

Pantheon Report

Generated at 2017-11-21 07:11:45 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

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

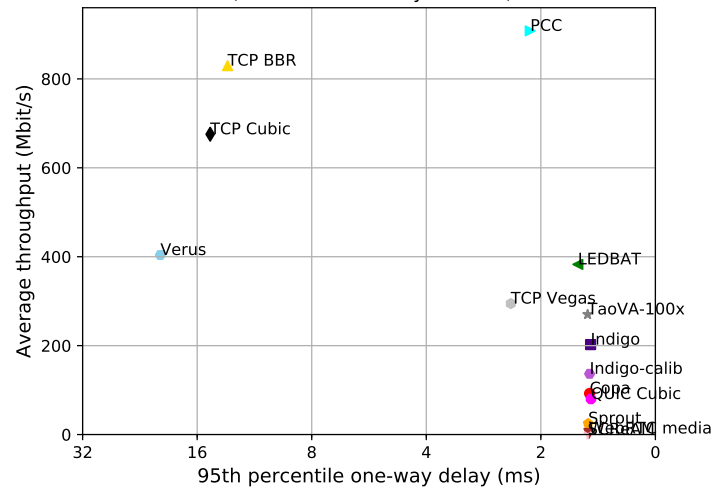
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

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

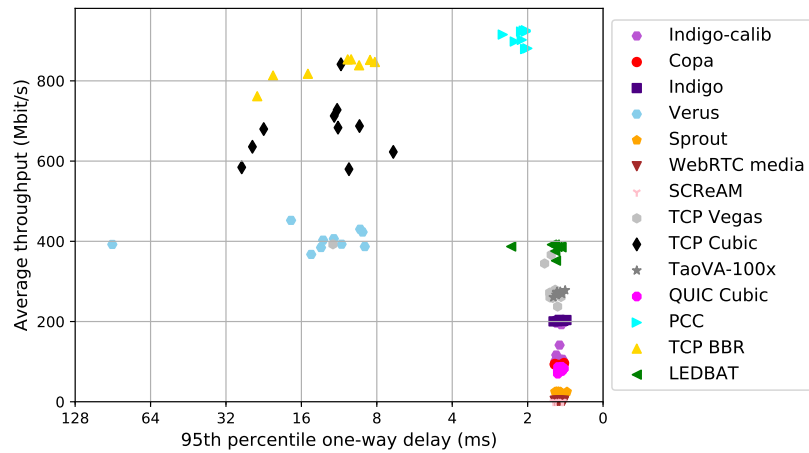
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
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 Stanford Ethernet to AWS California 1 Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from Stanford Ethernet to AWS California 1 Ethernet, 10 runs of 30s each per scheme



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	8	829.78	13.31	0.10
TCP Cubic	10	675.51	14.79	0.07
LEDBAT	9	382.71	1.35	0.08
PCC	9	908.09	2.13	0.14
QUIC Cubic	10	79.99	1.13	0.06
SCReAM	4	0.22	1.18	0.13
WebRTC media	10	2.41	1.16	0.07
Sprout	10	24.88	1.17	0.10
TaoVA-100x	8	270.18	1.18	0.07
TCP Vegas	10	294.61	2.40	0.07
Verus	10	403.87	20.00	0.25
Copa	10	92.44	1.15	0.07
Indigo	10	202.30	1.13	0.06
Indigo-calib	10	136.65	1.15	0.08

Run 1: Statistics of TCP BBR

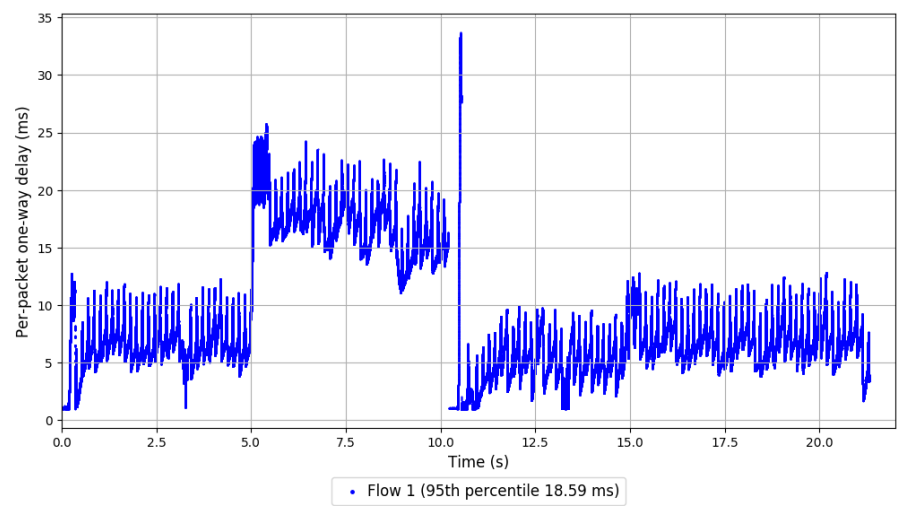
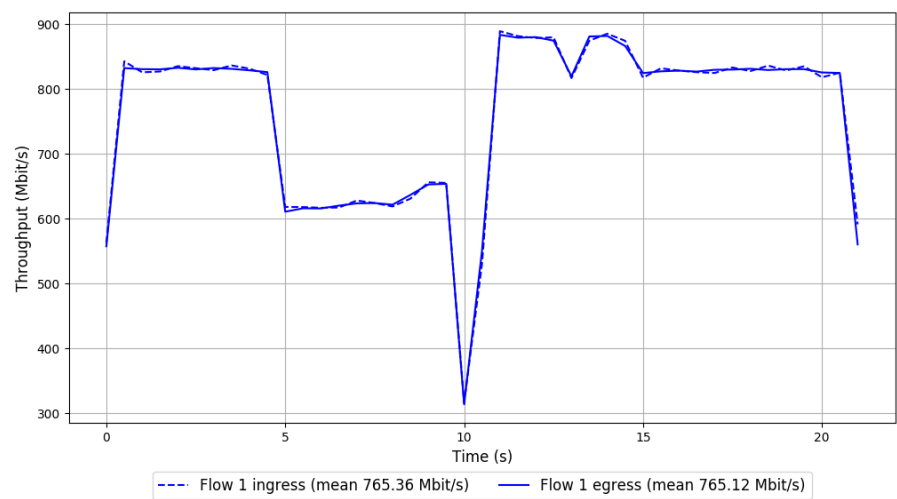
Start at: 2017-11-20 23:31:02

End at: 2017-11-20 23:31:32

Local clock offset: 1.783 ms

Remote clock offset: -2.643 ms

Run 1: Report of TCP BBR — Data Link

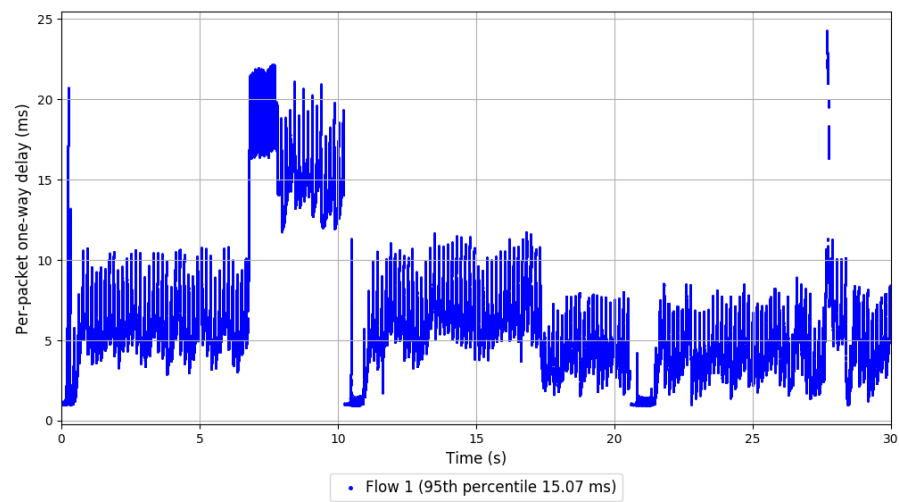
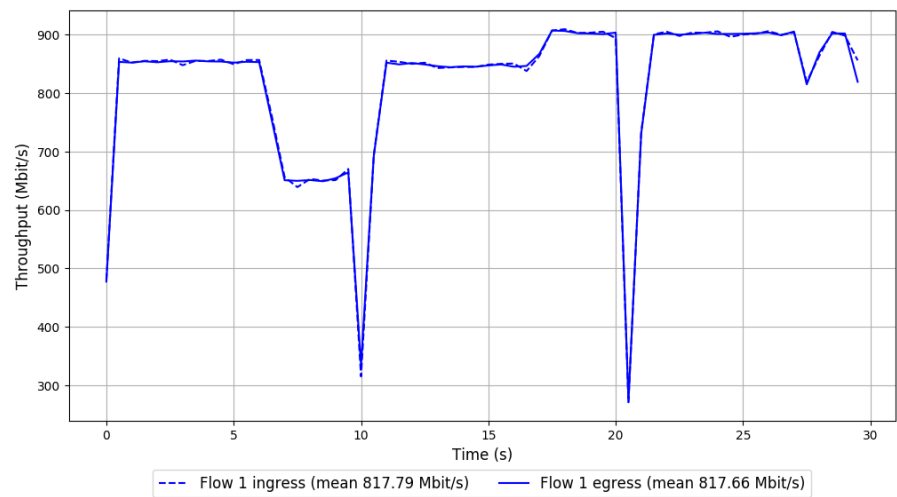


Run 2: Statistics of TCP BBR

Start at: 2017-11-20 23:50:19
End at: 2017-11-20 23:50:49
Local clock offset: 1.074 ms
Remote clock offset: -2.615 ms

Below is generated by plot.py at 2017-11-21 06:03:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 817.66 Mbit/s
95th percentile per-packet one-way delay: 15.075 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 817.66 Mbit/s
95th percentile per-packet one-way delay: 15.075 ms
Loss rate: 0.08%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-21 00:09:23

End at: 2017-11-21 00:09:53

Local clock offset: 1.879 ms

Remote clock offset: -2.193 ms

Below is generated by plot.py at 2017-11-21 06:03:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 853.58 Mbit/s

95th percentile per-packet one-way delay: 10.456 ms

Loss rate: 0.10%

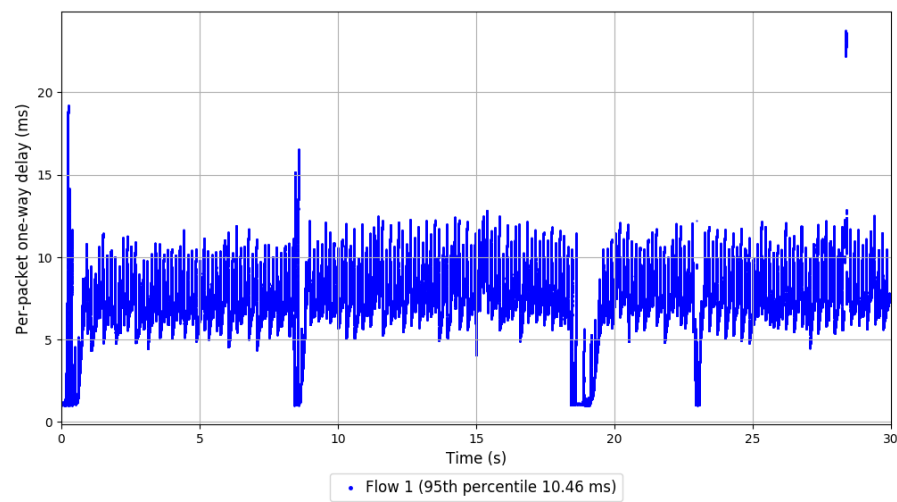
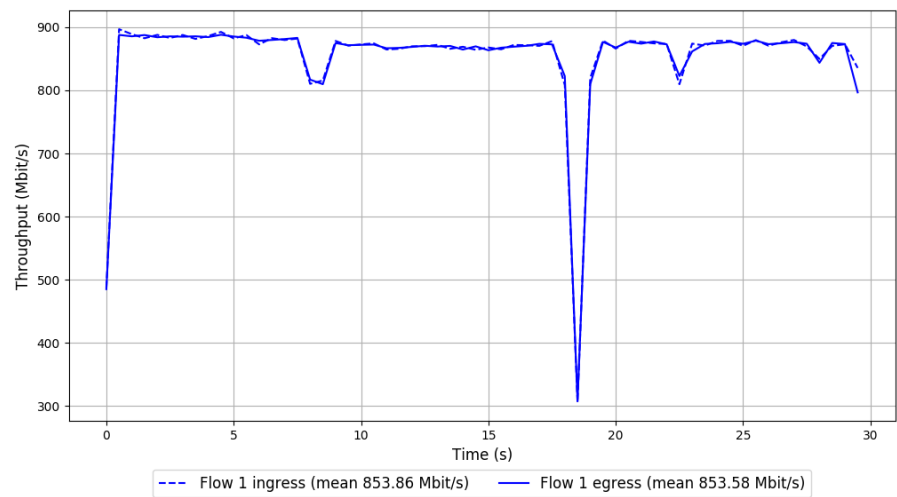
-- Flow 1:

Average throughput: 853.58 Mbit/s

95th percentile per-packet one-way delay: 10.456 ms

Loss rate: 0.10%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

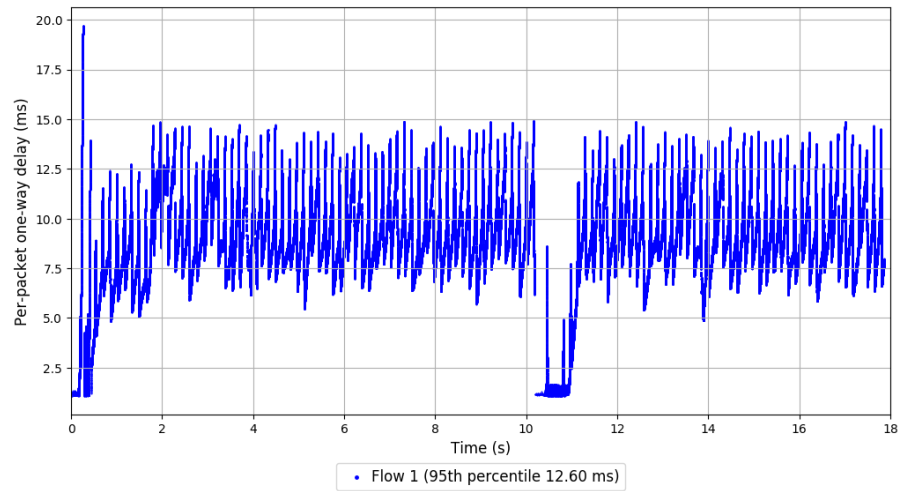
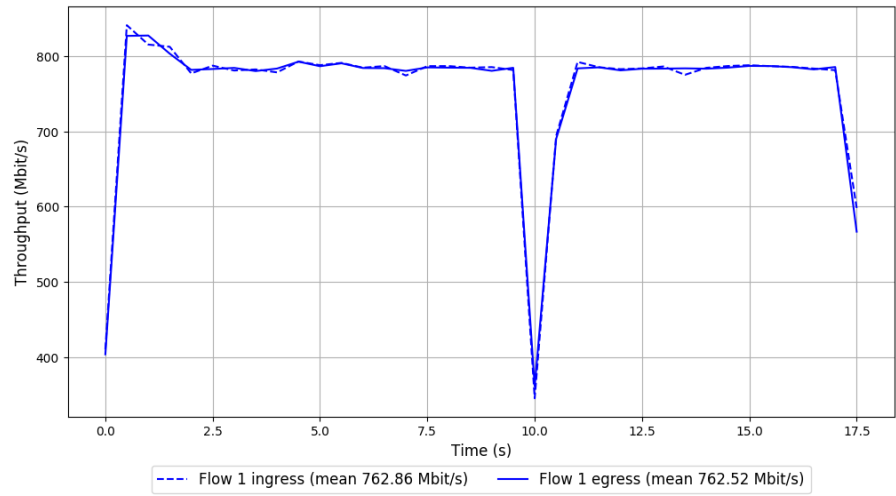
Start at: 2017-11-21 00:28:46

End at: 2017-11-21 00:29:16

Local clock offset: 1.312 ms

Remote clock offset: -1.893 ms

Run 4: Report of TCP BBR — Data Link

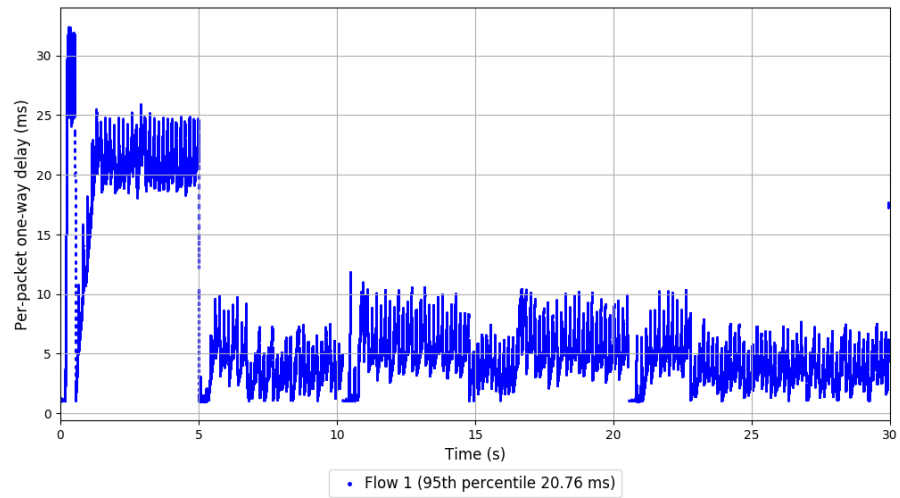
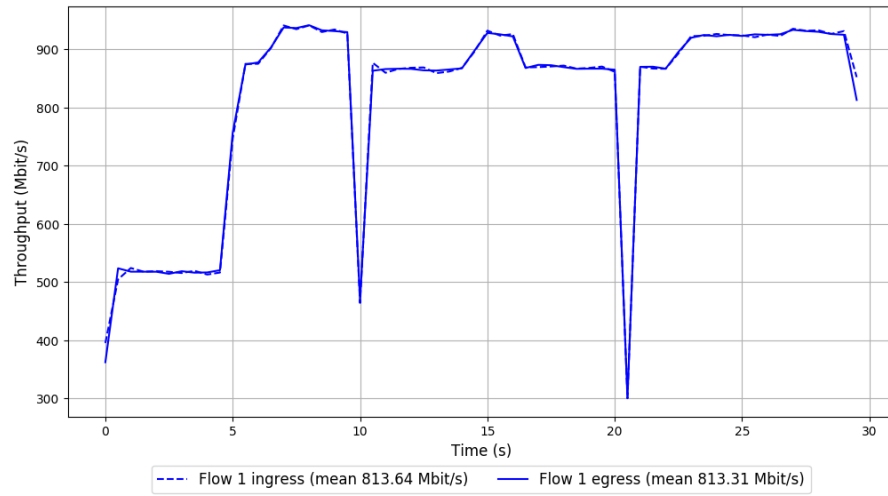


Run 5: Statistics of TCP BBR

Start at: 2017-11-21 00:47:59
End at: 2017-11-21 00:48:29
Local clock offset: 0.953 ms
Remote clock offset: -1.538 ms

Below is generated by plot.py at 2017-11-21 06:03:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 813.31 Mbit/s
95th percentile per-packet one-way delay: 20.759 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 813.31 Mbit/s
95th percentile per-packet one-way delay: 20.759 ms
Loss rate: 0.11%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-21 01:07:25

End at: 2017-11-21 01:07:55

Local clock offset: 0.521 ms

Remote clock offset: -1.293 ms

Below is generated by plot.py at 2017-11-21 06:03:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 853.76 Mbit/s

95th percentile per-packet one-way delay: 10.132 ms

Loss rate: 0.11%

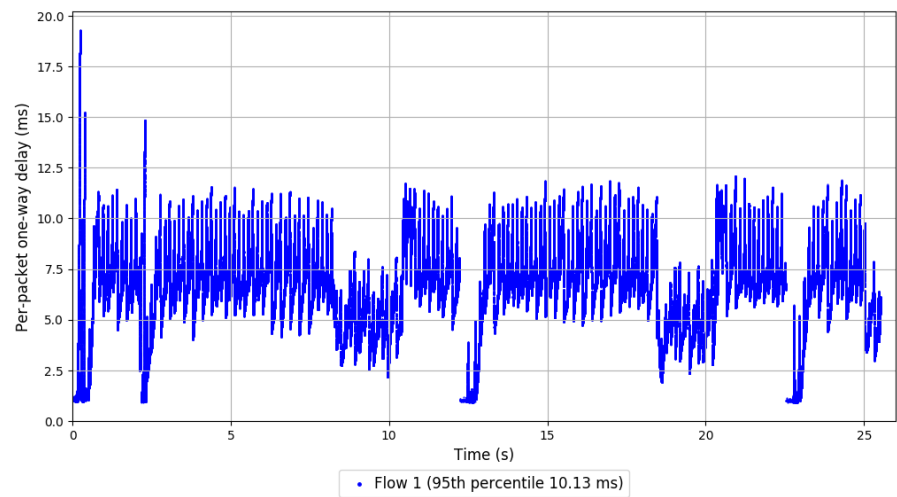
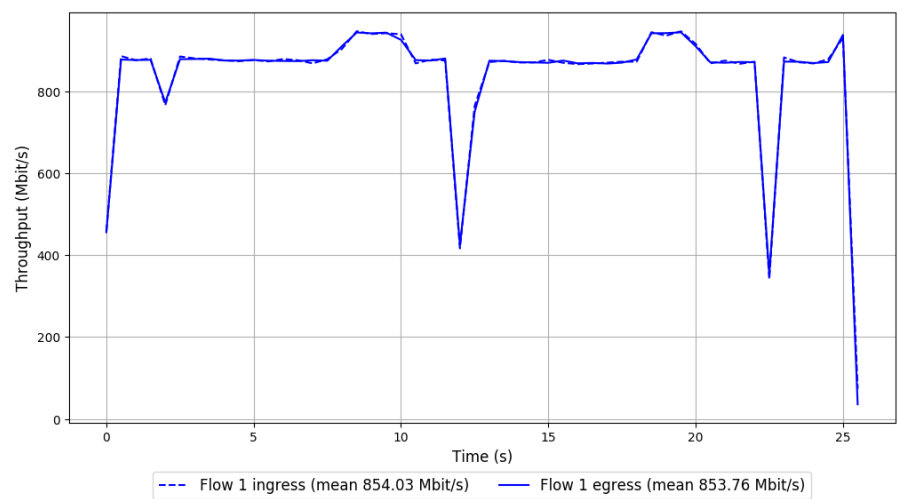
-- Flow 1:

Average throughput: 853.76 Mbit/s

95th percentile per-packet one-way delay: 10.132 ms

Loss rate: 0.11%

Run 6: Report of TCP BBR — Data Link

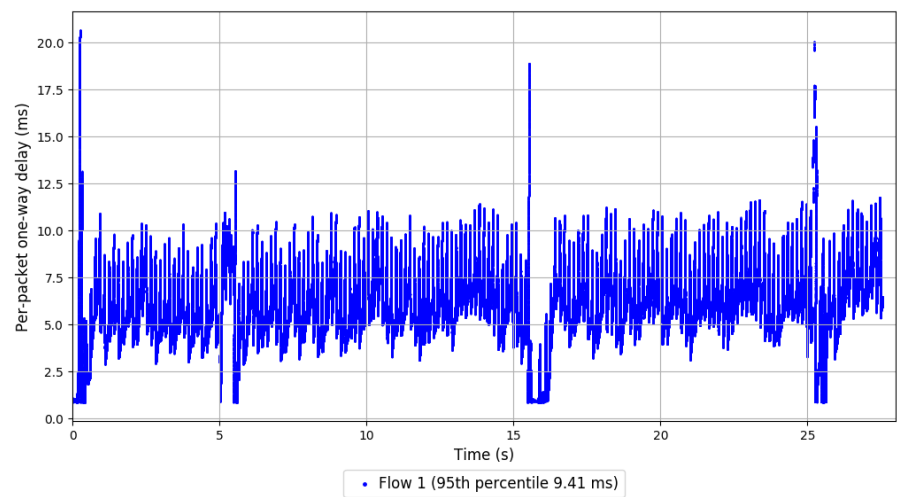
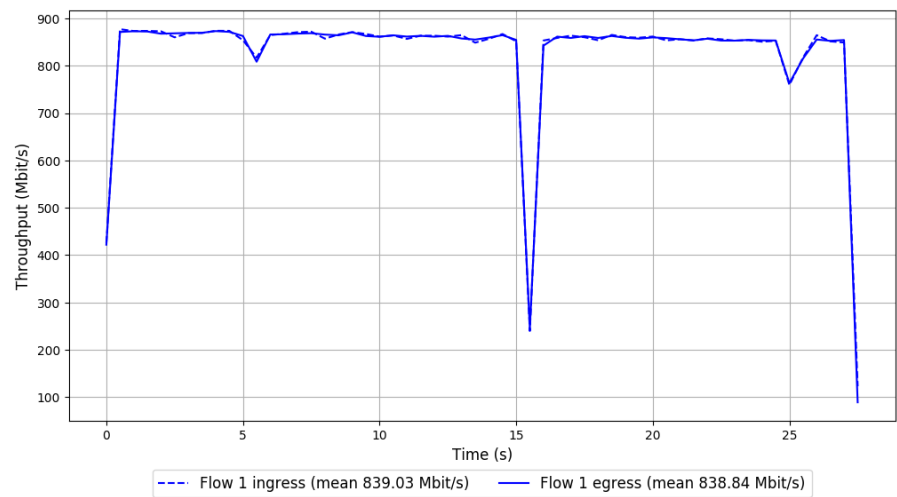


Run 7: Statistics of TCP BBR

Start at: 2017-11-21 01:26:49
End at: 2017-11-21 01:27:19
Local clock offset: 0.818 ms
Remote clock offset: -0.692 ms

Below is generated by plot.py at 2017-11-21 06:03:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 838.84 Mbit/s
95th percentile per-packet one-way delay: 9.412 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 838.84 Mbit/s
95th percentile per-packet one-way delay: 9.412 ms
Loss rate: 0.10%

Run 7: Report of TCP BBR — Data Link

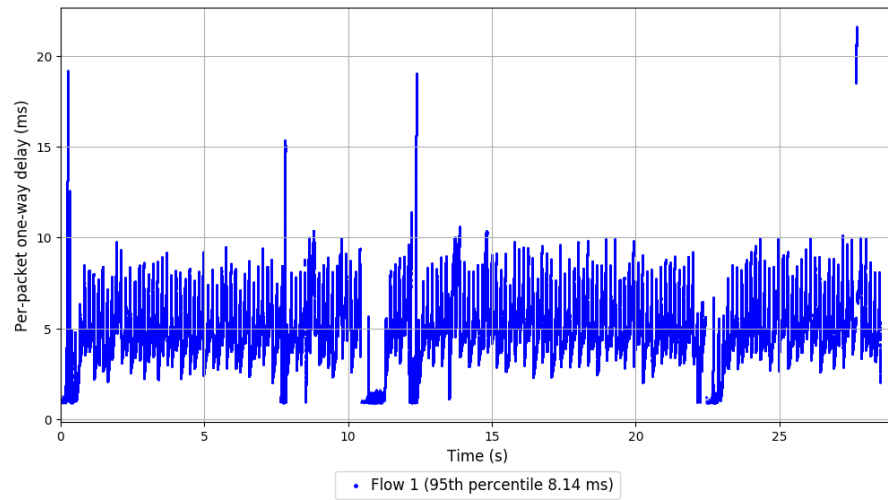
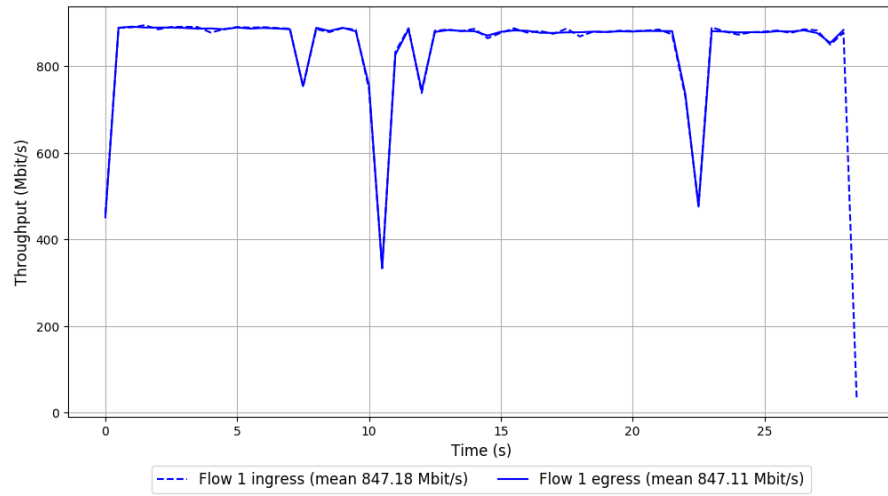


Run 8: Statistics of TCP BBR

Start at: 2017-11-21 01:46:13
End at: 2017-11-21 01:46:43
Local clock offset: 1.558 ms
Remote clock offset: -0.793 ms

Below is generated by plot.py at 2017-11-21 06:03:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 847.11 Mbit/s
95th percentile per-packet one-way delay: 8.145 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 847.11 Mbit/s
95th percentile per-packet one-way delay: 8.145 ms
Loss rate: 0.08%

Run 8: Report of TCP BBR — Data Link

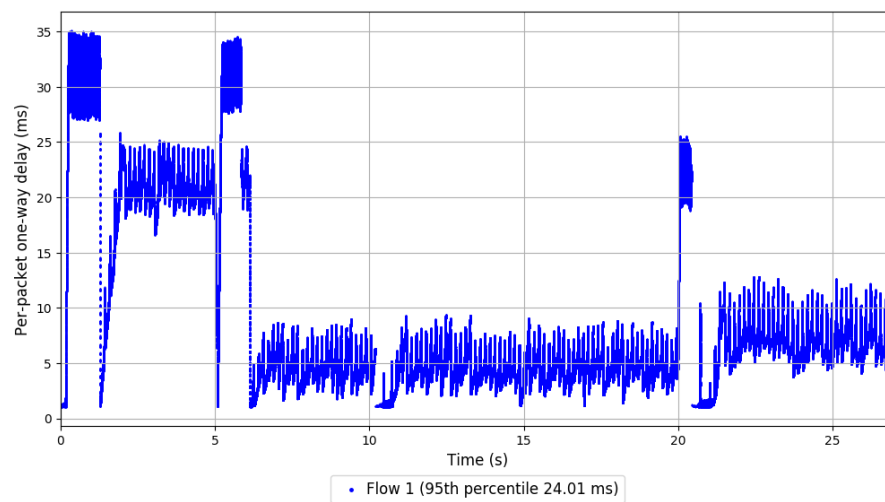
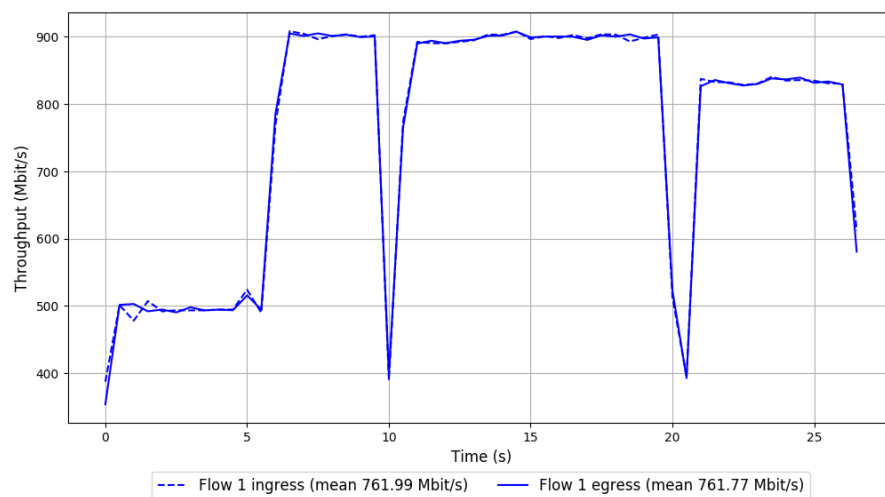


Run 9: Statistics of TCP BBR

Start at: 2017-11-21 02:05:11
End at: 2017-11-21 02:05:41
Local clock offset: 2.146 ms
Remote clock offset: -0.777 ms

Below is generated by plot.py at 2017-11-21 06:06:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 761.77 Mbit/s
95th percentile per-packet one-way delay: 24.013 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 761.77 Mbit/s
95th percentile per-packet one-way delay: 24.013 ms
Loss rate: 0.10%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-21 02:24:36

End at: 2017-11-21 02:25:06

Local clock offset: 2.209 ms

Remote clock offset: -0.784 ms

Below is generated by plot.py at 2017-11-21 06:11:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 852.24 Mbit/s

95th percentile per-packet one-way delay: 8.512 ms

Loss rate: 0.09%

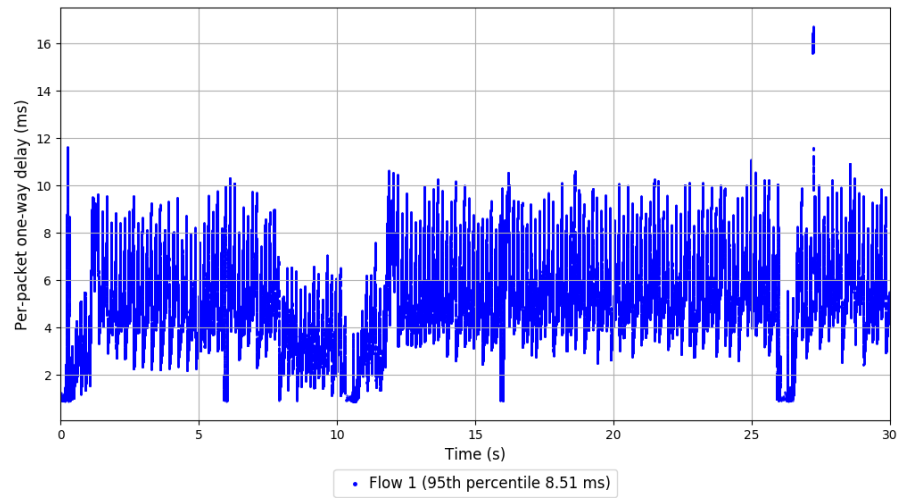
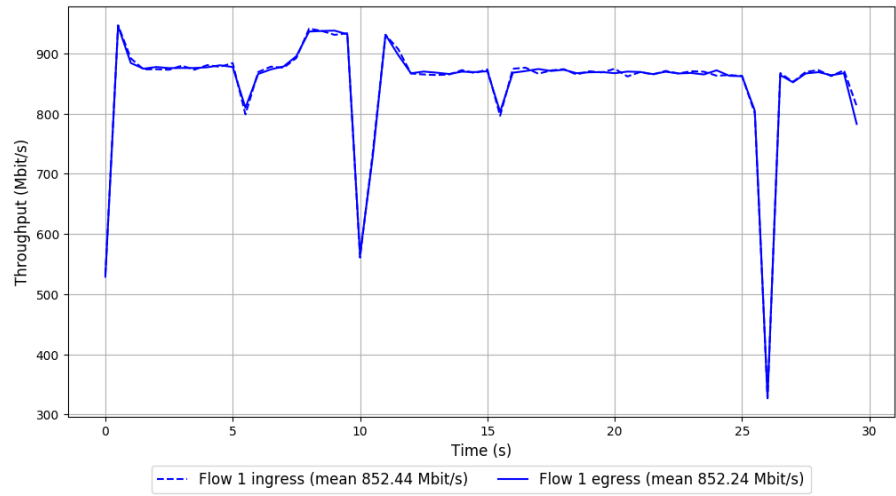
-- Flow 1:

Average throughput: 852.24 Mbit/s

95th percentile per-packet one-way delay: 8.512 ms

Loss rate: 0.09%

Run 10: Report of TCP BBR — Data Link

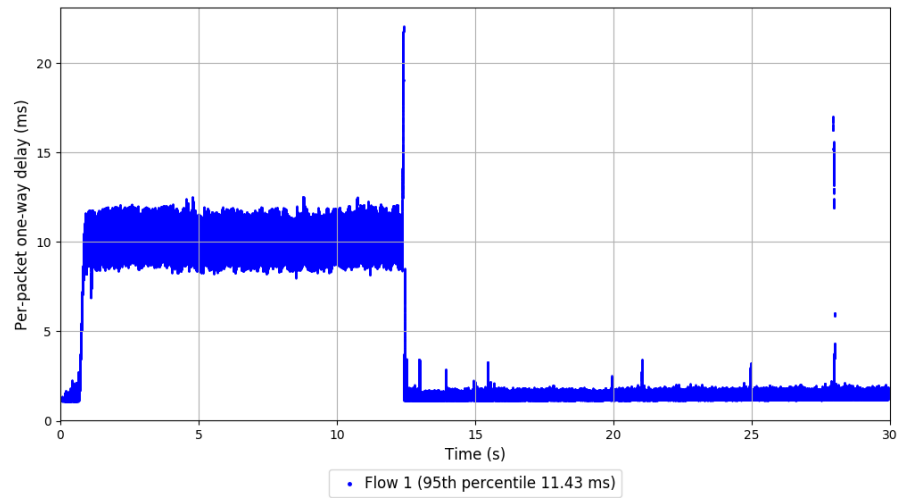
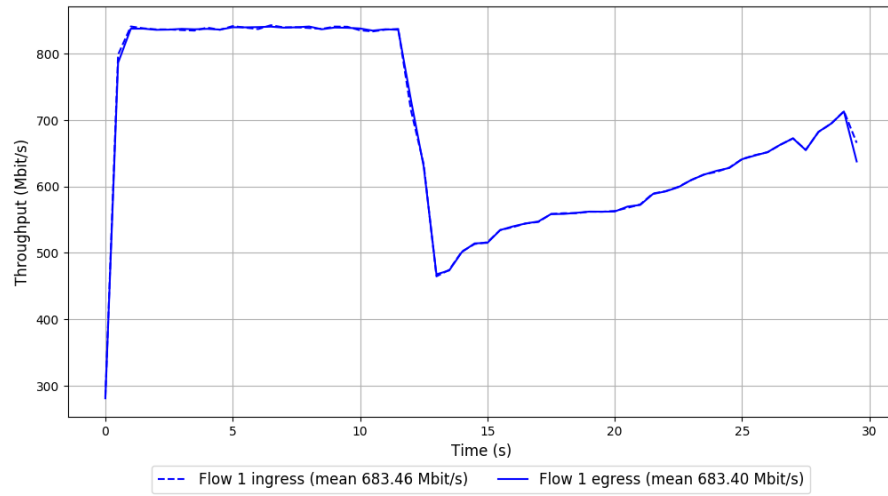


Run 1: Statistics of TCP Cubic

Start at: 2017-11-20 23:28:09
End at: 2017-11-20 23:28:39
Local clock offset: 2.269 ms
Remote clock offset: -2.694 ms

Below is generated by plot.py at 2017-11-21 06:12:07
Datalink statistics
-- Total of 1 flow:
Average throughput: 683.40 Mbit/s
95th percentile per-packet one-way delay: 11.428 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 683.40 Mbit/s
95th percentile per-packet one-way delay: 11.428 ms
Loss rate: 0.08%

Run 1: Report of TCP Cubic — Data Link

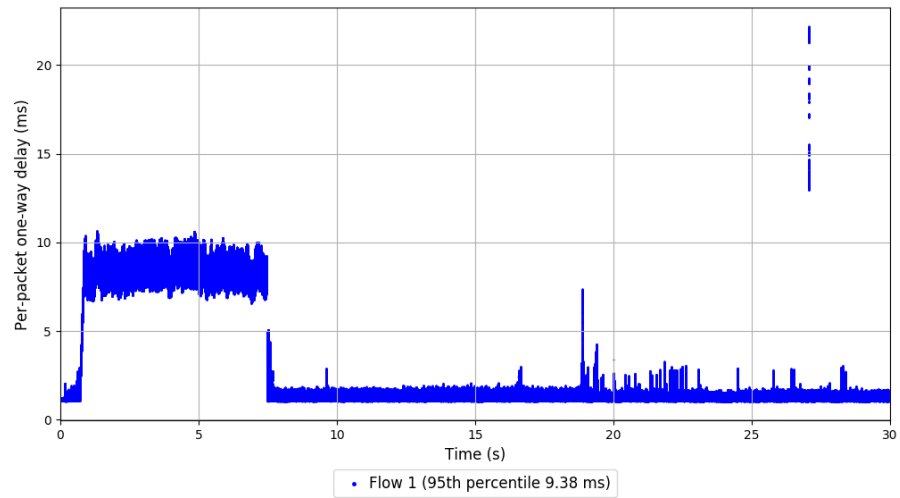
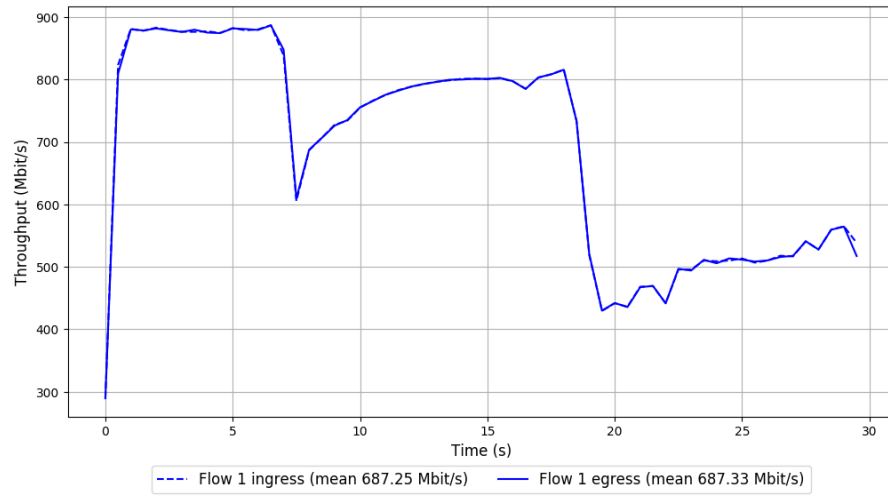


Run 2: Statistics of TCP Cubic

Start at: 2017-11-20 23:47:24
End at: 2017-11-20 23:47:54
Local clock offset: 1.11 ms
Remote clock offset: -2.627 ms

Below is generated by plot.py at 2017-11-21 06:12:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 687.33 Mbit/s
95th percentile per-packet one-way delay: 9.380 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 687.33 Mbit/s
95th percentile per-packet one-way delay: 9.380 ms
Loss rate: 0.06%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-21 00:06:34

End at: 2017-11-21 00:07:04

Local clock offset: 1.845 ms

Remote clock offset: -2.25 ms

Below is generated by plot.py at 2017-11-21 06:12:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 584.47 Mbit/s

95th percentile per-packet one-way delay: 27.690 ms

Loss rate: 0.08%

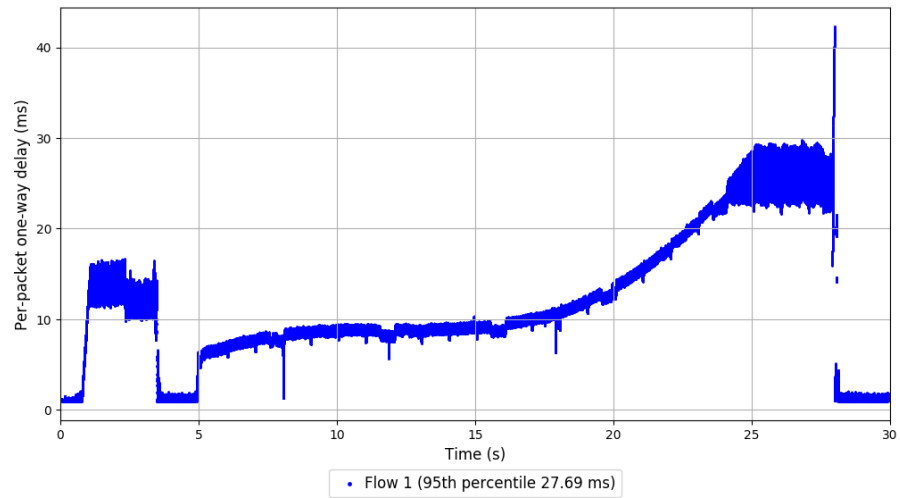
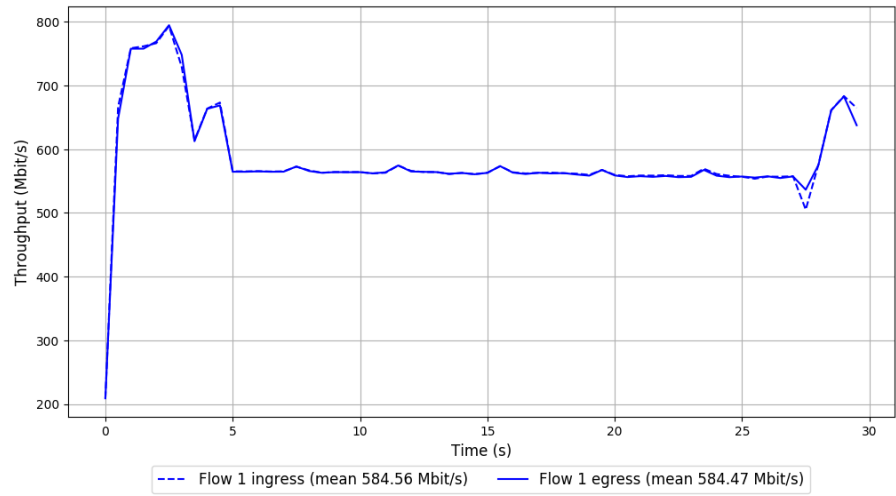
-- Flow 1:

Average throughput: 584.47 Mbit/s

95th percentile per-packet one-way delay: 27.690 ms

Loss rate: 0.08%

Run 3: Report of TCP Cubic — Data Link

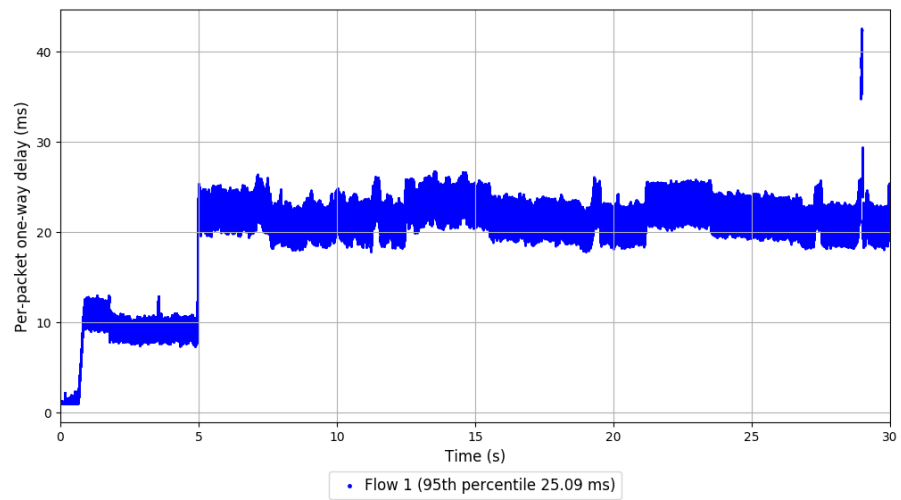
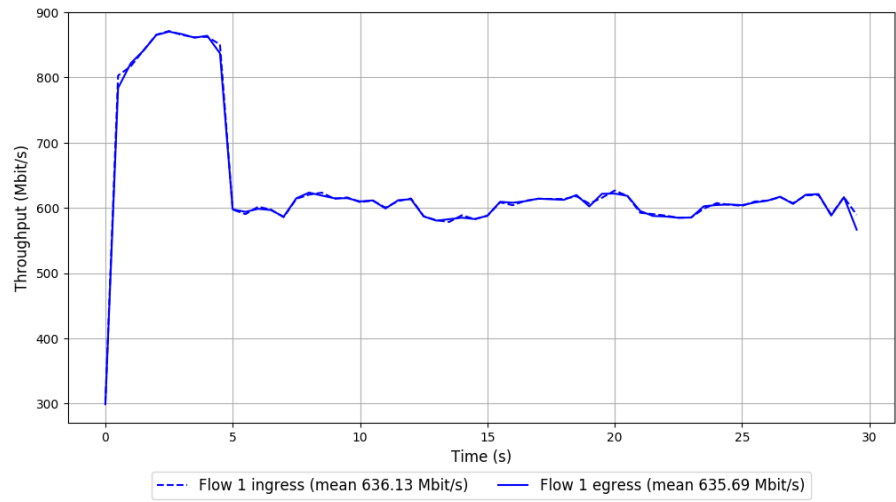


Run 4: Statistics of TCP Cubic

Start at: 2017-11-21 00:25:54
End at: 2017-11-21 00:26:24
Local clock offset: 1.452 ms
Remote clock offset: -1.891 ms

Below is generated by plot.py at 2017-11-21 06:12:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 635.69 Mbit/s
95th percentile per-packet one-way delay: 25.095 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 635.69 Mbit/s
95th percentile per-packet one-way delay: 25.095 ms
Loss rate: 0.13%

Run 4: Report of TCP Cubic — Data Link

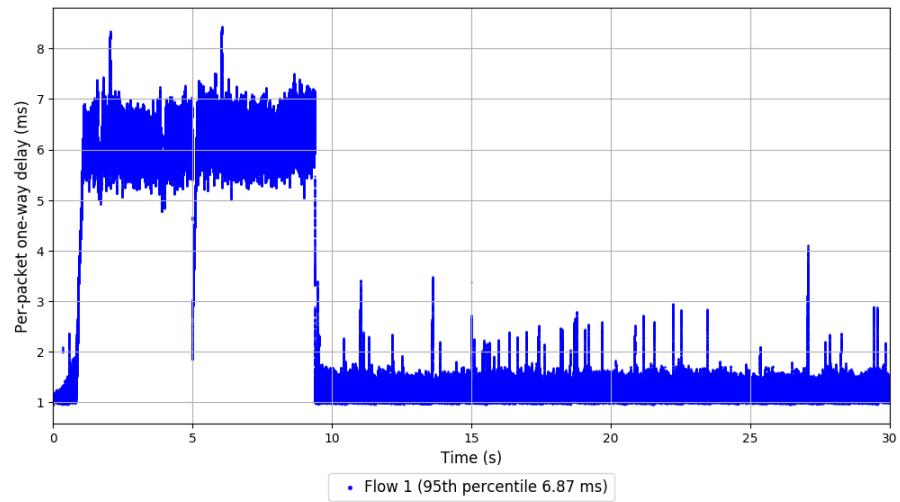
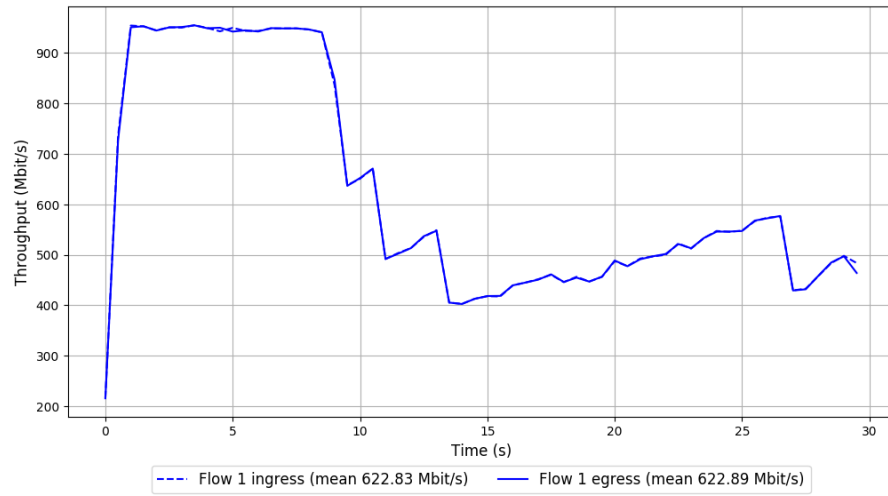


Run 5: Statistics of TCP Cubic

Start at: 2017-11-21 00:45:07
End at: 2017-11-21 00:45:37
Local clock offset: 0.996 ms
Remote clock offset: -1.491 ms

Below is generated by plot.py at 2017-11-21 06:12:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 622.89 Mbit/s
95th percentile per-packet one-way delay: 6.874 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 622.89 Mbit/s
95th percentile per-packet one-way delay: 6.874 ms
Loss rate: 0.06%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-21 01:04:30

End at: 2017-11-21 01:05:00

Local clock offset: 0.445 ms

Remote clock offset: -1.36 ms

Below is generated by plot.py at 2017-11-21 06:13:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 712.68 Mbit/s

95th percentile per-packet one-way delay: 11.834 ms

Loss rate: 0.04%

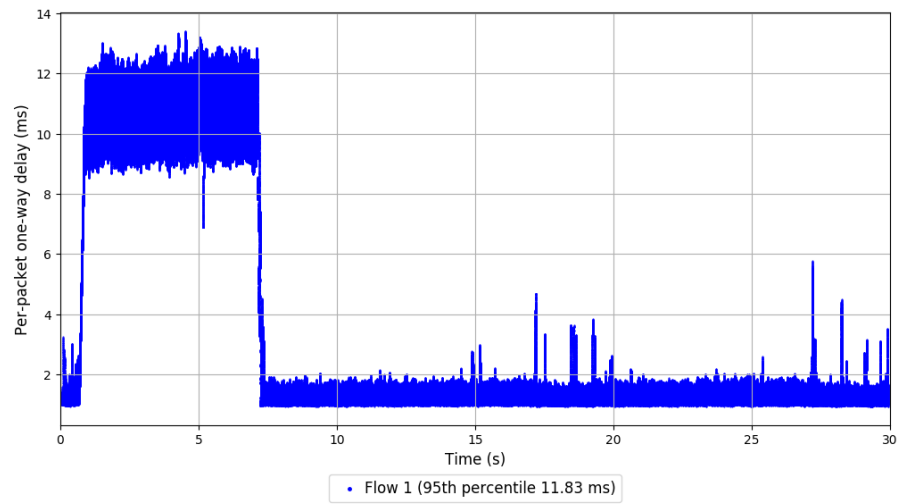
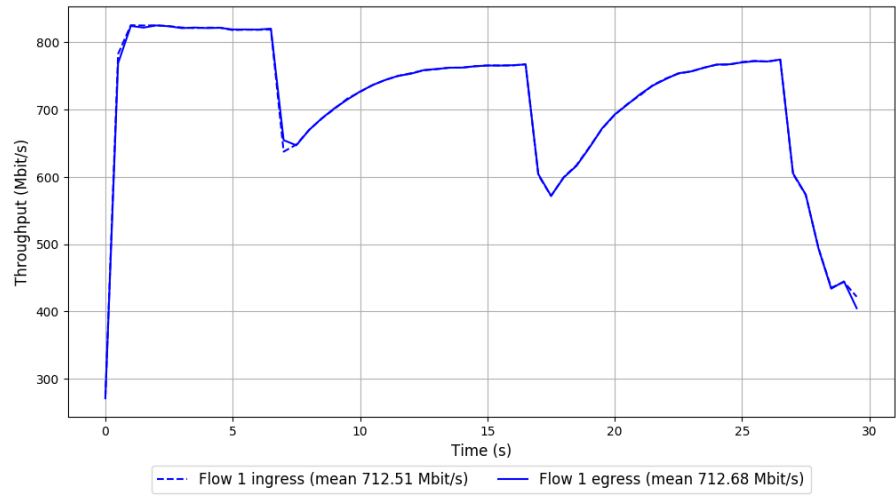
-- Flow 1:

Average throughput: 712.68 Mbit/s

95th percentile per-packet one-way delay: 11.834 ms

Loss rate: 0.04%

Run 6: Report of TCP Cubic — Data Link

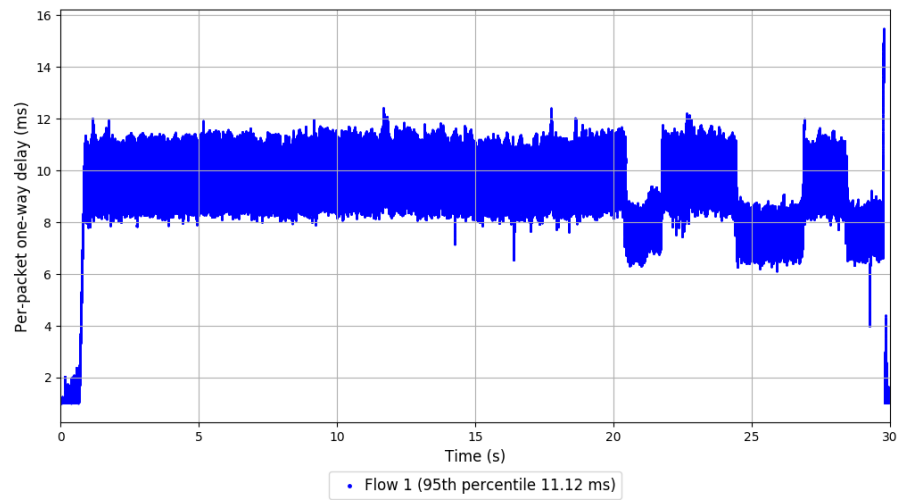
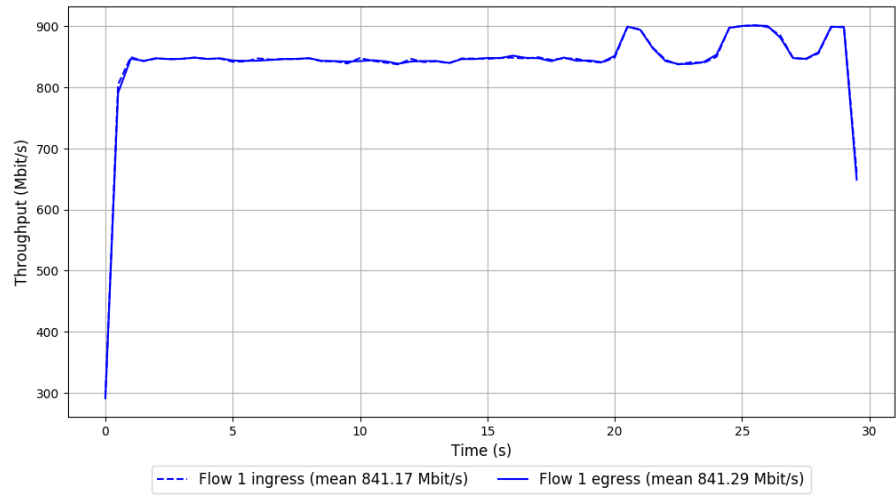


