

Pantheon Report

Generated at 2017-12-20 02:08:09 (UTC).

Data path: Colombia Ethernet (*remote*) → AWS Brazil 2 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).

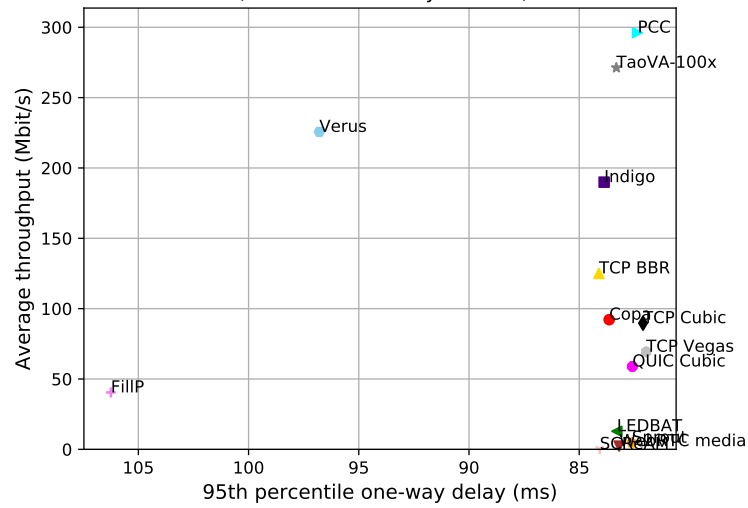
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

NTP offsets were measured against **gps.ntp.br** and have been applied to correct the timestamps in logs.

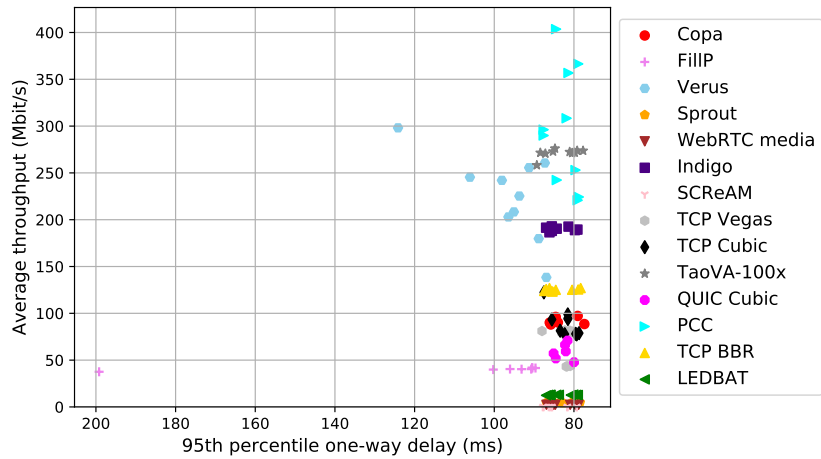
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fixlisp @ 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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeab30b267cde681
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 Colombia Ethernet to AWS Brazil 2 Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from Colombia Ethernet to AWS Brazil 2 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	125.06	84.11	0.61
TCP Cubic	10	89.69	82.10	0.61
LEDBAT	10	12.87	83.29	1.12
PCC	10	296.17	82.35	7.10
QUIC Cubic	6	58.90	82.59	0.75
SCReAM	10	0.22	84.07	0.51
WebRTC media	7	2.28	83.19	0.67
Sprout	9	4.69	82.61	0.68
TaoVA-100x	10	271.21	83.31	0.60
TCP Vegas	10	69.36	81.96	0.63
Verus	10	225.65	96.79	1.18
Copa	10	92.18	83.64	0.62
FillP	8	40.46	106.25	16.81
Indigo	9	189.91	83.87	0.59

Run 1: Statistics of TCP BBR

Start at: 2017-12-19 19:32:57

End at: 2017-12-19 19:33:27

Local clock offset: 9.377 ms

Remote clock offset: -4.777 ms

Below is generated by plot.py at 2017-12-20 01:38:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 123.86 Mbit/s

95th percentile per-packet one-way delay: 87.481 ms

Loss rate: 0.60%

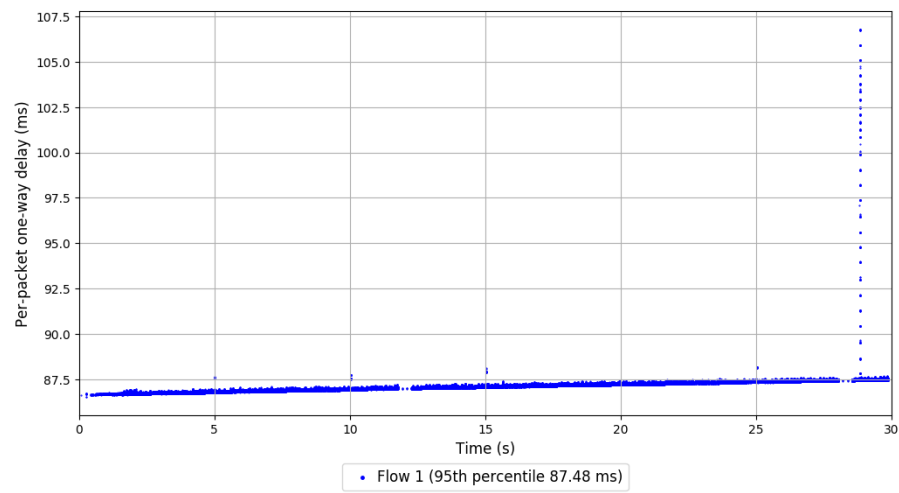
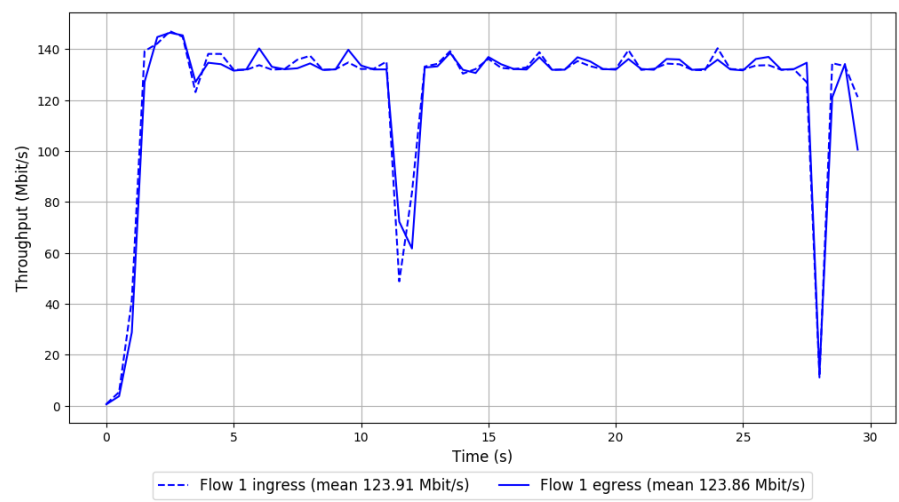
-- Flow 1:

Average throughput: 123.86 Mbit/s

95th percentile per-packet one-way delay: 87.481 ms

Loss rate: 0.60%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-19 19:52:07

End at: 2017-12-19 19:52:37

Local clock offset: 7.655 ms

Remote clock offset: 2.689 ms

Below is generated by plot.py at 2017-12-20 01:38:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 126.98 Mbit/s

95th percentile per-packet one-way delay: 78.311 ms

Loss rate: 0.58%

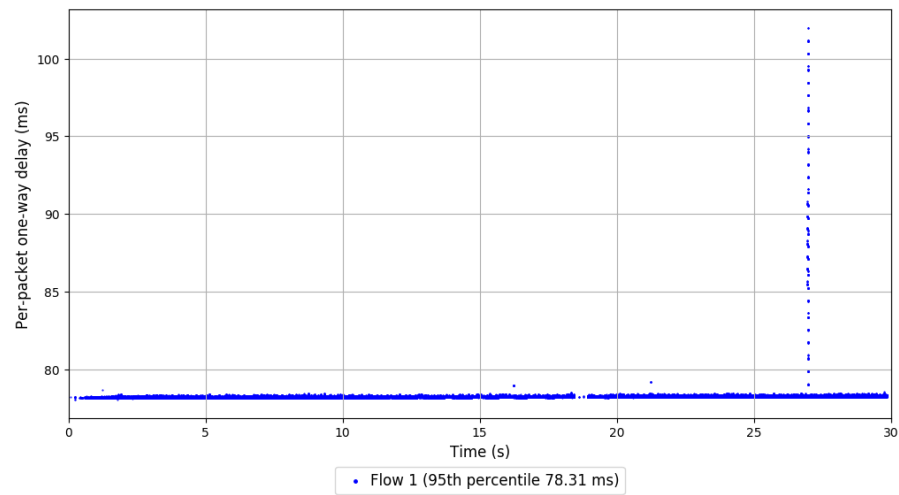
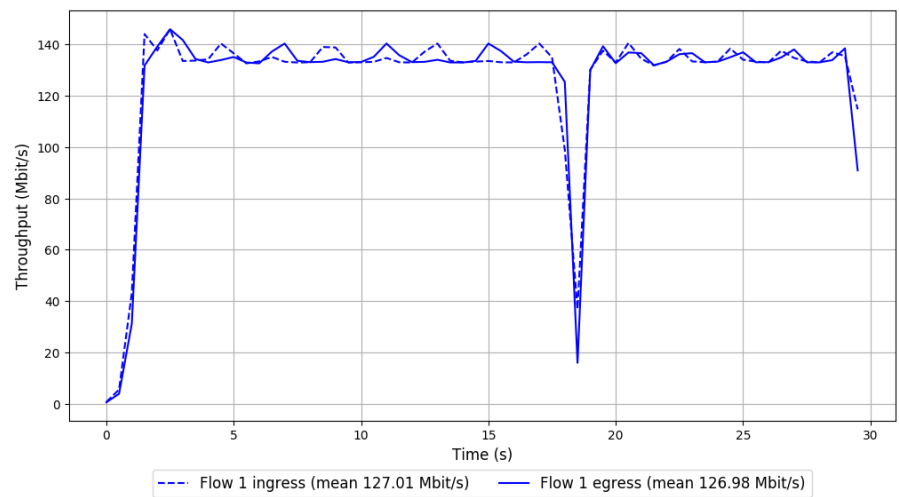
-- Flow 1:

Average throughput: 126.98 Mbit/s

95th percentile per-packet one-way delay: 78.311 ms

Loss rate: 0.58%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

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

End at: 2017-12-19 20:11:38

Local clock offset: 8.826 ms

Remote clock offset: -1.974 ms

Below is generated by plot.py at 2017-12-20 01:38:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 123.31 Mbit/s

95th percentile per-packet one-way delay: 85.346 ms

Loss rate: 0.60%

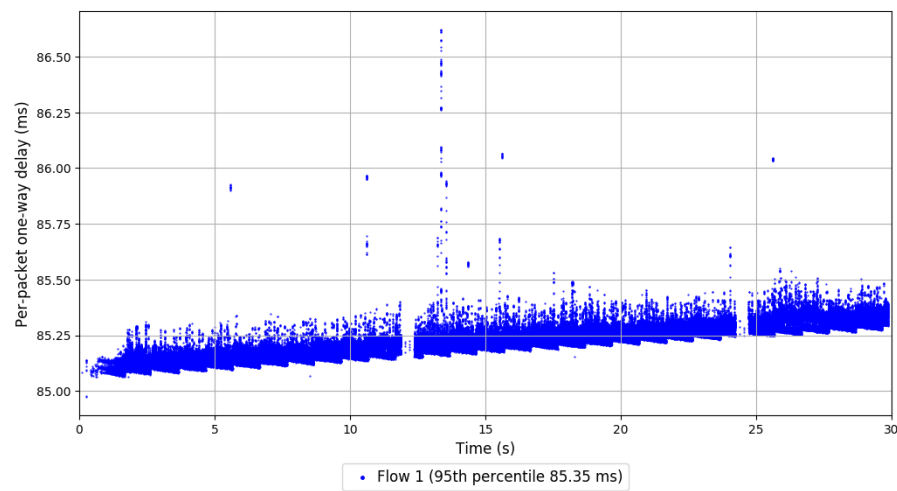
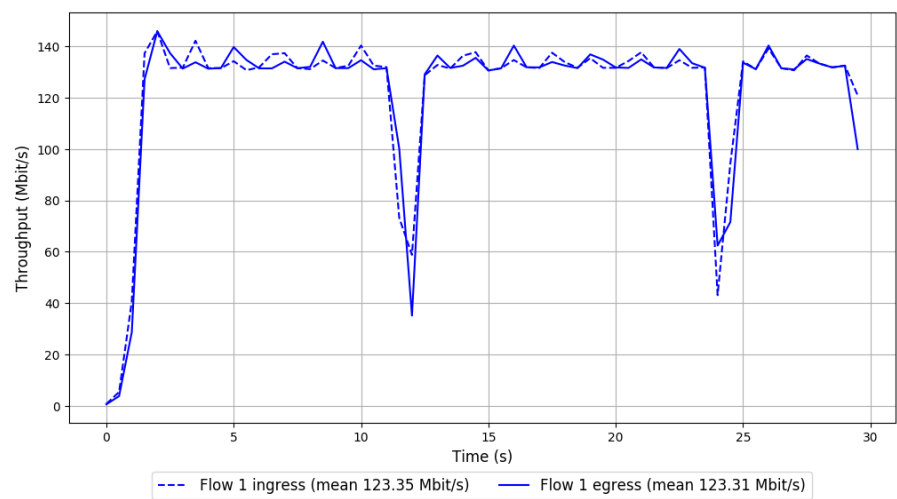
-- Flow 1:

Average throughput: 123.31 Mbit/s

95th percentile per-packet one-way delay: 85.346 ms

Loss rate: 0.60%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-19 20:30:08

End at: 2017-12-19 20:30:38

Local clock offset: 6.705 ms

Remote clock offset: 3.255 ms

Below is generated by plot.py at 2017-12-20 01:38:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 125.47 Mbit/s

95th percentile per-packet one-way delay: 78.939 ms

Loss rate: 0.63%

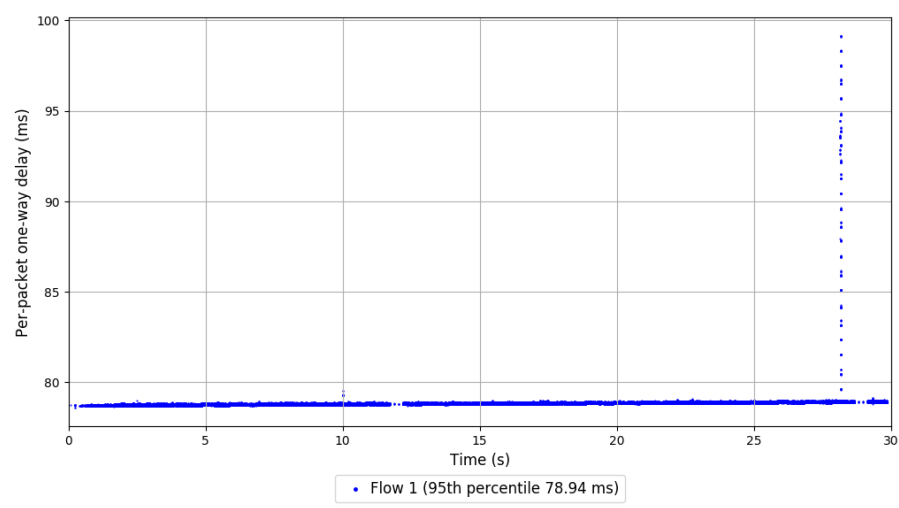
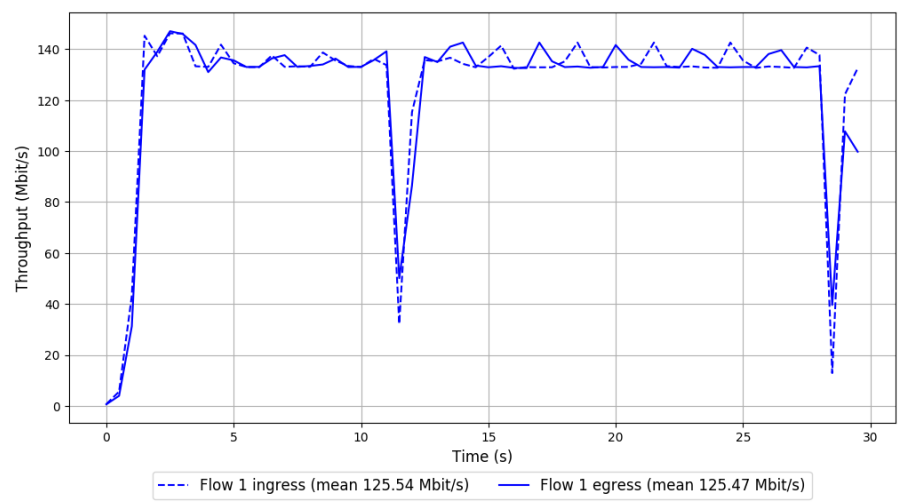
-- Flow 1:

Average throughput: 125.47 Mbit/s

95th percentile per-packet one-way delay: 78.939 ms

Loss rate: 0.63%

Run 4: Report of TCP BBR — Data Link

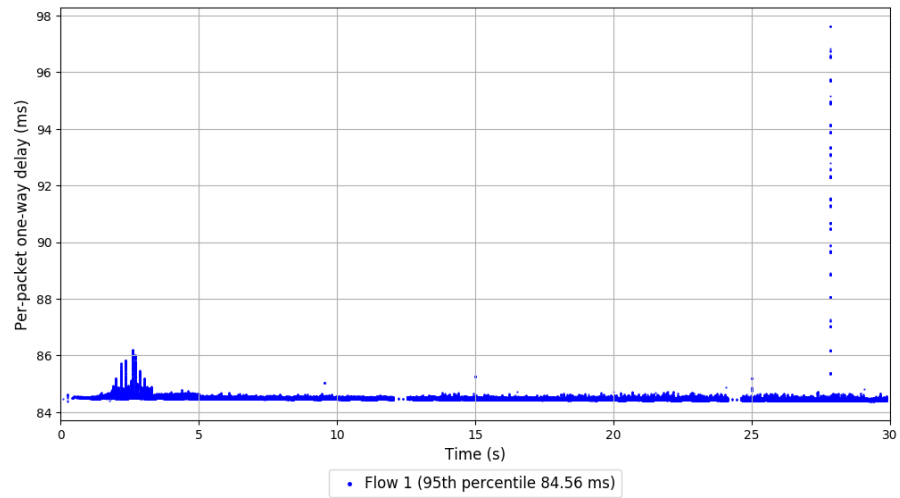
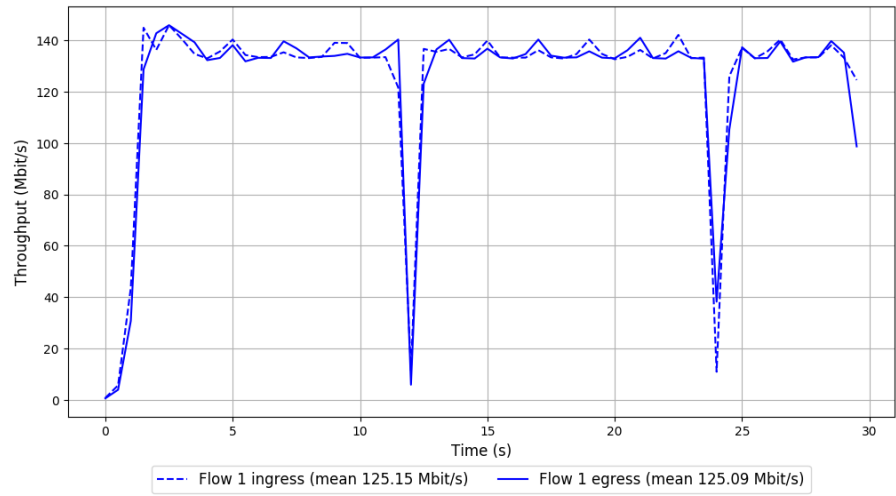


Run 5: Statistics of TCP BBR

Start at: 2017-12-19 20:49:18
End at: 2017-12-19 20:49:48
Local clock offset: 6.567 ms
Remote clock offset: -2.693 ms

Below is generated by plot.py at 2017-12-20 01:38:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 125.09 Mbit/s
95th percentile per-packet one-way delay: 84.563 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 125.09 Mbit/s
95th percentile per-packet one-way delay: 84.563 ms
Loss rate: 0.62%

Run 5: Report of TCP BBR — Data Link

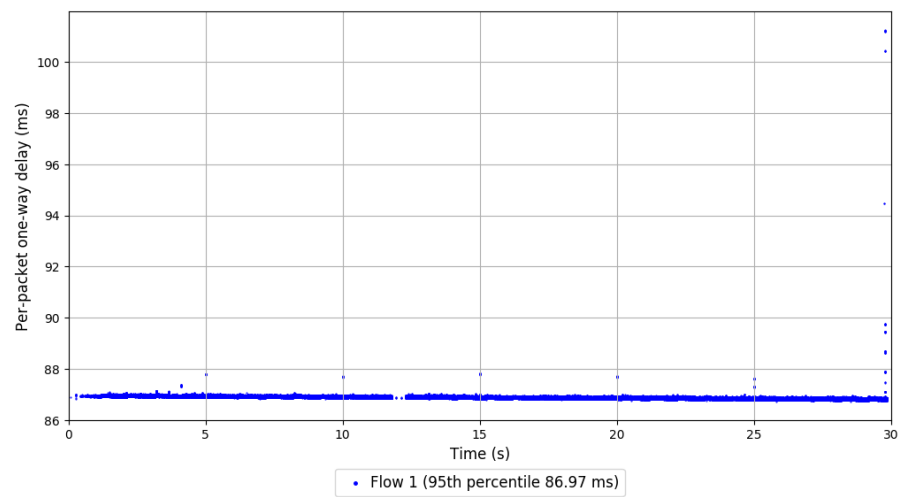
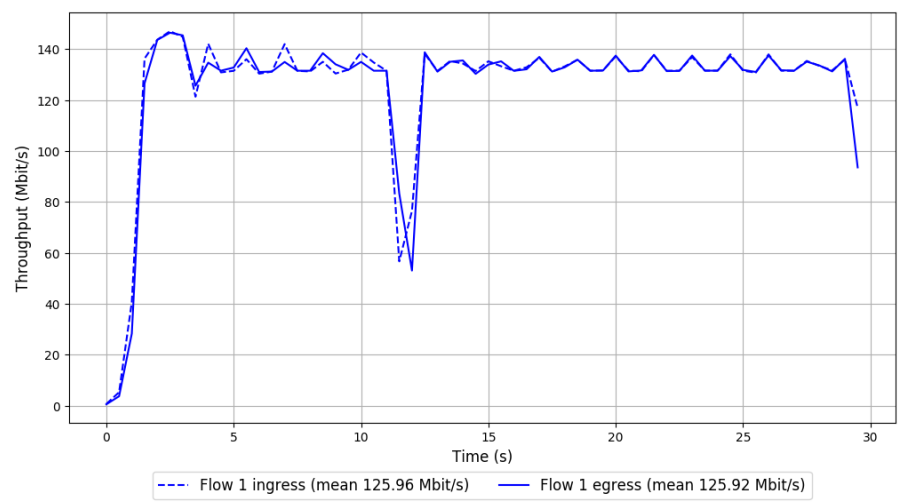


Run 6: Statistics of TCP BBR

Start at: 2017-12-19 21:08:18
End at: 2017-12-19 21:08:48
Local clock offset: 11.253 ms
Remote clock offset: -1.867 ms

Below is generated by plot.py at 2017-12-20 01:38:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 125.92 Mbit/s
95th percentile per-packet one-way delay: 86.973 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 125.92 Mbit/s
95th percentile per-packet one-way delay: 86.973 ms
Loss rate: 0.62%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-19 21:27:21

End at: 2017-12-19 21:27:51

Local clock offset: 11.776 ms

Remote clock offset: 3.385 ms

Below is generated by plot.py at 2017-12-20 01:38:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 125.16 Mbit/s

95th percentile per-packet one-way delay: 80.454 ms

Loss rate: 0.60%

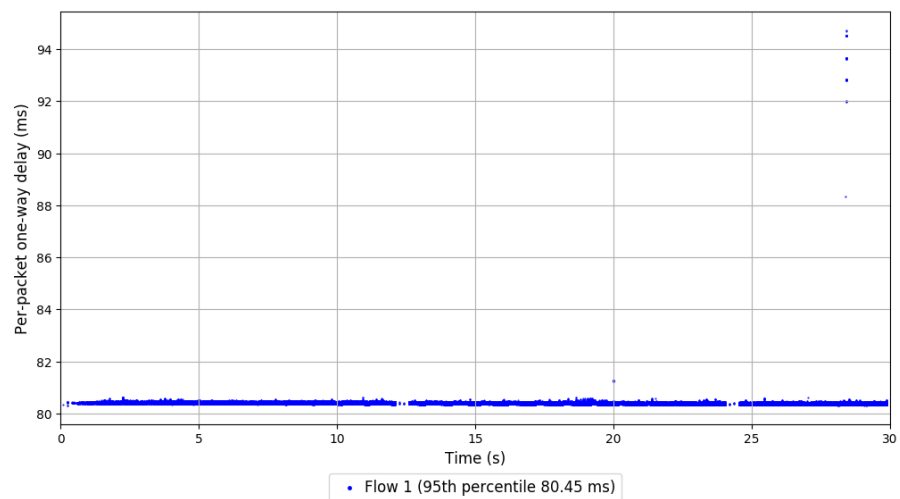
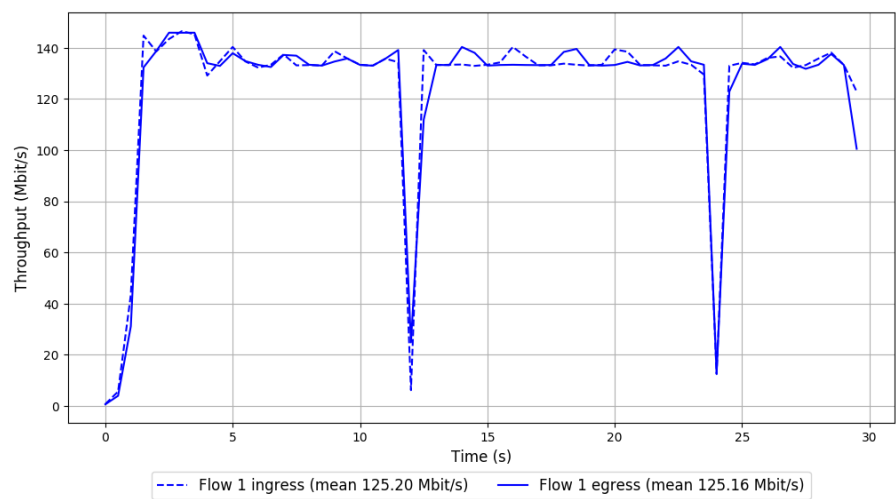
-- Flow 1:

Average throughput: 125.16 Mbit/s

95th percentile per-packet one-way delay: 80.454 ms

Loss rate: 0.60%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-19 21:46:28

End at: 2017-12-19 21:46:58

Local clock offset: 11.013 ms

Remote clock offset: -2.52 ms

Below is generated by plot.py at 2017-12-20 01:38:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 126.95 Mbit/s

95th percentile per-packet one-way delay: 86.140 ms

Loss rate: 0.60%

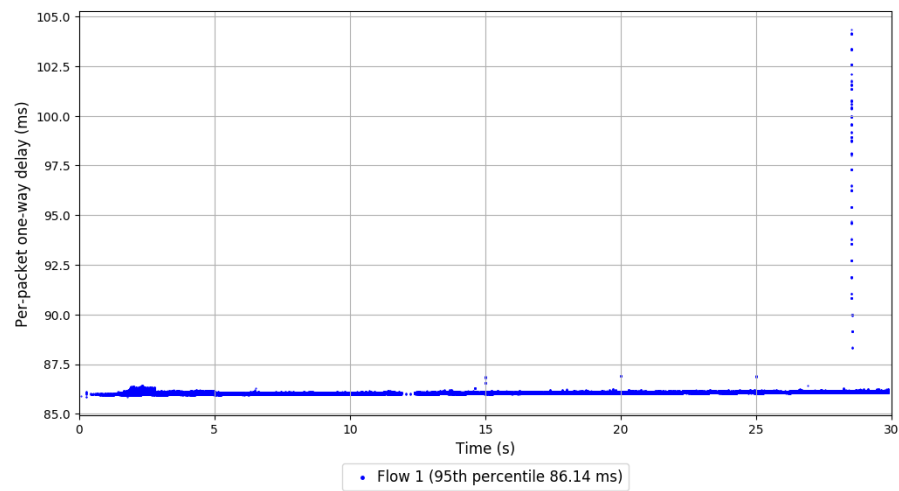
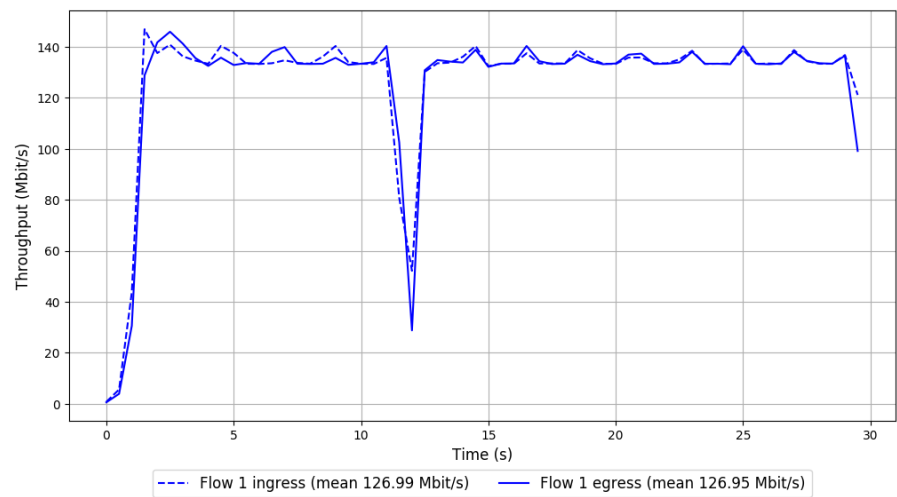
-- Flow 1:

Average throughput: 126.95 Mbit/s

95th percentile per-packet one-way delay: 86.140 ms

Loss rate: 0.60%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-19 22:05:33

End at: 2017-12-19 22:06:03

Local clock offset: 8.029 ms

Remote clock offset: -2.469 ms

Below is generated by plot.py at 2017-12-20 01:40:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 123.48 Mbit/s

95th percentile per-packet one-way delay: 85.589 ms

Loss rate: 0.61%

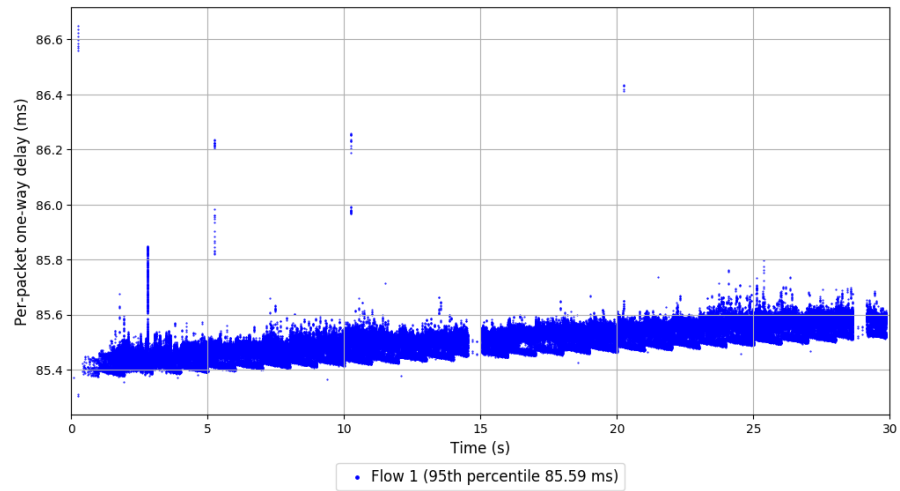
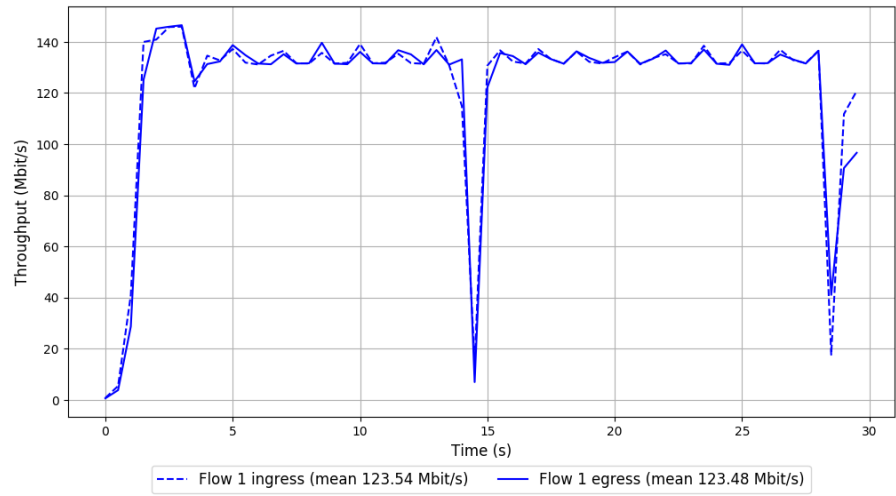
-- Flow 1:

Average throughput: 123.48 Mbit/s

95th percentile per-packet one-way delay: 85.589 ms

Loss rate: 0.61%

Run 9: Report of TCP BBR — Data Link

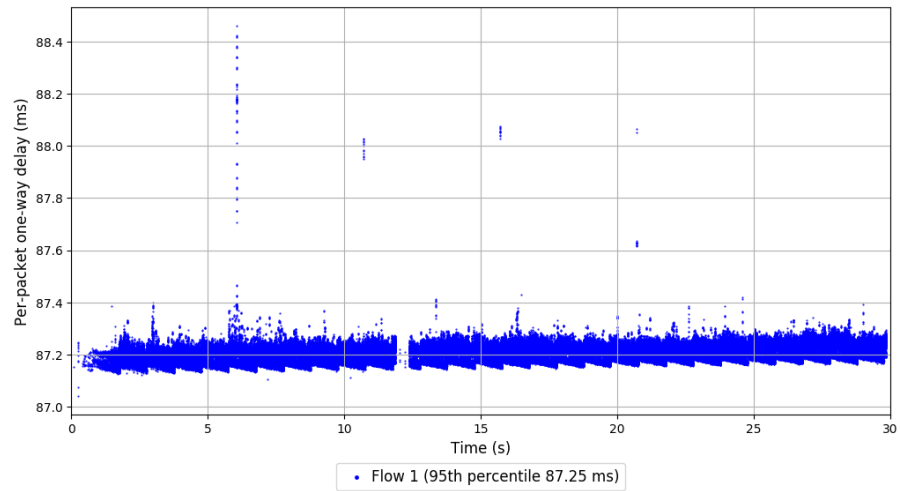
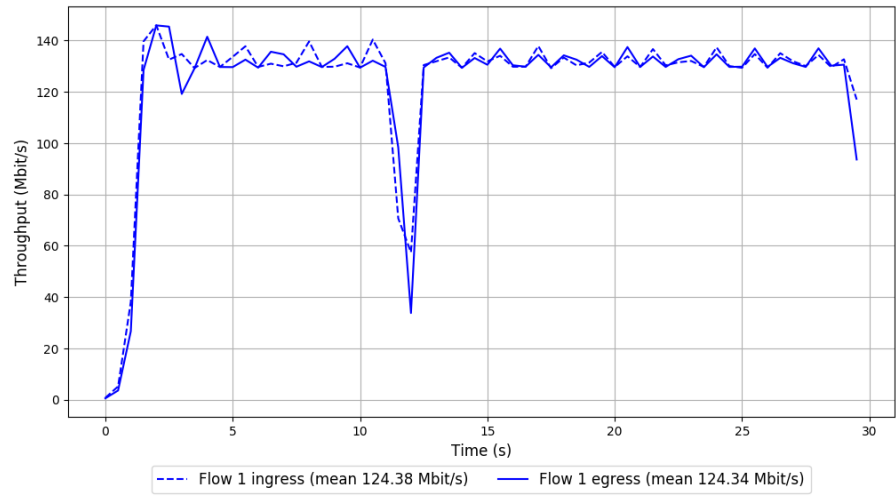


Run 10: Statistics of TCP BBR

Start at: 2017-12-19 22:24:37
End at: 2017-12-19 22:25:07
Local clock offset: 4.147 ms
Remote clock offset: -3.068 ms

Below is generated by plot.py at 2017-12-20 01:40:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 124.34 Mbit/s
95th percentile per-packet one-way delay: 87.254 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 124.34 Mbit/s
95th percentile per-packet one-way delay: 87.254 ms
Loss rate: 0.63%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-19 19:25:18

End at: 2017-12-19 19:25:48

Local clock offset: 19.919 ms

Remote clock offset: 1.483 ms

Below is generated by plot.py at 2017-12-20 01:40:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.83 Mbit/s

95th percentile per-packet one-way delay: 78.715 ms

Loss rate: 0.65%

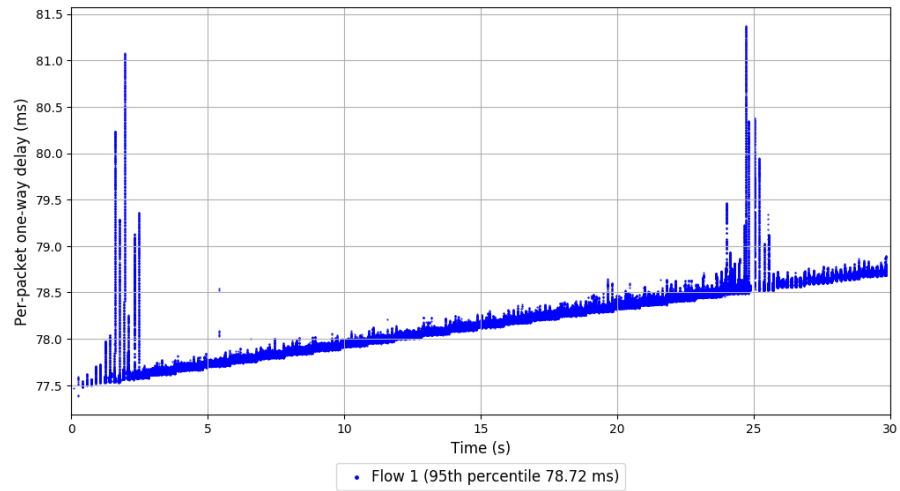
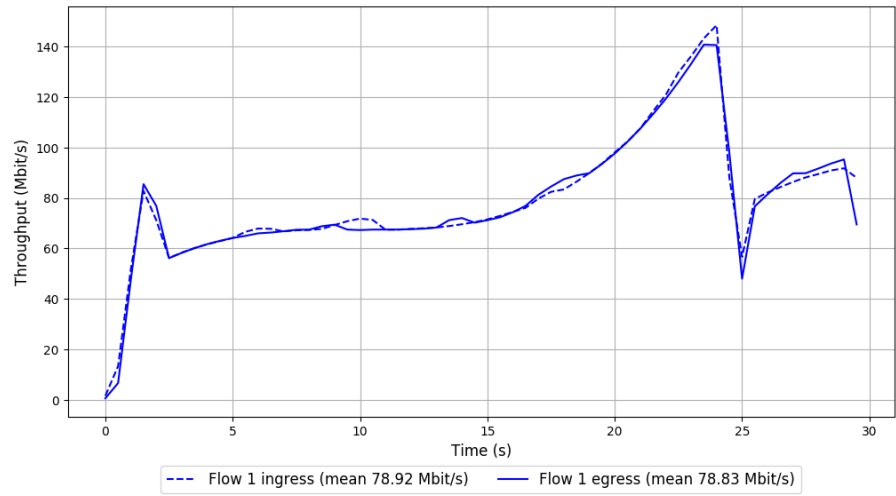
-- Flow 1:

Average throughput: 78.83 Mbit/s

95th percentile per-packet one-way delay: 78.715 ms

Loss rate: 0.65%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-19 19:44:26

End at: 2017-12-19 19:44:56

Local clock offset: 4.757 ms

Remote clock offset: 0.381 ms

Below is generated by plot.py at 2017-12-20 01:40:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 98.87 Mbit/s

95th percentile per-packet one-way delay: 81.547 ms

Loss rate: 0.84%

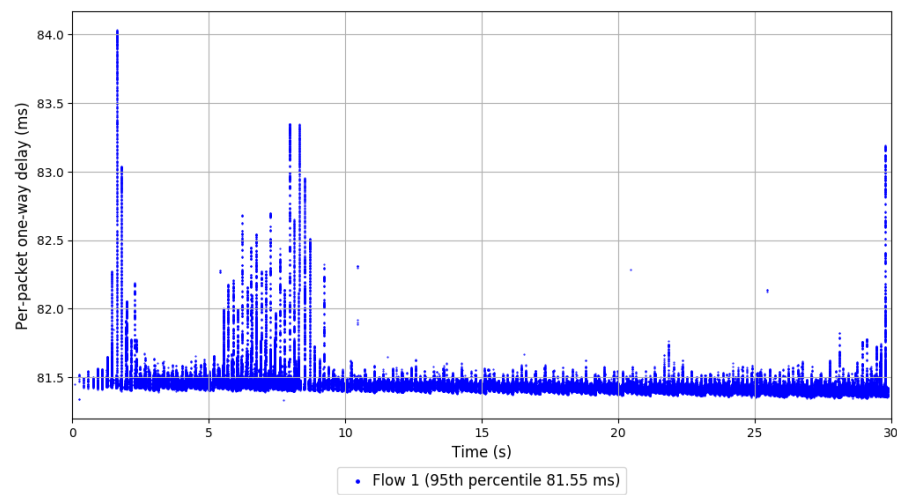
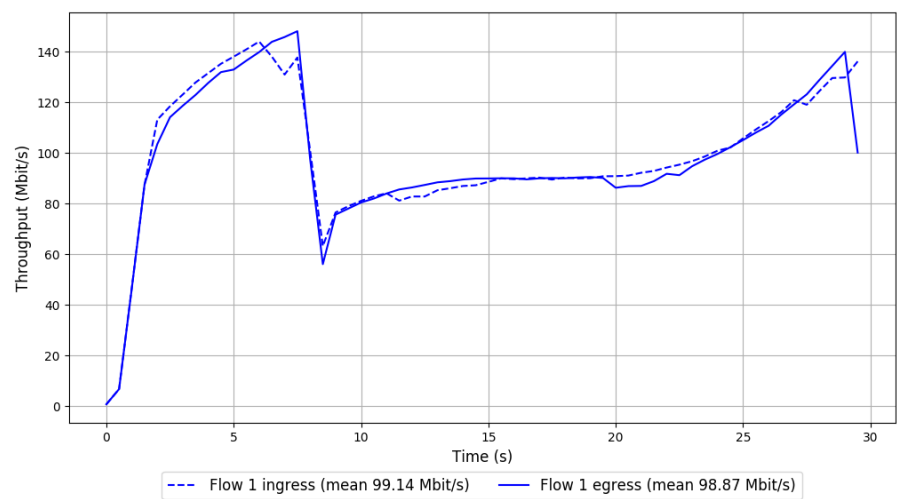
-- Flow 1:

Average throughput: 98.87 Mbit/s

95th percentile per-packet one-way delay: 81.547 ms

Loss rate: 0.84%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-19 20:03:31

End at: 2017-12-19 20:04:01

Local clock offset: 9.449 ms

Remote clock offset: -3.05 ms

Below is generated by plot.py at 2017-12-20 01:40:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.36 Mbit/s

95th percentile per-packet one-way delay: 87.545 ms

Loss rate: 0.29%

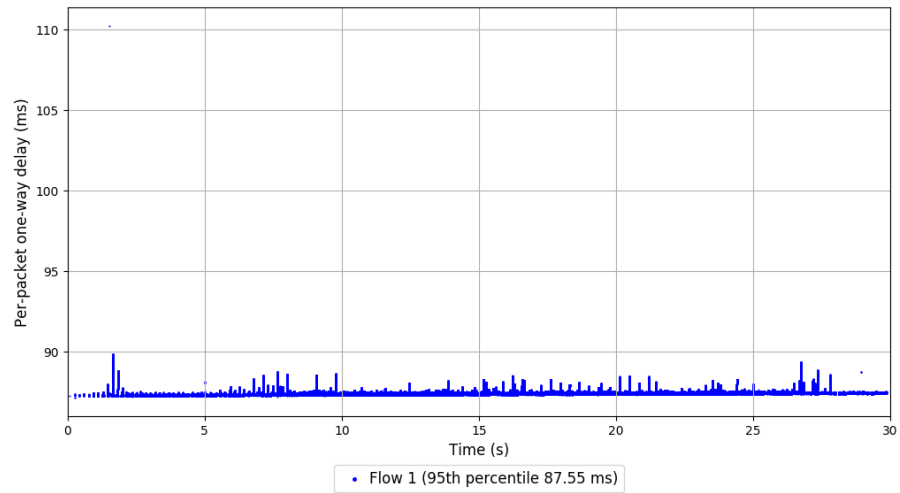
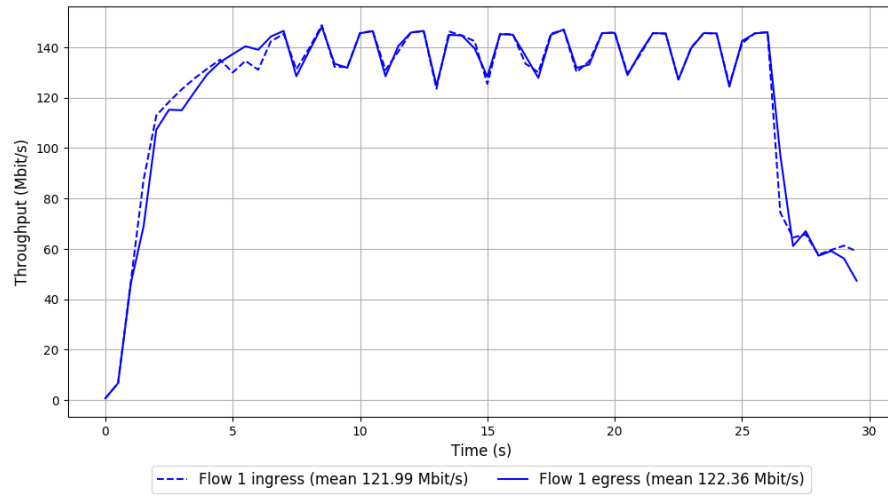
-- Flow 1:

Average throughput: 122.36 Mbit/s

95th percentile per-packet one-way delay: 87.545 ms

Loss rate: 0.29%

Run 3: Report of TCP Cubic — Data Link

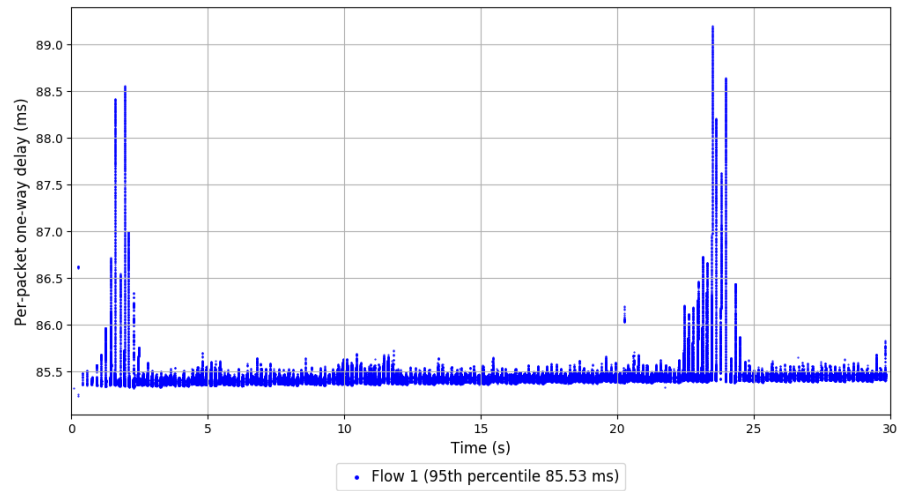
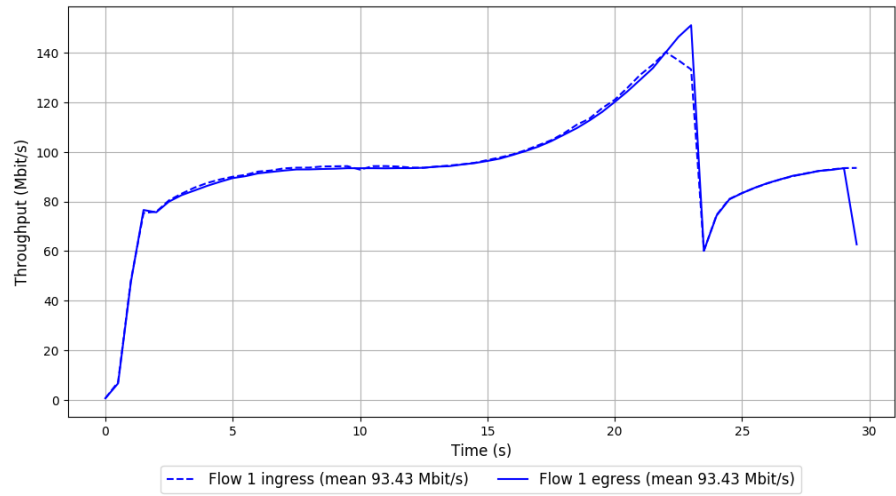


Run 4: Statistics of TCP Cubic

Start at: 2017-12-19 20:22:31
End at: 2017-12-19 20:23:01
Local clock offset: 6.328 ms
Remote clock offset: -2.492 ms

Below is generated by plot.py at 2017-12-20 01:40:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.43 Mbit/s
95th percentile per-packet one-way delay: 85.535 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 93.43 Mbit/s
95th percentile per-packet one-way delay: 85.535 ms
Loss rate: 0.56%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-19 20:41:40

End at: 2017-12-19 20:42:10

Local clock offset: 5.586 ms

Remote clock offset: 2.049 ms

Below is generated by plot.py at 2017-12-20 01:40:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.80 Mbit/s

95th percentile per-packet one-way delay: 81.515 ms

Loss rate: 0.55%

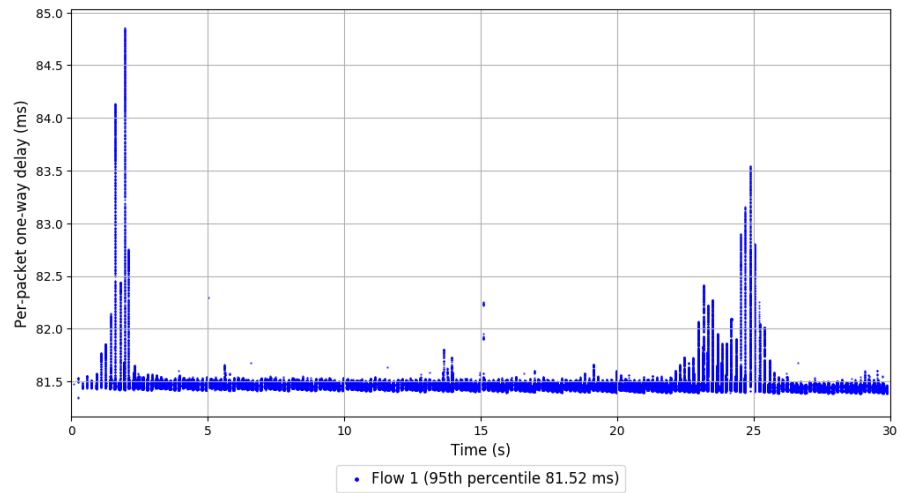
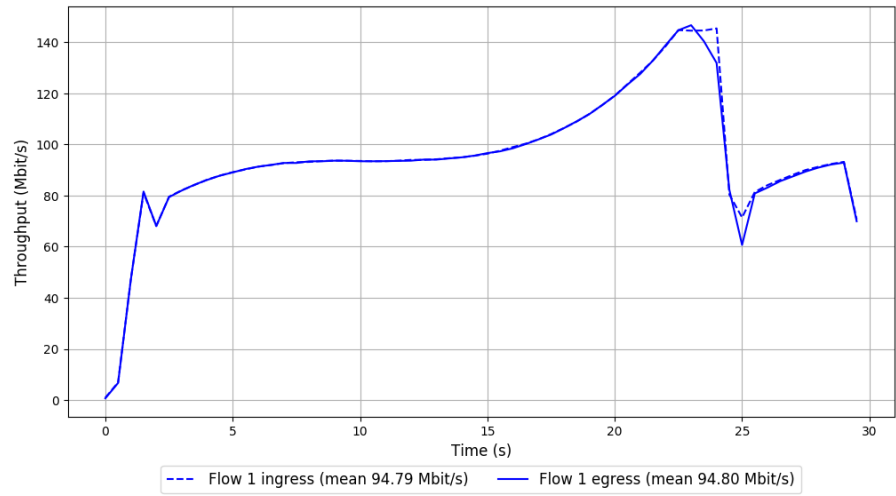
-- Flow 1:

Average throughput: 94.80 Mbit/s

95th percentile per-packet one-way delay: 81.515 ms

Loss rate: 0.55%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-19 21:00:46

End at: 2017-12-19 21:01:16

Local clock offset: 9.17 ms

Remote clock offset: 3.821 ms

Below is generated by plot.py at 2017-12-20 01:40:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.47 Mbit/s

95th percentile per-packet one-way delay: 79.312 ms

Loss rate: 0.67%

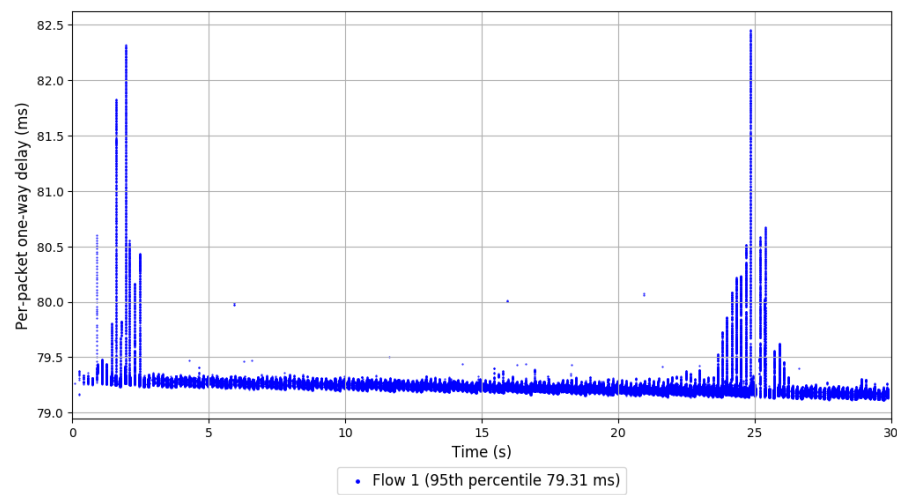
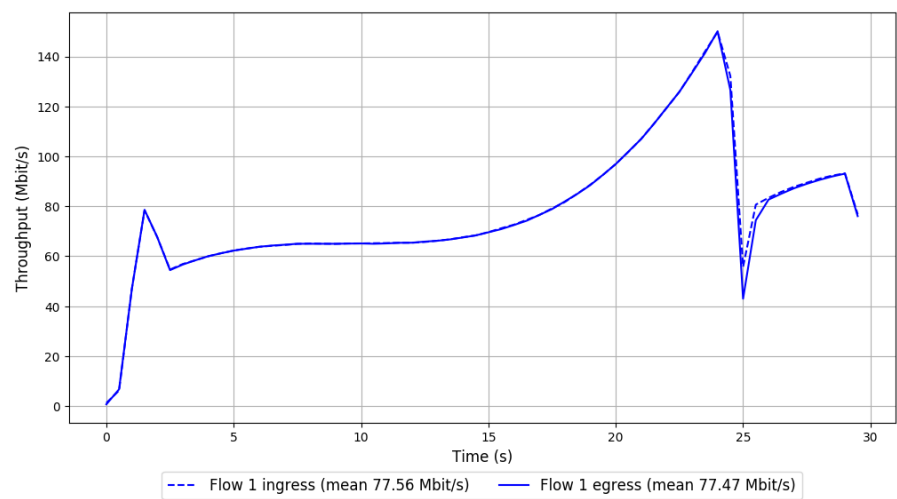
-- Flow 1:

