

Pantheon Report

Generated at 2017-12-20 03:44:54 (UTC).

Data path: Stanford Ethernet (*remote*) → AWS California 1 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).

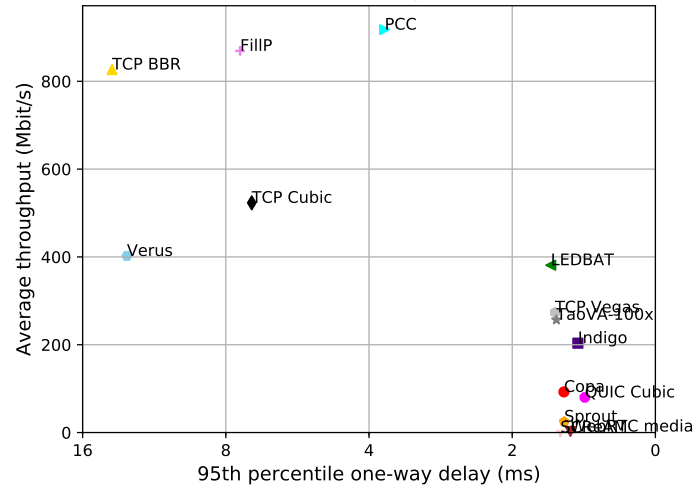
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.

