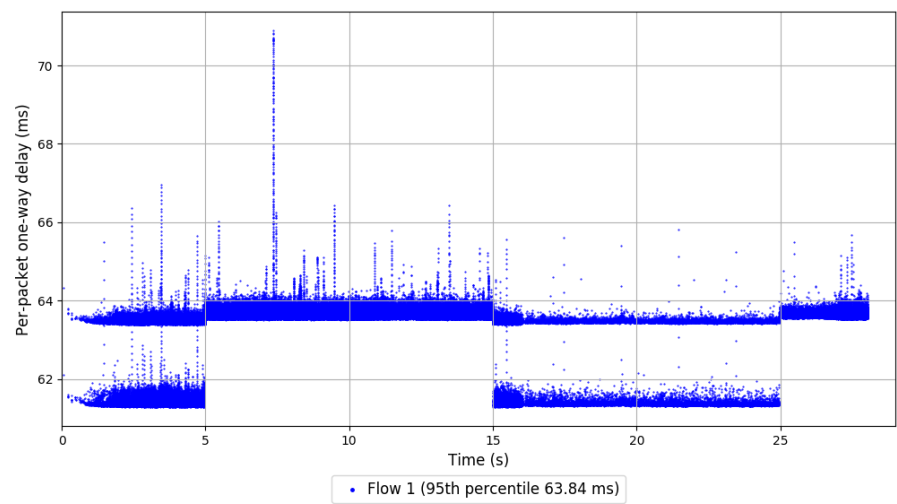
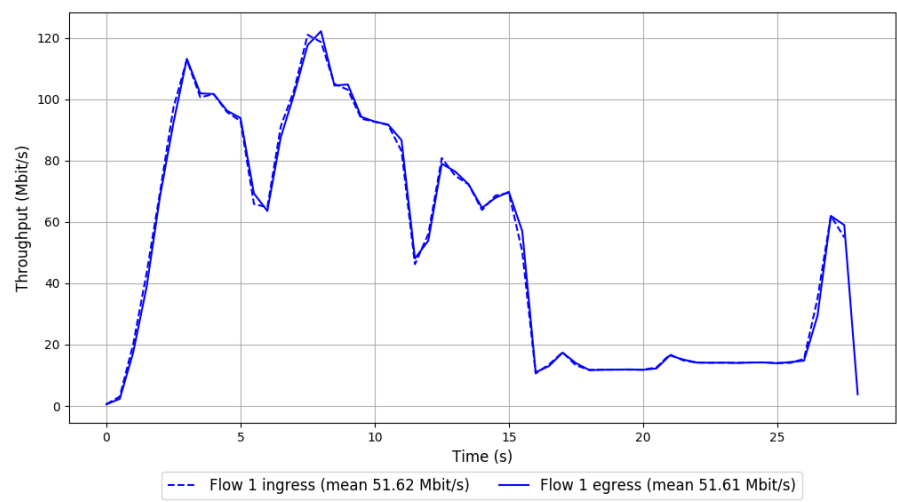
-- Flow 1:

Average throughput: 51.61 Mbit/s

95th percentile per-packet one-way delay: 63.837 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-20 09:53:15

End at: 2017-12-20 09:53:45

Below is generated by plot.py at 2017-12-20 12:30:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.38 Mbit/s

95th percentile per-packet one-way delay: 63.783 ms

Loss rate: 0.00%

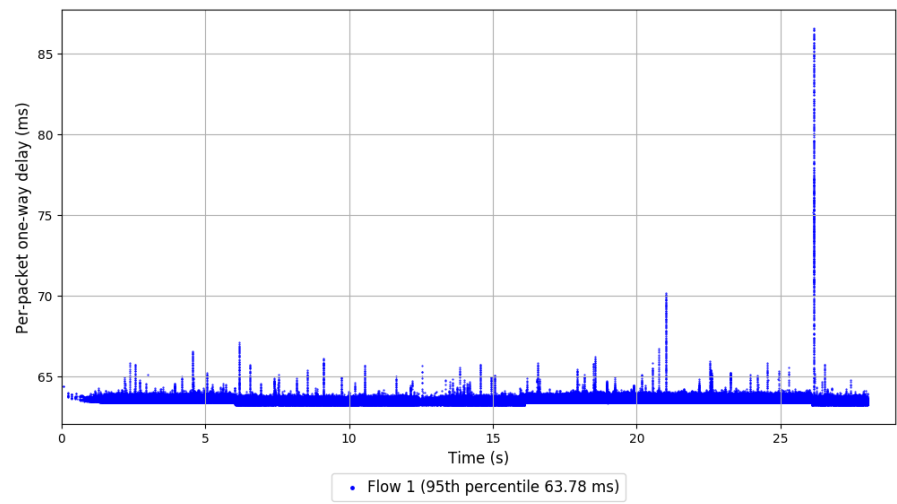
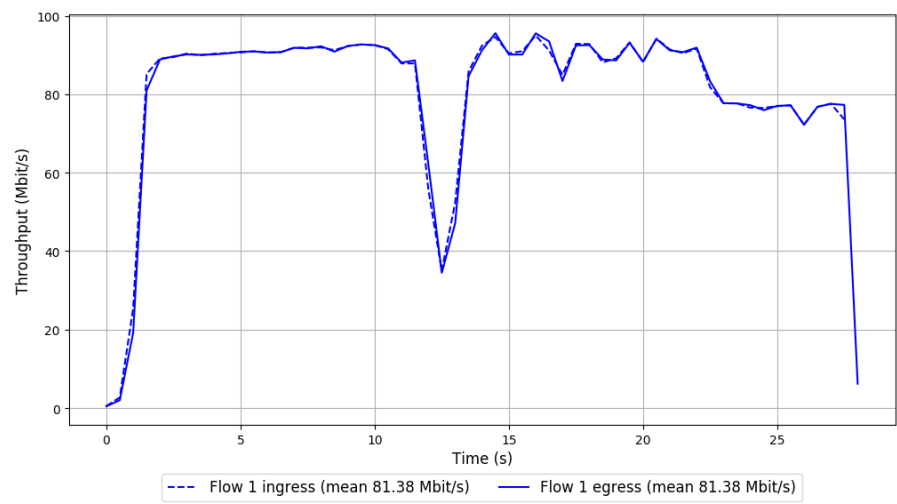
-- Flow 1:

Average throughput: 81.38 Mbit/s

95th percentile per-packet one-way delay: 63.783 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-20 10:05:04

End at: 2017-12-20 10:05:34

Below is generated by plot.py at 2017-12-20 12:30:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.80 Mbit/s

95th percentile per-packet one-way delay: 63.862 ms

Loss rate: 0.23%

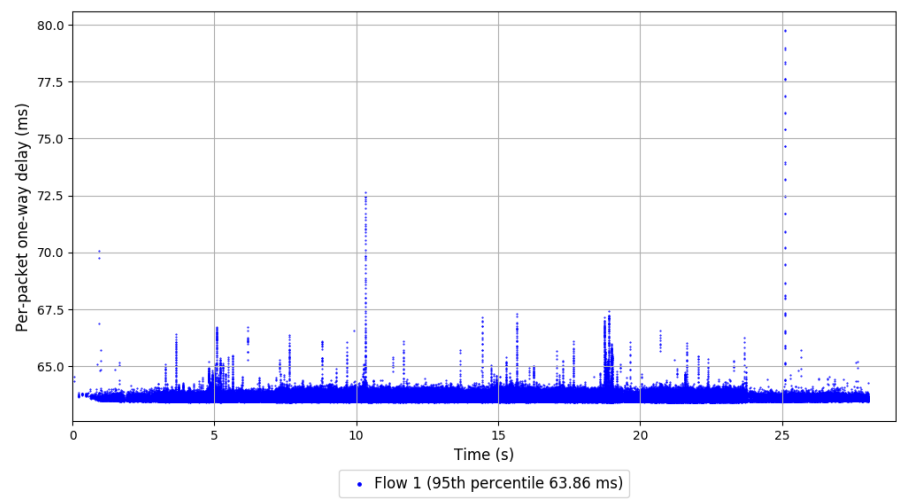
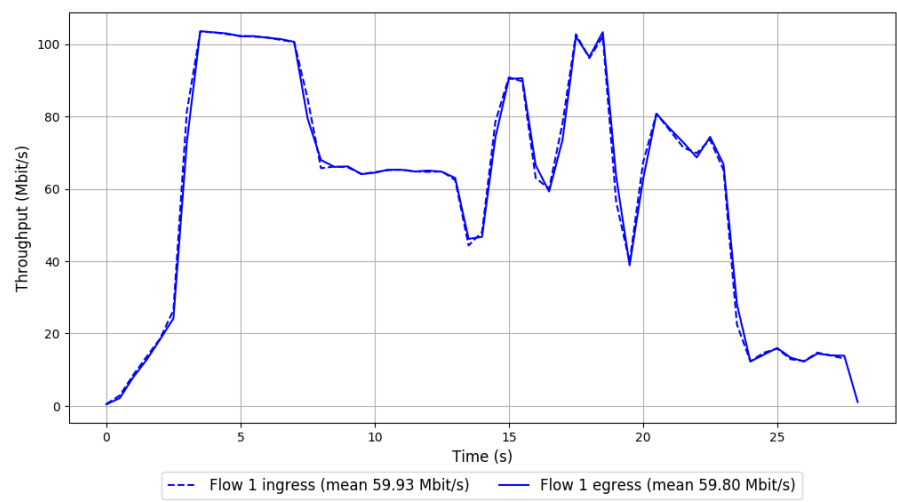
-- Flow 1:

Average throughput: 59.80 Mbit/s

95th percentile per-packet one-way delay: 63.862 ms

Loss rate: 0.23%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-20 10:16:19

End at: 2017-12-20 10:16:49

Below is generated by plot.py at 2017-12-20 12:30:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.47 Mbit/s

