

Pantheon Report

Generated at 2017-11-16 06:10:20 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

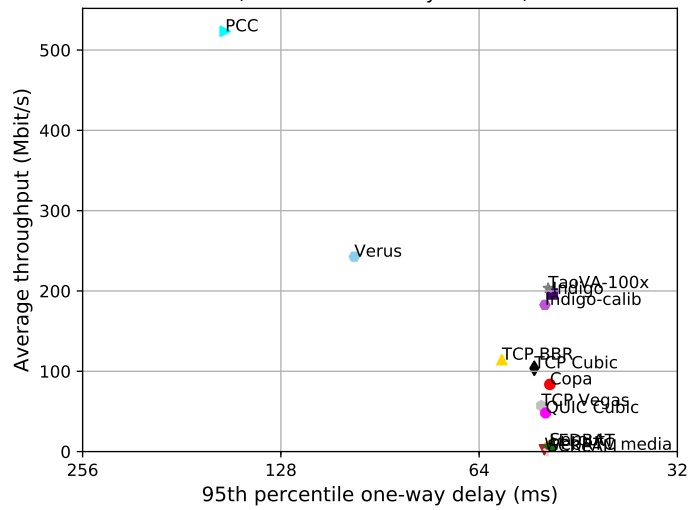
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

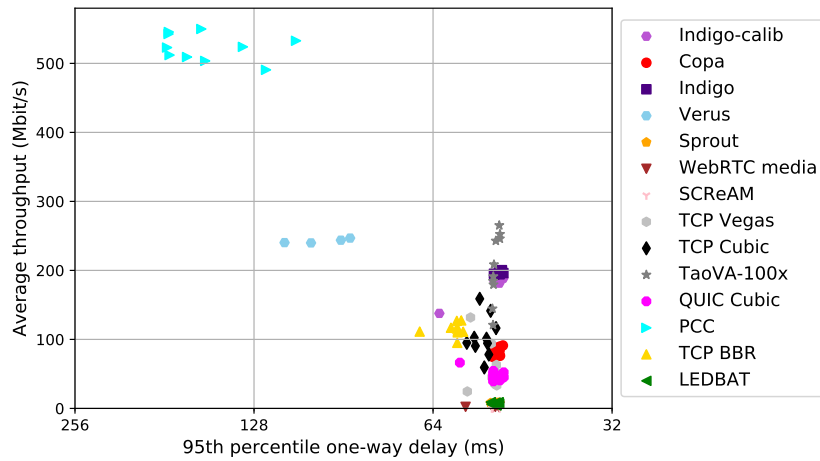
Git summary:

```
branch: indigos @ f54f2953f2a9765c9ffa988d13de5a9471790eb0
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE Iowa Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	114.42	59.10	0.19
TCP Cubic	10	103.75	52.77	0.09
LEDBAT	10	7.07	50.10	0.19
PCC	10	523.30	155.50	0.67
QUIC Cubic	10	48.08	50.73	0.00
SCReAM	3	0.22	50.41	0.00
WebRTC media	10	2.29	50.94	0.00
Sprout	10	7.99	50.00	0.13
TaoVA-100x	10	203.60	50.27	0.00
TCP Vegas	10	57.08	51.50	0.13
Verus	4	242.69	99.01	0.17
Copa	10	83.67	49.97	0.01
Indigo	10	196.32	49.55	0.02
Indigo-calib	10	182.66	50.85	0.03

Run 1: Statistics of TCP BBR

Start at: 2017-11-16 03:00:17

End at: 2017-11-16 03:00:47

Below is generated by plot.py at 2017-11-16 05:31:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.12 Mbit/s

95th percentile per-packet one-way delay: 56.956 ms

Loss rate: 0.00%

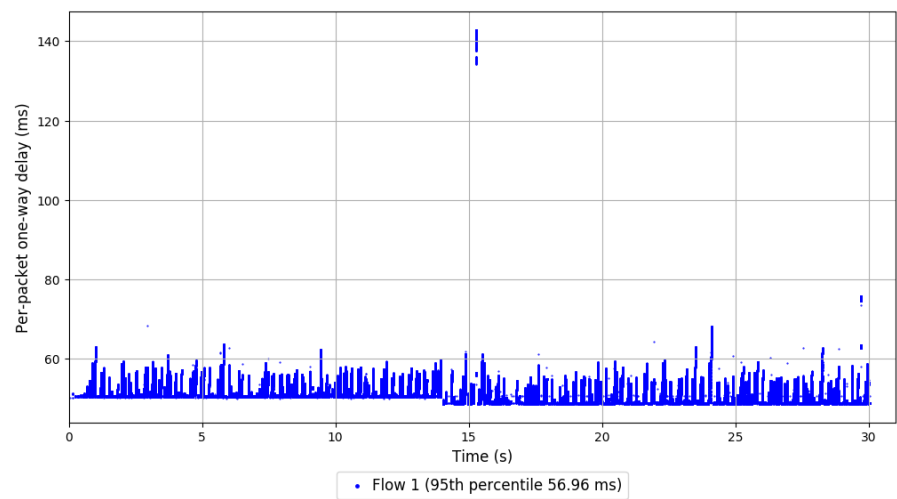
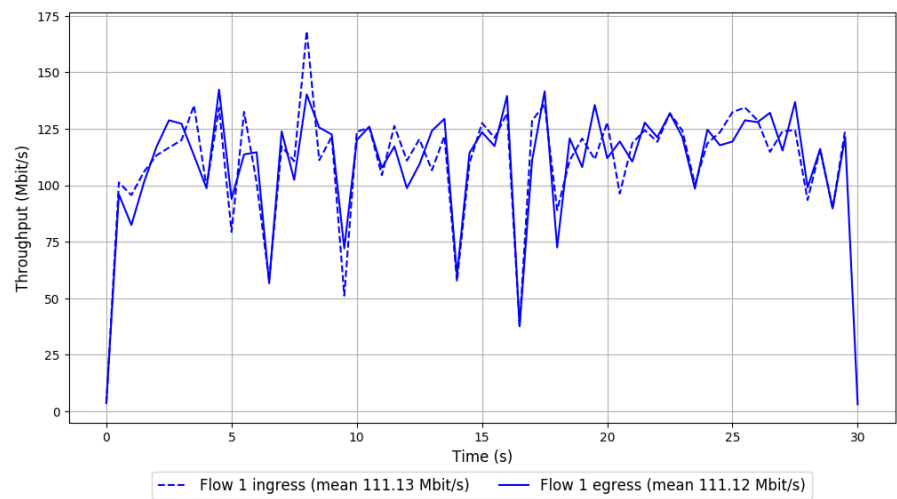
-- Flow 1:

Average throughput: 111.12 Mbit/s

95th percentile per-packet one-way delay: 56.956 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-16 03:10:31

End at: 2017-11-16 03:11:01

Below is generated by plot.py at 2017-11-16 05:31:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 126.88 Mbit/s

95th percentile per-packet one-way delay: 58.381 ms

Loss rate: 0.06%

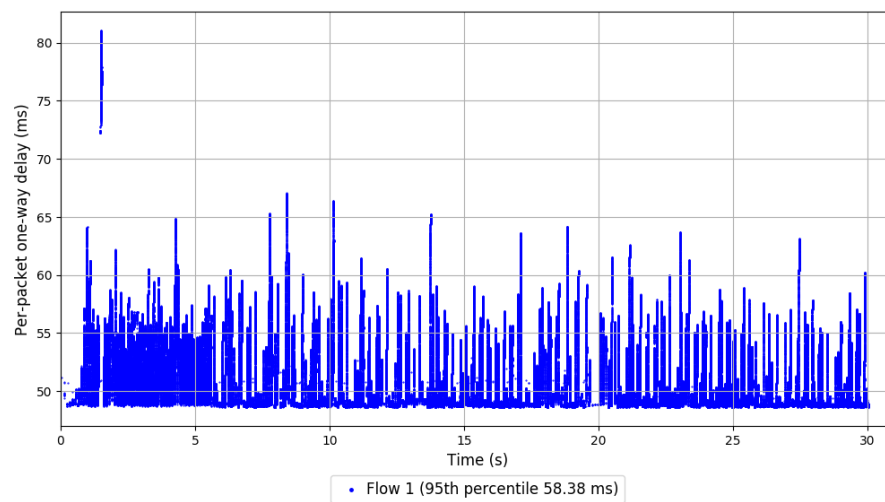
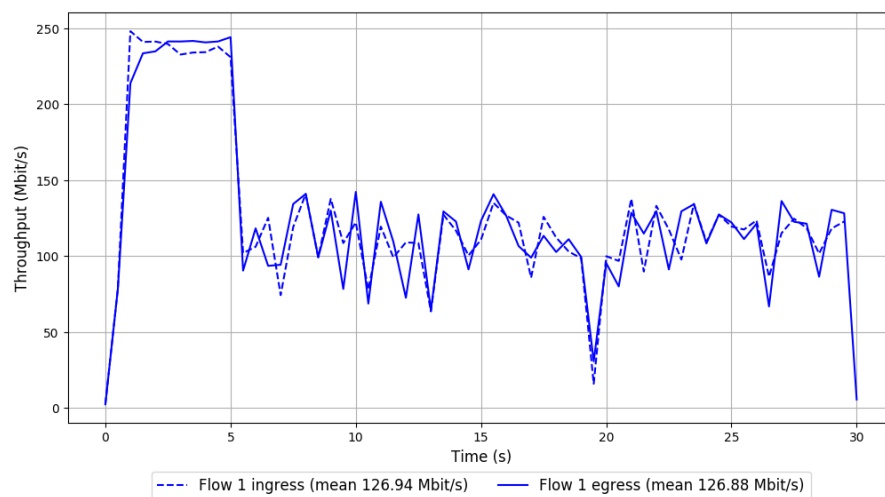
-- Flow 1:

Average throughput: 126.88 Mbit/s

95th percentile per-packet one-way delay: 58.381 ms

Loss rate: 0.06%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-16 03:20:36

End at: 2017-11-16 03:21:06

Below is generated by plot.py at 2017-11-16 05:31:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.89 Mbit/s

95th percentile per-packet one-way delay: 59.709 ms

Loss rate: 0.01%

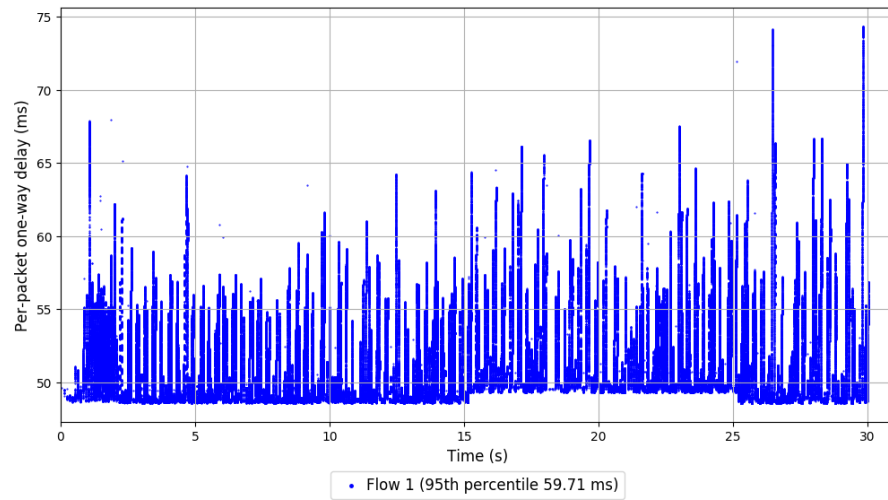
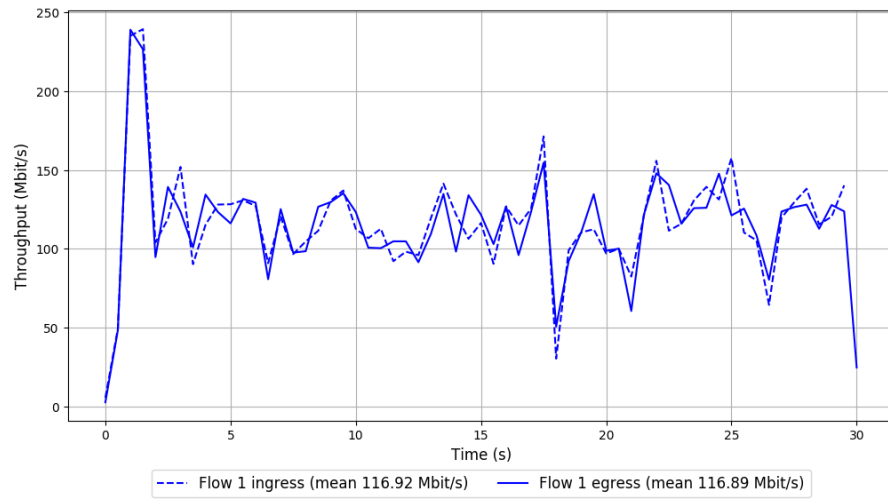
-- Flow 1:

Average throughput: 116.89 Mbit/s

95th percentile per-packet one-way delay: 59.709 ms

Loss rate: 0.01%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-16 03:30:45

End at: 2017-11-16 03:31:16

Below is generated by plot.py at 2017-11-16 05:31:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.05 Mbit/s

95th percentile per-packet one-way delay: 58.269 ms

Loss rate: 0.68%

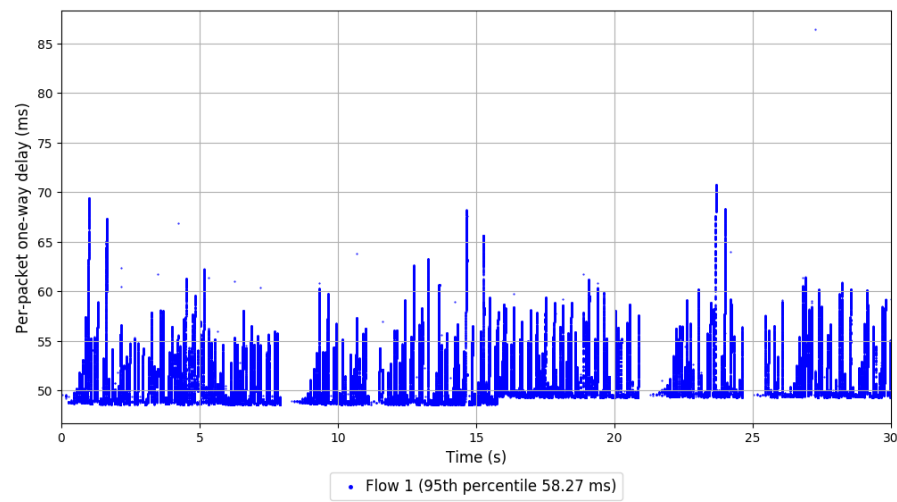
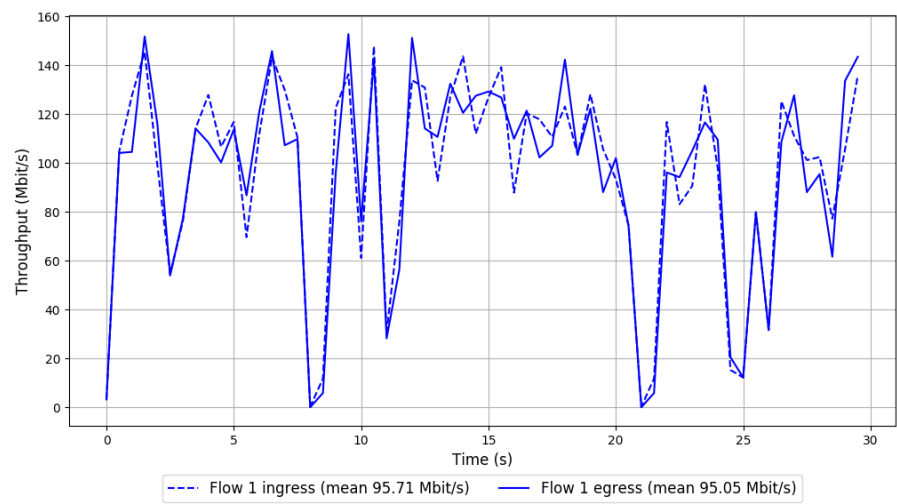
-- Flow 1:

Average throughput: 95.05 Mbit/s

95th percentile per-packet one-way delay: 58.269 ms

Loss rate: 0.68%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-16 03:41:01

End at: 2017-11-16 03:41:31

Below is generated by plot.py at 2017-11-16 05:31:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 127.51 Mbit/s

95th percentile per-packet one-way delay: 57.377 ms

Loss rate: 0.39%

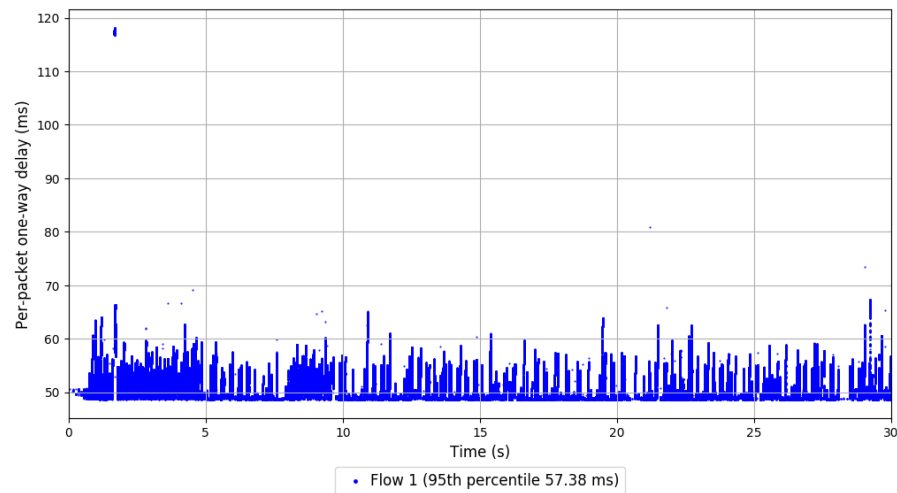
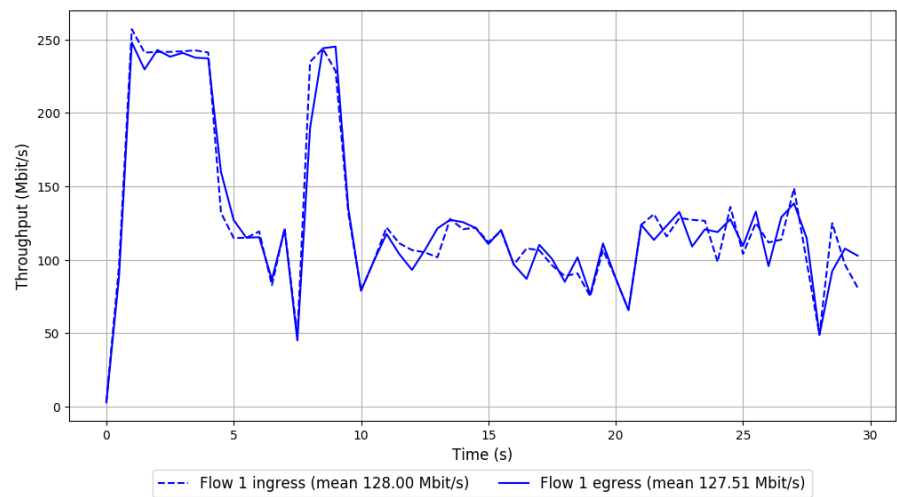
-- Flow 1:

Average throughput: 127.51 Mbit/s

95th percentile per-packet one-way delay: 57.377 ms

Loss rate: 0.39%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-16 03:51:16

End at: 2017-11-16 03:51:46

Below is generated by plot.py at 2017-11-16 05:31:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.94 Mbit/s

95th percentile per-packet one-way delay: 58.285 ms

Loss rate: 0.09%

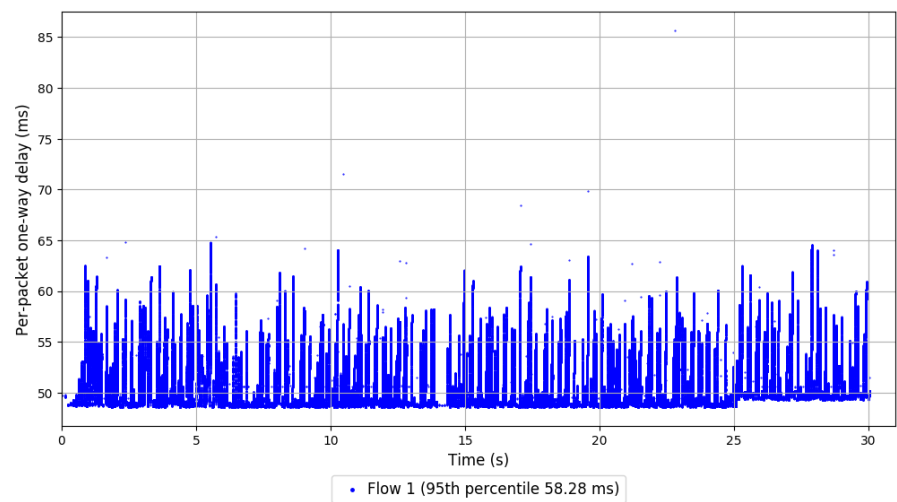
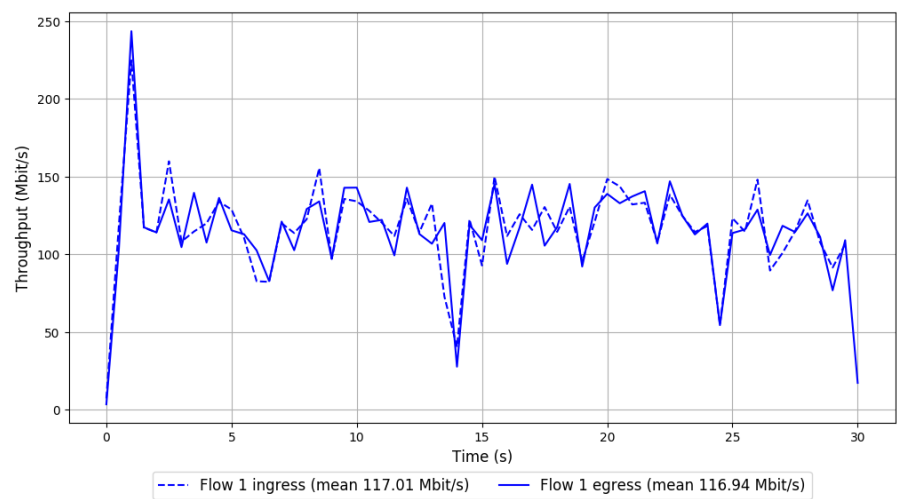
-- Flow 1:

Average throughput: 116.94 Mbit/s

95th percentile per-packet one-way delay: 58.285 ms

Loss rate: 0.09%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-16 04:01:30

End at: 2017-11-16 04:02:00

Below is generated by plot.py at 2017-11-16 05:31:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.83 Mbit/s

95th percentile per-packet one-way delay: 58.336 ms

Loss rate: 0.48%

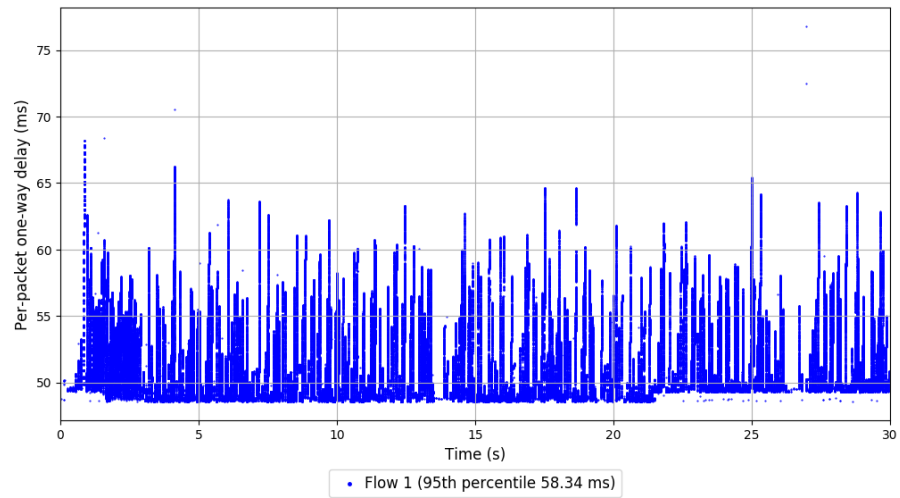
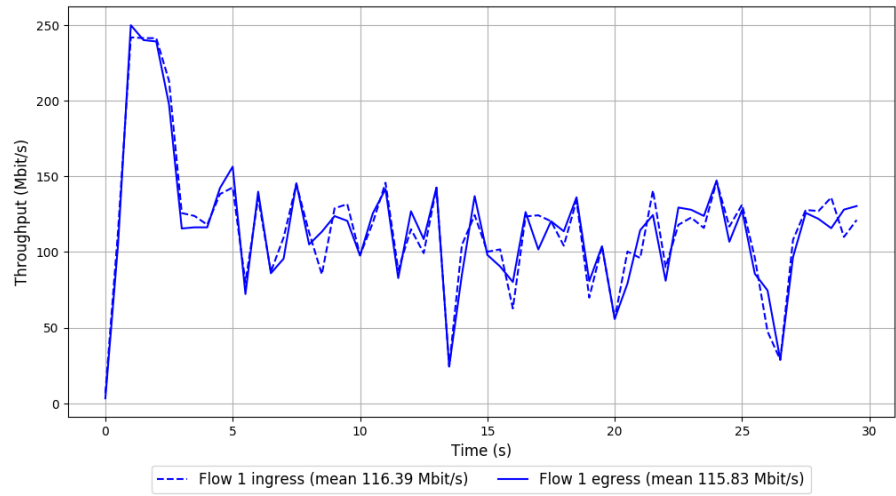
-- Flow 1:

Average throughput: 115.83 Mbit/s

95th percentile per-packet one-way delay: 58.336 ms

Loss rate: 0.48%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-16 04:11:50

End at: 2017-11-16 04:12:20

Below is generated by plot.py at 2017-11-16 05:31:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.35 Mbit/s

95th percentile per-packet one-way delay: 67.398 ms

Loss rate: 0.00%

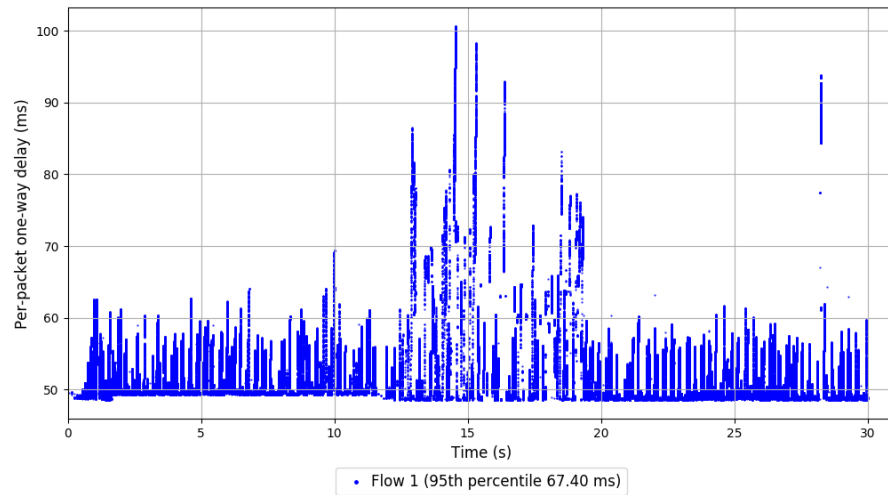
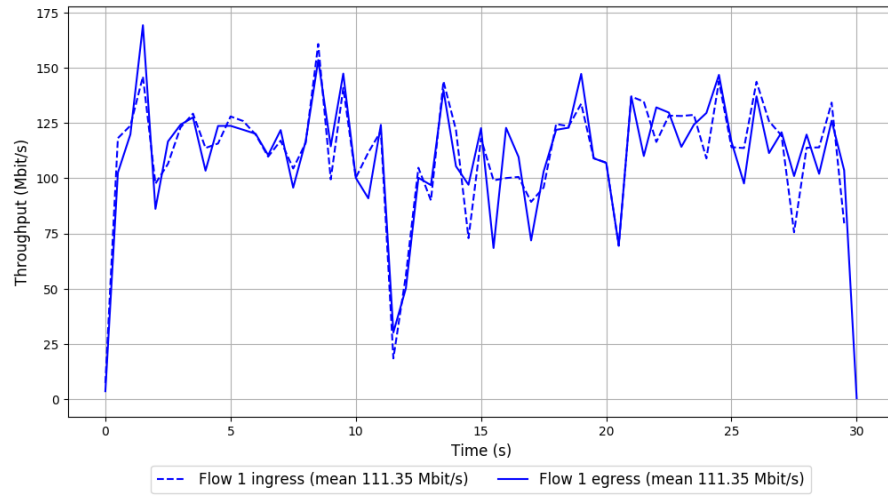
-- Flow 1:

Average throughput: 111.35 Mbit/s

95th percentile per-packet one-way delay: 67.398 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-16 04:22:08

End at: 2017-11-16 04:22:38

Below is generated by plot.py at 2017-11-16 05:33:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 112.38 Mbit/s

95th percentile per-packet one-way delay: 58.151 ms

Loss rate: 0.00%

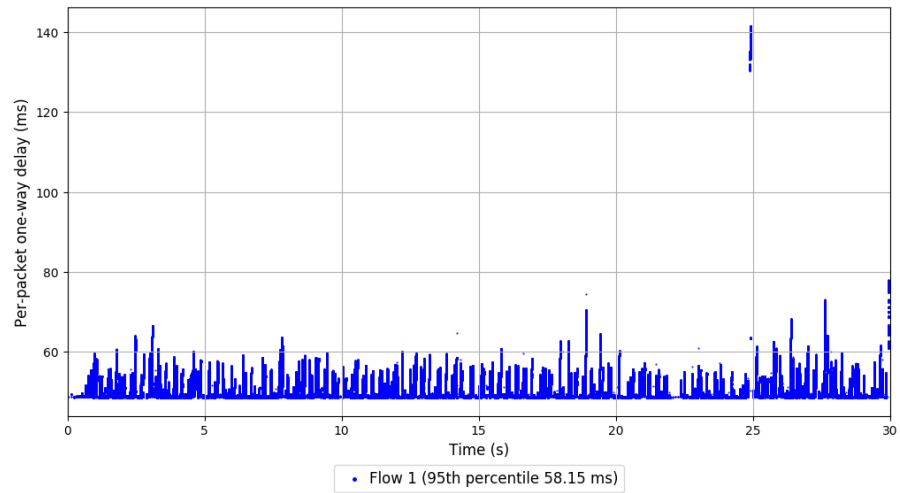
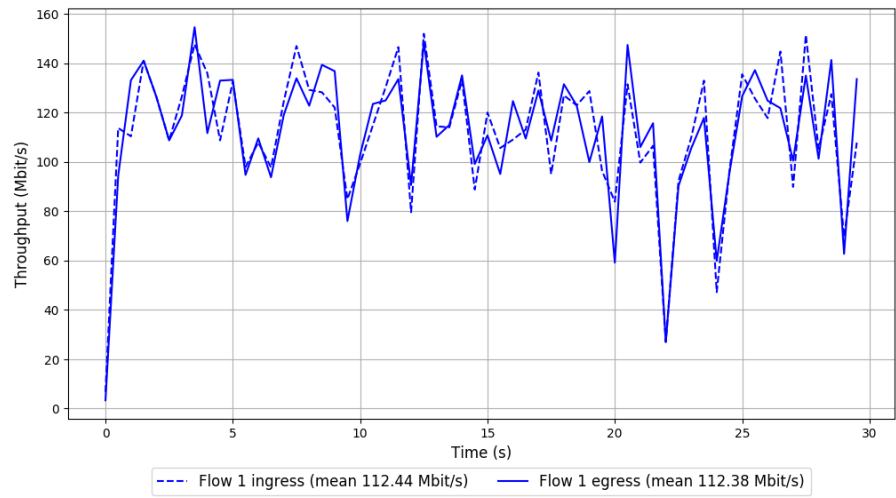
-- Flow 1:

Average throughput: 112.38 Mbit/s

95th percentile per-packet one-way delay: 58.151 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-16 04:32:30

End at: 2017-11-16 04:33:00

Below is generated by plot.py at 2017-11-16 05:33:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 110.24 Mbit/s

95th percentile per-packet one-way delay: 58.177 ms

Loss rate: 0.16%

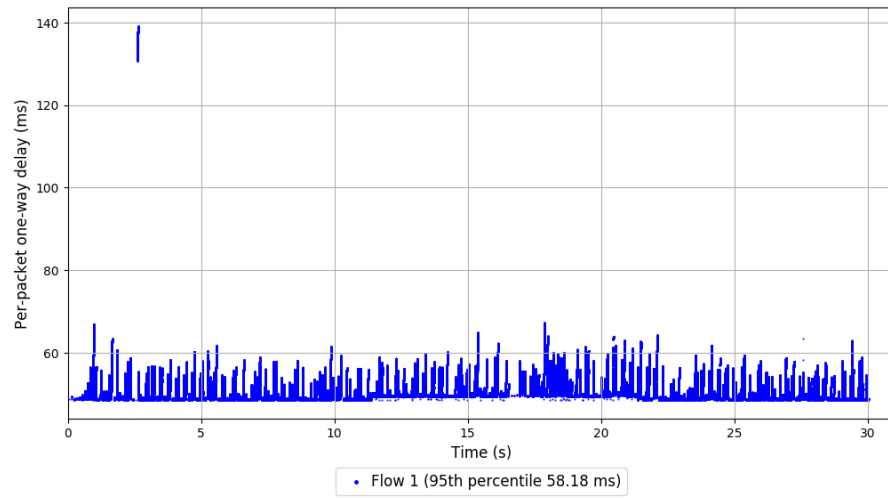
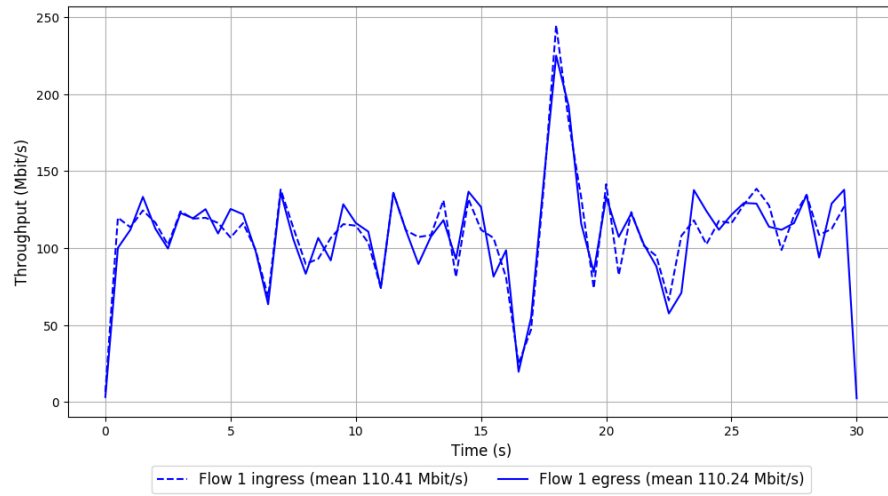
-- Flow 1:

Average throughput: 110.24 Mbit/s

95th percentile per-packet one-way delay: 58.177 ms

Loss rate: 0.16%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-16 03:04:23

End at: 2017-11-16 03:04:53

Below is generated by plot.py at 2017-11-16 05:33:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.39 Mbit/s

95th percentile per-packet one-way delay: 51.835 ms

Loss rate: 0.01%

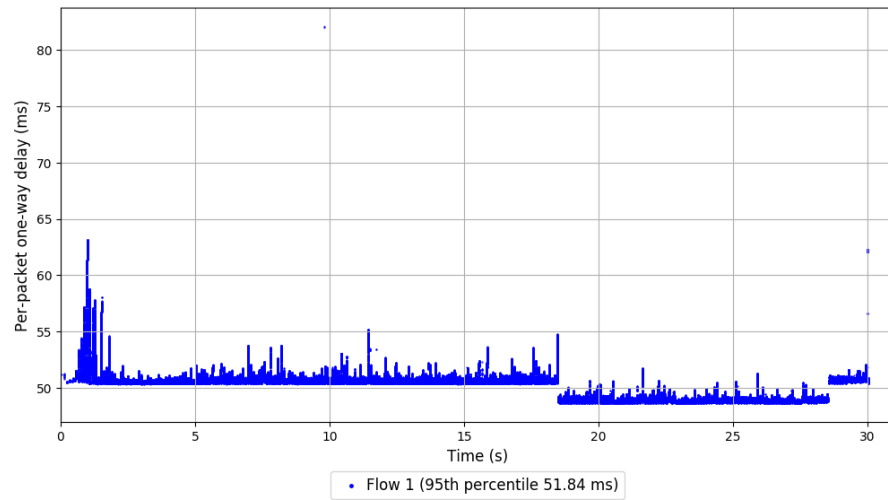
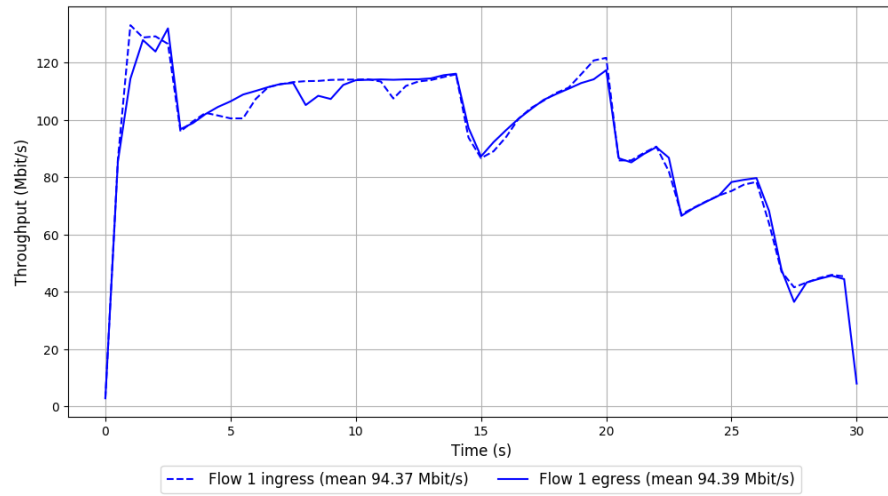
-- Flow 1:

Average throughput: 94.39 Mbit/s

95th percentile per-packet one-way delay: 51.835 ms

Loss rate: 0.01%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-16 03:14:38

End at: 2017-11-16 03:15:09

Below is generated by plot.py at 2017-11-16 05:33:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.05 Mbit/s

95th percentile per-packet one-way delay: 56.157 ms

Loss rate: 0.01%

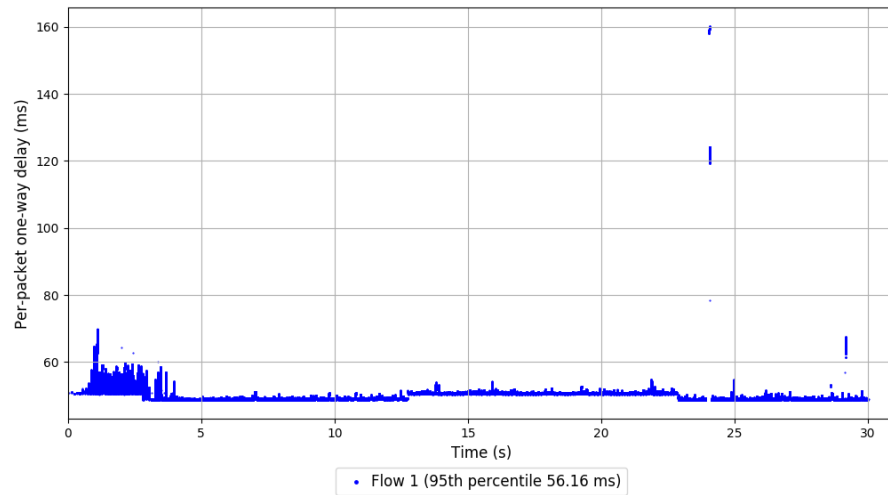
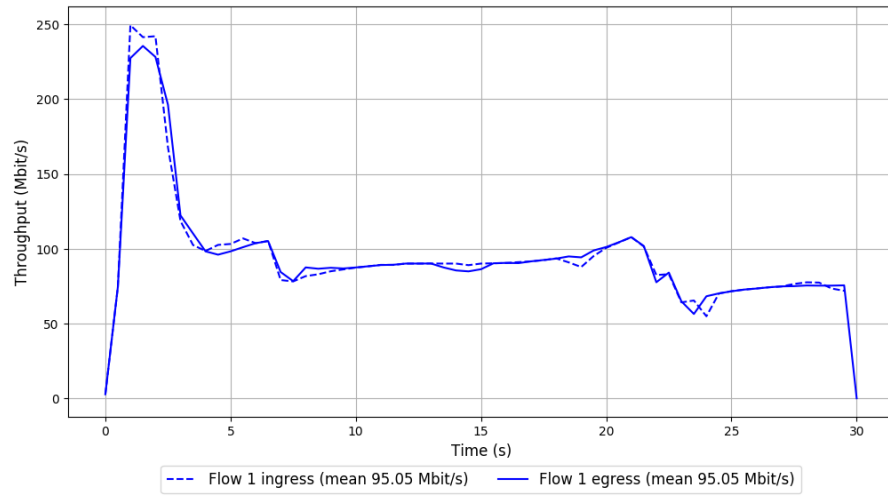
-- Flow 1:

Average throughput: 95.05 Mbit/s

95th percentile per-packet one-way delay: 56.157 ms

Loss rate: 0.01%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-16 03:24:42

End at: 2017-11-16 03:25:12

Below is generated by plot.py at 2017-11-16 05:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 141.40 Mbit/s

95th percentile per-packet one-way delay: 51.208 ms

Loss rate: 0.28%

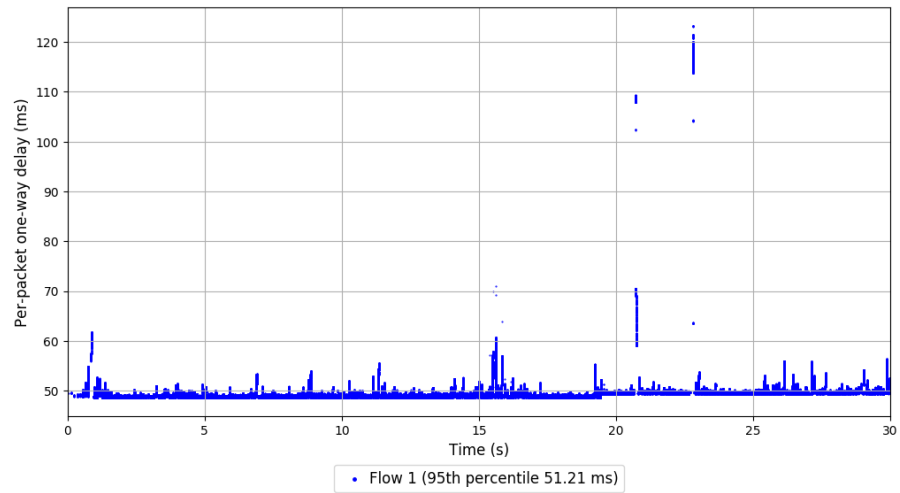
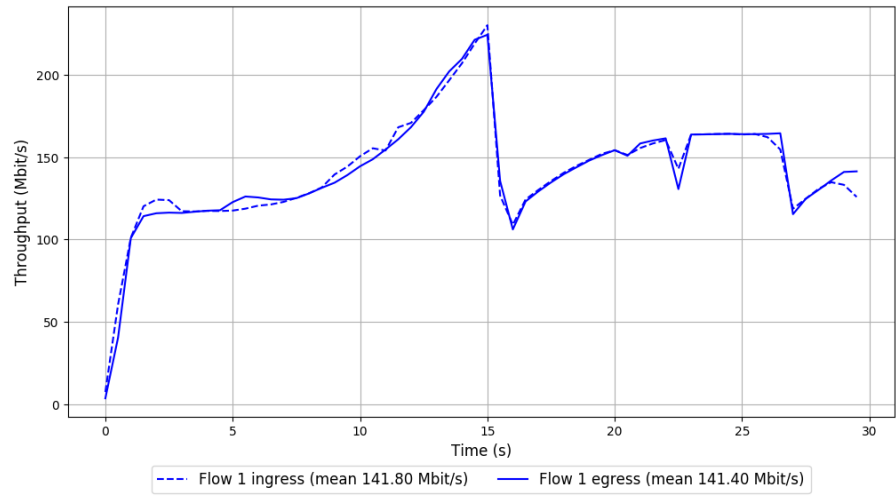
-- Flow 1:

Average throughput: 141.40 Mbit/s

95th percentile per-packet one-way delay: 51.208 ms

Loss rate: 0.28%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-16 03:34:55

End at: 2017-11-16 03:35:25

Below is generated by plot.py at 2017-11-16 05:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.06 Mbit/s

95th percentile per-packet one-way delay: 51.568 ms

Loss rate: 0.00%

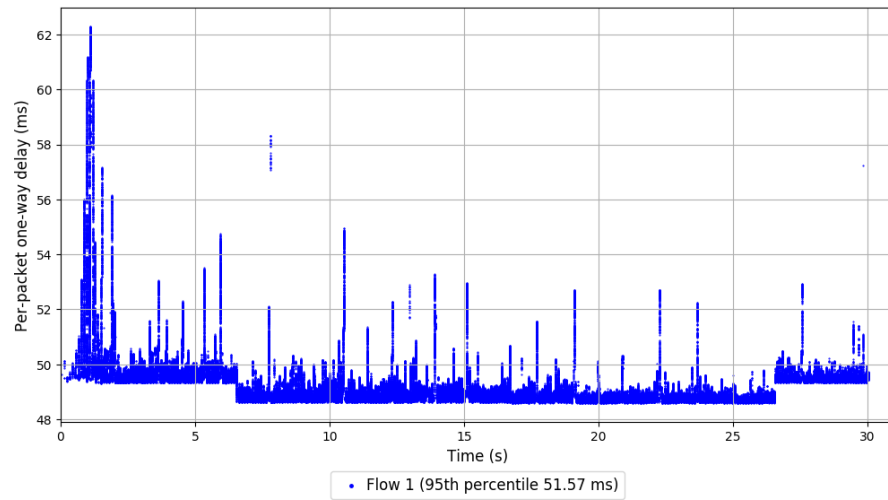
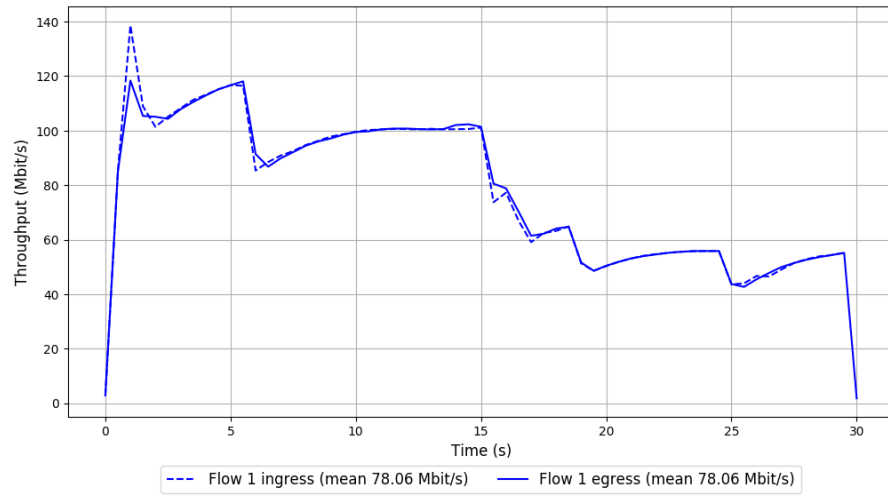
-- Flow 1:

Average throughput: 78.06 Mbit/s

95th percentile per-packet one-way delay: 51.568 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-16 03:45:07

End at: 2017-11-16 03:45:37

Below is generated by plot.py at 2017-11-16 05:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.03 Mbit/s

95th percentile per-packet one-way delay: 52.033 ms

Loss rate: 0.30%

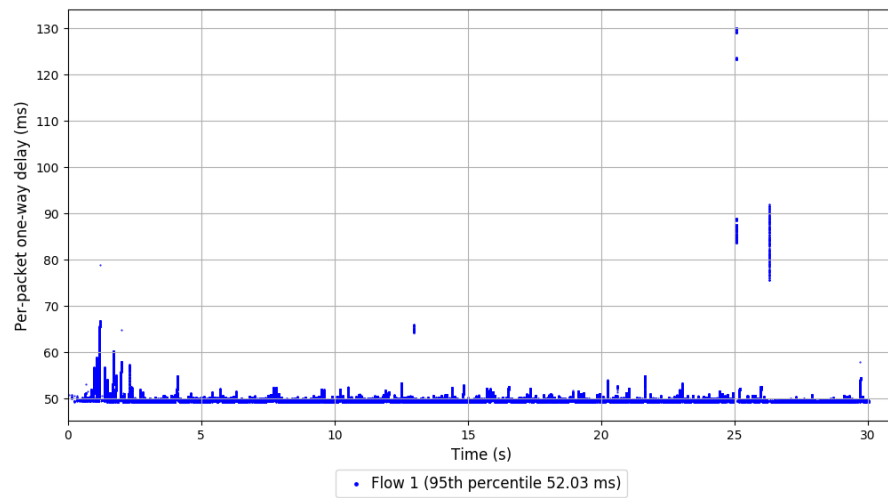
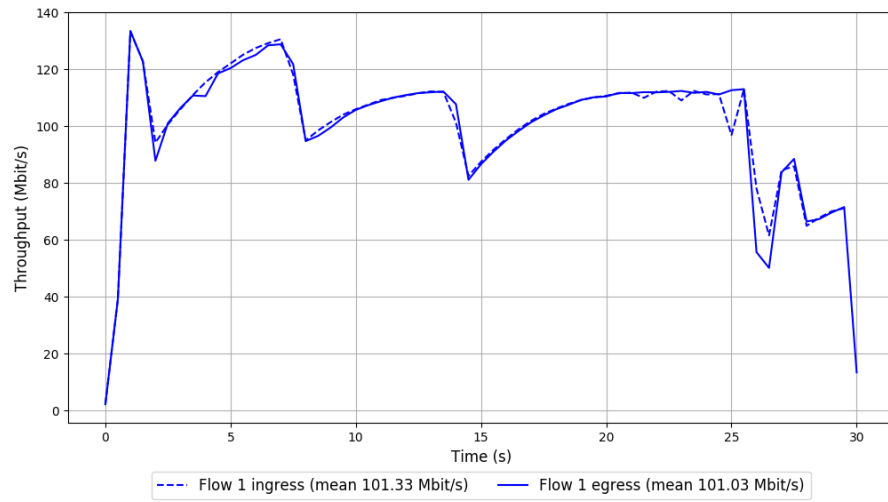
-- Flow 1:

Average throughput: 101.03 Mbit/s

95th percentile per-packet one-way delay: 52.033 ms

Loss rate: 0.30%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-16 03:55:21

End at: 2017-11-16 03:55:51

Below is generated by plot.py at 2017-11-16 05:34:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.60 Mbit/s

95th percentile per-packet one-way delay: 54.323 ms

Loss rate: 0.26%

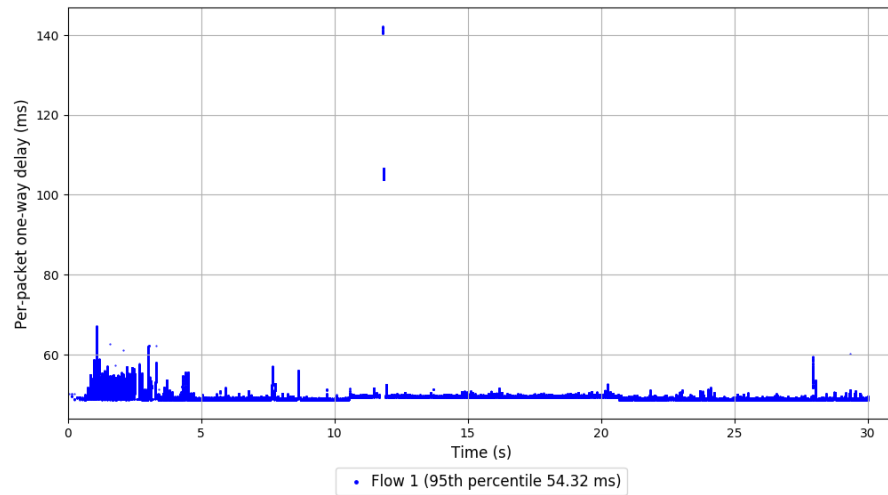
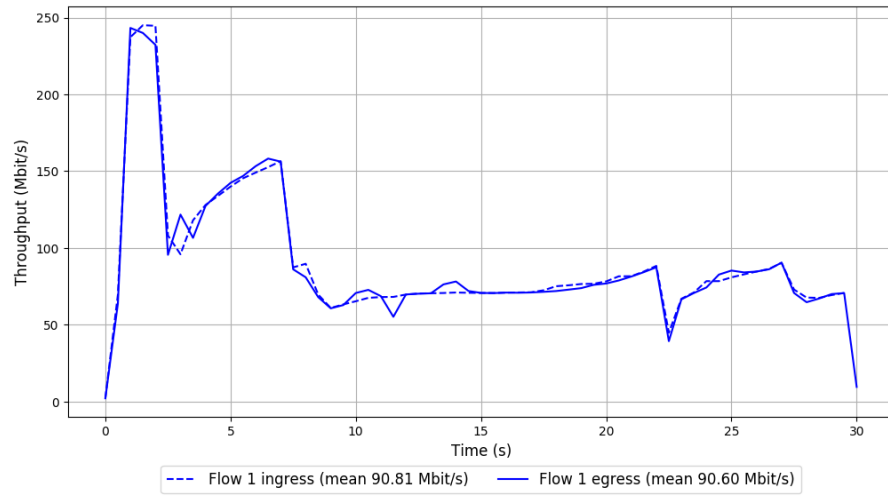
-- Flow 1:

Average throughput: 90.60 Mbit/s

95th percentile per-packet one-way delay: 54.323 ms

Loss rate: 0.26%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-16 04:05:31

End at: 2017-11-16 04:06:01

Below is generated by plot.py at 2017-11-16 05:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 158.82 Mbit/s

95th percentile per-packet one-way delay: 53.418 ms

Loss rate: 0.00%

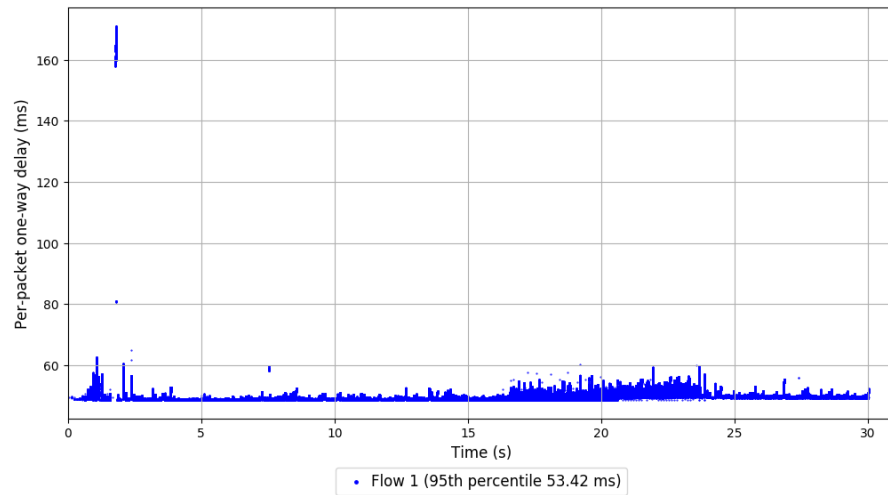
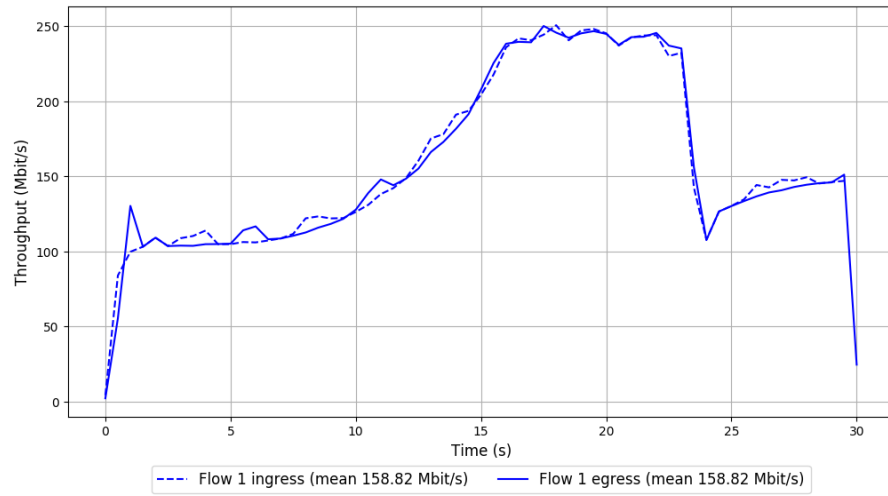
-- Flow 1:

Average throughput: 158.82 Mbit/s

95th percentile per-packet one-way delay: 53.418 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-16 04:15:56

End at: 2017-11-16 04:16:26

Below is generated by plot.py at 2017-11-16 05:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.36 Mbit/s

95th percentile per-packet one-way delay: 50.149 ms

Loss rate: 0.01%

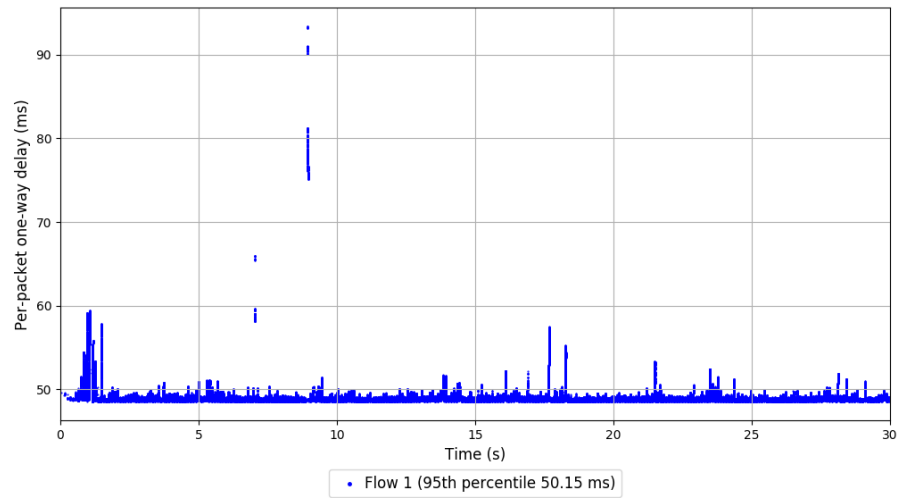
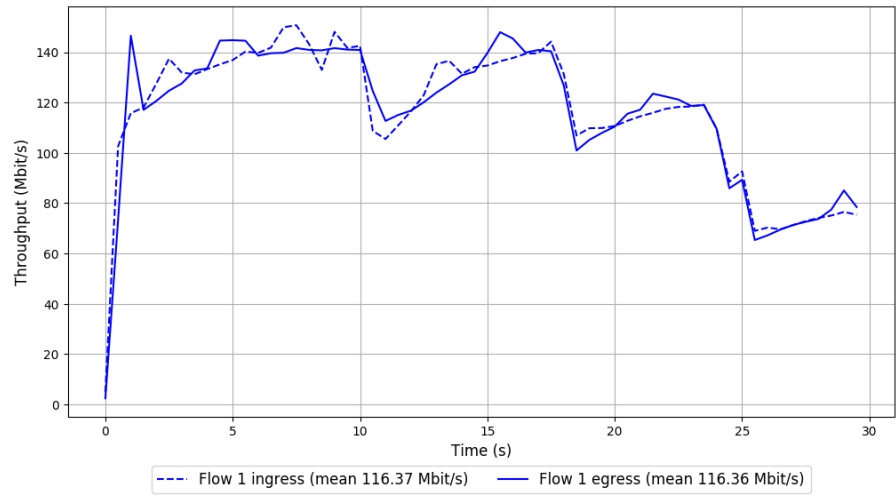
-- Flow 1:

Average throughput: 116.36 Mbit/s

95th percentile per-packet one-way delay: 50.149 ms

Loss rate: 0.01%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-16 04:26:13

End at: 2017-11-16 04:26:43

Below is generated by plot.py at 2017-11-16 05:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.39 Mbit/s

95th percentile per-packet one-way delay: 54.562 ms

Loss rate: 0.00%

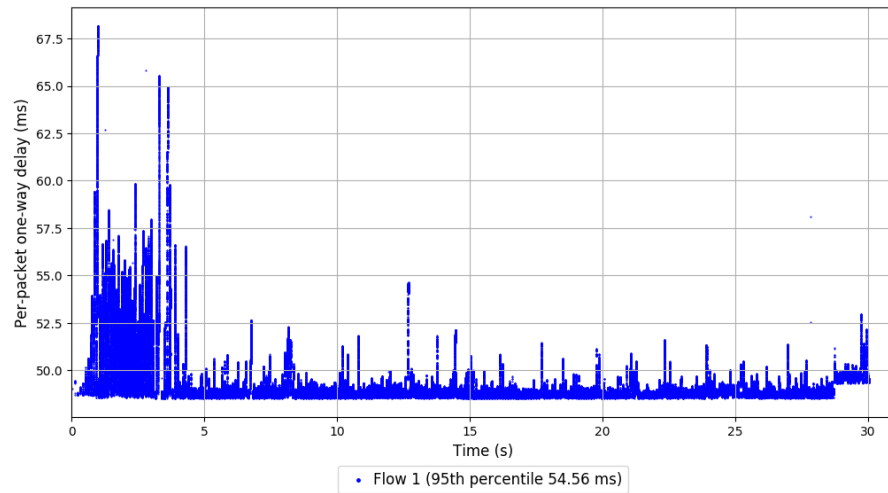
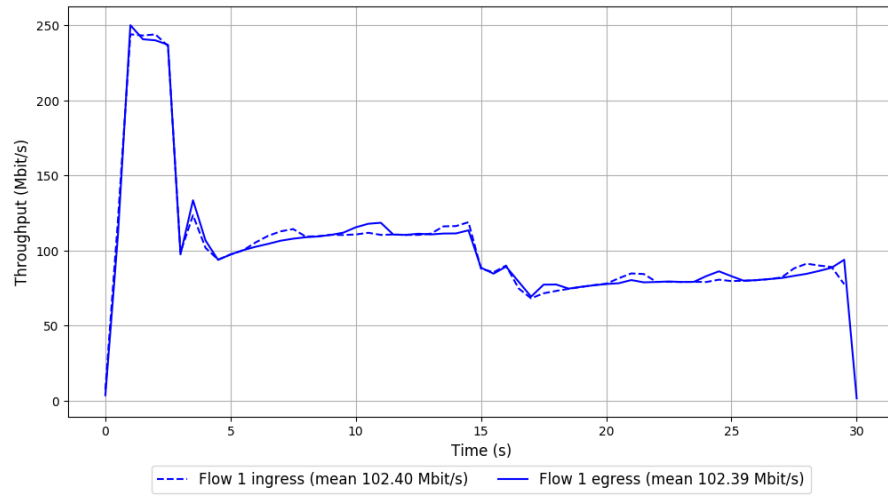
-- Flow 1:

Average throughput: 102.39 Mbit/s

95th percentile per-packet one-way delay: 54.562 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-16 04:36:36

End at: 2017-11-16 04:37:06

Below is generated by plot.py at 2017-11-16 05:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.36 Mbit/s

95th percentile per-packet one-way delay: 52.473 ms

Loss rate: 0.02%

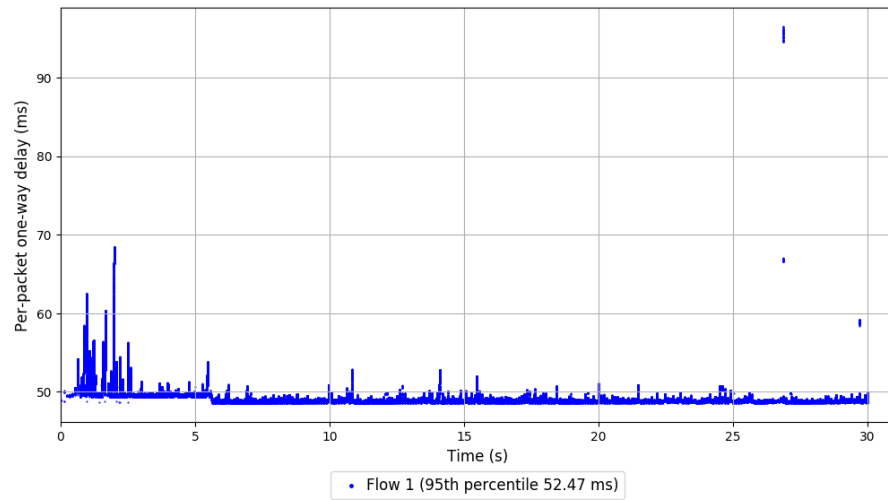
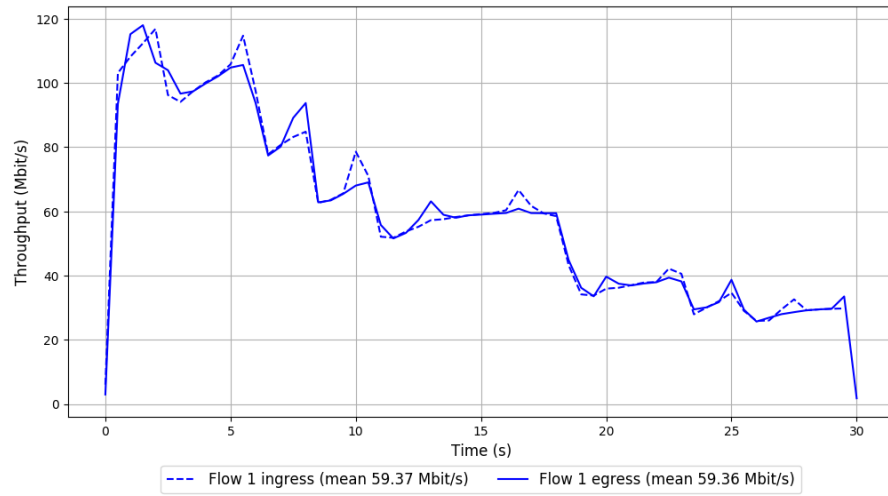
-- Flow 1:

Average throughput: 59.36 Mbit/s

95th percentile per-packet one-way delay: 52.473 ms

Loss rate: 0.02%

Run 10: Report of TCP Cubic — Data Link

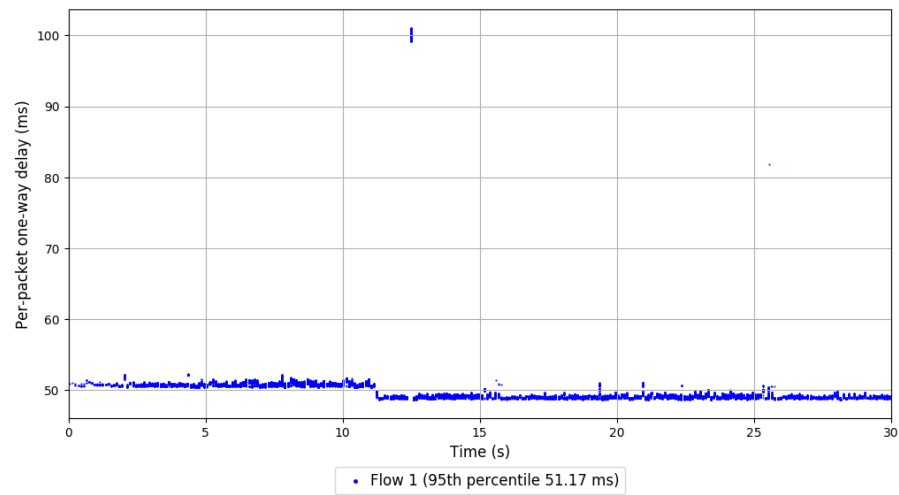
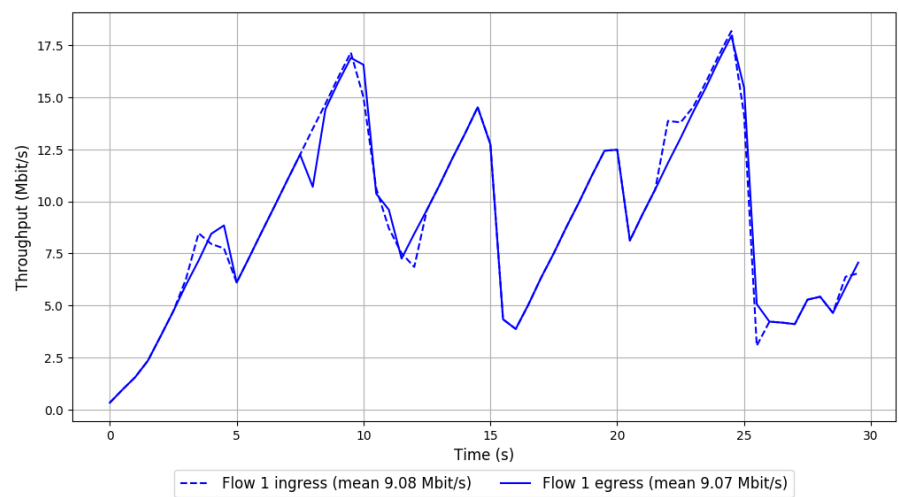


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-16 03:01:50
End at: 2017-11-16 03:02:20

# Below is generated by plot.py at 2017-11-16 05:35:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.07 Mbit/s
95th percentile per-packet one-way delay: 51.171 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 9.07 Mbit/s
95th percentile per-packet one-way delay: 51.171 ms
Loss rate: 0.08%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-11-16 03:12:04

End at: 2017-11-16 03:12:34

Below is generated by plot.py at 2017-11-16 05:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.04 Mbit/s

95th percentile per-packet one-way delay: 51.046 ms

Loss rate: 0.75%

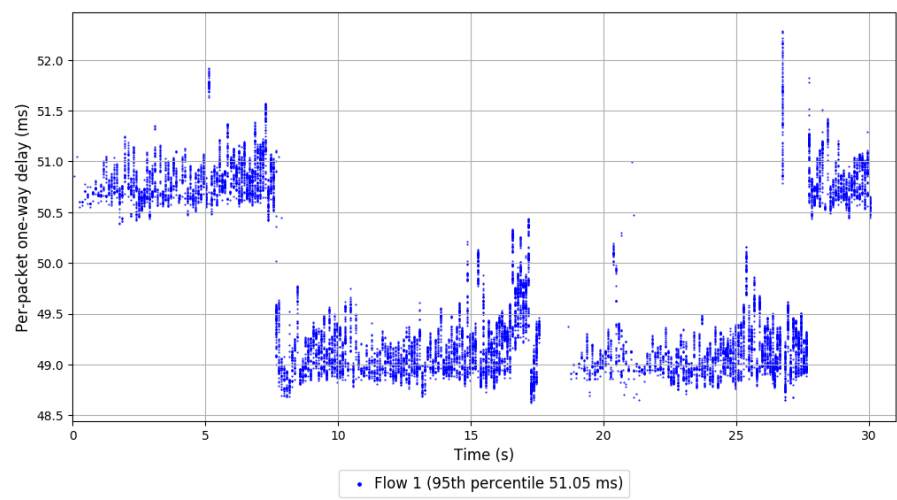
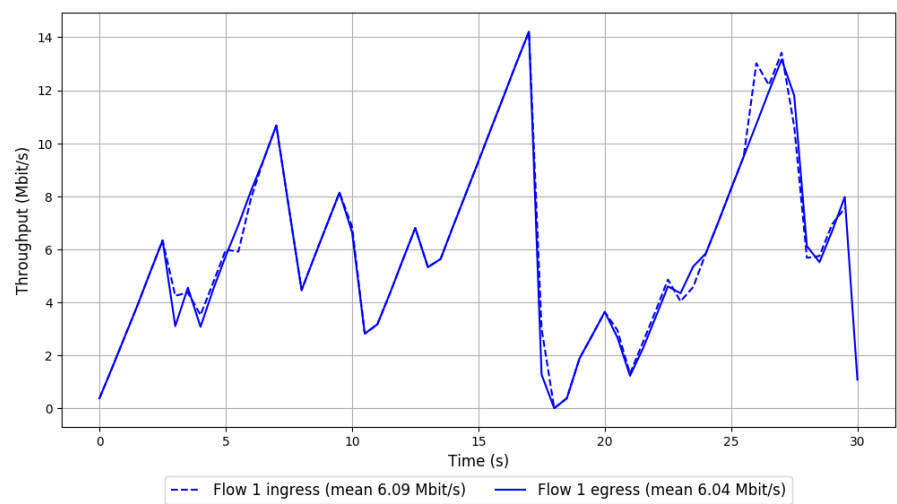
-- Flow 1:

Average throughput: 6.04 Mbit/s

95th percentile per-packet one-way delay: 51.046 ms

Loss rate: 0.75%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-16 03:22:09

End at: 2017-11-16 03:22:39

Below is generated by plot.py at 2017-11-16 05:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.06 Mbit/s

95th percentile per-packet one-way delay: 49.600 ms

Loss rate: 0.03%

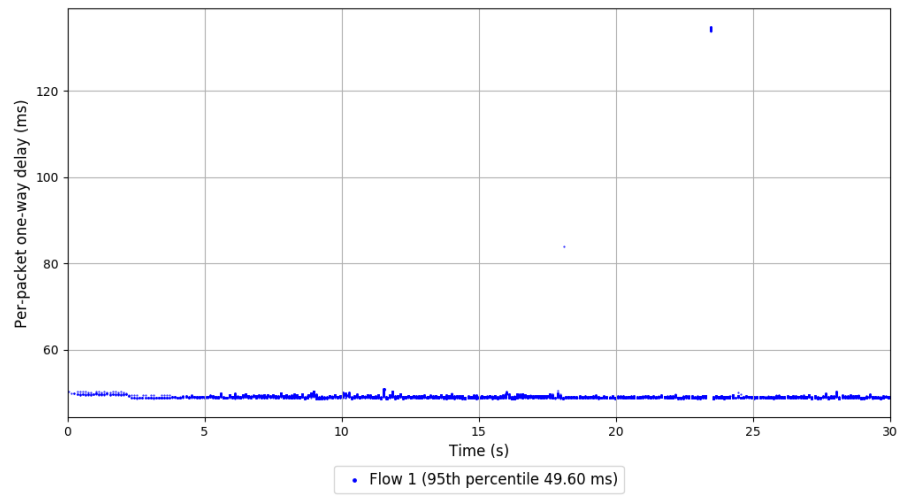
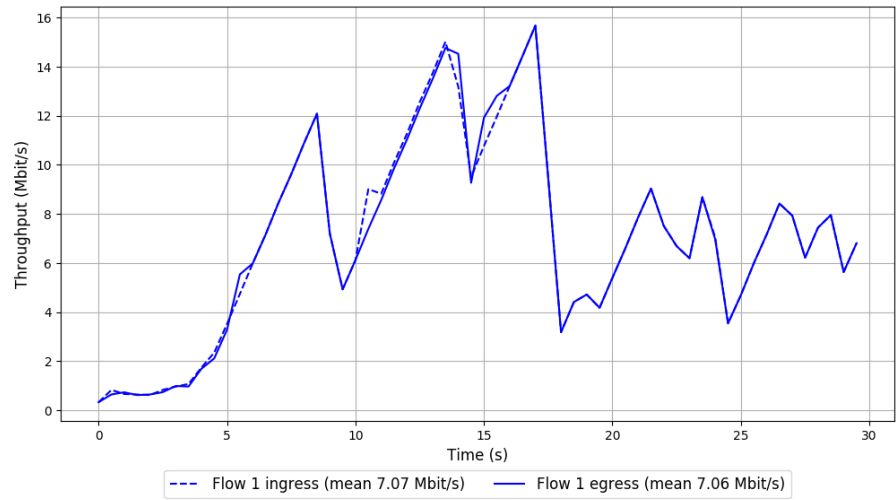
-- Flow 1:

Average throughput: 7.06 Mbit/s

95th percentile per-packet one-way delay: 49.600 ms

Loss rate: 0.03%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-16 03:32:17

End at: 2017-11-16 03:32:47

Below is generated by plot.py at 2017-11-16 05:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 50.069 ms

Loss rate: 0.11%

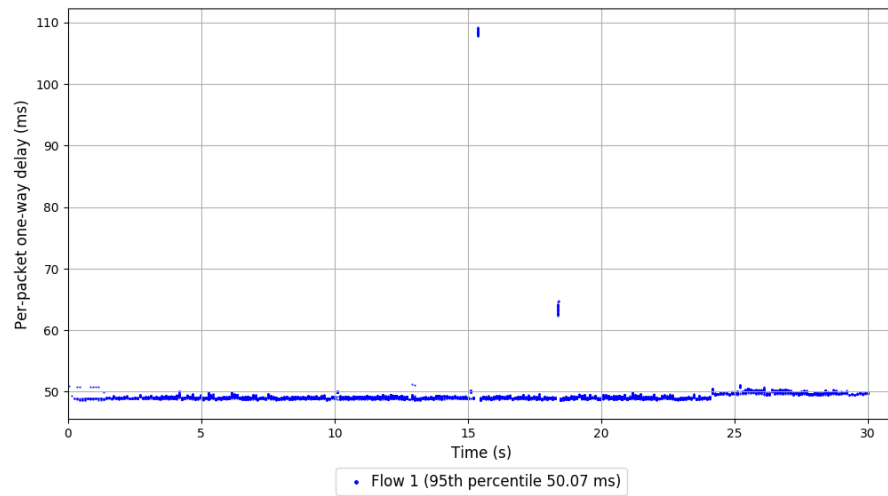
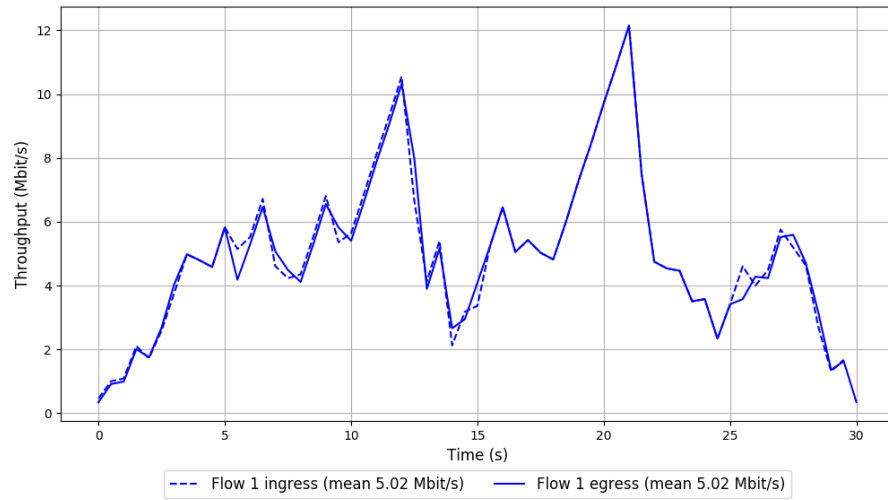
-- Flow 1:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 50.069 ms

Loss rate: 0.11%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-16 03:42:33

End at: 2017-11-16 03:43:03

Below is generated by plot.py at 2017-11-16 05:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.39 Mbit/s

95th percentile per-packet one-way delay: 50.200 ms

Loss rate: 0.15%

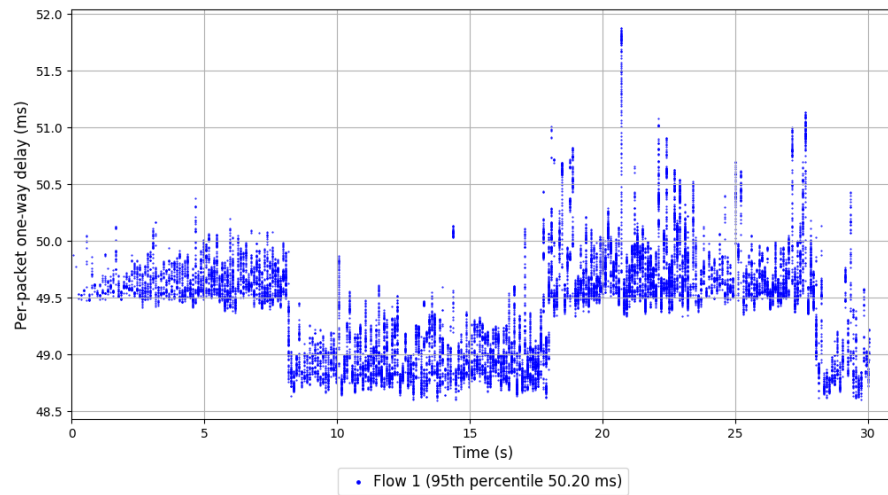
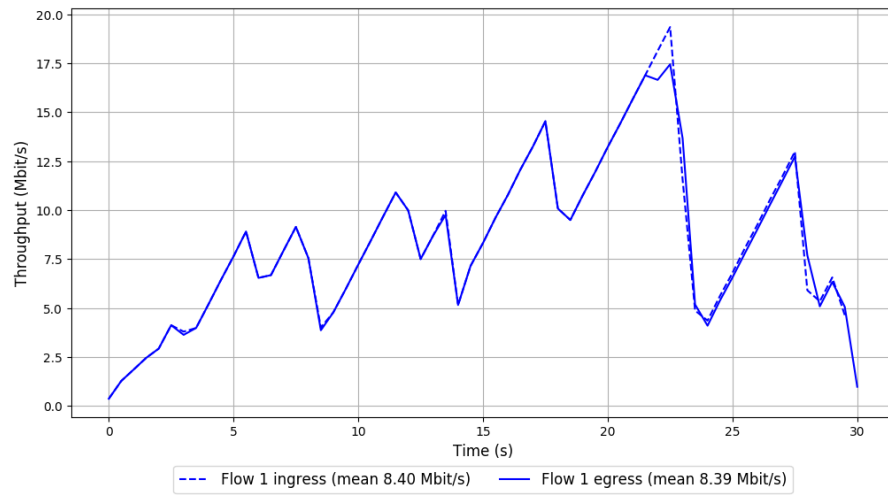
-- Flow 1:

Average throughput: 8.39 Mbit/s

95th percentile per-packet one-way delay: 50.200 ms

Loss rate: 0.15%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-16 03:52:49

End at: 2017-11-16 03:53:19

Below is generated by plot.py at 2017-11-16 05:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.69 Mbit/s

95th percentile per-packet one-way delay: 49.845 ms

Loss rate: 0.37%

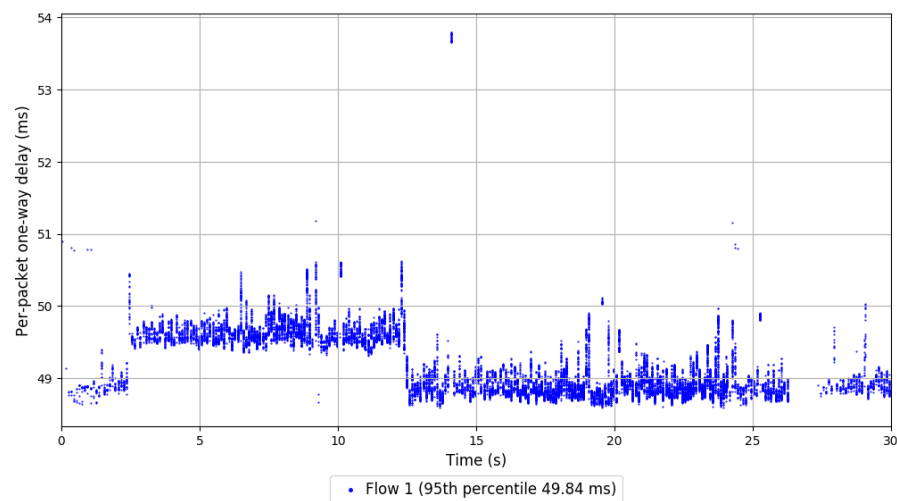
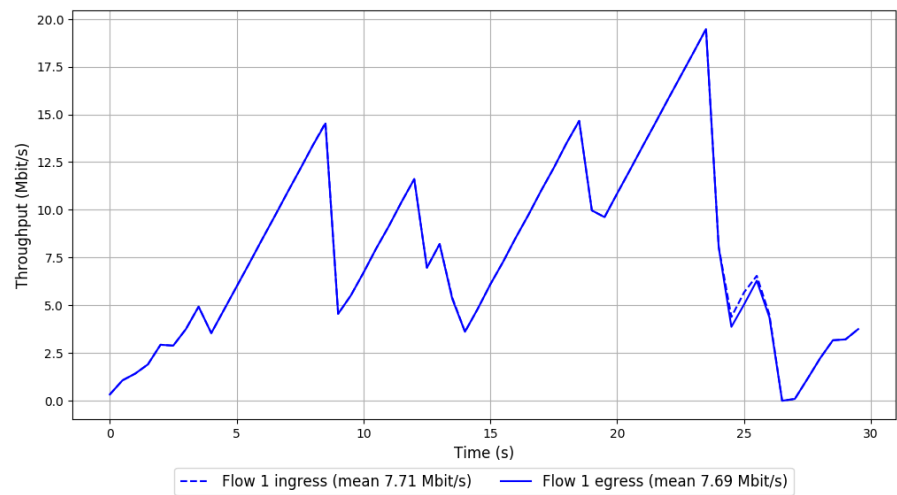
-- Flow 1:

Average throughput: 7.69 Mbit/s

95th percentile per-packet one-way delay: 49.845 ms

Loss rate: 0.37%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-16 04:02:59

End at: 2017-11-16 04:03:29

Below is generated by plot.py at 2017-11-16 05:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.88 Mbit/s

95th percentile per-packet one-way delay: 49.548 ms

Loss rate: 0.03%

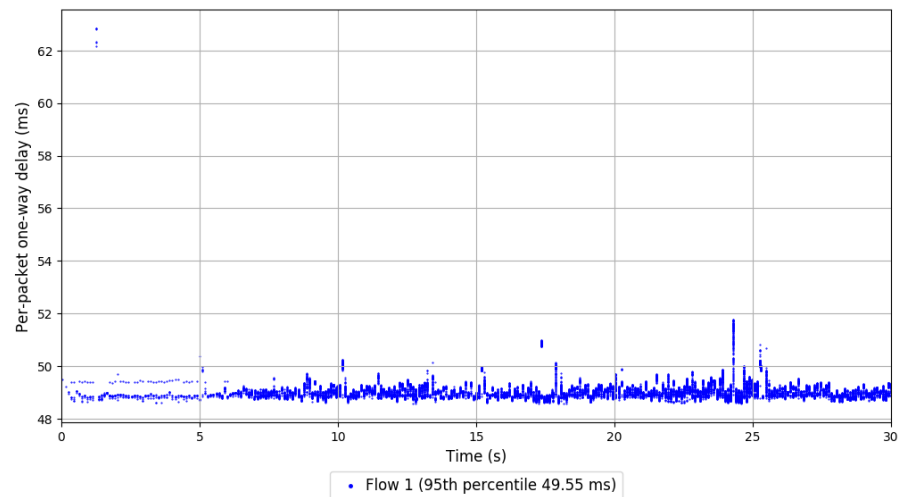
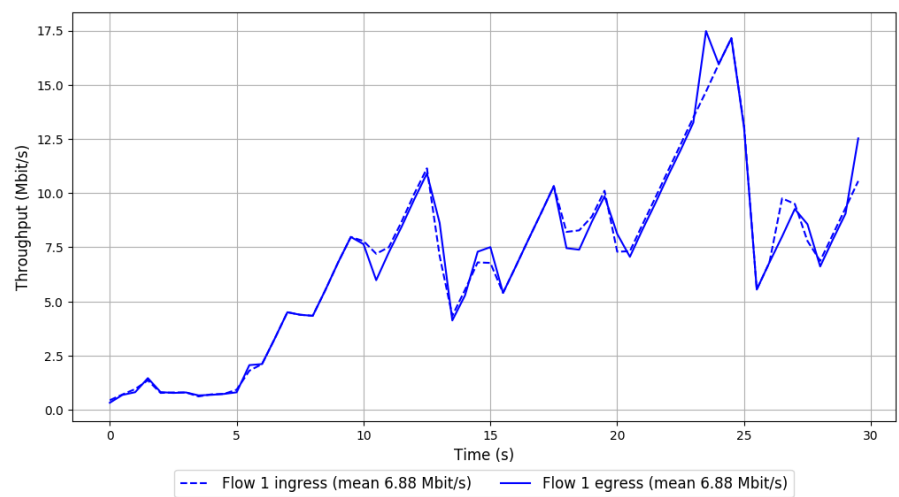
-- Flow 1:

Average throughput: 6.88 Mbit/s

95th percentile per-packet one-way delay: 49.548 ms

Loss rate: 0.03%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-16 04:13:22

End at: 2017-11-16 04:13:52

Below is generated by plot.py at 2017-11-16 05:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.06 Mbit/s

95th percentile per-packet one-way delay: 49.634 ms

Loss rate: 0.08%

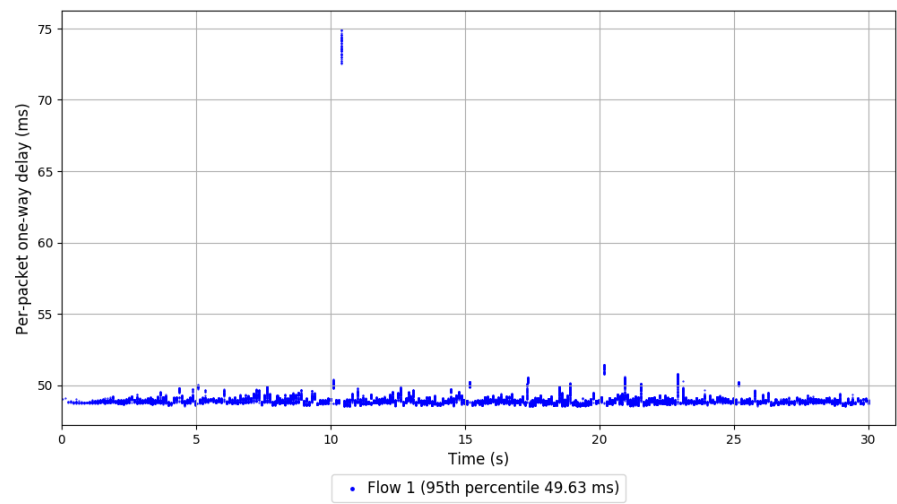
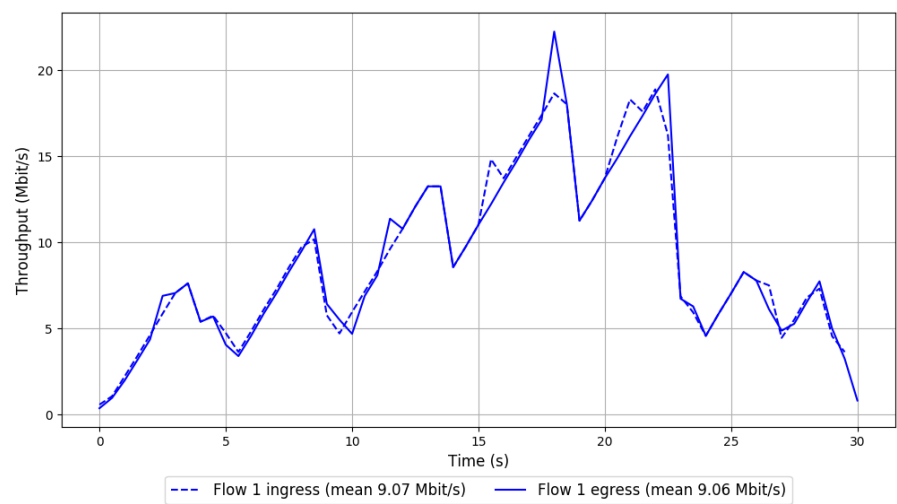
-- Flow 1:

Average throughput: 9.06 Mbit/s

95th percentile per-packet one-way delay: 49.634 ms

Loss rate: 0.08%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-16 04:23:40

End at: 2017-11-16 04:24:10

Below is generated by plot.py at 2017-11-16 05:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.27 Mbit/s

95th percentile per-packet one-way delay: 49.839 ms

Loss rate: 0.16%

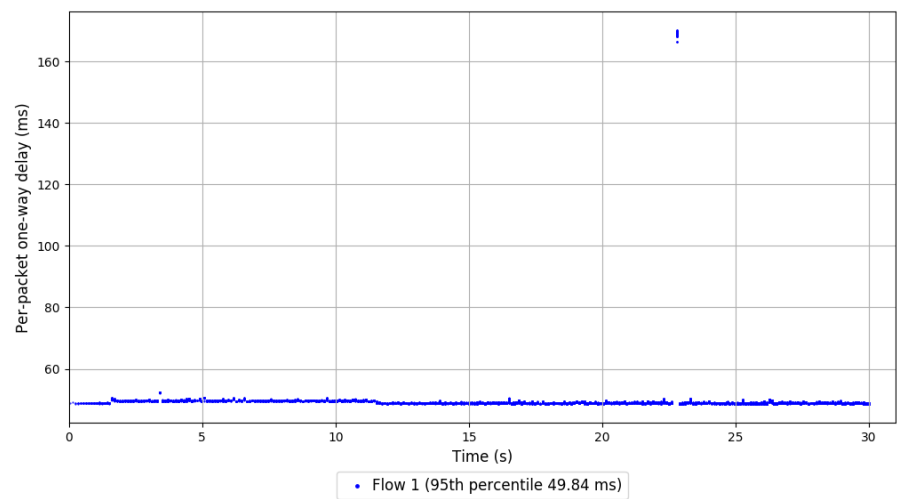
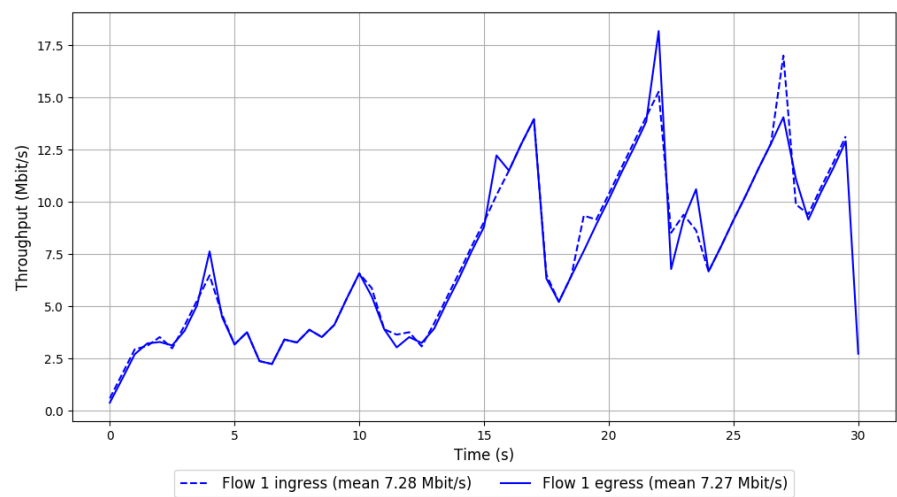
-- Flow 1:

Average throughput: 7.27 Mbit/s

95th percentile per-packet one-way delay: 49.839 ms

Loss rate: 0.16%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-16 04:34:03

End at: 2017-11-16 04:34:33

Below is generated by plot.py at 2017-11-16 05:35:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 50.069 ms

Loss rate: 0.11%

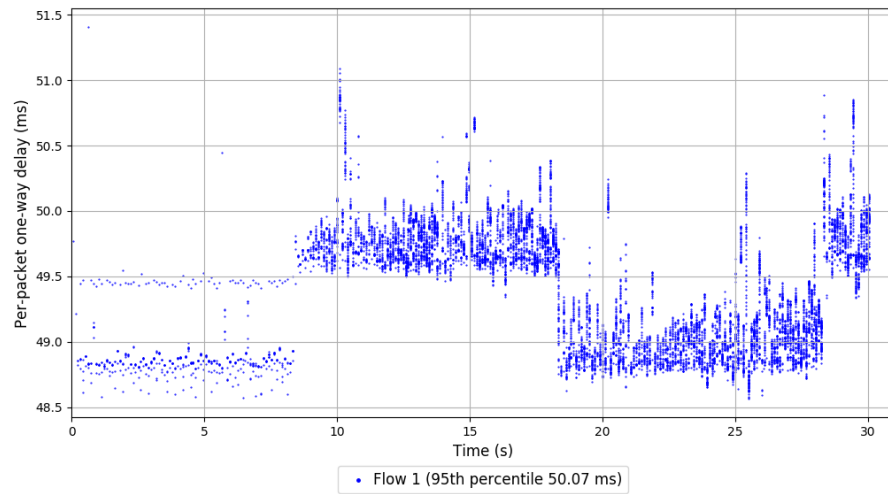
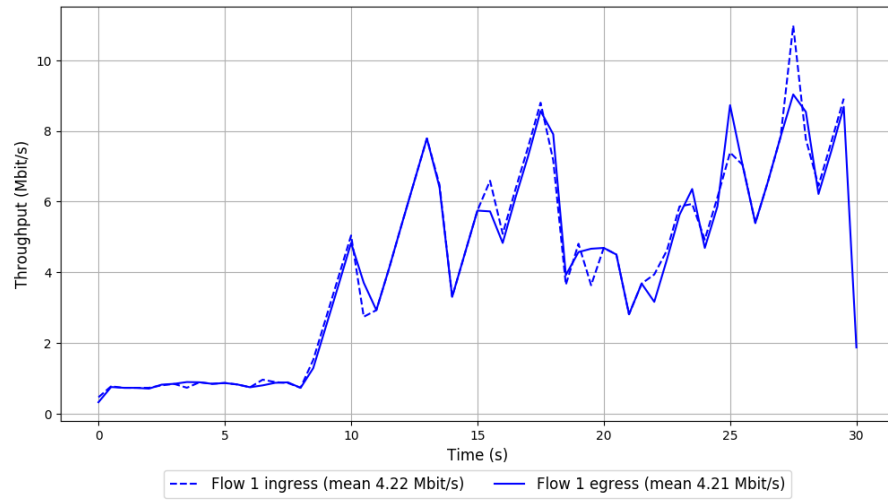
-- Flow 1:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 50.069 ms

Loss rate: 0.11%

Run 10: Report of LEDBAT — Data Link

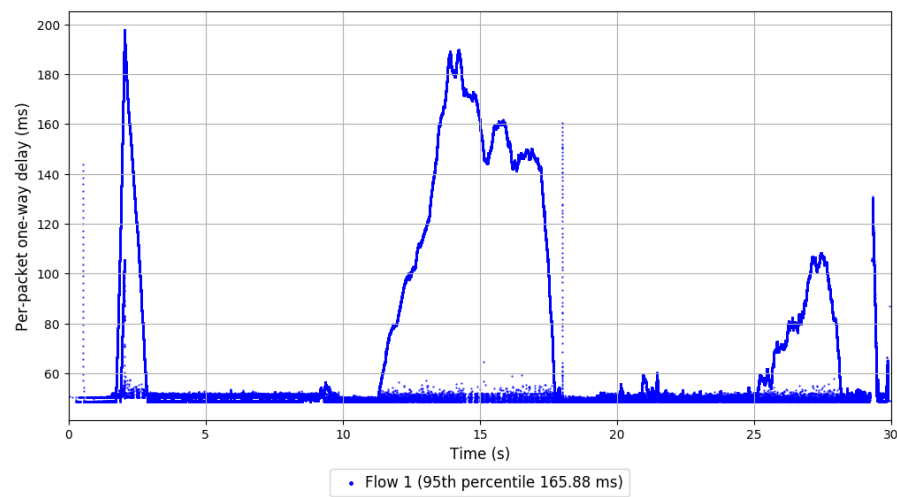
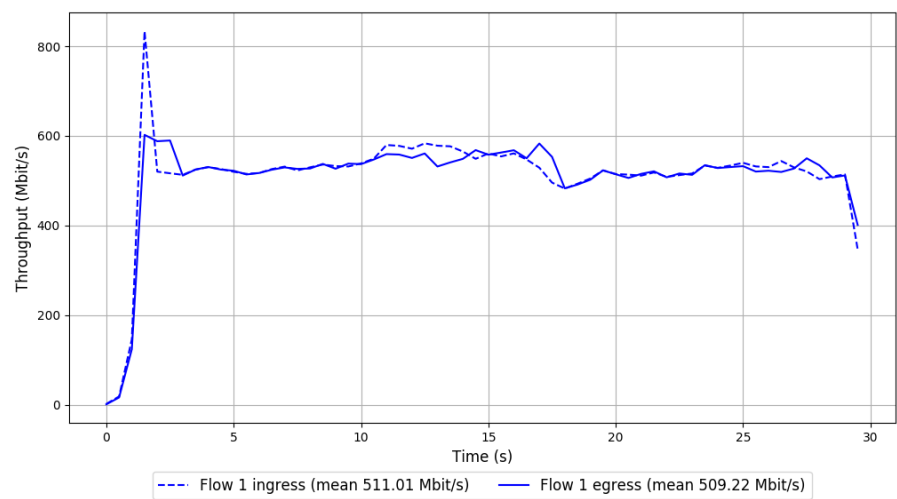


