

Pantheon Report

Generated at 2017-10-11 02:55:08 (UTC).

Data path: AWS Brazil 1 Ethernet (*local*) → Brazil Ethernet (*remote*).

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

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

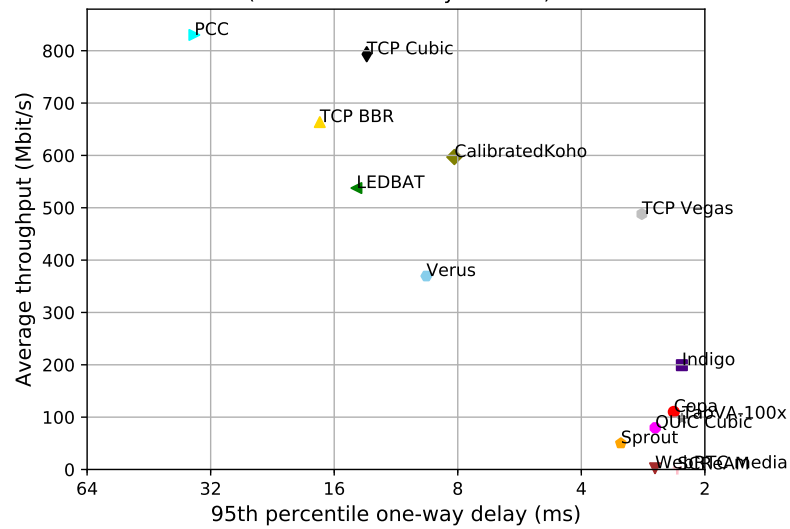
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

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

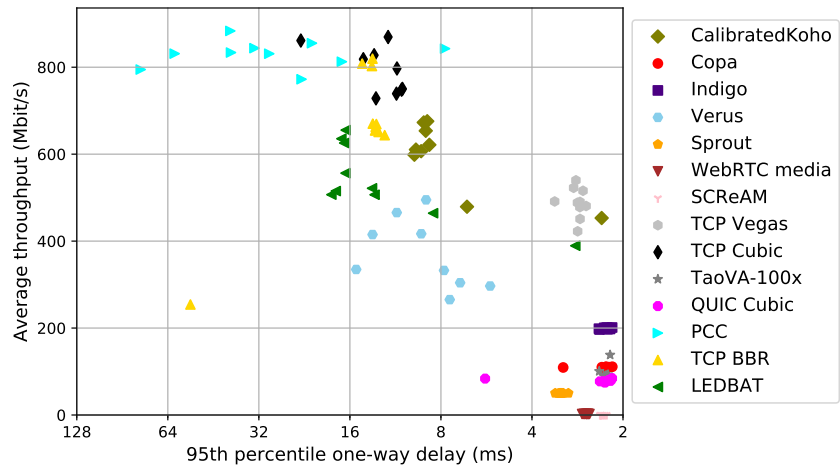
Git summary:

```
branch: indigos @ 45998d6404be7c5106956530acb9cfc43bd06e7d
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from AWS Brazil 1 Ethernet to Brazil Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from AWS Brazil 1 Ethernet to Brazil 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	663.67	17.35	0.21
TCP Cubic	9	793.33	13.33	0.03
LEDBAT	10	537.65	14.13	0.02
PCC	10	830.10	35.06	0.27
QUIC Cubic	9	79.61	2.64	0.00
SCReAM	6	0.22	2.33	0.00
WebRTC media	10	2.31	2.65	0.00
Sprout	10	50.17	3.20	0.01
TaoVA-100x	9	97.12	2.27	0.00
TCP Vegas	10	488.03	2.85	0.00
Verus	9	369.58	9.54	0.13
Copa	8	110.07	2.38	0.00
CalibratedKoho	9	596.91	8.16	0.01
Indigo	9	199.27	2.28	0.01

Run 1: Statistics of TCP BBR

Start at: 2017-10-10 20:50:24

End at: 2017-10-10 20:50:54

Local clock offset: 0.764 ms

Remote clock offset: 0.398 ms

Below is generated by plot.py at 2017-10-11 01:34:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 651.06 Mbit/s

95th percentile per-packet one-way delay: 12.858 ms

Loss rate: 0.06%

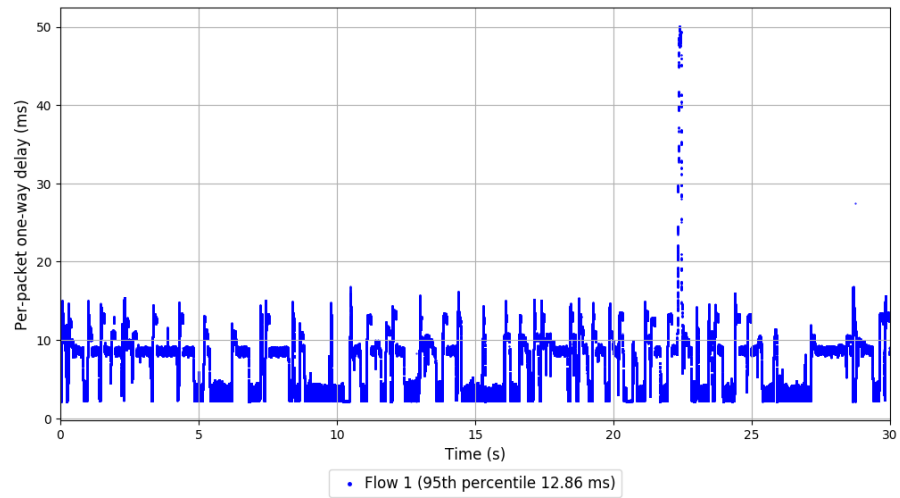
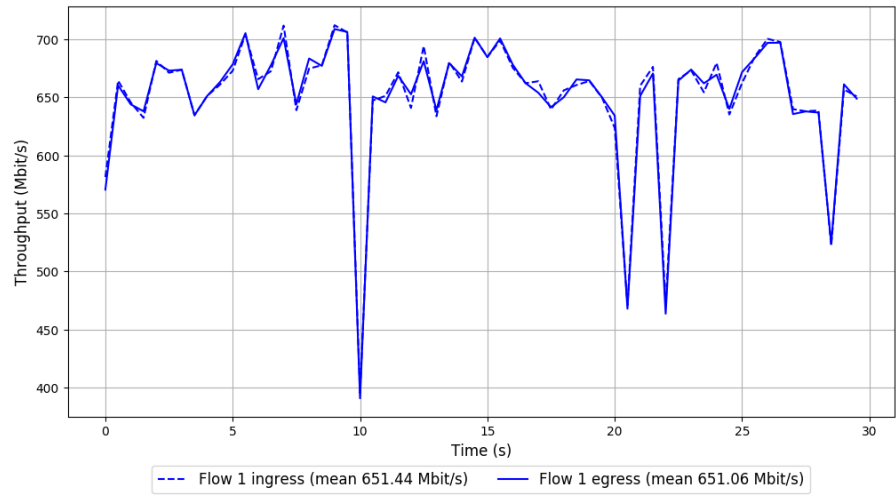
-- Flow 1:

Average throughput: 651.06 Mbit/s

95th percentile per-packet one-way delay: 12.858 ms

Loss rate: 0.06%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-10-10 21:08:26

End at: 2017-10-10 21:08:56

Local clock offset: 0.584 ms

Remote clock offset: 0.25 ms

Below is generated by plot.py at 2017-10-11 01:34:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 670.16 Mbit/s

95th percentile per-packet one-way delay: 13.442 ms

Loss rate: 0.04%

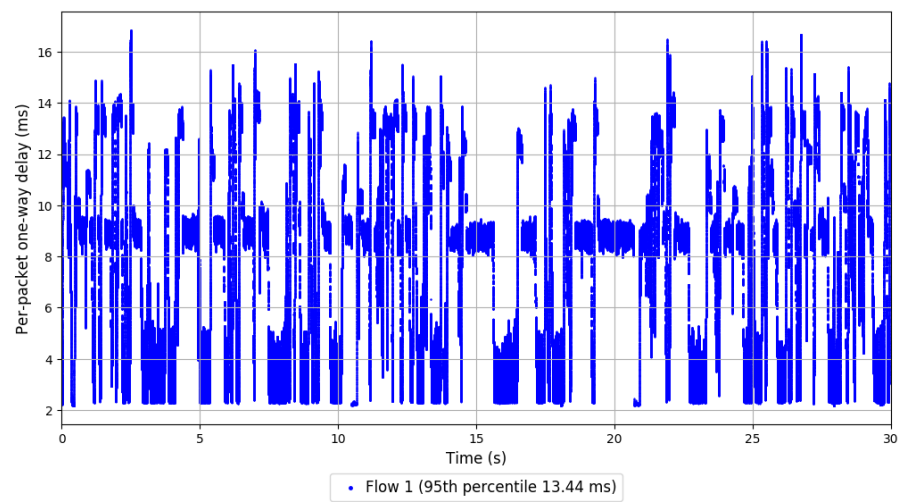
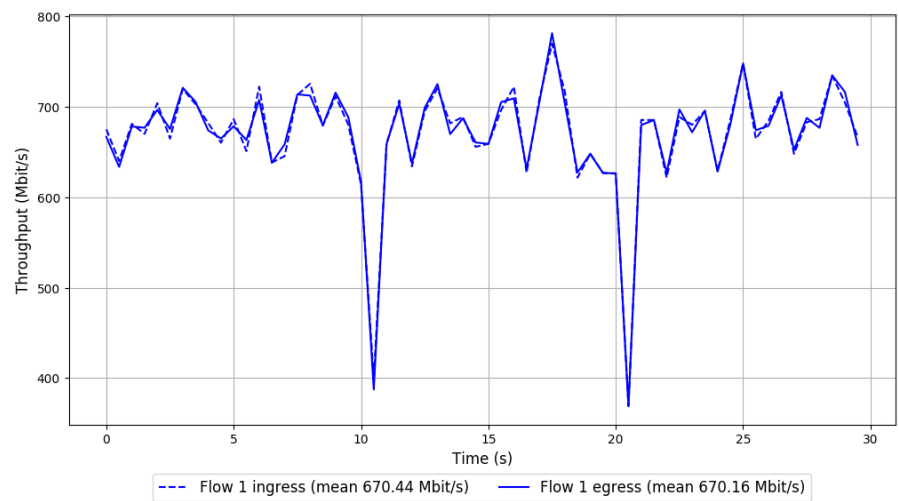
-- Flow 1:

Average throughput: 670.16 Mbit/s

95th percentile per-packet one-way delay: 13.442 ms

Loss rate: 0.04%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-10-10 21:26:50

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

Local clock offset: 0.789 ms

Remote clock offset: 0.318 ms

Below is generated by plot.py at 2017-10-11 01:34:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 654.48 Mbit/s

95th percentile per-packet one-way delay: 13.212 ms

Loss rate: 0.04%

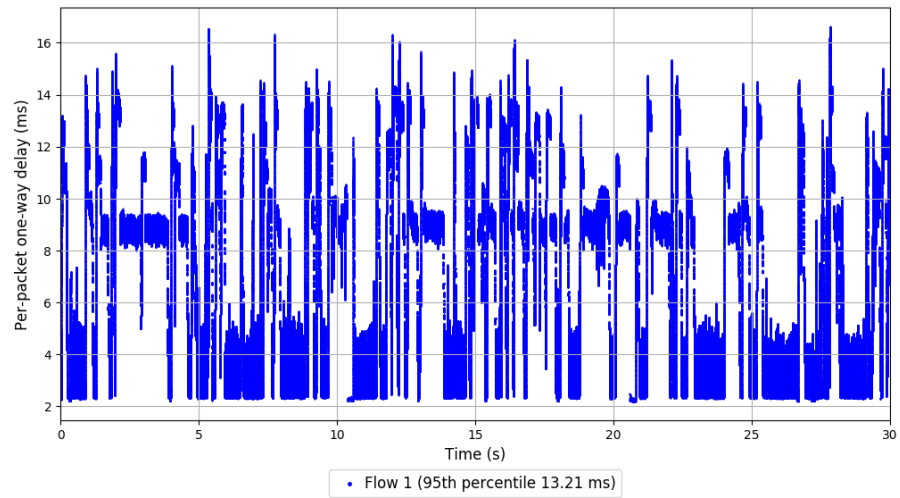
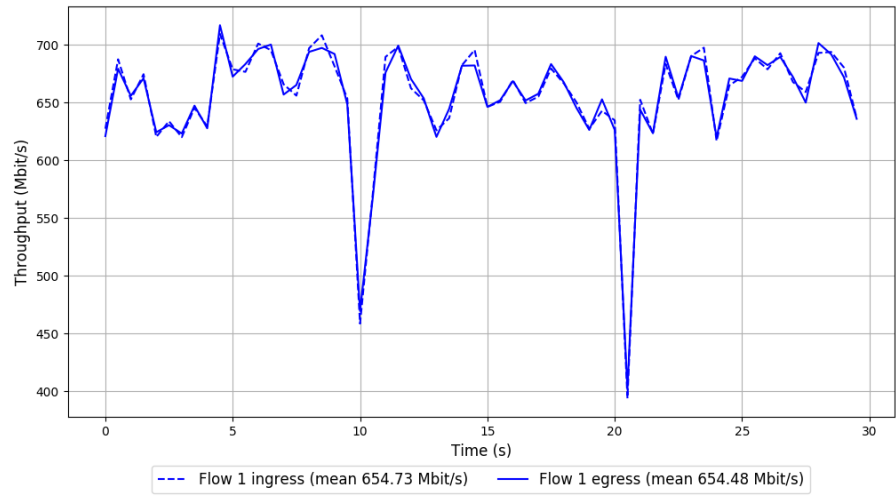
-- Flow 1:

Average throughput: 654.48 Mbit/s

95th percentile per-packet one-way delay: 13.212 ms

Loss rate: 0.04%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-10-10 21:45:20

End at: 2017-10-10 21:45:50

Local clock offset: 0.755 ms

Remote clock offset: 0.221 ms

Below is generated by plot.py at 2017-10-11 01:36:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 802.74 Mbit/s

95th percentile per-packet one-way delay: 13.530 ms

Loss rate: 0.12%

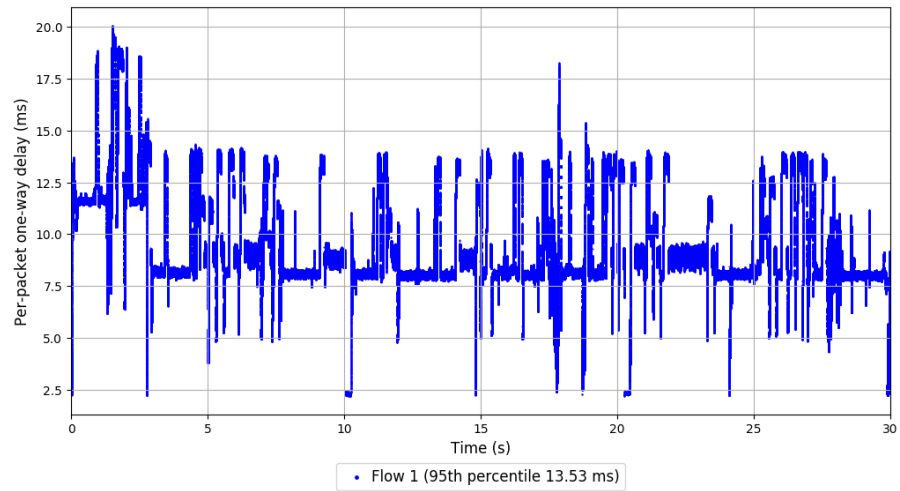
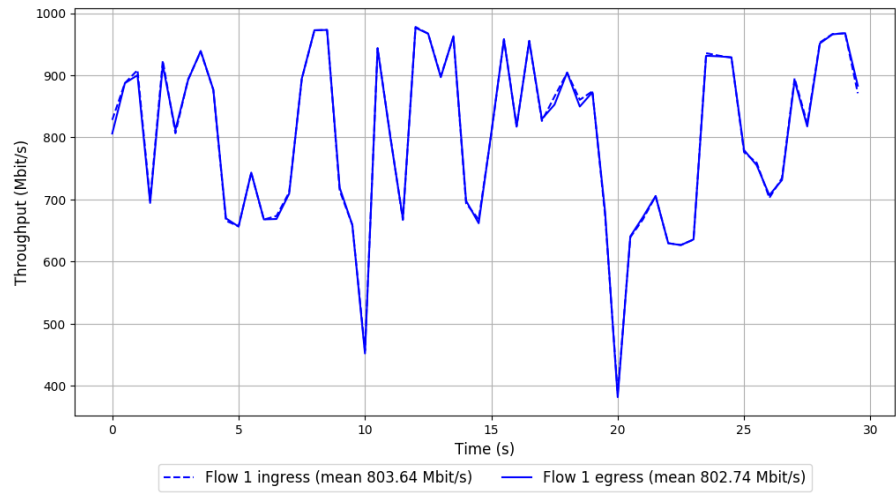
-- Flow 1:

Average throughput: 802.74 Mbit/s

95th percentile per-packet one-way delay: 13.530 ms

Loss rate: 0.12%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-10-10 22:03:17

End at: 2017-10-10 22:03:47

Local clock offset: 0.581 ms

Remote clock offset: 0.121 ms

Below is generated by plot.py at 2017-10-11 01:36:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 643.69 Mbit/s

95th percentile per-packet one-way delay: 12.277 ms

Loss rate: 0.00%

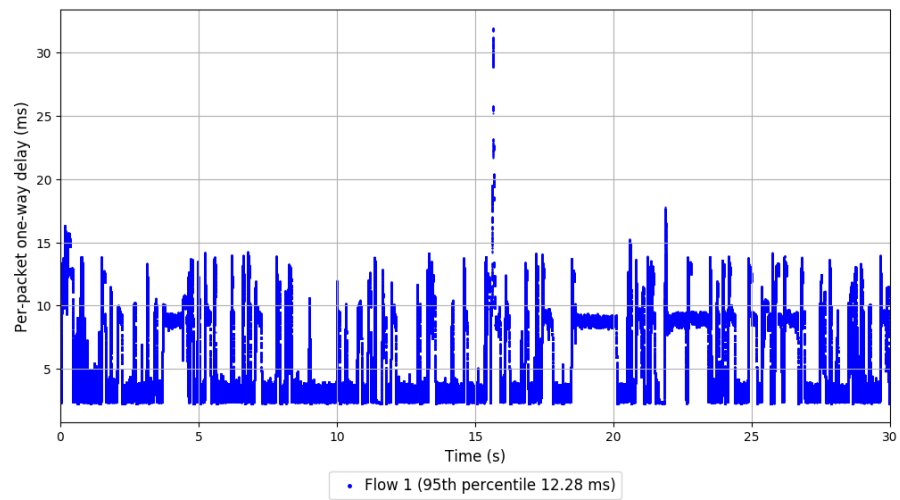
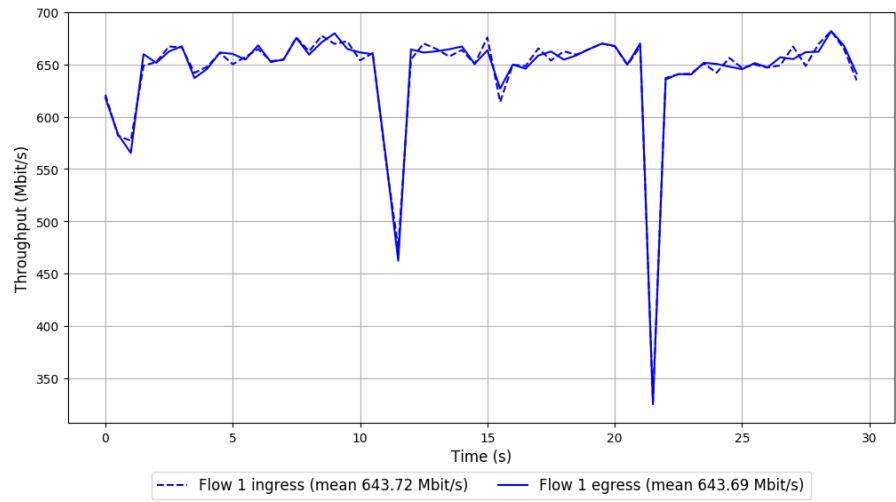
-- Flow 1:

Average throughput: 643.69 Mbit/s

95th percentile per-packet one-way delay: 12.277 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-10-10 22:21:37

End at: 2017-10-10 22:22:07

Local clock offset: 0.654 ms

Remote clock offset: -0.013 ms

Below is generated by plot.py at 2017-10-11 01:36:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 819.66 Mbit/s

95th percentile per-packet one-way delay: 13.470 ms

Loss rate: 0.59%

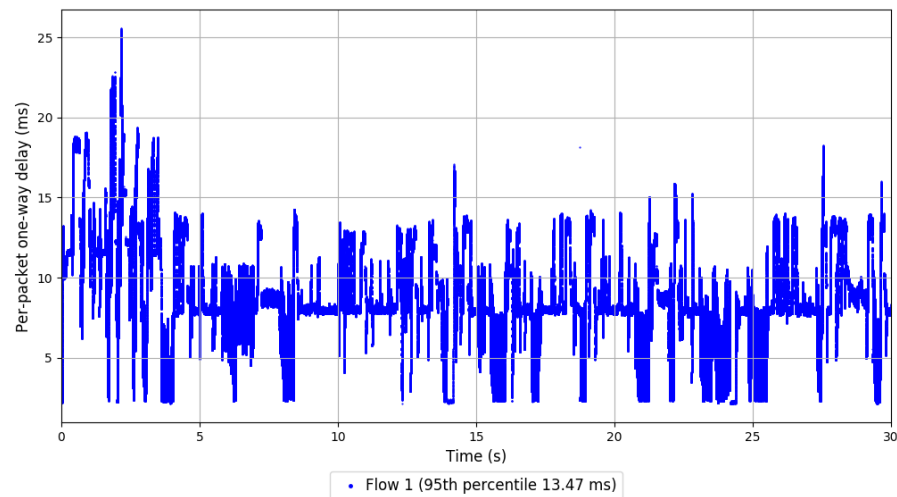
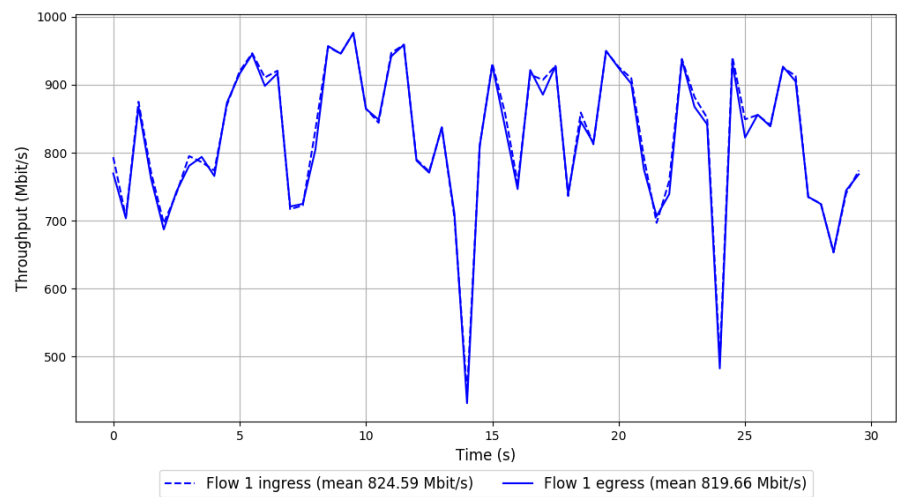
-- Flow 1:

Average throughput: 819.66 Mbit/s

95th percentile per-packet one-way delay: 13.470 ms

Loss rate: 0.59%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-10-10 22:40:09

End at: 2017-10-10 22:40:39

Local clock offset: 0.774 ms

Remote clock offset: 0.197 ms

Below is generated by plot.py at 2017-10-11 01:36:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 662.93 Mbit/s

95th percentile per-packet one-way delay: 13.148 ms

Loss rate: 0.03%

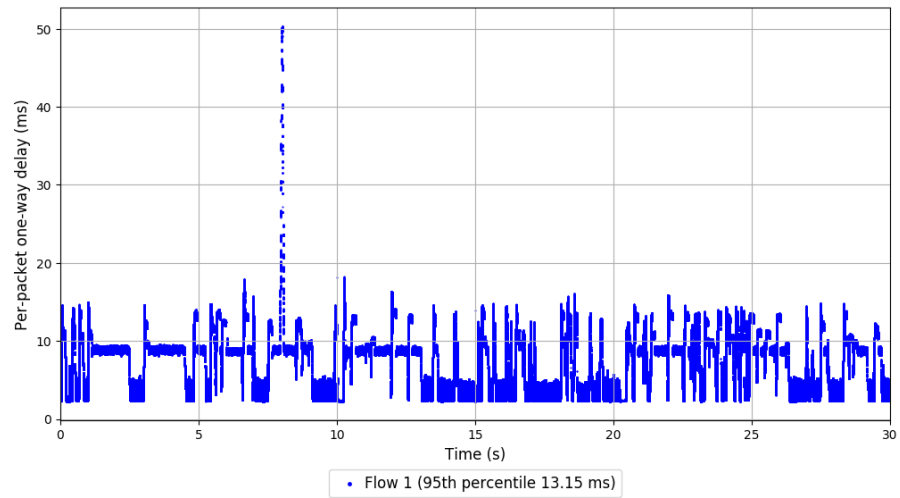
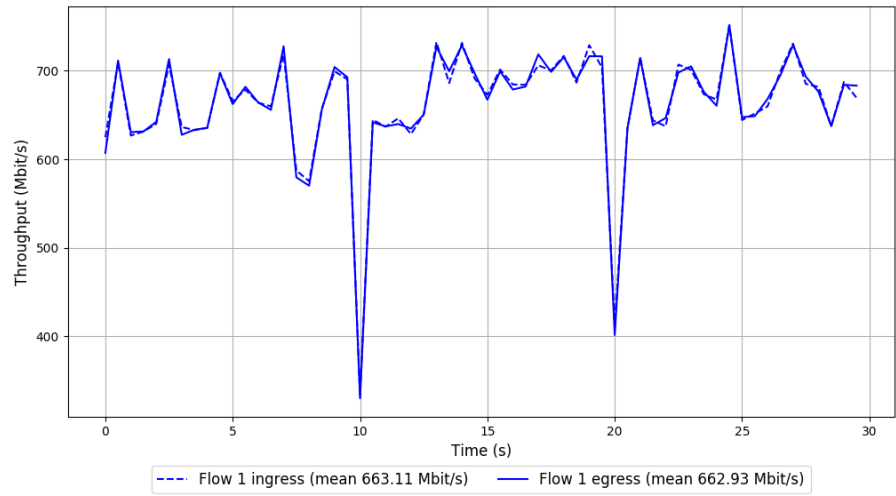
-- Flow 1:

Average throughput: 662.93 Mbit/s

95th percentile per-packet one-way delay: 13.148 ms

Loss rate: 0.03%

Run 7: Report of TCP BBR — Data Link

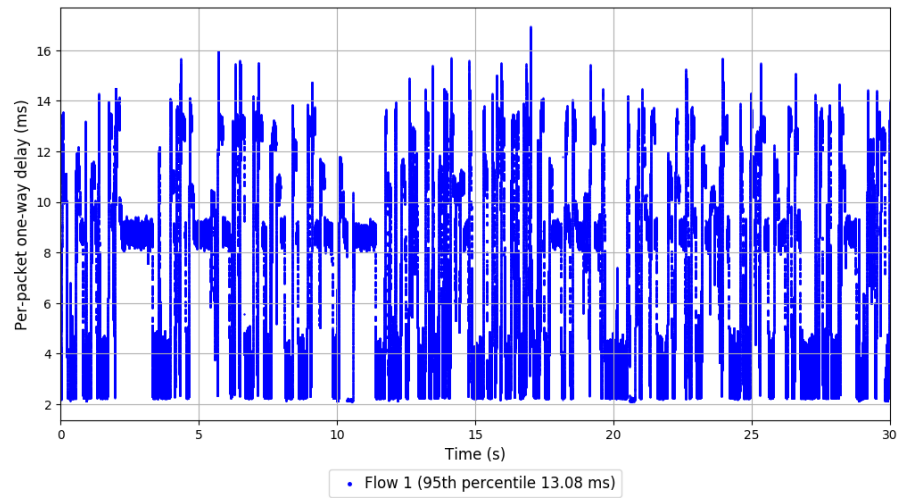
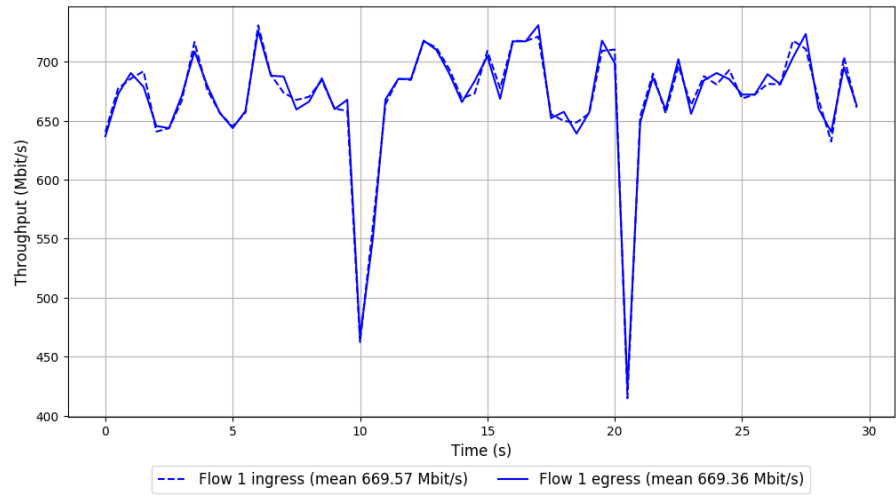


Run 8: Statistics of TCP BBR

Start at: 2017-10-10 22:58:25
End at: 2017-10-10 22:58:55
Local clock offset: 0.543 ms
Remote clock offset: -0.122 ms

Below is generated by plot.py at 2017-10-11 01:36:35
Datalink statistics
-- Total of 1 flow:
Average throughput: 669.36 Mbit/s
95th percentile per-packet one-way delay: 13.081 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 669.36 Mbit/s
95th percentile per-packet one-way delay: 13.081 ms
Loss rate: 0.03%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-10-10 23:17:06

End at: 2017-10-10 23:17:36

Local clock offset: 0.224 ms

Remote clock offset: -0.21 ms

Below is generated by plot.py at 2017-10-11 01:46:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 808.39 Mbit/s

95th percentile per-packet one-way delay: 14.565 ms

Loss rate: 0.03%

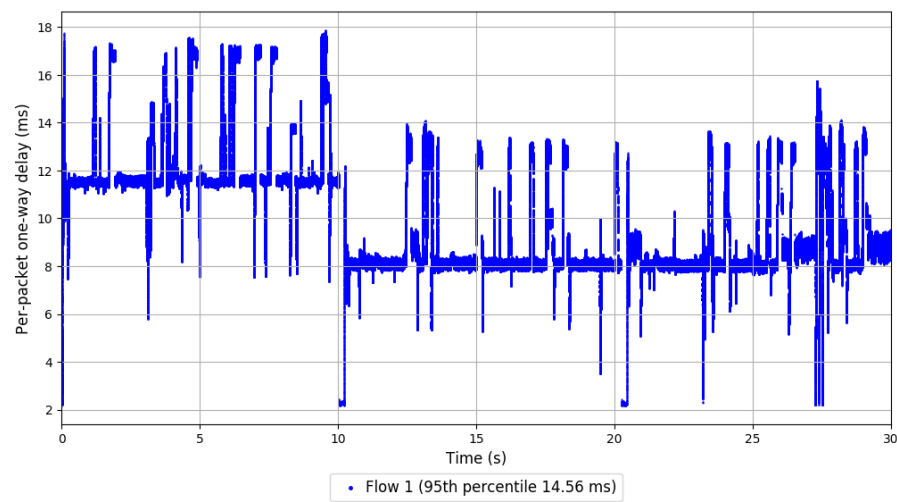
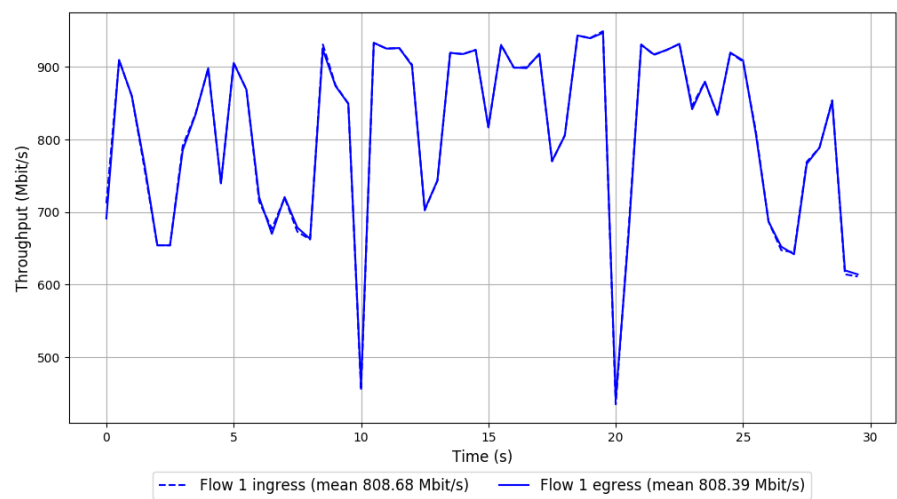
-- Flow 1:

Average throughput: 808.39 Mbit/s

95th percentile per-packet one-way delay: 14.565 ms

Loss rate: 0.03%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-10-10 23:35:36

End at: 2017-10-10 23:36:06

Local clock offset: 0.11 ms

Remote clock offset: -0.216 ms

Below is generated by plot.py at 2017-10-11 01:46:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 254.28 Mbit/s

95th percentile per-packet one-way delay: 53.888 ms

Loss rate: 1.17%

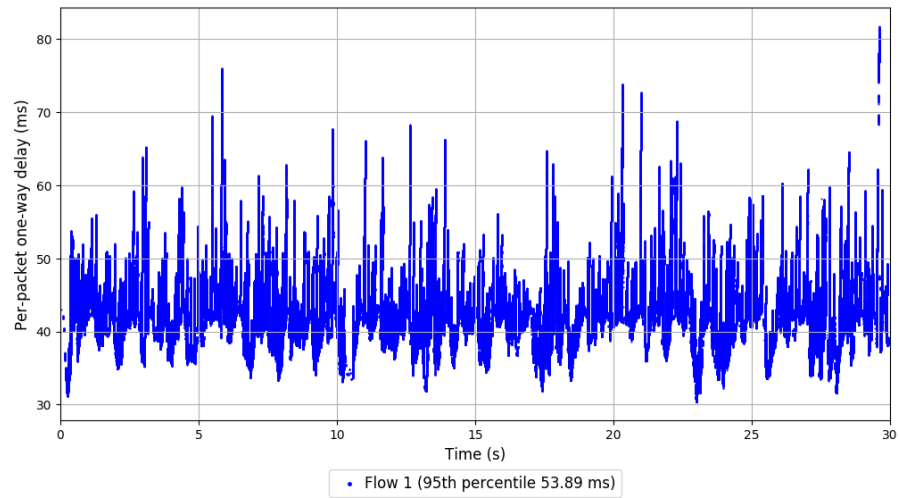
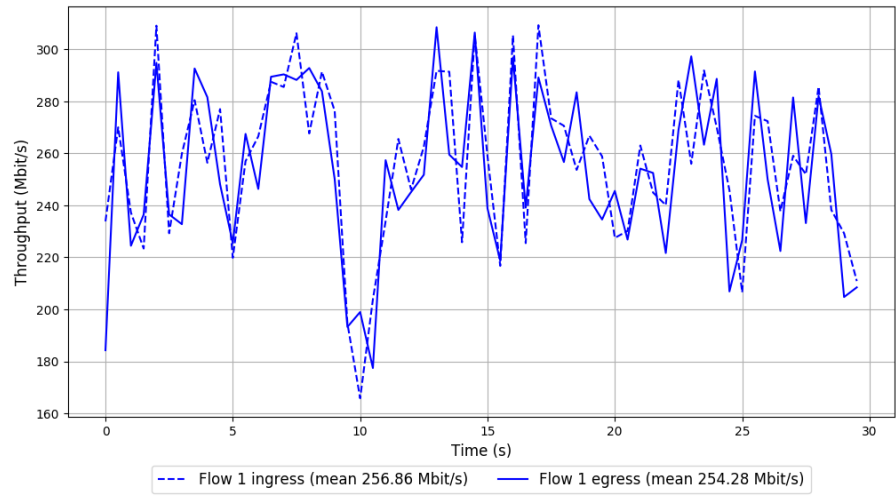
-- Flow 1:

Average throughput: 254.28 Mbit/s

95th percentile per-packet one-way delay: 53.888 ms

Loss rate: 1.17%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-10-10 20:44:29

End at: 2017-10-10 20:44:59

Local clock offset: 0.749 ms

Remote clock offset: 0.366 ms

Below is generated by plot.py at 2017-10-11 01:46:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 739.20 Mbit/s

95th percentile per-packet one-way delay: 11.224 ms

Loss rate: 0.03%

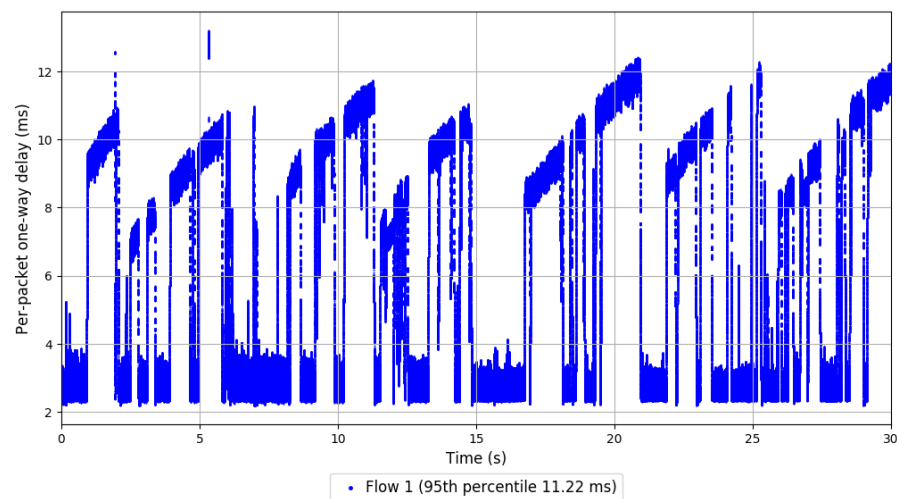
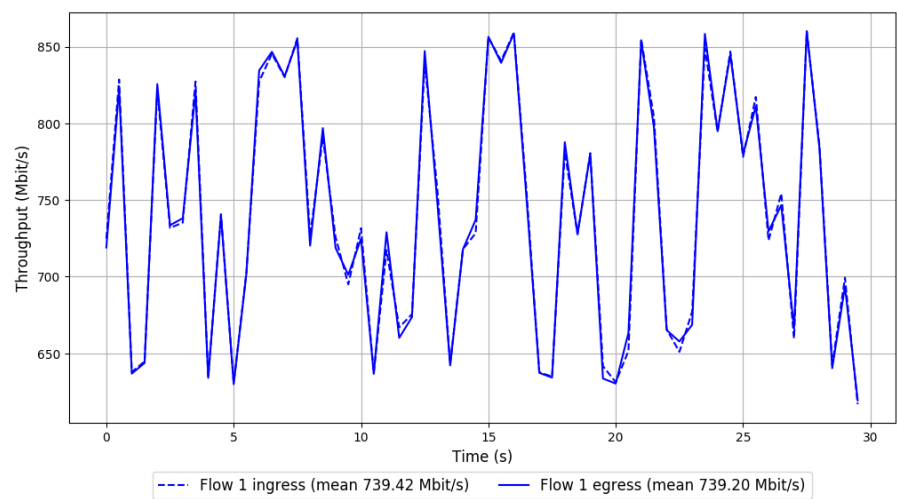
-- Flow 1:

Average throughput: 739.20 Mbit/s

95th percentile per-packet one-way delay: 11.224 ms

Loss rate: 0.03%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

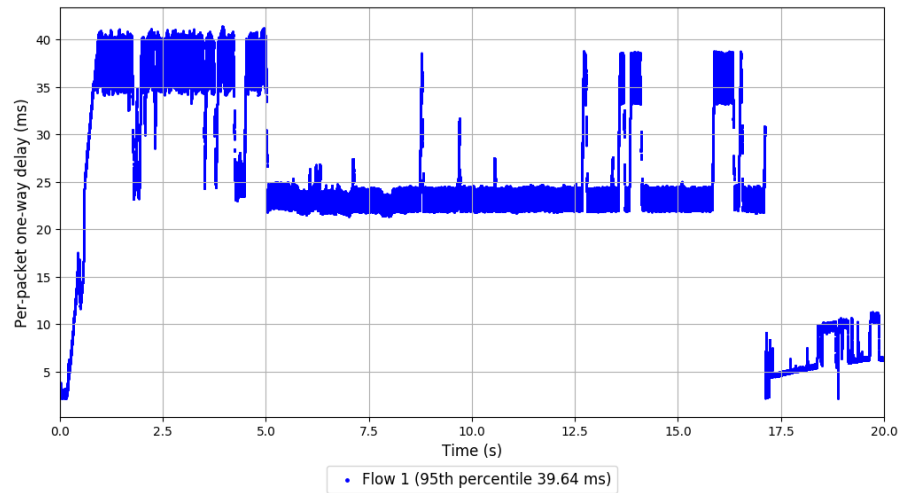
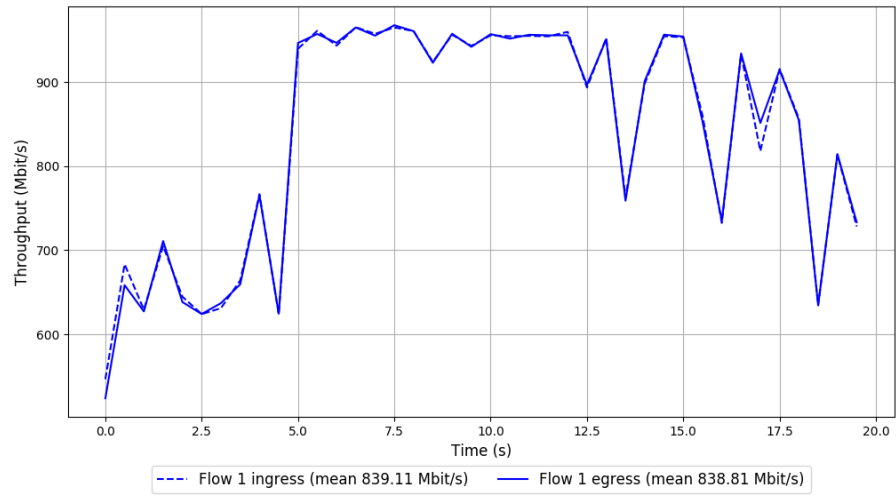
Start at: 2017-10-10 21:02:35

End at: 2017-10-10 21:03:05

Local clock offset: 0.605 ms

Remote clock offset: 0.283 ms

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-10-10 21:20:54

End at: 2017-10-10 21:21:24

Local clock offset: 0.695 ms

Remote clock offset: 0.237 ms

Below is generated by plot.py at 2017-10-11 01:47:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 861.33 Mbit/s

95th percentile per-packet one-way delay: 23.246 ms

Loss rate: 0.03%

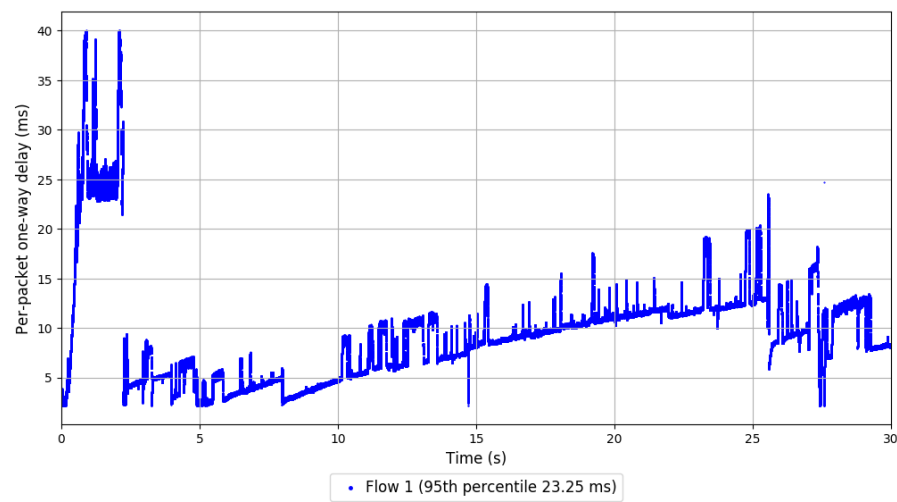
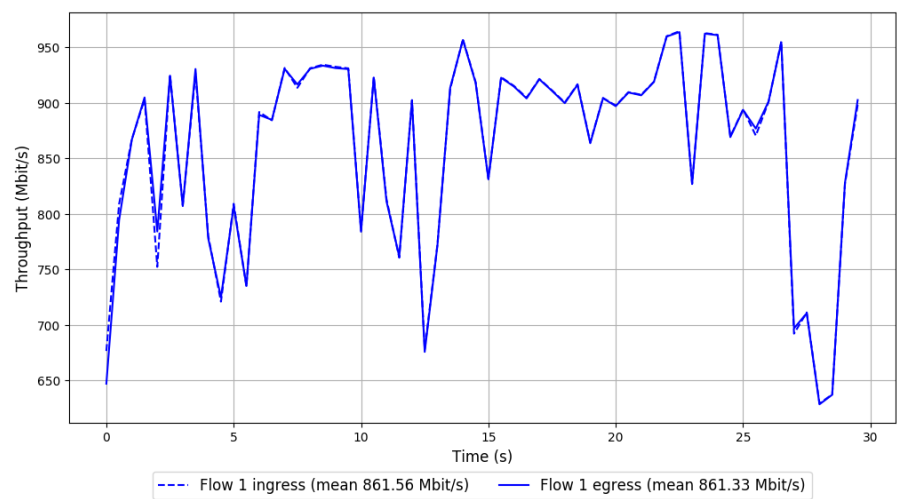
-- Flow 1:

Average throughput: 861.33 Mbit/s

95th percentile per-packet one-way delay: 23.246 ms

Loss rate: 0.03%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-10-10 21:39:17

End at: 2017-10-10 21:39:47

Local clock offset: 0.671 ms

Remote clock offset: 0.122 ms

Below is generated by plot.py at 2017-10-11 01:47:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 728.37 Mbit/s

95th percentile per-packet one-way delay: 13.119 ms

Loss rate: 0.01%

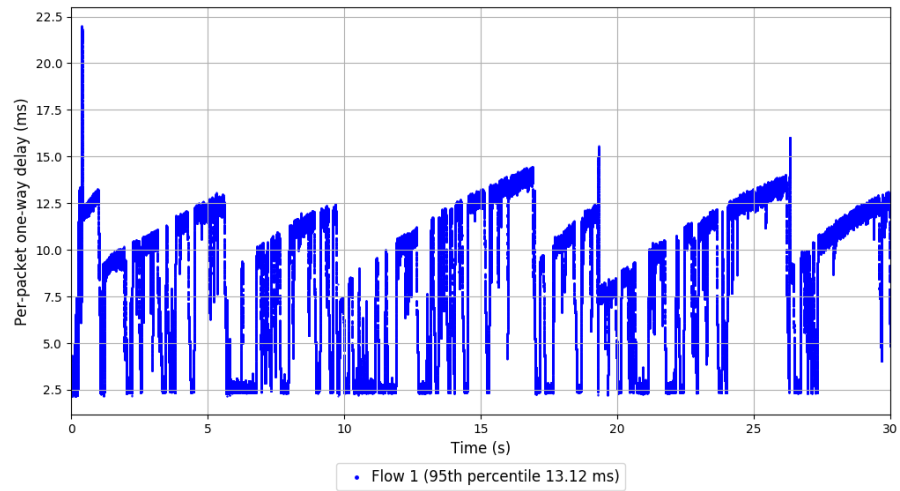
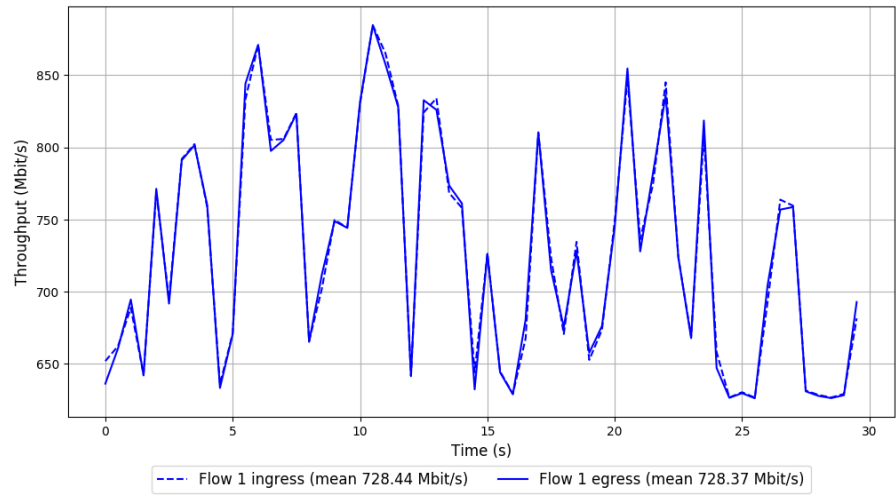
-- Flow 1:

Average throughput: 728.37 Mbit/s

95th percentile per-packet one-way delay: 13.119 ms

Loss rate: 0.01%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-10-10 21:57:52

End at: 2017-10-10 21:58:22

Local clock offset: 0.754 ms

Remote clock offset: 0.192 ms

Below is generated by plot.py at 2017-10-11 01:48:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 818.43 Mbit/s

95th percentile per-packet one-way delay: 14.443 ms

Loss rate: 0.04%

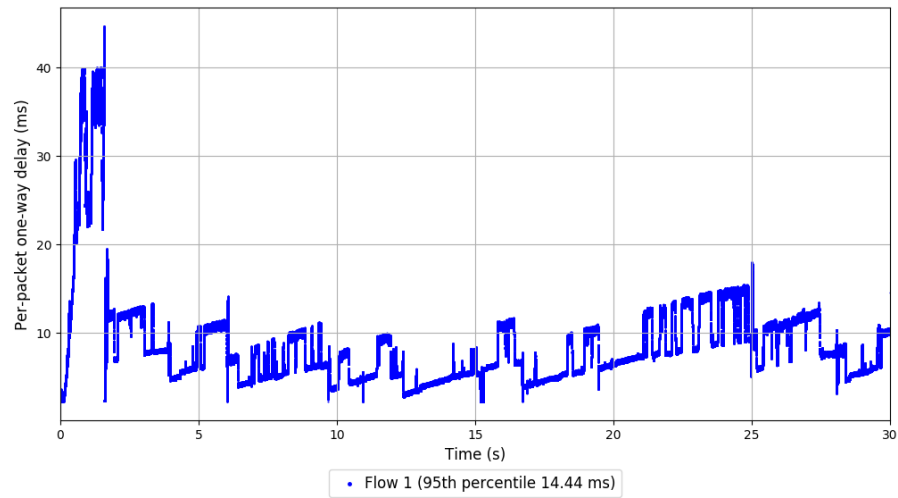
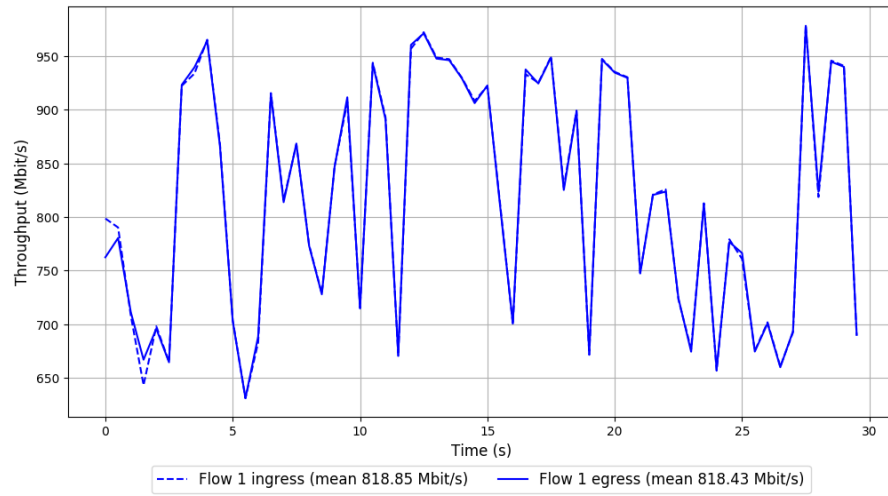
-- Flow 1:

Average throughput: 818.43 Mbit/s

95th percentile per-packet one-way delay: 14.443 ms

Loss rate: 0.04%

Run 5: Report of TCP Cubic — Data Link

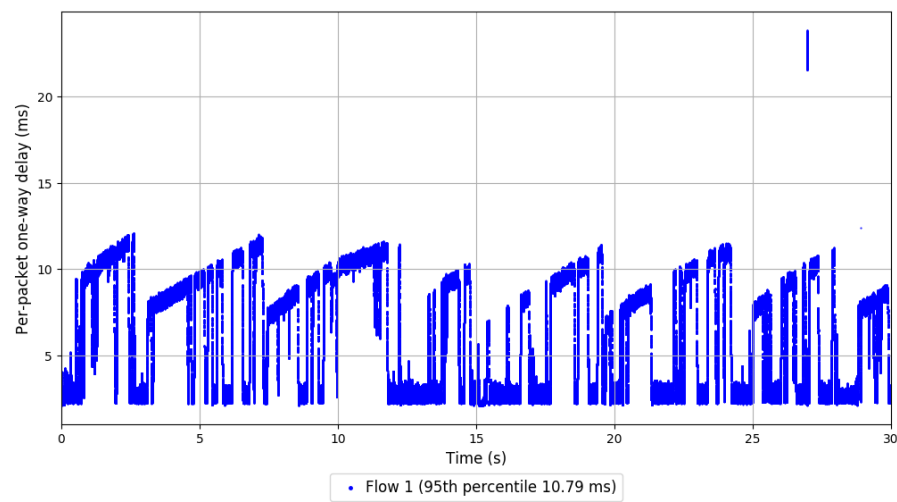
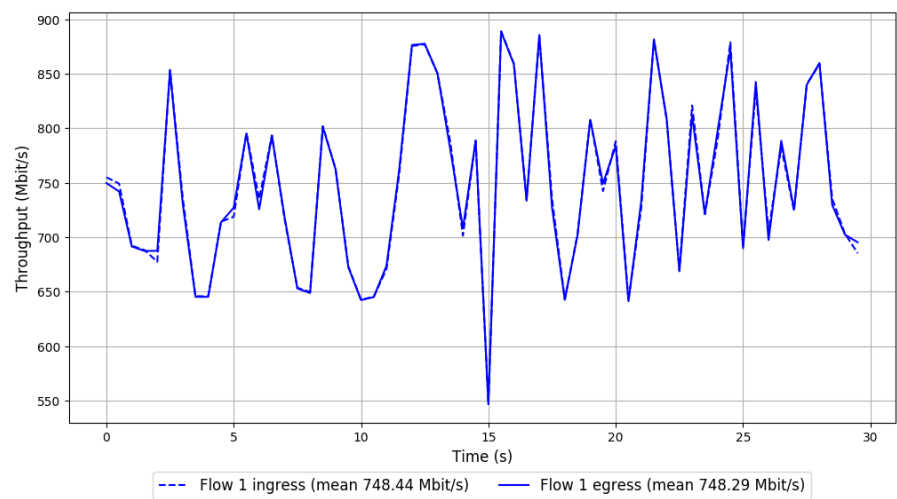


Run 6: Statistics of TCP Cubic

Start at: 2017-10-10 22:15:41
End at: 2017-10-10 22:16:11
Local clock offset: 0.655 ms
Remote clock offset: -0.017 ms

Below is generated by plot.py at 2017-10-11 01:48:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 748.29 Mbit/s
95th percentile per-packet one-way delay: 10.795 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 748.29 Mbit/s
95th percentile per-packet one-way delay: 10.795 ms
Loss rate: 0.02%

Run 6: Report of TCP Cubic — Data Link

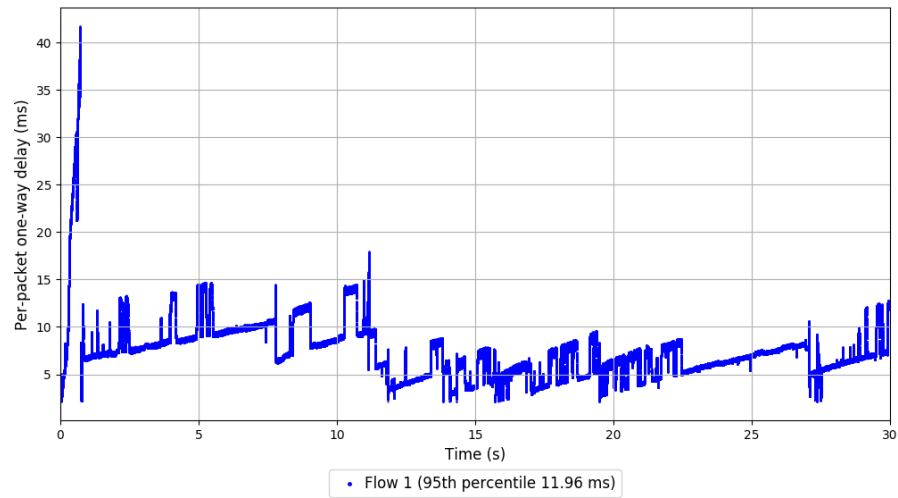
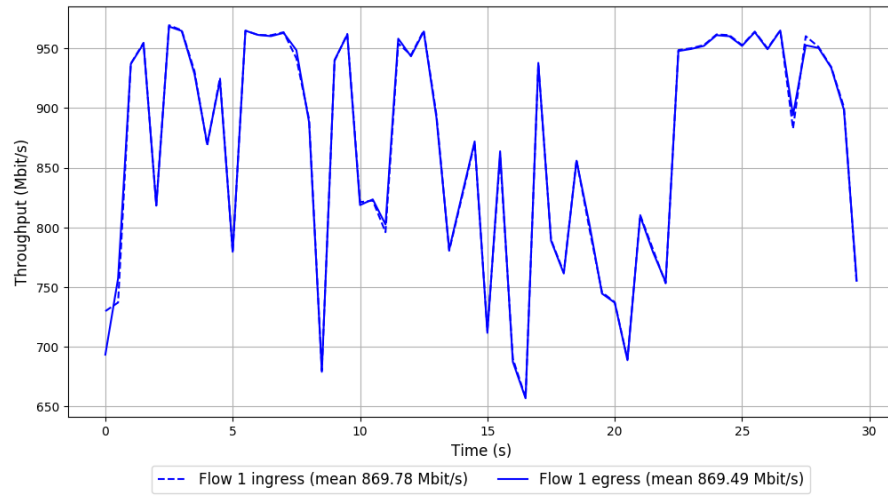


Run 7: Statistics of TCP Cubic

Start at: 2017-10-10 22:34:05
End at: 2017-10-10 22:34:35
Local clock offset: 0.651 ms
Remote clock offset: -0.075 ms

Below is generated by plot.py at 2017-10-11 01:50:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 869.49 Mbit/s
95th percentile per-packet one-way delay: 11.960 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 869.49 Mbit/s
95th percentile per-packet one-way delay: 11.960 ms
Loss rate: 0.03%

Run 7: Report of TCP Cubic — Data Link

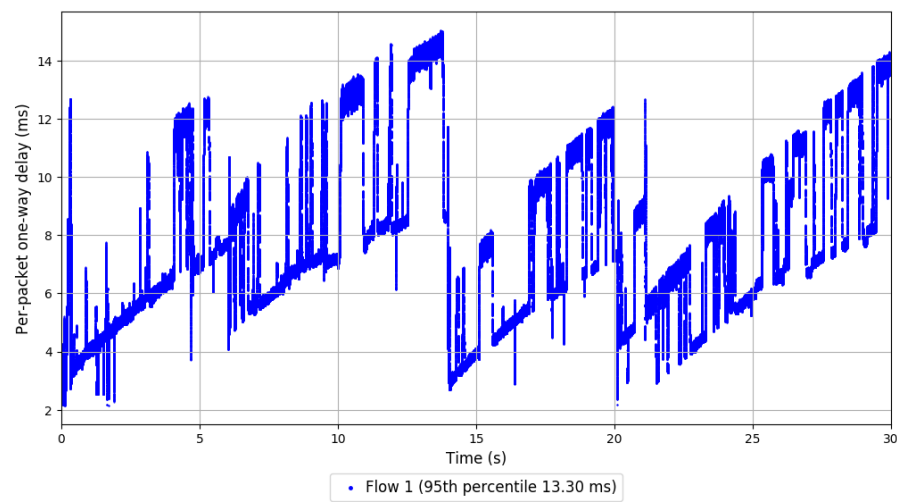
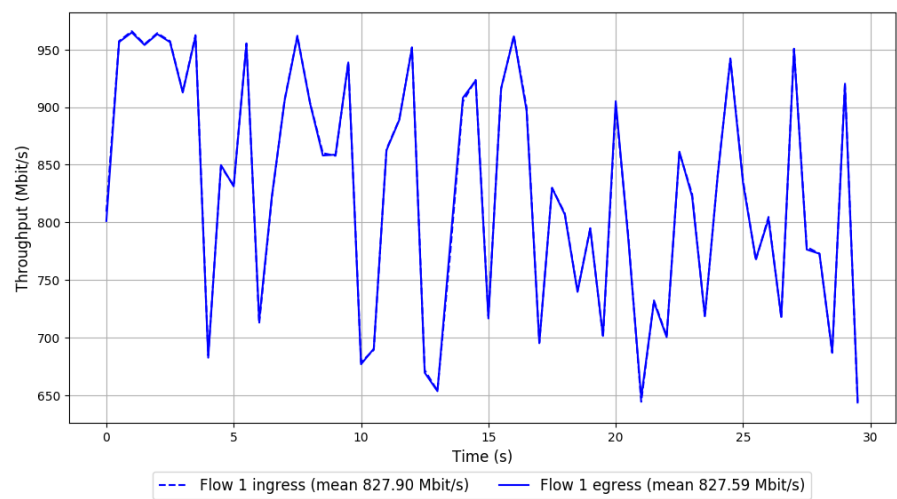


Run 8: Statistics of TCP Cubic

Start at: 2017-10-10 22:52:24
End at: 2017-10-10 22:52:54
Local clock offset: 0.674 ms
Remote clock offset: -0.065 ms

Below is generated by plot.py at 2017-10-11 01:54:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 827.59 Mbit/s
95th percentile per-packet one-way delay: 13.303 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 827.59 Mbit/s
95th percentile per-packet one-way delay: 13.303 ms
Loss rate: 0.04%

Run 8: Report of TCP Cubic — Data Link

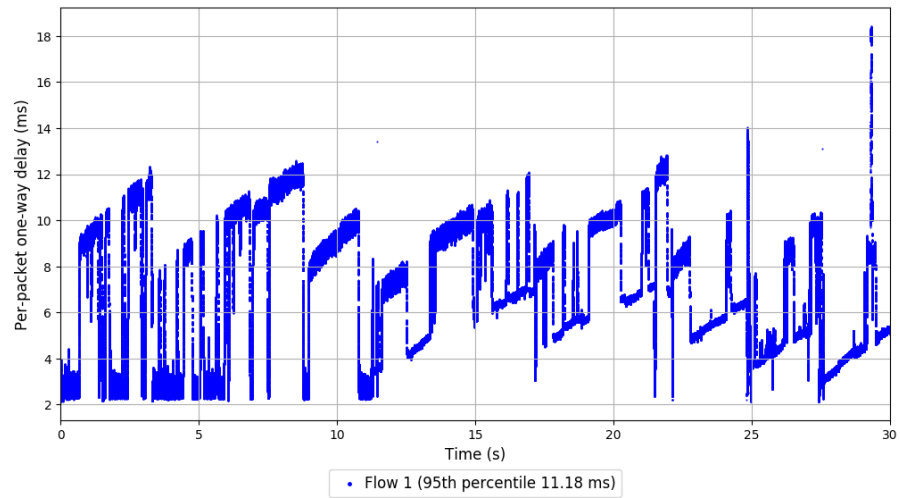
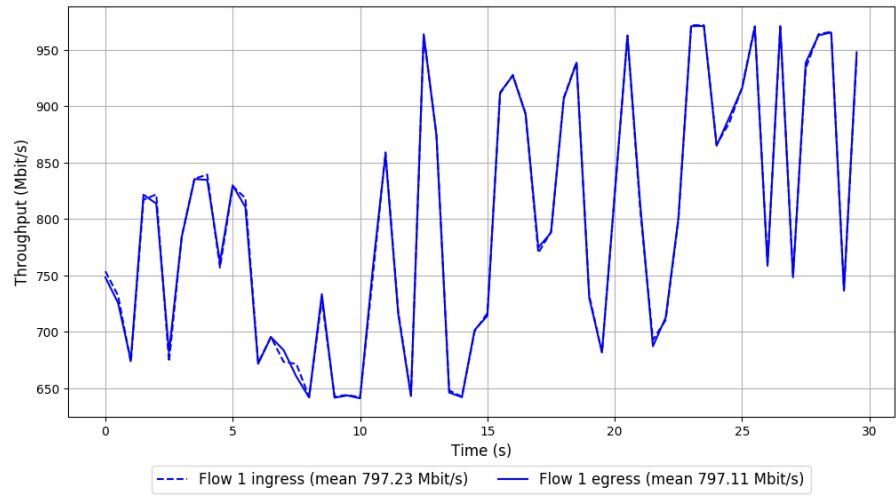


Run 9: Statistics of TCP Cubic

Start at: 2017-10-10 23:10:58
End at: 2017-10-10 23:11:28
Local clock offset: 0.344 ms
Remote clock offset: -0.229 ms

Below is generated by plot.py at 2017-10-11 01:57:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 797.11 Mbit/s
95th percentile per-packet one-way delay: 11.181 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 797.11 Mbit/s
95th percentile per-packet one-way delay: 11.181 ms
Loss rate: 0.01%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-10-10 23:29:32

End at: 2017-10-10 23:30:02

Local clock offset: 0.163 ms

Remote clock offset: -0.209 ms

Below is generated by plot.py at 2017-10-11 01:57:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 750.13 Mbit/s

95th percentile per-packet one-way delay: 10.724 ms

Loss rate: 0.03%

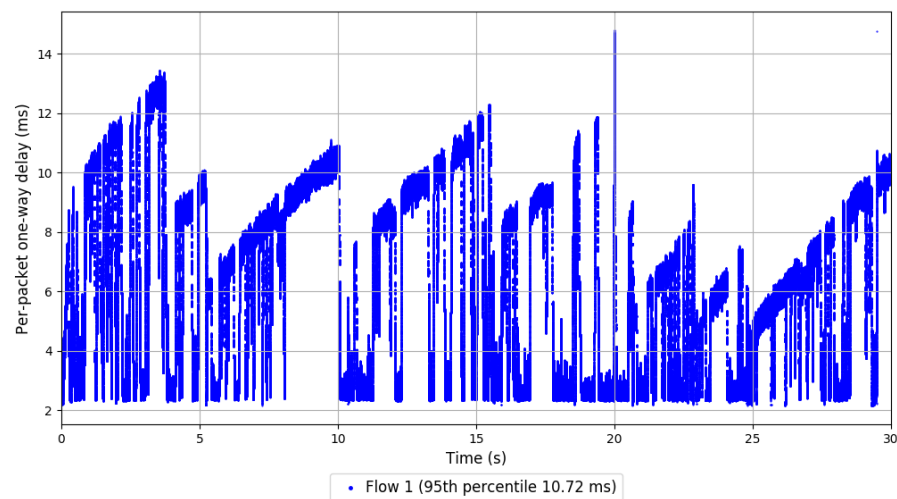
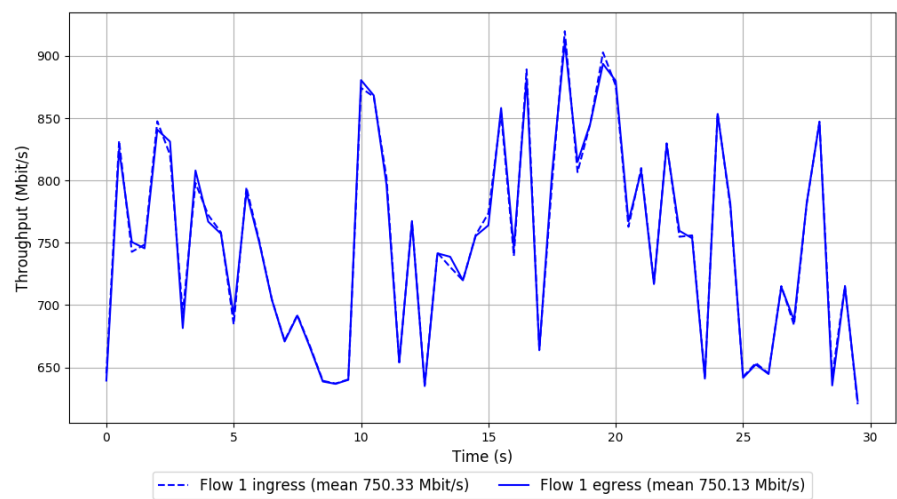
-- Flow 1:

Average throughput: 750.13 Mbit/s

95th percentile per-packet one-way delay: 10.724 ms

Loss rate: 0.03%

Run 10: Report of TCP Cubic — Data Link

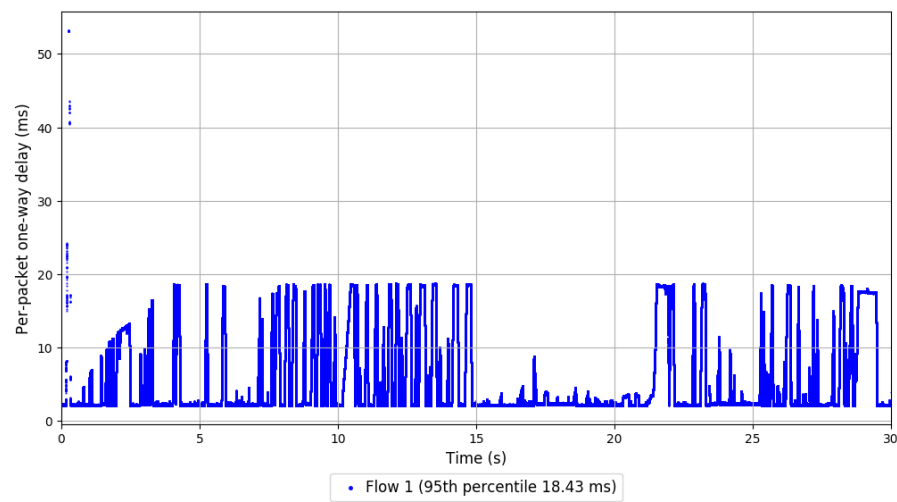
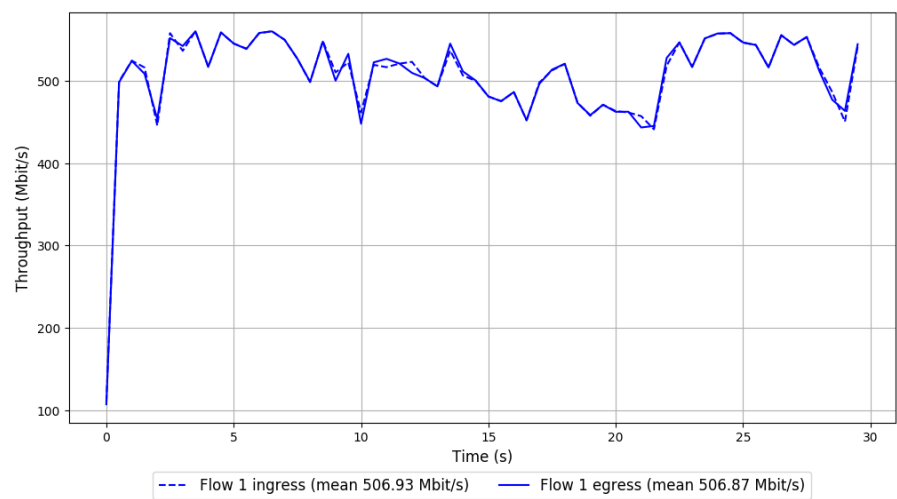


