

Pantheon Report

Generated at 2017-12-20 00:16:12 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

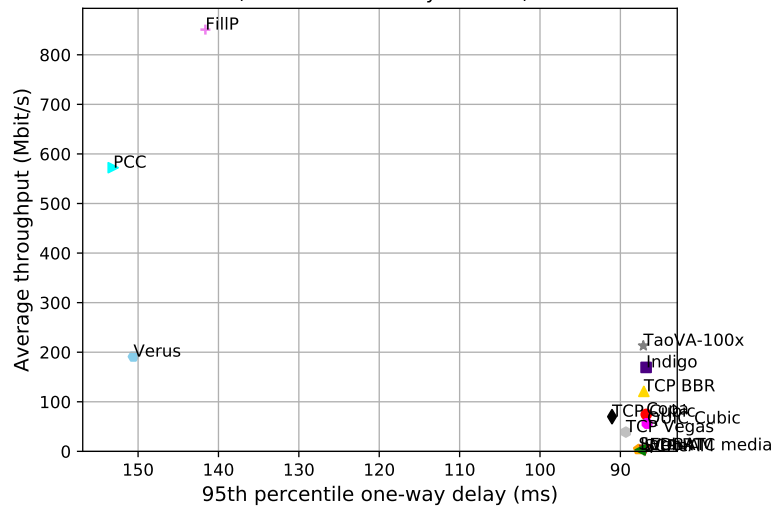
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

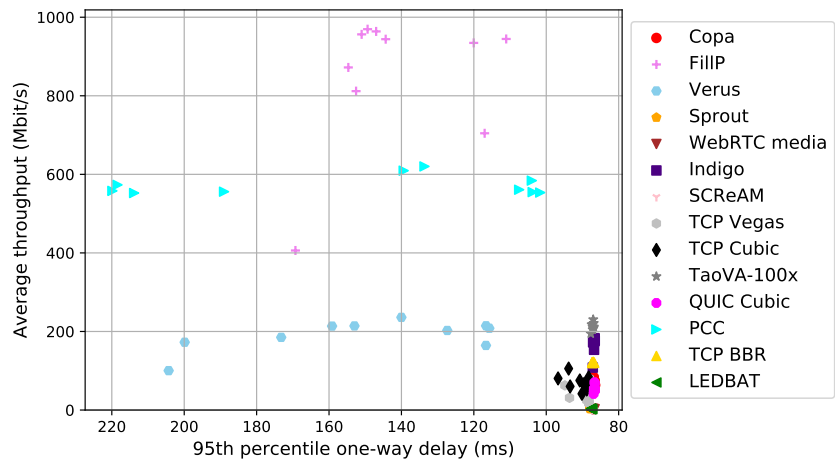
Git summary:

```
branch: master @ 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 Sydney Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	121.00	87.08	0.67
TCP Cubic	9	69.98	91.04	0.89
LEDBAT	10	2.73	87.55	1.23
PCC	10	572.25	153.09	2.42
QUIC Cubic	9	56.23	86.69	0.86
SCReAM	3	0.22	87.03	0.60
WebRTC media	9	2.14	86.98	0.75
Sprout	10	3.93	87.75	1.16
TaoVA-100x	10	213.01	87.14	0.70
TCP Vegas	10	38.83	89.32	0.98
Verus	10	191.14	150.58	1.01
Copa	10	74.56	86.78	0.55
FillP	10	850.78	141.63	1.95
Indigo	10	169.34	86.80	0.75

Run 1: Statistics of TCP BBR

Start at: 2017-12-19 19:13:48

End at: 2017-12-19 19:14:18

Below is generated by plot.py at 2017-12-19 23:22:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.82 Mbit/s

95th percentile per-packet one-way delay: 87.305 ms

Loss rate: 0.61%

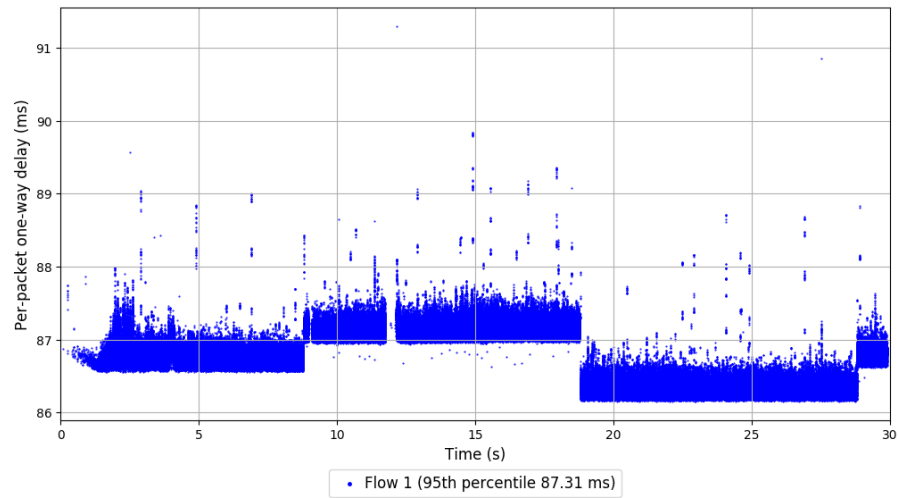
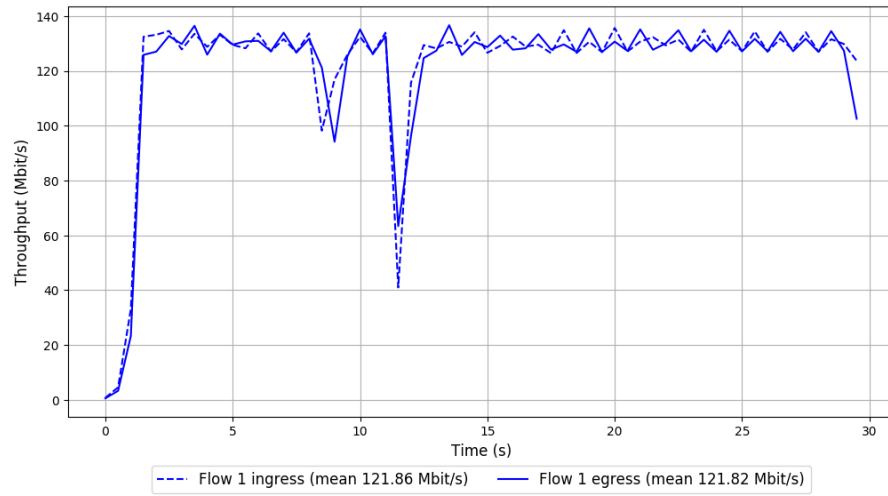
-- Flow 1:

Average throughput: 121.82 Mbit/s

95th percentile per-packet one-way delay: 87.305 ms

Loss rate: 0.61%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-19 19:25:59

End at: 2017-12-19 19:26:29

Below is generated by plot.py at 2017-12-19 23:22:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.42 Mbit/s

95th percentile per-packet one-way delay: 87.245 ms

Loss rate: 0.61%

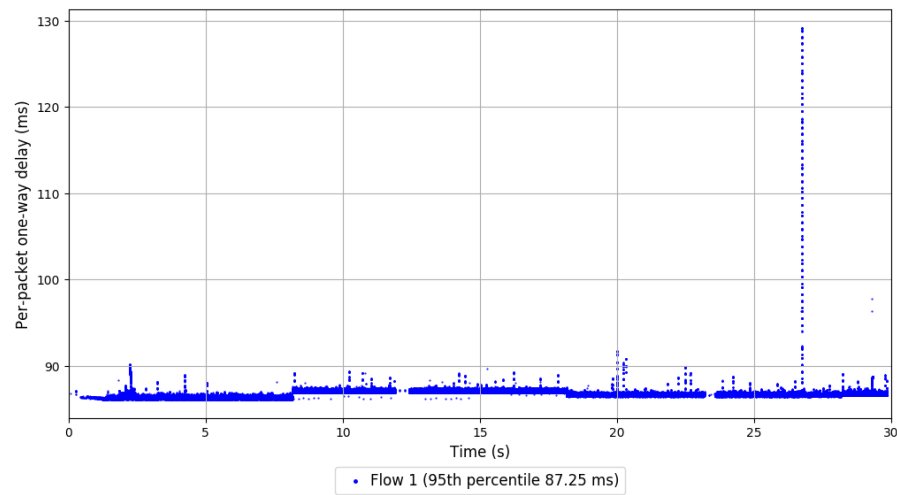
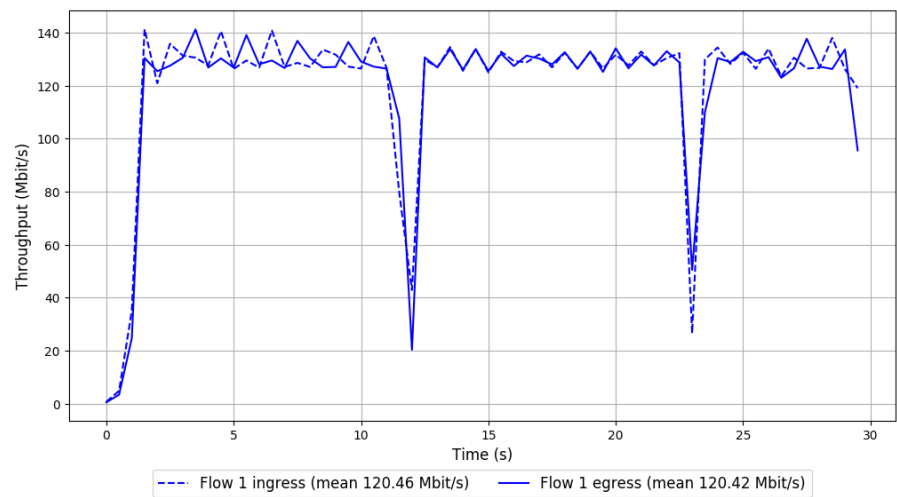
-- Flow 1:

Average throughput: 120.42 Mbit/s

95th percentile per-packet one-way delay: 87.245 ms

Loss rate: 0.61%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-19 19:38:12

End at: 2017-12-19 19:38:42

Below is generated by plot.py at 2017-12-19 23:22:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.70 Mbit/s

95th percentile per-packet one-way delay: 87.267 ms

Loss rate: 0.66%

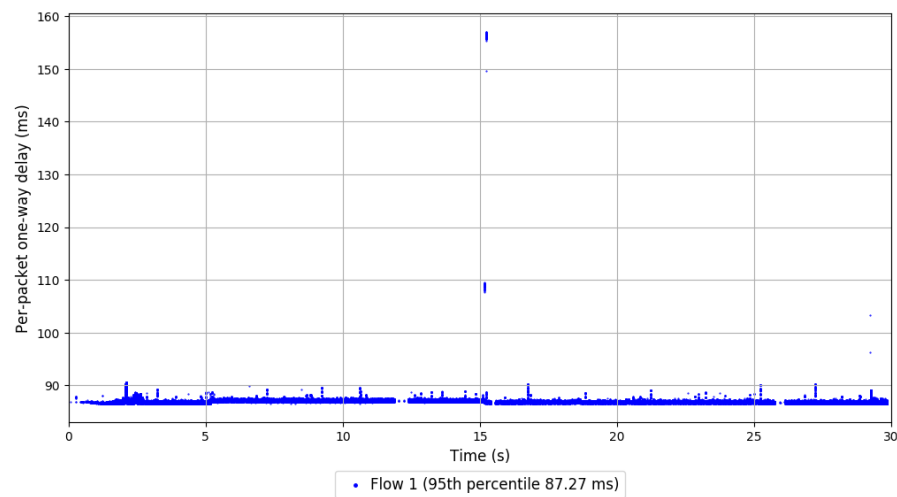
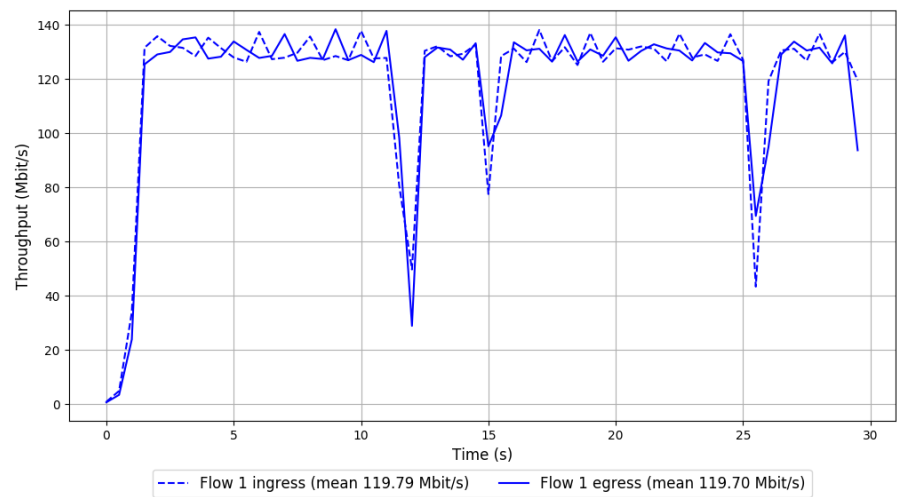
-- Flow 1:

Average throughput: 119.70 Mbit/s

95th percentile per-packet one-way delay: 87.267 ms

Loss rate: 0.66%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-19 19:50:30

End at: 2017-12-19 19:51:00

Below is generated by plot.py at 2017-12-19 23:22:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.97 Mbit/s

95th percentile per-packet one-way delay: 86.969 ms

Loss rate: 0.60%

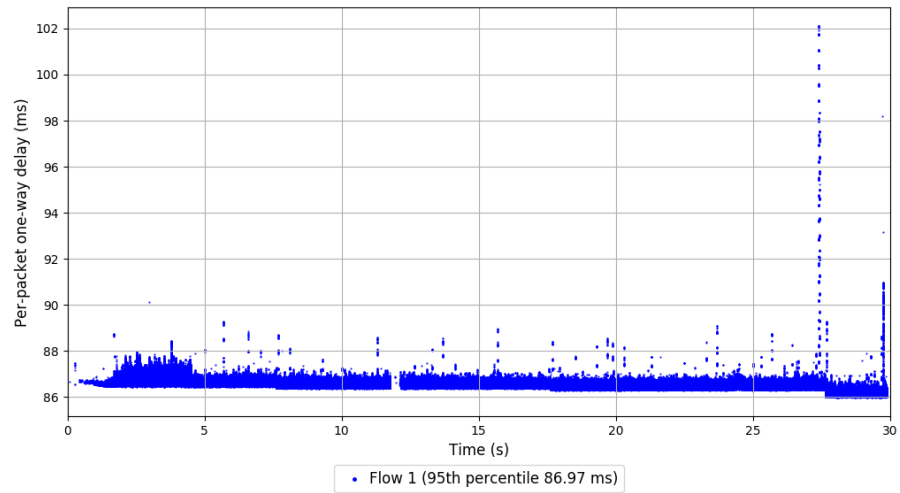
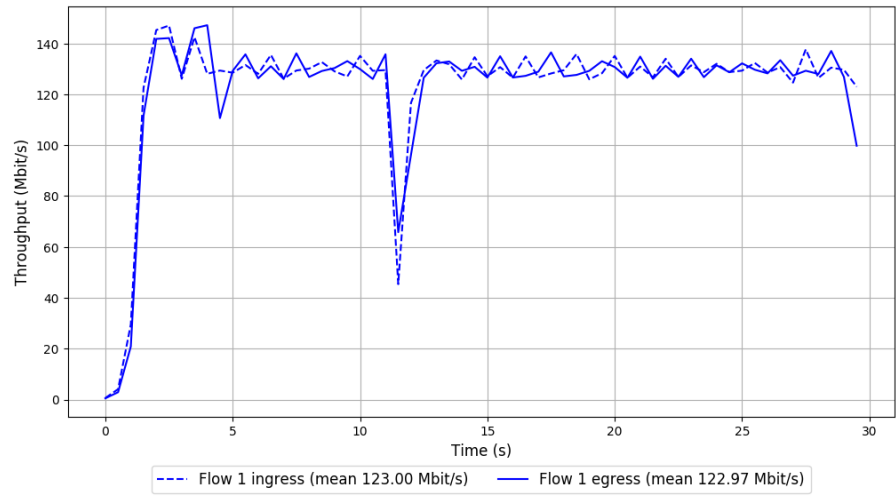
-- Flow 1:

Average throughput: 122.97 Mbit/s

95th percentile per-packet one-way delay: 86.969 ms

Loss rate: 0.60%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-19 20:02:42

End at: 2017-12-19 20:03:12

Below is generated by plot.py at 2017-12-19 23:22:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.24 Mbit/s

95th percentile per-packet one-way delay: 86.907 ms

Loss rate: 0.65%

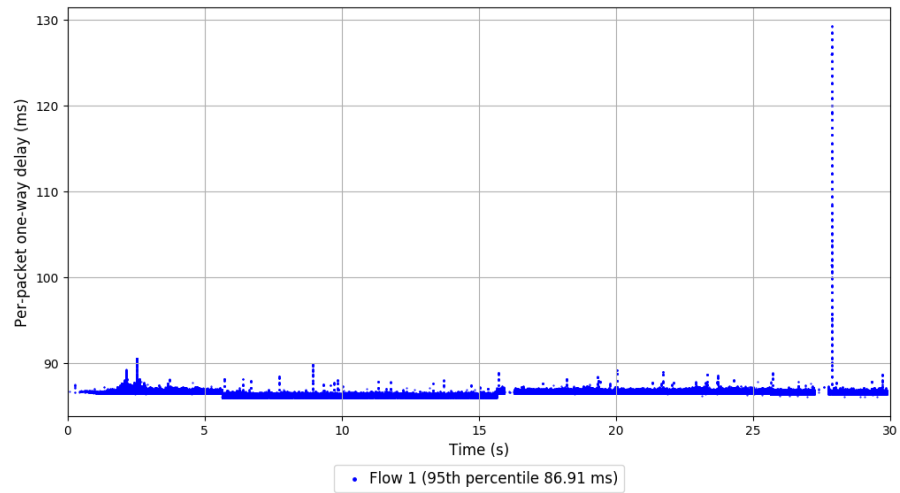
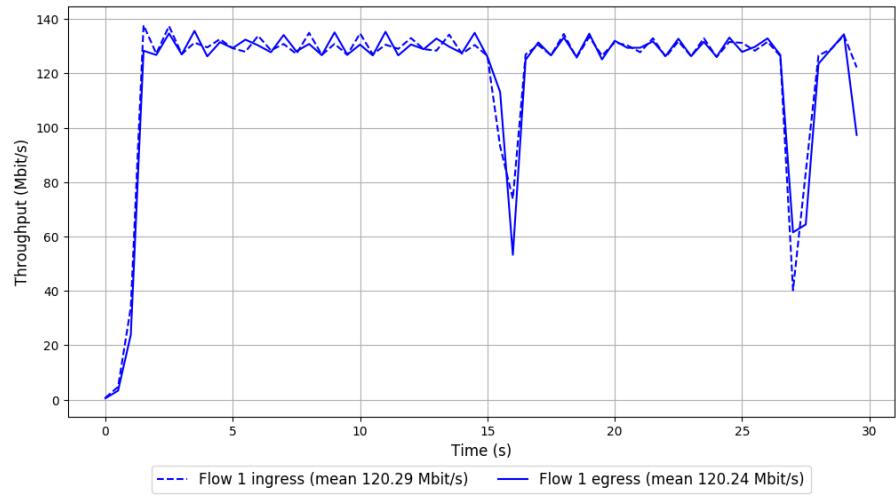
-- Flow 1:

Average throughput: 120.24 Mbit/s

95th percentile per-packet one-way delay: 86.907 ms

Loss rate: 0.65%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-19 20:14:50

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

Below is generated by plot.py at 2017-12-19 23:22:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.25 Mbit/s

95th percentile per-packet one-way delay: 87.225 ms

Loss rate: 0.61%

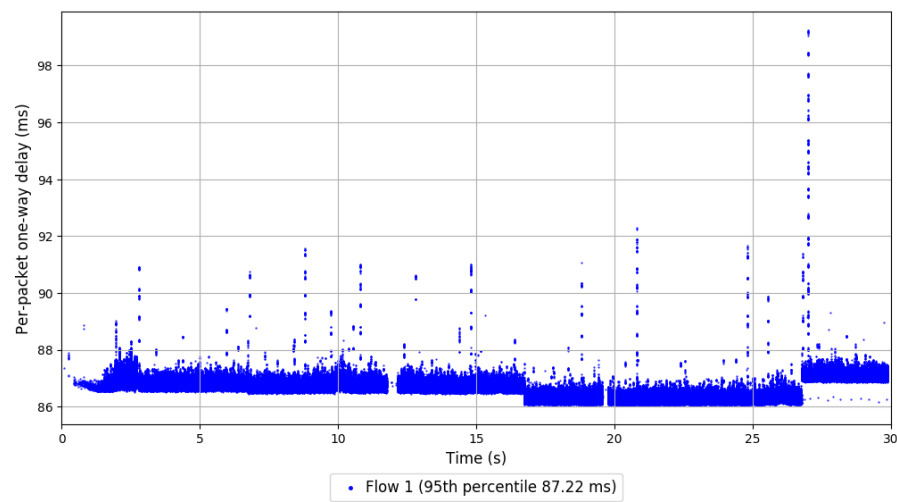
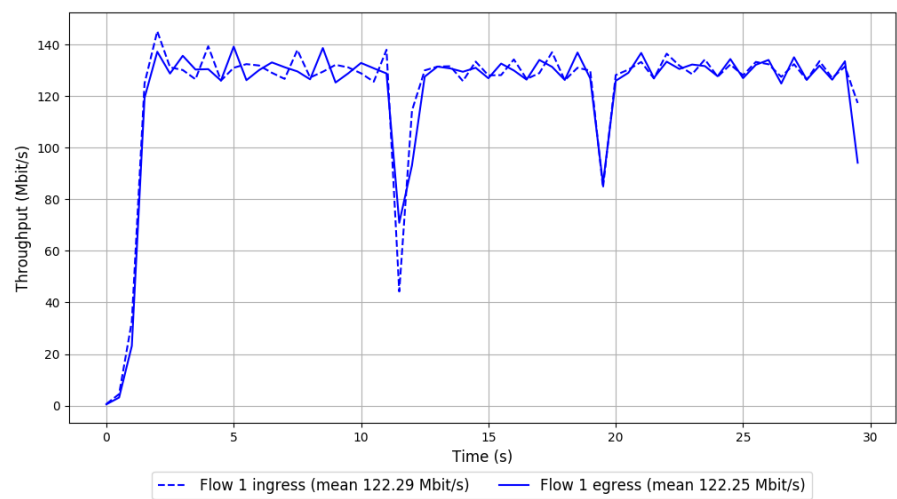
-- Flow 1:

Average throughput: 122.25 Mbit/s

95th percentile per-packet one-way delay: 87.225 ms

Loss rate: 0.61%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-19 20:26:43

End at: 2017-12-19 20:27:13

Below is generated by plot.py at 2017-12-19 23:22:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.75 Mbit/s

95th percentile per-packet one-way delay: 87.091 ms

Loss rate: 0.71%

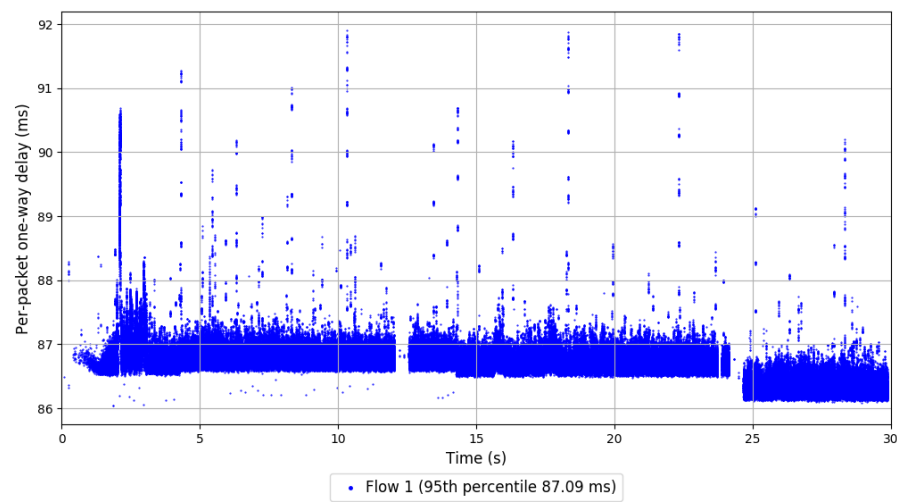
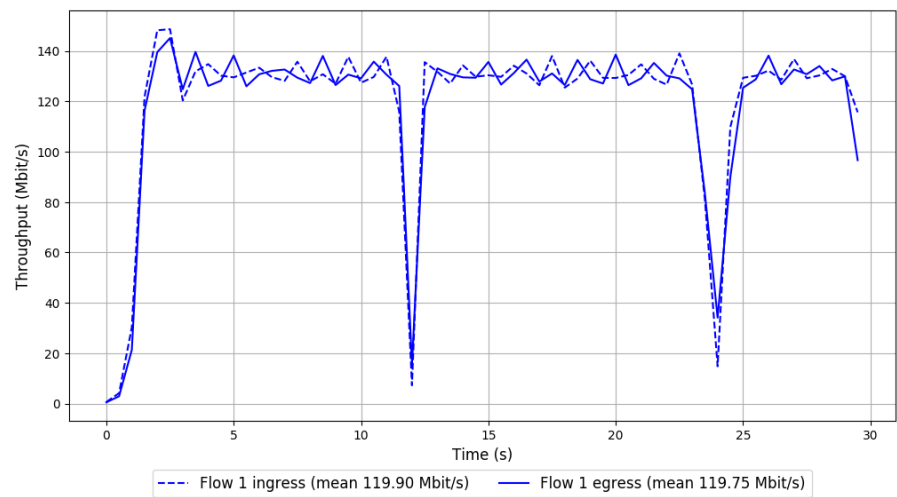
-- Flow 1:

Average throughput: 119.75 Mbit/s

95th percentile per-packet one-way delay: 87.091 ms

Loss rate: 0.71%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-19 20:39:03

End at: 2017-12-19 20:39:33

Below is generated by plot.py at 2017-12-19 23:22:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 121.80 Mbit/s

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

Loss rate: 0.80%

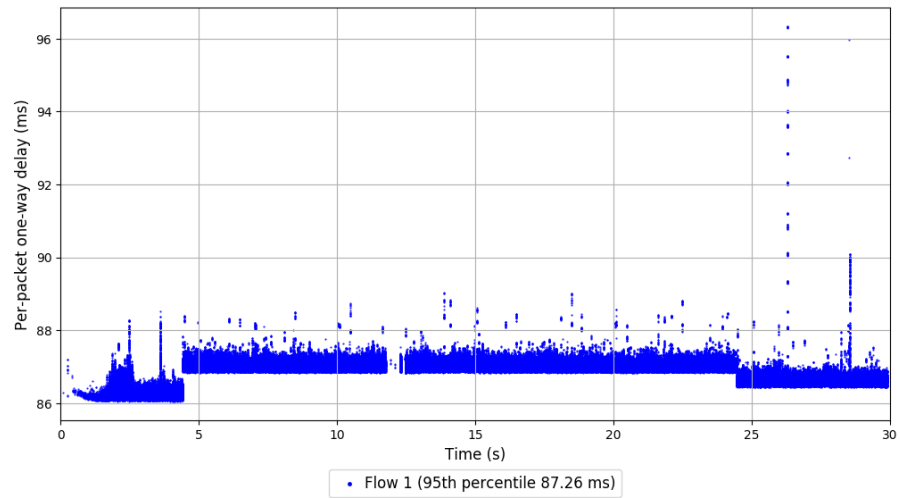
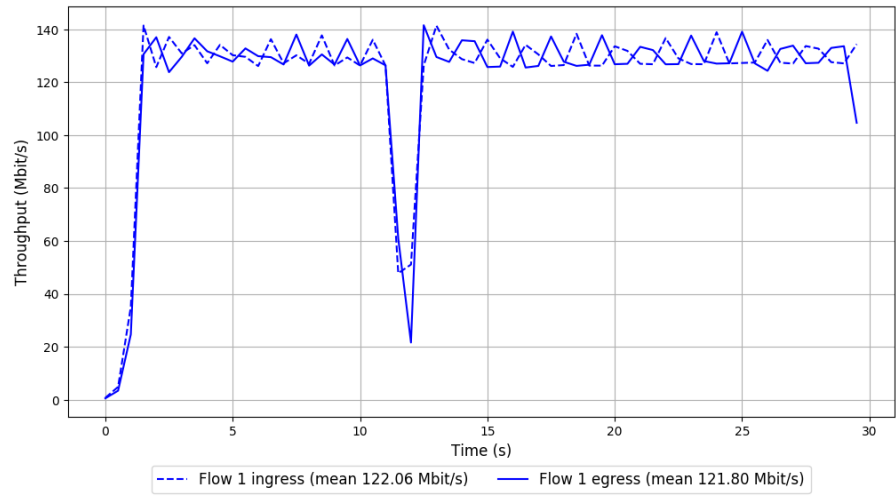
-- Flow 1:

Average throughput: 121.80 Mbit/s

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

Loss rate: 0.80%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-19 20:51:30

End at: 2017-12-19 20:52:00

Below is generated by plot.py at 2017-12-19 23:24:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.67 Mbit/s

95th percentile per-packet one-way delay: 86.830 ms

Loss rate: 0.61%

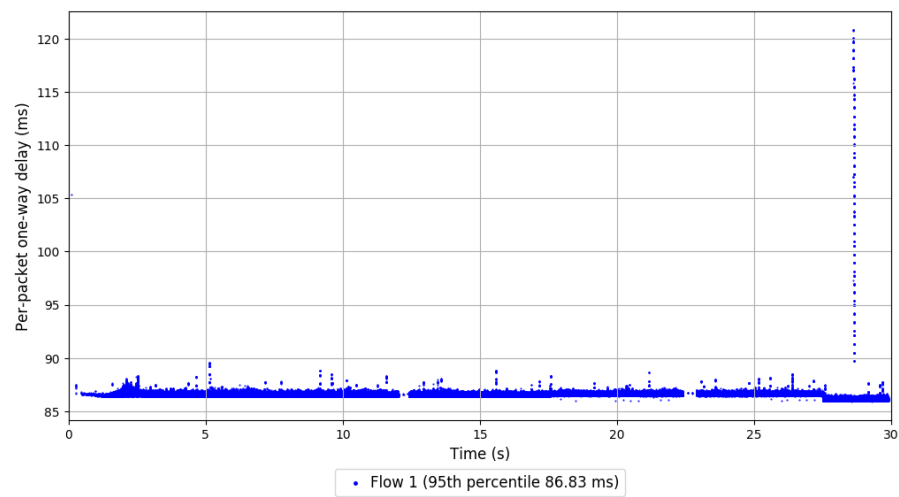
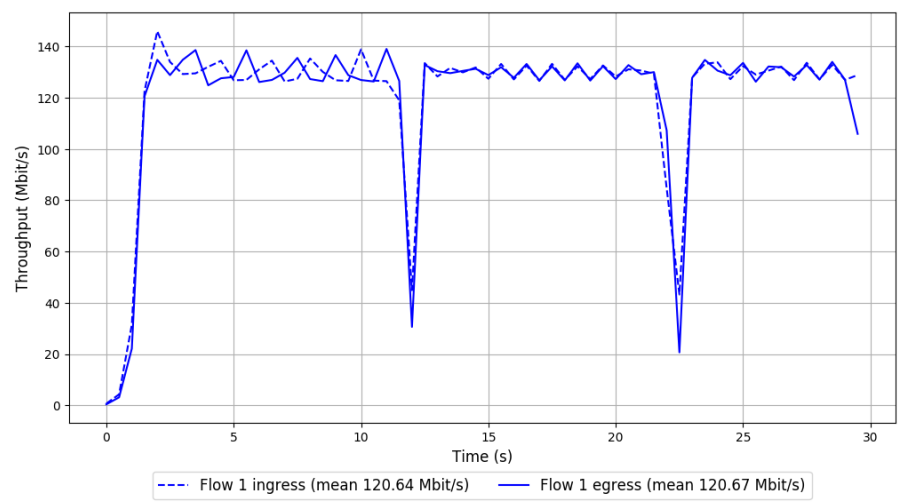
-- Flow 1:

Average throughput: 120.67 Mbit/s

95th percentile per-packet one-way delay: 86.830 ms

Loss rate: 0.61%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-19 21:04:23

End at: 2017-12-19 21:04:53

Below is generated by plot.py at 2017-12-19 23:24:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.37 Mbit/s

95th percentile per-packet one-way delay: 86.745 ms

Loss rate: 0.83%

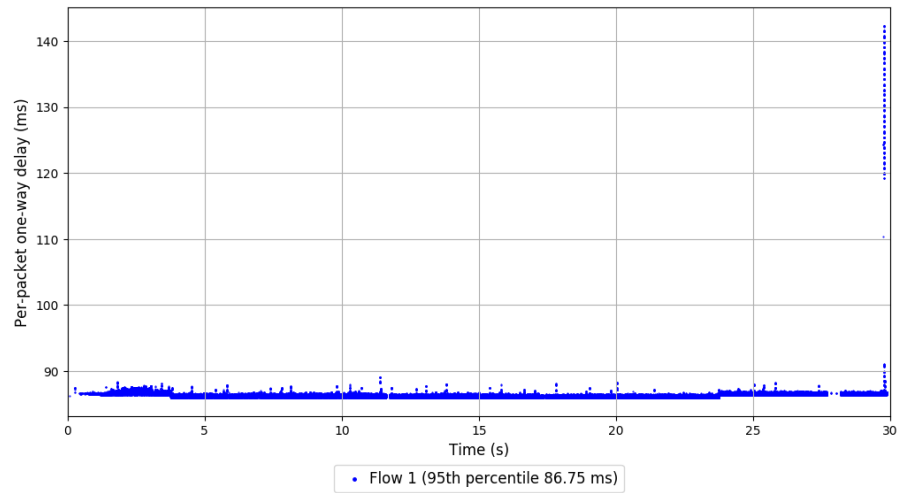
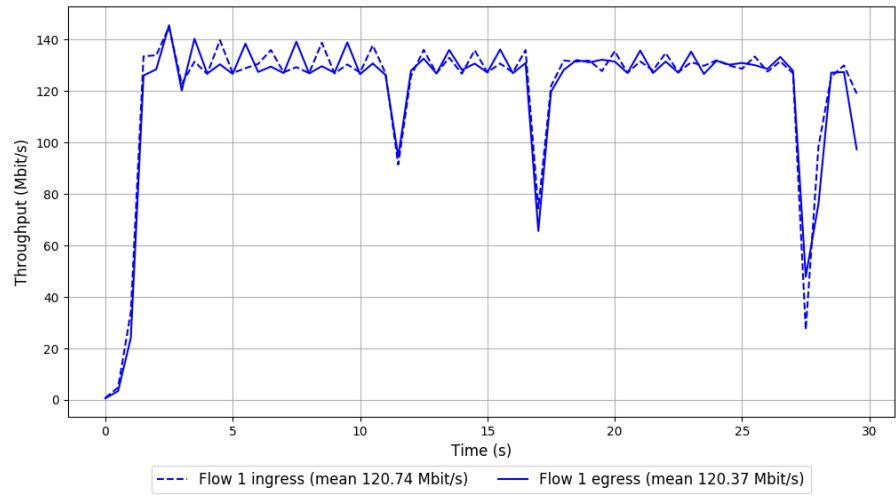
-- Flow 1:

Average throughput: 120.37 Mbit/s

95th percentile per-packet one-way delay: 86.745 ms

Loss rate: 0.83%

Run 10: Report of TCP BBR — Data Link

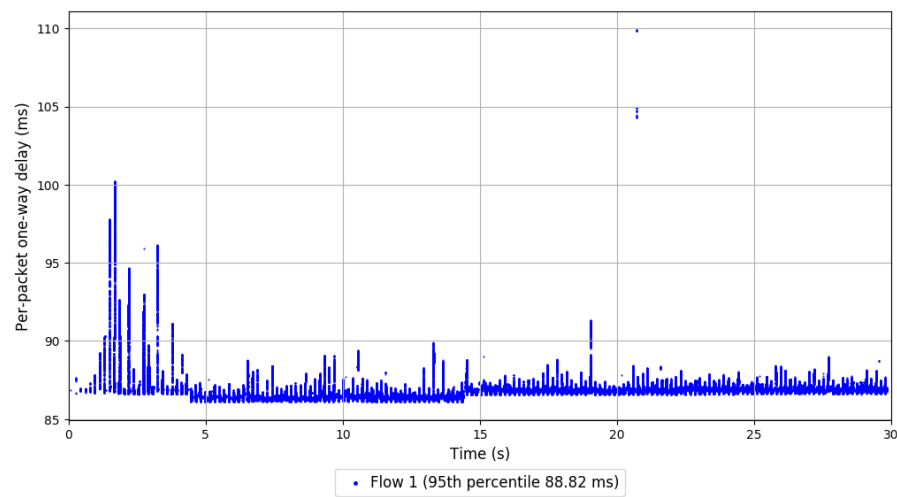
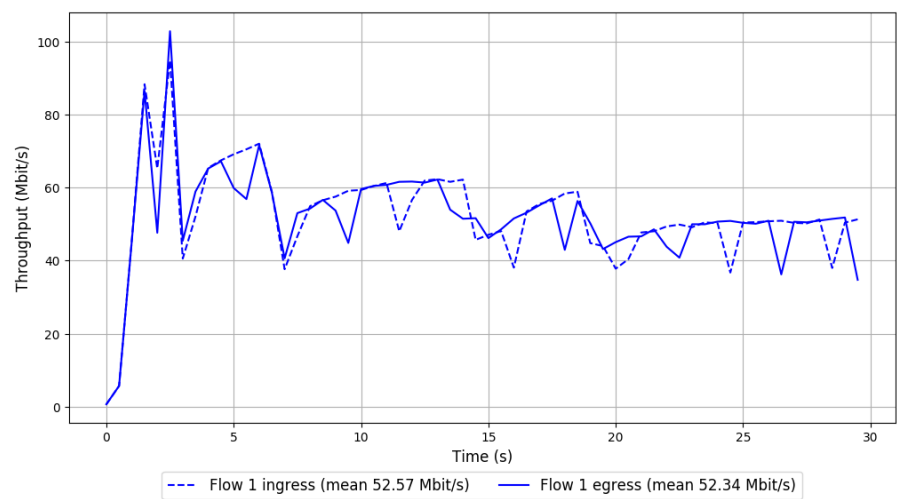


