

Pantheon Report

Generated at 2017-12-20 07:08:05 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

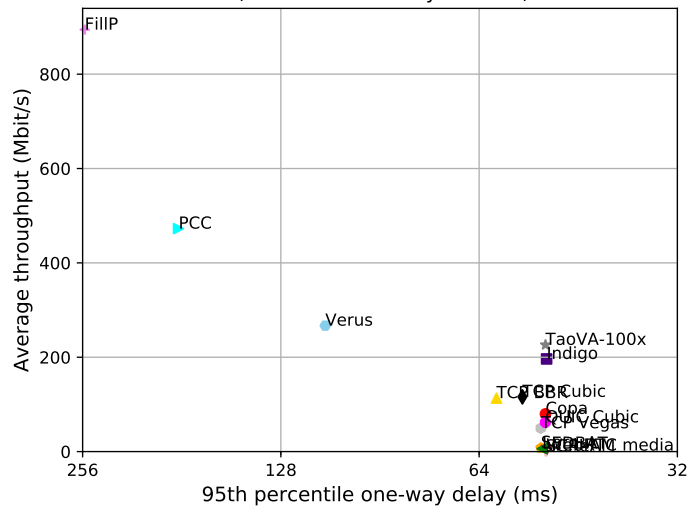
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

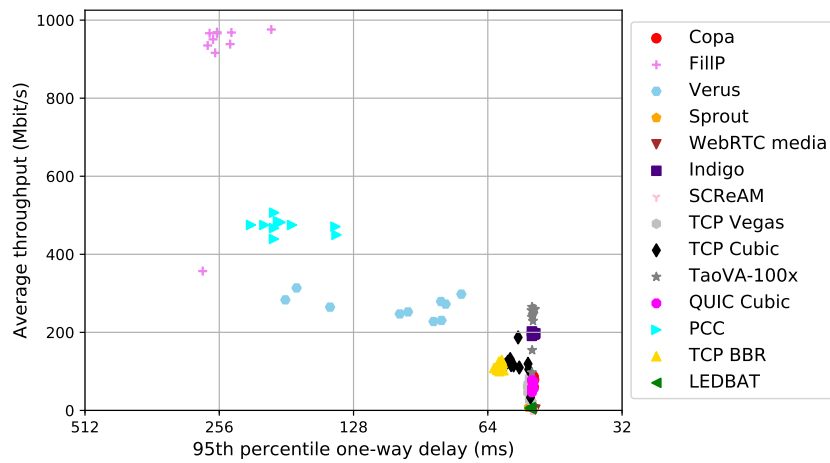
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	113.34	60.23	0.63
TCP Cubic	10	116.02	55.02	0.14
LEDBAT	10	6.12	51.35	1.09
PCC	10	472.55	183.03	0.92
QUIC Cubic	10	61.96	50.77	0.00
SCReAM	10	0.22	50.72	0.00
WebRTC media	4	2.14	50.62	0.01
Sprout	10	7.84	51.58	0.58
TaoVA-100x	10	226.24	50.75	0.00
TCP Vegas	10	49.51	51.60	0.34
Verus	10	266.91	109.60	0.58
Copa	9	79.93	50.75	0.01
FillP	10	894.32	254.15	2.33
Indigo	10	196.41	50.55	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-12-20 03:13:41

End at: 2017-12-20 03:14:11

Below is generated by plot.py at 2017-12-20 06:11:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 104.07 Mbit/s

95th percentile per-packet one-way delay: 61.066 ms

Loss rate: 0.31%

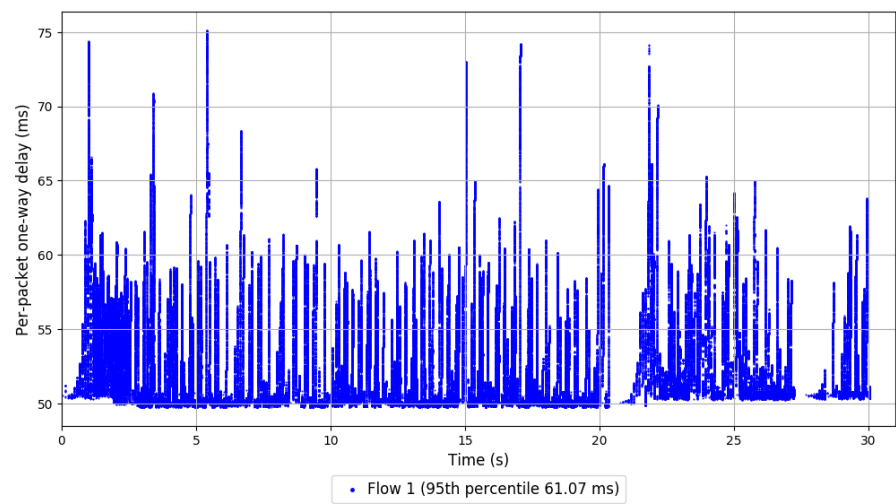
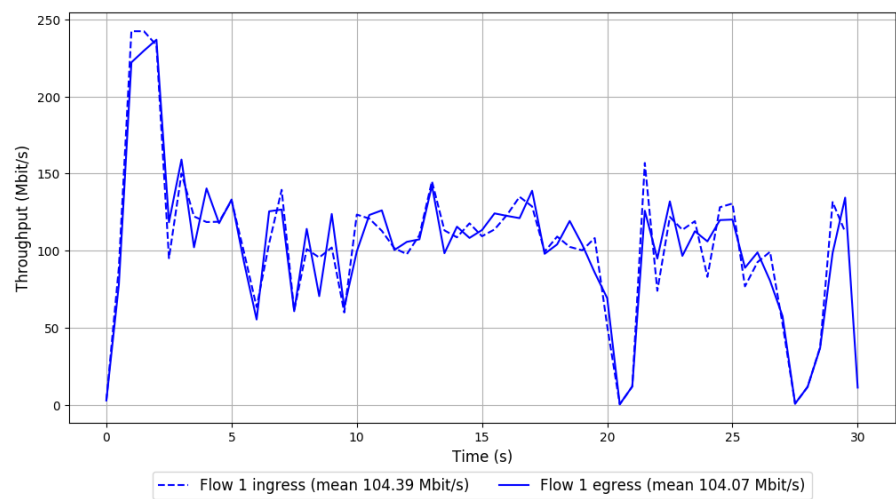
-- Flow 1:

Average throughput: 104.07 Mbit/s

95th percentile per-packet one-way delay: 61.066 ms

Loss rate: 0.31%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-20 03:24:55

End at: 2017-12-20 03:25:25

Below is generated by plot.py at 2017-12-20 06:11:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.49 Mbit/s

95th percentile per-packet one-way delay: 60.339 ms

Loss rate: 0.80%

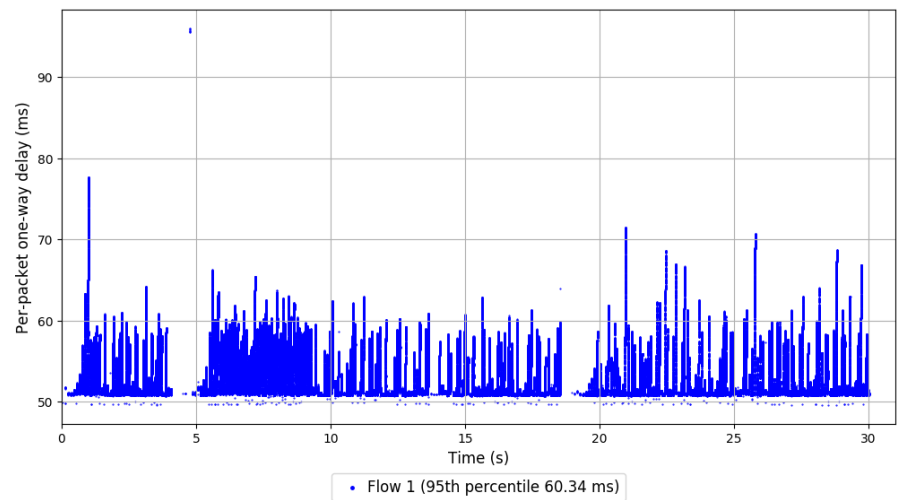
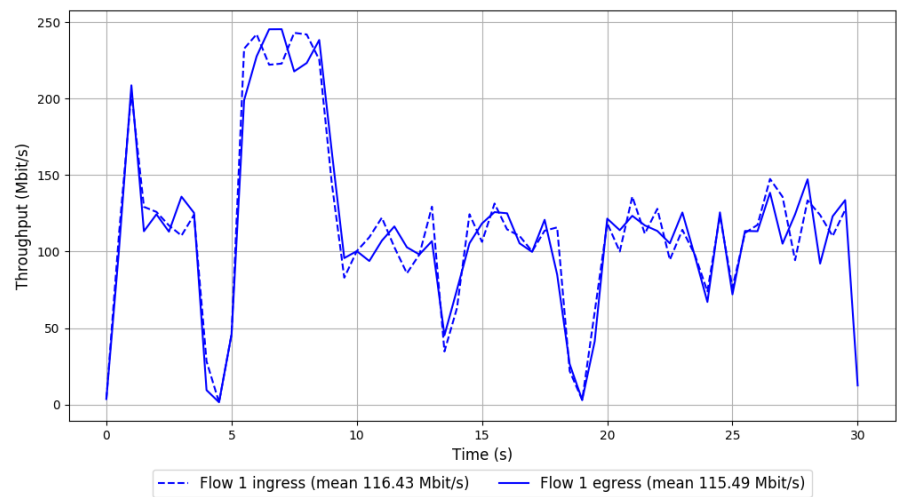
-- Flow 1:

Average throughput: 115.49 Mbit/s

95th percentile per-packet one-way delay: 60.339 ms

Loss rate: 0.80%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-20 03:36:21

End at: 2017-12-20 03:36:51

Below is generated by plot.py at 2017-12-20 06:11:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 125.01 Mbit/s

95th percentile per-packet one-way delay: 60.420 ms

Loss rate: 1.47%

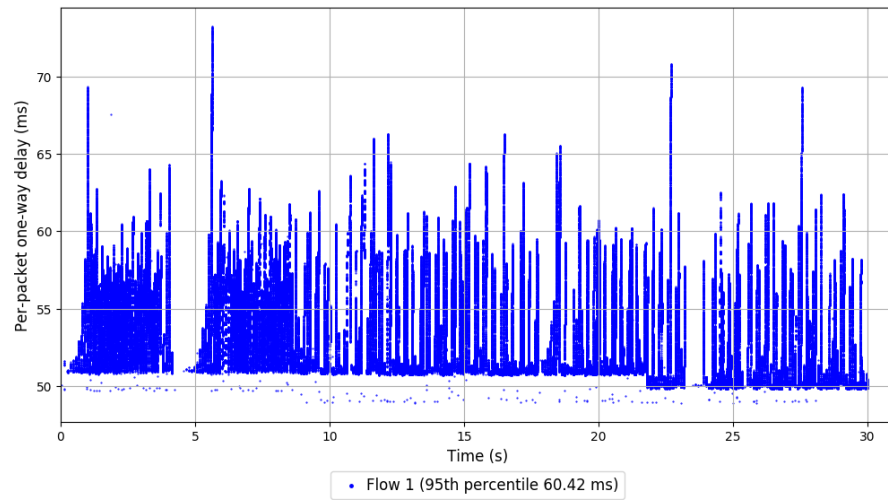
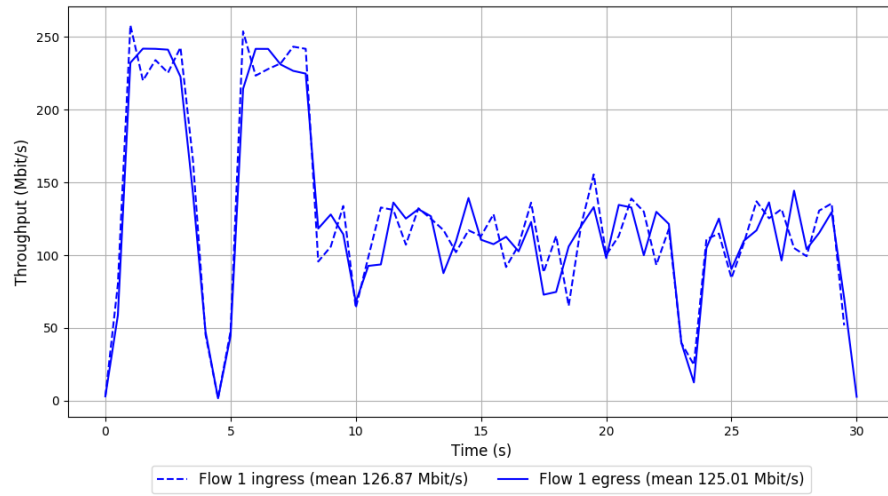
-- Flow 1:

Average throughput: 125.01 Mbit/s

95th percentile per-packet one-way delay: 60.420 ms

Loss rate: 1.47%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-20 03:47:57

End at: 2017-12-20 03:48:27

Below is generated by plot.py at 2017-12-20 06:11:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.75 Mbit/s

95th percentile per-packet one-way delay: 59.482 ms

Loss rate: 0.00%

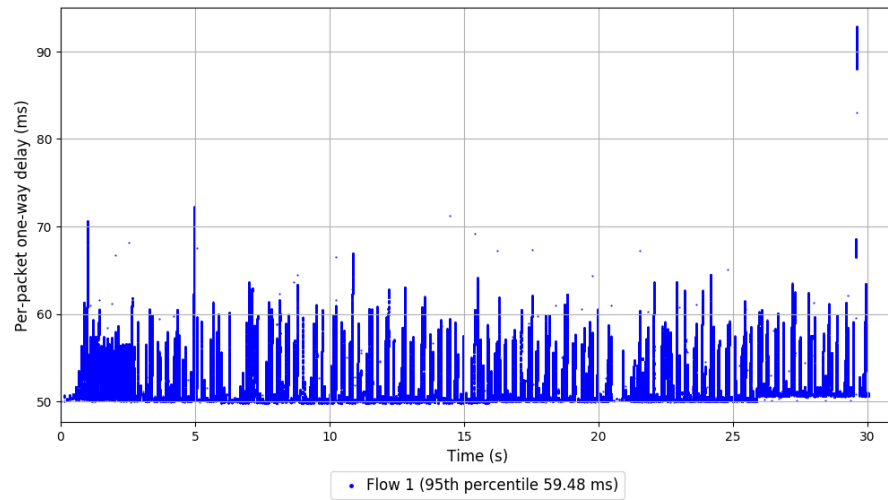
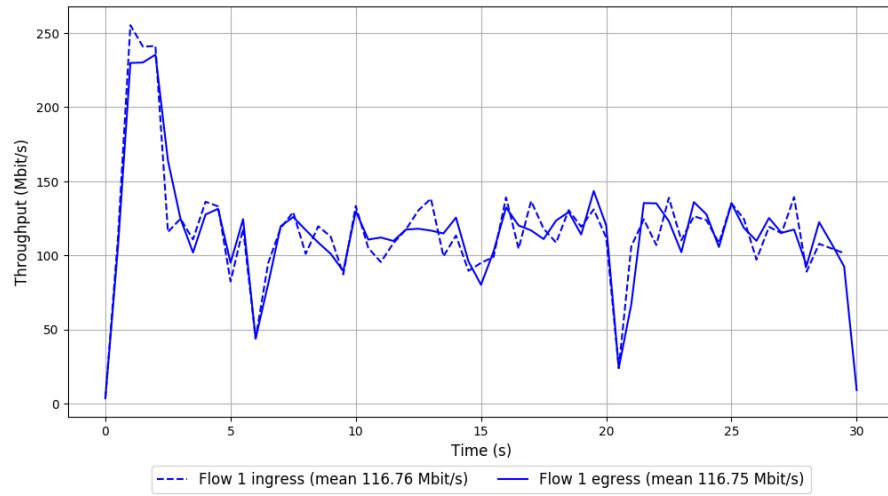
-- Flow 1:

Average throughput: 116.75 Mbit/s

95th percentile per-packet one-way delay: 59.482 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-20 03:59:44

End at: 2017-12-20 04:00:14

Below is generated by plot.py at 2017-12-20 06:11:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 129.55 Mbit/s

95th percentile per-packet one-way delay: 59.586 ms

Loss rate: 0.13%

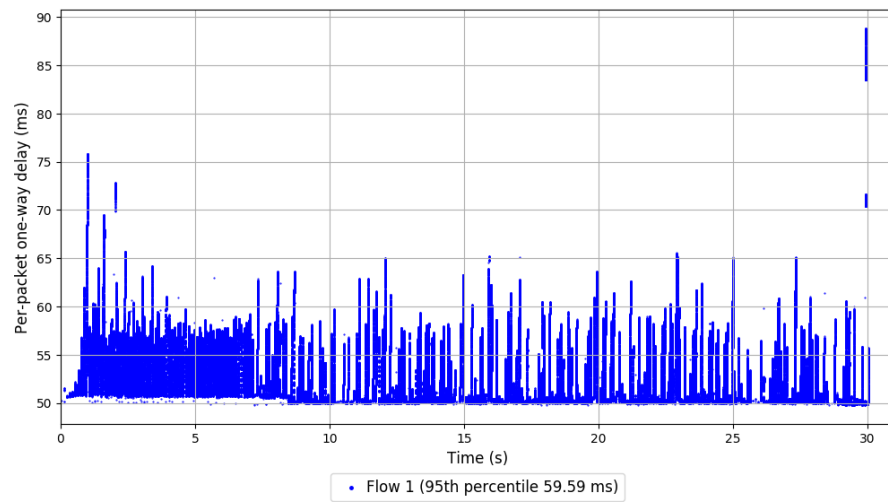
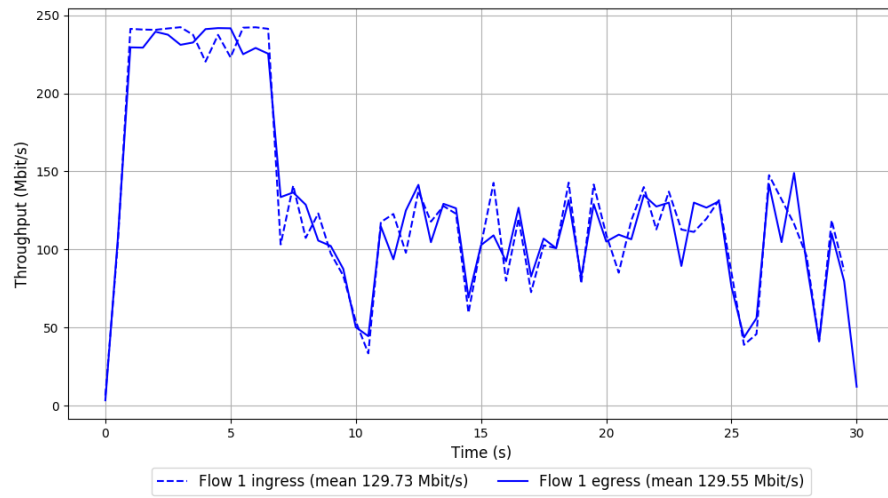
-- Flow 1:

Average throughput: 129.55 Mbit/s

95th percentile per-packet one-way delay: 59.586 ms

Loss rate: 0.13%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-20 04:11:27

End at: 2017-12-20 04:11:57

Below is generated by plot.py at 2017-12-20 06:11:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.79 Mbit/s

95th percentile per-packet one-way delay: 61.945 ms

Loss rate: 0.98%

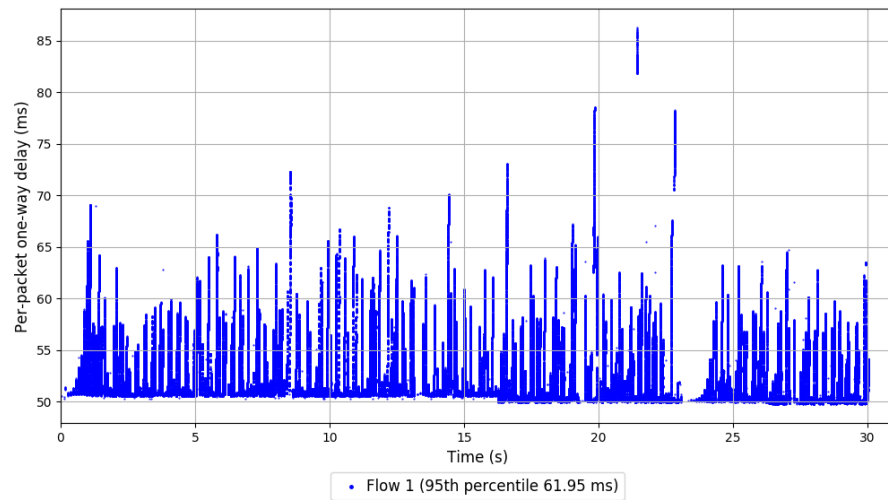
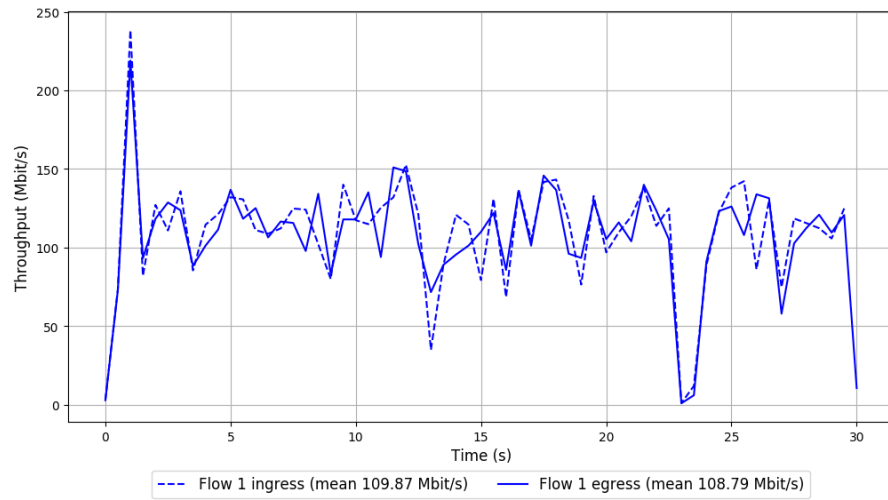
-- Flow 1:

Average throughput: 108.79 Mbit/s

95th percentile per-packet one-way delay: 61.945 ms

Loss rate: 0.98%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-20 04:23:08

End at: 2017-12-20 04:23:38

Below is generated by plot.py at 2017-12-20 06:11:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.04 Mbit/s