```
Run 1: Statistics of LEDBAT

Start at: 2017-10-10 20:51:55
End at: 2017-10-10 20:52:25
Local clock offset: 0.764 ms
Remote clock offset: 0.397 ms

# Below is generated by plot.py at 2017-10-11 01:57:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 506.87 Mbit/s
95th percentile per-packet one-way delay: 18.429 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 506.87 Mbit/s
95th percentile per-packet one-way delay: 18.429 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-10-10 21:09:58

End at: 2017-10-10 21:10:28

Local clock offset: 0.534 ms

Remote clock offset: 0.189 ms

Below is generated by plot.py at 2017-10-11 01:57:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 635.50 Mbit/s

95th percentile per-packet one-way delay: 17.078 ms

Loss rate: 0.03%

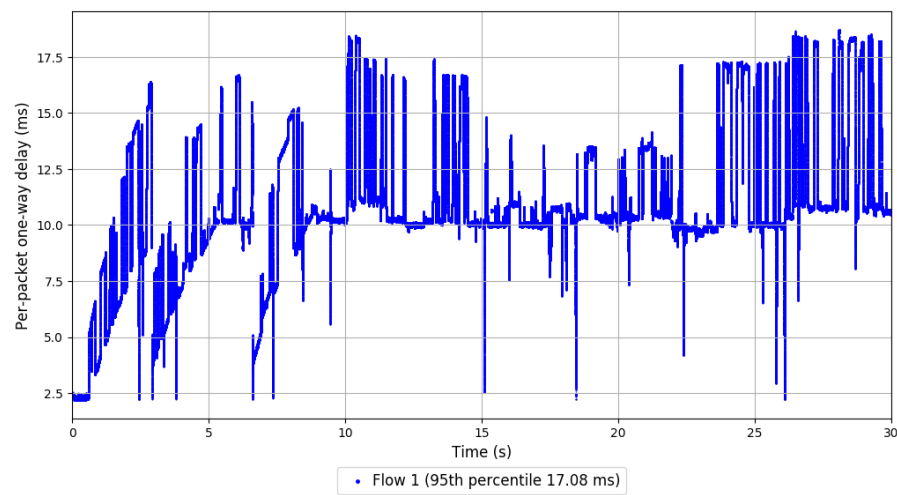
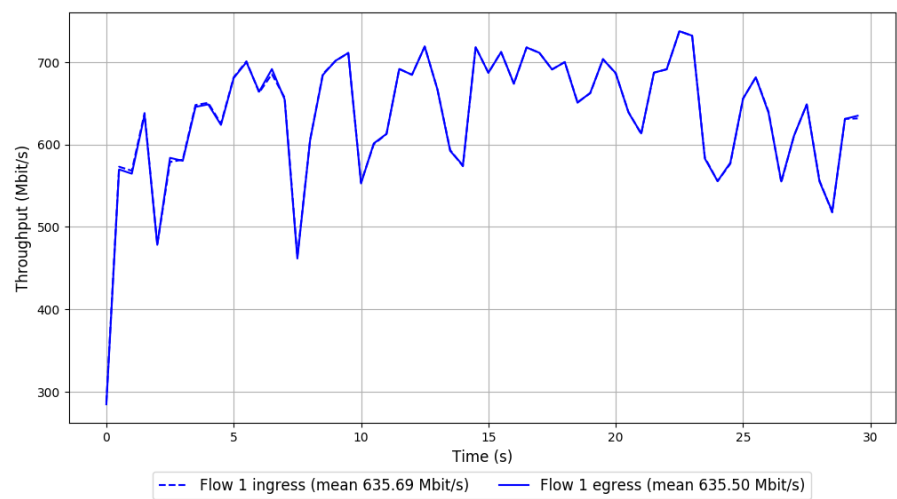
-- Flow 1:

Average throughput: 635.50 Mbit/s

95th percentile per-packet one-way delay: 17.078 ms

Loss rate: 0.03%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-10-10 21:28:21

End at: 2017-10-10 21:28:51

Local clock offset: 0.728 ms

Remote clock offset: 0.275 ms

Below is generated by plot.py at 2017-10-11 01:57:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 655.32 Mbit/s

95th percentile per-packet one-way delay: 16.527 ms

Loss rate: 0.03%

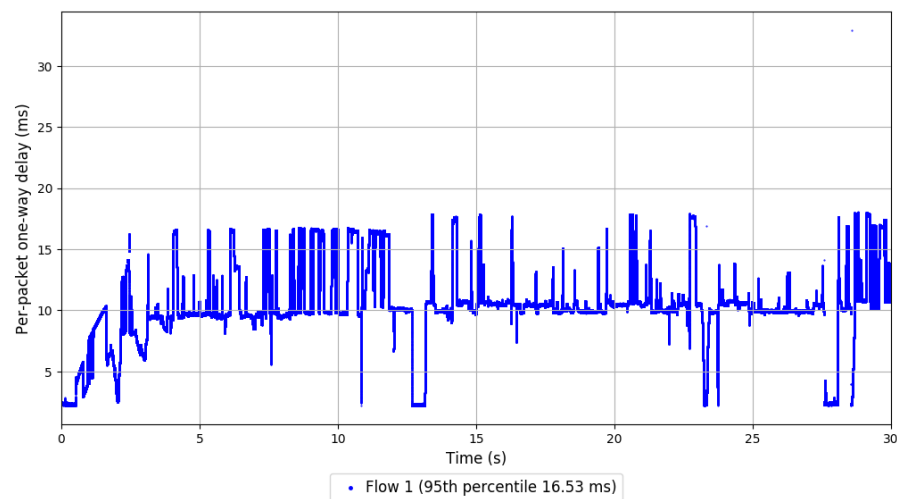
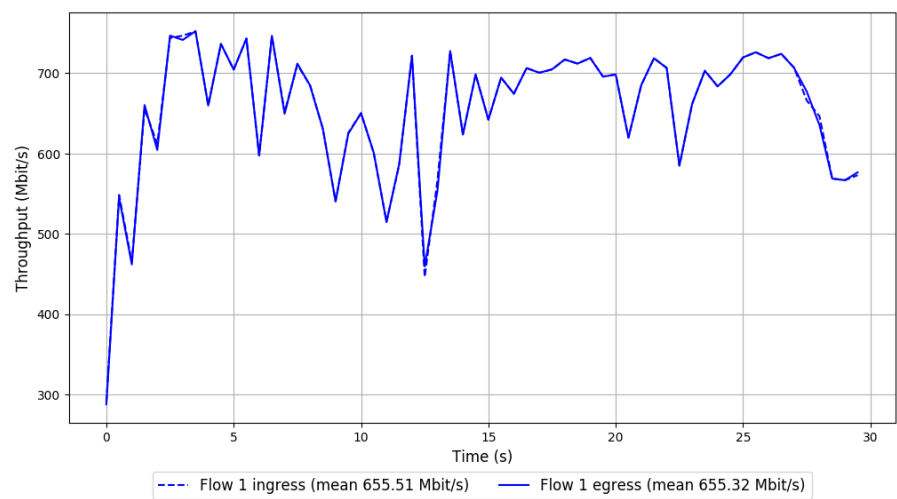
-- Flow 1:

Average throughput: 655.32 Mbit/s

95th percentile per-packet one-way delay: 16.527 ms

Loss rate: 0.03%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-10-10 21:46:56

End at: 2017-10-10 21:47:26

Local clock offset: 0.706 ms

Remote clock offset: 0.182 ms

Below is generated by plot.py at 2017-10-11 01:58:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 625.67 Mbit/s

95th percentile per-packet one-way delay: 16.715 ms

Loss rate: 0.03%

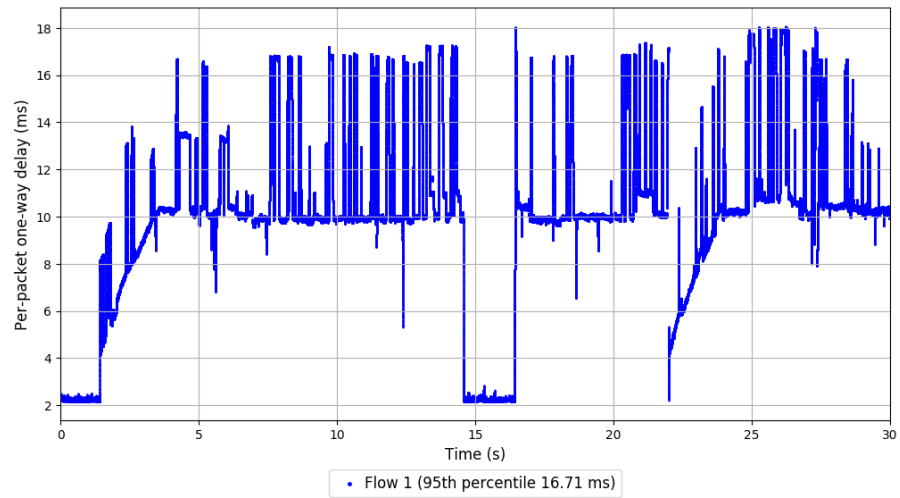
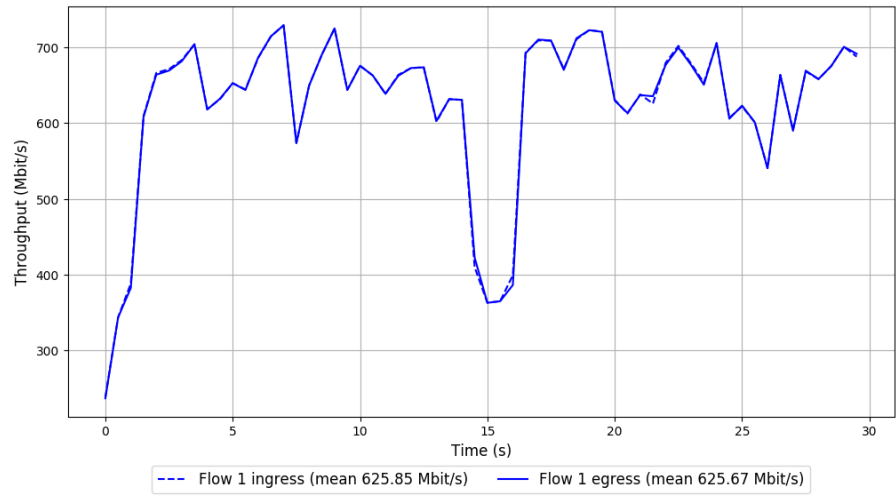
-- Flow 1:

Average throughput: 625.67 Mbit/s

95th percentile per-packet one-way delay: 16.715 ms

Loss rate: 0.03%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-10-10 22:04:48

End at: 2017-10-10 22:05:18

Local clock offset: 0.81 ms

Remote clock offset: 0.205 ms

Below is generated by plot.py at 2017-10-11 01:59:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 556.32 Mbit/s

95th percentile per-packet one-way delay: 16.551 ms

Loss rate: 0.03%

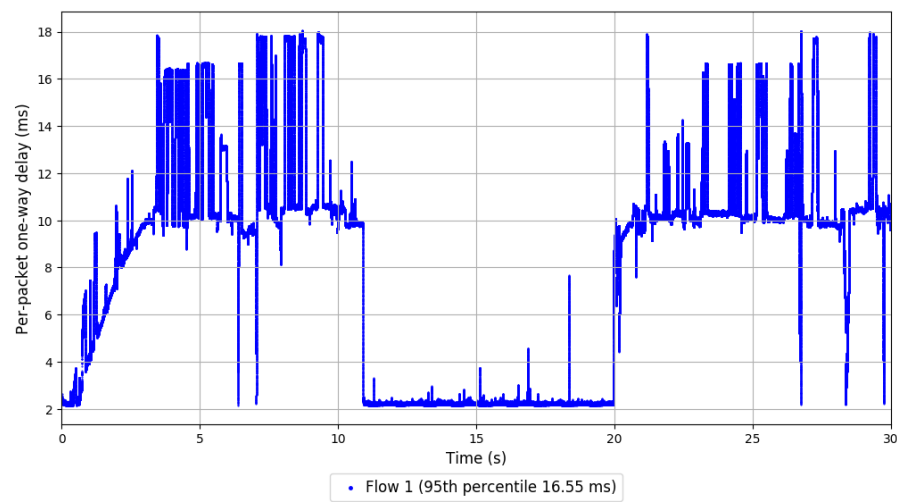
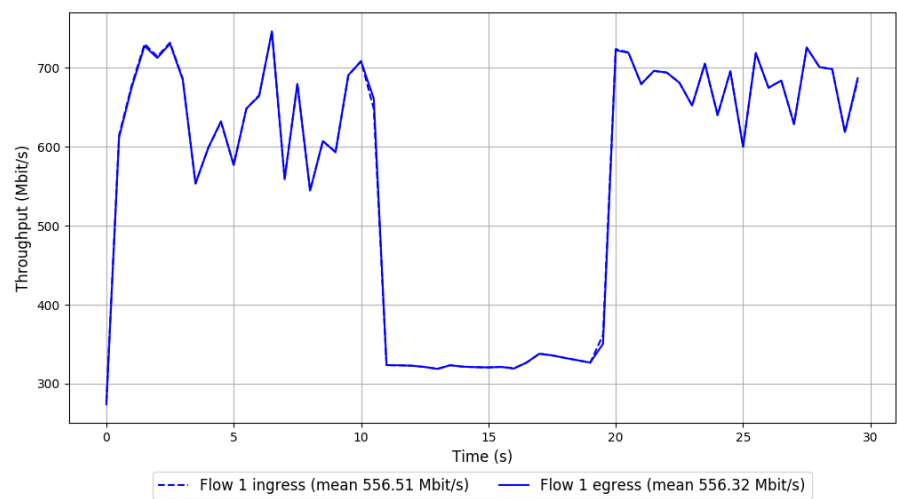
-- Flow 1:

Average throughput: 556.32 Mbit/s

95th percentile per-packet one-way delay: 16.551 ms

Loss rate: 0.03%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-10-10 22:23:15

End at: 2017-10-10 22:23:45

Local clock offset: 0.63 ms

Remote clock offset: 0.061 ms

Below is generated by plot.py at 2017-10-11 02:01:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 521.50 Mbit/s

95th percentile per-packet one-way delay: 13.523 ms

Loss rate: 0.00%

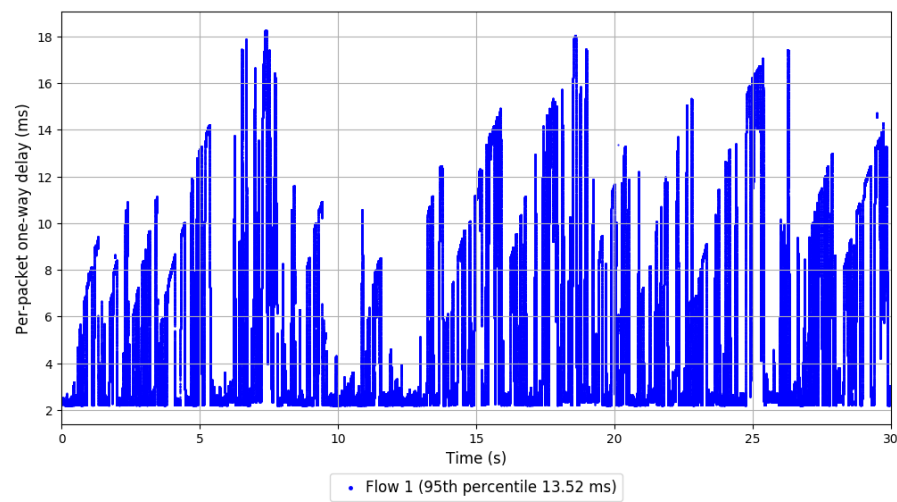
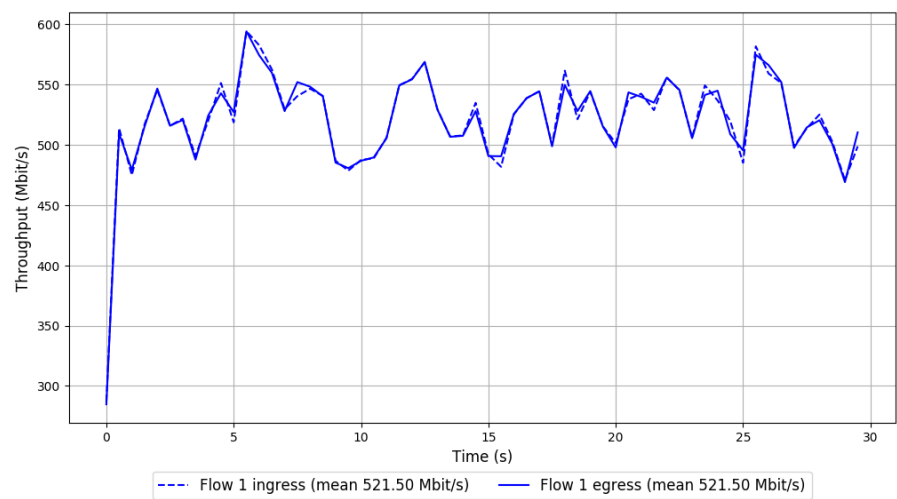
-- Flow 1:

Average throughput: 521.50 Mbit/s

95th percentile per-packet one-way delay: 13.523 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-10-10 22:41:40

End at: 2017-10-10 22:42:10

Local clock offset: 0.783 ms

Remote clock offset: 0.079 ms

Below is generated by plot.py at 2017-10-11 02:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 515.10 Mbit/s

95th percentile per-packet one-way delay: 17.821 ms

Loss rate: 0.03%

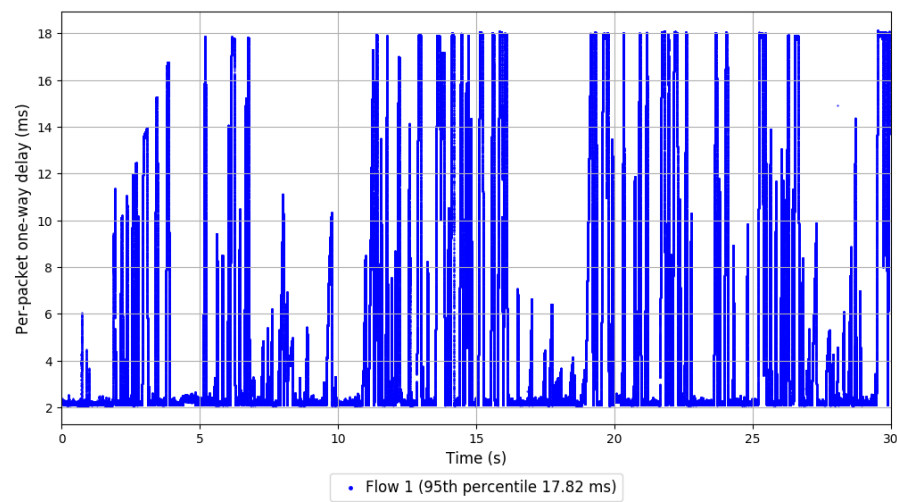
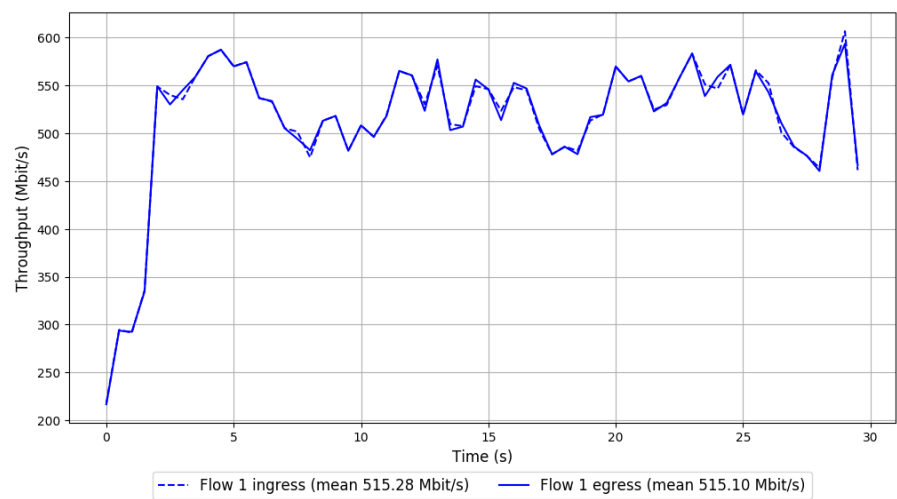
-- Flow 1:

Average throughput: 515.10 Mbit/s

95th percentile per-packet one-way delay: 17.821 ms

Loss rate: 0.03%

Run 7: Report of LEDBAT — Data Link

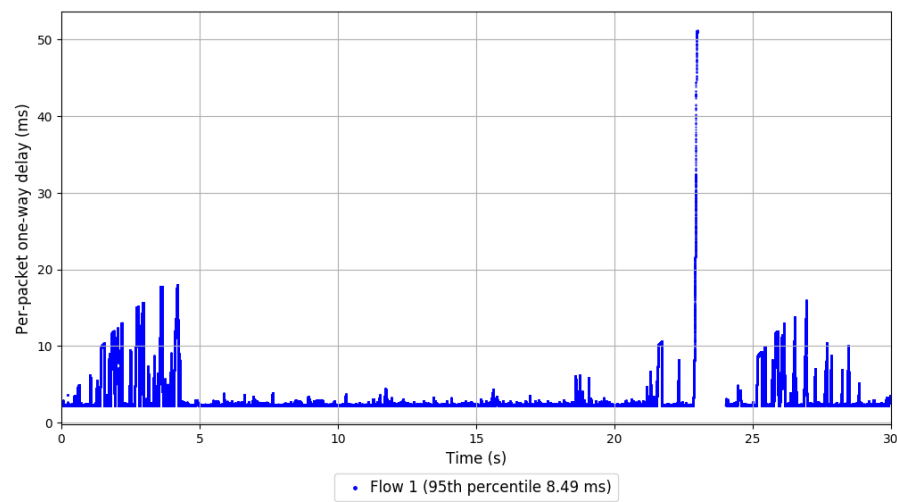
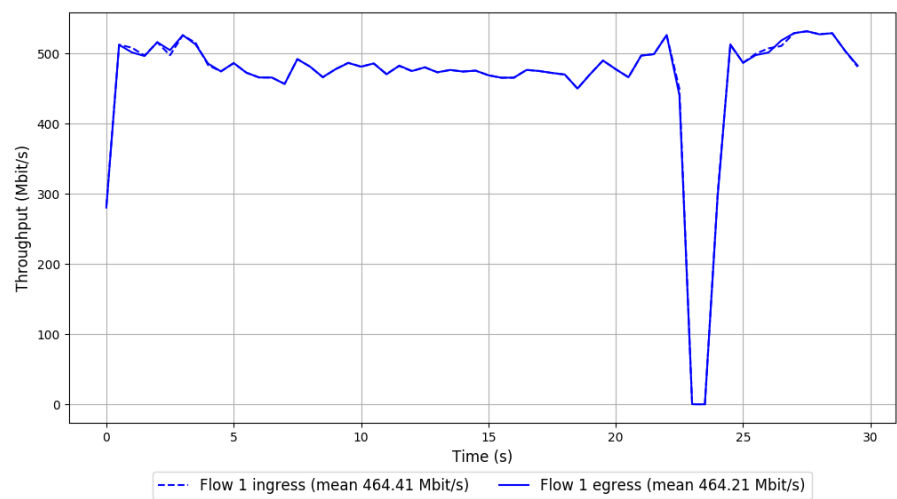


Run 8: Statistics of LEDBAT

Start at: 2017-10-10 22:59:57
End at: 2017-10-10 23:00:27
Local clock offset: 0.468 ms
Remote clock offset: -0.073 ms

Below is generated by plot.py at 2017-10-11 02:03:27
Datalink statistics
-- Total of 1 flow:
Average throughput: 464.21 Mbit/s
95th percentile per-packet one-way delay: 8.493 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 464.21 Mbit/s
95th percentile per-packet one-way delay: 8.493 ms
Loss rate: 0.04%

Run 8: Report of LEDBAT — Data Link

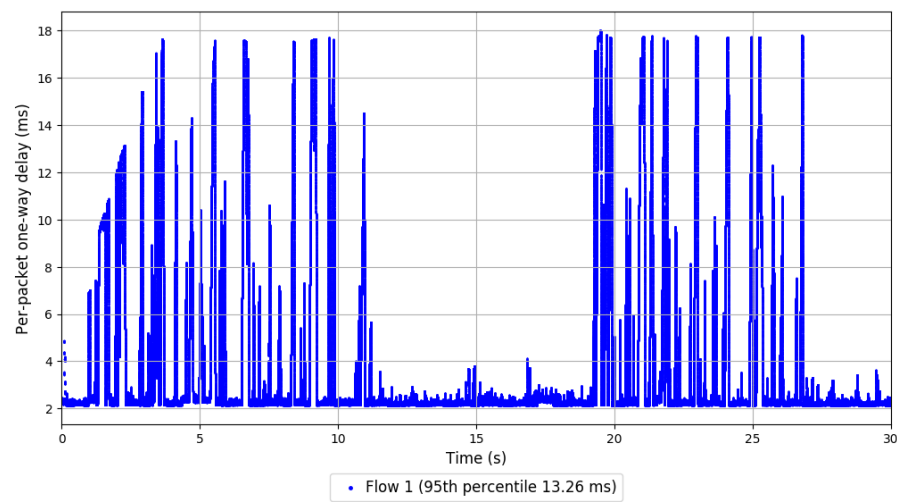
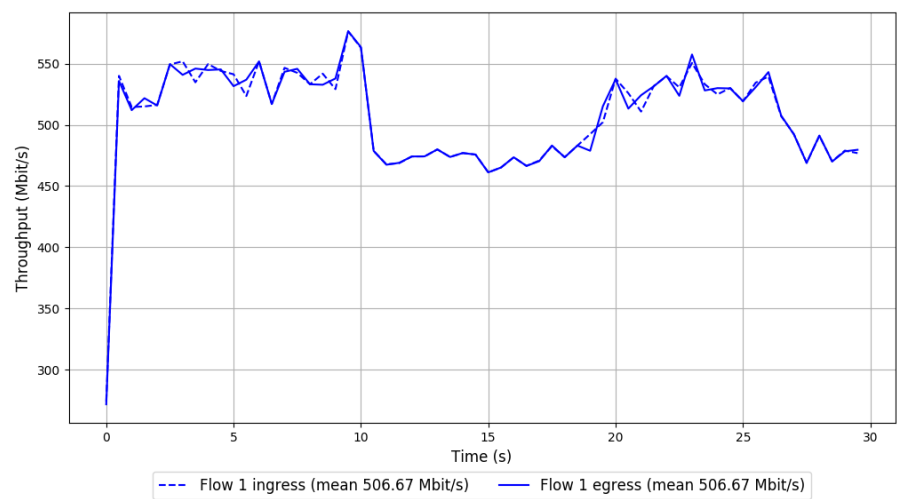


Run 9: Statistics of LEDBAT

Start at: 2017-10-10 23:18:42
End at: 2017-10-10 23:19:12
Local clock offset: 0.22 ms
Remote clock offset: -0.274 ms

Below is generated by plot.py at 2017-10-11 02:04:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 506.67 Mbit/s
95th percentile per-packet one-way delay: 13.264 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 506.67 Mbit/s
95th percentile per-packet one-way delay: 13.264 ms
Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-10-10 23:36:52

End at: 2017-10-10 23:37:22

Local clock offset: 0.124 ms

Remote clock offset: -0.207 ms

Below is generated by plot.py at 2017-10-11 02:04:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 389.32 Mbit/s

95th percentile per-packet one-way delay: 2.877 ms

Loss rate: 0.00%

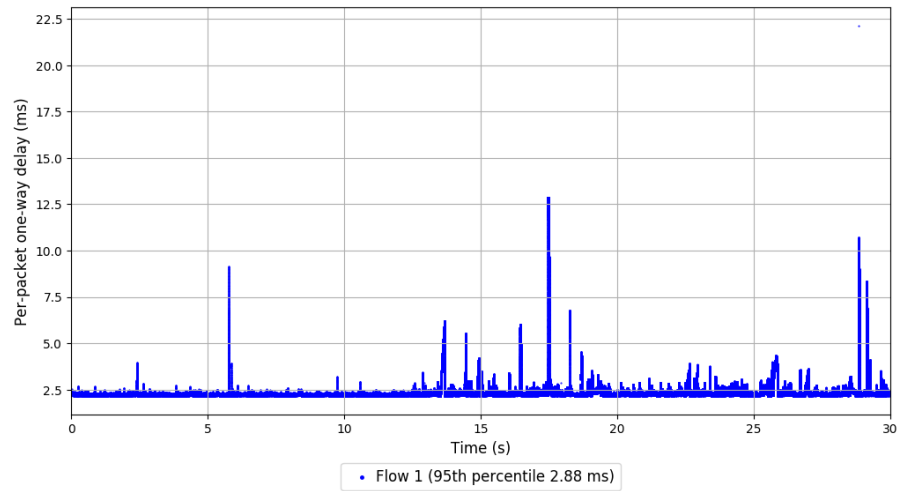
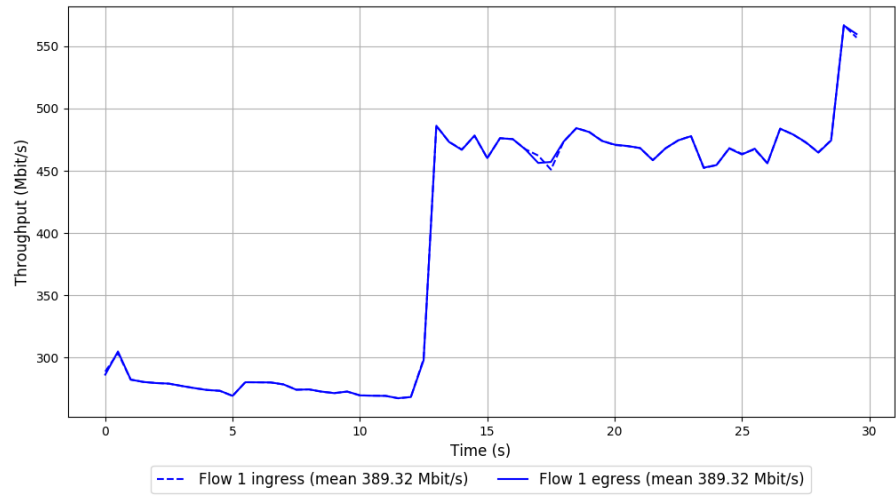
-- Flow 1:

Average throughput: 389.32 Mbit/s

95th percentile per-packet one-way delay: 2.877 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

