

Pantheon Report

Generated at 2017-10-11 03:19:55 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

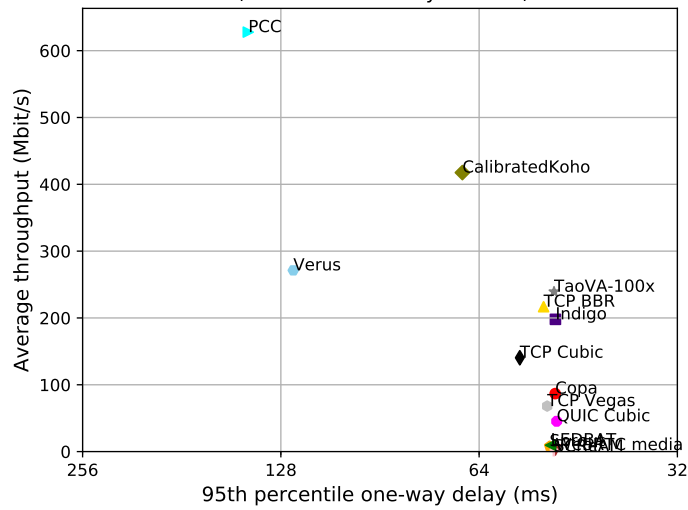
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

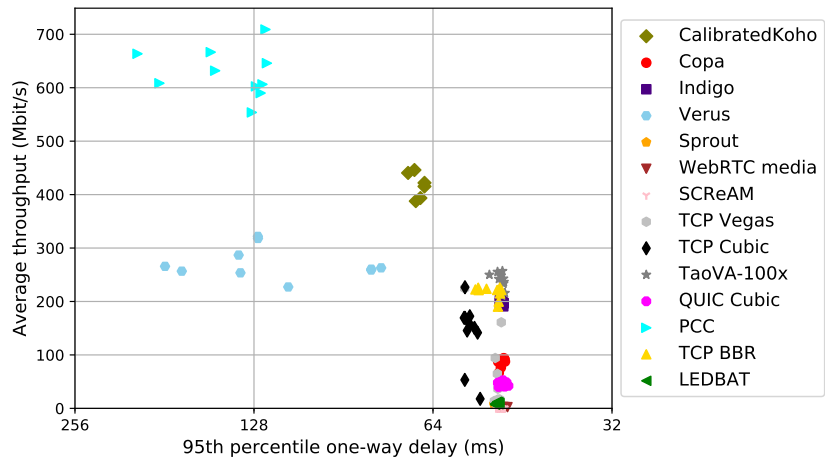
Git summary:

```
branch: indigos @ 45998d6404be7c5106956530acb9cfc43bd06e7d
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ 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 London Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



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



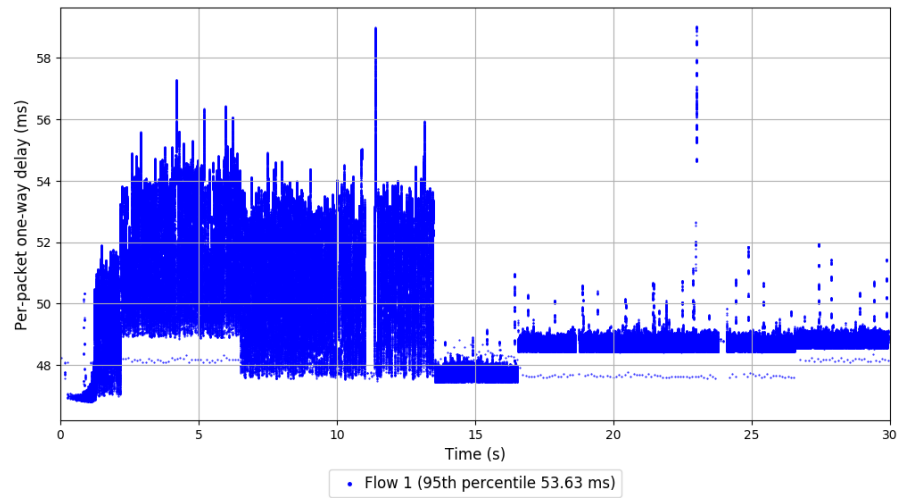
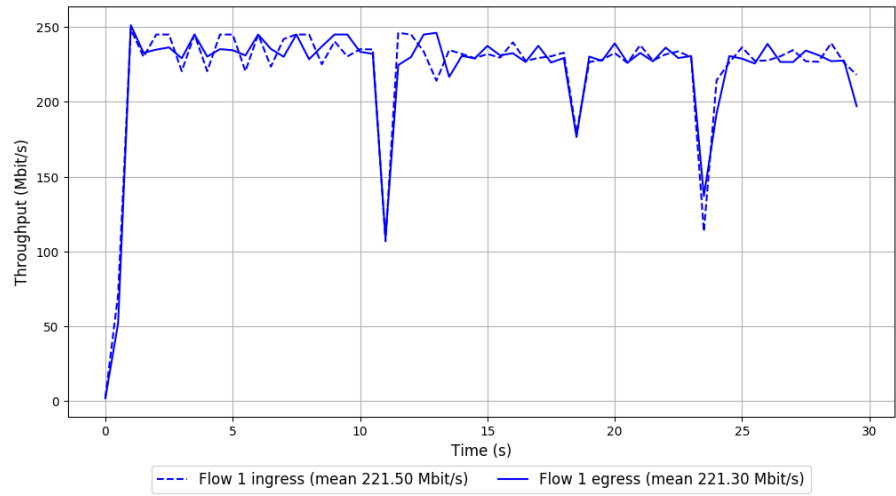
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	216.82	51.09	0.37
TCP Cubic	10	140.43	55.52	0.31
LEDBAT	10	9.53	49.85	0.54
PCC	10	627.77	143.44	3.13
QUIC Cubic	10	45.36	48.80	0.49
SCReAM	10	0.22	49.29	0.31
WebRTC media	10	2.29	49.02	0.37
Sprout	10	7.98	50.04	0.32
TaoVA-100x	10	239.23	49.25	0.36
TCP Vegas	10	68.09	50.45	0.29
Verus	10	271.21	122.57	1.49
Copa	10	86.75	49.05	0.32
CalibratedKoho	6	417.54	67.86	0.41
Indigo	10	197.91	49.02	0.35

```
Run 1: Statistics of TCP BBR

Start at: 2017-10-10 22:48:26
End at: 2017-10-10 22:48:56

# Below is generated by plot.py at 2017-10-11 02:29:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.30 Mbit/s
95th percentile per-packet one-way delay: 53.630 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 221.30 Mbit/s
95th percentile per-packet one-way delay: 53.630 ms
Loss rate: 0.36%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-10-10 22:58:57

End at: 2017-10-10 22:59:27

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.57 Mbit/s

95th percentile per-packet one-way delay: 54.308 ms

Loss rate: 0.35%

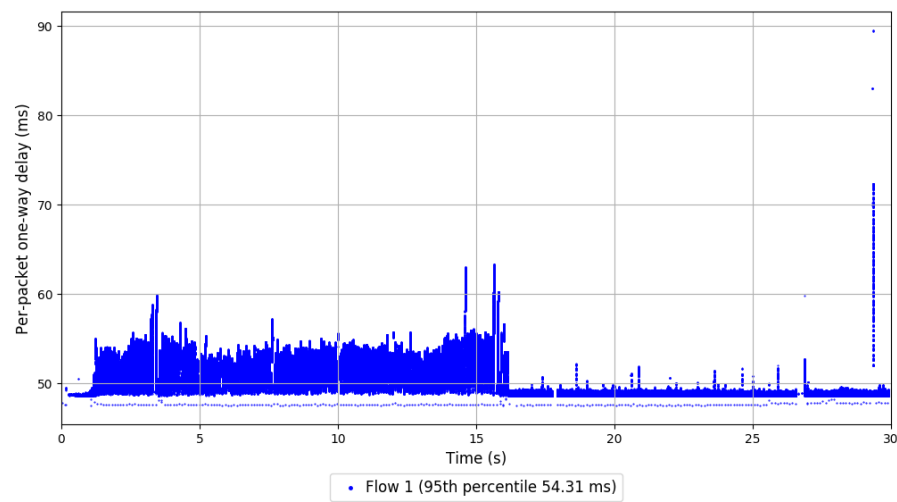
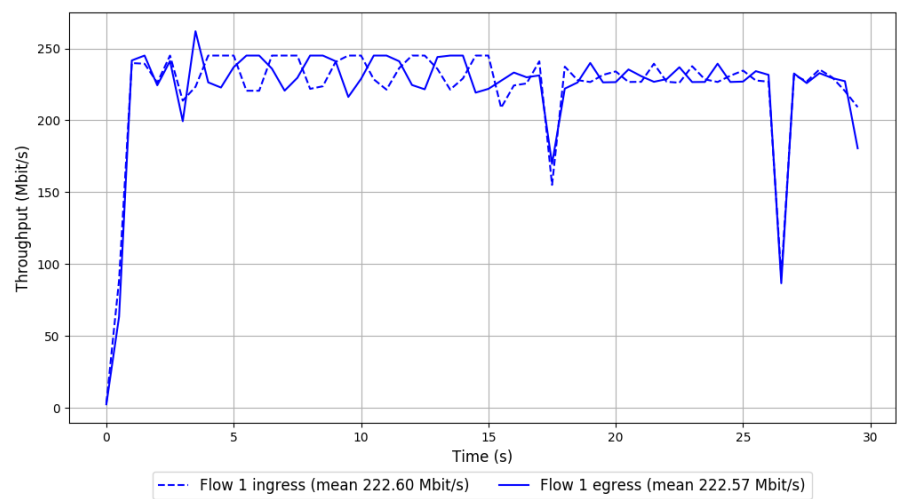
-- Flow 1:

Average throughput: 222.57 Mbit/s

95th percentile per-packet one-way delay: 54.308 ms

Loss rate: 0.35%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-10-10 23:09:58

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

Below is generated by plot.py at 2017-10-11 02:29:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.29 Mbit/s

95th percentile per-packet one-way delay: 49.394 ms

Loss rate: 0.36%

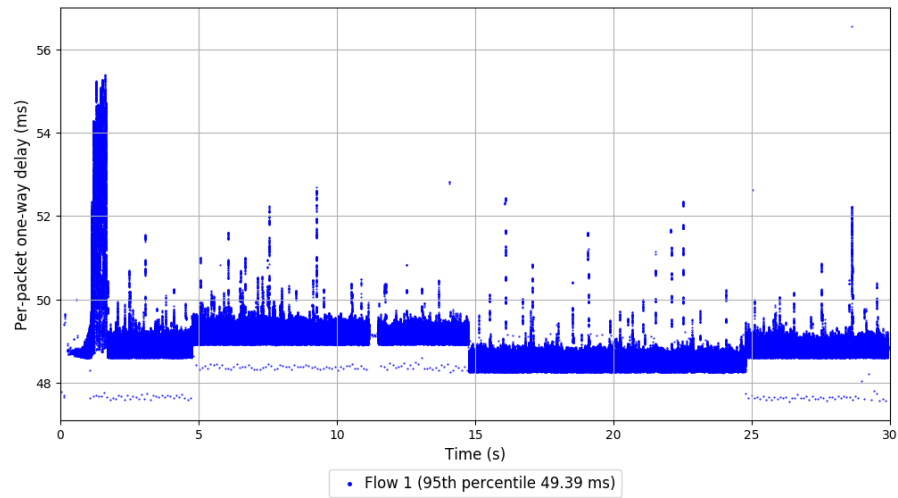
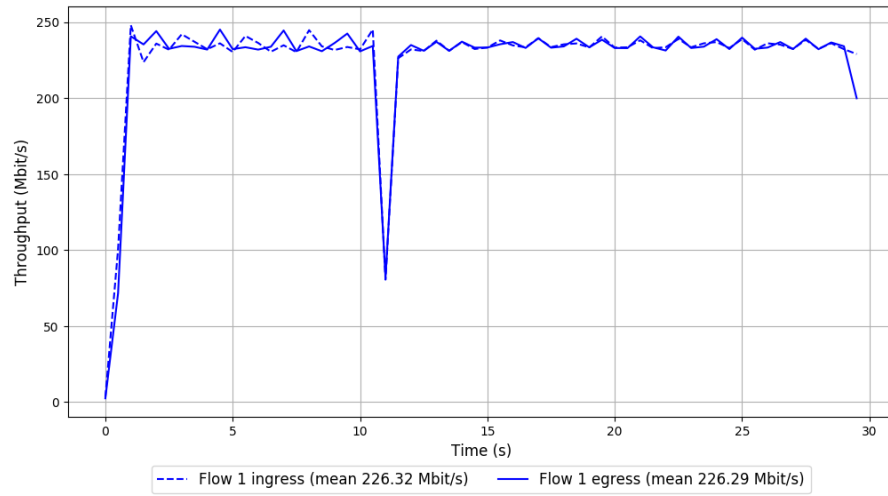
-- Flow 1:

Average throughput: 226.29 Mbit/s

95th percentile per-packet one-way delay: 49.394 ms

Loss rate: 0.36%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-10-10 23:20:48

End at: 2017-10-10 23:21:18

Below is generated by plot.py at 2017-10-11 02:29:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.73 Mbit/s

95th percentile per-packet one-way delay: 49.131 ms

Loss rate: 0.37%

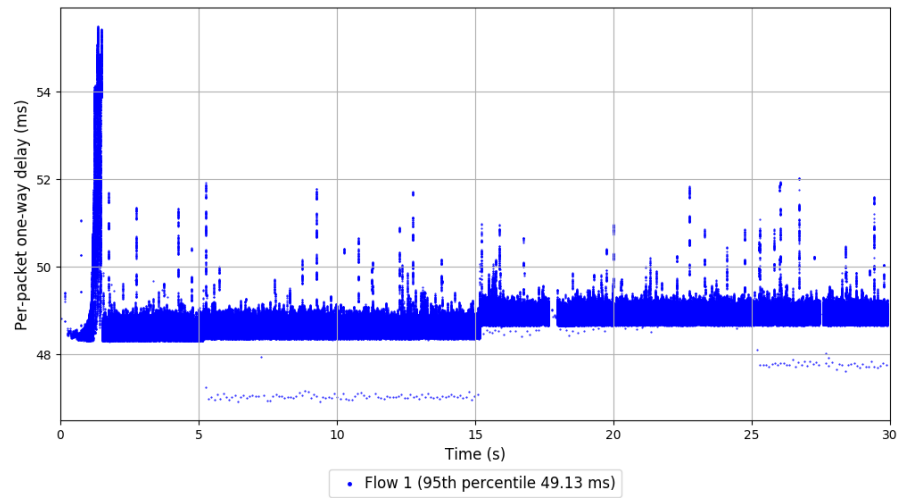
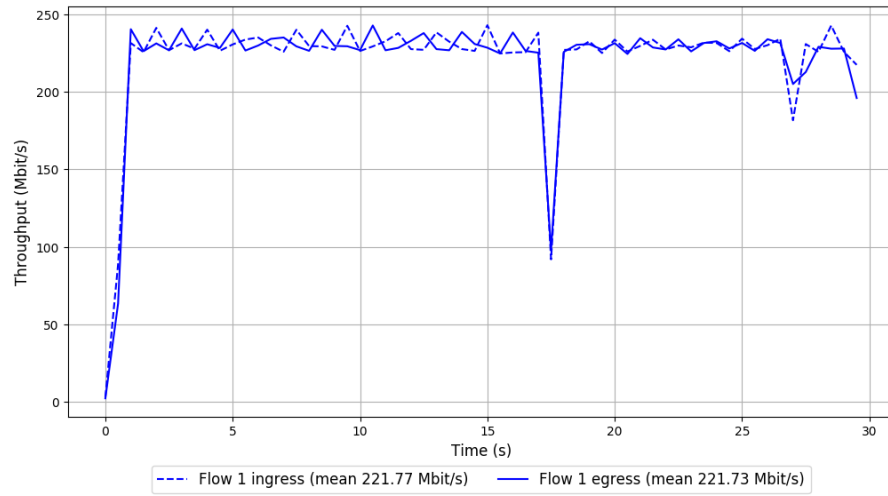
-- Flow 1:

Average throughput: 221.73 Mbit/s

95th percentile per-packet one-way delay: 49.131 ms

Loss rate: 0.37%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-10-10 23:31:44

End at: 2017-10-10 23:32:14

Below is generated by plot.py at 2017-10-11 02:29:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 225.77 Mbit/s

95th percentile per-packet one-way delay: 53.713 ms

Loss rate: 0.32%

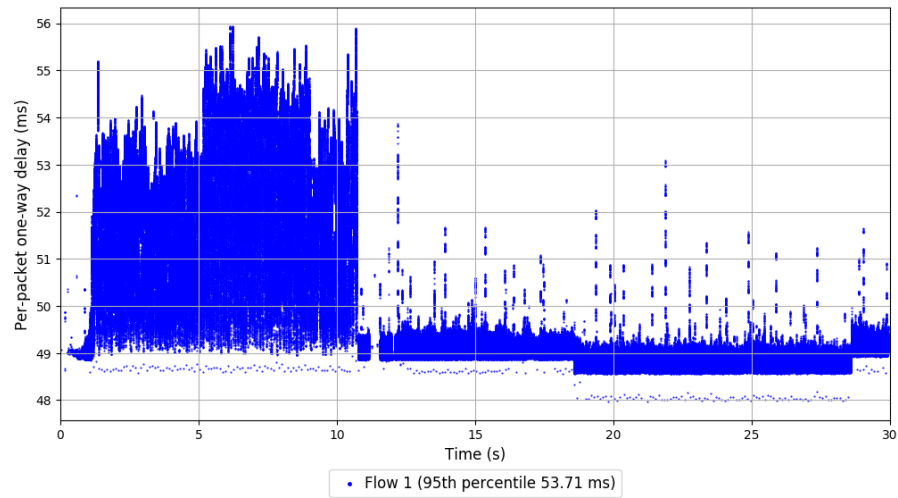
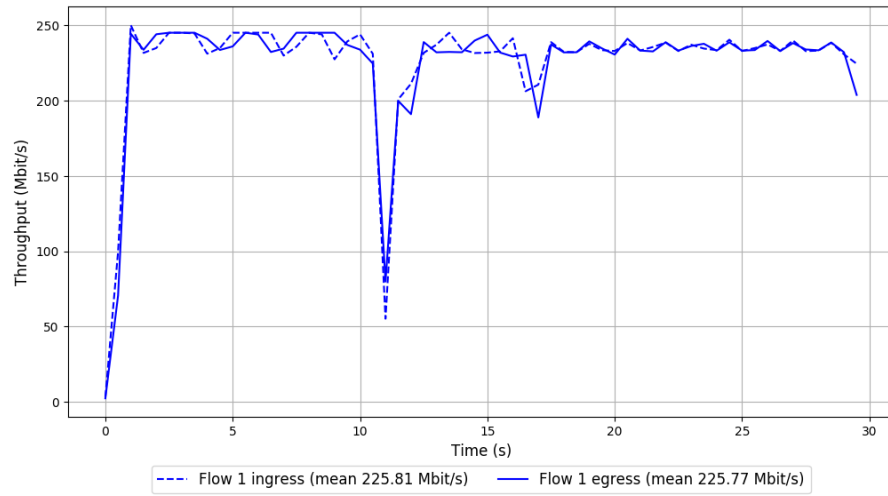
-- Flow 1:

Average throughput: 225.77 Mbit/s

95th percentile per-packet one-way delay: 53.713 ms

Loss rate: 0.32%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-10-10 23:41:58

End at: 2017-10-10 23:42:28

Below is generated by plot.py at 2017-10-11 02:29:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.74 Mbit/s

95th percentile per-packet one-way delay: 49.624 ms

Loss rate: 0.40%

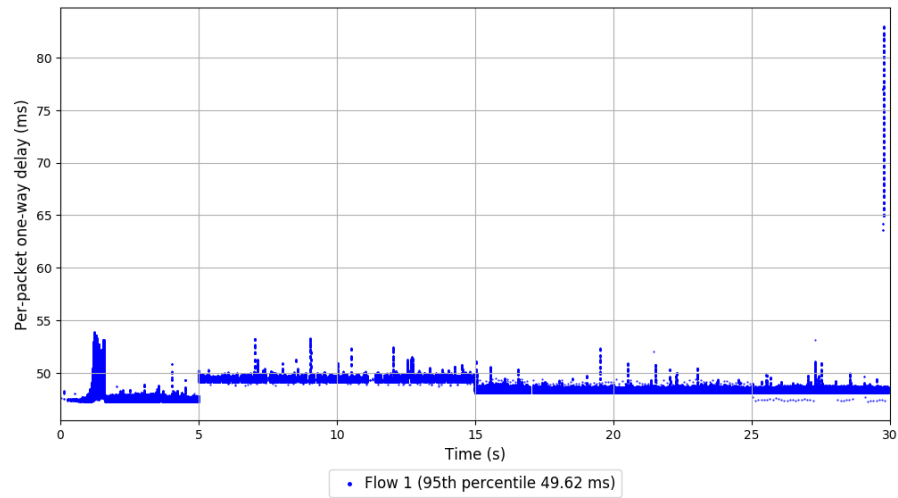
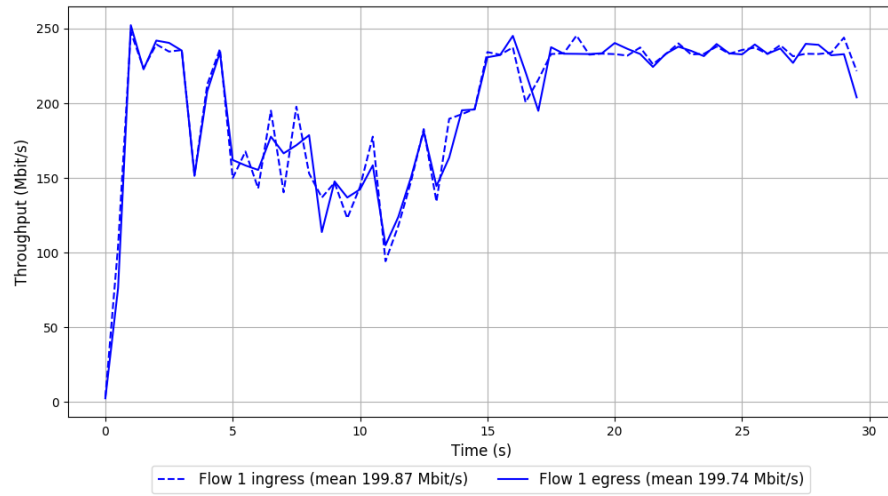
-- Flow 1:

Average throughput: 199.74 Mbit/s

95th percentile per-packet one-way delay: 49.624 ms

Loss rate: 0.40%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-10-10 23:52:49

End at: 2017-10-10 23:53:19

Below is generated by plot.py at 2017-10-11 02:29:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.34 Mbit/s

95th percentile per-packet one-way delay: 49.768 ms

Loss rate: 0.42%

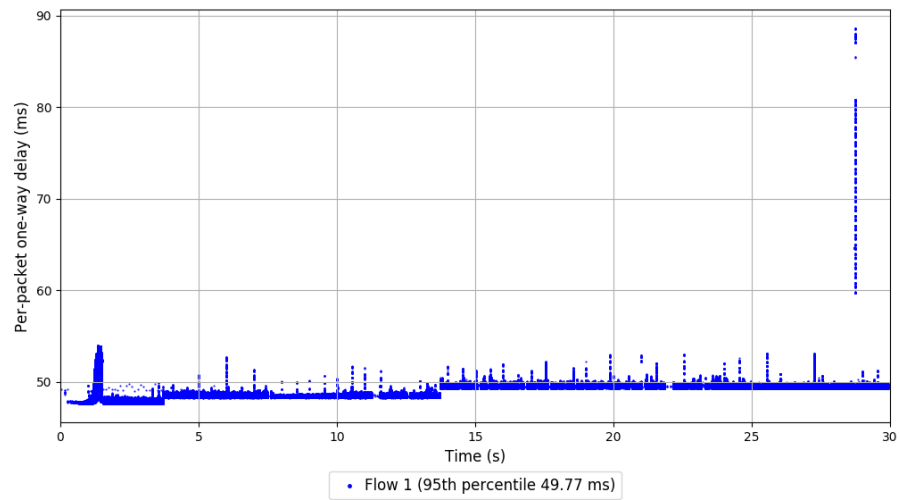
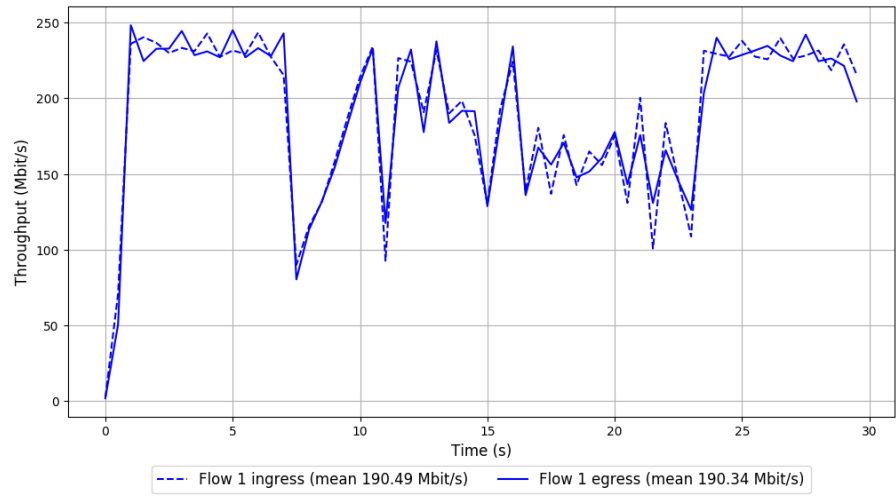
-- Flow 1:

Average throughput: 190.34 Mbit/s

95th percentile per-packet one-way delay: 49.768 ms

Loss rate: 0.42%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-10-11 00:03:40

End at: 2017-10-11 00:04:11

Below is generated by plot.py at 2017-10-11 02:29:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.16 Mbit/s

95th percentile per-packet one-way delay: 49.360 ms

Loss rate: 0.37%

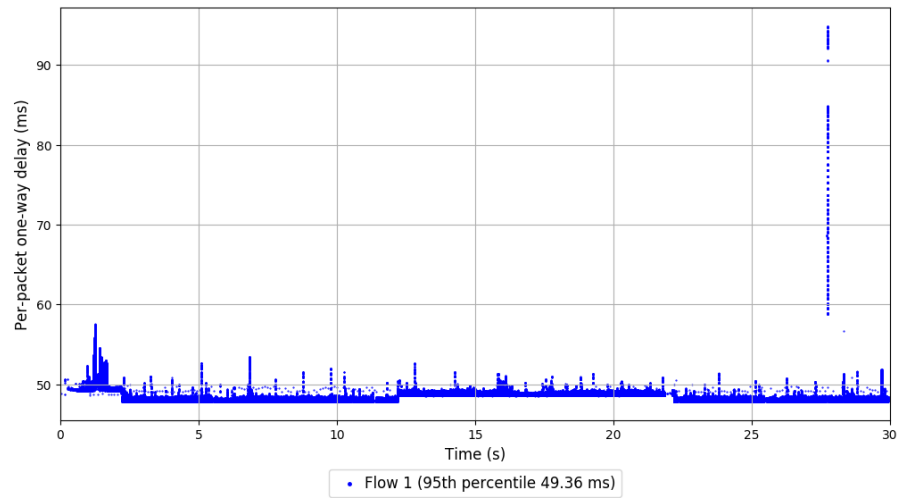
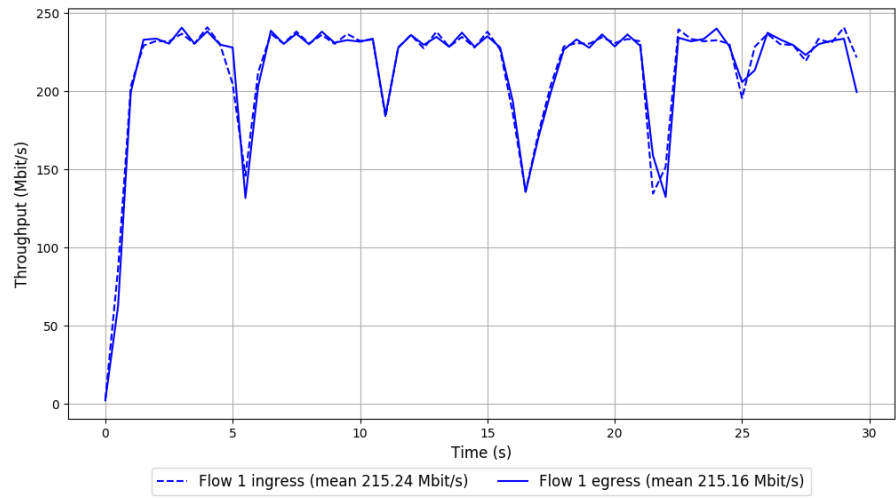
-- Flow 1:

Average throughput: 215.16 Mbit/s

95th percentile per-packet one-way delay: 49.360 ms

Loss rate: 0.37%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-10-11 00:14:39

End at: 2017-10-11 00:15:09

Below is generated by plot.py at 2017-10-11 02:32:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 223.81 Mbit/s

95th percentile per-packet one-way delay: 52.024 ms

Loss rate: 0.35%

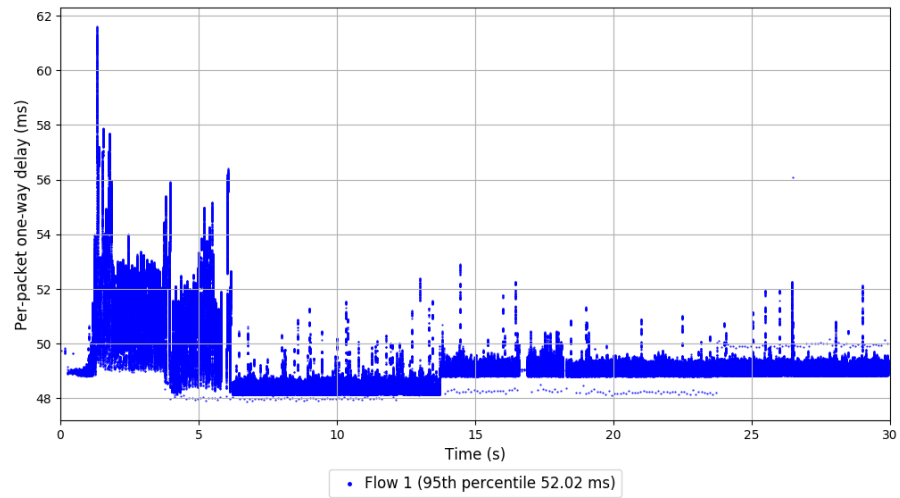
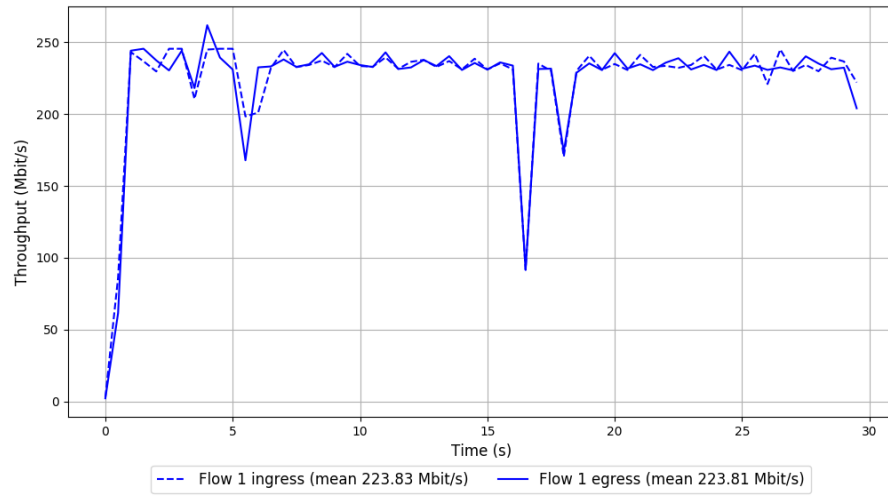
-- Flow 1:

Average throughput: 223.81 Mbit/s

95th percentile per-packet one-way delay: 52.024 ms

Loss rate: 0.35%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-10-11 00:25:06

End at: 2017-10-11 00:25:36

Below is generated by plot.py at 2017-10-11 02:32:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 221.53 Mbit/s

95th percentile per-packet one-way delay: 49.916 ms

Loss rate: 0.35%

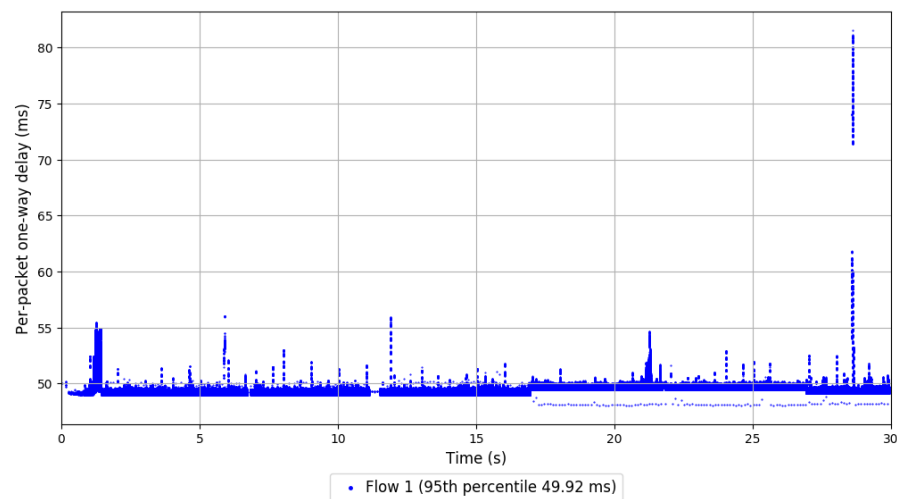
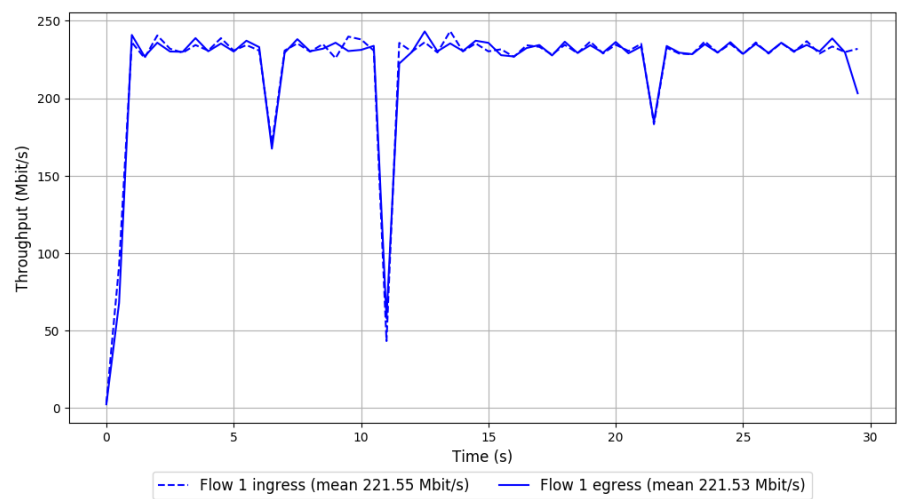
-- Flow 1:

Average throughput: 221.53 Mbit/s

95th percentile per-packet one-way delay: 49.916 ms

Loss rate: 0.35%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-10-10 22:47:42

End at: 2017-10-10 22:48:12

Below is generated by plot.py at 2017-10-11 02:32:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 145.60 Mbit/s

95th percentile per-packet one-way delay: 56.065 ms

Loss rate: 0.54%

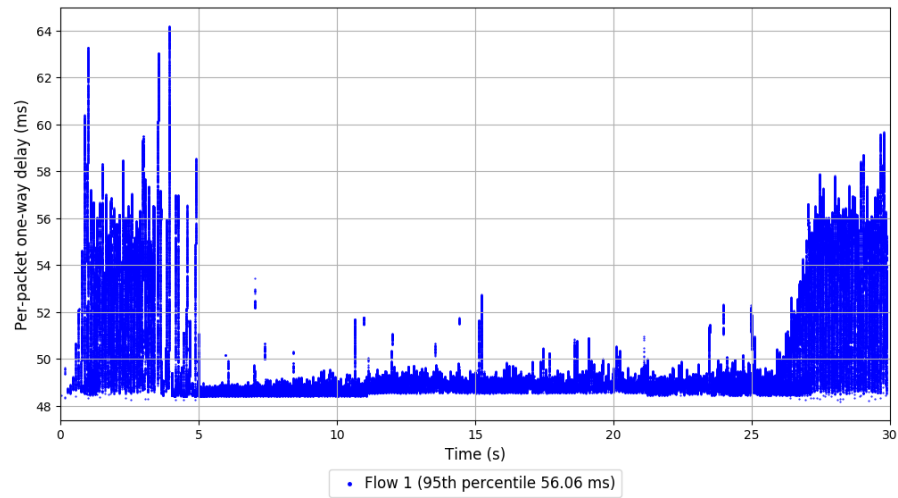
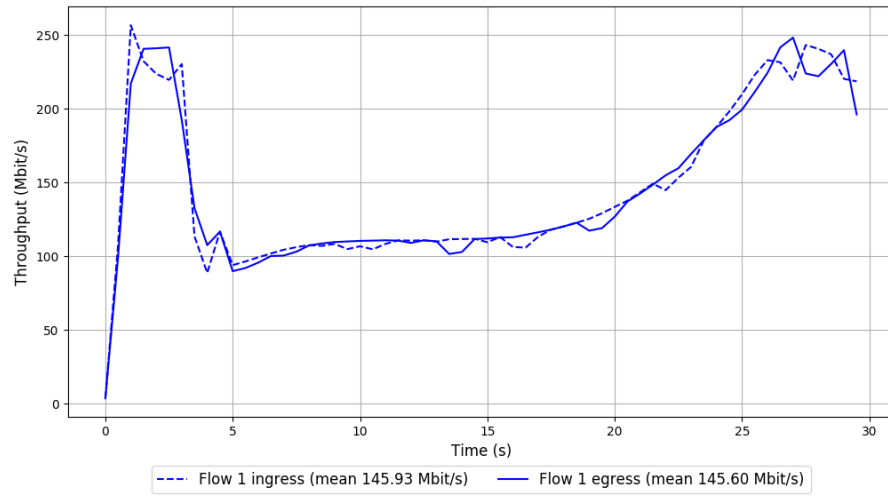
-- Flow 1:

Average throughput: 145.60 Mbit/s

95th percentile per-packet one-way delay: 56.065 ms

Loss rate: 0.54%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-10-10 22:58:11

End at: 2017-10-10 22:58:41

Below is generated by plot.py at 2017-10-11 02:32:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.38 Mbit/s

95th percentile per-packet one-way delay: 56.535 ms

Loss rate: 0.48%

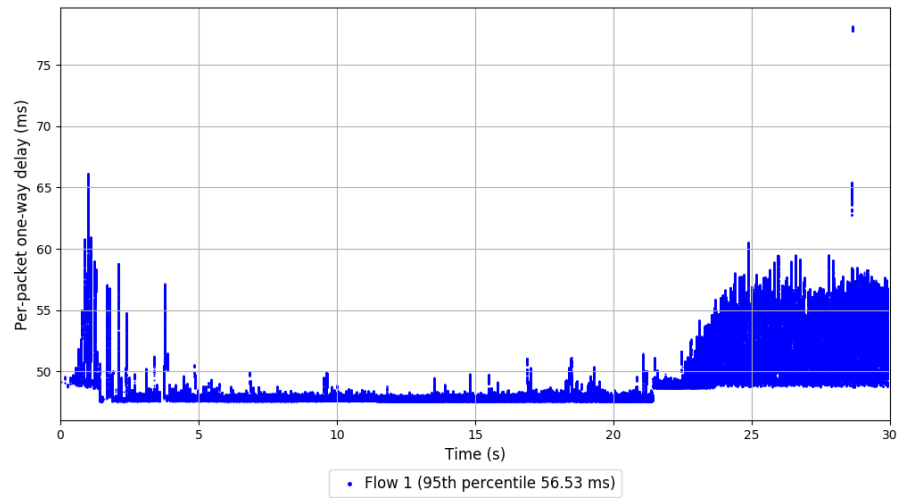
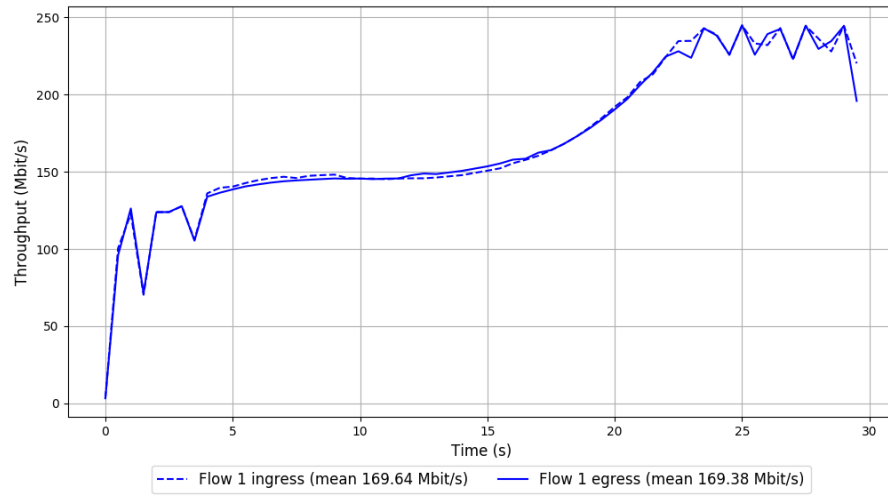
-- Flow 1:

Average throughput: 169.38 Mbit/s

95th percentile per-packet one-way delay: 56.535 ms

Loss rate: 0.48%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-10-10 23:09:09

End at: 2017-10-10 23:09:39

Below is generated by plot.py at 2017-10-11 02:33:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.65 Mbit/s

95th percentile per-packet one-way delay: 56.545 ms

Loss rate: 0.35%

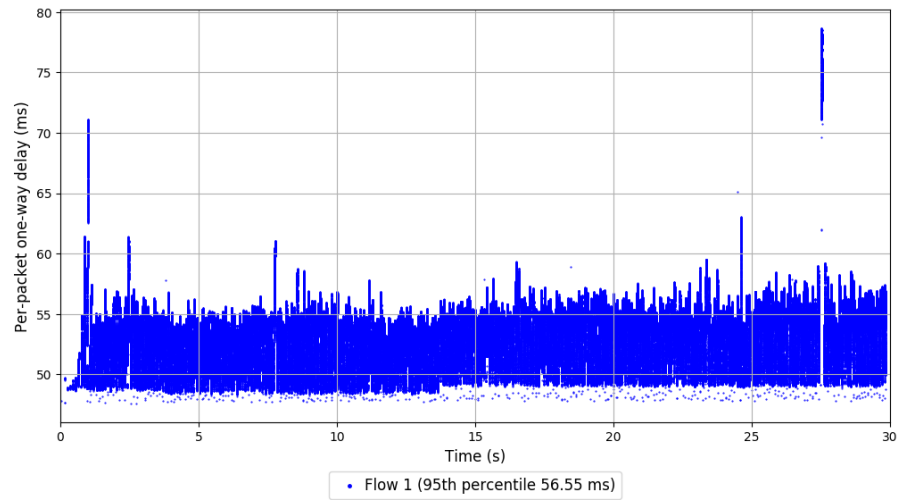
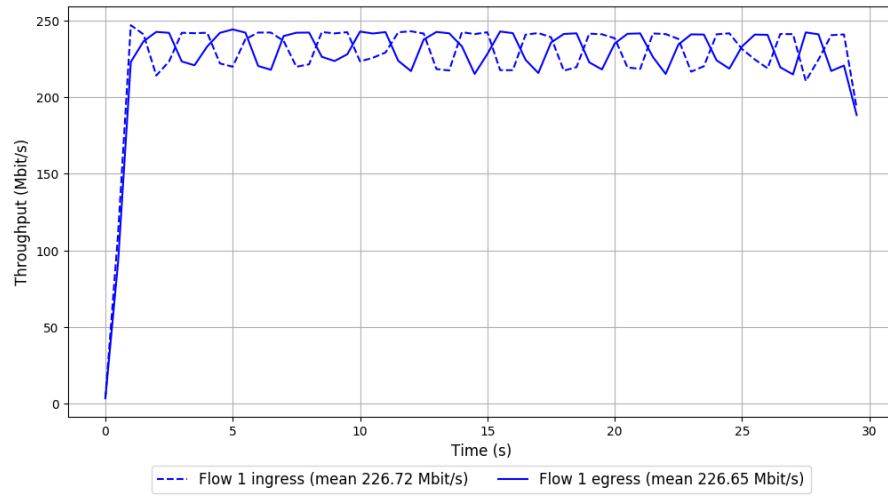
-- Flow 1:

Average throughput: 226.65 Mbit/s

95th percentile per-packet one-way delay: 56.545 ms

Loss rate: 0.35%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-10-10 23:20:02

End at: 2017-10-10 23:20:32

Below is generated by plot.py at 2017-10-11 02:33:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 157.47 Mbit/s

95th percentile per-packet one-way delay: 55.533 ms

Loss rate: 0.29%

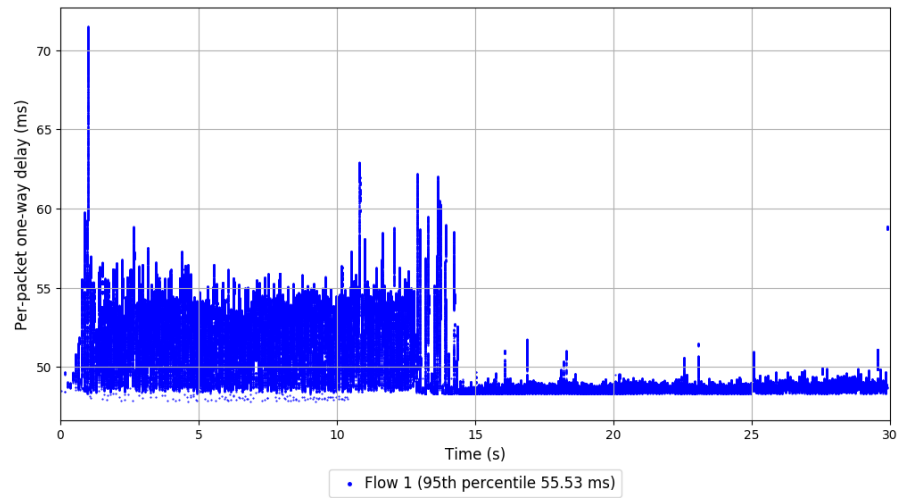
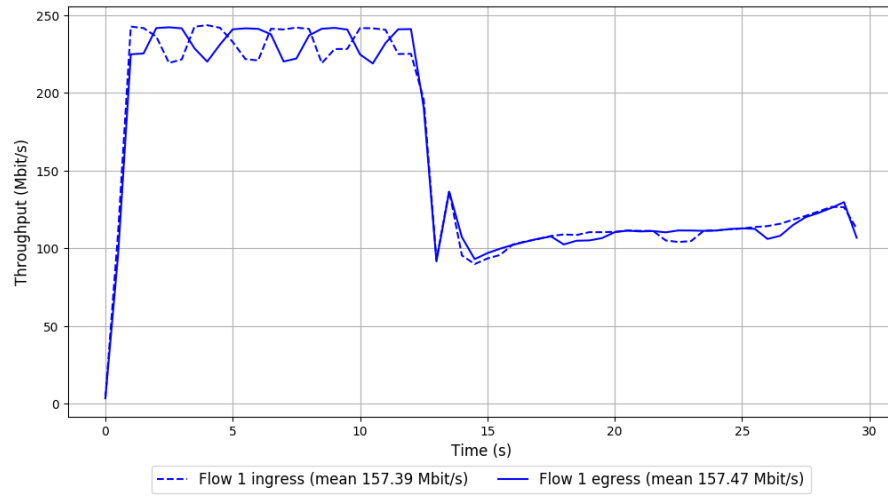
-- Flow 1:

Average throughput: 157.47 Mbit/s

95th percentile per-packet one-way delay: 55.533 ms

Loss rate: 0.29%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-10-10 23:30:58

End at: 2017-10-10 23:31:28

Below is generated by plot.py at 2017-10-11 02:33:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.39 Mbit/s

95th percentile per-packet one-way delay: 55.500 ms

Loss rate: 0.22%

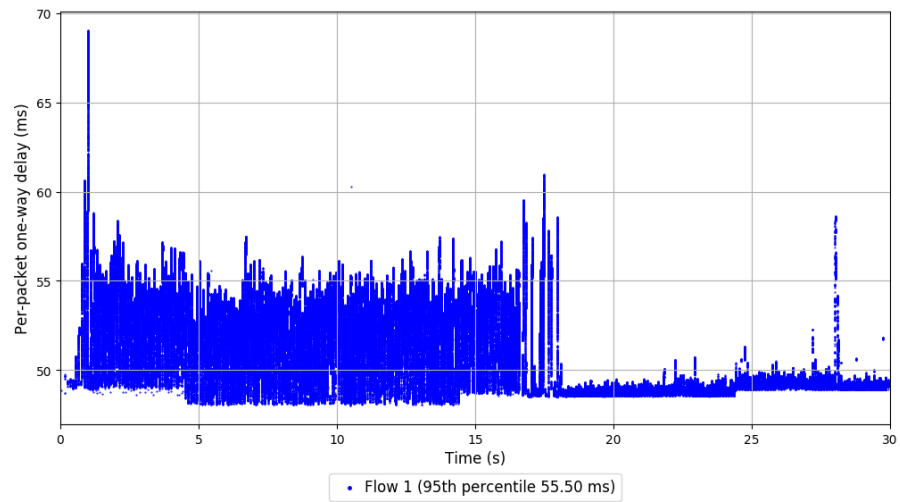
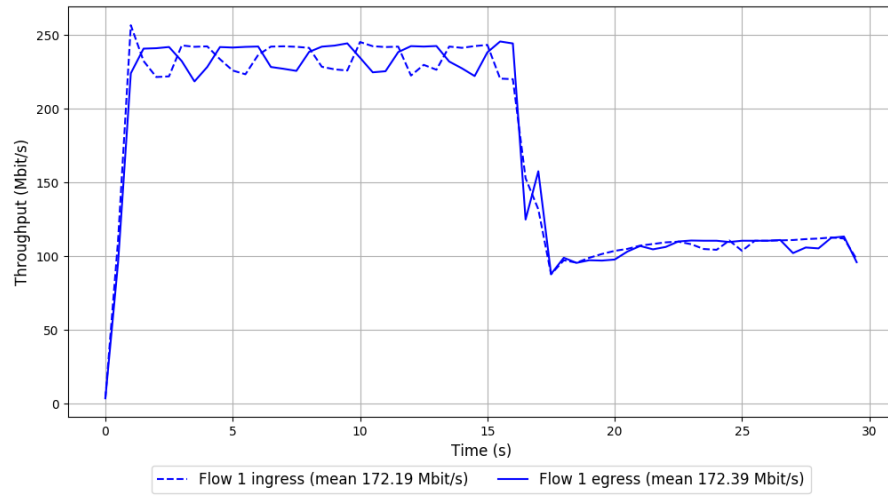
-- Flow 1:

Average throughput: 172.39 Mbit/s

95th percentile per-packet one-way delay: 55.500 ms

Loss rate: 0.22%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-10-10 23:41:18

End at: 2017-10-10 23:41:48

Below is generated by plot.py at 2017-10-11 02:33:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.29 Mbit/s

95th percentile per-packet one-way delay: 56.584 ms

Loss rate: 0.12%

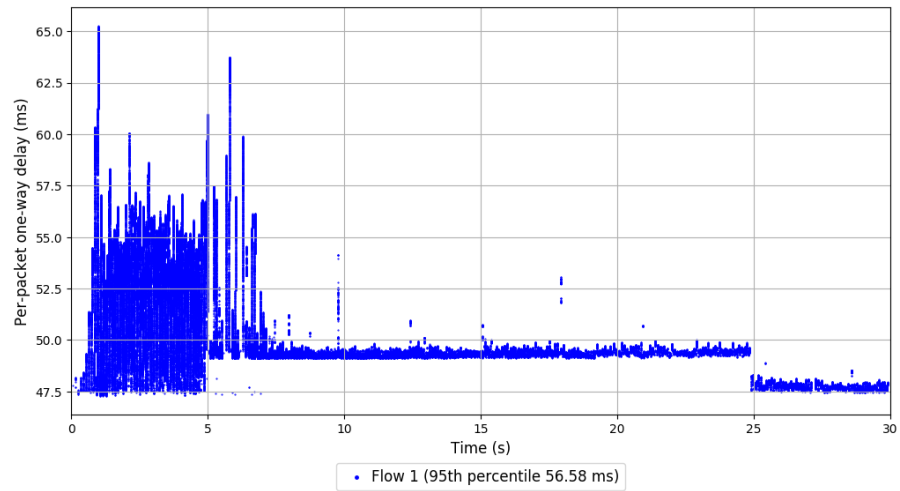
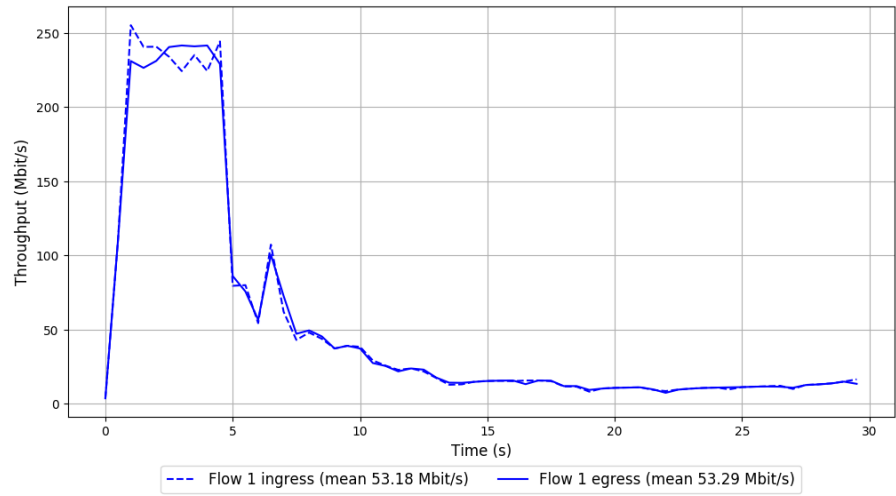
-- Flow 1:

Average throughput: 53.29 Mbit/s

95th percentile per-packet one-way delay: 56.584 ms

Loss rate: 0.12%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-10-10 23:52:11

End at: 2017-10-10 23:52:41

Below is generated by plot.py at 2017-10-11 02:33:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.80 Mbit/s