95th percentile per-packet one-way delay: 59.278 ms

Loss rate: 0.50%

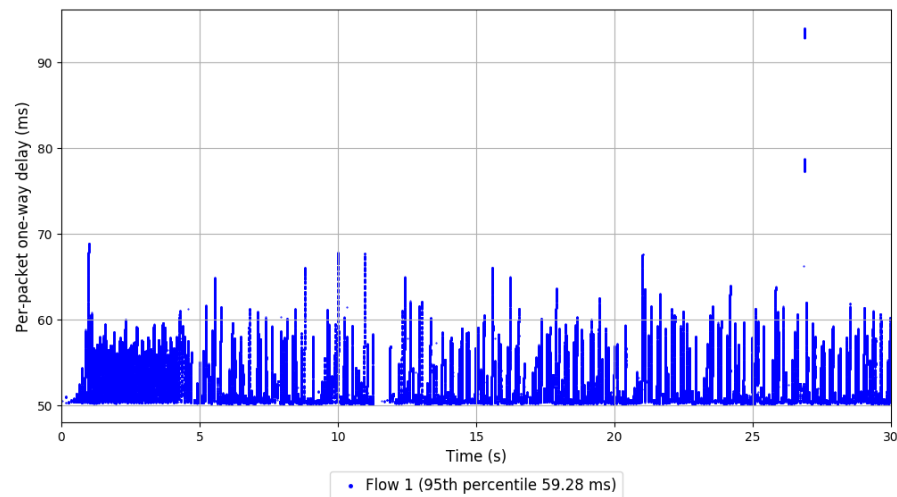
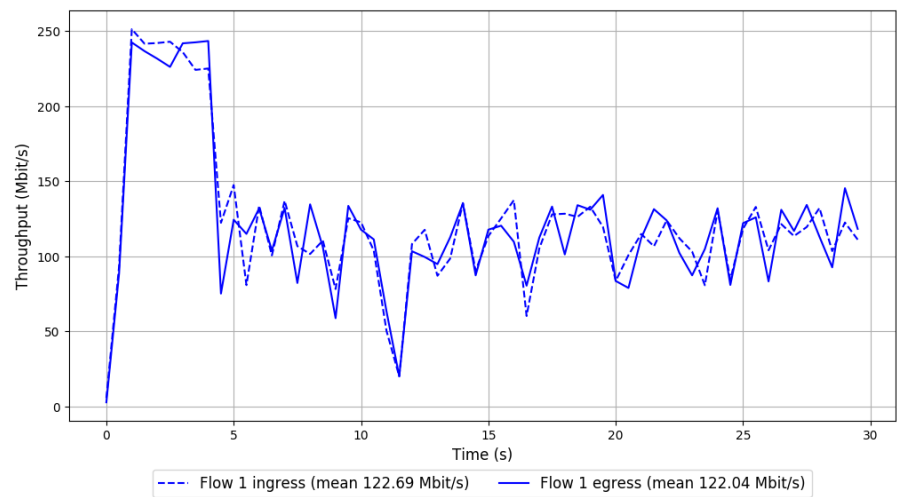
-- Flow 1:

Average throughput: 122.04 Mbit/s

95th percentile per-packet one-way delay: 59.278 ms

Loss rate: 0.50%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-20 04:34:39

End at: 2017-12-20 04:35:09

Below is generated by plot.py at 2017-12-20 06:11:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.42 Mbit/s

95th percentile per-packet one-way delay: 60.858 ms

Loss rate: 0.38%

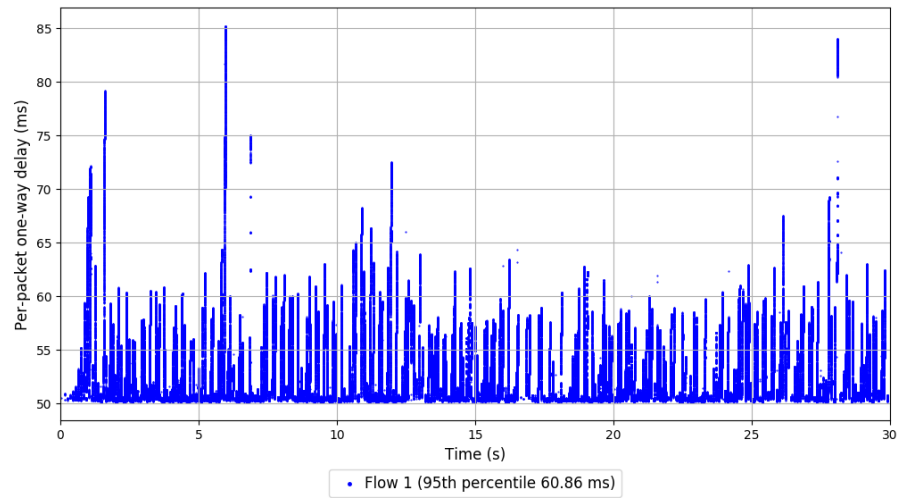
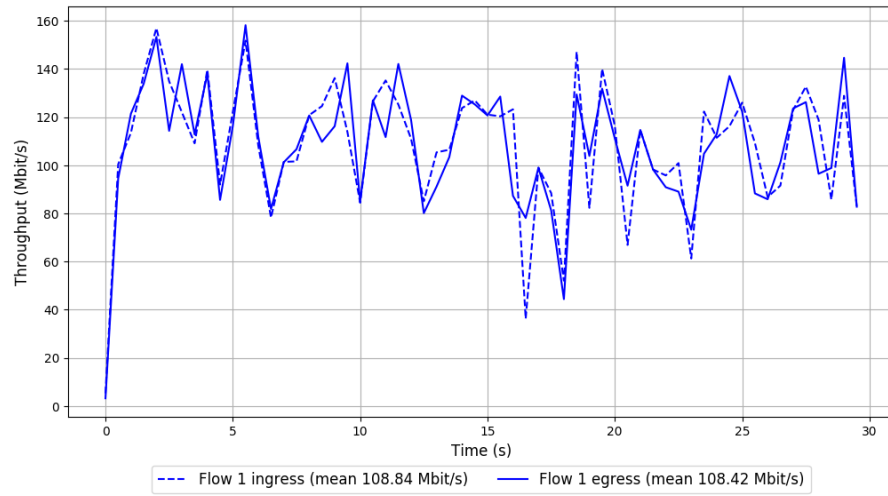
-- Flow 1:

Average throughput: 108.42 Mbit/s

95th percentile per-packet one-way delay: 60.858 ms

Loss rate: 0.38%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-20 04:46:17

End at: 2017-12-20 04:46:47

Below is generated by plot.py at 2017-12-20 06:13:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.49 Mbit/s

95th percentile per-packet one-way delay: 60.333 ms

Loss rate: 0.56%

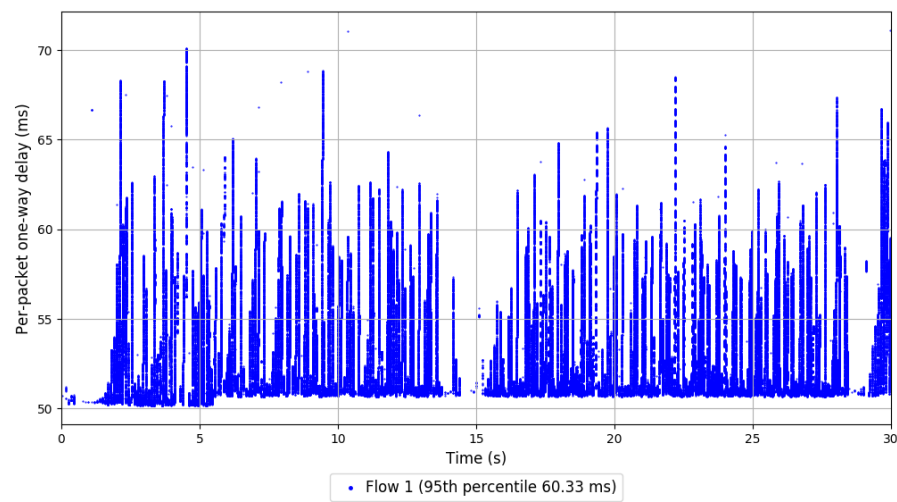
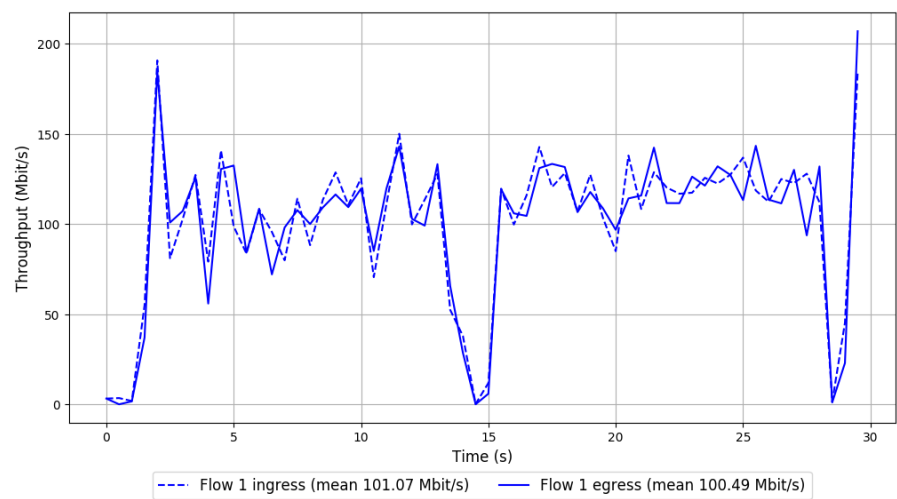
-- Flow 1:

Average throughput: 100.49 Mbit/s

95th percentile per-packet one-way delay: 60.333 ms

Loss rate: 0.56%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-20 04:57:48

End at: 2017-12-20 04:58:18

Below is generated by plot.py at 2017-12-20 06:13:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.80 Mbit/s

95th percentile per-packet one-way delay: 59.022 ms

Loss rate: 1.20%

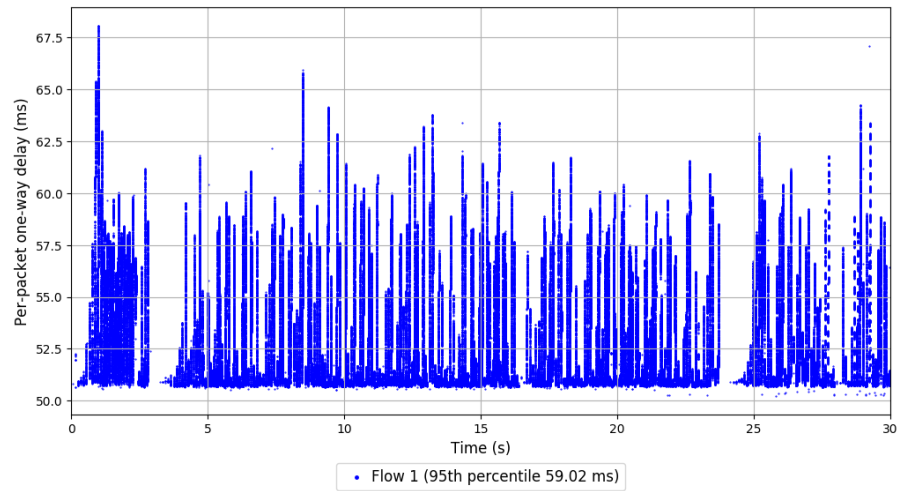
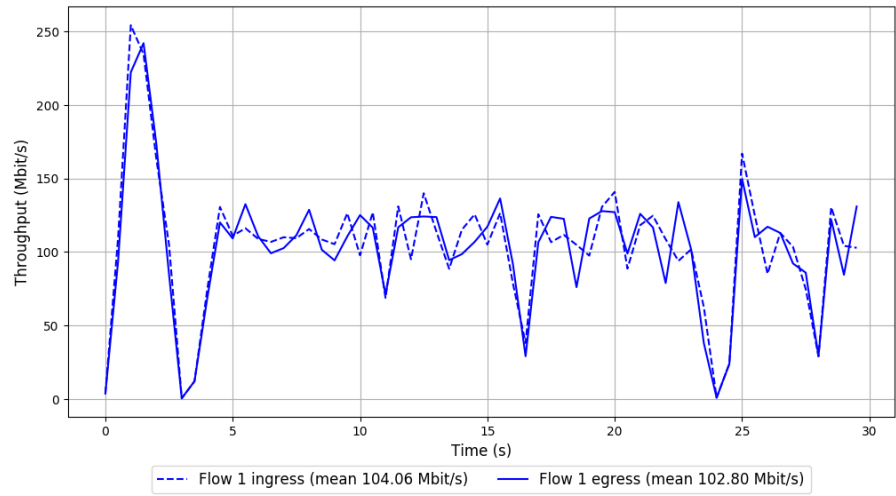
-- Flow 1:

Average throughput: 102.80 Mbit/s

95th percentile per-packet one-way delay: 59.022 ms

Loss rate: 1.20%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-20 03:10:58

End at: 2017-12-20 03:11:28

Below is generated by plot.py at 2017-12-20 06:13:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.27 Mbit/s

95th percentile per-packet one-way delay: 51.327 ms

Loss rate: 0.10%

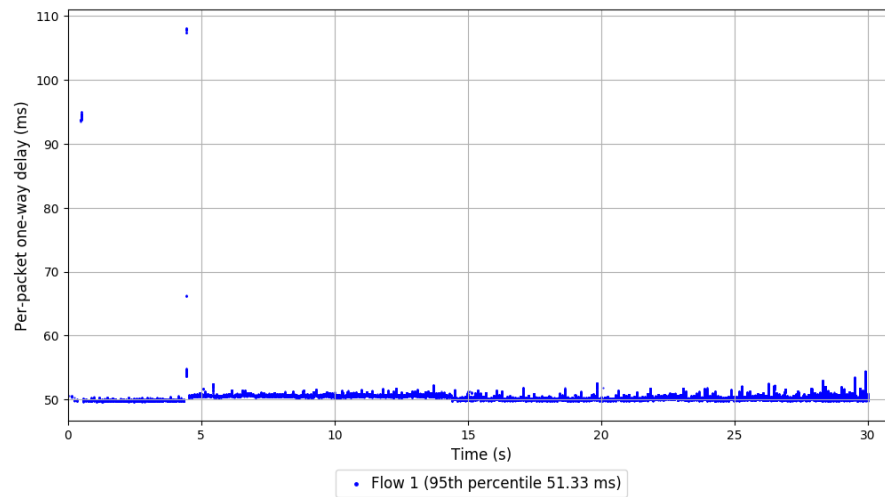
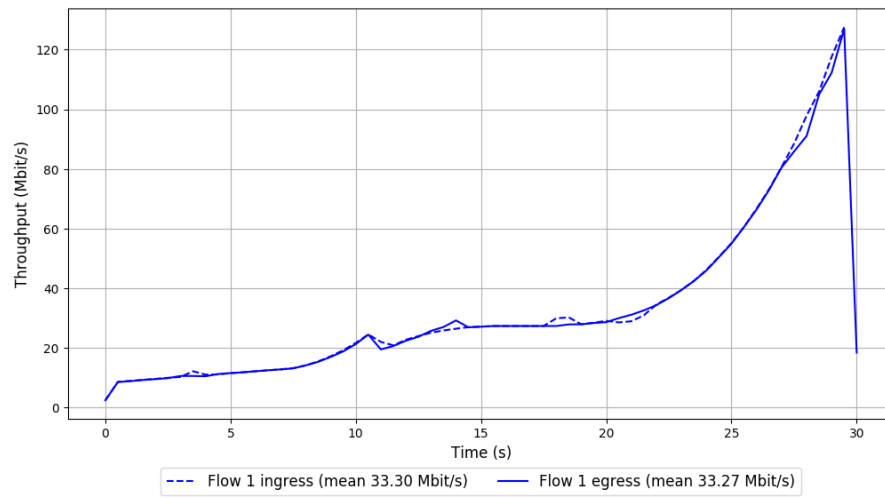
-- Flow 1:

Average throughput: 33.27 Mbit/s

95th percentile per-packet one-way delay: 51.327 ms

Loss rate: 0.10%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-20 03:22:08

End at: 2017-12-20 03:22:38

Below is generated by plot.py at 2017-12-20 06:13:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.70 Mbit/s

95th percentile per-packet one-way delay: 58.401 ms

Loss rate: 0.27%

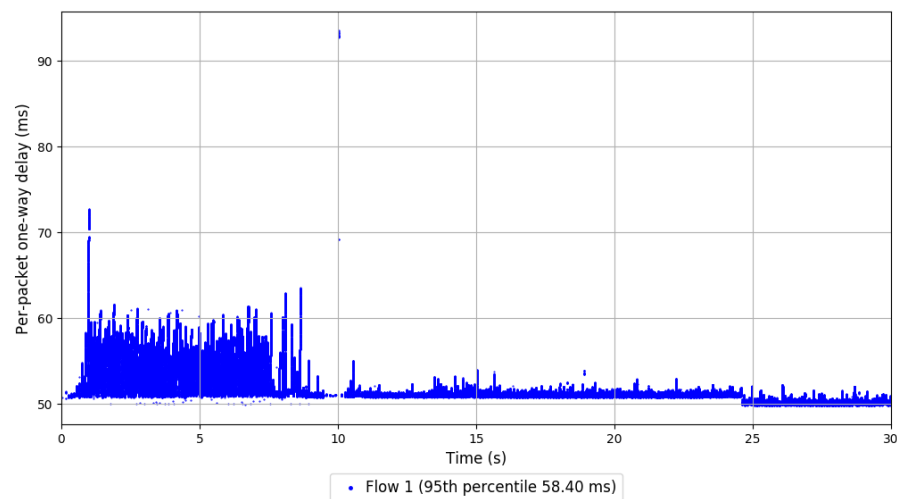
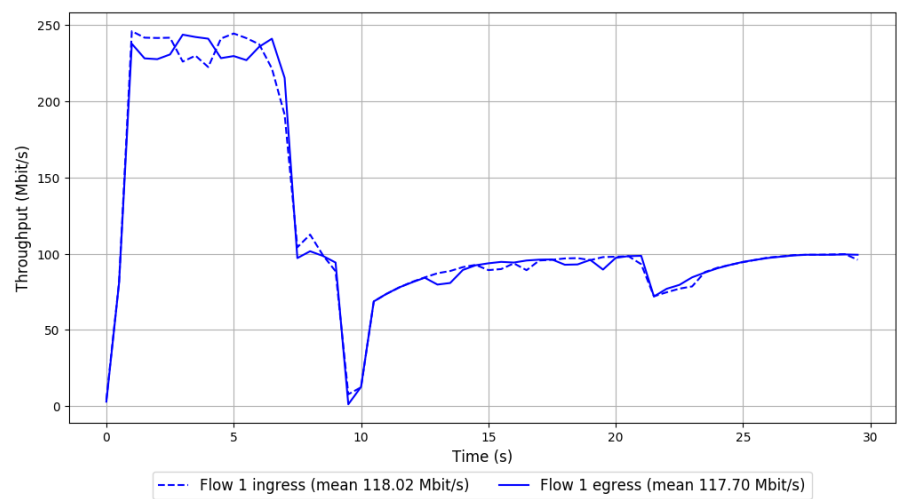
-- Flow 1:

Average throughput: 117.70 Mbit/s

95th percentile per-packet one-way delay: 58.401 ms

Loss rate: 0.27%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-20 03:33:33

End at: 2017-12-20 03:34:03

Below is generated by plot.py at 2017-12-20 06:13:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 131.55 Mbit/s

95th percentile per-packet one-way delay: 57.008 ms

Loss rate: 0.36%

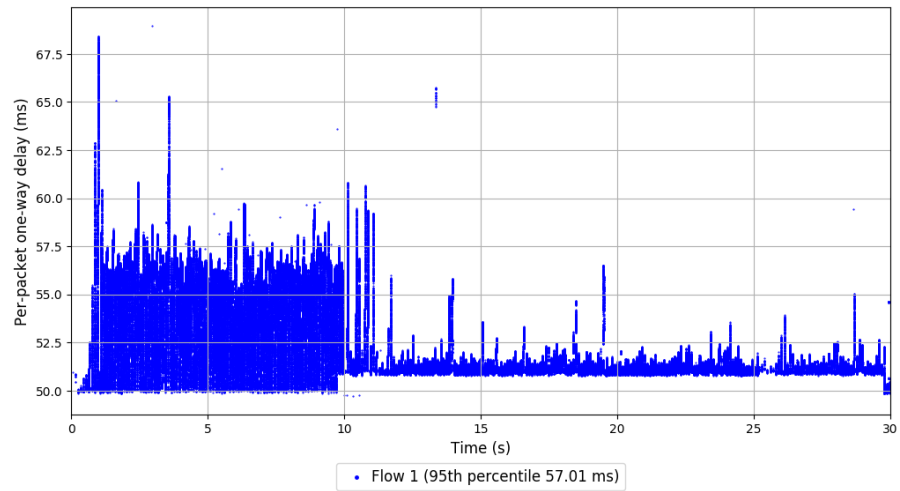
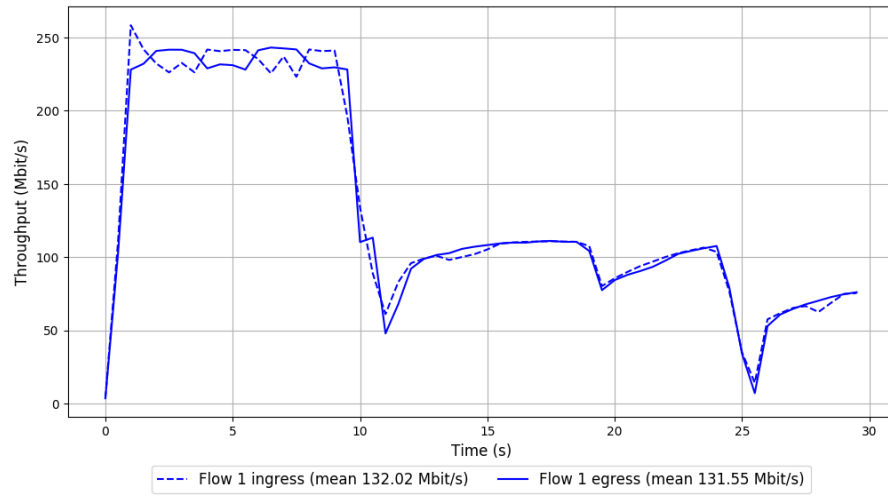
-- Flow 1:

Average throughput: 131.55 Mbit/s

95th percentile per-packet one-way delay: 57.008 ms

Loss rate: 0.36%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-20 03:45:10

End at: 2017-12-20 03:45:40

Below is generated by plot.py at 2017-12-20 06:13:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.36 Mbit/s

95th percentile per-packet one-way delay: 56.025 ms

Loss rate: 0.00%

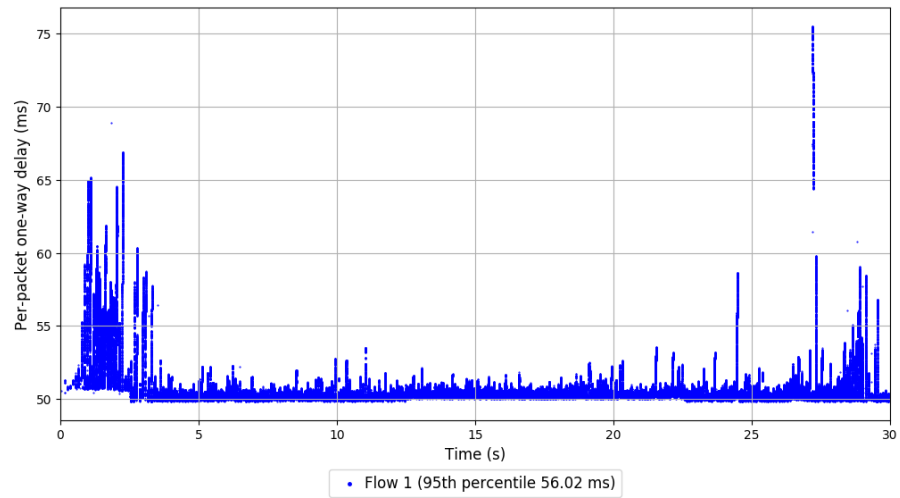
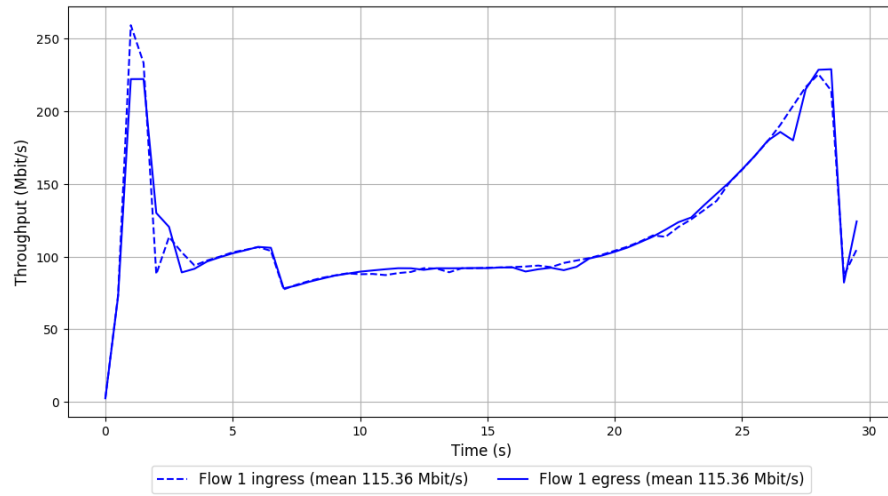
-- Flow 1:

Average throughput: 115.36 Mbit/s

95th percentile per-packet one-way delay: 56.025 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-20 03:56:57

End at: 2017-12-20 03:57:27

Below is generated by plot.py at 2017-12-20 06:13:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.40 Mbit/s

95th percentile per-packet one-way delay: 51.994 ms

Loss rate: 0.01%

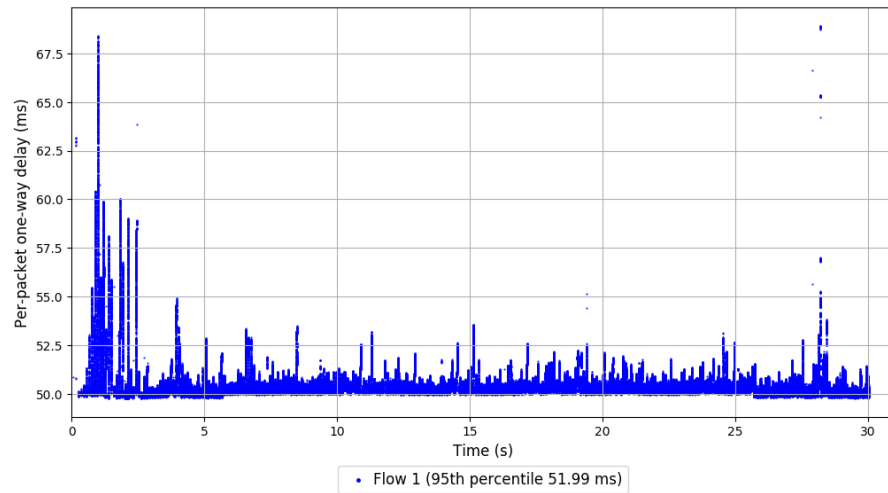
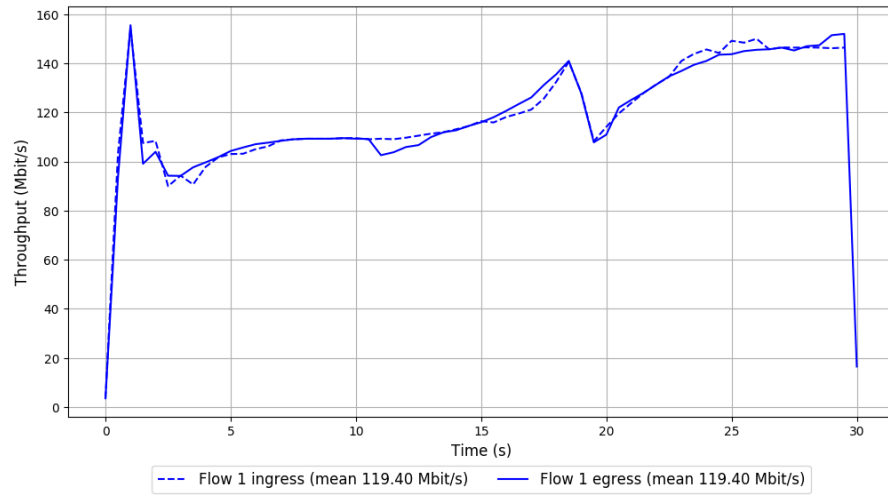
-- Flow 1:

Average throughput: 119.40 Mbit/s

95th percentile per-packet one-way delay: 51.994 ms

Loss rate: 0.01%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-20 04:08:39

End at: 2017-12-20 04:09:09

Below is generated by plot.py at 2017-12-20 06:13:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 124.75 Mbit/s

95th percentile per-packet one-way delay: 57.717 ms

Loss rate: 0.26%

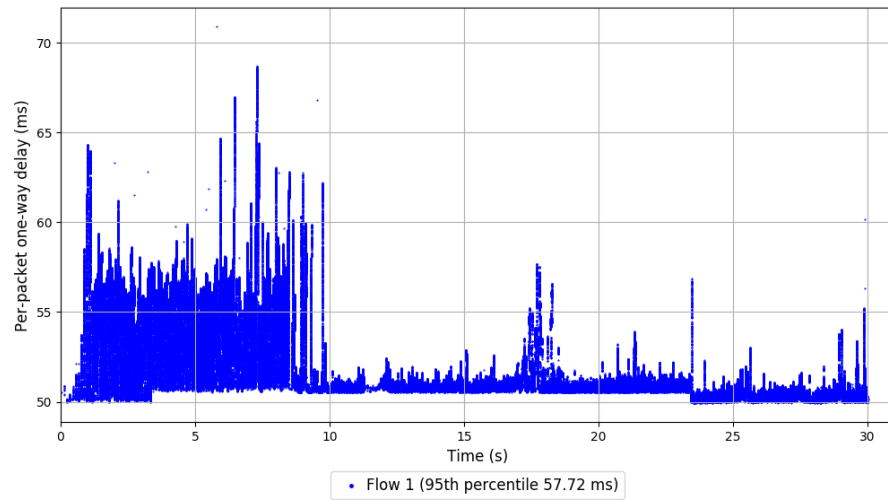
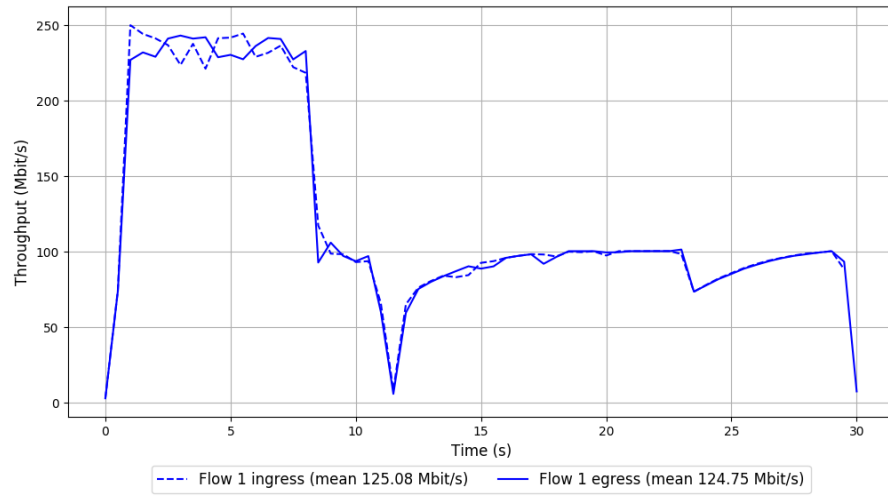
-- Flow 1:

Average throughput: 124.75 Mbit/s

95th percentile per-packet one-way delay: 57.717 ms

Loss rate: 0.26%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-20 04:20:18

End at: 2017-12-20 04:20:48

Below is generated by plot.py at 2017-12-20 06:15:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.99 Mbit/s

95th percentile per-packet one-way delay: 54.721 ms

Loss rate: 0.01%

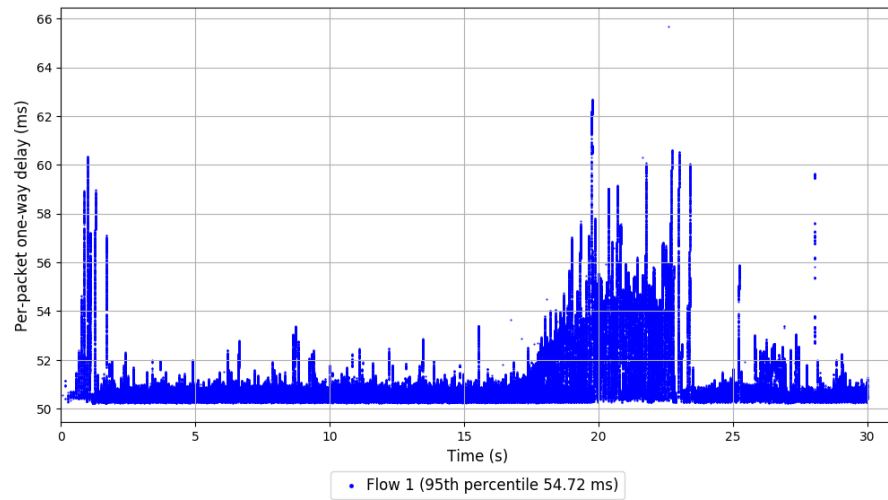
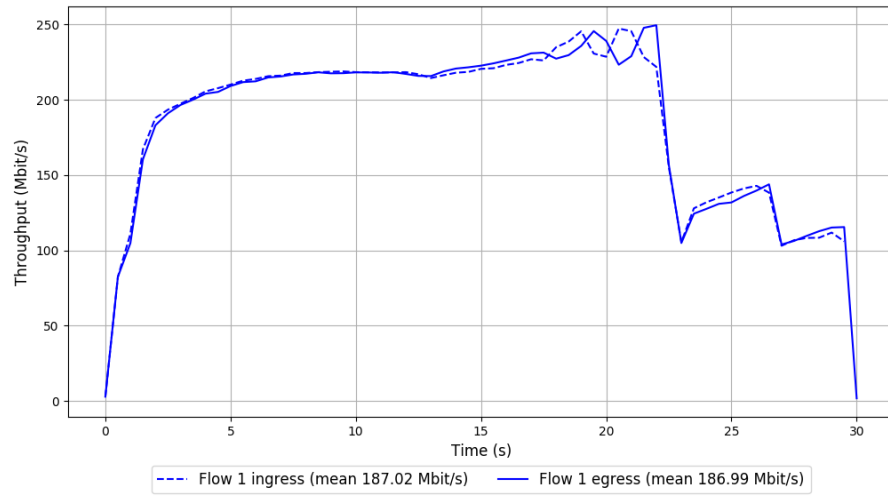
-- Flow 1:

Average throughput: 186.99 Mbit/s

95th percentile per-packet one-way delay: 54.721 ms

Loss rate: 0.01%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-20 04:31:53

End at: 2017-12-20 04:32:23

Below is generated by plot.py at 2017-12-20 06:15:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.15 Mbit/s

95th percentile per-packet one-way delay: 56.743 ms

Loss rate: 0.00%

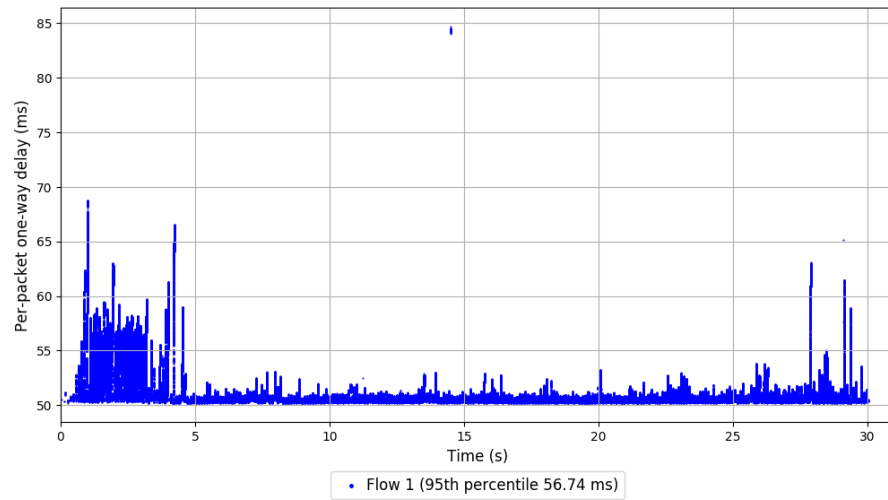
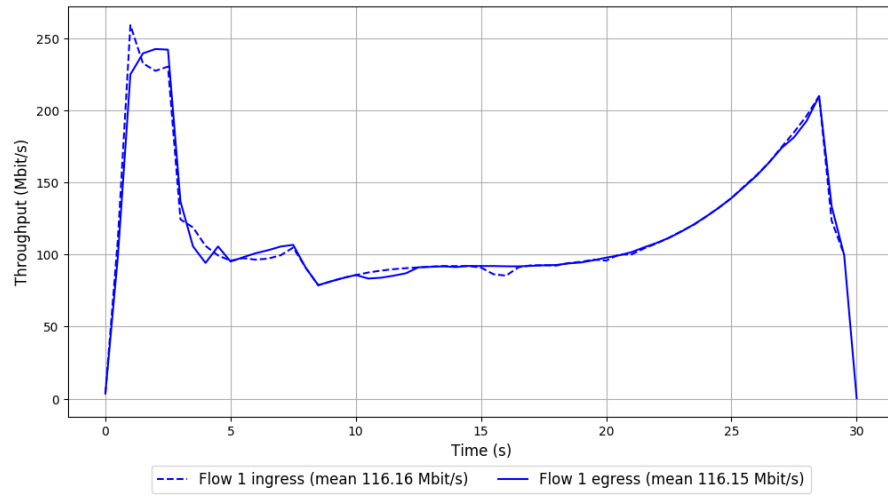
-- Flow 1:

Average throughput: 116.15 Mbit/s

95th percentile per-packet one-way delay: 56.743 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-20 04:43:31

End at: 2017-12-20 04:44:01

Below is generated by plot.py at 2017-12-20 06:15:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.08 Mbit/s

95th percentile per-packet one-way delay: 51.825 ms

Loss rate: 0.01%

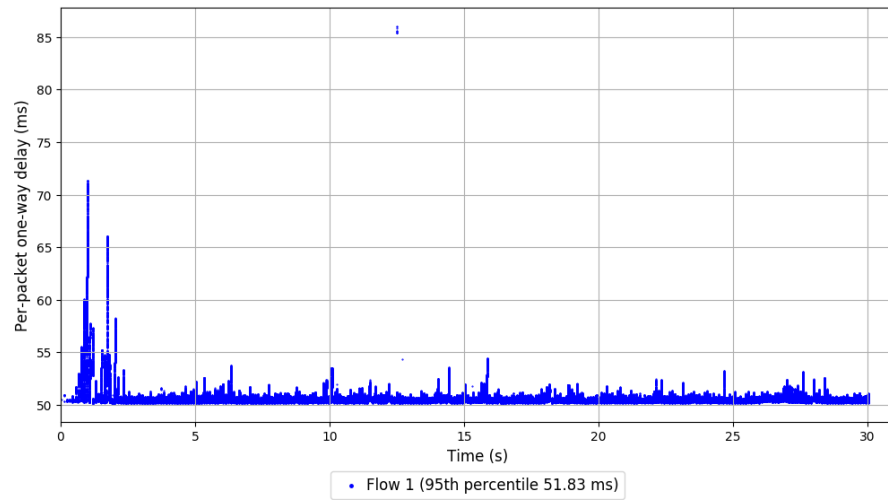
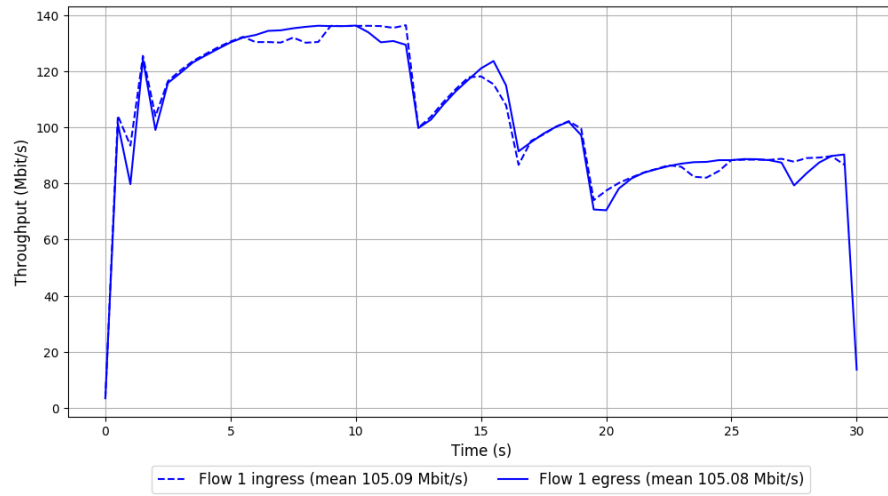
-- Flow 1:

Average throughput: 105.08 Mbit/s

95th percentile per-packet one-way delay: 51.825 ms

Loss rate: 0.01%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-20 04:55:02

End at: 2017-12-20 04:55:32

Below is generated by plot.py at 2017-12-20 06:15:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.93 Mbit/s

95th percentile per-packet one-way delay: 54.393 ms

Loss rate: 0.35%

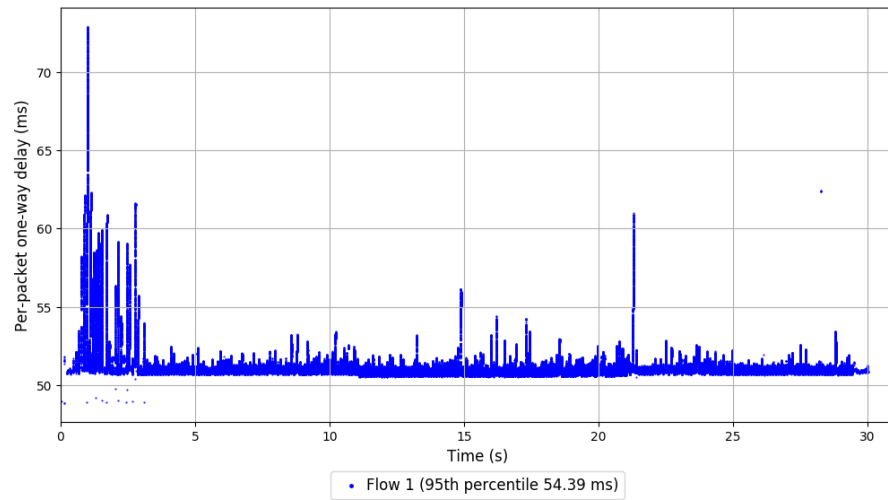
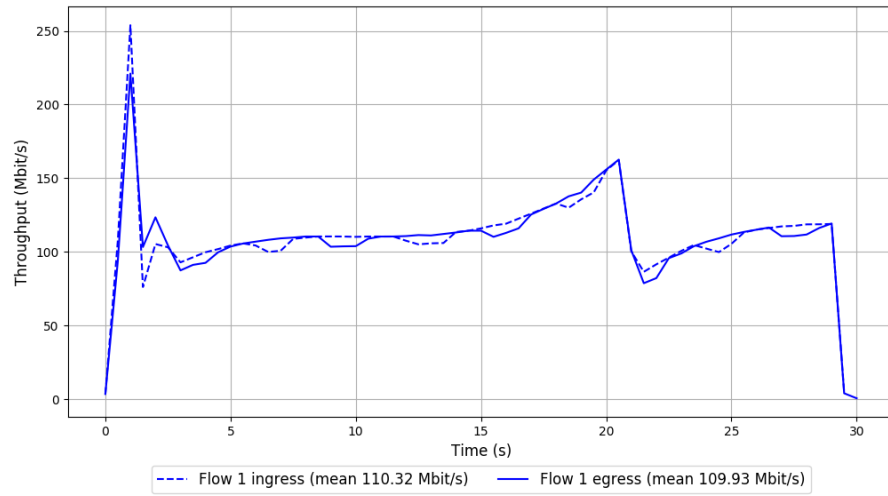
-- Flow 1:

Average throughput: 109.93 Mbit/s

95th percentile per-packet one-way delay: 54.393 ms

Loss rate: 0.35%

Run 10: Report of TCP Cubic — Data Link

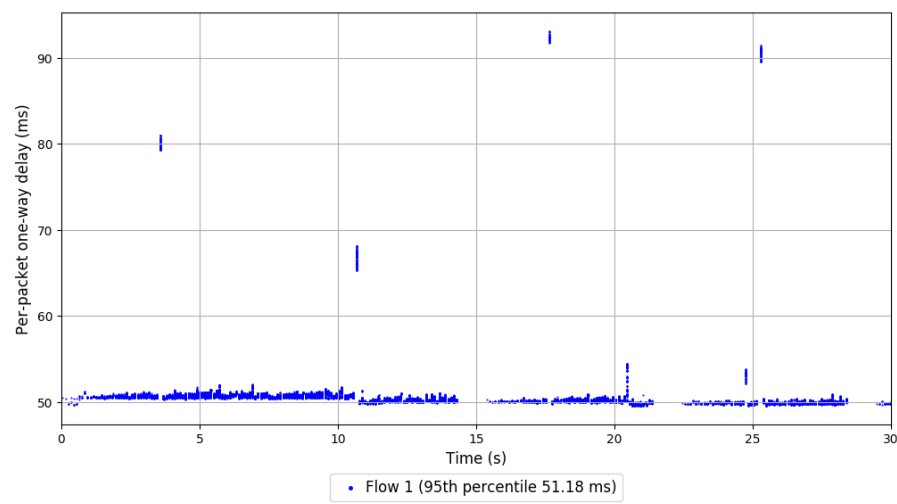
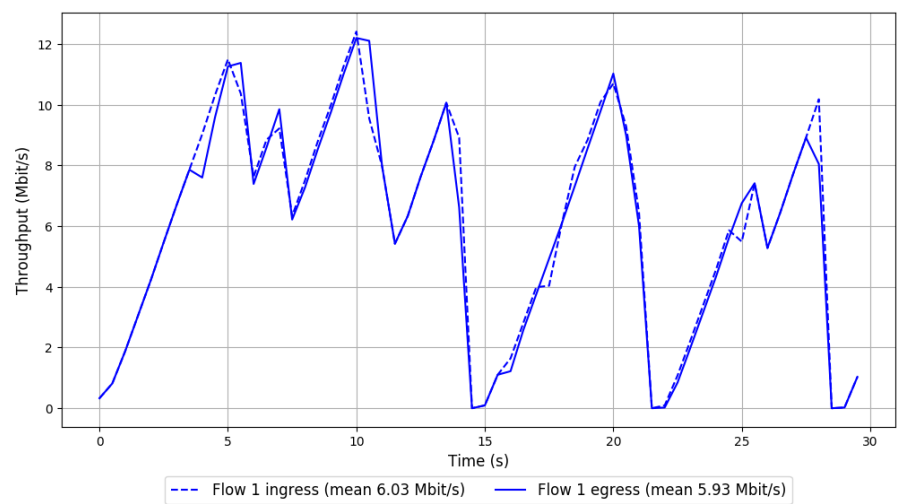


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-20 03:05:12
End at: 2017-12-20 03:05:42