Run 7: Statistics of TCP Cubic

Start at: 2017-11-21 01:23:49
End at: 2017-11-21 01:24:19
Local clock offset: 0.828 ms
Remote clock offset: -0.817 ms

Below is generated by plot.py at 2017-11-21 06:19:48
Datalink statistics
-- Total of 1 flow:
Average throughput: 841.29 Mbit/s
95th percentile per-packet one-way delay: 11.122 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 841.29 Mbit/s
95th percentile per-packet one-way delay: 11.122 ms
Loss rate: 0.05%

Run 7: Report of TCP Cubic — Data Link

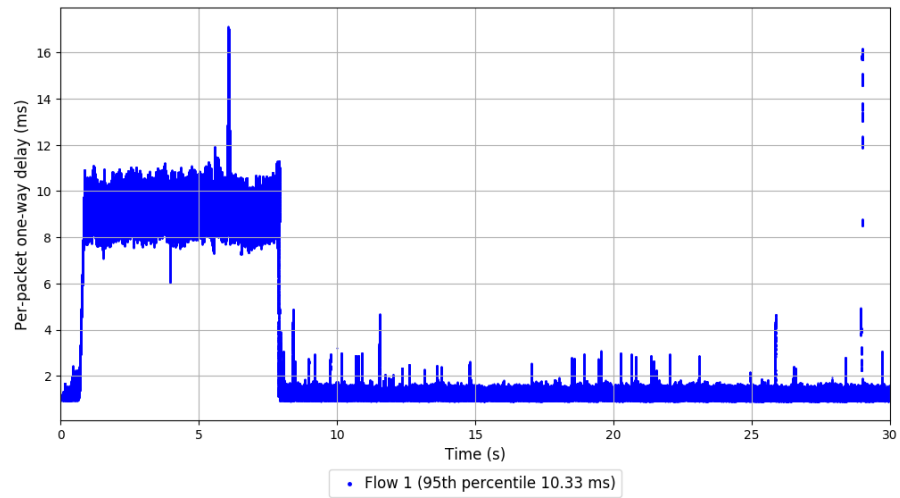
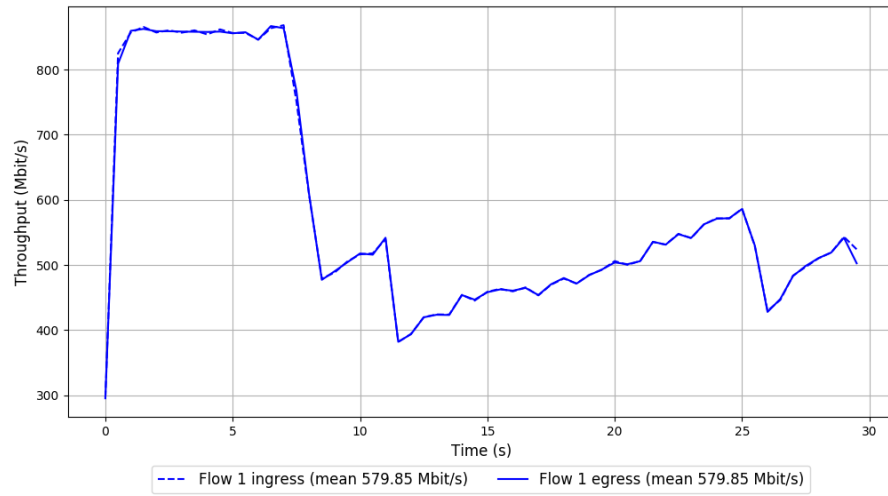


Run 8: Statistics of TCP Cubic

Start at: 2017-11-21 01:43:24
End at: 2017-11-21 01:43:54
Local clock offset: 1.497 ms
Remote clock offset: -0.736 ms

Below is generated by plot.py at 2017-11-21 06:19:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 579.85 Mbit/s
95th percentile per-packet one-way delay: 10.333 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 579.85 Mbit/s
95th percentile per-packet one-way delay: 10.333 ms
Loss rate: 0.07%

Run 8: Report of TCP Cubic — Data Link

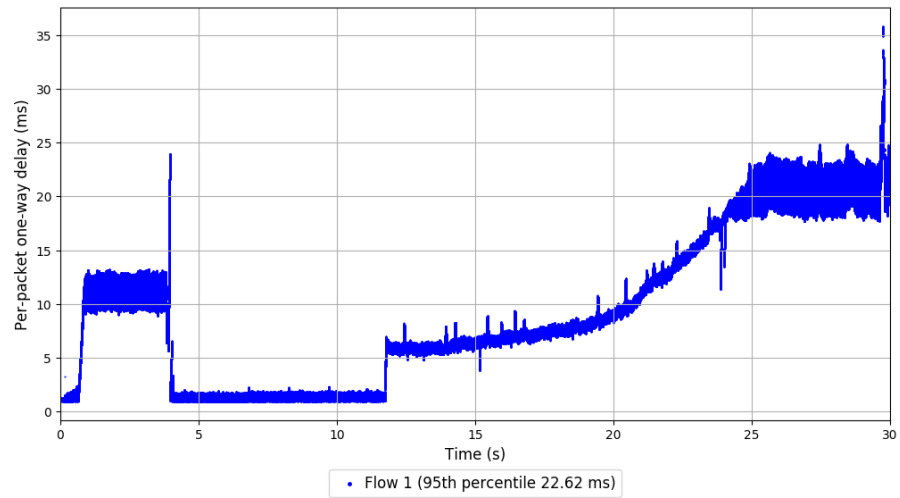
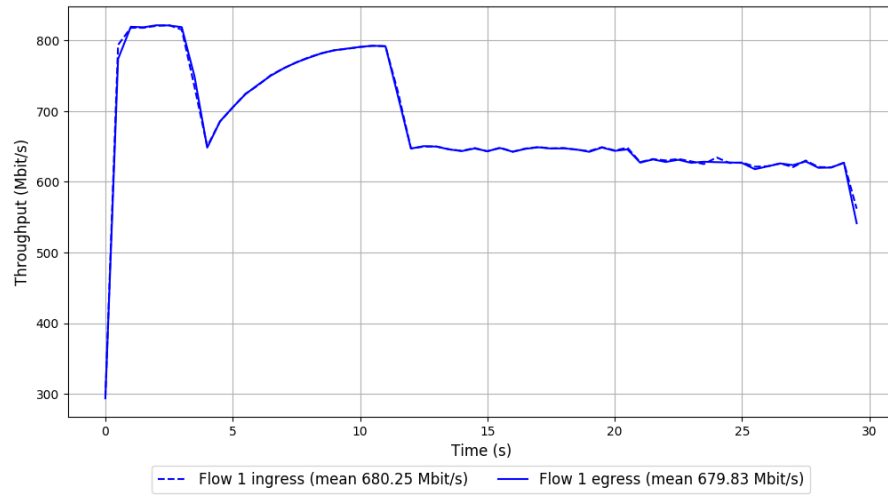


Run 9: Statistics of TCP Cubic

Start at: 2017-11-21 02:02:18
End at: 2017-11-21 02:02:48
Local clock offset: 2.1 ms
Remote clock offset: -0.706 ms

Below is generated by plot.py at 2017-11-21 06:21:21
Datalink statistics
-- Total of 1 flow:
Average throughput: 679.83 Mbit/s
95th percentile per-packet one-way delay: 22.622 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 679.83 Mbit/s
95th percentile per-packet one-way delay: 22.622 ms
Loss rate: 0.12%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-21 02:21:40

End at: 2017-11-21 02:22:10

Local clock offset: 2.277 ms

Remote clock offset: -0.817 ms

Below is generated by plot.py at 2017-11-21 06:22:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 727.66 Mbit/s

95th percentile per-packet one-way delay: 11.519 ms

Loss rate: 0.05%

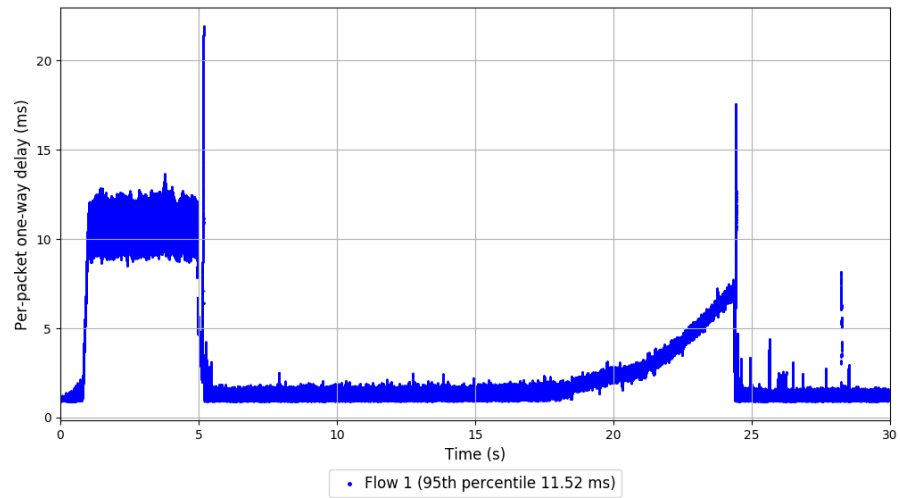
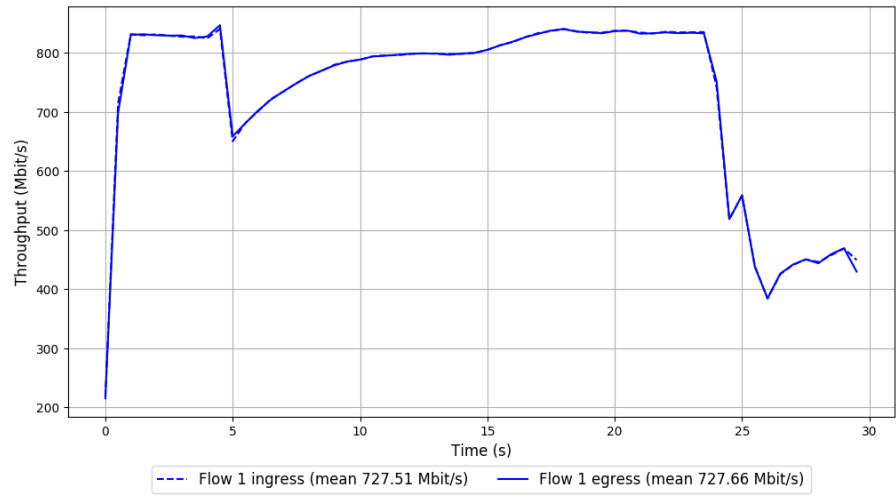
-- Flow 1:

Average throughput: 727.66 Mbit/s

95th percentile per-packet one-way delay: 11.519 ms

Loss rate: 0.05%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of LEDBAT

Start at: 2017-11-20 23:32:34

End at: 2017-11-20 23:33:04

Local clock offset: 1.696 ms

Remote clock offset: -2.632 ms

Below is generated by plot.py at 2017-11-21 06:22:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 351.70 Mbit/s

95th percentile per-packet one-way delay: 1.249 ms

Loss rate: 0.09%

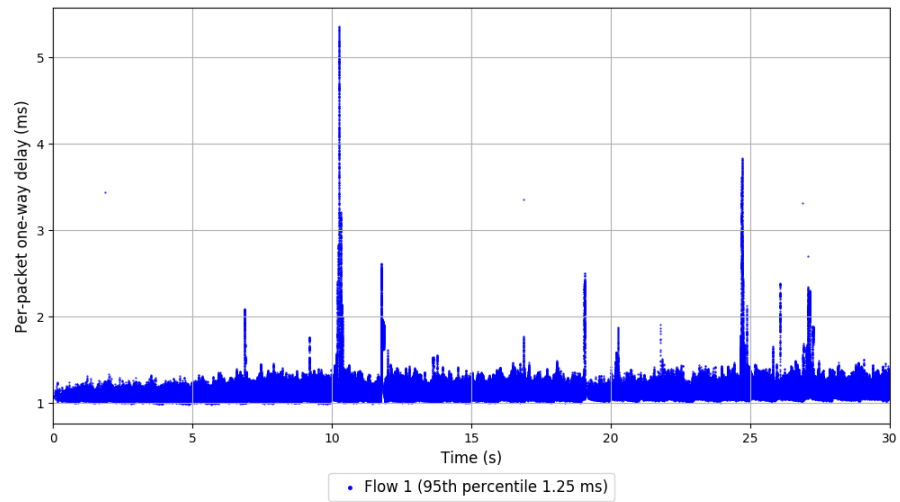
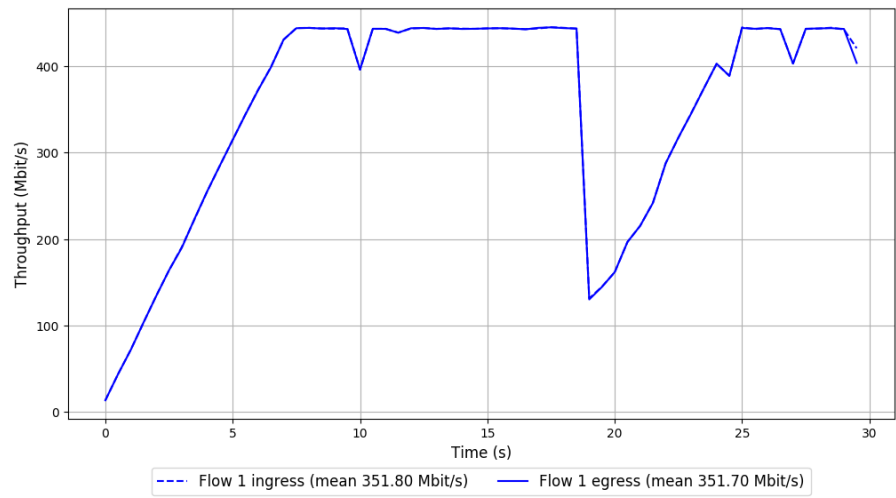
-- Flow 1:

Average throughput: 351.70 Mbit/s

95th percentile per-packet one-way delay: 1.249 ms

Loss rate: 0.09%

Run 1: Report of LEDBAT — Data Link

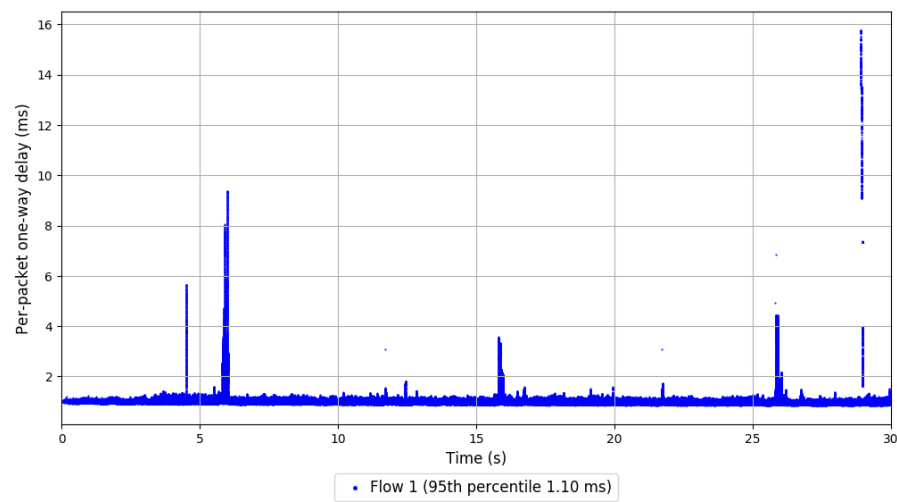
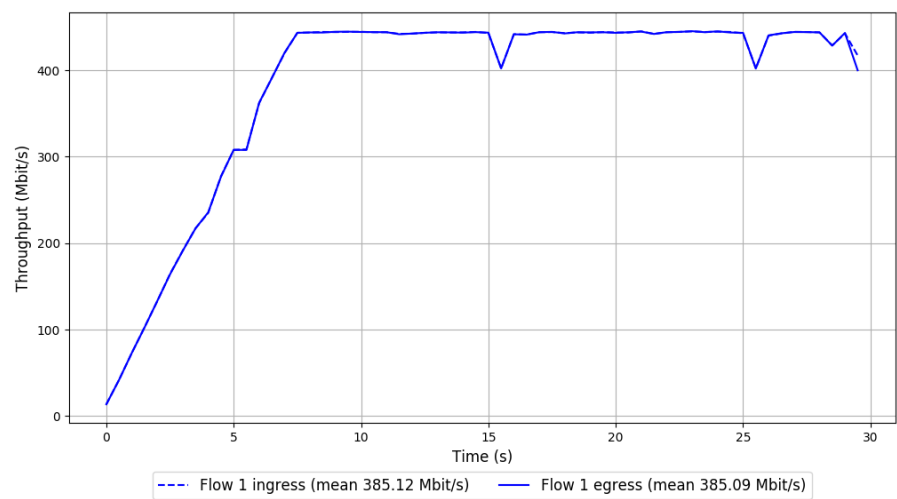


Run 2: Statistics of LEDBAT

Start at: 2017-11-20 23:52:01
End at: 2017-11-20 23:52:31
Local clock offset: 1.233 ms
Remote clock offset: -2.621 ms

Below is generated by plot.py at 2017-11-21 06:22:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 385.09 Mbit/s
95th percentile per-packet one-way delay: 1.102 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 385.09 Mbit/s
95th percentile per-packet one-way delay: 1.102 ms
Loss rate: 0.08%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-21 00:11:07

End at: 2017-11-21 00:11:37

Local clock offset: 1.813 ms

Remote clock offset: -2.15 ms

Below is generated by plot.py at 2017-11-21 06:22:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 375.65 Mbit/s

95th percentile per-packet one-way delay: 1.268 ms

Loss rate: 0.08%

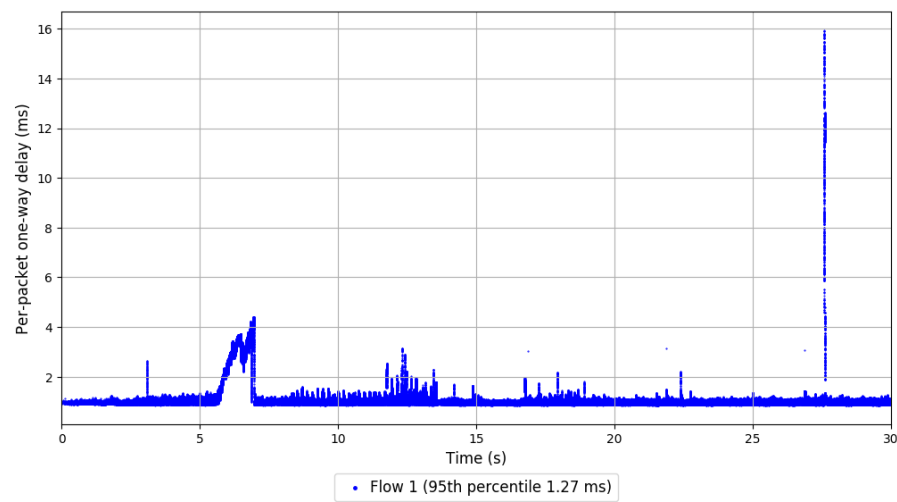
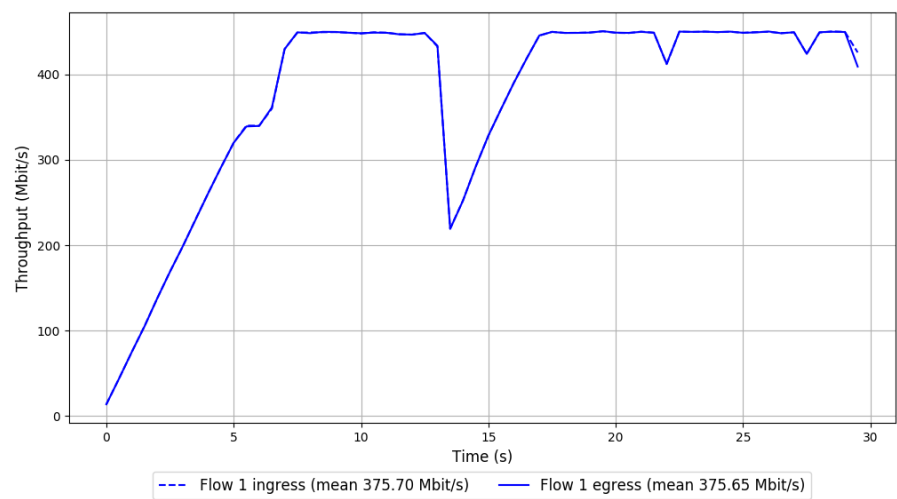
-- Flow 1:

Average throughput: 375.65 Mbit/s

95th percentile per-packet one-way delay: 1.268 ms

Loss rate: 0.08%

Run 3: Report of LEDBAT — Data Link

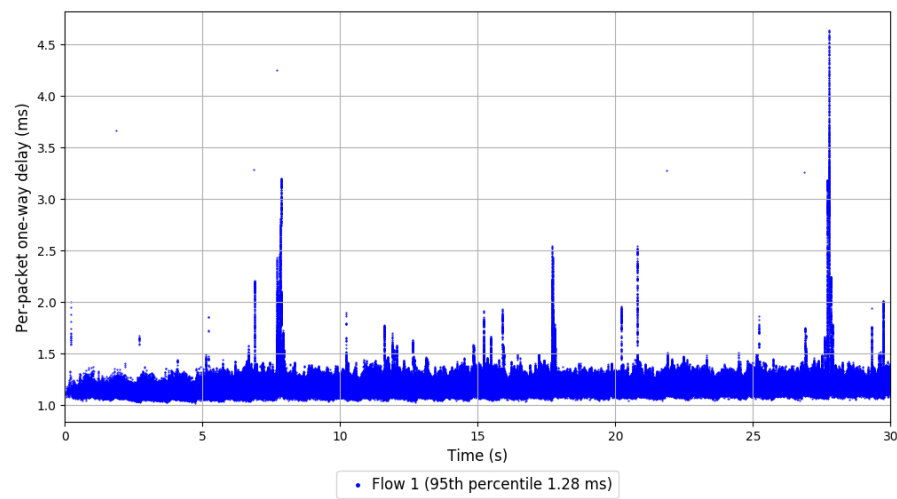
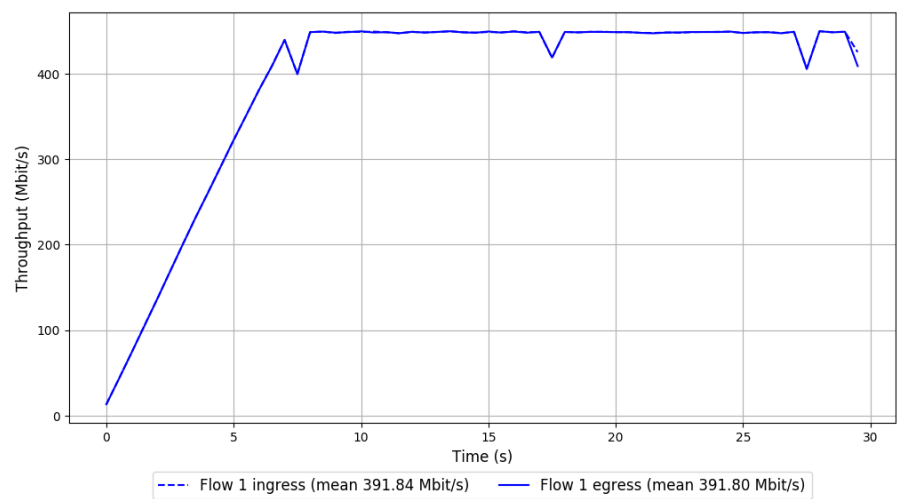


Run 4: Statistics of LEDBAT

Start at: 2017-11-21 00:30:14
End at: 2017-11-21 00:30:44
Local clock offset: 1.248 ms
Remote clock offset: -1.875 ms

Below is generated by plot.py at 2017-11-21 06:22:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 391.80 Mbit/s
95th percentile per-packet one-way delay: 1.282 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 391.80 Mbit/s
95th percentile per-packet one-way delay: 1.282 ms
Loss rate: 0.08%

Run 4: Report of LEDBAT — Data Link

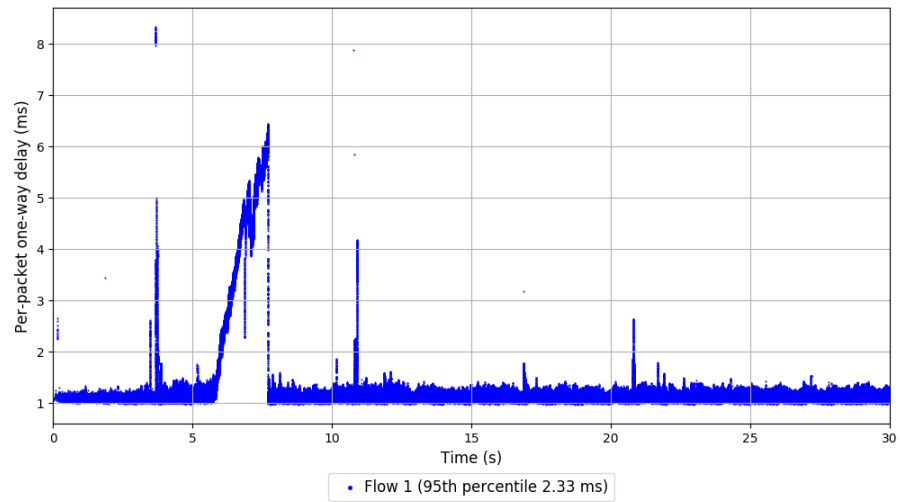
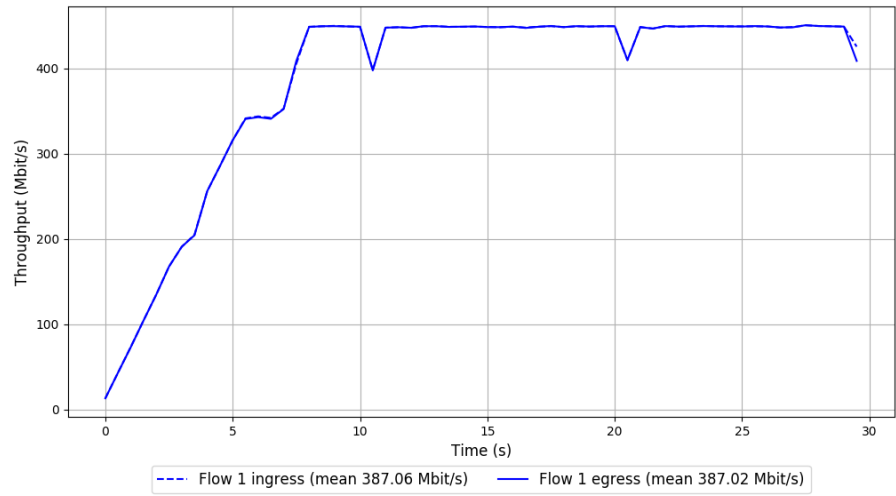


Run 5: Statistics of LEDBAT

Start at: 2017-11-21 00:49:41
End at: 2017-11-21 00:50:11
Local clock offset: 0.945 ms
Remote clock offset: -1.542 ms

Below is generated by plot.py at 2017-11-21 06:23:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 387.02 Mbit/s
95th percentile per-packet one-way delay: 2.327 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 387.02 Mbit/s
95th percentile per-packet one-way delay: 2.327 ms
Loss rate: 0.08%

Run 5: Report of LEDBAT — Data Link

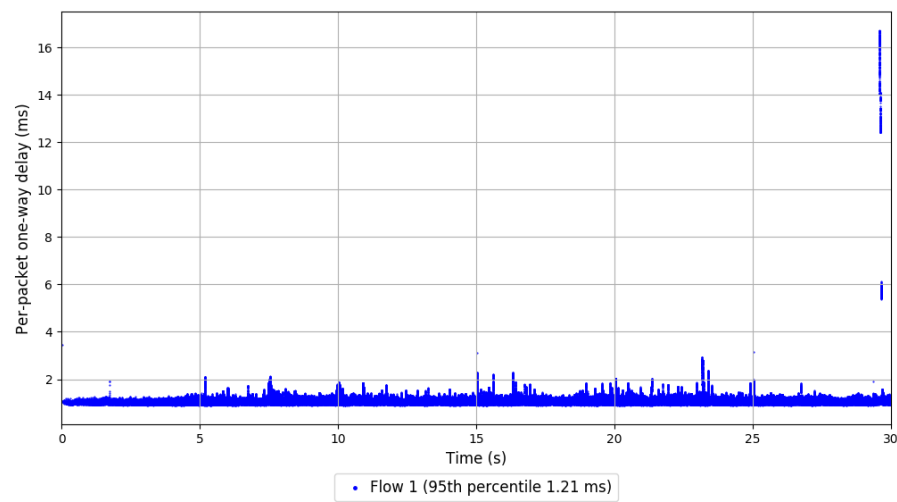
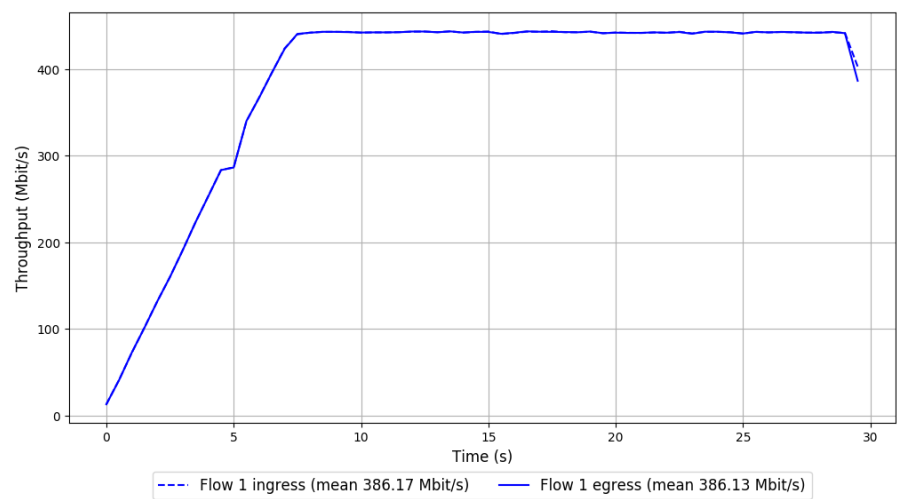


Run 6: Statistics of LEDBAT

Start at: 2017-11-21 01:09:04
End at: 2017-11-21 01:09:34
Local clock offset: 0.605 ms
Remote clock offset: -1.241 ms

Below is generated by plot.py at 2017-11-21 06:23:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 386.13 Mbit/s
95th percentile per-packet one-way delay: 1.209 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 386.13 Mbit/s
95th percentile per-packet one-way delay: 1.209 ms
Loss rate: 0.08%

Run 6: Report of LEDBAT — Data Link

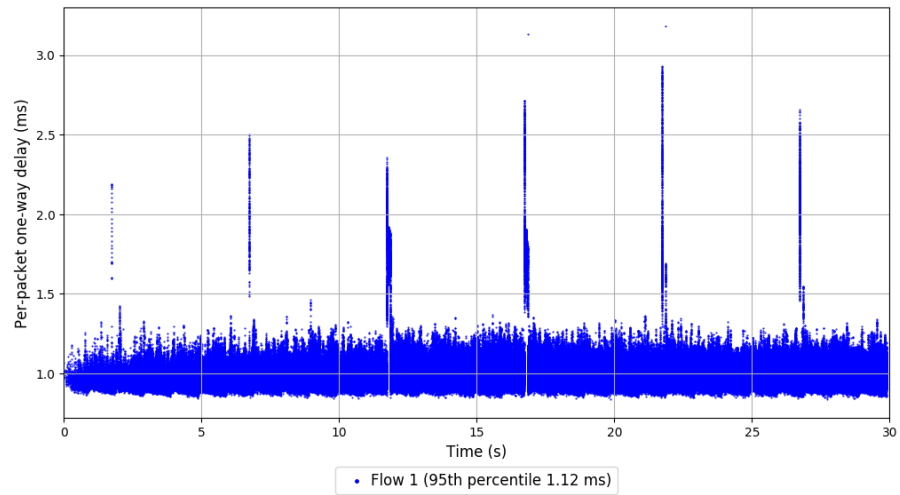
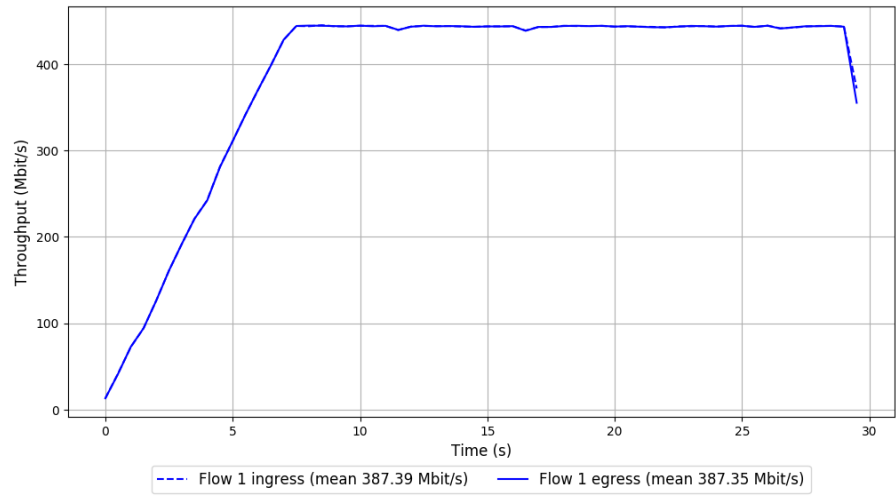


Run 7: Statistics of LEDBAT

Start at: 2017-11-21 01:28:29
End at: 2017-11-21 01:28:59
Local clock offset: 0.846 ms
Remote clock offset: -0.714 ms

Below is generated by plot.py at 2017-11-21 06:23:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 387.35 Mbit/s
95th percentile per-packet one-way delay: 1.116 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 387.35 Mbit/s
95th percentile per-packet one-way delay: 1.116 ms
Loss rate: 0.08%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

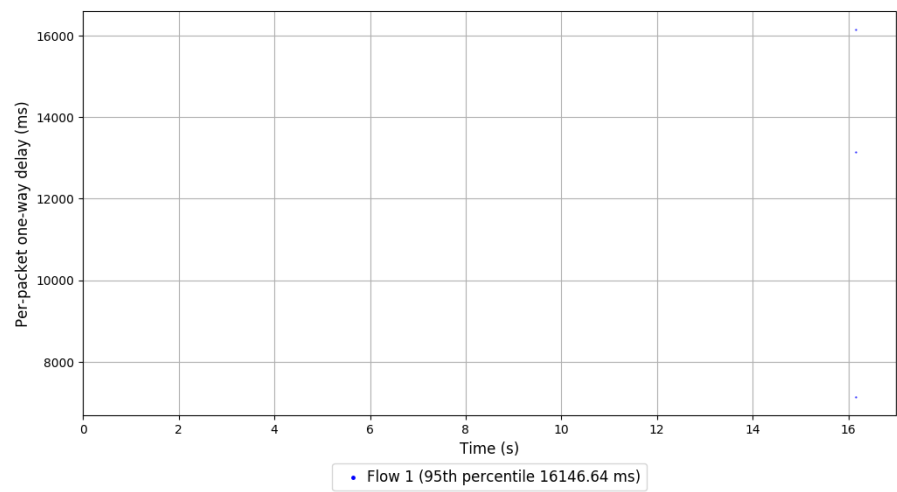
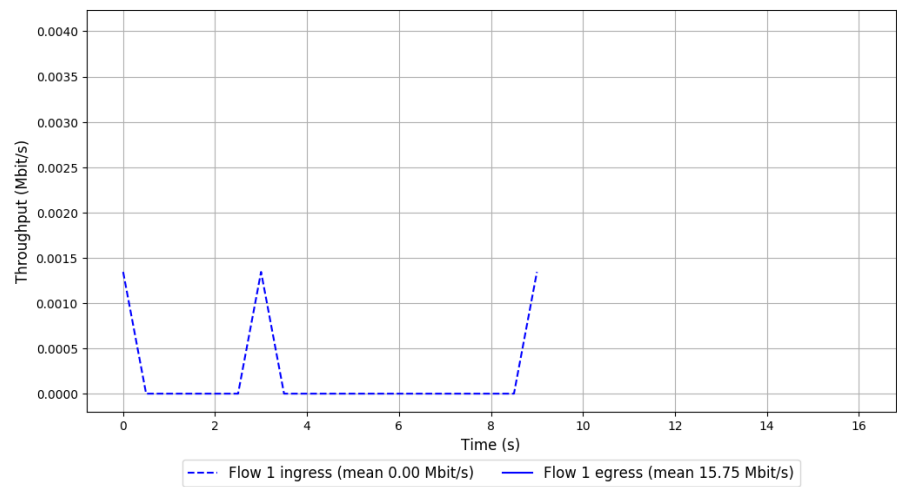
Start at: 2017-11-21 01:47:56

End at: 2017-11-21 01:48:26

Local clock offset: 1.631 ms

Remote clock offset: -0.719 ms

Run 8: Report of LEDBAT — Data Link

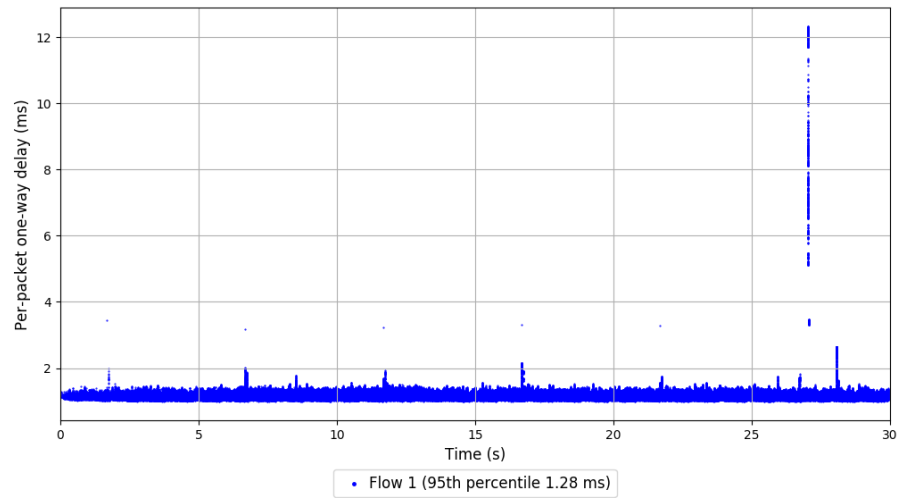
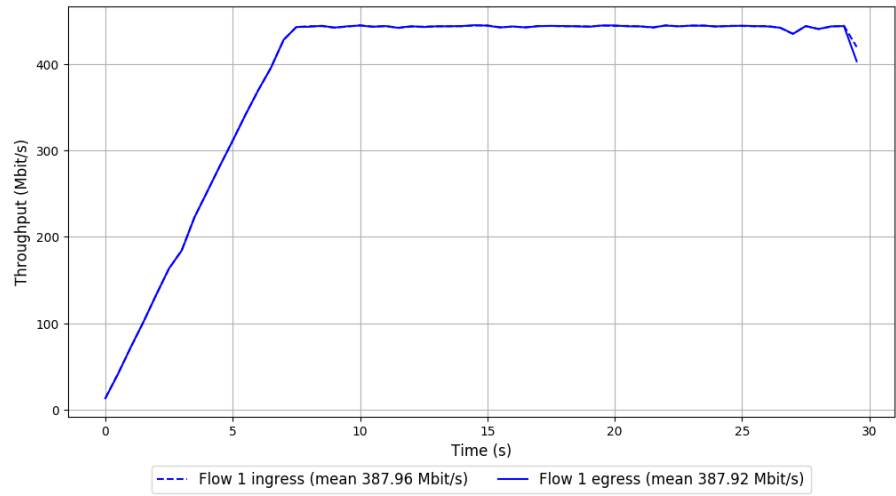


Run 9: Statistics of LEDBAT

Start at: 2017-11-21 02:06:49
End at: 2017-11-21 02:07:19
Local clock offset: 2.18 ms
Remote clock offset: -0.774 ms

Below is generated by plot.py at 2017-11-21 06:25:20
Datalink statistics
-- Total of 1 flow:
Average throughput: 387.92 Mbit/s
95th percentile per-packet one-way delay: 1.278 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 387.92 Mbit/s
95th percentile per-packet one-way delay: 1.278 ms
Loss rate: 0.08%

Run 9: Report of LEDBAT — Data Link

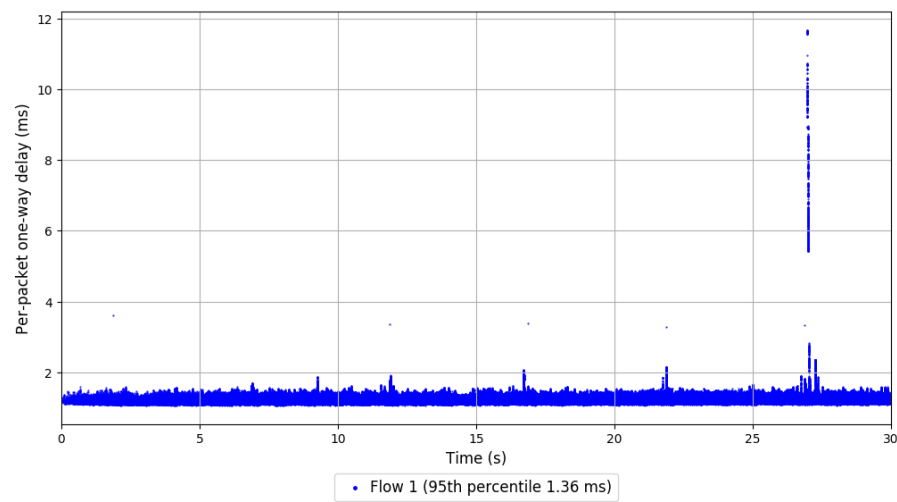
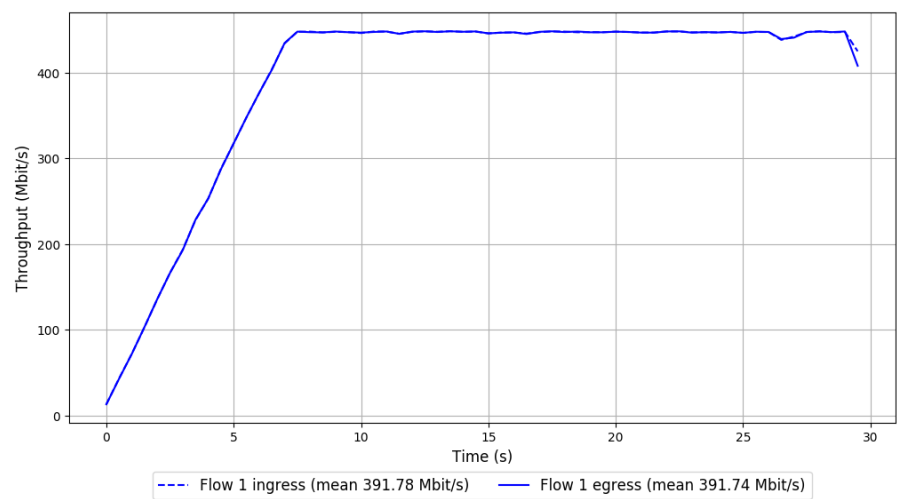


Run 10: Statistics of LEDBAT

Start at: 2017-11-21 02:26:19
End at: 2017-11-21 02:26:49
Local clock offset: 2.229 ms
Remote clock offset: -0.878 ms

Below is generated by plot.py at 2017-11-21 06:25:26
Datalink statistics
-- Total of 1 flow:
Average throughput: 391.74 Mbit/s
95th percentile per-packet one-way delay: 1.357 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 391.74 Mbit/s
95th percentile per-packet one-way delay: 1.357 ms
Loss rate: 0.07%

Run 10: Report of LEDBAT — Data Link

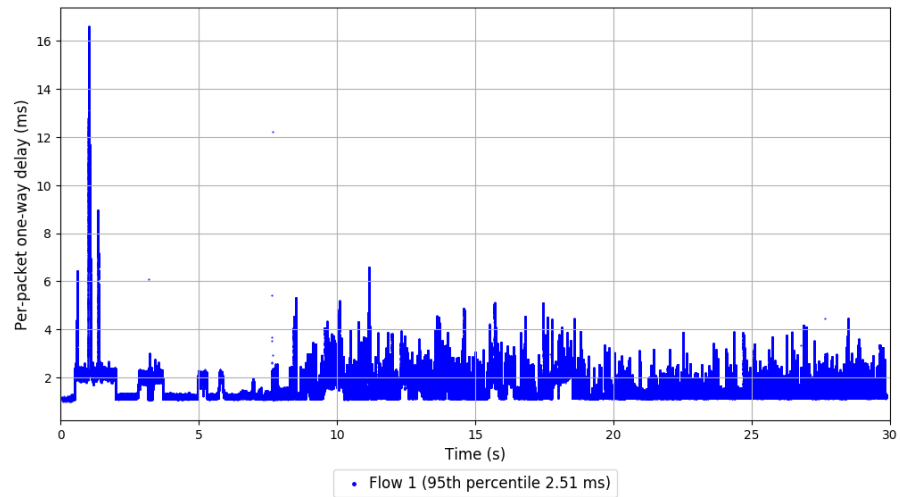
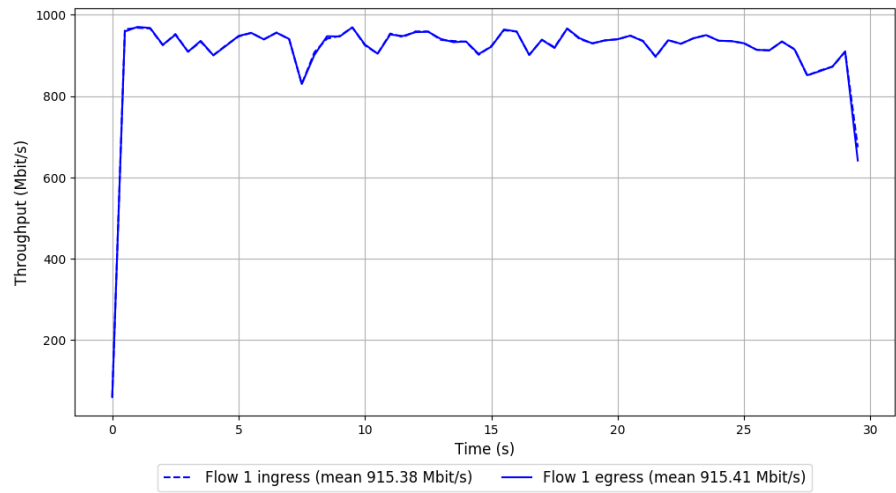


Run 1: Statistics of PCC

Start at: 2017-11-20 23:34:01
End at: 2017-11-20 23:34:31
Local clock offset: 1.585 ms
Remote clock offset: -2.703 ms

Below is generated by plot.py at 2017-11-21 06:32:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 915.41 Mbit/s
95th percentile per-packet one-way delay: 2.514 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 915.41 Mbit/s
95th percentile per-packet one-way delay: 2.514 ms
Loss rate: 0.06%

Run 1: Report of PCC — Data Link

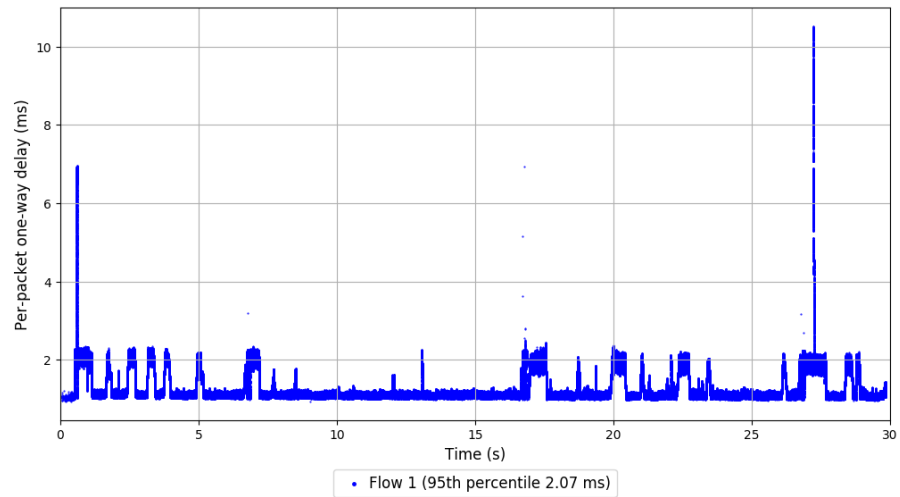
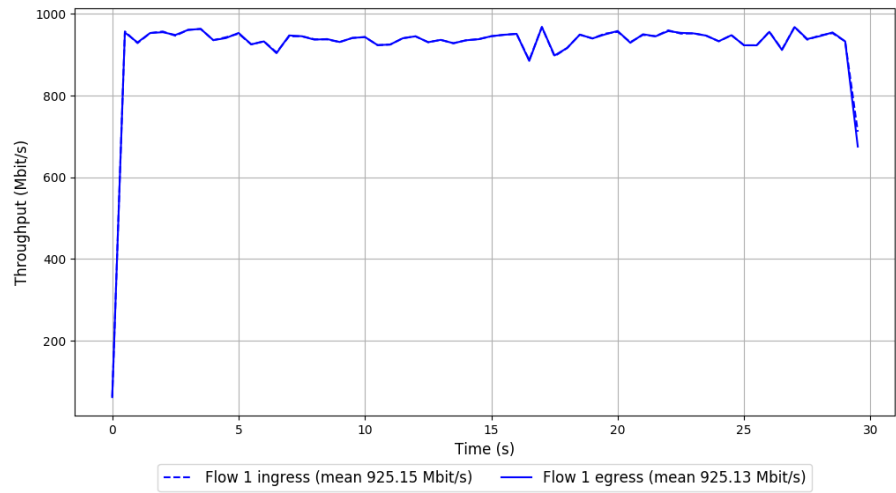


Run 2: Statistics of PCC

Start at: 2017-11-20 23:53:30
End at: 2017-11-20 23:54:00
Local clock offset: 1.498 ms
Remote clock offset: -2.593 ms

Below is generated by plot.py at 2017-11-21 06:35:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 925.13 Mbit/s
95th percentile per-packet one-way delay: 2.074 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 925.13 Mbit/s
95th percentile per-packet one-way delay: 2.074 ms
Loss rate: 0.07%

Run 2: Report of PCC — Data Link

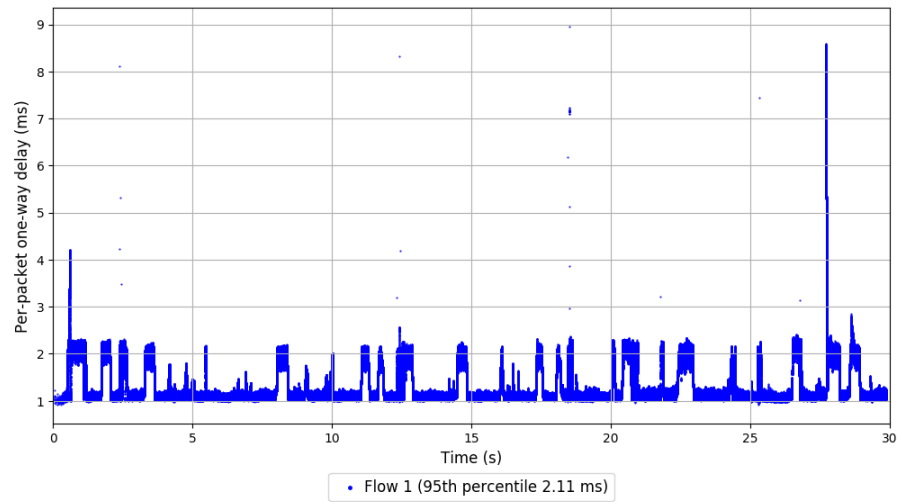
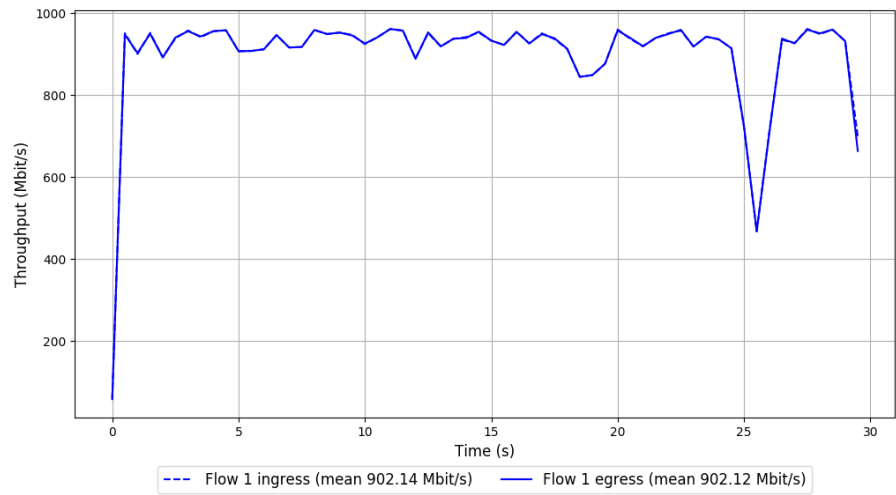


Run 3: Statistics of PCC

Start at: 2017-11-21 00:12:34
End at: 2017-11-21 00:13:04
Local clock offset: 1.845 ms
Remote clock offset: -2.213 ms

Below is generated by plot.py at 2017-11-21 06:35:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 902.12 Mbit/s
95th percentile per-packet one-way delay: 2.111 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 902.12 Mbit/s
95th percentile per-packet one-way delay: 2.111 ms
Loss rate: 0.07%

Run 3: Report of PCC — Data Link

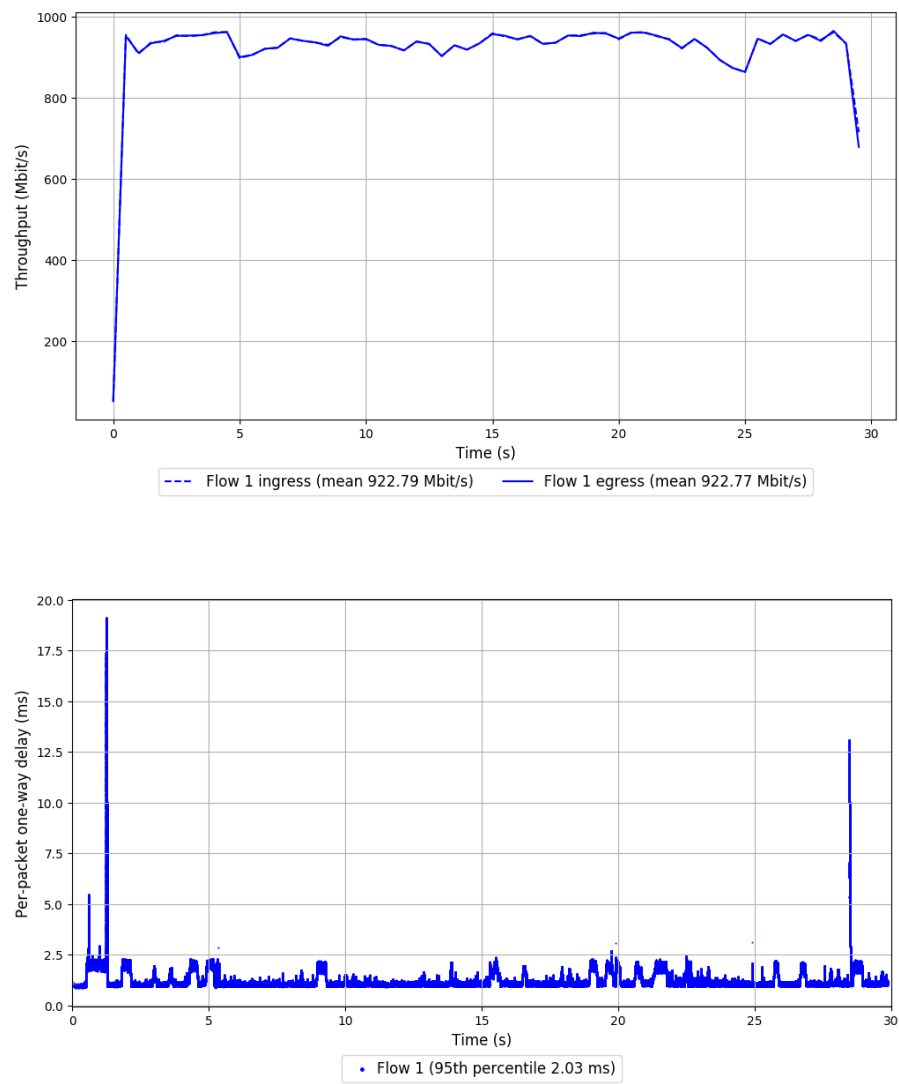


Run 4: Statistics of PCC

Start at: 2017-11-21 00:31:44
End at: 2017-11-21 00:32:14
Local clock offset: 1.104 ms
Remote clock offset: -1.792 ms