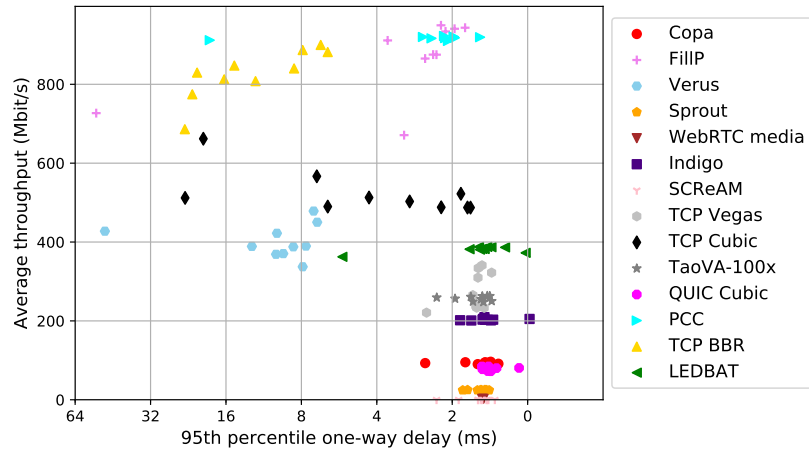
Git summary:

```
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 Stanford Ethernet to AWS California 1 Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from Stanford Ethernet to AWS California 1 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	826.77	13.87	0.09
TCP Cubic	10	523.15	7.06	0.06
LEDBAT	10	381.09	1.46	0.07
PCC	10	917.62	3.71	0.16
QUIC Cubic	10	80.02	0.99	0.06
SCReAM	10	0.22	1.33	0.13
WebRTC media	2	2.37	1.19	0.15
Sprout	10	24.73	1.27	0.06
TaoVA-100x	10	256.78	1.38	0.07
TCP Vegas	10	273.53	1.40	0.07
Verus	10	402.19	12.91	0.08
Copa	10	92.60	1.28	0.06
FillP	10	869.27	7.47	0.28
Indigo	10	203.55	1.08	0.07

Run 1: Statistics of TCP BBR

Start at: 2017-12-19 19:22:08

End at: 2017-12-19 19:22:38

Local clock offset: 17.98 ms

Remote clock offset: -2.172 ms

Below is generated by plot.py at 2017-12-20 02:24:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 829.72 Mbit/s

95th percentile per-packet one-way delay: 20.861 ms

Loss rate: 0.09%

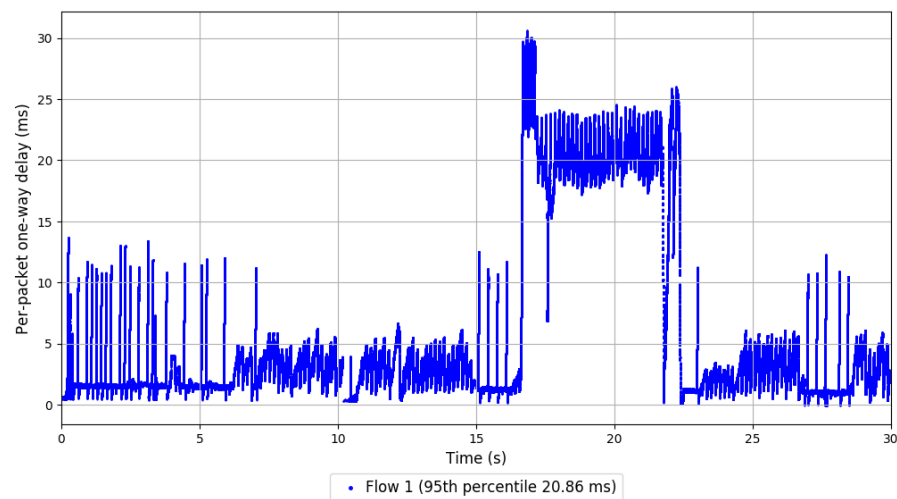
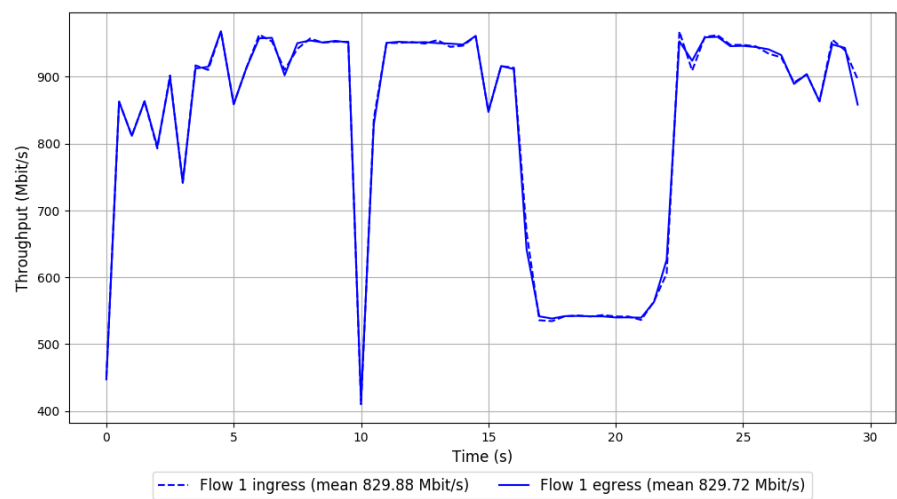
-- Flow 1:

Average throughput: 829.72 Mbit/s

95th percentile per-packet one-way delay: 20.861 ms

Loss rate: 0.09%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

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

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

Local clock offset: 10.633 ms

Remote clock offset: -1.34 ms

Below is generated by plot.py at 2017-12-20 02:25:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 886.91 Mbit/s

95th percentile per-packet one-way delay: 7.904 ms

Loss rate: 0.08%

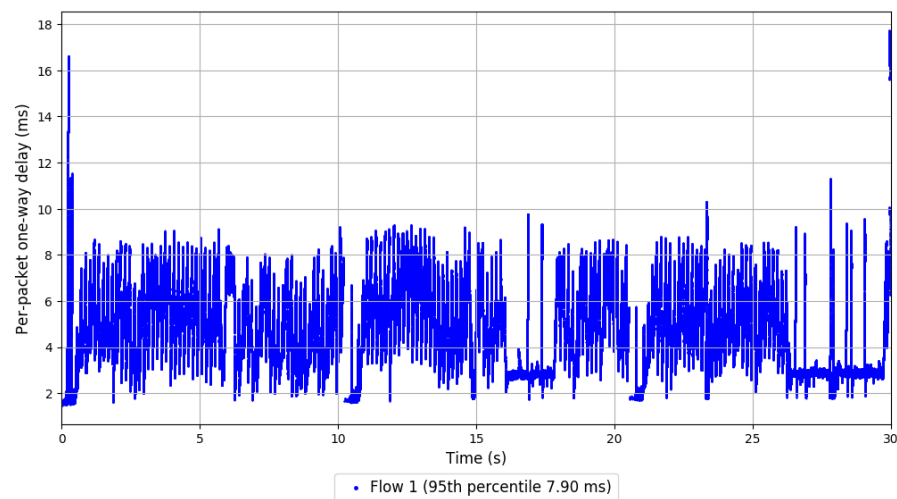
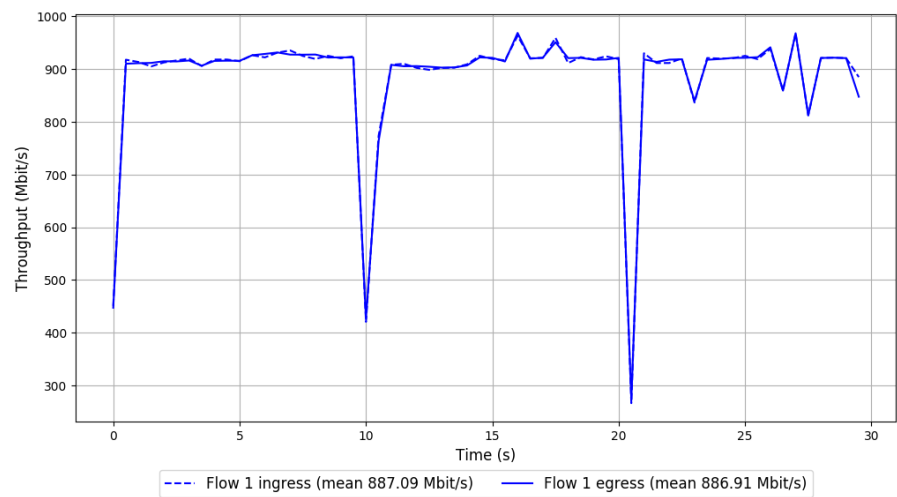
-- Flow 1:

Average throughput: 886.91 Mbit/s

95th percentile per-packet one-way delay: 7.904 ms

Loss rate: 0.08%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-19 20:03:56

End at: 2017-12-19 20:04:26

Local clock offset: 1.567 ms

Remote clock offset: -1.216 ms

Below is generated by plot.py at 2017-12-20 02:25:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 808.07 Mbit/s

95th percentile per-packet one-way delay: 12.195 ms

Loss rate: 0.09%

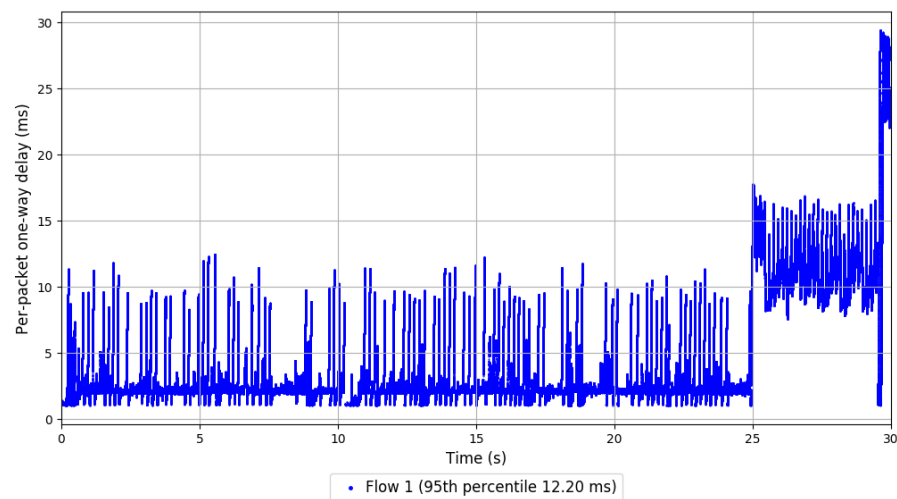
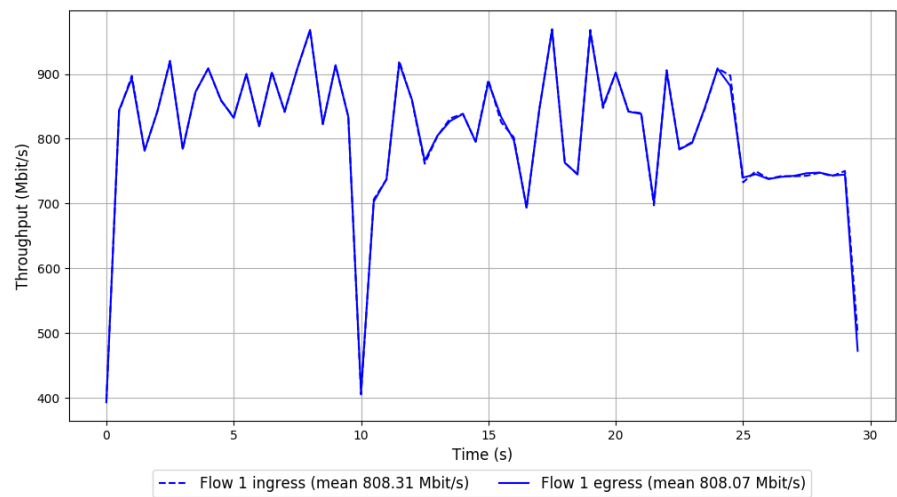
-- Flow 1:

Average throughput: 808.07 Mbit/s

95th percentile per-packet one-way delay: 12.195 ms

Loss rate: 0.09%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

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

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

Local clock offset: 3.365 ms

Remote clock offset: -0.546 ms

Below is generated by plot.py at 2017-12-20 02:25:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 847.53 Mbit/s

95th percentile per-packet one-way delay: 14.817 ms

Loss rate: 0.08%

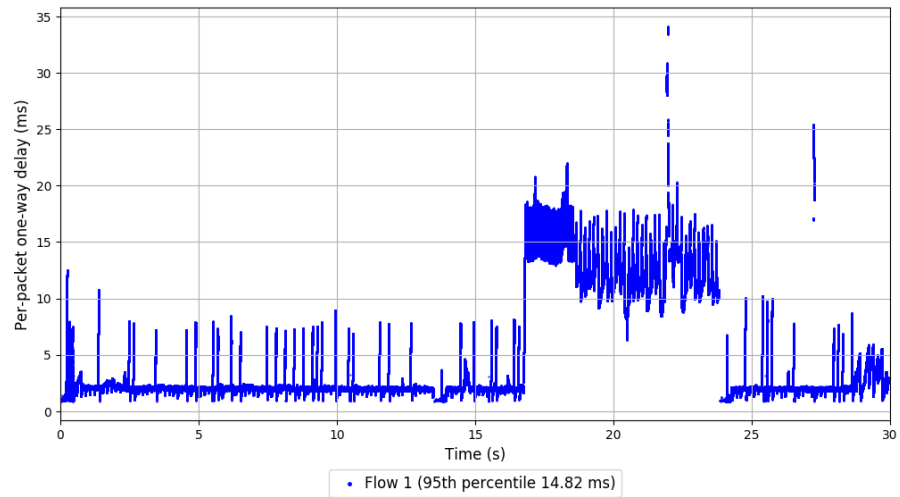
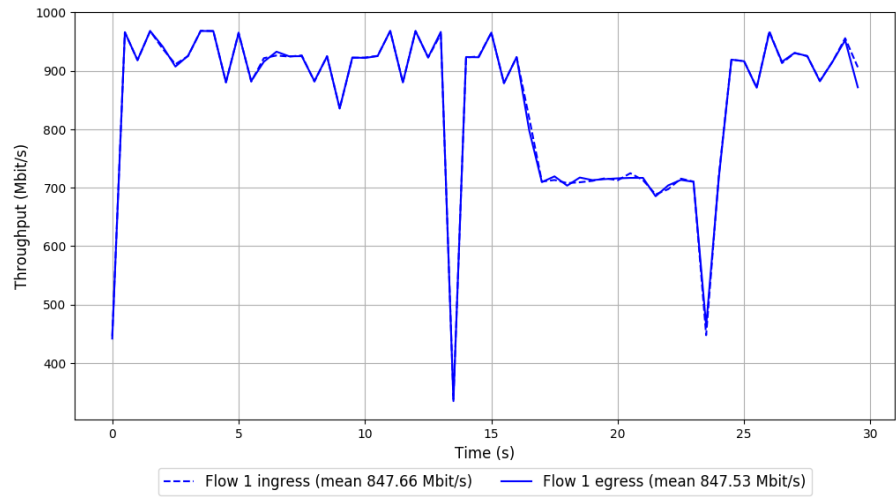
-- Flow 1:

Average throughput: 847.53 Mbit/s

95th percentile per-packet one-way delay: 14.817 ms

Loss rate: 0.08%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-19 20:45:36

End at: 2017-12-19 20:46:06

Local clock offset: 4.166 ms

Remote clock offset: -0.328 ms

Below is generated by plot.py at 2017-12-20 02:25:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 840.24 Mbit/s

95th percentile per-packet one-way delay: 8.556 ms

Loss rate: 0.08%

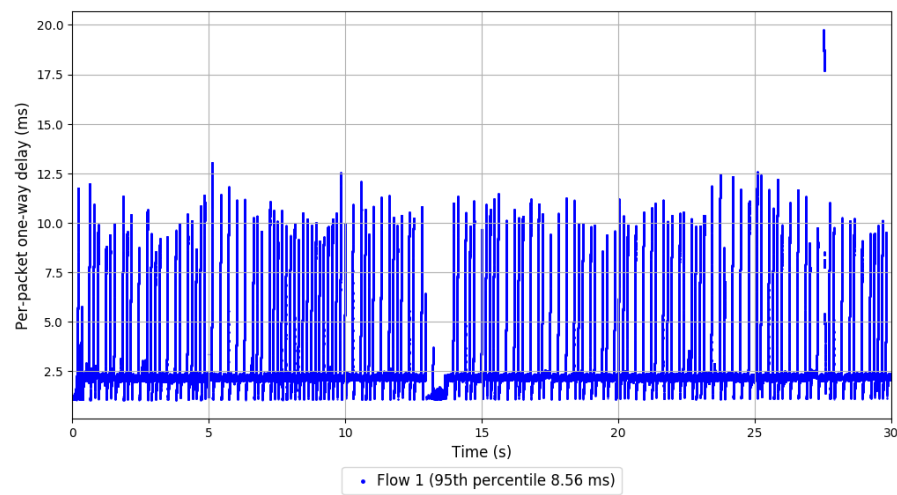
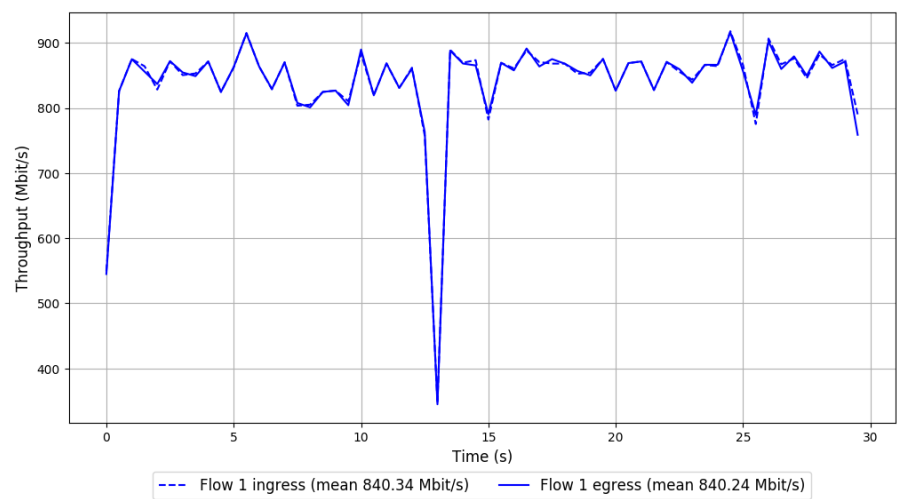
-- Flow 1:

Average throughput: 840.24 Mbit/s

95th percentile per-packet one-way delay: 8.556 ms

Loss rate: 0.08%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-19 21:06:35

End at: 2017-12-19 21:07:05

Local clock offset: 6.664 ms

Remote clock offset: -0.368 ms

Below is generated by plot.py at 2017-12-20 02:25:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 899.83 Mbit/s

95th percentile per-packet one-way delay: 6.699 ms

Loss rate: 0.08%

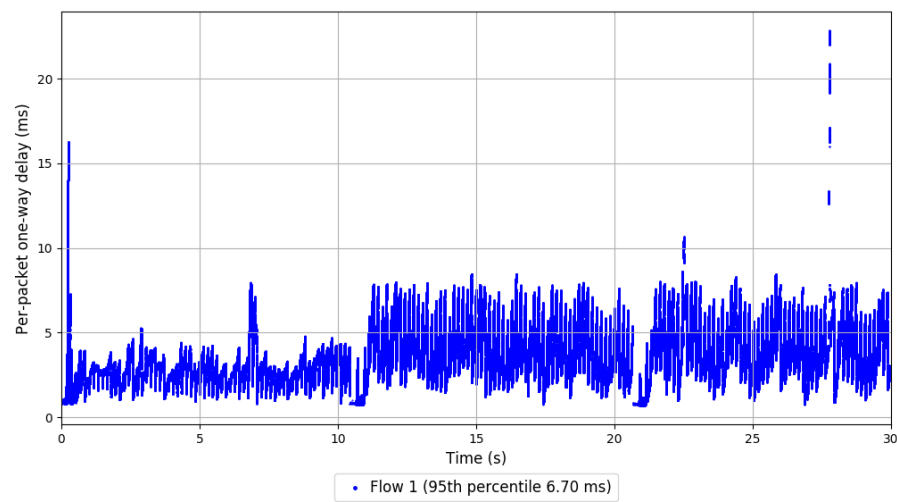
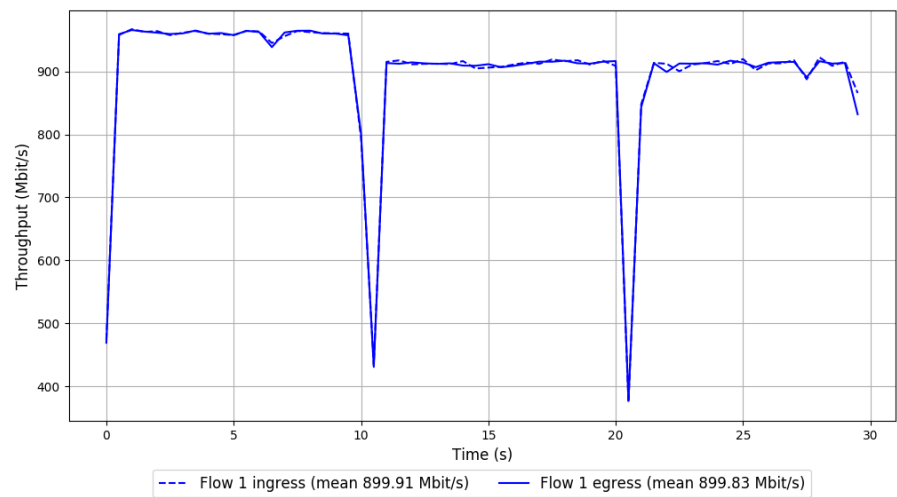
-- Flow 1:

Average throughput: 899.83 Mbit/s

95th percentile per-packet one-way delay: 6.699 ms

Loss rate: 0.08%

Run 6: Report of TCP BBR — Data Link

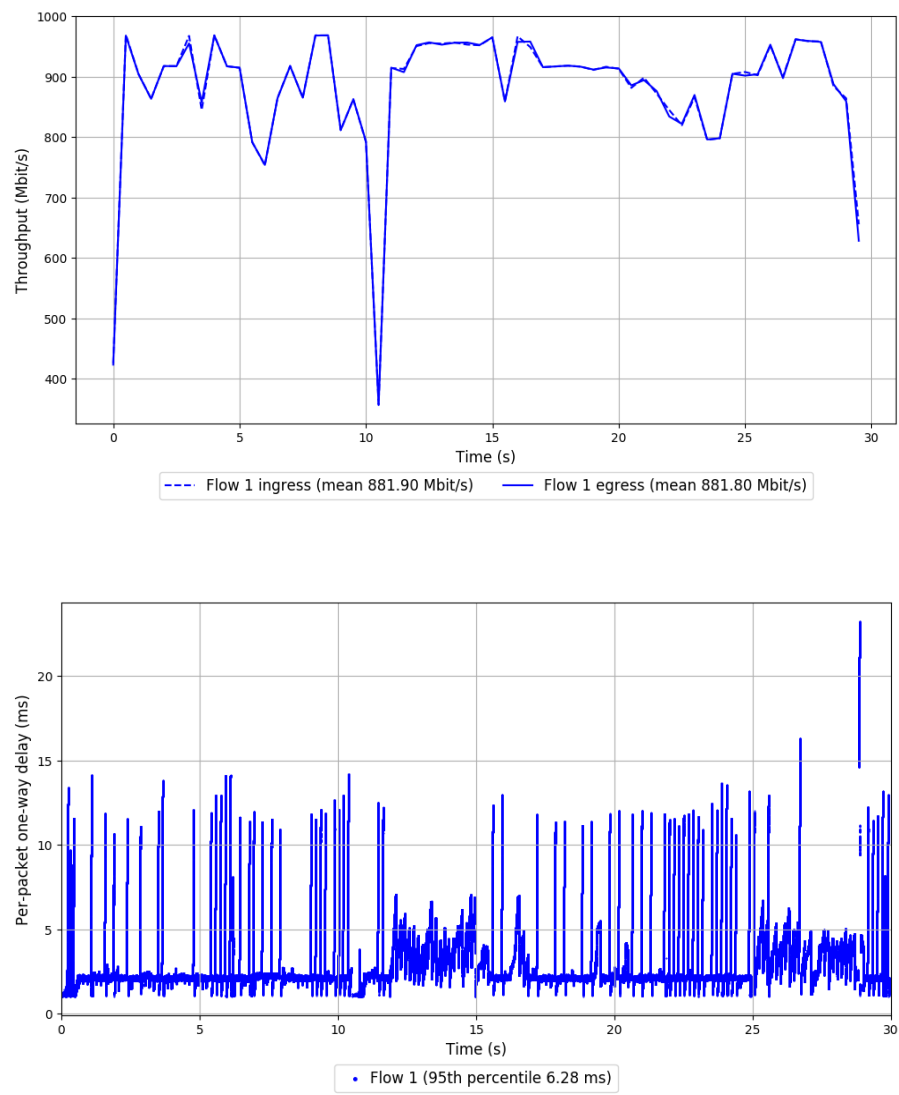


Run 7: Statistics of TCP BBR

Start at: 2017-12-19 21:27:31
End at: 2017-12-19 21:28:01
Local clock offset: 9.549 ms
Remote clock offset: -0.563 ms

Below is generated by plot.py at 2017-12-20 02:25:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 881.80 Mbit/s
95th percentile per-packet one-way delay: 6.281 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 881.80 Mbit/s
95th percentile per-packet one-way delay: 6.281 ms
Loss rate: 0.07%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-19 21:48:28

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

Local clock offset: 6.497 ms

Remote clock offset: -0.6 ms

Below is generated by plot.py at 2017-12-20 02:25:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 686.19 Mbit/s

95th percentile per-packet one-way delay: 23.356 ms

Loss rate: 0.11%

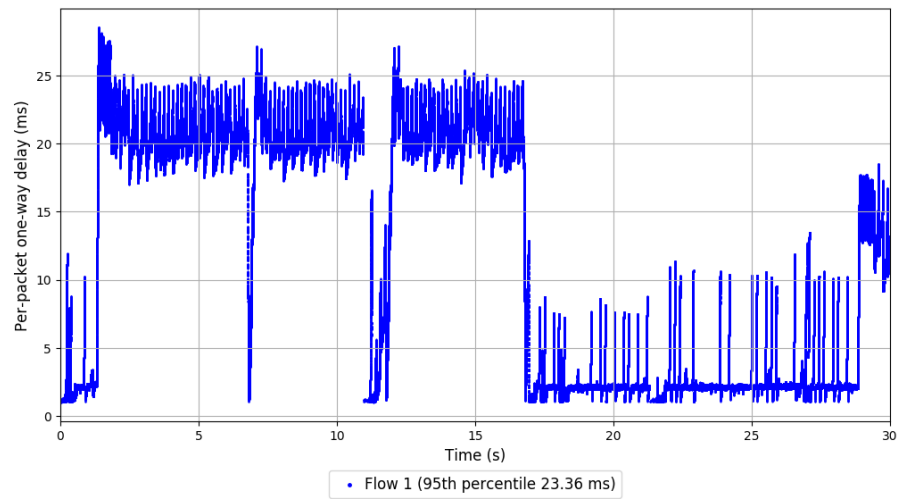
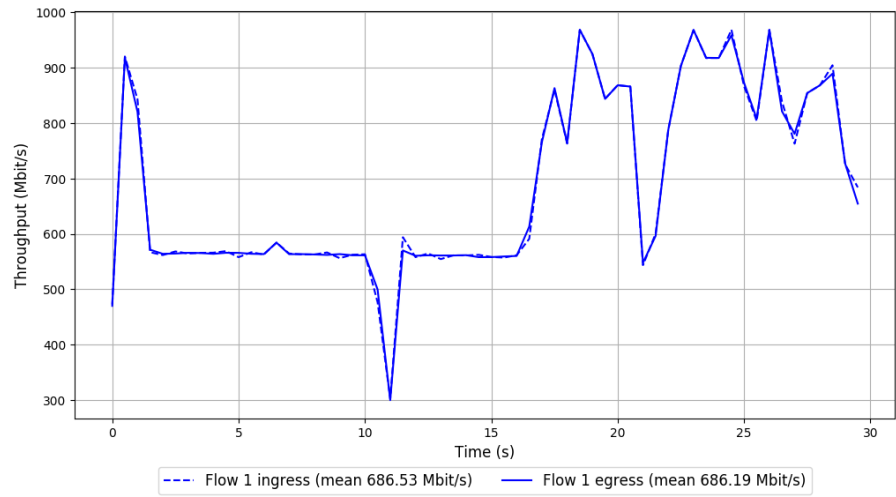
-- Flow 1:

Average throughput: 686.19 Mbit/s

95th percentile per-packet one-way delay: 23.356 ms

Loss rate: 0.11%

Run 8: Report of TCP BBR — Data Link

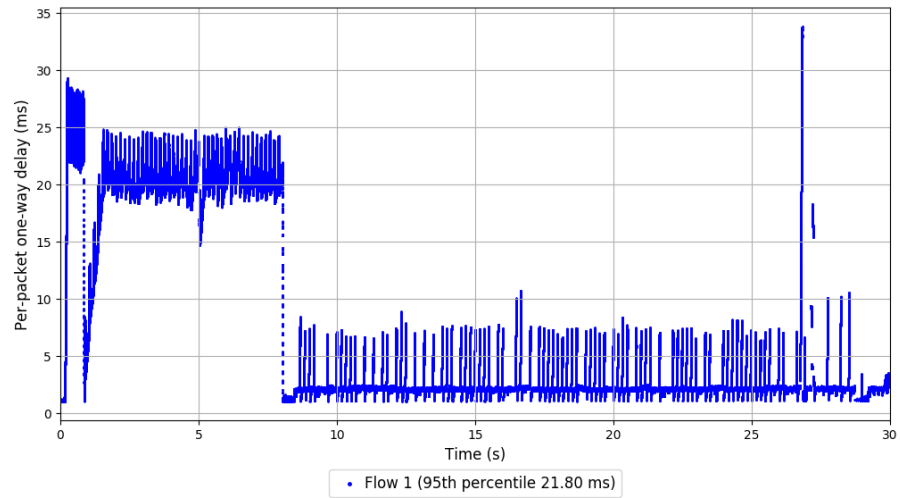
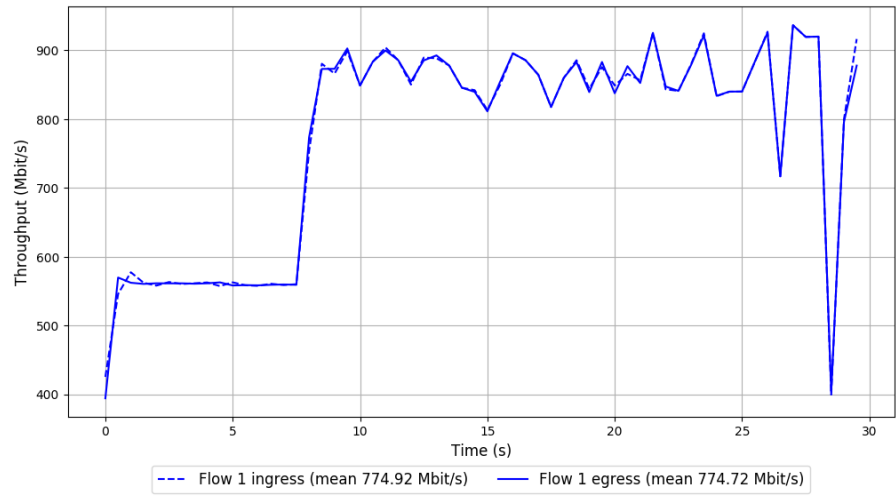


Run 9: Statistics of TCP BBR

Start at: 2017-12-19 22:09:17
End at: 2017-12-19 22:09:47
Local clock offset: 0.244 ms
Remote clock offset: -0.478 ms

Below is generated by plot.py at 2017-12-20 02:33:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 774.72 Mbit/s
95th percentile per-packet one-way delay: 21.802 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 774.72 Mbit/s
95th percentile per-packet one-way delay: 21.802 ms
Loss rate: 0.09%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-19 22:30:15

End at: 2017-12-19 22:30:45

Local clock offset: 0.091 ms

Remote clock offset: -0.69 ms

Below is generated by plot.py at 2017-12-20 02:35:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 812.64 Mbit/s

95th percentile per-packet one-way delay: 16.263 ms

Loss rate: 0.09%

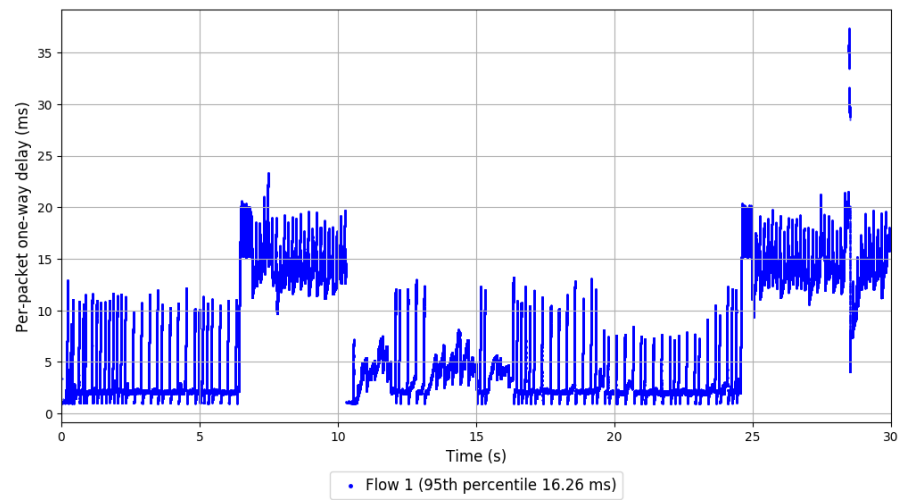
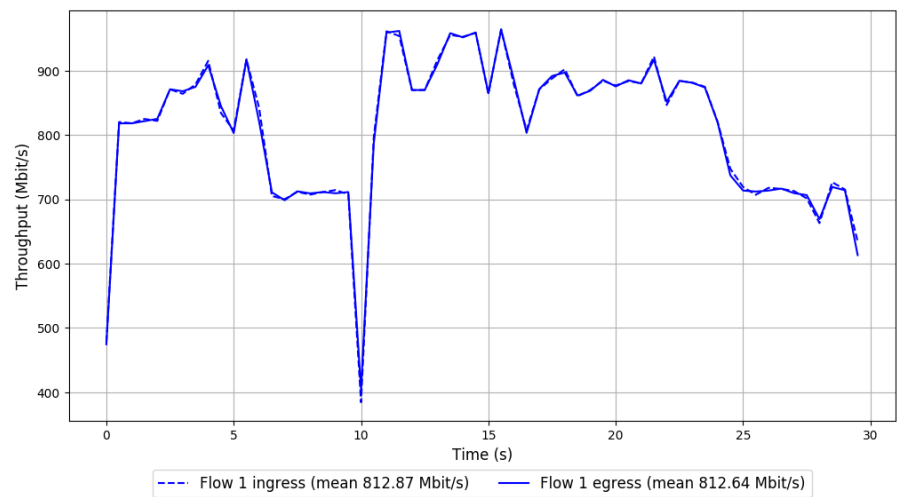
-- Flow 1:

Average throughput: 812.64 Mbit/s

95th percentile per-packet one-way delay: 16.263 ms

Loss rate: 0.09%

Run 10: Report of TCP BBR — Data Link

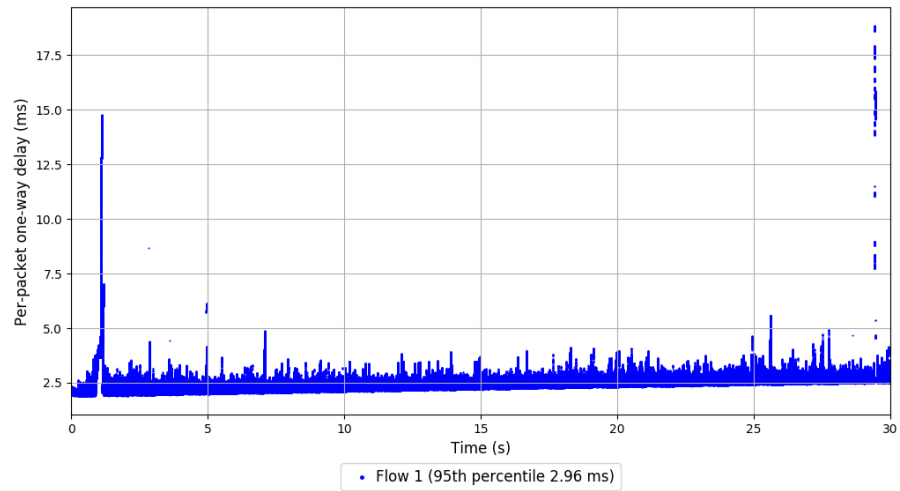
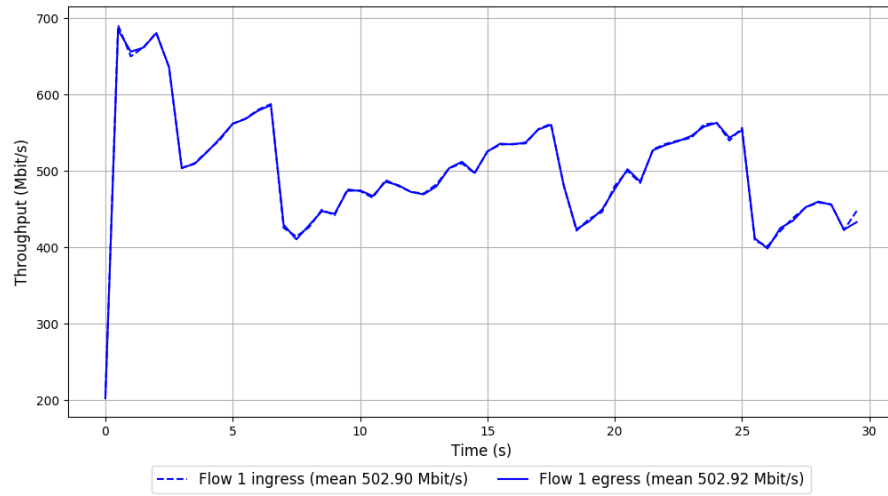


Run 1: Statistics of TCP Cubic

Start at: 2017-12-19 19:33:27
End at: 2017-12-19 19:33:57
Local clock offset: 13.457 ms
Remote clock offset: -1.776 ms

Below is generated by plot.py at 2017-12-20 02:35:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 502.92 Mbit/s
95th percentile per-packet one-way delay: 2.958 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 502.92 Mbit/s
95th percentile per-packet one-way delay: 2.958 ms
Loss rate: 0.06%

Run 1: Report of TCP Cubic — Data Link

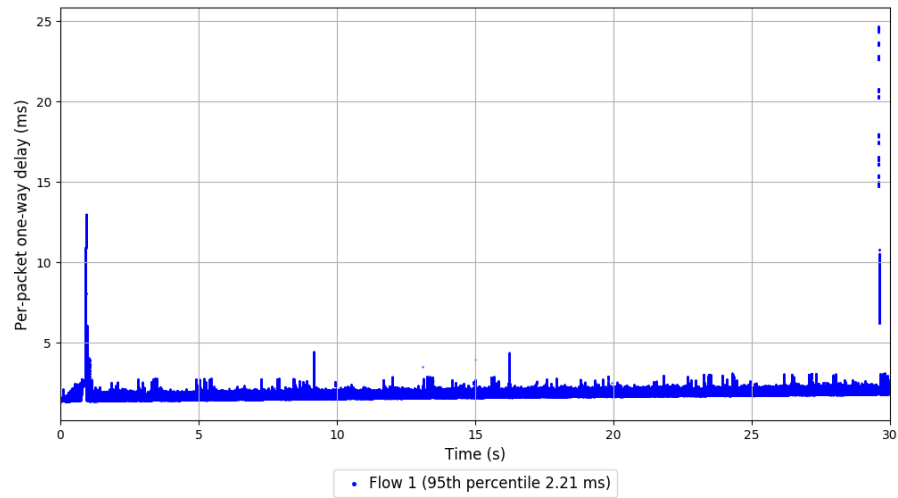
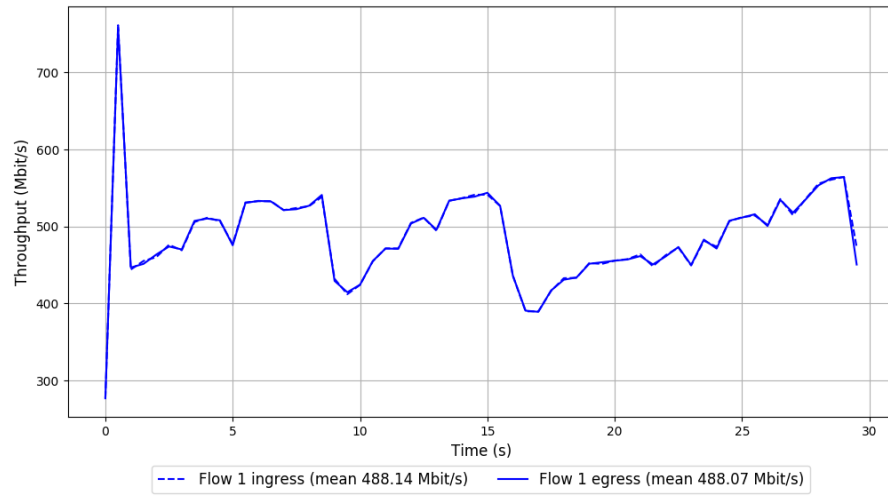


Run 2: Statistics of TCP Cubic

Start at: 2017-12-19 19:54:17
End at: 2017-12-19 19:54:47
Local clock offset: 5.836 ms
Remote clock offset: -1.225 ms

Below is generated by plot.py at 2017-12-20 02:35:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 488.07 Mbit/s
95th percentile per-packet one-way delay: 2.213 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 488.07 Mbit/s
95th percentile per-packet one-way delay: 2.213 ms
Loss rate: 0.08%

Run 2: Report of TCP Cubic — Data Link

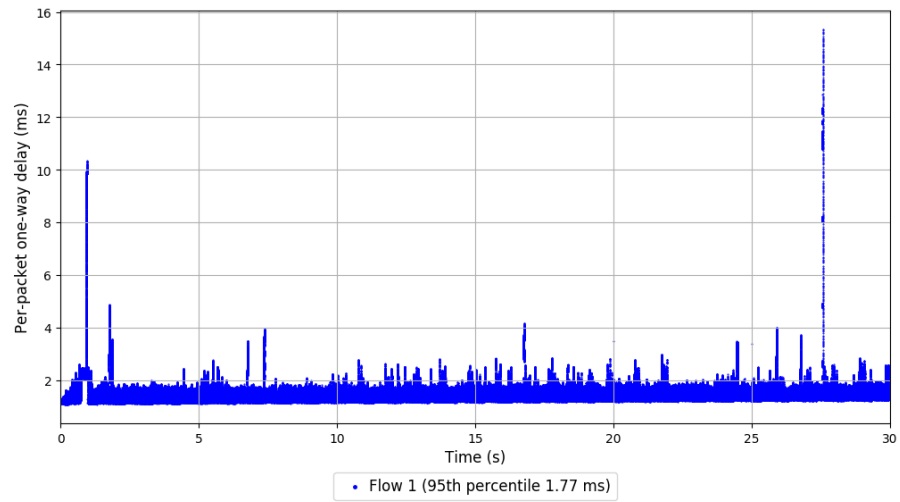
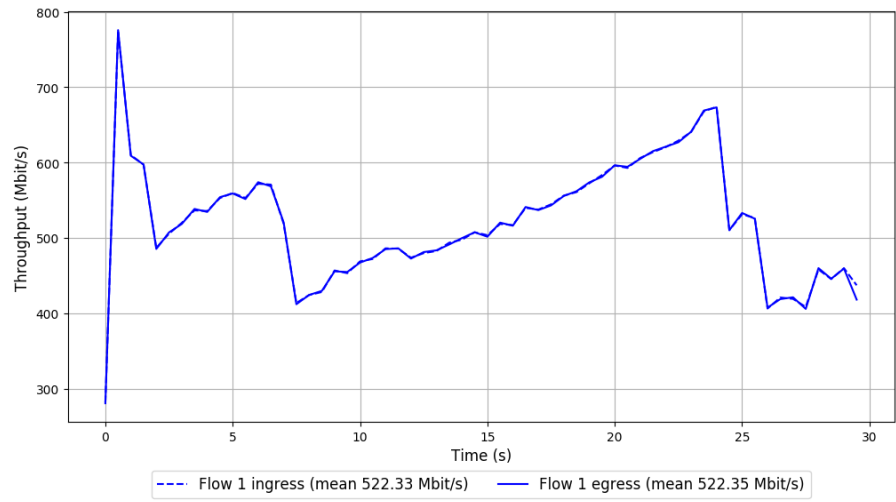


Run 3: Statistics of TCP Cubic

Start at: 2017-12-19 20:15:12
End at: 2017-12-19 20:15:42
Local clock offset: 3.313 ms
Remote clock offset: -0.881 ms

Below is generated by plot.py at 2017-12-20 02:35:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 522.35 Mbit/s
95th percentile per-packet one-way delay: 1.770 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 522.35 Mbit/s
95th percentile per-packet one-way delay: 1.770 ms
Loss rate: 0.06%

Run 3: Report of TCP Cubic — Data Link

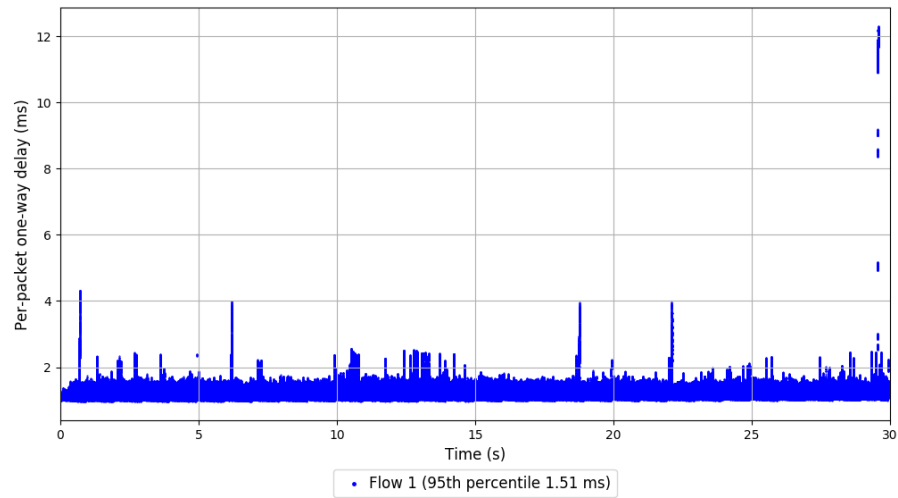
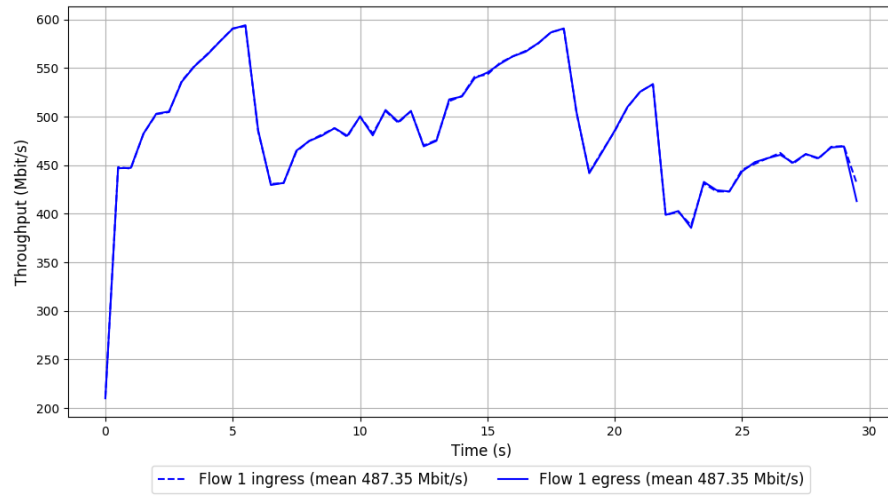


Run 4: Statistics of TCP Cubic

Start at: 2017-12-19 20:36:00
End at: 2017-12-19 20:36:30
Local clock offset: 4.037 ms
Remote clock offset: -0.485 ms

Below is generated by plot.py at 2017-12-20 02:35:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 487.35 Mbit/s
95th percentile per-packet one-way delay: 1.515 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 487.35 Mbit/s
95th percentile per-packet one-way delay: 1.515 ms
Loss rate: 0.07%

Run 4: Report of TCP Cubic — Data Link

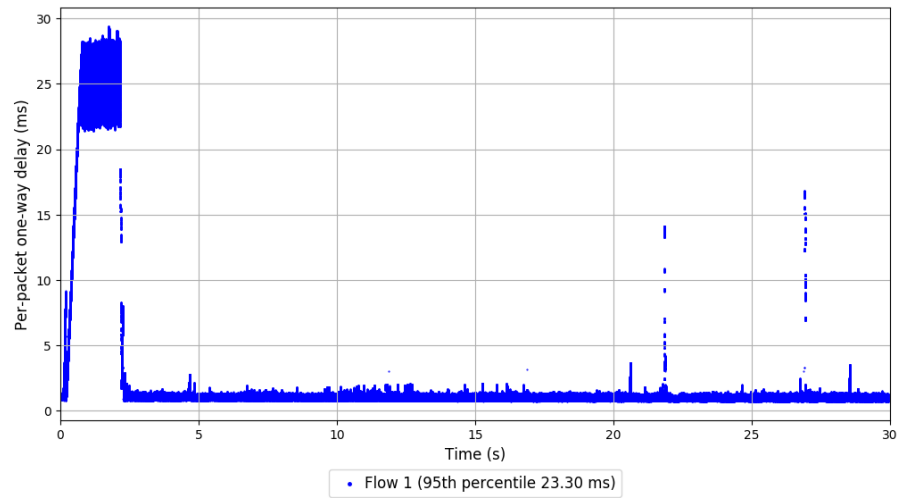
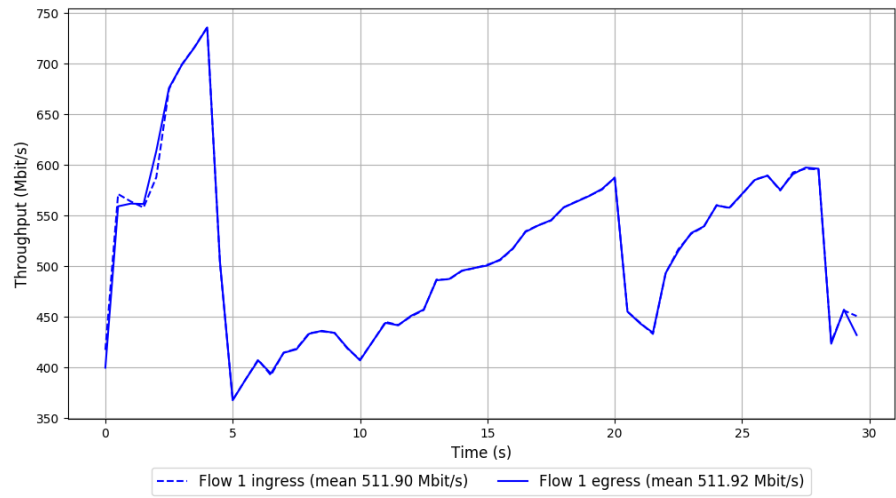


Run 5: Statistics of TCP Cubic

Start at: 2017-12-19 20:56:55
End at: 2017-12-19 20:57:25
Local clock offset: 4.465 ms
Remote clock offset: -0.386 ms

Below is generated by plot.py at 2017-12-20 02:35:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 511.92 Mbit/s
95th percentile per-packet one-way delay: 23.295 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 511.92 Mbit/s
95th percentile per-packet one-way delay: 23.295 ms
Loss rate: 0.06%

Run 5: Report of TCP Cubic — Data Link

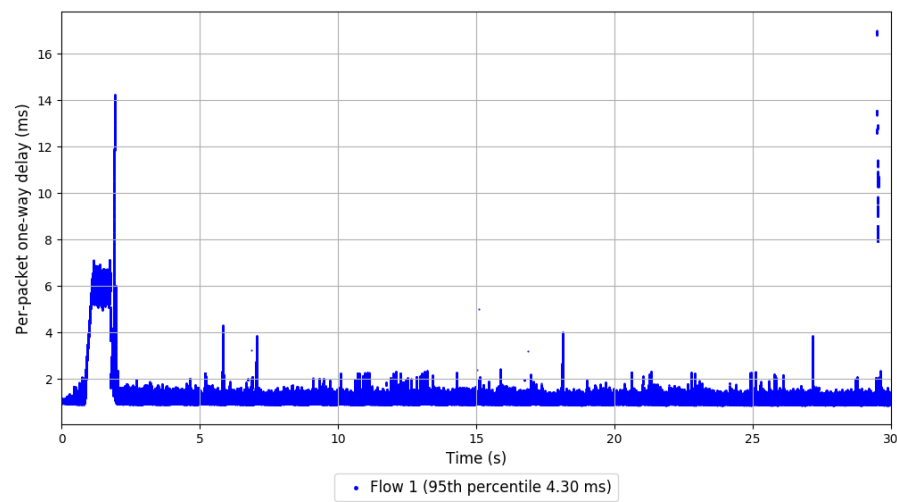
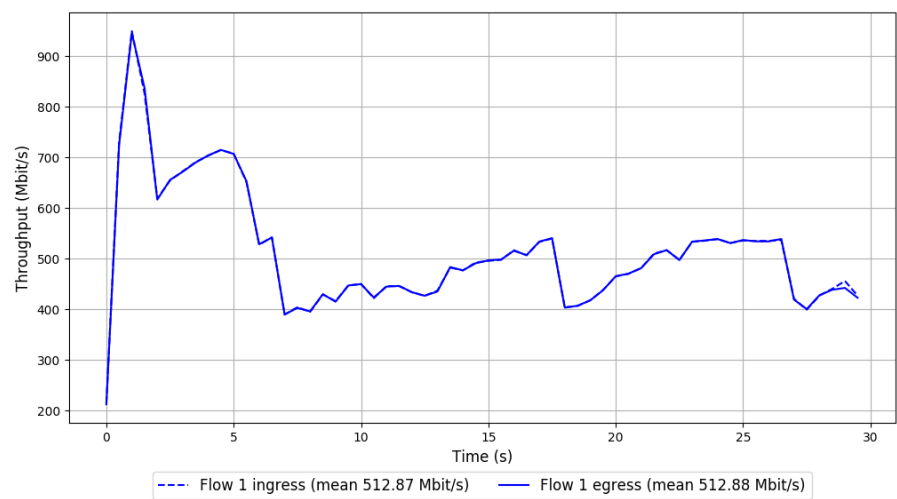


Run 6: Statistics of TCP Cubic

Start at: 2017-12-19 21:17:55
End at: 2017-12-19 21:18:25
Local clock offset: 9.711 ms
Remote clock offset: -0.452 ms

Below is generated by plot.py at 2017-12-20 02:35:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 512.88 Mbit/s
95th percentile per-packet one-way delay: 4.296 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 512.88 Mbit/s
95th percentile per-packet one-way delay: 4.296 ms
Loss rate: 0.06%

Run 6: Report of TCP Cubic — Data Link

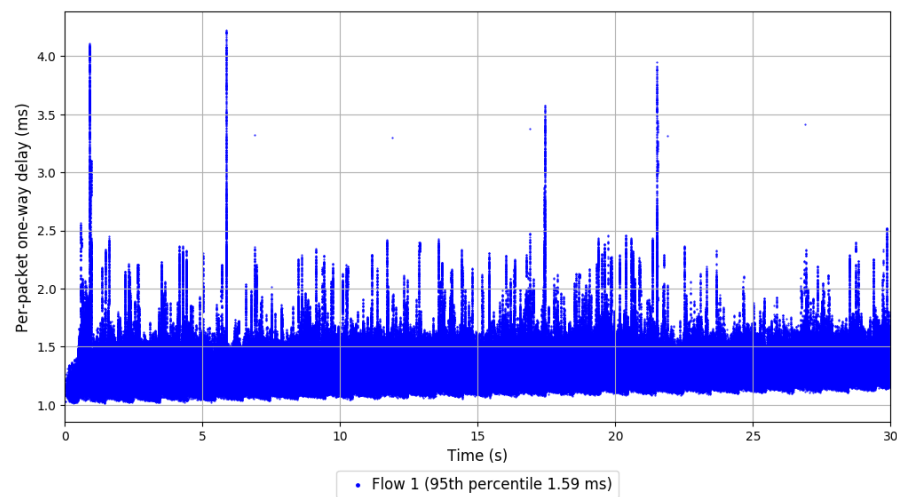
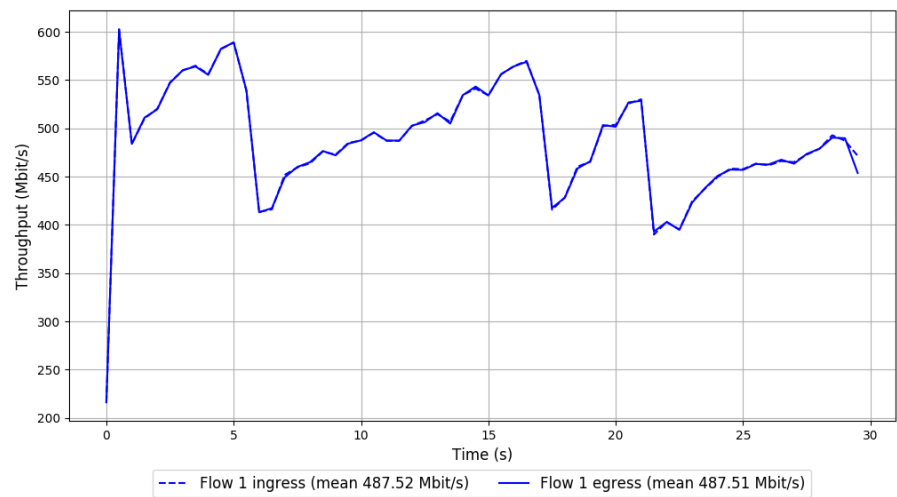


Run 7: Statistics of TCP Cubic

Start at: 2017-12-19 21:38:54
End at: 2017-12-19 21:39:24
Local clock offset: 7.496 ms
Remote clock offset: -0.659 ms

Below is generated by plot.py at 2017-12-20 02:38:35
Datalink statistics
-- Total of 1 flow:
Average throughput: 487.51 Mbit/s
95th percentile per-packet one-way delay: 1.595 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 487.51 Mbit/s
95th percentile per-packet one-way delay: 1.595 ms
Loss rate: 0.06%

Run 7: Report of TCP Cubic — Data Link

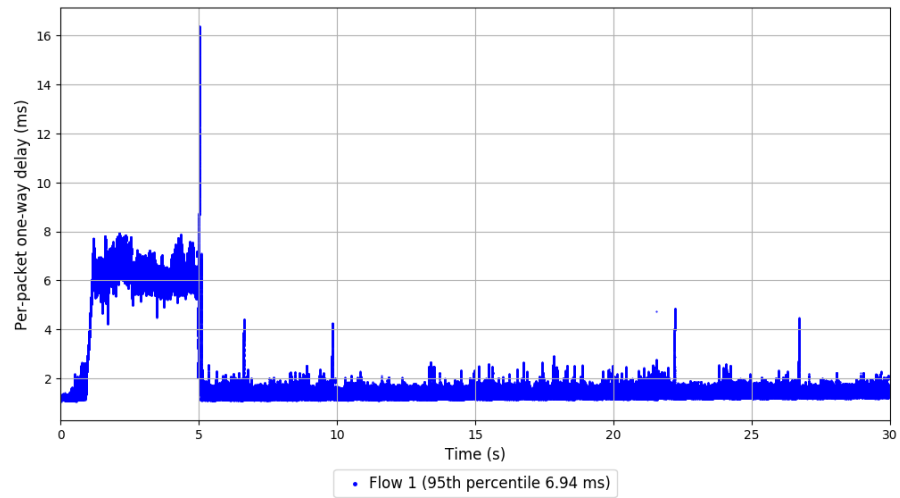
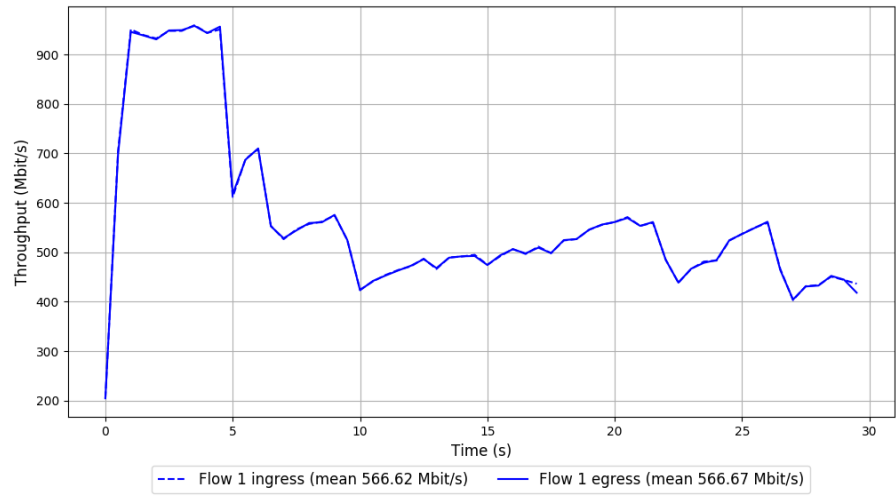


Run 8: Statistics of TCP Cubic

Start at: 2017-12-19 21:59:38
End at: 2017-12-19 22:00:08
Local clock offset: 2.849 ms
Remote clock offset: -0.525 ms

Below is generated by plot.py at 2017-12-20 02:39:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 566.67 Mbit/s
95th percentile per-packet one-way delay: 6.944 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 566.67 Mbit/s
95th percentile per-packet one-way delay: 6.944 ms
Loss rate: 0.05%

Run 8: Report of TCP Cubic — Data Link

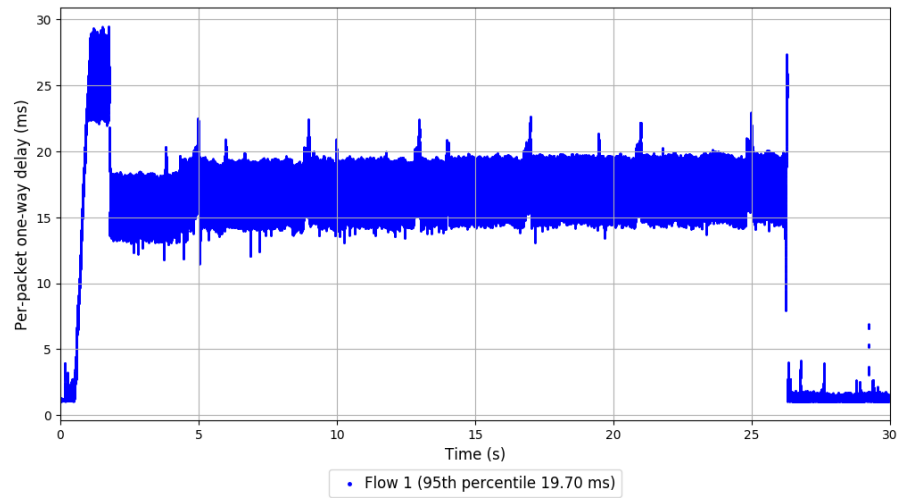
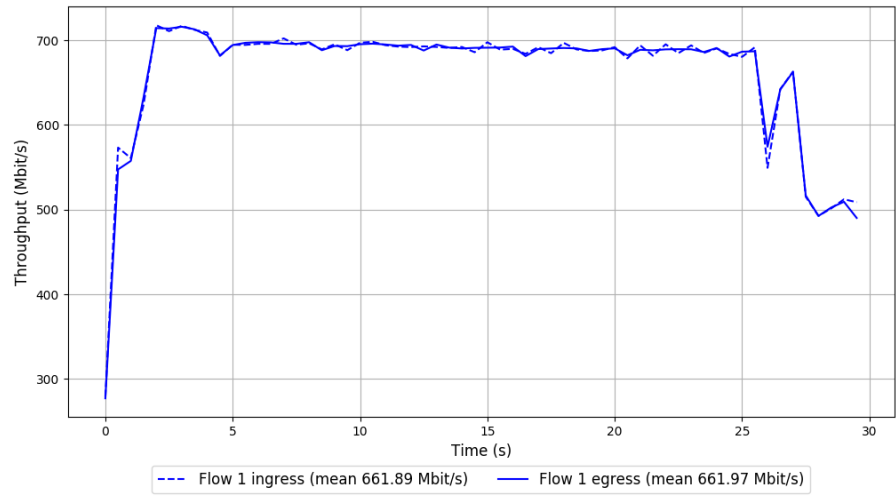


Run 9: Statistics of TCP Cubic

Start at: 2017-12-19 22:20:29
End at: 2017-12-19 22:20:59
Local clock offset: -0.271 ms
Remote clock offset: -0.526 ms

Below is generated by plot.py at 2017-12-20 02:41:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 661.97 Mbit/s
95th percentile per-packet one-way delay: 19.700 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 661.97 Mbit/s
95th percentile per-packet one-way delay: 19.700 ms
Loss rate: 0.05%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-19 22:41:28

End at: 2017-12-19 22:41:58

Local clock offset: 1.038 ms

Remote clock offset: -0.726 ms

Below is generated by plot.py at 2017-12-20 02:41:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 489.91 Mbit/s

95th percentile per-packet one-way delay: 6.280 ms

Loss rate: 0.08%

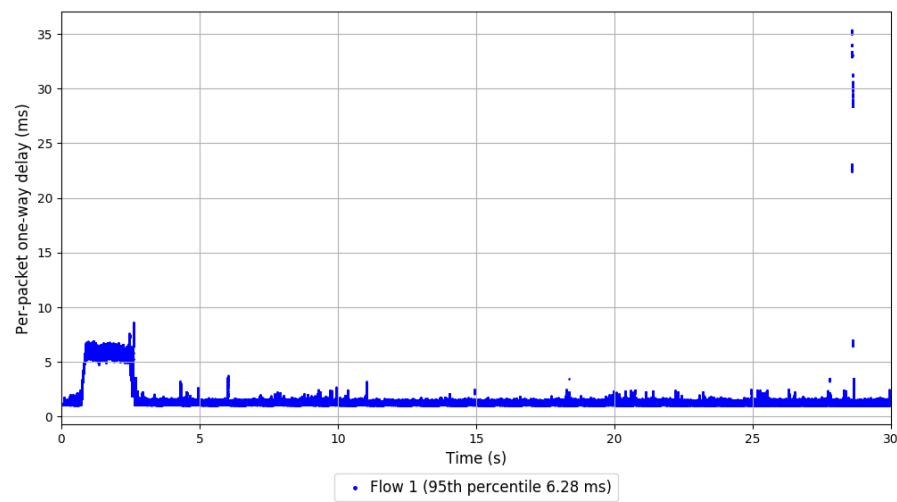
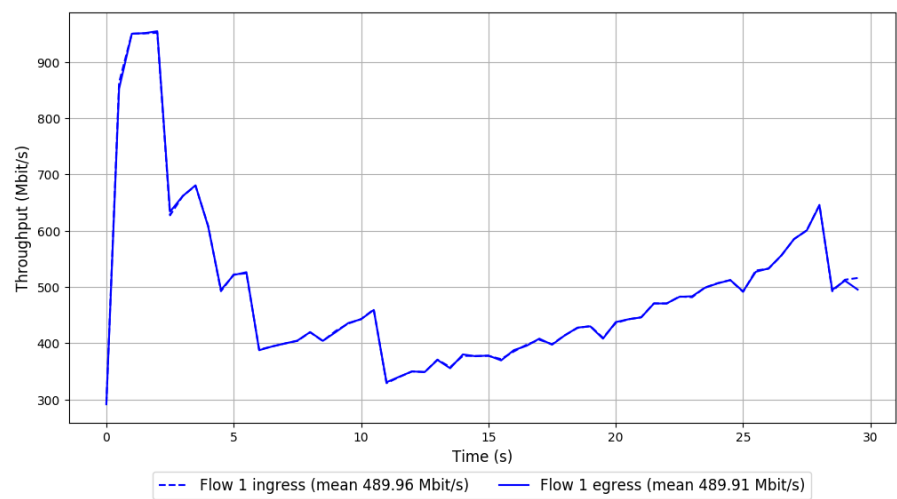
-- Flow 1:

Average throughput: 489.91 Mbit/s

95th percentile per-packet one-way delay: 6.280 ms

Loss rate: 0.08%

Run 10: Report of TCP Cubic — Data Link

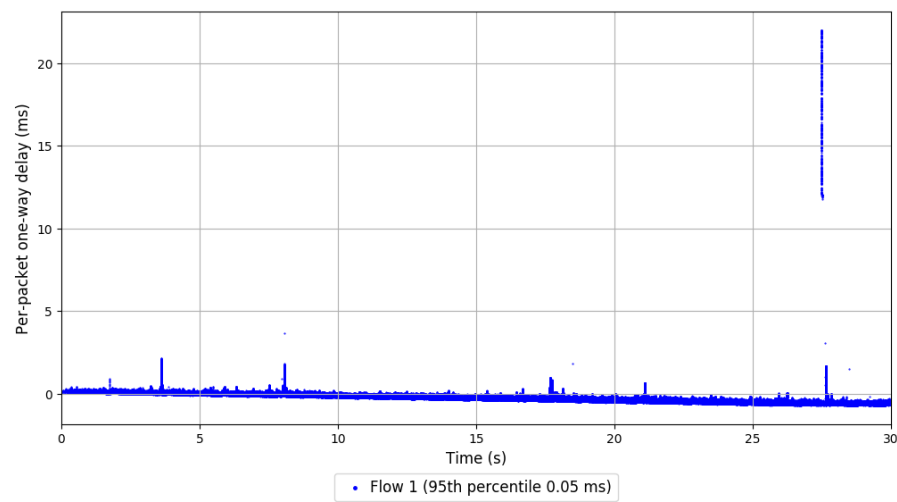
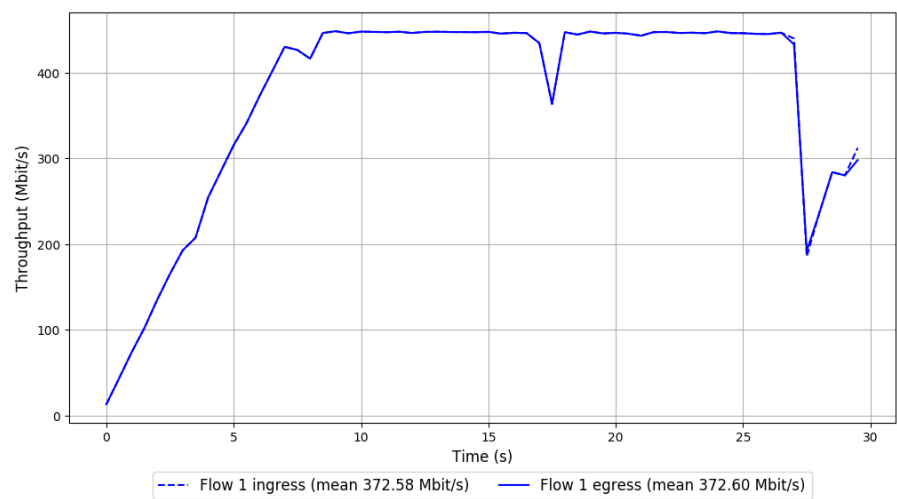


Run 1: Statistics of LEDBAT

Start at: 2017-12-19 19:19:17
End at: 2017-12-19 19:19:47
Local clock offset: 15.075 ms
Remote clock offset: -2.183 ms

Below is generated by plot.py at 2017-12-20 02:41:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 372.60 Mbit/s
95th percentile per-packet one-way delay: 0.054 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 372.60 Mbit/s
95th percentile per-packet one-way delay: 0.054 ms
Loss rate: 0.06%

Run 1: Report of LEDBAT — Data Link

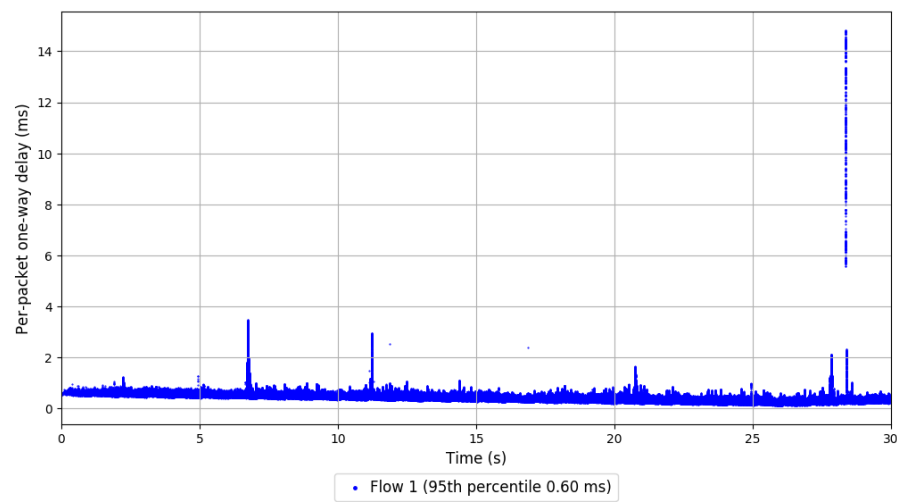
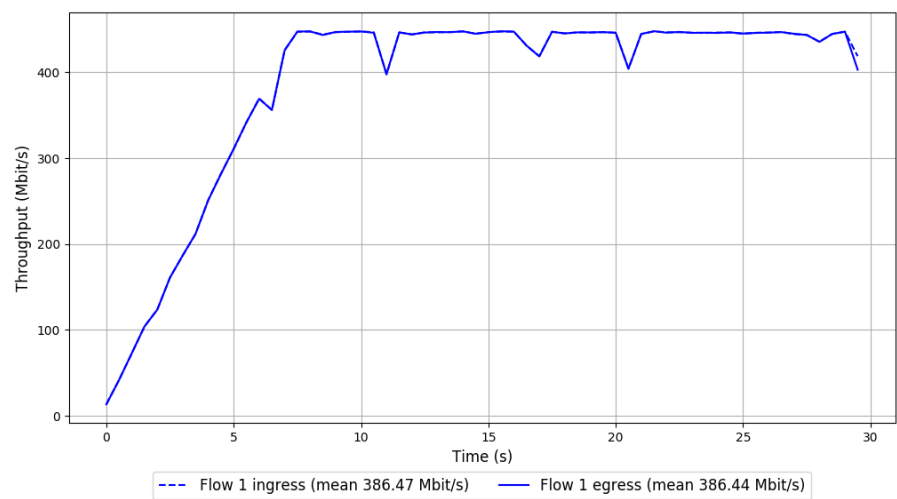


Run 2: Statistics of LEDBAT

Start at: 2017-12-19 19:40:14
End at: 2017-12-19 19:40:44
Local clock offset: 12.359 ms
Remote clock offset: -1.487 ms

Below is generated by plot.py at 2017-12-20 02:41:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 386.44 Mbit/s
95th percentile per-packet one-way delay: 0.599 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 386.44 Mbit/s
95th percentile per-packet one-way delay: 0.599 ms
Loss rate: 0.07%

Run 2: Report of LEDBAT — Data Link

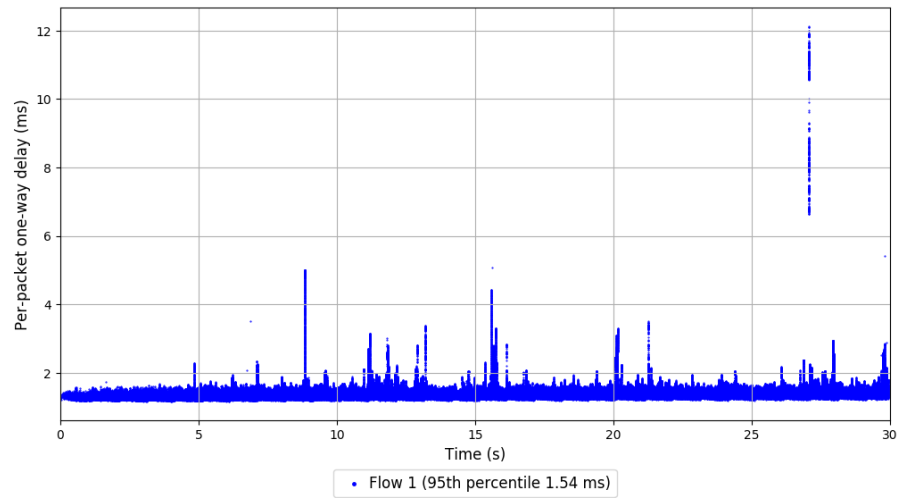
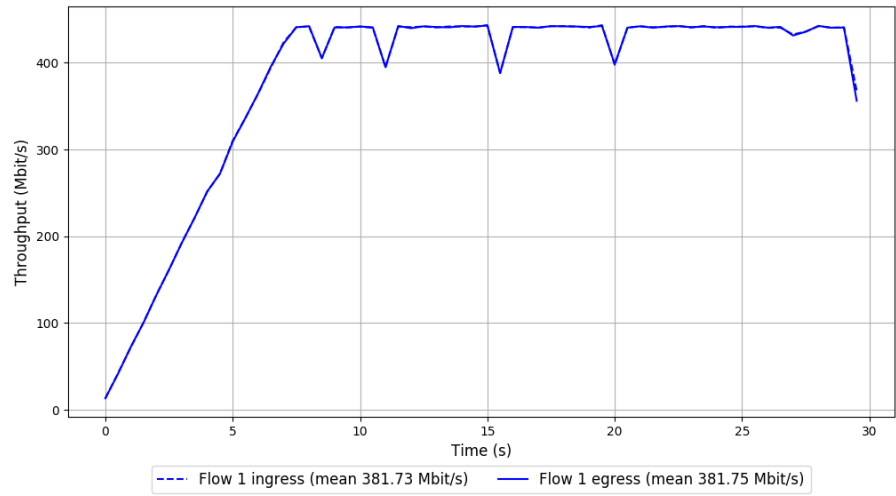


Run 3: Statistics of LEDBAT

Start at: 2017-12-19 20:01:05
End at: 2017-12-19 20:01:35
Local clock offset: 1.813 ms
Remote clock offset: -1.272 ms

Below is generated by plot.py at 2017-12-20 02:41:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 381.75 Mbit/s
95th percentile per-packet one-way delay: 1.541 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 381.75 Mbit/s
95th percentile per-packet one-way delay: 1.541 ms
Loss rate: 0.06%

Run 3: Report of LEDBAT — Data Link

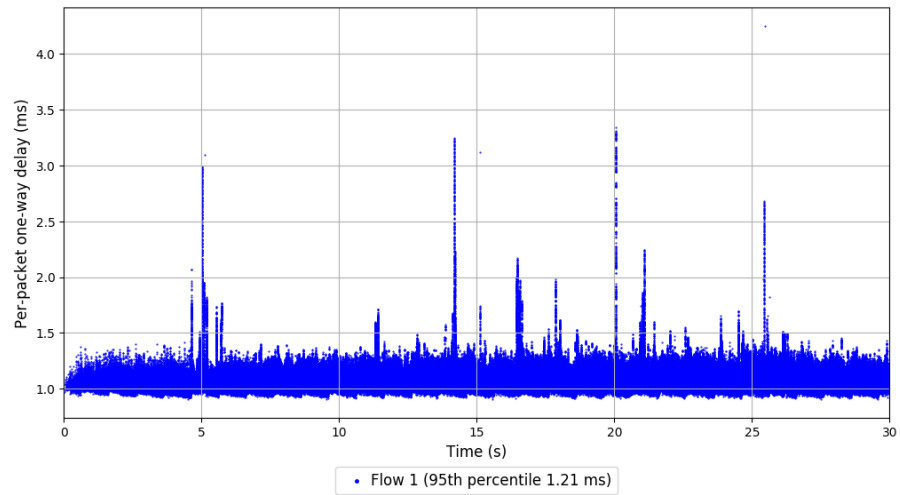
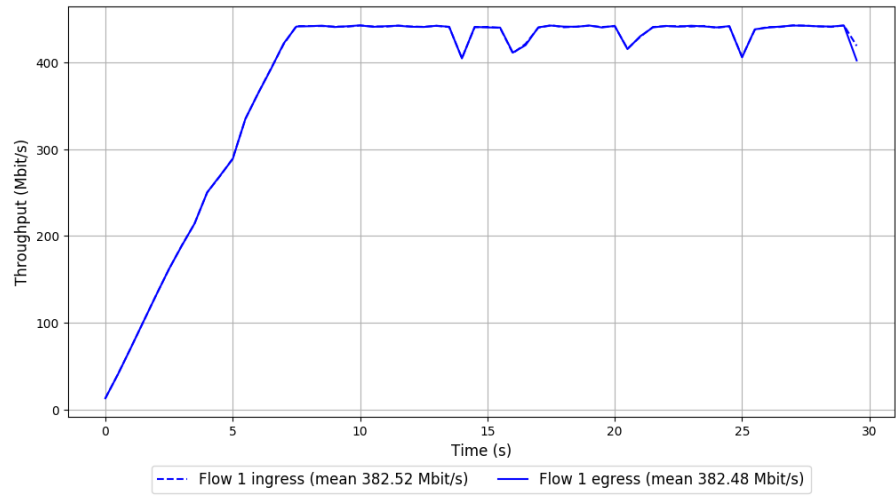


Run 4: Statistics of LEDBAT

Start at: 2017-12-19 20:22:00
End at: 2017-12-19 20:22:30
Local clock offset: 3.145 ms
Remote clock offset: -0.643 ms

Below is generated by plot.py at 2017-12-20 02:41:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 382.48 Mbit/s
95th percentile per-packet one-way delay: 1.206 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 382.48 Mbit/s