95th percentile per-packet one-way delay: 53.315 ms

Loss rate: 0.21%

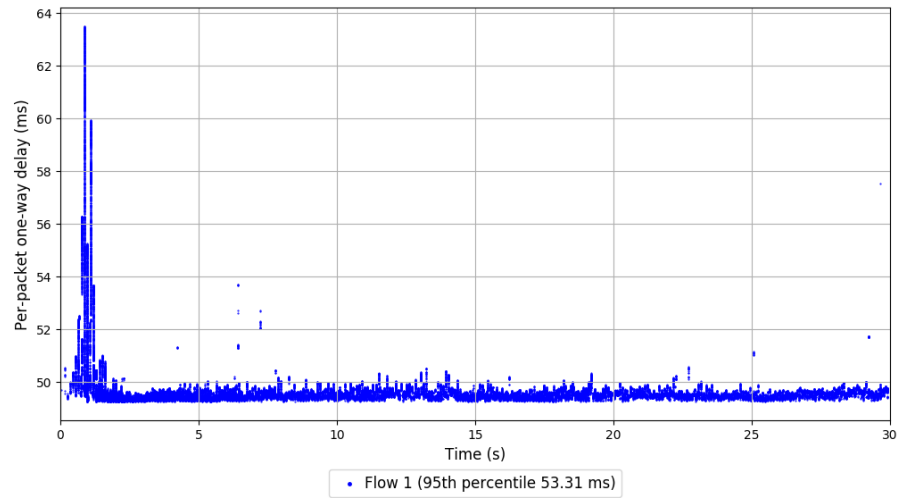
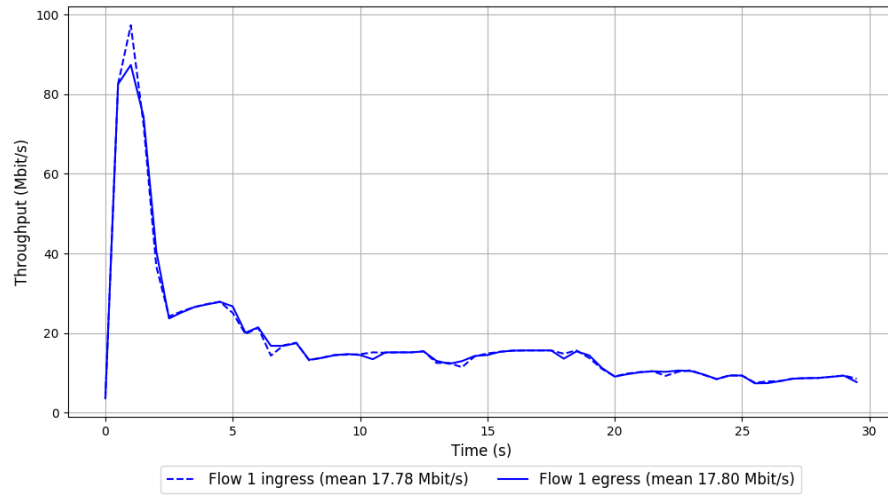
-- Flow 1:

Average throughput: 17.80 Mbit/s

95th percentile per-packet one-way delay: 53.315 ms

Loss rate: 0.21%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-10-11 00:02:56

End at: 2017-10-11 00:03:26

Below is generated by plot.py at 2017-10-11 02:33:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 150.64 Mbit/s

95th percentile per-packet one-way delay: 54.504 ms

Loss rate: 0.31%

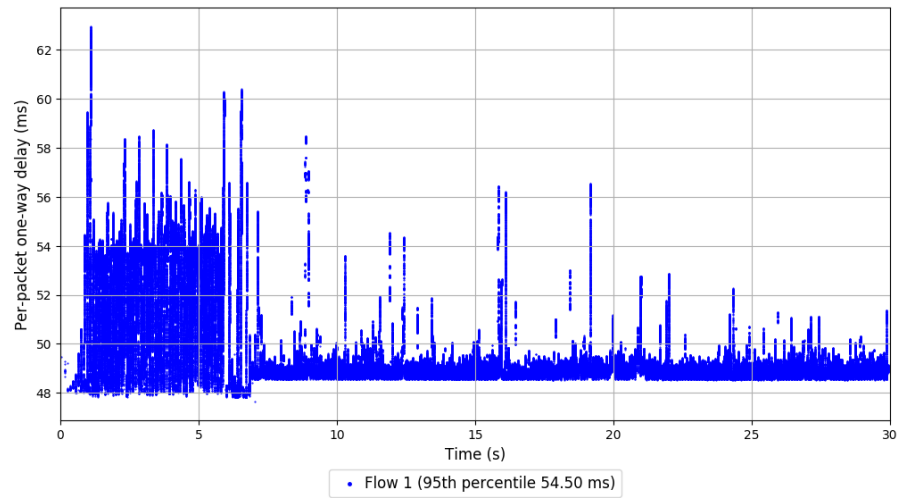
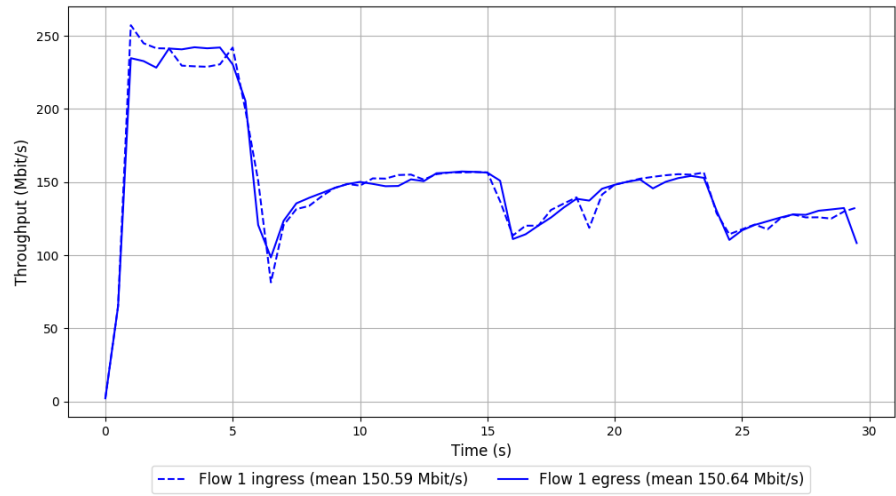
-- Flow 1:

Average throughput: 150.64 Mbit/s

95th percentile per-packet one-way delay: 54.504 ms

Loss rate: 0.31%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-10-11 00:13:55

End at: 2017-10-11 00:14:25

Below is generated by plot.py at 2017-10-11 02:34:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 141.67 Mbit/s

95th percentile per-packet one-way delay: 53.851 ms

Loss rate: 0.22%

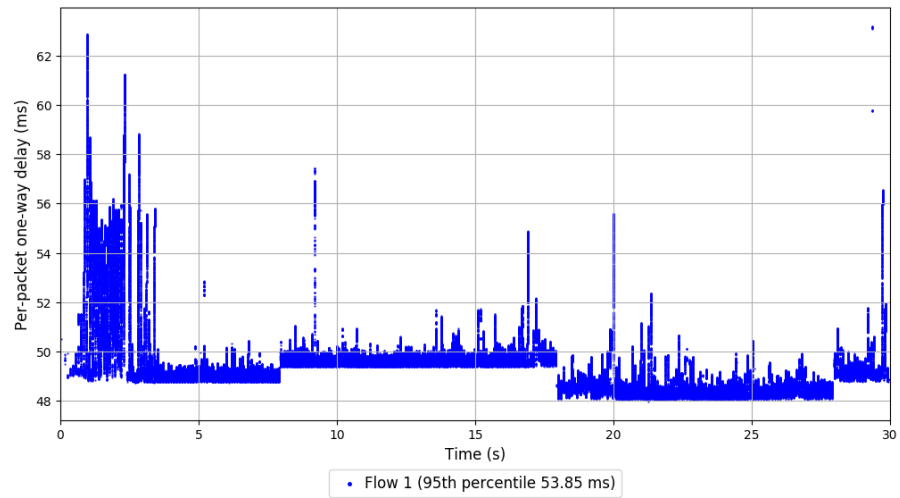
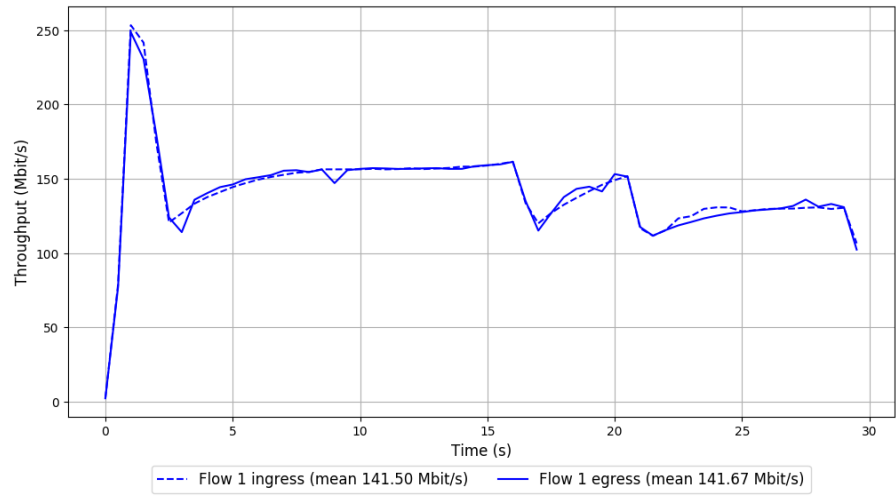
-- Flow 1:

Average throughput: 141.67 Mbit/s

95th percentile per-packet one-way delay: 53.851 ms

Loss rate: 0.22%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-10-11 00:24:20

End at: 2017-10-11 00:24:50

Below is generated by plot.py at 2017-10-11 02:34:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.38 Mbit/s

95th percentile per-packet one-way delay: 56.733 ms

Loss rate: 0.31%

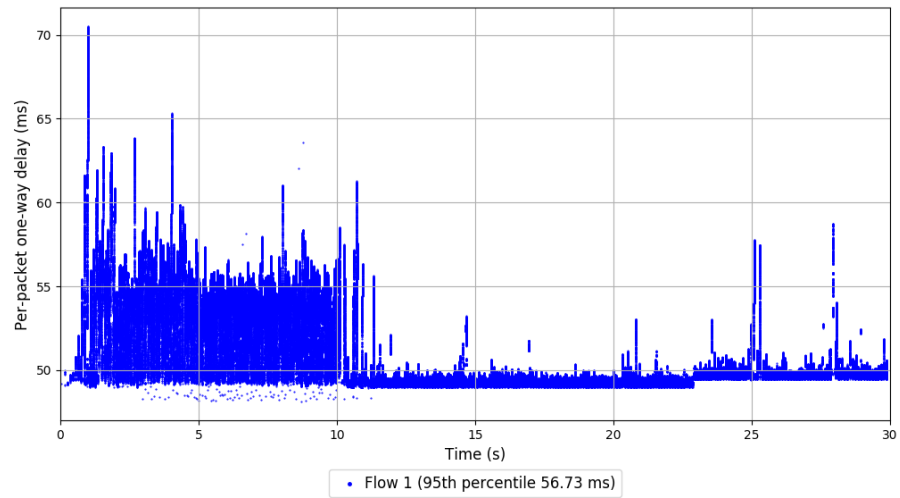
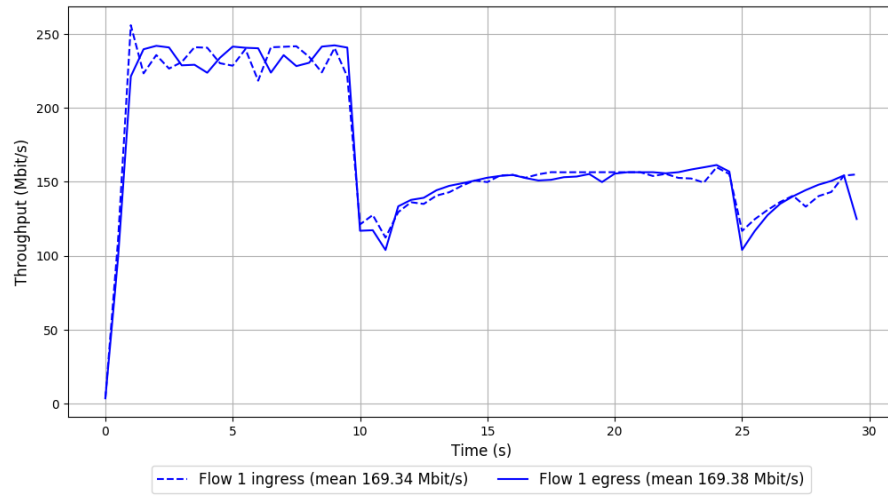
-- Flow 1:

Average throughput: 169.38 Mbit/s

95th percentile per-packet one-way delay: 56.733 ms

Loss rate: 0.31%

Run 10: Report of TCP Cubic — Data Link

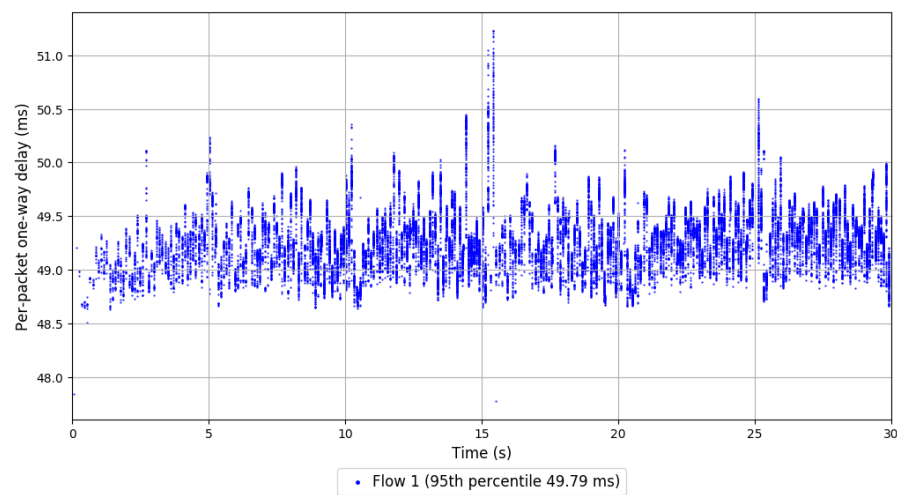
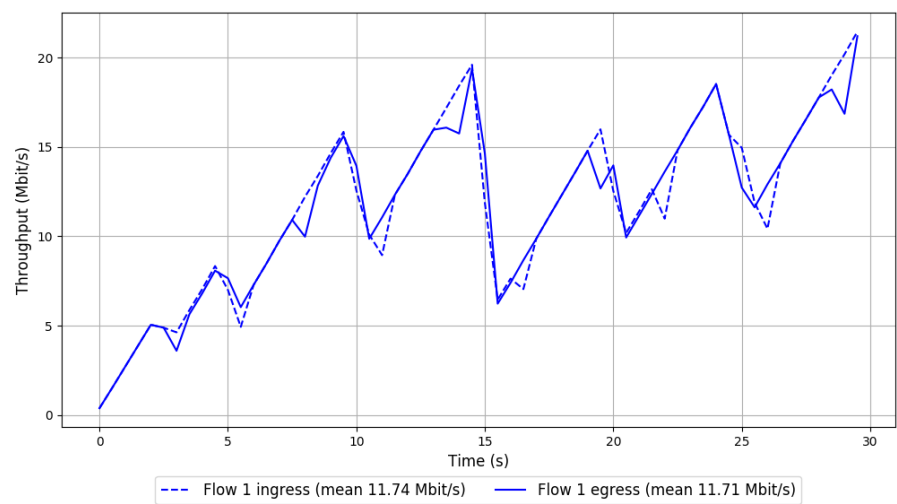


```
Run 1: Statistics of LEDBAT

Start at: 2017-10-10 22:54:20
End at: 2017-10-10 22:54:50

# Below is generated by plot.py at 2017-10-11 02:34:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.71 Mbit/s
95th percentile per-packet one-way delay: 49.787 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 11.71 Mbit/s
95th percentile per-packet one-way delay: 49.787 ms
Loss rate: 0.64%
```


Run 1: Report of LEDBAT — Data Link

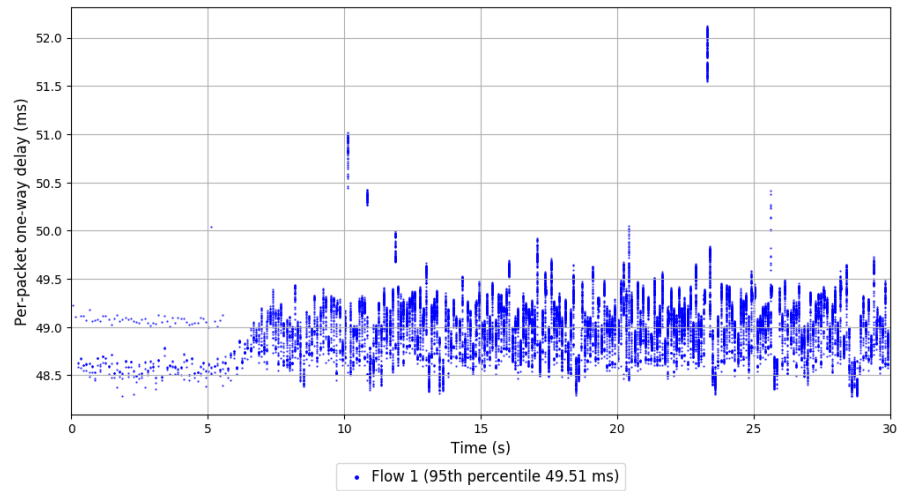
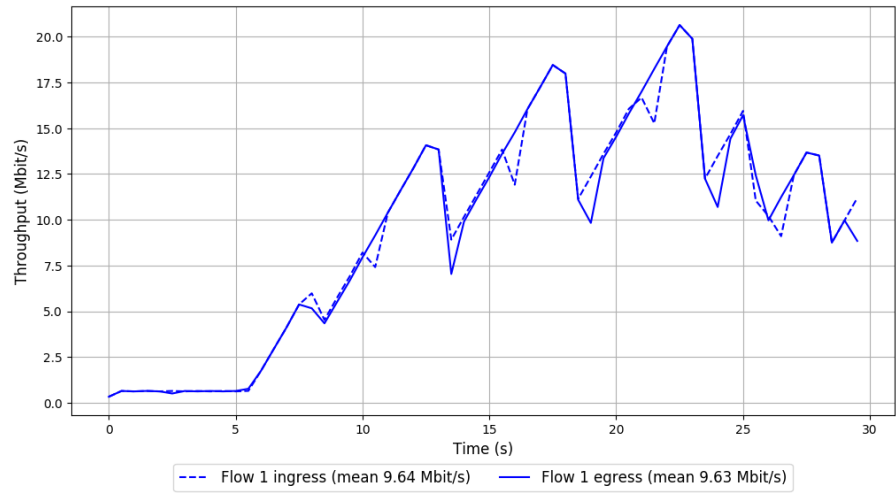


```
Run 2: Statistics of LEDBAT

Start at: 2017-10-10 23:05:17
End at: 2017-10-10 23:05:47

# Below is generated by plot.py at 2017-10-11 02:34:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.63 Mbit/s
95th percentile per-packet one-way delay: 49.511 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 9.63 Mbit/s
95th percentile per-packet one-way delay: 49.511 ms
Loss rate: 0.41%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-10-10 23:16:11

End at: 2017-10-10 23:16:41

Below is generated by plot.py at 2017-10-11 02:34:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.47 Mbit/s

95th percentile per-packet one-way delay: 49.518 ms

Loss rate: 0.63%

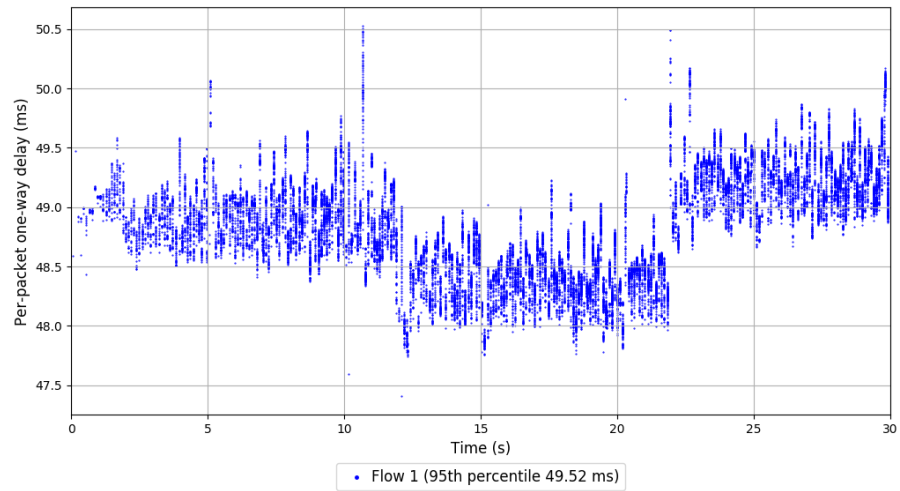
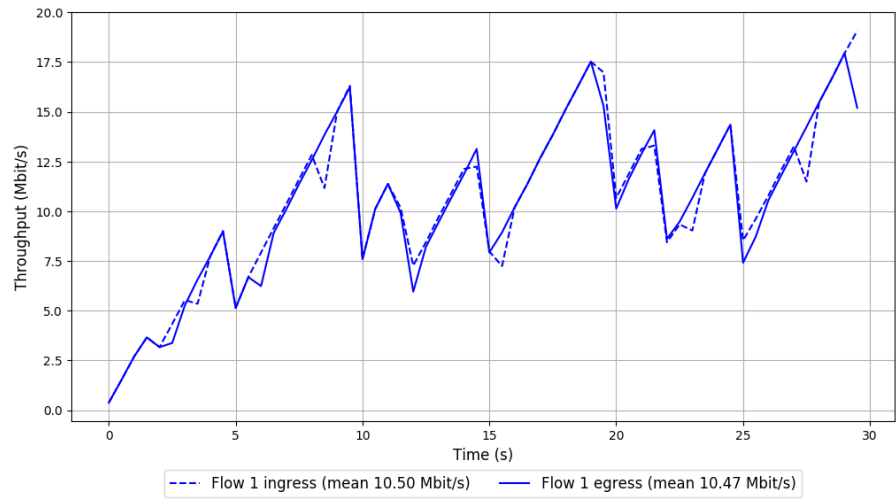
-- Flow 1:

Average throughput: 10.47 Mbit/s

95th percentile per-packet one-way delay: 49.518 ms

Loss rate: 0.63%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-10-10 23:27:10

End at: 2017-10-10 23:27:40

Below is generated by plot.py at 2017-10-11 02:34:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.55 Mbit/s

95th percentile per-packet one-way delay: 49.642 ms

Loss rate: 0.57%

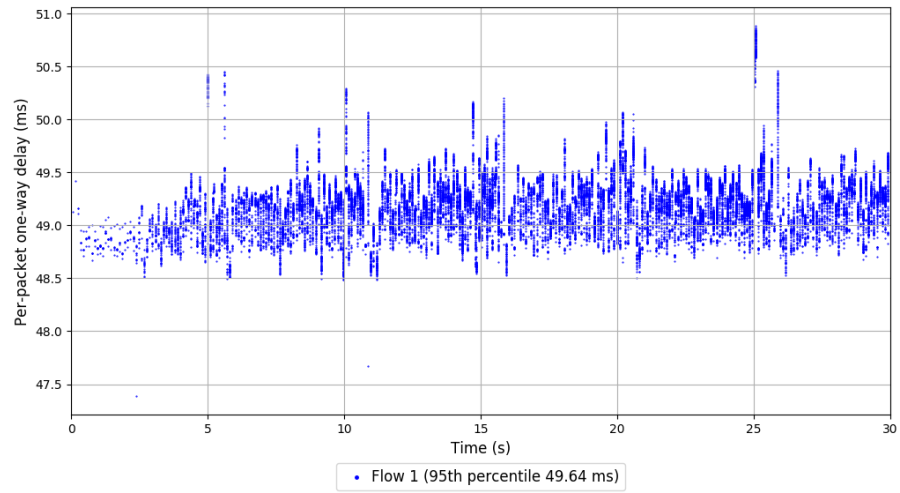
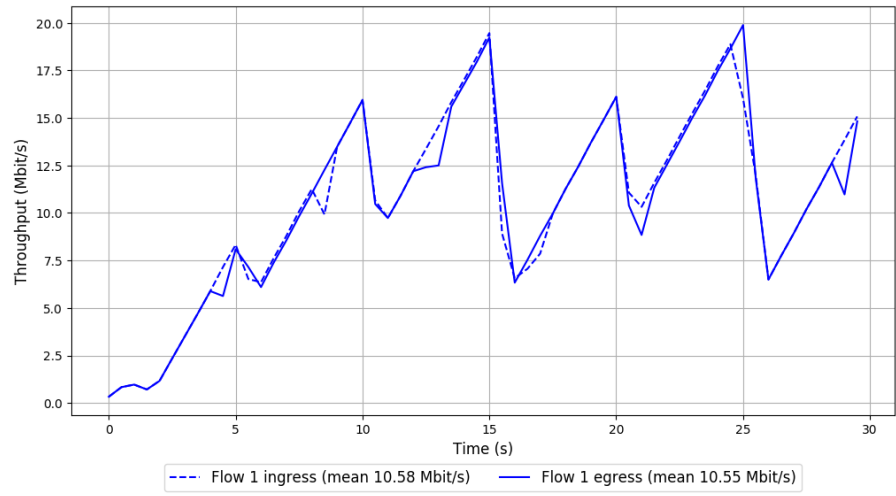
-- Flow 1:

Average throughput: 10.55 Mbit/s

95th percentile per-packet one-way delay: 49.642 ms

Loss rate: 0.57%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-10-10 23:37:28

End at: 2017-10-10 23:37:58

Below is generated by plot.py at 2017-10-11 02:34:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.34 Mbit/s

95th percentile per-packet one-way delay: 49.919 ms

Loss rate: 0.44%

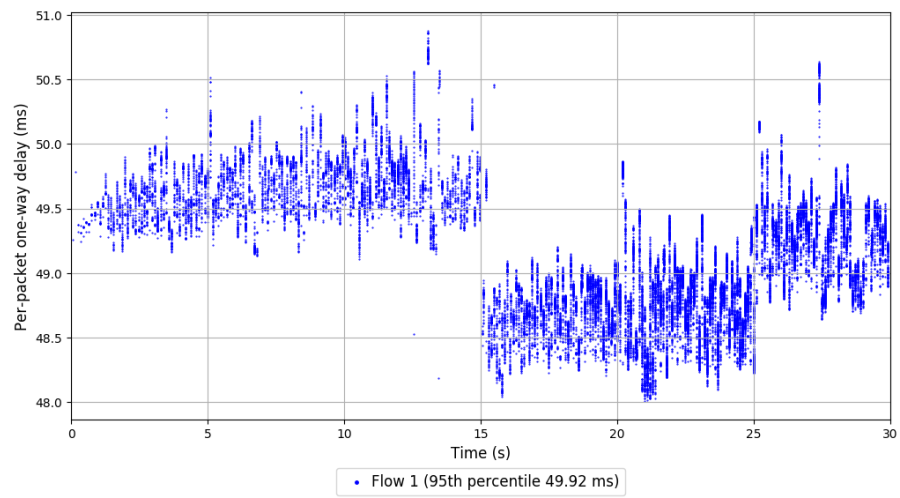
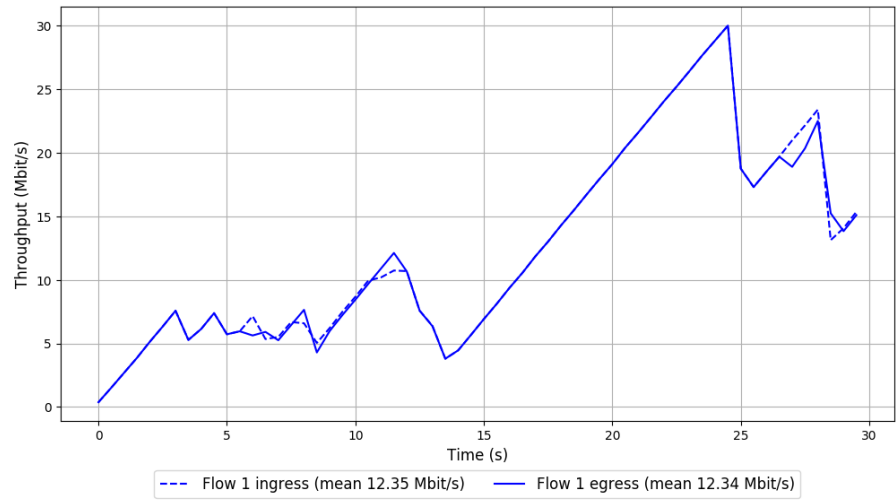
-- Flow 1:

Average throughput: 12.34 Mbit/s

95th percentile per-packet one-way delay: 49.919 ms

Loss rate: 0.44%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-10-10 23:48:08

End at: 2017-10-10 23:48:38

Below is generated by plot.py at 2017-10-11 02:34:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.05 Mbit/s

95th percentile per-packet one-way delay: 49.590 ms

Loss rate: 0.48%

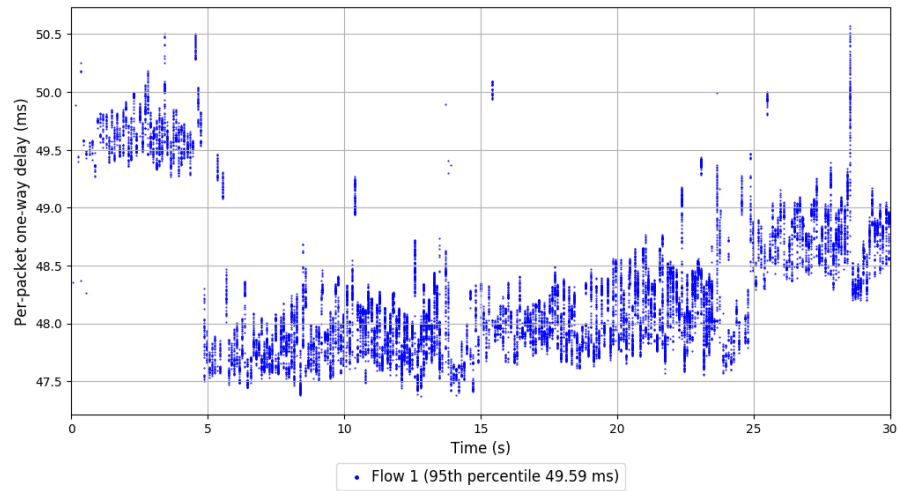
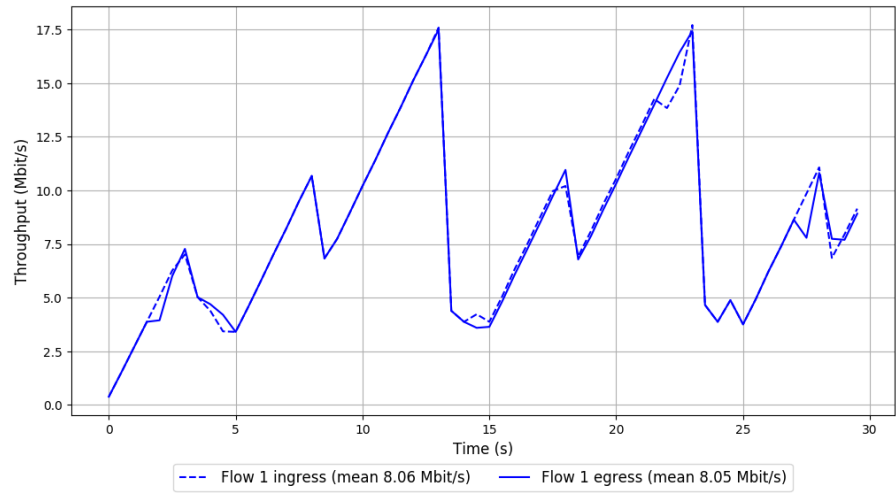
-- Flow 1:

Average throughput: 8.05 Mbit/s

95th percentile per-packet one-way delay: 49.590 ms

Loss rate: 0.48%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-10-10 23:59:05

End at: 2017-10-10 23:59:35

Below is generated by plot.py at 2017-10-11 02:34:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.89 Mbit/s

95th percentile per-packet one-way delay: 50.325 ms

Loss rate: 0.30%

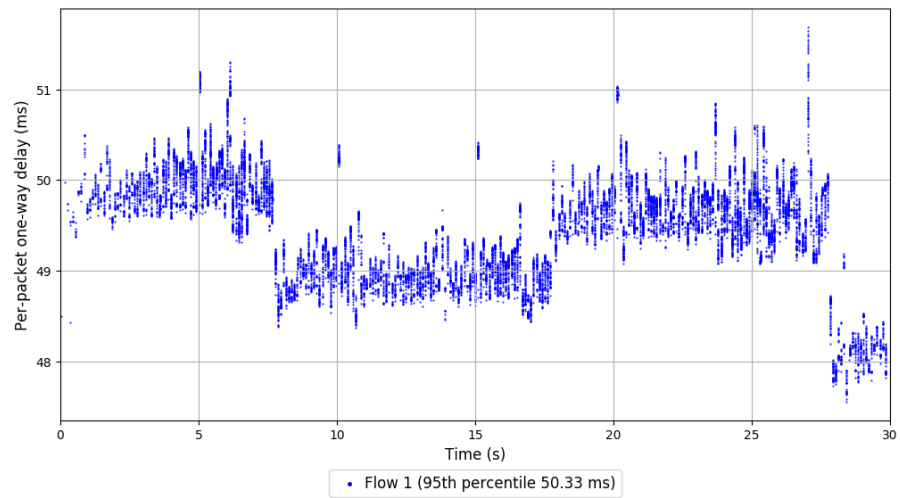
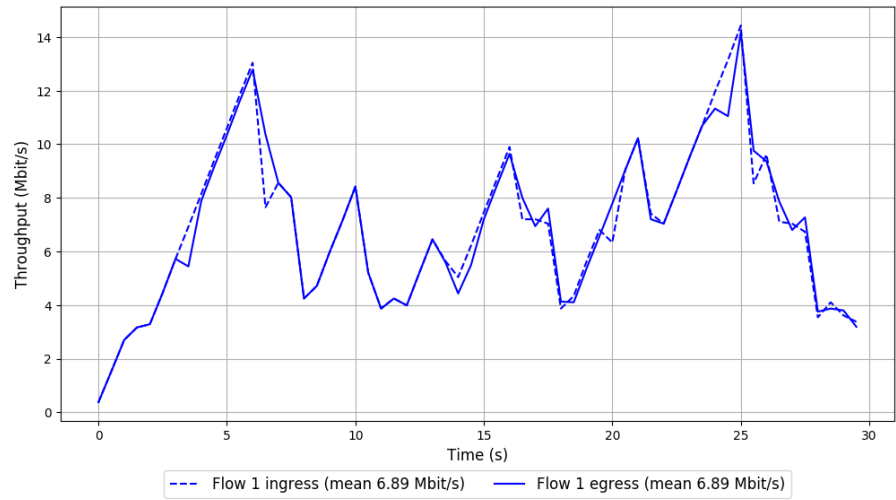
-- Flow 1:

Average throughput: 6.89 Mbit/s

95th percentile per-packet one-way delay: 50.325 ms

Loss rate: 0.30%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

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

End at: 2017-10-11 00:10:30

Below is generated by plot.py at 2017-10-11 02:34:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 49.723 ms

Loss rate: 0.58%

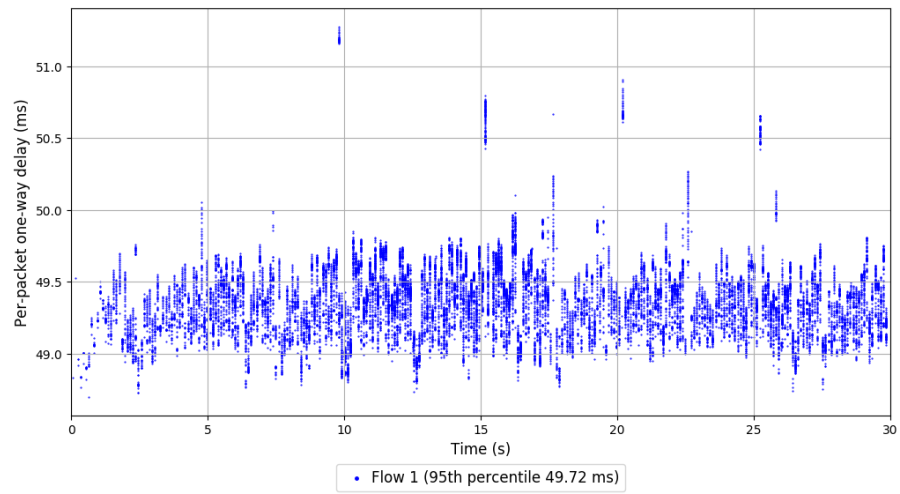
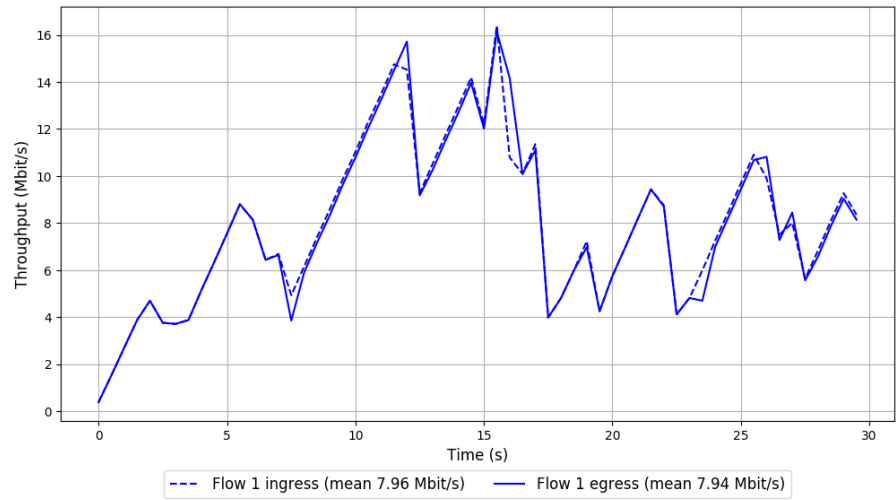
-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 49.723 ms

Loss rate: 0.58%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-10-11 00:20:29

End at: 2017-10-11 00:20:59

Below is generated by plot.py at 2017-10-11 02:34:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.01 Mbit/s

95th percentile per-packet one-way delay: 50.170 ms

Loss rate: 0.39%

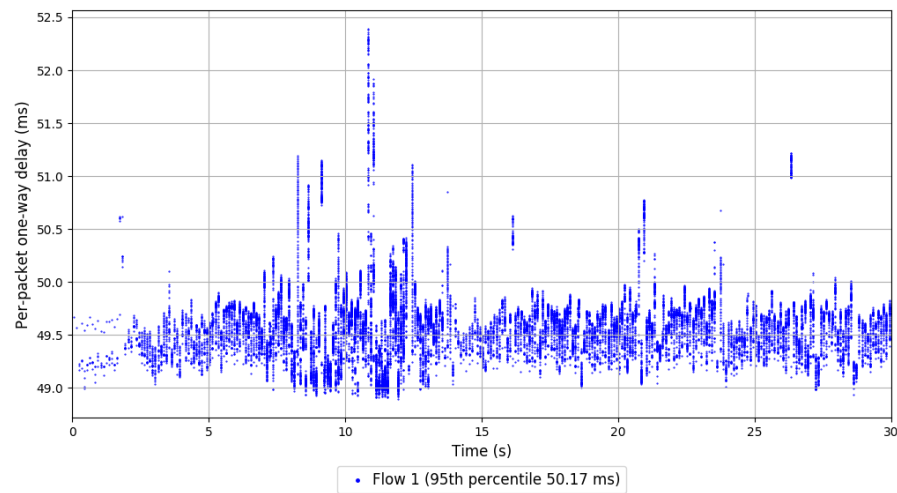
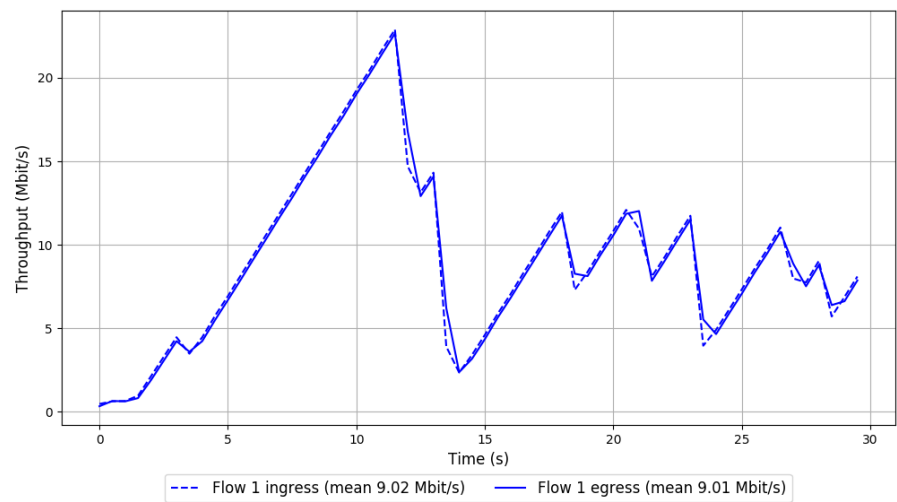
-- Flow 1:

Average throughput: 9.01 Mbit/s

95th percentile per-packet one-way delay: 50.170 ms

Loss rate: 0.39%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-10-11 00:30:56

End at: 2017-10-11 00:31:26

Below is generated by plot.py at 2017-10-11 02:34:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.70 Mbit/s

95th percentile per-packet one-way delay: 50.304 ms

Loss rate: 0.94%

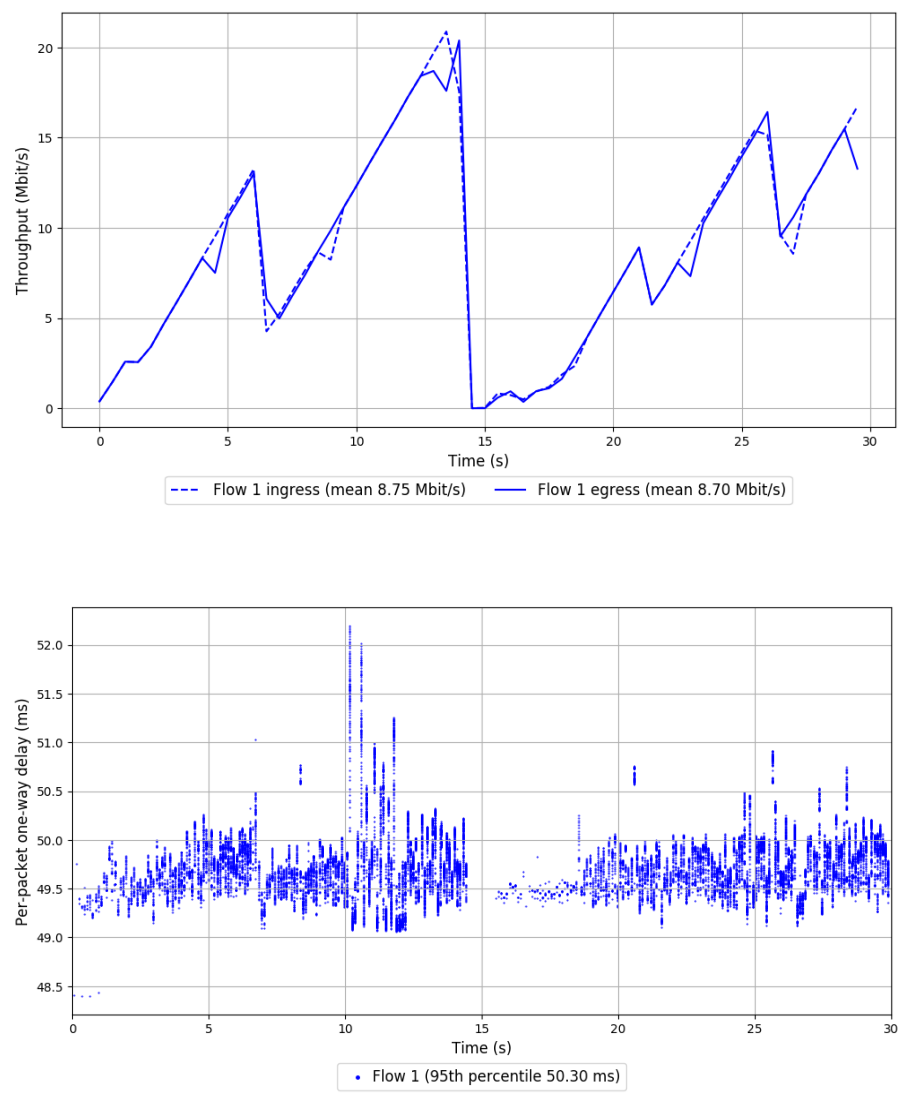
-- Flow 1:

Average throughput: 8.70 Mbit/s

95th percentile per-packet one-way delay: 50.304 ms

Loss rate: 0.94%

Run 10: Report of LEDBAT — Data Link

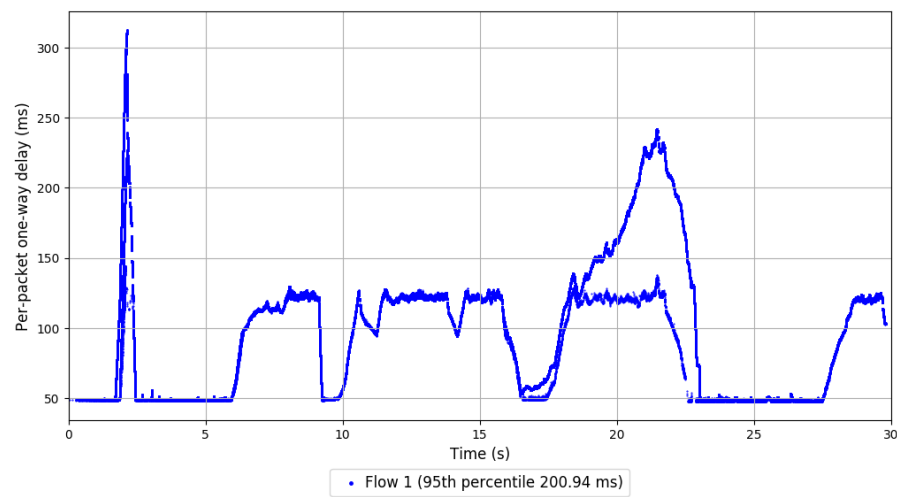
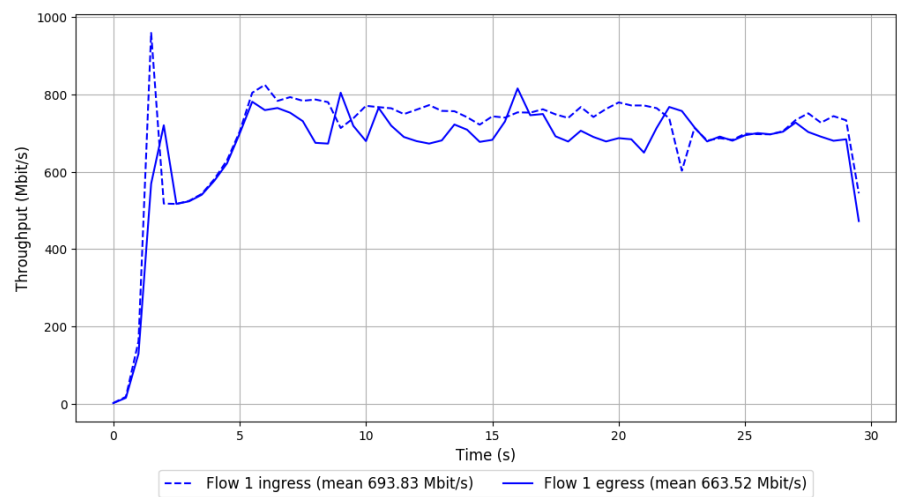


```
Run 1: Statistics of PCC

Start at: 2017-10-10 22:52:03
End at: 2017-10-10 22:52:33

# Below is generated by plot.py at 2017-10-11 02:45:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 663.52 Mbit/s
95th percentile per-packet one-way delay: 200.940 ms
Loss rate: 4.70%
-- Flow 1:
Average throughput: 663.52 Mbit/s
95th percentile per-packet one-way delay: 200.940 ms
Loss rate: 4.70%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-10-10 23:02:37

End at: 2017-10-10 23:03:07

Below is generated by plot.py at 2017-10-11 02:45:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 606.30 Mbit/s

95th percentile per-packet one-way delay: 123.849 ms

Loss rate: 1.22%

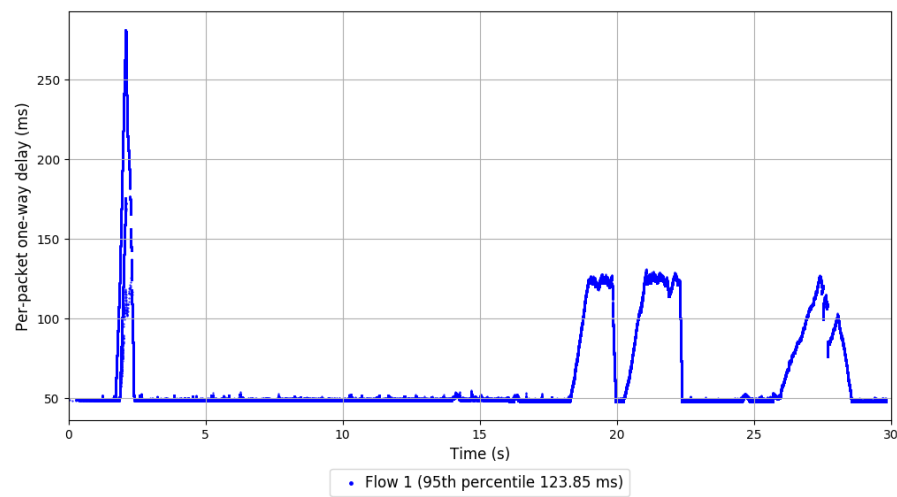
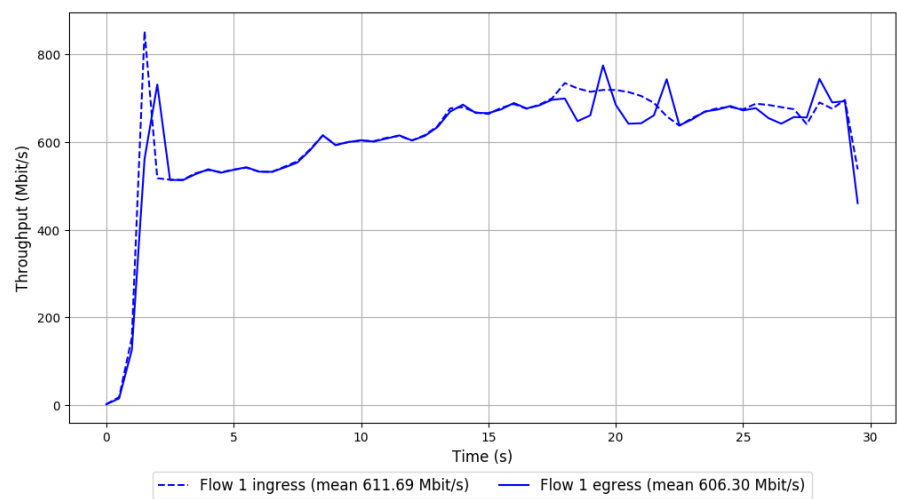
-- Flow 1:

Average throughput: 606.30 Mbit/s

95th percentile per-packet one-way delay: 123.849 ms

Loss rate: 1.22%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-10-10 23:13:32

End at: 2017-10-10 23:14:02

Below is generated by plot.py at 2017-10-11 02:45:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 602.49 Mbit/s

95th percentile per-packet one-way delay: 127.036 ms

Loss rate: 1.49%

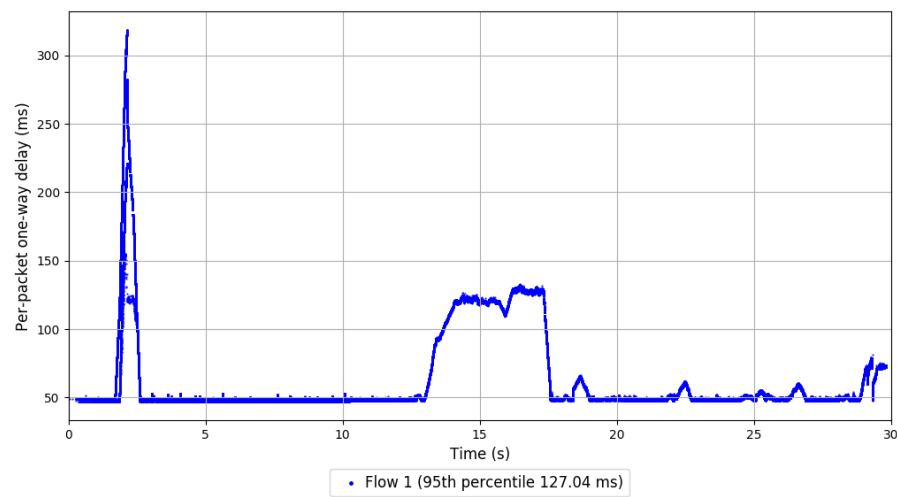
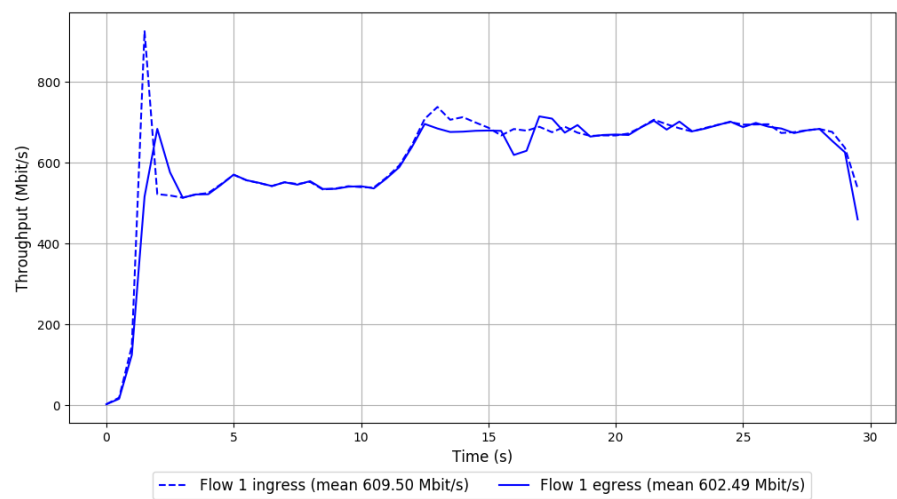
-- Flow 1:

Average throughput: 602.49 Mbit/s

95th percentile per-packet one-way delay: 127.036 ms

Loss rate: 1.49%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-10-10 23:24:30

End at: 2017-10-10 23:25:00

Below is generated by plot.py at 2017-10-11 02:45:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 631.85 Mbit/s

95th percentile per-packet one-way delay: 148.755 ms

Loss rate: 4.85%

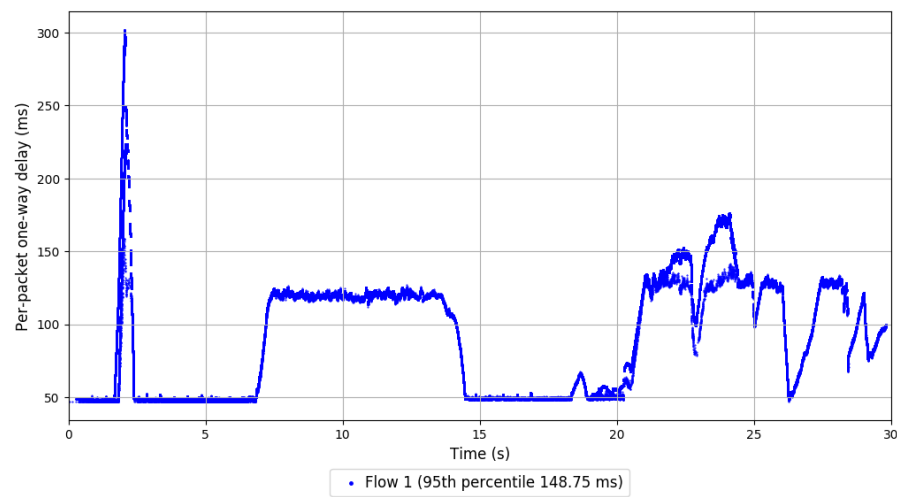
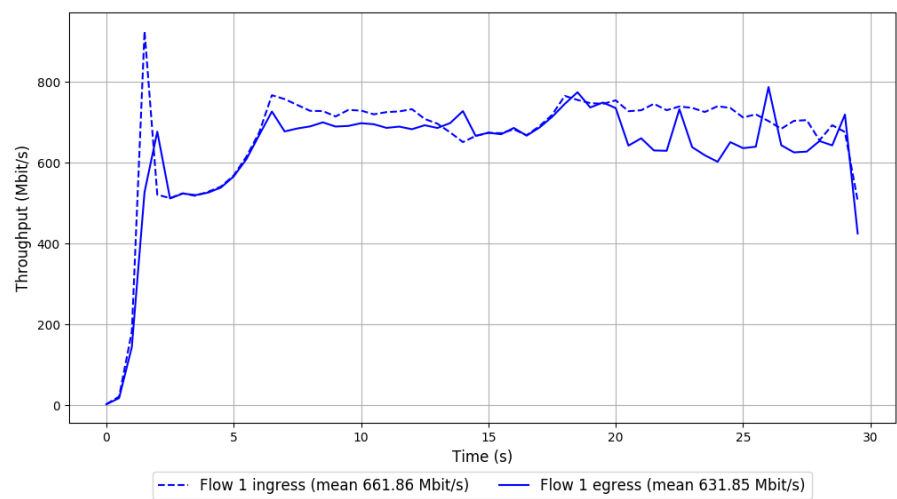
-- Flow 1:

Average throughput: 631.85 Mbit/s

95th percentile per-packet one-way delay: 148.755 ms

Loss rate: 4.85%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-10-10 23:35:16

End at: 2017-10-10 23:35:46

Below is generated by plot.py at 2017-10-11 02:45:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 590.00 Mbit/s

95th percentile per-packet one-way delay: 124.732 ms

Loss rate: 0.98%

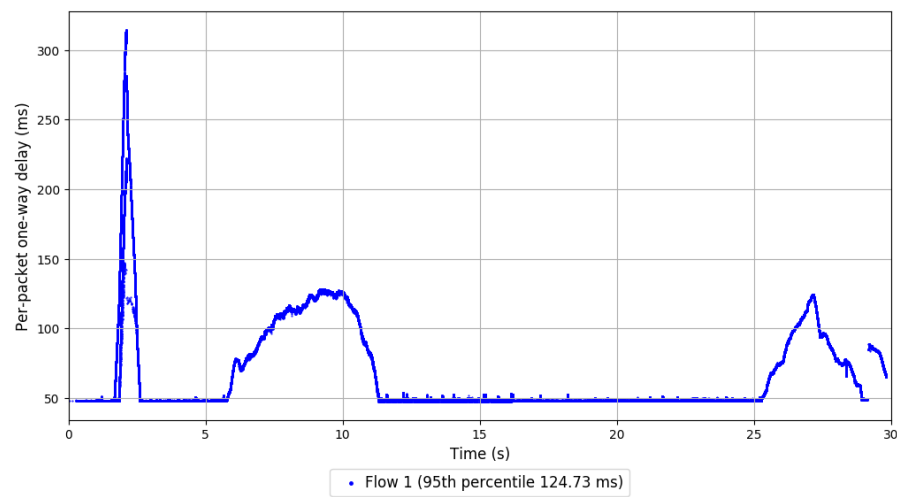
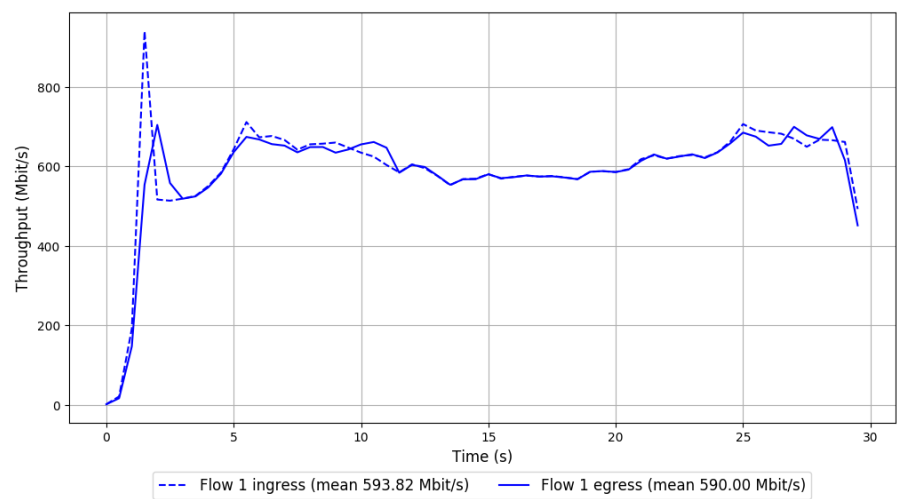
-- Flow 1:

Average throughput: 590.00 Mbit/s

95th percentile per-packet one-way delay: 124.732 ms

Loss rate: 0.98%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-10-10 23:45:29

End at: 2017-10-10 23:45:59

Below is generated by plot.py at 2017-10-11 02:45:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 553.76 Mbit/s

95th percentile per-packet one-way delay: 129.052 ms

Loss rate: 3.07%

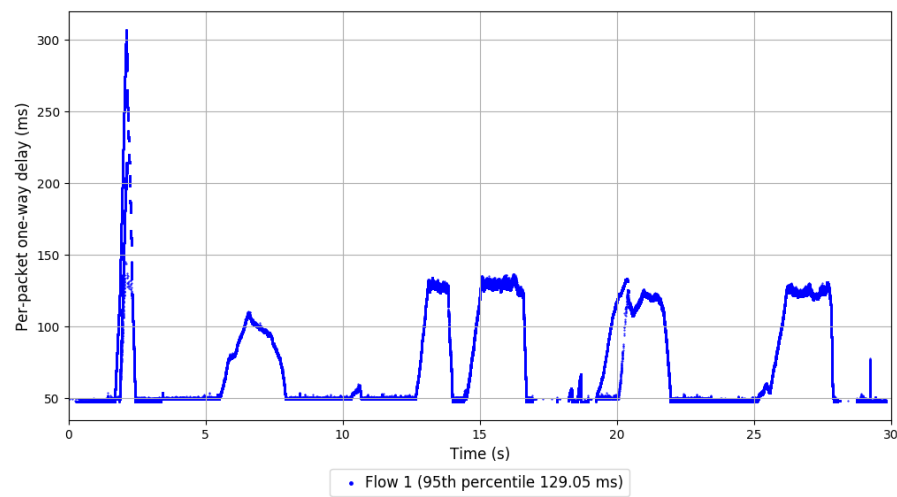
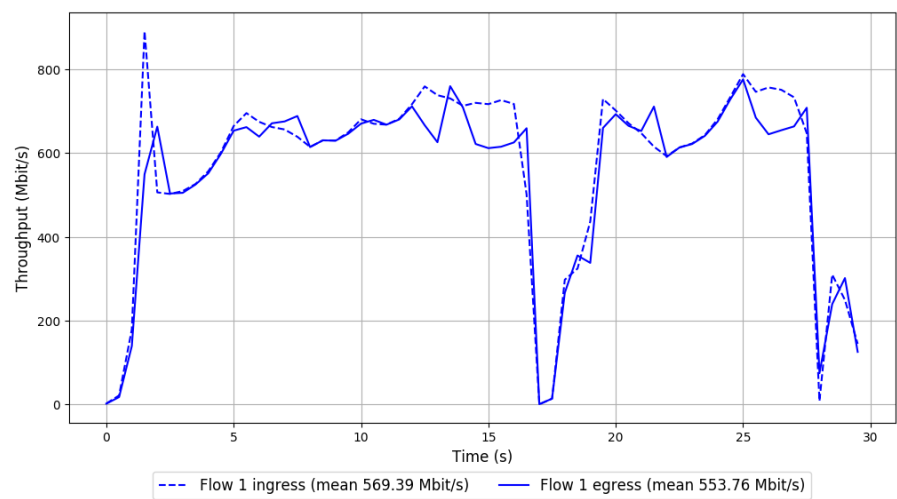
-- Flow 1:

Average throughput: 553.76 Mbit/s

95th percentile per-packet one-way delay: 129.052 ms

Loss rate: 3.07%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

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

End at: 2017-10-10 23:56:51

Below is generated by plot.py at 2017-10-11 02:45:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 608.38 Mbit/s

95th percentile per-packet one-way delay: 184.575 ms

Loss rate: 9.54%

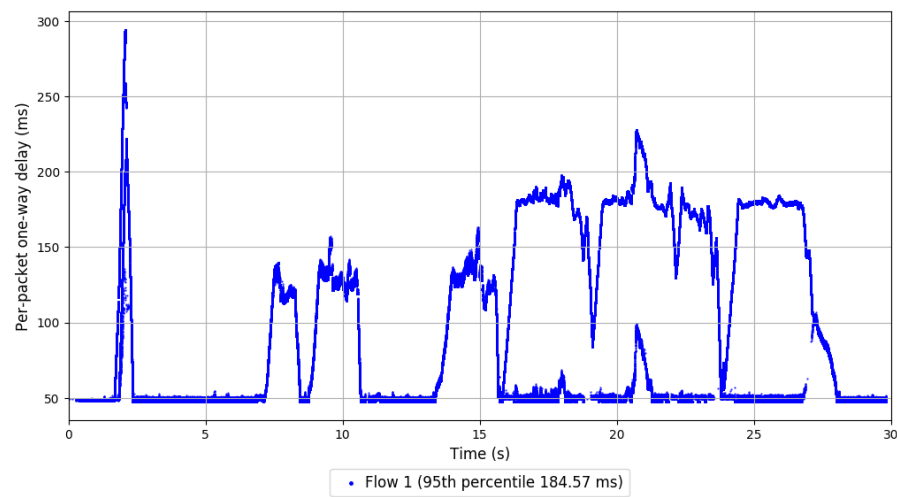
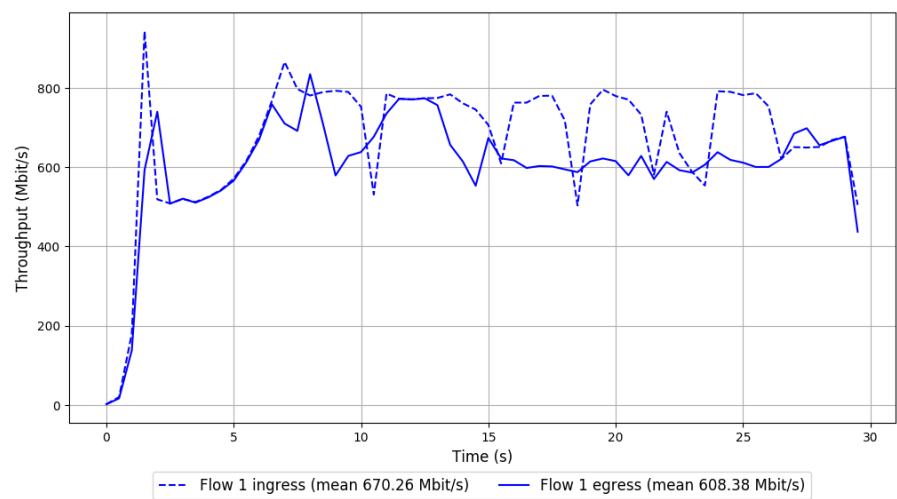
-- Flow 1:

Average throughput: 608.38 Mbit/s

95th percentile per-packet one-way delay: 184.575 ms

Loss rate: 9.54%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-10-11 00:07:13

End at: 2017-10-11 00:07:43

Below is generated by plot.py at 2017-10-11 02:48:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 708.97 Mbit/s

95th percentile per-packet one-way delay: 122.416 ms

Loss rate: 2.16%

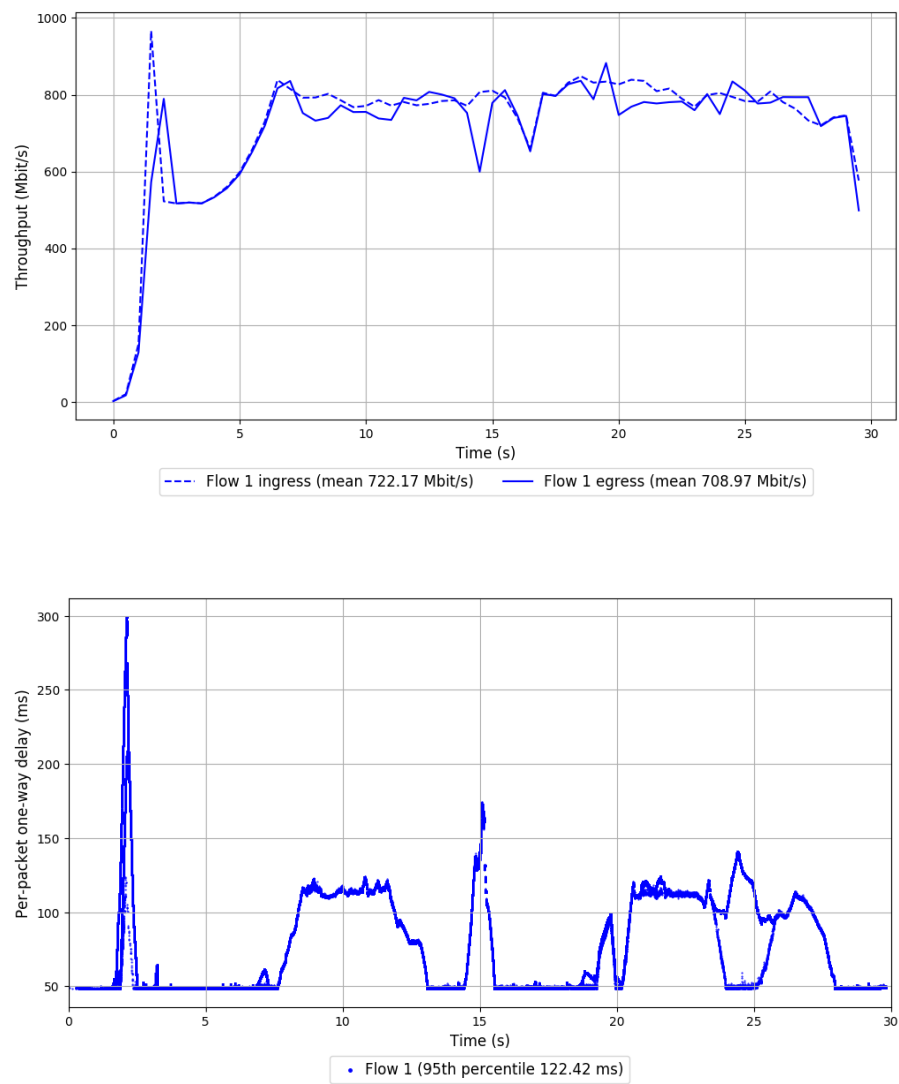
-- Flow 1:

Average throughput: 708.97 Mbit/s

95th percentile per-packet one-way delay: 122.416 ms

Loss rate: 2.16%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-10-11 00:18:15

End at: 2017-10-11 00:18:45

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 666.56 Mbit/s

95th percentile per-packet one-way delay: 151.316 ms

Loss rate: 1.13%

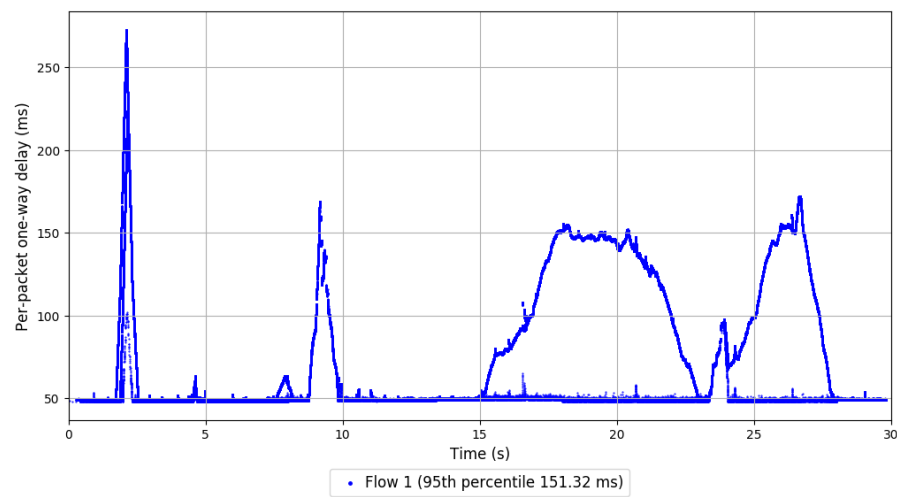
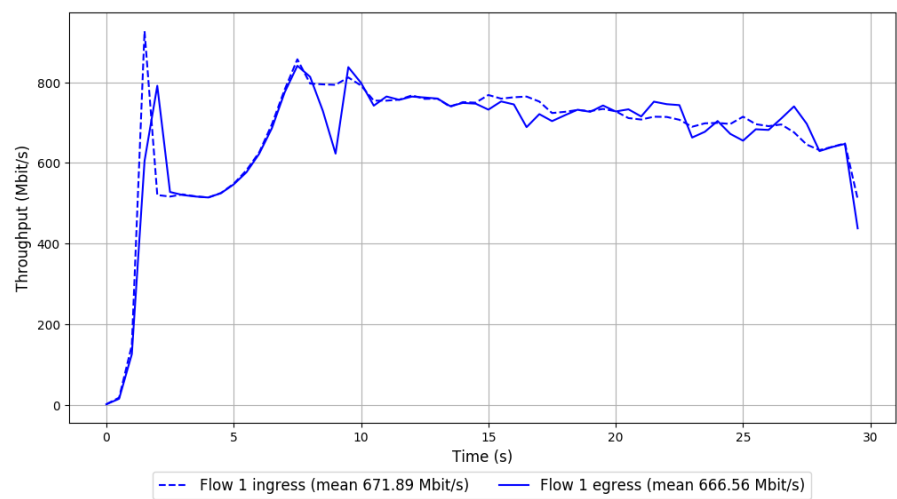
-- Flow 1:

Average throughput: 666.56 Mbit/s

95th percentile per-packet one-way delay: 151.316 ms

Loss rate: 1.13%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-10-11 00:28:42

End at: 2017-10-11 00:29:12

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 645.92 Mbit/s

95th percentile per-packet one-way delay: 121.750 ms

Loss rate: 2.12%

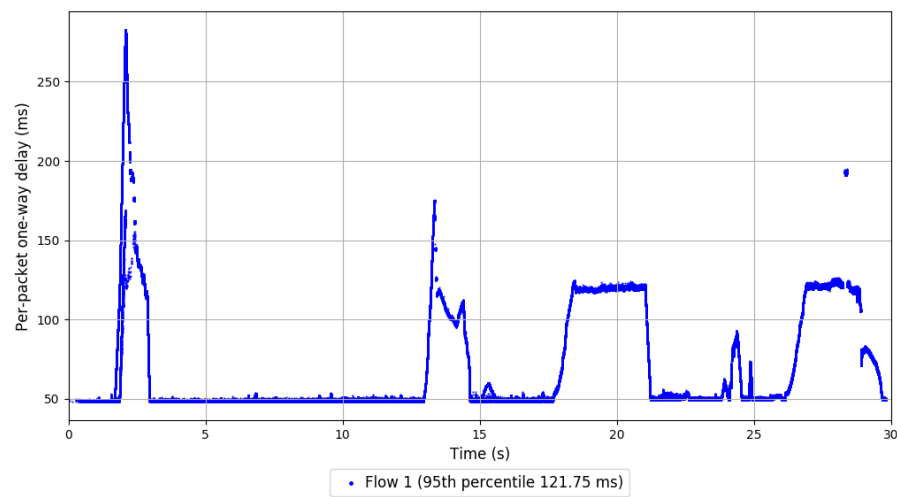
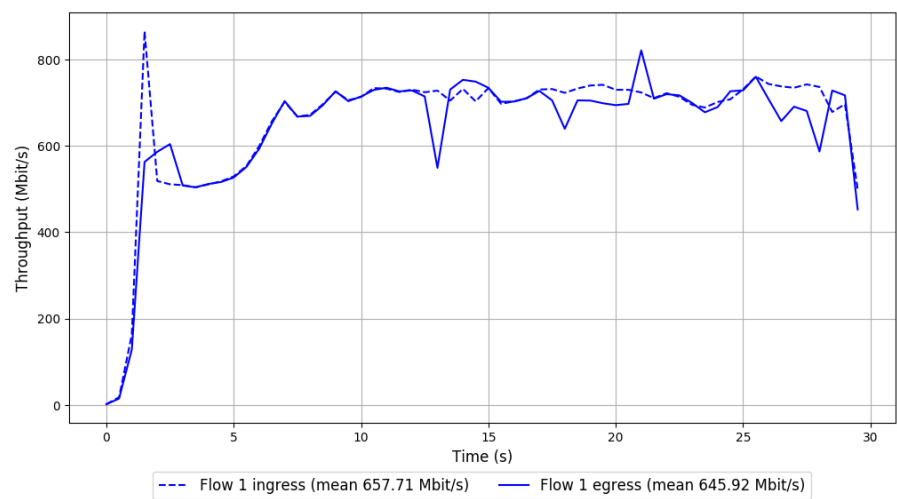
-- Flow 1:

Average throughput: 645.92 Mbit/s

95th percentile per-packet one-way delay: 121.750 ms

Loss rate: 2.12%

Run 10: Report of PCC — Data Link

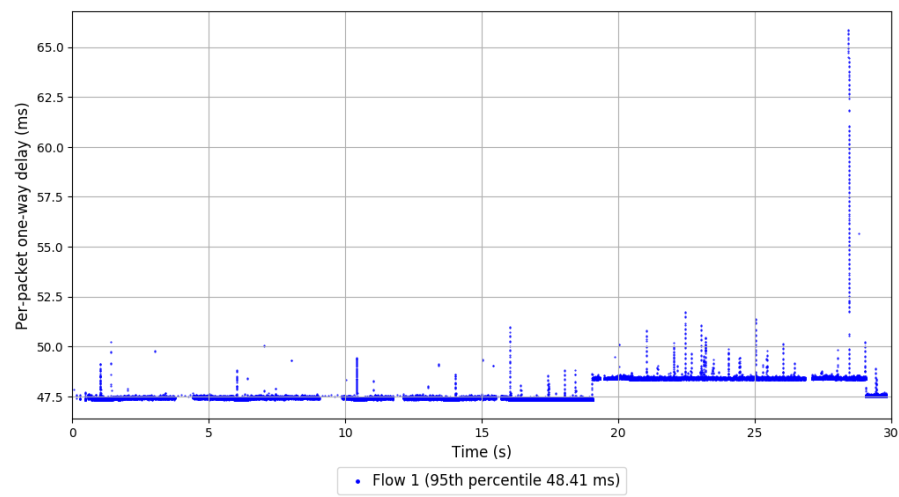
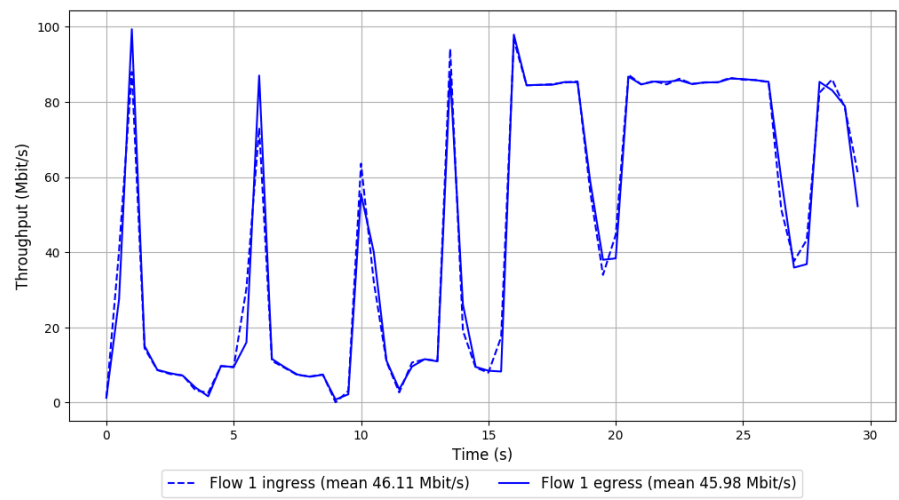


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-10-10 22:51:23
End at: 2017-10-10 22:51:54

# Below is generated by plot.py at 2017-10-11 02:55:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.98 Mbit/s
95th percentile per-packet one-way delay: 48.412 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 45.98 Mbit/s
95th percentile per-packet one-way delay: 48.412 ms
Loss rate: 0.60%
```


Run 1: Report of QUIC Cubic — Data Link

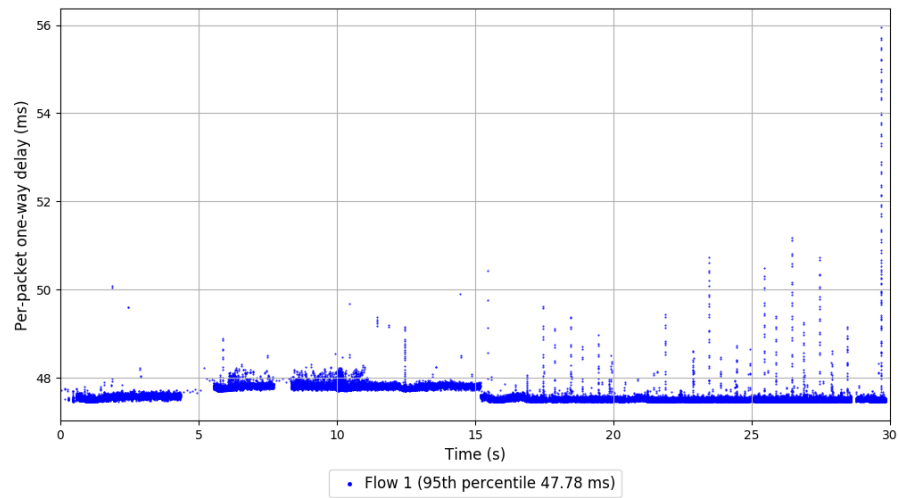
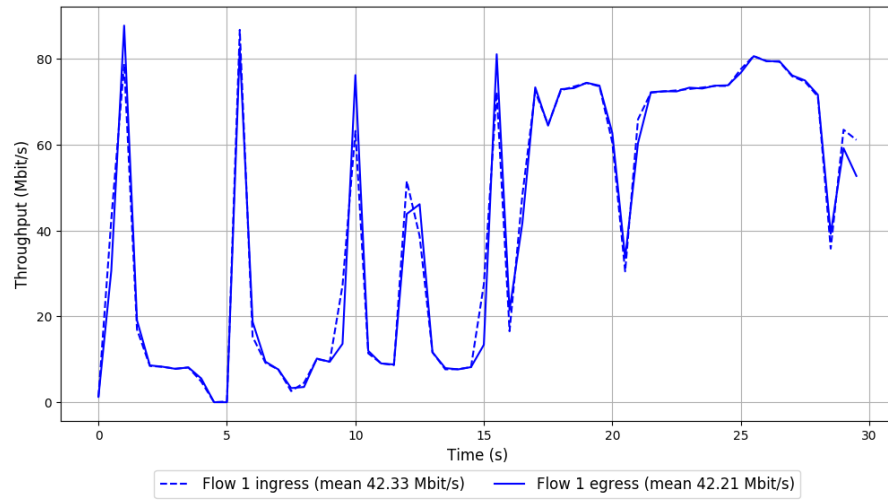


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-10-10 23:01:57
End at: 2017-10-10 23:02:27

# Below is generated by plot.py at 2017-10-11 02:55:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 42.21 Mbit/s
95th percentile per-packet one-way delay: 47.785 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 42.21 Mbit/s
95th percentile per-packet one-way delay: 47.785 ms
Loss rate: 0.63%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-10-10 23:12:53

End at: 2017-10-10 23:13:23

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.61 Mbit/s

95th percentile per-packet one-way delay: 48.793 ms

Loss rate: 0.55%

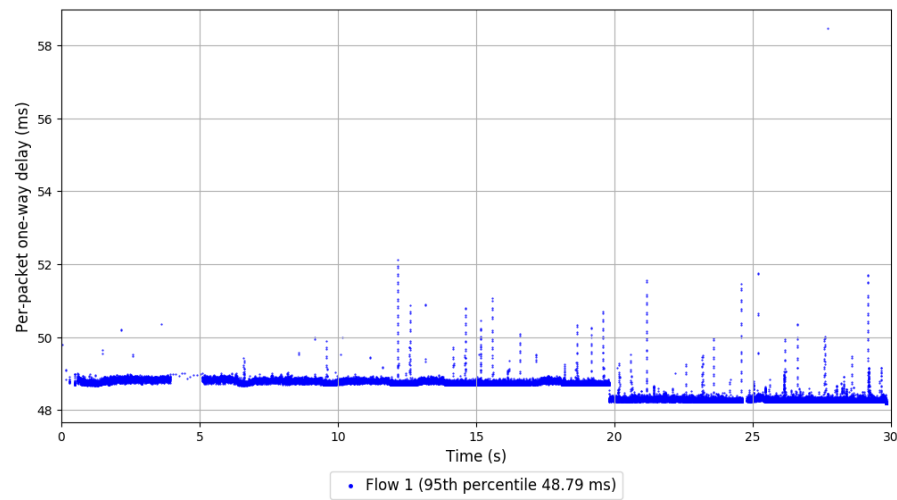
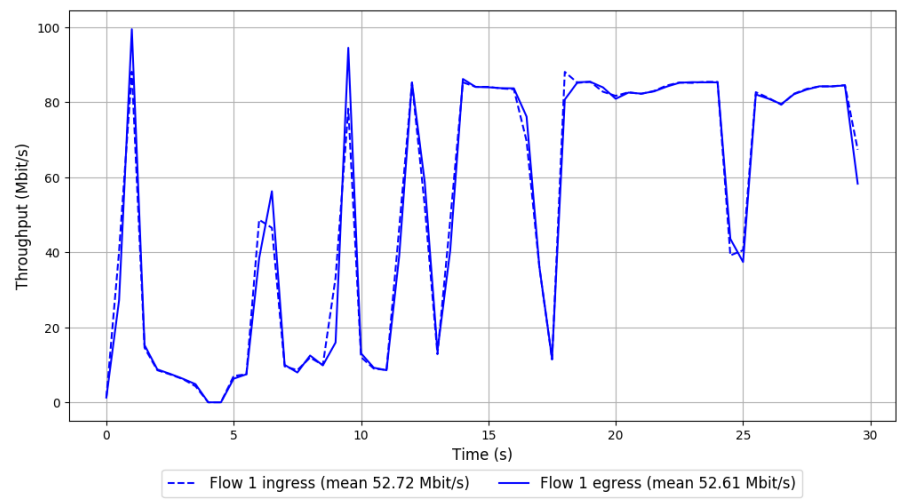
-- Flow 1:

Average throughput: 52.61 Mbit/s

95th percentile per-packet one-way delay: 48.793 ms

Loss rate: 0.55%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-10-10 23:23:51

End at: 2017-10-10 23:24:21

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.95 Mbit/s

95th percentile per-packet one-way delay: 48.439 ms

Loss rate: 0.57%

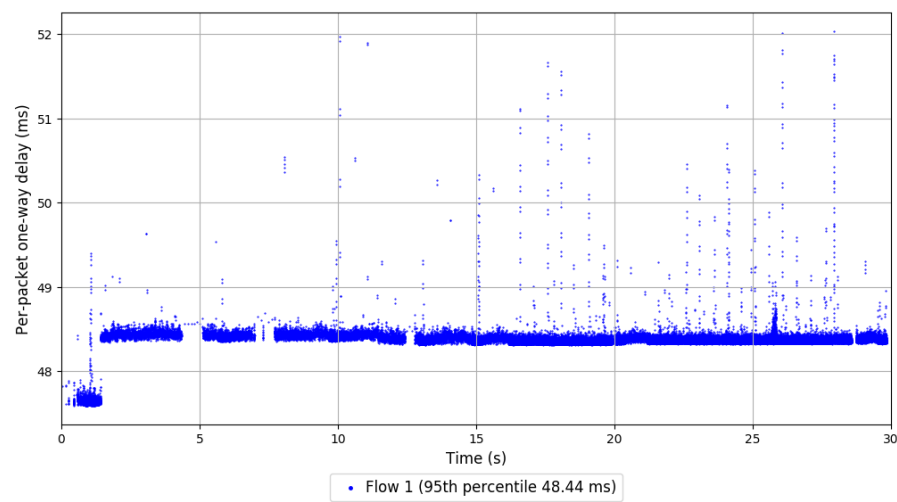
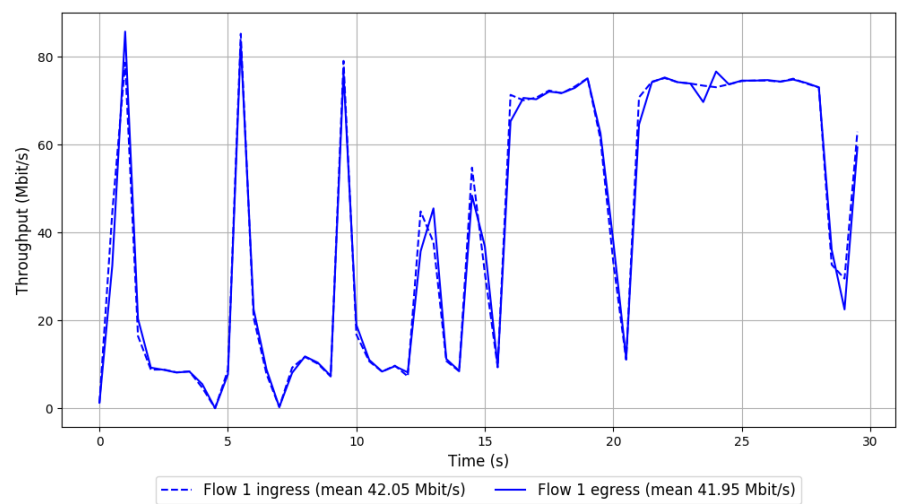
-- Flow 1:

Average throughput: 41.95 Mbit/s

95th percentile per-packet one-way delay: 48.439 ms

Loss rate: 0.57%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-10-10 23:34:37

End at: 2017-10-10 23:35:07

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.65 Mbit/s

95th percentile per-packet one-way delay: 48.149 ms

Loss rate: 0.58%

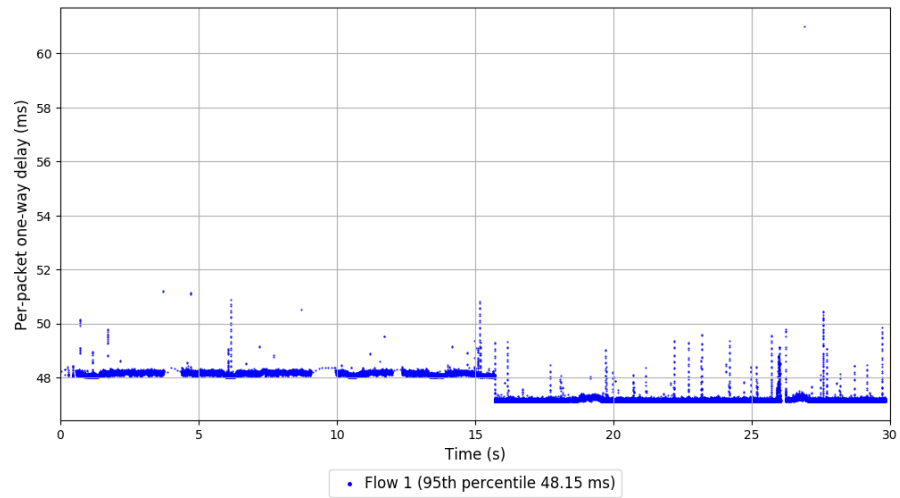
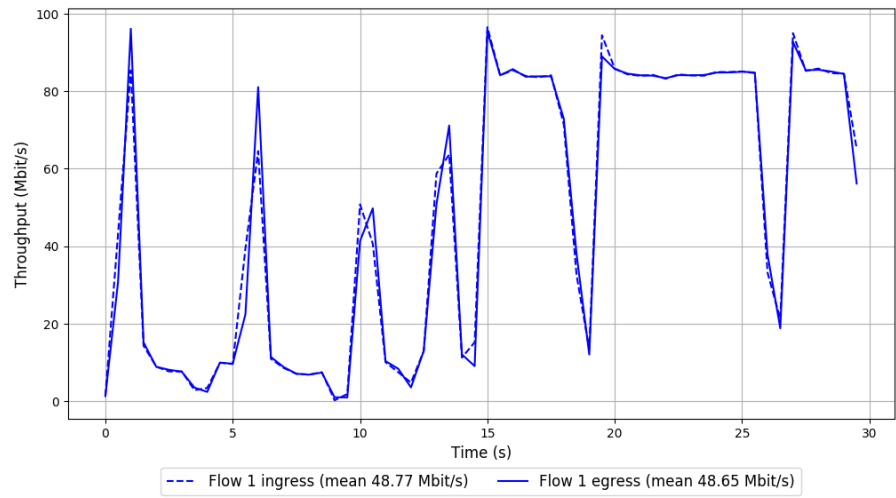
-- Flow 1:

Average throughput: 48.65 Mbit/s

95th percentile per-packet one-way delay: 48.149 ms

Loss rate: 0.58%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-10-10 23:44:50

End at: 2017-10-10 23:45:20

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.24 Mbit/s

95th percentile per-packet one-way delay: 49.236 ms

Loss rate: 0.64%

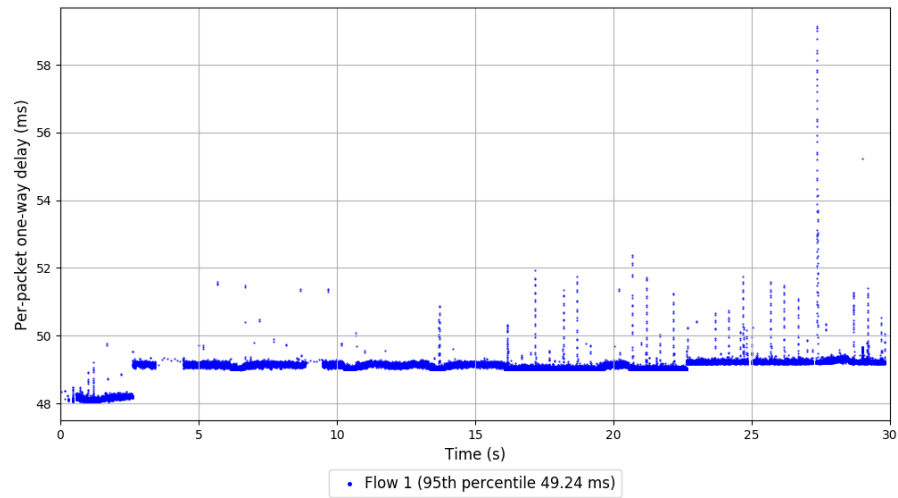
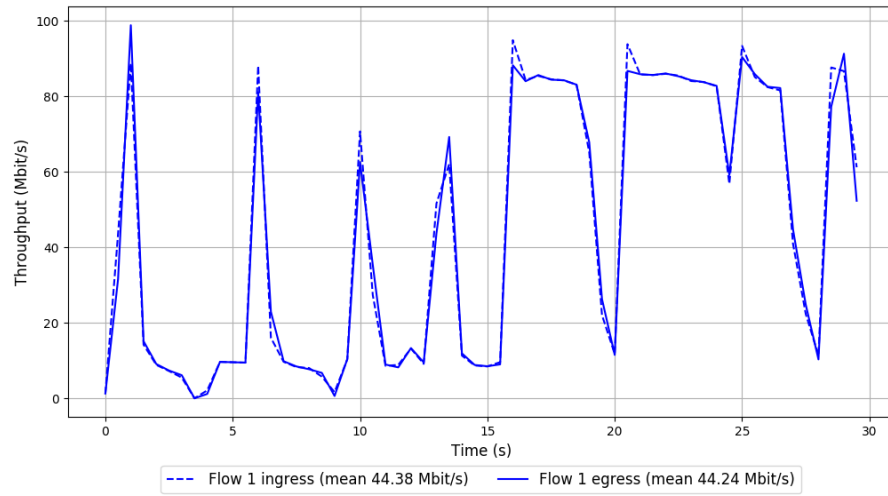
-- Flow 1:

Average throughput: 44.24 Mbit/s

95th percentile per-packet one-way delay: 49.236 ms

Loss rate: 0.64%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-10-10 23:55:41

End at: 2017-10-10 23:56:11

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.22 Mbit/s

95th percentile per-packet one-way delay: 49.319 ms

Loss rate: 0.55%

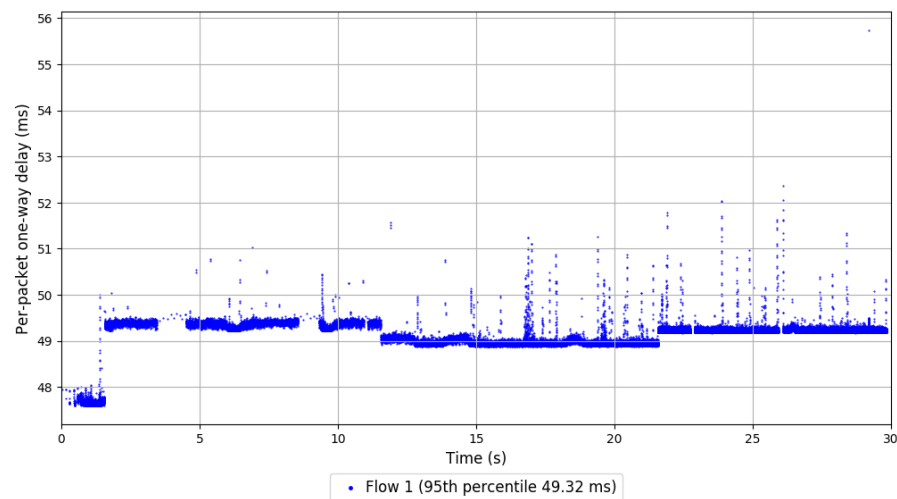
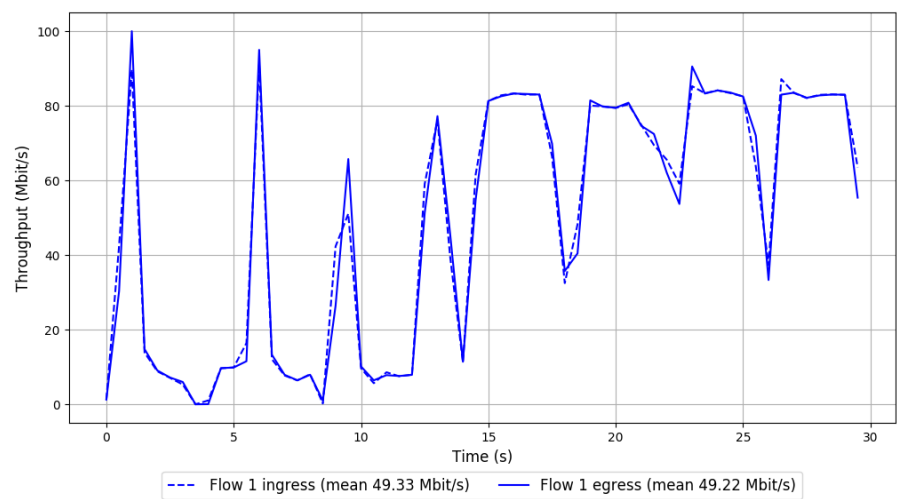
-- Flow 1:

Average throughput: 49.22 Mbit/s

95th percentile per-packet one-way delay: 49.319 ms

Loss rate: 0.55%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-10-11 00:06:34

End at: 2017-10-11 00:07:04

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.62 Mbit/s

95th percentile per-packet one-way delay: 48.491 ms

Loss rate: 0.22%

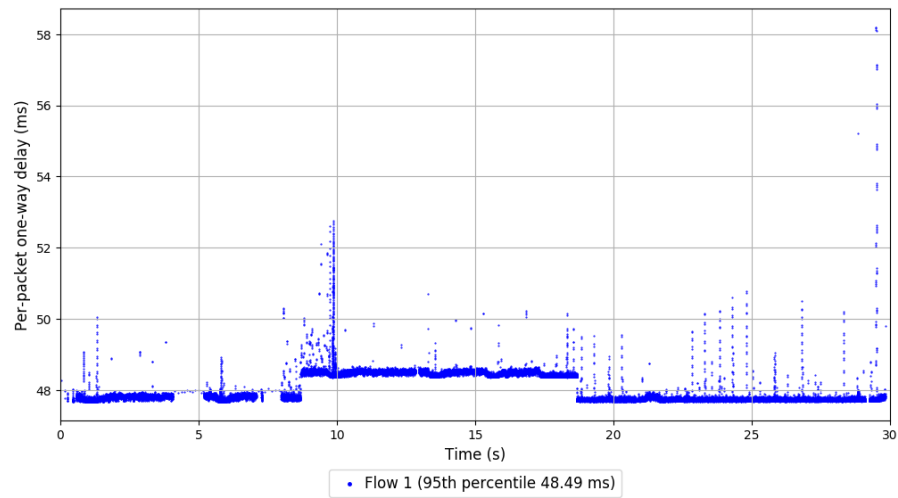
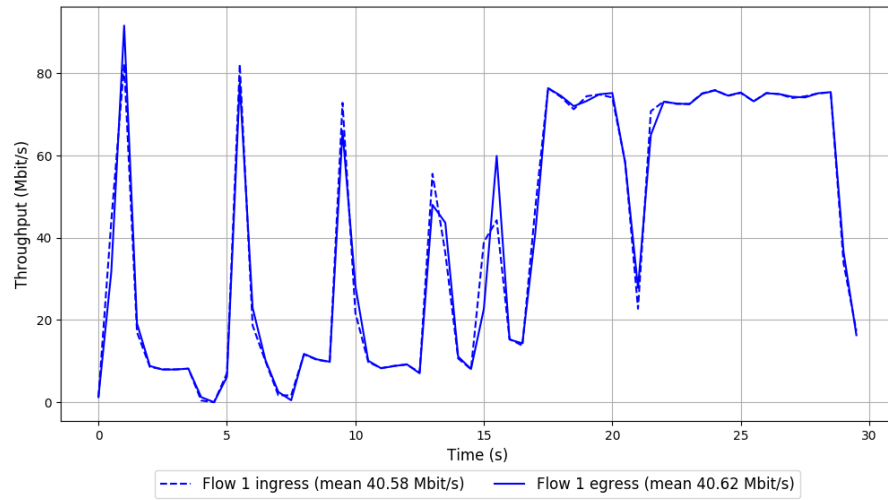
-- Flow 1:

Average throughput: 40.62 Mbit/s

95th percentile per-packet one-way delay: 48.491 ms

Loss rate: 0.22%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-10-11 00:17:35

End at: 2017-10-11 00:18:05

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.97 Mbit/s

95th percentile per-packet one-way delay: 49.784 ms

Loss rate: 0.57%

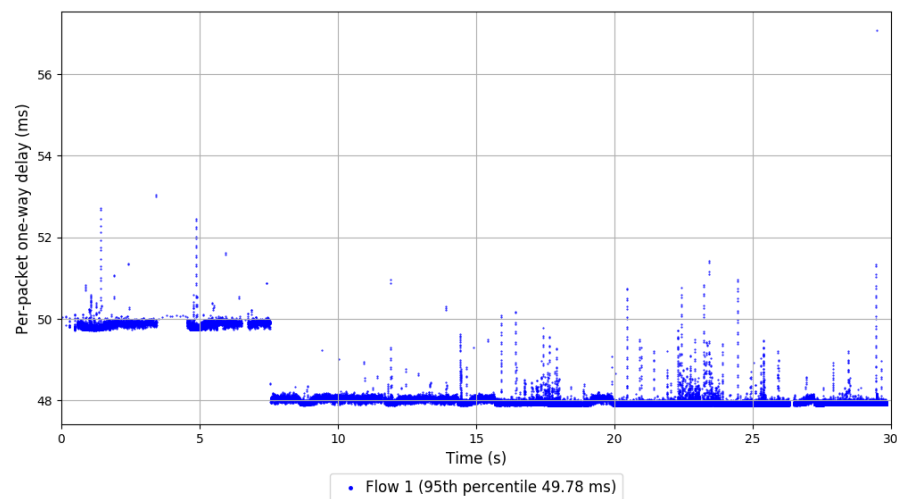
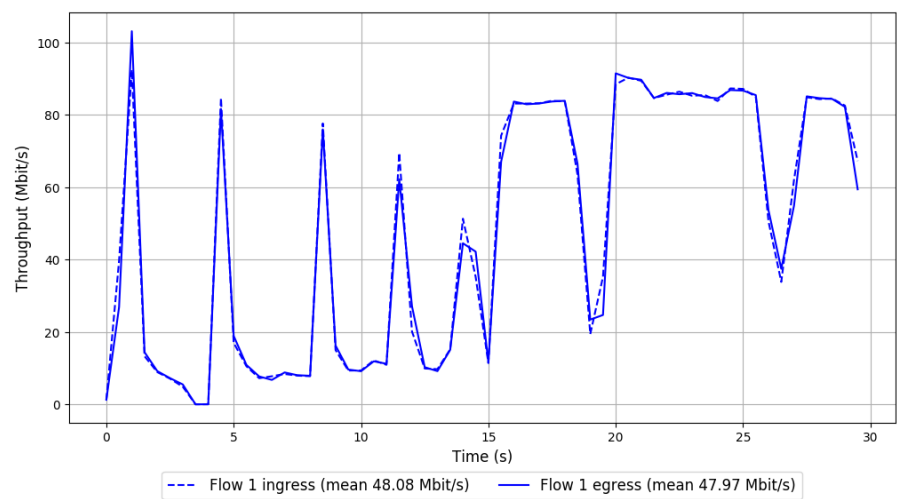
-- Flow 1:

Average throughput: 47.97 Mbit/s

95th percentile per-packet one-way delay: 49.784 ms

Loss rate: 0.57%

Run 9: Report of QUIC Cubic — Data Link

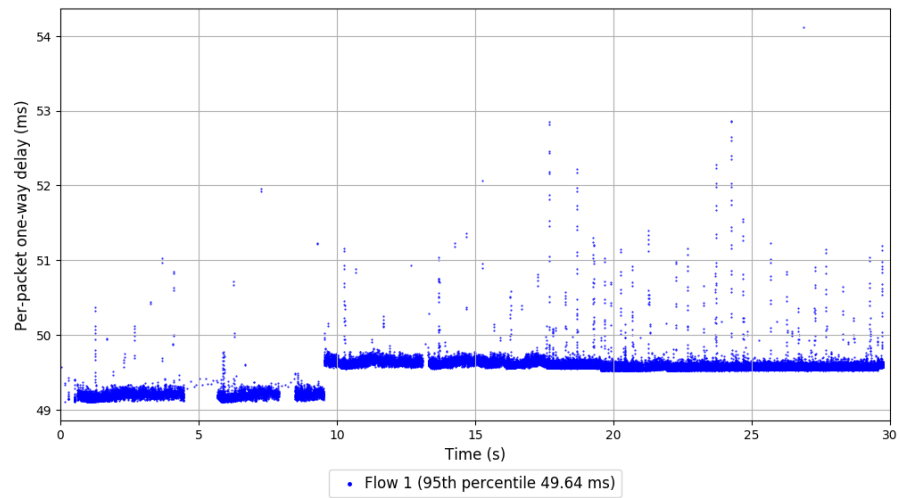
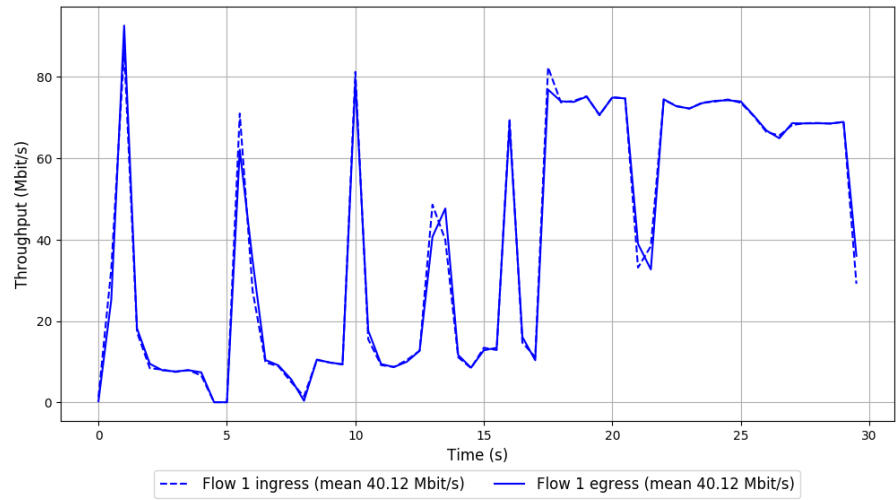


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-10-11 00:28:03
End at: 2017-10-11 00:28:33

# Below is generated by plot.py at 2017-10-11 02:55:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.12 Mbit/s
95th percentile per-packet one-way delay: 49.640 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.12 Mbit/s
95th percentile per-packet one-way delay: 49.640 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

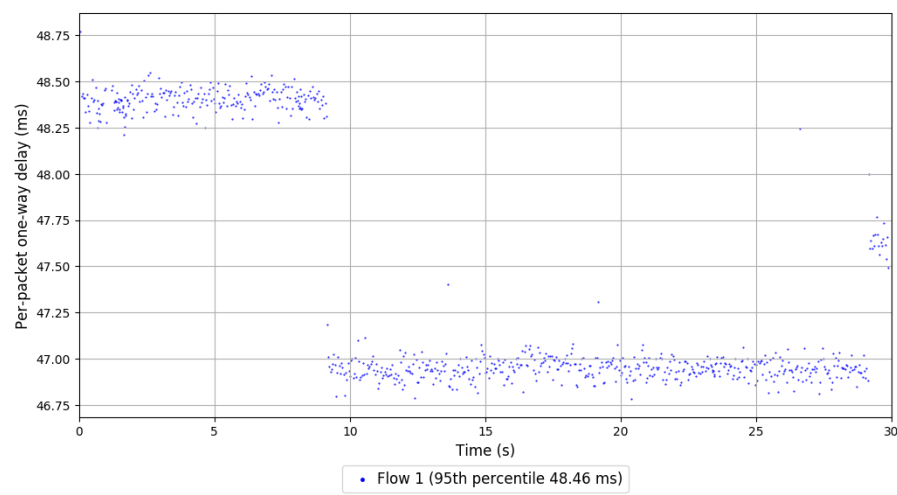
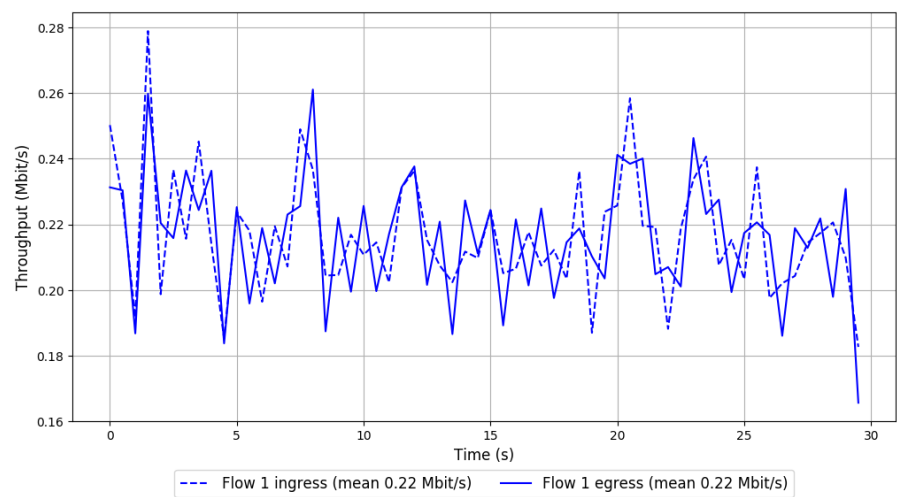