Below is generated by plot.py at 2017-11-21 06:36:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 922.77 Mbit/s
95th percentile per-packet one-way delay: 2.034 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 922.77 Mbit/s
95th percentile per-packet one-way delay: 2.034 ms
Loss rate: 0.07%

Run 4: Report of PCC — Data Link

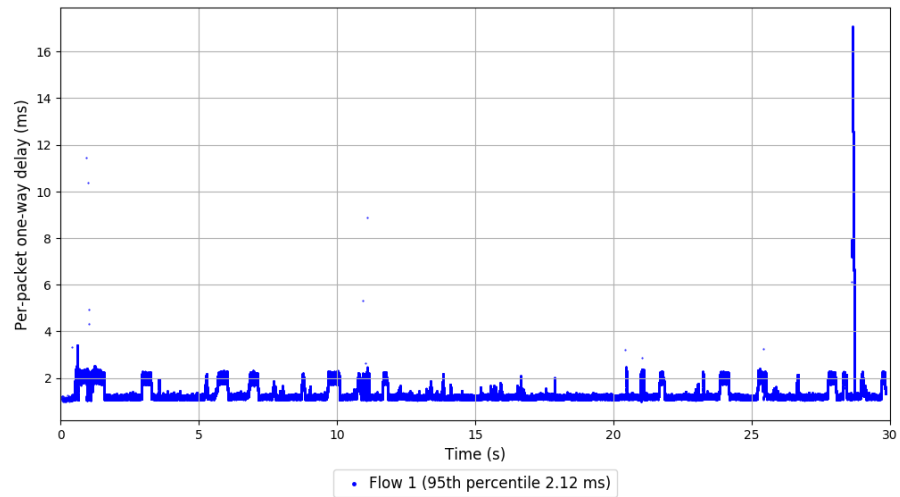
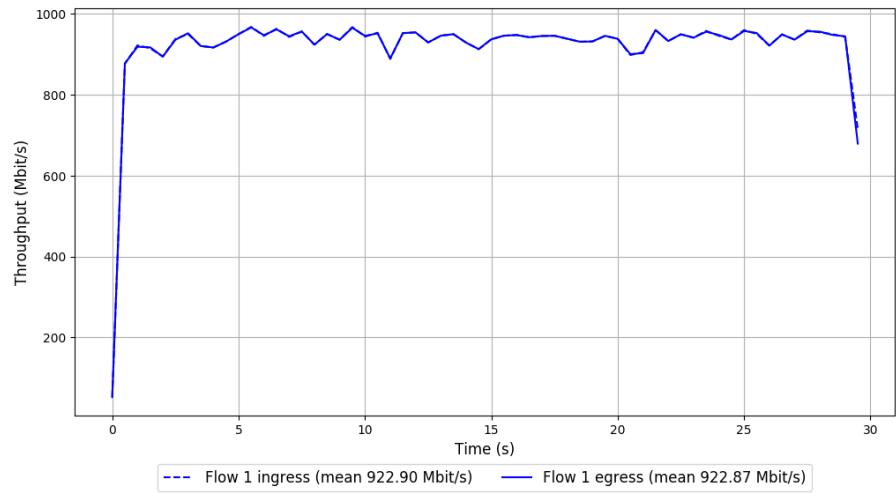


Run 5: Statistics of PCC

Start at: 2017-11-21 00:51:11
End at: 2017-11-21 00:51:41
Local clock offset: 0.92 ms
Remote clock offset: -1.596 ms

Below is generated by plot.py at 2017-11-21 06:37:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 922.87 Mbit/s
95th percentile per-packet one-way delay: 2.124 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 922.87 Mbit/s
95th percentile per-packet one-way delay: 2.124 ms
Loss rate: 0.07%

Run 5: Report of PCC — Data Link

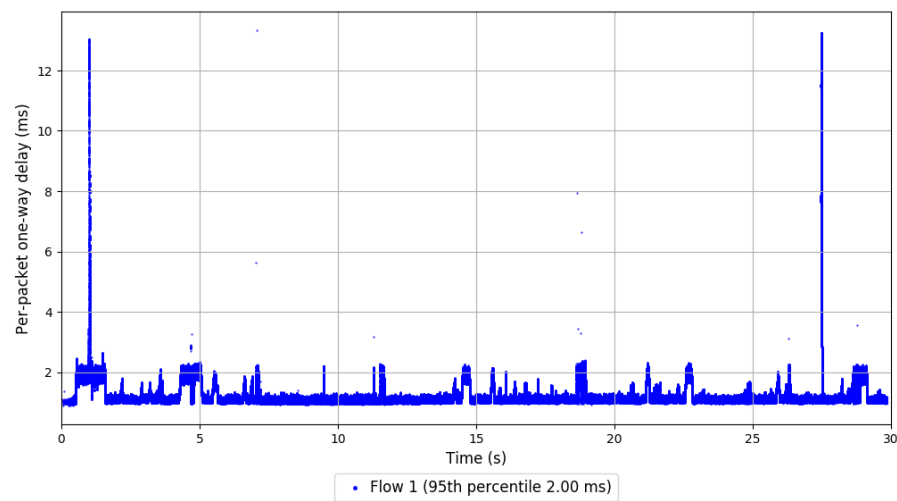
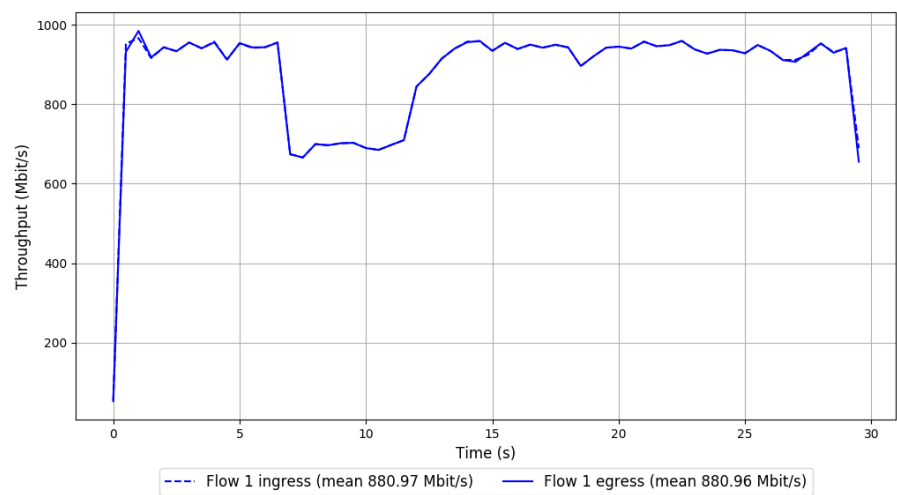


Run 6: Statistics of PCC

Start at: 2017-11-21 01:10:33
End at: 2017-11-21 01:11:03
Local clock offset: 0.66 ms
Remote clock offset: -1.188 ms

Below is generated by plot.py at 2017-11-21 06:37:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 880.96 Mbit/s
95th percentile per-packet one-way delay: 2.005 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 880.96 Mbit/s
95th percentile per-packet one-way delay: 2.005 ms
Loss rate: 0.07%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-21 01:29:58

End at: 2017-11-21 01:30:28

Local clock offset: 0.871 ms

Remote clock offset: -0.75 ms

Below is generated by plot.py at 2017-11-21 06:39:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 926.22 Mbit/s

95th percentile per-packet one-way delay: 2.034 ms

Loss rate: 0.06%

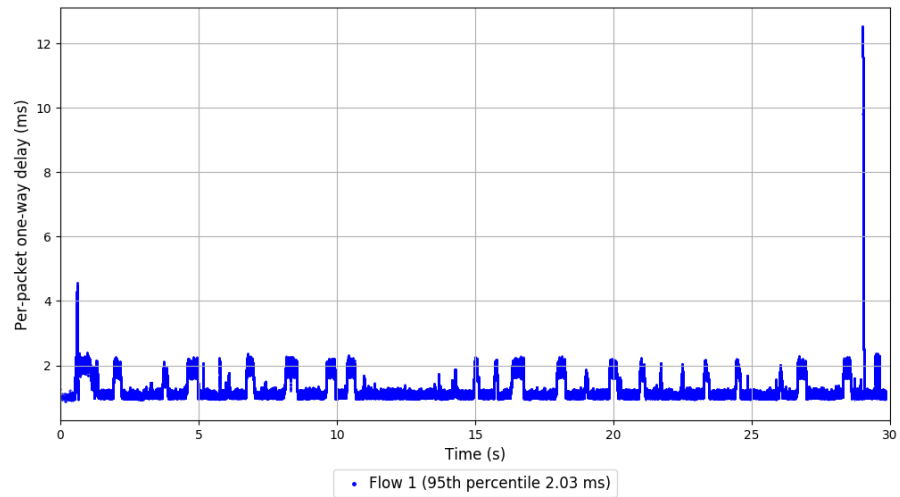
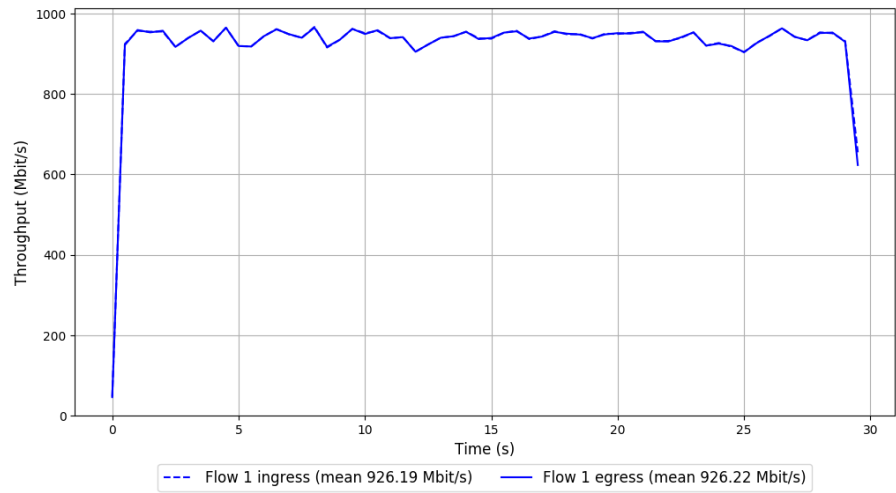
-- Flow 1:

Average throughput: 926.22 Mbit/s

95th percentile per-packet one-way delay: 2.034 ms

Loss rate: 0.06%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

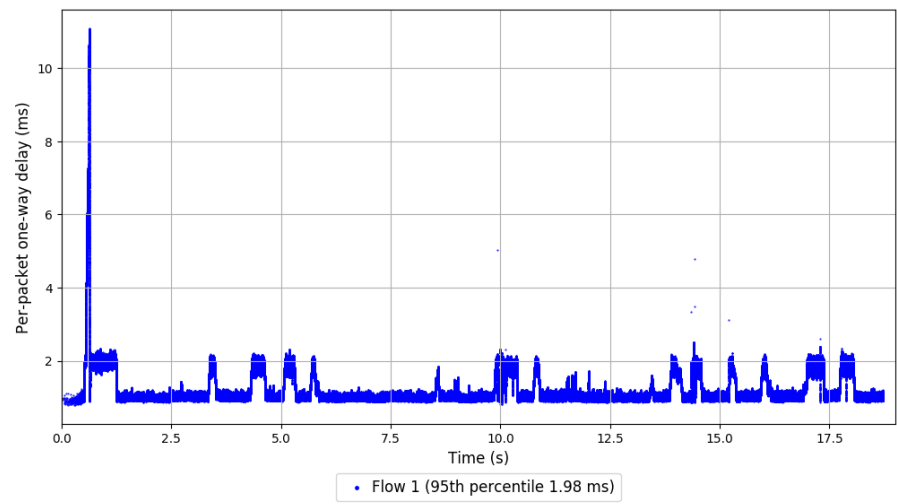
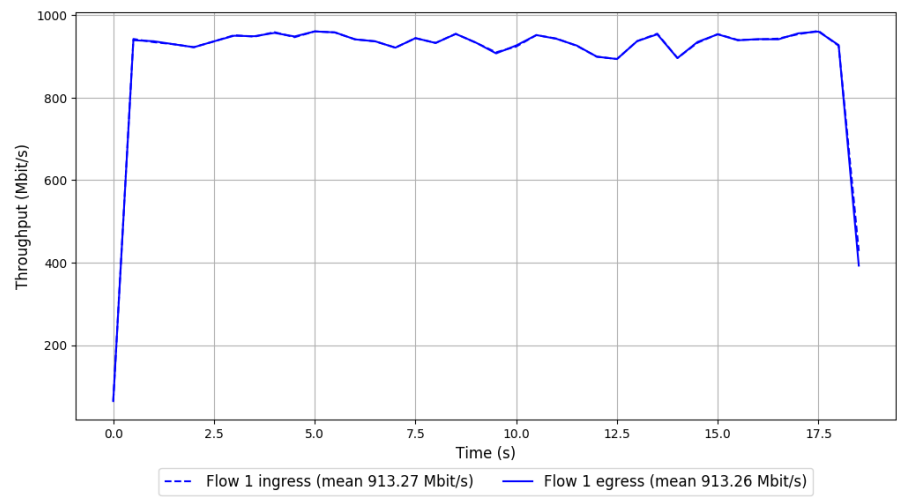
Start at: 2017-11-21 01:49:06

End at: 2017-11-21 01:49:36

Local clock offset: 1.696 ms

Remote clock offset: -0.73 ms

Run 8: Report of PCC — Data Link

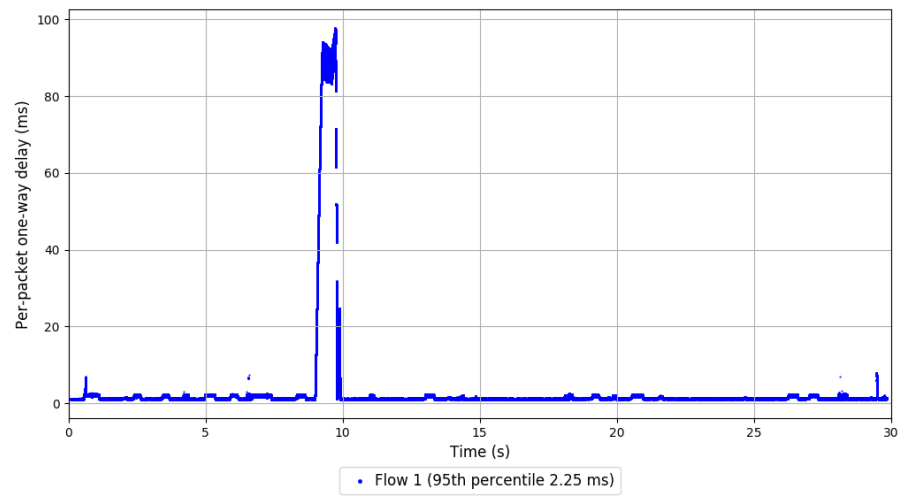
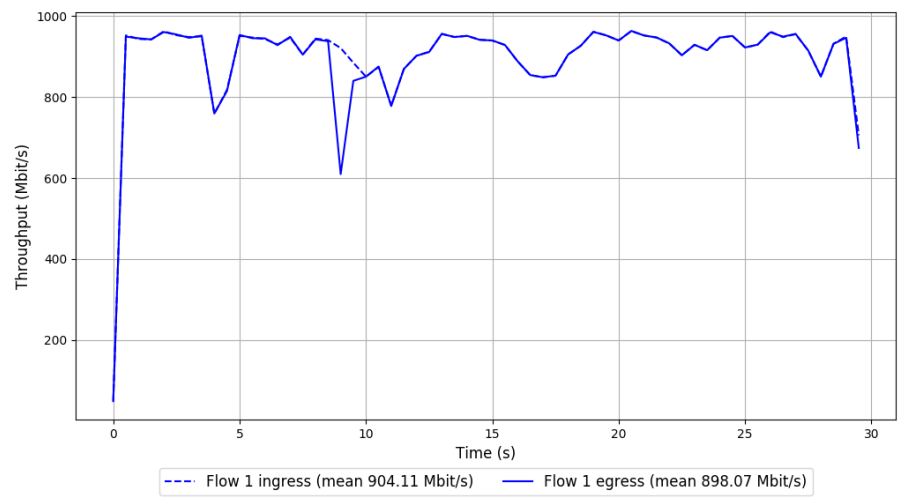


Run 9: Statistics of PCC

Start at: 2017-11-21 02:08:19
End at: 2017-11-21 02:08:49
Local clock offset: 2.179 ms
Remote clock offset: -0.793 ms

Below is generated by plot.py at 2017-11-21 06:47:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 898.07 Mbit/s
95th percentile per-packet one-way delay: 2.251 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 898.07 Mbit/s
95th percentile per-packet one-way delay: 2.251 ms
Loss rate: 0.74%

Run 9: Report of PCC — Data Link

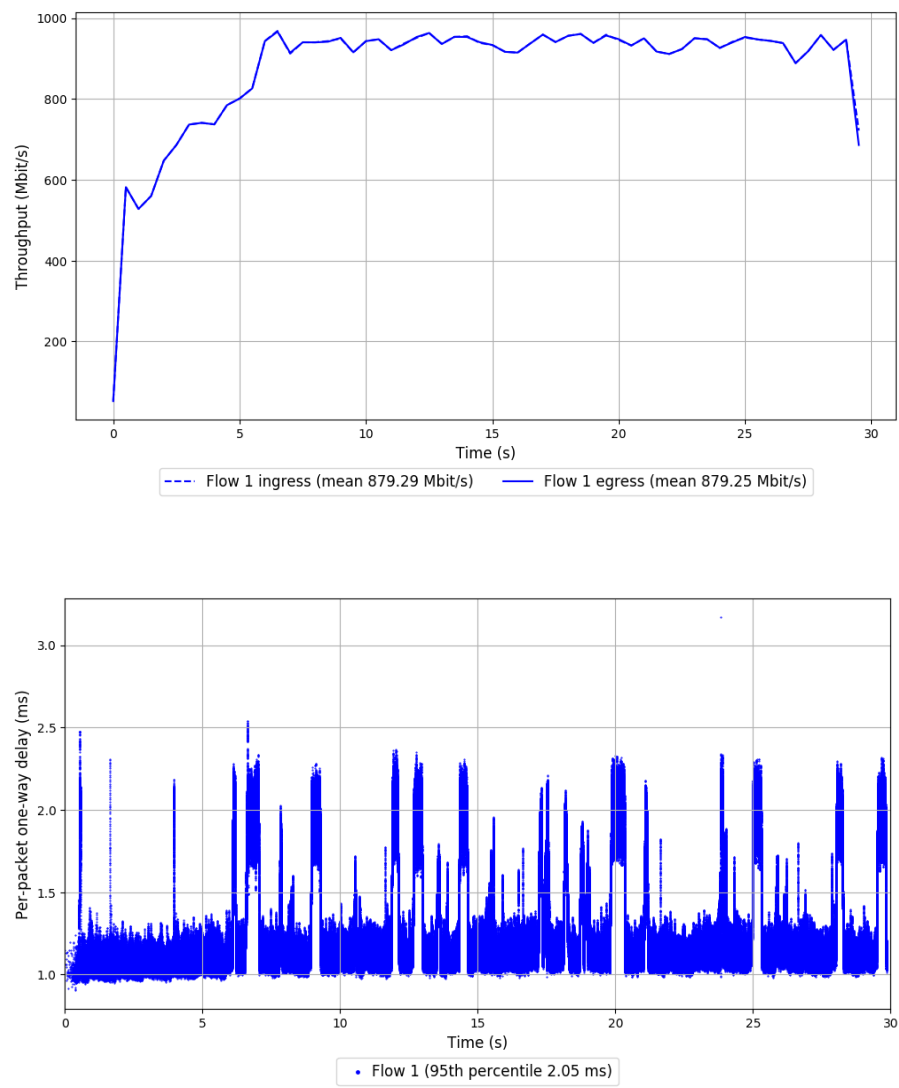


Run 10: Statistics of PCC

Start at: 2017-11-21 02:27:49
End at: 2017-11-21 02:28:19
Local clock offset: 2.08 ms
Remote clock offset: -0.867 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 879.25 Mbit/s
95th percentile per-packet one-way delay: 2.047 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 879.25 Mbit/s
95th percentile per-packet one-way delay: 2.047 ms
Loss rate: 0.07%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2017-11-20 23:36:48

End at: 2017-11-20 23:37:18

Local clock offset: 1.403 ms

Remote clock offset: -2.62 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.89 Mbit/s

95th percentile per-packet one-way delay: 1.151 ms

Loss rate: 0.08%

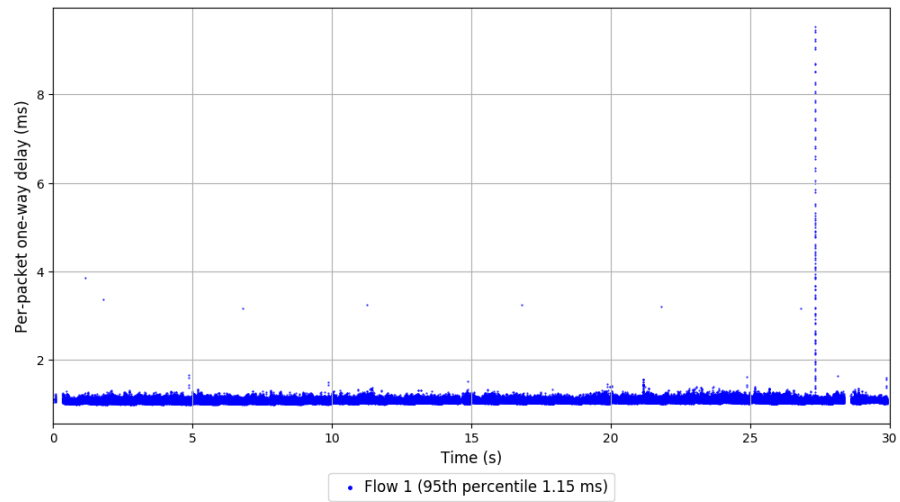
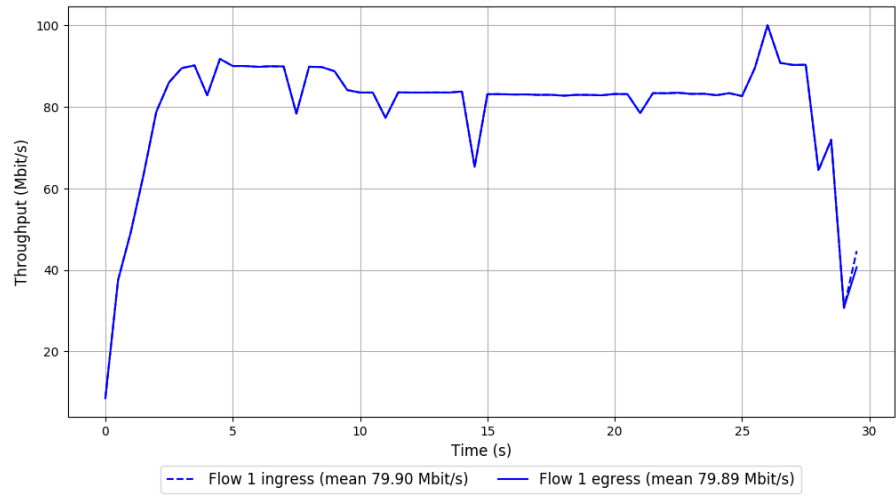
-- Flow 1:

Average throughput: 79.89 Mbit/s

95th percentile per-packet one-way delay: 1.151 ms

Loss rate: 0.08%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-20 23:56:17

End at: 2017-11-20 23:56:47

Local clock offset: 1.663 ms

Remote clock offset: -2.568 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.17 Mbit/s

95th percentile per-packet one-way delay: 1.053 ms

Loss rate: 0.07%

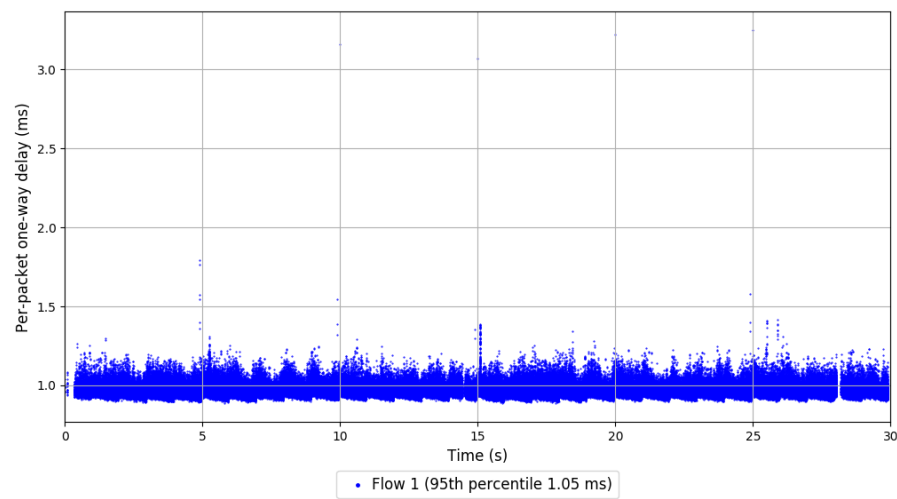
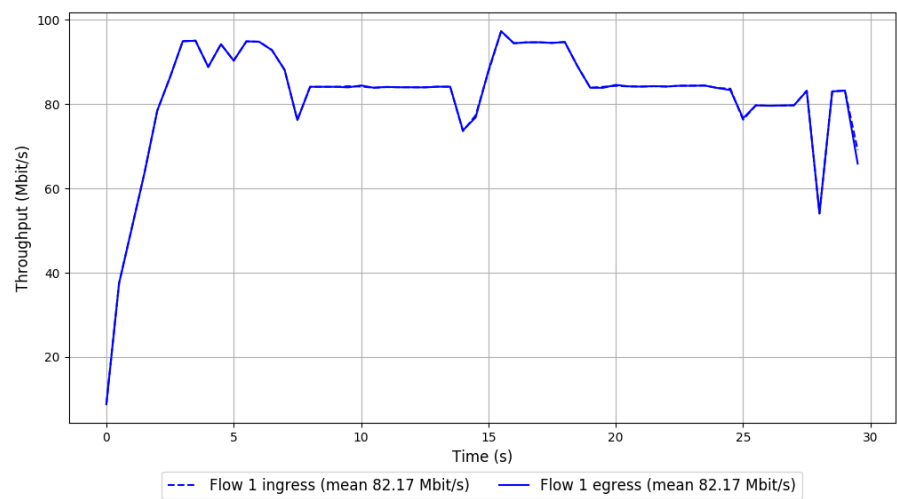
-- Flow 1:

Average throughput: 82.17 Mbit/s

95th percentile per-packet one-way delay: 1.053 ms

Loss rate: 0.07%

Run 2: Report of QUIC Cubic — Data Link

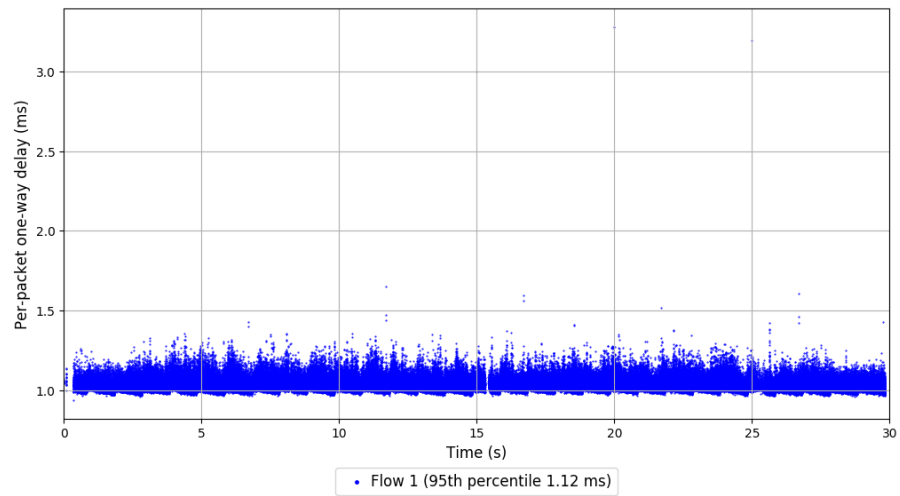
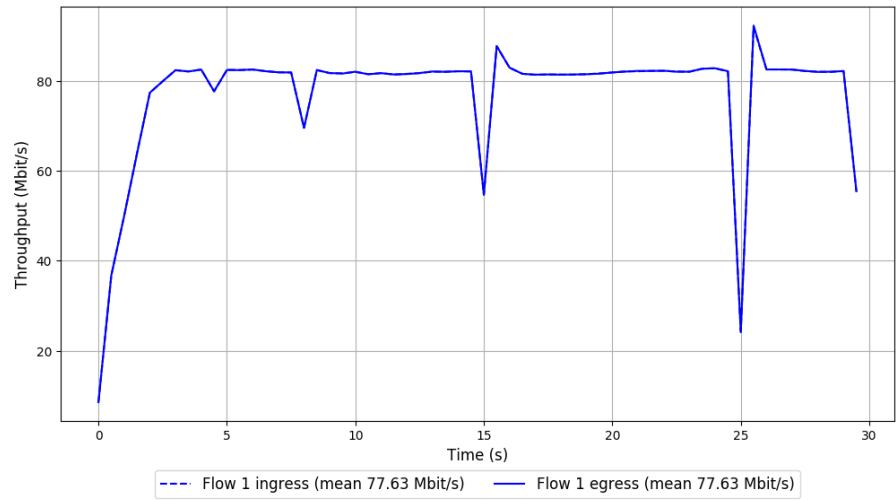


Run 3: Statistics of QUIC Cubic

Start at: 2017-11-21 00:15:21
End at: 2017-11-21 00:15:51
Local clock offset: 1.905 ms
Remote clock offset: -2.157 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 77.63 Mbit/s
95th percentile per-packet one-way delay: 1.119 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 77.63 Mbit/s
95th percentile per-packet one-way delay: 1.119 ms
Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-21 00:34:32

End at: 2017-11-21 00:35:02

Local clock offset: 1.196 ms

Remote clock offset: -1.784 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.64 Mbit/s

95th percentile per-packet one-way delay: 1.194 ms

Loss rate: 0.06%

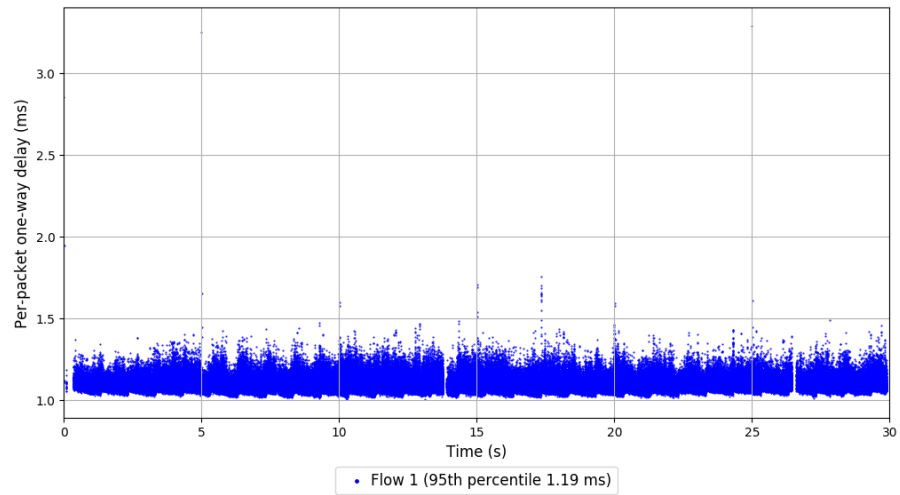
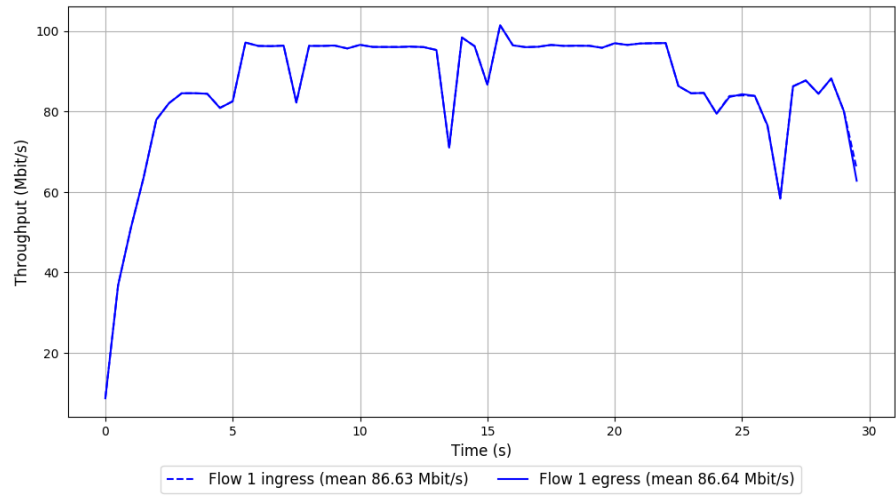
-- Flow 1:

Average throughput: 86.64 Mbit/s

95th percentile per-packet one-way delay: 1.194 ms

Loss rate: 0.06%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-21 00:53:59

End at: 2017-11-21 00:54:29

Local clock offset: 0.819 ms

Remote clock offset: -1.564 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.73 Mbit/s

95th percentile per-packet one-way delay: 1.088 ms

Loss rate: 0.07%

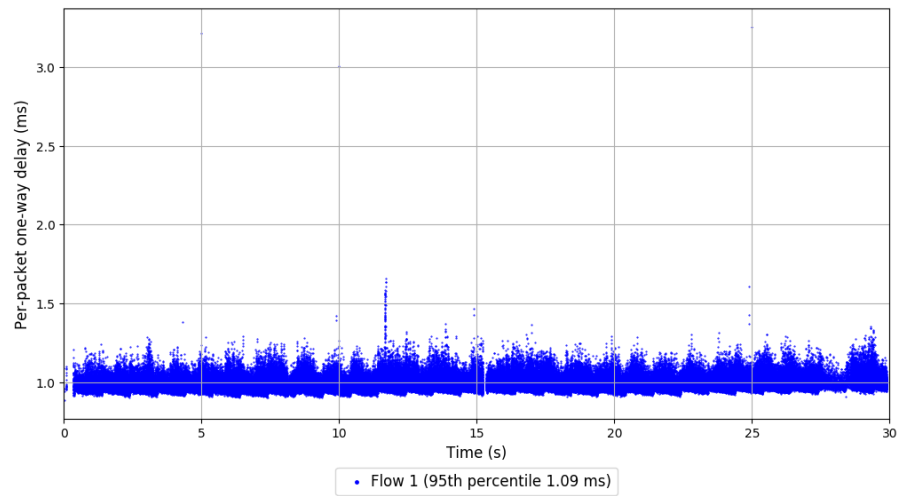
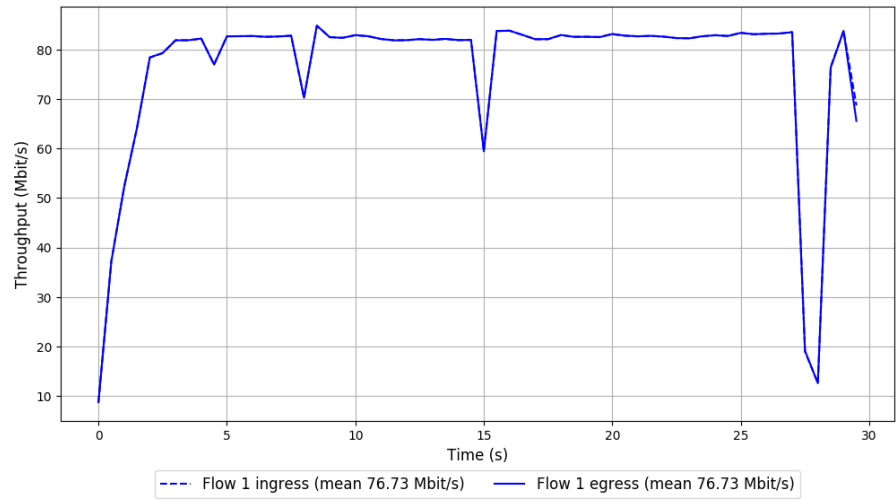
-- Flow 1:

Average throughput: 76.73 Mbit/s

95th percentile per-packet one-way delay: 1.088 ms

Loss rate: 0.07%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-21 01:13:18

End at: 2017-11-21 01:13:48

Local clock offset: 0.673 ms

Remote clock offset: -1.089 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.14 Mbit/s

95th percentile per-packet one-way delay: 1.111 ms

Loss rate: 0.07%

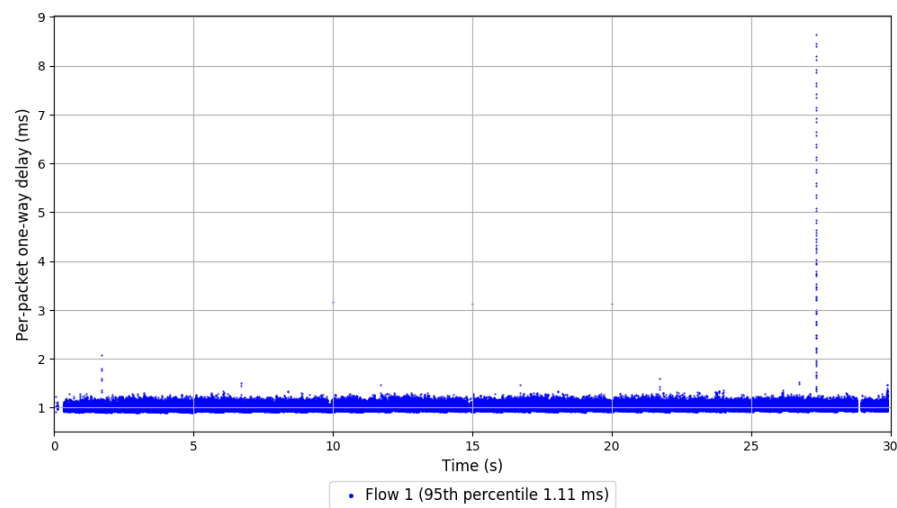
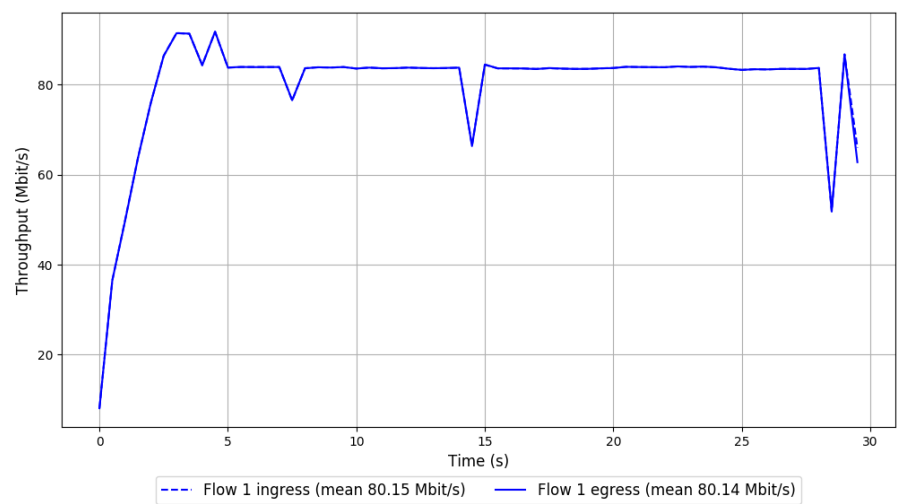
-- Flow 1:

Average throughput: 80.14 Mbit/s

95th percentile per-packet one-way delay: 1.111 ms

Loss rate: 0.07%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-21 01:32:45

End at: 2017-11-21 01:33:15

Local clock offset: 1.014 ms

Remote clock offset: -0.719 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.95 Mbit/s

95th percentile per-packet one-way delay: 1.200 ms

Loss rate: 0.02%

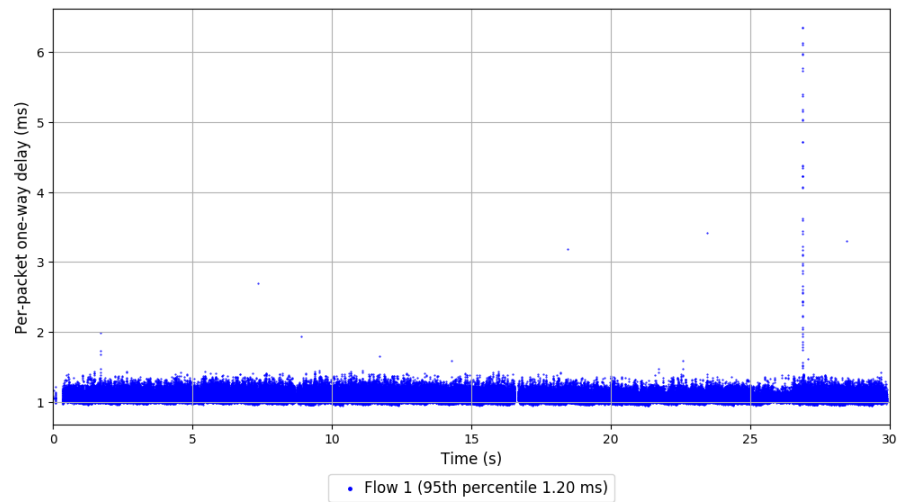
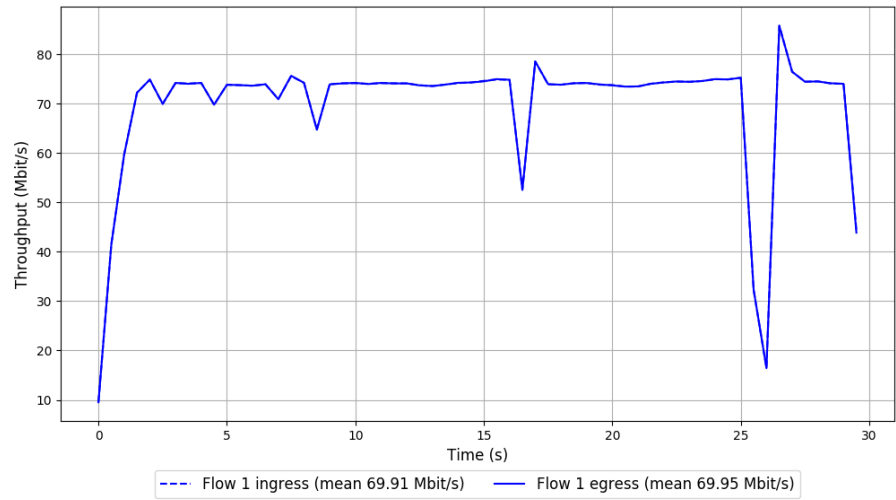
-- Flow 1:

Average throughput: 69.95 Mbit/s

95th percentile per-packet one-way delay: 1.200 ms

Loss rate: 0.02%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-21 01:51:43

End at: 2017-11-21 01:52:13

Local clock offset: 1.881 ms

Remote clock offset: -0.812 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.70 Mbit/s

95th percentile per-packet one-way delay: 1.201 ms

Loss rate: 0.07%

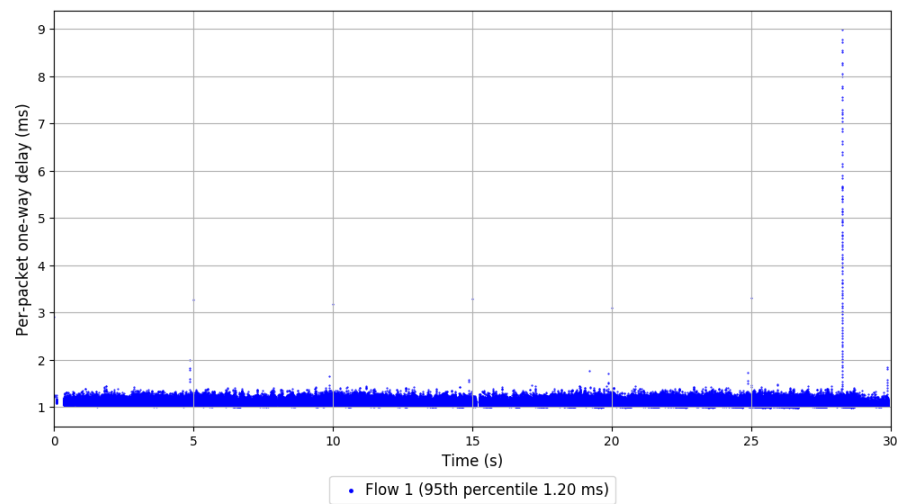
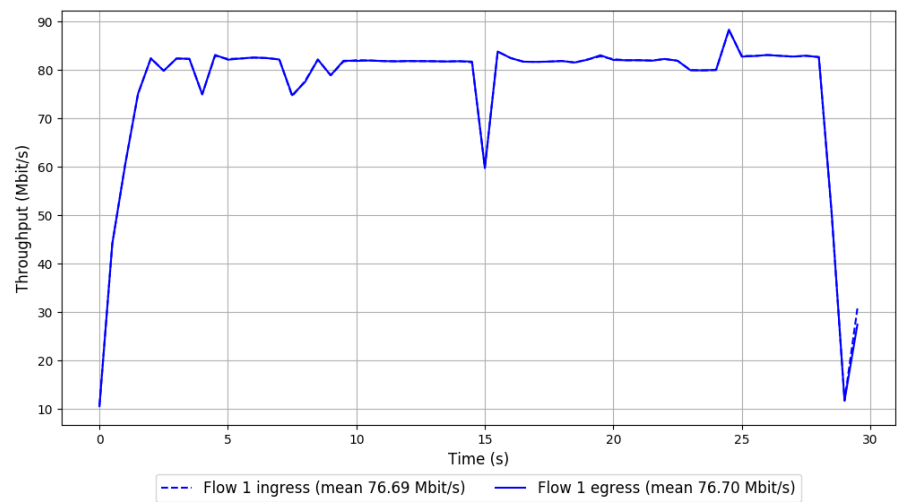
-- Flow 1:

Average throughput: 76.70 Mbit/s

95th percentile per-packet one-way delay: 1.201 ms

Loss rate: 0.07%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-21 02:11:05

End at: 2017-11-21 02:11:35

Local clock offset: 2.106 ms

Remote clock offset: -0.779 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.25 Mbit/s

95th percentile per-packet one-way delay: 1.099 ms

Loss rate: 0.06%

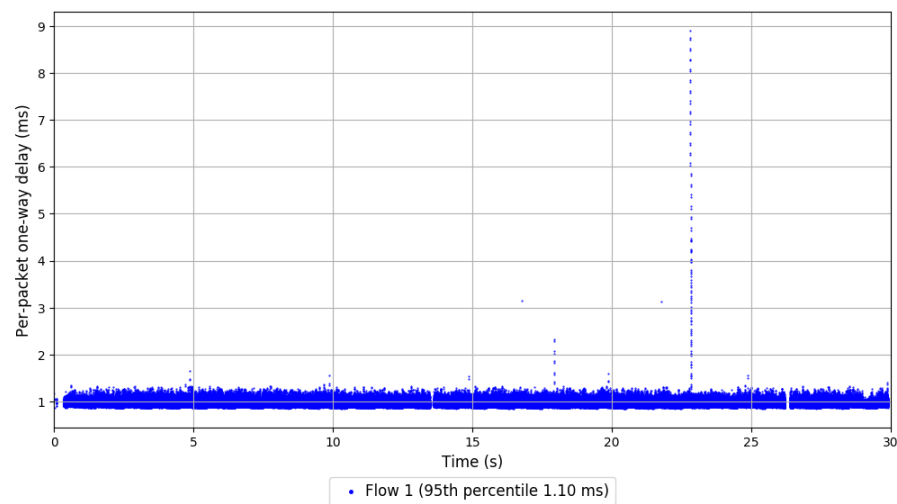
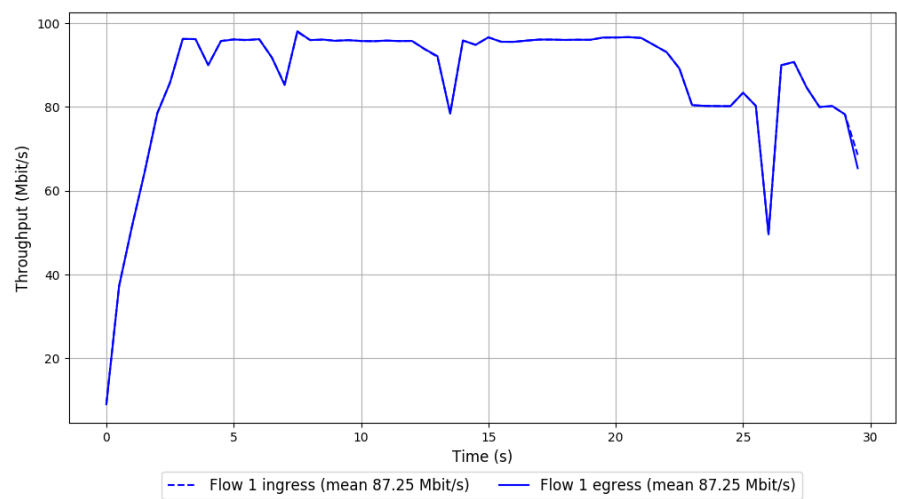
-- Flow 1:

Average throughput: 87.25 Mbit/s

95th percentile per-packet one-way delay: 1.099 ms

Loss rate: 0.06%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-11-21 02:30:35

End at: 2017-11-21 02:31:05

Local clock offset: 1.944 ms

Remote clock offset: -0.798 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.85 Mbit/s

95th percentile per-packet one-way delay: 1.039 ms

Loss rate: 0.08%

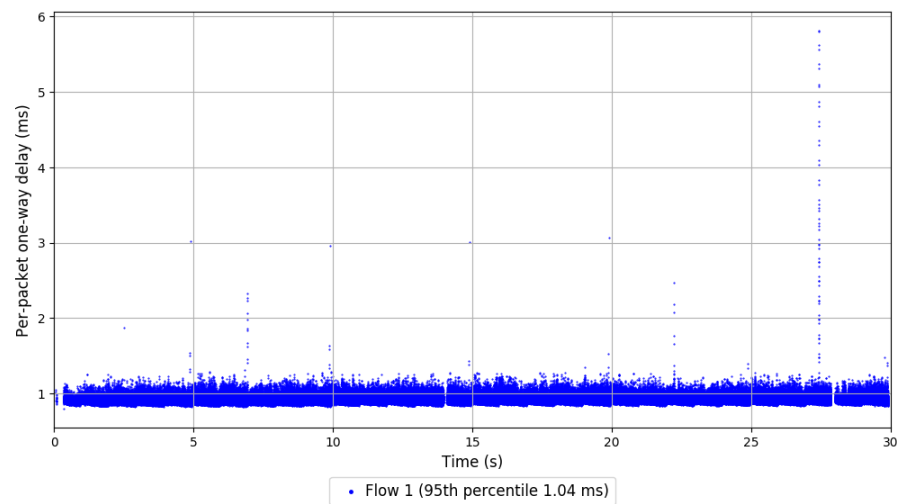
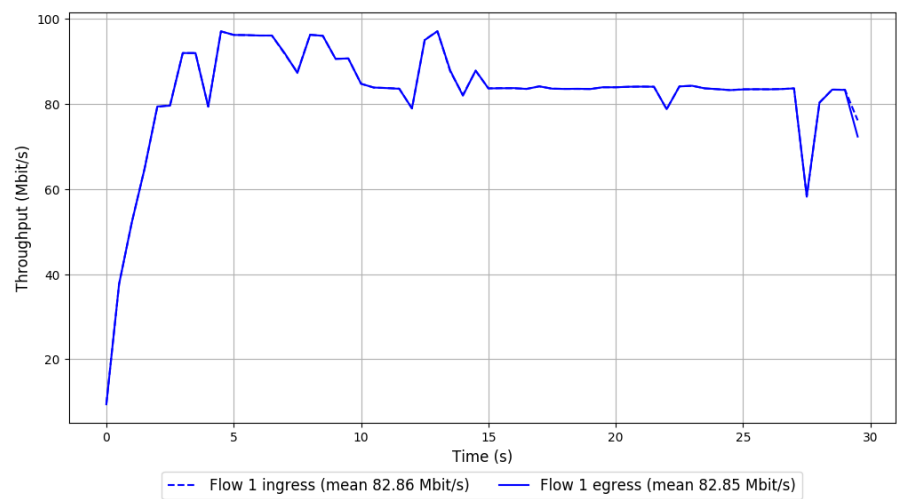
-- Flow 1:

Average throughput: 82.85 Mbit/s

95th percentile per-packet one-way delay: 1.039 ms

Loss rate: 0.08%

Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

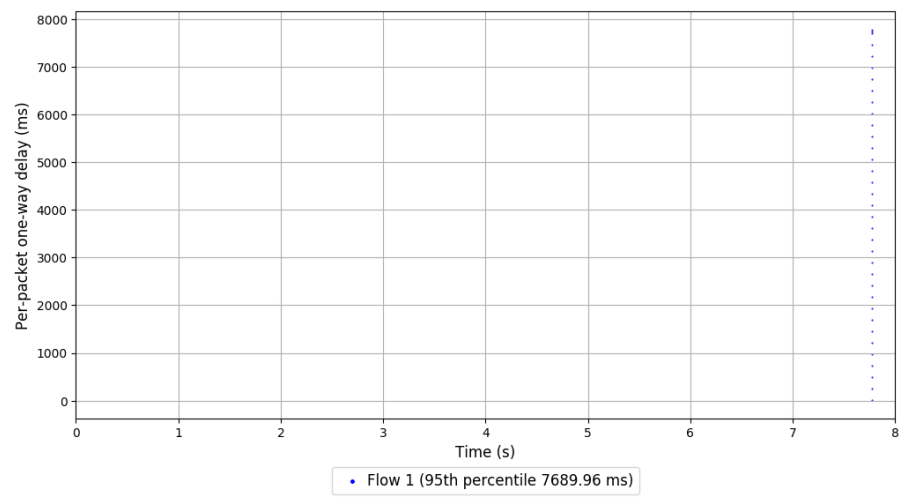
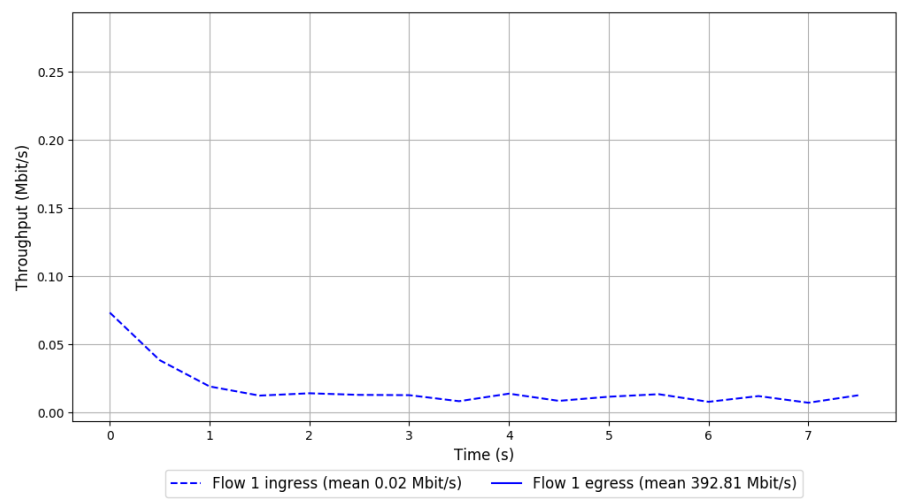
Start at: 2017-11-20 23:35:38