Average throughput: 77.47 Mbit/s

95th percentile per-packet one-way delay: 79.312 ms

Loss rate: 0.67%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-19 21:19:48

End at: 2017-12-19 21:20:18

Local clock offset: 11.426 ms

Remote clock offset: 2.607 ms

Below is generated by plot.py at 2017-12-20 01:40:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.10 Mbit/s

95th percentile per-packet one-way delay: 79.596 ms

Loss rate: 0.67%

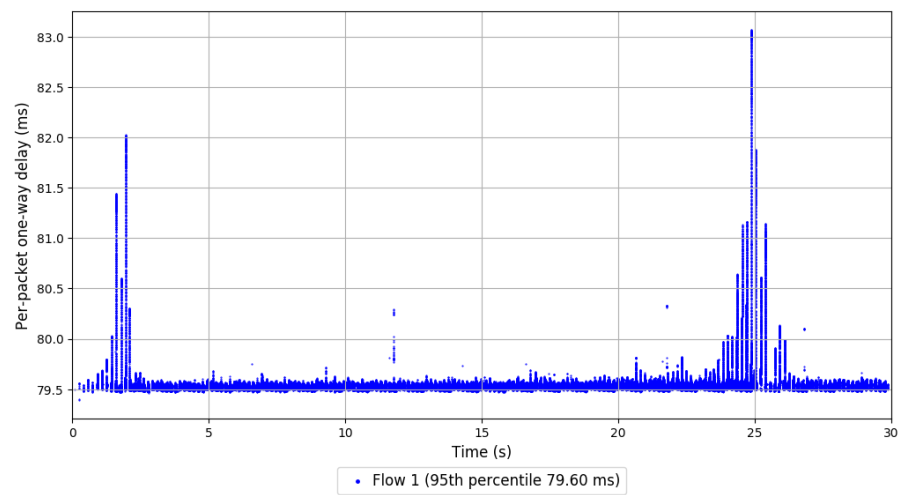
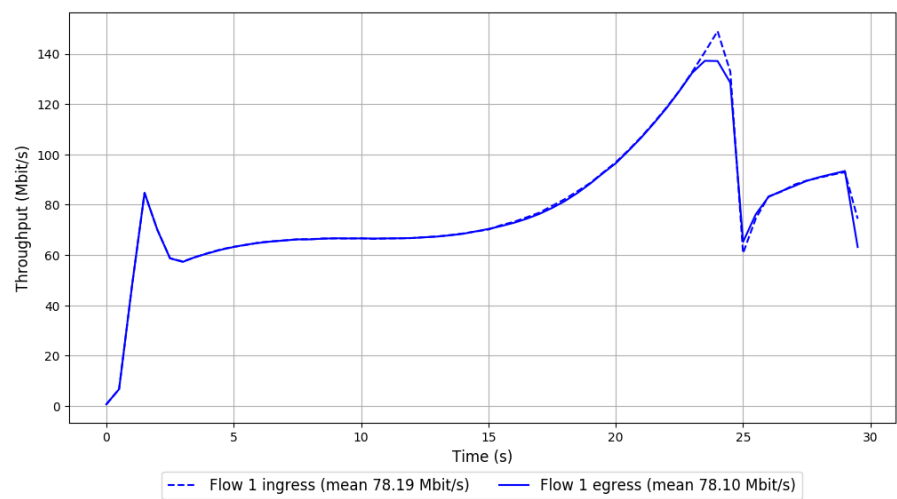
-- Flow 1:

Average throughput: 78.10 Mbit/s

95th percentile per-packet one-way delay: 79.596 ms

Loss rate: 0.67%

Run 7: Report of TCP Cubic — Data Link

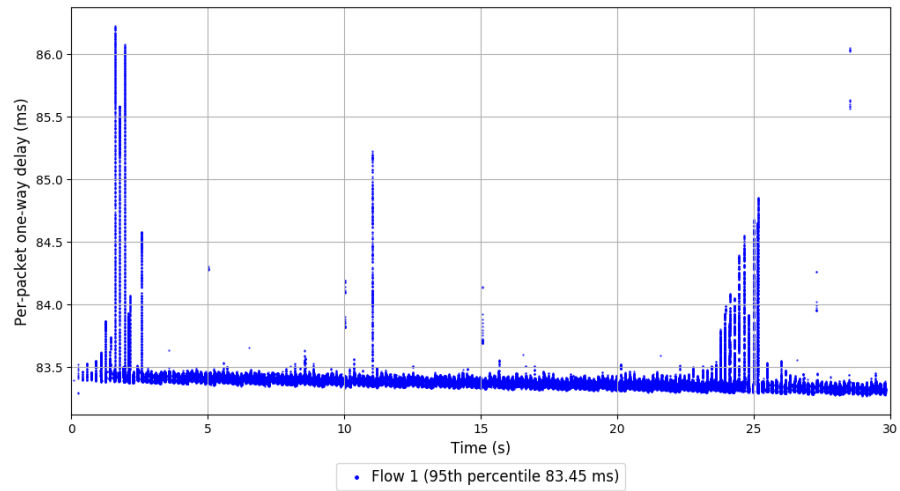
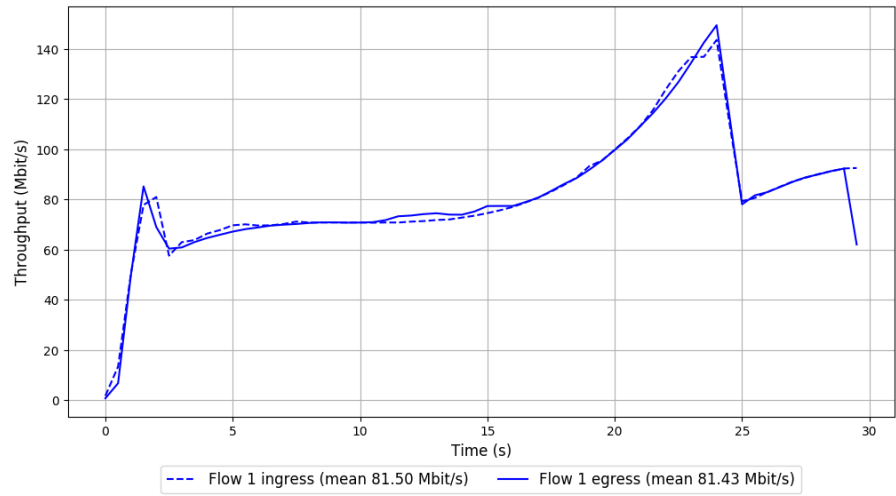


Run 8: Statistics of TCP Cubic

Start at: 2017-12-19 21:38:47
End at: 2017-12-19 21:39:17
Local clock offset: 13.455 ms
Remote clock offset: -1.616 ms

Below is generated by plot.py at 2017-12-20 01:40:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 81.43 Mbit/s
95th percentile per-packet one-way delay: 83.453 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 81.43 Mbit/s
95th percentile per-packet one-way delay: 83.453 ms
Loss rate: 0.64%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-19 21:57:53

End at: 2017-12-19 21:58:23

Local clock offset: 9.258 ms

Remote clock offset: 2.172 ms

Below is generated by plot.py at 2017-12-20 01:41:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.71 Mbit/s

95th percentile per-packet one-way delay: 82.314 ms

Loss rate: 0.67%

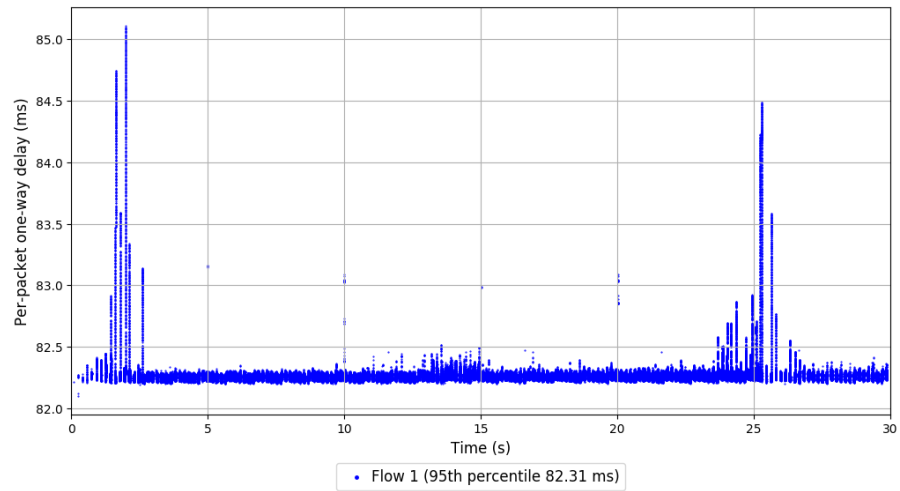
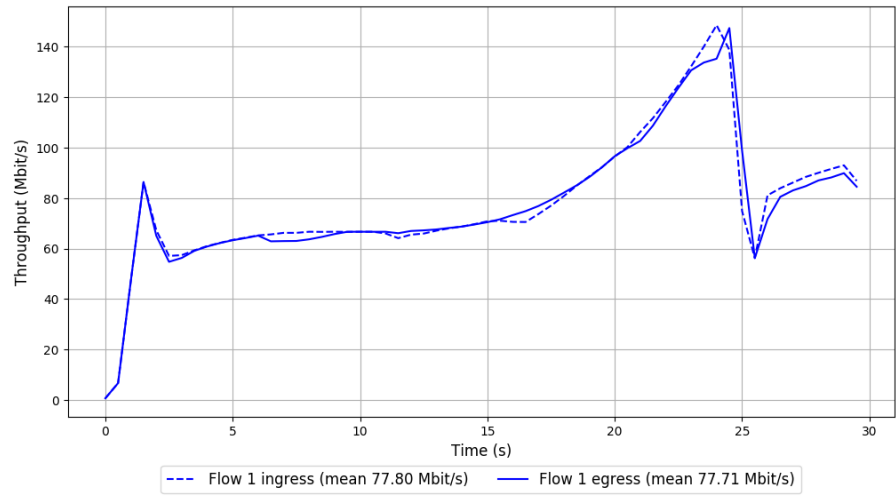
-- Flow 1:

Average throughput: 77.71 Mbit/s

95th percentile per-packet one-way delay: 82.314 ms

Loss rate: 0.67%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-19 22:16:57

End at: 2017-12-19 22:17:27

Local clock offset: 5.545 ms

Remote clock offset: 1.148 ms

Below is generated by plot.py at 2017-12-20 01:41:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.89 Mbit/s

95th percentile per-packet one-way delay: 81.516 ms

Loss rate: 0.56%

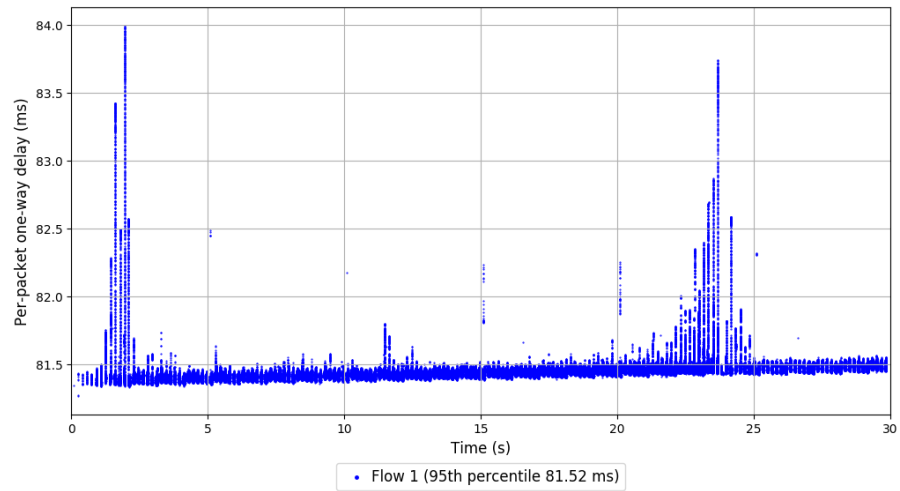
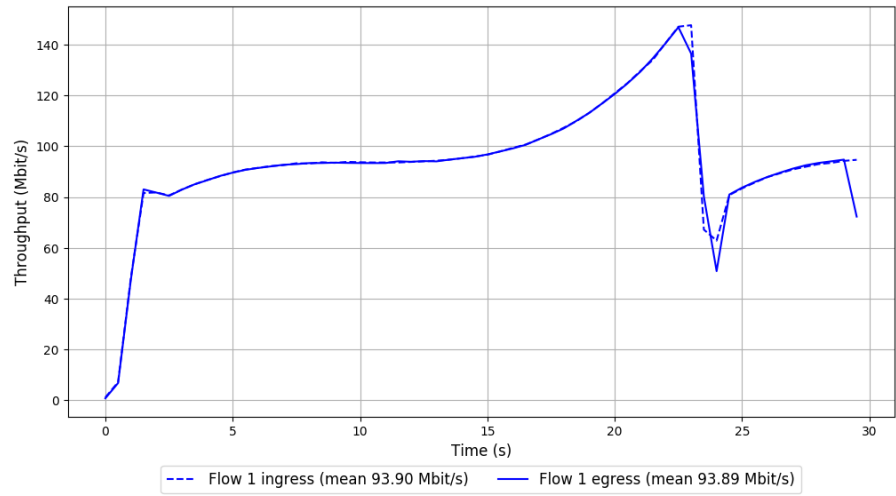
-- Flow 1:

Average throughput: 93.89 Mbit/s

95th percentile per-packet one-way delay: 81.516 ms

Loss rate: 0.56%

Run 10: Report of TCP Cubic — Data Link

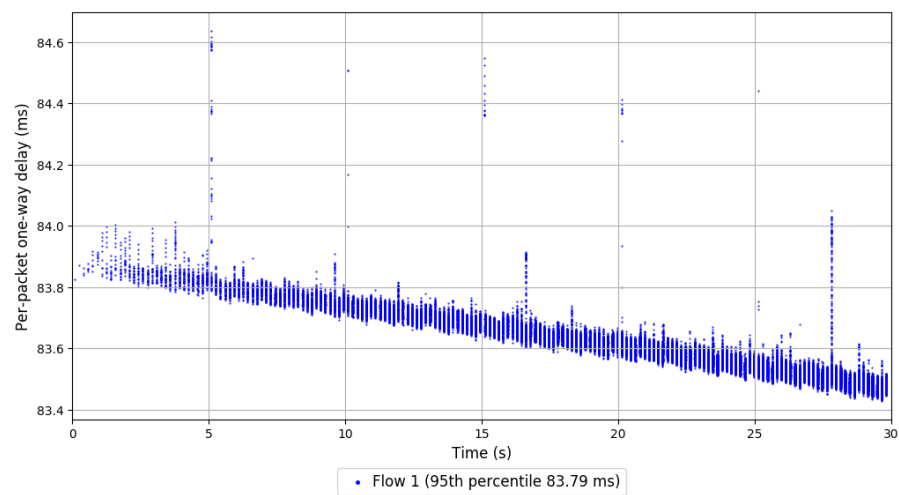
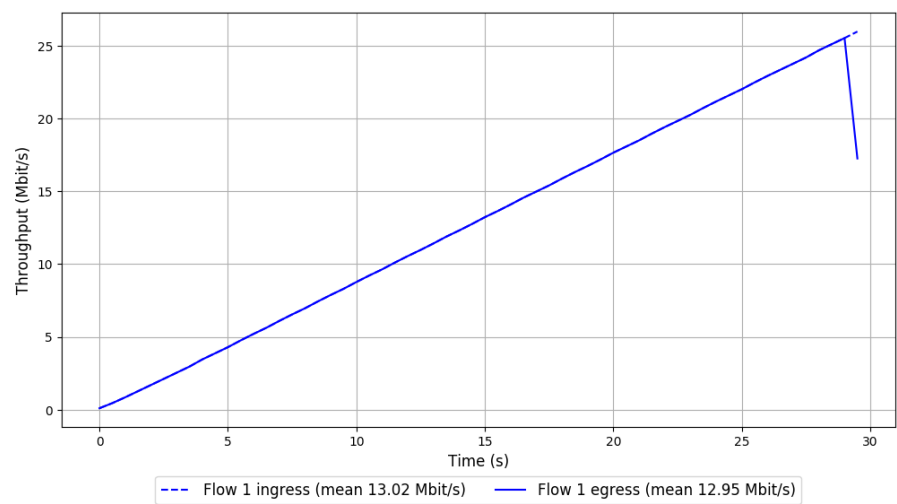


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-19 19:16:19
End at: 2017-12-19 19:16:49
Local clock offset: 8.618 ms
Remote clock offset: -5.298 ms

# Below is generated by plot.py at 2017-12-20 01:41:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.95 Mbit/s
95th percentile per-packet one-way delay: 83.792 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 12.95 Mbit/s
95th percentile per-packet one-way delay: 83.792 ms
Loss rate: 1.12%
```


Run 1: Report of LEDBAT — Data Link

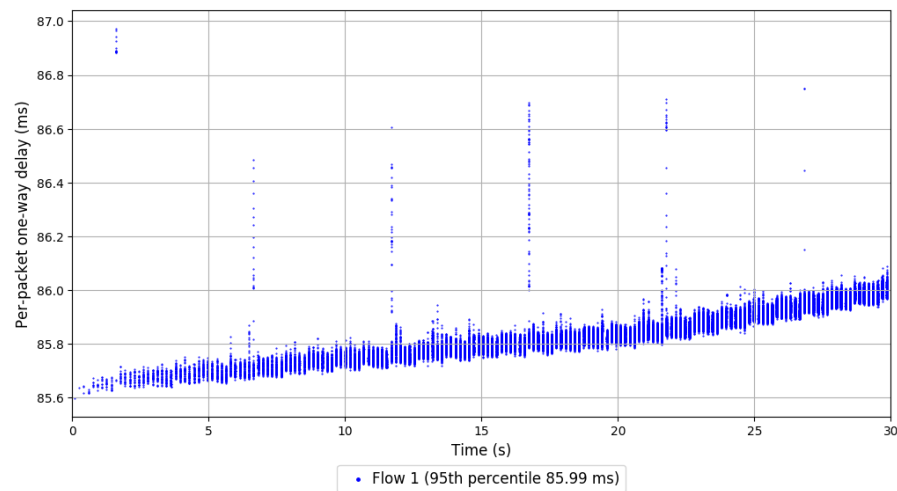
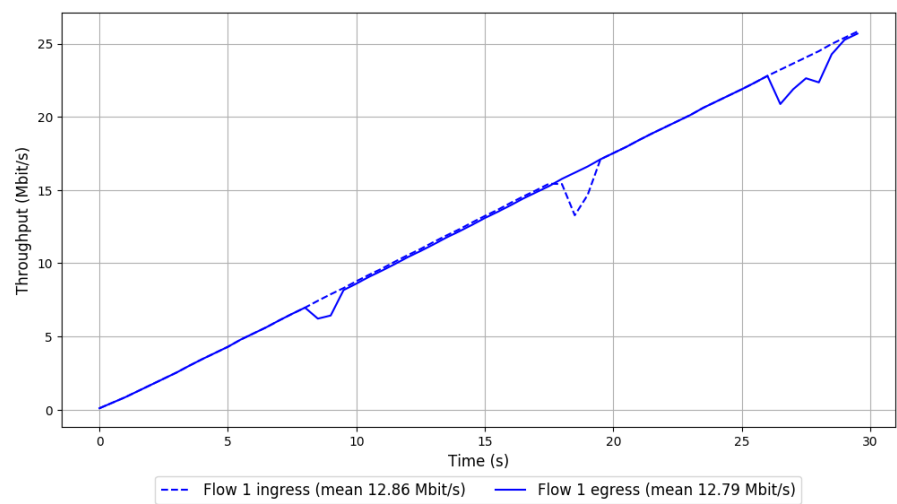


Run 2: Statistics of LEDBAT

Start at: 2017-12-19 19:35:27
End at: 2017-12-19 19:35:57
Local clock offset: 6.135 ms
Remote clock offset: -3.701 ms

Below is generated by plot.py at 2017-12-20 01:41:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.79 Mbit/s
95th percentile per-packet one-way delay: 85.992 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 12.79 Mbit/s
95th percentile per-packet one-way delay: 85.992 ms
Loss rate: 1.12%

Run 2: Report of LEDBAT — Data Link

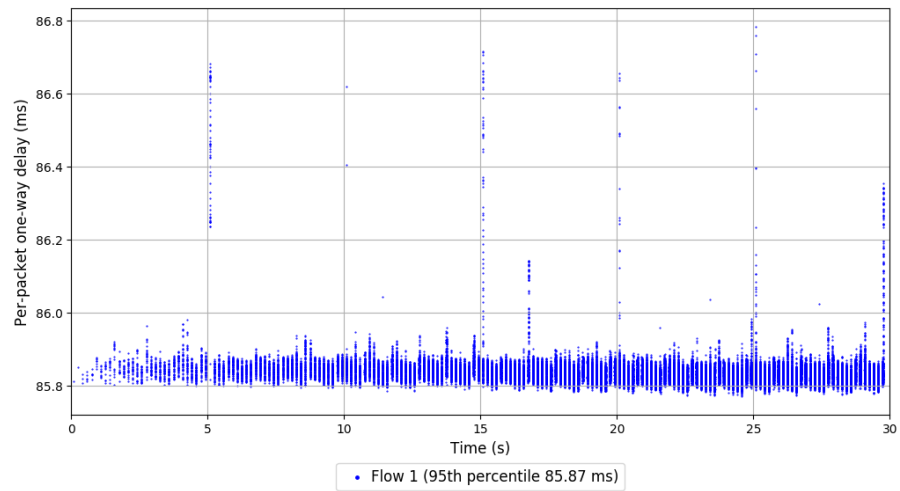
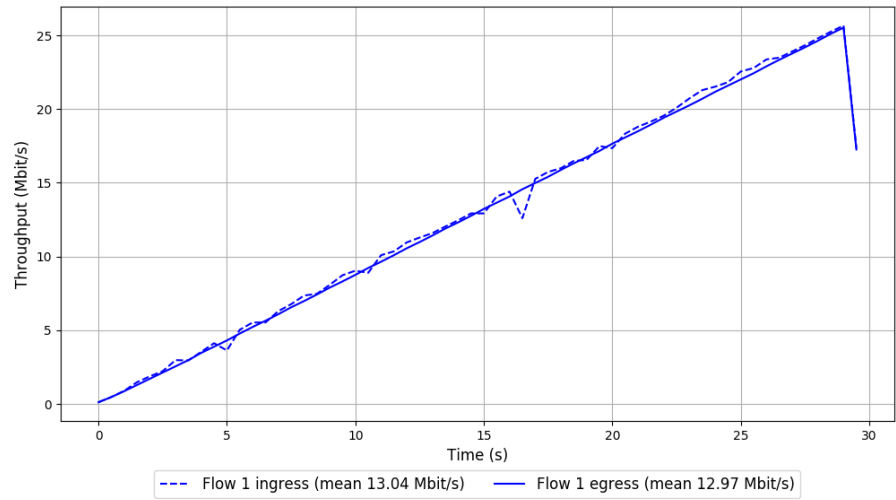


Run 3: Statistics of LEDBAT

Start at: 2017-12-19 19:54:37
End at: 2017-12-19 19:55:07
Local clock offset: 7.333 ms
Remote clock offset: -3.796 ms

Below is generated by plot.py at 2017-12-20 01:41:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.97 Mbit/s
95th percentile per-packet one-way delay: 85.874 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 12.97 Mbit/s
95th percentile per-packet one-way delay: 85.874 ms
Loss rate: 1.12%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-19 20:13:36

End at: 2017-12-19 20:14:06

Local clock offset: 7.945 ms

Remote clock offset: 2.414 ms

Below is generated by plot.py at 2017-12-20 01:41:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.66 Mbit/s

95th percentile per-packet one-way delay: 80.782 ms

Loss rate: 1.13%

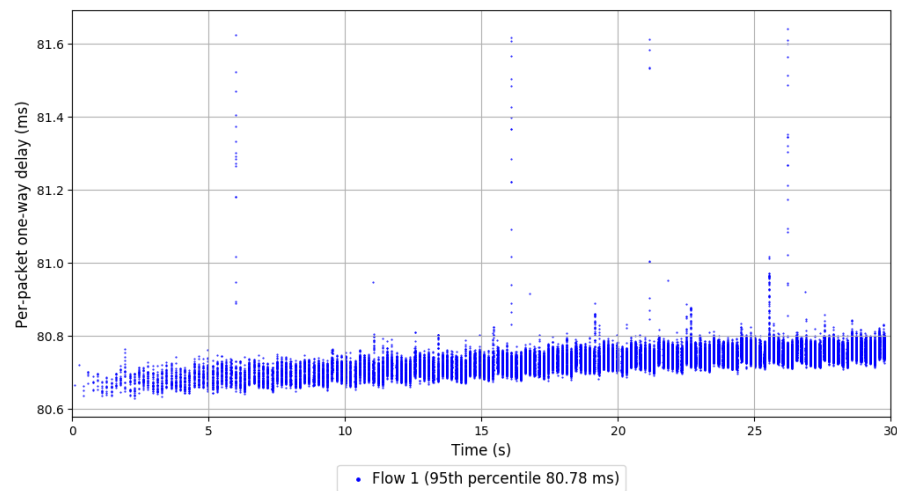
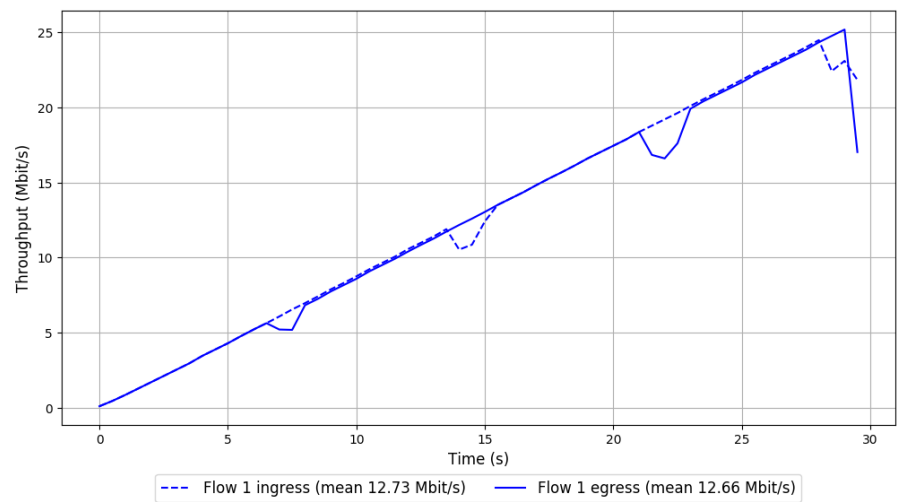
-- Flow 1:

Average throughput: 12.66 Mbit/s

95th percentile per-packet one-way delay: 80.782 ms

Loss rate: 1.13%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-19 20:32:36

End at: 2017-12-19 20:33:06

Local clock offset: 5.911 ms

Remote clock offset: 4.216 ms

Below is generated by plot.py at 2017-12-20 01:41:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.79 Mbit/s

95th percentile per-packet one-way delay: 79.027 ms

Loss rate: 1.12%

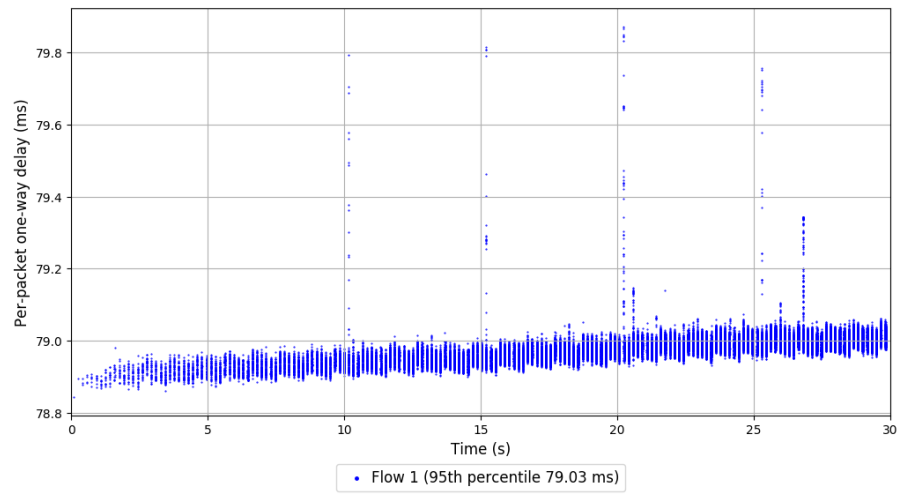
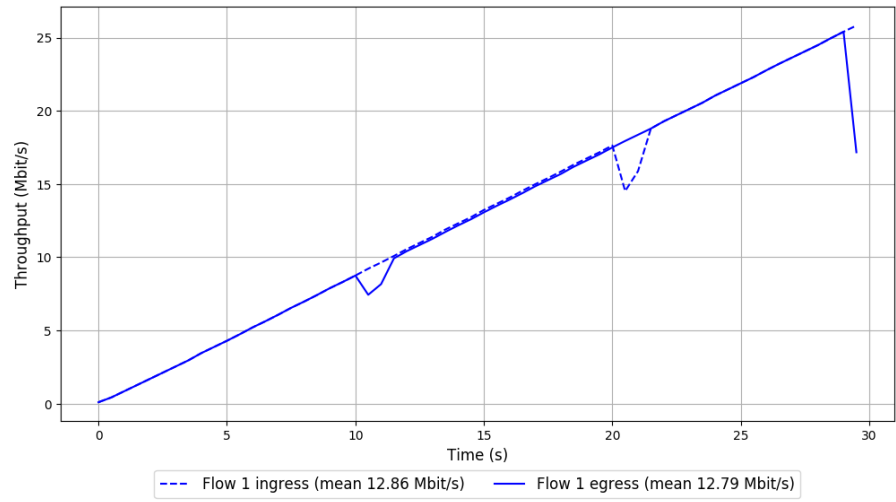
-- Flow 1:

Average throughput: 12.79 Mbit/s

95th percentile per-packet one-way delay: 79.027 ms

Loss rate: 1.12%

Run 5: Report of LEDBAT — Data Link

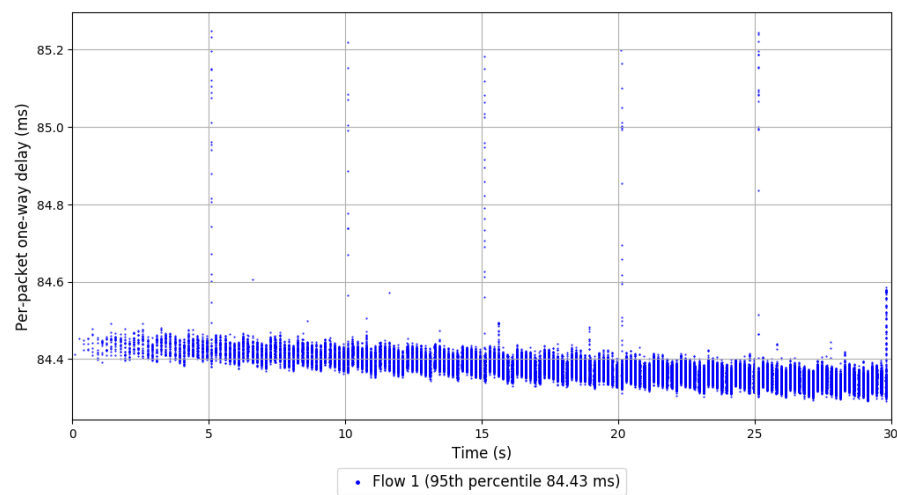
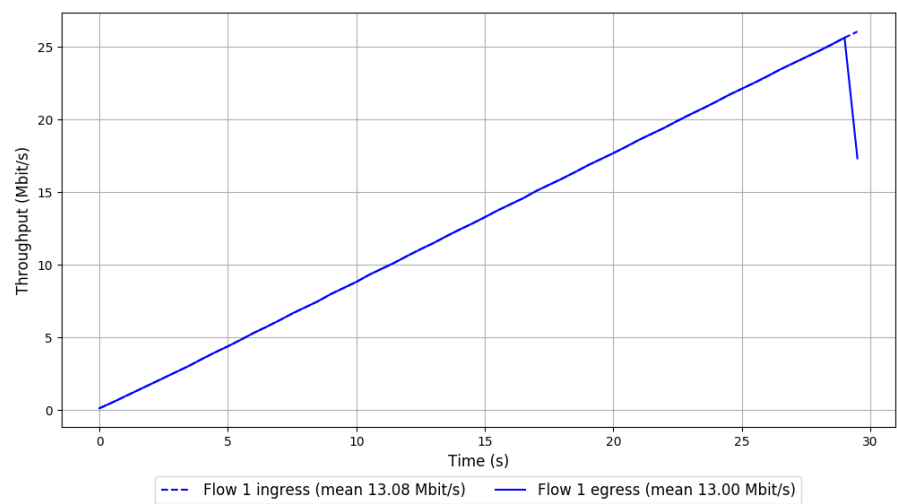


Run 6: Statistics of LEDBAT

Start at: 2017-12-19 20:51:46
End at: 2017-12-19 20:52:16
Local clock offset: 7.064 ms
Remote clock offset: -2.389 ms

Below is generated by plot.py at 2017-12-20 01:41:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.00 Mbit/s
95th percentile per-packet one-way delay: 84.427 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 13.00 Mbit/s
95th percentile per-packet one-way delay: 84.427 ms
Loss rate: 1.12%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-19 21:10:48

End at: 2017-12-19 21:11:18

Local clock offset: 11.998 ms

Remote clock offset: 3.746 ms

Below is generated by plot.py at 2017-12-20 01:41:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.97 Mbit/s

95th percentile per-packet one-way delay: 79.434 ms

Loss rate: 1.12%

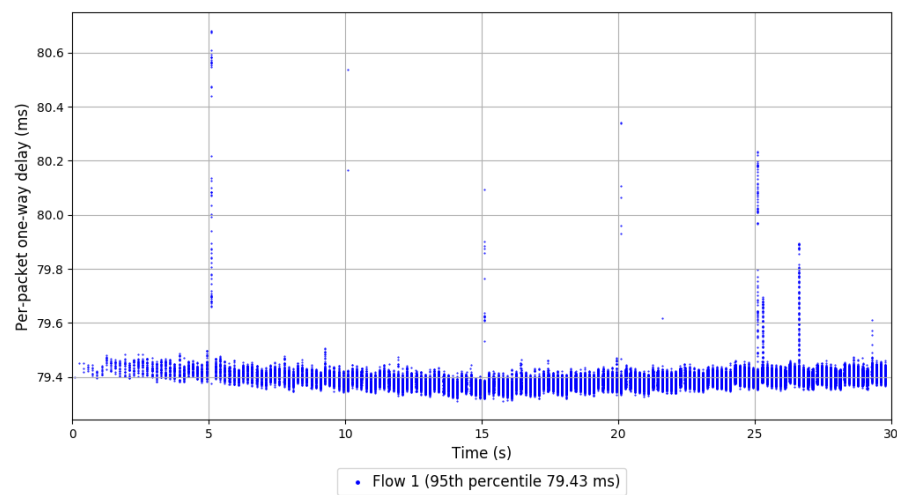
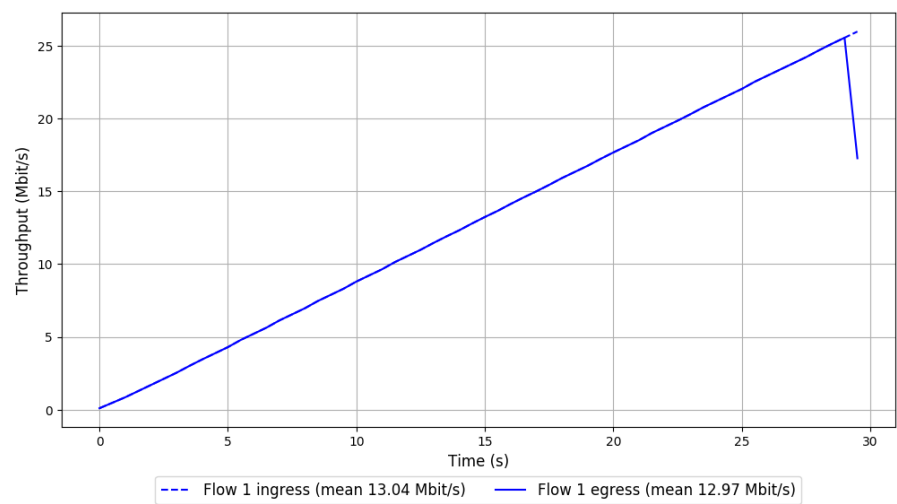
-- Flow 1:

Average throughput: 12.97 Mbit/s

95th percentile per-packet one-way delay: 79.434 ms

Loss rate: 1.12%

Run 7: Report of LEDBAT — Data Link

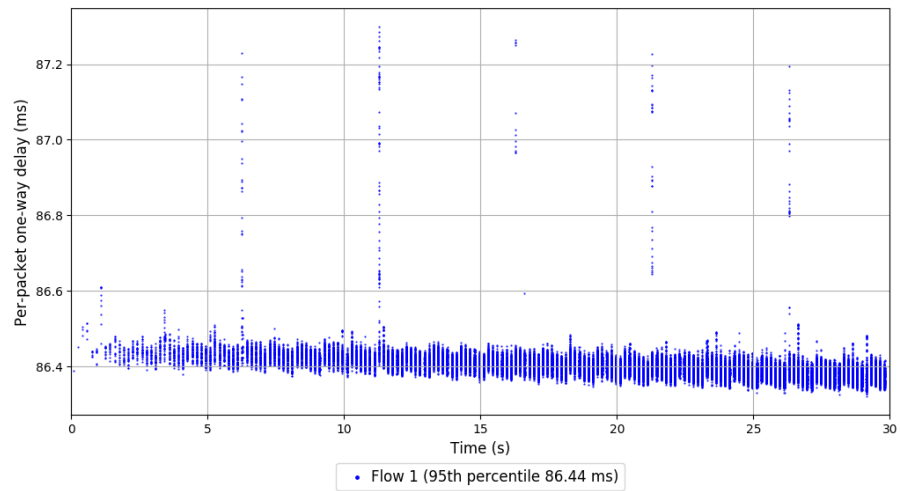
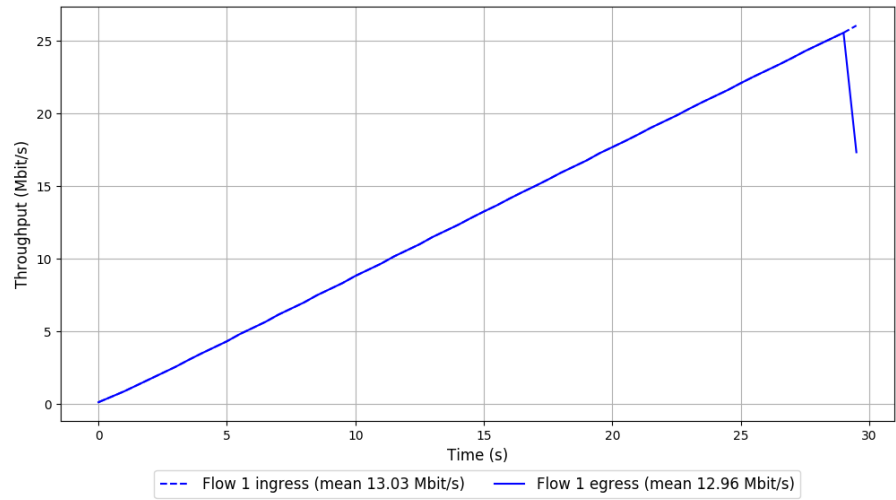


Run 8: Statistics of LEDBAT

Start at: 2017-12-19 21:29:51
End at: 2017-12-19 21:30:21
Local clock offset: 12.039 ms
Remote clock offset: -2.677 ms

Below is generated by plot.py at 2017-12-20 01:41:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.96 Mbit/s
95th percentile per-packet one-way delay: 86.444 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 12.96 Mbit/s
95th percentile per-packet one-way delay: 86.444 ms
Loss rate: 1.12%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-19 21:48:58

End at: 2017-12-19 21:49:28

Local clock offset: 10.302 ms

Remote clock offset: 1.779 ms

Below is generated by plot.py at 2017-12-20 01:41:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.21 Mbit/s

95th percentile per-packet one-way delay: 80.146 ms

Loss rate: 1.11%

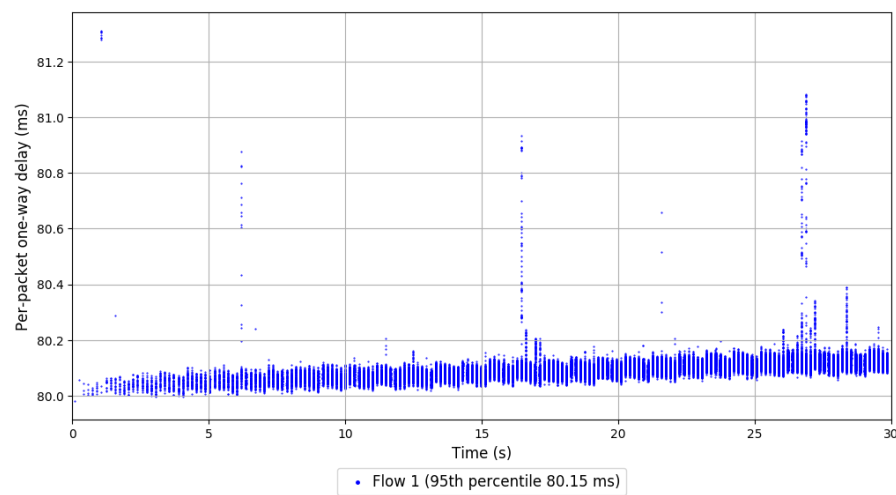
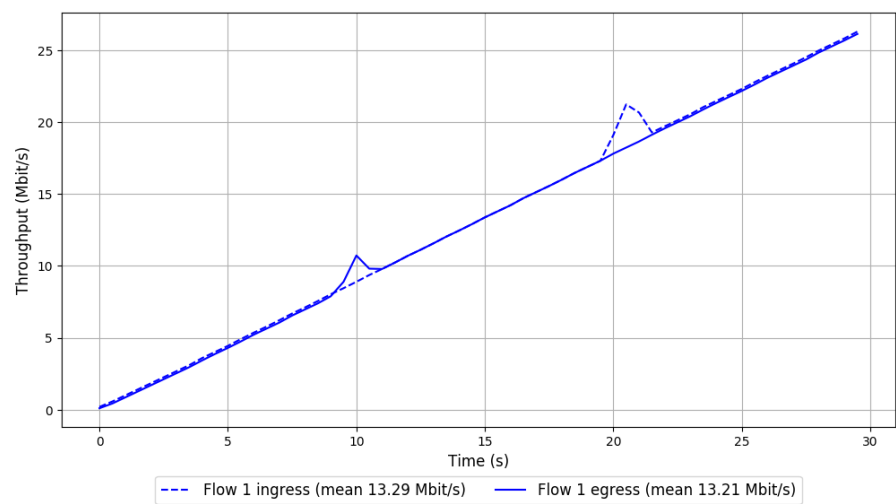
-- Flow 1:

Average throughput: 13.21 Mbit/s

95th percentile per-packet one-way delay: 80.146 ms

Loss rate: 1.11%

Run 9: Report of LEDBAT — Data Link

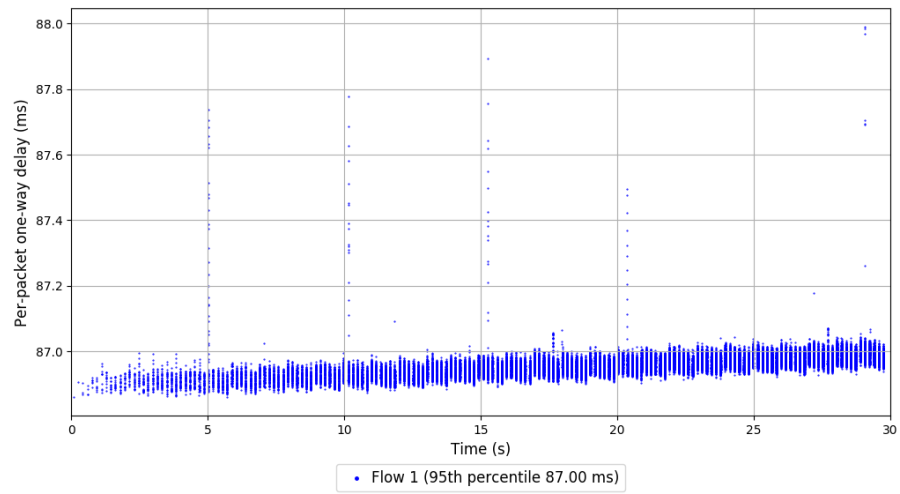
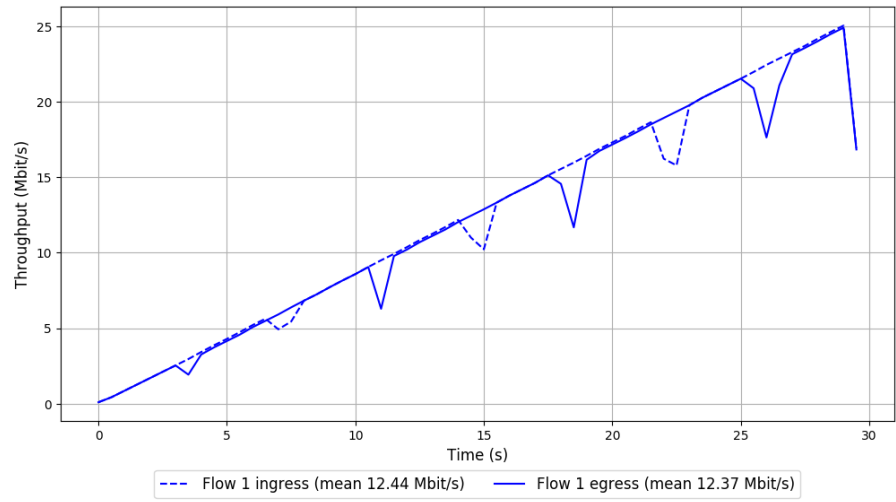


Run 10: Statistics of LEDBAT

Start at: 2017-12-19 22:08:03
End at: 2017-12-19 22:08:33
Local clock offset: 7.315 ms
Remote clock offset: -2.574 ms

Below is generated by plot.py at 2017-12-20 01:41:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.37 Mbit/s
95th percentile per-packet one-way delay: 87.005 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 12.37 Mbit/s
95th percentile per-packet one-way delay: 87.005 ms
Loss rate: 1.14%

Run 10: Report of LEDBAT — Data Link

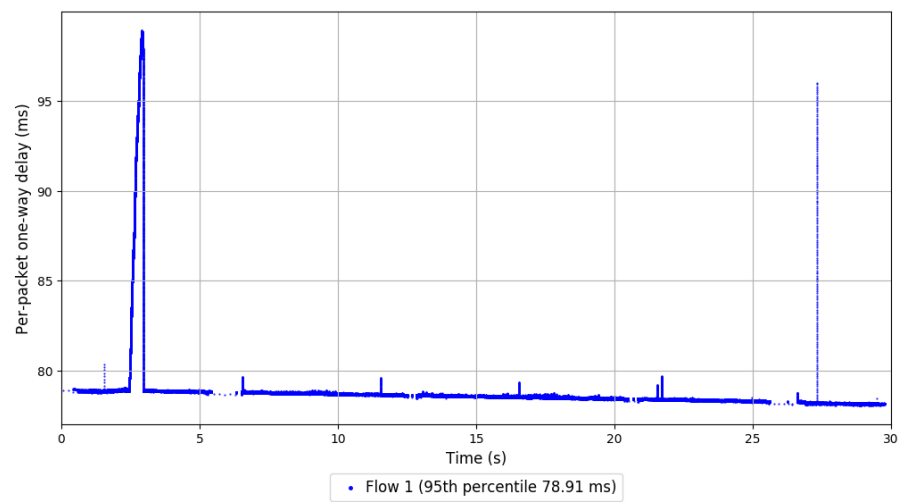
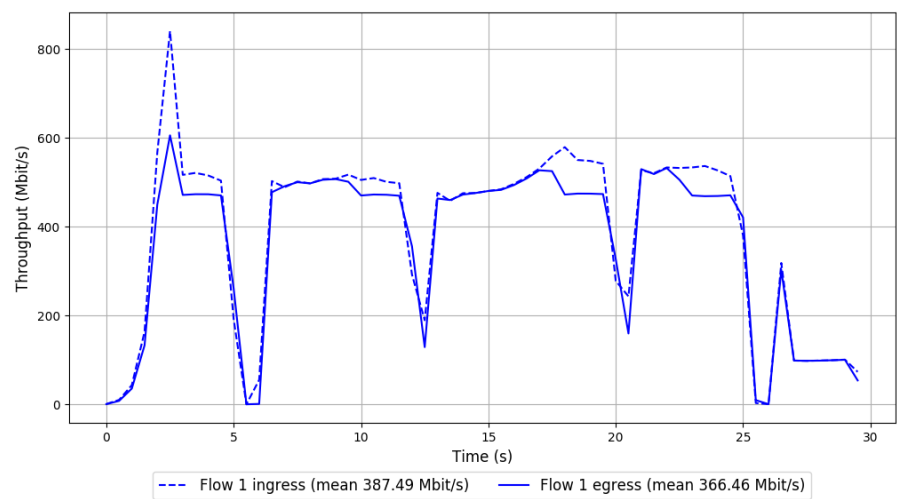


```
Run 1: Statistics of PCC

Start at: 2017-12-19 19:23:55
End at: 2017-12-19 19:24:25
Local clock offset: 17.942 ms
Remote clock offset: 1.77 ms