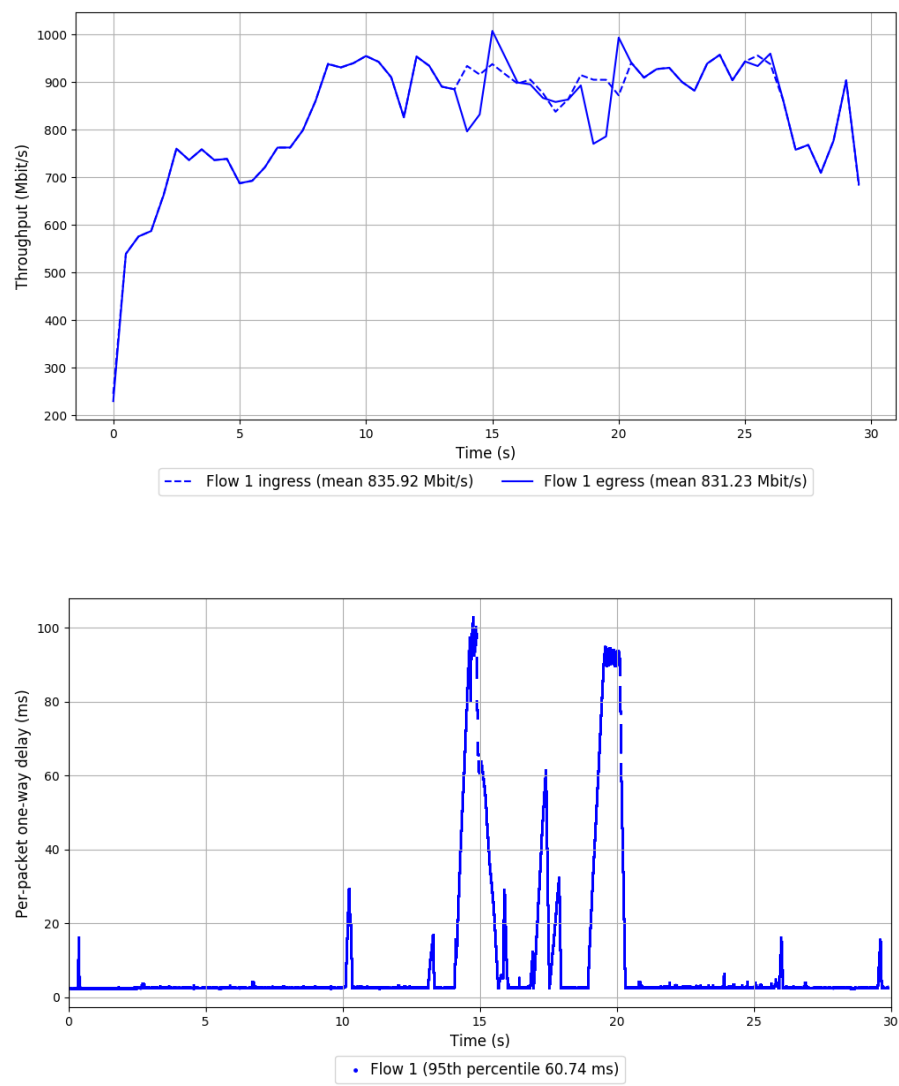


```
Run 1: Statistics of PCC

Start at: 2017-10-10 20:47:37
End at: 2017-10-10 20:48:07
Local clock offset: 0.683 ms
Remote clock offset: 0.432 ms

# Below is generated by plot.py at 2017-10-11 02:09:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 831.23 Mbit/s
95th percentile per-packet one-way delay: 60.740 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 831.23 Mbit/s
95th percentile per-packet one-way delay: 60.740 ms
Loss rate: 0.56%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-10-10 21:05:37

End at: 2017-10-10 21:06:07

Local clock offset: 0.554 ms

Remote clock offset: 0.221 ms

Below is generated by plot.py at 2017-10-11 02:10:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 831.07 Mbit/s

95th percentile per-packet one-way delay: 29.564 ms

Loss rate: 0.22%

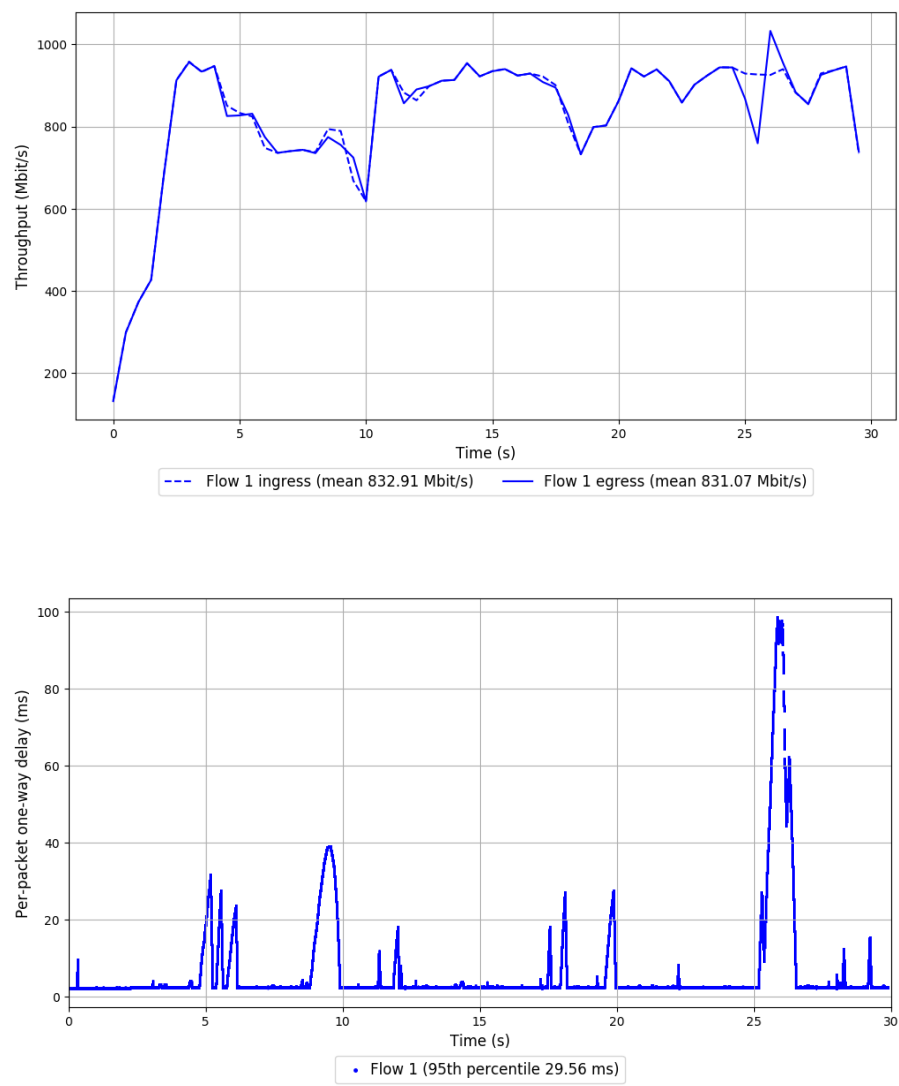
-- Flow 1:

Average throughput: 831.07 Mbit/s

95th percentile per-packet one-way delay: 29.564 ms

Loss rate: 0.22%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-10-10 21:24:01

End at: 2017-10-10 21:24:31

Local clock offset: 0.842 ms

Remote clock offset: 0.422 ms

Below is generated by plot.py at 2017-10-11 02:11:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 842.77 Mbit/s

95th percentile per-packet one-way delay: 7.752 ms

Loss rate: 0.04%

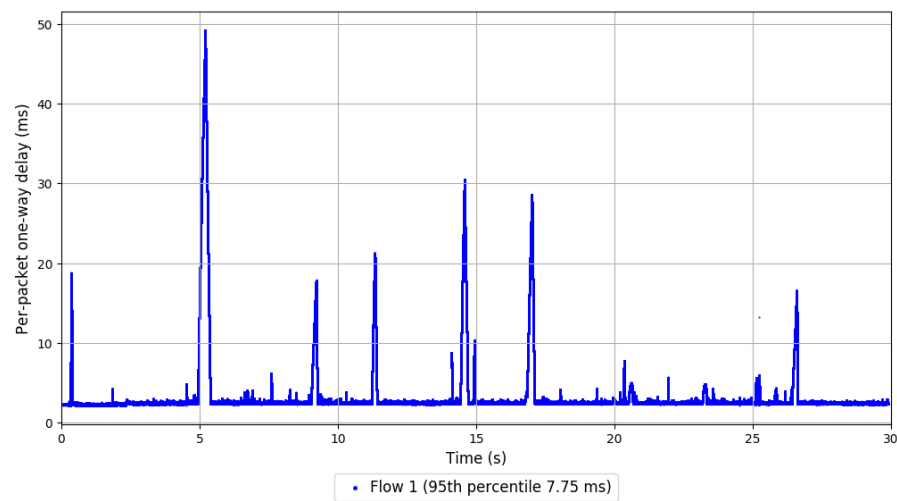
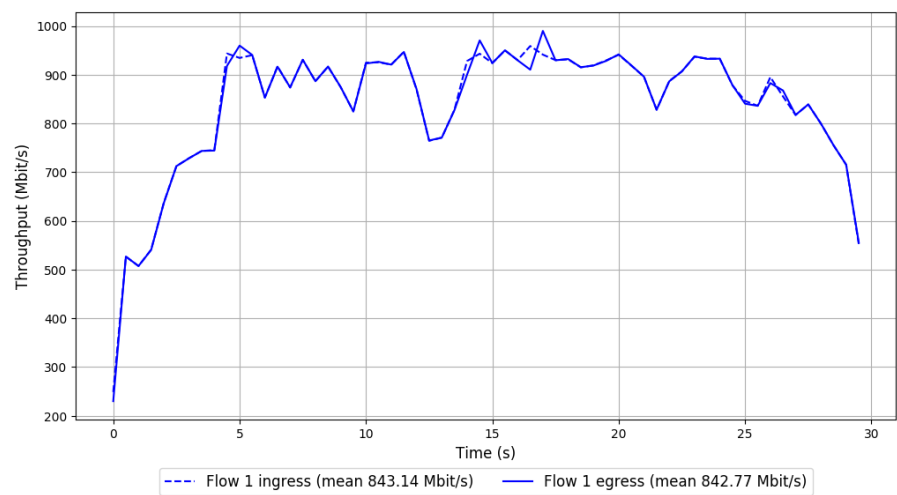
-- Flow 1:

Average throughput: 842.77 Mbit/s

95th percentile per-packet one-way delay: 7.752 ms

Loss rate: 0.04%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-10-10 21:42:26

End at: 2017-10-10 21:42:56

Local clock offset: 0.736 ms

Remote clock offset: 0.088 ms

Below is generated by plot.py at 2017-10-11 02:14:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 833.77 Mbit/s

95th percentile per-packet one-way delay: 39.557 ms

Loss rate: 0.26%

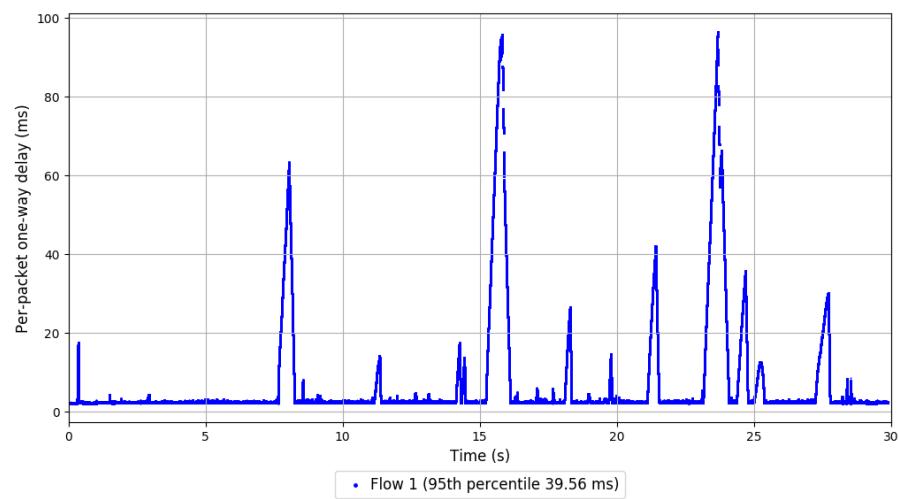
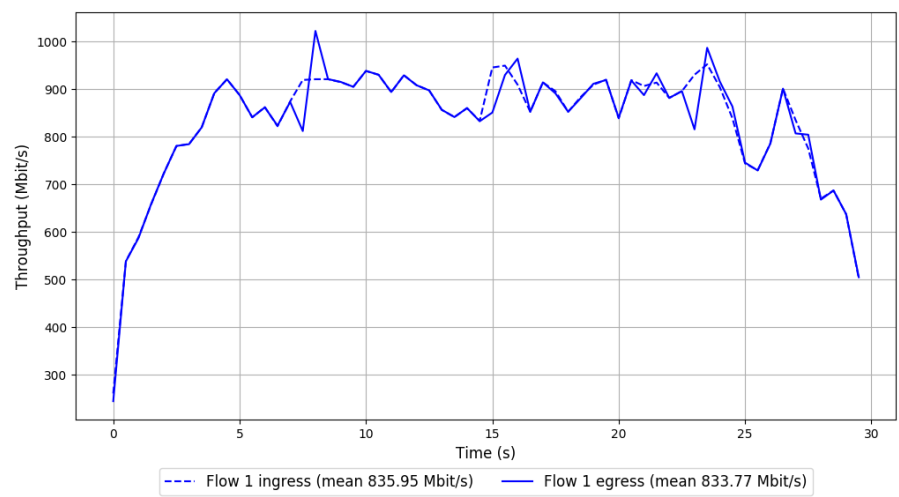
-- Flow 1:

Average throughput: 833.77 Mbit/s

95th percentile per-packet one-way delay: 39.557 ms

Loss rate: 0.26%

Run 4: Report of PCC — Data Link

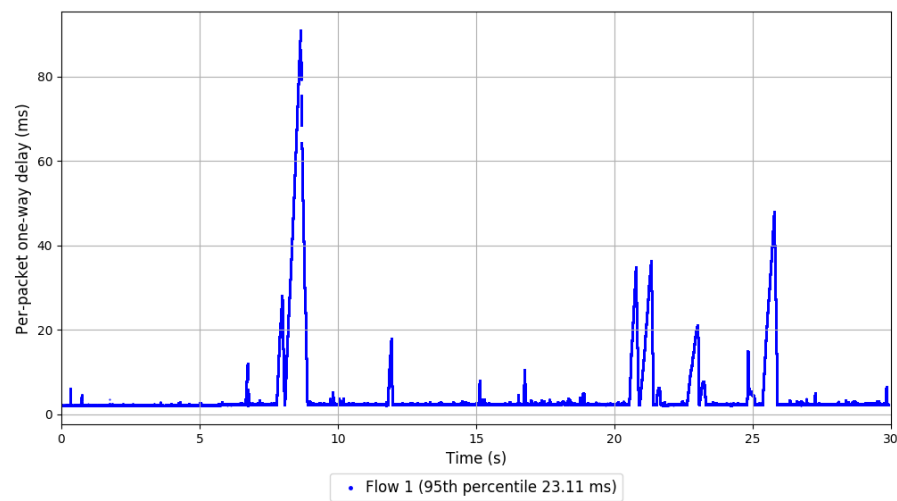
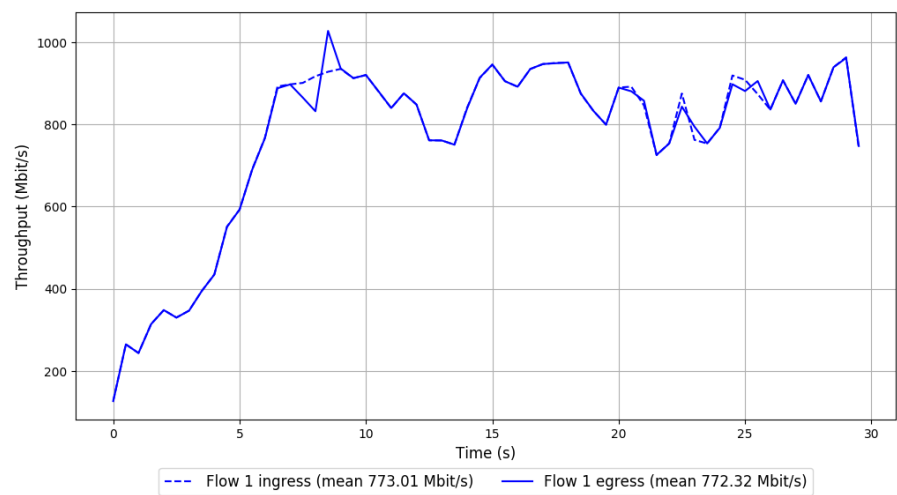


Run 5: Statistics of PCC

Start at: 2017-10-10 22:00:32
End at: 2017-10-10 22:01:02
Local clock offset: 0.587 ms
Remote clock offset: -0.146 ms

Below is generated by plot.py at 2017-10-11 02:14:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 772.32 Mbit/s
95th percentile per-packet one-way delay: 23.114 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 772.32 Mbit/s
95th percentile per-packet one-way delay: 23.114 ms
Loss rate: 0.09%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-10-10 22:18:52

End at: 2017-10-10 22:19:22

Local clock offset: 0.651 ms

Remote clock offset: 0.04 ms

Below is generated by plot.py at 2017-10-11 02:15:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 812.66 Mbit/s

95th percentile per-packet one-way delay: 17.007 ms

Loss rate: 0.04%

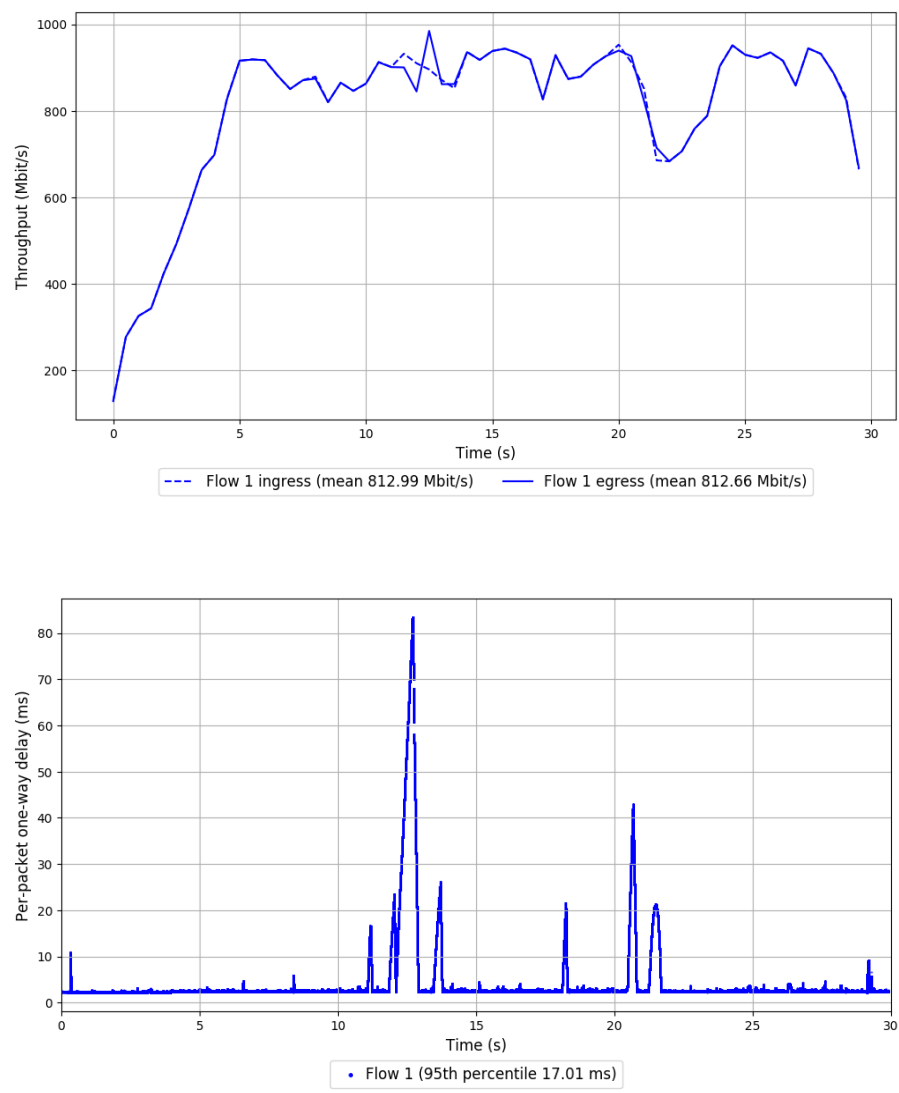
-- Flow 1:

Average throughput: 812.66 Mbit/s

95th percentile per-packet one-way delay: 17.007 ms

Loss rate: 0.04%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-10-10 22:37:22

End at: 2017-10-10 22:37:52

Local clock offset: 0.663 ms

Remote clock offset: 0.003 ms

Below is generated by plot.py at 2017-10-11 02:15:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 794.67 Mbit/s

95th percentile per-packet one-way delay: 78.652 ms

Loss rate: 0.82%

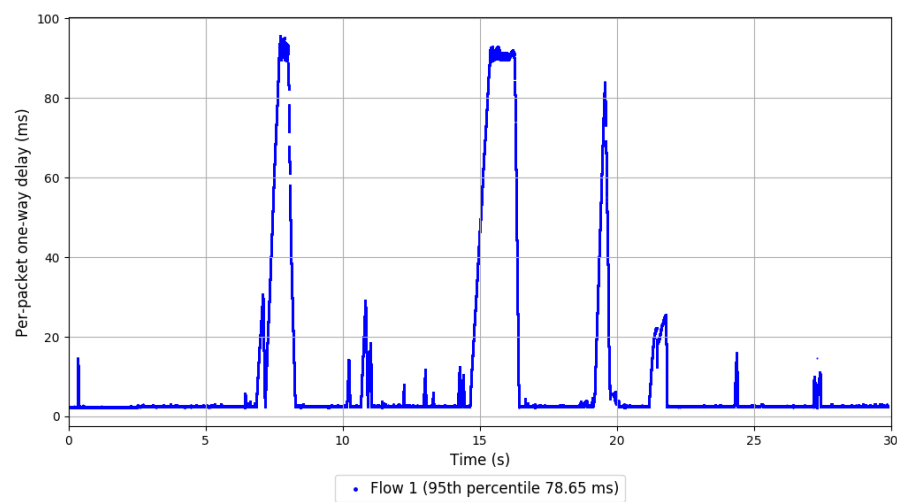
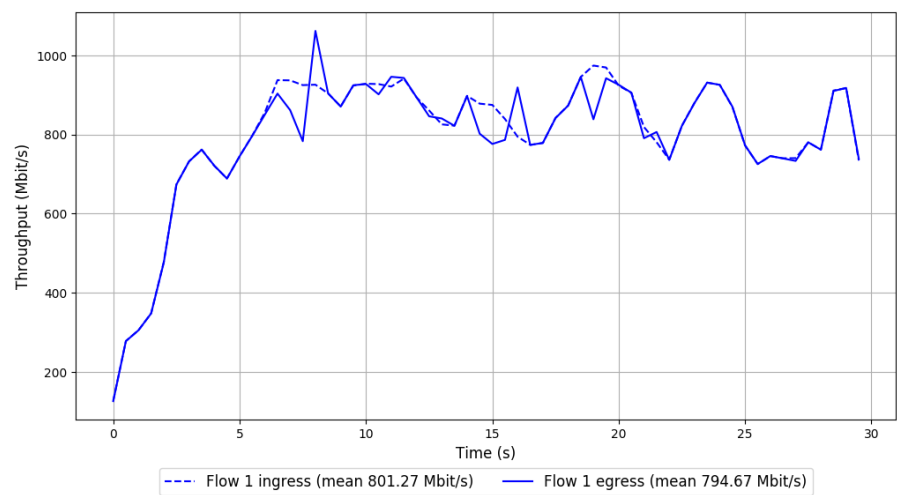
-- Flow 1:

Average throughput: 794.67 Mbit/s

95th percentile per-packet one-way delay: 78.652 ms

Loss rate: 0.82%

Run 7: Report of PCC — Data Link

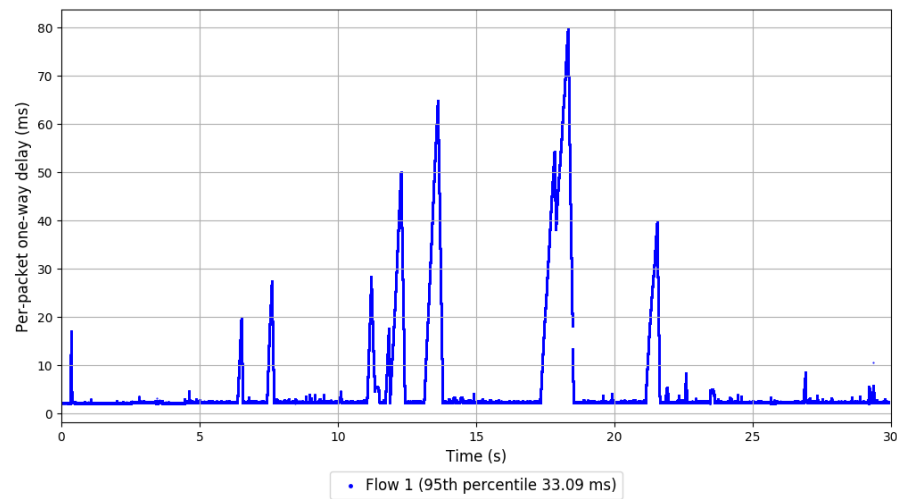
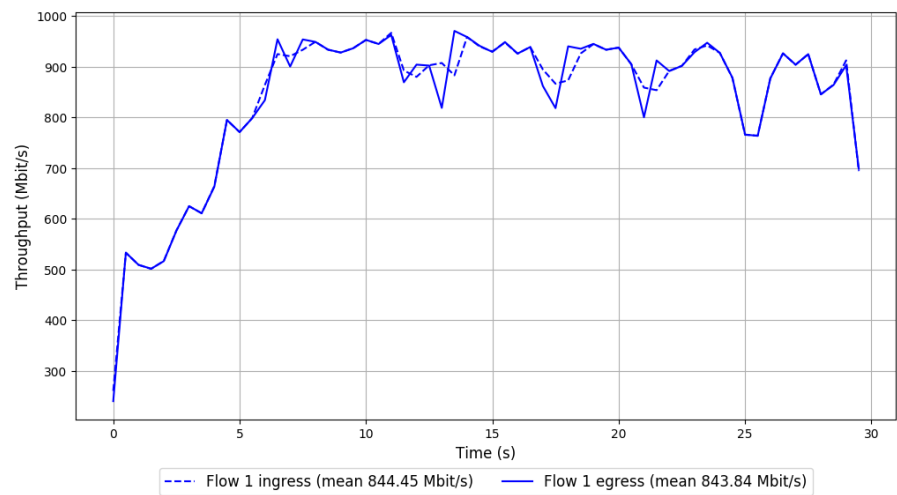


Run 8: Statistics of PCC

Start at: 2017-10-10 22:55:29
End at: 2017-10-10 22:55:59
Local clock offset: 0.502 ms
Remote clock offset: -0.155 ms

Below is generated by plot.py at 2017-10-11 02:17:44
Datalink statistics
-- Total of 1 flow:
Average throughput: 843.84 Mbit/s
95th percentile per-packet one-way delay: 33.085 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 843.84 Mbit/s
95th percentile per-packet one-way delay: 33.085 ms
Loss rate: 0.07%

Run 8: Report of PCC — Data Link

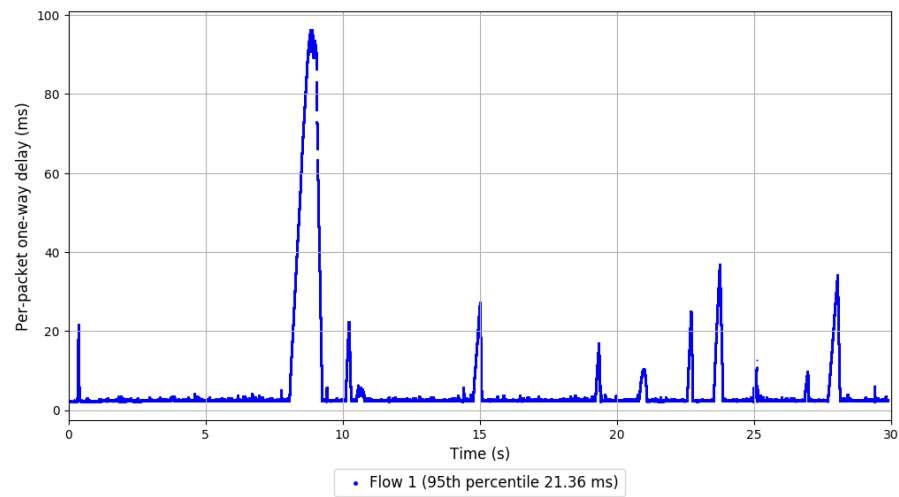
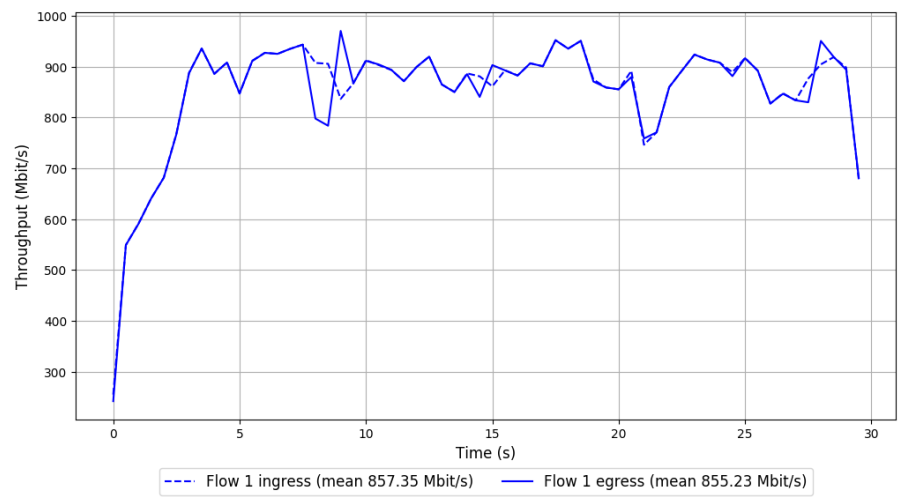


Run 9: Statistics of PCC

Start at: 2017-10-10 23:14:12
End at: 2017-10-10 23:14:42
Local clock offset: 0.328 ms
Remote clock offset: -0.189 ms

Below is generated by plot.py at 2017-10-11 02:24:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 855.23 Mbit/s
95th percentile per-packet one-way delay: 21.355 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 855.23 Mbit/s
95th percentile per-packet one-way delay: 21.355 ms
Loss rate: 0.25%

Run 9: Report of PCC — Data Link

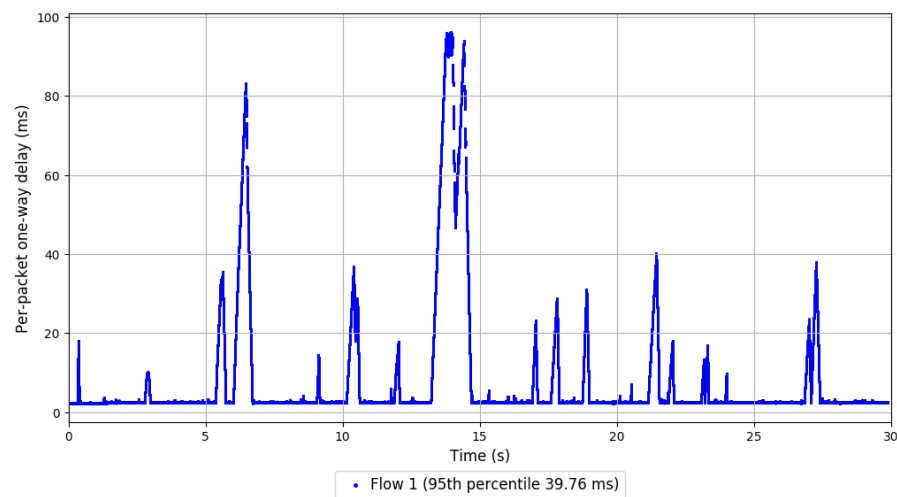
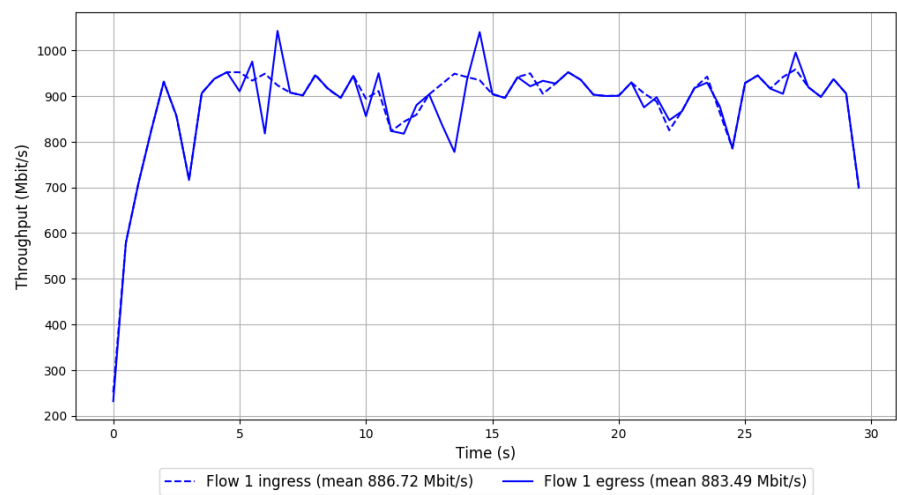


Run 10: Statistics of PCC

Start at: 2017-10-10 23:32:42
End at: 2017-10-10 23:33:12
Local clock offset: 0.113 ms
Remote clock offset: -0.208 ms

Below is generated by plot.py at 2017-10-11 02:24:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 883.49 Mbit/s
95th percentile per-packet one-way delay: 39.762 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 883.49 Mbit/s
95th percentile per-packet one-way delay: 39.762 ms
Loss rate: 0.36%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

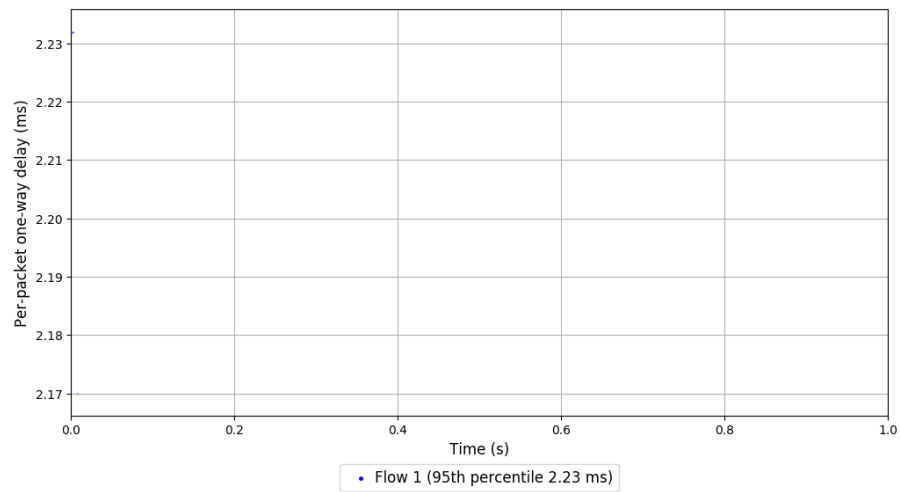
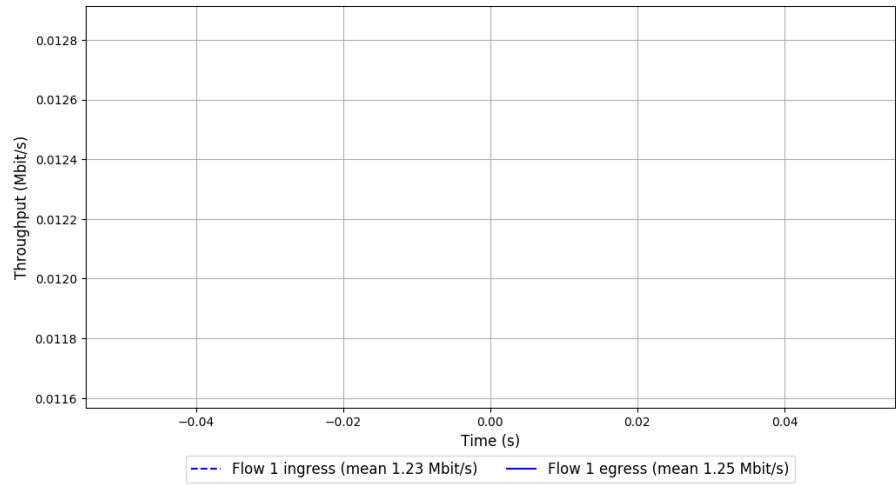
Start at: 2017-10-10 20:37:26

End at: 2017-10-10 20:37:56

Local clock offset: 0.838 ms

Remote clock offset: 0.479 ms

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

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

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

Local clock offset: 0.625 ms

Remote clock offset: 0.265 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.09 Mbit/s

95th percentile per-packet one-way delay: 2.174 ms

Loss rate: 0.00%

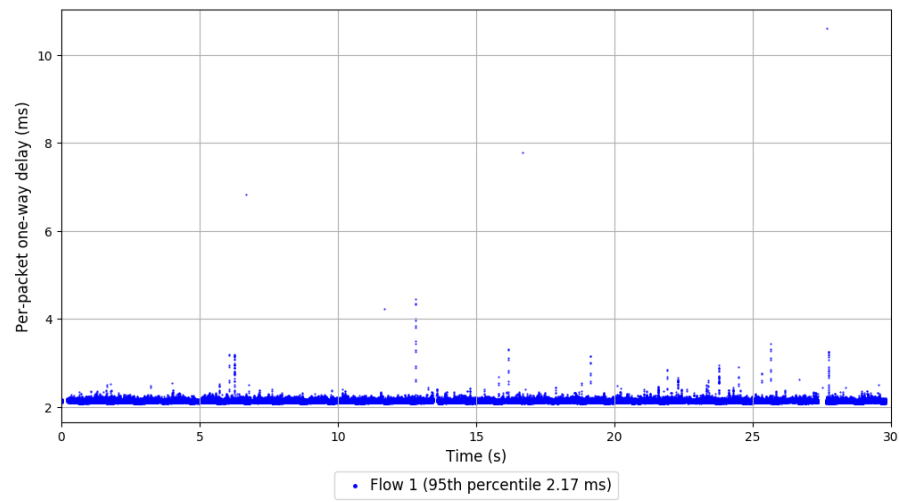
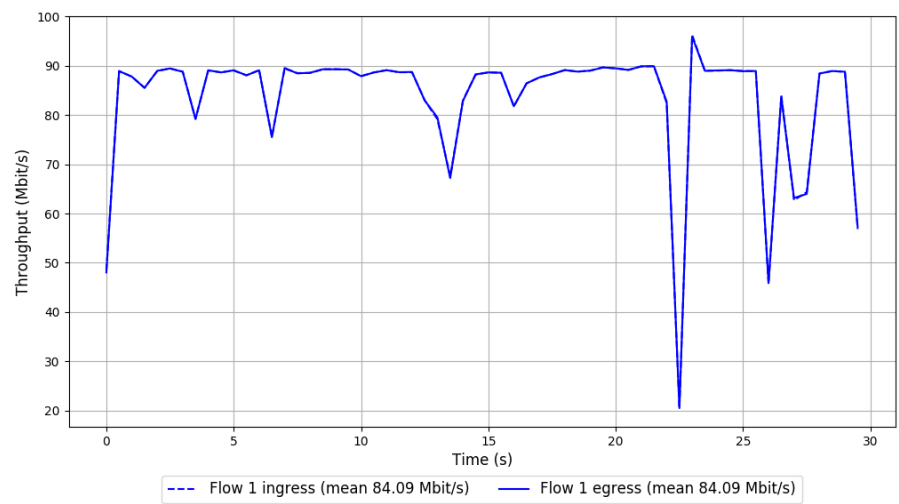
-- Flow 1:

Average throughput: 84.09 Mbit/s

95th percentile per-packet one-way delay: 2.174 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-10-10 21:13:50

End at: 2017-10-10 21:14:20

Local clock offset: 0.623 ms

Remote clock offset: 0.194 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.33 Mbit/s

95th percentile per-packet one-way delay: 2.175 ms

Loss rate: 0.00%

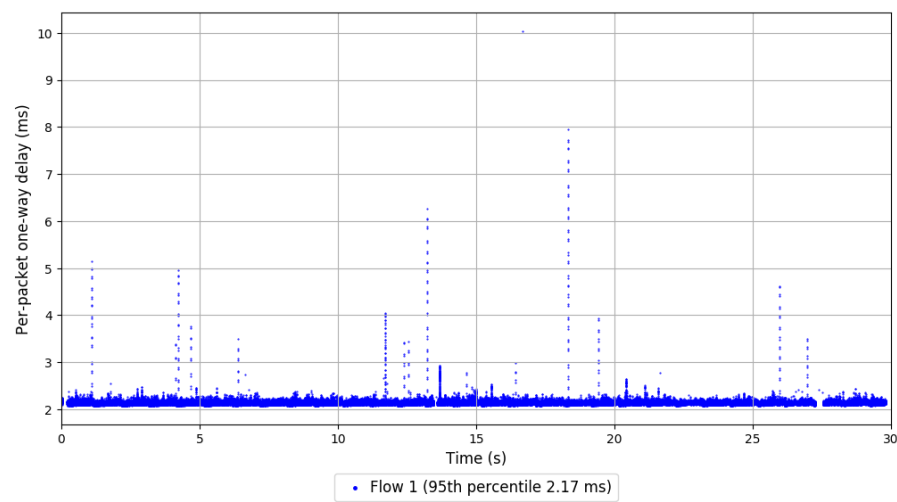
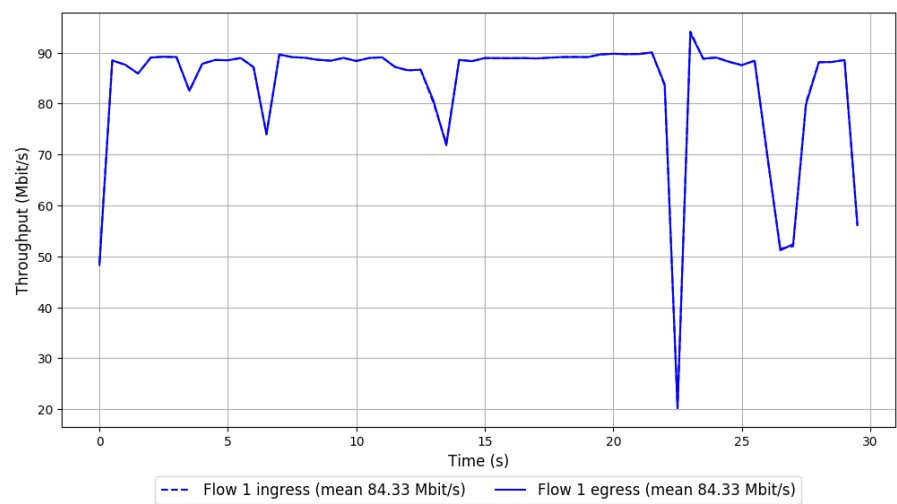
-- Flow 1:

Average throughput: 84.33 Mbit/s

95th percentile per-packet one-way delay: 2.175 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-10-10 21:32:14

End at: 2017-10-10 21:32:44

Local clock offset: 0.588 ms

Remote clock offset: 0.11 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.78 Mbit/s

95th percentile per-packet one-way delay: 2.315 ms

Loss rate: 0.00%

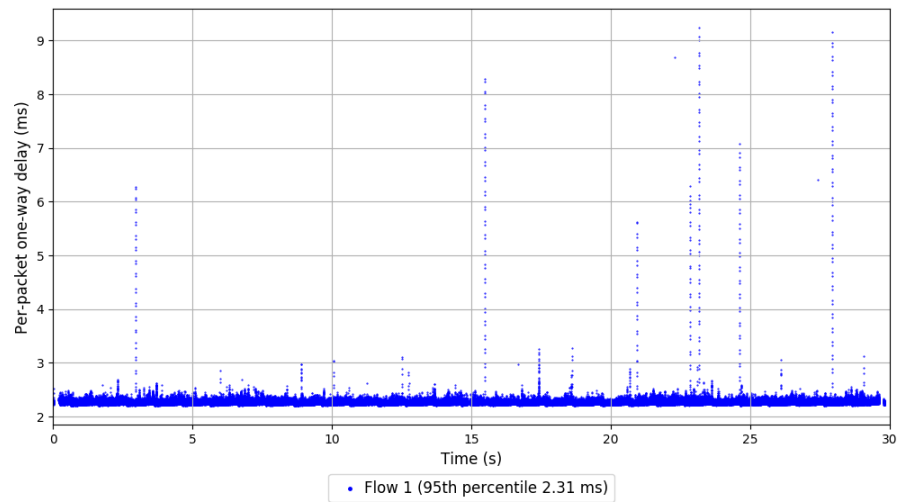
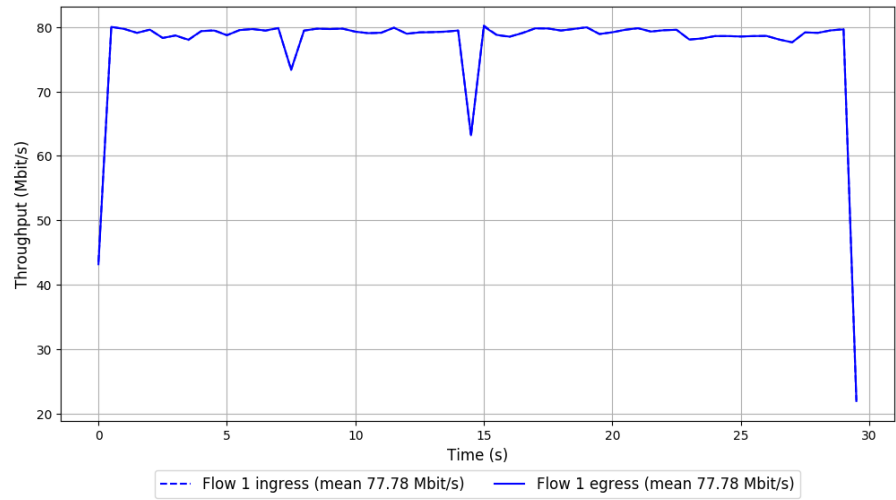
-- Flow 1:

Average throughput: 77.78 Mbit/s

95th percentile per-packet one-way delay: 2.315 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-10-10 21:50:48

End at: 2017-10-10 21:51:18

Local clock offset: 0.663 ms

Remote clock offset: 0.218 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.39 Mbit/s

95th percentile per-packet one-way delay: 2.385 ms

Loss rate: 0.00%

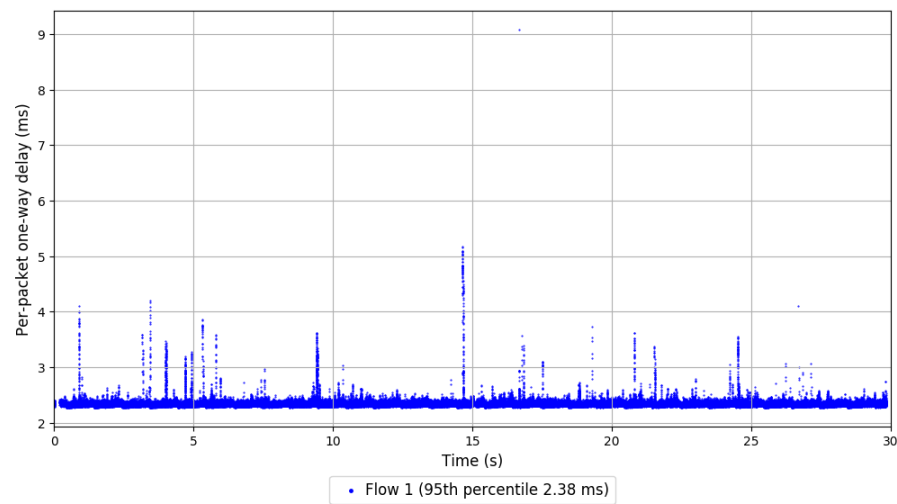
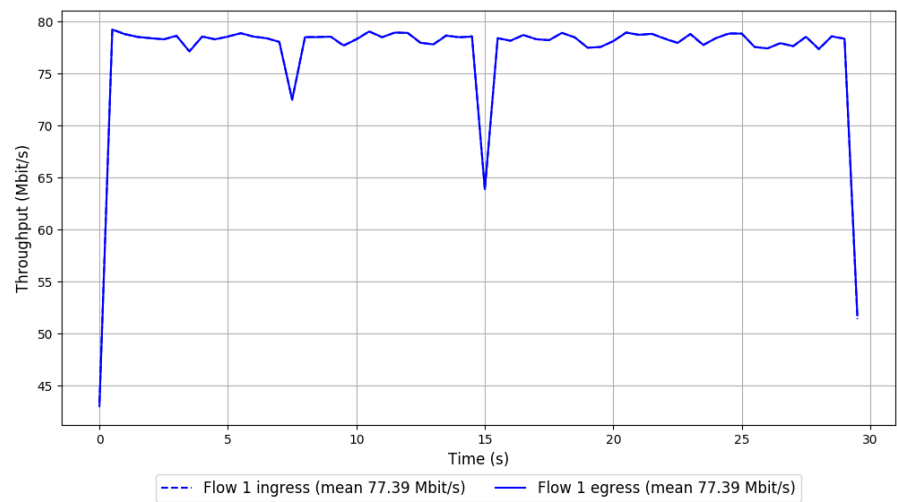
-- Flow 1:

Average throughput: 77.39 Mbit/s

95th percentile per-packet one-way delay: 2.385 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-10-10 22:08:36

End at: 2017-10-10 22:09:06

Local clock offset: 0.637 ms

Remote clock offset: 0.024 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.56 Mbit/s

95th percentile per-packet one-way delay: 2.198 ms

Loss rate: 0.00%

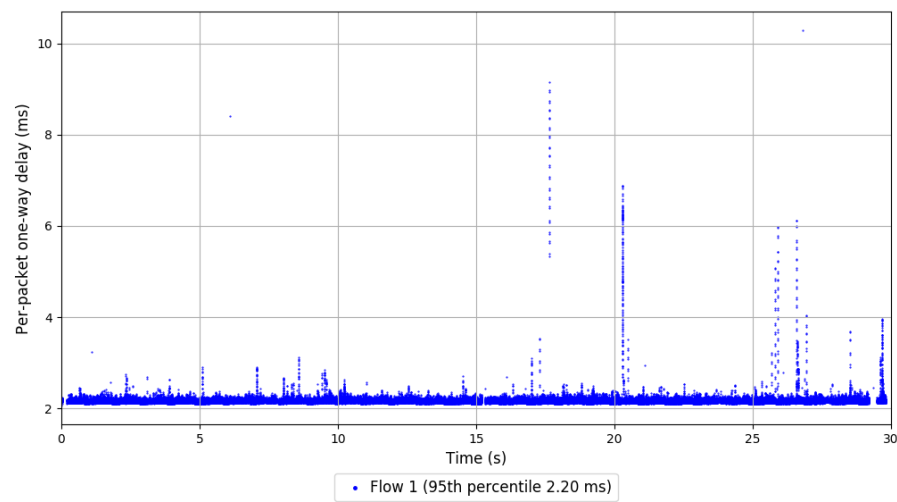
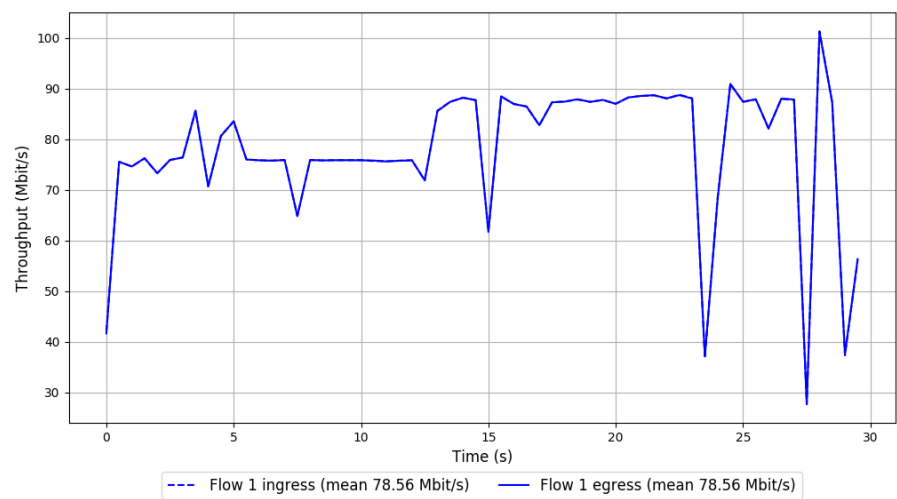
-- Flow 1:

Average throughput: 78.56 Mbit/s

95th percentile per-packet one-way delay: 2.198 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-10-10 22:27:00

End at: 2017-10-10 22:27:31

Local clock offset: 0.692 ms

Remote clock offset: 0.049 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.73 Mbit/s

95th percentile per-packet one-way delay: 5.715 ms

Loss rate: 0.00%

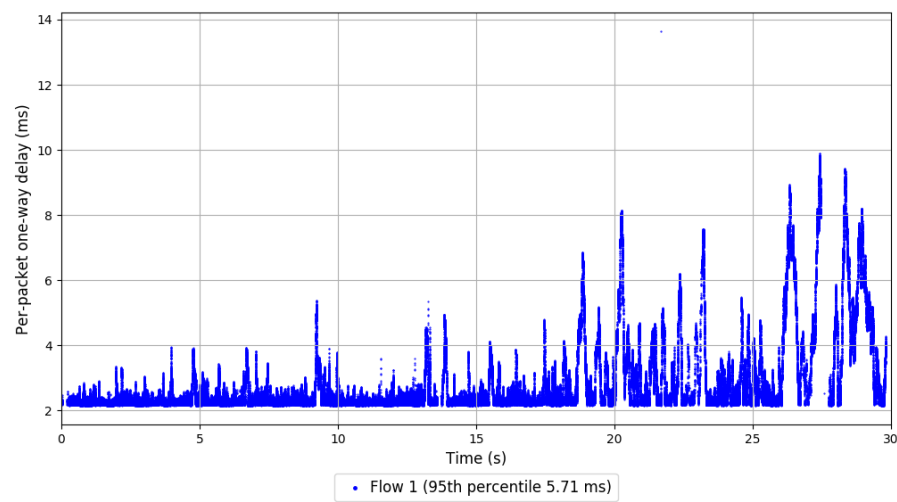
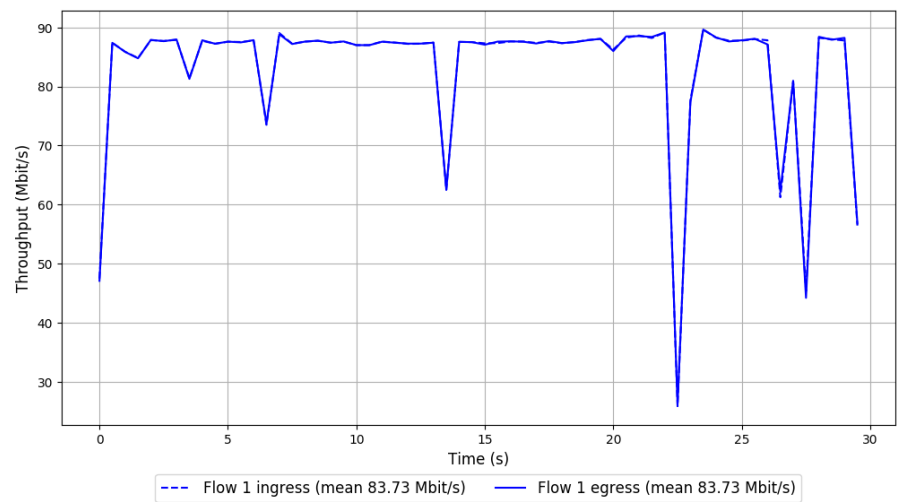
-- Flow 1:

Average throughput: 83.73 Mbit/s

95th percentile per-packet one-way delay: 5.715 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-10-10 22:45:25

End at: 2017-10-10 22:45:55

Local clock offset: 0.58 ms

Remote clock offset: -0.129 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.45 Mbit/s

95th percentile per-packet one-way delay: 2.229 ms

Loss rate: 0.00%

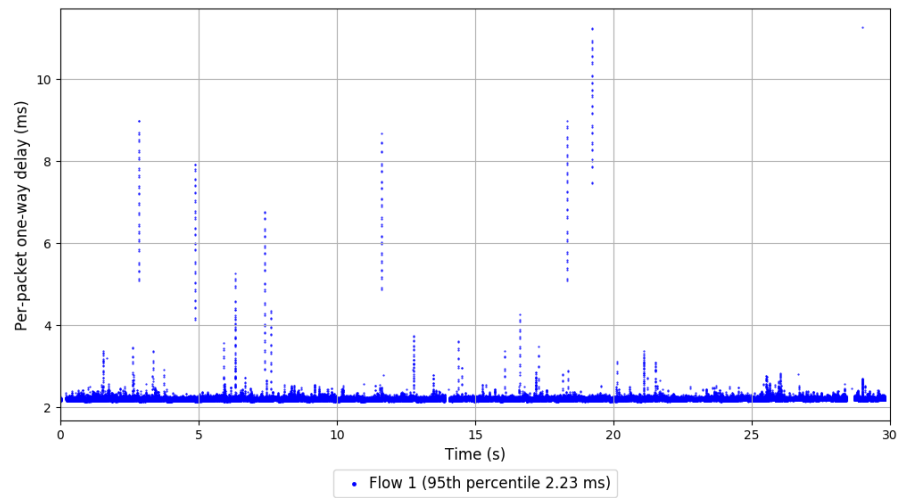
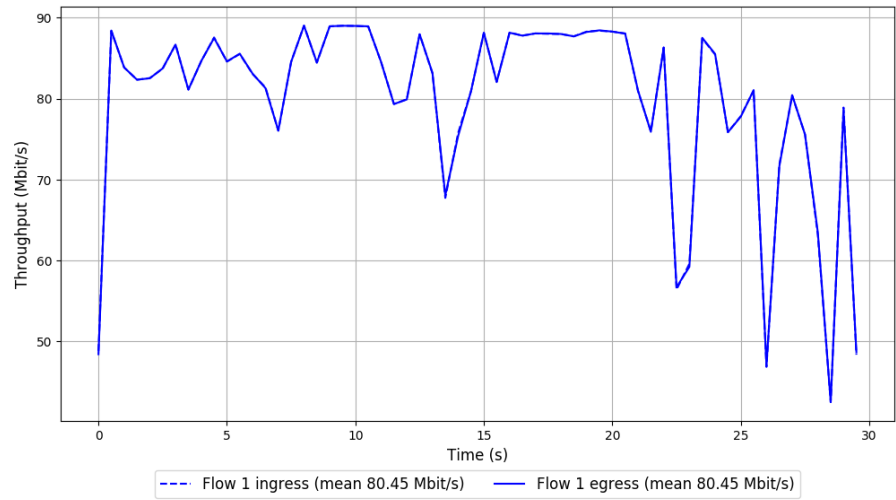
-- Flow 1:

Average throughput: 80.45 Mbit/s

95th percentile per-packet one-way delay: 2.229 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-10-10 23:04:00

End at: 2017-10-10 23:04:30

Local clock offset: 0.52 ms

Remote clock offset: -0.074 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.12 Mbit/s

95th percentile per-packet one-way delay: 2.302 ms

Loss rate: 0.00%

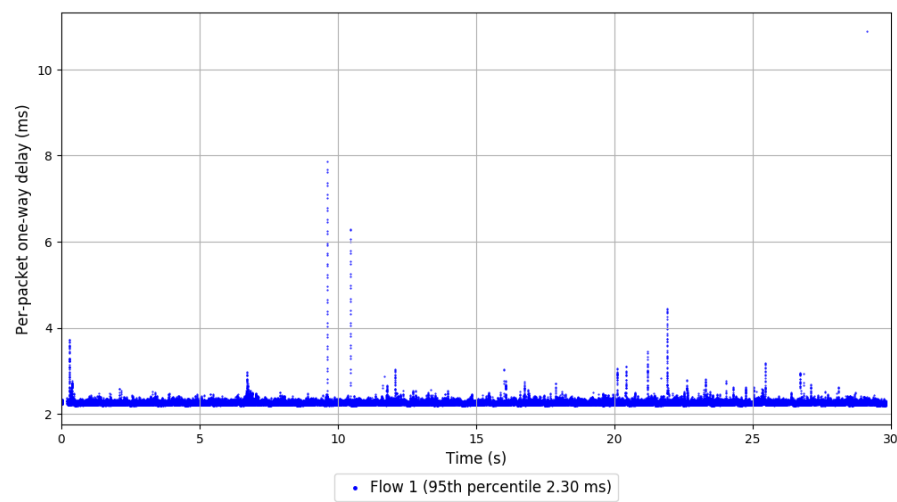
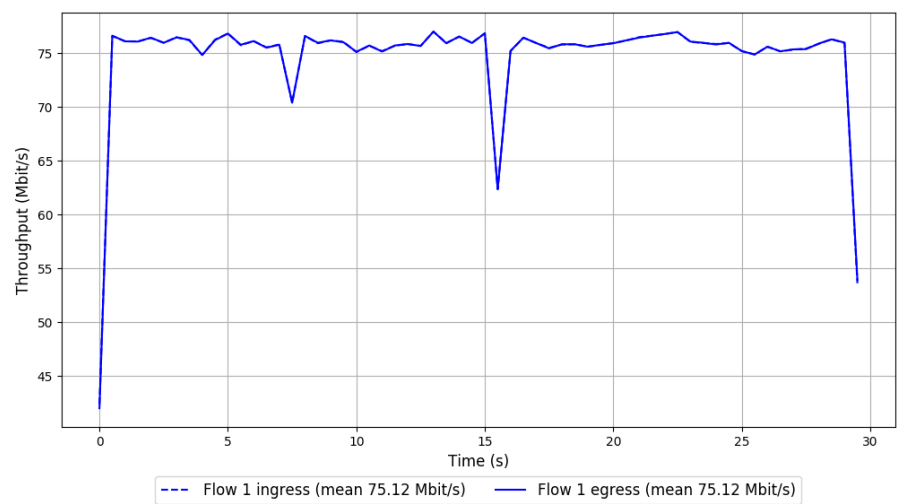
-- Flow 1:

Average throughput: 75.12 Mbit/s

95th percentile per-packet one-way delay: 2.302 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-10-10 23:22:30

End at: 2017-10-10 23:23:00

Local clock offset: 0.179 ms

Remote clock offset: -0.208 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.02 Mbit/s

95th percentile per-packet one-way delay: 2.289 ms

Loss rate: 0.00%

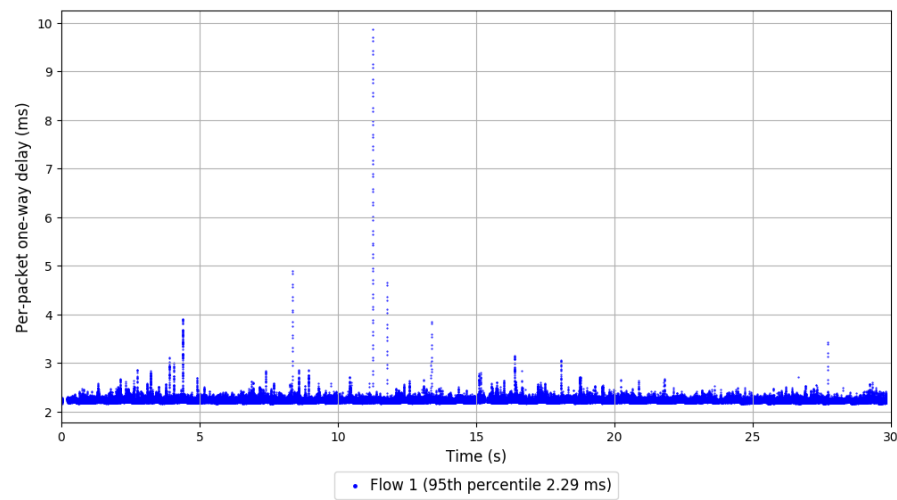
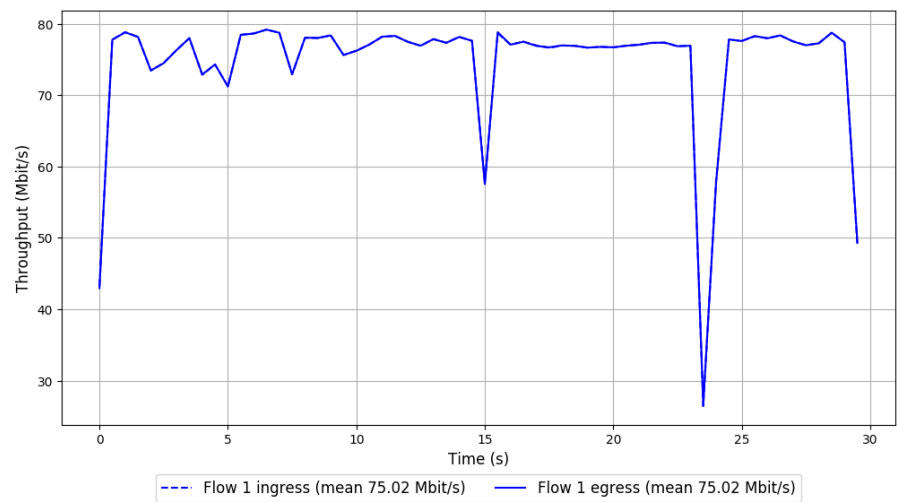
-- Flow 1:

Average throughput: 75.02 Mbit/s

95th percentile per-packet one-way delay: 2.289 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

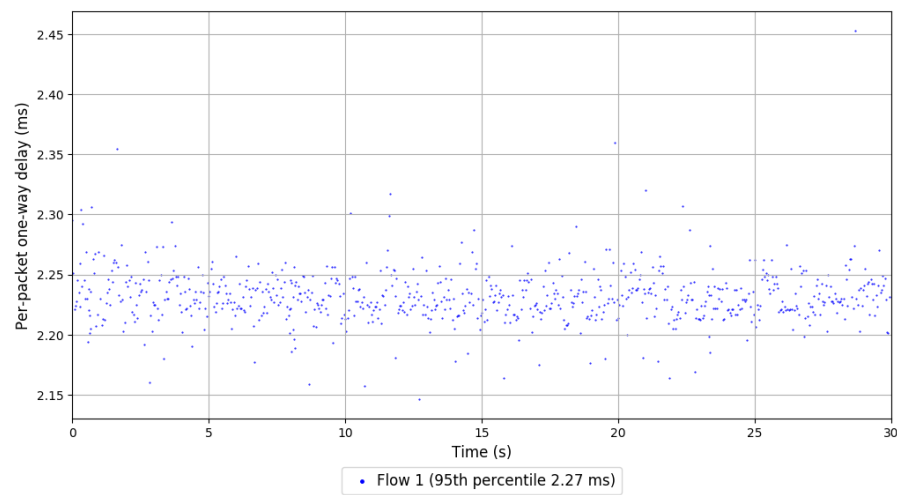
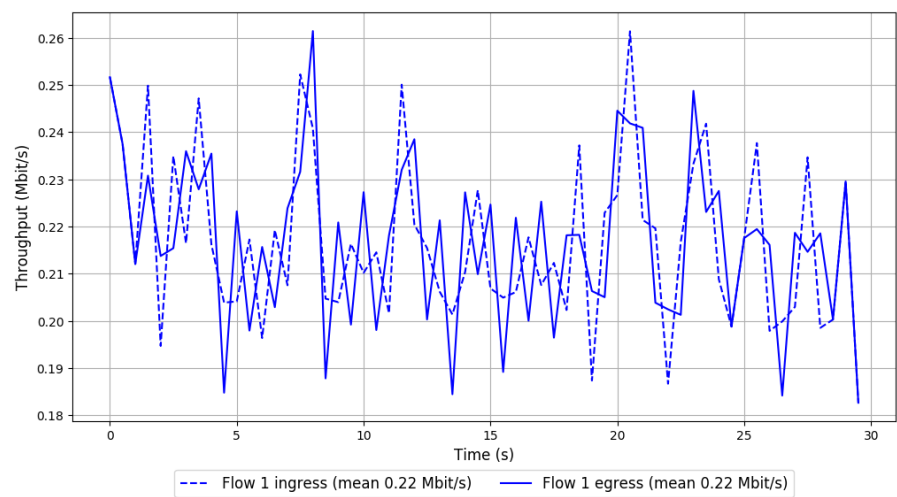