End at: 2017-11-20 23:36:08

Local clock offset: 1.376 ms

Remote clock offset: -2.624 ms

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

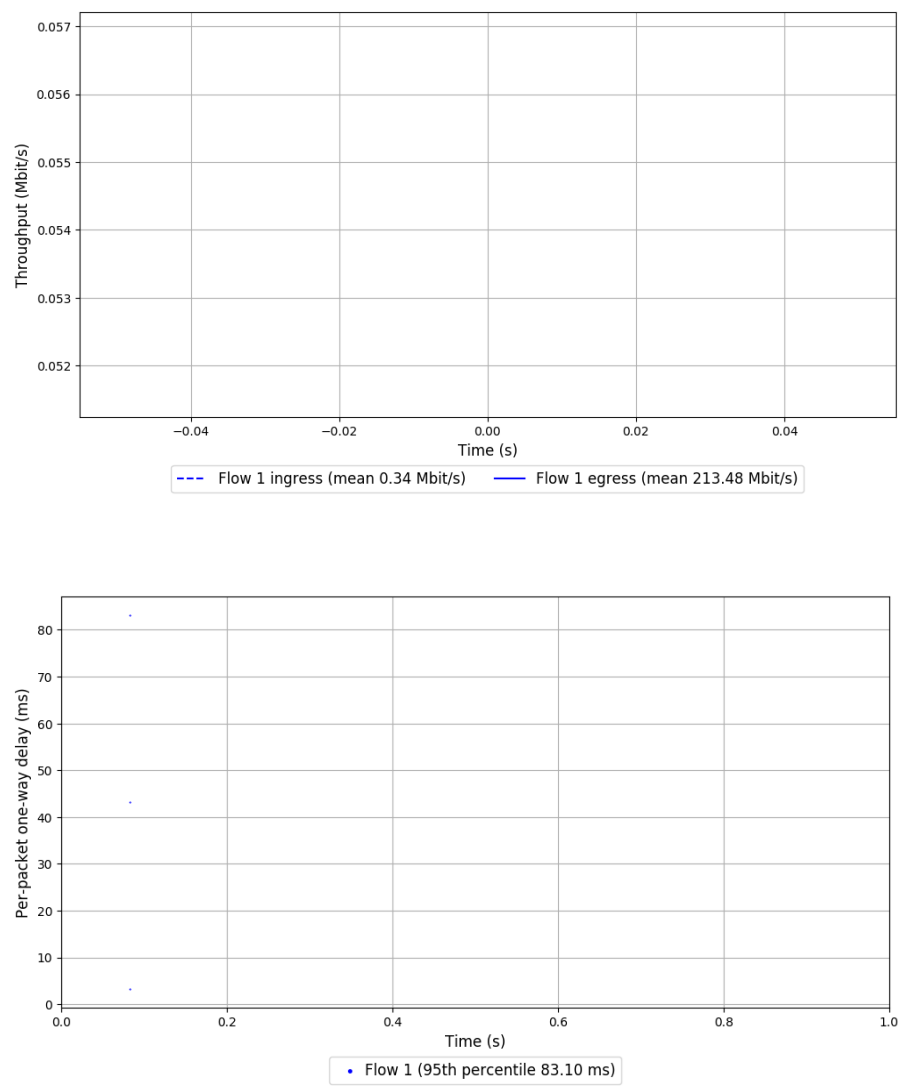
Start at: 2017-11-20 23:55:07

End at: 2017-11-20 23:55:37

Local clock offset: 1.563 ms

Remote clock offset: -2.564 ms

Run 2: Report of SReAM — Data Link

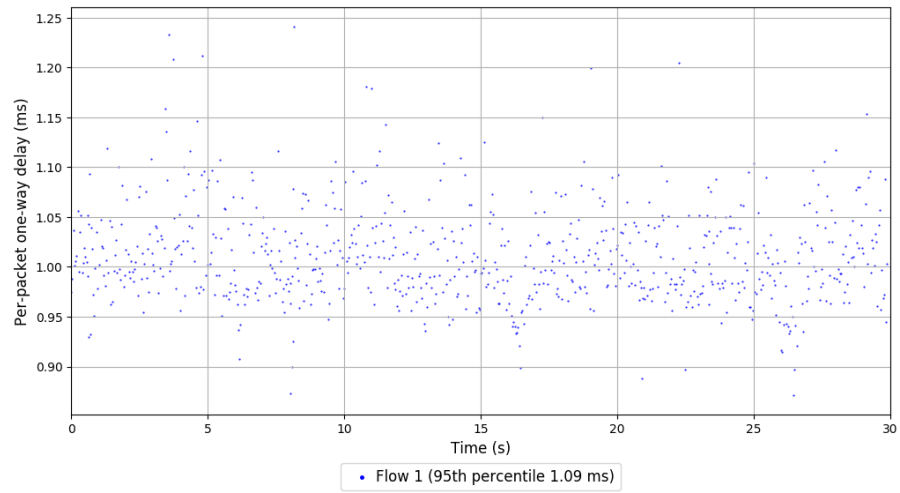
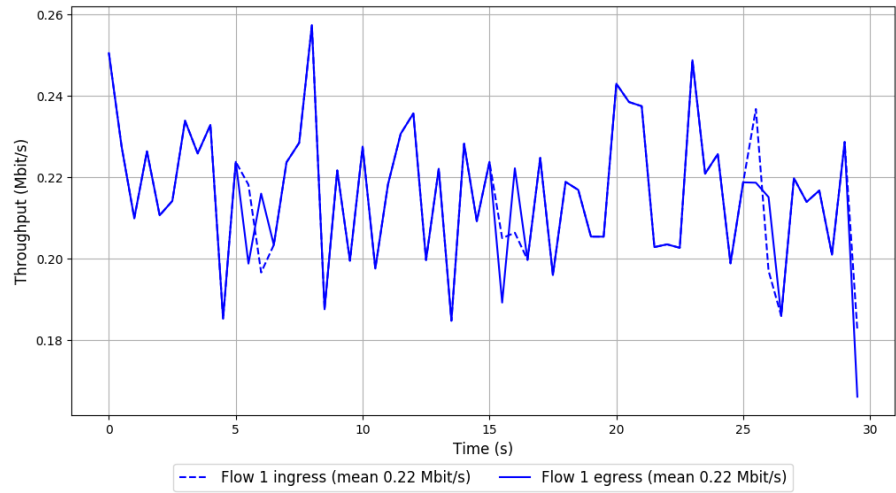


Run 3: Statistics of SCReAM

Start at: 2017-11-21 00:14:11
End at: 2017-11-21 00:14:41
Local clock offset: 1.844 ms
Remote clock offset: -2.088 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.095 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.095 ms
Loss rate: 0.13%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

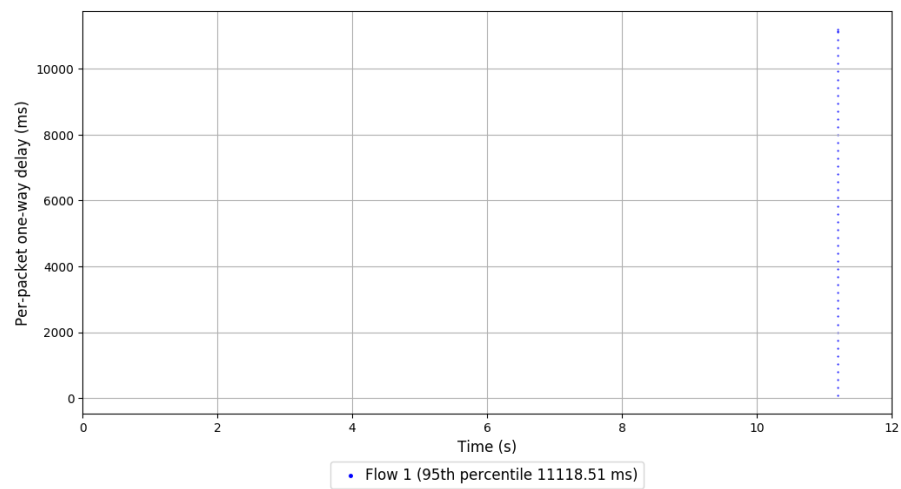
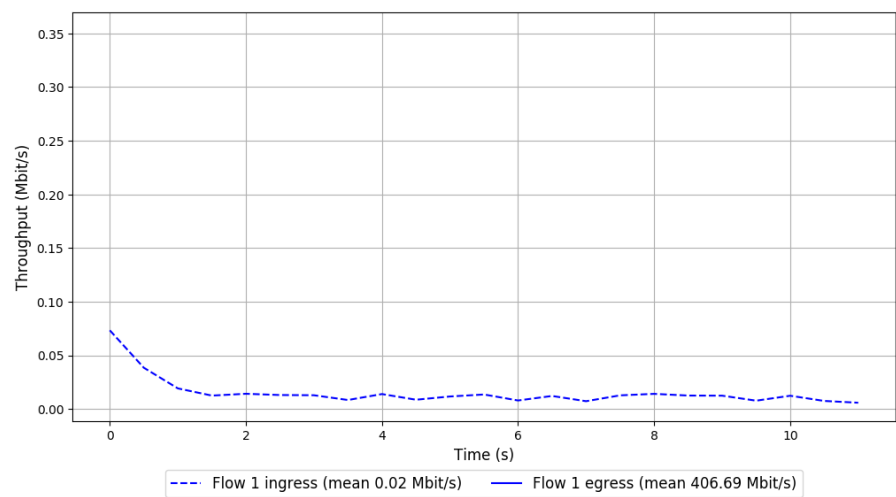
Start at: 2017-11-21 00:33:22

End at: 2017-11-21 00:33:52

Local clock offset: 1.23 ms

Remote clock offset: -1.785 ms

Run 4: Report of SReAM — Data Link

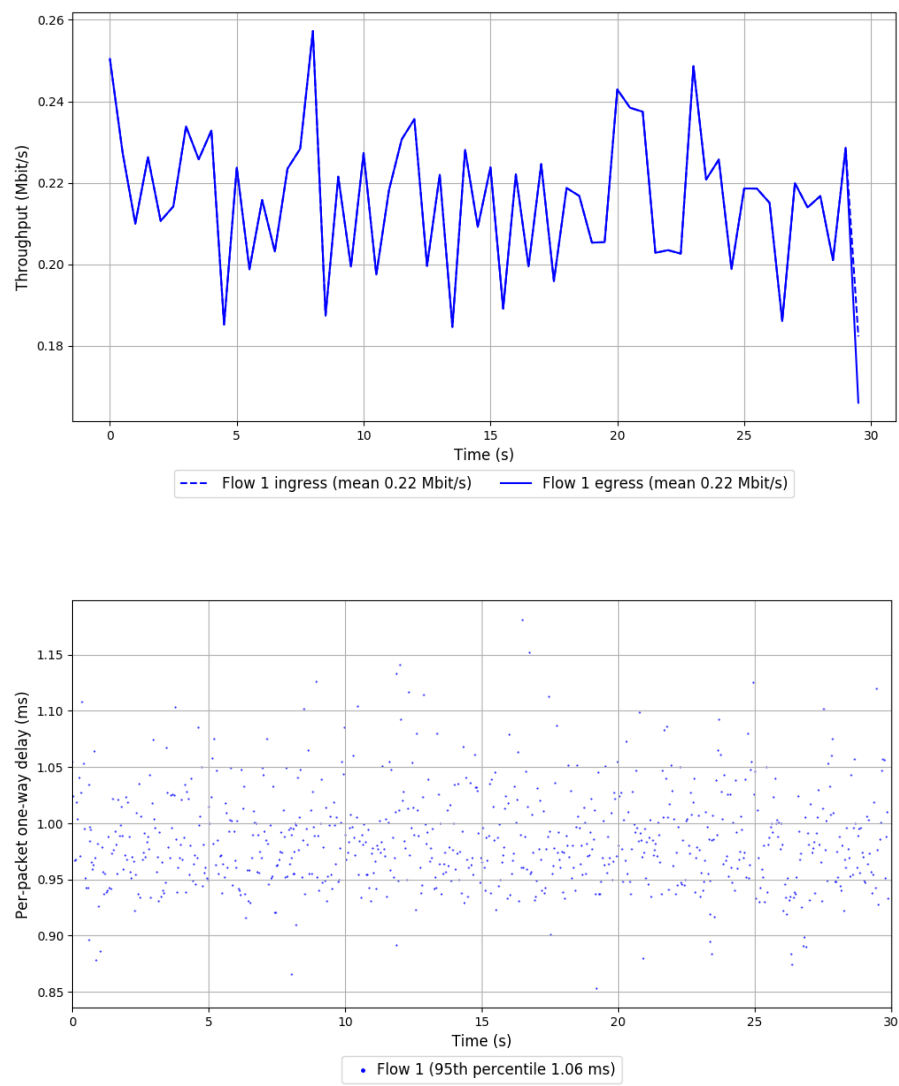


Run 5: Statistics of SCReAM

Start at: 2017-11-21 00:52:48
End at: 2017-11-21 00:53:18
Local clock offset: 0.814 ms
Remote clock offset: -1.505 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.061 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.061 ms
Loss rate: 0.13%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

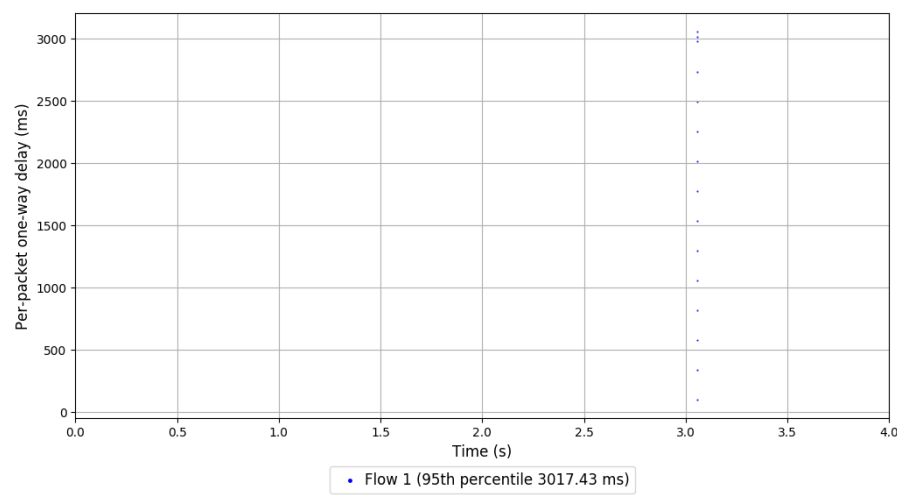
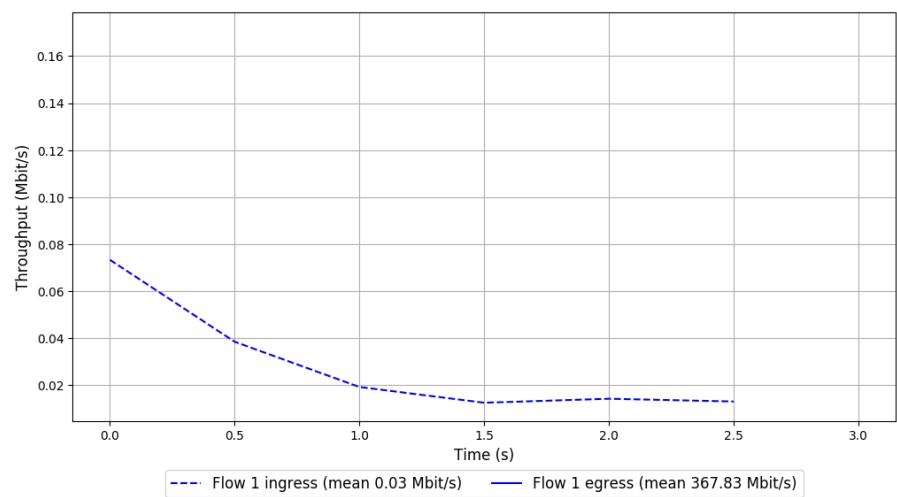
Start at: 2017-11-21 01:12:08

End at: 2017-11-21 01:12:38

Local clock offset: 0.766 ms

Remote clock offset: -1.165 ms

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

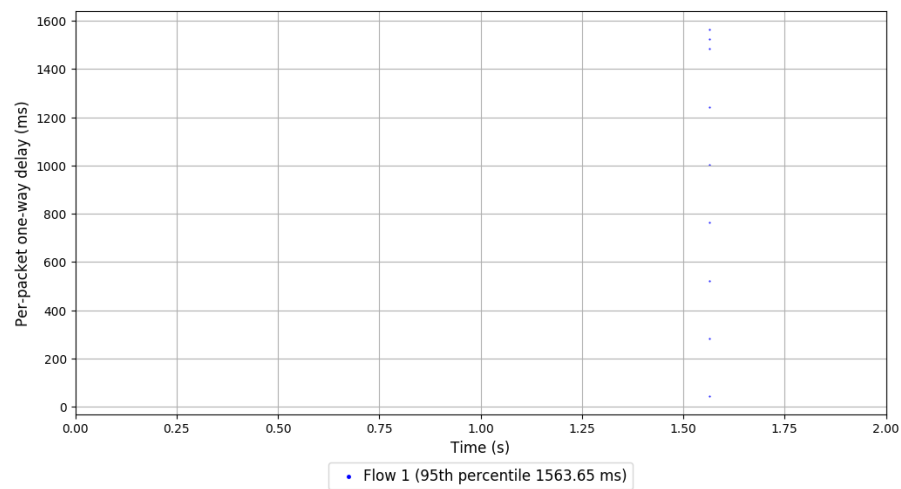
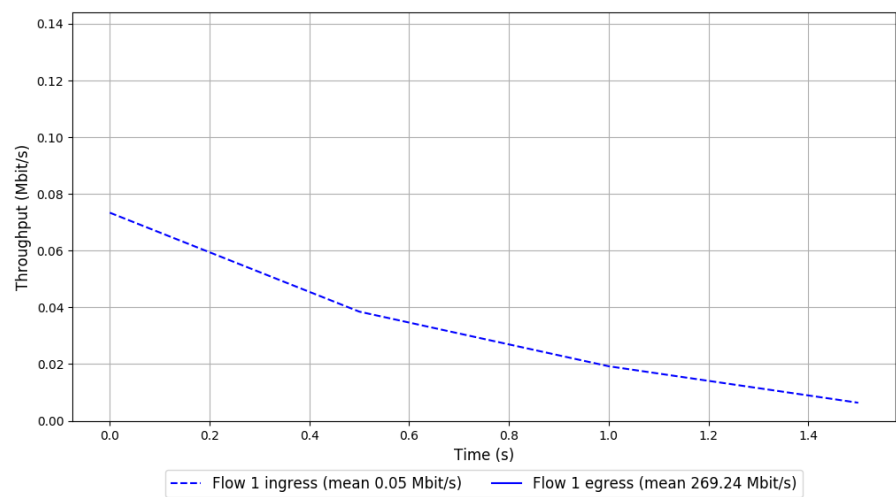
Start at: 2017-11-21 01:31:35

End at: 2017-11-21 01:32:05

Local clock offset: 0.933 ms

Remote clock offset: -0.638 ms

Run 7: Report of SReAM — Data Link

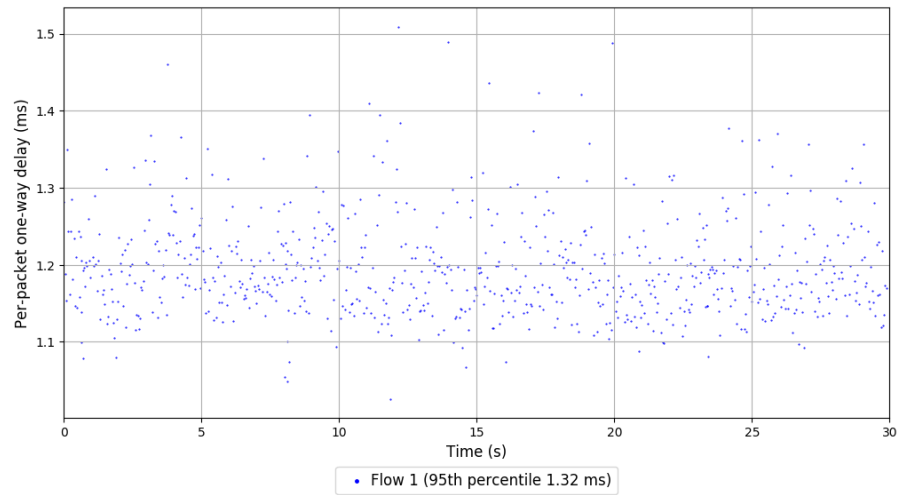
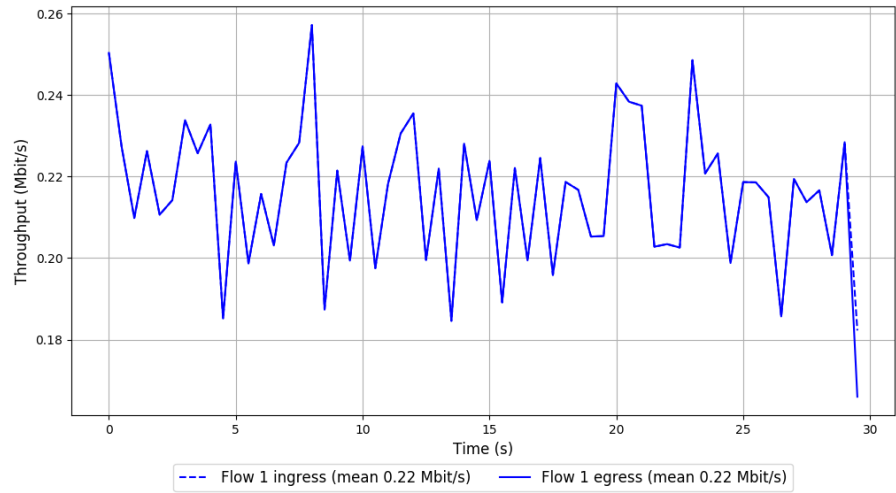


Run 8: Statistics of SCReAM

Start at: 2017-11-21 01:50:32
End at: 2017-11-21 01:51:02
Local clock offset: 1.824 ms
Remote clock offset: -0.806 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.316 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.316 ms
Loss rate: 0.13%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

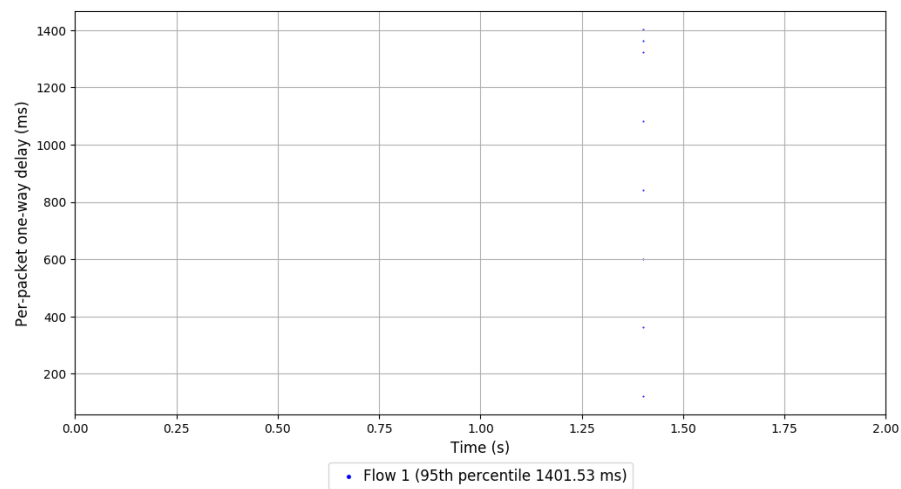
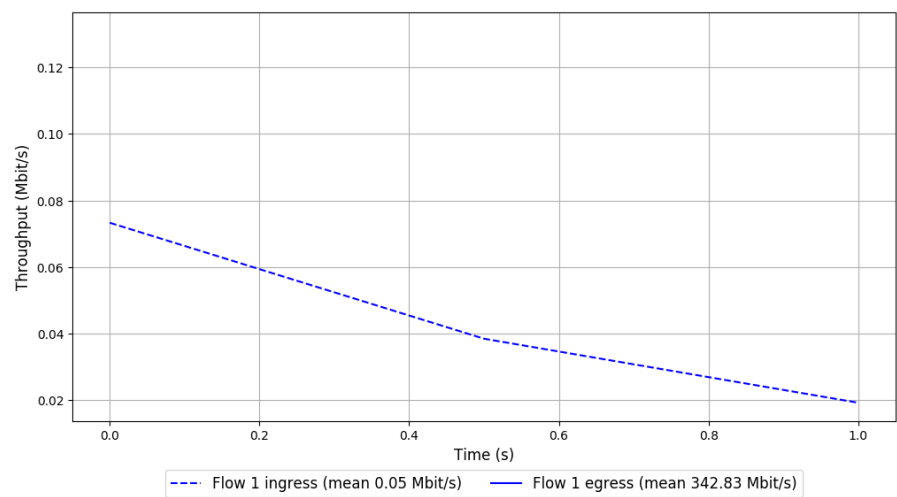
Start at: 2017-11-21 02:09:55

End at: 2017-11-21 02:10:25

Local clock offset: 2.127 ms

Remote clock offset: -0.791 ms

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-11-21 02:29:24

End at: 2017-11-21 02:29:54

Local clock offset: 2.021 ms

Remote clock offset: -0.838 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.258 ms

Loss rate: 0.13%

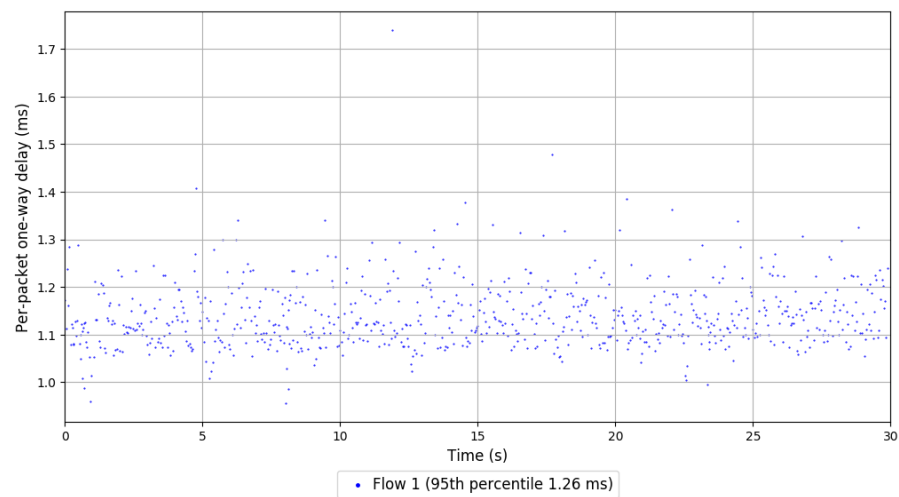
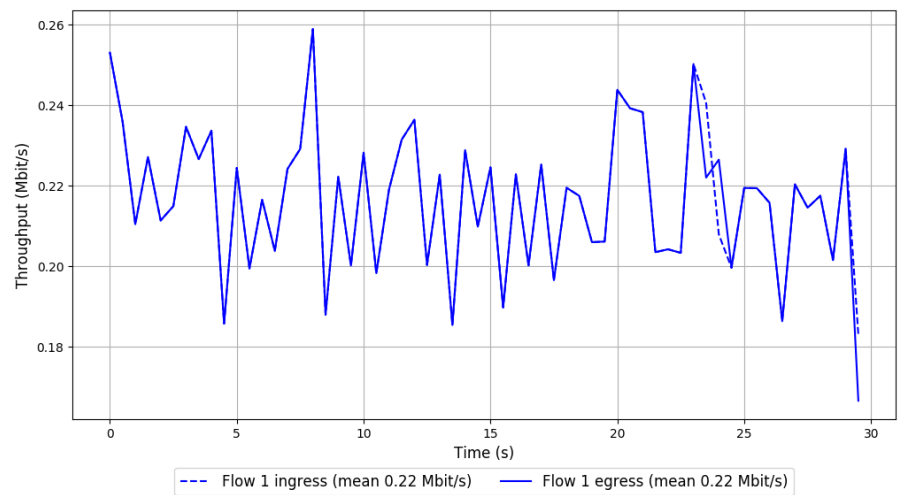
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.258 ms

Loss rate: 0.13%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2017-11-20 23:39:34

End at: 2017-11-20 23:40:04

Local clock offset: 1.208 ms

Remote clock offset: -2.687 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 1.263 ms

Loss rate: 0.04%

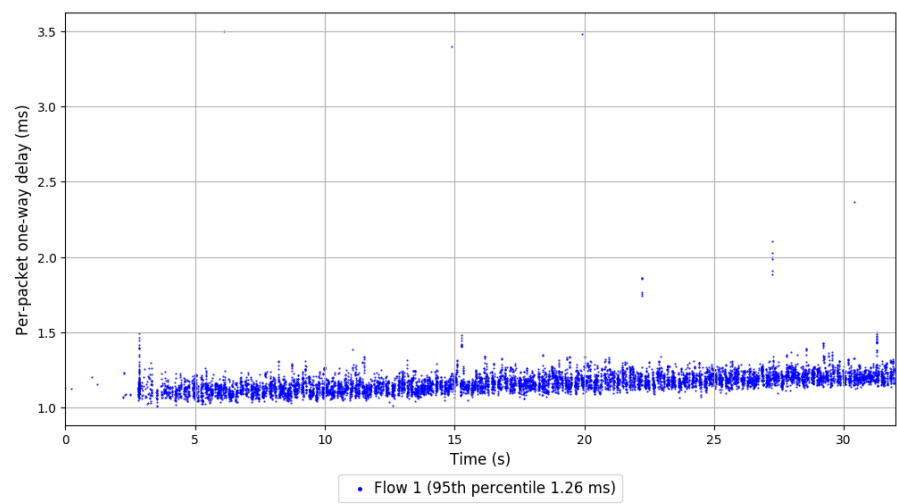
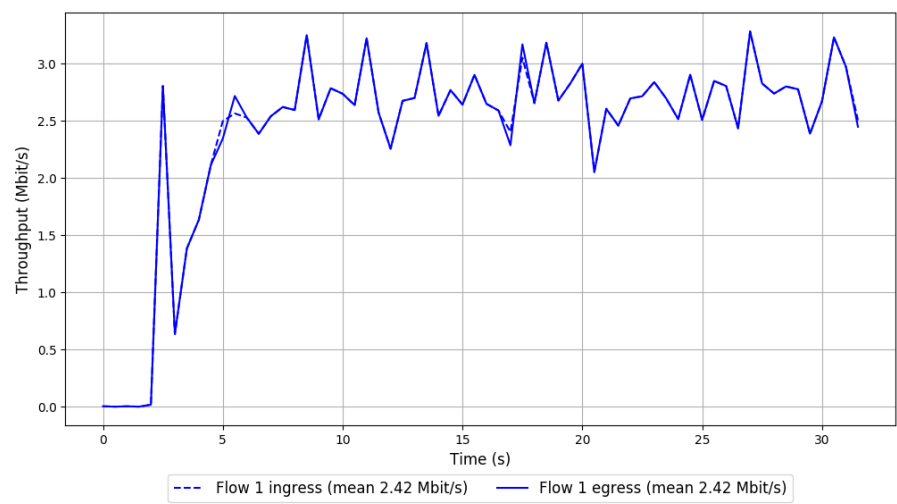
-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 1.263 ms

Loss rate: 0.04%

Run 1: Report of WebRTC media — Data Link

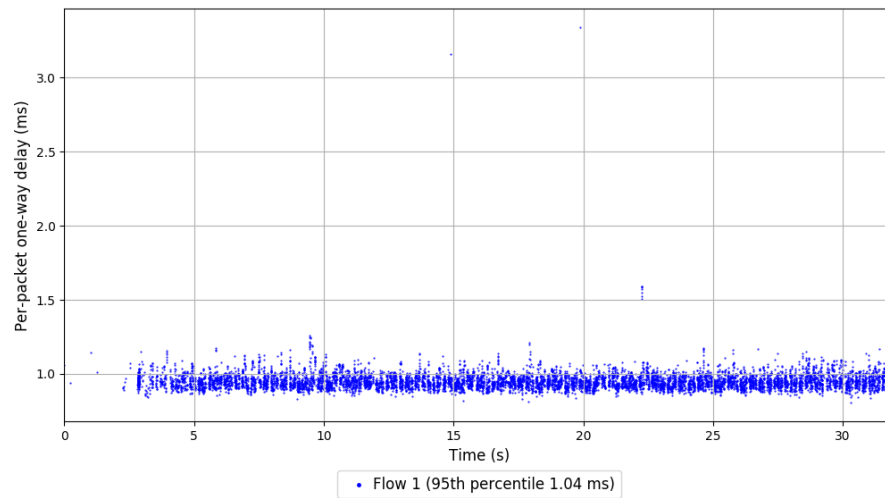
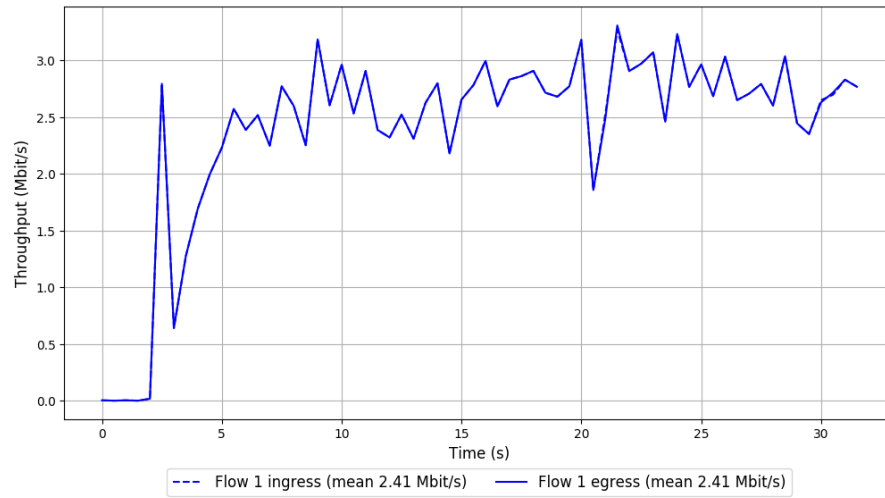


Run 2: Statistics of WebRTC media

Start at: 2017-11-20 23:59:01
End at: 2017-11-20 23:59:31
Local clock offset: 1.721 ms
Remote clock offset: -2.475 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 1.036 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 1.036 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

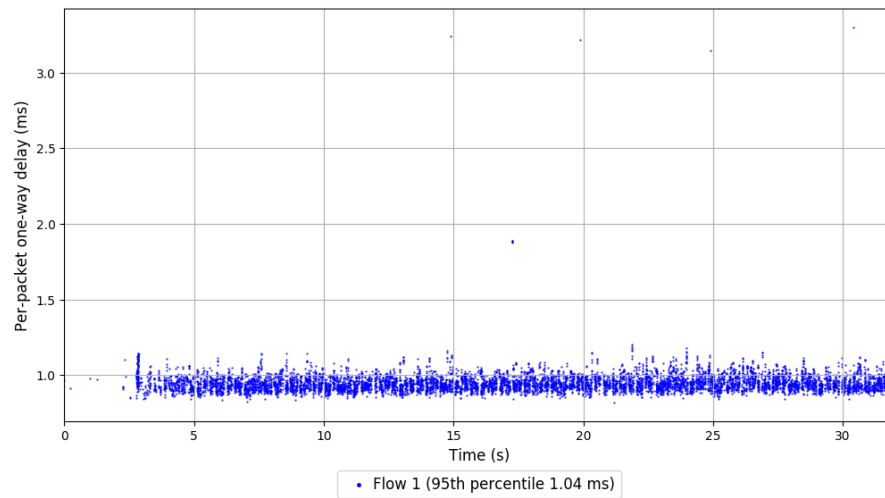
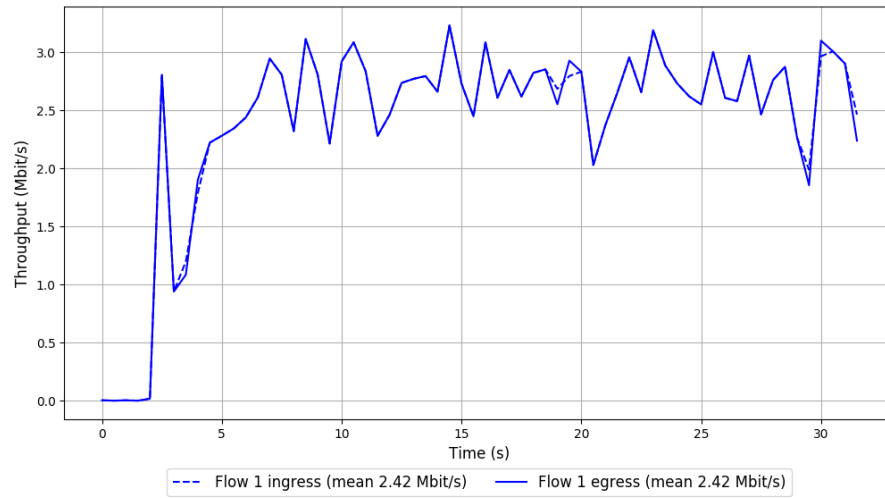


Run 3: Statistics of WebRTC media

Start at: 2017-11-21 00:18:08
End at: 2017-11-21 00:18:38
Local clock offset: 1.841 ms
Remote clock offset: -2.093 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 1.039 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 1.039 ms
Loss rate: 0.15%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-21 00:37:16

End at: 2017-11-21 00:37:46

Local clock offset: 1.229 ms

Remote clock offset: -1.64 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 1.139 ms

Loss rate: 0.00%

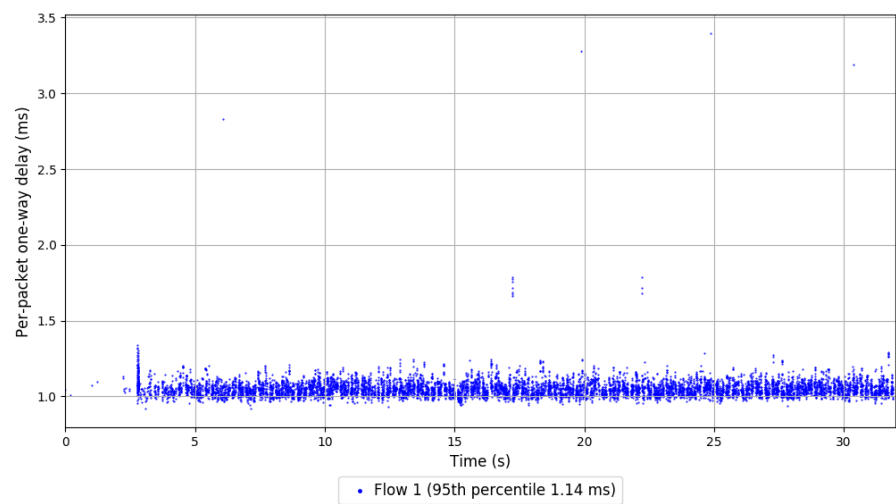
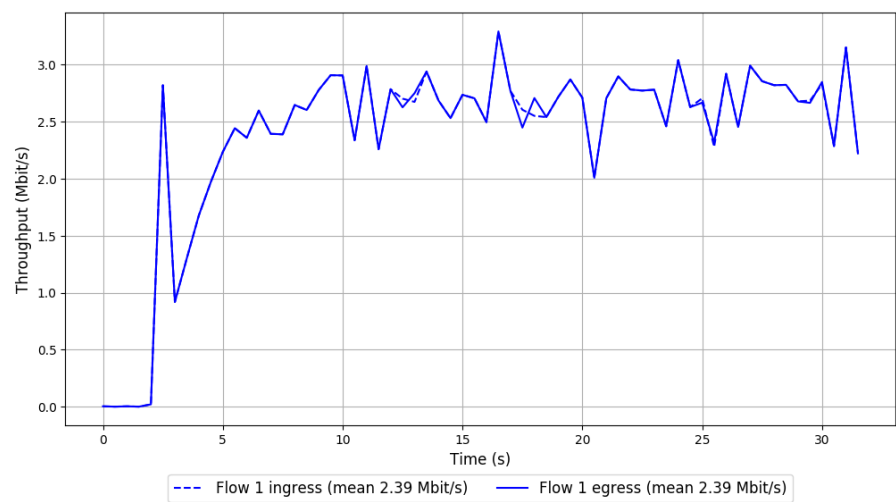
-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 1.139 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link

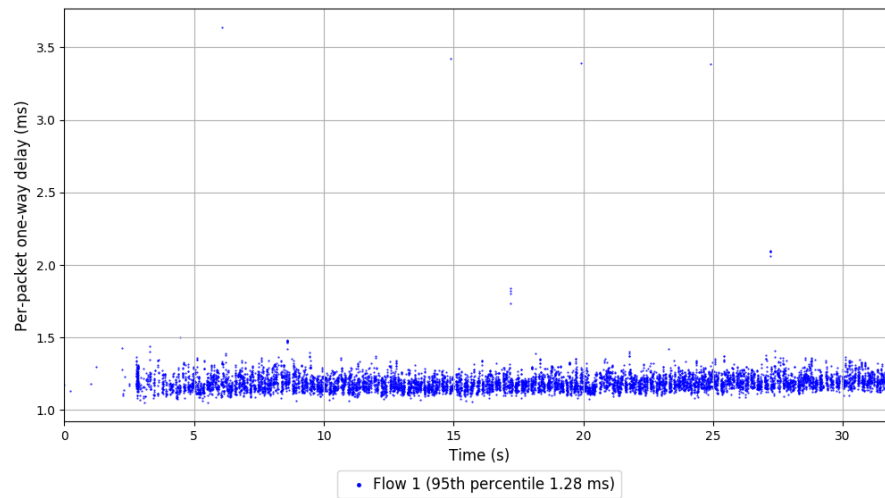
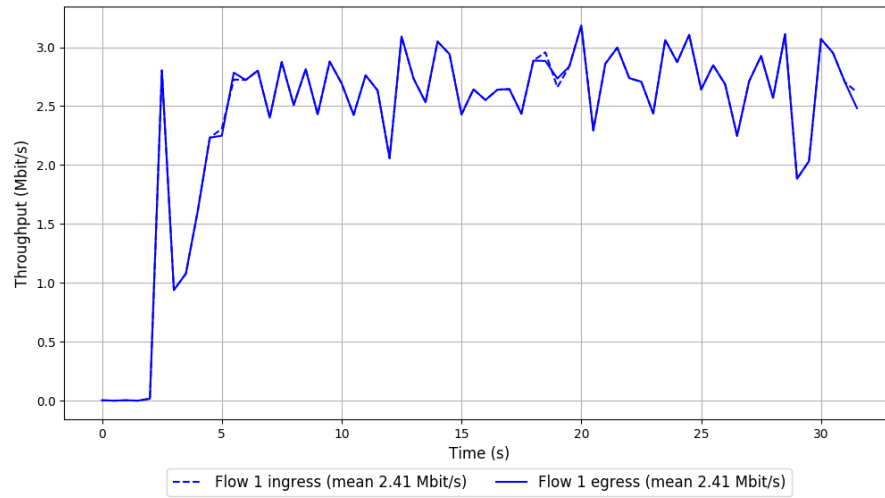


Run 5: Statistics of WebRTC media

Start at: 2017-11-21 00:56:43
End at: 2017-11-21 00:57:13
Local clock offset: 0.781 ms
Remote clock offset: -1.588 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 1.282 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 1.282 ms
Loss rate: 0.09%

Run 5: Report of WebRTC media — Data Link

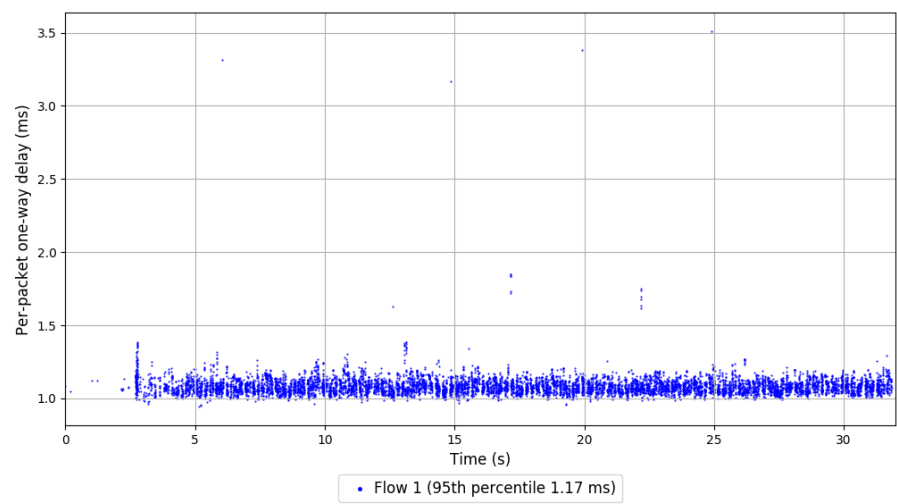
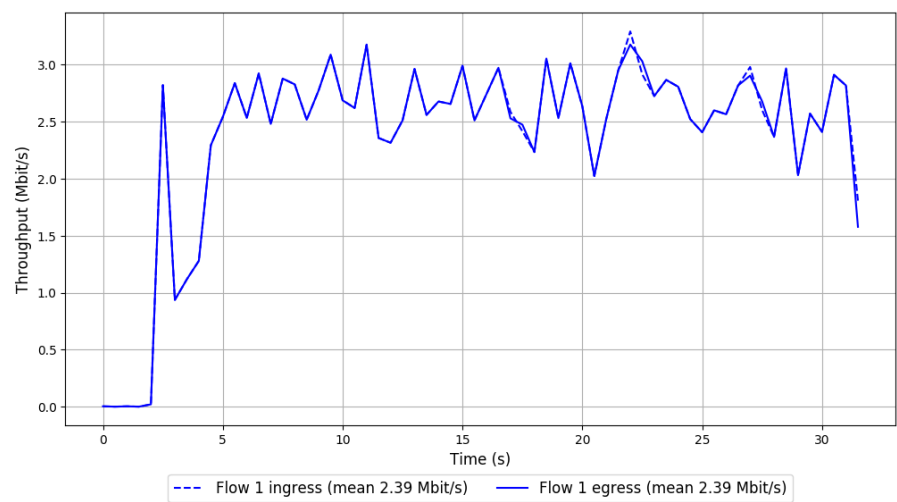


Run 6: Statistics of WebRTC media

Start at: 2017-11-21 01:16:02
End at: 2017-11-21 01:16:32
Local clock offset: 0.77 ms
Remote clock offset: -0.995 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 1.166 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 1.166 ms
Loss rate: 0.15%

Run 6: Report of WebRTC media — Data Link

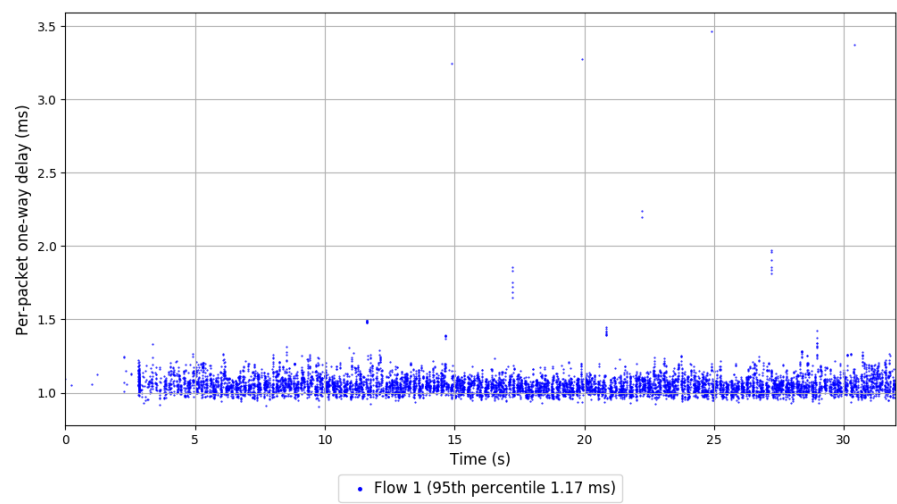
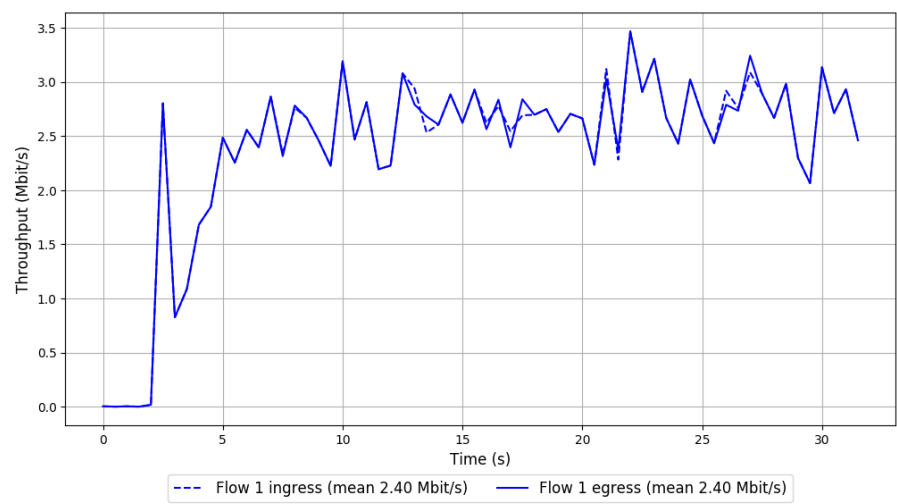


Run 7: Statistics of WebRTC media

Start at: 2017-11-21 01:35:32
End at: 2017-11-21 01:36:02
Local clock offset: 1.025 ms
Remote clock offset: -0.703 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 1.168 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 1.168 ms
Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link

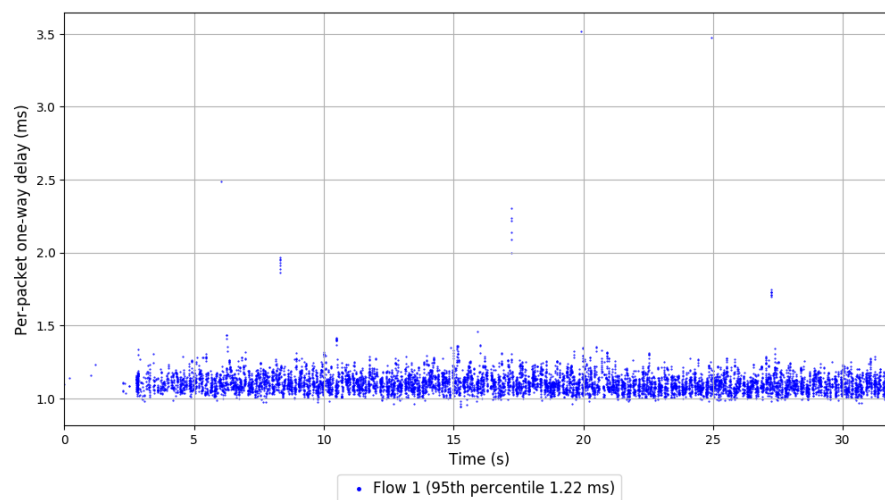
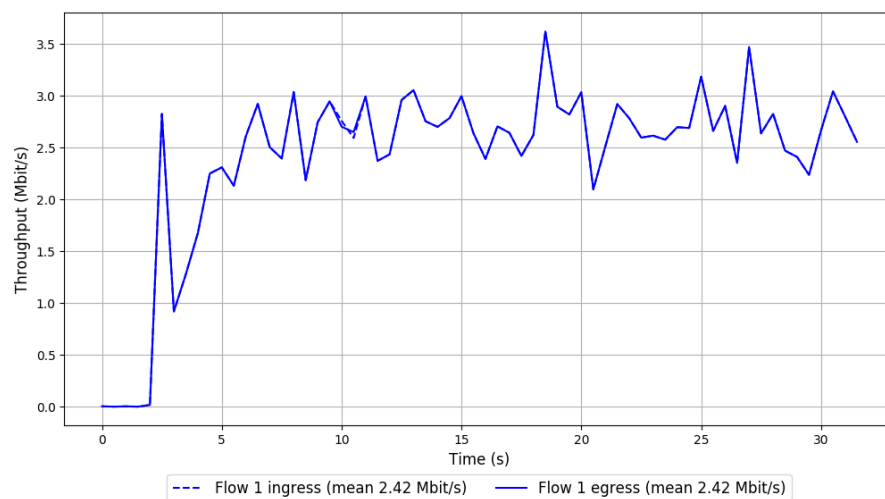


Run 8: Statistics of WebRTC media

Start at: 2017-11-21 01:54:27
End at: 2017-11-21 01:54:57
Local clock offset: 2.008 ms
Remote clock offset: -0.767 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 1.217 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 1.217 ms
Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link

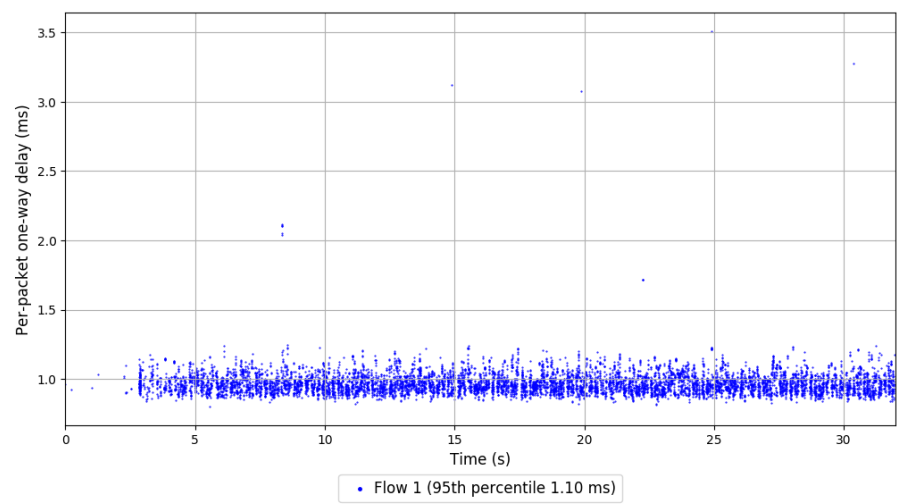
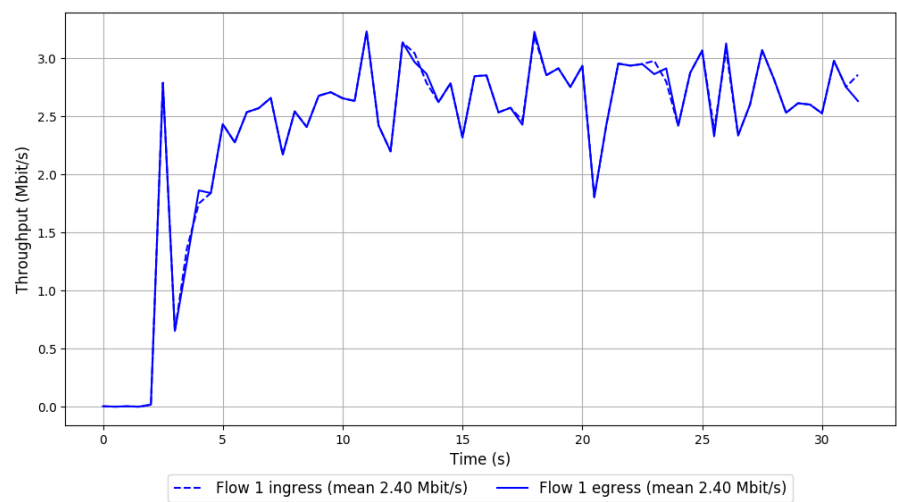


Run 9: Statistics of WebRTC media

Start at: 2017-11-21 02:13:50
End at: 2017-11-21 02:14:20
Local clock offset: 2.186 ms
Remote clock offset: -0.698 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 1.097 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 1.097 ms
Loss rate: 0.15%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-21 02:33:18

End at: 2017-11-21 02:33:48

Local clock offset: 1.914 ms

Remote clock offset: -0.904 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.41 Mbit/s

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

Loss rate: 0.11%

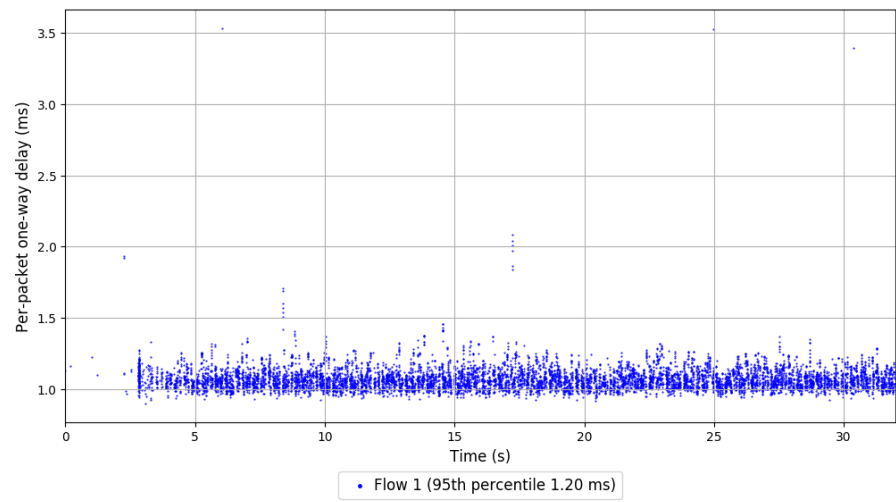
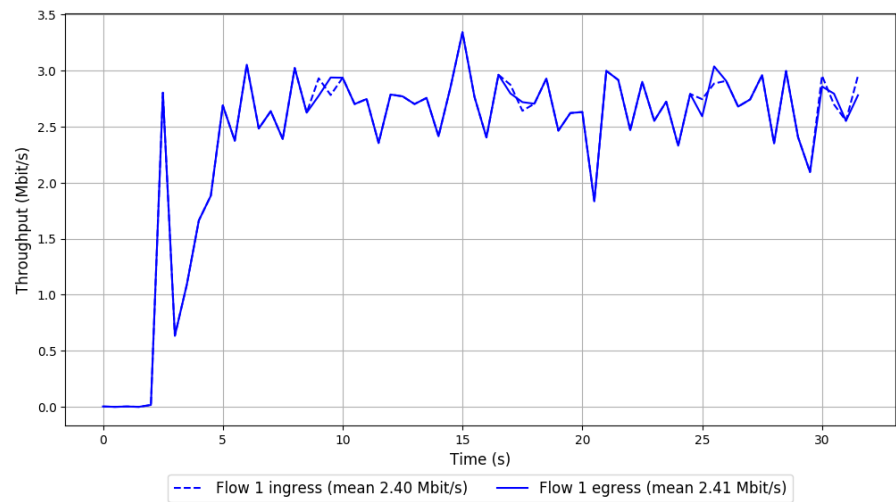
-- Flow 1:

Average throughput: 2.41 Mbit/s

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

Loss rate: 0.11%

Run 10: Report of WebRTC media — Data Link

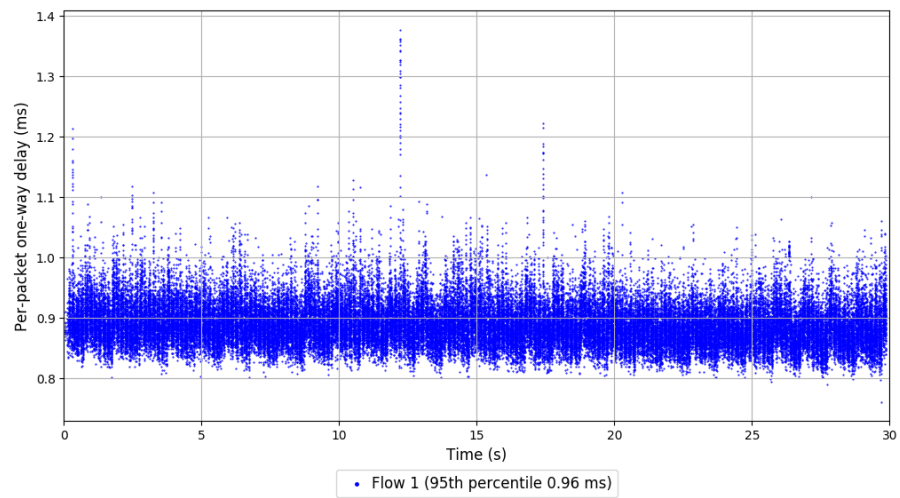
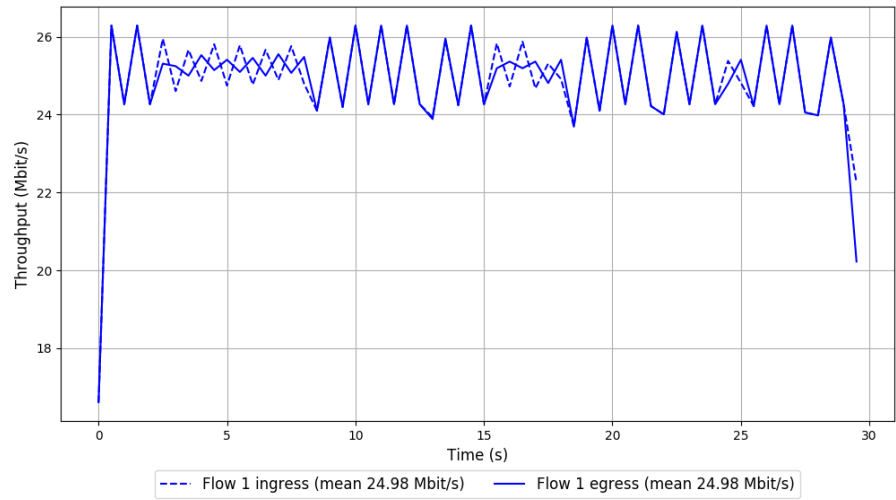


Run 1: Statistics of Sprout

Start at: 2017-11-20 23:44:53
End at: 2017-11-20 23:45:23
Local clock offset: 0.893 ms
Remote clock offset: -2.523 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.98 Mbit/s
95th percentile per-packet one-way delay: 0.957 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.98 Mbit/s
95th percentile per-packet one-way delay: 0.957 ms
Loss rate: 0.14%

Run 1: Report of Sprout — Data Link

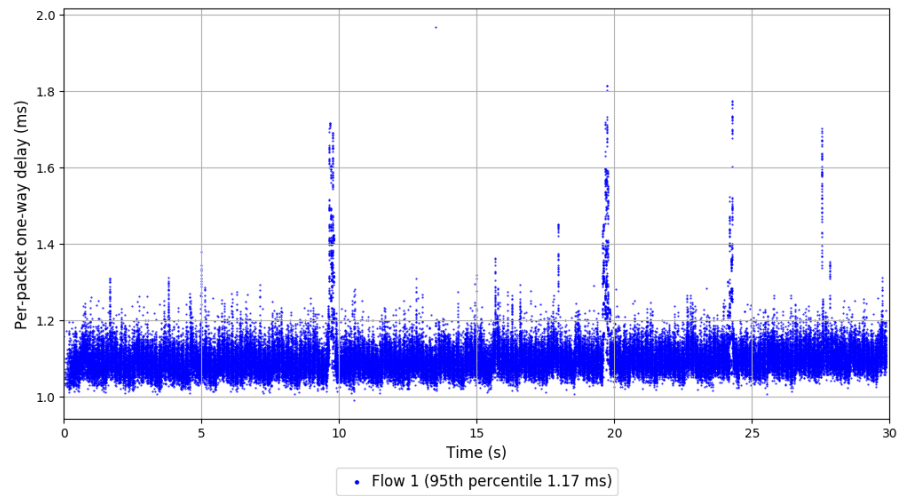
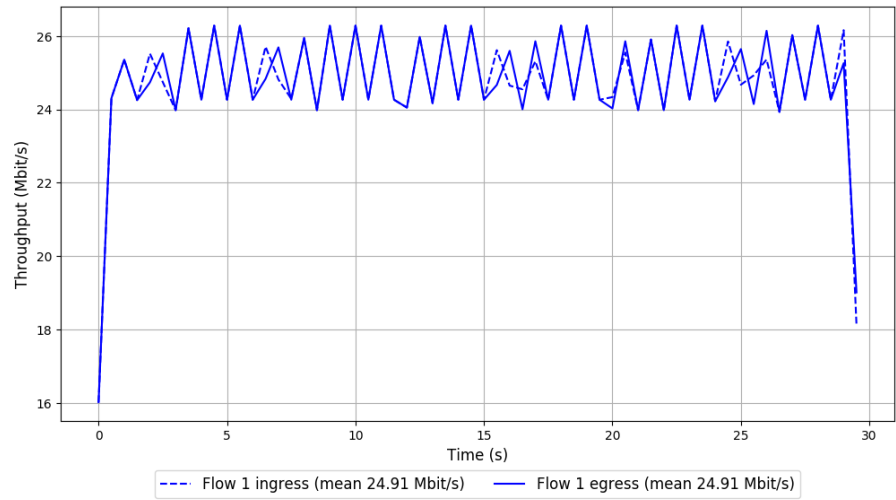


Run 2: Statistics of Sprout

Start at: 2017-11-21 00:04:07
End at: 2017-11-21 00:04:37
Local clock offset: 1.835 ms
Remote clock offset: -2.392 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.91 Mbit/s
95th percentile per-packet one-way delay: 1.172 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.91 Mbit/s
95th percentile per-packet one-way delay: 1.172 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

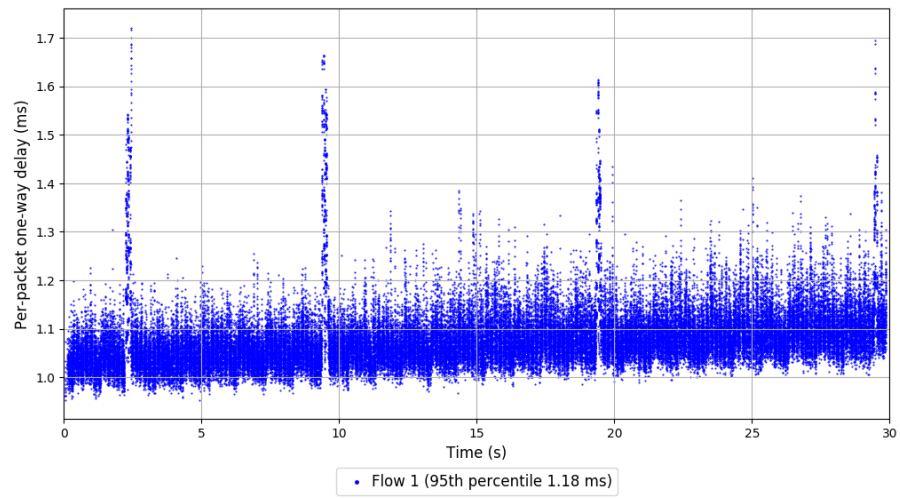
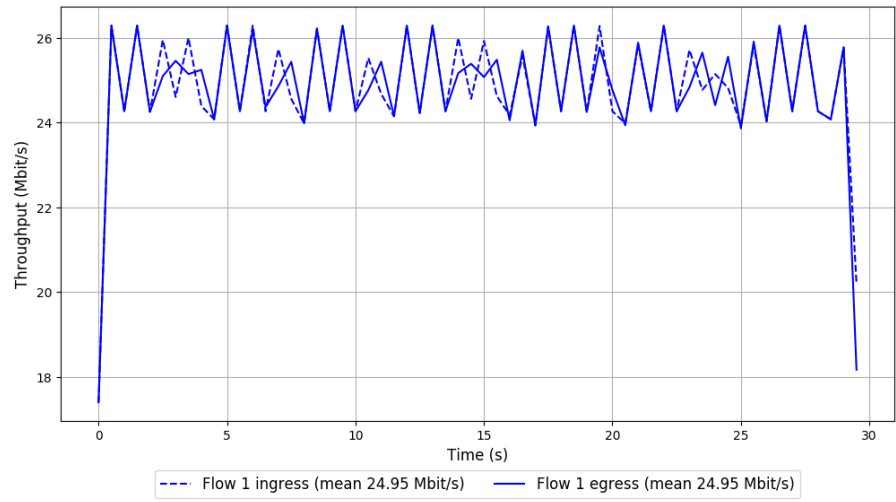


Run 3: Statistics of Sprout

Start at: 2017-11-21 00:23:27
End at: 2017-11-21 00:23:57
Local clock offset: 1.547 ms
Remote clock offset: -1.977 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.95 Mbit/s
95th percentile per-packet one-way delay: 1.183 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.95 Mbit/s
95th percentile per-packet one-way delay: 1.183 ms
Loss rate: 0.14%

Run 3: Report of Sprout — Data Link

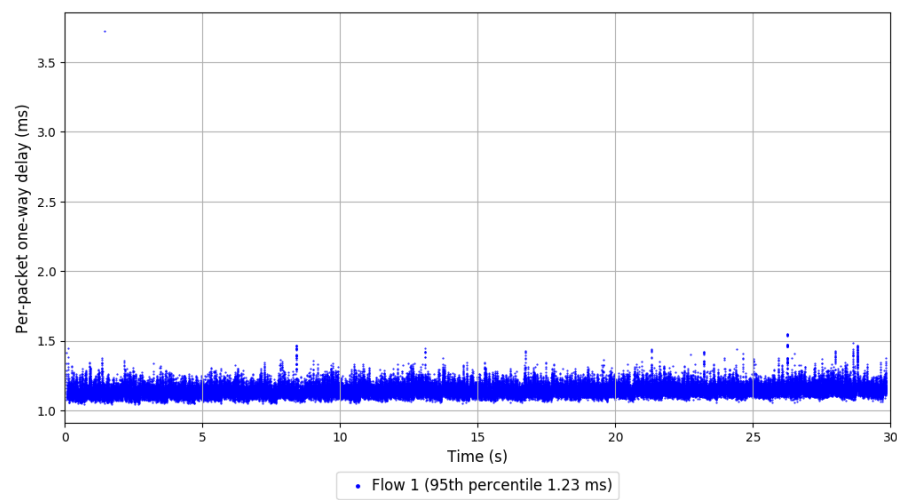
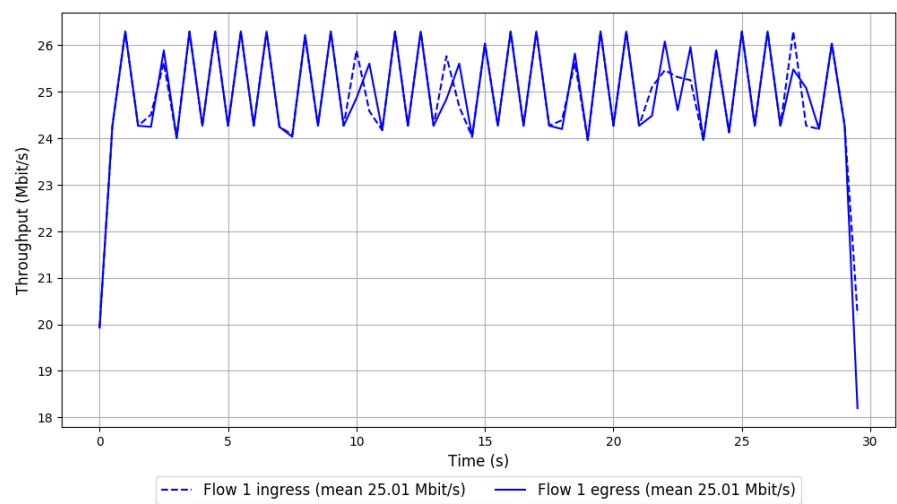


Run 4: Statistics of Sprout

Start at: 2017-11-21 00:42:36
End at: 2017-11-21 00:43:06
Local clock offset: 1.066 ms
Remote clock offset: -1.563 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 25.01 Mbit/s
95th percentile per-packet one-way delay: 1.226 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 25.01 Mbit/s
95th percentile per-packet one-way delay: 1.226 ms
Loss rate: 0.14%

Run 4: Report of Sprout — Data Link

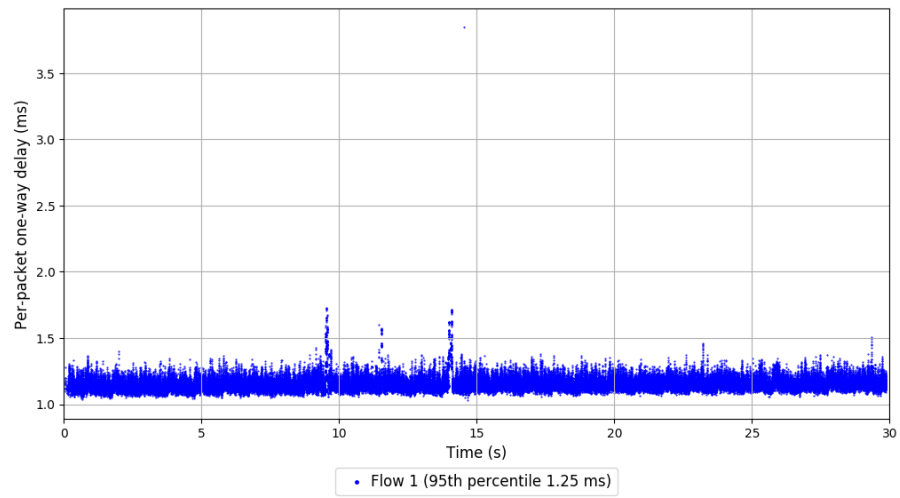
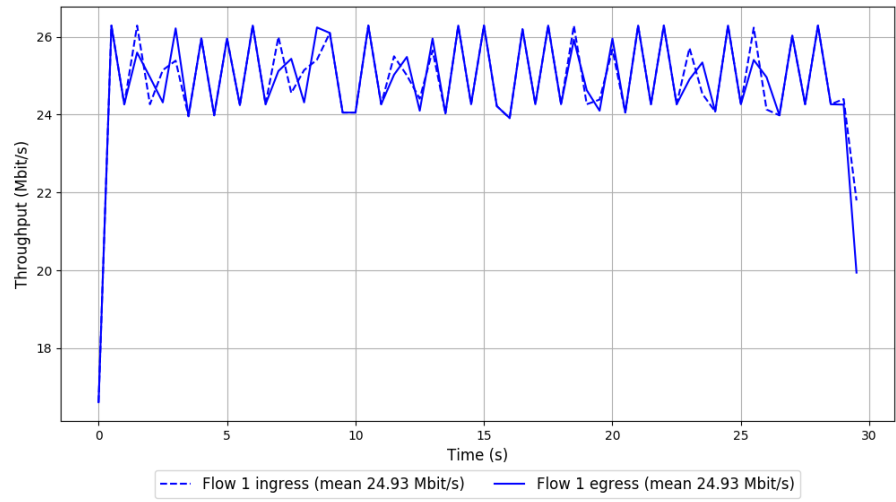


Run 5: Statistics of Sprout

Start at: 2017-11-21 01:02:02
End at: 2017-11-21 01:02:32
Local clock offset: 0.593 ms
Remote clock offset: -1.413 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.93 Mbit/s
95th percentile per-packet one-way delay: 1.247 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 24.93 Mbit/s
95th percentile per-packet one-way delay: 1.247 ms
Loss rate: 0.13%

Run 5: Report of Sprout — Data Link

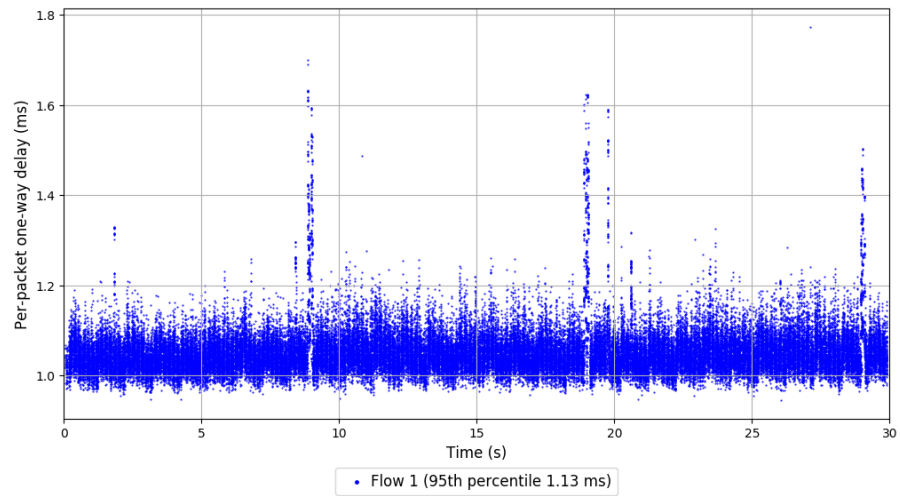
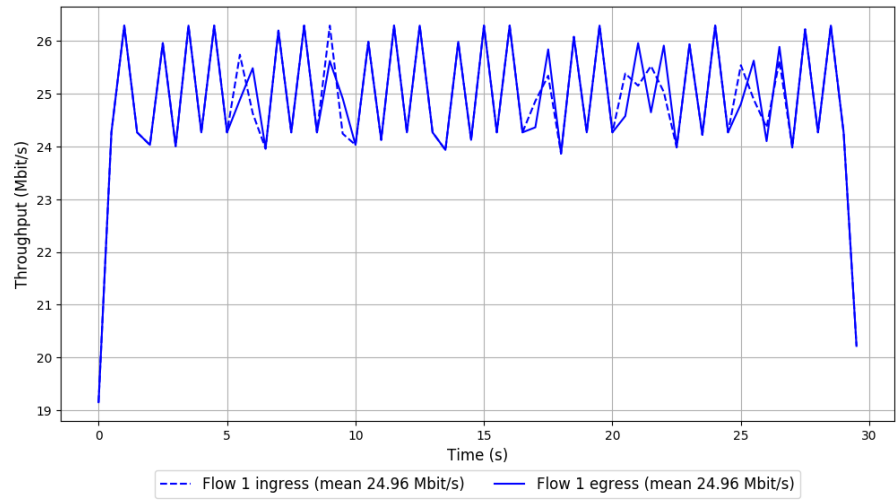


Run 6: Statistics of Sprout

Start at: 2017-11-21 01:21:23
End at: 2017-11-21 01:21:53
Local clock offset: 0.714 ms
Remote clock offset: -0.893 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.96 Mbit/s
95th percentile per-packet one-way delay: 1.130 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.96 Mbit/s
95th percentile per-packet one-way delay: 1.130 ms
Loss rate: 0.00%

Run 6: Report of Sprout — Data Link

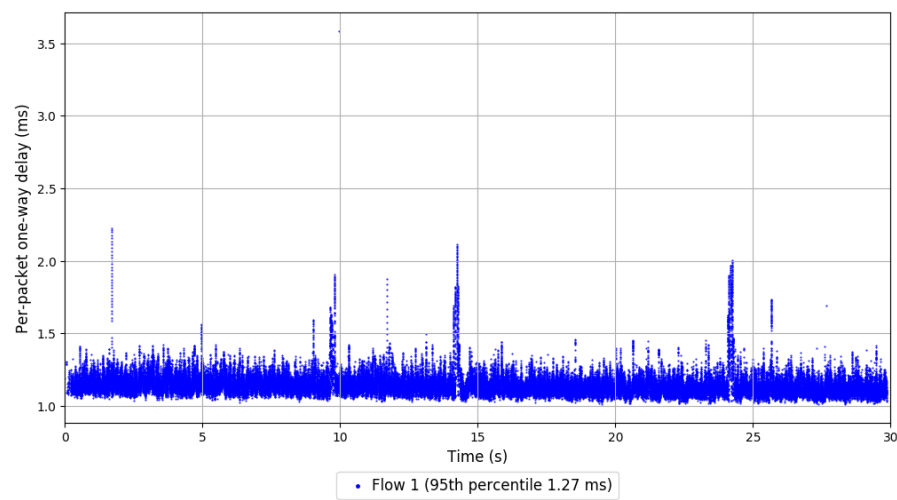
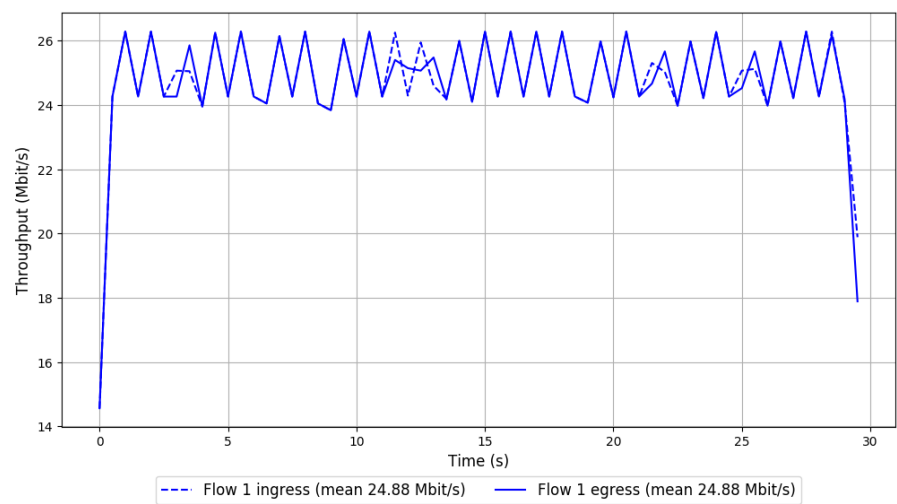


Run 7: Statistics of Sprout

Start at: 2017-11-21 01:40:58
End at: 2017-11-21 01:41:28
Local clock offset: 1.39 ms
Remote clock offset: -0.748 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.88 Mbit/s
95th percentile per-packet one-way delay: 1.273 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 24.88 Mbit/s
95th percentile per-packet one-way delay: 1.273 ms
Loss rate: 0.13%

Run 7: Report of Sprout — Data Link

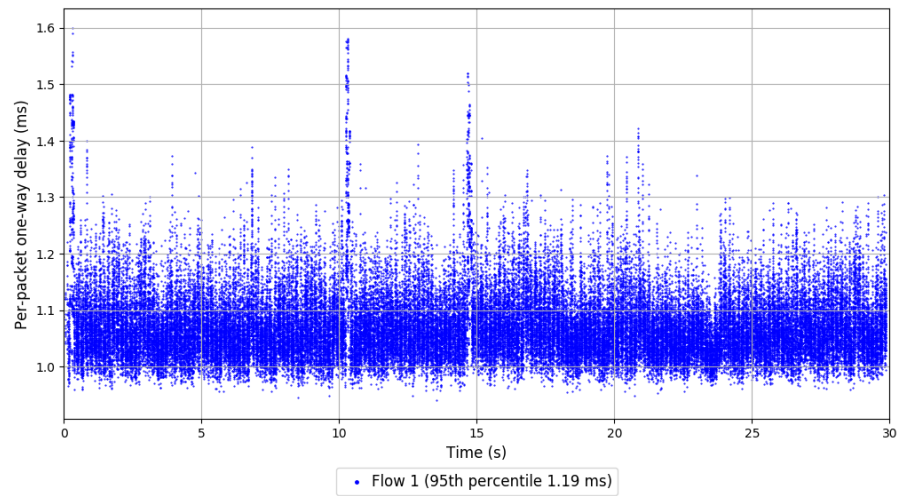
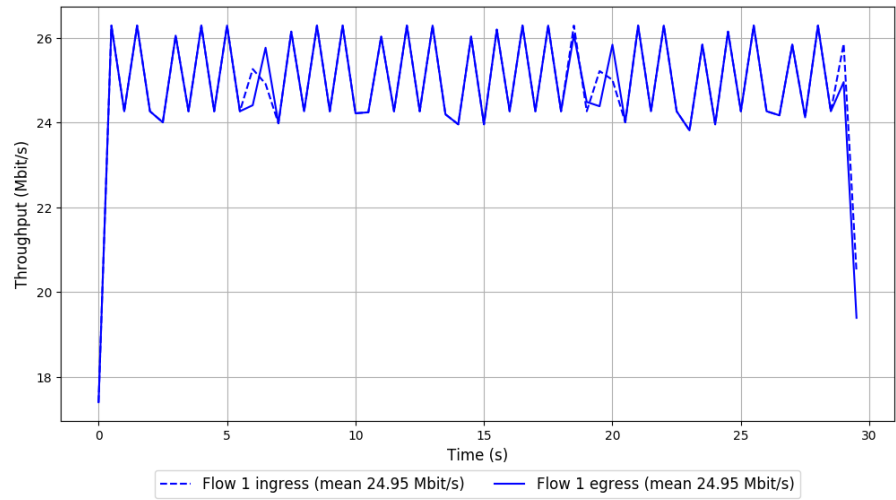


Run 8: Statistics of Sprout

Start at: 2017-11-21 01:59:47
End at: 2017-11-21 02:00:17
Local clock offset: 2.026 ms
Remote clock offset: -0.782 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.95 Mbit/s
95th percentile per-packet one-way delay: 1.187 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 24.95 Mbit/s
95th percentile per-packet one-way delay: 1.187 ms
Loss rate: 0.13%

Run 8: Report of Sprout — Data Link

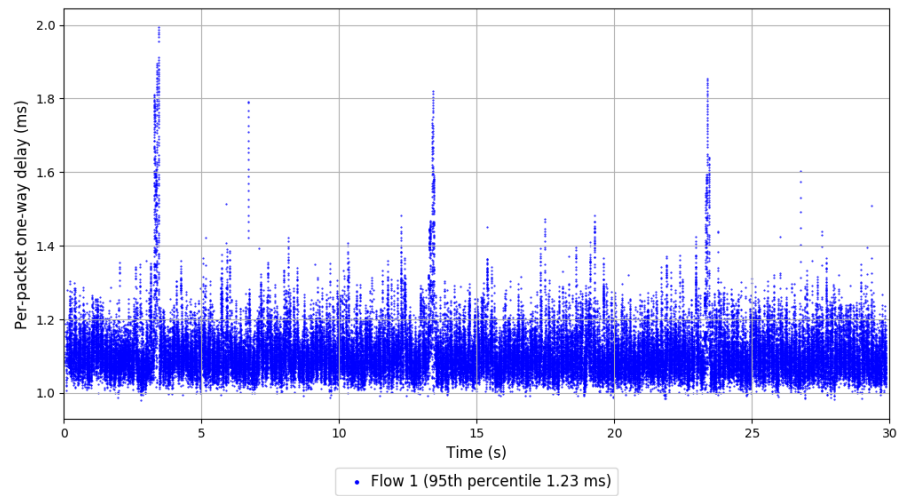
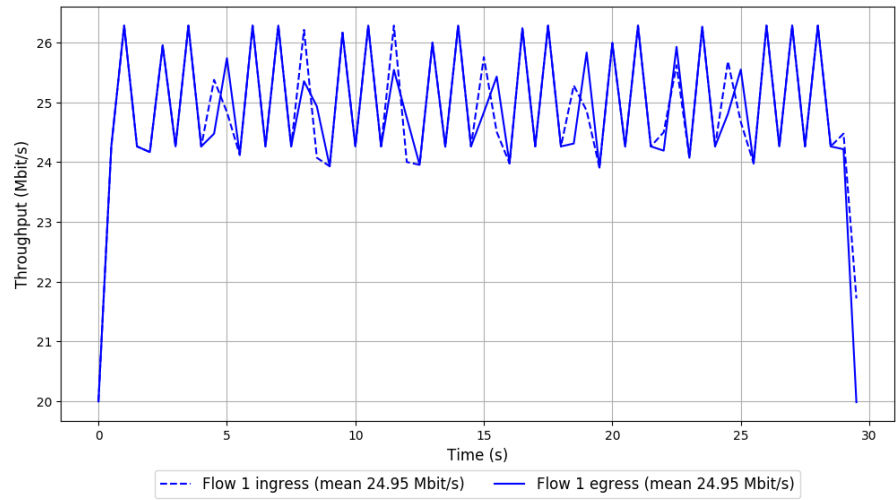


Run 9: Statistics of Sprout

Start at: 2017-11-21 02:19:13
End at: 2017-11-21 02:19:43
Local clock offset: 2.373 ms
Remote clock offset: -0.721 ms

Below is generated by plot.py at 2017-11-21 06:47:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.95 Mbit/s
95th percentile per-packet one-way delay: 1.230 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 24.95 Mbit/s
95th percentile per-packet one-way delay: 1.230 ms
Loss rate: 0.13%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-21 02:38:36

End at: 2017-11-21 02:39:06

Local clock offset: 1.865 ms

Remote clock offset: -0.843 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 24.33 Mbit/s

95th percentile per-packet one-way delay: 1.137 ms

Loss rate: 0.07%

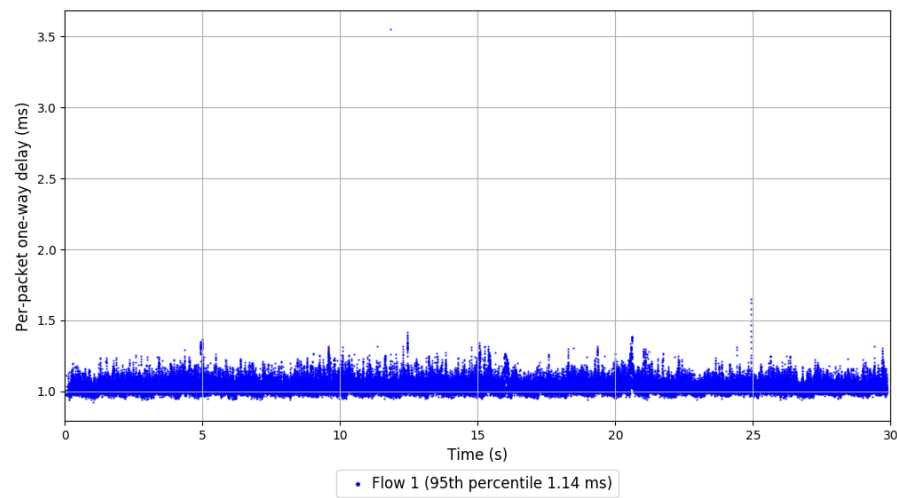
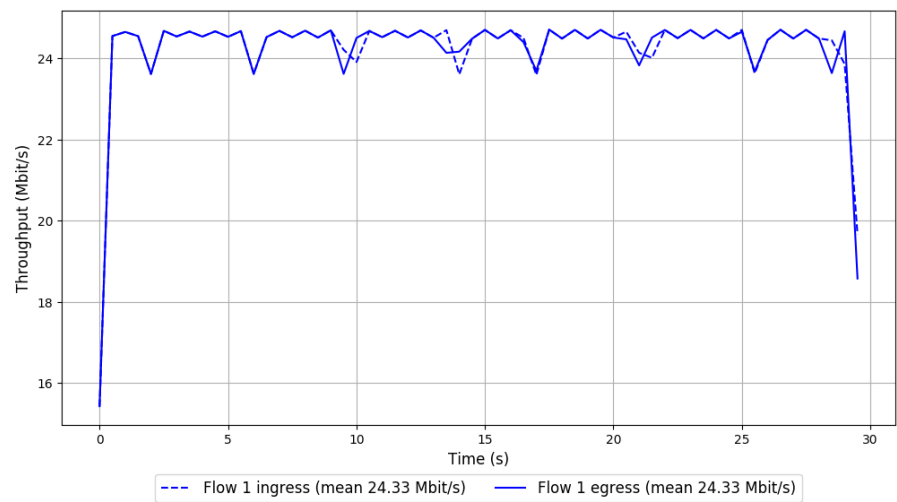
-- Flow 1:

Average throughput: 24.33 Mbit/s

95th percentile per-packet one-way delay: 1.137 ms

Loss rate: 0.07%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2017-11-20 23:43:26

End at: 2017-11-20 23:43:56

Local clock offset: 0.795 ms

Remote clock offset: -2.586 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 278.20 Mbit/s

95th percentile per-packet one-way delay: 1.005 ms

Loss rate: 0.08%

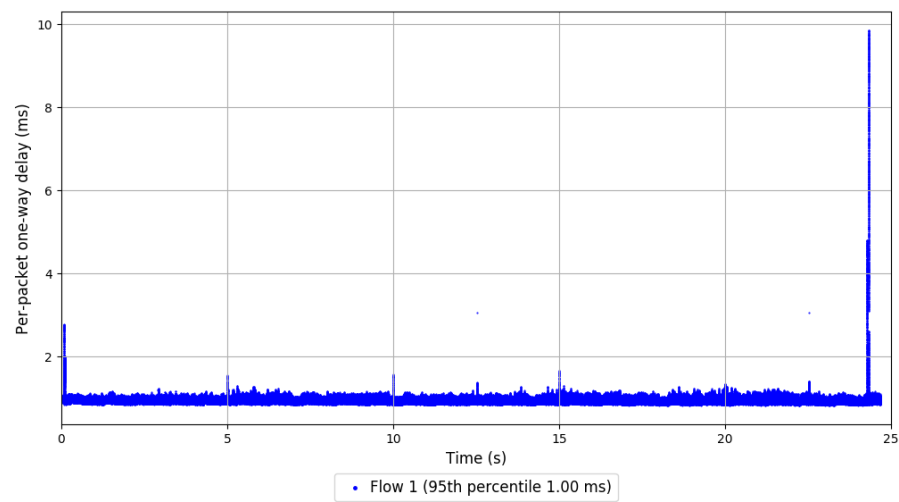
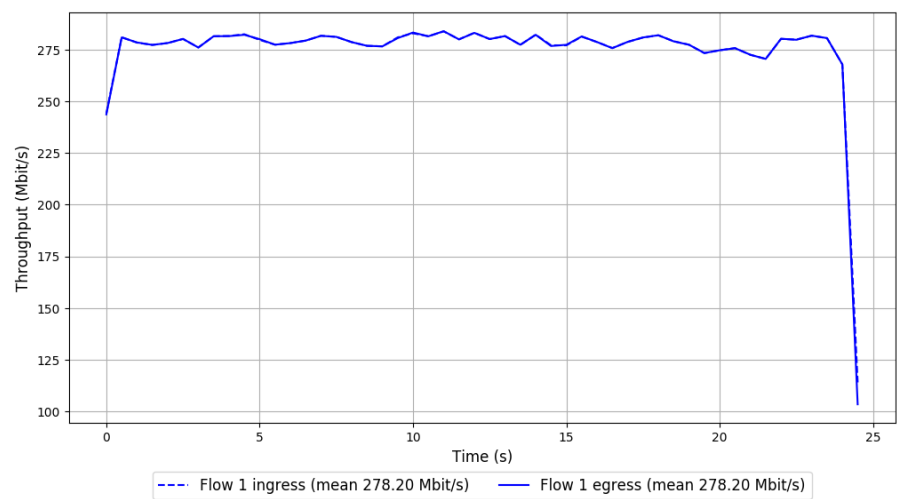
-- Flow 1:

Average throughput: 278.20 Mbit/s

95th percentile per-packet one-way delay: 1.005 ms

Loss rate: 0.08%

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



Run 2: Statistics of TaoVA-100x

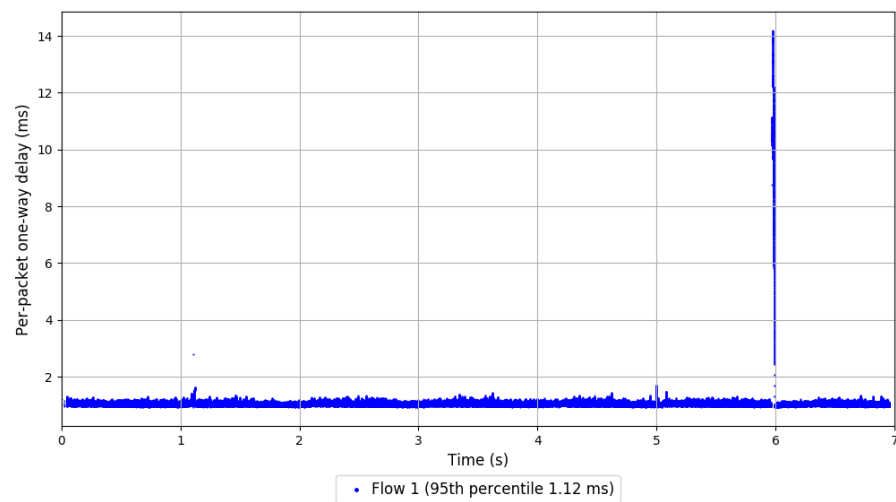
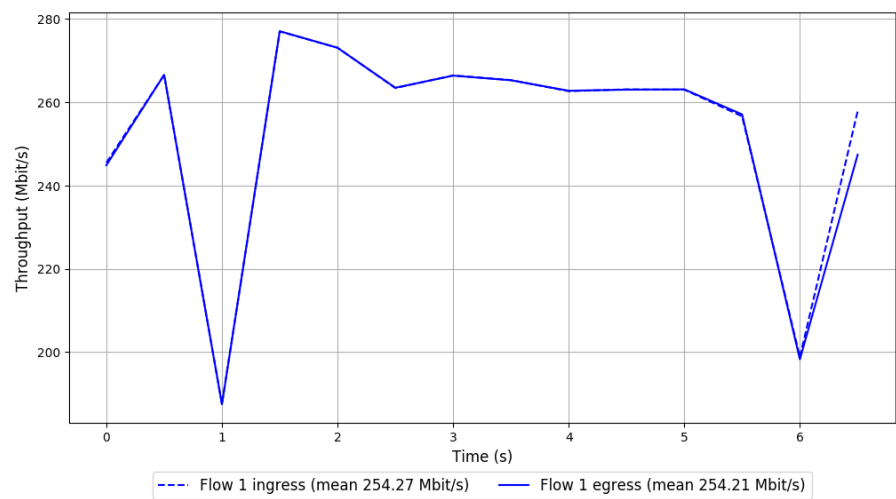
Start at: 2017-11-21 00:02:53

End at: 2017-11-21 00:03:23

Local clock offset: 1.773 ms

Remote clock offset: -2.451 ms

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-21 00:21:59

End at: 2017-11-21 00:22:29

Local clock offset: 1.685 ms

Remote clock offset: -1.975 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 274.60 Mbit/s

95th percentile per-packet one-way delay: 1.133 ms

Loss rate: 0.07%

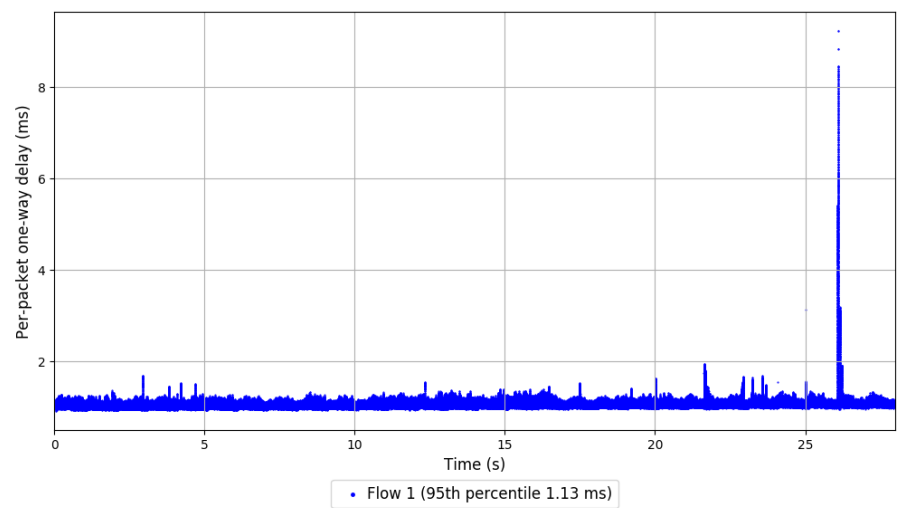
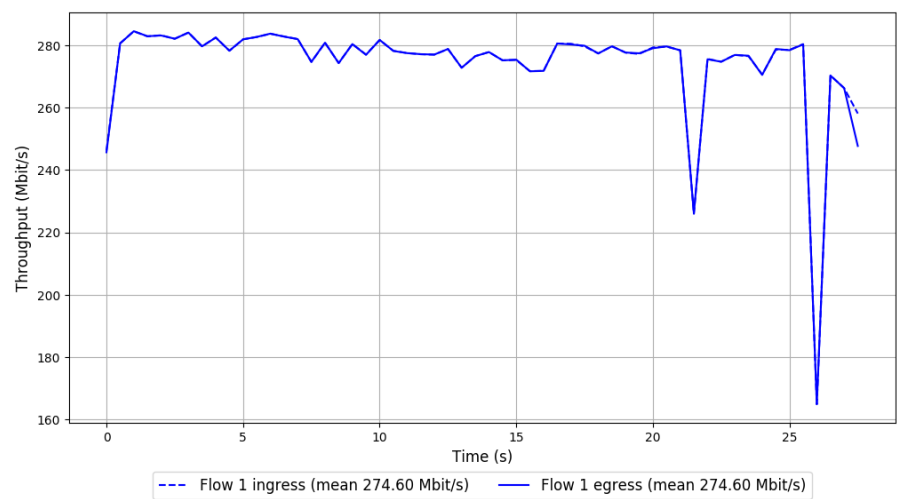
-- Flow 1:

Average throughput: 274.60 Mbit/s

95th percentile per-packet one-way delay: 1.133 ms

Loss rate: 0.07%

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



Run 4: Statistics of TaoVA-100x

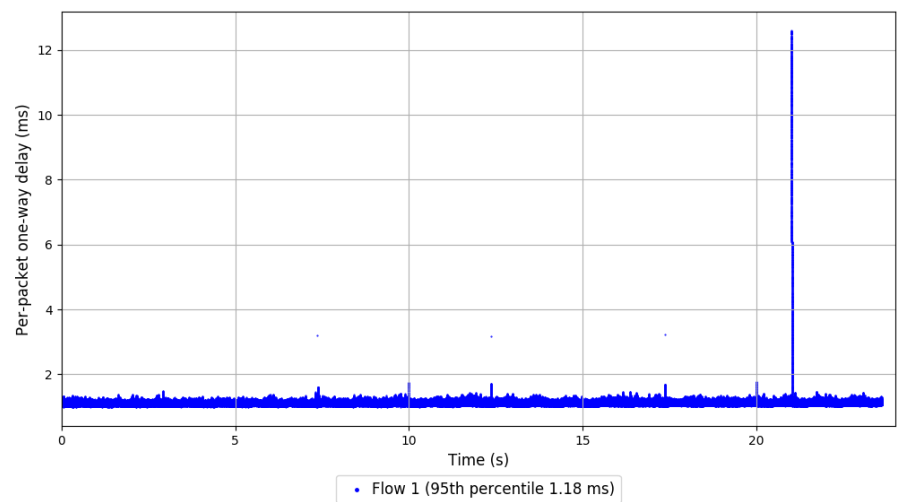
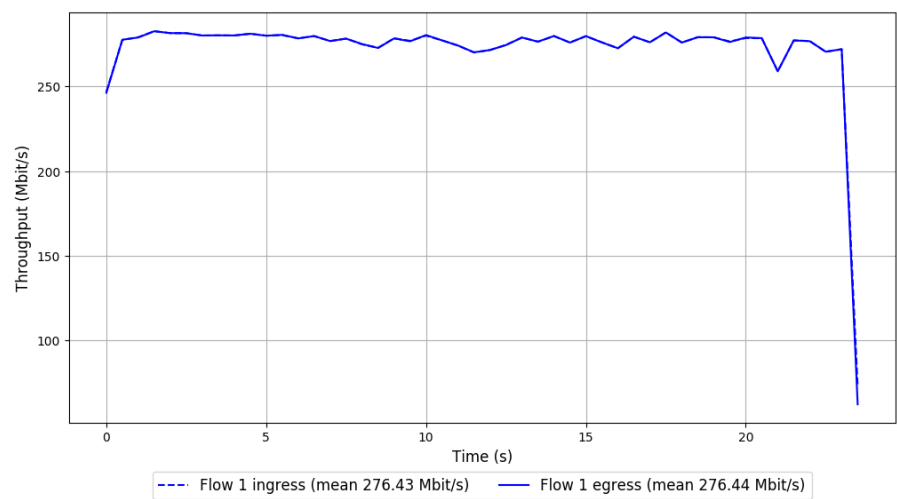
Start at: 2017-11-21 00:41:10

End at: 2017-11-21 00:41:40

Local clock offset: 1.144 ms

Remote clock offset: -1.542 ms

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-21 01:00:34

End at: 2017-11-21 01:01:04

Local clock offset: 0.625 ms

Remote clock offset: -1.445 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 266.79 Mbit/s

95th percentile per-packet one-way delay: 1.246 ms

Loss rate: 0.07%

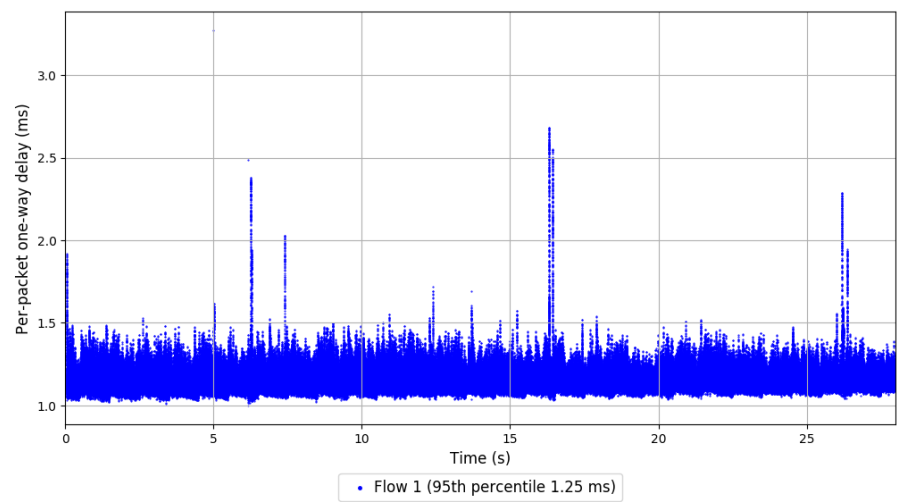
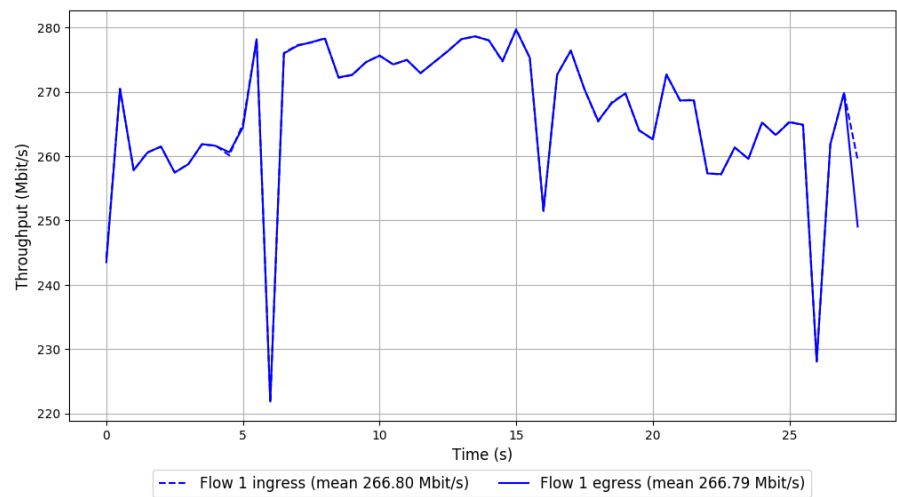
-- Flow 1:

Average throughput: 266.79 Mbit/s

95th percentile per-packet one-way delay: 1.246 ms

Loss rate: 0.07%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-21 01:19:54

End at: 2017-11-21 01:20:24

Local clock offset: 0.783 ms

Remote clock offset: -0.937 ms

Below is generated by plot.py at 2017-11-21 06:47:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 274.23 Mbit/s

95th percentile per-packet one-way delay: 1.220 ms

Loss rate: 0.07%

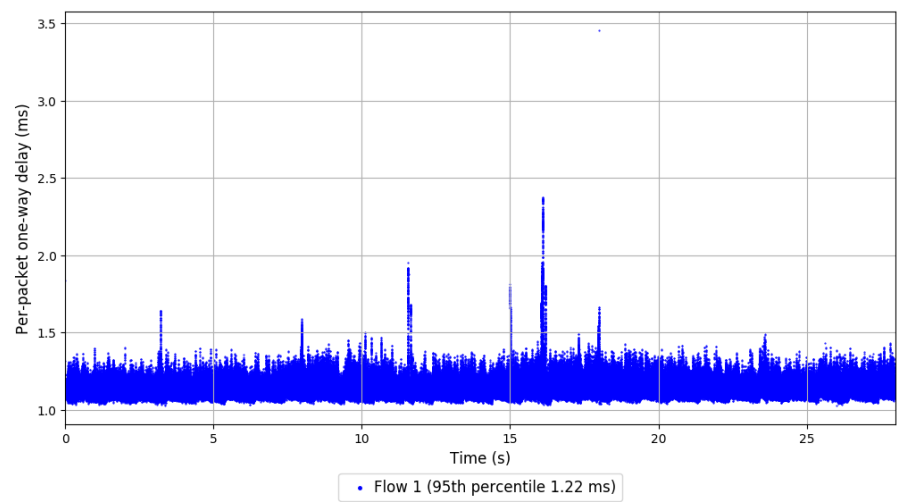
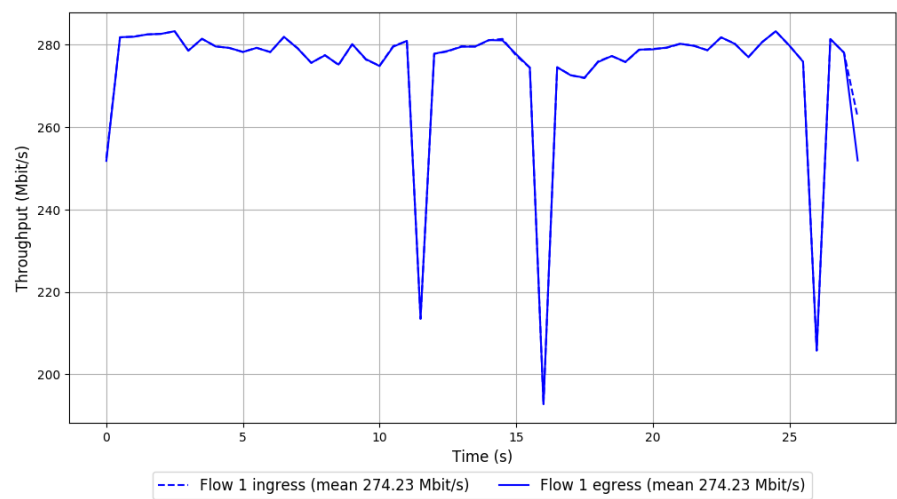
-- Flow 1:

Average throughput: 274.23 Mbit/s

95th percentile per-packet one-way delay: 1.220 ms

Loss rate: 0.07%

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

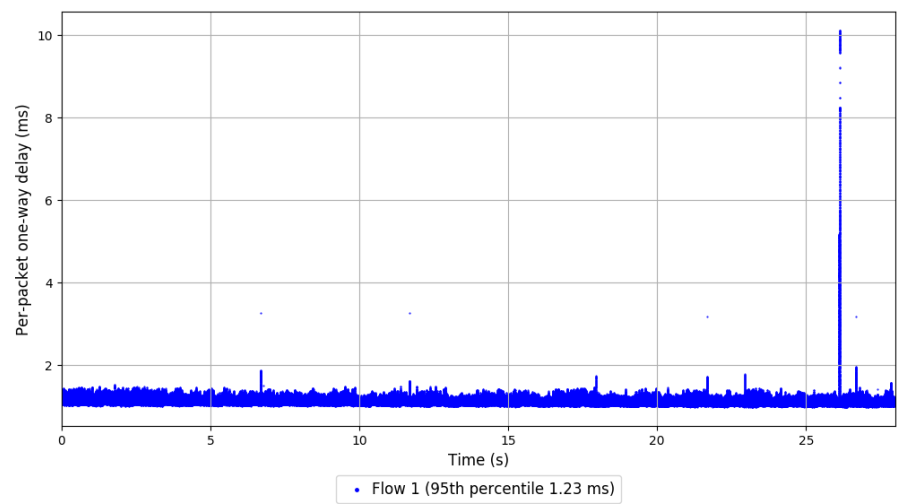
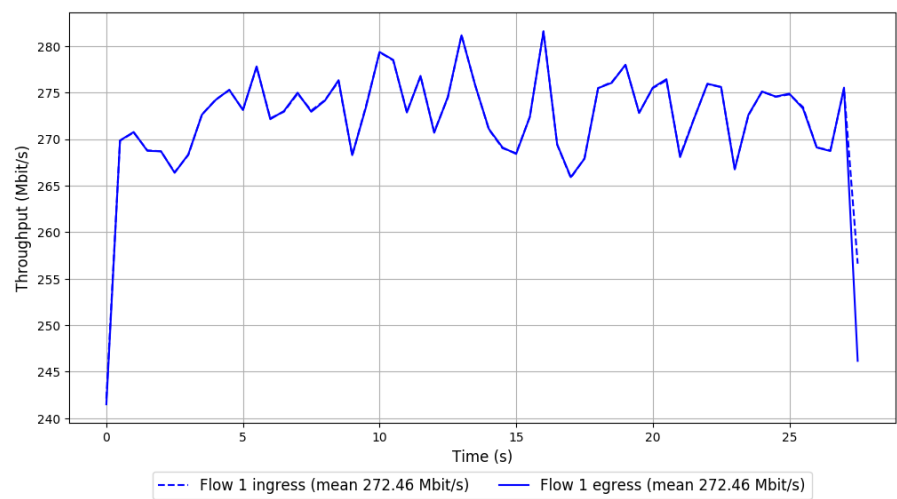


Run 7: Statistics of TaoVA-100x

Start at: 2017-11-21 01:39:29
End at: 2017-11-21 01:39:59
Local clock offset: 1.293 ms
Remote clock offset: -0.733 ms

Below is generated by plot.py at 2017-11-21 06:48:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 272.46 Mbit/s
95th percentile per-packet one-way delay: 1.229 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 272.46 Mbit/s
95th percentile per-packet one-way delay: 1.229 ms
Loss rate: 0.07%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-21 01:58:18

End at: 2017-11-21 01:58:48

Local clock offset: 2.026 ms

Remote clock offset: -0.689 ms

Below is generated by plot.py at 2017-11-21 06:52:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 268.75 Mbit/s

95th percentile per-packet one-way delay: 1.087 ms

Loss rate: 0.07%

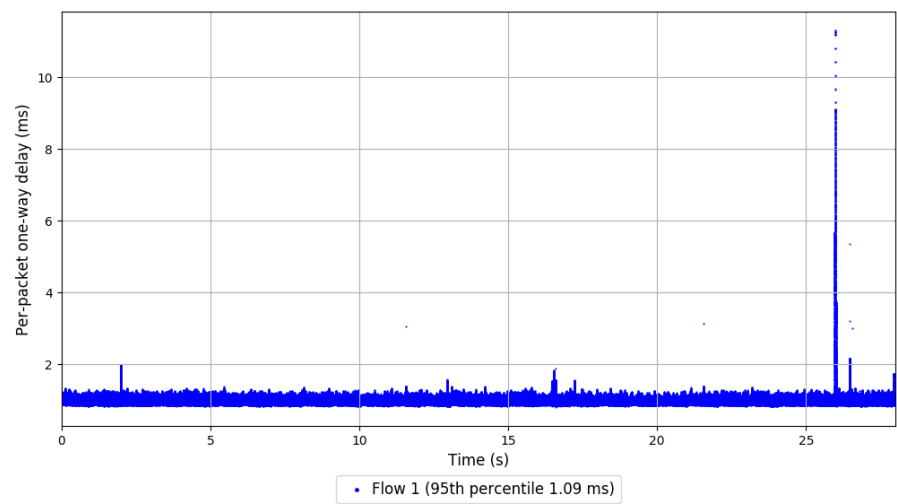
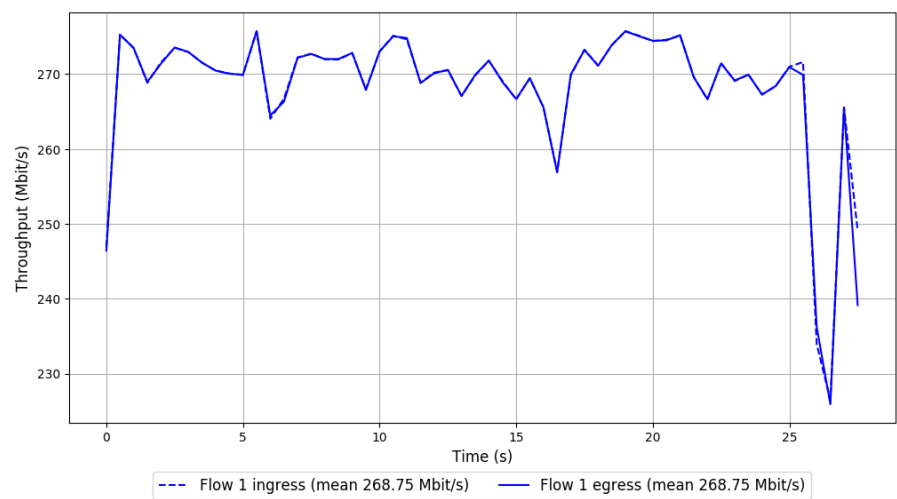
-- Flow 1:

Average throughput: 268.75 Mbit/s

95th percentile per-packet one-way delay: 1.087 ms

Loss rate: 0.07%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-21 02:17:45

End at: 2017-11-21 02:18:15

Local clock offset: 2.328 ms

Remote clock offset: -0.772 ms

Below is generated by plot.py at 2017-11-21 06:52:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 265.97 Mbit/s

95th percentile per-packet one-way delay: 1.232 ms

Loss rate: 0.07%

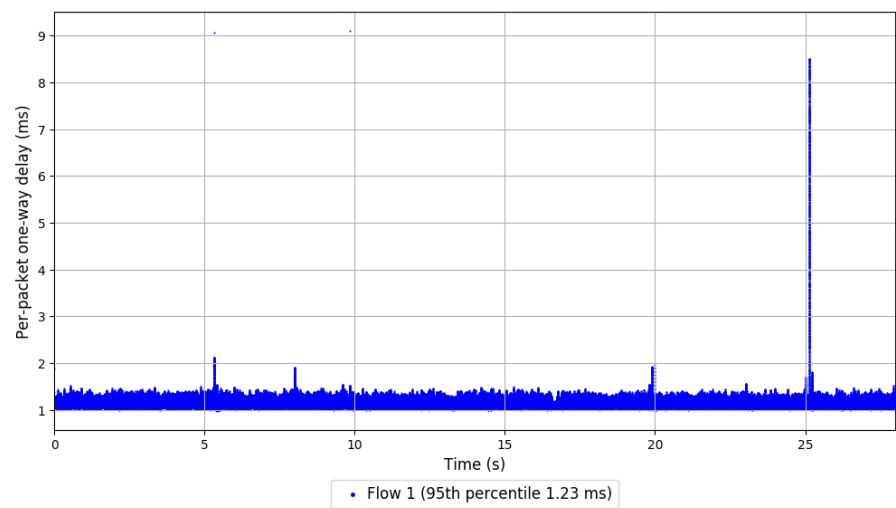
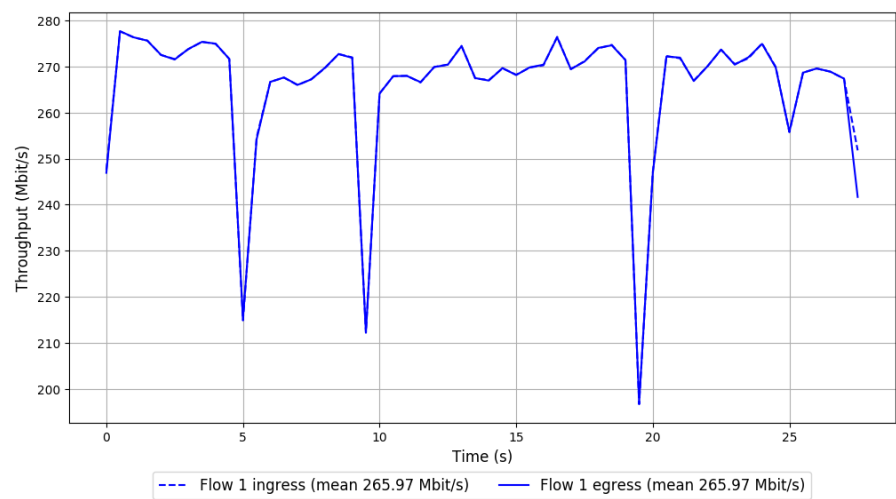
-- Flow 1:

Average throughput: 265.97 Mbit/s

95th percentile per-packet one-way delay: 1.232 ms

Loss rate: 0.07%

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



Run 10: Statistics of TaoVA-100x

Start at: 2017-11-21 02:37:08

End at: 2017-11-21 02:37:38

Local clock offset: 1.979 ms

Remote clock offset: -0.897 ms

Below is generated by plot.py at 2017-11-21 06:53:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 260.44 Mbit/s

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

Loss rate: 0.07%

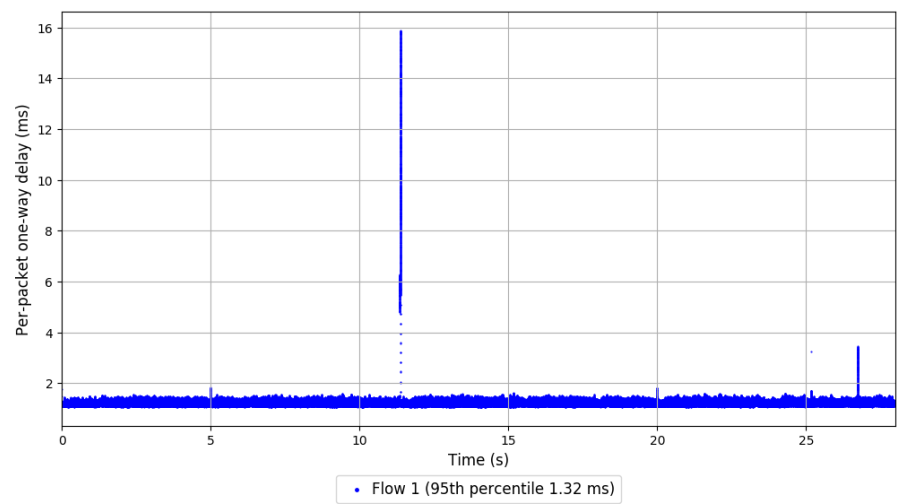
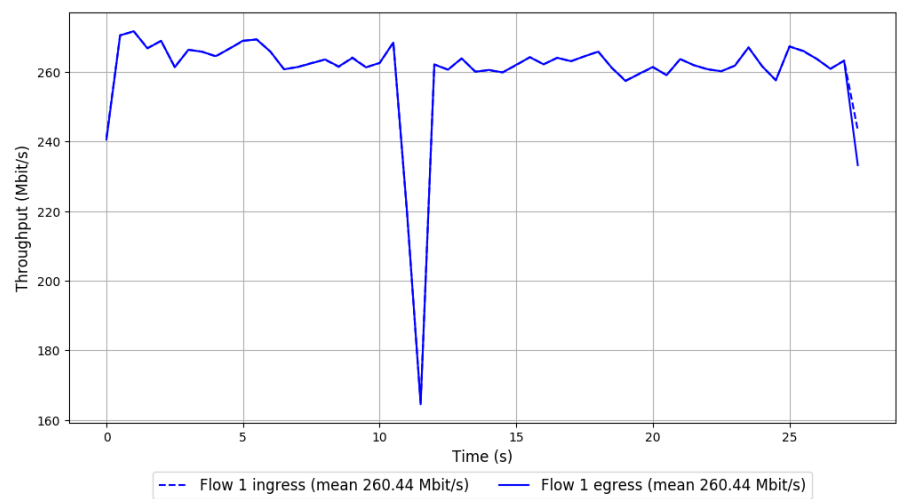
-- Flow 1:

Average throughput: 260.44 Mbit/s

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

Loss rate: 0.07%

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

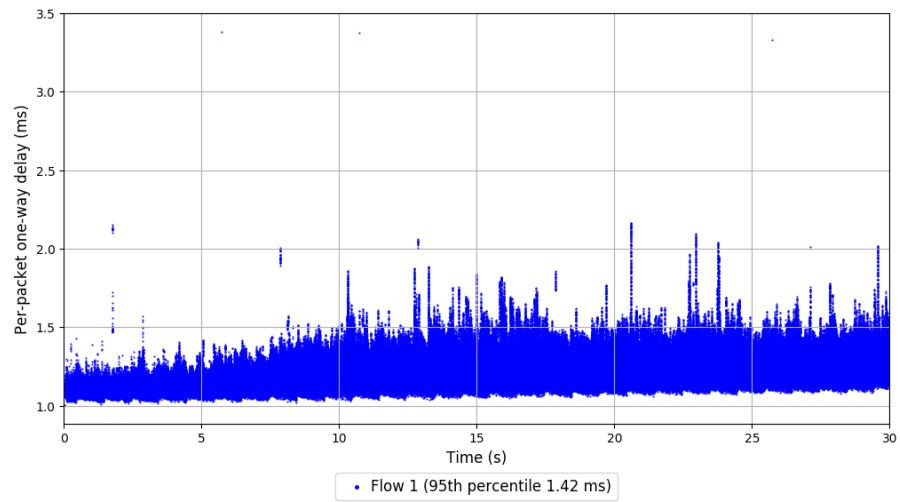
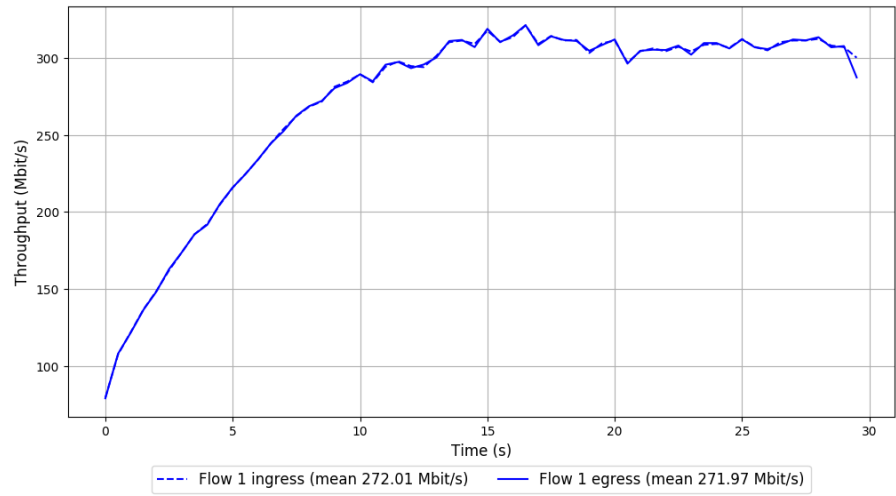


Run 1: Statistics of TCP Vegas

Start at: 2017-11-20 23:40:44
End at: 2017-11-20 23:41:14
Local clock offset: 1.01 ms
Remote clock offset: -2.609 ms

Below is generated by plot.py at 2017-11-21 06:53:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 271.97 Mbit/s
95th percentile per-packet one-way delay: 1.415 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 271.97 Mbit/s
95th percentile per-packet one-way delay: 1.415 ms
Loss rate: 0.08%

Run 1: Report of TCP Vegas — Data Link

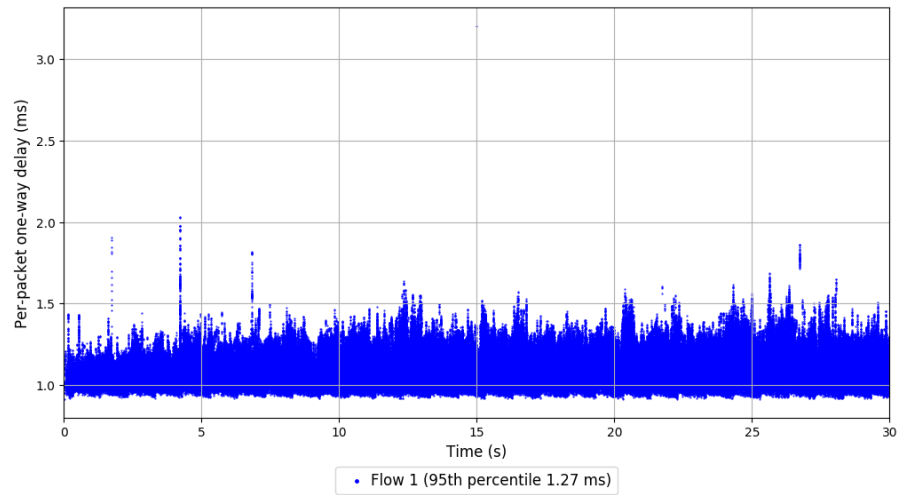
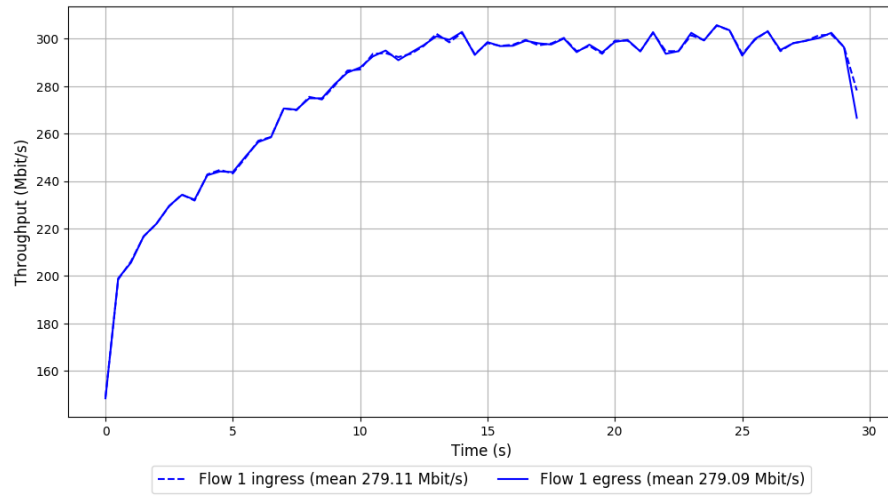


Run 2: Statistics of TCP Vegas

Start at: 2017-11-21 00:00:11
End at: 2017-11-21 00:00:41
Local clock offset: 1.837 ms
Remote clock offset: -2.439 ms

Below is generated by plot.py at 2017-11-21 06:53:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 279.09 Mbit/s
95th percentile per-packet one-way delay: 1.269 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 279.09 Mbit/s
95th percentile per-packet one-way delay: 1.269 ms
Loss rate: 0.07%

Run 2: Report of TCP Vegas — Data Link

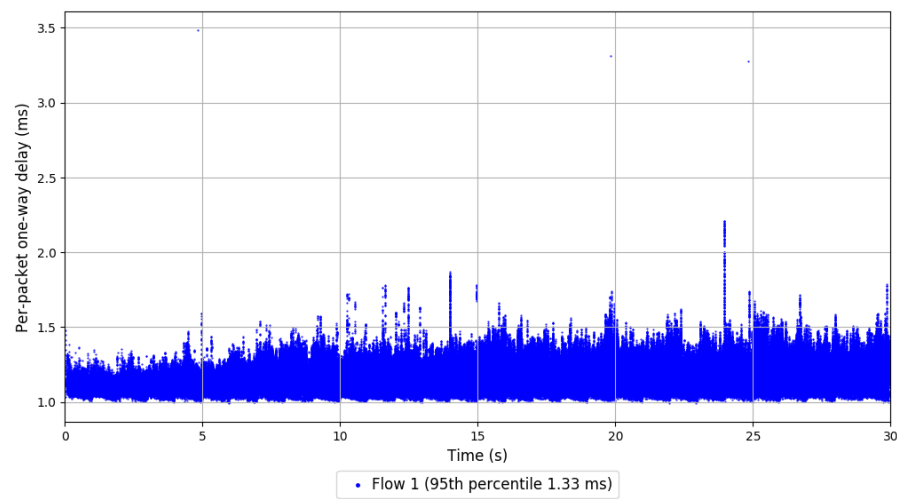
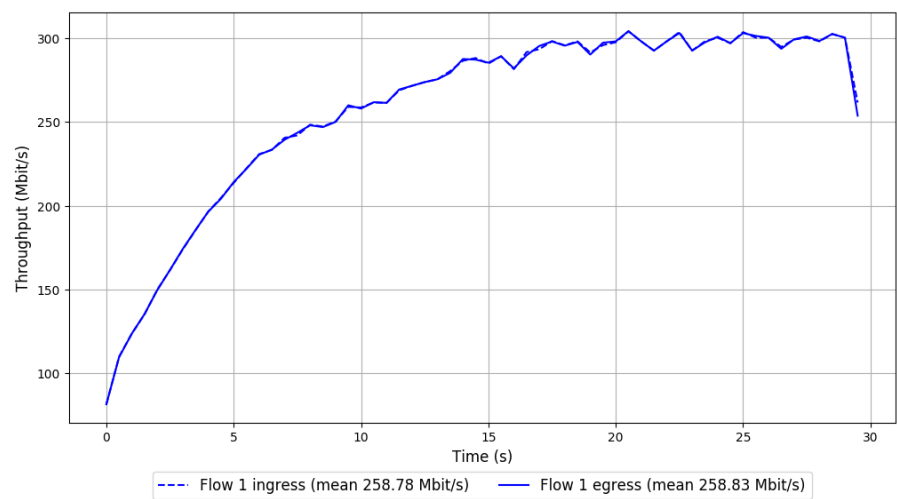


Run 3: Statistics of TCP Vegas

Start at: 2017-11-21 00:19:18
End at: 2017-11-21 00:19:48
Local clock offset: 1.938 ms
Remote clock offset: -2.124 ms

Below is generated by plot.py at 2017-11-21 06:53:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 258.83 Mbit/s
95th percentile per-packet one-way delay: 1.335 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 258.83 Mbit/s
95th percentile per-packet one-way delay: 1.335 ms
Loss rate: 0.05%

Run 3: Report of TCP Vegas — Data Link

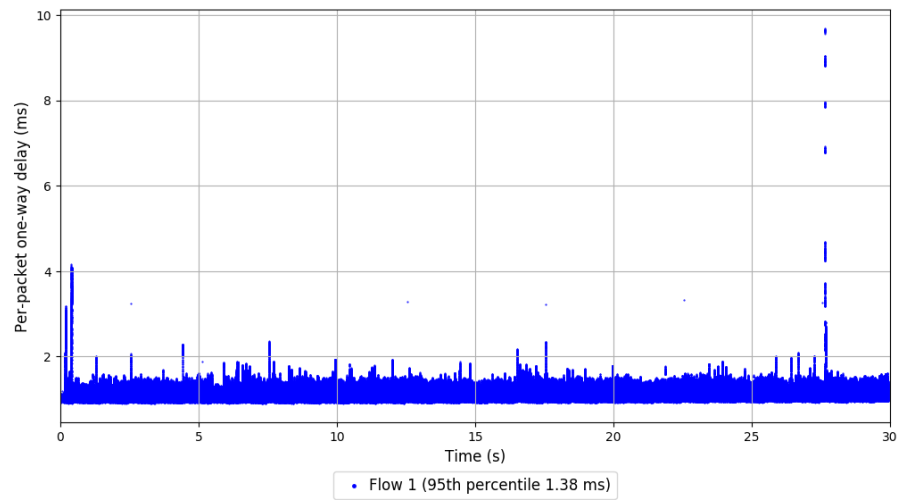
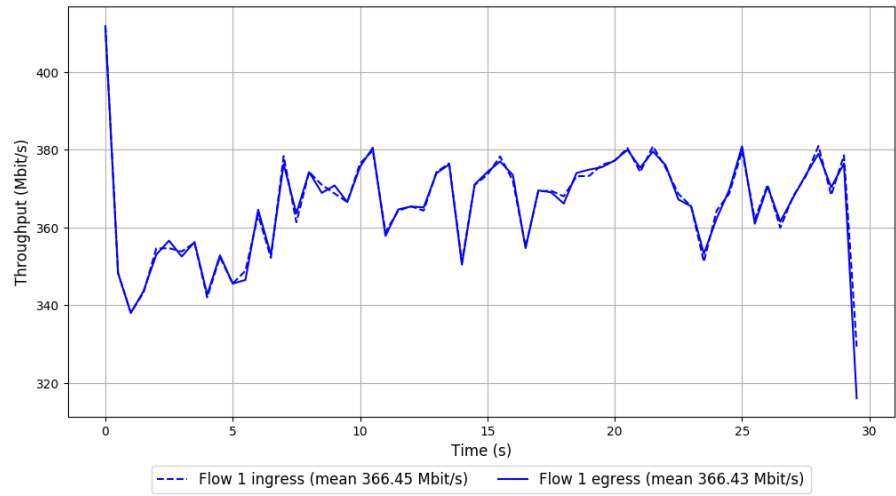


Run 4: Statistics of TCP Vegas

Start at: 2017-11-21 00:38:25
End at: 2017-11-21 00:38:55
Local clock offset: 1.228 ms
Remote clock offset: -1.593 ms

Below is generated by plot.py at 2017-11-21 06:53:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 366.43 Mbit/s
95th percentile per-packet one-way delay: 1.375 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 366.43 Mbit/s
95th percentile per-packet one-way delay: 1.375 ms
Loss rate: 0.07%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-21 00:57:52

End at: 2017-11-21 00:58:22

Local clock offset: 0.757 ms

Remote clock offset: -1.494 ms

Below is generated by plot.py at 2017-11-21 06:53:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 260.01 Mbit/s

95th percentile per-packet one-way delay: 1.407 ms

Loss rate: 0.08%

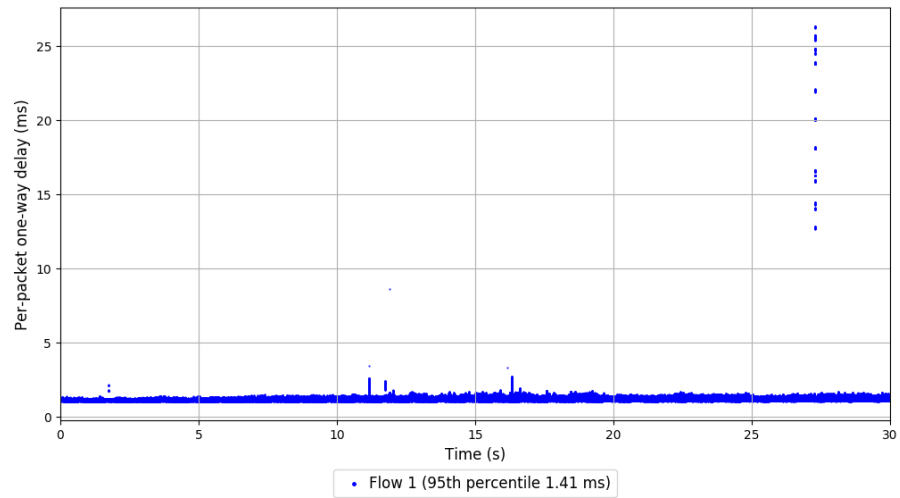
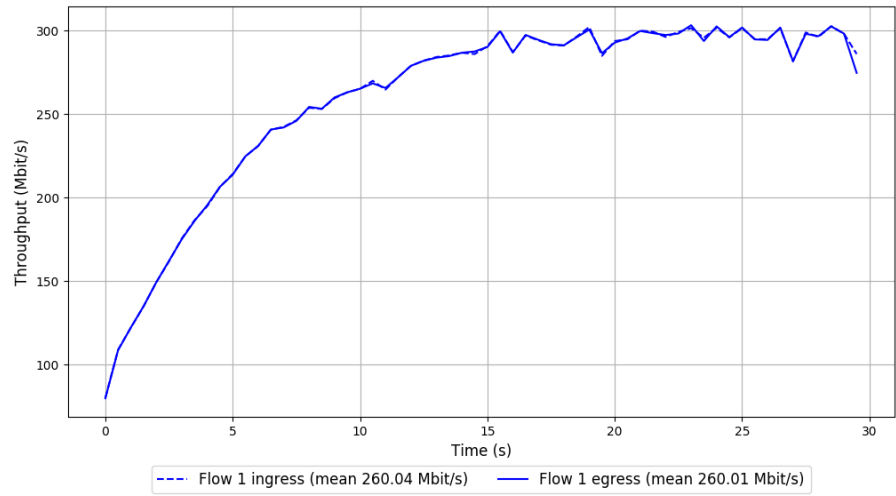
-- Flow 1:

Average throughput: 260.01 Mbit/s

95th percentile per-packet one-way delay: 1.407 ms

Loss rate: 0.08%

Run 5: Report of TCP Vegas — Data Link

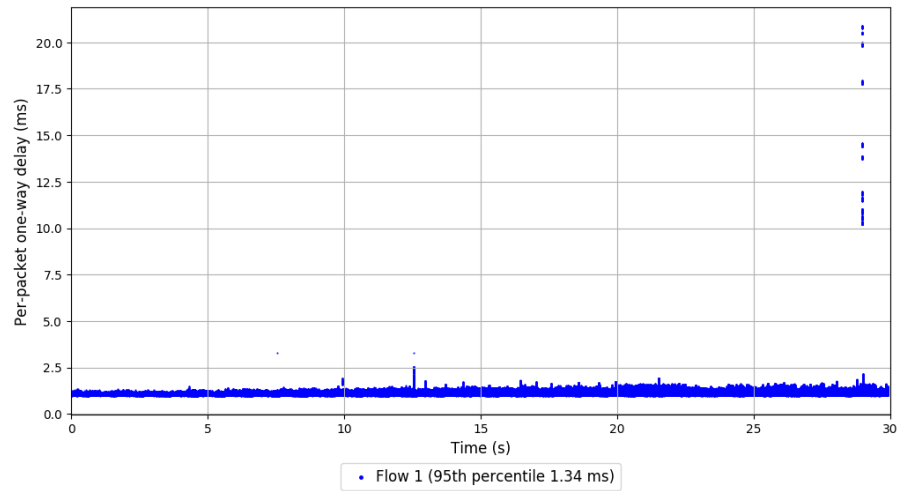
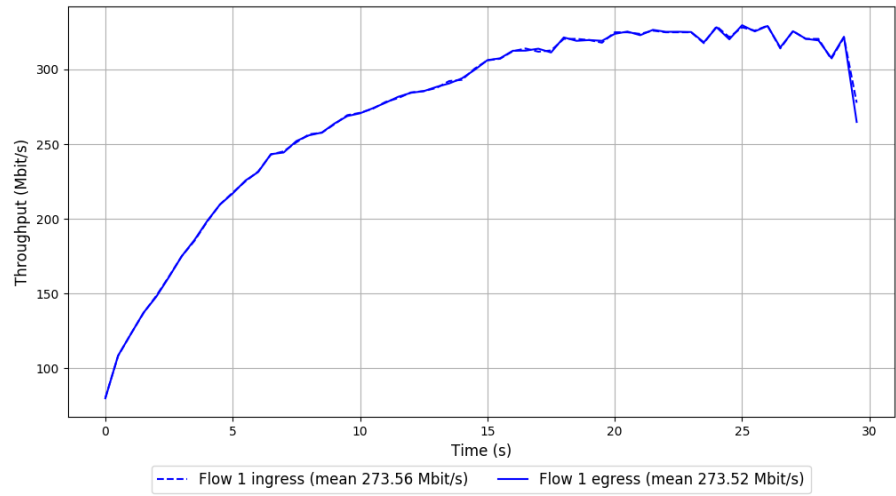


Run 6: Statistics of TCP Vegas

Start at: 2017-11-21 01:17:12
End at: 2017-11-21 01:17:42
Local clock offset: 0.77 ms
Remote clock offset: -0.959 ms

Below is generated by plot.py at 2017-11-21 06:54:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 273.52 Mbit/s
95th percentile per-packet one-way delay: 1.342 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 273.52 Mbit/s
95th percentile per-packet one-way delay: 1.342 ms
Loss rate: 0.08%

Run 6: Report of TCP Vegas — Data Link

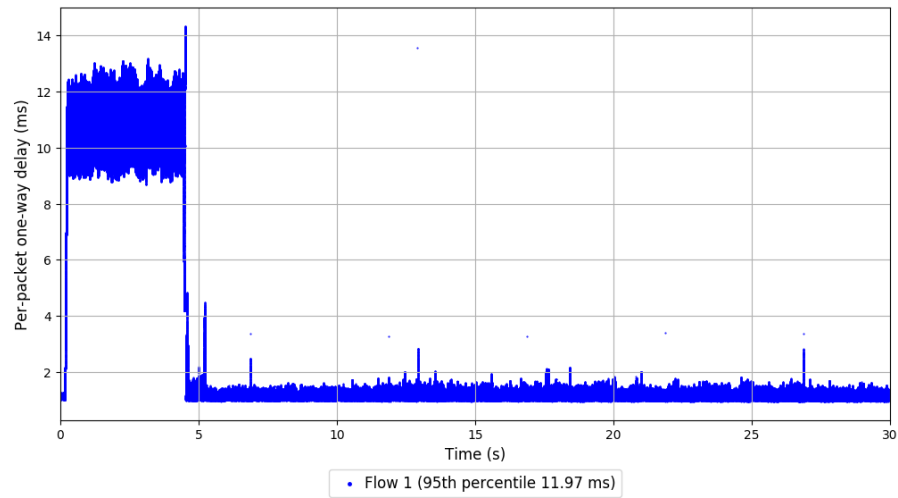
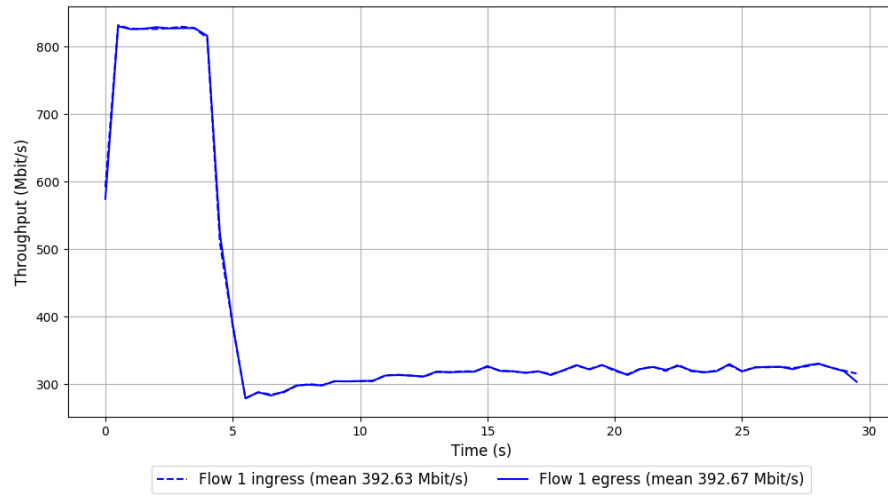


Run 7: Statistics of TCP Vegas

Start at: 2017-11-21 01:36:42
End at: 2017-11-21 01:37:12
Local clock offset: 1.117 ms
Remote clock offset: -0.691 ms

Below is generated by plot.py at 2017-11-21 06:56:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 392.67 Mbit/s
95th percentile per-packet one-way delay: 11.972 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 392.67 Mbit/s
95th percentile per-packet one-way delay: 11.972 ms
Loss rate: 0.06%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-21 01:55:37

End at: 2017-11-21 01:56:07

Local clock offset: 1.938 ms

Remote clock offset: -0.68 ms

Below is generated by plot.py at 2017-11-21 06:56:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 261.45 Mbit/s

95th percentile per-packet one-way delay: 1.116 ms

Loss rate: 0.08%

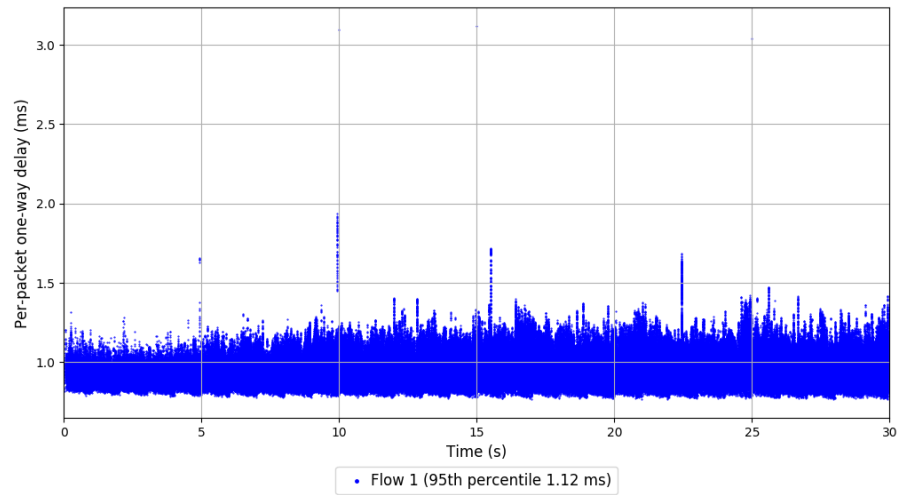
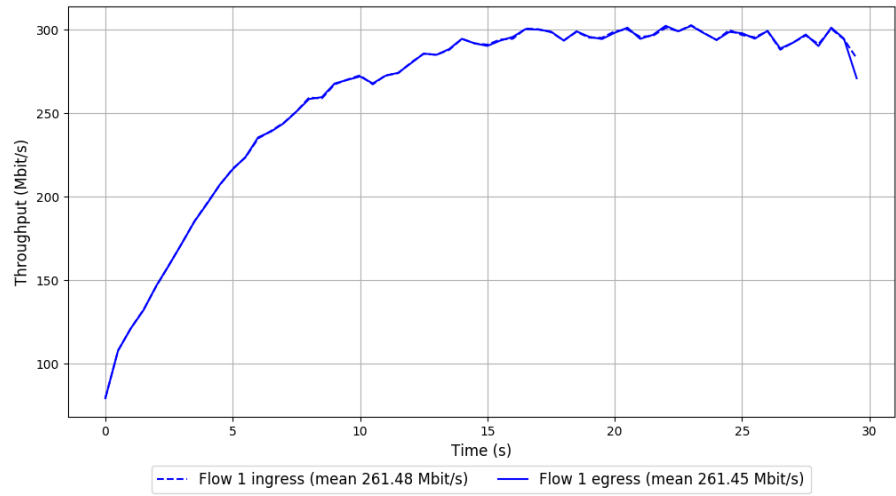
-- Flow 1:

Average throughput: 261.45 Mbit/s

95th percentile per-packet one-way delay: 1.116 ms

Loss rate: 0.08%

Run 8: Report of TCP Vegas — Data Link

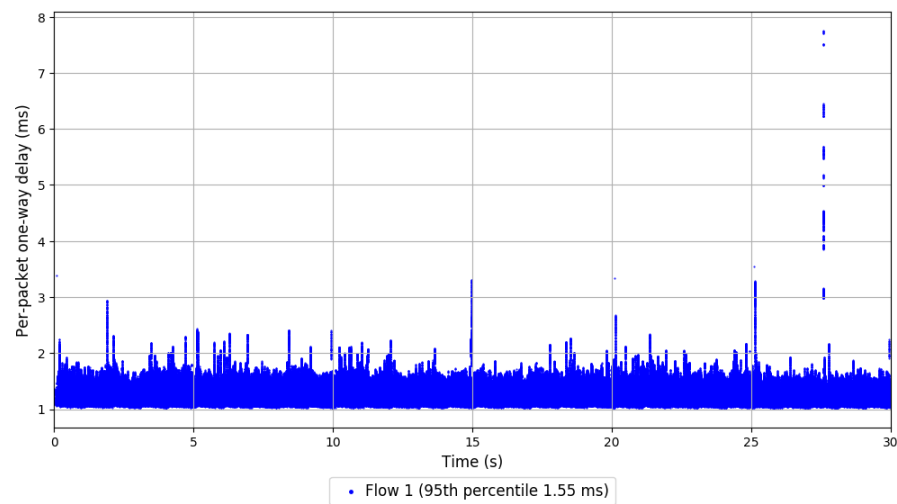
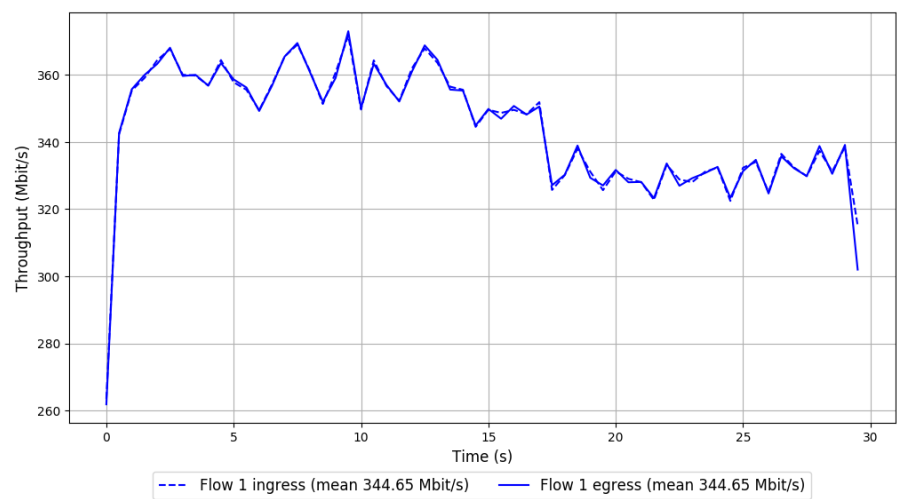


Run 9: Statistics of TCP Vegas

Start at: 2017-11-21 02:15:00
End at: 2017-11-21 02:15:30
Local clock offset: 2.29 ms
Remote clock offset: -0.814 ms

Below is generated by plot.py at 2017-11-21 06:56:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 344.65 Mbit/s
95th percentile per-packet one-way delay: 1.551 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 344.65 Mbit/s
95th percentile per-packet one-way delay: 1.551 ms
Loss rate: 0.07%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-21 02:34:28

End at: 2017-11-21 02:34:58

Local clock offset: 1.92 ms

Remote clock offset: -0.853 ms

Below is generated by plot.py at 2017-11-21 06:56:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 237.45 Mbit/s

95th percentile per-packet one-way delay: 1.206 ms

Loss rate: 0.07%

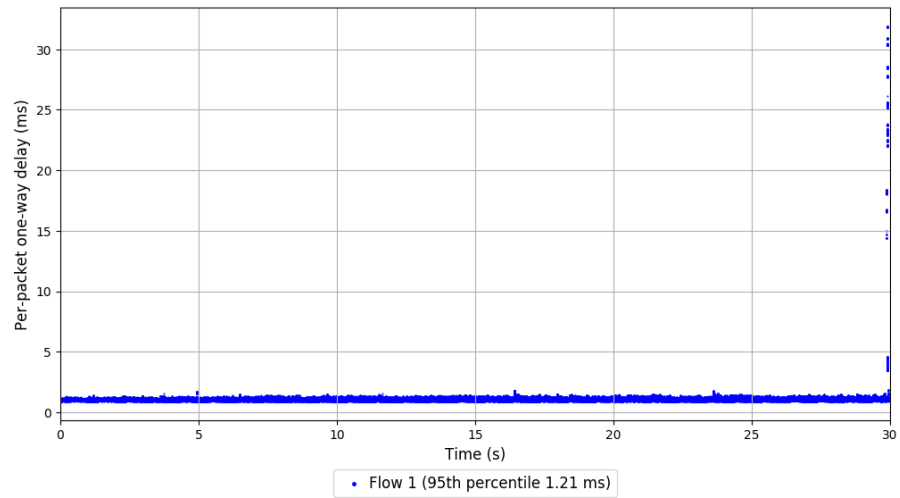
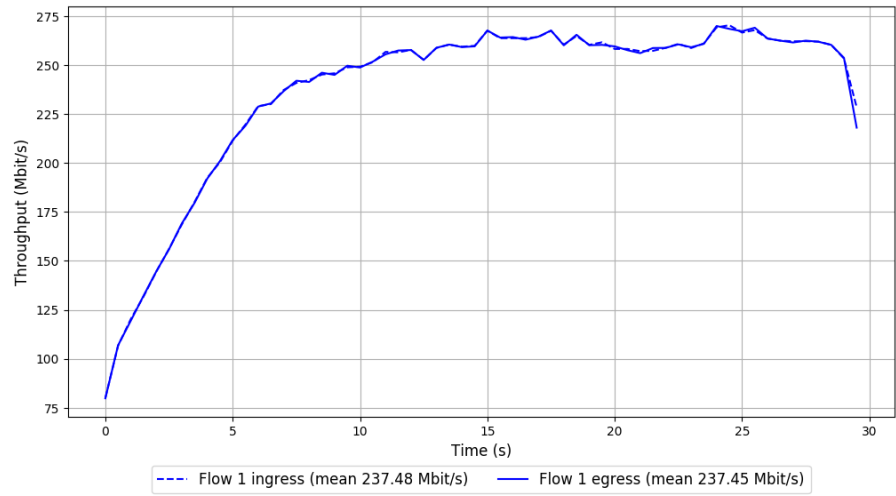
-- Flow 1:

Average throughput: 237.45 Mbit/s

95th percentile per-packet one-way delay: 1.206 ms

Loss rate: 0.07%

Run 10: Report of TCP Vegas — Data Link

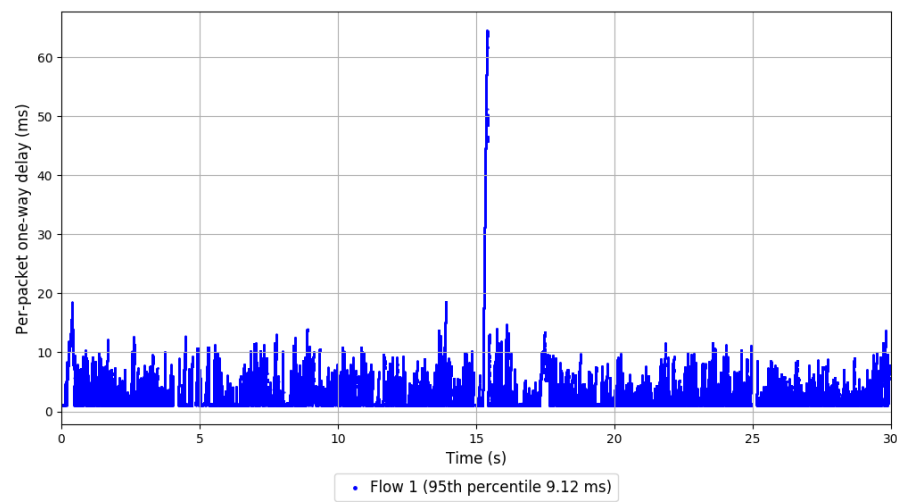
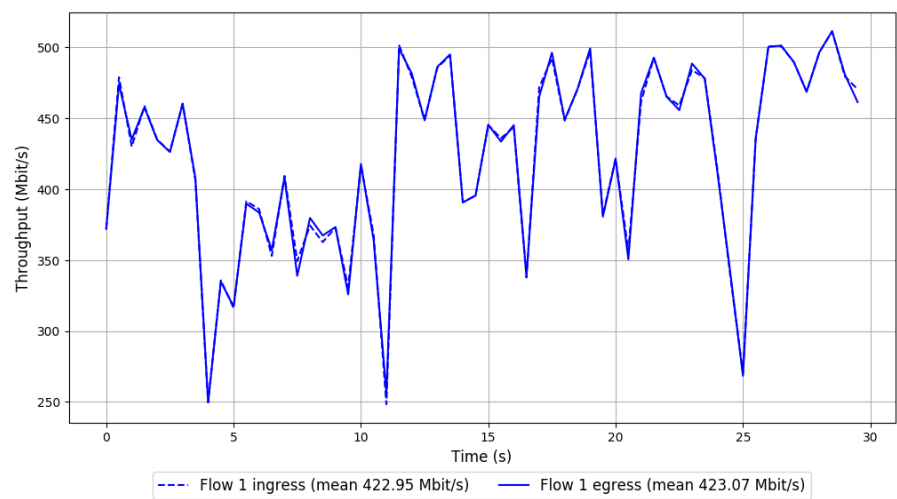


Run 1: Statistics of Verus

Start at: 2017-11-20 23:38:01
End at: 2017-11-20 23:38:31
Local clock offset: 1.254 ms
Remote clock offset: -2.694 ms

Below is generated by plot.py at 2017-11-21 06:58:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 423.07 Mbit/s
95th percentile per-packet one-way delay: 9.115 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 423.07 Mbit/s
95th percentile per-packet one-way delay: 9.115 ms
Loss rate: 0.04%

Run 1: Report of Verus — Data Link

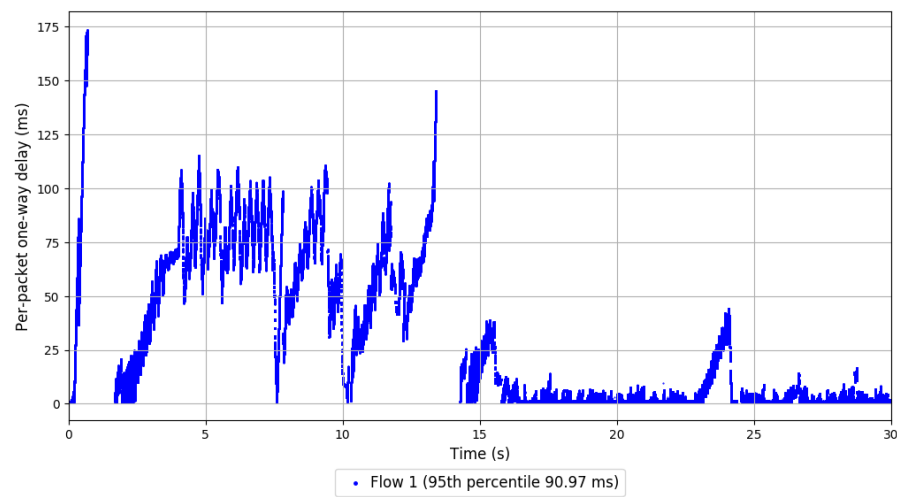
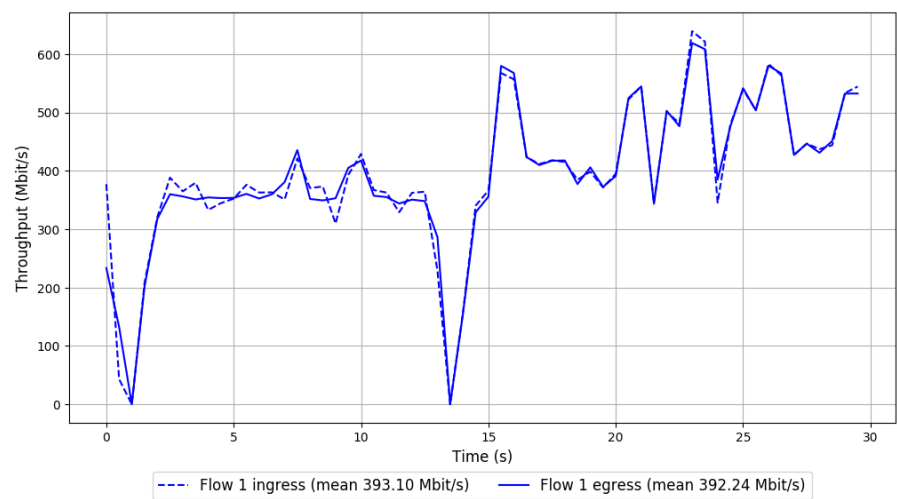


Run 2: Statistics of Verus

Start at: 2017-11-20 23:57:30
End at: 2017-11-20 23:58:00
Local clock offset: 1.788 ms
Remote clock offset: -2.493 ms

Below is generated by plot.py at 2017-11-21 06:58:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 392.24 Mbit/s
95th percentile per-packet one-way delay: 90.970 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 392.24 Mbit/s
95th percentile per-packet one-way delay: 90.970 ms
Loss rate: 0.28%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-21 00:16:34

End at: 2017-11-21 00:17:04

Local clock offset: 1.912 ms

Remote clock offset: -2.15 ms

Below is generated by plot.py at 2017-11-21 06:59:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 430.19 Mbit/s

95th percentile per-packet one-way delay: 9.324 ms

Loss rate: 0.07%

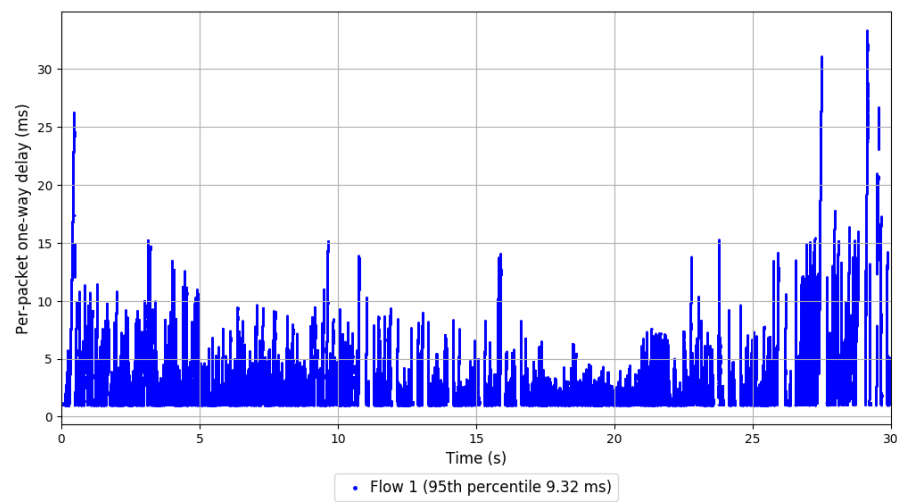
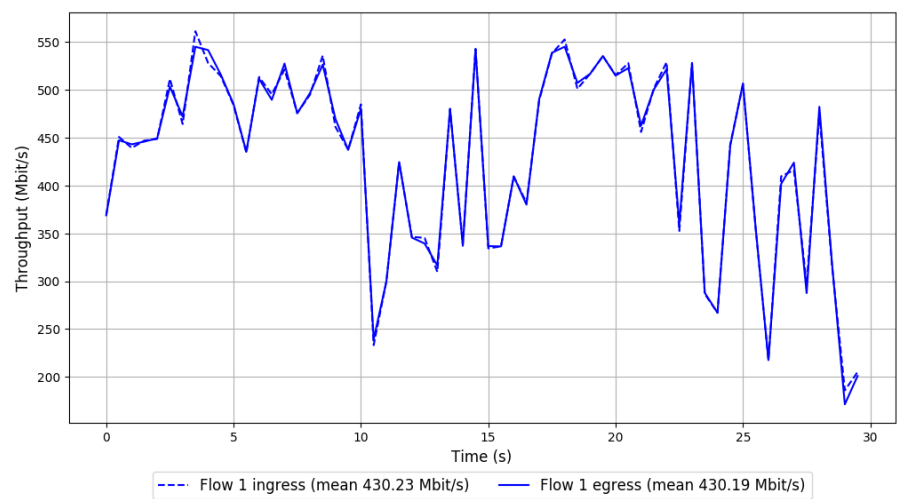
-- Flow 1:

Average throughput: 430.19 Mbit/s

95th percentile per-packet one-way delay: 9.324 ms

Loss rate: 0.07%

Run 3: Report of Verus — Data Link

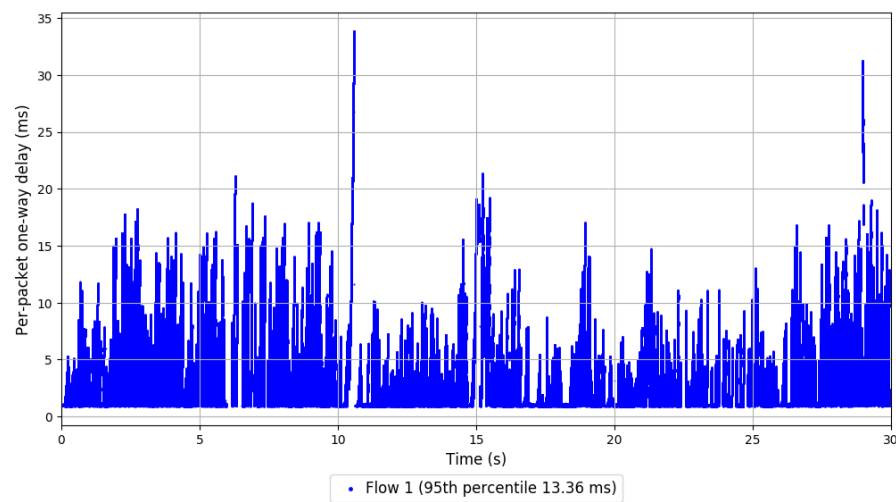
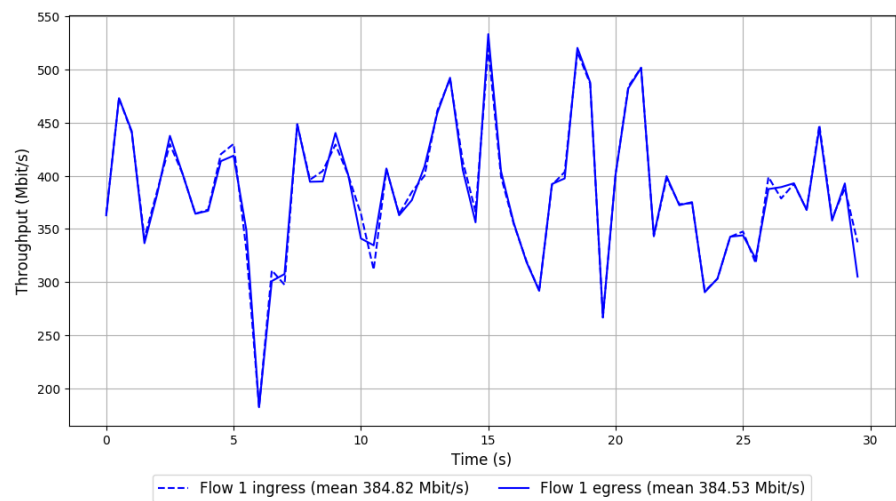


Run 4: Statistics of Verus

Start at: 2017-11-21 00:35:45
End at: 2017-11-21 00:36:15
Local clock offset: 1.122 ms
Remote clock offset: -1.681 ms

Below is generated by plot.py at 2017-11-21 07:00:19
Datalink statistics
-- Total of 1 flow:
Average throughput: 384.53 Mbit/s
95th percentile per-packet one-way delay: 13.359 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 384.53 Mbit/s
95th percentile per-packet one-way delay: 13.359 ms
Loss rate: 0.14%

Run 4: Report of Verus — Data Link

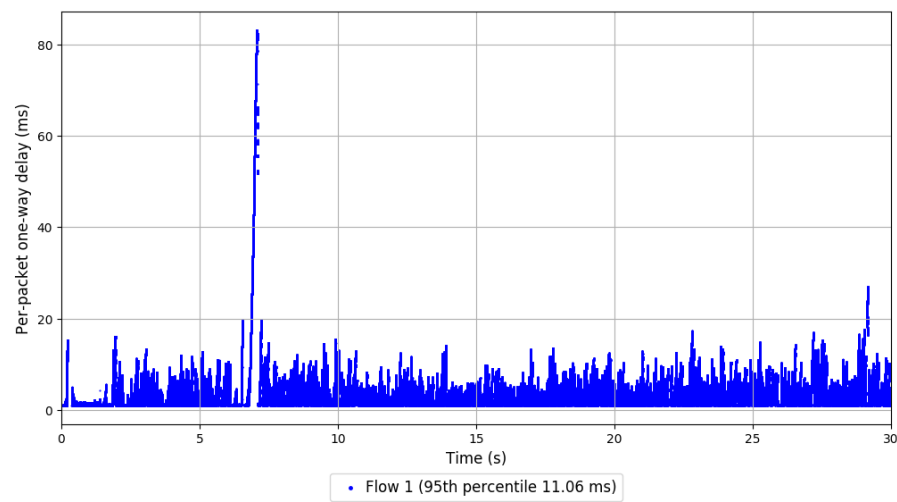
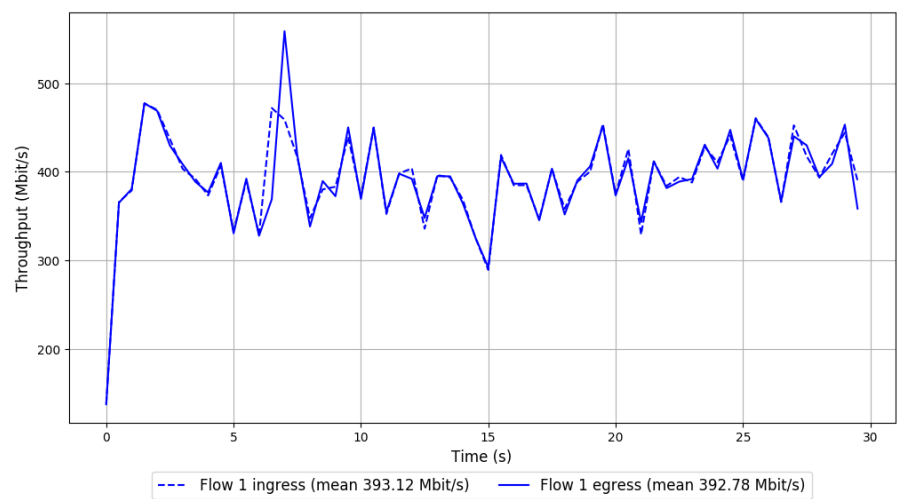


Run 5: Statistics of Verus

Start at: 2017-11-21 00:55:12
End at: 2017-11-21 00:55:42
Local clock offset: 0.835 ms
Remote clock offset: -1.534 ms