# Below is generated by plot.py at 2017-12-20 01:46:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 366.46 Mbit/s
95th percentile per-packet one-way delay: 78.914 ms
Loss rate: 5.96%
-- Flow 1:
Average throughput: 366.46 Mbit/s
95th percentile per-packet one-way delay: 78.914 ms
Loss rate: 5.96%
```

Run 1: Report of PCC — Data Link

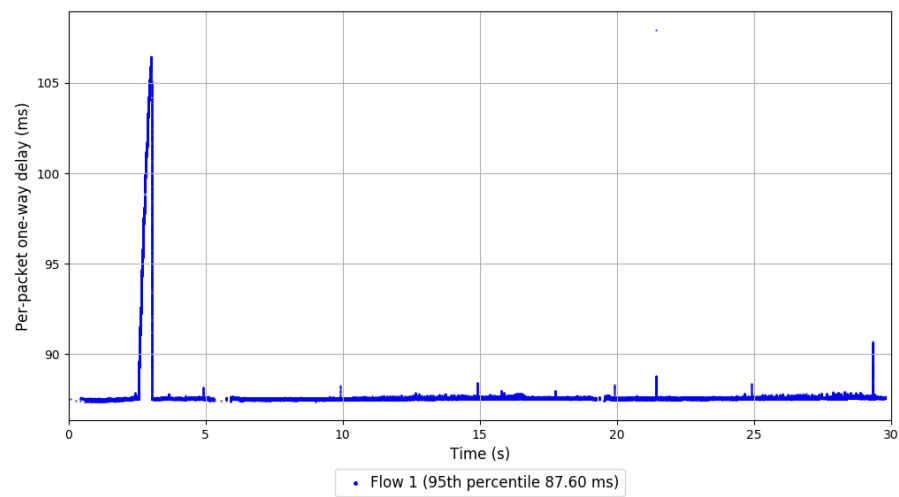
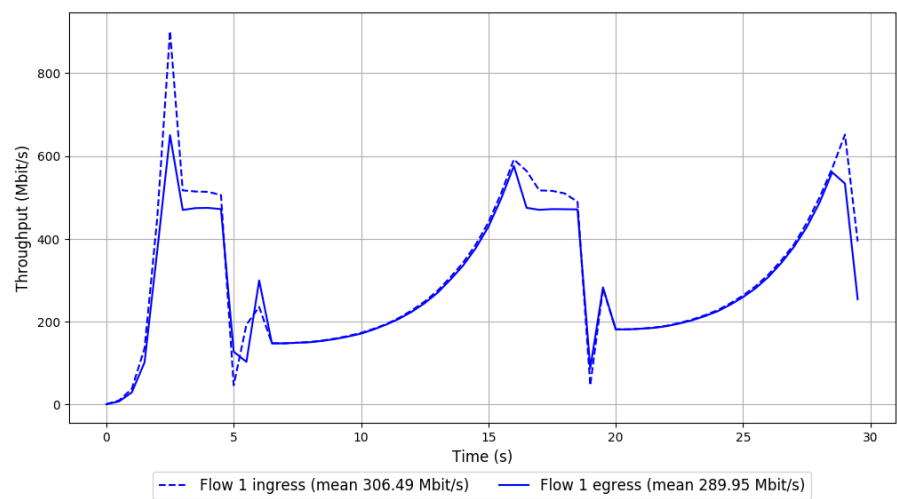


Run 2: Statistics of PCC

Start at: 2017-12-19 19:43:06
End at: 2017-12-19 19:43:36
Local clock offset: 4.877 ms
Remote clock offset: -4.095 ms

Below is generated by plot.py at 2017-12-20 01:46:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 289.95 Mbit/s
95th percentile per-packet one-way delay: 87.598 ms
Loss rate: 5.94%
-- Flow 1:
Average throughput: 289.95 Mbit/s
95th percentile per-packet one-way delay: 87.598 ms
Loss rate: 5.94%

Run 2: Report of PCC — Data Link

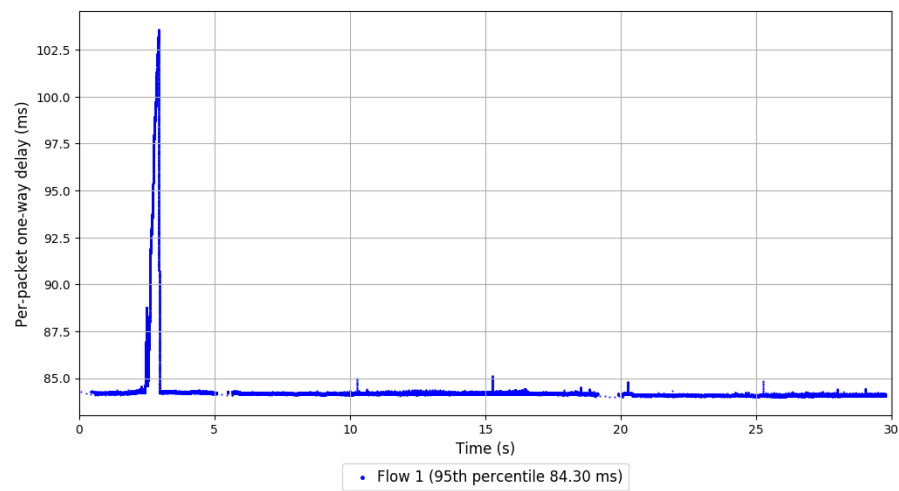
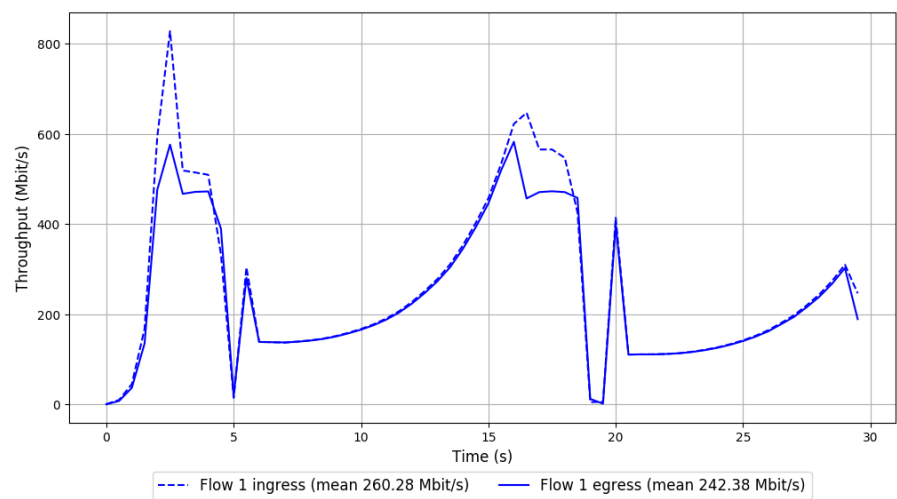


Run 3: Statistics of PCC

Start at: 2017-12-19 20:02:12
End at: 2017-12-19 20:02:42
Local clock offset: 9.0 ms
Remote clock offset: -3.478 ms

Below is generated by plot.py at 2017-12-20 01:46:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 242.38 Mbit/s
95th percentile per-packet one-way delay: 84.304 ms
Loss rate: 7.40%
-- Flow 1:
Average throughput: 242.38 Mbit/s
95th percentile per-packet one-way delay: 84.304 ms
Loss rate: 7.40%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-19 20:21:13

End at: 2017-12-19 20:21:43

Local clock offset: 6.477 ms

Remote clock offset: 2.737 ms

Below is generated by plot.py at 2017-12-20 01:46:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 220.78 Mbit/s

95th percentile per-packet one-way delay: 79.059 ms

Loss rate: 10.29%

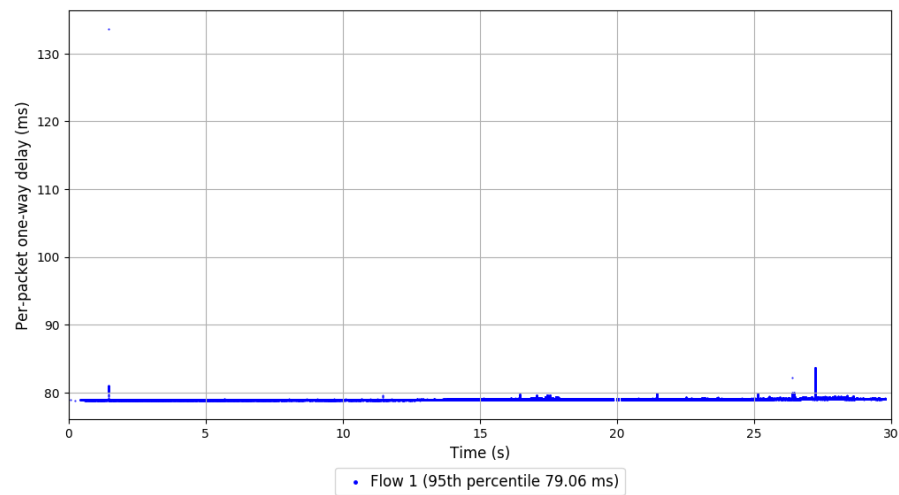
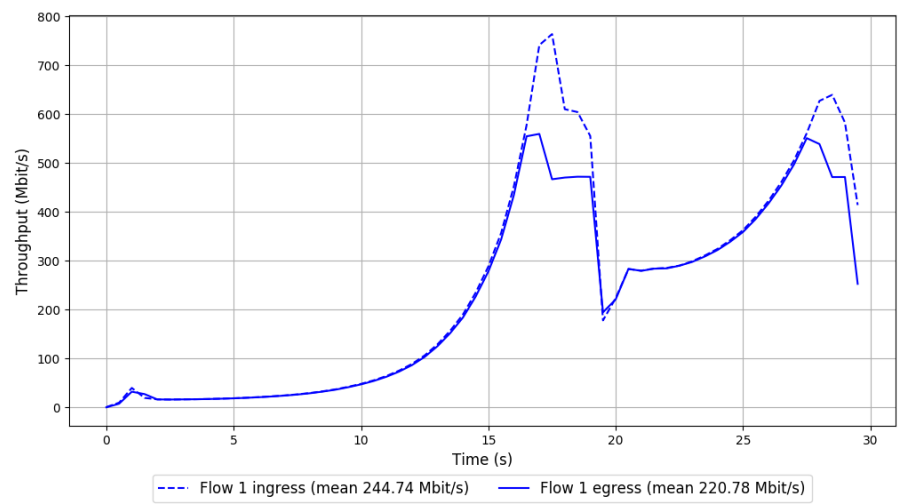
-- Flow 1:

Average throughput: 220.78 Mbit/s

95th percentile per-packet one-way delay: 79.059 ms

Loss rate: 10.29%

Run 4: Report of PCC — Data Link

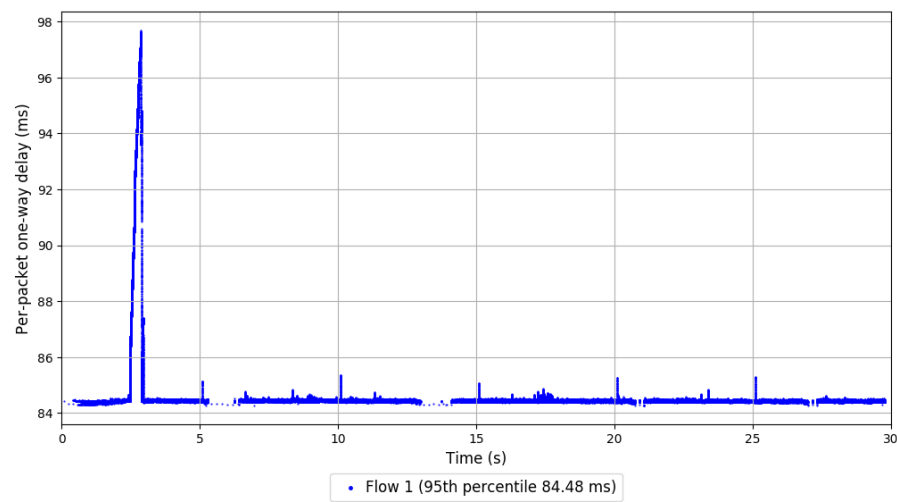
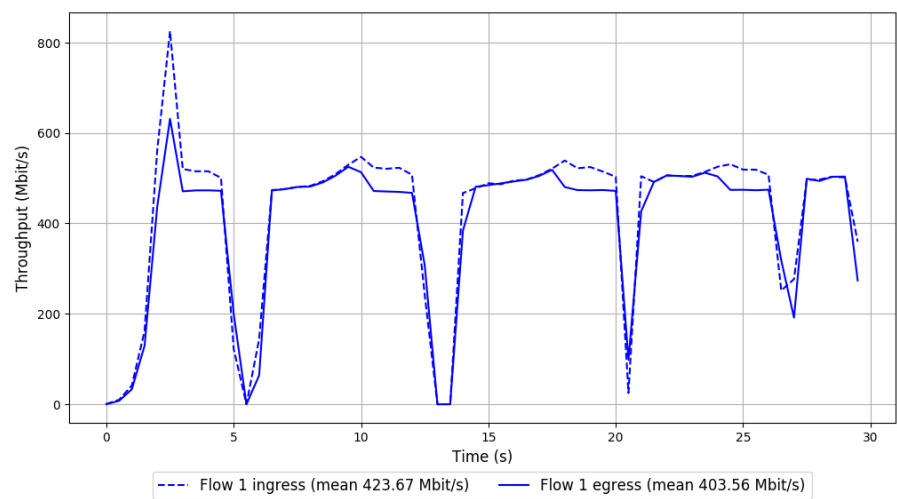


Run 5: Statistics of PCC

Start at: 2017-12-19 20:40:15
End at: 2017-12-19 20:40:45
Local clock offset: 5.56 ms
Remote clock offset: -2.373 ms

Below is generated by plot.py at 2017-12-20 01:47:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 403.56 Mbit/s
95th percentile per-packet one-way delay: 84.477 ms
Loss rate: 5.28%
-- Flow 1:
Average throughput: 403.56 Mbit/s
95th percentile per-packet one-way delay: 84.477 ms
Loss rate: 5.28%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-19 20:59:28

End at: 2017-12-19 20:59:58

Local clock offset: 8.795 ms

Remote clock offset: 3.24 ms

Below is generated by plot.py at 2017-12-20 01:47:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 224.28 Mbit/s

95th percentile per-packet one-way delay: 78.768 ms

Loss rate: 6.76%

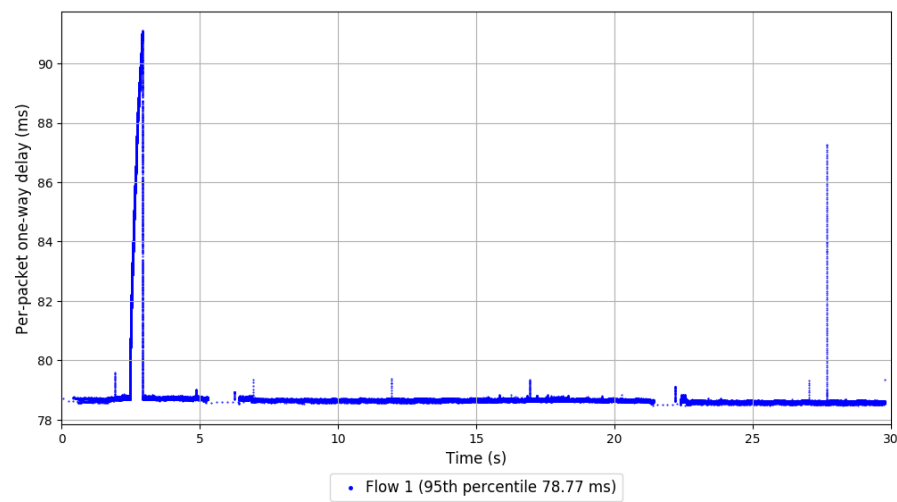
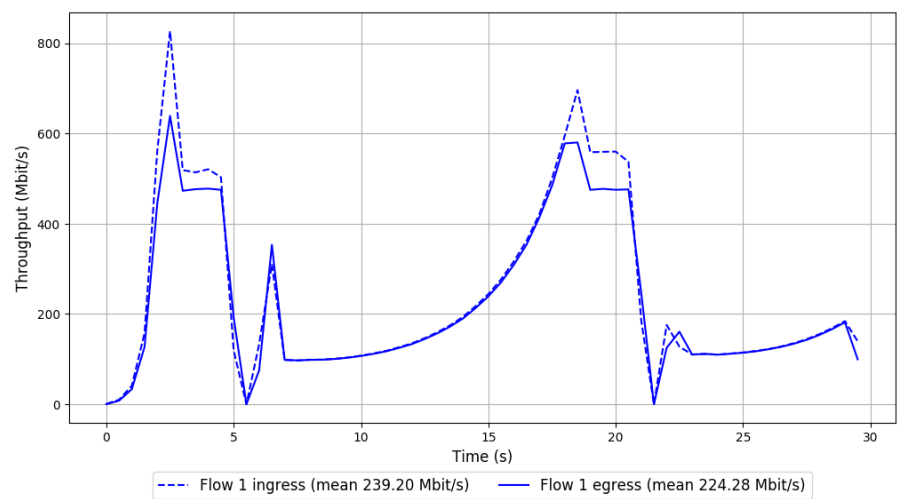
-- Flow 1:

Average throughput: 224.28 Mbit/s

95th percentile per-packet one-way delay: 78.768 ms

Loss rate: 6.76%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-19 21:18:27

End at: 2017-12-19 21:18:57

Local clock offset: 11.457 ms

Remote clock offset: 3.316 ms

Below is generated by plot.py at 2017-12-20 01:47:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 308.36 Mbit/s

95th percentile per-packet one-way delay: 81.832 ms

Loss rate: 6.62%

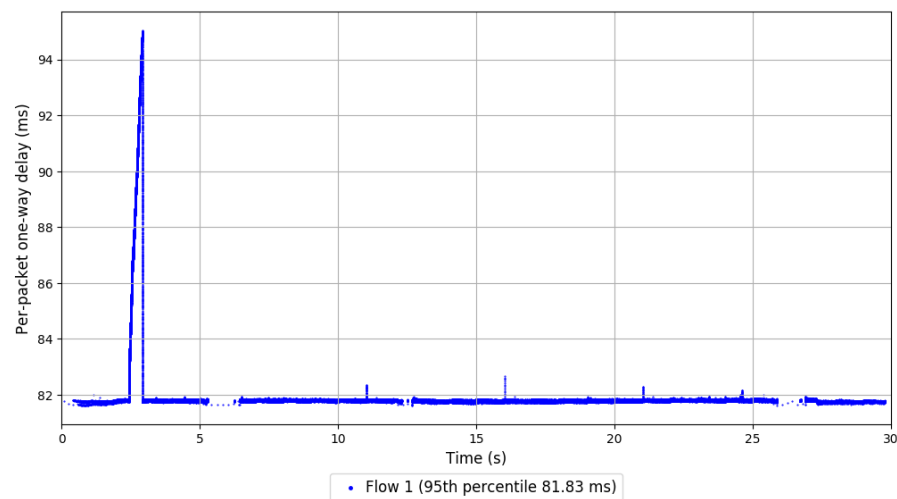
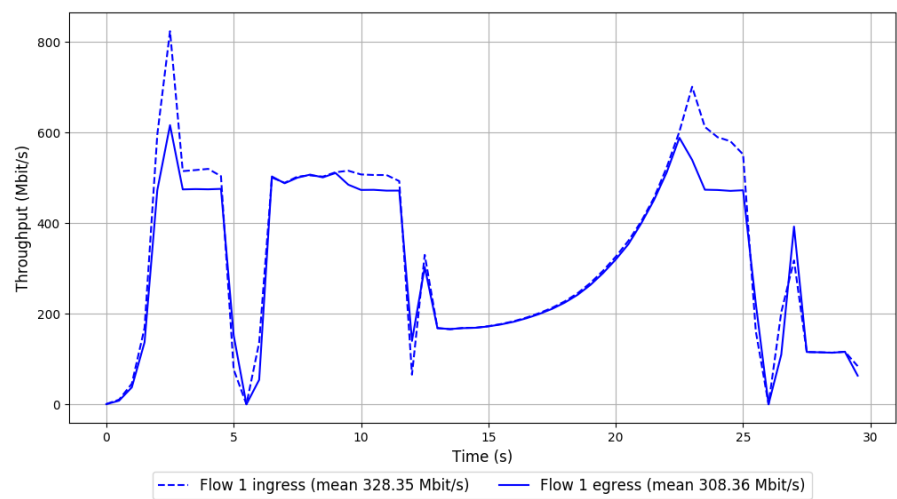
-- Flow 1:

Average throughput: 308.36 Mbit/s

95th percentile per-packet one-way delay: 81.832 ms

Loss rate: 6.62%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-19 21:37:27

End at: 2017-12-19 21:37:57

Local clock offset: 13.324 ms

Remote clock offset: 2.006 ms

Below is generated by plot.py at 2017-12-20 01:47:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 253.01 Mbit/s

95th percentile per-packet one-way delay: 79.600 ms

Loss rate: 6.72%

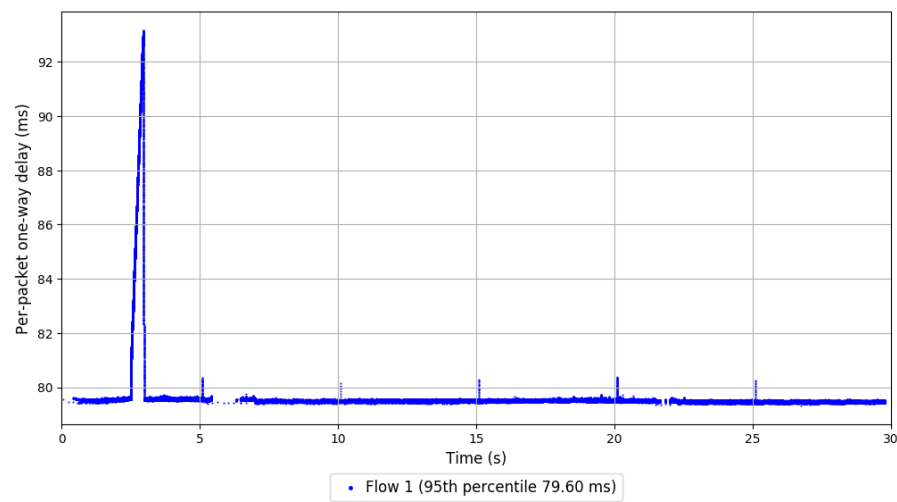
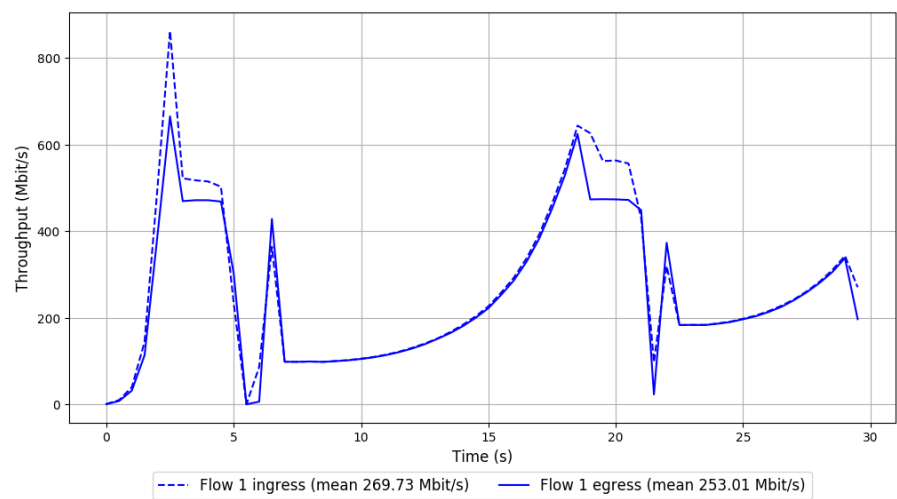
-- Flow 1:

Average throughput: 253.01 Mbit/s

95th percentile per-packet one-way delay: 79.600 ms

Loss rate: 6.72%

Run 8: Report of PCC — Data Link

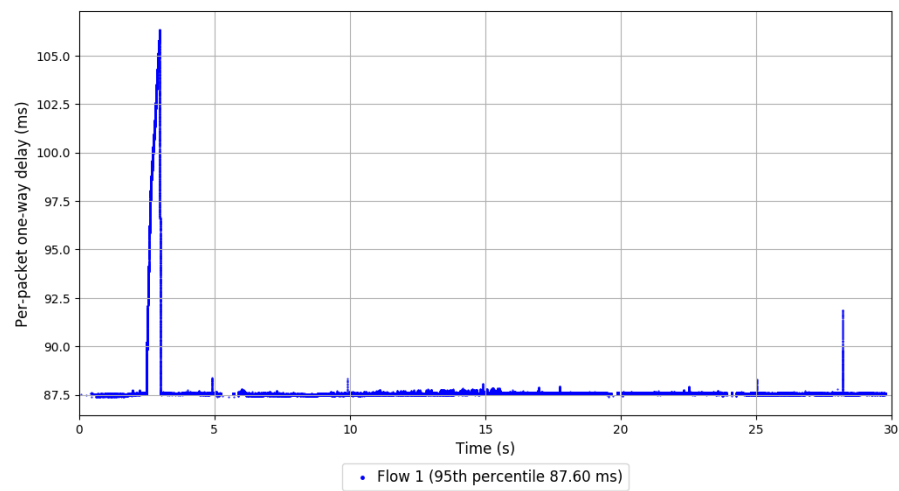
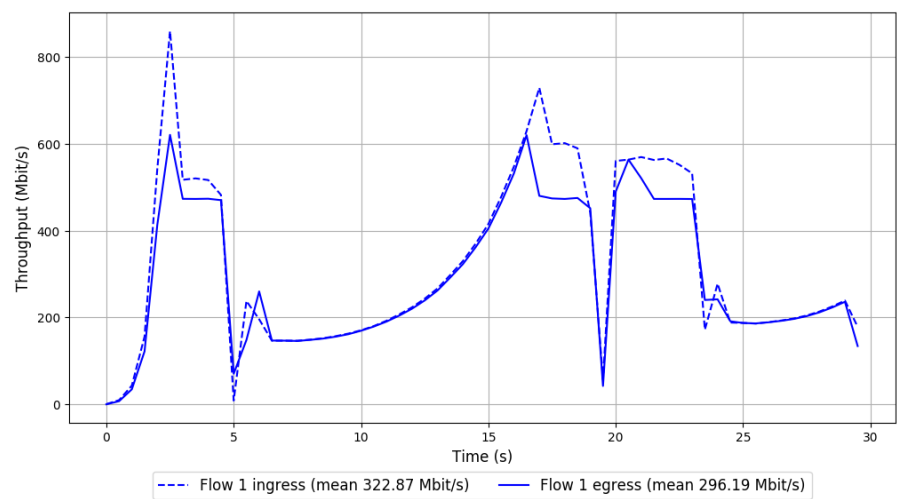


Run 9: Statistics of PCC

Start at: 2017-12-19 21:56:32
End at: 2017-12-19 21:57:02
Local clock offset: 9.328 ms
Remote clock offset: -2.715 ms

Below is generated by plot.py at 2017-12-20 01:48:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 296.19 Mbit/s
95th percentile per-packet one-way delay: 87.602 ms
Loss rate: 8.79%
-- Flow 1:
Average throughput: 296.19 Mbit/s
95th percentile per-packet one-way delay: 87.602 ms
Loss rate: 8.79%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-19 22:15:34

End at: 2017-12-19 22:16:04

Local clock offset: 5.87 ms

Remote clock offset: 1.664 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 356.76 Mbit/s

95th percentile per-packet one-way delay: 81.365 ms

Loss rate: 7.20%

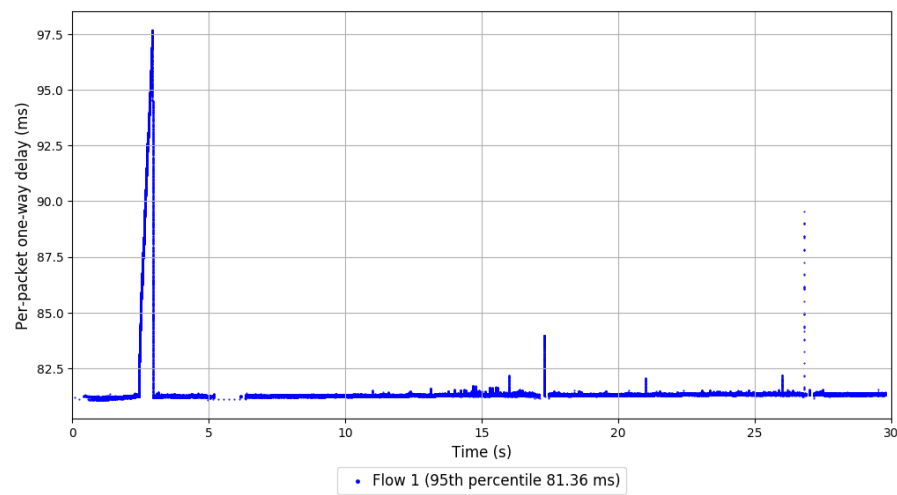
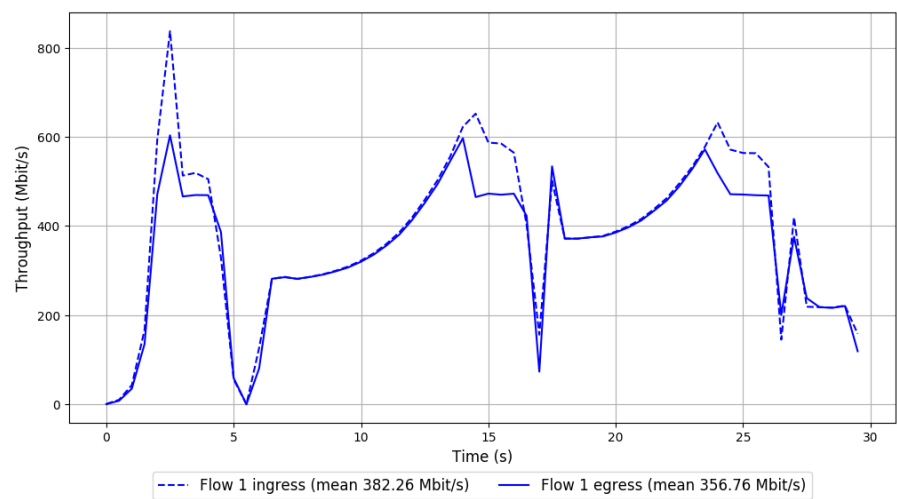
-- Flow 1:

Average throughput: 356.76 Mbit/s

95th percentile per-packet one-way delay: 81.365 ms

Loss rate: 7.20%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2017-12-19 19:29:16

End at: 2017-12-19 19:29:46

Local clock offset: 15.141 ms

Remote clock offset: -3.986 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.19 Mbit/s

95th percentile per-packet one-way delay: 85.106 ms

Loss rate: 0.77%

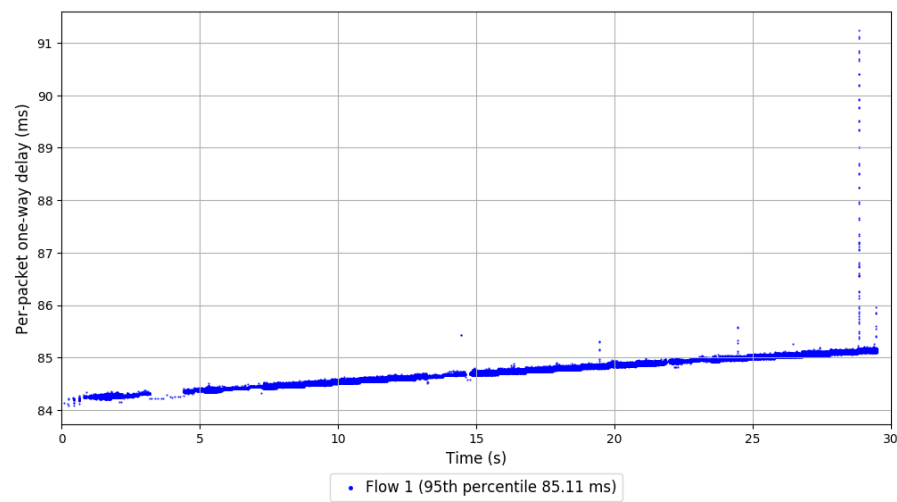
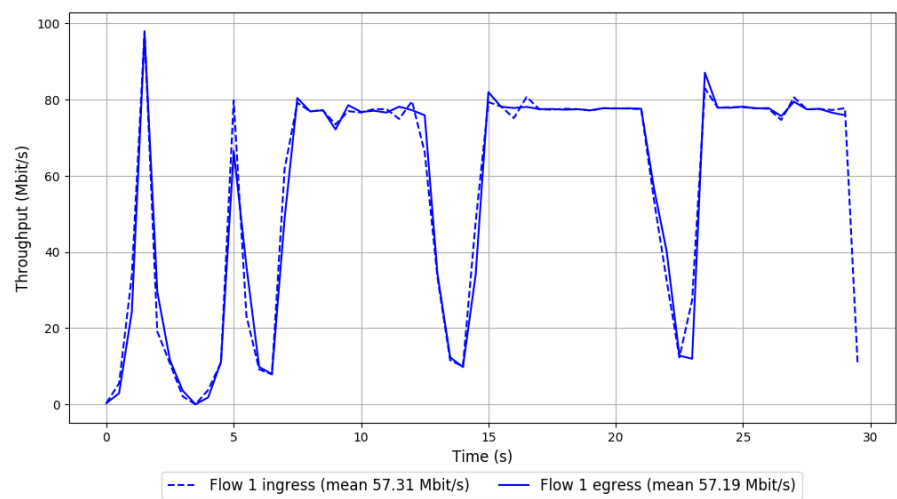
-- Flow 1:

Average throughput: 57.19 Mbit/s

95th percentile per-packet one-way delay: 85.106 ms

Loss rate: 0.77%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-19 19:48:27

End at: 2017-12-19 19:48:57

Local clock offset: 6.021 ms

Remote clock offset: -2.981 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.78 Mbit/s

95th percentile per-packet one-way delay: 84.559 ms

Loss rate: 0.91%

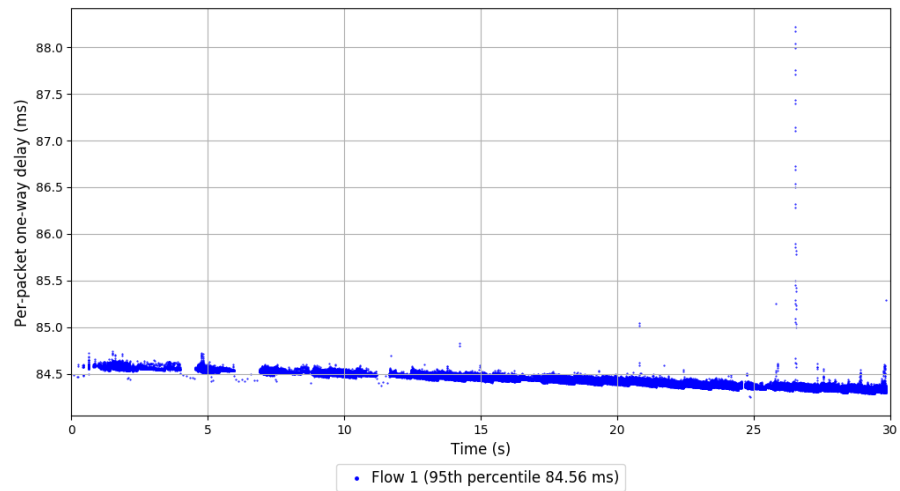
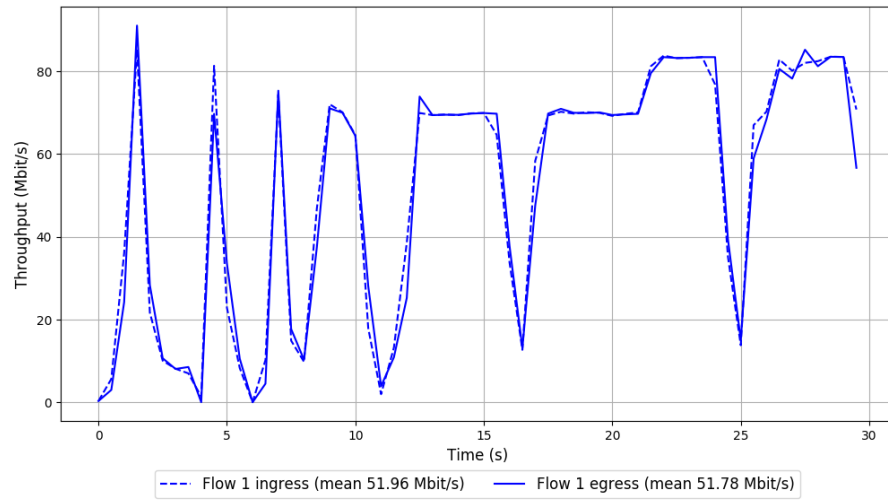
-- Flow 1:

Average throughput: 51.78 Mbit/s

95th percentile per-packet one-way delay: 84.559 ms

Loss rate: 0.91%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

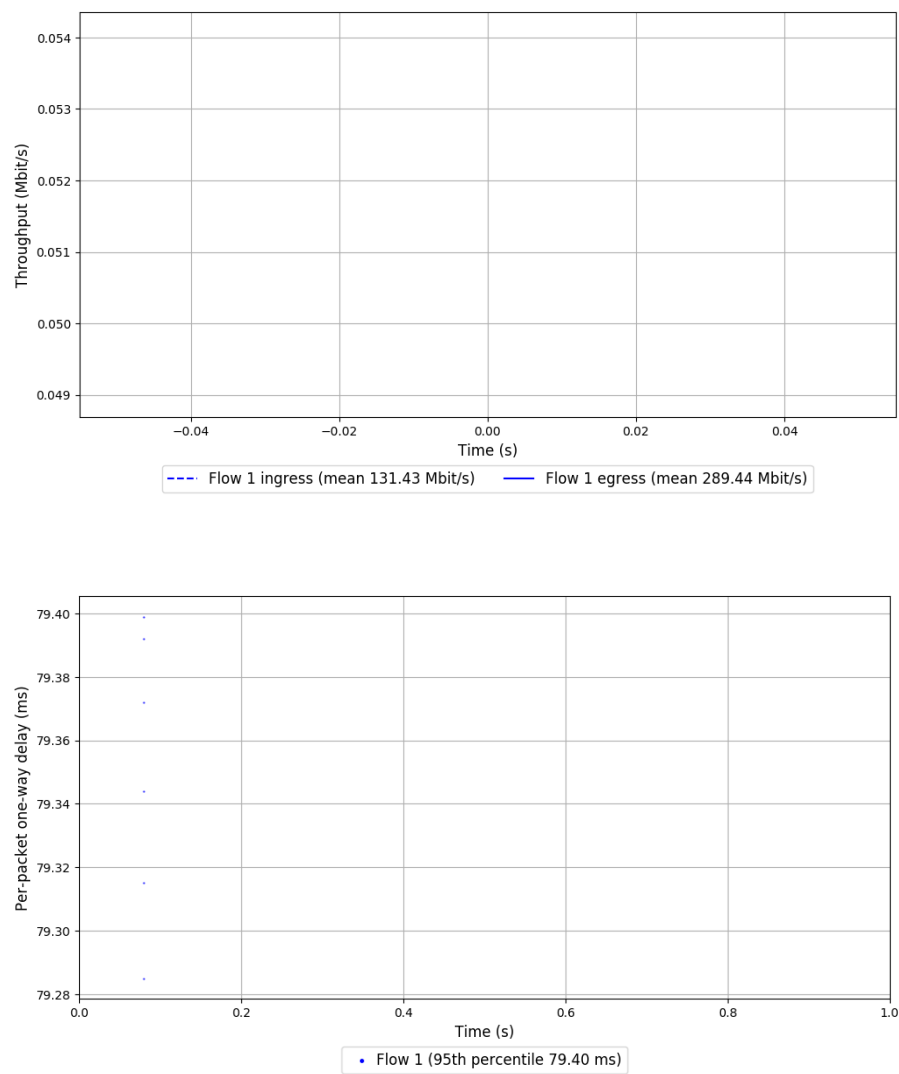
Start at: 2017-12-19 20:07:32

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

Local clock offset: 9.086 ms

Remote clock offset: 1.515 ms

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-19 20:26:31

End at: 2017-12-19 20:27:01

Local clock offset: 6.209 ms

Remote clock offset: -1.628 ms

Run 4: Report of QUIC Cubic — Data Link

Figure is missing

Figure is missing

Run 5: Statistics of QUIC Cubic

Start at: 2017-12-19 20:45:39

End at: 2017-12-19 20:46:09

Local clock offset: 6.023 ms

Remote clock offset: 3.354 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.81 Mbit/s

95th percentile per-packet one-way delay: 79.974 ms

Loss rate: 0.36%

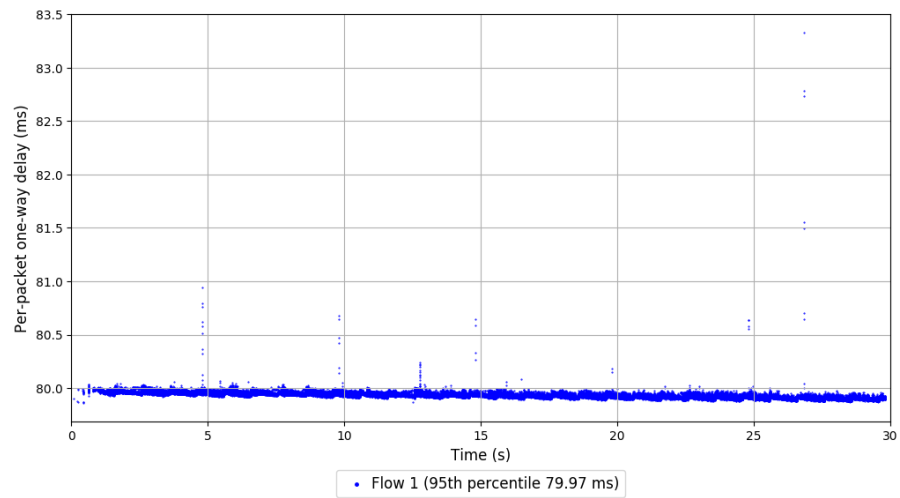
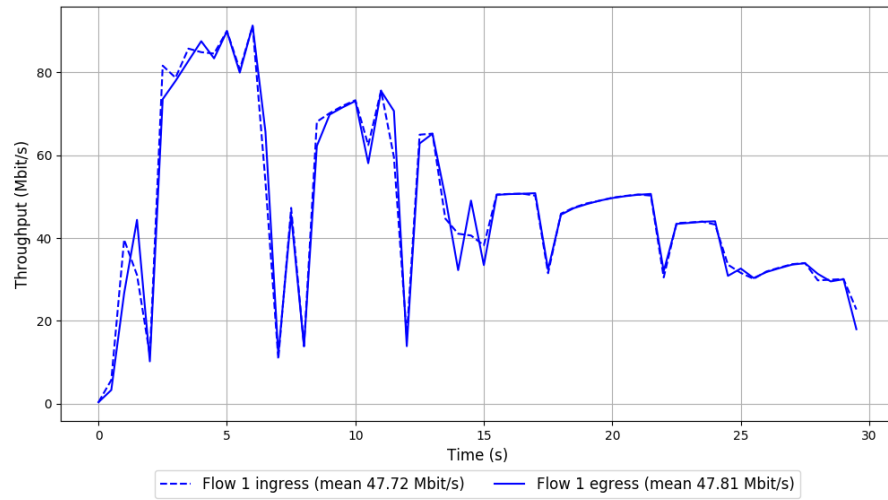
-- Flow 1:

Average throughput: 47.81 Mbit/s

95th percentile per-packet one-way delay: 79.974 ms

Loss rate: 0.36%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-19 21:04:42

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

Local clock offset: 10.261 ms

Remote clock offset: 4.098 ms

Run 6: Report of QUIC Cubic — Data Link

Figure is missing

Figure is missing

Run 7: Statistics of QUIC Cubic

Start at: 2017-12-19 21:23:44

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

Local clock offset: 11.495 ms

Remote clock offset: -2.292 ms

Run 7: Report of QUIC Cubic — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of QUIC Cubic

Start at: 2017-12-19 21:42:46

End at: 2017-12-19 21:43:16

Local clock offset: 12.301 ms

Remote clock offset: 3.607 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.91 Mbit/s

95th percentile per-packet one-way delay: 81.602 ms

Loss rate: 0.78%

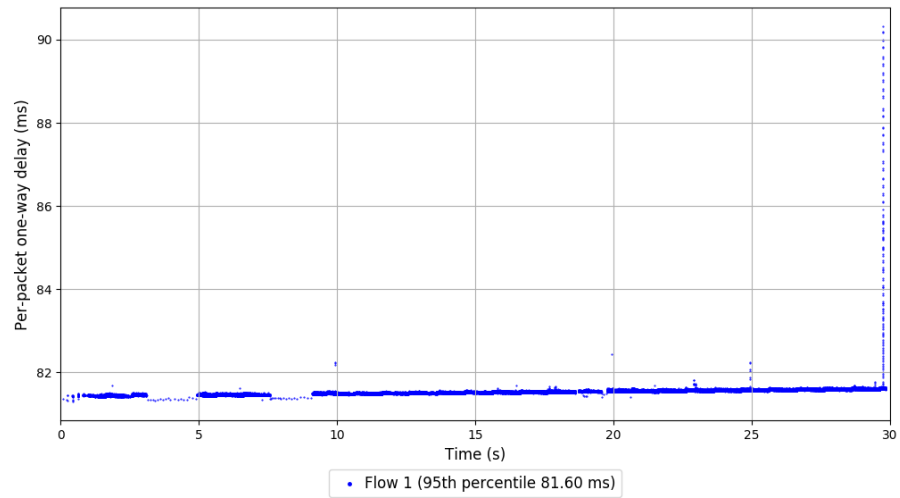
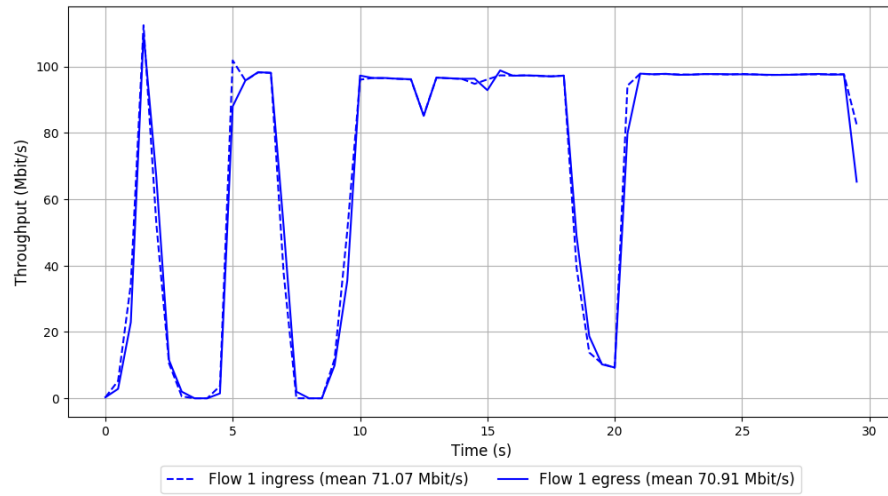
-- Flow 1:

Average throughput: 70.91 Mbit/s

95th percentile per-packet one-way delay: 81.602 ms

Loss rate: 0.78%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-19 22:01:52

End at: 2017-12-19 22:02:22

Local clock offset: 9.14 ms

Remote clock offset: 2.333 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.38 Mbit/s

95th percentile per-packet one-way delay: 82.239 ms

Loss rate: 0.84%

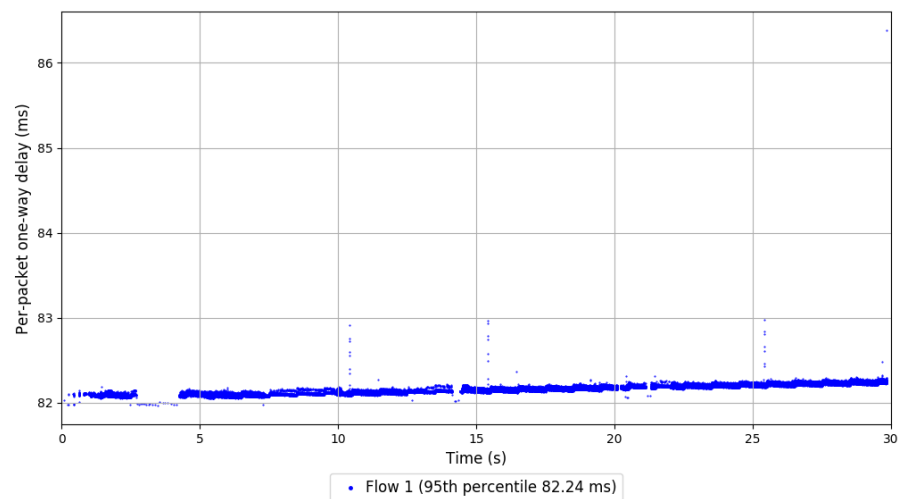
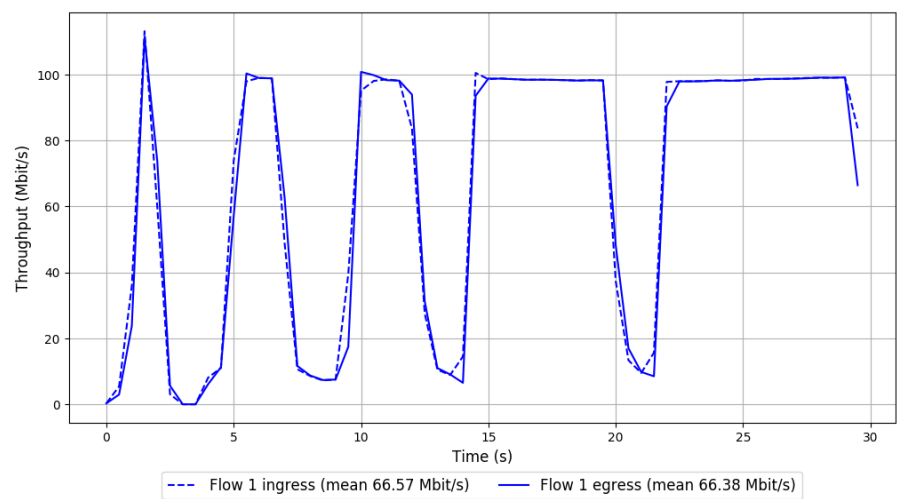
-- Flow 1:

Average throughput: 66.38 Mbit/s

95th percentile per-packet one-way delay: 82.239 ms

Loss rate: 0.84%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-19 22:20:57

End at: 2017-12-19 22:21:27

Local clock offset: 4.657 ms

Remote clock offset: 0.712 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.34 Mbit/s

95th percentile per-packet one-way delay: 82.046 ms

Loss rate: 0.81%

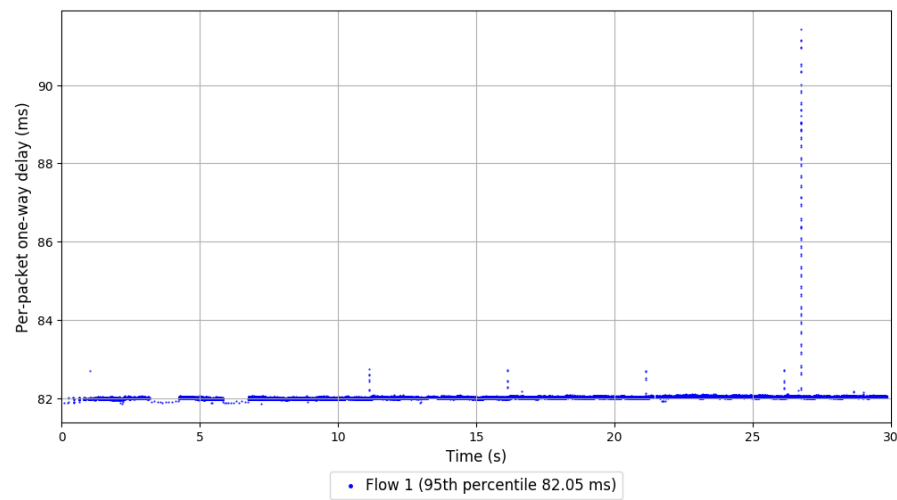
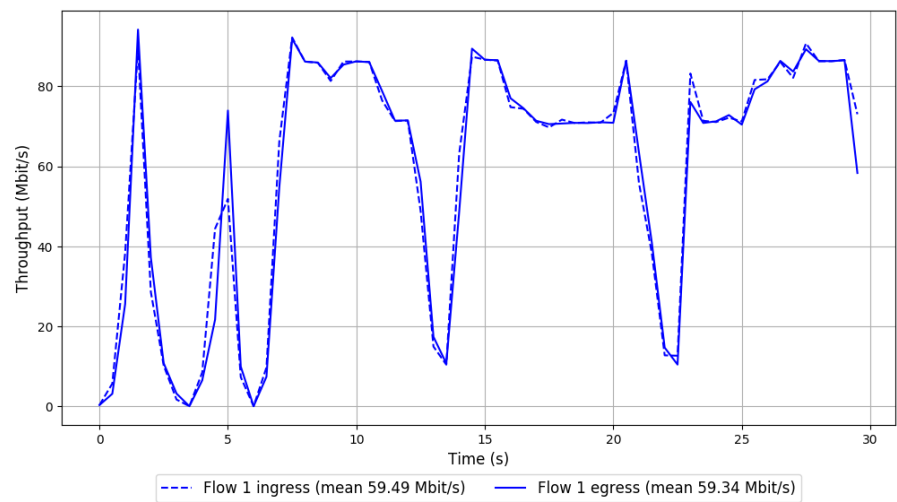
-- Flow 1:

Average throughput: 59.34 Mbit/s

95th percentile per-packet one-way delay: 82.046 ms

Loss rate: 0.81%

Run 10: Report of QUIC Cubic — Data Link

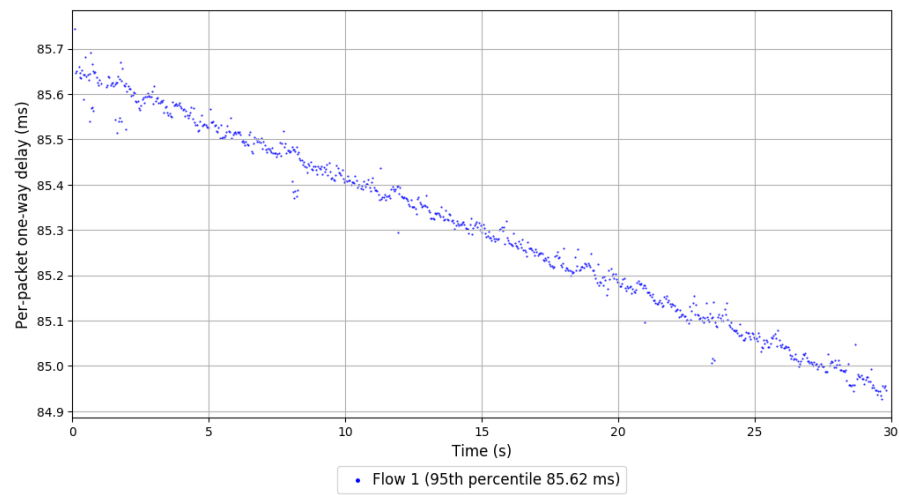
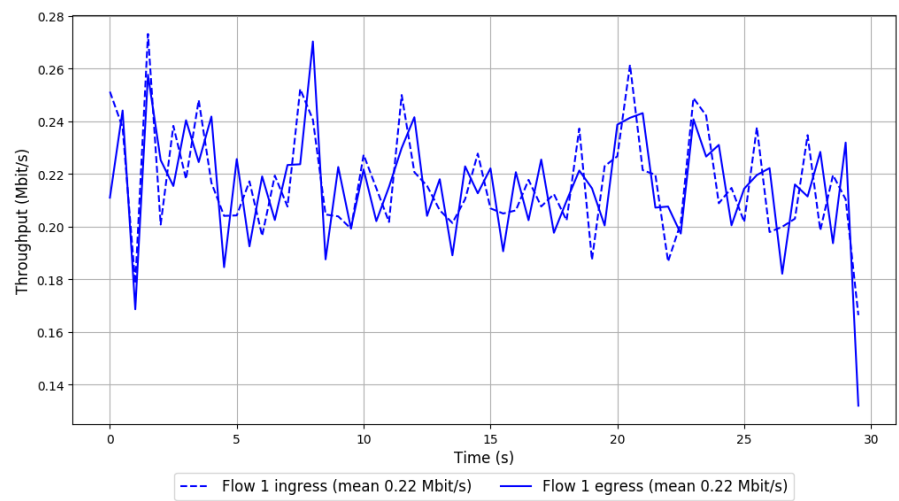


```
Run 1: Statistics of SCReAM

Start at: 2017-12-19 19:21:24
End at: 2017-12-19 19:21:54
Local clock offset: 14.102 ms
Remote clock offset: -5.234 ms