```
Run 1: Statistics of SCReAM

Start at: 2017-10-10 22:53:43
End at: 2017-10-10 22:54:13

# Below is generated by plot.py at 2017-10-11 02:55:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.459 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.459 ms
Loss rate: 0.26%
```

Run 1: Report of SReAM — Data Link

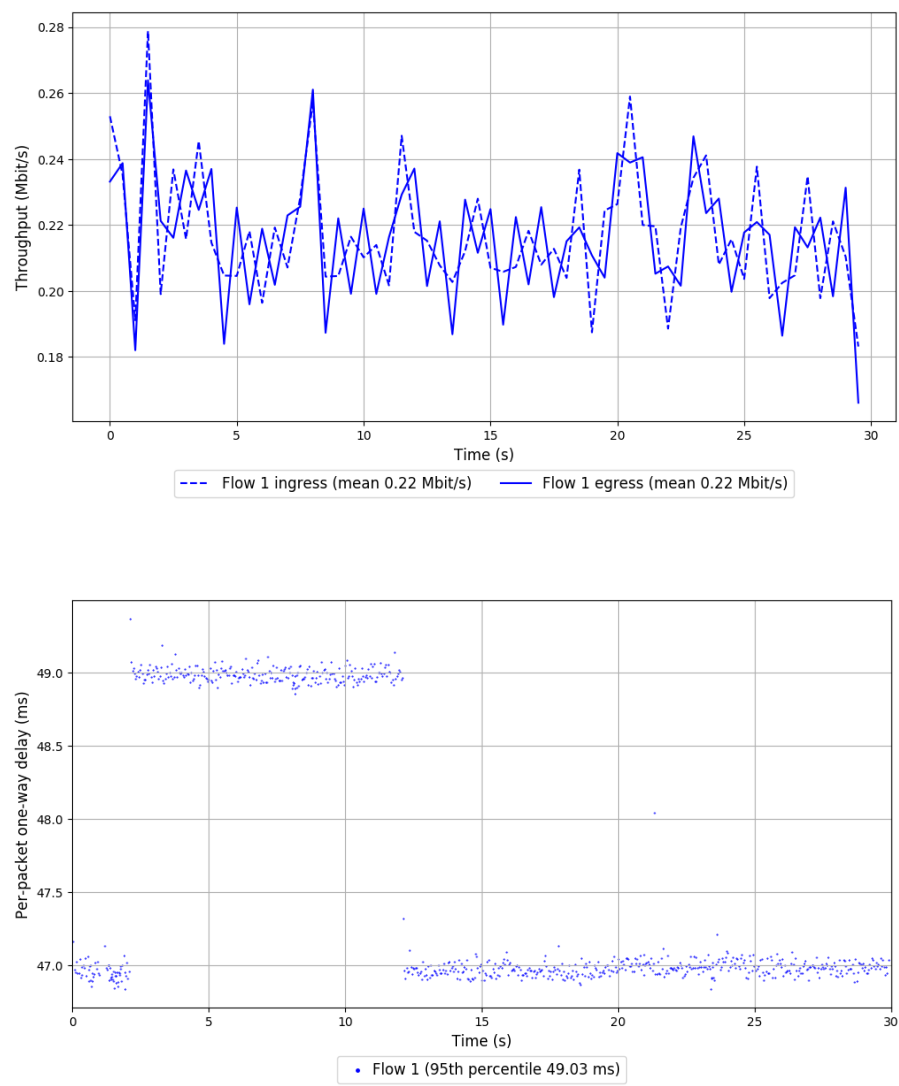


```
Run 2: Statistics of SCReAM

Start at: 2017-10-10 23:04:41
End at: 2017-10-10 23:05:11

# Below is generated by plot.py at 2017-10-11 02:55:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.034 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.034 ms
Loss rate: 0.26%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-10-10 23:15:34

End at: 2017-10-10 23:16:04

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.757 ms

Loss rate: 0.26%

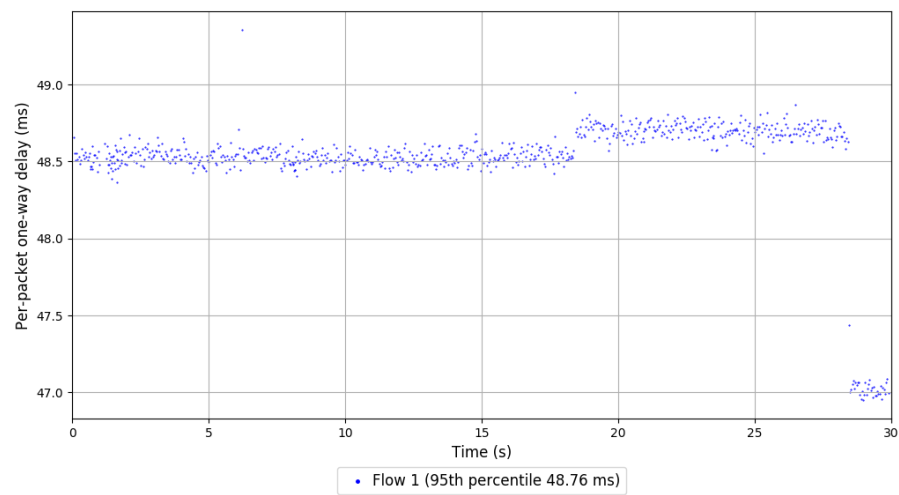
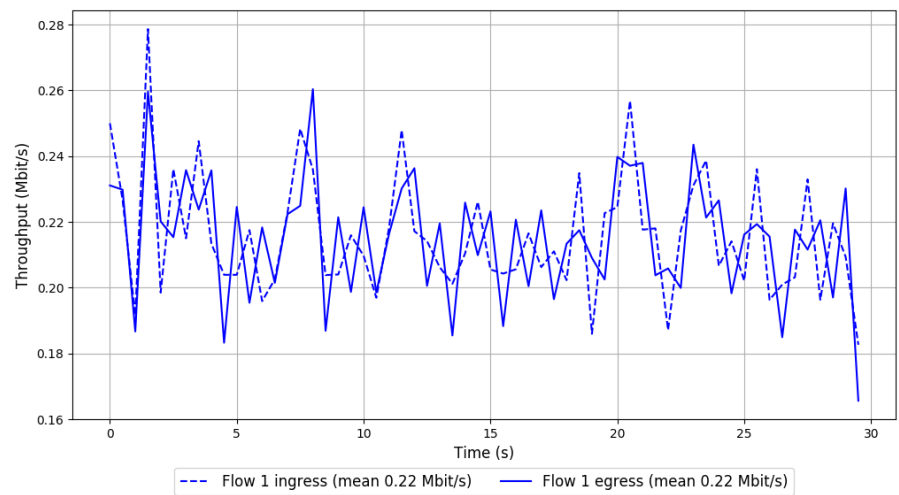
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.757 ms

Loss rate: 0.26%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-10-10 23:26:34

End at: 2017-10-10 23:27:04

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.075 ms

Loss rate: 0.38%

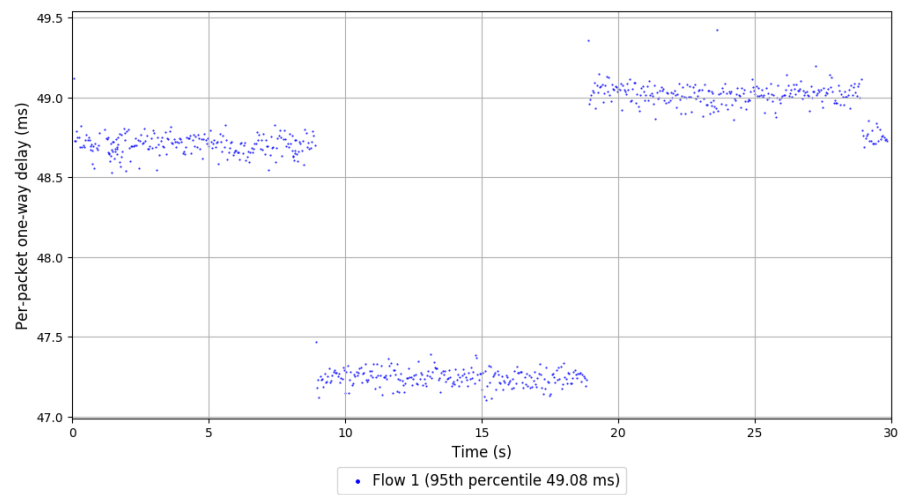
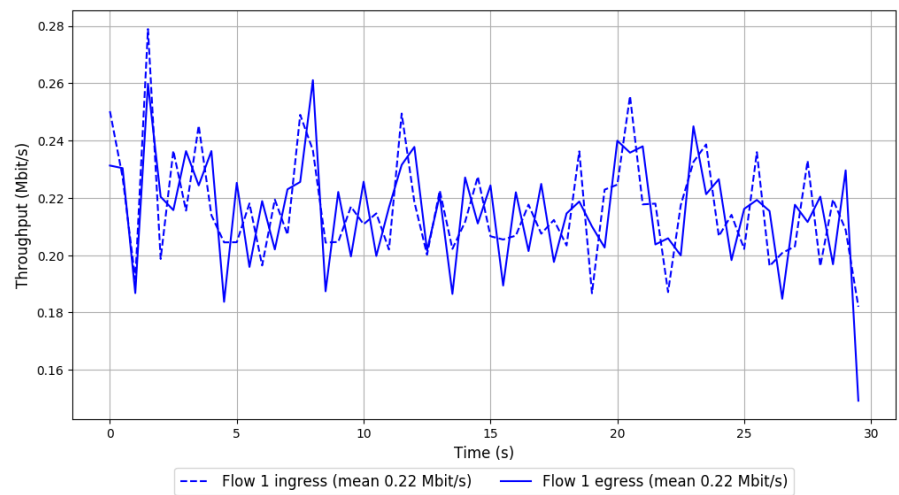
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.075 ms

Loss rate: 0.38%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-10-10 23:36:51

End at: 2017-10-10 23:37:21

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.864 ms

Loss rate: 0.26%

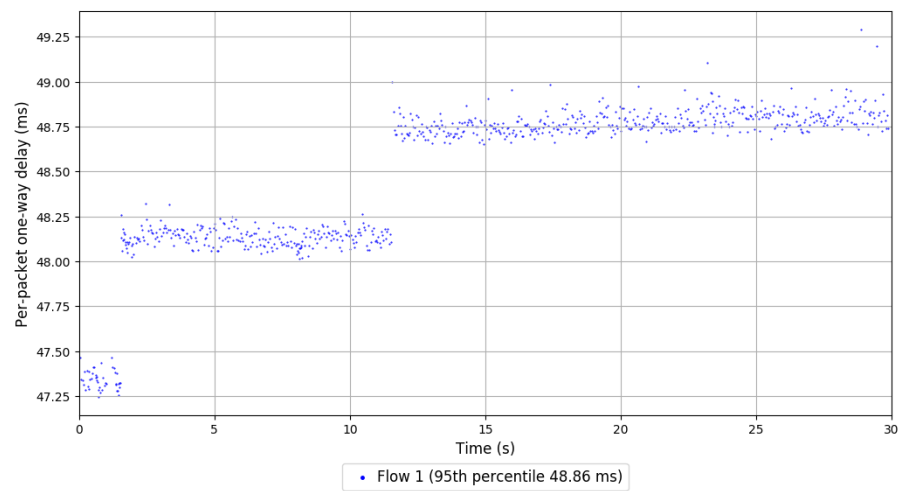
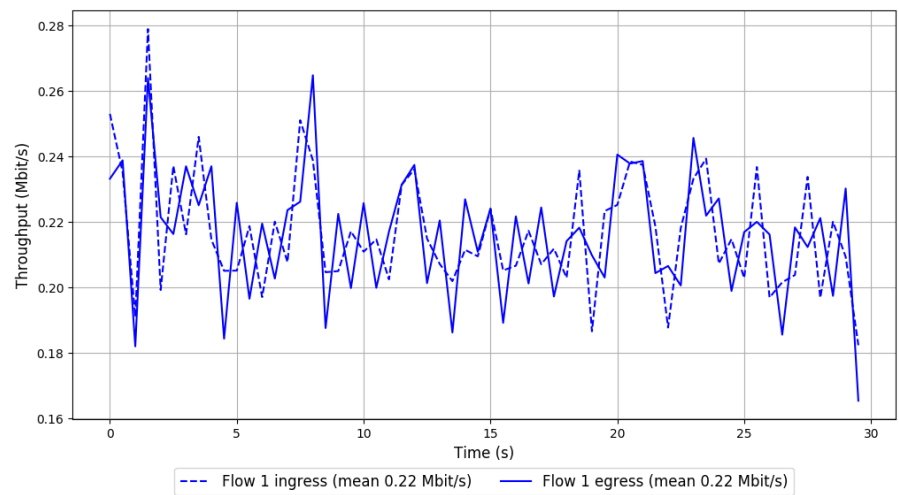
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.864 ms

Loss rate: 0.26%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-10-10 23:47:31

End at: 2017-10-10 23:48:01

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.437 ms

Loss rate: 0.38%

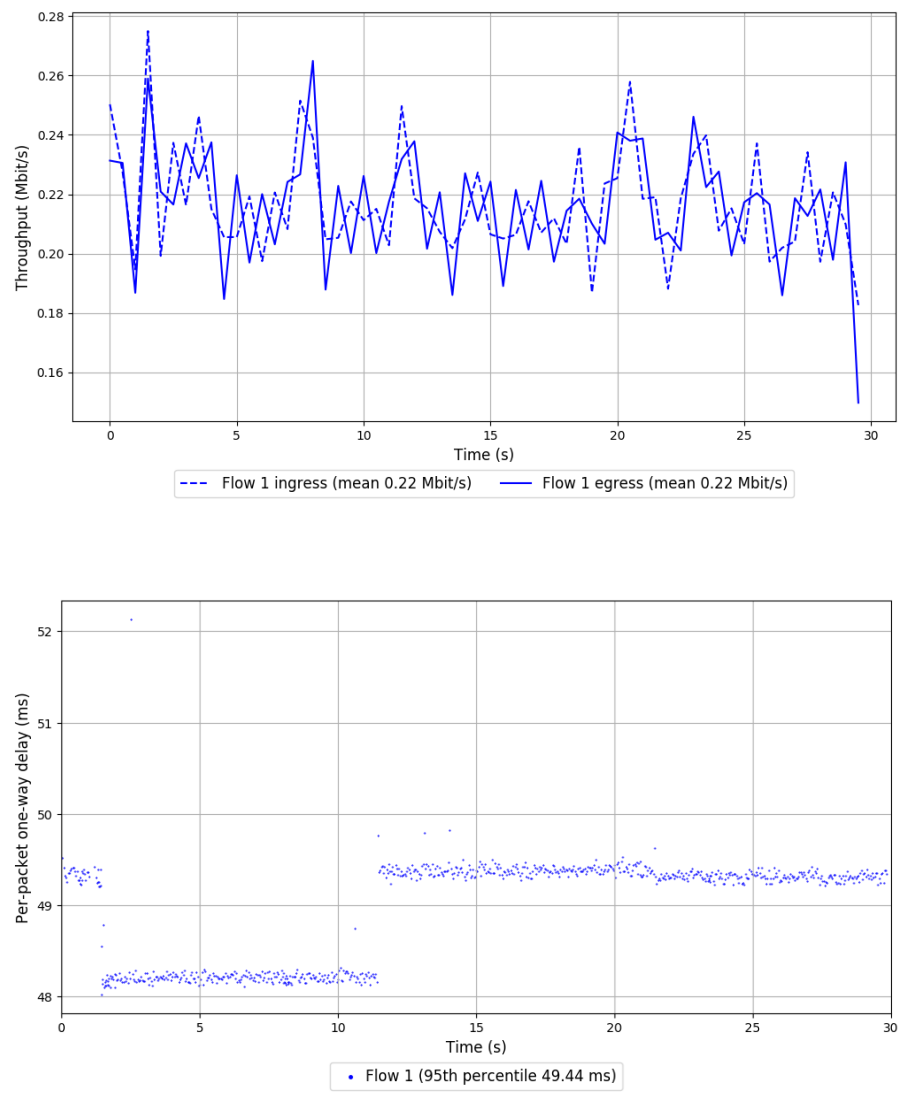
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.437 ms

Loss rate: 0.38%

Run 6: Report of SReAM — Data Link

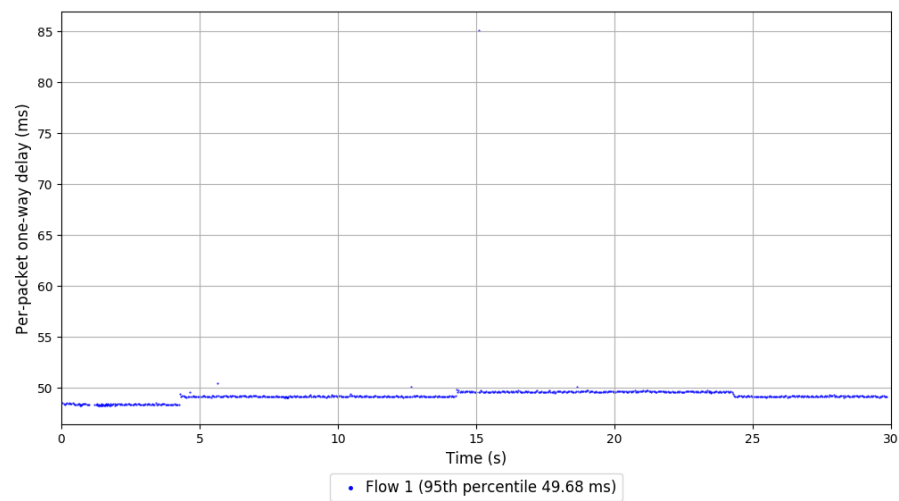
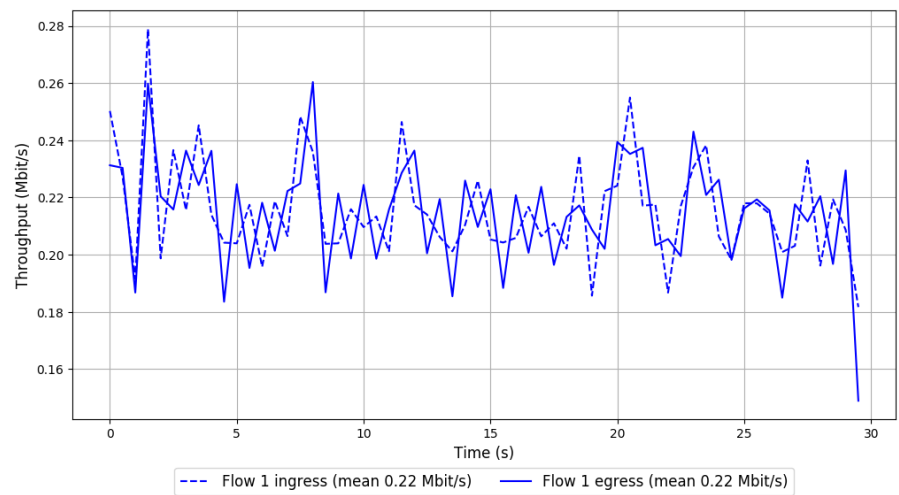


```
Run 7: Statistics of SCReAM

Start at: 2017-10-10 23:58:28
End at: 2017-10-10 23:58:58

# Below is generated by plot.py at 2017-10-11 02:55:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.683 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.683 ms
Loss rate: 0.38%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-10-11 00:09:23

End at: 2017-10-11 00:09:53

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.608 ms

Loss rate: 0.38%

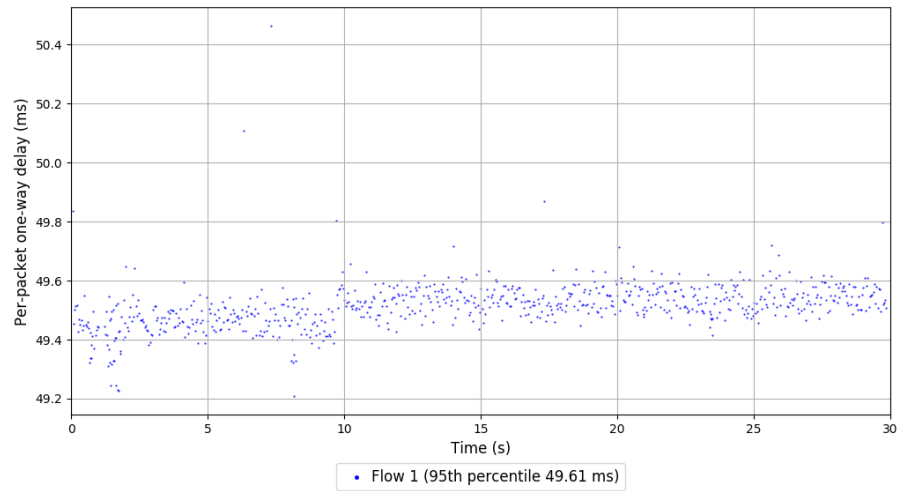
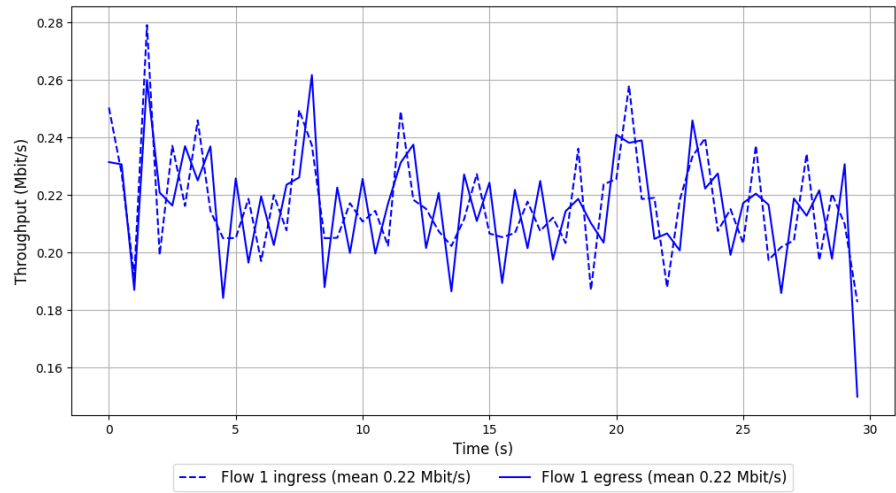
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.608 ms

Loss rate: 0.38%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-10-11 00:19:52

End at: 2017-10-11 00:20:22

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.122 ms

Loss rate: 0.26%

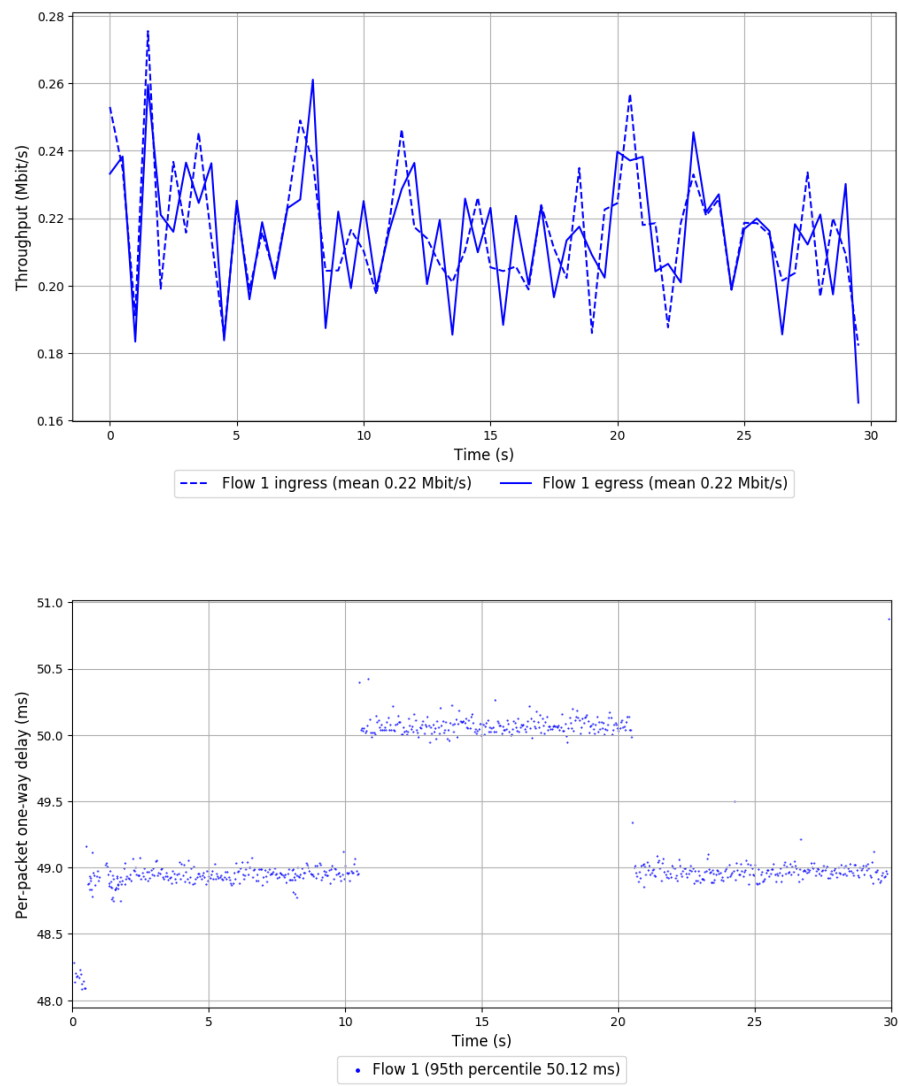
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.122 ms

Loss rate: 0.26%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-10-11 00:30:20

End at: 2017-10-11 00:30:50

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.870 ms

Loss rate: 0.26%

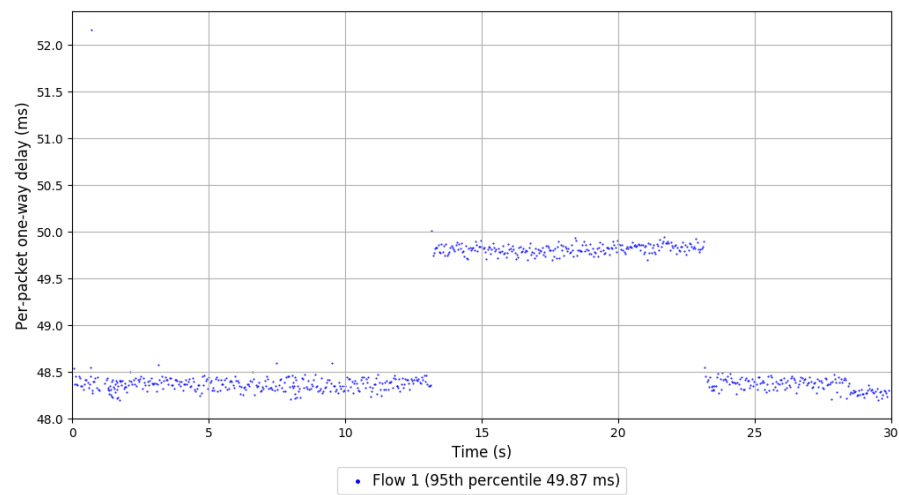
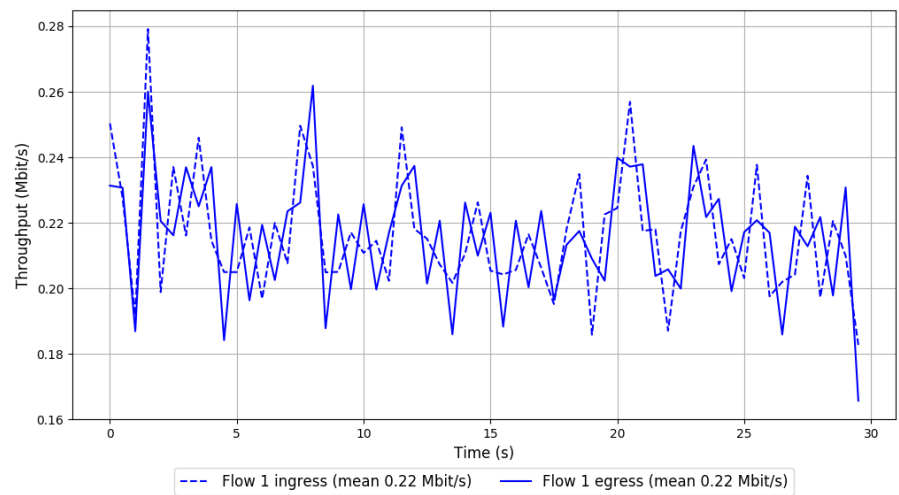
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.870 ms

Loss rate: 0.26%

Run 10: Report of SReAM — Data Link

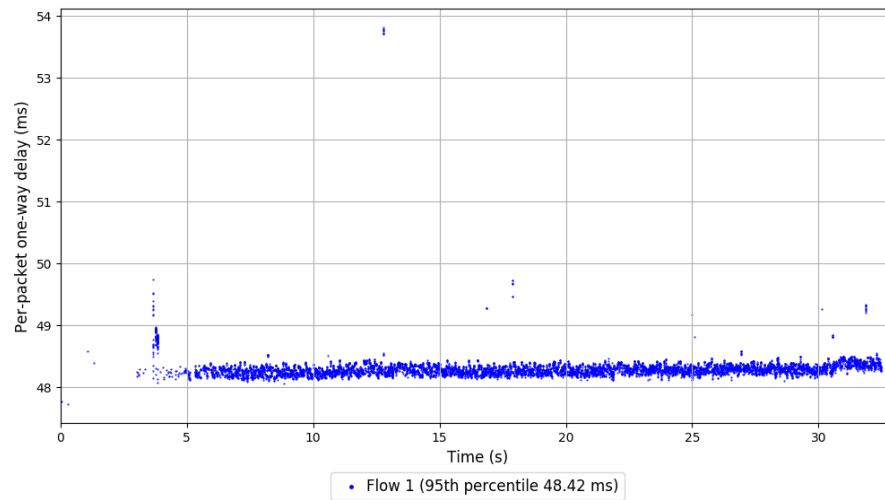
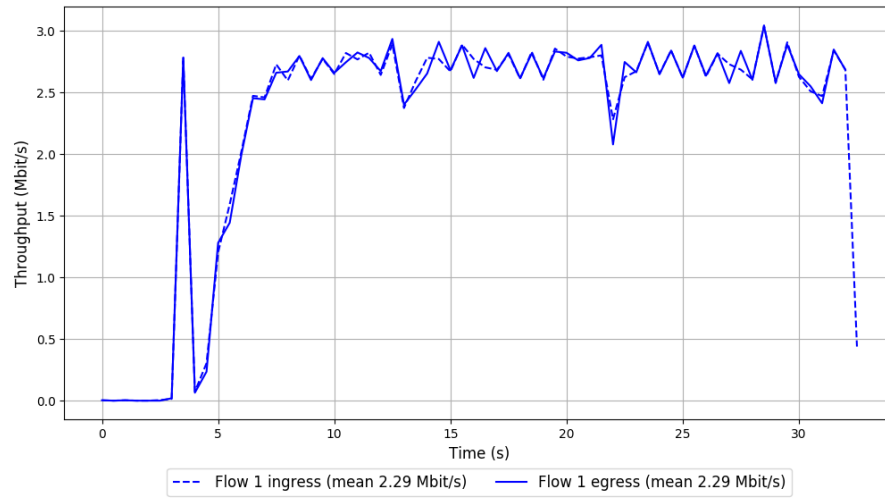


```
Run 1: Statistics of WebRTC media

Start at: 2017-10-10 22:47:05
End at: 2017-10-10 22:47:35

# Below is generated by plot.py at 2017-10-11 02:55:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 48.423 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 48.423 ms
Loss rate: 0.44%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-10-10 22:57:34

End at: 2017-10-10 22:58:04

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 47.966 ms

Loss rate: 0.47%

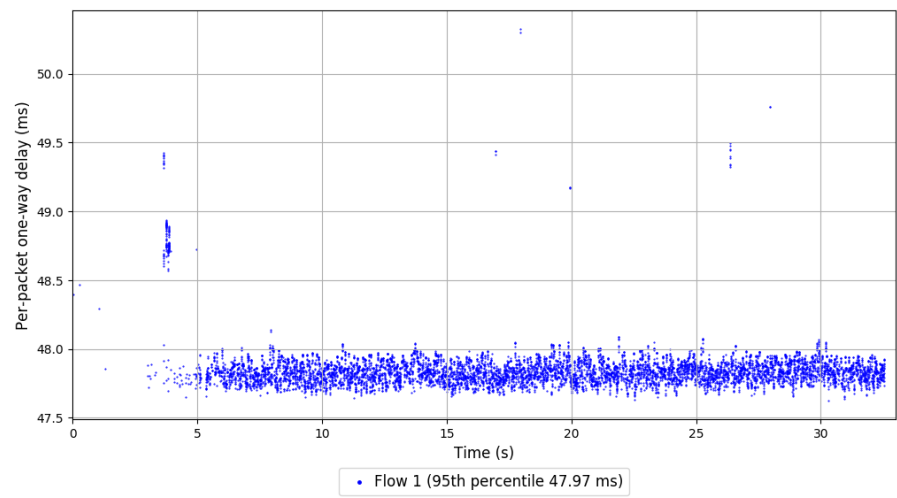
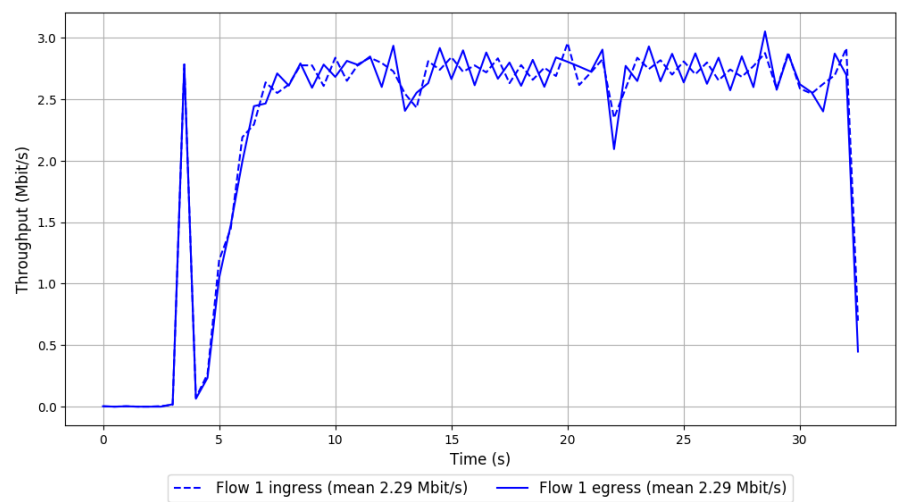
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 47.966 ms

Loss rate: 0.47%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-10-10 23:08:32

End at: 2017-10-10 23:09:02

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 48.598 ms

Loss rate: 0.32%

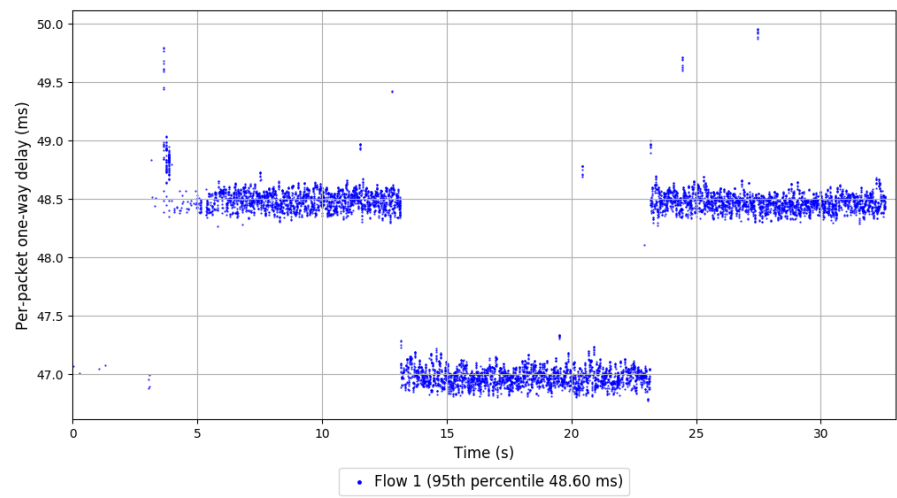
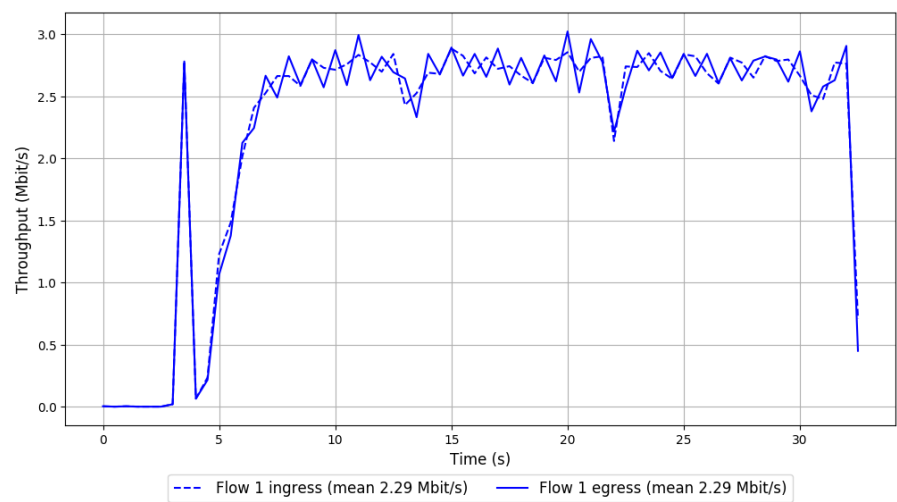
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 48.598 ms

Loss rate: 0.32%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-10-10 23:19:25

End at: 2017-10-10 23:19:55

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 48.699 ms

Loss rate: 0.36%

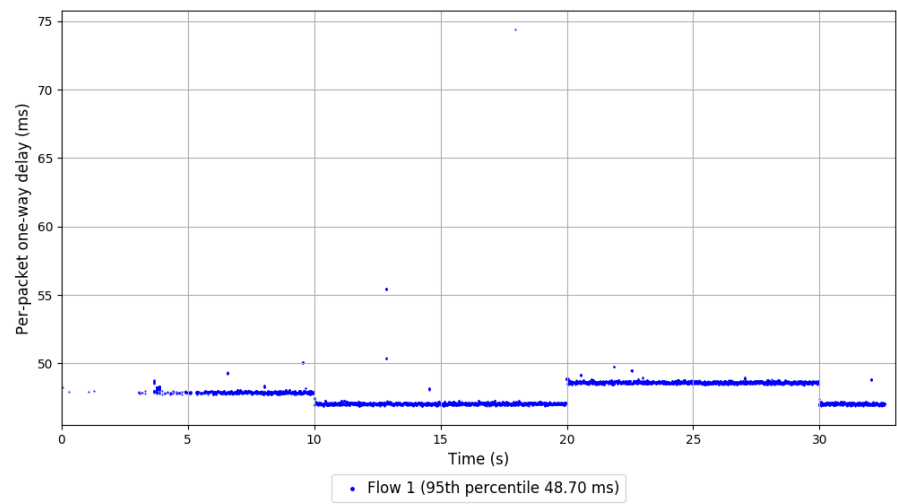
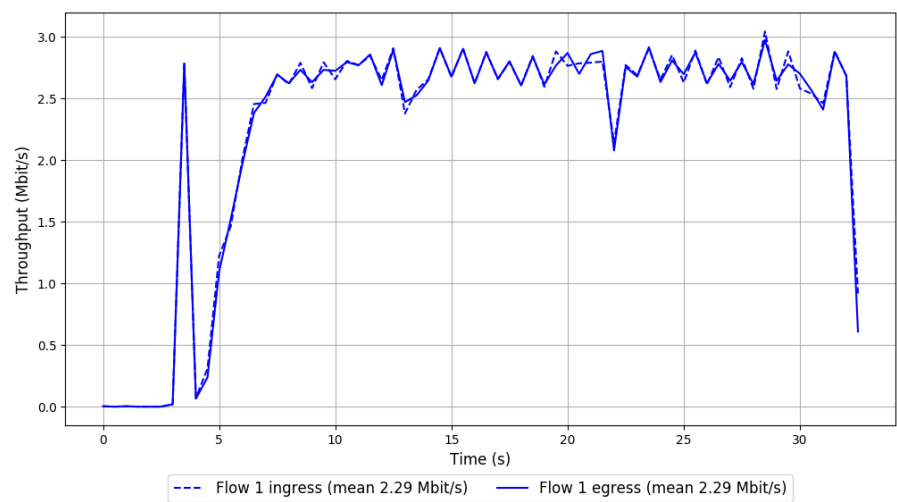
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 48.699 ms

Loss rate: 0.36%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-10-10 23:30:21

End at: 2017-10-10 23:30:51

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 48.801 ms

Loss rate: 0.30%

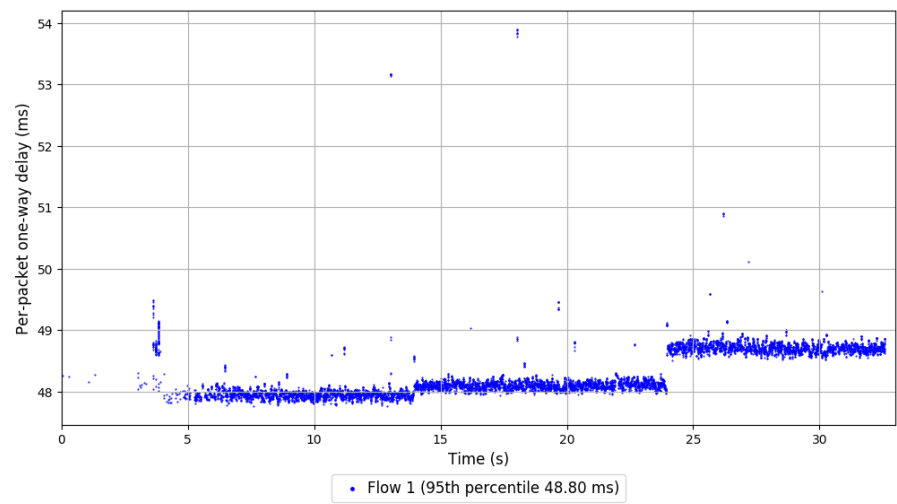
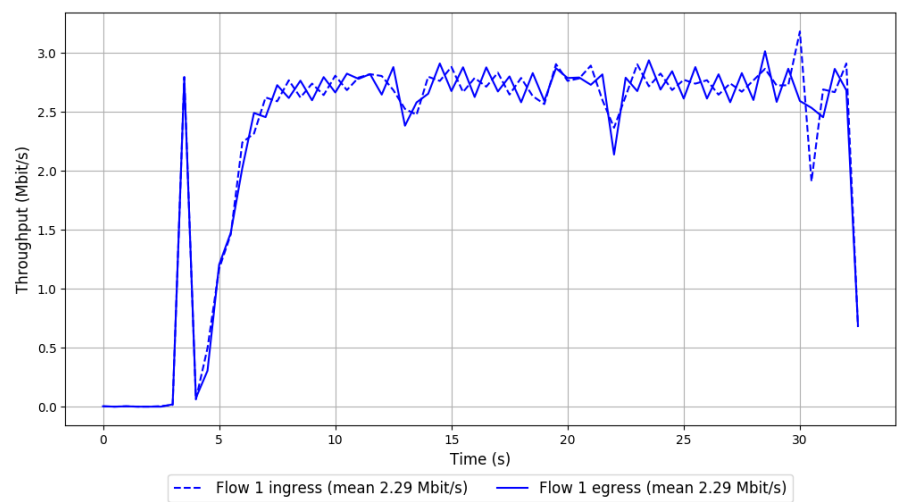
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 48.801 ms

Loss rate: 0.30%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-10-10 23:40:41

End at: 2017-10-10 23:41:11

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.162 ms

Loss rate: 0.43%

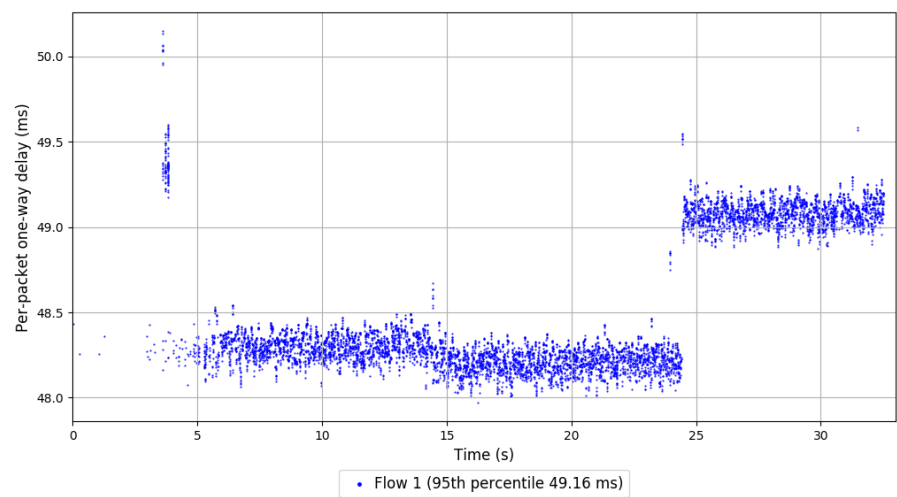
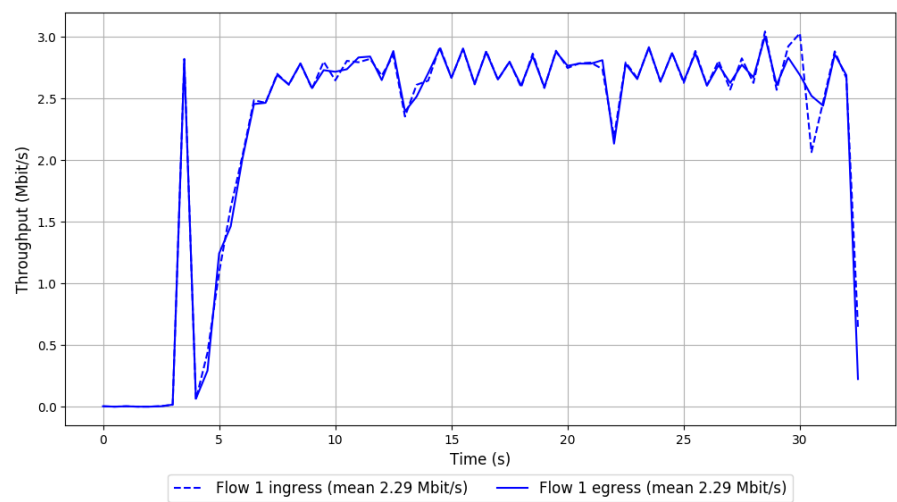
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.162 ms

Loss rate: 0.43%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-10-10 23:51:34

End at: 2017-10-10 23:52:04

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.499 ms

Loss rate: 0.31%

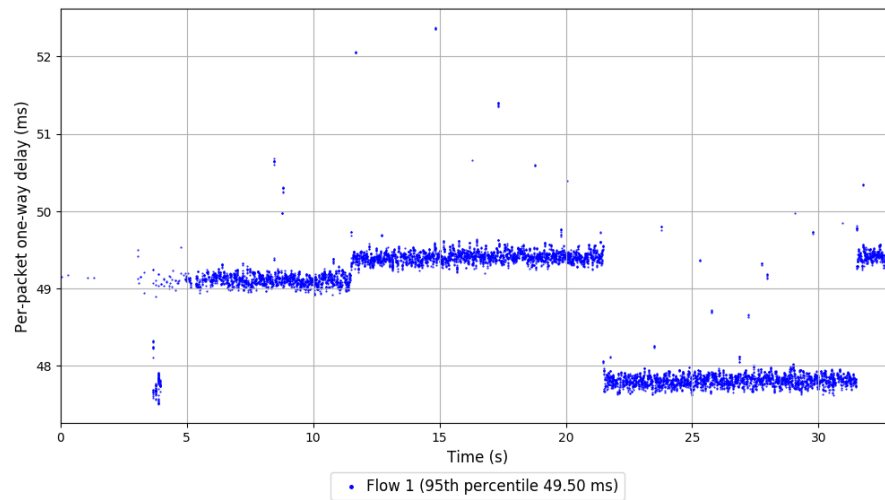
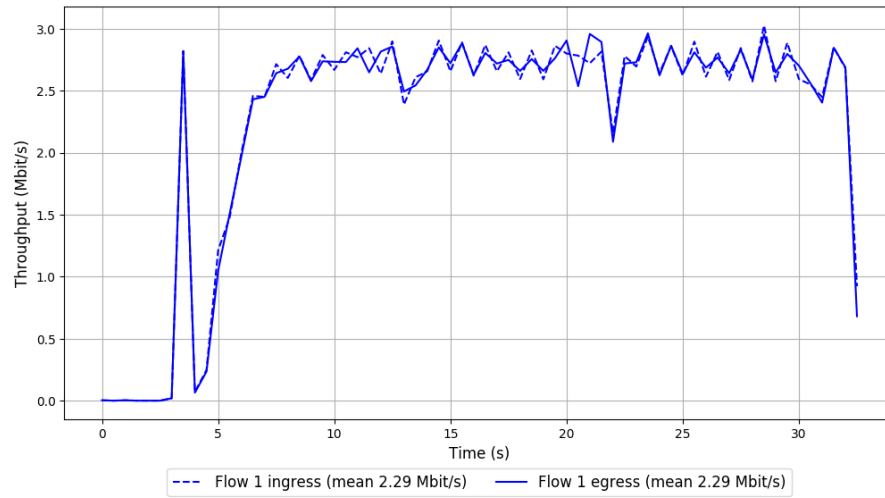
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.499 ms

Loss rate: 0.31%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-10-11 00:02:19

End at: 2017-10-11 00:02:49

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 49.438 ms

Loss rate: 0.31%

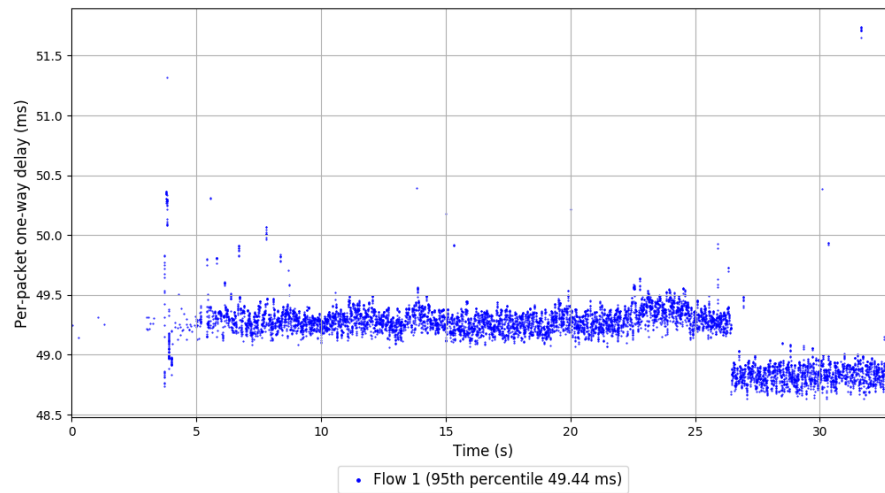
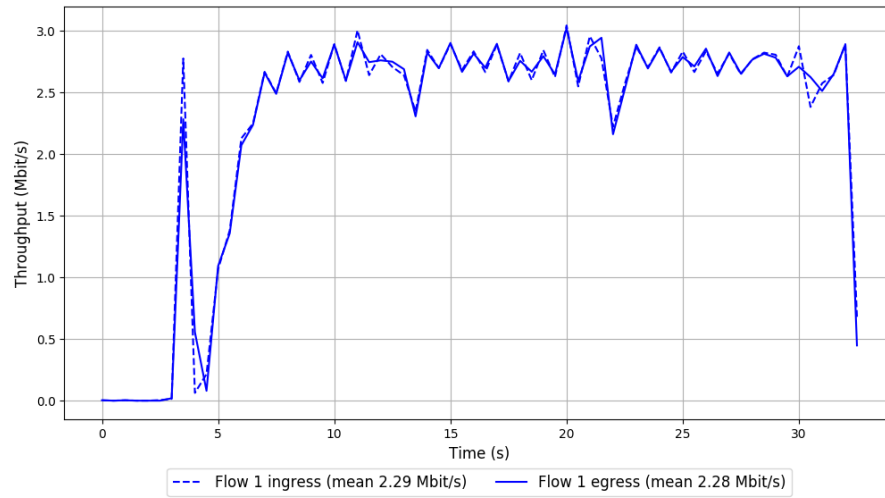
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 49.438 ms

Loss rate: 0.31%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-10-11 00:13:18

End at: 2017-10-11 00:13:48

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.872 ms

Loss rate: 0.32%

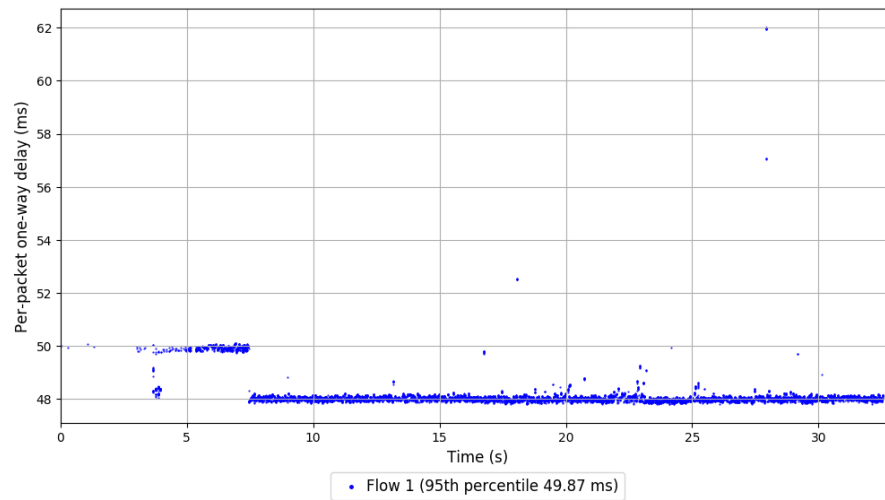
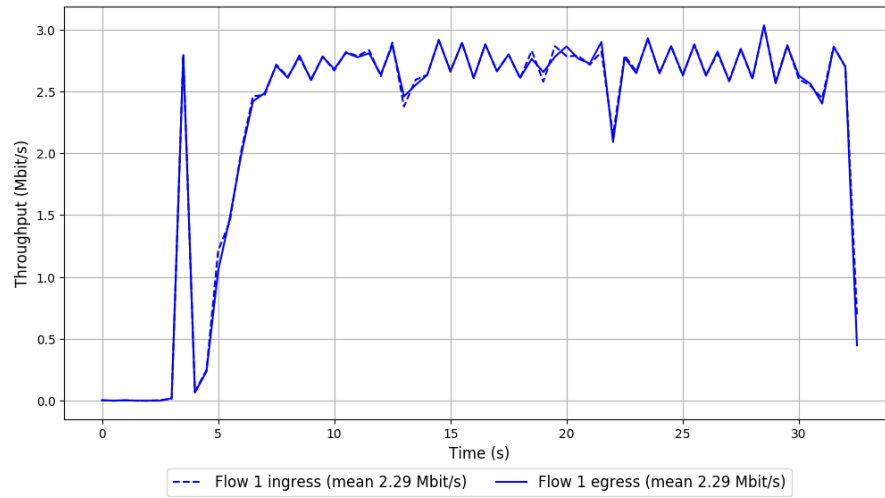
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.872 ms

Loss rate: 0.32%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-10-11 00:23:43