```
Run 1: Statistics of TCP Cubic

Start at: 2017-12-19 19:16:53
End at: 2017-12-19 19:17:23

# Below is generated by plot.py at 2017-12-19 23:24:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.34 Mbit/s
95th percentile per-packet one-way delay: 88.821 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 52.34 Mbit/s
95th percentile per-packet one-way delay: 88.821 ms
Loss rate: 1.01%
```

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-19 19:29:04

End at: 2017-12-19 19:29:34

Below is generated by plot.py at 2017-12-19 23:24:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.19 Mbit/s

95th percentile per-packet one-way delay: 89.560 ms

Loss rate: 1.16%

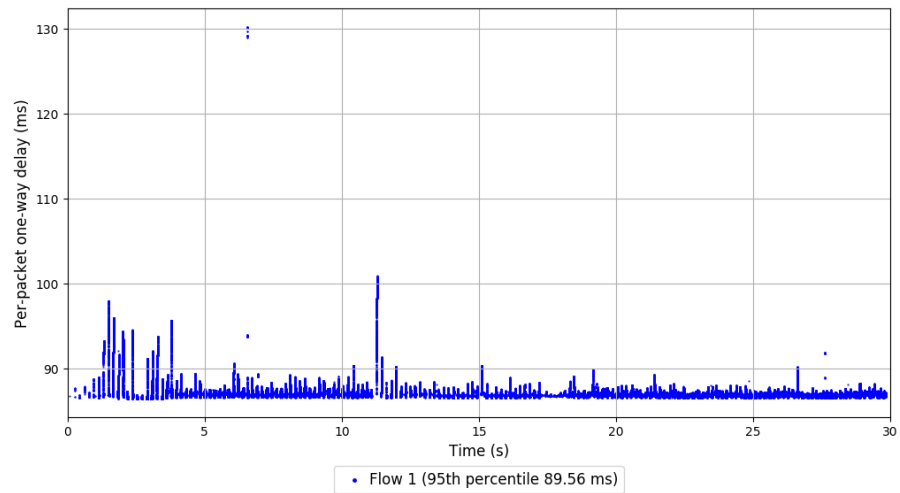
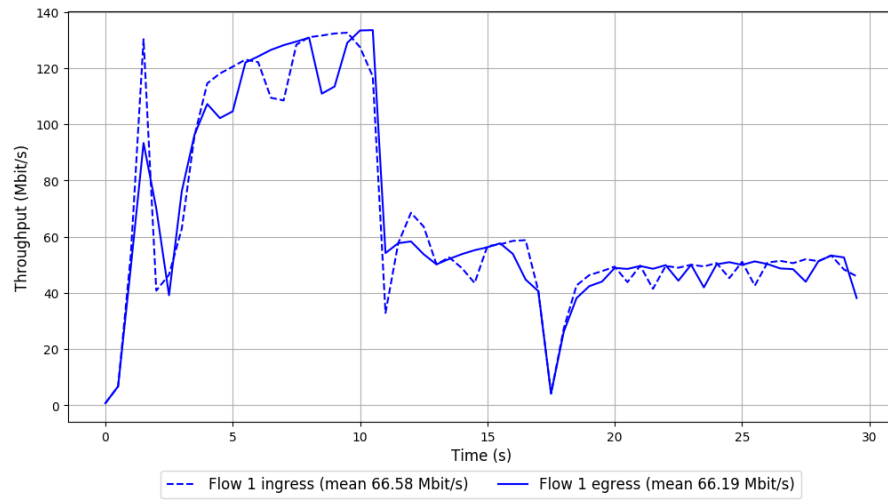
-- Flow 1:

Average throughput: 66.19 Mbit/s

95th percentile per-packet one-way delay: 89.560 ms

Loss rate: 1.16%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-19 19:41:16

End at: 2017-12-19 19:41:46

Below is generated by plot.py at 2017-12-19 23:24:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.43 Mbit/s

95th percentile per-packet one-way delay: 90.141 ms

Loss rate: 1.41%

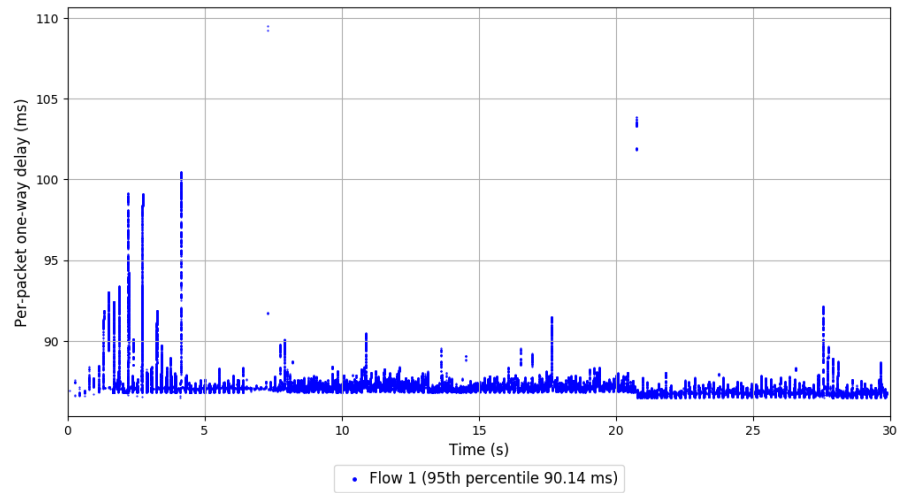
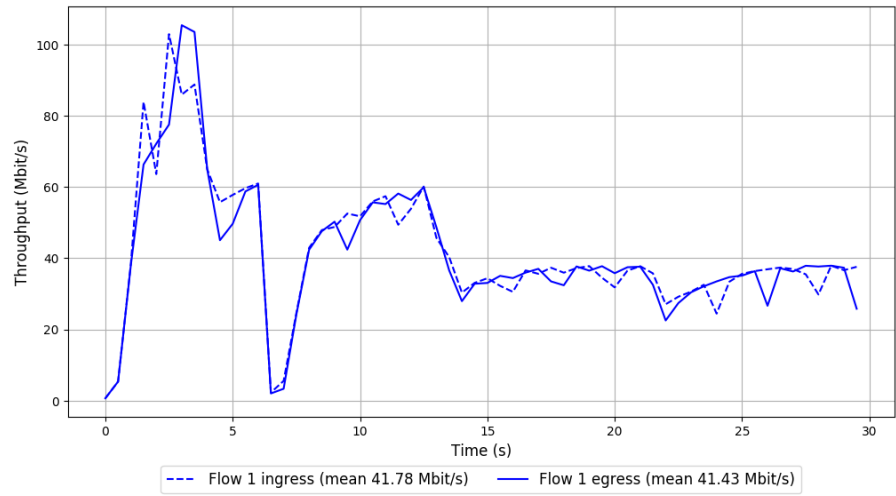
-- Flow 1:

Average throughput: 41.43 Mbit/s

95th percentile per-packet one-way delay: 90.141 ms

Loss rate: 1.41%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-19 19:53:35

End at: 2017-12-19 19:54:05

Below is generated by plot.py at 2017-12-19 23:24:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.48 Mbit/s

95th percentile per-packet one-way delay: 87.889 ms

Loss rate: 0.85%

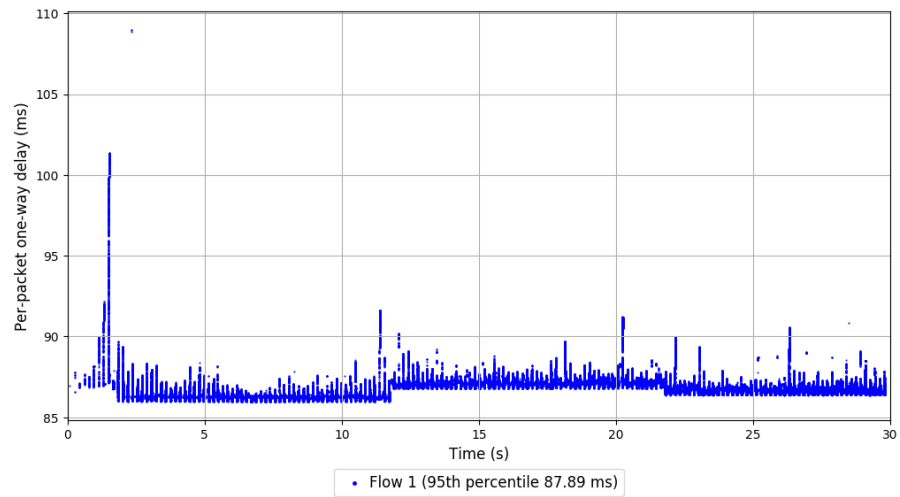
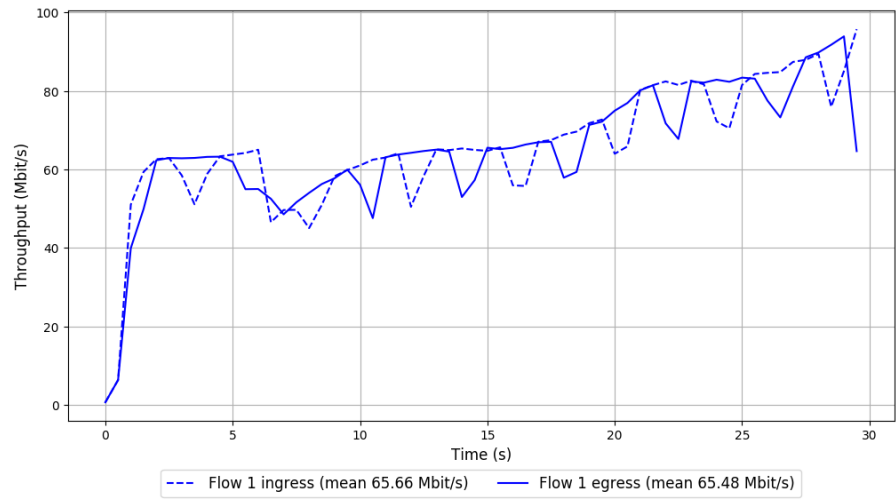
-- Flow 1:

Average throughput: 65.48 Mbit/s

95th percentile per-packet one-way delay: 87.889 ms

Loss rate: 0.85%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-19 20:05:47

End at: 2017-12-19 20:06:17

Below is generated by plot.py at 2017-12-19 23:24:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.09 Mbit/s

95th percentile per-packet one-way delay: 93.400 ms

Loss rate: 0.58%

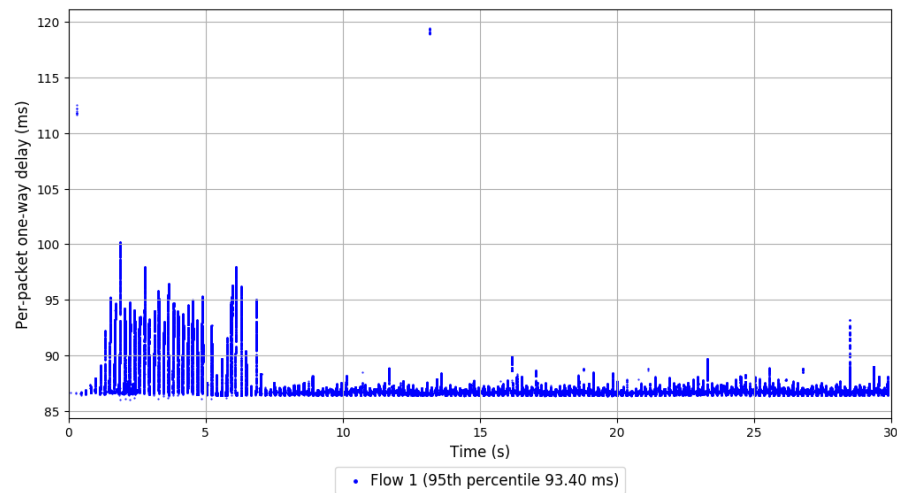
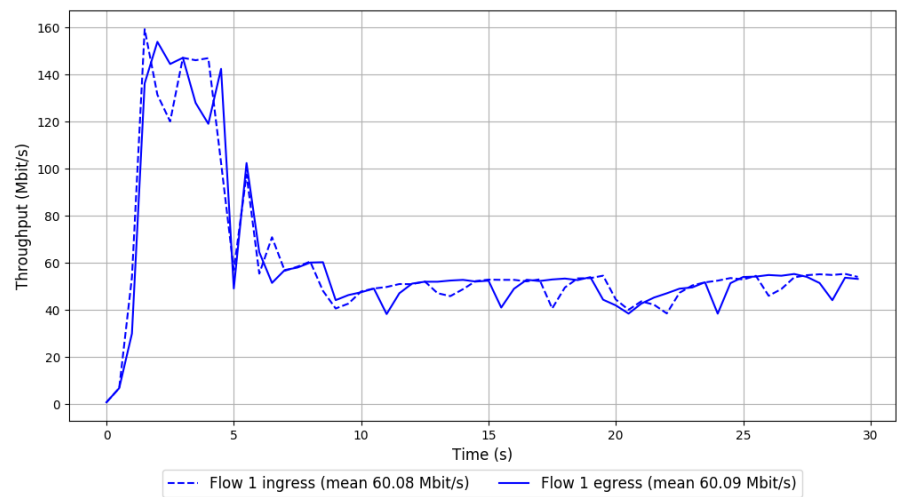
-- Flow 1:

Average throughput: 60.09 Mbit/s

95th percentile per-packet one-way delay: 93.400 ms

Loss rate: 0.58%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-19 20:17:53

End at: 2017-12-19 20:18:23

Below is generated by plot.py at 2017-12-19 23:24:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.00 Mbit/s

95th percentile per-packet one-way delay: 88.289 ms

Loss rate: 0.76%

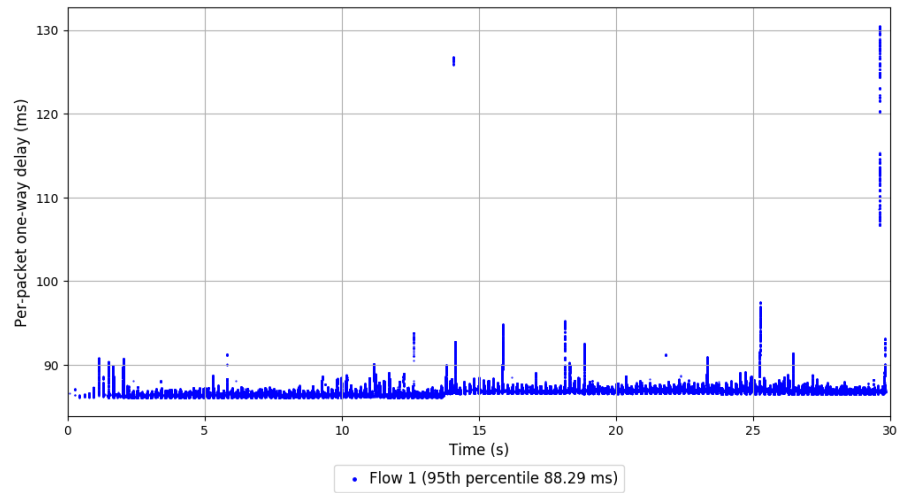
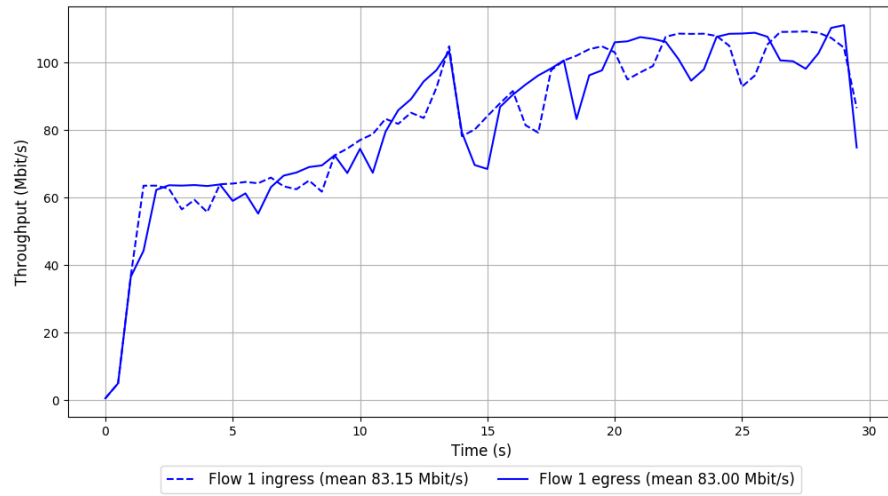
-- Flow 1:

Average throughput: 83.00 Mbit/s

95th percentile per-packet one-way delay: 88.289 ms

Loss rate: 0.76%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-19 20:29:48

End at: 2017-12-19 20:30:18

Below is generated by plot.py at 2017-12-19 23:24:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.30 Mbit/s

95th percentile per-packet one-way delay: 90.730 ms

Loss rate: 0.69%

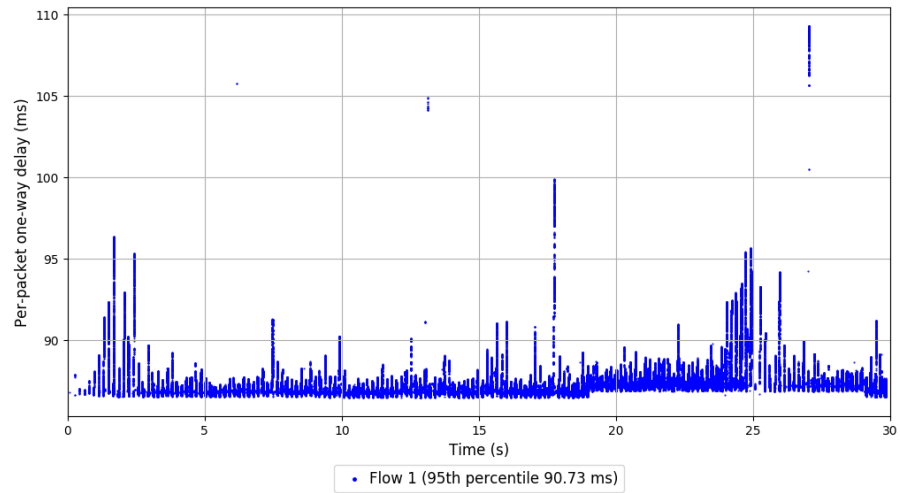
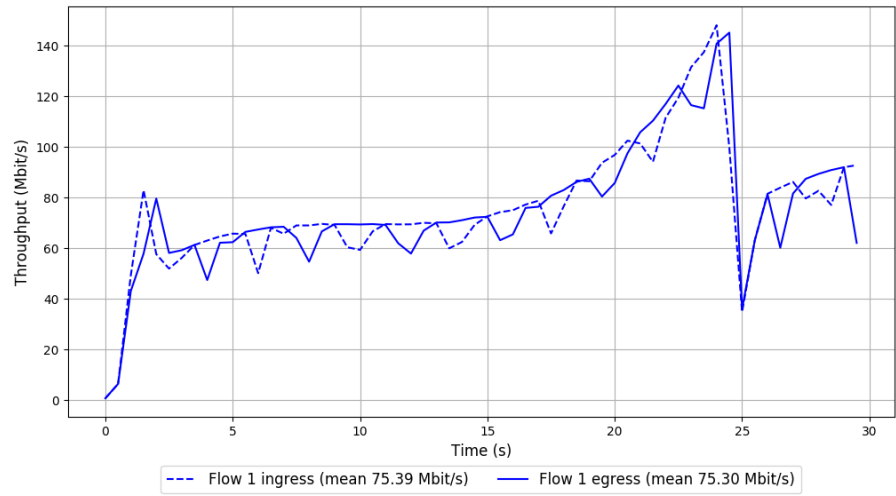
-- Flow 1:

Average throughput: 75.30 Mbit/s

95th percentile per-packet one-way delay: 90.730 ms

Loss rate: 0.69%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-19 20:42:07

End at: 2017-12-19 20:42:37

Below is generated by plot.py at 2017-12-19 23:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.54 Mbit/s

95th percentile per-packet one-way delay: 93.815 ms

Loss rate: 0.66%

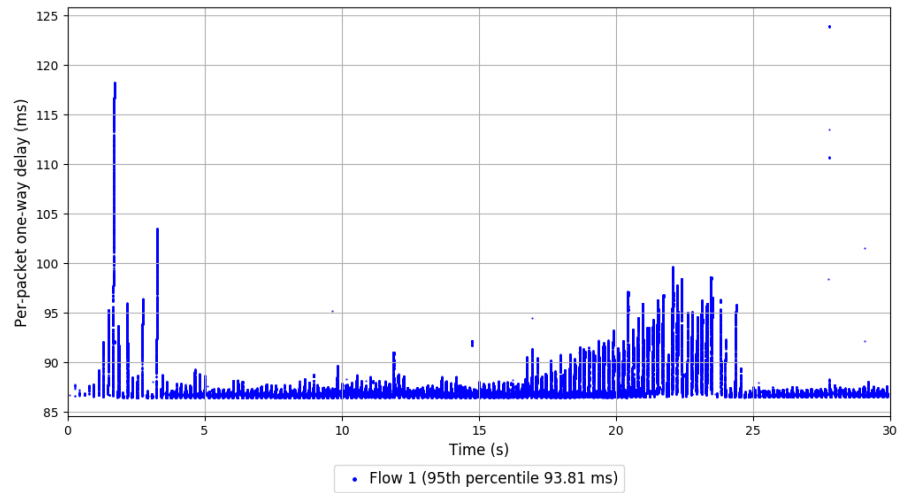
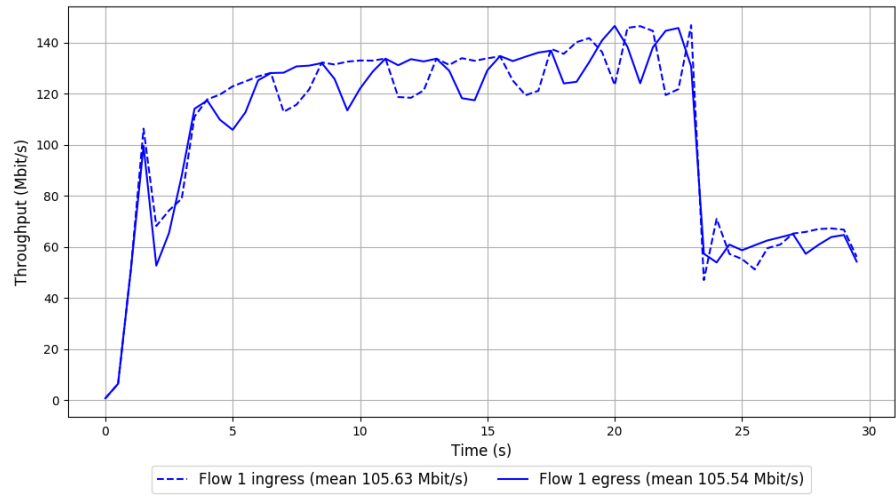
-- Flow 1:

Average throughput: 105.54 Mbit/s

95th percentile per-packet one-way delay: 93.815 ms

Loss rate: 0.66%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-19 20:54:36

End at: 2017-12-19 20:55:06

Below is generated by plot.py at 2017-12-19 23:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.48 Mbit/s

95th percentile per-packet one-way delay: 96.732 ms

Loss rate: 0.91%

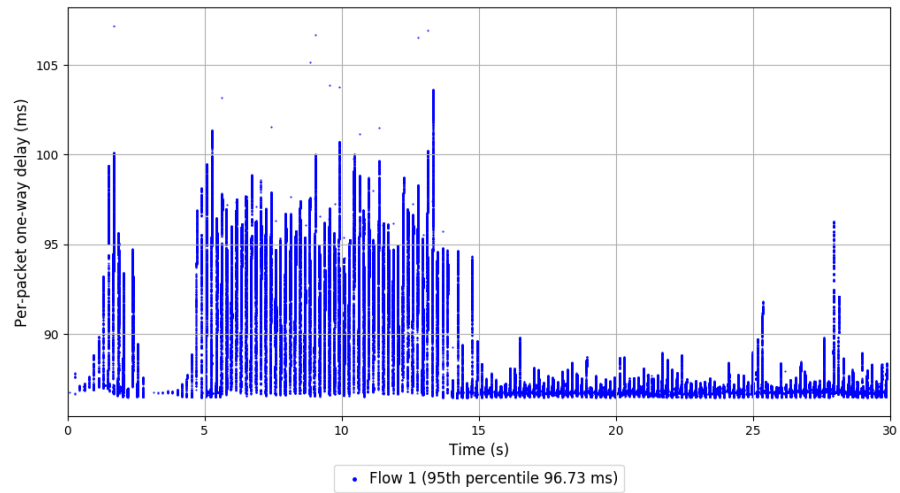
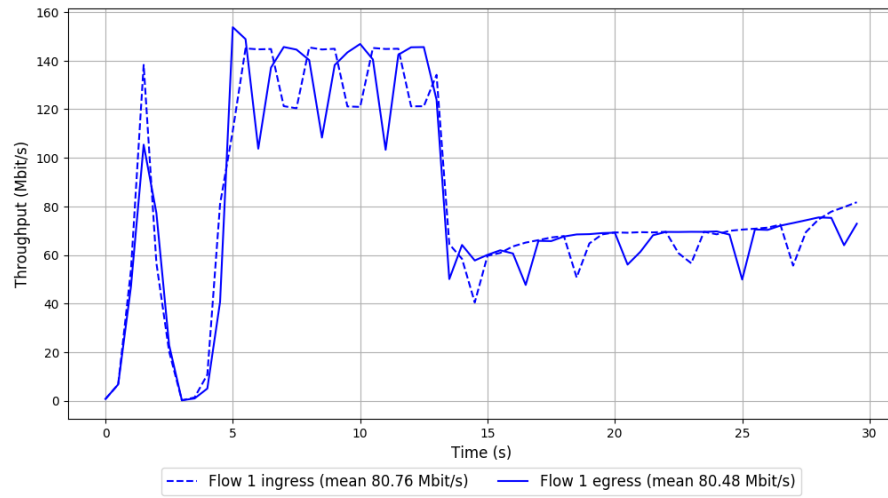
-- Flow 1:

Average throughput: 80.48 Mbit/s

95th percentile per-packet one-way delay: 96.732 ms

Loss rate: 0.91%

Run 9: Report of TCP Cubic — Data Link

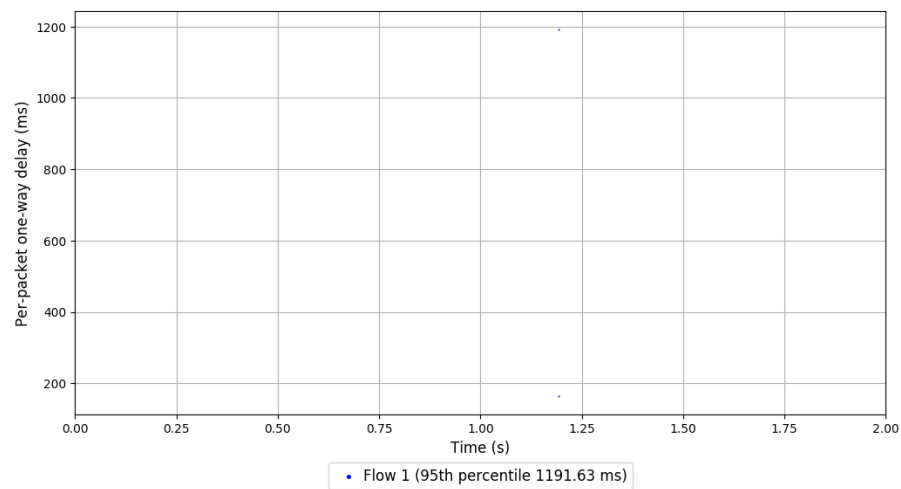
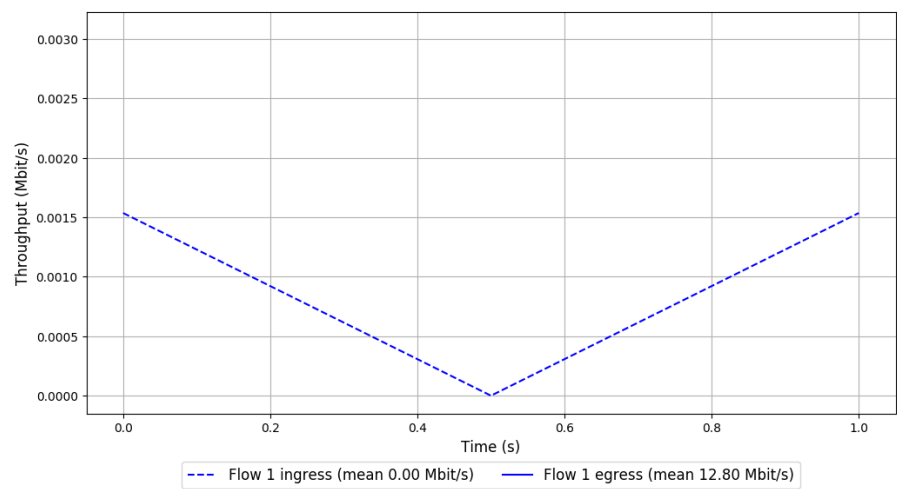


Run 10: Statistics of TCP Cubic

Start at: 2017-12-19 21:07:33

End at: 2017-12-19 21:08:03

Run 10: Report of TCP Cubic — Data Link

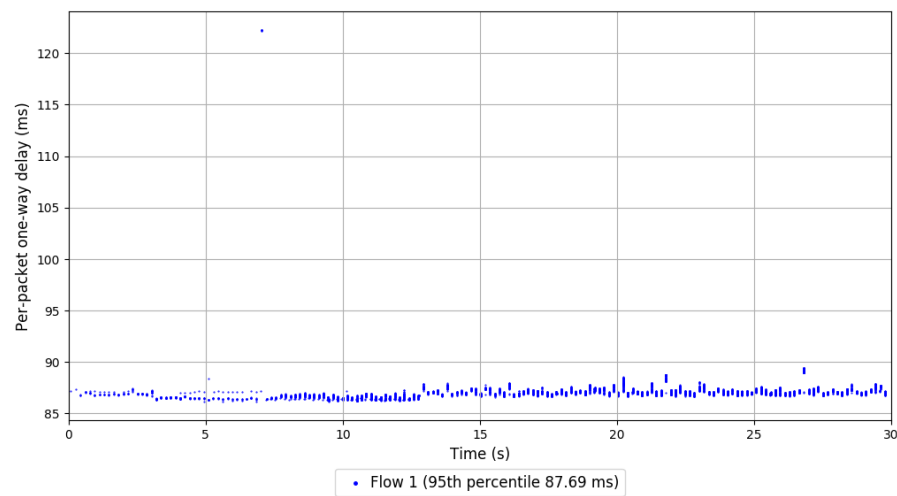
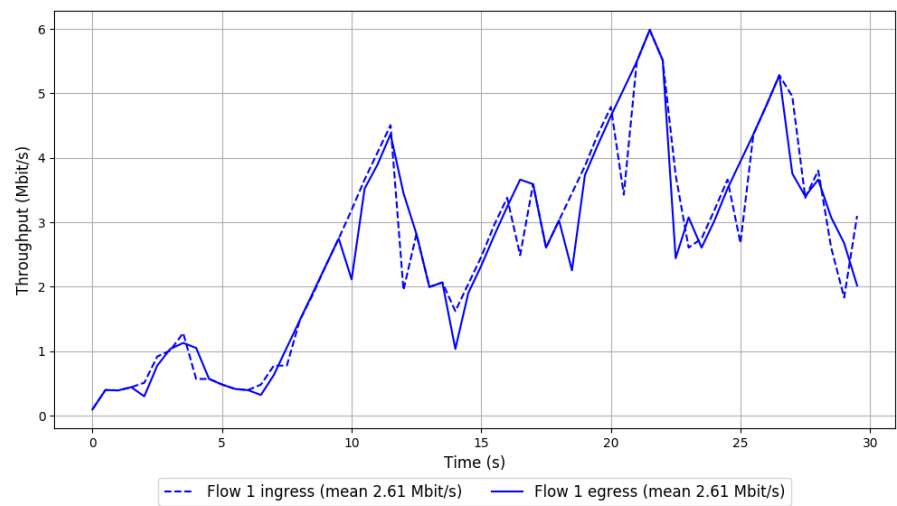


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-19 19:15:14
End at: 2017-12-19 19:15:44

# Below is generated by plot.py at 2017-12-19 23:24:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 87.686 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 87.686 ms
Loss rate: 0.72%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-12-19 19:27:25

End at: 2017-12-19 19:27:55

Below is generated by plot.py at 2017-12-19 23:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.57 Mbit/s

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

Loss rate: 0.90%

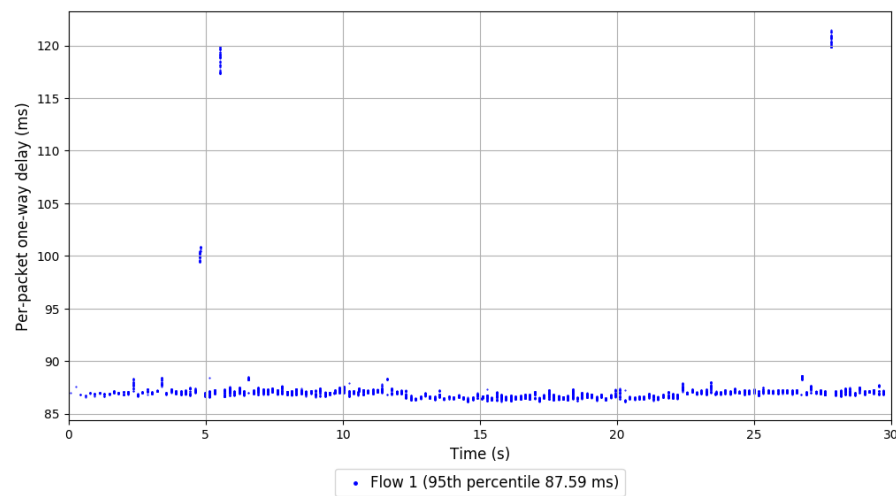
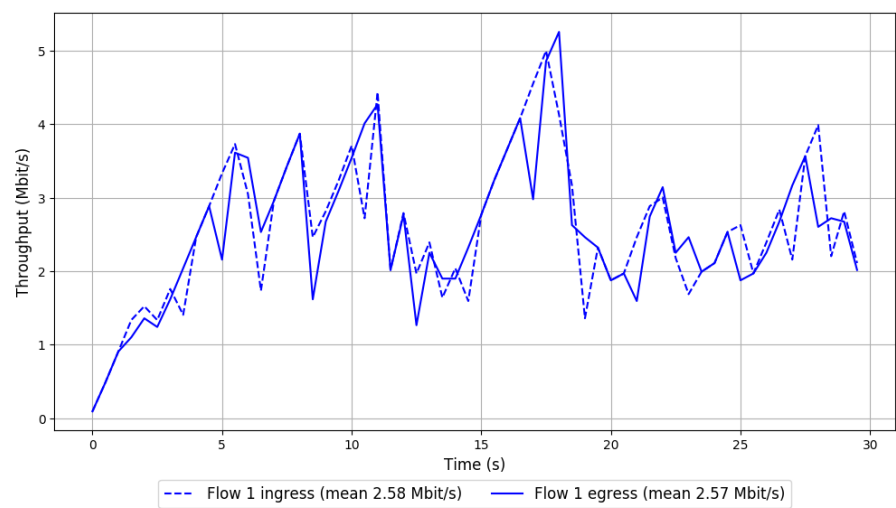
-- Flow 1:

Average throughput: 2.57 Mbit/s

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

Loss rate: 0.90%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-19 19:39:38

End at: 2017-12-19 19:40:08

Below is generated by plot.py at 2017-12-19 23:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 87.637 ms

Loss rate: 0.76%

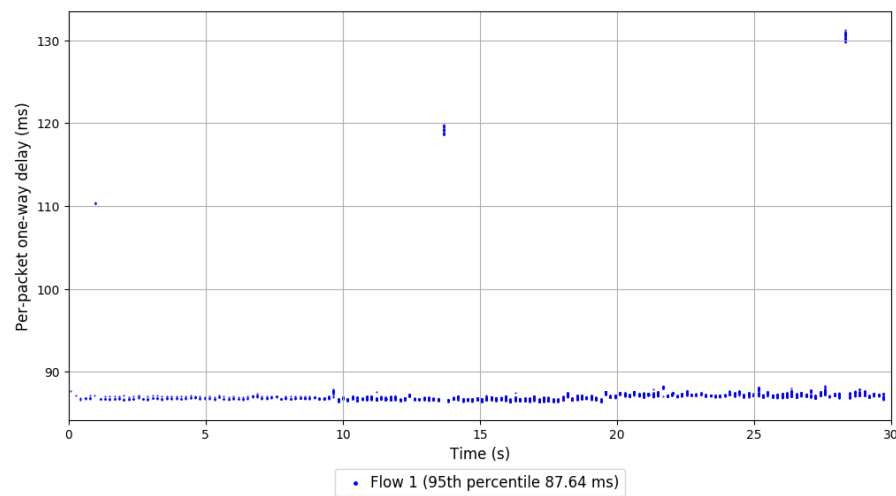
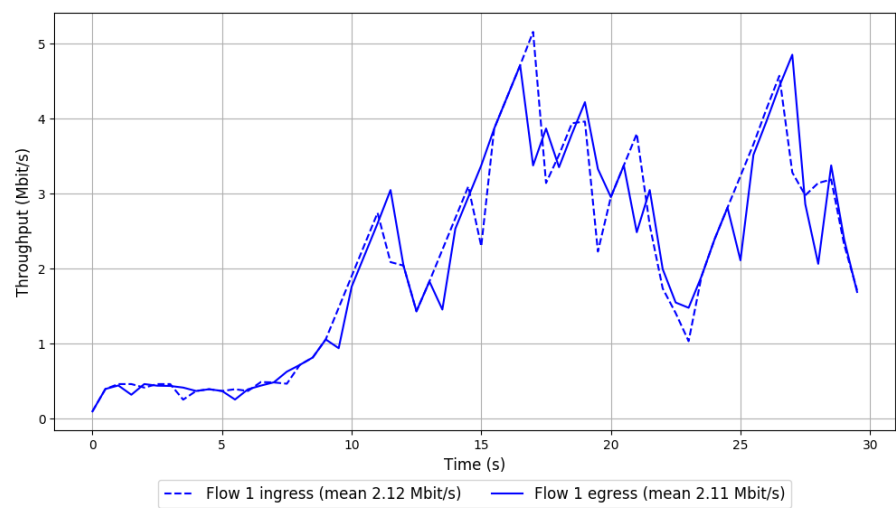
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 87.637 ms

Loss rate: 0.76%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-19 19:51:56

End at: 2017-12-19 19:52:26

Below is generated by plot.py at 2017-12-19 23:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 87.536 ms

Loss rate: 0.92%

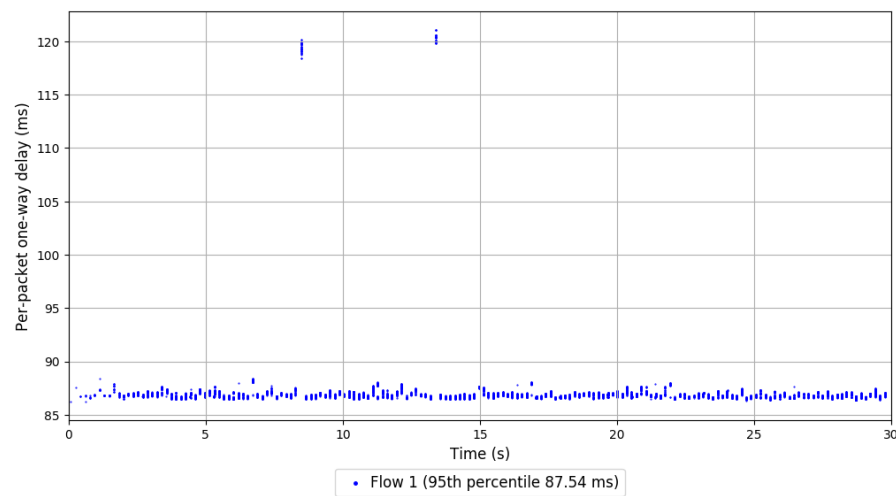
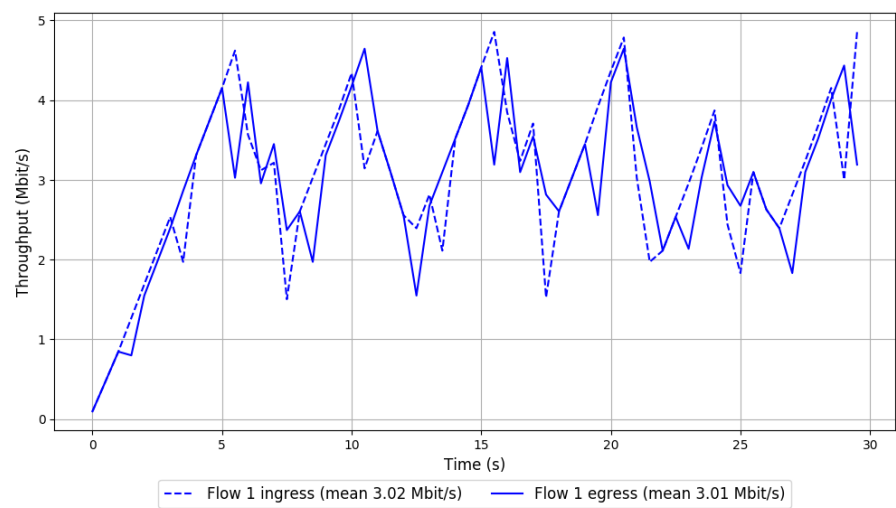
-- Flow 1:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 87.536 ms

Loss rate: 0.92%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-19 20:04:07

End at: 2017-12-19 20:04:37

Below is generated by plot.py at 2017-12-19 23:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.94 Mbit/s

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

Loss rate: 0.93%

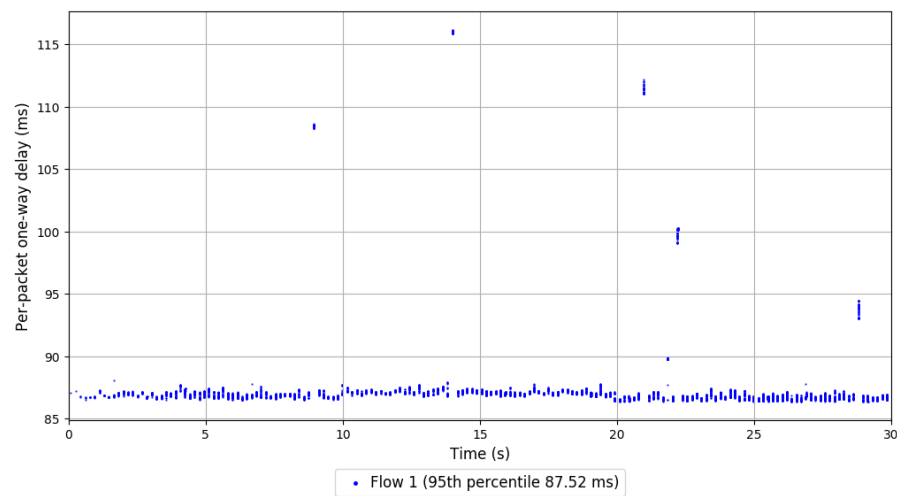
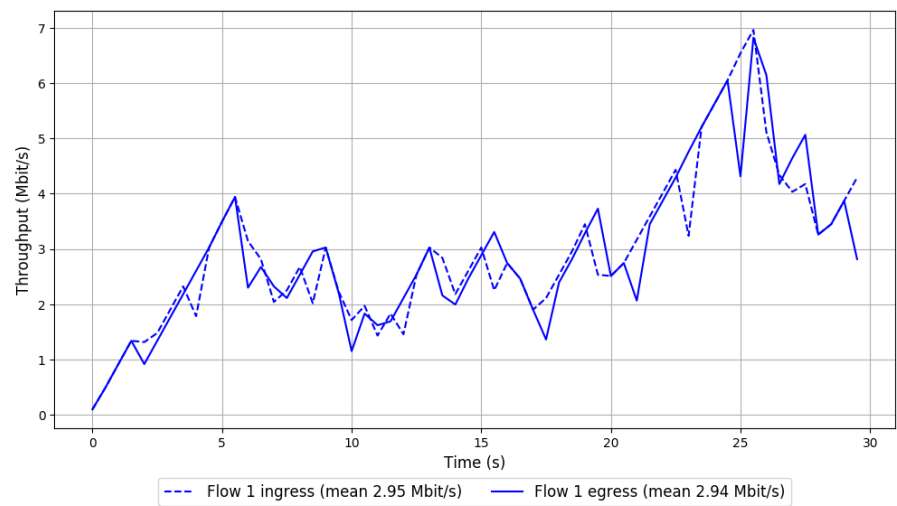
-- Flow 1:

Average throughput: 2.94 Mbit/s

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

Loss rate: 0.93%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-19 20:16:17

End at: 2017-12-19 20:16:47

Below is generated by plot.py at 2017-12-19 23:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 87.617 ms

Loss rate: 1.04%

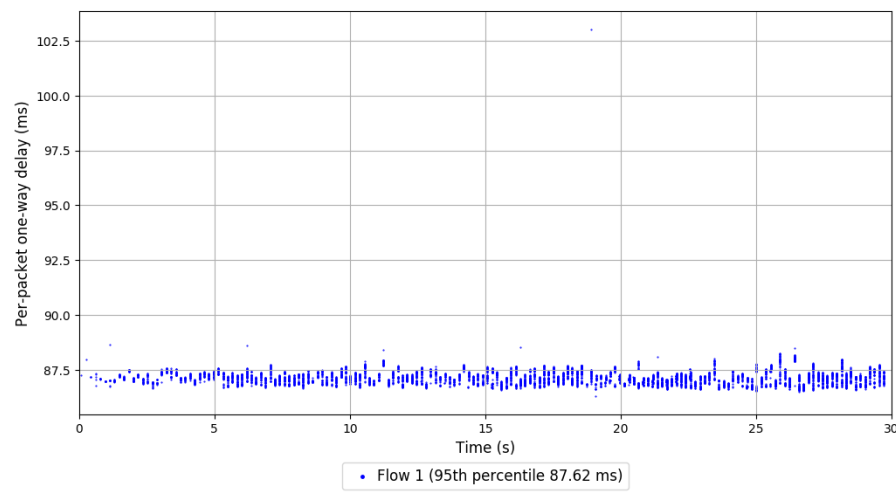
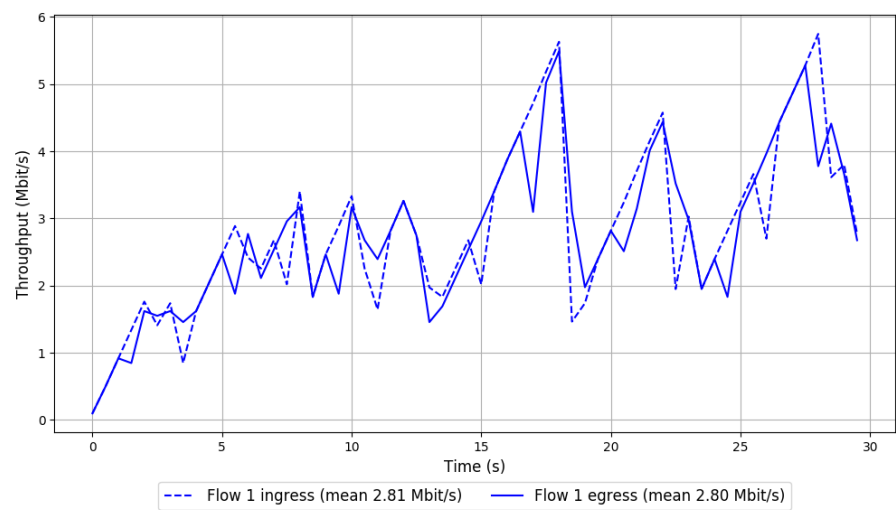
-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 87.617 ms

Loss rate: 1.04%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-19 20:28:09

End at: 2017-12-19 20:28:39

Below is generated by plot.py at 2017-12-19 23:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.69 Mbit/s

95th percentile per-packet one-way delay: 87.588 ms

Loss rate: 2.16%

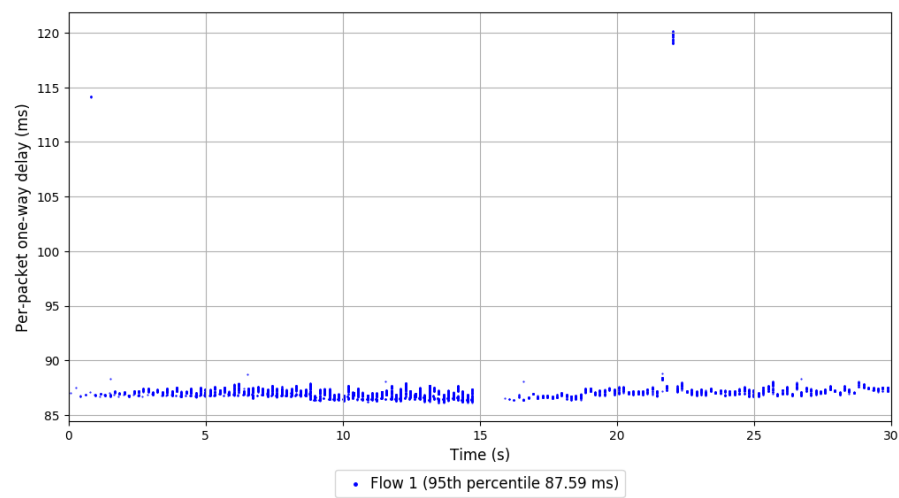
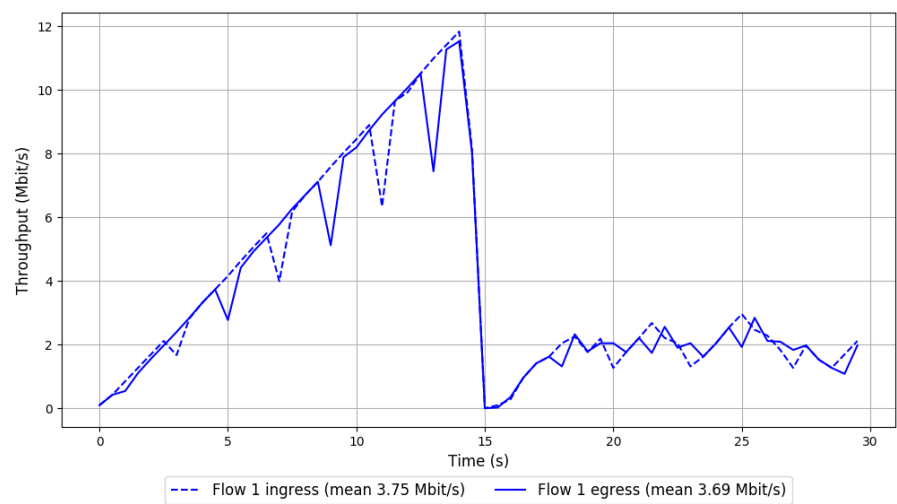
-- Flow 1:

Average throughput: 3.69 Mbit/s

95th percentile per-packet one-way delay: 87.588 ms

Loss rate: 2.16%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-19 20:40:28

End at: 2017-12-19 20:40:58

Below is generated by plot.py at 2017-12-19 23:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.75 Mbit/s

95th percentile per-packet one-way delay: 87.696 ms

Loss rate: 0.99%

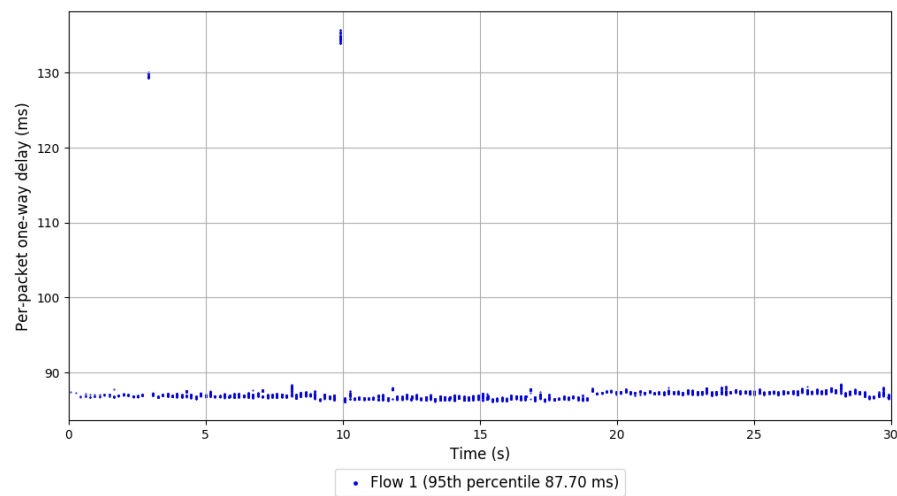
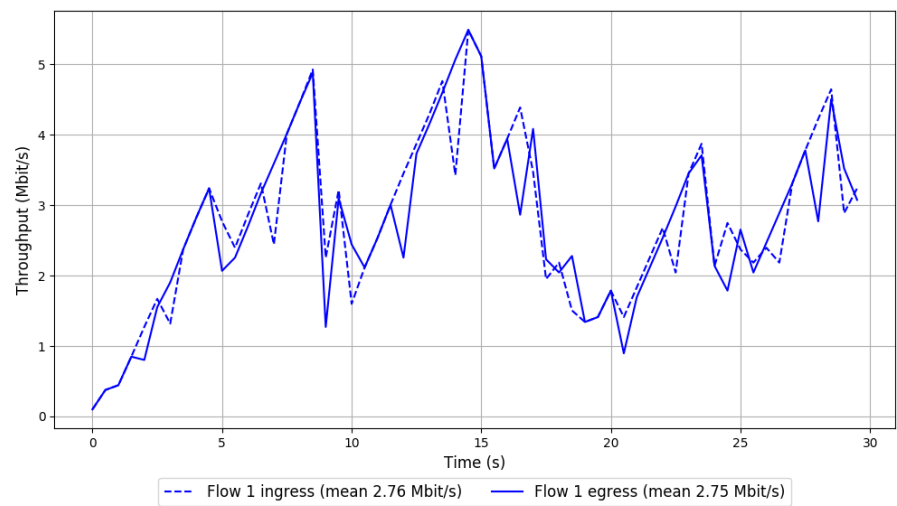
-- Flow 1:

Average throughput: 2.75 Mbit/s

95th percentile per-packet one-way delay: 87.696 ms

Loss rate: 0.99%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-19 20:52:55

End at: 2017-12-19 20:53:25

Below is generated by plot.py at 2017-12-19 23:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.280 ms

Loss rate: 2.21%

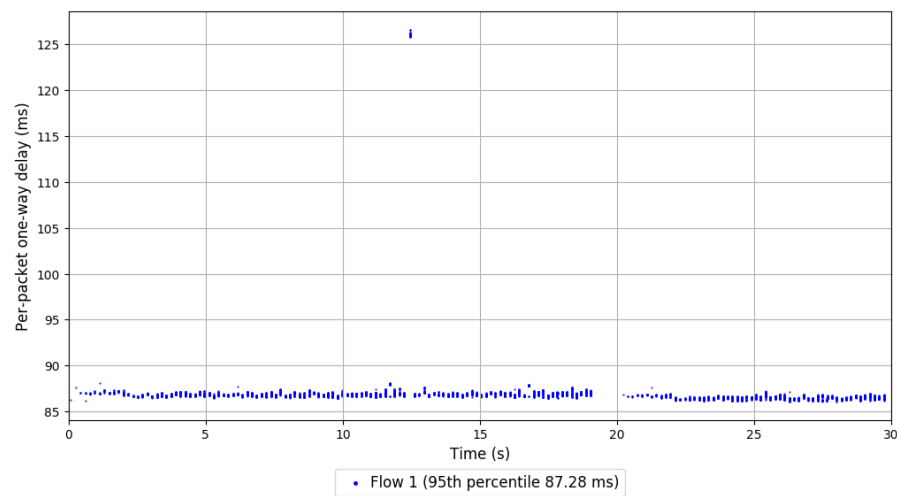
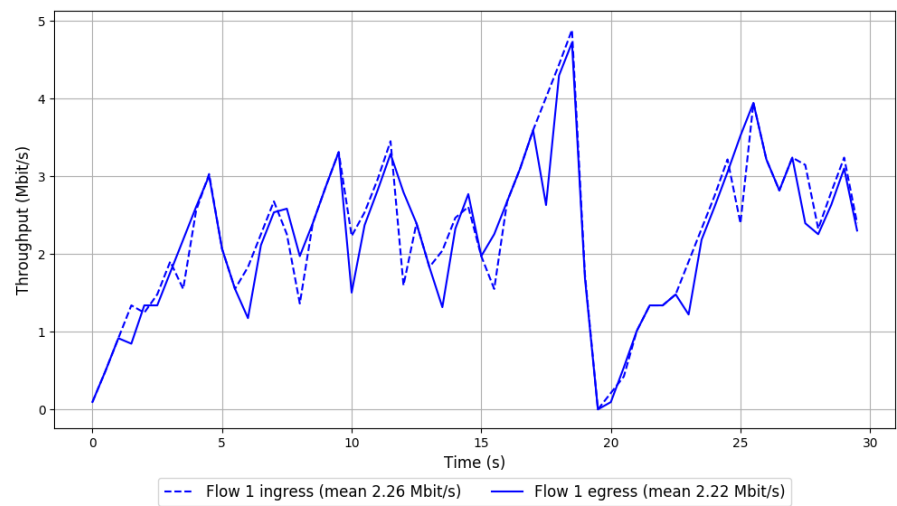
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.280 ms

Loss rate: 2.21%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-19 21:05:51

End at: 2017-12-19 21:06:21

Below is generated by plot.py at 2017-12-19 23:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 87.347 ms

Loss rate: 1.71%

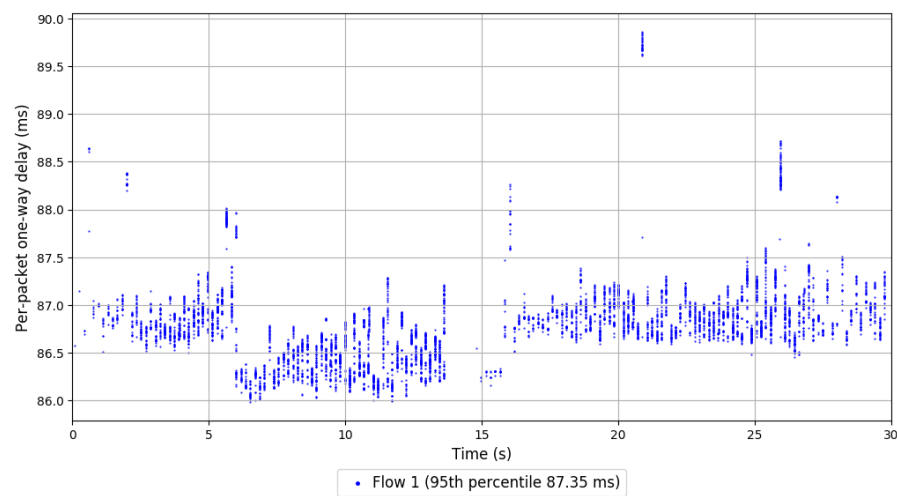
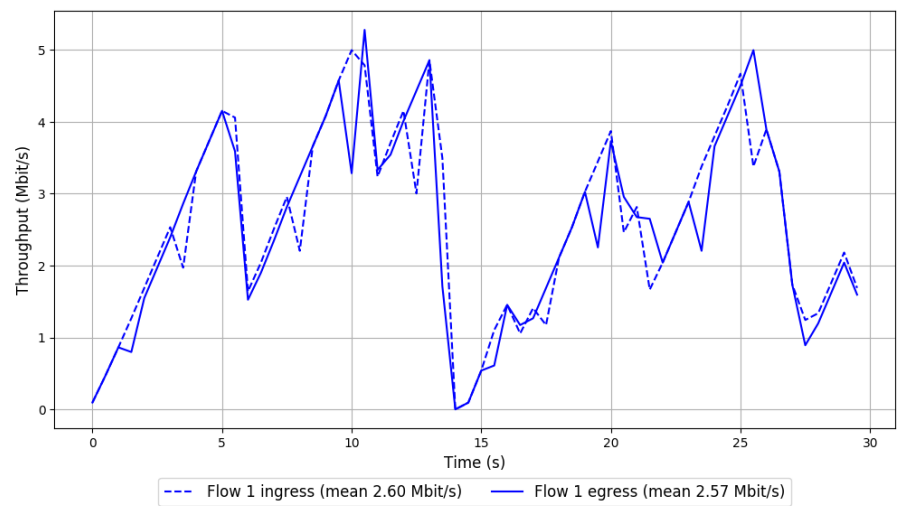
-- Flow 1:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 87.347 ms

Loss rate: 1.71%

Run 10: Report of LEDBAT — Data Link

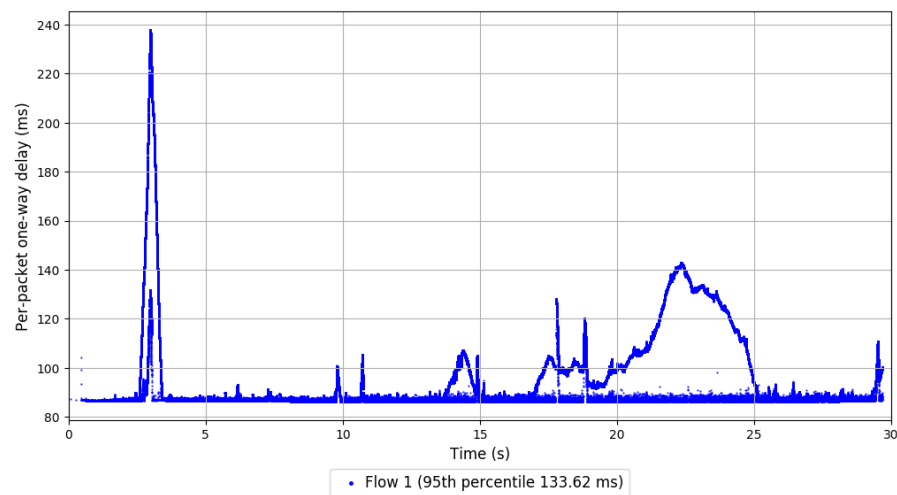
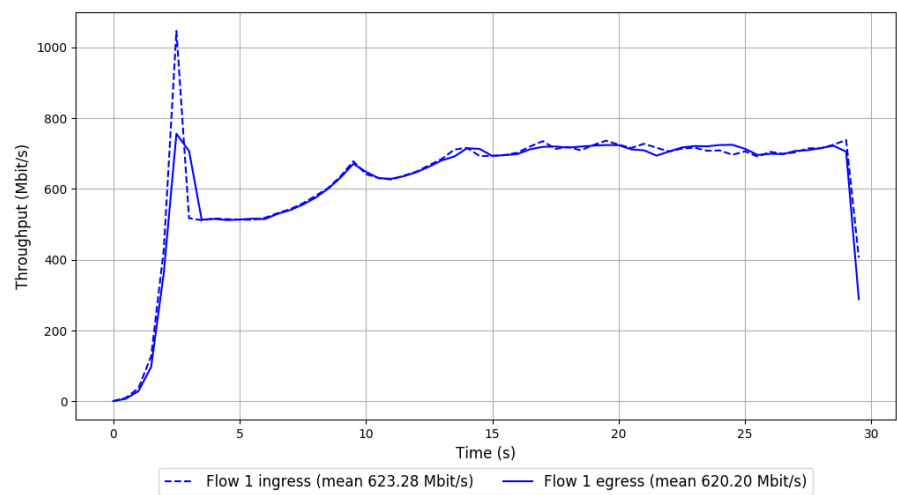


```
Run 1: Statistics of PCC

Start at: 2017-12-19 19:17:35
End at: 2017-12-19 19:18:05

# Below is generated by plot.py at 2017-12-19 23:34:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 620.20 Mbit/s
95th percentile per-packet one-way delay: 133.624 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 620.20 Mbit/s
95th percentile per-packet one-way delay: 133.624 ms
Loss rate: 1.08%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-19 19:29:47

End at: 2017-12-19 19:30:17

Below is generated by plot.py at 2017-12-19 23:34:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 609.40 Mbit/s

95th percentile per-packet one-way delay: 139.373 ms

Loss rate: 0.98%

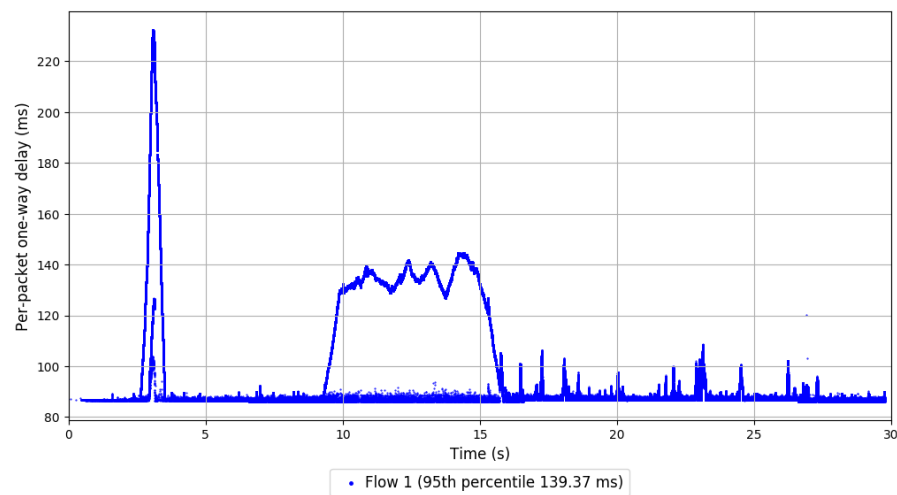
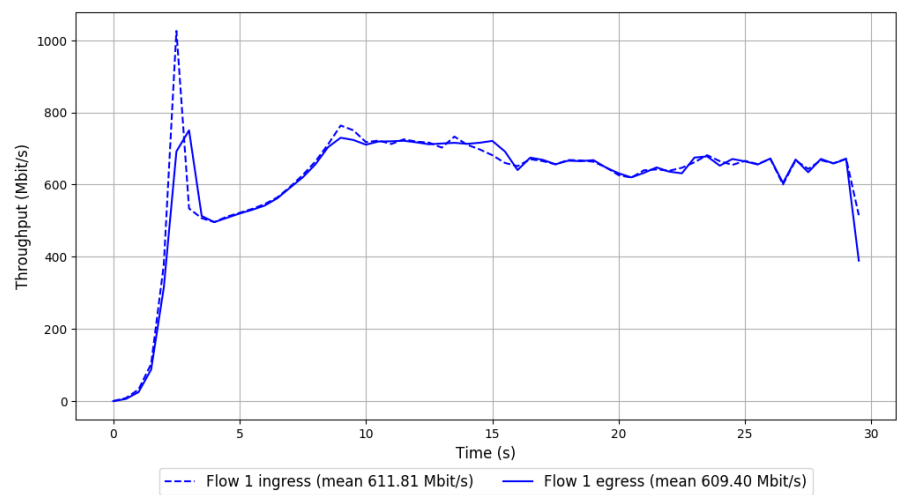
-- Flow 1:

Average throughput: 609.40 Mbit/s

95th percentile per-packet one-way delay: 139.373 ms

Loss rate: 0.98%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-19 19:41:58

End at: 2017-12-19 19:42:28

Below is generated by plot.py at 2017-12-19 23:34:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 584.07 Mbit/s

95th percentile per-packet one-way delay: 103.978 ms

Loss rate: 1.30%

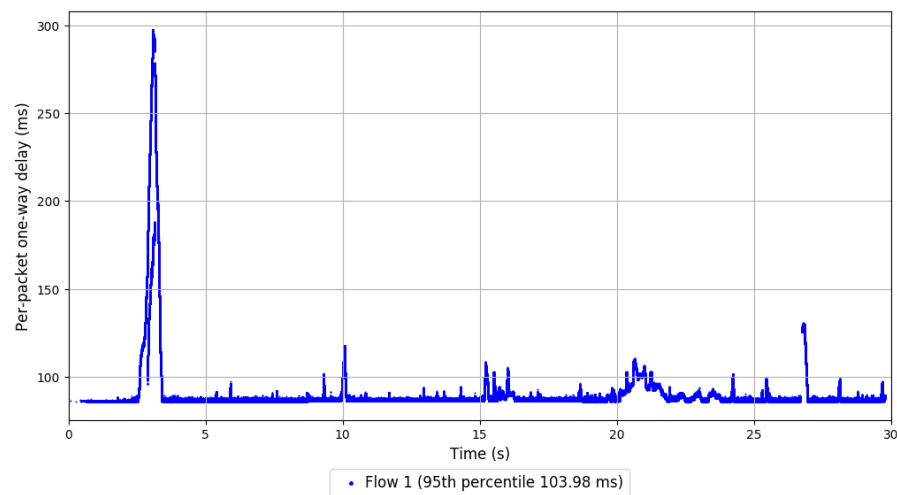
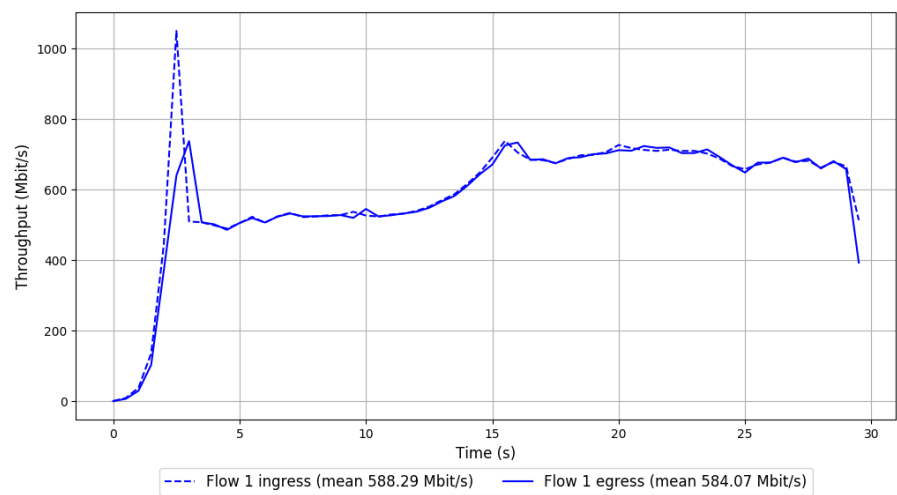
-- Flow 1:

Average throughput: 584.07 Mbit/s

95th percentile per-packet one-way delay: 103.978 ms

Loss rate: 1.30%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-19 19:54:19

End at: 2017-12-19 19:54:49

Below is generated by plot.py at 2017-12-19 23:34:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 554.83 Mbit/s

95th percentile per-packet one-way delay: 103.741 ms

Loss rate: 1.31%

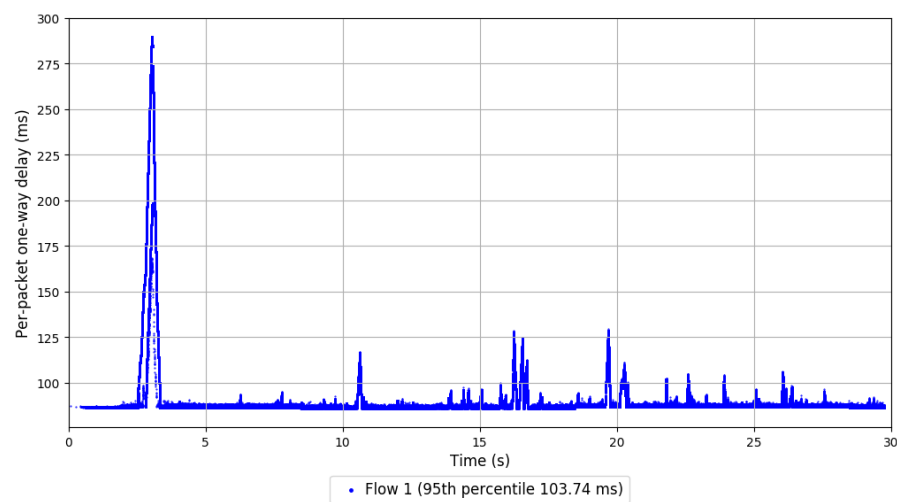
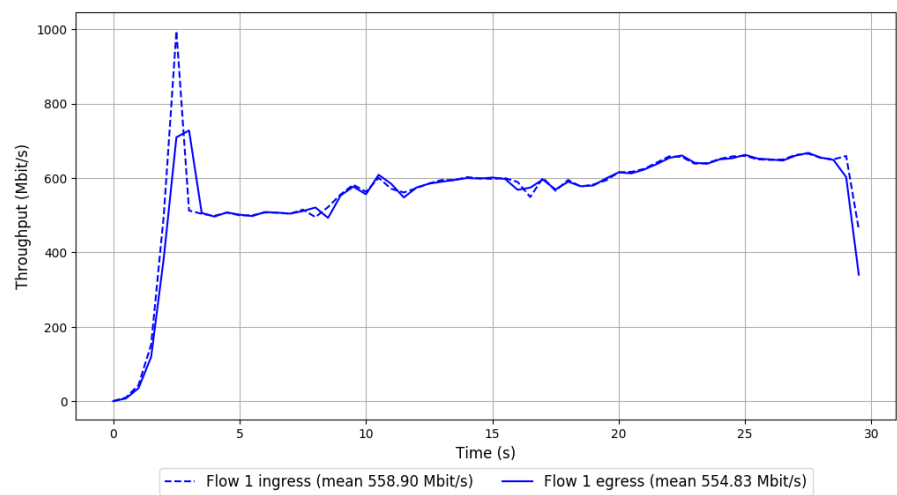
-- Flow 1:

Average throughput: 554.83 Mbit/s

95th percentile per-packet one-way delay: 103.741 ms

Loss rate: 1.31%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-19 20:06:30

End at: 2017-12-19 20:07:00

Below is generated by plot.py at 2017-12-19 23:34:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 555.89 Mbit/s

95th percentile per-packet one-way delay: 188.993 ms

Loss rate: 2.04%

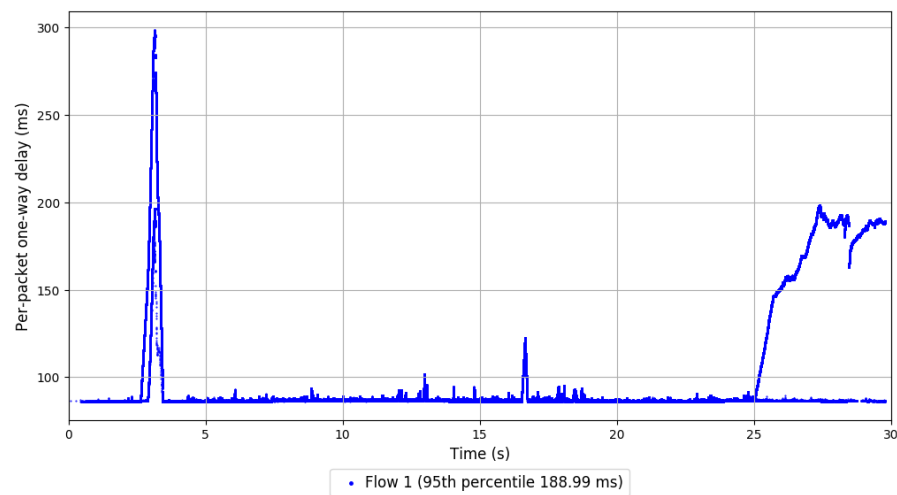
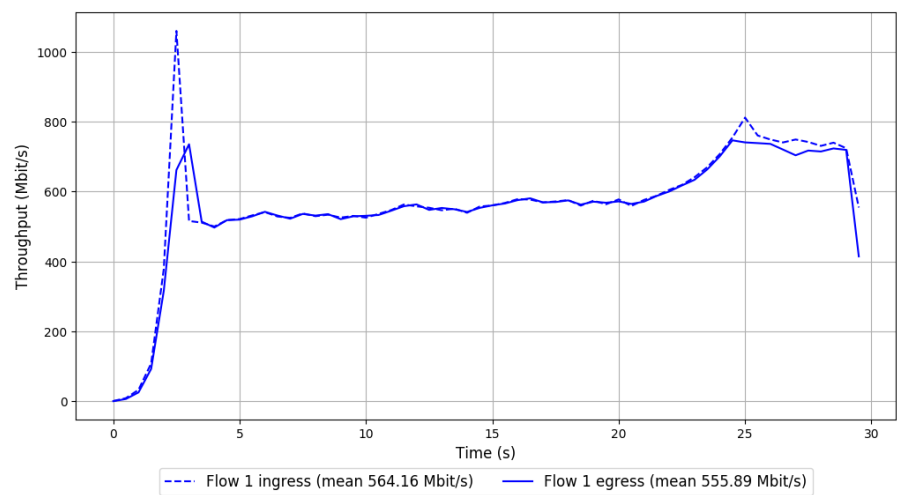
-- Flow 1:

Average throughput: 555.89 Mbit/s

95th percentile per-packet one-way delay: 188.993 ms

Loss rate: 2.04%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-19 20:18:38

End at: 2017-12-19 20:19:08

Below is generated by plot.py at 2017-12-19 23:34:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 560.92 Mbit/s

95th percentile per-packet one-way delay: 107.477 ms

Loss rate: 1.14%

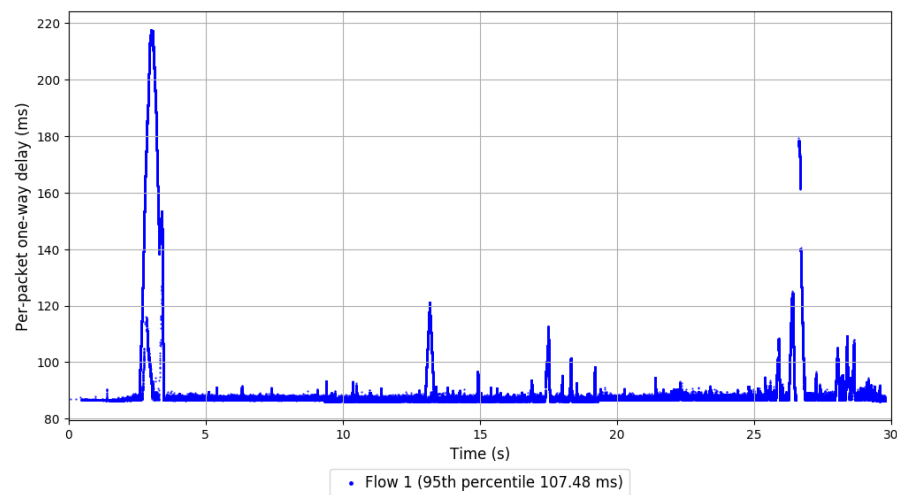
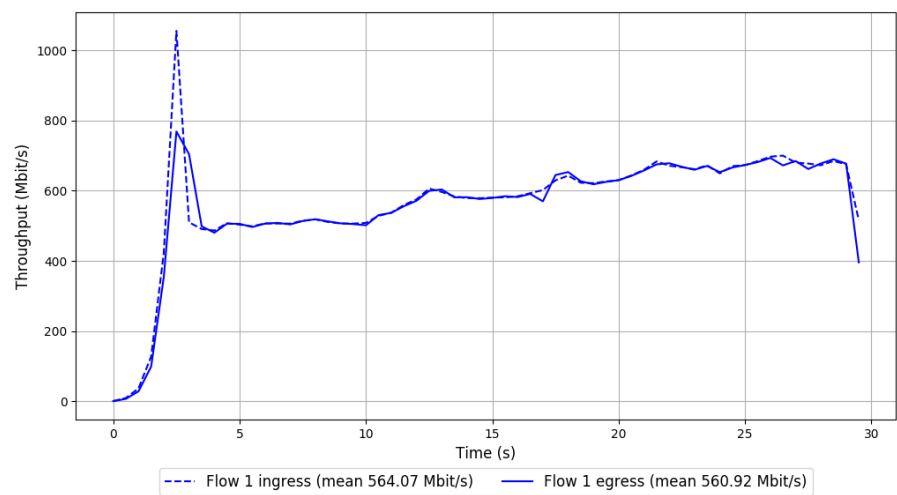
-- Flow 1:

Average throughput: 560.92 Mbit/s

95th percentile per-packet one-way delay: 107.477 ms

Loss rate: 1.14%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-19 20:30:32

End at: 2017-12-19 20:31:02

Below is generated by plot.py at 2017-12-19 23:34:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 553.61 Mbit/s

95th percentile per-packet one-way delay: 101.661 ms

Loss rate: 0.87%

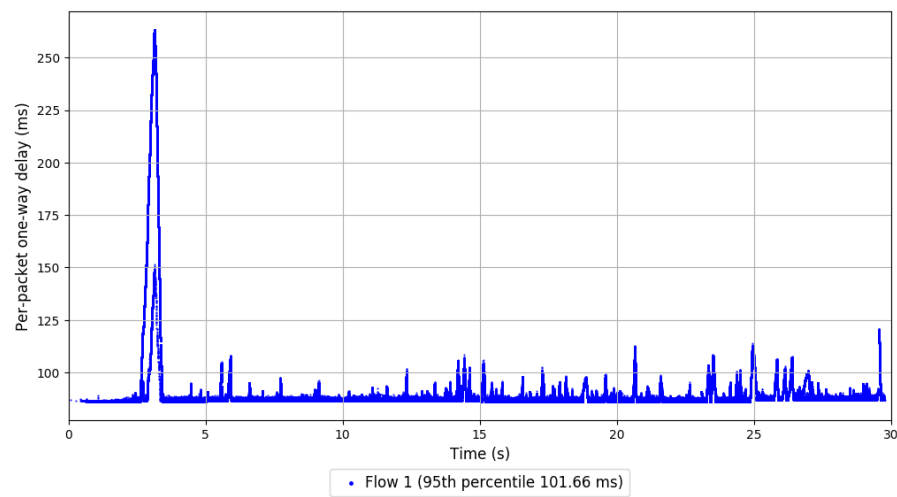
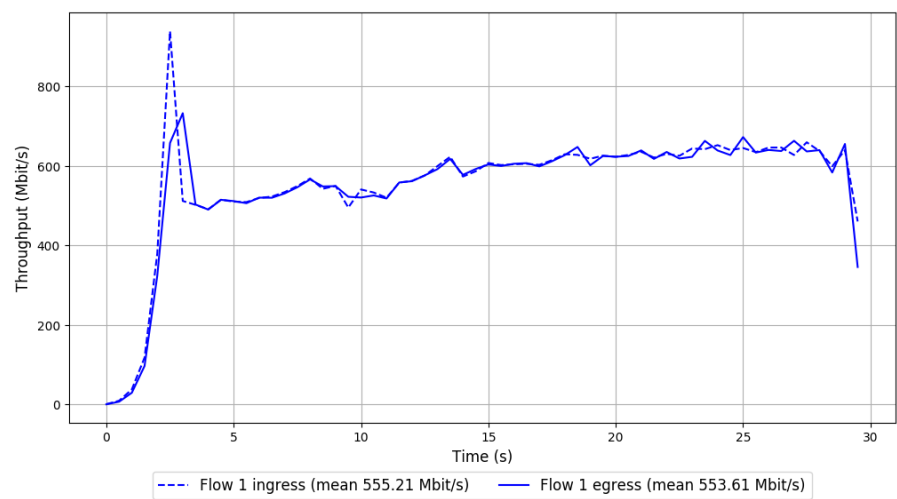
-- Flow 1:

Average throughput: 553.61 Mbit/s

95th percentile per-packet one-way delay: 101.661 ms

Loss rate: 0.87%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-19 20:42:52

End at: 2017-12-19 20:43:22

Below is generated by plot.py at 2017-12-19 23:34:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 552.45 Mbit/s

95th percentile per-packet one-way delay: 213.835 ms

Loss rate: 2.74%

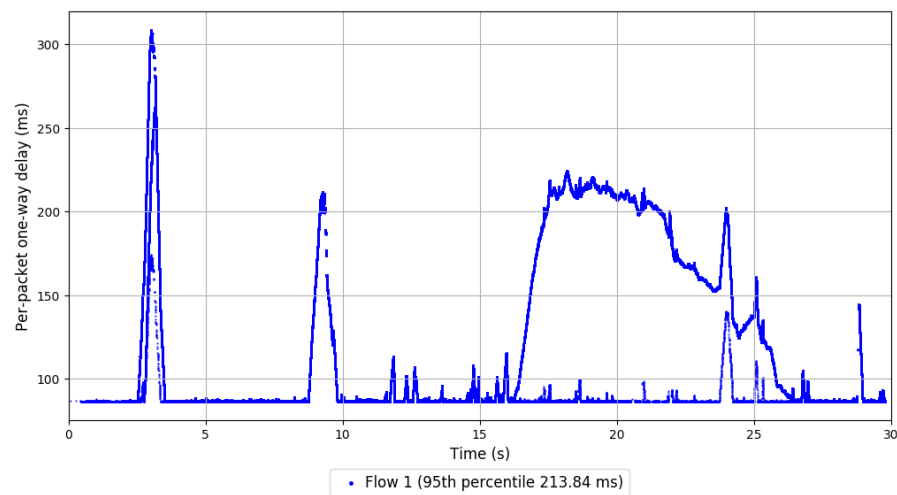
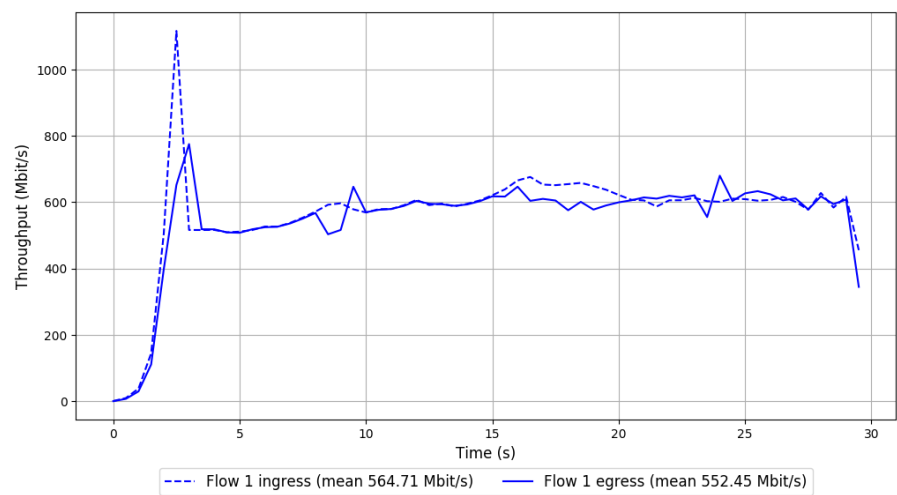
-- Flow 1:

Average throughput: 552.45 Mbit/s

95th percentile per-packet one-way delay: 213.835 ms

Loss rate: 2.74%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-19 20:55:20

End at: 2017-12-19 20:55:50

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 573.24 Mbit/s

95th percentile per-packet one-way delay: 218.420 ms

Loss rate: 4.64%

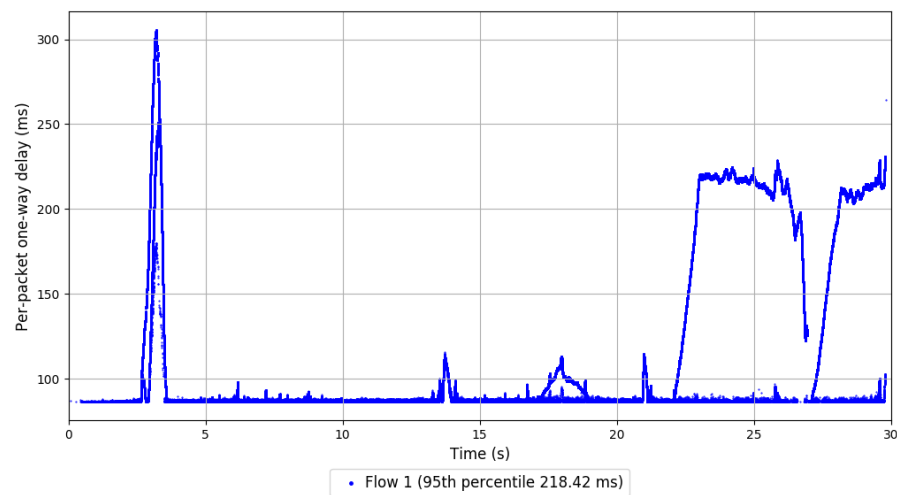
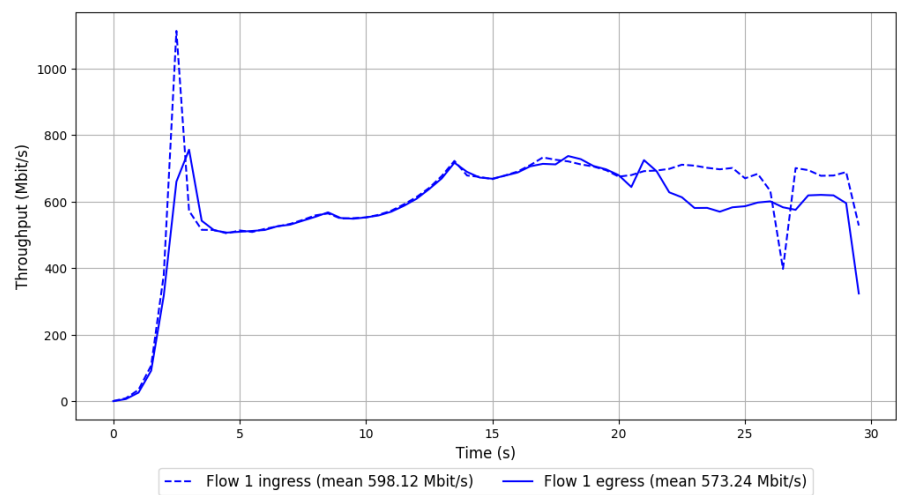
-- Flow 1:

Average throughput: 573.24 Mbit/s

95th percentile per-packet one-way delay: 218.420 ms

Loss rate: 4.64%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-19 21:08:13

End at: 2017-12-19 21:08:43

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 557.92 Mbit/s

95th percentile per-packet one-way delay: 219.831 ms

Loss rate: 8.14%

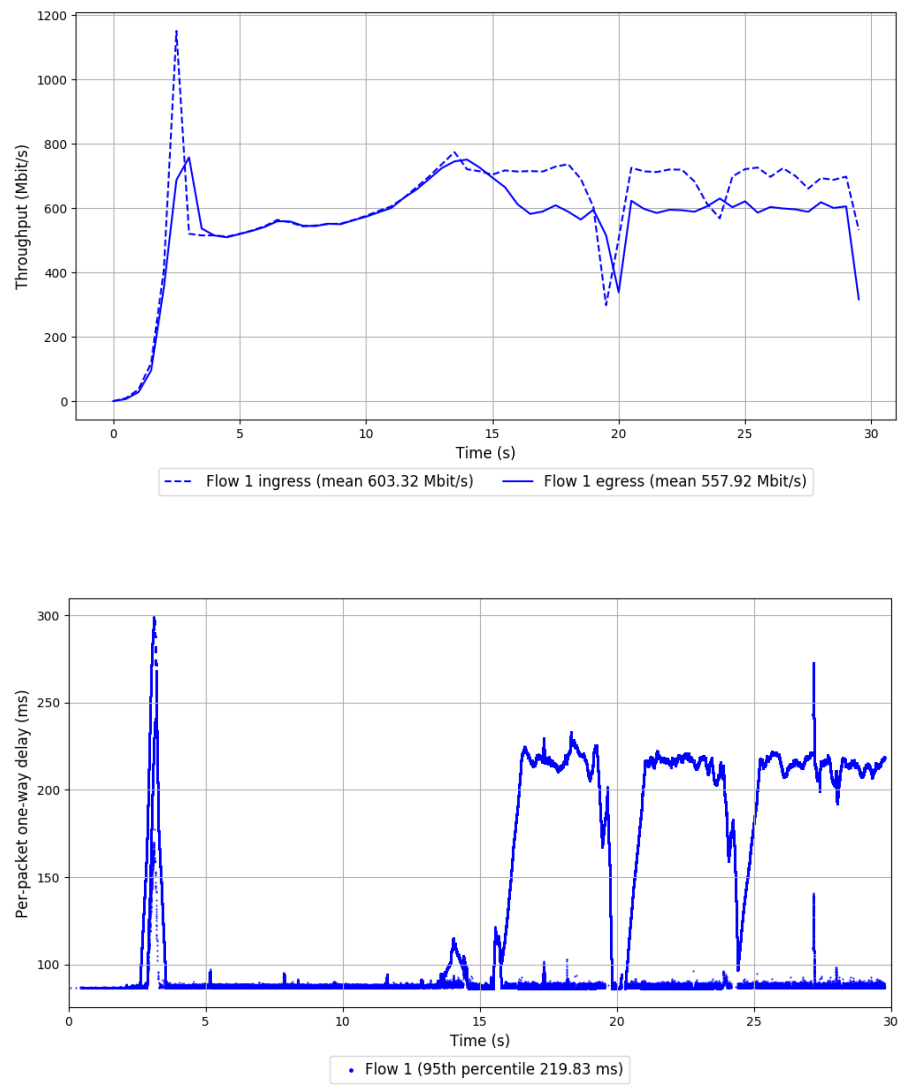
-- Flow 1:

Average throughput: 557.92 Mbit/s

95th percentile per-packet one-way delay: 219.831 ms

Loss rate: 8.14%

Run 10: Report of PCC — Data Link

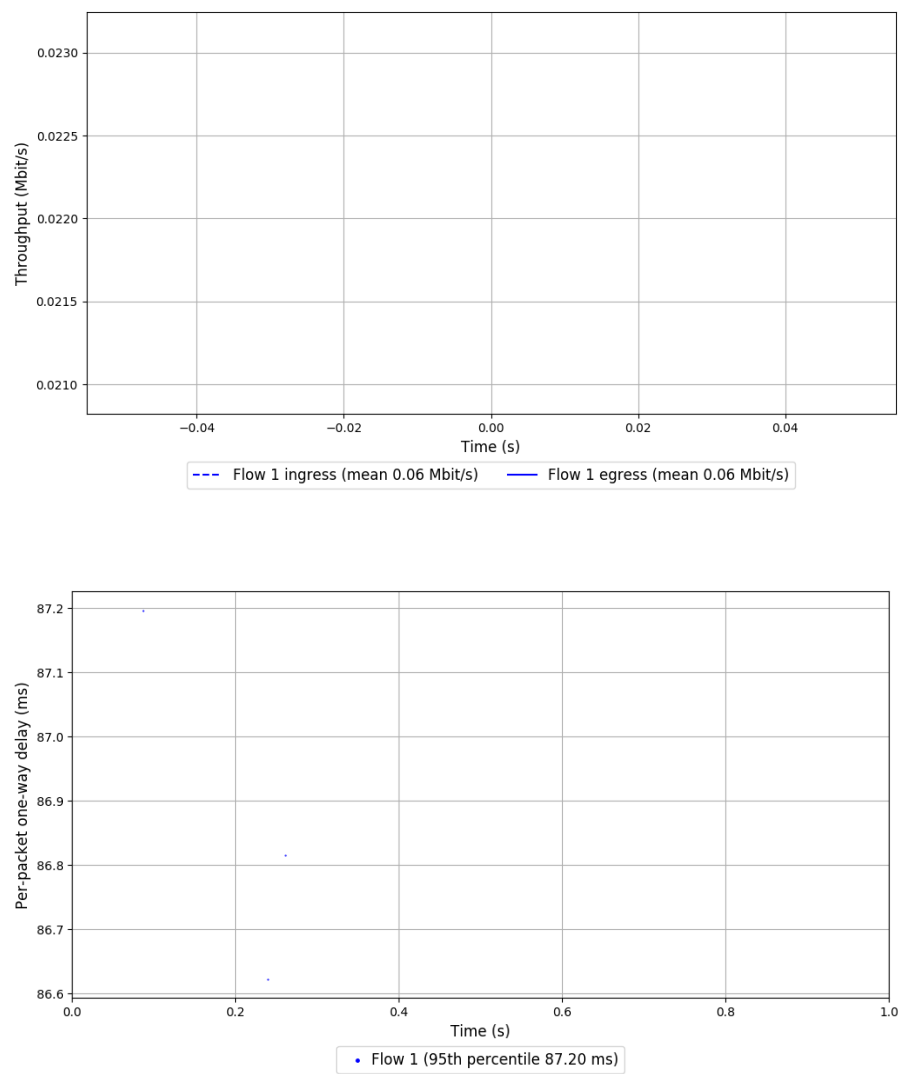


Run 1: Statistics of QUIC Cubic

Start at: 2017-12-19 19:19:18

End at: 2017-12-19 19:19:48

Run 1: Report of QUIC Cubic — Data Link

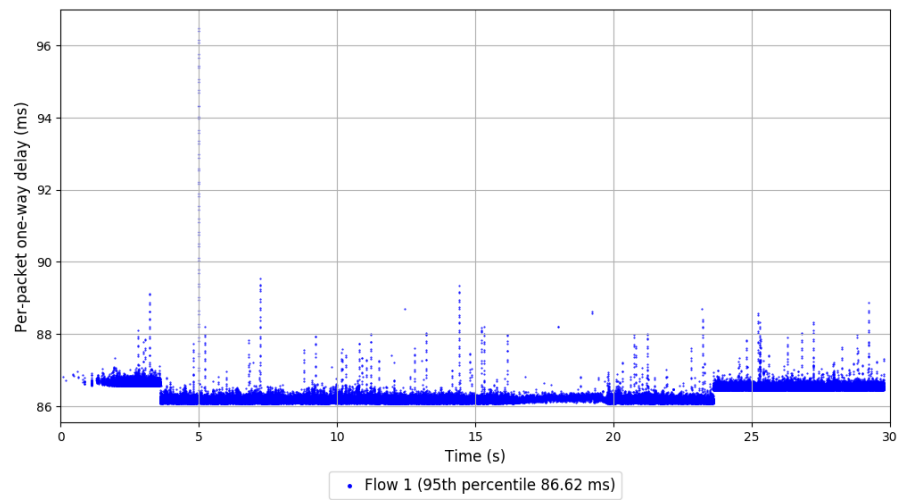
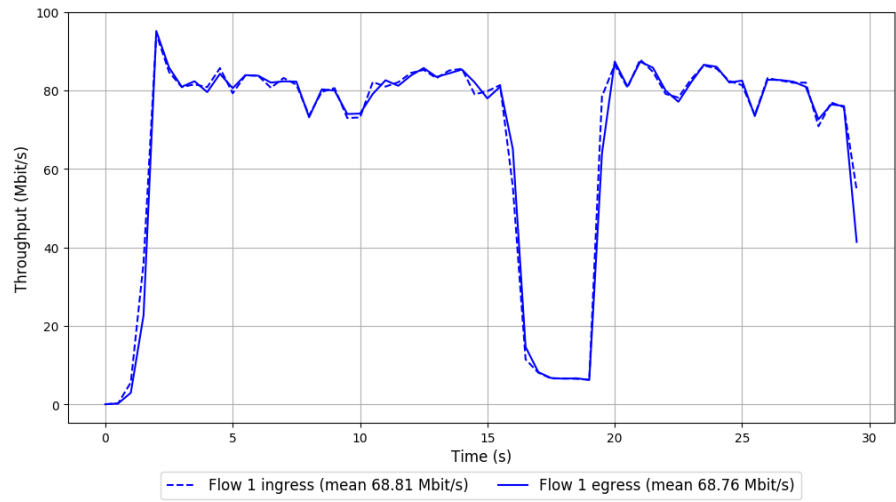


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-12-19 19:31:30
End at: 2017-12-19 19:32:00

# Below is generated by plot.py at 2017-12-19 23:44:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.76 Mbit/s
95th percentile per-packet one-way delay: 86.620 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 68.76 Mbit/s
95th percentile per-packet one-way delay: 86.620 ms
Loss rate: 0.65%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-19 19:43:41

End at: 2017-12-19 19:44:11

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.43 Mbit/s

95th percentile per-packet one-way delay: 86.587 ms

Loss rate: 0.71%

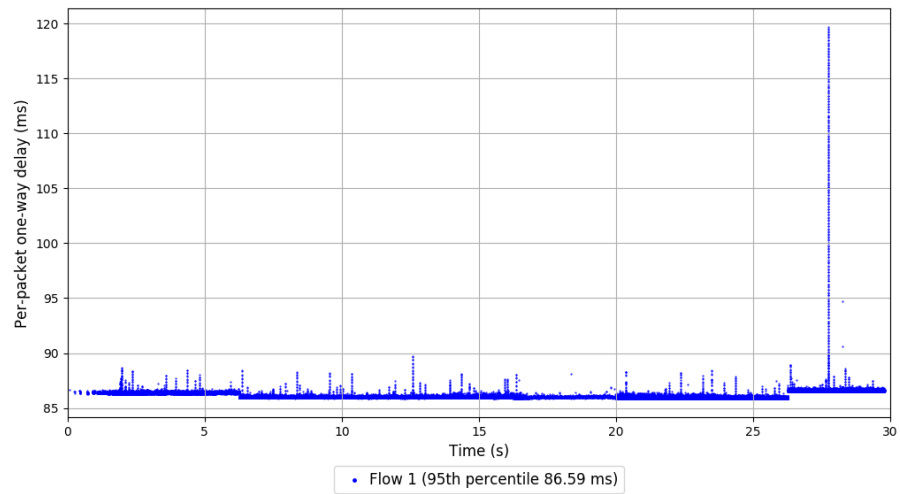
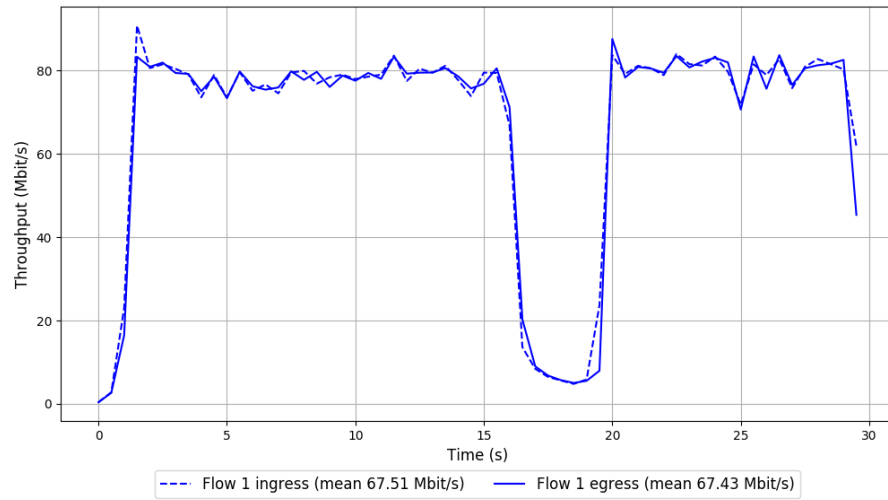
-- Flow 1:

Average throughput: 67.43 Mbit/s

95th percentile per-packet one-way delay: 86.587 ms

Loss rate: 0.71%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-19 19:56:00

End at: 2017-12-19 19:56:30

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.29 Mbit/s

95th percentile per-packet one-way delay: 86.517 ms

Loss rate: 0.99%

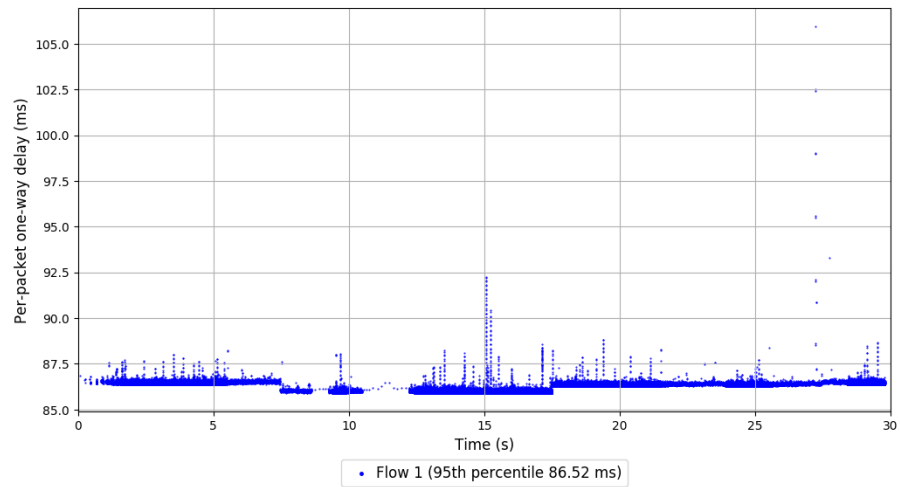
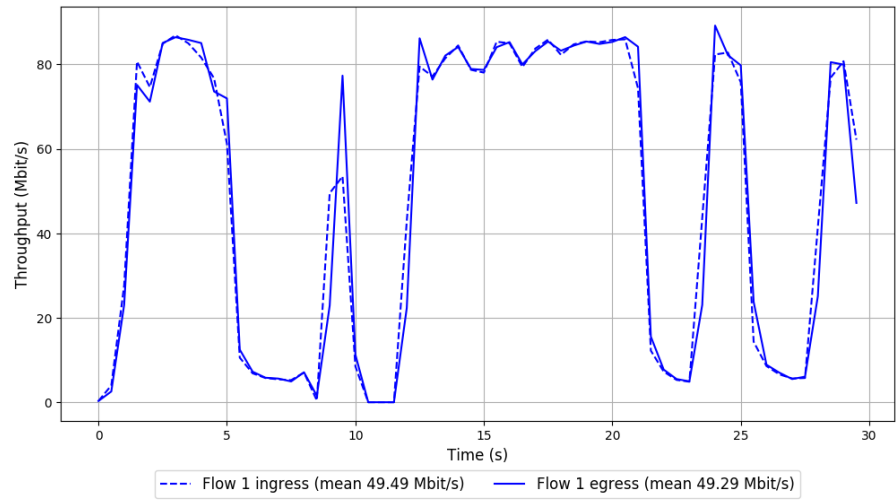
-- Flow 1:

Average throughput: 49.29 Mbit/s

95th percentile per-packet one-way delay: 86.517 ms

Loss rate: 0.99%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-19 20:08:11

End at: 2017-12-19 20:08:41

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.90 Mbit/s

95th percentile per-packet one-way delay: 86.675 ms

Loss rate: 0.61%

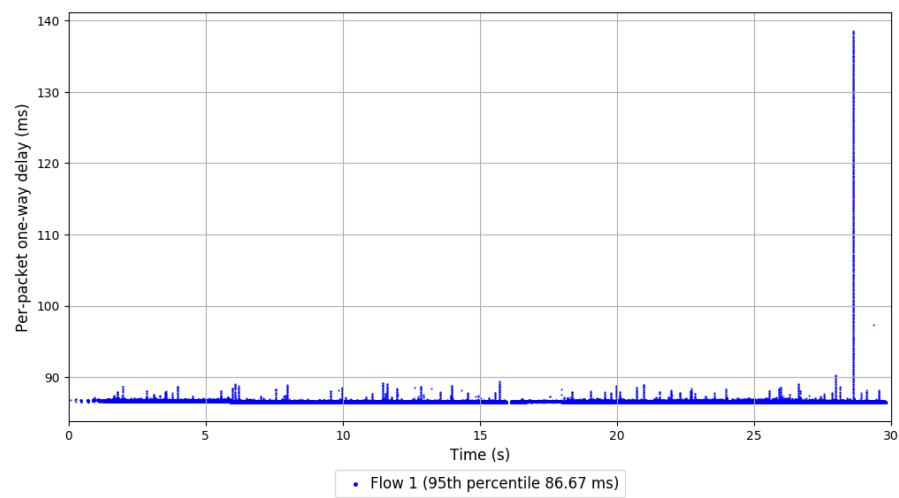
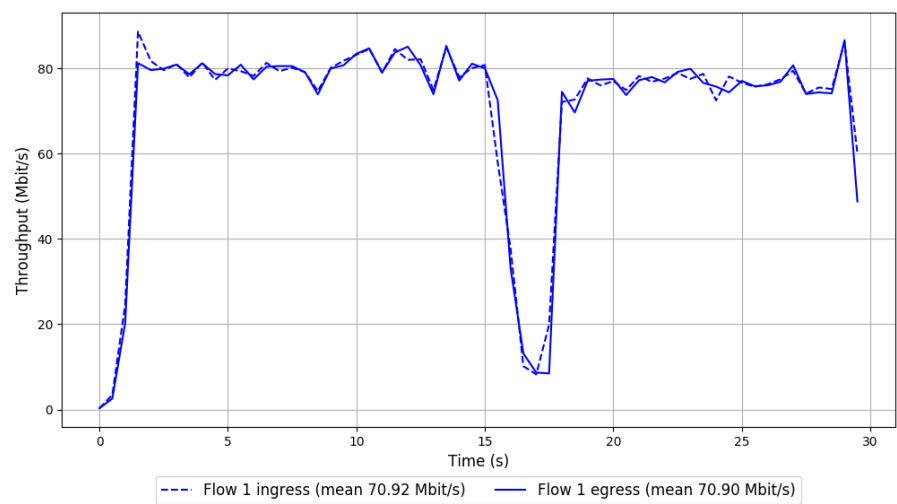
-- Flow 1:

Average throughput: 70.90 Mbit/s

95th percentile per-packet one-way delay: 86.675 ms

Loss rate: 0.61%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

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

End at: 2017-12-19 20:20:50

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.42 Mbit/s

95th percentile per-packet one-way delay: 86.860 ms

Loss rate: 0.85%

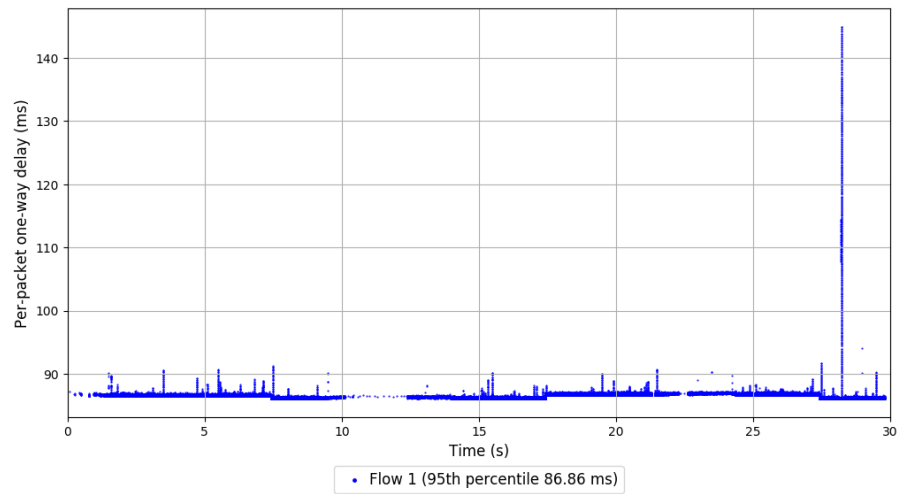
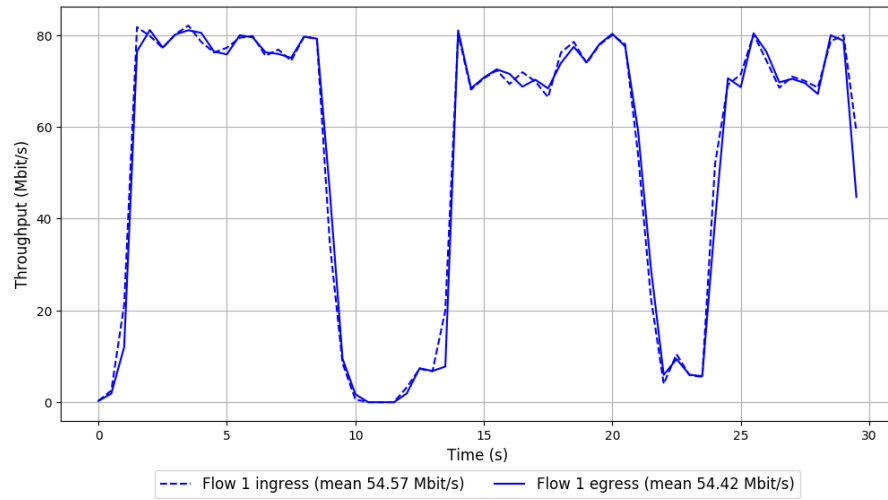
-- Flow 1:

Average throughput: 54.42 Mbit/s

95th percentile per-packet one-way delay: 86.860 ms

Loss rate: 0.85%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-19 20:32:13

End at: 2017-12-19 20:32:43

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.92 Mbit/s

95th percentile per-packet one-way delay: 86.919 ms

Loss rate: 1.26%

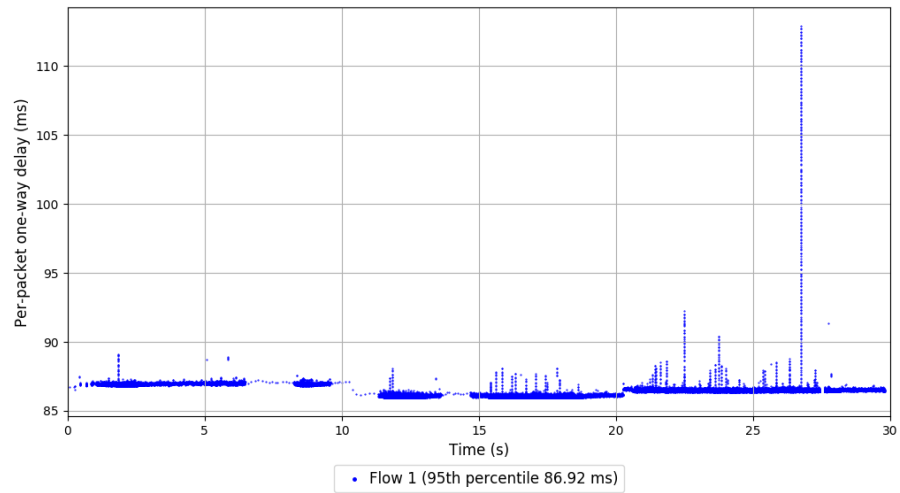
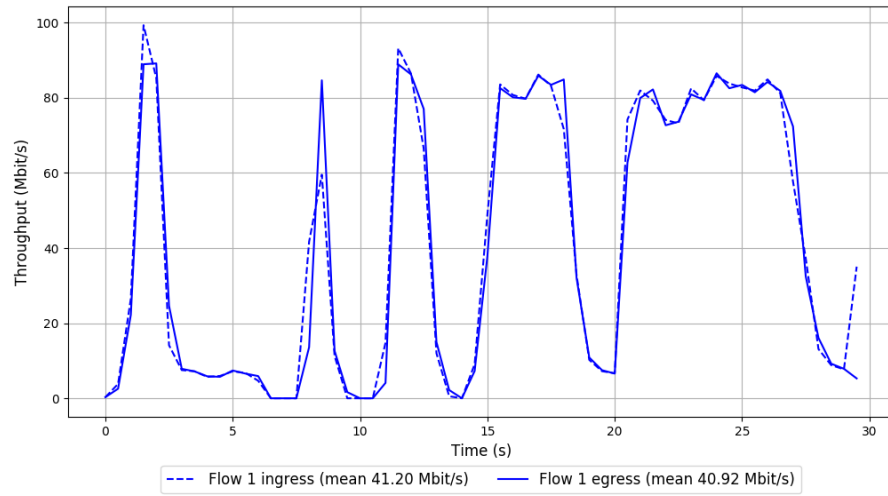
-- Flow 1:

Average throughput: 40.92 Mbit/s

95th percentile per-packet one-way delay: 86.919 ms

Loss rate: 1.26%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-19 20:44:33

End at: 2017-12-19 20:45:03

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.89 Mbit/s

95th percentile per-packet one-way delay: 86.594 ms

Loss rate: 0.90%

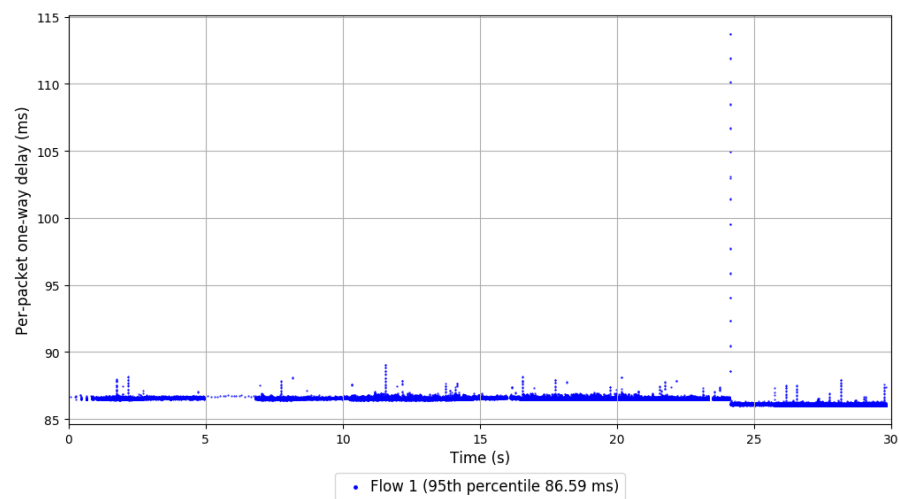
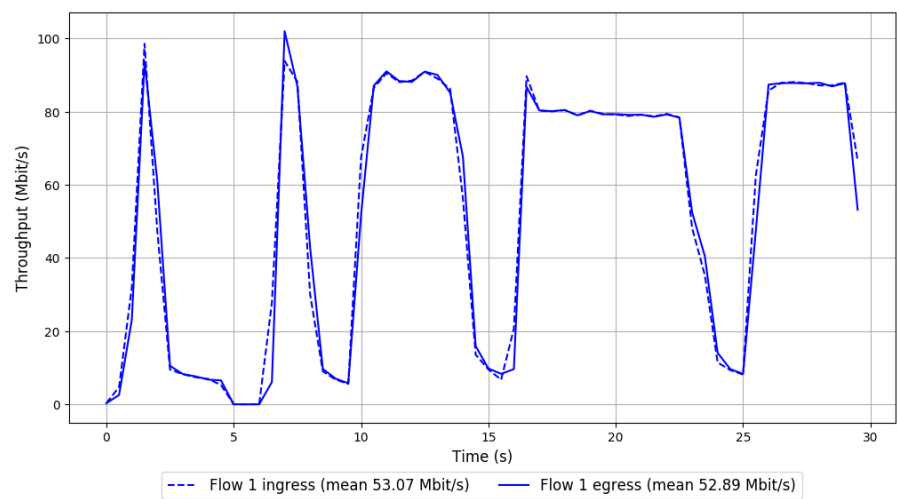
-- Flow 1:

Average throughput: 52.89 Mbit/s

95th percentile per-packet one-way delay: 86.594 ms

Loss rate: 0.90%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-19 20:57:04

End at: 2017-12-19 20:57:34

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.70 Mbit/s

95th percentile per-packet one-way delay: 86.515 ms

Loss rate: 0.67%

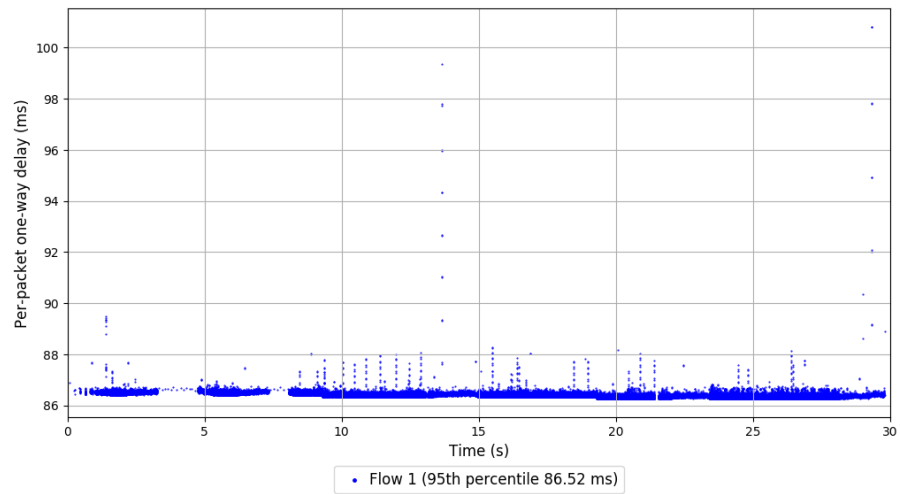
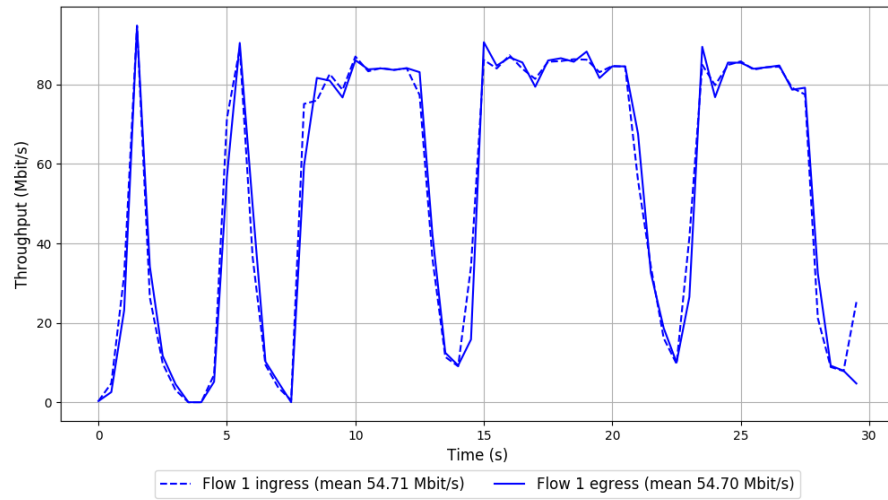
-- Flow 1:

Average throughput: 54.70 Mbit/s

95th percentile per-packet one-way delay: 86.515 ms

Loss rate: 0.67%

Run 9: Report of QUIC Cubic — Data Link

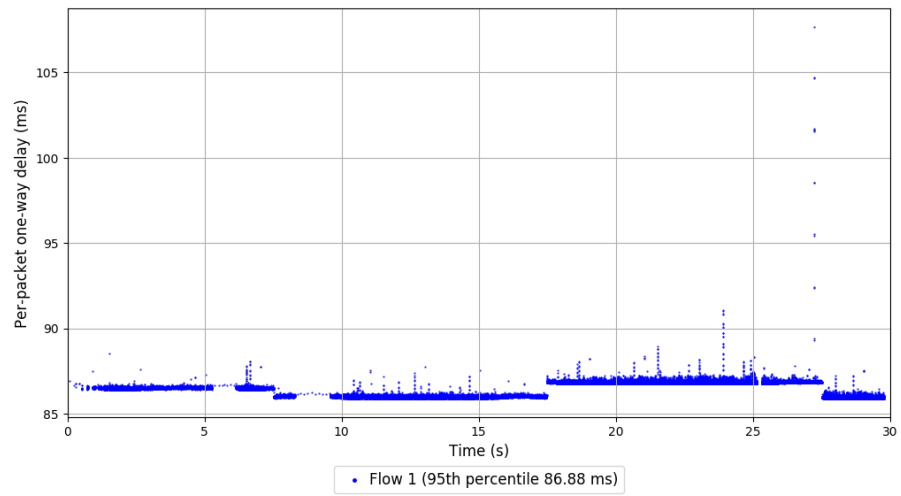
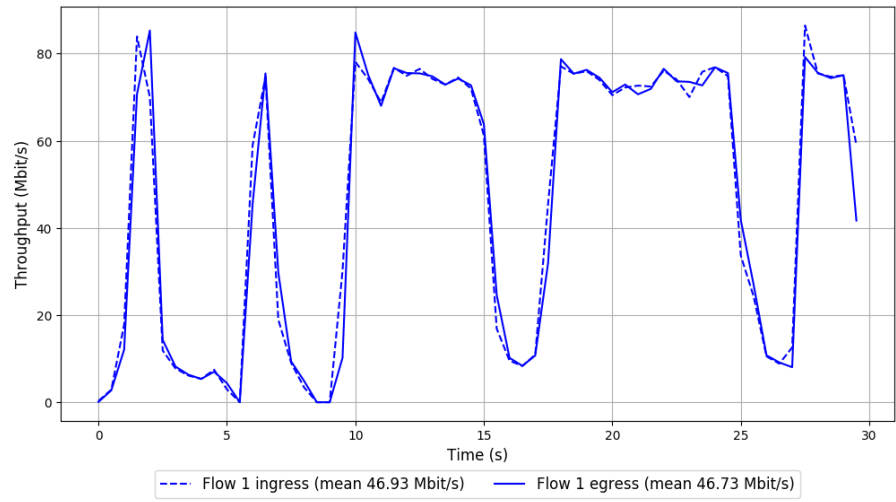


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-19 21:09:56
End at: 2017-12-19 21:10:26