95th percentile per-packet one-way delay: 1.206 ms
Loss rate: 0.08%

Run 4: Report of LEDBAT — Data Link

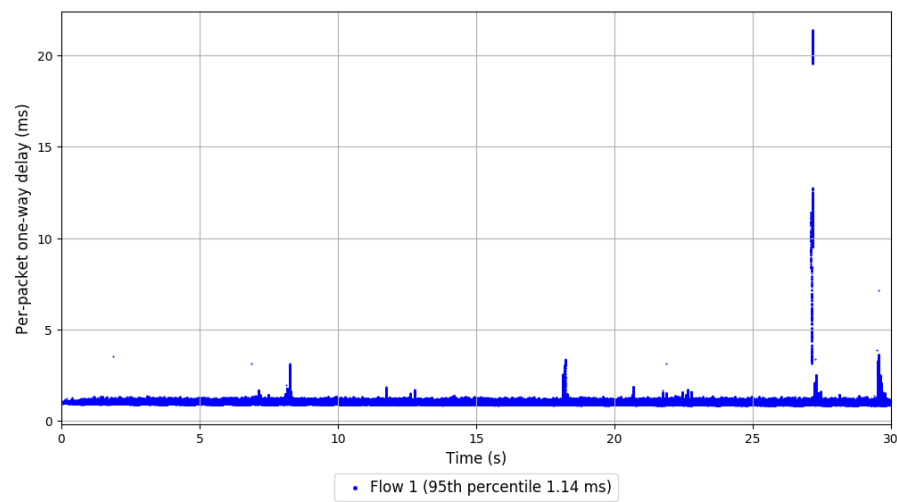
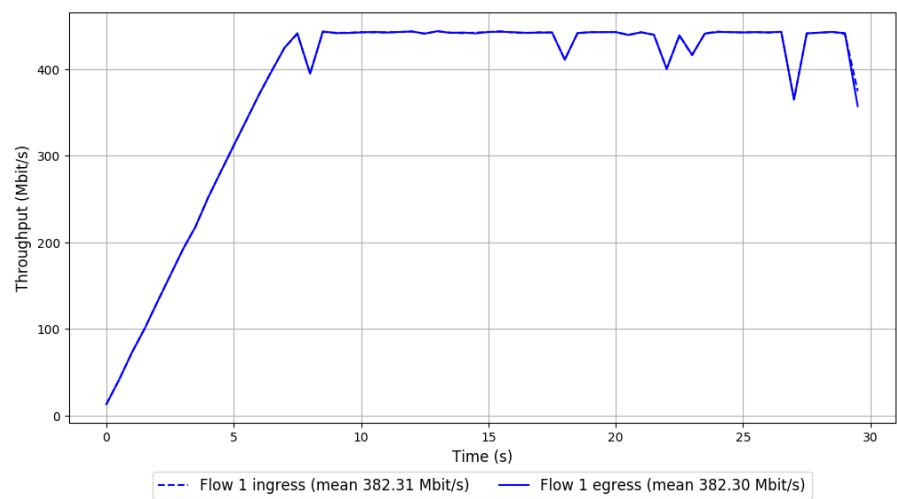


Run 5: Statistics of LEDBAT

Start at: 2017-12-19 20:42:47
End at: 2017-12-19 20:43:17
Local clock offset: 4.238 ms
Remote clock offset: -0.381 ms

Below is generated by plot.py at 2017-12-20 02:43:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 382.30 Mbit/s
95th percentile per-packet one-way delay: 1.141 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 382.30 Mbit/s
95th percentile per-packet one-way delay: 1.141 ms
Loss rate: 0.08%

Run 5: Report of LEDBAT — Data Link

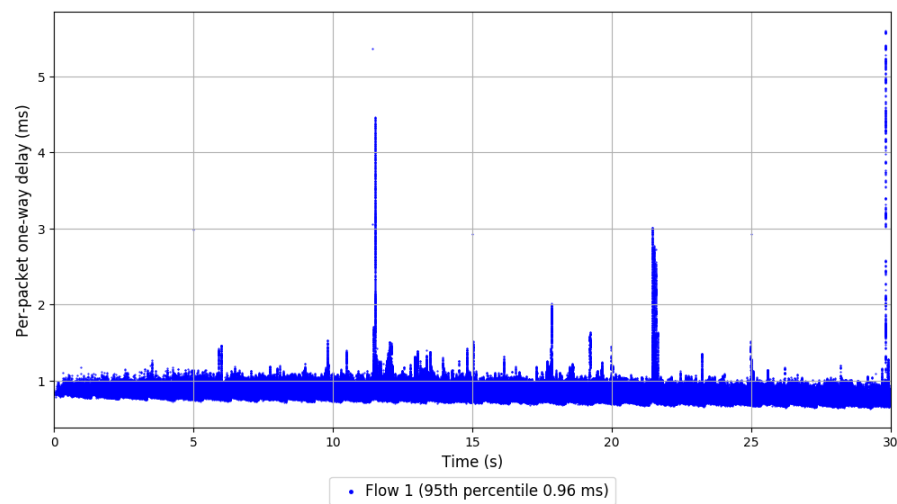
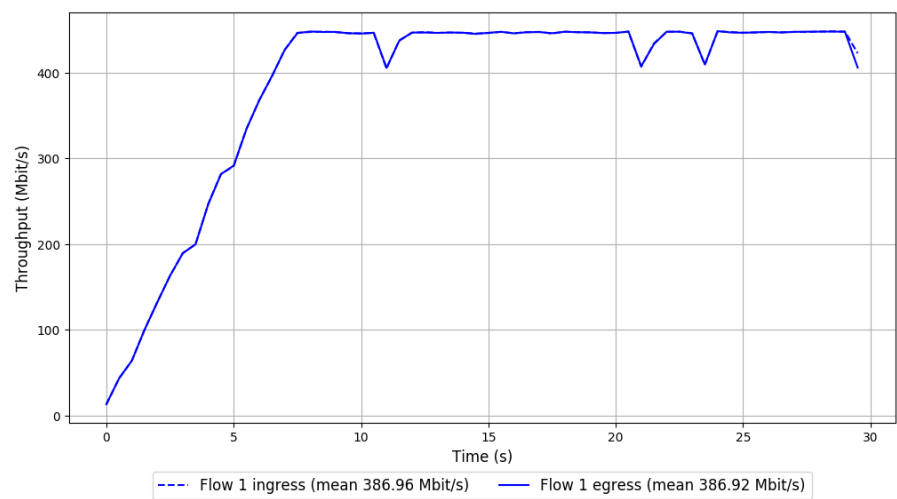


Run 6: Statistics of LEDBAT

Start at: 2017-12-19 21:03:43
End at: 2017-12-19 21:04:13
Local clock offset: 5.926 ms
Remote clock offset: -0.301 ms

Below is generated by plot.py at 2017-12-20 02:44:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 386.92 Mbit/s
95th percentile per-packet one-way delay: 0.961 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 386.92 Mbit/s
95th percentile per-packet one-way delay: 0.961 ms
Loss rate: 0.08%

Run 6: Report of LEDBAT — Data Link

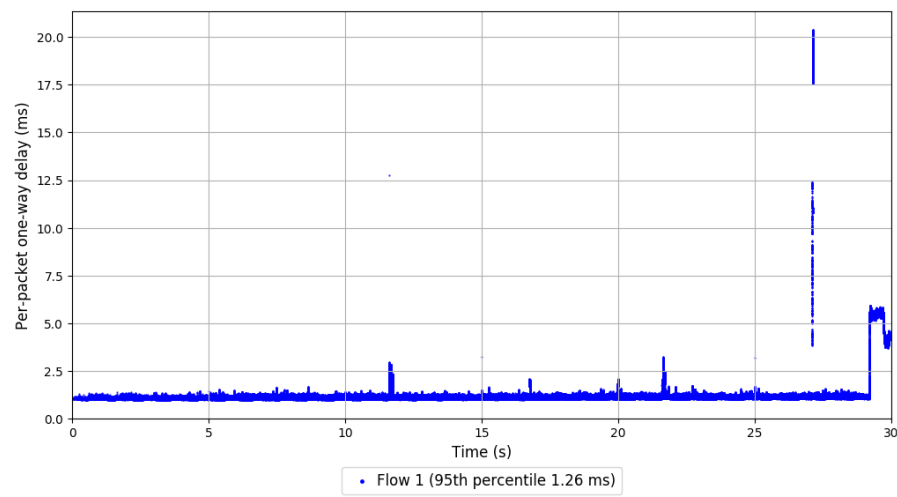
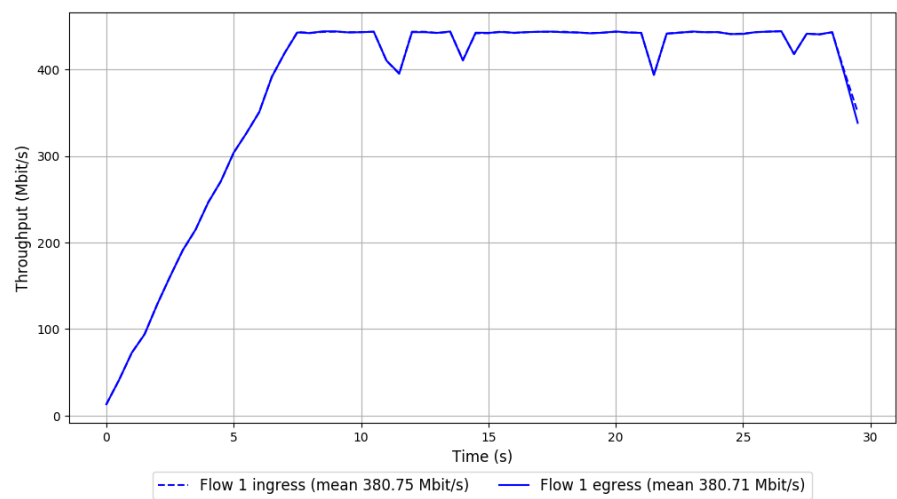


Run 7: Statistics of LEDBAT

Start at: 2017-12-19 21:24:43
End at: 2017-12-19 21:25:13
Local clock offset: 9.753 ms
Remote clock offset: -0.605 ms

Below is generated by plot.py at 2017-12-20 02:44:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 380.71 Mbit/s
95th percentile per-packet one-way delay: 1.265 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 380.71 Mbit/s
95th percentile per-packet one-way delay: 1.265 ms
Loss rate: 0.07%

Run 7: Report of LEDBAT — Data Link

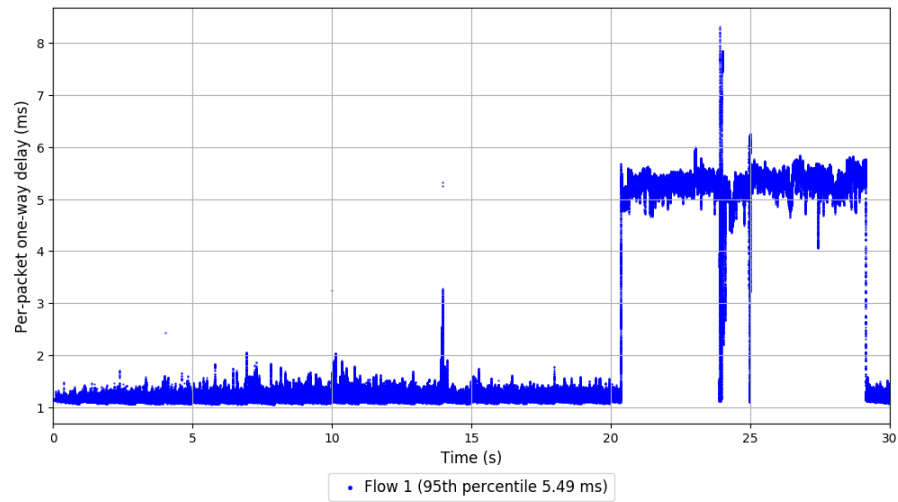
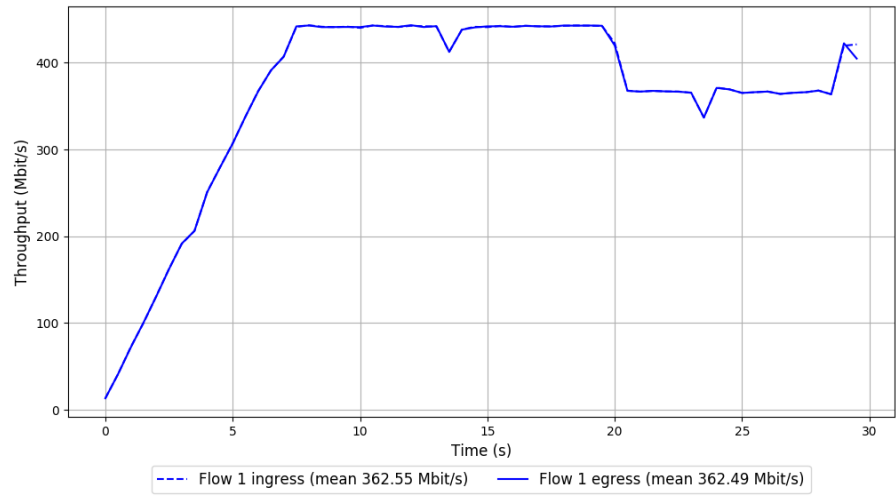


Run 8: Statistics of LEDBAT

Start at: 2017-12-19 21:45:41
End at: 2017-12-19 21:46:11
Local clock offset: 6.631 ms
Remote clock offset: -0.617 ms

Below is generated by plot.py at 2017-12-20 02:44:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 362.49 Mbit/s
95th percentile per-packet one-way delay: 5.490 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 362.49 Mbit/s
95th percentile per-packet one-way delay: 5.490 ms
Loss rate: 0.08%

Run 8: Report of LEDBAT — Data Link

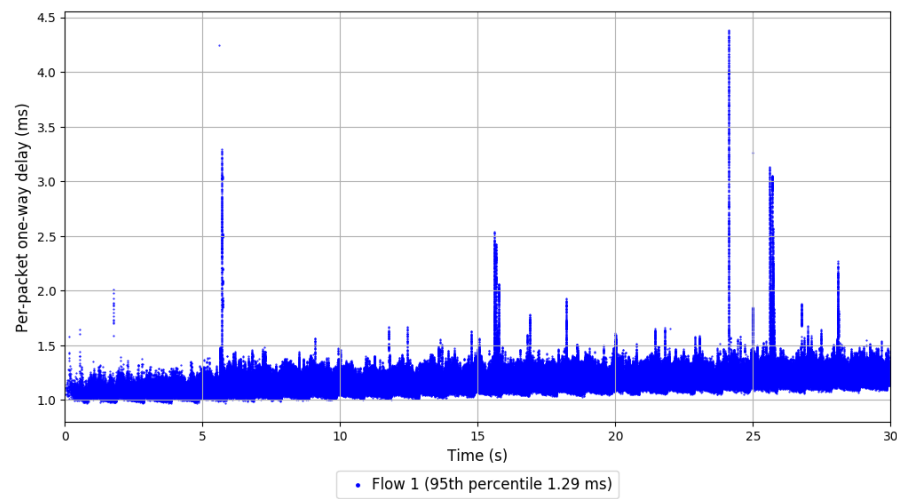
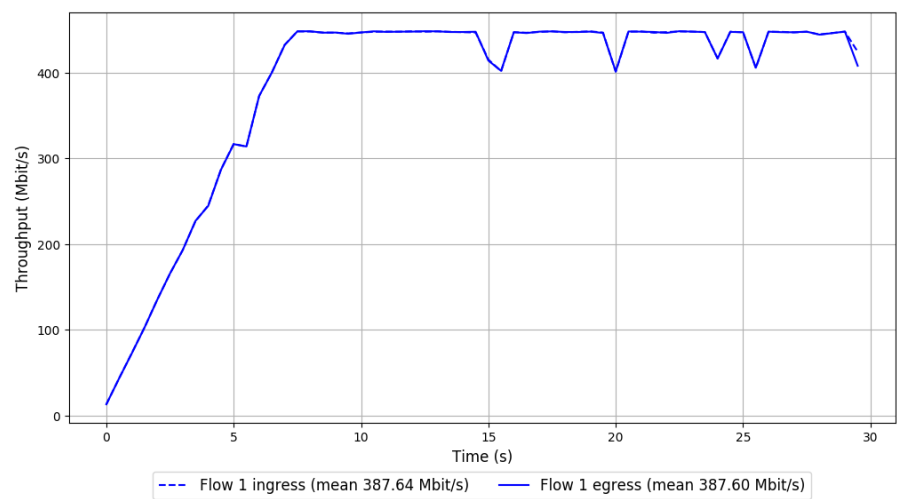


Run 9: Statistics of LEDBAT

Start at: 2017-12-19 22:06:29
End at: 2017-12-19 22:06:59
Local clock offset: 0.874 ms
Remote clock offset: -0.358 ms

Below is generated by plot.py at 2017-12-20 02:44:48
Datalink statistics
-- Total of 1 flow:
Average throughput: 387.60 Mbit/s
95th percentile per-packet one-way delay: 1.292 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 387.60 Mbit/s
95th percentile per-packet one-way delay: 1.292 ms
Loss rate: 0.08%

Run 9: Report of LEDBAT — Data Link

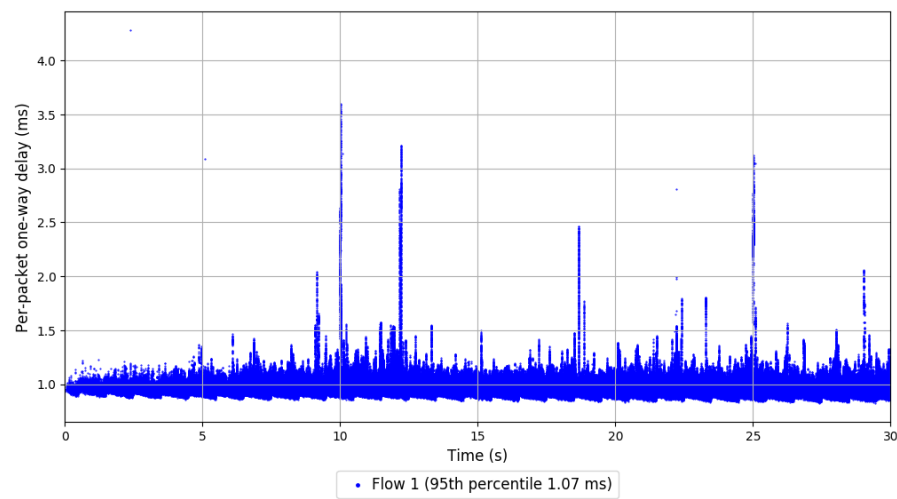
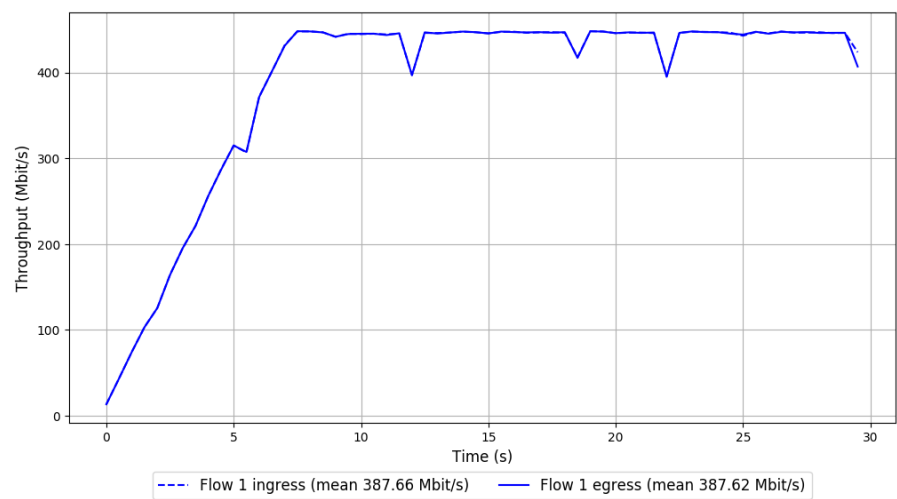


Run 10: Statistics of LEDBAT

Start at: 2017-12-19 22:27:23
End at: 2017-12-19 22:27:53
Local clock offset: -0.072 ms
Remote clock offset: -0.527 ms

Below is generated by plot.py at 2017-12-20 02:45:07
Datalink statistics
-- Total of 1 flow:
Average throughput: 387.62 Mbit/s
95th percentile per-packet one-way delay: 1.072 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 387.62 Mbit/s
95th percentile per-packet one-way delay: 1.072 ms
Loss rate: 0.08%

Run 10: Report of LEDBAT — Data Link

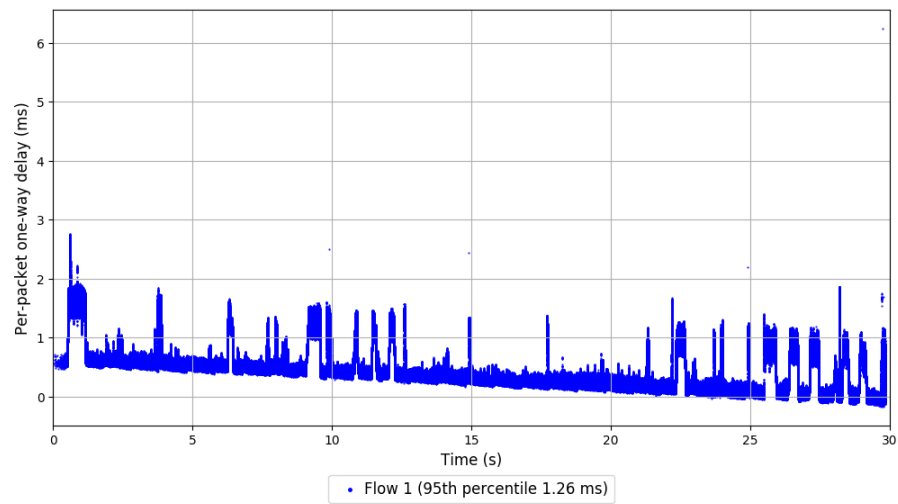
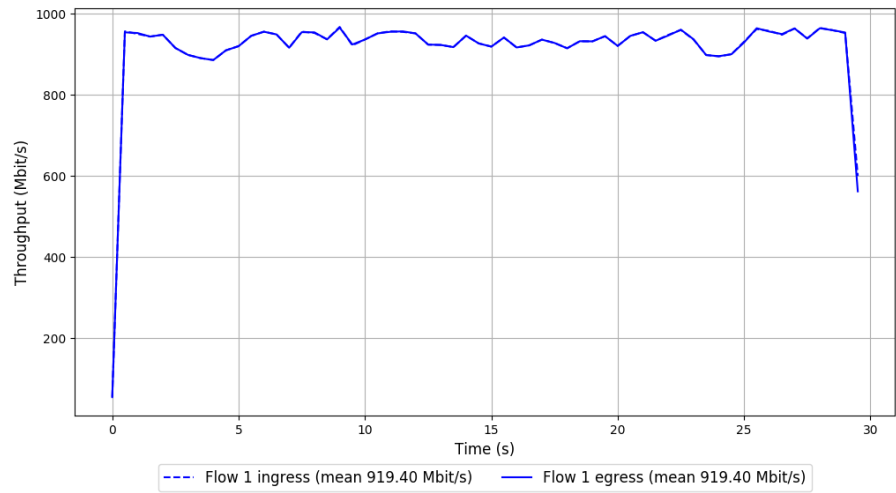


Run 1: Statistics of PCC

Start at: 2017-12-19 19:17:41
End at: 2017-12-19 19:18:11
Local clock offset: 12.976 ms
Remote clock offset: -2.369 ms

Below is generated by plot.py at 2017-12-20 02:53:44
Datalink statistics
-- Total of 1 flow:
Average throughput: 919.40 Mbit/s
95th percentile per-packet one-way delay: 1.261 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 919.40 Mbit/s
95th percentile per-packet one-way delay: 1.261 ms
Loss rate: 0.07%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

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

End at: 2017-12-19 19:39:08

Local clock offset: 11.445 ms

Remote clock offset: -1.48 ms

Below is generated by plot.py at 2017-12-20 02:54:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 911.85 Mbit/s

95th percentile per-packet one-way delay: 18.567 ms

Loss rate: 0.80%

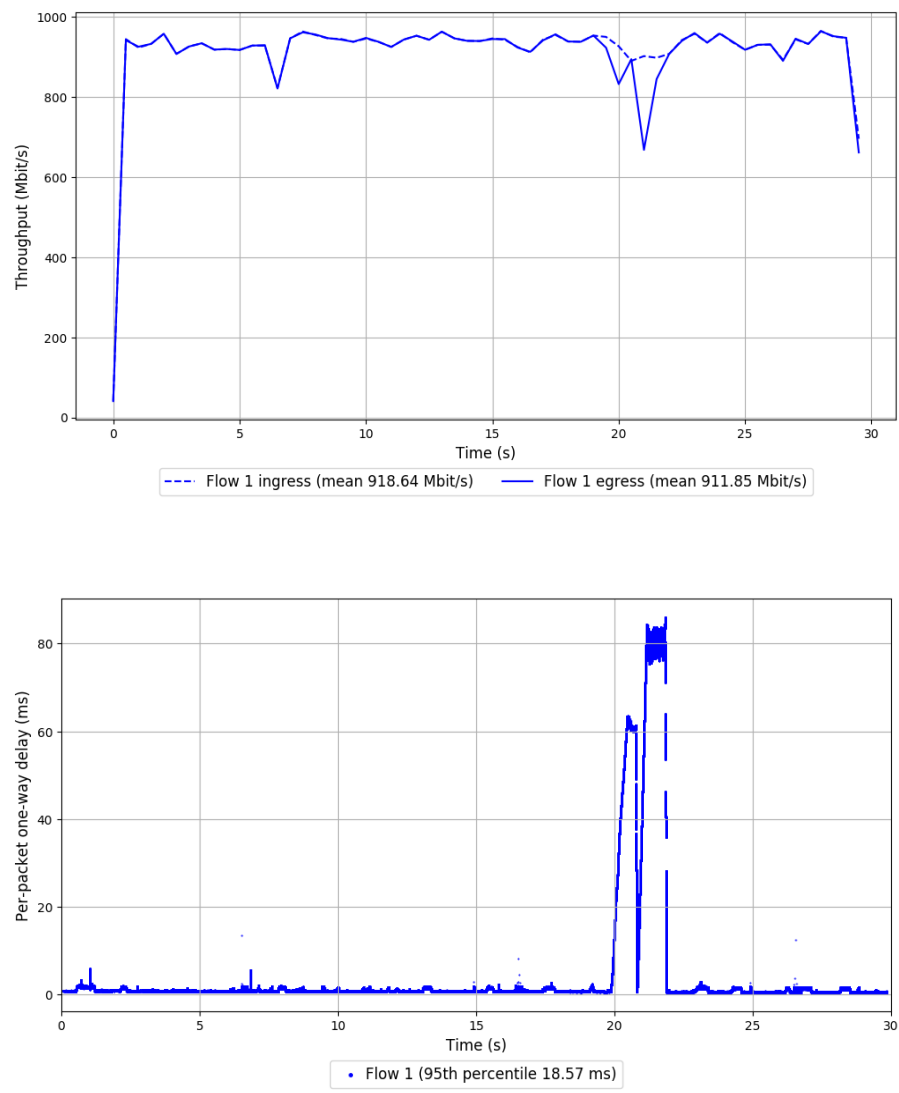
-- Flow 1:

Average throughput: 911.85 Mbit/s

95th percentile per-packet one-way delay: 18.567 ms

Loss rate: 0.80%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

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

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

Local clock offset: 2.449 ms

Remote clock offset: -1.26 ms

Below is generated by plot.py at 2017-12-20 02:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 920.01 Mbit/s

95th percentile per-packet one-way delay: 2.618 ms

Loss rate: 0.08%

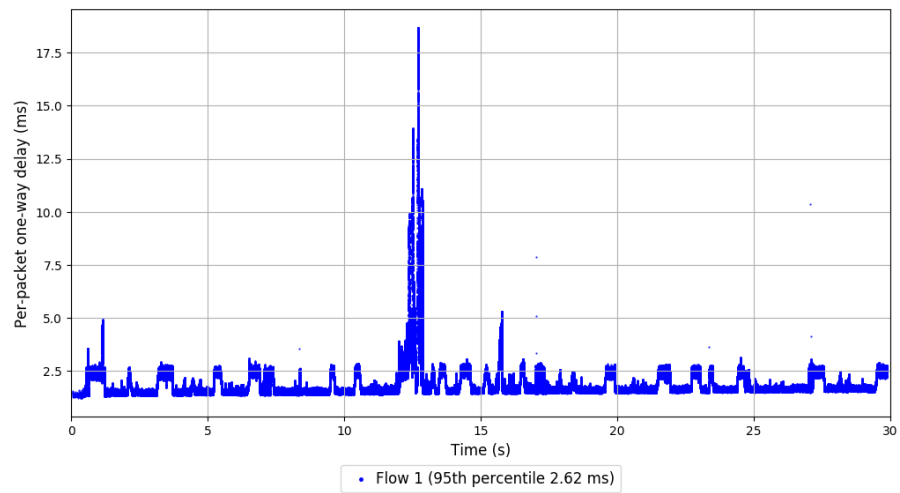
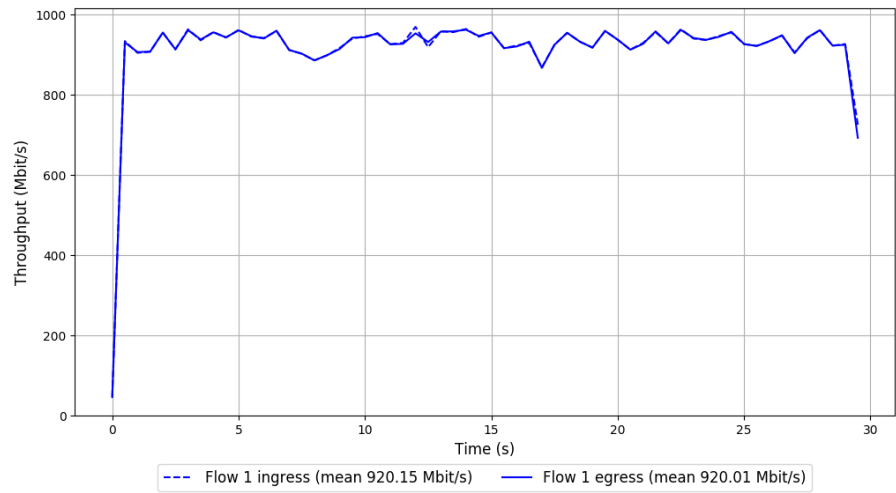
-- Flow 1:

Average throughput: 920.01 Mbit/s

95th percentile per-packet one-way delay: 2.618 ms

Loss rate: 0.08%

Run 3: Report of PCC — Data Link

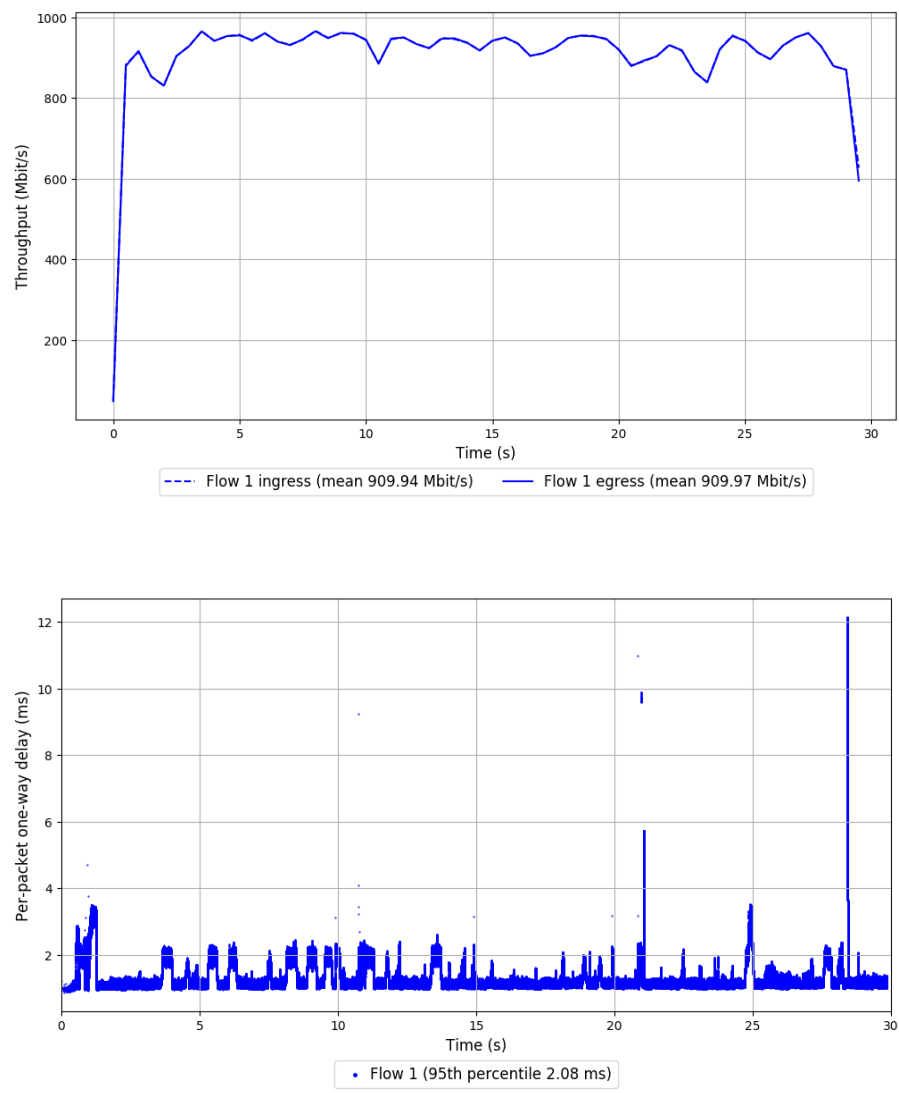


Run 4: Statistics of PCC

Start at: 2017-12-19 20:20:24
End at: 2017-12-19 20:20:54
Local clock offset: 3.273 ms
Remote clock offset: -0.589 ms

Below is generated by plot.py at 2017-12-20 02:57:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 909.97 Mbit/s
95th percentile per-packet one-way delay: 2.080 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 909.97 Mbit/s
95th percentile per-packet one-way delay: 2.080 ms
Loss rate: 0.06%

Run 4: Report of PCC — Data Link

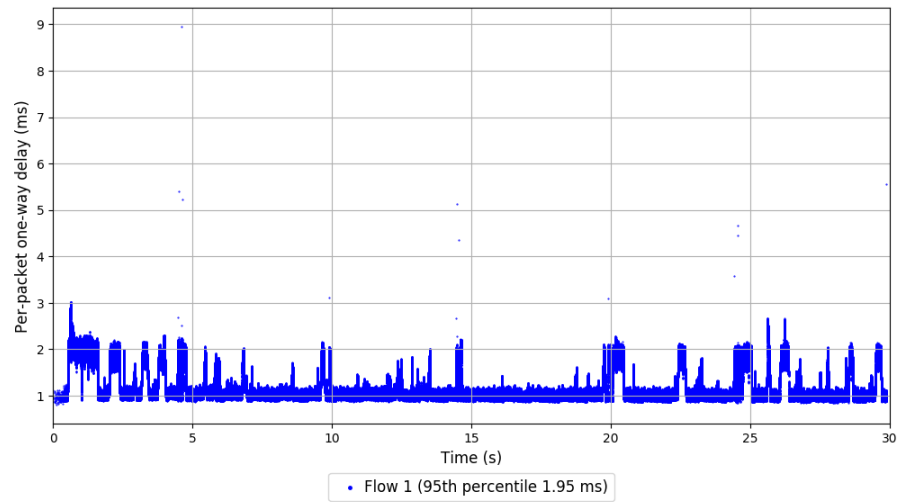
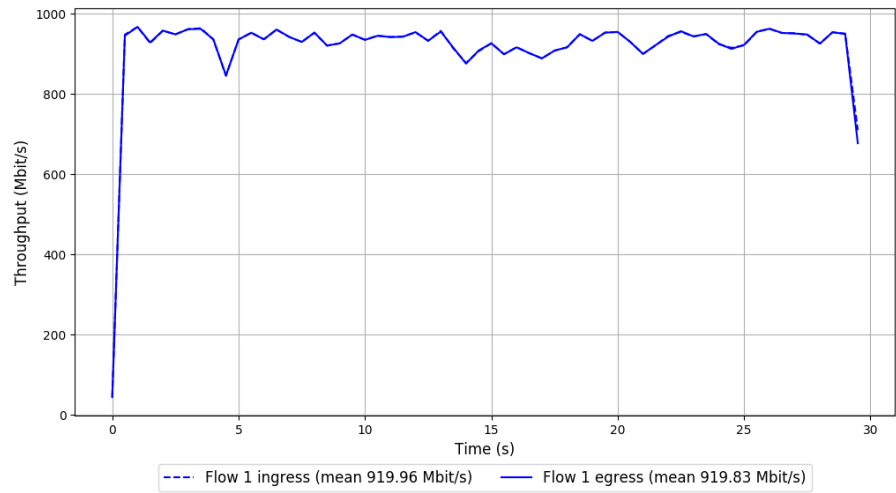


Run 5: Statistics of PCC

Start at: 2017-12-19 20:41:10
End at: 2017-12-19 20:41:40
Local clock offset: 3.981 ms
Remote clock offset: -0.424 ms

Below is generated by plot.py at 2017-12-20 02:57:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 919.83 Mbit/s
95th percentile per-packet one-way delay: 1.952 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 919.83 Mbit/s
95th percentile per-packet one-way delay: 1.952 ms
Loss rate: 0.07%

Run 5: Report of PCC — Data Link

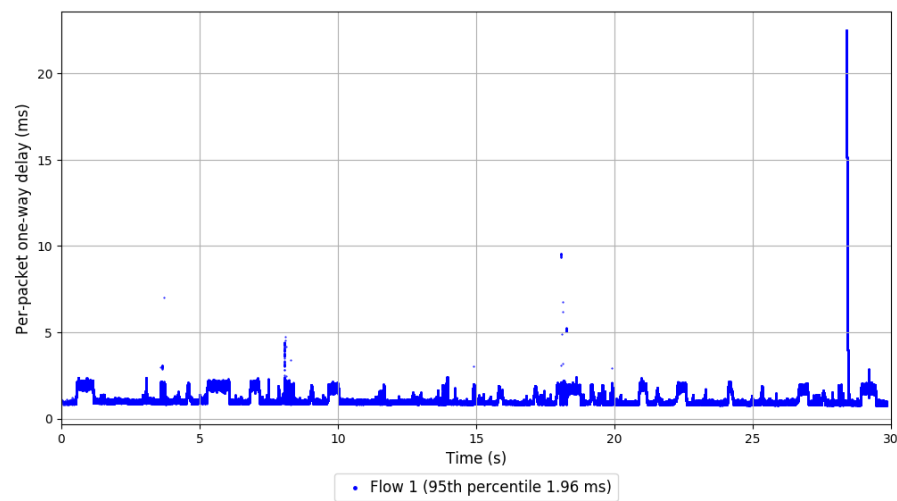
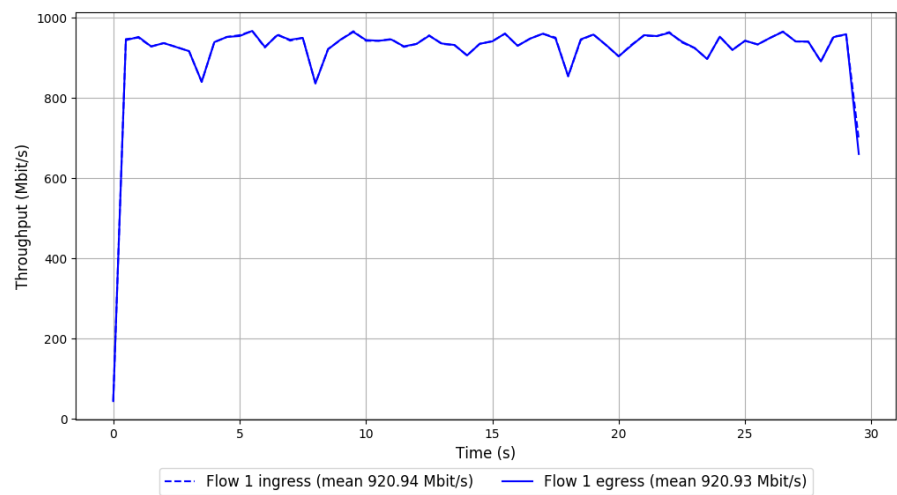


Run 6: Statistics of PCC

Start at: 2017-12-19 21:02:07
End at: 2017-12-19 21:02:37
Local clock offset: 5.552 ms
Remote clock offset: -0.373 ms

Below is generated by plot.py at 2017-12-20 02:57:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 920.93 Mbit/s
95th percentile per-packet one-way delay: 1.962 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 920.93 Mbit/s
95th percentile per-packet one-way delay: 1.962 ms
Loss rate: 0.07%

Run 6: Report of PCC — Data Link

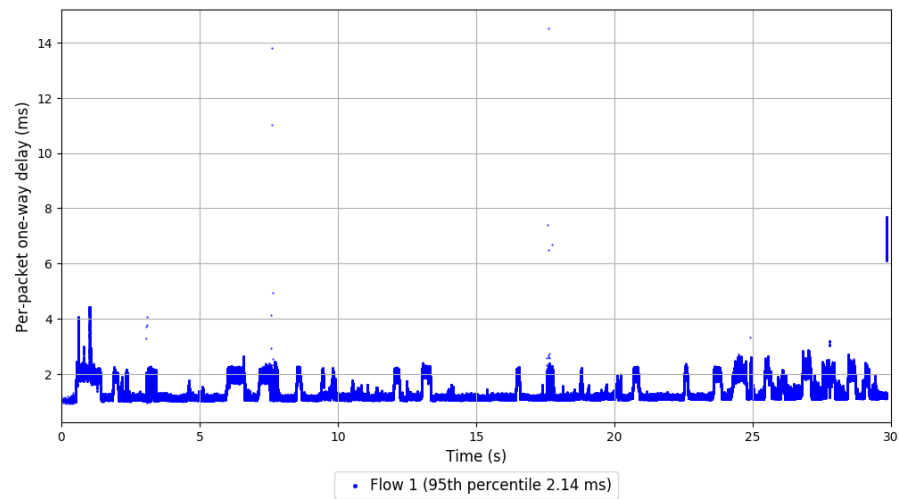
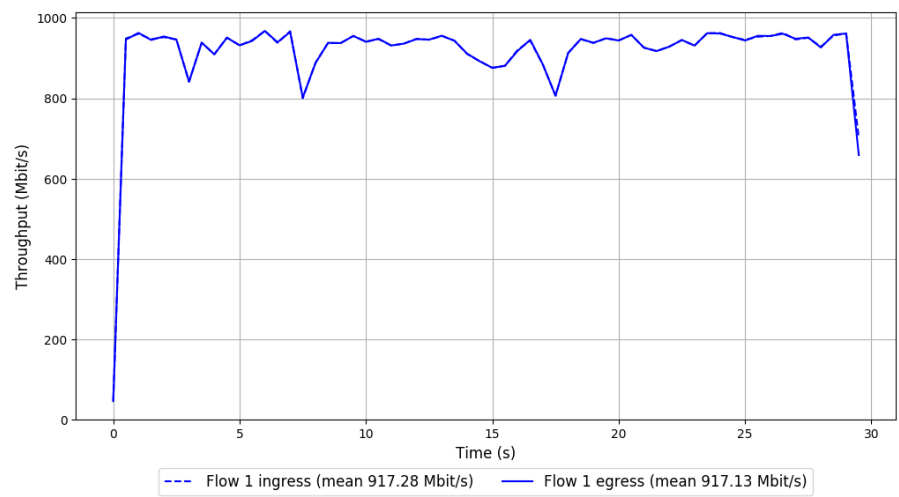


Run 7: Statistics of PCC

Start at: 2017-12-19 21:23:07
End at: 2017-12-19 21:23:37
Local clock offset: 10.029 ms
Remote clock offset: -0.562 ms

Below is generated by plot.py at 2017-12-20 02:57:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 917.13 Mbit/s
95th percentile per-packet one-way delay: 2.136 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 917.13 Mbit/s
95th percentile per-packet one-way delay: 2.136 ms
Loss rate: 0.08%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-19 21:44:05

End at: 2017-12-19 21:44:35

Local clock offset: 6.684 ms

Remote clock offset: -0.63 ms

Below is generated by plot.py at 2017-12-20 02:58:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 922.60 Mbit/s

95th percentile per-packet one-way delay: 2.157 ms

Loss rate: 0.07%

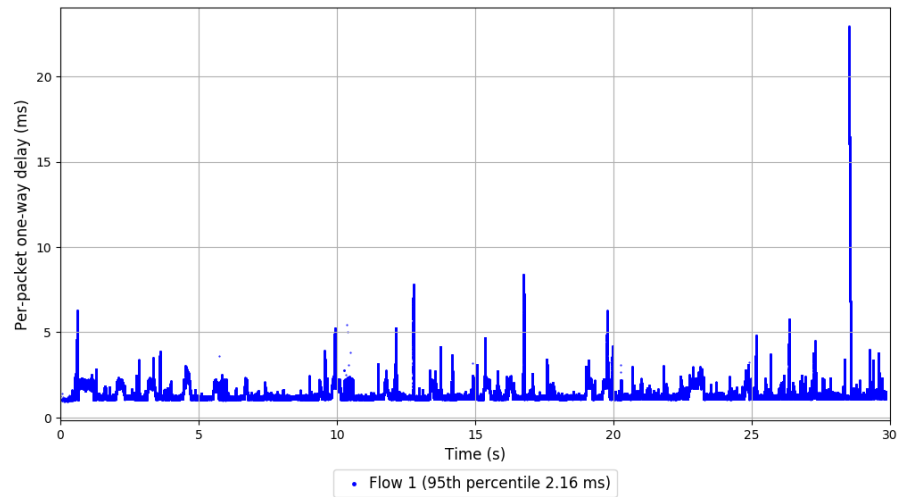
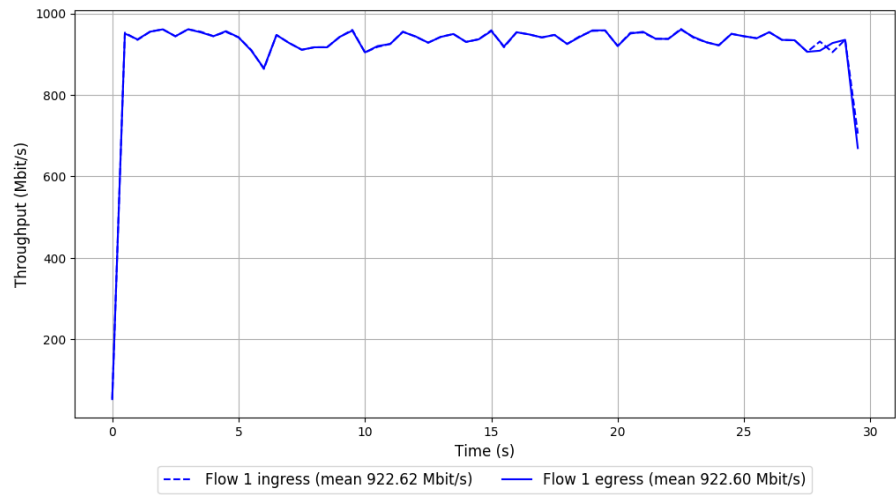
-- Flow 1:

Average throughput: 922.60 Mbit/s

95th percentile per-packet one-way delay: 2.157 ms

Loss rate: 0.07%

Run 8: Report of PCC — Data Link

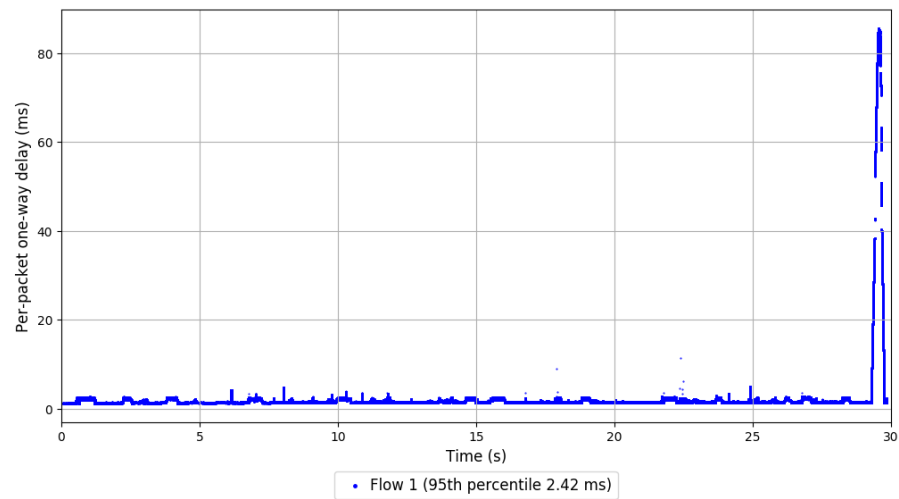
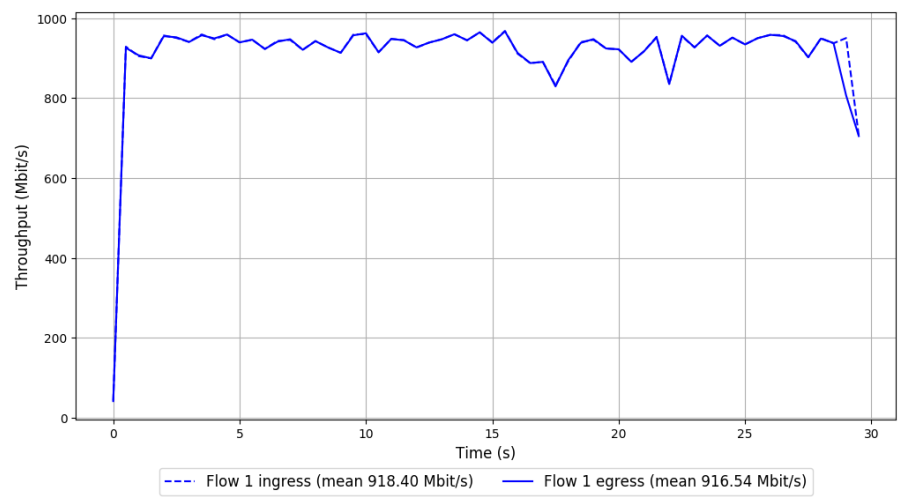


Run 9: Statistics of PCC

Start at: 2017-12-19 22:04:52
End at: 2017-12-19 22:05:22
Local clock offset: 1.485 ms
Remote clock offset: -0.489 ms

Below is generated by plot.py at 2017-12-20 03:07:44
Datalink statistics
-- Total of 1 flow:
Average throughput: 916.54 Mbit/s
95th percentile per-packet one-way delay: 2.419 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 916.54 Mbit/s
95th percentile per-packet one-way delay: 2.419 ms
Loss rate: 0.27%

Run 9: Report of PCC — Data Link

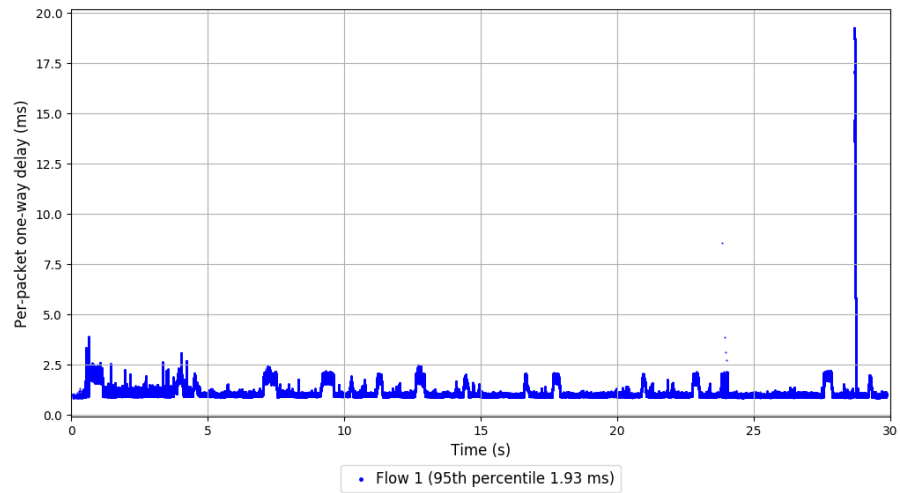
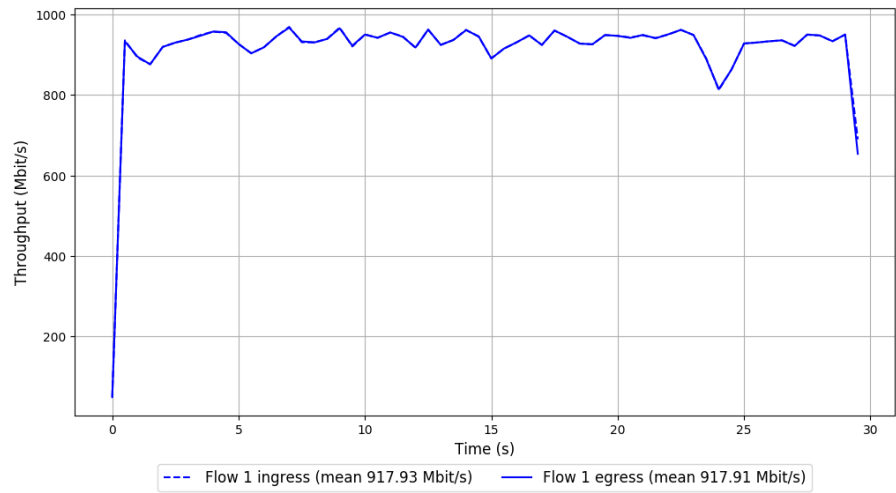


Run 10: Statistics of PCC

Start at: 2017-12-19 22:25:46
End at: 2017-12-19 22:26:16
Local clock offset: -0.139 ms
Remote clock offset: -0.481 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 917.91 Mbit/s
95th percentile per-packet one-way delay: 1.930 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 917.91 Mbit/s
95th percentile per-packet one-way delay: 1.930 ms
Loss rate: 0.07%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2017-12-19 19:23:50

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

Local clock offset: 19.943 ms

Remote clock offset: -2.152 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.73 Mbit/s

95th percentile per-packet one-way delay: 0.227 ms

Loss rate: 0.08%

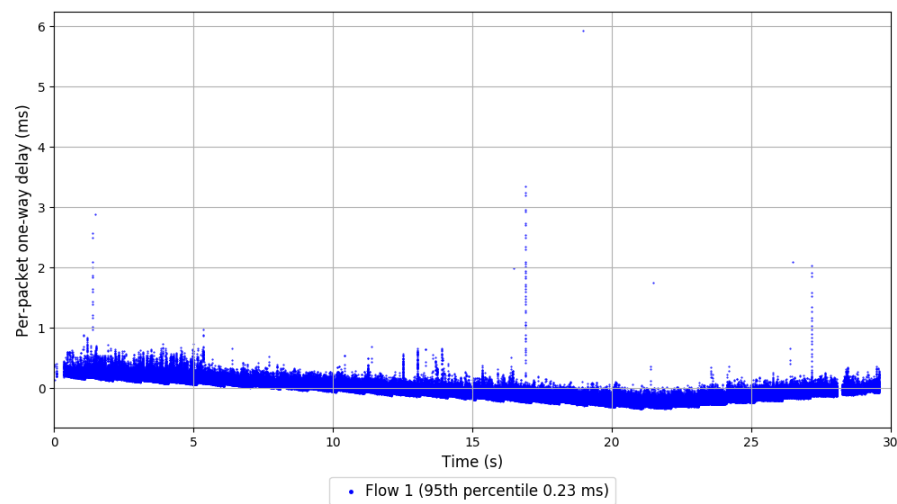
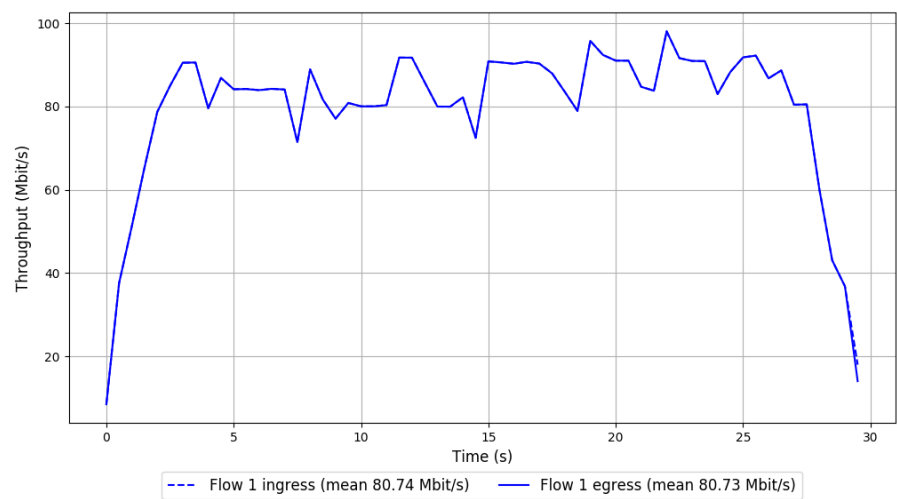
-- Flow 1:

Average throughput: 80.73 Mbit/s

95th percentile per-packet one-way delay: 0.227 ms

Loss rate: 0.08%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-19 19:44:47

End at: 2017-12-19 19:45:17

Local clock offset: 9.45 ms

Remote clock offset: -1.252 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.92 Mbit/s

95th percentile per-packet one-way delay: 1.204 ms

Loss rate: 0.07%

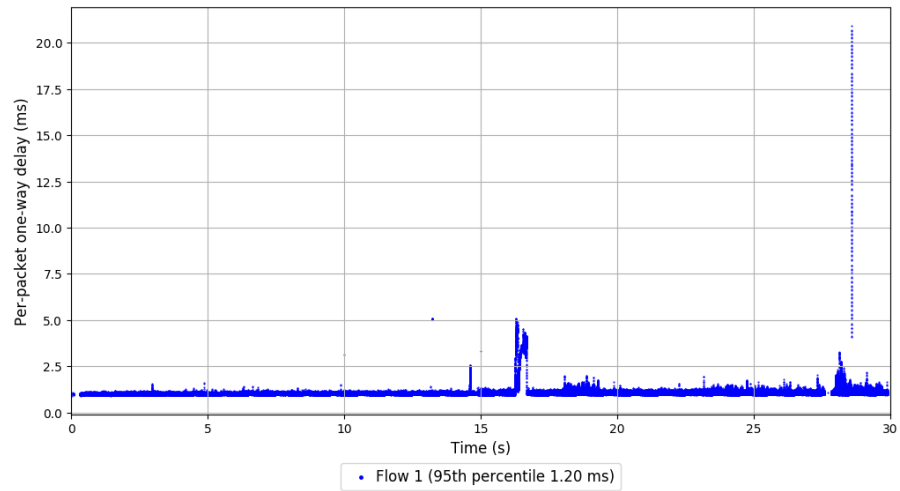
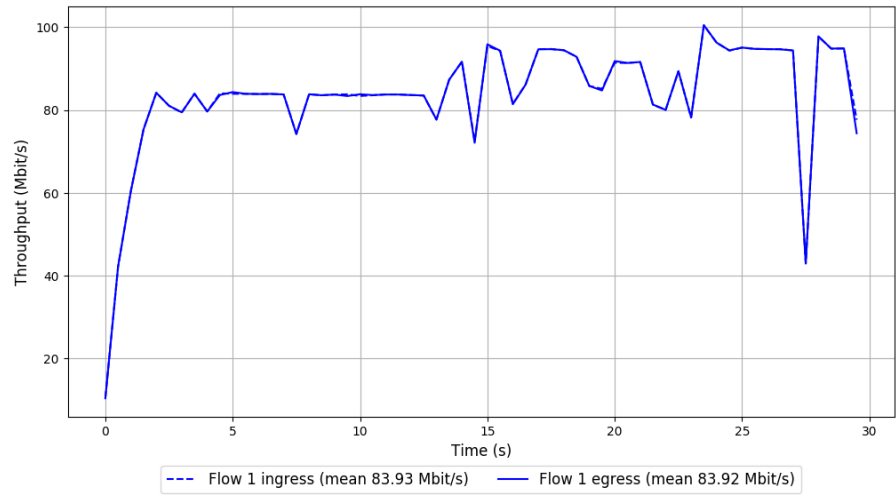
-- Flow 1:

Average throughput: 83.92 Mbit/s

95th percentile per-packet one-way delay: 1.204 ms

Loss rate: 0.07%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-19 20:05:38

End at: 2017-12-19 20:06:08

Local clock offset: 1.761 ms

Remote clock offset: -1.081 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.36 Mbit/s

95th percentile per-packet one-way delay: 0.978 ms

Loss rate: 0.07%

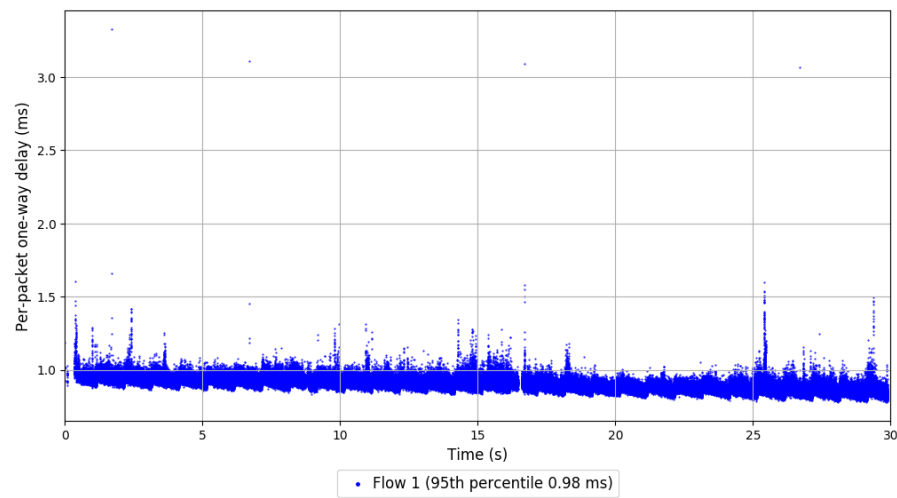
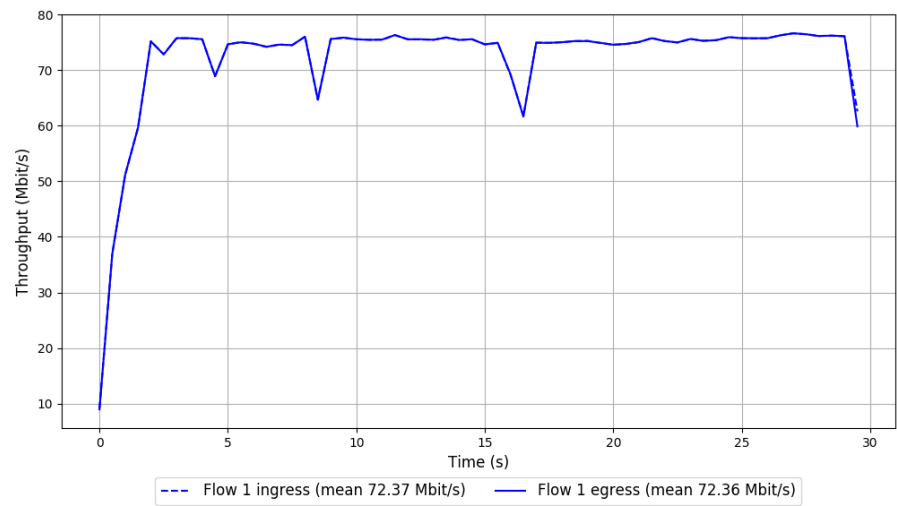
-- Flow 1:

Average throughput: 72.36 Mbit/s

95th percentile per-packet one-way delay: 0.978 ms

Loss rate: 0.07%

Run 3: Report of QUIC Cubic — Data Link

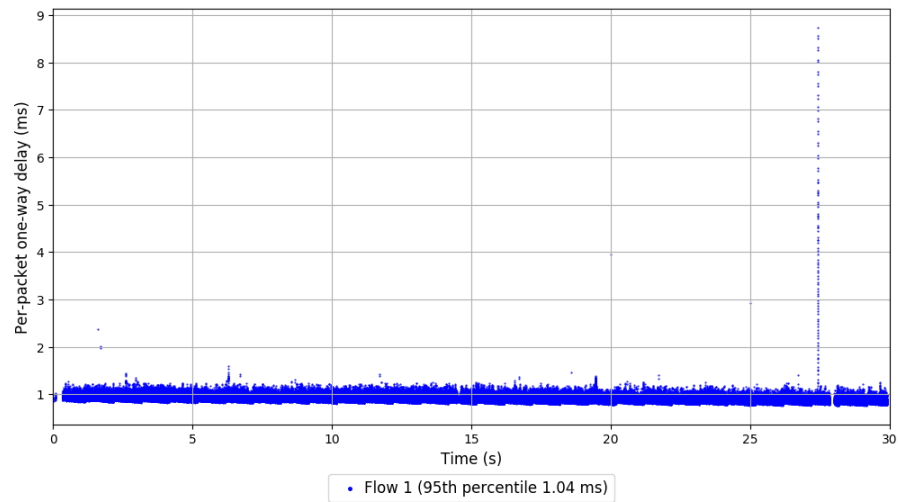
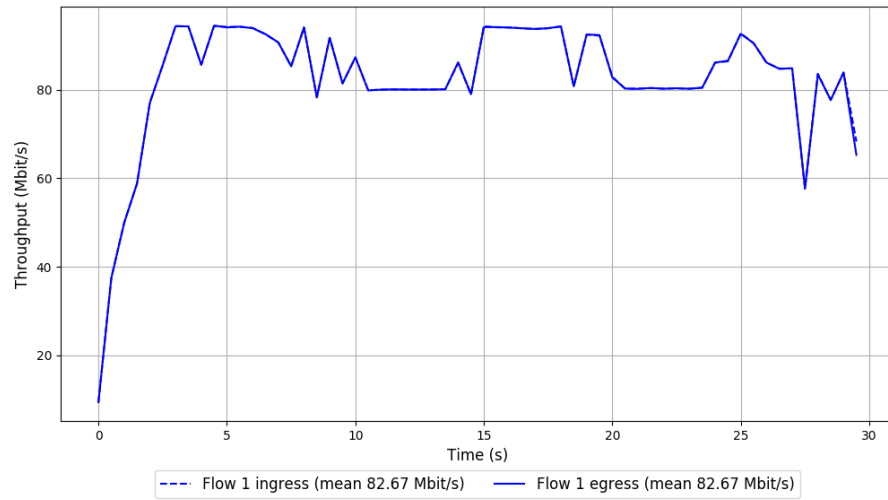


Run 4: Statistics of QUIC Cubic

Start at: 2017-12-19 20:26:31
End at: 2017-12-19 20:27:01
Local clock offset: 3.619 ms
Remote clock offset: -0.484 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 82.67 Mbit/s
95th percentile per-packet one-way delay: 1.039 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 82.67 Mbit/s
95th percentile per-packet one-way delay: 1.039 ms
Loss rate: 0.06%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

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

End at: 2017-12-19 20:47:49

Local clock offset: 3.847 ms

Remote clock offset: -0.285 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.45 Mbit/s

95th percentile per-packet one-way delay: 1.084 ms

Loss rate: 0.07%

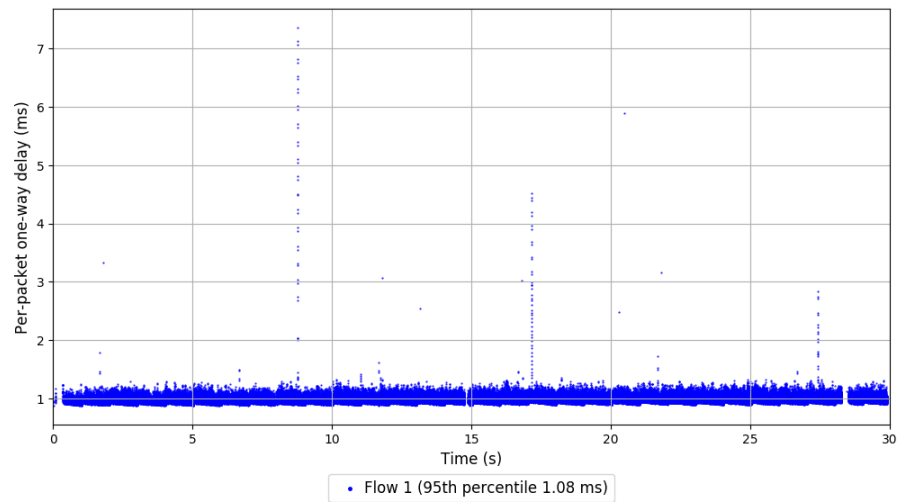
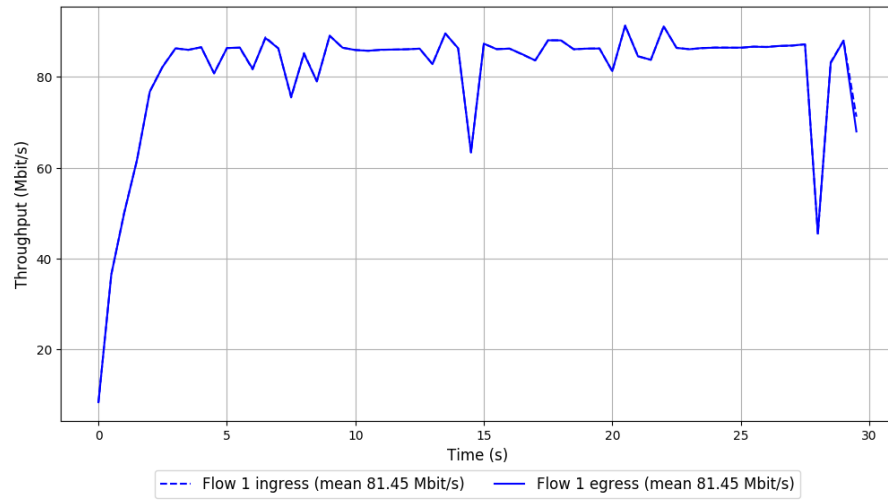
-- Flow 1:

Average throughput: 81.45 Mbit/s

95th percentile per-packet one-way delay: 1.084 ms

Loss rate: 0.07%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-19 21:08:20

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

Local clock offset: 7.131 ms

Remote clock offset: -0.311 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.29 Mbit/s

95th percentile per-packet one-way delay: 0.825 ms

Loss rate: 0.01%

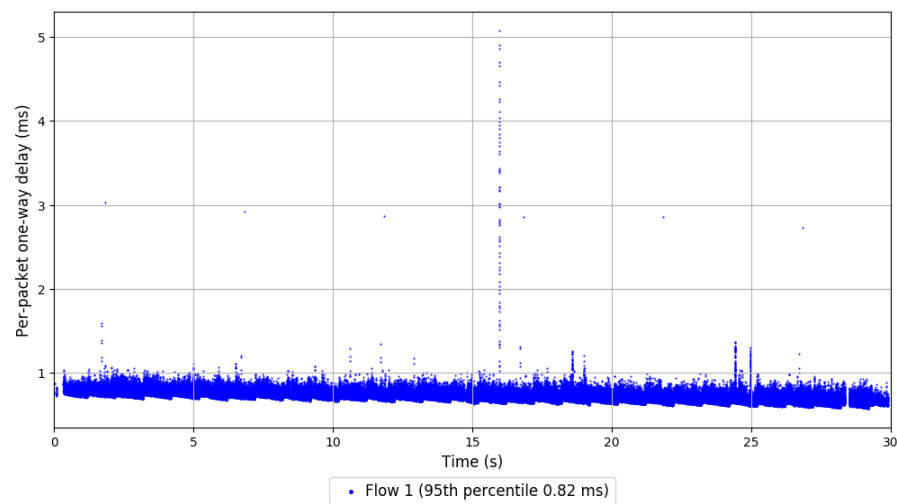
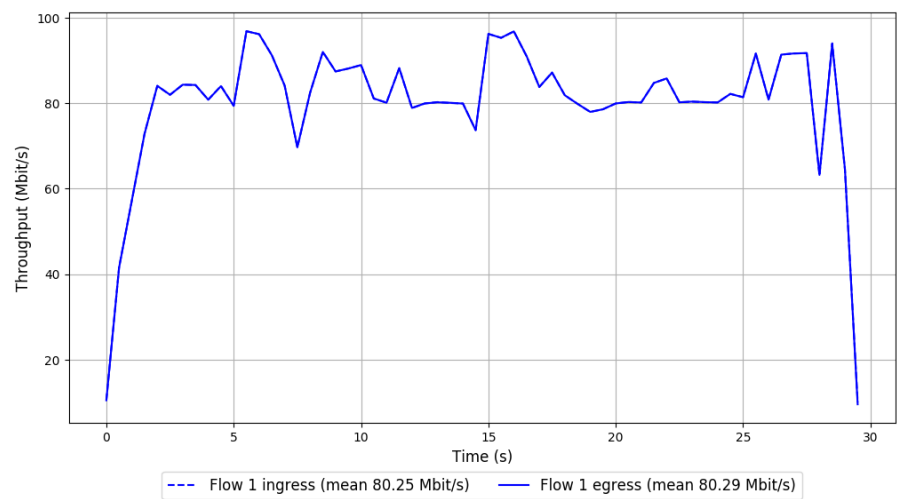
-- Flow 1:

Average throughput: 80.29 Mbit/s

95th percentile per-packet one-way delay: 0.825 ms

Loss rate: 0.01%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-19 21:29:17

End at: 2017-12-19 21:29:47

Local clock offset: 9.284 ms

Remote clock offset: -0.605 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.57 Mbit/s

95th percentile per-packet one-way delay: 1.036 ms

Loss rate: 0.07%

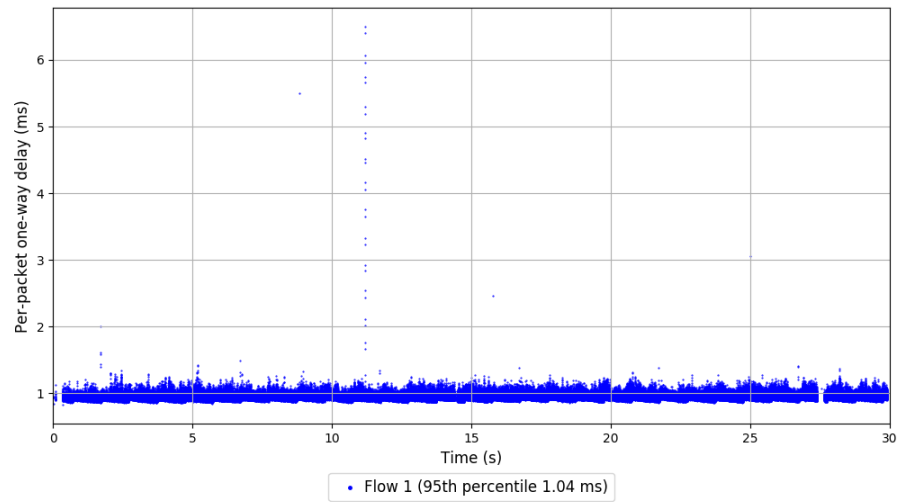
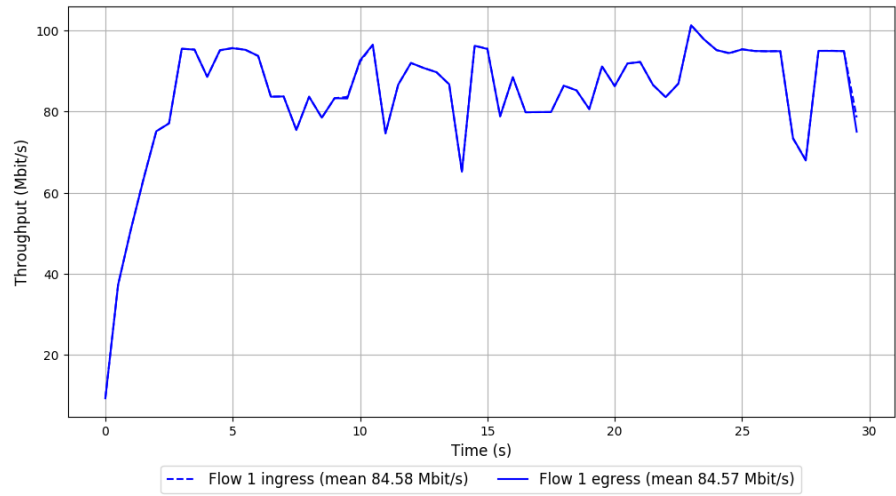
-- Flow 1:

Average throughput: 84.57 Mbit/s

95th percentile per-packet one-way delay: 1.036 ms

Loss rate: 0.07%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-19 21:50:05

End at: 2017-12-19 21:50:35

Local clock offset: 6.522 ms

Remote clock offset: -0.591 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.08 Mbit/s

95th percentile per-packet one-way delay: 1.213 ms

Loss rate: 0.07%

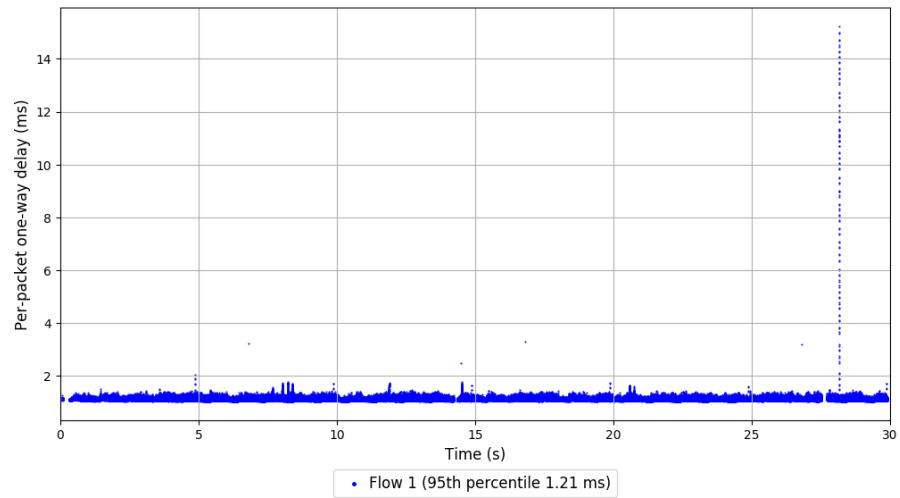
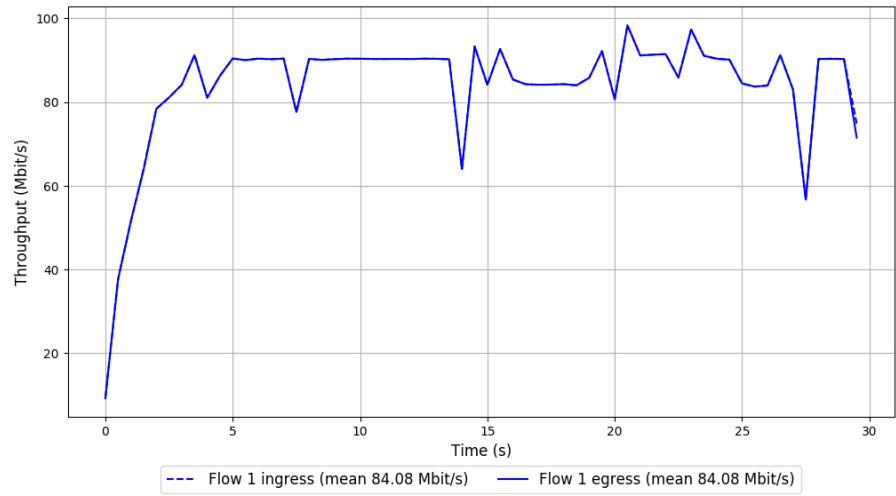
-- Flow 1:

Average throughput: 84.08 Mbit/s

95th percentile per-packet one-way delay: 1.213 ms

Loss rate: 0.07%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-19 22:10:59

End at: 2017-12-19 22:11:29

Local clock offset: 0.009 ms

Remote clock offset: -0.502 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.39 Mbit/s

95th percentile per-packet one-way delay: 1.198 ms

Loss rate: 0.07%

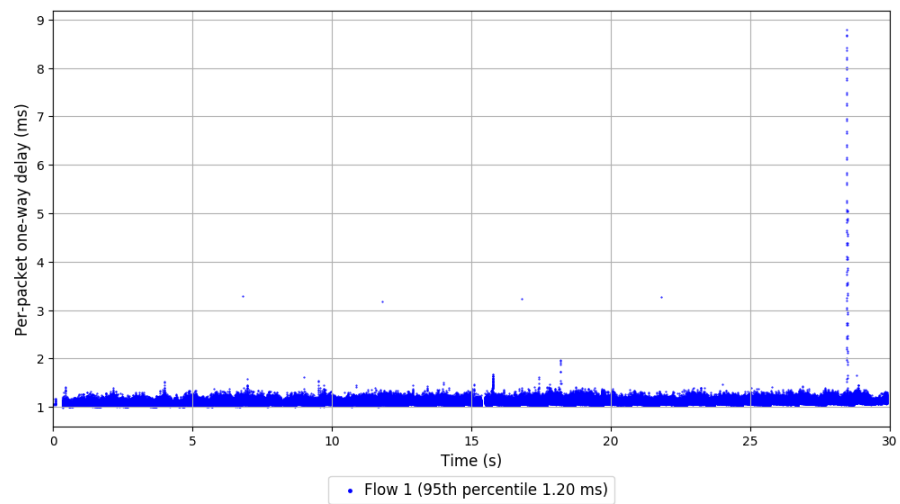
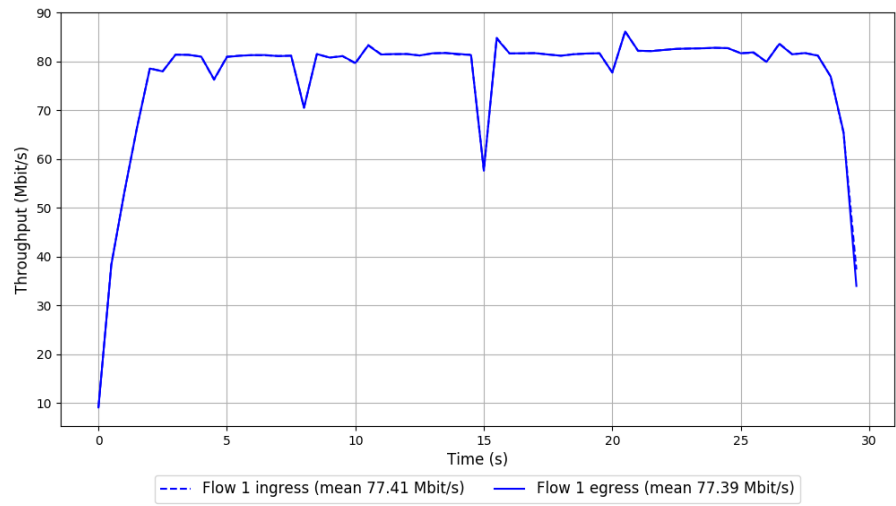
-- Flow 1:

Average throughput: 77.39 Mbit/s

95th percentile per-packet one-way delay: 1.198 ms

Loss rate: 0.07%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-19 22:31:57

End at: 2017-12-19 22:32:27

Local clock offset: 0.127 ms

Remote clock offset: -0.742 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.74 Mbit/s

95th percentile per-packet one-way delay: 1.056 ms

Loss rate: 0.06%

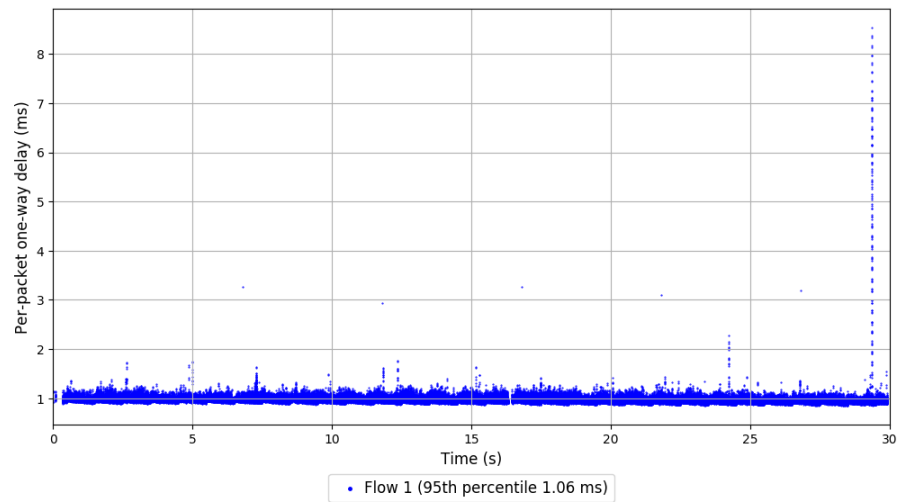
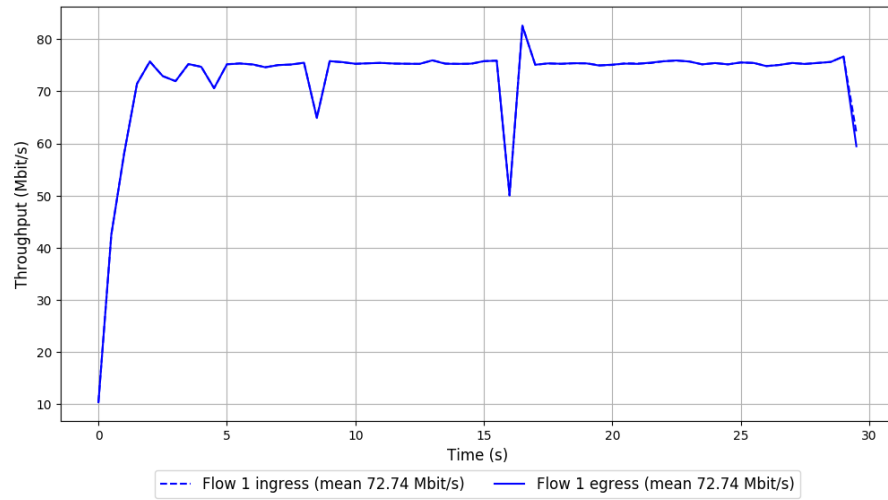
-- Flow 1:

Average throughput: 72.74 Mbit/s

95th percentile per-packet one-way delay: 1.056 ms

Loss rate: 0.06%

Run 10: Report of QUIC Cubic — Data Link

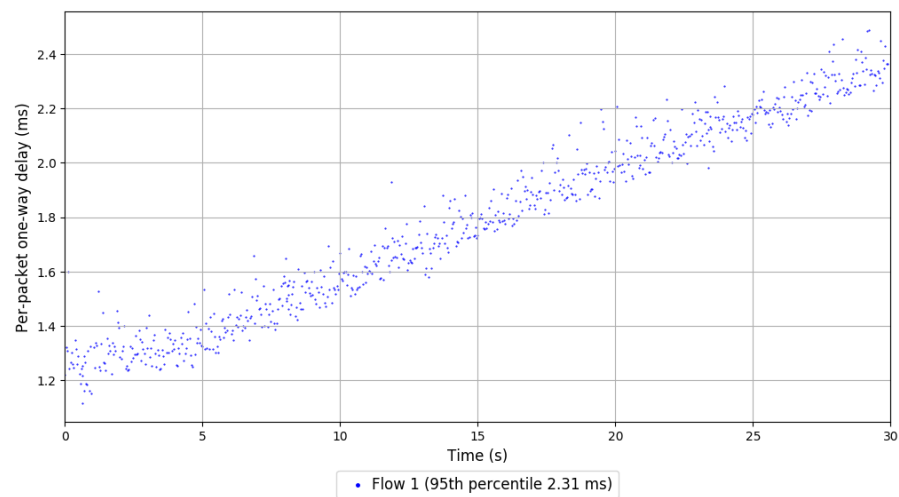
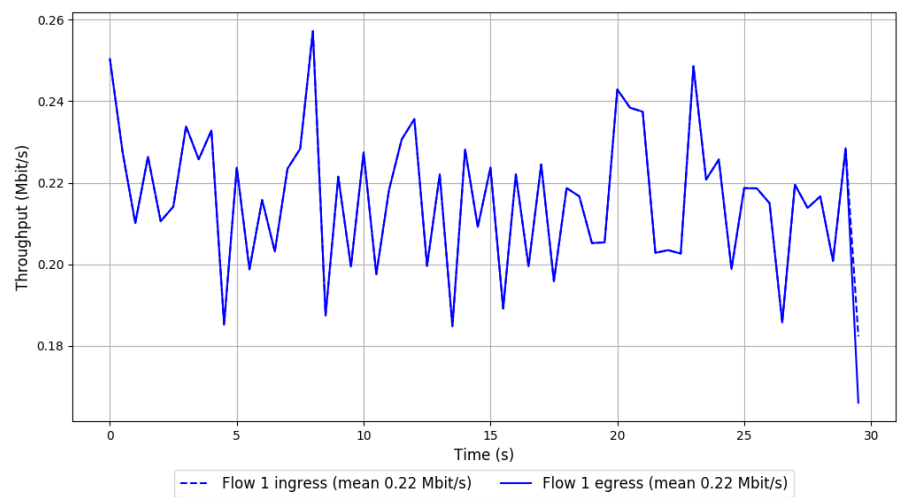