End at: 2017-10-11 00:24:13

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 49.767 ms

Loss rate: 0.46%

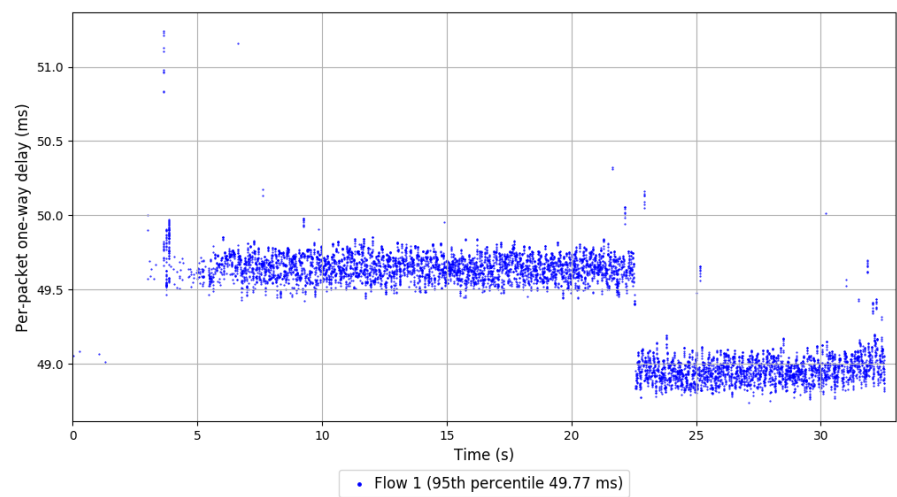
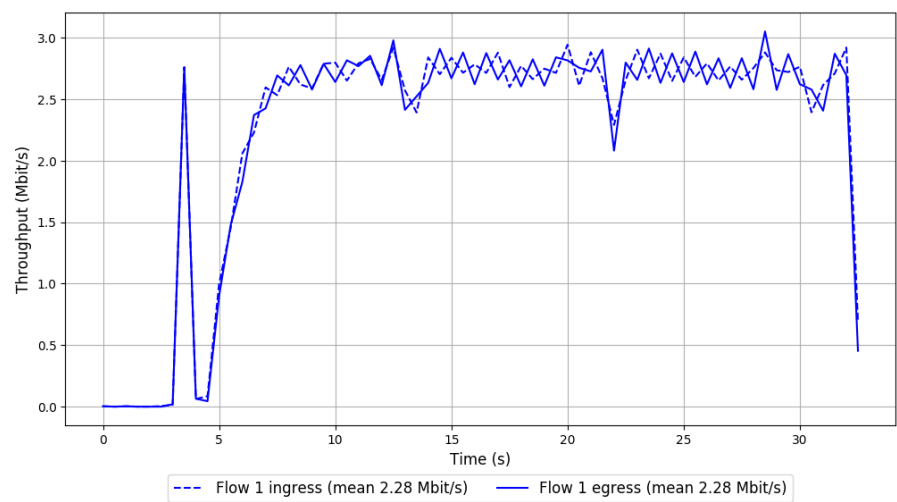
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 49.767 ms

Loss rate: 0.46%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-10-10 22:50:46

End at: 2017-10-10 22:51:16

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 49.440 ms

Loss rate: 0.08%

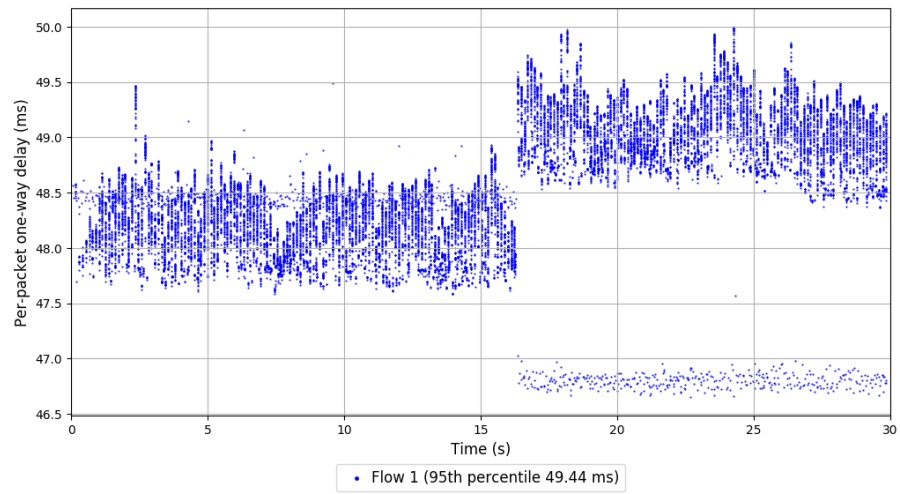
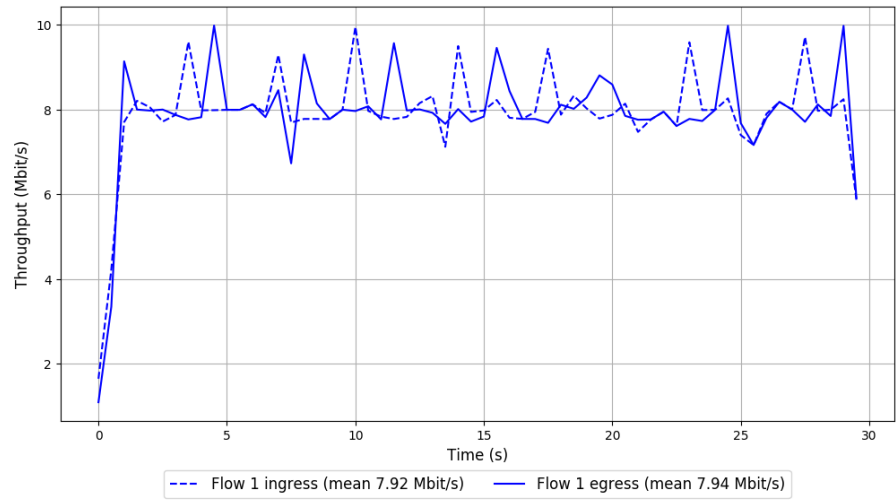
-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 49.440 ms

Loss rate: 0.08%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-10-10 23:01:20

End at: 2017-10-10 23:01:50

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 49.792 ms

Loss rate: 0.41%

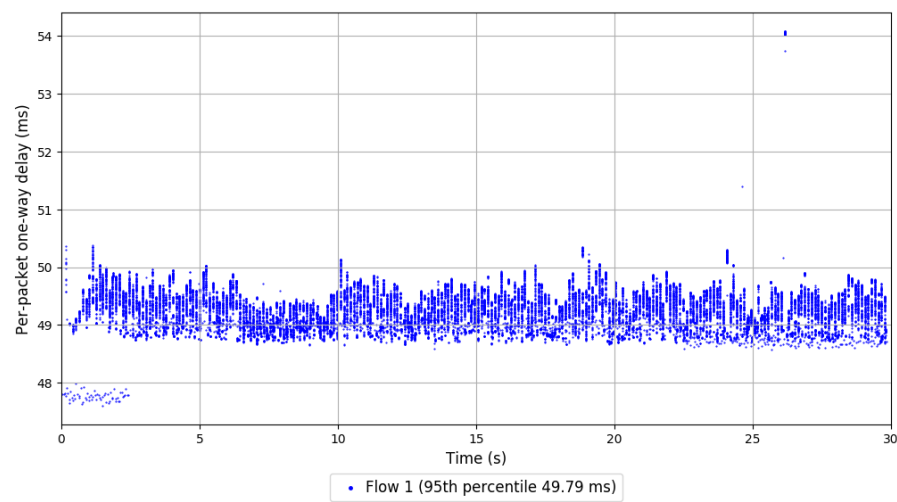
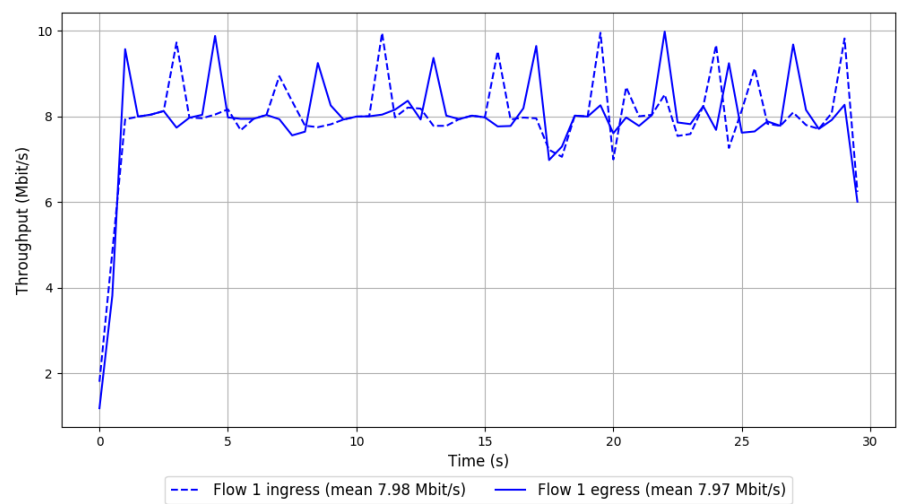
-- Flow 1:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 49.792 ms

Loss rate: 0.41%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-10-10 23:12:16

End at: 2017-10-10 23:12:46

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 49.925 ms

Loss rate: 0.37%

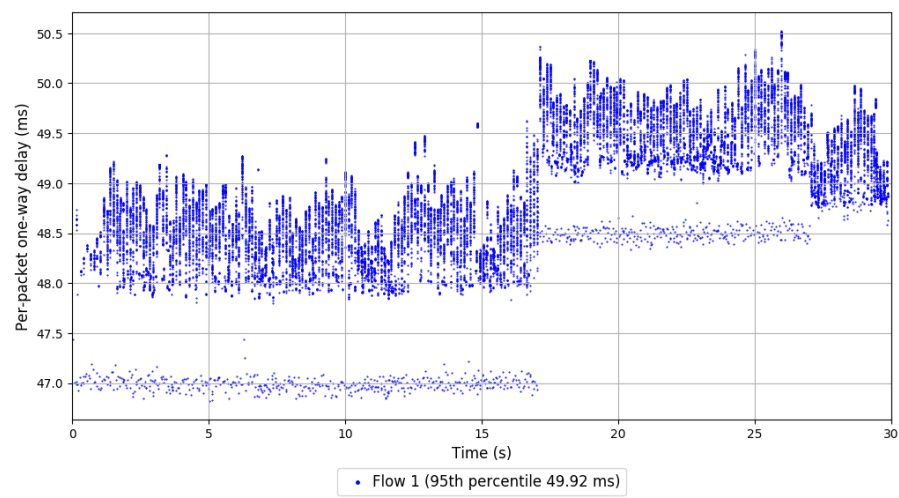
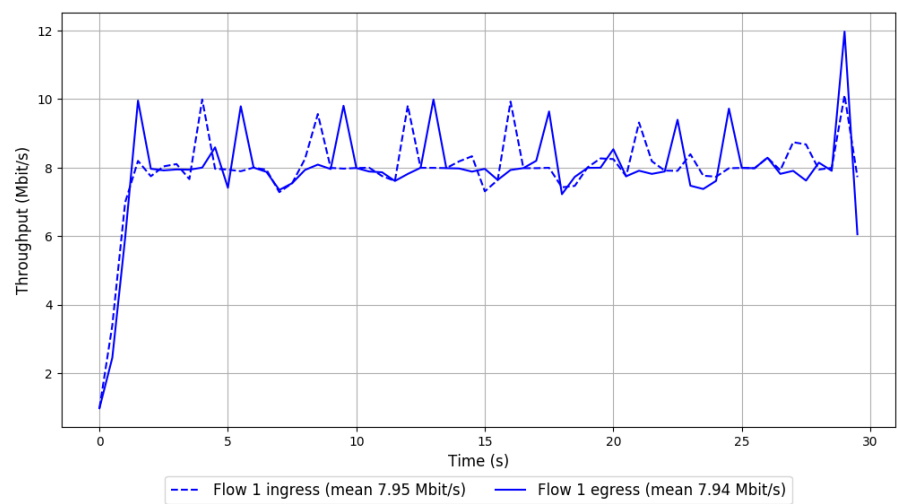
-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 49.925 ms

Loss rate: 0.37%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-10-10 23:23:14

End at: 2017-10-10 23:23:44

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 49.411 ms

Loss rate: 0.42%

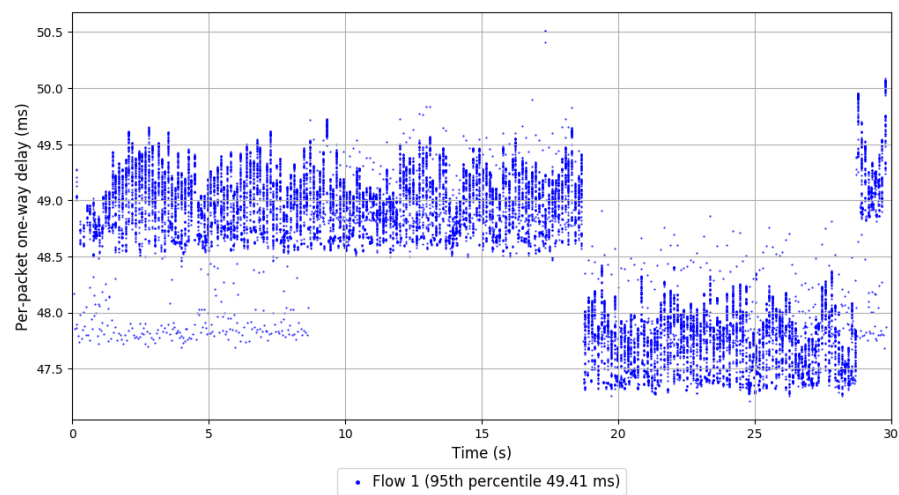
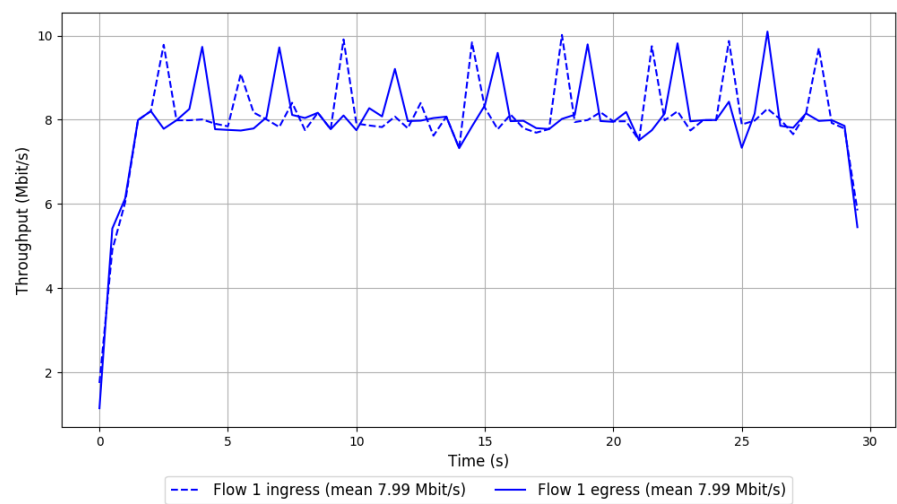
-- Flow 1:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 49.411 ms

Loss rate: 0.42%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-10-10 23:34:00

End at: 2017-10-10 23:34:30

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 49.971 ms

Loss rate: 0.56%

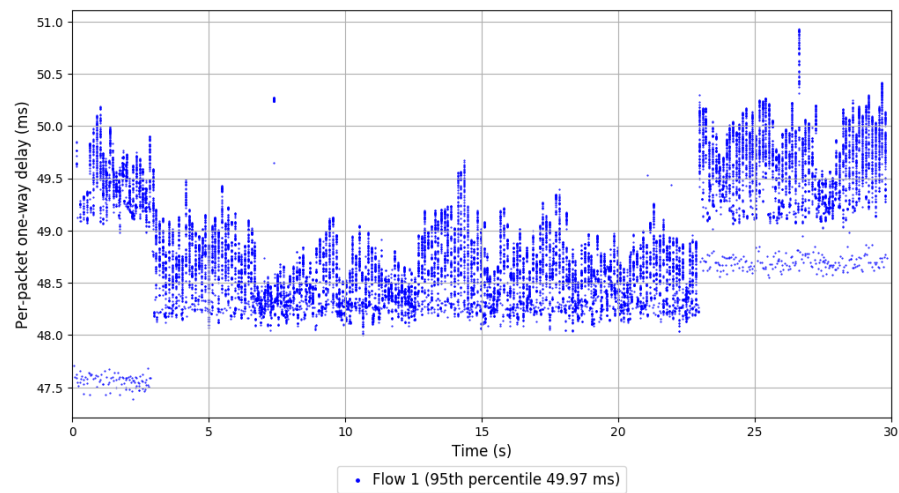
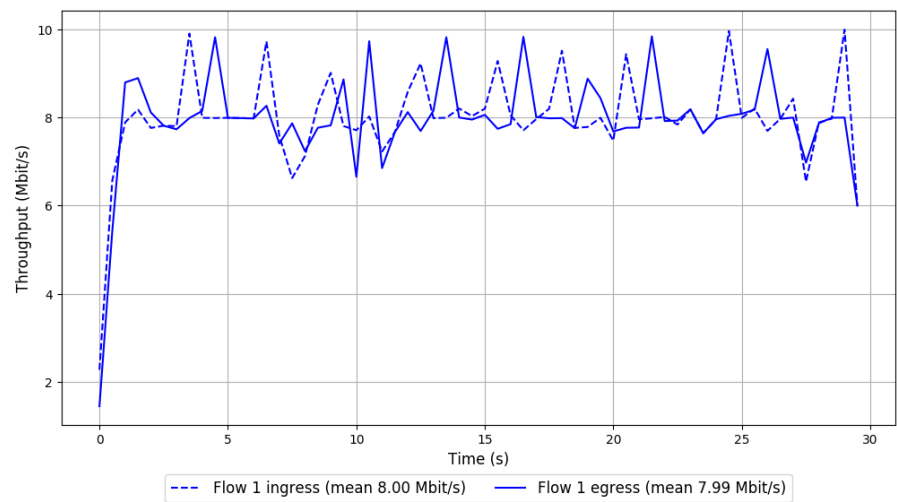
-- Flow 1:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 49.971 ms

Loss rate: 0.56%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-10-10 23:44:13

End at: 2017-10-10 23:44:43

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 50.413 ms

Loss rate: 0.44%

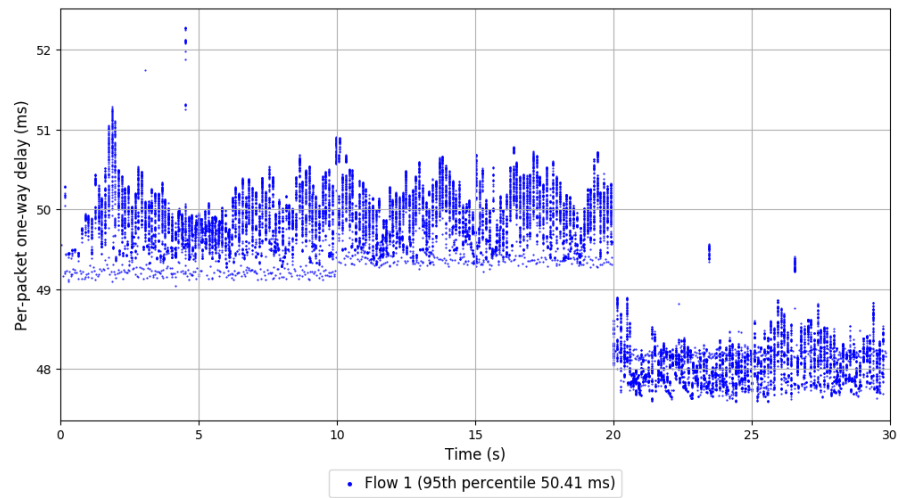
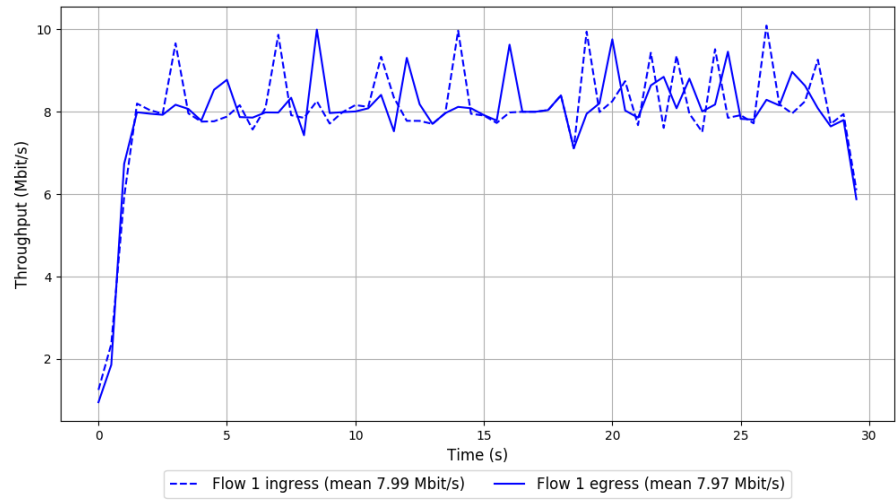
-- Flow 1:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 50.413 ms

Loss rate: 0.44%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-10-10 23:55:04

End at: 2017-10-10 23:55:34

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 50.509 ms

Loss rate: 0.08%

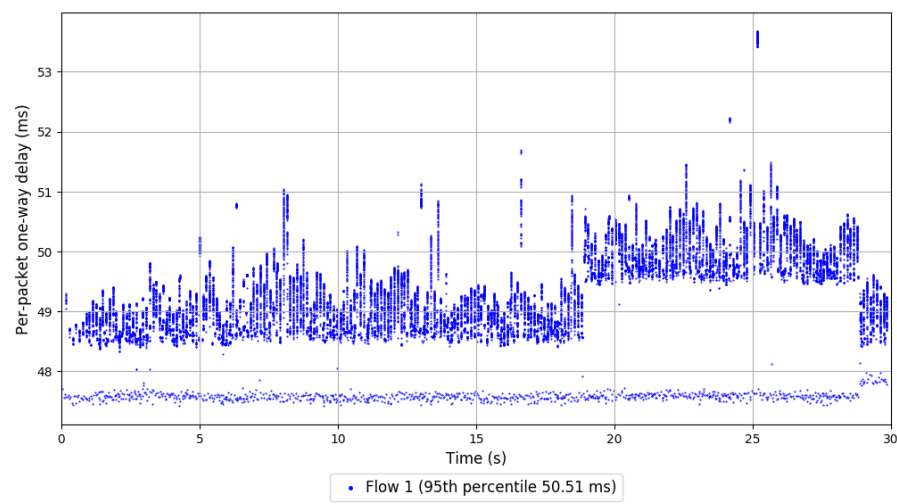
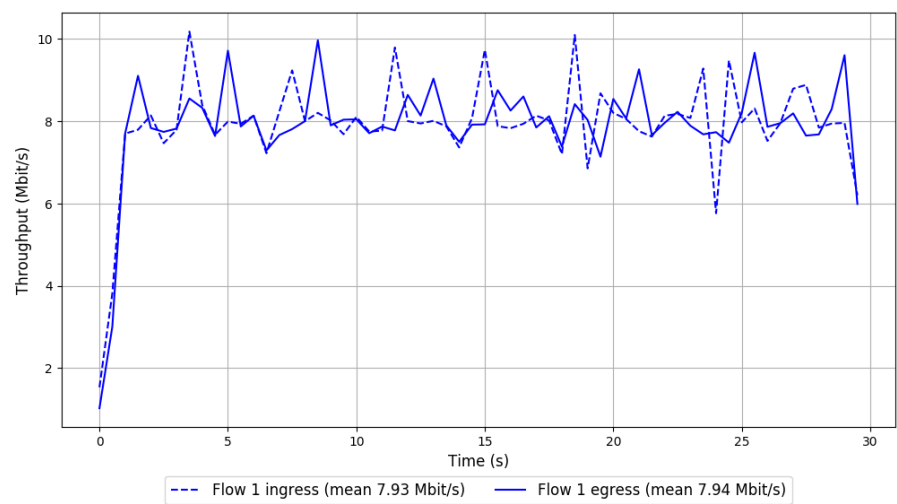
-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 50.509 ms

Loss rate: 0.08%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-10-11 00:05:57

End at: 2017-10-11 00:06:27

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.05 Mbit/s

95th percentile per-packet one-way delay: 50.079 ms

Loss rate: 0.01%

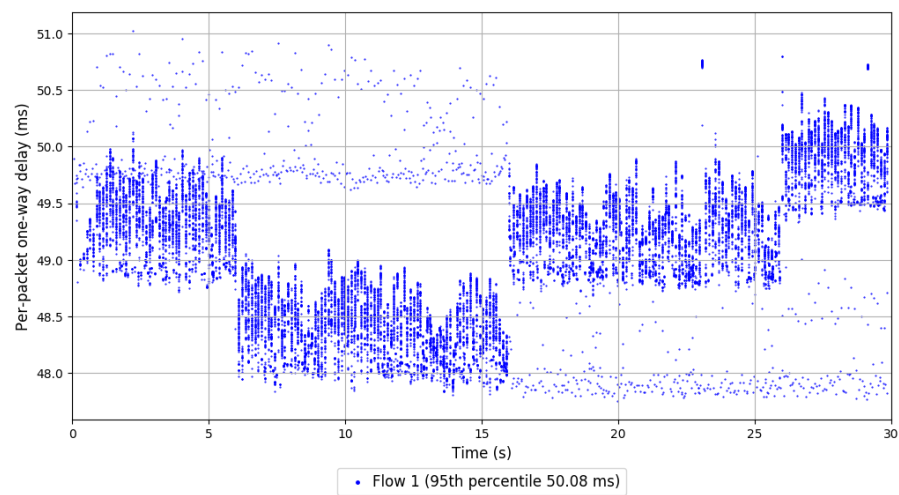
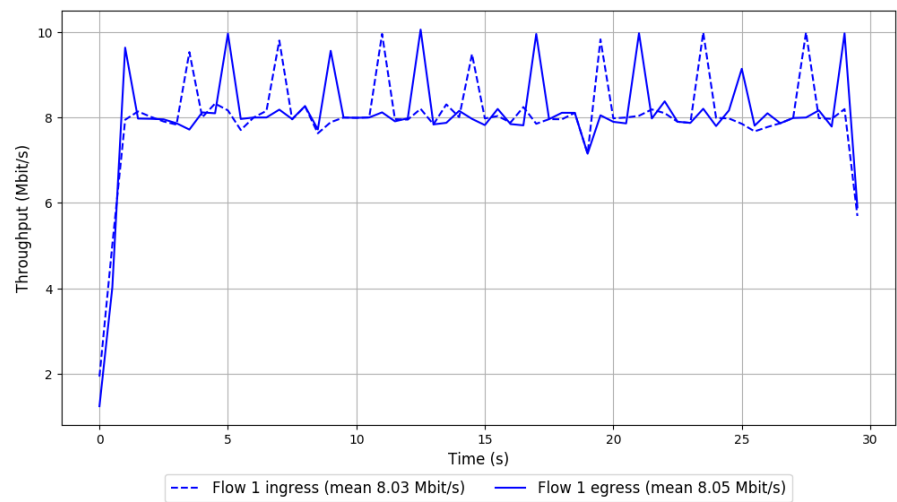
-- Flow 1:

Average throughput: 8.05 Mbit/s

95th percentile per-packet one-way delay: 50.079 ms

Loss rate: 0.01%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-10-11 00:16:58

End at: 2017-10-11 00:17:28

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 50.555 ms

Loss rate: 0.36%

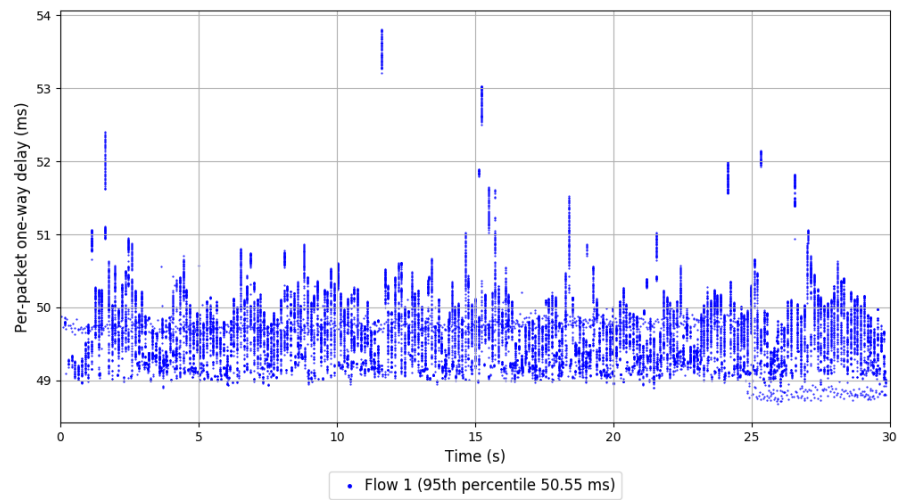
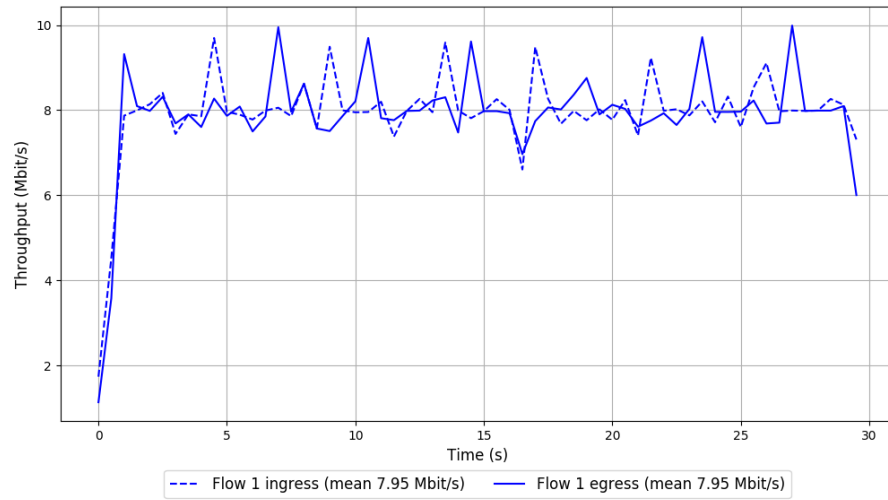
-- Flow 1:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 50.555 ms

Loss rate: 0.36%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-10-11 00:27:26

End at: 2017-10-11 00:27:56

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.07 Mbit/s

95th percentile per-packet one-way delay: 50.352 ms

Loss rate: 0.43%

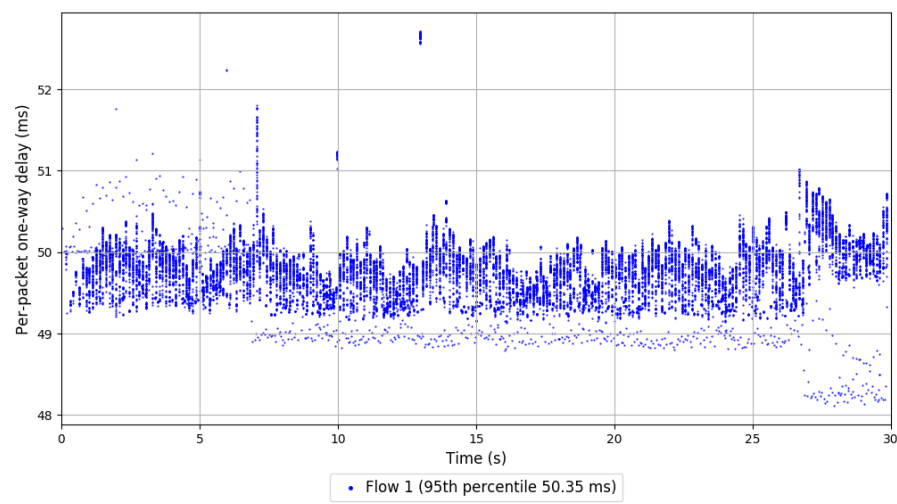
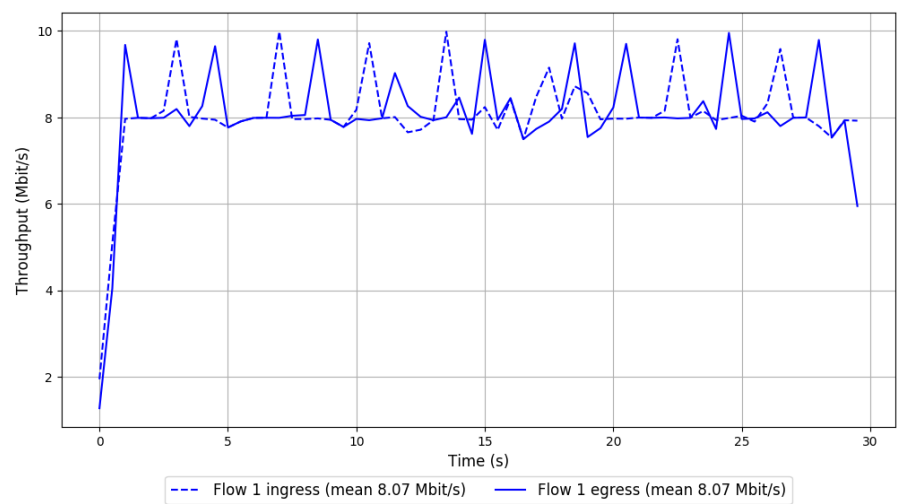
-- Flow 1:

Average throughput: 8.07 Mbit/s

95th percentile per-packet one-way delay: 50.352 ms

Loss rate: 0.43%

Run 10: Report of Sprout — Data Link

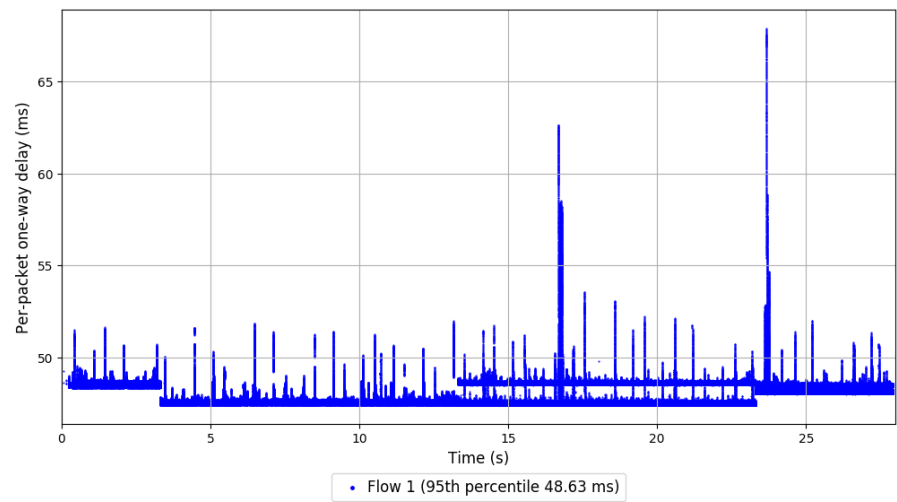
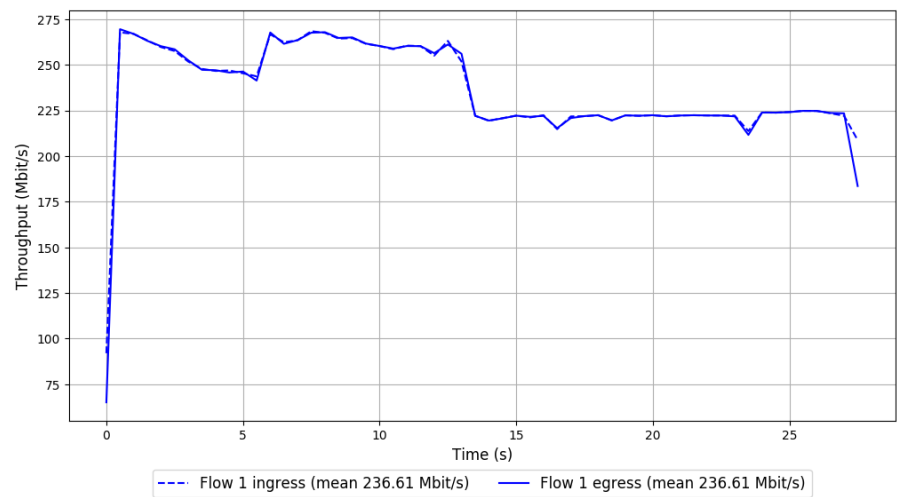


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-10-10 22:46:07
End at: 2017-10-10 22:46:37

# Below is generated by plot.py at 2017-10-11 02:55:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 236.61 Mbit/s
95th percentile per-packet one-way delay: 48.630 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 236.61 Mbit/s
95th percentile per-packet one-way delay: 48.630 ms
Loss rate: 0.36%
```


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

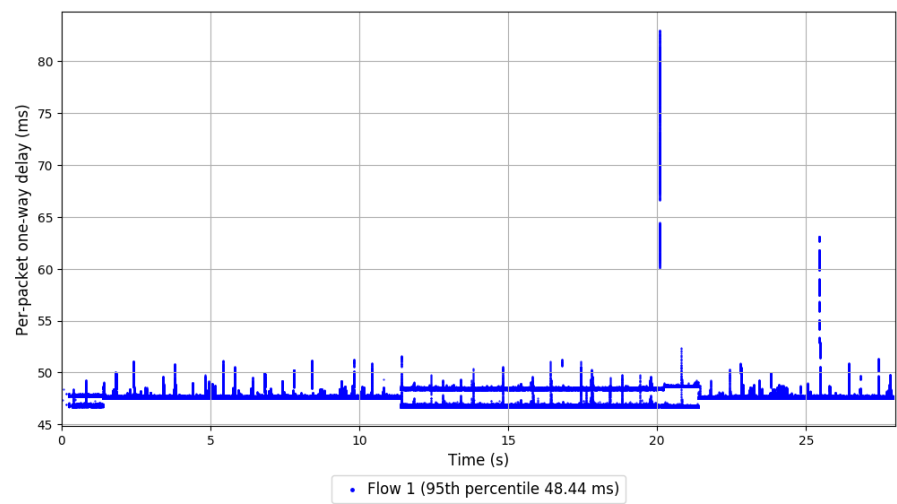
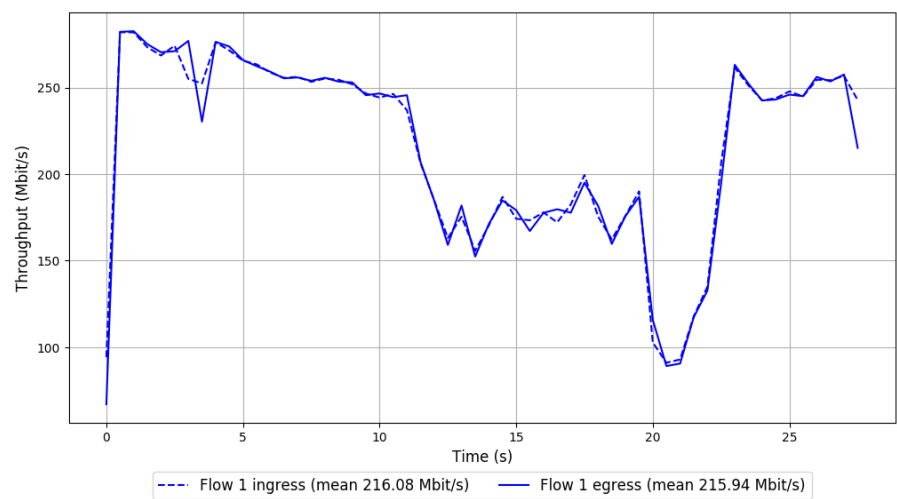


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-10-10 22:56:39
End at: 2017-10-10 22:57:09

# Below is generated by plot.py at 2017-10-11 02:55:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.94 Mbit/s
95th percentile per-packet one-way delay: 48.443 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 215.94 Mbit/s
95th percentile per-packet one-way delay: 48.443 ms
Loss rate: 0.42%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-10-10 23:07:34

End at: 2017-10-10 23:08:04

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 242.76 Mbit/s

95th percentile per-packet one-way delay: 48.732 ms

Loss rate: 0.40%

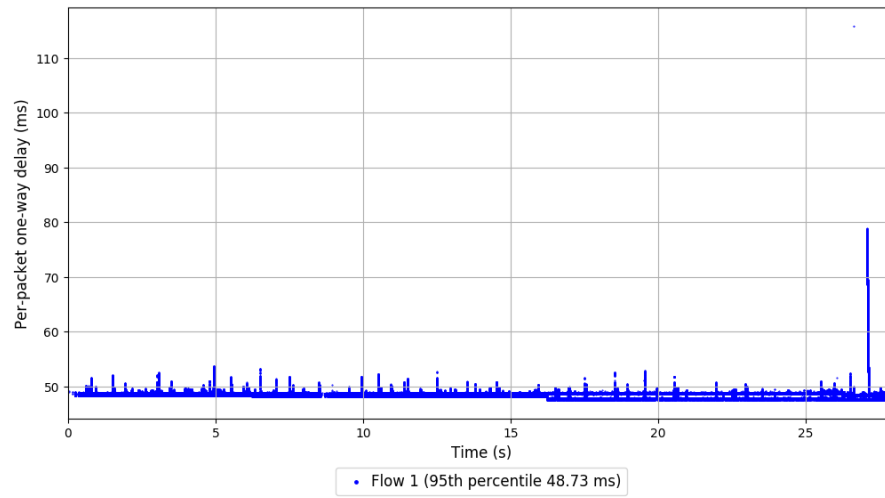
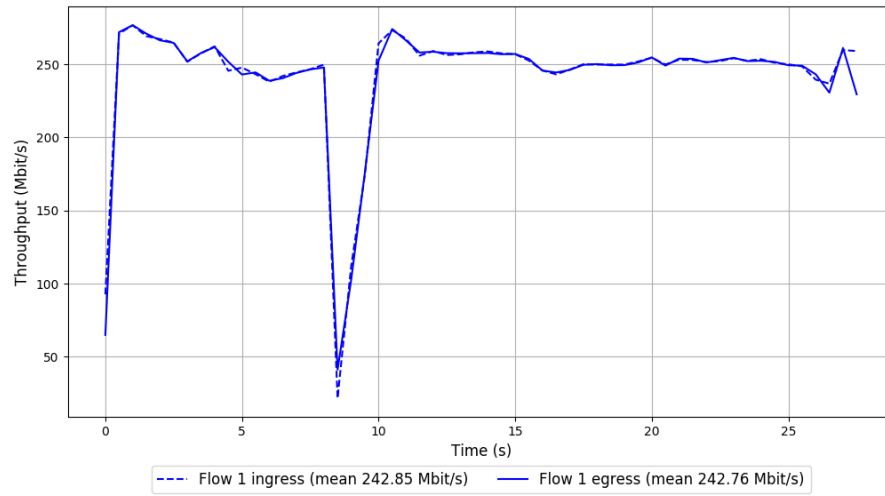
-- Flow 1:

Average throughput: 242.76 Mbit/s

95th percentile per-packet one-way delay: 48.732 ms

Loss rate: 0.40%

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

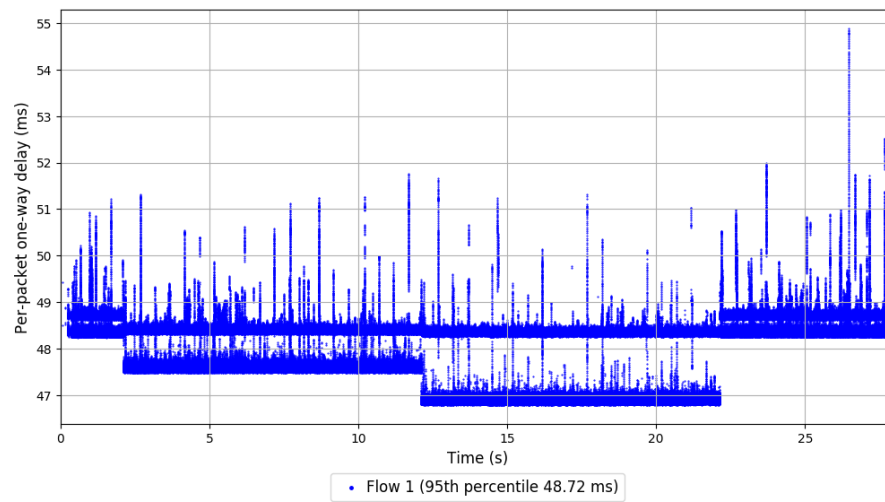
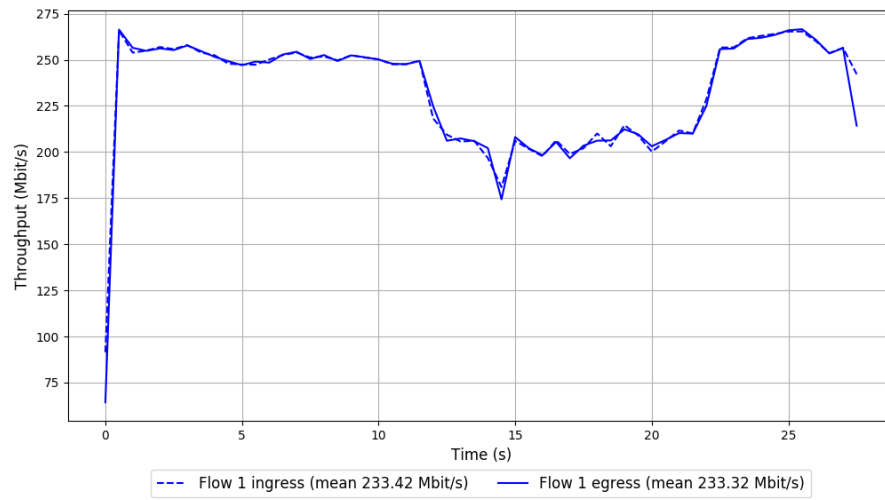


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-10-10 23:18:29
End at: 2017-10-10 23:18:59

# Below is generated by plot.py at 2017-10-11 02:55:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 233.32 Mbit/s
95th percentile per-packet one-way delay: 48.721 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 233.32 Mbit/s
95th percentile per-packet one-way delay: 48.721 ms
Loss rate: 0.40%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-10-10 23:29:27

End at: 2017-10-10 23:29:57

Below is generated by plot.py at 2017-10-11 02:55:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 210.88 Mbit/s

95th percentile per-packet one-way delay: 48.981 ms

Loss rate: 0.29%

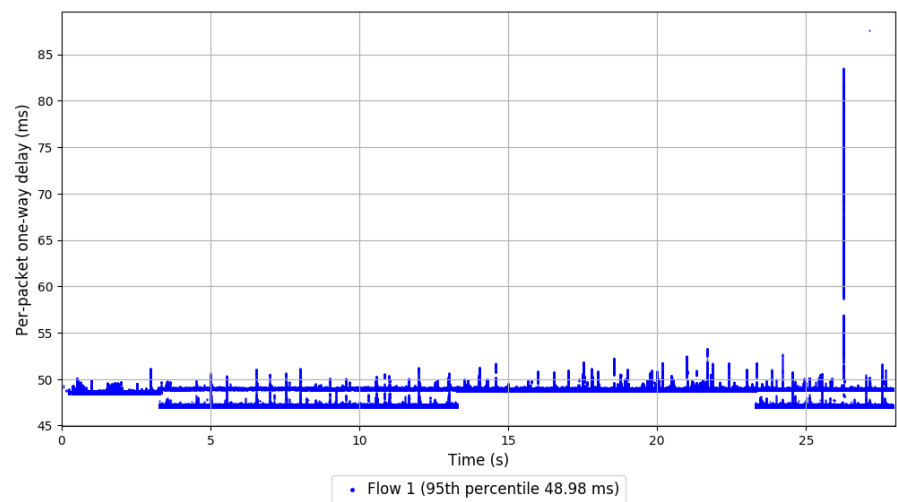
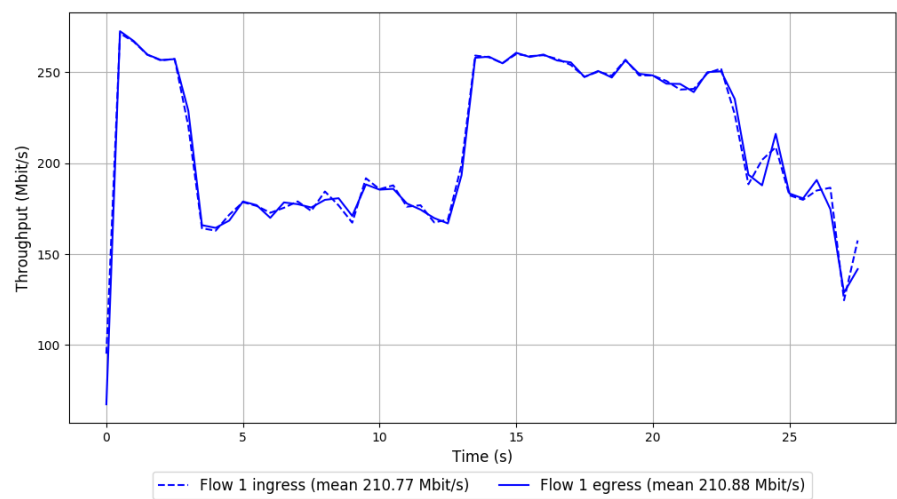
-- Flow 1:

Average throughput: 210.88 Mbit/s

95th percentile per-packet one-way delay: 48.981 ms

Loss rate: 0.29%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-10-10 23:39:43

End at: 2017-10-10 23:40:13

Below is generated by plot.py at 2017-10-11 02:56:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 248.02 Mbit/s

95th percentile per-packet one-way delay: 49.254 ms

Loss rate: 0.34%

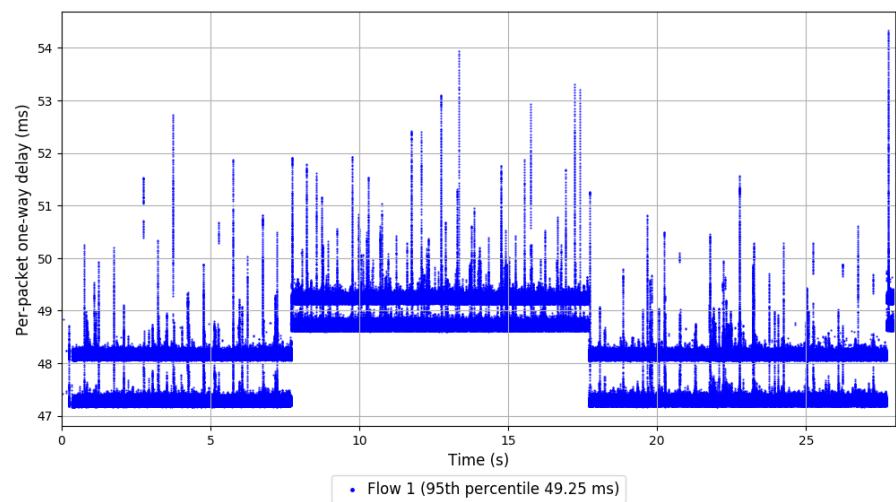
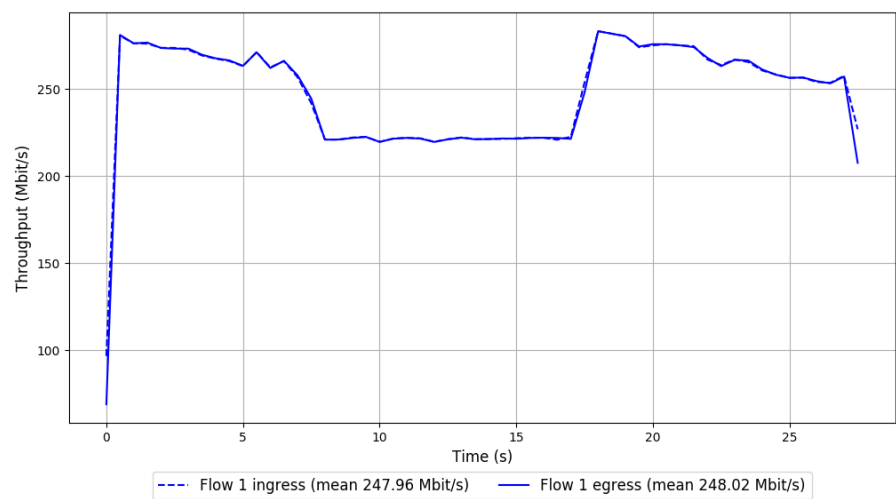
-- Flow 1:

Average throughput: 248.02 Mbit/s

95th percentile per-packet one-way delay: 49.254 ms

Loss rate: 0.34%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-10-10 23:50:35

End at: 2017-10-10 23:51:05

Below is generated by plot.py at 2017-10-11 03:01:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 257.02 Mbit/s

95th percentile per-packet one-way delay: 48.913 ms

Loss rate: 0.31%

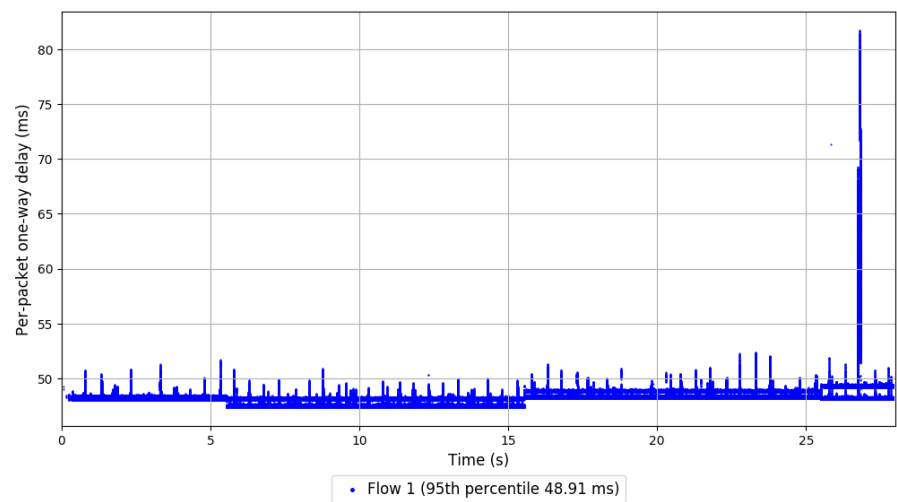
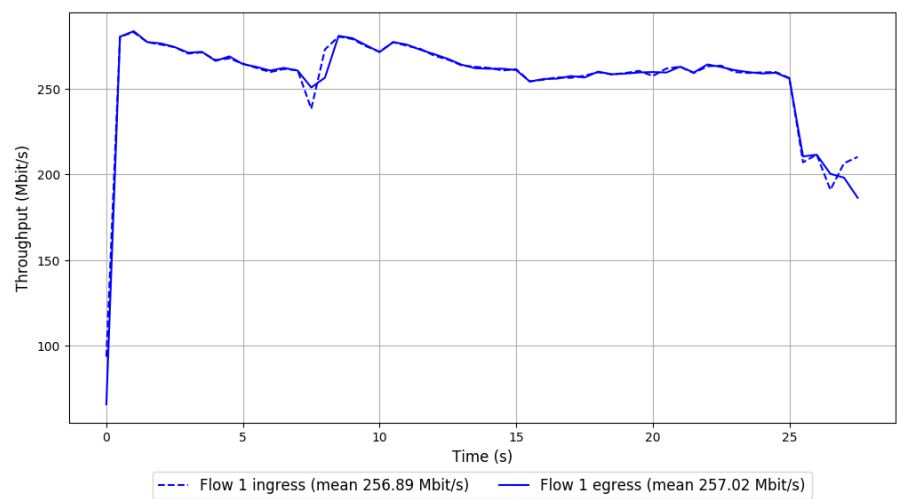
-- Flow 1:

Average throughput: 257.02 Mbit/s

95th percentile per-packet one-way delay: 48.913 ms

Loss rate: 0.31%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-10-11 00:01:20

End at: 2017-10-11 00:01:50

Below is generated by plot.py at 2017-10-11 03:01:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 250.00 Mbit/s

95th percentile per-packet one-way delay: 51.441 ms

Loss rate: 0.37%

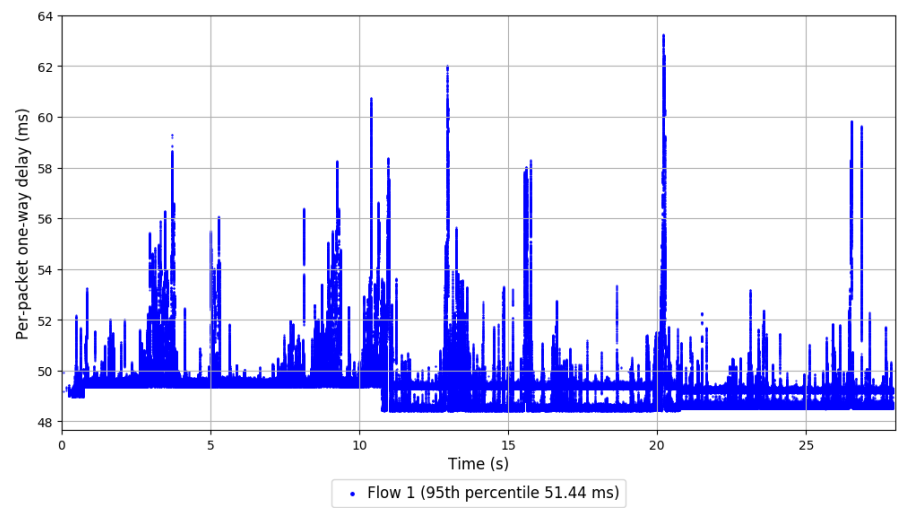
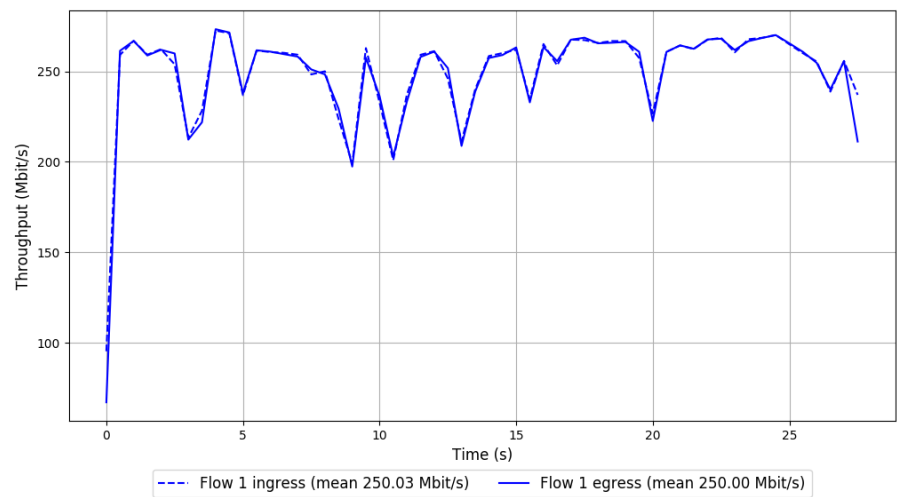
-- Flow 1:

Average throughput: 250.00 Mbit/s

95th percentile per-packet one-way delay: 51.441 ms

Loss rate: 0.37%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-10-11 00:12:20

End at: 2017-10-11 00:12:50

Below is generated by plot.py at 2017-10-11 03:01:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 242.24 Mbit/s

95th percentile per-packet one-way delay: 49.584 ms

Loss rate: 0.38%

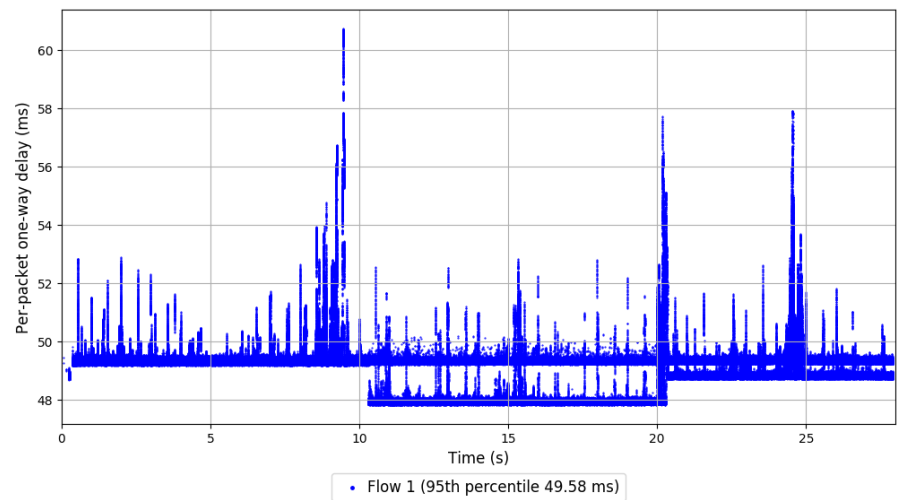
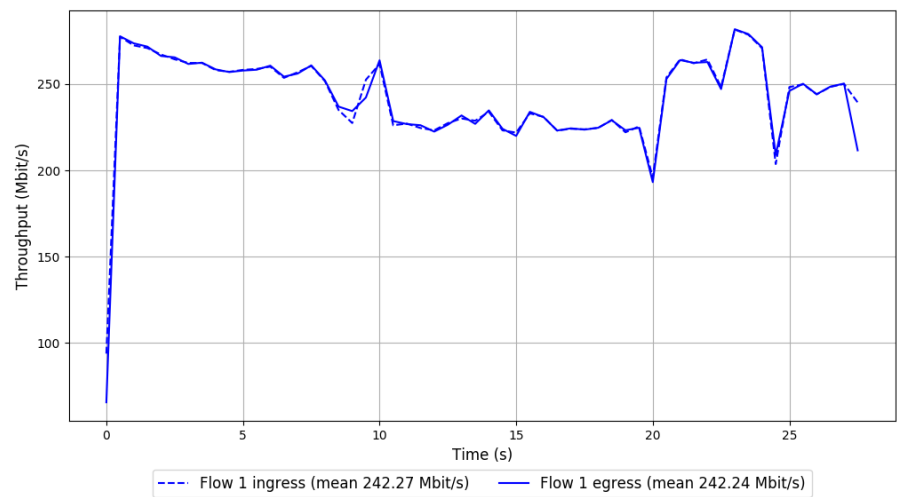
-- Flow 1:

Average throughput: 242.24 Mbit/s

95th percentile per-packet one-way delay: 49.584 ms

Loss rate: 0.38%

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

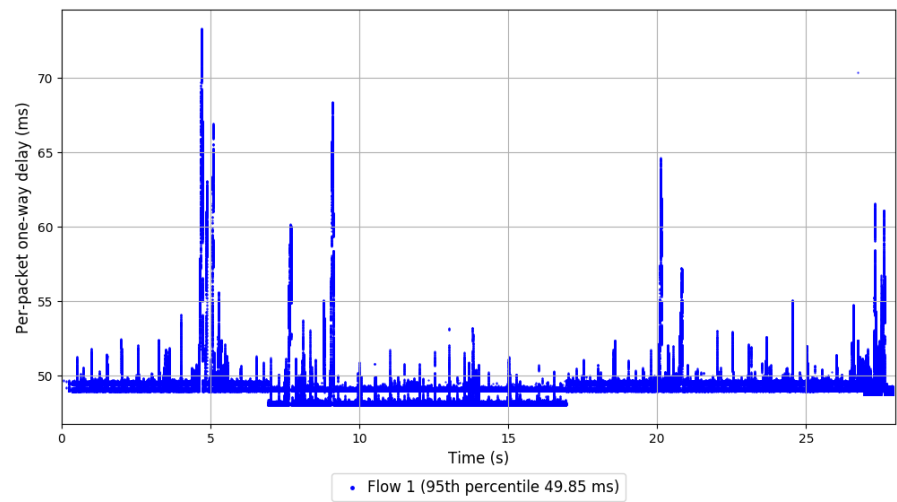
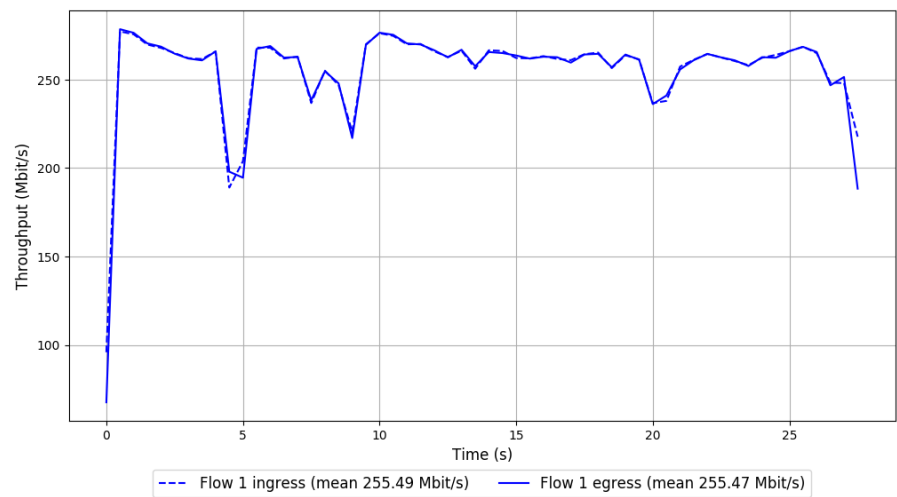


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-10-11 00:22:44
End at: 2017-10-11 00:23:14

# Below is generated by plot.py at 2017-10-11 03:02:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 255.47 Mbit/s
95th percentile per-packet one-way delay: 49.850 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 255.47 Mbit/s
95th percentile per-packet one-way delay: 49.850 ms
Loss rate: 0.37%
```