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

Loss rate: 0.01%

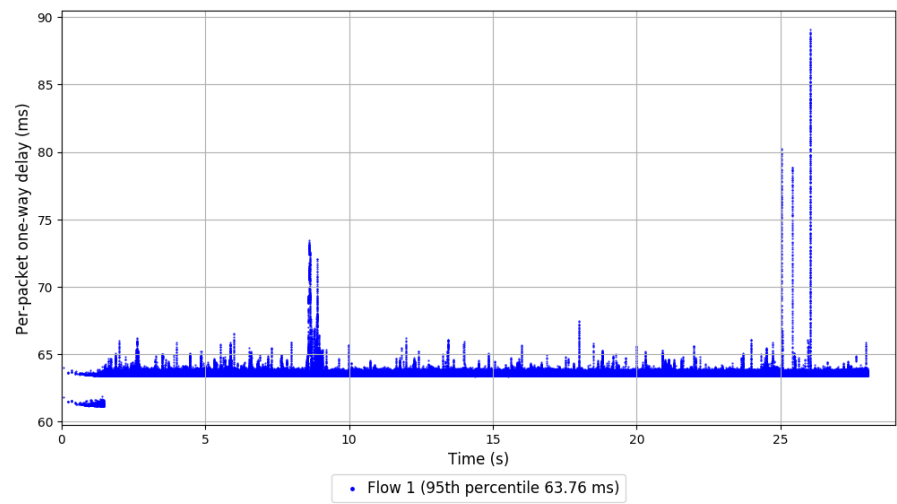
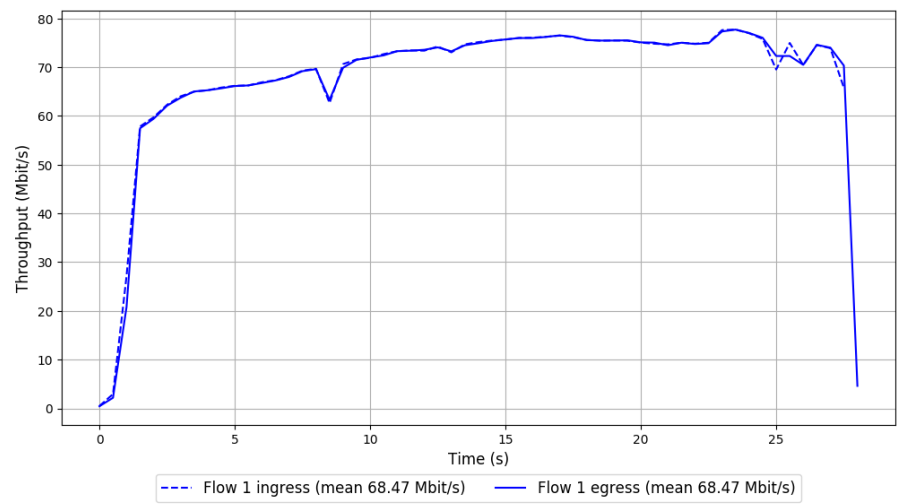
-- Flow 1:

Average throughput: 68.47 Mbit/s

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

Loss rate: 0.01%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-20 10:27:47

End at: 2017-12-20 10:28:17

Below is generated by plot.py at 2017-12-20 12:30:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.03 Mbit/s

95th percentile per-packet one-way delay: 63.752 ms

Loss rate: 0.00%

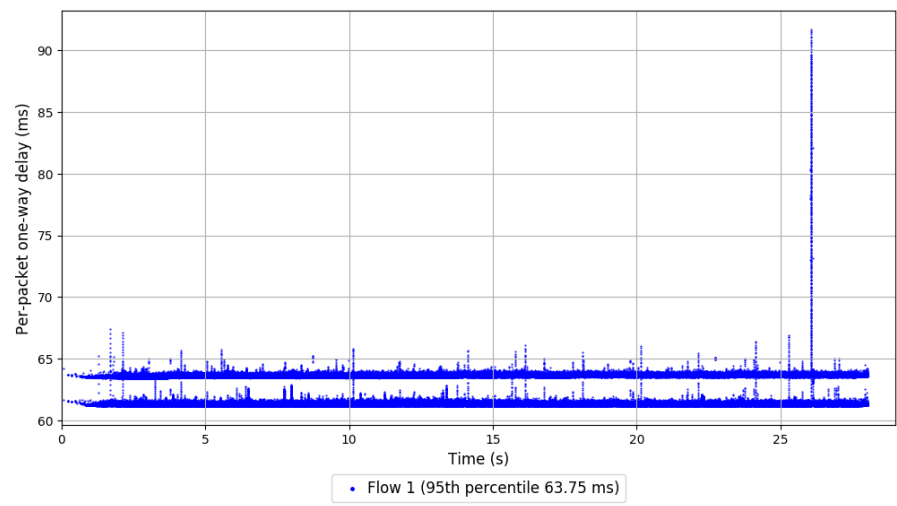
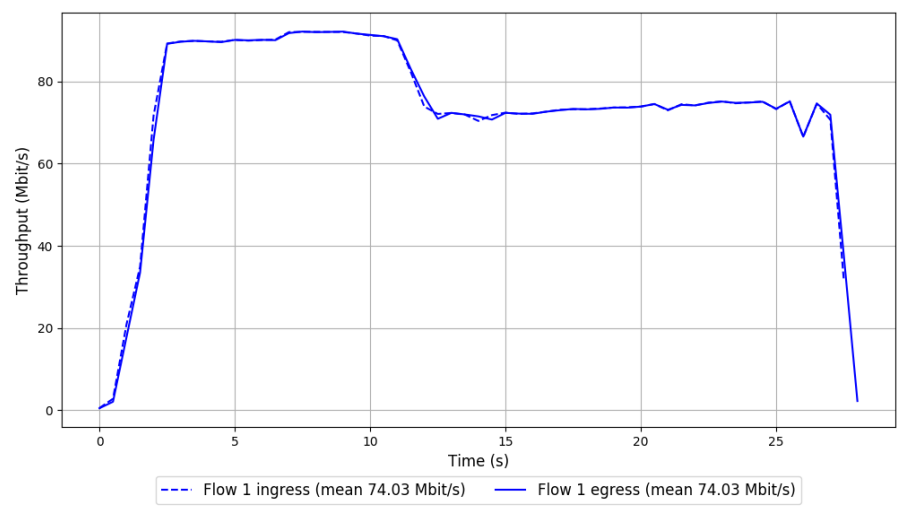
-- Flow 1:

Average throughput: 74.03 Mbit/s

95th percentile per-packet one-way delay: 63.752 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-20 10:39:24

End at: 2017-12-20 10:39:54

Below is generated by plot.py at 2017-12-20 12:30:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.14 Mbit/s

95th percentile per-packet one-way delay: 63.783 ms

Loss rate: 0.01%

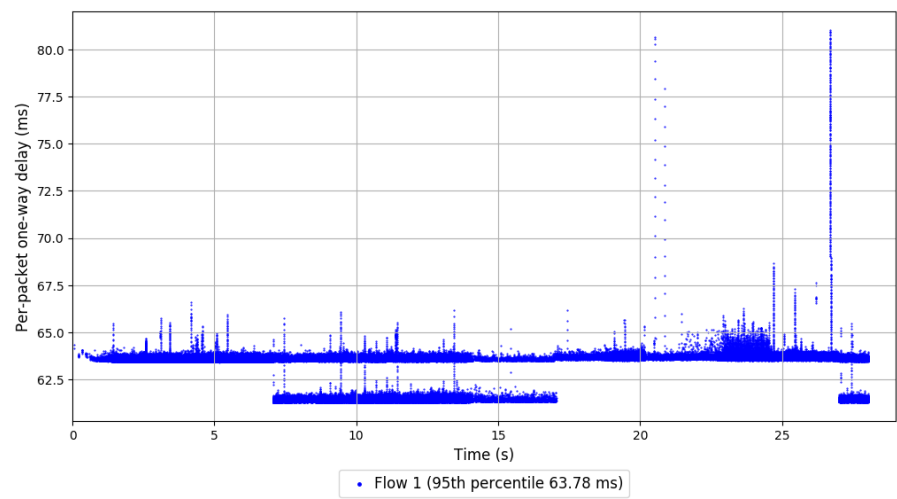
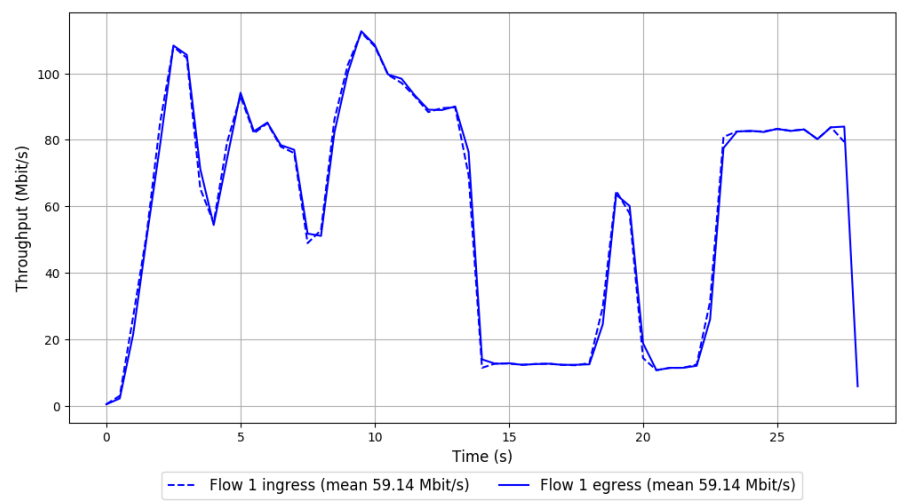
-- Flow 1:

Average throughput: 59.14 Mbit/s

95th percentile per-packet one-way delay: 63.783 ms

Loss rate: 0.01%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-20 10:50:51

End at: 2017-12-20 10:51:21

Below is generated by plot.py at 2017-12-20 12:31:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.61 Mbit/s

95th percentile per-packet one-way delay: 63.758 ms

Loss rate: 0.00%

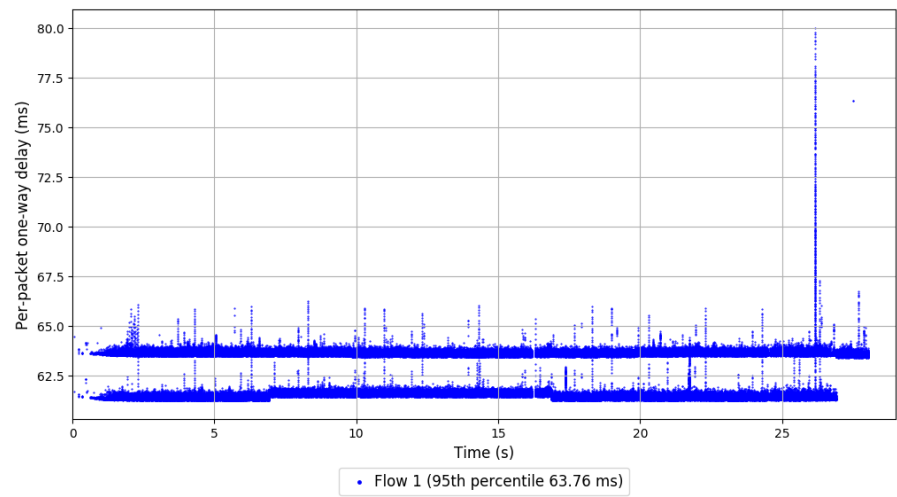
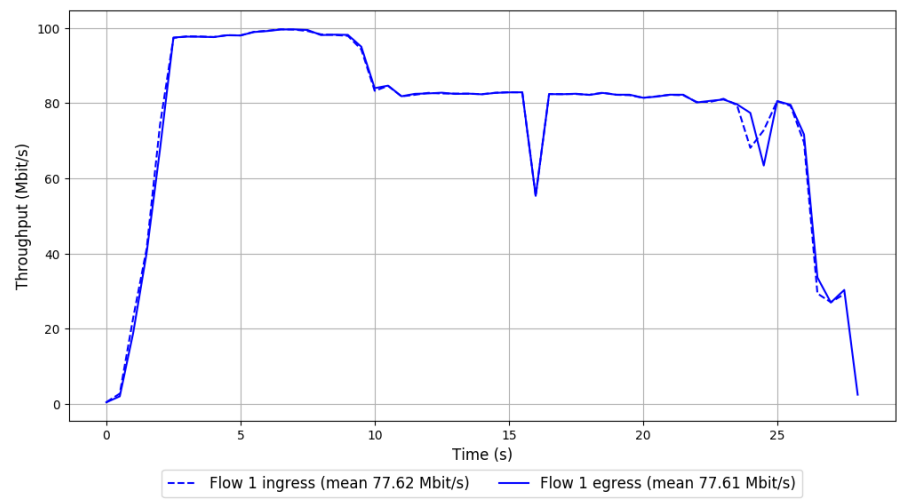
-- Flow 1:

Average throughput: 77.61 Mbit/s

95th percentile per-packet one-way delay: 63.758 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

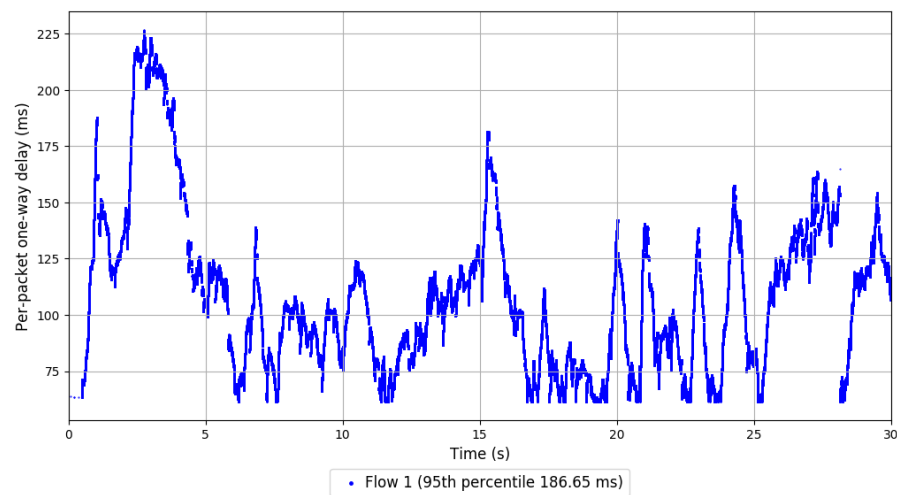
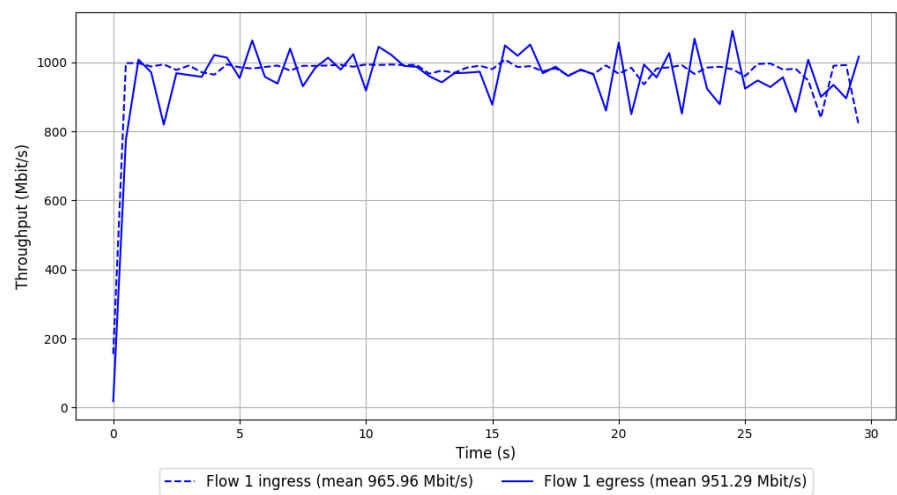


```
Run 1: Statistics of FillP

Start at: 2017-12-20 09:11:47
End at: 2017-12-20 09:12:17

# Below is generated by plot.py at 2017-12-20 12:46:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 951.29 Mbit/s
95th percentile per-packet one-way delay: 186.645 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 951.29 Mbit/s
95th percentile per-packet one-way delay: 186.645 ms
Loss rate: 1.51%
```


Run 1: Report of FillP — Data Link

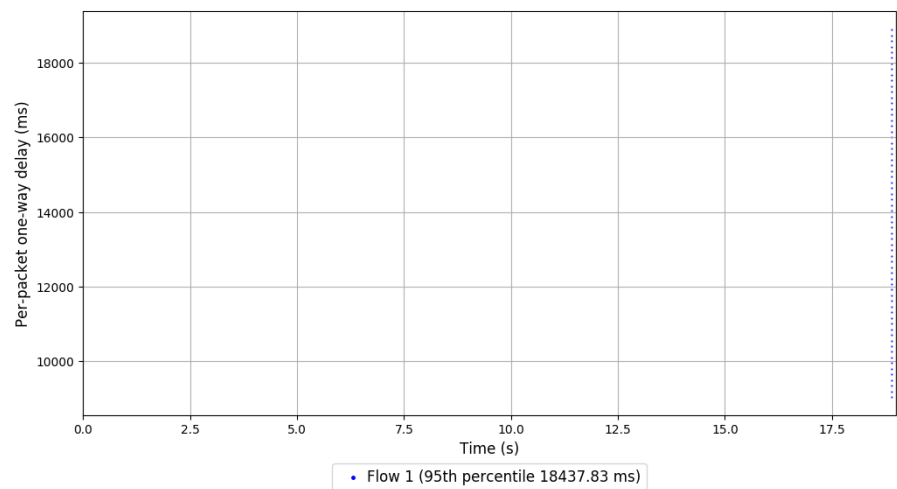
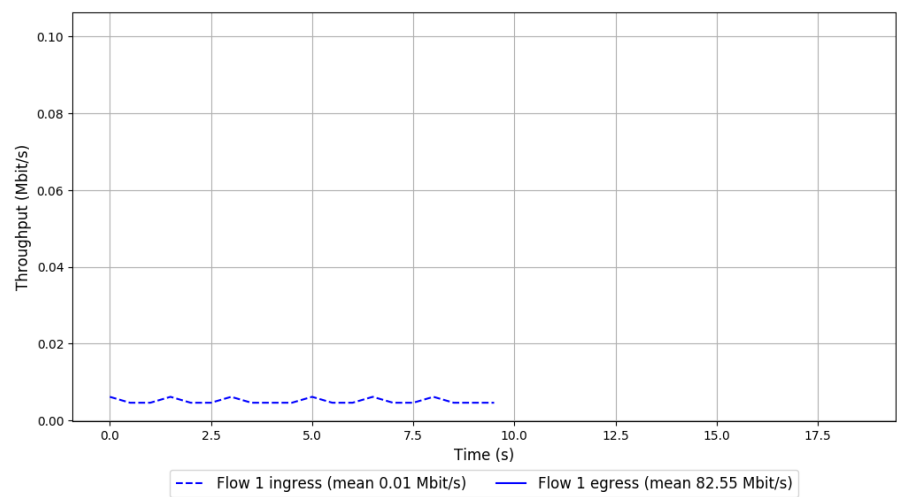


Run 2: Statistics of FillP

Start at: 2017-12-20 09:23:24

End at: 2017-12-20 09:23:54

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2017-12-20 09:34:21

End at: 2017-12-20 09:34:51

Below is generated by plot.py at 2017-12-20 12:46:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 902.48 Mbit/s

95th percentile per-packet one-way delay: 294.849 ms

Loss rate: 5.19%

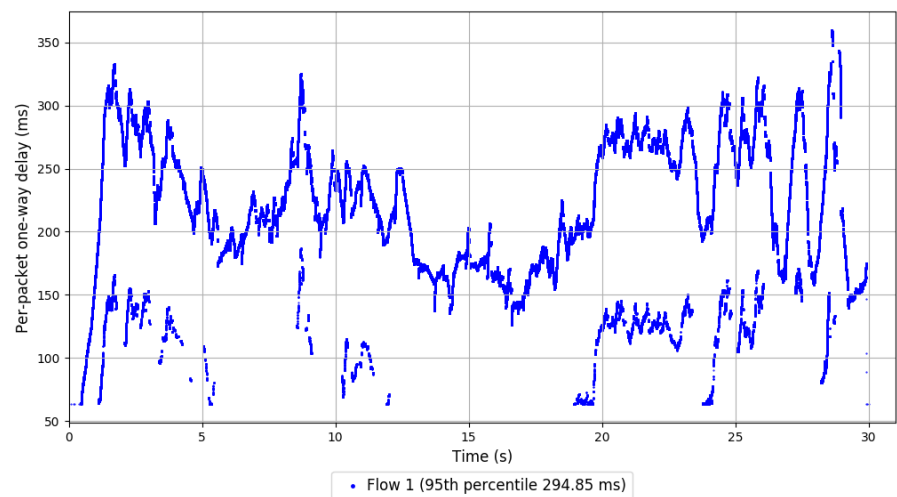
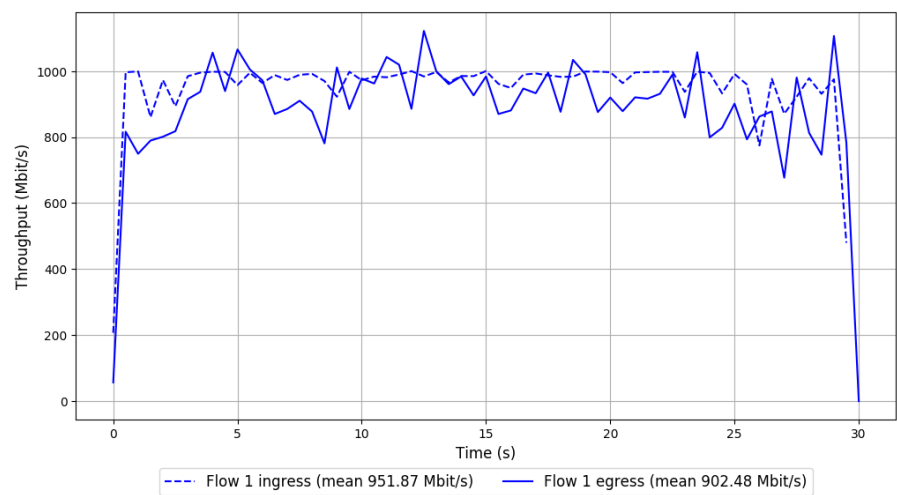
-- Flow 1:

Average throughput: 902.48 Mbit/s

95th percentile per-packet one-way delay: 294.849 ms

Loss rate: 5.19%

Run 3: Report of FillP — Data Link

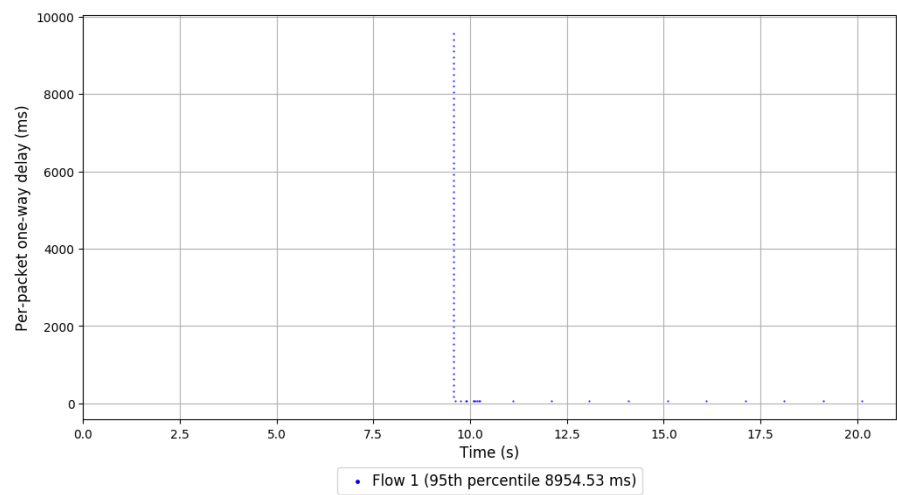
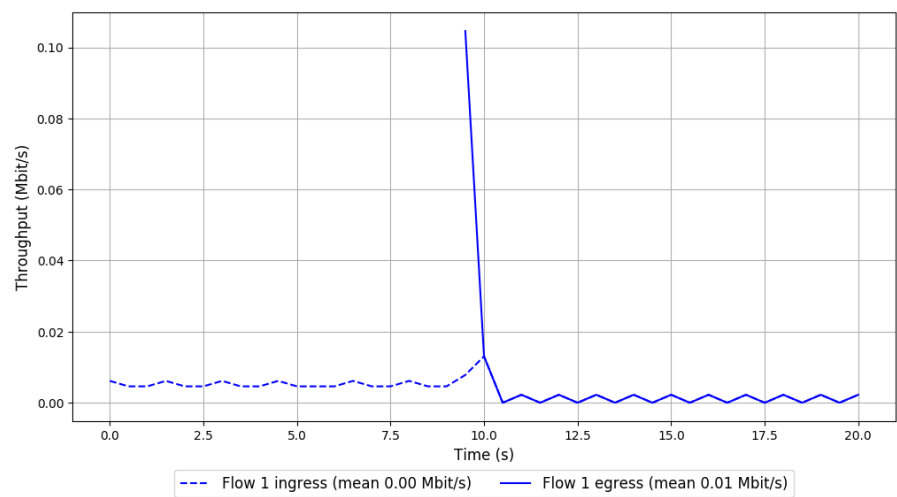


Run 4: Statistics of FillP

Start at: 2017-12-20 09:45:54

End at: 2017-12-20 09:46:24

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2017-12-20 09:57:04

End at: 2017-12-20 09:57:34

Below is generated by plot.py at 2017-12-20 12:47:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 952.11 Mbit/s

95th percentile per-packet one-way delay: 278.482 ms

Loss rate: 1.40%

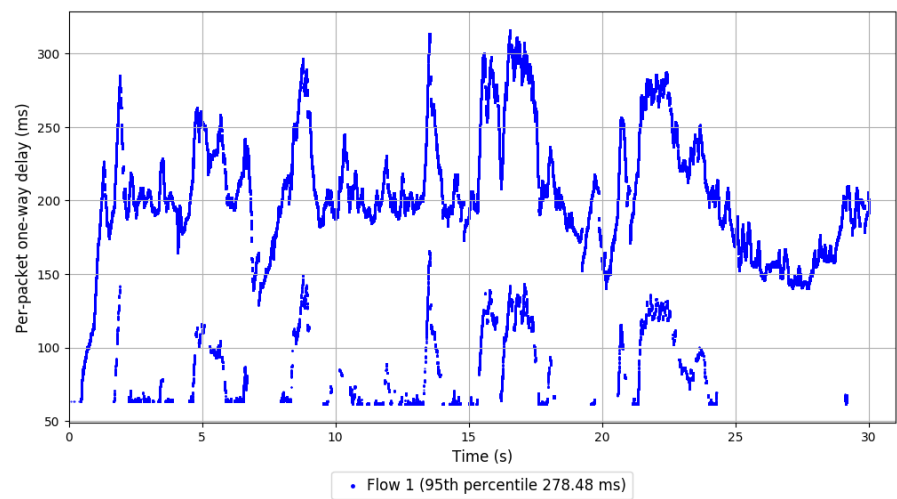
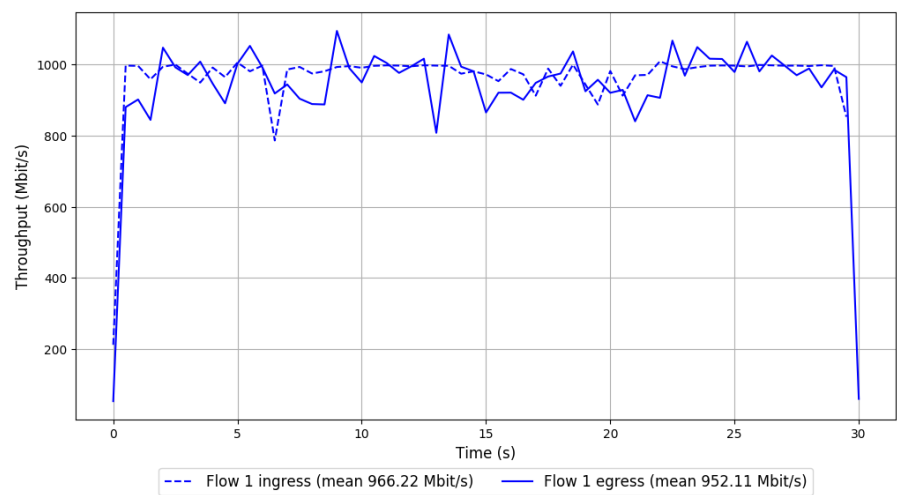
-- Flow 1:

Average throughput: 952.11 Mbit/s

95th percentile per-packet one-way delay: 278.482 ms

Loss rate: 1.40%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2017-12-20 10:08:58

End at: 2017-12-20 10:09:28

Below is generated by plot.py at 2017-12-20 12:47:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 384.85 Mbit/s

95th percentile per-packet one-way delay: 163.006 ms

Loss rate: 0.65%

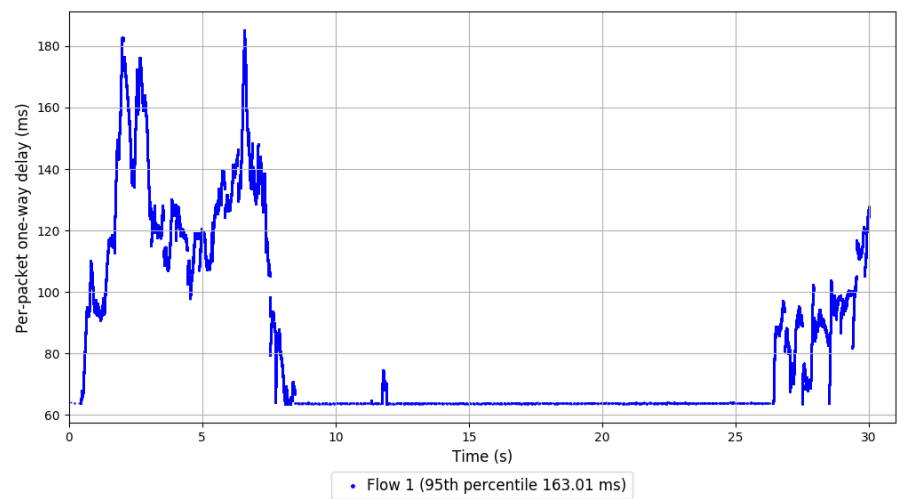
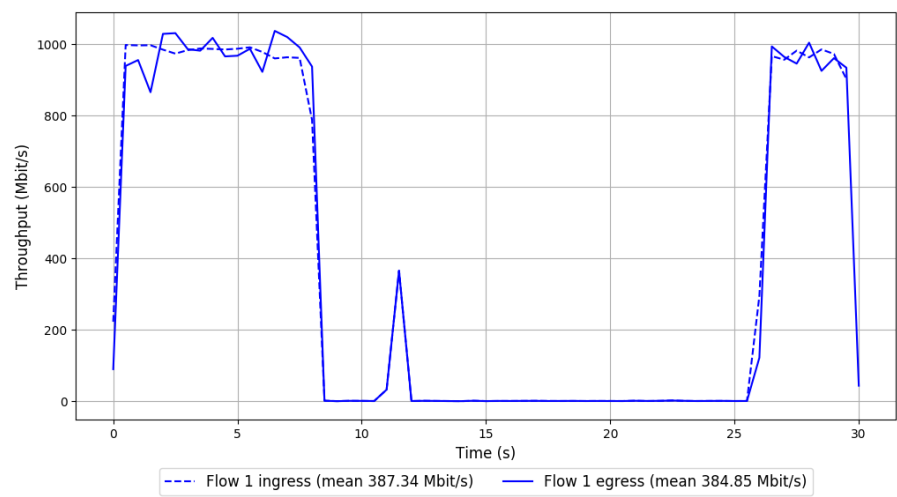
-- Flow 1:

Average throughput: 384.85 Mbit/s

95th percentile per-packet one-way delay: 163.006 ms

Loss rate: 0.65%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2017-12-20 10:19:53

End at: 2017-12-20 10:20:24

Below is generated by plot.py at 2017-12-20 12:47:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 952.02 Mbit/s