```
Run 1: Statistics of SCReAM

Start at: 2017-10-10 20:54:36
End at: 2017-10-10 20:55:06
Local clock offset: 0.669 ms
Remote clock offset: 0.32 ms

# Below is generated by plot.py at 2017-10-11 02:24:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.265 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.265 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SReAM

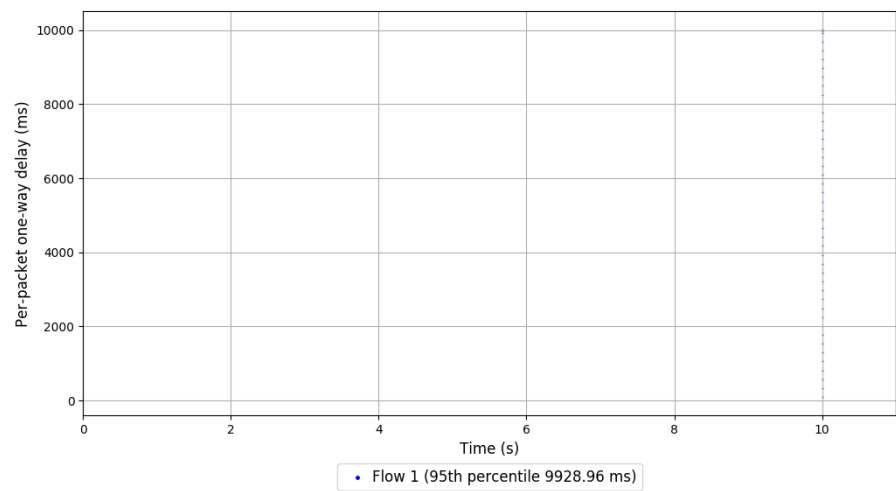
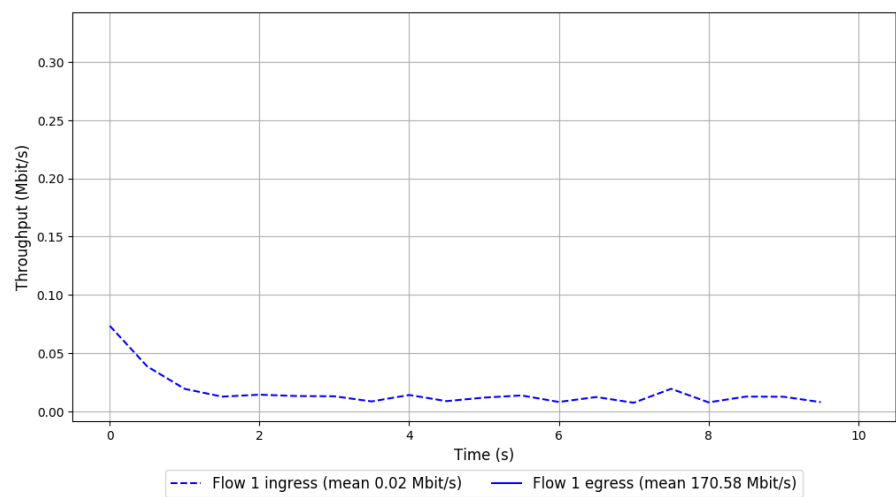
Start at: 2017-10-10 21:12:46

End at: 2017-10-10 21:13:16

Local clock offset: 0.599 ms

Remote clock offset: 0.179 ms

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

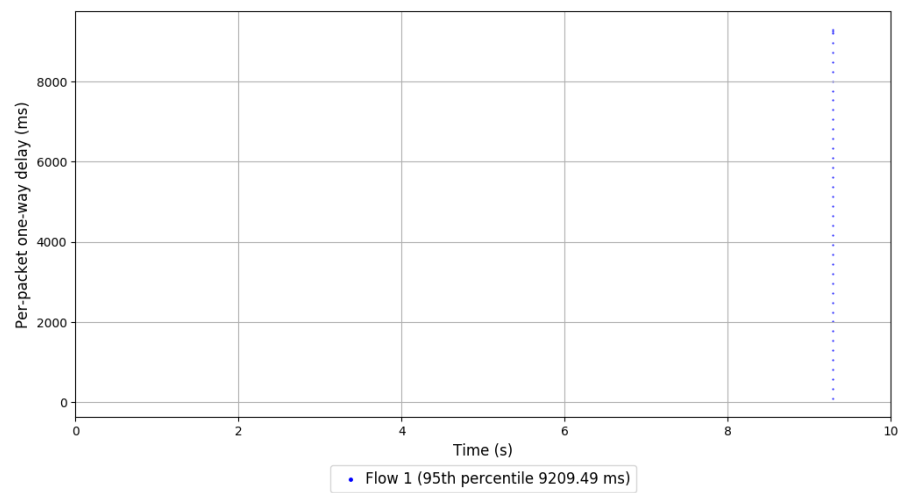
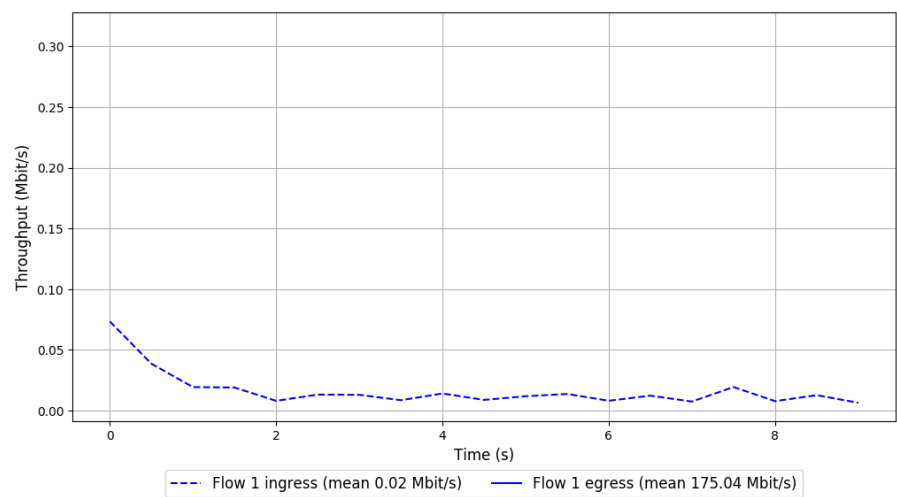
Start at: 2017-10-10 21:31:10

End at: 2017-10-10 21:31:40

Local clock offset: 0.729 ms

Remote clock offset: 0.156 ms

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-10-10 21:49:43

End at: 2017-10-10 21:50:13

Local clock offset: 0.701 ms

Remote clock offset: 0.208 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.330 ms

Loss rate: 0.00%

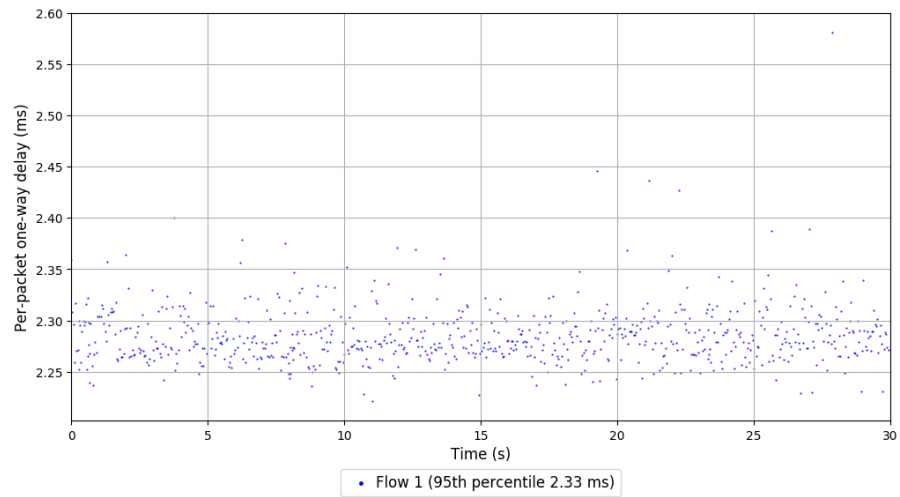
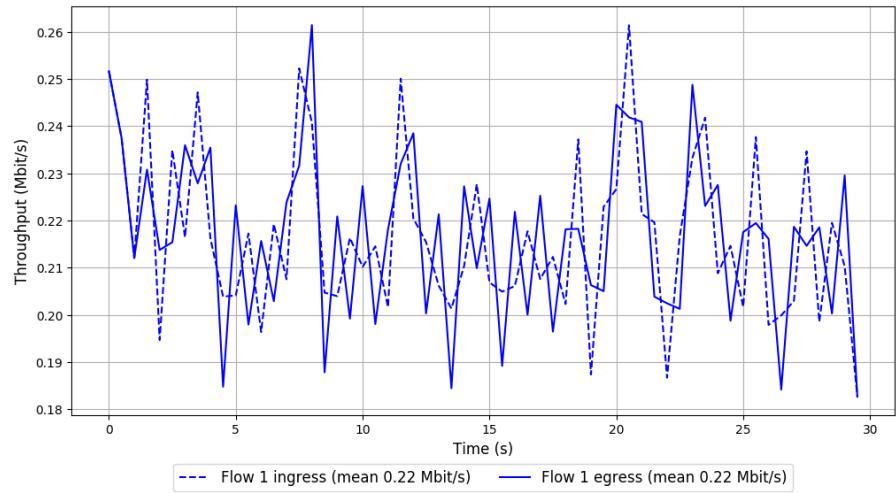
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.330 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-10-10 22:07:32

End at: 2017-10-10 22:08:02

Local clock offset: 0.72 ms

Remote clock offset: 0.16 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.382 ms

Loss rate: 0.00%

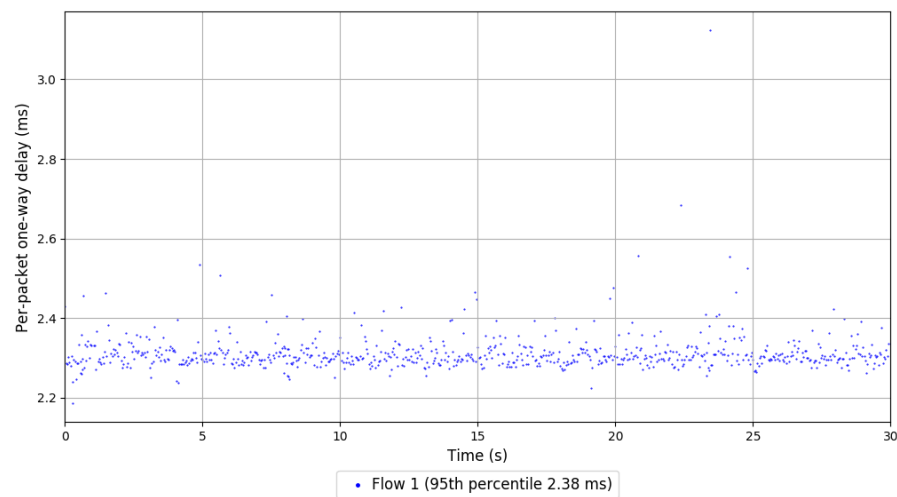
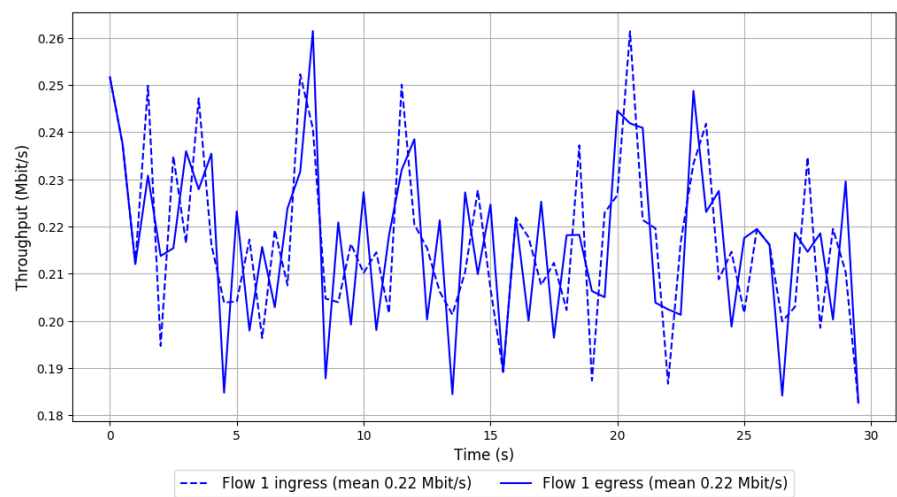
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.382 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

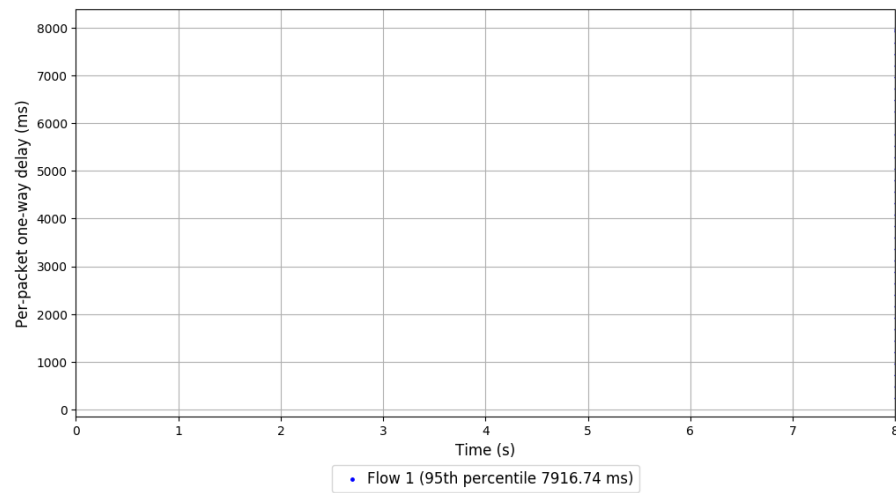
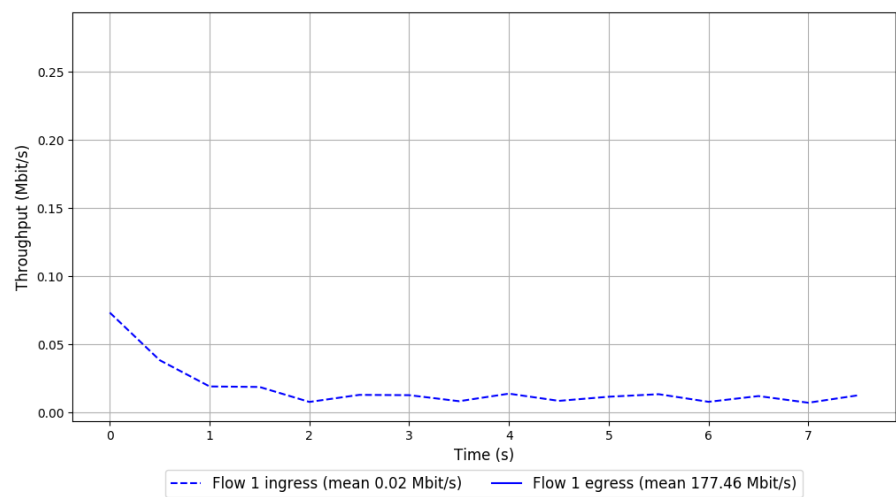
Start at: 2017-10-10 22:25:56

End at: 2017-10-10 22:26:26

Local clock offset: 0.67 ms

Remote clock offset: -0.02 ms

Run 6: Report of SReAM — Data Link

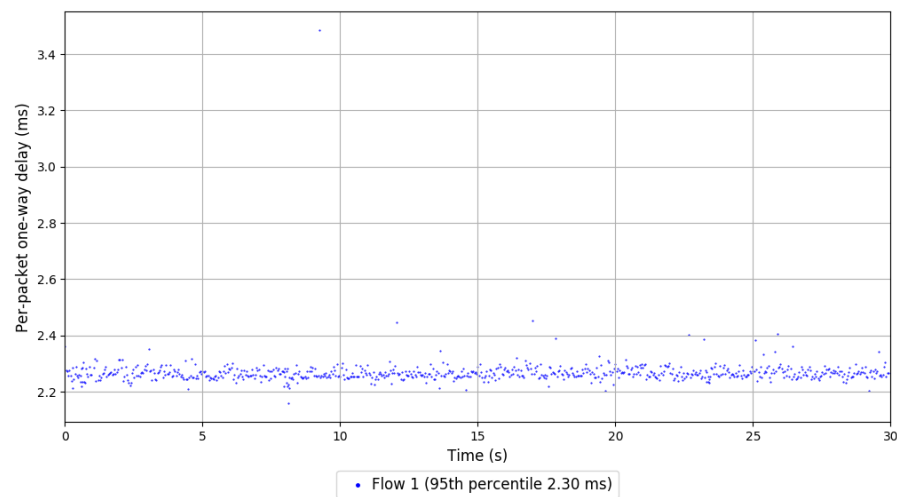
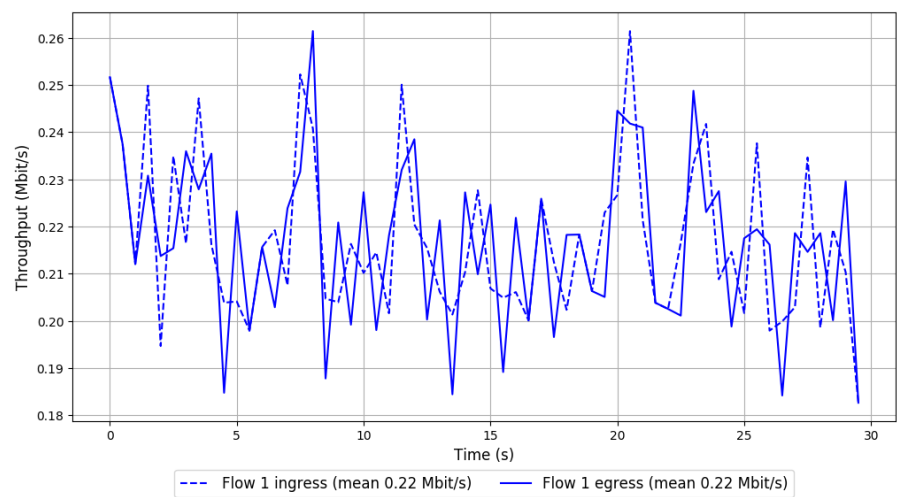


Run 7: Statistics of SCReAM

Start at: 2017-10-10 22:44:21
End at: 2017-10-10 22:44:51
Local clock offset: 0.608 ms
Remote clock offset: -0.073 ms

Below is generated by plot.py at 2017-10-11 02:24:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.299 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.299 ms
Loss rate: 0.00%

Run 7: Report of SReAM — Data Link

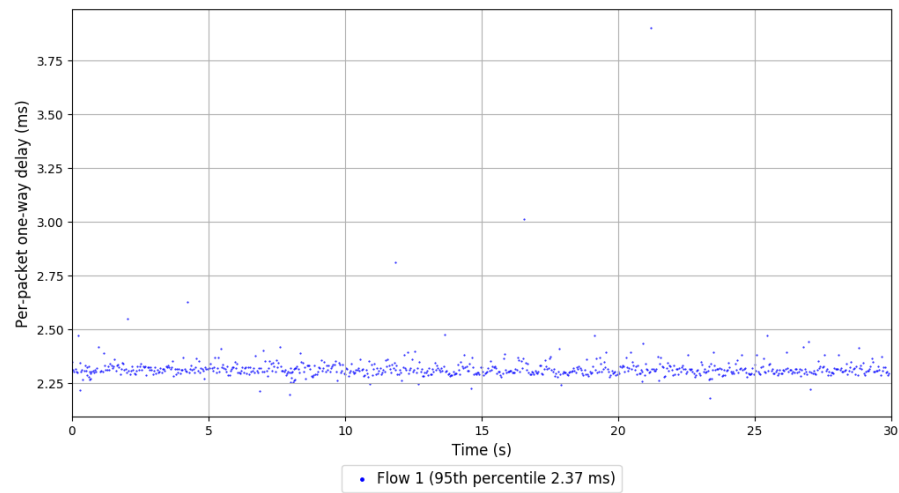
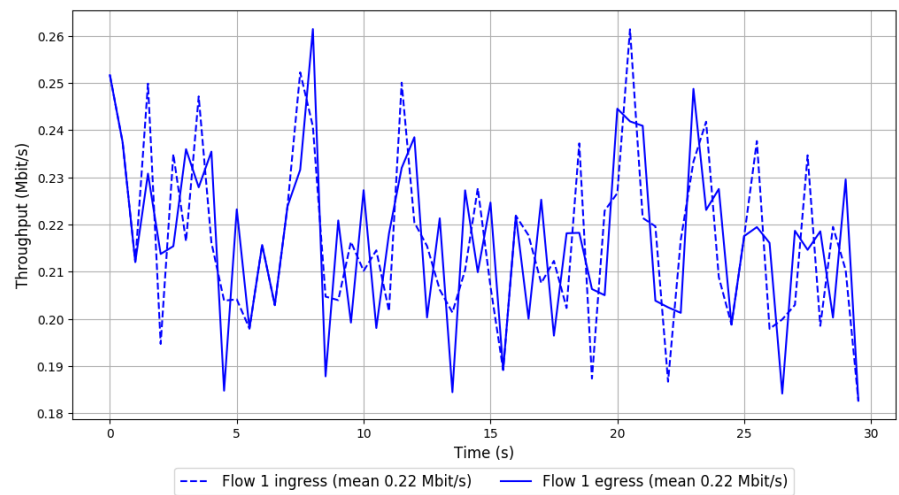


Run 8: Statistics of SCReAM

Start at: 2017-10-10 23:02:56
End at: 2017-10-10 23:03:26
Local clock offset: 0.532 ms
Remote clock offset: -0.064 ms

Below is generated by plot.py at 2017-10-11 02:24:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.369 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.369 ms
Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

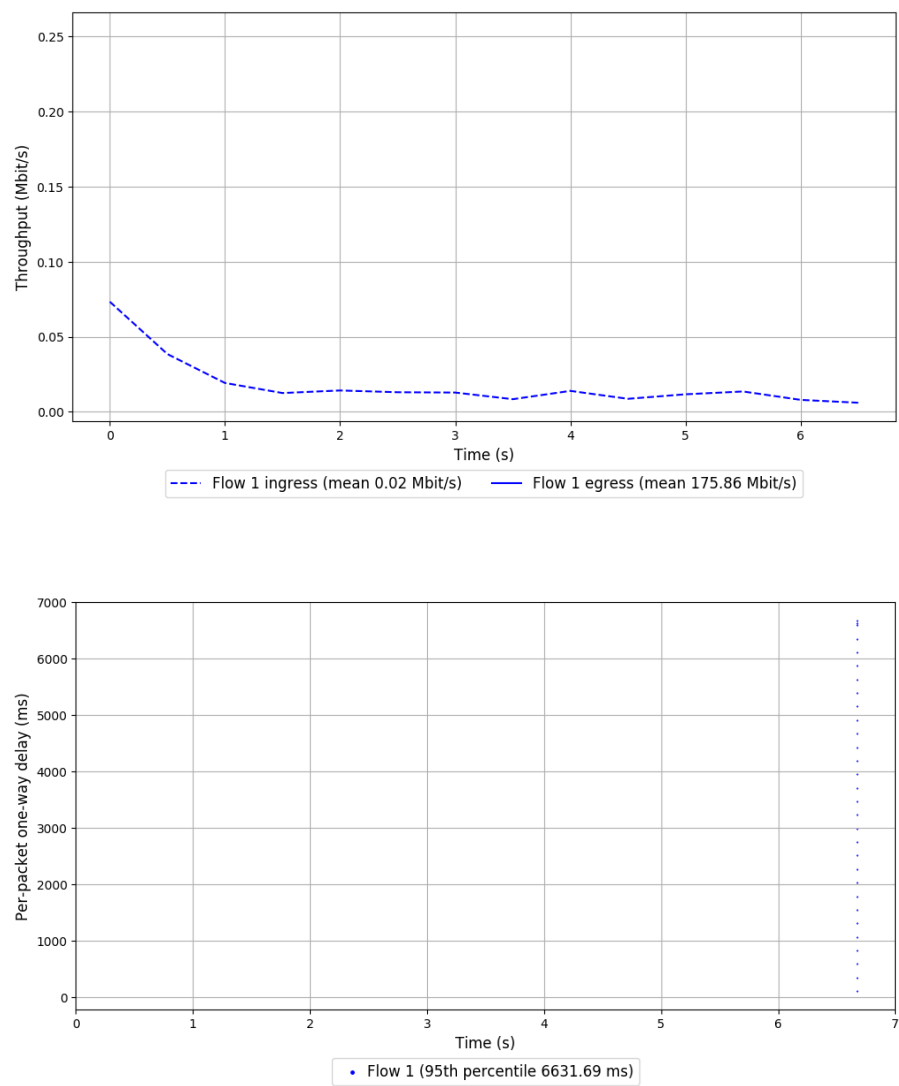
Start at: 2017-10-10 23:21:26

End at: 2017-10-10 23:21:56

Local clock offset: 0.211 ms

Remote clock offset: -0.227 ms

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SCReAM

Start at: 2017-10-10 23:39:22

End at: 2017-10-10 23:39:52

Local clock offset: 0.102 ms

Remote clock offset: -0.288 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.364 ms

Loss rate: 0.00%

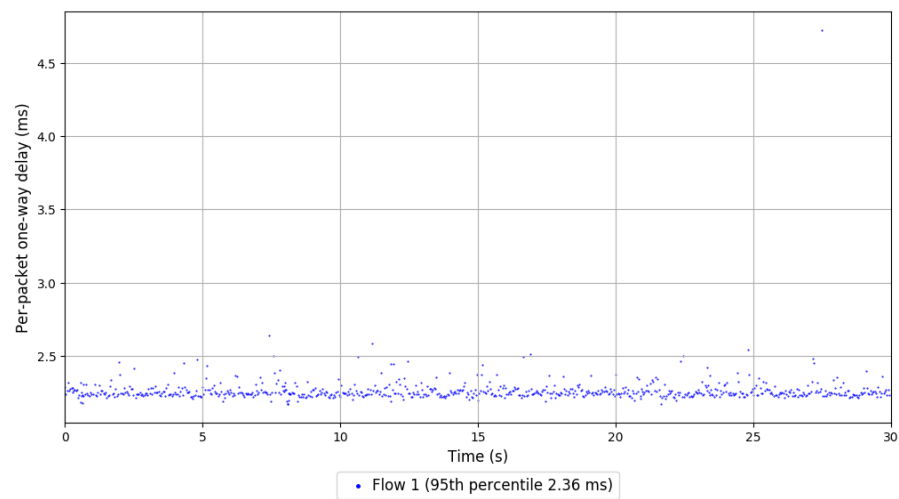
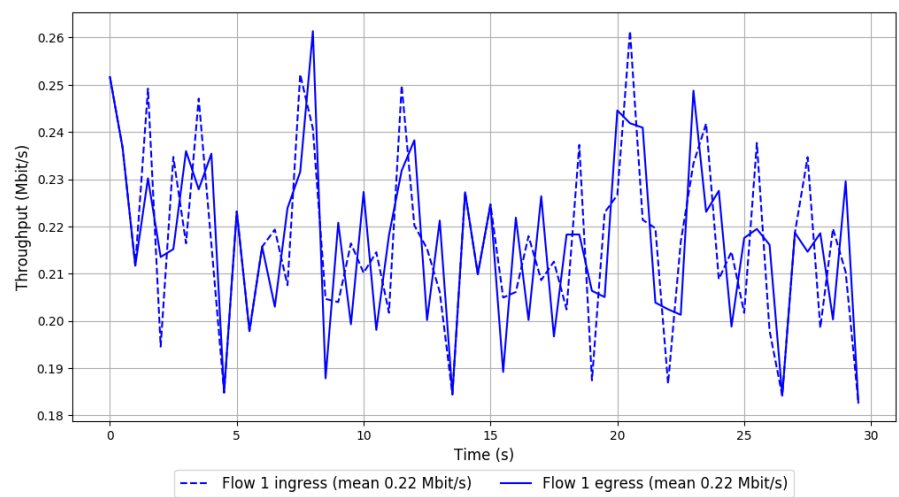
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.364 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2017-10-10 20:40:46

End at: 2017-10-10 20:41:16

Local clock offset: 0.833 ms

Remote clock offset: 0.471 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 2.642 ms

Loss rate: 0.00%

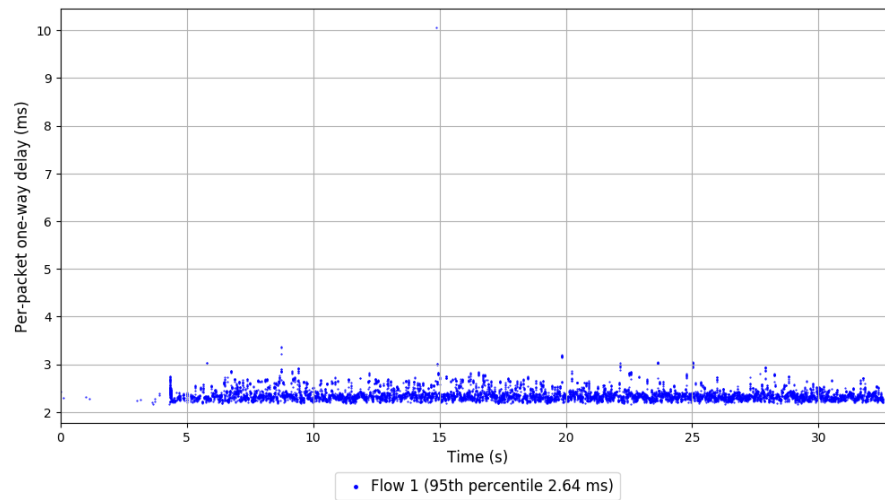
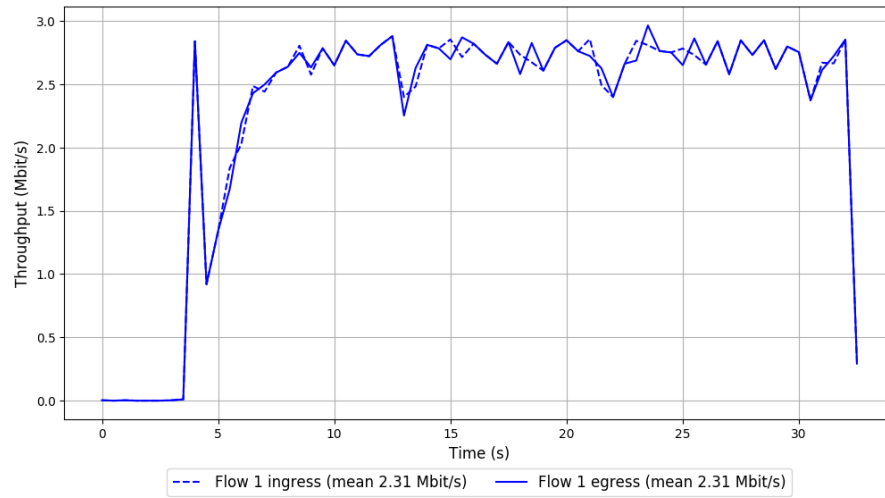
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 2.642 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-10-10 20:59:04

End at: 2017-10-10 20:59:34

Local clock offset: 0.685 ms

Remote clock offset: 0.348 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 2.582 ms

Loss rate: 0.00%

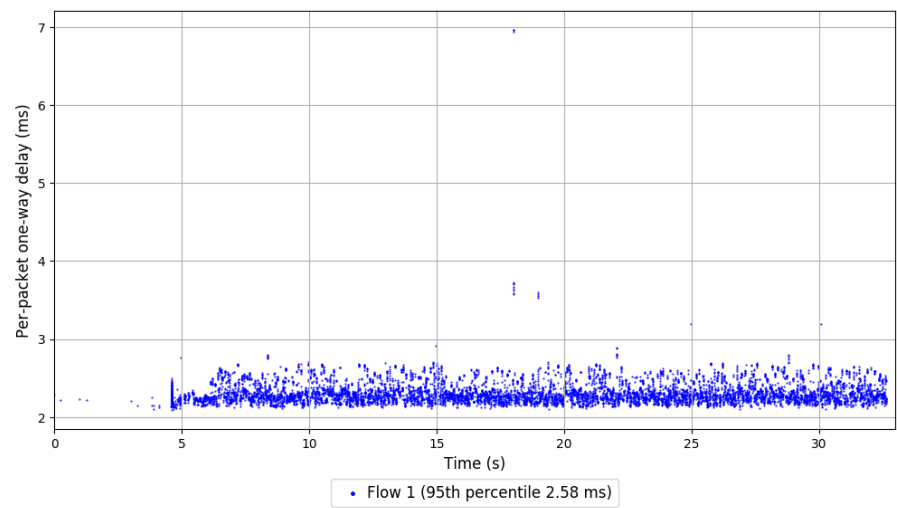
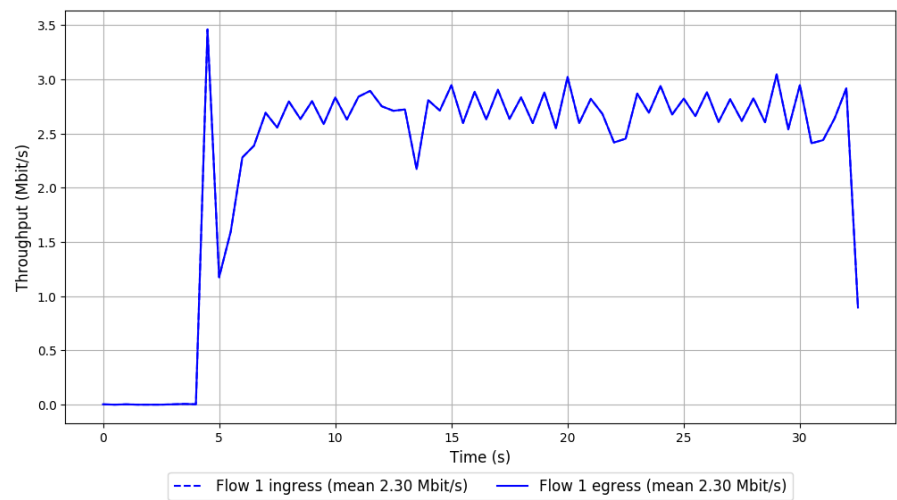
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 2.582 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-10-10 21:17:13

End at: 2017-10-10 21:17:43

Local clock offset: 0.663 ms

Remote clock offset: 0.291 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 2.683 ms

Loss rate: 0.00%

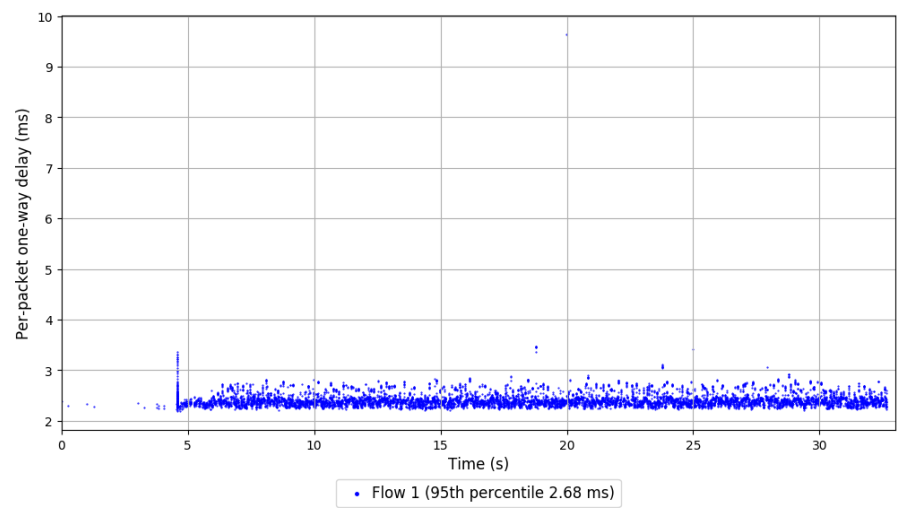
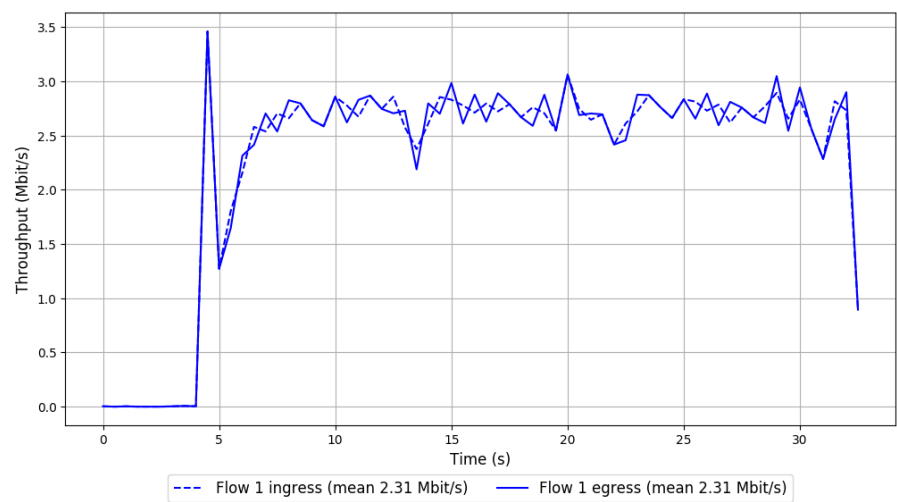
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 2.683 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-10-10 21:35:38

End at: 2017-10-10 21:36:08

Local clock offset: 0.542 ms

Remote clock offset: 0.081 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 2.730 ms

Loss rate: 0.00%

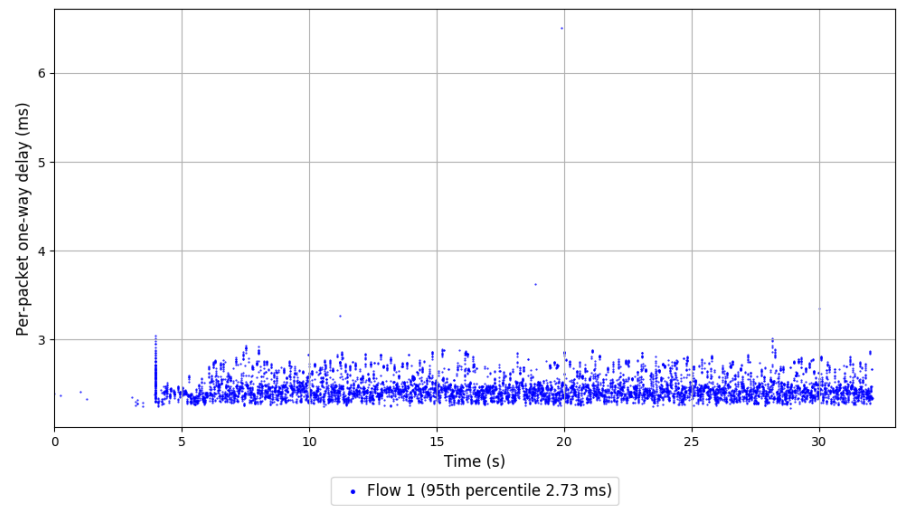
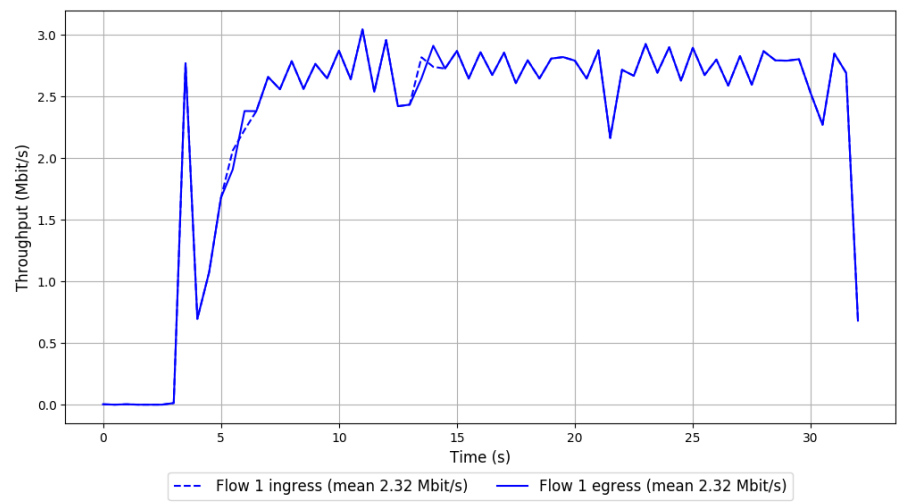
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 2.730 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-10-10 21:54:11

End at: 2017-10-10 21:54:41

Local clock offset: 0.671 ms

Remote clock offset: 0.113 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 2.636 ms

Loss rate: 0.00%

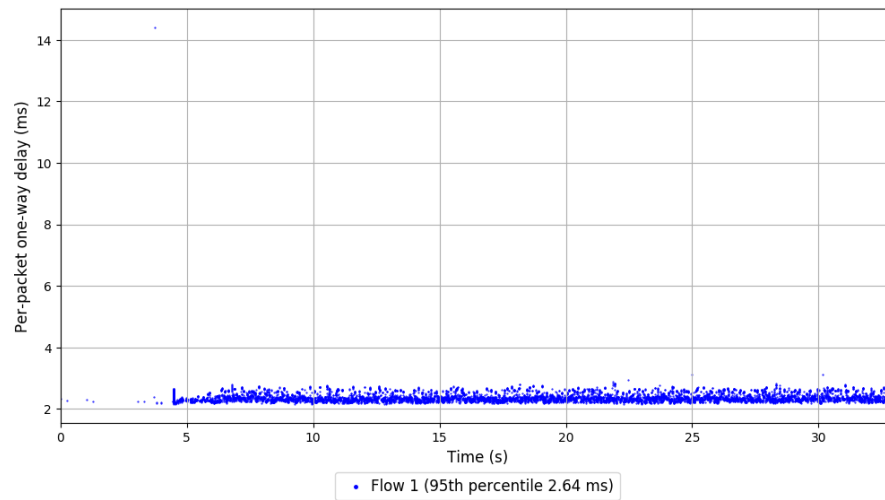
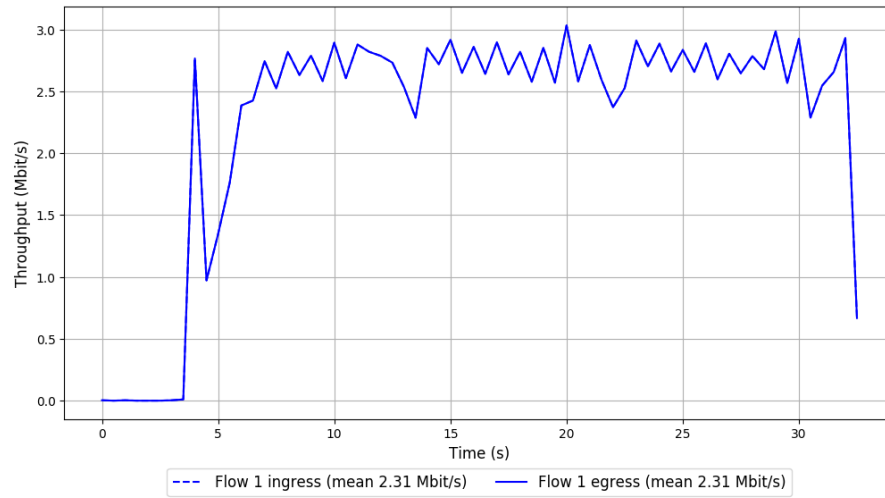
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 2.636 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

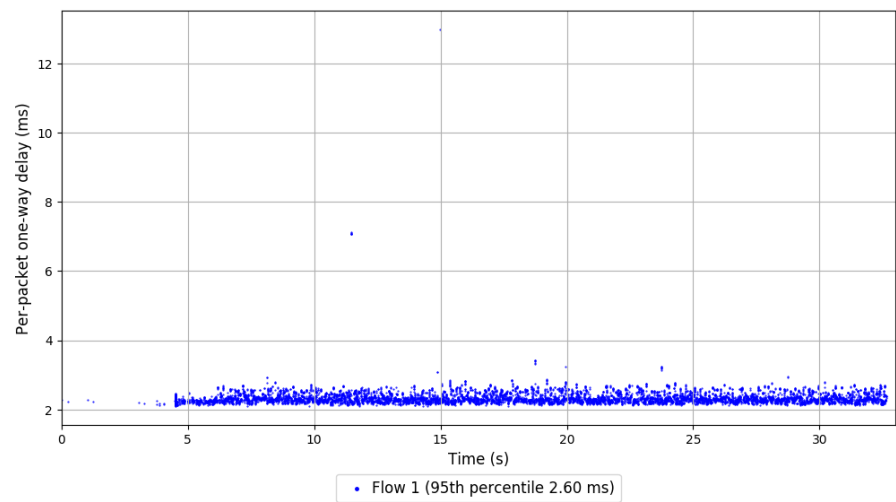
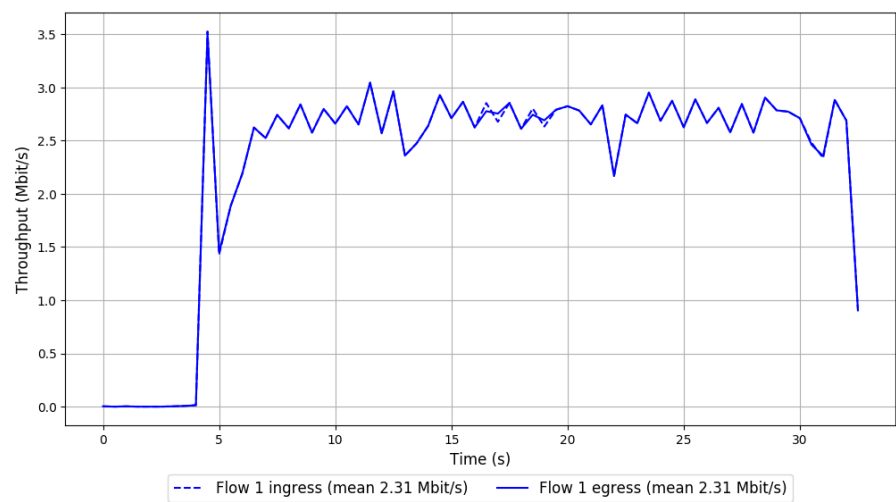


Run 6: Statistics of WebRTC media

Start at: 2017-10-10 22:12:00
End at: 2017-10-10 22:12:30
Local clock offset: 0.512 ms
Remote clock offset: -0.102 ms

Below is generated by plot.py at 2017-10-11 02:24:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 2.603 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 2.603 ms
Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-10-10 22:30:24

End at: 2017-10-10 22:30:54

Local clock offset: 0.612 ms

Remote clock offset: 0.031 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 2.696 ms

Loss rate: 0.00%

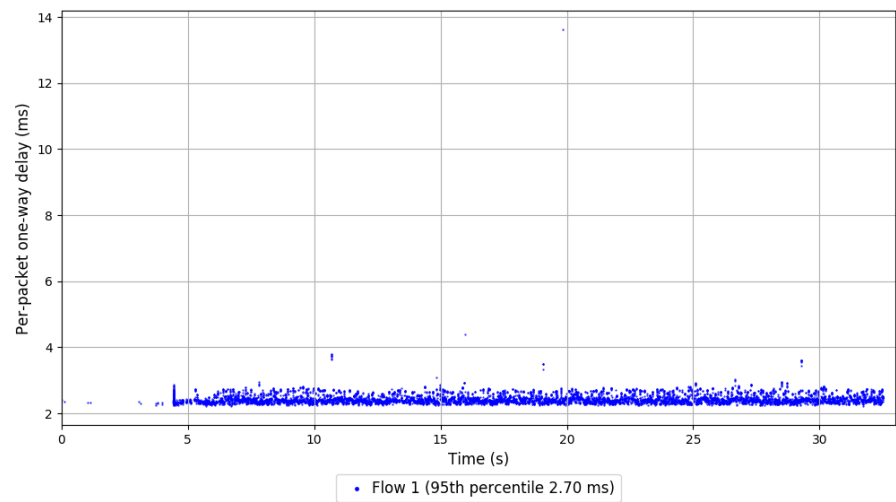
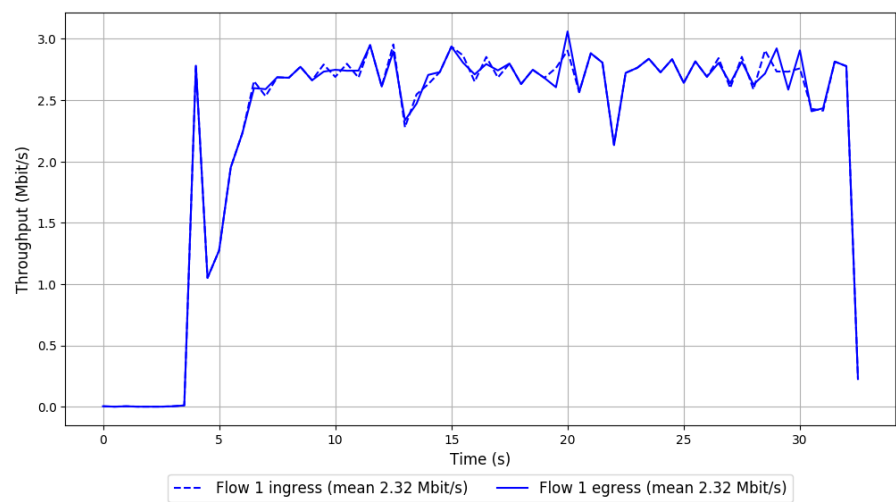
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 2.696 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-10-10 22:48:41

End at: 2017-10-10 22:49:11

Local clock offset: 0.651 ms

Remote clock offset: -0.05 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

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

Loss rate: 0.00%

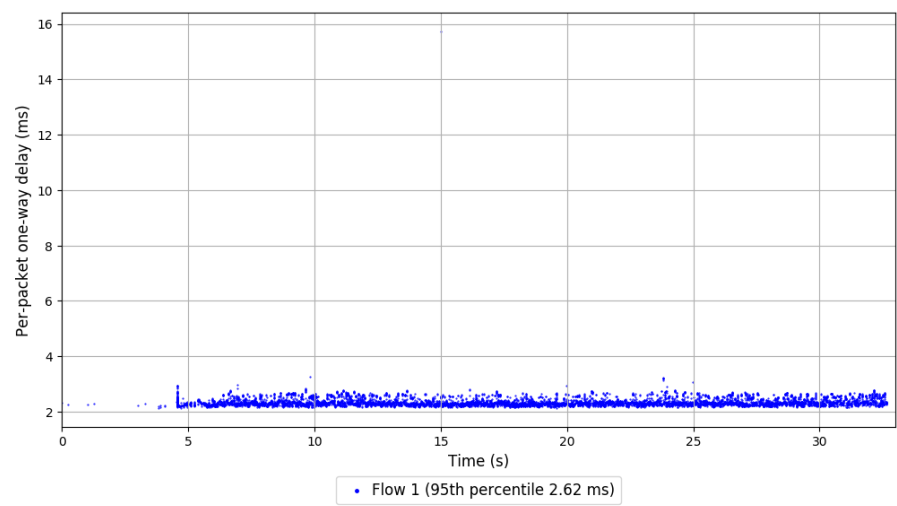
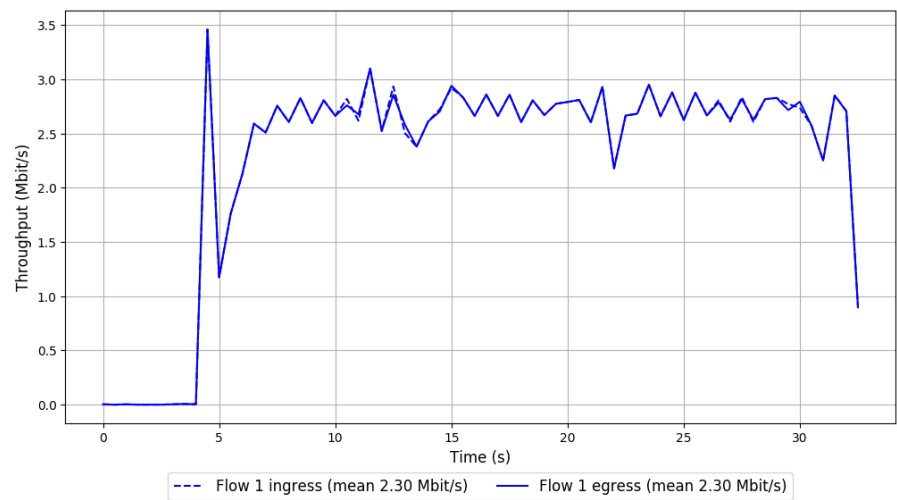
-- Flow 1:

Average throughput: 2.30 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link

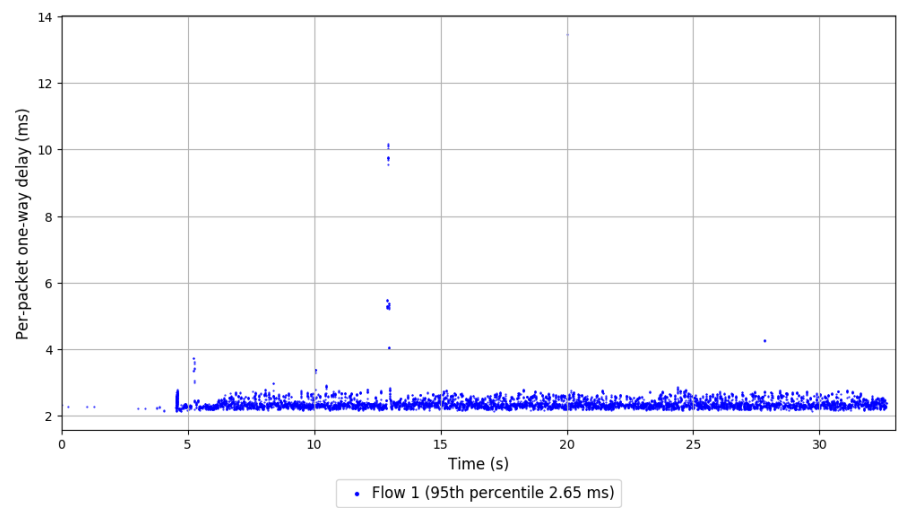
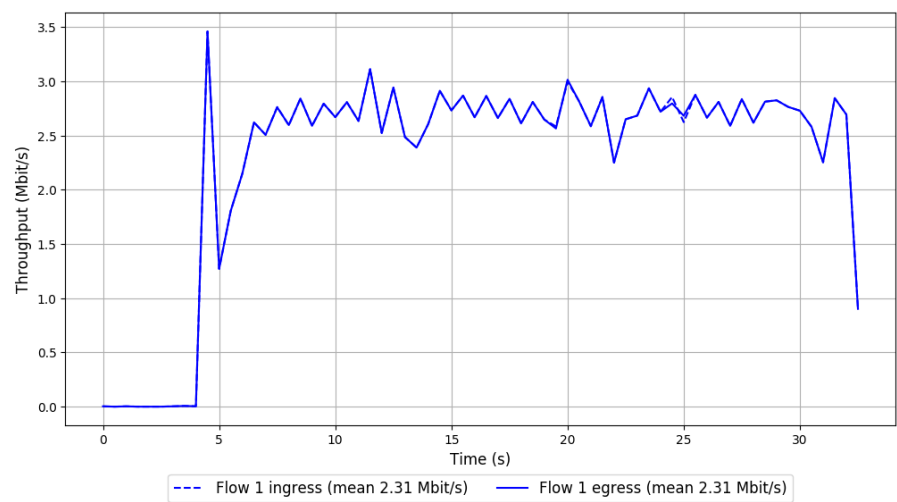


Run 9: Statistics of WebRTC media

Start at: 2017-10-10 23:07:16
End at: 2017-10-10 23:07:46
Local clock offset: 0.364 ms
Remote clock offset: -0.224 ms

Below is generated by plot.py at 2017-10-11 02:24:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 2.655 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 2.655 ms
Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-10-10 23:25:53

End at: 2017-10-10 23:26:23

Local clock offset: 0.174 ms

Remote clock offset: -0.206 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 2.609 ms