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

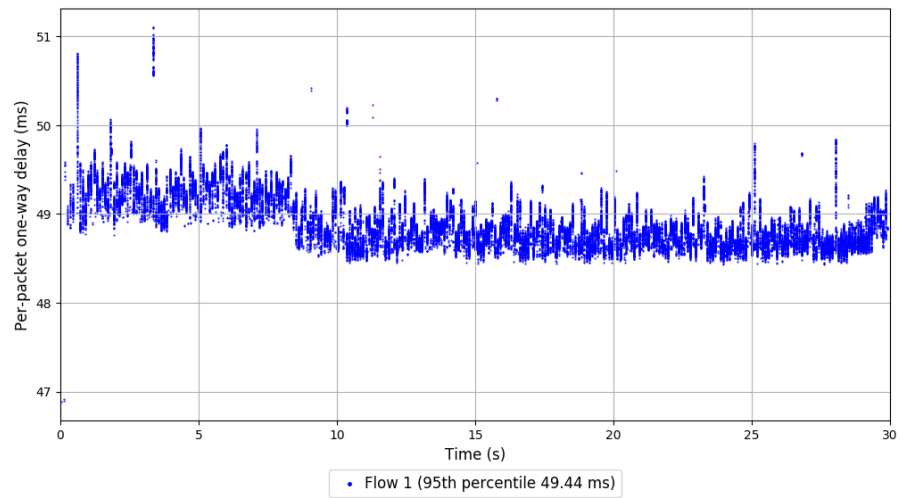
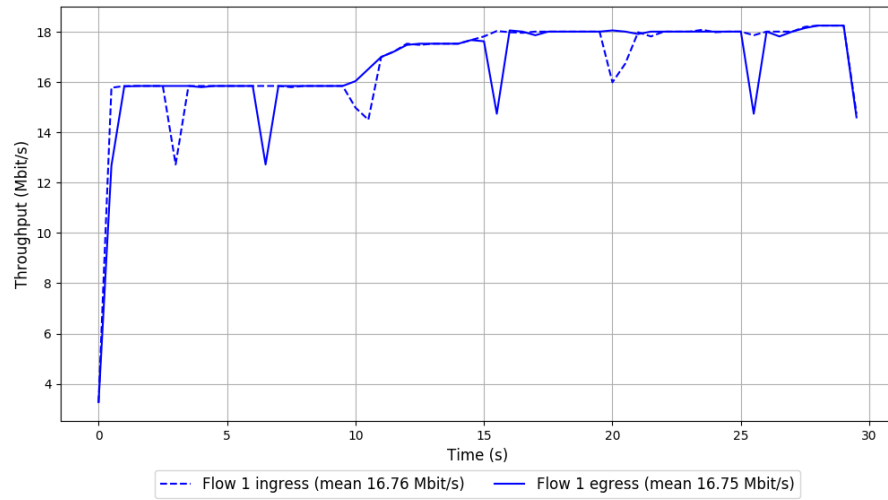


```
Run 1: Statistics of TCP Vegas

Start at: 2017-10-10 22:49:14
End at: 2017-10-10 22:49:44

# Below is generated by plot.py at 2017-10-11 03:02:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.75 Mbit/s
95th percentile per-packet one-way delay: 49.435 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 16.75 Mbit/s
95th percentile per-packet one-way delay: 49.435 ms
Loss rate: 0.36%
```

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-10-10 22:59:45

End at: 2017-10-10 23:00:15

Below is generated by plot.py at 2017-10-11 03:02:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 161.03 Mbit/s

95th percentile per-packet one-way delay: 49.129 ms

Loss rate: 0.21%

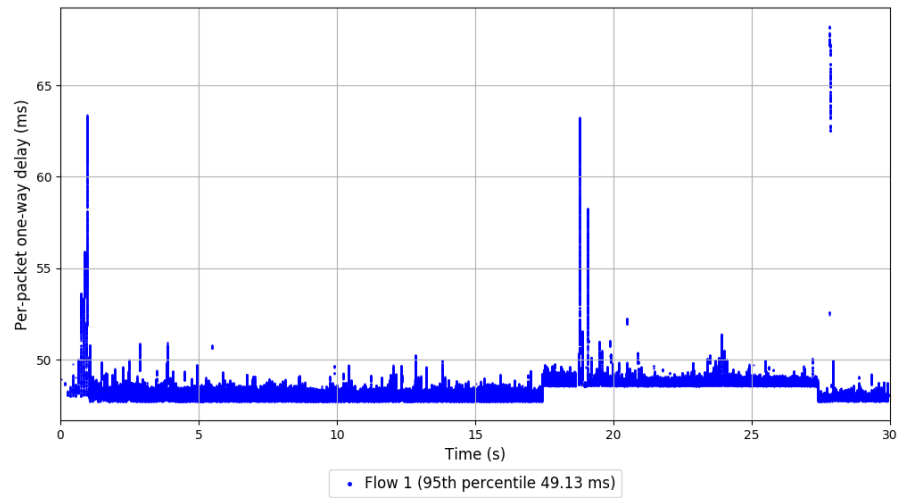
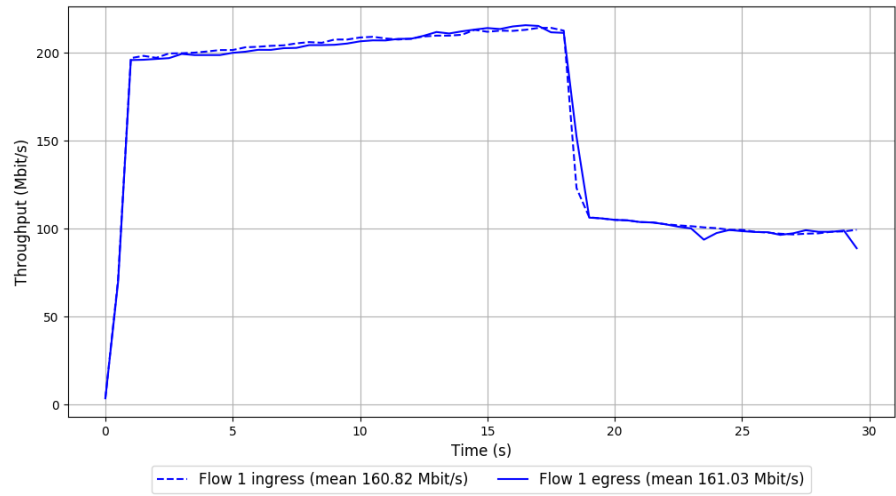
-- Flow 1:

Average throughput: 161.03 Mbit/s

95th percentile per-packet one-way delay: 49.129 ms

Loss rate: 0.21%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-10-10 23:10:46

End at: 2017-10-10 23:11:16

Below is generated by plot.py at 2017-10-11 03:02:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.68 Mbit/s

95th percentile per-packet one-way delay: 49.356 ms

Loss rate: 0.09%

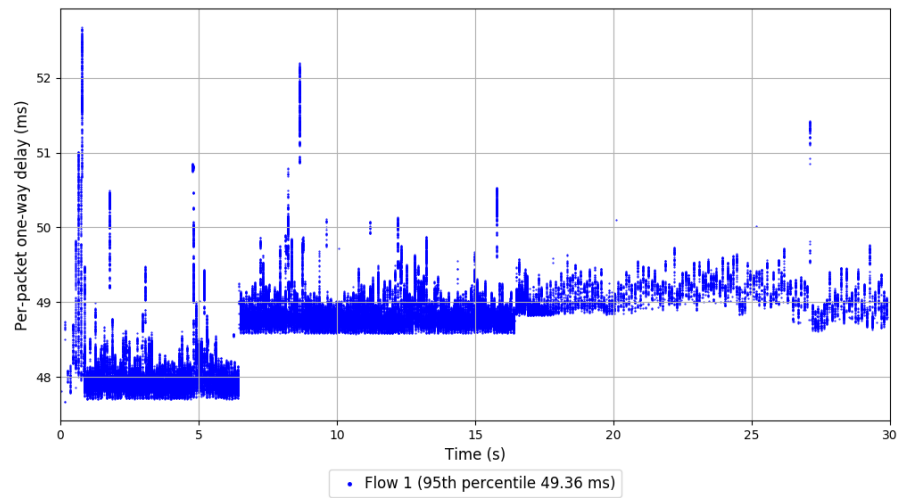
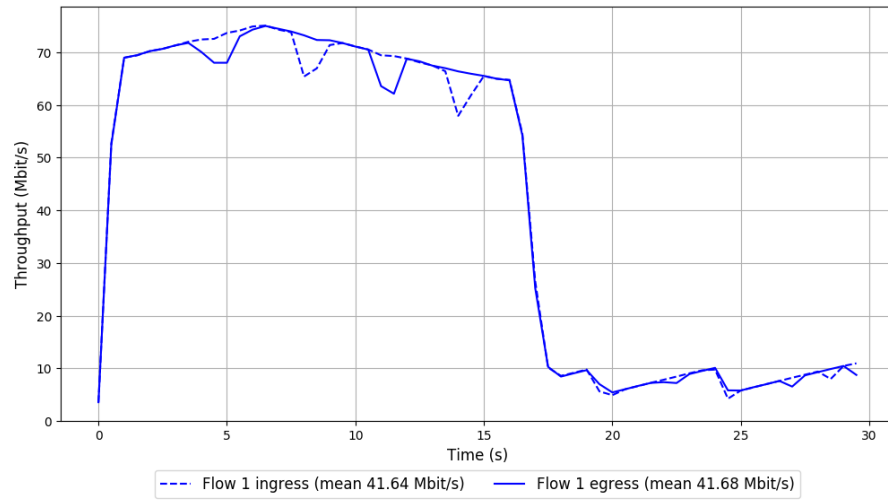
-- Flow 1:

Average throughput: 41.68 Mbit/s

95th percentile per-packet one-way delay: 49.356 ms

Loss rate: 0.09%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-10-10 23:21:36

End at: 2017-10-10 23:22:06

Below is generated by plot.py at 2017-10-11 03:02:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 224.75 Mbit/s

95th percentile per-packet one-way delay: 56.615 ms

Loss rate: 0.13%

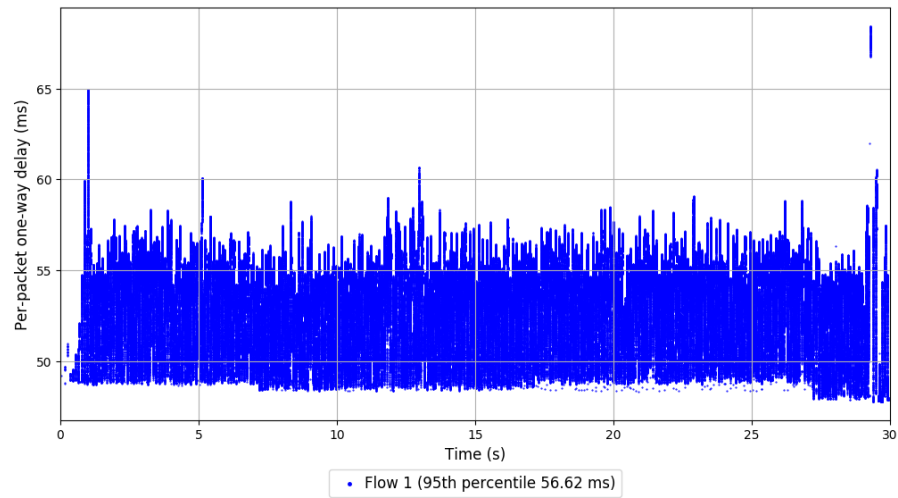
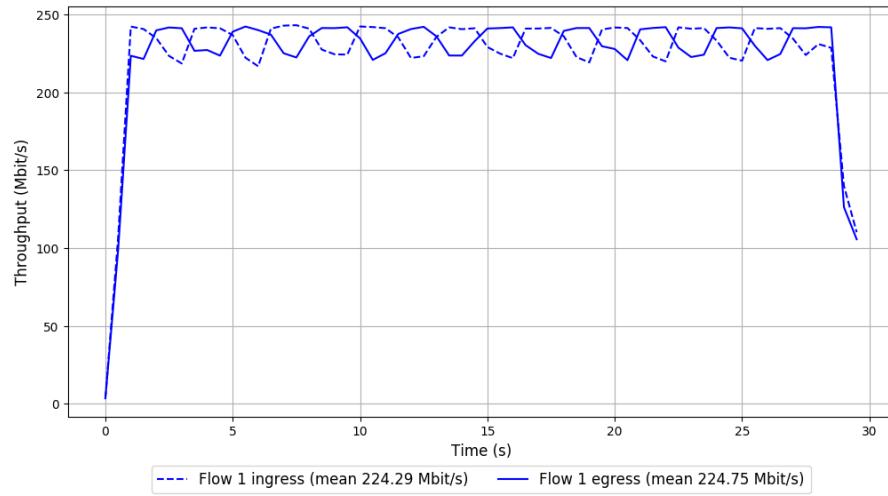
-- Flow 1:

Average throughput: 224.75 Mbit/s

95th percentile per-packet one-way delay: 56.615 ms

Loss rate: 0.13%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

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

End at: 2017-10-10 23:33:02

Below is generated by plot.py at 2017-10-11 03:02:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.86 Mbit/s

95th percentile per-packet one-way delay: 49.728 ms

Loss rate: 0.57%

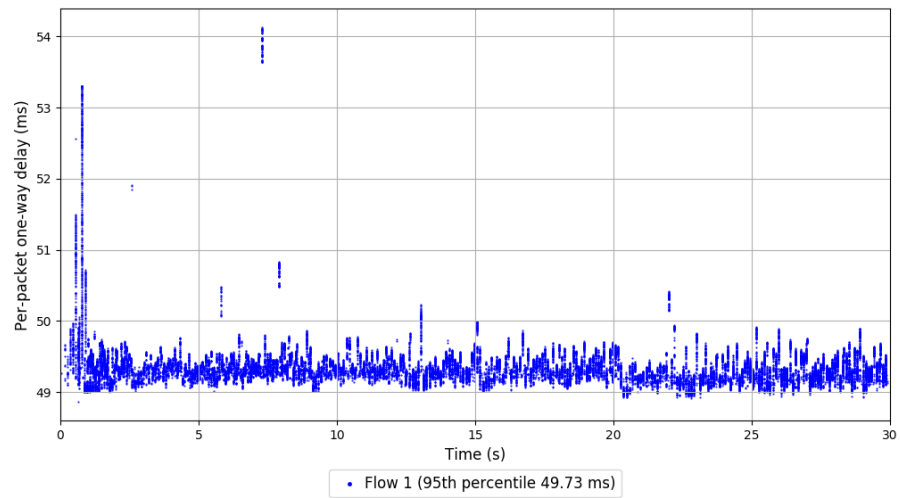
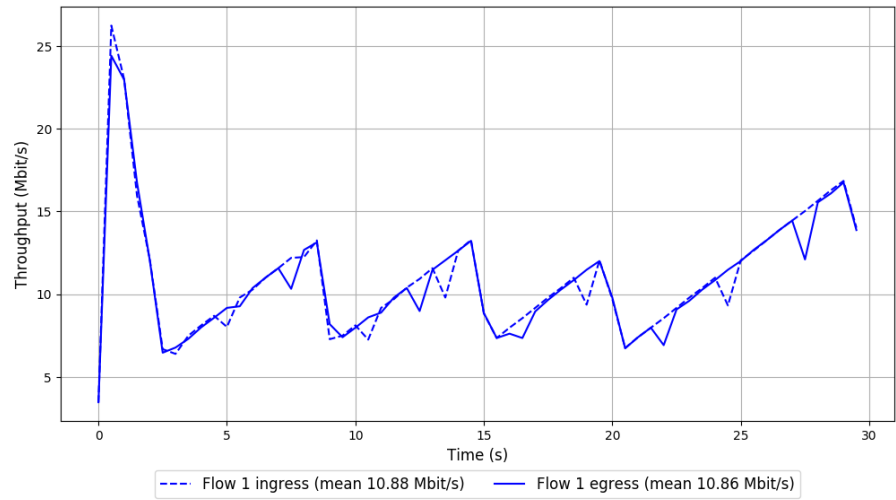
-- Flow 1:

Average throughput: 10.86 Mbit/s

95th percentile per-packet one-way delay: 49.728 ms

Loss rate: 0.57%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-10-10 23:42:45

End at: 2017-10-10 23:43:15

Below is generated by plot.py at 2017-10-11 03:02:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.54 Mbit/s

95th percentile per-packet one-way delay: 49.800 ms

Loss rate: 0.11%

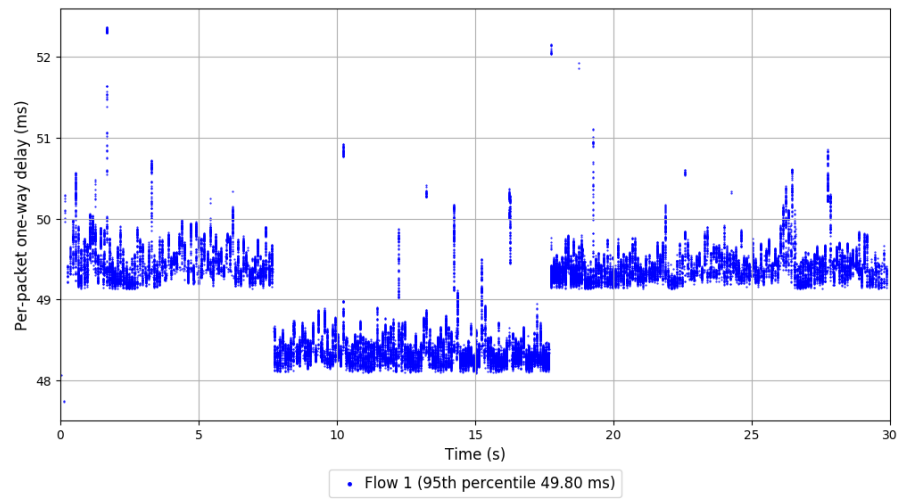
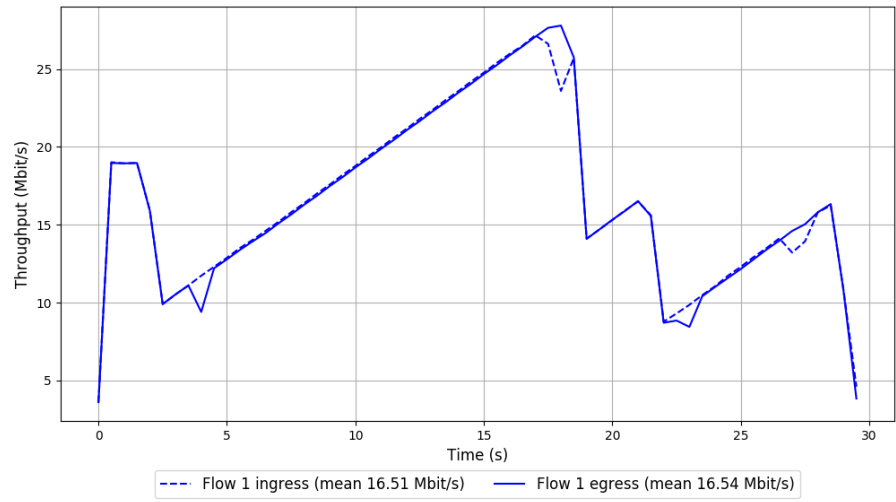
-- Flow 1:

Average throughput: 16.54 Mbit/s

95th percentile per-packet one-way delay: 49.800 ms

Loss rate: 0.11%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-10-10 23:53:36

End at: 2017-10-10 23:54:06

Below is generated by plot.py at 2017-10-11 03:02:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.80 Mbit/s

95th percentile per-packet one-way delay: 50.459 ms

Loss rate: 0.58%

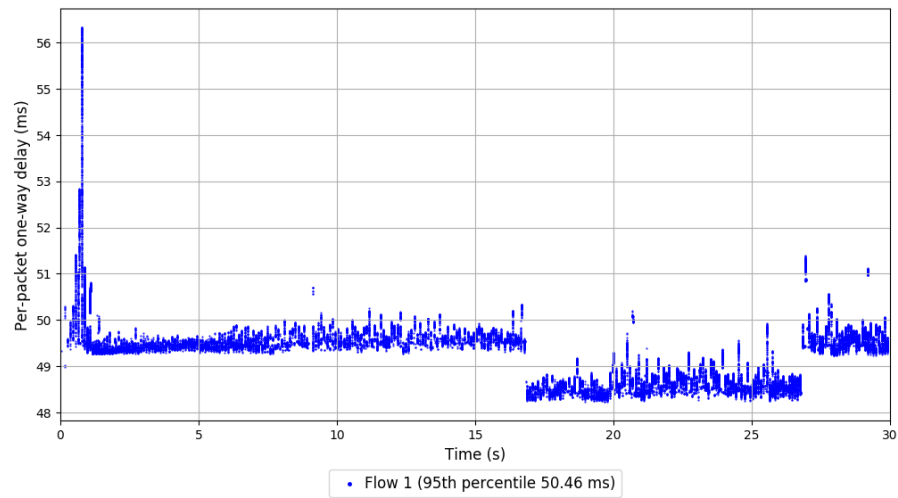
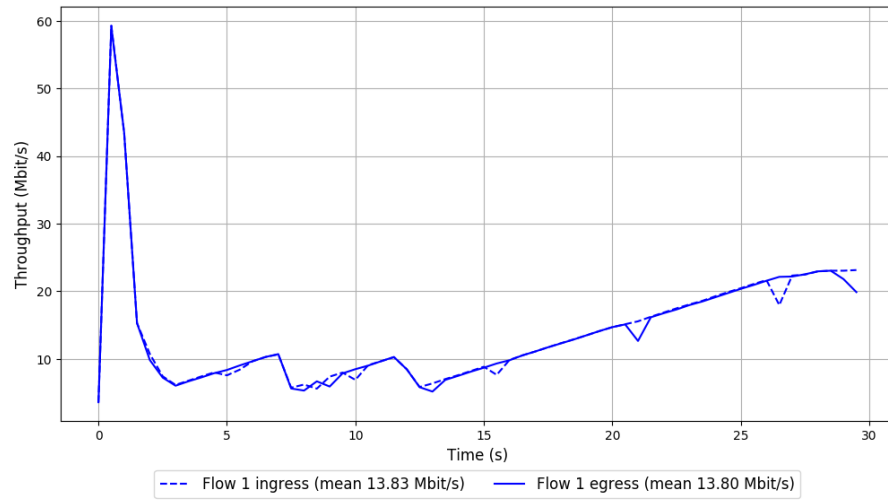
-- Flow 1:

Average throughput: 13.80 Mbit/s

95th percentile per-packet one-way delay: 50.459 ms

Loss rate: 0.58%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-10-11 00:04:28

End at: 2017-10-11 00:04:58

Below is generated by plot.py at 2017-10-11 03:02:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.64 Mbit/s

95th percentile per-packet one-way delay: 49.775 ms

Loss rate: 0.45%

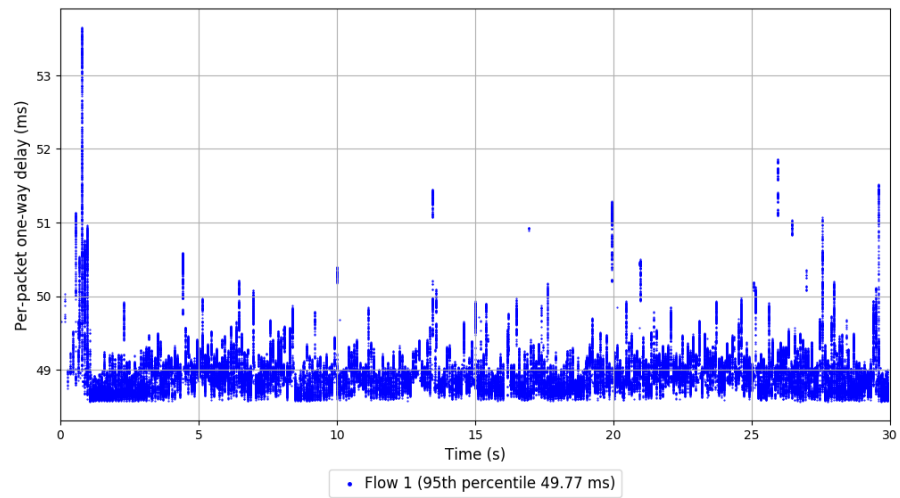
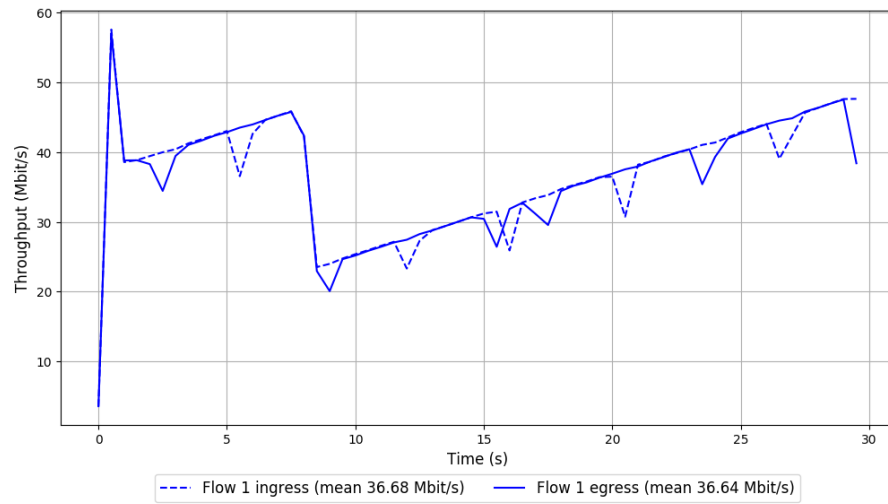
-- Flow 1:

Average throughput: 36.64 Mbit/s

95th percentile per-packet one-way delay: 49.775 ms

Loss rate: 0.45%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-10-11 00:15:27

End at: 2017-10-11 00:15:57

Below is generated by plot.py at 2017-10-11 03:02:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.61 Mbit/s

95th percentile per-packet one-way delay: 49.881 ms

Loss rate: 0.25%

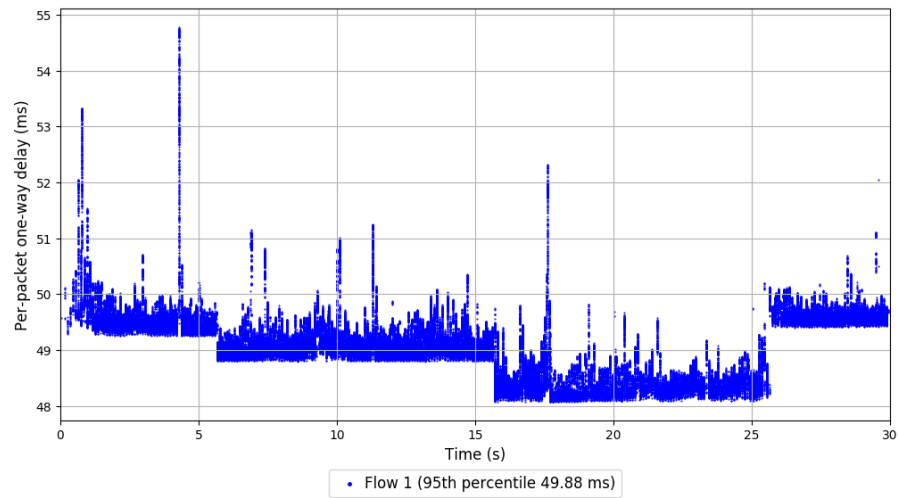
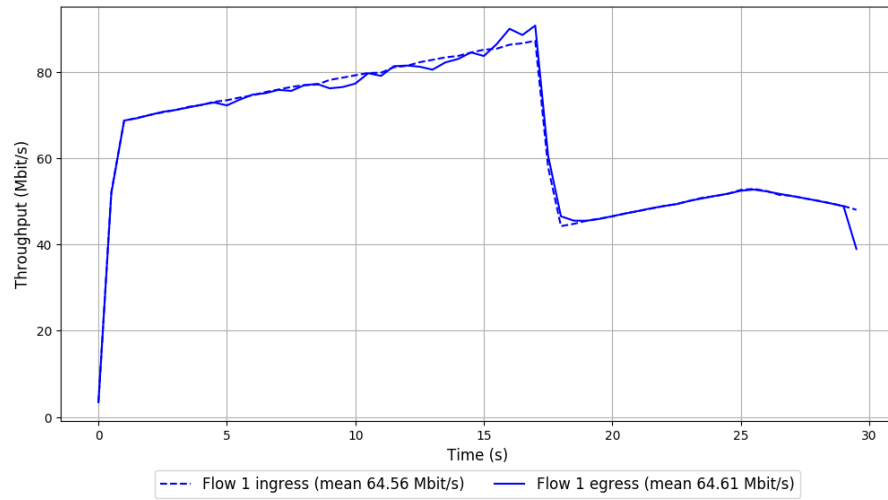
-- Flow 1:

Average throughput: 64.61 Mbit/s

95th percentile per-packet one-way delay: 49.881 ms

Loss rate: 0.25%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-10-11 00:25:54

End at: 2017-10-11 00:26:24

Below is generated by plot.py at 2017-10-11 03:02:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.27 Mbit/s

95th percentile per-packet one-way delay: 50.292 ms

Loss rate: 0.12%

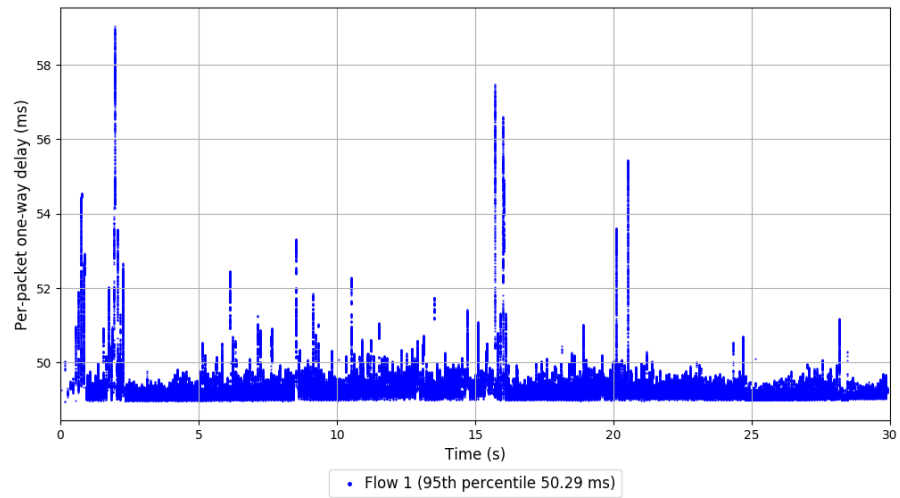
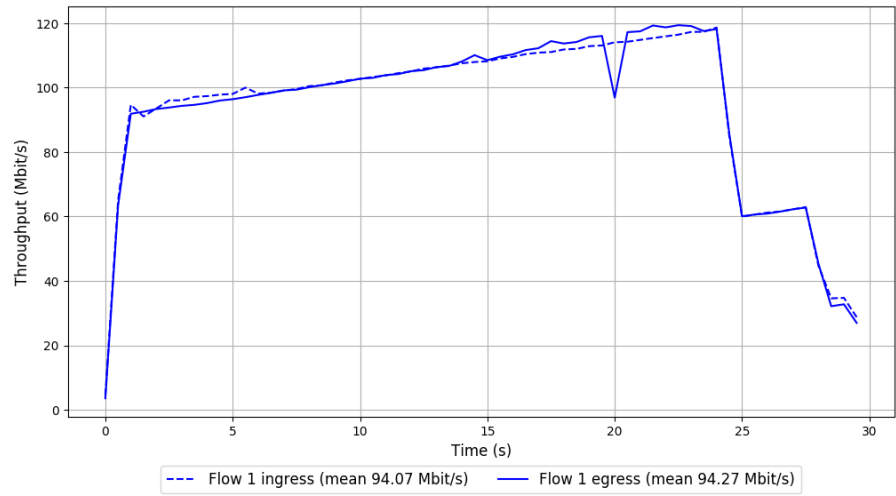
-- Flow 1:

Average throughput: 94.27 Mbit/s

95th percentile per-packet one-way delay: 50.292 ms

Loss rate: 0.12%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-10-10 22:54:58

End at: 2017-10-10 22:55:28

Below is generated by plot.py at 2017-10-11 03:02:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 286.82 Mbit/s

95th percentile per-packet one-way delay: 135.824 ms

Loss rate: 0.41%

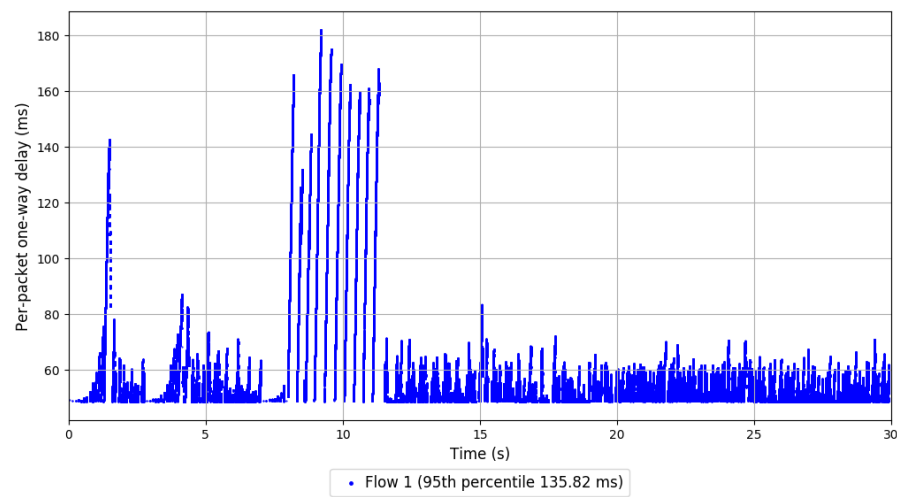
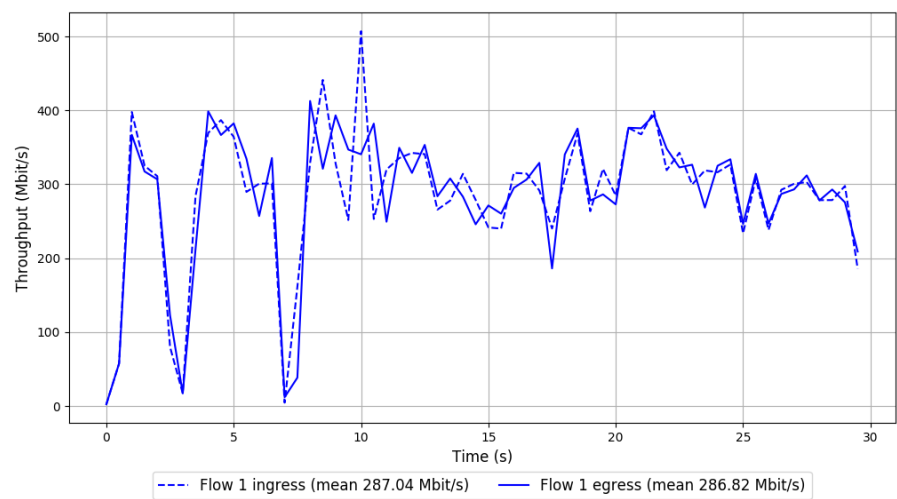
-- Flow 1:

Average throughput: 286.82 Mbit/s

95th percentile per-packet one-way delay: 135.824 ms

Loss rate: 0.41%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-10-10 23:05:55

End at: 2017-10-10 23:06:25

Below is generated by plot.py at 2017-10-11 03:03:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 265.77 Mbit/s

95th percentile per-packet one-way delay: 180.637 ms

Loss rate: 4.49%

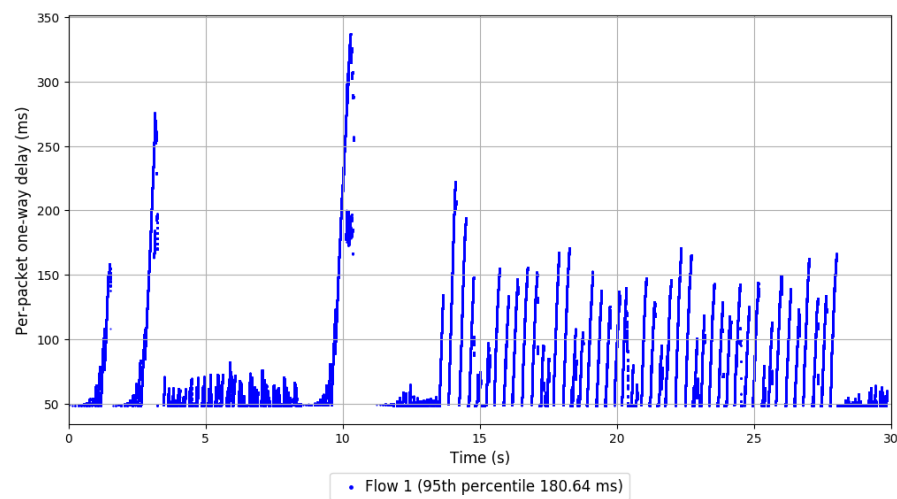
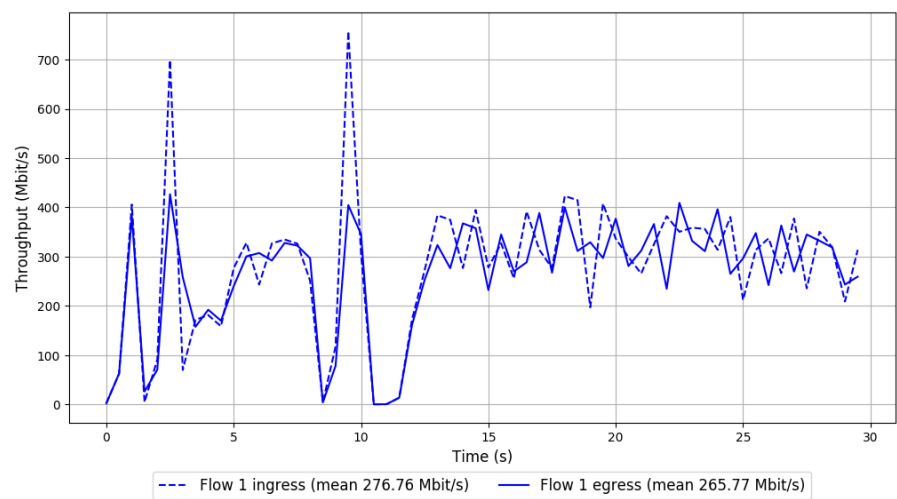
-- Flow 1:

Average throughput: 265.77 Mbit/s

95th percentile per-packet one-way delay: 180.637 ms

Loss rate: 4.49%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-10-10 23:16:48

End at: 2017-10-10 23:17:18

Below is generated by plot.py at 2017-10-11 03:03:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 262.96 Mbit/s

95th percentile per-packet one-way delay: 78.225 ms

Loss rate: 2.08%

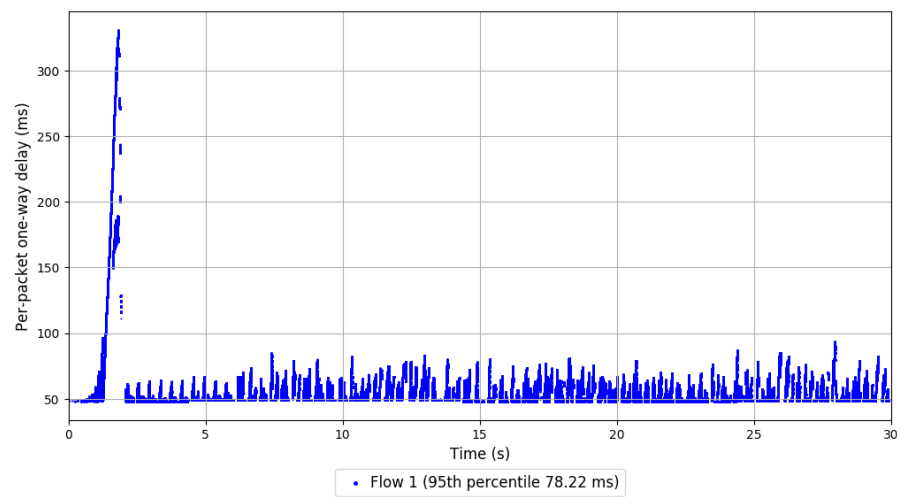
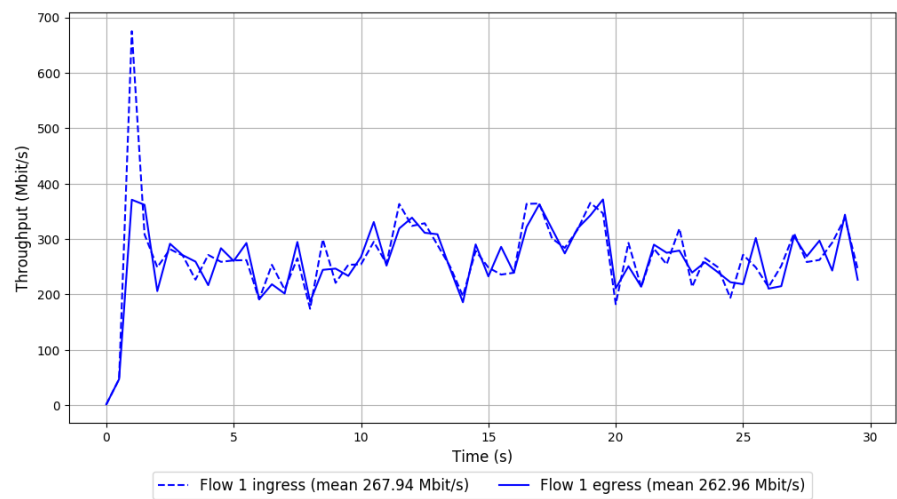
-- Flow 1:

Average throughput: 262.96 Mbit/s

95th percentile per-packet one-way delay: 78.225 ms

Loss rate: 2.08%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-10-10 23:27:48

End at: 2017-10-10 23:28:18

Below is generated by plot.py at 2017-10-11 03:05:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 260.46 Mbit/s

95th percentile per-packet one-way delay: 81.275 ms

Loss rate: 3.00%

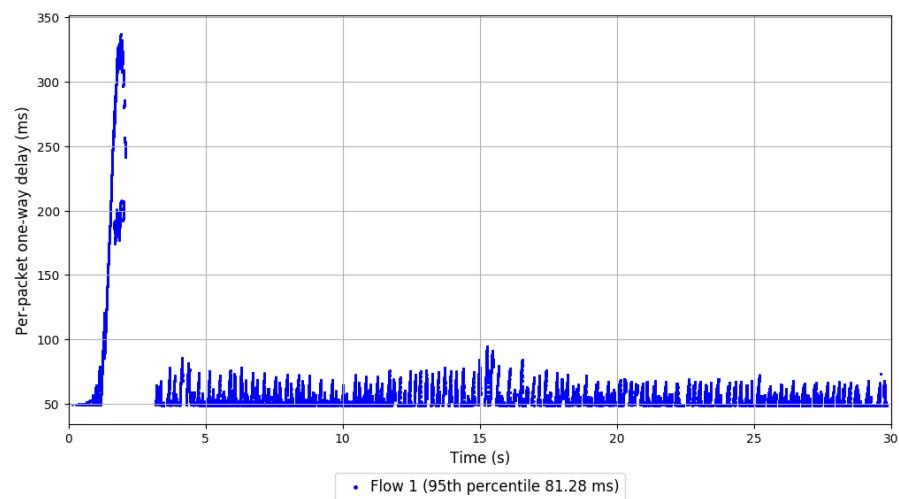
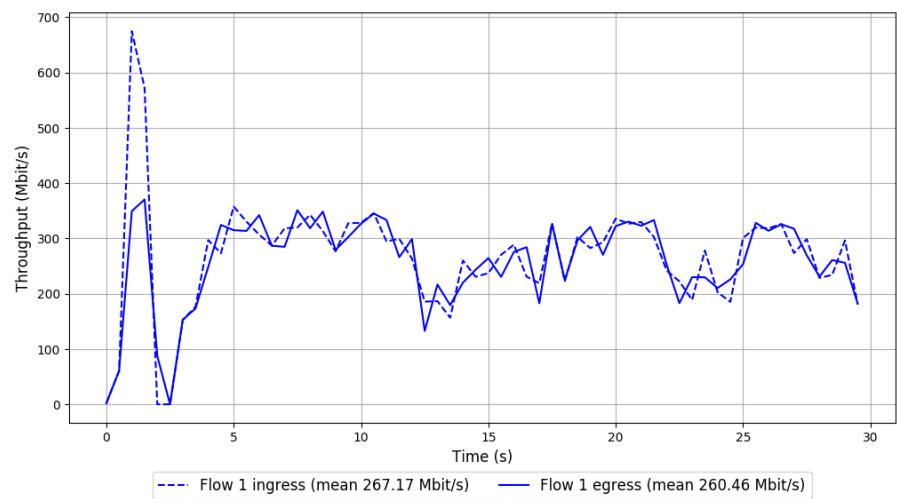
-- Flow 1:

Average throughput: 260.46 Mbit/s

95th percentile per-packet one-way delay: 81.275 ms

Loss rate: 3.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-10-10 23:38:05

End at: 2017-10-10 23:38:35

Below is generated by plot.py at 2017-10-11 03:05:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 253.61 Mbit/s