```
Run 1: Statistics of SCReAM

Start at: 2017-12-19 19:26:24
End at: 2017-12-19 19:26:54
Local clock offset: 18.922 ms
Remote clock offset: -2.103 ms

# Below is generated by plot.py at 2017-12-20 03:08:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.310 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.310 ms
Loss rate: 0.13%
```

Run 1: Report of SReAM — Data Link

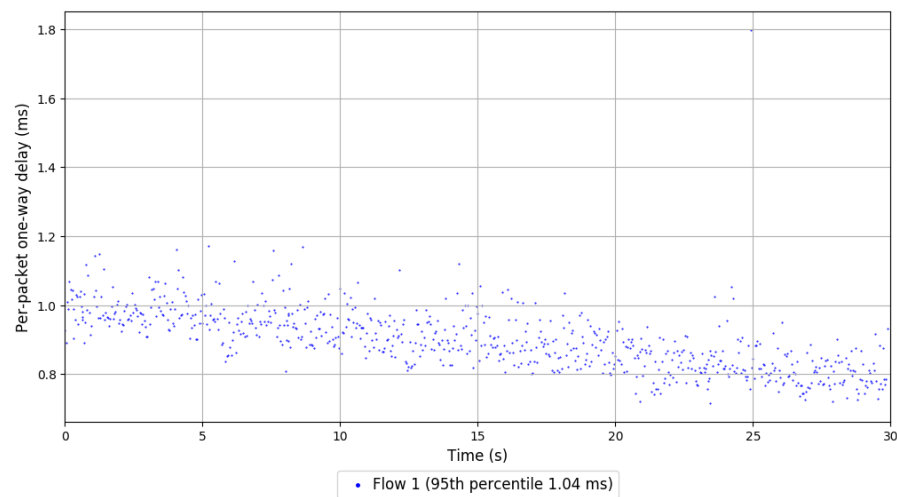
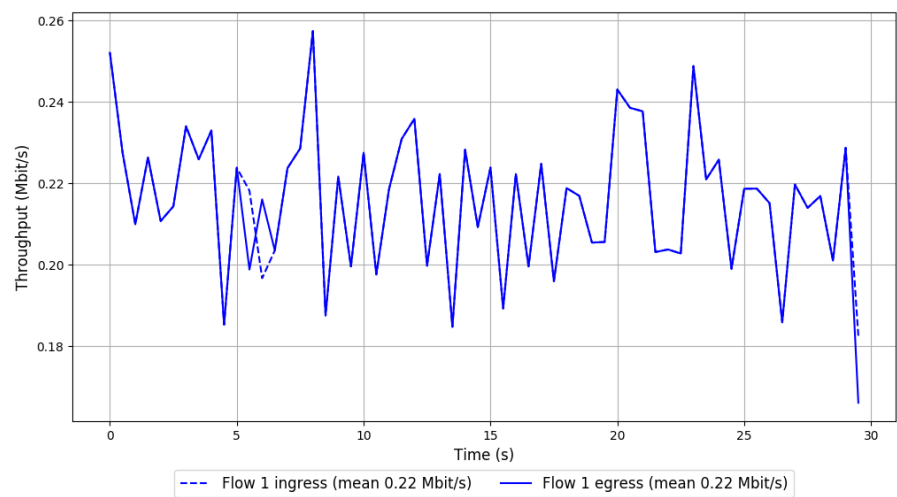


Run 2: Statistics of SCReAM

Start at: 2017-12-19 19:47:16
End at: 2017-12-19 19:47:46
Local clock offset: 9.701 ms
Remote clock offset: -1.302 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.042 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.042 ms
Loss rate: 0.13%

Run 2: Report of SReAM — Data Link

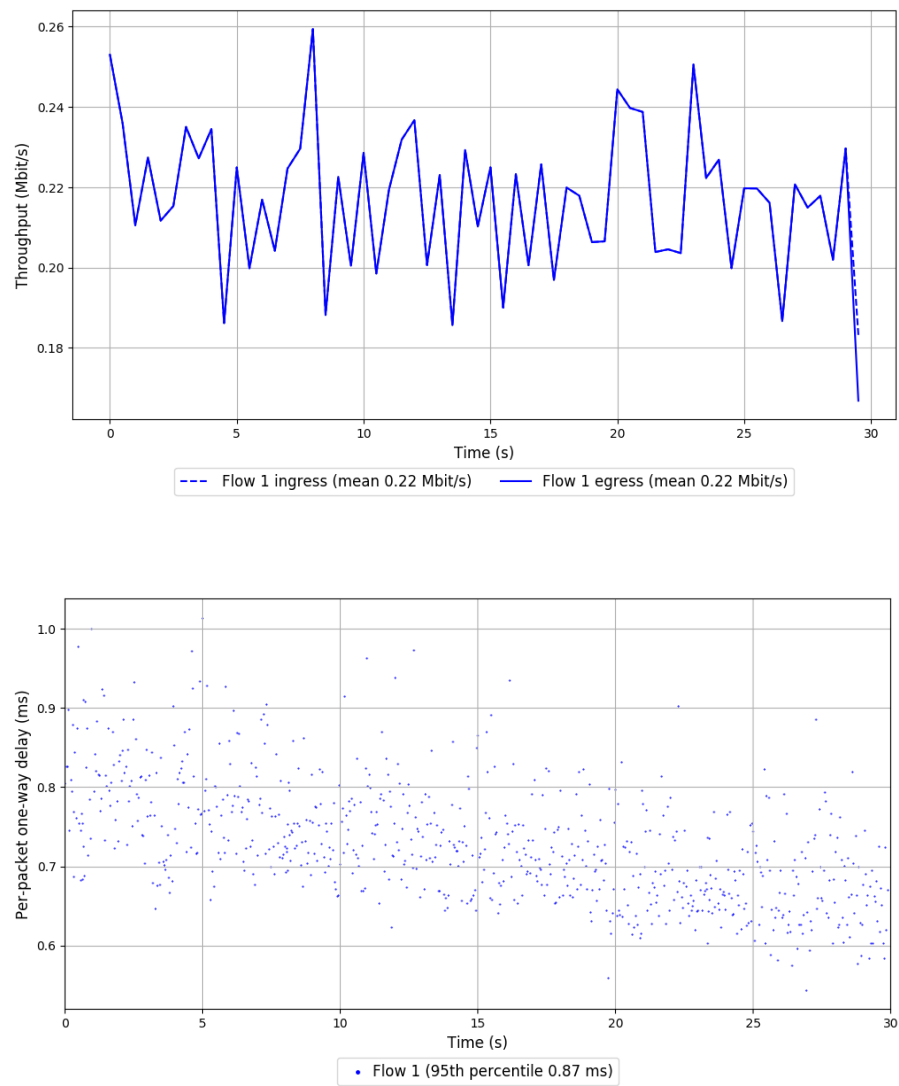


Run 3: Statistics of SCReAM

Start at: 2017-12-19 20:08:07
End at: 2017-12-19 20:08:37
Local clock offset: 2.269 ms
Remote clock offset: -0.989 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.870 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.870 ms
Loss rate: 0.13%

Run 3: Report of SReAM — Data Link

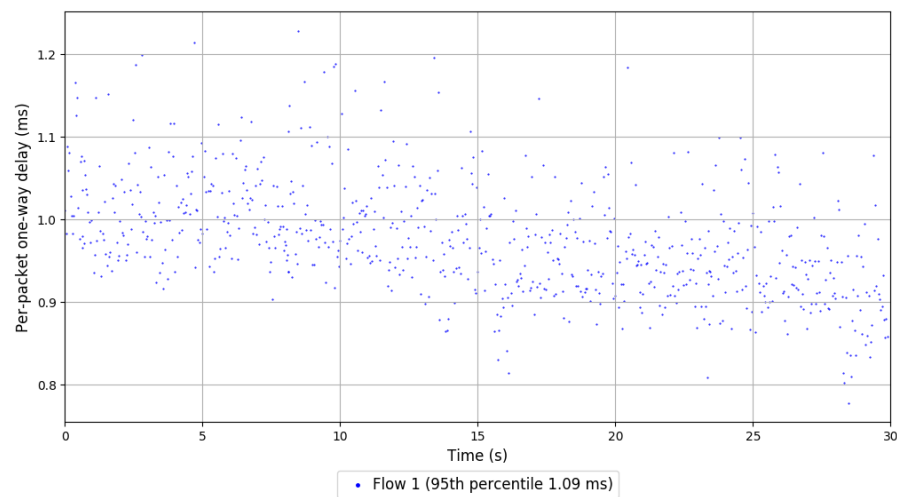
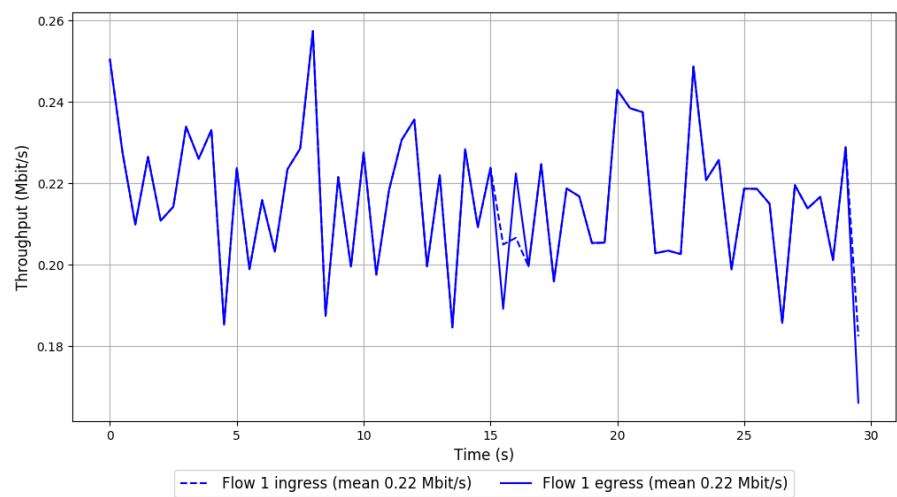


Run 4: Statistics of SCReAM

Start at: 2017-12-19 20:29:00
End at: 2017-12-19 20:29:30
Local clock offset: 4.168 ms
Remote clock offset: -0.411 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.092 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.092 ms
Loss rate: 0.13%

Run 4: Report of SReAM — Data Link

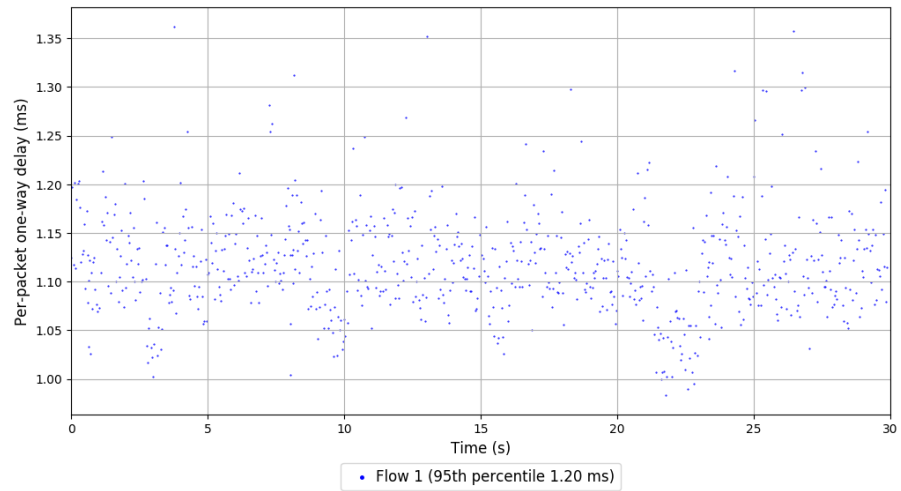
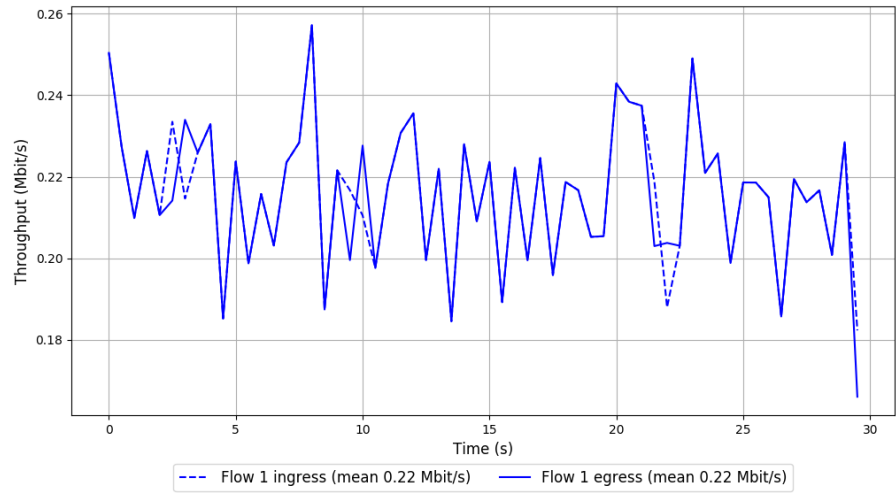


Run 5: Statistics of SCReAM

Start at: 2017-12-19 20:49:53
End at: 2017-12-19 20:50:23
Local clock offset: 3.852 ms
Remote clock offset: -0.344 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.203 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.203 ms
Loss rate: 0.13%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-19 21:10:49

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

Local clock offset: 7.968 ms

Remote clock offset: -0.27 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.069 ms

Loss rate: 0.13%

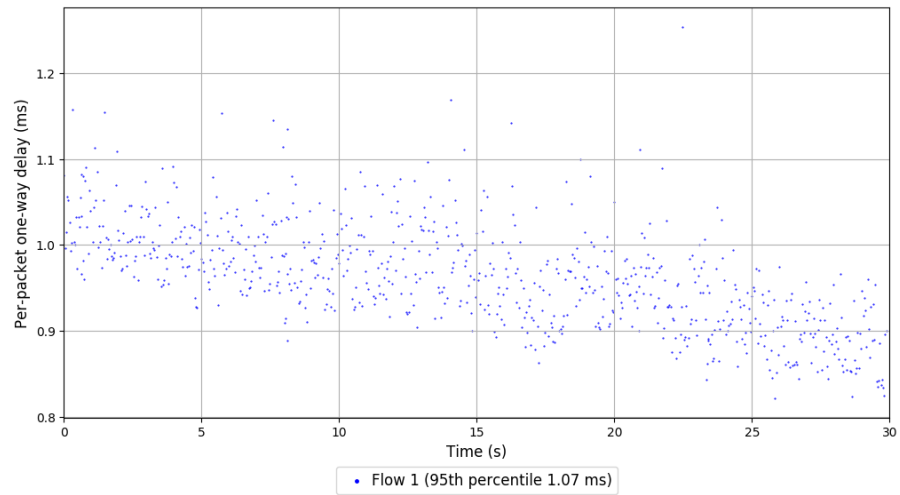
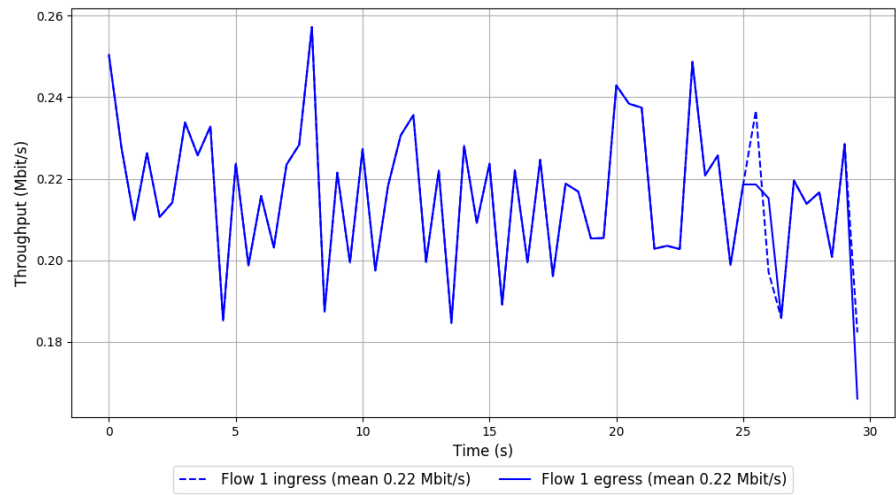
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.069 ms

Loss rate: 0.13%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-19 21:31:51

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

Local clock offset: 9.181 ms

Remote clock offset: -0.6 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.310 ms

Loss rate: 0.13%

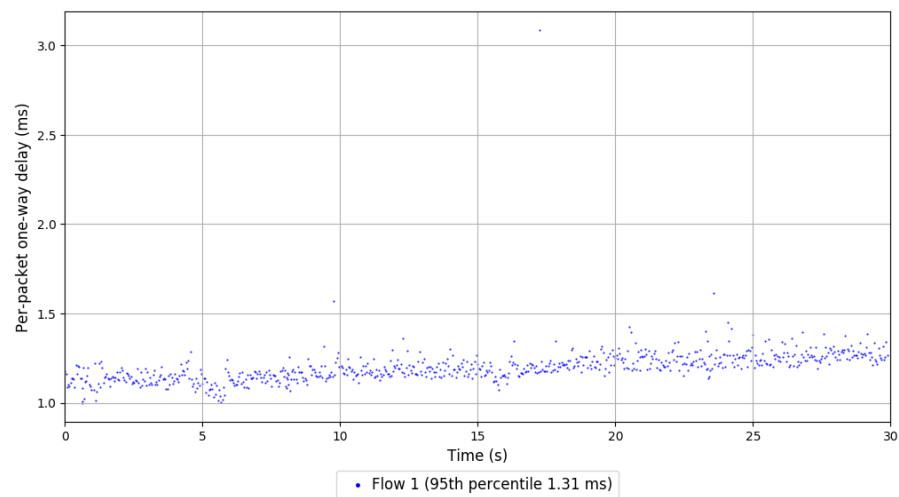
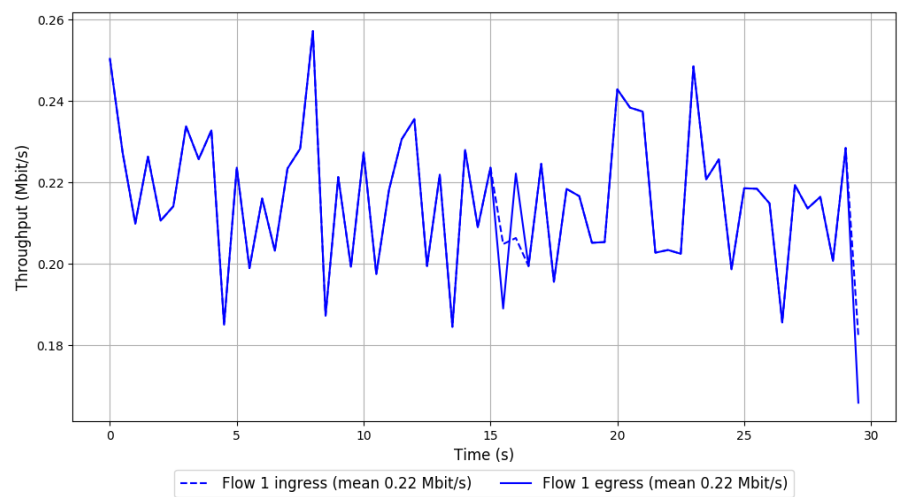
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.310 ms

Loss rate: 0.13%

Run 7: Report of SReAM — Data Link

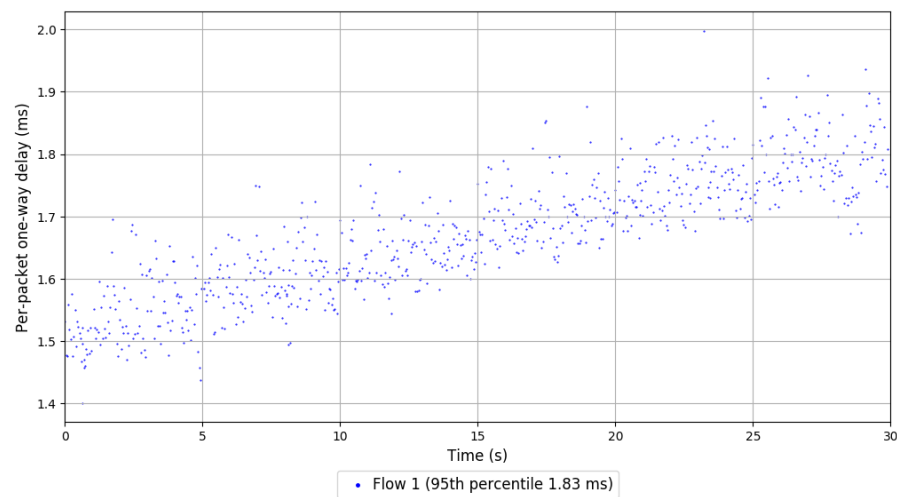
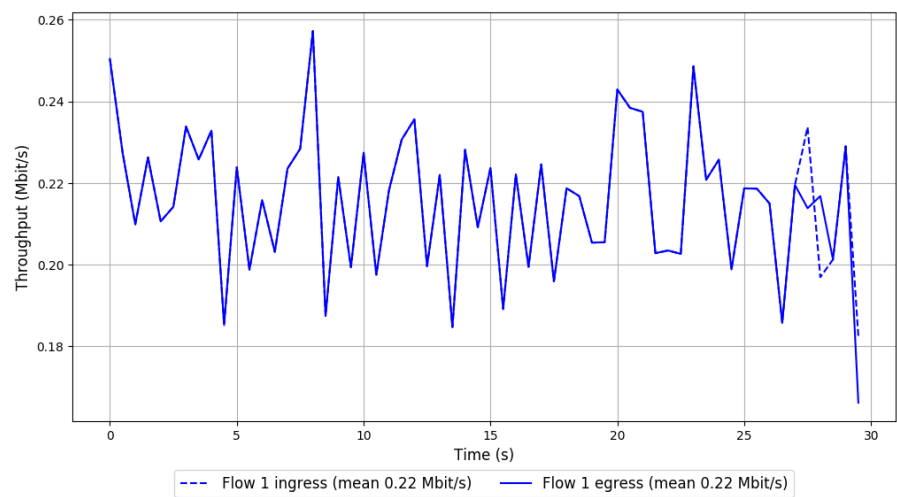


Run 8: Statistics of SCReAM

Start at: 2017-12-19 21:52:39
End at: 2017-12-19 21:53:09
Local clock offset: 6.092 ms
Remote clock offset: -0.467 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.829 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.829 ms
Loss rate: 0.13%

Run 8: Report of SReAM — Data Link

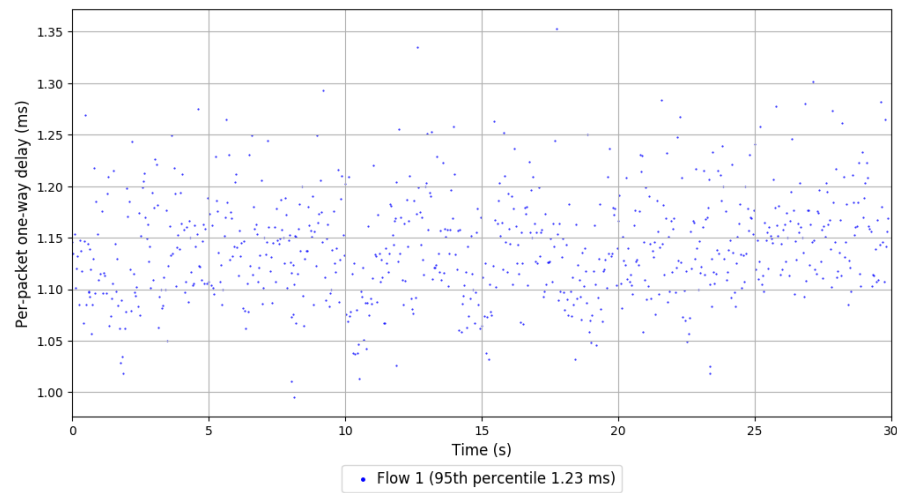
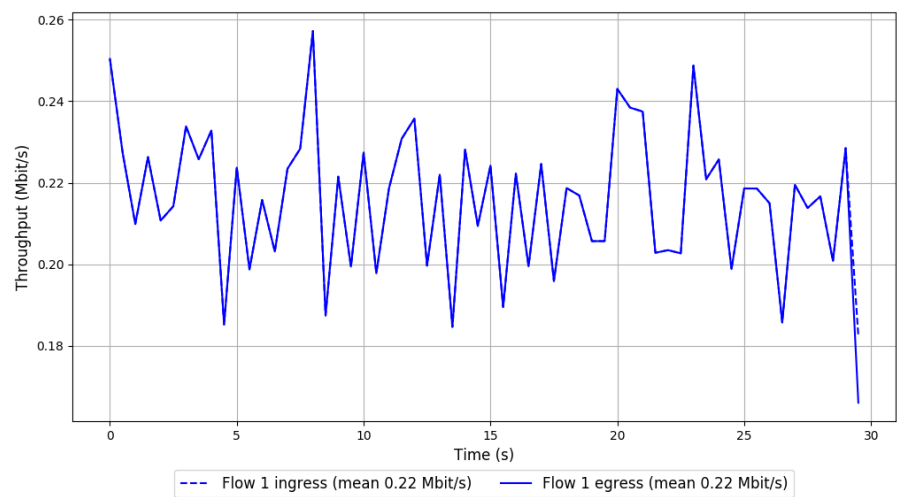


Run 9: Statistics of SCReAM

Start at: 2017-12-19 22:13:33
End at: 2017-12-19 22:14:03
Local clock offset: -0.244 ms
Remote clock offset: -0.515 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.231 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.231 ms
Loss rate: 0.13%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-19 22:34:27

End at: 2017-12-19 22:34:57

Local clock offset: 0.401 ms

Remote clock offset: -0.815 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.317 ms

Loss rate: 0.13%

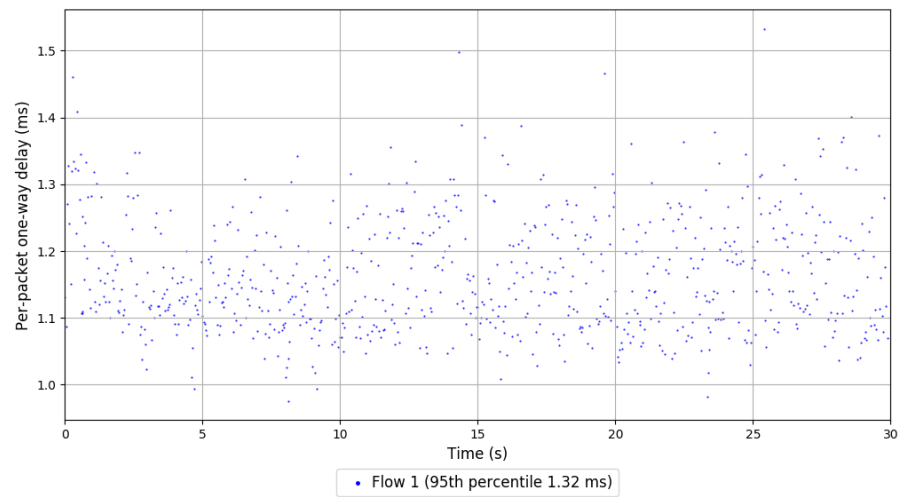
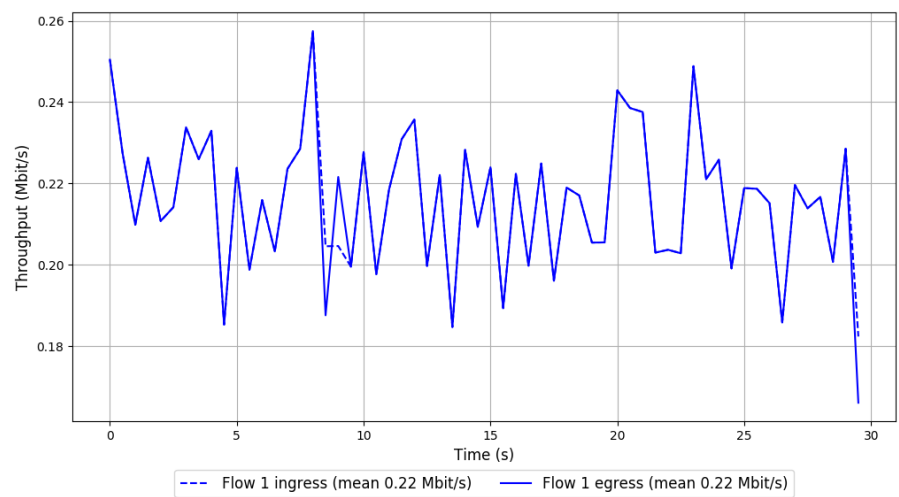
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.317 ms

Loss rate: 0.13%

Run 10: Report of SCRaM — Data Link

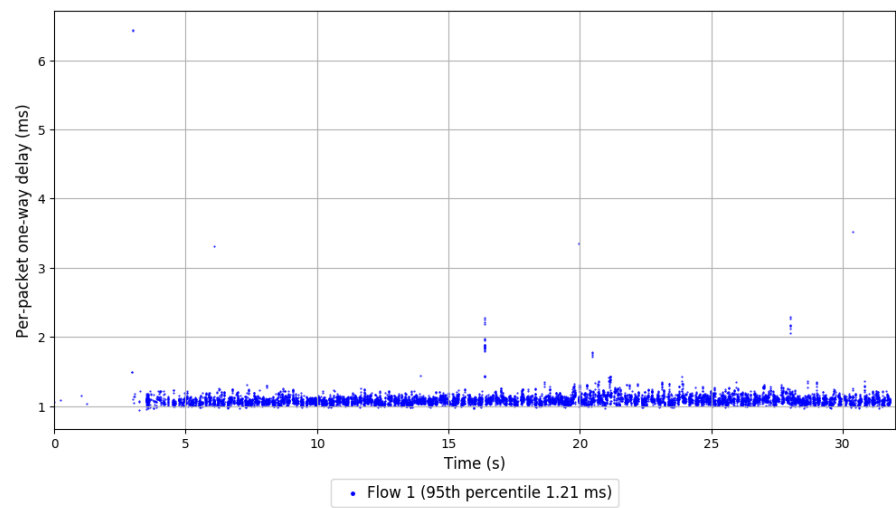
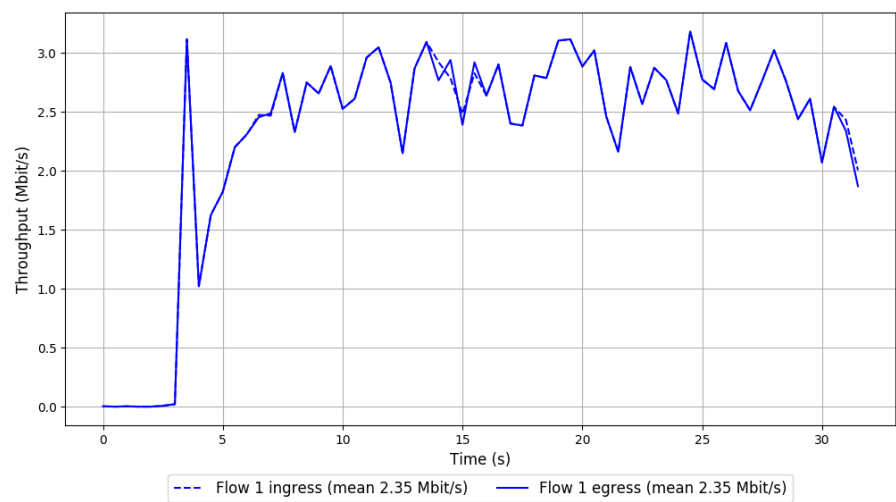


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-19 19:36:07
End at: 2017-12-19 19:36:37
Local clock offset: 10.932 ms
Remote clock offset: -1.573 ms

# Below is generated by plot.py at 2017-12-20 03:08:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 1.205 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 1.205 ms
Loss rate: 0.15%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

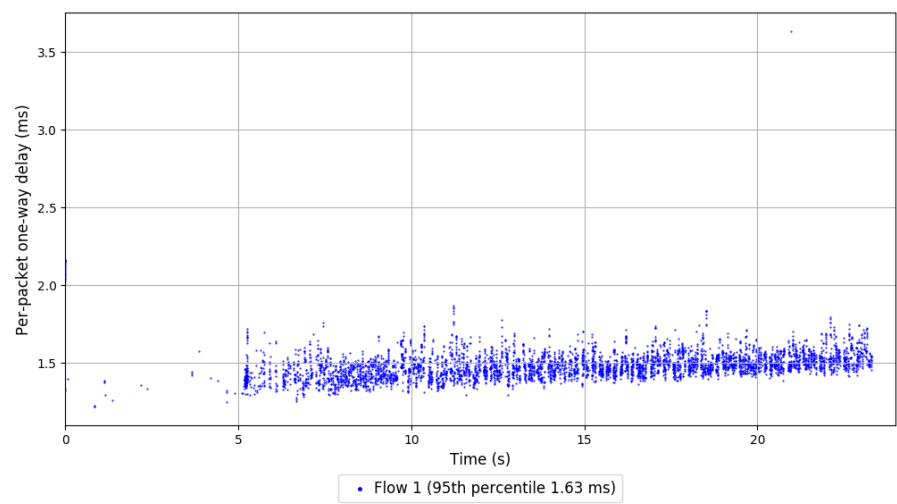
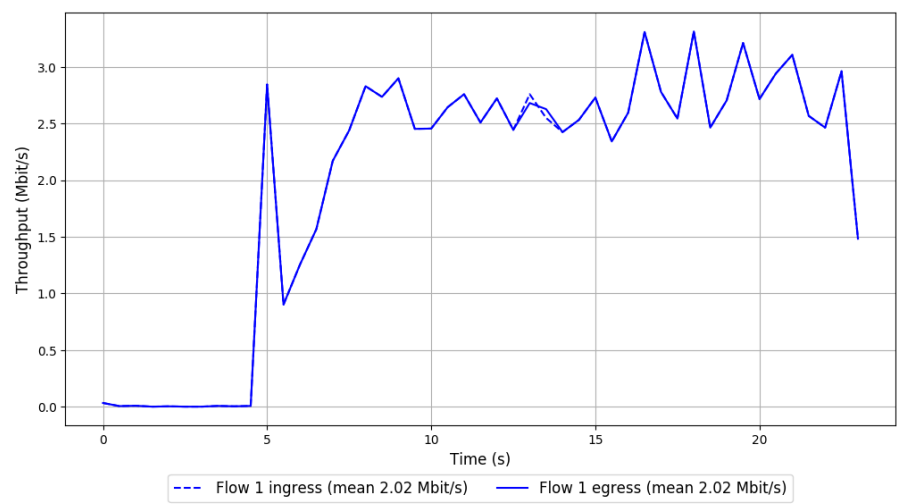
Start at: 2017-12-19 19:56:57

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

Local clock offset: 3.821 ms

Remote clock offset: -1.202 ms

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

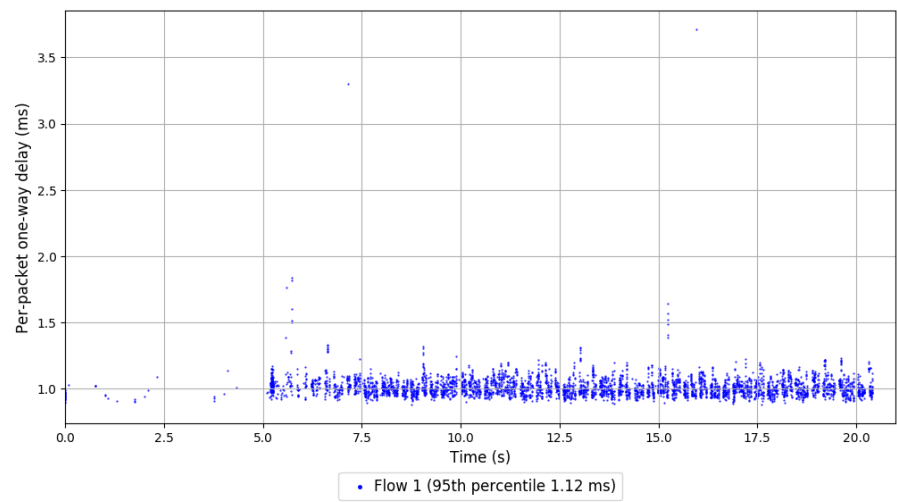
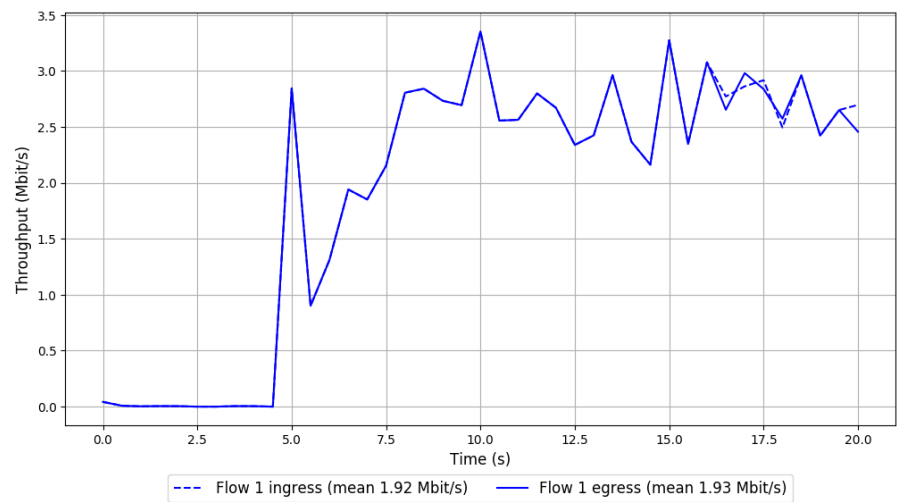
Start at: 2017-12-19 20:17:53

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

Local clock offset: 2.883 ms

Remote clock offset: -0.794 ms

Run 3: Report of WebRTC media — Data Link

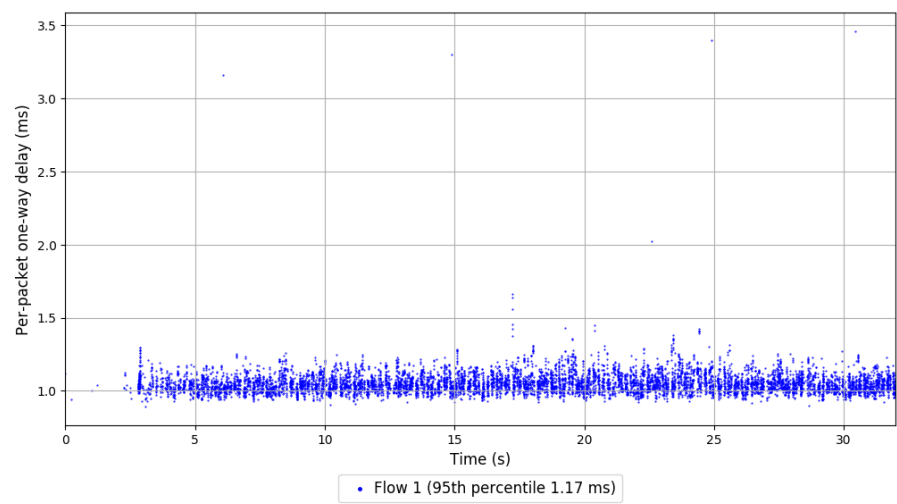
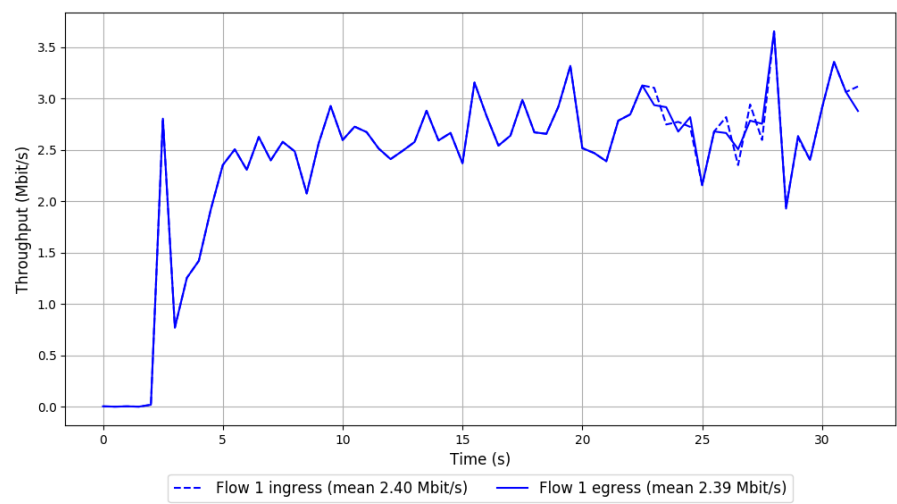


Run 4: Statistics of WebRTC media

Start at: 2017-12-19 20:38:39
End at: 2017-12-19 20:39:09
Local clock offset: 3.879 ms
Remote clock offset: -0.507 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 1.170 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 1.170 ms
Loss rate: 0.16%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

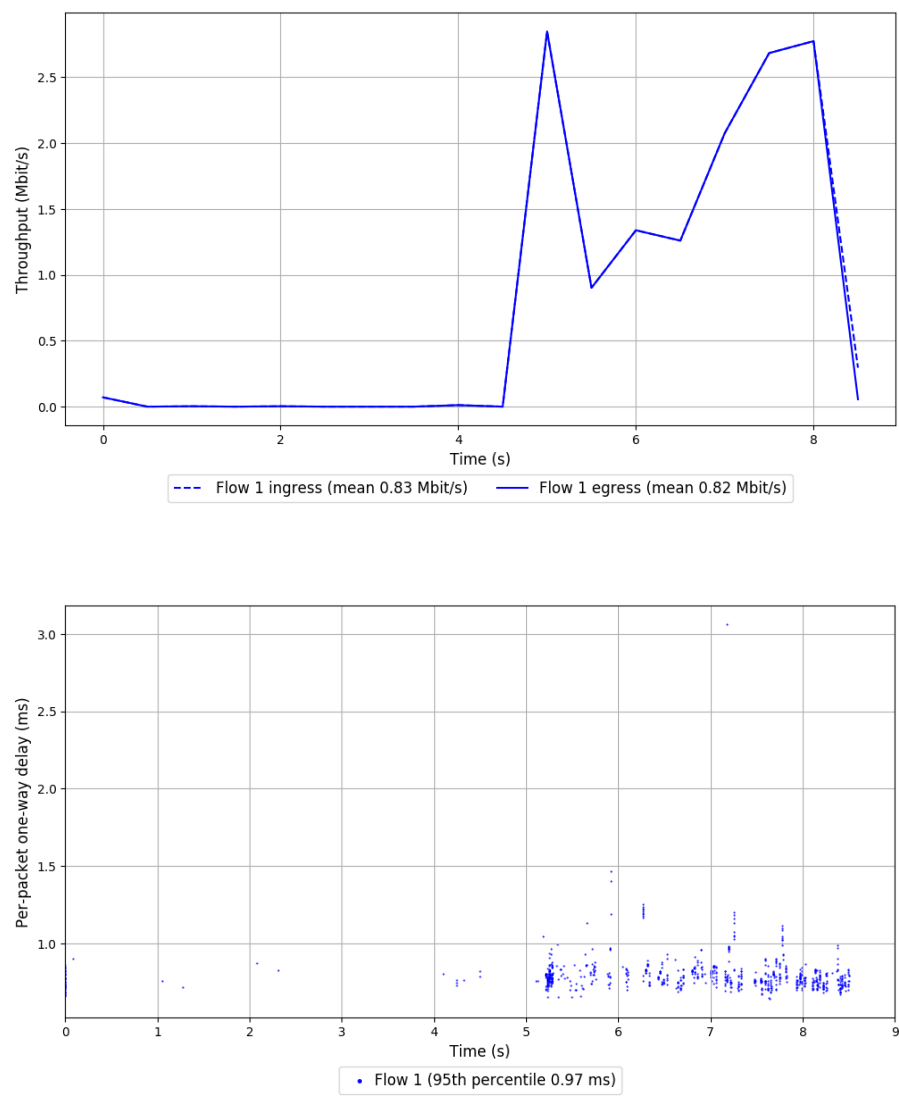
Start at: 2017-12-19 20:59:35

End at: 2017-12-19 21:00:05

Local clock offset: 4.984 ms

Remote clock offset: -0.348 ms

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

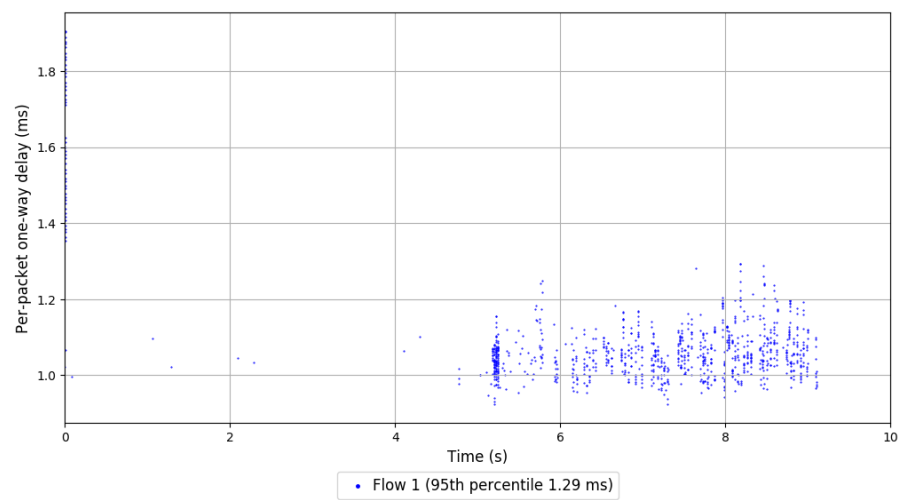
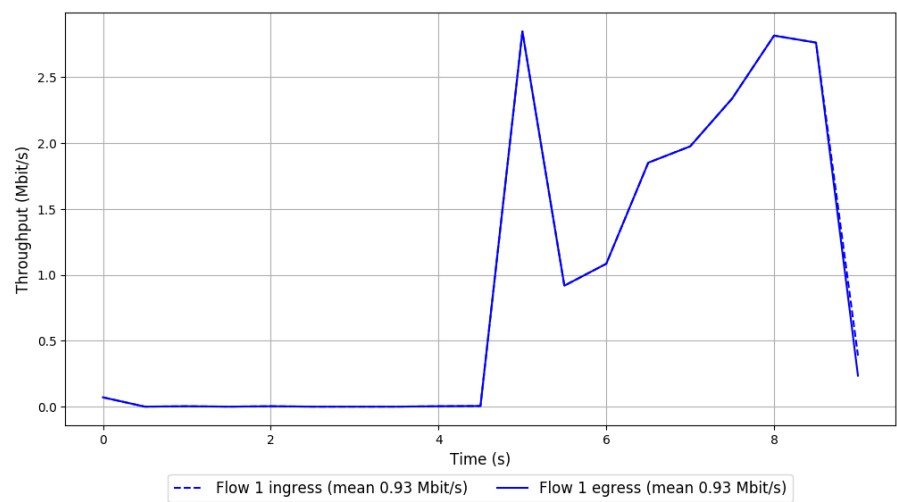
Start at: 2017-12-19 21:20:36

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

Local clock offset: 9.96 ms

Remote clock offset: -0.513 ms

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

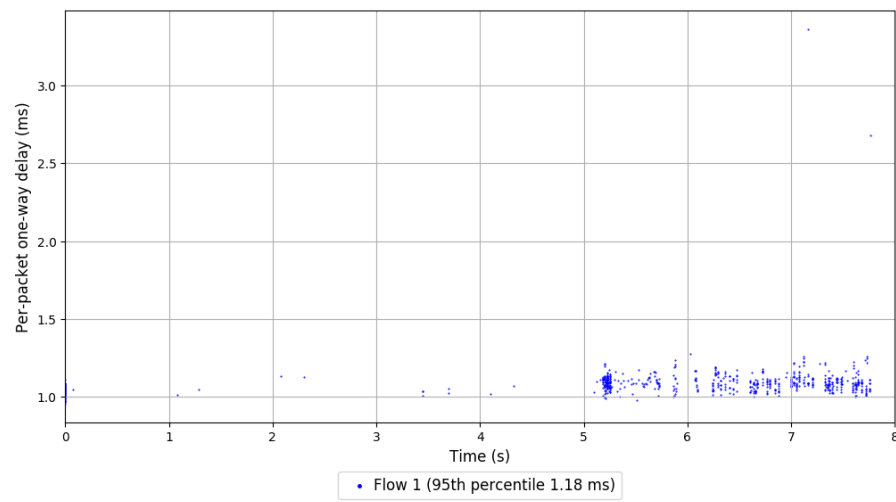
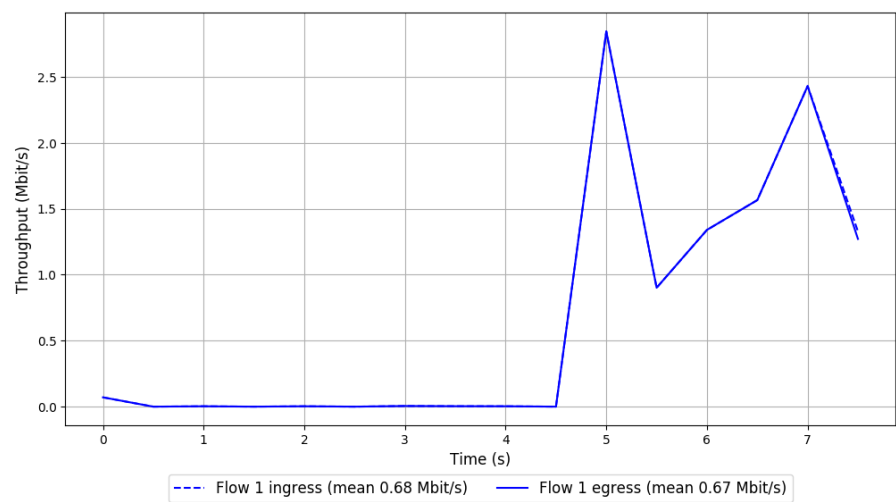
Start at: 2017-12-19 21:41:34

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

Local clock offset: 6.997 ms

Remote clock offset: -0.579 ms

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

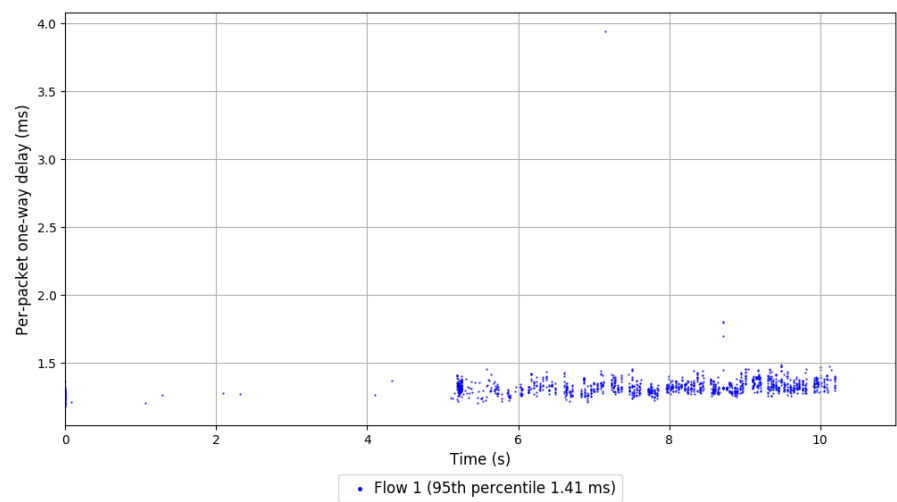
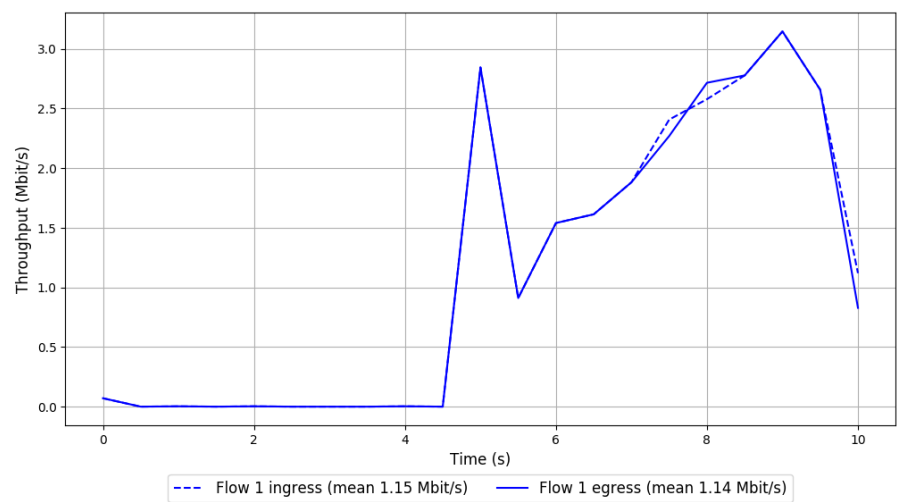
Start at: 2017-12-19 22:02:21

End at: 2017-12-19 22:02:51

Local clock offset: 2.42 ms

Remote clock offset: -0.473 ms

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

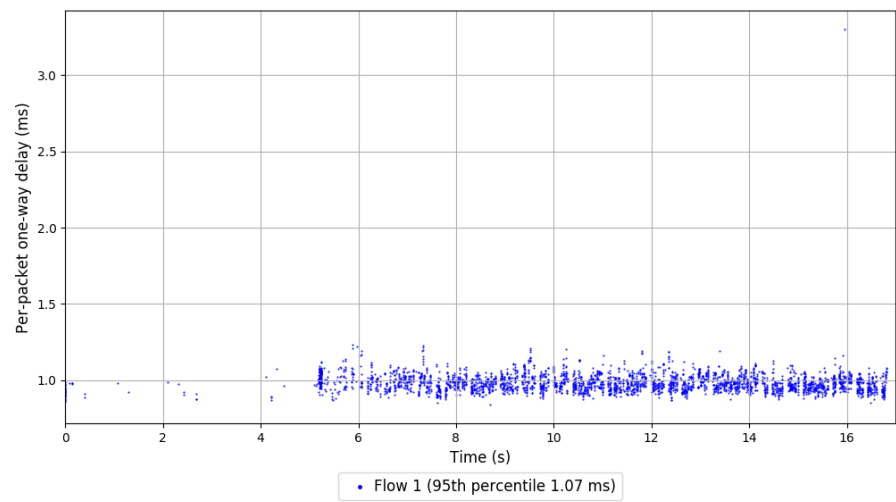
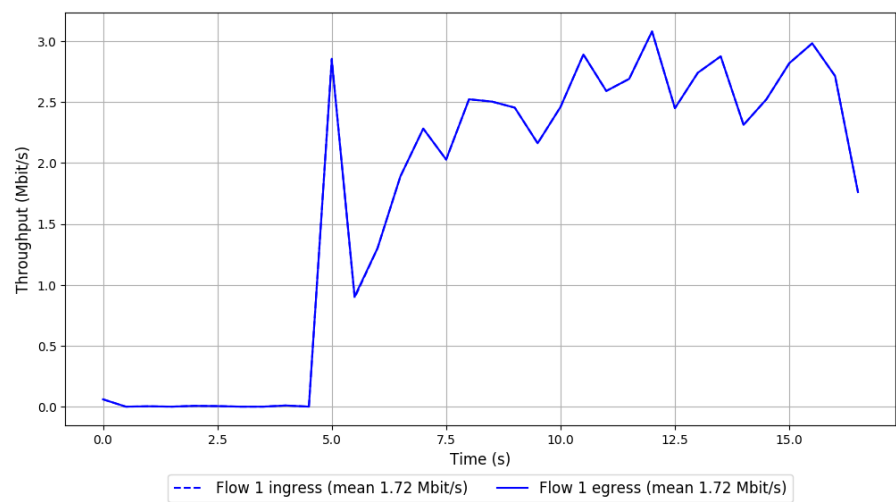
Start at: 2017-12-19 22:23:15

End at: 2017-12-19 22:23:45

Local clock offset: -0.314 ms

Remote clock offset: -0.509 ms

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

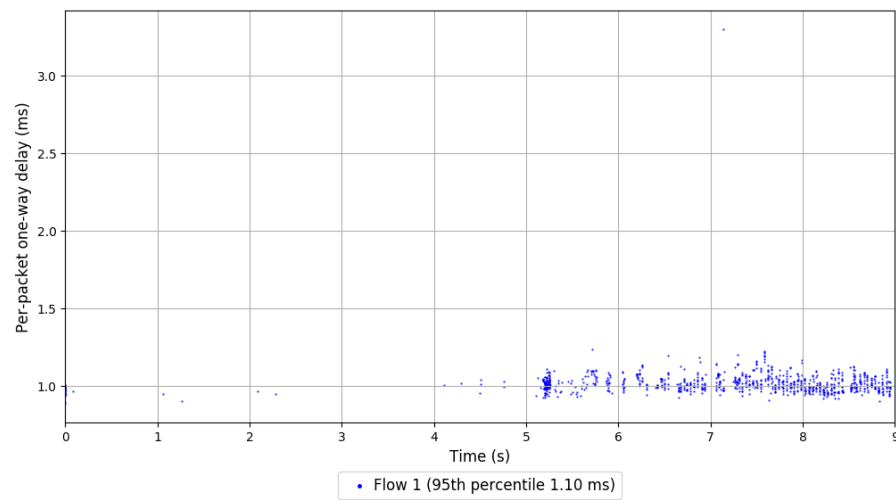
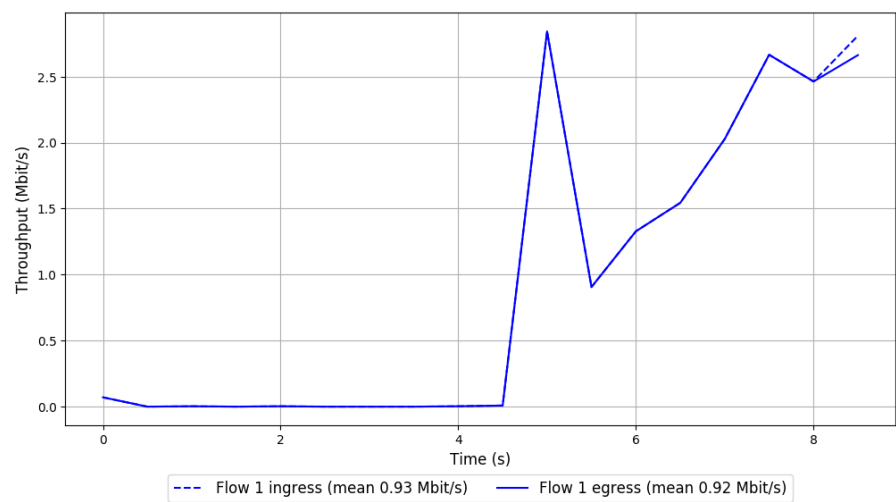
Start at: 2017-12-19 22:44:07

End at: 2017-12-19 22:44:37

Local clock offset: 0.999 ms

Remote clock offset: -0.69 ms

Run 10: Report of WebRTC media — Data Link

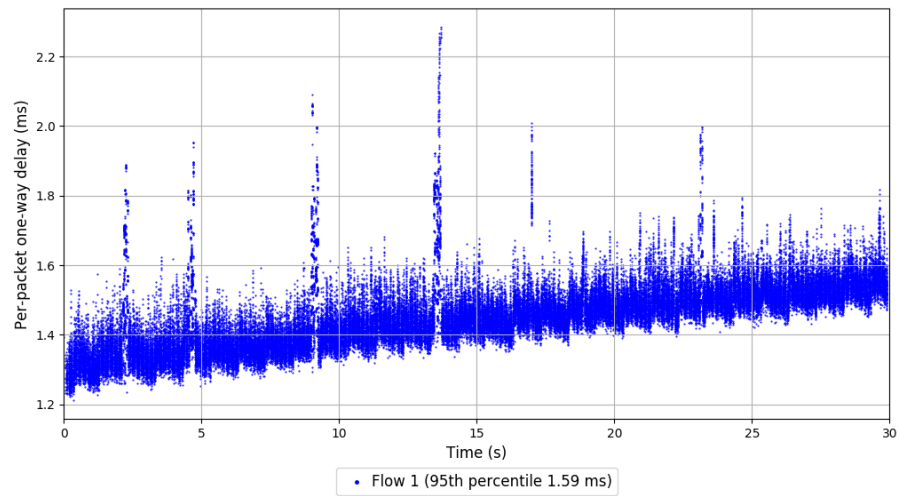
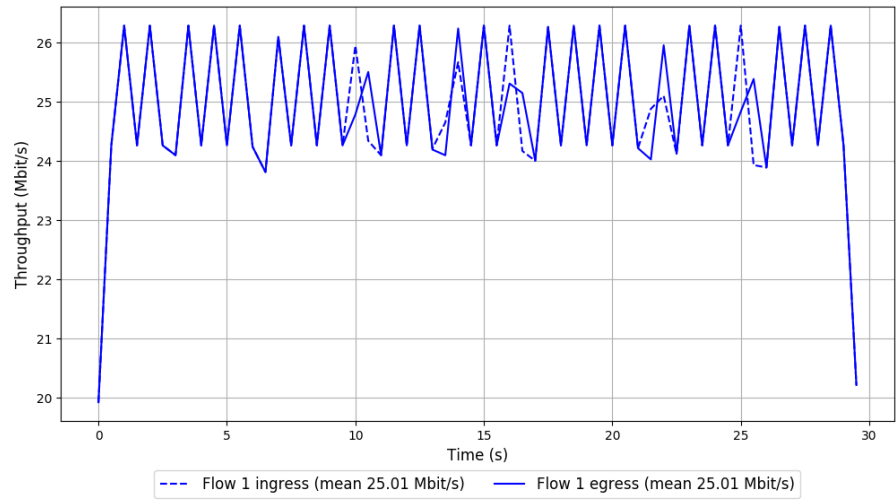


Run 1: Statistics of Sprout

Start at: 2017-12-19 19:34:57
End at: 2017-12-19 19:35:27
Local clock offset: 11.402 ms
Remote clock offset: -1.712 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 25.01 Mbit/s
95th percentile per-packet one-way delay: 1.594 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 25.01 Mbit/s
95th percentile per-packet one-way delay: 1.594 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

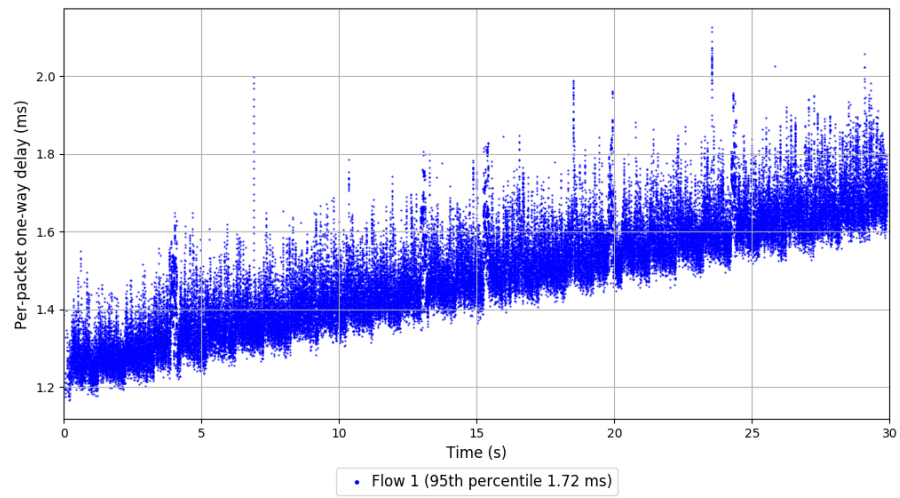
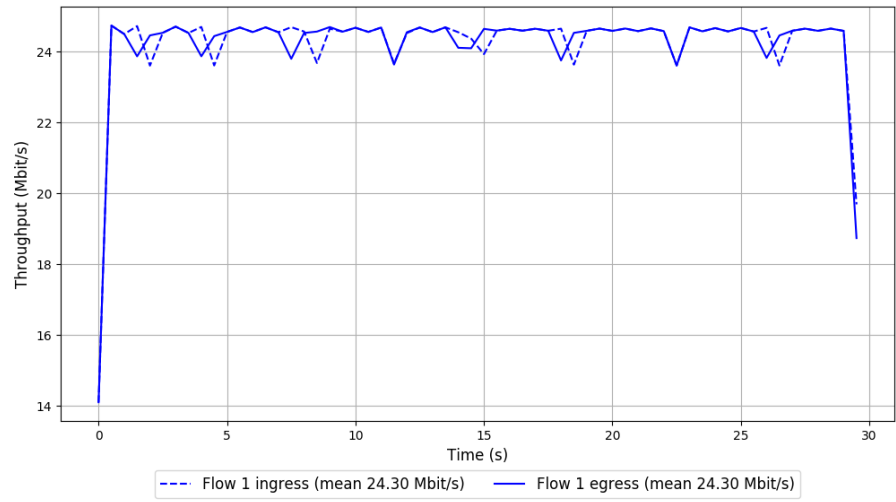


Run 2: Statistics of Sprout

Start at: 2017-12-19 19:55:46
End at: 2017-12-19 19:56:16
Local clock offset: 4.587 ms
Remote clock offset: -1.245 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.30 Mbit/s
95th percentile per-packet one-way delay: 1.722 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 24.30 Mbit/s
95th percentile per-packet one-way delay: 1.722 ms
Loss rate: 0.07%

Run 2: Report of Sprout — Data Link

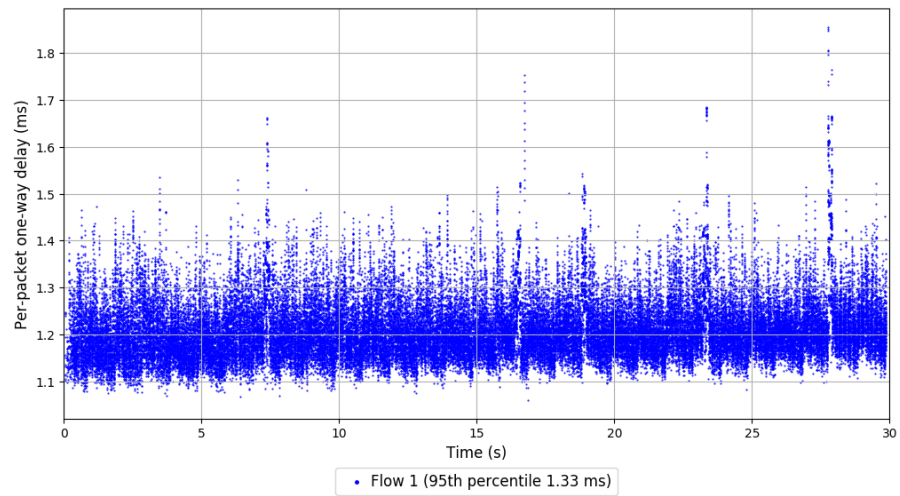
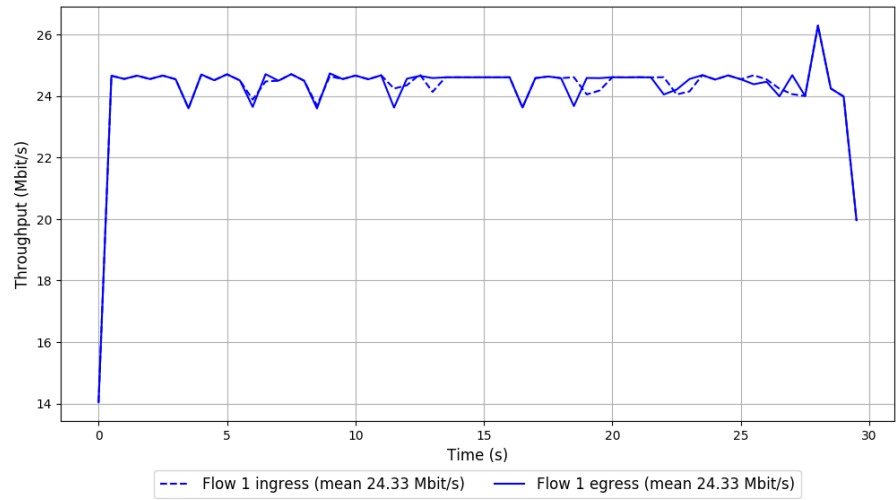


Run 3: Statistics of Sprout

Start at: 2017-12-19 20:16:42
End at: 2017-12-19 20:17:12
Local clock offset: 3.051 ms
Remote clock offset: -0.826 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.33 Mbit/s
95th percentile per-packet one-way delay: 1.332 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.33 Mbit/s
95th percentile per-packet one-way delay: 1.332 ms
Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

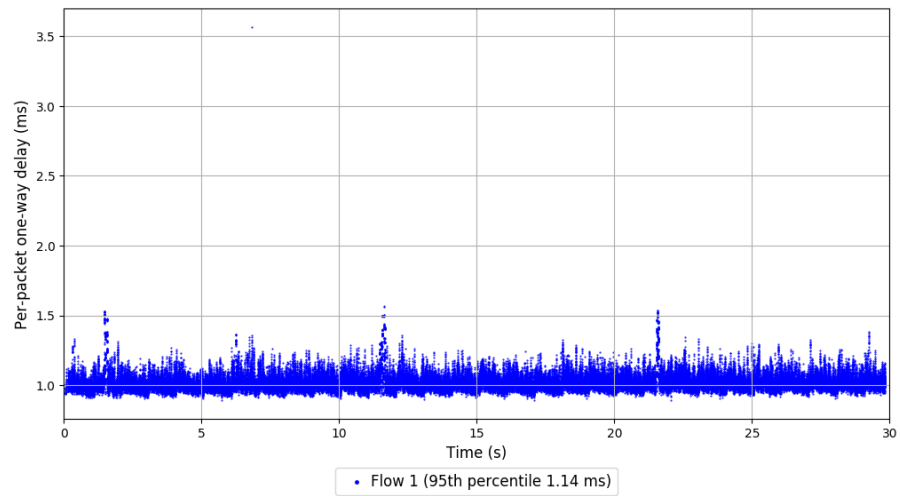
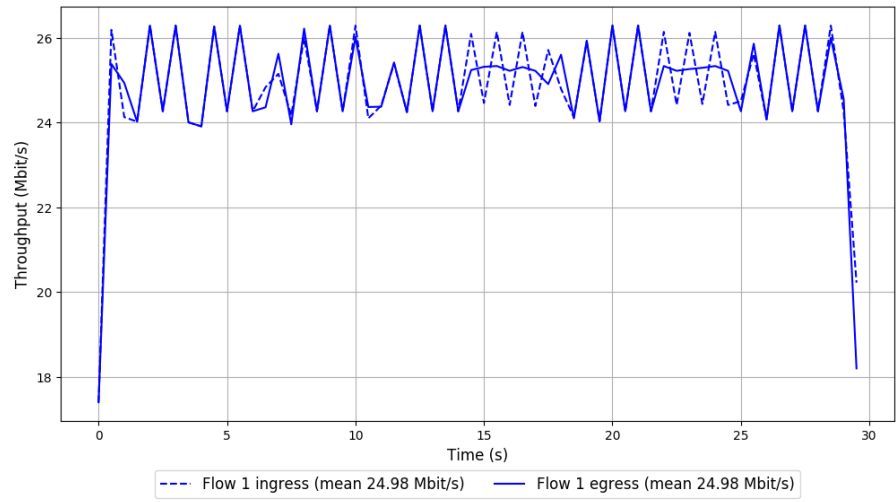


Run 4: Statistics of Sprout

Start at: 2017-12-19 20:37:28
End at: 2017-12-19 20:37:58
Local clock offset: 3.949 ms
Remote clock offset: -0.411 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.98 Mbit/s
95th percentile per-packet one-way delay: 1.135 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.98 Mbit/s
95th percentile per-packet one-way delay: 1.135 ms
Loss rate: 0.14%

Run 4: Report of Sprout — Data Link

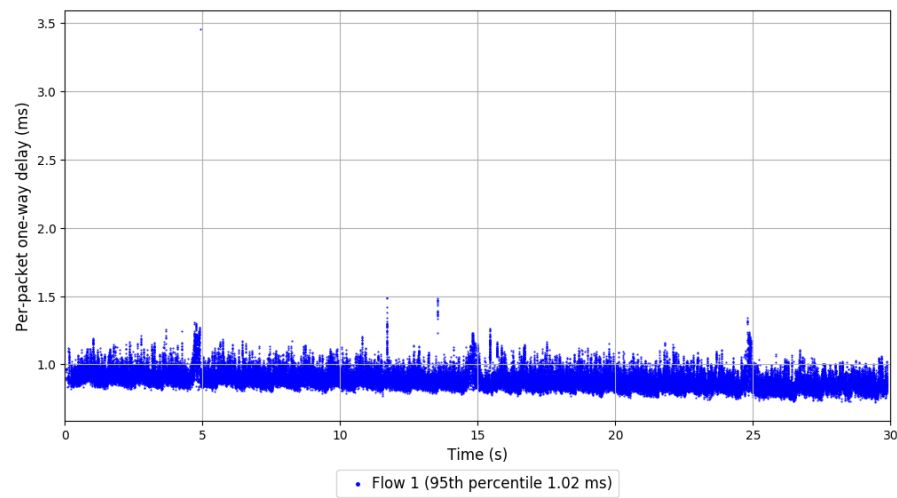
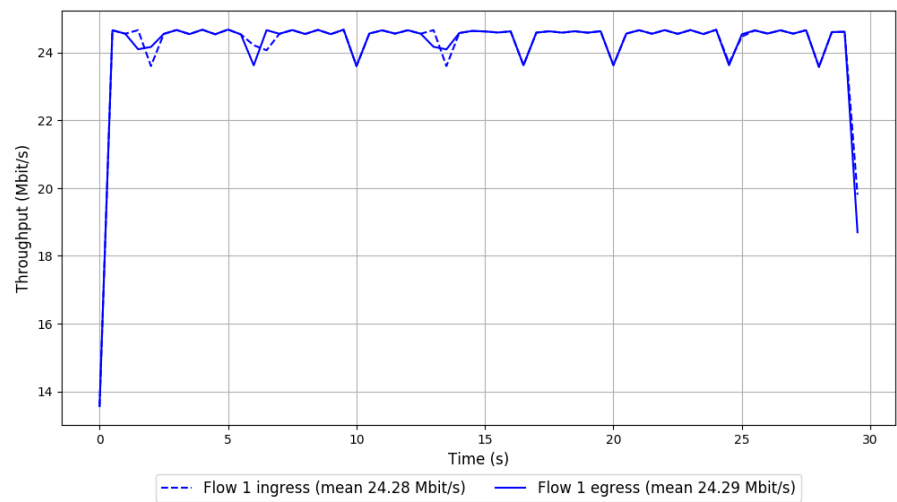


Run 5: Statistics of Sprout

Start at: 2017-12-19 20:58:25
End at: 2017-12-19 20:58:55
Local clock offset: 4.734 ms
Remote clock offset: -0.404 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.29 Mbit/s
95th percentile per-packet one-way delay: 1.020 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 24.29 Mbit/s
95th percentile per-packet one-way delay: 1.020 ms
Loss rate: 0.08%

Run 5: Report of Sprout — Data Link

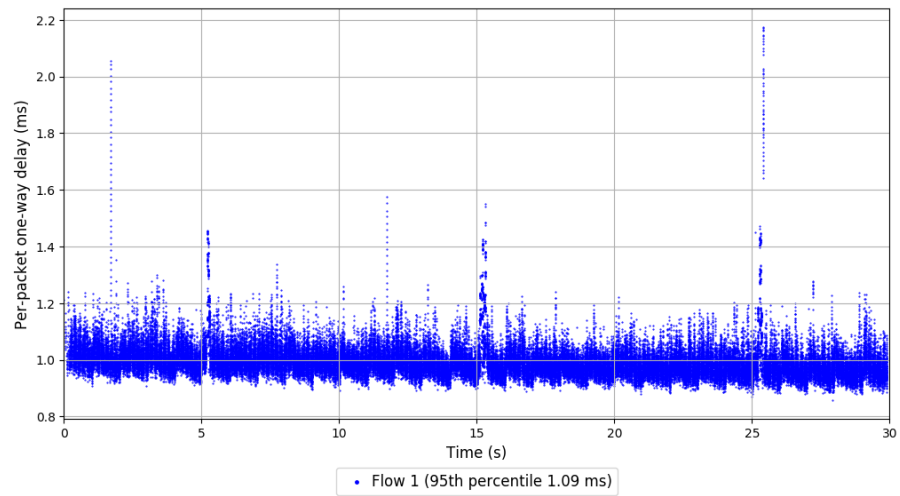
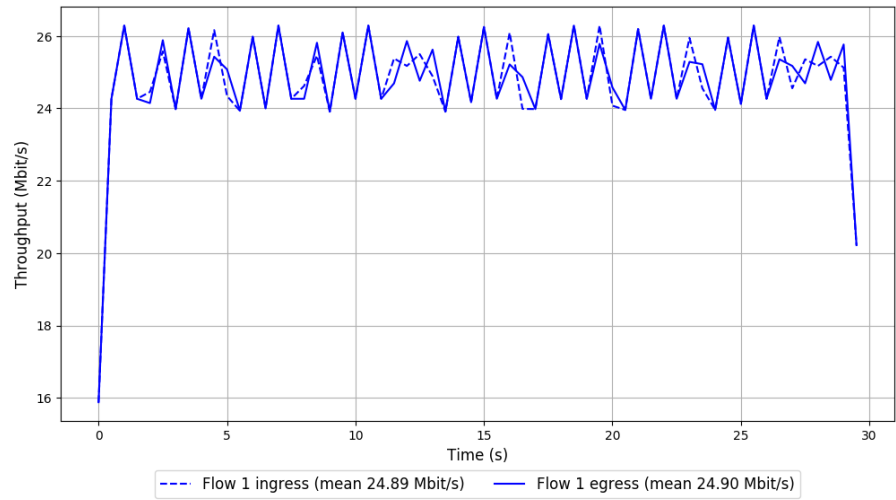


Run 6: Statistics of Sprout

Start at: 2017-12-19 21:19:25
End at: 2017-12-19 21:19:55
Local clock offset: 9.779 ms
Remote clock offset: -0.496 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.90 Mbit/s
95th percentile per-packet one-way delay: 1.092 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.90 Mbit/s
95th percentile per-packet one-way delay: 1.092 ms
Loss rate: 0.00%

Run 6: Report of Sprout — Data Link

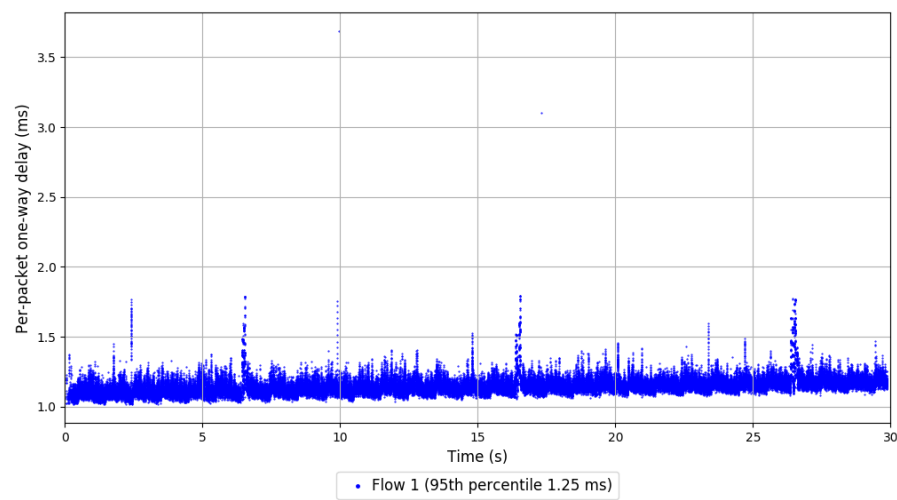
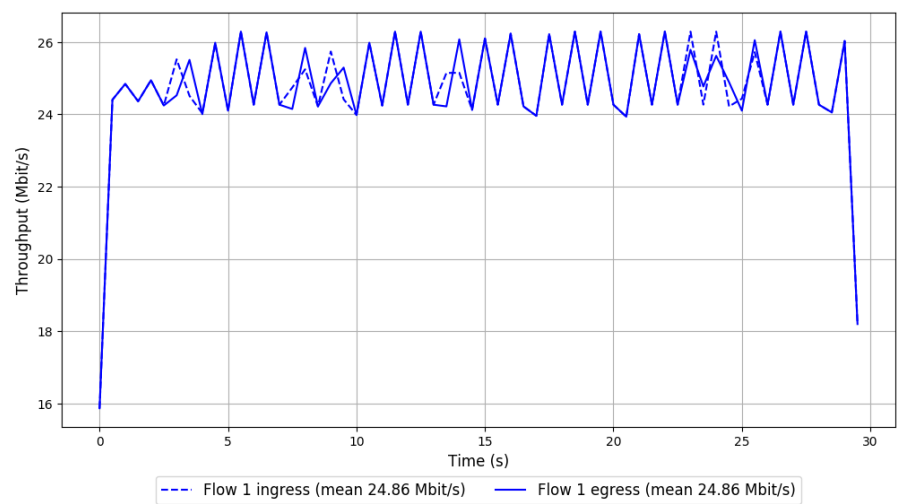


Run 7: Statistics of Sprout

Start at: 2017-12-19 21:40:23
End at: 2017-12-19 21:40:53
Local clock offset: 7.297 ms
Remote clock offset: -0.537 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.86 Mbit/s
95th percentile per-packet one-way delay: 1.245 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.86 Mbit/s
95th percentile per-packet one-way delay: 1.245 ms
Loss rate: 0.00%

Run 7: Report of Sprout — Data Link

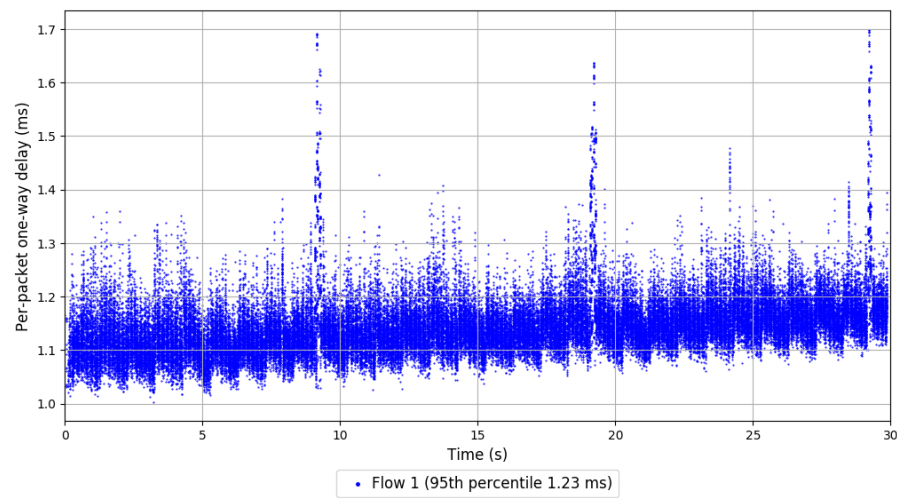
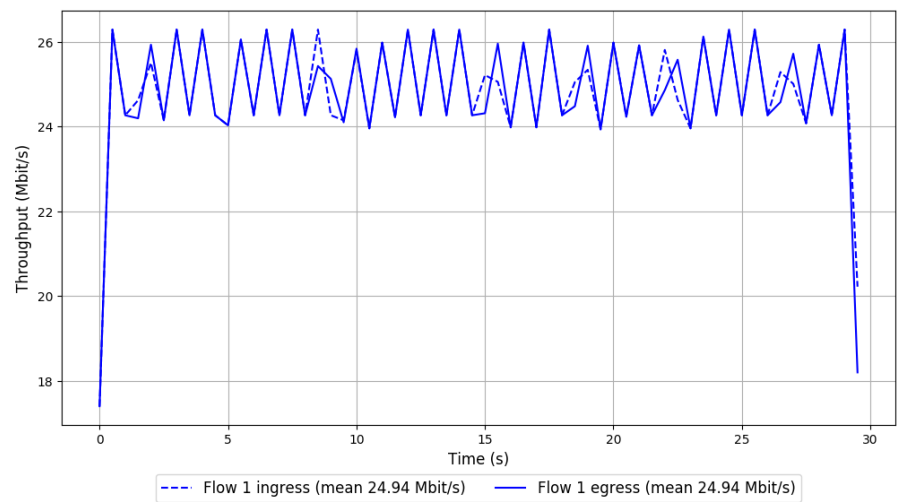


Run 8: Statistics of Sprout

Start at: 2017-12-19 22:01:11
End at: 2017-12-19 22:01:41
Local clock offset: 2.524 ms
Remote clock offset: -0.442 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.94 Mbit/s
95th percentile per-packet one-way delay: 1.233 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.94 Mbit/s
95th percentile per-packet one-way delay: 1.233 ms
Loss rate: 0.14%

Run 8: Report of Sprout — Data Link

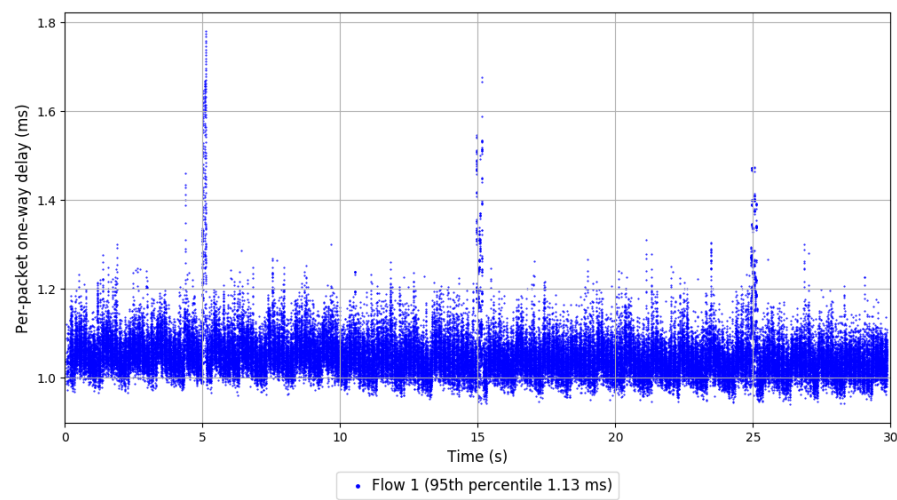
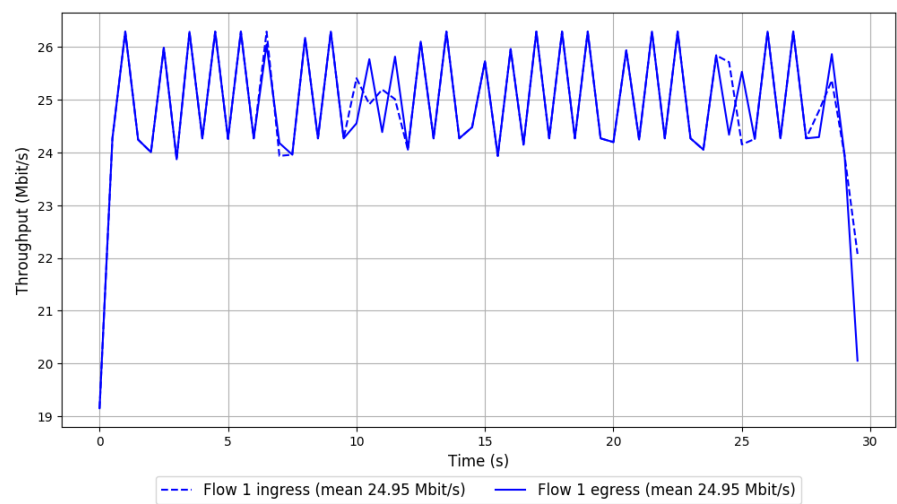


Run 9: Statistics of Sprout

Start at: 2017-12-19 22:22:05
End at: 2017-12-19 22:22:35
Local clock offset: -0.244 ms
Remote clock offset: -0.446 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.95 Mbit/s
95th percentile per-packet one-way delay: 1.131 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.95 Mbit/s
95th percentile per-packet one-way delay: 1.131 ms
Loss rate: 0.14%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-19 22:42:56

End at: 2017-12-19 22:43:26

Local clock offset: 1.125 ms

Remote clock offset: -0.702 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 24.77 Mbit/s

95th percentile per-packet one-way delay: 1.237 ms

Loss rate: 0.00%

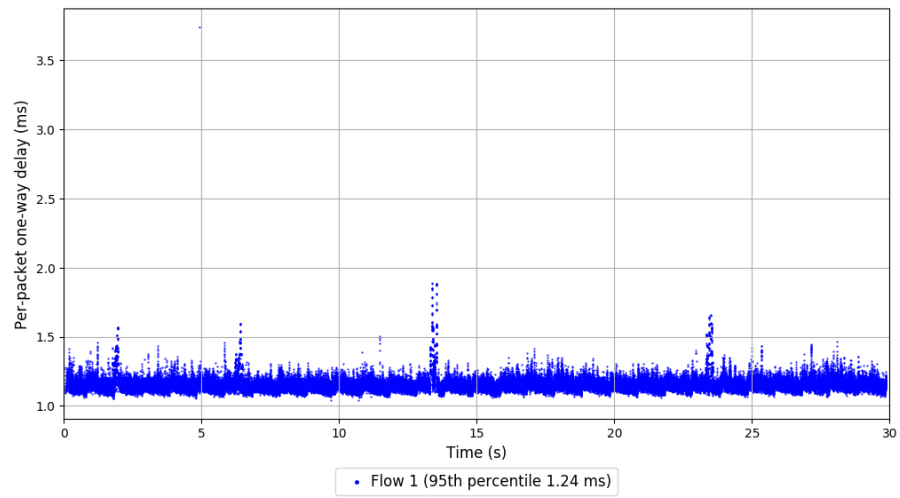
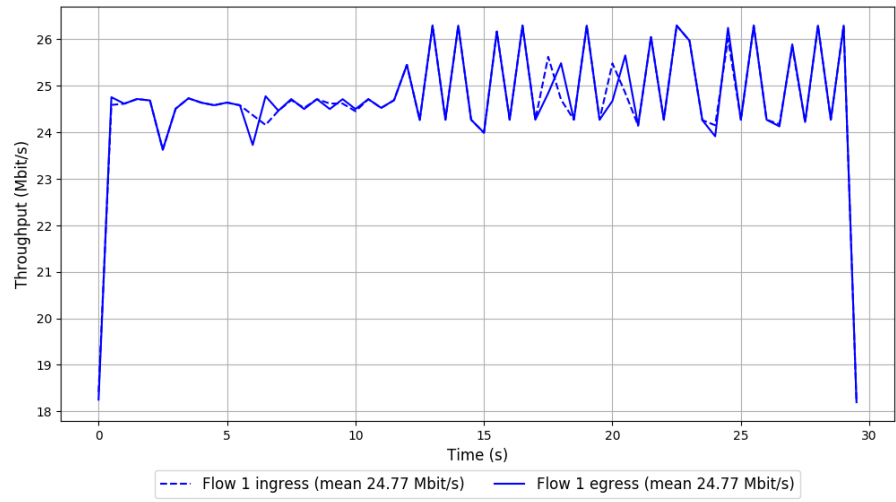
-- Flow 1:

Average throughput: 24.77 Mbit/s

95th percentile per-packet one-way delay: 1.237 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

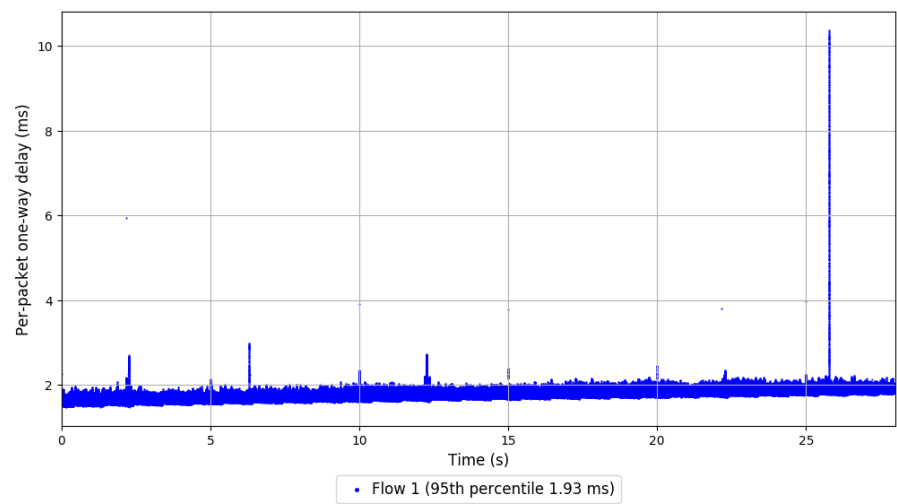
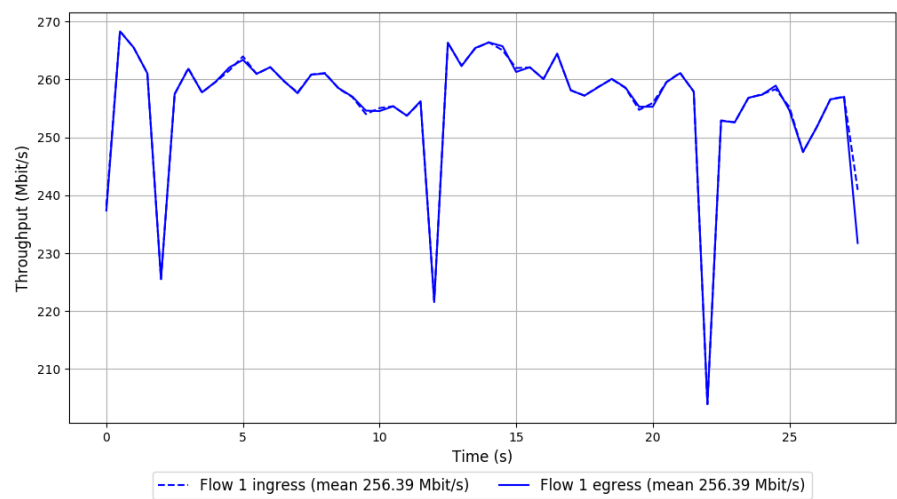


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-19 19:28:51
End at: 2017-12-19 19:29:21
Local clock offset: 15.504 ms
Remote clock offset: -1.994 ms

# Below is generated by plot.py at 2017-12-20 03:08:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 256.39 Mbit/s
95th percentile per-packet one-way delay: 1.925 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 256.39 Mbit/s
95th percentile per-packet one-way delay: 1.925 ms
Loss rate: 0.07%
```