Loss rate: 0.00%

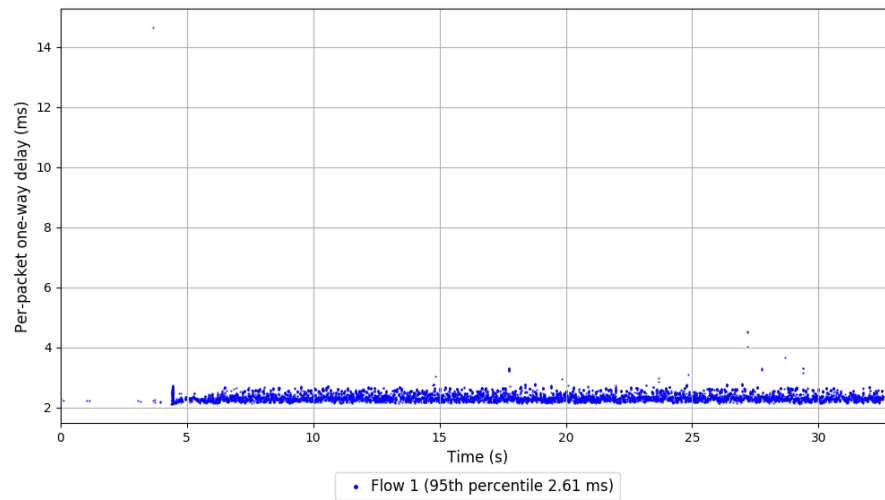
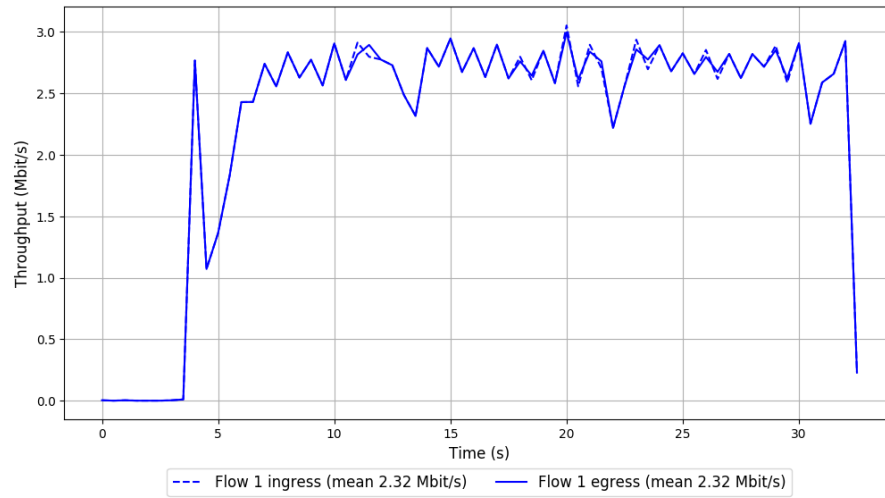
-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 2.609 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-10-10 20:39:41

End at: 2017-10-10 20:40:11

Local clock offset: 0.783 ms

Remote clock offset: 0.413 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.87 Mbit/s

95th percentile per-packet one-way delay: 3.274 ms

Loss rate: 0.10%

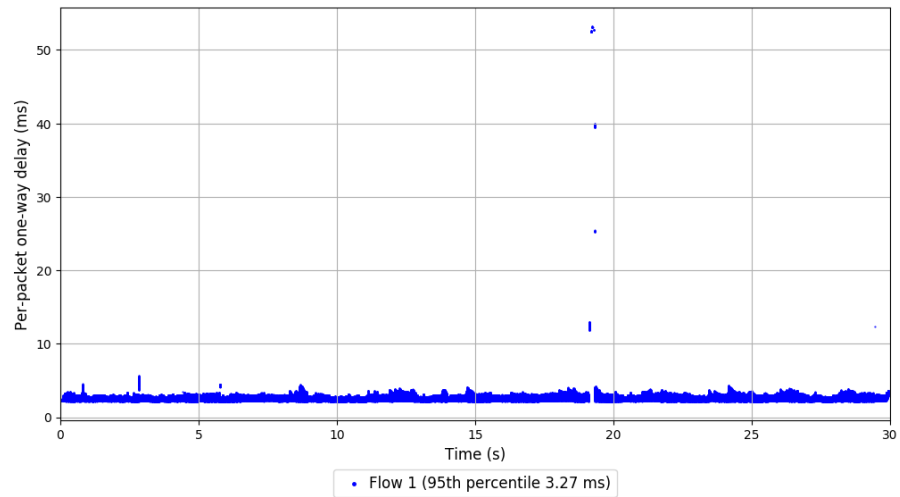
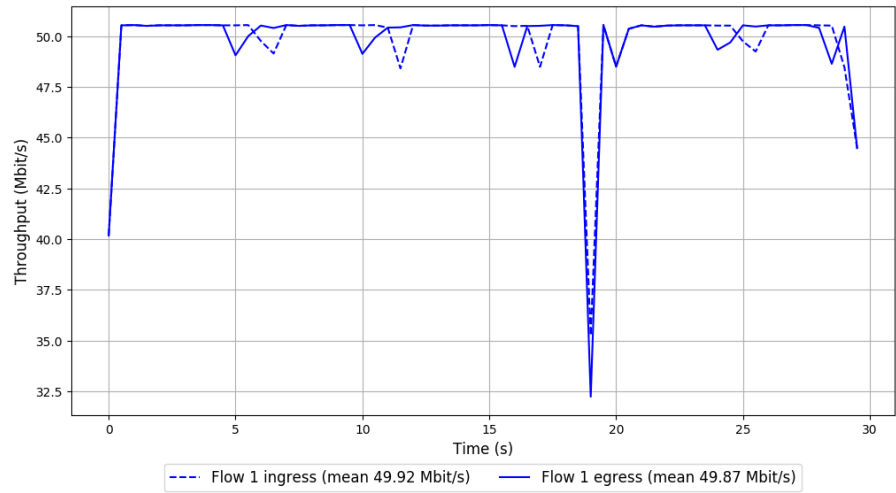
-- Flow 1:

Average throughput: 49.87 Mbit/s

95th percentile per-packet one-way delay: 3.274 ms

Loss rate: 0.10%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-10-10 20:57:59

End at: 2017-10-10 20:58:29

Local clock offset: 0.692 ms

Remote clock offset: 0.297 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.17 Mbit/s

95th percentile per-packet one-way delay: 3.189 ms

Loss rate: 0.00%

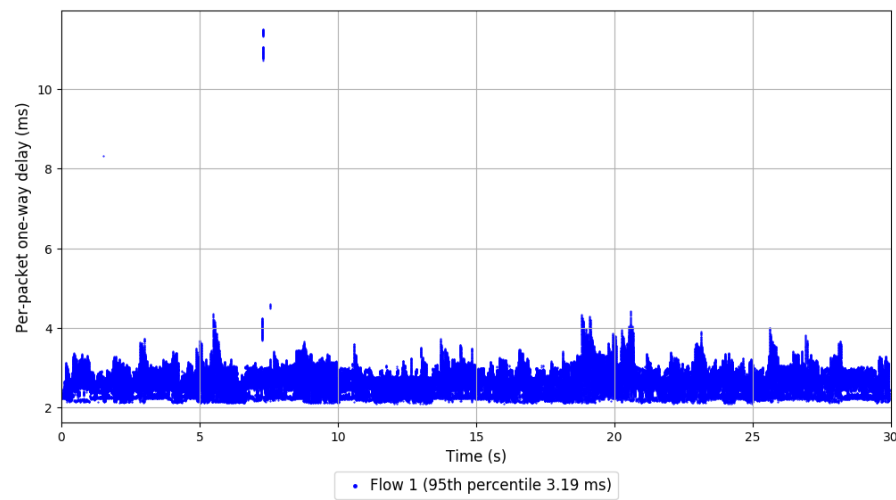
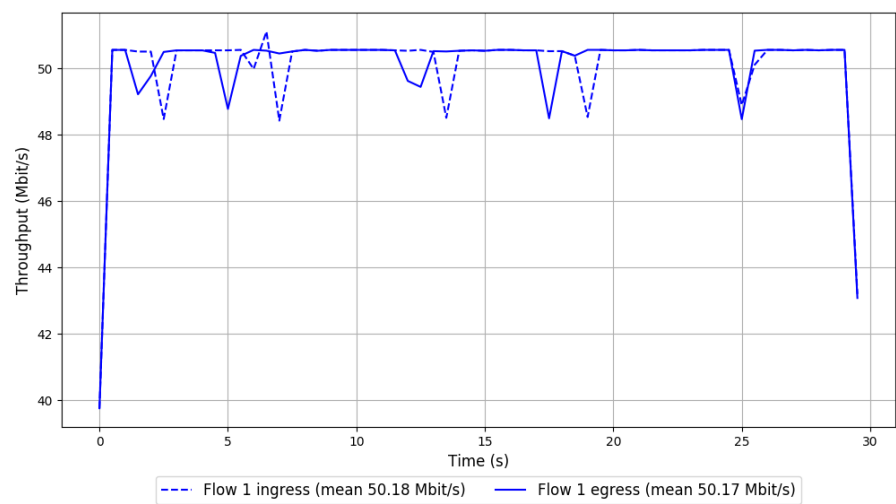
-- Flow 1:

Average throughput: 50.17 Mbit/s

95th percentile per-packet one-way delay: 3.189 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-10-10 21:16:08

End at: 2017-10-10 21:16:38

Local clock offset: 0.616 ms

Remote clock offset: 0.223 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.21 Mbit/s

95th percentile per-packet one-way delay: 3.233 ms

Loss rate: 0.00%

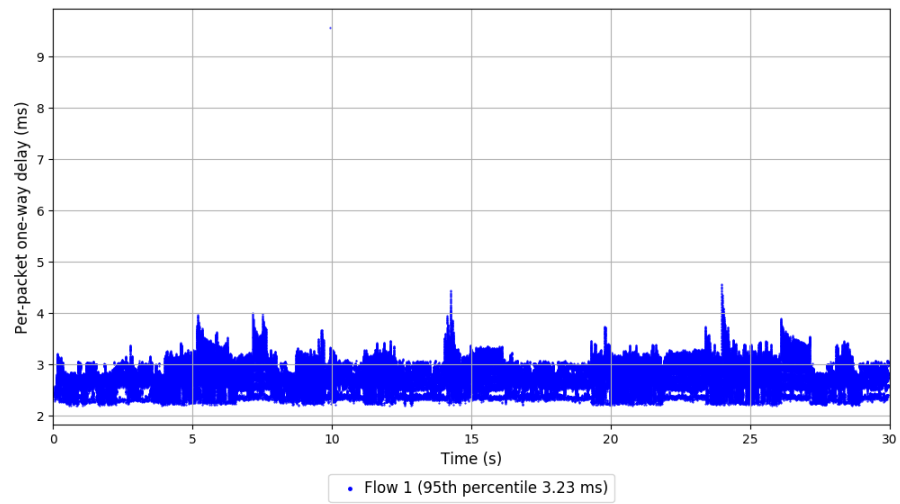
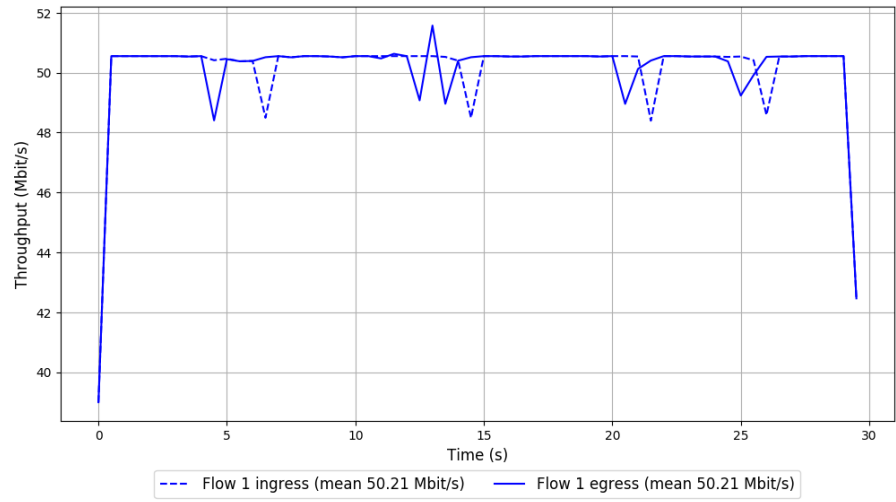
-- Flow 1:

Average throughput: 50.21 Mbit/s

95th percentile per-packet one-way delay: 3.233 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-10-10 21:34:33

End at: 2017-10-10 21:35:03

Local clock offset: 0.515 ms

Remote clock offset: 0.056 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.20 Mbit/s

95th percentile per-packet one-way delay: 3.192 ms

Loss rate: 0.00%

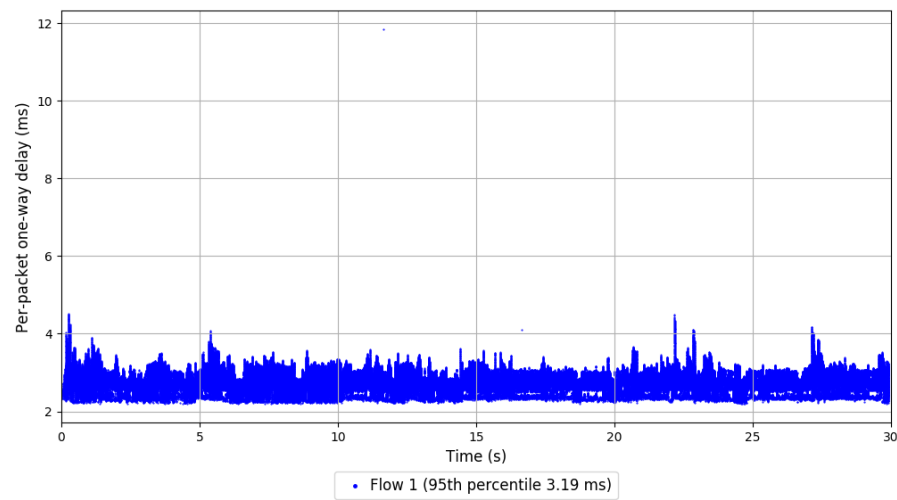
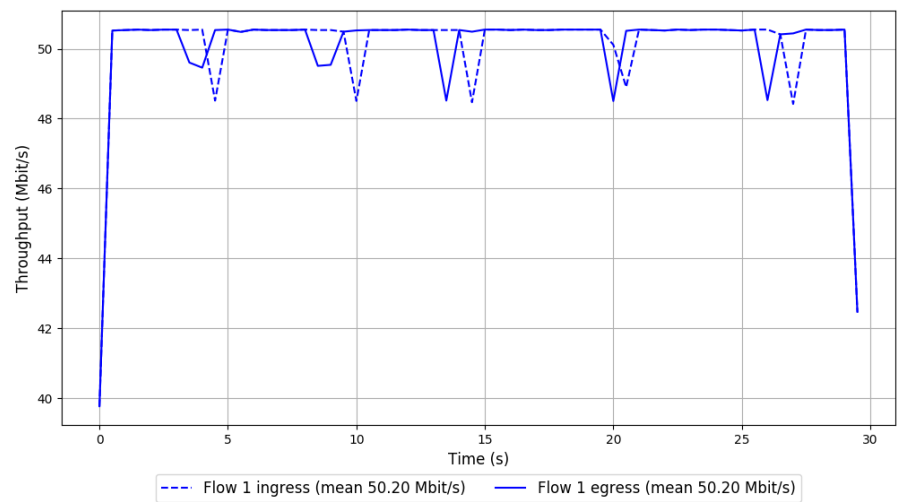
-- Flow 1:

Average throughput: 50.20 Mbit/s

95th percentile per-packet one-way delay: 3.192 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-10-10 21:53:06

End at: 2017-10-10 21:53:36

Local clock offset: 0.69 ms

Remote clock offset: 0.139 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.23 Mbit/s

95th percentile per-packet one-way delay: 3.217 ms

Loss rate: 0.00%

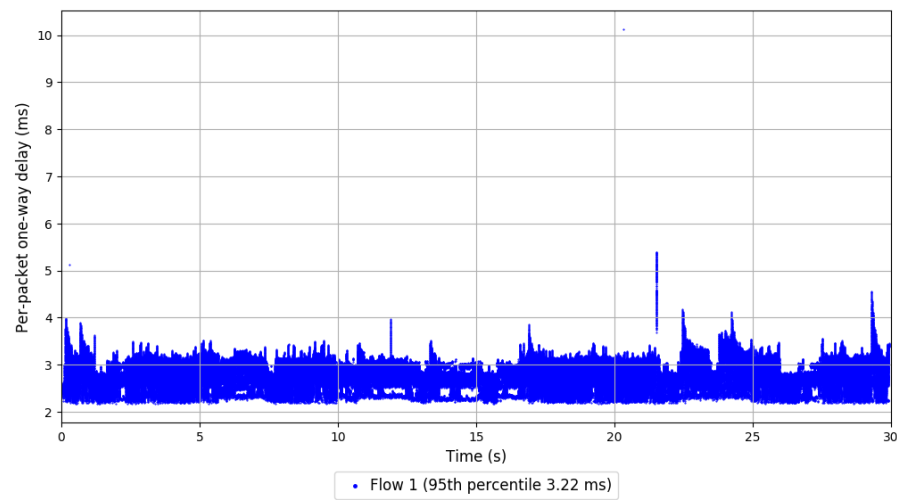
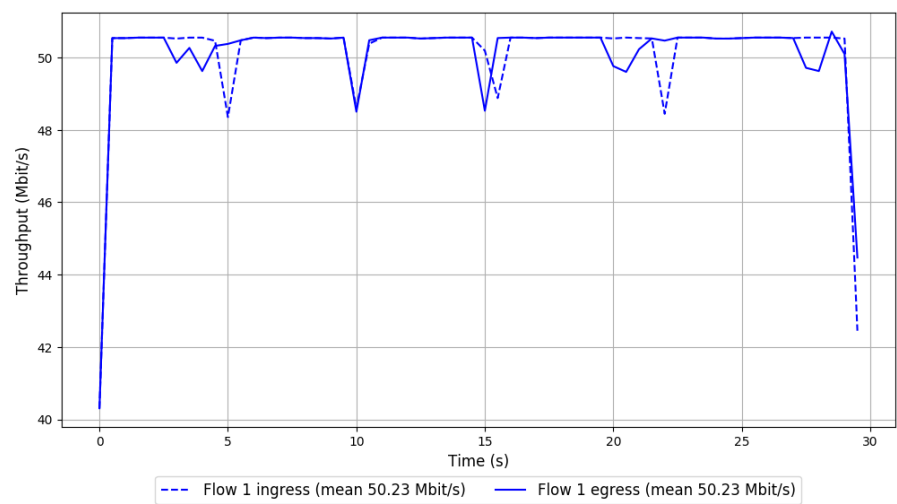
-- Flow 1:

Average throughput: 50.23 Mbit/s

95th percentile per-packet one-way delay: 3.217 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link

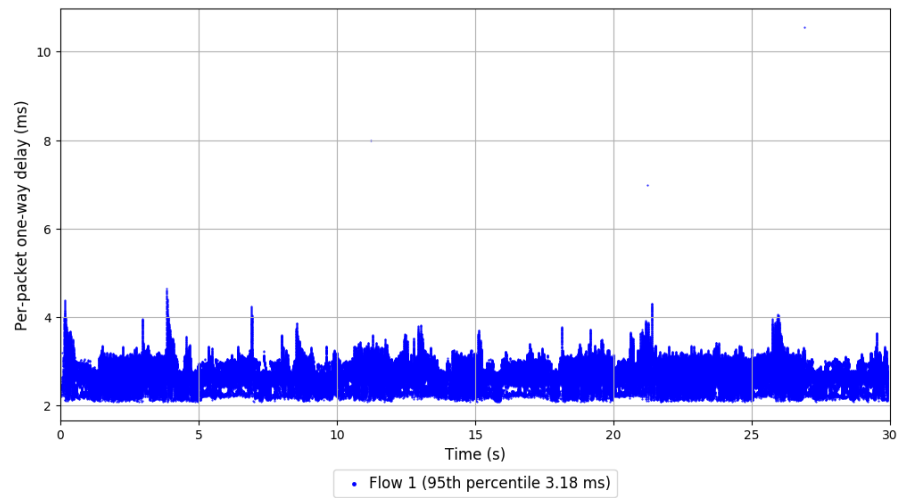
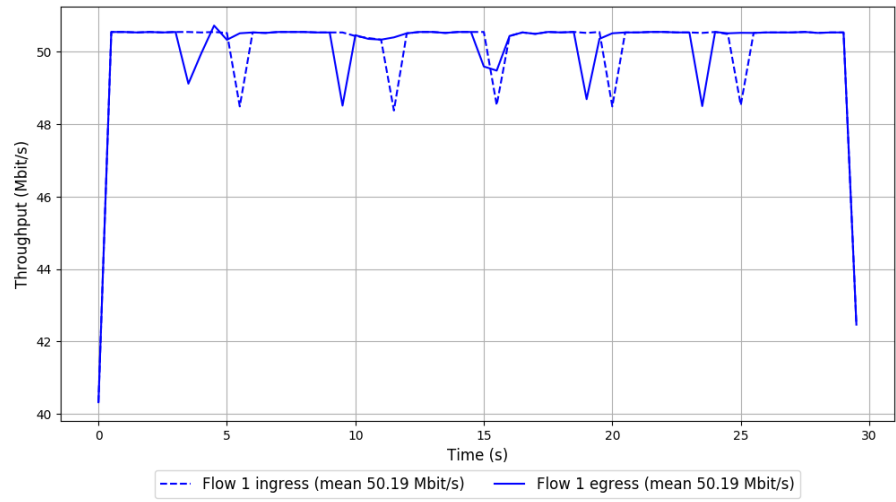


Run 6: Statistics of Sprout

Start at: 2017-10-10 22:10:54
End at: 2017-10-10 22:11:25
Local clock offset: 0.509 ms
Remote clock offset: -0.133 ms

Below is generated by plot.py at 2017-10-11 02:24:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 50.19 Mbit/s
95th percentile per-packet one-way delay: 3.179 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.19 Mbit/s
95th percentile per-packet one-way delay: 3.179 ms
Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-10-10 22:29:19

End at: 2017-10-10 22:29:49

Local clock offset: 0.686 ms

Remote clock offset: 0.07 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.19 Mbit/s

95th percentile per-packet one-way delay: 3.032 ms

Loss rate: 0.00%

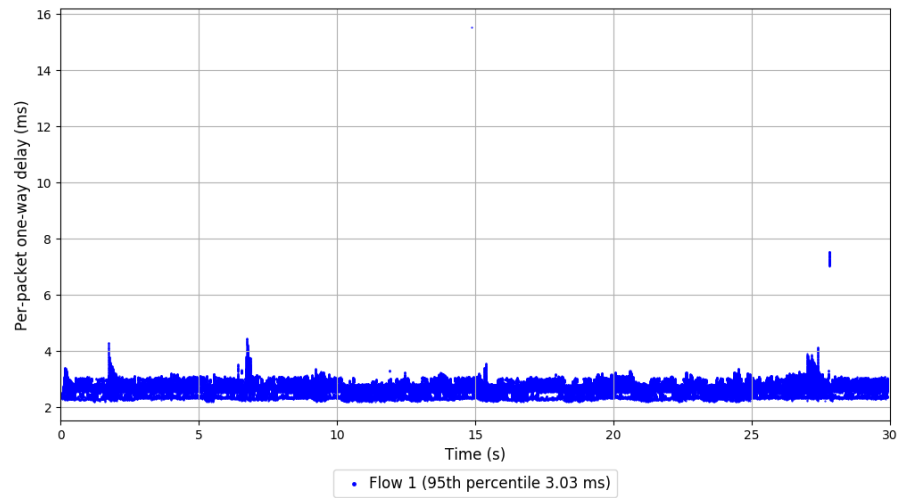
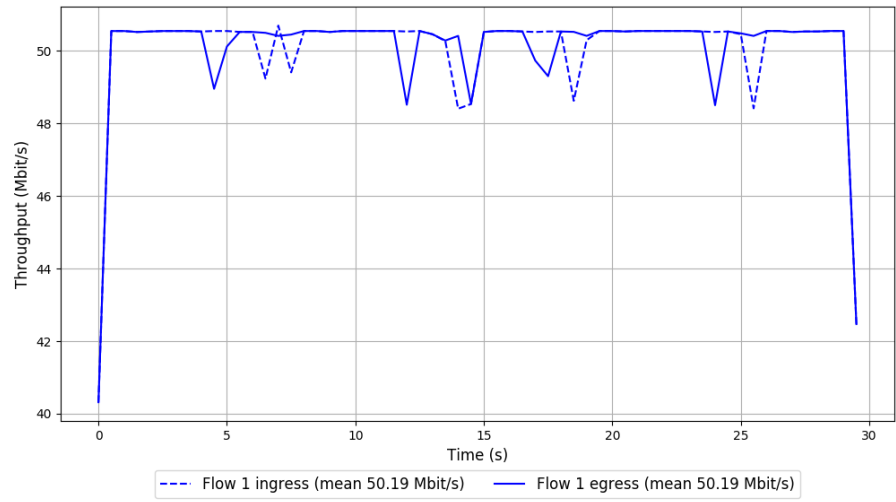
-- Flow 1:

Average throughput: 50.19 Mbit/s

95th percentile per-packet one-way delay: 3.032 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link

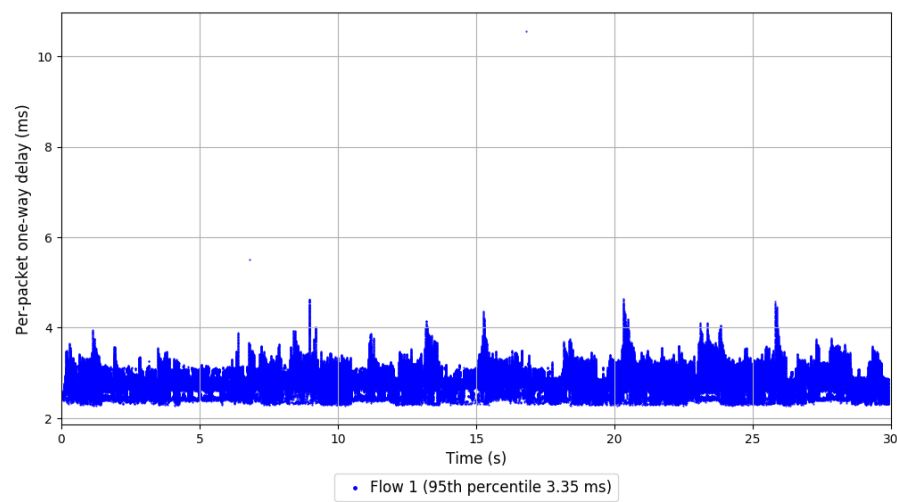
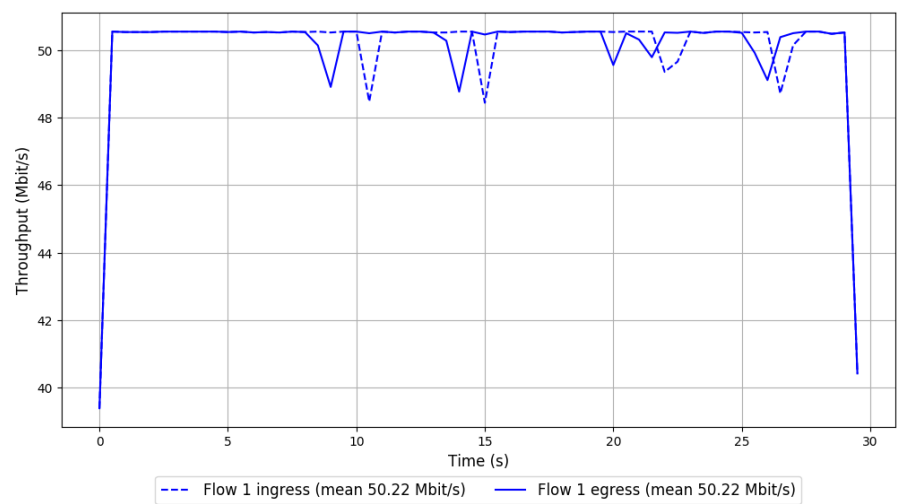


Run 8: Statistics of Sprout

Start at: 2017-10-10 22:47:36
End at: 2017-10-10 22:48:06
Local clock offset: 0.494 ms
Remote clock offset: -0.097 ms

Below is generated by plot.py at 2017-10-11 02:24:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 50.22 Mbit/s
95th percentile per-packet one-way delay: 3.351 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.22 Mbit/s
95th percentile per-packet one-way delay: 3.351 ms
Loss rate: 0.00%

Run 8: Report of Sprout — Data Link

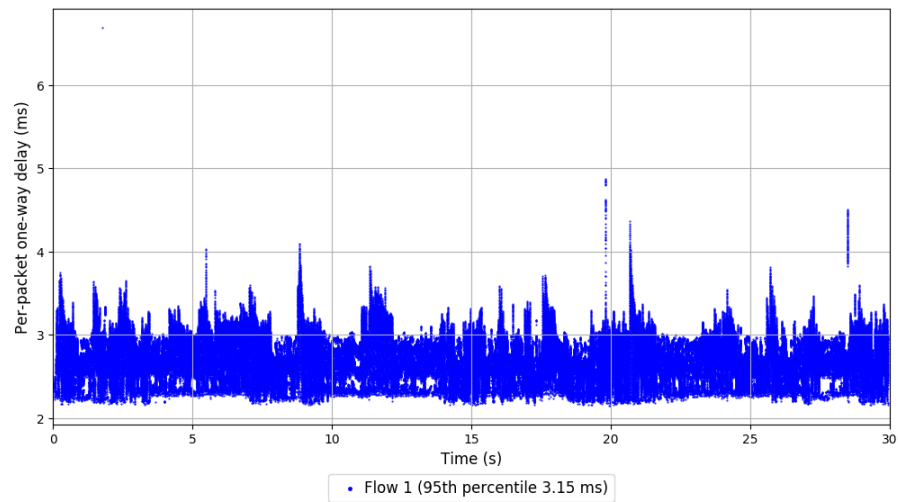
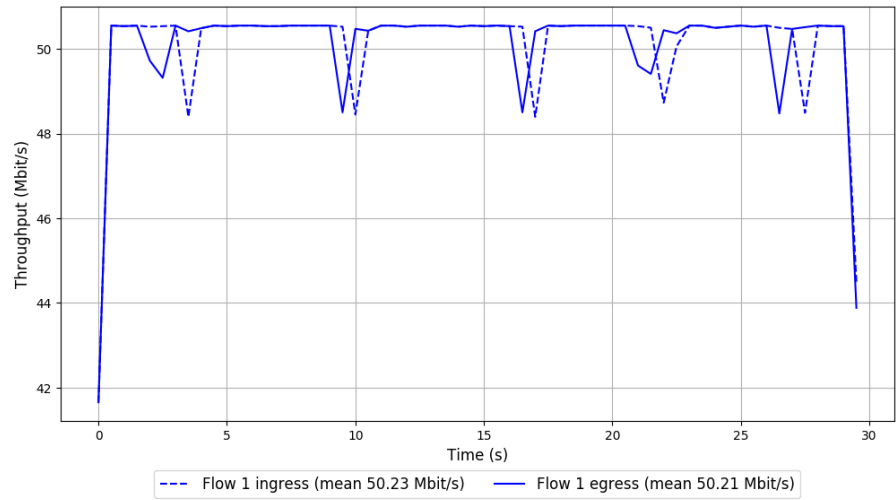


Run 9: Statistics of Sprout

Start at: 2017-10-10 23:06:11
End at: 2017-10-10 23:06:41
Local clock offset: 0.503 ms
Remote clock offset: -0.071 ms

Below is generated by plot.py at 2017-10-11 02:24:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 50.21 Mbit/s
95th percentile per-packet one-way delay: 3.150 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 50.21 Mbit/s
95th percentile per-packet one-way delay: 3.150 ms
Loss rate: 0.02%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-10-10 23:24:48

End at: 2017-10-10 23:25:18

Local clock offset: 0.19 ms

Remote clock offset: -0.192 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.17 Mbit/s

95th percentile per-packet one-way delay: 3.232 ms

Loss rate: 0.00%

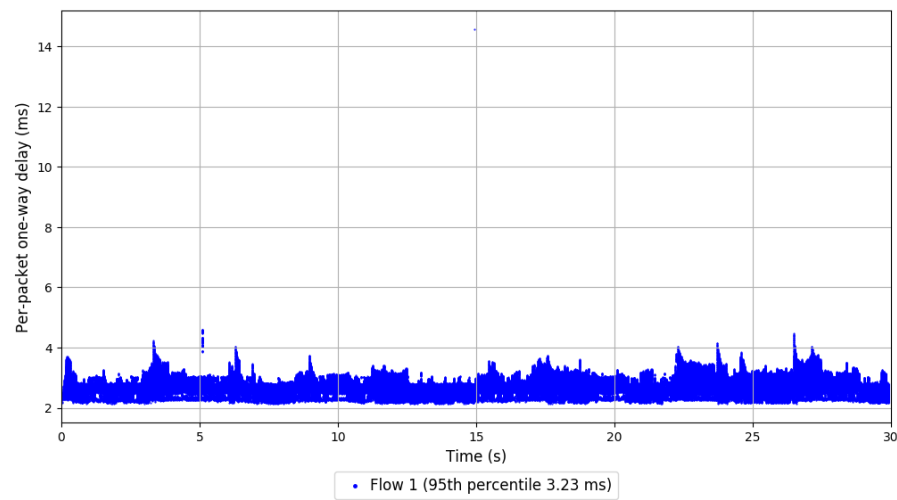
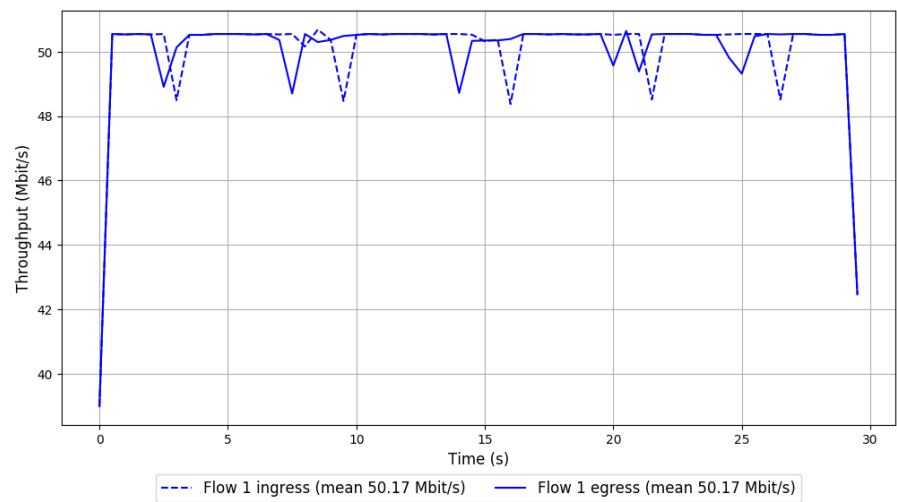
-- Flow 1:

Average throughput: 50.17 Mbit/s

95th percentile per-packet one-way delay: 3.232 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

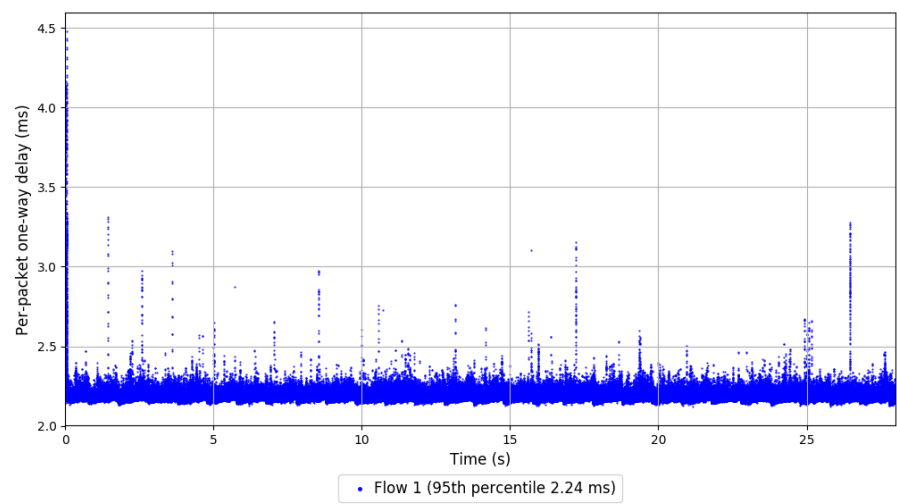
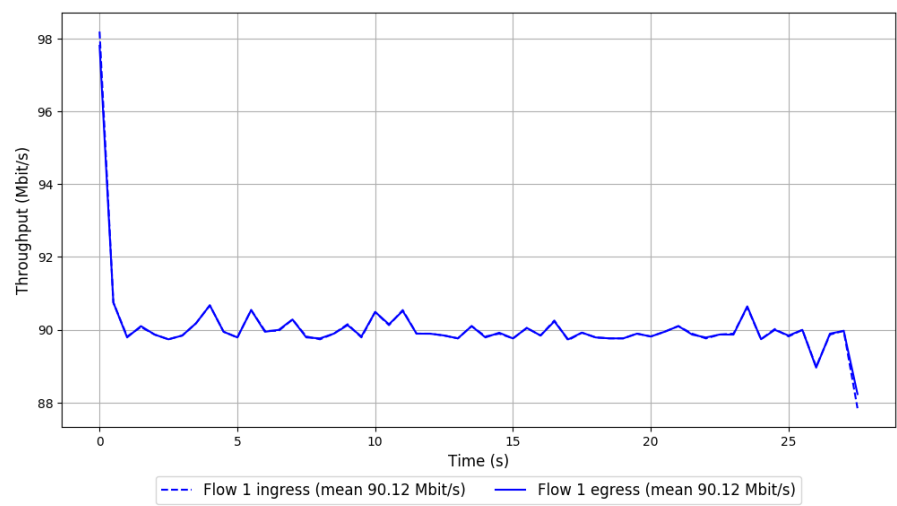


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-10-10 20:53:26
End at: 2017-10-10 20:53:56
Local clock offset: 0.72 ms
Remote clock offset: 0.39 ms