```
Run 1: Statistics of PCC

Start at: 2017-11-16 02:56:32
End at: 2017-11-16 02:57:02

# Below is generated by plot.py at 2017-11-16 05:42:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 509.22 Mbit/s
95th percentile per-packet one-way delay: 165.884 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 509.22 Mbit/s
95th percentile per-packet one-way delay: 165.884 ms
Loss rate: 0.36%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-16 03:06:45

End at: 2017-11-16 03:07:15

Below is generated by plot.py at 2017-11-16 05:42:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 503.57 Mbit/s

95th percentile per-packet one-way delay: 154.631 ms

Loss rate: 0.66%

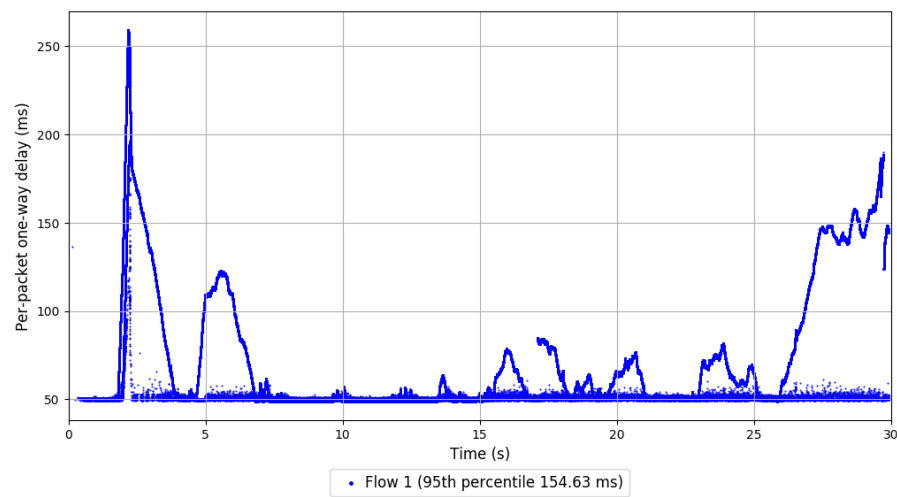
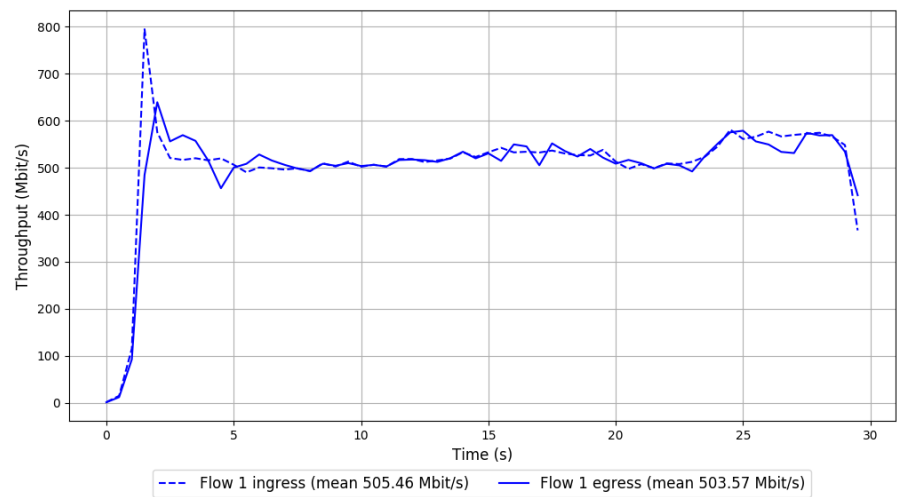
-- Flow 1:

Average throughput: 503.57 Mbit/s

95th percentile per-packet one-way delay: 154.631 ms

Loss rate: 0.66%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-16 03:16:57

End at: 2017-11-16 03:17:27

Below is generated by plot.py at 2017-11-16 05:42:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 512.04 Mbit/s

95th percentile per-packet one-way delay: 177.483 ms

Loss rate: 0.90%

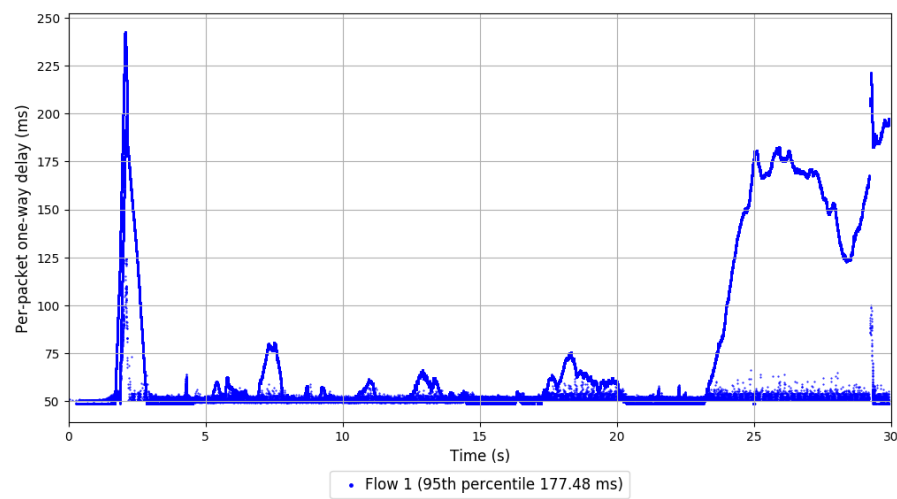
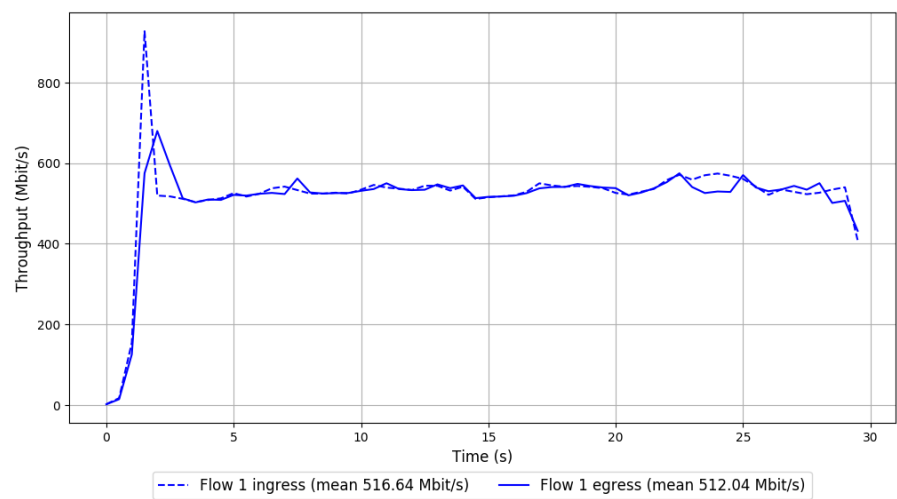
-- Flow 1:

Average throughput: 512.04 Mbit/s

95th percentile per-packet one-way delay: 177.483 ms

Loss rate: 0.90%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-16 03:27:04

End at: 2017-11-16 03:27:34

Below is generated by plot.py at 2017-11-16 05:42:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 523.92 Mbit/s

95th percentile per-packet one-way delay: 133.623 ms

Loss rate: 0.48%

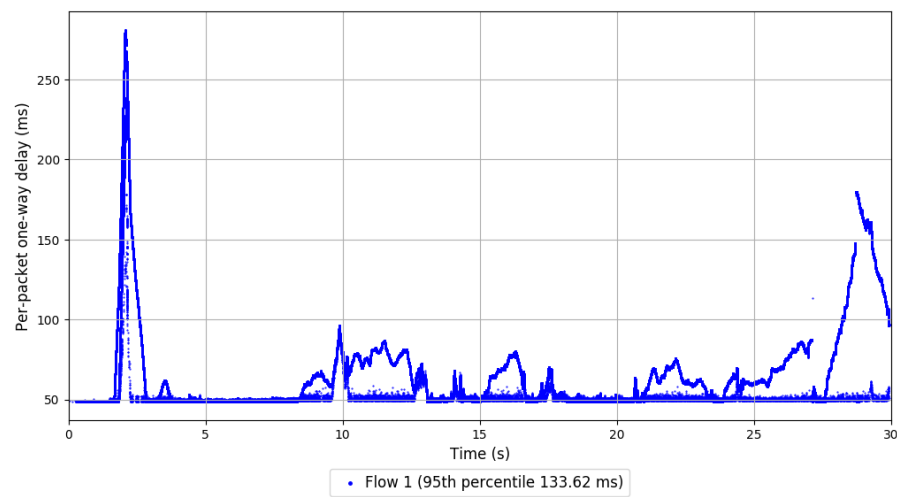
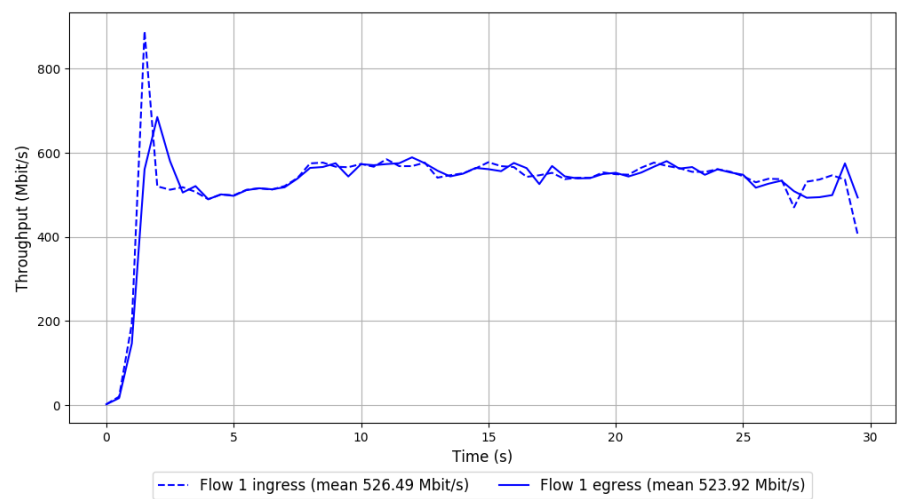
-- Flow 1:

Average throughput: 523.92 Mbit/s

95th percentile per-packet one-way delay: 133.623 ms

Loss rate: 0.48%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-16 03:37:18

End at: 2017-11-16 03:37:48

Below is generated by plot.py at 2017-11-16 05:43:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 549.86 Mbit/s

95th percentile per-packet one-way delay: 156.960 ms

Loss rate: 0.65%

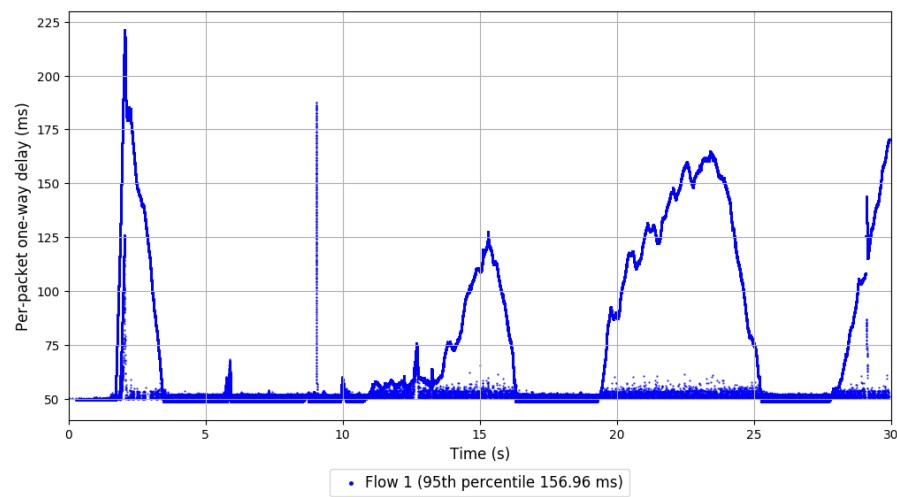
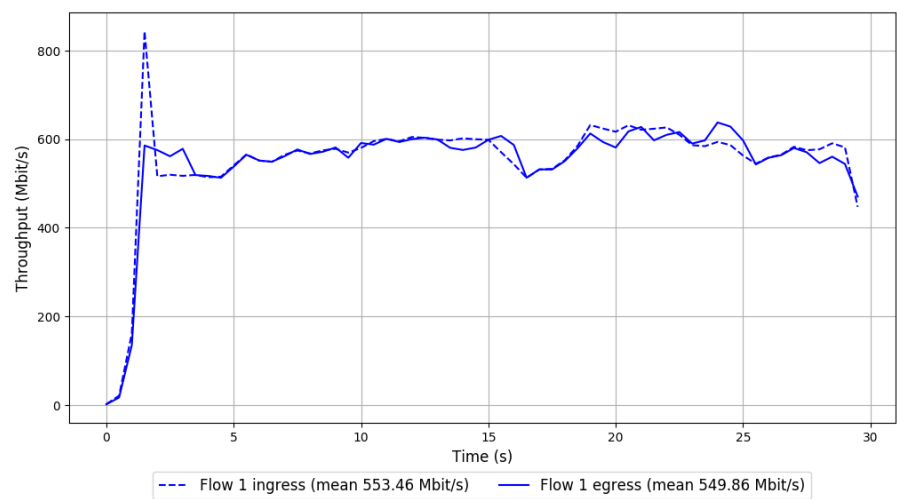
-- Flow 1:

Average throughput: 549.86 Mbit/s

95th percentile per-packet one-way delay: 156.960 ms

Loss rate: 0.65%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-16 03:47:30

End at: 2017-11-16 03:48:00

Below is generated by plot.py at 2017-11-16 05:43:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 532.75 Mbit/s

95th percentile per-packet one-way delay: 108.788 ms

Loss rate: 1.01%

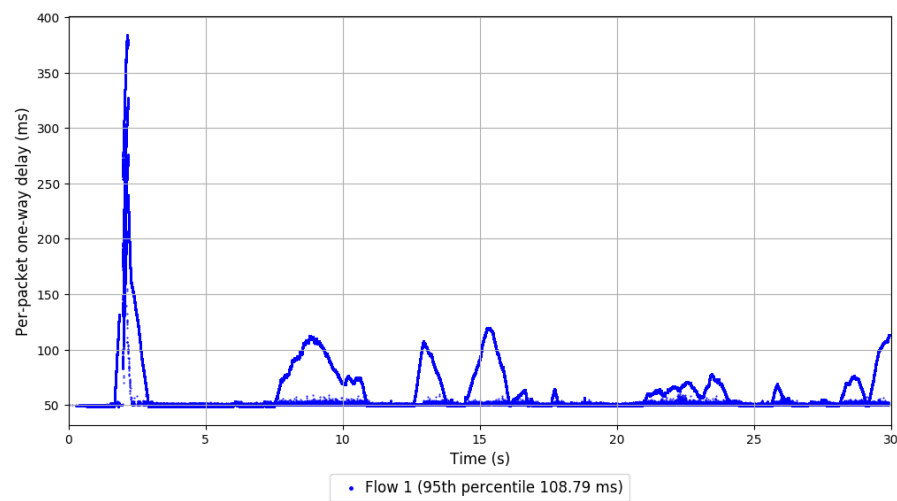
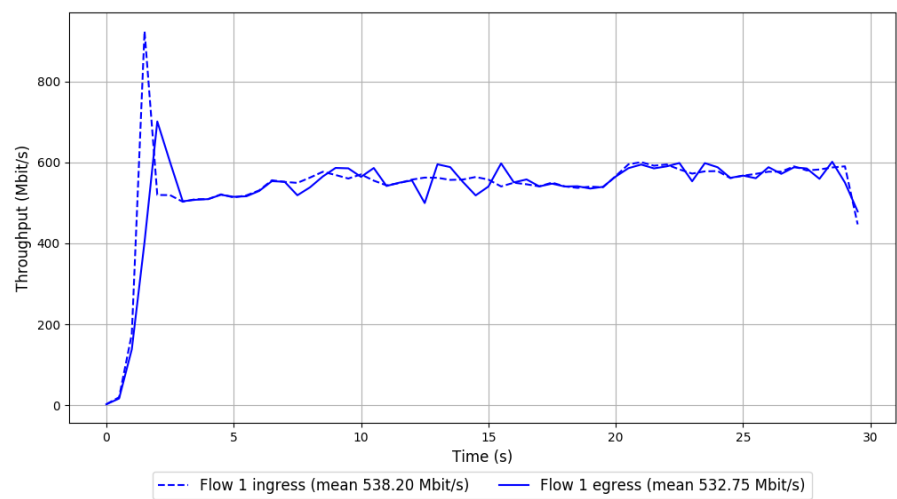
-- Flow 1:

Average throughput: 532.75 Mbit/s

95th percentile per-packet one-way delay: 108.788 ms

Loss rate: 1.01%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-16 03:57:46

End at: 2017-11-16 03:58:16

Below is generated by plot.py at 2017-11-16 05:43:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 522.94 Mbit/s

95th percentile per-packet one-way delay: 179.225 ms

Loss rate: 0.77%

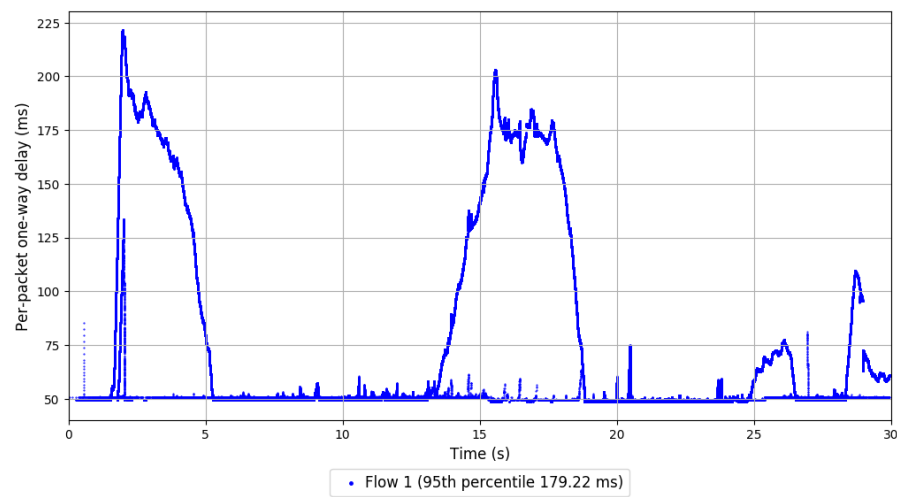
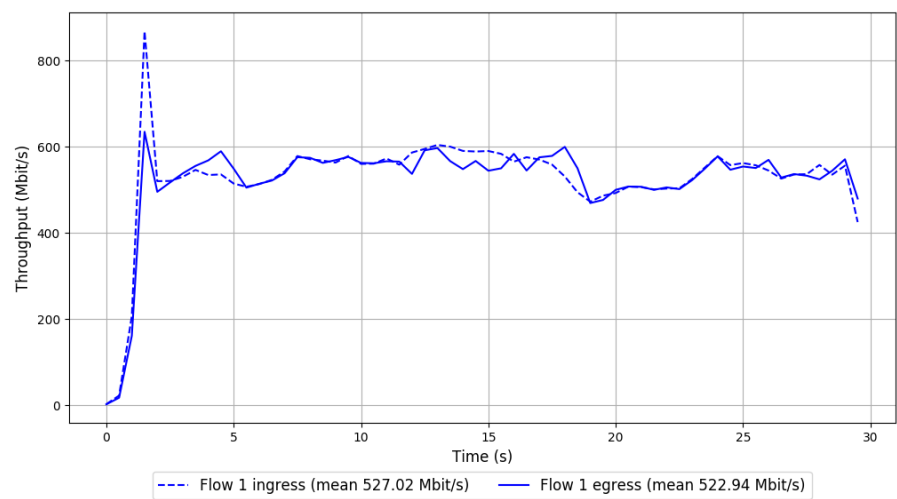
-- Flow 1:

Average throughput: 522.94 Mbit/s

95th percentile per-packet one-way delay: 179.225 ms

Loss rate: 0.77%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-16 04:08:03

End at: 2017-11-16 04:08:33

Below is generated by plot.py at 2017-11-16 05:45:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 542.59 Mbit/s

95th percentile per-packet one-way delay: 178.181 ms

Loss rate: 0.84%

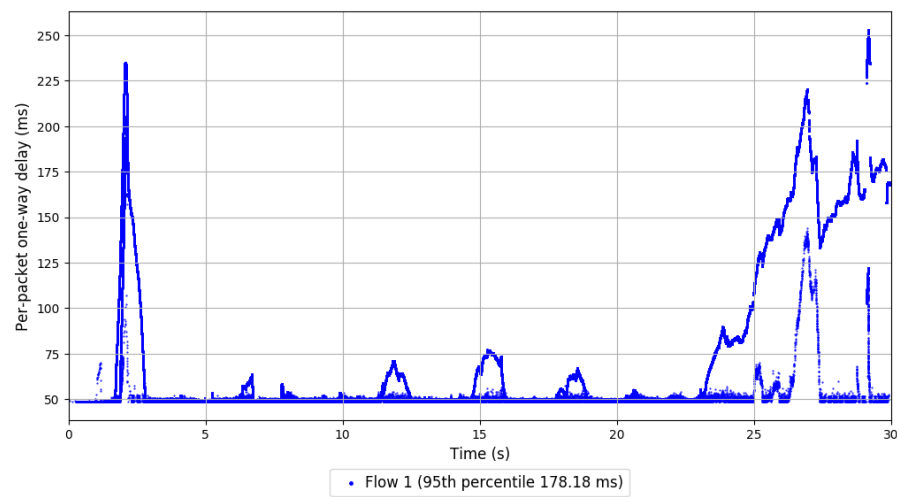
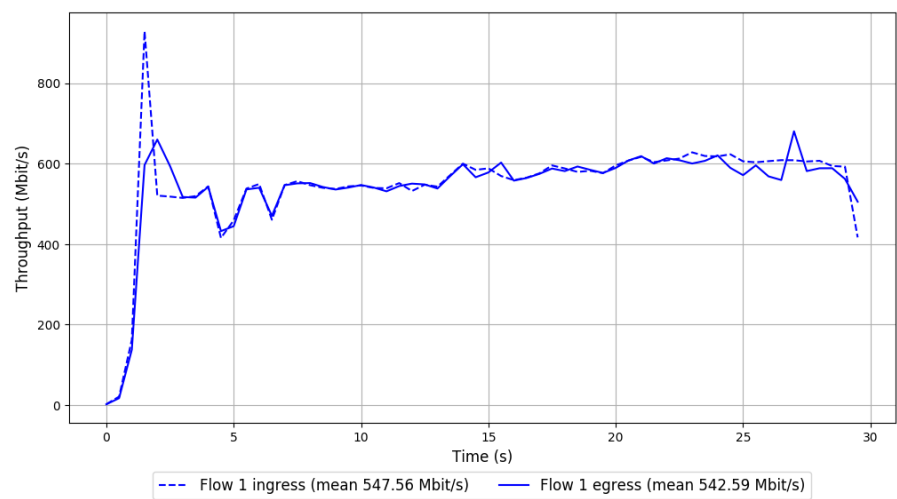
-- Flow 1:

Average throughput: 542.59 Mbit/s

95th percentile per-packet one-way delay: 178.181 ms

Loss rate: 0.84%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-16 04:18:25

End at: 2017-11-16 04:18:55

Below is generated by plot.py at 2017-11-16 05:50:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 490.64 Mbit/s

95th percentile per-packet one-way delay: 122.177 ms

Loss rate: 0.33%

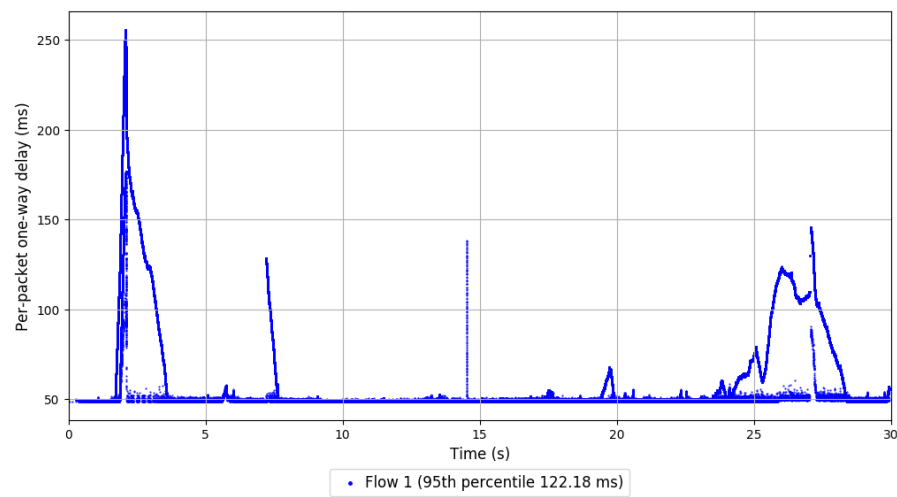
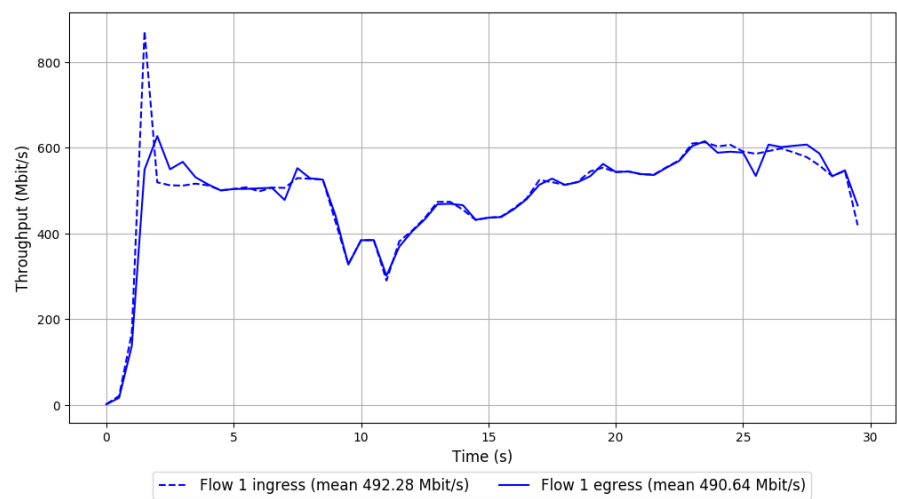
-- Flow 1:

Average throughput: 490.64 Mbit/s

95th percentile per-packet one-way delay: 122.177 ms

Loss rate: 0.33%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-16 04:28:43

End at: 2017-11-16 04:29:13

Below is generated by plot.py at 2017-11-16 05:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 545.46 Mbit/s

95th percentile per-packet one-way delay: 178.003 ms

Loss rate: 0.67%

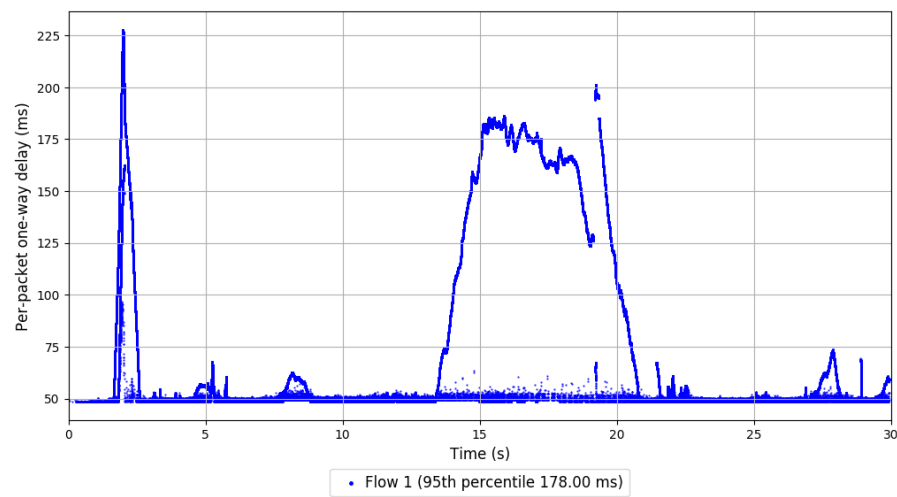
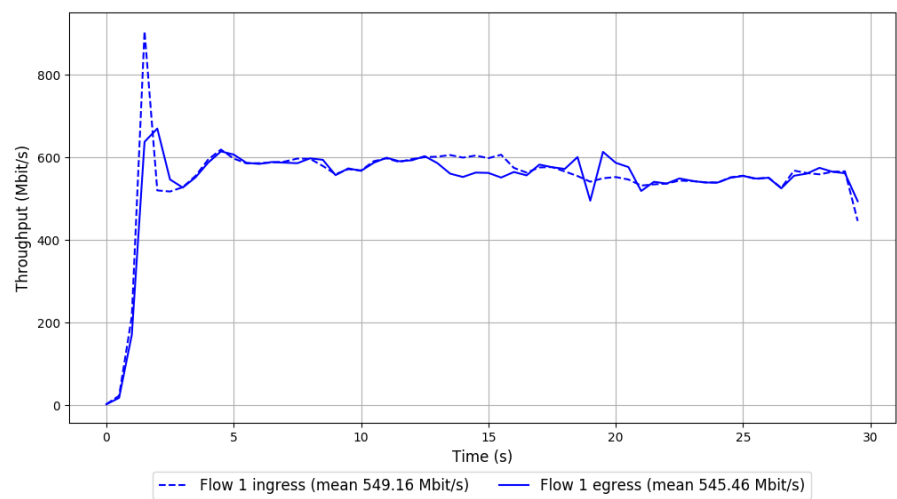
-- Flow 1:

Average throughput: 545.46 Mbit/s

95th percentile per-packet one-way delay: 178.003 ms

Loss rate: 0.67%

Run 10: Report of PCC — Data Link

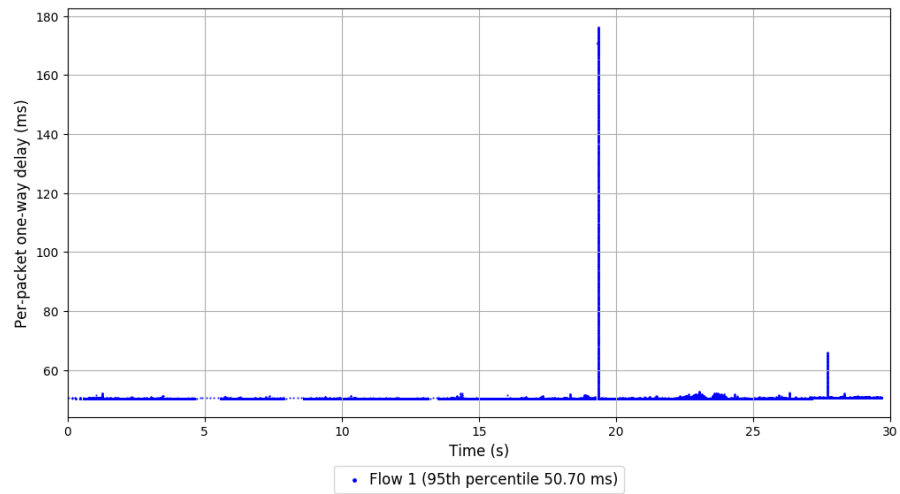
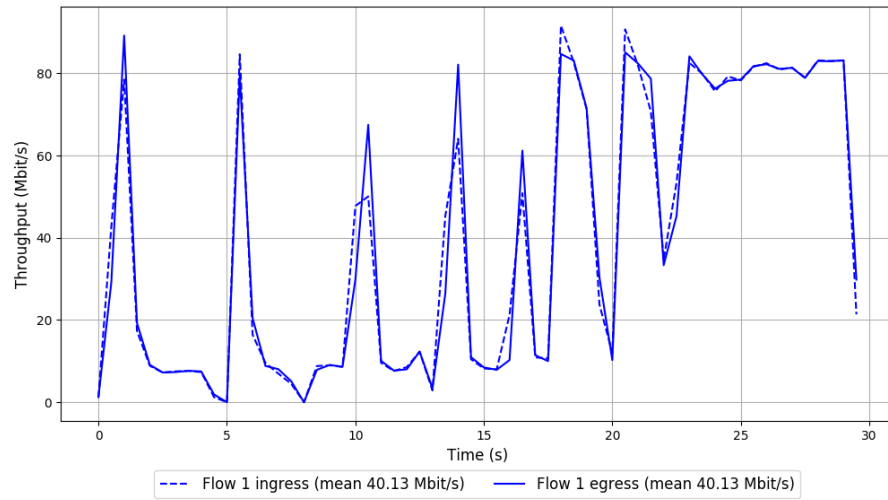


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-16 03:03:44
End at: 2017-11-16 03:04:14

# Below is generated by plot.py at 2017-11-16 05:51:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.13 Mbit/s
95th percentile per-packet one-way delay: 50.703 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.13 Mbit/s
95th percentile per-packet one-way delay: 50.703 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-16 03:13:59

End at: 2017-11-16 03:14:30

Below is generated by plot.py at 2017-11-16 05:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.23 Mbit/s

95th percentile per-packet one-way delay: 50.675 ms

Loss rate: 0.01%

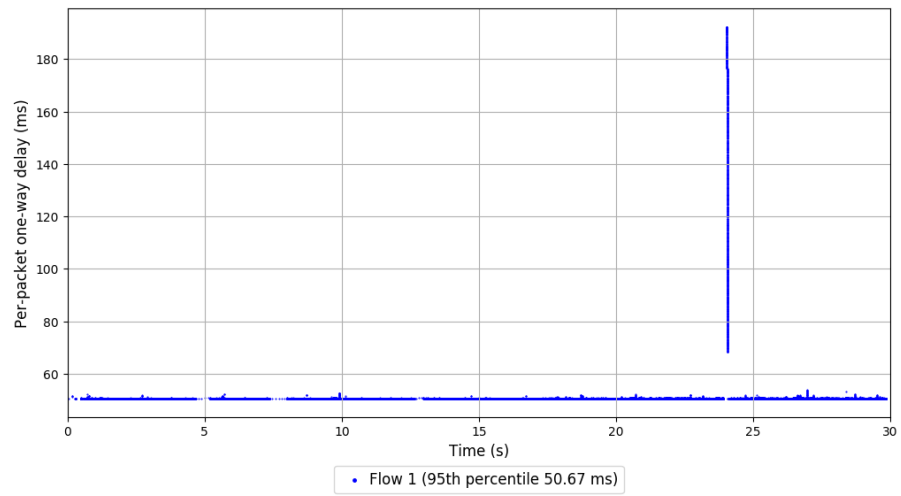
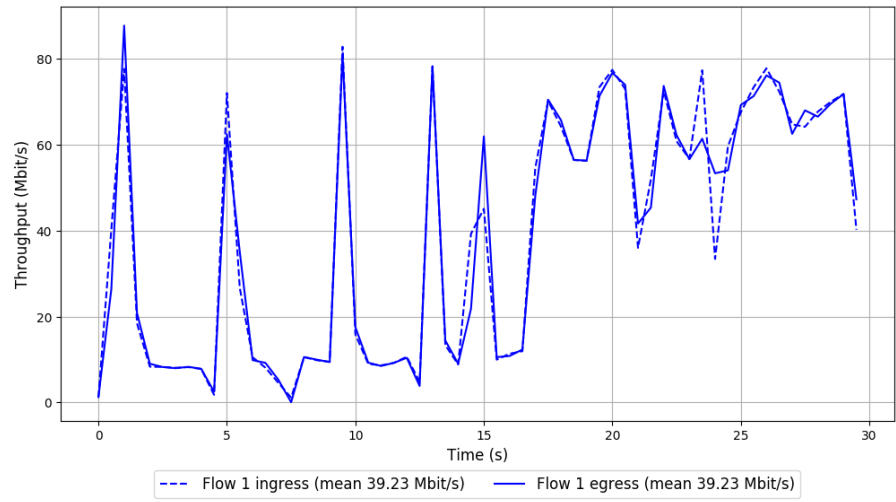
-- Flow 1:

Average throughput: 39.23 Mbit/s

95th percentile per-packet one-way delay: 50.675 ms

Loss rate: 0.01%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-16 03:24:02

End at: 2017-11-16 03:24:32

Below is generated by plot.py at 2017-11-16 05:51:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.32 Mbit/s

95th percentile per-packet one-way delay: 50.729 ms

Loss rate: 0.00%

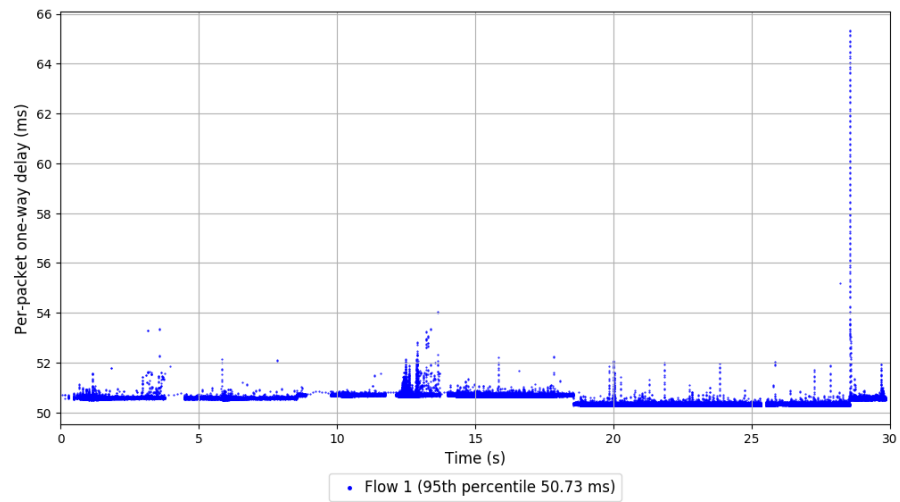
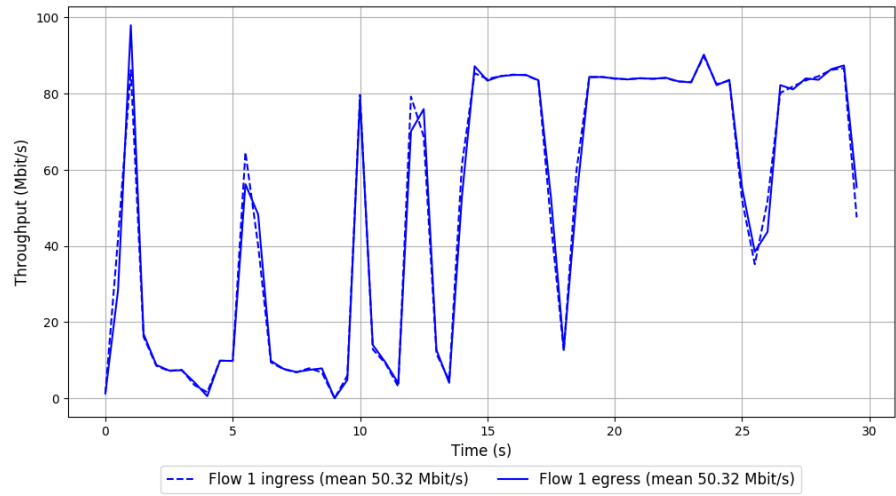
-- Flow 1:

Average throughput: 50.32 Mbit/s

95th percentile per-packet one-way delay: 50.729 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-16 03:34:15

End at: 2017-11-16 03:34:45

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.35 Mbit/s

95th percentile per-packet one-way delay: 50.682 ms

Loss rate: 0.00%

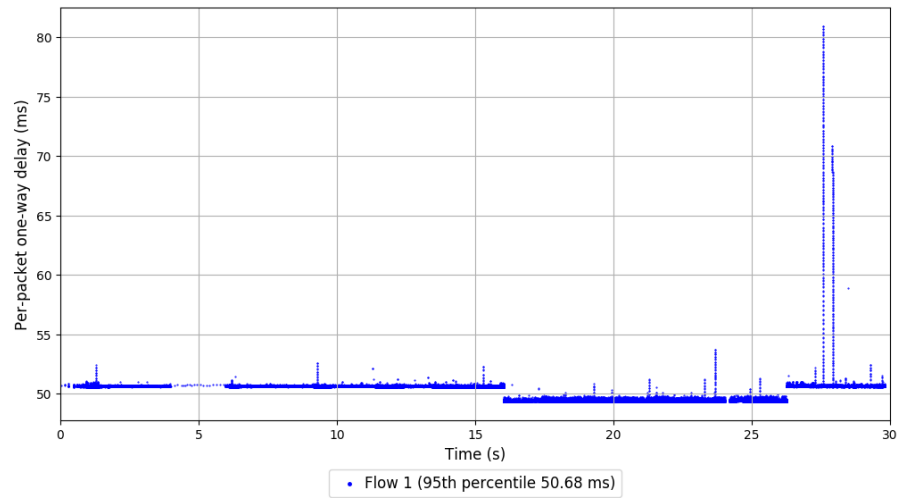
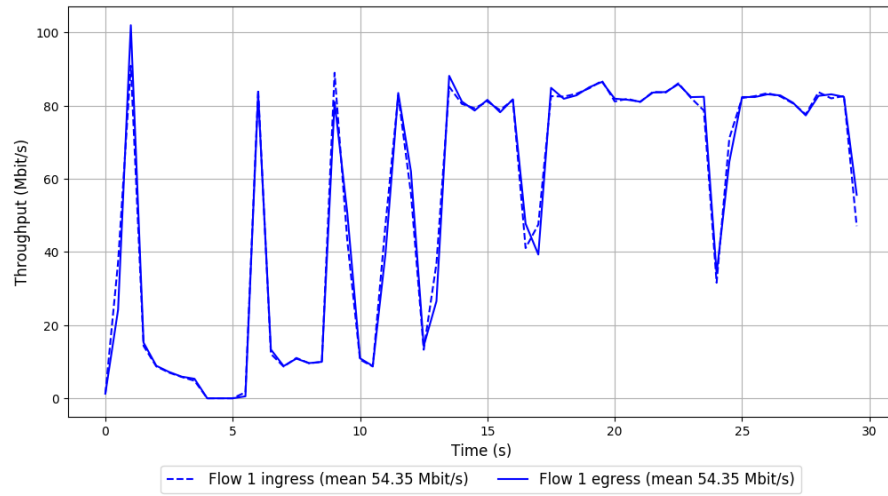
-- Flow 1:

Average throughput: 54.35 Mbit/s

95th percentile per-packet one-way delay: 50.682 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-16 03:44:27

End at: 2017-11-16 03:44:57

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.34 Mbit/s

95th percentile per-packet one-way delay: 57.690 ms

Loss rate: 0.00%

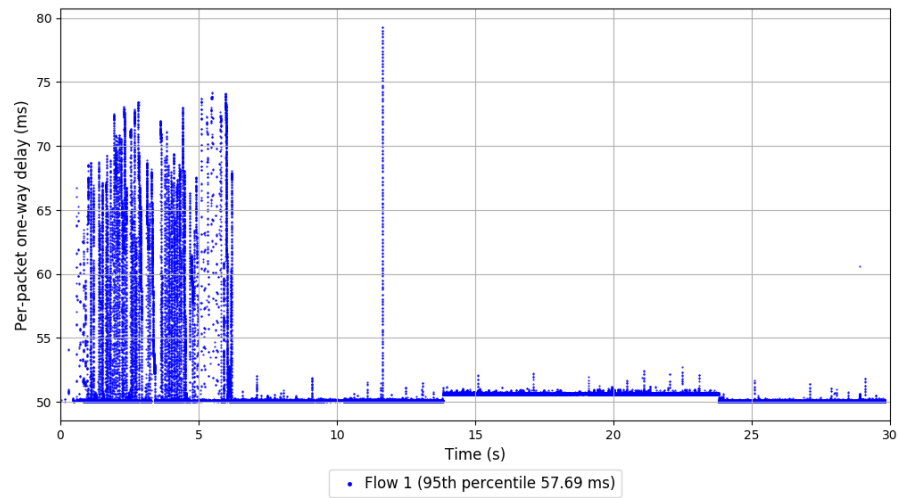
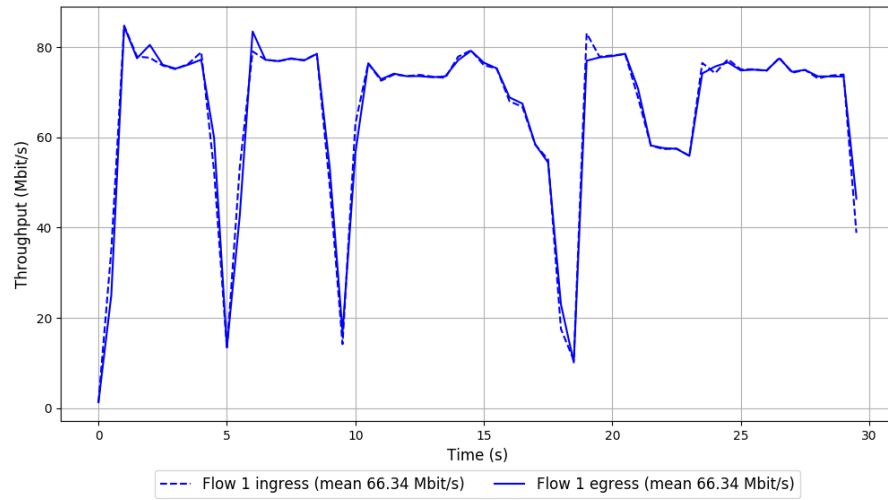
-- Flow 1:

Average throughput: 66.34 Mbit/s

95th percentile per-packet one-way delay: 57.690 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-16 03:54:41

End at: 2017-11-16 03:55:11

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.67 Mbit/s

95th percentile per-packet one-way delay: 50.730 ms

Loss rate: 0.00%

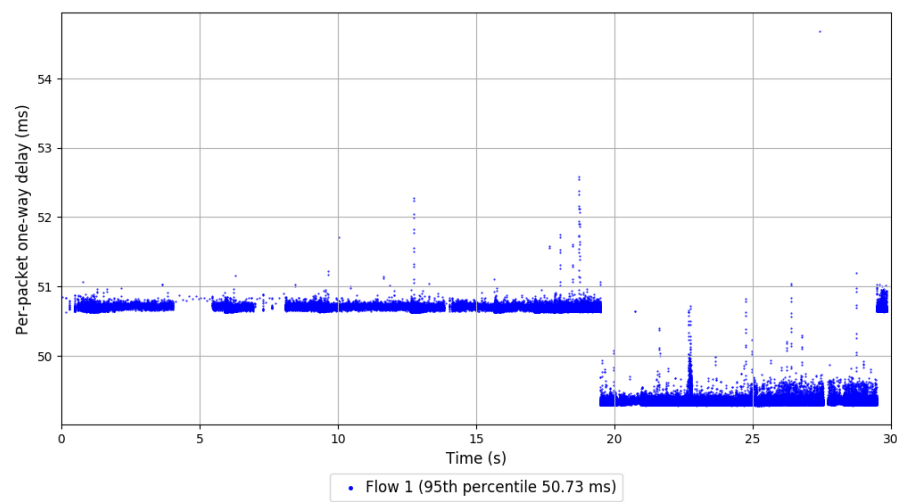
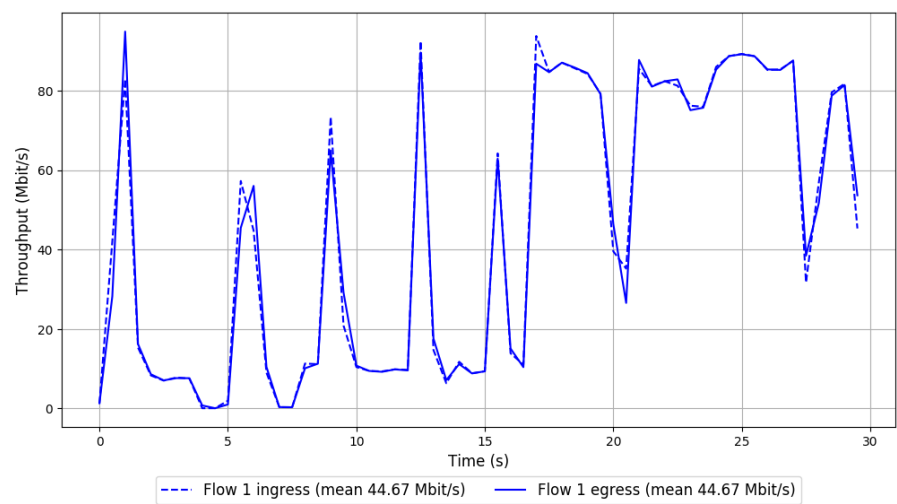
-- Flow 1:

Average throughput: 44.67 Mbit/s

95th percentile per-packet one-way delay: 50.730 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-16 04:04:52

End at: 2017-11-16 04:05:22

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.62 Mbit/s

95th percentile per-packet one-way delay: 49.401 ms

Loss rate: 0.00%

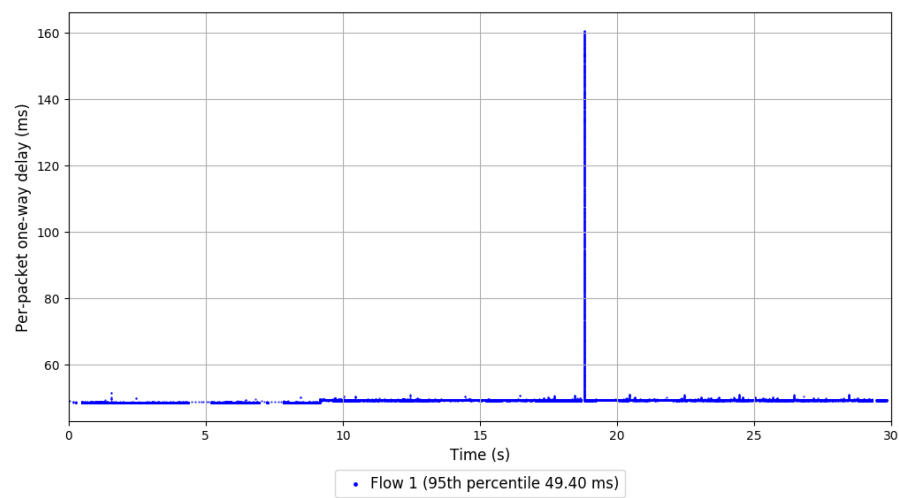
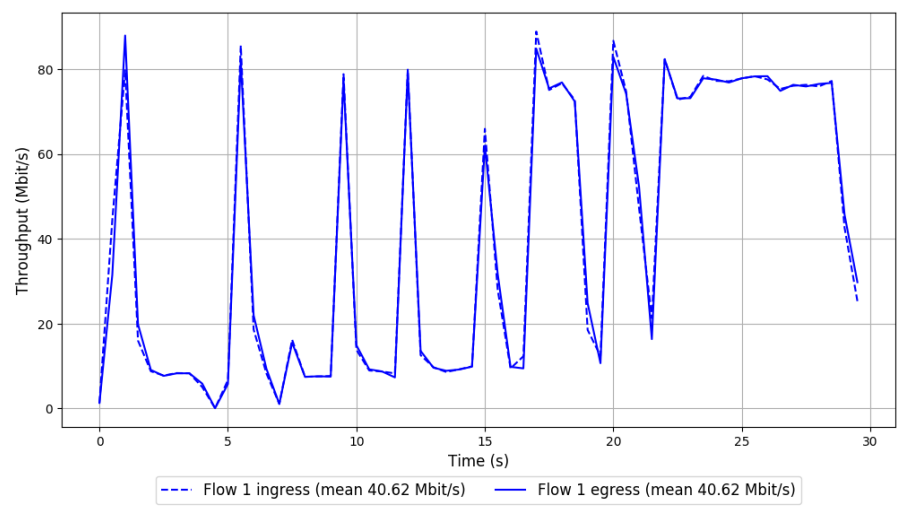
-- Flow 1:

Average throughput: 40.62 Mbit/s

95th percentile per-packet one-way delay: 49.401 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-16 04:15:16

End at: 2017-11-16 04:15:46

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.72 Mbit/s

95th percentile per-packet one-way delay: 49.331 ms

Loss rate: 0.00%

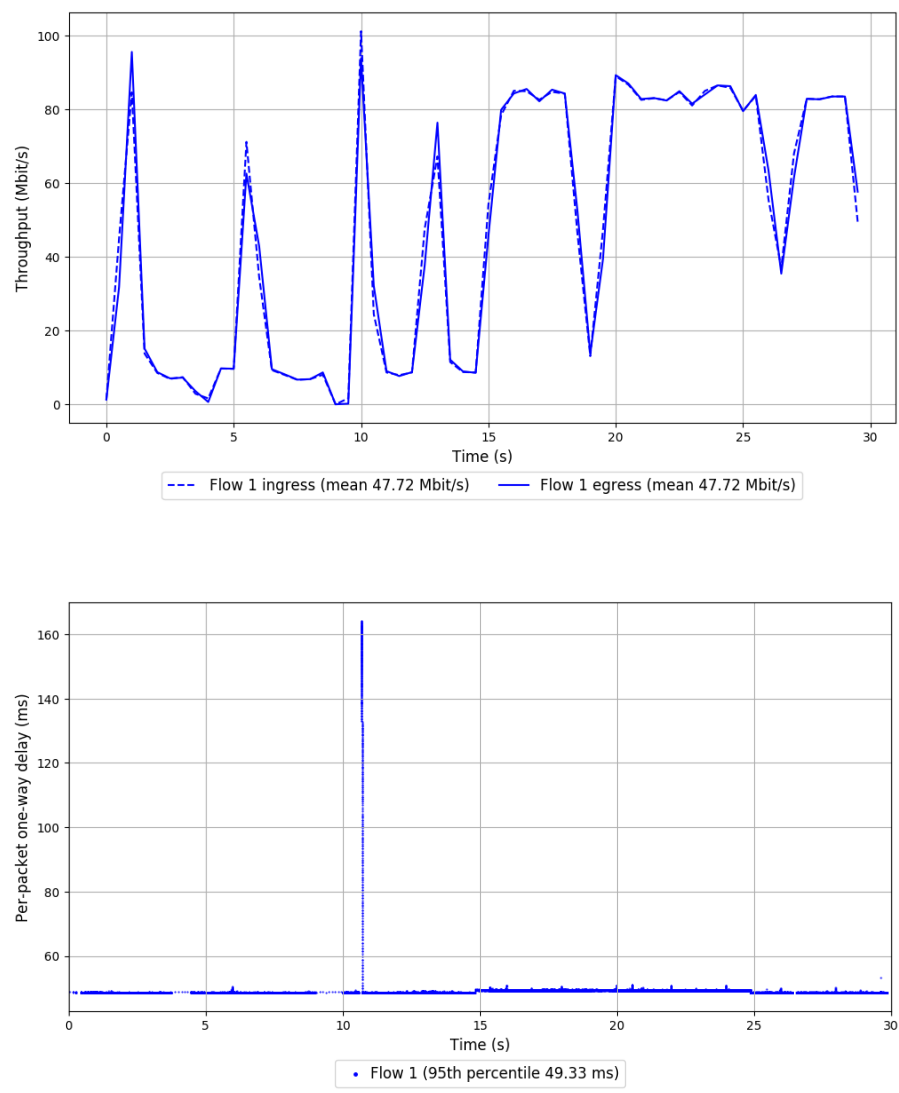
-- Flow 1:

Average throughput: 47.72 Mbit/s

95th percentile per-packet one-way delay: 49.331 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-16 04:25:33

End at: 2017-11-16 04:26:03

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.14 Mbit/s

95th percentile per-packet one-way delay: 48.669 ms

Loss rate: 0.00%

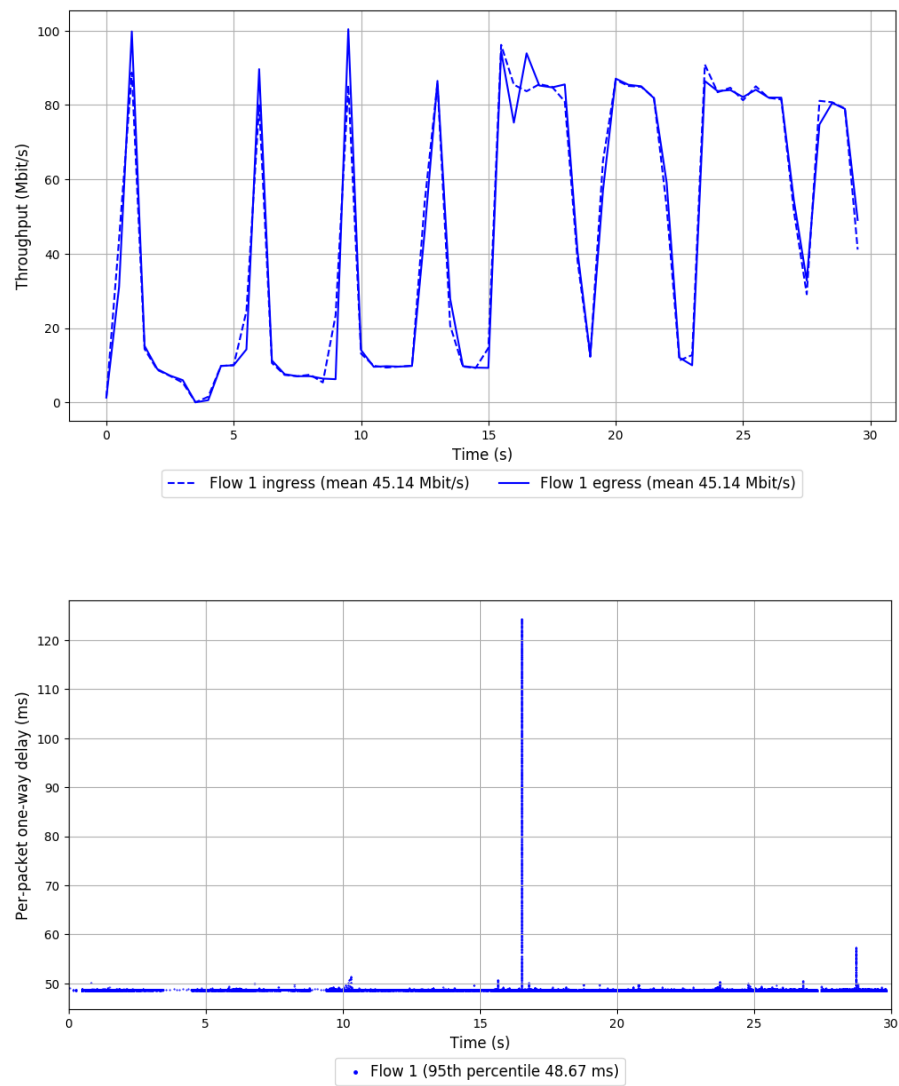
-- Flow 1:

Average throughput: 45.14 Mbit/s

95th percentile per-packet one-way delay: 48.669 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

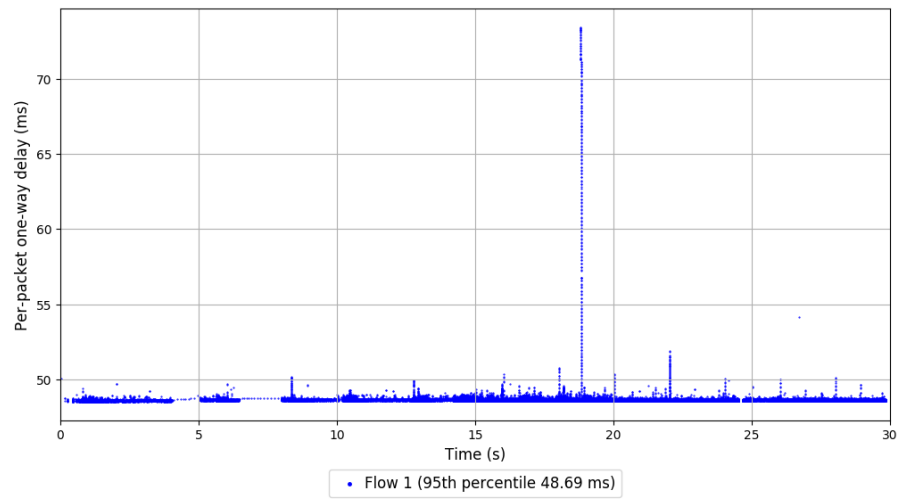
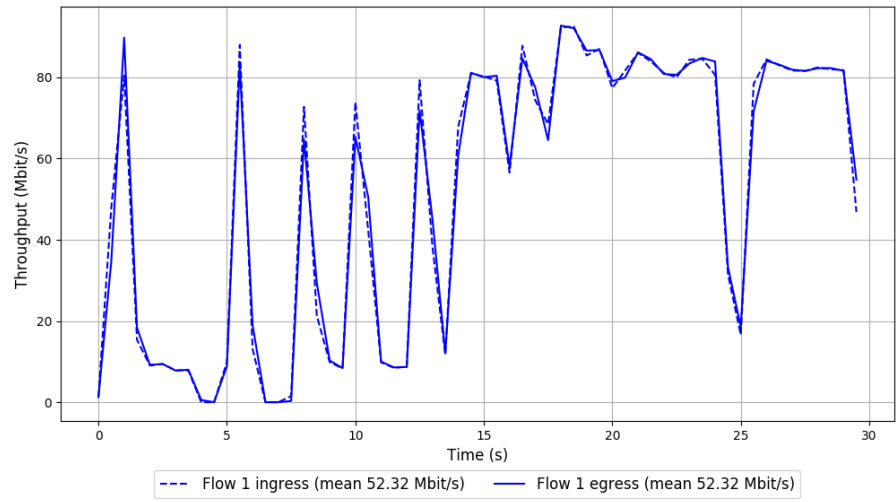


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-11-16 04:35:56
End at: 2017-11-16 04:36:26

# Below is generated by plot.py at 2017-11-16 05:51:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.32 Mbit/s
95th percentile per-packet one-way delay: 48.689 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.32 Mbit/s
95th percentile per-packet one-way delay: 48.689 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