95th percentile per-packet one-way delay: 264.796 ms

Loss rate: 1.44%

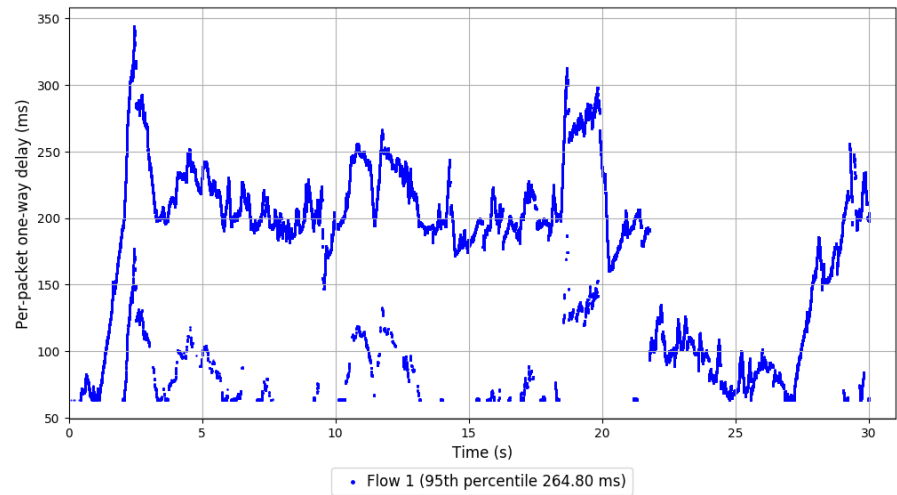
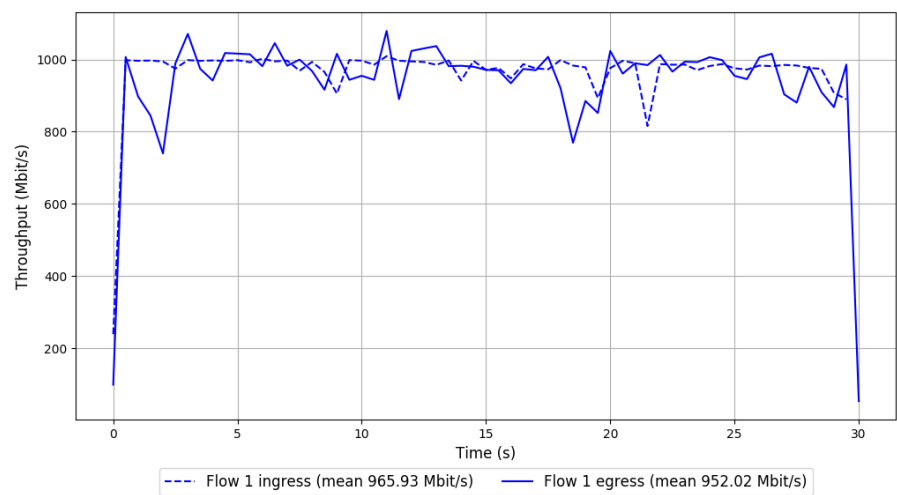
-- Flow 1:

Average throughput: 952.02 Mbit/s

95th percentile per-packet one-way delay: 264.796 ms

Loss rate: 1.44%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2017-12-20 10:31:37

End at: 2017-12-20 10:32:07

Below is generated by plot.py at 2017-12-20 12:47:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 847.35 Mbit/s

95th percentile per-packet one-way delay: 290.200 ms

Loss rate: 2.88%

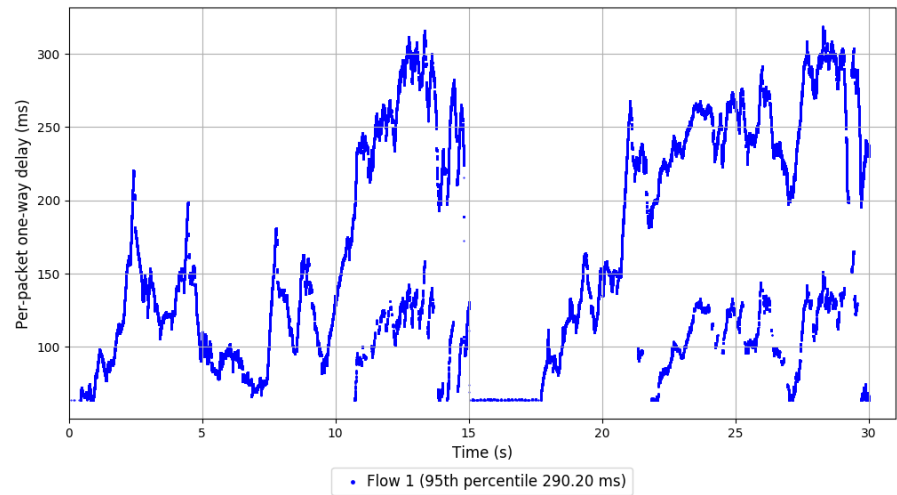
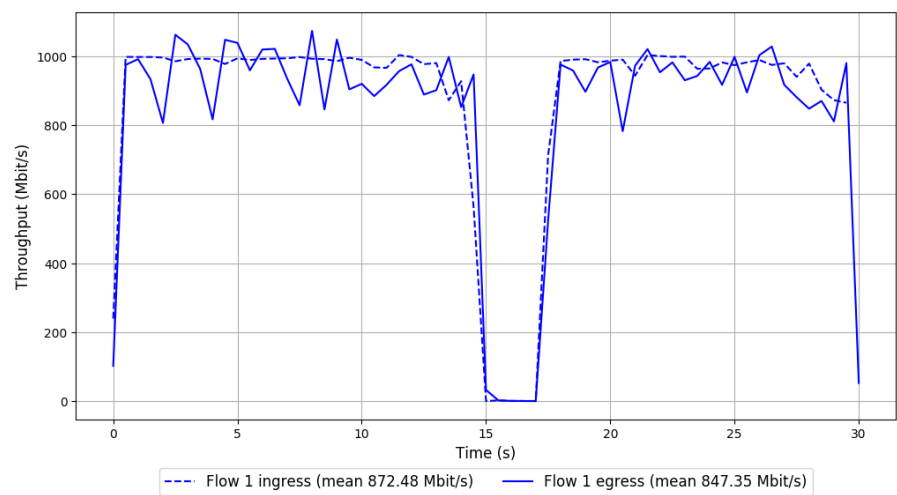
-- Flow 1:

Average throughput: 847.35 Mbit/s

95th percentile per-packet one-way delay: 290.200 ms

Loss rate: 2.88%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2017-12-20 10:43:03

End at: 2017-12-20 10:43:33

Below is generated by plot.py at 2017-12-20 12:48:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 949.99 Mbit/s

95th percentile per-packet one-way delay: 273.832 ms

Loss rate: 2.01%

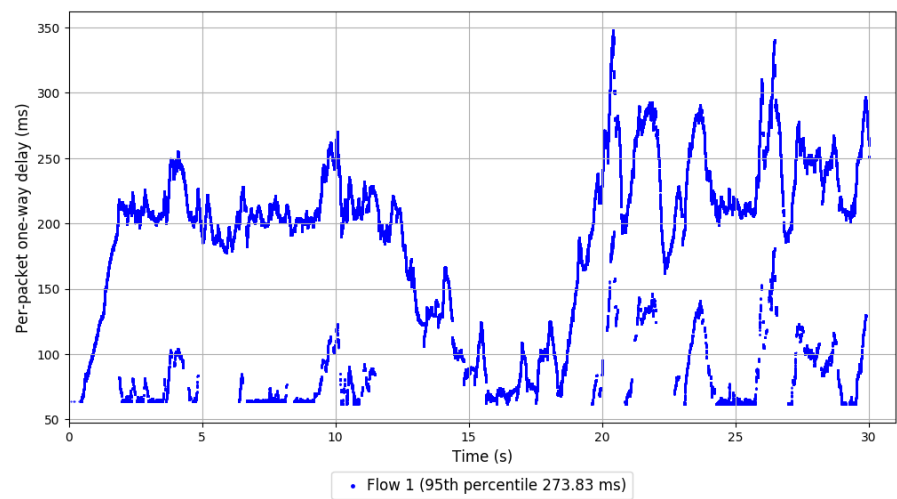
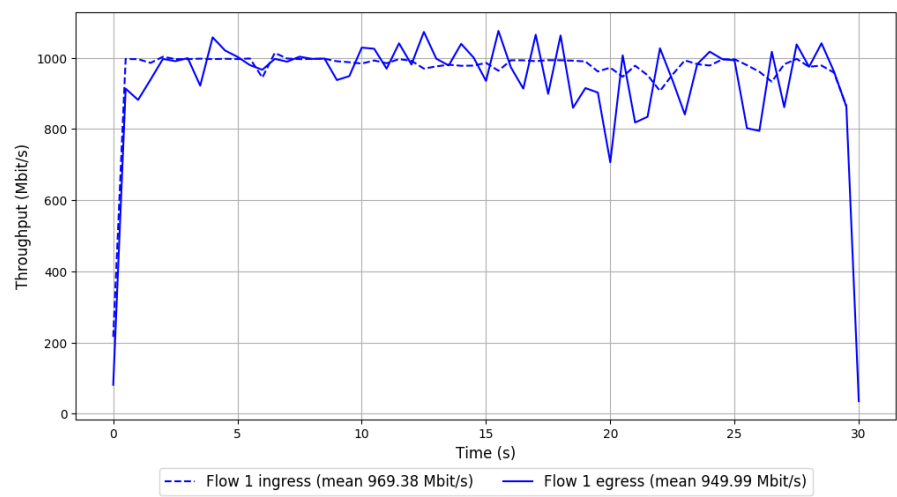
-- Flow 1:

Average throughput: 949.99 Mbit/s

95th percentile per-packet one-way delay: 273.832 ms

Loss rate: 2.01%

Run 9: Report of FillP — Data Link

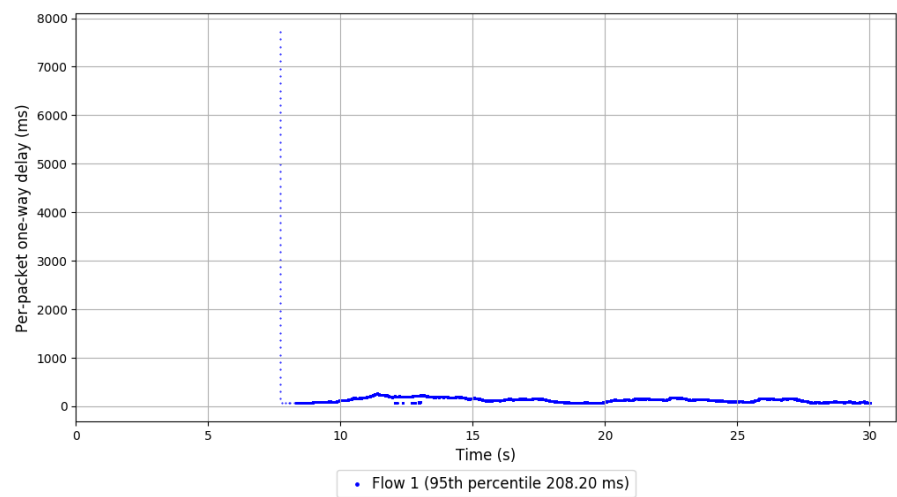
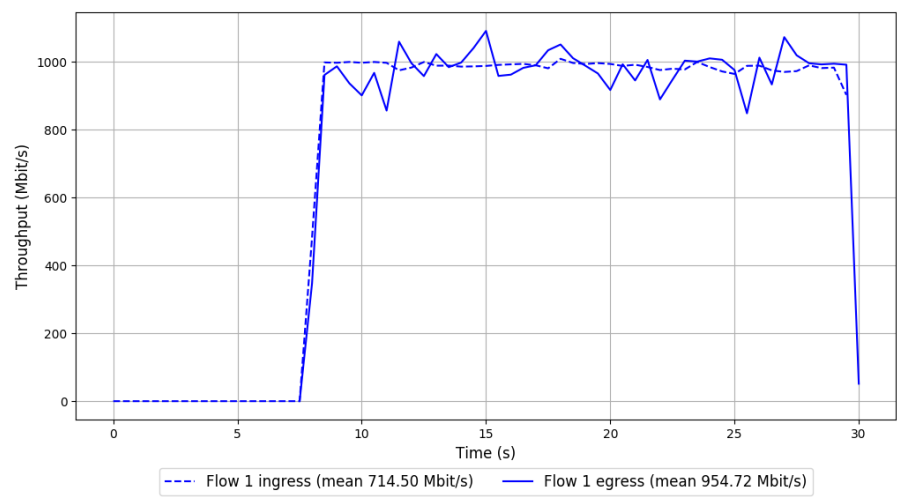