# Below is generated by plot.py at 2017-12-20 01:49:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.620 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.620 ms
Loss rate: 0.51%
```

Run 1: Report of SReAM — Data Link

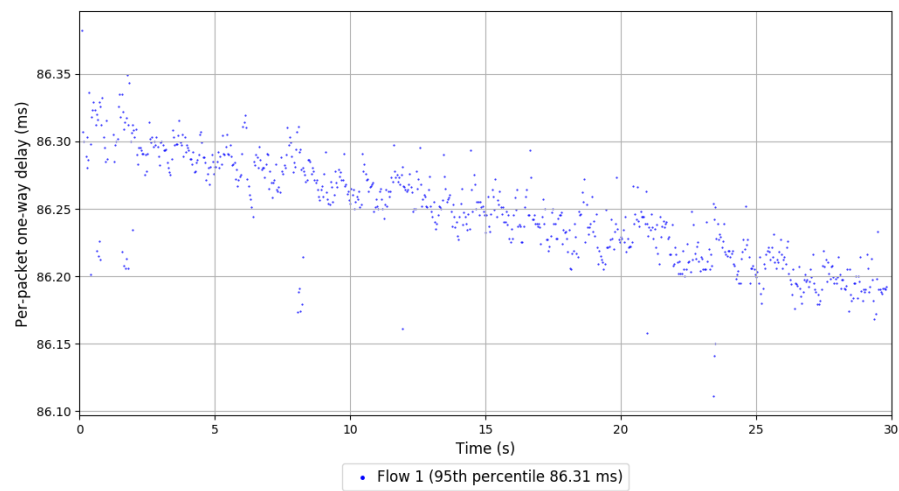
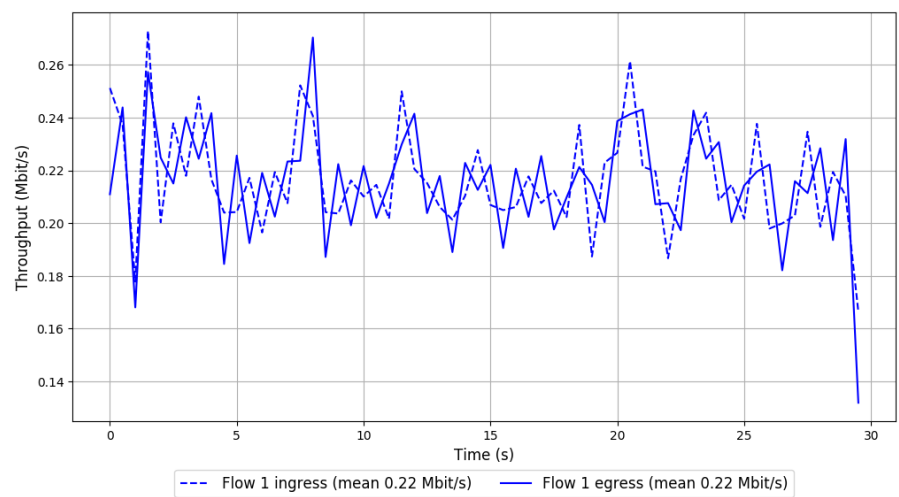


Run 2: Statistics of SCReAM

Start at: 2017-12-19 19:40:35
End at: 2017-12-19 19:41:05
Local clock offset: 4.258 ms
Remote clock offset: -4.508 ms

Below is generated by plot.py at 2017-12-20 01:49:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.307 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.307 ms
Loss rate: 0.51%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-19 19:59:41

End at: 2017-12-19 20:00:11

Local clock offset: 8.07 ms

Remote clock offset: 1.339 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 79.277 ms

Loss rate: 0.51%

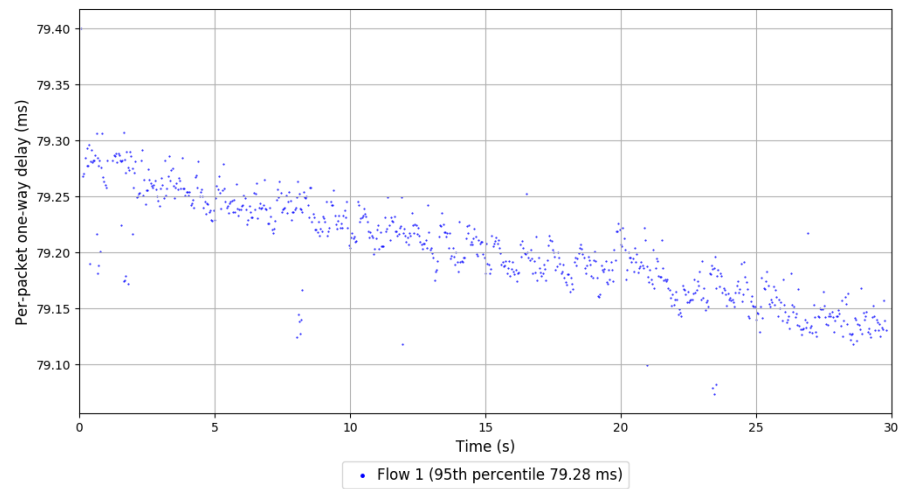
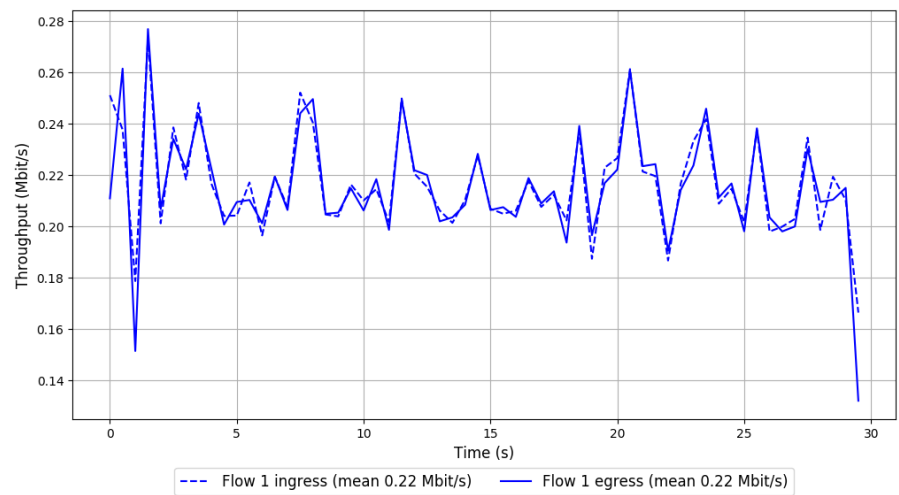
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 79.277 ms

Loss rate: 0.51%

Run 3: Report of SReAM — Data Link

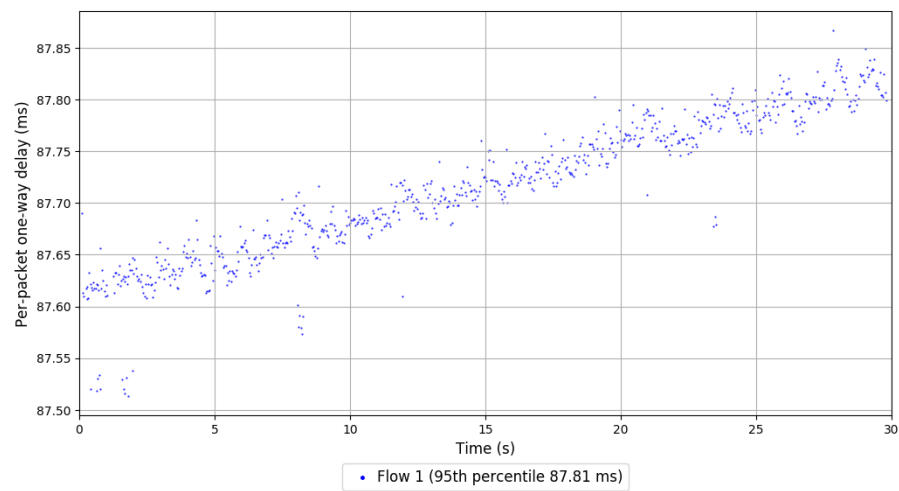
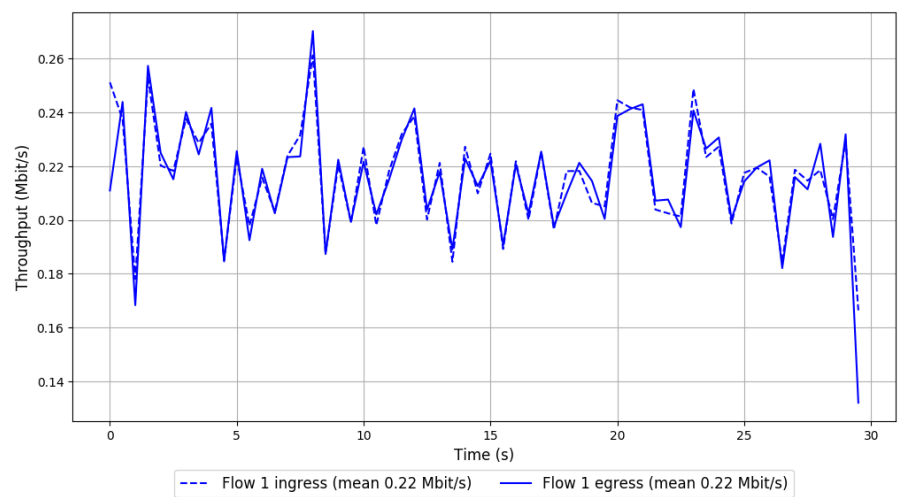


Run 4: Statistics of SCReAM

Start at: 2017-12-19 20:18:42
End at: 2017-12-19 20:19:12
Local clock offset: 7.449 ms
Remote clock offset: -2.677 ms

Below is generated by plot.py at 2017-12-20 01:49:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.811 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.811 ms
Loss rate: 0.51%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-19 20:37:44

End at: 2017-12-19 20:38:14

Local clock offset: 5.488 ms

Remote clock offset: 3.618 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 81.611 ms

Loss rate: 0.51%

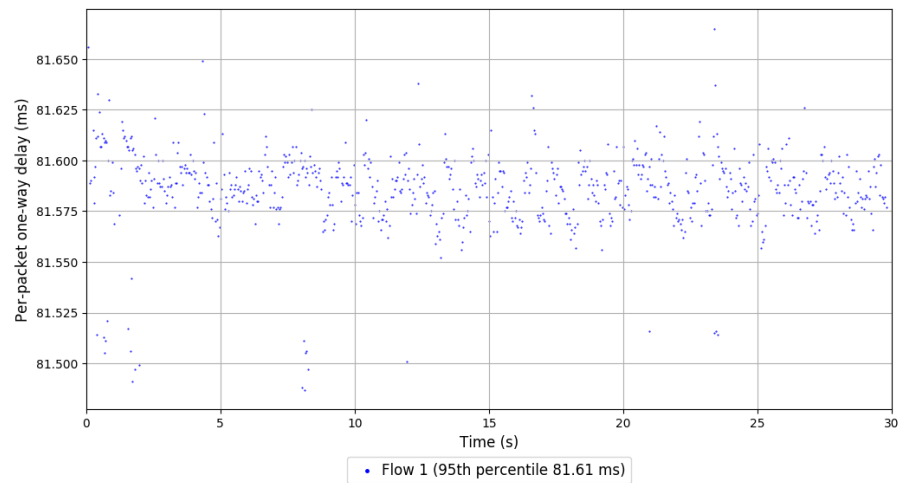
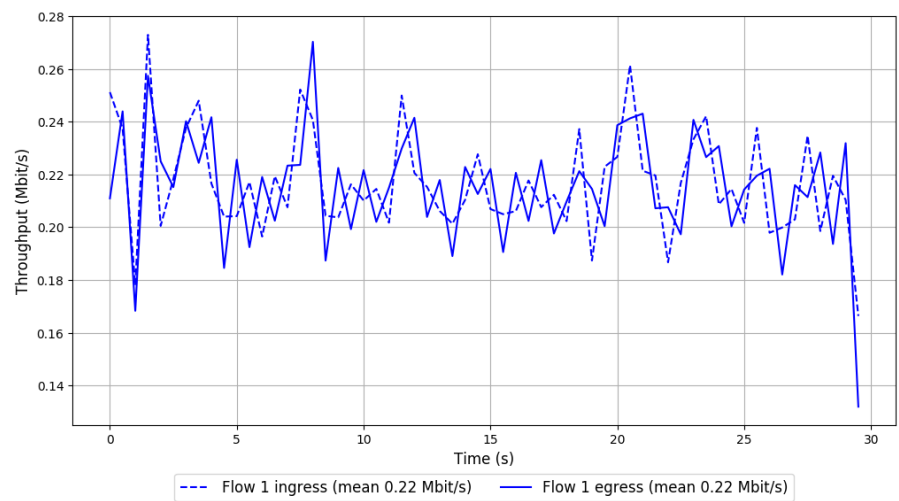
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 81.611 ms

Loss rate: 0.51%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2017-12-19 20:56:57

End at: 2017-12-19 20:57:27

Local clock offset: 8.187 ms

Remote clock offset: 2.479 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 79.302 ms

Loss rate: 0.51%

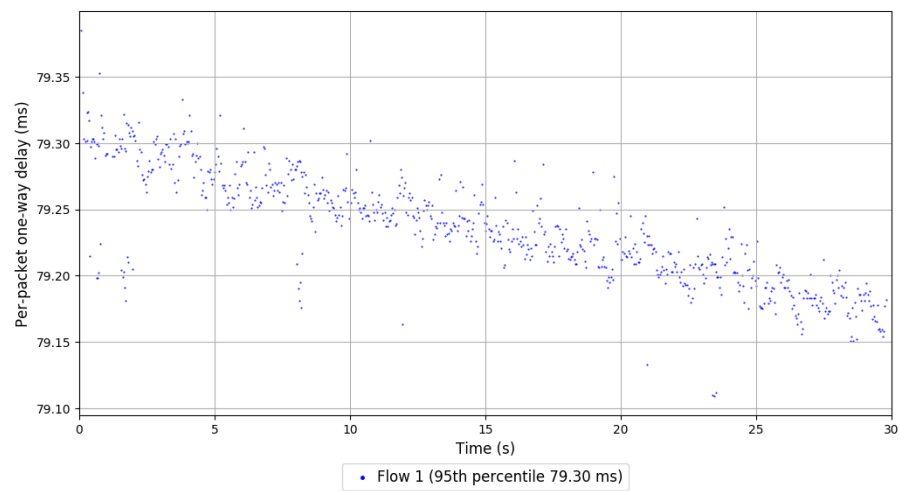
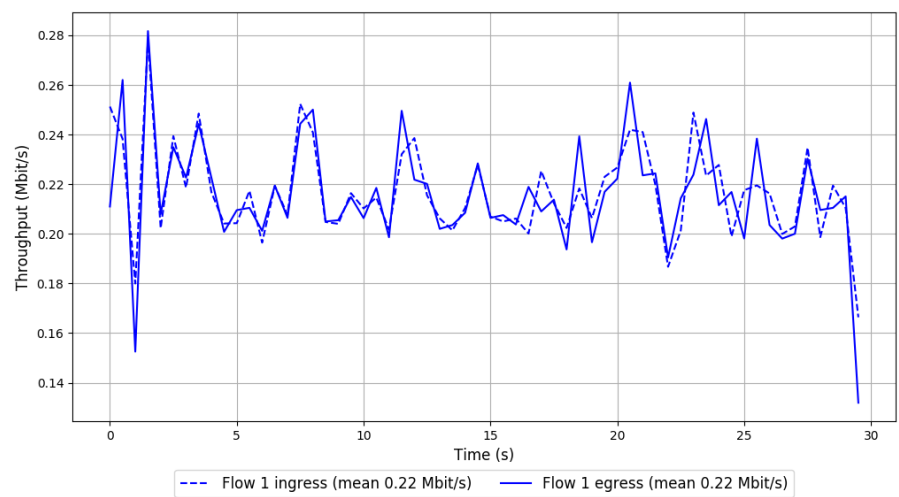
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 79.302 ms

Loss rate: 0.51%

Run 6: Report of SReAM — Data Link

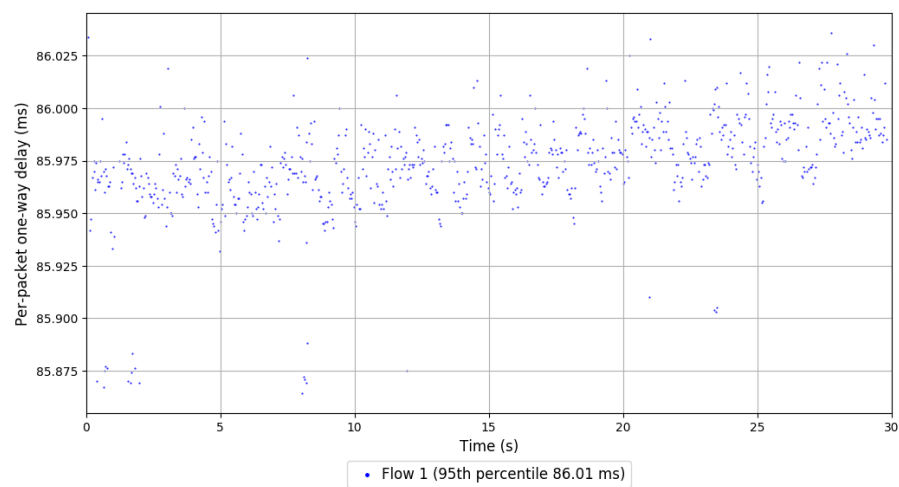
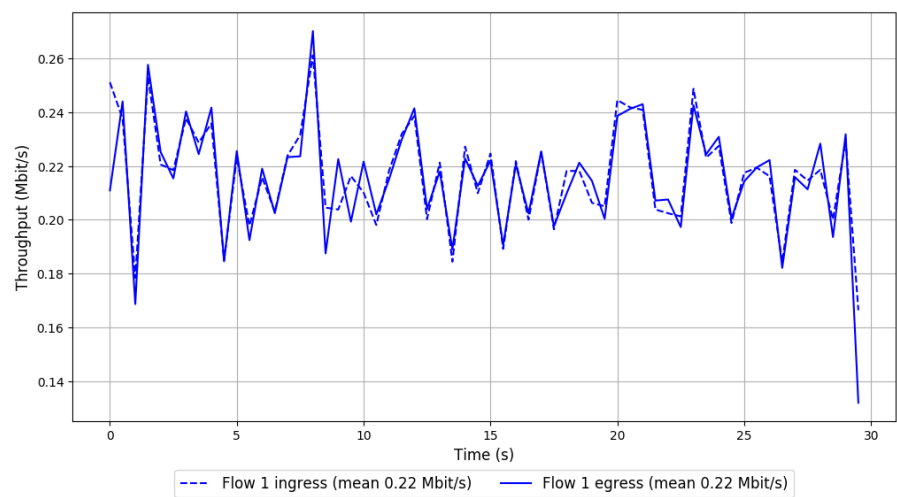


Run 7: Statistics of SCReAM

Start at: 2017-12-19 21:15:55
End at: 2017-12-19 21:16:25
Local clock offset: 11.591 ms
Remote clock offset: -2.384 ms

Below is generated by plot.py at 2017-12-20 01:49:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.006 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.006 ms
Loss rate: 0.51%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-19 21:34:56

End at: 2017-12-19 21:35:26

Local clock offset: 12.77 ms

Remote clock offset: -1.89 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.480 ms

Loss rate: 0.51%

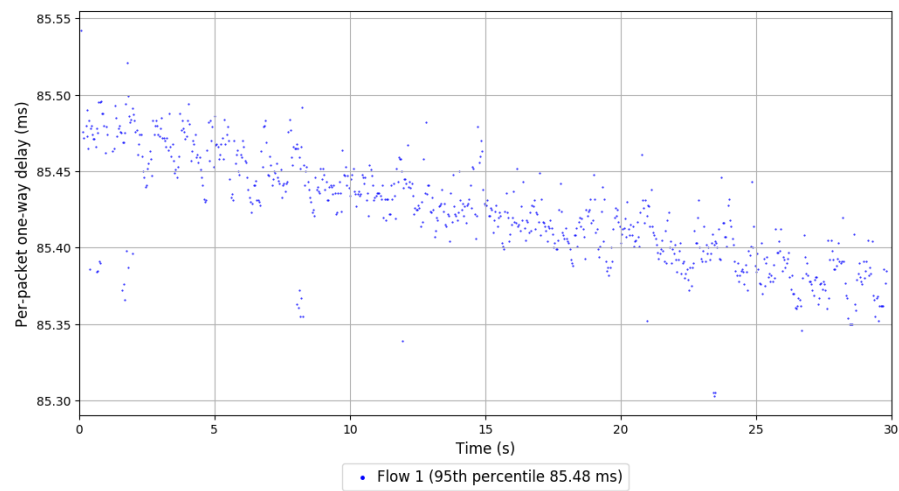
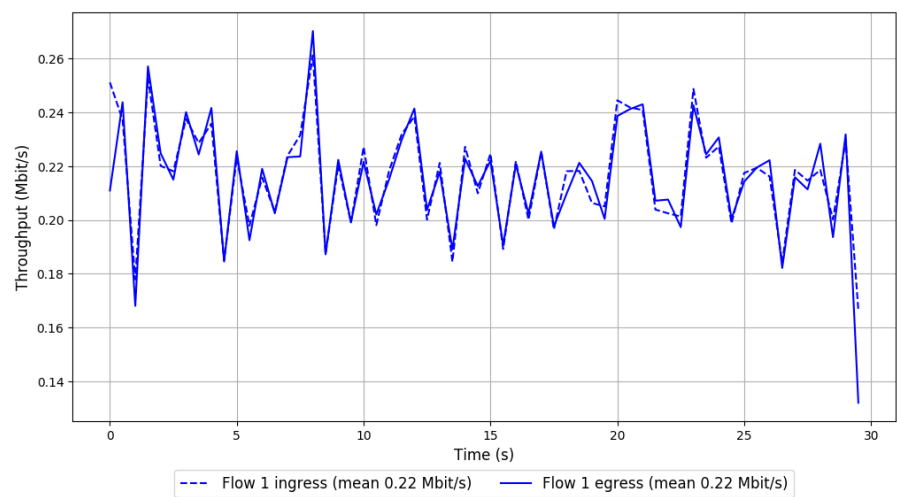
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.480 ms

Loss rate: 0.51%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-19 21:54:01

End at: 2017-12-19 21:54:31

Local clock offset: 9.532 ms

Remote clock offset: 3.038 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 81.683 ms

Loss rate: 0.51%

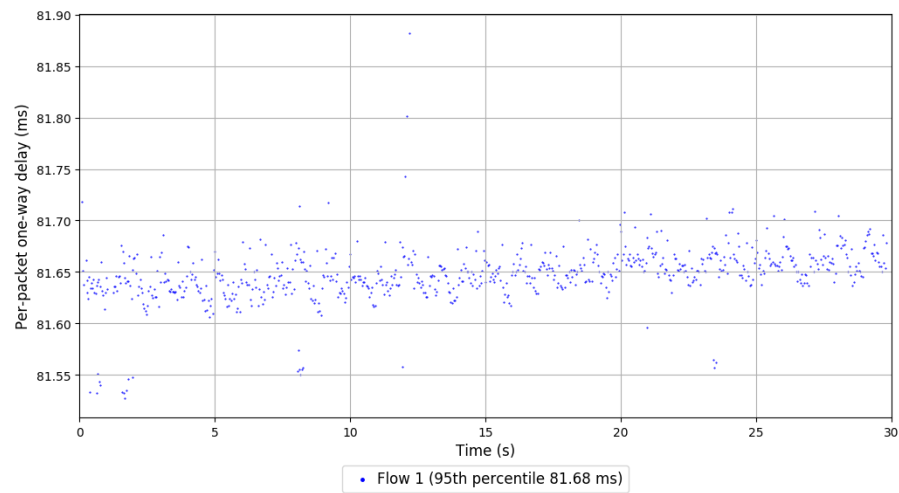
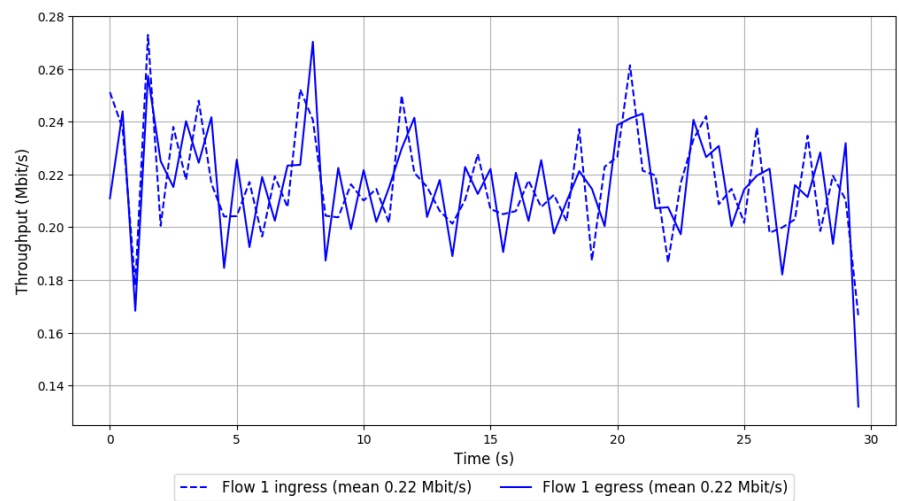
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 81.683 ms

Loss rate: 0.51%

Run 9: Report of SReAM — Data Link

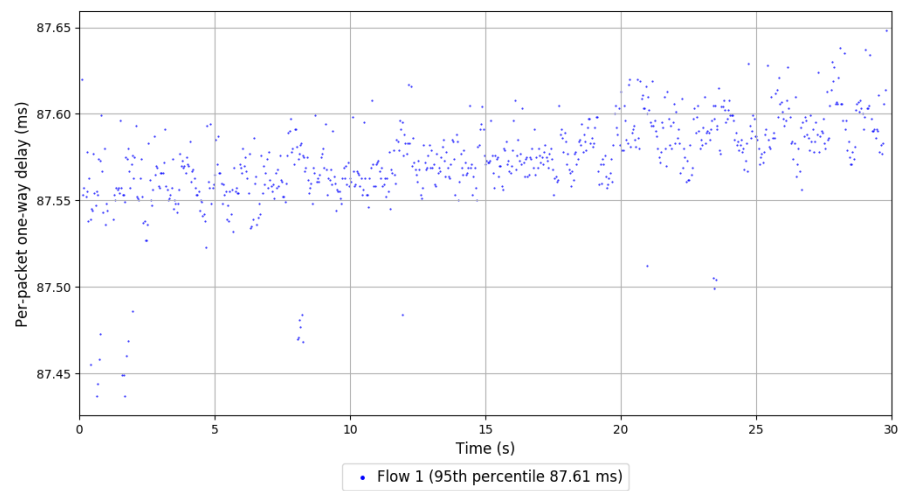
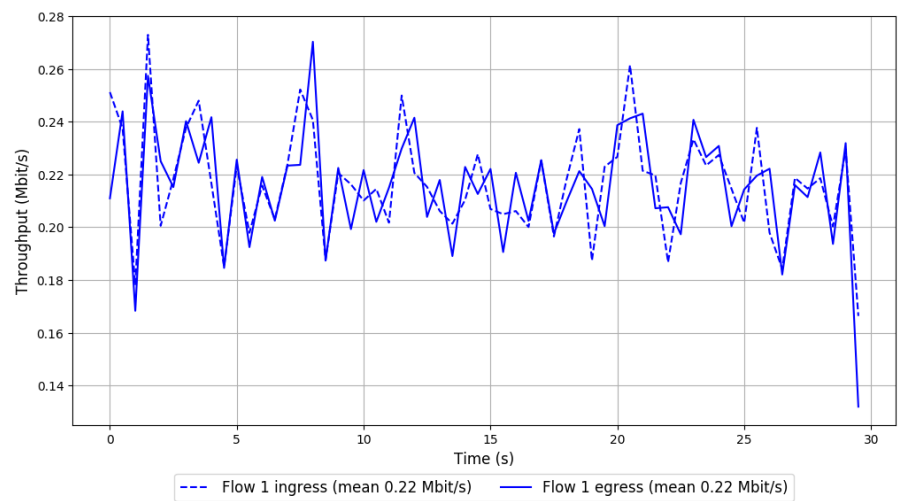


Run 10: Statistics of SCReAM

Start at: 2017-12-19 22:13:02
End at: 2017-12-19 22:13:32
Local clock offset: 6.349 ms
Remote clock offset: -3.088 ms

Below is generated by plot.py at 2017-12-20 01:49:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.609 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.609 ms
Loss rate: 0.51%

Run 10: Report of SReAM — Data Link

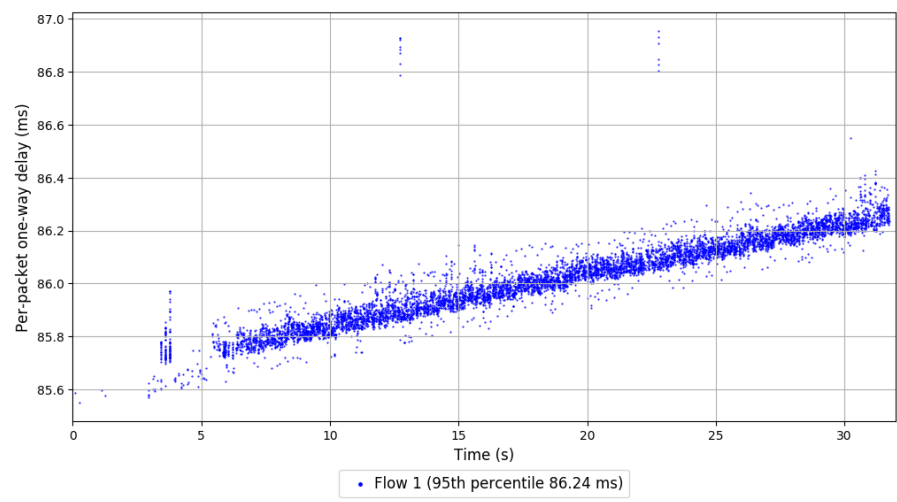
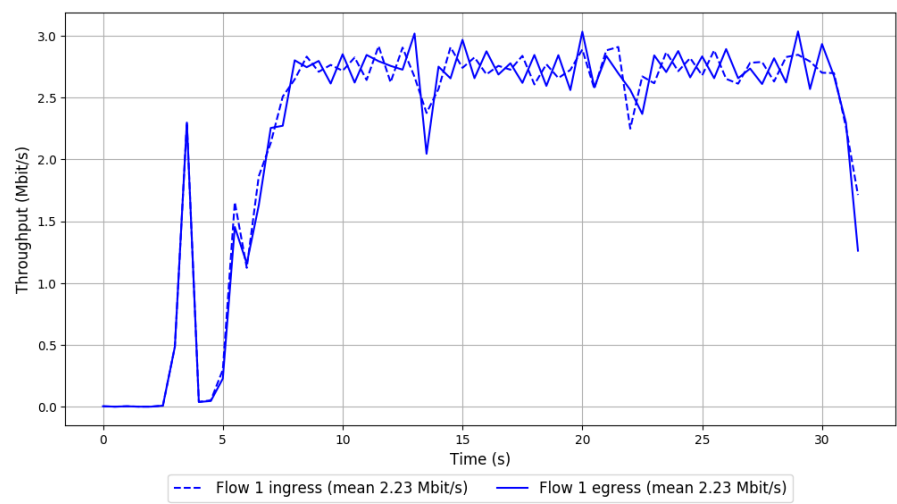


Run 1: Statistics of WebRTC media

Start at: 2017-12-19 19:30:29
End at: 2017-12-19 19:30:59
Local clock offset: 13.312 ms
Remote clock offset: -4.874 ms

Below is generated by plot.py at 2017-12-20 01:49:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 86.240 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 86.240 ms
Loss rate: 0.61%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

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

End at: 2017-12-19 19:50:09

Local clock offset: 6.534 ms

Remote clock offset: 0.678 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 80.945 ms

Loss rate: 0.62%

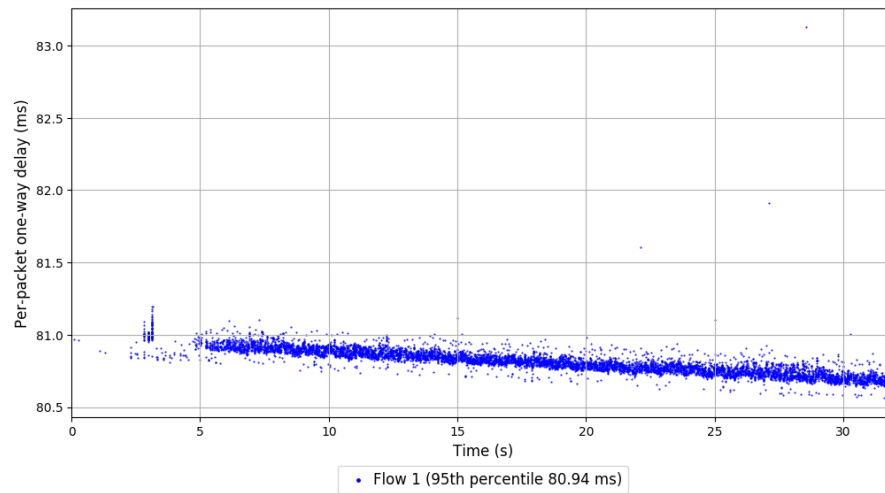
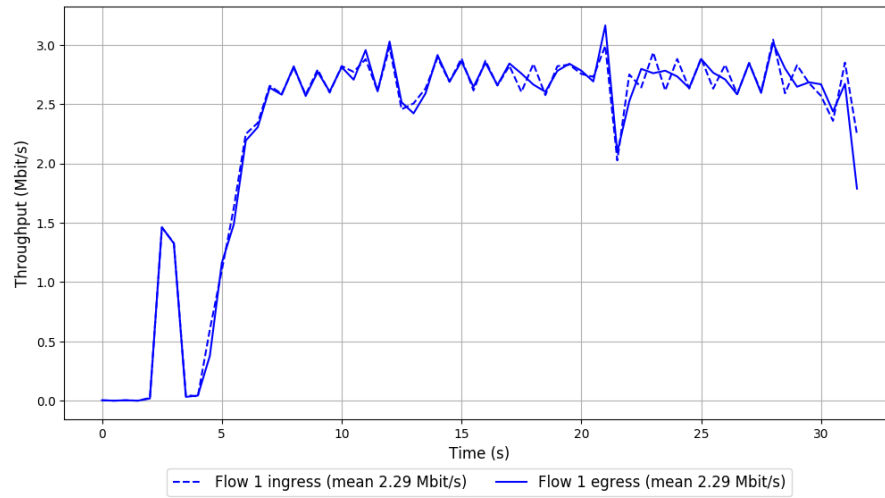
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 80.945 ms

Loss rate: 0.62%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

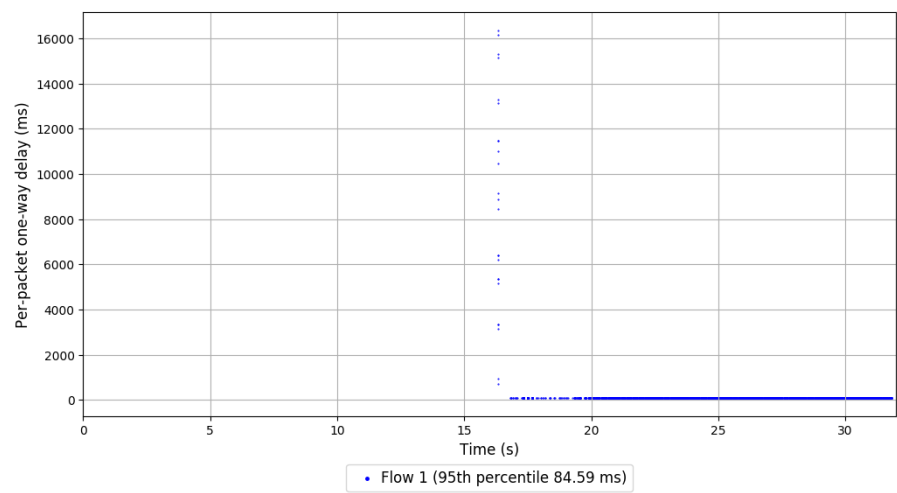
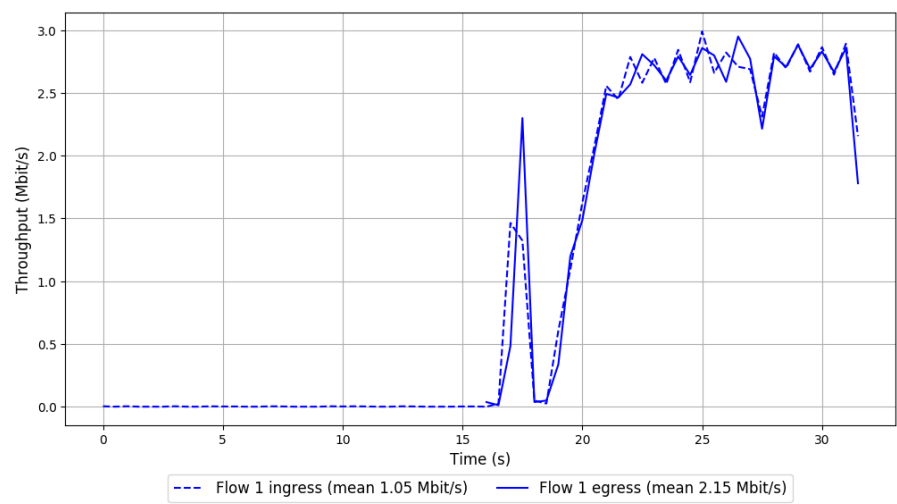
Start at: 2017-12-19 20:08:41

End at: 2017-12-19 20:09:11

Local clock offset: 9.114 ms

Remote clock offset: -3.236 ms

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

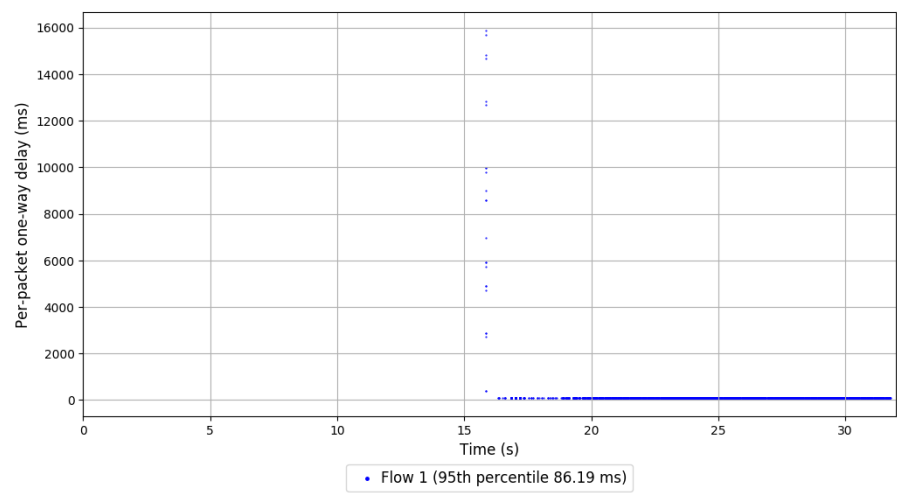
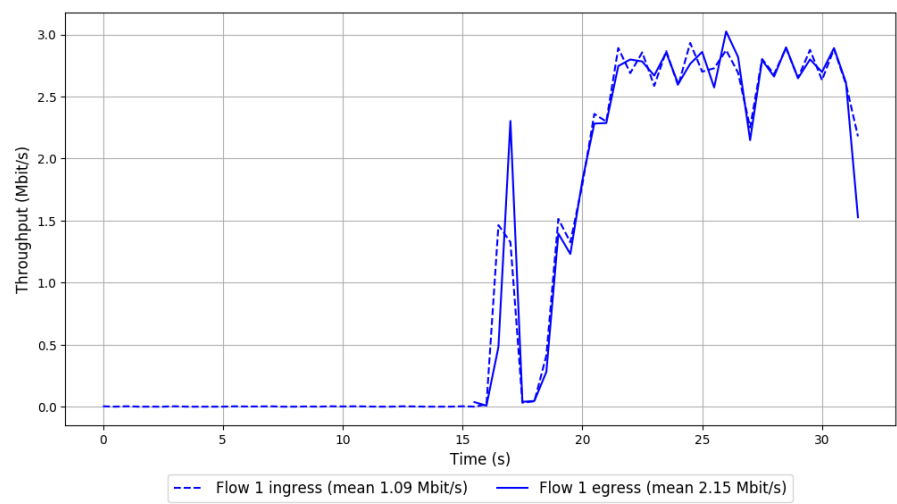
Start at: 2017-12-19 20:27:40

End at: 2017-12-19 20:28:10

Local clock offset: 6.3 ms

Remote clock offset: -2.738 ms

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

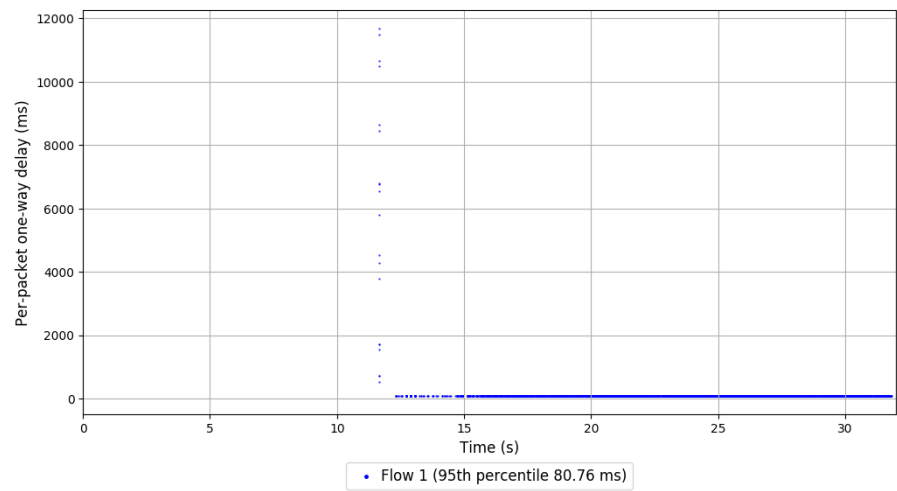
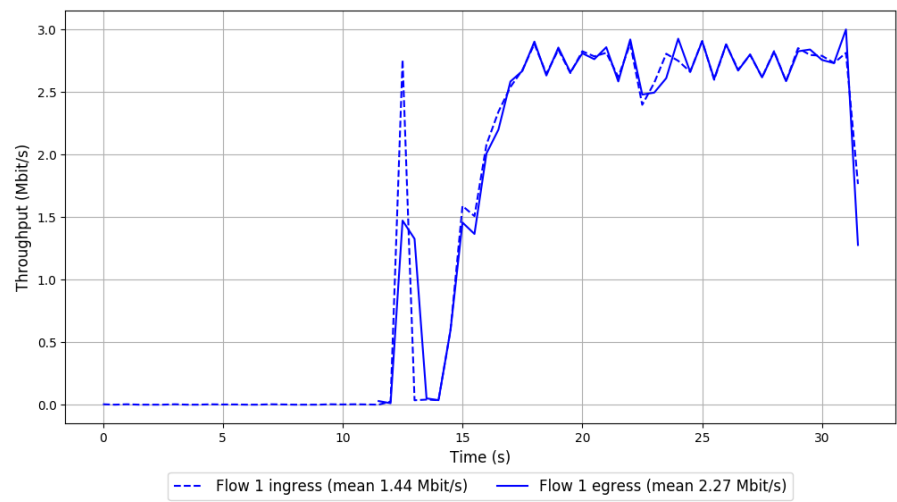
Start at: 2017-12-19 20:46:51

End at: 2017-12-19 20:47:21

Local clock offset: 6.125 ms

Remote clock offset: 2.518 ms

Run 5: Report of WebRTC media — Data Link

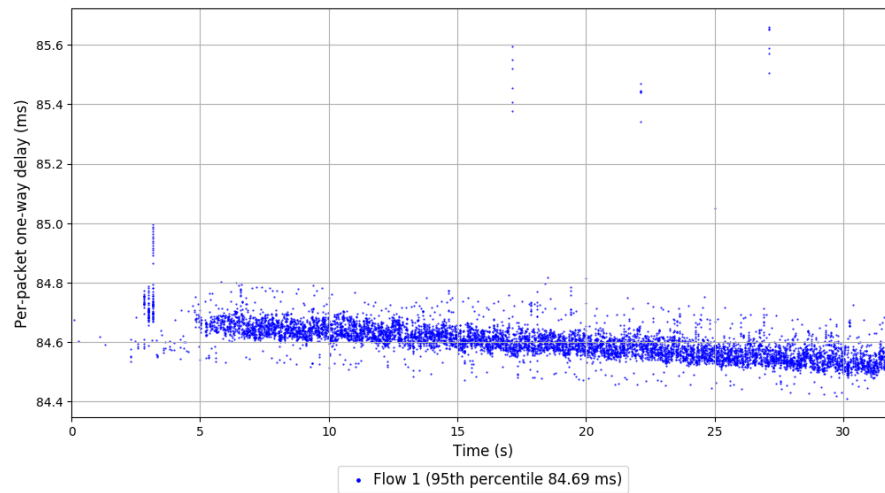
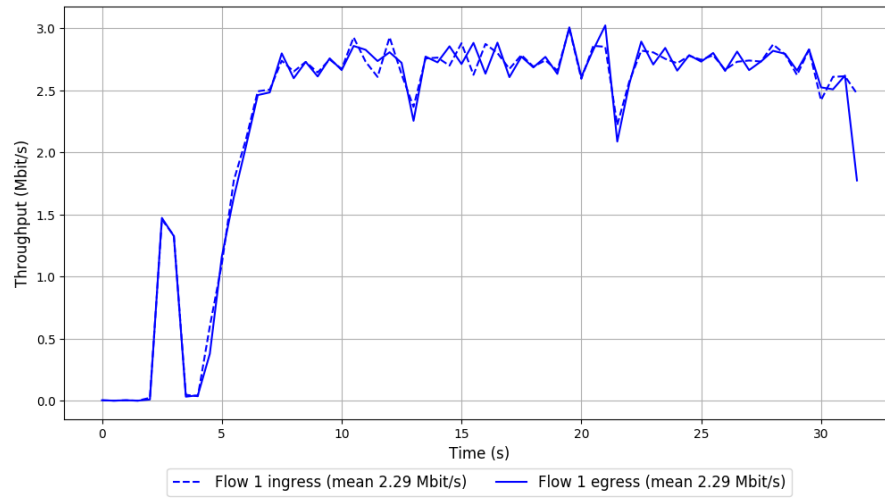


Run 6: Statistics of WebRTC media

Start at: 2017-12-19 21:05:51
End at: 2017-12-19 21:06:21
Local clock offset: 10.592 ms
Remote clock offset: -2.718 ms

Below is generated by plot.py at 2017-12-20 01:49:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 84.688 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 84.688 ms
Loss rate: 0.77%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-19 21:24:53

End at: 2017-12-19 21:25:23

Local clock offset: 11.579 ms

Remote clock offset: 2.505 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 79.650 ms

Loss rate: 0.62%

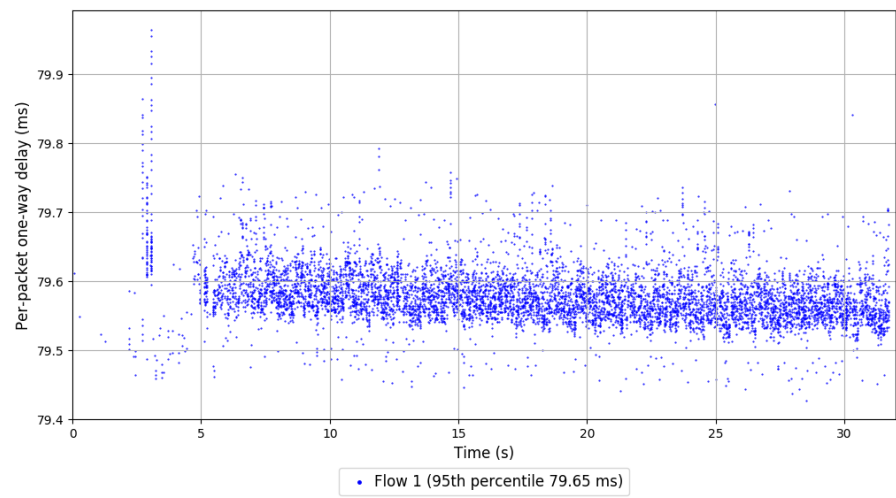
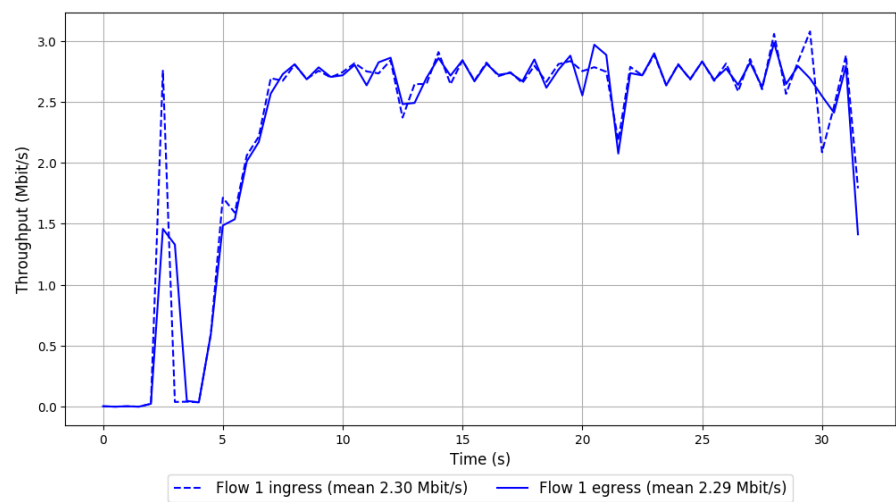
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 79.650 ms

Loss rate: 0.62%

Run 7: Report of WebRTC media — Data Link

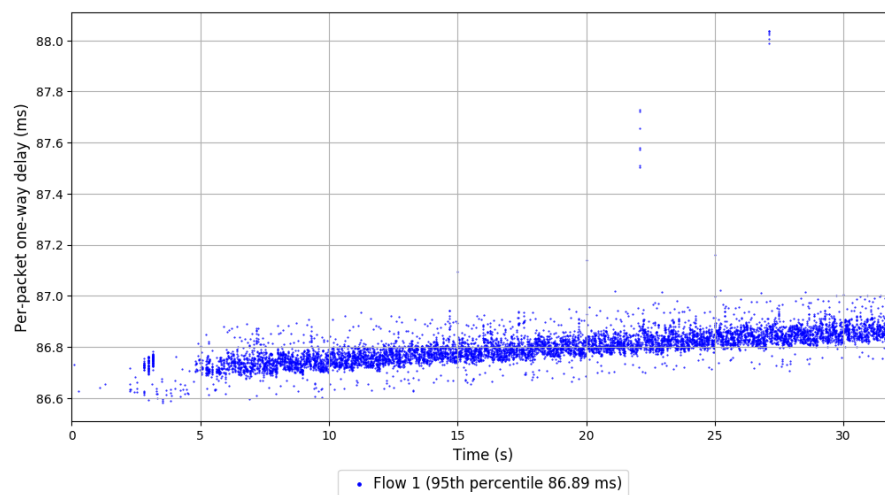
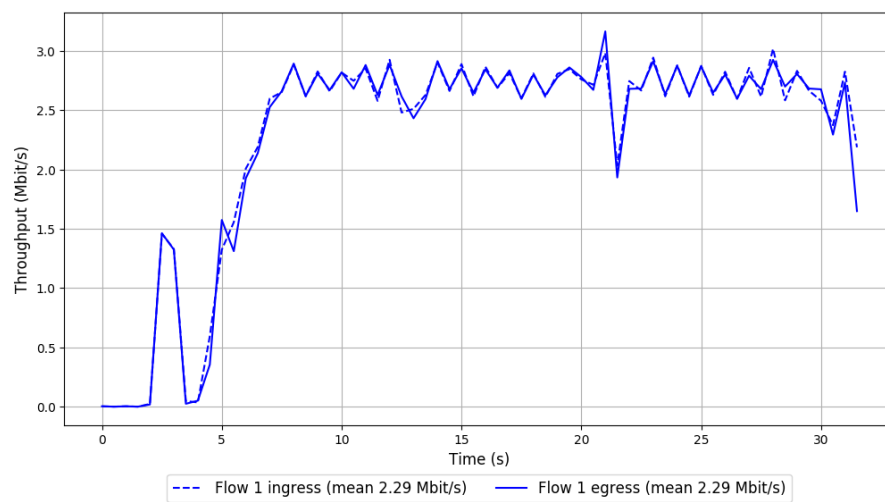


Run 8: Statistics of WebRTC media

Start at: 2017-12-19 21:44:00
End at: 2017-12-19 21:44:30
Local clock offset: 11.839 ms
Remote clock offset: -3.203 ms

Below is generated by plot.py at 2017-12-20 01:49:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 86.889 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 86.889 ms
Loss rate: 0.72%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-19 22:03:06

End at: 2017-12-19 22:03:36

Local clock offset: 8.974 ms

Remote clock offset: 2.898 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 78.833 ms

Loss rate: 0.76%

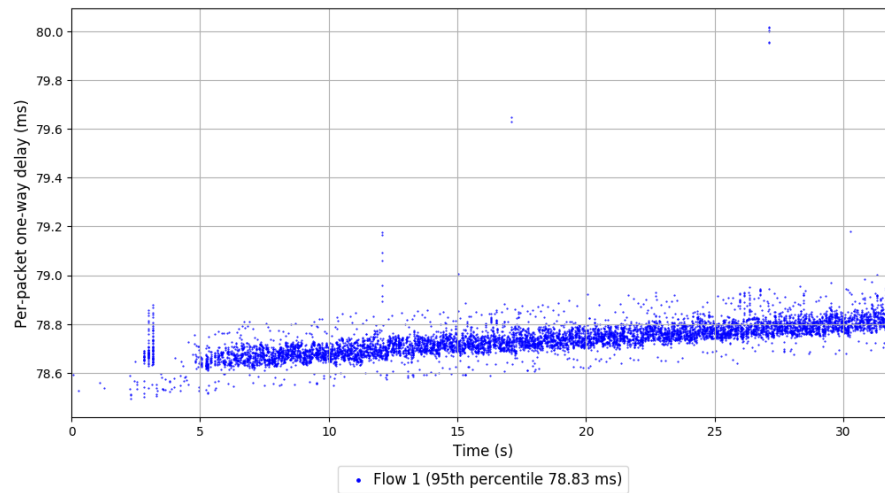
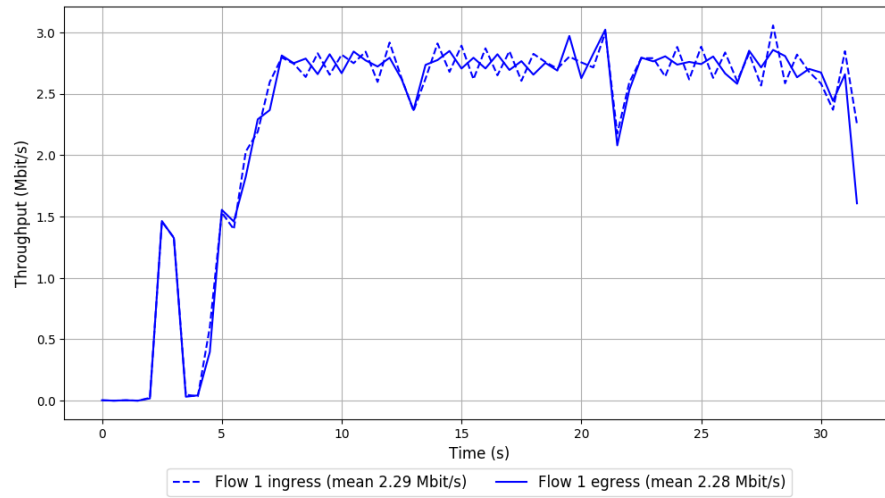
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 78.833 ms

Loss rate: 0.76%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-19 22:22:10

End at: 2017-12-19 22:22:40

Local clock offset: 4.481 ms

Remote clock offset: -4.192 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 85.081 ms

Loss rate: 0.61%

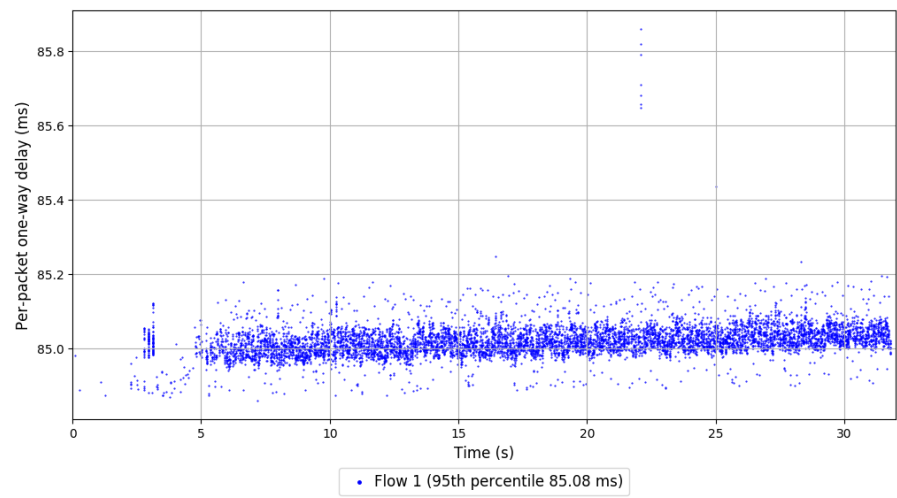
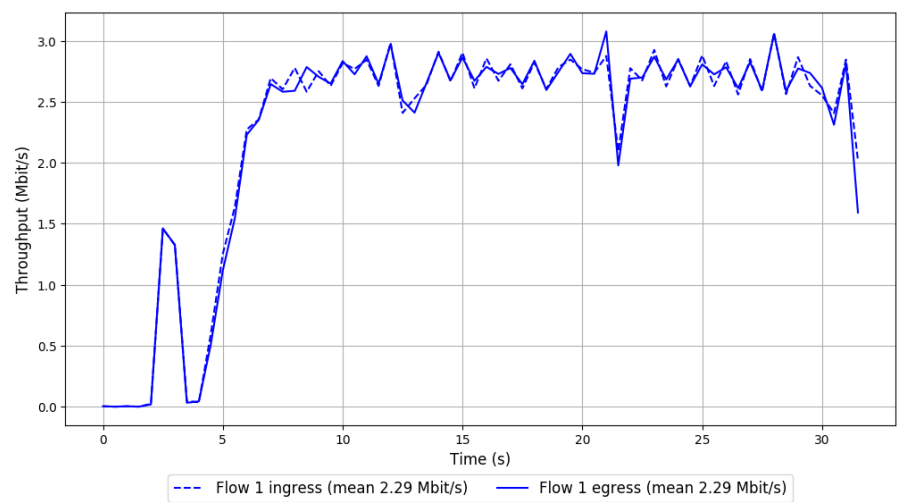
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 85.081 ms

Loss rate: 0.61%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-19 19:18:53

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

Local clock offset: 11.007 ms

Remote clock offset: 1.533 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 80.571 ms

Loss rate: 0.65%

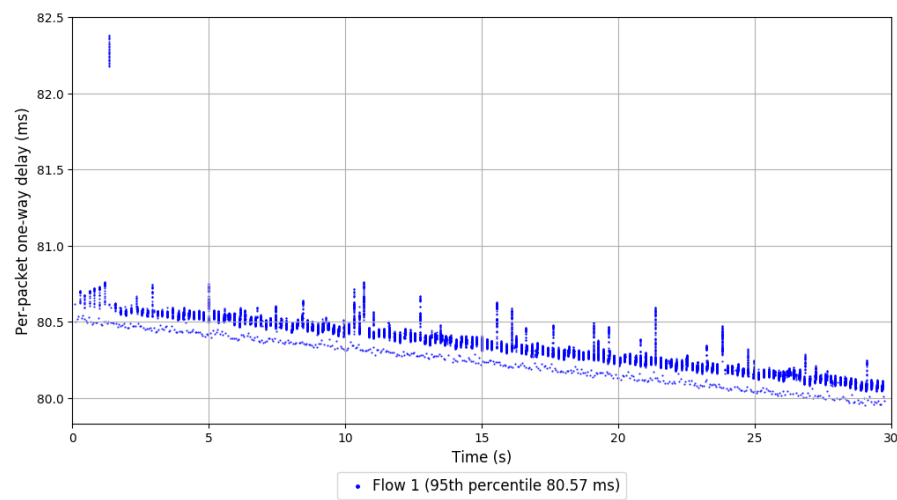
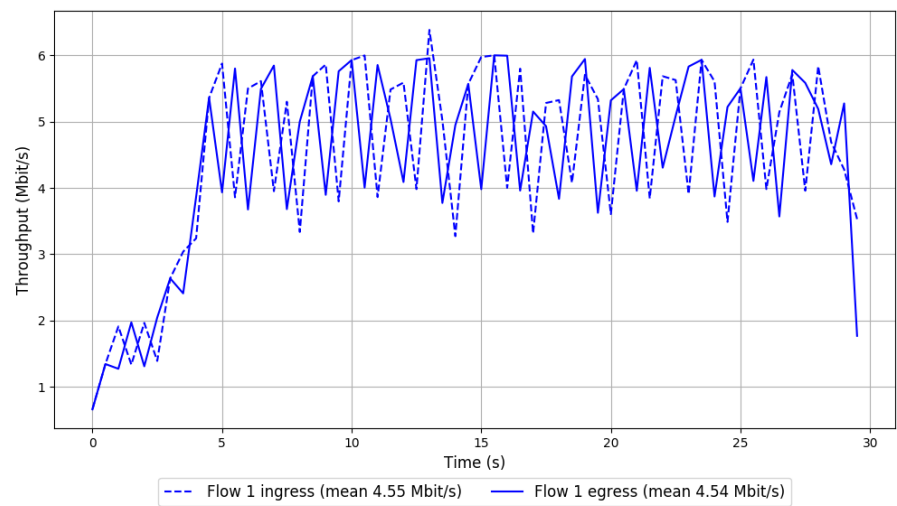
-- Flow 1:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 80.571 ms

Loss rate: 0.65%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-19 19:38:03

End at: 2017-12-19 19:38:33

Local clock offset: 4.528 ms

Remote clock offset: 2.008 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.77 Mbit/s

95th percentile per-packet one-way delay: 78.462 ms

Loss rate: 0.70%

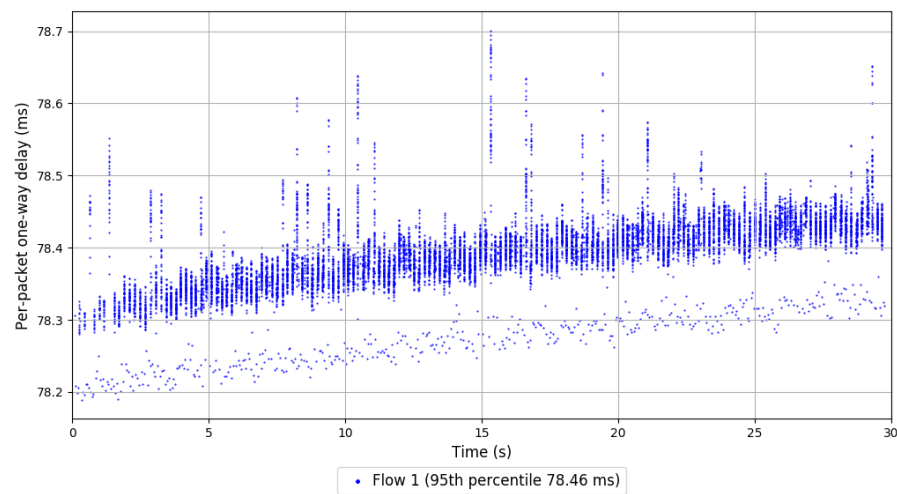
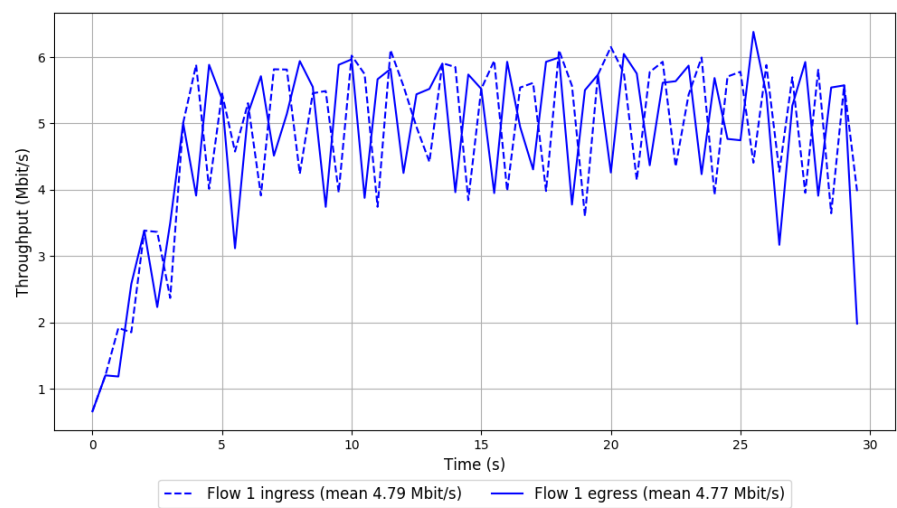
-- Flow 1:

Average throughput: 4.77 Mbit/s

95th percentile per-packet one-way delay: 78.462 ms

Loss rate: 0.70%

Run 2: Report of Sprout — Data Link

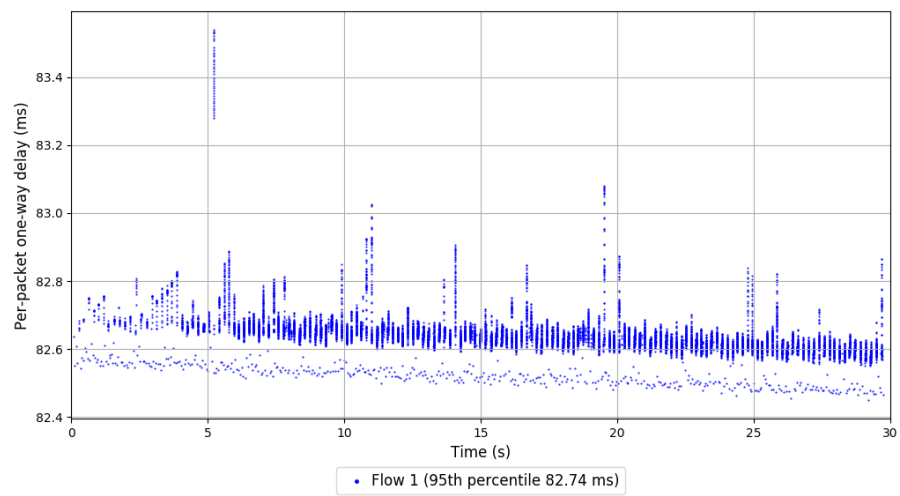
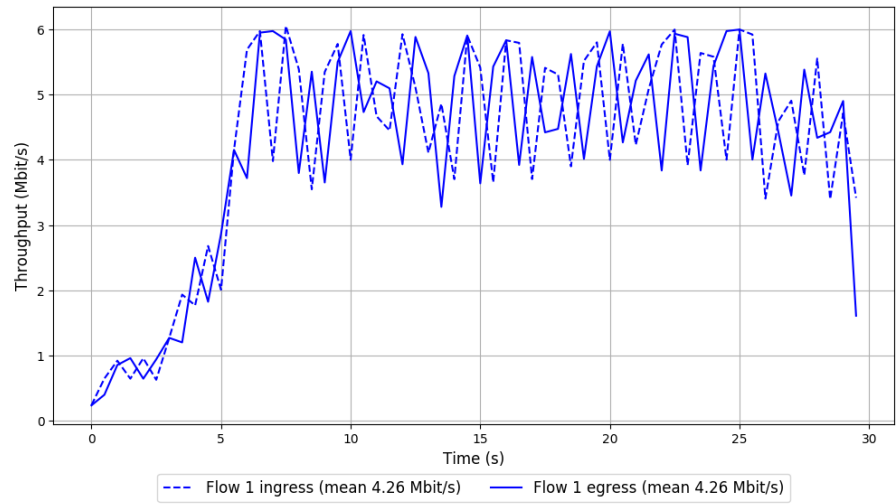


Run 3: Statistics of Sprout

Start at: 2017-12-19 19:57:10
End at: 2017-12-19 19:57:40
Local clock offset: 7.592 ms
Remote clock offset: 1.251 ms

Below is generated by plot.py at 2017-12-20 01:49:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 82.743 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 82.743 ms
Loss rate: 0.71%

Run 3: Report of Sprout — Data Link

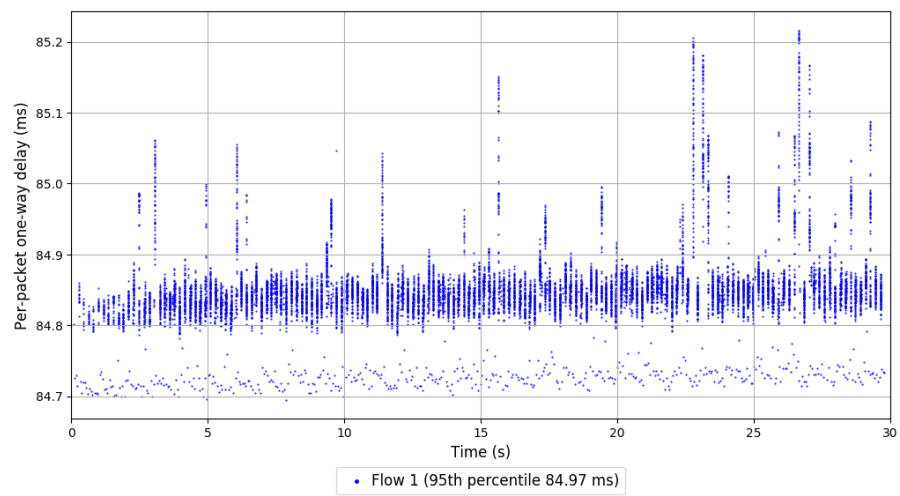
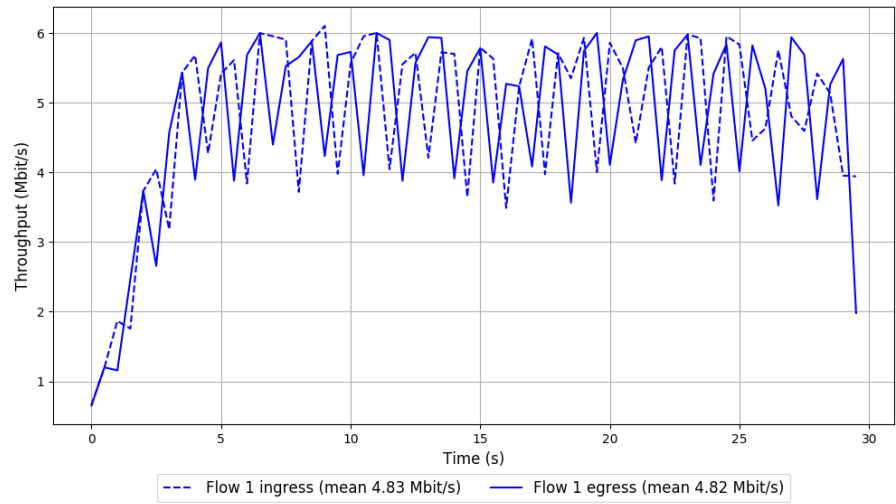


Run 4: Statistics of Sprout

Start at: 2017-12-19 20:16:10
End at: 2017-12-19 20:16:40
Local clock offset: 7.529 ms
Remote clock offset: -1.791 ms

Below is generated by plot.py at 2017-12-20 01:49:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 84.966 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 84.966 ms
Loss rate: 0.68%

Run 4: Report of Sprout — Data Link

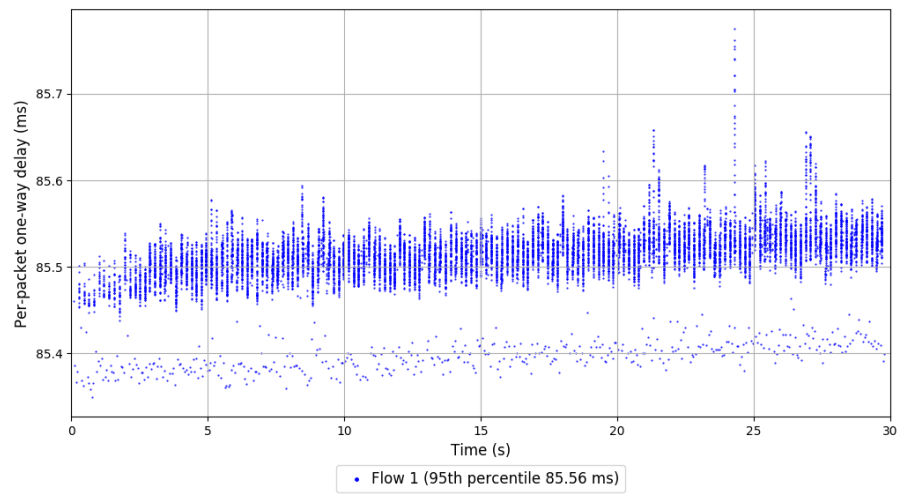
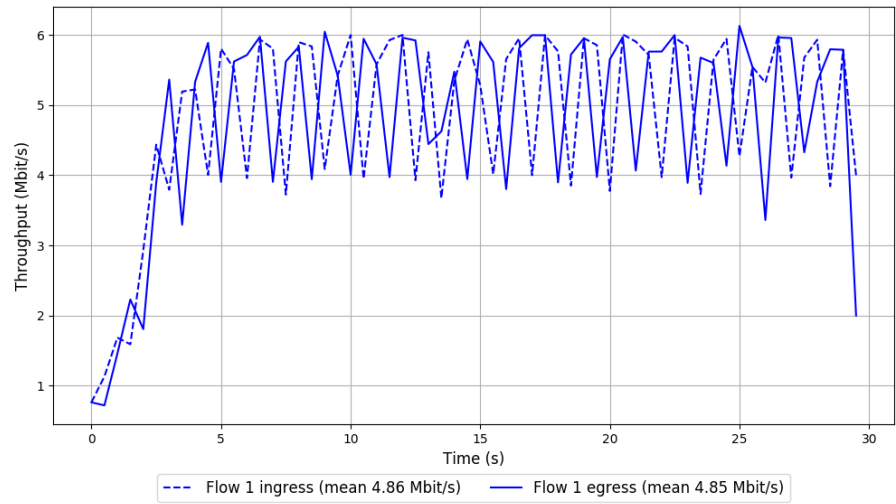


Run 5: Statistics of Sprout

Start at: 2017-12-19 20:35:13
End at: 2017-12-19 20:35:43
Local clock offset: 5.552 ms
Remote clock offset: -1.776 ms

Below is generated by plot.py at 2017-12-20 01:49:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.85 Mbit/s
95th percentile per-packet one-way delay: 85.556 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 4.85 Mbit/s
95th percentile per-packet one-way delay: 85.556 ms
Loss rate: 0.69%

Run 5: Report of Sprout — Data Link

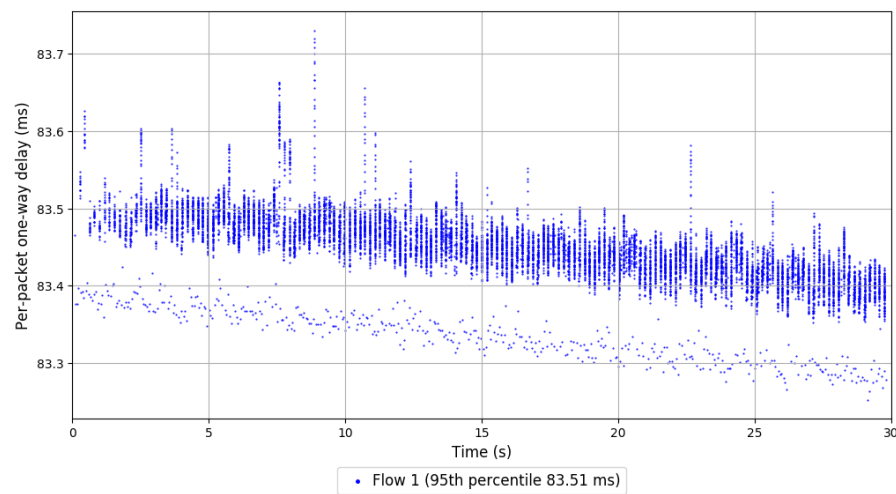
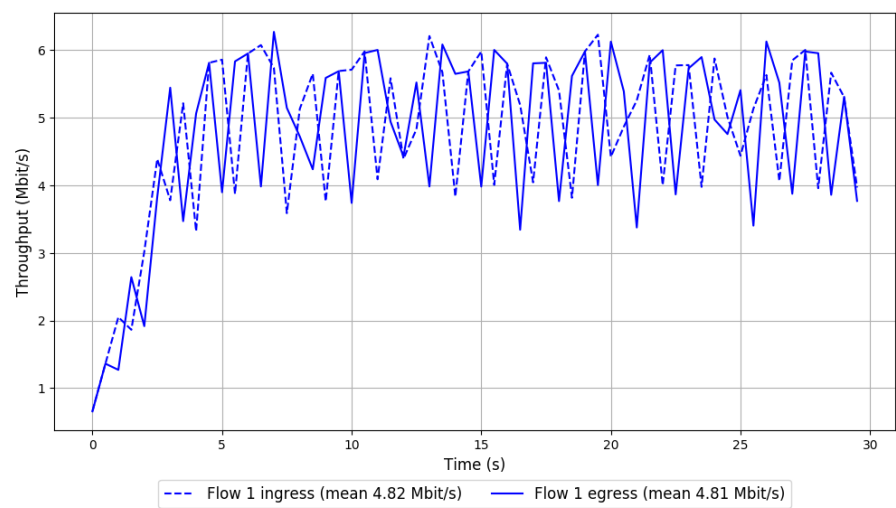


Run 6: Statistics of Sprout

Start at: 2017-12-19 20:54:25
End at: 2017-12-19 20:54:55
Local clock offset: 7.58 ms
Remote clock offset: -1.507 ms

Below is generated by plot.py at 2017-12-20 01:49:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.81 Mbit/s
95th percentile per-packet one-way delay: 83.508 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 4.81 Mbit/s
95th percentile per-packet one-way delay: 83.508 ms
Loss rate: 0.69%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

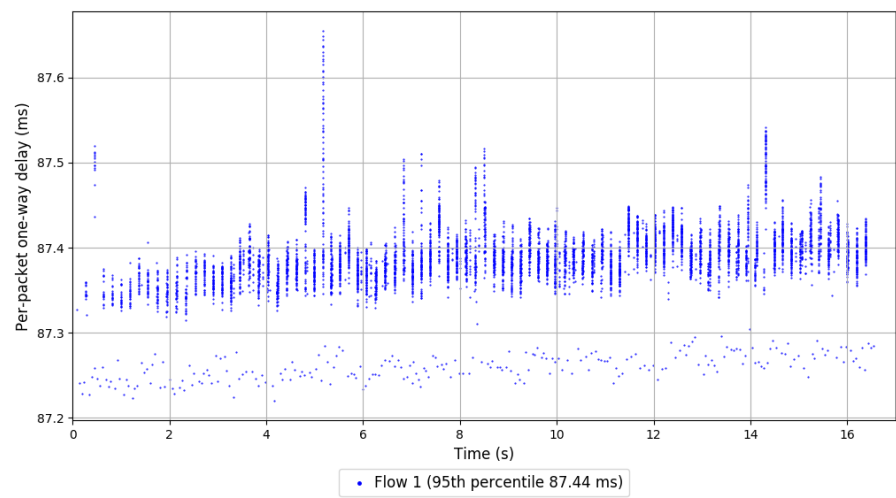
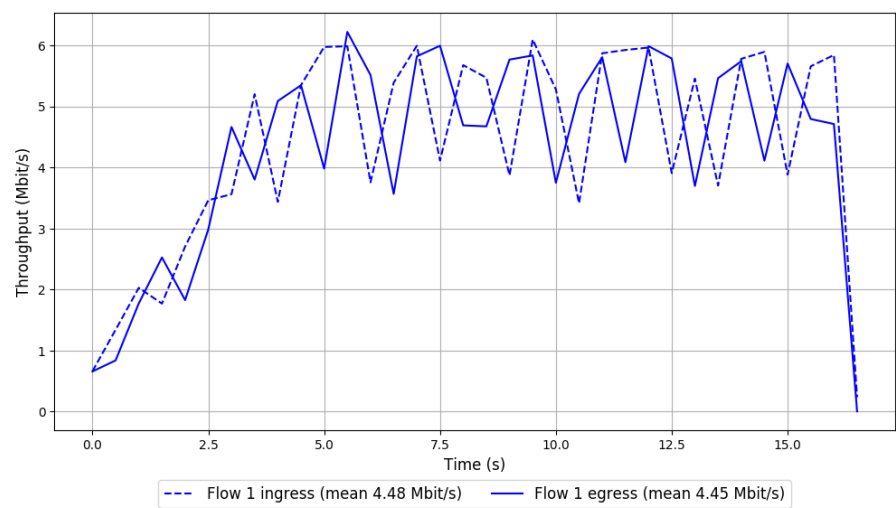
Start at: 2017-12-19 21:13:24

End at: 2017-12-19 21:13:54

Local clock offset: 11.93 ms

Remote clock offset: -2.004 ms

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-19 21:32:27

End at: 2017-12-19 21:32:57

Local clock offset: 12.43 ms

Remote clock offset: 3.018 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 80.537 ms

Loss rate: 0.66%

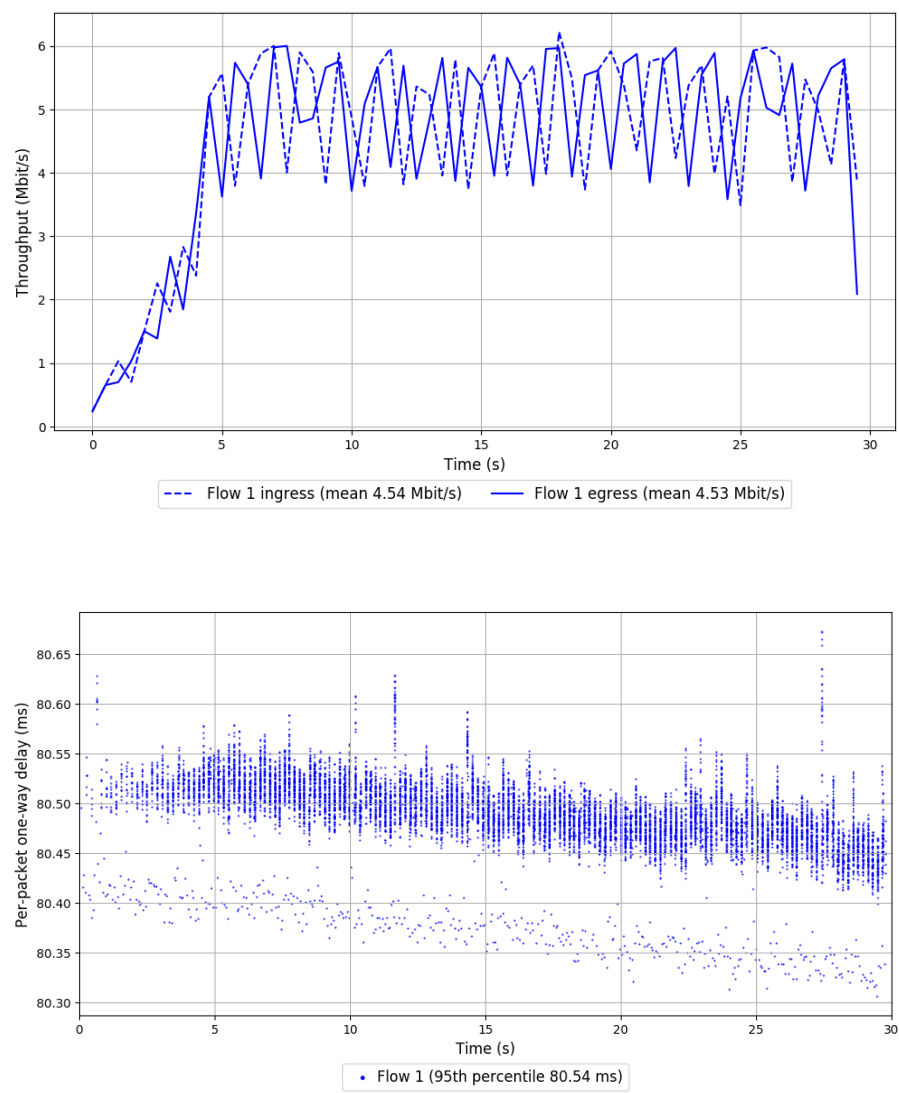
-- Flow 1:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 80.537 ms

Loss rate: 0.66%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-19 21:51:29

End at: 2017-12-19 21:51:59

Local clock offset: 9.884 ms

Remote clock offset: 2.907 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.82 Mbit/s

95th percentile per-packet one-way delay: 80.240 ms

Loss rate: 0.65%

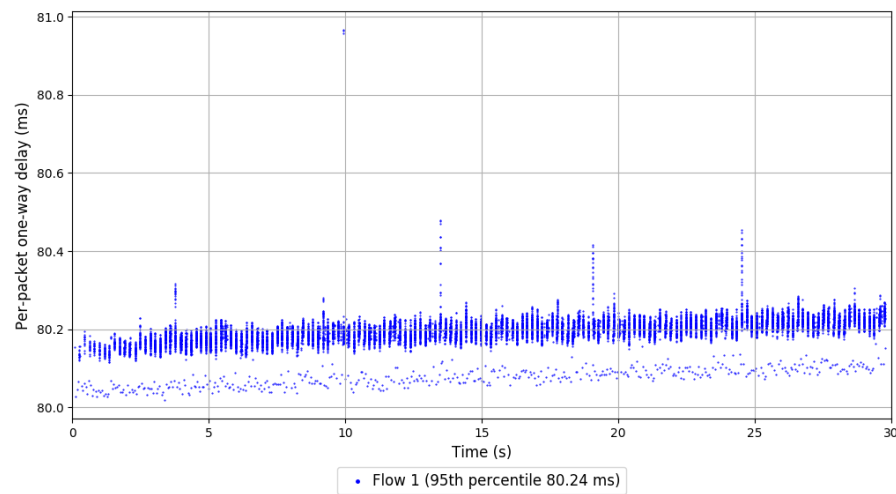
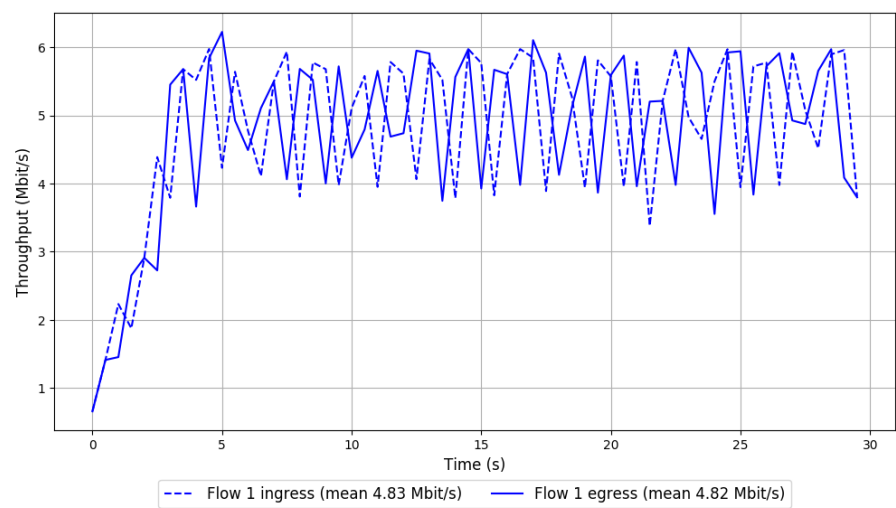
-- Flow 1:

Average throughput: 4.82 Mbit/s

95th percentile per-packet one-way delay: 80.240 ms

Loss rate: 0.65%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-19 22:10:32

End at: 2017-12-19 22:11:02

Local clock offset: 6.736 ms

Remote clock offset: -3.498 ms

Below is generated by plot.py at 2017-12-20 01:49:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.77 Mbit/s

95th percentile per-packet one-way delay: 86.908 ms

Loss rate: 0.66%

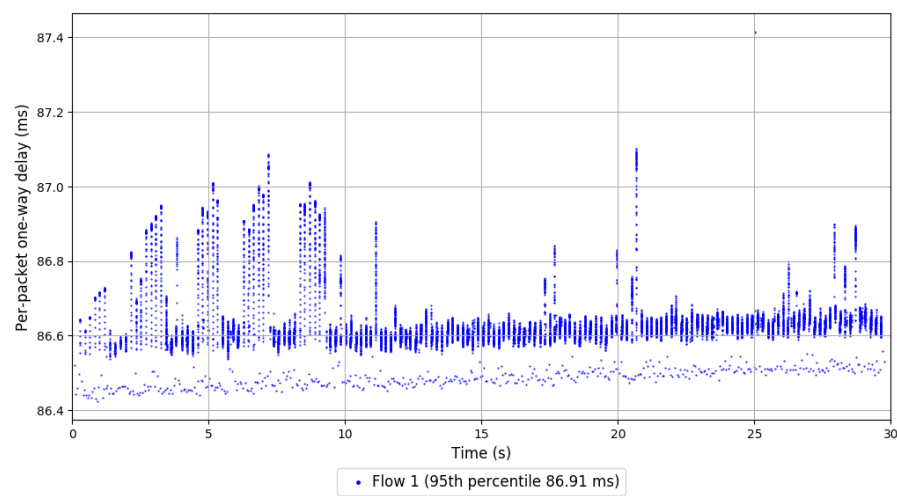
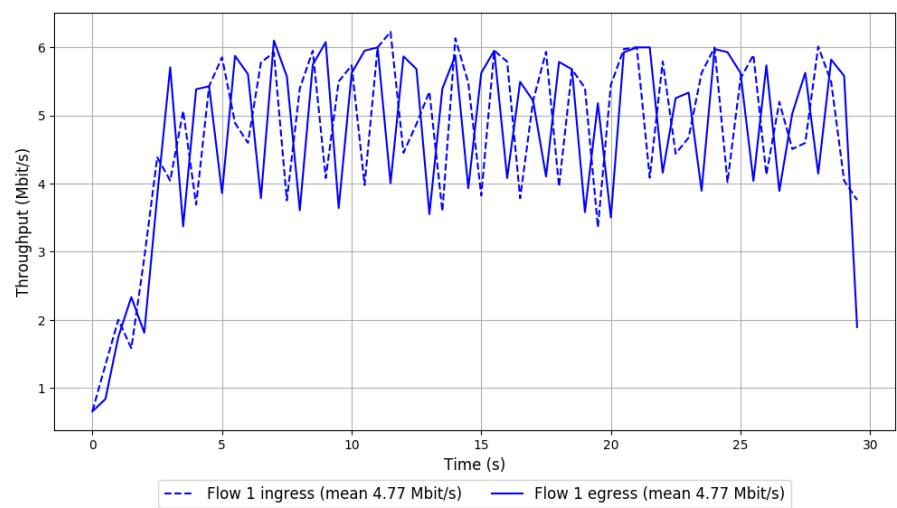
-- Flow 1:

Average throughput: 4.77 Mbit/s

95th percentile per-packet one-way delay: 86.908 ms

Loss rate: 0.66%

Run 10: Report of Sprout — Data Link

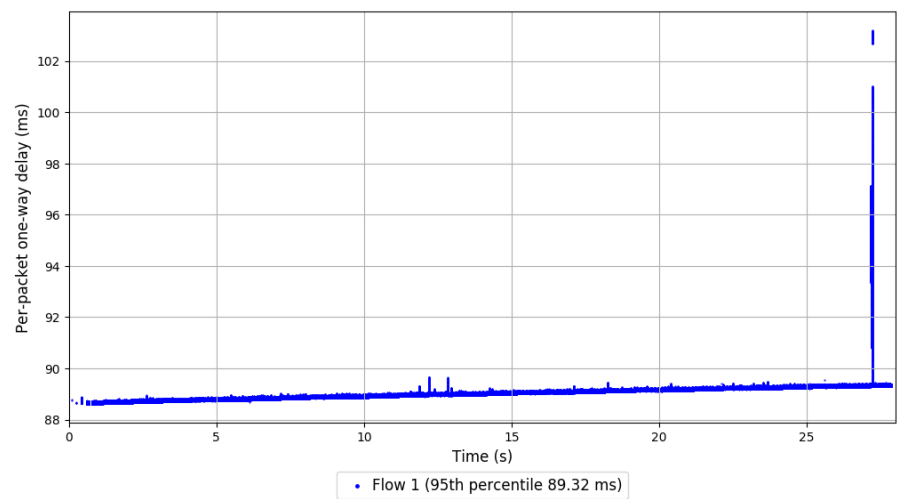
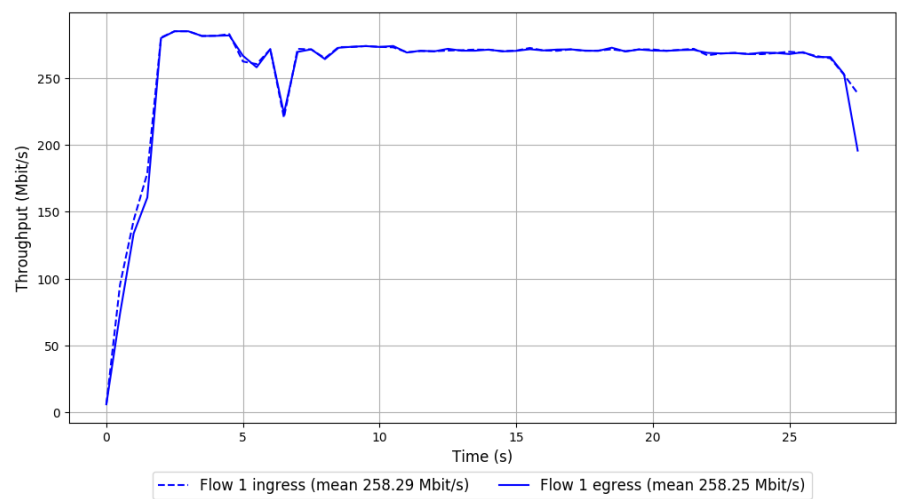


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-19 19:26:32
End at: 2017-12-19 19:27:02
Local clock offset: 18.699 ms
Remote clock offset: -4.989 ms

# Below is generated by plot.py at 2017-12-20 01:53:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 258.25 Mbit/s
95th percentile per-packet one-way delay: 89.318 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 258.25 Mbit/s
95th percentile per-packet one-way delay: 89.318 ms
Loss rate: 0.62%
```