# Below is generated by plot.py at 2017-12-19 23:44:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.73 Mbit/s
95th percentile per-packet one-way delay: 86.882 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 46.73 Mbit/s
95th percentile per-packet one-way delay: 86.882 ms
Loss rate: 1.09%
```

Run 10: Report of QUIC Cubic — Data Link

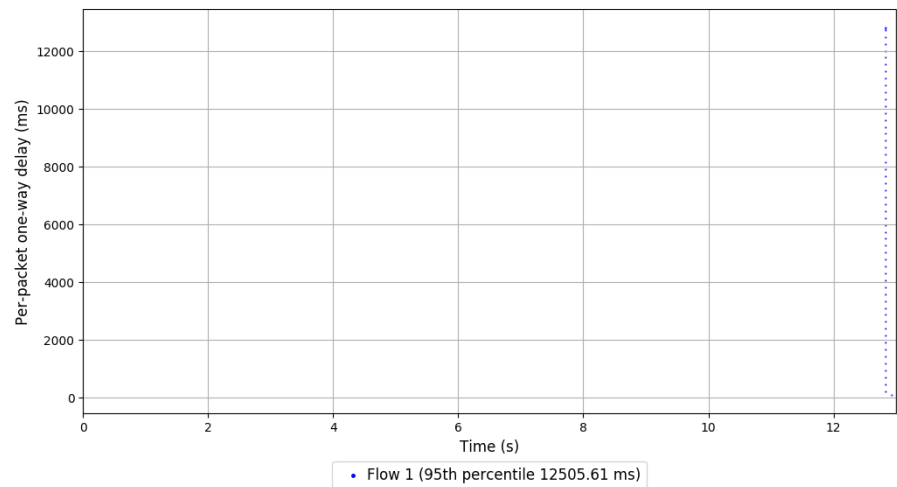
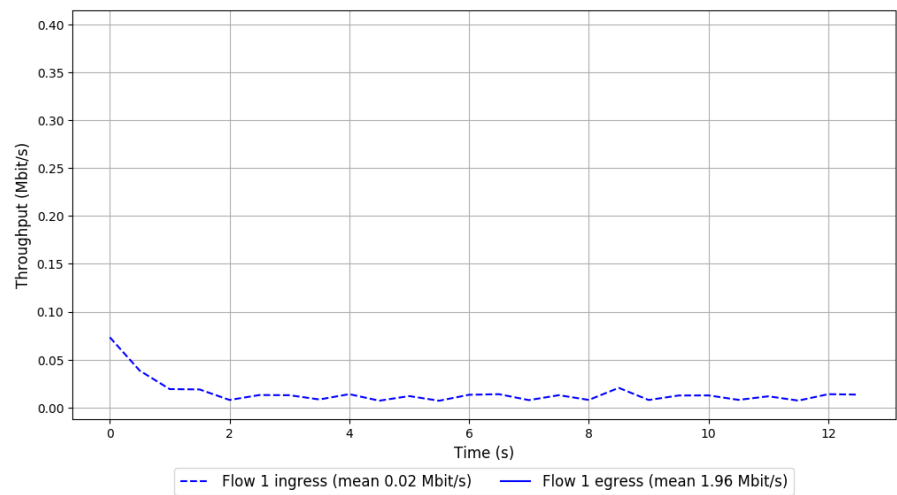


Run 1: Statistics of SReAM

Start at: 2017-12-19 19:18:40

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

Run 1: Report of SReAM — Data Link

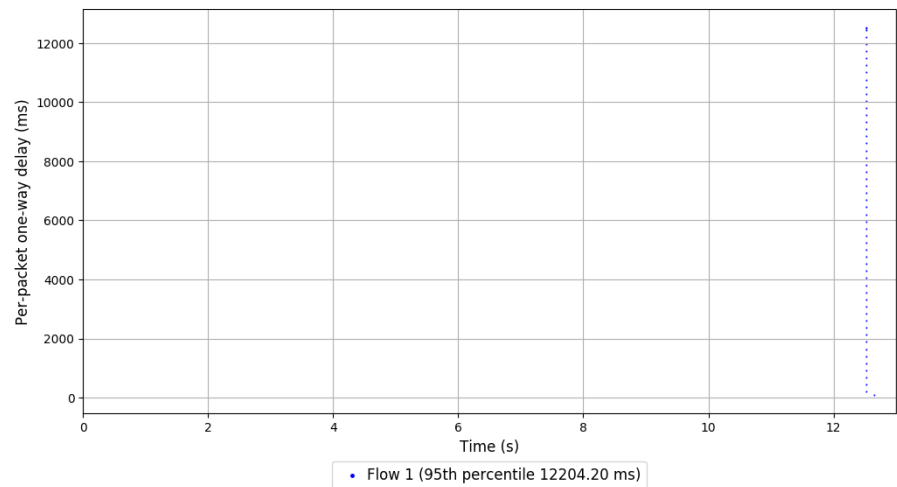
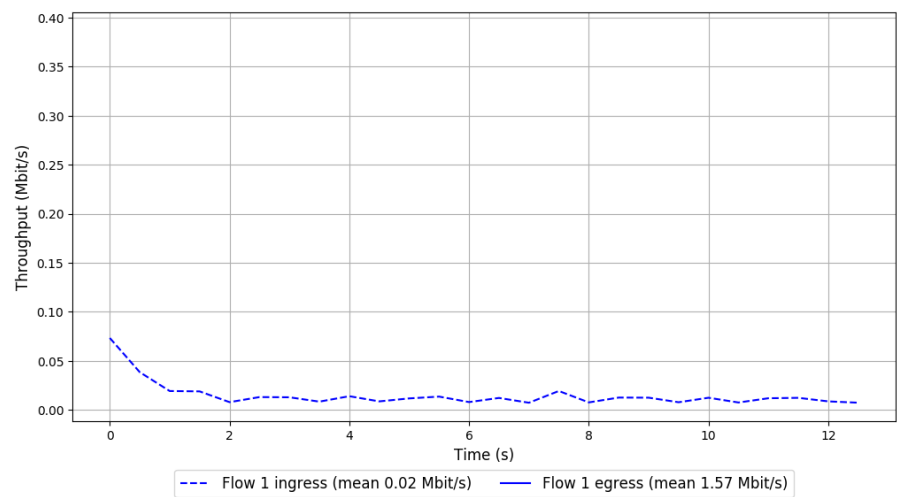


Run 2: Statistics of SReAM

Start at: 2017-12-19 19:30:51

End at: 2017-12-19 19:31:21

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-19 19:43:02

End at: 2017-12-19 19:43:32

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.792 ms

Loss rate: 0.52%

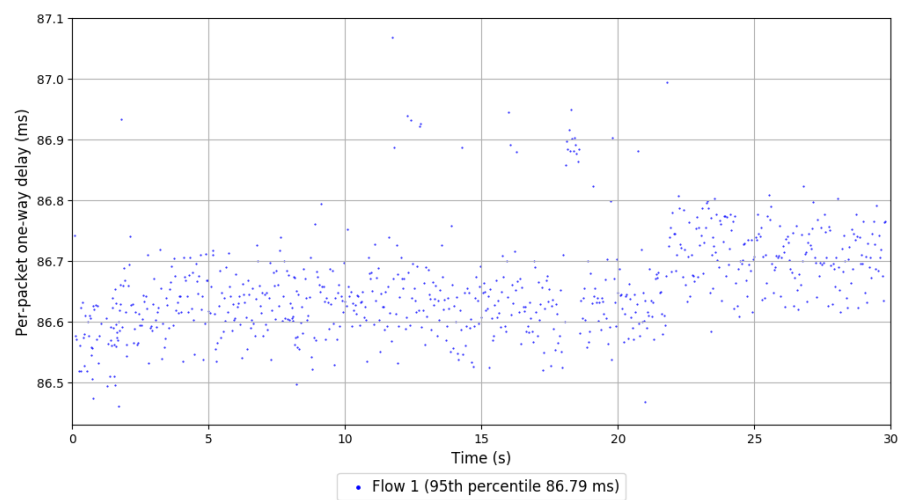
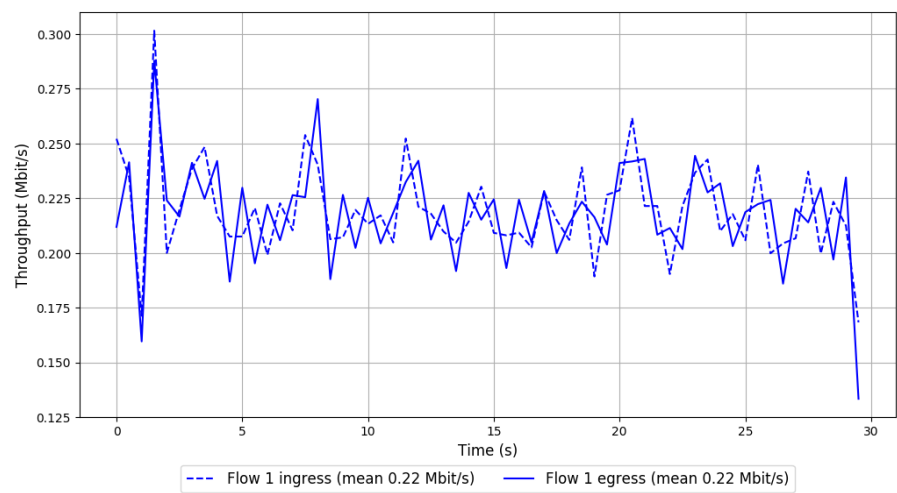
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.792 ms

Loss rate: 0.52%

Run 3: Report of SReAM — Data Link

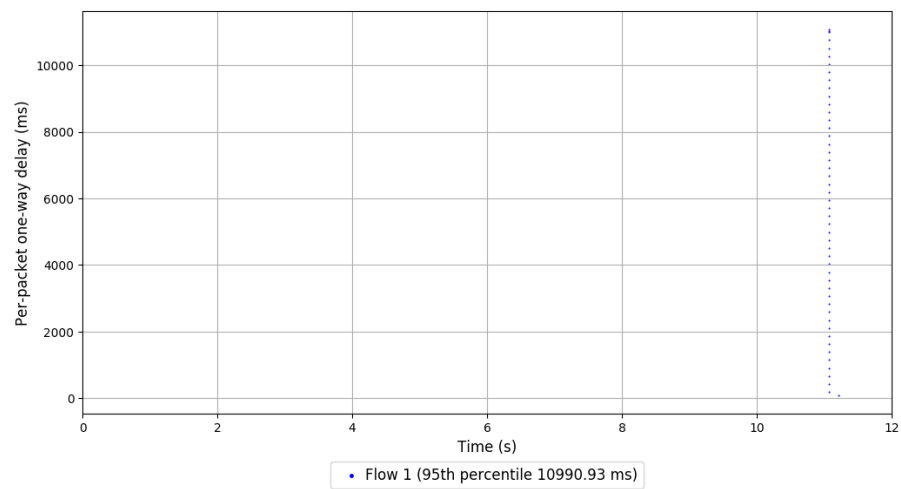
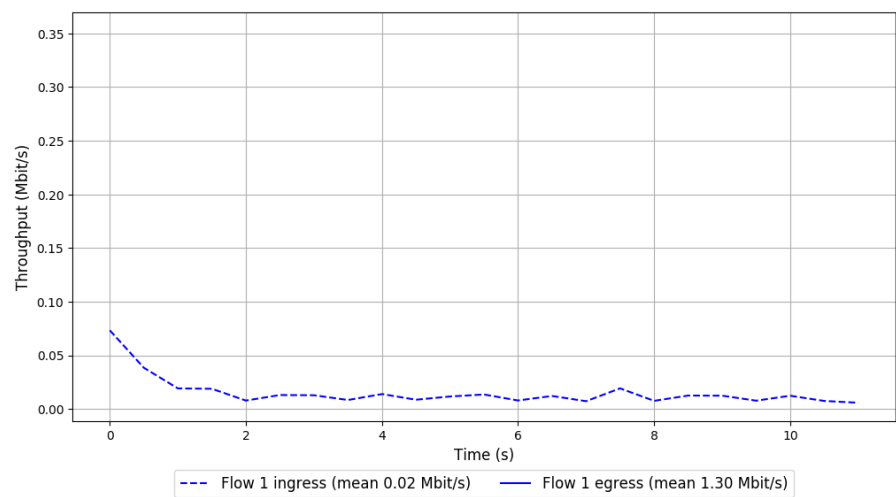


Run 4: Statistics of SReAM

Start at: 2017-12-19 19:55:21

End at: 2017-12-19 19:55:51

Run 4: Report of SReAM — Data Link

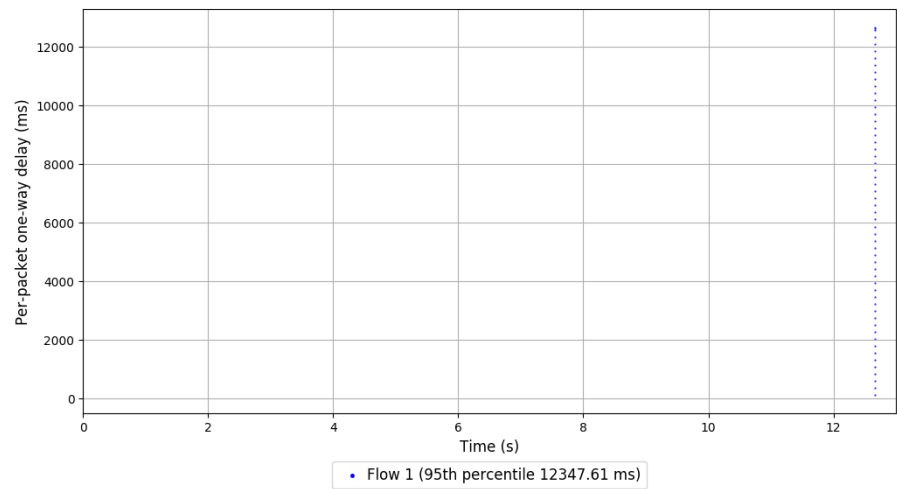
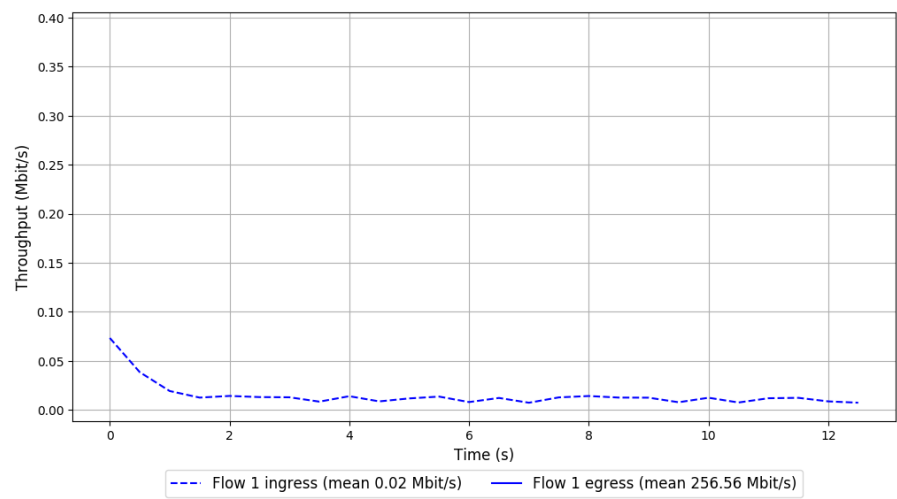


Run 5: Statistics of SReAM

Start at: 2017-12-19 20:07:32

End at: 2017-12-19 20:08:02

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

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

End at: 2017-12-19 20:20:11

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.296 ms

Loss rate: 0.64%

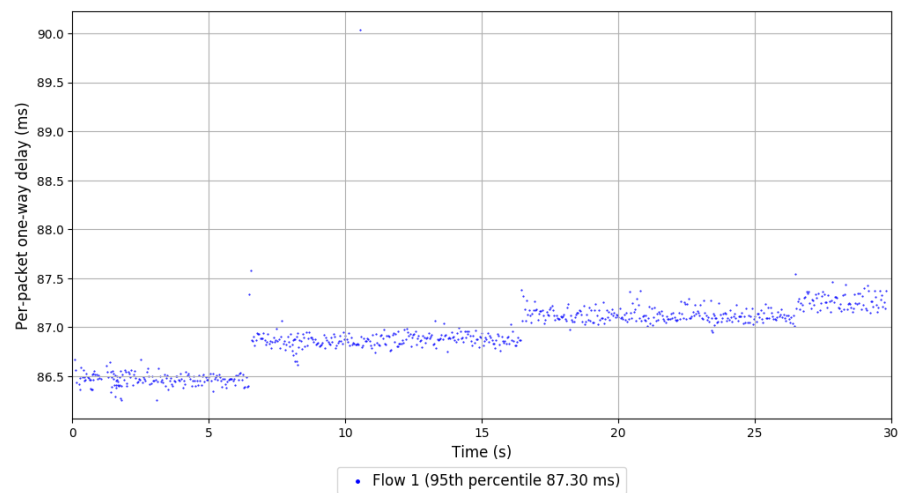
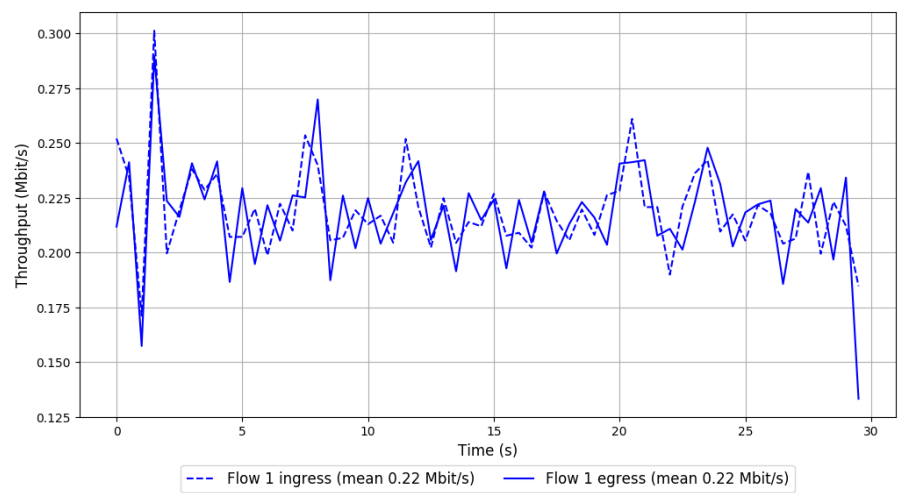
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.296 ms

Loss rate: 0.64%

Run 6: Report of SReAM — Data Link

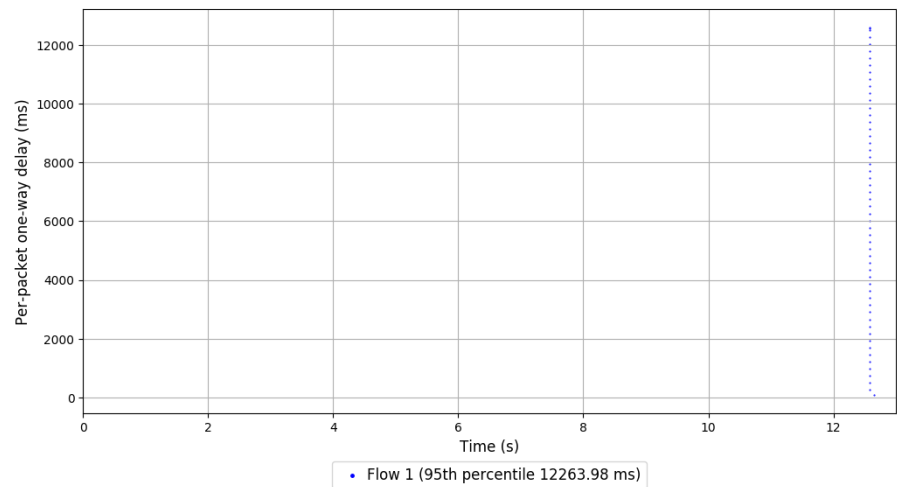
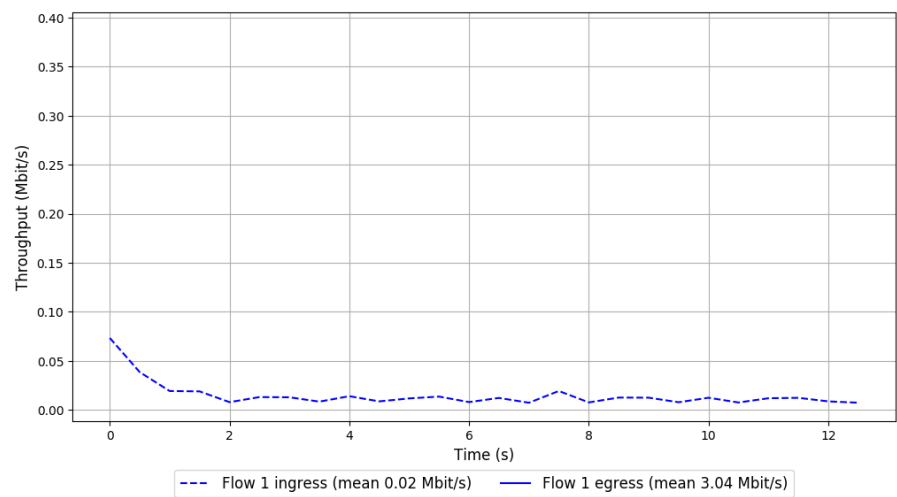


Run 7: Statistics of SReAM

Start at: 2017-12-19 20:31:35

End at: 2017-12-19 20:32:05

Run 7: Report of SReAM — Data Link

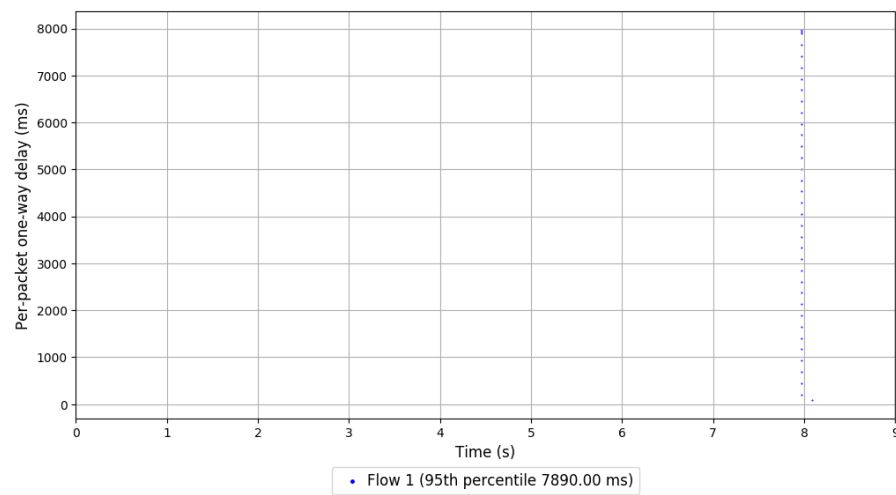
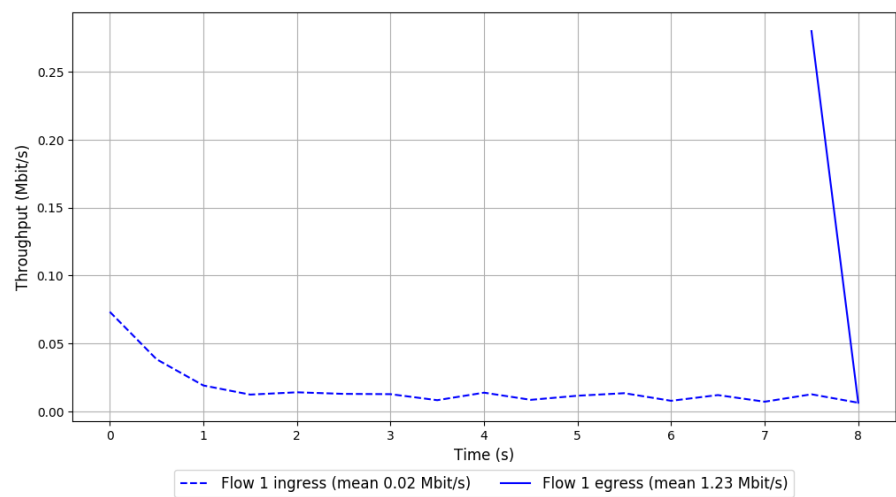


Run 8: Statistics of SReAM

Start at: 2017-12-19 20:43:54

End at: 2017-12-19 20:44:24

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-19 20:56:25

End at: 2017-12-19 20:56:55

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.000 ms

Loss rate: 0.64%

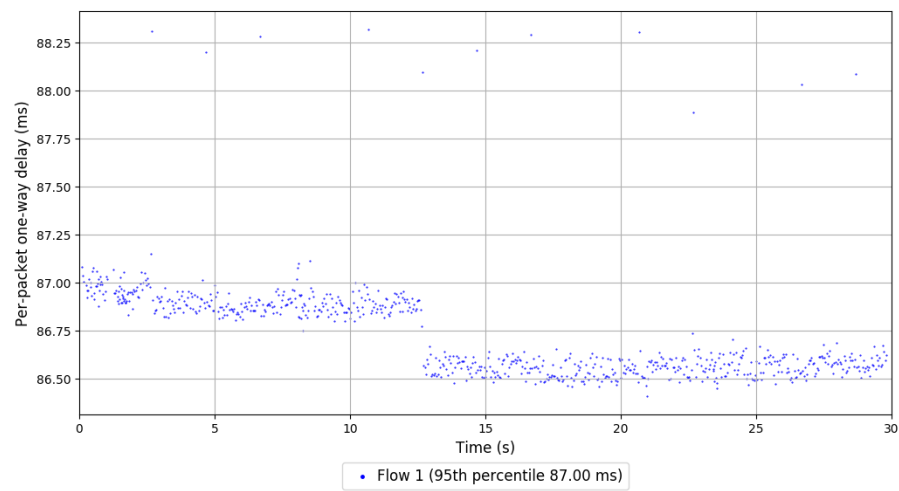
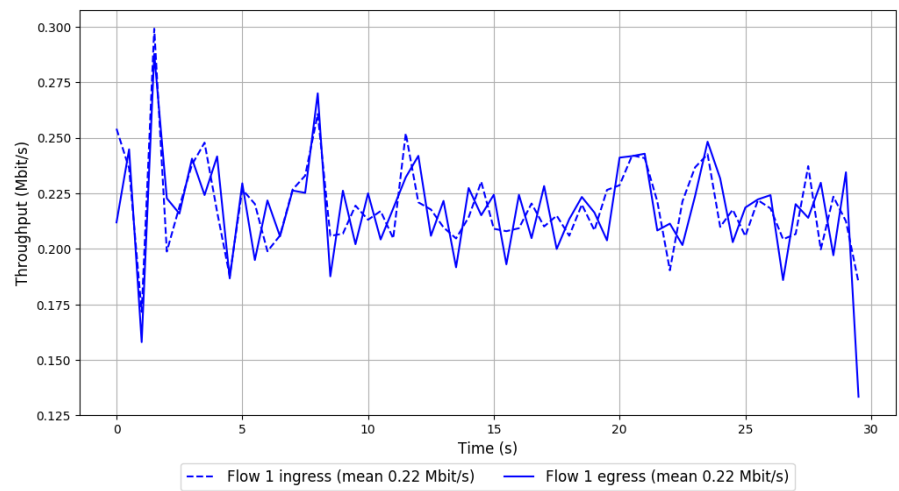
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.000 ms

Loss rate: 0.64%

Run 9: Report of SCSReAM — Data Link

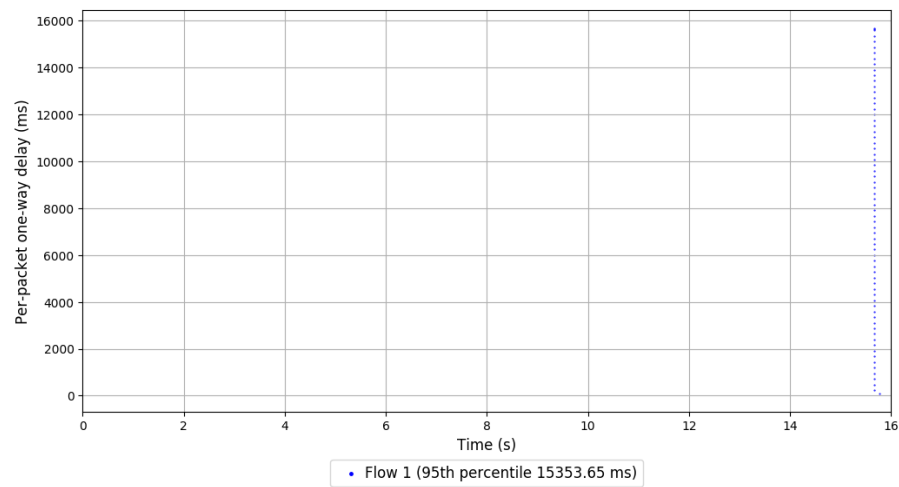
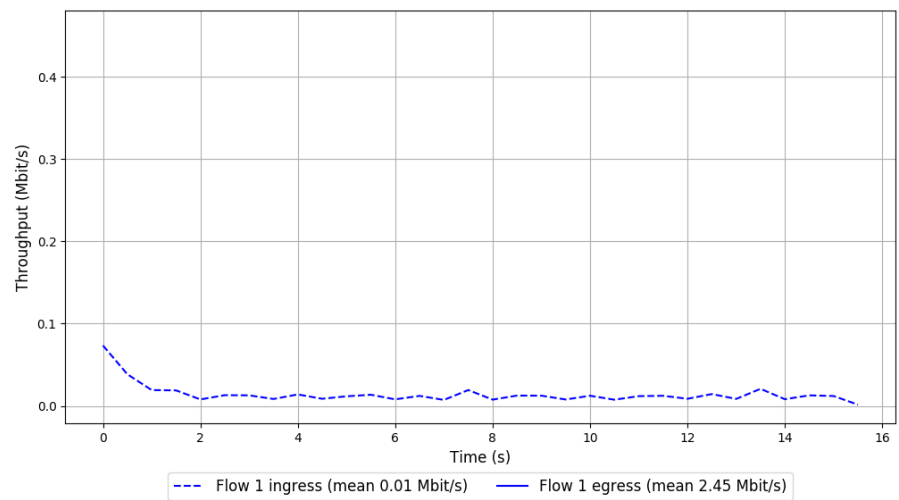


Run 10: Statistics of SCReAM

Start at: 2017-12-19 21:09:17

End at: 2017-12-19 21:09:47

Run 10: Report of SReAM — Data Link

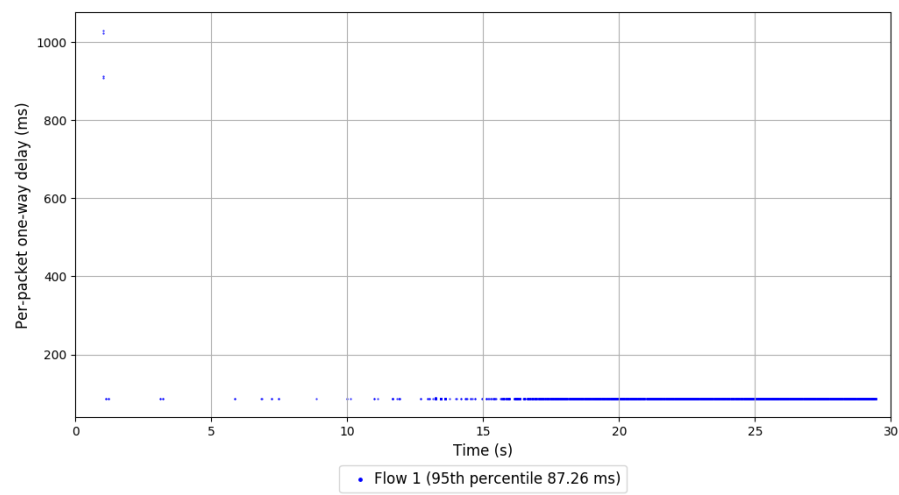
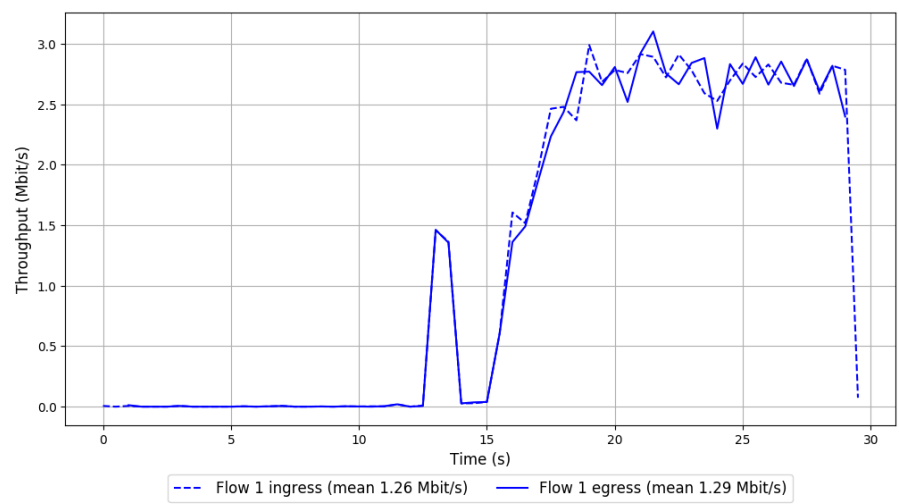


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-19 19:22:04
End at: 2017-12-19 19:22:34

# Below is generated by plot.py at 2017-12-19 23:44:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 87.264 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 87.264 ms
Loss rate: 1.19%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-19 19:34:18

End at: 2017-12-19 19:34:48

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 86.942 ms

Loss rate: 0.63%

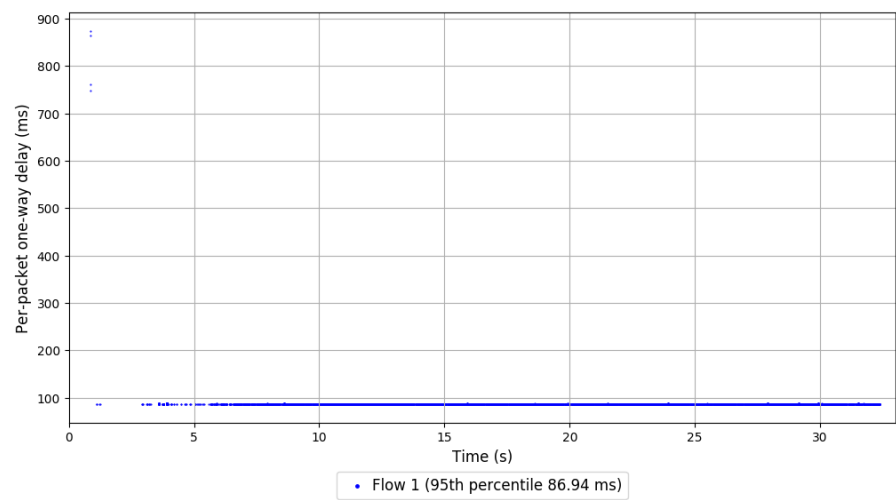
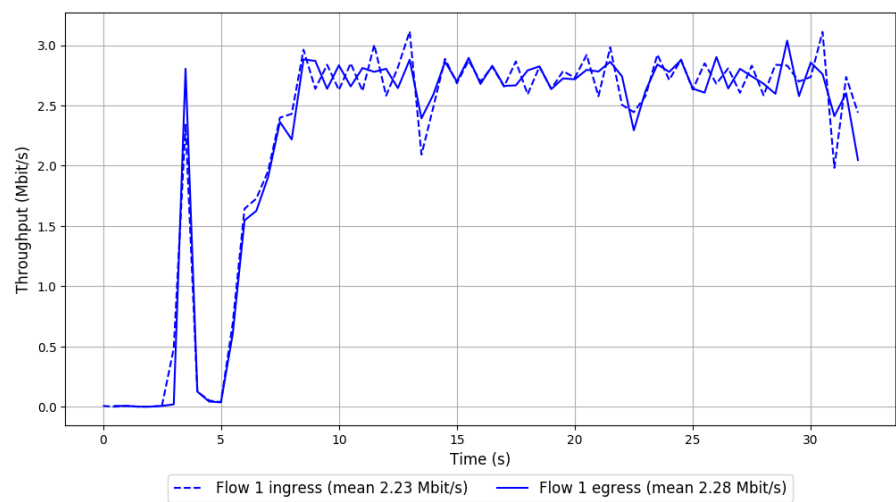
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 86.942 ms

Loss rate: 0.63%

Run 2: Report of WebRTC media — Data Link

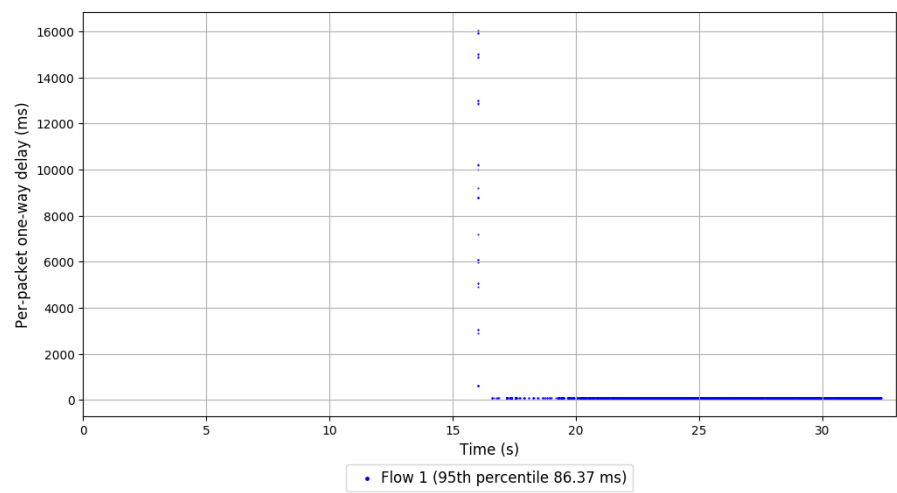
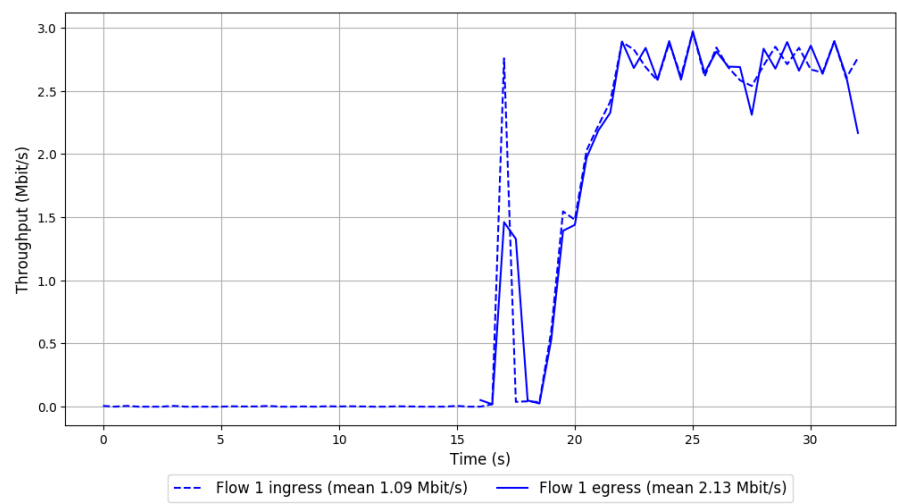


Run 3: Statistics of WebRTC media

Start at: 2017-12-19 19:46:30

End at: 2017-12-19 19:47:00

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-19 19:58:44

End at: 2017-12-19 19:59:14

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.016 ms

Loss rate: 0.62%

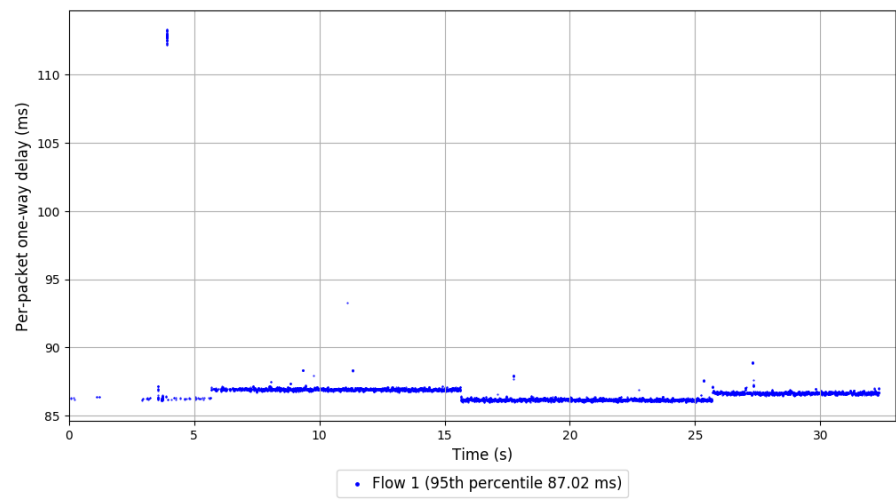
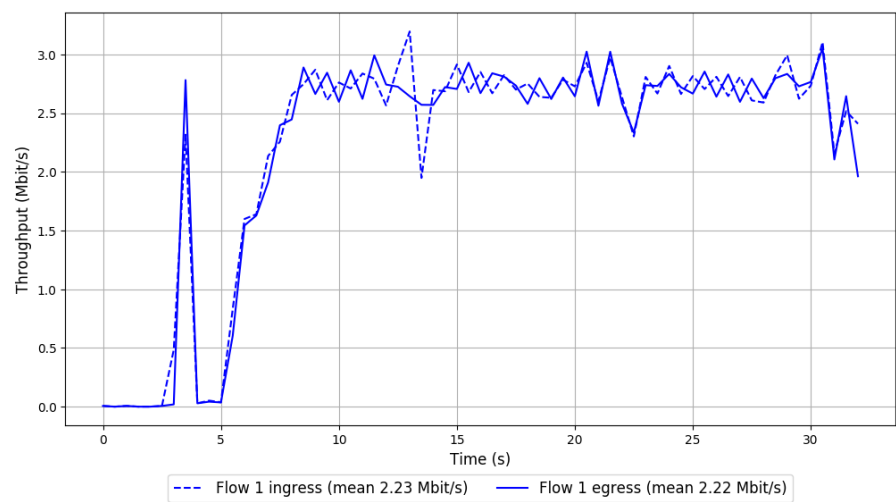
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.016 ms

Loss rate: 0.62%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-19 20:10:52

End at: 2017-12-19 20:11:22

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.181 ms

Loss rate: 0.62%

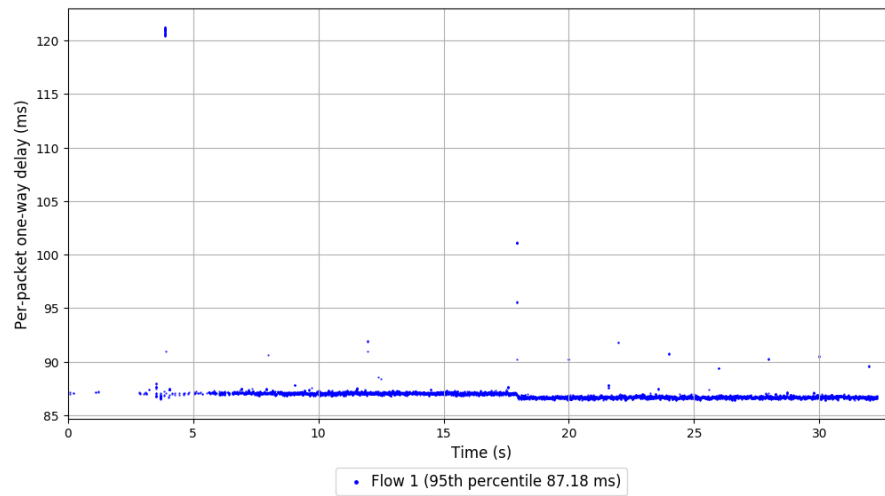
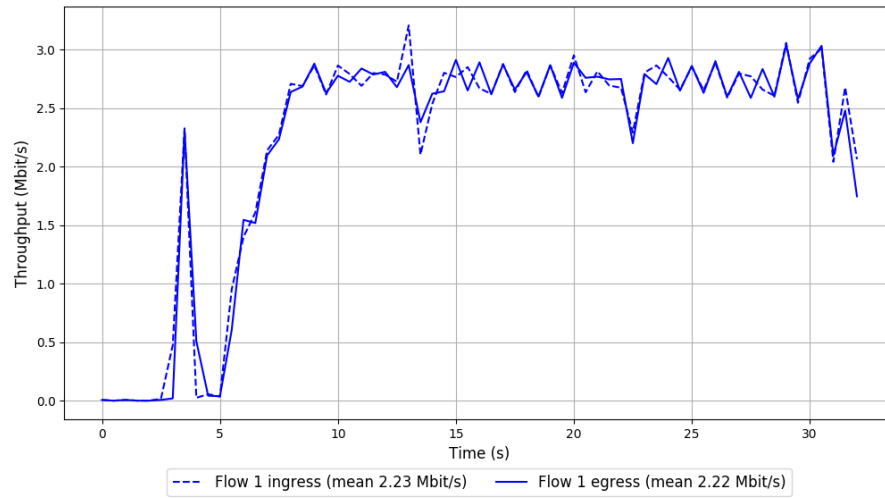
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 87.181 ms

Loss rate: 0.62%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-19 20:22:48

End at: 2017-12-19 20:23:18

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 86.918 ms

Loss rate: 0.60%

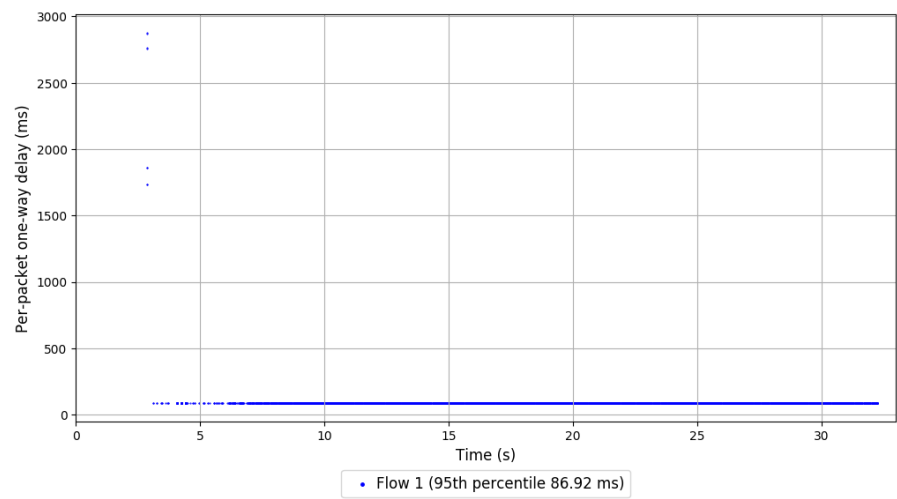
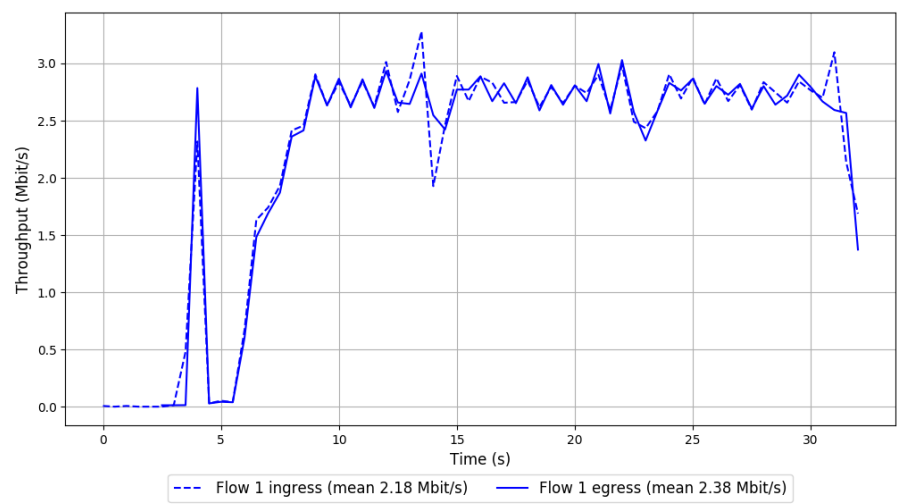
-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 86.918 ms

Loss rate: 0.60%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-19 20:35:02

End at: 2017-12-19 20:35:32

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 86.802 ms

Loss rate: 0.77%

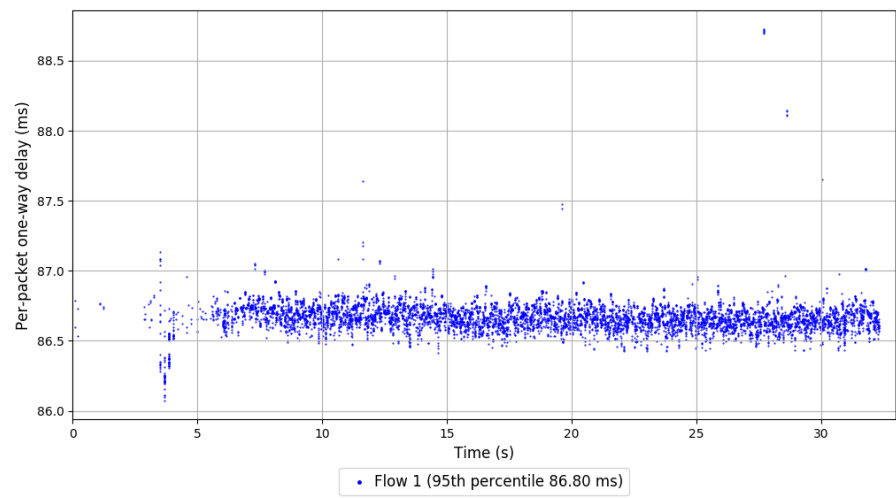
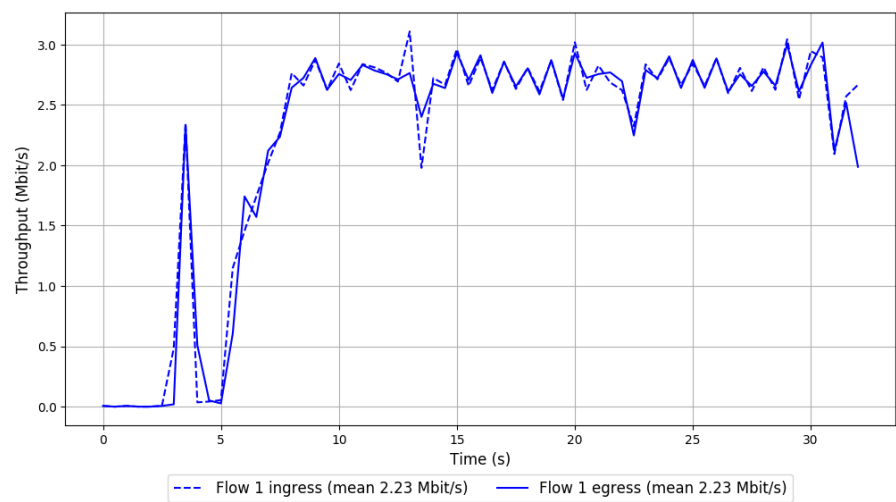
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 86.802 ms

Loss rate: 0.77%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-19 20:47:23

End at: 2017-12-19 20:47:53

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.998 ms

Loss rate: 0.73%

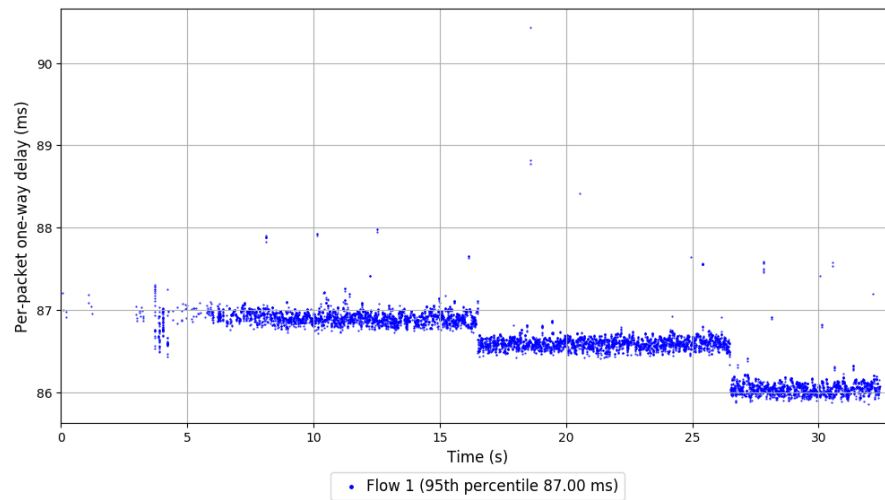
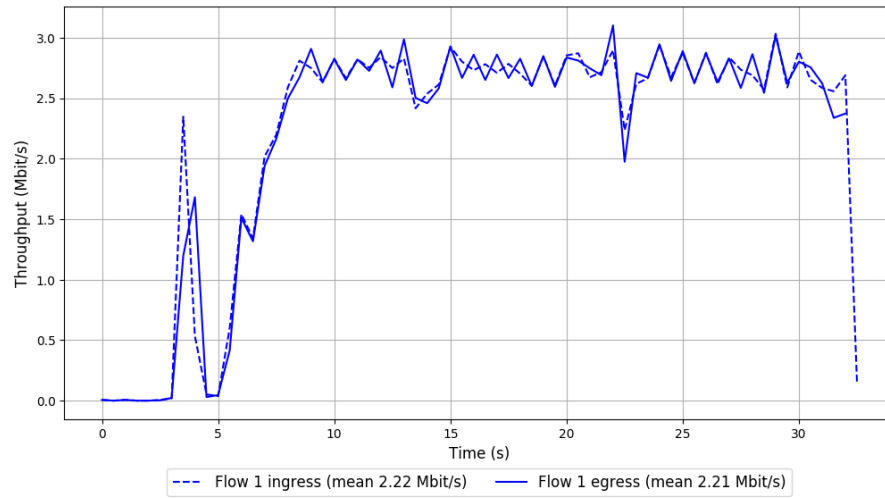
-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 86.998 ms

Loss rate: 0.73%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-19 21:00:12

End at: 2017-12-19 21:00:42

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

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

Loss rate: 0.79%

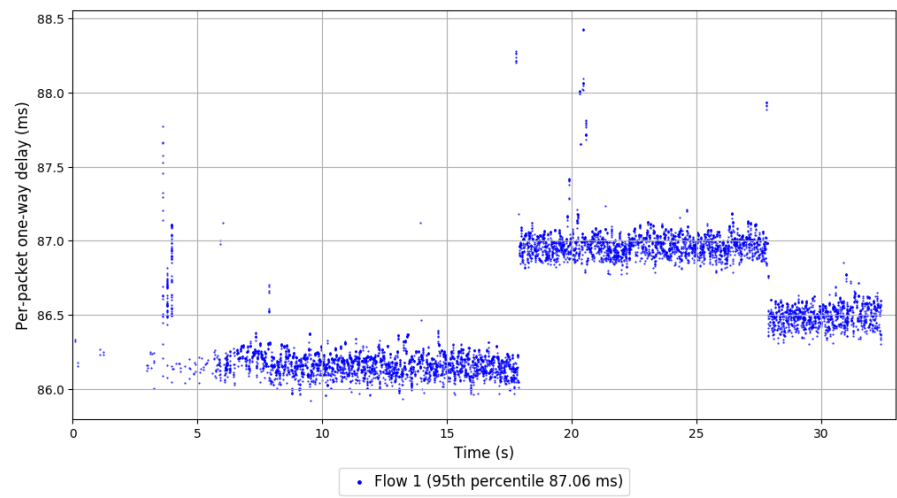
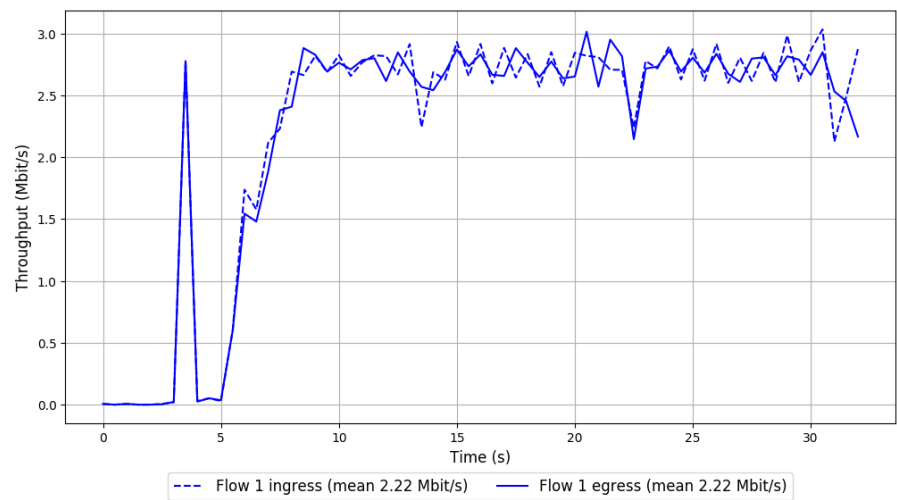
-- Flow 1:

Average throughput: 2.22 Mbit/s

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

Loss rate: 0.79%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-19 21:12:49

End at: 2017-12-19 21:13:19

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.638 ms

Loss rate: 0.78%

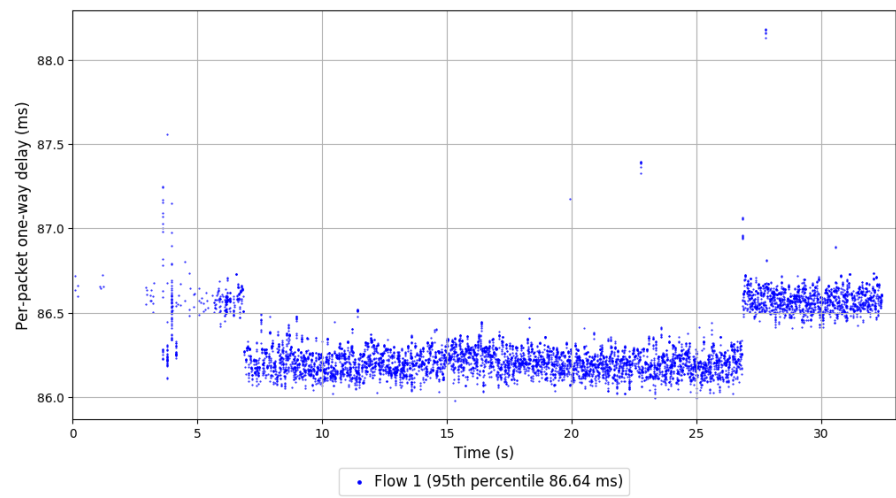
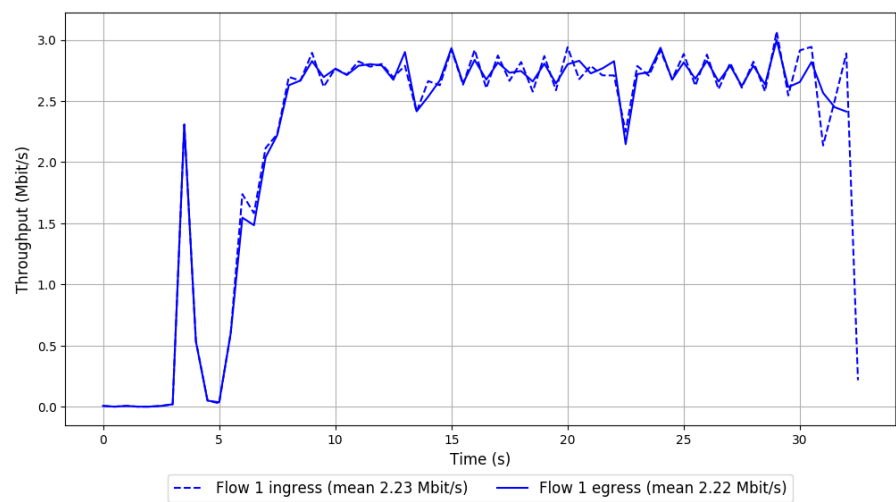
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 86.638 ms

Loss rate: 0.78%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-19 19:14:35

End at: 2017-12-19 19:15:05

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 87.786 ms

Loss rate: 0.93%

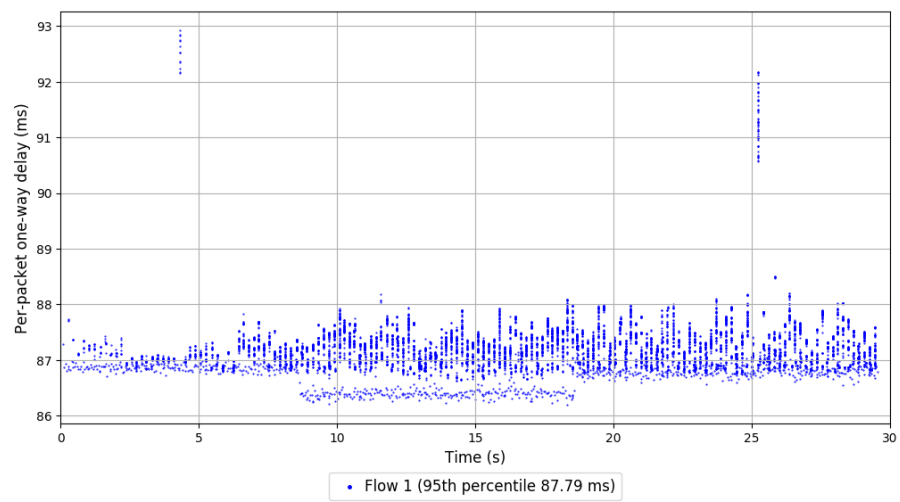
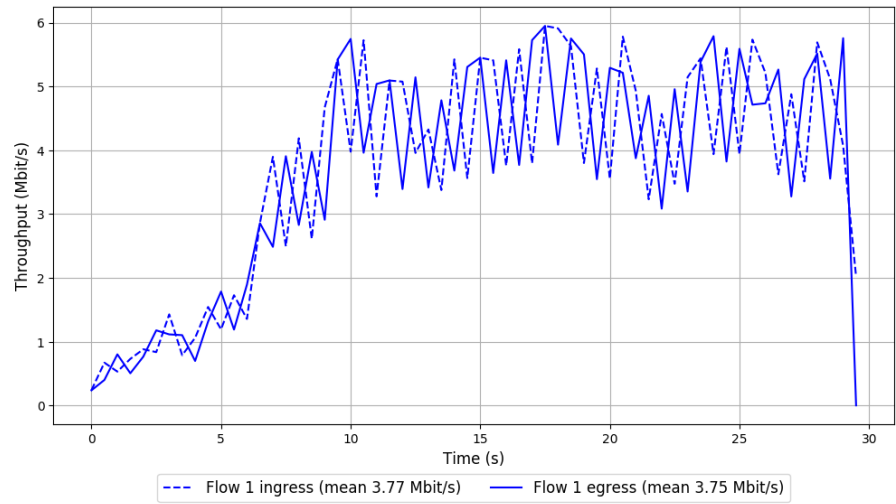
-- Flow 1:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 87.786 ms

Loss rate: 0.93%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-19 19:26:45

End at: 2017-12-19 19:27:15

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 87.782 ms

Loss rate: 0.86%

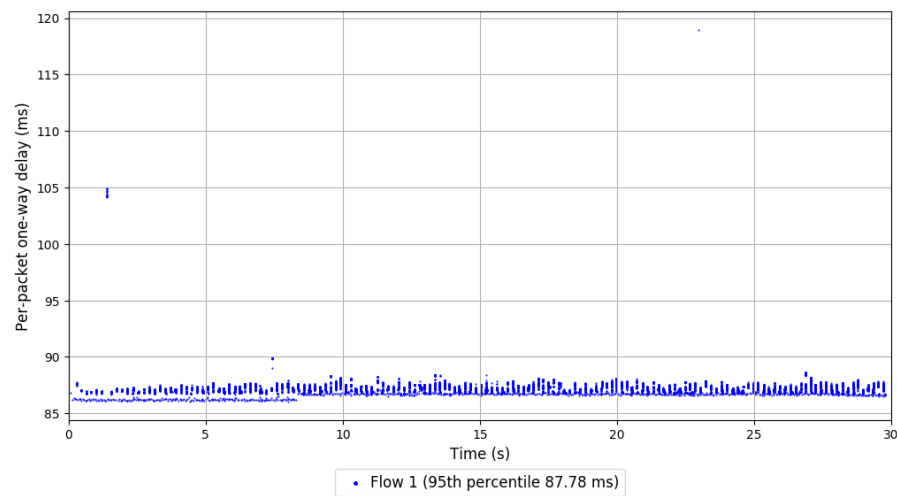
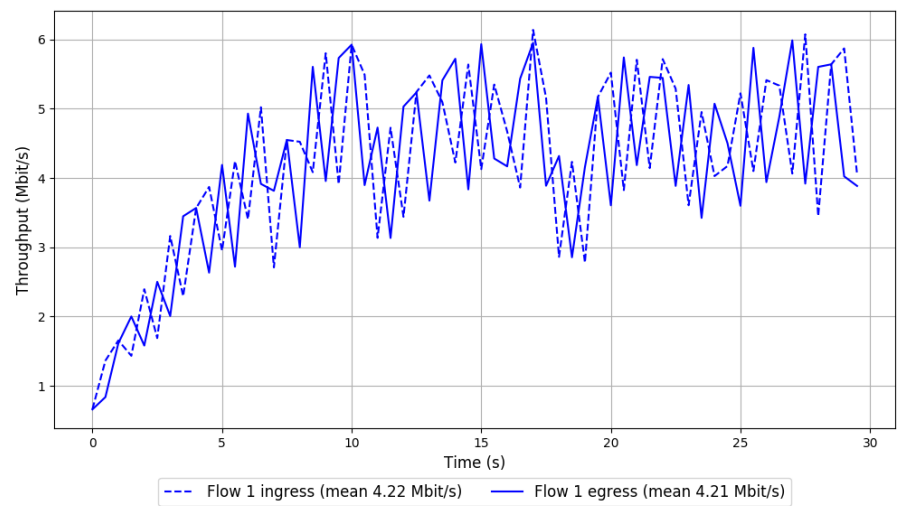
-- Flow 1:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 87.782 ms

Loss rate: 0.86%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-19 19:38:58

End at: 2017-12-19 19:39:28

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 87.851 ms

Loss rate: 0.86%

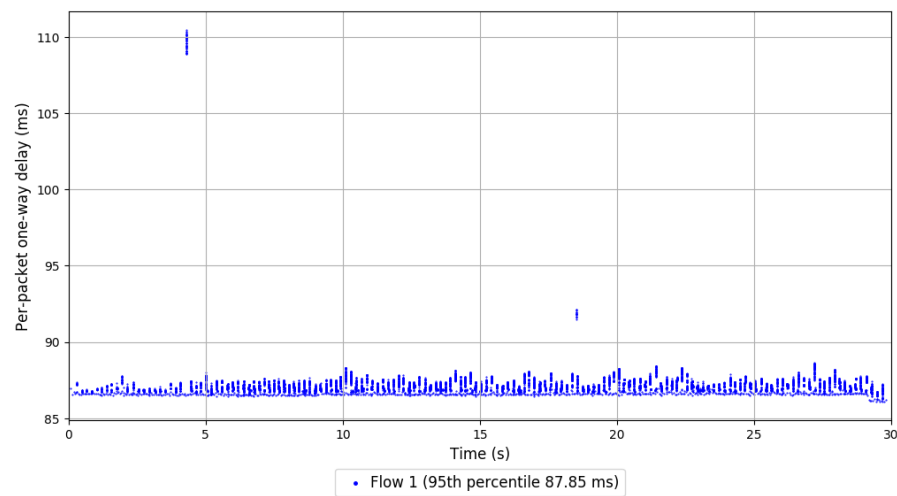
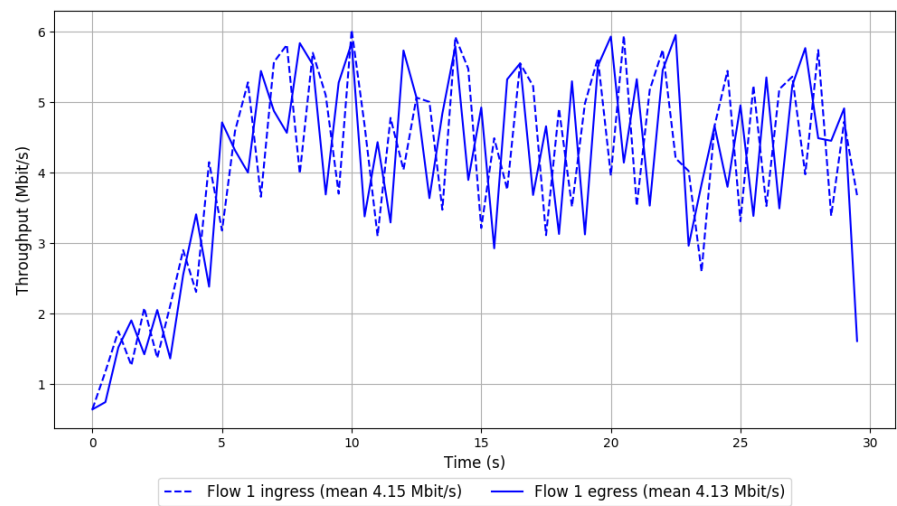
-- Flow 1:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 87.851 ms

Loss rate: 0.86%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-19 19:51:16

End at: 2017-12-19 19:51:46

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 87.596 ms

Loss rate: 0.93%

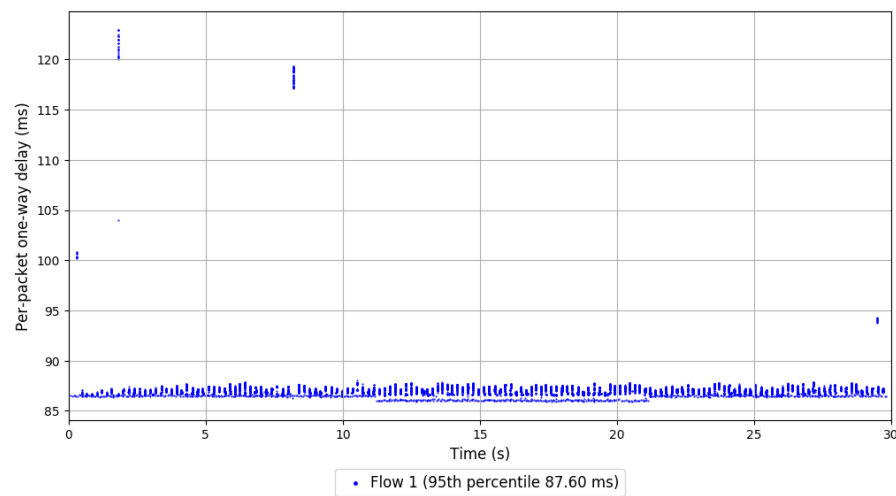
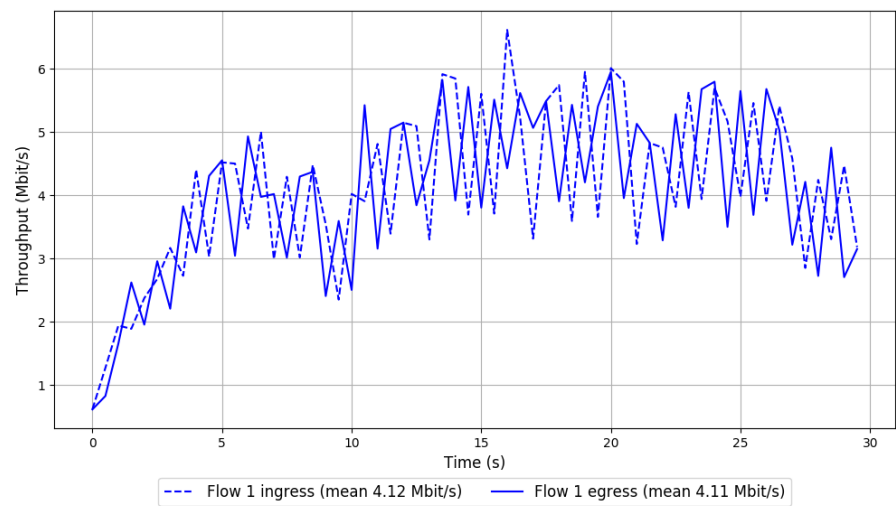
-- Flow 1:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 87.596 ms

Loss rate: 0.93%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-19 20:03:28

End at: 2017-12-19 20:03:58

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 87.595 ms

Loss rate: 0.78%

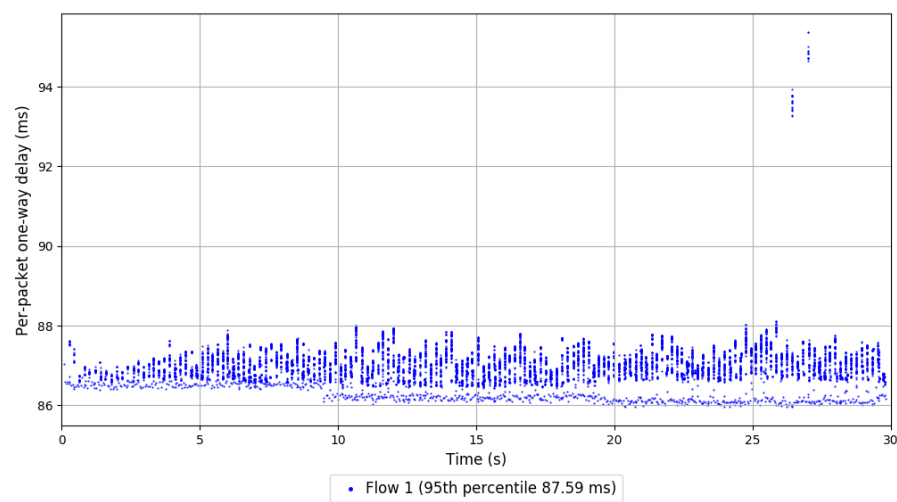
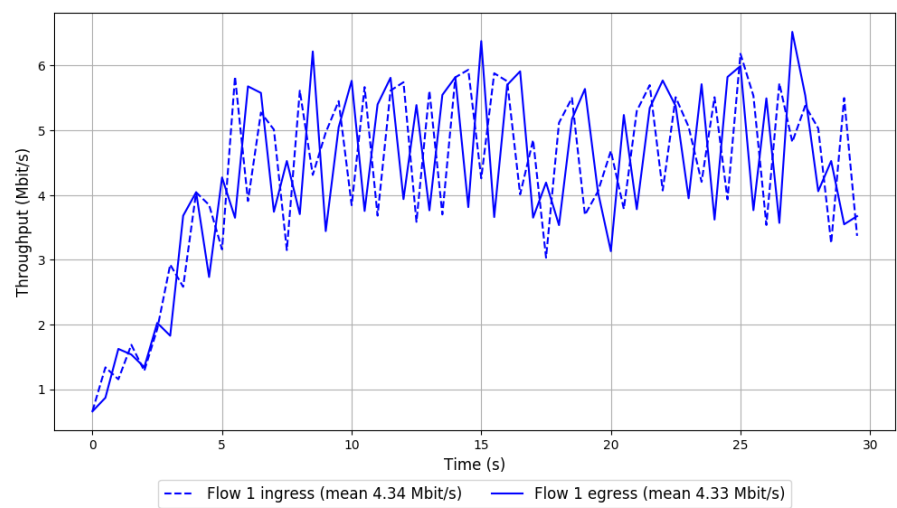
-- Flow 1:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 87.595 ms

Loss rate: 0.78%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-19 20:15:37

End at: 2017-12-19 20:16:07

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 87.921 ms

Loss rate: 0.73%

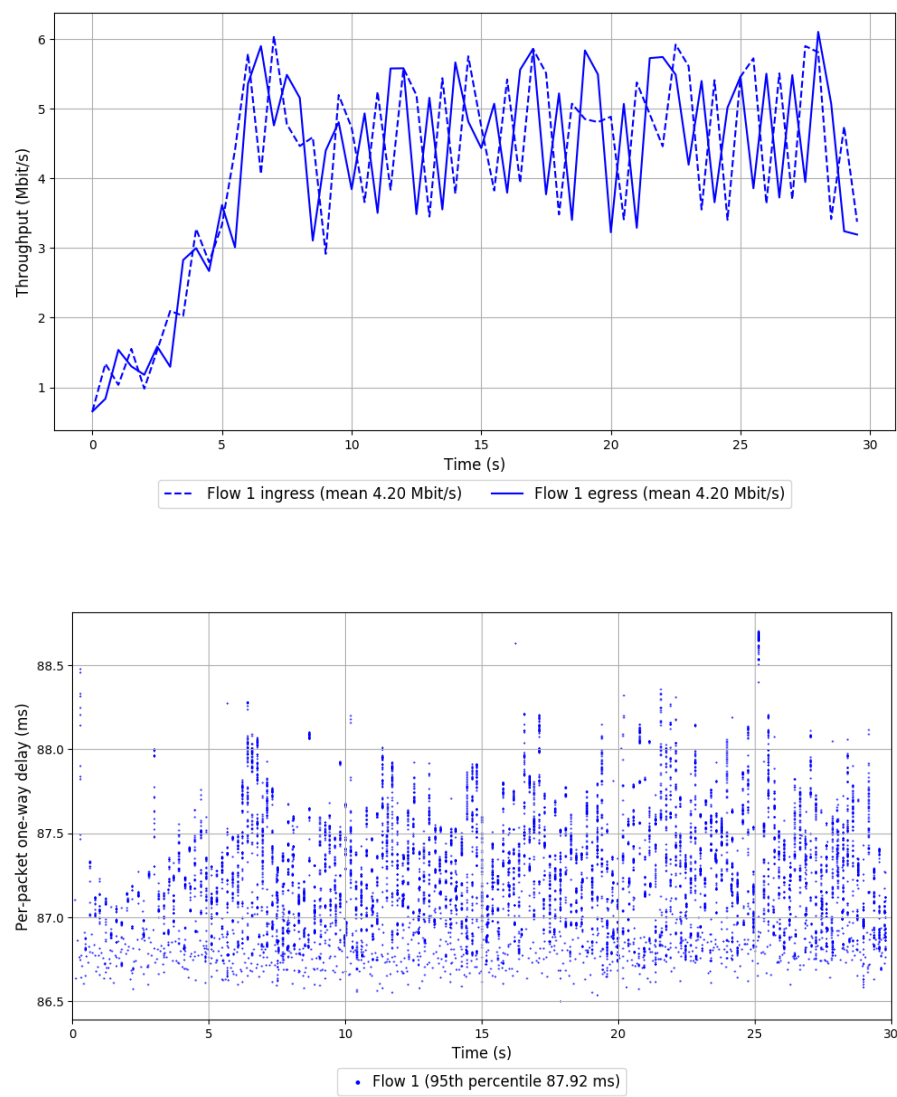
-- Flow 1:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 87.921 ms

Loss rate: 0.73%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-19 20:27:29

End at: 2017-12-19 20:27:59

Below is generated by plot.py at 2017-12-19 23:44:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 87.861 ms

Loss rate: 2.41%

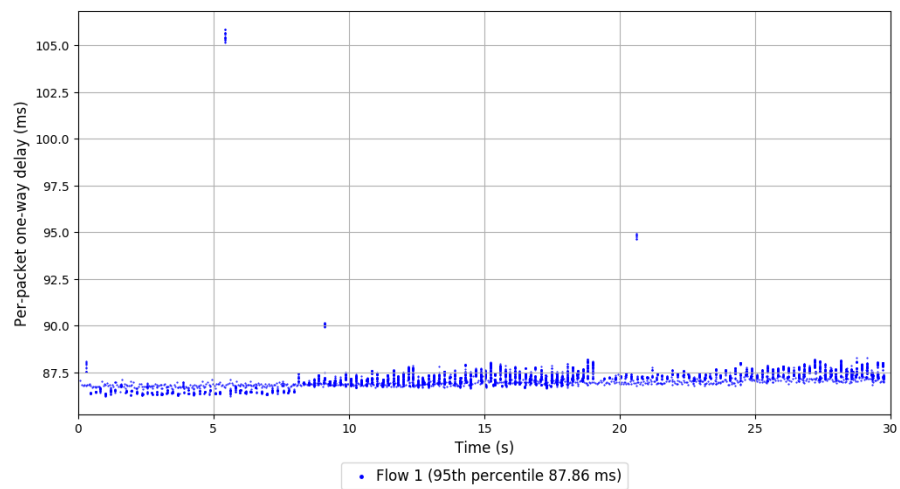
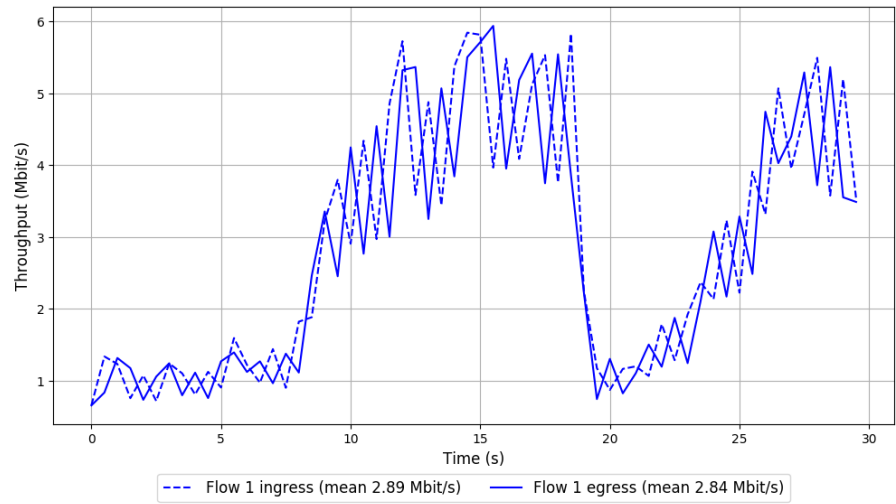
-- Flow 1:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 87.861 ms

Loss rate: 2.41%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-19 20:39:49

End at: 2017-12-19 20:40:19

Below is generated by plot.py at 2017-12-19 23:44:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 87.563 ms

Loss rate: 2.74%

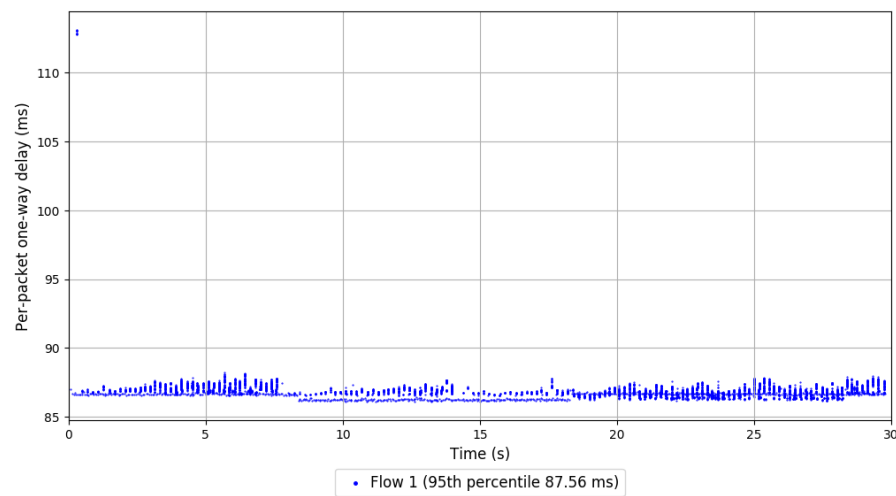
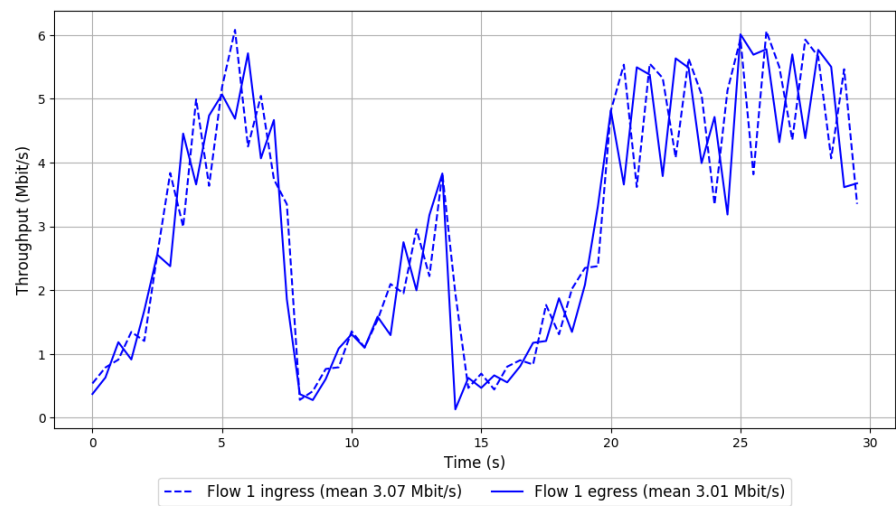
-- Flow 1:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 87.563 ms

Loss rate: 2.74%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-19 20:52:16

End at: 2017-12-19 20:52:46

Below is generated by plot.py at 2017-12-19 23:44:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 87.634 ms

Loss rate: 0.80%

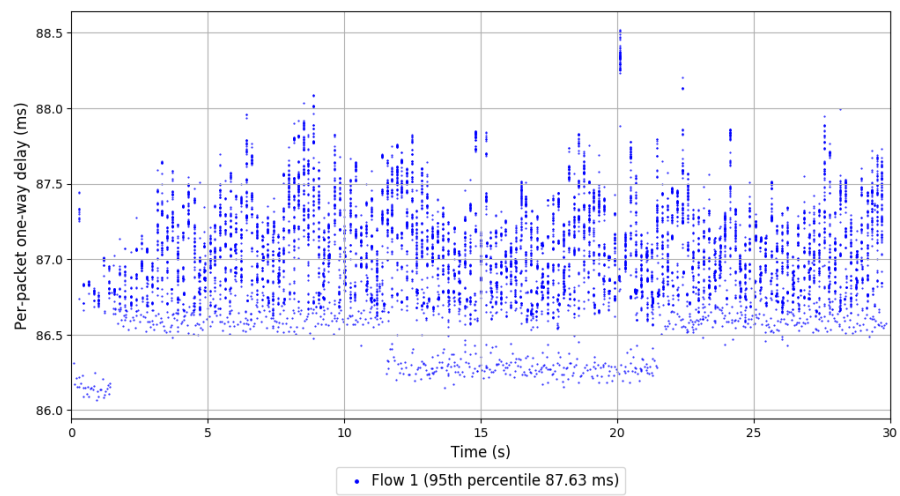
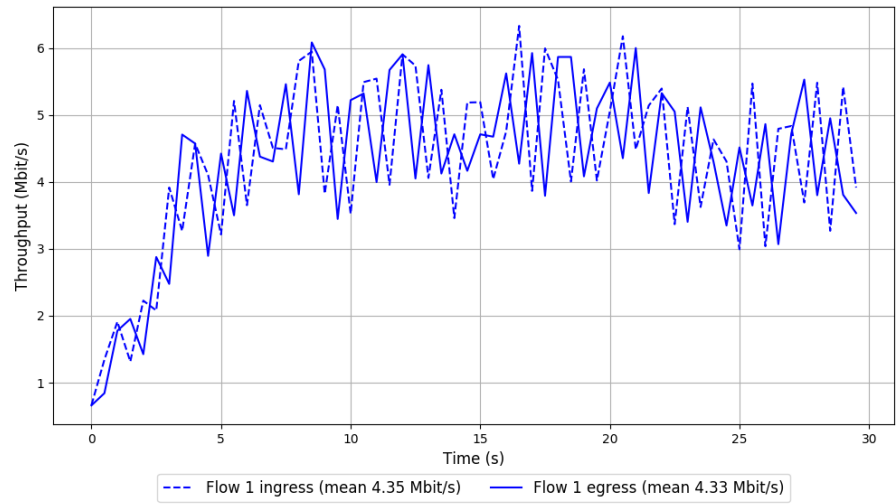
-- Flow 1:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 87.634 ms

Loss rate: 0.80%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-19 21:05:11

End at: 2017-12-19 21:05:41

Below is generated by plot.py at 2017-12-19 23:44:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.42 Mbit/s

95th percentile per-packet one-way delay: 87.873 ms

Loss rate: 0.60%

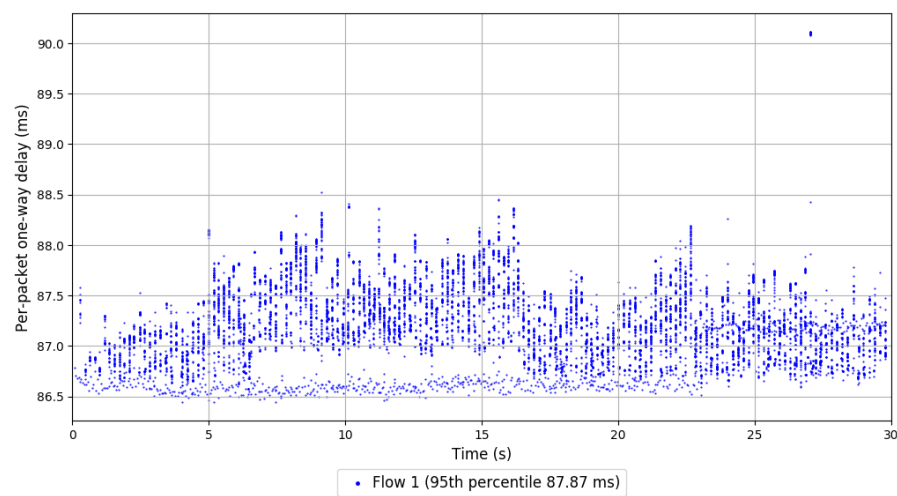
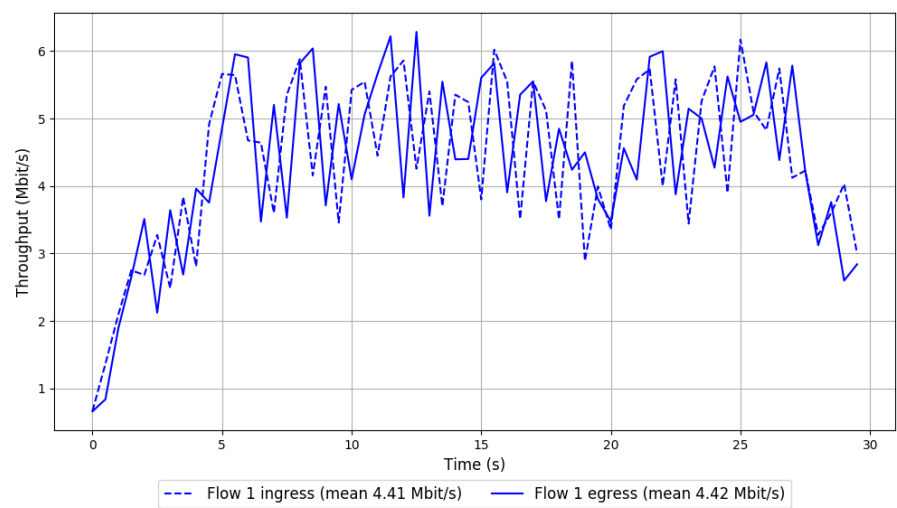
-- Flow 1:

Average throughput: 4.42 Mbit/s

95th percentile per-packet one-way delay: 87.873 ms

Loss rate: 0.60%

Run 10: Report of Sprout — Data Link

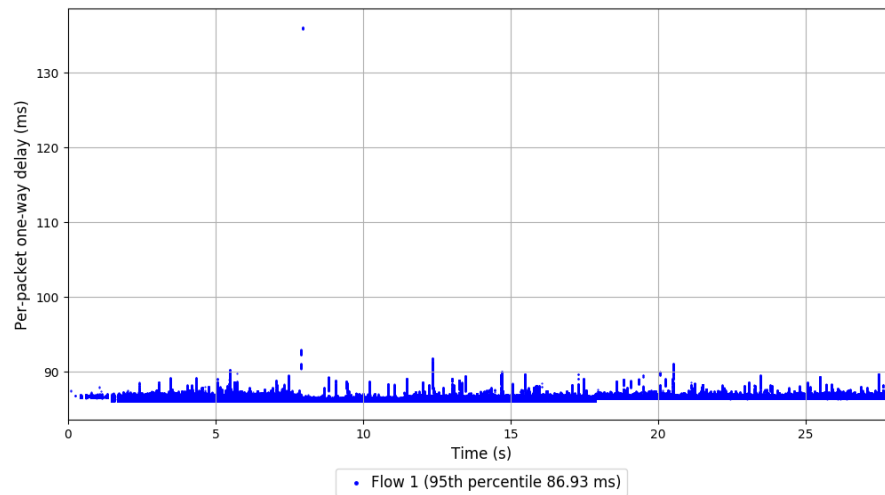
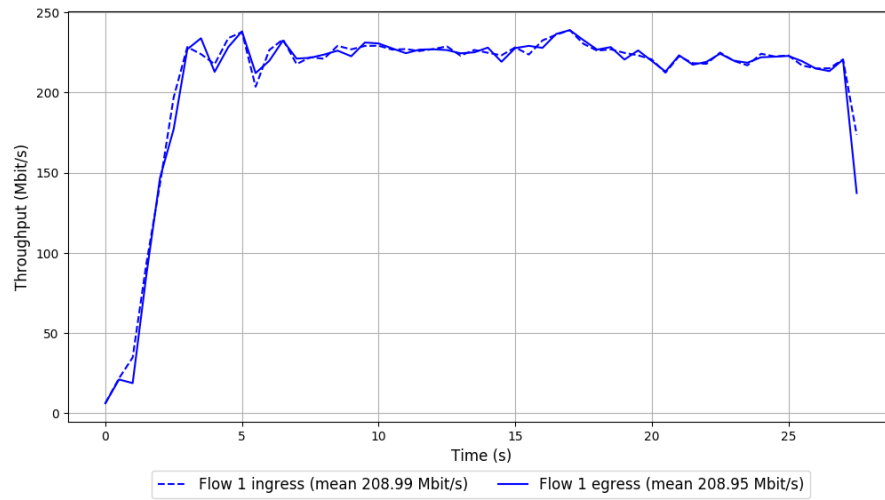


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-19 19:15:54
End at: 2017-12-19 19:16:24

# Below is generated by plot.py at 2017-12-19 23:44:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 208.95 Mbit/s
95th percentile per-packet one-way delay: 86.934 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 208.95 Mbit/s
95th percentile per-packet one-way delay: 86.934 ms
Loss rate: 0.64%
```