# Below is generated by plot.py at 2017-10-11 02:24:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.12 Mbit/s
95th percentile per-packet one-way delay: 2.240 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 90.12 Mbit/s
95th percentile per-packet one-way delay: 2.240 ms
Loss rate: 0.00%
```


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



Run 2: Statistics of TaoVA-100x

Start at: 2017-10-10 21:11:36

End at: 2017-10-10 21:12:06

Local clock offset: 0.592 ms

Remote clock offset: 0.256 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.96 Mbit/s

95th percentile per-packet one-way delay: 2.317 ms

Loss rate: 0.00%

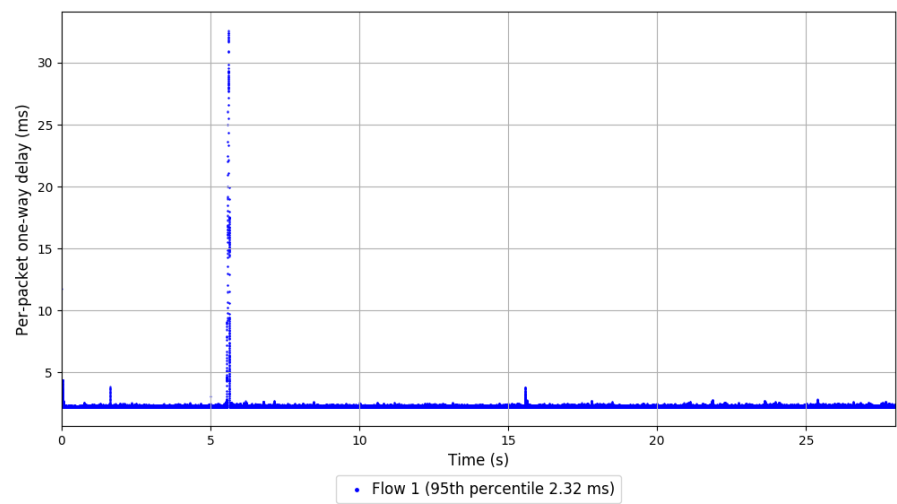
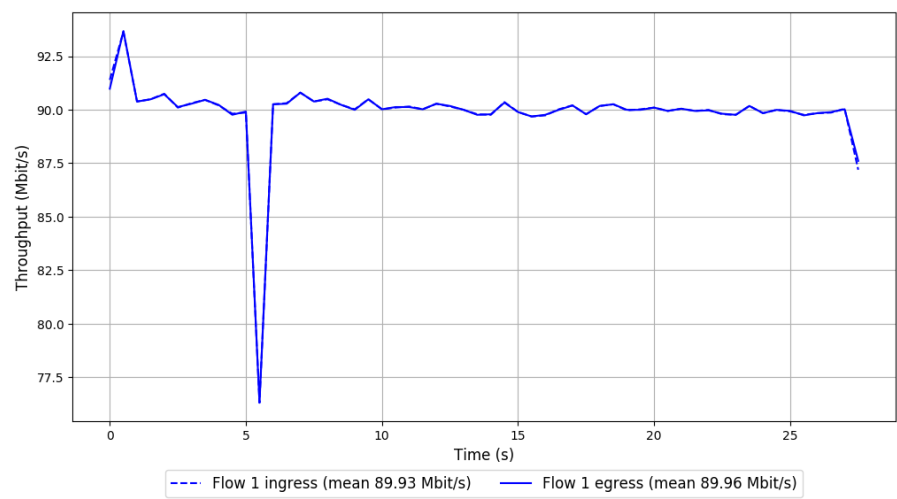
-- Flow 1:

Average throughput: 89.96 Mbit/s

95th percentile per-packet one-way delay: 2.317 ms

Loss rate: 0.00%

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-10-10 21:30:00

End at: 2017-10-10 21:30:30

Local clock offset: 0.79 ms

Remote clock offset: 0.285 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.66 Mbit/s

95th percentile per-packet one-way delay: 2.252 ms

Loss rate: 0.00%

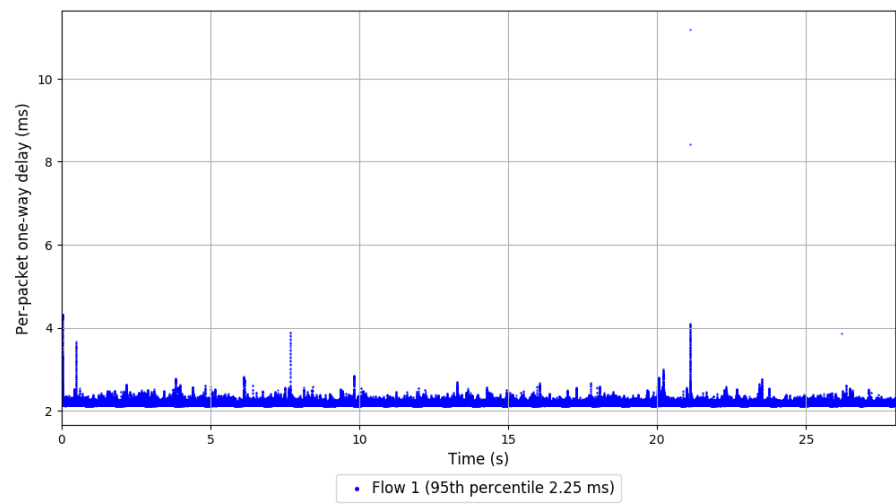
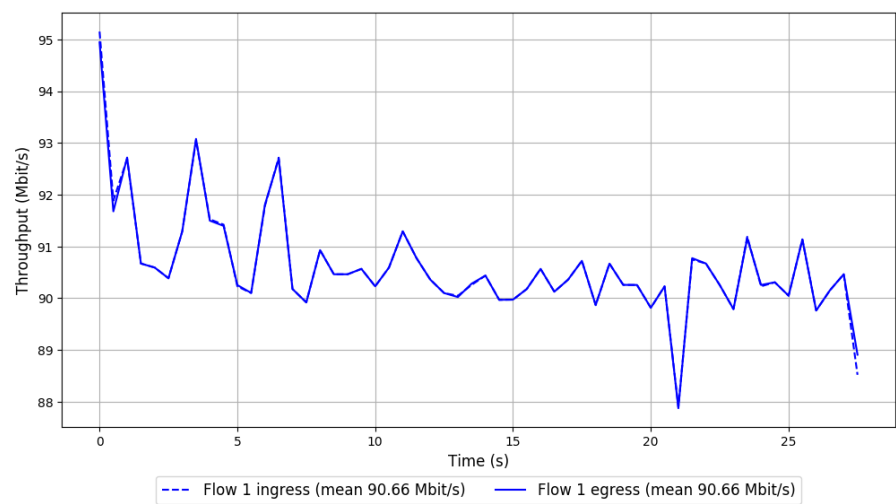
-- Flow 1:

Average throughput: 90.66 Mbit/s

95th percentile per-packet one-way delay: 2.252 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-10-10 21:48:33

End at: 2017-10-10 21:49:03

Local clock offset: 0.704 ms

Remote clock offset: 0.138 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.10 Mbit/s

95th percentile per-packet one-way delay: 2.265 ms

Loss rate: 0.00%

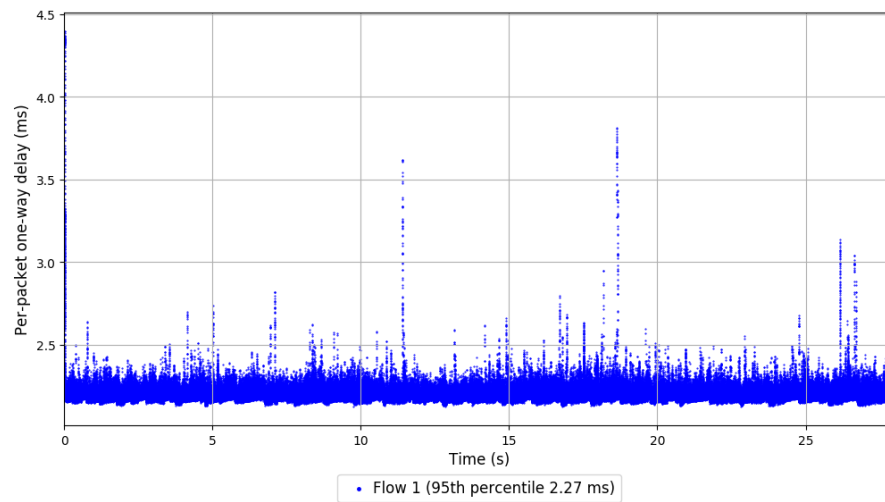
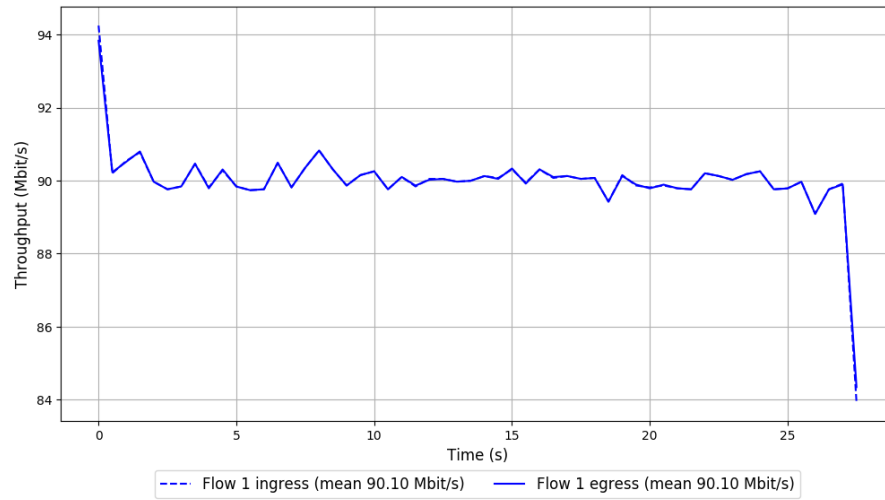
-- Flow 1:

Average throughput: 90.10 Mbit/s

95th percentile per-packet one-way delay: 2.265 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-10-10 22:06:21

End at: 2017-10-10 22:06:51

Local clock offset: 0.612 ms

Remote clock offset: 0.124 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.66 Mbit/s

95th percentile per-packet one-way delay: 2.397 ms

Loss rate: 0.00%

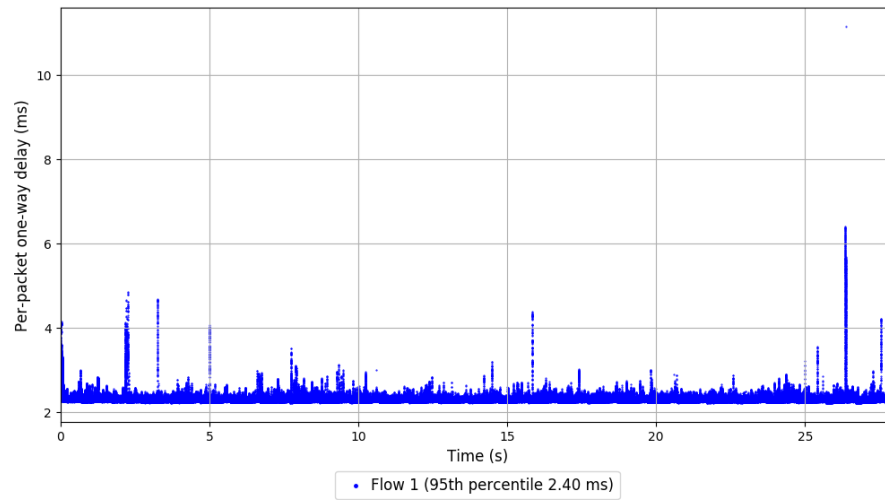
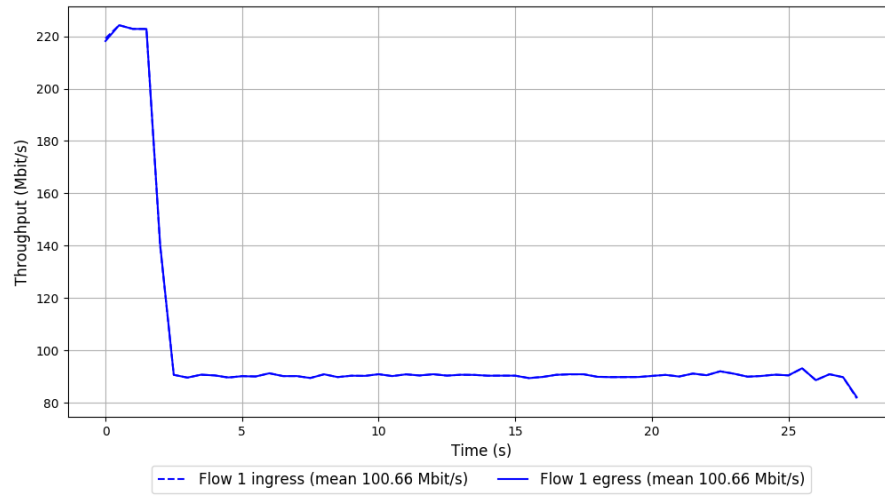
-- Flow 1:

Average throughput: 100.66 Mbit/s

95th percentile per-packet one-way delay: 2.397 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-10-10 22:24:46

End at: 2017-10-10 22:25:16

Local clock offset: 0.634 ms

Remote clock offset: 0.068 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.54 Mbit/s

95th percentile per-packet one-way delay: 2.285 ms

Loss rate: 0.00%

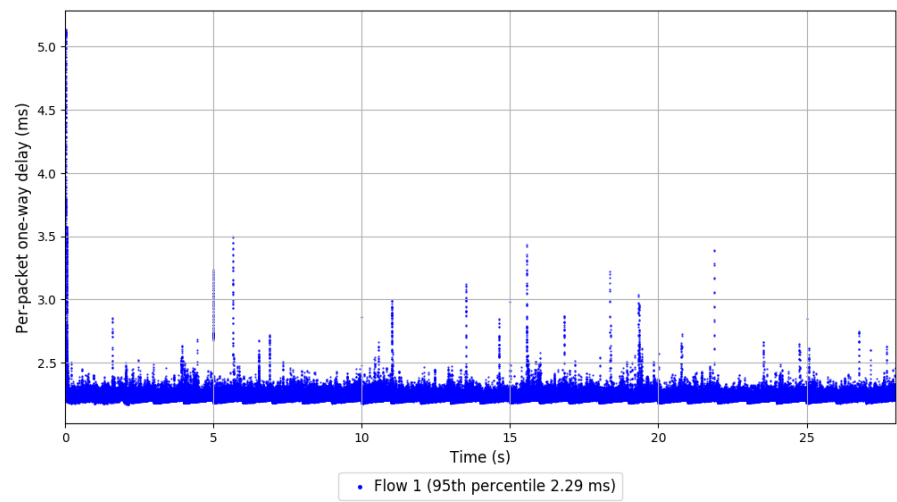
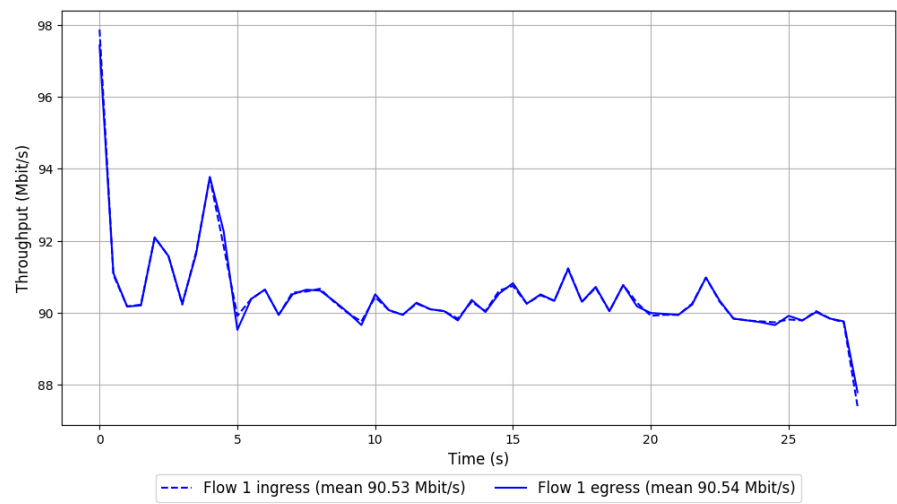
-- Flow 1:

Average throughput: 90.54 Mbit/s

95th percentile per-packet one-way delay: 2.285 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-10-10 22:43:11

End at: 2017-10-10 22:43:41

Local clock offset: 0.701 ms

Remote clock offset: 0.005 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.98 Mbit/s

95th percentile per-packet one-way delay: 2.241 ms

Loss rate: 0.00%

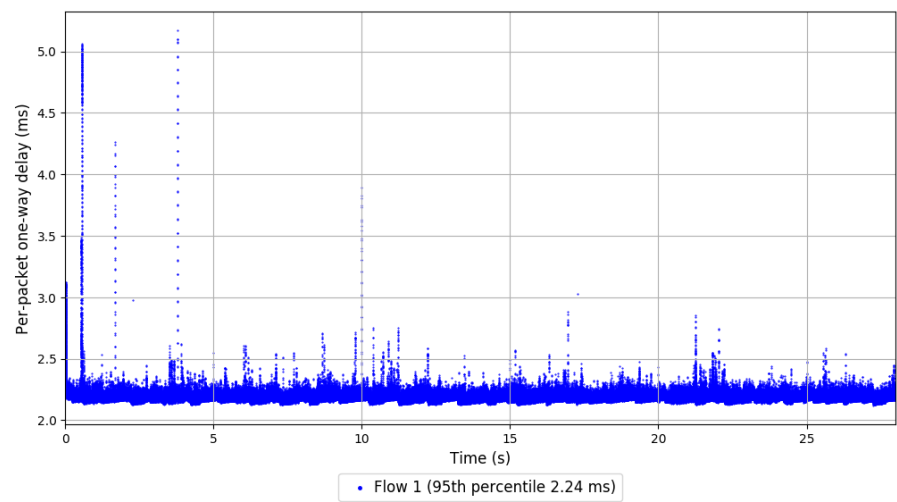
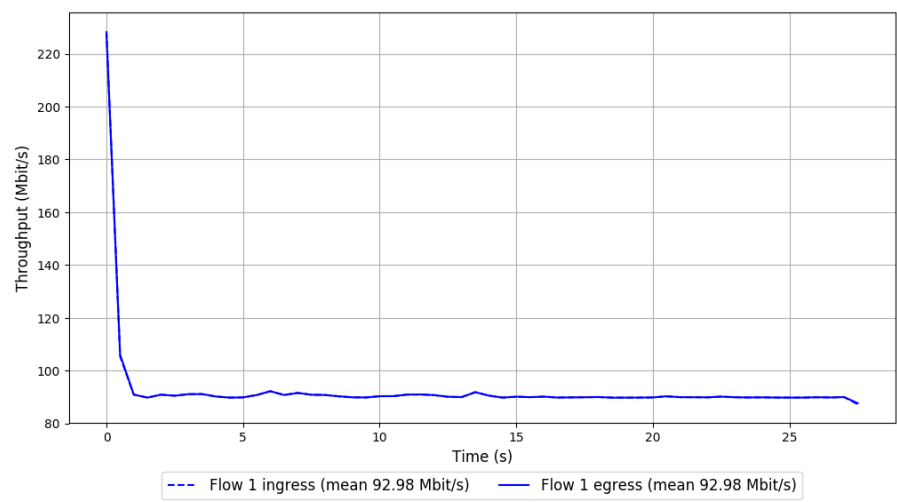
-- Flow 1:

Average throughput: 92.98 Mbit/s

95th percentile per-packet one-way delay: 2.241 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-10-10 23:01:26

End at: 2017-10-10 23:01:56

Local clock offset: 0.564 ms

Remote clock offset: -0.076 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.79 Mbit/s

95th percentile per-packet one-way delay: 2.260 ms

Loss rate: 0.00%

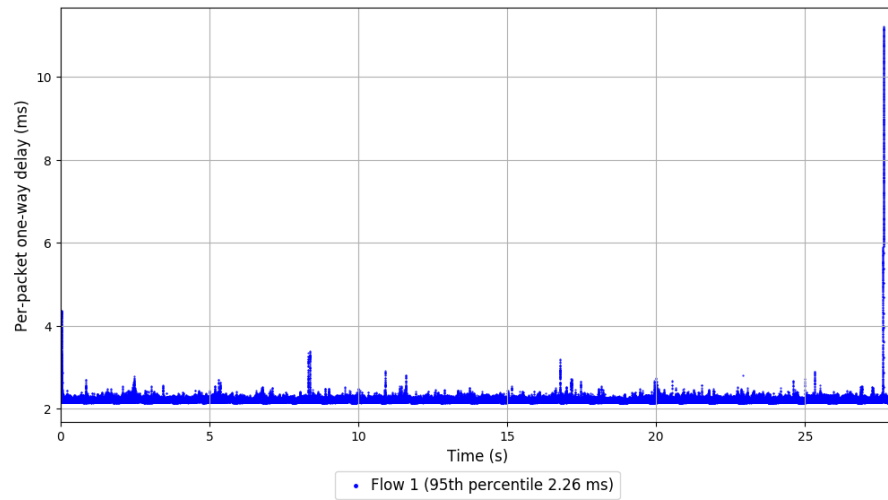
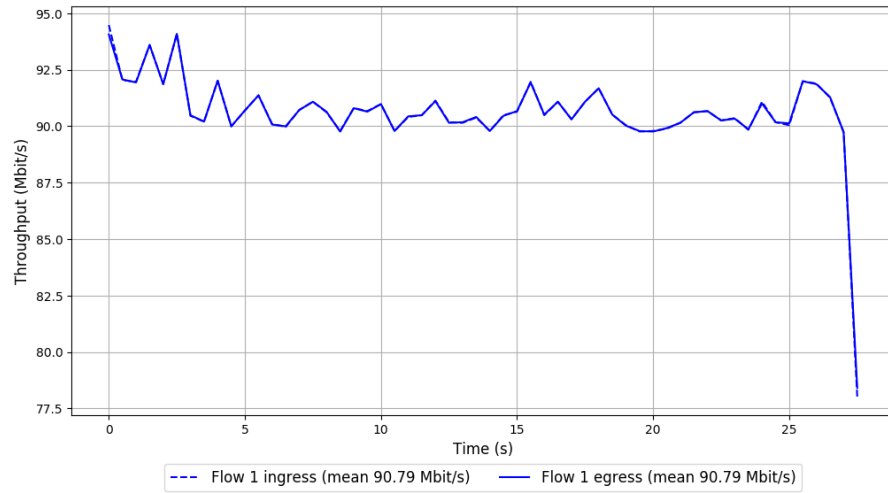
-- Flow 1:

Average throughput: 90.79 Mbit/s

95th percentile per-packet one-way delay: 2.260 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-10-10 23:20:13

End at: 2017-10-10 23:20:43

Local clock offset: 0.227 ms

Remote clock offset: -0.224 ms

Below is generated by plot.py at 2017-10-11 02:24:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 138.30 Mbit/s

95th percentile per-packet one-way delay: 2.206 ms

Loss rate: 0.00%

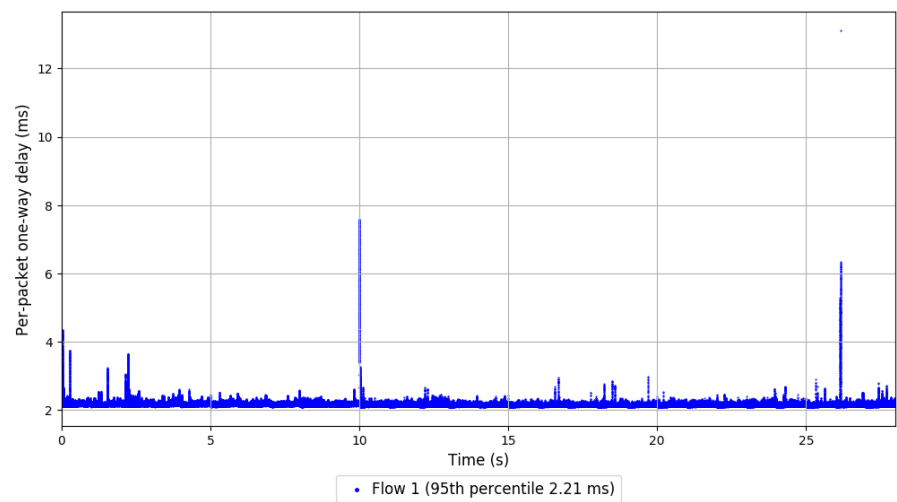
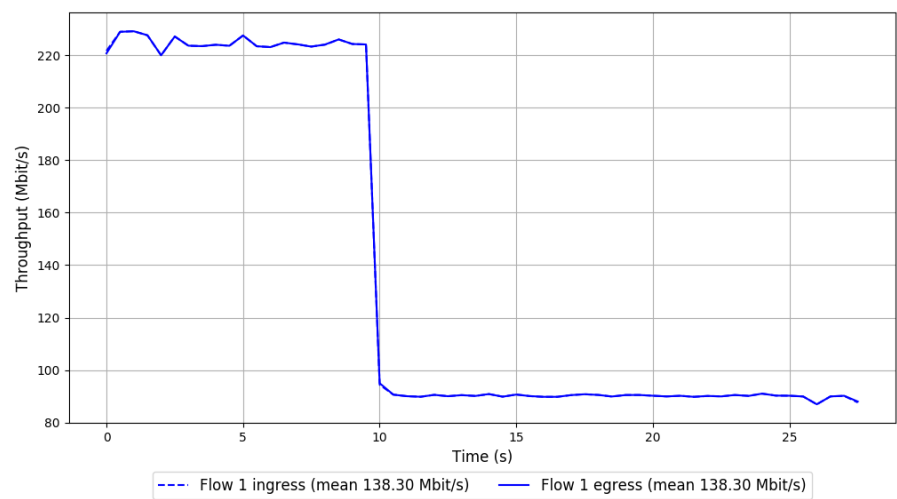
-- Flow 1:

Average throughput: 138.30 Mbit/s

95th percentile per-packet one-way delay: 2.206 ms

Loss rate: 0.00%

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



Run 10: Statistics of TaoVA-100x

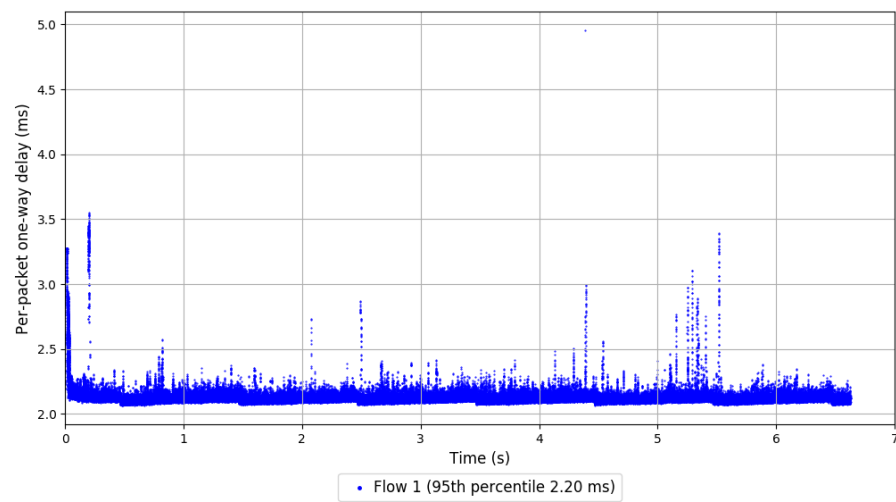
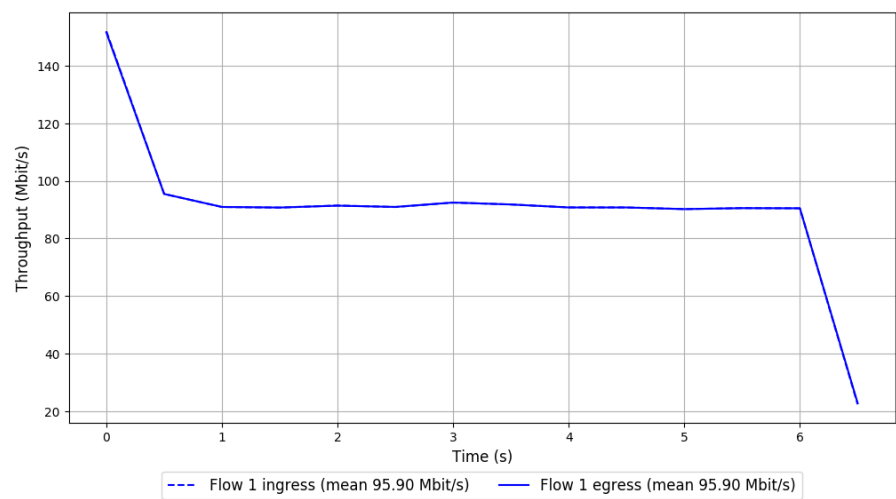
Start at: 2017-10-10 23:38:17

End at: 2017-10-10 23:38:47

Local clock offset: 0.168 ms

Remote clock offset: -0.279 ms

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



Run 1: Statistics of TCP Vegas

Start at: 2017-10-10 20:41:50

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

Local clock offset: 0.847 ms

Remote clock offset: 0.451 ms

Below is generated by plot.py at 2017-10-11 02:29:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 515.79 Mbit/s

95th percentile per-packet one-way delay: 2.712 ms

Loss rate: 0.00%

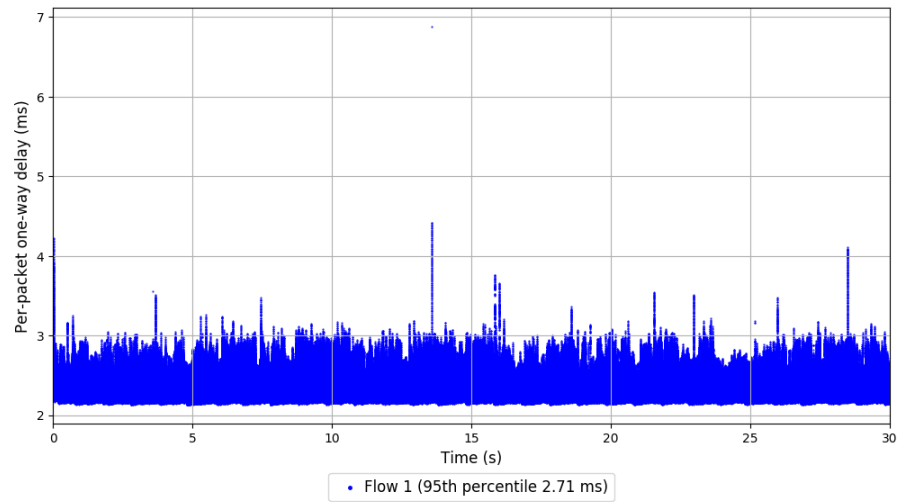
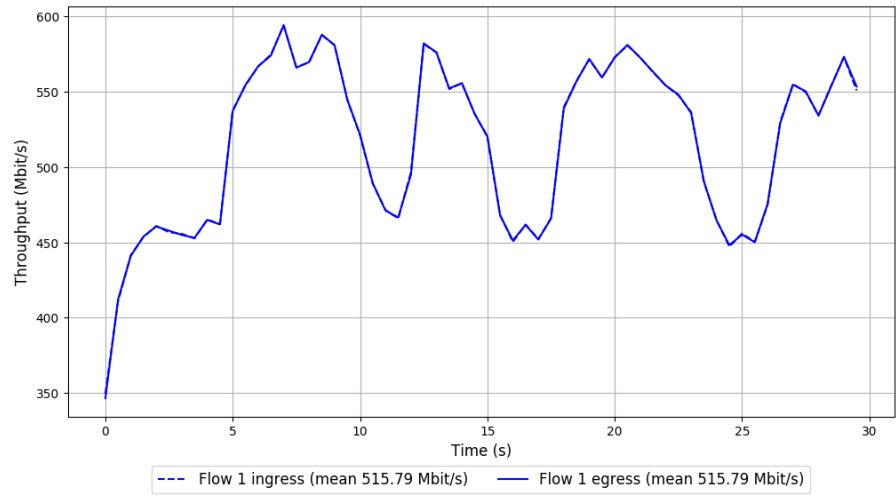
-- Flow 1:

Average throughput: 515.79 Mbit/s

95th percentile per-packet one-way delay: 2.712 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-10-10 21:00:08

End at: 2017-10-10 21:00:38

Local clock offset: 0.67 ms

Remote clock offset: 0.353 ms

Below is generated by plot.py at 2017-10-11 02:29:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 490.19 Mbit/s

95th percentile per-packet one-way delay: 2.775 ms

Loss rate: 0.00%

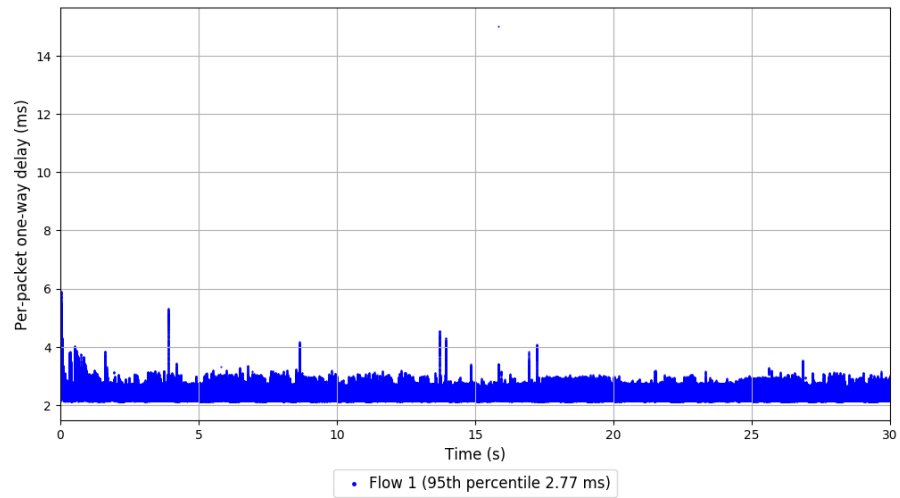
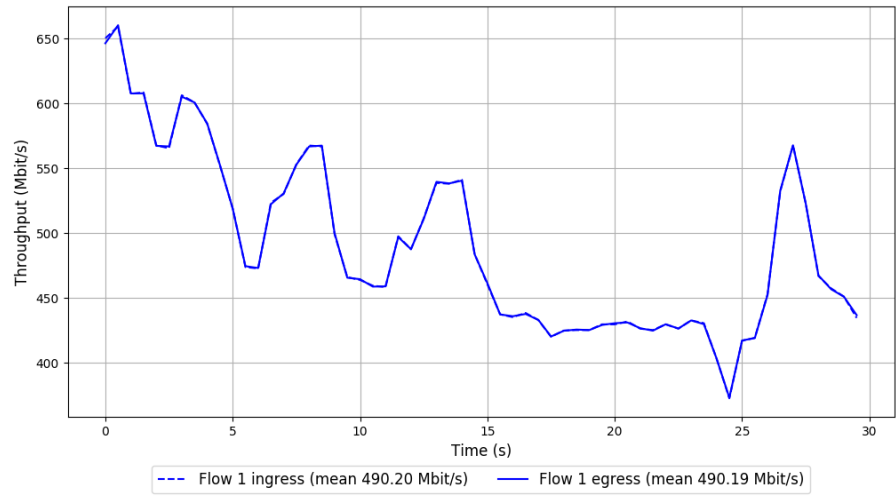
-- Flow 1:

Average throughput: 490.19 Mbit/s

95th percentile per-packet one-way delay: 2.775 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-10-10 21:18:17

End at: 2017-10-10 21:18:47

Local clock offset: 0.719 ms

Remote clock offset: 0.265 ms

Below is generated by plot.py at 2017-10-11 02:29:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 478.11 Mbit/s

95th percentile per-packet one-way delay: 2.778 ms

Loss rate: 0.00%

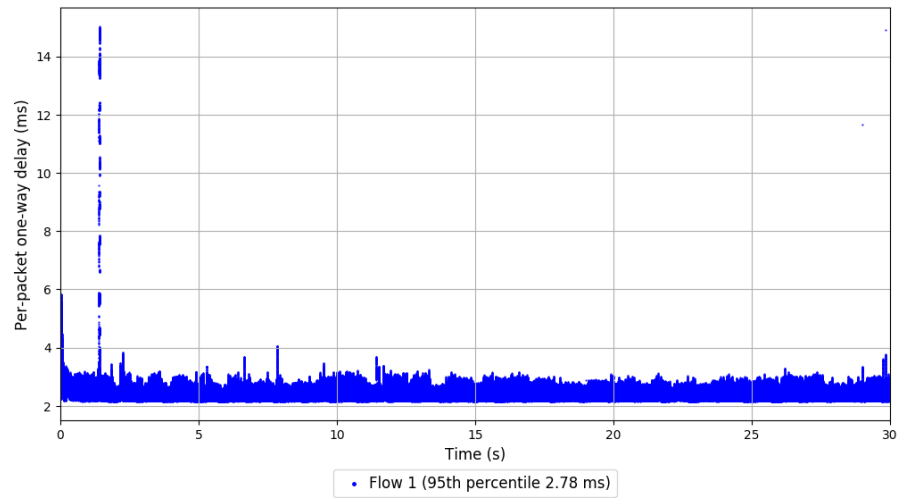
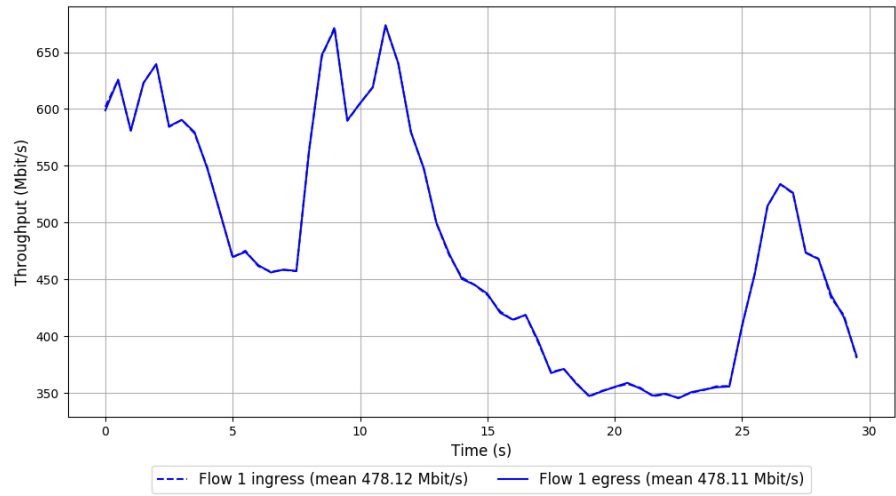
-- Flow 1:

Average throughput: 478.11 Mbit/s

95th percentile per-packet one-way delay: 2.778 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-10-10 21:36:42

End at: 2017-10-10 21:37:12

Local clock offset: 0.625 ms

Remote clock offset: 0.109 ms

Below is generated by plot.py at 2017-10-11 02:29:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 451.02 Mbit/s

95th percentile per-packet one-way delay: 2.774 ms

Loss rate: 0.00%

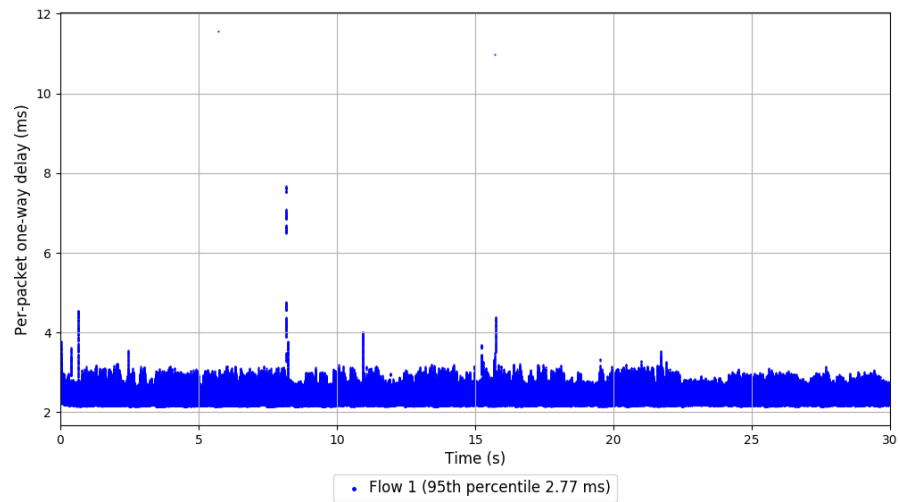
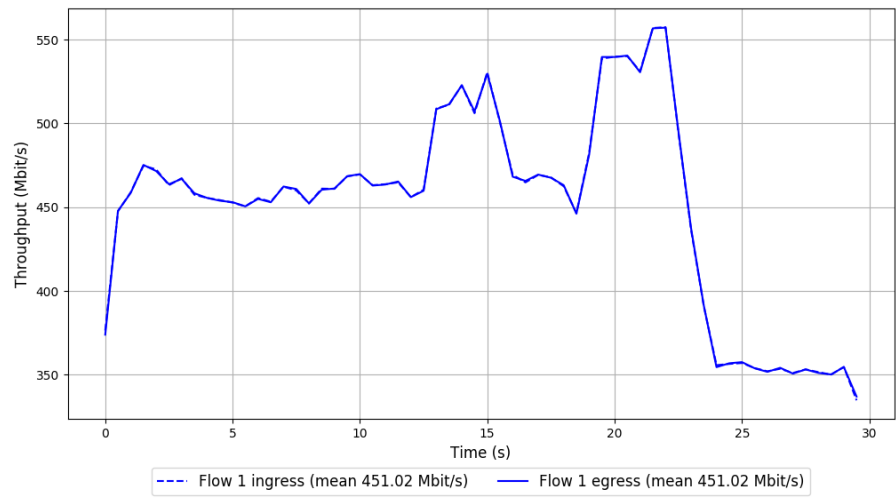
-- Flow 1:

Average throughput: 451.02 Mbit/s

95th percentile per-packet one-way delay: 2.774 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-10-10 21:55:15

End at: 2017-10-10 21:55:45

Local clock offset: 0.695 ms

Remote clock offset: 0.102 ms

Below is generated by plot.py at 2017-10-11 02:30:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 488.24 Mbit/s

95th percentile per-packet one-way delay: 2.829 ms

Loss rate: 0.02%

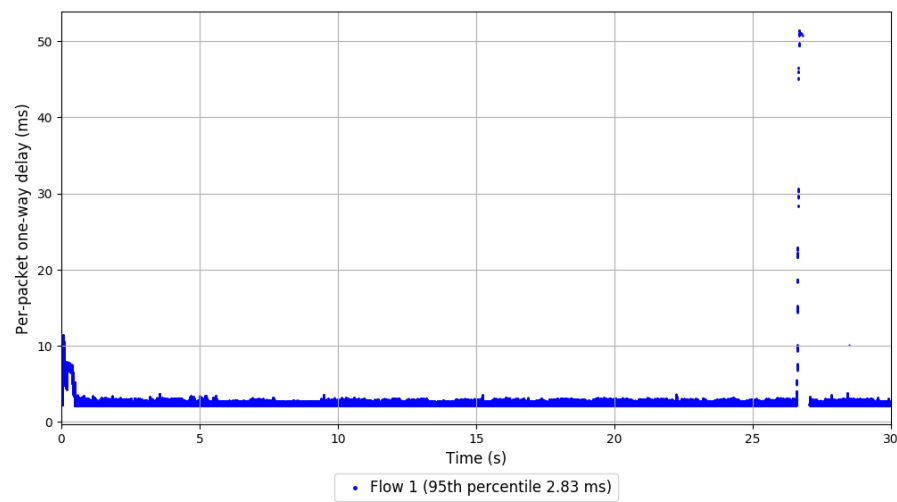
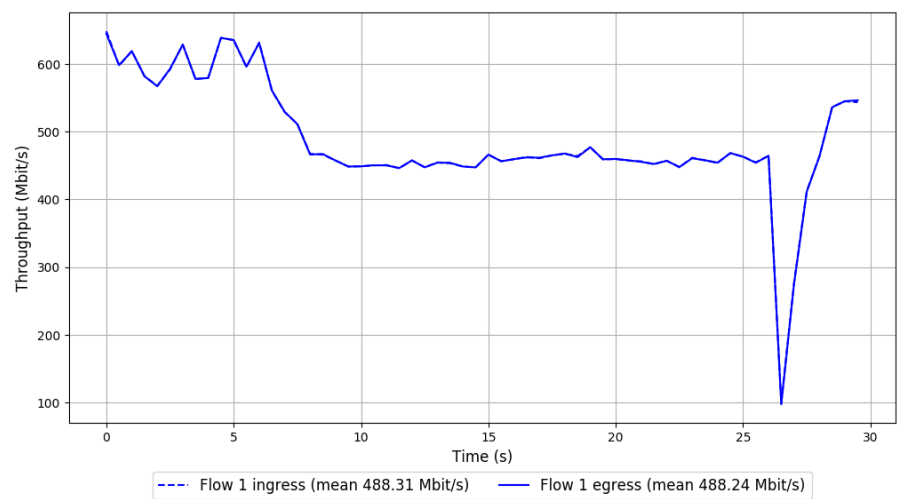
-- Flow 1:

Average throughput: 488.24 Mbit/s

95th percentile per-packet one-way delay: 2.829 ms

Loss rate: 0.02%

Run 5: Report of TCP Vegas — Data Link

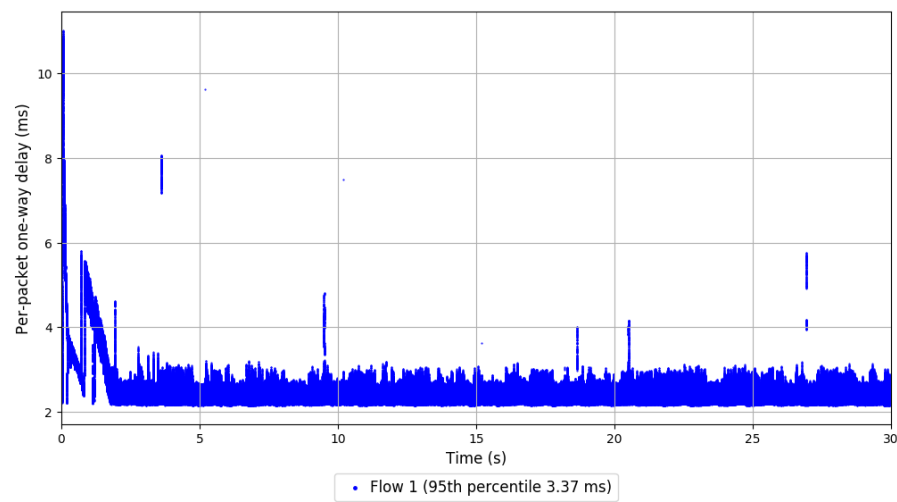
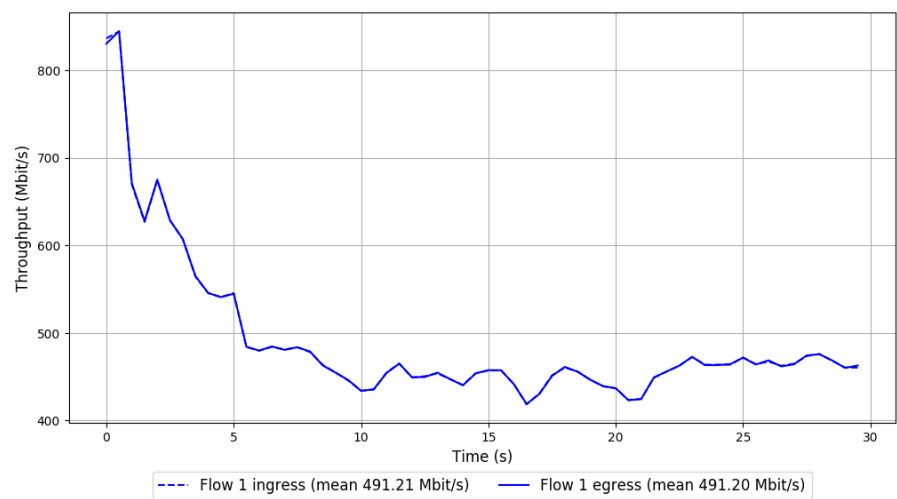


Run 6: Statistics of TCP Vegas

Start at: 2017-10-10 22:13:04
End at: 2017-10-10 22:13:34
Local clock offset: 0.501 ms
Remote clock offset: -0.118 ms

Below is generated by plot.py at 2017-10-11 02:31:21
Datalink statistics
-- Total of 1 flow:
Average throughput: 491.20 Mbit/s
95th percentile per-packet one-way delay: 3.365 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 491.20 Mbit/s
95th percentile per-packet one-way delay: 3.365 ms
Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link

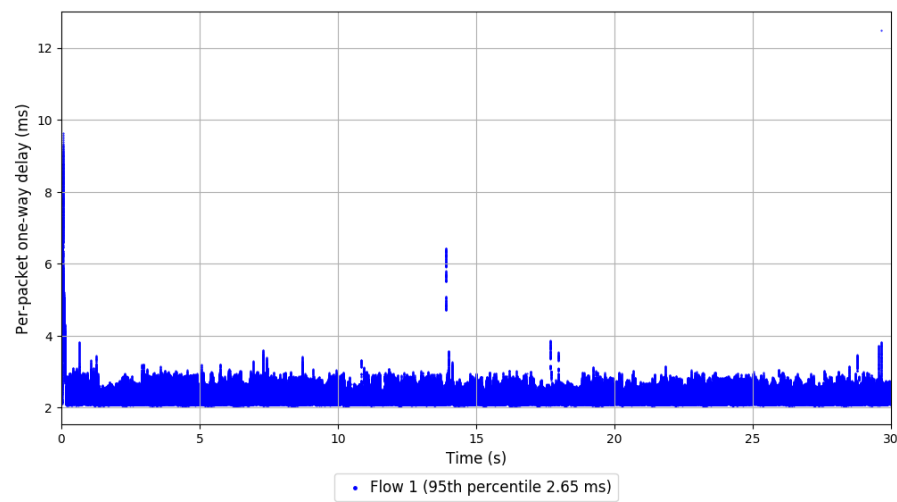
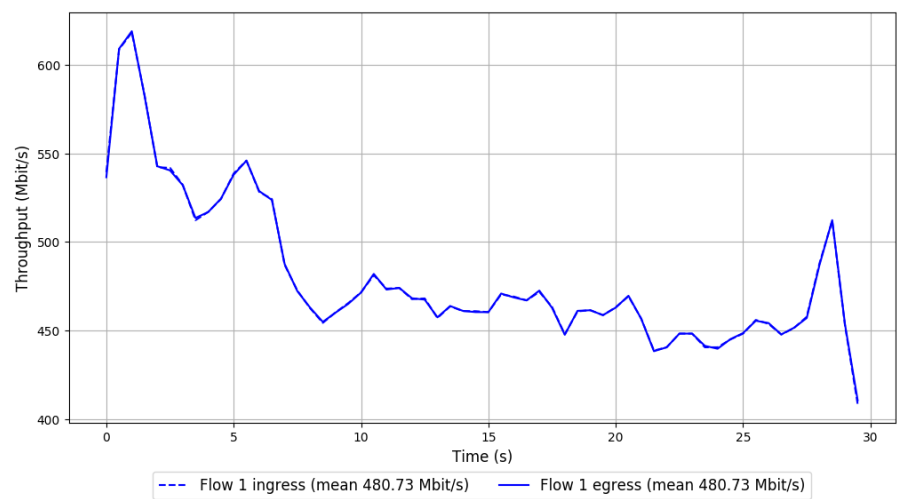


Run 7: Statistics of TCP Vegas

Start at: 2017-10-10 22:31:28
End at: 2017-10-10 22:31:58
Local clock offset: 0.706 ms
Remote clock offset: -0.006 ms

Below is generated by plot.py at 2017-10-11 02:31:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 480.73 Mbit/s
95th percentile per-packet one-way delay: 2.649 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 480.73 Mbit/s
95th percentile per-packet one-way delay: 2.649 ms
Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link

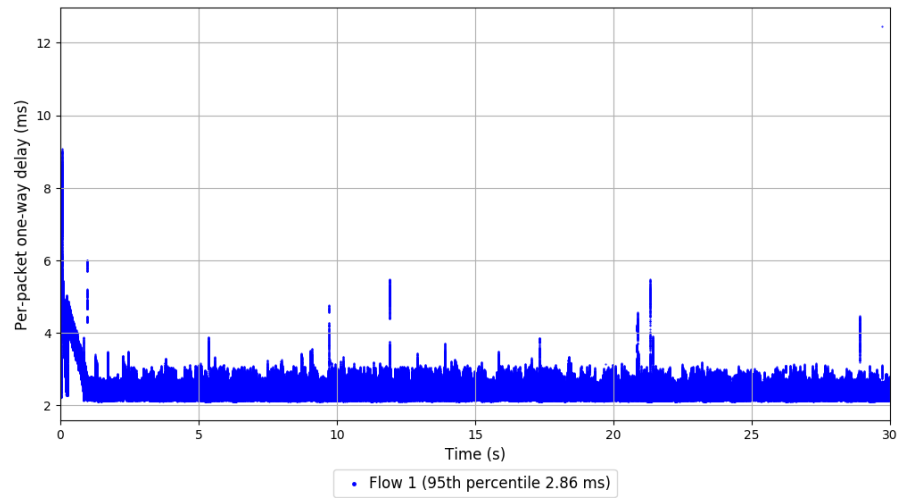
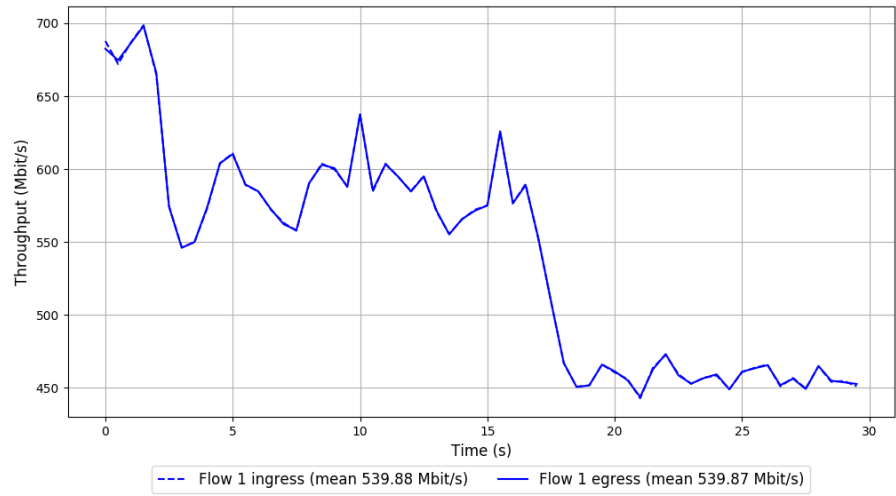


Run 8: Statistics of TCP Vegas

Start at: 2017-10-10 22:49:45
End at: 2017-10-10 22:50:15
Local clock offset: 0.636 ms
Remote clock offset: -0.101 ms

Below is generated by plot.py at 2017-10-11 02:32:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 539.87 Mbit/s
95th percentile per-packet one-way delay: 2.862 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 539.87 Mbit/s
95th percentile per-packet one-way delay: 2.862 ms
Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link

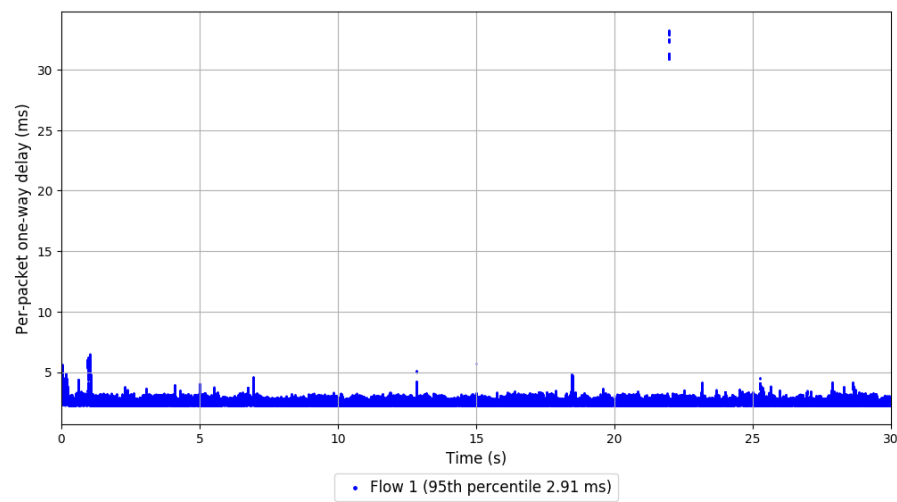
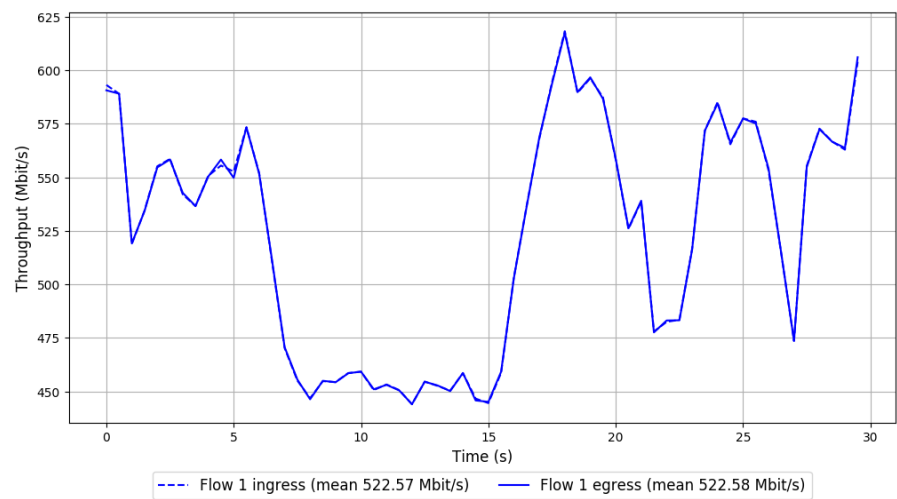


Run 9: Statistics of TCP Vegas

Start at: 2017-10-10 23:08:19
End at: 2017-10-10 23:08:50
Local clock offset: 0.318 ms
Remote clock offset: -0.192 ms

Below is generated by plot.py at 2017-10-11 02:36:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 522.58 Mbit/s
95th percentile per-packet one-way delay: 2.913 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 522.58 Mbit/s
95th percentile per-packet one-way delay: 2.913 ms
Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-10-10 23:26:57

End at: 2017-10-10 23:27:27

Local clock offset: 0.137 ms

Remote clock offset: -0.233 ms

Below is generated by plot.py at 2017-10-11 02:36:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 422.58 Mbit/s

95th percentile per-packet one-way delay: 2.825 ms

Loss rate: 0.00%

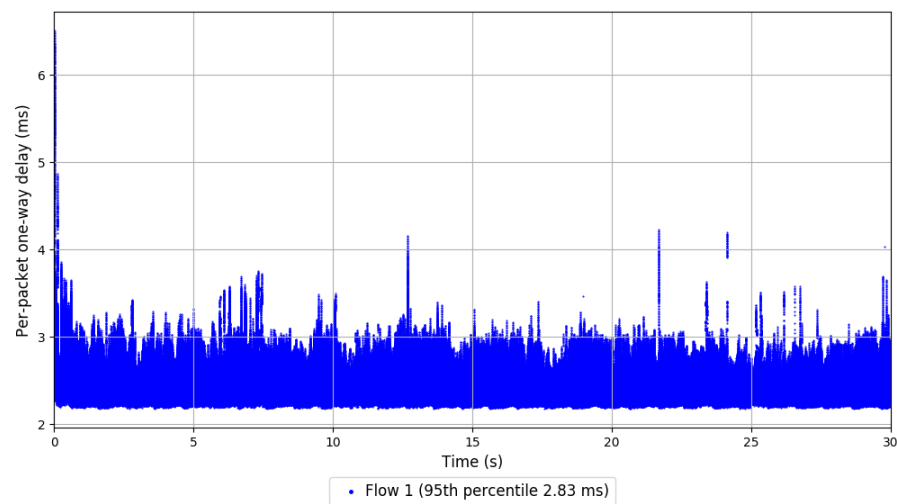
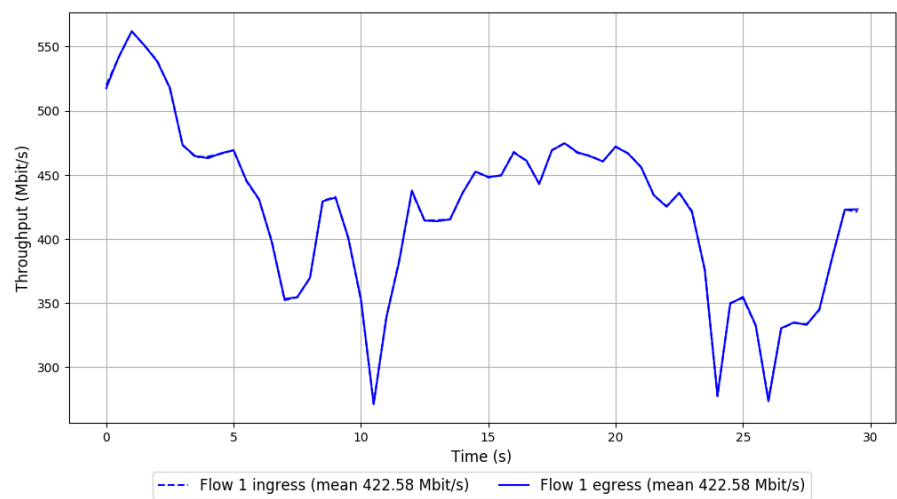
-- Flow 1:

Average throughput: 422.58 Mbit/s

95th percentile per-packet one-way delay: 2.825 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-10-10 20:49:05

End at: 2017-10-10 20:49:35

Local clock offset: 0.76 ms

Remote clock offset: 0.386 ms

Below is generated by plot.py at 2017-10-11 02:36:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 296.71 Mbit/s

95th percentile per-packet one-way delay: 5.499 ms

Loss rate: 0.05%

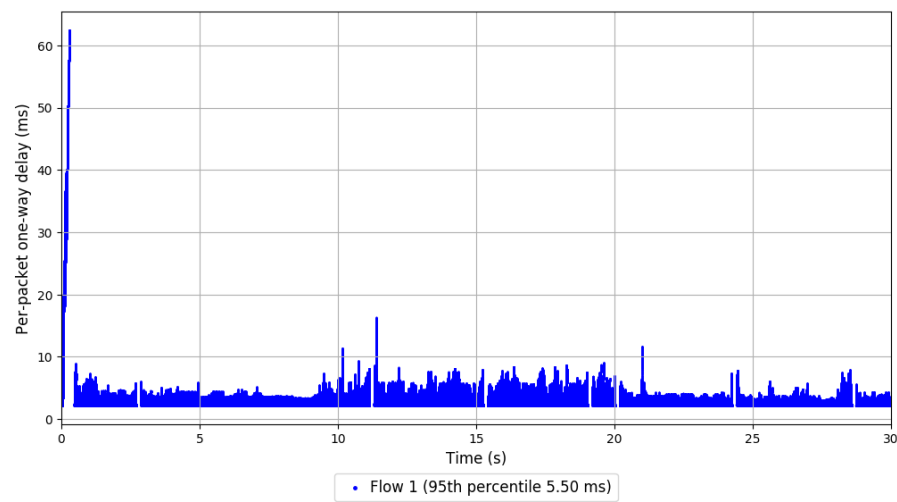
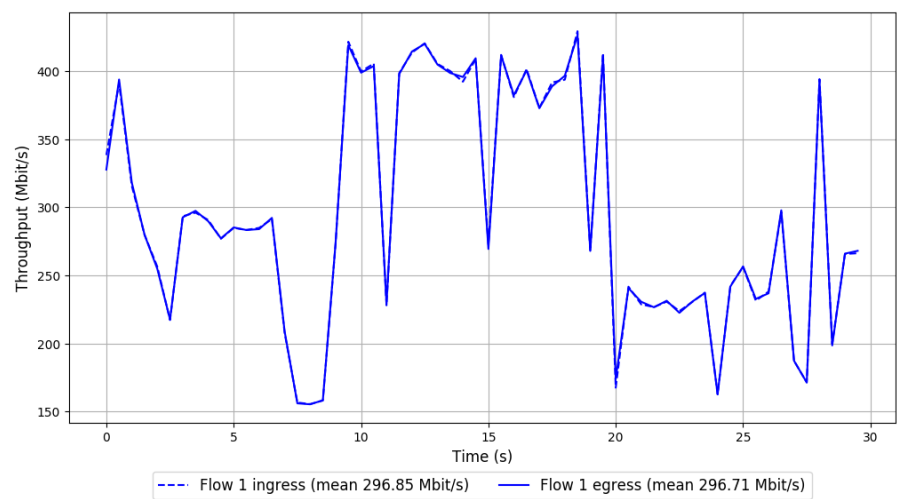
-- Flow 1:

Average throughput: 296.71 Mbit/s

95th percentile per-packet one-way delay: 5.499 ms

Loss rate: 0.05%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-10-10 21:07:05

End at: 2017-10-10 21:07:35

Local clock offset: 0.607 ms

Remote clock offset: 0.283 ms

Below is generated by plot.py at 2017-10-11 02:36:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 334.82 Mbit/s

95th percentile per-packet one-way delay: 15.250 ms

Loss rate: 0.82%

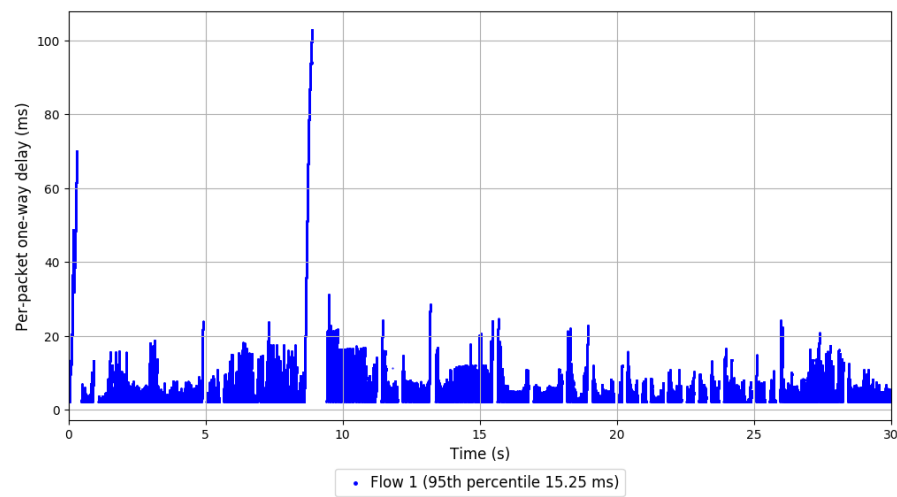
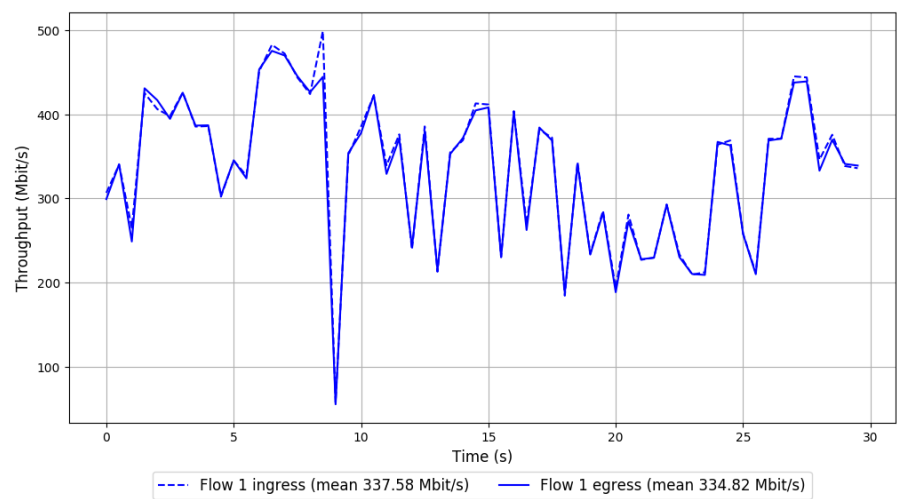
-- Flow 1:

Average throughput: 334.82 Mbit/s

95th percentile per-packet one-way delay: 15.250 ms

Loss rate: 0.82%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-10-10 21:25:29

End at: 2017-10-10 21:25:59

Local clock offset: 0.954 ms

Remote clock offset: 0.395 ms

Below is generated by plot.py at 2017-10-11 02:36:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 332.60 Mbit/s

95th percentile per-packet one-way delay: 7.817 ms

Loss rate: 0.03%

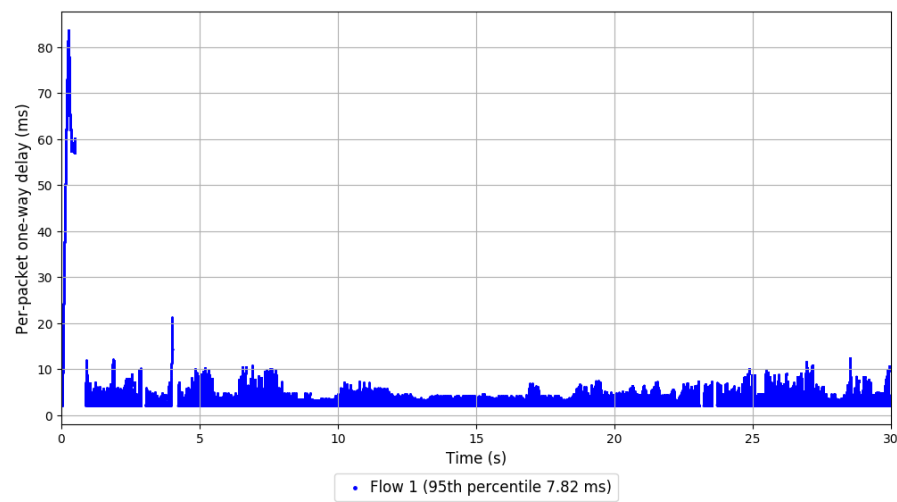
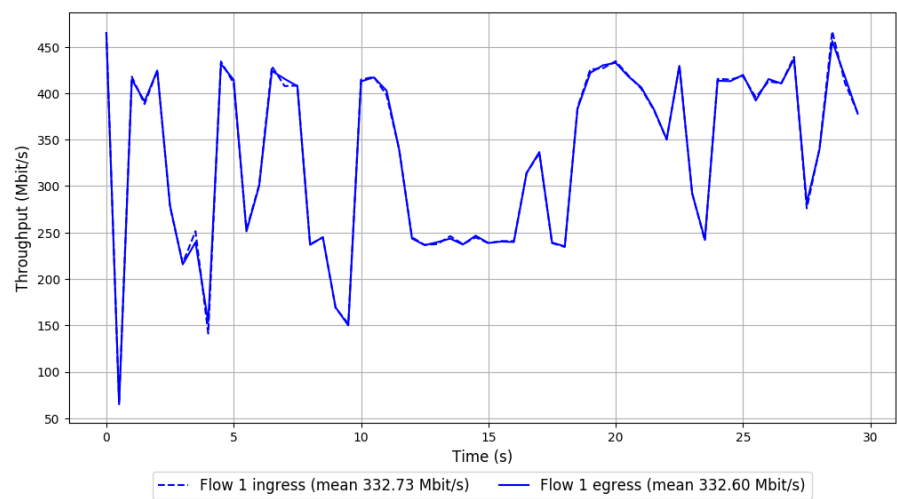
-- Flow 1:

Average throughput: 332.60 Mbit/s

95th percentile per-packet one-way delay: 7.817 ms

Loss rate: 0.03%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-10-10 21:43:54

End at: 2017-10-10 21:44:24

Local clock offset: 0.711 ms

Remote clock offset: 0.176 ms

Below is generated by plot.py at 2017-10-11 02:37:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 415.10 Mbit/s

95th percentile per-packet one-way delay: 13.465 ms

Loss rate: 0.05%

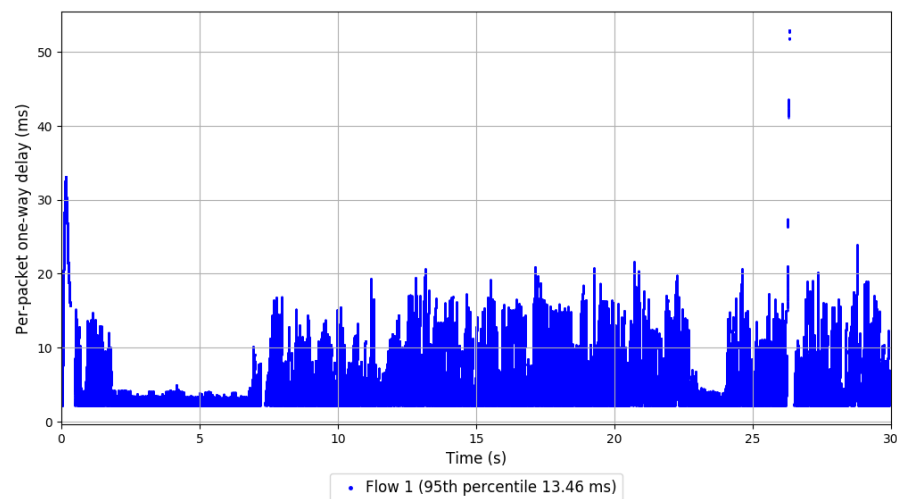
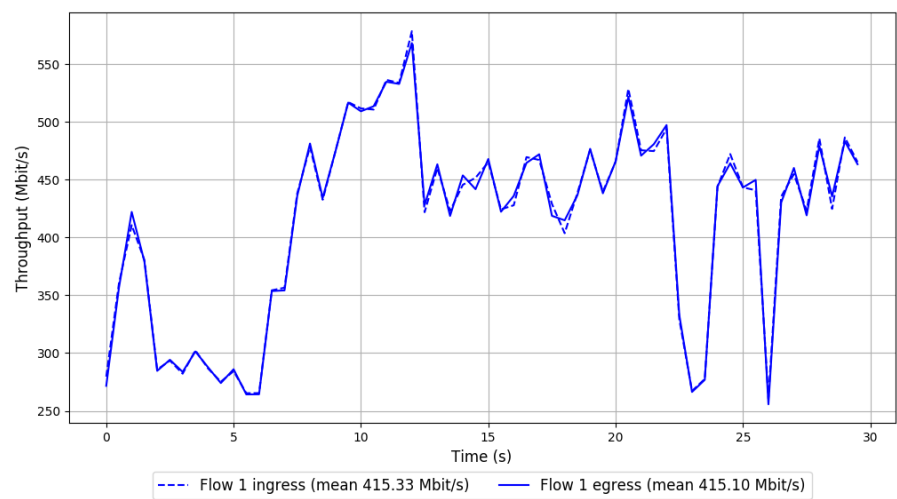
-- Flow 1:

Average throughput: 415.10 Mbit/s

95th percentile per-packet one-way delay: 13.465 ms

Loss rate: 0.05%

Run 4: Report of Verus — Data Link

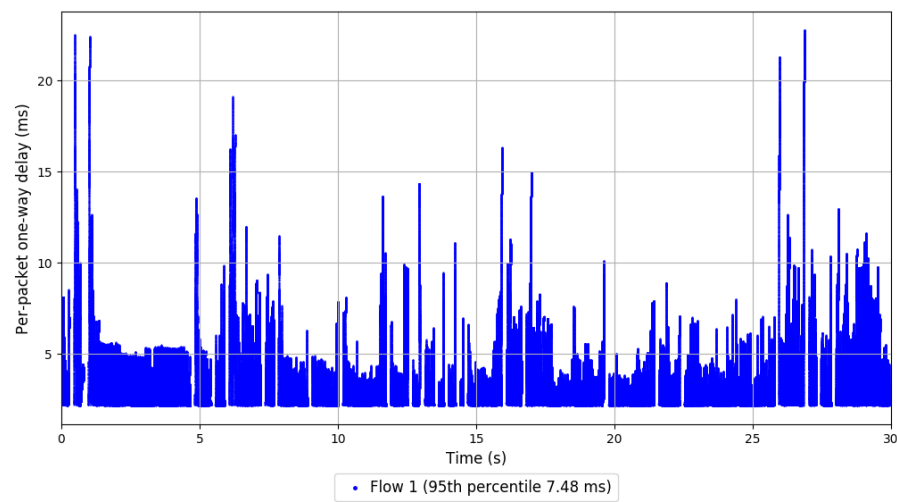
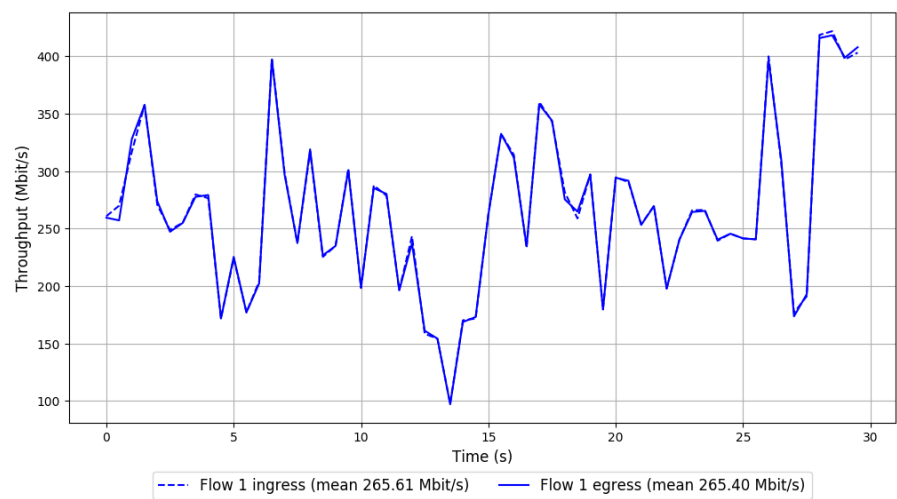


Run 5: Statistics of Verus

Start at: 2017-10-10 22:01:59
End at: 2017-10-10 22:02:29
Local clock offset: 0.533 ms
Remote clock offset: -0.038 ms

Below is generated by plot.py at 2017-10-11 02:37:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 265.40 Mbit/s
95th percentile per-packet one-way delay: 7.481 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 265.40 Mbit/s