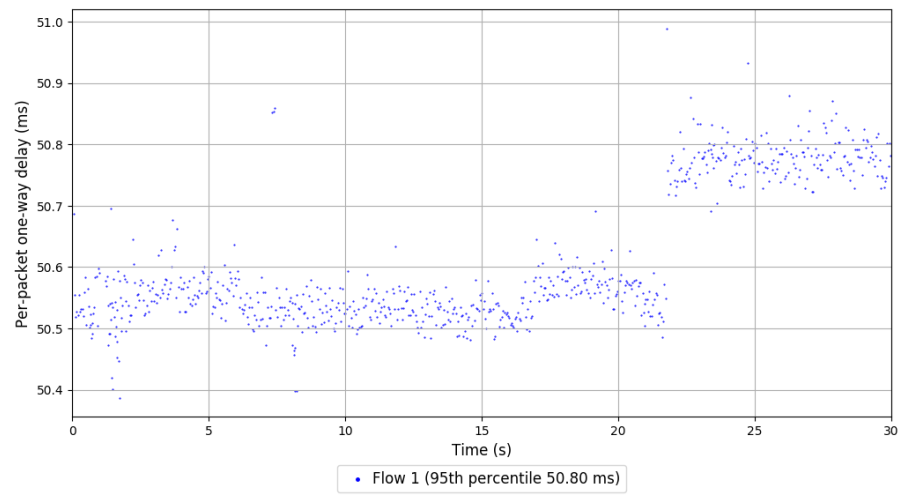
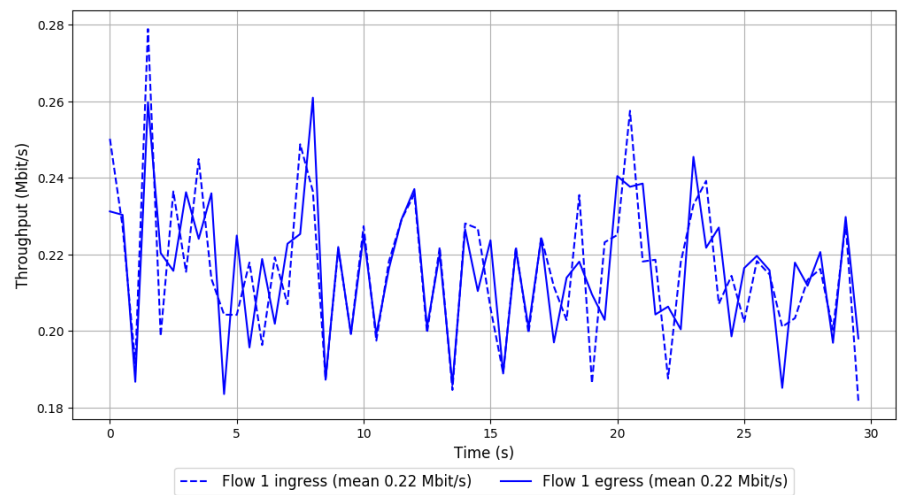


```
Run 1: Statistics of SCReAM

Start at: 2017-11-16 02:58:19
End at: 2017-11-16 02:58:49

# Below is generated by plot.py at 2017-11-16 05:51:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.803 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.803 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

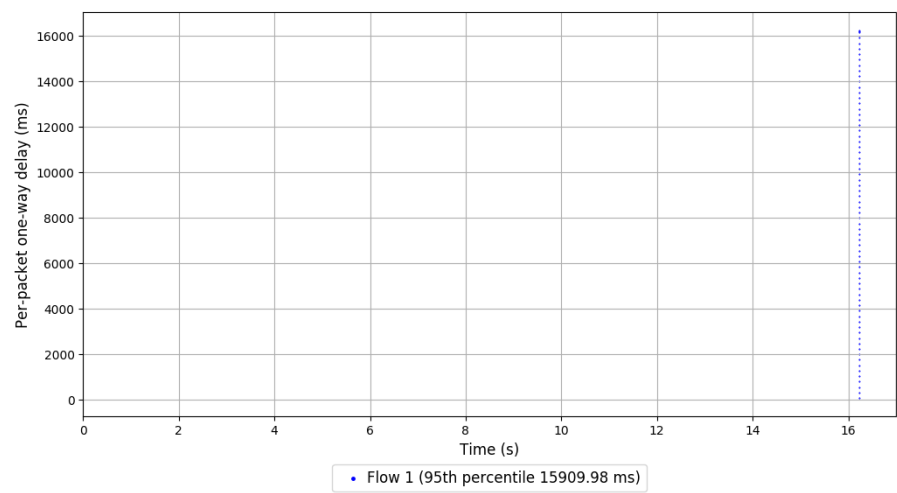
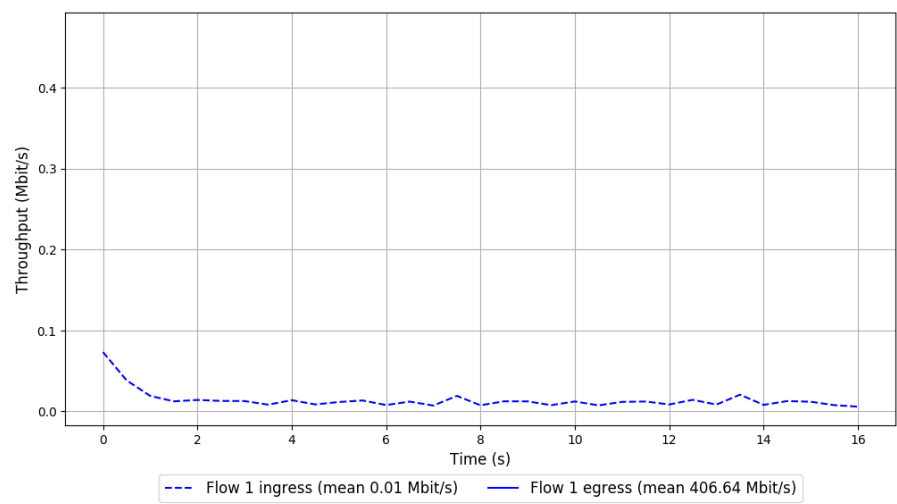


Run 2: Statistics of SReAM

Start at: 2017-11-16 03:08:33

End at: 2017-11-16 03:09:03

Run 2: Report of SReAM — Data Link

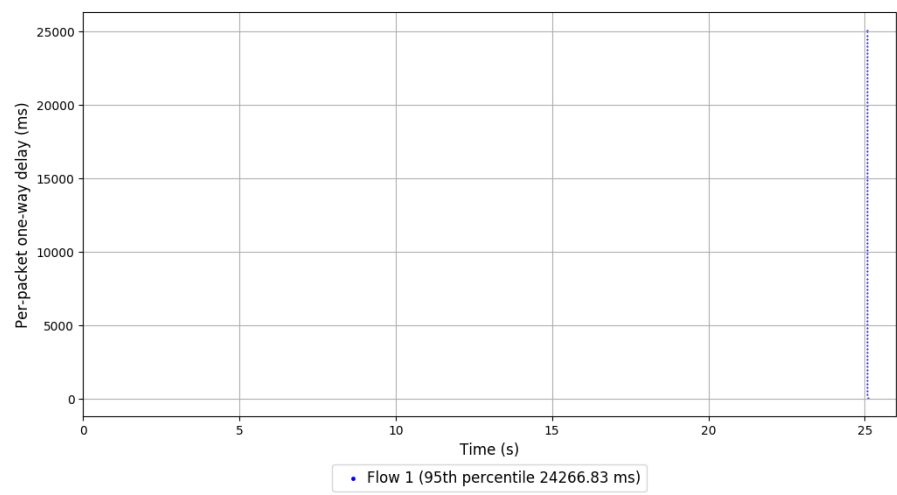
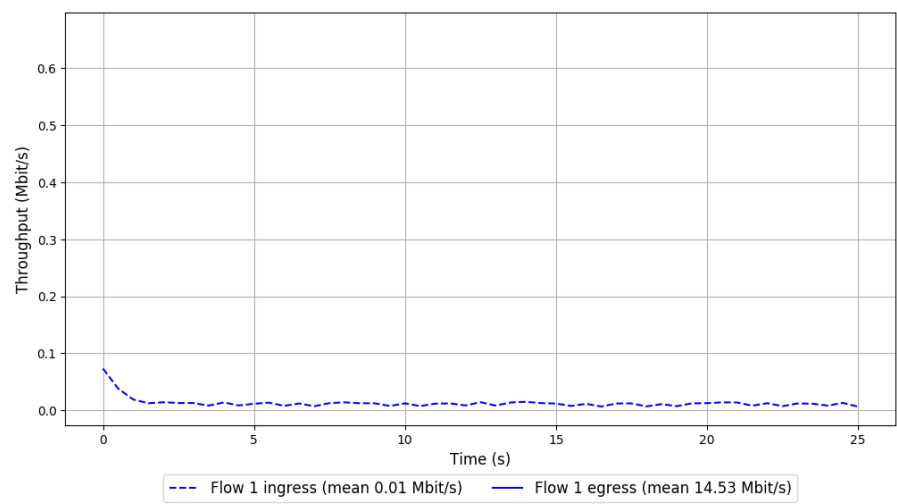


Run 3: Statistics of SReAM

Start at: 2017-11-16 03:18:38

End at: 2017-11-16 03:19:08

Run 3: Report of SReAM — Data Link

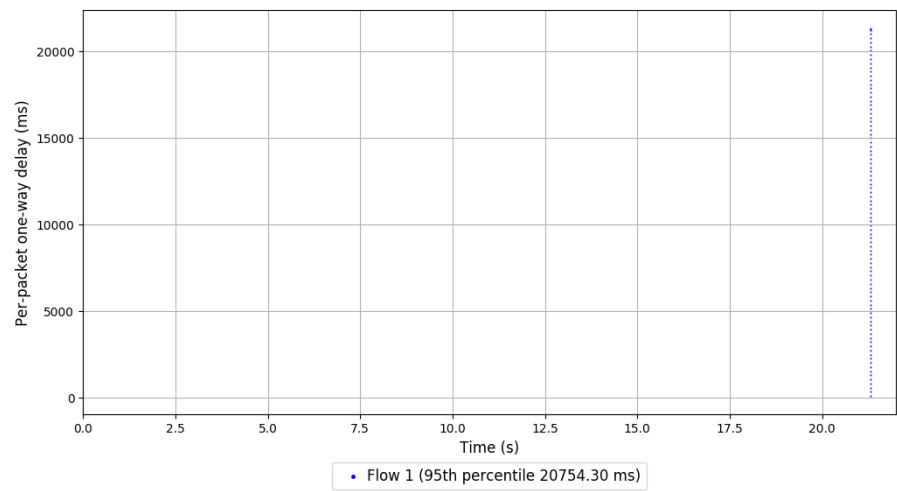
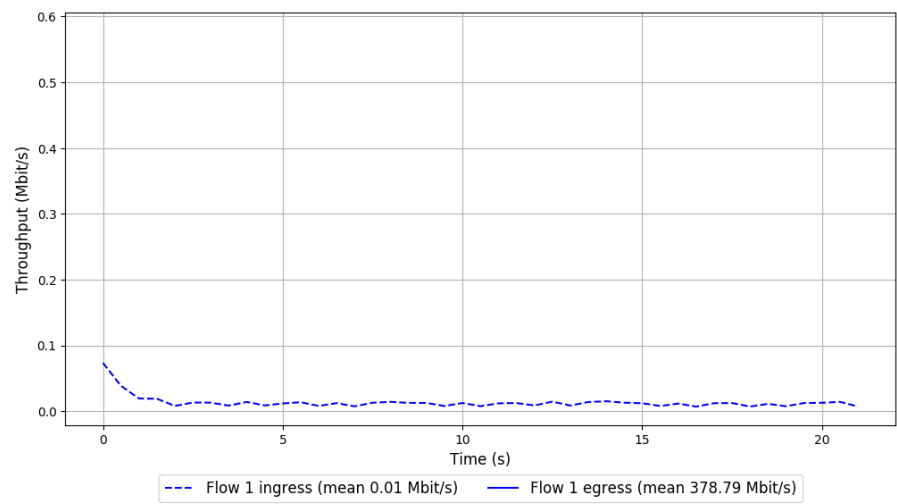


Run 4: Statistics of SReAM

Start at: 2017-11-16 03:28:49

End at: 2017-11-16 03:29:19

Run 4: Report of SReAM — Data Link

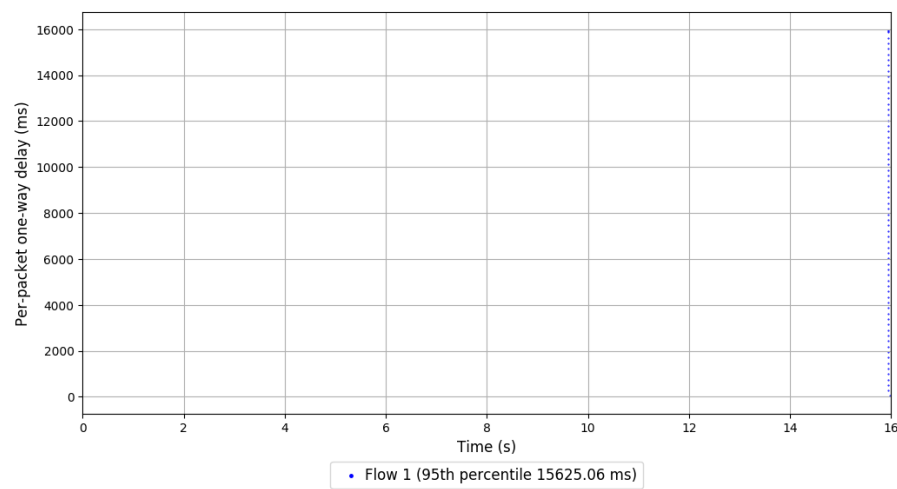
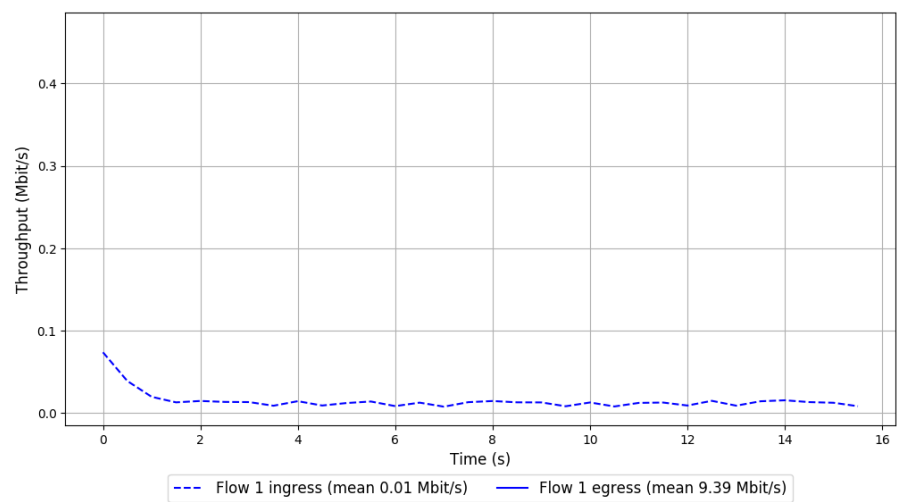


Run 5: Statistics of SReAM

Start at: 2017-11-16 03:39:04

End at: 2017-11-16 03:39:34

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-16 03:49:18

End at: 2017-11-16 03:49:48

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.968 ms

Loss rate: 0.00%

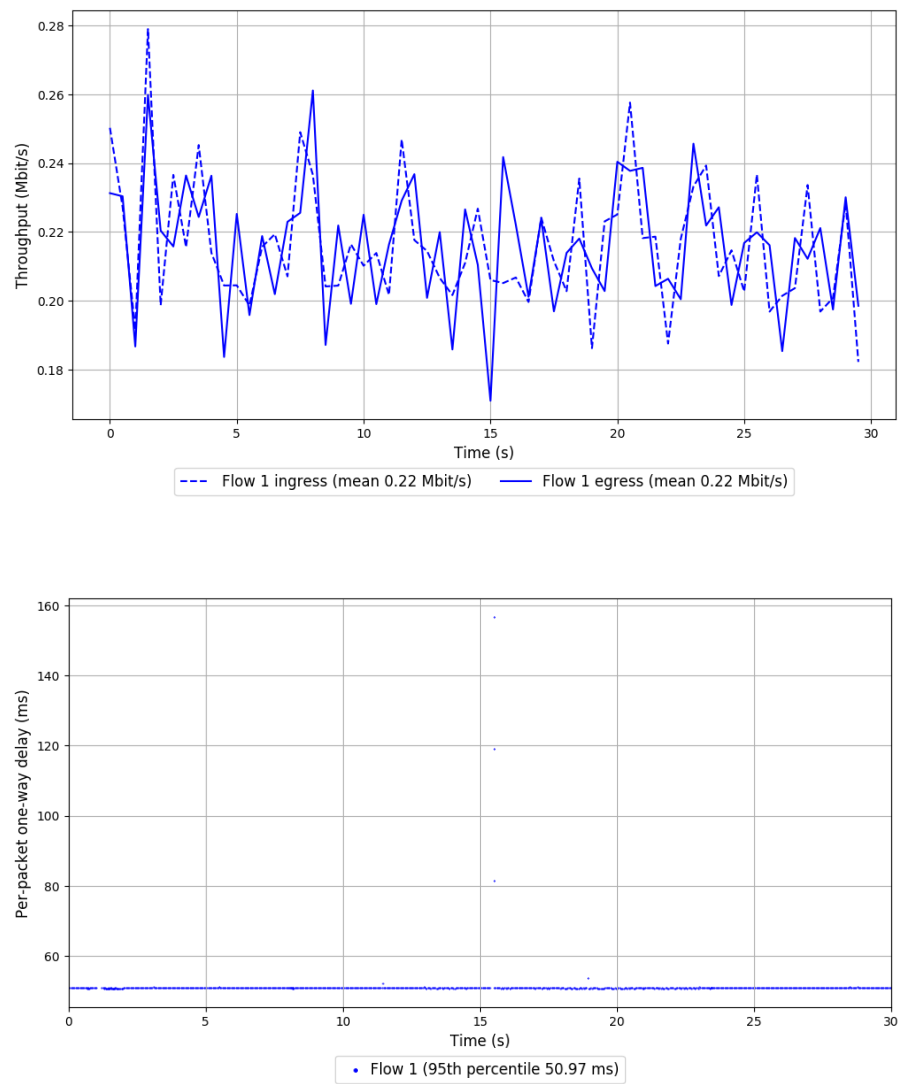
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.968 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

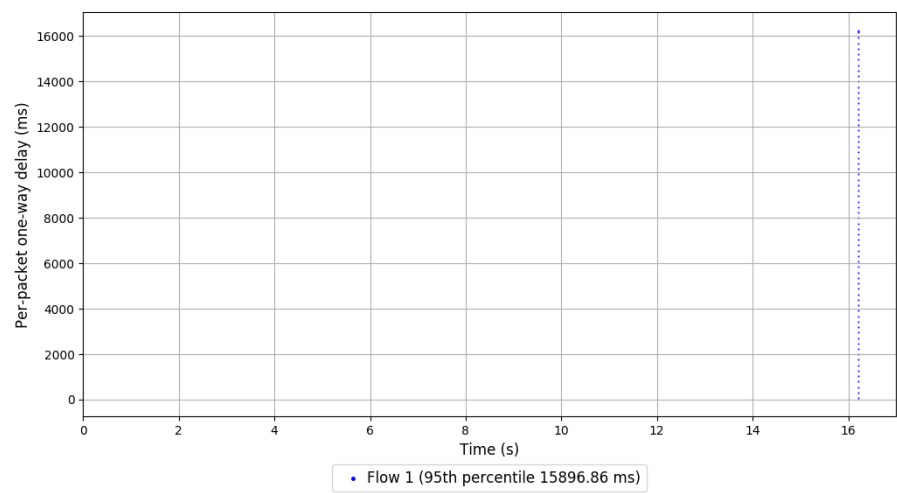
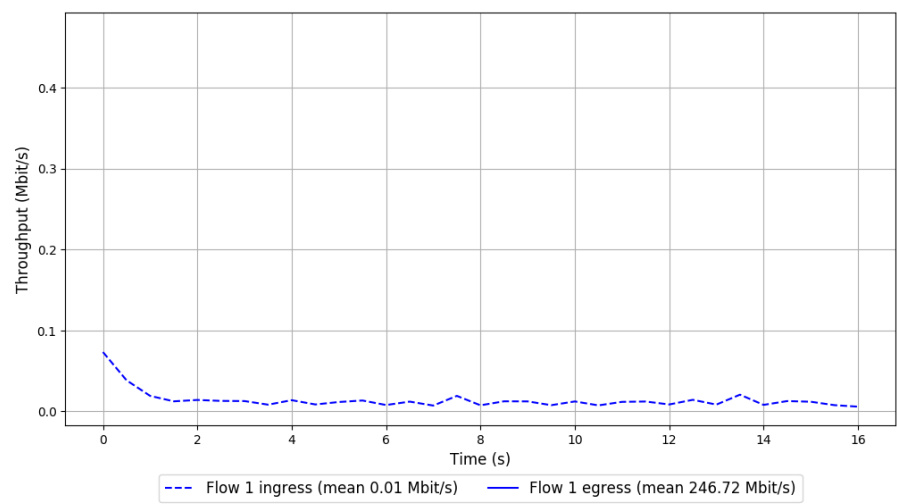


Run 7: Statistics of SReAM

Start at: 2017-11-16 03:59:32

End at: 2017-11-16 04:00:03

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-11-16 04:09:52

End at: 2017-11-16 04:10:22

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.461 ms

Loss rate: 0.00%

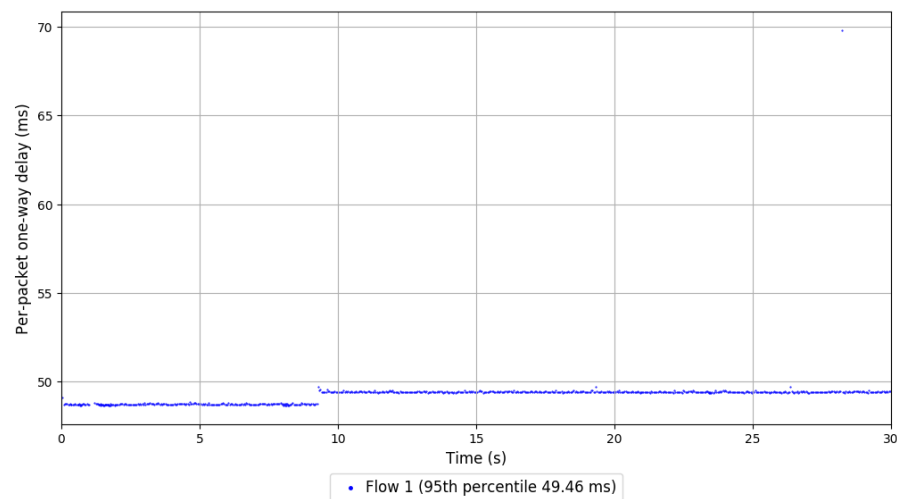
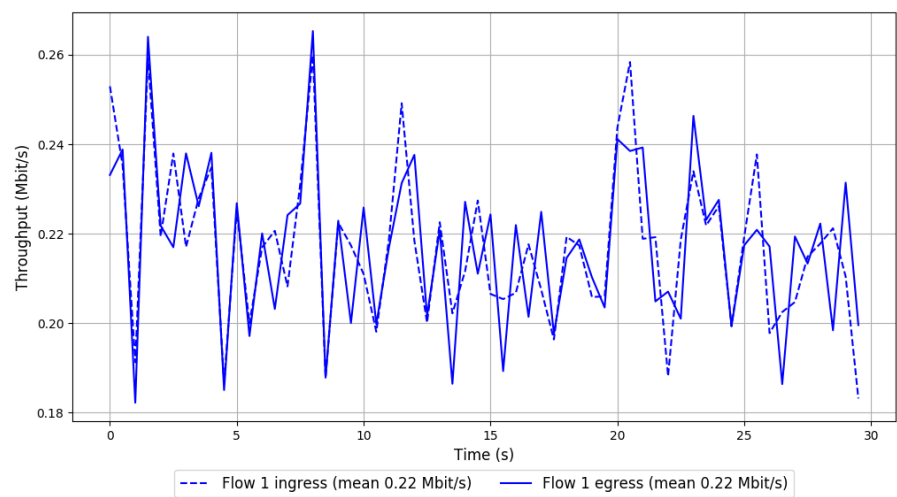
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.461 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link

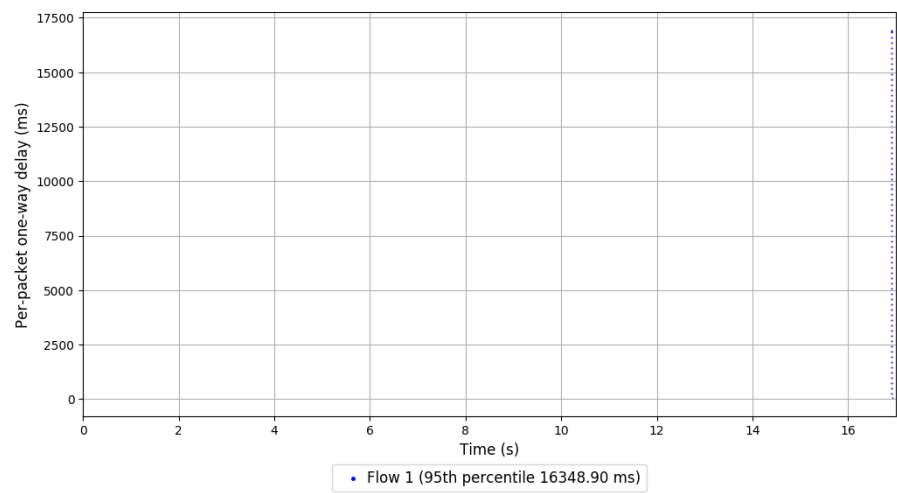
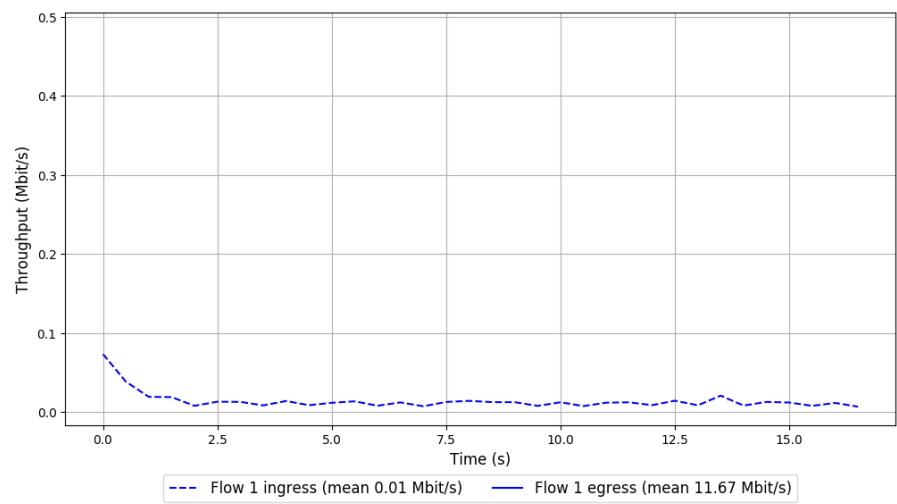


Run 9: Statistics of SReAM

Start at: 2017-11-16 04:20:11

End at: 2017-11-16 04:20:41

Run 9: Report of SReAM — Data Link

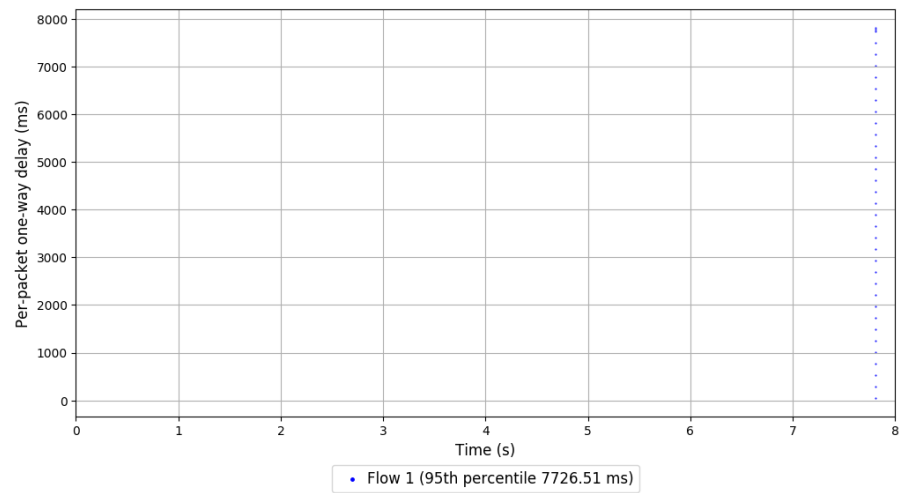
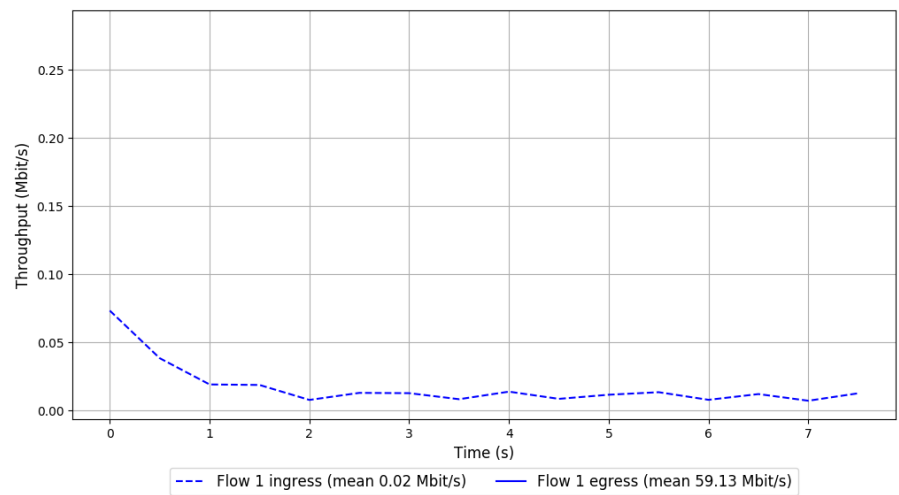


Run 10: Statistics of SCReAM

Start at: 2017-11-16 04:30:32

End at: 2017-11-16 04:31:02

Run 10: Report of SCSReAM — Data Link

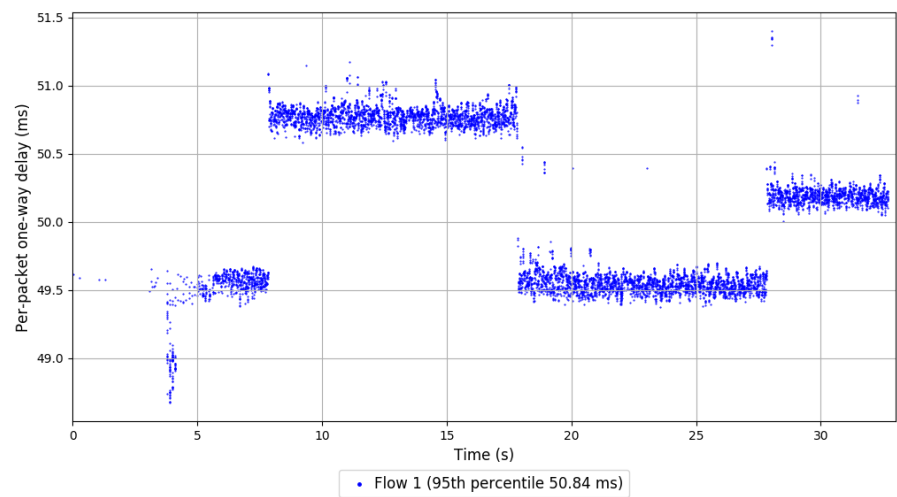
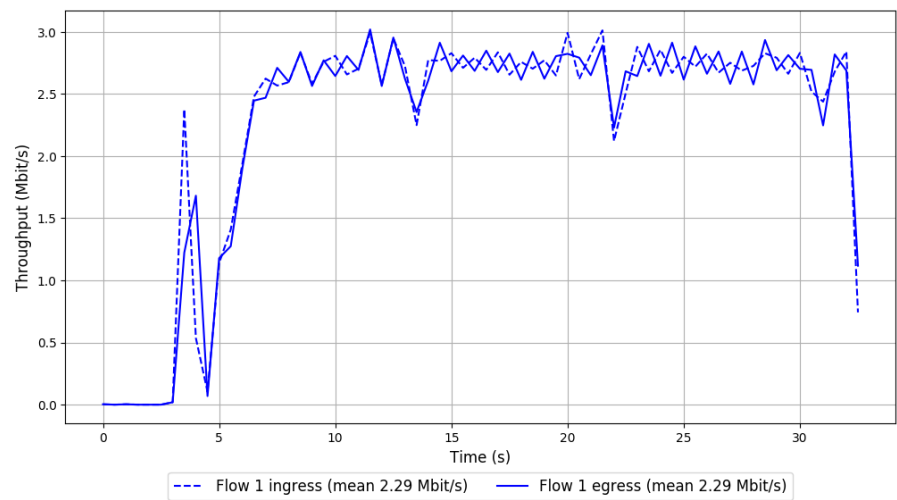


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-16 02:58:56
End at: 2017-11-16 02:59:26

# Below is generated by plot.py at 2017-11-16 05:51:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.845 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.845 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-16 03:09:09

End at: 2017-11-16 03:09:39

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.702 ms

Loss rate: 0.00%

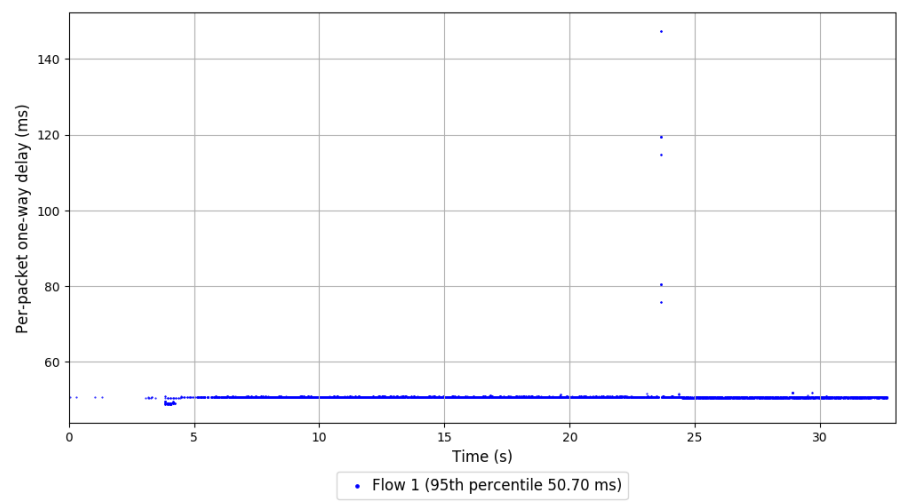
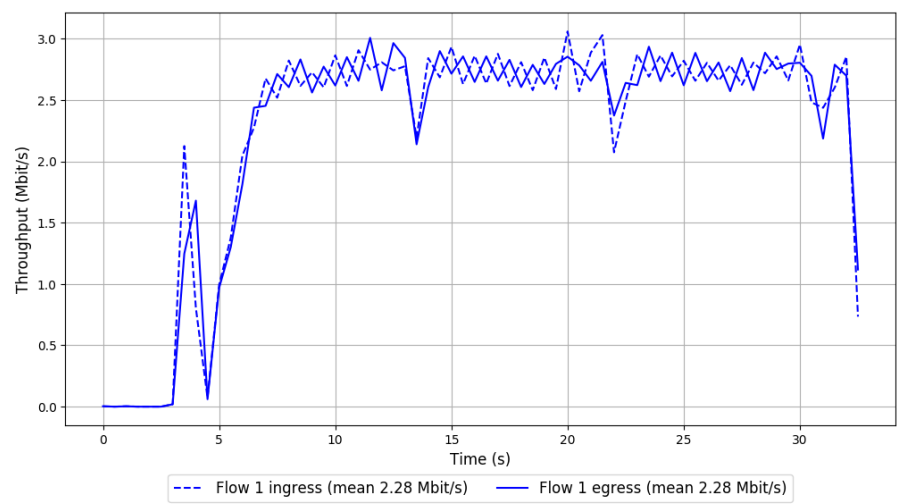
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.702 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-16 03:19:15

End at: 2017-11-16 03:19:45

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.285 ms

Loss rate: 0.00%

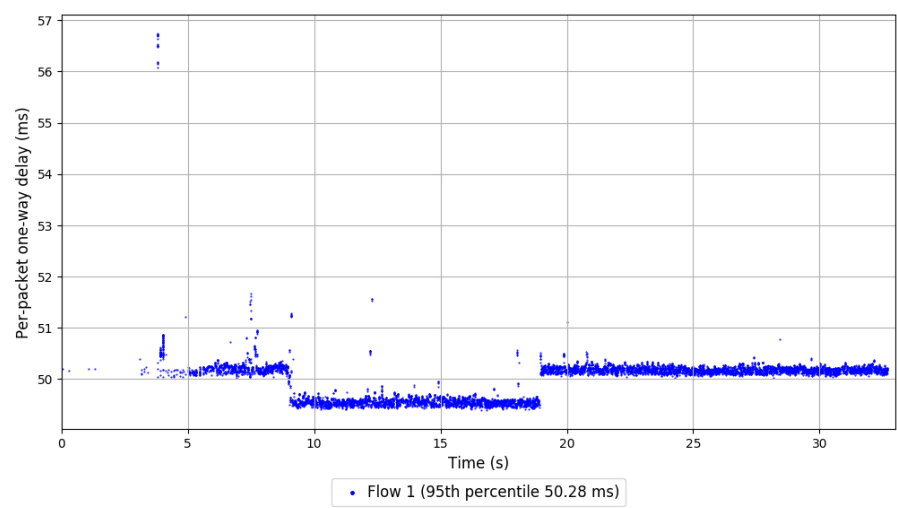
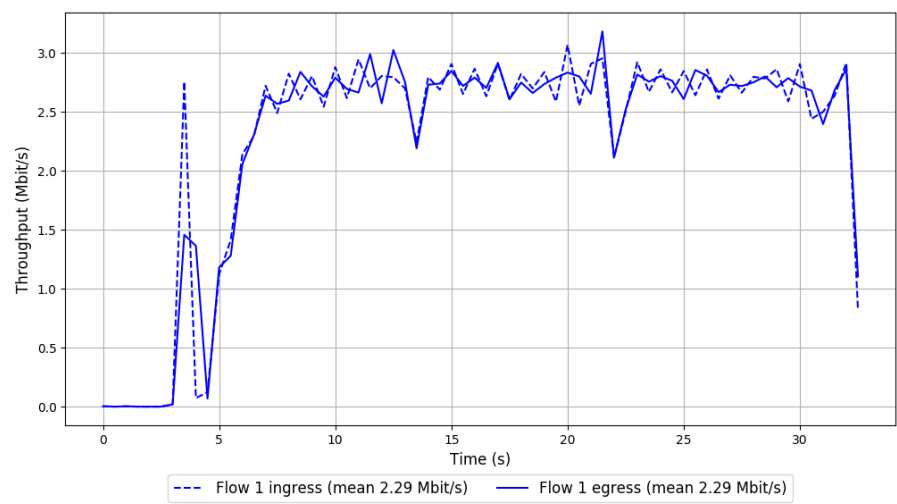
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.285 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-16 03:29:25

End at: 2017-11-16 03:29:55

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.790 ms

Loss rate: 0.00%

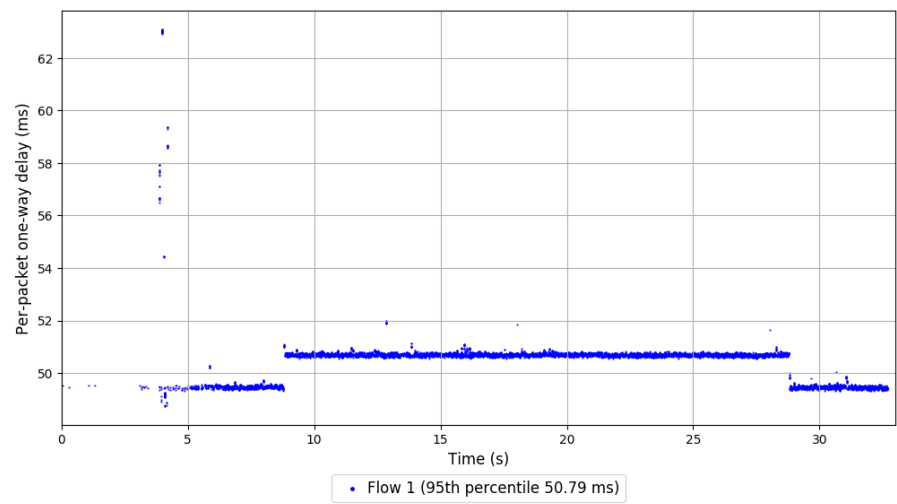
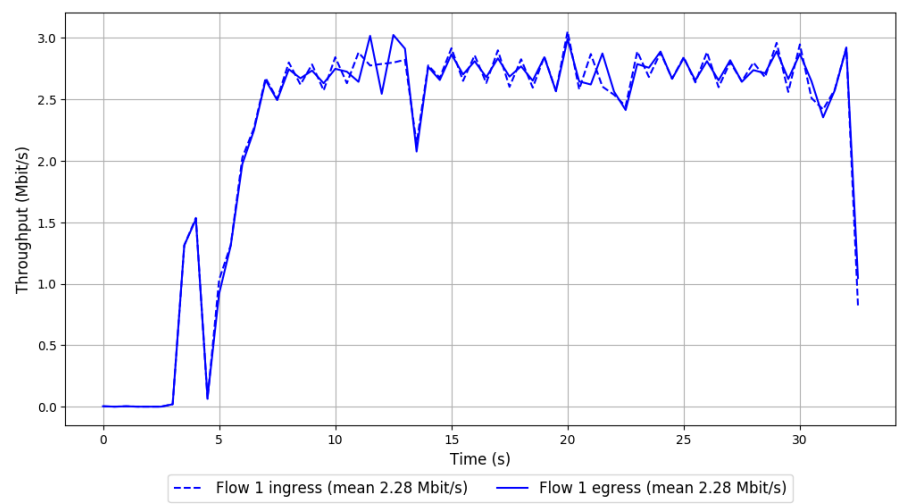
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.790 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-16 03:39:41

End at: 2017-11-16 03:40:11

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 56.426 ms

Loss rate: 0.00%

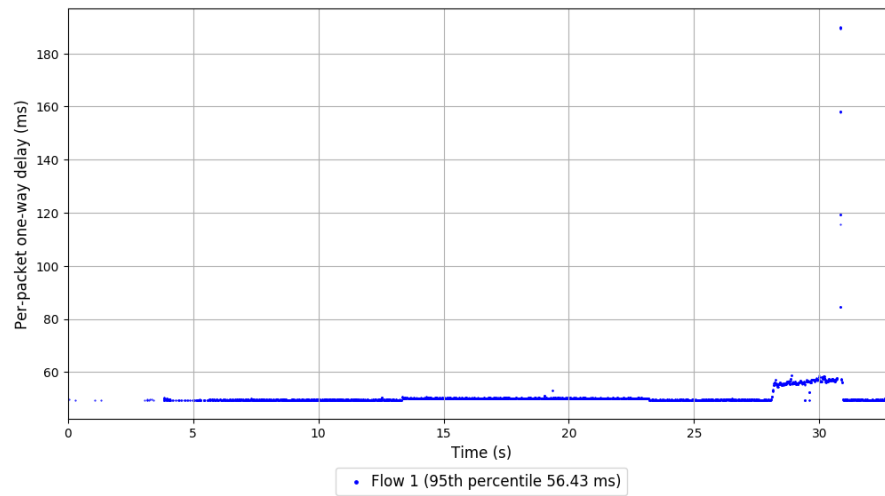
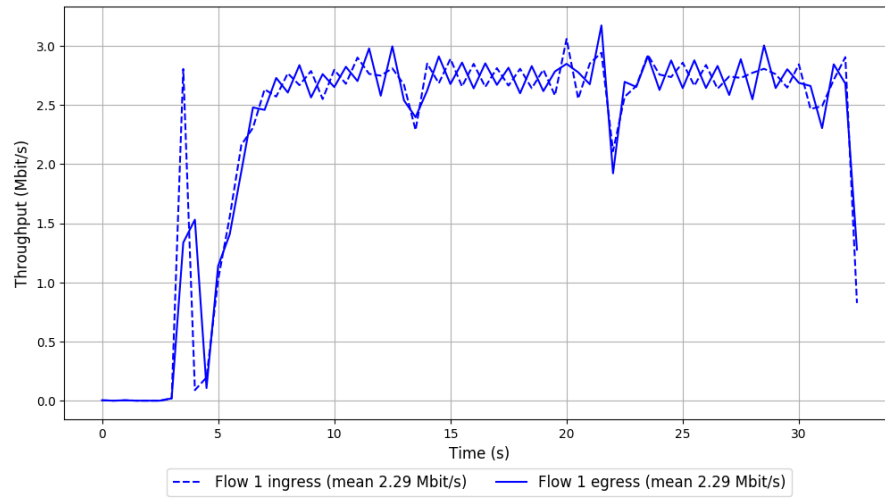
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 56.426 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-16 03:49:55

End at: 2017-11-16 03:50:25

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.855 ms

Loss rate: 0.00%

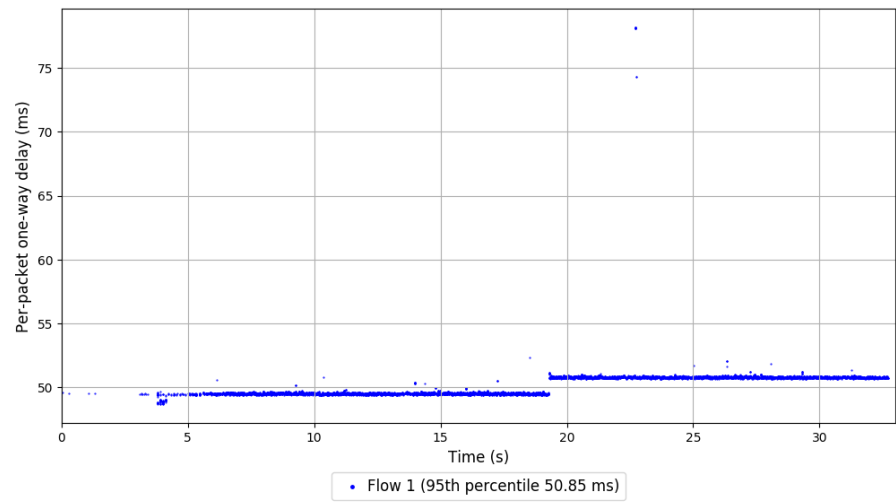
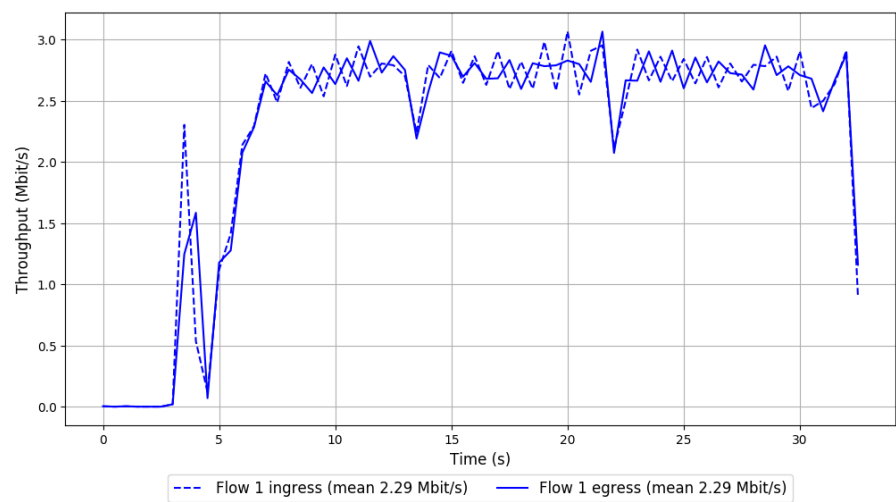
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.855 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-16 04:00:09

End at: 2017-11-16 04:00:39

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.831 ms

Loss rate: 0.00%

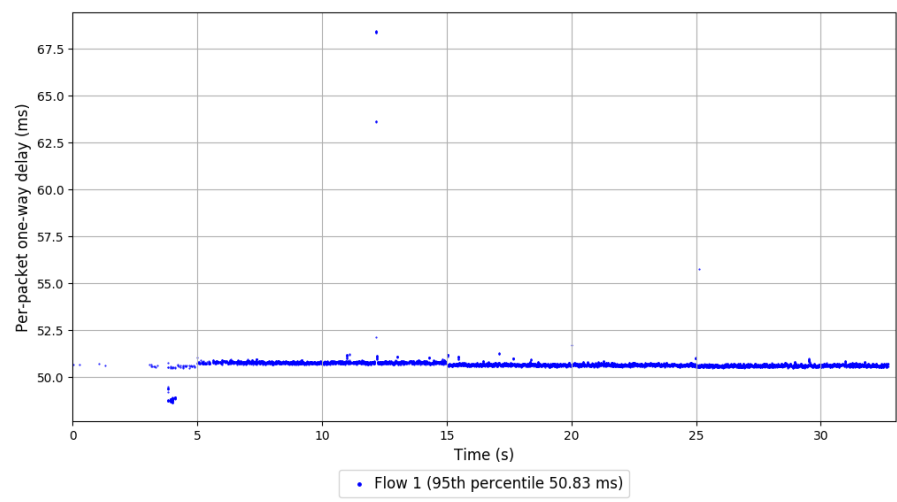
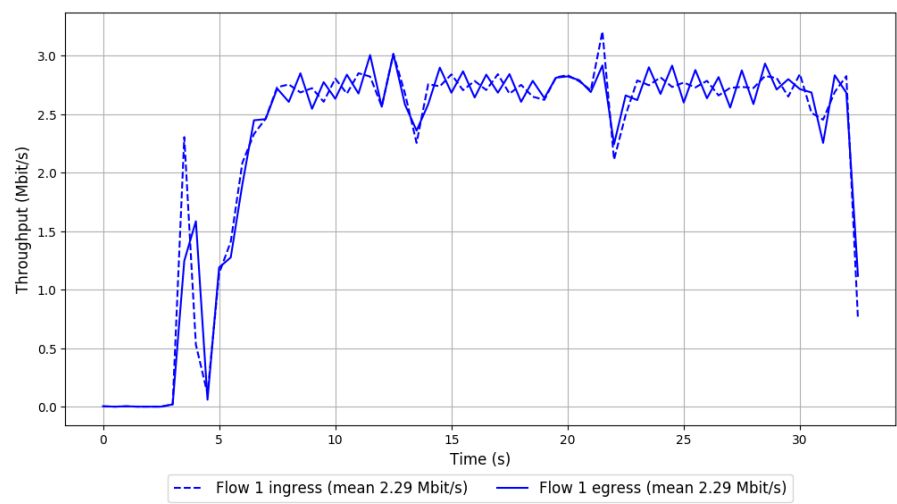
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.831 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-16 04:10:28

End at: 2017-11-16 04:10:58

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.530 ms

Loss rate: 0.00%

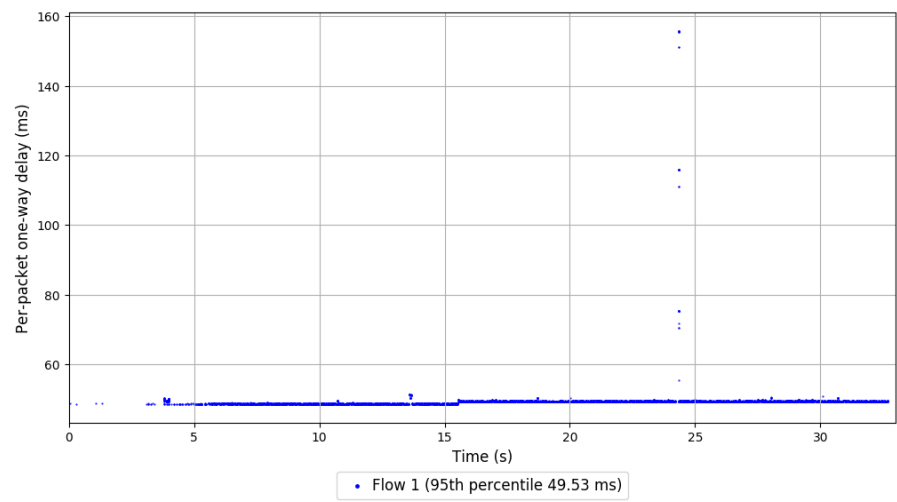
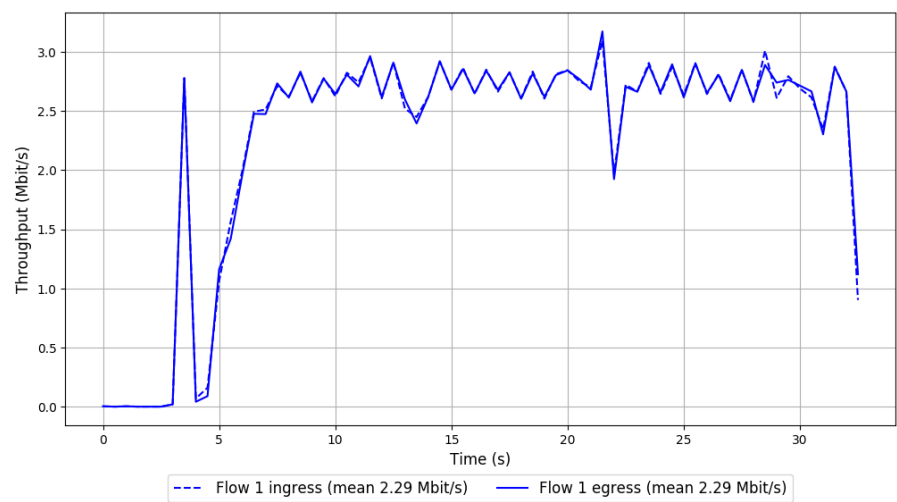
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.530 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-16 04:20:47

End at: 2017-11-16 04:21:17

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.567 ms

Loss rate: 0.00%

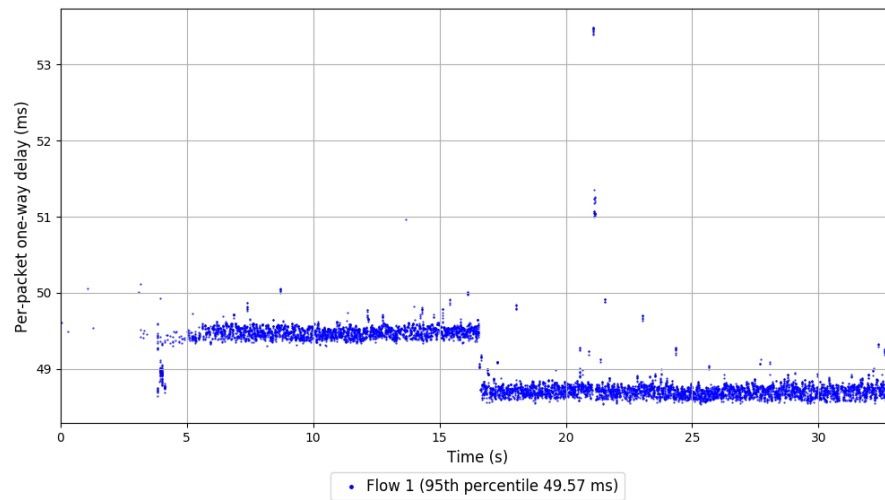
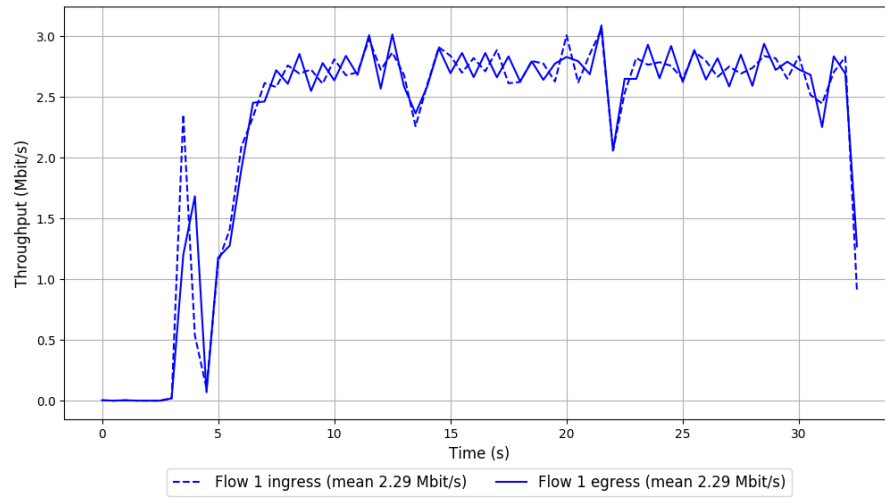
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.567 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-16 04:31:09

End at: 2017-11-16 04:31:39

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.595 ms

Loss rate: 0.00%

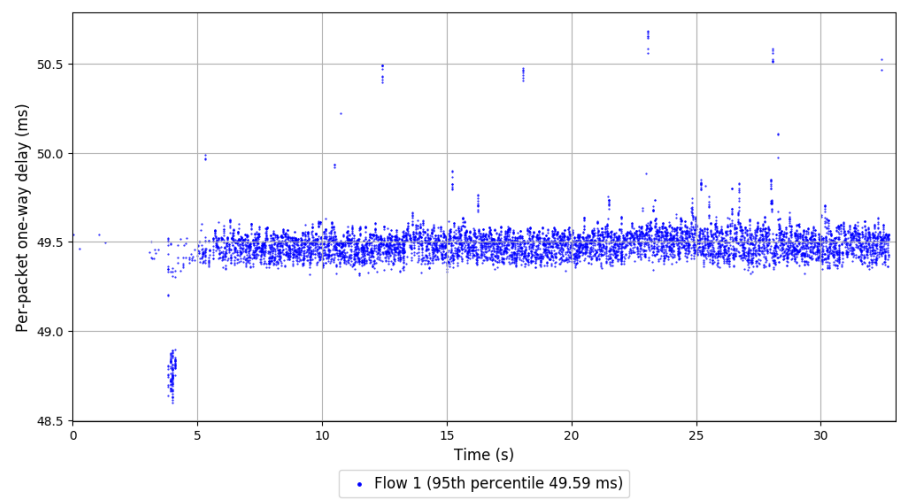
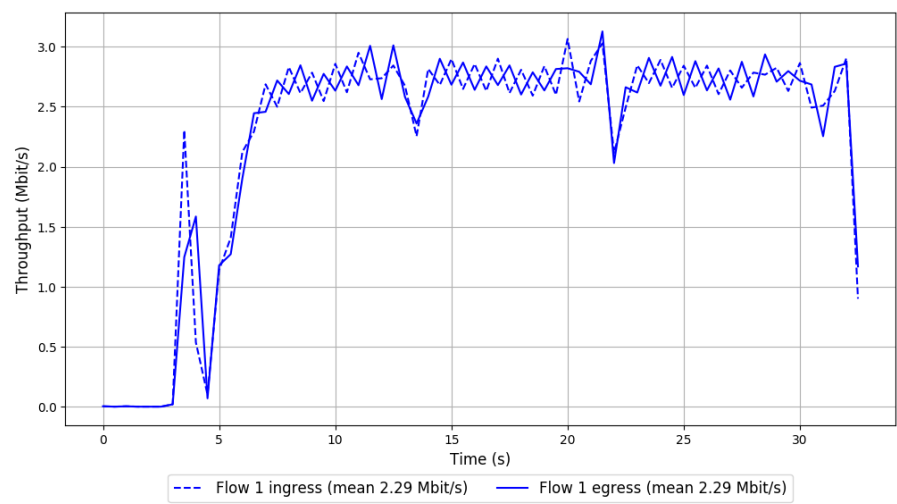
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.595 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

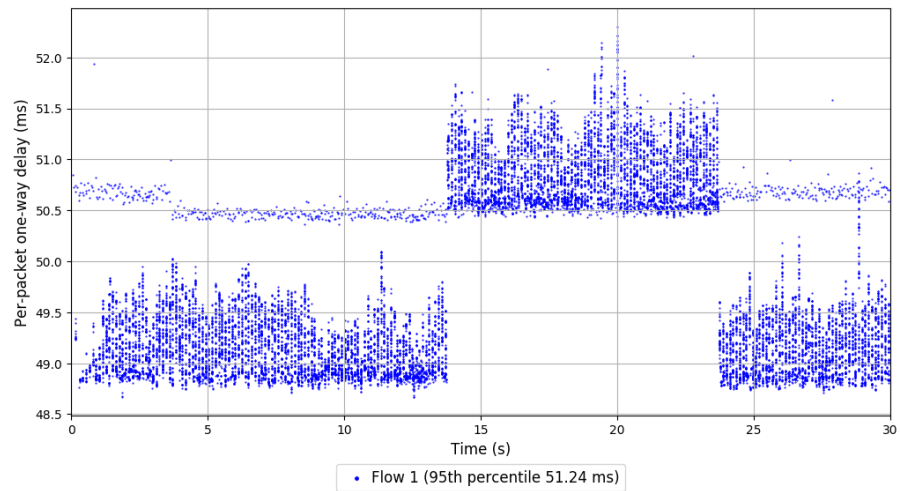
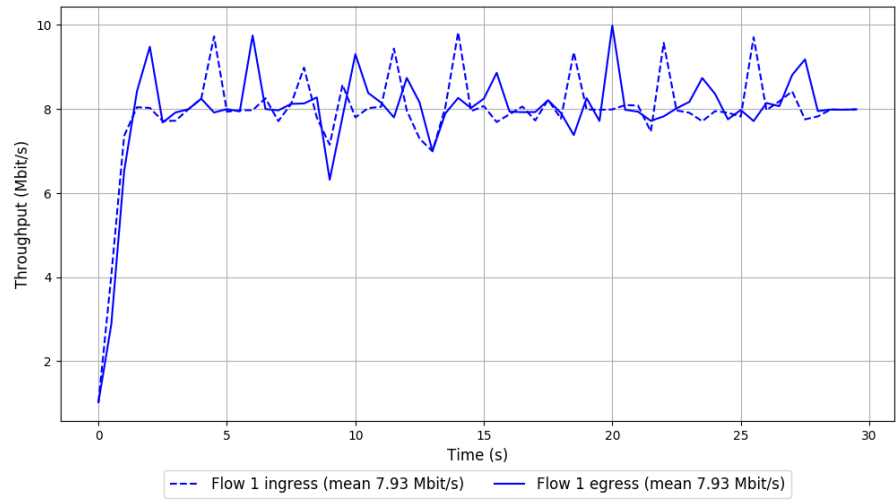