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

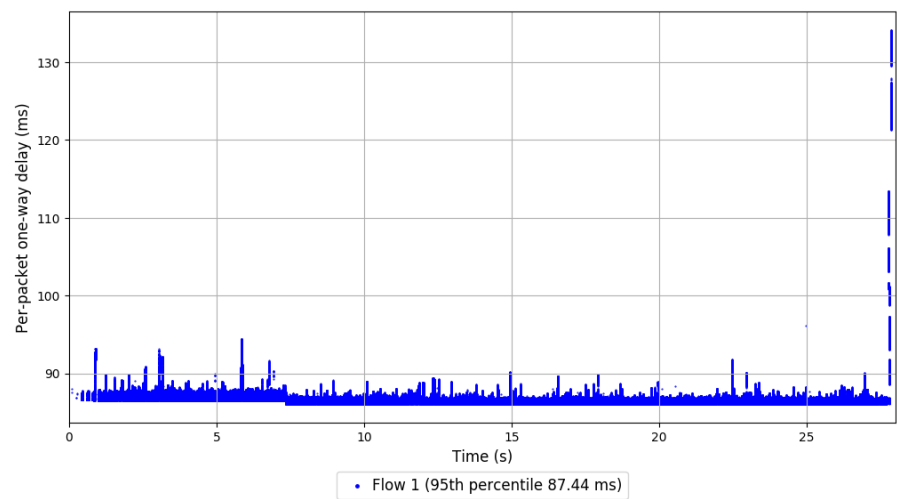
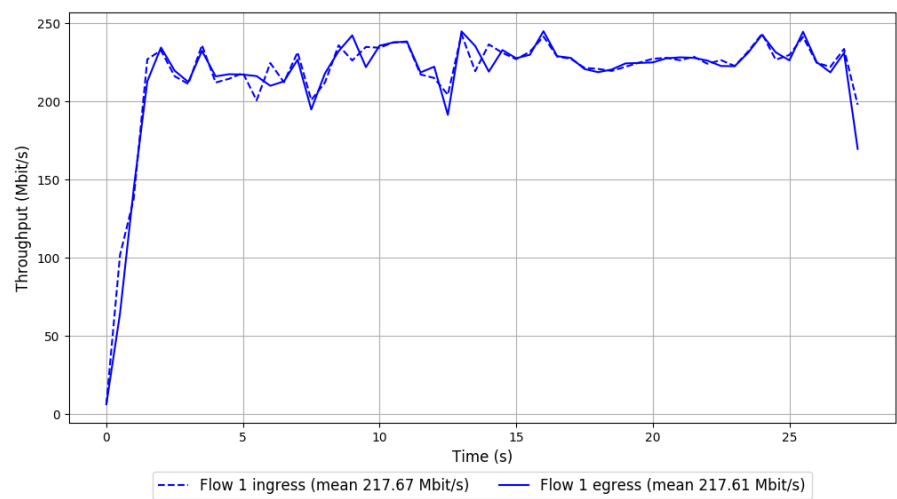


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-19 19:28:04
End at: 2017-12-19 19:28:34

# Below is generated by plot.py at 2017-12-19 23:44:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.61 Mbit/s
95th percentile per-packet one-way delay: 87.444 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 217.61 Mbit/s
95th percentile per-packet one-way delay: 87.444 ms
Loss rate: 0.59%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-19 19:40:17

End at: 2017-12-19 19:40:47

Below is generated by plot.py at 2017-12-19 23:44:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 204.63 Mbit/s

95th percentile per-packet one-way delay: 87.151 ms

Loss rate: 0.73%

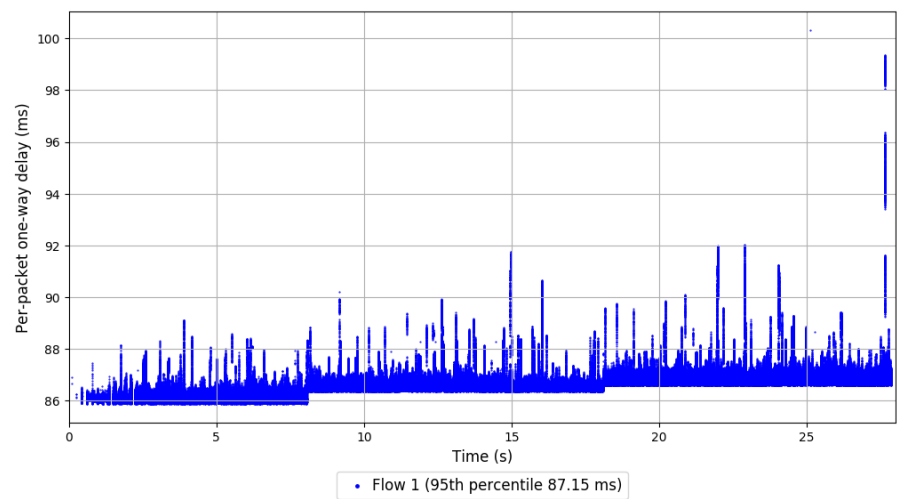
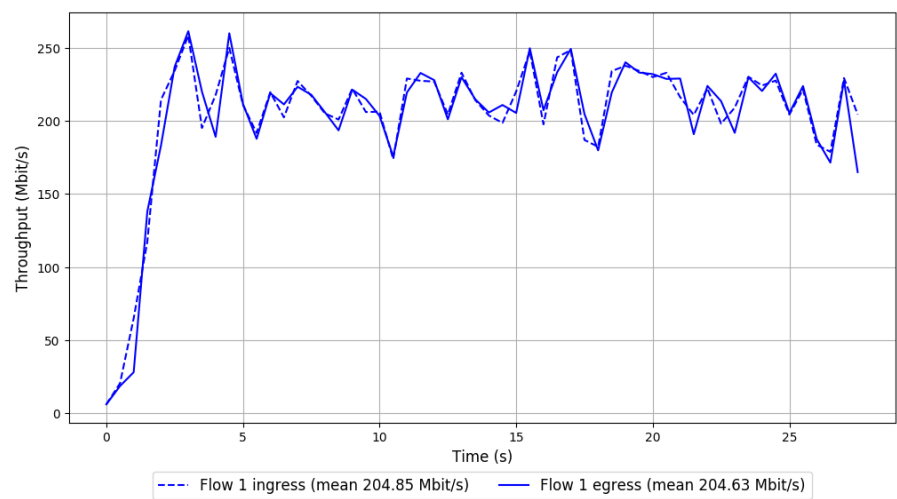
-- Flow 1:

Average throughput: 204.63 Mbit/s

95th percentile per-packet one-way delay: 87.151 ms

Loss rate: 0.73%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-19 19:52:35

End at: 2017-12-19 19:53:05

Below is generated by plot.py at 2017-12-19 23:44:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 210.71 Mbit/s

95th percentile per-packet one-way delay: 87.055 ms

Loss rate: 0.69%

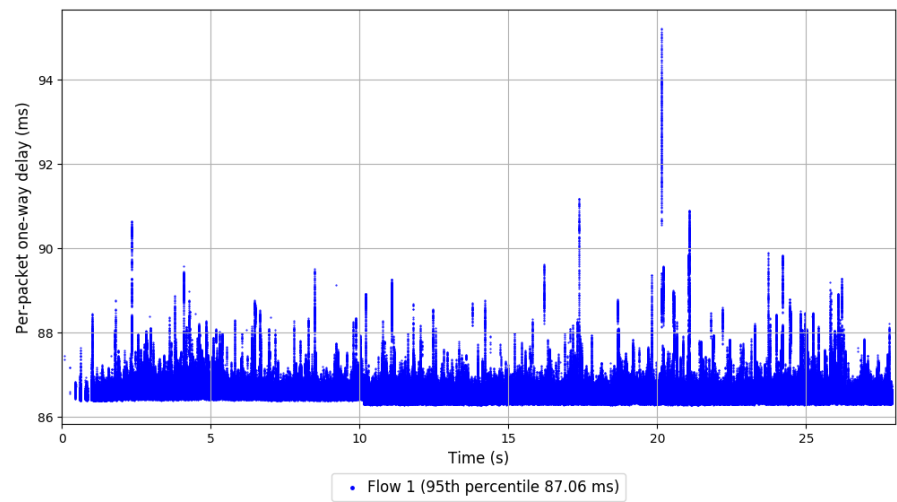
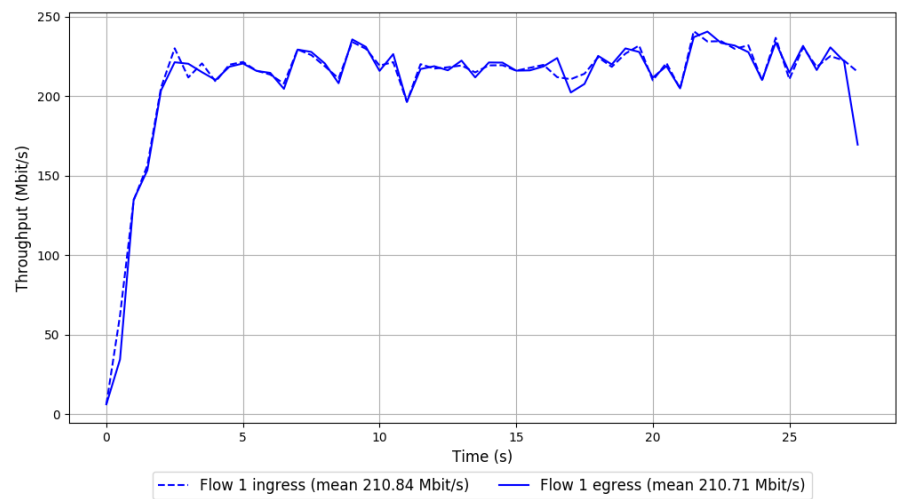
-- Flow 1:

Average throughput: 210.71 Mbit/s

95th percentile per-packet one-way delay: 87.055 ms

Loss rate: 0.69%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-19 20:04:47

End at: 2017-12-19 20:05:17

Below is generated by plot.py at 2017-12-19 23:44:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 211.81 Mbit/s

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

Loss rate: 0.78%

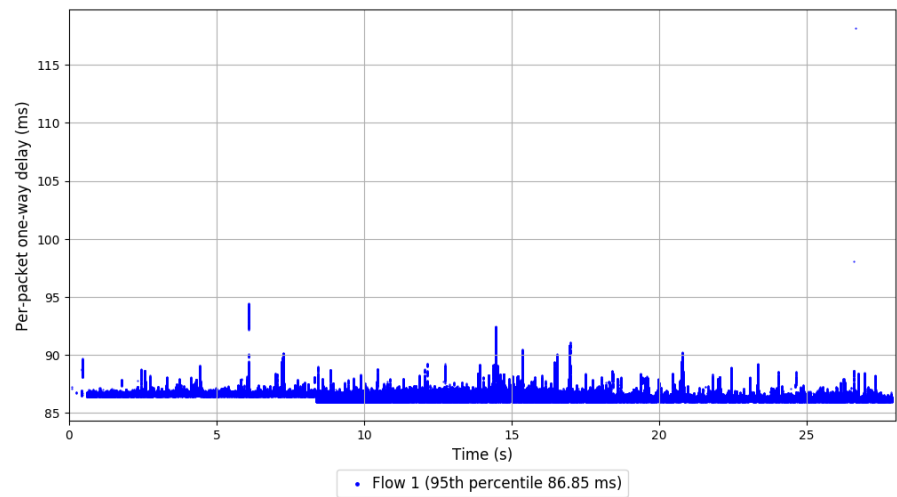
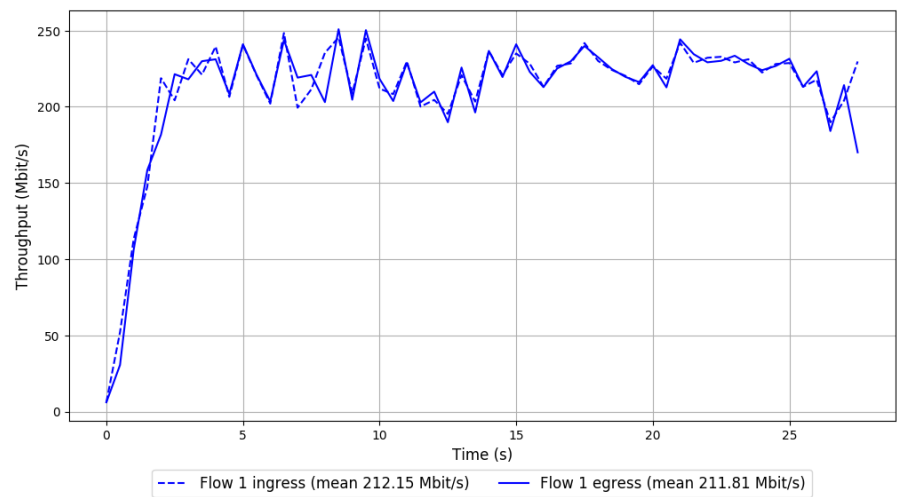
-- Flow 1:

Average throughput: 211.81 Mbit/s

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

Loss rate: 0.78%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-19 20:16:56

End at: 2017-12-19 20:17:26

Below is generated by plot.py at 2017-12-19 23:44:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.58 Mbit/s

95th percentile per-packet one-way delay: 87.699 ms

Loss rate: 0.74%

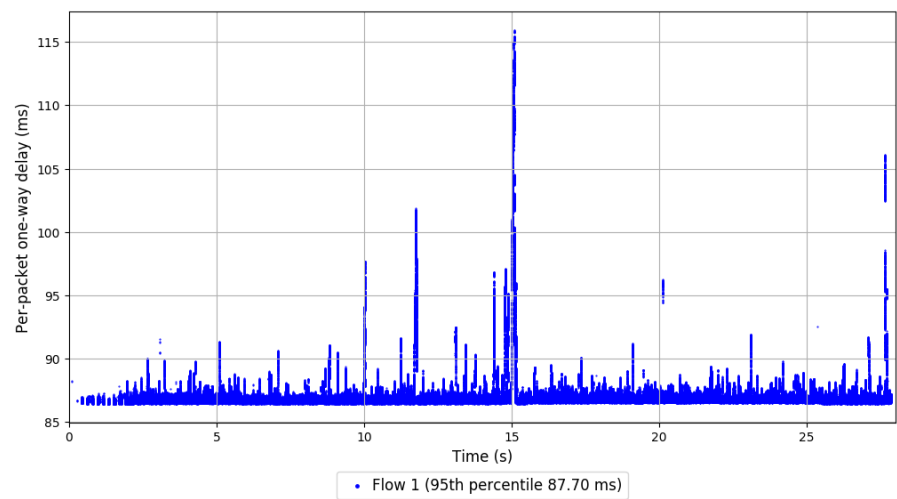
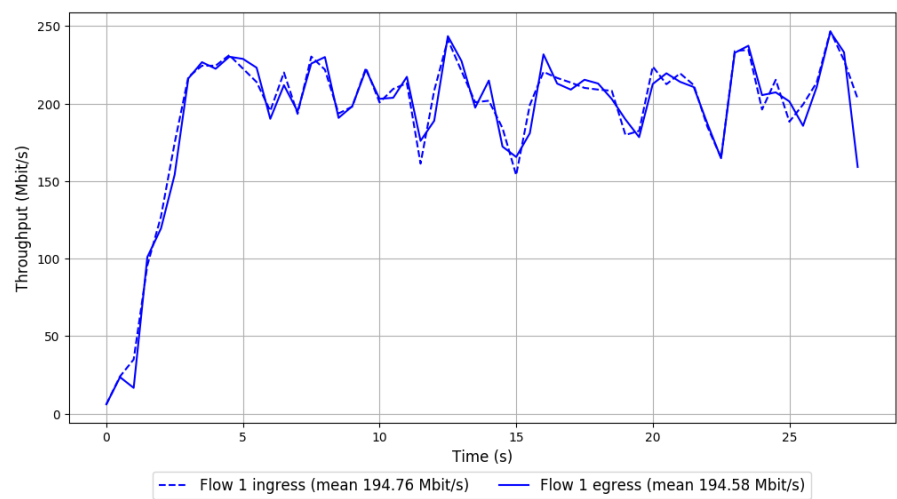
-- Flow 1:

Average throughput: 194.58 Mbit/s

95th percentile per-packet one-way delay: 87.699 ms

Loss rate: 0.74%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-19 20:28:48

End at: 2017-12-19 20:29:18

Below is generated by plot.py at 2017-12-19 23:48:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.34 Mbit/s

95th percentile per-packet one-way delay: 87.189 ms

Loss rate: 1.08%

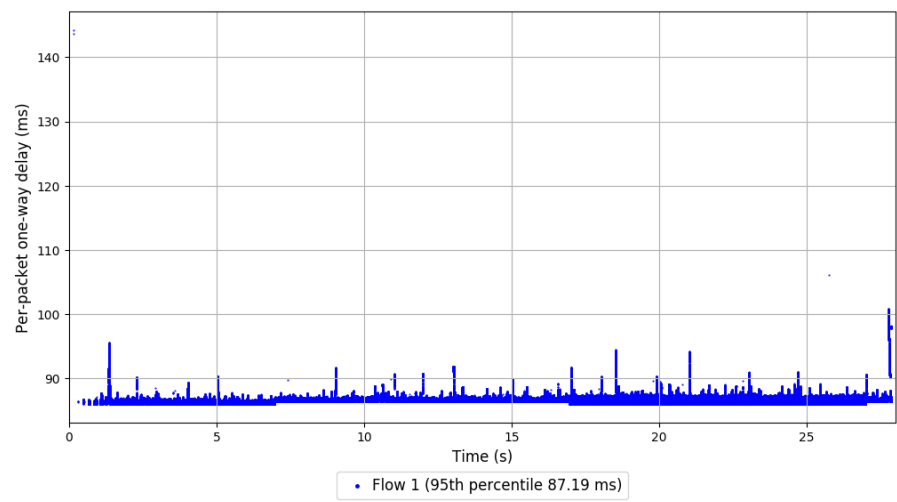
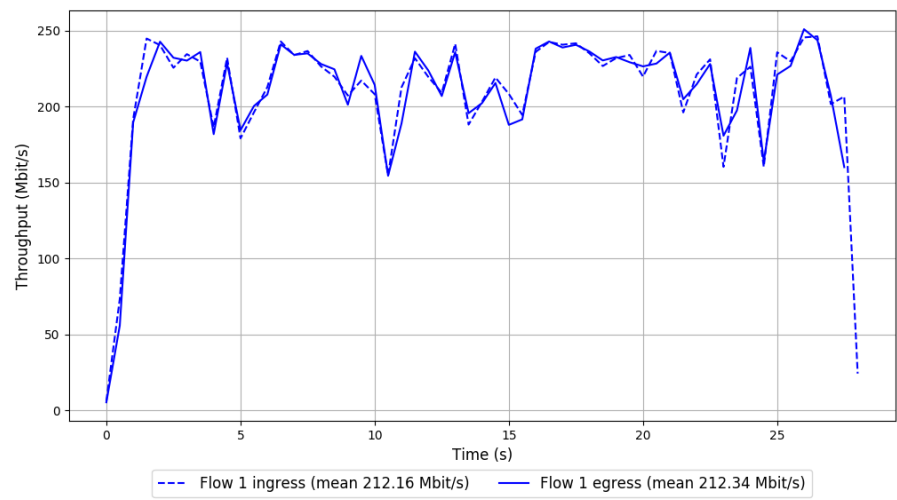
-- Flow 1:

Average throughput: 212.34 Mbit/s

95th percentile per-packet one-way delay: 87.189 ms

Loss rate: 1.08%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-19 20:41:08

End at: 2017-12-19 20:41:38

Below is generated by plot.py at 2017-12-19 23:48:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.02 Mbit/s