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



Run 2: Statistics of TaoVA-100x

Start at: 2017-12-19 19:45:41

End at: 2017-12-19 19:46:11

Local clock offset: 4.954 ms

Remote clock offset: 2.595 ms

Below is generated by plot.py at 2017-12-20 01:53:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 273.71 Mbit/s

95th percentile per-packet one-way delay: 77.702 ms

Loss rate: 0.59%

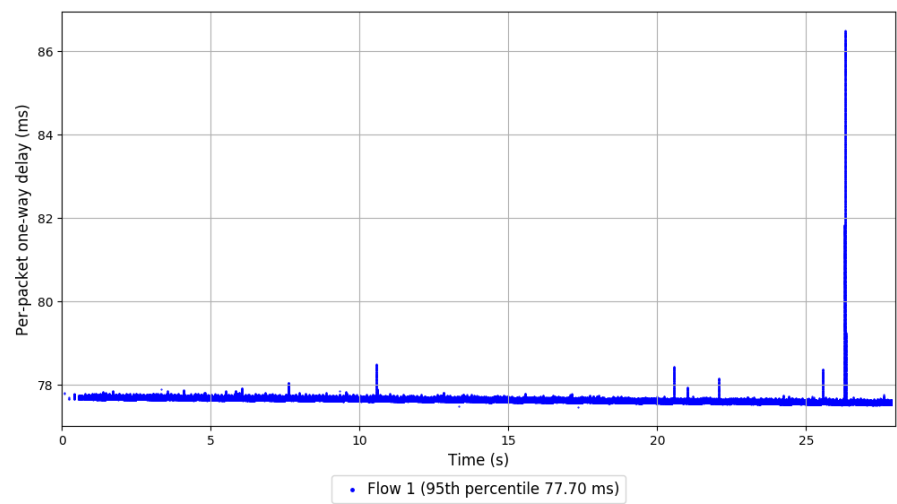
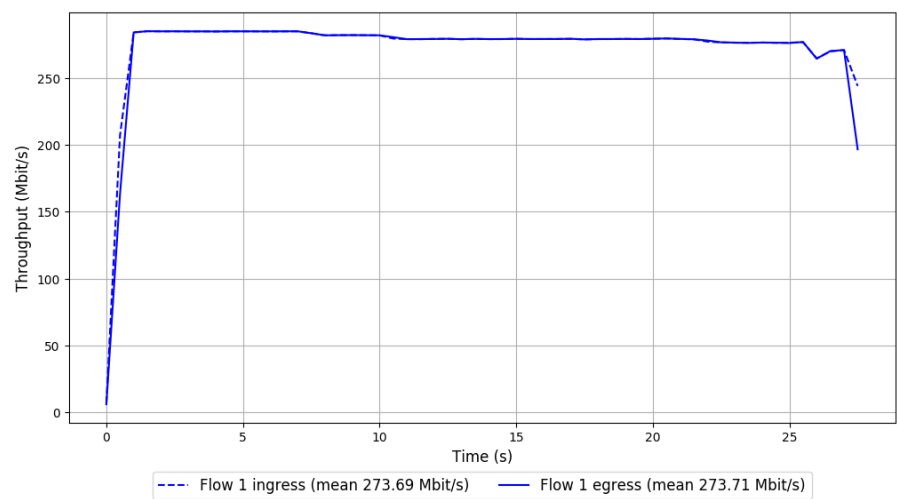
-- Flow 1:

Average throughput: 273.71 Mbit/s

95th percentile per-packet one-way delay: 77.702 ms

Loss rate: 0.59%

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



Run 3: Statistics of TaoVA-100x

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

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

Local clock offset: 9.42 ms

Remote clock offset: -2.532 ms

Below is generated by plot.py at 2017-12-20 01:53:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 270.64 Mbit/s

95th percentile per-packet one-way delay: 87.169 ms

Loss rate: 0.61%

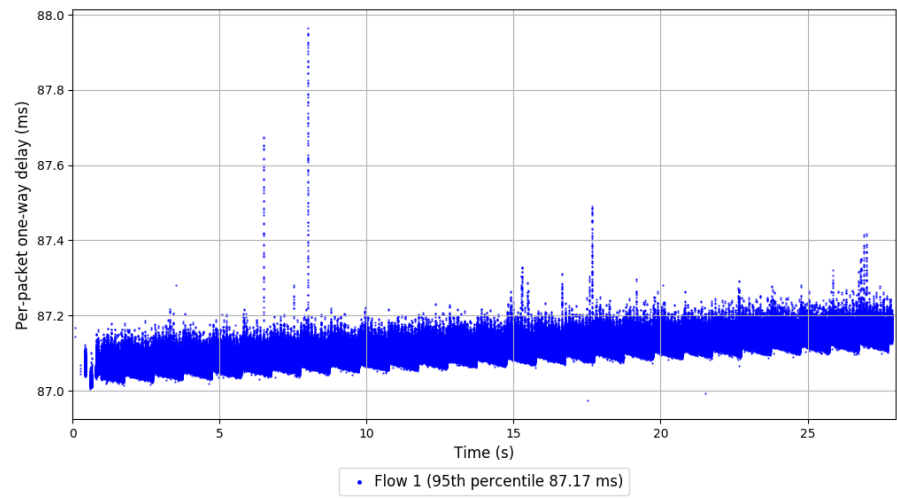
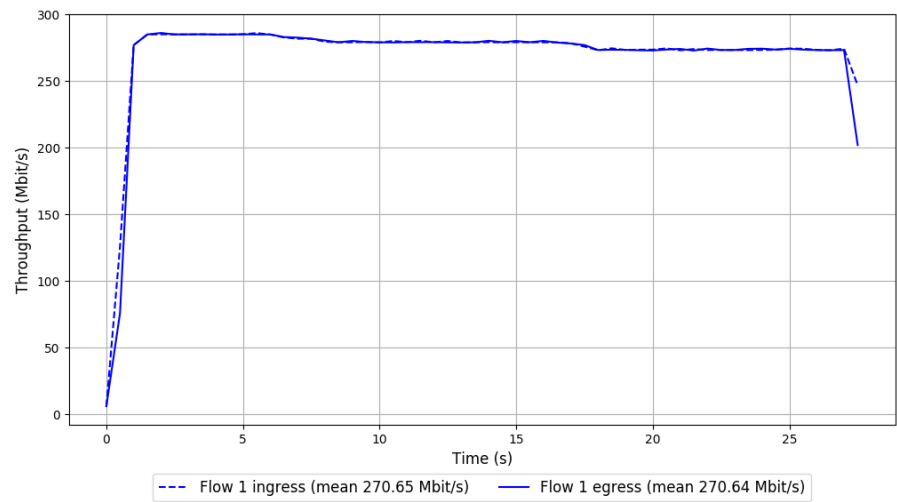
-- Flow 1:

Average throughput: 270.64 Mbit/s

95th percentile per-packet one-way delay: 87.169 ms

Loss rate: 0.61%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-19 20:23:45

End at: 2017-12-19 20:24:15

Local clock offset: 6.187 ms

Remote clock offset: -1.663 ms

Below is generated by plot.py at 2017-12-20 01:53:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 276.03 Mbit/s

95th percentile per-packet one-way delay: 84.763 ms

Loss rate: 0.61%

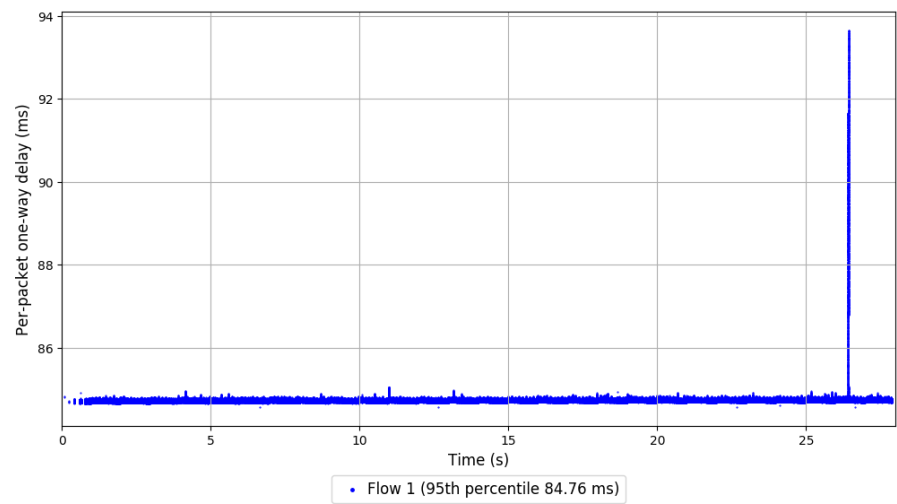
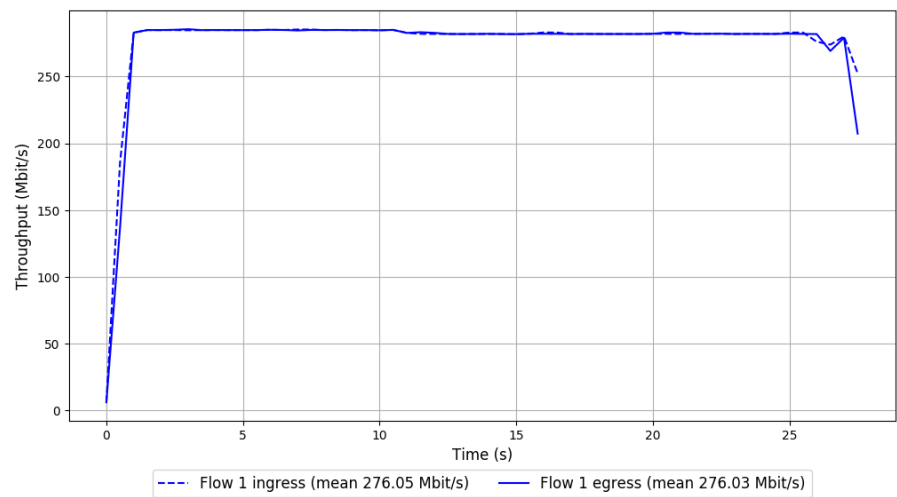
-- Flow 1:

Average throughput: 276.03 Mbit/s

95th percentile per-packet one-way delay: 84.763 ms

Loss rate: 0.61%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-19 20:42:54

End at: 2017-12-19 20:43:24

Local clock offset: 5.758 ms

Remote clock offset: 4.203 ms

Below is generated by plot.py at 2017-12-20 01:53:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 272.40 Mbit/s

95th percentile per-packet one-way delay: 81.074 ms

Loss rate: 0.62%

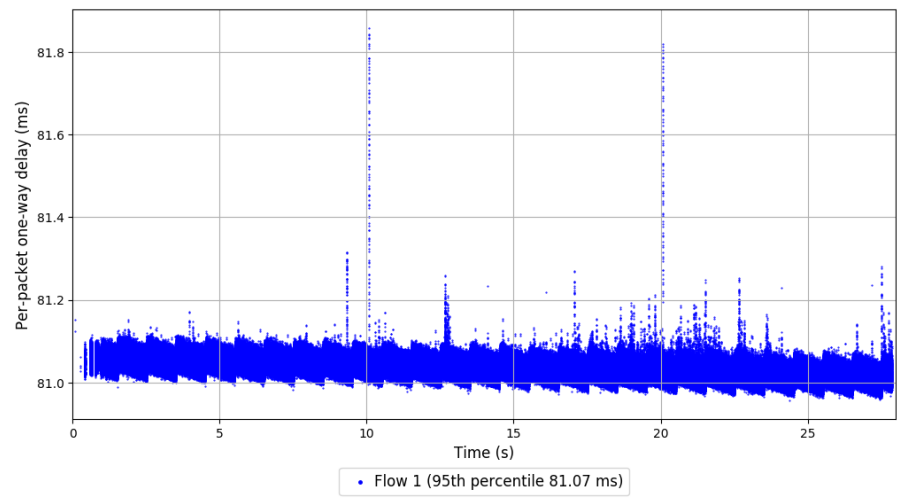
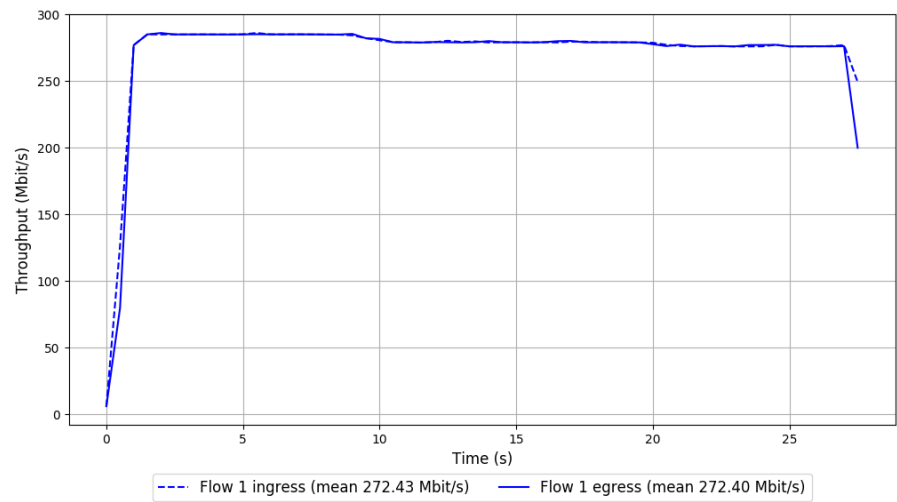
-- Flow 1:

Average throughput: 272.40 Mbit/s

95th percentile per-packet one-way delay: 81.074 ms

Loss rate: 0.62%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-19 21:02:00

End at: 2017-12-19 21:02:30

Local clock offset: 9.467 ms

Remote clock offset: 2.157 ms

Below is generated by plot.py at 2017-12-20 01:53:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 271.66 Mbit/s

95th percentile per-packet one-way delay: 79.800 ms

Loss rate: 0.59%

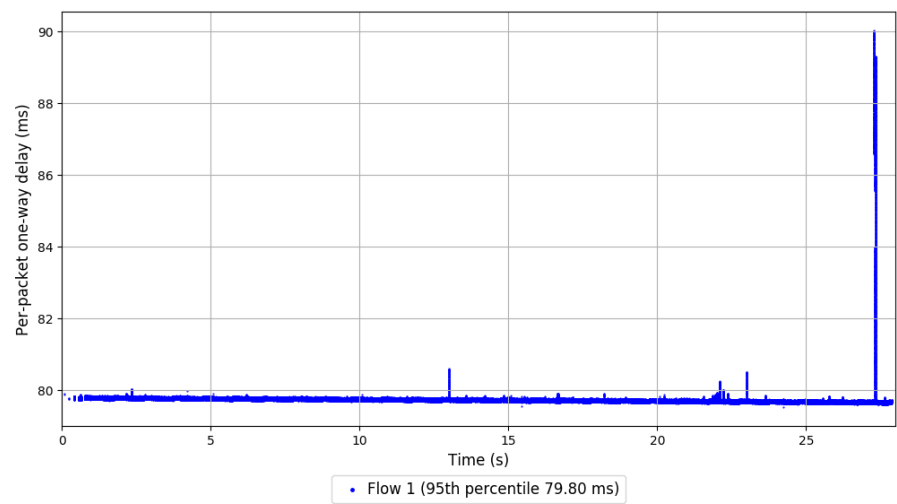
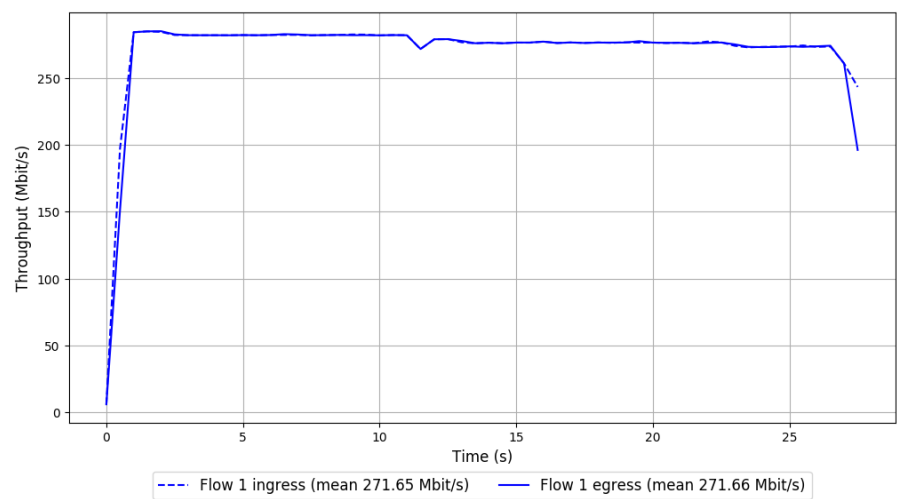
-- Flow 1:

Average throughput: 271.66 Mbit/s

95th percentile per-packet one-way delay: 79.800 ms

Loss rate: 0.59%

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



Run 7: Statistics of TaoVA-100x

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

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

Local clock offset: 11.403 ms

Remote clock offset: 3.366 ms

Below is generated by plot.py at 2017-12-20 01:55:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 271.31 Mbit/s

95th percentile per-packet one-way delay: 80.446 ms

Loss rate: 0.60%

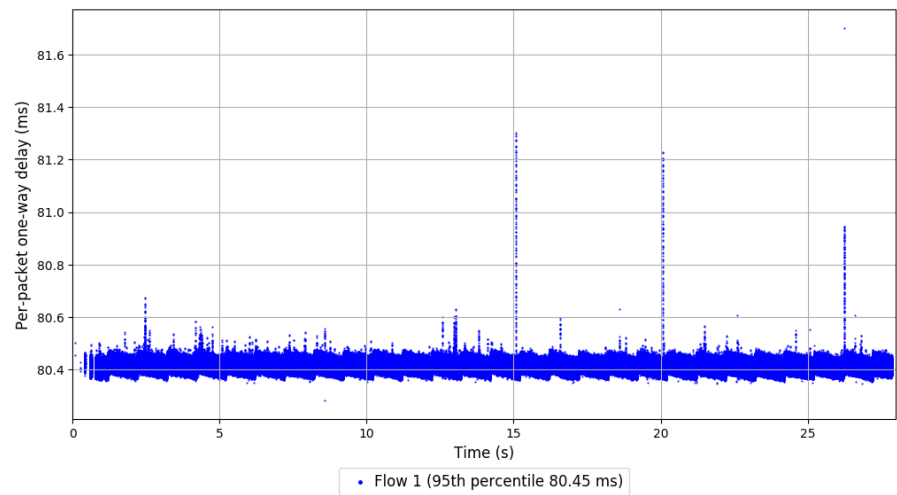
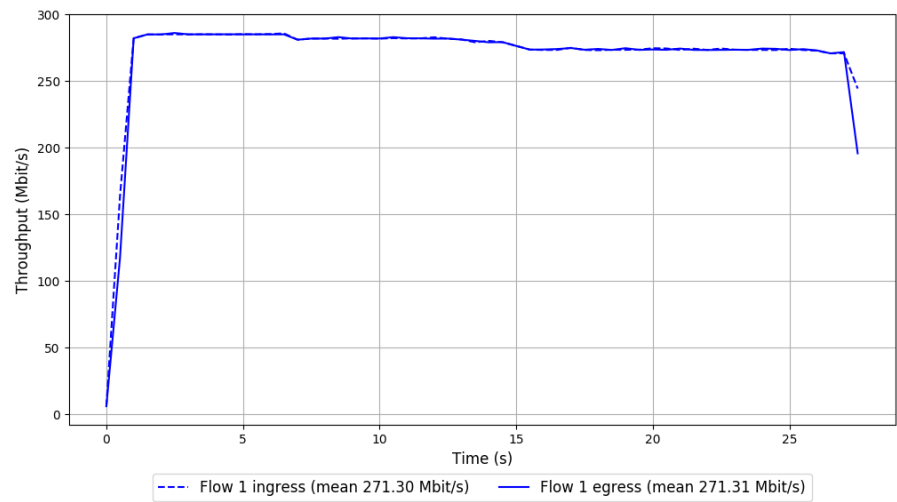
-- Flow 1:

Average throughput: 271.31 Mbit/s

95th percentile per-packet one-way delay: 80.446 ms

Loss rate: 0.60%

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

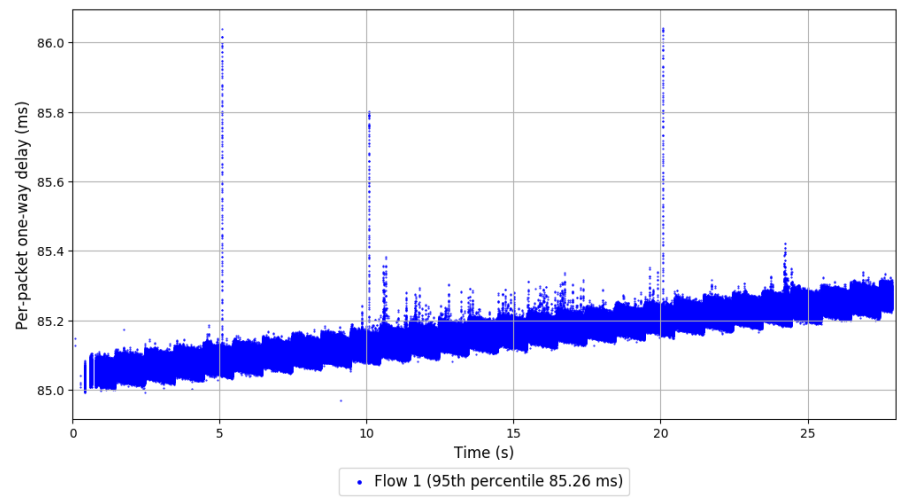
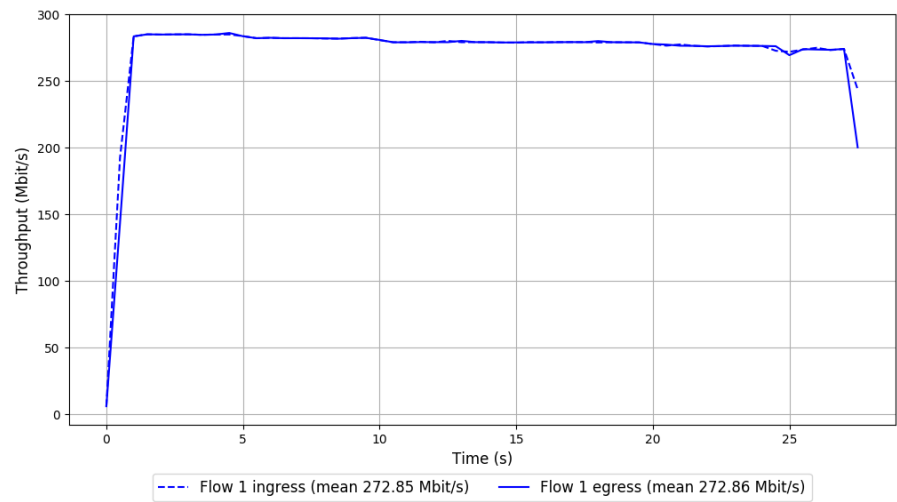


Run 8: Statistics of TaoVA-100x

Start at: 2017-12-19 21:40:00
End at: 2017-12-19 21:40:30
Local clock offset: 13.593 ms
Remote clock offset: -2.834 ms

Below is generated by plot.py at 2017-12-20 01:56:21
Datalink statistics
-- Total of 1 flow:
Average throughput: 272.86 Mbit/s
95th percentile per-packet one-way delay: 85.256 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 272.86 Mbit/s
95th percentile per-packet one-way delay: 85.256 ms
Loss rate: 0.59%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-19 21:59:07