95th percentile per-packet one-way delay: 134.890 ms

Loss rate: 1.50%

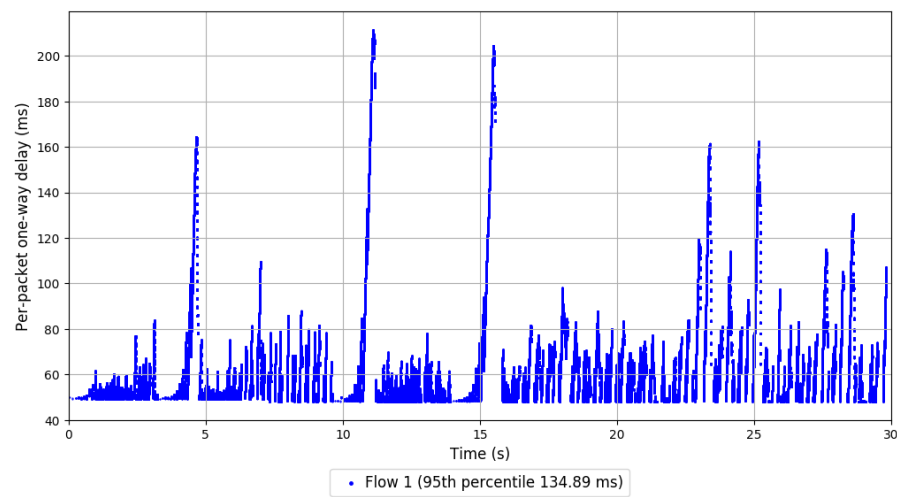
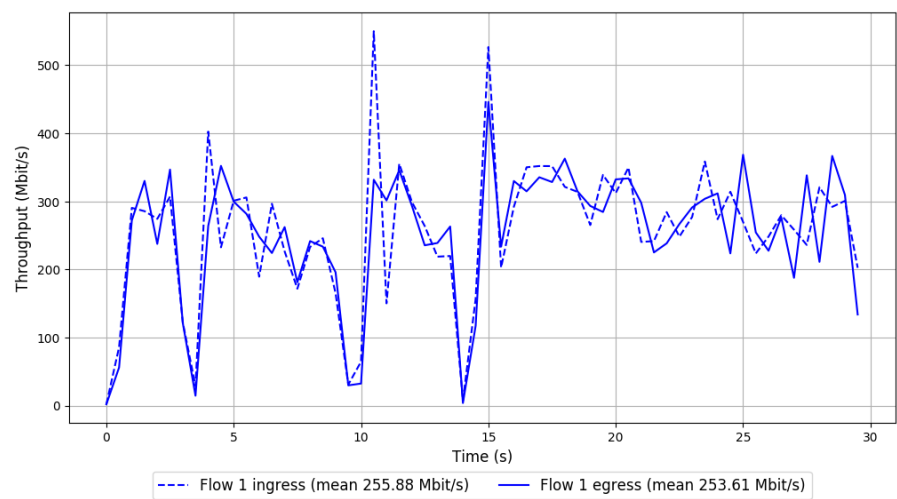
-- Flow 1:

Average throughput: 253.61 Mbit/s

95th percentile per-packet one-way delay: 134.890 ms

Loss rate: 1.50%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

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

End at: 2017-10-10 23:49:19

Below is generated by plot.py at 2017-10-11 03:06:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 258.82 Mbit/s

95th percentile per-packet one-way delay: 81.312 ms

Loss rate: 1.87%

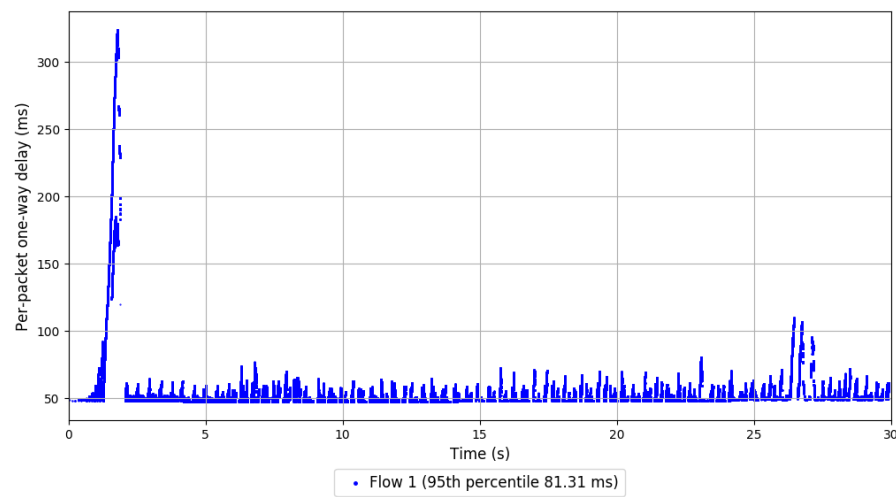
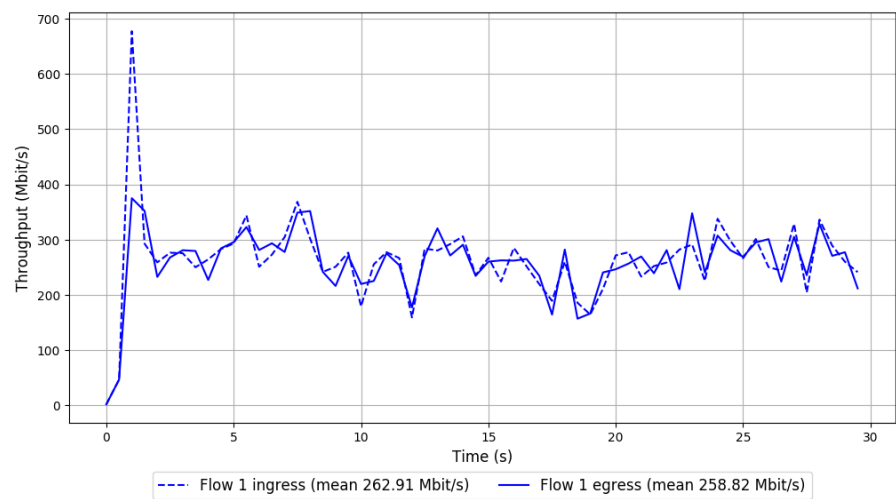
-- Flow 1:

Average throughput: 258.82 Mbit/s

95th percentile per-packet one-way delay: 81.312 ms

Loss rate: 1.87%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-10-10 23:59:42

End at: 2017-10-11 00:00:12

Below is generated by plot.py at 2017-10-11 03:06:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 256.73 Mbit/s

95th percentile per-packet one-way delay: 169.280 ms

Loss rate: 0.57%

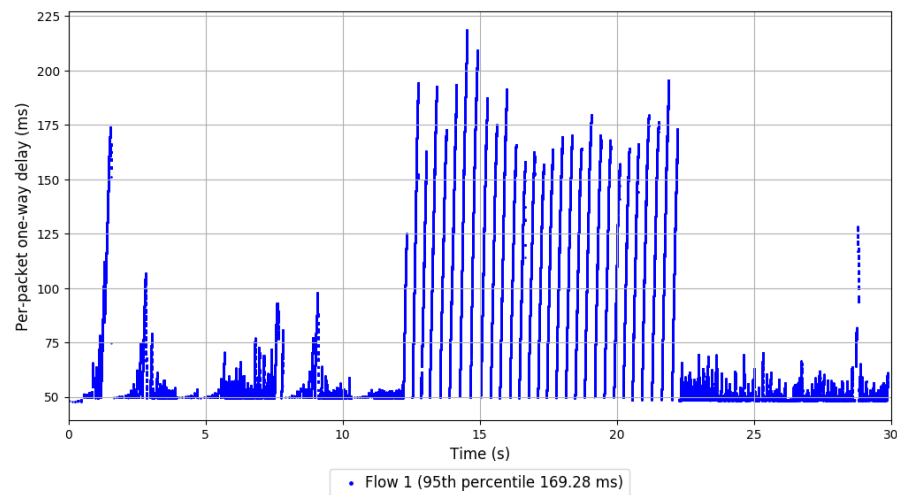
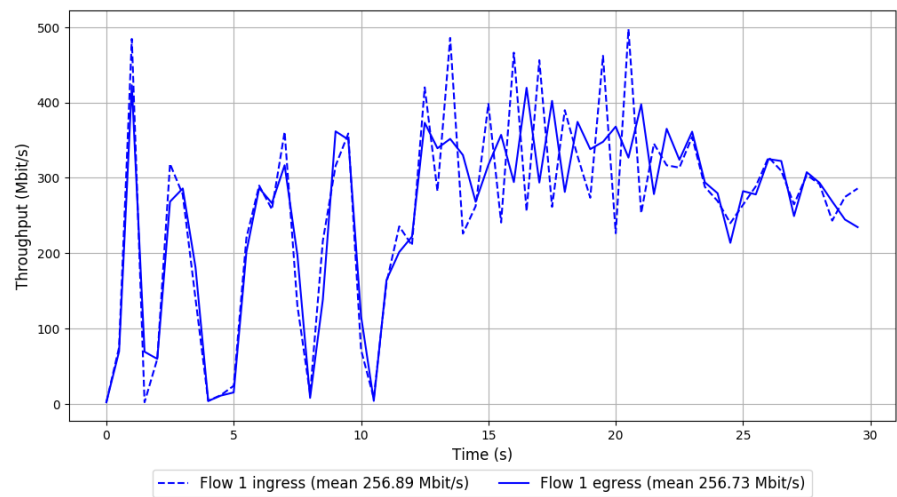
-- Flow 1:

Average throughput: 256.73 Mbit/s

95th percentile per-packet one-way delay: 169.280 ms

Loss rate: 0.57%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-10-11 00:10:37

End at: 2017-10-11 00:11:07

Below is generated by plot.py at 2017-10-11 03:08:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 321.84 Mbit/s

95th percentile per-packet one-way delay: 126.096 ms

Loss rate: 0.20%

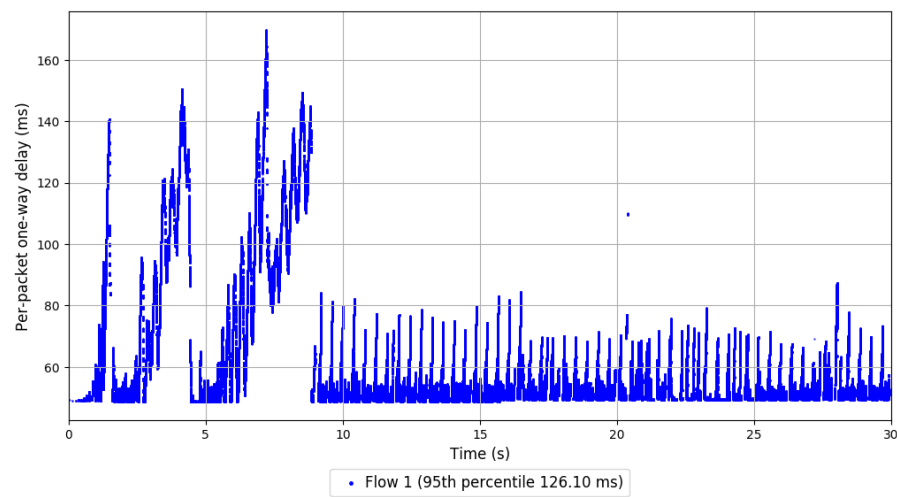
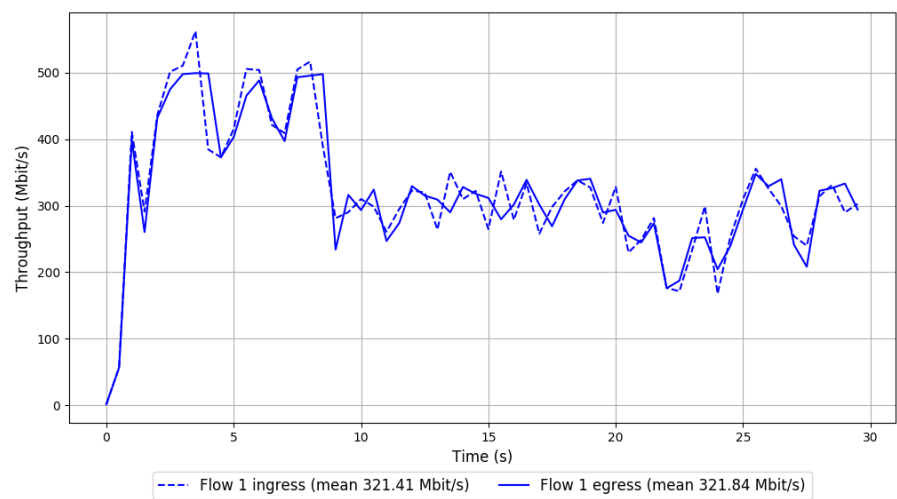
-- Flow 1:

Average throughput: 321.84 Mbit/s

95th percentile per-packet one-way delay: 126.096 ms

Loss rate: 0.20%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-10-11 00:21:06

End at: 2017-10-11 00:21:36

Below is generated by plot.py at 2017-10-11 03:08:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 227.15 Mbit/s

95th percentile per-packet one-way delay: 112.093 ms

Loss rate: 0.64%

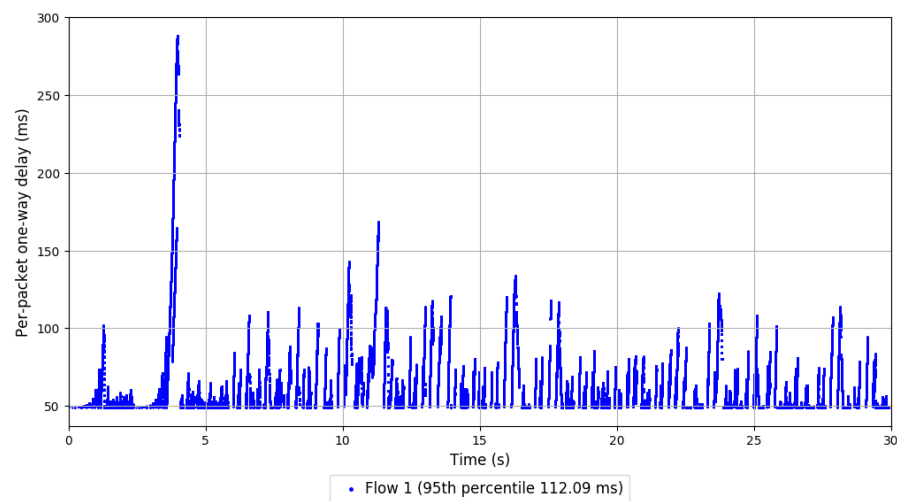
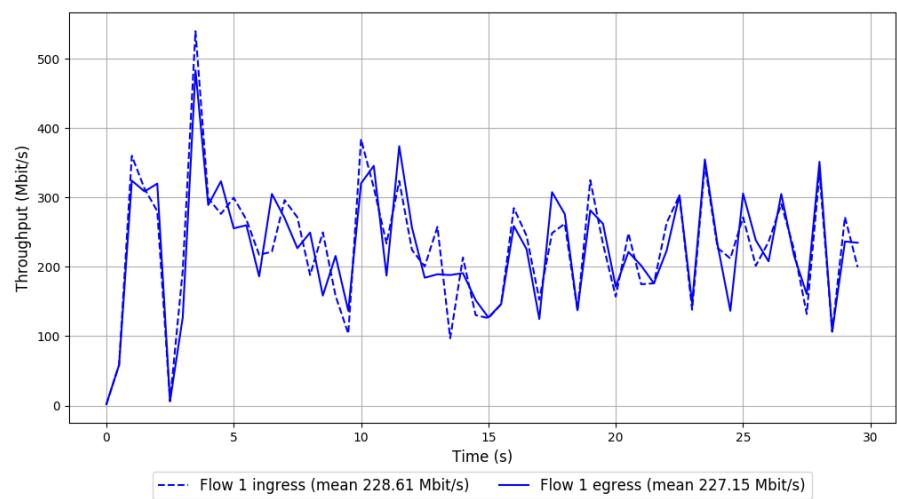
-- Flow 1:

Average throughput: 227.15 Mbit/s

95th percentile per-packet one-way delay: 112.093 ms

Loss rate: 0.64%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-10-11 00:31:34

End at: 2017-10-11 00:32:04

Below is generated by plot.py at 2017-10-11 03:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 317.95 Mbit/s

95th percentile per-packet one-way delay: 126.044 ms

Loss rate: 0.12%

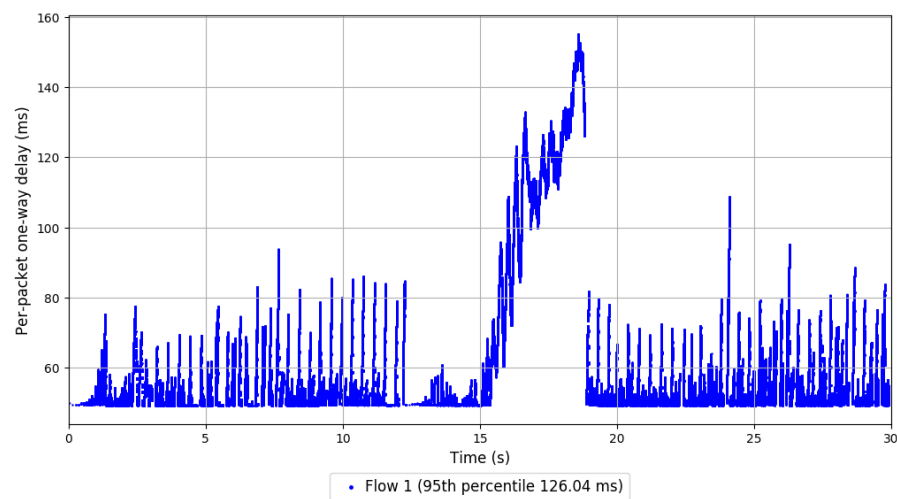
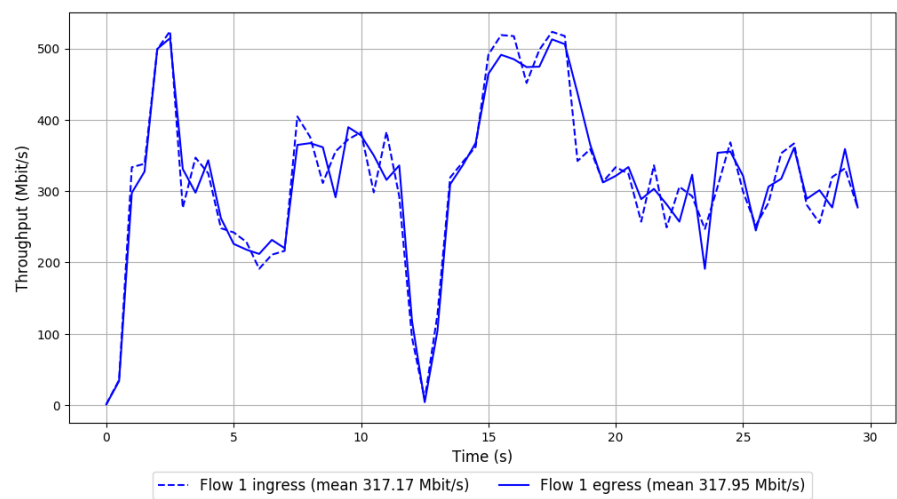
-- Flow 1:

Average throughput: 317.95 Mbit/s

95th percentile per-packet one-way delay: 126.044 ms

Loss rate: 0.12%

Run 10: Report of Verus — Data Link

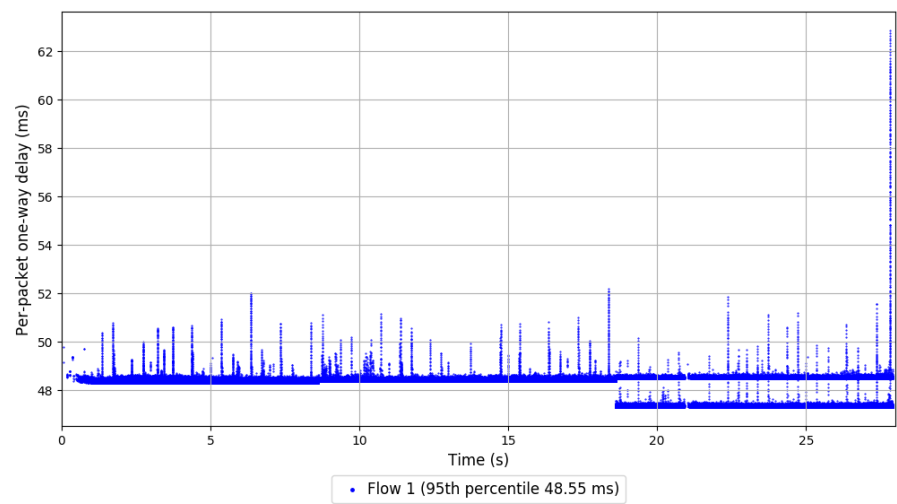
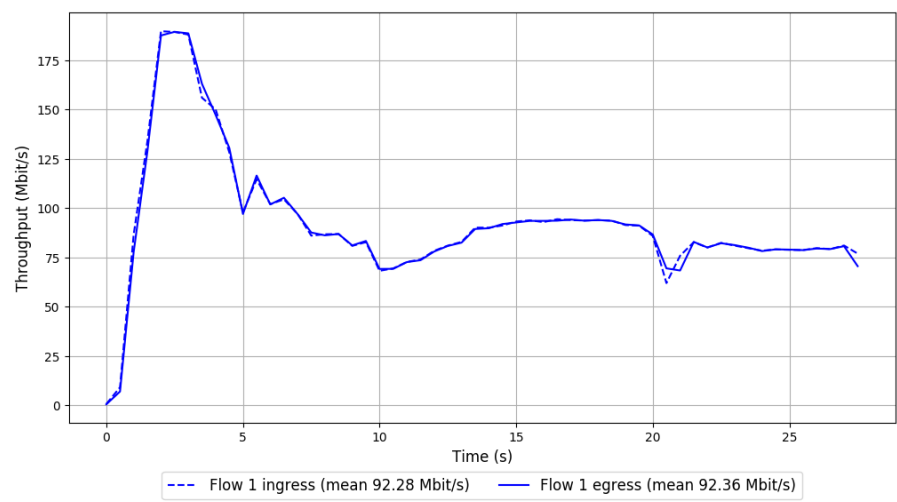


```
Run 1: Statistics of Copa

Start at: 2017-10-10 22:45:22
End at: 2017-10-10 22:45:52

# Below is generated by plot.py at 2017-10-11 03:09:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.36 Mbit/s
95th percentile per-packet one-way delay: 48.548 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 92.36 Mbit/s
95th percentile per-packet one-way delay: 48.548 ms
Loss rate: 0.28%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-10-10 22:55:54

End at: 2017-10-10 22:56:24

Below is generated by plot.py at 2017-10-11 03:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.37 Mbit/s

95th percentile per-packet one-way delay: 48.555 ms

Loss rate: 0.31%

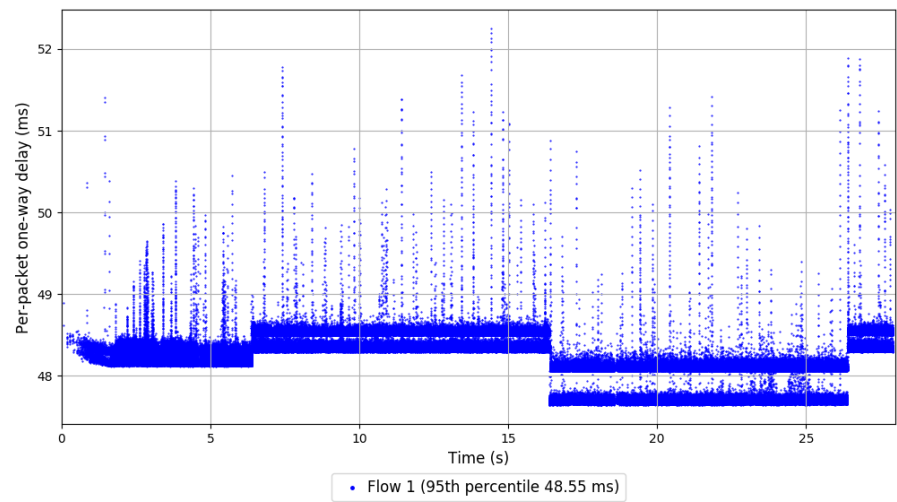
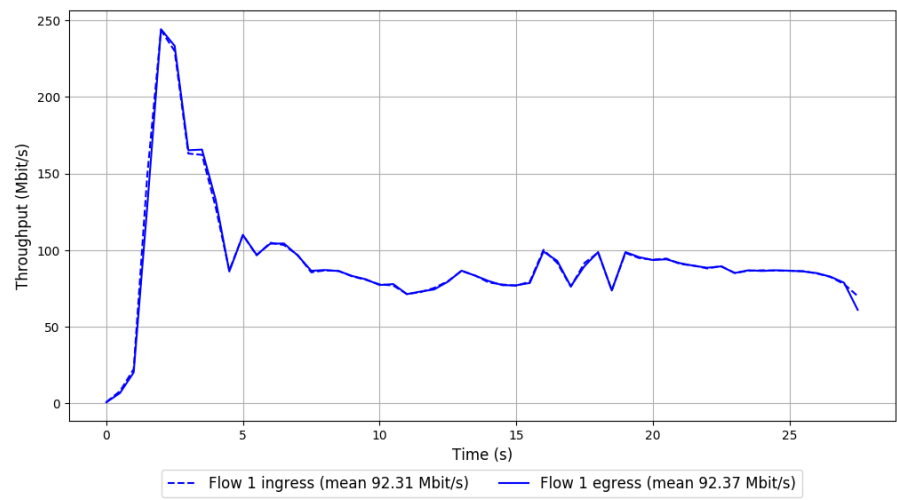
-- Flow 1:

Average throughput: 92.37 Mbit/s

95th percentile per-packet one-way delay: 48.555 ms

Loss rate: 0.31%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-10-10 23:06:50

End at: 2017-10-10 23:07:20

Below is generated by plot.py at 2017-10-11 03:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.63 Mbit/s

95th percentile per-packet one-way delay: 48.430 ms

Loss rate: 0.37%

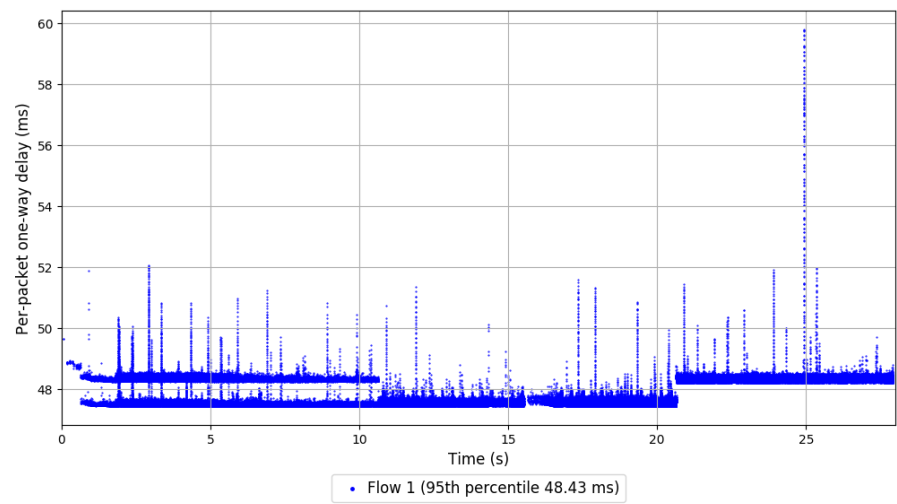
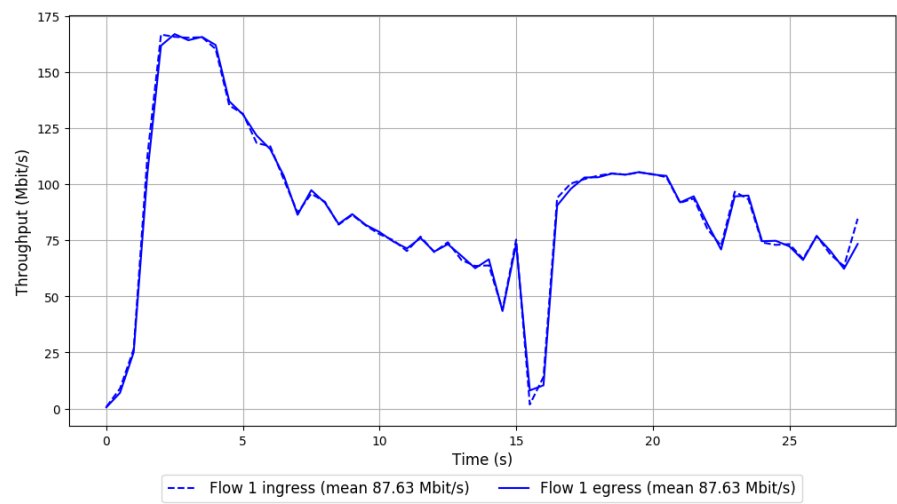
-- Flow 1:

Average throughput: 87.63 Mbit/s

95th percentile per-packet one-way delay: 48.430 ms

Loss rate: 0.37%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-10-10 23:17:43

End at: 2017-10-10 23:18:13

Below is generated by plot.py at 2017-10-11 03:09:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.93 Mbit/s

95th percentile per-packet one-way delay: 48.657 ms

Loss rate: 0.33%

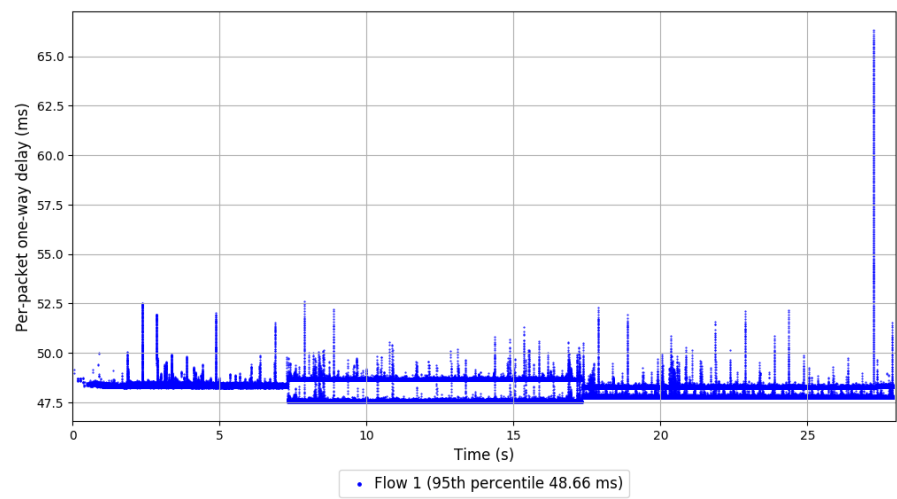
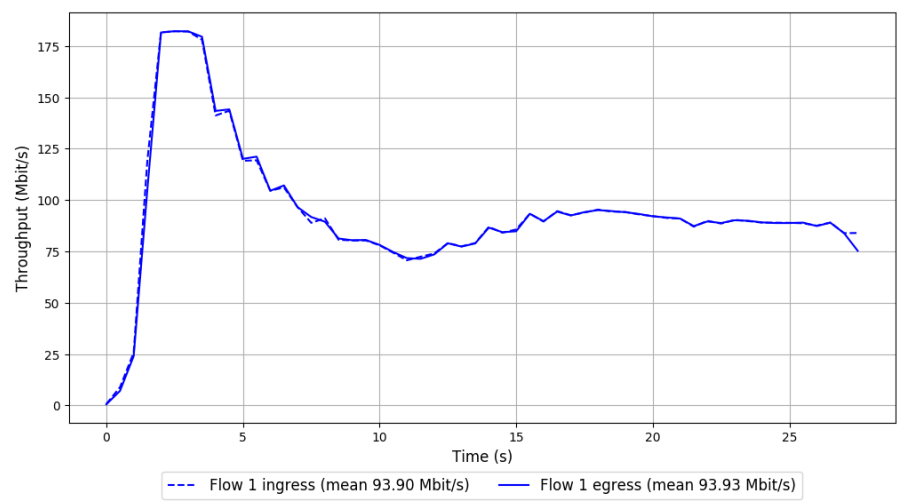
-- Flow 1:

Average throughput: 93.93 Mbit/s

95th percentile per-packet one-way delay: 48.657 ms

Loss rate: 0.33%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-10-10 23:28:43

End at: 2017-10-10 23:29:13

Below is generated by plot.py at 2017-10-11 03:09:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.34 Mbit/s

95th percentile per-packet one-way delay: 48.908 ms

Loss rate: 0.35%

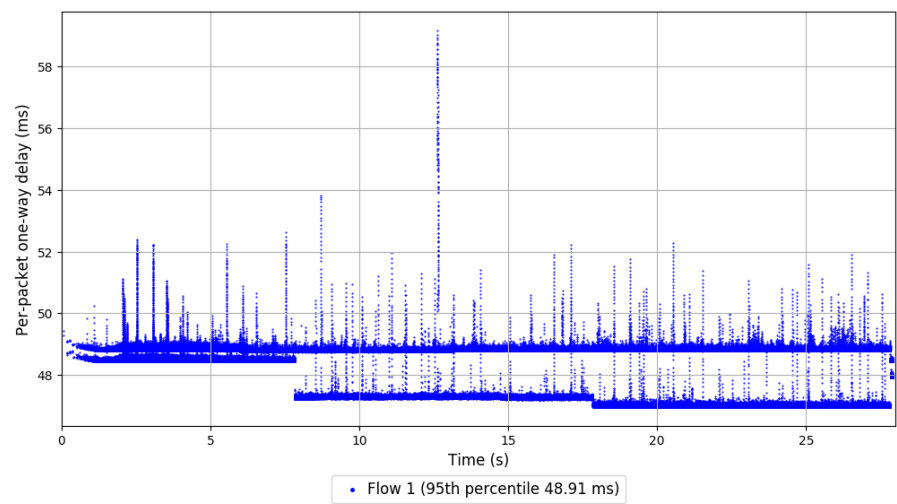
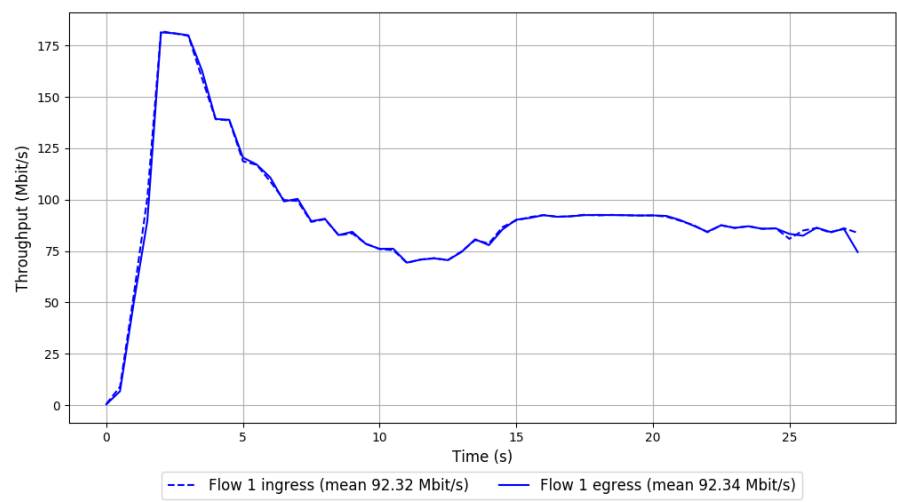
-- Flow 1:

Average throughput: 92.34 Mbit/s

95th percentile per-packet one-way delay: 48.908 ms

Loss rate: 0.35%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-10-10 23:38:59

End at: 2017-10-10 23:39:29

Below is generated by plot.py at 2017-10-11 03:09:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.33 Mbit/s

95th percentile per-packet one-way delay: 49.207 ms

Loss rate: 0.44%

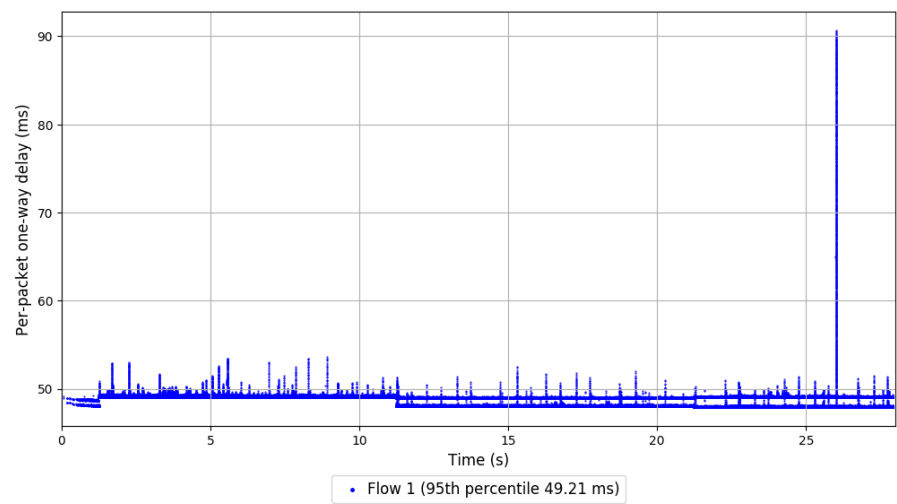
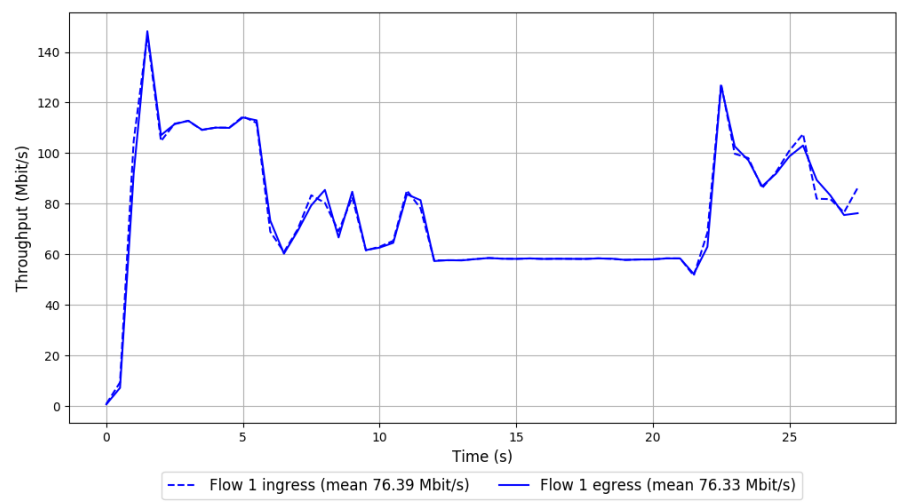
-- Flow 1:

Average throughput: 76.33 Mbit/s

95th percentile per-packet one-way delay: 49.207 ms

Loss rate: 0.44%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-10-10 23:49:51

End at: 2017-10-10 23:50:21

Below is generated by plot.py at 2017-10-11 03:09:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.07 Mbit/s

95th percentile per-packet one-way delay: 49.348 ms

Loss rate: 0.39%

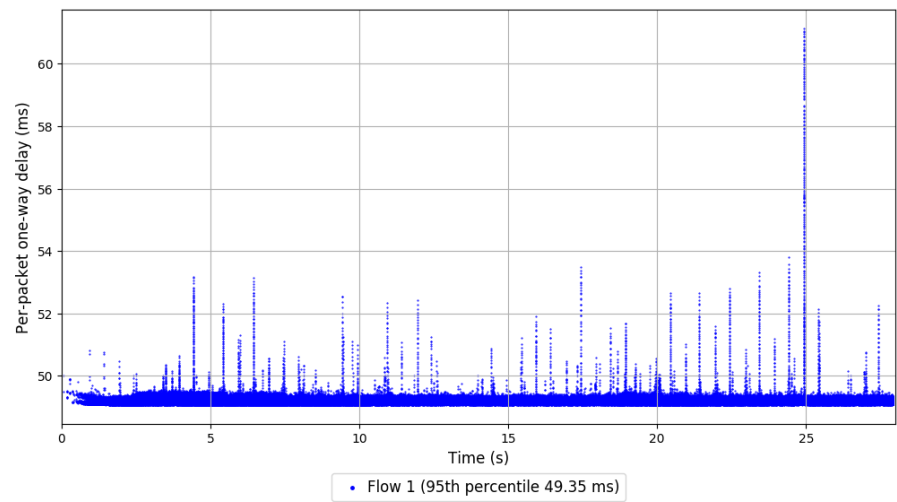
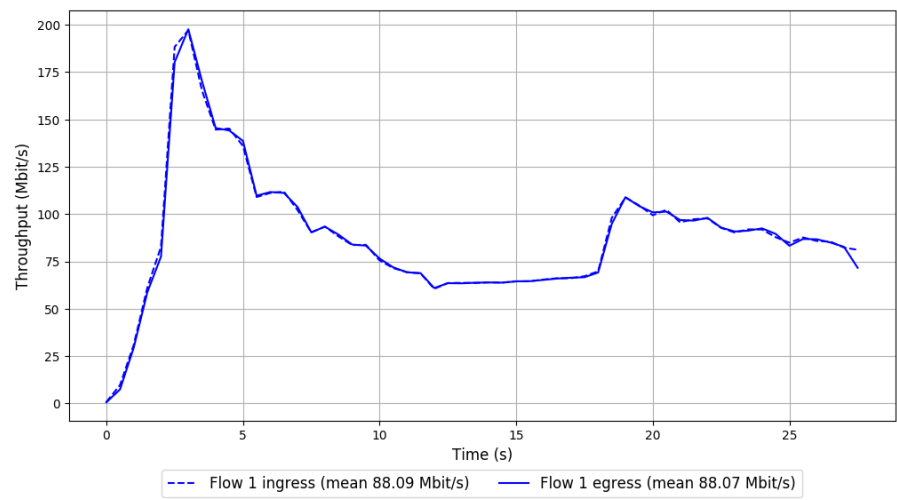
-- Flow 1:

Average throughput: 88.07 Mbit/s

95th percentile per-packet one-way delay: 49.348 ms

Loss rate: 0.39%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-10-11 00:00:37

End at: 2017-10-11 00:01:07

Below is generated by plot.py at 2017-10-11 03:10:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.27 Mbit/s

95th percentile per-packet one-way delay: 49.603 ms

Loss rate: 0.31%

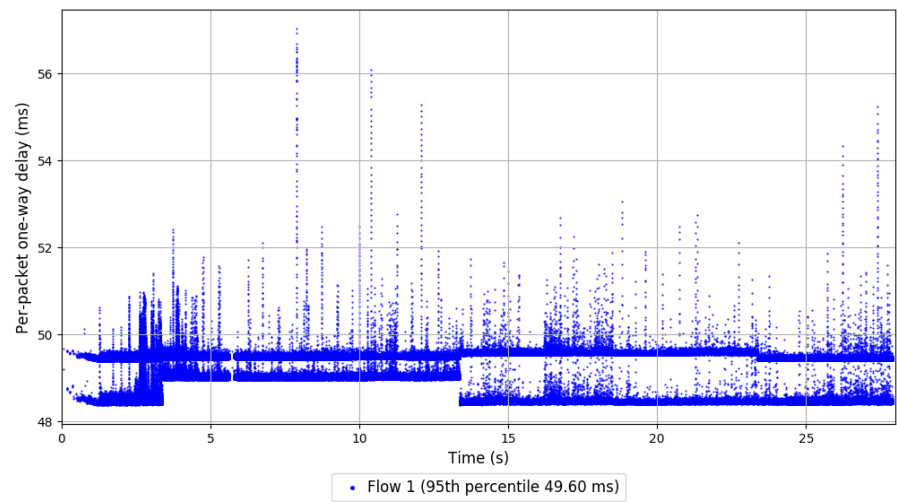
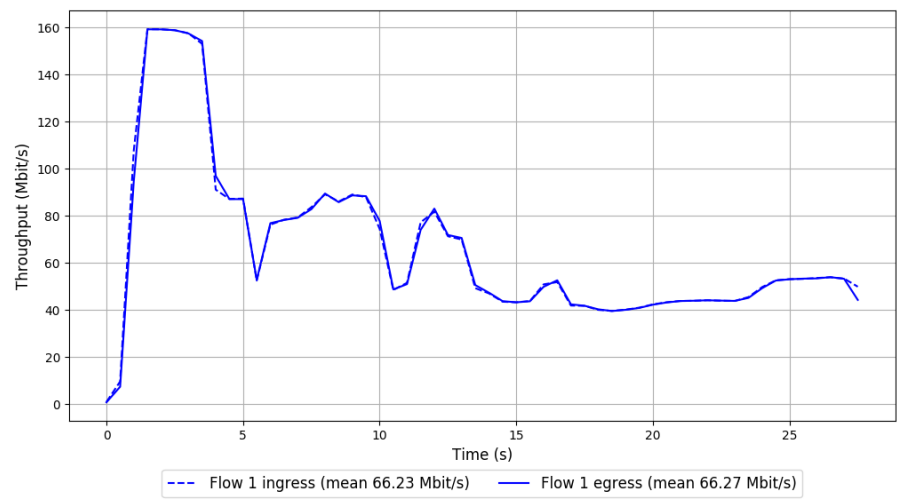
-- Flow 1:

Average throughput: 66.27 Mbit/s

95th percentile per-packet one-way delay: 49.603 ms

Loss rate: 0.31%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-10-11 00:11:36

End at: 2017-10-11 00:12:06

Below is generated by plot.py at 2017-10-11 03:10:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.28 Mbit/s

95th percentile per-packet one-way delay: 49.723 ms

Loss rate: 0.17%

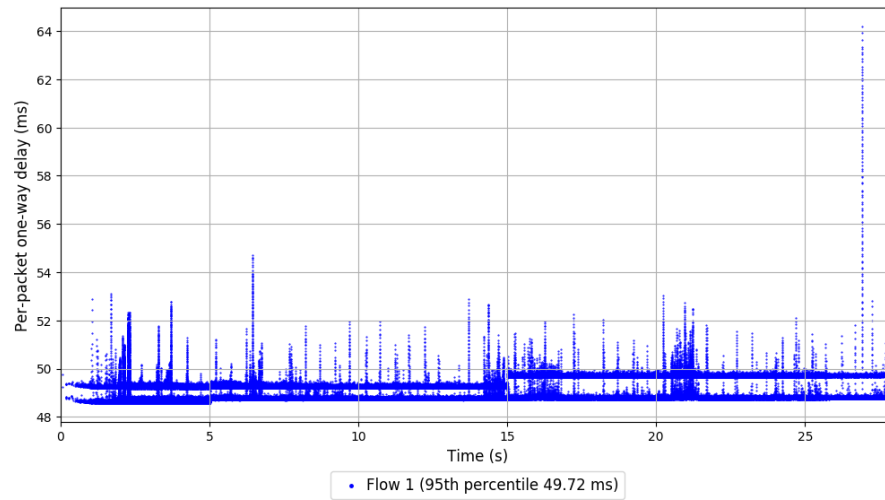
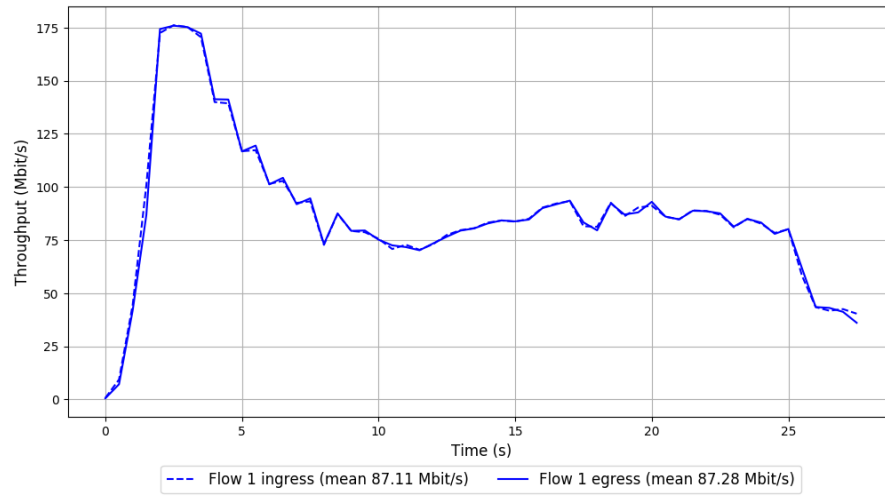
-- Flow 1:

Average throughput: 87.28 Mbit/s

95th percentile per-packet one-way delay: 49.723 ms

Loss rate: 0.17%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-10-11 00:21:59

End at: 2017-10-11 00:22:29

Below is generated by plot.py at 2017-10-11 03:11:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.96 Mbit/s

95th percentile per-packet one-way delay: 49.570 ms

Loss rate: 0.24%

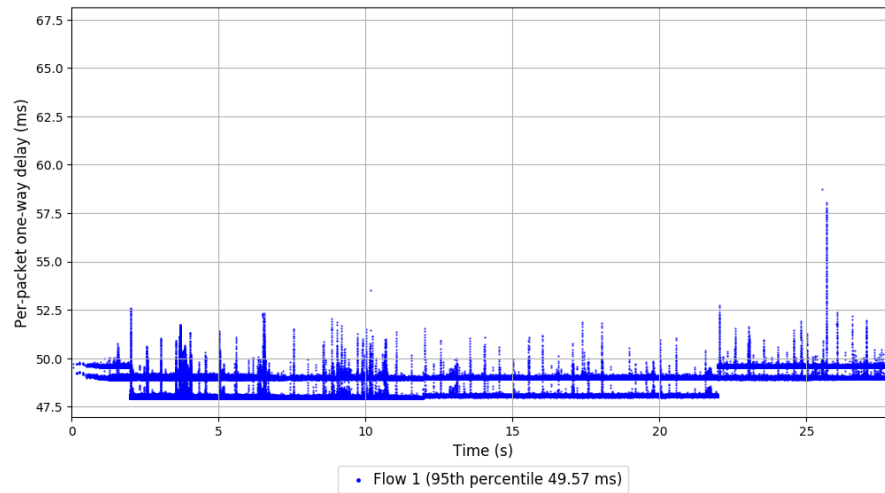
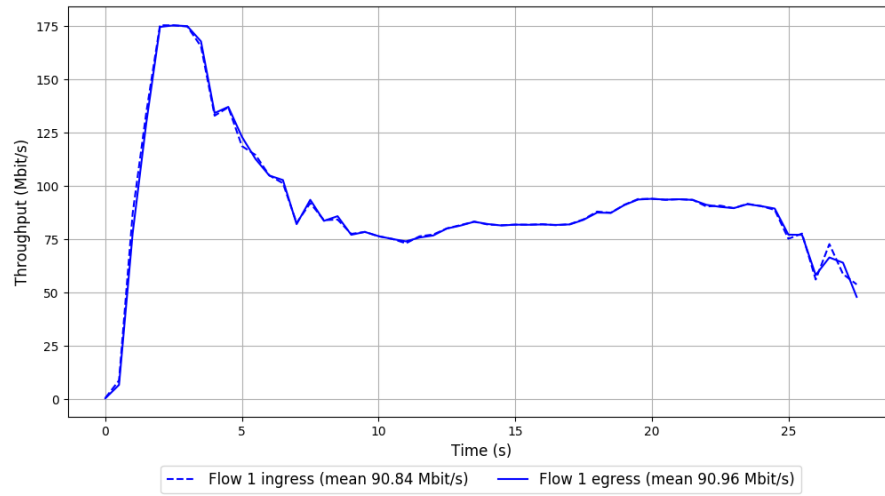
-- Flow 1:

Average throughput: 90.96 Mbit/s

95th percentile per-packet one-way delay: 49.570 ms

Loss rate: 0.24%

Run 10: Report of Copa — Data Link

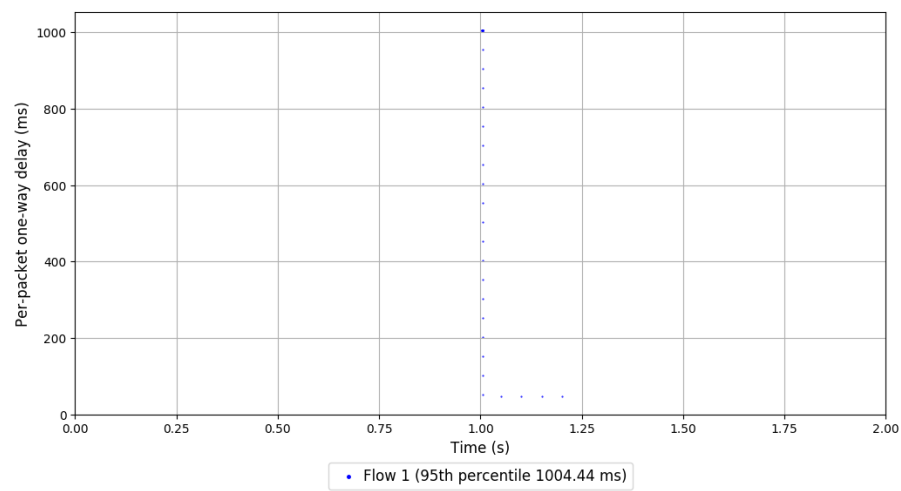
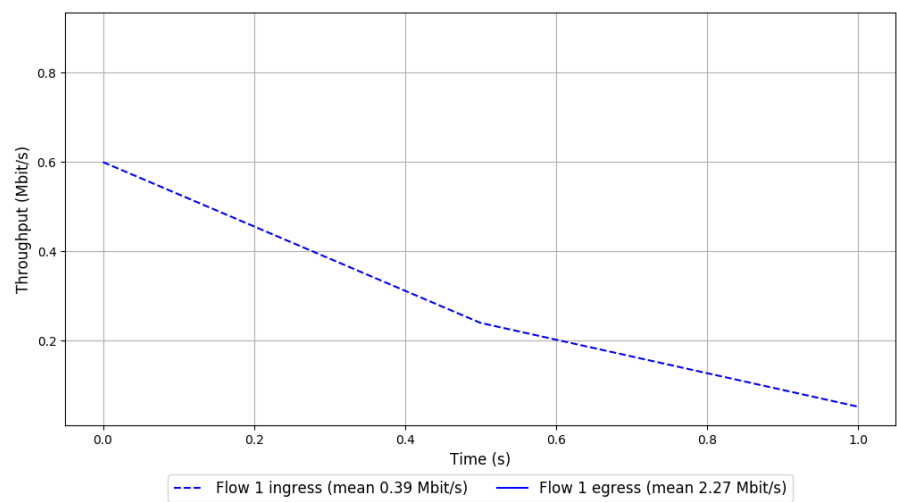


Run 1: Statistics of CalibratedKoho

Start at: 2017-10-10 22:53:07

End at: 2017-10-10 22:53:37

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-10-10 23:03:36

End at: 2017-10-10 23:04:06

Below is generated by plot.py at 2017-10-11 03:16:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 415.33 Mbit/s

95th percentile per-packet one-way delay: 66.147 ms

Loss rate: 0.41%

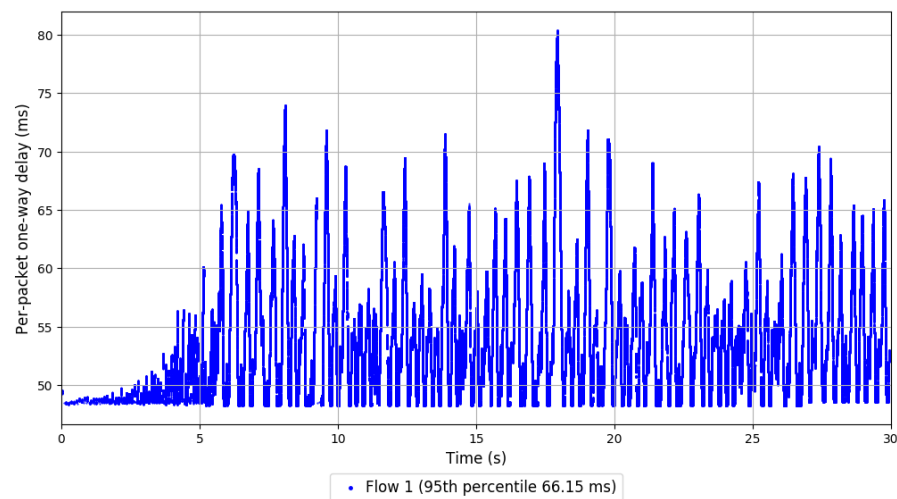
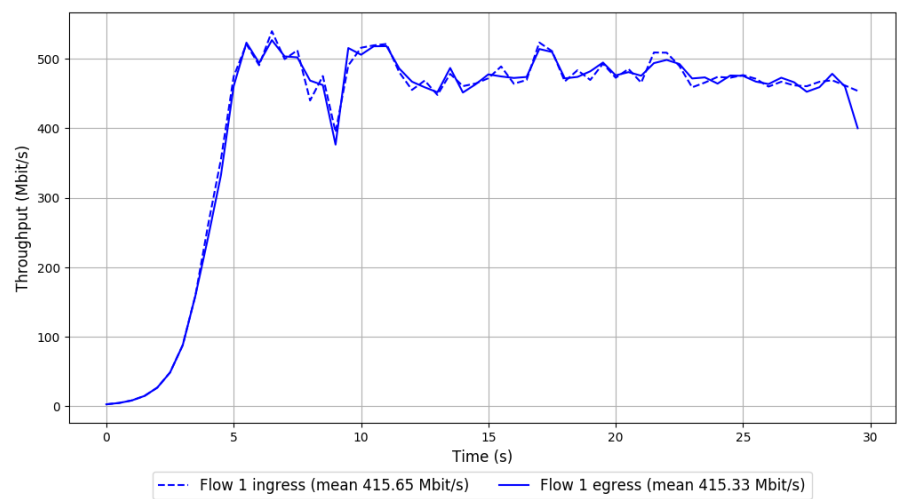
-- Flow 1:

Average throughput: 415.33 Mbit/s

95th percentile per-packet one-way delay: 66.147 ms

Loss rate: 0.41%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-10-10 23:14:31

End at: 2017-10-10 23:15:02

Below is generated by plot.py at 2017-10-11 03:16:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 393.55 Mbit/s

95th percentile per-packet one-way delay: 67.198 ms

Loss rate: 0.40%

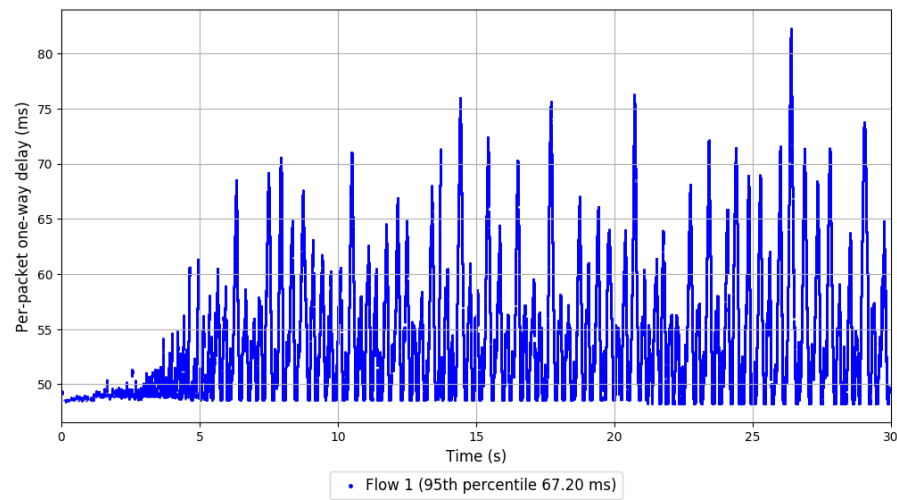
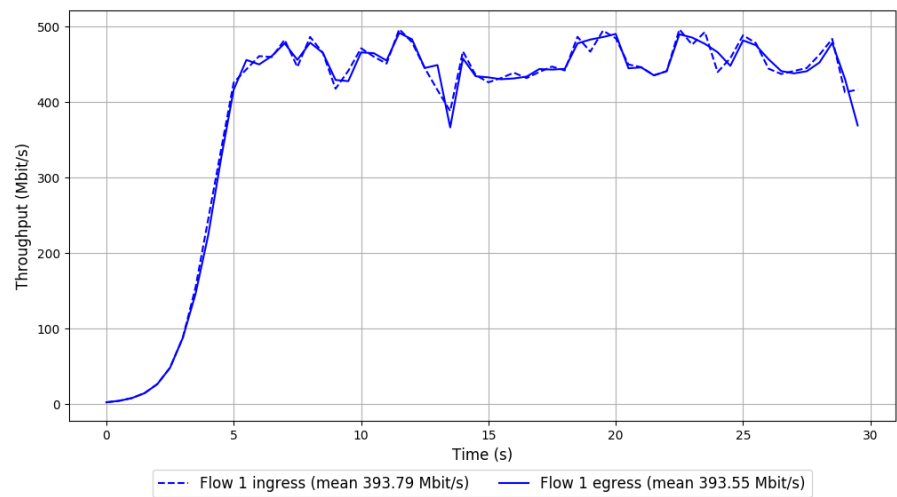
-- Flow 1:

Average throughput: 393.55 Mbit/s

95th percentile per-packet one-way delay: 67.198 ms

Loss rate: 0.40%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-10-10 23:25:31

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

Below is generated by plot.py at 2017-10-11 03:16:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 387.78 Mbit/s

95th percentile per-packet one-way delay: 68.409 ms

Loss rate: 0.39%

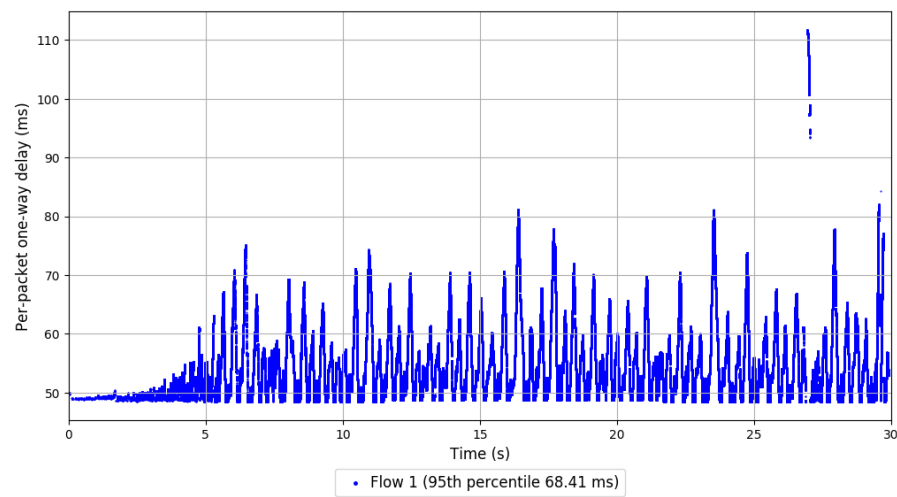
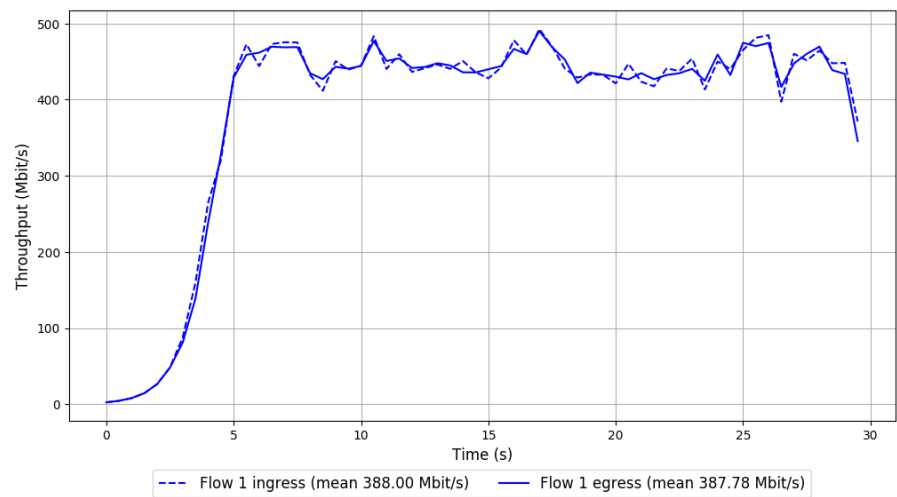
-- Flow 1:

Average throughput: 387.78 Mbit/s

95th percentile per-packet one-way delay: 68.409 ms

Loss rate: 0.39%

Run 4: Report of CalibratedKoho — Data Link

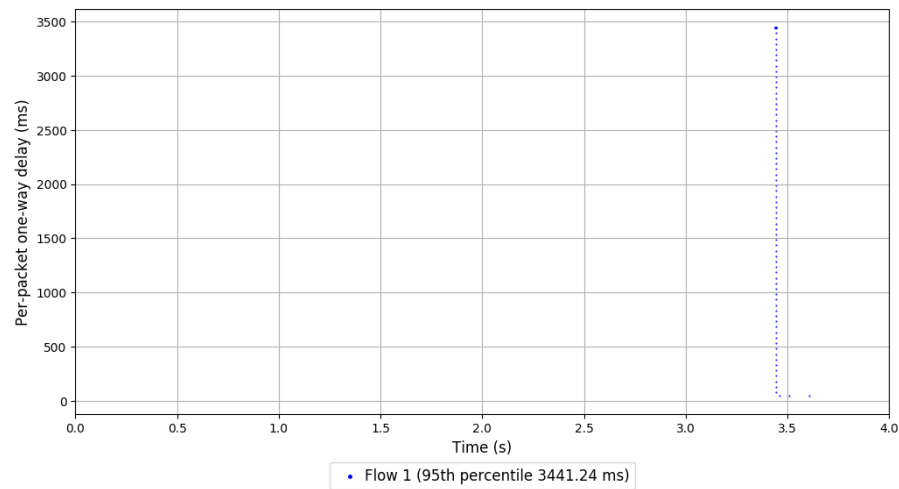
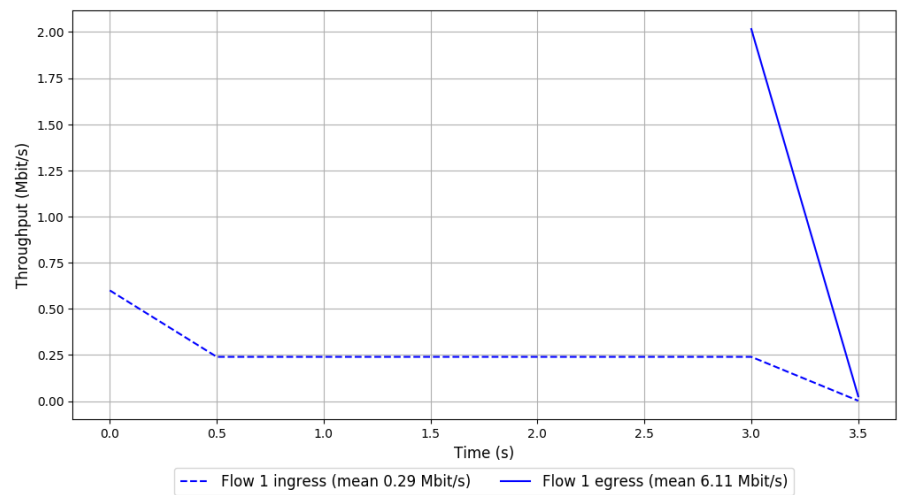


Run 5: Statistics of CalibratedKoho

Start at: 2017-10-10 23:36:15

End at: 2017-10-10 23:36:45

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-10-10 23:46:27

End at: 2017-10-10 23:46:57

Below is generated by plot.py at 2017-10-11 03:17:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 422.00 Mbit/s

95th percentile per-packet one-way delay: 66.140 ms

Loss rate: 0.33%

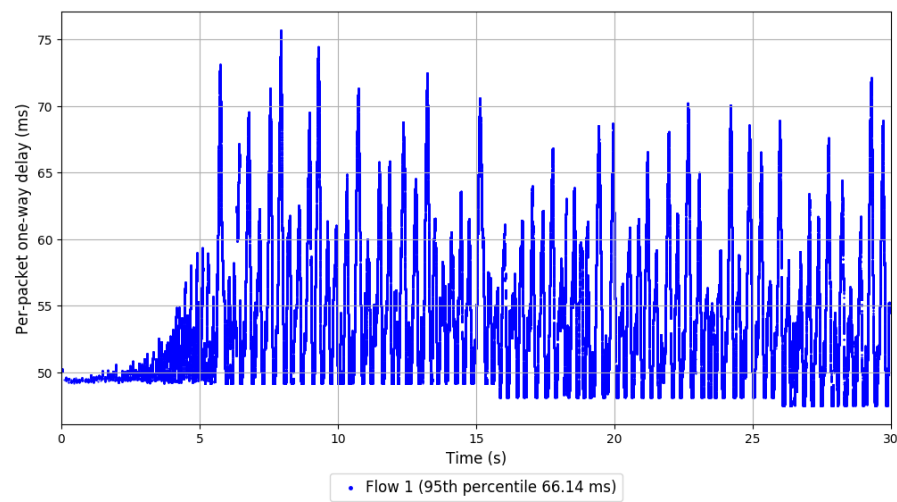
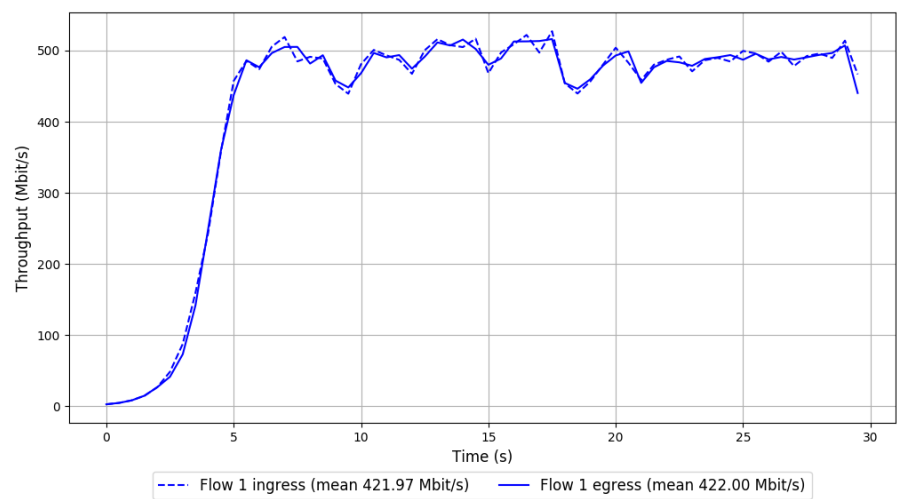
-- Flow 1:

Average throughput: 422.00 Mbit/s

95th percentile per-packet one-way delay: 66.140 ms

Loss rate: 0.33%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-10-10 23:57:21

End at: 2017-10-10 23:57:52

Below is generated by plot.py at 2017-10-11 03:17:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 446.01 Mbit/s

95th percentile per-packet one-way delay: 68.764 ms

Loss rate: 0.47%

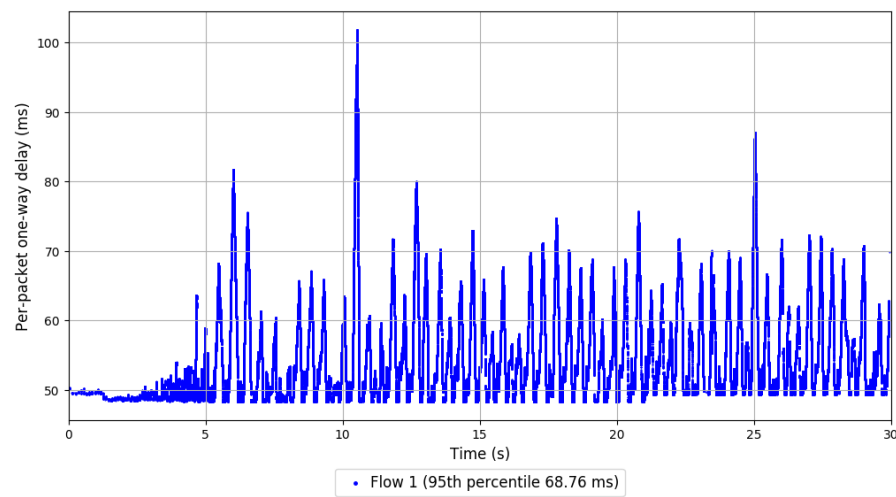
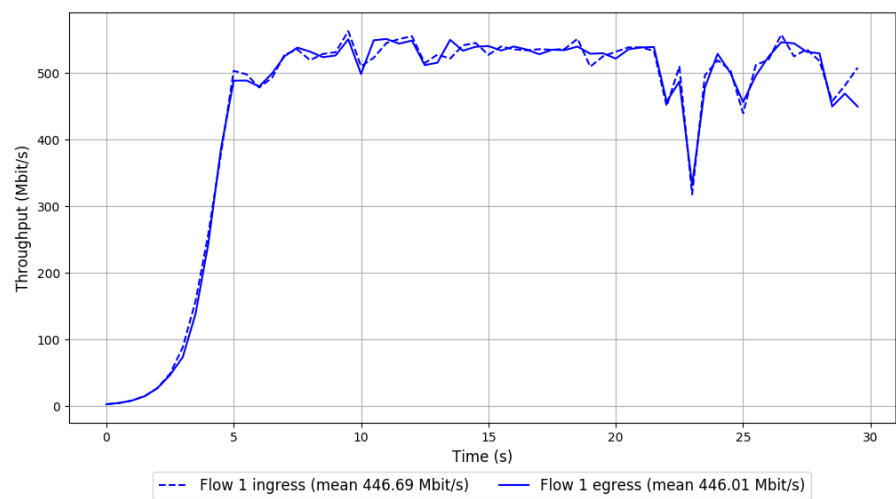
-- Flow 1:

Average throughput: 446.01 Mbit/s

95th percentile per-packet one-way delay: 68.764 ms

Loss rate: 0.47%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-10-11 00:08:16

End at: 2017-10-11 00:08:46

Below is generated by plot.py at 2017-10-11 03:18:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 440.55 Mbit/s

95th percentile per-packet one-way delay: 70.482 ms

Loss rate: 0.45%

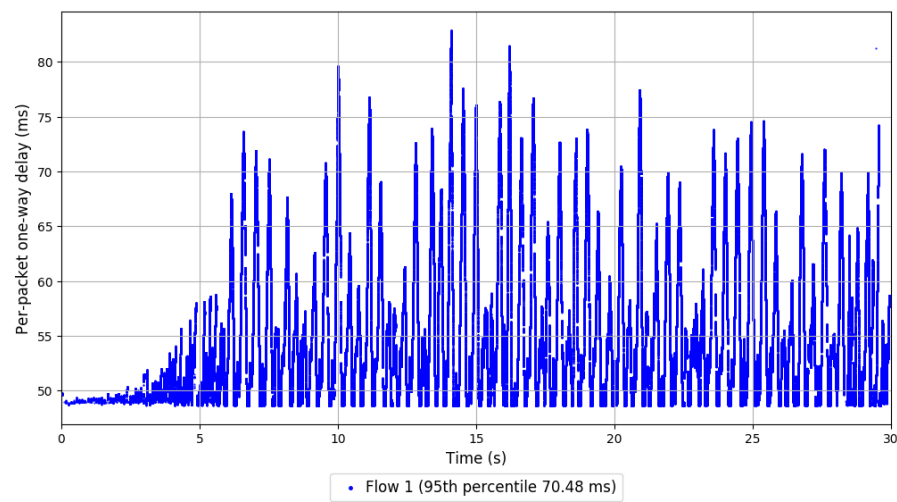
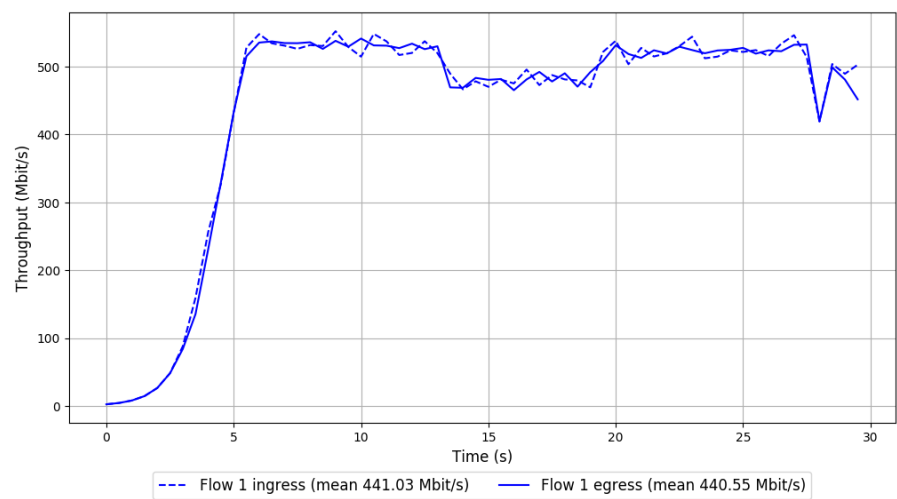
-- Flow 1:

Average throughput: 440.55 Mbit/s

95th percentile per-packet one-way delay: 70.482 ms

Loss rate: 0.45%

Run 8: Report of CalibratedKoho — Data Link

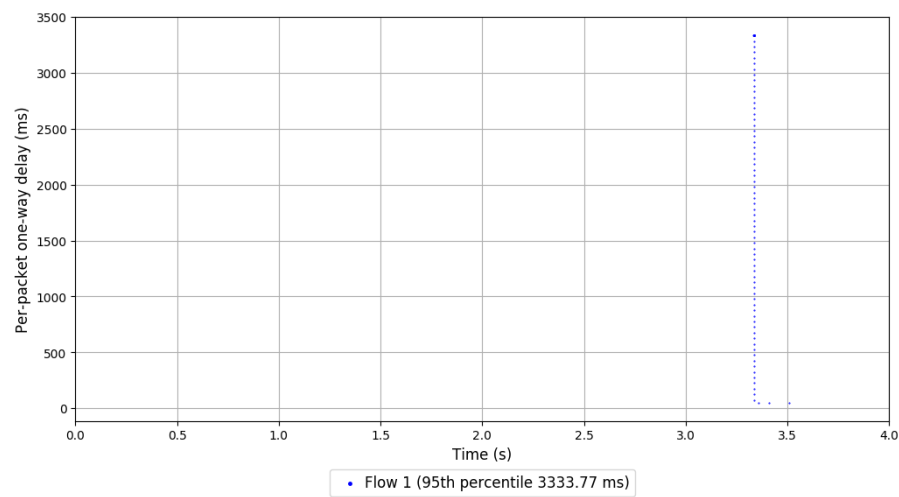
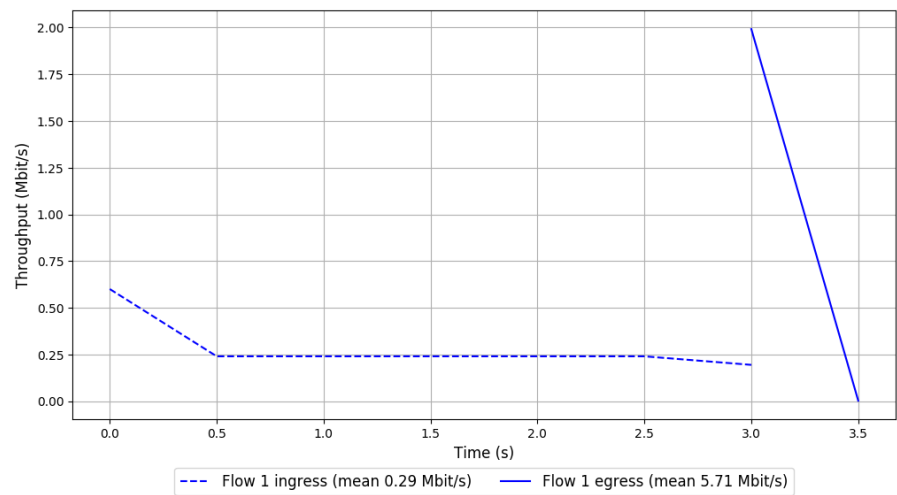


Run 9: Statistics of CalibratedKoho

Start at: 2017-10-11 00:19:16

End at: 2017-10-11 00:19:46

Run 9: Report of CalibratedKoho — Data Link

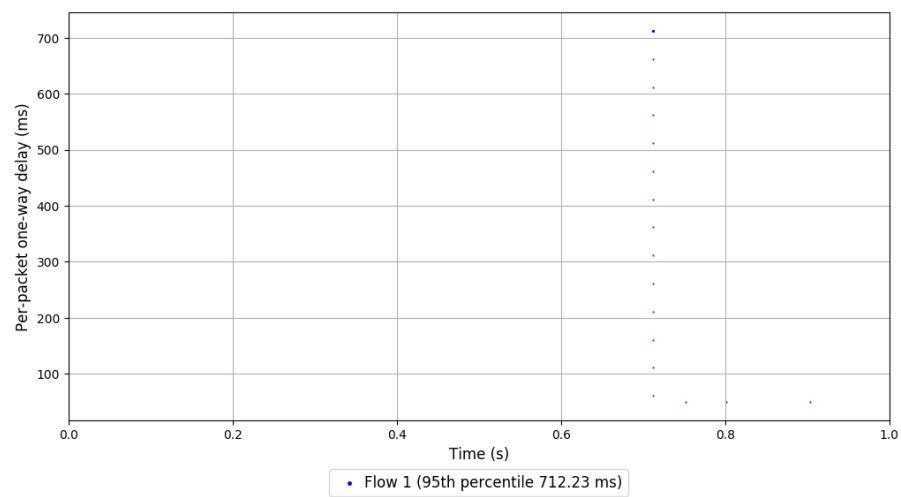
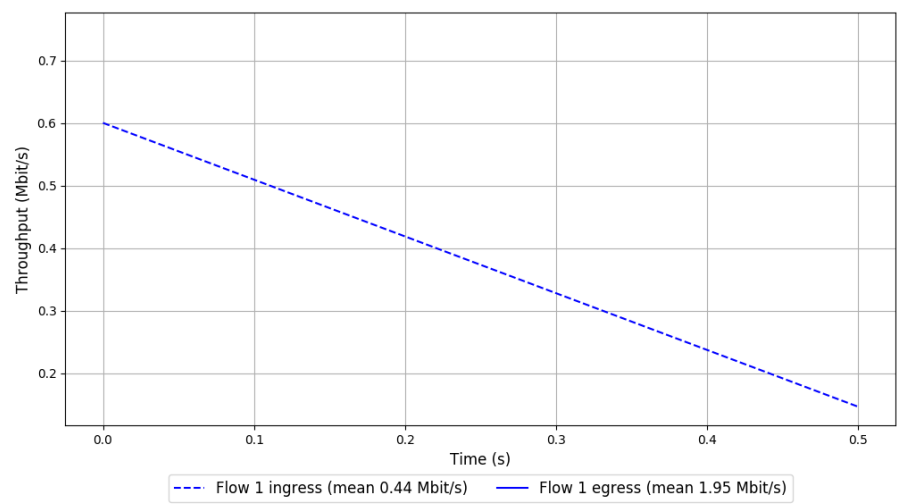


Run 10: Statistics of CalibratedKoho

Start at: 2017-10-11 00:29:43

End at: 2017-10-11 00:30:13

Run 10: Report of CalibratedKoho — Data Link

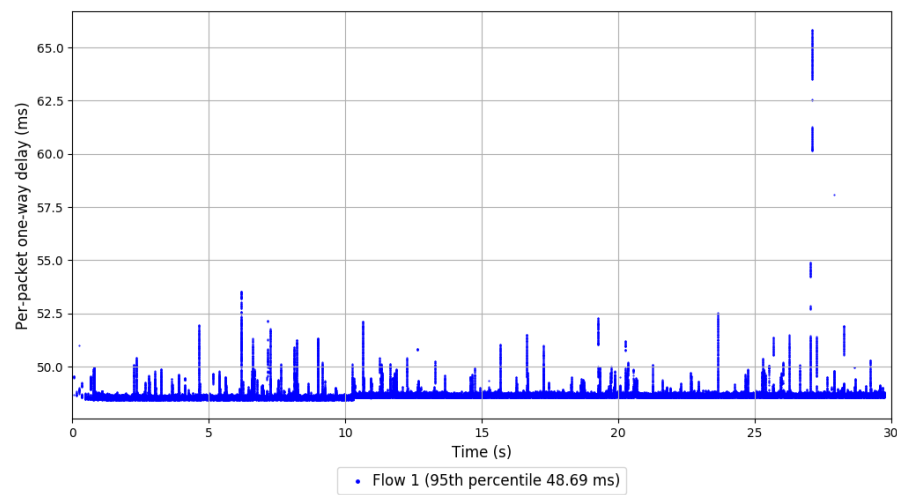
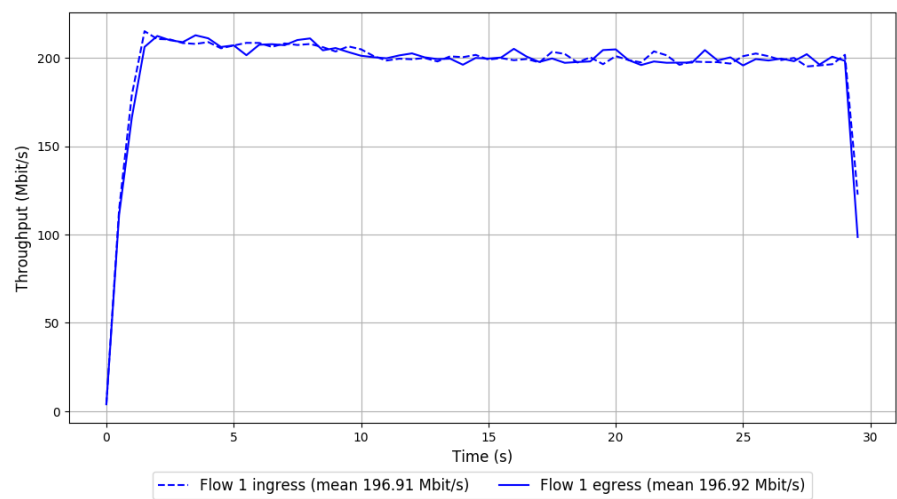