95th percentile per-packet one-way delay: 87.197 ms

Loss rate: 0.66%

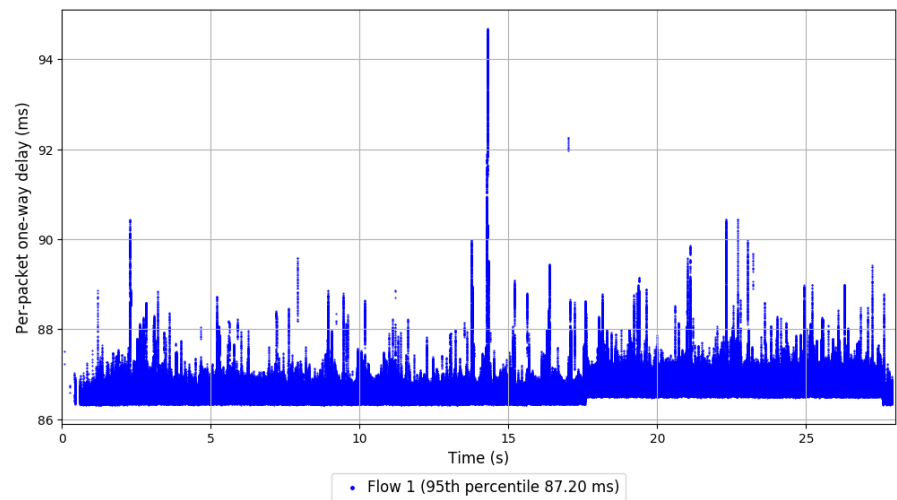
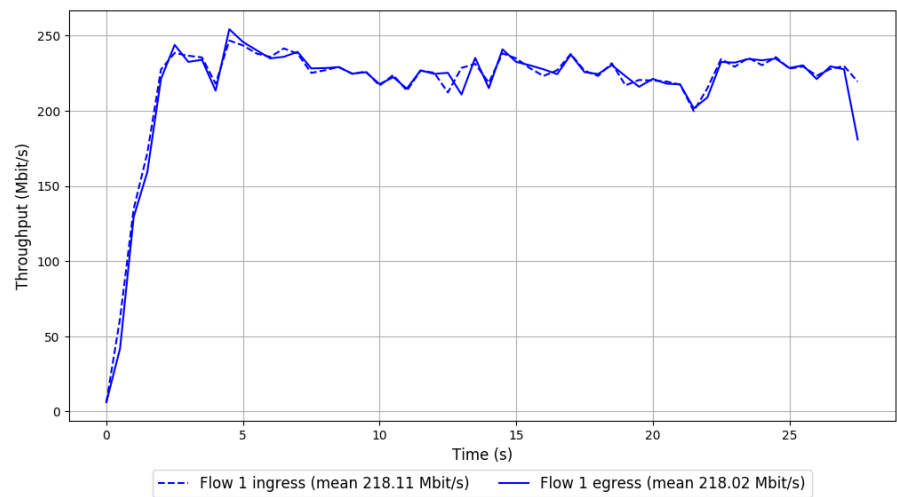
-- Flow 1:

Average throughput: 218.02 Mbit/s

95th percentile per-packet one-way delay: 87.197 ms

Loss rate: 0.66%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-19 20:53:35

End at: 2017-12-19 20:54:05

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.42 Mbit/s

95th percentile per-packet one-way delay: 87.023 ms

Loss rate: 0.66%

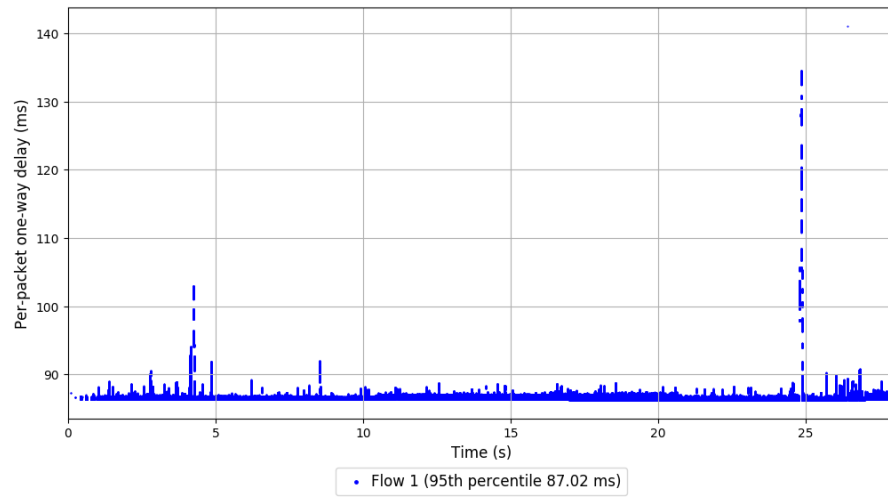
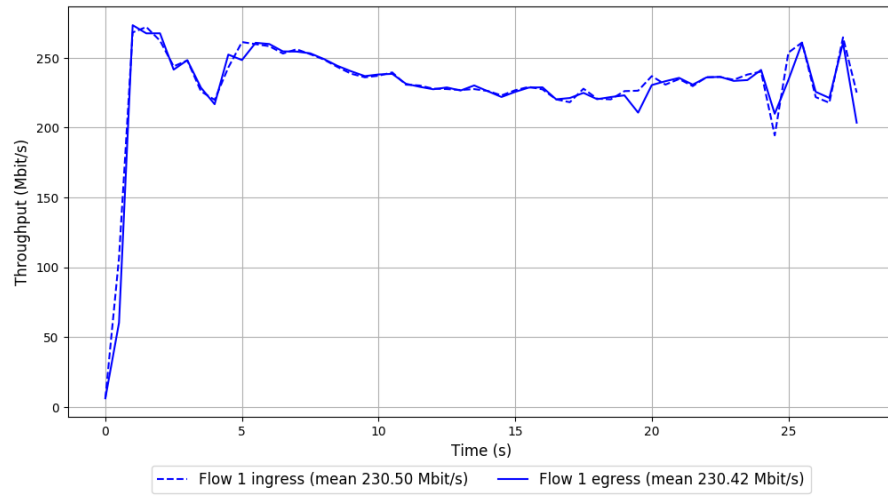
-- Flow 1:

Average throughput: 230.42 Mbit/s

95th percentile per-packet one-way delay: 87.023 ms

Loss rate: 0.66%

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

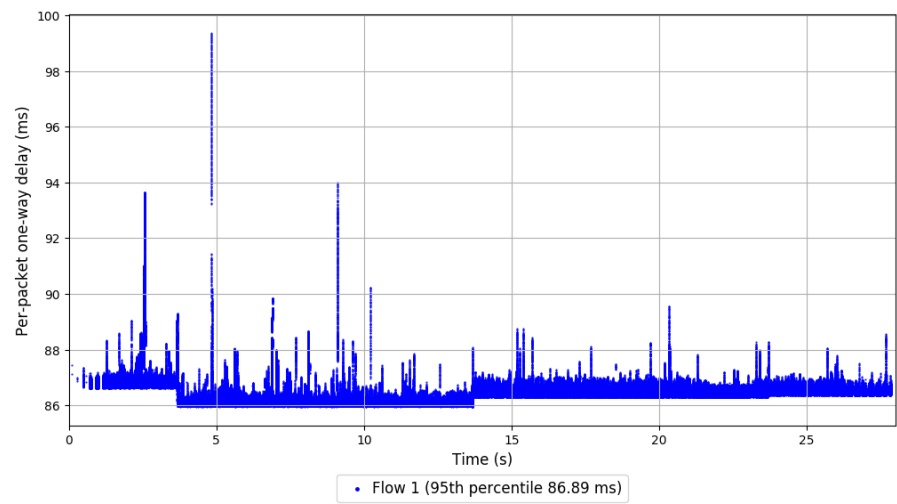
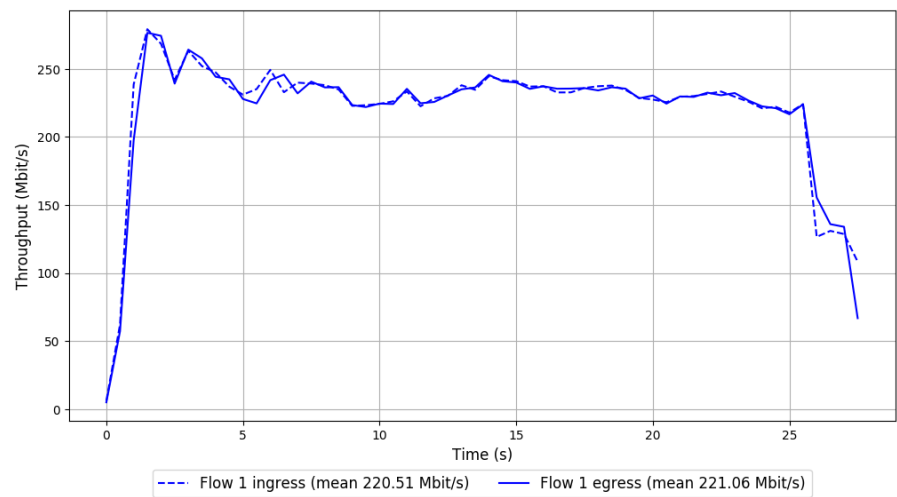


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-19 21:06:32
End at: 2017-12-19 21:07:02