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

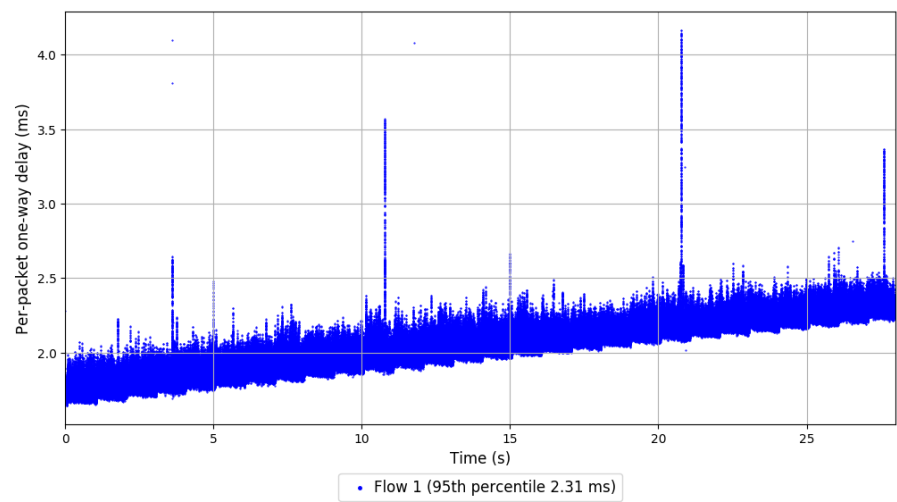
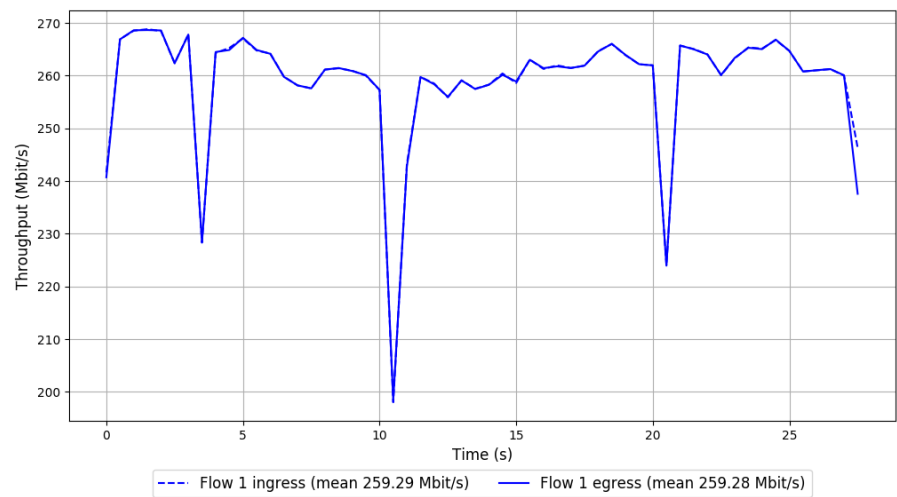


Run 2: Statistics of TaoVA-100x

Start at: 2017-12-19 19:49:42
End at: 2017-12-19 19:50:12
Local clock offset: 10.821 ms
Remote clock offset: -1.233 ms

Below is generated by plot.py at 2017-12-20 03:08:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 259.28 Mbit/s
95th percentile per-packet one-way delay: 2.306 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 259.28 Mbit/s
95th percentile per-packet one-way delay: 2.306 ms
Loss rate: 0.07%

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-19 20:10:34

End at: 2017-12-19 20:11:04

Local clock offset: 3.336 ms

Remote clock offset: -0.938 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 250.22 Mbit/s

95th percentile per-packet one-way delay: 0.955 ms

Loss rate: 0.07%

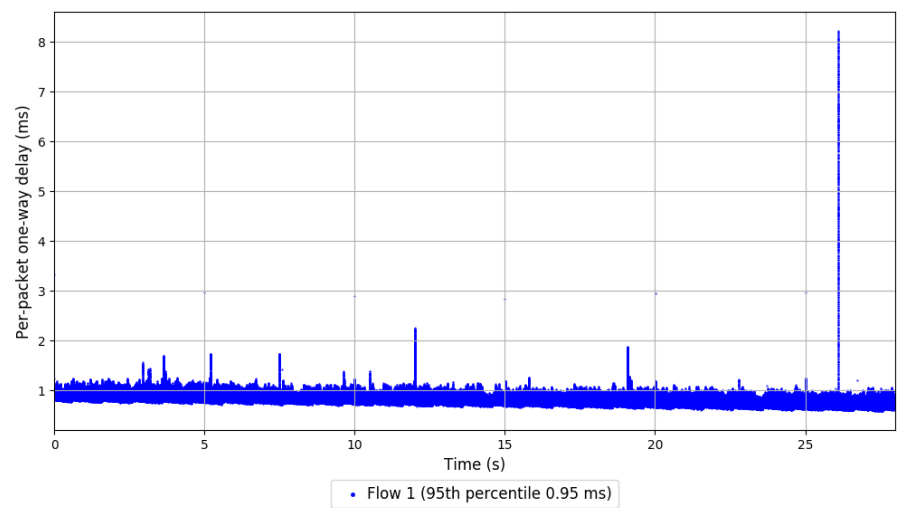
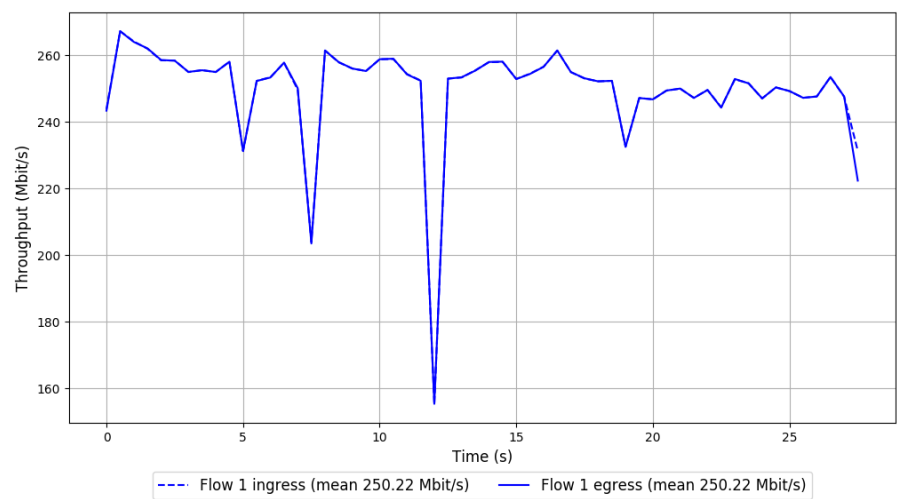
-- Flow 1:

Average throughput: 250.22 Mbit/s

95th percentile per-packet one-way delay: 0.955 ms

Loss rate: 0.07%

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



Run 4: Statistics of TaoVA-100x

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

End at: 2017-12-19 20:31:56

Local clock offset: 4.546 ms

Remote clock offset: -0.399 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 255.12 Mbit/s

95th percentile per-packet one-way delay: 1.237 ms

Loss rate: 0.07%

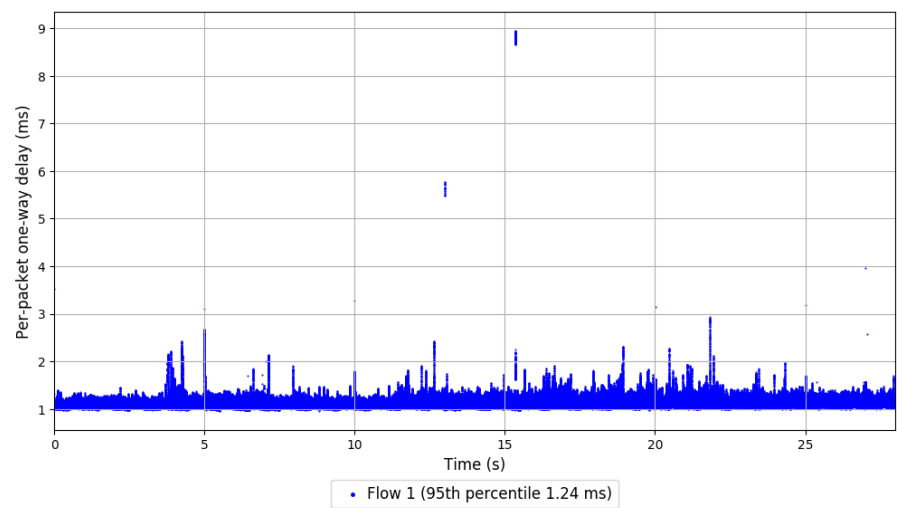
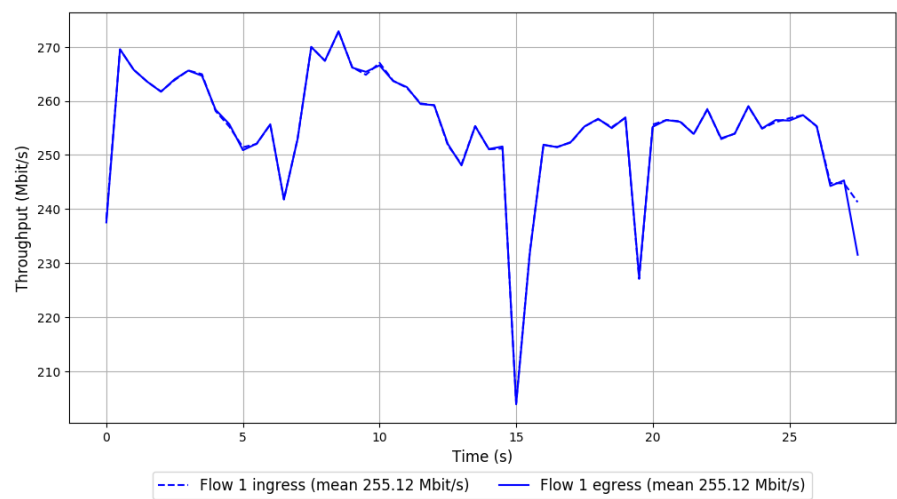
-- Flow 1:

Average throughput: 255.12 Mbit/s

95th percentile per-packet one-way delay: 1.237 ms

Loss rate: 0.07%

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



Run 5: Statistics of TaoVA-100x

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

End at: 2017-12-19 20:52:50

Local clock offset: 3.929 ms

Remote clock offset: -0.397 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 247.81 Mbit/s

95th percentile per-packet one-way delay: 1.173 ms

Loss rate: 0.07%

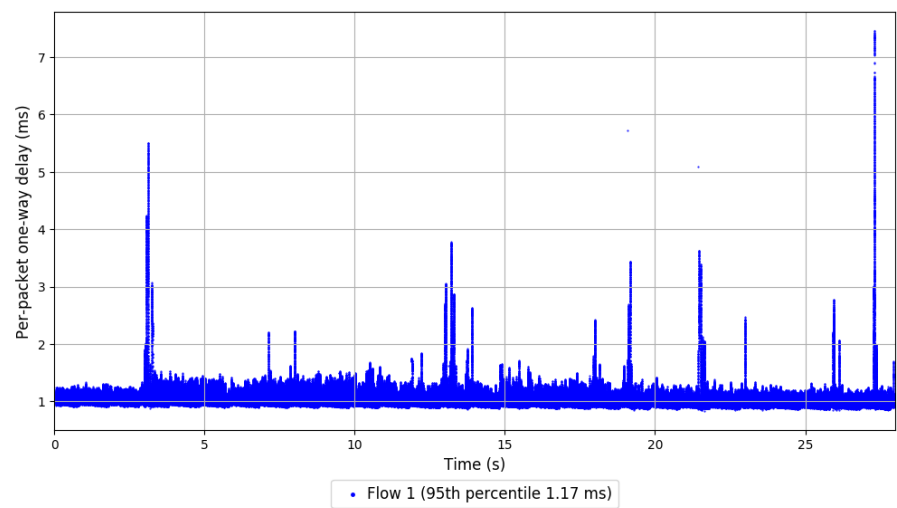
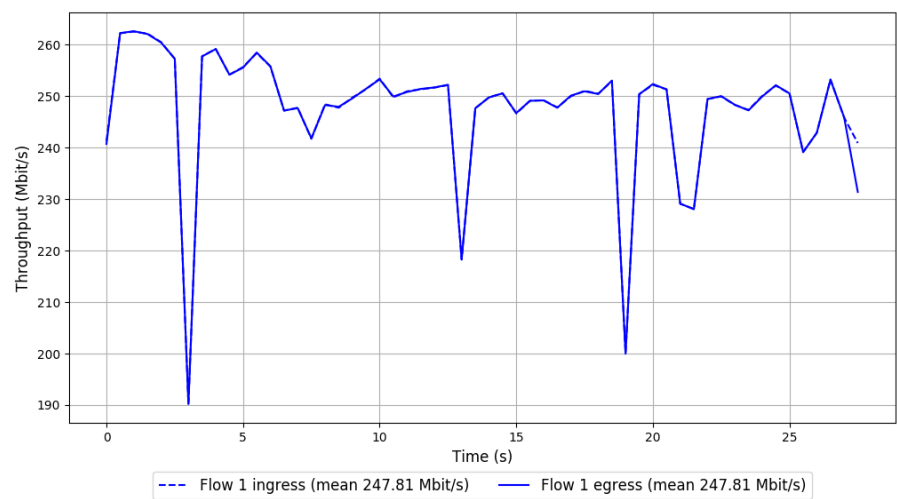
-- Flow 1:

Average throughput: 247.81 Mbit/s

95th percentile per-packet one-way delay: 1.173 ms

Loss rate: 0.07%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-19 21:13:15

End at: 2017-12-19 21:13:45

Local clock offset: 8.628 ms

Remote clock offset: -0.352 ms

Below is generated by plot.py at 2017-12-20 03:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 263.01 Mbit/s

95th percentile per-packet one-way delay: 1.004 ms

Loss rate: 0.07%

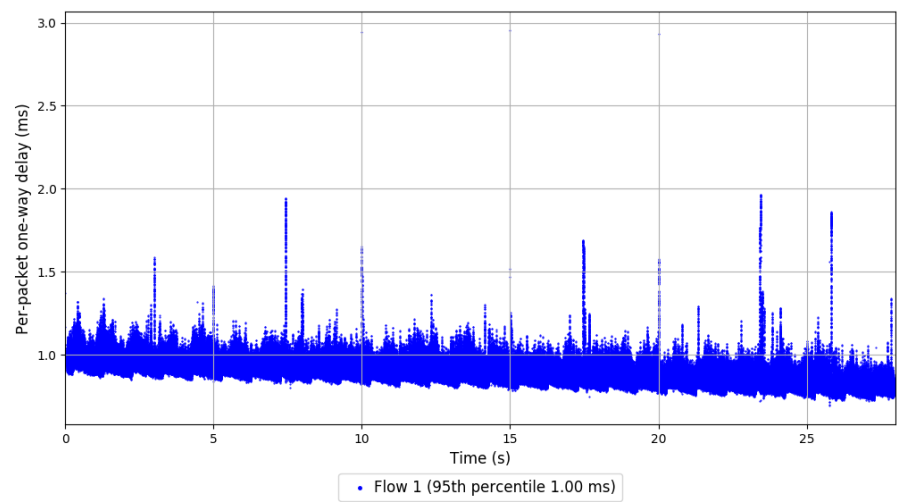
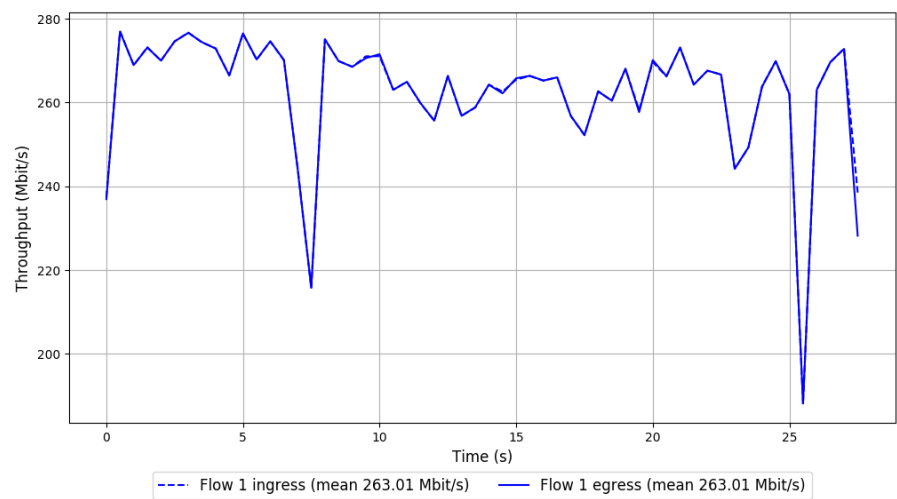
-- Flow 1:

Average throughput: 263.01 Mbit/s

95th percentile per-packet one-way delay: 1.004 ms

Loss rate: 0.07%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-19 21:34:17

End at: 2017-12-19 21:34:48

Local clock offset: 8.541 ms

Remote clock offset: -0.69 ms

Below is generated by plot.py at 2017-12-20 03:12:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 249.04 Mbit/s

95th percentile per-packet one-way delay: 1.450 ms

Loss rate: 0.06%

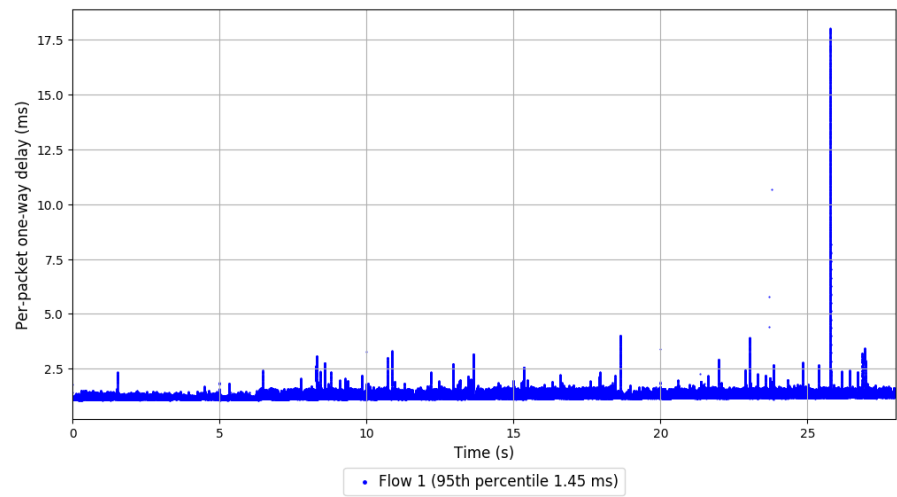
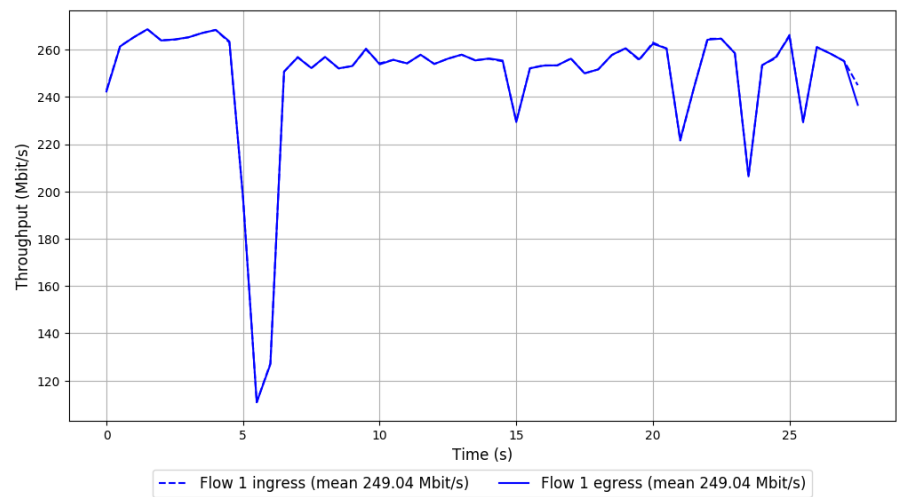
-- Flow 1:

Average throughput: 249.04 Mbit/s

95th percentile per-packet one-way delay: 1.450 ms

Loss rate: 0.06%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-19 21:55:06

End at: 2017-12-19 21:55:36

Local clock offset: 4.459 ms

Remote clock offset: -0.502 ms

Below is generated by plot.py at 2017-12-20 03:13:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 261.01 Mbit/s