```
Run 1: Statistics of Sprout

Start at: 2017-11-16 03:02:27
End at: 2017-11-16 03:02:58

# Below is generated by plot.py at 2017-11-16 05:51:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.93 Mbit/s
95th percentile per-packet one-way delay: 51.236 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.93 Mbit/s
95th percentile per-packet one-way delay: 51.236 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-16 03:12:41

End at: 2017-11-16 03:13:11

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.98 Mbit/s

95th percentile per-packet one-way delay: 49.679 ms

Loss rate: 0.05%

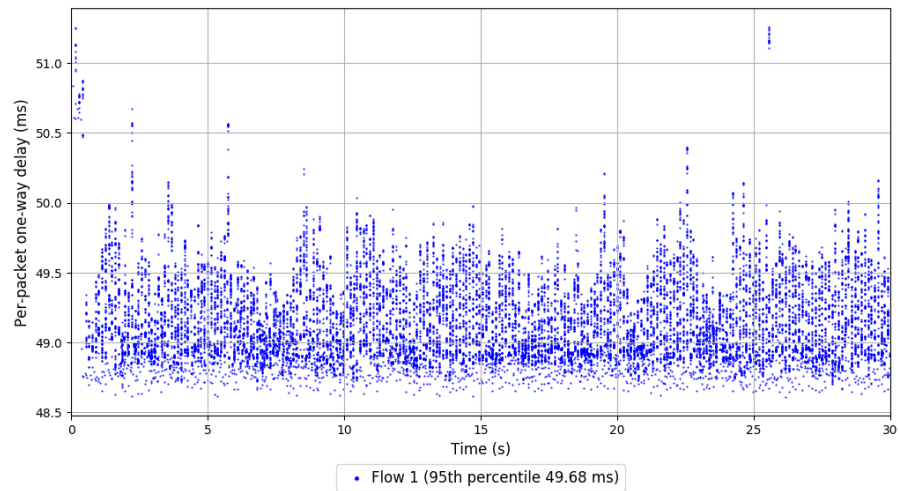
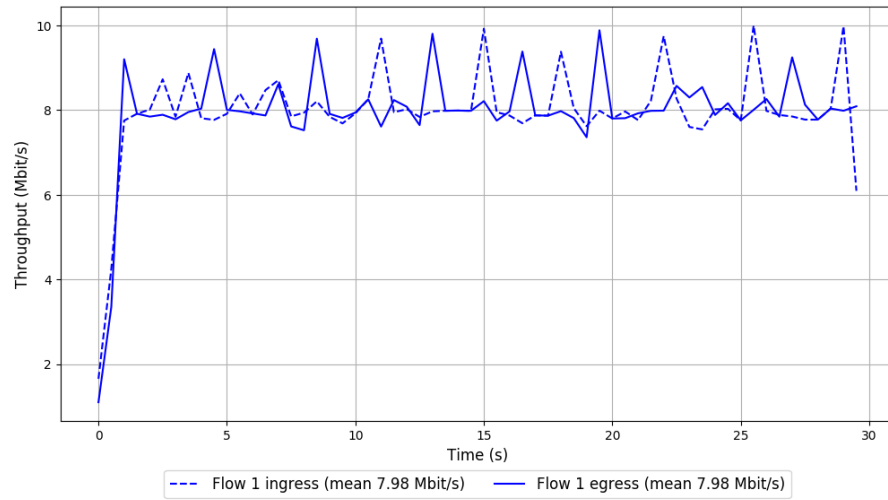
-- Flow 1:

Average throughput: 7.98 Mbit/s

95th percentile per-packet one-way delay: 49.679 ms

Loss rate: 0.05%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-16 03:22:46

End at: 2017-11-16 03:23:16

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 49.888 ms

Loss rate: 0.42%

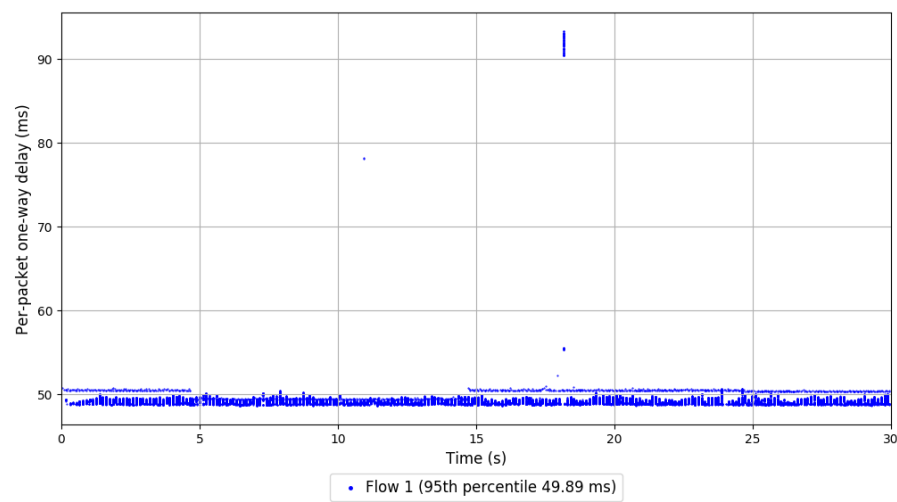
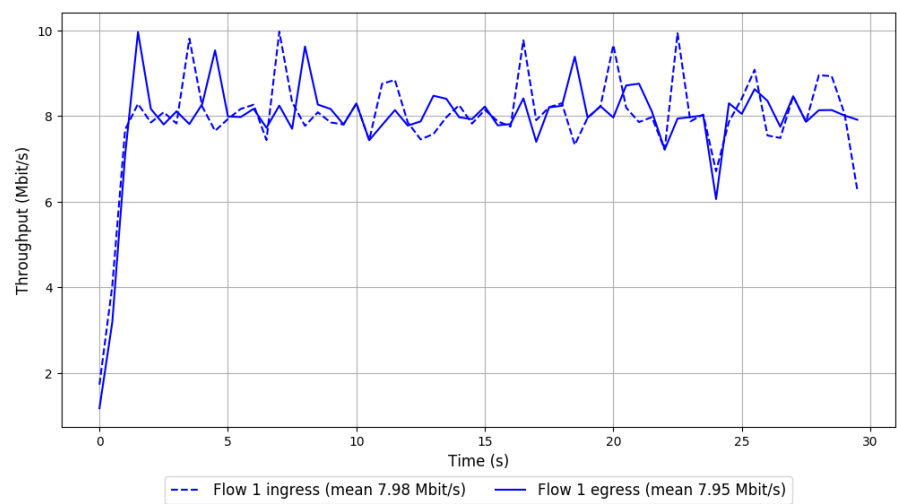
-- Flow 1:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 49.888 ms

Loss rate: 0.42%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-16 03:32:54

End at: 2017-11-16 03:33:24

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 50.403 ms

Loss rate: 0.12%

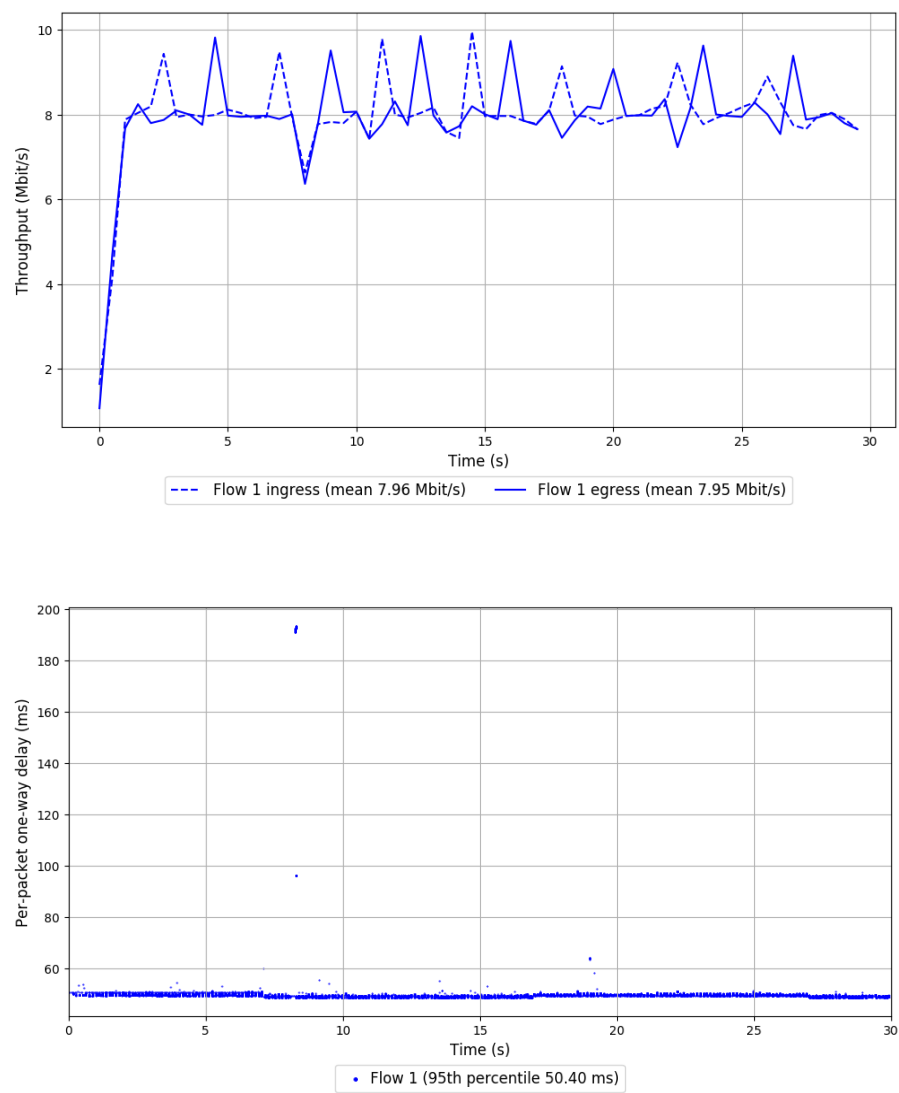
-- Flow 1:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 50.403 ms

Loss rate: 0.12%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-16 03:43:11

End at: 2017-11-16 03:43:41

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 50.479 ms

Loss rate: 0.03%

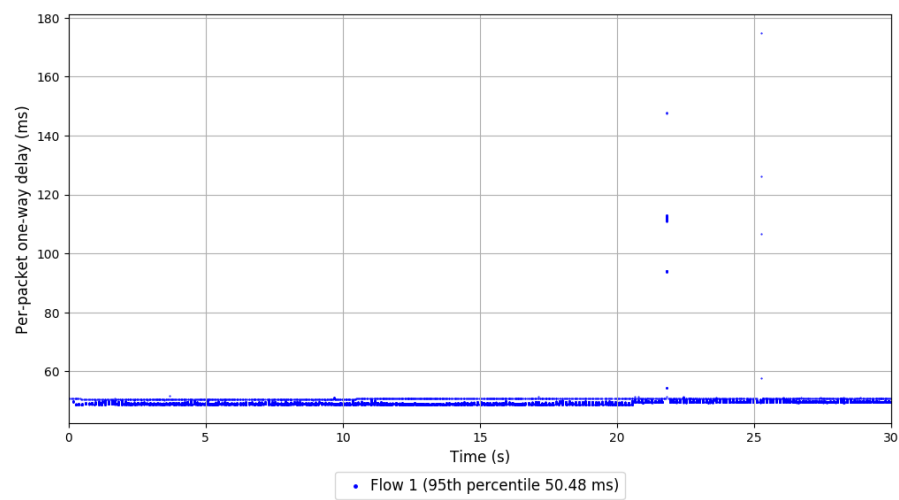
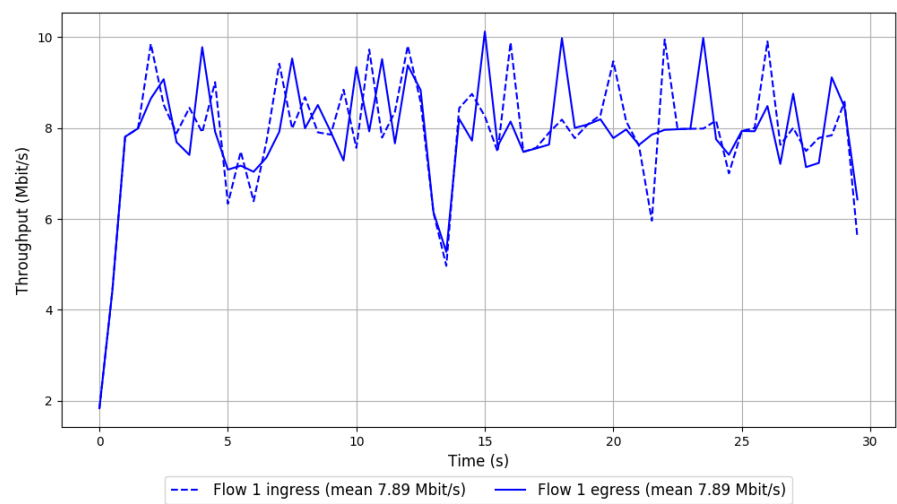
-- Flow 1:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 50.479 ms

Loss rate: 0.03%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-16 03:53:26

End at: 2017-11-16 03:53:56

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 49.751 ms

Loss rate: 0.06%

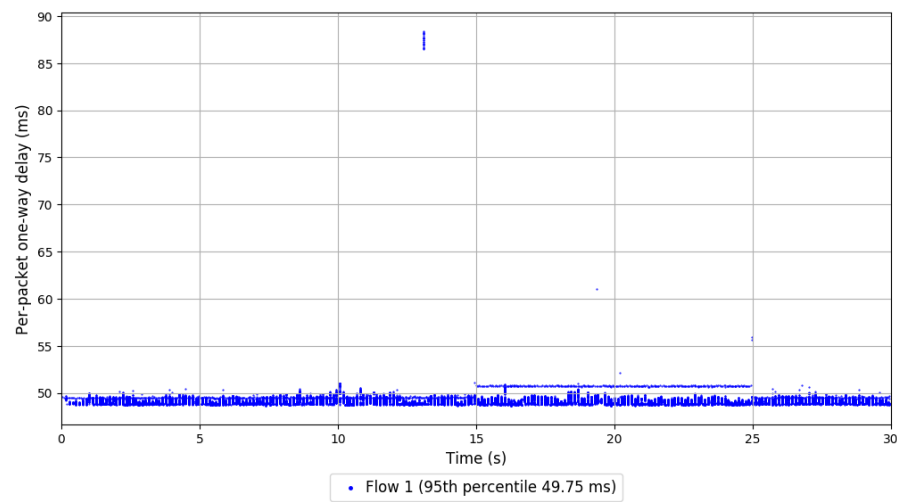
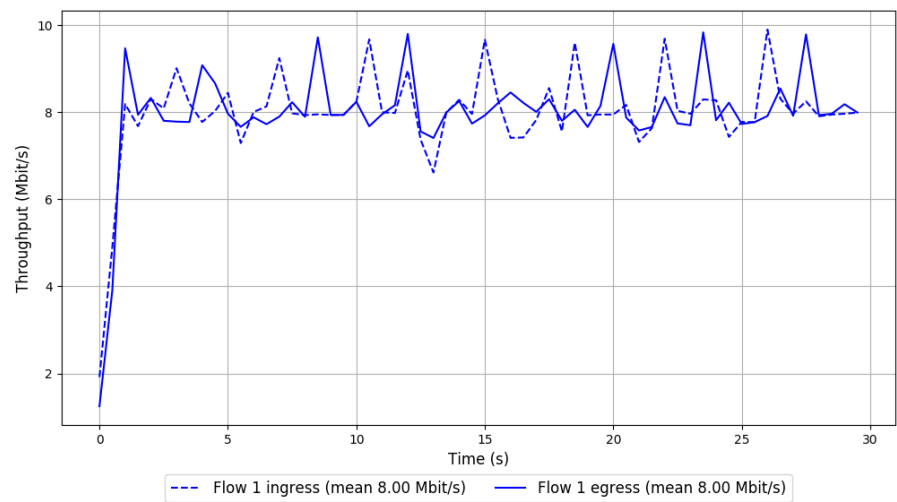
-- Flow 1:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 49.751 ms

Loss rate: 0.06%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-16 04:03:36

End at: 2017-11-16 04:04:06

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.10 Mbit/s

95th percentile per-packet one-way delay: 49.488 ms

Loss rate: 0.08%

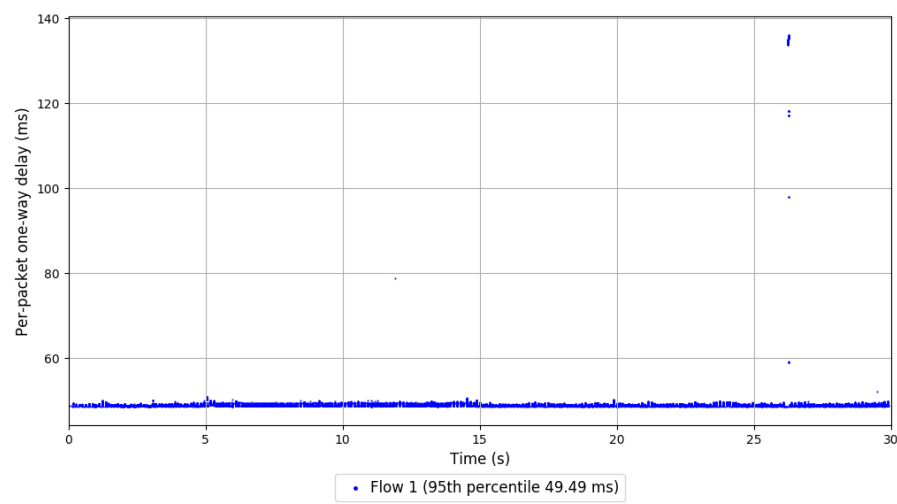
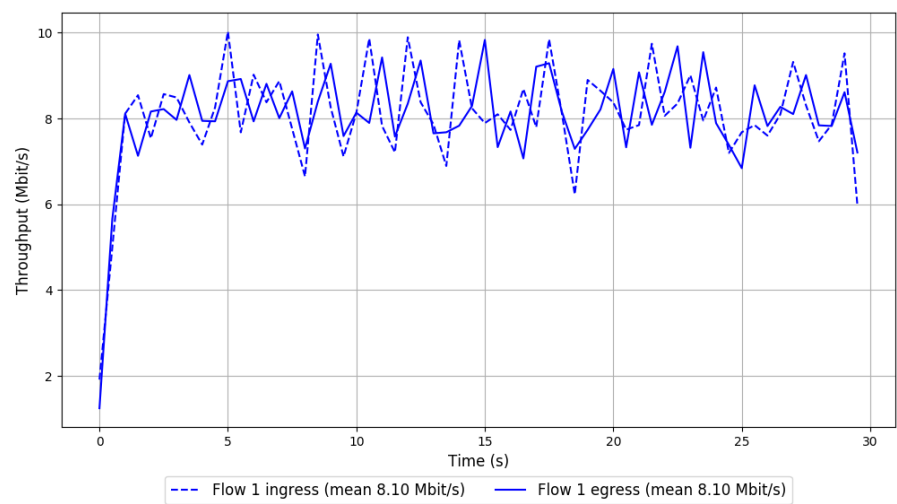
-- Flow 1:

Average throughput: 8.10 Mbit/s

95th percentile per-packet one-way delay: 49.488 ms

Loss rate: 0.08%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-16 04:13:59

End at: 2017-11-16 04:14:29

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 50.074 ms

Loss rate: 0.07%

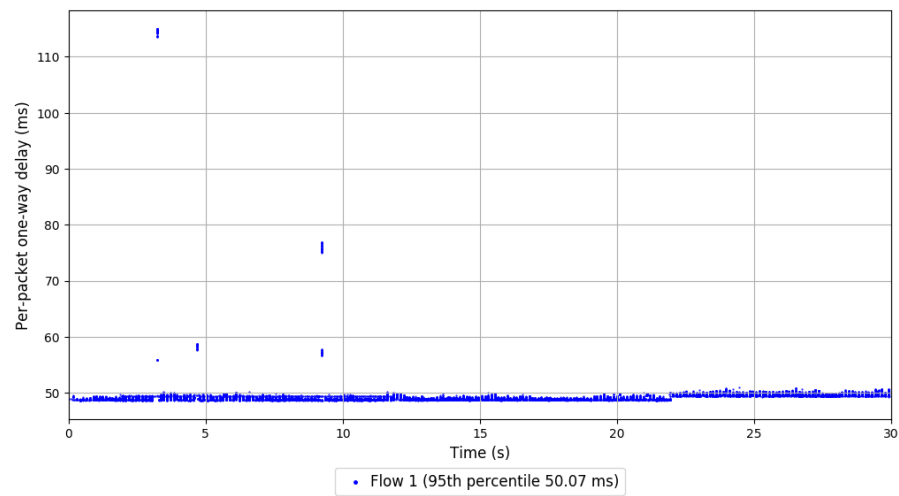
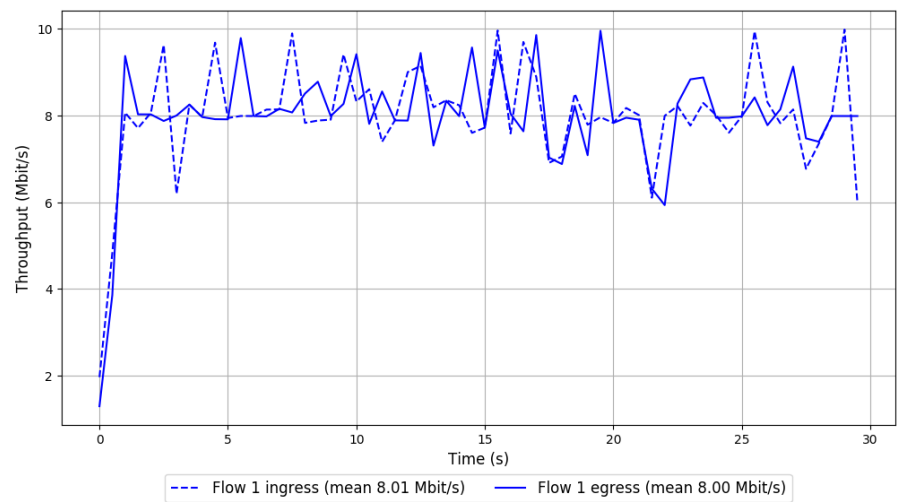
-- Flow 1:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 50.074 ms

Loss rate: 0.07%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-16 04:24:17

End at: 2017-11-16 04:24:47

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.20 Mbit/s

95th percentile per-packet one-way delay: 49.486 ms

Loss rate: 0.04%

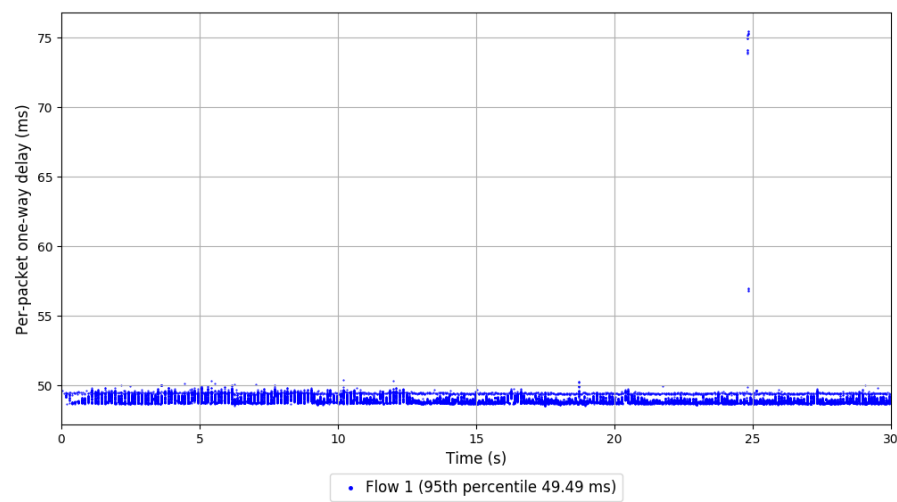
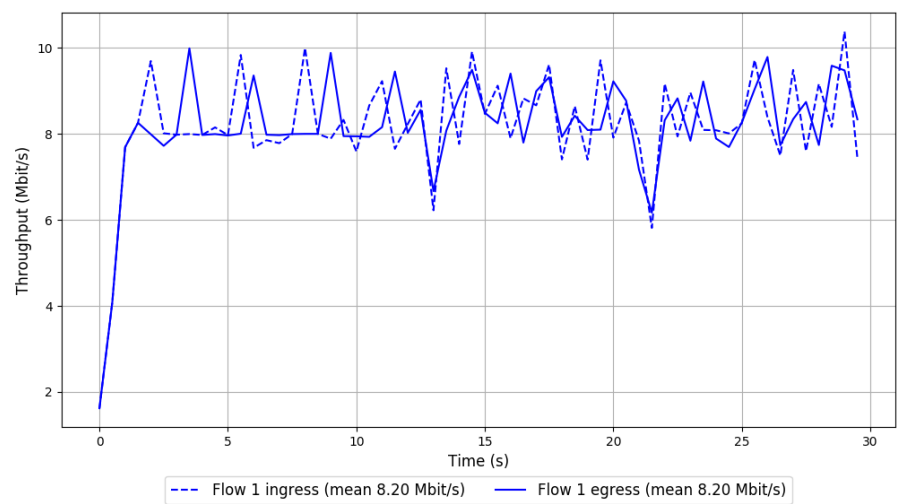
-- Flow 1:

Average throughput: 8.20 Mbit/s

95th percentile per-packet one-way delay: 49.486 ms

Loss rate: 0.04%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-16 04:34:40

End at: 2017-11-16 04:35:10

Below is generated by plot.py at 2017-11-16 05:51:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 49.555 ms

Loss rate: 0.40%

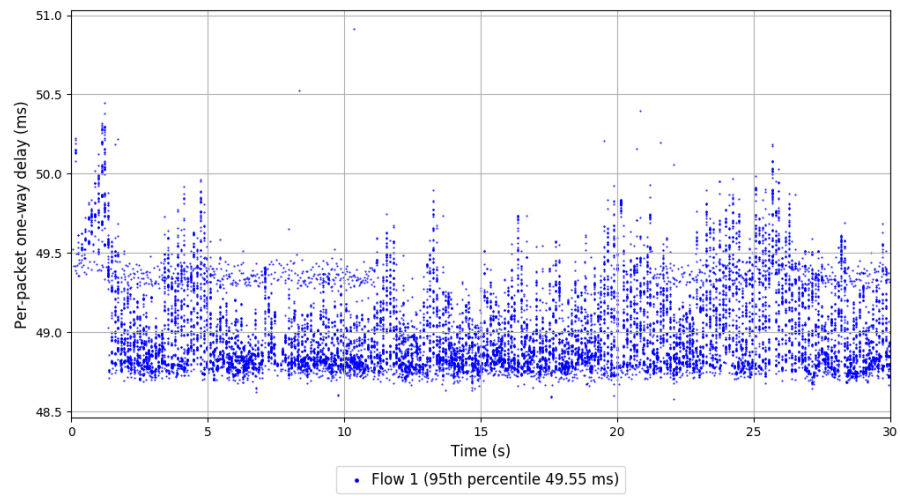
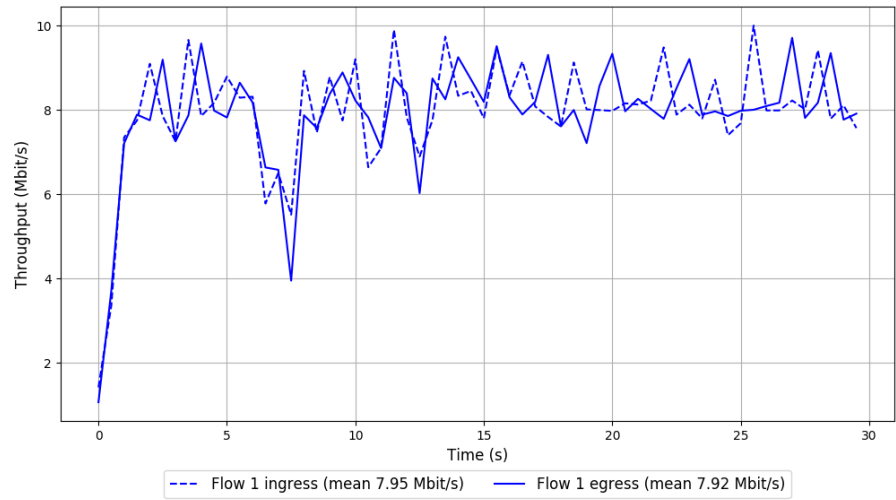
-- Flow 1:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 49.555 ms

Loss rate: 0.40%

Run 10: Report of Sprout — Data Link

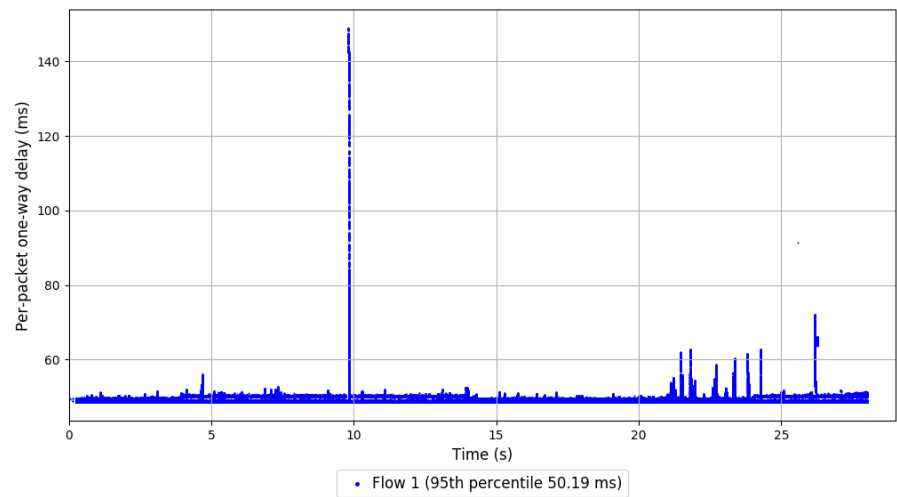
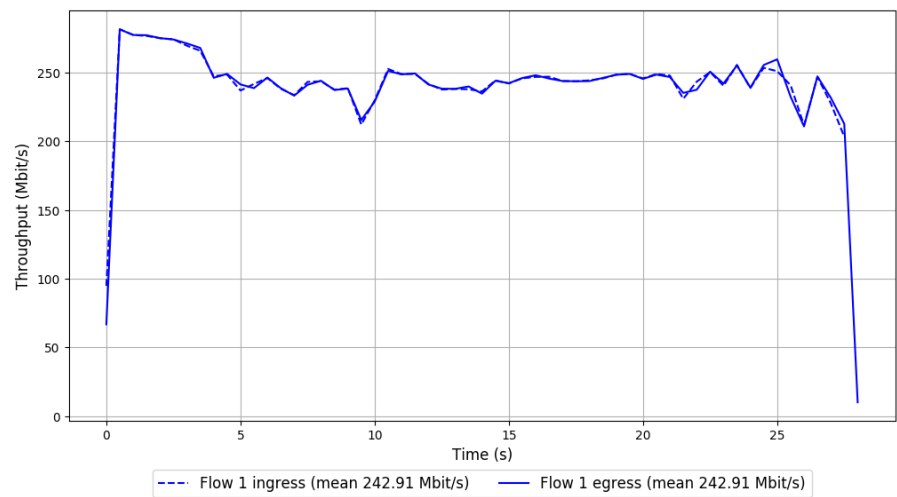


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-16 02:54:45
End at: 2017-11-16 02:55:15