# Below is generated by plot.py at 2017-12-19 23:49:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.06 Mbit/s
95th percentile per-packet one-way delay: 86.886 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 221.06 Mbit/s
95th percentile per-packet one-way delay: 86.886 ms
Loss rate: 0.45%
```

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



Run 1: Statistics of TCP Vegas

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

End at: 2017-12-19 19:12:41

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.10 Mbit/s

95th percentile per-packet one-way delay: 93.572 ms

Loss rate: 0.70%

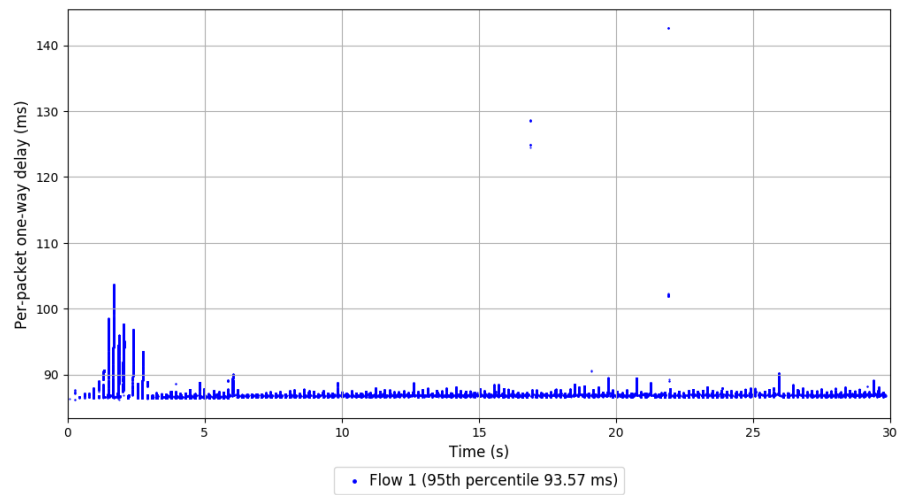
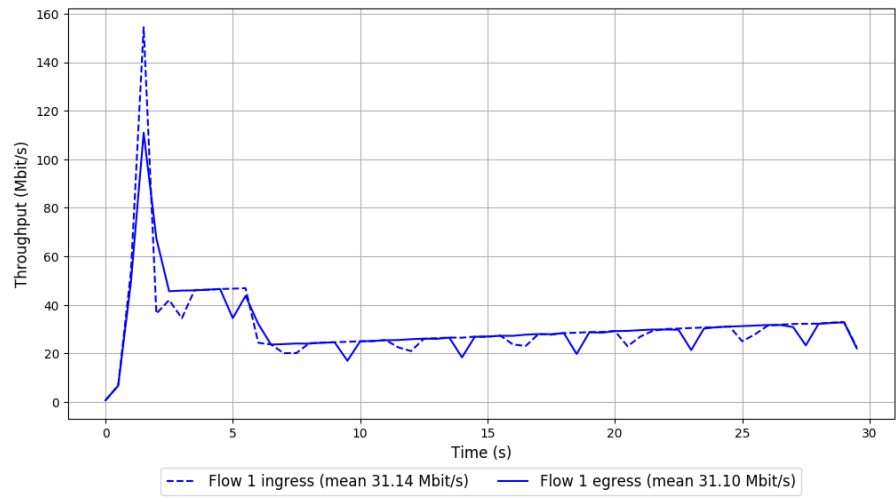
-- Flow 1:

Average throughput: 31.10 Mbit/s

95th percentile per-packet one-way delay: 93.572 ms

Loss rate: 0.70%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-19 19:24:26

End at: 2017-12-19 19:24:56

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.50 Mbit/s

95th percentile per-packet one-way delay: 88.244 ms

Loss rate: 2.14%

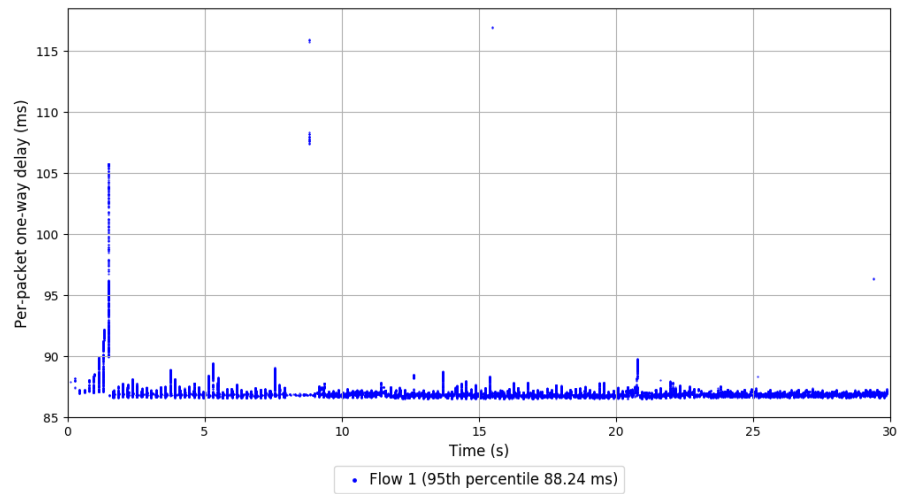
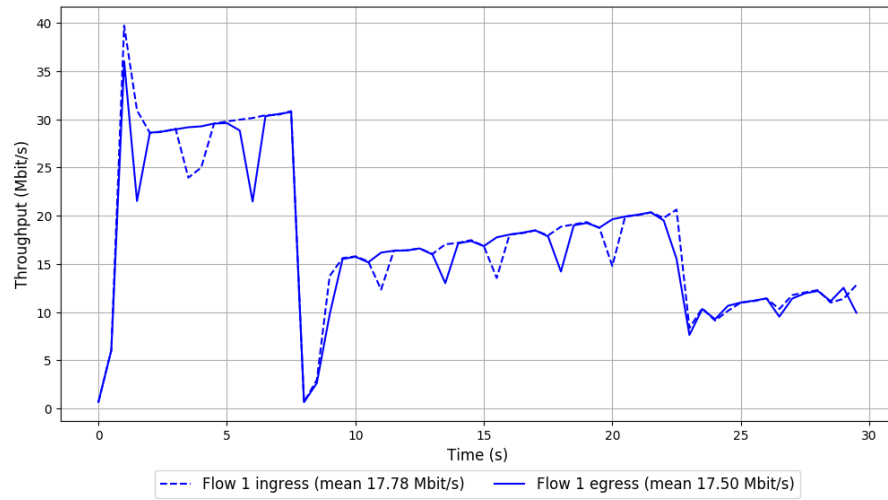
-- Flow 1:

Average throughput: 17.50 Mbit/s

95th percentile per-packet one-way delay: 88.244 ms

Loss rate: 2.14%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-19 19:36:42

End at: 2017-12-19 19:37:12

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.98 Mbit/s

95th percentile per-packet one-way delay: 88.007 ms

Loss rate: 0.62%

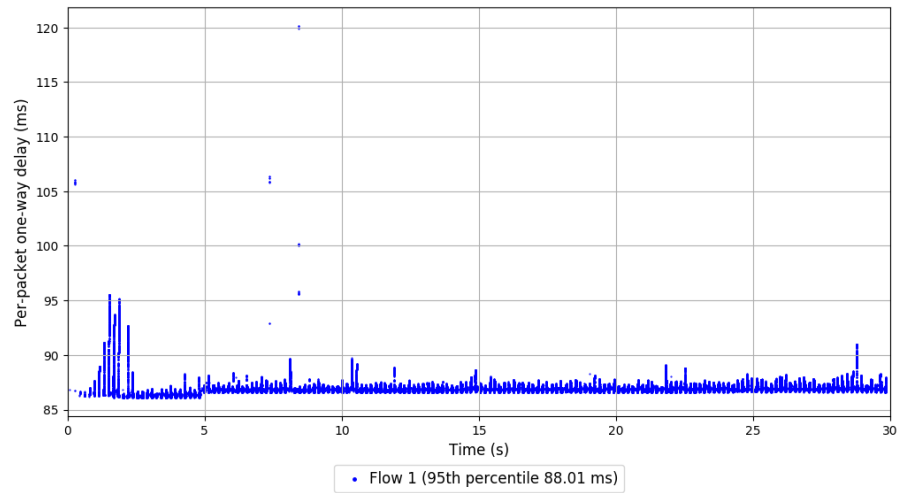
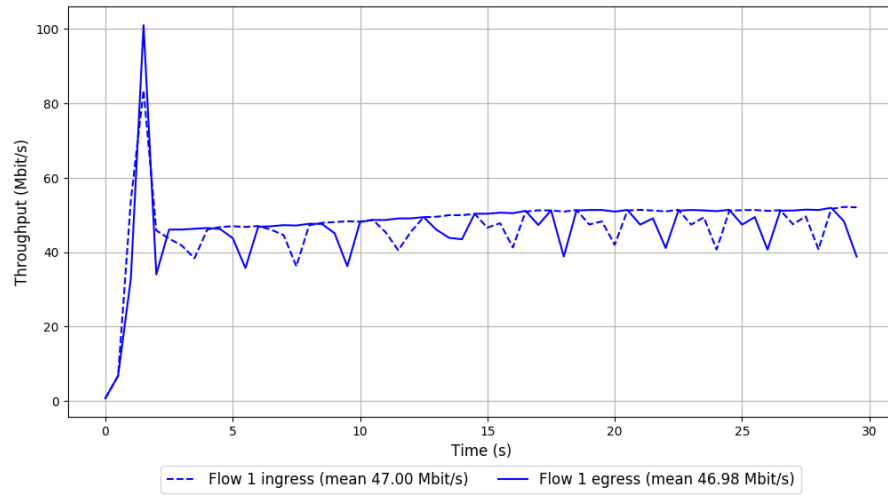
-- Flow 1:

Average throughput: 46.98 Mbit/s

95th percentile per-packet one-way delay: 88.007 ms

Loss rate: 0.62%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-19 19:48:54

End at: 2017-12-19 19:49:24

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.46 Mbit/s

95th percentile per-packet one-way delay: 87.501 ms

Loss rate: 0.66%

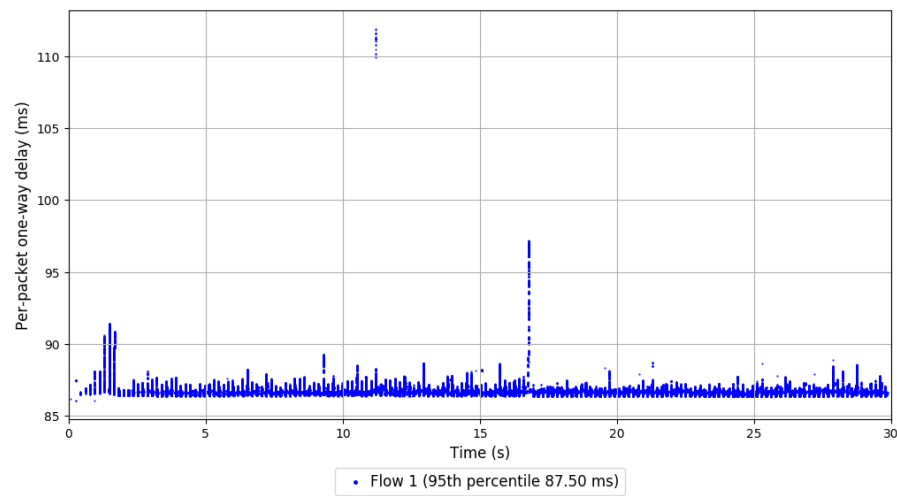
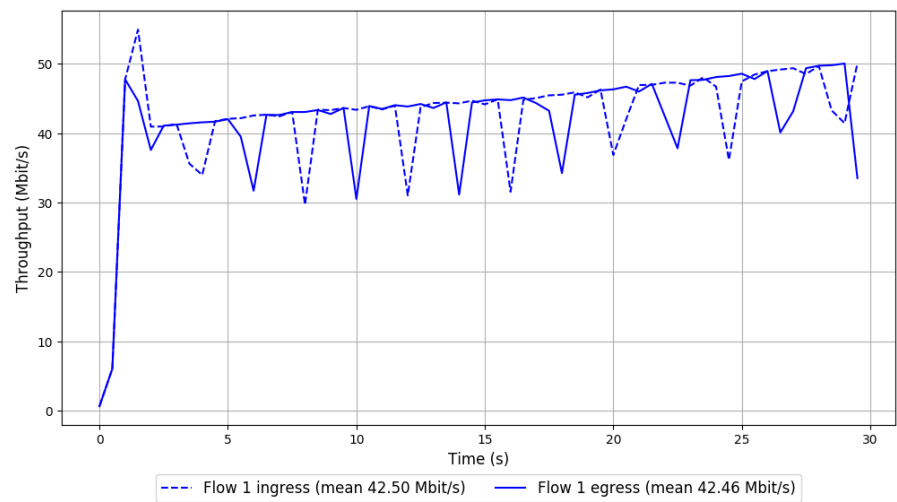
-- Flow 1:

Average throughput: 42.46 Mbit/s

95th percentile per-packet one-way delay: 87.501 ms

Loss rate: 0.66%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-19 20:01:08

End at: 2017-12-19 20:01:38

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 24.84 Mbit/s

95th percentile per-packet one-way delay: 88.808 ms

Loss rate: 2.02%

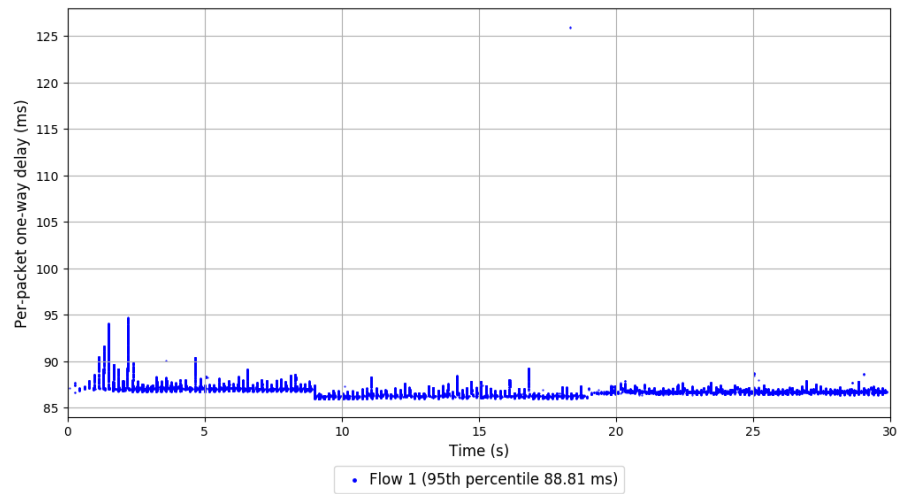
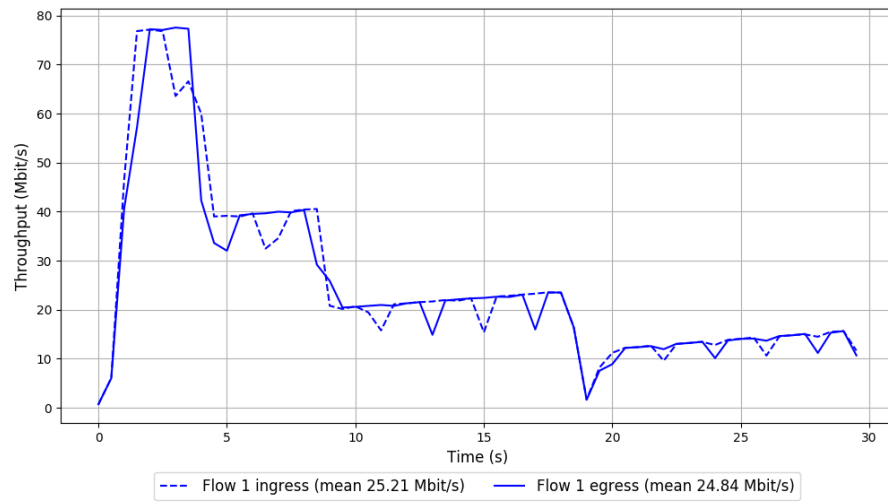
-- Flow 1:

Average throughput: 24.84 Mbit/s

95th percentile per-packet one-way delay: 88.808 ms

Loss rate: 2.02%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-19 20:13:14

End at: 2017-12-19 20:13:44

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.77 Mbit/s

95th percentile per-packet one-way delay: 87.820 ms

Loss rate: 0.66%

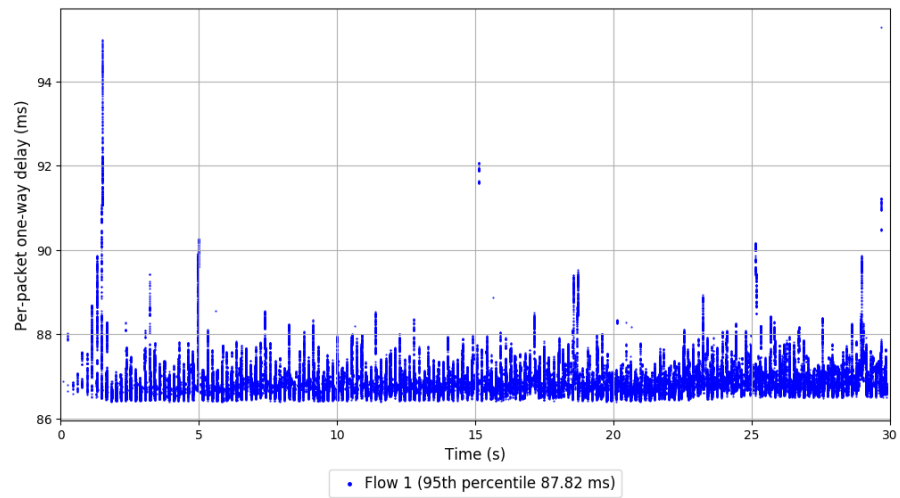
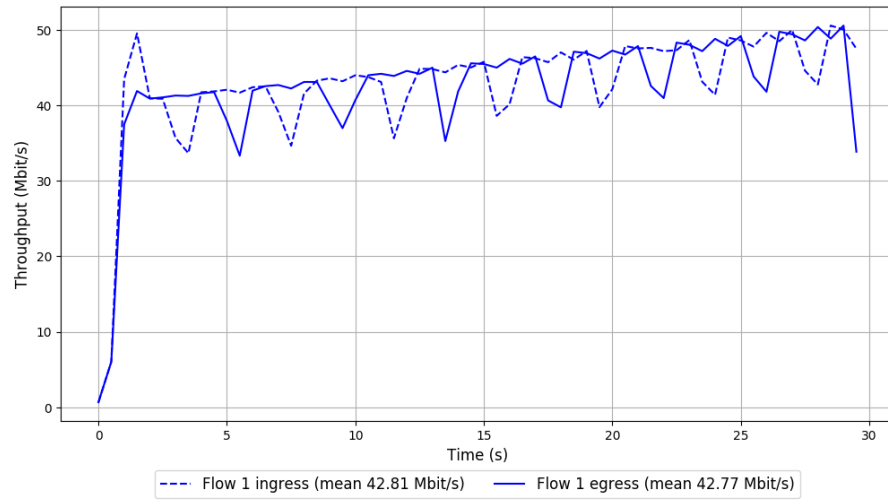
-- Flow 1:

Average throughput: 42.77 Mbit/s

95th percentile per-packet one-way delay: 87.820 ms

Loss rate: 0.66%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-19 20:25:06

End at: 2017-12-19 20:25:36

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.41 Mbit/s

95th percentile per-packet one-way delay: 88.139 ms

Loss rate: 1.38%

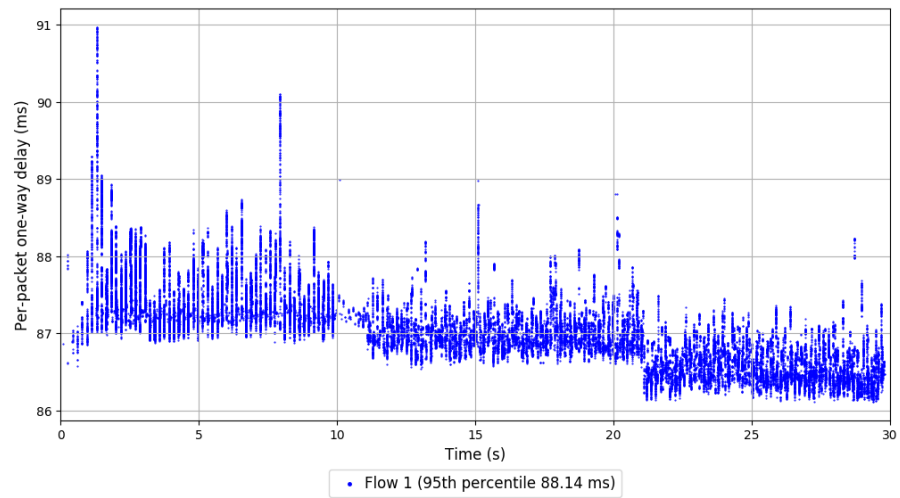
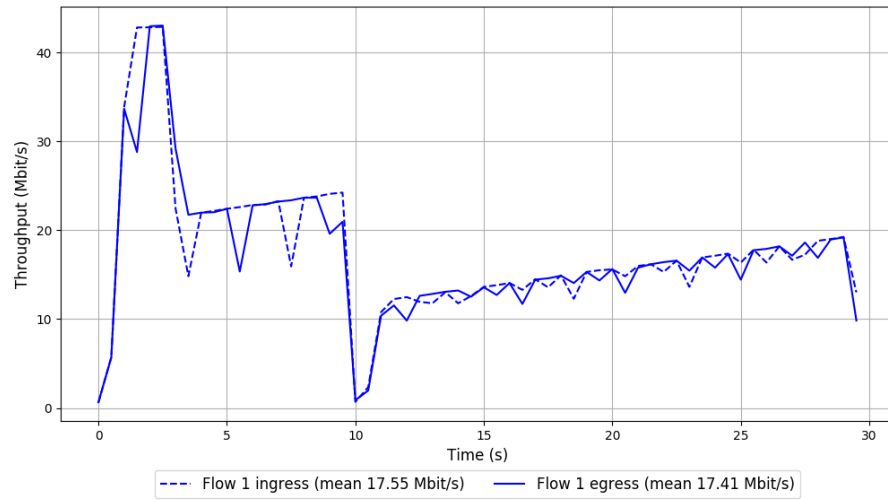
-- Flow 1:

Average throughput: 17.41 Mbit/s

95th percentile per-packet one-way delay: 88.139 ms

Loss rate: 1.38%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-19 20:37:27

End at: 2017-12-19 20:37:57

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.40 Mbit/s

95th percentile per-packet one-way delay: 88.157 ms

Loss rate: 0.57%

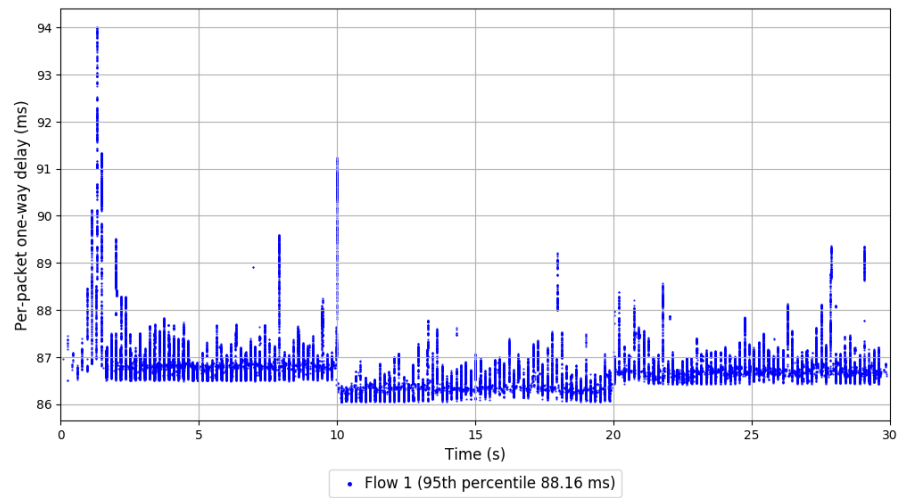
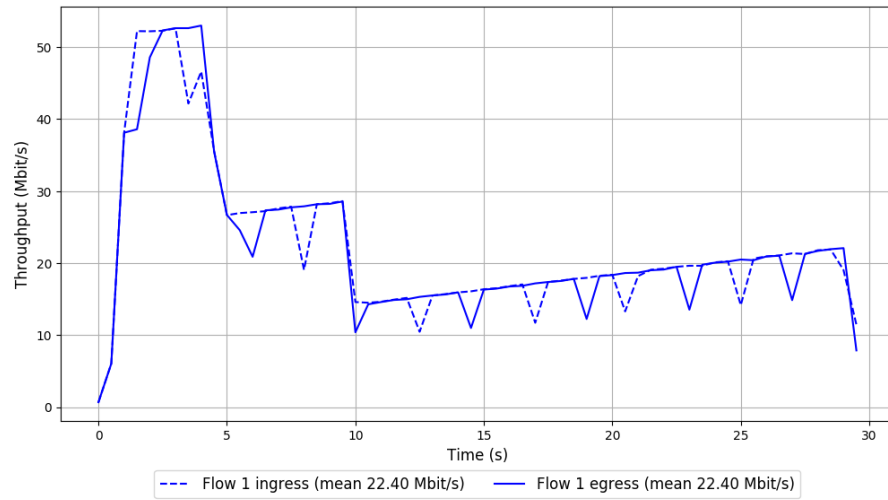
-- Flow 1:

Average throughput: 22.40 Mbit/s

95th percentile per-packet one-way delay: 88.157 ms

Loss rate: 0.57%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-19 20:49:48

End at: 2017-12-19 20:50:18

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.11 Mbit/s

95th percentile per-packet one-way delay: 88.071 ms

Loss rate: 0.64%

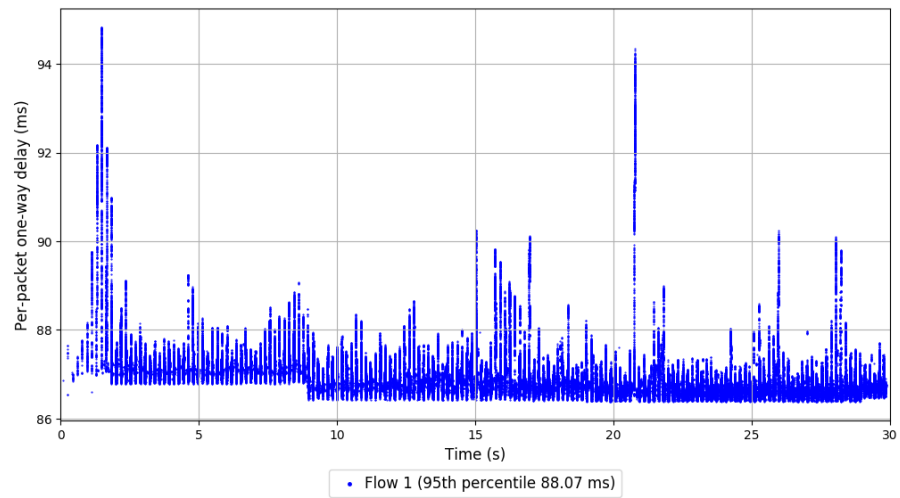
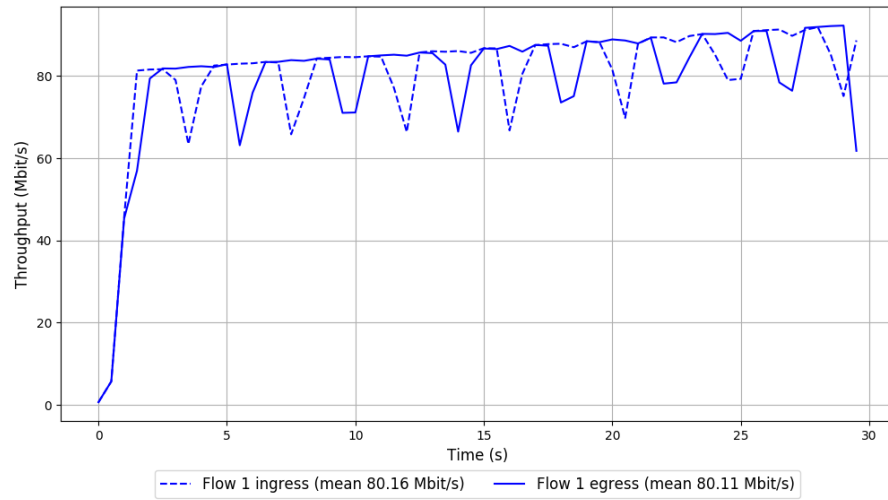
-- Flow 1:

Average throughput: 80.11 Mbit/s

95th percentile per-packet one-way delay: 88.071 ms

Loss rate: 0.64%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-19 21:02:42

End at: 2017-12-19 21:03:12

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.76 Mbit/s

95th percentile per-packet one-way delay: 94.865 ms

Loss rate: 0.40%

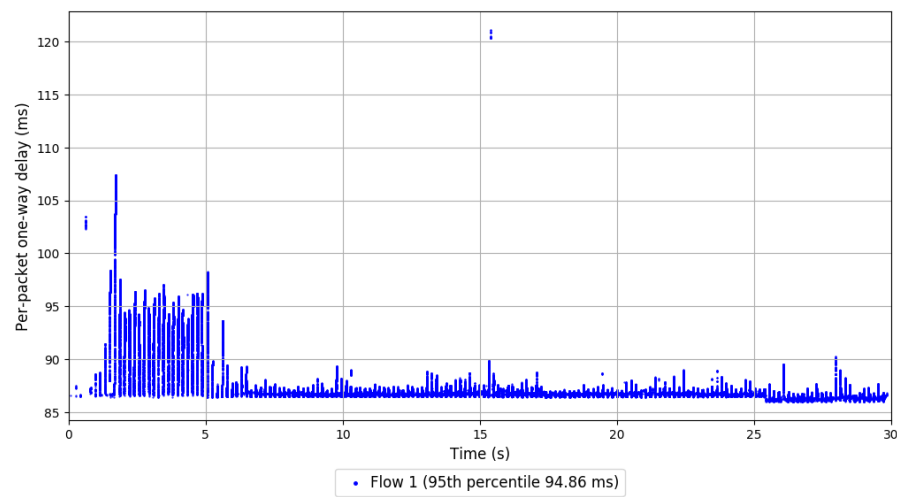
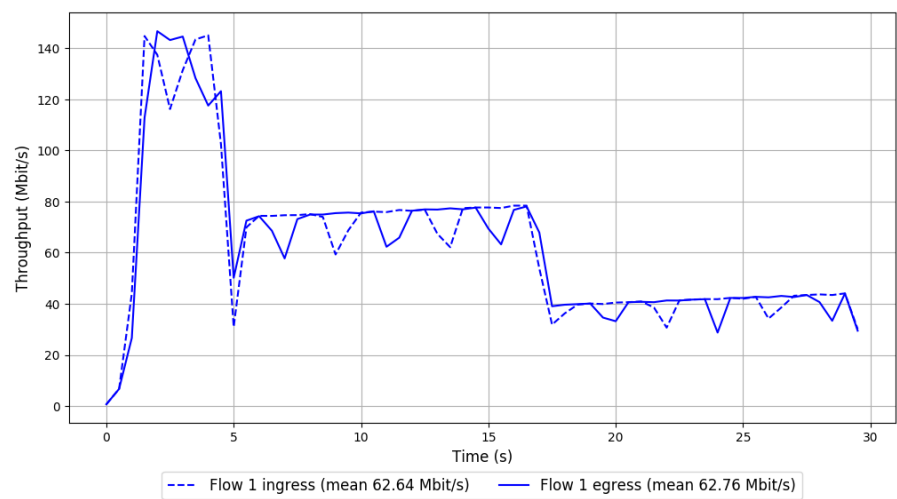
-- Flow 1:

Average throughput: 62.76 Mbit/s

95th percentile per-packet one-way delay: 94.865 ms

Loss rate: 0.40%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

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

End at: 2017-12-19 19:13:23

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.12 Mbit/s

95th percentile per-packet one-way delay: 152.975 ms

Loss rate: 0.76%

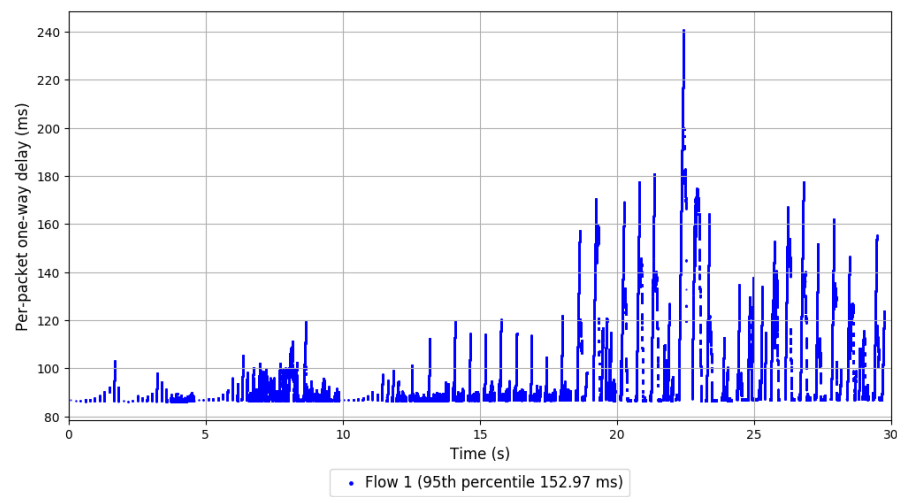
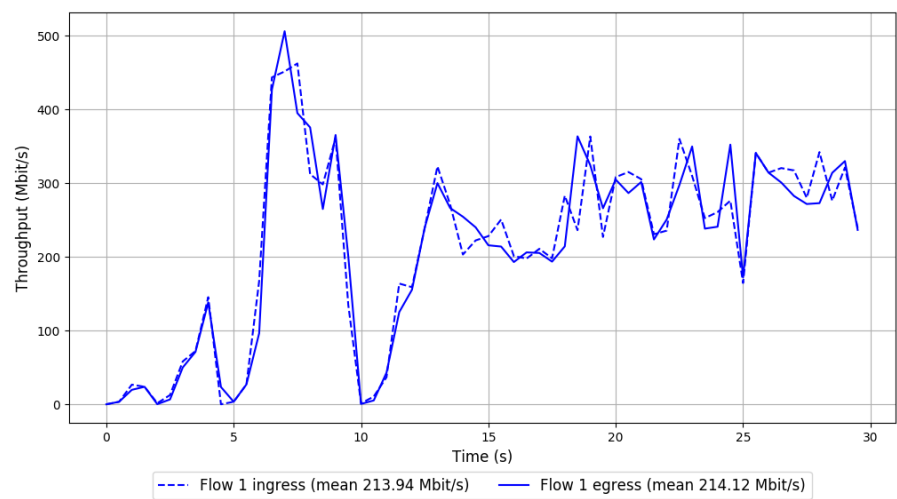
-- Flow 1:

Average throughput: 214.12 Mbit/s

95th percentile per-packet one-way delay: 152.975 ms

Loss rate: 0.76%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-19 19:25:06

End at: 2017-12-19 19:25:36

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.60 Mbit/s

95th percentile per-packet one-way delay: 199.872 ms

Loss rate: 2.94%

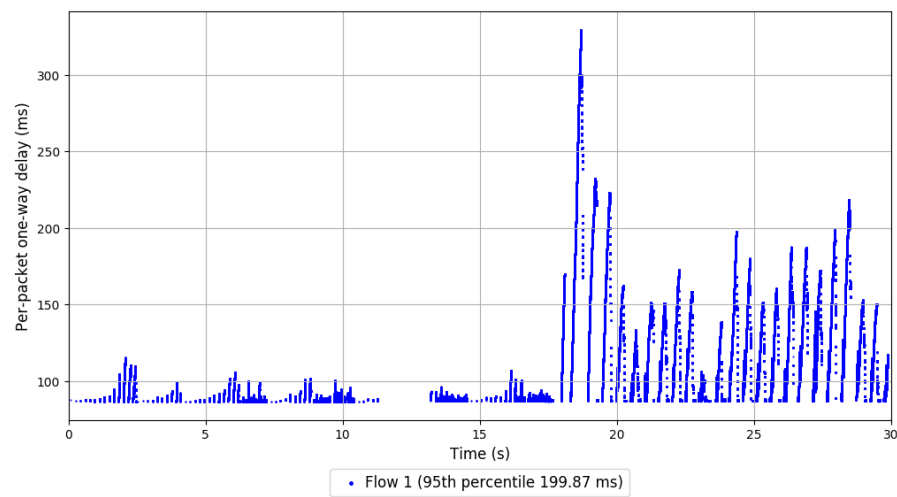
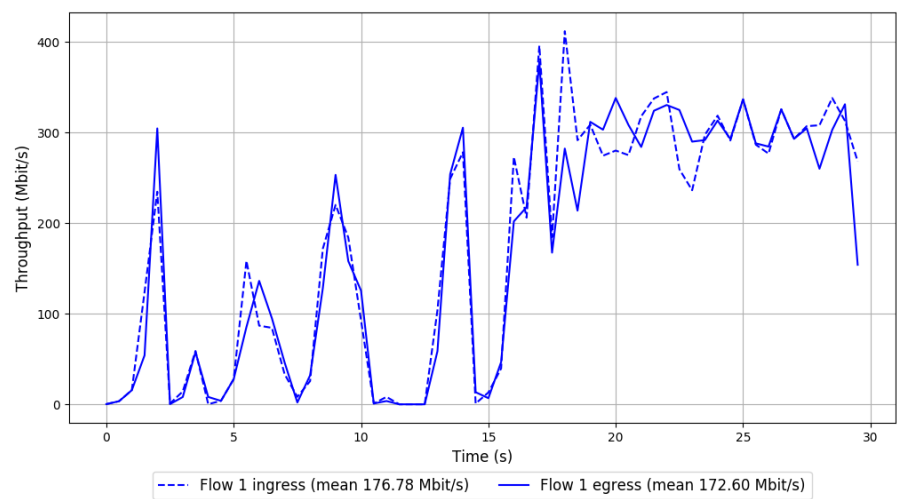
-- Flow 1:

Average throughput: 172.60 Mbit/s

95th percentile per-packet one-way delay: 199.872 ms

Loss rate: 2.94%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-19 19:37:25

End at: 2017-12-19 19:37:55

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.31 Mbit/s

95th percentile per-packet one-way delay: 204.295 ms

Loss rate: 1.05%

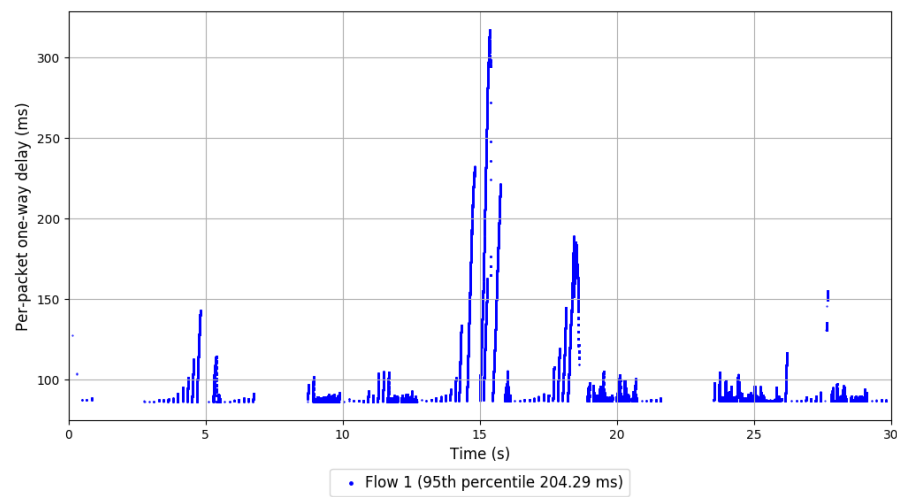
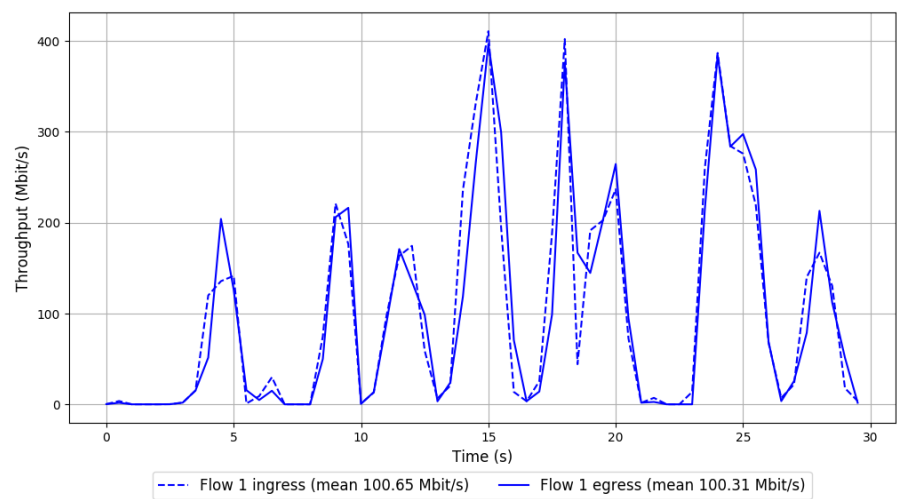
-- Flow 1:

Average throughput: 100.31 Mbit/s

95th percentile per-packet one-way delay: 204.295 ms

Loss rate: 1.05%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-19 19:49:36

End at: 2017-12-19 19:50:06

Below is generated by plot.py at 2017-12-19 23:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 185.03 Mbit/s

95th percentile per-packet one-way delay: 173.206 ms

Loss rate: 0.24%

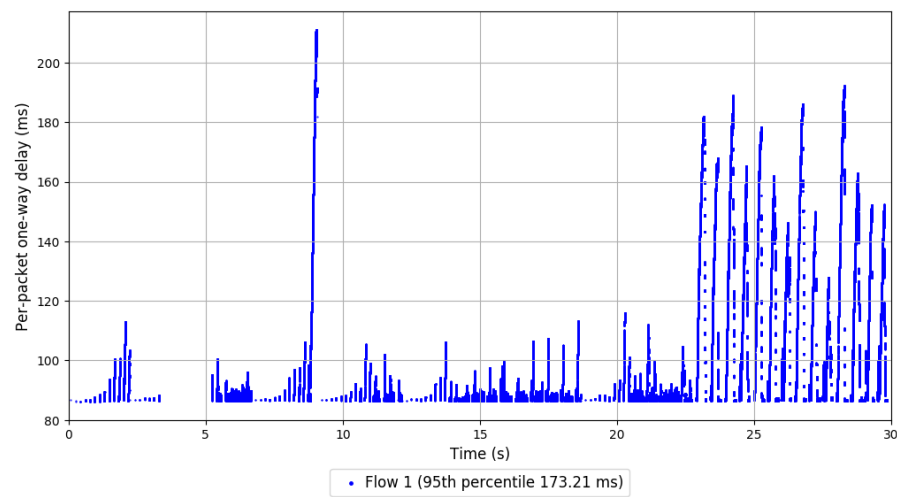
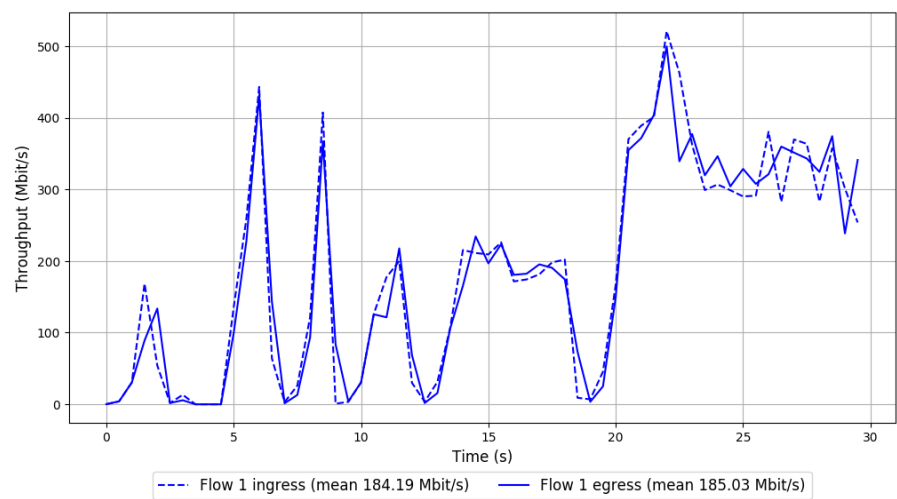
-- Flow 1:

Average throughput: 185.03 Mbit/s

95th percentile per-packet one-way delay: 173.206 ms

Loss rate: 0.24%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-19 20:01:50

End at: 2017-12-19 20:02:20

Below is generated by plot.py at 2017-12-19 23:50:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 164.45 Mbit/s

95th percentile per-packet one-way delay: 116.650 ms

Loss rate: 0.98%

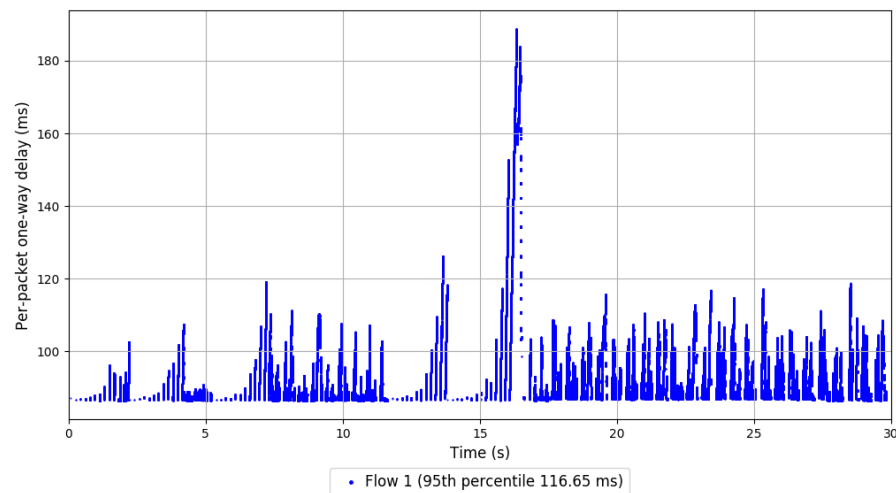
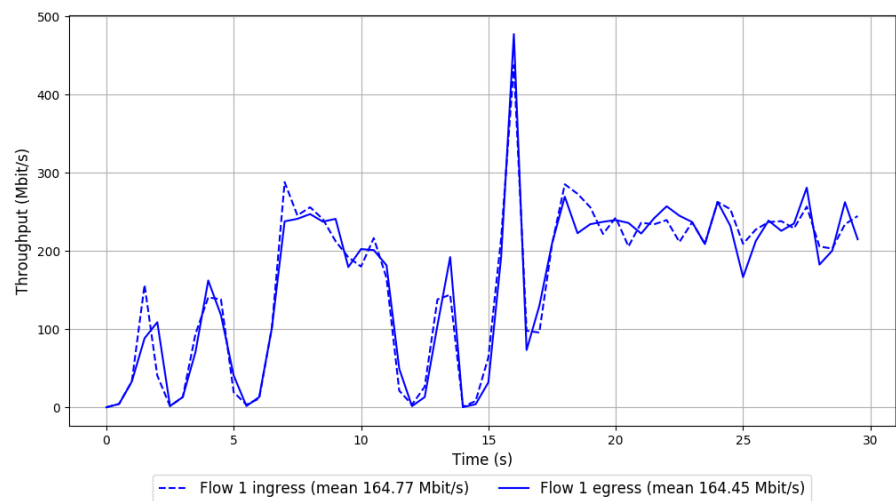
-- Flow 1:

Average throughput: 164.45 Mbit/s

95th percentile per-packet one-way delay: 116.650 ms

Loss rate: 0.98%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-19 20:13:56

End at: 2017-12-19 20:14:26

Below is generated by plot.py at 2017-12-19 23:51:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.55 Mbit/s

95th percentile per-packet one-way delay: 127.338 ms

Loss rate: 0.40%

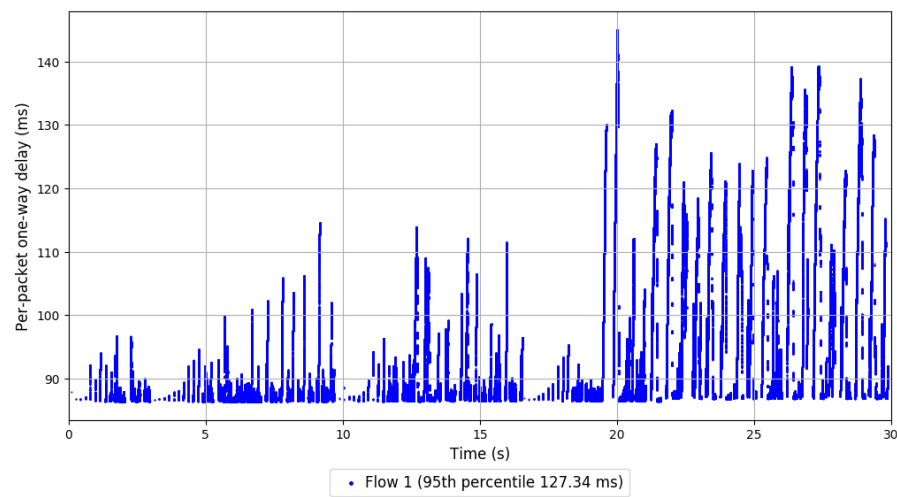
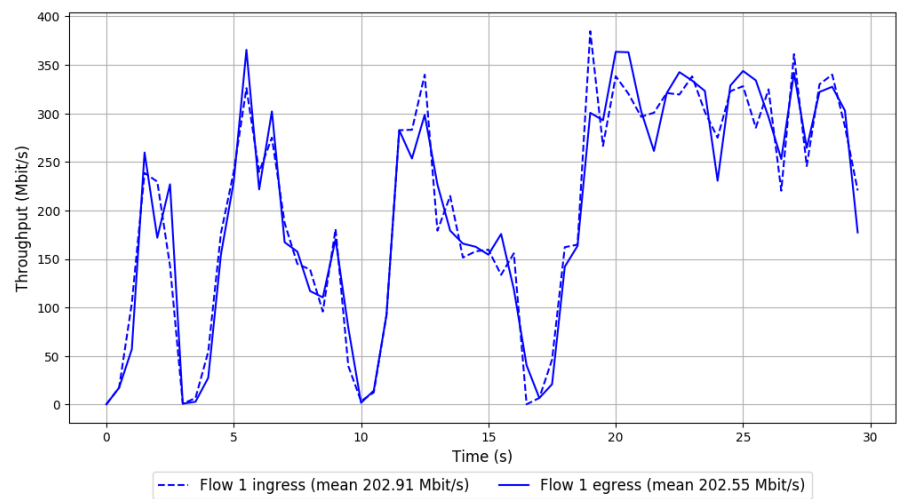
-- Flow 1:

Average throughput: 202.55 Mbit/s

95th percentile per-packet one-way delay: 127.338 ms

Loss rate: 0.40%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-19 20:25:47

End at: 2017-12-19 20:26:17

Below is generated by plot.py at 2017-12-19 23:51:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.67 Mbit/s

95th percentile per-packet one-way delay: 159.157 ms

Loss rate: 1.27%

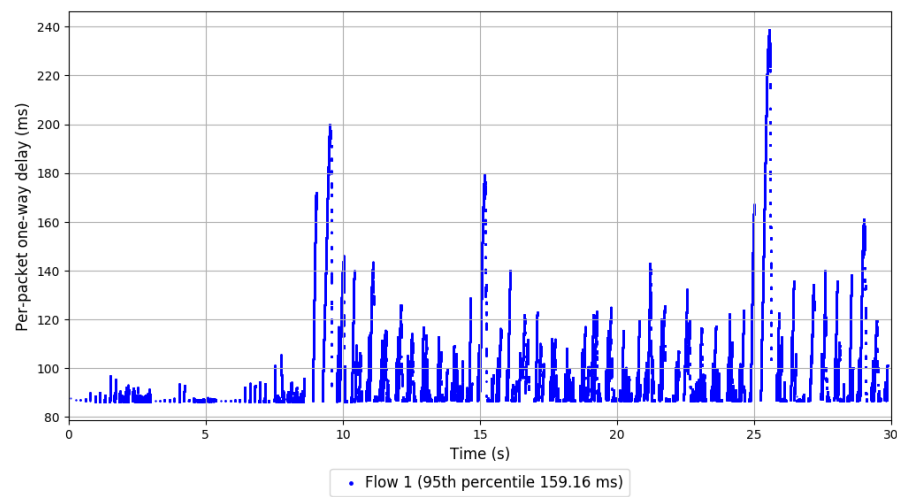
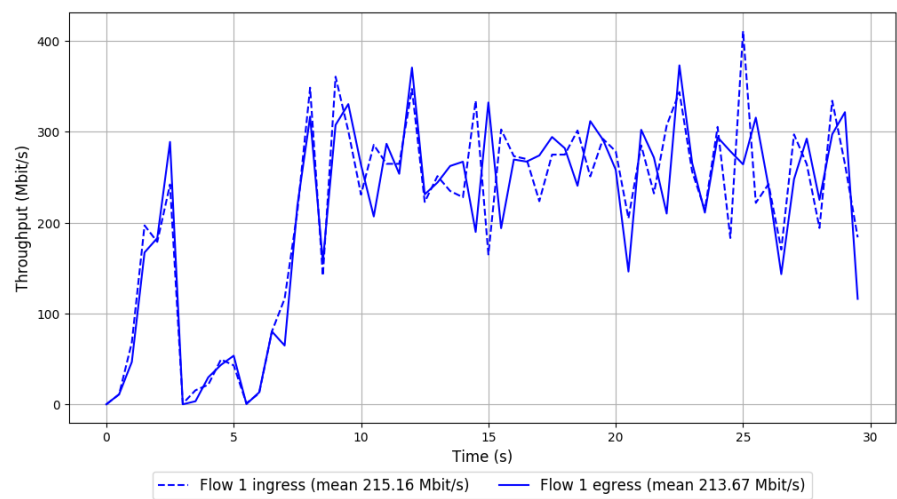
-- Flow 1:

Average throughput: 213.67 Mbit/s

95th percentile per-packet one-way delay: 159.157 ms

Loss rate: 1.27%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-19 20:38:08

End at: 2017-12-19 20:38:38

Below is generated by plot.py at 2017-12-19 23:52:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 208.21 Mbit/s

95th percentile per-packet one-way delay: 115.724 ms

Loss rate: 0.43%

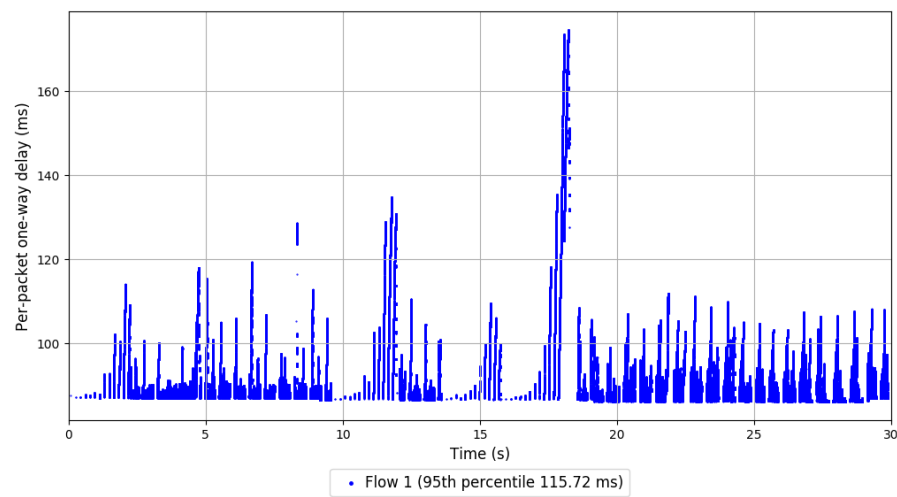
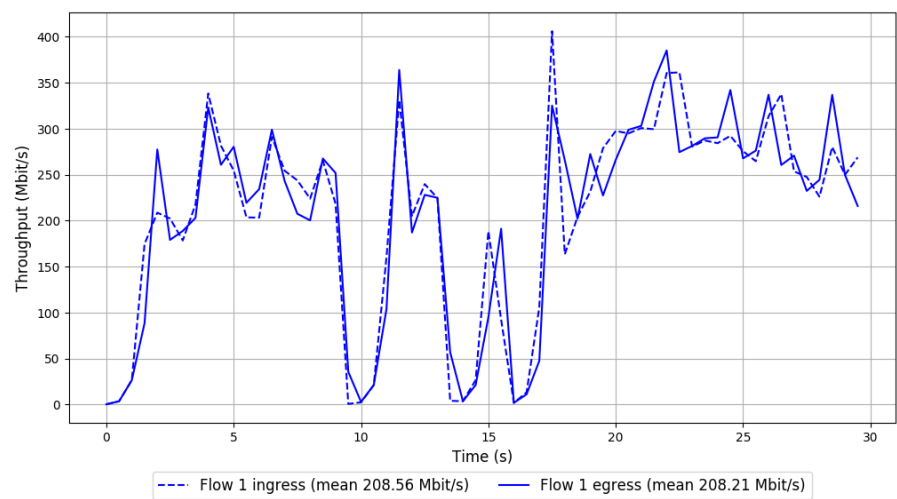
-- Flow 1:

Average throughput: 208.21 Mbit/s

95th percentile per-packet one-way delay: 115.724 ms

Loss rate: 0.43%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-19 20:50:32

End at: 2017-12-19 20:51:02

Below is generated by plot.py at 2017-12-19 23:52:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 235.93 Mbit/s

95th percentile per-packet one-way delay: 140.011 ms

Loss rate: 0.75%

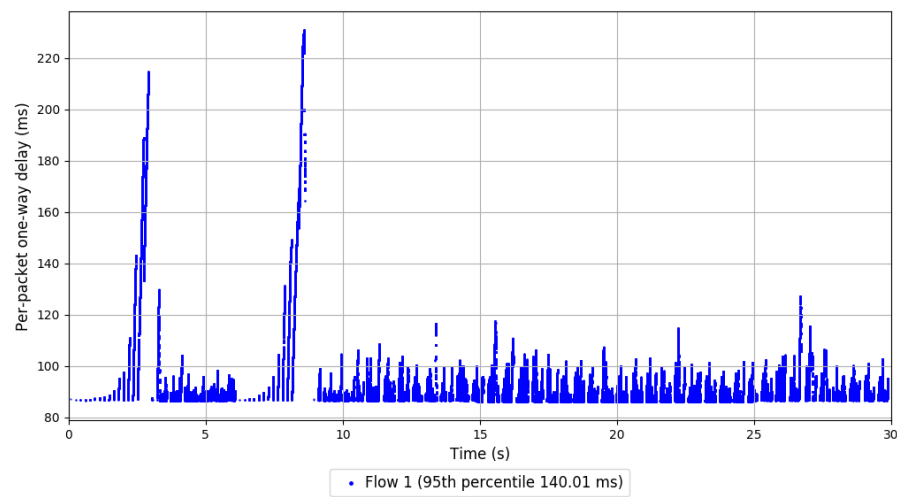
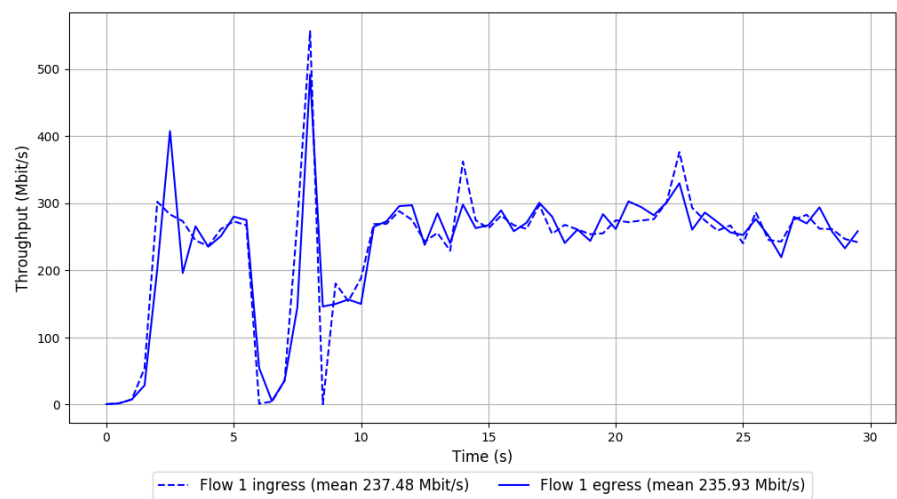
-- Flow 1:

Average throughput: 235.93 Mbit/s

95th percentile per-packet one-way delay: 140.011 ms

Loss rate: 0.75%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-19 21:03:26

End at: 2017-12-19 21:03:56

Below is generated by plot.py at 2017-12-19 23:52:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.48 Mbit/s

95th percentile per-packet one-way delay: 116.621 ms

Loss rate: 1.24%

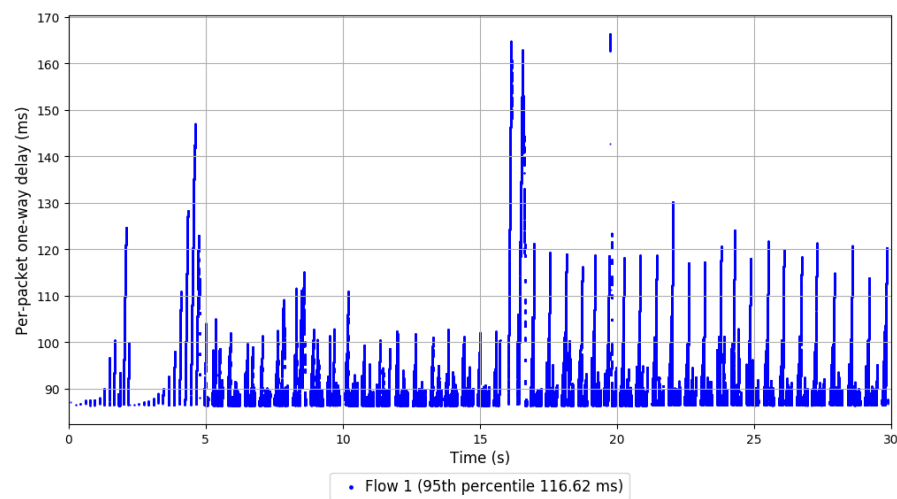
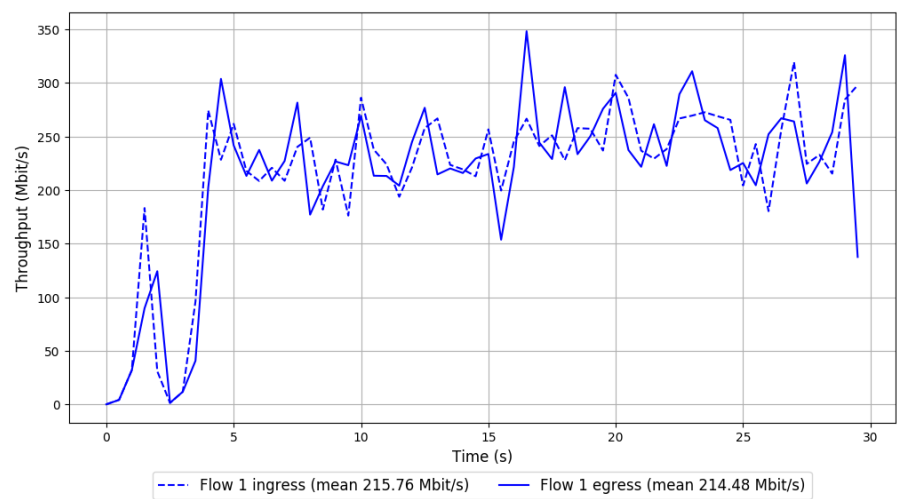
-- Flow 1:

Average throughput: 214.48 Mbit/s

95th percentile per-packet one-way delay: 116.621 ms

Loss rate: 1.24%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-19 19:21:17

End at: 2017-12-19 19:21:47

Below is generated by plot.py at 2017-12-19 23:52:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.65 Mbit/s

95th percentile per-packet one-way delay: 86.696 ms

Loss rate: 0.31%

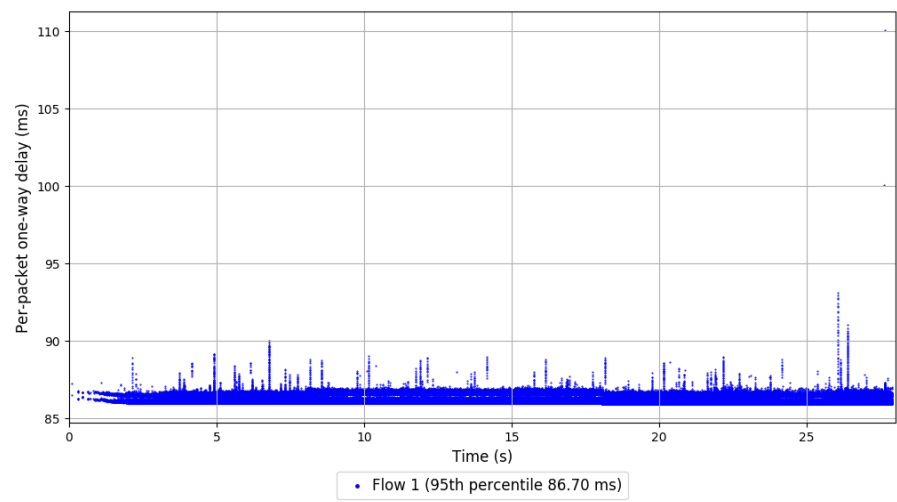
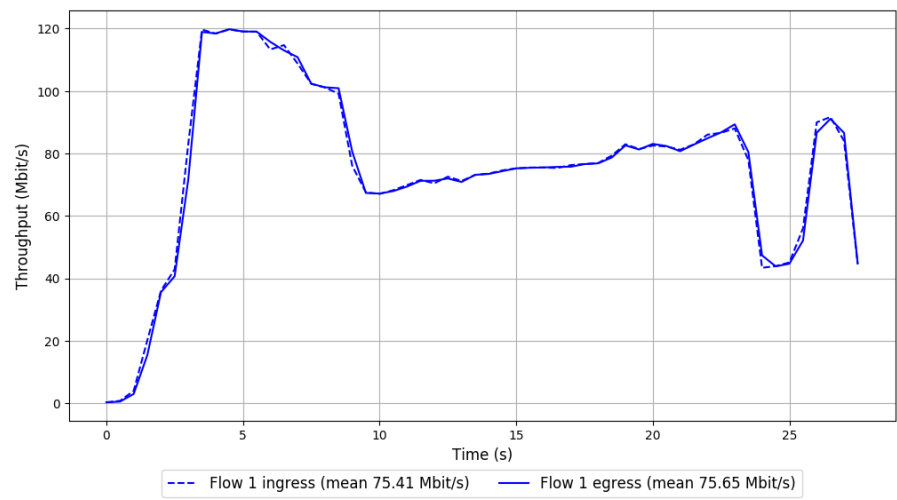
-- Flow 1:

Average throughput: 75.65 Mbit/s

95th percentile per-packet one-way delay: 86.696 ms

Loss rate: 0.31%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-19 19:33:31

End at: 2017-12-19 19:34:01

Below is generated by plot.py at 2017-12-19 23:52:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.56 Mbit/s

95th percentile per-packet one-way delay: 87.040 ms

Loss rate: 0.58%

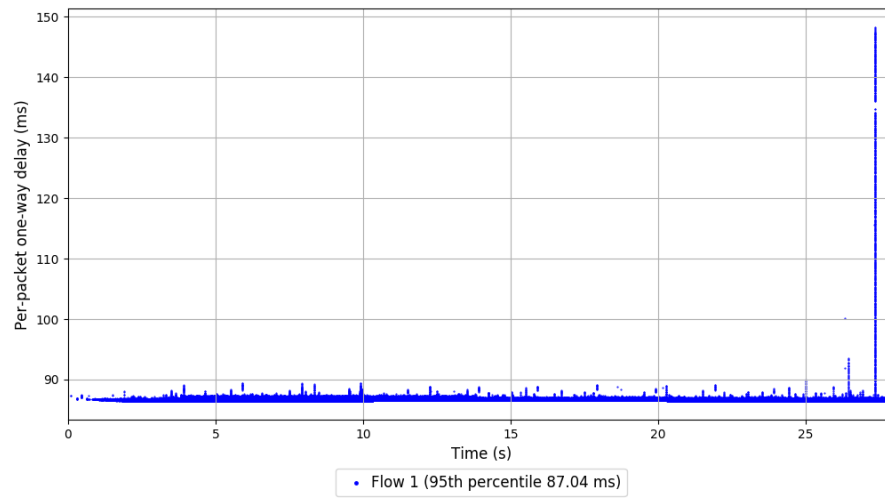
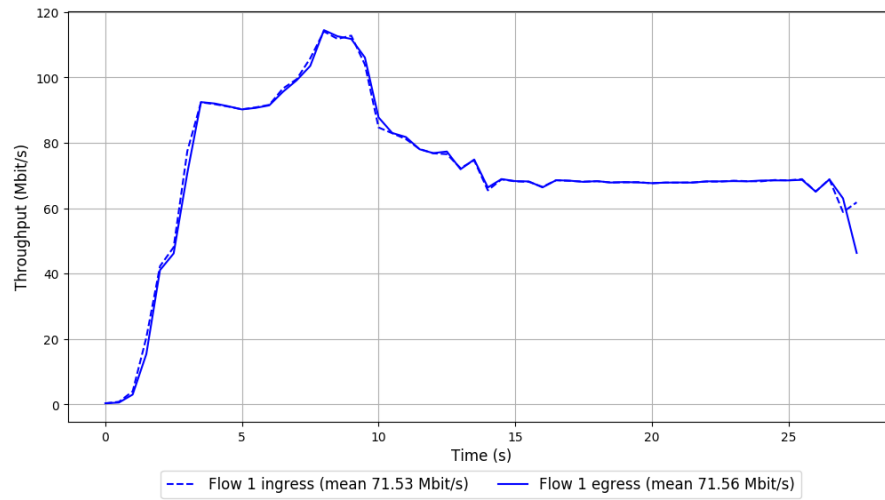
-- Flow 1:

Average throughput: 71.56 Mbit/s

95th percentile per-packet one-way delay: 87.040 ms

Loss rate: 0.58%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-19 19:45:44

End at: 2017-12-19 19:46:14

Below is generated by plot.py at 2017-12-19 23:52:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.46 Mbit/s

95th percentile per-packet one-way delay: 86.491 ms

Loss rate: 0.24%

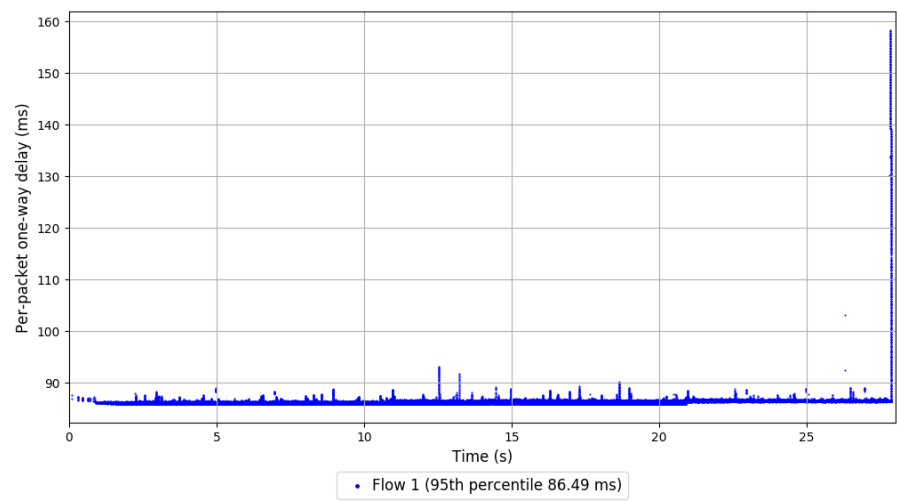
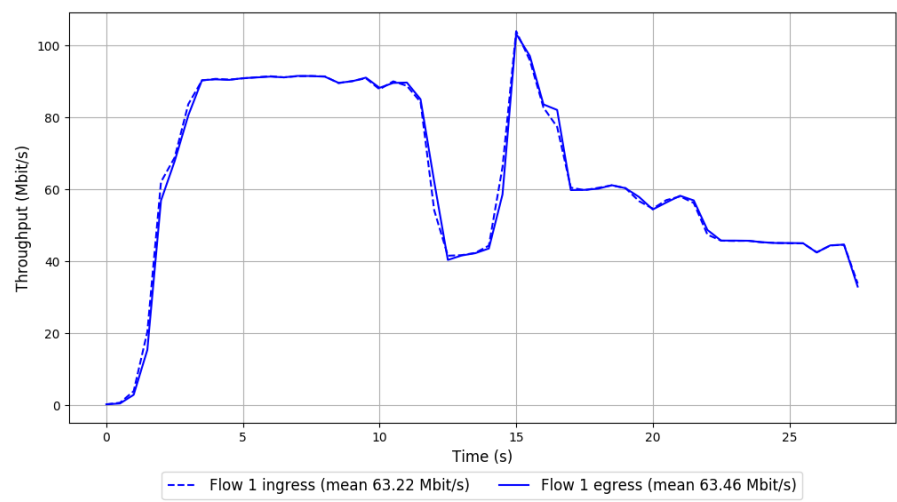
-- Flow 1:

Average throughput: 63.46 Mbit/s

95th percentile per-packet one-way delay: 86.491 ms

Loss rate: 0.24%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-19 19:57:57

End at: 2017-12-19 19:58:27

Below is generated by plot.py at 2017-12-19 23:53:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.55 Mbit/s

95th percentile per-packet one-way delay: 86.648 ms

Loss rate: 0.33%

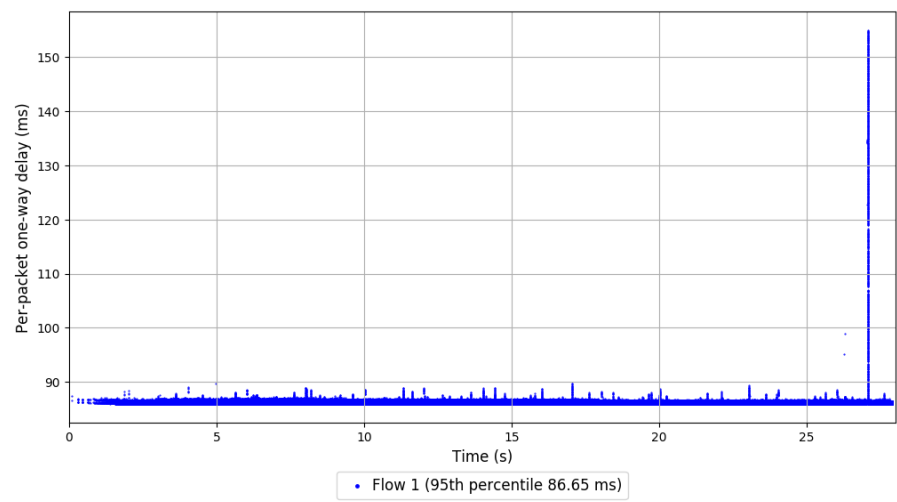
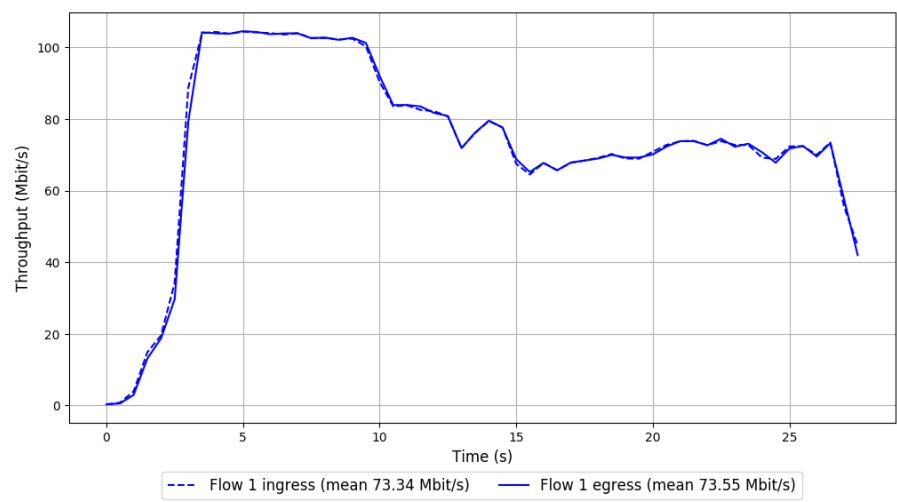
-- Flow 1:

Average throughput: 73.55 Mbit/s

95th percentile per-packet one-way delay: 86.648 ms

Loss rate: 0.33%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-19 20:10:05

End at: 2017-12-19 20:10:35

Below is generated by plot.py at 2017-12-19 23:53:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.58 Mbit/s

95th percentile per-packet one-way delay: 86.722 ms

Loss rate: 0.66%

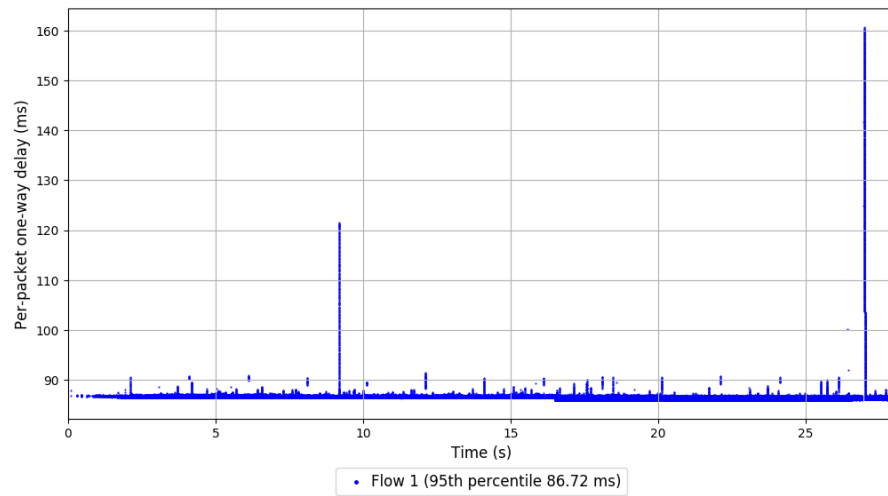
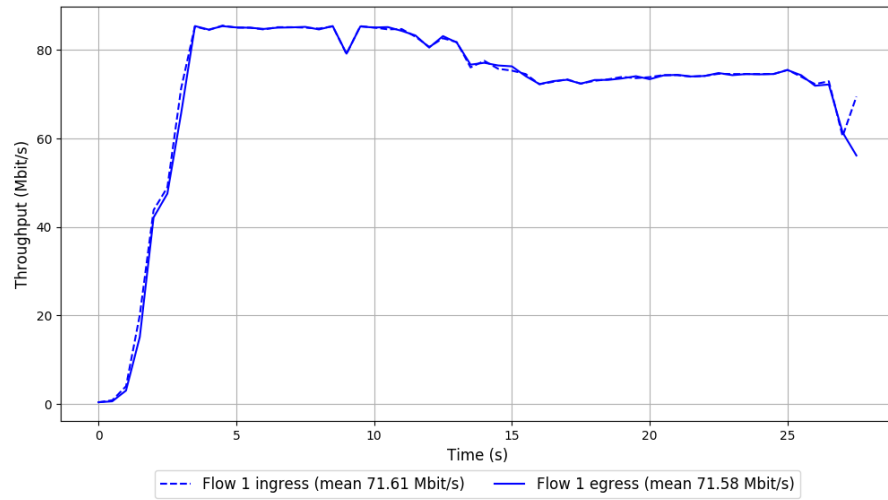
-- Flow 1:

Average throughput: 71.58 Mbit/s

95th percentile per-packet one-way delay: 86.722 ms

Loss rate: 0.66%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-19 20:22:01

End at: 2017-12-19 20:22:31

Below is generated by plot.py at 2017-12-19 23:53:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.20 Mbit/s

95th percentile per-packet one-way delay: 86.748 ms

Loss rate: 0.64%

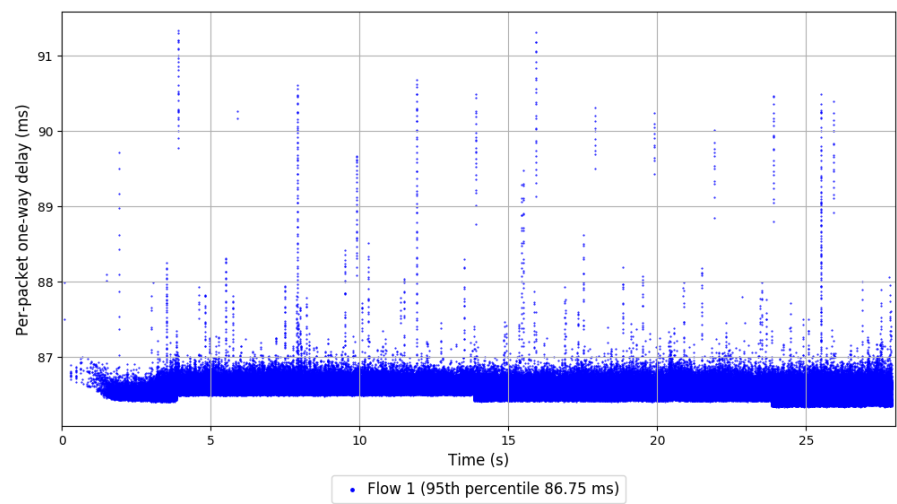
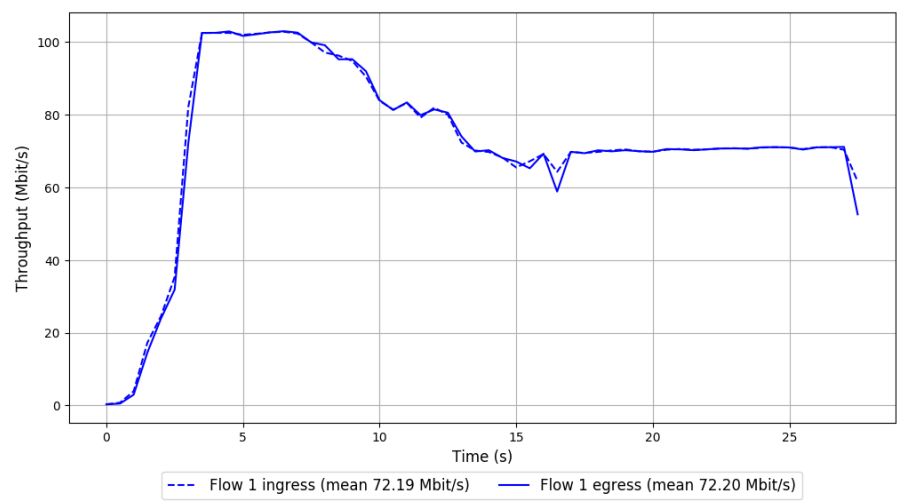
-- Flow 1:

Average throughput: 72.20 Mbit/s

95th percentile per-packet one-way delay: 86.748 ms

Loss rate: 0.64%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-19 20:34:15

End at: 2017-12-19 20:34:45

Below is generated by plot.py at 2017-12-19 23:53:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.18 Mbit/s

95th percentile per-packet one-way delay: 86.944 ms

Loss rate: 0.76%

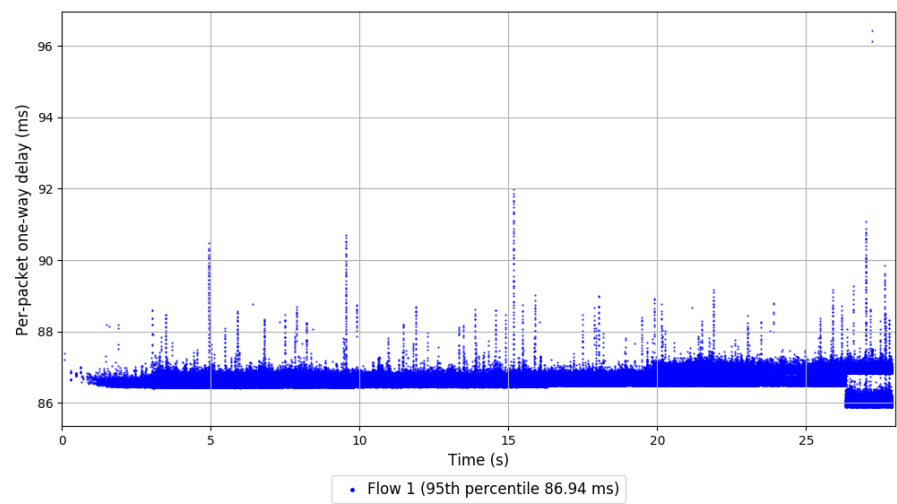
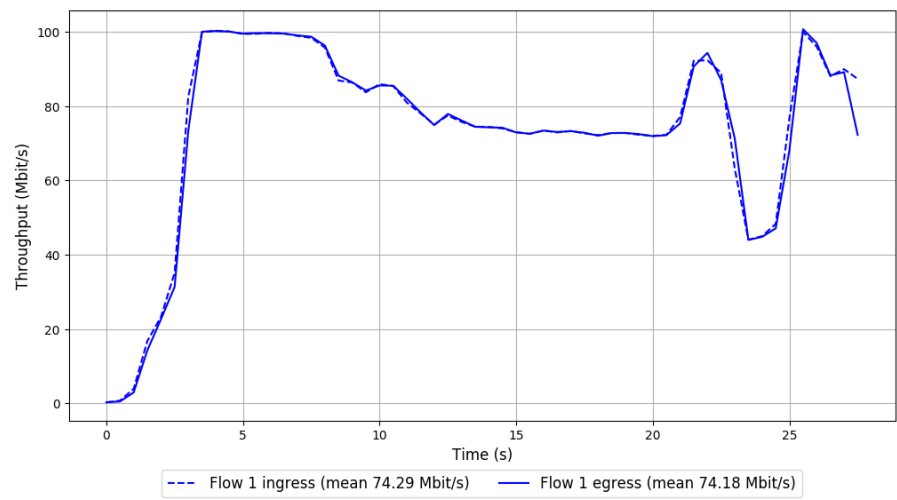
-- Flow 1:

Average throughput: 74.18 Mbit/s

95th percentile per-packet one-way delay: 86.944 ms

Loss rate: 0.76%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-19 20:46:36

End at: 2017-12-19 20:47:06

Below is generated by plot.py at 2017-12-19 23:54:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.82 Mbit/s

95th percentile per-packet one-way delay: 86.877 ms

Loss rate: 0.64%

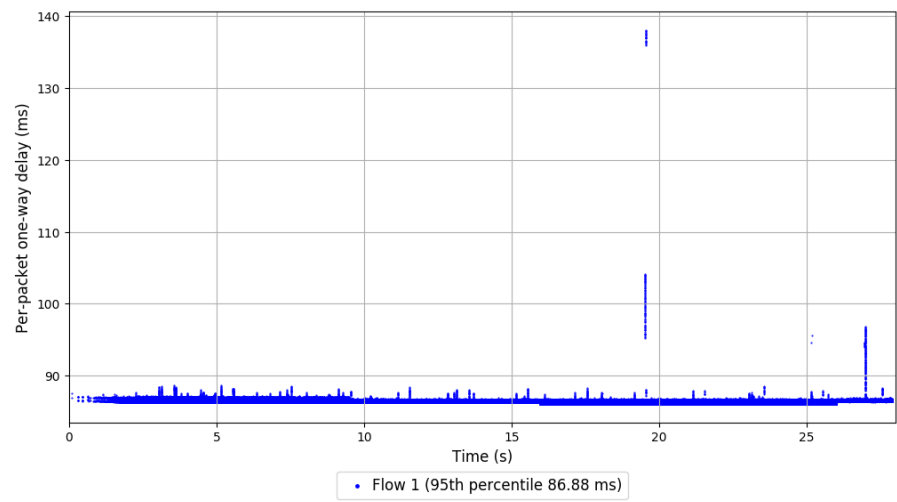
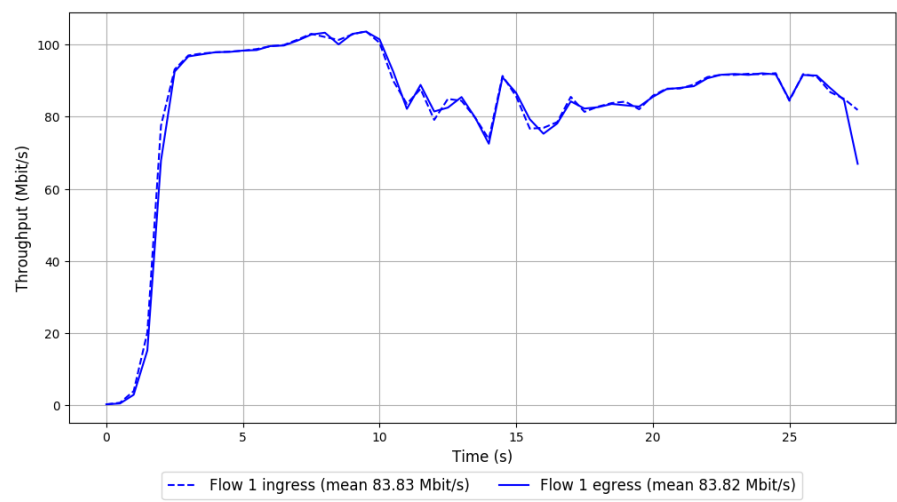
-- Flow 1:

Average throughput: 83.82 Mbit/s

95th percentile per-packet one-way delay: 86.877 ms

Loss rate: 0.64%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-19 20:59:24

End at: 2017-12-19 20:59:54

Below is generated by plot.py at 2017-12-19 23:54:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.73 Mbit/s

95th percentile per-packet one-way delay: 86.892 ms

Loss rate: 0.62%

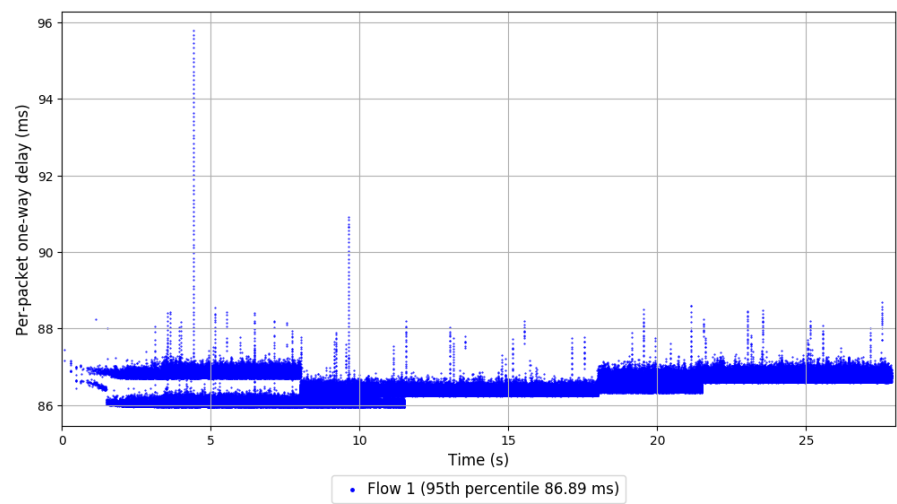
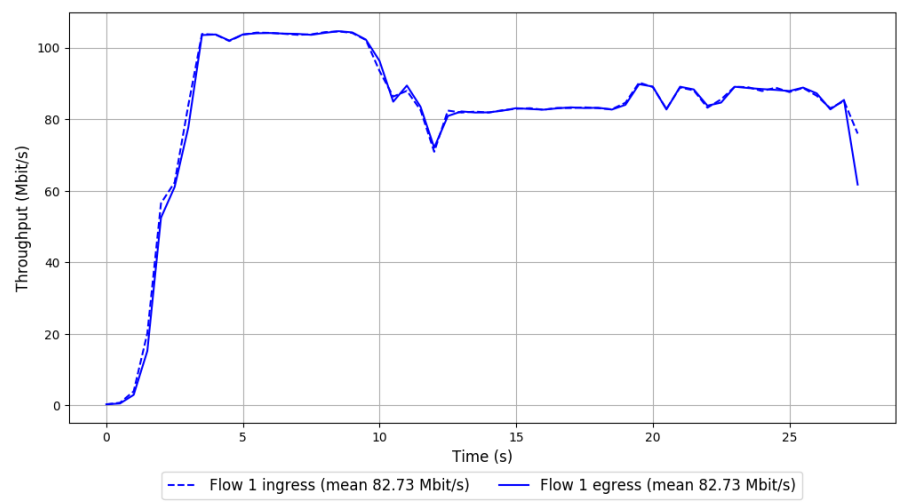
-- Flow 1:

Average throughput: 82.73 Mbit/s

95th percentile per-packet one-way delay: 86.892 ms

Loss rate: 0.62%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-19 21:12:01

End at: 2017-12-19 21:12:32

Below is generated by plot.py at 2017-12-19 23:54:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.84 Mbit/s

95th percentile per-packet one-way delay: 86.767 ms

Loss rate: 0.70%

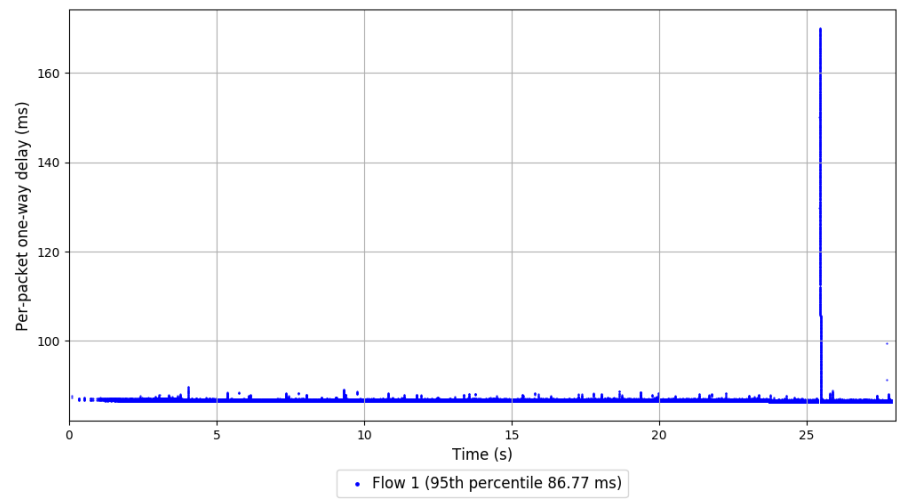
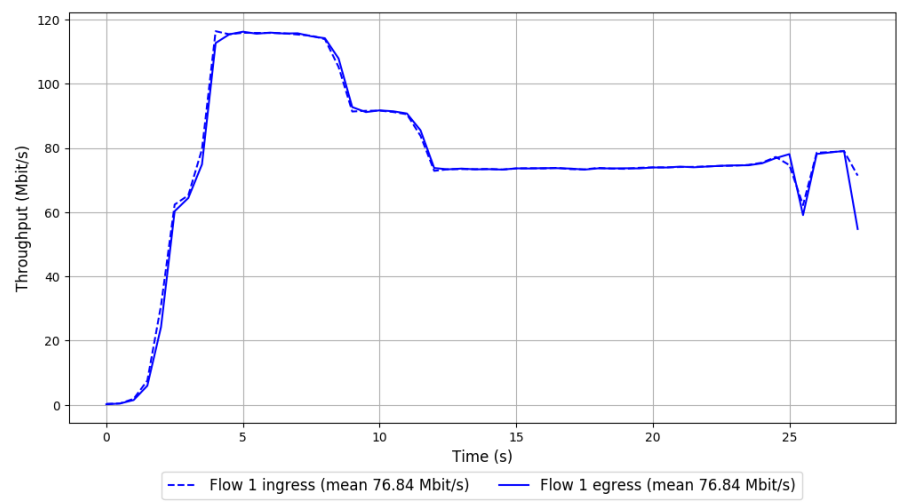
-- Flow 1:

Average throughput: 76.84 Mbit/s

95th percentile per-packet one-way delay: 86.767 ms

Loss rate: 0.70%

Run 10: Report of Copa — Data Link

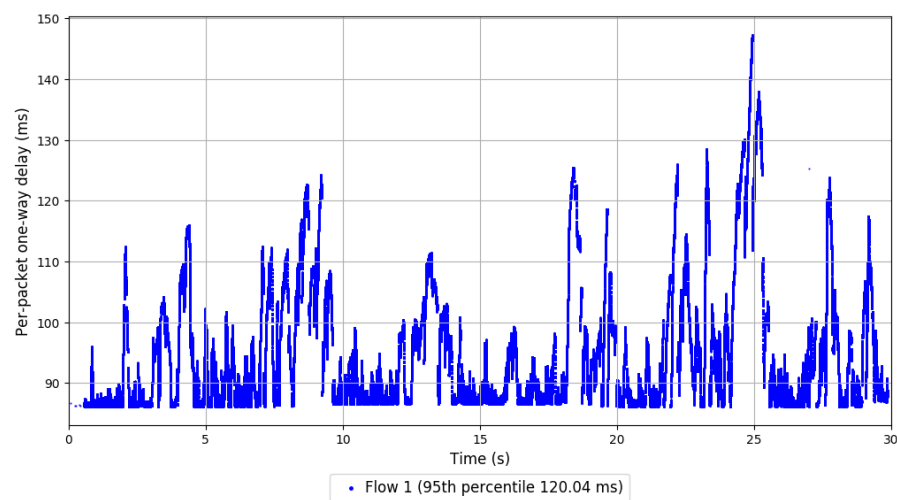
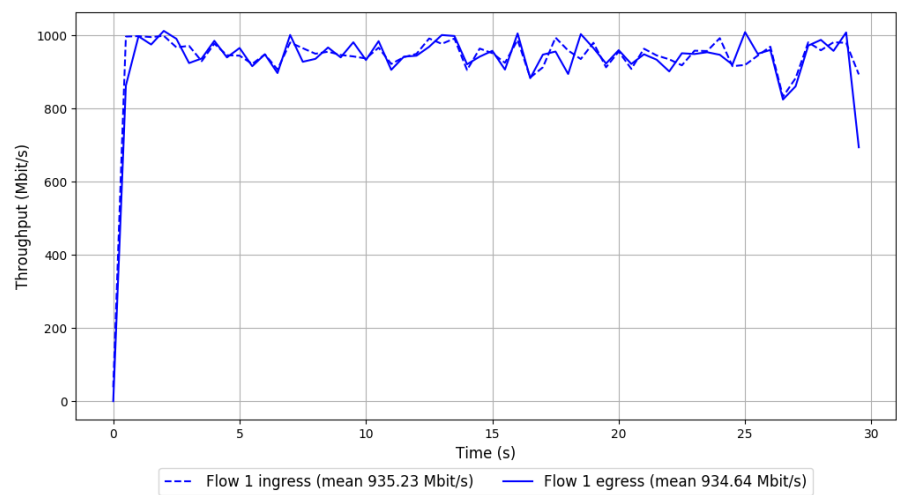