95th percentile per-packet one-way delay: 7.481 ms
Loss rate: 0.08%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

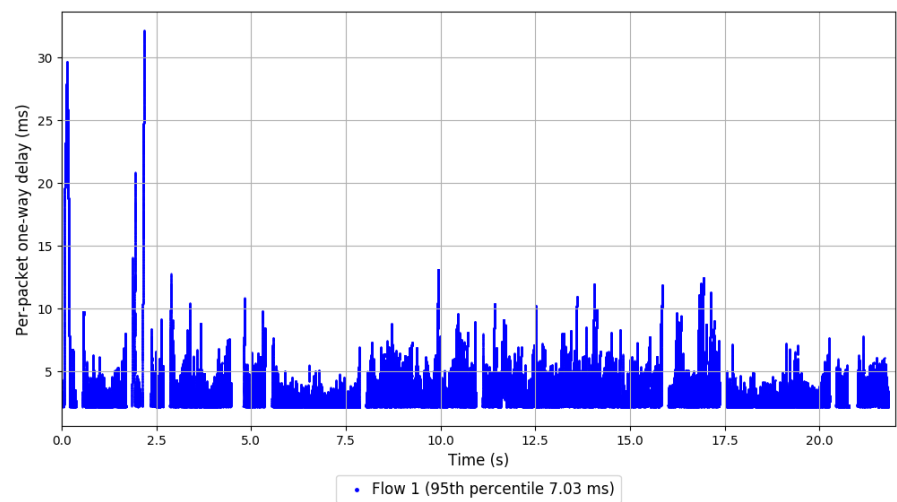
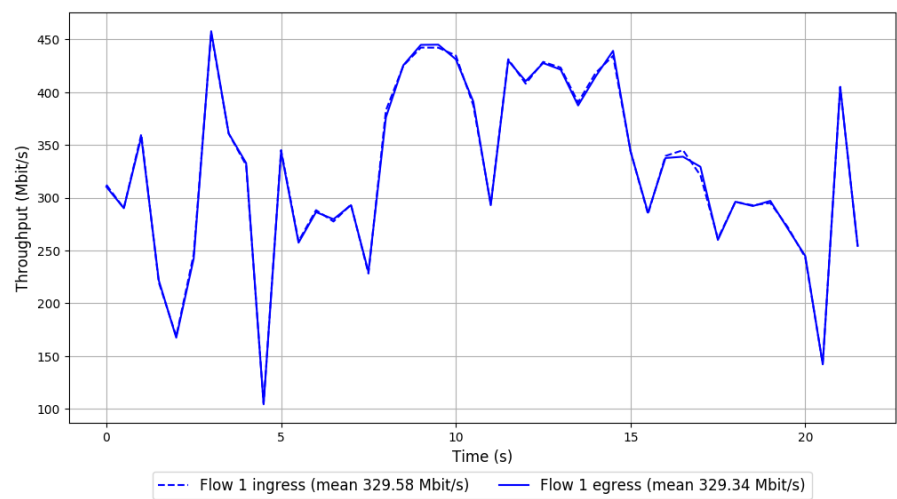
Start at: 2017-10-10 22:20:21

End at: 2017-10-10 22:20:51

Local clock offset: 0.646 ms

Remote clock offset: 0.03 ms

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-10-10 22:38:49

End at: 2017-10-10 22:39:19

Local clock offset: 0.806 ms

Remote clock offset: 0.208 ms

Below is generated by plot.py at 2017-10-11 02:38:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 304.20 Mbit/s

95th percentile per-packet one-way delay: 6.912 ms

Loss rate: 0.04%

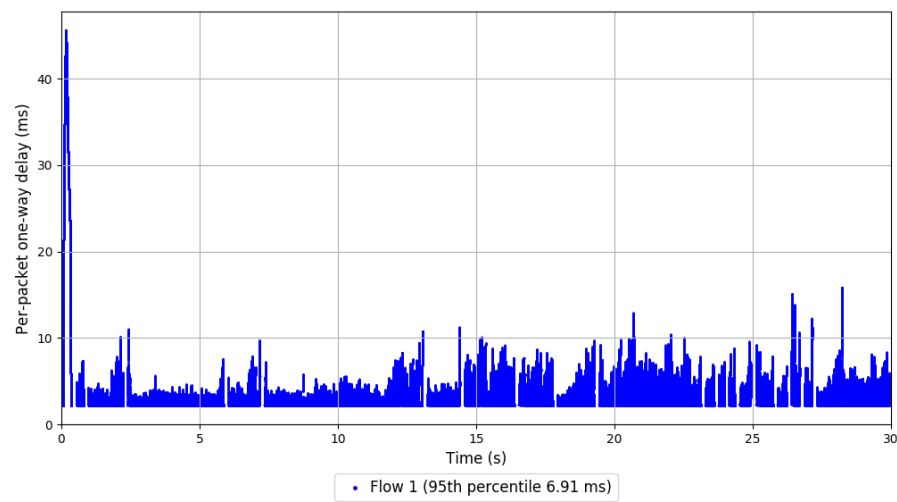
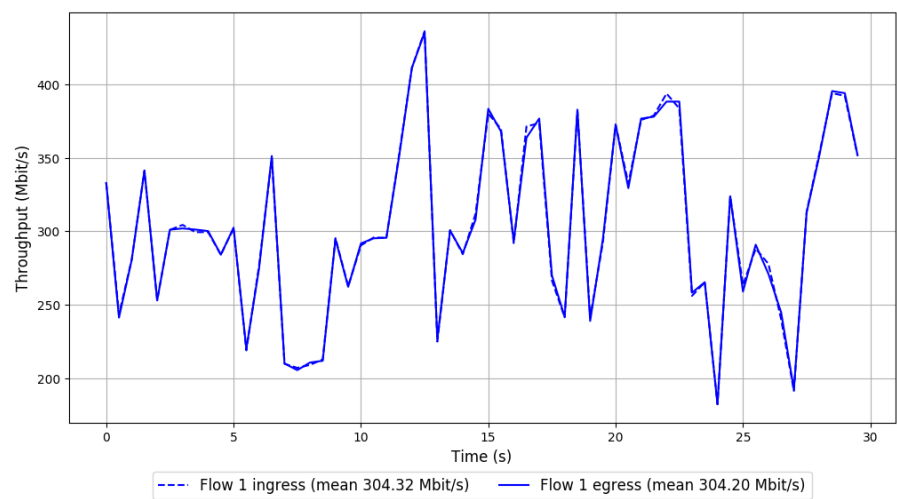
-- Flow 1:

Average throughput: 304.20 Mbit/s

95th percentile per-packet one-way delay: 6.912 ms

Loss rate: 0.04%

Run 7: Report of Verus — Data Link

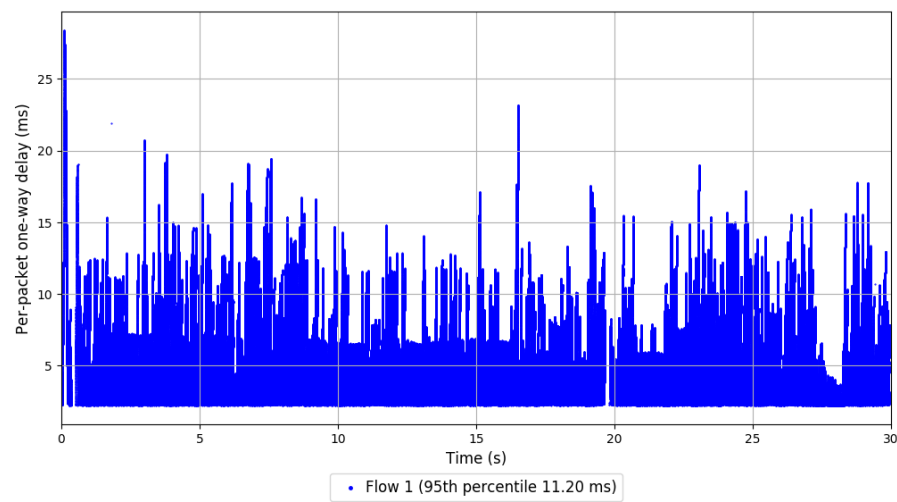
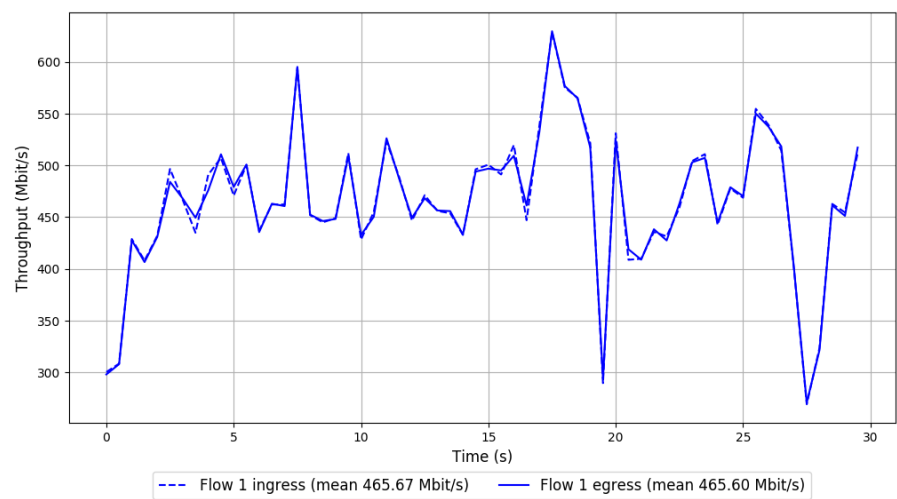


Run 8: Statistics of Verus

Start at: 2017-10-10 22:56:57
End at: 2017-10-10 22:57:27
Local clock offset: 0.47 ms
Remote clock offset: -0.172 ms

Below is generated by plot.py at 2017-10-11 02:42:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 465.60 Mbit/s
95th percentile per-packet one-way delay: 11.197 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 465.60 Mbit/s
95th percentile per-packet one-way delay: 11.197 ms
Loss rate: 0.02%

Run 8: Report of Verus — Data Link

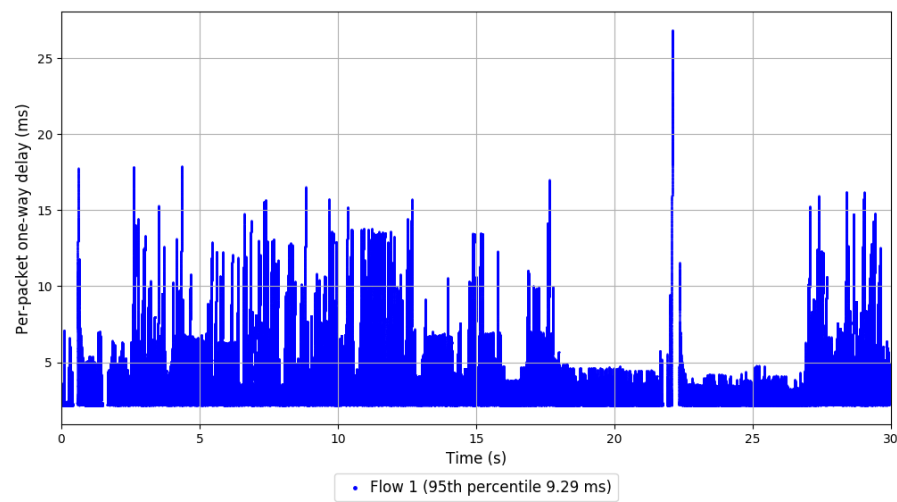
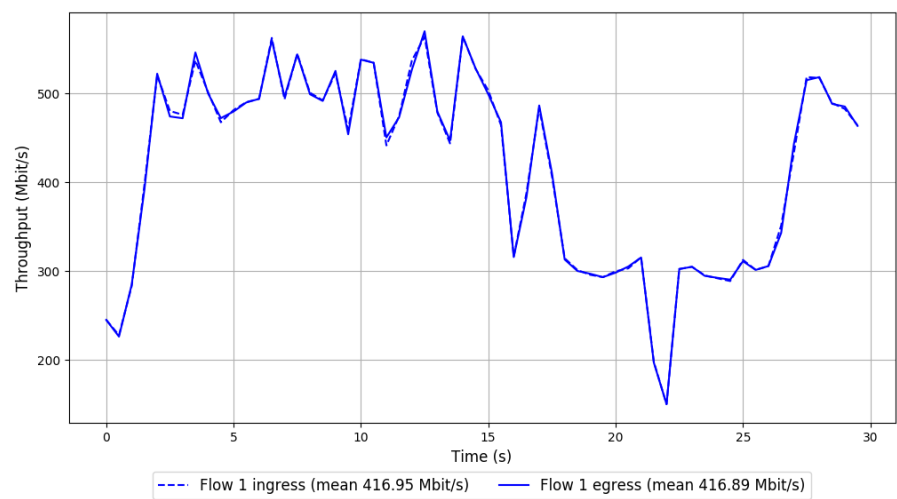


Run 9: Statistics of Verus

Start at: 2017-10-10 23:15:41
End at: 2017-10-10 23:16:11
Local clock offset: 0.285 ms
Remote clock offset: -0.212 ms

Below is generated by plot.py at 2017-10-11 02:42:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 416.89 Mbit/s
95th percentile per-packet one-way delay: 9.293 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 416.89 Mbit/s
95th percentile per-packet one-way delay: 9.293 ms
Loss rate: 0.01%

Run 9: Report of Verus — Data Link

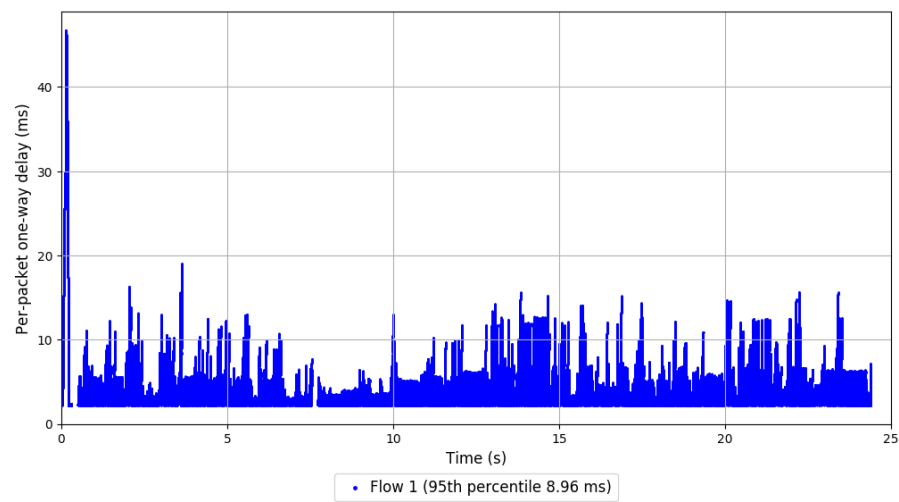
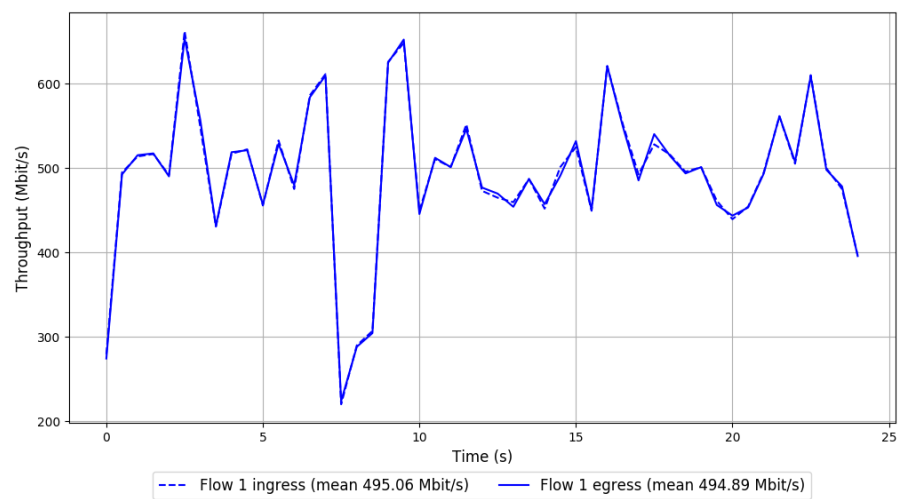


Run 10: Statistics of Verus

Start at: 2017-10-10 23:34:11
End at: 2017-10-10 23:34:41
Local clock offset: 0.138 ms
Remote clock offset: -0.217 ms

Below is generated by plot.py at 2017-10-11 02:42:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 494.89 Mbit/s
95th percentile per-packet one-way delay: 8.958 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 494.89 Mbit/s
95th percentile per-packet one-way delay: 8.958 ms
Loss rate: 0.03%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-10-10 20:38:30

End at: 2017-10-10 20:39:00

Local clock offset: 0.846 ms

Remote clock offset: 0.489 ms

Below is generated by plot.py at 2017-10-11 02:42:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.69 Mbit/s

95th percentile per-packet one-way delay: 2.272 ms

Loss rate: 0.00%

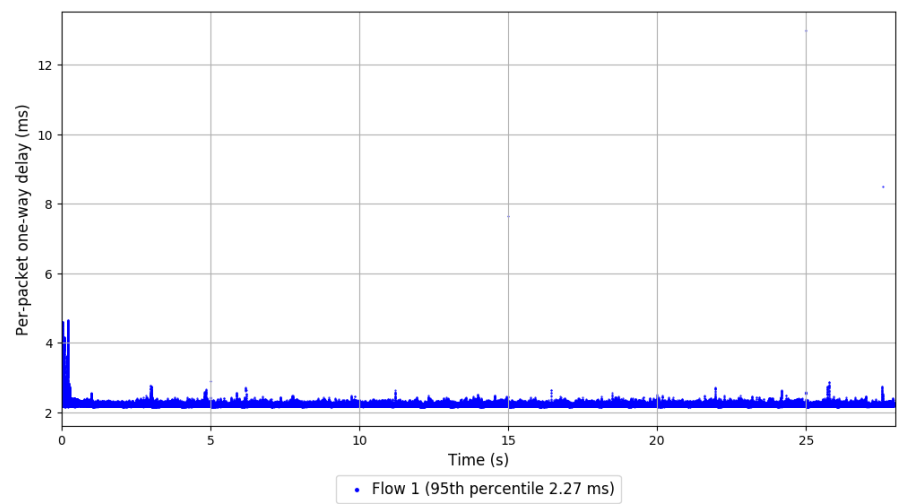
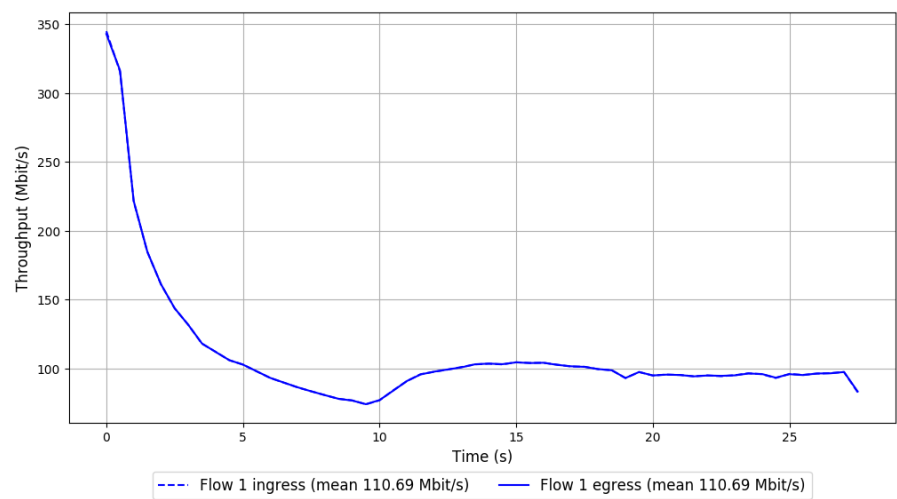
-- Flow 1:

Average throughput: 110.69 Mbit/s

95th percentile per-packet one-way delay: 2.272 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-10-10 20:56:47

End at: 2017-10-10 20:57:17

Local clock offset: 0.589 ms

Remote clock offset: 0.308 ms

Below is generated by plot.py at 2017-10-11 02:42:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.97 Mbit/s

95th percentile per-packet one-way delay: 2.350 ms

Loss rate: 0.00%

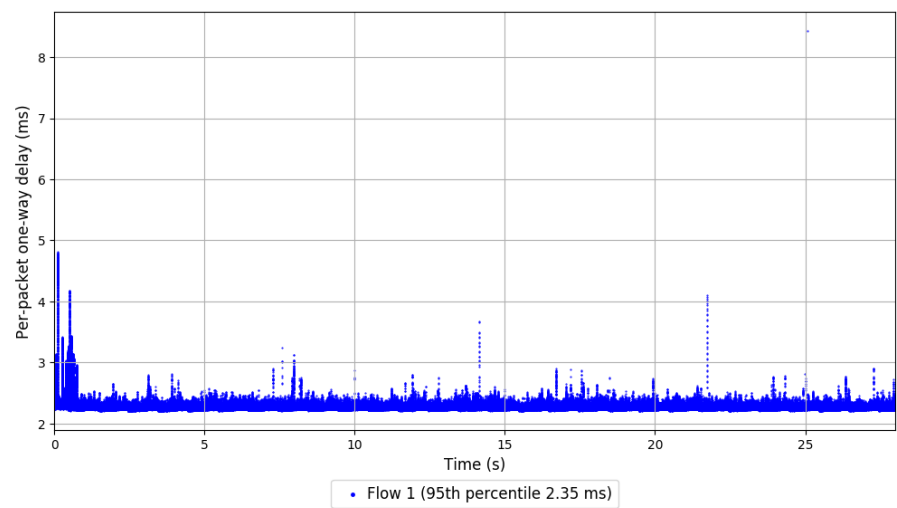
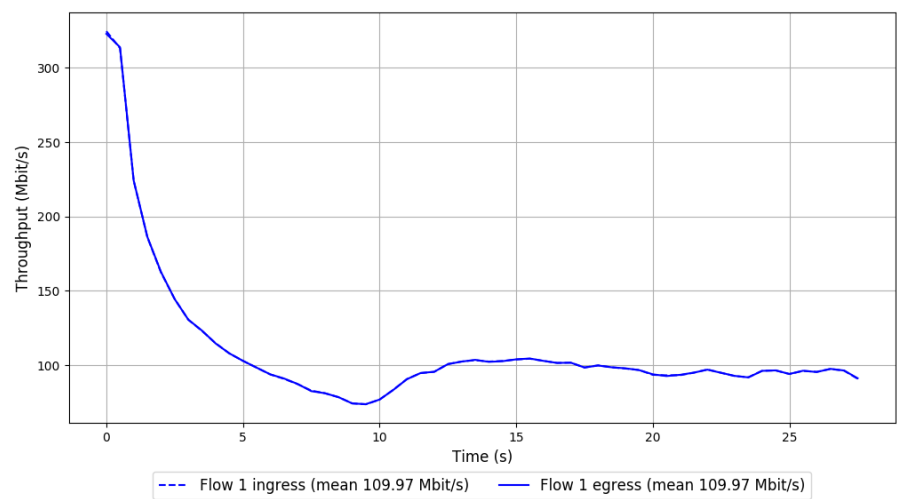
-- Flow 1:

Average throughput: 109.97 Mbit/s

95th percentile per-packet one-way delay: 2.350 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-10-10 21:14:57

End at: 2017-10-10 21:15:27

Local clock offset: 0.645 ms

Remote clock offset: 0.179 ms

Below is generated by plot.py at 2017-10-11 02:42:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.05 Mbit/s

95th percentile per-packet one-way delay: 2.170 ms

Loss rate: 0.00%

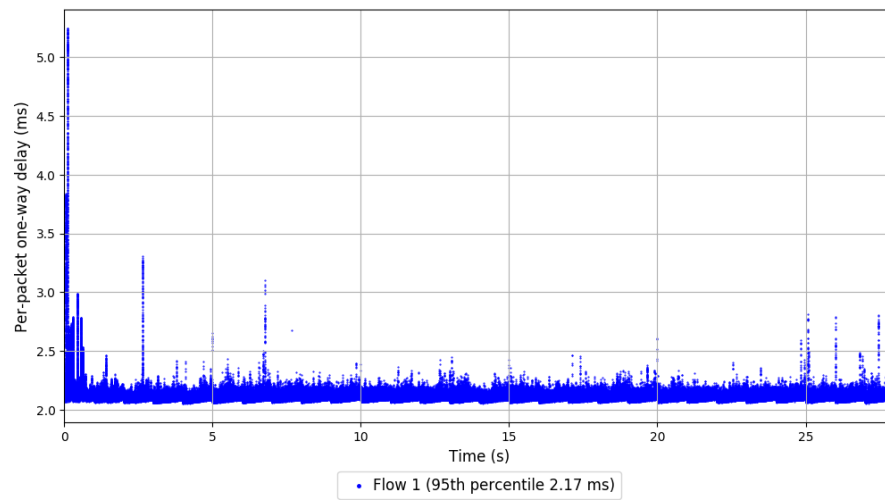
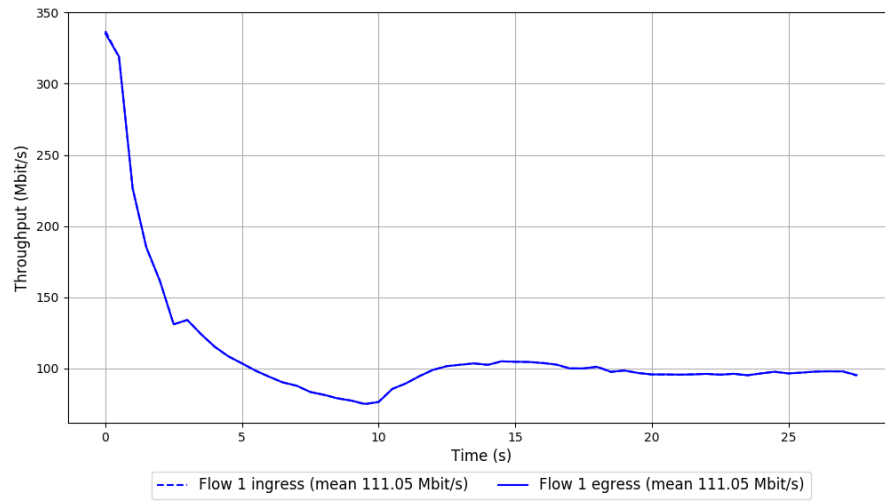
-- Flow 1:

Average throughput: 111.05 Mbit/s

95th percentile per-packet one-way delay: 2.170 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-10-10 21:33:21

End at: 2017-10-10 21:33:51

Local clock offset: 0.604 ms

Remote clock offset: 0.017 ms

Below is generated by plot.py at 2017-10-11 02:42:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.09 Mbit/s

95th percentile per-packet one-way delay: 2.230 ms

Loss rate: 0.00%

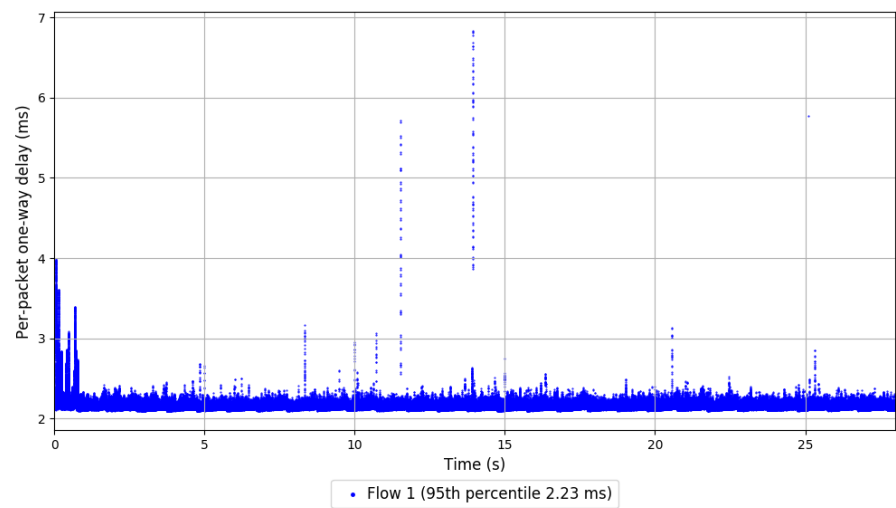
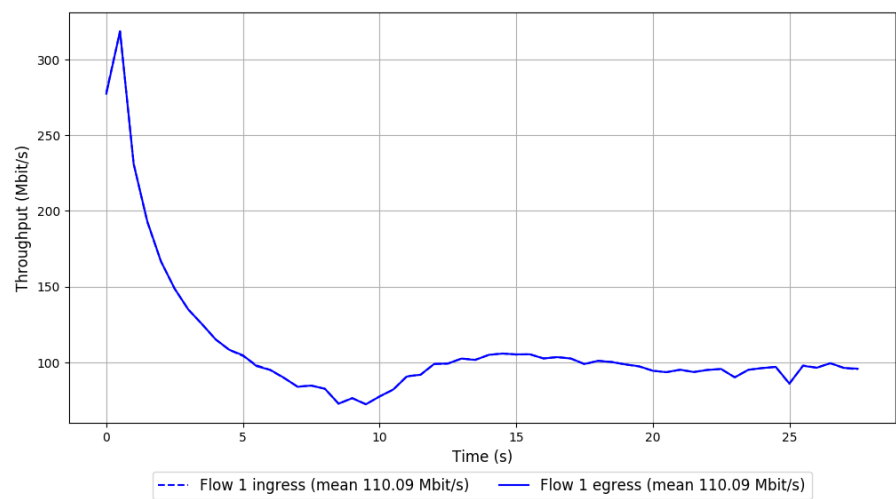
-- Flow 1:

Average throughput: 110.09 Mbit/s

95th percentile per-packet one-way delay: 2.230 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-10-10 21:51:55

End at: 2017-10-10 21:52:25

Local clock offset: 0.72 ms

Remote clock offset: 0.13 ms

Below is generated by plot.py at 2017-10-11 02:42:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.31 Mbit/s

95th percentile per-packet one-way delay: 2.277 ms

Loss rate: 0.00%

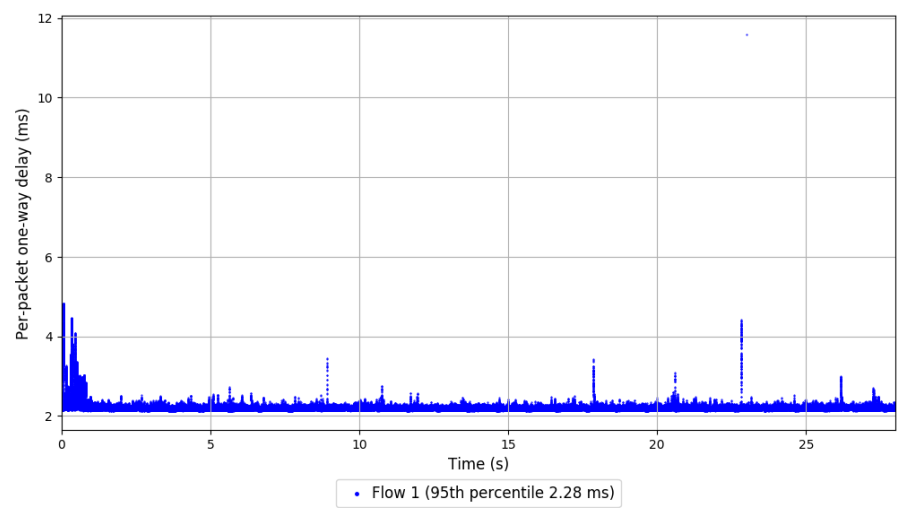
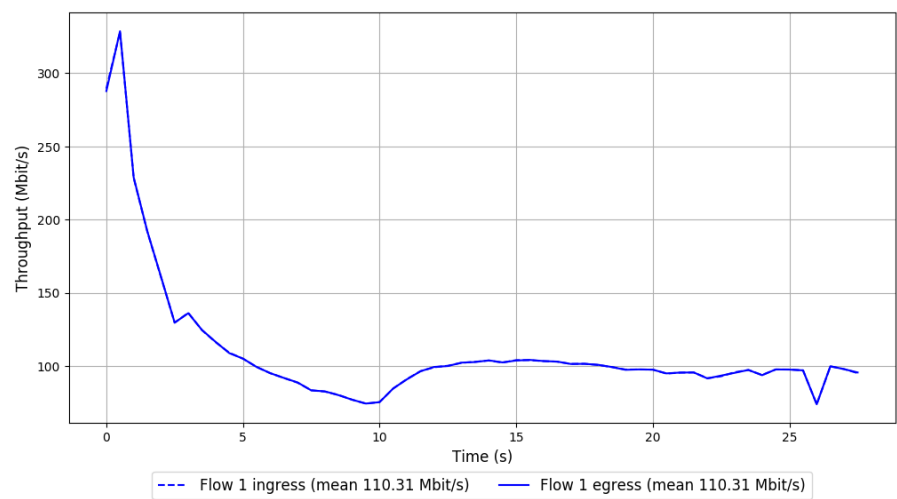
-- Flow 1:

Average throughput: 110.31 Mbit/s

95th percentile per-packet one-way delay: 2.277 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link

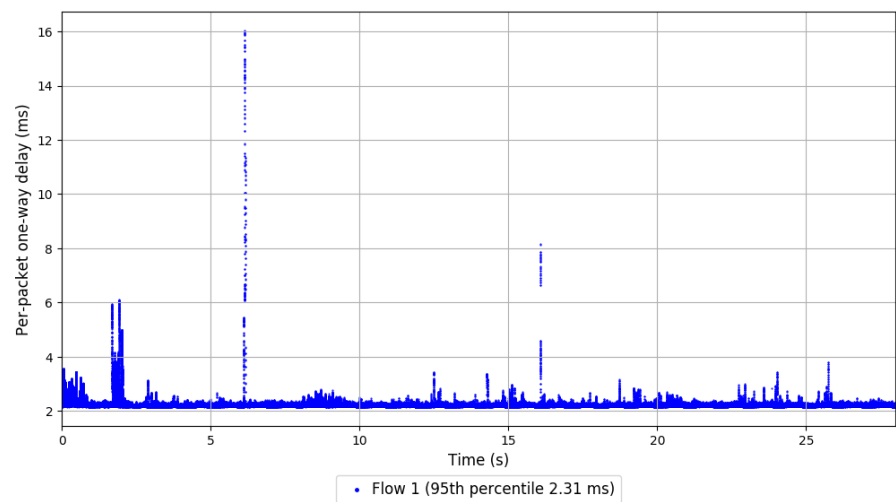
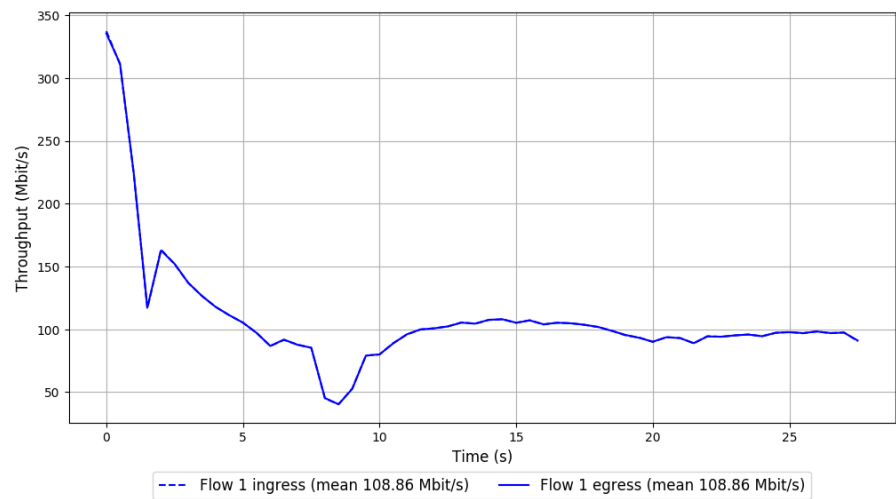


Run 6: Statistics of Copa

Start at: 2017-10-10 22:09:43
End at: 2017-10-10 22:10:13
Local clock offset: 0.574 ms
Remote clock offset: -0.041 ms

Below is generated by plot.py at 2017-10-11 02:42:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 108.86 Mbit/s
95th percentile per-packet one-way delay: 2.312 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 108.86 Mbit/s
95th percentile per-packet one-way delay: 2.312 ms
Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-10-10 22:28:08

End at: 2017-10-10 22:28:38

Local clock offset: 0.69 ms

Remote clock offset: 0.003 ms

Below is generated by plot.py at 2017-10-11 02:42:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.33 Mbit/s

95th percentile per-packet one-way delay: 3.154 ms

Loss rate: 0.00%

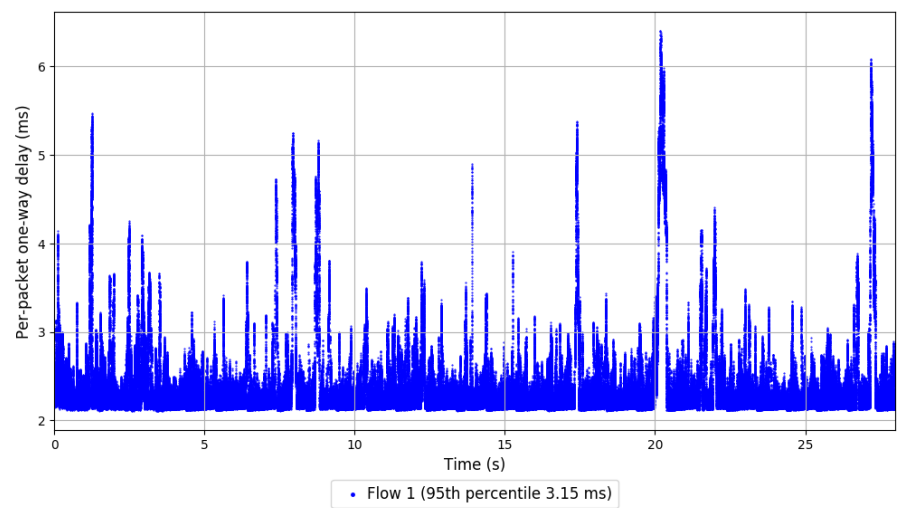
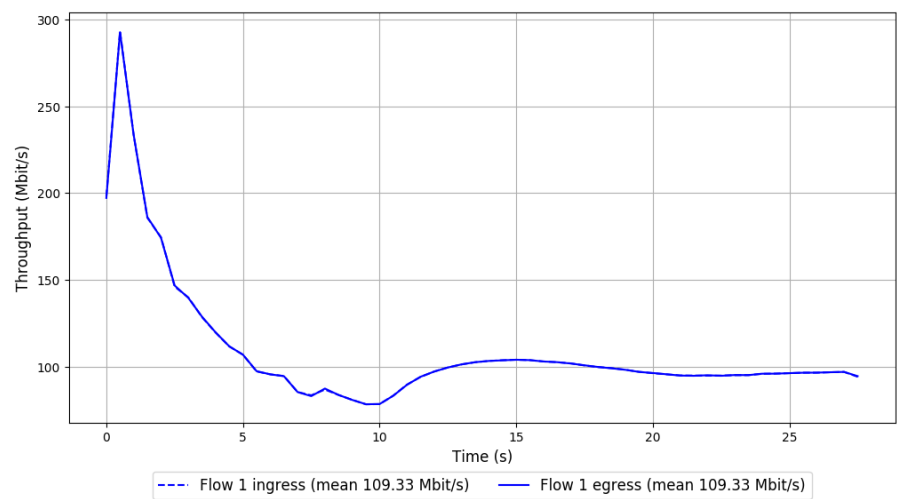
-- Flow 1:

Average throughput: 109.33 Mbit/s

95th percentile per-packet one-way delay: 3.154 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

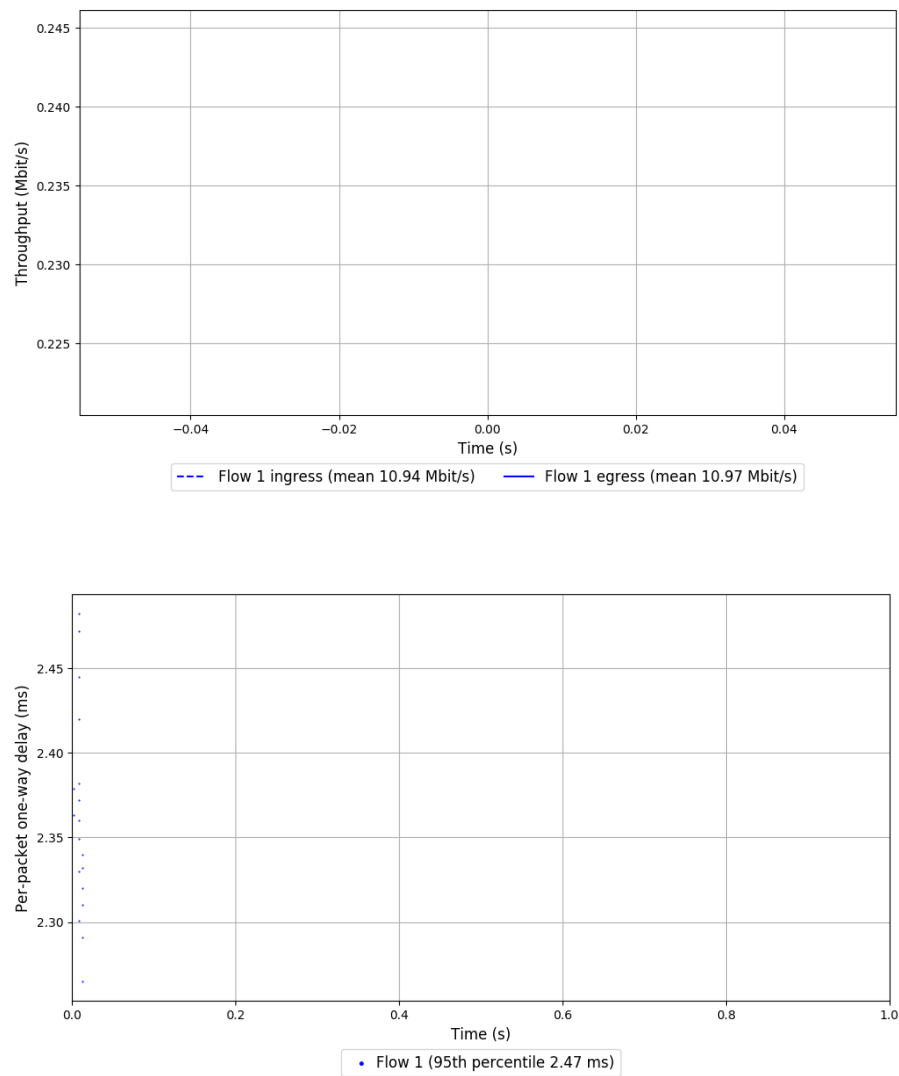
Start at: 2017-10-10 22:46:32

End at: 2017-10-10 22:47:03

Local clock offset: 0.561 ms

Remote clock offset: -0.14 ms

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

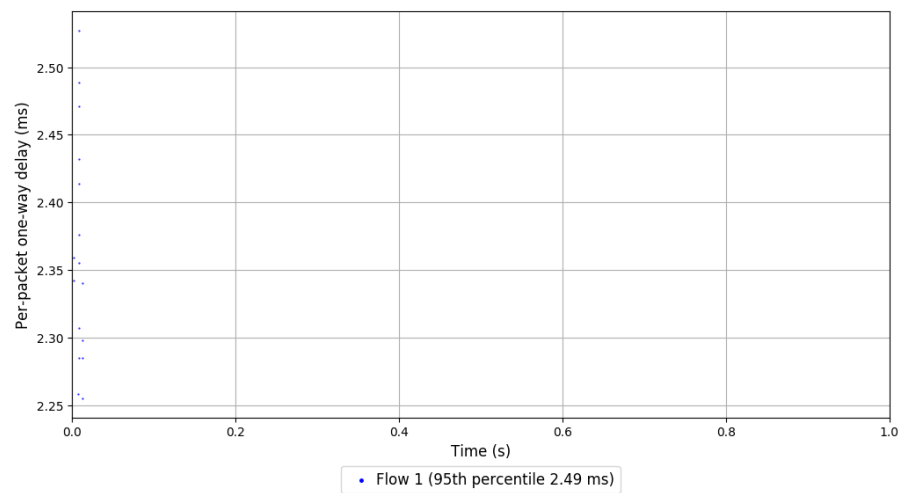
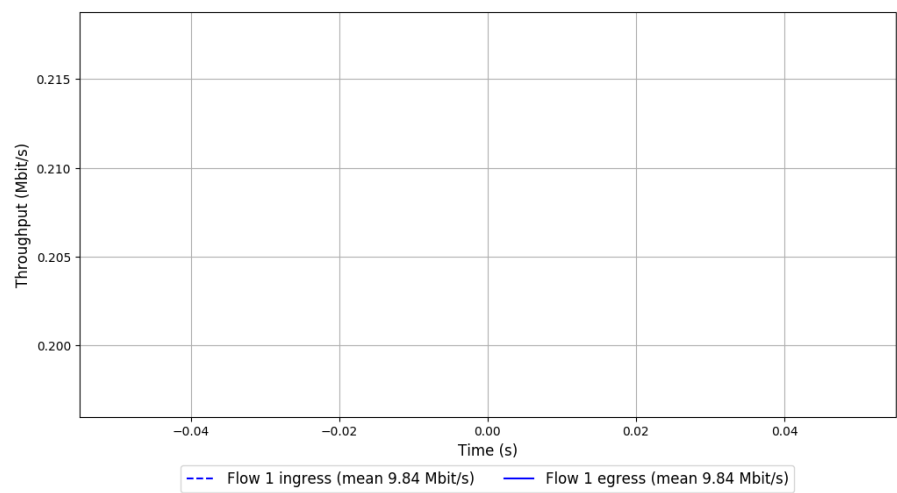
Start at: 2017-10-10 23:05:07

End at: 2017-10-10 23:05:37

Local clock offset: 0.525 ms

Remote clock offset: -0.084 ms

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-10-10 23:23:37

End at: 2017-10-10 23:24:07

Local clock offset: 0.21 ms

Remote clock offset: -0.174 ms

Below is generated by plot.py at 2017-10-11 02:42:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.26 Mbit/s

95th percentile per-packet one-way delay: 2.285 ms

Loss rate: 0.00%

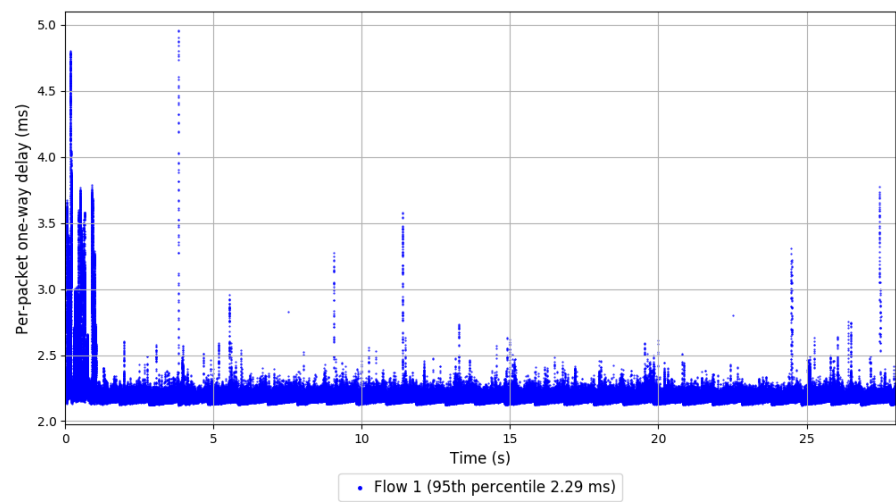
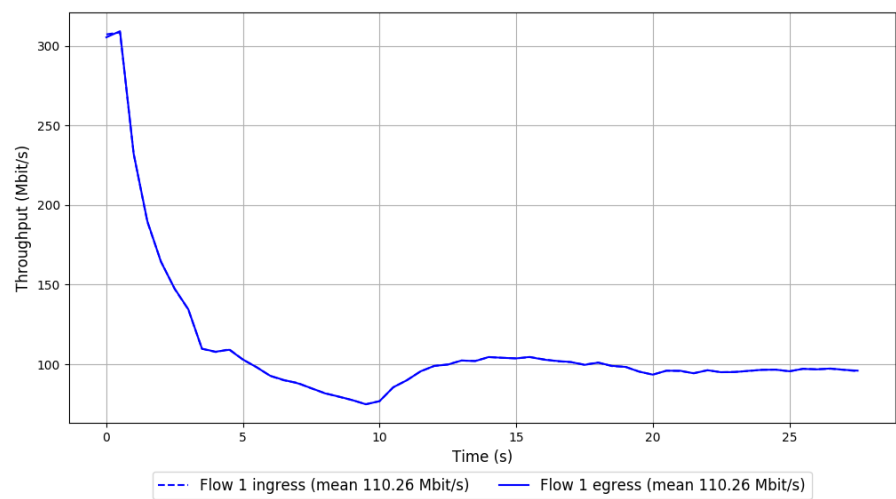
-- Flow 1:

Average throughput: 110.26 Mbit/s

95th percentile per-packet one-way delay: 2.285 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-10-10 20:46:02

End at: 2017-10-10 20:46:32

Local clock offset: 0.744 ms

Remote clock offset: 0.432 ms

Below is generated by plot.py at 2017-10-11 02:49:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 598.72 Mbit/s

95th percentile per-packet one-way delay: 9.792 ms

Loss rate: 0.08%

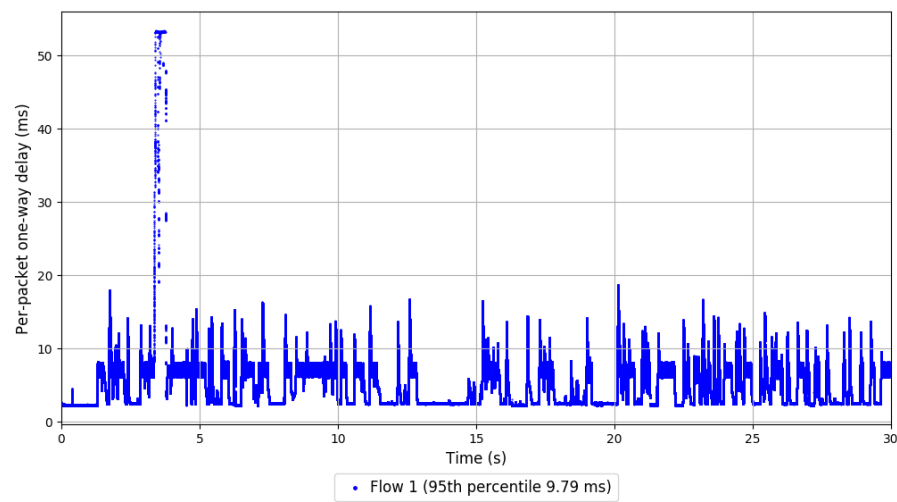
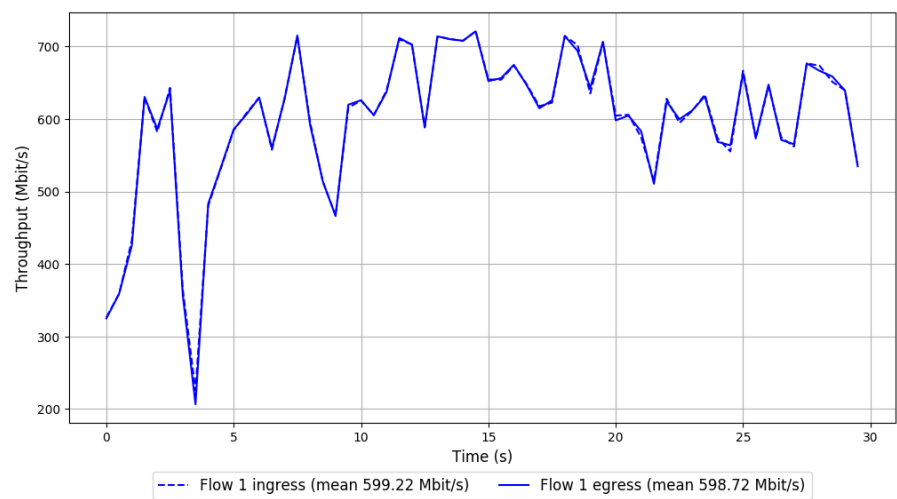
-- Flow 1:

Average throughput: 598.72 Mbit/s

95th percentile per-packet one-way delay: 9.792 ms

Loss rate: 0.08%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-10-10 21:04:01

End at: 2017-10-10 21:04:31

Local clock offset: 0.585 ms

Remote clock offset: 0.269 ms

Below is generated by plot.py at 2017-10-11 02:50:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 621.52 Mbit/s

95th percentile per-packet one-way delay: 8.737 ms

Loss rate: 0.00%

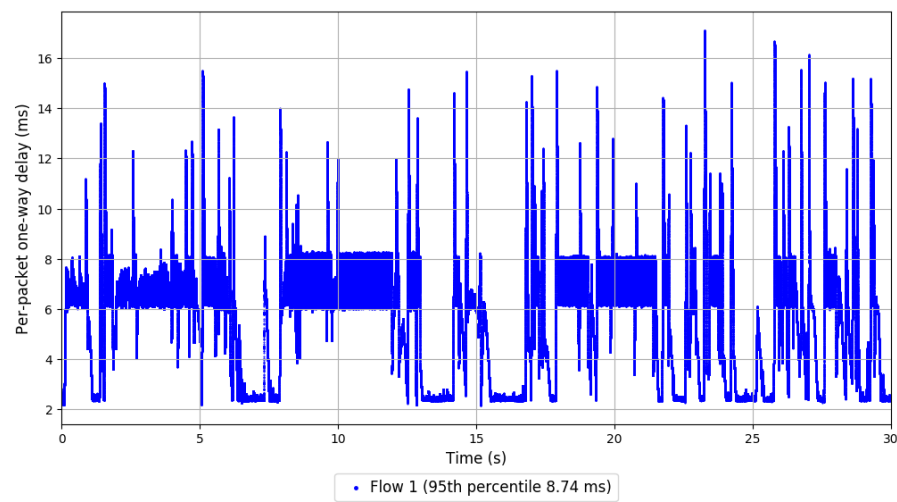
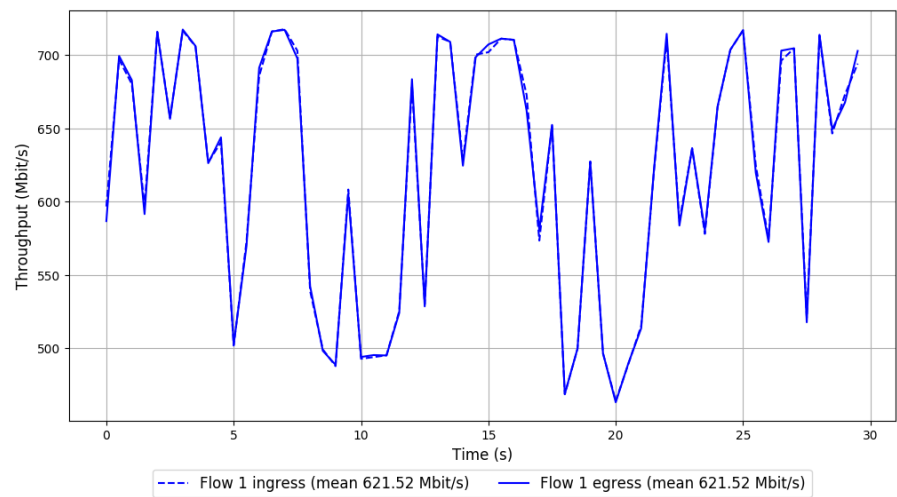
-- Flow 1:

Average throughput: 621.52 Mbit/s

95th percentile per-packet one-way delay: 8.737 ms

Loss rate: 0.00%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-10-10 21:22:32

End at: 2017-10-10 21:23:02

Local clock offset: 0.719 ms

Remote clock offset: 0.239 ms

Below is generated by plot.py at 2017-10-11 02:50:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 479.10 Mbit/s

95th percentile per-packet one-way delay: 6.560 ms

Loss rate: 0.01%

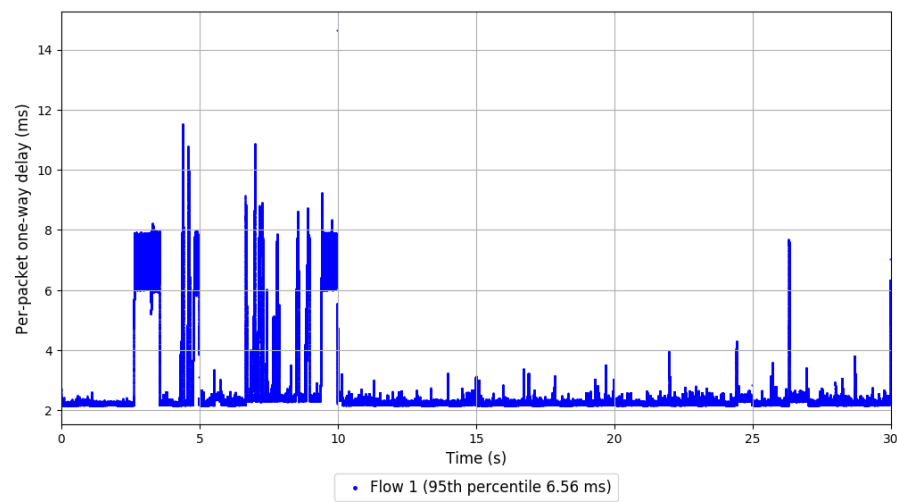
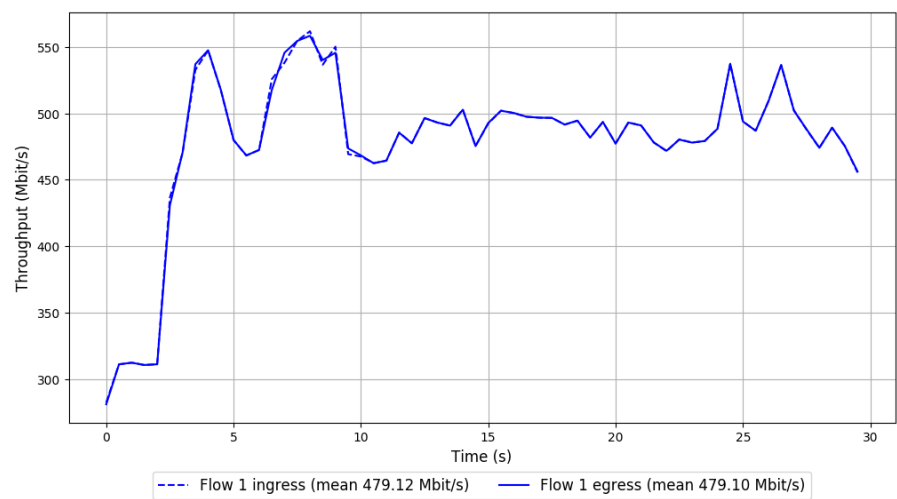
-- Flow 1:

Average throughput: 479.10 Mbit/s

95th percentile per-packet one-way delay: 6.560 ms

Loss rate: 0.01%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-10-10 21:40:50

End at: 2017-10-10 21:41:20

Local clock offset: 0.644 ms

Remote clock offset: 0.136 ms

Below is generated by plot.py at 2017-10-11 02:50:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 606.83 Mbit/s

95th percentile per-packet one-way delay: 9.300 ms

Loss rate: 0.01%

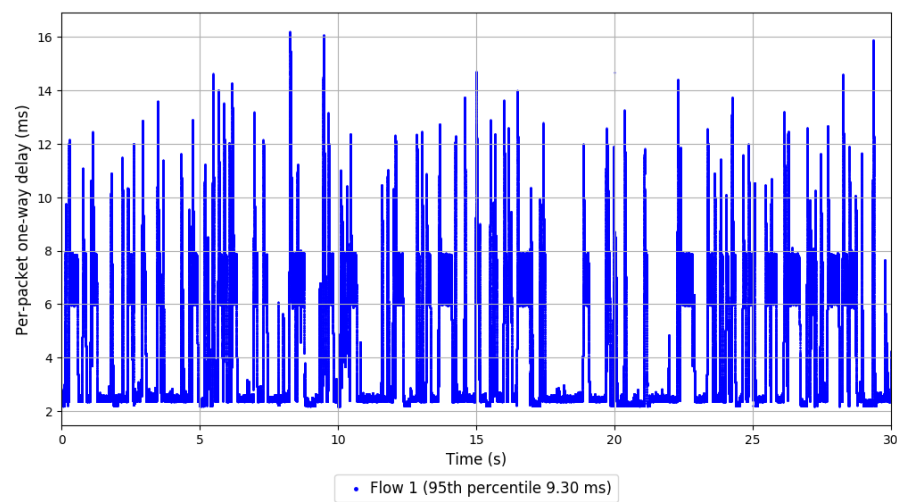
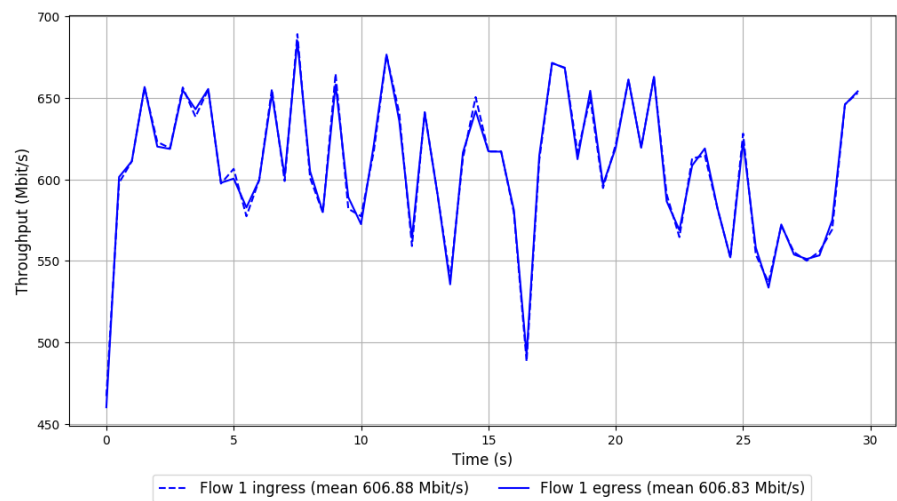
-- Flow 1:

Average throughput: 606.83 Mbit/s

95th percentile per-packet one-way delay: 9.300 ms

Loss rate: 0.01%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

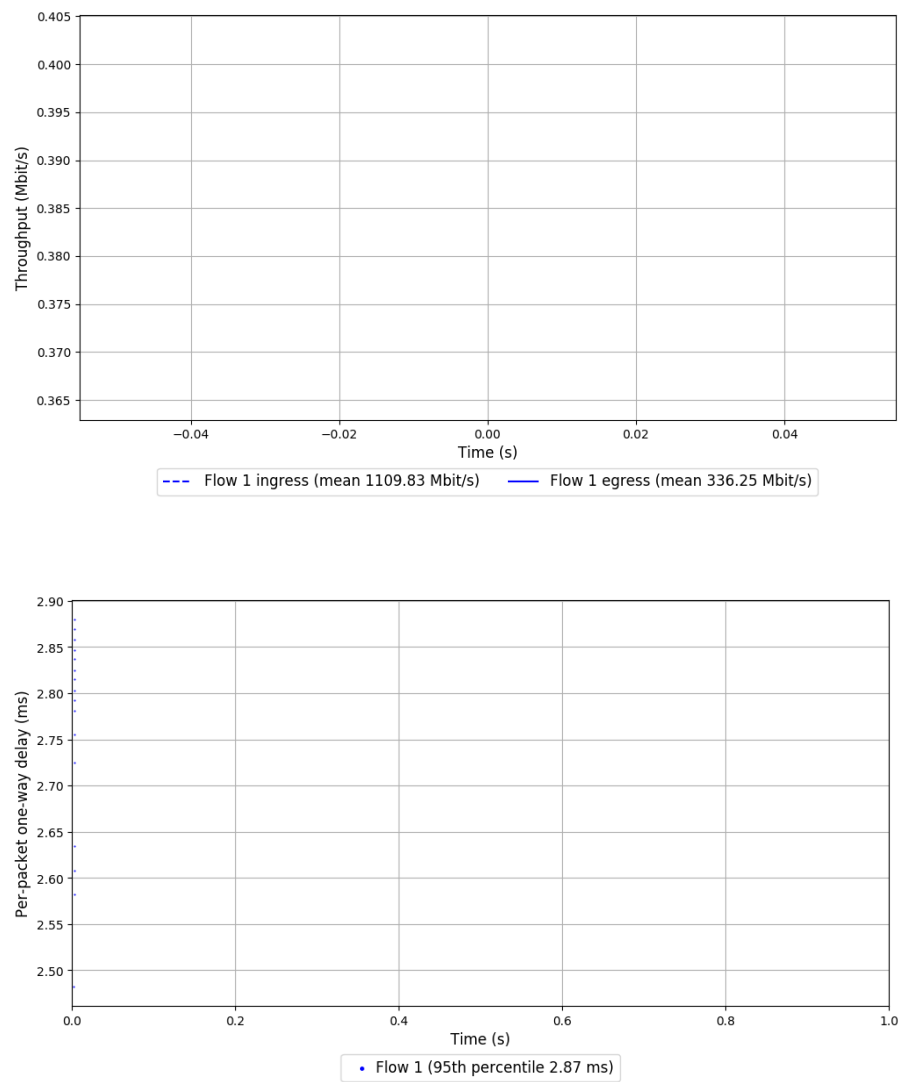
Start at: 2017-10-10 21:59:29

End at: 2017-10-10 21:59:59

Local clock offset: 0.632 ms

Remote clock offset: 0.058 ms

Run 5: Report of CalibratedKoho — Data Link

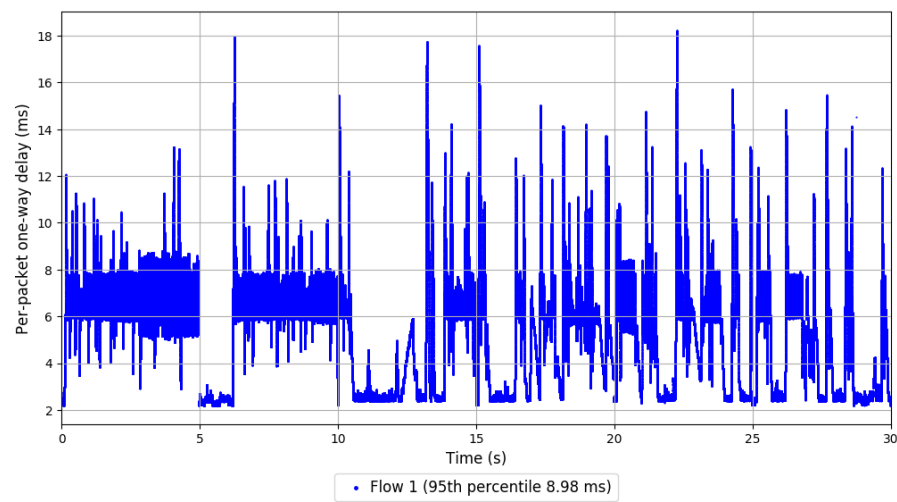
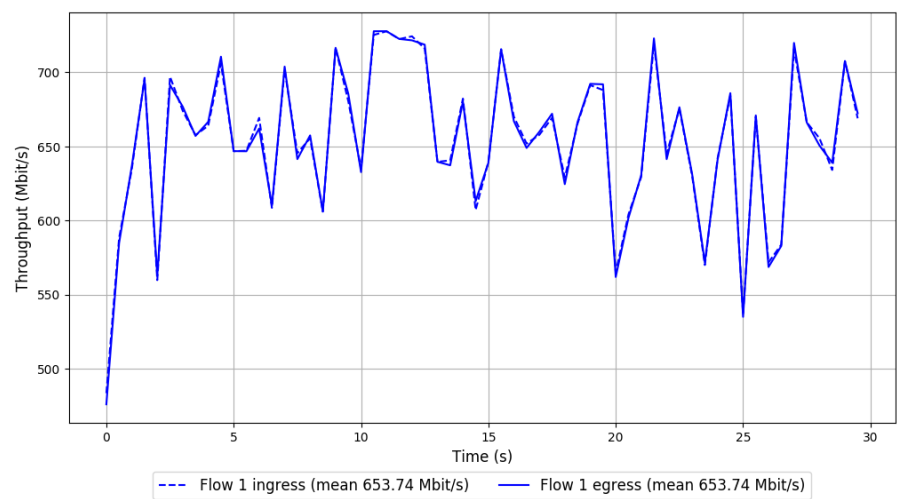


Run 6: Statistics of CalibratedKoho

Start at: 2017-10-10 22:17:14
End at: 2017-10-10 22:17:44
Local clock offset: 0.579 ms
Remote clock offset: -0.003 ms

Below is generated by plot.py at 2017-10-11 02:51:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 653.74 Mbit/s
95th percentile per-packet one-way delay: 8.981 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 653.74 Mbit/s
95th percentile per-packet one-way delay: 8.981 ms
Loss rate: 0.00%

Run 6: Report of CalibratedKoho — Data Link

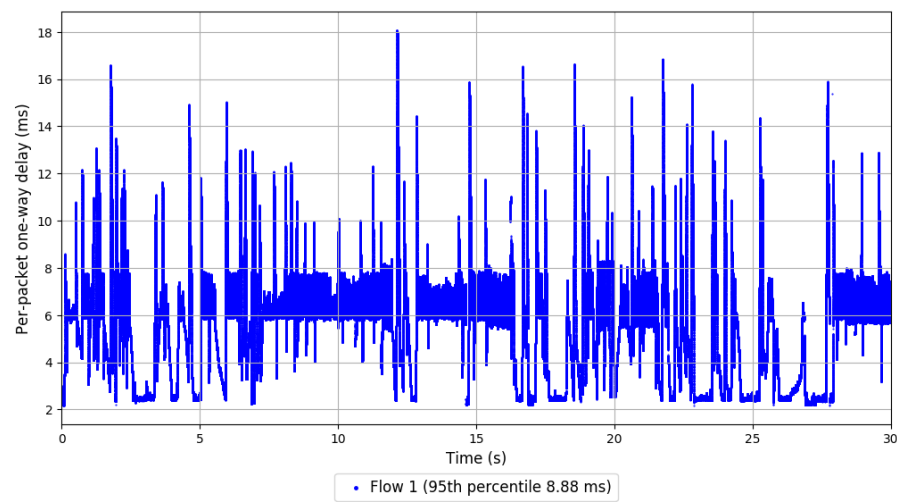
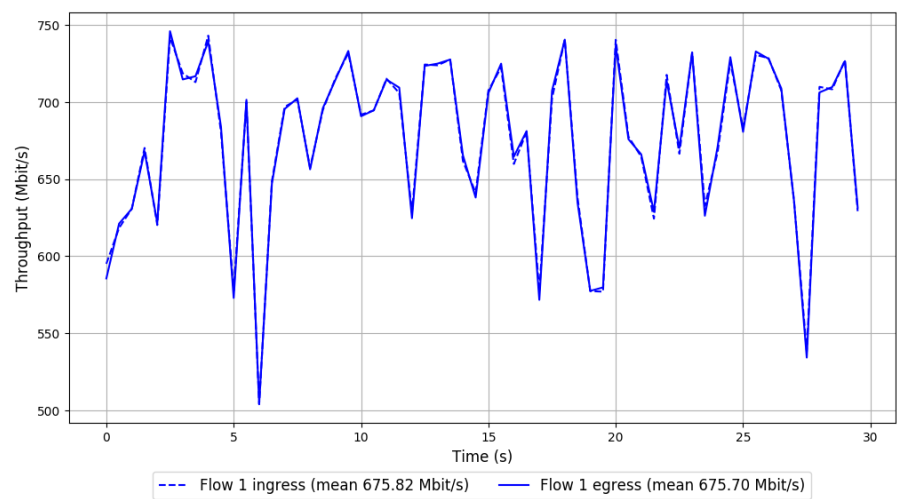


Run 7: Statistics of CalibratedKoho

Start at: 2017-10-10 22:35:43
End at: 2017-10-10 22:36:13
Local clock offset: 0.559 ms
Remote clock offset: -0.064 ms

Below is generated by plot.py at 2017-10-11 02:52:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 675.70 Mbit/s
95th percentile per-packet one-way delay: 8.879 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 675.70 Mbit/s
95th percentile per-packet one-way delay: 8.879 ms
Loss rate: 0.02%

Run 7: Report of CalibratedKoho — Data Link

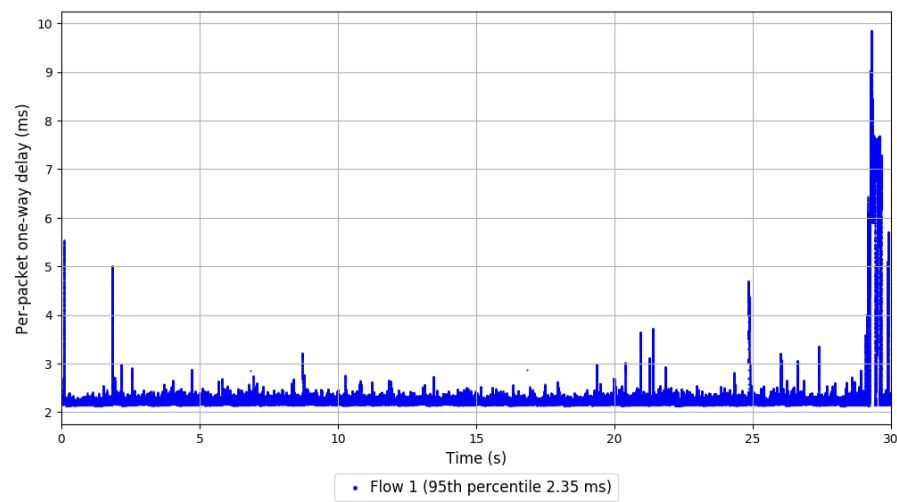
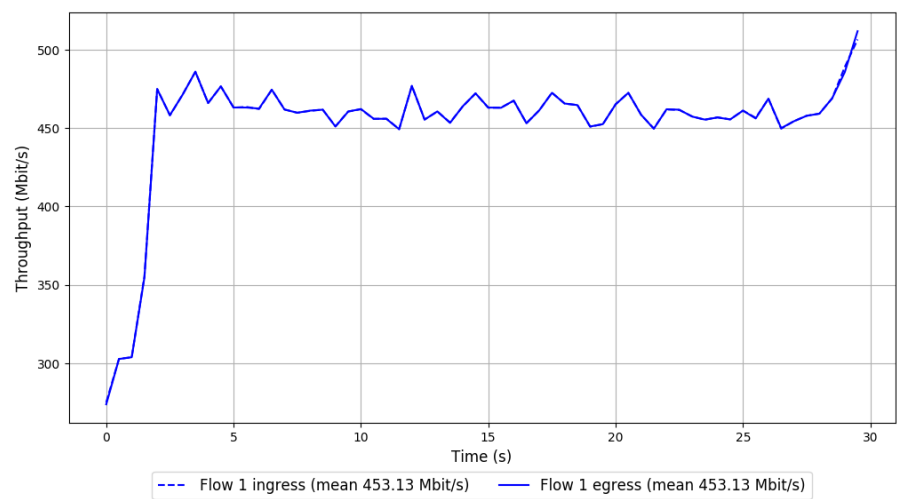


Run 8: Statistics of CalibratedKoho

Start at: 2017-10-10 22:54:01
End at: 2017-10-10 22:54:31
Local clock offset: 0.493 ms
Remote clock offset: -0.167 ms

Below is generated by plot.py at 2017-10-11 02:52:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 453.13 Mbit/s
95th percentile per-packet one-way delay: 2.353 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 453.13 Mbit/s
95th percentile per-packet one-way delay: 2.353 ms
Loss rate: 0.00%

Run 8: Report of CalibratedKoho — Data Link

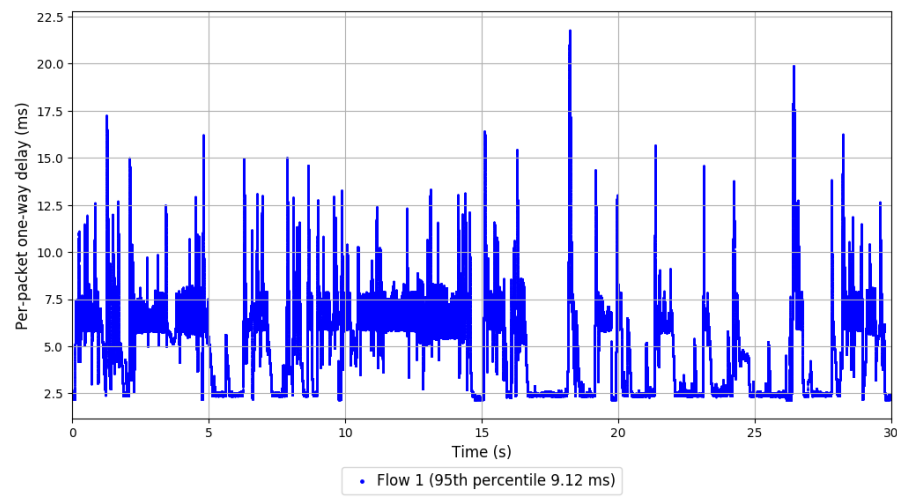
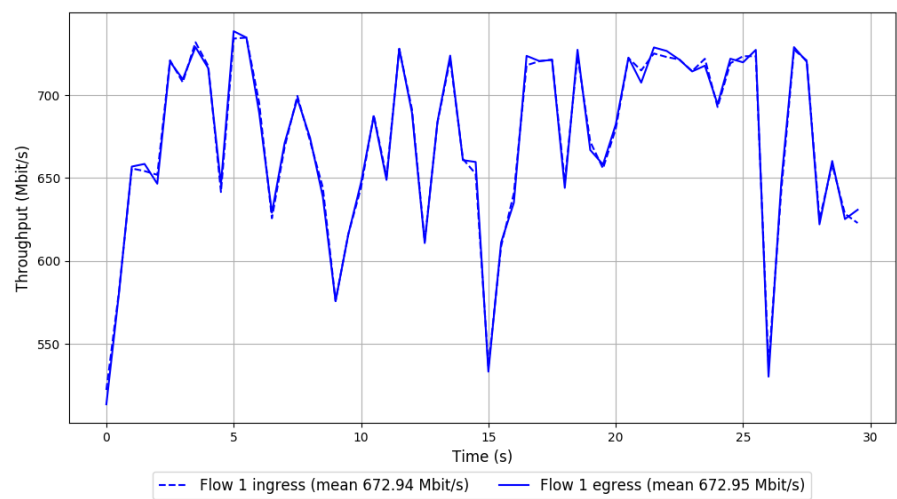


Run 9: Statistics of CalibratedKoho

Start at: 2017-10-10 23:12:33
End at: 2017-10-10 23:13:03
Local clock offset: 0.295 ms
Remote clock offset: -0.266 ms

Below is generated by plot.py at 2017-10-11 02:52:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 672.95 Mbit/s
95th percentile per-packet one-way delay: 9.118 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 672.95 Mbit/s
95th percentile per-packet one-way delay: 9.118 ms
Loss rate: 0.00%

Run 9: Report of CalibratedKoho — Data Link

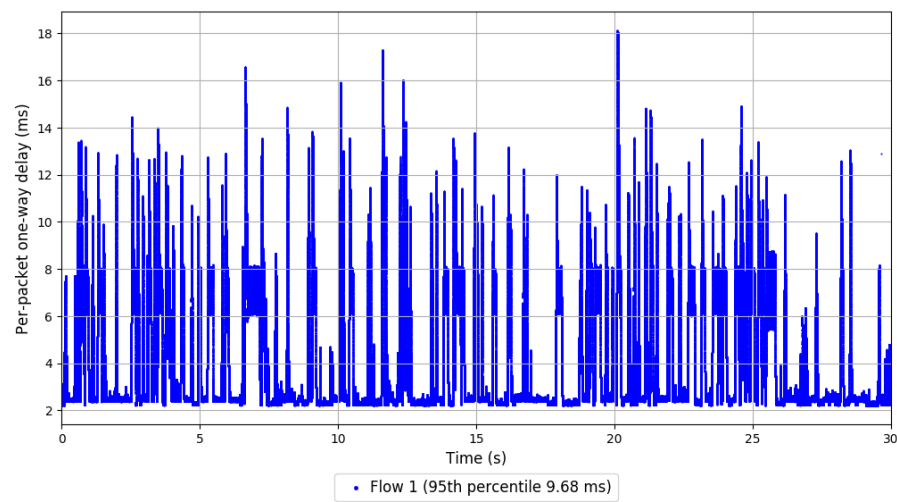
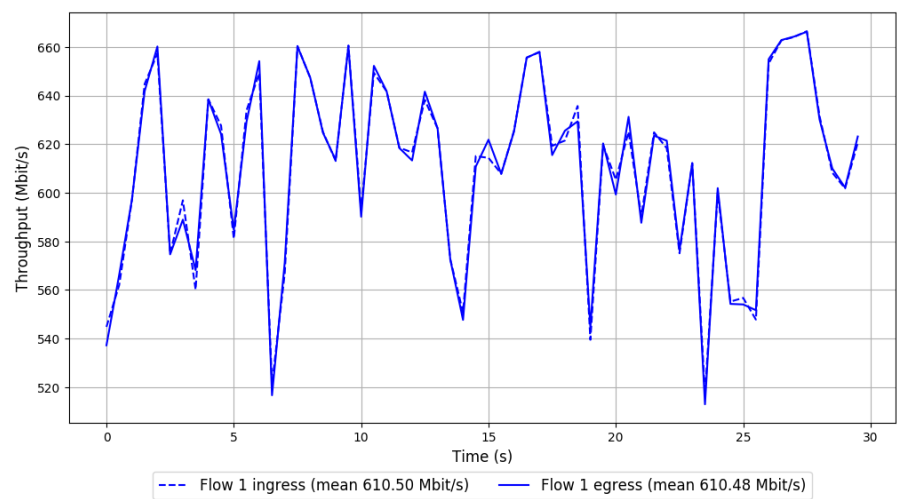


Run 10: Statistics of CalibratedKoho

Start at: 2017-10-10 23:31:05
End at: 2017-10-10 23:31:35
Local clock offset: 0.138 ms
Remote clock offset: -0.222 ms

Below is generated by plot.py at 2017-10-11 02:55:06
Datalink statistics
-- Total of 1 flow:
Average throughput: 610.48 Mbit/s
95th percentile per-packet one-way delay: 9.678 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 610.48 Mbit/s
95th percentile per-packet one-way delay: 9.678 ms
Loss rate: 0.00%

Run 10: Report of CalibratedKoho — Data Link

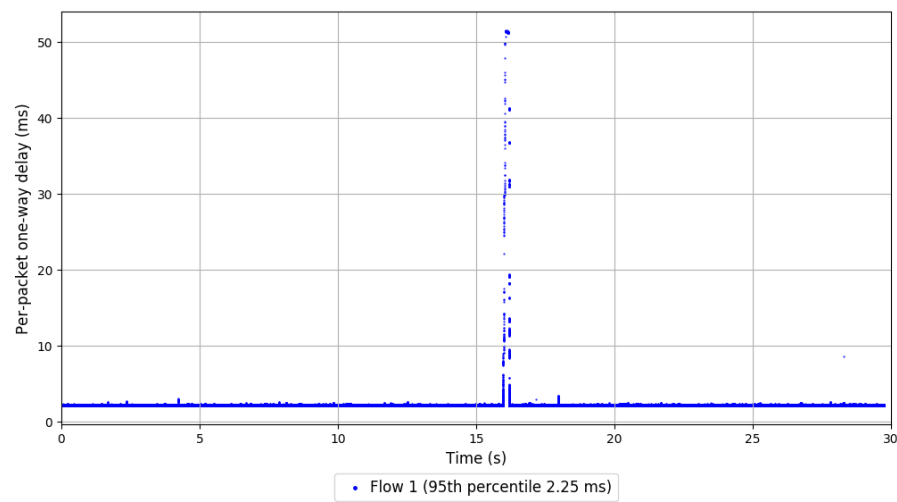
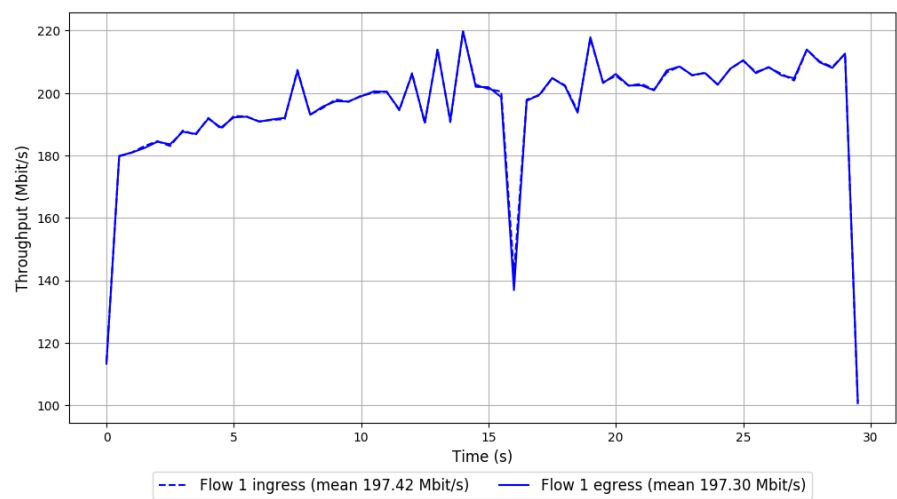