# Below is generated by plot.py at 2017-11-16 05:52:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 242.91 Mbit/s
95th percentile per-packet one-way delay: 50.186 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 242.91 Mbit/s
95th percentile per-packet one-way delay: 50.186 ms
Loss rate: 0.00%
```

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

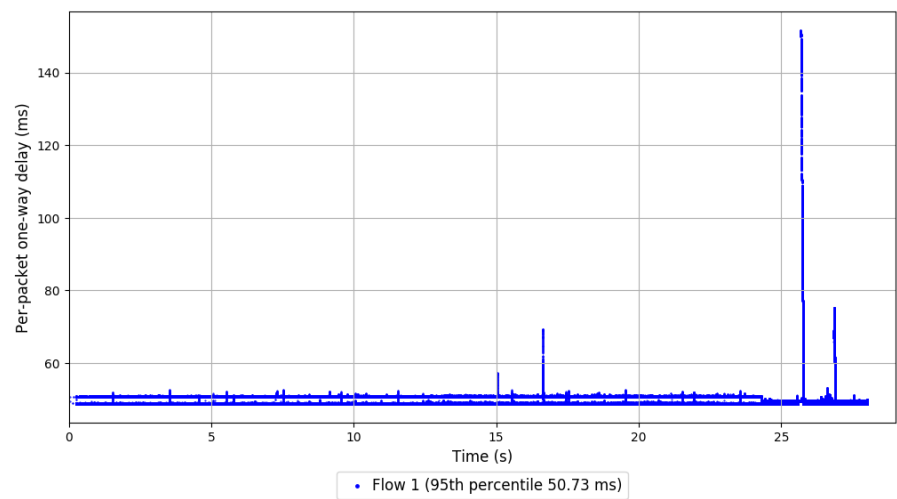
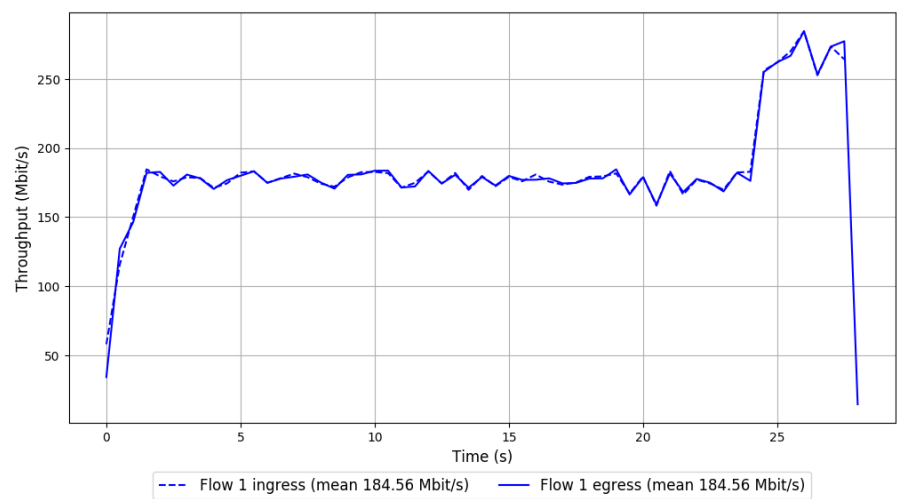


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-16 03:05:05
End at: 2017-11-16 03:05:35

# Below is generated by plot.py at 2017-11-16 05:52:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.56 Mbit/s
95th percentile per-packet one-way delay: 50.731 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.56 Mbit/s
95th percentile per-packet one-way delay: 50.731 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-16 03:15:21

End at: 2017-11-16 03:15:51

Below is generated by plot.py at 2017-11-16 05:52:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.95 Mbit/s

95th percentile per-packet one-way delay: 50.736 ms

Loss rate: 0.00%

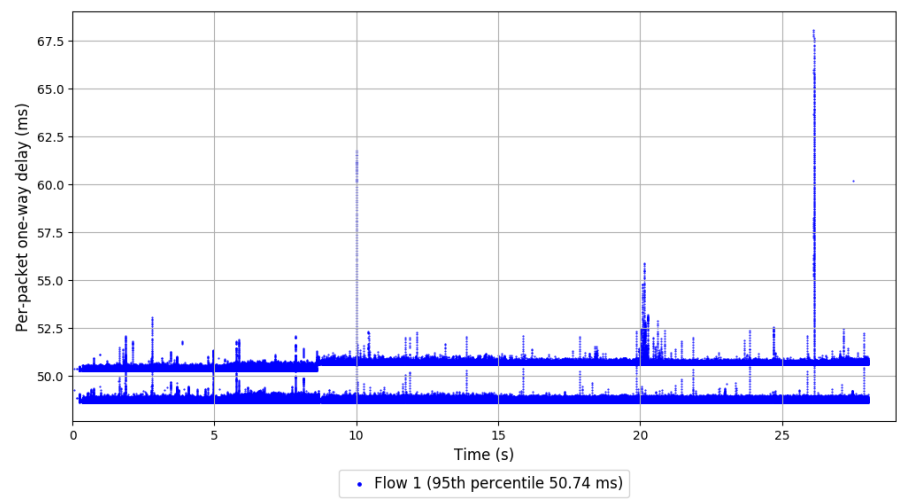
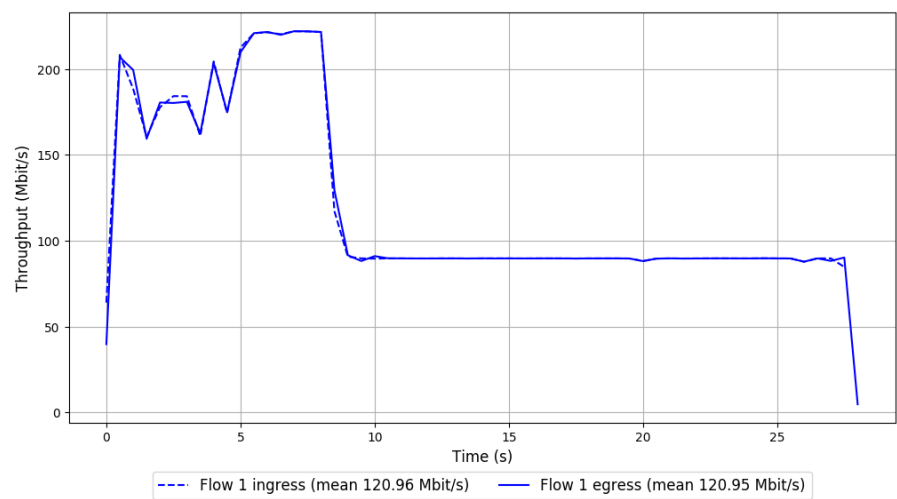
-- Flow 1:

Average throughput: 120.95 Mbit/s

95th percentile per-packet one-way delay: 50.736 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-11-16 03:25:26

End at: 2017-11-16 03:25:56

Below is generated by plot.py at 2017-11-16 05:52:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 144.52 Mbit/s

95th percentile per-packet one-way delay: 50.850 ms

Loss rate: 0.00%

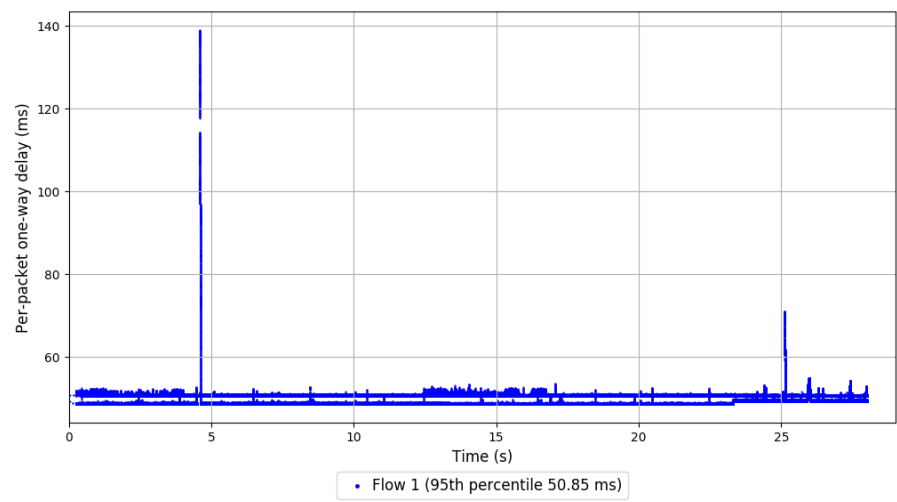
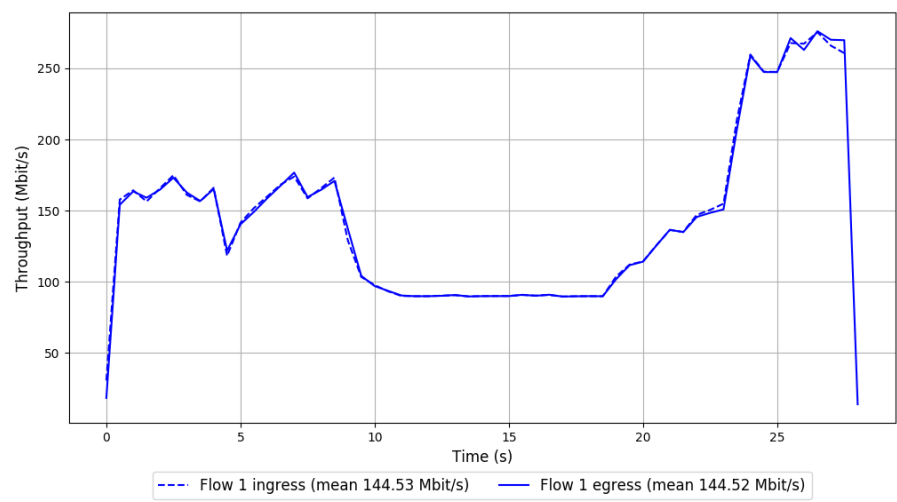
-- Flow 1:

Average throughput: 144.52 Mbit/s

95th percentile per-packet one-way delay: 50.850 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-16 03:35:36

End at: 2017-11-16 03:36:06

Below is generated by plot.py at 2017-11-16 05:52:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.21 Mbit/s

95th percentile per-packet one-way delay: 50.677 ms

Loss rate: 0.00%

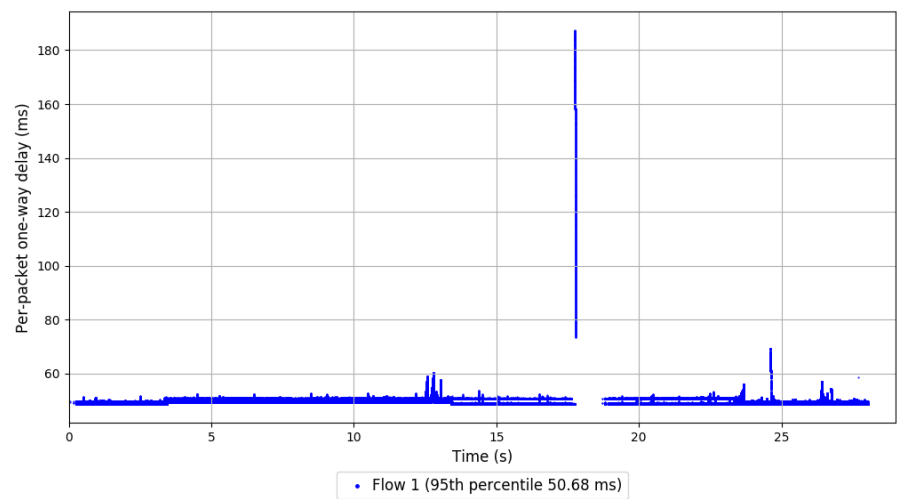
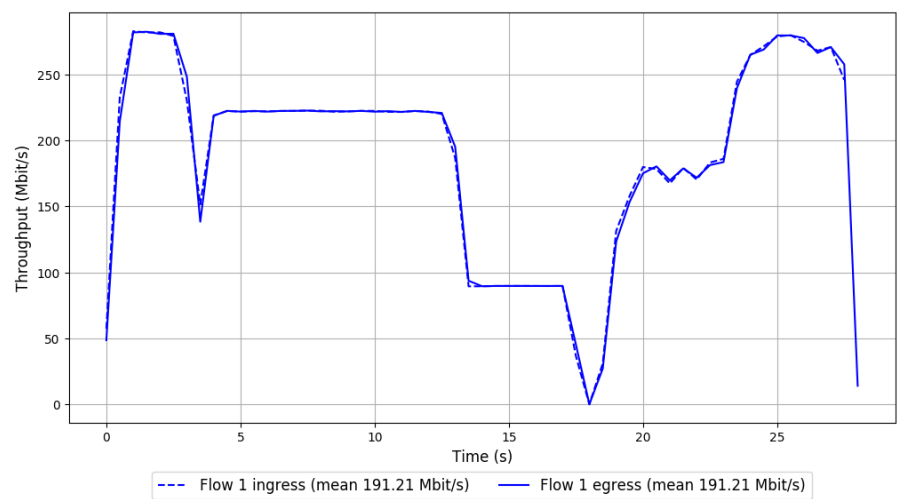
-- Flow 1:

Average throughput: 191.21 Mbit/s

95th percentile per-packet one-way delay: 50.677 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-16 03:45:50

End at: 2017-11-16 03:46:20

Below is generated by plot.py at 2017-11-16 05:52:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.46 Mbit/s

95th percentile per-packet one-way delay: 50.641 ms

Loss rate: 0.00%

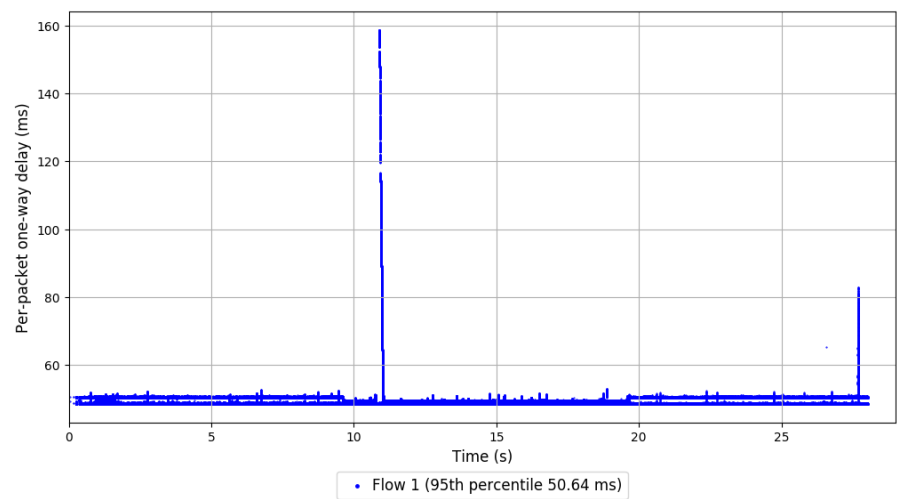
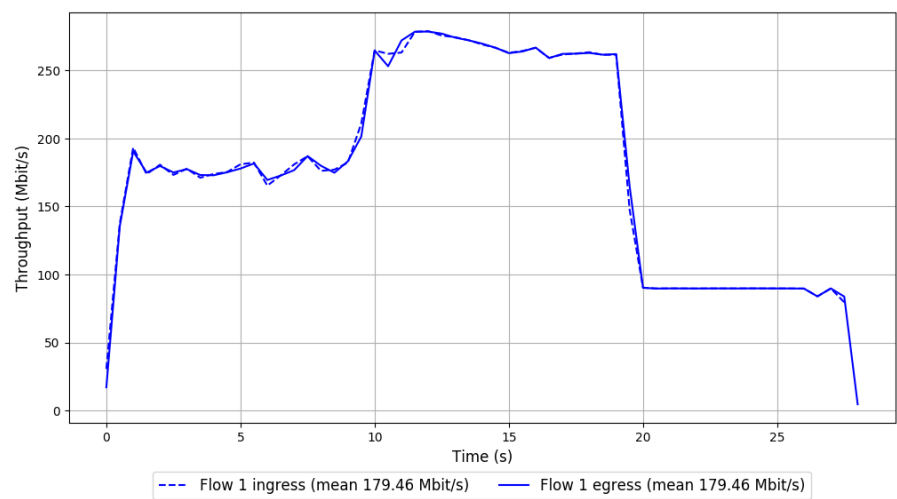
-- Flow 1:

Average throughput: 179.46 Mbit/s

95th percentile per-packet one-way delay: 50.641 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-16 03:56:02

End at: 2017-11-16 03:56:32

Below is generated by plot.py at 2017-11-16 05:55:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 208.53 Mbit/s

95th percentile per-packet one-way delay: 50.553 ms

Loss rate: 0.00%

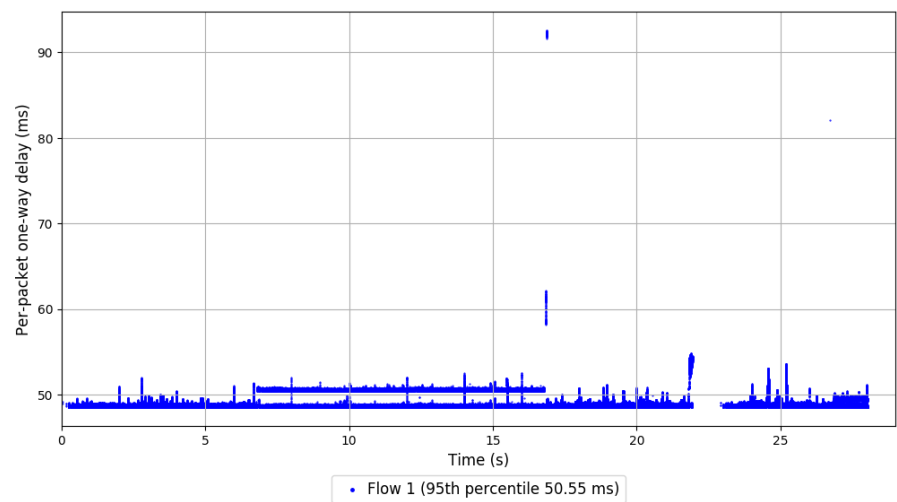
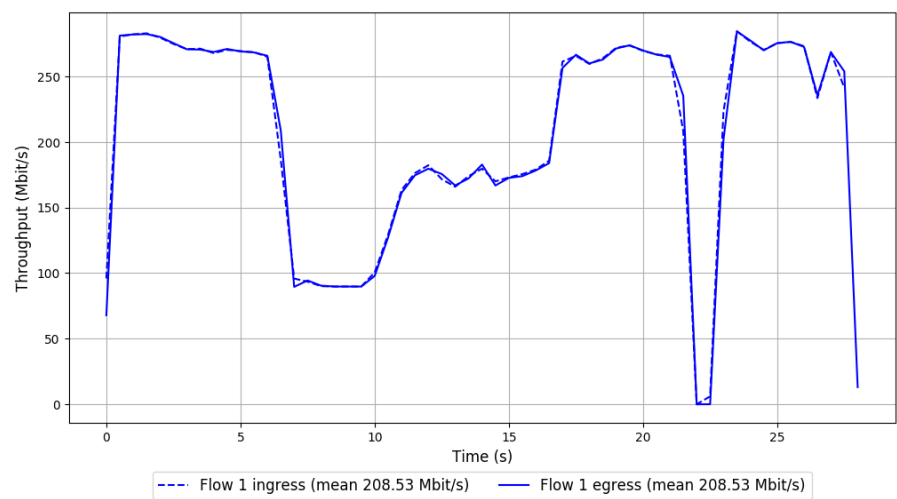
-- Flow 1:

Average throughput: 208.53 Mbit/s

95th percentile per-packet one-way delay: 50.553 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-16 04:06:16

End at: 2017-11-16 04:06:46

Below is generated by plot.py at 2017-11-16 05:57:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 252.57 Mbit/s

95th percentile per-packet one-way delay: 49.391 ms

Loss rate: 0.00%

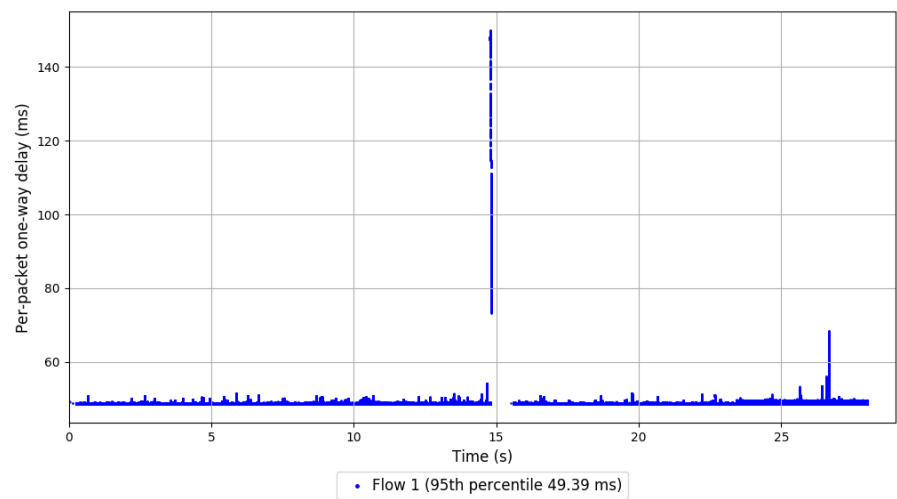
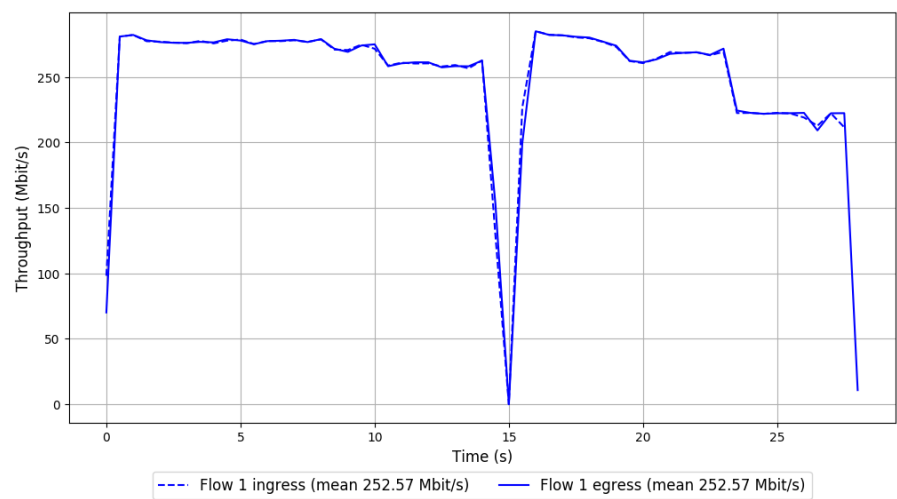
-- Flow 1:

Average throughput: 252.57 Mbit/s

95th percentile per-packet one-way delay: 49.391 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-16 04:16:38

End at: 2017-11-16 04:17:08

Below is generated by plot.py at 2017-11-16 05:57:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 245.98 Mbit/s

95th percentile per-packet one-way delay: 49.413 ms

Loss rate: 0.00%

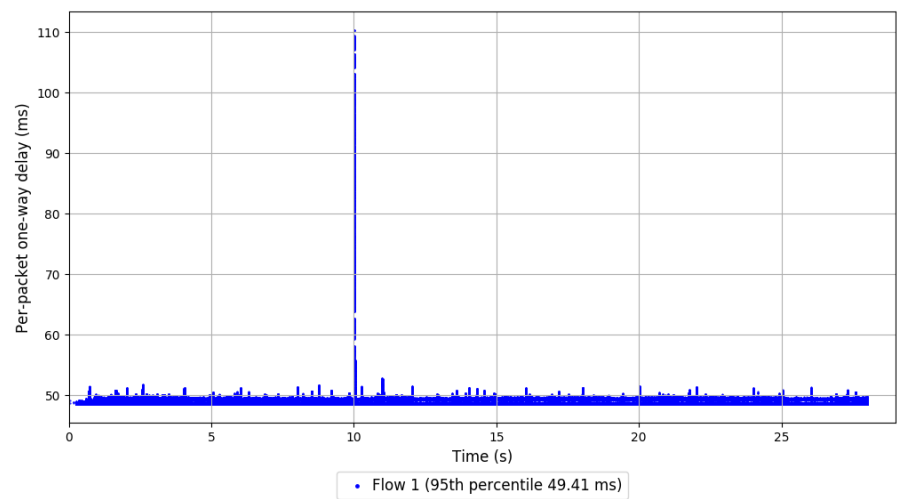
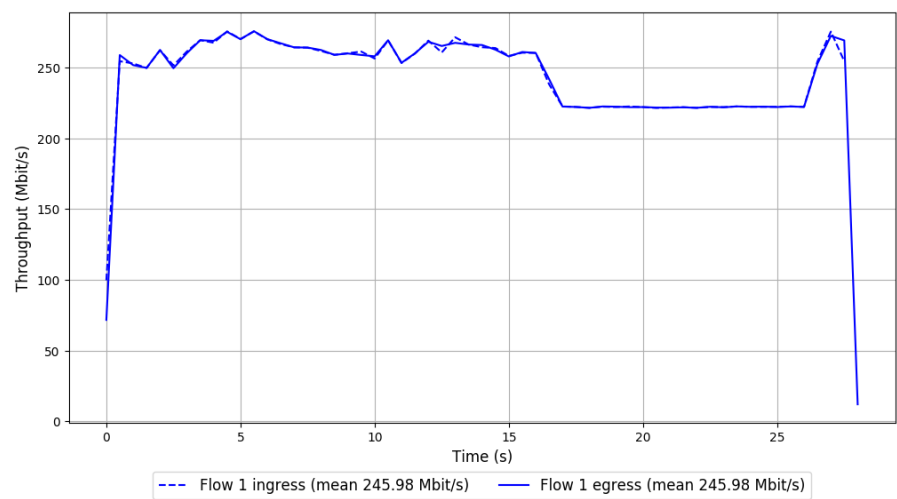
-- Flow 1:

Average throughput: 245.98 Mbit/s

95th percentile per-packet one-way delay: 49.413 ms

Loss rate: 0.00%

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

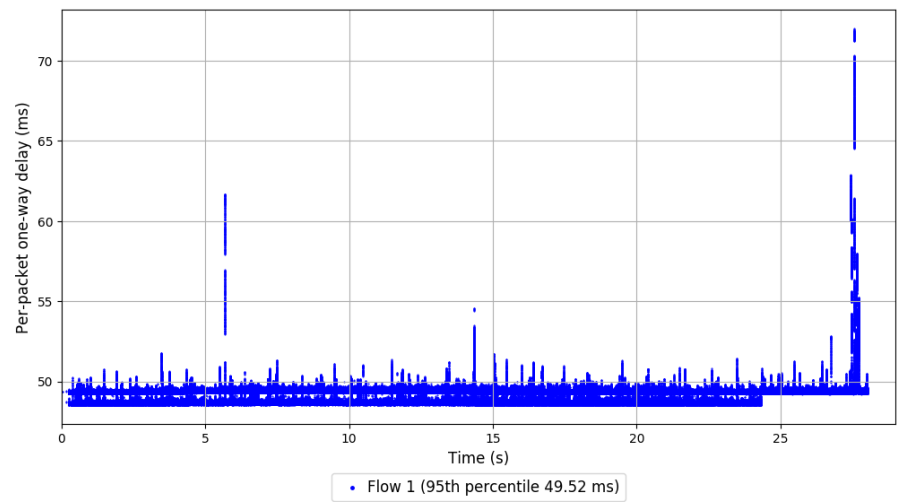
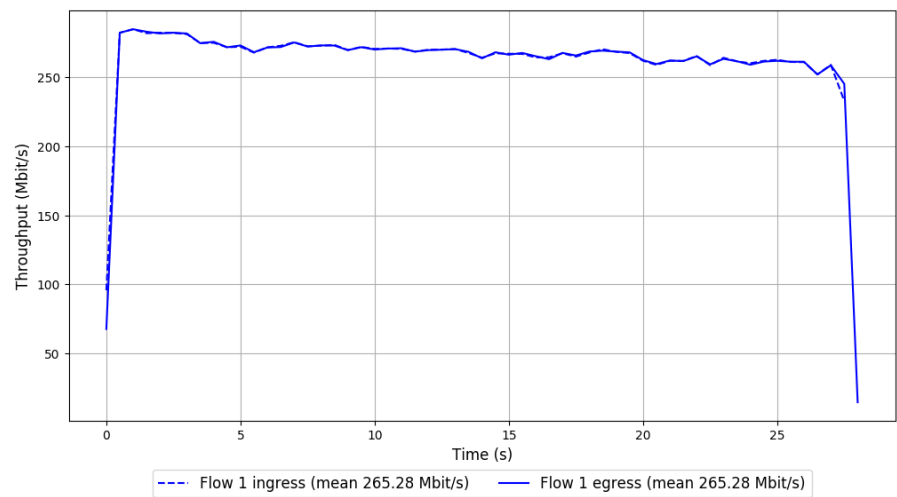


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-16 04:26:55
End at: 2017-11-16 04:27:25

# Below is generated by plot.py at 2017-11-16 05:58:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 265.28 Mbit/s
95th percentile per-packet one-way delay: 49.524 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 265.28 Mbit/s
95th percentile per-packet one-way delay: 49.524 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-16 03:03:05

End at: 2017-11-16 03:03:35

Below is generated by plot.py at 2017-11-16 05:58:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.29 Mbit/s

95th percentile per-packet one-way delay: 50.930 ms

Loss rate: 0.22%

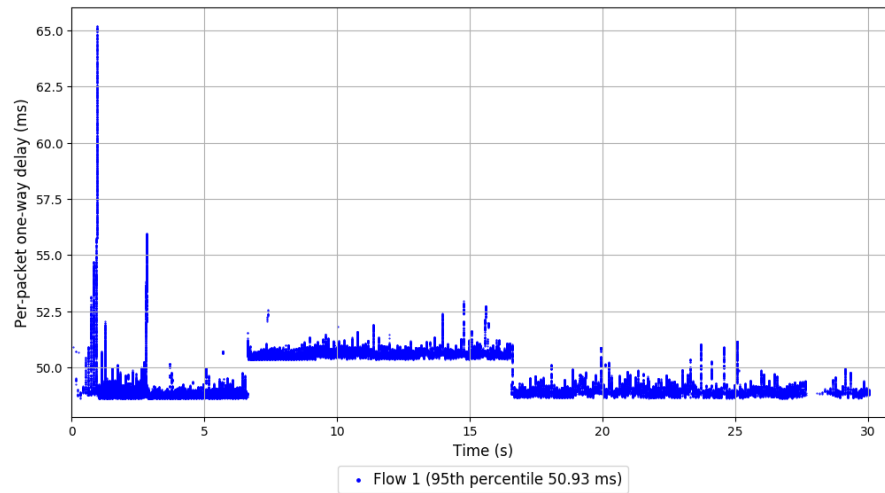
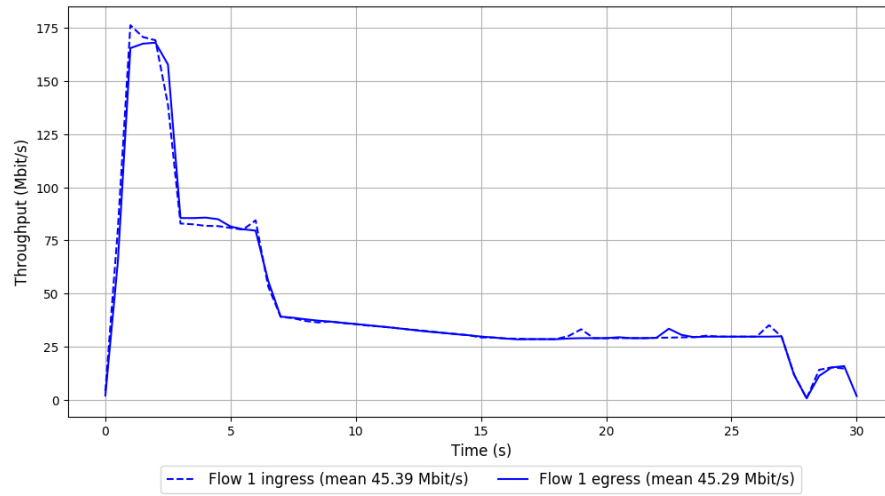
-- Flow 1:

Average throughput: 45.29 Mbit/s

95th percentile per-packet one-way delay: 50.930 ms

Loss rate: 0.22%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-16 03:13:18

End at: 2017-11-16 03:13:48

Below is generated by plot.py at 2017-11-16 05:58:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.06 Mbit/s

95th percentile per-packet one-way delay: 51.091 ms

Loss rate: 0.16%

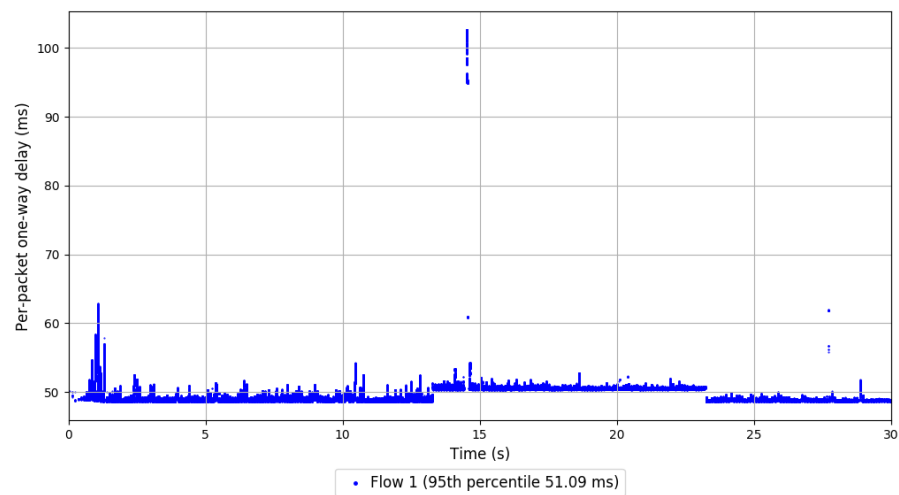
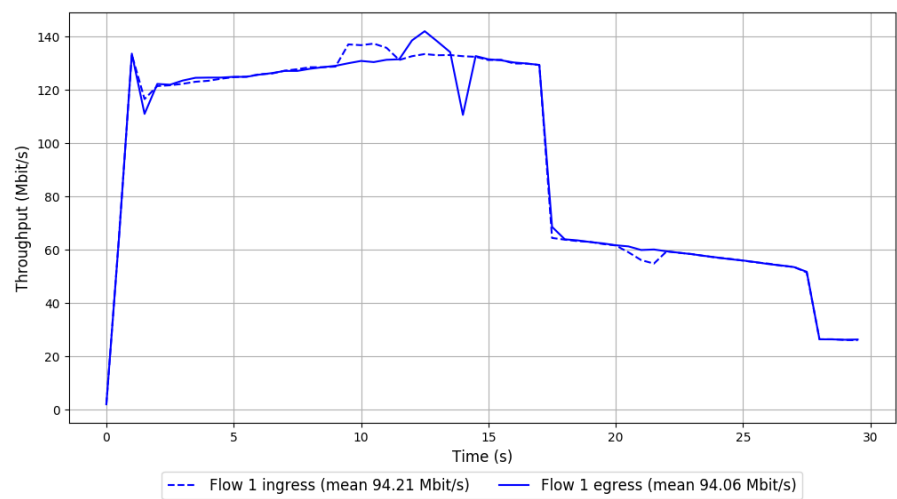
-- Flow 1:

Average throughput: 94.06 Mbit/s

95th percentile per-packet one-way delay: 51.091 ms

Loss rate: 0.16%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-16 03:23:24

End at: 2017-11-16 03:23:54

Below is generated by plot.py at 2017-11-16 05:58:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.28 Mbit/s

95th percentile per-packet one-way delay: 50.335 ms

Loss rate: 0.00%

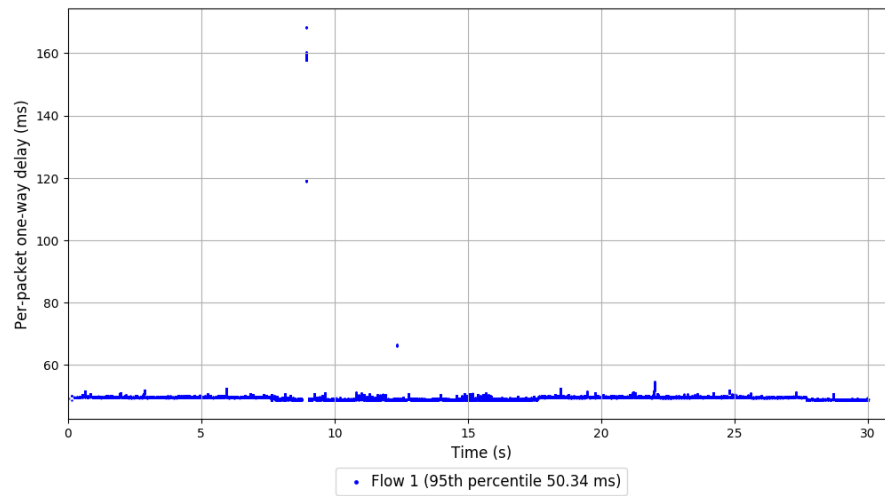
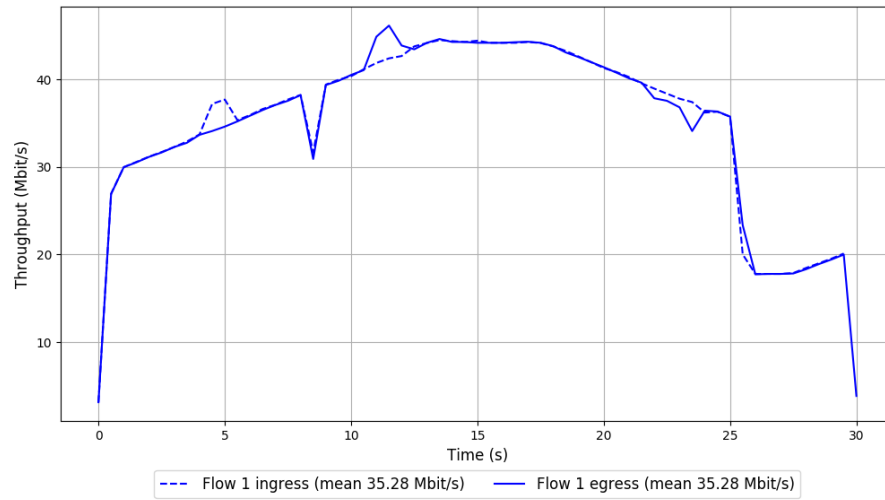
-- Flow 1:

Average throughput: 35.28 Mbit/s

95th percentile per-packet one-way delay: 50.335 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-16 03:33:31

End at: 2017-11-16 03:34:01

Below is generated by plot.py at 2017-11-16 05:58:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 131.78 Mbit/s

95th percentile per-packet one-way delay: 55.356 ms

Loss rate: 0.11%

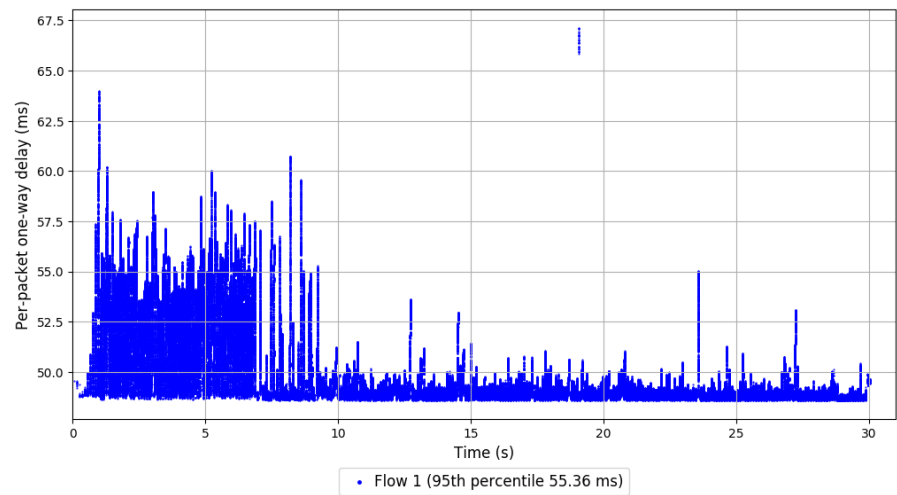
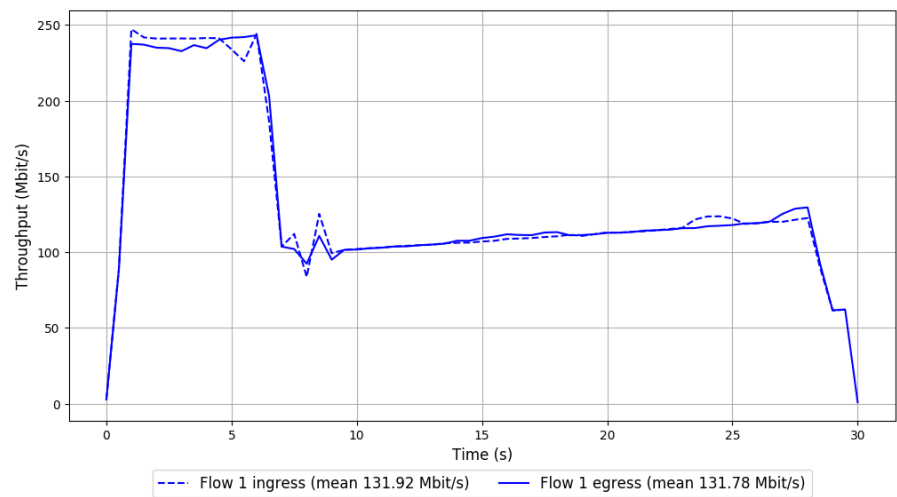
-- Flow 1:

Average throughput: 131.78 Mbit/s

95th percentile per-packet one-way delay: 55.356 ms

Loss rate: 0.11%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-16 03:43:48

End at: 2017-11-16 03:44:18

Below is generated by plot.py at 2017-11-16 05:58:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.77 Mbit/s

95th percentile per-packet one-way delay: 50.423 ms

Loss rate: 0.25%

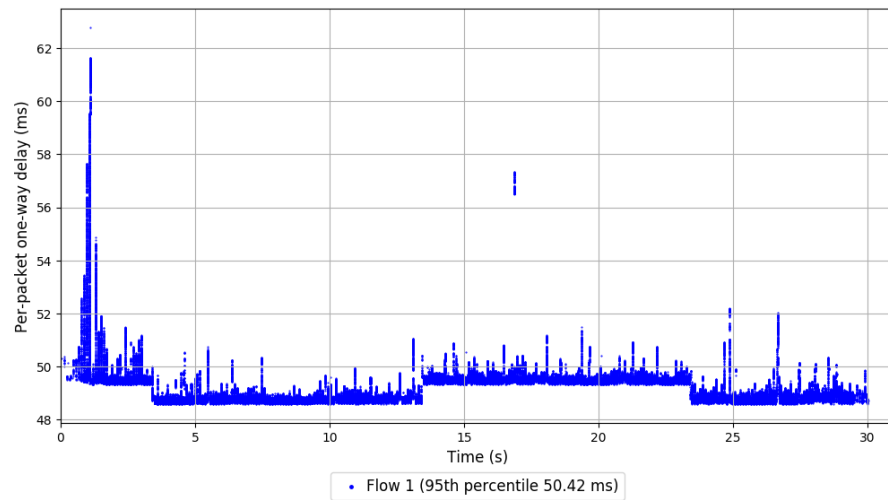
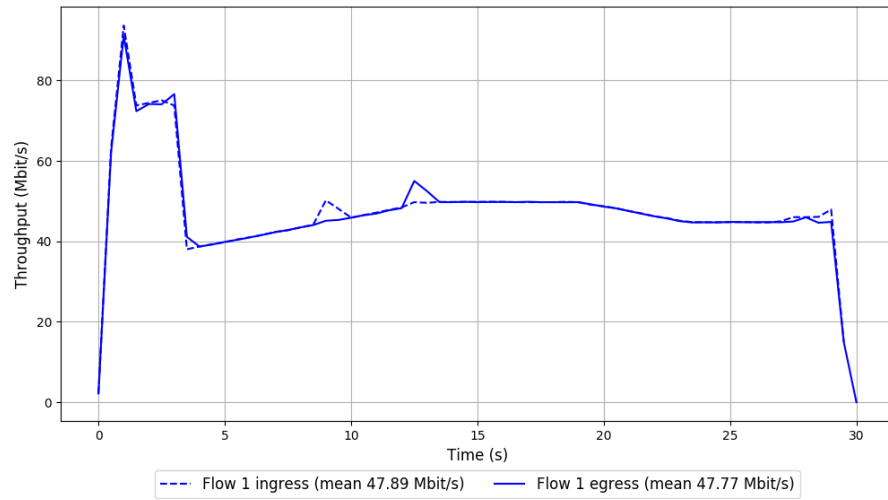
-- Flow 1:

Average throughput: 47.77 Mbit/s

95th percentile per-packet one-way delay: 50.423 ms

Loss rate: 0.25%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-16 03:54:03

End at: 2017-11-16 03:54:33

Below is generated by plot.py at 2017-11-16 05:58:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 24.57 Mbit/s

95th percentile per-packet one-way delay: 56.048 ms

Loss rate: 0.23%

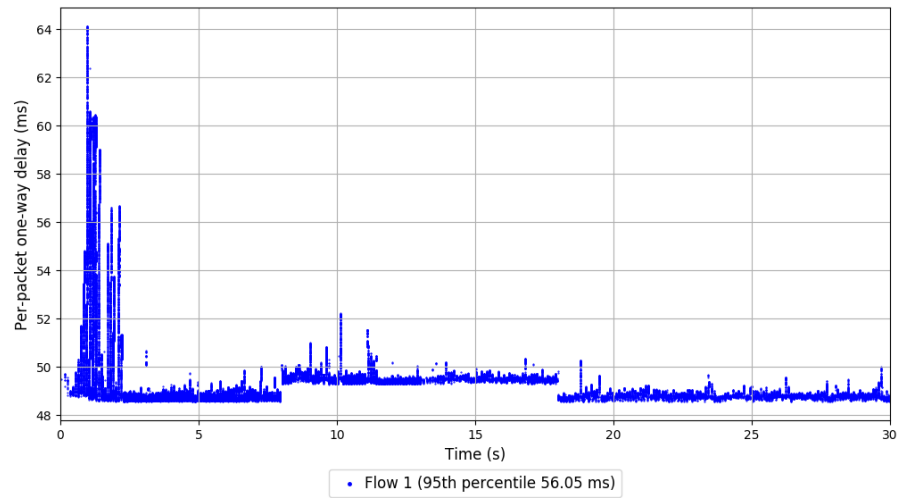
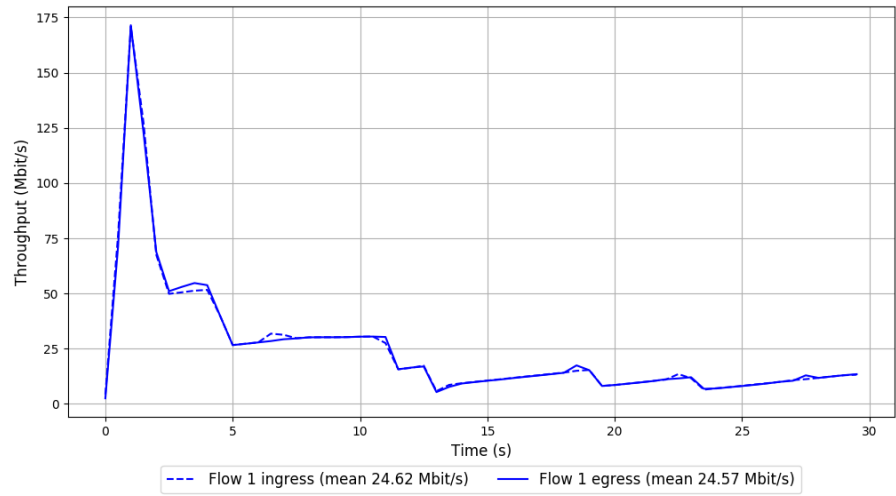
-- Flow 1:

Average throughput: 24.57 Mbit/s

95th percentile per-packet one-way delay: 56.048 ms

Loss rate: 0.23%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-16 04:04:13

End at: 2017-11-16 04:04:43

Below is generated by plot.py at 2017-11-16 05:58:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.33 Mbit/s

95th percentile per-packet one-way delay: 50.018 ms

Loss rate: 0.01%

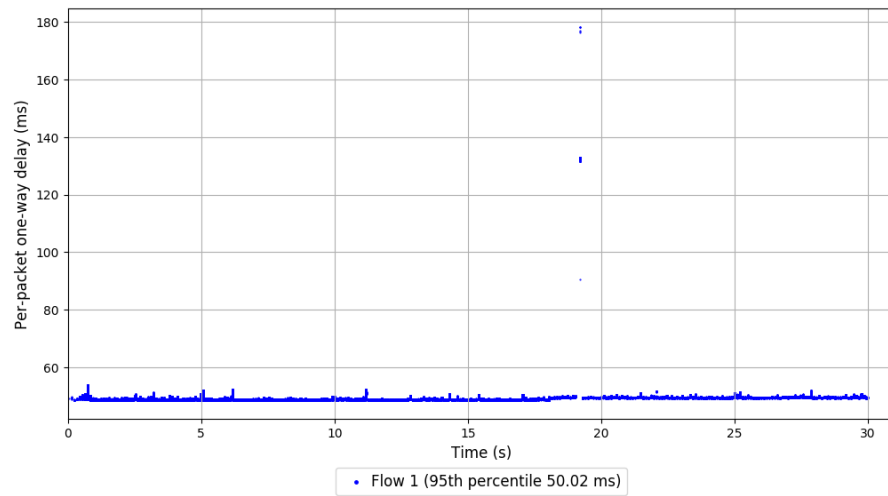
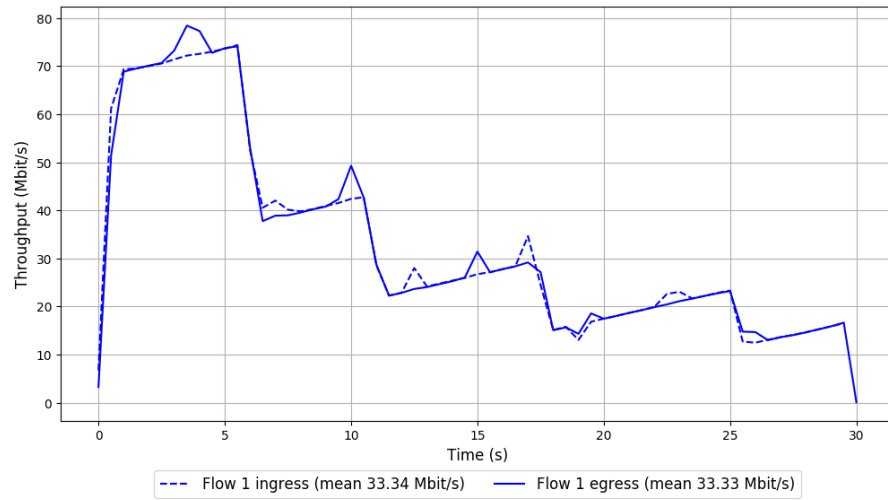
-- Flow 1:

Average throughput: 33.33 Mbit/s

95th percentile per-packet one-way delay: 50.018 ms

Loss rate: 0.01%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-16 04:14:36

End at: 2017-11-16 04:15:06

Below is generated by plot.py at 2017-11-16 05:58:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.98 Mbit/s

95th percentile per-packet one-way delay: 50.091 ms

Loss rate: 0.00%

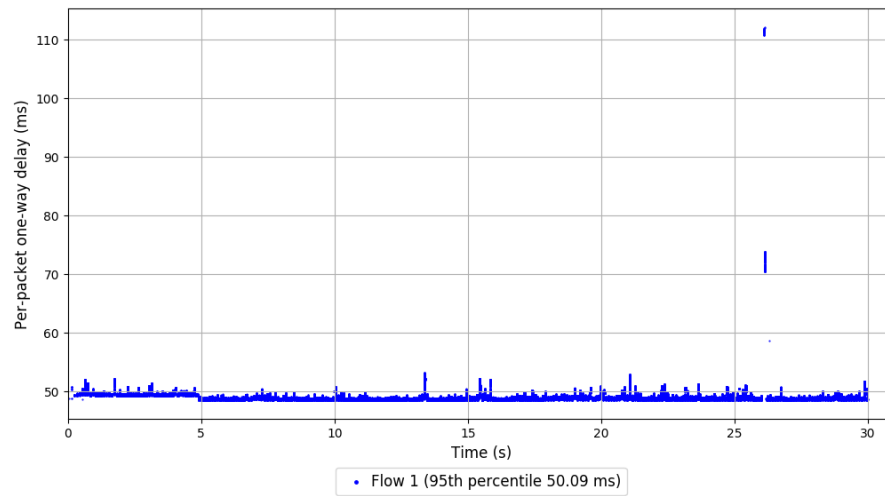
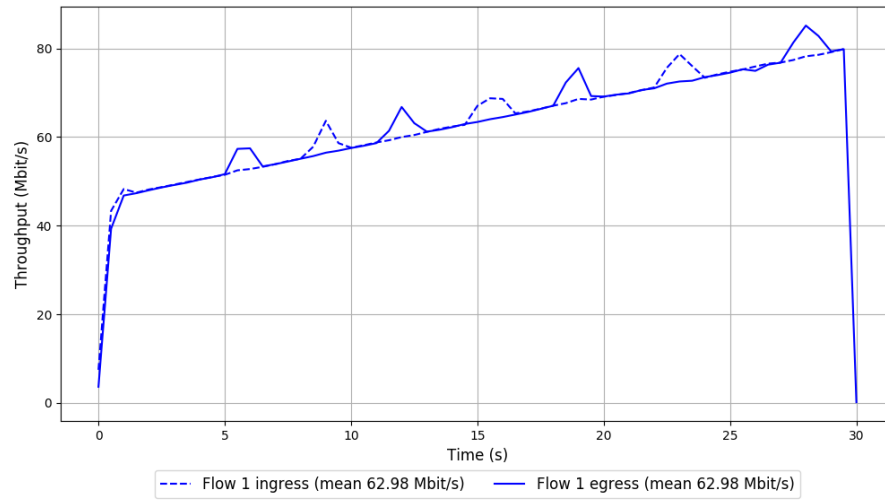
-- Flow 1:

Average throughput: 62.98 Mbit/s

95th percentile per-packet one-way delay: 50.091 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-16 04:24:54

End at: 2017-11-16 04:25:24

Below is generated by plot.py at 2017-11-16 05:58:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.00 Mbit/s

95th percentile per-packet one-way delay: 49.955 ms

Loss rate: 0.00%

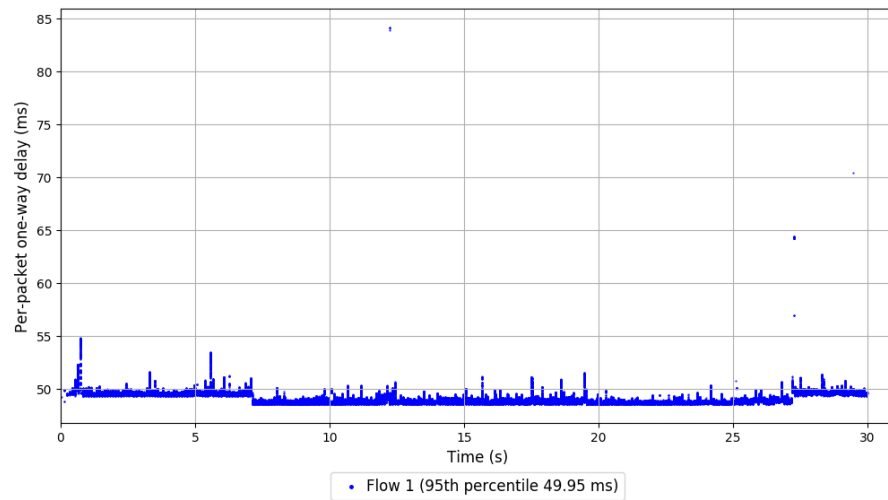
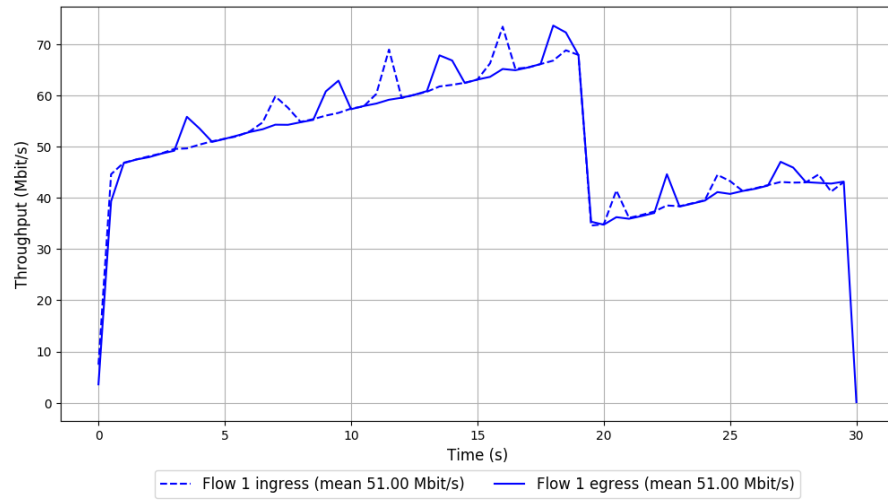
-- Flow 1:

Average throughput: 51.00 Mbit/s

95th percentile per-packet one-way delay: 49.955 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-16 04:35:17

End at: 2017-11-16 04:35:47

Below is generated by plot.py at 2017-11-16 05:58:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.72 Mbit/s

95th percentile per-packet one-way delay: 50.756 ms

Loss rate: 0.28%

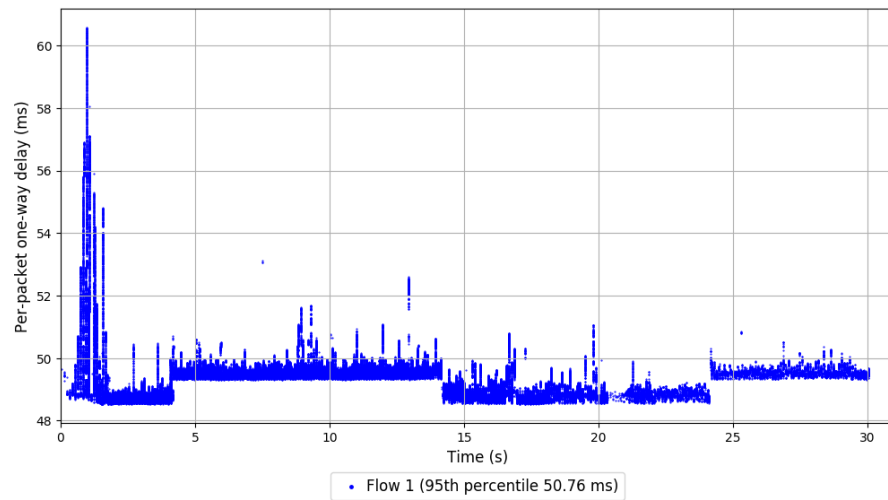
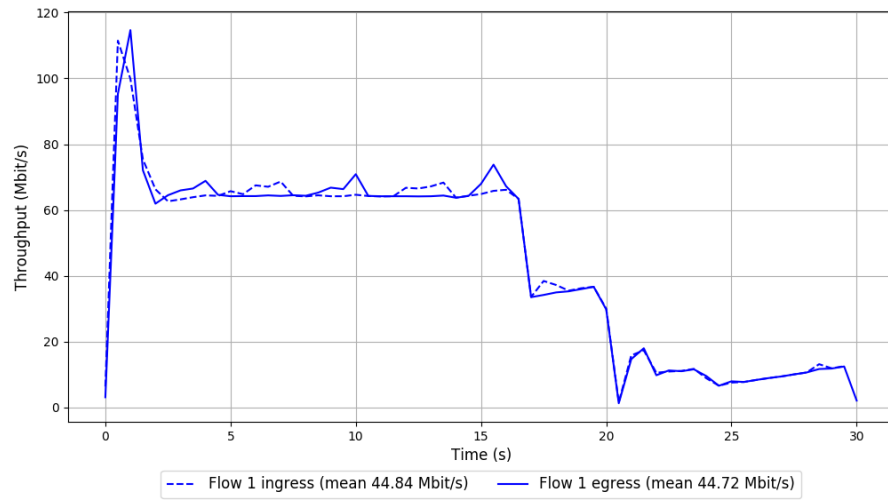
-- Flow 1:

Average throughput: 44.72 Mbit/s

95th percentile per-packet one-way delay: 50.756 ms

Loss rate: 0.28%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-11-16 02:57:27

End at: 2017-11-16 02:57:57

Below is generated by plot.py at 2017-11-16 05:58:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 240.28 Mbit/s

95th percentile per-packet one-way delay: 113.733 ms

Loss rate: 0.39%

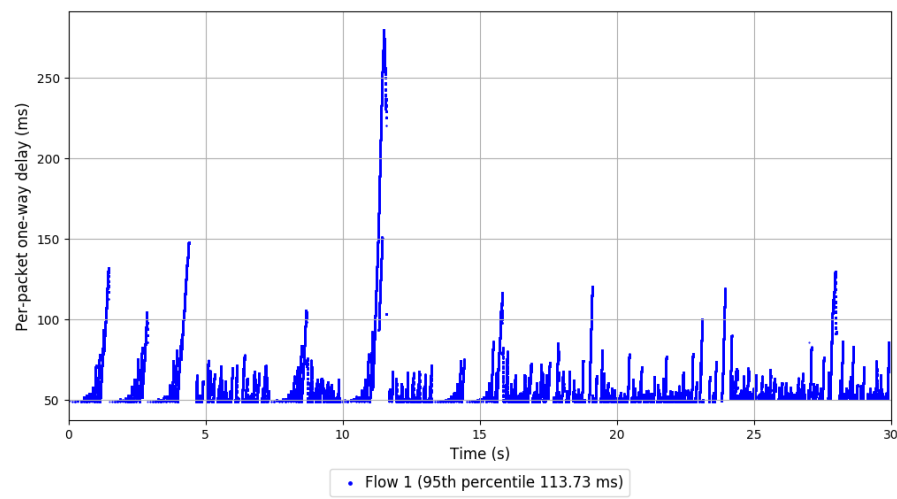
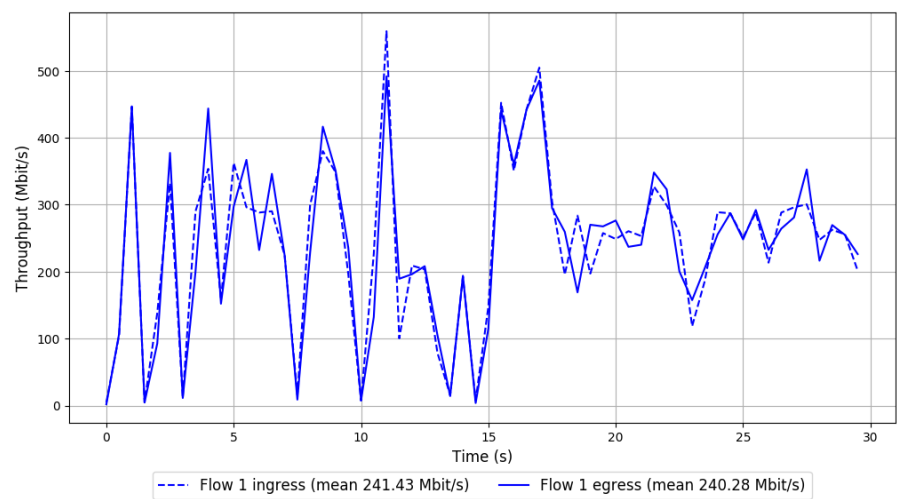
-- Flow 1:

Average throughput: 240.28 Mbit/s

95th percentile per-packet one-way delay: 113.733 ms

Loss rate: 0.39%

Run 1: Report of Verus — Data Link

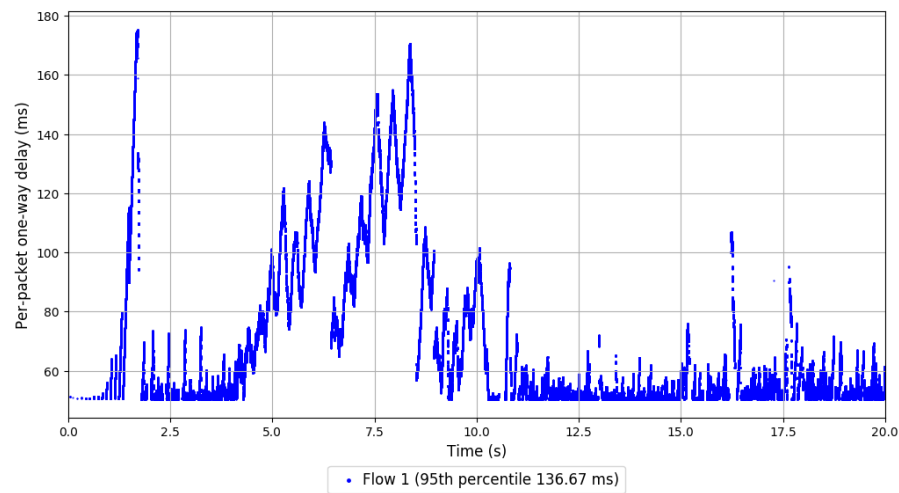
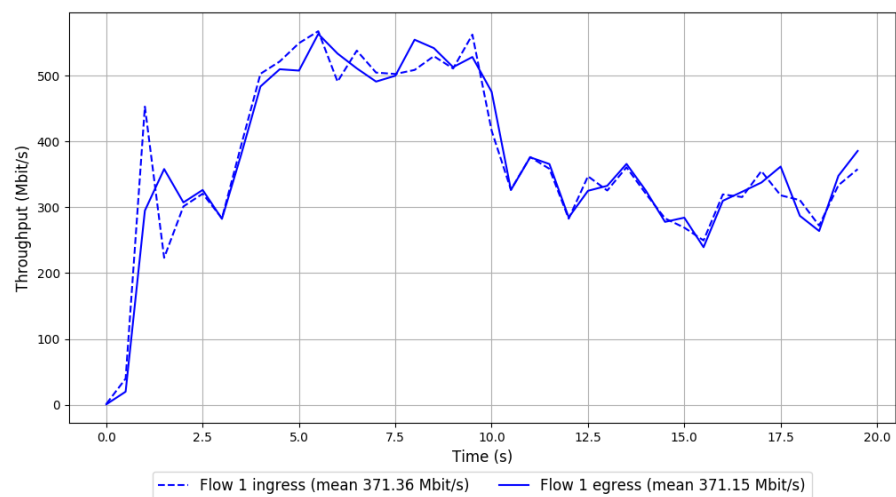


Run 2: Statistics of Verus

Start at: 2017-11-16 03:07:40

End at: 2017-11-16 03:08:10

Run 2: Report of Verus — Data Link

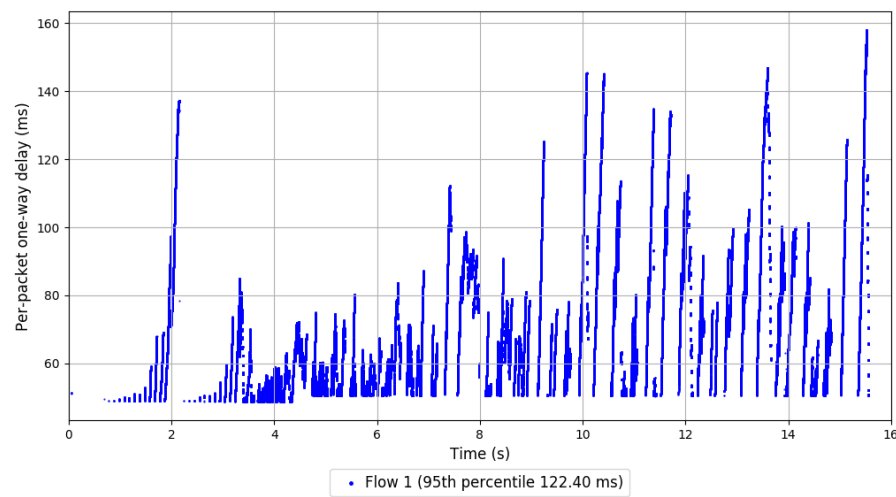
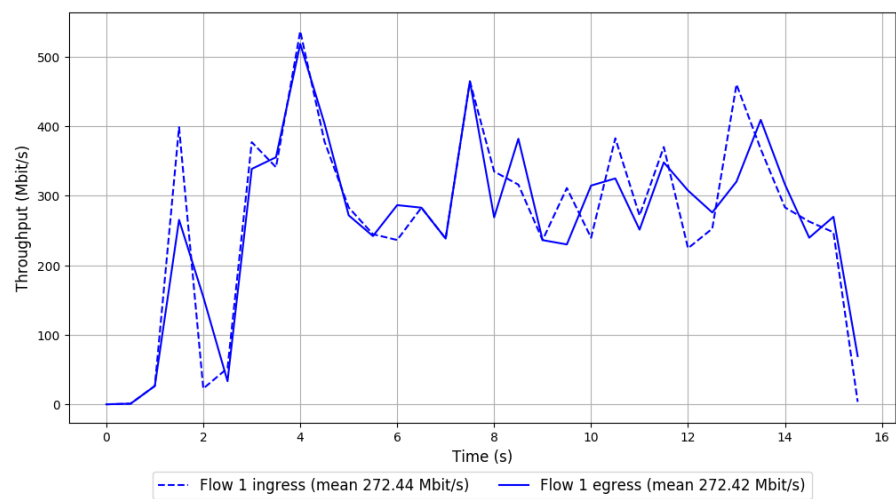


Run 3: Statistics of Verus

Start at: 2017-11-16 03:17:52

End at: 2017-11-16 03:18:22

Run 3: Report of Verus — Data Link

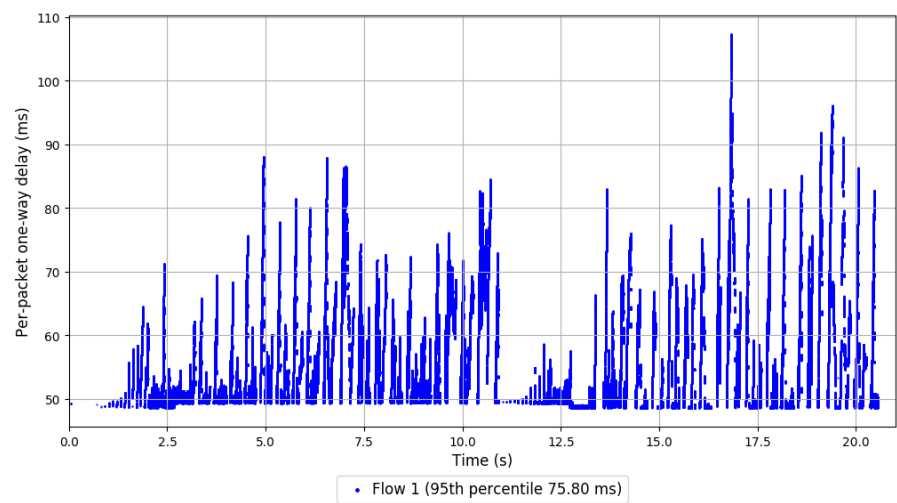
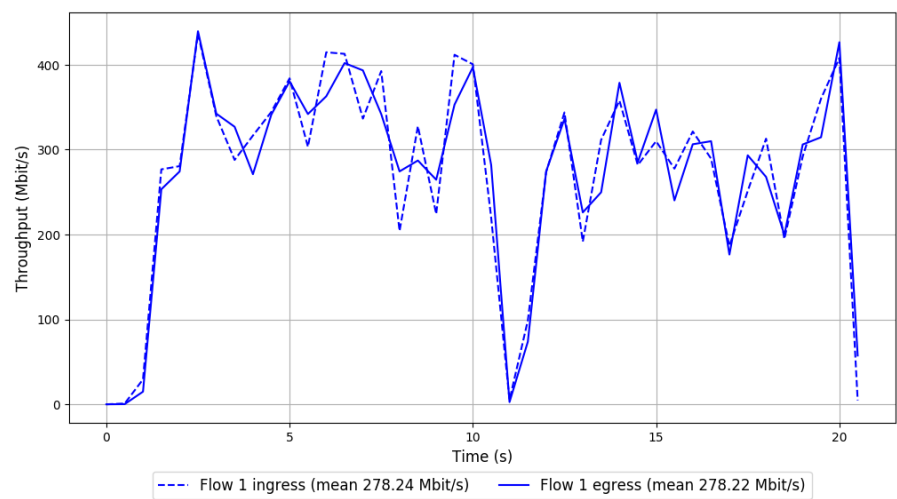


Run 4: Statistics of Verus

Start at: 2017-11-16 03:27:59

End at: 2017-11-16 03:28:29

Run 4: Report of Verus — Data Link

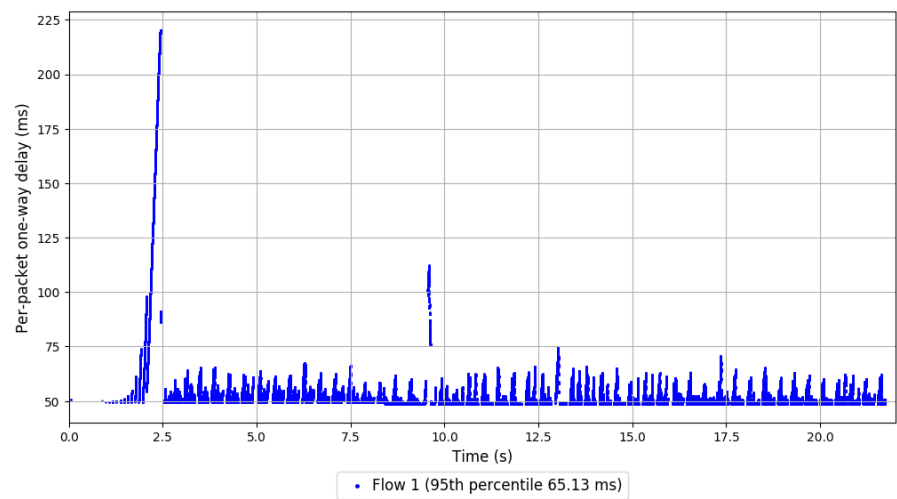
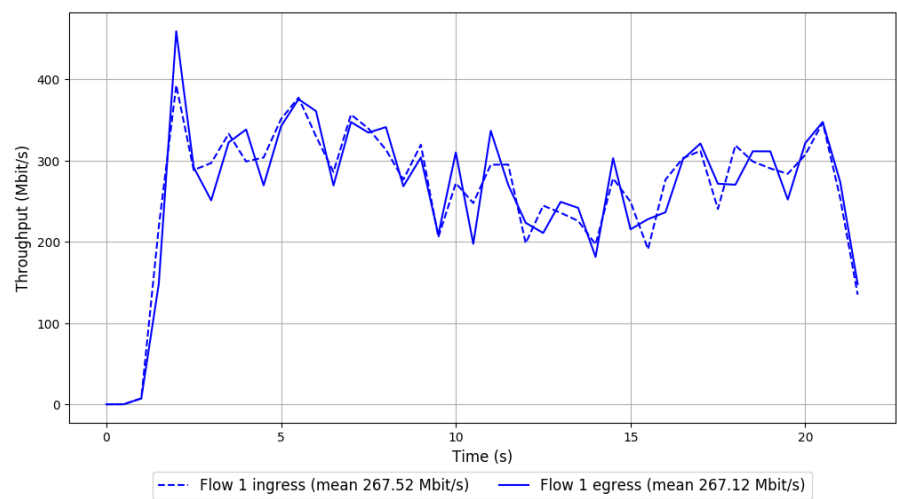


Run 5: Statistics of Verus

Start at: 2017-11-16 03:38:15

End at: 2017-11-16 03:38:45

Run 5: Report of Verus — Data Link

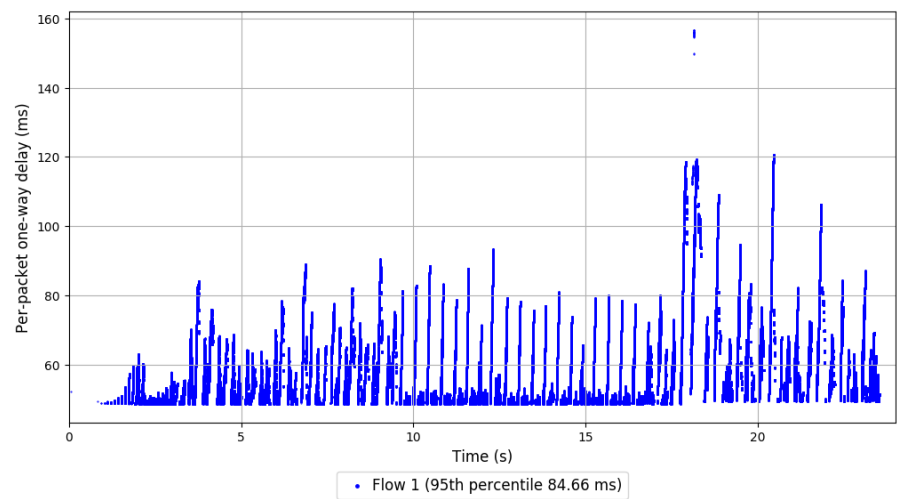
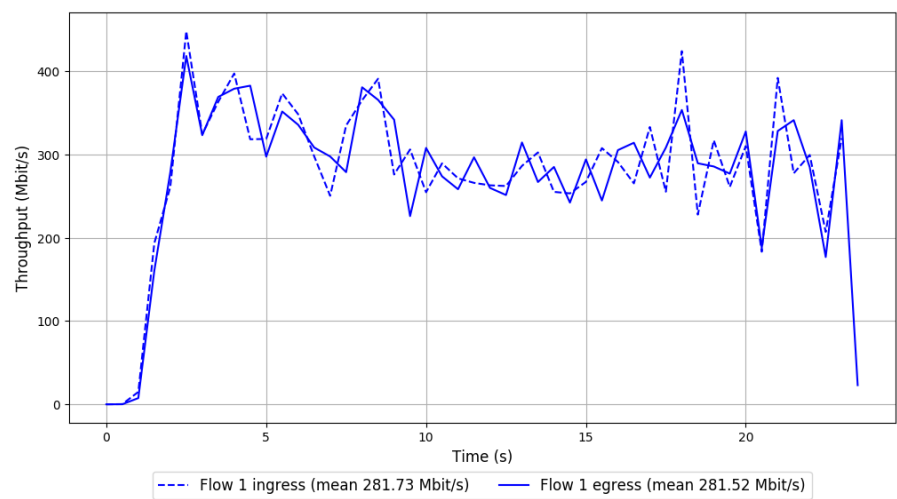


Run 6: Statistics of Verus

Start at: 2017-11-16 03:48:27

End at: 2017-11-16 03:48:57

Run 6: Report of Verus — Data Link

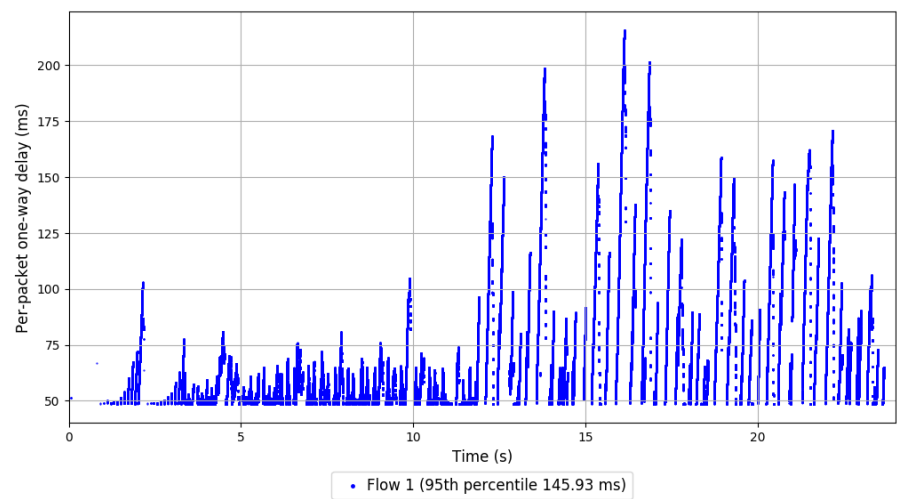
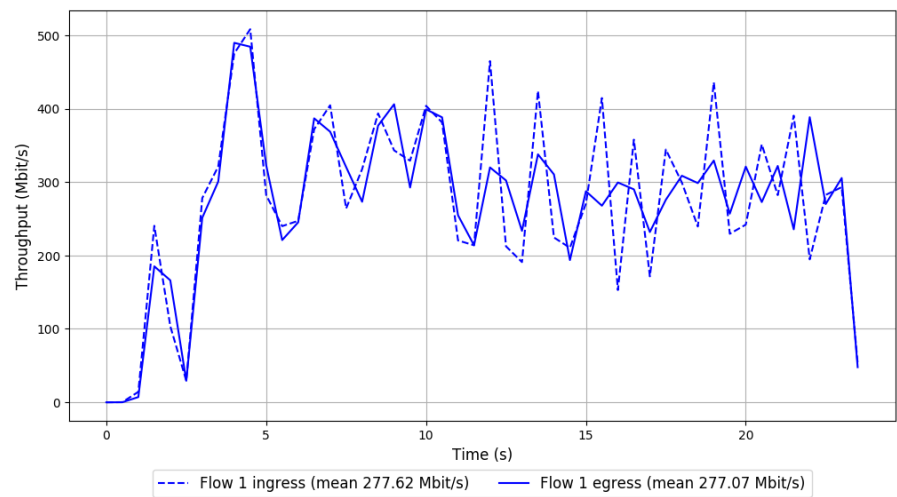


Run 7: Statistics of Verus

Start at: 2017-11-16 03:58:41

End at: 2017-11-16 03:59:11

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-16 04:08:59

End at: 2017-11-16 04:09:29

Below is generated by plot.py at 2017-11-16 06:00:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 239.86 Mbit/s

95th percentile per-packet one-way delay: 102.645 ms

Loss rate: 0.11%

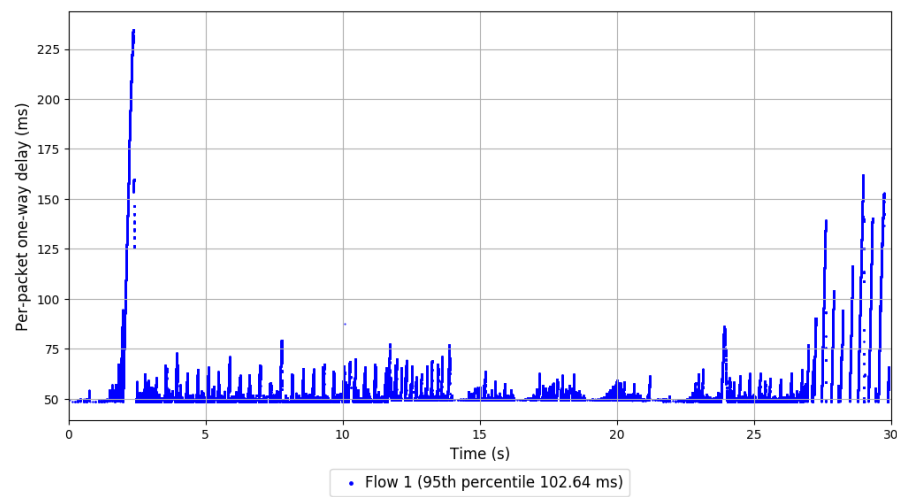
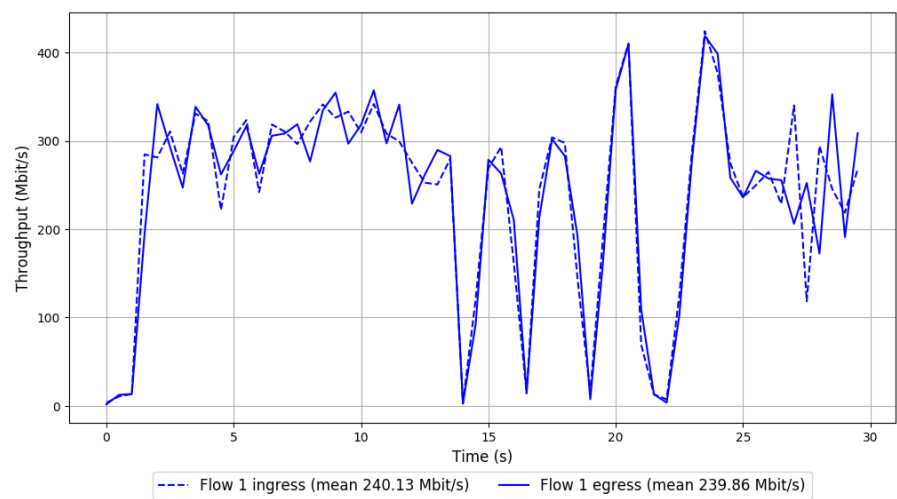
-- Flow 1:

Average throughput: 239.86 Mbit/s

95th percentile per-packet one-way delay: 102.645 ms

Loss rate: 0.11%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-16 04:19:20

End at: 2017-11-16 04:19:50

Below is generated by plot.py at 2017-11-16 06:01:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 243.78 Mbit/s

95th percentile per-packet one-way delay: 91.441 ms

Loss rate: 0.08%

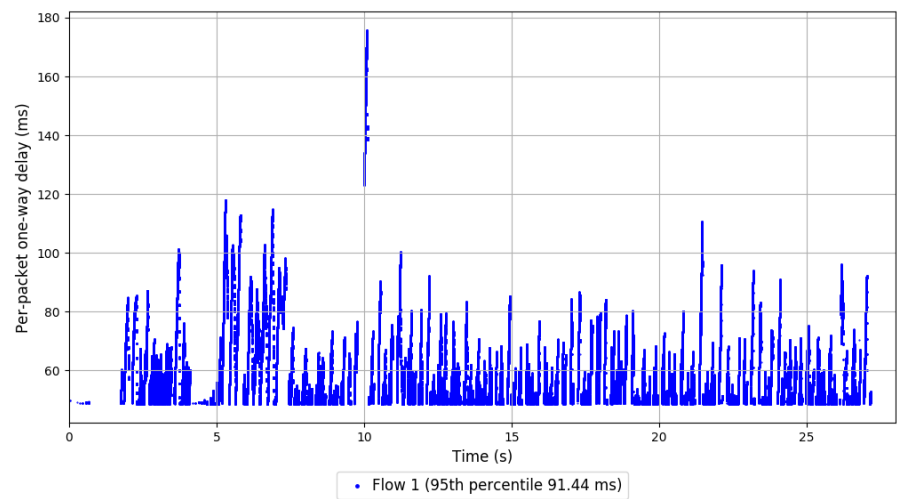
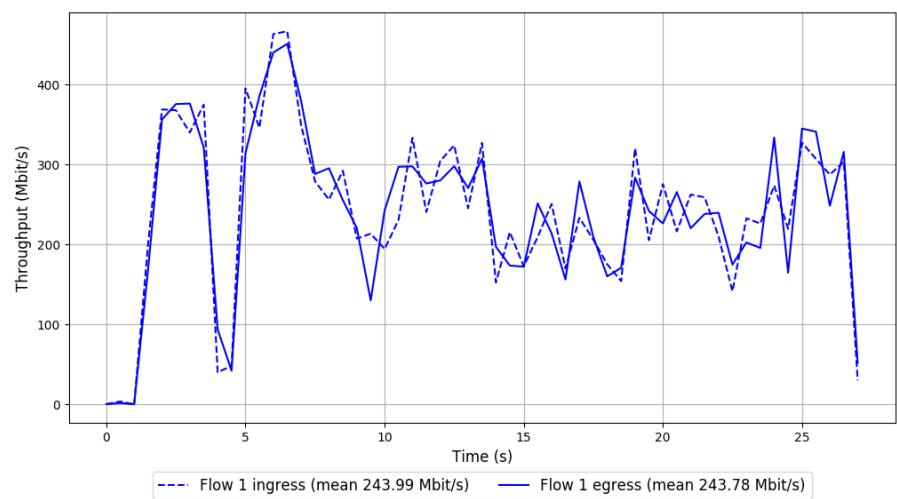
-- Flow 1:

Average throughput: 243.78 Mbit/s

95th percentile per-packet one-way delay: 91.441 ms

Loss rate: 0.08%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-16 04:29:39

End at: 2017-11-16 04:30:09

Below is generated by plot.py at 2017-11-16 06:01:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 246.83 Mbit/s

95th percentile per-packet one-way delay: 88.228 ms

Loss rate: 0.11%

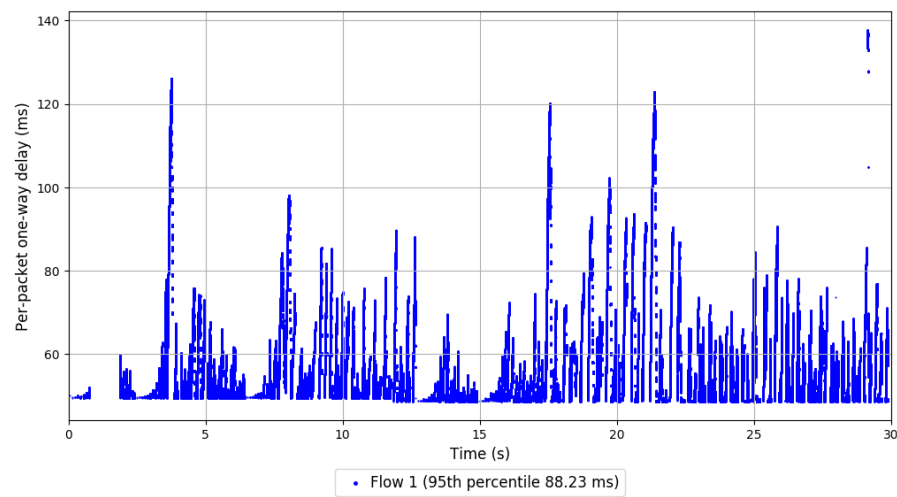
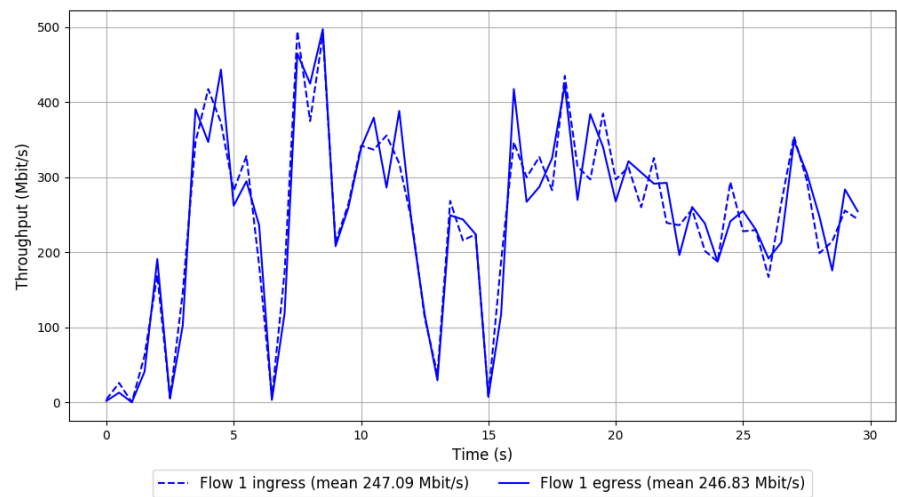
-- Flow 1:

Average throughput: 246.83 Mbit/s

95th percentile per-packet one-way delay: 88.228 ms

Loss rate: 0.11%

Run 10: Report of Verus — Data Link

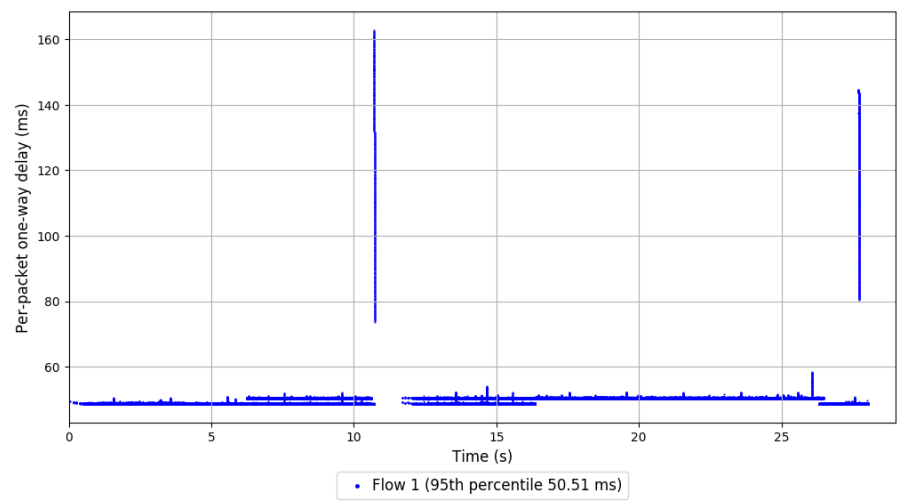
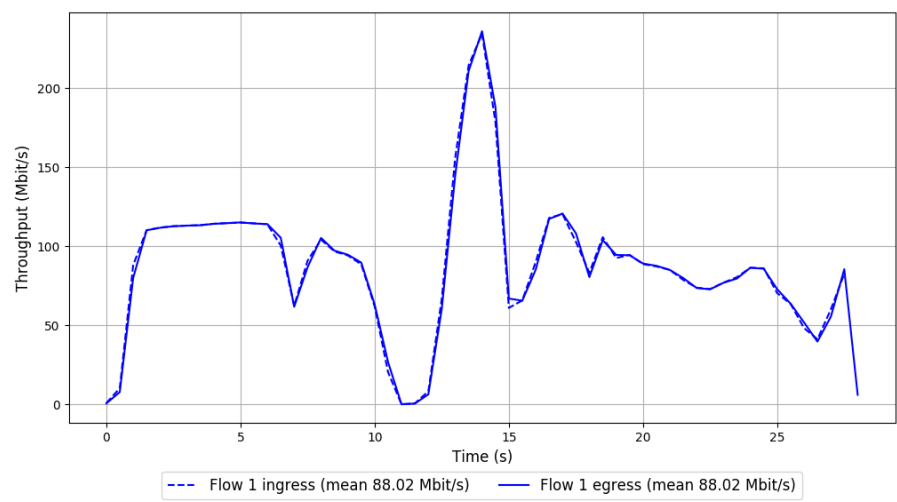