Run 10: Statistics of FillP

Start at: 2017-12-20 10:54:36

End at: 2017-12-20 10:55:06

Run 10: Report of FillP — Data Link

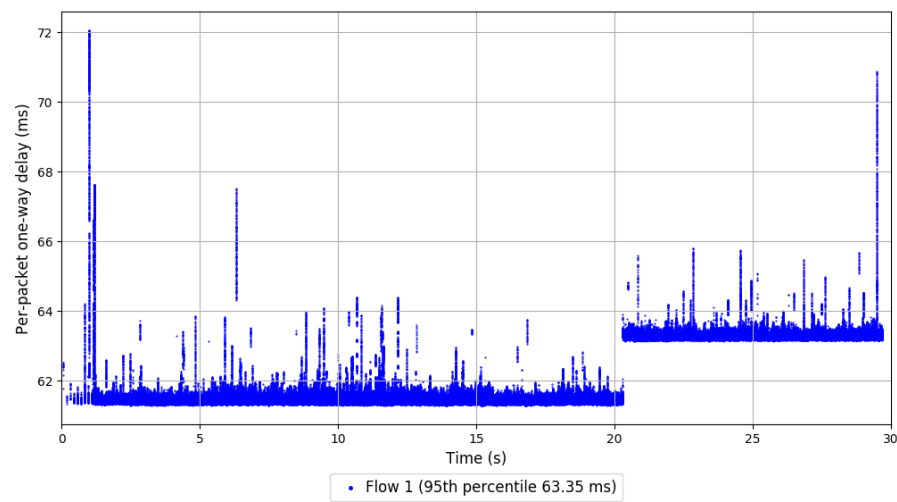
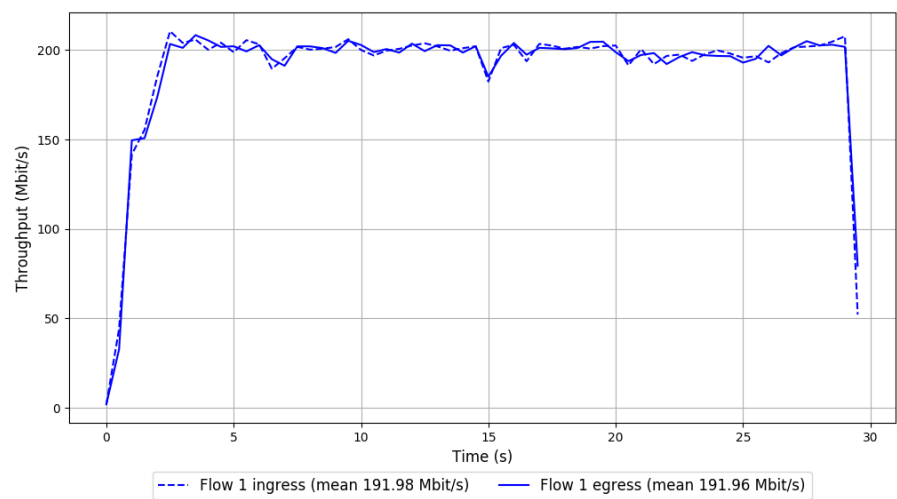


```
Run 1: Statistics of Indigo

Start at: 2017-12-20 09:13:02
End at: 2017-12-20 09:13:32

# Below is generated by plot.py at 2017-12-20 12:48:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.96 Mbit/s
95th percentile per-packet one-way delay: 63.348 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 191.96 Mbit/s
95th percentile per-packet one-way delay: 63.348 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-20 09:24:02

End at: 2017-12-20 09:24:32

Below is generated by plot.py at 2017-12-20 12:48:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.29 Mbit/s

95th percentile per-packet one-way delay: 61.738 ms

Loss rate: 0.01%

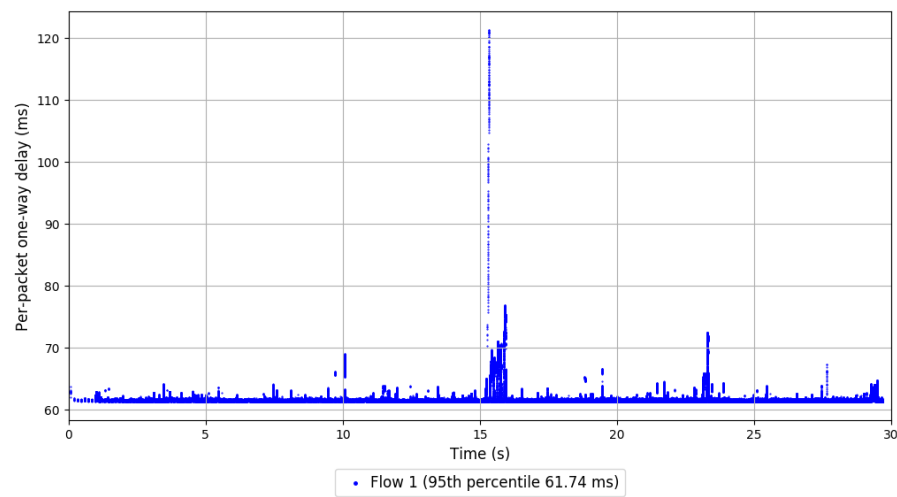
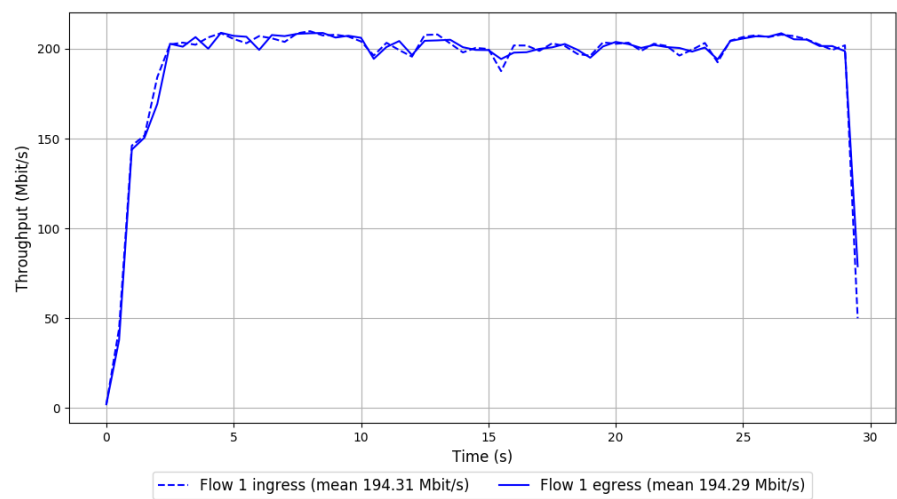
-- Flow 1:

Average throughput: 194.29 Mbit/s

95th percentile per-packet one-way delay: 61.738 ms

Loss rate: 0.01%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-20 09:35:37

End at: 2017-12-20 09:36:07

Below is generated by plot.py at 2017-12-20 12:48:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.23 Mbit/s

95th percentile per-packet one-way delay: 63.391 ms

Loss rate: 0.01%

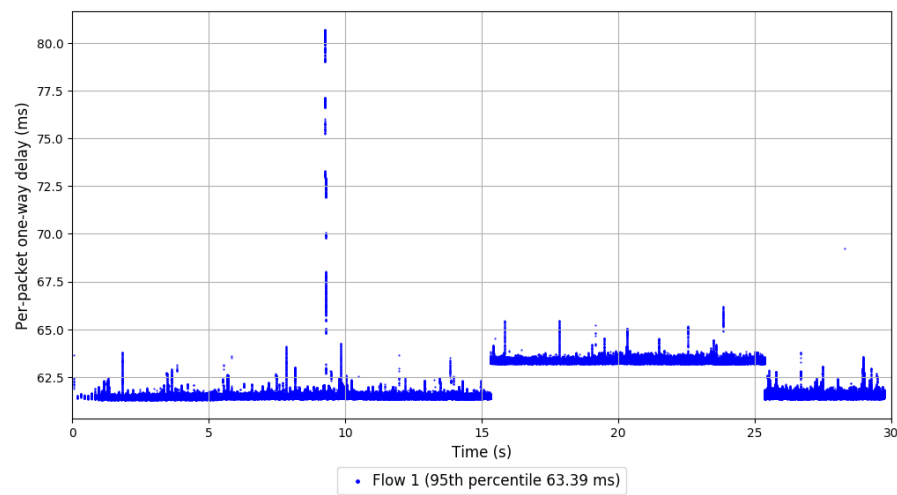
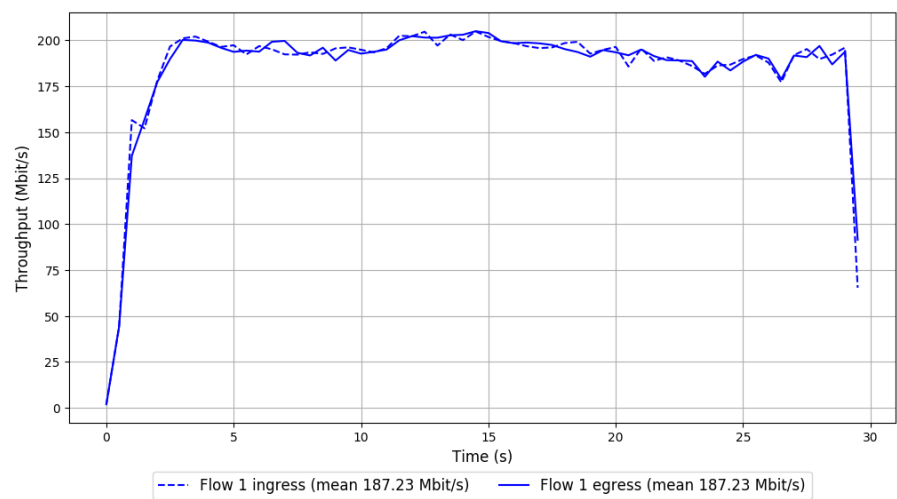
-- Flow 1:

Average throughput: 187.23 Mbit/s

95th percentile per-packet one-way delay: 63.391 ms

Loss rate: 0.01%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-20 09:46:32

End at: 2017-12-20 09:47:02

Below is generated by plot.py at 2017-12-20 12:48:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.25 Mbit/s

95th percentile per-packet one-way delay: 63.866 ms

Loss rate: 0.01%

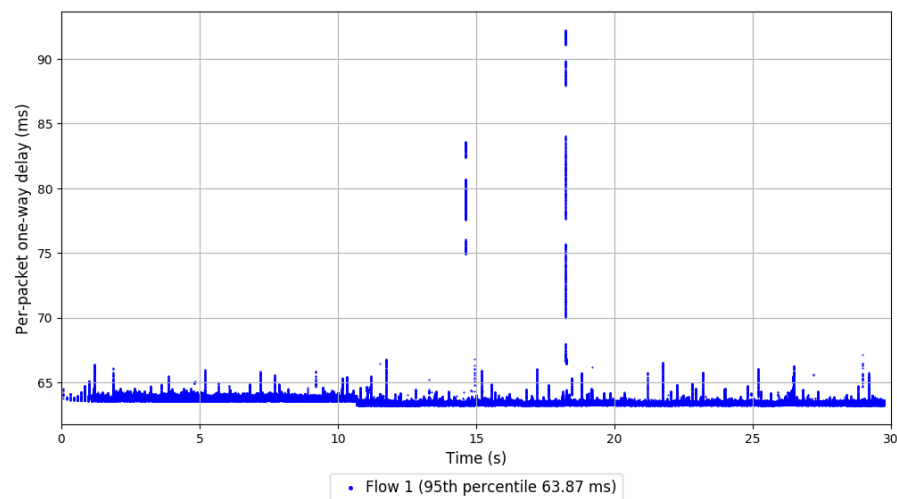
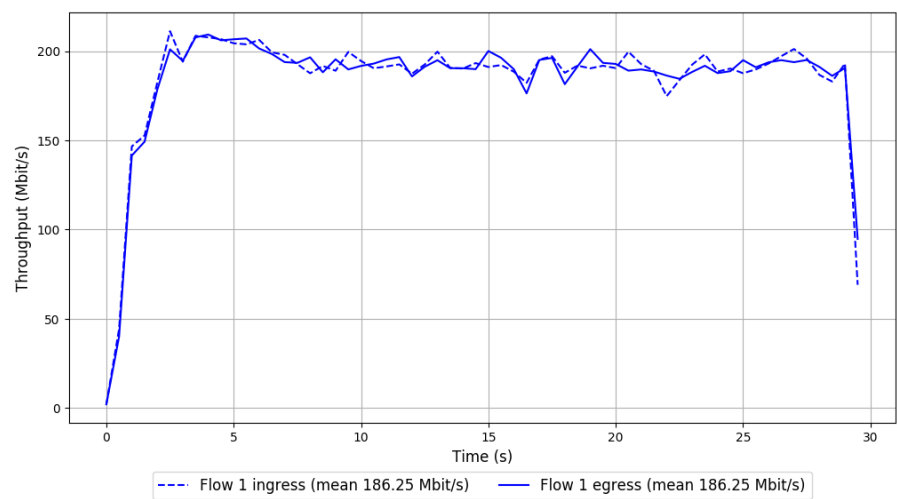
-- Flow 1:

Average throughput: 186.25 Mbit/s

95th percentile per-packet one-way delay: 63.866 ms

Loss rate: 0.01%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-20 09:58:22

End at: 2017-12-20 09:58:52

Below is generated by plot.py at 2017-12-20 12:48:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.96 Mbit/s

95th percentile per-packet one-way delay: 63.798 ms

Loss rate: 0.00%

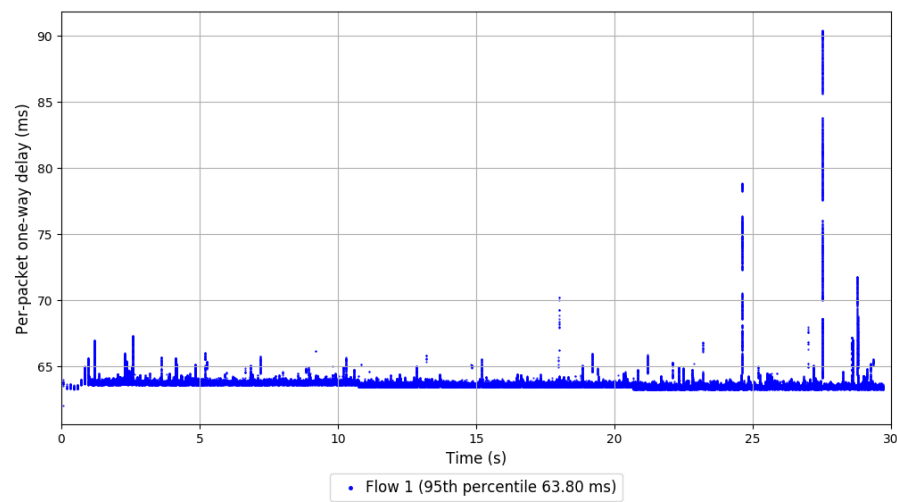
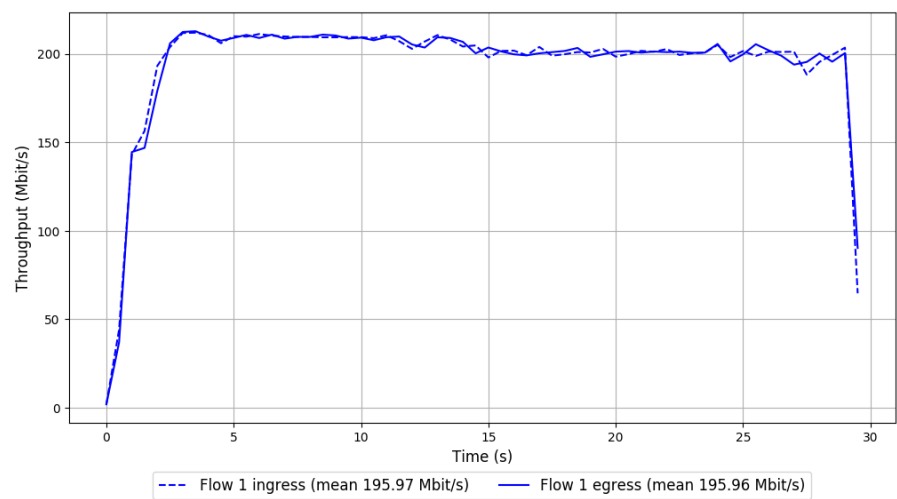
-- Flow 1:

Average throughput: 195.96 Mbit/s

95th percentile per-packet one-way delay: 63.798 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-20 10:09:50

End at: 2017-12-20 10:10:20

Below is generated by plot.py at 2017-12-20 12:48:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.77 Mbit/s

95th percentile per-packet one-way delay: 63.835 ms

Loss rate: 0.00%

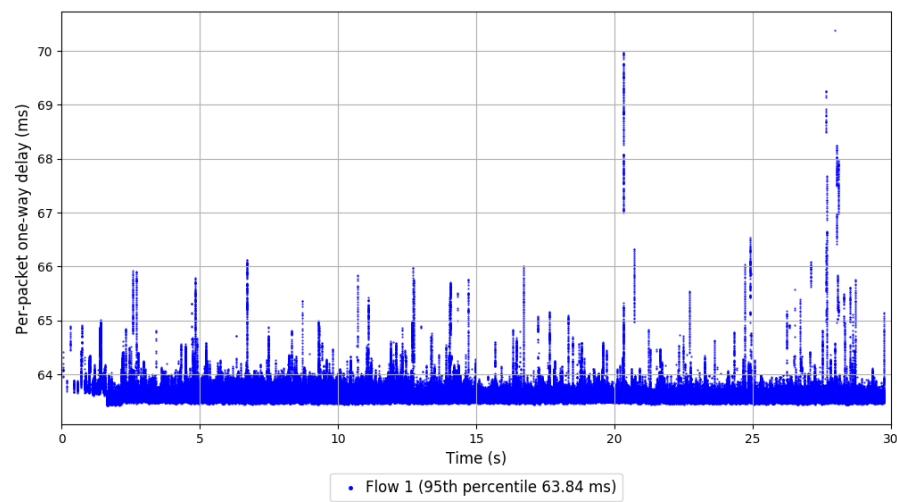
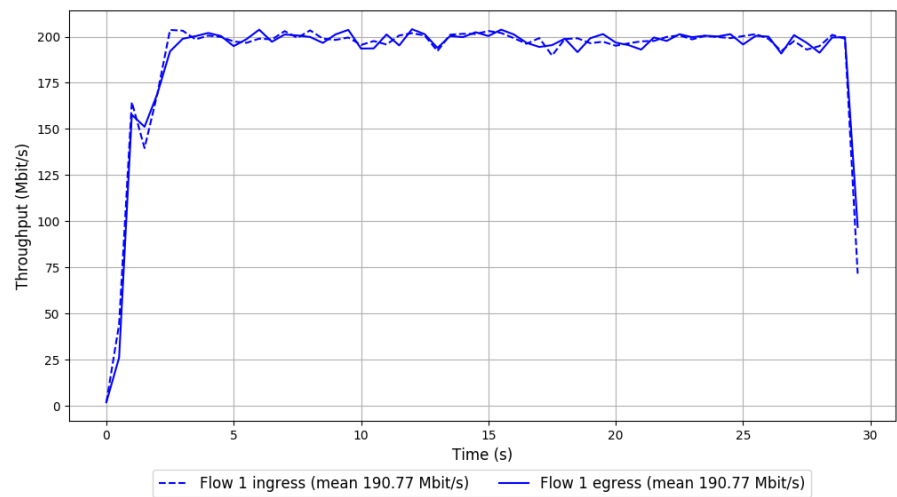
-- Flow 1:

Average throughput: 190.77 Mbit/s

95th percentile per-packet one-way delay: 63.835 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-20 10:21:09

End at: 2017-12-20 10:21:39

Below is generated by plot.py at 2017-12-20 12:48:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.43 Mbit/s

95th percentile per-packet one-way delay: 63.738 ms

Loss rate: 0.18%

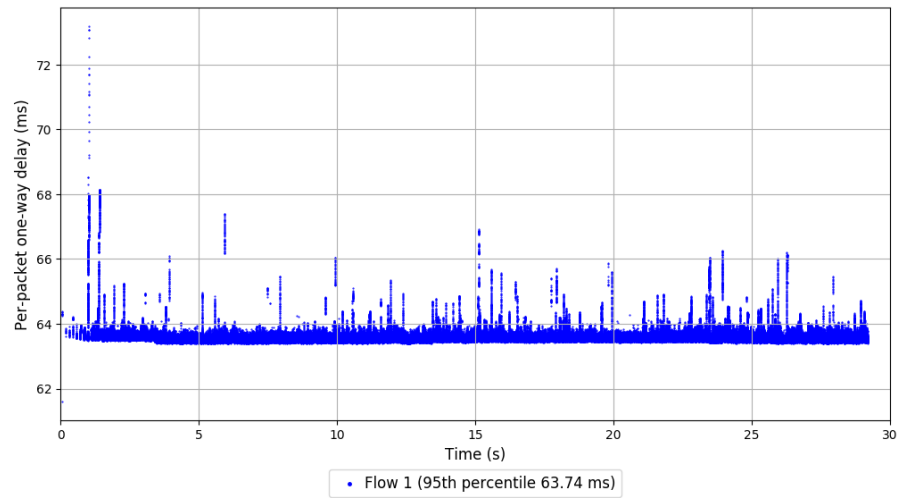
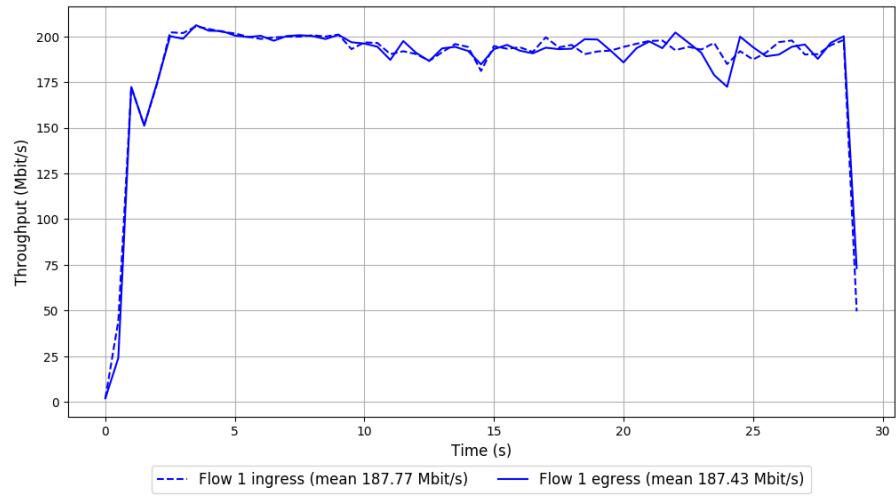
-- Flow 1:

Average throughput: 187.43 Mbit/s

95th percentile per-packet one-way delay: 63.738 ms

Loss rate: 0.18%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-20 10:32:51

End at: 2017-12-20 10:33:21

Below is generated by plot.py at 2017-12-20 12:49:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.29 Mbit/s

95th percentile per-packet one-way delay: 63.844 ms

Loss rate: 0.07%

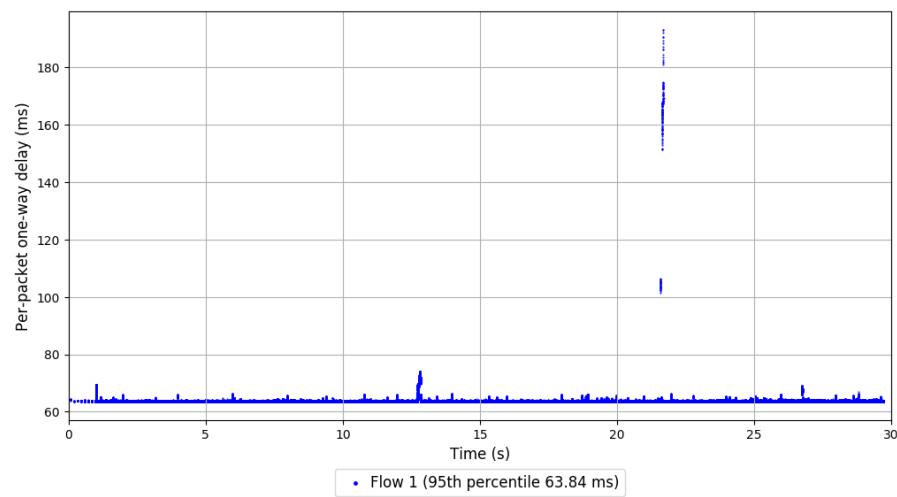
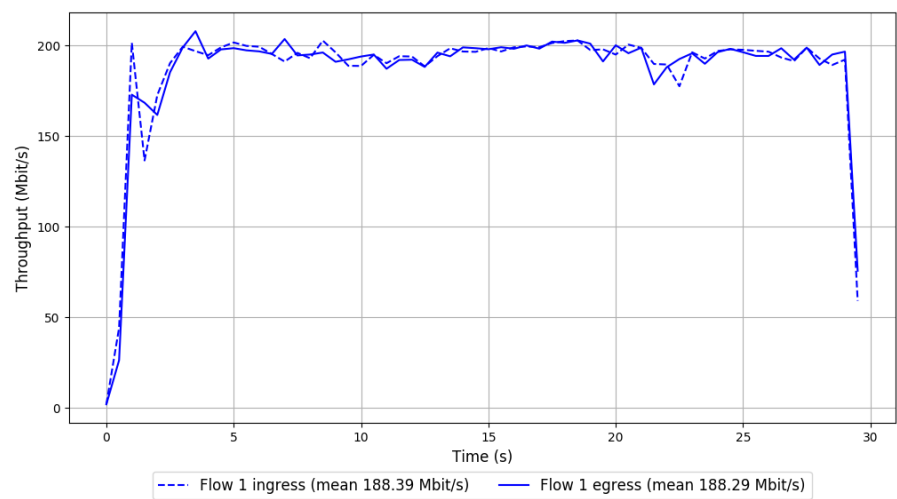
-- Flow 1:

Average throughput: 188.29 Mbit/s

95th percentile per-packet one-way delay: 63.844 ms

Loss rate: 0.07%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-20 10:44:20

End at: 2017-12-20 10:44:50

Below is generated by plot.py at 2017-12-20 12:49:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.93 Mbit/s

95th percentile per-packet one-way delay: 63.882 ms

Loss rate: 0.02%

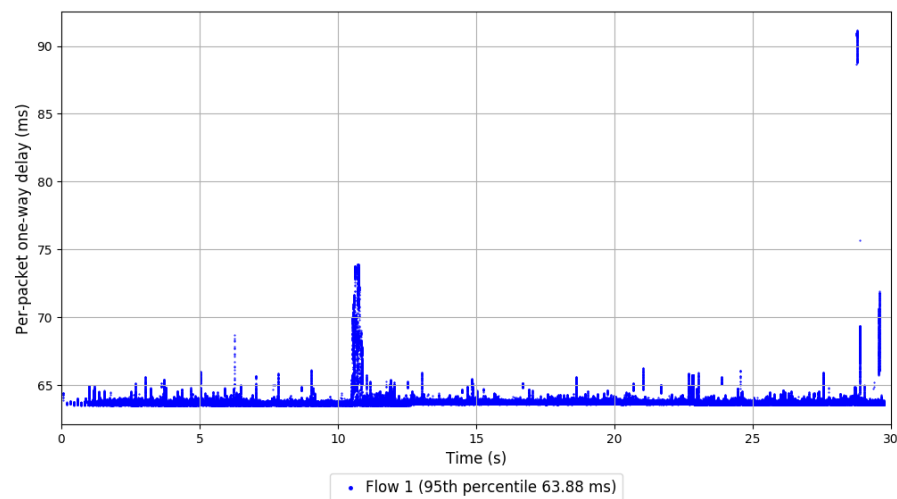
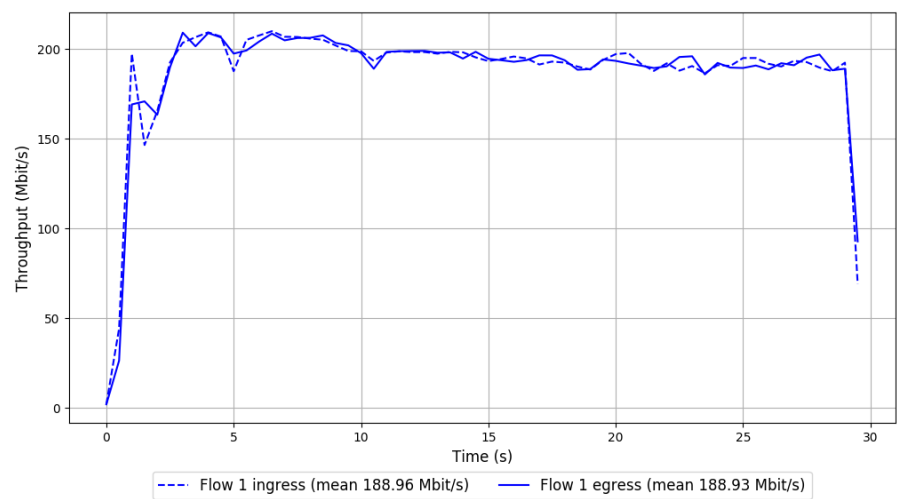
-- Flow 1:

Average throughput: 188.93 Mbit/s

95th percentile per-packet one-way delay: 63.882 ms

Loss rate: 0.02%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-20 10:55:42

End at: 2017-12-20 10:56:12

Below is generated by plot.py at 2017-12-20 12:49:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.18 Mbit/s

95th percentile per-packet one-way delay: 63.853 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 185.18 Mbit/s

95th percentile per-packet one-way delay: 63.853 ms

Loss rate: 0.03%

Run 10: Report of Indigo — Data Link