Below is generated by plot.py at 2017-11-21 07:00:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 392.78 Mbit/s
95th percentile per-packet one-way delay: 11.060 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 392.78 Mbit/s
95th percentile per-packet one-way delay: 11.060 ms
Loss rate: 0.15%

Run 5: Report of Verus — Data Link

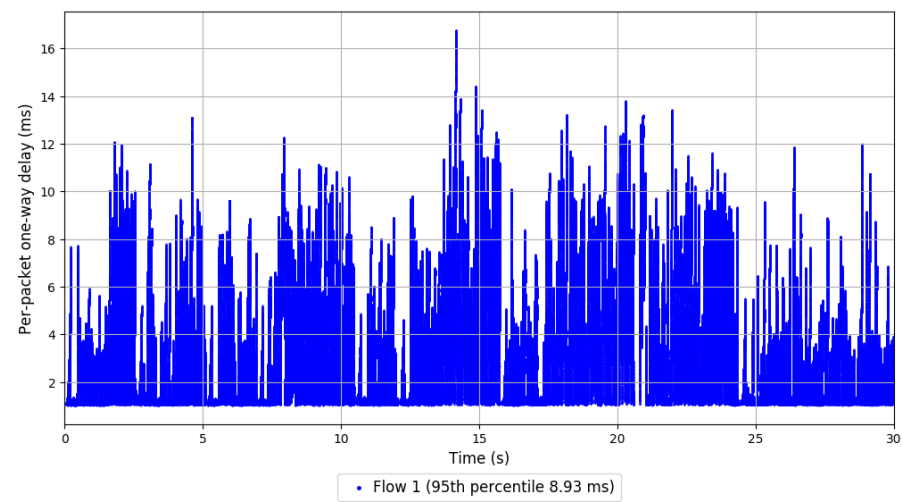
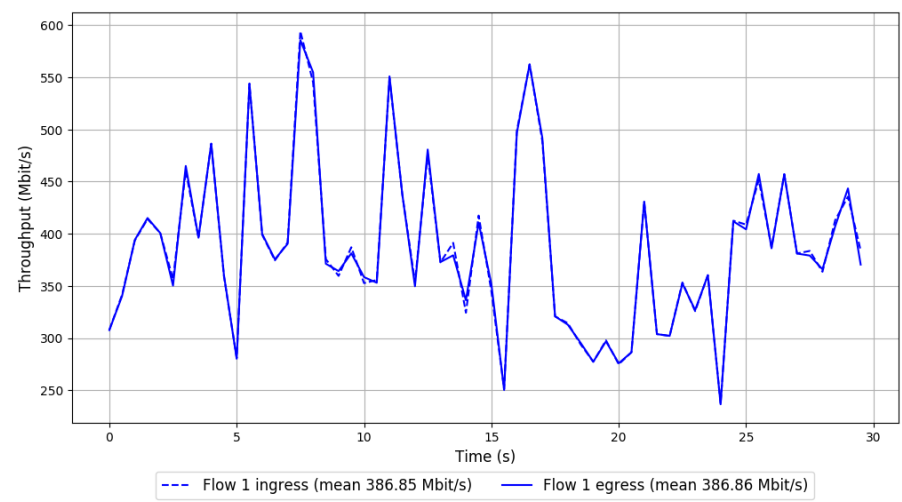


Run 6: Statistics of Verus

Start at: 2017-11-21 01:14:32
End at: 2017-11-21 01:15:02
Local clock offset: 0.771 ms
Remote clock offset: -1.087 ms

Below is generated by plot.py at 2017-11-21 07:02:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 386.86 Mbit/s
95th percentile per-packet one-way delay: 8.933 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 386.86 Mbit/s
95th percentile per-packet one-way delay: 8.933 ms
Loss rate: 0.06%

Run 6: Report of Verus — Data Link

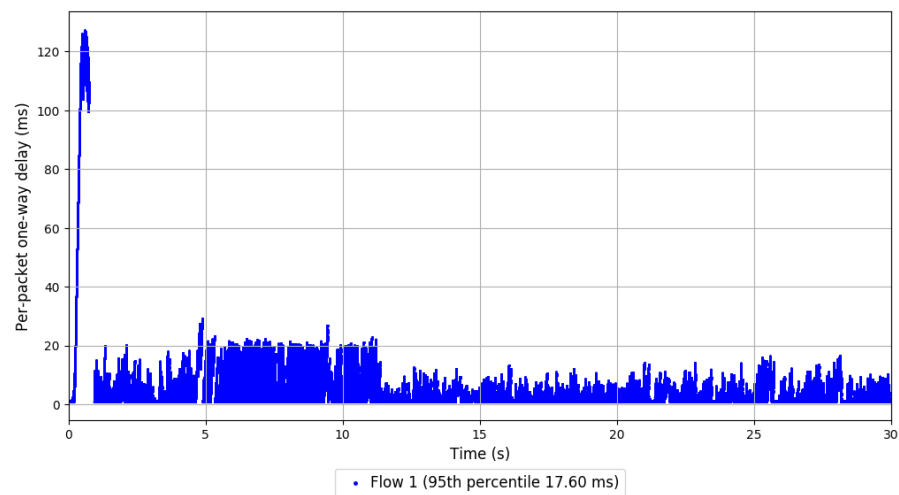
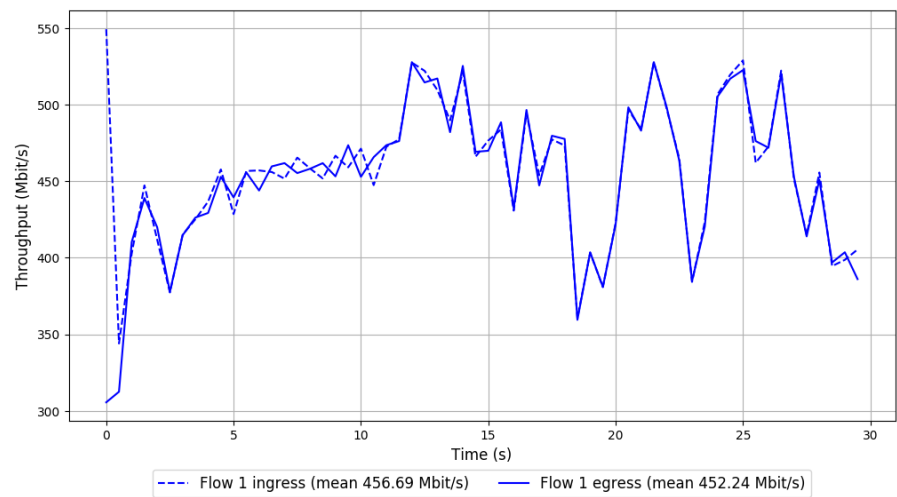


Run 7: Statistics of Verus

Start at: 2017-11-21 01:33:58
End at: 2017-11-21 01:34:28
Local clock offset: 0.993 ms
Remote clock offset: -0.673 ms

Below is generated by plot.py at 2017-11-21 07:03:26
Datalink statistics
-- Total of 1 flow:
Average throughput: 452.24 Mbit/s
95th percentile per-packet one-way delay: 17.596 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 452.24 Mbit/s
95th percentile per-packet one-way delay: 17.596 ms
Loss rate: 1.04%

Run 7: Report of Verus — Data Link

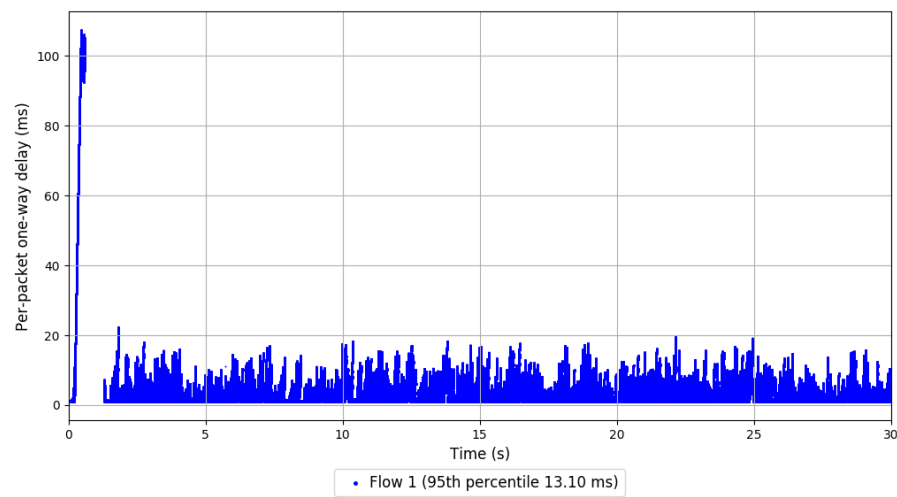
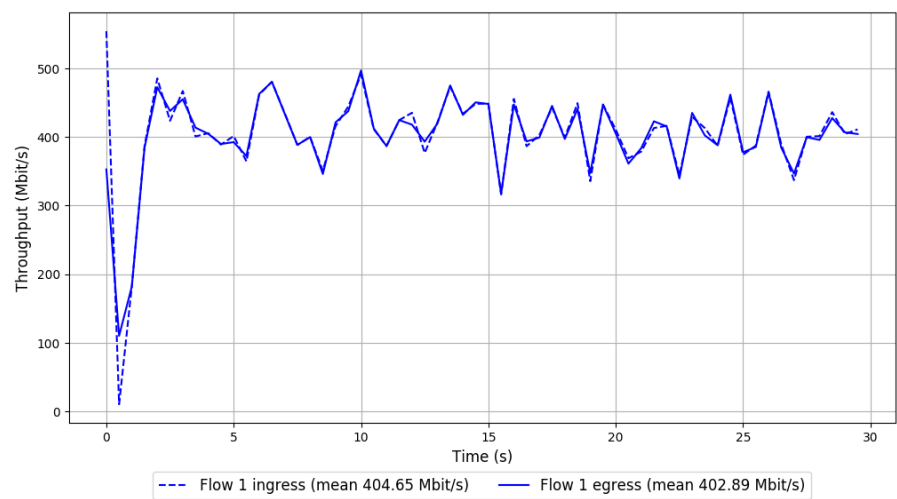


Run 8: Statistics of Verus

Start at: 2017-11-21 01:52:56
End at: 2017-11-21 01:53:26
Local clock offset: 1.851 ms
Remote clock offset: -0.801 ms

Below is generated by plot.py at 2017-11-21 07:03:26
Datalink statistics
-- Total of 1 flow:
Average throughput: 402.89 Mbit/s
95th percentile per-packet one-way delay: 13.102 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 402.89 Mbit/s
95th percentile per-packet one-way delay: 13.102 ms
Loss rate: 0.50%

Run 8: Report of Verus — Data Link

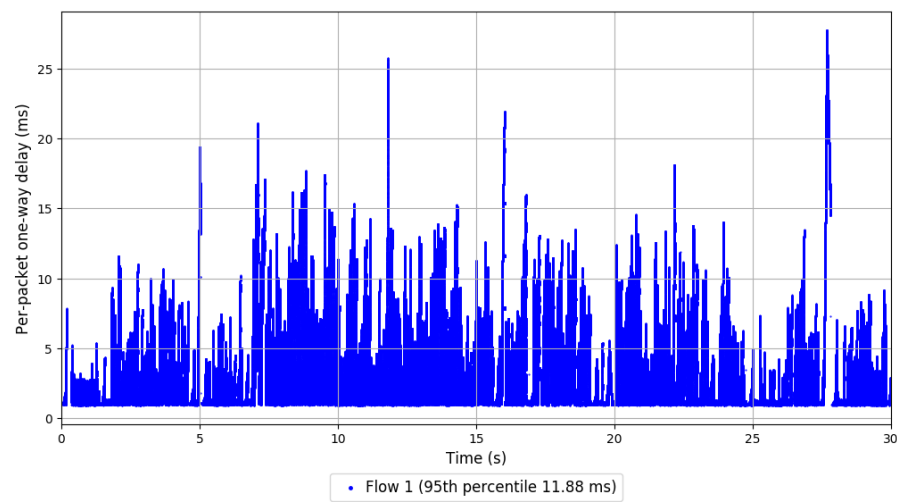
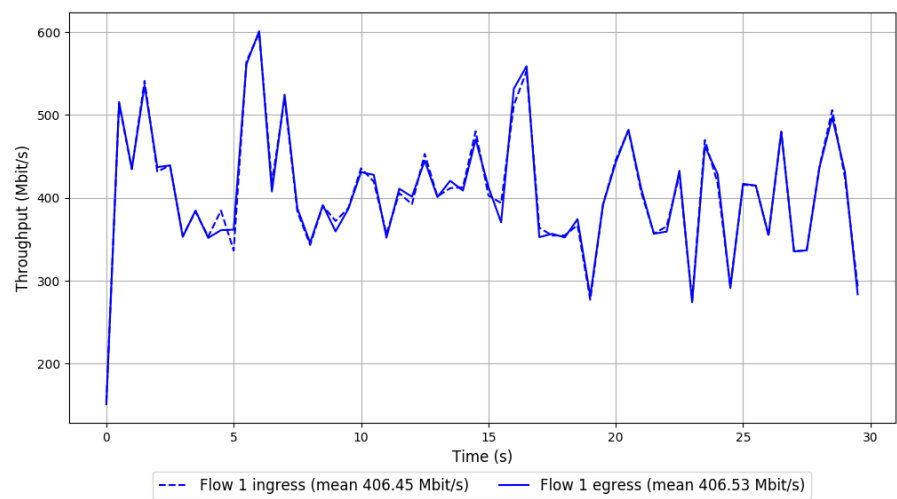


Run 9: Statistics of Verus

Start at: 2017-11-21 02:12:18
End at: 2017-11-21 02:12:48
Local clock offset: 2.142 ms
Remote clock offset: -0.808 ms

Below is generated by plot.py at 2017-11-21 07:05:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 406.53 Mbit/s
95th percentile per-packet one-way delay: 11.876 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 406.53 Mbit/s
95th percentile per-packet one-way delay: 11.876 ms
Loss rate: 0.05%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-21 02:31:48

End at: 2017-11-21 02:32:18

Local clock offset: 2.038 ms

Remote clock offset: -0.92 ms

Below is generated by plot.py at 2017-11-21 07:05:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 367.37 Mbit/s

95th percentile per-packet one-way delay: 14.620 ms

Loss rate: 0.15%

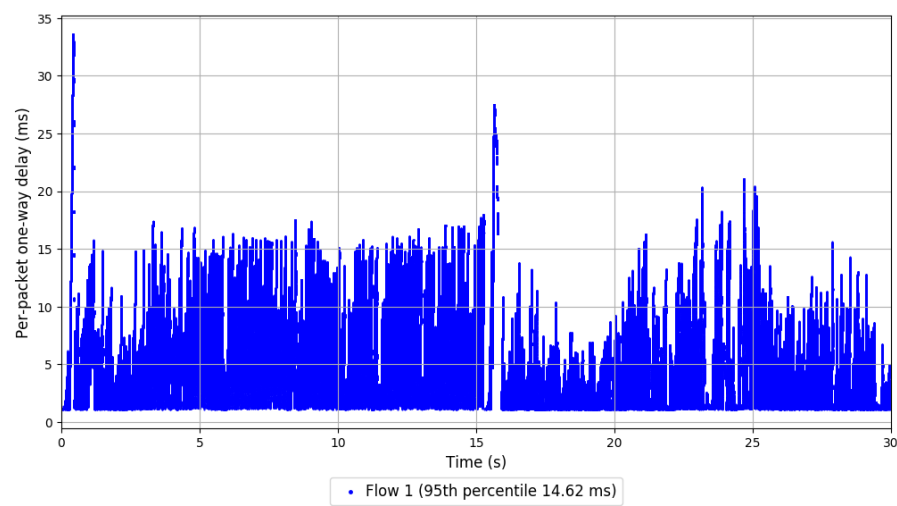
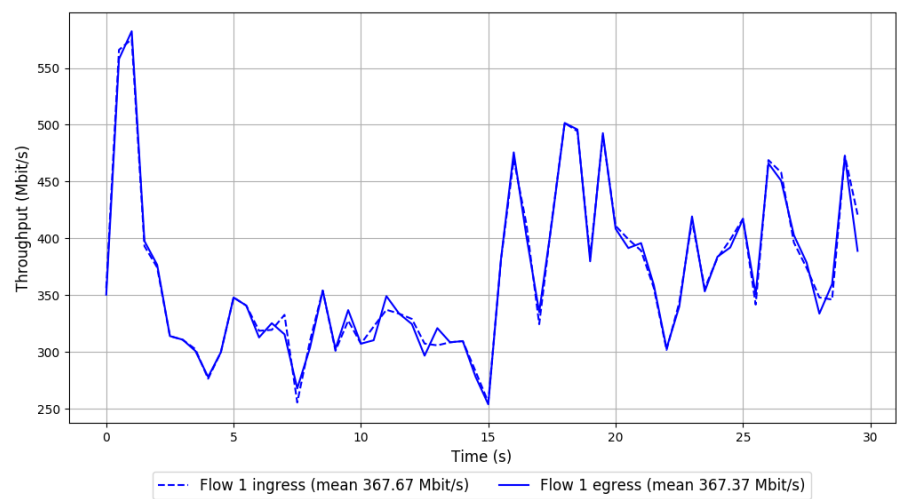
-- Flow 1:

Average throughput: 367.37 Mbit/s

95th percentile per-packet one-way delay: 14.620 ms

Loss rate: 0.15%

Run 10: Report of Verus — Data Link

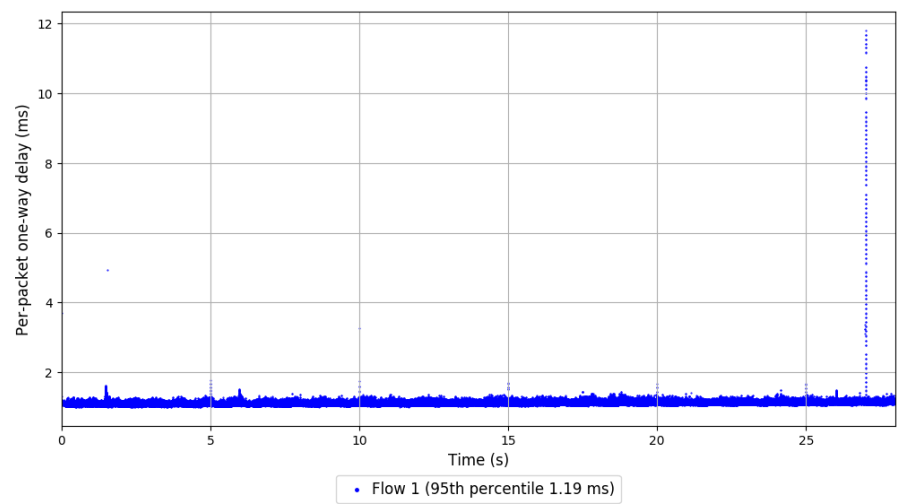
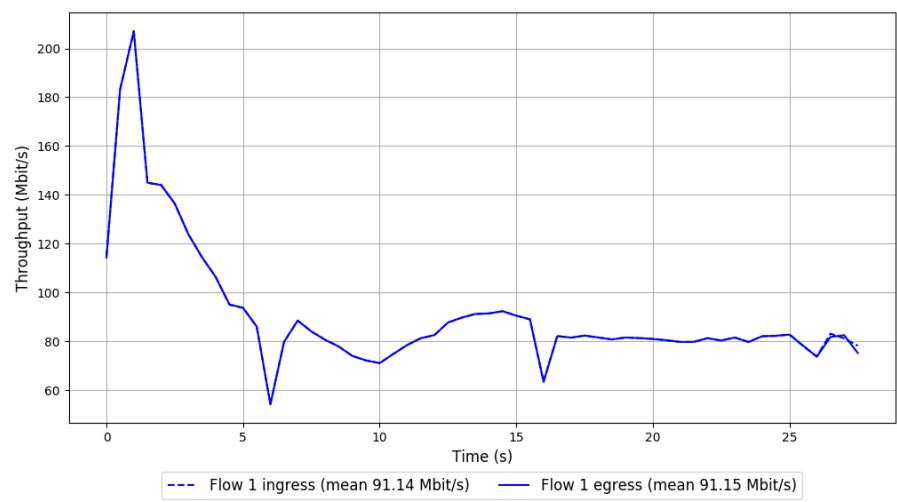


Run 1: Statistics of Copa

Start at: 2017-11-20 23:29:46
End at: 2017-11-20 23:30:16
Local clock offset: 2.051 ms
Remote clock offset: -2.611 ms

Below is generated by plot.py at 2017-11-21 07:05:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.15 Mbit/s
95th percentile per-packet one-way delay: 1.191 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 91.15 Mbit/s
95th percentile per-packet one-way delay: 1.191 ms
Loss rate: 0.06%

Run 1: Report of Copa — Data Link

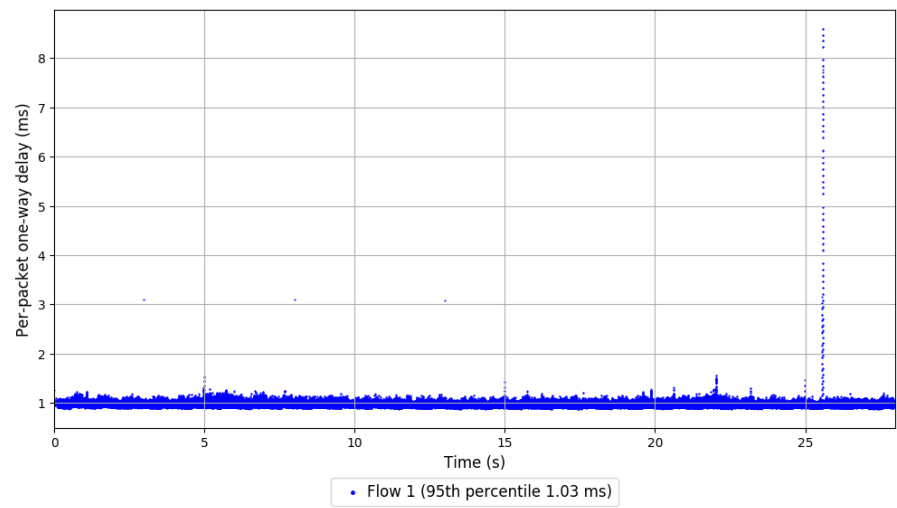
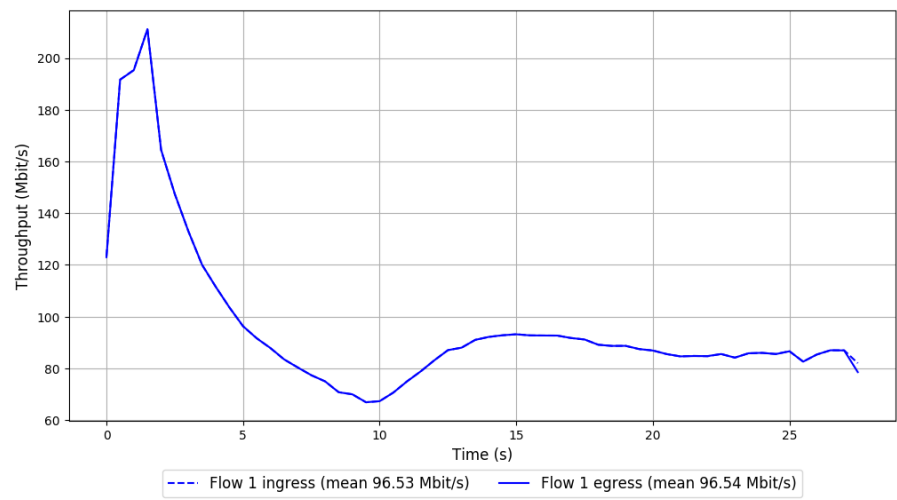


Run 2: Statistics of Copa

Start at: 2017-11-20 23:49:02
End at: 2017-11-20 23:49:32
Local clock offset: 1.042 ms
Remote clock offset: -2.617 ms

Below is generated by plot.py at 2017-11-21 07:05:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.54 Mbit/s
95th percentile per-packet one-way delay: 1.035 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 96.54 Mbit/s
95th percentile per-packet one-way delay: 1.035 ms
Loss rate: 0.07%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-21 00:08:07

End at: 2017-11-21 00:08:37

Local clock offset: 1.761 ms

Remote clock offset: -2.25 ms

Below is generated by plot.py at 2017-11-21 07:05:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.08 Mbit/s

95th percentile per-packet one-way delay: 1.052 ms

Loss rate: 0.07%

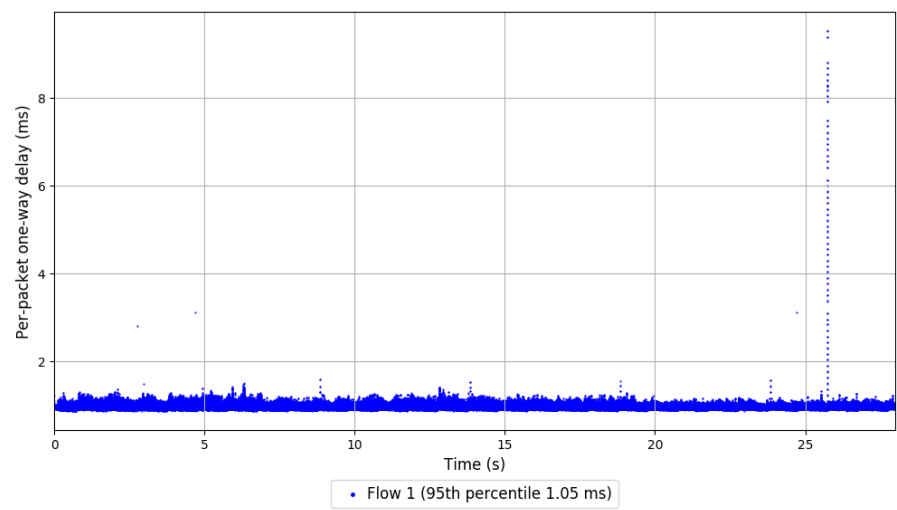
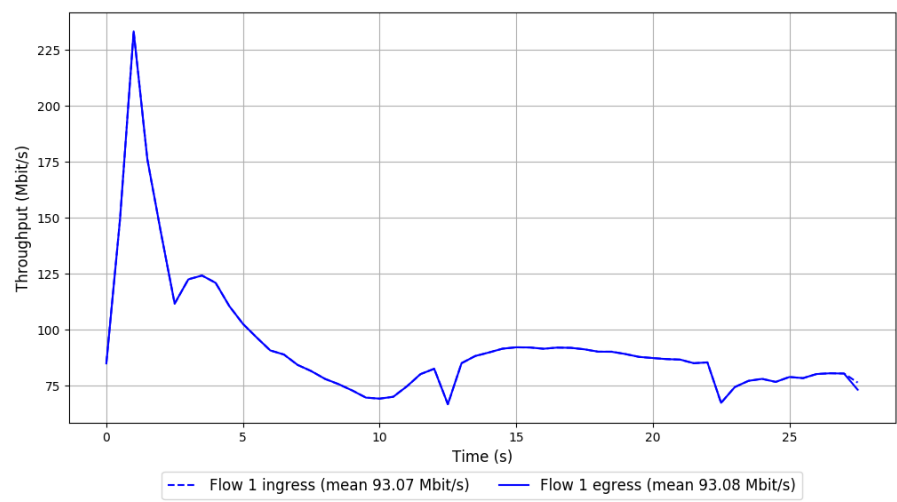
-- Flow 1:

Average throughput: 93.08 Mbit/s

95th percentile per-packet one-way delay: 1.052 ms

Loss rate: 0.07%

Run 3: Report of Copa — Data Link

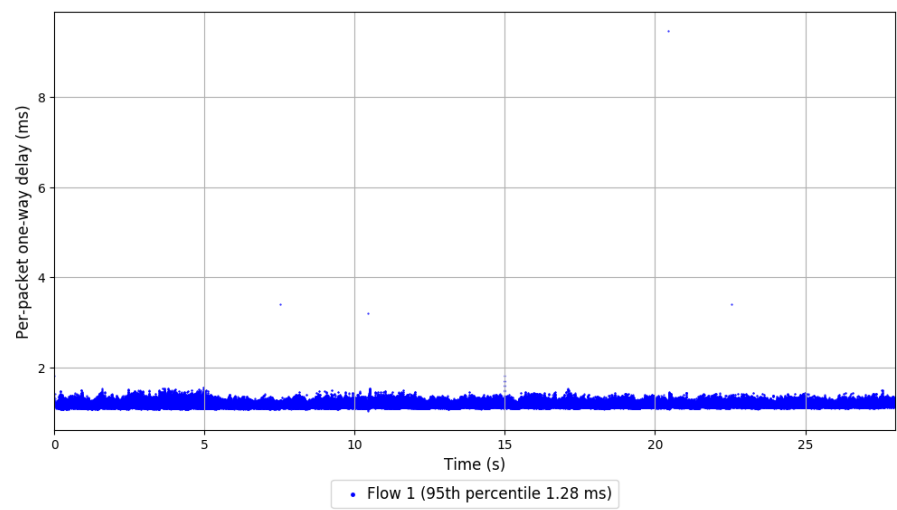
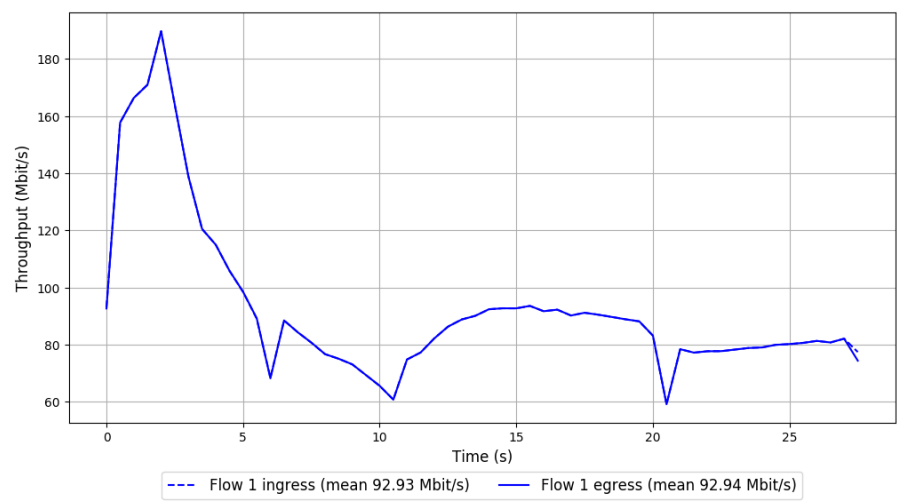


Run 4: Statistics of Copa

Start at: 2017-11-21 00:27:29
End at: 2017-11-21 00:27:59
Local clock offset: 1.363 ms
Remote clock offset: -1.951 ms

Below is generated by plot.py at 2017-11-21 07:05:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 92.94 Mbit/s
95th percentile per-packet one-way delay: 1.281 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 92.94 Mbit/s
95th percentile per-packet one-way delay: 1.281 ms
Loss rate: 0.06%

Run 4: Report of Copa — Data Link

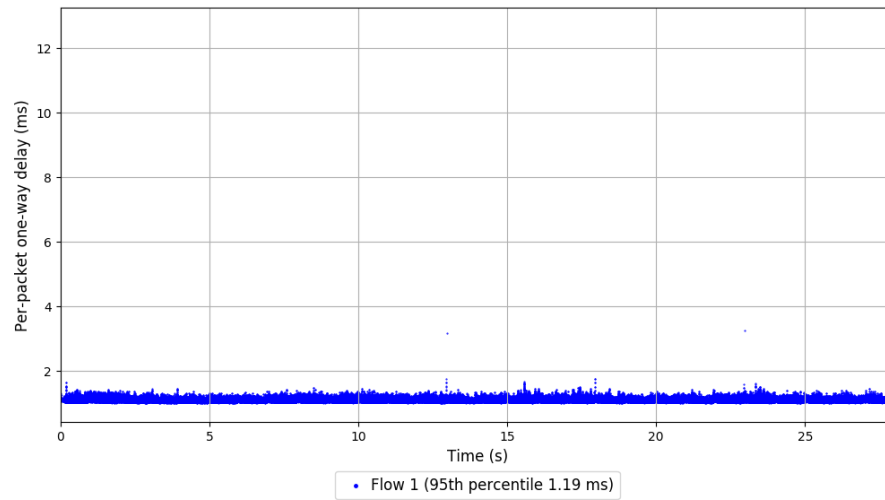
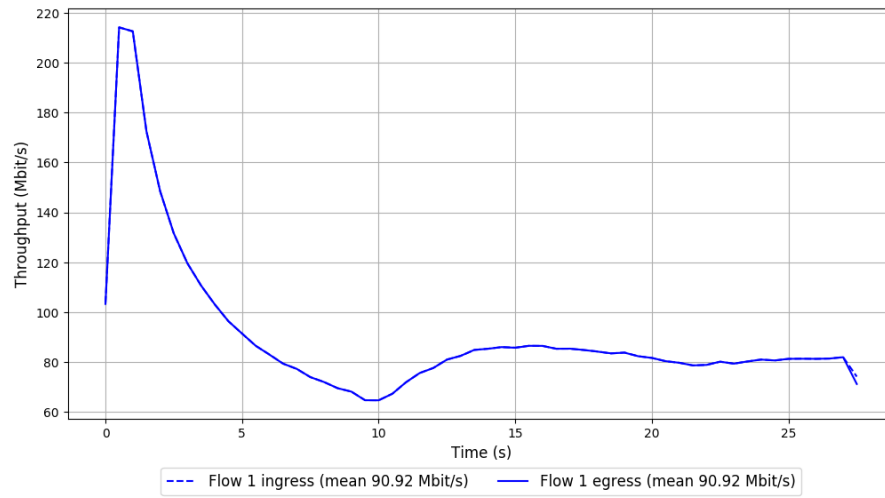


Run 5: Statistics of Copa

Start at: 2017-11-21 00:46:42
End at: 2017-11-21 00:47:12
Local clock offset: 0.959 ms
Remote clock offset: -1.567 ms

Below is generated by plot.py at 2017-11-21 07:05:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.92 Mbit/s
95th percentile per-packet one-way delay: 1.186 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 90.92 Mbit/s
95th percentile per-packet one-way delay: 1.186 ms
Loss rate: 0.06%

Run 5: Report of Copa — Data Link

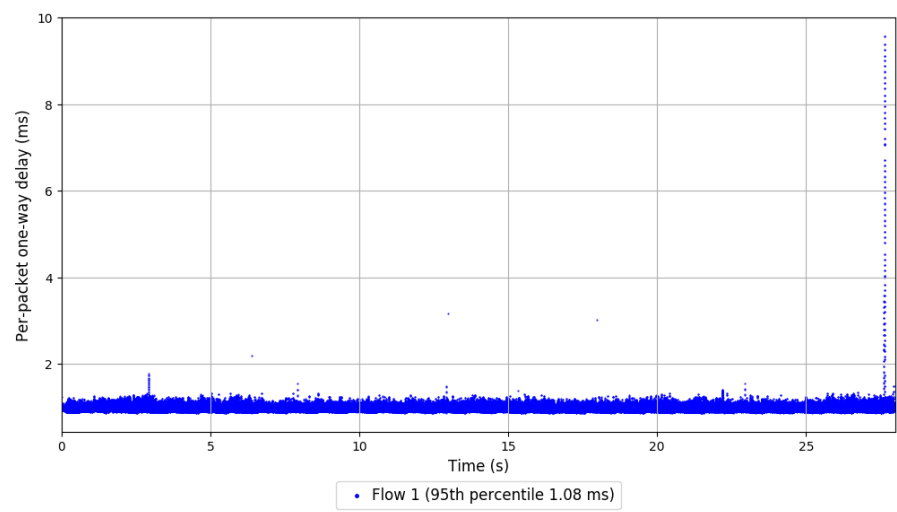
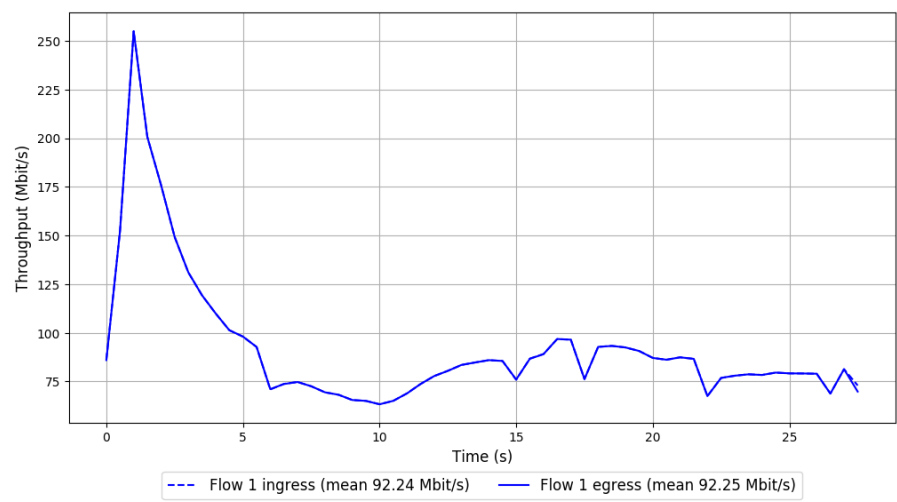


Run 6: Statistics of Copa

Start at: 2017-11-21 01:06:08
End at: 2017-11-21 01:06:39
Local clock offset: 0.56 ms
Remote clock offset: -1.212 ms

Below is generated by plot.py at 2017-11-21 07:05:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 92.25 Mbit/s
95th percentile per-packet one-way delay: 1.082 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 92.25 Mbit/s
95th percentile per-packet one-way delay: 1.082 ms
Loss rate: 0.06%

Run 6: Report of Copa — Data Link

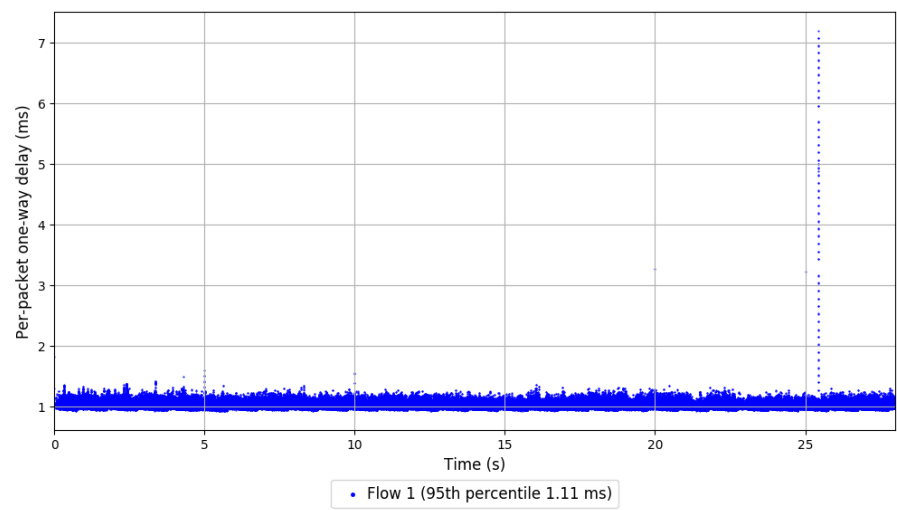
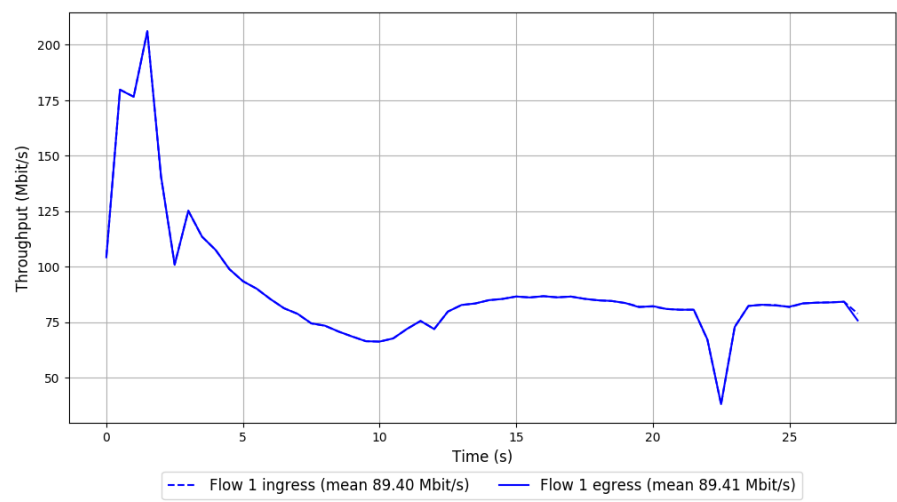


Run 7: Statistics of Copa

Start at: 2017-11-21 01:25:32
End at: 2017-11-21 01:26:02
Local clock offset: 0.874 ms
Remote clock offset: -0.735 ms

Below is generated by plot.py at 2017-11-21 07:05:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 89.41 Mbit/s
95th percentile per-packet one-way delay: 1.112 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 89.41 Mbit/s
95th percentile per-packet one-way delay: 1.112 ms
Loss rate: 0.07%

Run 7: Report of Copa — Data Link

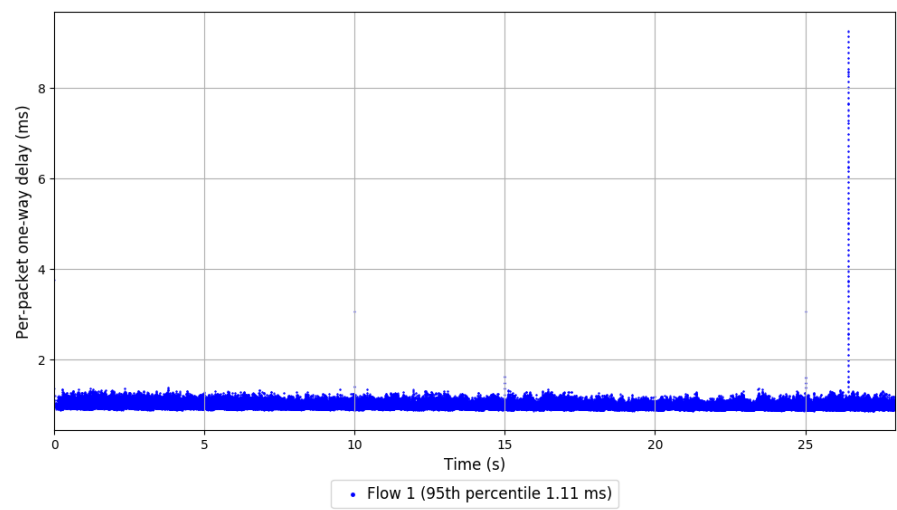
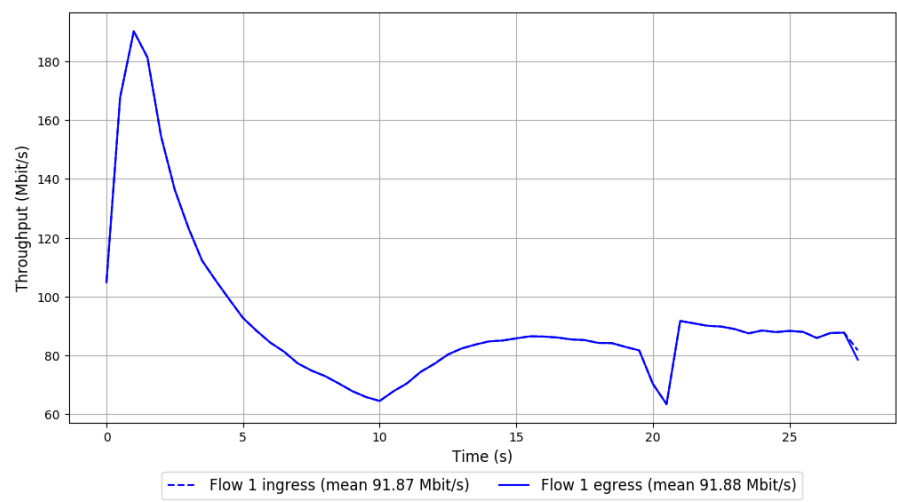


Run 8: Statistics of Copa

Start at: 2017-11-21 01:44:57
End at: 2017-11-21 01:45:27
Local clock offset: 1.491 ms
Remote clock offset: -0.807 ms

Below is generated by plot.py at 2017-11-21 07:05:40
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.88 Mbit/s
95th percentile per-packet one-way delay: 1.106 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 91.88 Mbit/s
95th percentile per-packet one-way delay: 1.106 ms
Loss rate: 0.07%

Run 8: Report of Copa — Data Link

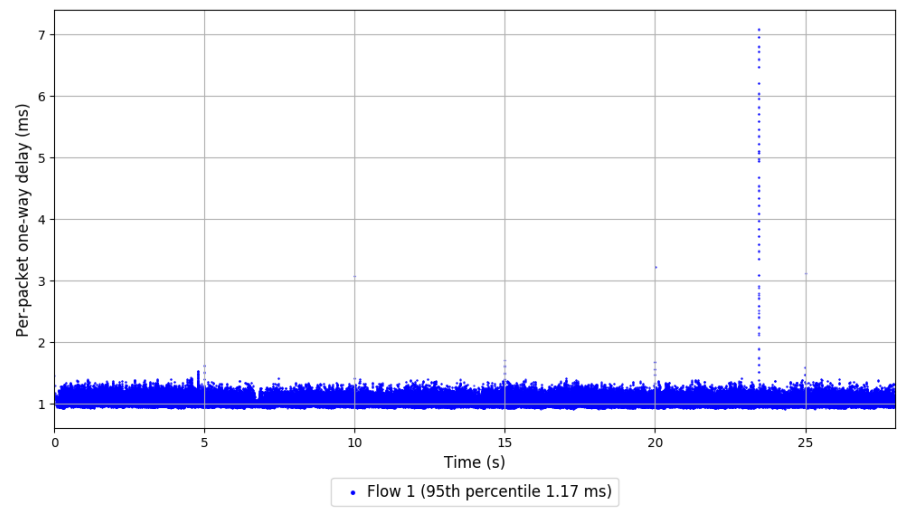
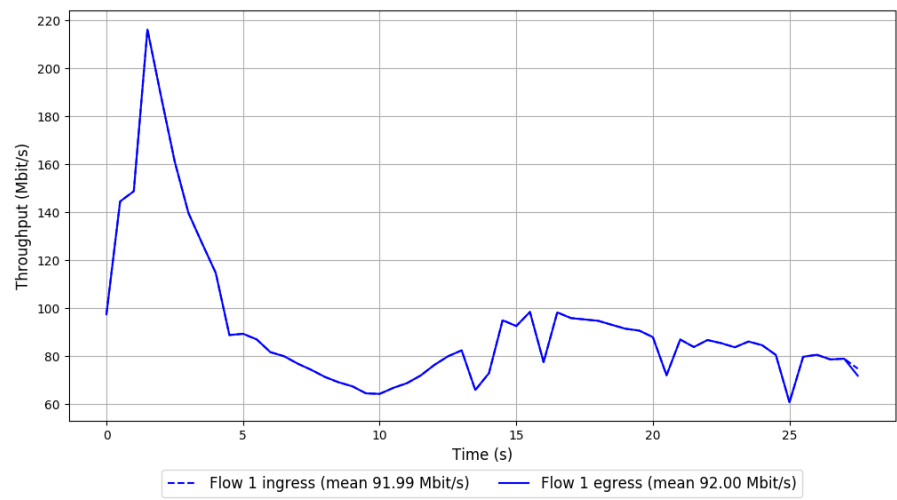


Run 9: Statistics of Copa

Start at: 2017-11-21 02:03:55
End at: 2017-11-21 02:04:25
Local clock offset: 2.055 ms
Remote clock offset: -0.779 ms

Below is generated by plot.py at 2017-11-21 07:05:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 92.00 Mbit/s
95th percentile per-packet one-way delay: 1.169 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 92.00 Mbit/s
95th percentile per-packet one-way delay: 1.169 ms
Loss rate: 0.06%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-21 02:23:19

End at: 2017-11-21 02:23:49

Local clock offset: 2.373 ms

Remote clock offset: -0.834 ms

Below is generated by plot.py at 2017-11-21 07:06:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.21 Mbit/s

95th percentile per-packet one-way delay: 1.277 ms

Loss rate: 0.07%

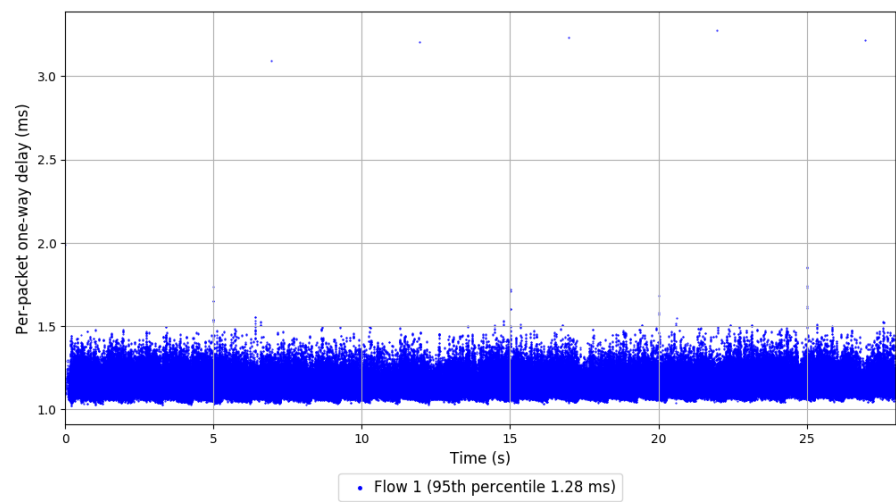
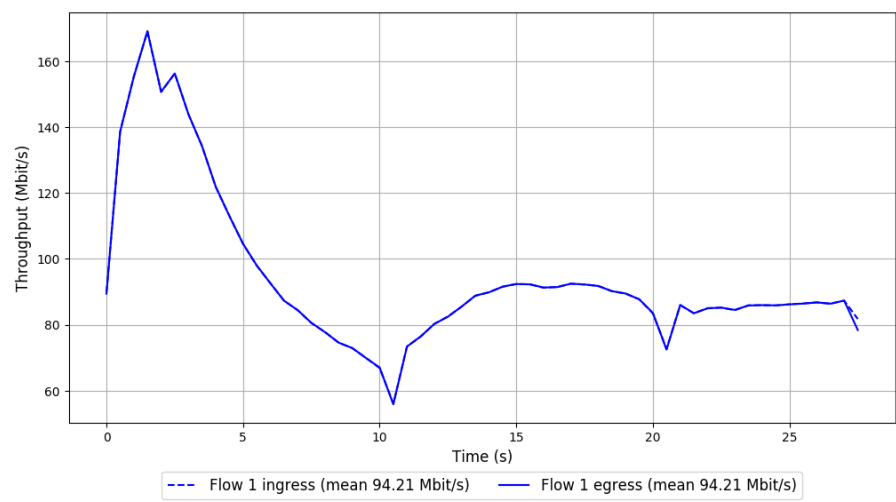
-- Flow 1:

Average throughput: 94.21 Mbit/s

95th percentile per-packet one-way delay: 1.277 ms

Loss rate: 0.07%

Run 10: Report of Copa — Data Link

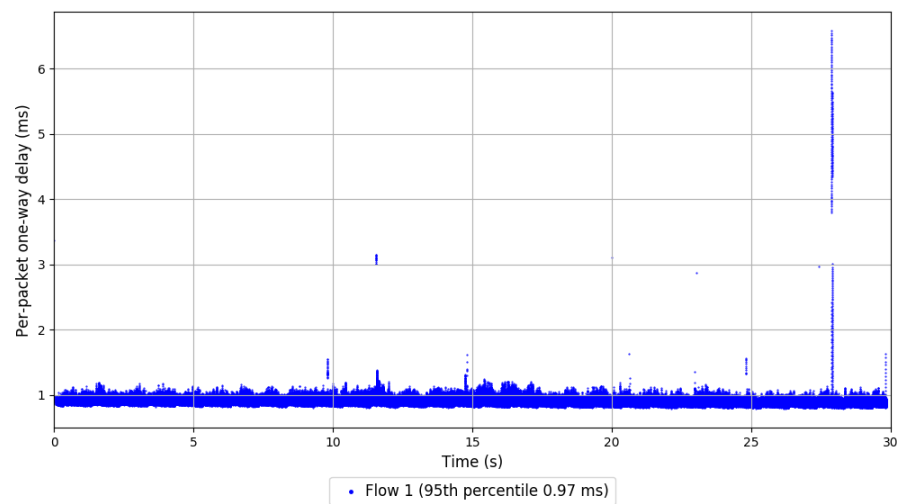
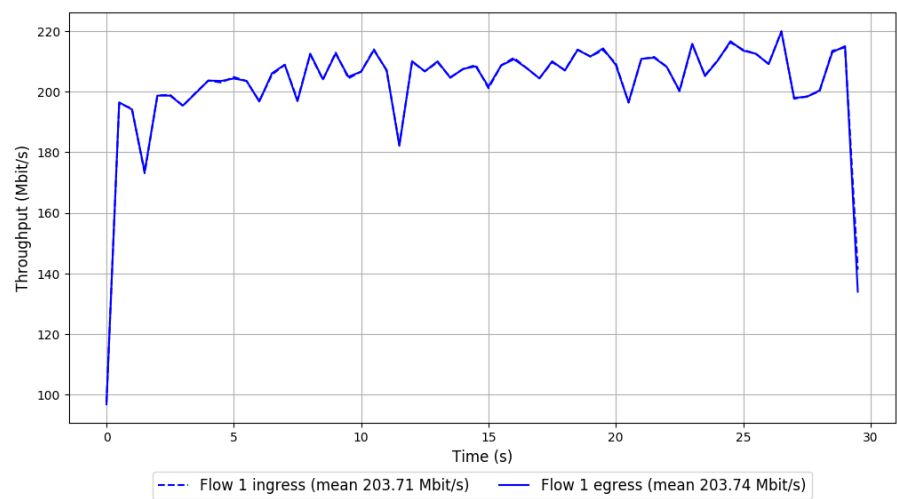


```
Run 1: Statistics of Indigo

Start at: 2017-11-20 23:42:05
End at: 2017-11-20 23:42:35
Local clock offset: 0.73 ms
Remote clock offset: -2.557 ms

# Below is generated by plot.py at 2017-11-21 07:07:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.74 Mbit/s
95th percentile per-packet one-way delay: 0.972 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 203.74 Mbit/s
95th percentile per-packet one-way delay: 0.972 ms
Loss rate: 0.06%
```


Run 1: Report of Indigo — Data Link

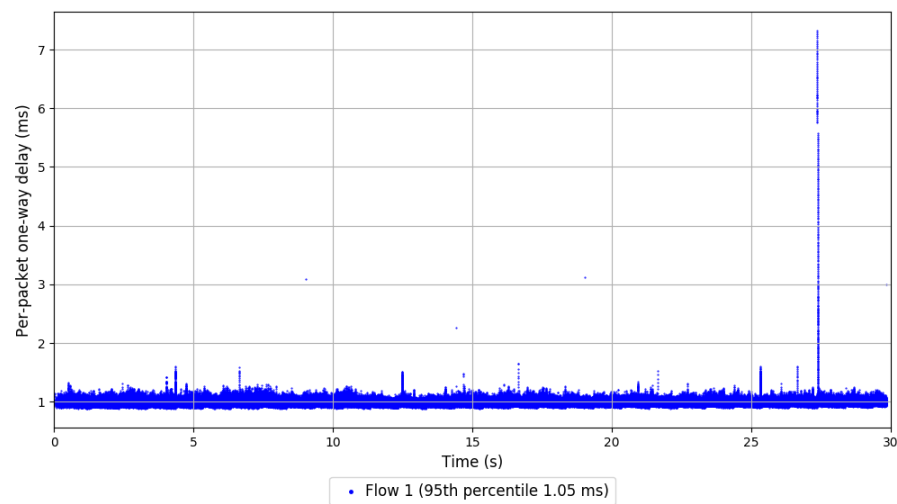
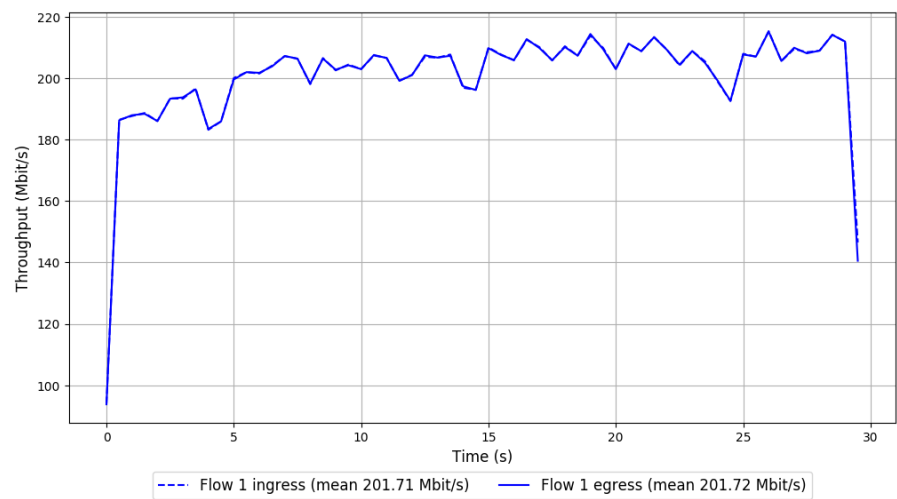


Run 2: Statistics of Indigo

Start at: 2017-11-21 00:01:32
End at: 2017-11-21 00:02:02
Local clock offset: 1.784 ms
Remote clock offset: -2.469 ms