```
Run 1: Statistics of Copa

Start at: 2017-11-16 02:59:33
End at: 2017-11-16 03:00:03

# Below is generated by plot.py at 2017-11-16 06:01:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.02 Mbit/s
95th percentile per-packet one-way delay: 50.511 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 88.02 Mbit/s
95th percentile per-packet one-way delay: 50.511 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-16 03:09:46

End at: 2017-11-16 03:10:16

Below is generated by plot.py at 2017-11-16 06:01:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.17 Mbit/s

95th percentile per-packet one-way delay: 48.837 ms

Loss rate: 0.10%

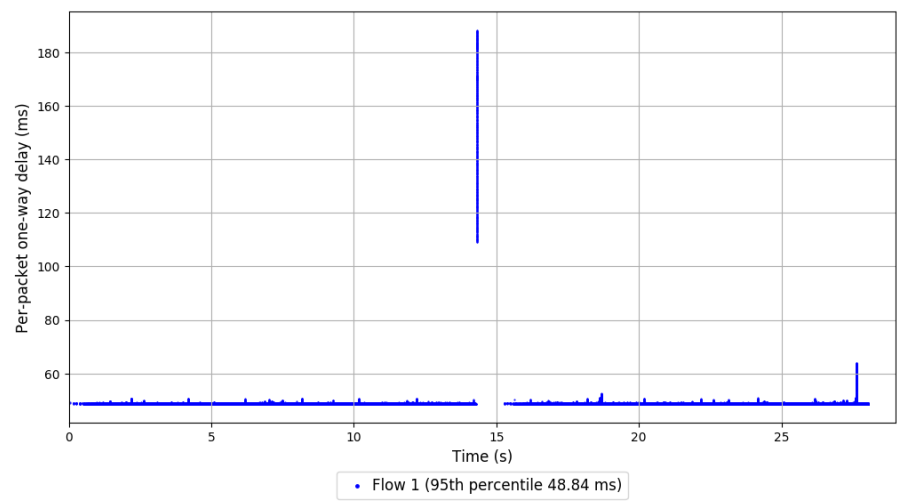
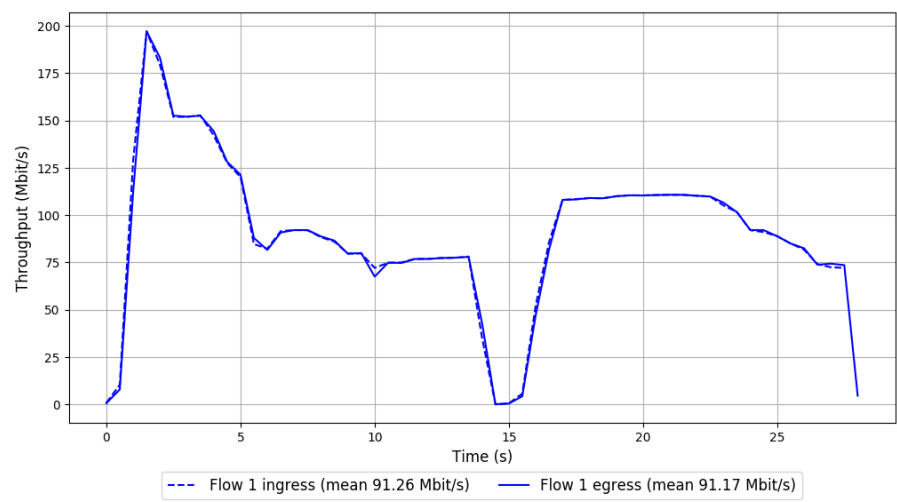
-- Flow 1:

Average throughput: 91.17 Mbit/s

95th percentile per-packet one-way delay: 48.837 ms

Loss rate: 0.10%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-16 03:19:52

End at: 2017-11-16 03:20:22

Below is generated by plot.py at 2017-11-16 06:01:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.28 Mbit/s

95th percentile per-packet one-way delay: 50.558 ms

Loss rate: 0.00%

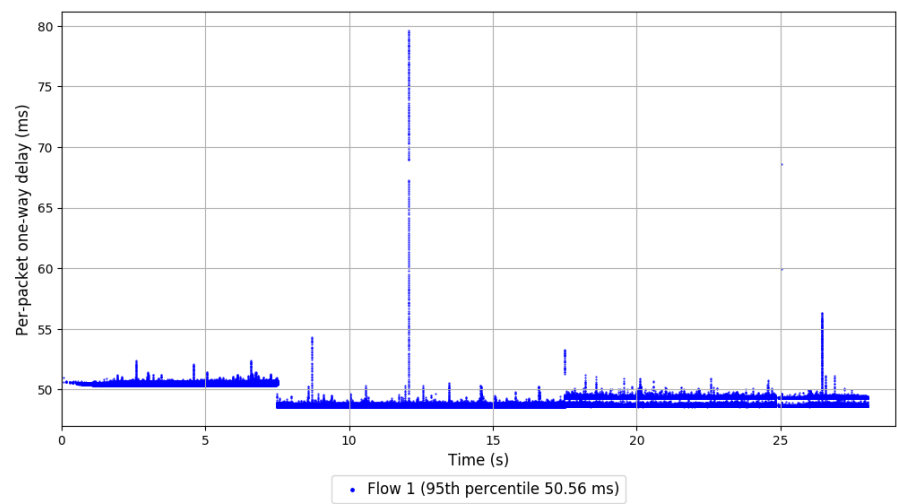
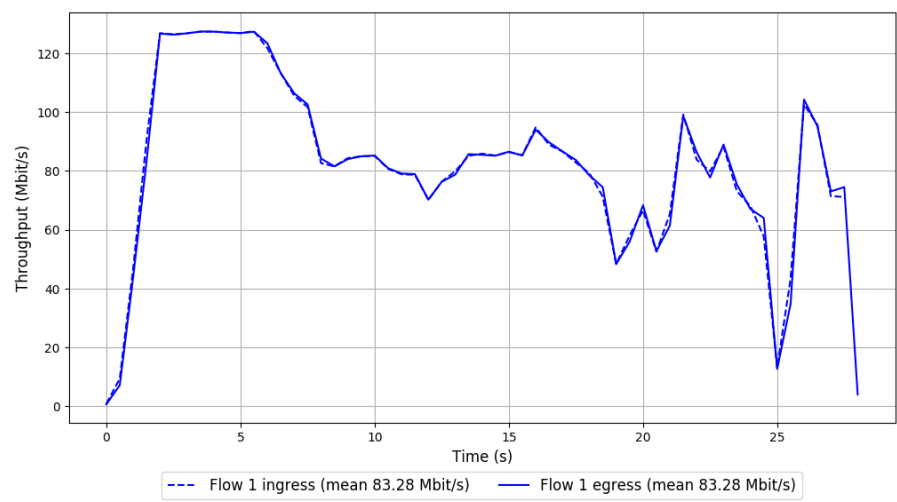
-- Flow 1:

Average throughput: 83.28 Mbit/s

95th percentile per-packet one-way delay: 50.558 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-16 03:30:02

End at: 2017-11-16 03:30:32

Below is generated by plot.py at 2017-11-16 06:02:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.28 Mbit/s

95th percentile per-packet one-way delay: 49.475 ms

Loss rate: 0.00%

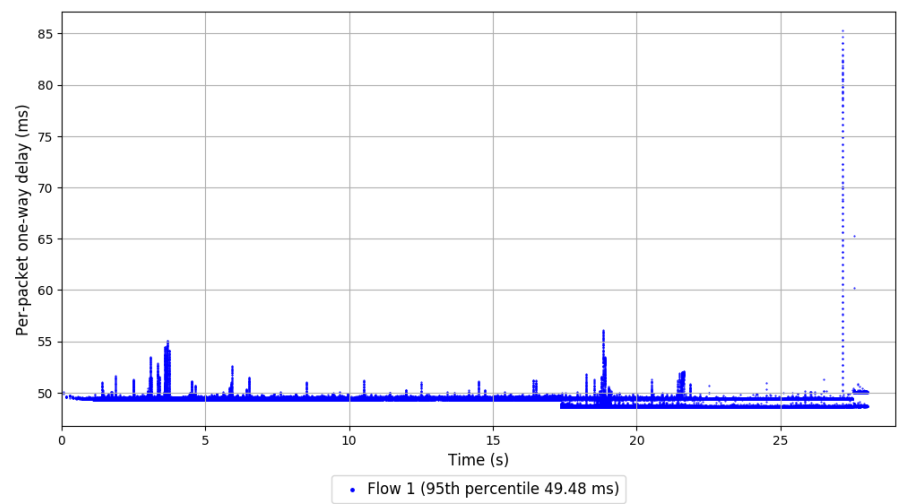
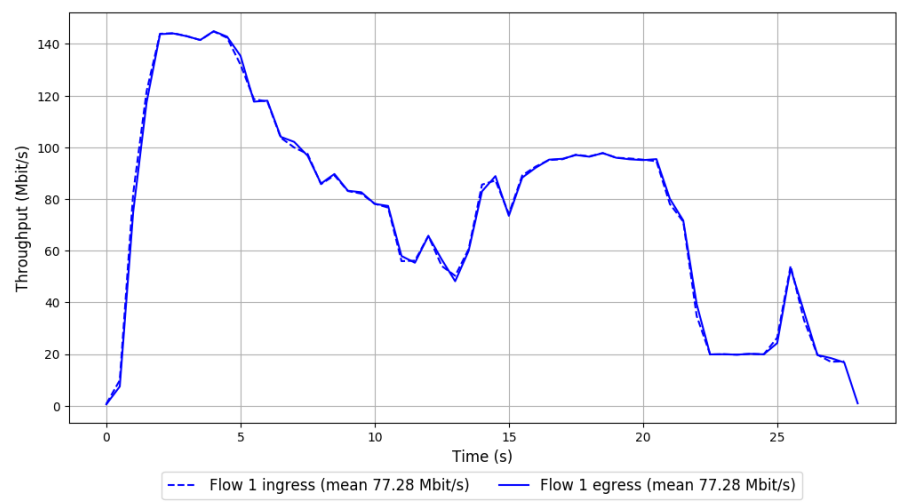
-- Flow 1:

Average throughput: 77.28 Mbit/s

95th percentile per-packet one-way delay: 49.475 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-16 03:40:17

End at: 2017-11-16 03:40:47

Below is generated by plot.py at 2017-11-16 06:02:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.43 Mbit/s

95th percentile per-packet one-way delay: 50.696 ms

Loss rate: 0.00%

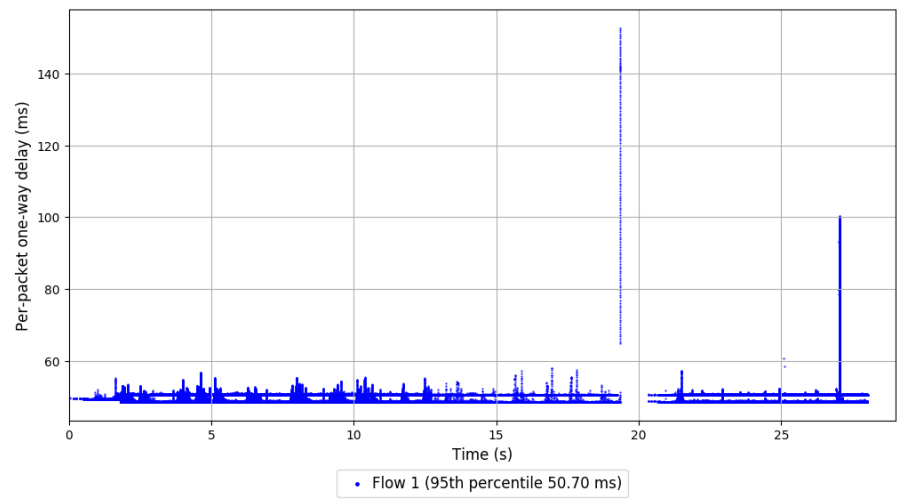
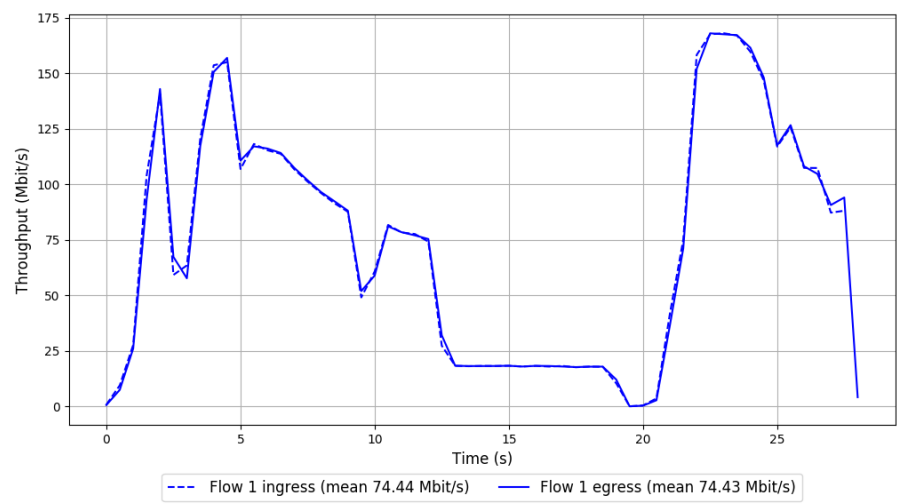
-- Flow 1:

Average throughput: 74.43 Mbit/s

95th percentile per-packet one-way delay: 50.696 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-16 03:50:32

End at: 2017-11-16 03:51:02

Below is generated by plot.py at 2017-11-16 06:03:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.40 Mbit/s

95th percentile per-packet one-way delay: 50.705 ms

Loss rate: 0.00%

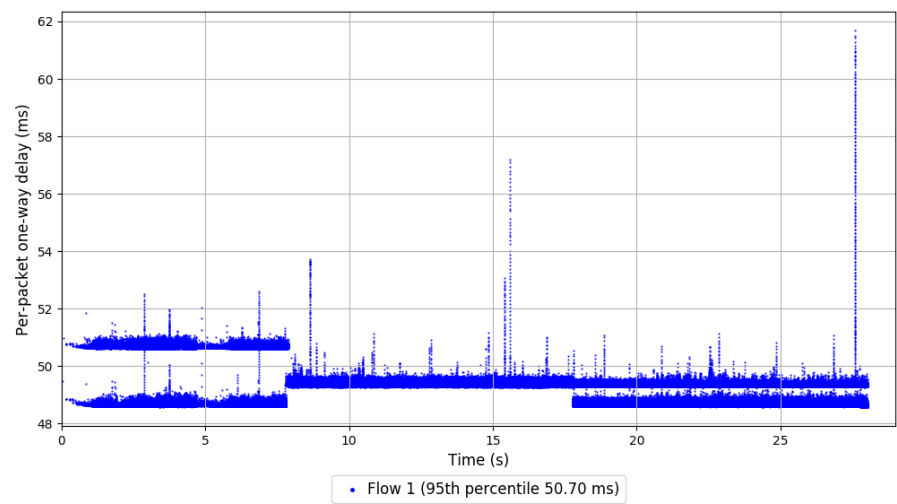
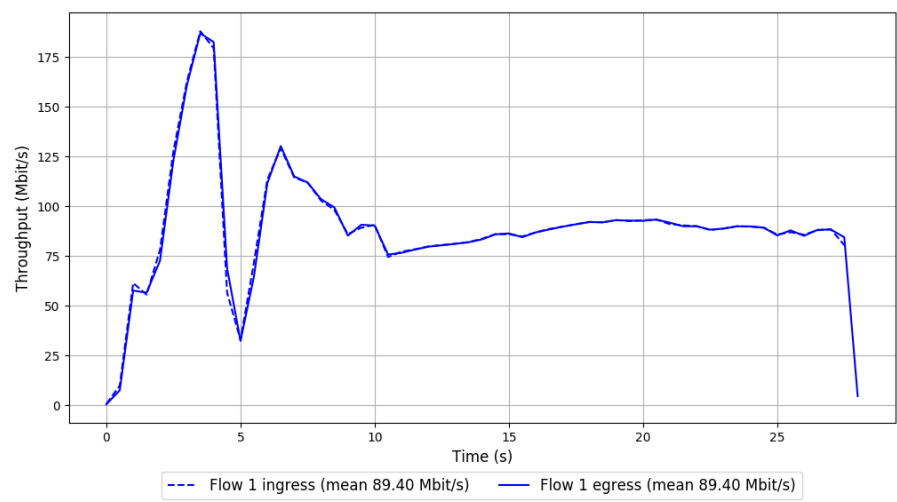
-- Flow 1:

Average throughput: 89.40 Mbit/s

95th percentile per-packet one-way delay: 50.705 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-16 04:00:46

End at: 2017-11-16 04:01:16

Below is generated by plot.py at 2017-11-16 06:03:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.43 Mbit/s

95th percentile per-packet one-way delay: 50.676 ms

Loss rate: 0.00%

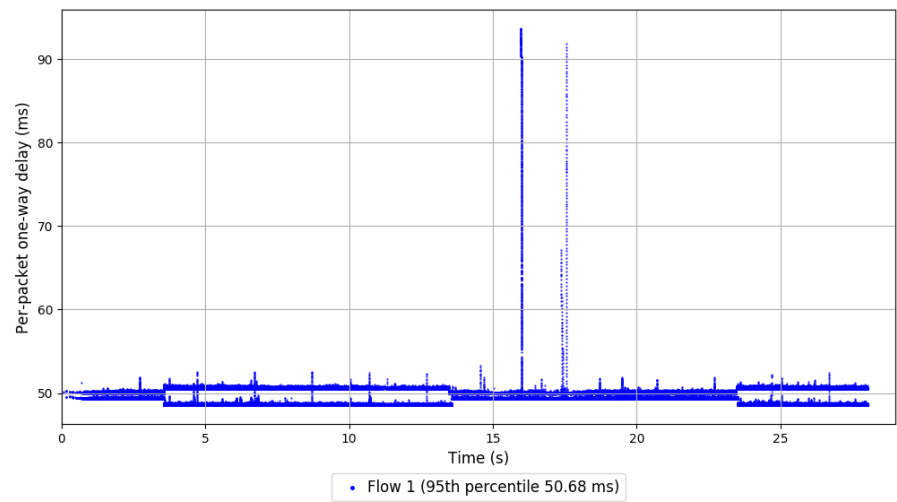
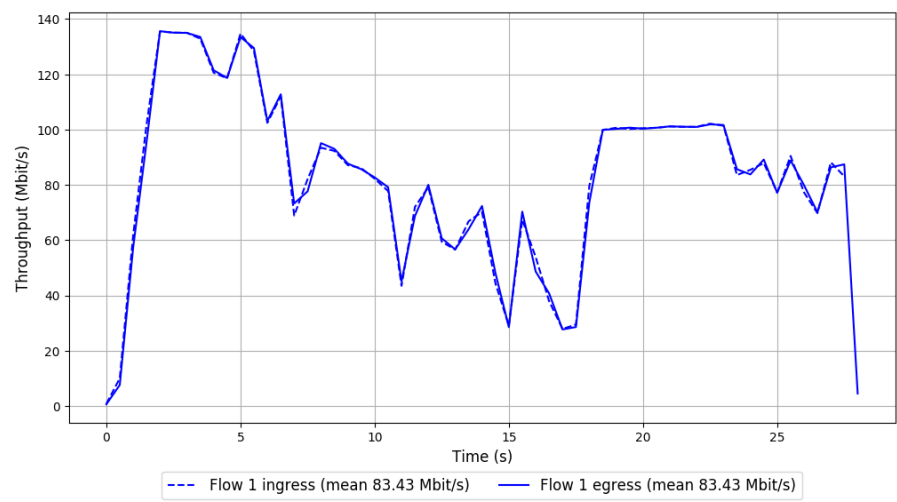
-- Flow 1:

Average throughput: 83.43 Mbit/s

95th percentile per-packet one-way delay: 50.676 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-16 04:11:05

End at: 2017-11-16 04:11:35

Below is generated by plot.py at 2017-11-16 06:03:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.87 Mbit/s

95th percentile per-packet one-way delay: 49.468 ms

Loss rate: 0.00%

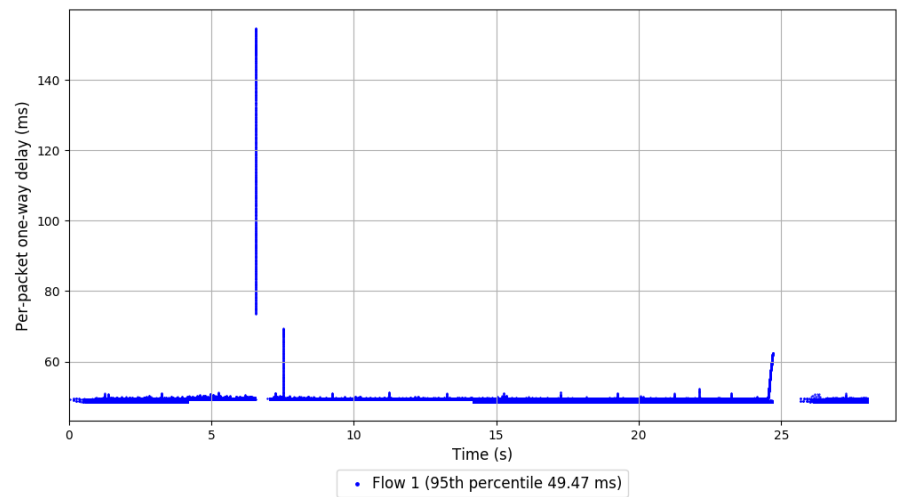
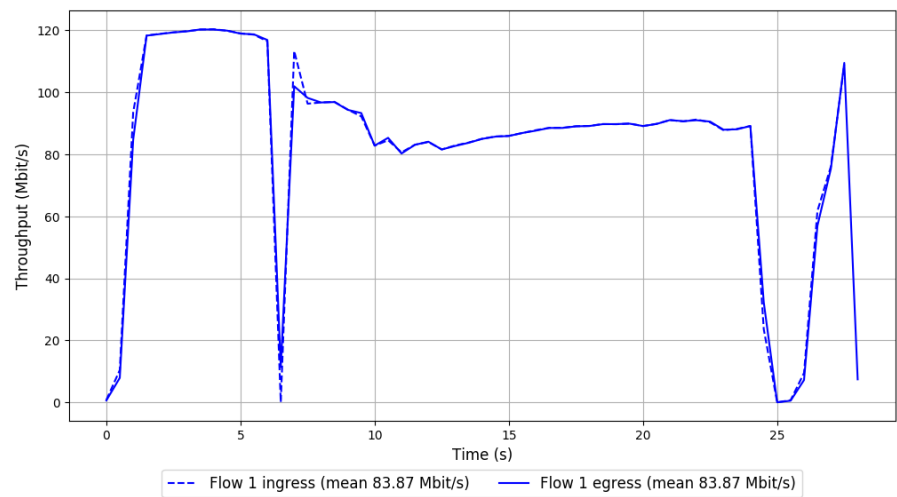
-- Flow 1:

Average throughput: 83.87 Mbit/s

95th percentile per-packet one-way delay: 49.468 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-16 04:21:24

End at: 2017-11-16 04:21:54

Below is generated by plot.py at 2017-11-16 06:03:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.25 Mbit/s

95th percentile per-packet one-way delay: 49.382 ms

Loss rate: 0.00%

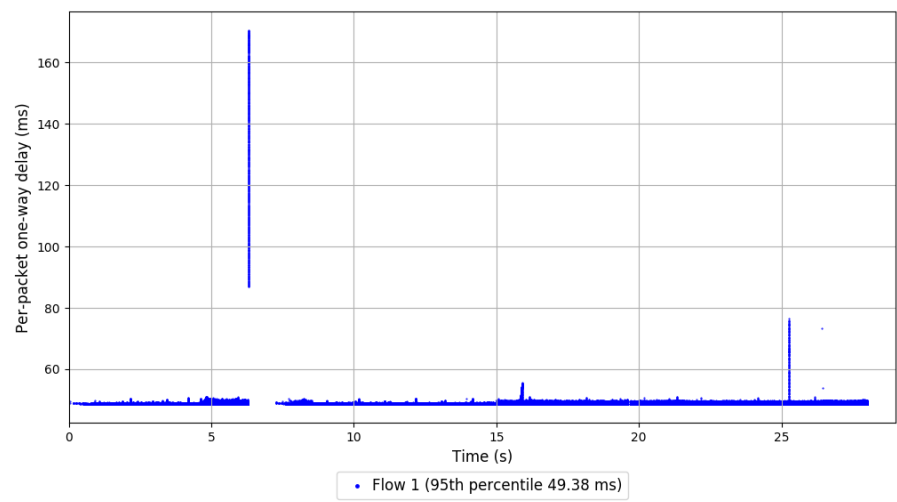
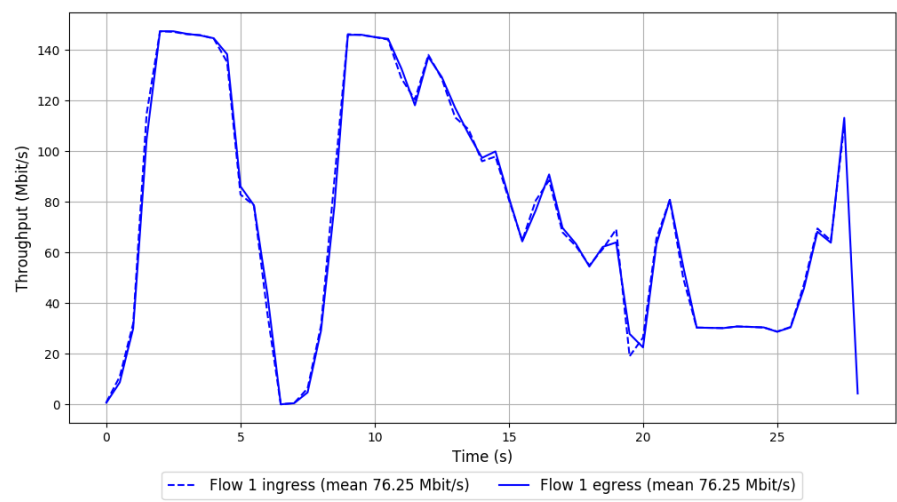
-- Flow 1:

Average throughput: 76.25 Mbit/s

95th percentile per-packet one-way delay: 49.382 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-16 04:31:45

End at: 2017-11-16 04:32:15

Below is generated by plot.py at 2017-11-16 06:03:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.61 Mbit/s

95th percentile per-packet one-way delay: 49.419 ms

Loss rate: 0.00%

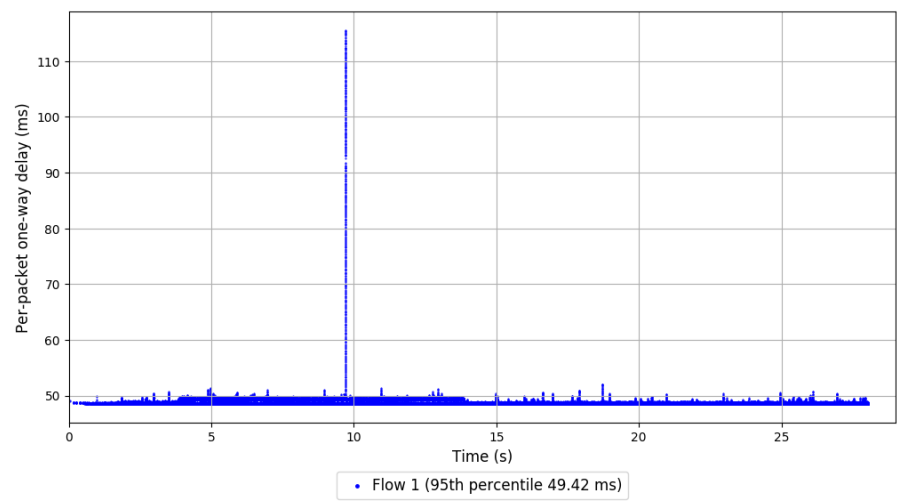
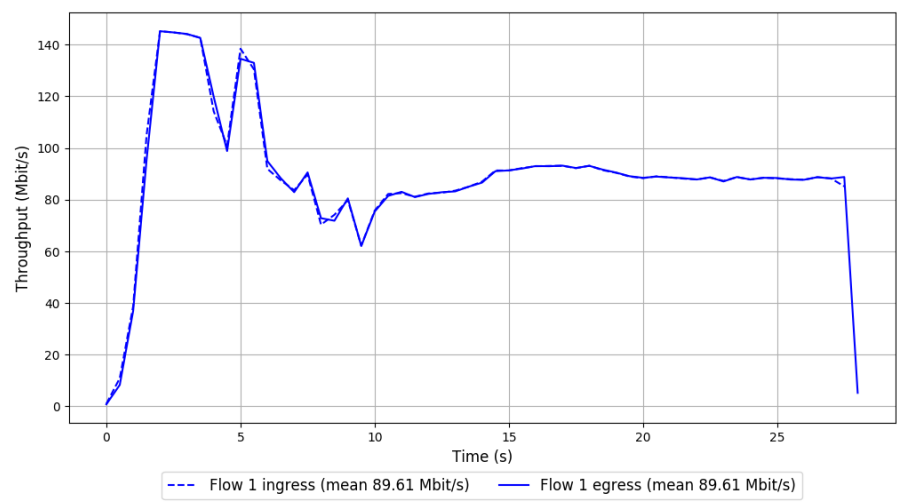
-- Flow 1:

Average throughput: 89.61 Mbit/s

95th percentile per-packet one-way delay: 49.419 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