End at: 2017-12-19 21:59:37

Local clock offset: 9.216 ms

Remote clock offset: 2.067 ms

Below is generated by plot.py at 2017-12-20 02:00:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 273.73 Mbit/s

95th percentile per-packet one-way delay: 79.178 ms

Loss rate: 0.59%

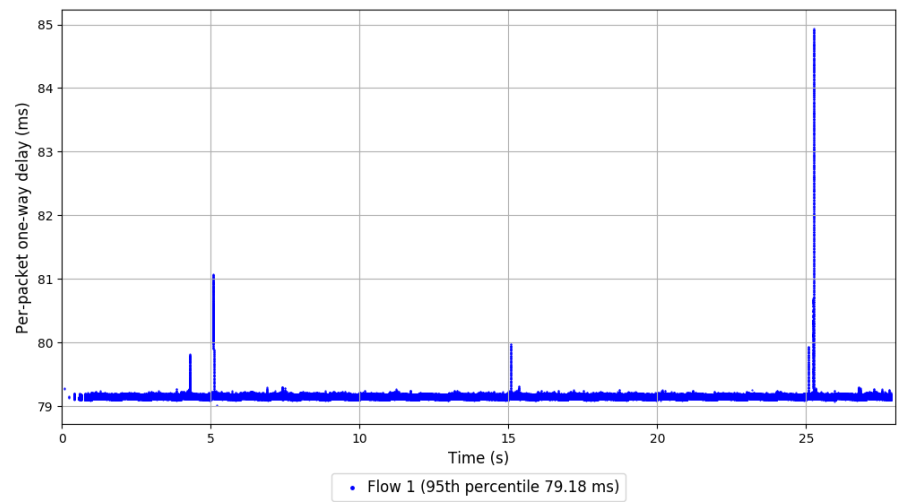
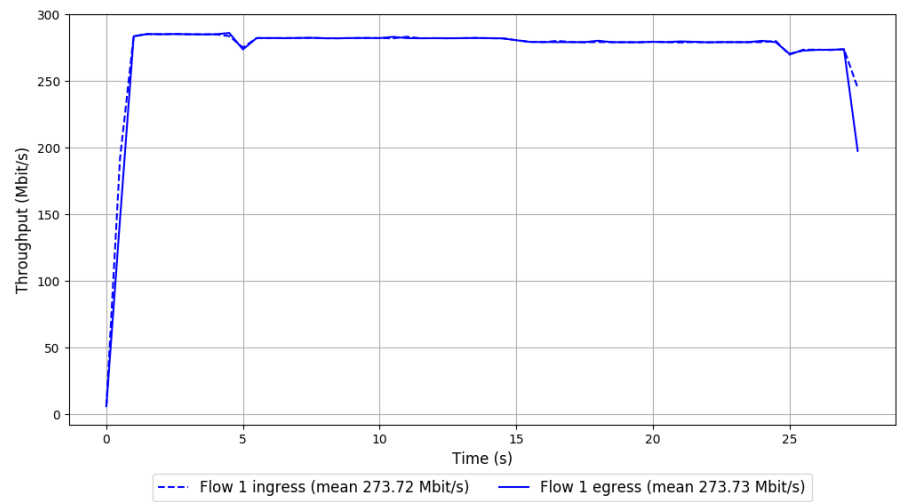
-- Flow 1:

Average throughput: 273.73 Mbit/s

95th percentile per-packet one-way delay: 79.178 ms

Loss rate: 0.59%

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



Run 10: Statistics of TaoVA-100x

Start at: 2017-12-19 22:18:11

End at: 2017-12-19 22:18:41

Local clock offset: 5.242 ms

Remote clock offset: -4.18 ms

Below is generated by plot.py at 2017-12-20 02:00:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 271.55 Mbit/s

95th percentile per-packet one-way delay: 88.433 ms

Loss rate: 0.61%

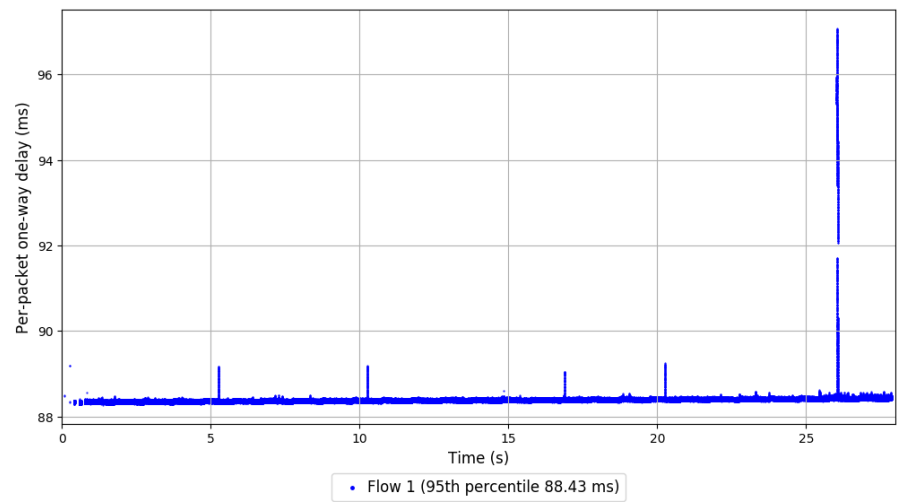
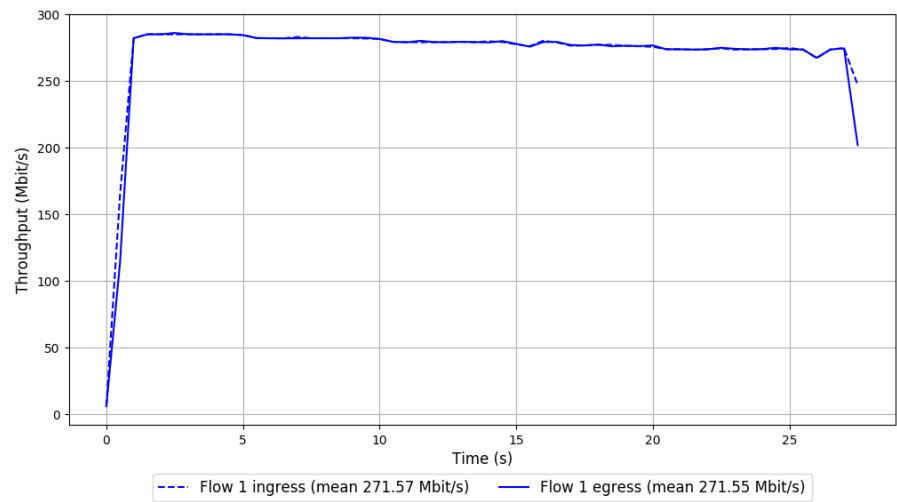
-- Flow 1:

Average throughput: 271.55 Mbit/s

95th percentile per-packet one-way delay: 88.433 ms

Loss rate: 0.61%

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

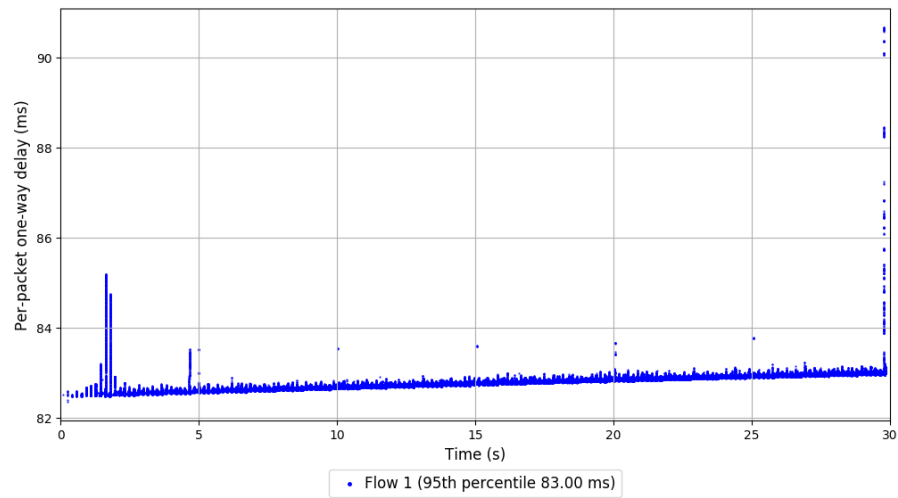
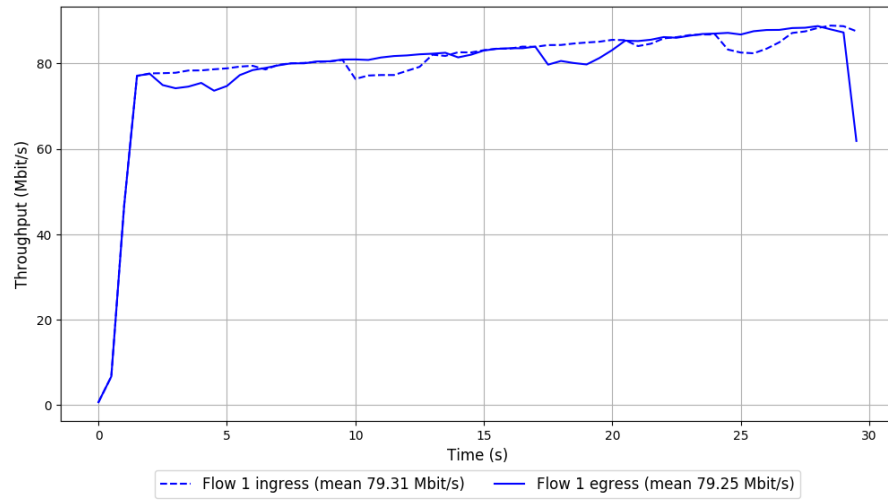


Run 1: Statistics of TCP Vegas

Start at: 2017-12-19 19:34:12
End at: 2017-12-19 19:34:42
Local clock offset: 7.435 ms
Remote clock offset: -0.155 ms

Below is generated by plot.py at 2017-12-20 02:00:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 79.25 Mbit/s
95th percentile per-packet one-way delay: 83.000 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 79.25 Mbit/s
95th percentile per-packet one-way delay: 83.000 ms
Loss rate: 0.63%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-19 19:53:22

End at: 2017-12-19 19:53:52

Local clock offset: 7.369 ms

Remote clock offset: 1.94 ms

Below is generated by plot.py at 2017-12-20 02:00:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.73 Mbit/s

95th percentile per-packet one-way delay: 82.273 ms

Loss rate: 0.63%

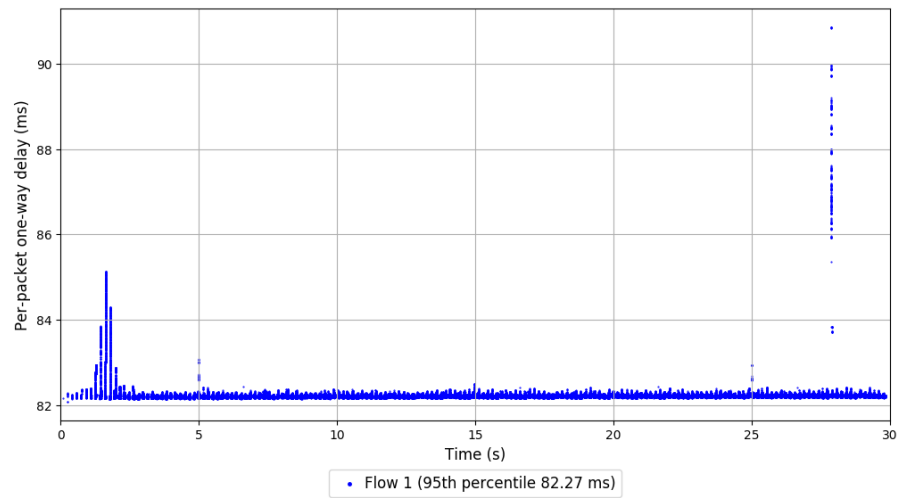
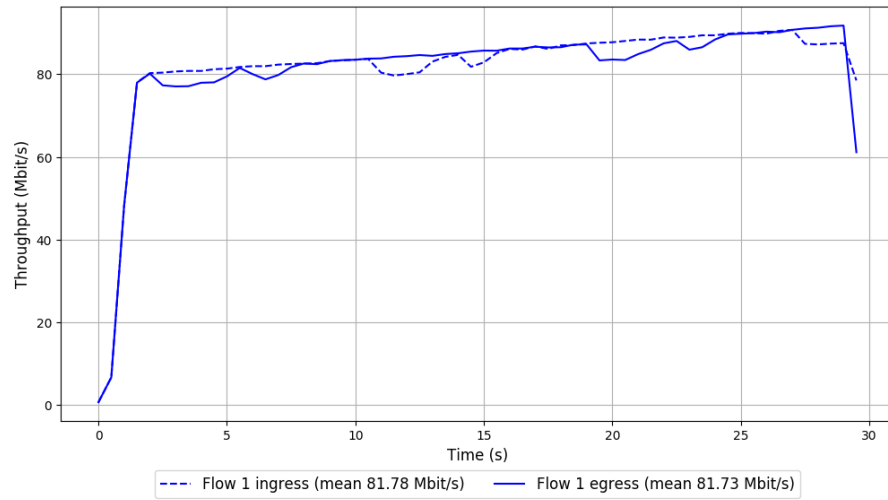
-- Flow 1:

Average throughput: 81.73 Mbit/s

95th percentile per-packet one-way delay: 82.273 ms

Loss rate: 0.63%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

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

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

Local clock offset: 8.198 ms

Remote clock offset: 2.799 ms

Below is generated by plot.py at 2017-12-20 02:00:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.46 Mbit/s

95th percentile per-packet one-way delay: 81.667 ms

Loss rate: 0.65%

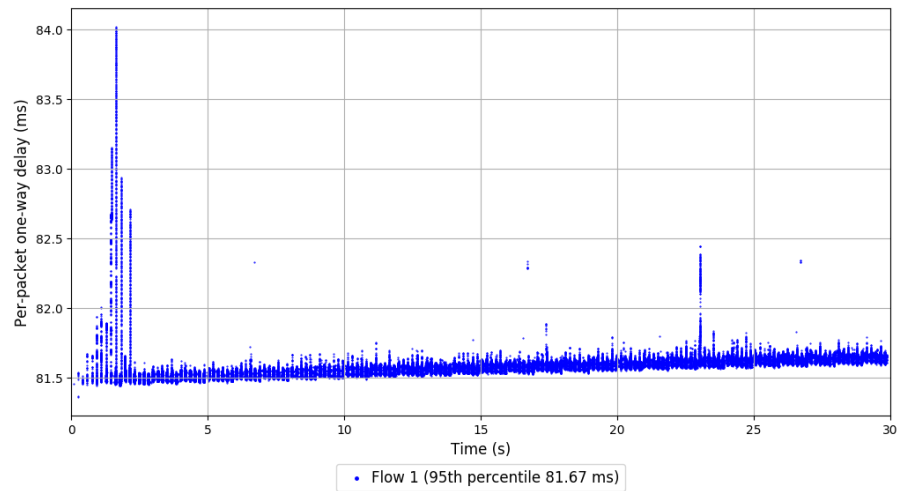
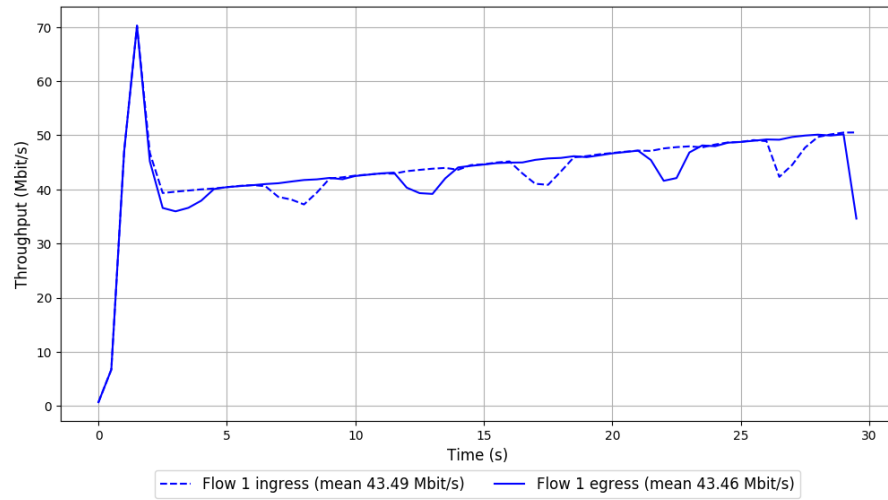
-- Flow 1:

Average throughput: 43.46 Mbit/s

95th percentile per-packet one-way delay: 81.667 ms

Loss rate: 0.65%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-19 20:31:23

End at: 2017-12-19 20:31:53

Local clock offset: 6.3 ms

Remote clock offset: 4.28 ms

Below is generated by plot.py at 2017-12-20 02:00:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.74 Mbit/s

95th percentile per-packet one-way delay: 80.919 ms

Loss rate: 0.64%

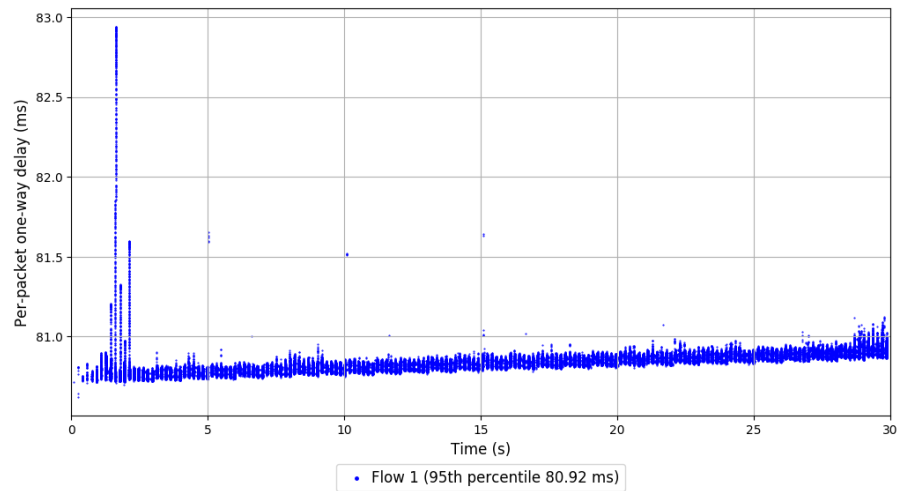
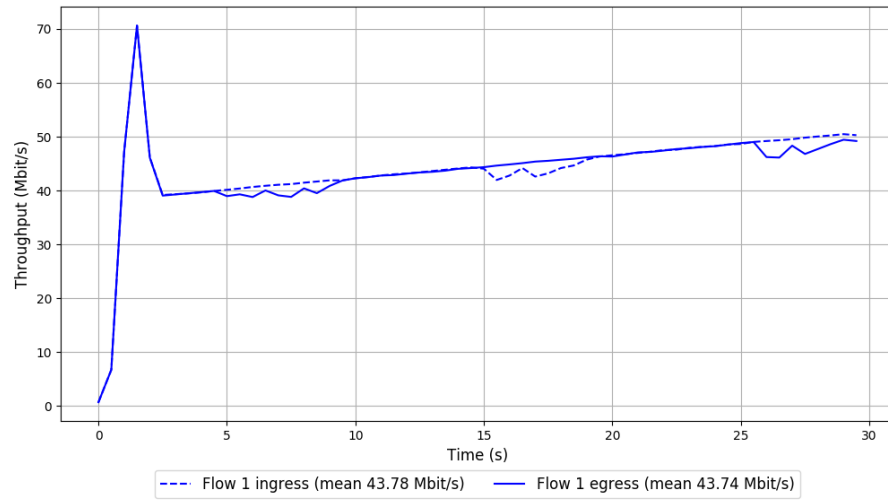
-- Flow 1:

Average throughput: 43.74 Mbit/s

95th percentile per-packet one-way delay: 80.919 ms

Loss rate: 0.64%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-19 20:50:34

End at: 2017-12-19 20:51:04

Local clock offset: 6.809 ms

Remote clock offset: 3.314 ms

Below is generated by plot.py at 2017-12-20 02:00:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.16 Mbit/s

95th percentile per-packet one-way delay: 81.919 ms

Loss rate: 0.65%

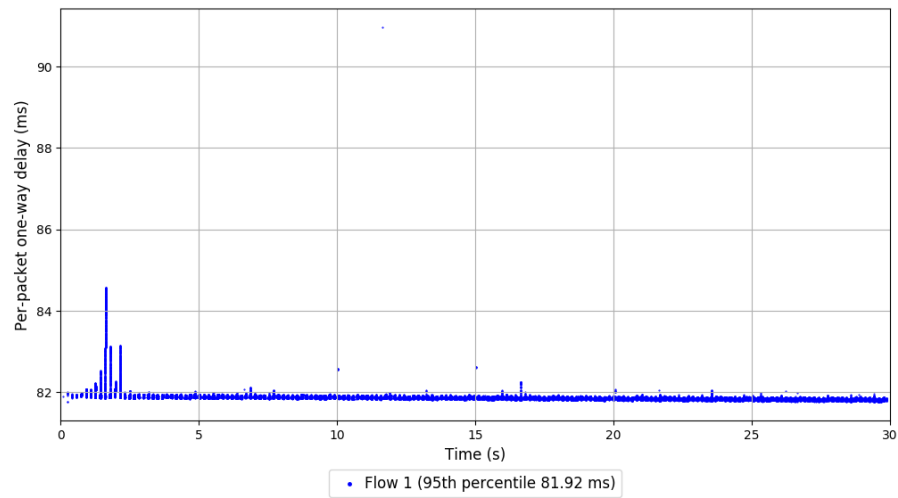
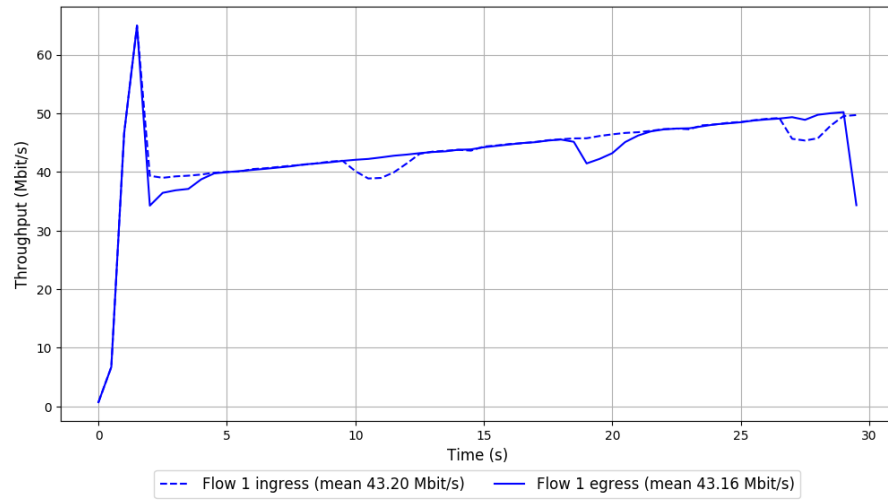
-- Flow 1:

Average throughput: 43.16 Mbit/s

95th percentile per-packet one-way delay: 81.919 ms

Loss rate: 0.65%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-19 21:09:34

End at: 2017-12-19 21:10:04

Local clock offset: 11.625 ms

Remote clock offset: 3.258 ms

Below is generated by plot.py at 2017-12-20 02:00:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.69 Mbit/s

95th percentile per-packet one-way delay: 80.329 ms

Loss rate: 0.63%

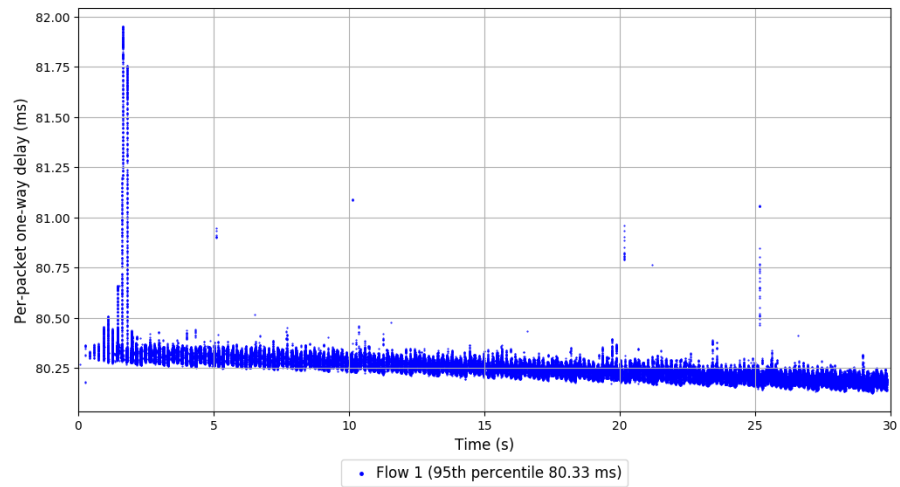
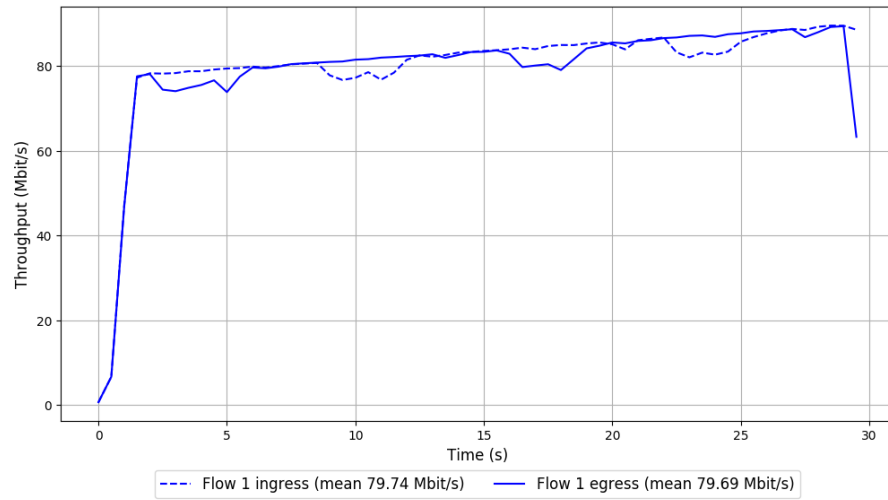
-- Flow 1:

Average throughput: 79.69 Mbit/s

95th percentile per-packet one-way delay: 80.329 ms

Loss rate: 0.63%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-19 21:28:36

End at: 2017-12-19 21:29:06

Local clock offset: 11.899 ms

Remote clock offset: 3.414 ms

Below is generated by plot.py at 2017-12-20 02:00:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.59 Mbit/s

95th percentile per-packet one-way delay: 80.037 ms

Loss rate: 0.63%

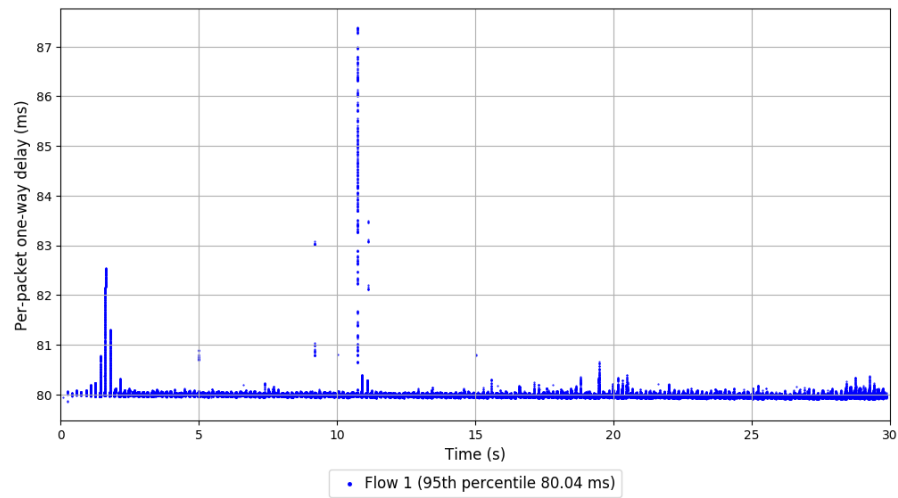
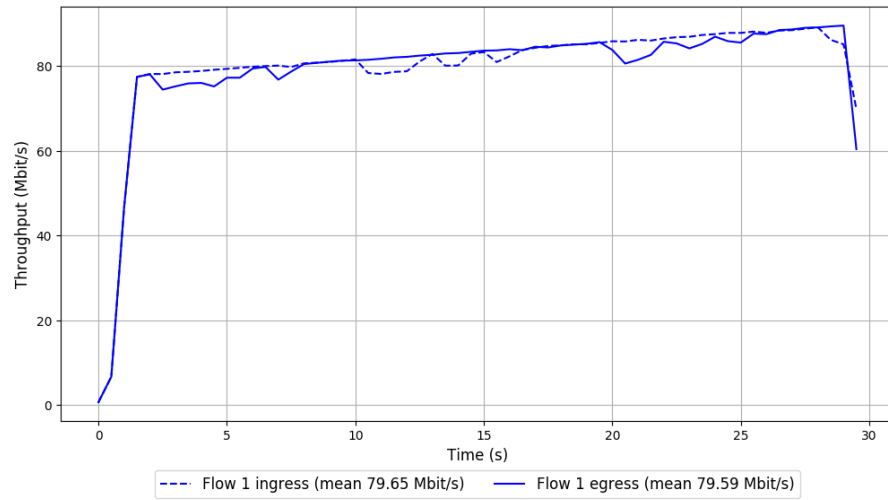
-- Flow 1:

Average throughput: 79.59 Mbit/s

95th percentile per-packet one-way delay: 80.037 ms

Loss rate: 0.63%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-19 21:47:43

End at: 2017-12-19 21:48:13

Local clock offset: 10.68 ms

Remote clock offset: 2.679 ms

Below is generated by plot.py at 2017-12-20 02:00:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.48 Mbit/s

95th percentile per-packet one-way delay: 81.064 ms

Loss rate: 0.62%

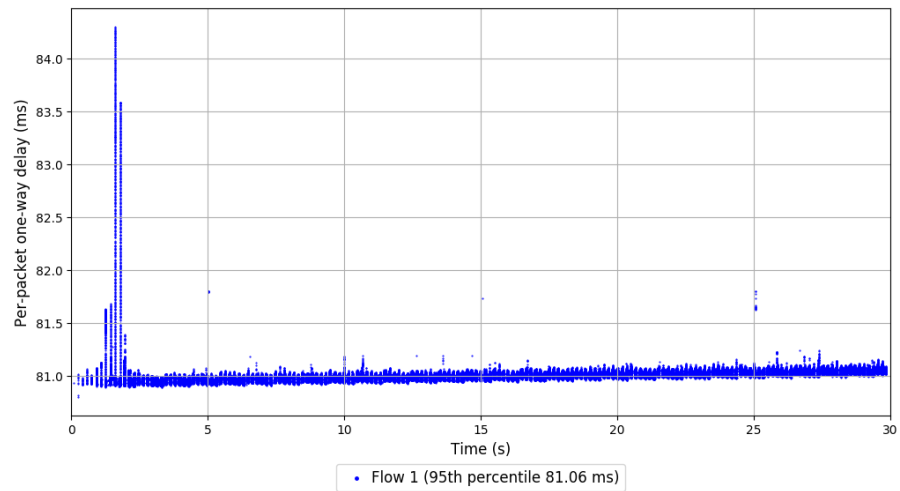
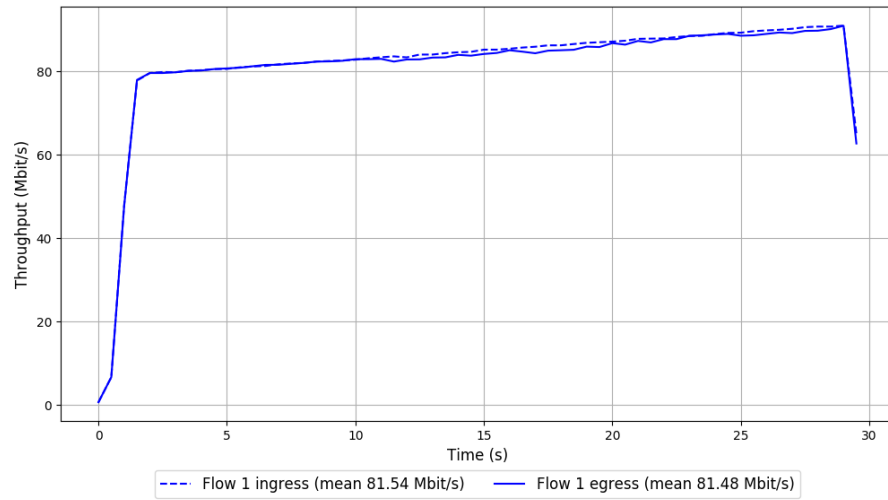
-- Flow 1:

Average throughput: 81.48 Mbit/s

95th percentile per-packet one-way delay: 81.064 ms

Loss rate: 0.62%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-19 22:06:49

End at: 2017-12-19 22:07:19

Local clock offset: 7.629 ms

Remote clock offset: -3.32 ms

Below is generated by plot.py at 2017-12-20 02:00:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.09 Mbit/s

95th percentile per-packet one-way delay: 88.015 ms

Loss rate: 0.63%

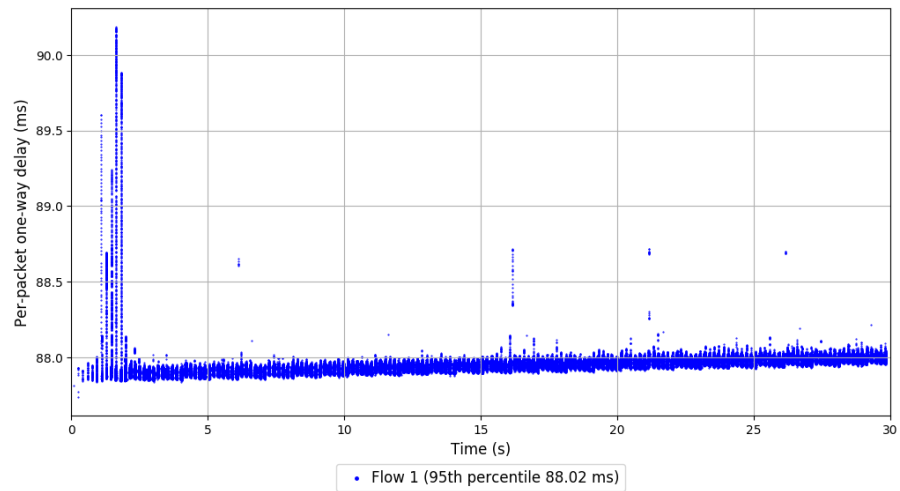
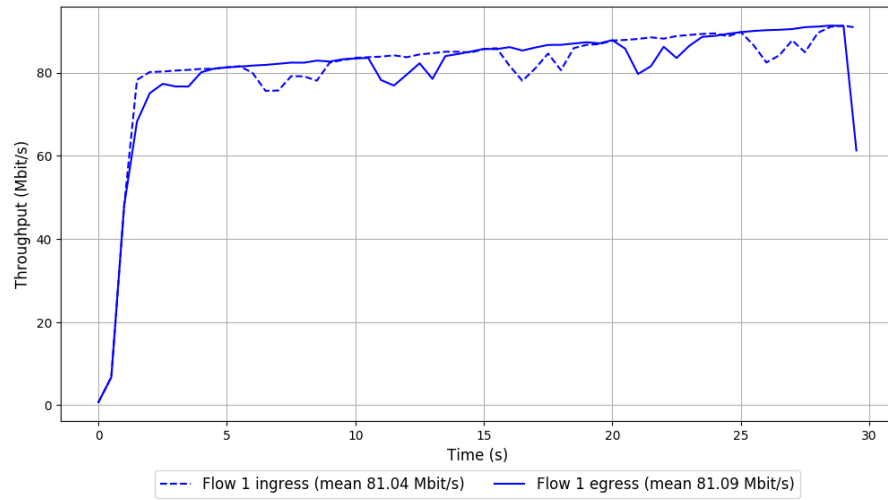
-- Flow 1:

Average throughput: 81.09 Mbit/s

95th percentile per-packet one-way delay: 88.015 ms

Loss rate: 0.63%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-19 22:25:53

End at: 2017-12-19 22:26:23

Local clock offset: 4.021 ms

Remote clock offset: 2.229 ms

Below is generated by plot.py at 2017-12-20 02:00:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.42 Mbit/s

95th percentile per-packet one-way delay: 80.395 ms

Loss rate: 0.63%

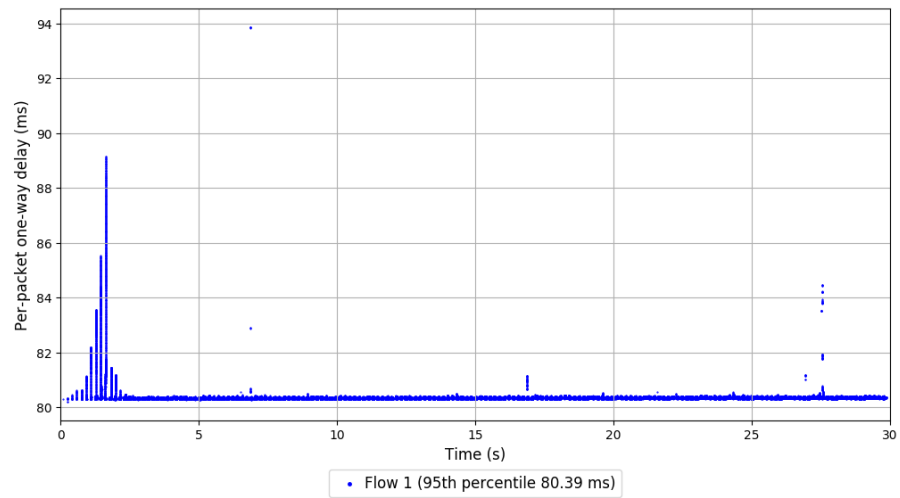
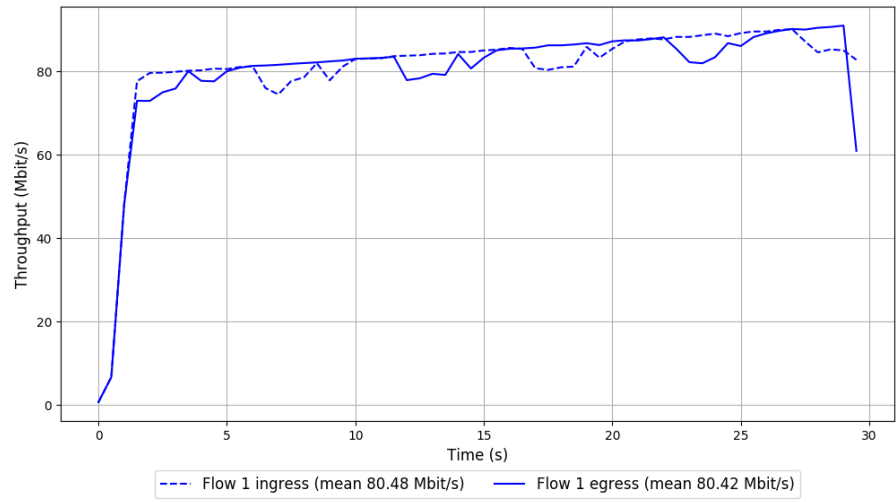
-- Flow 1:

Average throughput: 80.42 Mbit/s

95th percentile per-packet one-way delay: 80.395 ms

Loss rate: 0.63%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

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

End at: 2017-12-19 19:18:00

Local clock offset: 9.938 ms

Remote clock offset: 1.482 ms

Below is generated by plot.py at 2017-12-20 02:00:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 208.34 Mbit/s

95th percentile per-packet one-way delay: 95.074 ms

Loss rate: 0.25%

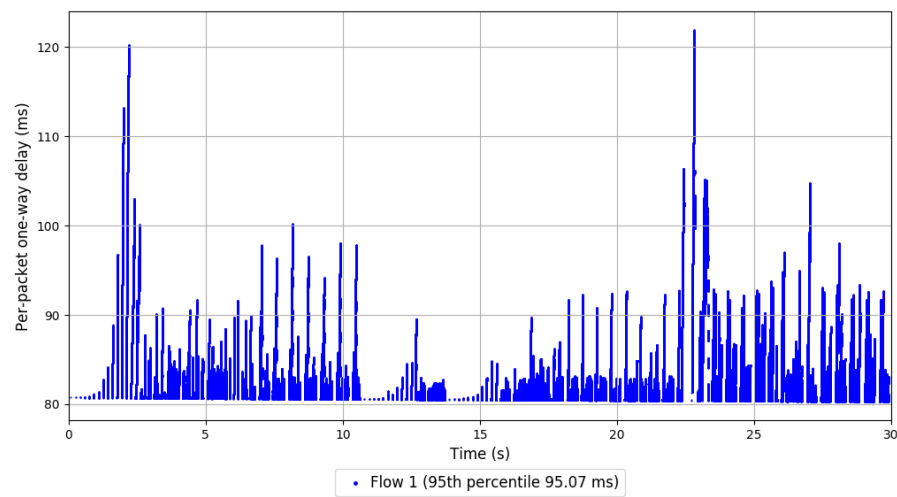
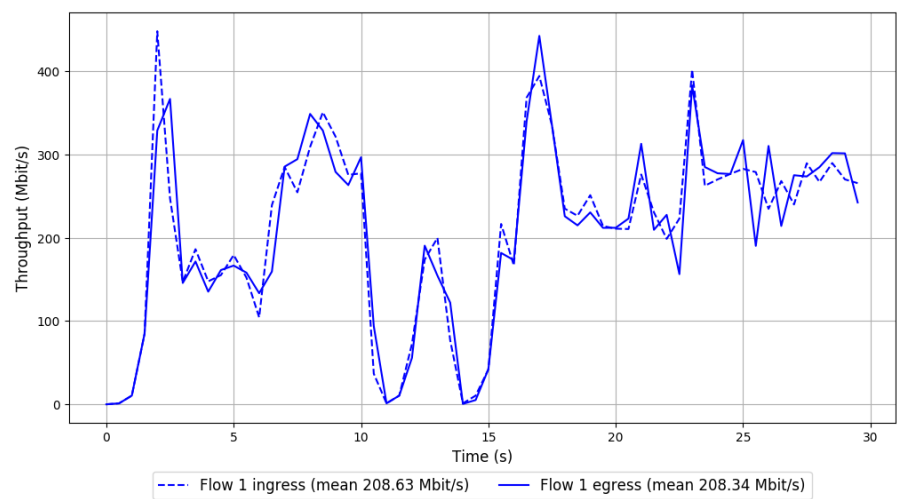
-- Flow 1:

Average throughput: 208.34 Mbit/s

95th percentile per-packet one-way delay: 95.074 ms

Loss rate: 0.25%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-19 19:36:37

End at: 2017-12-19 19:37:07

Local clock offset: 5.486 ms

Remote clock offset: 1.113 ms

Below is generated by plot.py at 2017-12-20 02:00:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 255.57 Mbit/s

95th percentile per-packet one-way delay: 91.250 ms

Loss rate: 3.22%

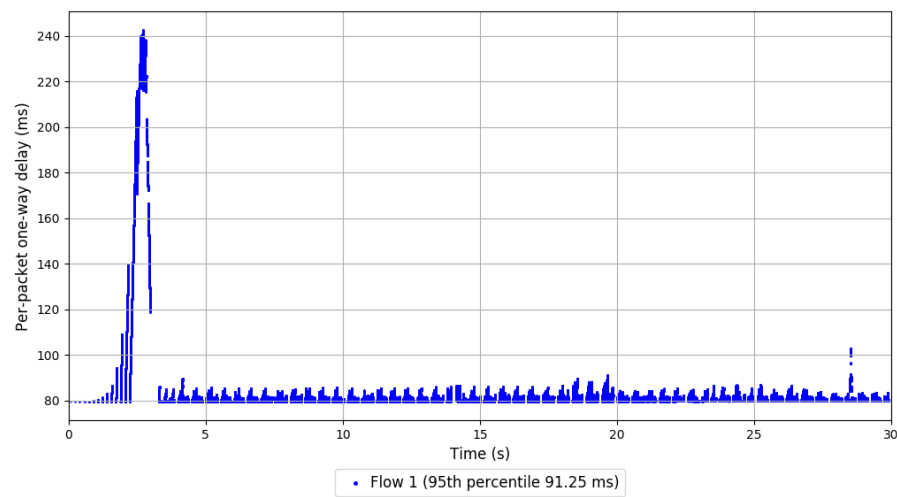
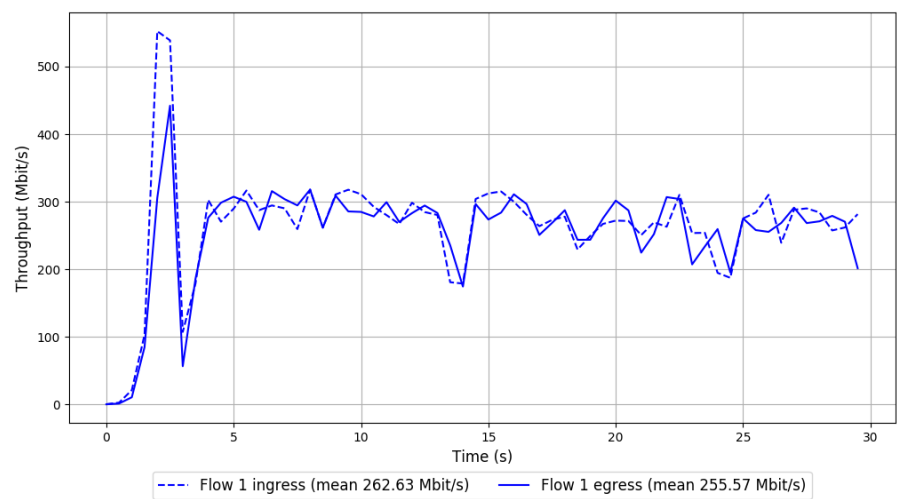
-- Flow 1:

Average throughput: 255.57 Mbit/s

95th percentile per-packet one-way delay: 91.250 ms

Loss rate: 3.22%

Run 2: Report of Verus — Data Link

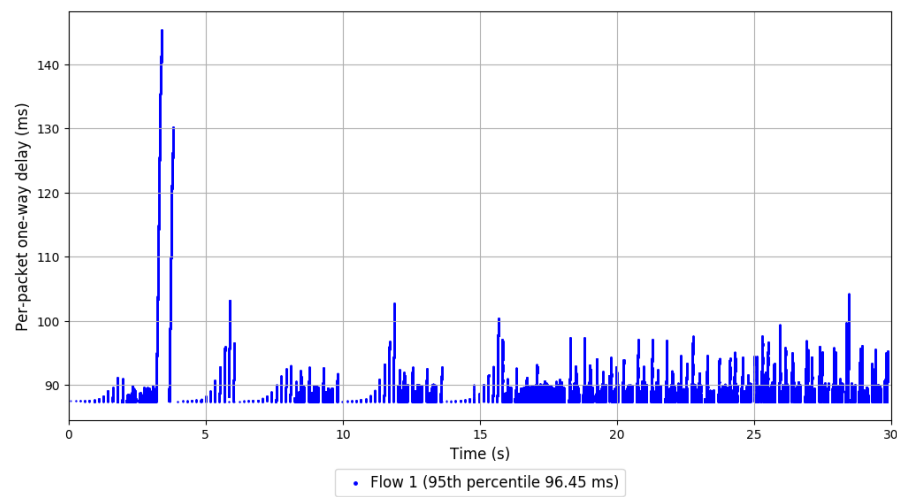
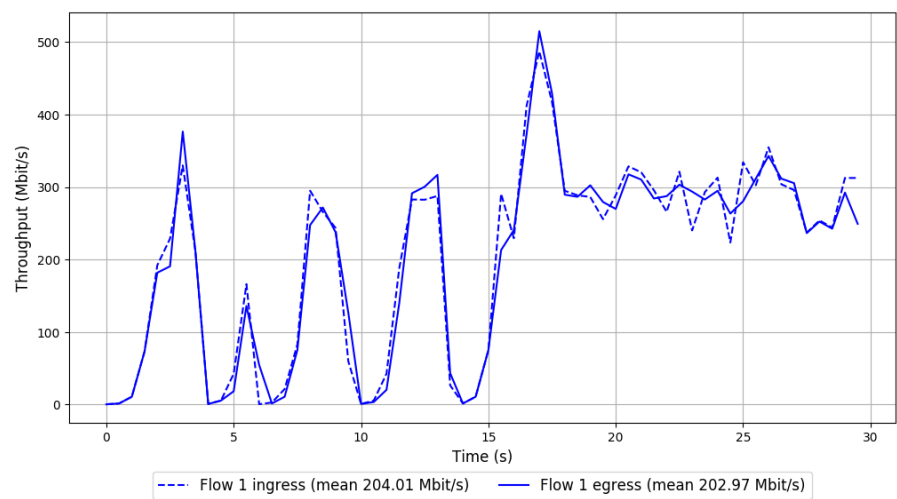


Run 3: Statistics of Verus

Start at: 2017-12-19 19:55:47
End at: 2017-12-19 19:56:17
Local clock offset: 7.389 ms
Remote clock offset: -3.597 ms

Below is generated by plot.py at 2017-12-20 02:00:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 202.97 Mbit/s
95th percentile per-packet one-way delay: 96.451 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 202.97 Mbit/s
95th percentile per-packet one-way delay: 96.451 ms
Loss rate: 1.18%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-19 20:14:46

End at: 2017-12-19 20:15:16

Local clock offset: 7.702 ms

Remote clock offset: 2.54 ms

Below is generated by plot.py at 2017-12-20 02:00:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 225.27 Mbit/s

95th percentile per-packet one-way delay: 93.707 ms

Loss rate: 0.11%

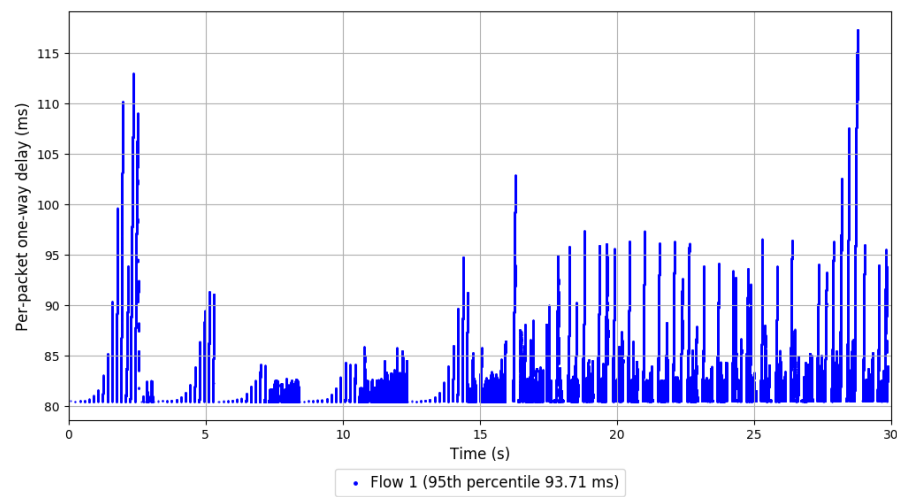
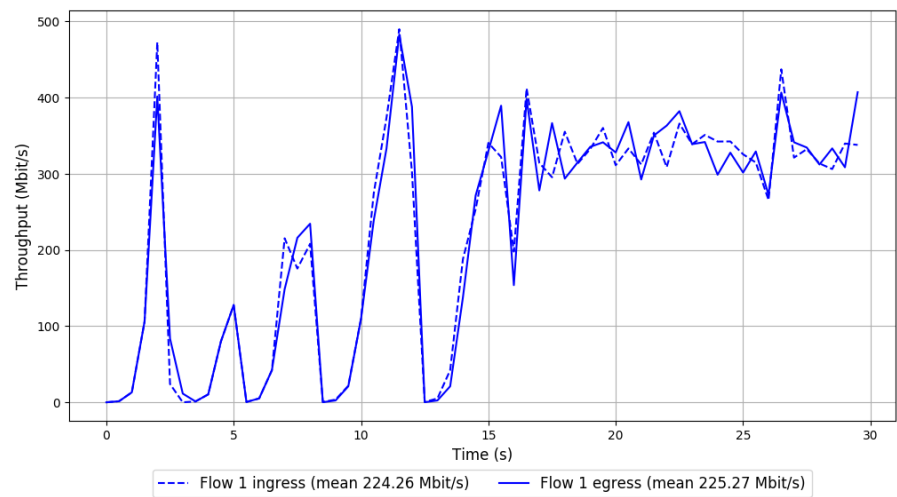
-- Flow 1:

Average throughput: 225.27 Mbit/s

95th percentile per-packet one-way delay: 93.707 ms

Loss rate: 0.11%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-19 20:33:46

End at: 2017-12-19 20:34:16

Local clock offset: 5.732 ms

Remote clock offset: 3.427 ms

Below is generated by plot.py at 2017-12-20 02:00:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 260.58 Mbit/s

95th percentile per-packet one-way delay: 87.303 ms

Loss rate: 0.35%

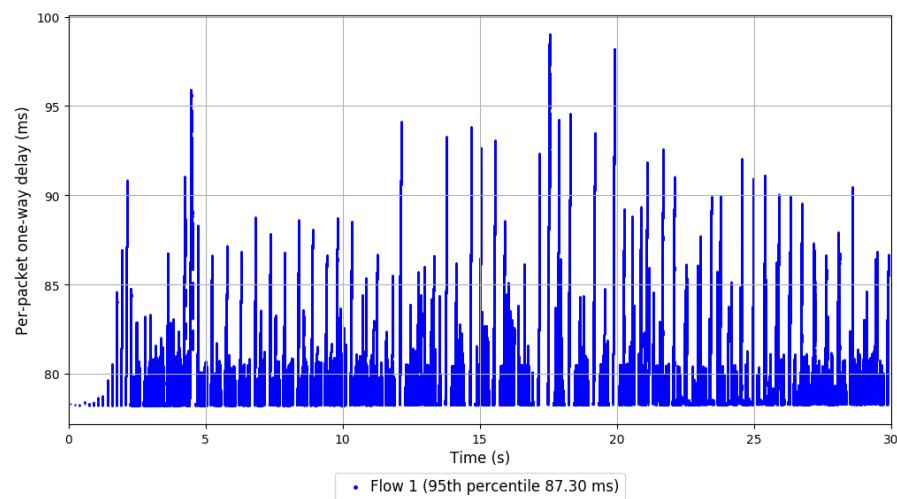
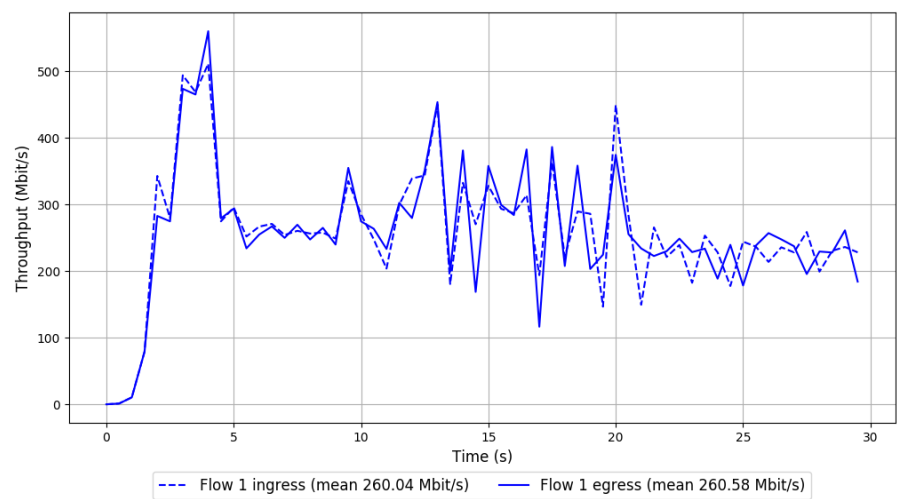
-- Flow 1:

Average throughput: 260.58 Mbit/s

95th percentile per-packet one-way delay: 87.303 ms

Loss rate: 0.35%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-19 20:52:57

End at: 2017-12-19 20:53:27

Local clock offset: 7.269 ms

Remote clock offset: 3.78 ms

Below is generated by plot.py at 2017-12-20 02:00:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 298.14 Mbit/s