Below is generated by plot.py at 2017-11-21 07:07:31
Datalink statistics
-- Total of 1 flow:
Average throughput: 201.72 Mbit/s
95th percentile per-packet one-way delay: 1.055 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 201.72 Mbit/s
95th percentile per-packet one-way delay: 1.055 ms
Loss rate: 0.05%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-21 00:20:38

End at: 2017-11-21 00:21:08

Local clock offset: 1.915 ms

Remote clock offset: -2.11 ms

Below is generated by plot.py at 2017-11-21 07:08:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.43 Mbit/s

95th percentile per-packet one-way delay: 1.313 ms

Loss rate: 0.06%

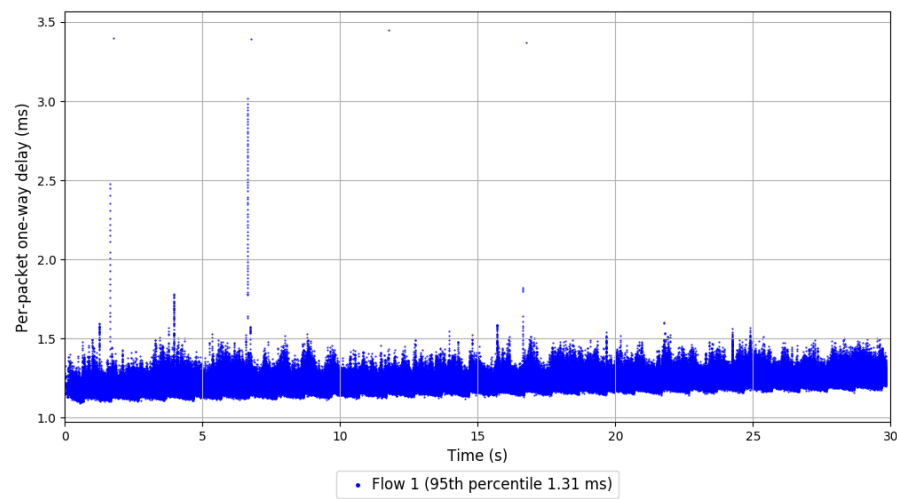
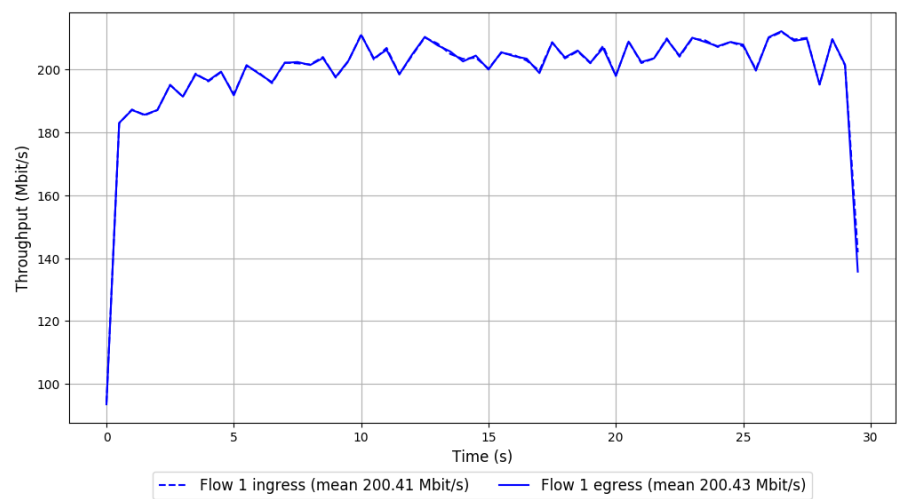
-- Flow 1:

Average throughput: 200.43 Mbit/s

95th percentile per-packet one-way delay: 1.313 ms

Loss rate: 0.06%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-21 00:39:50

End at: 2017-11-21 00:40:20

Local clock offset: 1.1 ms

Remote clock offset: -1.656 ms

Below is generated by plot.py at 2017-11-21 07:08:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.72 Mbit/s

95th percentile per-packet one-way delay: 1.150 ms

Loss rate: 0.07%

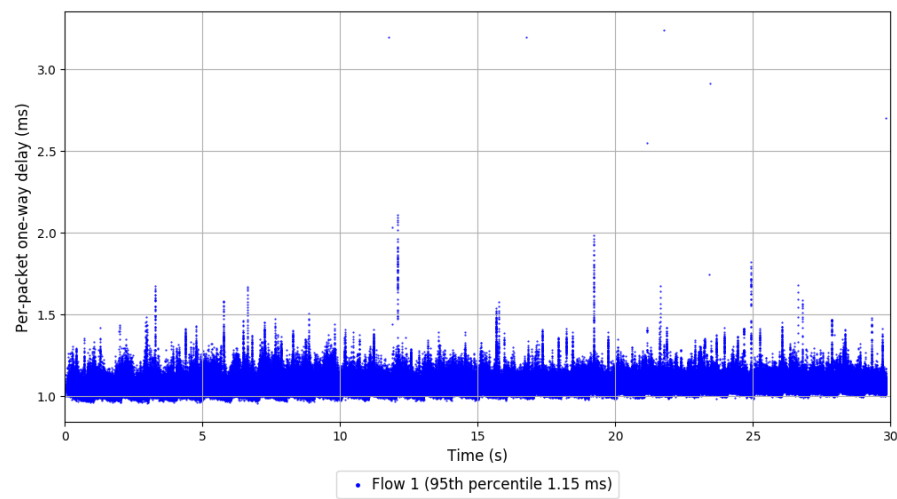
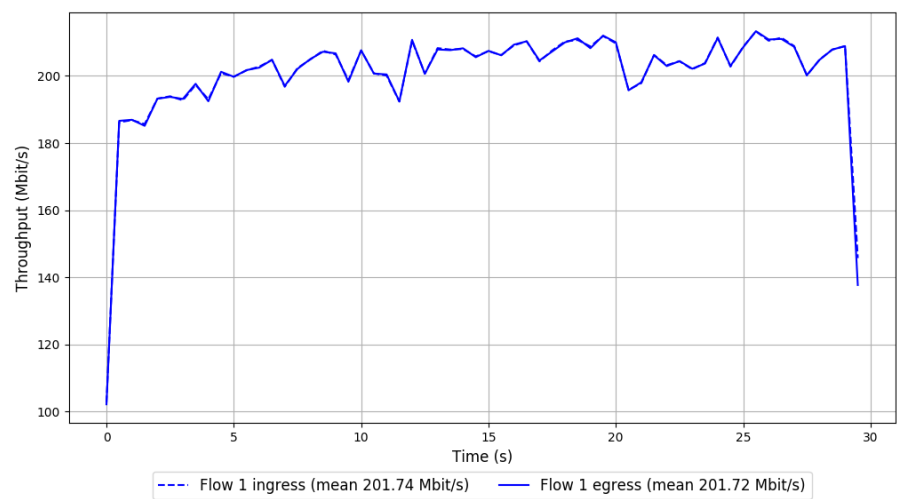
-- Flow 1:

Average throughput: 201.72 Mbit/s

95th percentile per-packet one-way delay: 1.150 ms

Loss rate: 0.07%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-21 00:59:13

End at: 2017-11-21 00:59:43

Local clock offset: 0.686 ms

Remote clock offset: -1.5 ms

Below is generated by plot.py at 2017-11-21 07:08:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.12 Mbit/s

95th percentile per-packet one-way delay: 1.207 ms

Loss rate: 0.07%

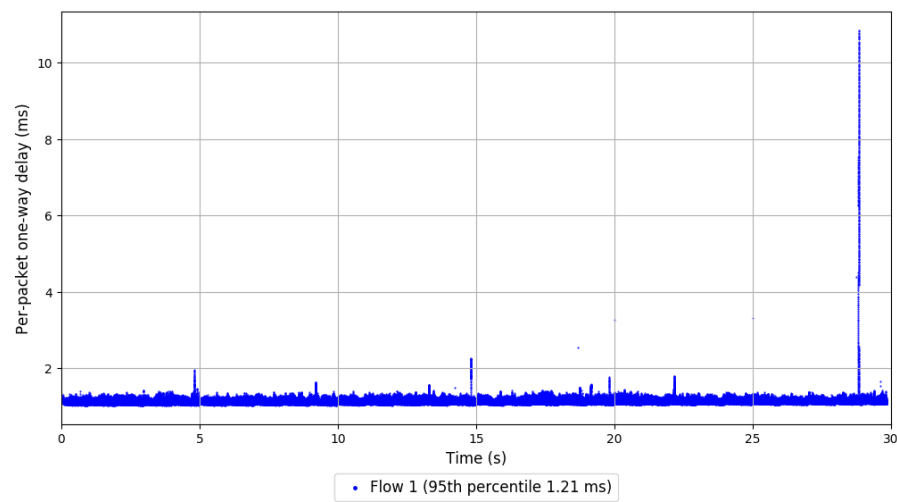
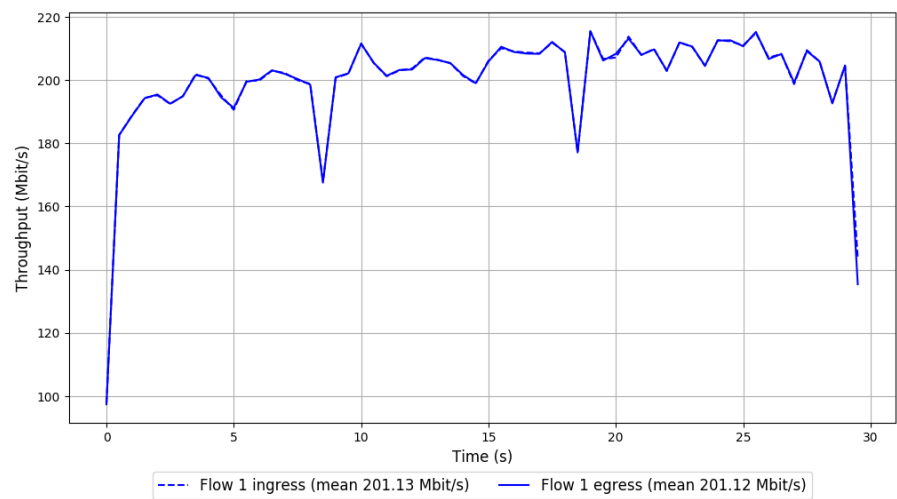
-- Flow 1:

Average throughput: 201.12 Mbit/s

95th percentile per-packet one-way delay: 1.207 ms

Loss rate: 0.07%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-21 01:18:33

End at: 2017-11-21 01:19:03

Local clock offset: 0.694 ms

Remote clock offset: -0.924 ms

Below is generated by plot.py at 2017-11-21 07:08:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.37 Mbit/s

95th percentile per-packet one-way delay: 1.062 ms

Loss rate: 0.07%

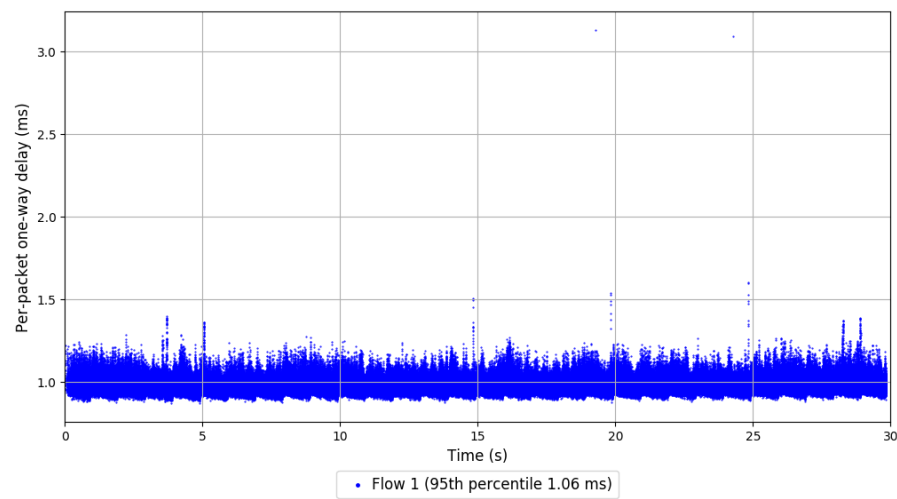
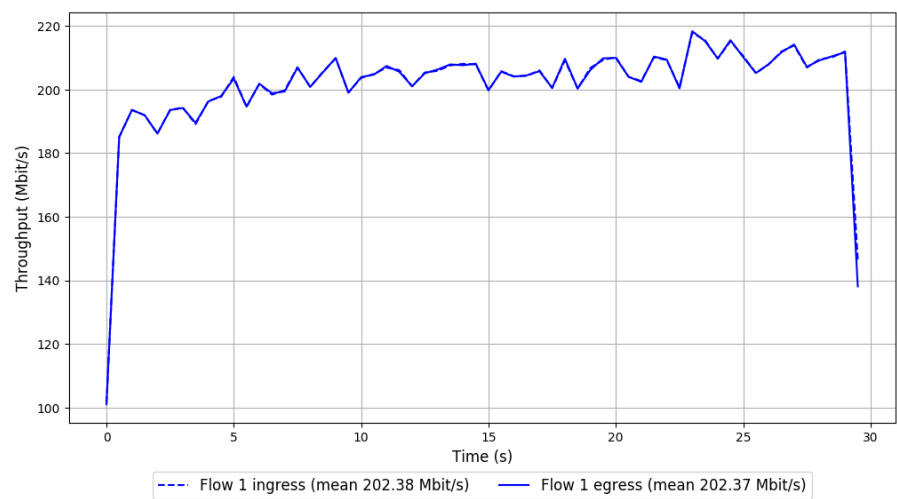
-- Flow 1:

Average throughput: 202.37 Mbit/s

95th percentile per-packet one-way delay: 1.062 ms

Loss rate: 0.07%

Run 6: Report of Indigo — Data Link

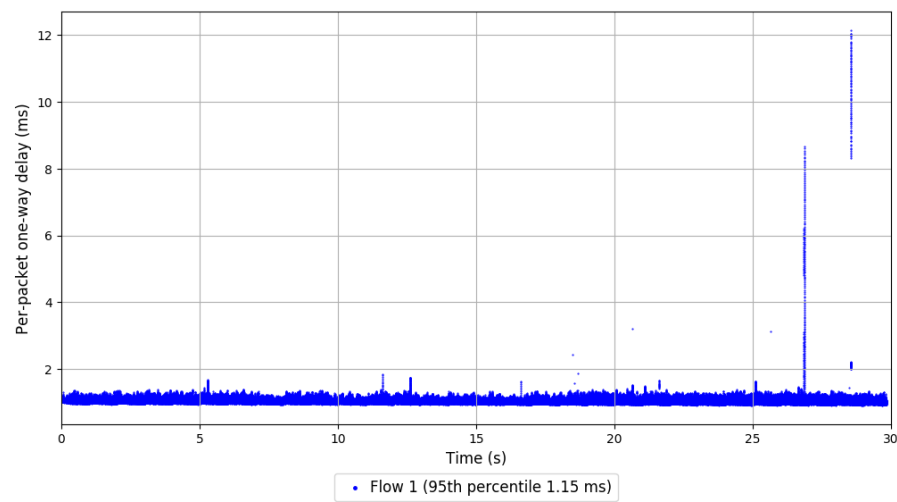
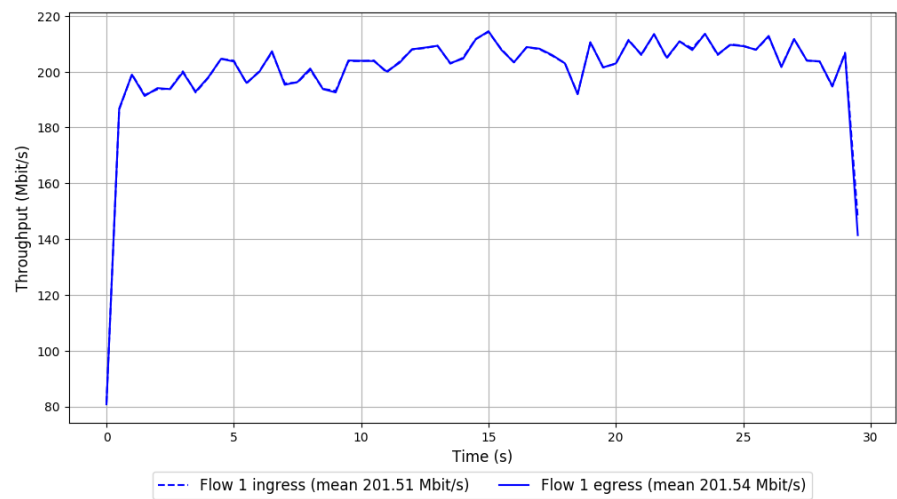


Run 7: Statistics of Indigo

Start at: 2017-11-21 01:38:08
End at: 2017-11-21 01:38:38
Local clock offset: 1.22 ms
Remote clock offset: -0.643 ms

Below is generated by plot.py at 2017-11-21 07:08:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 201.54 Mbit/s
95th percentile per-packet one-way delay: 1.145 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 201.54 Mbit/s
95th percentile per-packet one-way delay: 1.145 ms
Loss rate: 0.06%

Run 7: Report of Indigo — Data Link

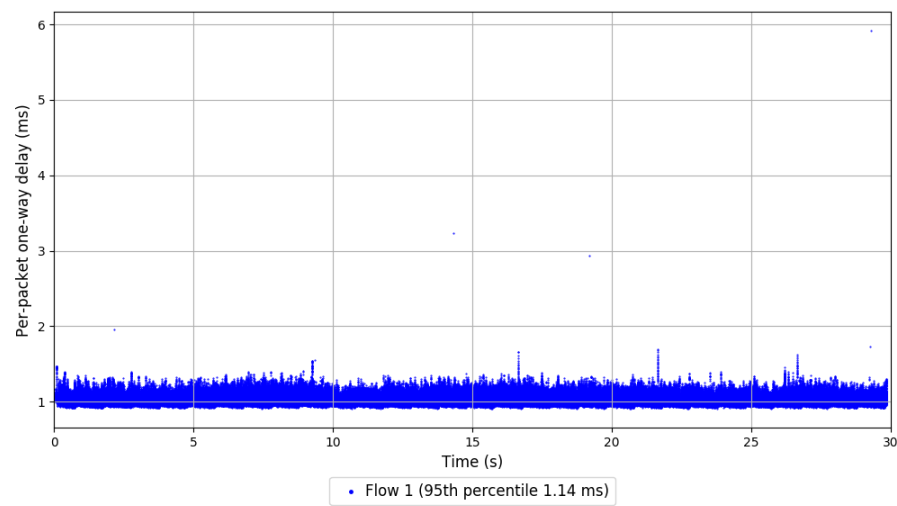
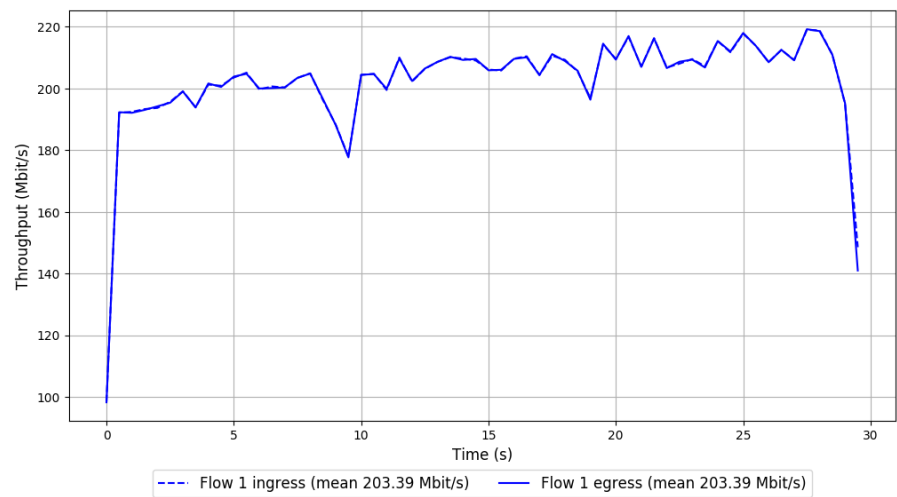


Run 8: Statistics of Indigo

Start at: 2017-11-21 01:56:57
End at: 2017-11-21 01:57:28
Local clock offset: 2.002 ms
Remote clock offset: -0.791 ms

Below is generated by plot.py at 2017-11-21 07:09:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 203.39 Mbit/s
95th percentile per-packet one-way delay: 1.135 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 203.39 Mbit/s
95th percentile per-packet one-way delay: 1.135 ms
Loss rate: 0.06%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-21 02:16:24

End at: 2017-11-21 02:16:54

Local clock offset: 2.217 ms

Remote clock offset: -0.796 ms

Below is generated by plot.py at 2017-11-21 07:10:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 204.13 Mbit/s

95th percentile per-packet one-way delay: 1.153 ms

Loss rate: 0.06%

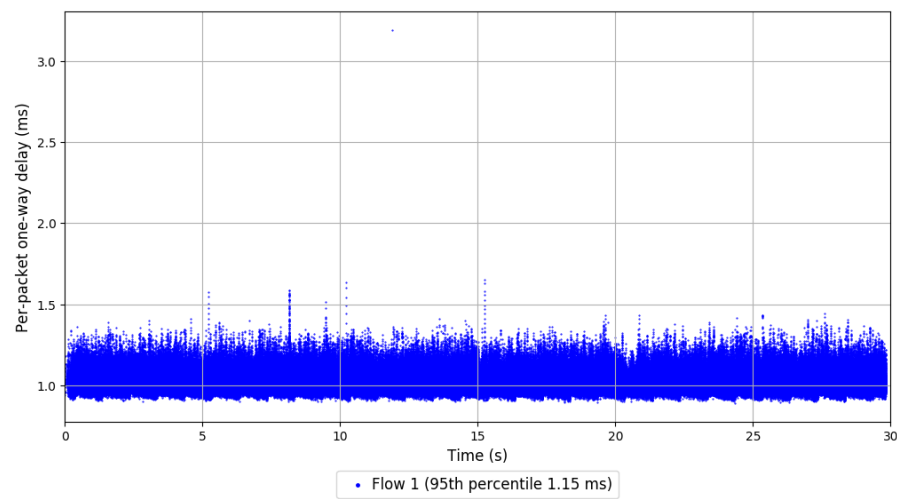
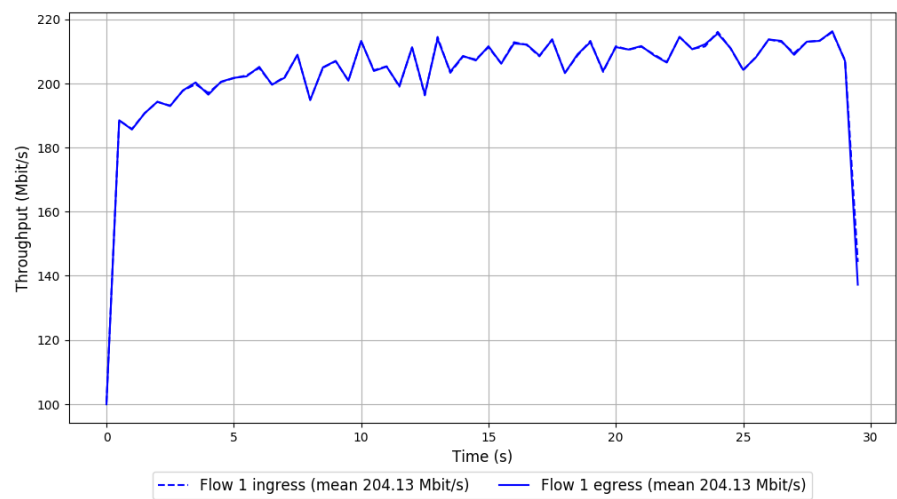
-- Flow 1:

Average throughput: 204.13 Mbit/s

95th percentile per-packet one-way delay: 1.153 ms

Loss rate: 0.06%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-21 02:35:48

End at: 2017-11-21 02:36:18

Local clock offset: 1.875 ms

Remote clock offset: -0.897 ms

Below is generated by plot.py at 2017-11-21 07:10:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.86 Mbit/s

95th percentile per-packet one-way delay: 1.125 ms

Loss rate: 0.07%

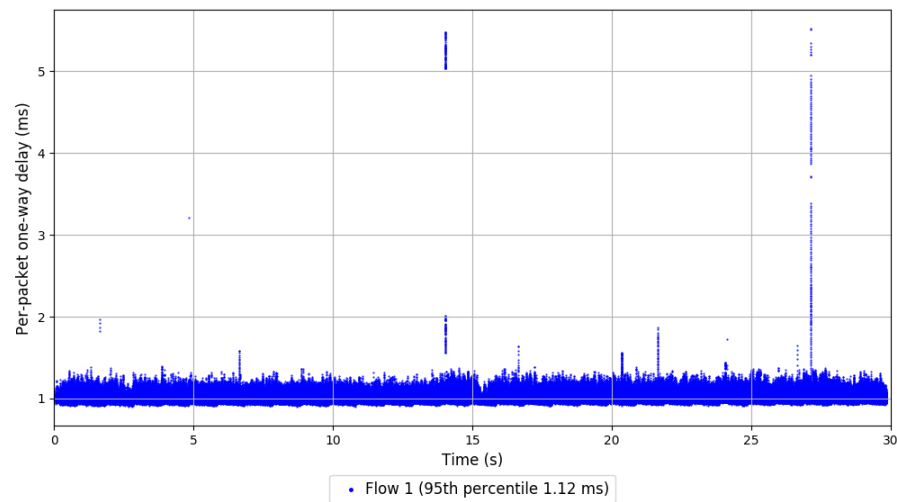
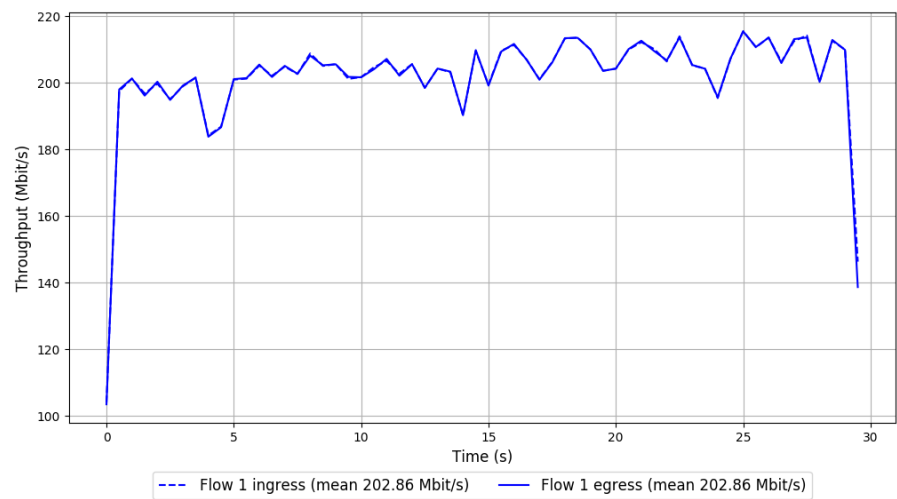
-- Flow 1:

Average throughput: 202.86 Mbit/s

95th percentile per-packet one-way delay: 1.125 ms

Loss rate: 0.07%

Run 10: Report of Indigo — Data Link

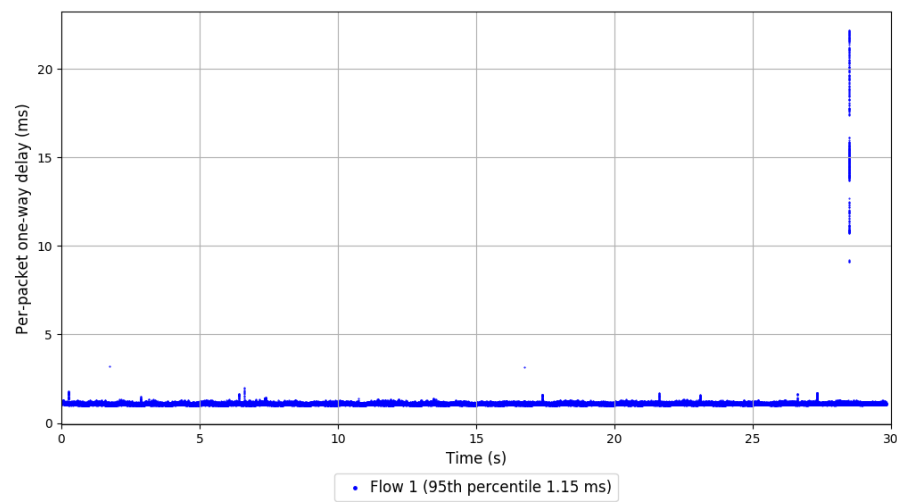
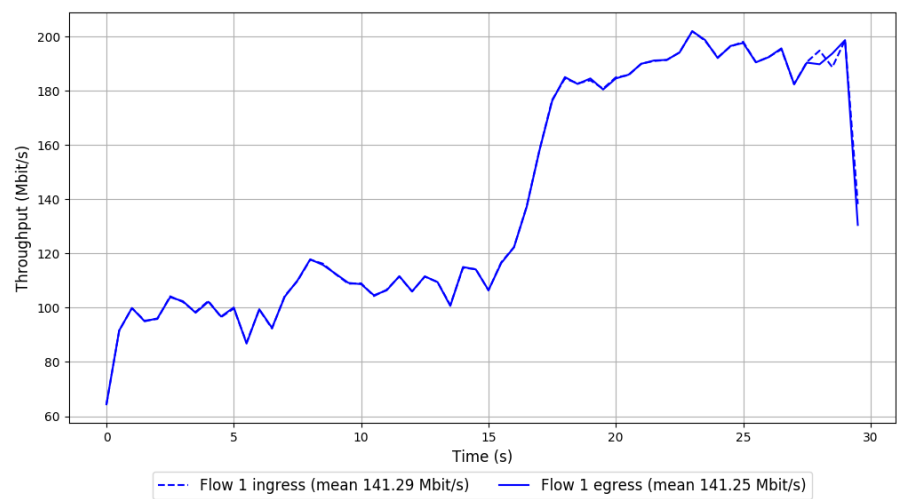


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-20 23:26:51
End at: 2017-11-20 23:27:21
Local clock offset: 2.472 ms
Remote clock offset: -2.613 ms

# Below is generated by plot.py at 2017-11-21 07:10:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 141.25 Mbit/s
95th percentile per-packet one-way delay: 1.153 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 141.25 Mbit/s
95th percentile per-packet one-way delay: 1.153 ms
Loss rate: 0.10%
```

Run 1: Report of Indigo-calib — Data Link



Run 2: Statistics of Indigo-calib

Start at: 2017-11-20 23:46:04

End at: 2017-11-20 23:46:34

Local clock offset: 1.039 ms

Remote clock offset: -2.579 ms

Below is generated by plot.py at 2017-11-21 07:11:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.17 Mbit/s

95th percentile per-packet one-way delay: 1.105 ms

Loss rate: 0.07%

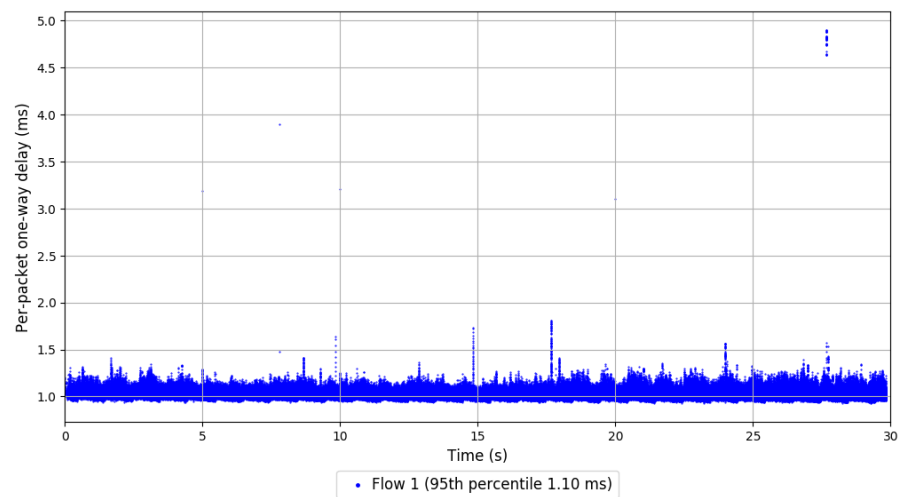
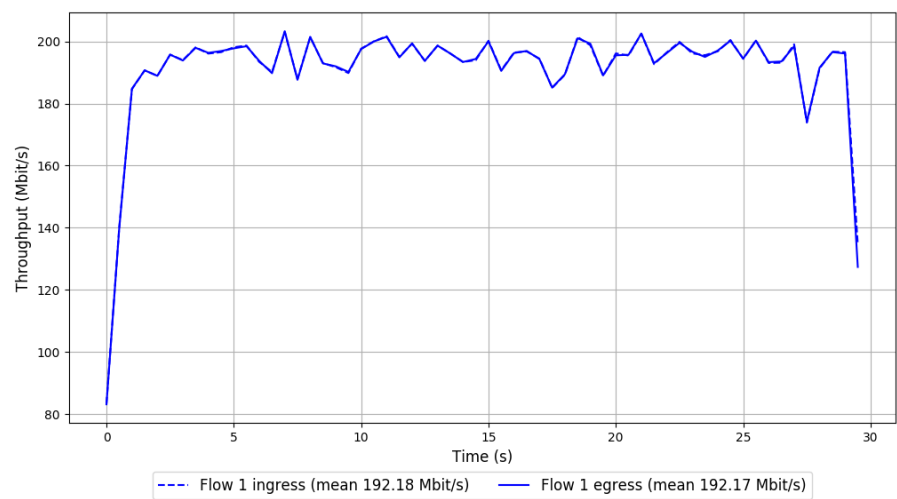
-- Flow 1:

Average throughput: 192.17 Mbit/s

95th percentile per-packet one-way delay: 1.105 ms

Loss rate: 0.07%

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-11-21 00:05:18

End at: 2017-11-21 00:05:48

Local clock offset: 1.859 ms

Remote clock offset: -2.315 ms

Below is generated by plot.py at 2017-11-21 07:11:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.87 Mbit/s

95th percentile per-packet one-way delay: 1.124 ms

Loss rate: 0.08%

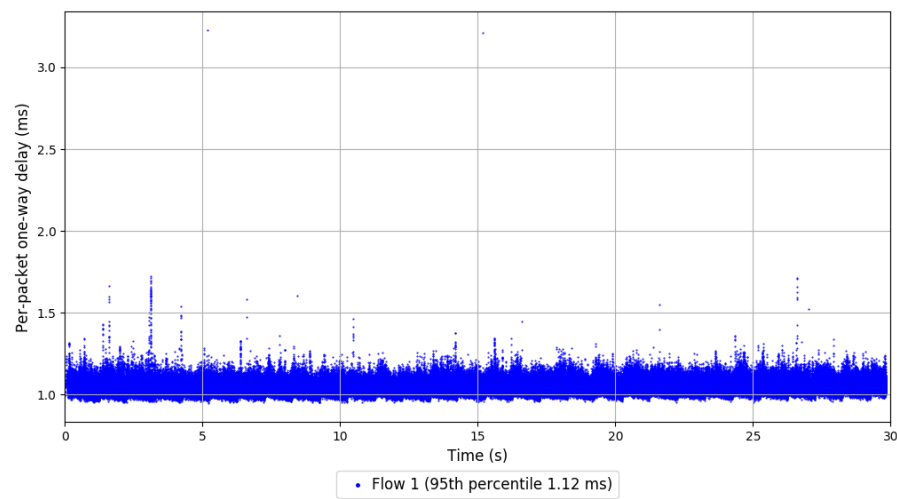
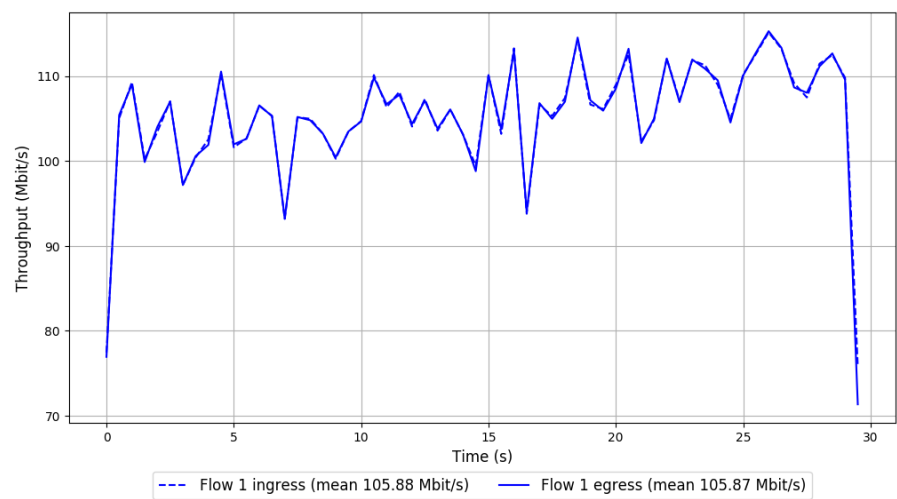
-- Flow 1:

Average throughput: 105.87 Mbit/s

95th percentile per-packet one-way delay: 1.124 ms

Loss rate: 0.08%

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-21 00:24:39

End at: 2017-11-21 00:25:09

Local clock offset: 1.54 ms

Remote clock offset: -2.002 ms

Below is generated by plot.py at 2017-11-21 07:11:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.27 Mbit/s

95th percentile per-packet one-way delay: 1.263 ms

Loss rate: 0.07%

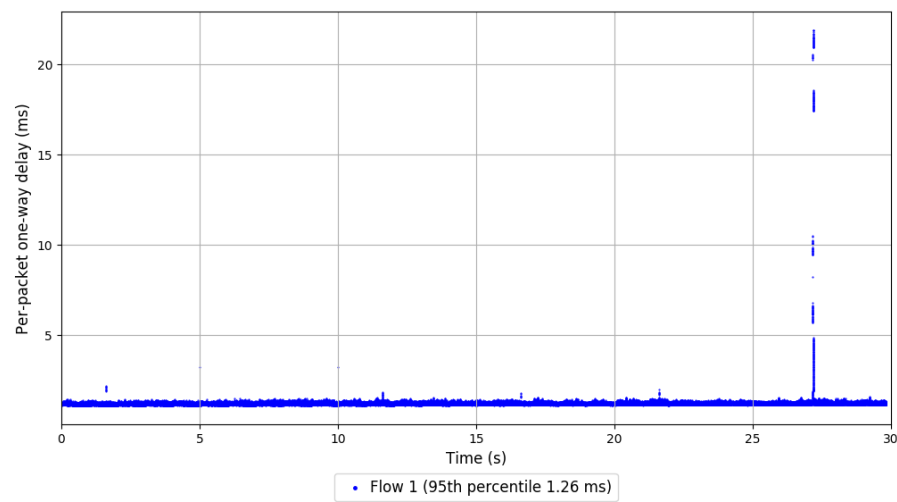
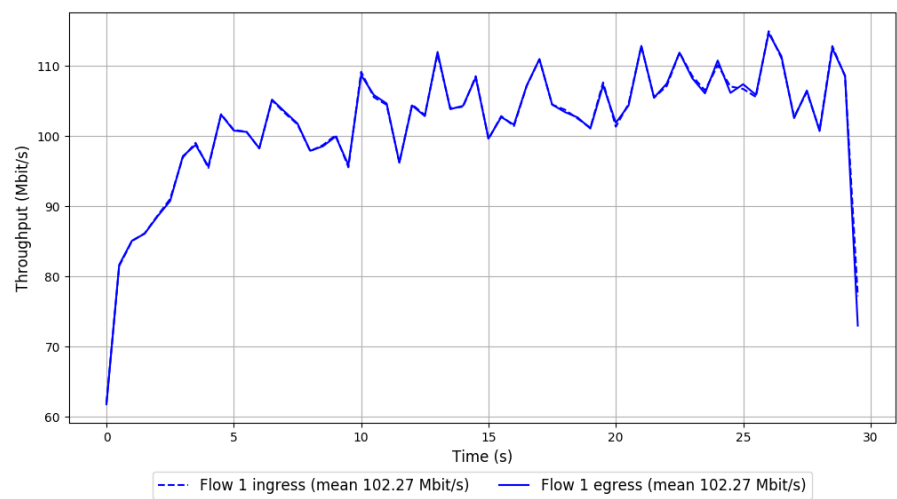
-- Flow 1:

Average throughput: 102.27 Mbit/s

95th percentile per-packet one-way delay: 1.263 ms

Loss rate: 0.07%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-21 00:43:47

End at: 2017-11-21 00:44:17

Local clock offset: 0.931 ms

Remote clock offset: -1.468 ms

Below is generated by plot.py at 2017-11-21 07:11:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.92 Mbit/s

95th percentile per-packet one-way delay: 1.042 ms

Loss rate: 0.06%

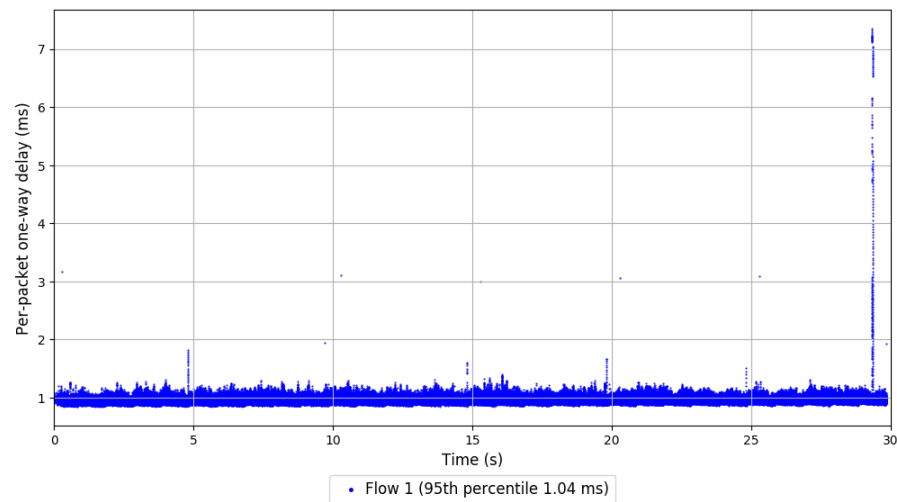
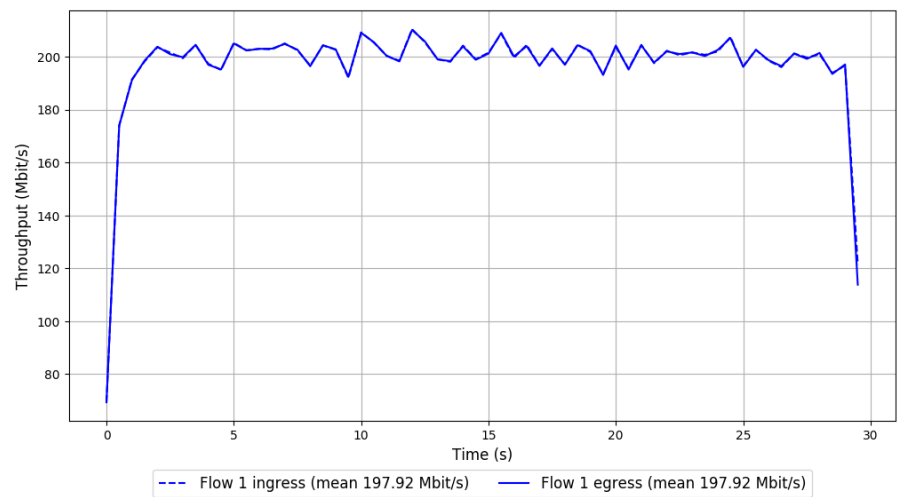
-- Flow 1:

Average throughput: 197.92 Mbit/s

95th percentile per-packet one-way delay: 1.042 ms

Loss rate: 0.06%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-11-21 01:03:14

End at: 2017-11-21 01:03:44

Local clock offset: 0.559 ms

Remote clock offset: -1.395 ms

Below is generated by plot.py at 2017-11-21 07:11:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.54 Mbit/s

95th percentile per-packet one-way delay: 1.241 ms

Loss rate: 0.11%

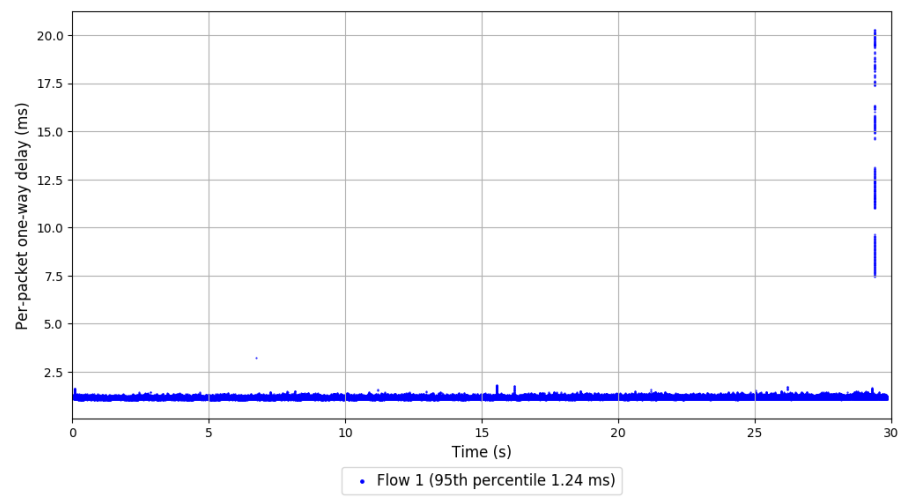
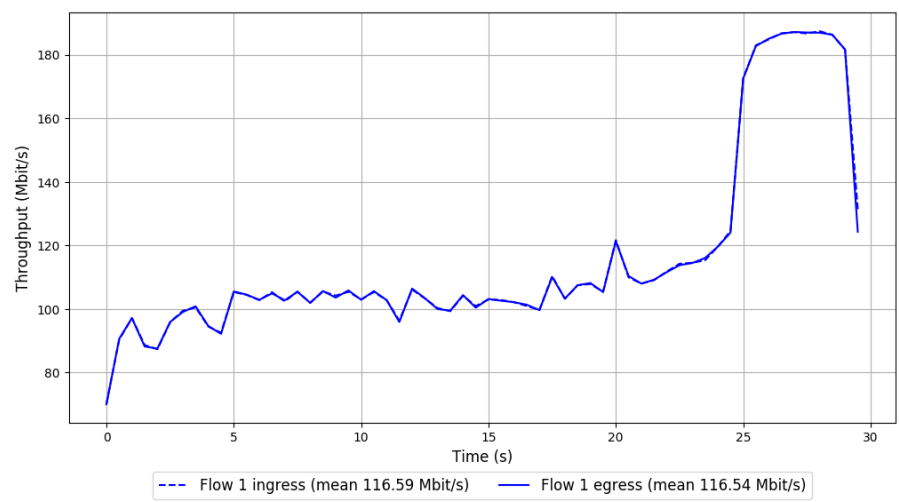
-- Flow 1:

Average throughput: 116.54 Mbit/s

95th percentile per-packet one-way delay: 1.241 ms

Loss rate: 0.11%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-21 01:22:34

End at: 2017-11-21 01:23:04

Local clock offset: 0.799 ms

Remote clock offset: -0.807 ms

Below is generated by plot.py at 2017-11-21 07:11:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 104.16 Mbit/s

95th percentile per-packet one-way delay: 1.104 ms

Loss rate: 0.08%

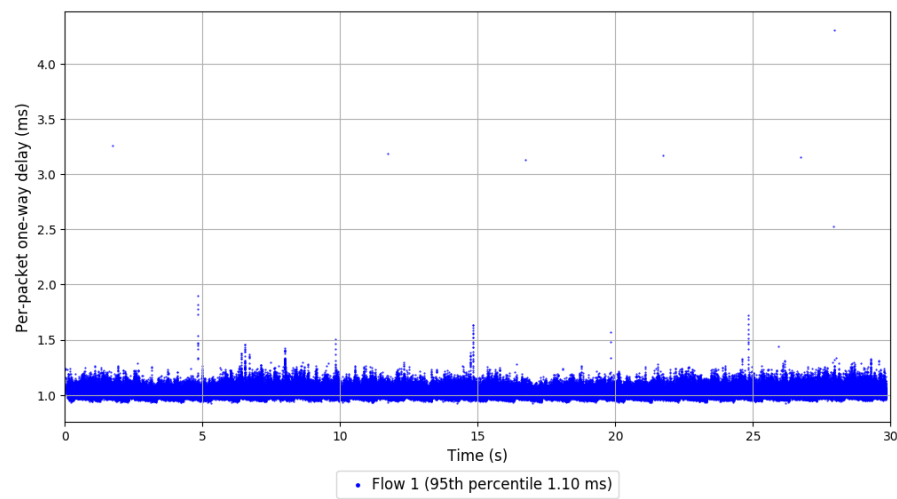
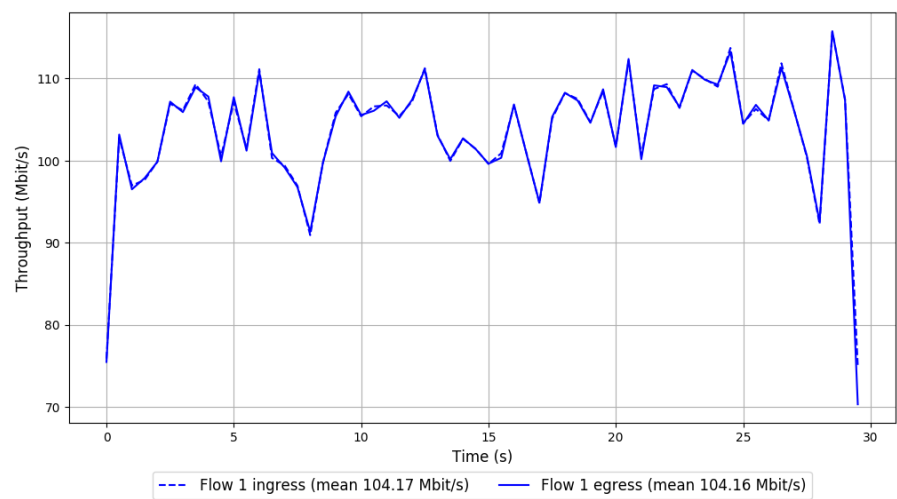
-- Flow 1:

Average throughput: 104.16 Mbit/s

95th percentile per-packet one-way delay: 1.104 ms

Loss rate: 0.08%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-21 01:42:08

End at: 2017-11-21 01:42:38

Local clock offset: 1.358 ms

Remote clock offset: -0.735 ms

Below is generated by plot.py at 2017-11-21 07:11:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.81 Mbit/s

95th percentile per-packet one-way delay: 1.075 ms

Loss rate: 0.07%

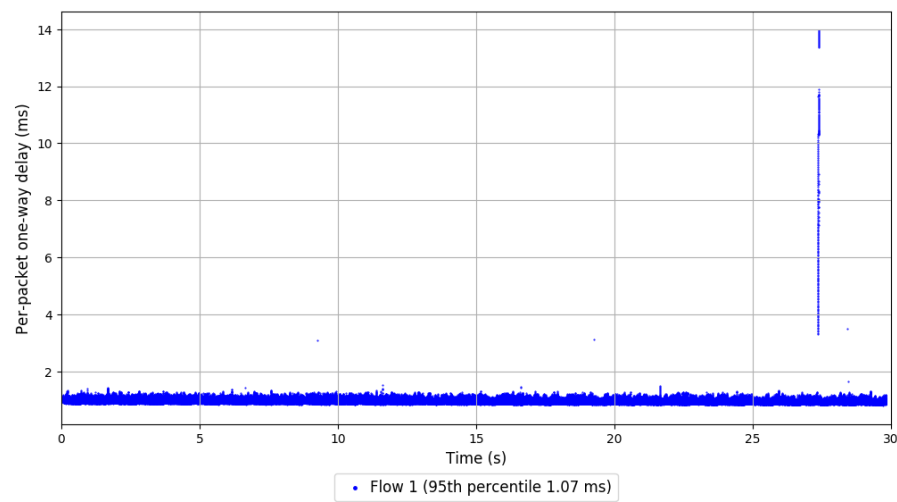
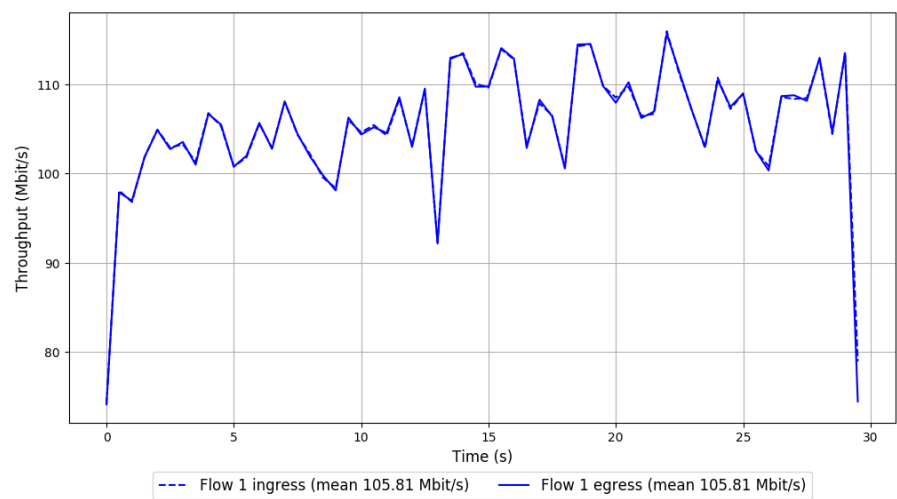
-- Flow 1:

Average throughput: 105.81 Mbit/s

95th percentile per-packet one-way delay: 1.075 ms

Loss rate: 0.07%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-21 02:00:58

End at: 2017-11-21 02:01:28

Local clock offset: 2.131 ms

Remote clock offset: -0.708 ms

Below is generated by plot.py at 2017-11-21 07:11:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.07 Mbit/s

95th percentile per-packet one-way delay: 1.227 ms

Loss rate: 0.06%

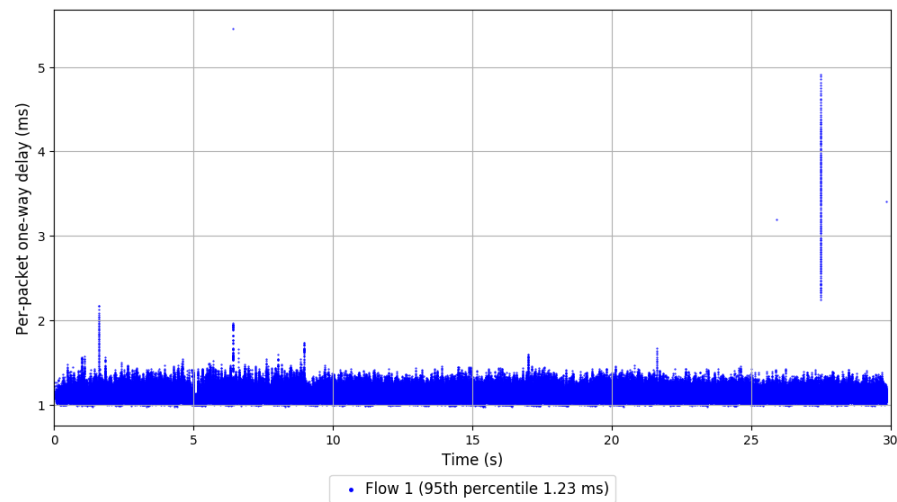
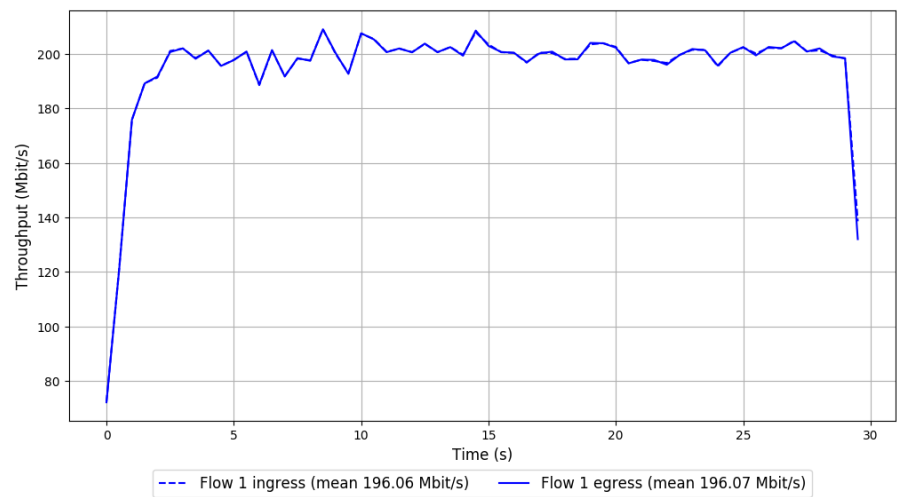
-- Flow 1:

Average throughput: 196.07 Mbit/s

95th percentile per-packet one-way delay: 1.227 ms

Loss rate: 0.06%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-21 02:20:25

End at: 2017-11-21 02:20:55

Local clock offset: 2.265 ms

Remote clock offset: -0.81 ms

Below is generated by plot.py at 2017-11-21 07:11:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 104.43 Mbit/s

95th percentile per-packet one-way delay: 1.150 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 104.43 Mbit/s

95th percentile per-packet one-way delay: 1.150 ms

Loss rate: 0.07%

Run 10: Report of Indigo-calib — Data Link