95th percentile per-packet one-way delay: 1.506 ms

Loss rate: 0.07%

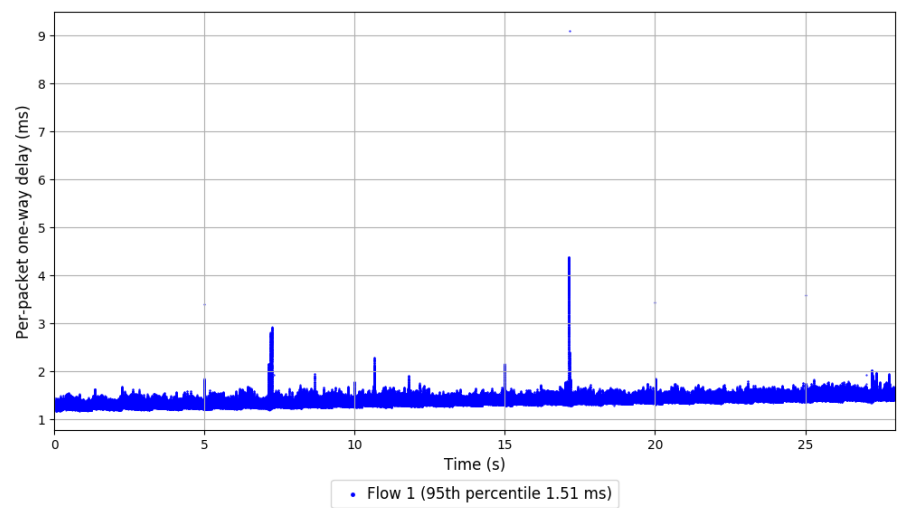
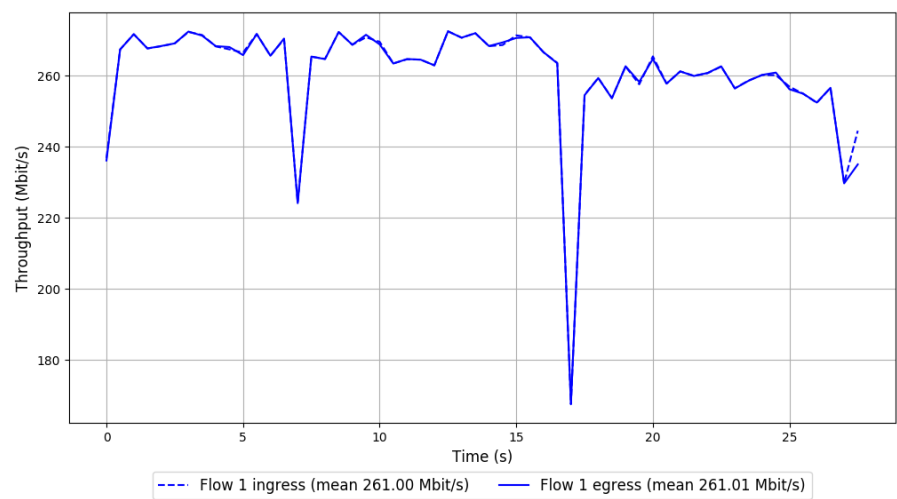
-- Flow 1:

Average throughput: 261.01 Mbit/s

95th percentile per-packet one-way delay: 1.506 ms

Loss rate: 0.07%

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

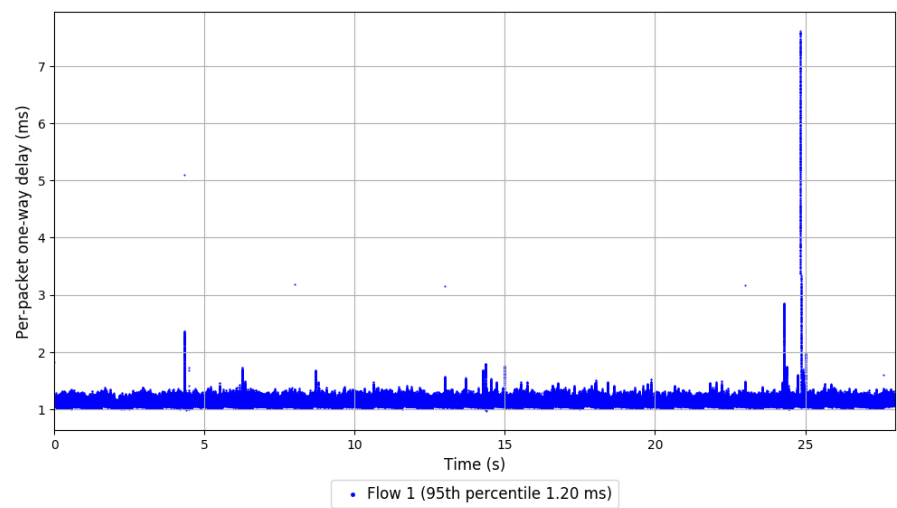
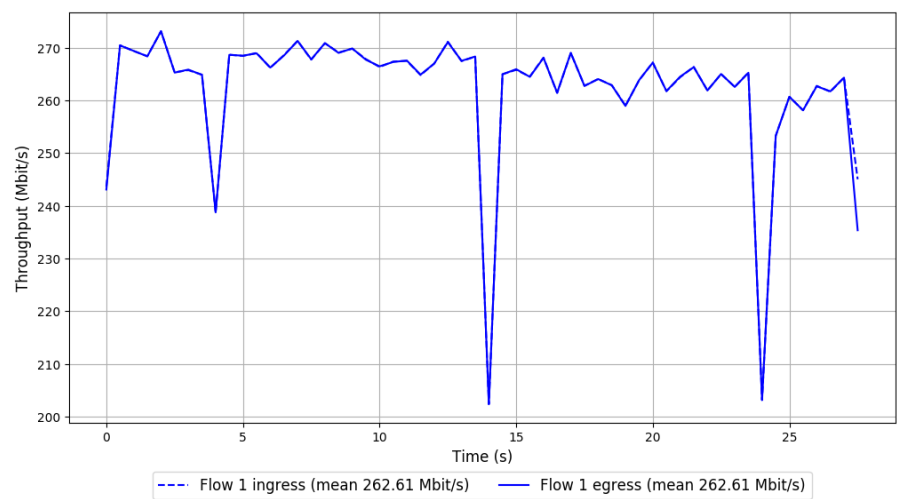


Run 9: Statistics of TaoVA-100x

Start at: 2017-12-19 22:15:59
End at: 2017-12-19 22:16:29
Local clock offset: -0.246 ms
Remote clock offset: -0.466 ms

Below is generated by plot.py at 2017-12-20 03:13:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 262.61 Mbit/s
95th percentile per-packet one-way delay: 1.202 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 262.61 Mbit/s
95th percentile per-packet one-way delay: 1.202 ms
Loss rate: 0.07%

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



Run 10: Statistics of TaoVA-100x

Start at: 2017-12-19 22:36:54

End at: 2017-12-19 22:37:24

Local clock offset: 0.628 ms

Remote clock offset: -0.7 ms

Below is generated by plot.py at 2017-12-20 03:13:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 263.31 Mbit/s

95th percentile per-packet one-way delay: 1.070 ms

Loss rate: 0.07%

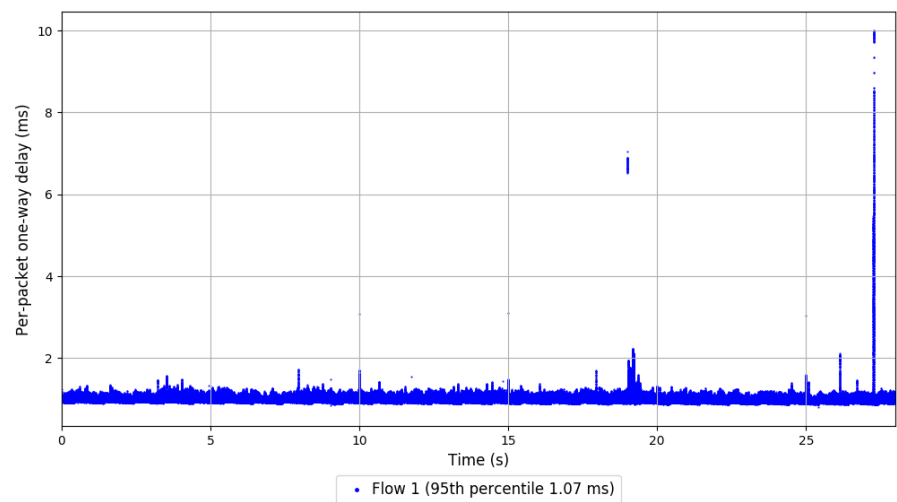
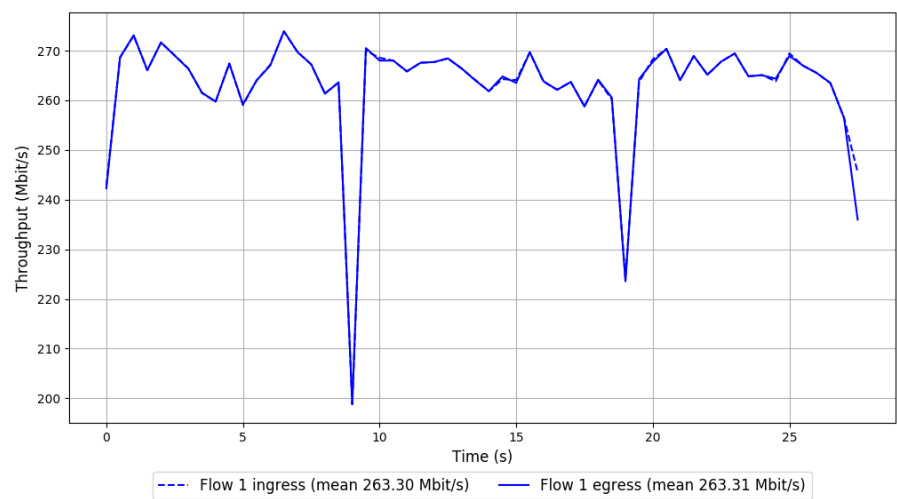
-- Flow 1:

Average throughput: 263.31 Mbit/s

95th percentile per-packet one-way delay: 1.070 ms

Loss rate: 0.07%

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

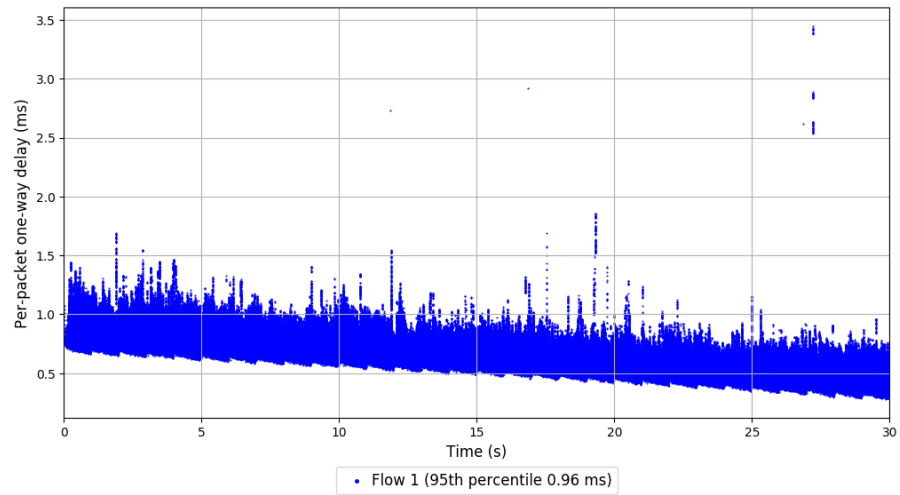
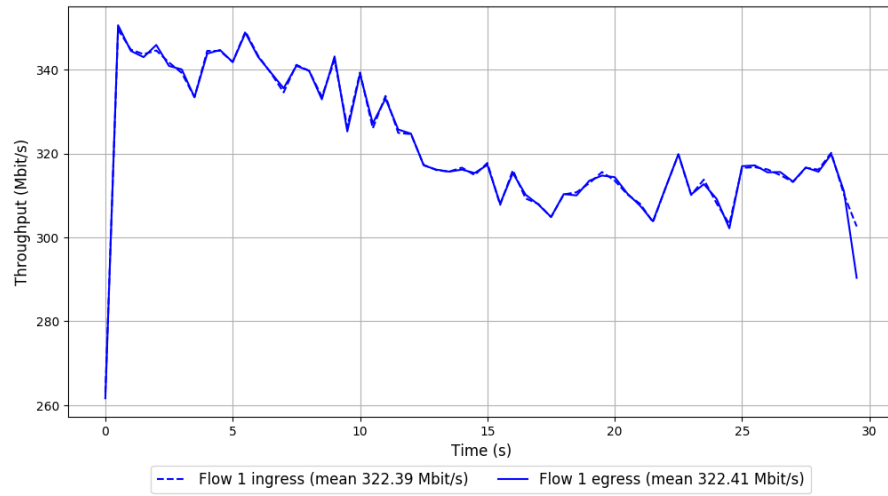


Run 1: Statistics of TCP Vegas

Start at: 2017-12-19 19:20:45
End at: 2017-12-19 19:21:15
Local clock offset: 16.879 ms
Remote clock offset: -2.281 ms

Below is generated by plot.py at 2017-12-20 03:13:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 322.41 Mbit/s
95th percentile per-packet one-way delay: 0.956 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 322.41 Mbit/s
95th percentile per-packet one-way delay: 0.956 ms
Loss rate: 0.06%

Run 1: Report of TCP Vegas — Data Link

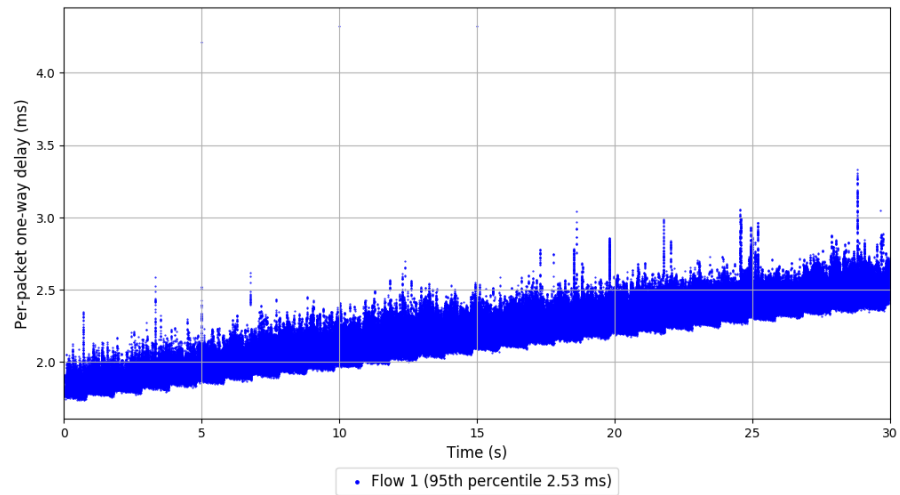
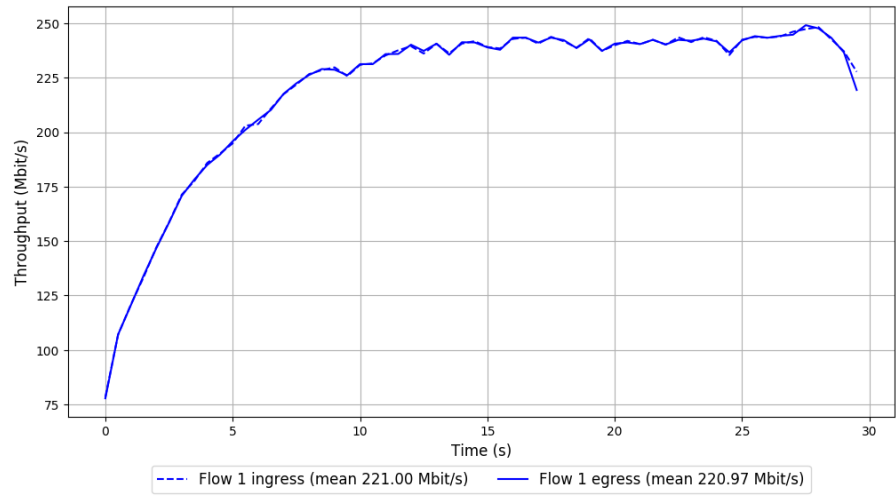


Run 2: Statistics of TCP Vegas

Start at: 2017-12-19 19:41:43
End at: 2017-12-19 19:42:13
Local clock offset: 12.363 ms
Remote clock offset: -1.312 ms

Below is generated by plot.py at 2017-12-20 03:13:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 220.97 Mbit/s
95th percentile per-packet one-way delay: 2.533 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 220.97 Mbit/s
95th percentile per-packet one-way delay: 2.533 ms
Loss rate: 0.07%

Run 2: Report of TCP Vegas — Data Link

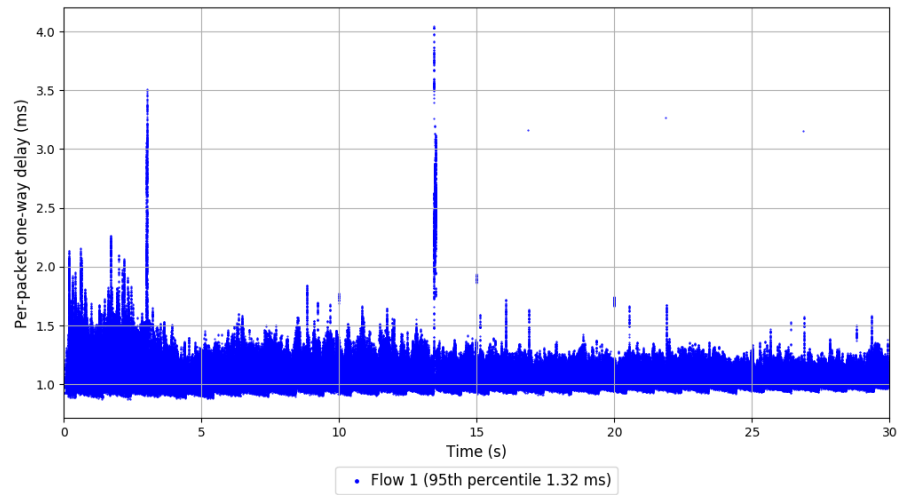
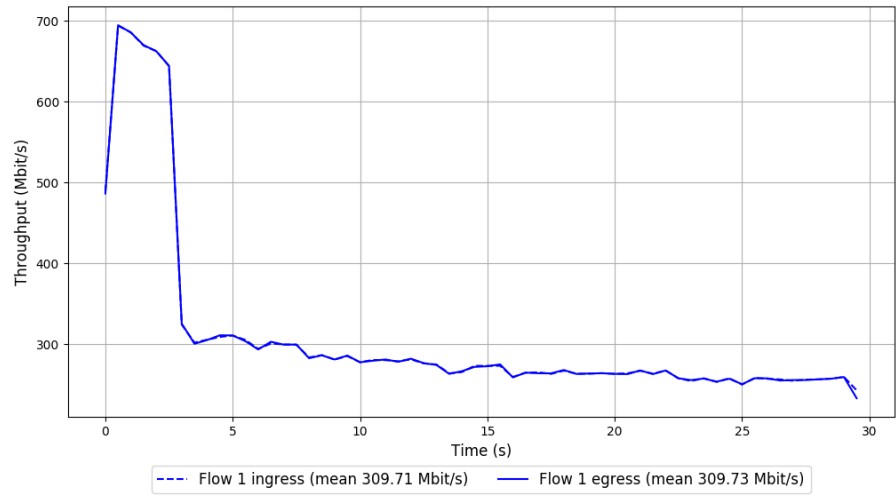


Run 3: Statistics of TCP Vegas

Start at: 2017-12-19 20:02:34
End at: 2017-12-19 20:03:04
Local clock offset: 1.481 ms
Remote clock offset: -1.225 ms

Below is generated by plot.py at 2017-12-20 03:13:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 309.73 Mbit/s
95th percentile per-packet one-way delay: 1.317 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 309.73 Mbit/s
95th percentile per-packet one-way delay: 1.317 ms
Loss rate: 0.06%

Run 3: Report of TCP Vegas — Data Link

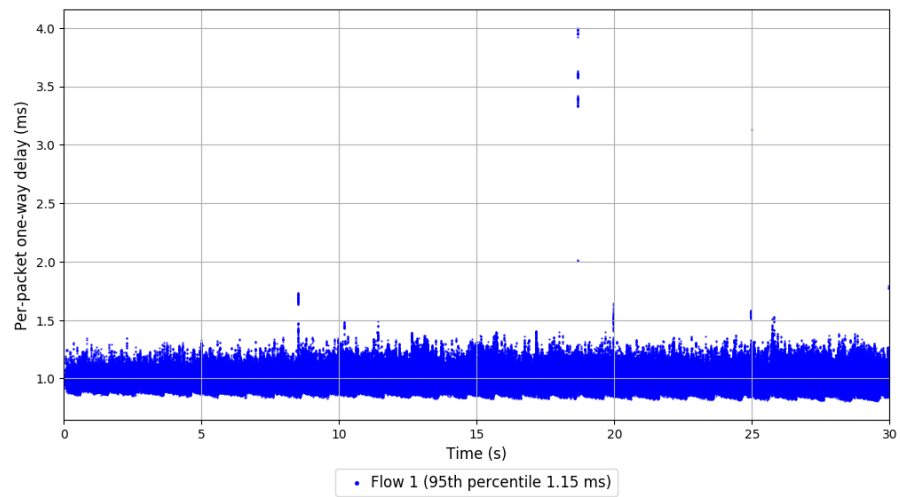
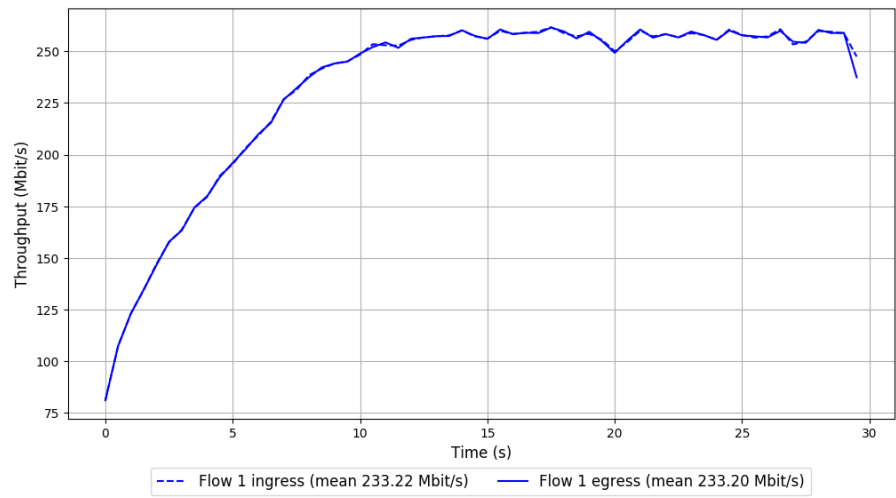


Run 4: Statistics of TCP Vegas

Start at: 2017-12-19 20:23:29
End at: 2017-12-19 20:23:59
Local clock offset: 3.214 ms
Remote clock offset: -0.534 ms

Below is generated by plot.py at 2017-12-20 03:13:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 233.20 Mbit/s
95th percentile per-packet one-way delay: 1.153 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 233.20 Mbit/s
95th percentile per-packet one-way delay: 1.153 ms
Loss rate: 0.07%

Run 4: Report of TCP Vegas — Data Link

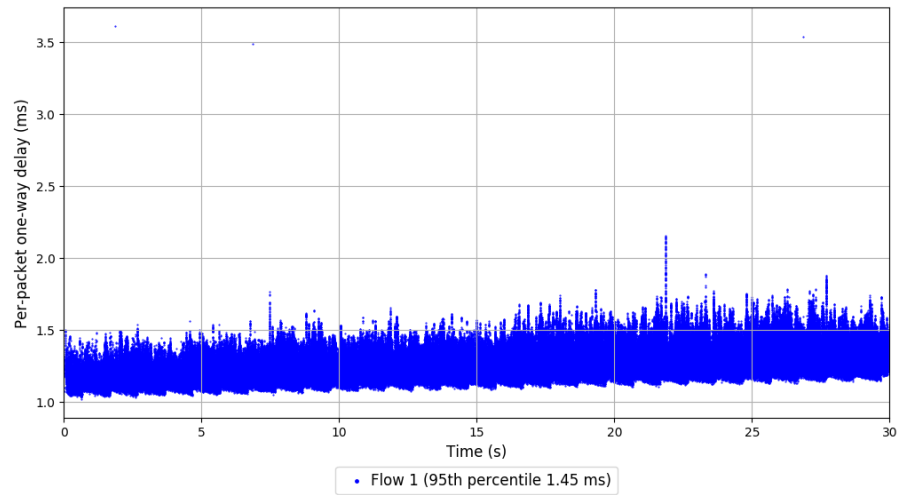
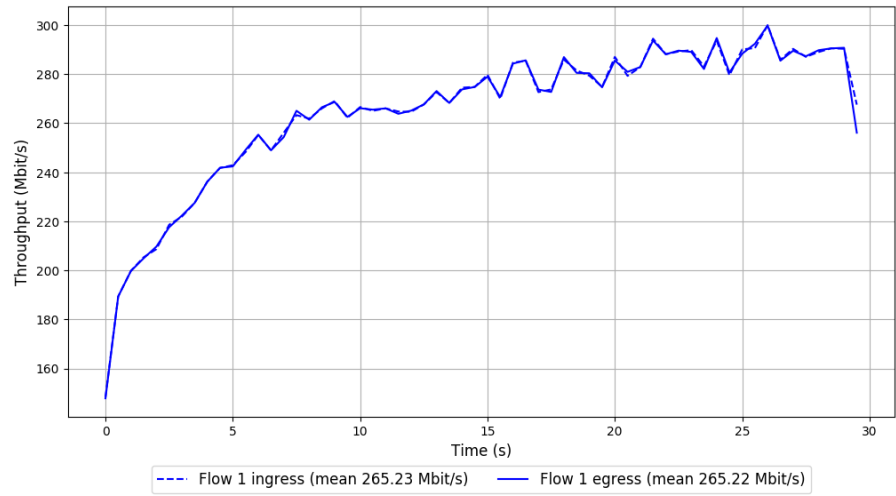


Run 5: Statistics of TCP Vegas

Start at: 2017-12-19 20:44:15
End at: 2017-12-19 20:44:45
Local clock offset: 4.361 ms
Remote clock offset: -0.396 ms

Below is generated by plot.py at 2017-12-20 03:13:46
Datalink statistics
-- Total of 1 flow:
Average throughput: 265.22 Mbit/s
95th percentile per-packet one-way delay: 1.453 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 265.22 Mbit/s
95th percentile per-packet one-way delay: 1.453 ms
Loss rate: 0.07%

Run 5: Report of TCP Vegas — Data Link

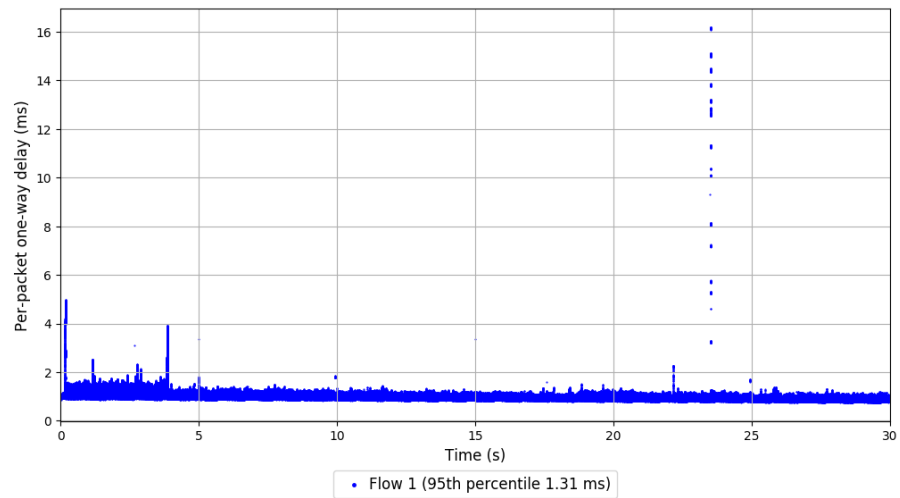
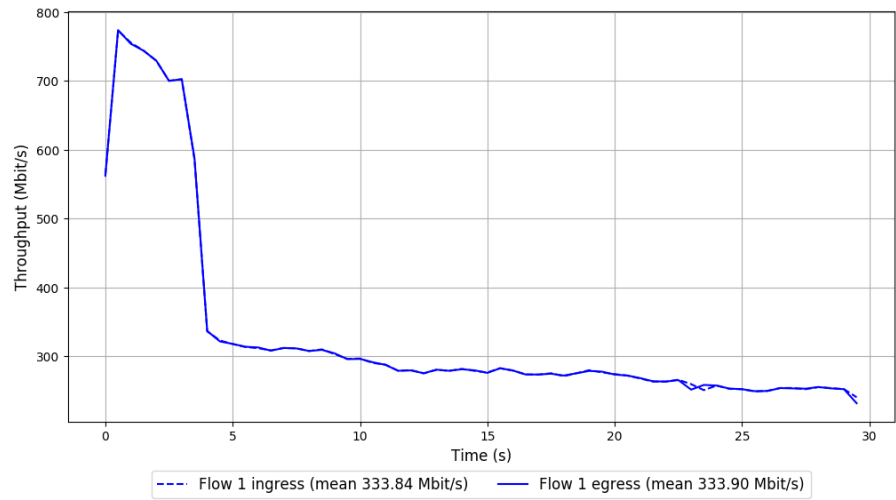


Run 6: Statistics of TCP Vegas

Start at: 2017-12-19 21:05:12
End at: 2017-12-19 21:05:42
Local clock offset: 6.397 ms
Remote clock offset: -0.357 ms

Below is generated by plot.py at 2017-12-20 03:15:48
Datalink statistics
-- Total of 1 flow:
Average throughput: 333.90 Mbit/s
95th percentile per-packet one-way delay: 1.310 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 333.90 Mbit/s
95th percentile per-packet one-way delay: 1.310 ms
Loss rate: 0.05%

Run 6: Report of TCP Vegas — Data Link

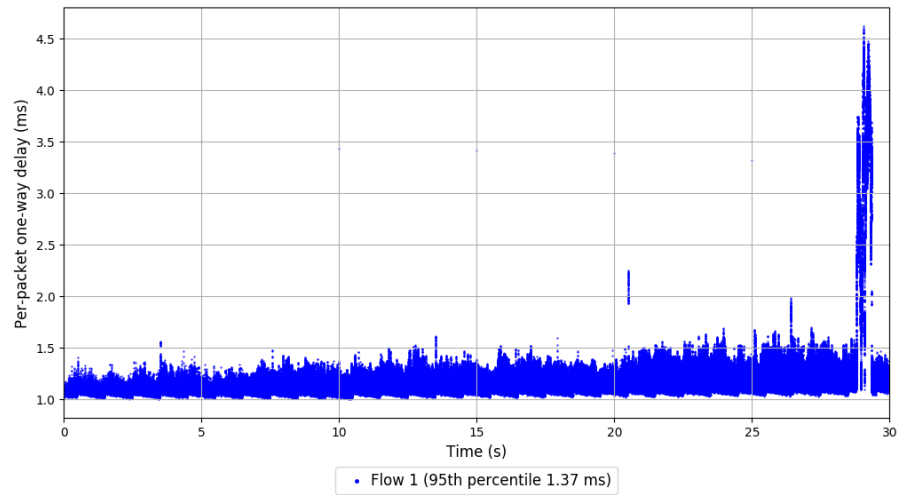
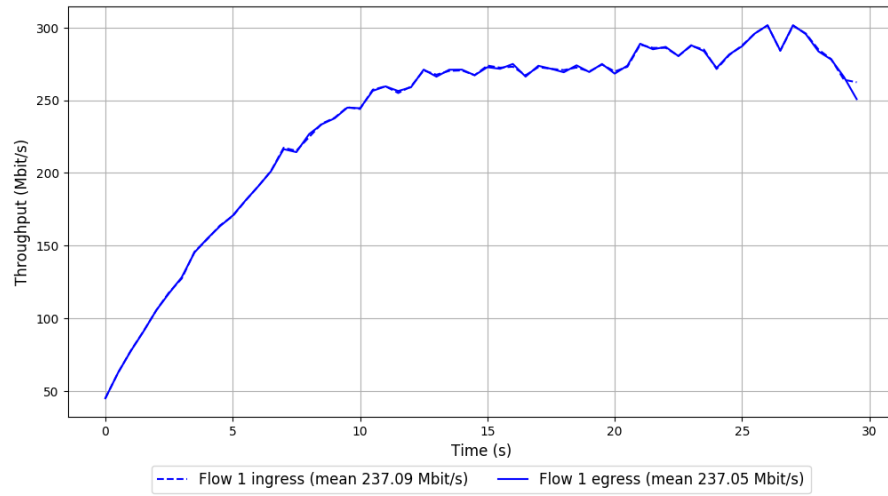


Run 7: Statistics of TCP Vegas

Start at: 2017-12-19 21:26:11
End at: 2017-12-19 21:26:41
Local clock offset: 9.558 ms
Remote clock offset: -0.631 ms

Below is generated by plot.py at 2017-12-20 03:15:48
Datalink statistics
-- Total of 1 flow:
Average throughput: 237.05 Mbit/s
95th percentile per-packet one-way delay: 1.366 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 237.05 Mbit/s
95th percentile per-packet one-way delay: 1.366 ms
Loss rate: 0.08%

Run 7: Report of TCP Vegas — Data Link

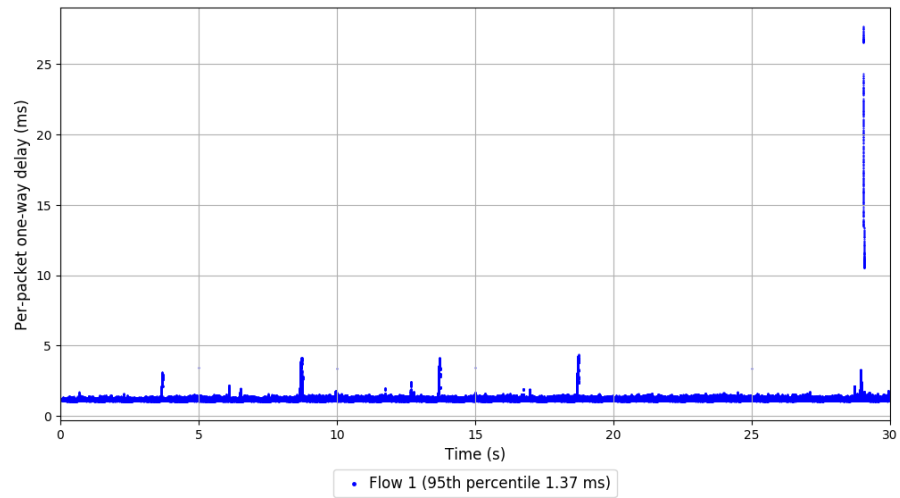
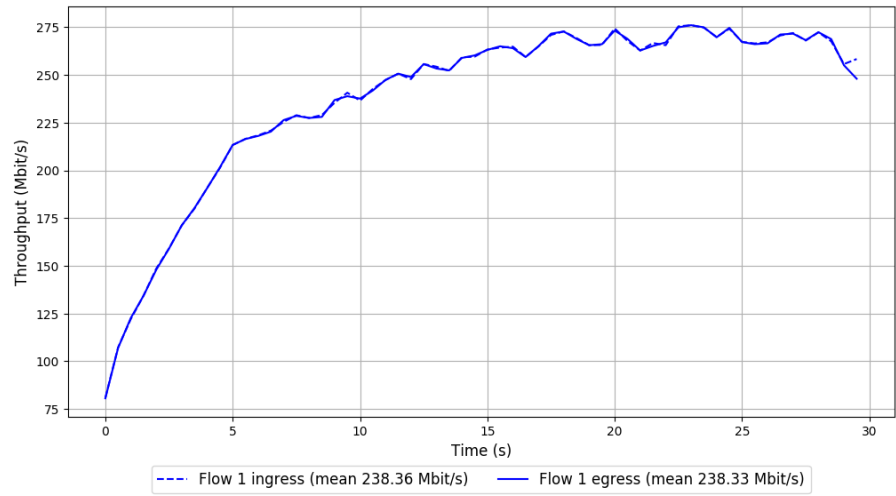


Run 8: Statistics of TCP Vegas

Start at: 2017-12-19 21:47:09
End at: 2017-12-19 21:47:39
Local clock offset: 6.566 ms
Remote clock offset: -0.591 ms

Below is generated by plot.py at 2017-12-20 03:15:48
Datalink statistics
-- Total of 1 flow:
Average throughput: 238.33 Mbit/s
95th percentile per-packet one-way delay: 1.370 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 238.33 Mbit/s
95th percentile per-packet one-way delay: 1.370 ms
Loss rate: 0.08%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-19 22:07:58

End at: 2017-12-19 22:08:28

Local clock offset: 0.583 ms

Remote clock offset: -0.372 ms

Below is generated by plot.py at 2017-12-20 03:15:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 233.61 Mbit/s

95th percentile per-packet one-way delay: 1.353 ms

Loss rate: 0.07%

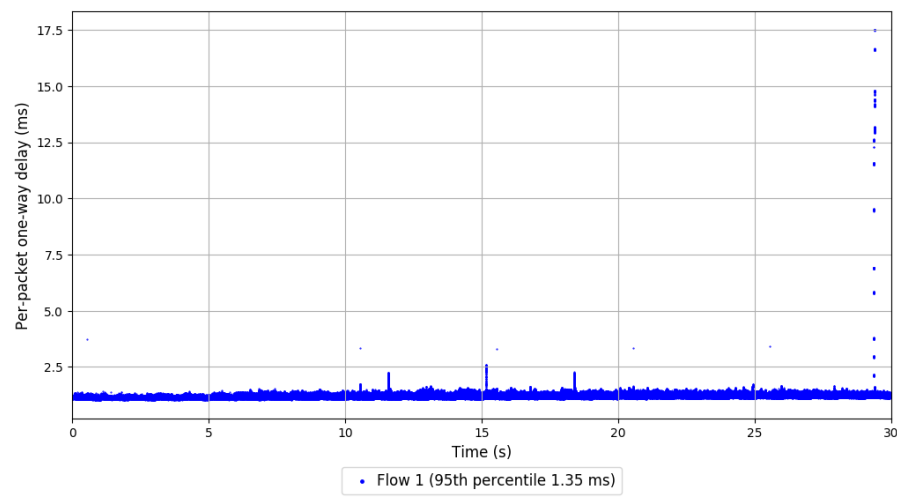
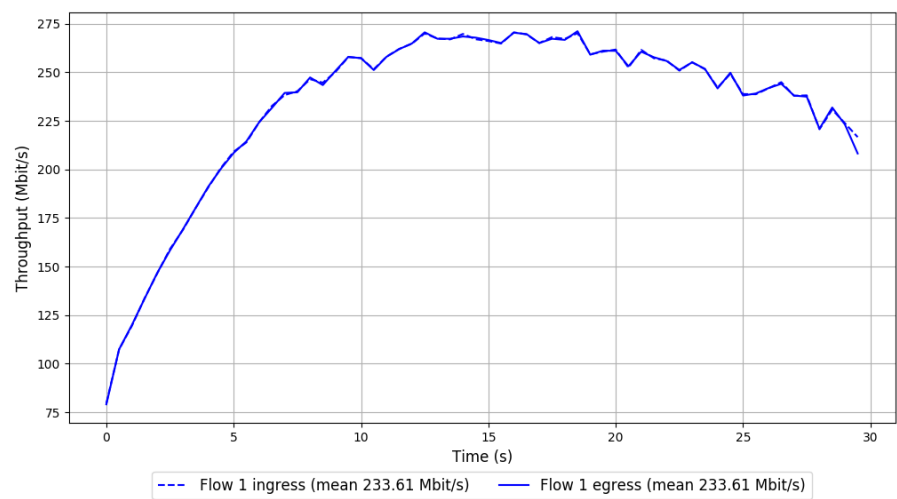
-- Flow 1:

Average throughput: 233.61 Mbit/s

95th percentile per-packet one-way delay: 1.353 ms

Loss rate: 0.07%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-19 22:28:52

End at: 2017-12-19 22:29:22

Local clock offset: -0.055 ms

Remote clock offset: -0.573 ms

Below is generated by plot.py at 2017-12-20 03:17:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 340.89 Mbit/s

95th percentile per-packet one-way delay: 1.210 ms

Loss rate: 0.06%

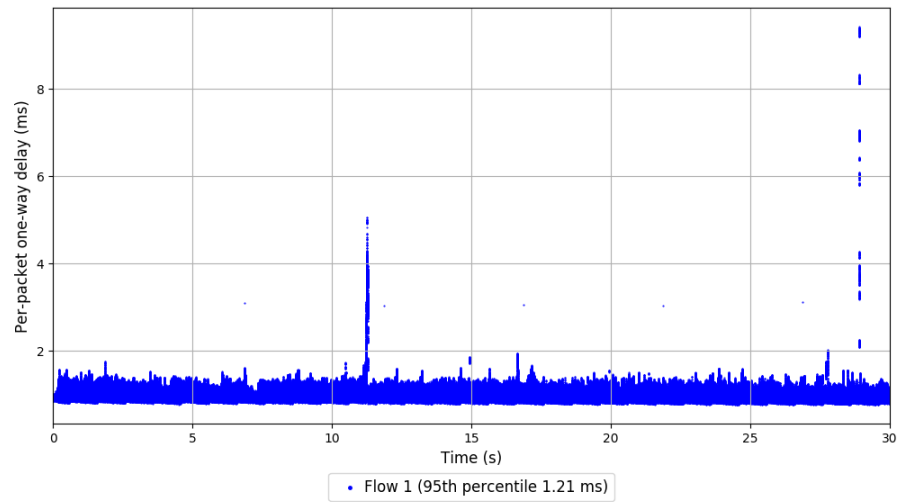
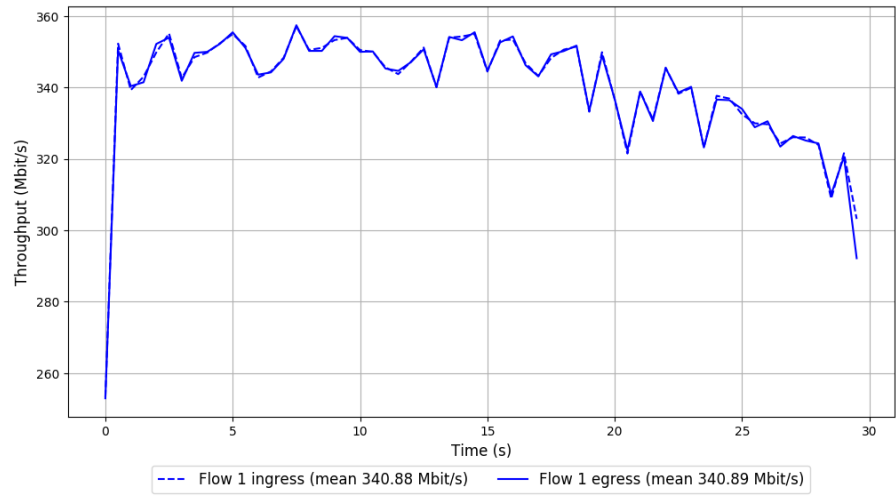
-- Flow 1:

Average throughput: 340.89 Mbit/s

95th percentile per-packet one-way delay: 1.210 ms

Loss rate: 0.06%

Run 10: Report of TCP Vegas — Data Link

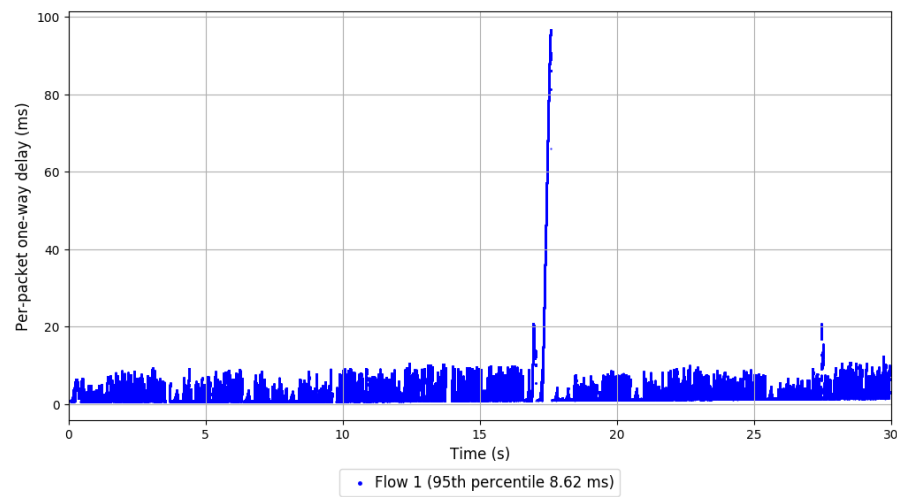
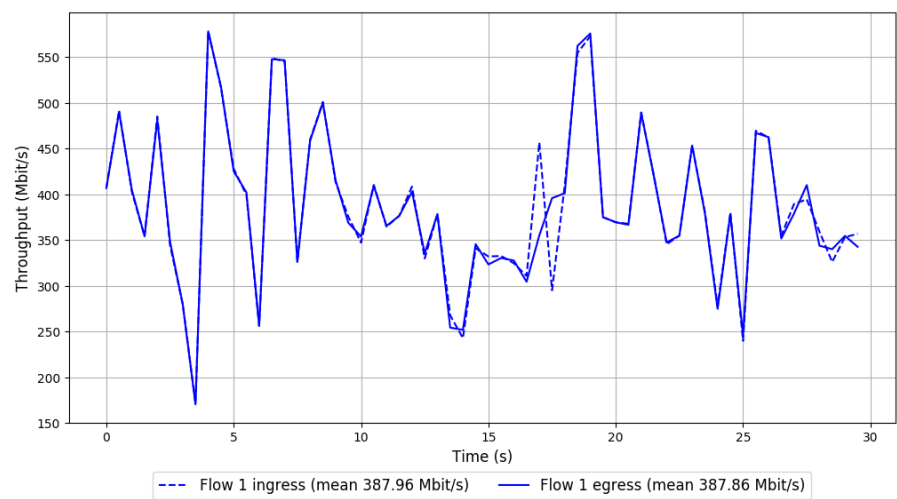


Run 1: Statistics of Verus

Start at: 2017-12-19 19:31:56
End at: 2017-12-19 19:32:27
Local clock offset: 14.808 ms
Remote clock offset: -1.848 ms

Below is generated by plot.py at 2017-12-20 03:18:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 387.86 Mbit/s
95th percentile per-packet one-way delay: 8.615 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 387.86 Mbit/s
95th percentile per-packet one-way delay: 8.615 ms
Loss rate: 0.12%

Run 1: Report of Verus — Data Link

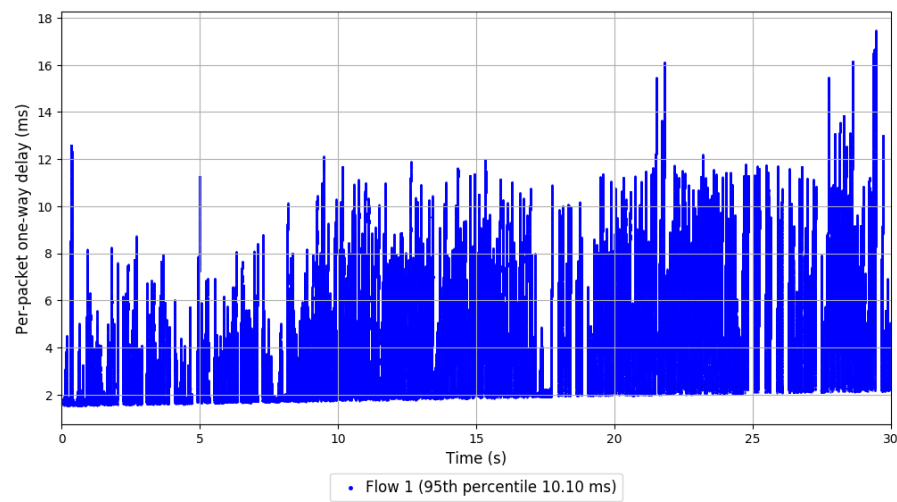
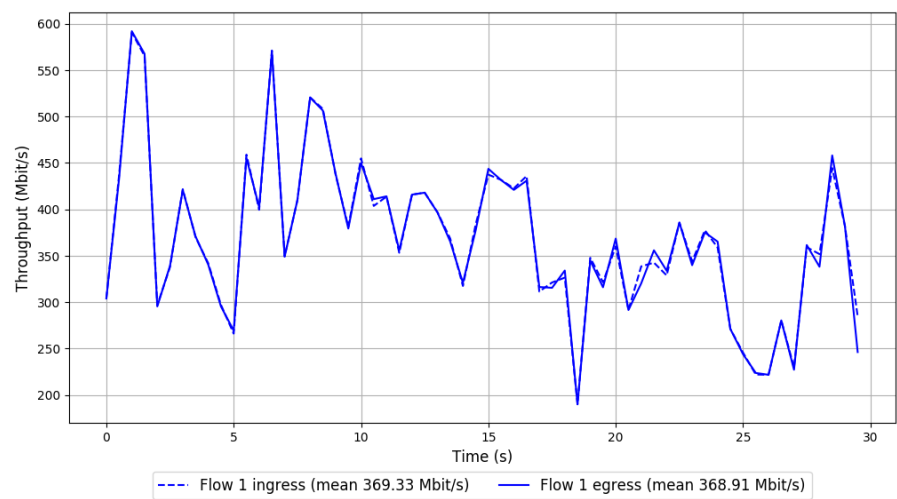


Run 2: Statistics of Verus

Start at: 2017-12-19 19:52:47
End at: 2017-12-19 19:53:17
Local clock offset: 7.713 ms
Remote clock offset: -1.248 ms

Below is generated by plot.py at 2017-12-20 03:18:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 368.91 Mbit/s
95th percentile per-packet one-way delay: 10.101 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 368.91 Mbit/s
95th percentile per-packet one-way delay: 10.101 ms
Loss rate: 0.17%

Run 2: Report of Verus — Data Link

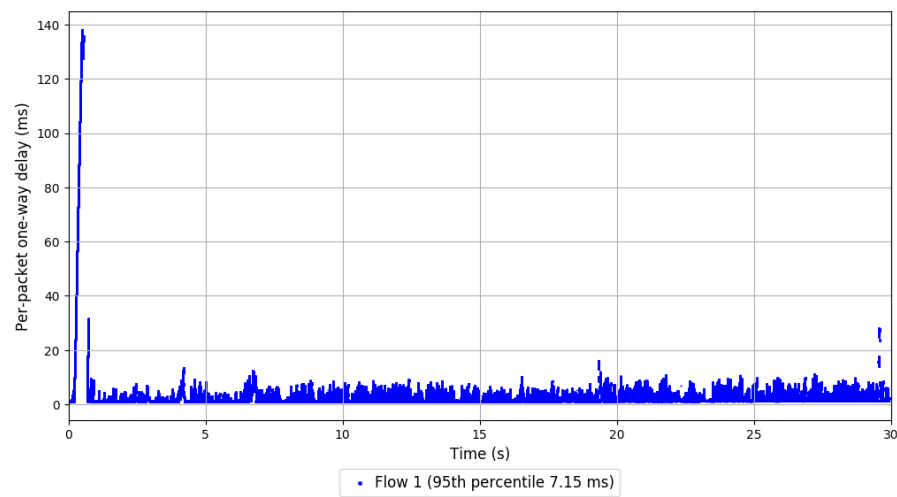
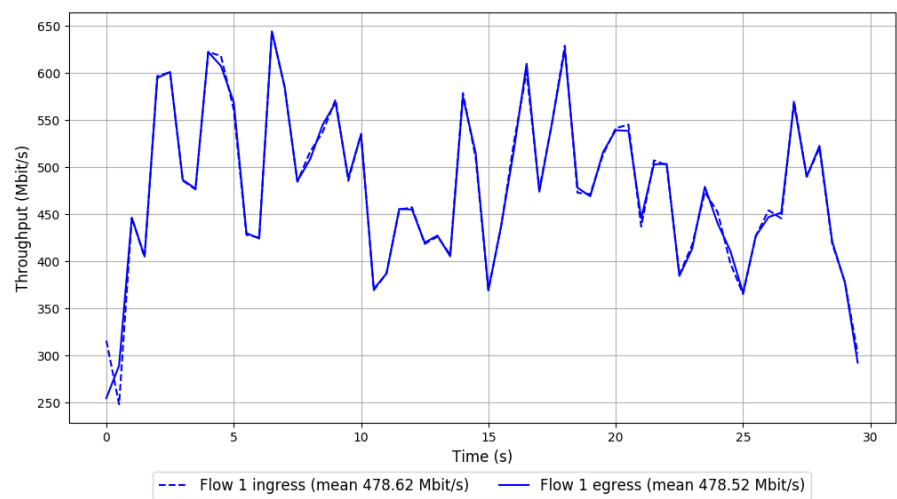


Run 3: Statistics of Verus

Start at: 2017-12-19 20:13:37
End at: 2017-12-19 20:14:07
Local clock offset: 3.863 ms
Remote clock offset: -0.927 ms

Below is generated by plot.py at 2017-12-20 03:20:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 478.52 Mbit/s
95th percentile per-packet one-way delay: 7.149 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 478.52 Mbit/s
95th percentile per-packet one-way delay: 7.149 ms
Loss rate: 0.10%

Run 3: Report of Verus — Data Link

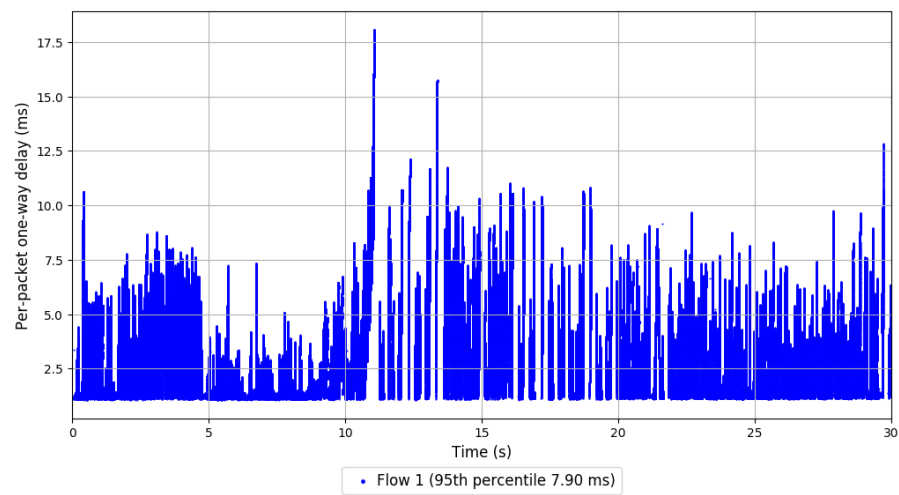
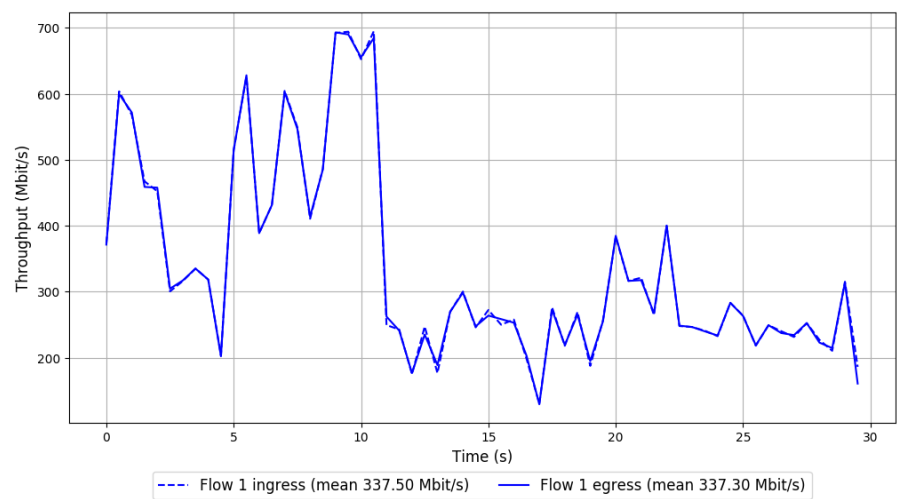


Run 4: Statistics of Verus

Start at: 2017-12-19 20:34:32
End at: 2017-12-19 20:35:02
Local clock offset: 4.292 ms
Remote clock offset: -0.482 ms

Below is generated by plot.py at 2017-12-20 03:20:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 337.30 Mbit/s
95th percentile per-packet one-way delay: 7.904 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 337.30 Mbit/s
95th percentile per-packet one-way delay: 7.904 ms
Loss rate: 0.13%

Run 4: Report of Verus — Data Link

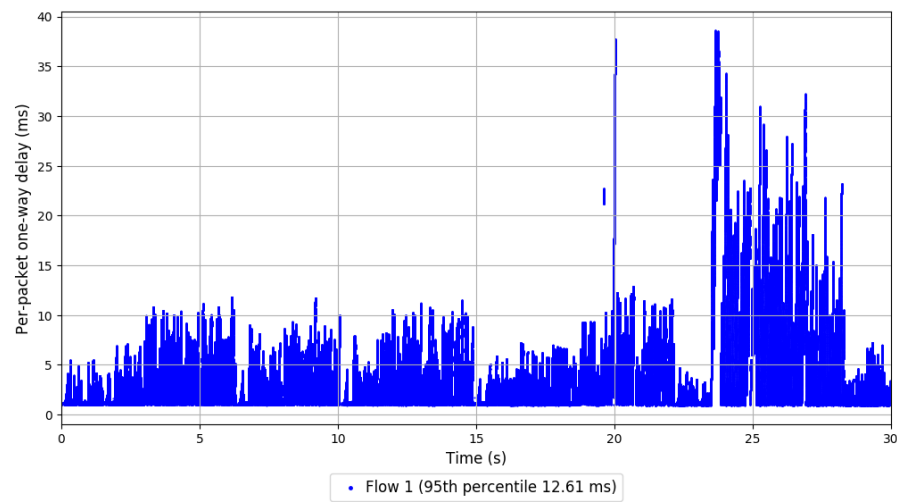
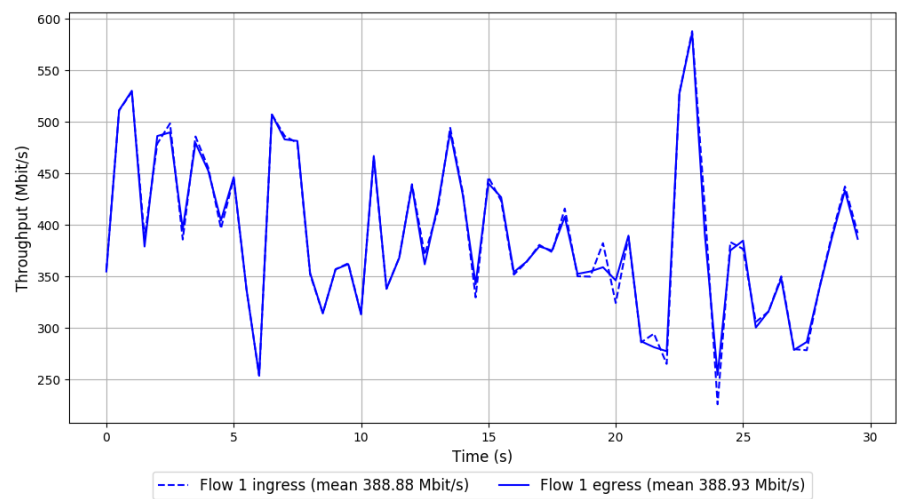