# Below is generated by plot.py at 2017-12-20 06:15:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.93 Mbit/s
95th percentile per-packet one-way delay: 51.179 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 5.93 Mbit/s
95th percentile per-packet one-way delay: 51.179 ms
Loss rate: 1.68%
```


Run 1: Report of LEDBAT — Data Link

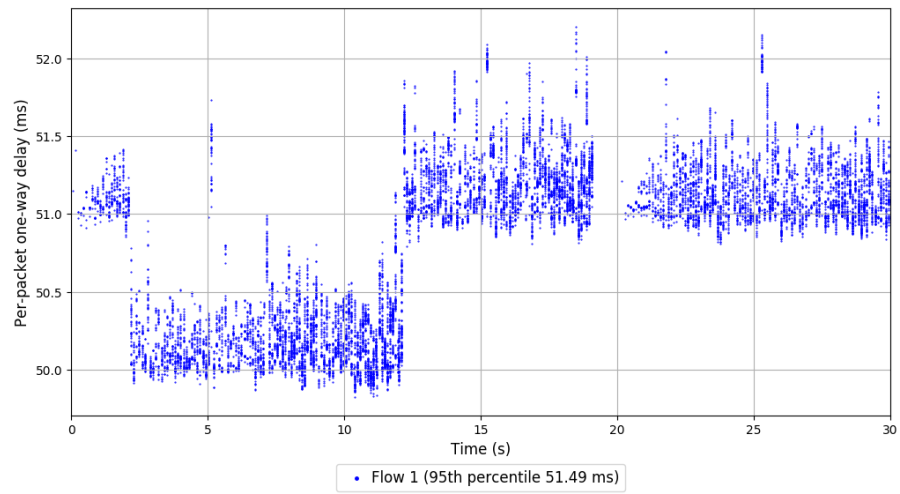
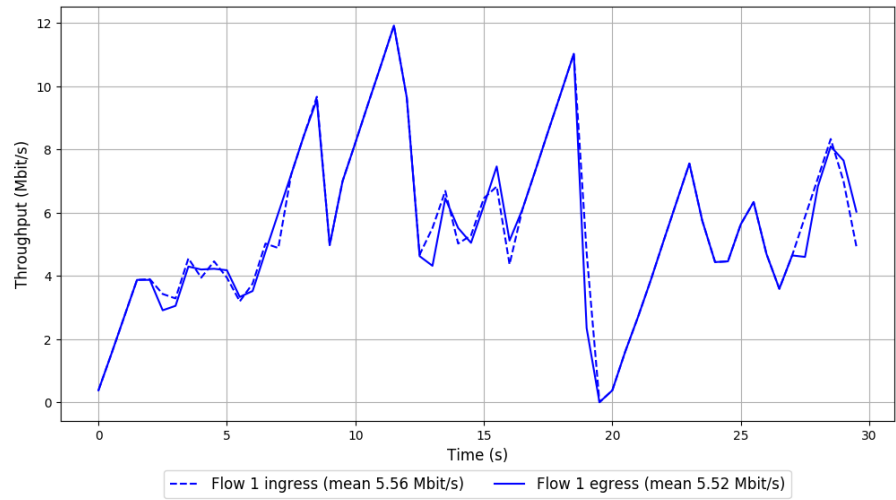


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-20 03:16:51
End at: 2017-12-20 03:17:21

# Below is generated by plot.py at 2017-12-20 06:15:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.52 Mbit/s
95th percentile per-packet one-way delay: 51.488 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 5.52 Mbit/s
95th percentile per-packet one-way delay: 51.488 ms
Loss rate: 0.78%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-20 03:28:07

End at: 2017-12-20 03:28:37

Below is generated by plot.py at 2017-12-20 06:15:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay: 51.227 ms

Loss rate: 0.62%

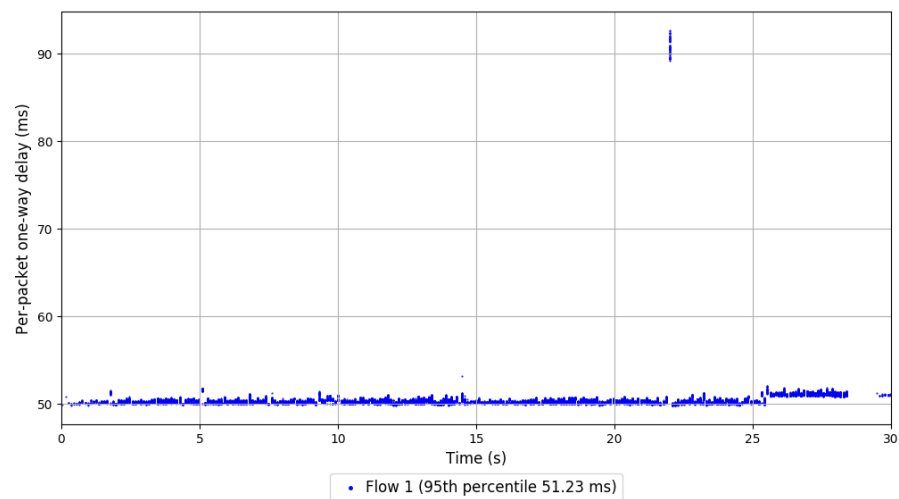
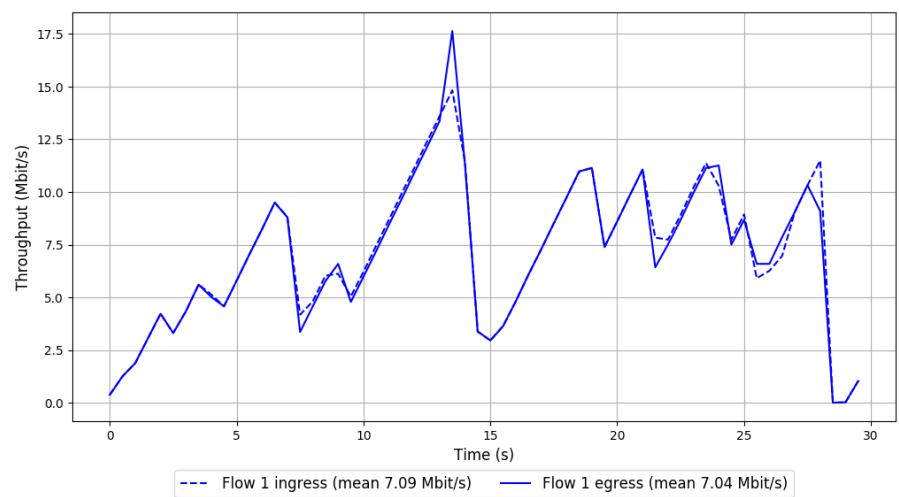
-- Flow 1:

Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay: 51.227 ms

Loss rate: 0.62%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-20 03:39:32

End at: 2017-12-20 03:40:02

Below is generated by plot.py at 2017-12-20 06:15:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 51.548 ms

Loss rate: 2.82%

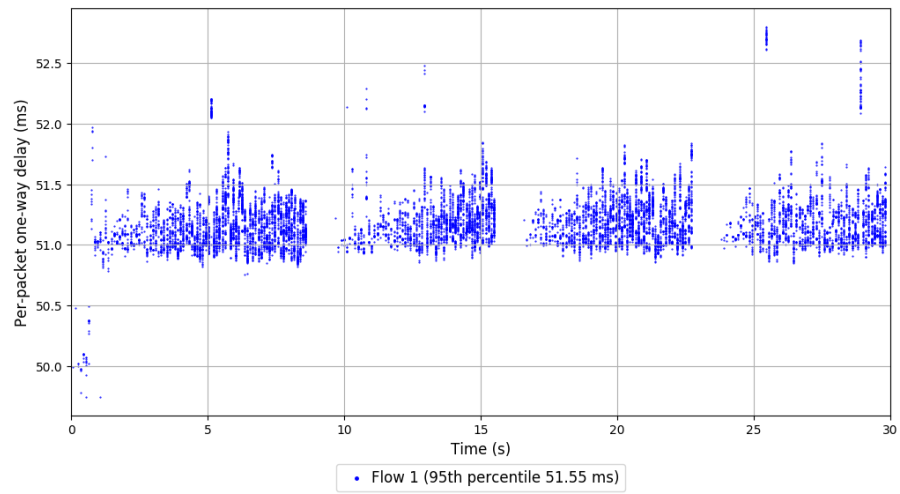
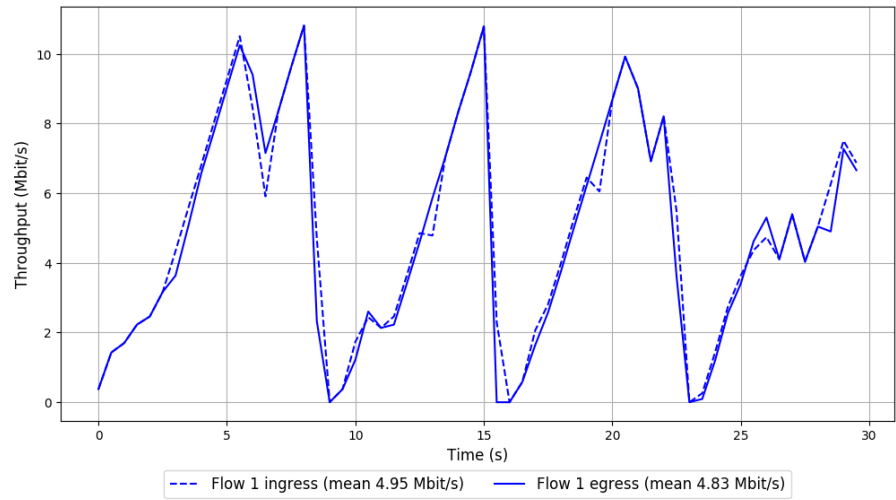
-- Flow 1:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 51.548 ms

Loss rate: 2.82%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-20 03:51:12

End at: 2017-12-20 03:51:42

Below is generated by plot.py at 2017-12-20 06:15:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.45 Mbit/s

95th percentile per-packet one-way delay: 51.264 ms

Loss rate: 0.54%

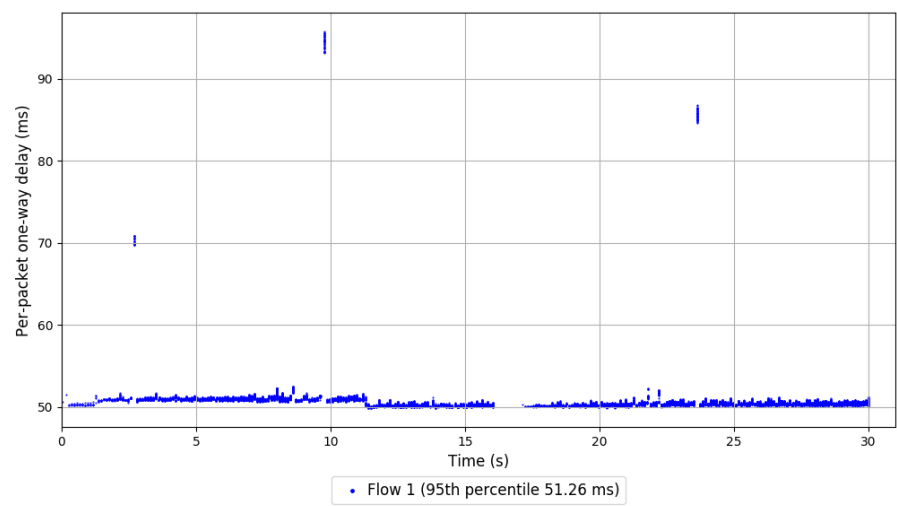
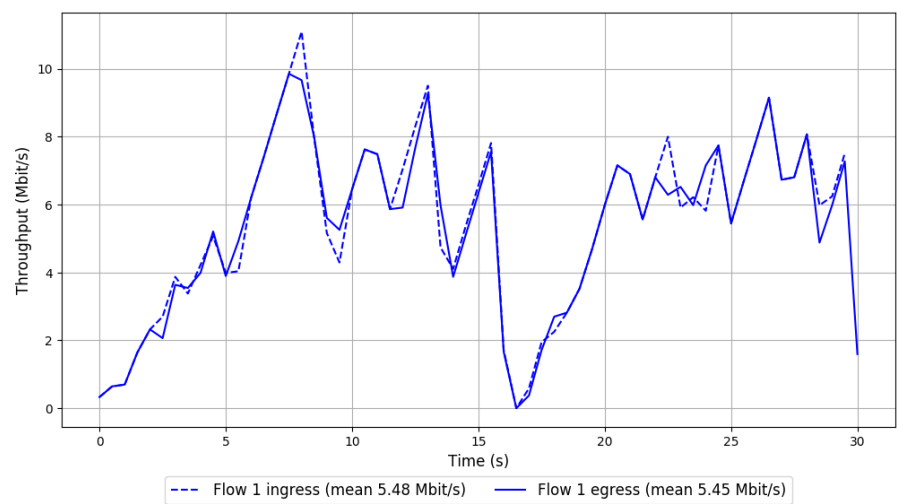
-- Flow 1:

Average throughput: 5.45 Mbit/s

95th percentile per-packet one-way delay: 51.264 ms

Loss rate: 0.54%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-20 04:02:52

End at: 2017-12-20 04:03:22

Below is generated by plot.py at 2017-12-20 06:15:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.85 Mbit/s

95th percentile per-packet one-way delay: 51.428 ms

Loss rate: 1.18%

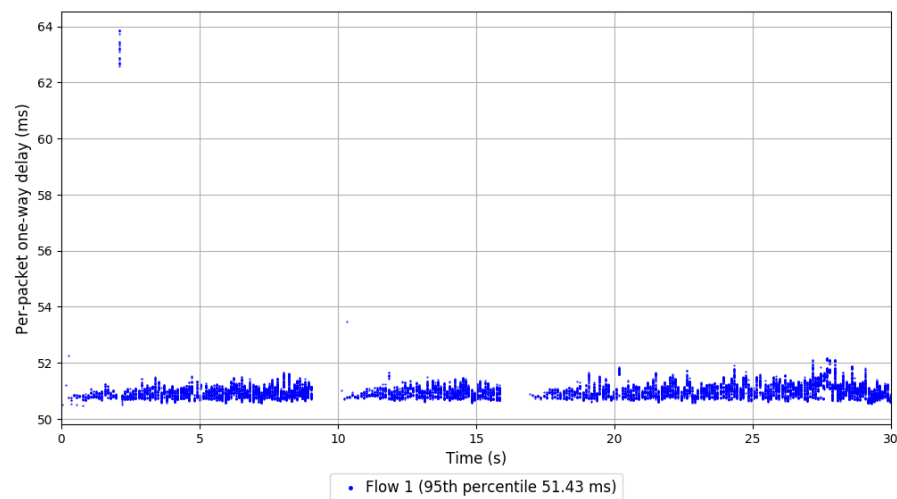
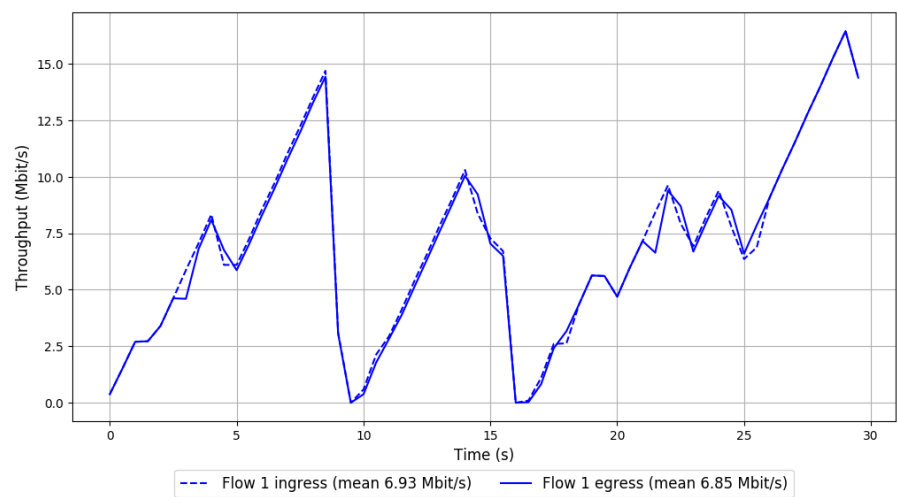
-- Flow 1:

Average throughput: 6.85 Mbit/s

95th percentile per-packet one-way delay: 51.428 ms

Loss rate: 1.18%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-20 04:14:35

End at: 2017-12-20 04:15:05

Below is generated by plot.py at 2017-12-20 06:15:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.75 Mbit/s

95th percentile per-packet one-way delay: 51.565 ms

Loss rate: 0.62%

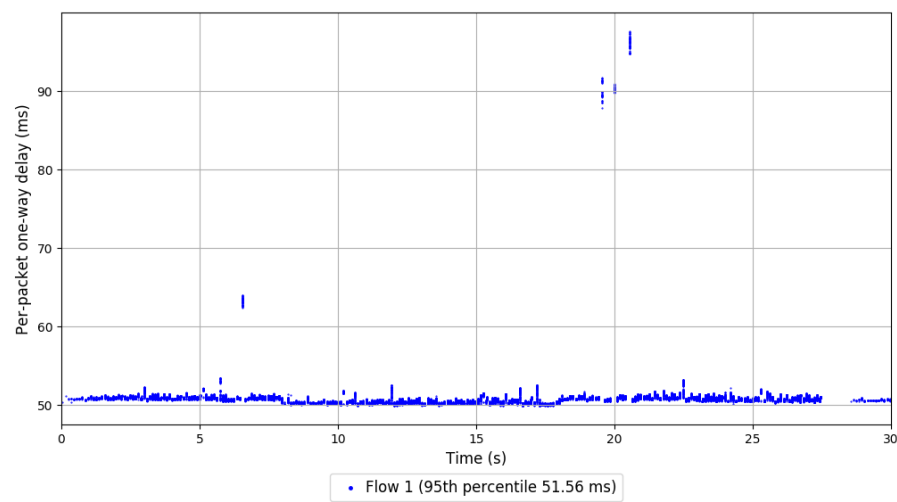
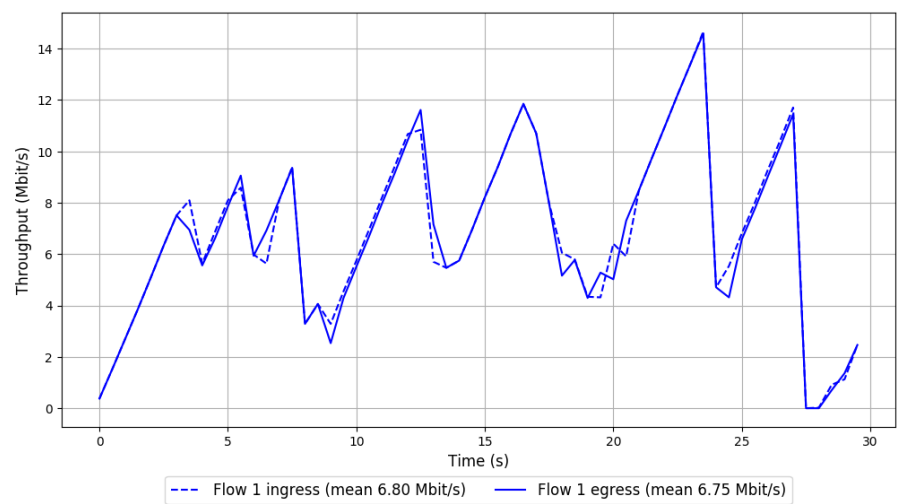
-- Flow 1:

Average throughput: 6.75 Mbit/s

95th percentile per-packet one-way delay: 51.565 ms

Loss rate: 0.62%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-20 04:26:10

End at: 2017-12-20 04:26:40

Below is generated by plot.py at 2017-12-20 06:15:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.85 Mbit/s

95th percentile per-packet one-way delay: 51.089 ms

Loss rate: 1.45%

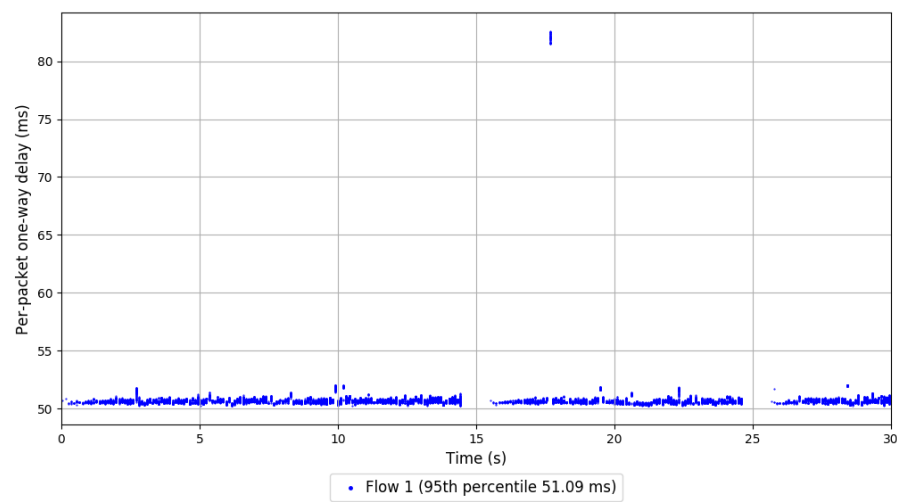
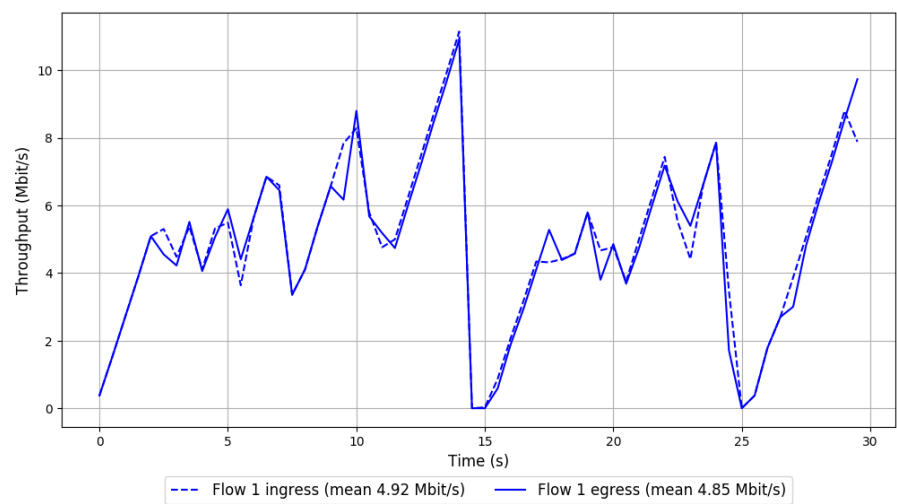
-- Flow 1:

Average throughput: 4.85 Mbit/s

95th percentile per-packet one-way delay: 51.089 ms

Loss rate: 1.45%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-20 04:37:49

End at: 2017-12-20 04:38:20

Below is generated by plot.py at 2017-12-20 06:15:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.31 Mbit/s

95th percentile per-packet one-way delay: 51.251 ms

Loss rate: 0.62%

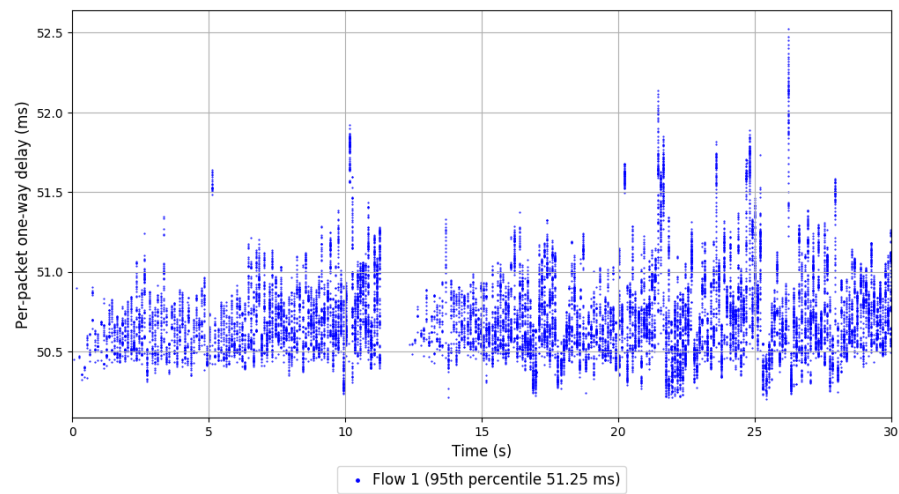
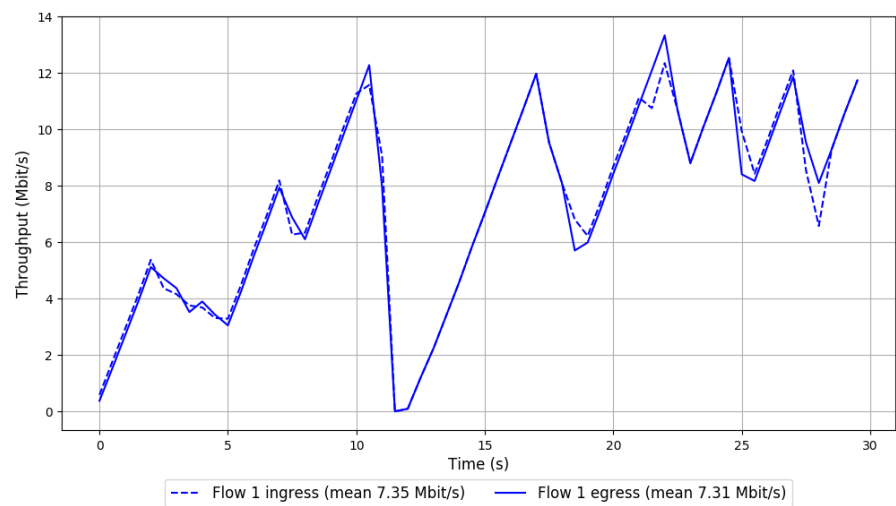
-- Flow 1:

Average throughput: 7.31 Mbit/s

95th percentile per-packet one-way delay: 51.251 ms

Loss rate: 0.62%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-20 04:49:29

End at: 2017-12-20 04:49:59

Below is generated by plot.py at 2017-12-20 06:15:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 51.432 ms

Loss rate: 0.59%

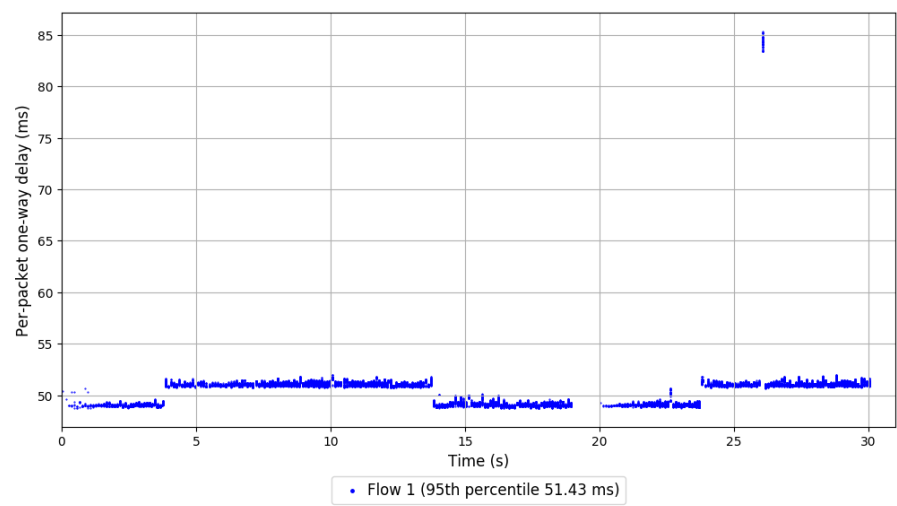
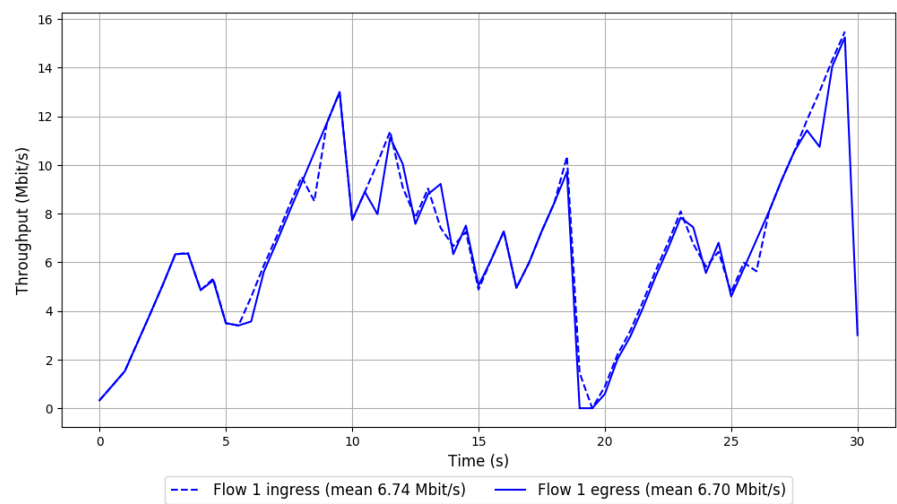
-- Flow 1:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 51.432 ms

Loss rate: 0.59%

Run 10: Report of LEDBAT — Data Link

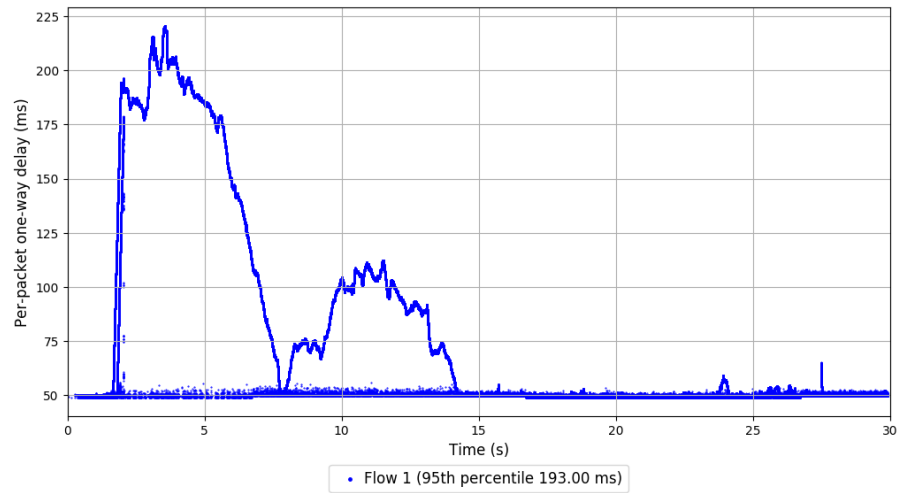
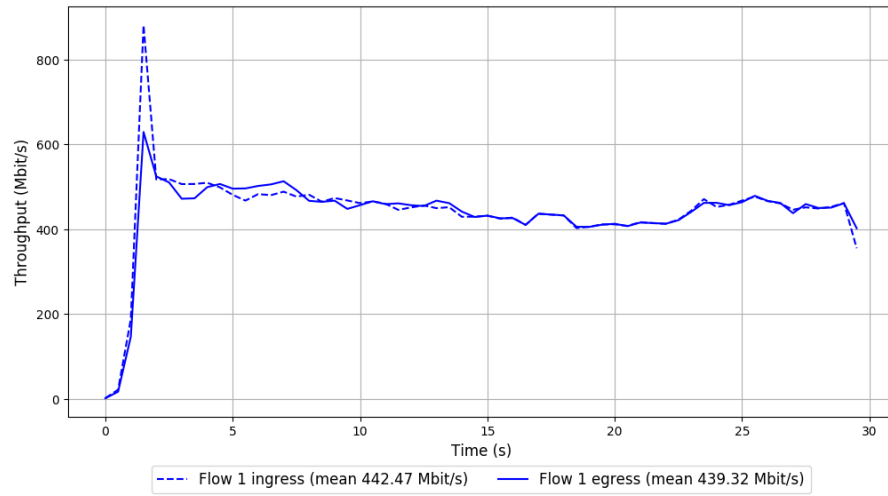