```
Run 1: Statistics of FillP

Start at: 2017-12-19 19:19:58
End at: 2017-12-19 19:20:28

# Below is generated by plot.py at 2017-12-20 00:09:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 934.64 Mbit/s
95th percentile per-packet one-way delay: 120.039 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 934.64 Mbit/s
95th percentile per-packet one-way delay: 120.039 ms
Loss rate: 0.64%
```

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2017-12-19 19:32:14

End at: 2017-12-19 19:32:44

Below is generated by plot.py at 2017-12-20 00:09:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 872.16 Mbit/s

95th percentile per-packet one-way delay: 154.668 ms

Loss rate: 2.32%

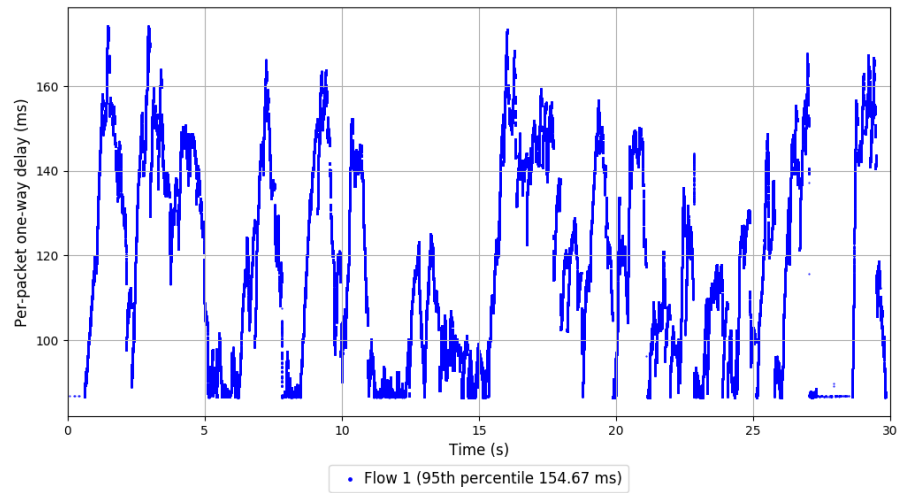
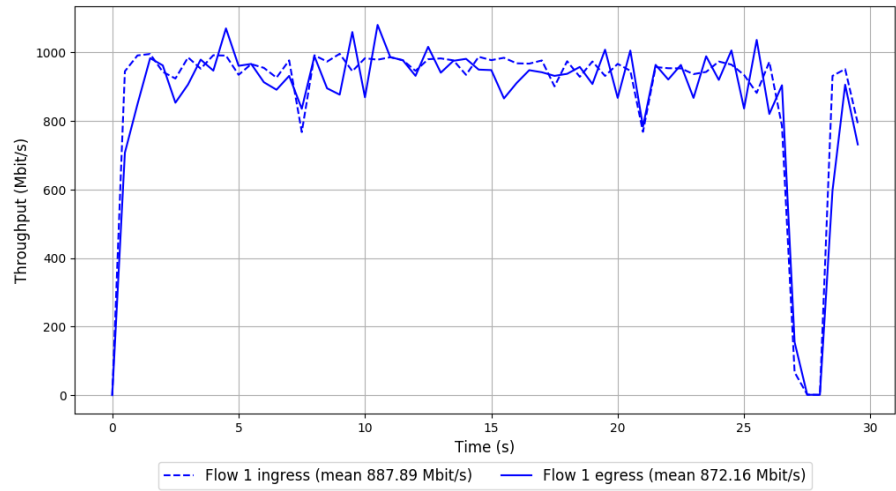
-- Flow 1:

Average throughput: 872.16 Mbit/s

95th percentile per-packet one-way delay: 154.668 ms

Loss rate: 2.32%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2017-12-19 19:44:25

End at: 2017-12-19 19:44:55

Below is generated by plot.py at 2017-12-20 00:10:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 944.63 Mbit/s

95th percentile per-packet one-way delay: 111.062 ms

Loss rate: 0.62%

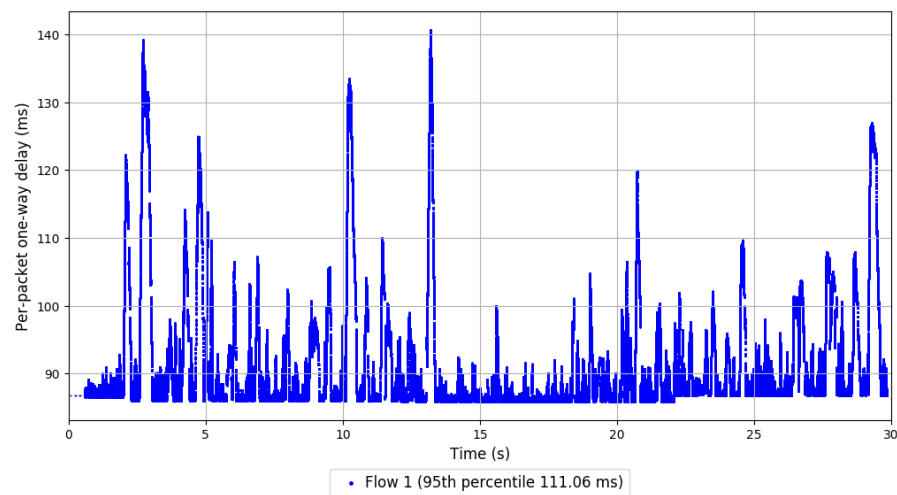
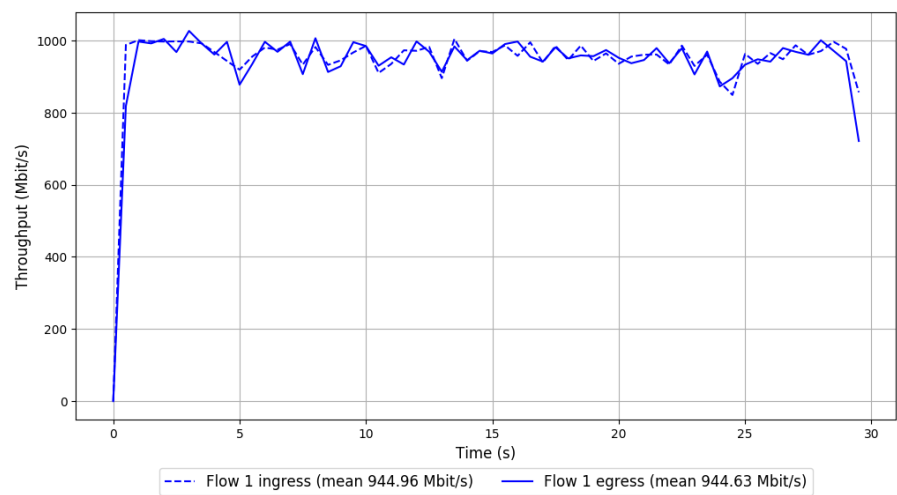
-- Flow 1:

Average throughput: 944.63 Mbit/s

95th percentile per-packet one-way delay: 111.062 ms

Loss rate: 0.62%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2017-12-19 19:56:43

End at: 2017-12-19 19:57:13

Below is generated by plot.py at 2017-12-20 00:10:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 811.82 Mbit/s

95th percentile per-packet one-way delay: 152.528 ms

Loss rate: 1.55%

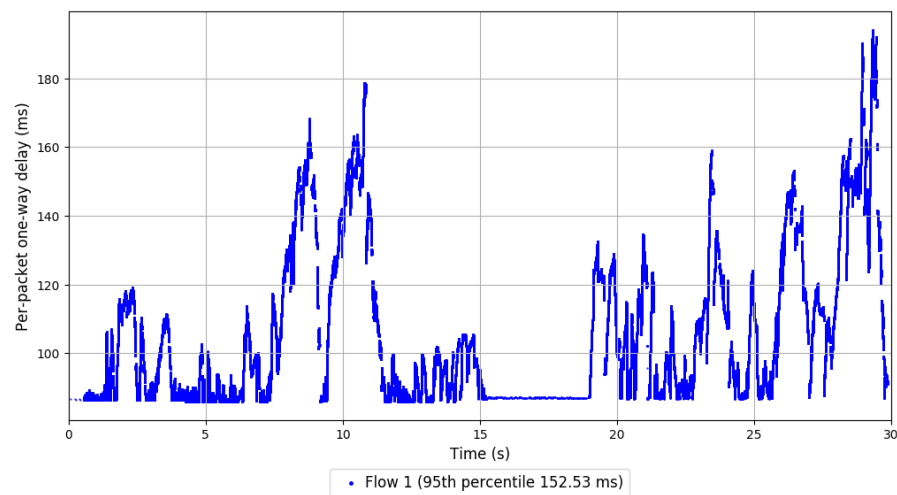
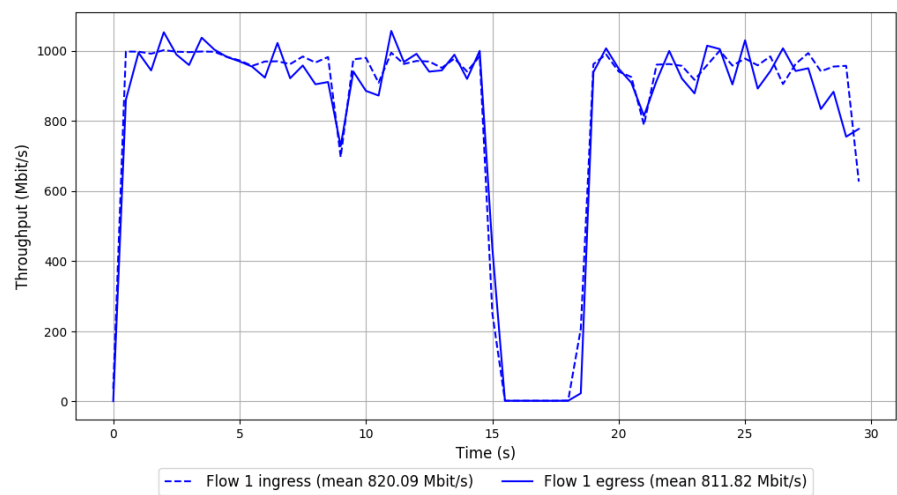
-- Flow 1:

Average throughput: 811.82 Mbit/s

95th percentile per-packet one-way delay: 152.528 ms

Loss rate: 1.55%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2017-12-19 20:08:56

End at: 2017-12-19 20:09:26

Below is generated by plot.py at 2017-12-20 00:10:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 704.55 Mbit/s

95th percentile per-packet one-way delay: 117.015 ms

Loss rate: 0.81%

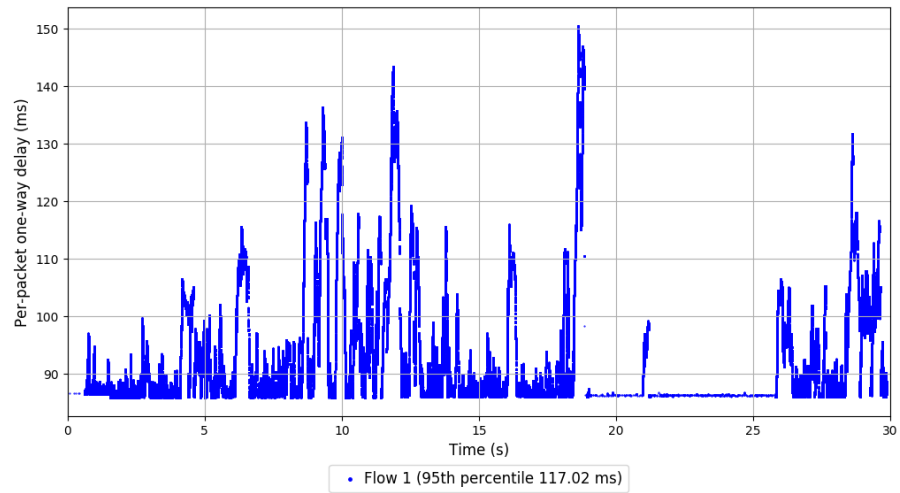
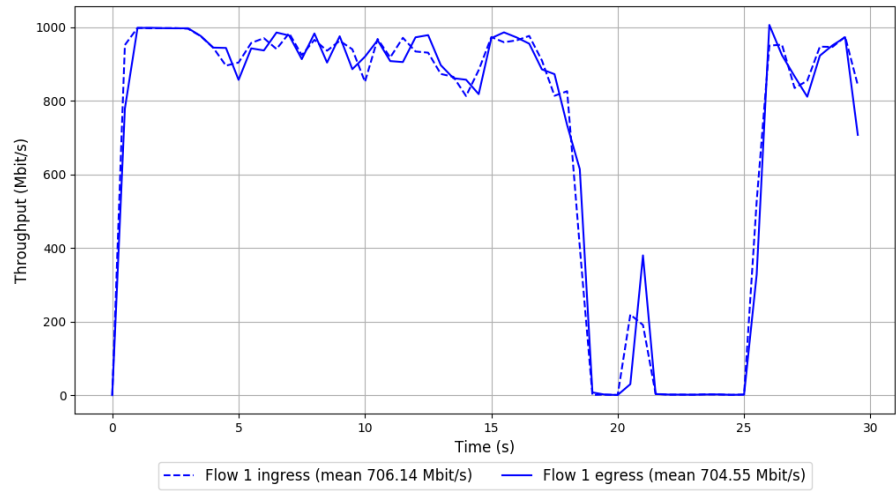
-- Flow 1:

Average throughput: 704.55 Mbit/s

95th percentile per-packet one-way delay: 117.015 ms

Loss rate: 0.81%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2017-12-19 20:21:03

End at: 2017-12-19 20:21:33

Below is generated by plot.py at 2017-12-20 00:10:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 406.18 Mbit/s

95th percentile per-packet one-way delay: 169.278 ms

Loss rate: 7.89%

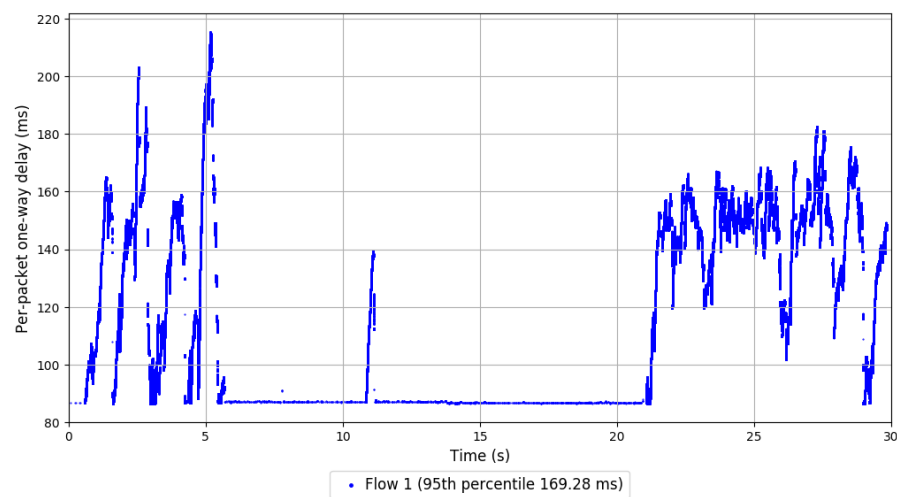
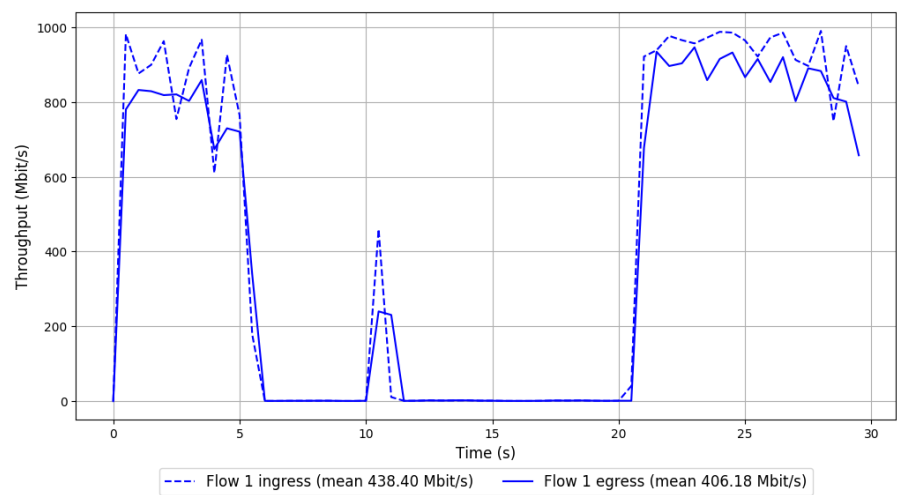
-- Flow 1:

Average throughput: 406.18 Mbit/s

95th percentile per-packet one-way delay: 169.278 ms

Loss rate: 7.89%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2017-12-19 20:32:56

End at: 2017-12-19 20:33:26

Below is generated by plot.py at 2017-12-20 00:11:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 944.07 Mbit/s

95th percentile per-packet one-way delay: 144.348 ms

Loss rate: 1.20%

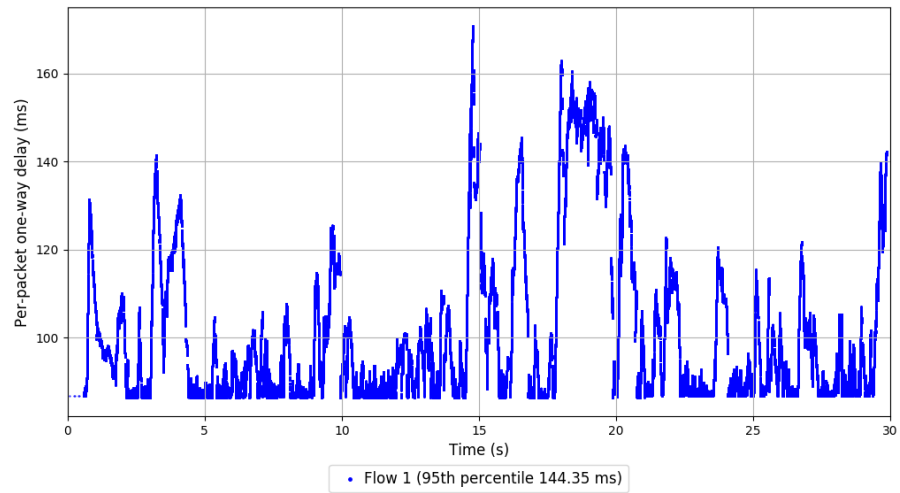
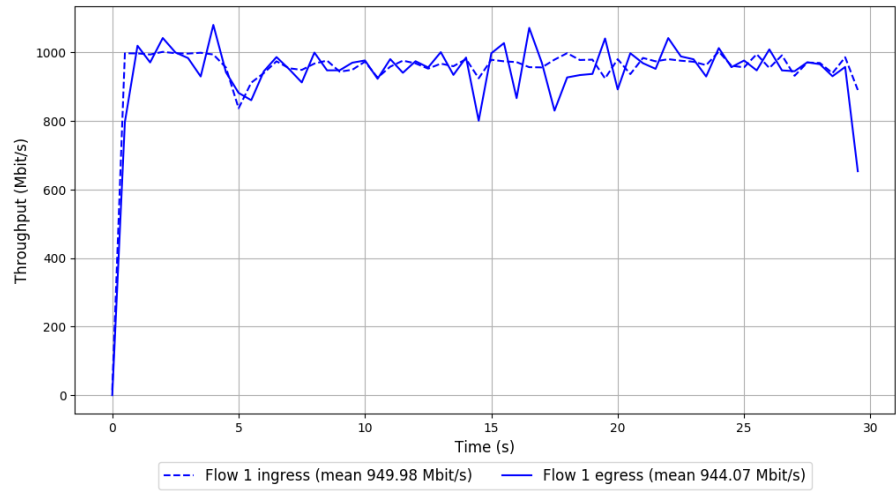
-- Flow 1:

Average throughput: 944.07 Mbit/s

95th percentile per-packet one-way delay: 144.348 ms

Loss rate: 1.20%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2017-12-19 20:45:16

End at: 2017-12-19 20:45:46

Below is generated by plot.py at 2017-12-20 00:12:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 963.85 Mbit/s

95th percentile per-packet one-way delay: 146.986 ms

Loss rate: 1.35%

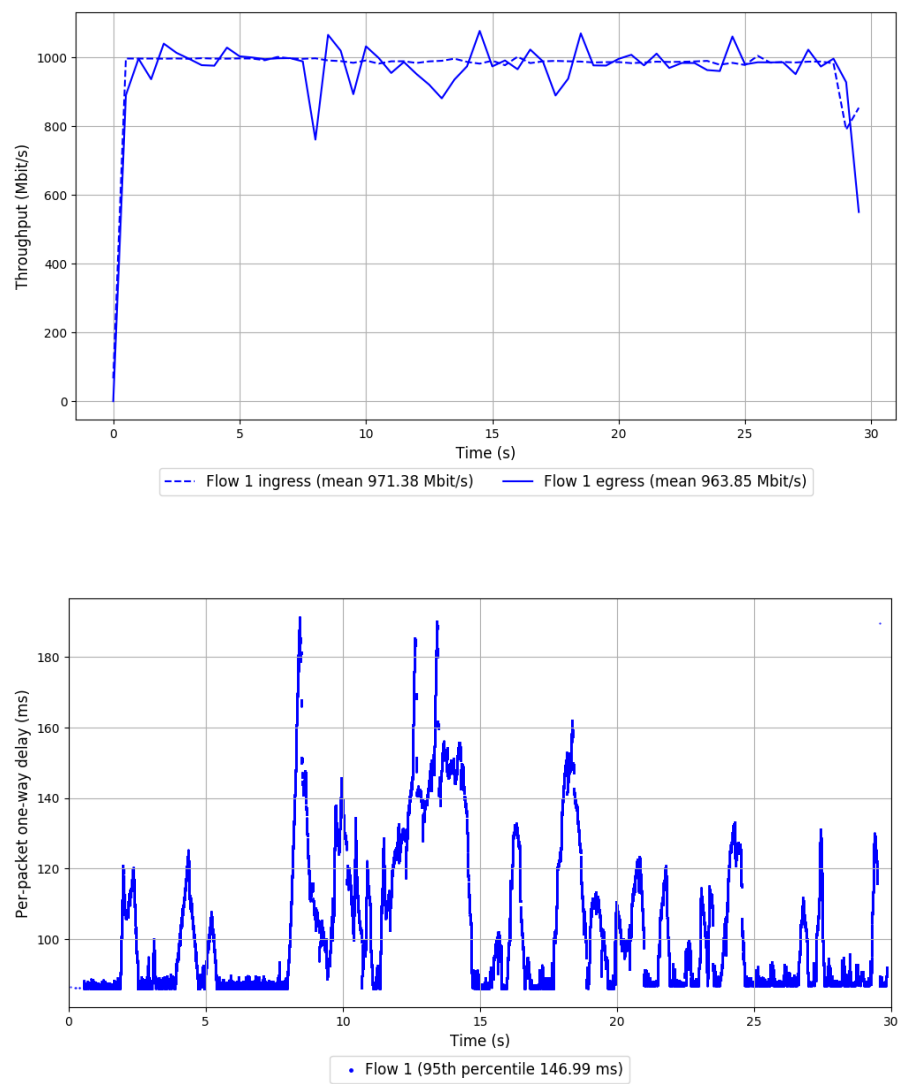
-- Flow 1:

Average throughput: 963.85 Mbit/s

95th percentile per-packet one-way delay: 146.986 ms

Loss rate: 1.35%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2017-12-19 20:57:55

End at: 2017-12-19 20:58:25

Below is generated by plot.py at 2017-12-20 00:15:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 969.53 Mbit/s

95th percentile per-packet one-way delay: 149.350 ms

Loss rate: 1.32%

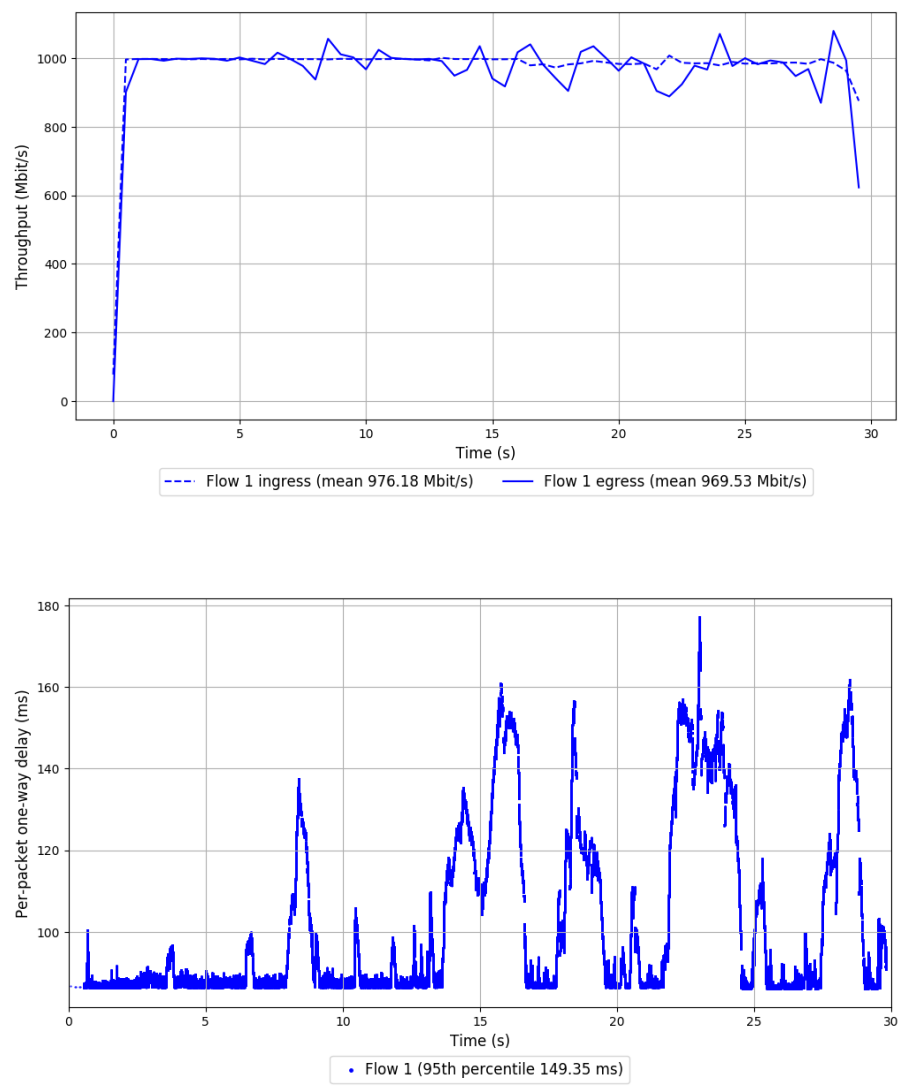
-- Flow 1:

Average throughput: 969.53 Mbit/s

95th percentile per-packet one-way delay: 149.350 ms

Loss rate: 1.32%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2017-12-19 21:10:40

End at: 2017-12-19 21:11:10

Below is generated by plot.py at 2017-12-20 00:16:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 956.37 Mbit/s

95th percentile per-packet one-way delay: 150.989 ms

Loss rate: 1.84%

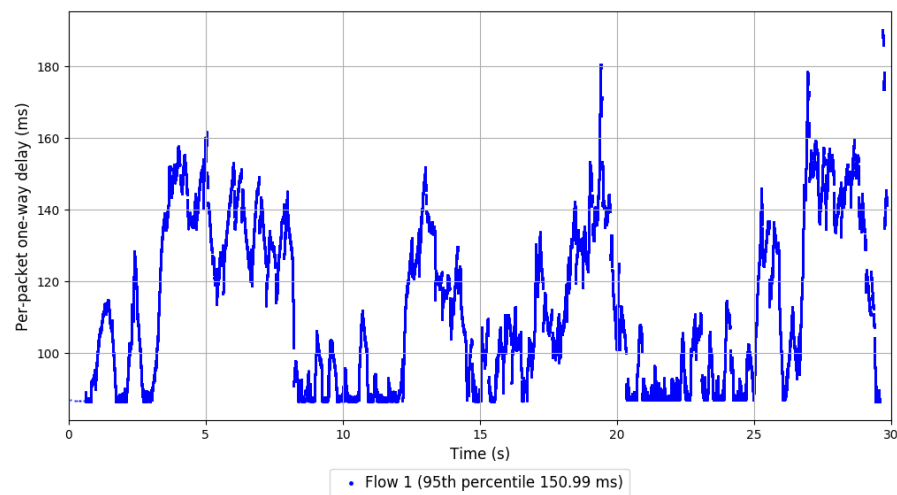
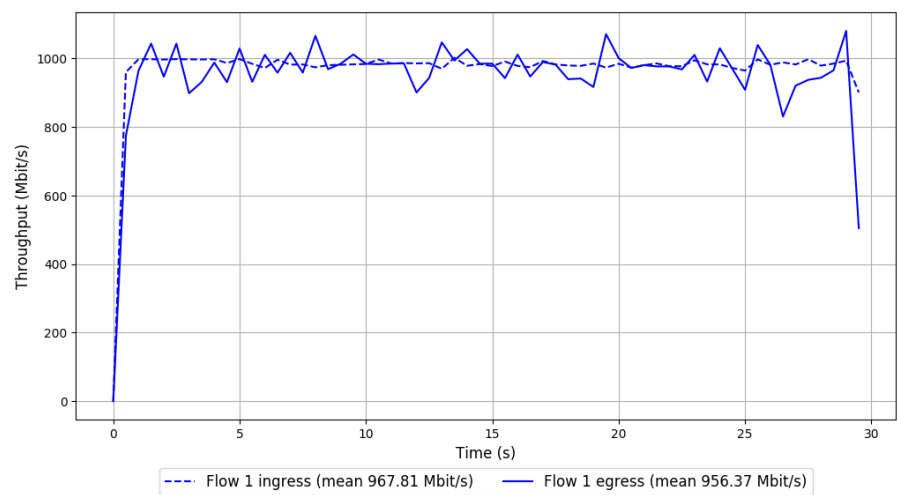
-- Flow 1:

Average throughput: 956.37 Mbit/s

95th percentile per-packet one-way delay: 150.989 ms

Loss rate: 1.84%

Run 10: Report of FillP — Data Link

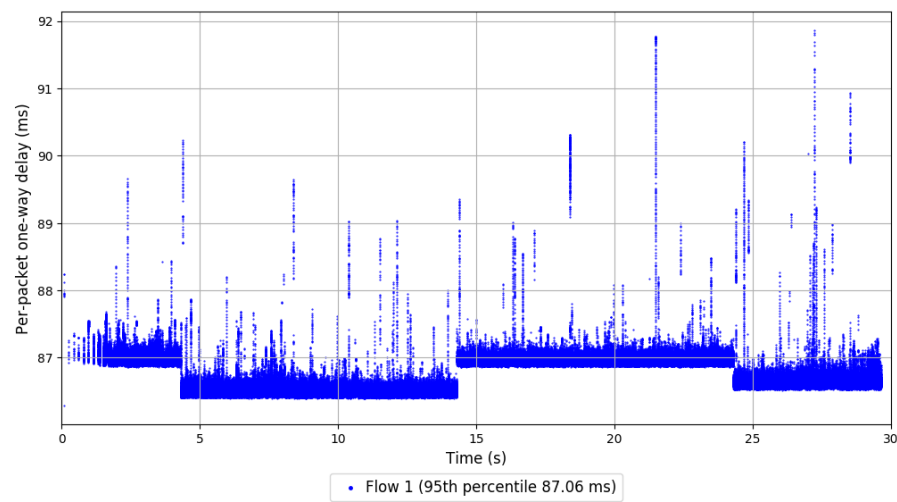
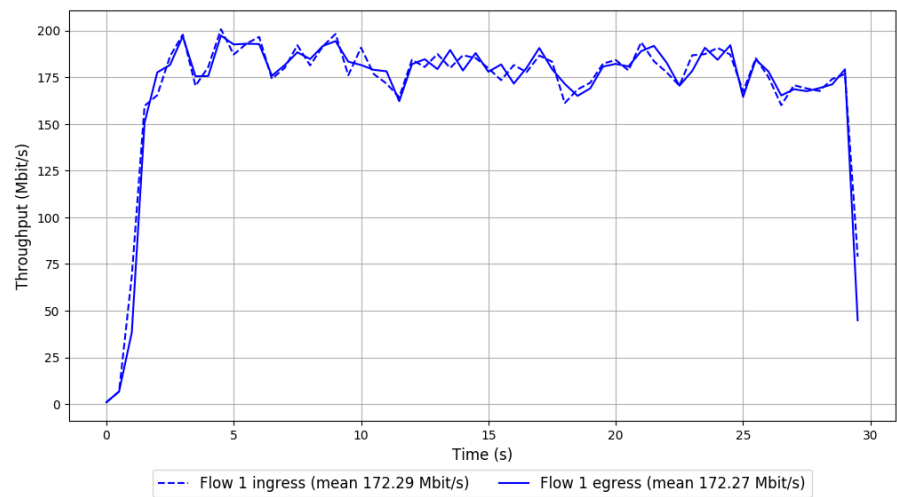


```
Run 1: Statistics of Indigo

Start at: 2017-12-19 19:23:33
End at: 2017-12-19 19:24:03

# Below is generated by plot.py at 2017-12-20 00:16:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 172.27 Mbit/s
95th percentile per-packet one-way delay: 87.059 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 172.27 Mbit/s
95th percentile per-packet one-way delay: 87.059 ms
Loss rate: 0.60%
```

Run 1: Report of Indigo — Data Link

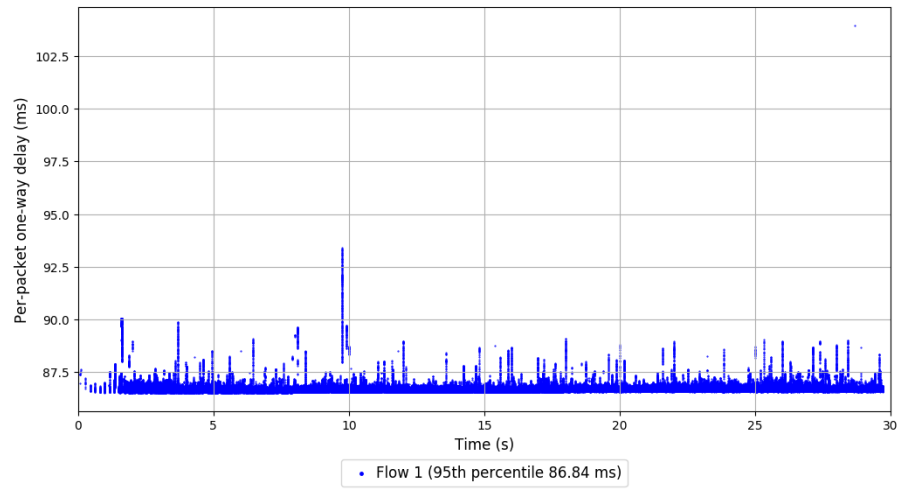
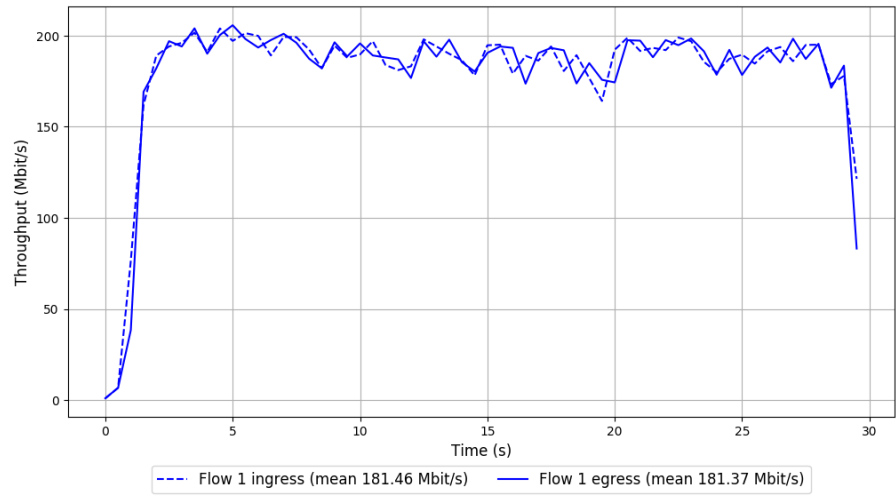


```
Run 2: Statistics of Indigo

Start at: 2017-12-19 19:35:49
End at: 2017-12-19 19:36:19

# Below is generated by plot.py at 2017-12-20 00:16:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.37 Mbit/s
95th percentile per-packet one-way delay: 86.839 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 181.37 Mbit/s
95th percentile per-packet one-way delay: 86.839 ms
Loss rate: 0.63%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-19 19:48:01

End at: 2017-12-19 19:48:31

Below is generated by plot.py at 2017-12-20 00:16:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.65 Mbit/s

95th percentile per-packet one-way delay: 86.595 ms

Loss rate: 0.63%

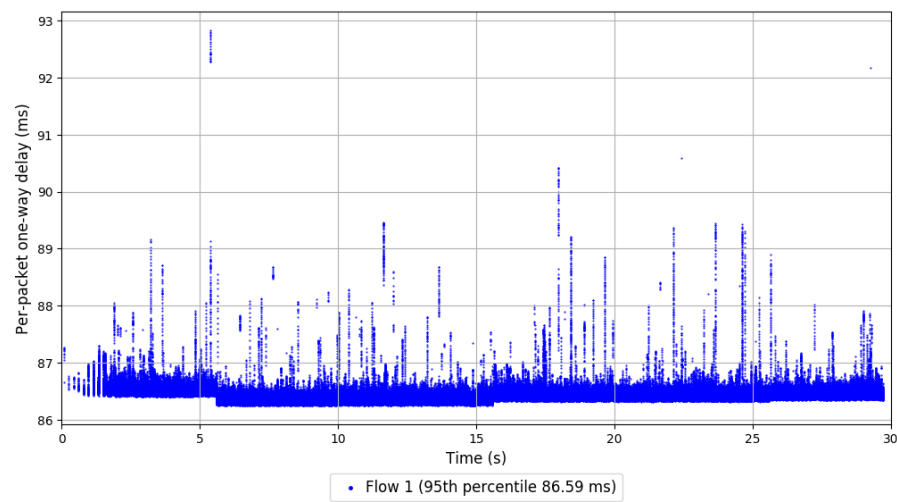
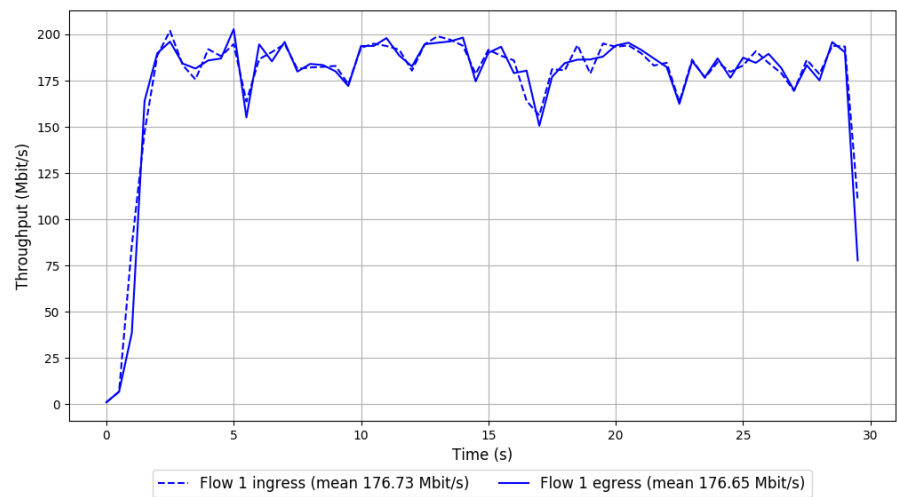
-- Flow 1:

Average throughput: 176.65 Mbit/s

95th percentile per-packet one-way delay: 86.595 ms

Loss rate: 0.63%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-19 20:00:15

End at: 2017-12-19 20:00:45

Below is generated by plot.py at 2017-12-20 00:16:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.97 Mbit/s

95th percentile per-packet one-way delay: 86.697 ms

Loss rate: 0.70%

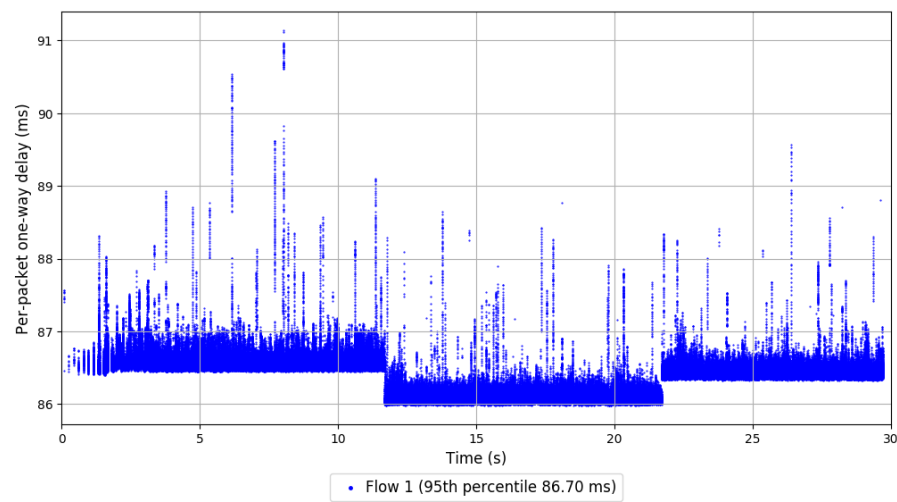
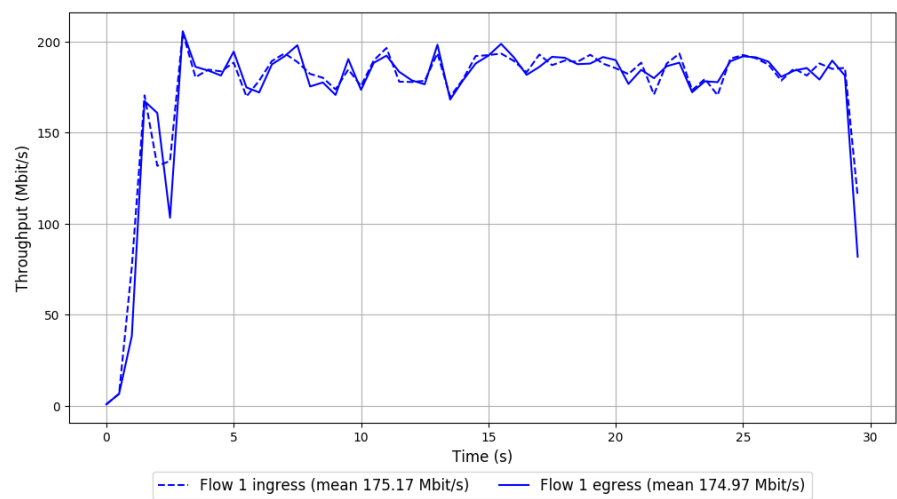
-- Flow 1:

Average throughput: 174.97 Mbit/s

95th percentile per-packet one-way delay: 86.697 ms

Loss rate: 0.70%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-19 20:12:23

End at: 2017-12-19 20:12:53

Below is generated by plot.py at 2017-12-20 00:16:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 153.37 Mbit/s

95th percentile per-packet one-way delay: 86.795 ms

Loss rate: 0.50%

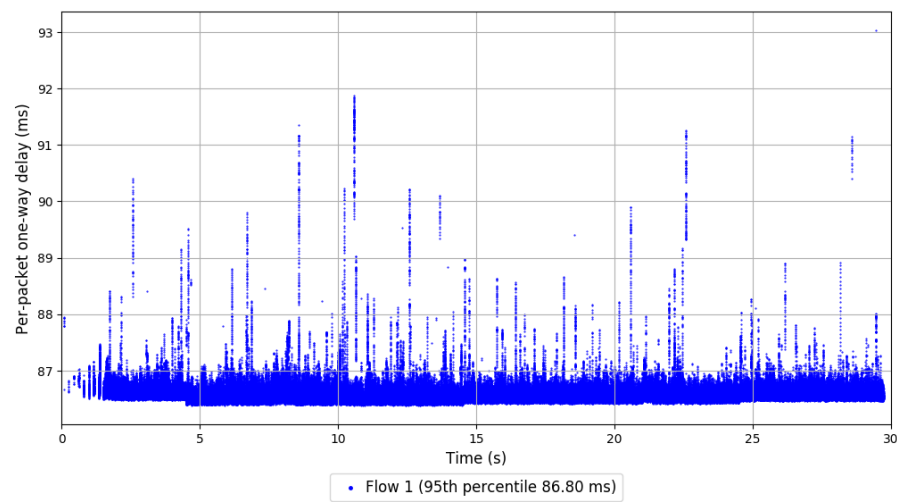
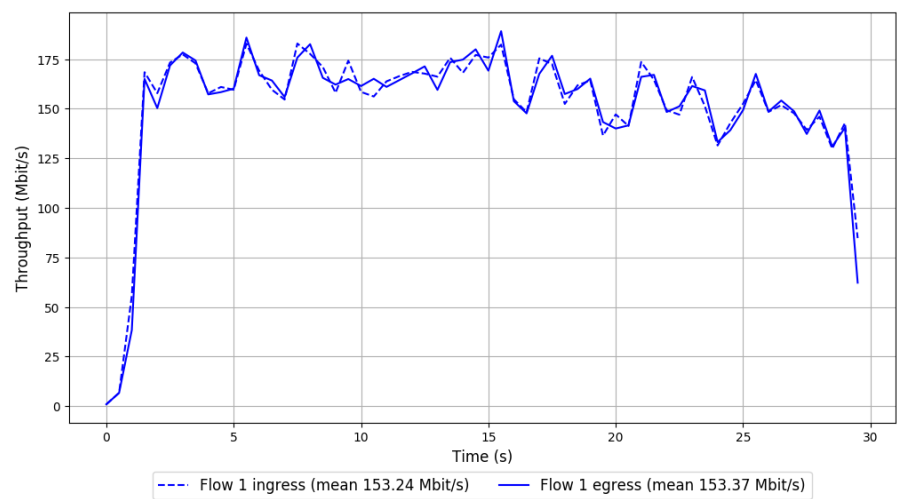
-- Flow 1:

Average throughput: 153.37 Mbit/s

95th percentile per-packet one-way delay: 86.795 ms

Loss rate: 0.50%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-19 20:24:18

End at: 2017-12-19 20:24:48

Below is generated by plot.py at 2017-12-20 00:16:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.98 Mbit/s

95th percentile per-packet one-way delay: 87.139 ms

Loss rate: 0.92%

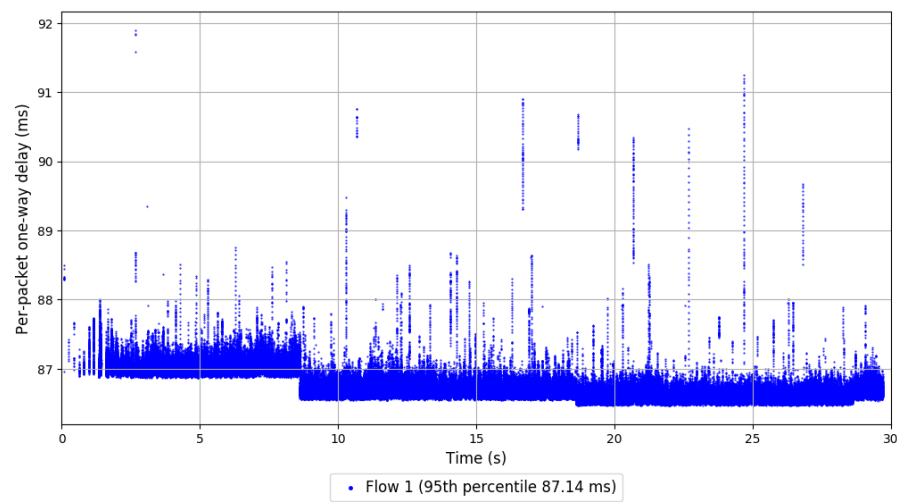
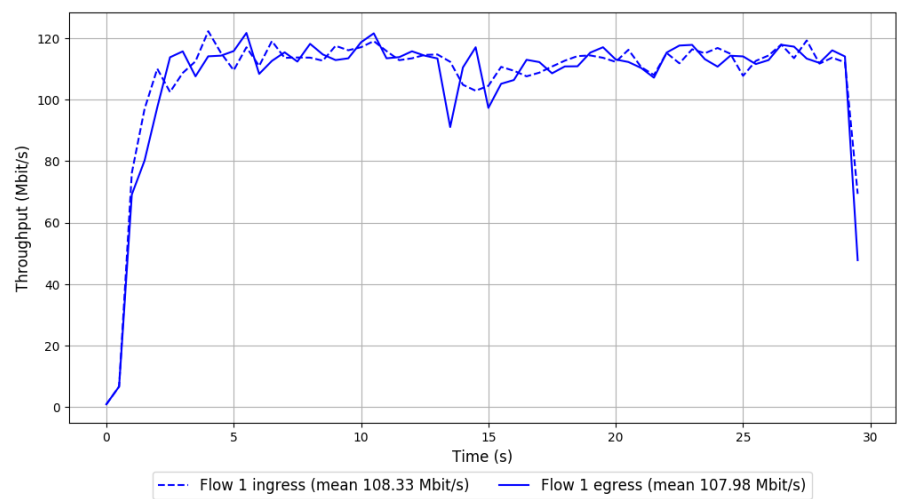
-- Flow 1:

Average throughput: 107.98 Mbit/s

95th percentile per-packet one-way delay: 87.139 ms

Loss rate: 0.92%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-19 20:36:34

End at: 2017-12-19 20:37:04

Below is generated by plot.py at 2017-12-20 00:16:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.57 Mbit/s

95th percentile per-packet one-way delay: 86.906 ms

Loss rate: 0.78%

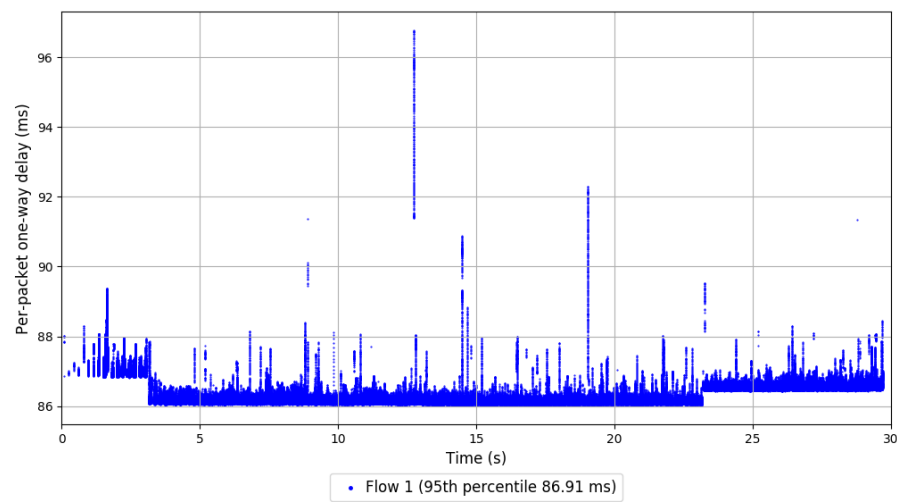
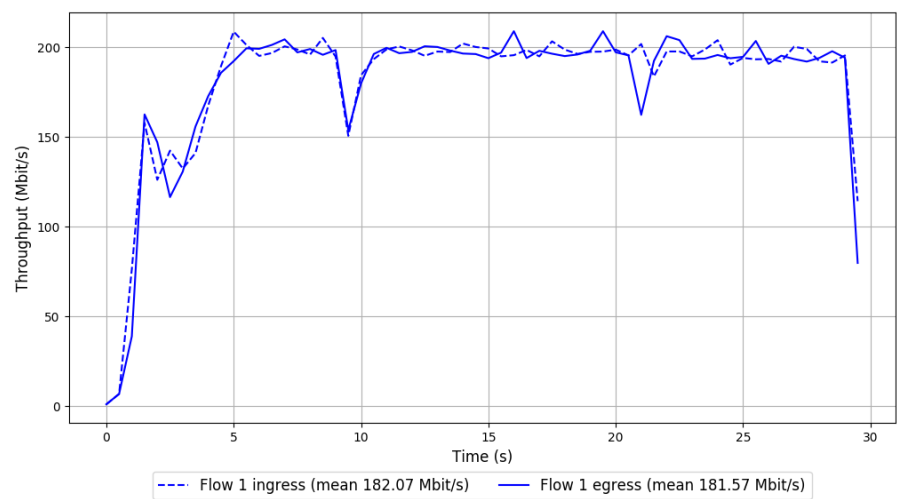
-- Flow 1:

Average throughput: 181.57 Mbit/s

95th percentile per-packet one-way delay: 86.906 ms

Loss rate: 0.78%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-19 20:48:55

End at: 2017-12-19 20:49:25

Below is generated by plot.py at 2017-12-20 00:16:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.61 Mbit/s

95th percentile per-packet one-way delay: 86.672 ms

Loss rate: 0.59%

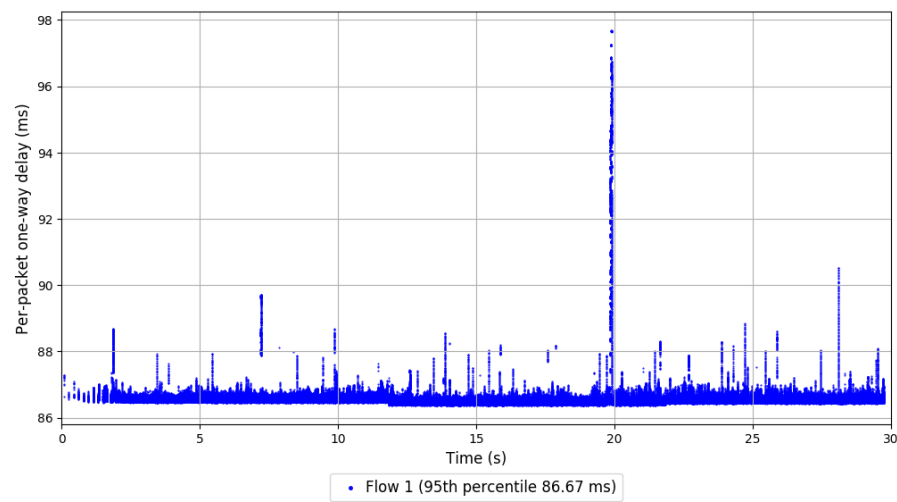
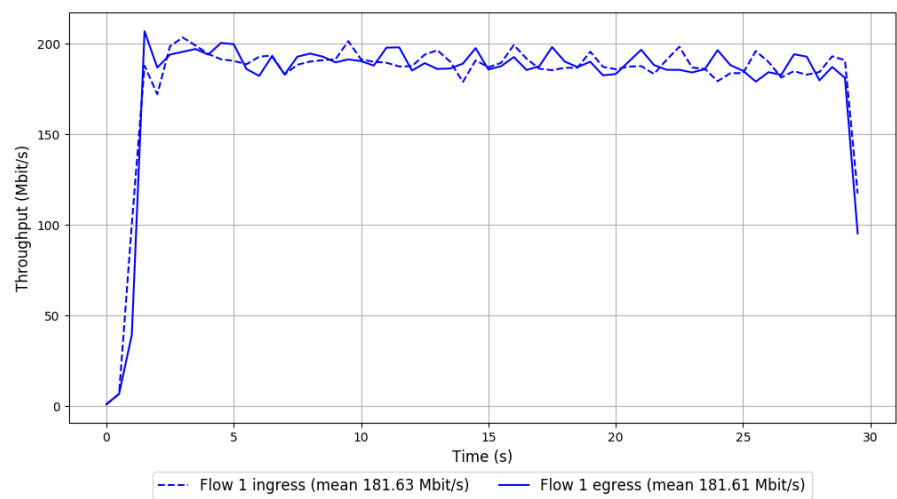
-- Flow 1:

Average throughput: 181.61 Mbit/s

95th percentile per-packet one-way delay: 86.672 ms

Loss rate: 0.59%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-19 21:01:47

End at: 2017-12-19 21:02:17

Below is generated by plot.py at 2017-12-20 00:16:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.59 Mbit/s

95th percentile per-packet one-way delay: 86.634 ms

Loss rate: 1.17%

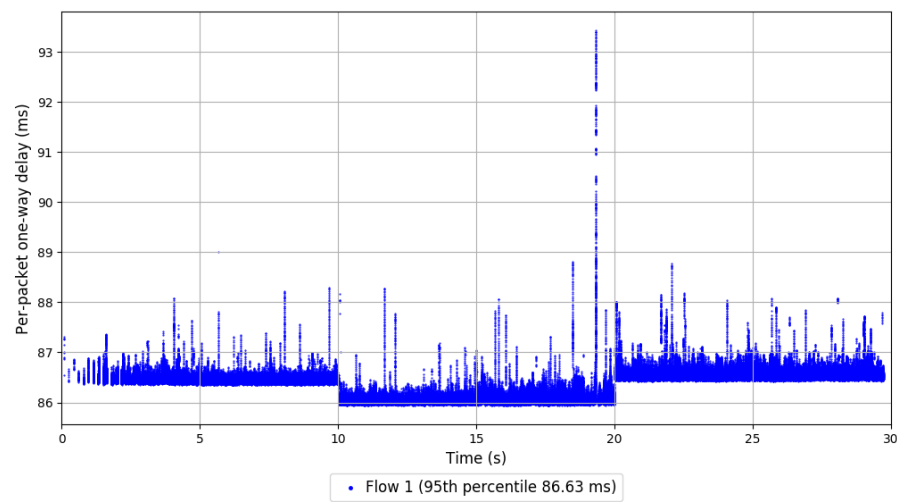
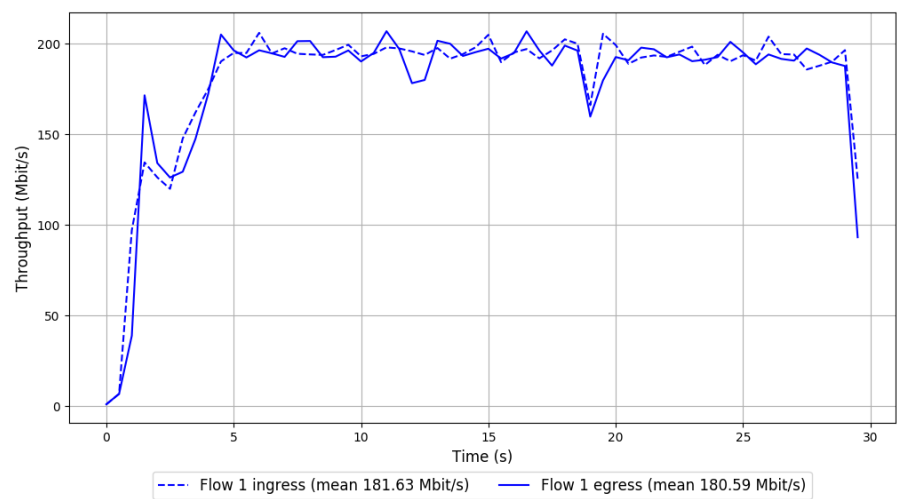
-- Flow 1:

Average throughput: 180.59 Mbit/s

95th percentile per-packet one-way delay: 86.634 ms

Loss rate: 1.17%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-19 21:14:24

End at: 2017-12-19 21:14:54

Below is generated by plot.py at 2017-12-20 00:16:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.05 Mbit/s

95th percentile per-packet one-way delay: 86.666 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 183.05 Mbit/s

95th percentile per-packet one-way delay: 86.666 ms

Loss rate: 0.94%

Run 10: Report of Indigo — Data Link