Run 5: Statistics of Verus

Start at: 2017-12-19 20:55:25
End at: 2017-12-19 20:55:55
Local clock offset: 4.311 ms
Remote clock offset: -0.509 ms

Below is generated by plot.py at 2017-12-20 03:20:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 388.93 Mbit/s
95th percentile per-packet one-way delay: 12.609 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 388.93 Mbit/s
95th percentile per-packet one-way delay: 12.609 ms
Loss rate: 0.06%

Run 5: Report of Verus — Data Link

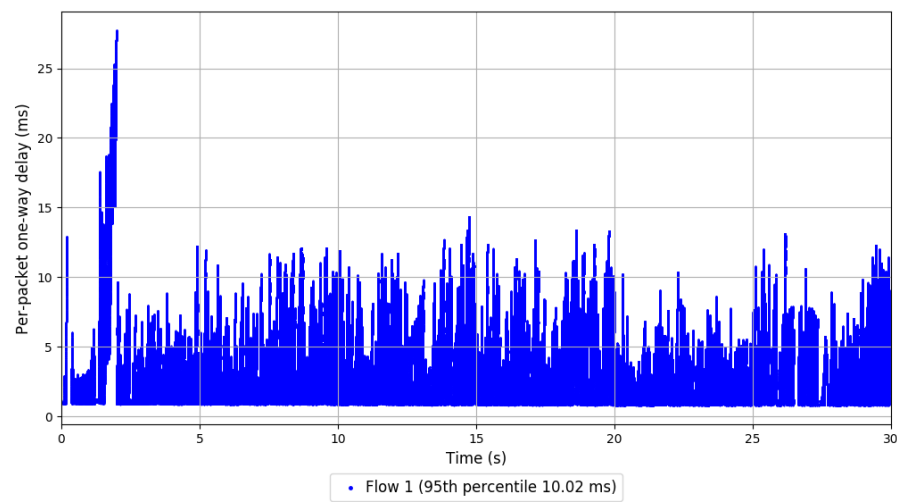
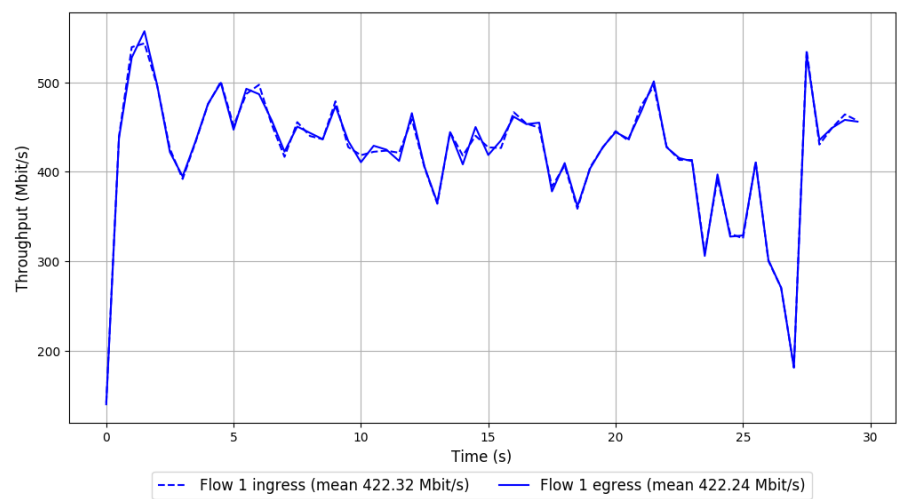


Run 6: Statistics of Verus

Start at: 2017-12-19 21:16:22
End at: 2017-12-19 21:16:52
Local clock offset: 9.543 ms
Remote clock offset: -0.431 ms

Below is generated by plot.py at 2017-12-20 03:21:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 422.24 Mbit/s
95th percentile per-packet one-way delay: 10.016 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 422.24 Mbit/s
95th percentile per-packet one-way delay: 10.016 ms
Loss rate: 0.03%

Run 6: Report of Verus — Data Link

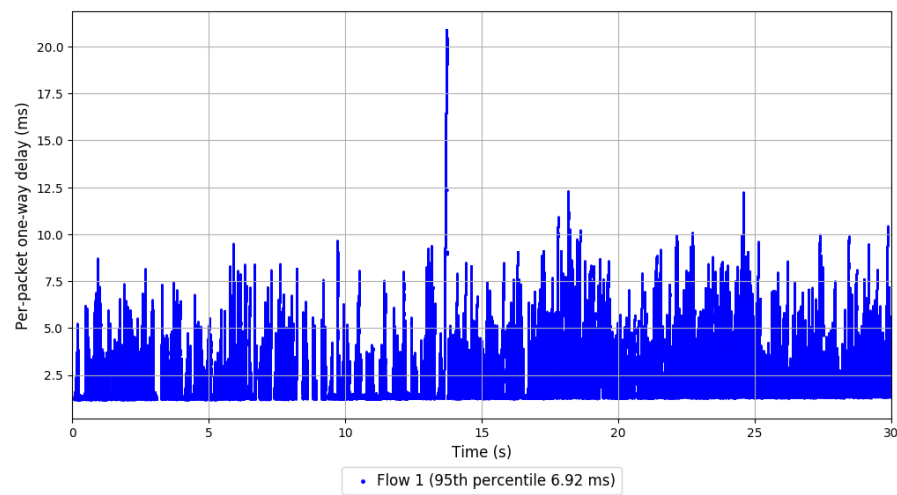
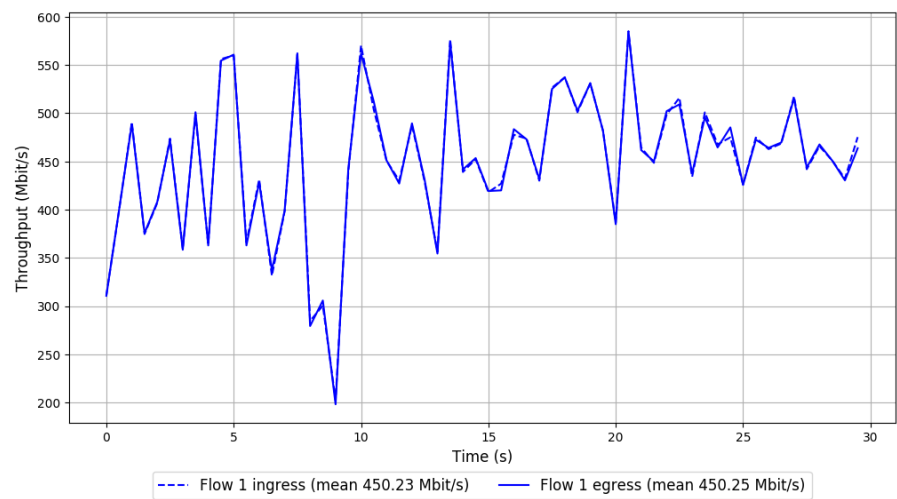


Run 7: Statistics of Verus

Start at: 2017-12-19 21:37:21
End at: 2017-12-19 21:37:51
Local clock offset: 7.958 ms
Remote clock offset: -0.681 ms

Below is generated by plot.py at 2017-12-20 03:22:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 450.25 Mbit/s
95th percentile per-packet one-way delay: 6.918 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 450.25 Mbit/s
95th percentile per-packet one-way delay: 6.918 ms
Loss rate: 0.05%

Run 7: Report of Verus — Data Link

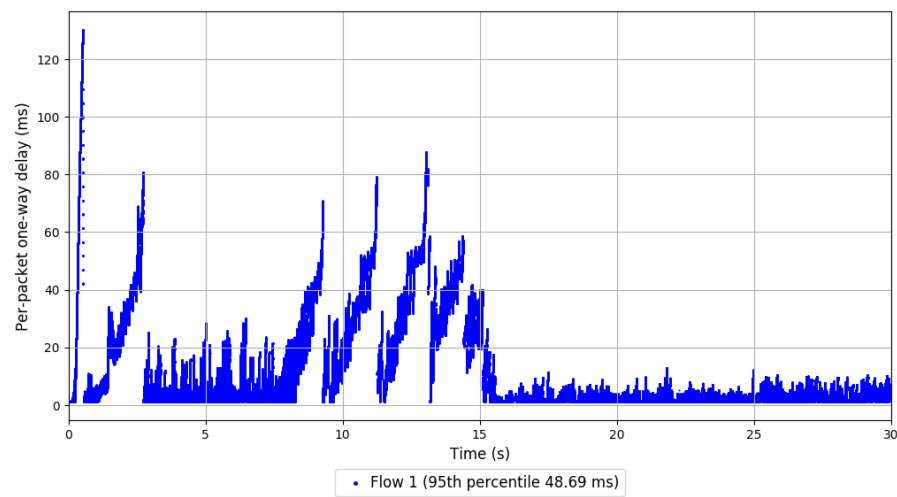
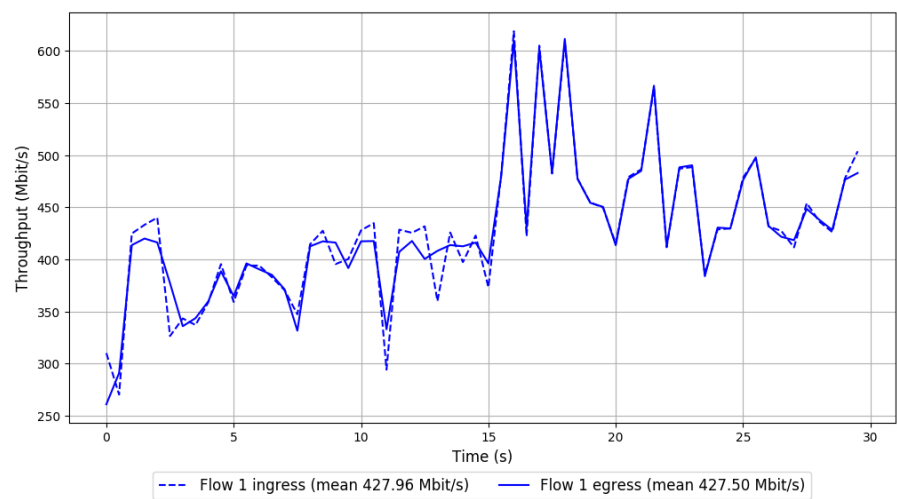


Run 8: Statistics of Verus

Start at: 2017-12-19 21:58:06
End at: 2017-12-19 21:58:36
Local clock offset: 3.31 ms
Remote clock offset: -0.472 ms

Below is generated by plot.py at 2017-12-20 03:24:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 427.50 Mbit/s
95th percentile per-packet one-way delay: 48.694 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 427.50 Mbit/s
95th percentile per-packet one-way delay: 48.694 ms
Loss rate: 0.18%

Run 8: Report of Verus — Data Link

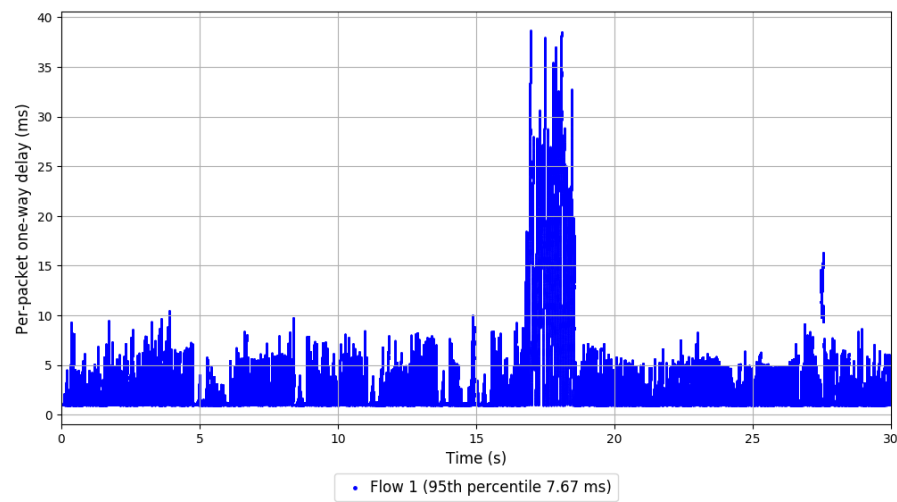
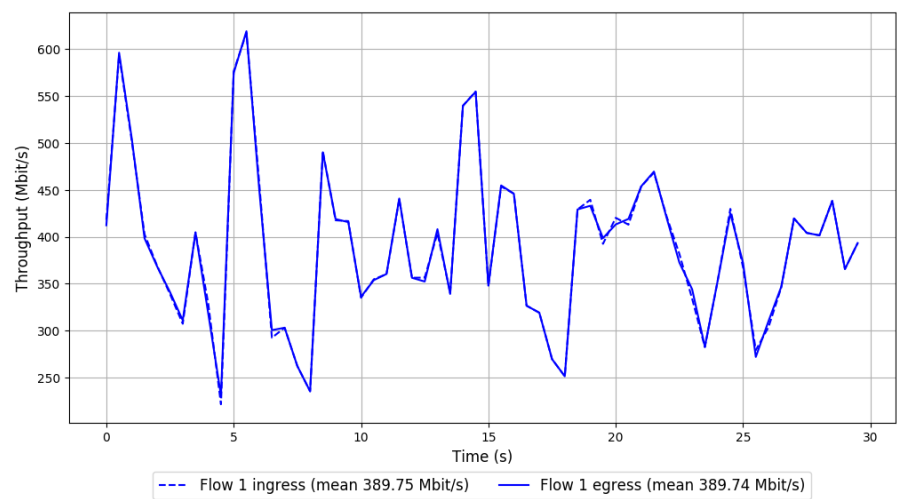


Run 9: Statistics of Verus

Start at: 2017-12-19 22:18:58
End at: 2017-12-19 22:19:28
Local clock offset: -0.323 ms
Remote clock offset: -0.426 ms

Below is generated by plot.py at 2017-12-20 03:24:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 389.74 Mbit/s
95th percentile per-packet one-way delay: 7.672 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 389.74 Mbit/s
95th percentile per-packet one-way delay: 7.672 ms
Loss rate: 0.00%

Run 9: Report of Verus — Data Link

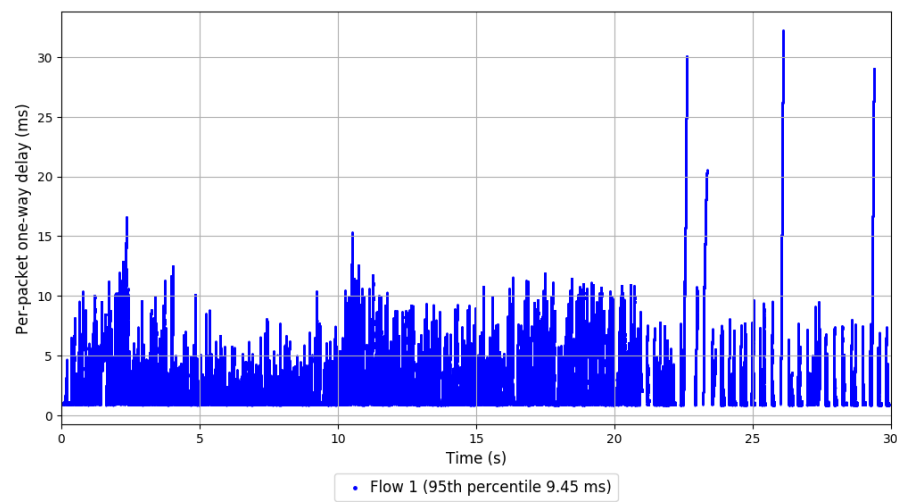
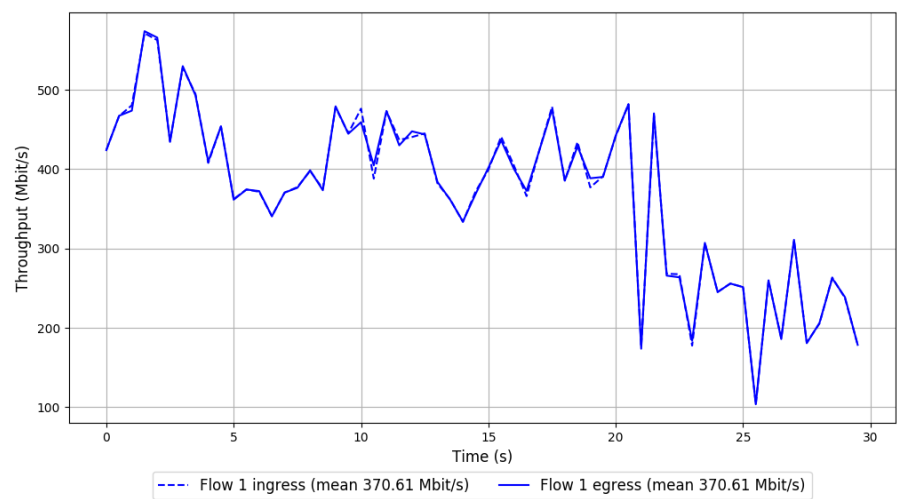


Run 10: Statistics of Verus

Start at: 2017-12-19 22:39:58
End at: 2017-12-19 22:40:28
Local clock offset: 0.814 ms
Remote clock offset: -0.671 ms

Below is generated by plot.py at 2017-12-20 03:24:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 370.61 Mbit/s
95th percentile per-packet one-way delay: 9.448 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 370.61 Mbit/s
95th percentile per-packet one-way delay: 9.448 ms
Loss rate: 0.00%

Run 10: Report of Verus — Data Link

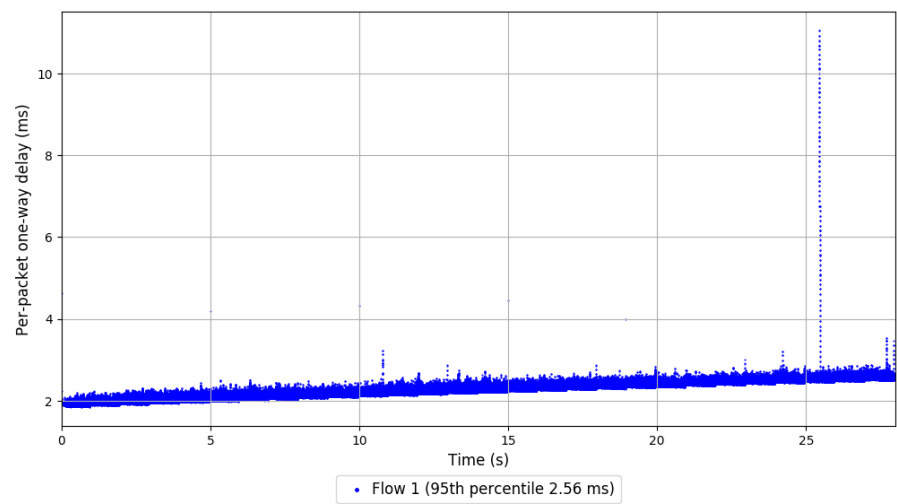
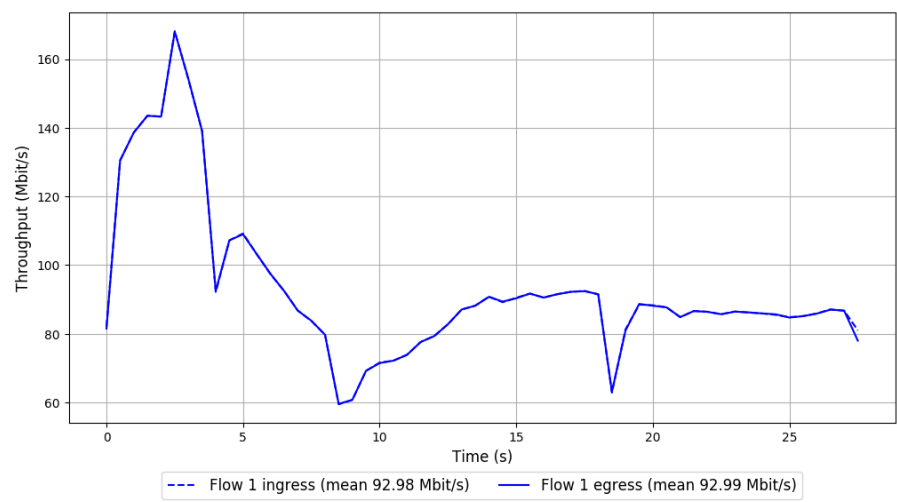


Run 1: Statistics of Copa

Start at: 2017-12-19 19:27:34
End at: 2017-12-19 19:28:04
Local clock offset: 17.305 ms
Remote clock offset: -2.042 ms

Below is generated by plot.py at 2017-12-20 03:24:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 92.99 Mbit/s
95th percentile per-packet one-way delay: 2.564 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 92.99 Mbit/s
95th percentile per-packet one-way delay: 2.564 ms
Loss rate: 0.07%

Run 1: Report of Copa — Data Link

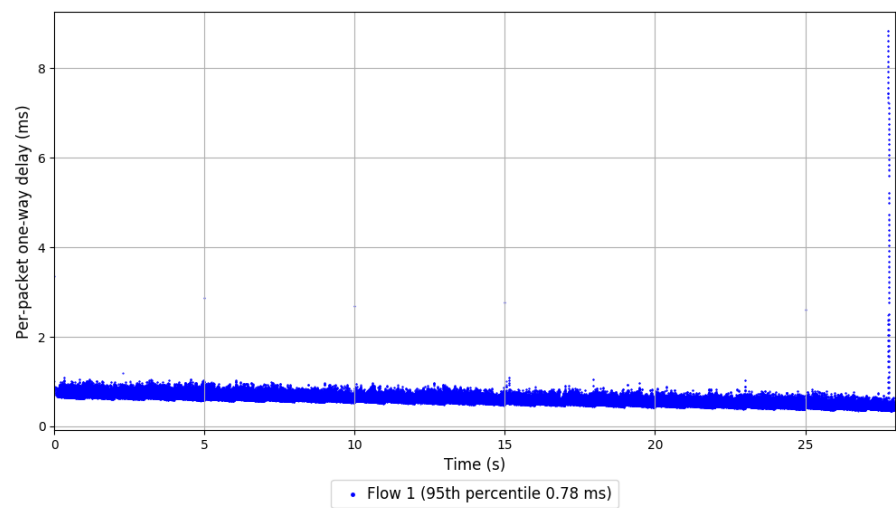
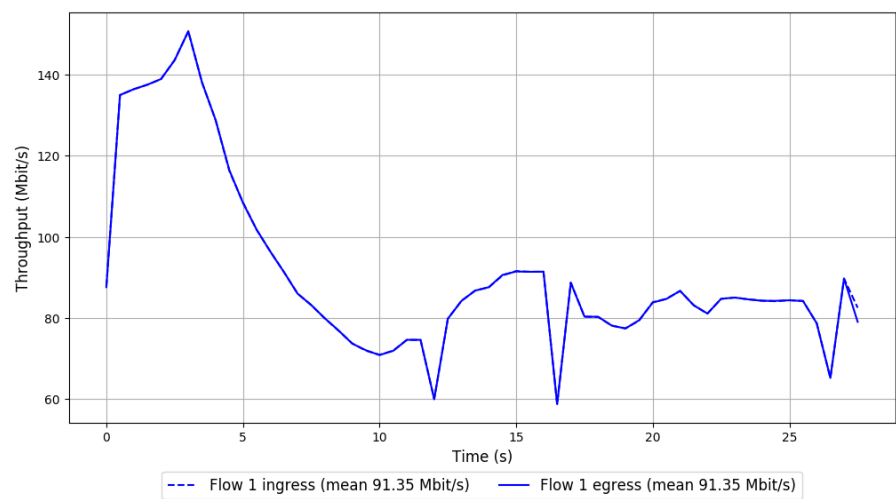


Run 2: Statistics of Copa

Start at: 2017-12-19 19:48:26
End at: 2017-12-19 19:48:56
Local clock offset: 10.103 ms
Remote clock offset: -1.288 ms

Below is generated by plot.py at 2017-12-20 03:24:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.35 Mbit/s
95th percentile per-packet one-way delay: 0.776 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 91.35 Mbit/s
95th percentile per-packet one-way delay: 0.776 ms
Loss rate: 0.07%

Run 2: Report of Copa — Data Link

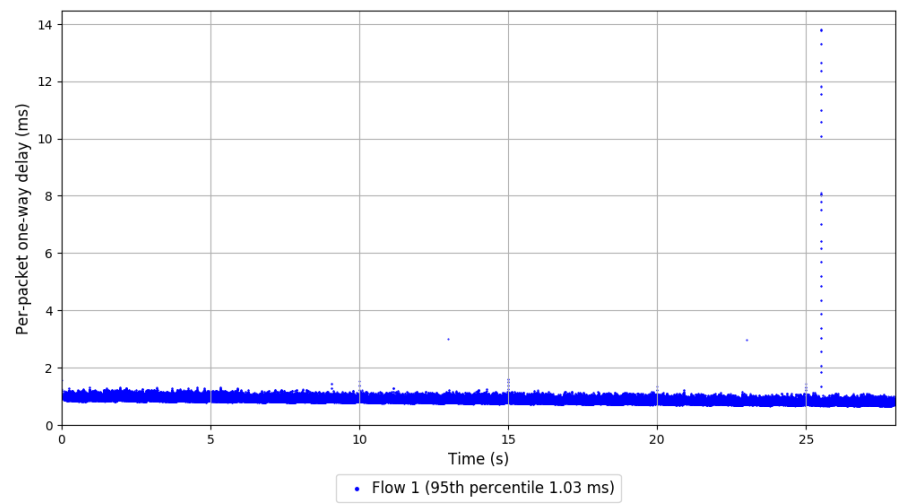
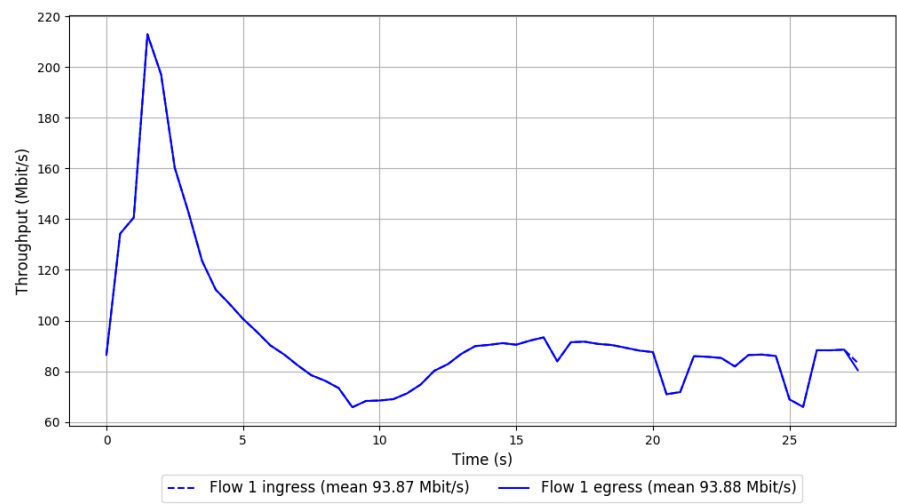


Run 3: Statistics of Copa

Start at: 2017-12-19 20:09:17
End at: 2017-12-19 20:09:47
Local clock offset: 2.832 ms
Remote clock offset: -1.055 ms

Below is generated by plot.py at 2017-12-20 03:24:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.88 Mbit/s
95th percentile per-packet one-way delay: 1.026 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 93.88 Mbit/s
95th percentile per-packet one-way delay: 1.026 ms
Loss rate: 0.06%

Run 3: Report of Copa — Data Link

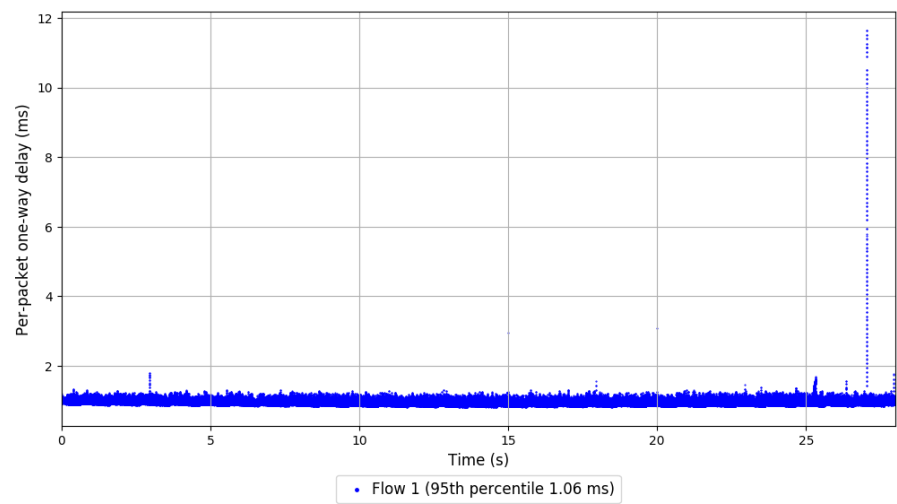
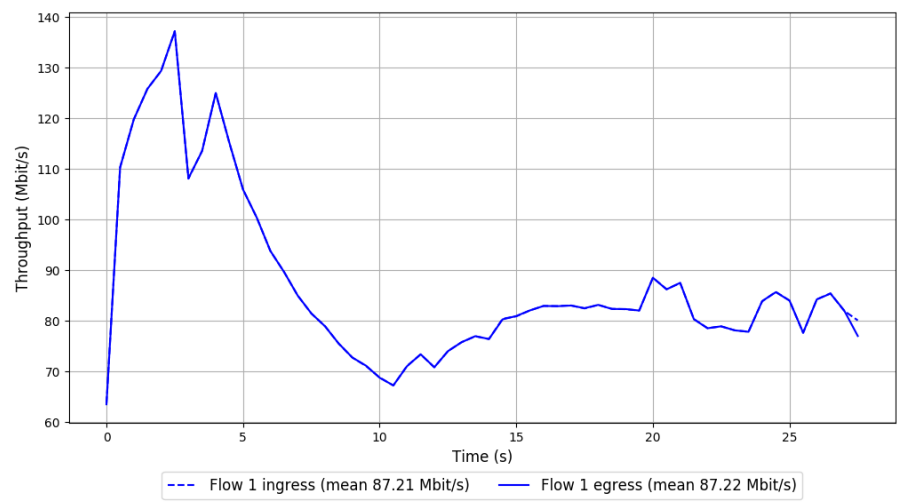


Run 4: Statistics of Copa

Start at: 2017-12-19 20:30:10
End at: 2017-12-19 20:30:40
Local clock offset: 4.523 ms
Remote clock offset: -0.416 ms

Below is generated by plot.py at 2017-12-20 03:24:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 87.22 Mbit/s
95th percentile per-packet one-way delay: 1.064 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 87.22 Mbit/s
95th percentile per-packet one-way delay: 1.064 ms
Loss rate: 0.07%

Run 4: Report of Copa — Data Link

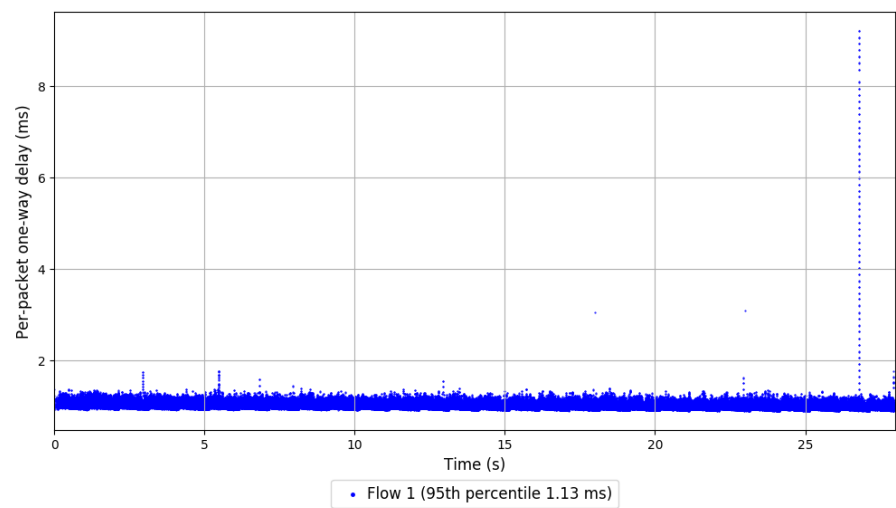
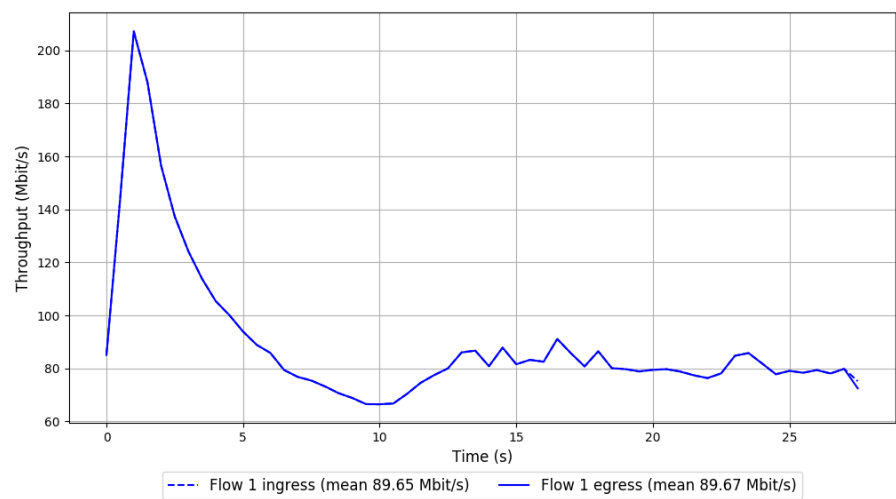


Run 5: Statistics of Copa

Start at: 2017-12-19 20:51:03
End at: 2017-12-19 20:51:33
Local clock offset: 3.801 ms
Remote clock offset: -0.437 ms

Below is generated by plot.py at 2017-12-20 03:24:19
Datalink statistics
-- Total of 1 flow:
Average throughput: 89.67 Mbit/s
95th percentile per-packet one-way delay: 1.133 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 89.67 Mbit/s
95th percentile per-packet one-way delay: 1.133 ms
Loss rate: 0.06%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-19 21:11:59

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

Local clock offset: 8.25 ms

Remote clock offset: -0.31 ms

Below is generated by plot.py at 2017-12-20 03:24:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.37 Mbit/s

95th percentile per-packet one-way delay: 0.980 ms

Loss rate: 0.06%

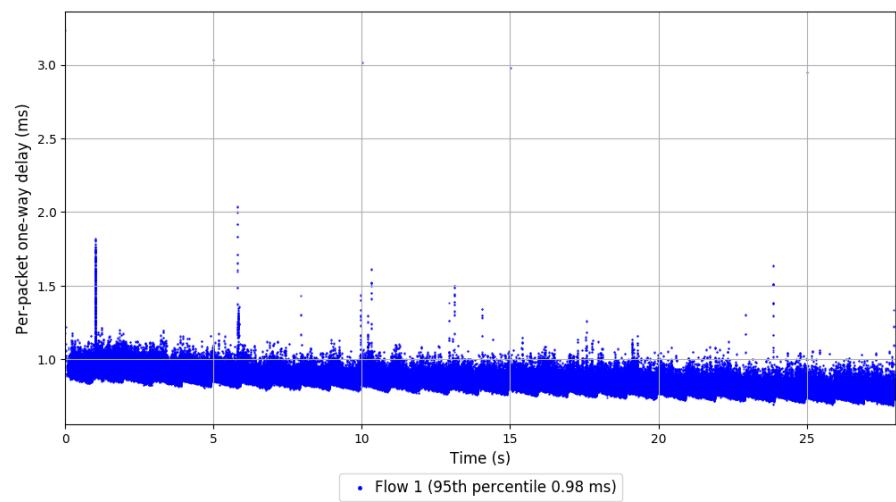
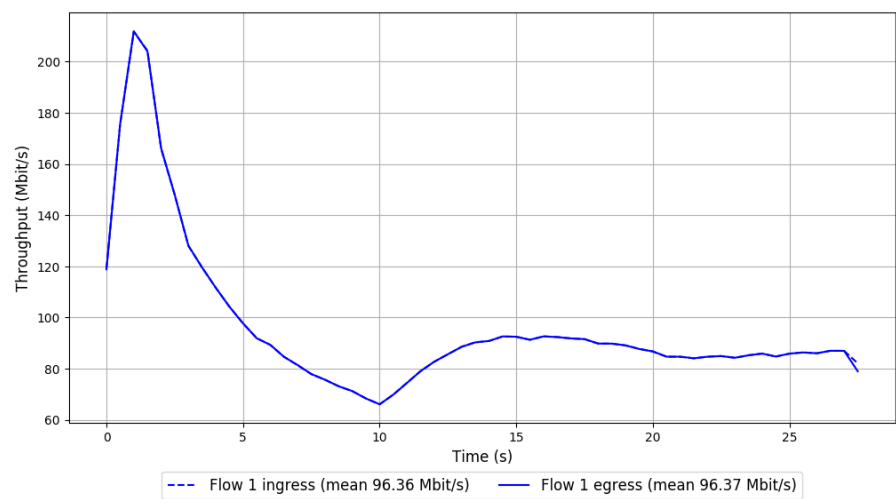
-- Flow 1:

Average throughput: 96.37 Mbit/s

95th percentile per-packet one-way delay: 0.980 ms

Loss rate: 0.06%

Run 6: Report of Copa — Data Link

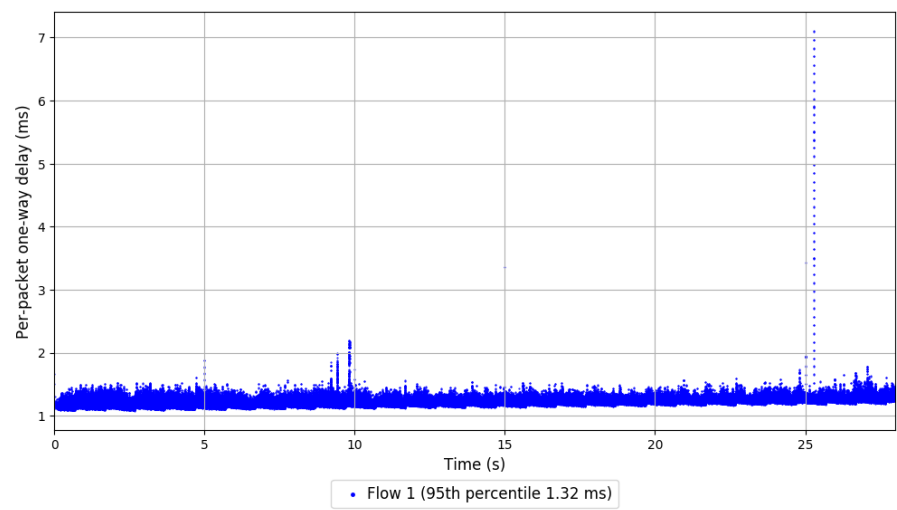
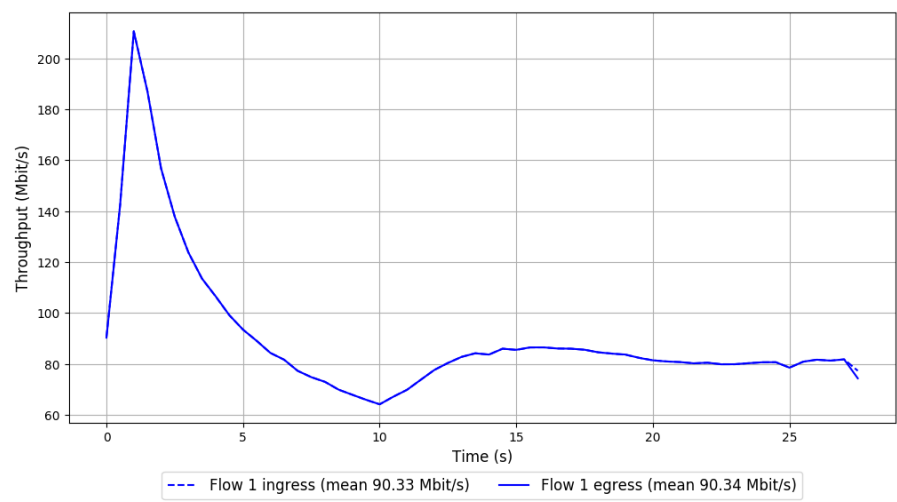


Run 7: Statistics of Copa

Start at: 2017-12-19 21:33:01
End at: 2017-12-19 21:33:31
Local clock offset: 8.868 ms
Remote clock offset: -0.693 ms

Below is generated by plot.py at 2017-12-20 03:25:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.34 Mbit/s
95th percentile per-packet one-way delay: 1.323 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 90.34 Mbit/s
95th percentile per-packet one-way delay: 1.323 ms
Loss rate: 0.06%

Run 7: Report of Copa — Data Link

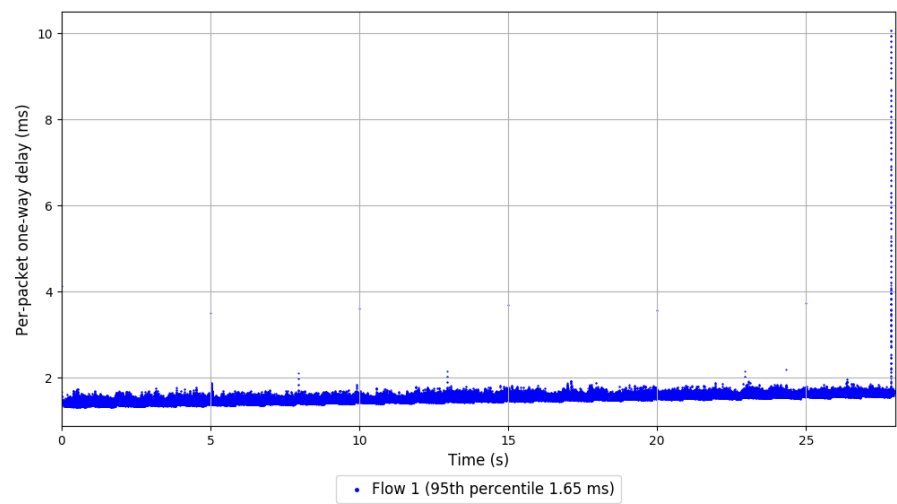
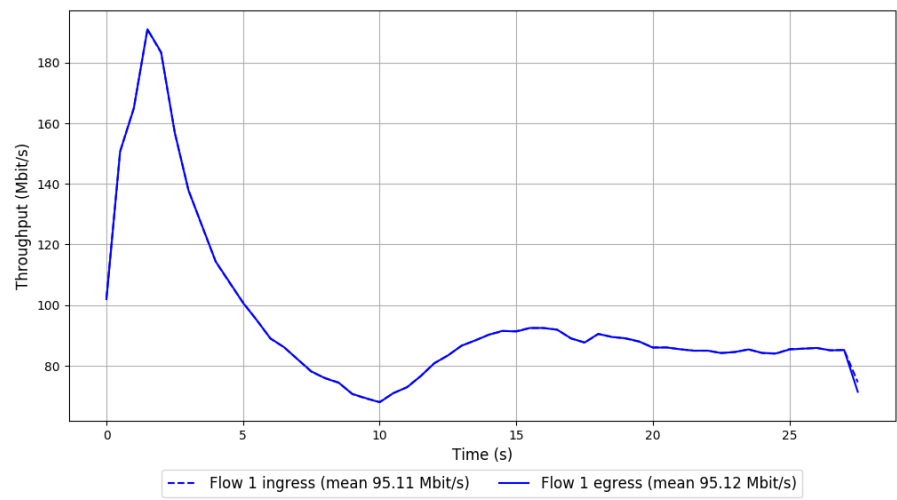


Run 8: Statistics of Copa

Start at: 2017-12-19 21:53:49
End at: 2017-12-19 21:54:19
Local clock offset: 5.272 ms
Remote clock offset: -0.527 ms

Below is generated by plot.py at 2017-12-20 03:25:35
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.12 Mbit/s
95th percentile per-packet one-way delay: 1.652 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 95.12 Mbit/s
95th percentile per-packet one-way delay: 1.652 ms
Loss rate: 0.06%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-19 22:14:42

End at: 2017-12-19 22:15:12

Local clock offset: -0.296 ms

Remote clock offset: -0.52 ms

Below is generated by plot.py at 2017-12-20 03:26:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.08 Mbit/s

95th percentile per-packet one-way delay: 1.138 ms

Loss rate: 0.07%

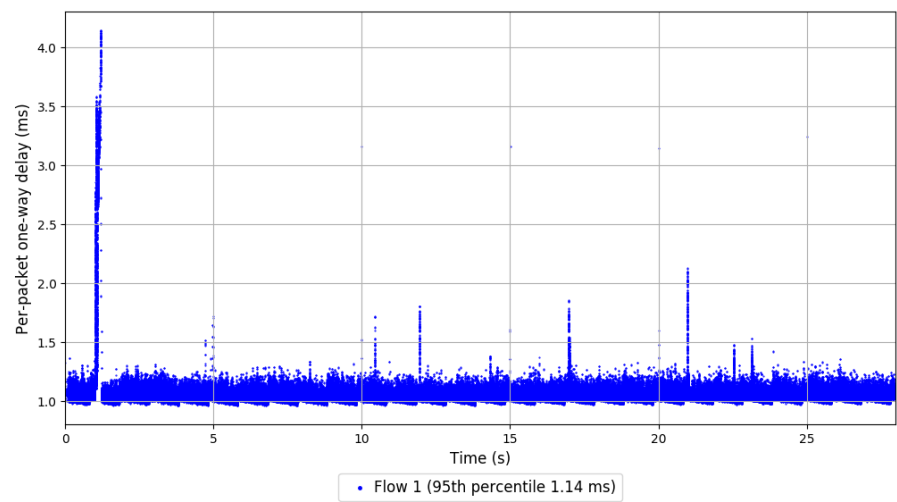
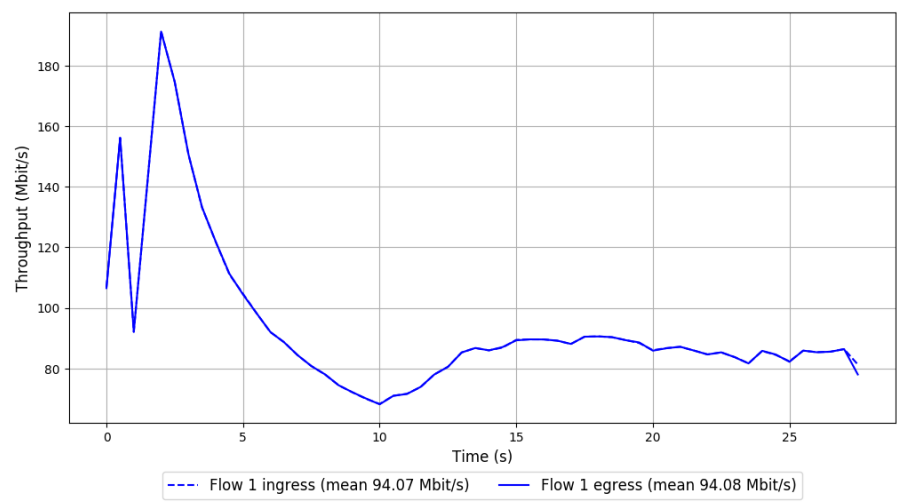
-- Flow 1:

Average throughput: 94.08 Mbit/s

95th percentile per-packet one-way delay: 1.138 ms

Loss rate: 0.07%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-19 22:35:37

End at: 2017-12-19 22:36:07

Local clock offset: 0.508 ms

Remote clock offset: -0.8 ms

Below is generated by plot.py at 2017-12-20 03:26:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.02 Mbit/s

95th percentile per-packet one-way delay: 1.123 ms

Loss rate: 0.06%

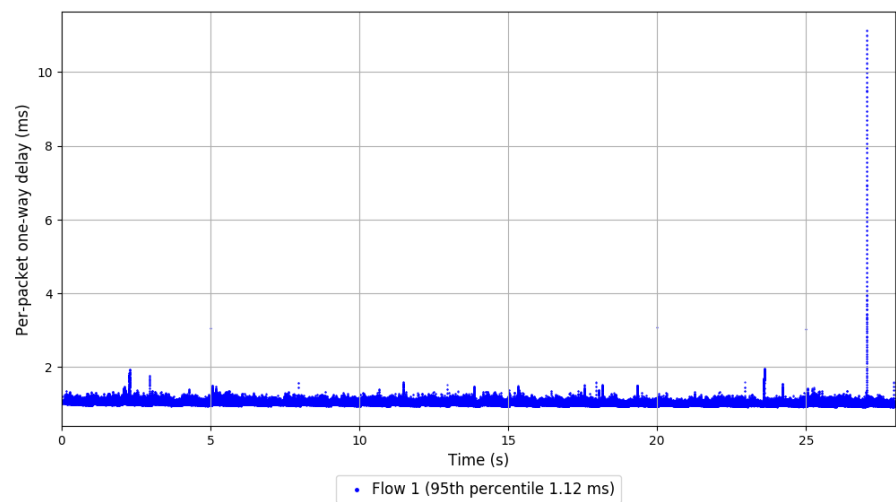
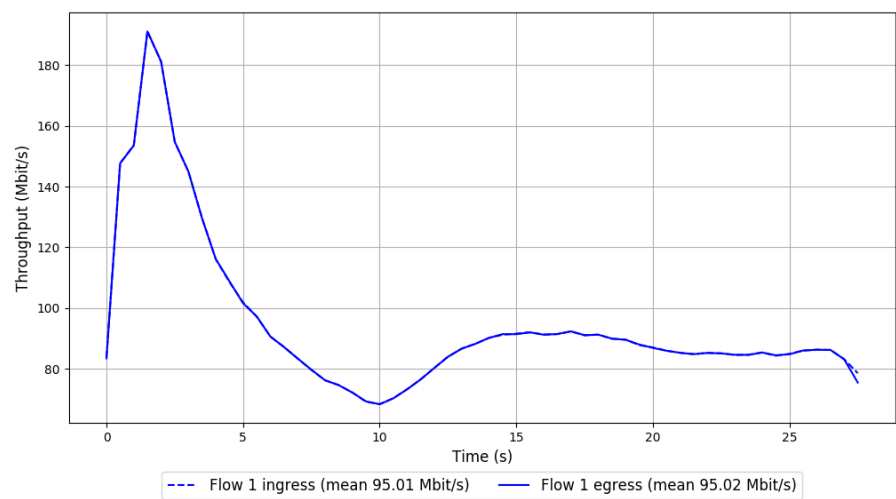
-- Flow 1:

Average throughput: 95.02 Mbit/s

95th percentile per-packet one-way delay: 1.123 ms

Loss rate: 0.06%

Run 10: Report of Copa — Data Link

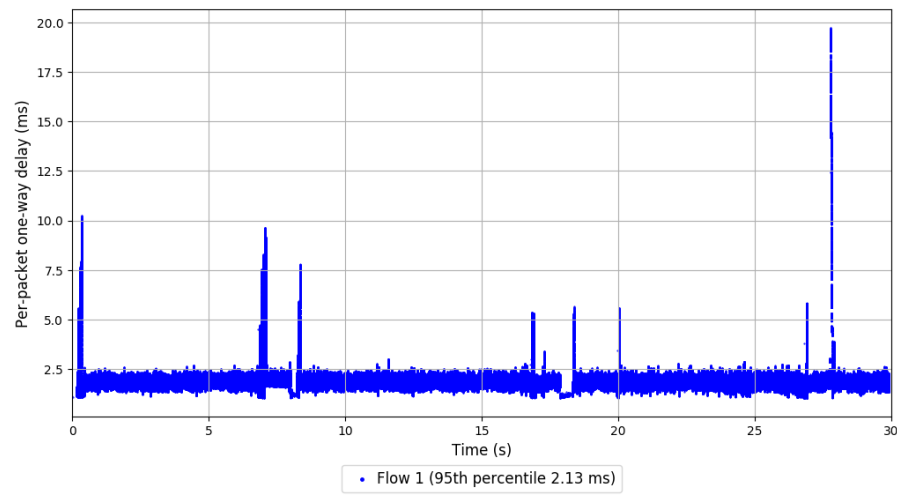
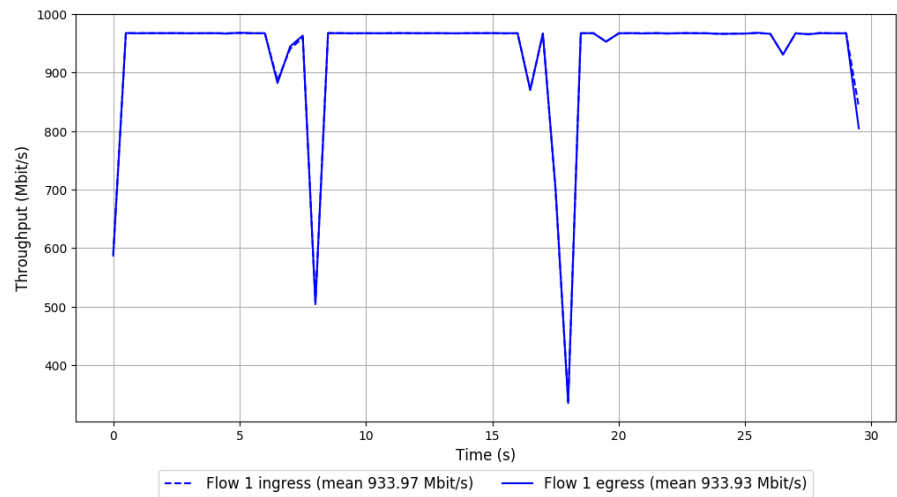


```
Run 1: Statistics of FillP

Start at: 2017-12-19 19:30:18
End at: 2017-12-19 19:30:48
Local clock offset: 14.656 ms
Remote clock offset: -1.87 ms

# Below is generated by plot.py at 2017-12-20 03:38:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 933.93 Mbit/s
95th percentile per-packet one-way delay: 2.127 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 933.93 Mbit/s
95th percentile per-packet one-way delay: 2.127 ms
Loss rate: 0.07%
```


Run 1: Report of FillP — Data Link

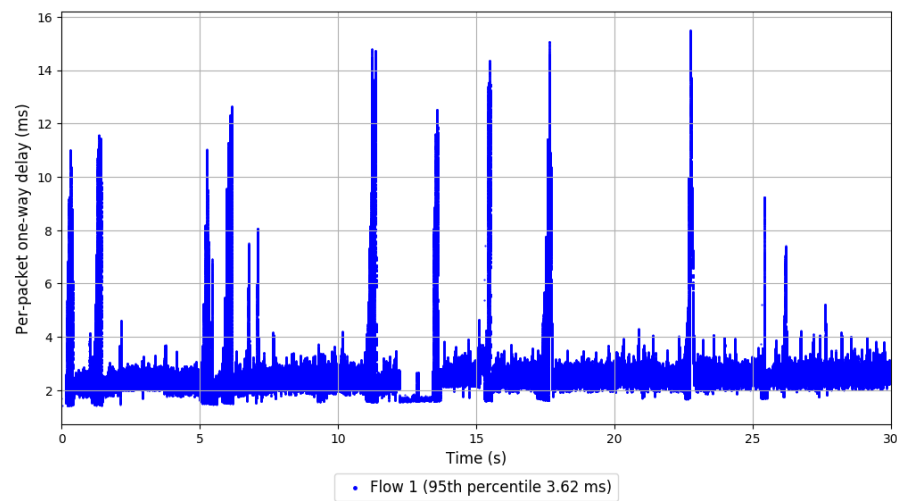
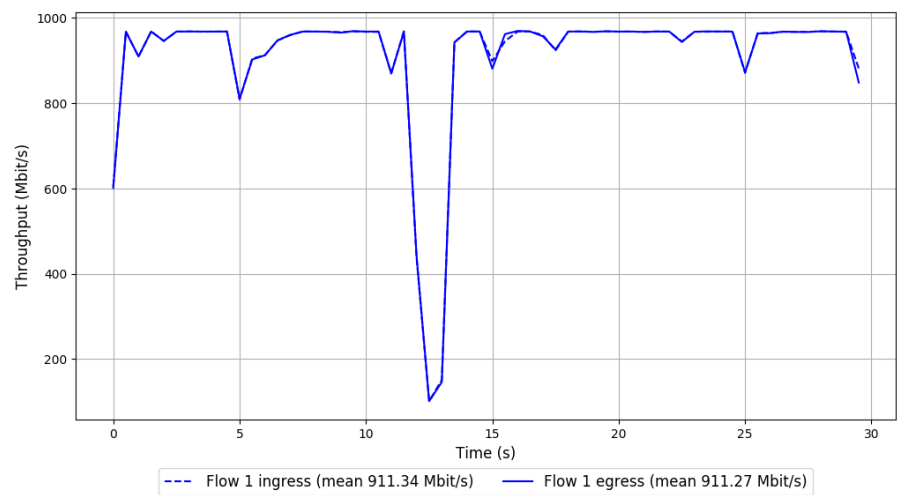