```
Run 1: Statistics of PCC

Start at: 2017-12-20 03:10:06
End at: 2017-12-20 03:10:36

# Below is generated by plot.py at 2017-12-20 06:22:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 439.32 Mbit/s
95th percentile per-packet one-way delay: 193.002 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 439.32 Mbit/s
95th percentile per-packet one-way delay: 193.002 ms
Loss rate: 0.71%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-20 03:21:14

End at: 2017-12-20 03:21:44

Below is generated by plot.py at 2017-12-20 06:22:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 475.23 Mbit/s

95th percentile per-packet one-way delay: 217.272 ms

Loss rate: 3.24%

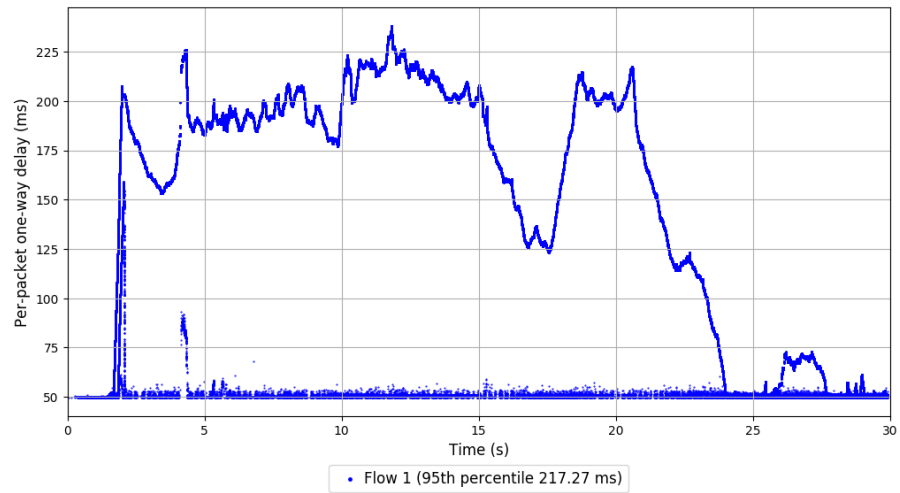
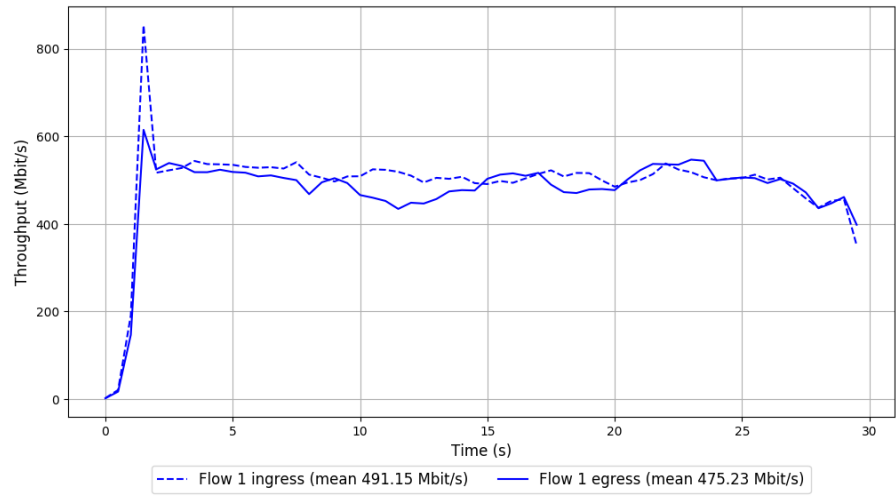
-- Flow 1:

Average throughput: 475.23 Mbit/s

95th percentile per-packet one-way delay: 217.272 ms

Loss rate: 3.24%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-20 03:32:39

End at: 2017-12-20 03:33:09

Below is generated by plot.py at 2017-12-20 06:22:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 449.72 Mbit/s

95th percentile per-packet one-way delay: 139.747 ms

Loss rate: 0.07%

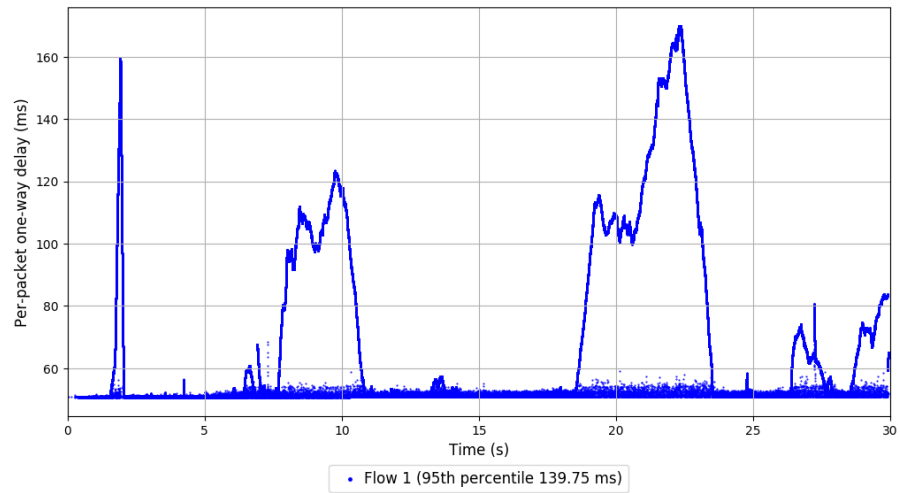
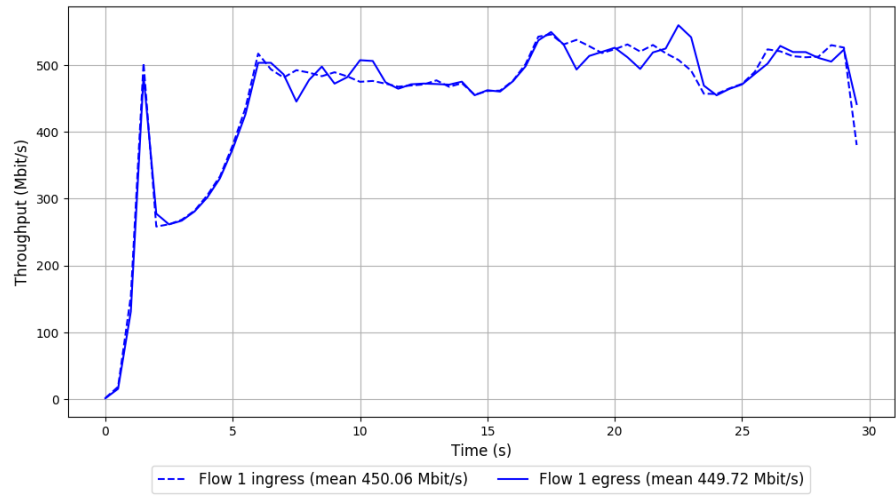
-- Flow 1:

Average throughput: 449.72 Mbit/s

95th percentile per-packet one-way delay: 139.747 ms

Loss rate: 0.07%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-20 03:44:17

End at: 2017-12-20 03:44:47

Below is generated by plot.py at 2017-12-20 06:22:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 467.09 Mbit/s

95th percentile per-packet one-way delay: 192.941 ms

Loss rate: 0.47%

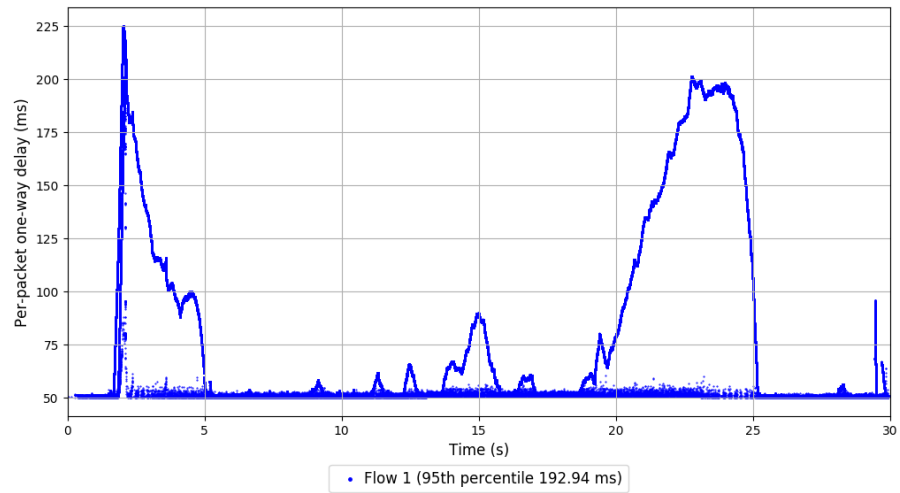
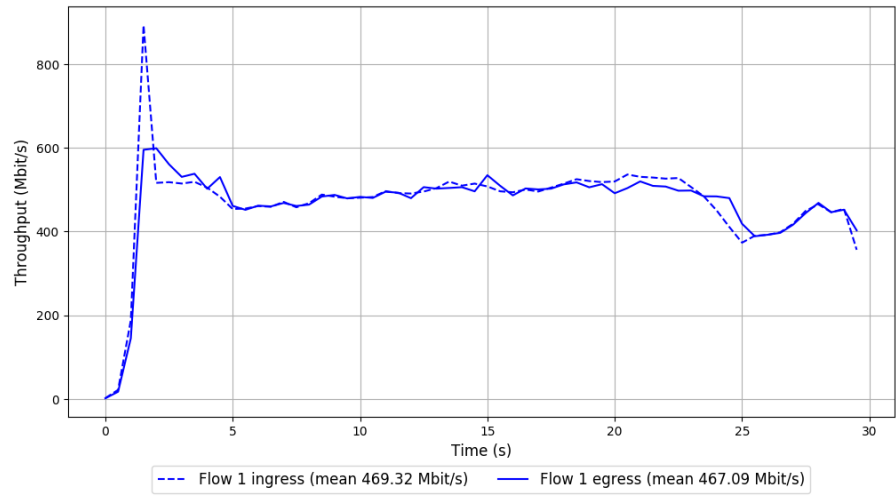
-- Flow 1:

Average throughput: 467.09 Mbit/s

95th percentile per-packet one-way delay: 192.941 ms

Loss rate: 0.47%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

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

End at: 2017-12-20 03:56:33

Below is generated by plot.py at 2017-12-20 06:22:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 475.01 Mbit/s

95th percentile per-packet one-way delay: 175.799 ms

Loss rate: 0.39%

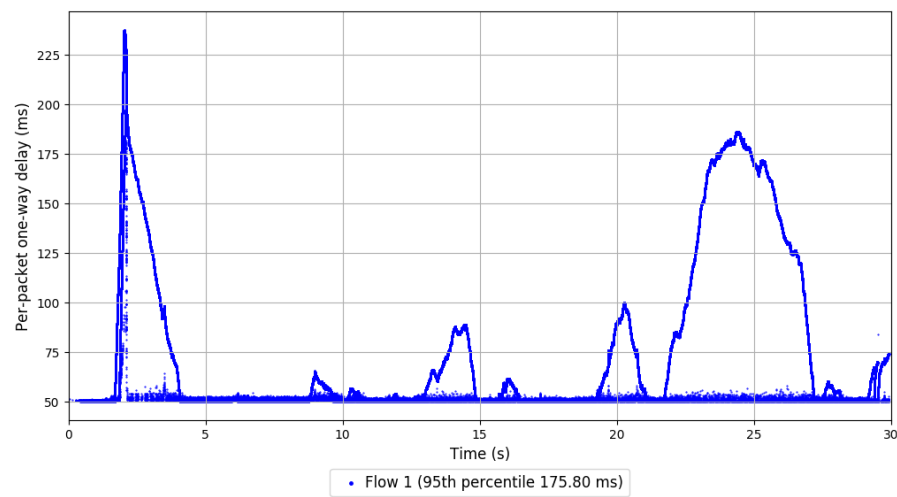
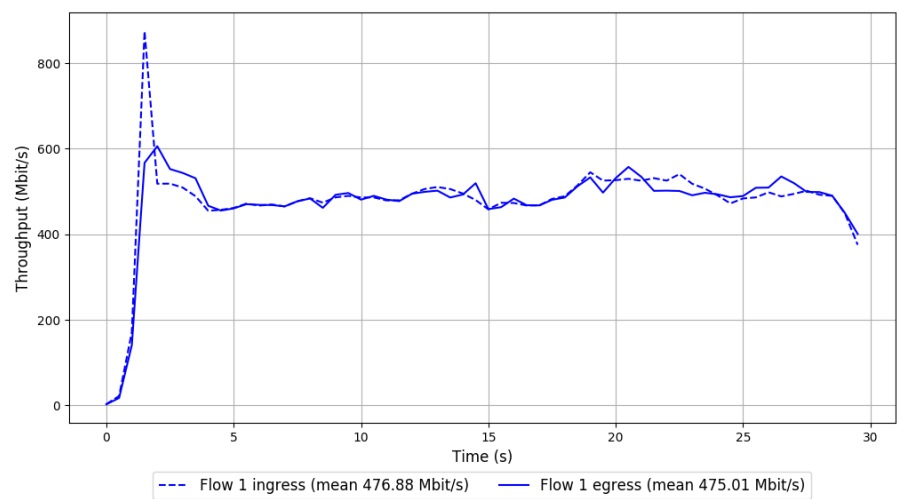
-- Flow 1:

Average throughput: 475.01 Mbit/s

95th percentile per-packet one-way delay: 175.799 ms

Loss rate: 0.39%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-20 04:07:44

End at: 2017-12-20 04:08:14

Below is generated by plot.py at 2017-12-20 06:23:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 481.92 Mbit/s

95th percentile per-packet one-way delay: 186.462 ms

Loss rate: 0.51%

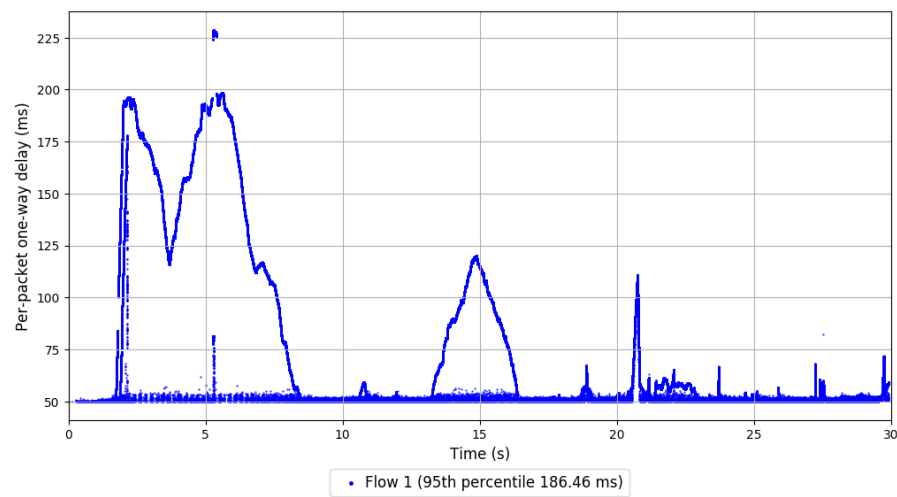
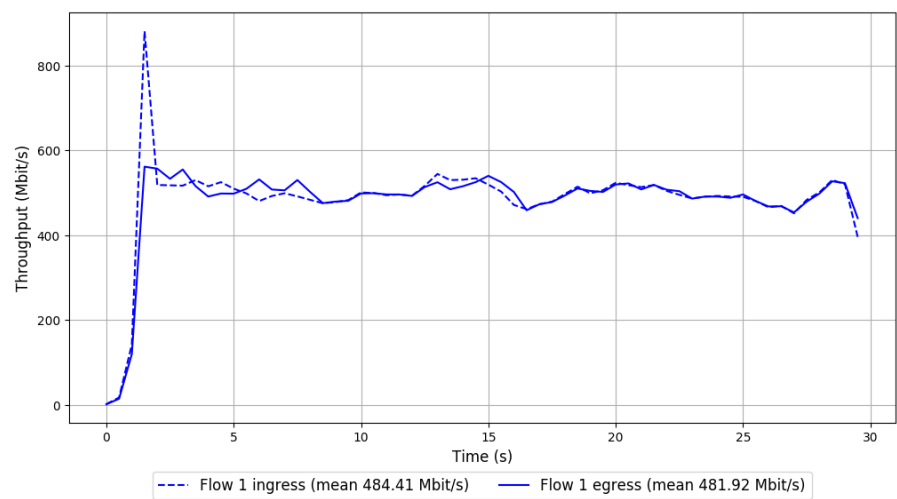
-- Flow 1:

Average throughput: 481.92 Mbit/s

95th percentile per-packet one-way delay: 186.462 ms

Loss rate: 0.51%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-20 04:19:23

End at: 2017-12-20 04:19:53

Below is generated by plot.py at 2017-12-20 06:23:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 475.02 Mbit/s