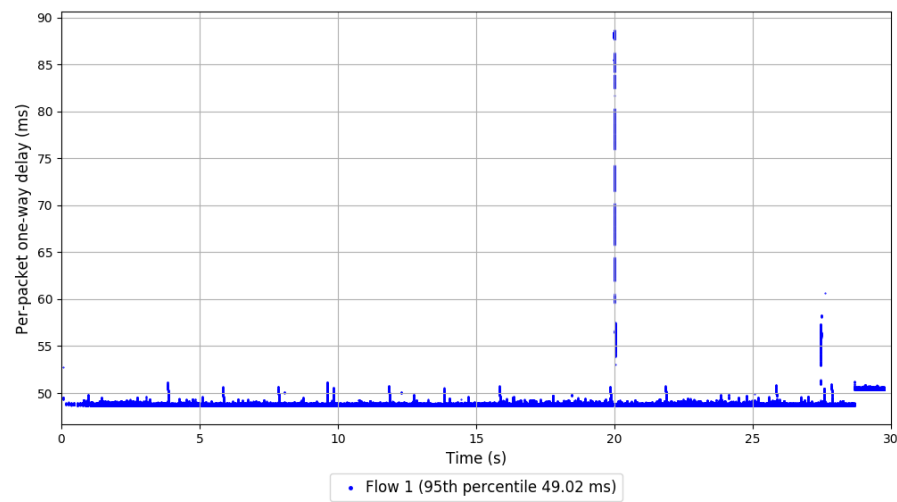
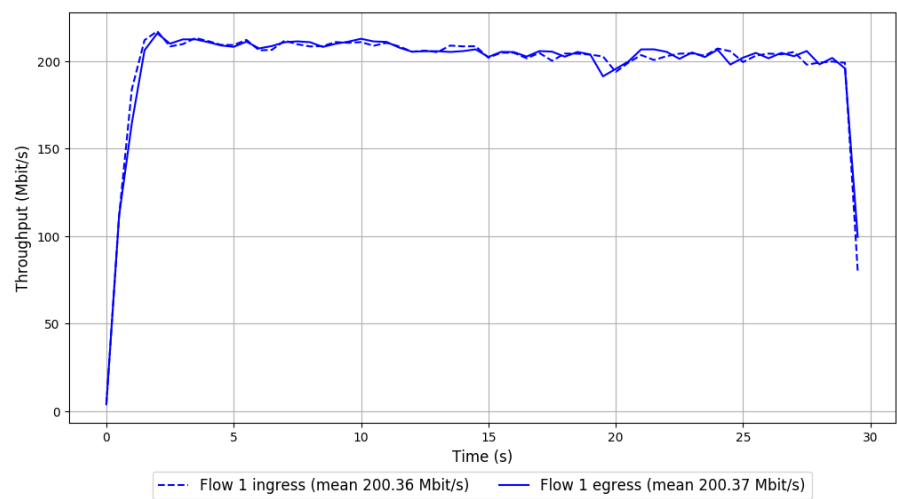


```
Run 1: Statistics of Indigo

Start at: 2017-11-16 02:55:42
End at: 2017-11-16 02:56:12

# Below is generated by plot.py at 2017-11-16 06:05:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 200.37 Mbit/s
95th percentile per-packet one-way delay: 49.017 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 200.37 Mbit/s
95th percentile per-packet one-way delay: 49.017 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-11-16 03:05:56

End at: 2017-11-16 03:06:26

Below is generated by plot.py at 2017-11-16 06:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.15 Mbit/s

95th percentile per-packet one-way delay: 50.560 ms

Loss rate: 0.00%

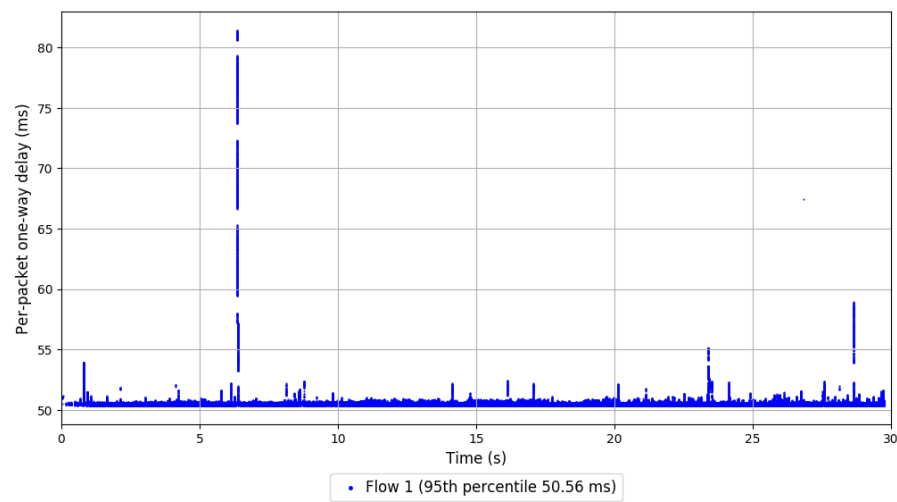
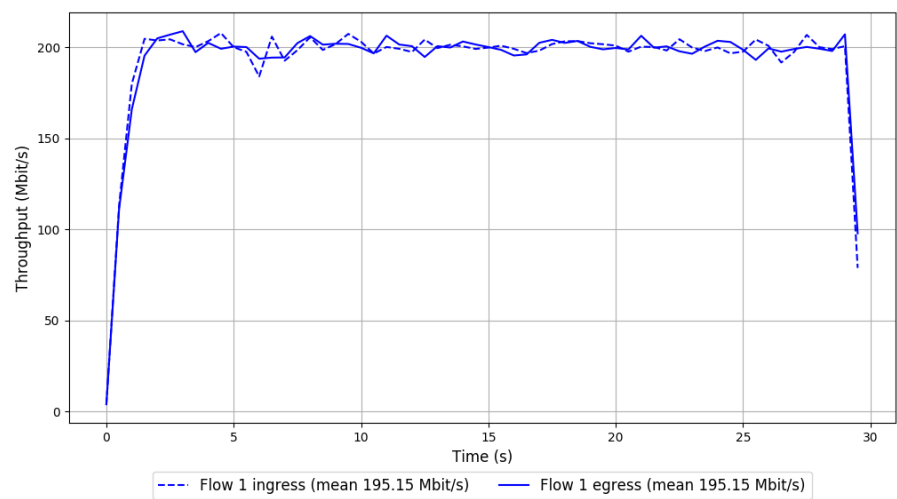
-- Flow 1:

Average throughput: 195.15 Mbit/s

95th percentile per-packet one-way delay: 50.560 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-16 03:16:07

End at: 2017-11-16 03:16:37

Below is generated by plot.py at 2017-11-16 06:05:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.91 Mbit/s

95th percentile per-packet one-way delay: 50.493 ms

Loss rate: 0.11%

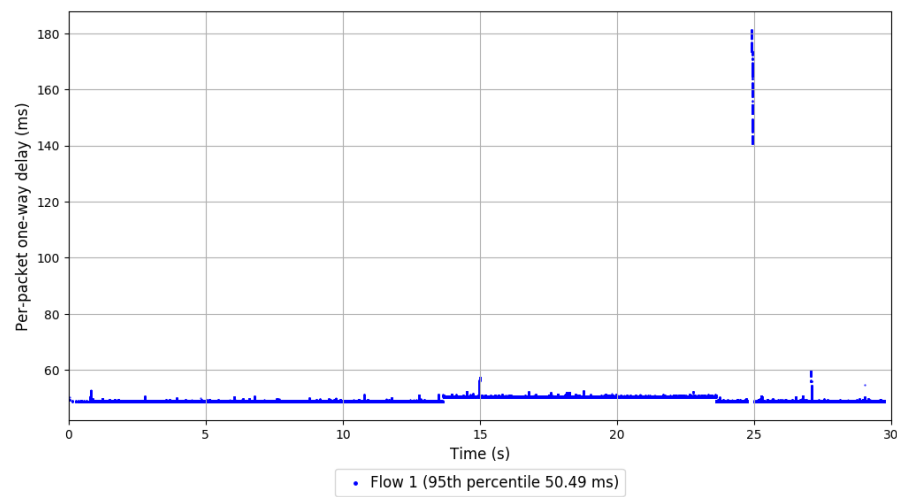
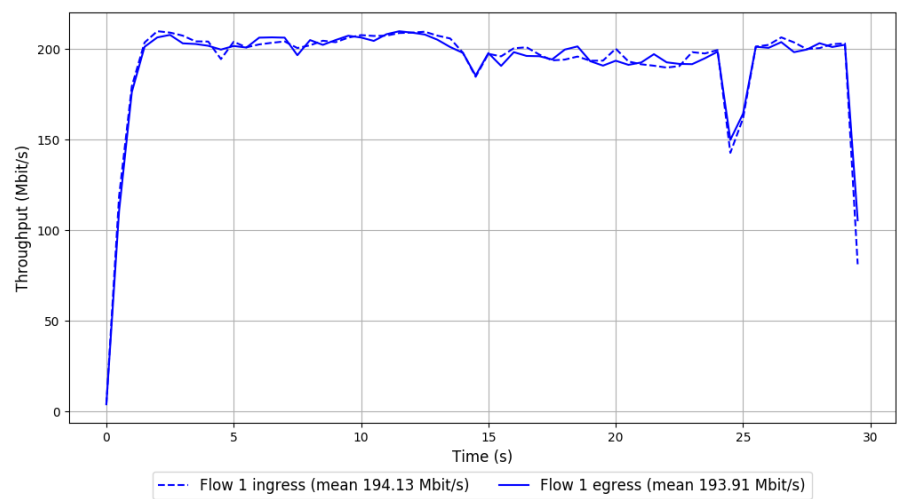
-- Flow 1:

Average throughput: 193.91 Mbit/s

95th percentile per-packet one-way delay: 50.493 ms

Loss rate: 0.11%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-16 03:26:14

End at: 2017-11-16 03:26:44

Below is generated by plot.py at 2017-11-16 06:06:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.38 Mbit/s

95th percentile per-packet one-way delay: 49.473 ms

Loss rate: 0.00%

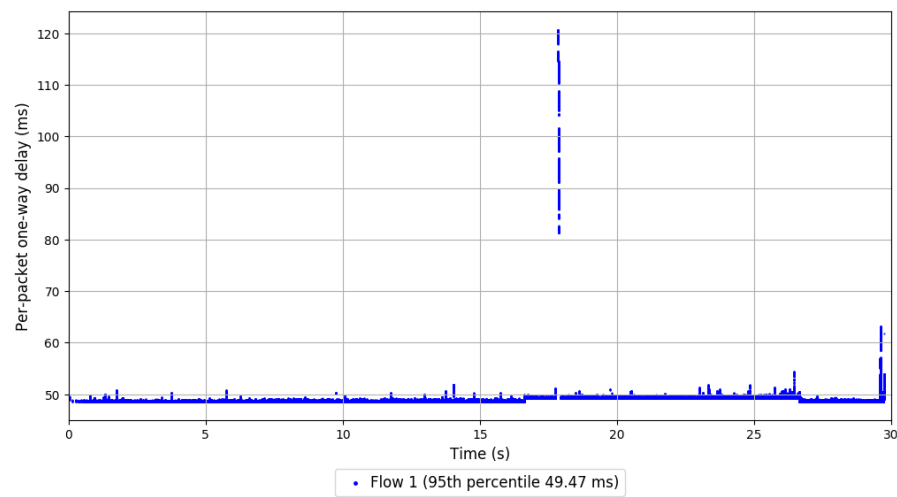
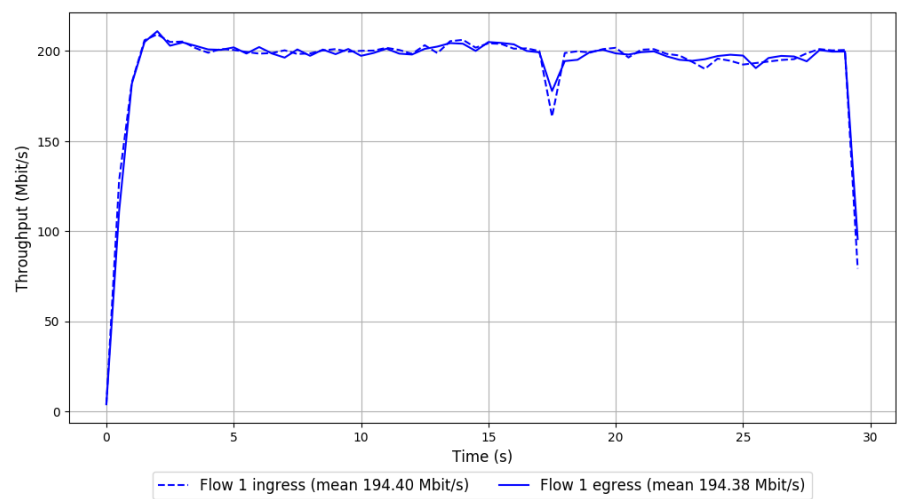
-- Flow 1:

Average throughput: 194.38 Mbit/s

95th percentile per-packet one-way delay: 49.473 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-16 03:36:29

End at: 2017-11-16 03:36:59

Below is generated by plot.py at 2017-11-16 06:06:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.94 Mbit/s

95th percentile per-packet one-way delay: 49.404 ms

Loss rate: 0.00%

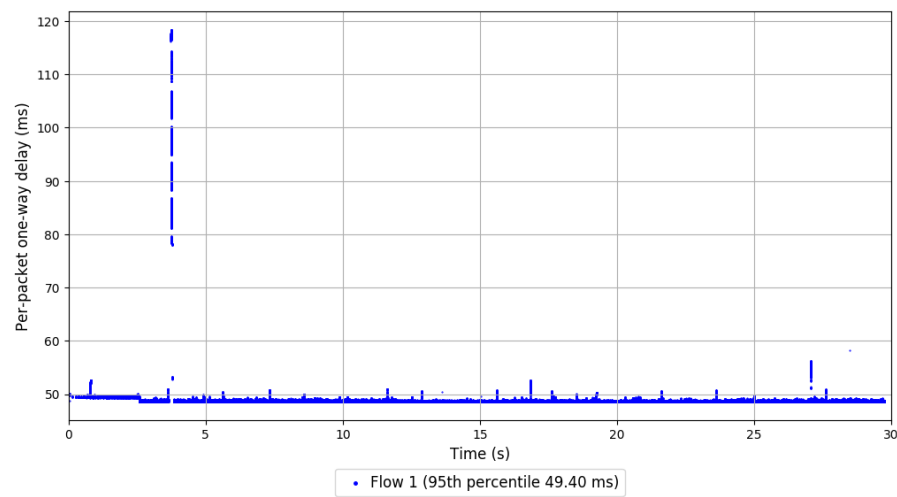
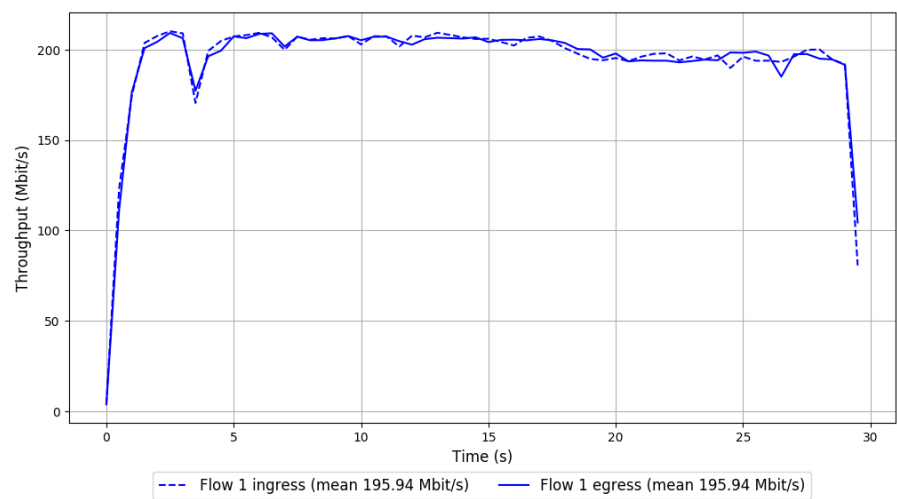
-- Flow 1:

Average throughput: 195.94 Mbit/s

95th percentile per-packet one-way delay: 49.404 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-16 03:46:41

End at: 2017-11-16 03:47:11

Below is generated by plot.py at 2017-11-16 06:06:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.26 Mbit/s

95th percentile per-packet one-way delay: 49.443 ms

Loss rate: 0.00%

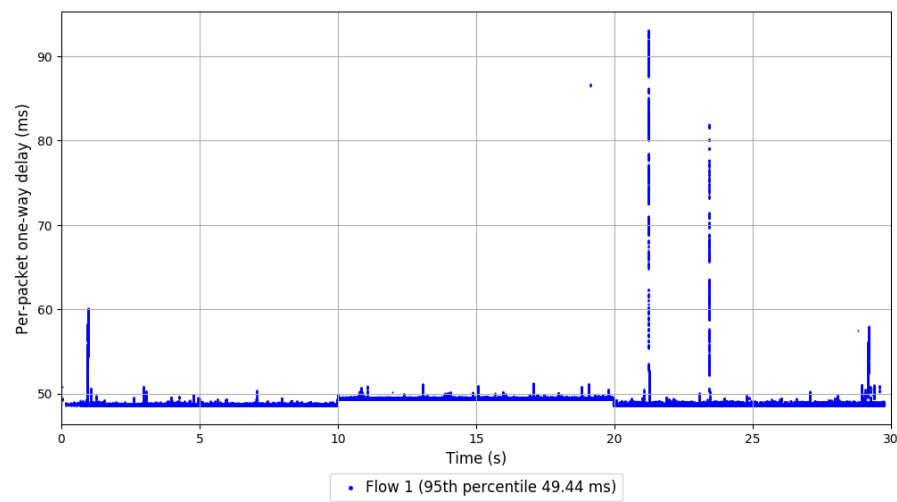
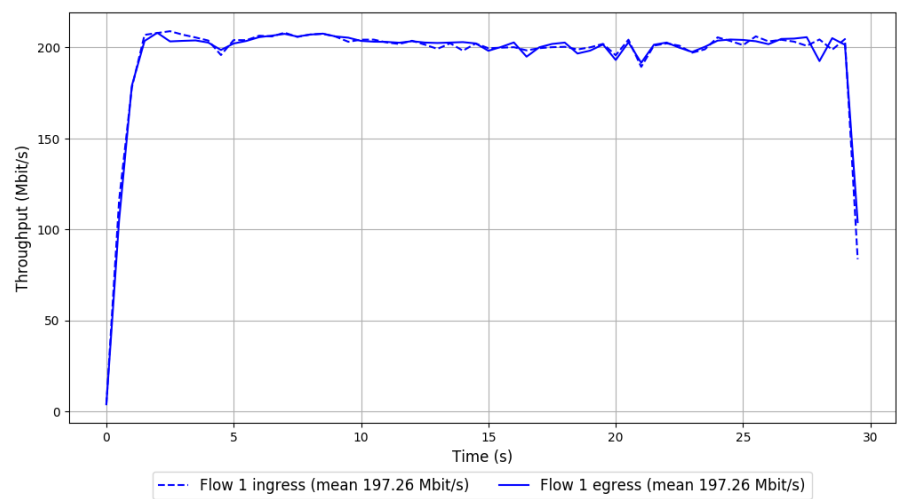
-- Flow 1:

Average throughput: 197.26 Mbit/s

95th percentile per-packet one-way delay: 49.443 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-16 03:56:56

End at: 2017-11-16 03:57:26

Below is generated by plot.py at 2017-11-16 06:06:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.93 Mbit/s

95th percentile per-packet one-way delay: 49.463 ms

Loss rate: 0.00%

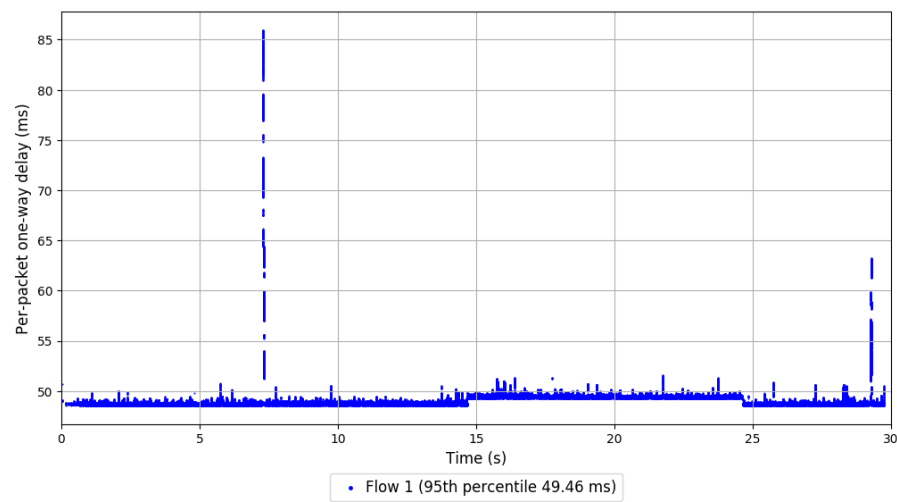
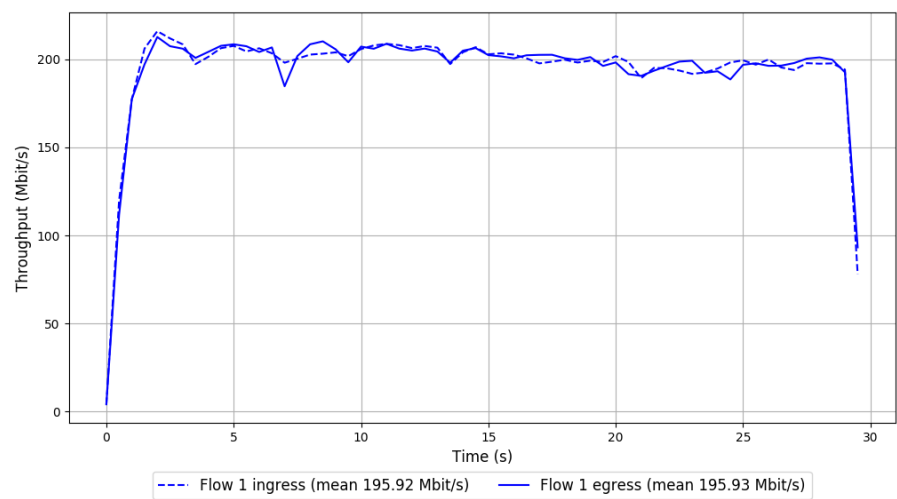
-- Flow 1:

Average throughput: 195.93 Mbit/s

95th percentile per-packet one-way delay: 49.463 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-16 04:07:14

End at: 2017-11-16 04:07:44

Below is generated by plot.py at 2017-11-16 06:07:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.09 Mbit/s

95th percentile per-packet one-way delay: 49.361 ms

Loss rate: 0.13%

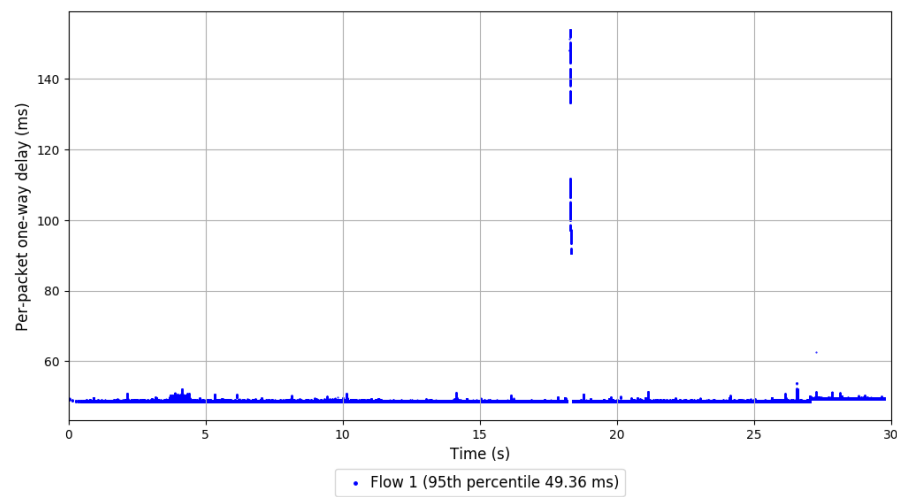
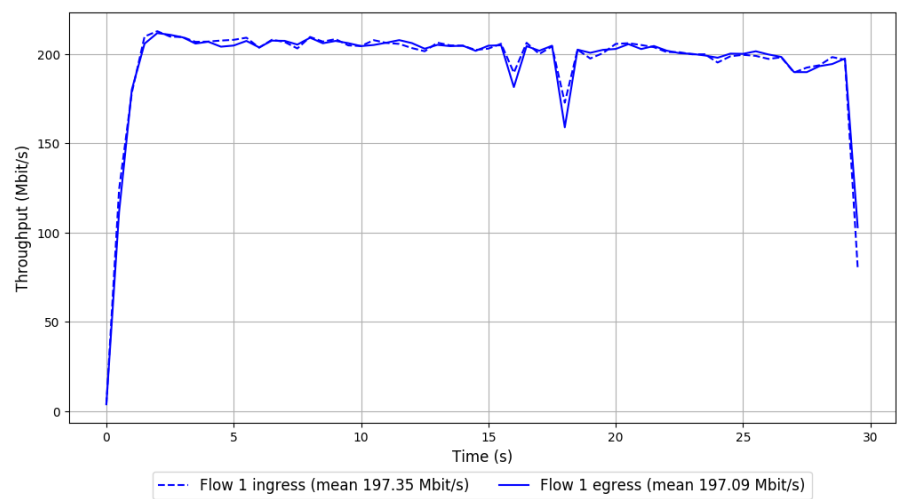
-- Flow 1:

Average throughput: 197.09 Mbit/s

95th percentile per-packet one-way delay: 49.361 ms

Loss rate: 0.13%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-16 04:17:36

End at: 2017-11-16 04:18:06

Below is generated by plot.py at 2017-11-16 06:08:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.17 Mbit/s

95th percentile per-packet one-way delay: 48.743 ms

Loss rate: 0.00%

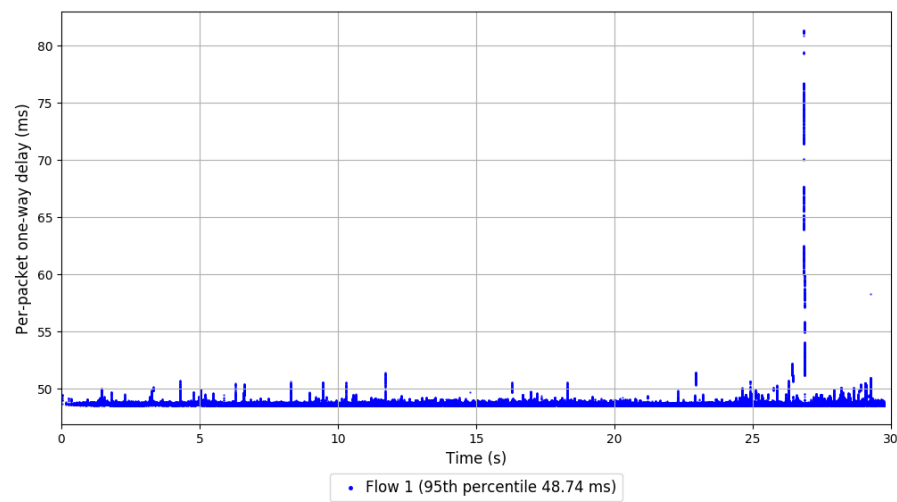
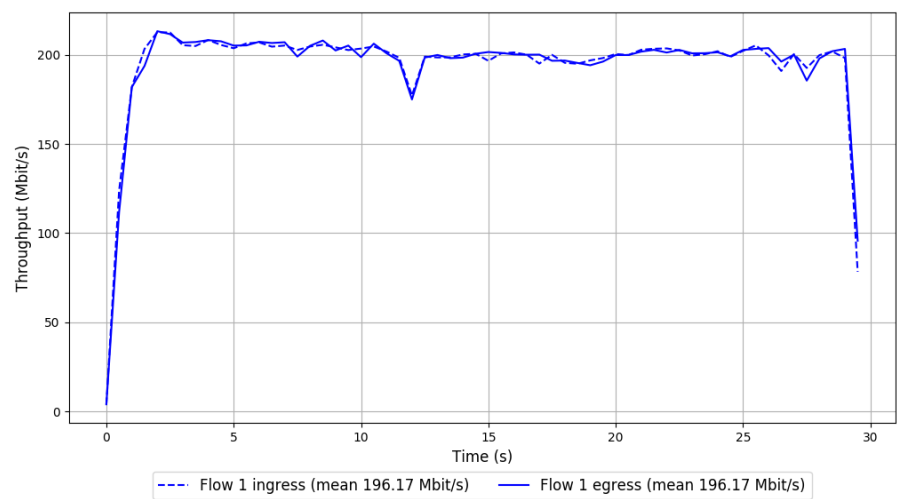
-- Flow 1:

Average throughput: 196.17 Mbit/s

95th percentile per-packet one-way delay: 48.743 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-16 04:27:54

End at: 2017-11-16 04:28:24

Below is generated by plot.py at 2017-11-16 06:08:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.03 Mbit/s

95th percentile per-packet one-way delay: 49.583 ms

Loss rate: 0.00%

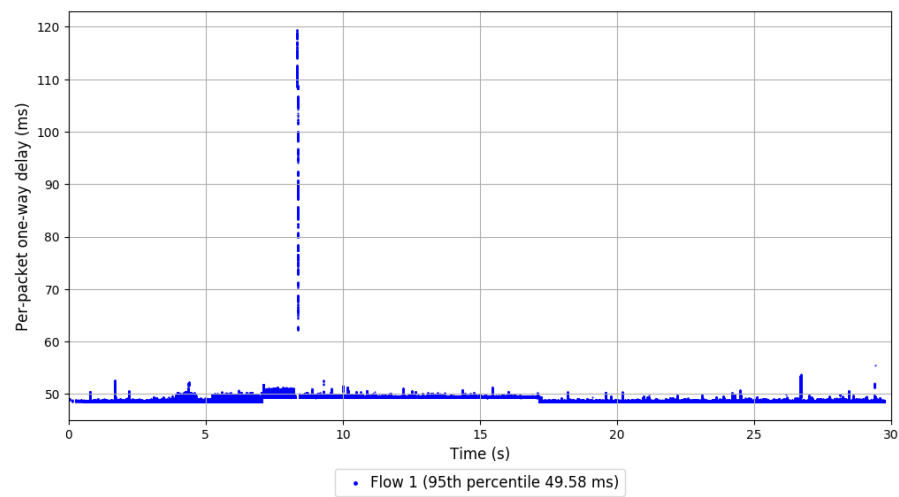
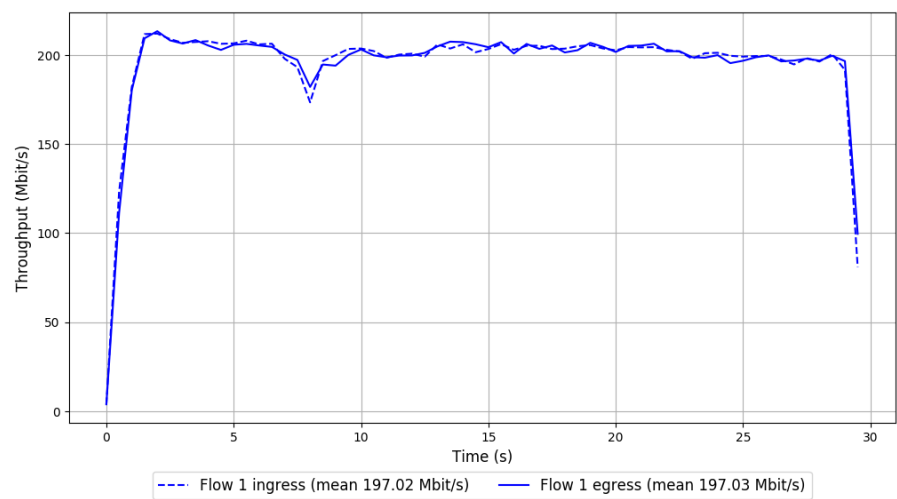
-- Flow 1:

Average throughput: 197.03 Mbit/s

95th percentile per-packet one-way delay: 49.583 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

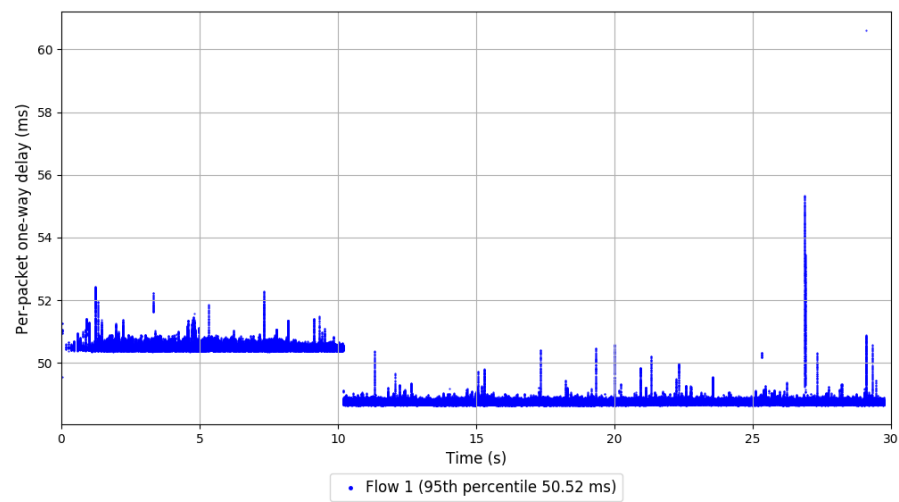
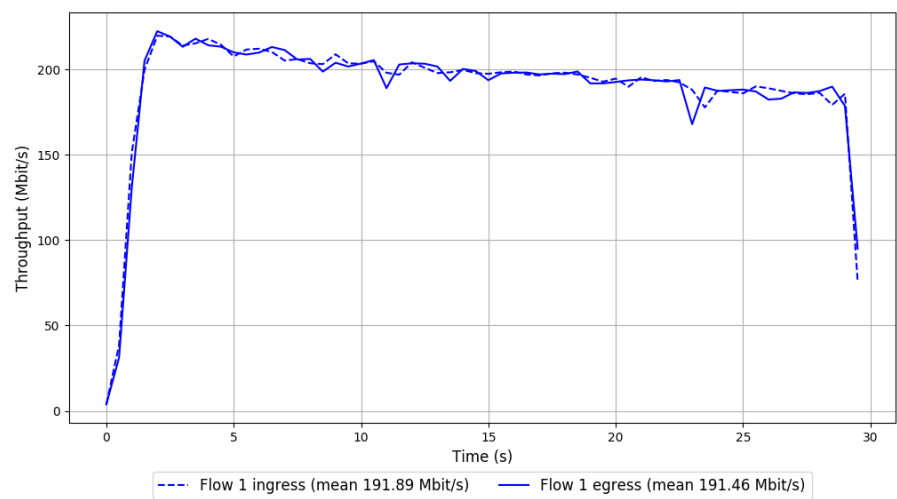


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-16 03:01:01
End at: 2017-11-16 03:01:31

# Below is generated by plot.py at 2017-11-16 06:08:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.46 Mbit/s
95th percentile per-packet one-way delay: 50.516 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 191.46 Mbit/s
95th percentile per-packet one-way delay: 50.516 ms
Loss rate: 0.22%
```

Run 1: Report of Indigo-calib — Data Link

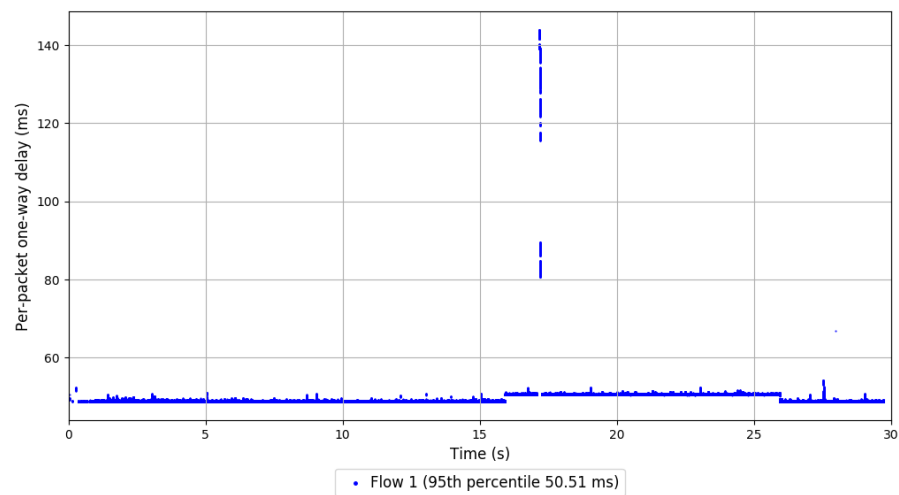
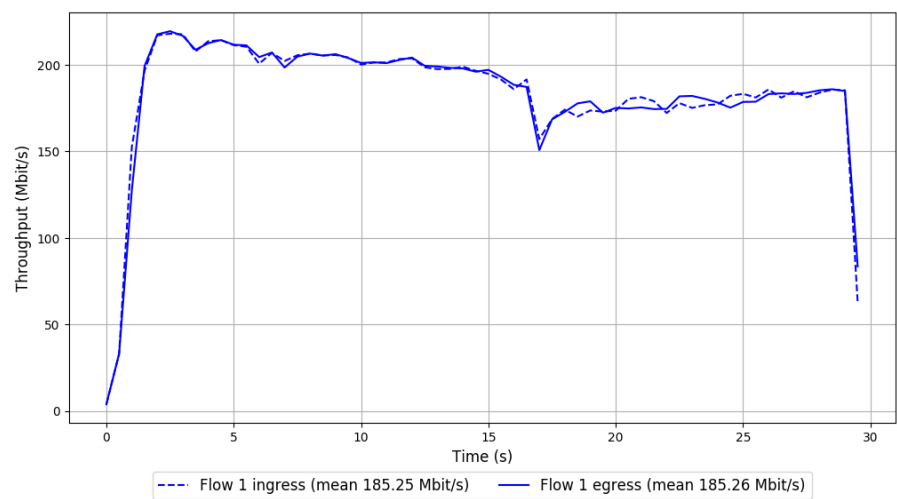


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-16 03:11:15
End at: 2017-11-16 03:11:45

# Below is generated by plot.py at 2017-11-16 06:09:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 185.26 Mbit/s
95th percentile per-packet one-way delay: 50.512 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.26 Mbit/s
95th percentile per-packet one-way delay: 50.512 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link

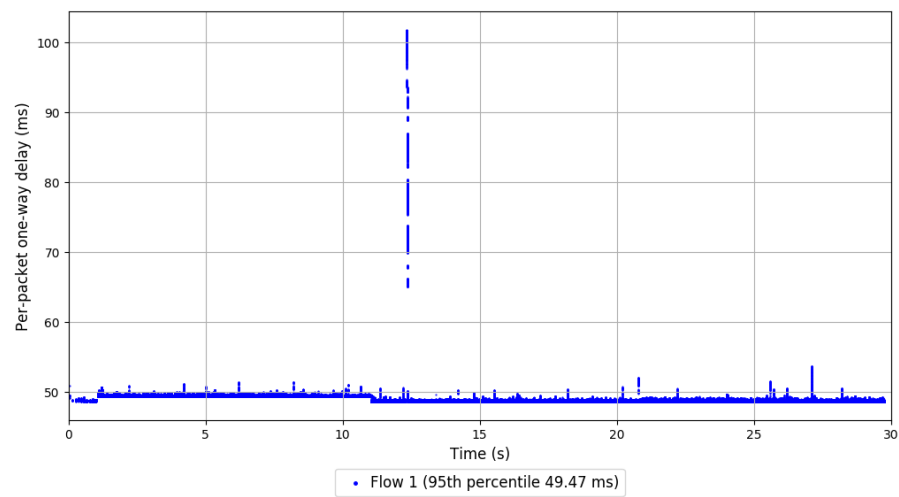
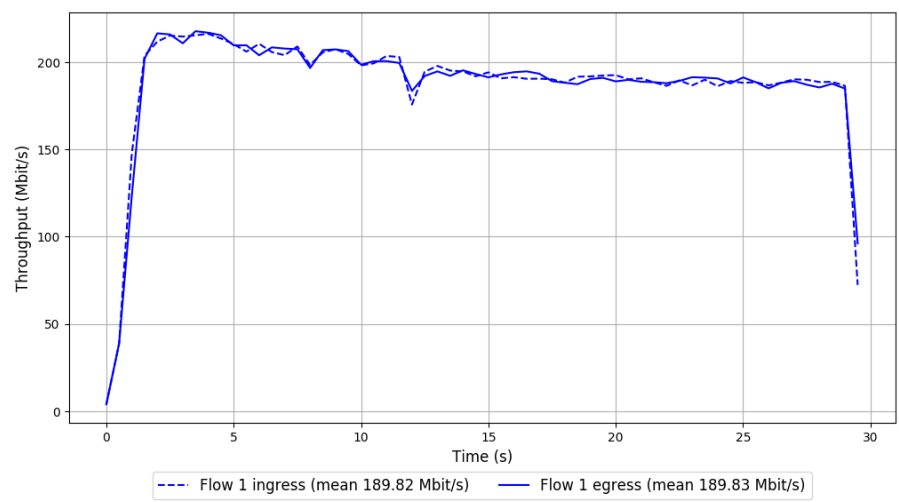


```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-16 03:21:20
End at: 2017-11-16 03:21:50

# Below is generated by plot.py at 2017-11-16 06:09:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.83 Mbit/s
95th percentile per-packet one-way delay: 49.470 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 189.83 Mbit/s
95th percentile per-packet one-way delay: 49.470 ms
Loss rate: 0.00%
```

Run 3: Report of Indigo-calib — Data Link

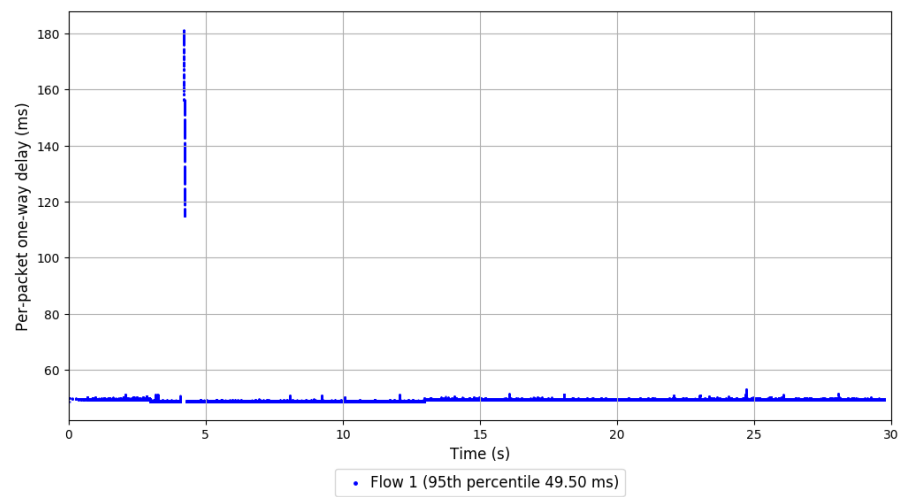
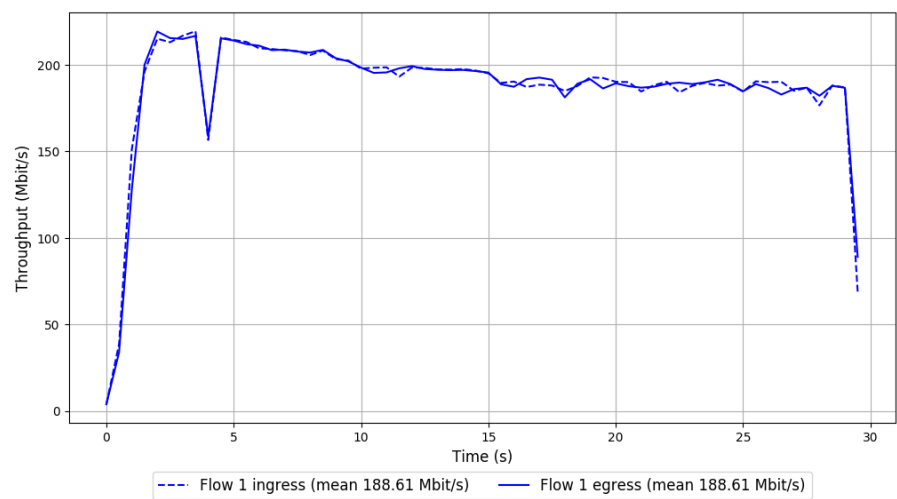


```
Run 4: Statistics of Indigo-calib

Start at: 2017-11-16 03:31:28
End at: 2017-11-16 03:31:58

# Below is generated by plot.py at 2017-11-16 06:09:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 188.61 Mbit/s
95th percentile per-packet one-way delay: 49.504 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 188.61 Mbit/s
95th percentile per-packet one-way delay: 49.504 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-16 03:41:45

End at: 2017-11-16 03:42:15

Below is generated by plot.py at 2017-11-16 06:09:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.51 Mbit/s

95th percentile per-packet one-way delay: 49.495 ms

Loss rate: 0.00%

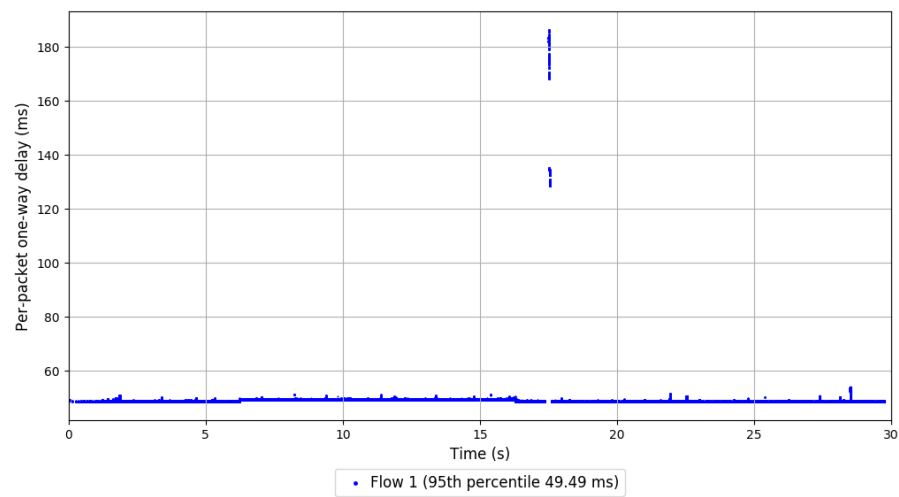
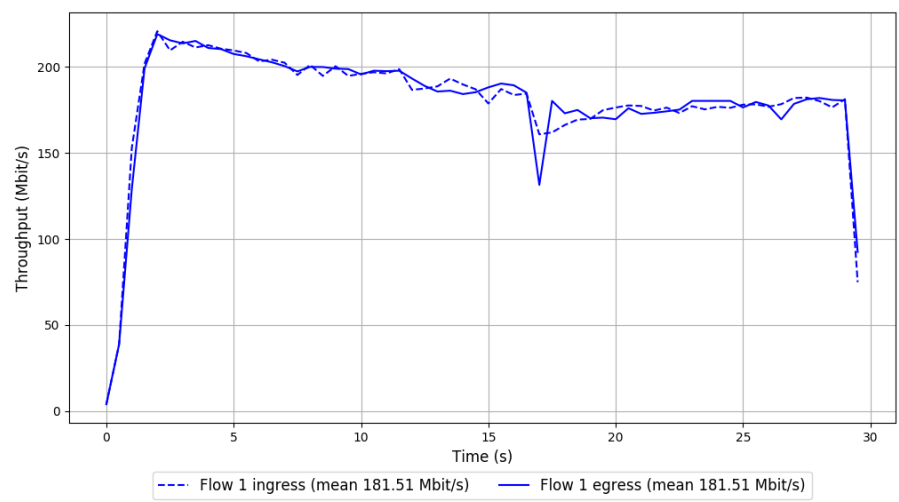
-- Flow 1:

Average throughput: 181.51 Mbit/s

95th percentile per-packet one-way delay: 49.495 ms

Loss rate: 0.00%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-11-16 03:52:00

End at: 2017-11-16 03:52:30

Below is generated by plot.py at 2017-11-16 06:09:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.11 Mbit/s

95th percentile per-packet one-way delay: 48.836 ms

Loss rate: 0.00%

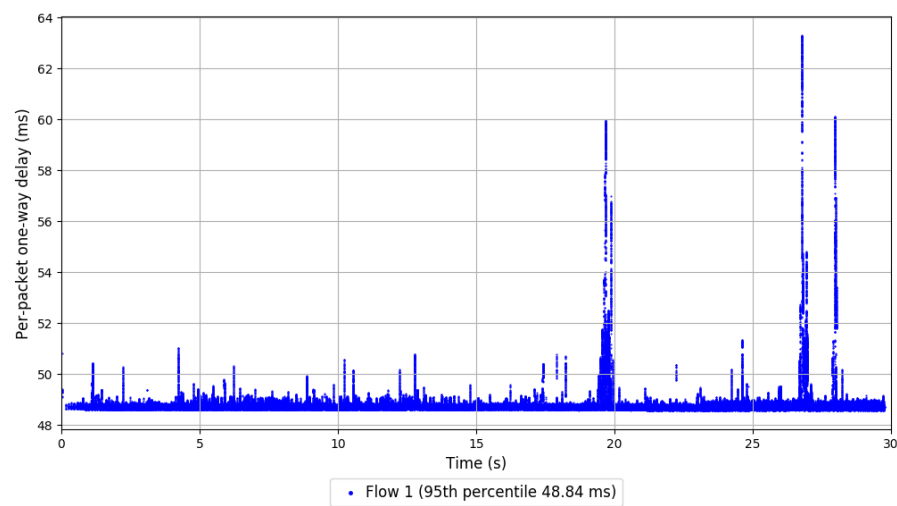
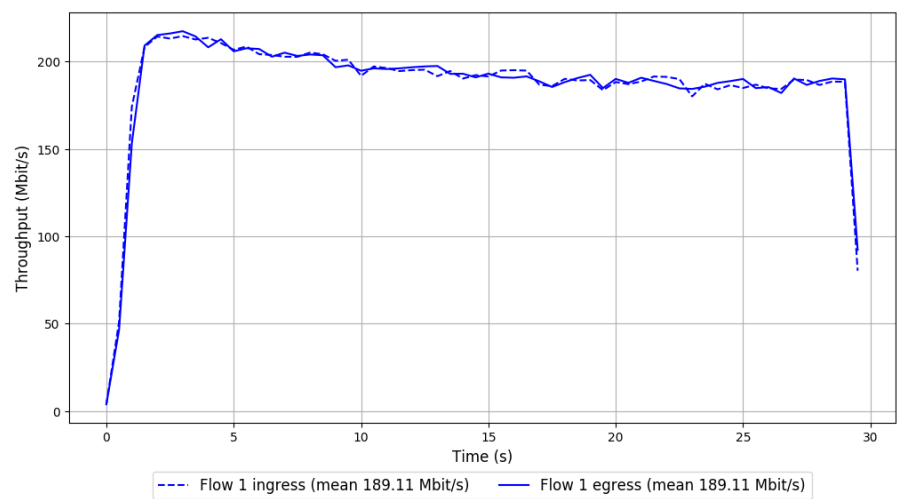
-- Flow 1:

Average throughput: 189.11 Mbit/s

95th percentile per-packet one-way delay: 48.836 ms

Loss rate: 0.00%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-16 04:02:13

End at: 2017-11-16 04:02:43

Below is generated by plot.py at 2017-11-16 06:09:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 137.72 Mbit/s

95th percentile per-packet one-way delay: 62.450 ms

Loss rate: 0.00%

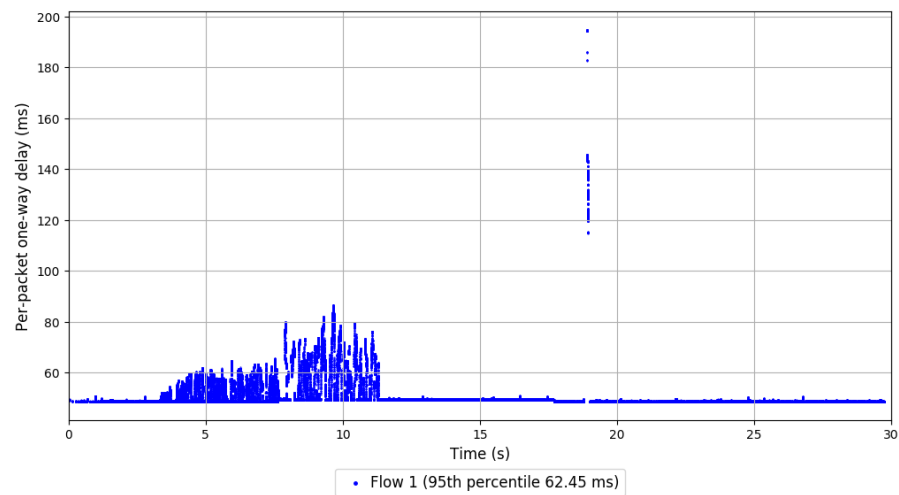
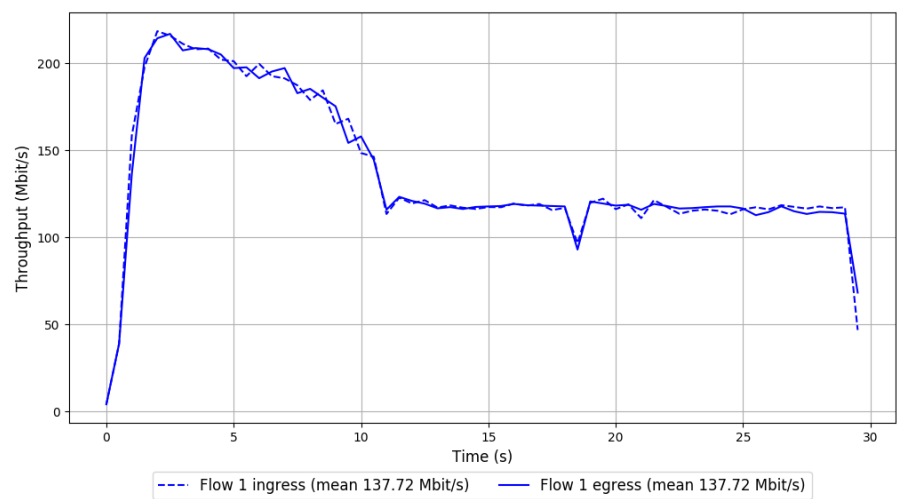
-- Flow 1:

Average throughput: 137.72 Mbit/s

95th percentile per-packet one-way delay: 62.450 ms

Loss rate: 0.00%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-16 04:12:33

End at: 2017-11-16 04:13:03

Below is generated by plot.py at 2017-11-16 06:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.70 Mbit/s

95th percentile per-packet one-way delay: 48.742 ms

Loss rate: 0.00%

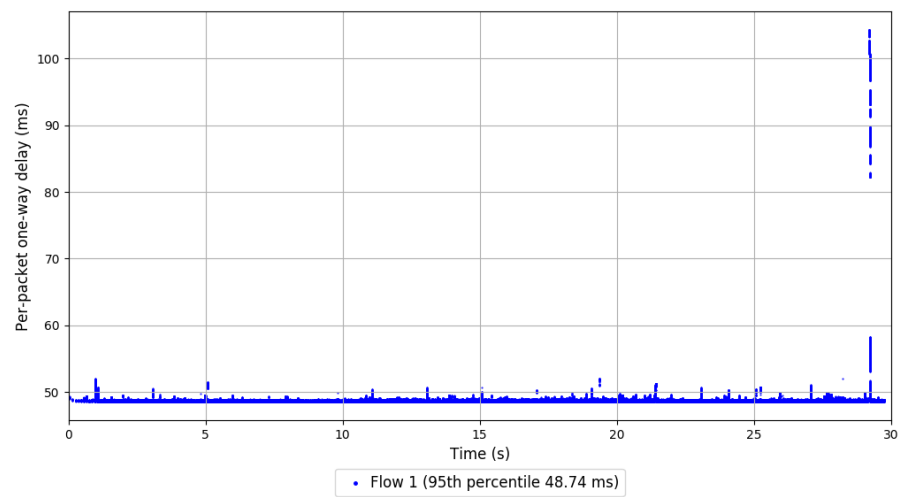
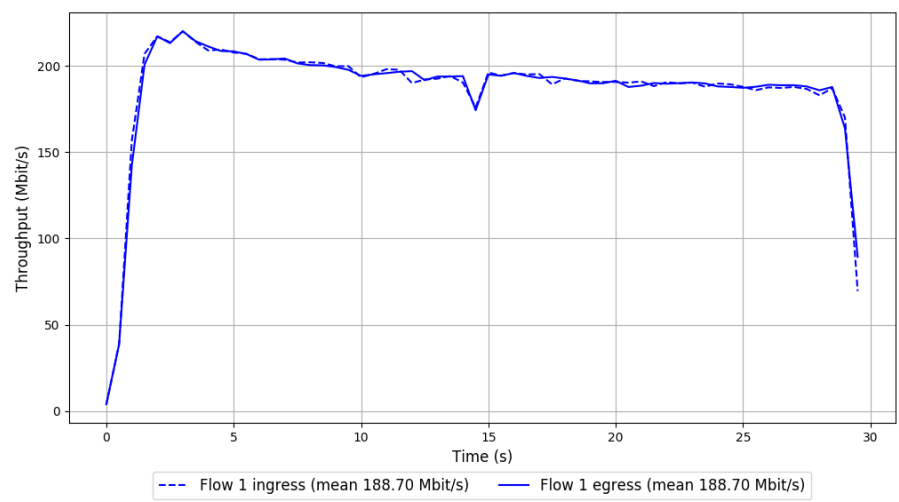
-- Flow 1:

Average throughput: 188.70 Mbit/s

95th percentile per-packet one-way delay: 48.742 ms

Loss rate: 0.00%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-16 04:22:51

End at: 2017-11-16 04:23:21

Below is generated by plot.py at 2017-11-16 06:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.06 Mbit/s

95th percentile per-packet one-way delay: 49.445 ms

Loss rate: 0.09%

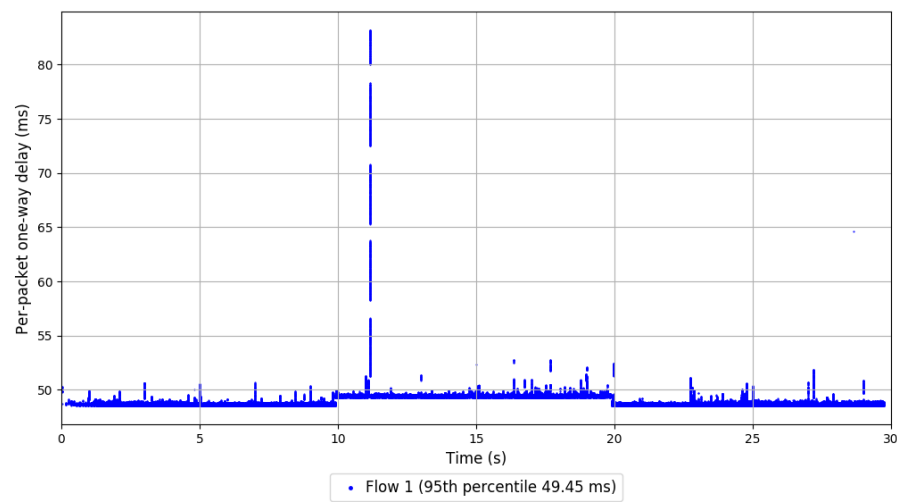
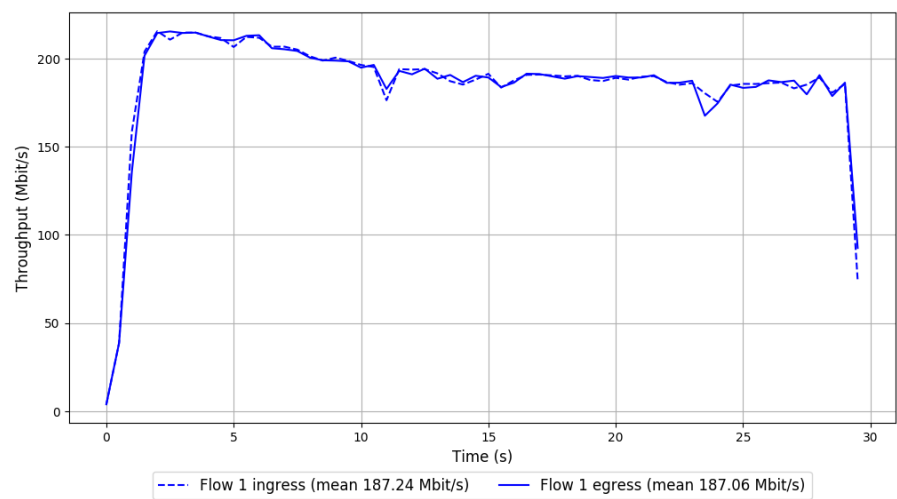
-- Flow 1:

Average throughput: 187.06 Mbit/s

95th percentile per-packet one-way delay: 49.445 ms

Loss rate: 0.09%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-16 04:33:13

End at: 2017-11-16 04:33:43

Below is generated by plot.py at 2017-11-16 06:10:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.36 Mbit/s

95th percentile per-packet one-way delay: 49.520 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 187.36 Mbit/s

95th percentile per-packet one-way delay: 49.520 ms

Loss rate: 0.00%

Run 10: Report of Indigo-calib — Data Link