Run 2: Statistics of FillP

Start at: 2017-12-19 19:51:09
End at: 2017-12-19 19:51:40
Local clock offset: 9.165 ms
Remote clock offset: -1.184 ms

Below is generated by plot.py at 2017-12-20 03:38:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 911.27 Mbit/s
95th percentile per-packet one-way delay: 3.621 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 911.27 Mbit/s
95th percentile per-packet one-way delay: 3.621 ms
Loss rate: 0.07%

Run 2: Report of FillP — Data Link

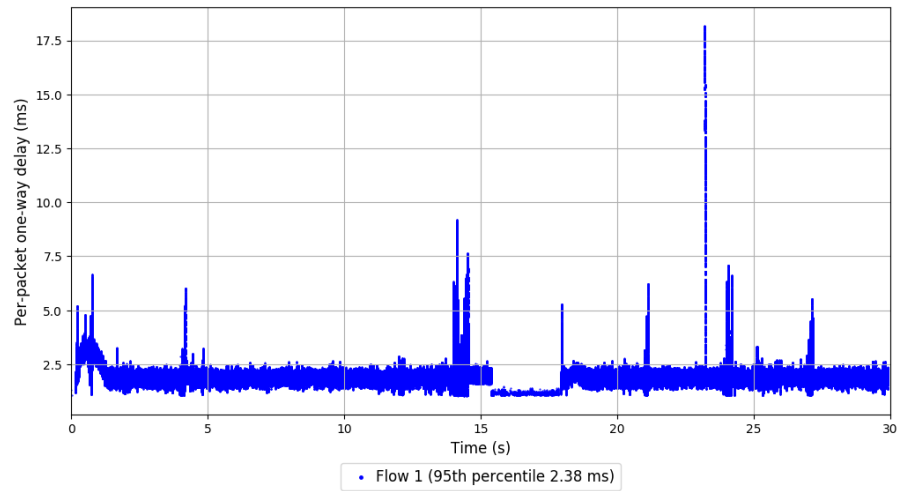
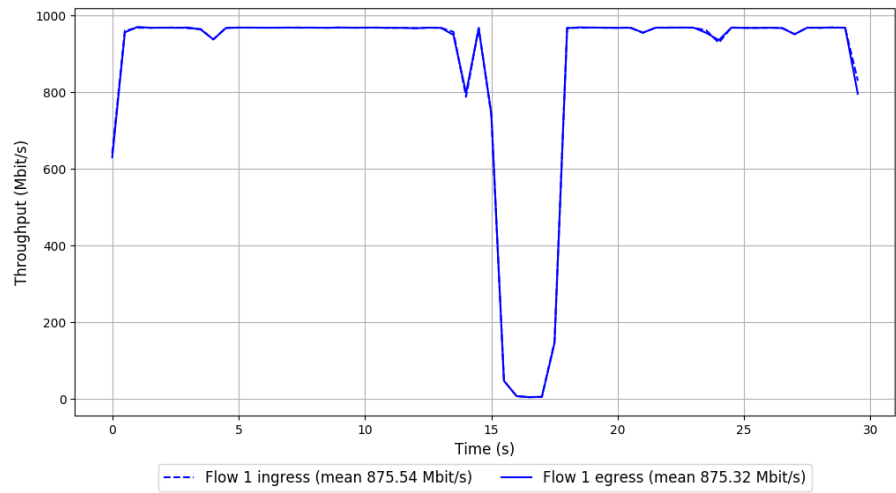


Run 3: Statistics of FillP

Start at: 2017-12-19 20:12:01
End at: 2017-12-19 20:12:31
Local clock offset: 3.928 ms
Remote clock offset: -0.979 ms

Below is generated by plot.py at 2017-12-20 03:38:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 875.32 Mbit/s
95th percentile per-packet one-way delay: 2.384 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 875.32 Mbit/s
95th percentile per-packet one-way delay: 2.384 ms
Loss rate: 0.09%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2017-12-19 20:32:53

End at: 2017-12-19 20:33:23

Local clock offset: 4.486 ms

Remote clock offset: -0.37 ms

Below is generated by plot.py at 2017-12-20 03:39:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 949.61 Mbit/s

95th percentile per-packet one-way delay: 2.218 ms

Loss rate: 0.40%

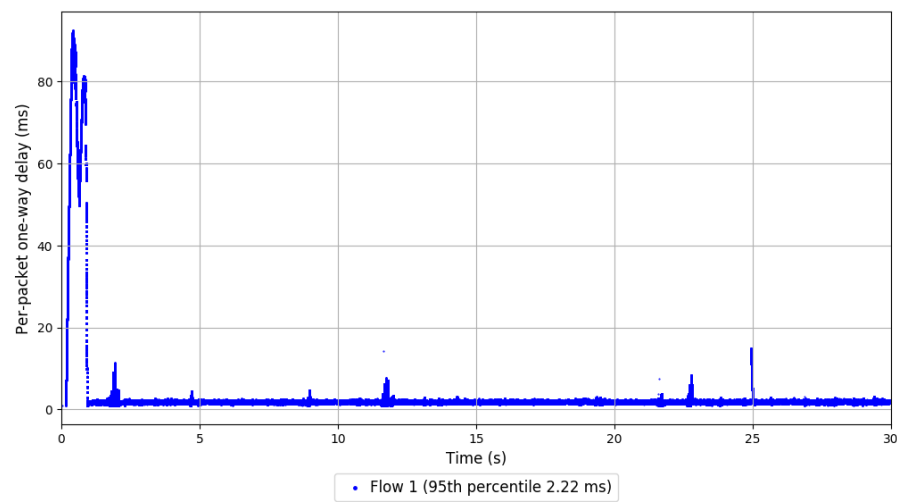
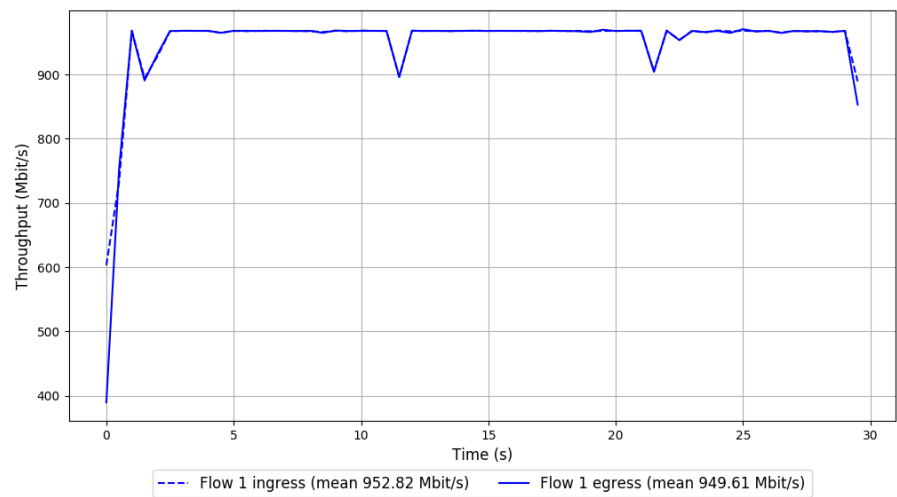
-- Flow 1:

Average throughput: 949.61 Mbit/s

95th percentile per-packet one-way delay: 2.218 ms

Loss rate: 0.40%

Run 4: Report of FillP — Data Link

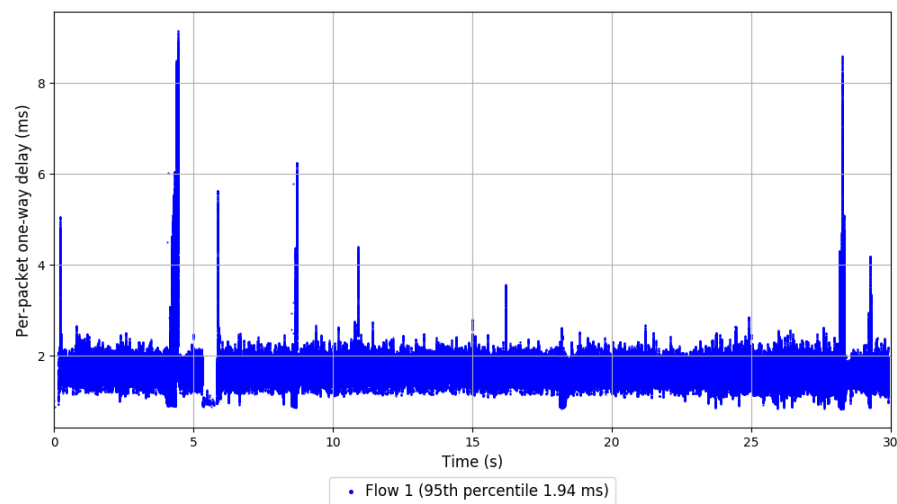
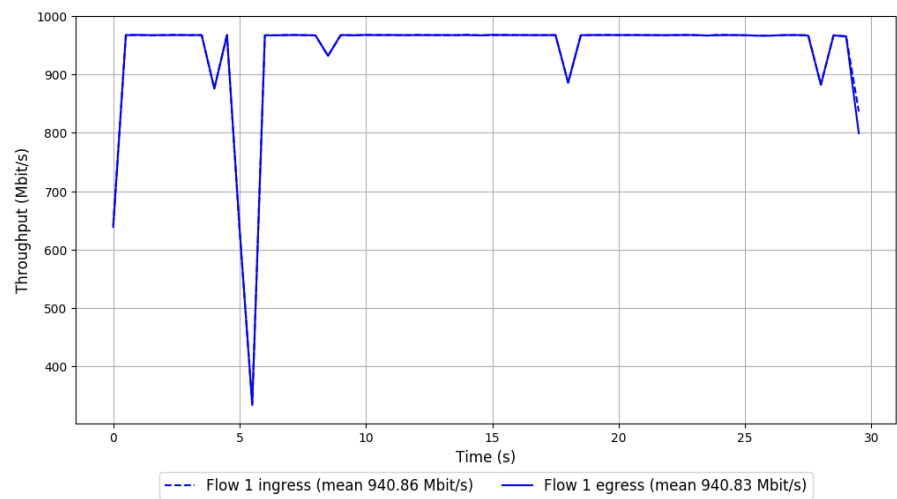


Run 5: Statistics of FillP

Start at: 2017-12-19 20:53:47
End at: 2017-12-19 20:54:17
Local clock offset: 3.989 ms
Remote clock offset: -0.485 ms

Below is generated by plot.py at 2017-12-20 03:39:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 940.83 Mbit/s
95th percentile per-packet one-way delay: 1.938 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 940.83 Mbit/s
95th percentile per-packet one-way delay: 1.938 ms
Loss rate: 0.07%

Run 5: Report of FillP — Data Link

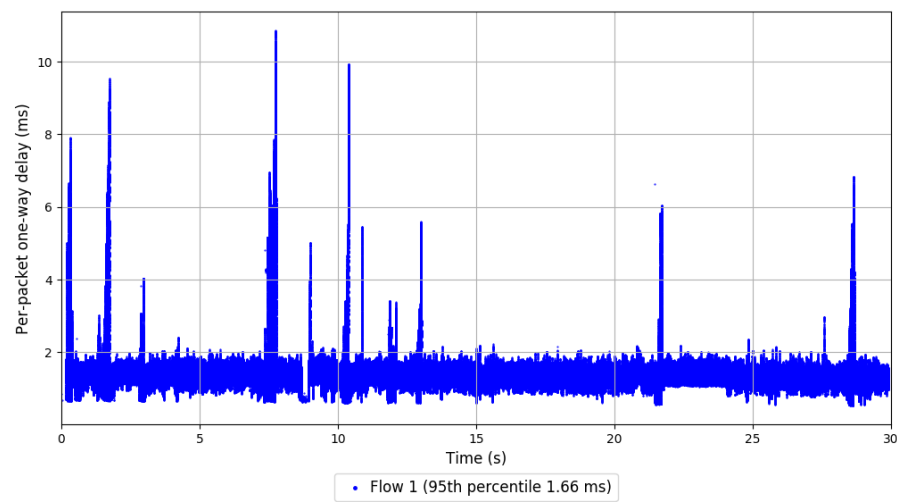
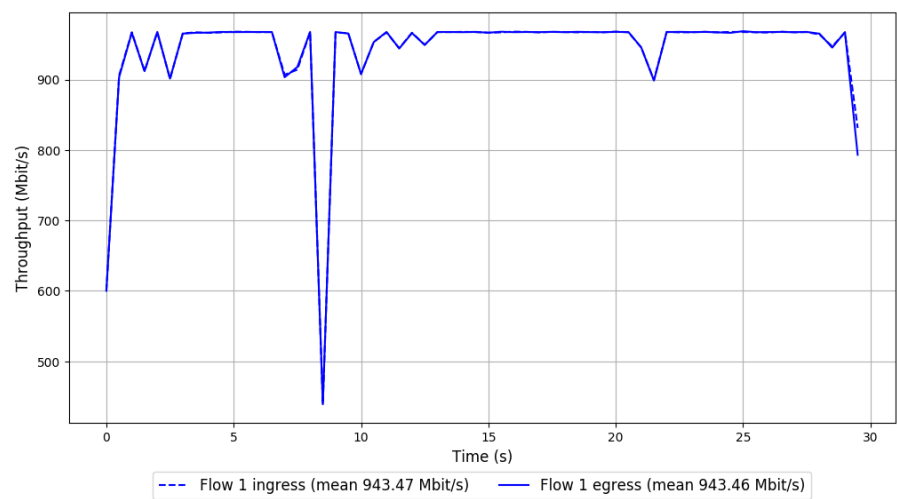


Run 6: Statistics of FillP

Start at: 2017-12-19 21:14:43
End at: 2017-12-19 21:15:13
Local clock offset: 8.957 ms
Remote clock offset: -0.286 ms

Below is generated by plot.py at 2017-12-20 03:40:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 943.46 Mbit/s
95th percentile per-packet one-way delay: 1.659 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 943.46 Mbit/s
95th percentile per-packet one-way delay: 1.659 ms
Loss rate: 0.07%

Run 6: Report of FillP — Data Link

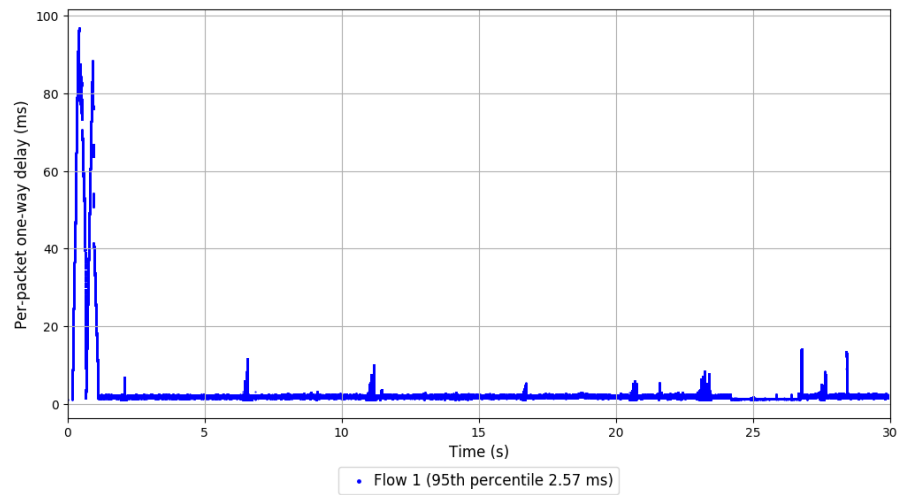
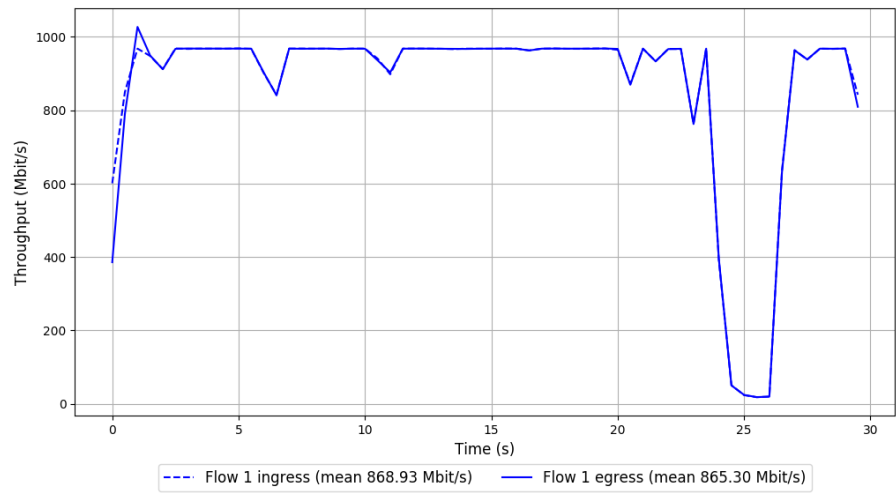


Run 7: Statistics of FillP

Start at: 2017-12-19 21:35:44
End at: 2017-12-19 21:36:14
Local clock offset: 8.301 ms
Remote clock offset: -0.691 ms

Below is generated by plot.py at 2017-12-20 03:40:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 865.30 Mbit/s
95th percentile per-packet one-way delay: 2.566 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 865.30 Mbit/s
95th percentile per-packet one-way delay: 2.566 ms
Loss rate: 0.48%

Run 7: Report of FillP — Data Link

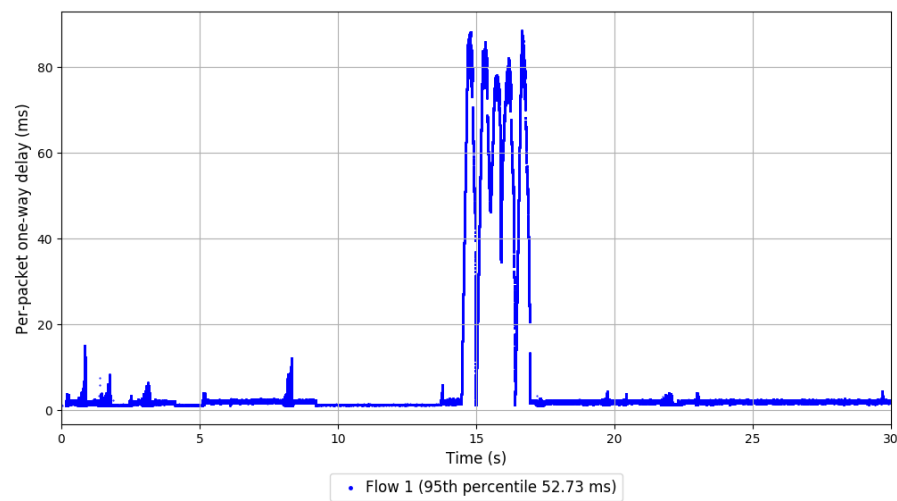
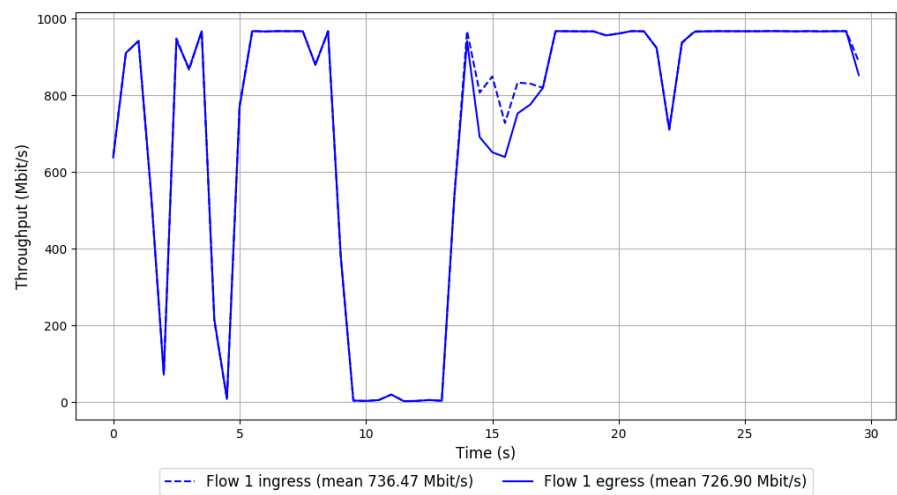


Run 8: Statistics of FillP

Start at: 2017-12-19 21:56:33
End at: 2017-12-19 21:57:03
Local clock offset: 3.799 ms
Remote clock offset: -0.471 ms

Below is generated by plot.py at 2017-12-20 03:40:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 726.90 Mbit/s
95th percentile per-packet one-way delay: 52.729 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 726.90 Mbit/s
95th percentile per-packet one-way delay: 52.729 ms
Loss rate: 1.37%

Run 8: Report of FillP — Data Link

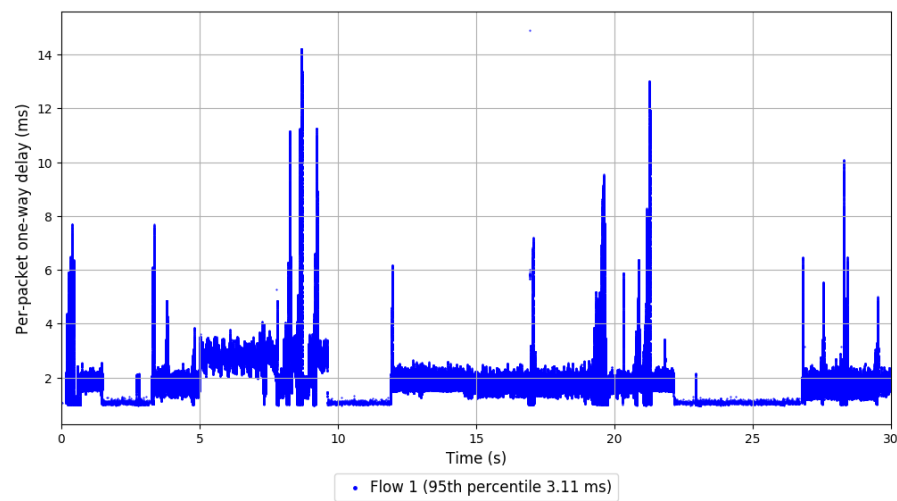
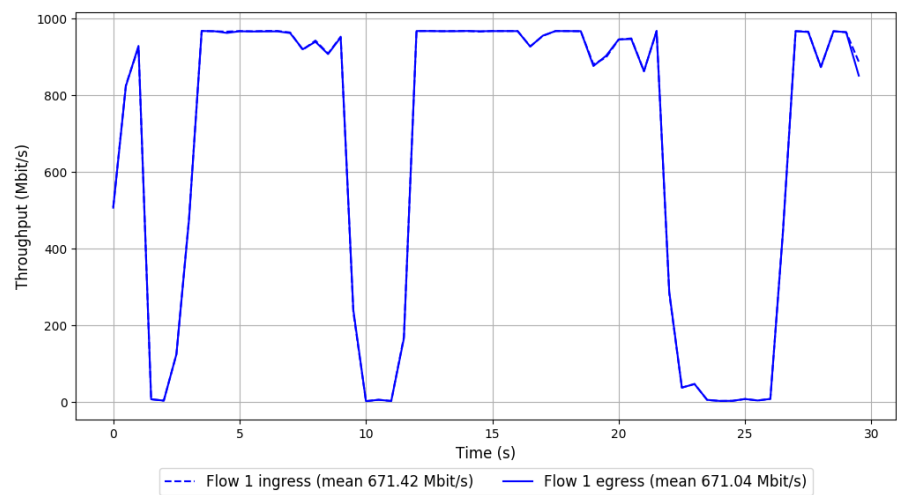


Run 9: Statistics of FillP

Start at: 2017-12-19 22:17:27
End at: 2017-12-19 22:17:57
Local clock offset: -0.283 ms
Remote clock offset: -0.439 ms

Below is generated by plot.py at 2017-12-20 03:44:27
Datalink statistics
-- Total of 1 flow:
Average throughput: 671.04 Mbit/s
95th percentile per-packet one-way delay: 3.113 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 671.04 Mbit/s
95th percentile per-packet one-way delay: 3.113 ms
Loss rate: 0.12%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2017-12-19 22:38:22

End at: 2017-12-19 22:38:52

Local clock offset: 0.765 ms

Remote clock offset: -0.769 ms

Below is generated by plot.py at 2017-12-20 03:44:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 875.09 Mbit/s

95th percentile per-packet one-way delay: 2.312 ms

Loss rate: 0.08%

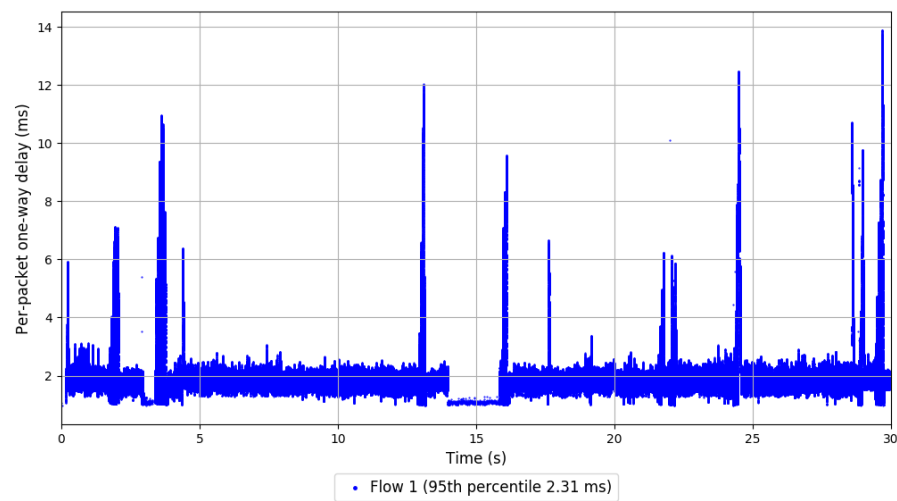
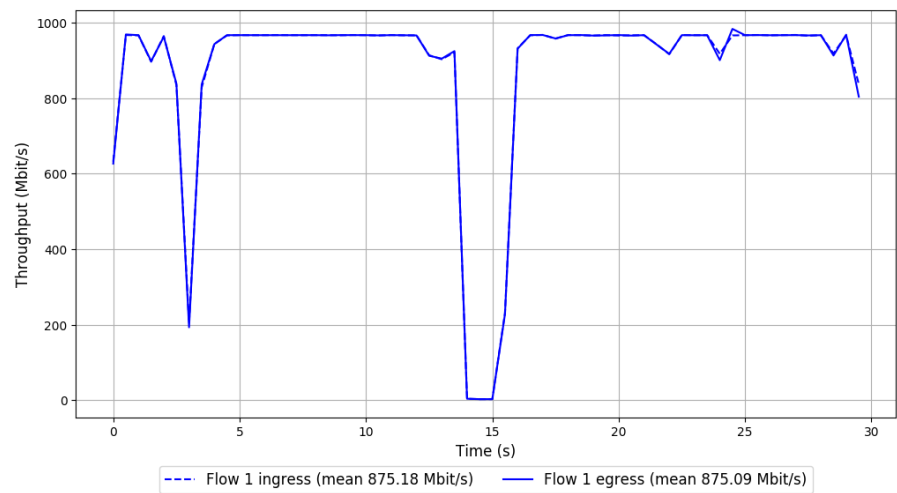
-- Flow 1:

Average throughput: 875.09 Mbit/s

95th percentile per-packet one-way delay: 2.312 ms

Loss rate: 0.08%

Run 10: Report of FillP — Data Link

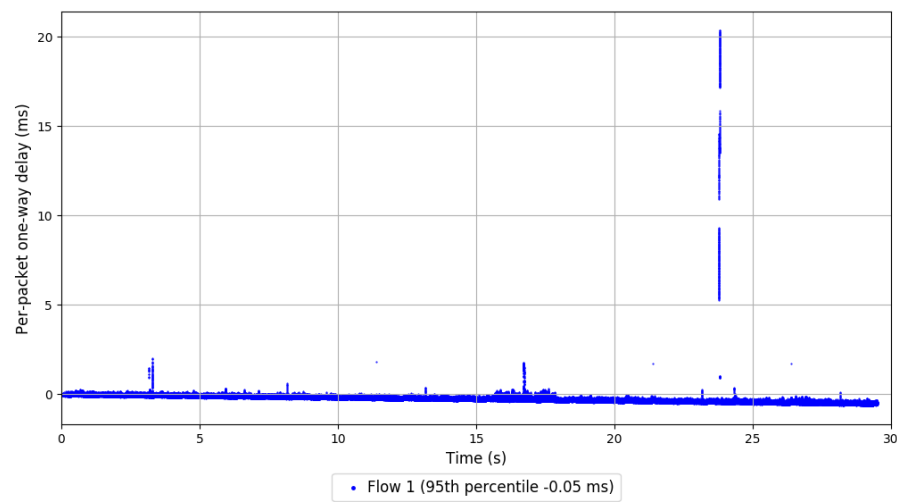
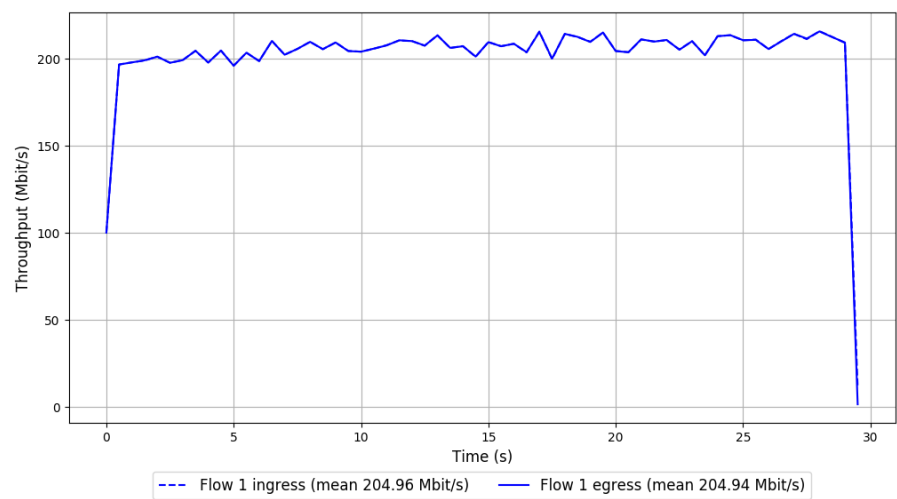


Run 1: Statistics of Indigo

Start at: 2017-12-19 19:16:20
End at: 2017-12-19 19:16:50
Local clock offset: 10.848 ms
Remote clock offset: -2.309 ms

Below is generated by plot.py at 2017-12-20 03:44:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 204.94 Mbit/s
95th percentile per-packet one-way delay: -0.051 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 204.94 Mbit/s
95th percentile per-packet one-way delay: -0.051 ms
Loss rate: 0.07%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-19 19:37:17

End at: 2017-12-19 19:37:48

Local clock offset: 10.843 ms

Remote clock offset: -1.56 ms

Below is generated by plot.py at 2017-12-20 03:44:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 203.09 Mbit/s

95th percentile per-packet one-way delay: 0.915 ms

Loss rate: 0.07%

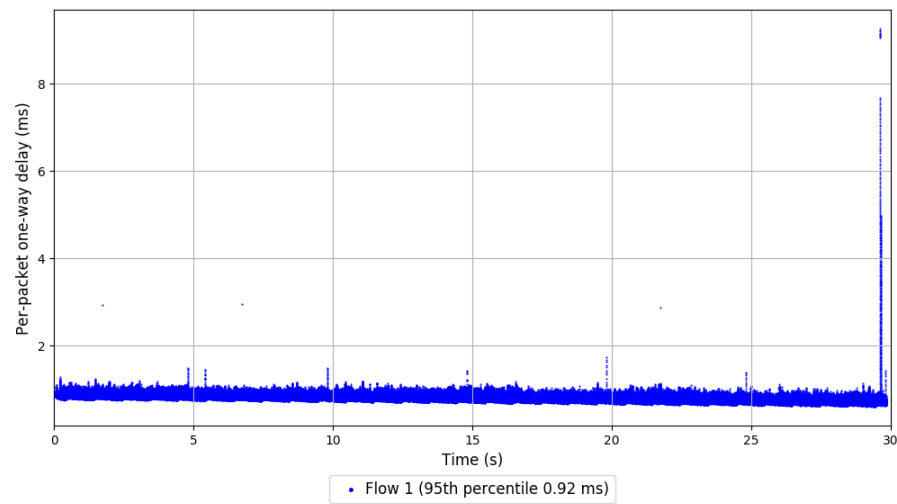
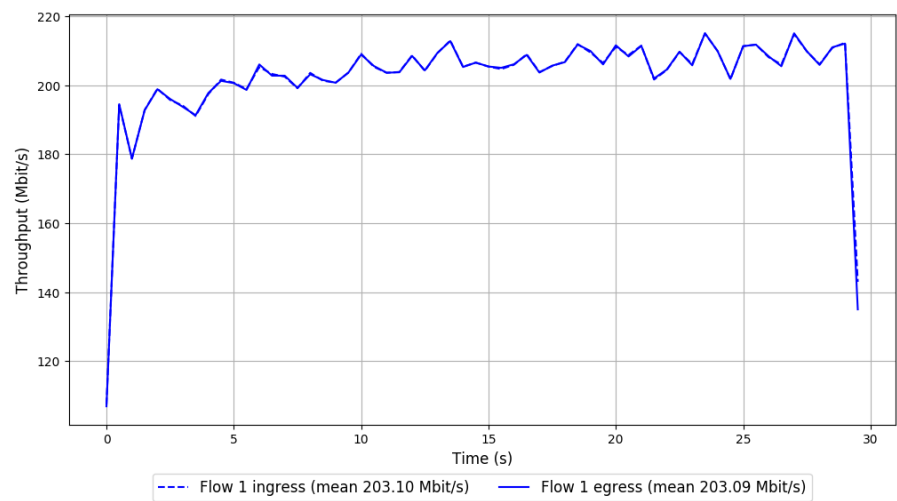
-- Flow 1:

Average throughput: 203.09 Mbit/s

95th percentile per-packet one-way delay: 0.915 ms

Loss rate: 0.07%

Run 2: Report of Indigo — Data Link

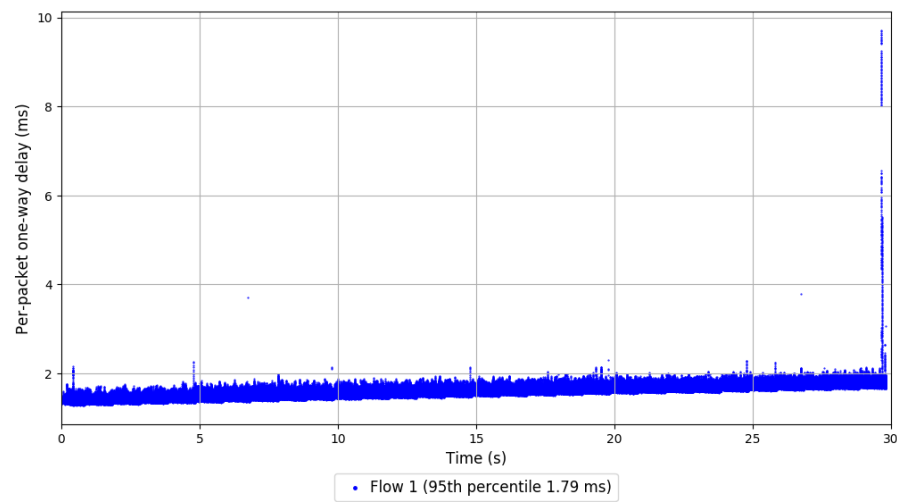
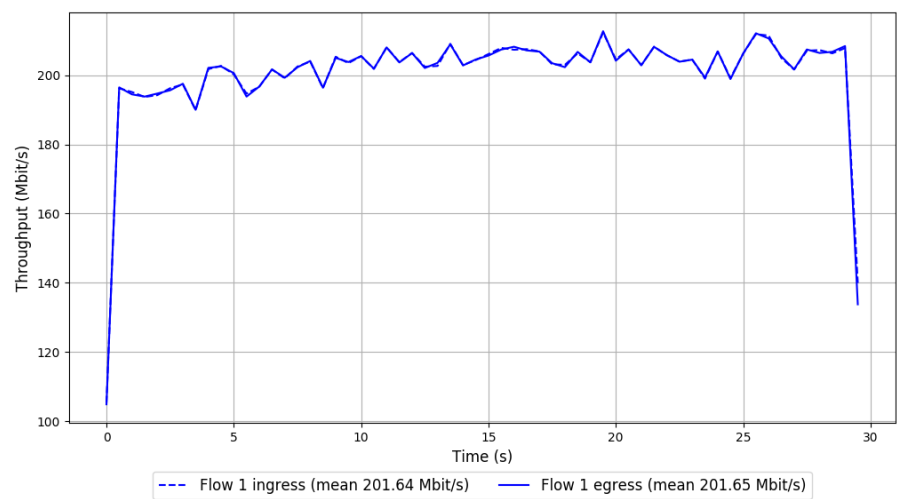


Run 3: Statistics of Indigo

Start at: 2017-12-19 19:58:07
End at: 2017-12-19 19:58:37
Local clock offset: 3.302 ms
Remote clock offset: -1.266 ms

Below is generated by plot.py at 2017-12-20 03:44:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 201.65 Mbit/s
95th percentile per-packet one-way delay: 1.791 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 201.65 Mbit/s
95th percentile per-packet one-way delay: 1.791 ms
Loss rate: 0.05%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

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

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

Local clock offset: 3.094 ms

Remote clock offset: -0.754 ms

Below is generated by plot.py at 2017-12-20 03:44:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 205.32 Mbit/s

95th percentile per-packet one-way delay: 1.179 ms

Loss rate: 0.07%

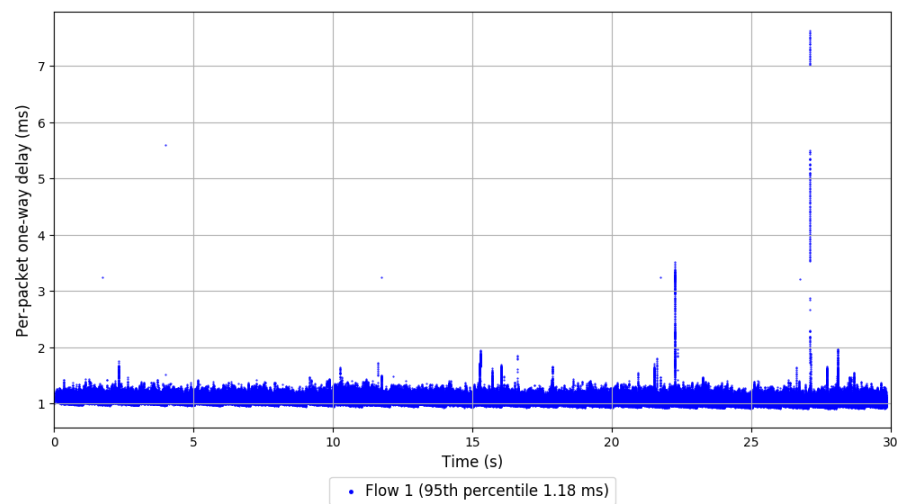
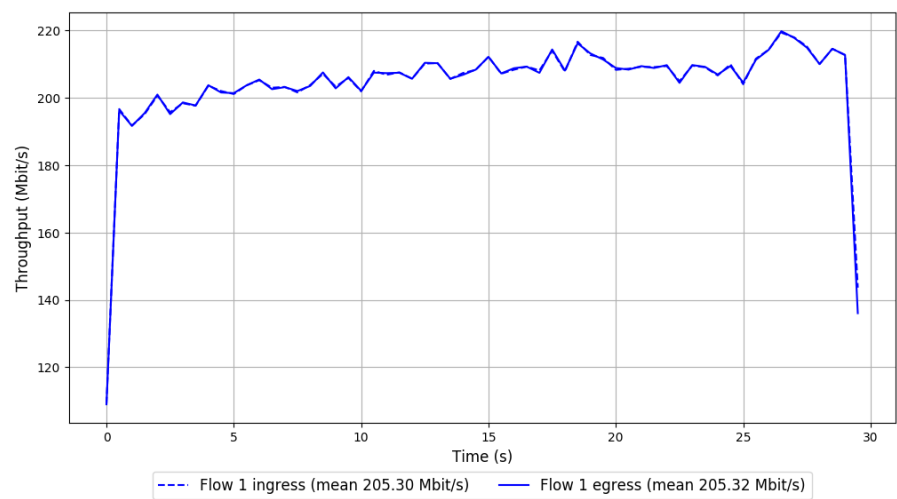
-- Flow 1:

Average throughput: 205.32 Mbit/s

95th percentile per-packet one-way delay: 1.179 ms

Loss rate: 0.07%

Run 4: Report of Indigo — Data Link

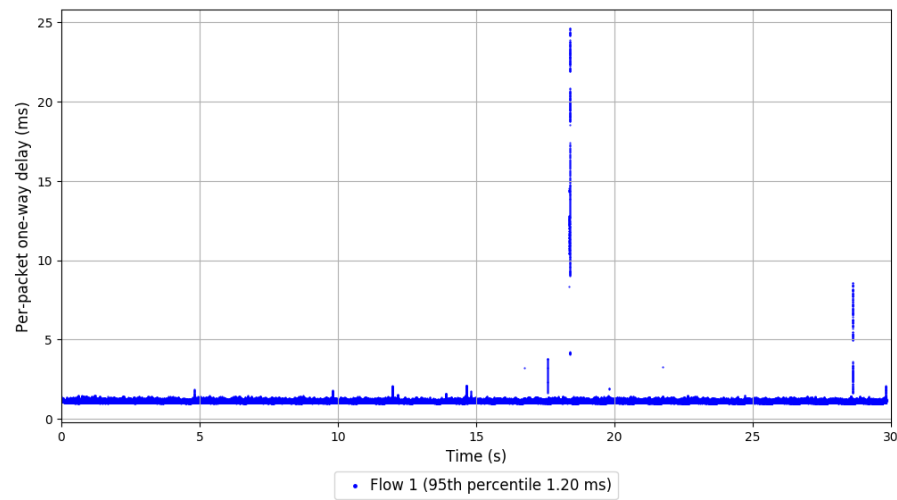
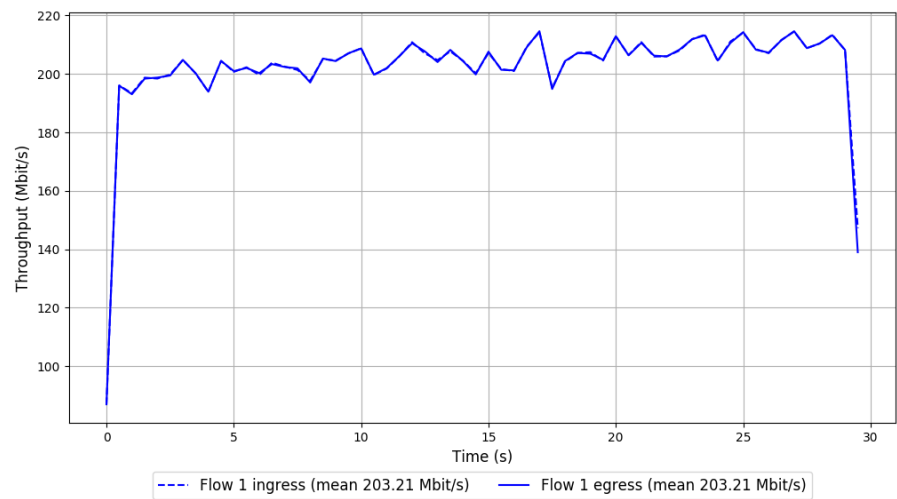


Run 5: Statistics of Indigo

Start at: 2017-12-19 20:39:50
End at: 2017-12-19 20:40:20
Local clock offset: 3.962 ms
Remote clock offset: -0.481 ms

Below is generated by plot.py at 2017-12-20 03:44:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 203.21 Mbit/s
95th percentile per-packet one-way delay: 1.196 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 203.21 Mbit/s
95th percentile per-packet one-way delay: 1.196 ms
Loss rate: 0.07%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

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

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

Local clock offset: 5.225 ms

Remote clock offset: -0.386 ms

Below is generated by plot.py at 2017-12-20 03:44:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.35 Mbit/s

95th percentile per-packet one-way delay: 0.973 ms

Loss rate: 0.07%

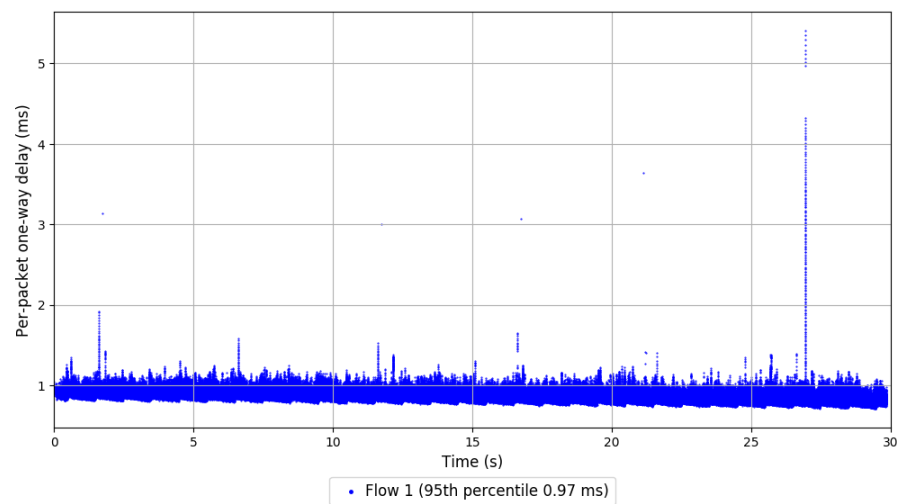
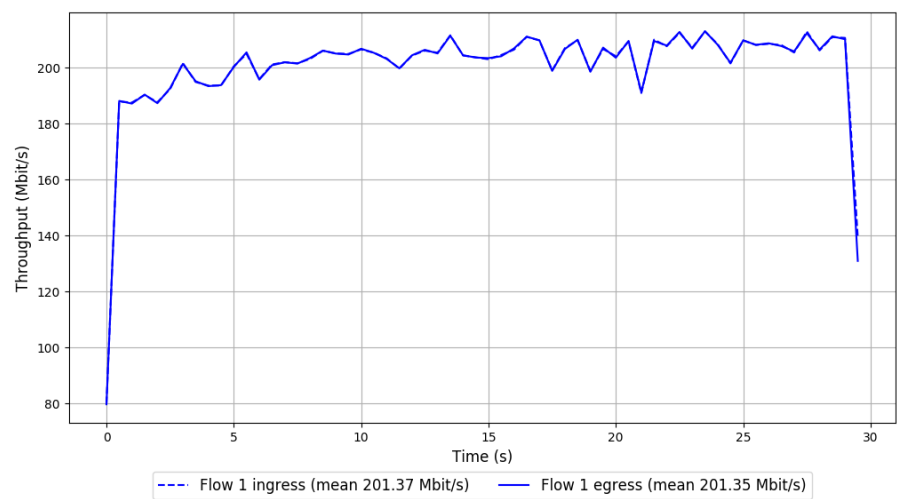
-- Flow 1:

Average throughput: 201.35 Mbit/s

95th percentile per-packet one-way delay: 0.973 ms

Loss rate: 0.07%

Run 6: Report of Indigo — Data Link

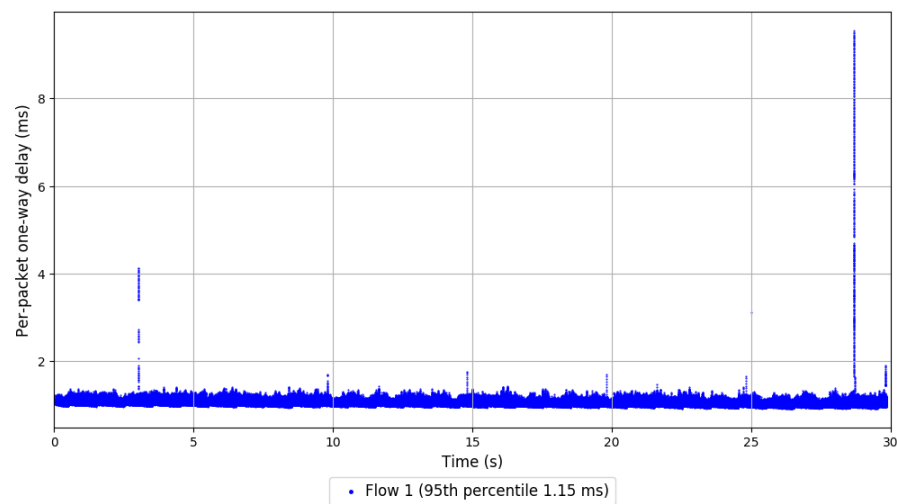
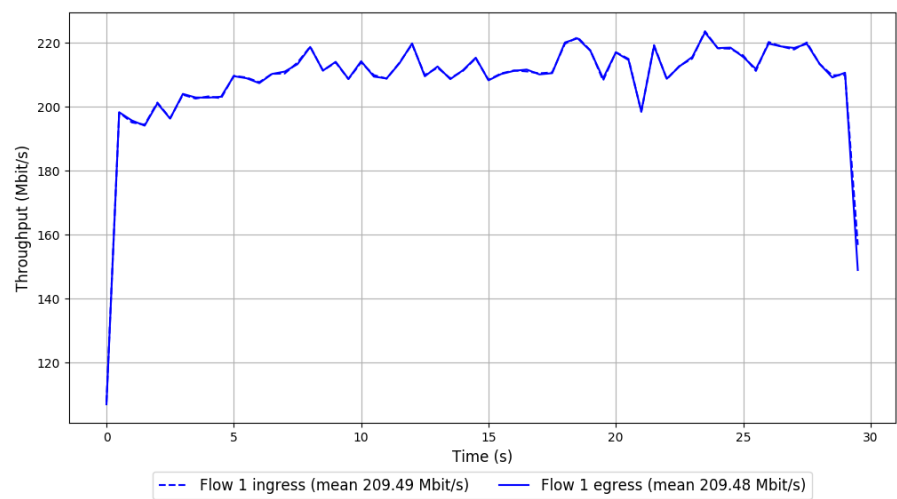


Run 7: Statistics of Indigo

Start at: 2017-12-19 21:21:46
End at: 2017-12-19 21:22:16
Local clock offset: 10.013 ms
Remote clock offset: -0.556 ms

Below is generated by plot.py at 2017-12-20 03:44:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 209.48 Mbit/s
95th percentile per-packet one-way delay: 1.146 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 209.48 Mbit/s
95th percentile per-packet one-way delay: 1.146 ms
Loss rate: 0.07%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-19 21:42:44

End at: 2017-12-19 21:43:14

Local clock offset: 6.845 ms

Remote clock offset: -0.568 ms

Below is generated by plot.py at 2017-12-20 03:44:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.76 Mbit/s

95th percentile per-packet one-way delay: 1.128 ms

Loss rate: 0.07%

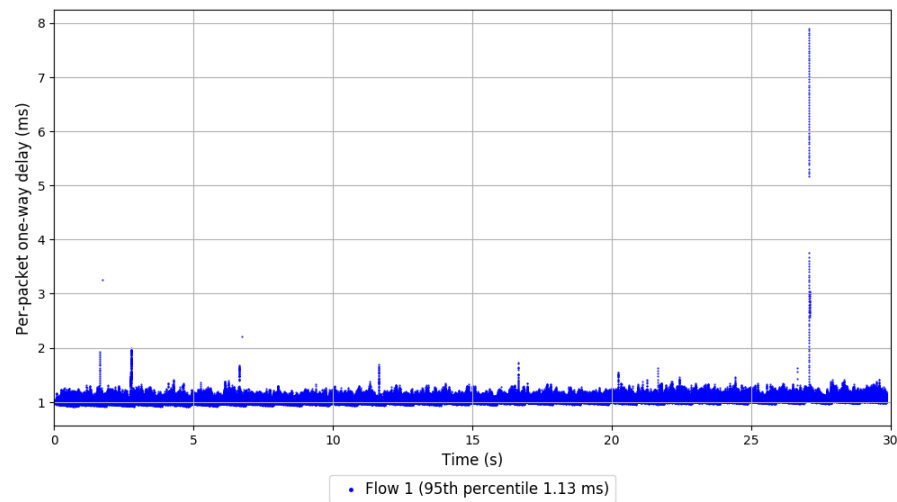
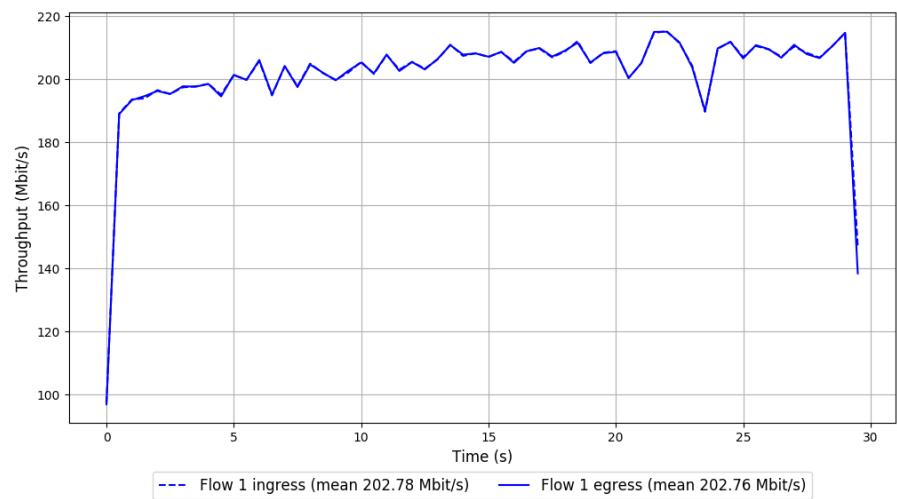
-- Flow 1:

Average throughput: 202.76 Mbit/s

95th percentile per-packet one-way delay: 1.128 ms

Loss rate: 0.07%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-19 22:03:32

End at: 2017-12-19 22:04:02

Local clock offset: 2.117 ms

Remote clock offset: -0.387 ms

Below is generated by plot.py at 2017-12-20 03:44:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.08 Mbit/s

95th percentile per-packet one-way delay: 1.494 ms

Loss rate: 0.08%

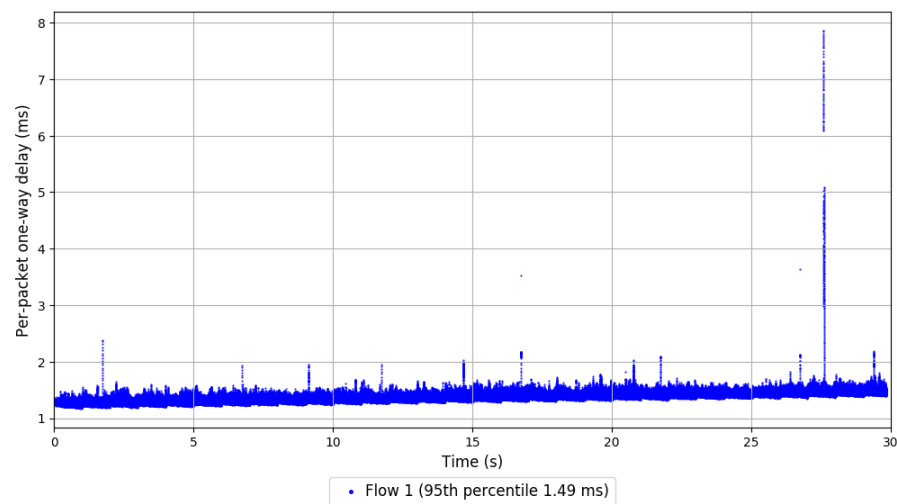
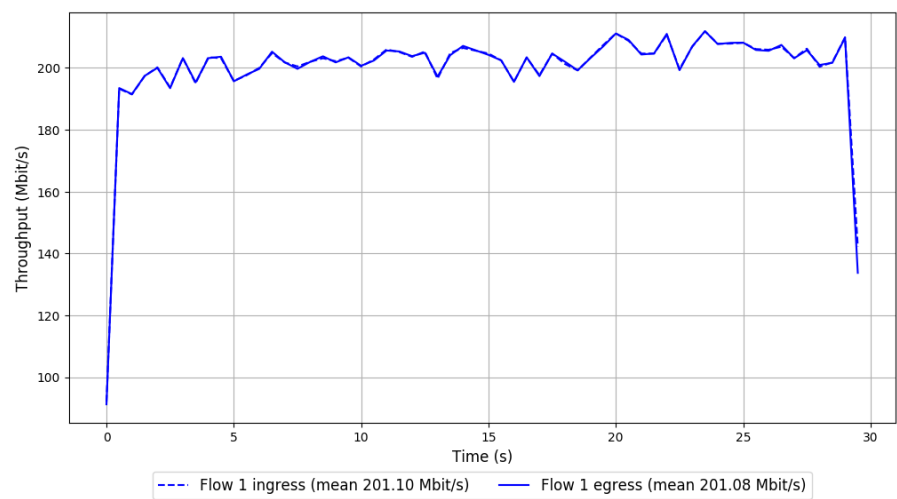
-- Flow 1:

Average throughput: 201.08 Mbit/s

95th percentile per-packet one-way delay: 1.494 ms

Loss rate: 0.08%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-19 22:24:26

End at: 2017-12-19 22:24:56

Local clock offset: -0.181 ms

Remote clock offset: -0.456 ms

Below is generated by plot.py at 2017-12-20 03:44:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.66 Mbit/s

95th percentile per-packet one-way delay: 1.057 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 202.66 Mbit/s

95th percentile per-packet one-way delay: 1.057 ms

Loss rate: 0.08%

Run 10: Report of Indigo — Data Link