95th percentile per-packet one-way delay: 202.782 ms

Loss rate: 1.53%

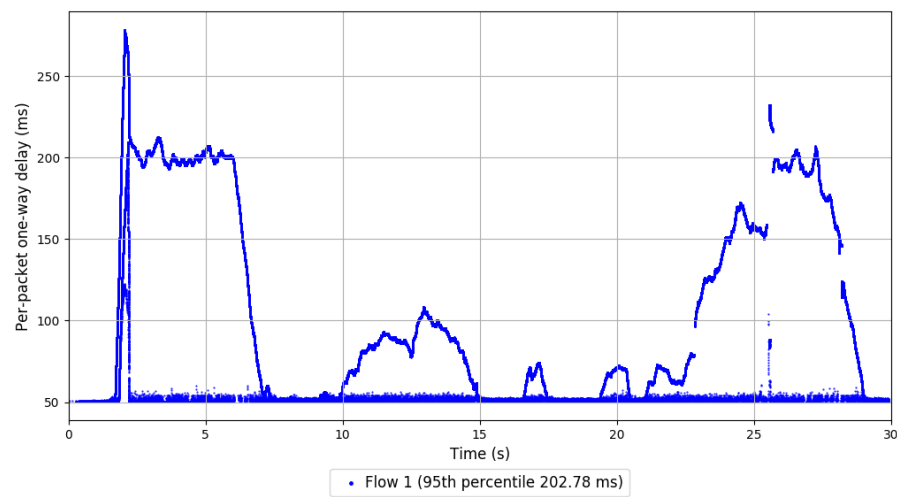
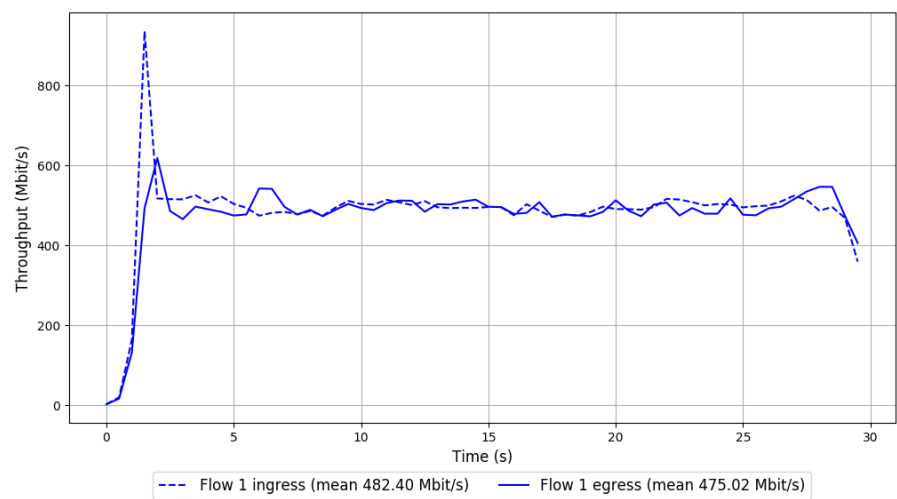
-- Flow 1:

Average throughput: 475.02 Mbit/s

95th percentile per-packet one-way delay: 202.782 ms

Loss rate: 1.53%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-20 04:30:59

End at: 2017-12-20 04:31:29

Below is generated by plot.py at 2017-12-20 06:23:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 470.89 Mbit/s

95th percentile per-packet one-way delay: 140.504 ms

Loss rate: 0.41%

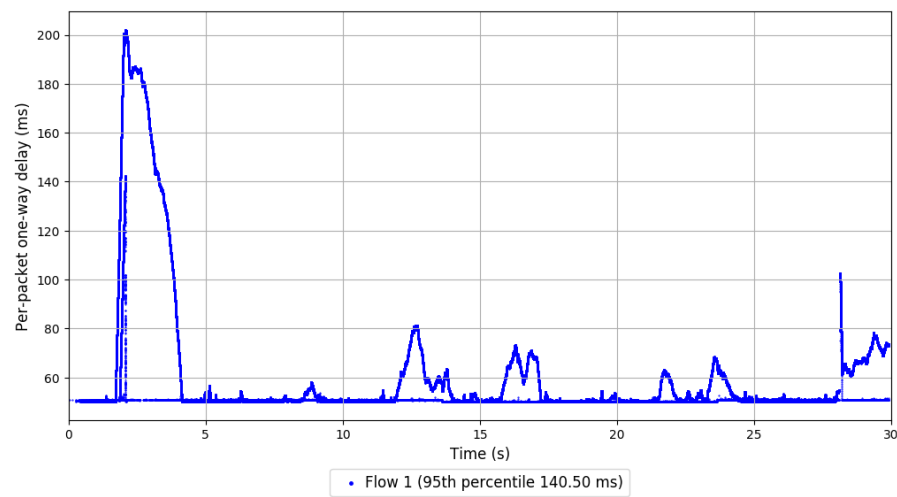
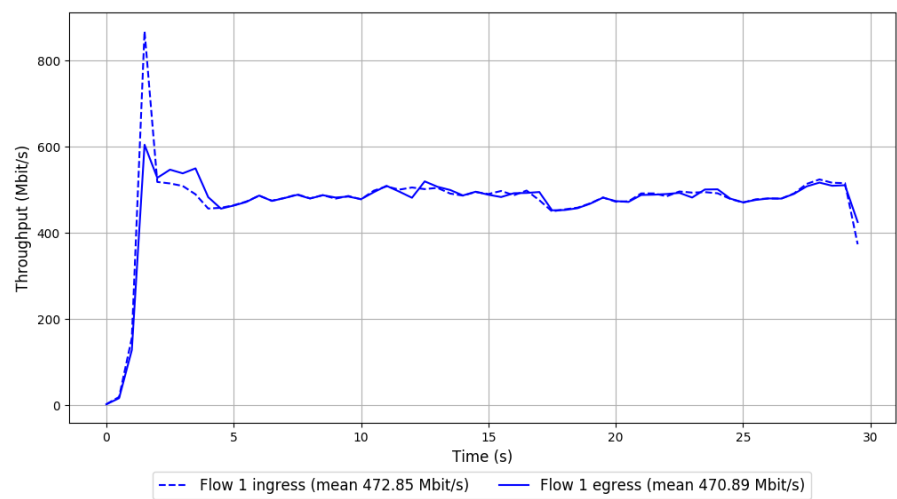
-- Flow 1:

Average throughput: 470.89 Mbit/s

95th percentile per-packet one-way delay: 140.504 ms

Loss rate: 0.41%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-20 04:42:36

End at: 2017-12-20 04:43:06

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 506.67 Mbit/s

95th percentile per-packet one-way delay: 192.790 ms

Loss rate: 1.41%

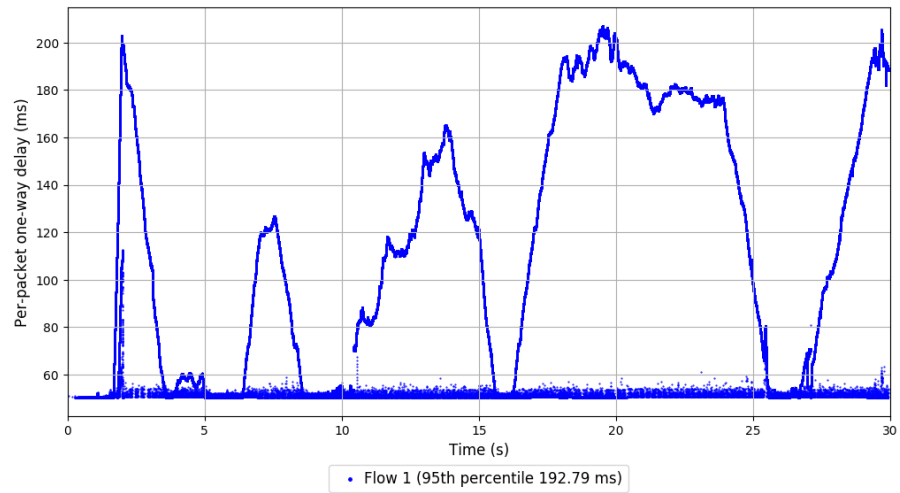
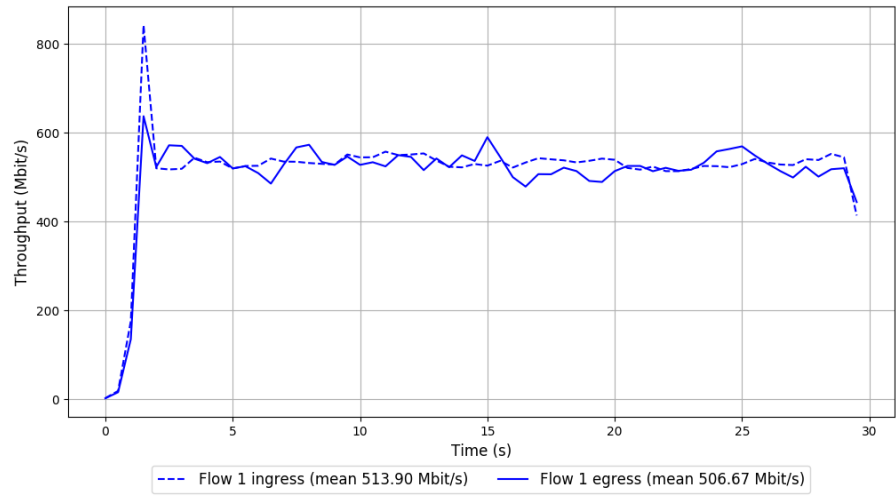
-- Flow 1:

Average throughput: 506.67 Mbit/s

95th percentile per-packet one-way delay: 192.790 ms

Loss rate: 1.41%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-20 04:54:07

End at: 2017-12-20 04:54:37

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 484.59 Mbit/s

95th percentile per-packet one-way delay: 189.023 ms

Loss rate: 0.49%

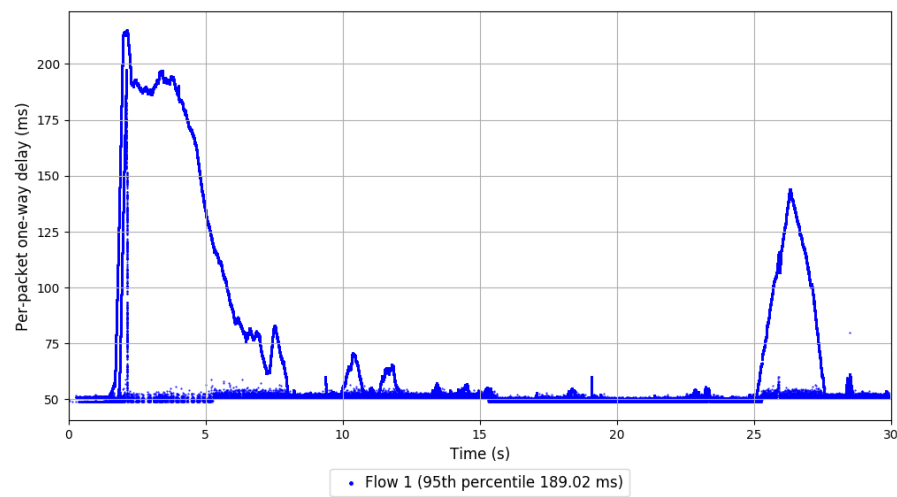
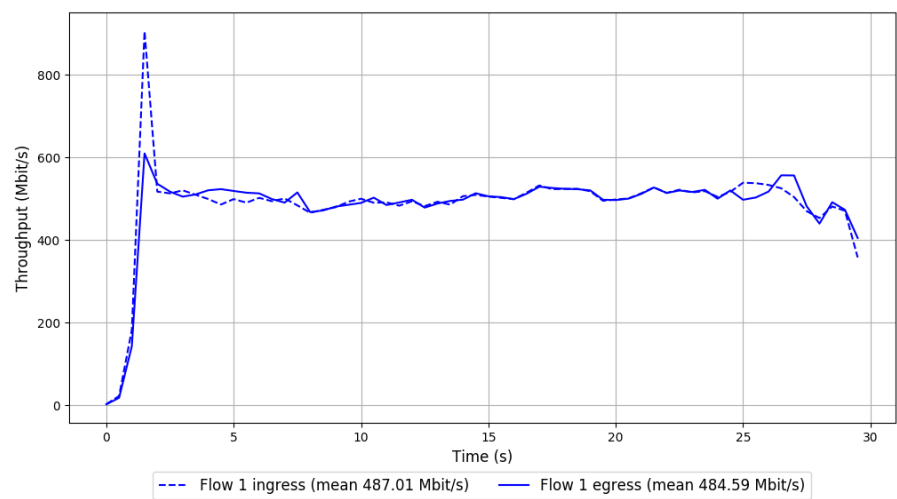
-- Flow 1:

Average throughput: 484.59 Mbit/s

95th percentile per-packet one-way delay: 189.023 ms

Loss rate: 0.49%

Run 10: Report of PCC — Data Link

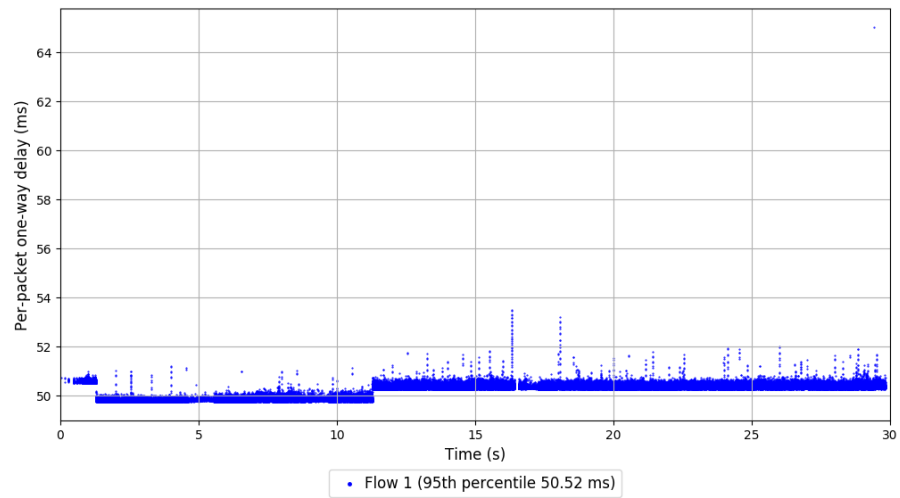
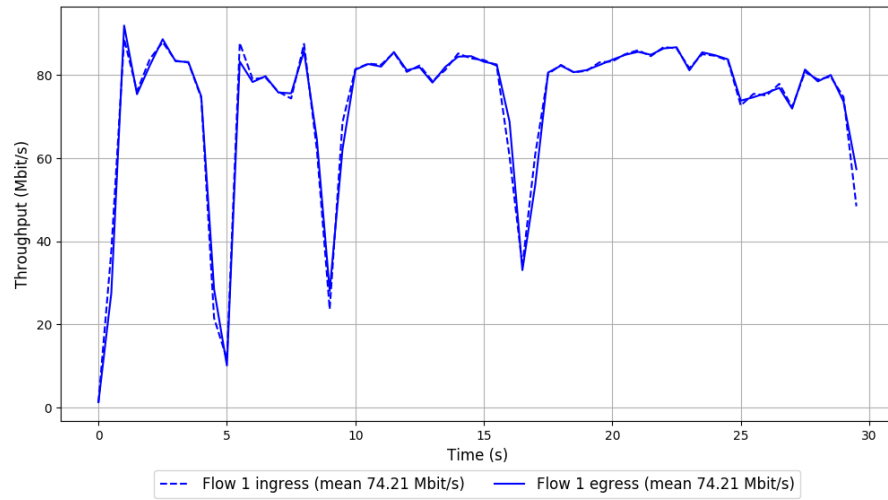


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-20 03:07:48
End at: 2017-12-20 03:08:18

# Below is generated by plot.py at 2017-12-20 06:31:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.21 Mbit/s
95th percentile per-packet one-way delay: 50.518 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 74.21 Mbit/s
95th percentile per-packet one-way delay: 50.518 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link

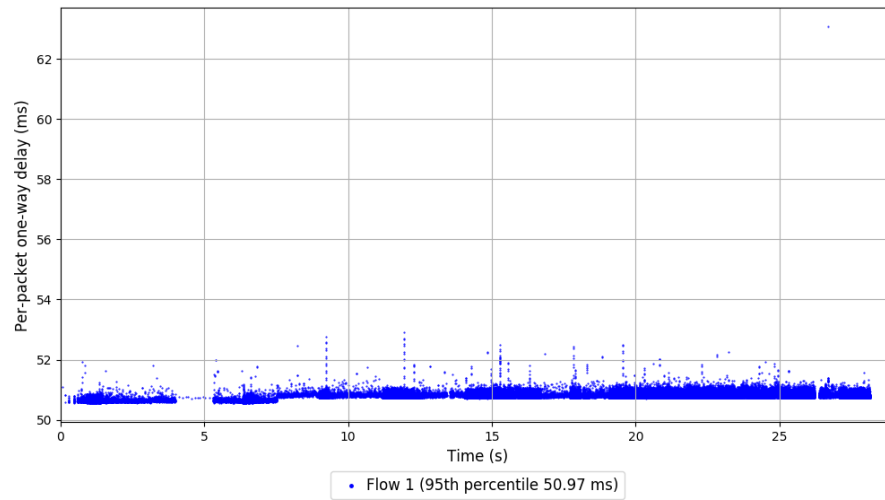
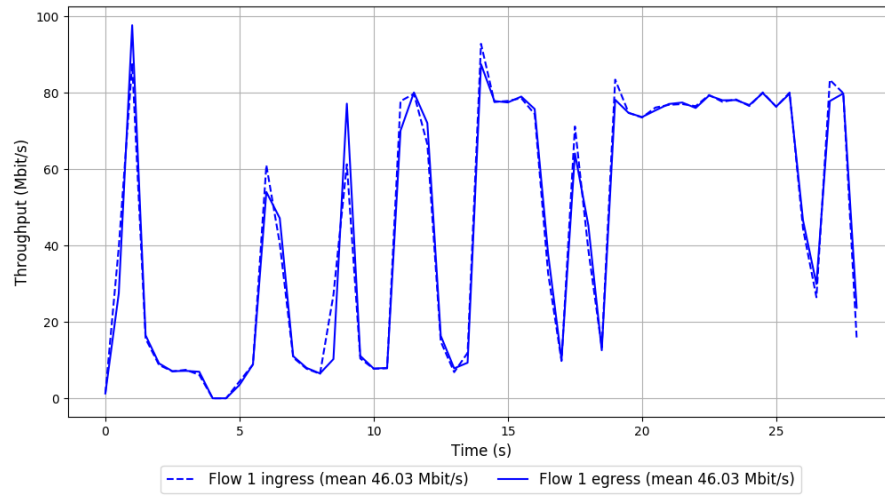


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-12-20 03:19:00
End at: 2017-12-20 03:19:30

# Below is generated by plot.py at 2017-12-20 06:31:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.03 Mbit/s
95th percentile per-packet one-way delay: 50.970 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.03 Mbit/s
95th percentile per-packet one-way delay: 50.970 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-20 03:30:38

End at: 2017-12-20 03:31:08

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.50 Mbit/s

95th percentile per-packet one-way delay: 50.534 ms

Loss rate: 0.00%

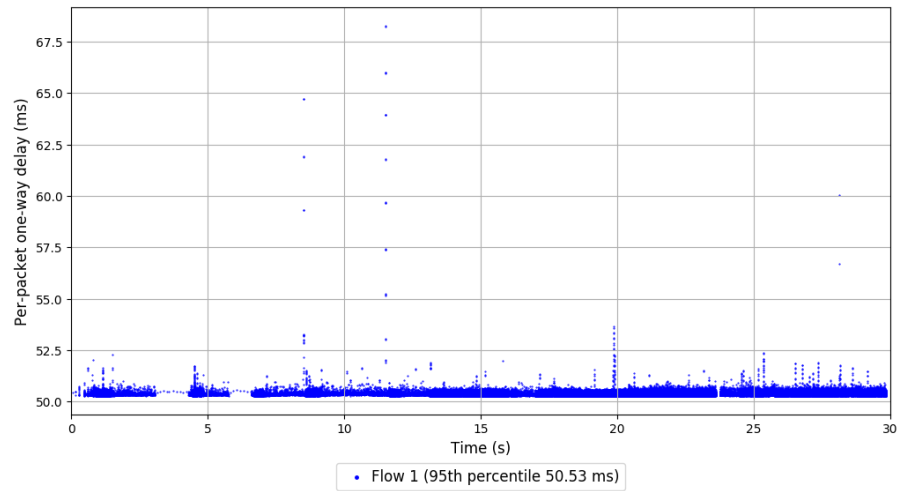
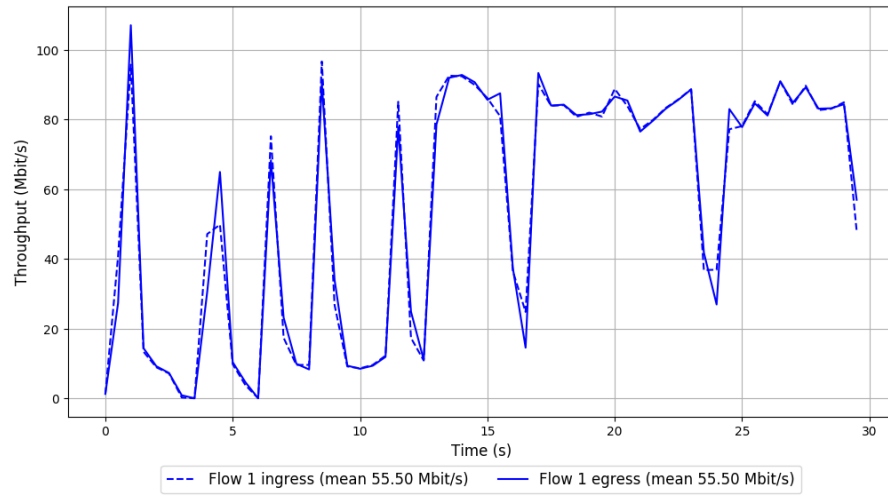
-- Flow 1:

Average throughput: 55.50 Mbit/s

95th percentile per-packet one-way delay: 50.534 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-20 03:42:01

End at: 2017-12-20 03:42:31

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.04 Mbit/s

95th percentile per-packet one-way delay: 50.709 ms

Loss rate: 0.00%

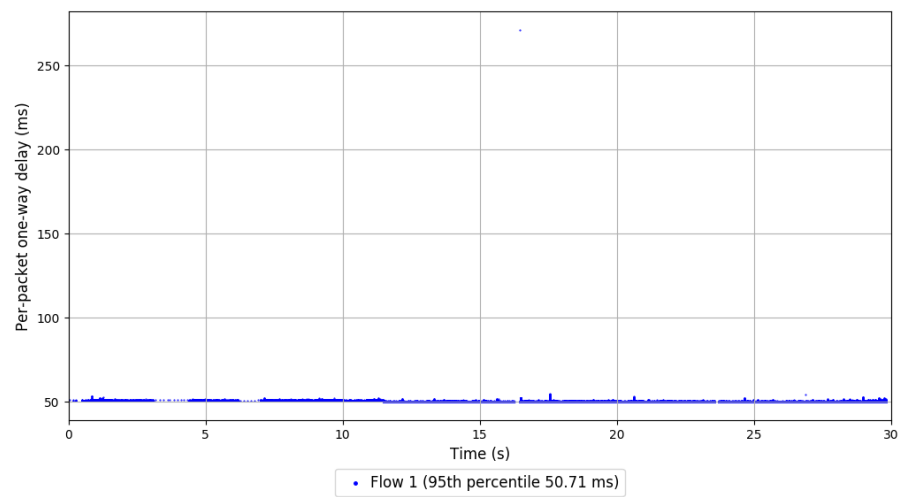
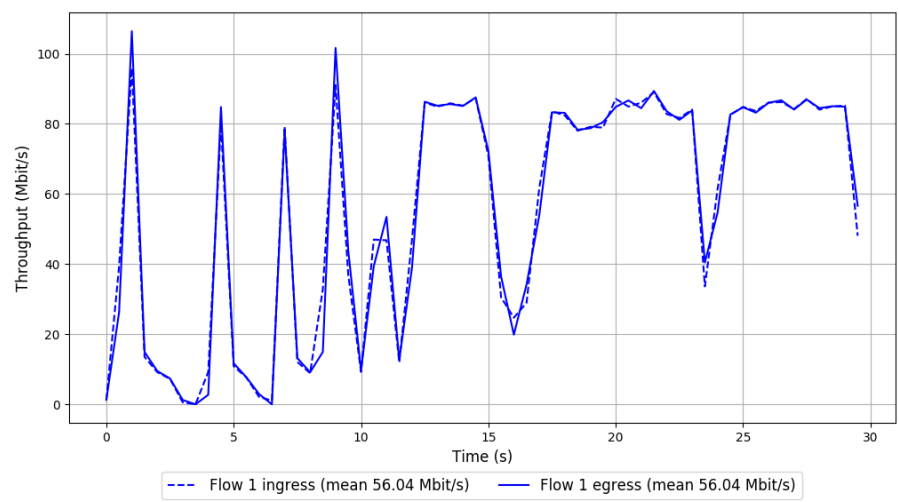
-- Flow 1:

Average throughput: 56.04 Mbit/s

95th percentile per-packet one-way delay: 50.709 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-20 03:53:46

End at: 2017-12-20 03:54:16

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.95 Mbit/s

95th percentile per-packet one-way delay: 50.960 ms

Loss rate: 0.00%

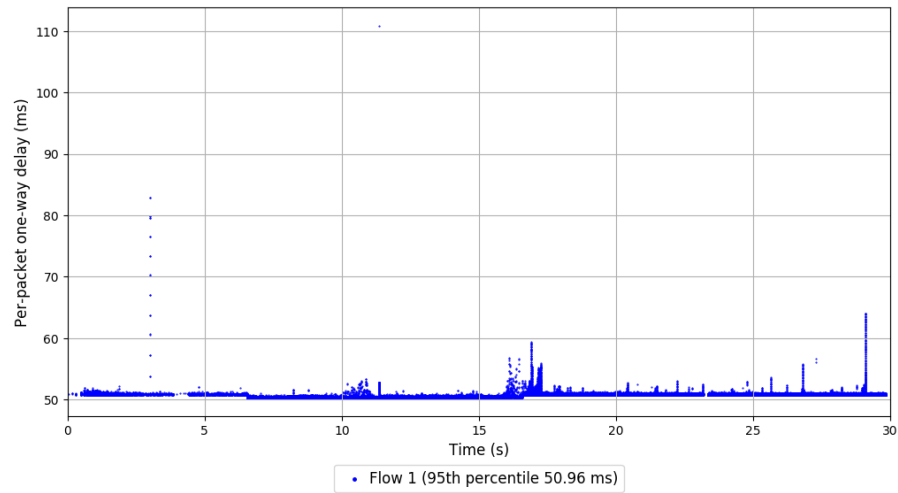
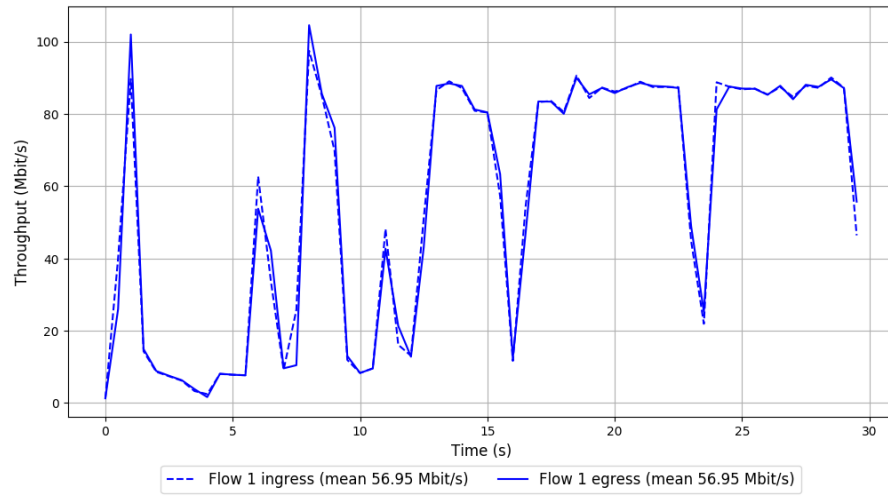
-- Flow 1:

Average throughput: 56.95 Mbit/s

95th percentile per-packet one-way delay: 50.960 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-20 04:05:28

End at: 2017-12-20 04:05:58

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.90 Mbit/s

95th percentile per-packet one-way delay: 50.824 ms

Loss rate: 0.00%

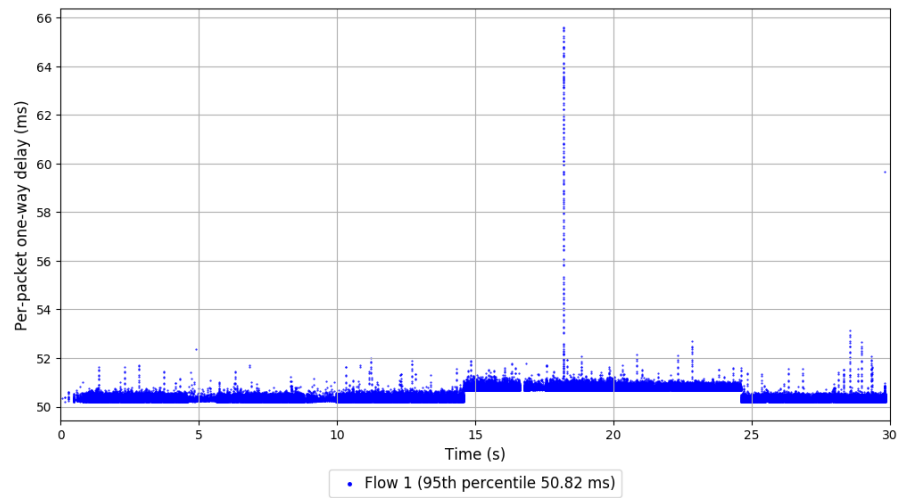
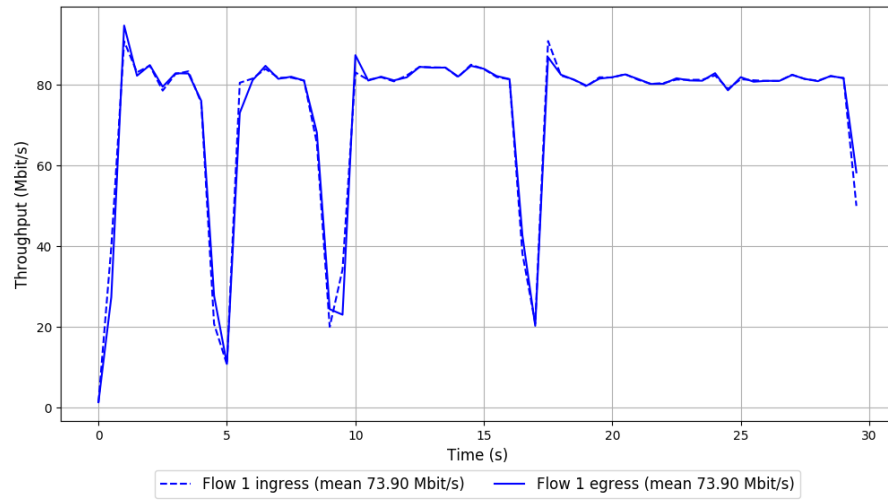
-- Flow 1:

Average throughput: 73.90 Mbit/s

95th percentile per-packet one-way delay: 50.824 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-20 04:17:06

End at: 2017-12-20 04:17:36

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.83 Mbit/s

95th percentile per-packet one-way delay: 50.976 ms

Loss rate: 0.00%

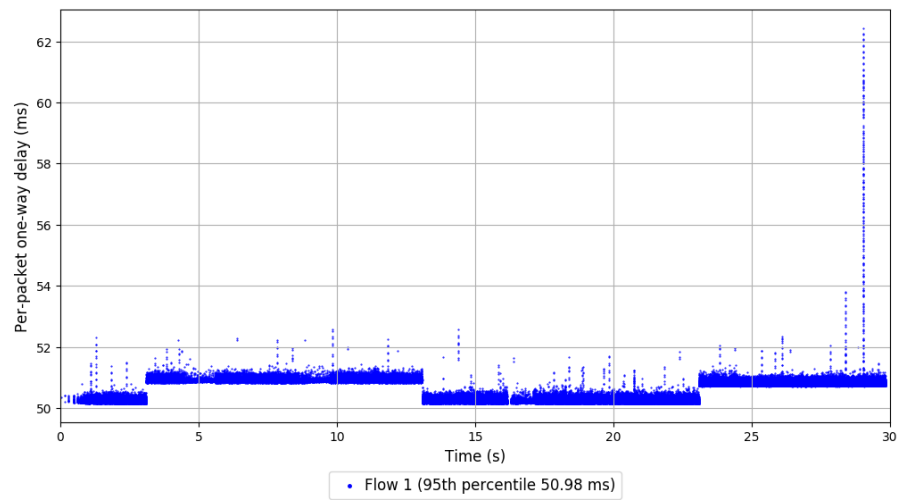
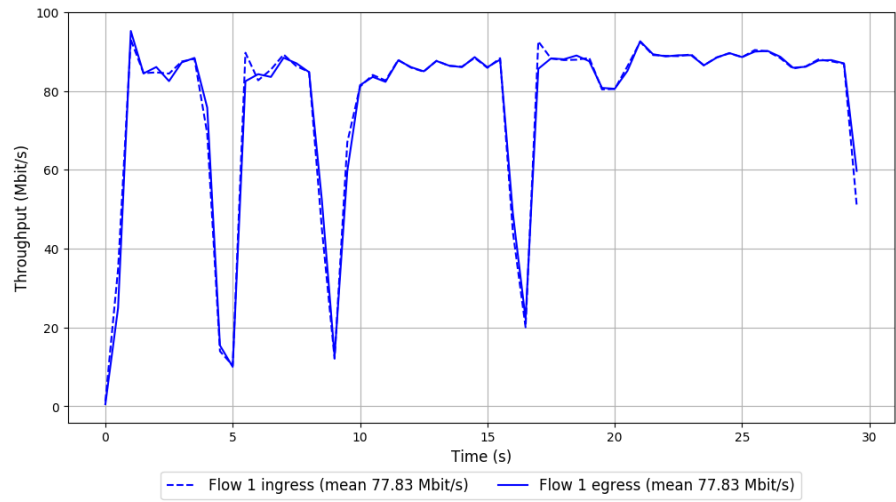
-- Flow 1:

Average throughput: 77.83 Mbit/s

95th percentile per-packet one-way delay: 50.976 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-20 04:28:44

End at: 2017-12-20 04:29:14

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.30 Mbit/s

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

Loss rate: 0.00%

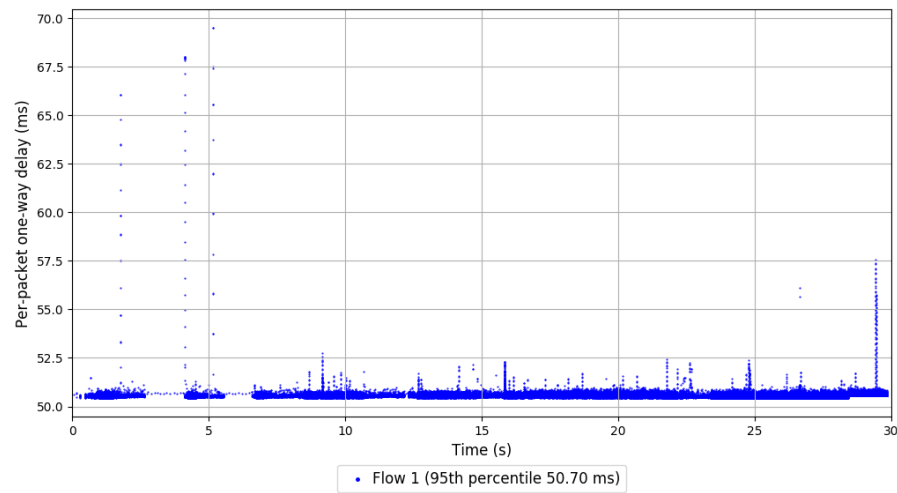
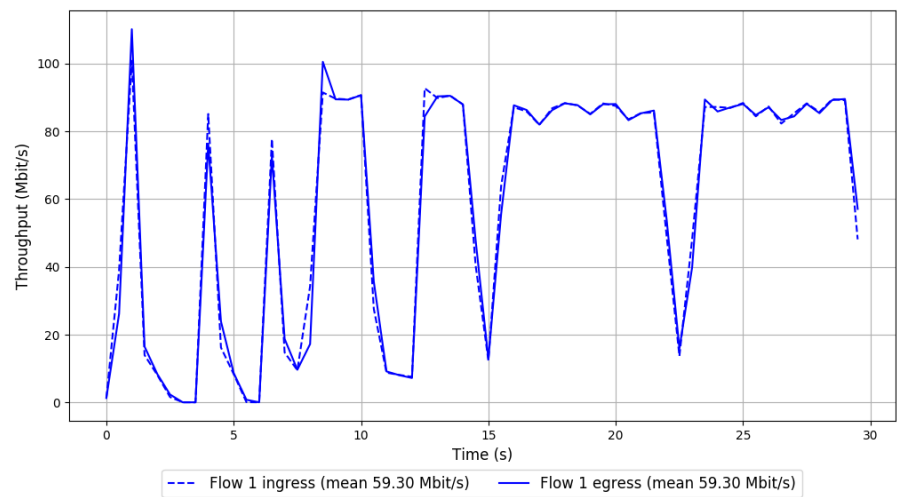
-- Flow 1:

Average throughput: 59.30 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-20 04:40:23

End at: 2017-12-20 04:40:53

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.53 Mbit/s

95th percentile per-packet one-way delay: 50.899 ms

Loss rate: 0.00%

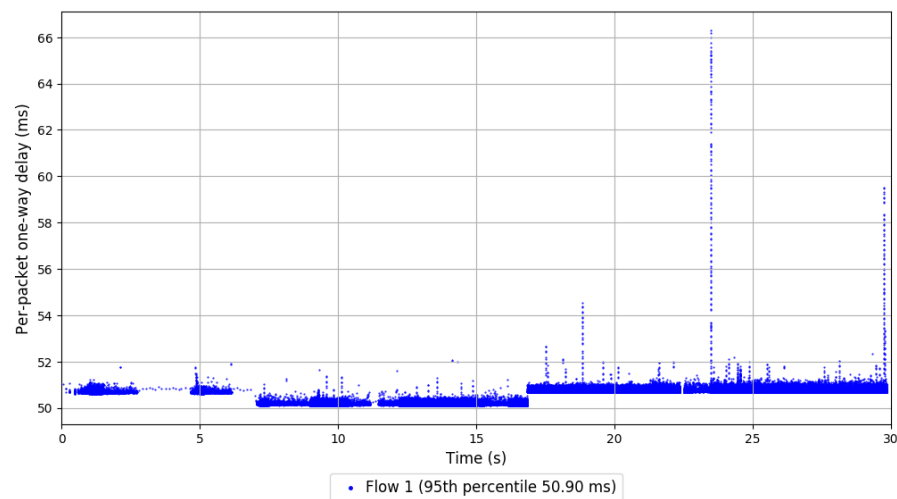
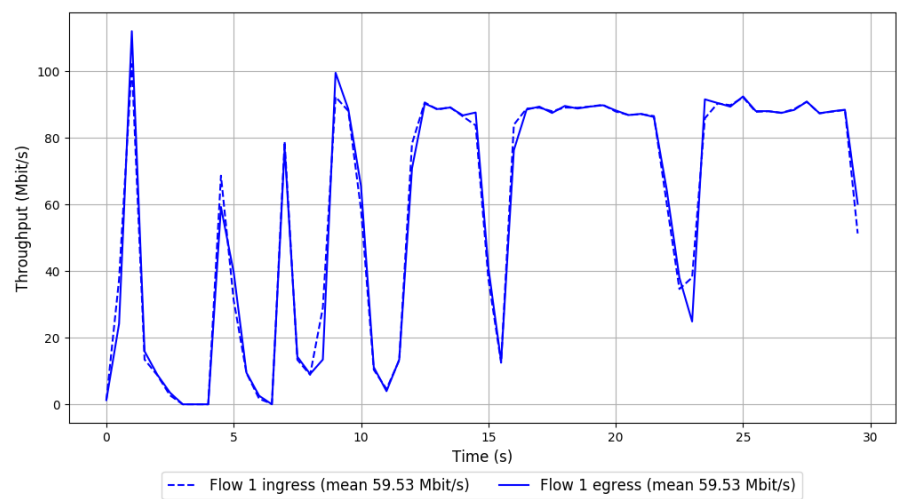
-- Flow 1:

Average throughput: 59.53 Mbit/s

95th percentile per-packet one-way delay: 50.899 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

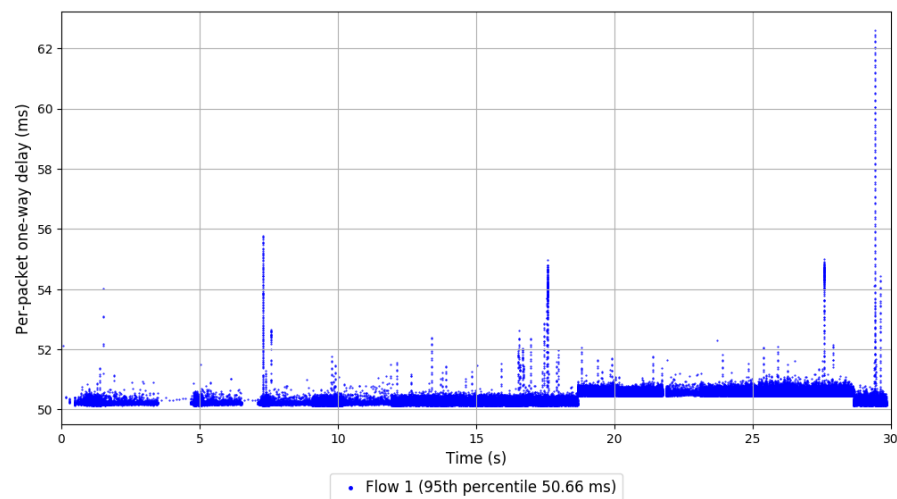
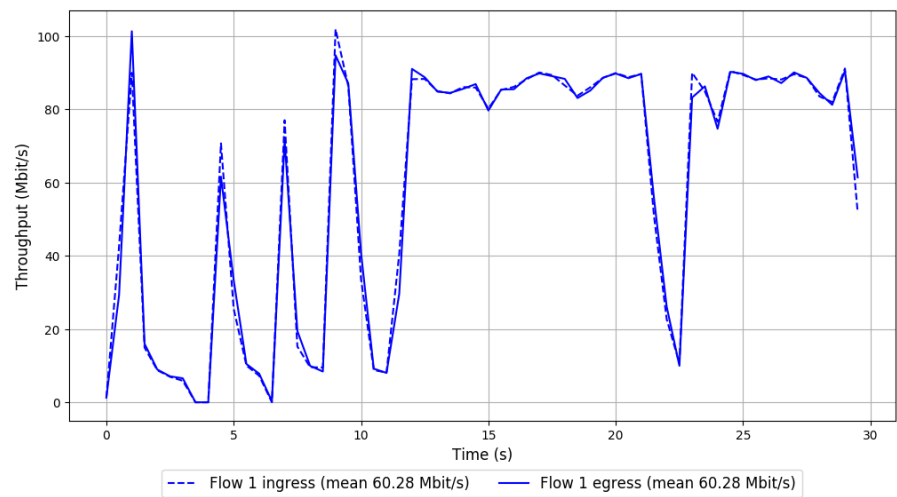


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-20 04:52:01
End at: 2017-12-20 04:52:31

# Below is generated by plot.py at 2017-12-20 06:31:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.28 Mbit/s
95th percentile per-packet one-way delay: 50.660 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.28 Mbit/s
95th percentile per-packet one-way delay: 50.660 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

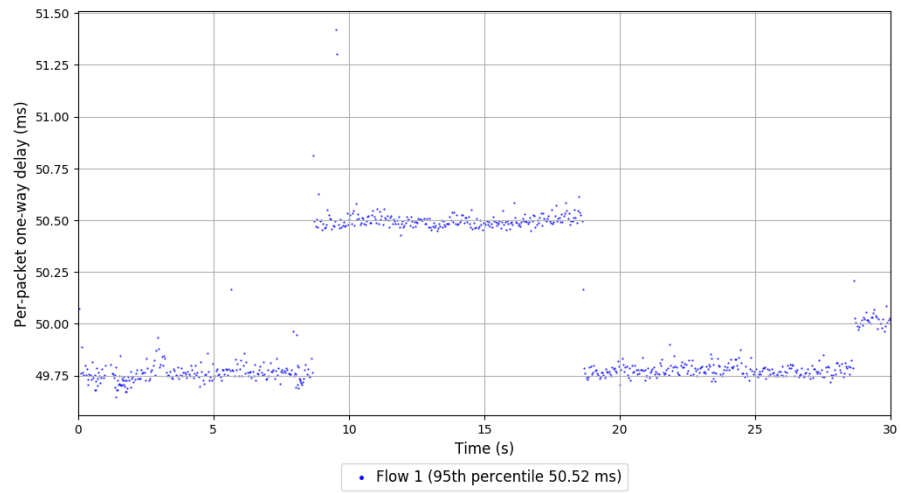
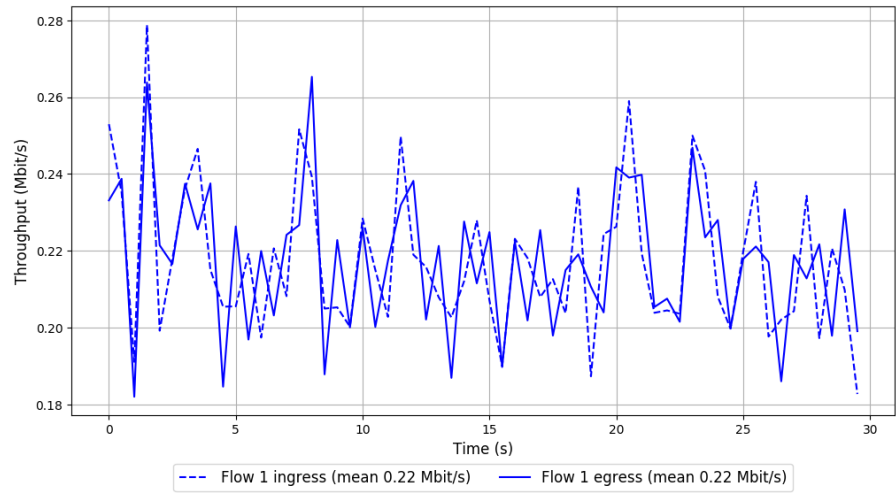


```
Run 1: Statistics of SCReAM

Start at: 2017-12-20 03:13:04
End at: 2017-12-20 03:13:34

# Below is generated by plot.py at 2017-12-20 06:31:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.525 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.525 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

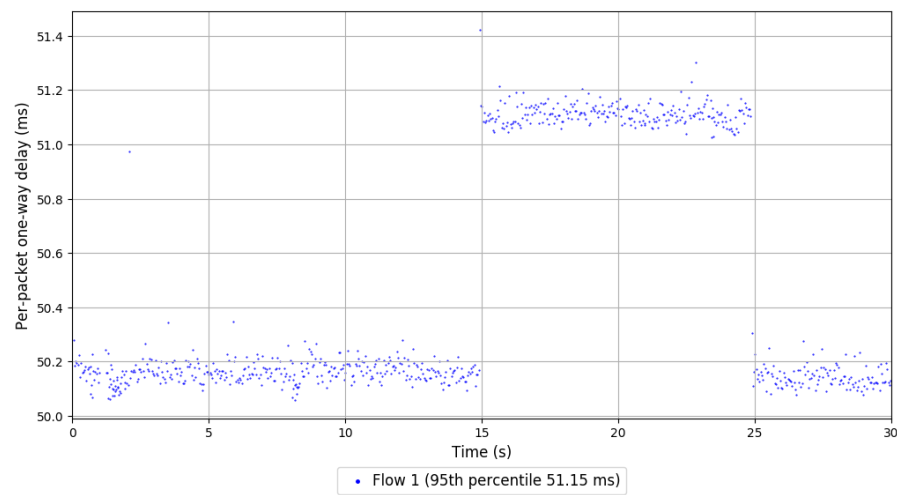
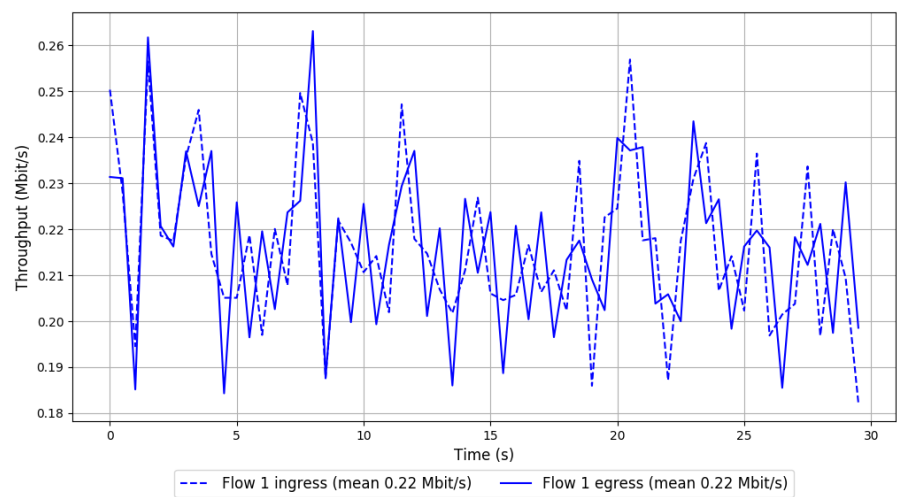