```
Run 1: Statistics of Indigo

Start at: 2017-10-10 22:49:52
End at: 2017-10-10 22:50:22

# Below is generated by plot.py at 2017-10-11 03:18:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 196.92 Mbit/s
95th percentile per-packet one-way delay: 48.689 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 196.92 Mbit/s
95th percentile per-packet one-way delay: 48.689 ms
Loss rate: 0.34%
```

Run 1: Report of Indigo — Data Link

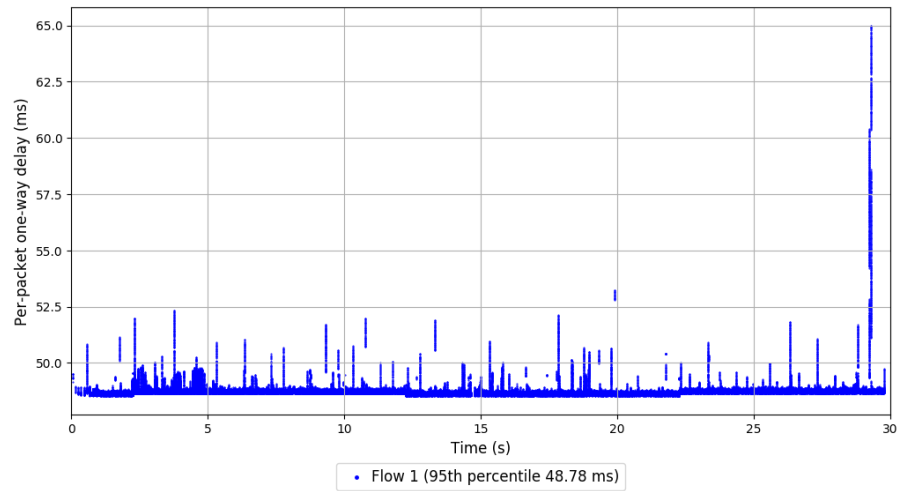
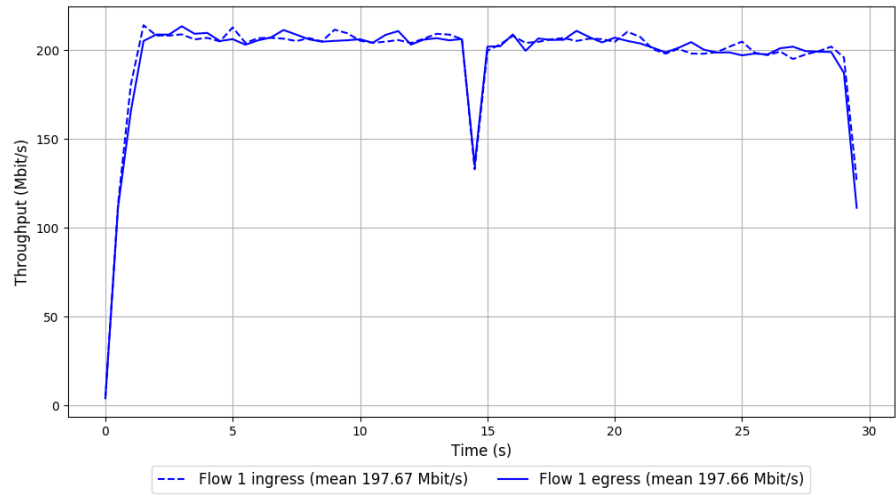


```
Run 2: Statistics of Indigo

Start at: 2017-10-10 23:00:30
End at: 2017-10-10 23:01:00

# Below is generated by plot.py at 2017-10-11 03:18:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 197.66 Mbit/s
95th percentile per-packet one-way delay: 48.777 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 197.66 Mbit/s
95th percentile per-packet one-way delay: 48.777 ms
Loss rate: 0.34%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-10-10 23:11:25

End at: 2017-10-10 23:11:55

Below is generated by plot.py at 2017-10-11 03:18:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.71 Mbit/s

95th percentile per-packet one-way delay: 48.945 ms

Loss rate: 0.36%

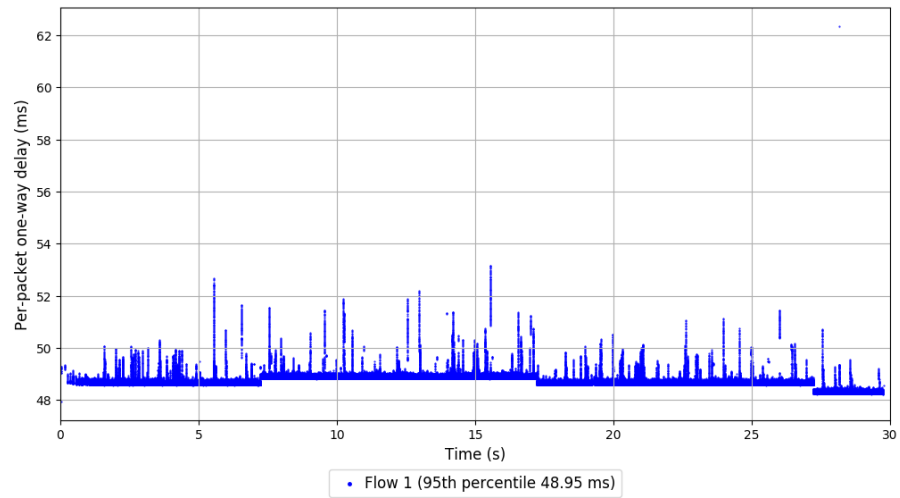
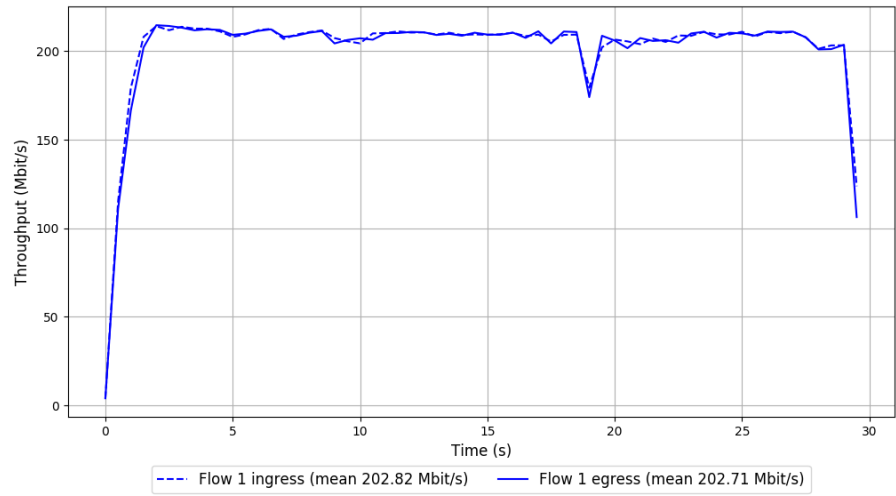
-- Flow 1:

Average throughput: 202.71 Mbit/s

95th percentile per-packet one-way delay: 48.945 ms

Loss rate: 0.36%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-10-10 23:22:24

End at: 2017-10-10 23:22:54

Below is generated by plot.py at 2017-10-11 03:18:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.30 Mbit/s

95th percentile per-packet one-way delay: 48.730 ms

Loss rate: 0.35%

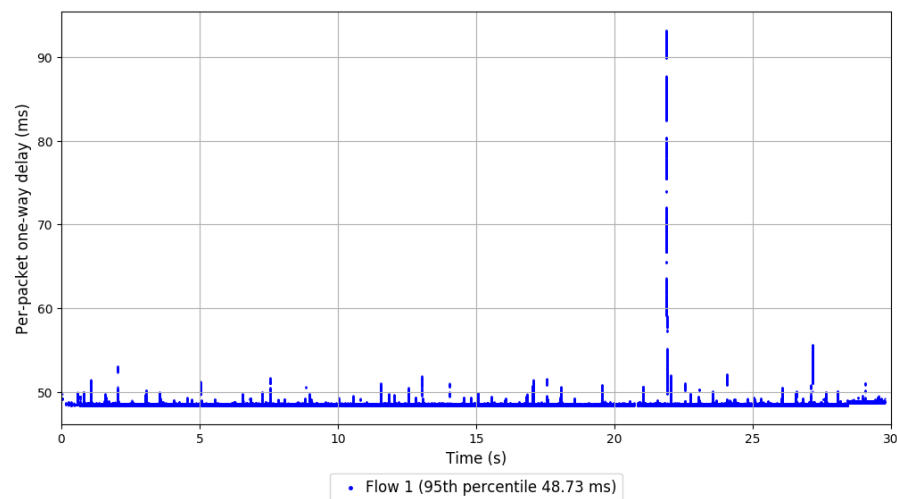
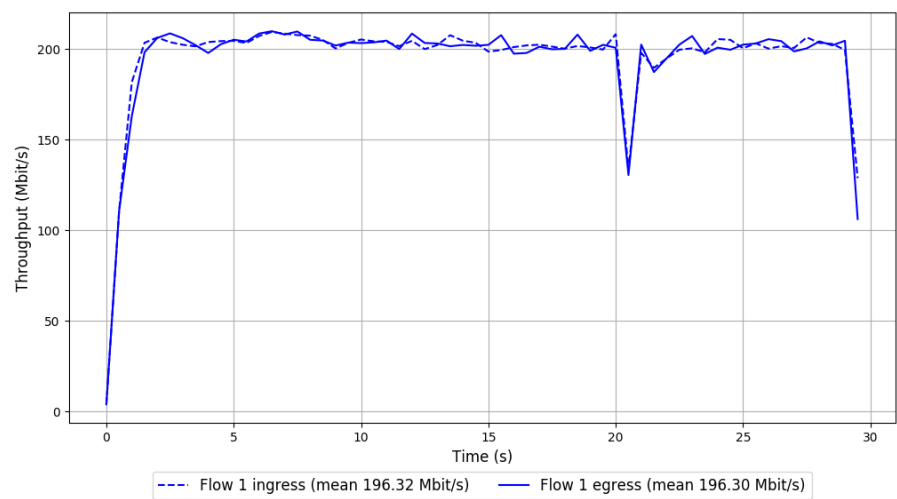
-- Flow 1:

Average throughput: 196.30 Mbit/s

95th percentile per-packet one-way delay: 48.730 ms

Loss rate: 0.35%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-10-10 23:33:10

End at: 2017-10-10 23:33:40

Below is generated by plot.py at 2017-10-11 03:19:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 198.17 Mbit/s

95th percentile per-packet one-way delay: 49.045 ms

Loss rate: 0.35%

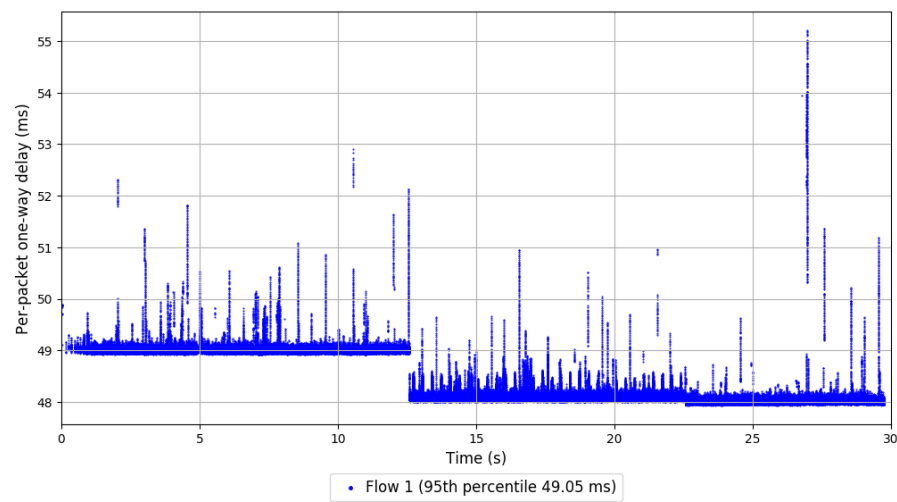
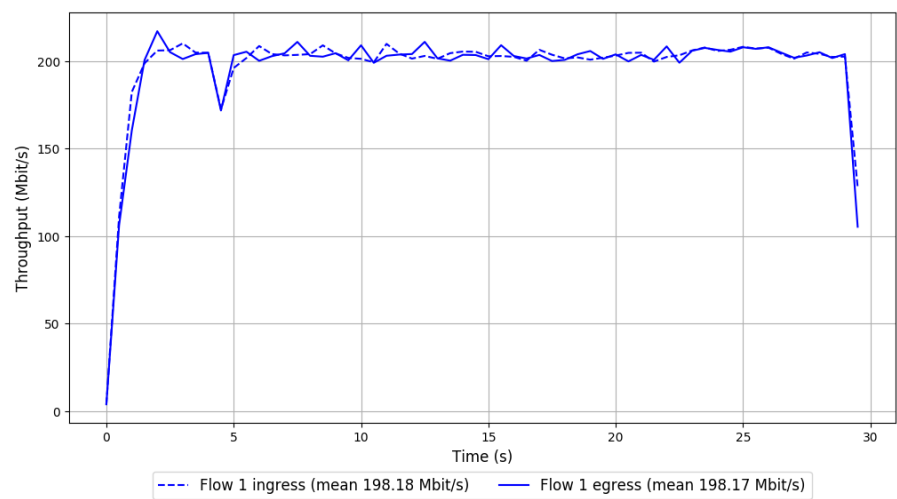
-- Flow 1:

Average throughput: 198.17 Mbit/s

95th percentile per-packet one-way delay: 49.045 ms

Loss rate: 0.35%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-10-10 23:43:23

End at: 2017-10-10 23:43:53

Below is generated by plot.py at 2017-10-11 03:19:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.46 Mbit/s

95th percentile per-packet one-way delay: 49.268 ms

Loss rate: 0.35%

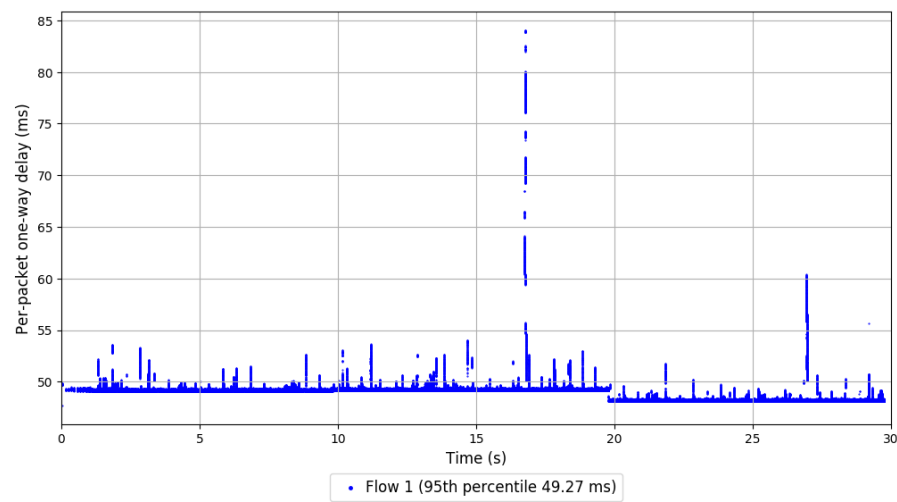
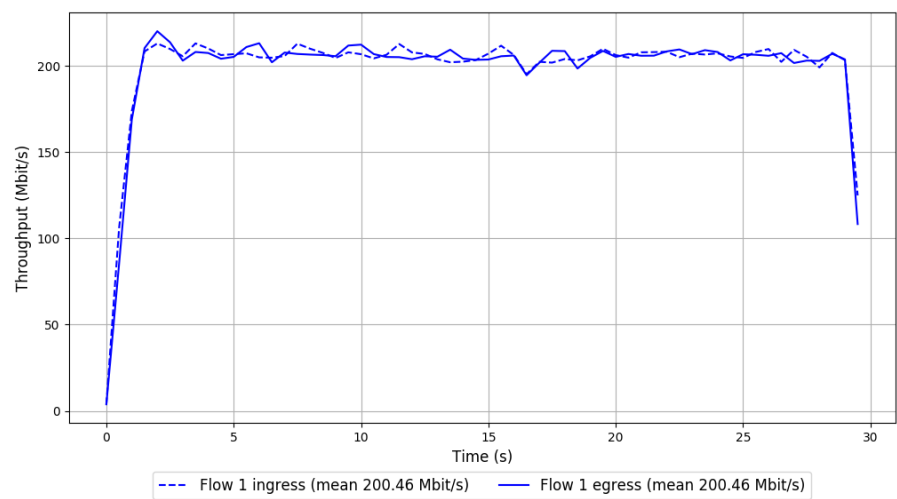
-- Flow 1:

Average throughput: 200.46 Mbit/s

95th percentile per-packet one-way delay: 49.268 ms

Loss rate: 0.35%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-10-10 23:54:13

End at: 2017-10-10 23:54:44

Below is generated by plot.py at 2017-10-11 03:19:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.10 Mbit/s

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

Loss rate: 0.35%

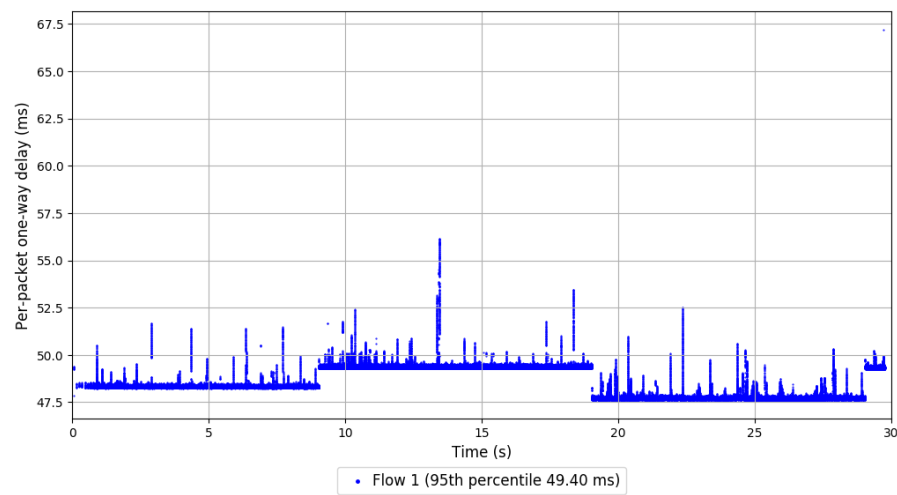
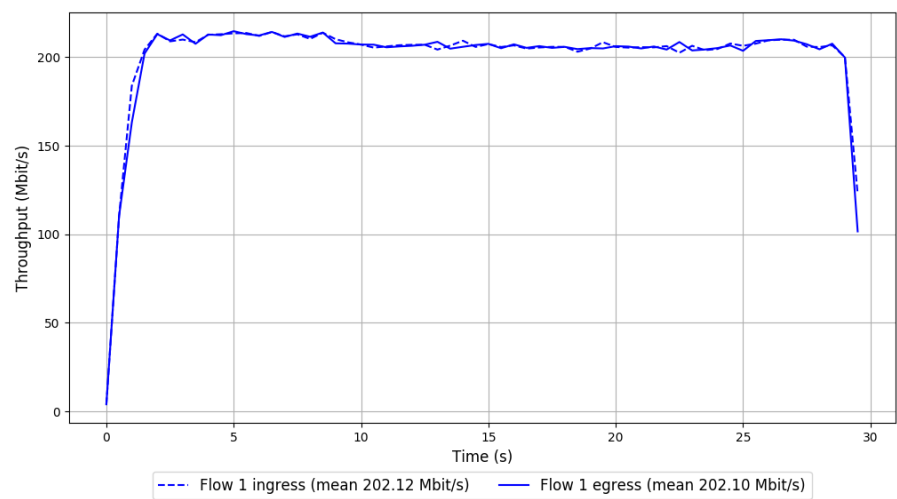
-- Flow 1:

Average throughput: 202.10 Mbit/s

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

Loss rate: 0.35%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-10-11 00:05:07

End at: 2017-10-11 00:05:37

Below is generated by plot.py at 2017-10-11 03:19:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.94 Mbit/s

95th percentile per-packet one-way delay: 48.752 ms

Loss rate: 0.35%

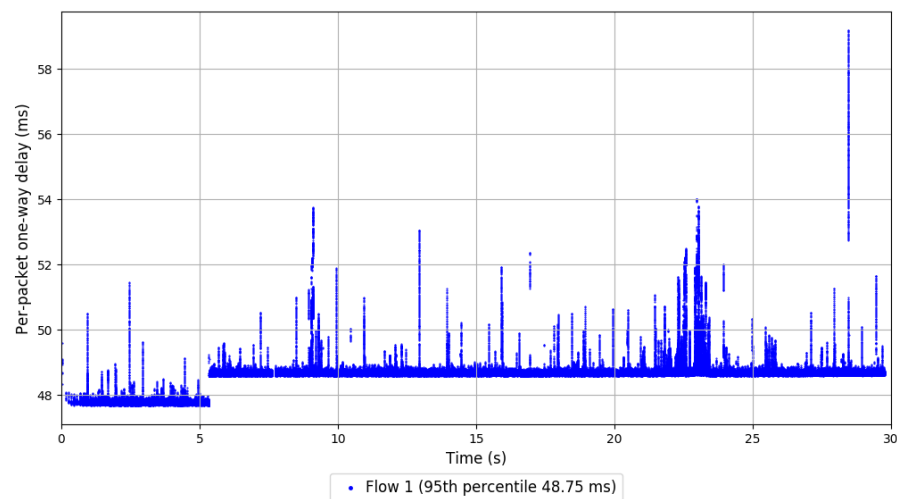
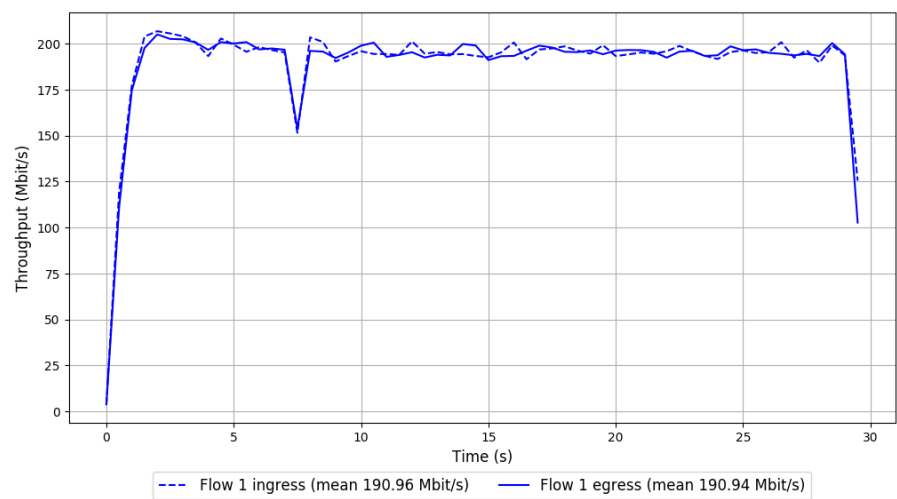
-- Flow 1:

Average throughput: 190.94 Mbit/s

95th percentile per-packet one-way delay: 48.752 ms

Loss rate: 0.35%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-10-11 00:16:07

End at: 2017-10-11 00:16:37

Below is generated by plot.py at 2017-10-11 03:19:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.20 Mbit/s

95th percentile per-packet one-way delay: 49.412 ms

Loss rate: 0.35%

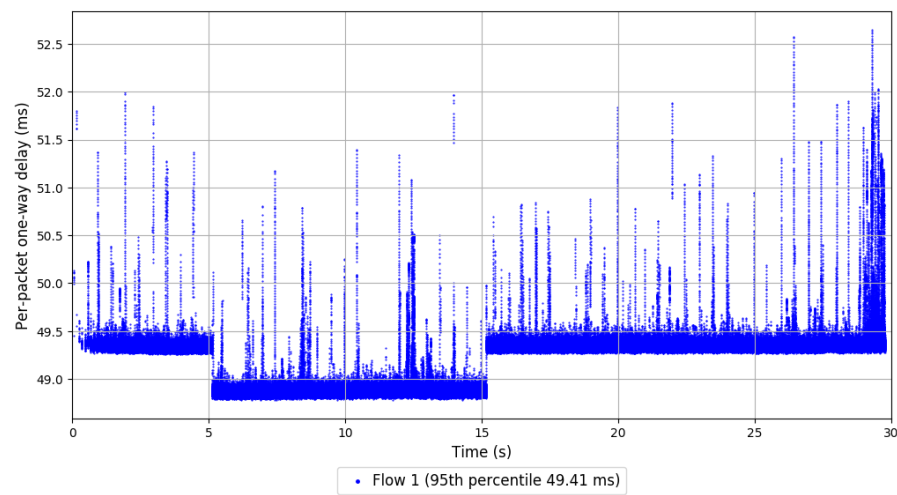
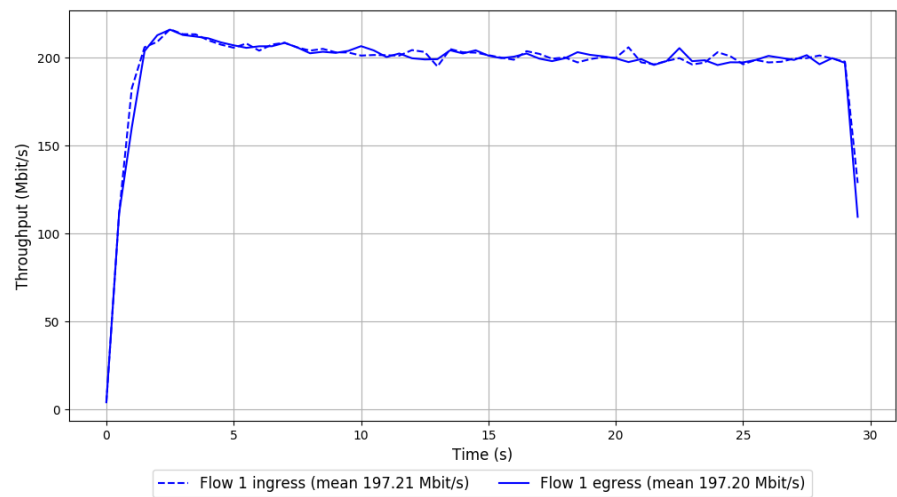
-- Flow 1:

Average throughput: 197.20 Mbit/s

95th percentile per-packet one-way delay: 49.412 ms

Loss rate: 0.35%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-10-11 00:26:36

End at: 2017-10-11 00:27:06

Below is generated by plot.py at 2017-10-11 03:19:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.62 Mbit/s

95th percentile per-packet one-way delay: 49.137 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 196.62 Mbit/s

95th percentile per-packet one-way delay: 49.137 ms

Loss rate: 0.35%

Run 10: Report of Indigo — Data Link