95th percentile per-packet one-way delay: 124.159 ms

Loss rate: 0.83%

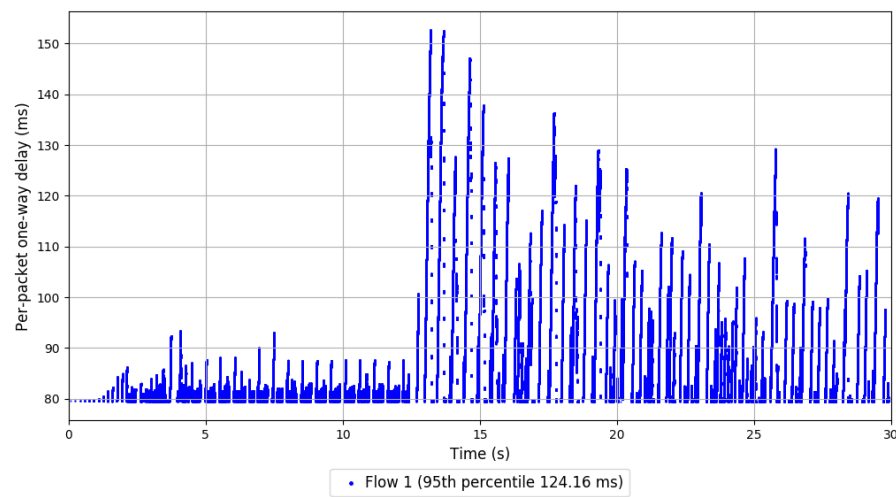
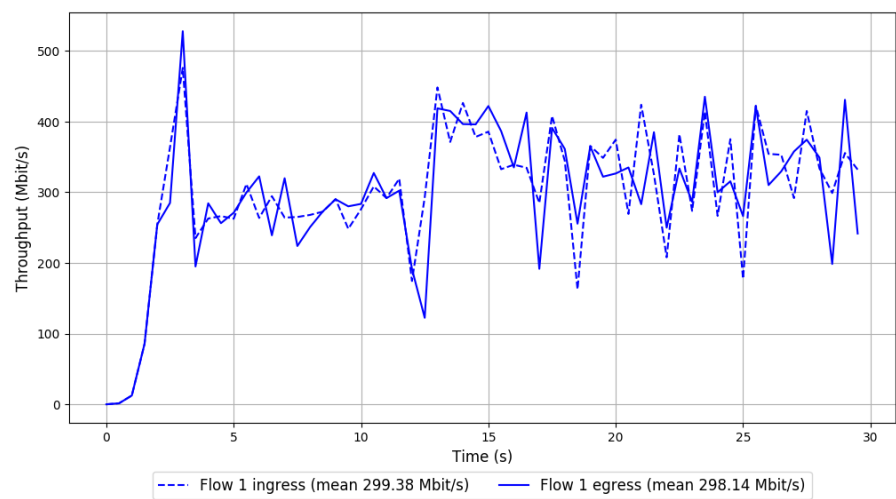
-- Flow 1:

Average throughput: 298.14 Mbit/s

95th percentile per-packet one-way delay: 124.159 ms

Loss rate: 0.83%

Run 6: Report of Verus — Data Link

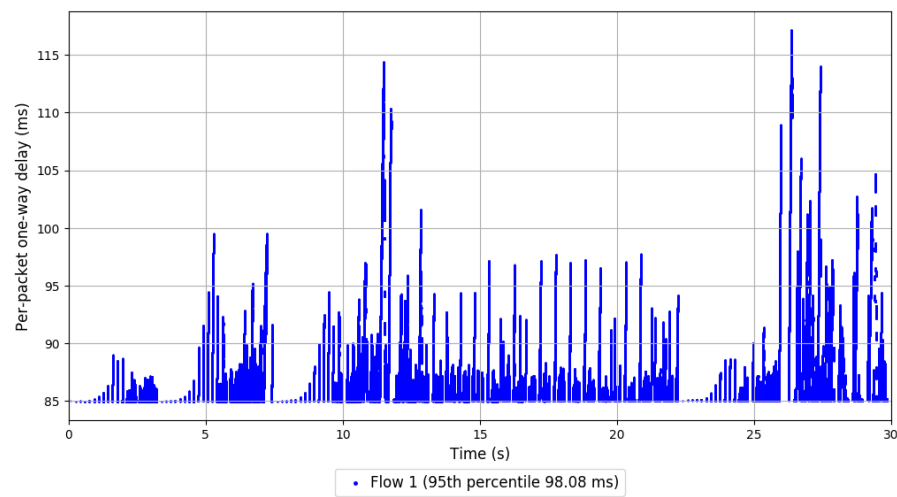
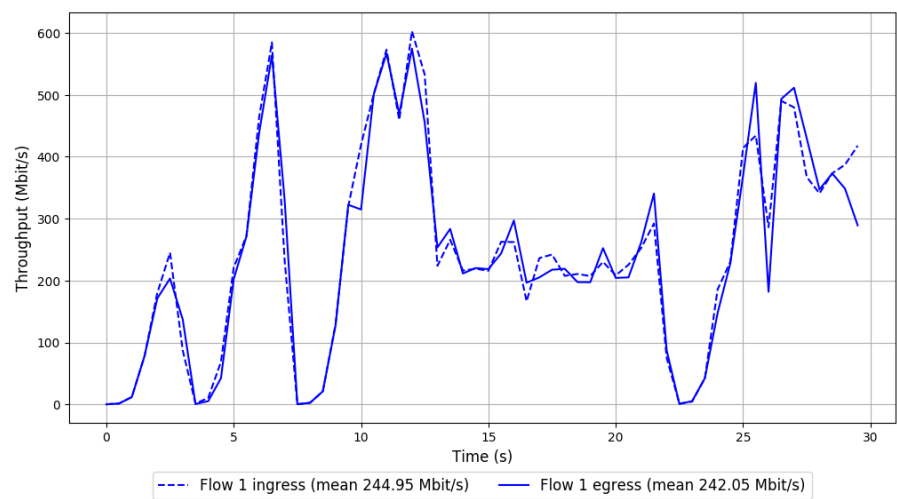


Run 7: Statistics of Verus

Start at: 2017-12-19 21:11:59
End at: 2017-12-19 21:12:29
Local clock offset: 12.154 ms
Remote clock offset: -1.557 ms

Below is generated by plot.py at 2017-12-20 02:02:19
Datalink statistics
-- Total of 1 flow:
Average throughput: 242.05 Mbit/s
95th percentile per-packet one-way delay: 98.084 ms
Loss rate: 1.92%
-- Flow 1:
Average throughput: 242.05 Mbit/s
95th percentile per-packet one-way delay: 98.084 ms
Loss rate: 1.92%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-19 21:31:01

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

Local clock offset: 12.209 ms

Remote clock offset: 2.219 ms

Below is generated by plot.py at 2017-12-20 02:02:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 245.43 Mbit/s

95th percentile per-packet one-way delay: 106.112 ms

Loss rate: 2.71%

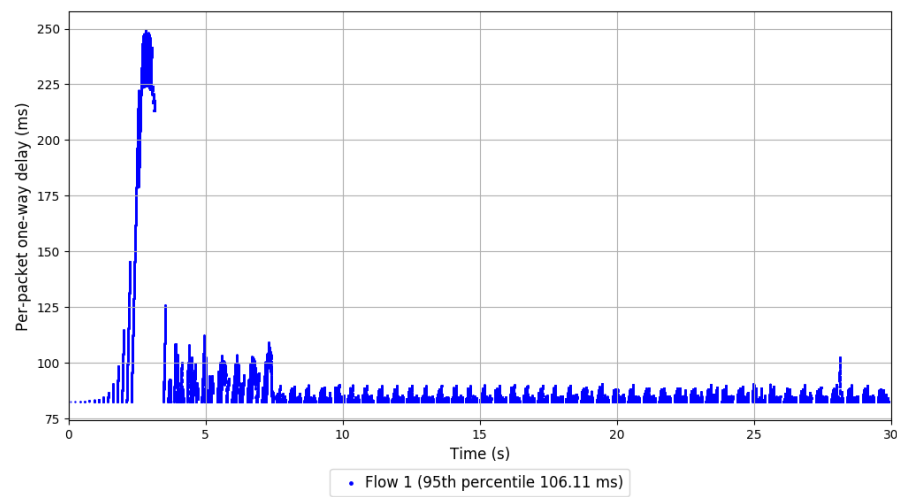
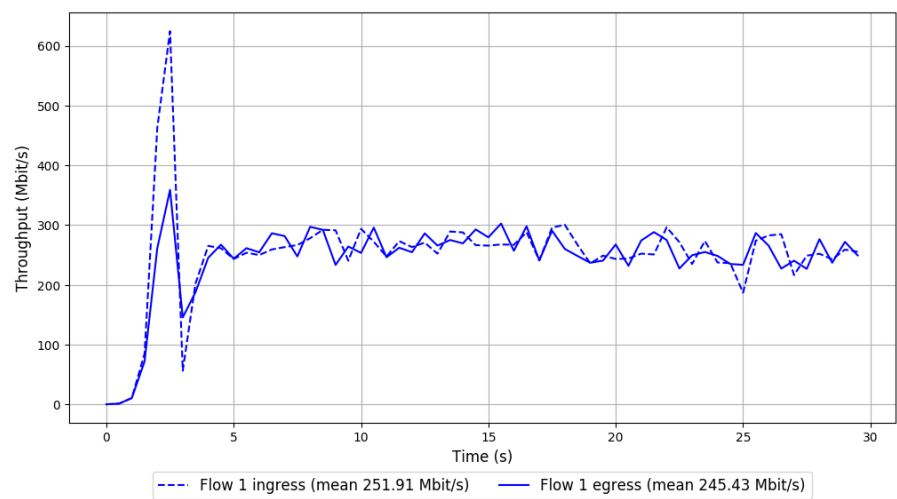
-- Flow 1:

Average throughput: 245.43 Mbit/s

95th percentile per-packet one-way delay: 106.112 ms

Loss rate: 2.71%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-19 21:50:08

End at: 2017-12-19 21:50:38

Local clock offset: 10.138 ms

Remote clock offset: 1.307 ms

Below is generated by plot.py at 2017-12-20 02:02:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.76 Mbit/s

95th percentile per-packet one-way delay: 88.846 ms

Loss rate: 1.15%

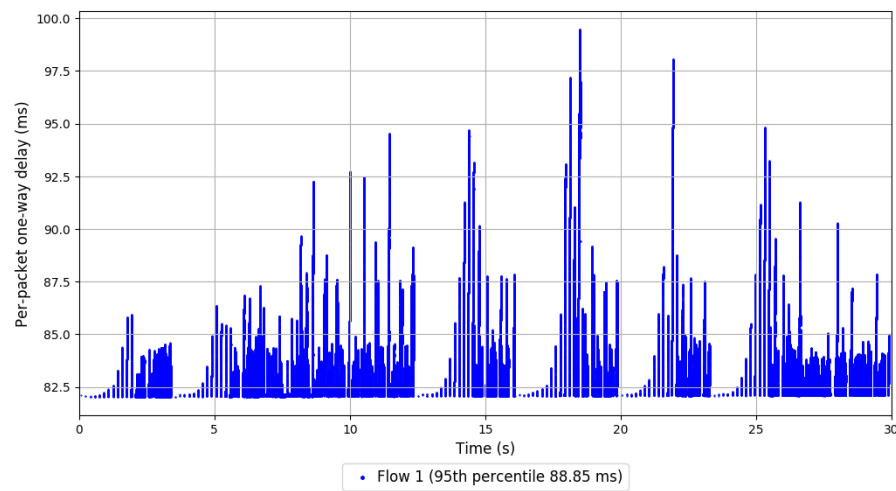
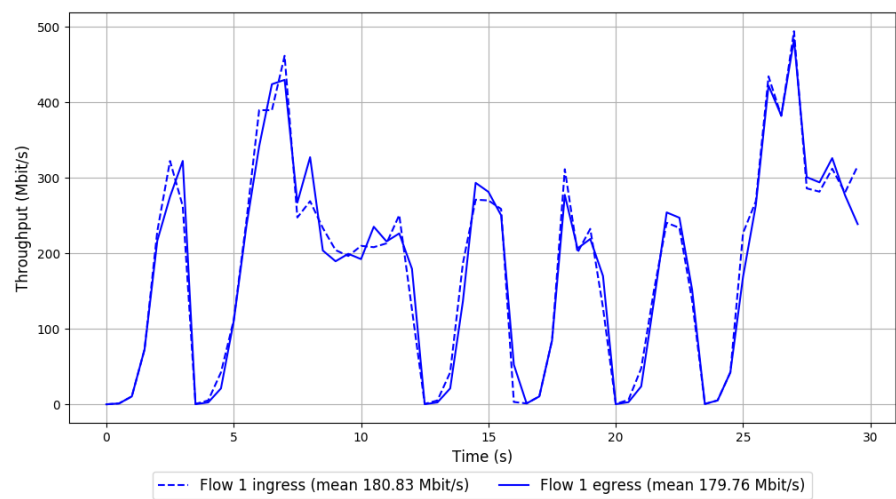
-- Flow 1:

Average throughput: 179.76 Mbit/s

95th percentile per-packet one-way delay: 88.846 ms

Loss rate: 1.15%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-19 22:09:14

End at: 2017-12-19 22:09:44

Local clock offset: 7.038 ms

Remote clock offset: 2.239 ms

Below is generated by plot.py at 2017-12-20 02:02:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 138.39 Mbit/s

95th percentile per-packet one-way delay: 86.926 ms

Loss rate: 0.04%

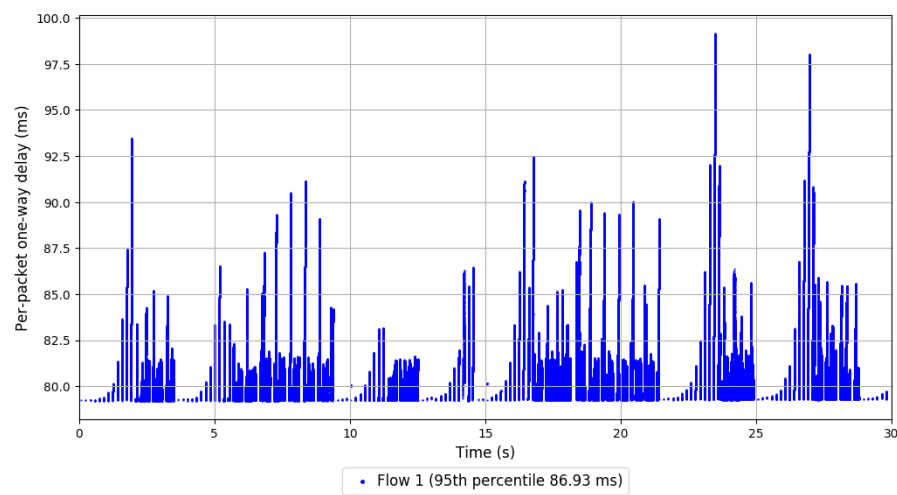
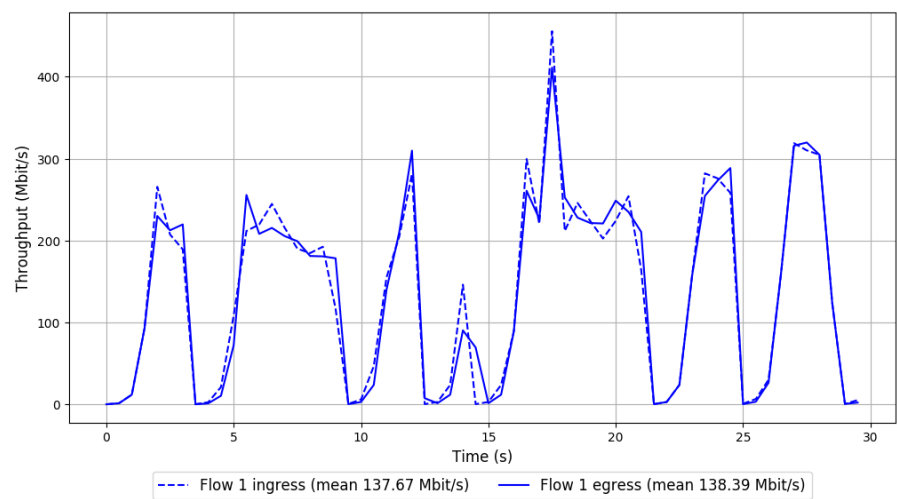
-- Flow 1:

Average throughput: 138.39 Mbit/s

95th percentile per-packet one-way delay: 86.926 ms

Loss rate: 0.04%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-19 19:31:38

End at: 2017-12-19 19:32:09

Local clock offset: 11.621 ms

Remote clock offset: 0.065 ms

Below is generated by plot.py at 2017-12-20 02:02:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.15 Mbit/s

95th percentile per-packet one-way delay: 84.576 ms

Loss rate: 0.60%

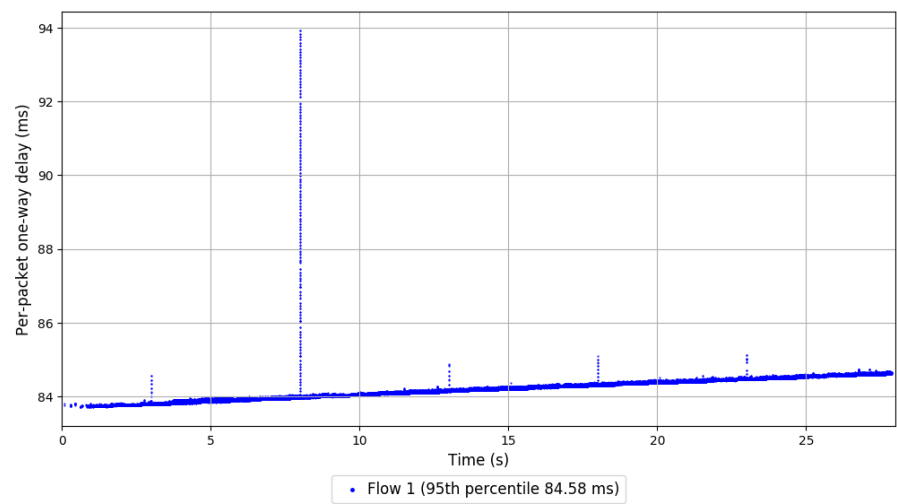
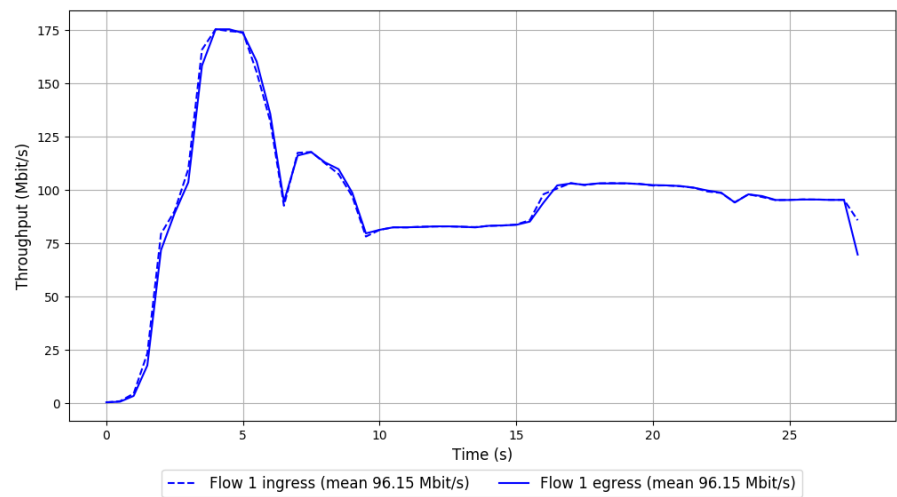
-- Flow 1:

Average throughput: 96.15 Mbit/s

95th percentile per-packet one-way delay: 84.576 ms

Loss rate: 0.60%

Run 1: Report of Copa — Data Link

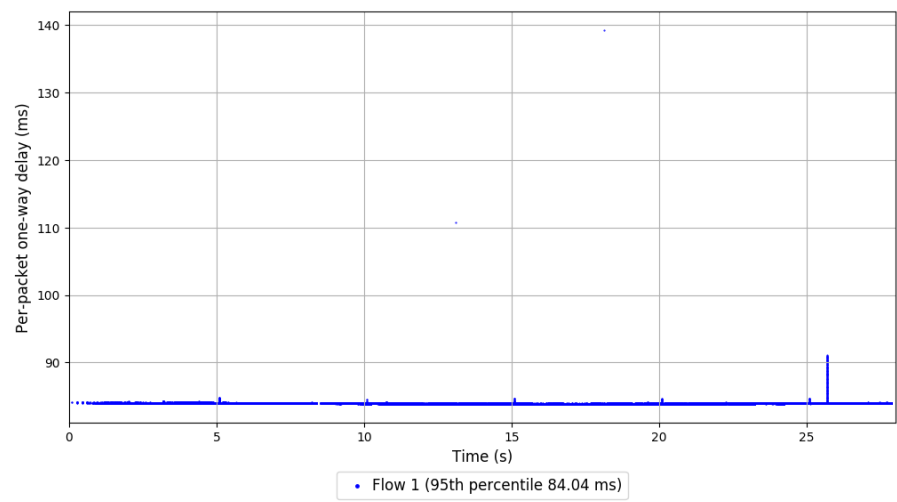
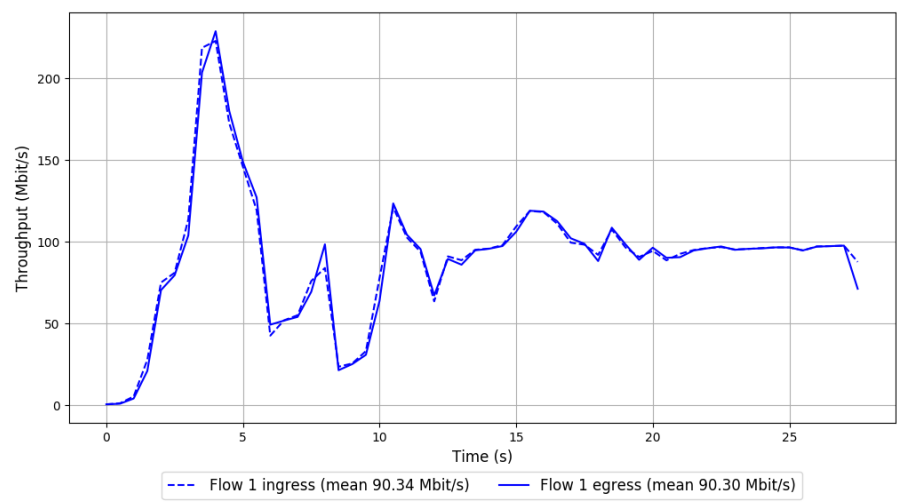


Run 2: Statistics of Copa

Start at: 2017-12-19 19:50:49
End at: 2017-12-19 19:51:19
Local clock offset: 7.275 ms
Remote clock offset: -2.524 ms

Below is generated by plot.py at 2017-12-20 02:02:44
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.30 Mbit/s
95th percentile per-packet one-way delay: 84.036 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 90.30 Mbit/s
95th percentile per-packet one-way delay: 84.036 ms
Loss rate: 0.65%

Run 2: Report of Copa — Data Link

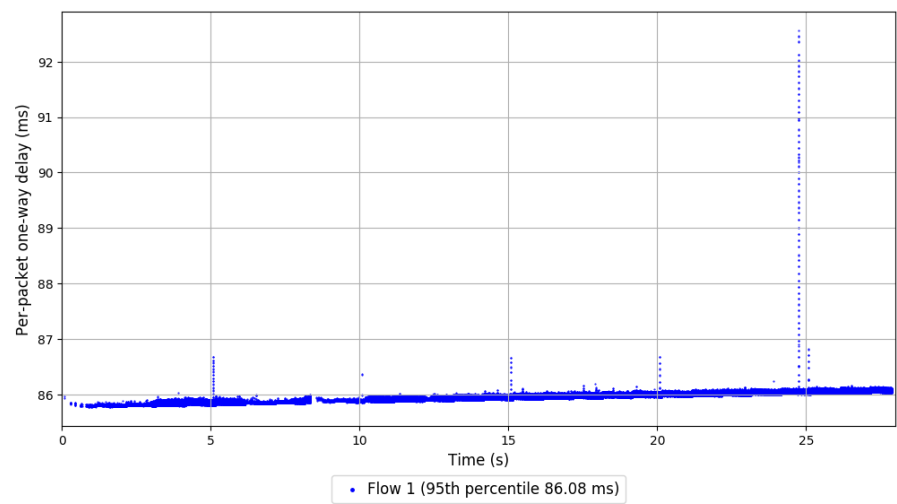
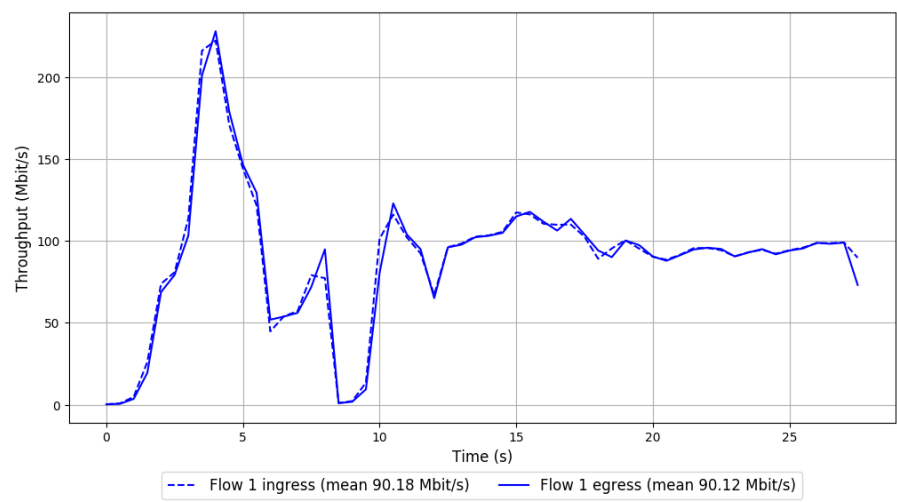


Run 3: Statistics of Copa

Start at: 2017-12-19 20:09:50
End at: 2017-12-19 20:10:20
Local clock offset: 9.22 ms
Remote clock offset: -2.811 ms

Below is generated by plot.py at 2017-12-20 02:02:44
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.12 Mbit/s
95th percentile per-packet one-way delay: 86.076 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 90.12 Mbit/s
95th percentile per-packet one-way delay: 86.076 ms
Loss rate: 0.67%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-19 20:28:50

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

Local clock offset: 6.401 ms

Remote clock offset: 2.448 ms

Below is generated by plot.py at 2017-12-20 02:03:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.22 Mbit/s

95th percentile per-packet one-way delay: 79.061 ms

Loss rate: 0.60%

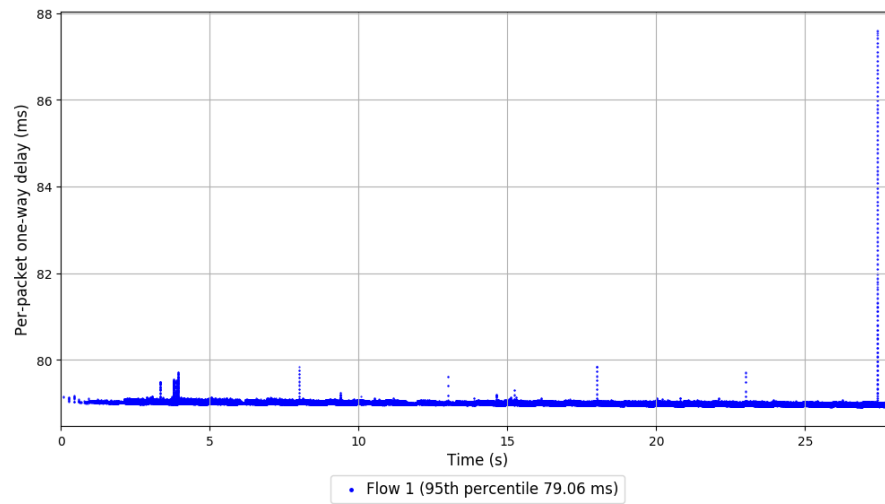
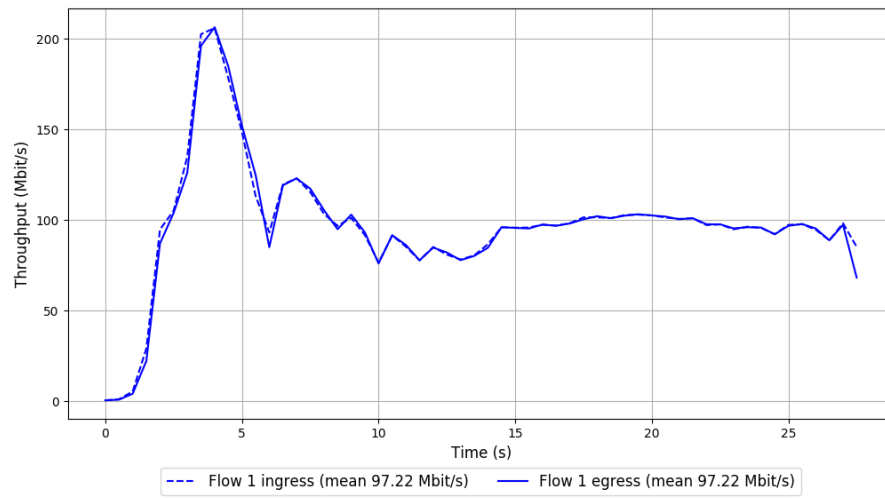
-- Flow 1:

Average throughput: 97.22 Mbit/s

95th percentile per-packet one-way delay: 79.061 ms

Loss rate: 0.60%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-19 20:48:01

End at: 2017-12-19 20:48:31

Local clock offset: 6.296 ms

Remote clock offset: 4.182 ms

Below is generated by plot.py at 2017-12-20 02:03:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.55 Mbit/s

95th percentile per-packet one-way delay: 77.386 ms

Loss rate: 0.65%

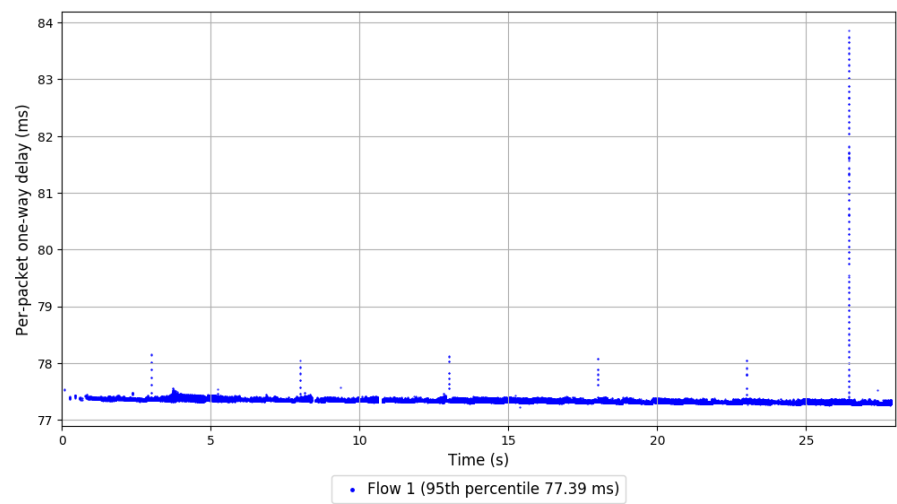
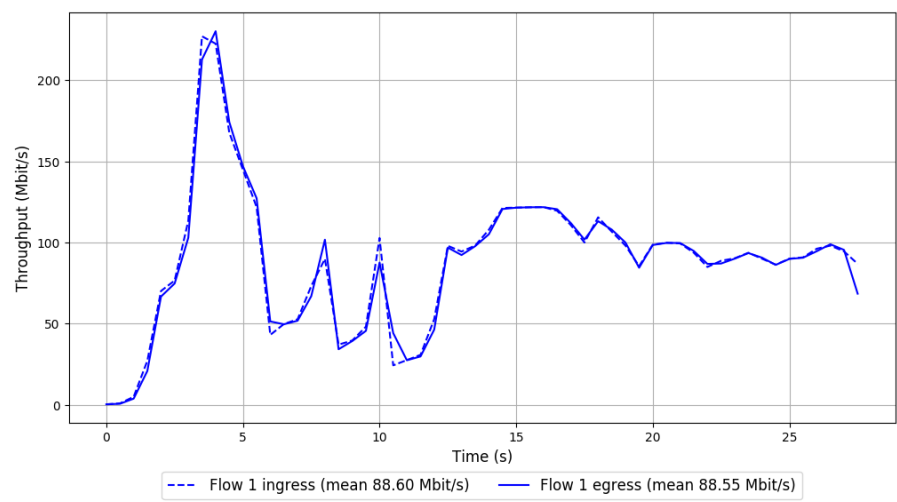
-- Flow 1:

Average throughput: 88.55 Mbit/s

95th percentile per-packet one-way delay: 77.386 ms

Loss rate: 0.65%

Run 5: Report of Copa — Data Link

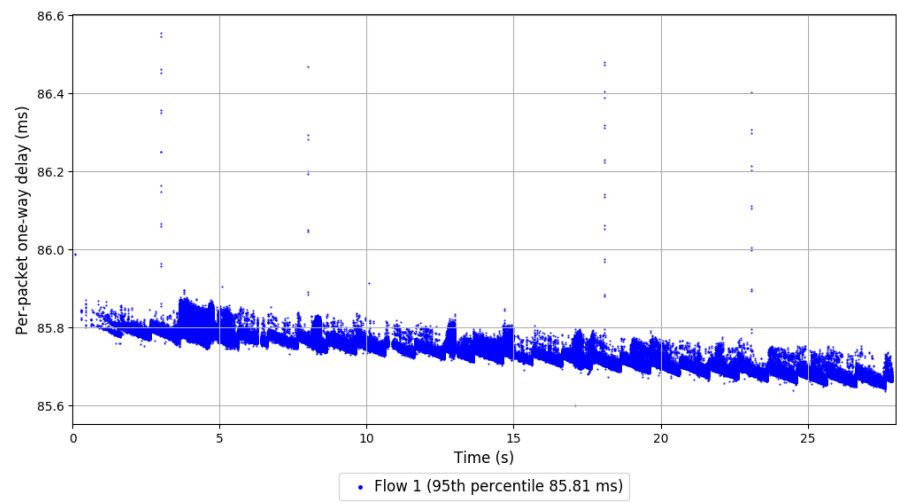
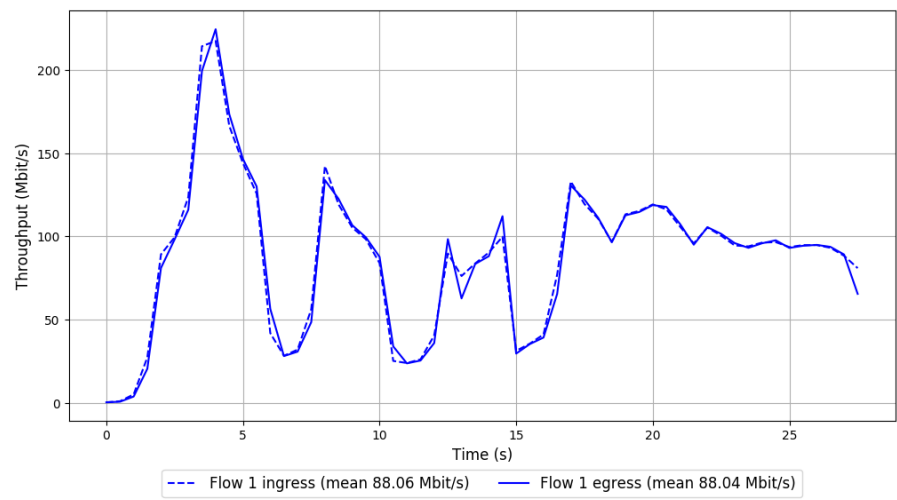


Run 6: Statistics of Copa

Start at: 2017-12-19 21:07:01
End at: 2017-12-19 21:07:31
Local clock offset: 10.923 ms
Remote clock offset: -2.377 ms

Below is generated by plot.py at 2017-12-20 02:04:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 88.04 Mbit/s
95th percentile per-packet one-way delay: 85.811 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 88.04 Mbit/s
95th percentile per-packet one-way delay: 85.811 ms
Loss rate: 0.63%

Run 6: Report of Copa — Data Link

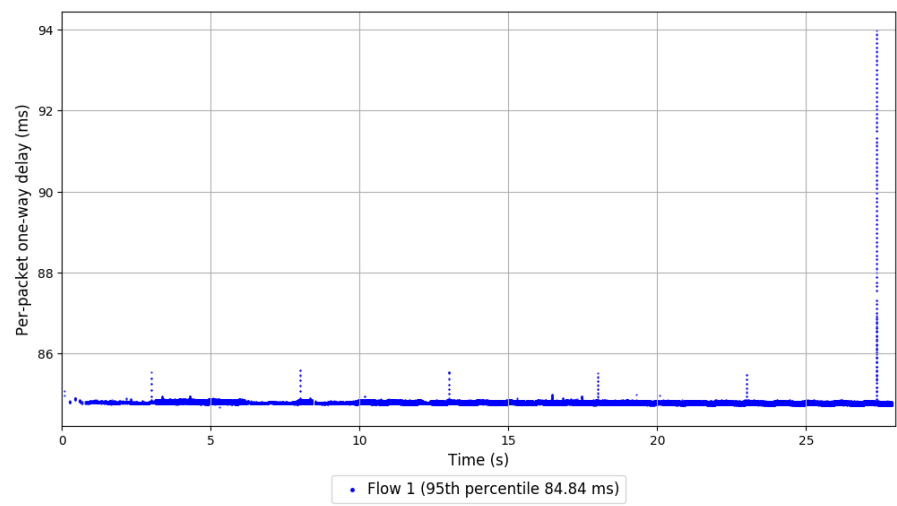
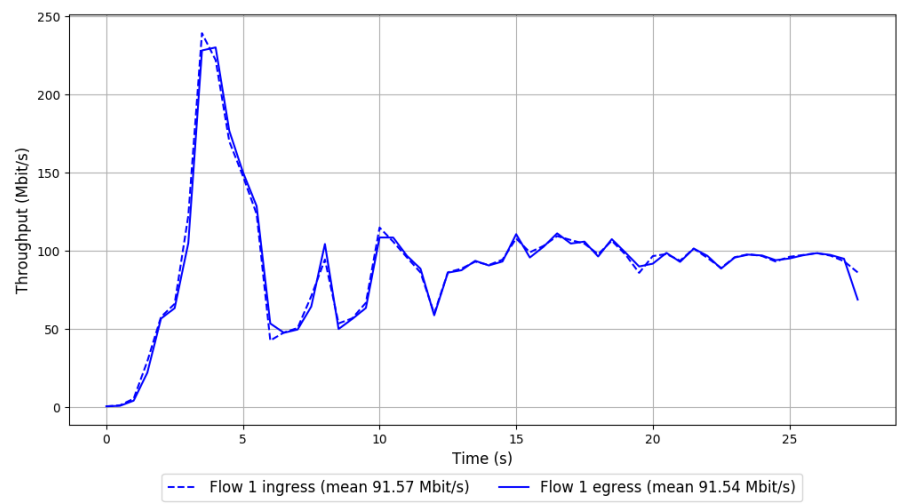


Run 7: Statistics of Copa

Start at: 2017-12-19 21:26:03
End at: 2017-12-19 21:26:33
Local clock offset: 11.681 ms
Remote clock offset: -2.697 ms

Below is generated by plot.py at 2017-12-20 02:04:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.54 Mbit/s
95th percentile per-packet one-way delay: 84.837 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 91.54 Mbit/s
95th percentile per-packet one-way delay: 84.837 ms
Loss rate: 0.63%

Run 7: Report of Copa — Data Link

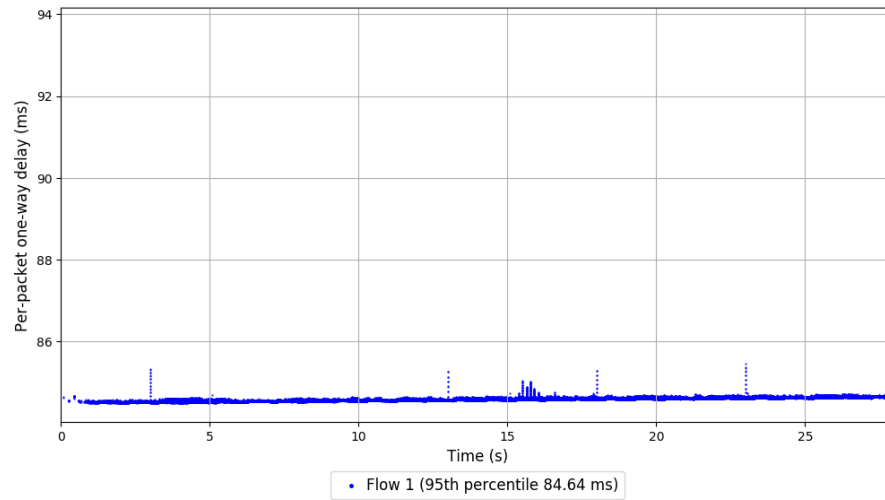
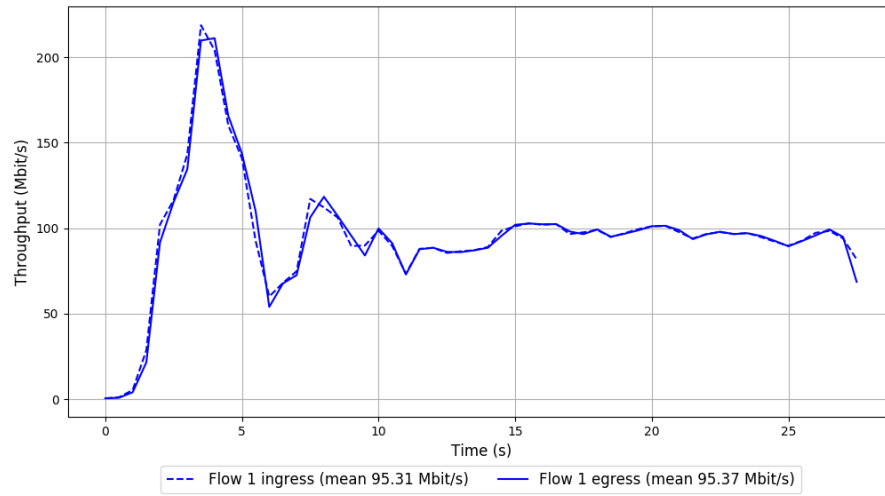


Run 8: Statistics of Copa

Start at: 2017-12-19 21:45:10
End at: 2017-12-19 21:45:40
Local clock offset: 11.396 ms
Remote clock offset: -2.945 ms

Below is generated by plot.py at 2017-12-20 02:04:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.37 Mbit/s
95th percentile per-packet one-way delay: 84.644 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 95.37 Mbit/s
95th percentile per-packet one-way delay: 84.644 ms
Loss rate: 0.54%

Run 8: Report of Copa — Data Link

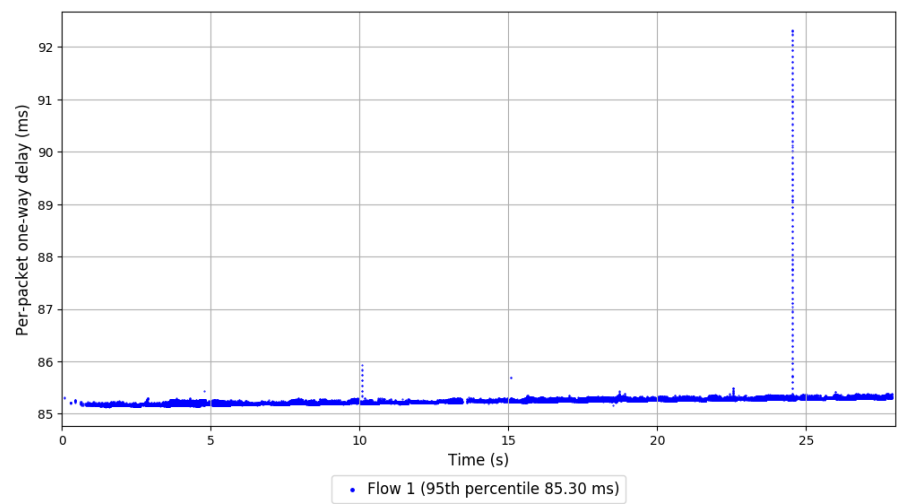
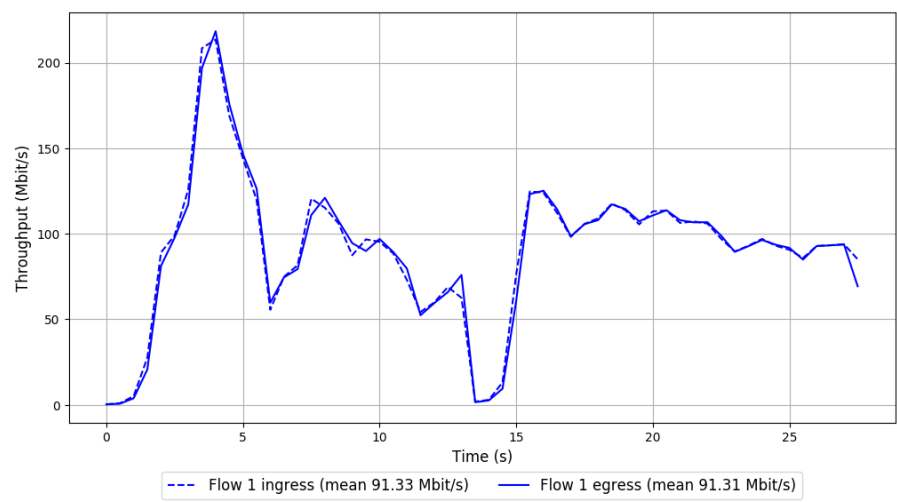


Run 9: Statistics of Copa

Start at: 2017-12-19 22:04:15
End at: 2017-12-19 22:04:45
Local clock offset: 8.42 ms
Remote clock offset: -2.454 ms

Below is generated by plot.py at 2017-12-20 02:05:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.31 Mbit/s
95th percentile per-packet one-way delay: 85.303 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 91.31 Mbit/s
95th percentile per-packet one-way delay: 85.303 ms
Loss rate: 0.62%

Run 9: Report of Copa — Data Link

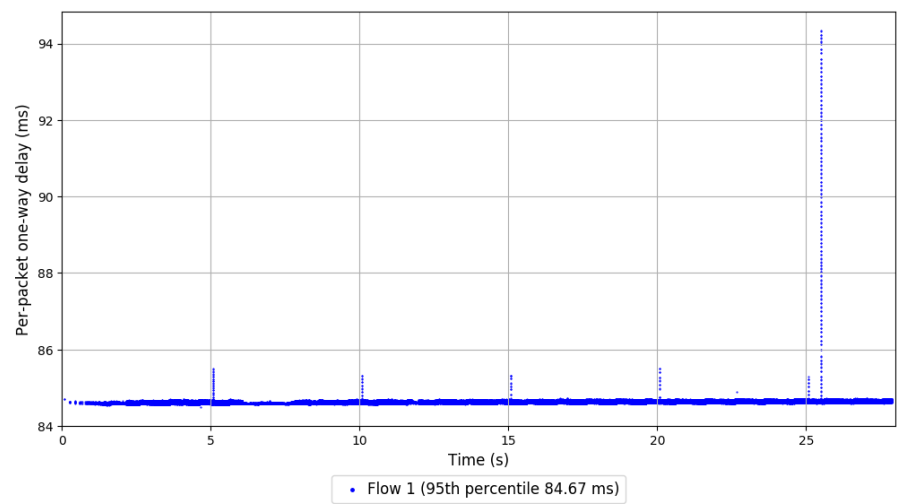
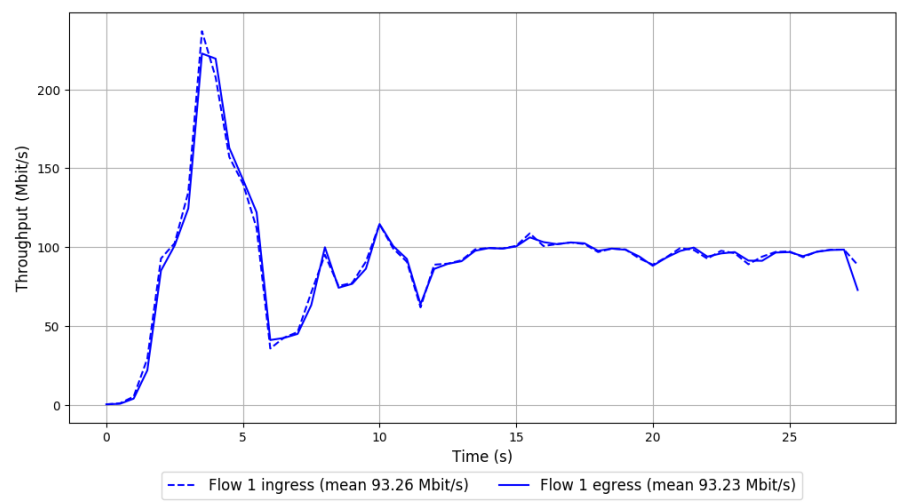


Run 10: Statistics of Copa

Start at: 2017-12-19 22:23:19
End at: 2017-12-19 22:23:49
Local clock offset: 4.316 ms
Remote clock offset: -3.629 ms

Below is generated by plot.py at 2017-12-20 02:05:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.23 Mbit/s
95th percentile per-packet one-way delay: 84.672 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 93.23 Mbit/s
95th percentile per-packet one-way delay: 84.672 ms
Loss rate: 0.63%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

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

End at: 2017-12-19 19:28:33

Local clock offset: 16.769 ms

Remote clock offset: 0.268 ms

Below is generated by plot.py at 2017-12-20 02:05:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.35 Mbit/s

95th percentile per-packet one-way delay: 93.146 ms

Loss rate: 15.49%

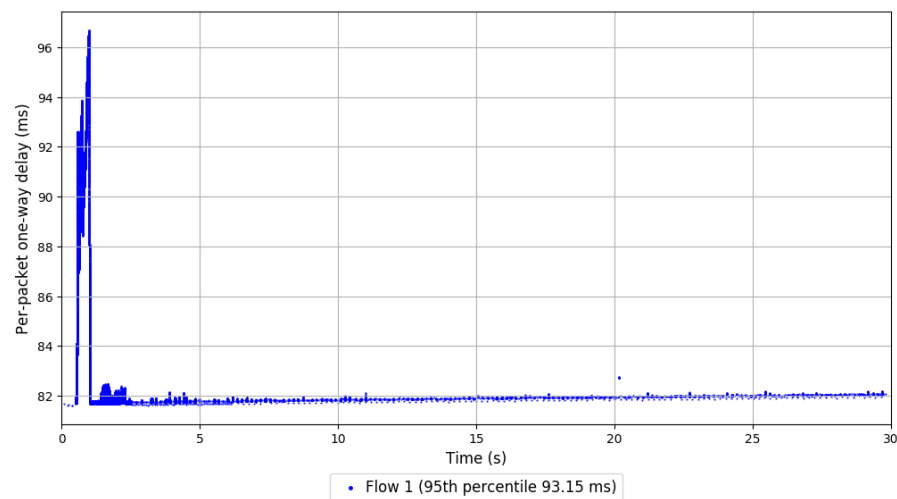
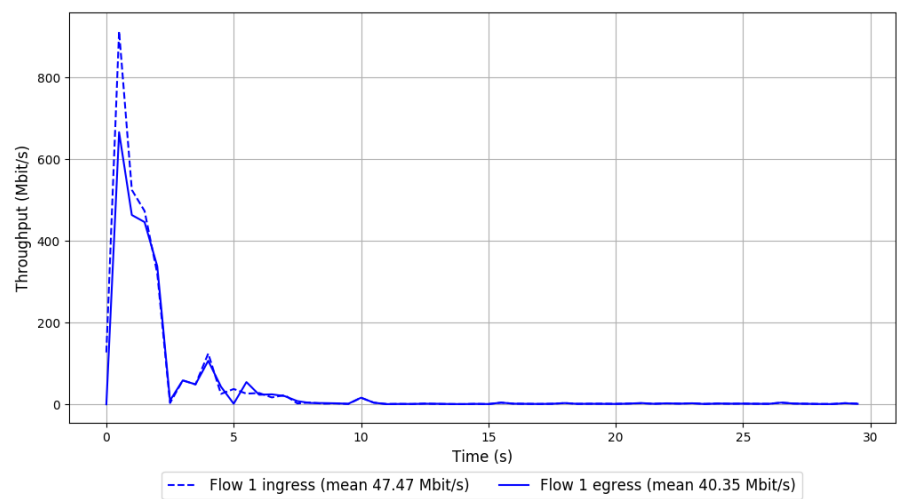
-- Flow 1:

Average throughput: 40.35 Mbit/s

95th percentile per-packet one-way delay: 93.146 ms

Loss rate: 15.49%

Run 1: Report of FillP — Data Link

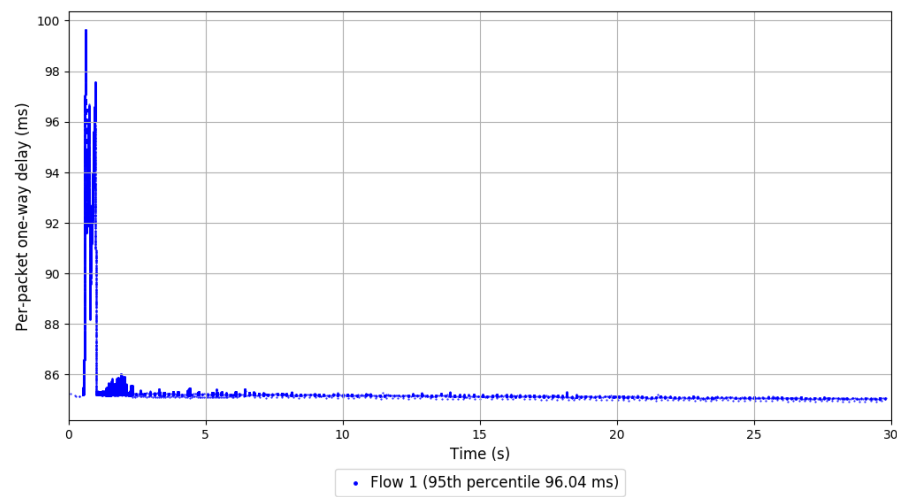
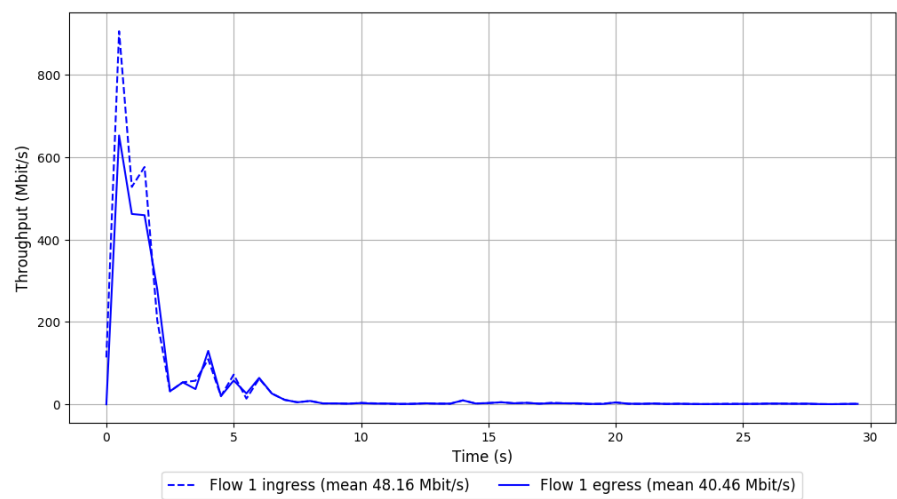


Run 2: Statistics of FillP

Start at: 2017-12-19 19:47:14
End at: 2017-12-19 19:47:44
Local clock offset: 5.518 ms
Remote clock offset: -3.027 ms

Below is generated by plot.py at 2017-12-20 02:05:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 40.46 Mbit/s
95th percentile per-packet one-way delay: 96.044 ms
Loss rate: 16.46%
-- Flow 1:
Average throughput: 40.46 Mbit/s
95th percentile per-packet one-way delay: 96.044 ms
Loss rate: 16.46%