```
Run 1: Statistics of Indigo

Start at: 2017-10-10 20:43:15
End at: 2017-10-10 20:43:45
Local clock offset: 0.805 ms
Remote clock offset: 0.42 ms

# Below is generated by plot.py at 2017-10-11 02:55:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 197.30 Mbit/s
95th percentile per-packet one-way delay: 2.250 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 197.30 Mbit/s
95th percentile per-packet one-way delay: 2.250 ms
Loss rate: 0.06%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

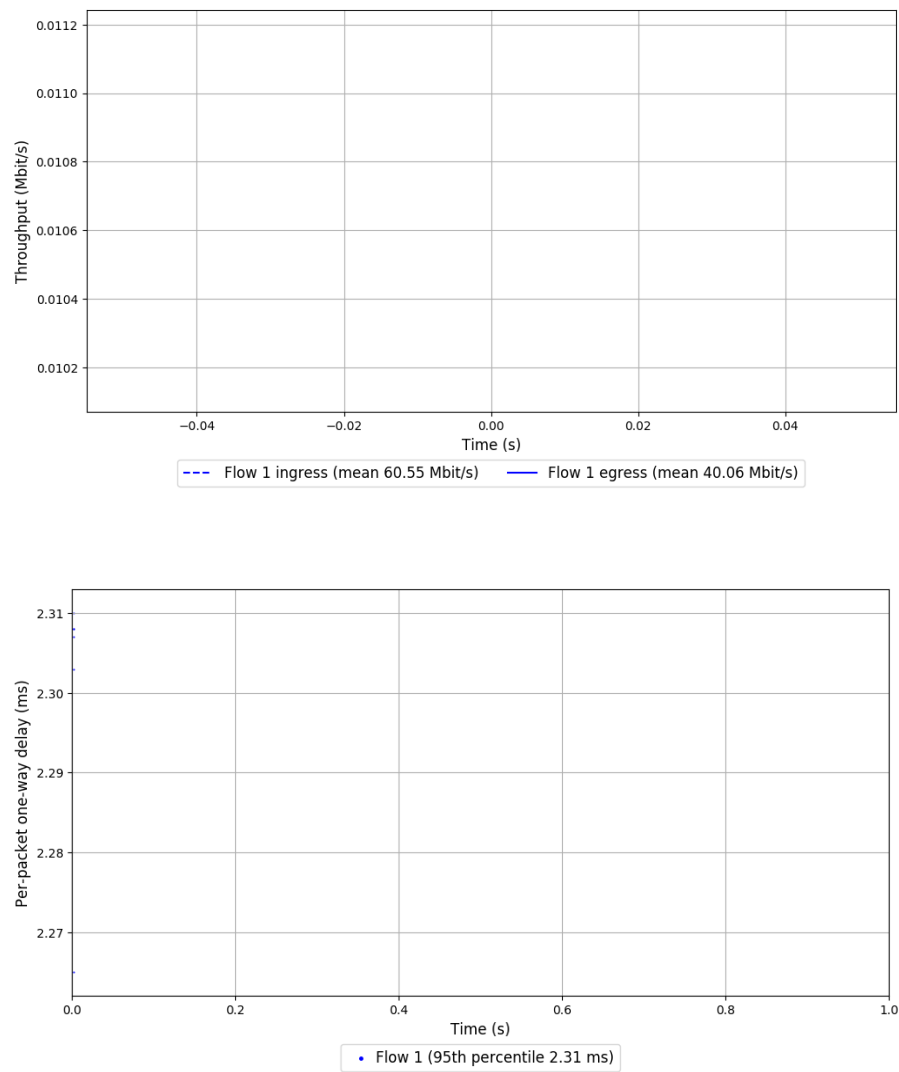
Start at: 2017-10-10 21:01:31

End at: 2017-10-10 21:02:01

Local clock offset: 0.614 ms

Remote clock offset: 0.289 ms

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

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

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

Local clock offset: 0.708 ms

Remote clock offset: 0.248 ms

Below is generated by plot.py at 2017-10-11 02:55:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.85 Mbit/s

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

Loss rate: 0.00%

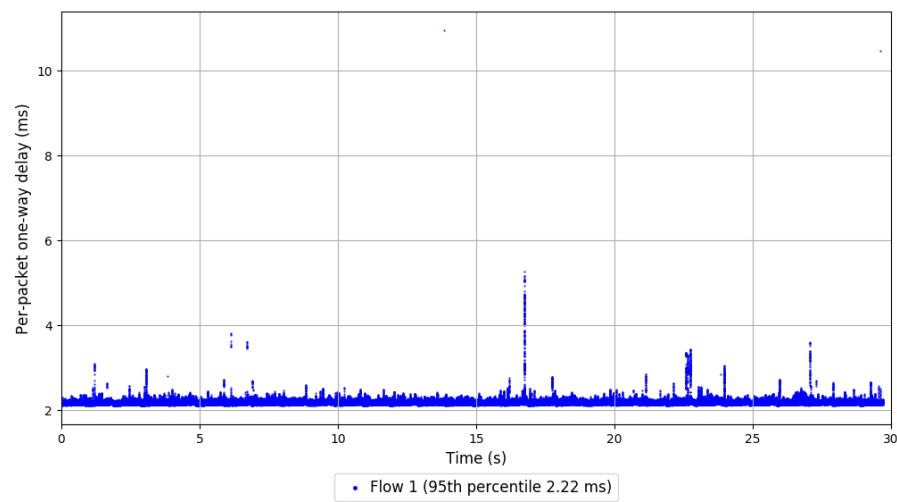
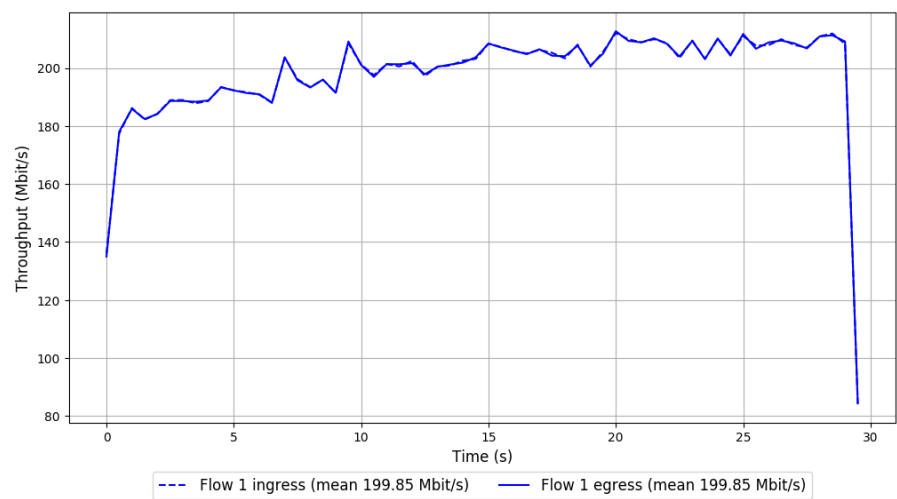
-- Flow 1:

Average throughput: 199.85 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-10-10 21:38:03

End at: 2017-10-10 21:38:33

Local clock offset: 0.692 ms

Remote clock offset: 0.092 ms

Below is generated by plot.py at 2017-10-11 02:55:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.24 Mbit/s

95th percentile per-packet one-way delay: 2.173 ms

Loss rate: 0.00%

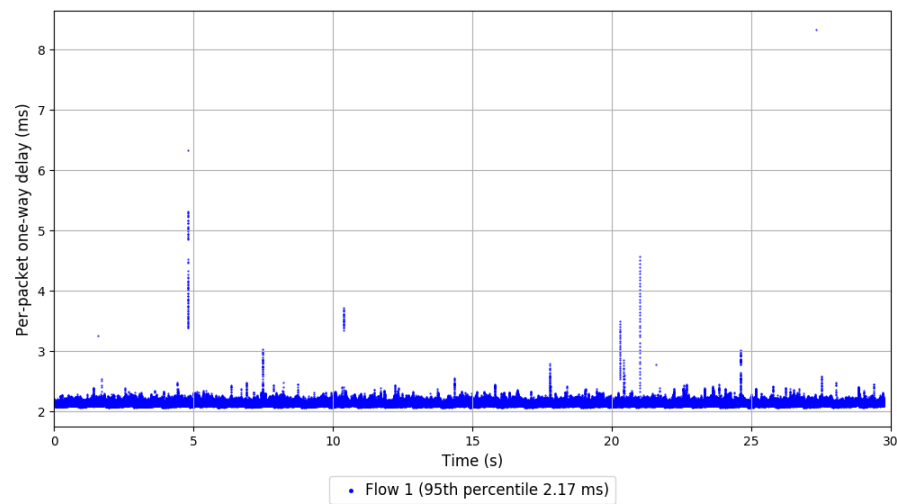
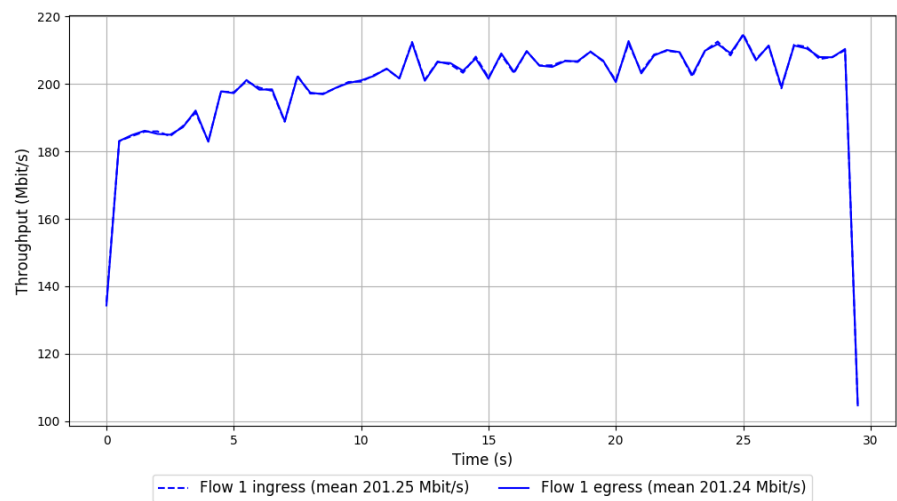
-- Flow 1:

Average throughput: 201.24 Mbit/s

95th percentile per-packet one-way delay: 2.173 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-10-10 21:56:38

End at: 2017-10-10 21:57:08

Local clock offset: 0.653 ms

Remote clock offset: 0.181 ms

Below is generated by plot.py at 2017-10-11 02:55:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.65 Mbit/s

95th percentile per-packet one-way delay: 2.391 ms

Loss rate: 0.00%

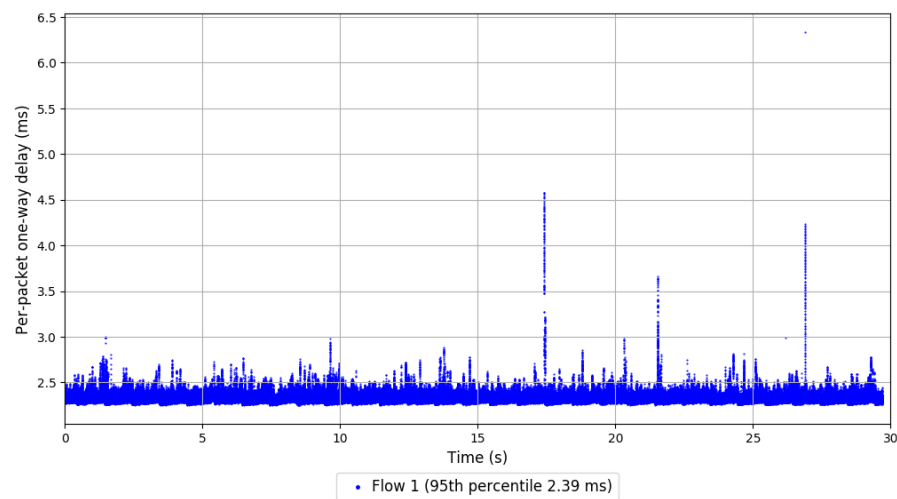
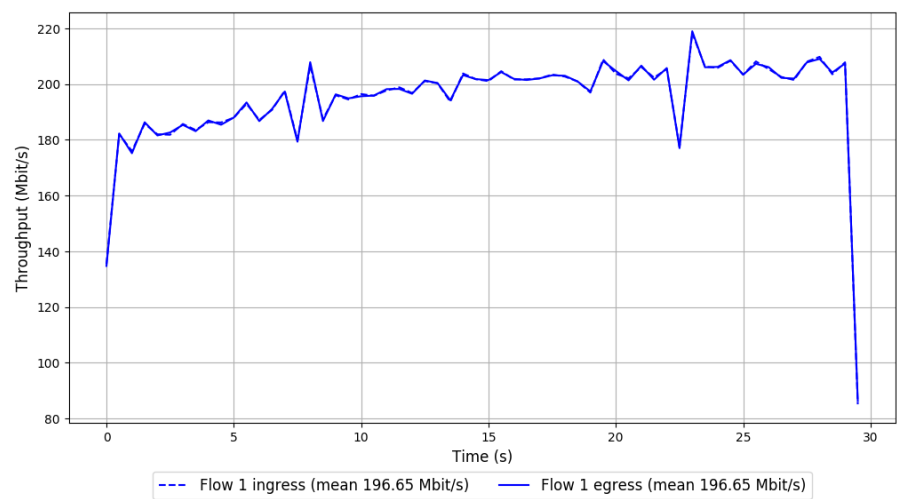
-- Flow 1:

Average throughput: 196.65 Mbit/s

95th percentile per-packet one-way delay: 2.391 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-10-10 22:14:27

End at: 2017-10-10 22:14:57

Local clock offset: 0.478 ms

Remote clock offset: -0.012 ms

Below is generated by plot.py at 2017-10-11 02:55:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 198.55 Mbit/s

95th percentile per-packet one-way delay: 2.402 ms

Loss rate: 0.00%

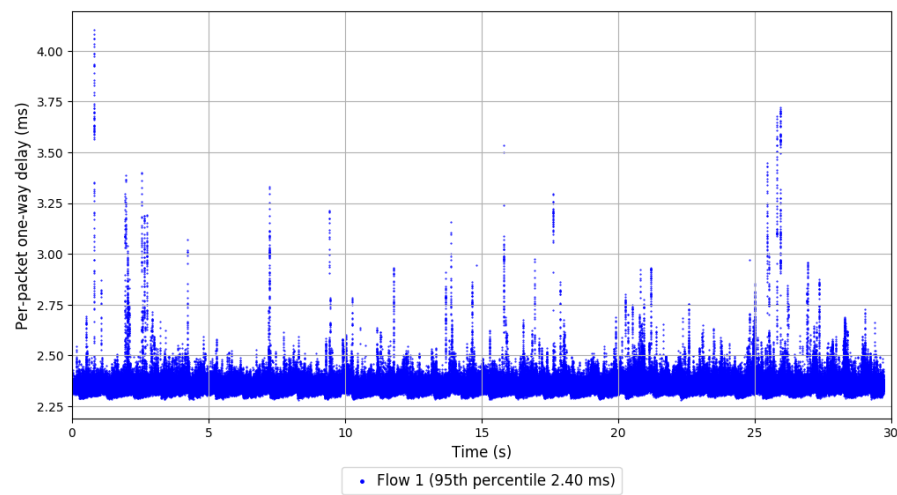
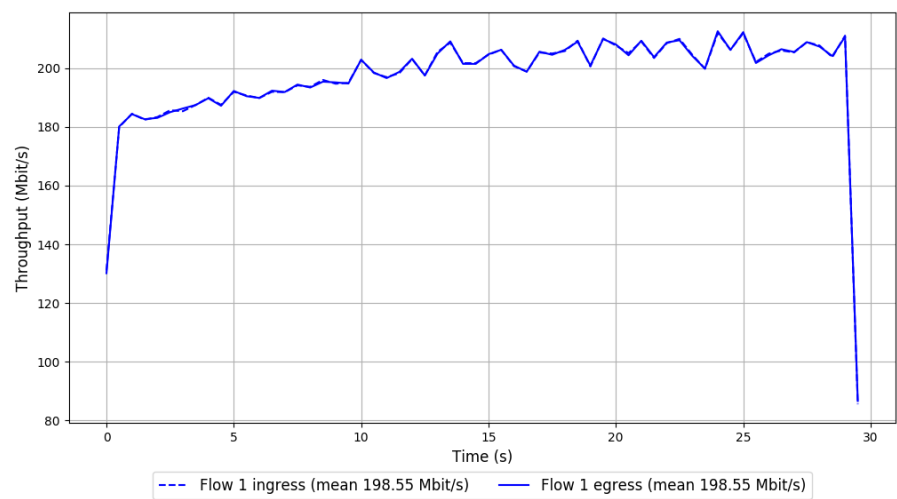
-- Flow 1:

Average throughput: 198.55 Mbit/s

95th percentile per-packet one-way delay: 2.402 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-10-10 22:32:51

End at: 2017-10-10 22:33:21

Local clock offset: 0.655 ms

Remote clock offset: 0.023 ms

Below is generated by plot.py at 2017-10-11 02:55:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.56 Mbit/s

95th percentile per-packet one-way delay: 2.308 ms

Loss rate: 0.00%

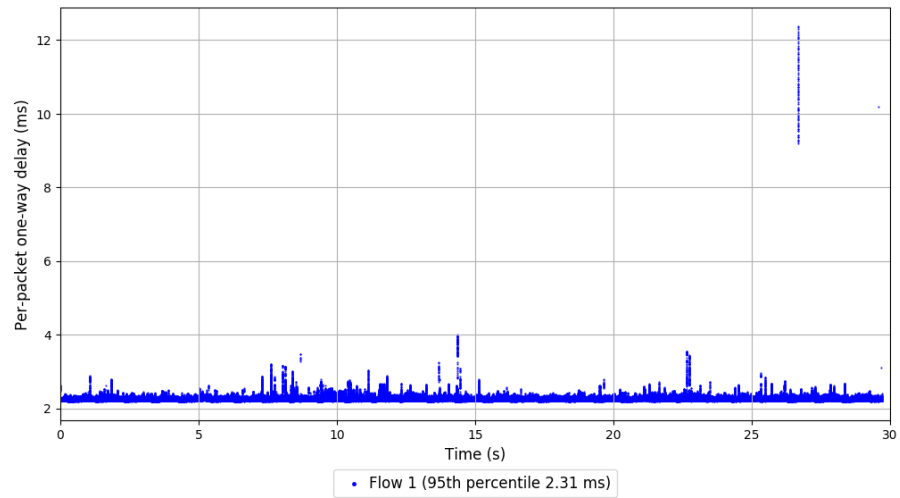
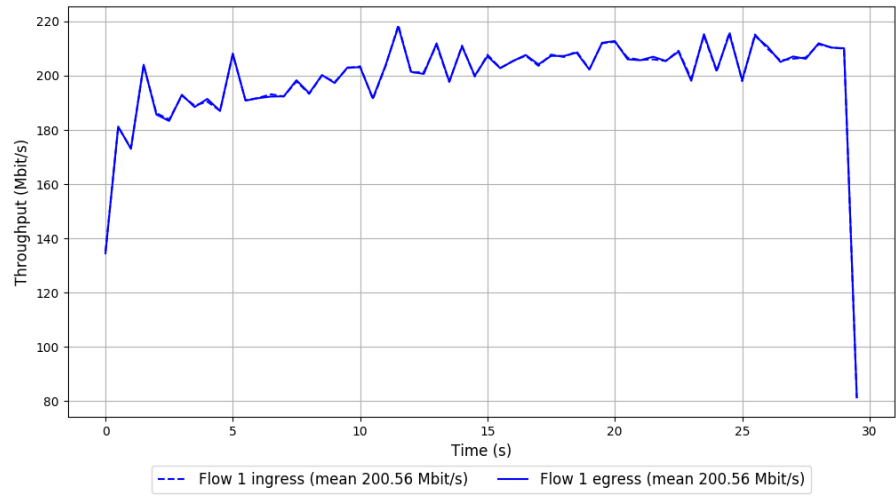
-- Flow 1:

Average throughput: 200.56 Mbit/s

95th percentile per-packet one-way delay: 2.308 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link

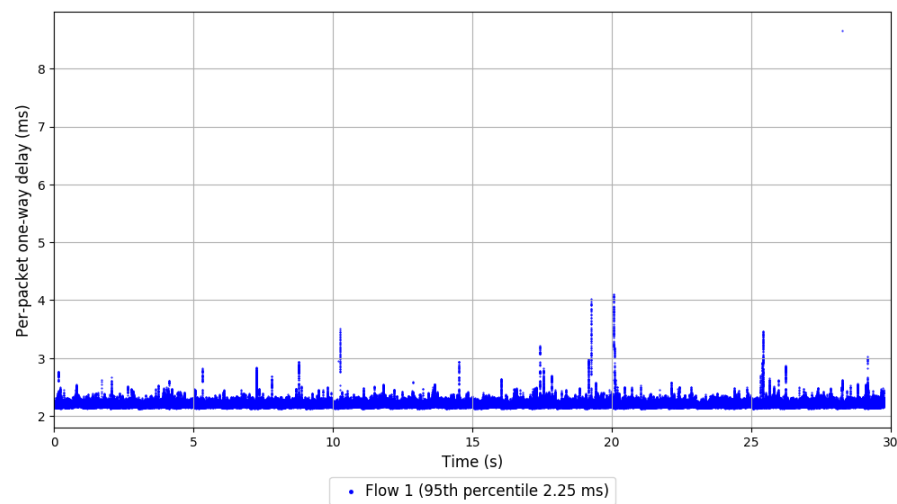
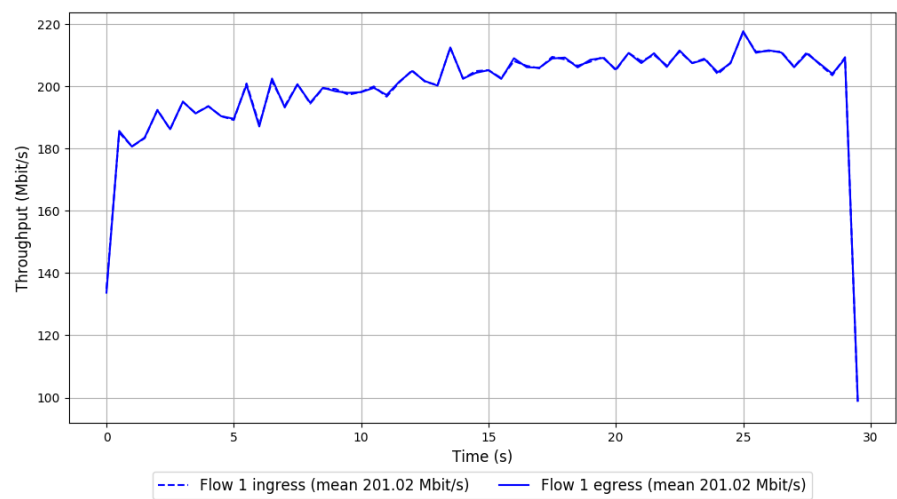


Run 8: Statistics of Indigo

Start at: 2017-10-10 22:51:10
End at: 2017-10-10 22:51:40
Local clock offset: 0.661 ms
Remote clock offset: -0.013 ms

Below is generated by plot.py at 2017-10-11 02:55:06
Datalink statistics
-- Total of 1 flow:
Average throughput: 201.02 Mbit/s
95th percentile per-packet one-way delay: 2.255 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 201.02 Mbit/s
95th percentile per-packet one-way delay: 2.255 ms
Loss rate: 0.00%

Run 8: Report of Indigo — Data Link

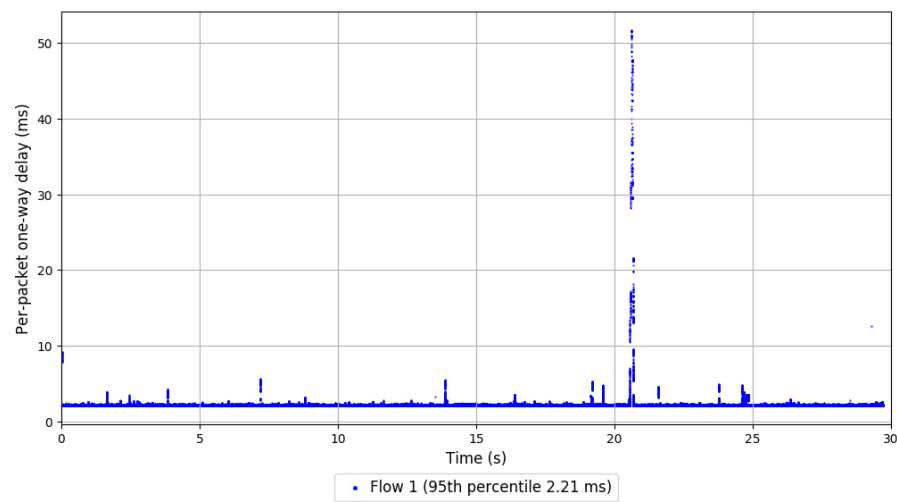
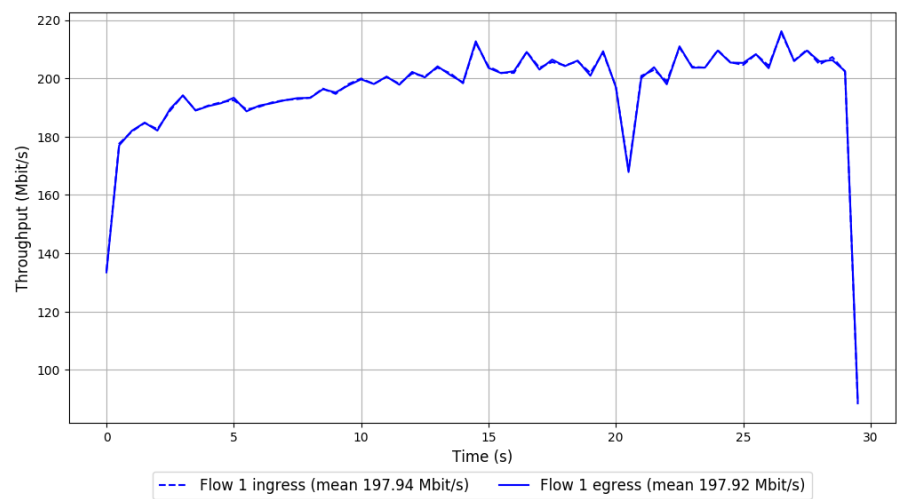


Run 9: Statistics of Indigo

Start at: 2017-10-10 23:09:44
End at: 2017-10-10 23:10:14
Local clock offset: 0.415 ms
Remote clock offset: -0.213 ms

Below is generated by plot.py at 2017-10-11 02:55:06
Datalink statistics
-- Total of 1 flow:
Average throughput: 197.92 Mbit/s
95th percentile per-packet one-way delay: 2.207 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 197.92 Mbit/s
95th percentile per-packet one-way delay: 2.207 ms
Loss rate: 0.01%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-10-10 23:28:17

End at: 2017-10-10 23:28:47

Local clock offset: 0.138 ms

Remote clock offset: -0.218 ms

Below is generated by plot.py at 2017-10-11 02:55:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.30 Mbit/s

95th percentile per-packet one-way delay: 2.276 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 200.30 Mbit/s

95th percentile per-packet one-way delay: 2.276 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