Run 2: Report of FillP — Data Link

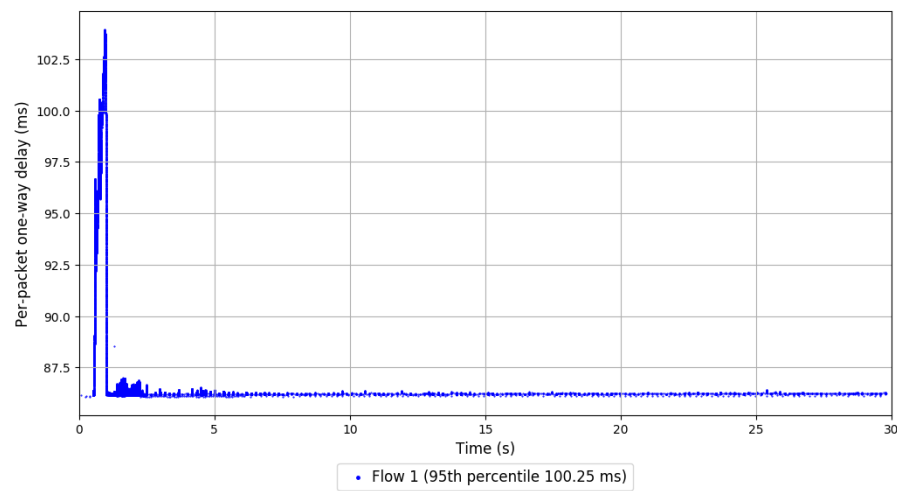
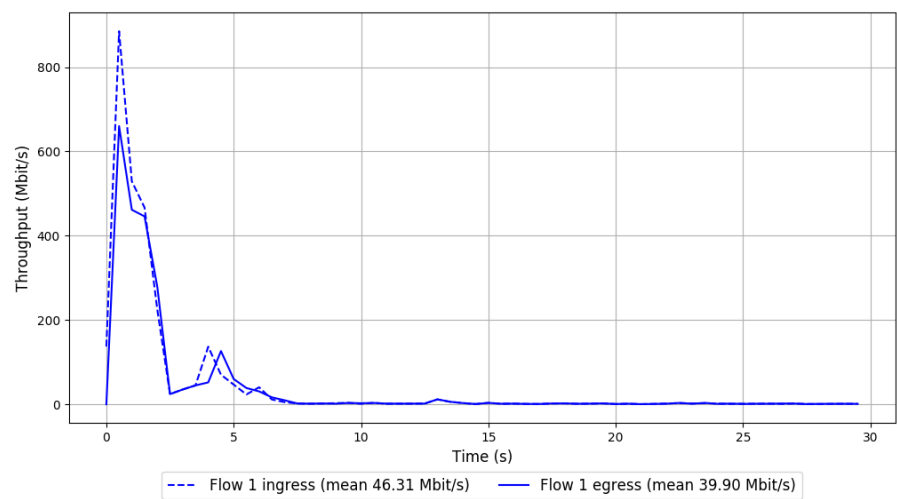


Run 3: Statistics of FillP

Start at: 2017-12-19 20:06:19
End at: 2017-12-19 20:06:49
Local clock offset: 9.153 ms
Remote clock offset: -3.367 ms

Below is generated by plot.py at 2017-12-20 02:05:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.90 Mbit/s
95th percentile per-packet one-way delay: 100.248 ms
Loss rate: 14.32%
-- Flow 1:
Average throughput: 39.90 Mbit/s
95th percentile per-packet one-way delay: 100.248 ms
Loss rate: 14.32%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2017-12-19 20:25:18

End at: 2017-12-19 20:25:48

Local clock offset: 6.162 ms

Remote clock offset: 2.421 ms

Below is generated by plot.py at 2017-12-20 02:05:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.40 Mbit/s

95th percentile per-packet one-way delay: 90.723 ms

Loss rate: 16.38%

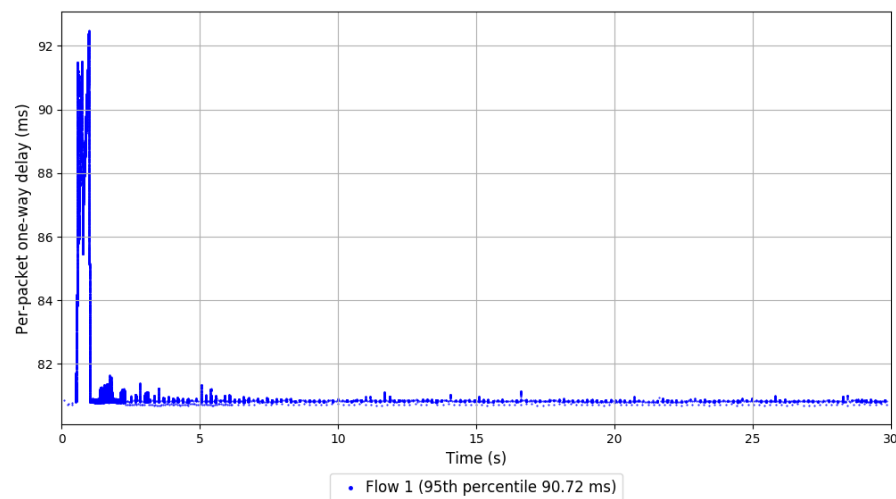
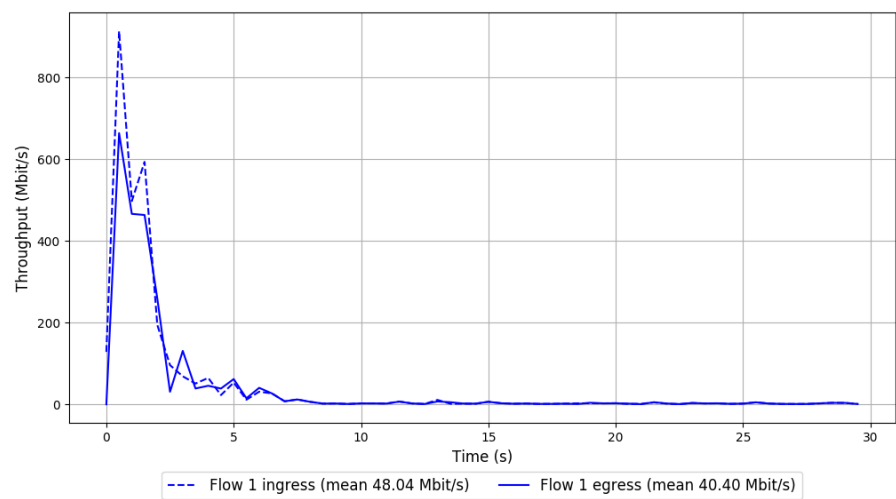
-- Flow 1:

Average throughput: 40.40 Mbit/s

95th percentile per-packet one-way delay: 90.723 ms

Loss rate: 16.38%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2017-12-19 20:44:26

End at: 2017-12-19 20:44:56

Local clock offset: 5.892 ms

Remote clock offset: 3.277 ms

Below is generated by plot.py at 2017-12-20 02:05:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.55 Mbit/s

95th percentile per-packet one-way delay: 199.200 ms

Loss rate: 25.33%

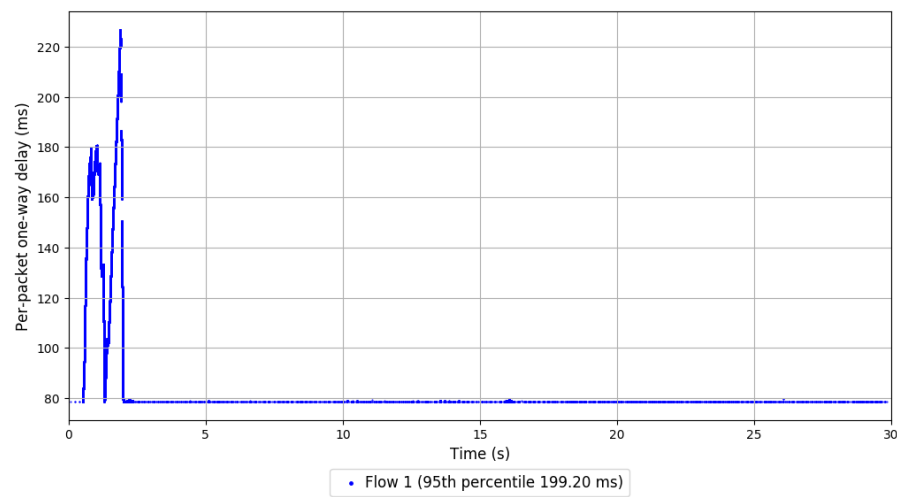
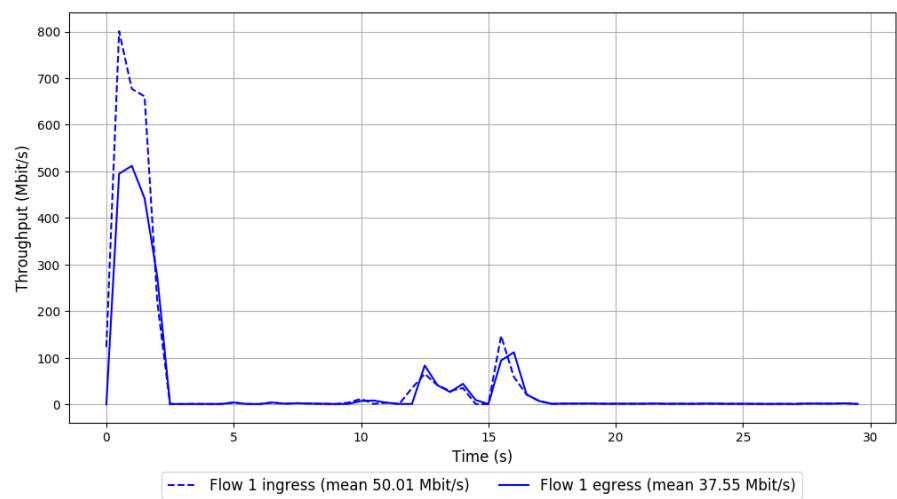
-- Flow 1:

Average throughput: 37.55 Mbit/s

95th percentile per-packet one-way delay: 199.200 ms

Loss rate: 25.33%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

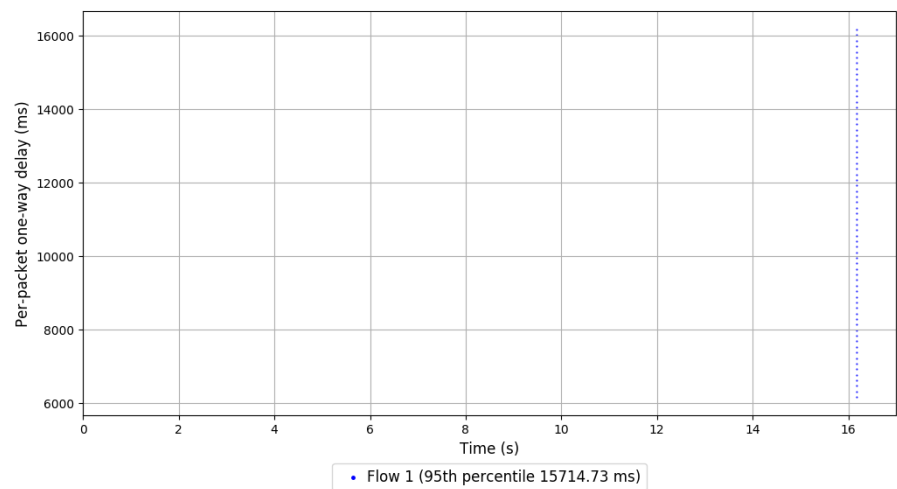
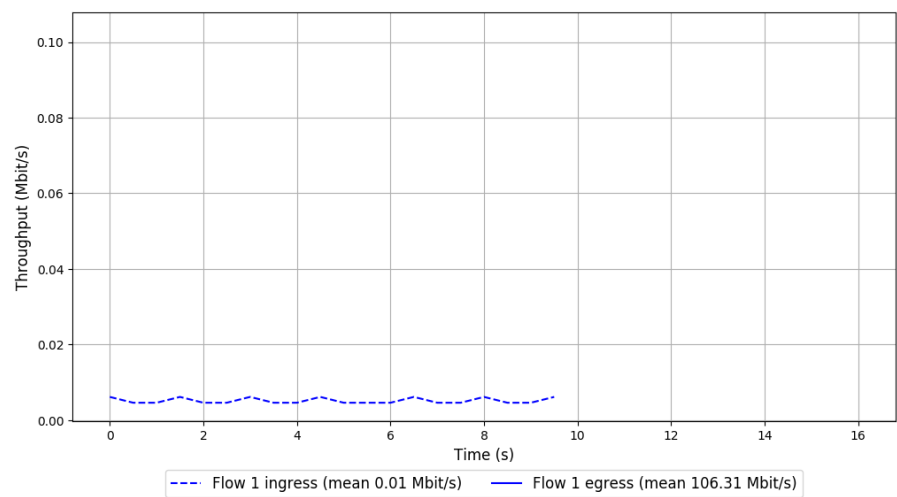
Start at: 2017-12-19 21:03:32

End at: 2017-12-19 21:04:02

Local clock offset: 9.914 ms

Remote clock offset: -1.866 ms

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

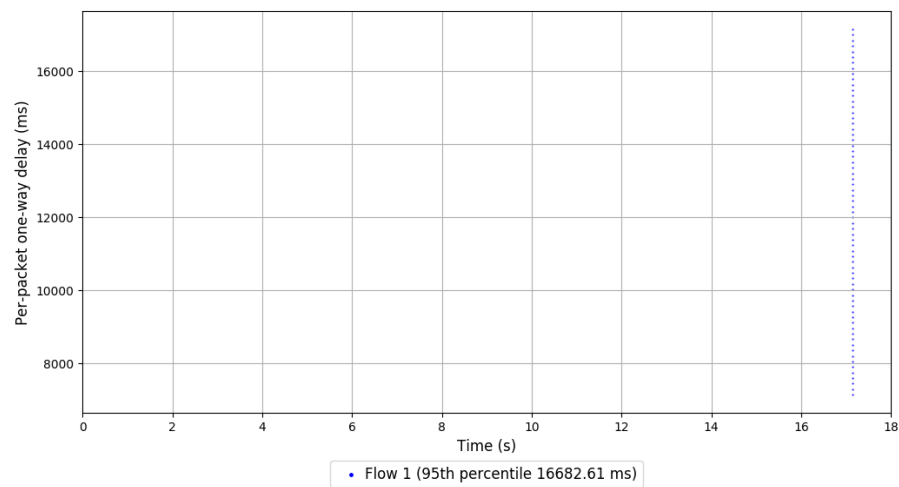
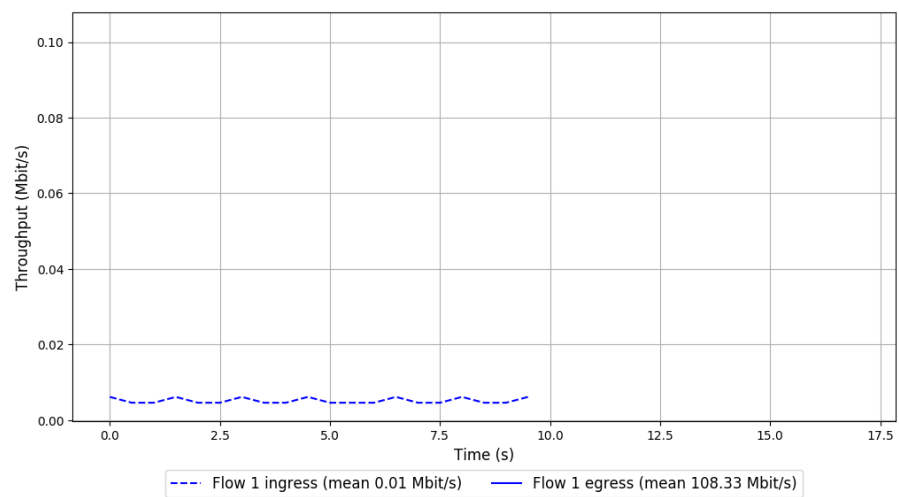
Start at: 2017-12-19 21:22:34

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

Local clock offset: 11.458 ms

Remote clock offset: -1.48 ms

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2017-12-19 21:41:33

End at: 2017-12-19 21:42:03

Local clock offset: 12.868 ms

Remote clock offset: 1.894 ms

Below is generated by plot.py at 2017-12-20 02:05:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.55 Mbit/s

95th percentile per-packet one-way delay: 89.654 ms

Loss rate: 13.82%

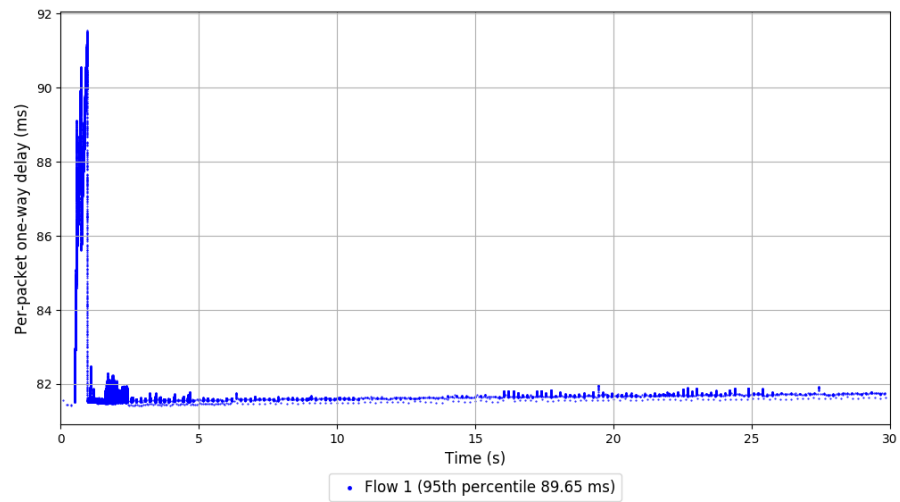
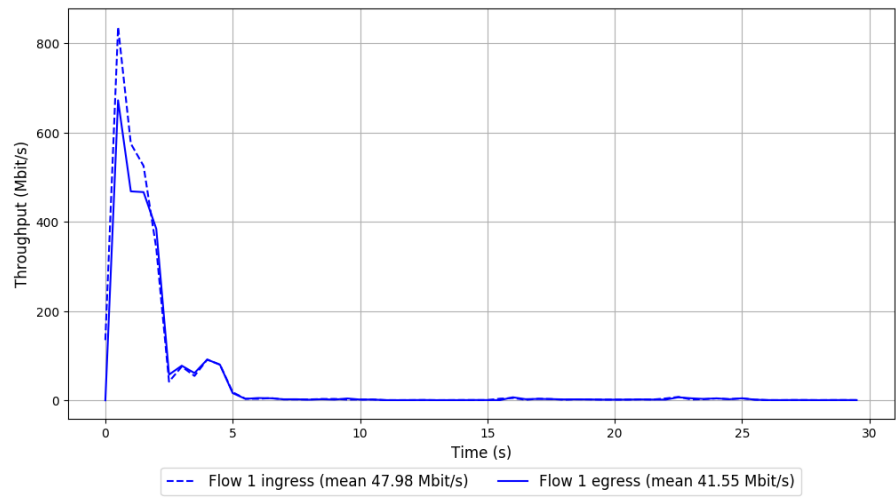
-- Flow 1:

Average throughput: 41.55 Mbit/s

95th percentile per-packet one-way delay: 89.654 ms

Loss rate: 13.82%

Run 8: Report of FillP — Data Link

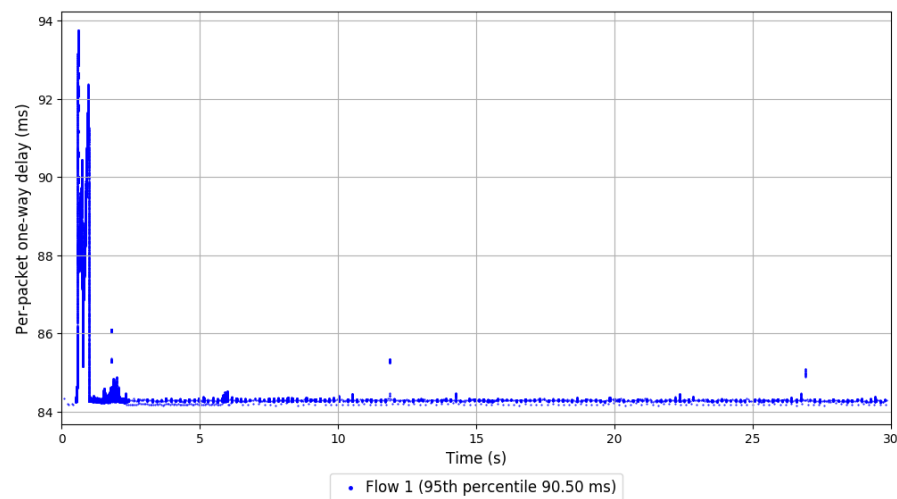
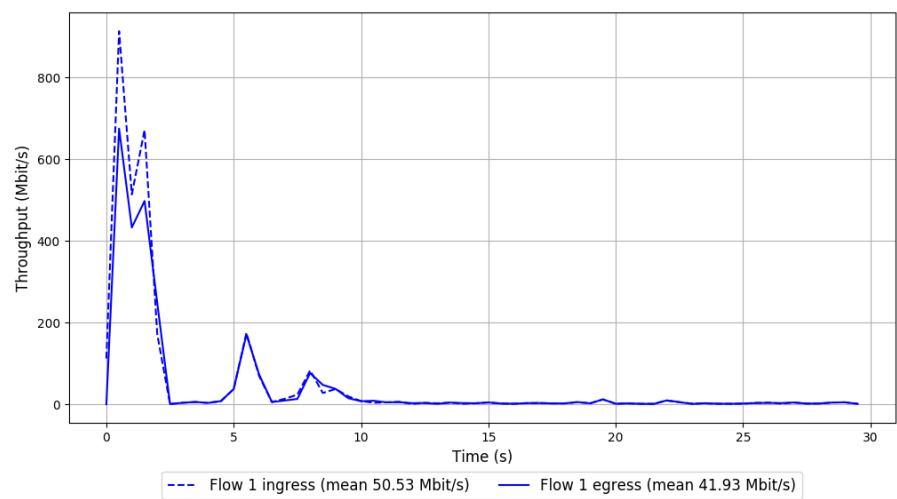


Run 9: Statistics of FillP

Start at: 2017-12-19 22:00:39
End at: 2017-12-19 22:01:09
Local clock offset: 9.135 ms
Remote clock offset: -2.783 ms

Below is generated by plot.py at 2017-12-20 02:05:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 41.93 Mbit/s
95th percentile per-packet one-way delay: 90.496 ms
Loss rate: 17.48%
-- Flow 1:
Average throughput: 41.93 Mbit/s
95th percentile per-packet one-way delay: 90.496 ms
Loss rate: 17.48%

Run 9: Report of FillP — Data Link

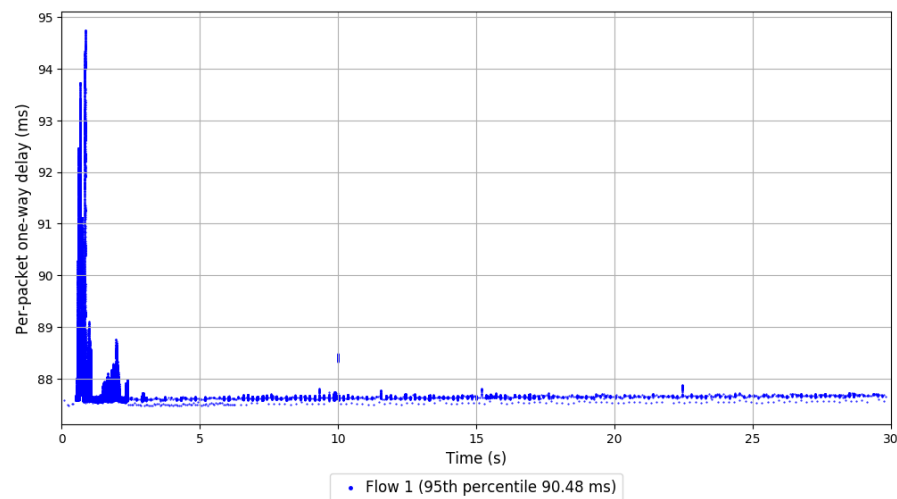
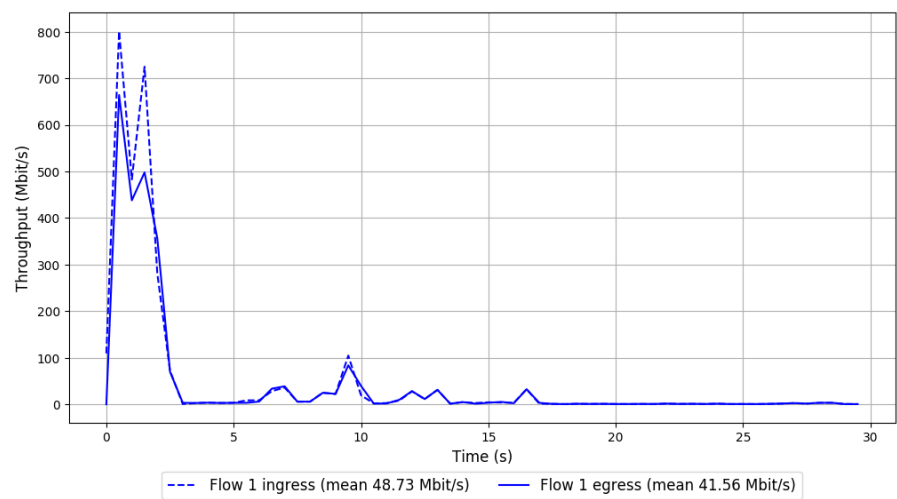


Run 10: Statistics of FillP

Start at: 2017-12-19 22:19:44
End at: 2017-12-19 22:20:14
Local clock offset: 4.91 ms
Remote clock offset: -3.321 ms

Below is generated by plot.py at 2017-12-20 02:05:20
Datalink statistics
-- Total of 1 flow:
Average throughput: 41.56 Mbit/s
95th percentile per-packet one-way delay: 90.477 ms
Loss rate: 15.20%
-- Flow 1:
Average throughput: 41.56 Mbit/s
95th percentile per-packet one-way delay: 90.477 ms
Loss rate: 15.20%

Run 10: Report of FillP — Data Link

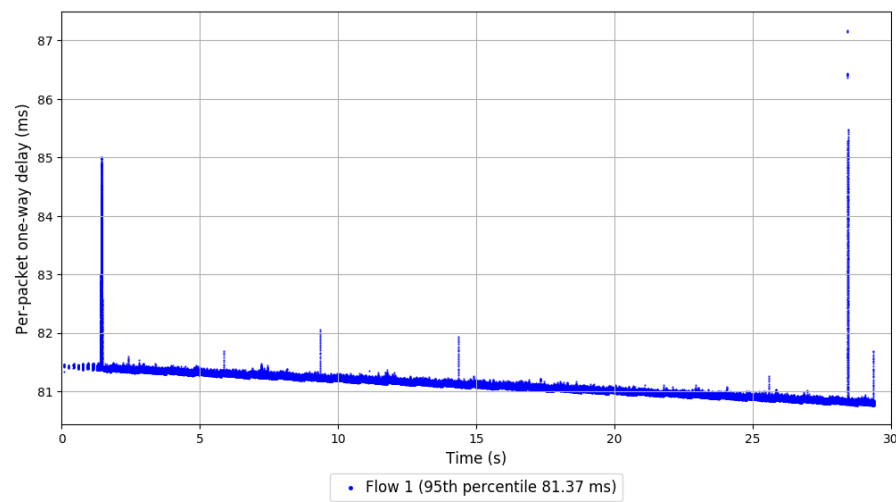
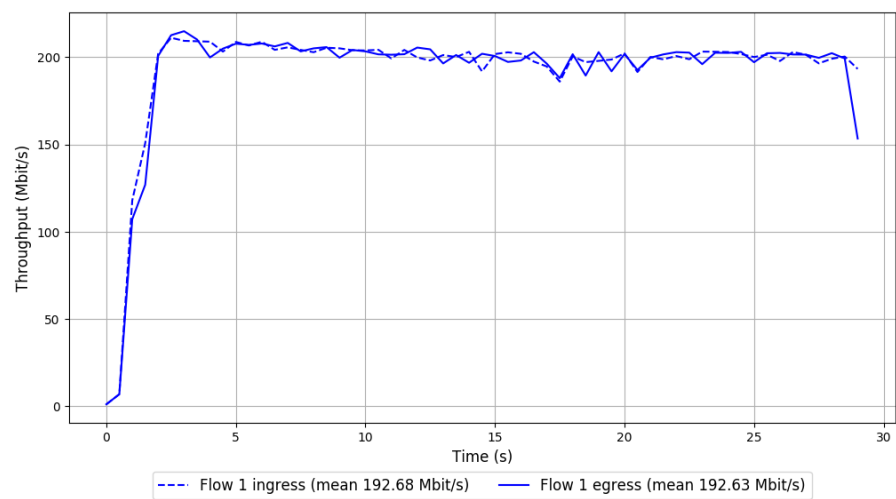


```
Run 1: Statistics of Indigo

Start at: 2017-12-19 19:20:03
End at: 2017-12-19 19:20:33
Local clock offset: 12.305 ms
Remote clock offset: 0.686 ms

# Below is generated by plot.py at 2017-12-20 02:07:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 192.63 Mbit/s
95th percentile per-packet one-way delay: 81.367 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 192.63 Mbit/s
95th percentile per-packet one-way delay: 81.367 ms
Loss rate: 0.60%
```

Run 1: Report of Indigo — Data Link

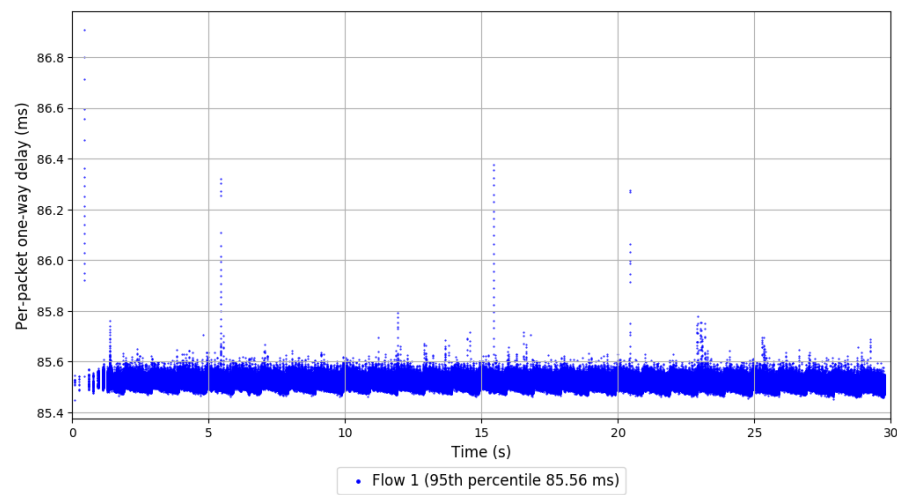
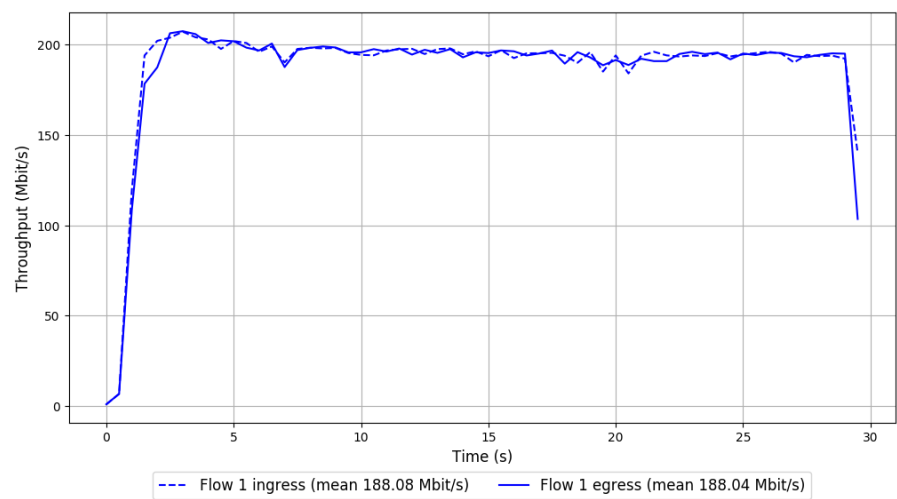


Run 2: Statistics of Indigo

Start at: 2017-12-19 19:39:13
End at: 2017-12-19 19:39:43
Local clock offset: 4.206 ms
Remote clock offset: -4.022 ms

Below is generated by plot.py at 2017-12-20 02:07:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 188.04 Mbit/s
95th percentile per-packet one-way delay: 85.555 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 188.04 Mbit/s
95th percentile per-packet one-way delay: 85.555 ms
Loss rate: 0.58%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

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

End at: 2017-12-19 19:58:50

Local clock offset: 7.725 ms

Remote clock offset: -3.606 ms

Below is generated by plot.py at 2017-12-20 02:07:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.53 Mbit/s

95th percentile per-packet one-way delay: 86.142 ms

Loss rate: 0.61%

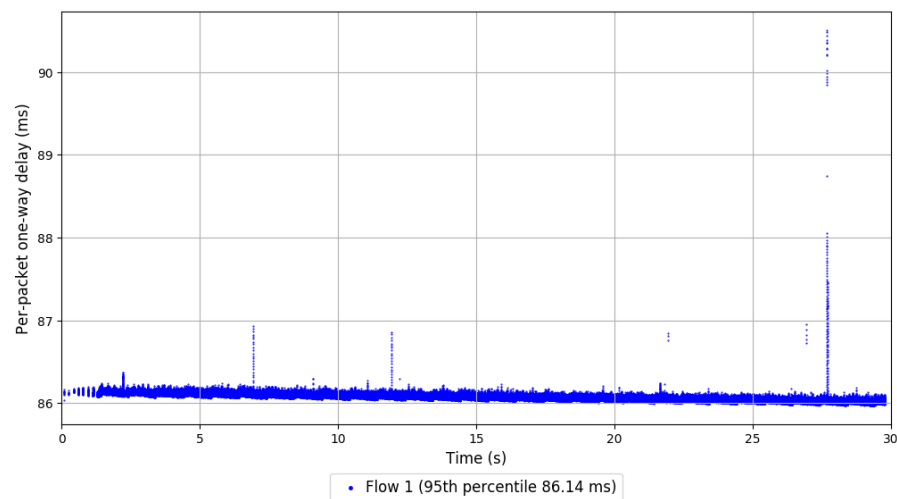
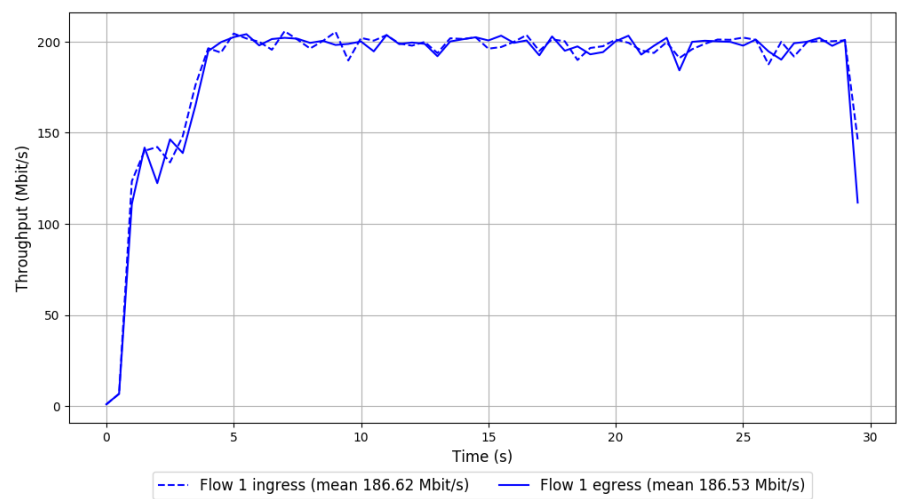
-- Flow 1:

Average throughput: 186.53 Mbit/s

95th percentile per-packet one-way delay: 86.142 ms

Loss rate: 0.61%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

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

End at: 2017-12-19 20:17:50

Local clock offset: 7.519 ms

Remote clock offset: 2.247 ms

Below is generated by plot.py at 2017-12-20 02:07:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.44 Mbit/s

95th percentile per-packet one-way delay: 79.124 ms

Loss rate: 0.60%

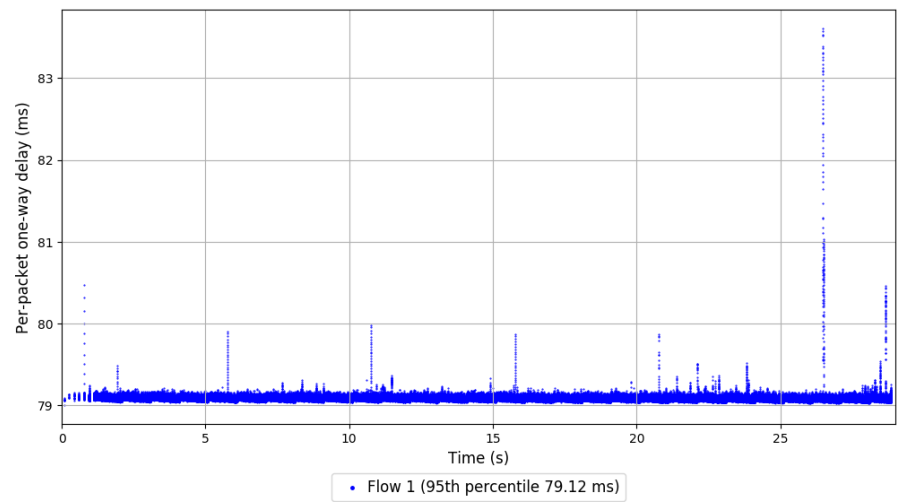
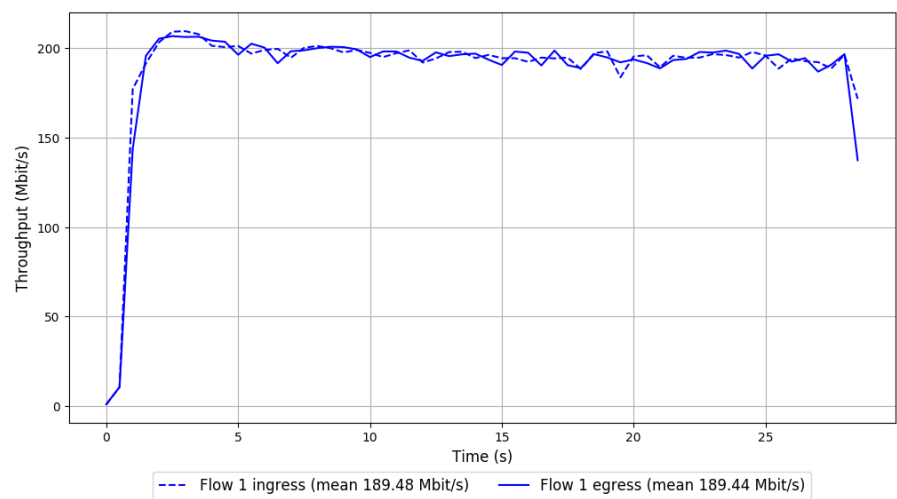
-- Flow 1:

Average throughput: 189.44 Mbit/s

95th percentile per-packet one-way delay: 79.124 ms

Loss rate: 0.60%

Run 4: Report of Indigo — Data Link

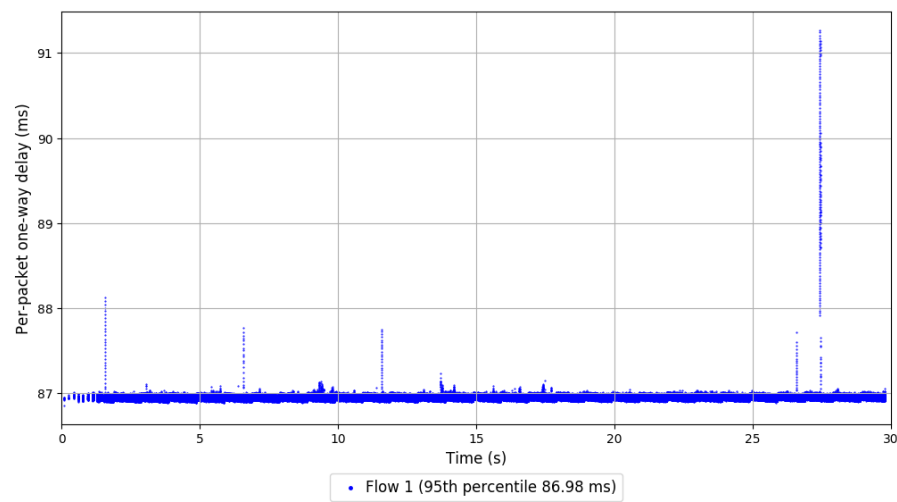
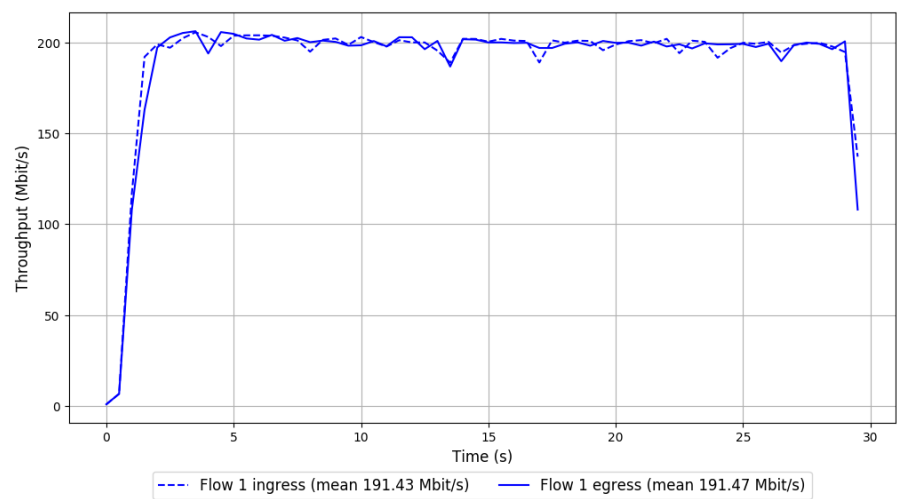


Run 5: Statistics of Indigo

Start at: 2017-12-19 20:36:23
End at: 2017-12-19 20:36:53
Local clock offset: 5.488 ms
Remote clock offset: -1.714 ms

Below is generated by plot.py at 2017-12-20 02:07:46
Datalink statistics
-- Total of 1 flow:
Average throughput: 191.47 Mbit/s
95th percentile per-packet one-way delay: 86.984 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 191.47 Mbit/s
95th percentile per-packet one-way delay: 86.984 ms
Loss rate: 0.55%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-19 20:55:35

End at: 2017-12-19 20:56:05

Local clock offset: 7.834 ms

Remote clock offset: -2.37 ms

Below is generated by plot.py at 2017-12-20 02:07:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.41 Mbit/s

95th percentile per-packet one-way delay: 84.334 ms

Loss rate: 0.57%

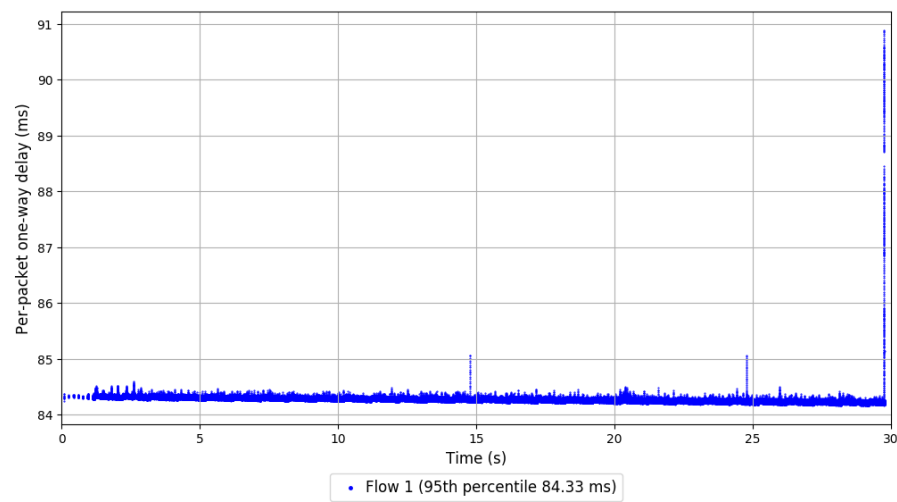
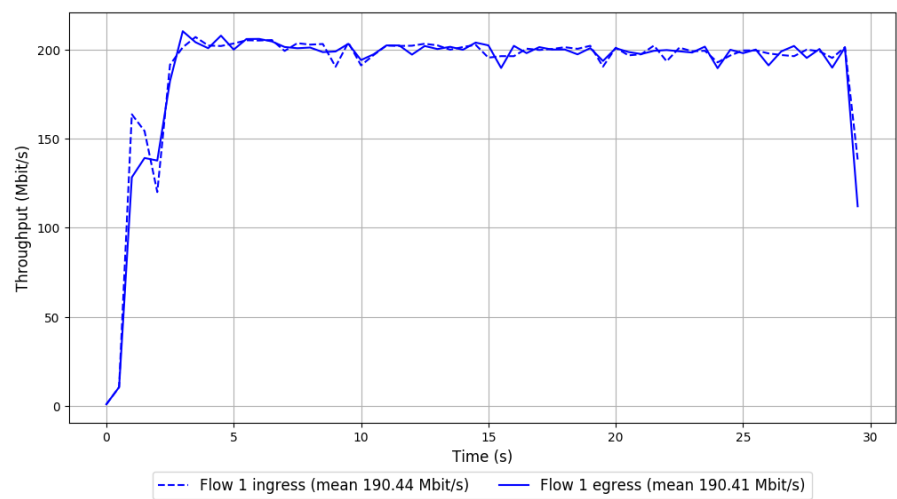
-- Flow 1:

Average throughput: 190.41 Mbit/s

95th percentile per-packet one-way delay: 84.334 ms

Loss rate: 0.57%

Run 6: Report of Indigo — Data Link

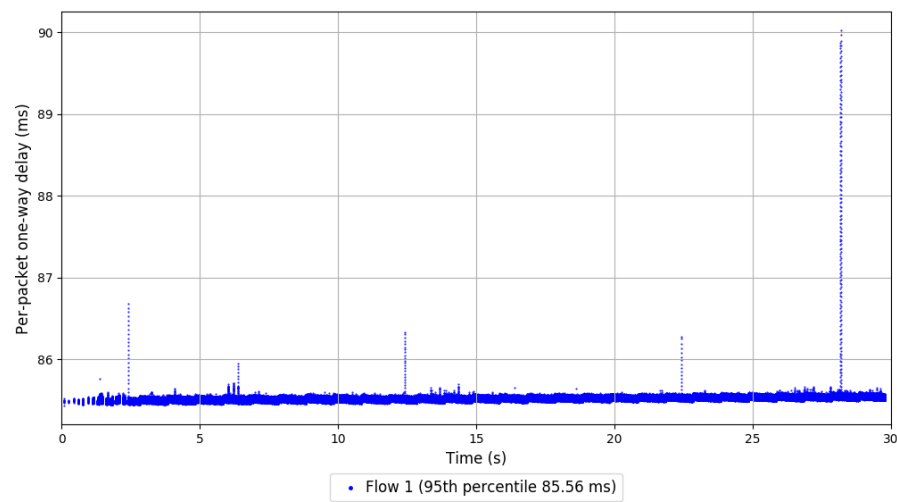
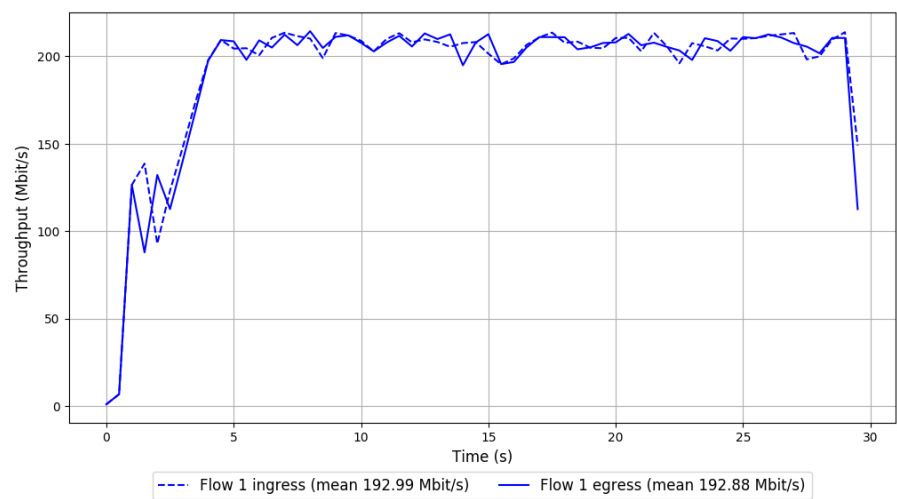


Run 7: Statistics of Indigo

Start at: 2017-12-19 21:14:34
End at: 2017-12-19 21:15:04
Local clock offset: 11.769 ms
Remote clock offset: -1.882 ms

Below is generated by plot.py at 2017-12-20 02:07:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 192.88 Mbit/s
95th percentile per-packet one-way delay: 85.556 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 192.88 Mbit/s
95th percentile per-packet one-way delay: 85.556 ms
Loss rate: 0.62%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

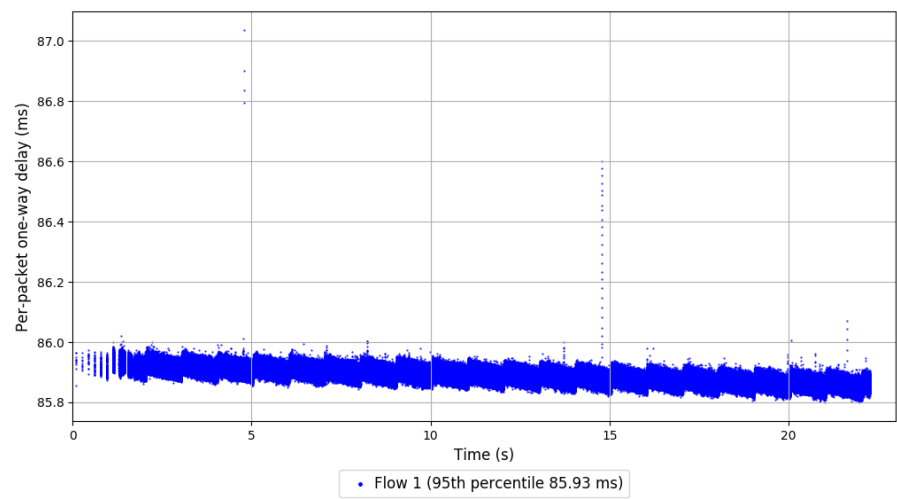
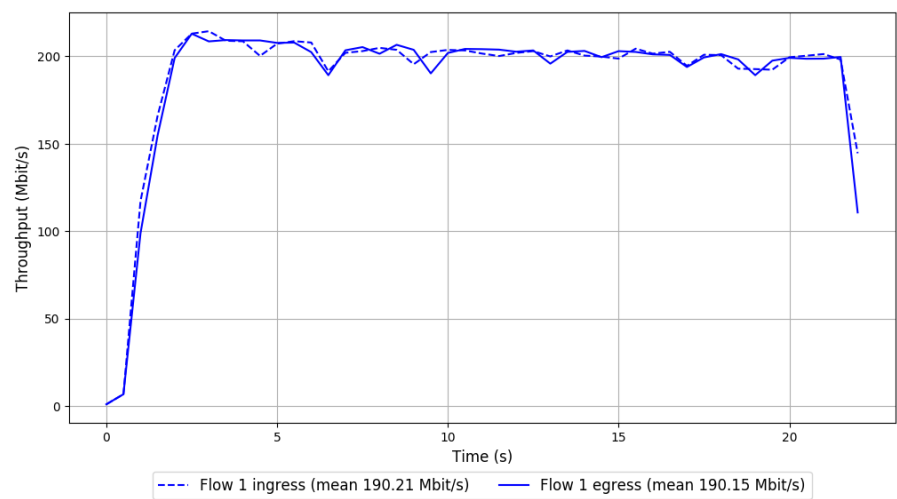
Start at: 2017-12-19 21:33:37

End at: 2017-12-19 21:34:07

Local clock offset: 12.638 ms

Remote clock offset: -2.368 ms

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-19 21:52:39

End at: 2017-12-19 21:53:09

Local clock offset: 9.741 ms

Remote clock offset: 2.093 ms

Below is generated by plot.py at 2017-12-20 02:08:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.89 Mbit/s

95th percentile per-packet one-way delay: 79.750 ms

Loss rate: 0.54%

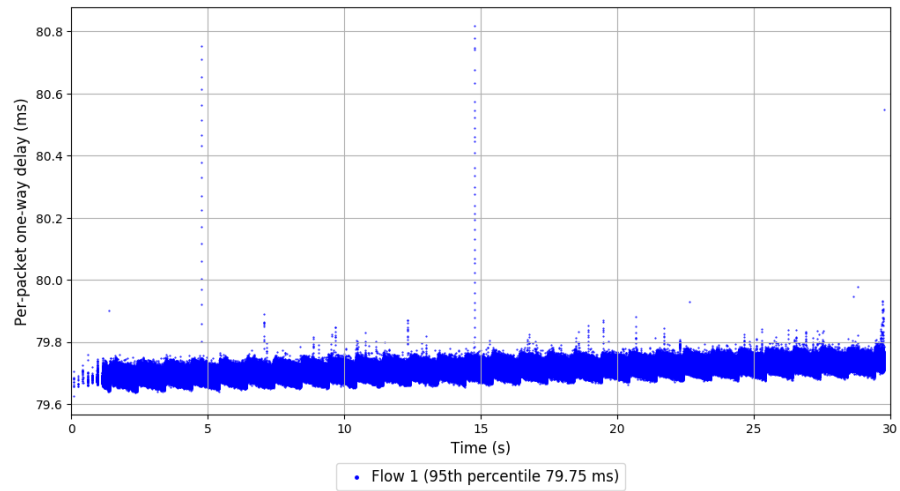
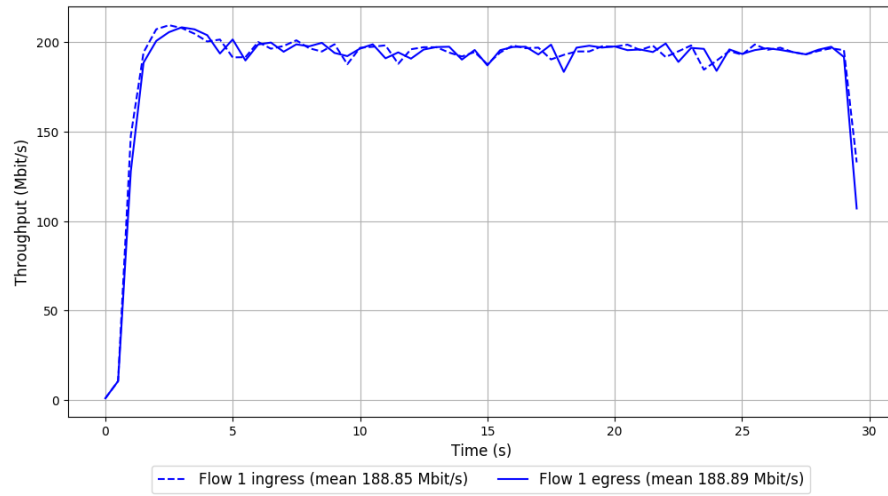
-- Flow 1:

Average throughput: 188.89 Mbit/s

95th percentile per-packet one-way delay: 79.750 ms

Loss rate: 0.54%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-19 22:11:42

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

Local clock offset: 6.585 ms

Remote clock offset: -3.035 ms

Below is generated by plot.py at 2017-12-20 02:08:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.94 Mbit/s

95th percentile per-packet one-way delay: 86.007 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 188.94 Mbit/s

95th percentile per-packet one-way delay: 86.007 ms

Loss rate: 0.67%

Run 10: Report of Indigo — Data Link