```
Run 2: Statistics of SCReAM

Start at: 2017-12-20 03:24:18
End at: 2017-12-20 03:24:48

# Below is generated by plot.py at 2017-12-20 06:31:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.147 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.147 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-20 03:35:44

End at: 2017-12-20 03:36:14

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.859 ms

Loss rate: 0.00%

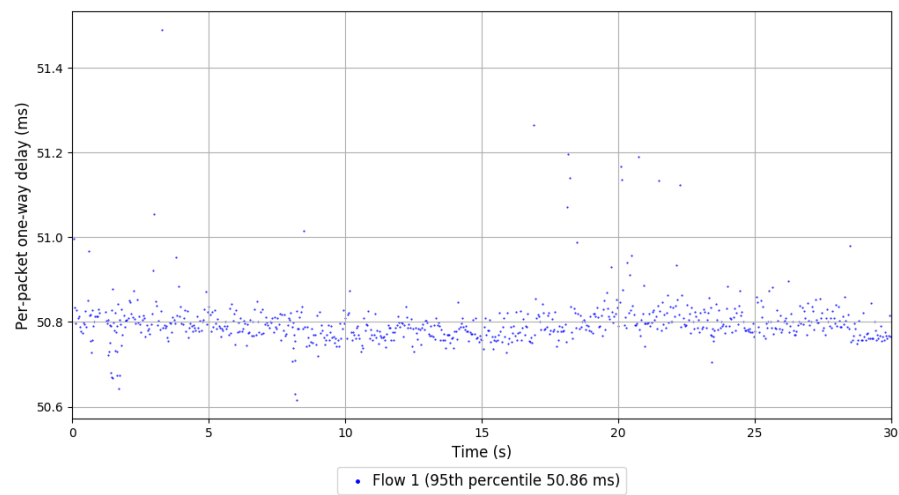
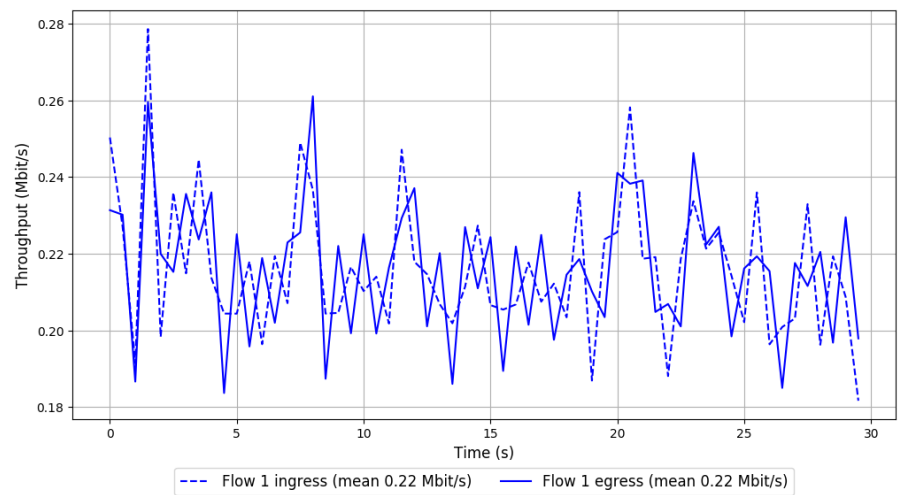
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.859 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-20 03:47:20

End at: 2017-12-20 03:47:50

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.985 ms

Loss rate: 0.00%

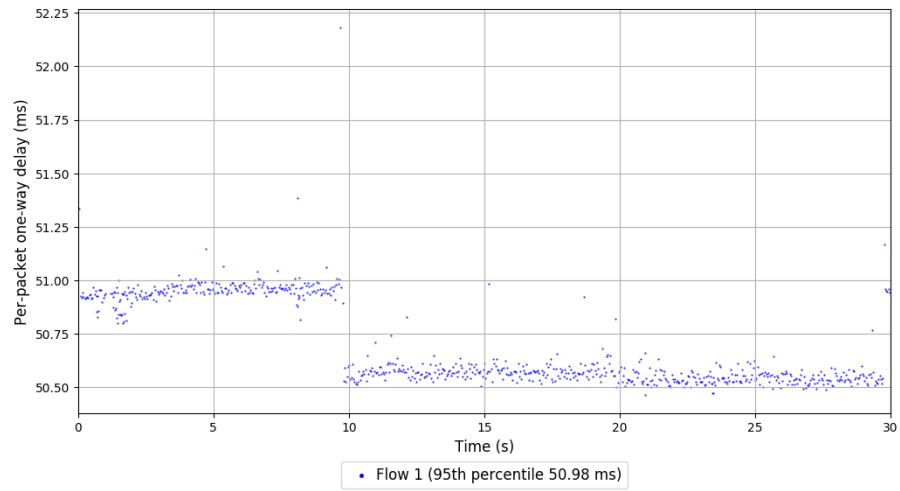
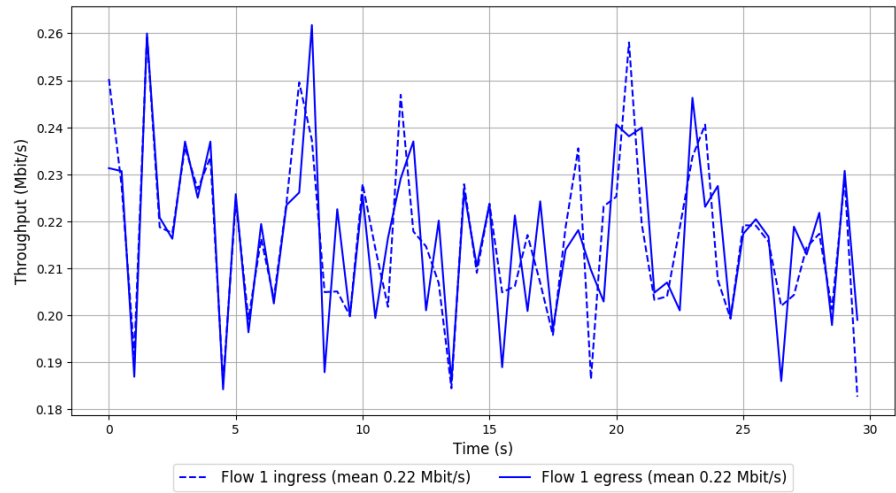
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.985 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

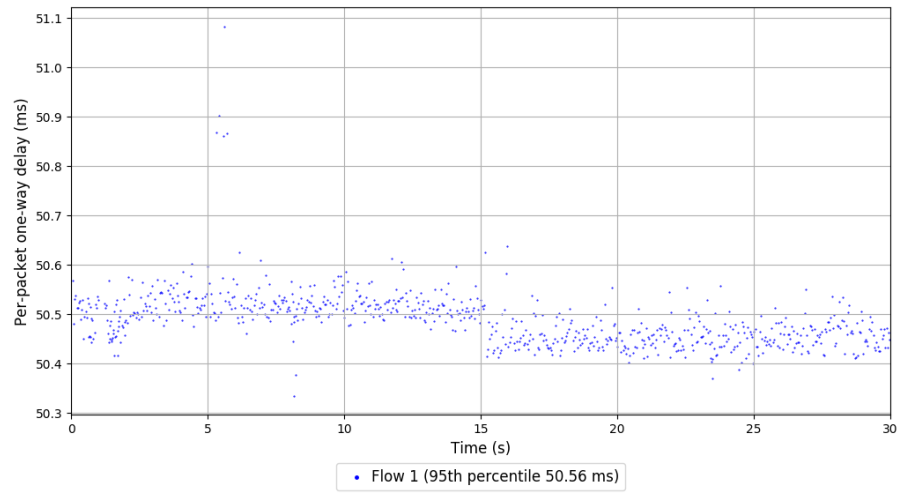
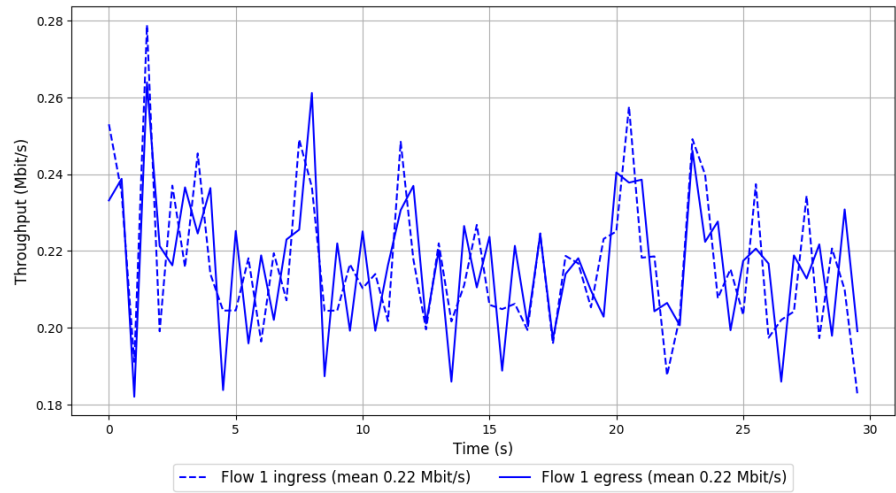


```
Run 5: Statistics of SCReAM

Start at: 2017-12-20 03:59:08
End at: 2017-12-20 03:59:38

# Below is generated by plot.py at 2017-12-20 06:31:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.562 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.562 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-20 04:10:50

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

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.757 ms

Loss rate: 0.00%

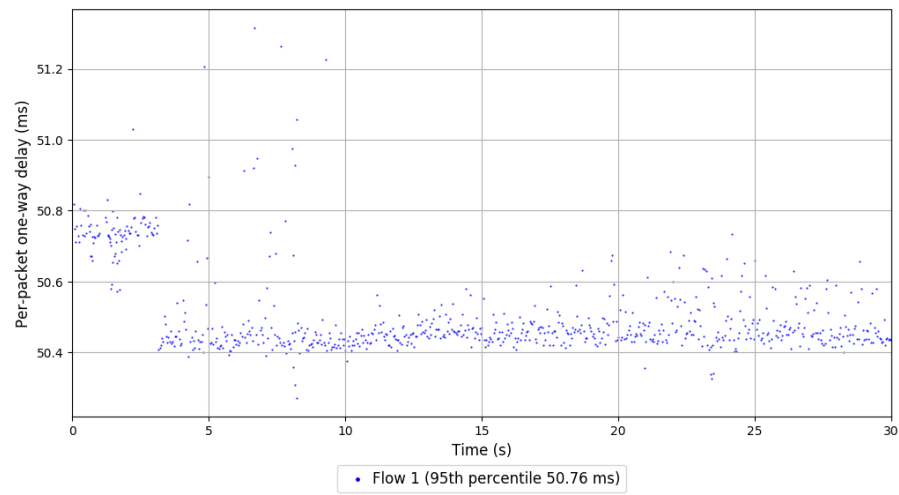
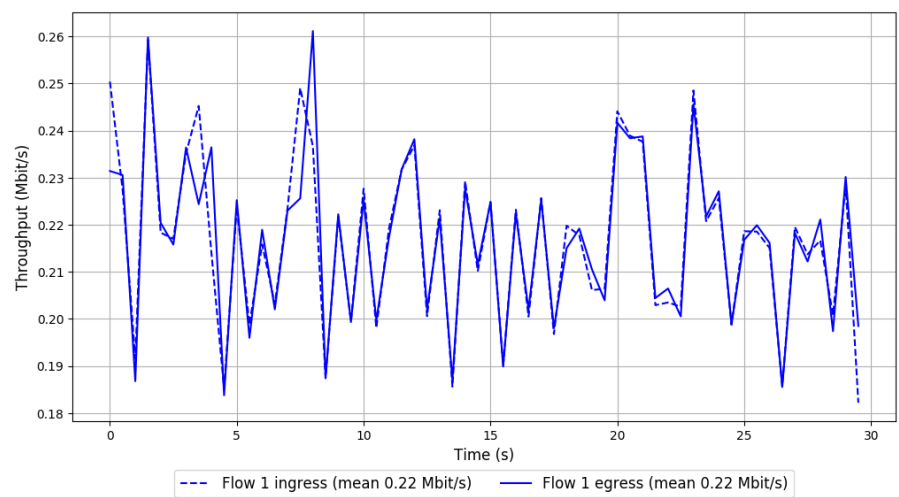
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.757 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

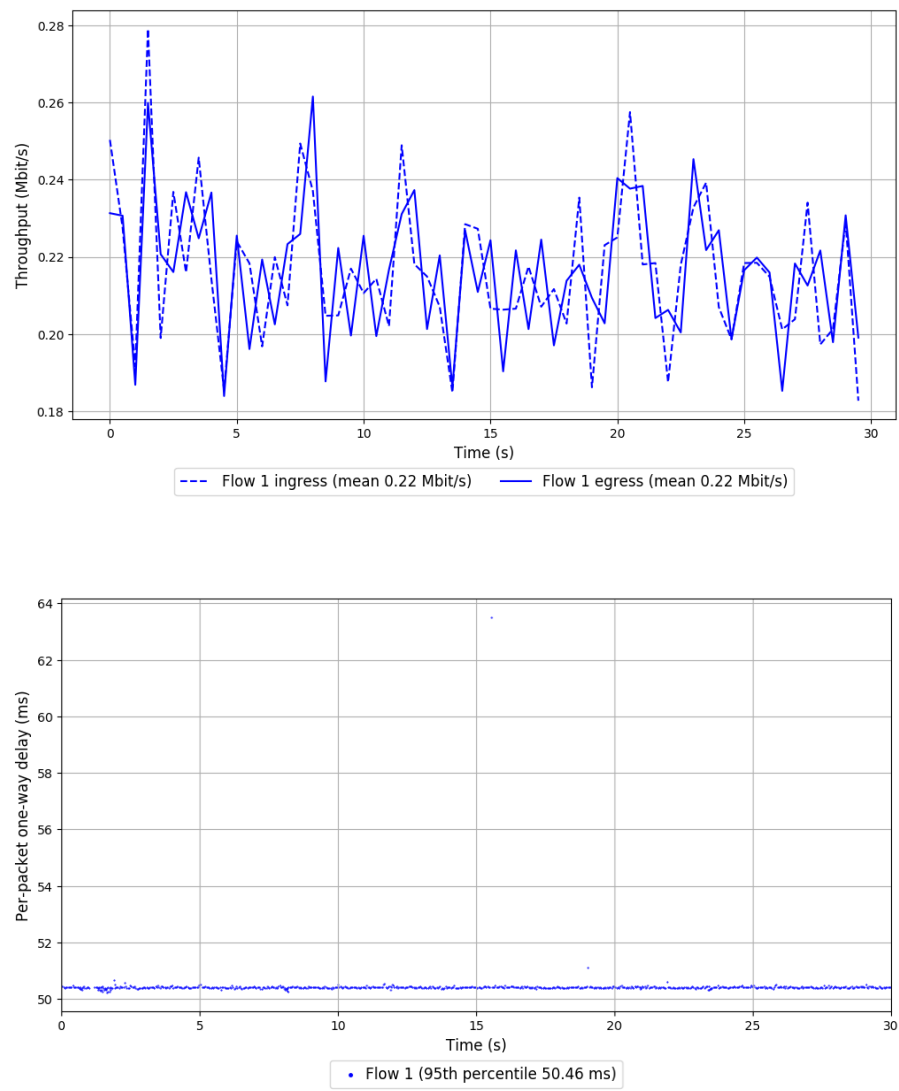


```
Run 7: Statistics of SCReAM

Start at: 2017-12-20 04:22:31
End at: 2017-12-20 04:23:01

# Below is generated by plot.py at 2017-12-20 06:31:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.459 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.459 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-20 04:34:03

End at: 2017-12-20 04:34:33

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.474 ms

Loss rate: 0.00%

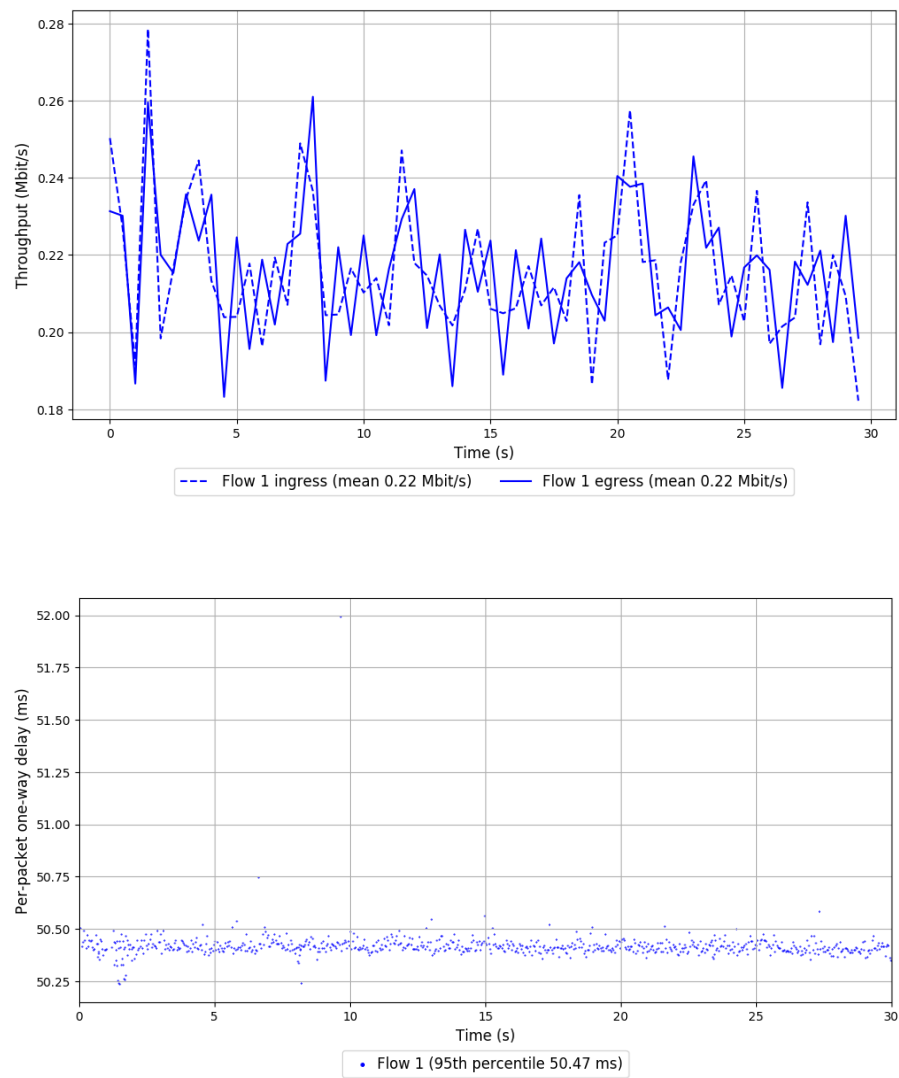
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.474 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-20 04:45:40

End at: 2017-12-20 04:46:10

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.749 ms

Loss rate: 0.00%

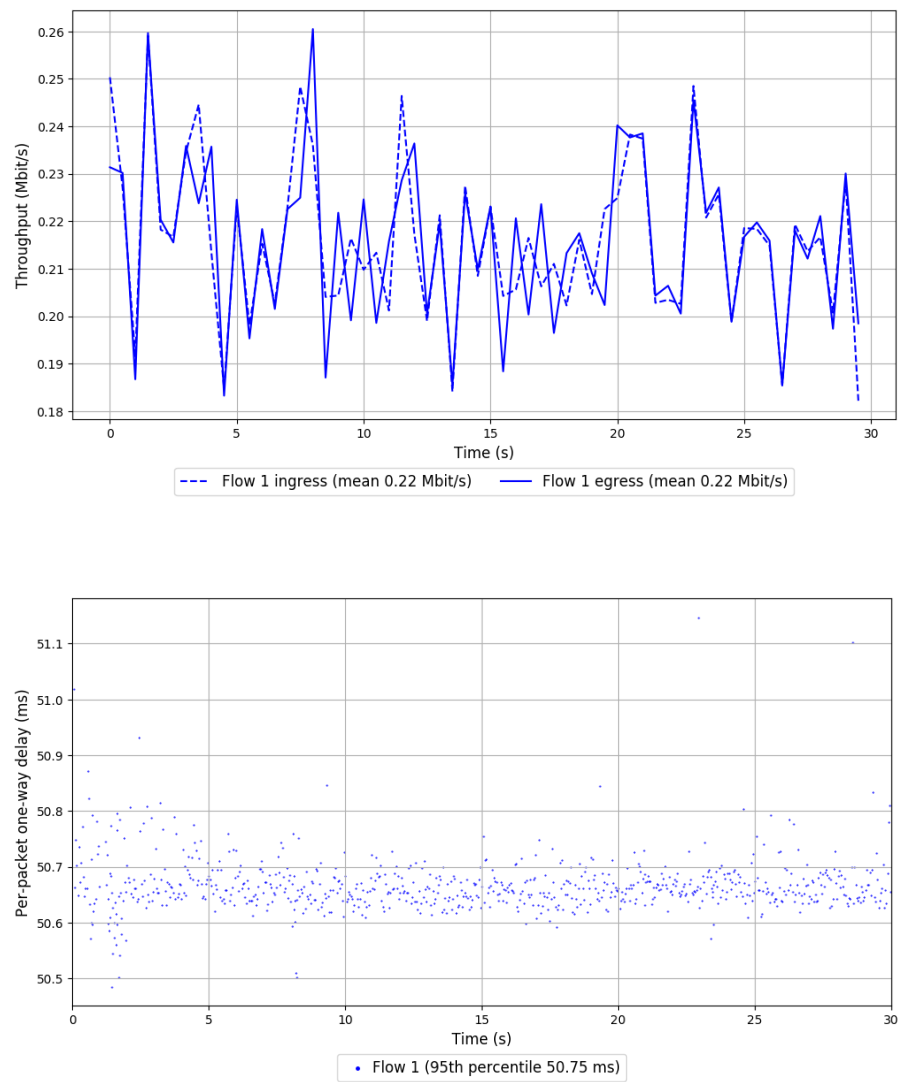
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.749 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-20 04:57:12

End at: 2017-12-20 04:57:42

Below is generated by plot.py at 2017-12-20 06:31:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.707 ms

Loss rate: 0.00%

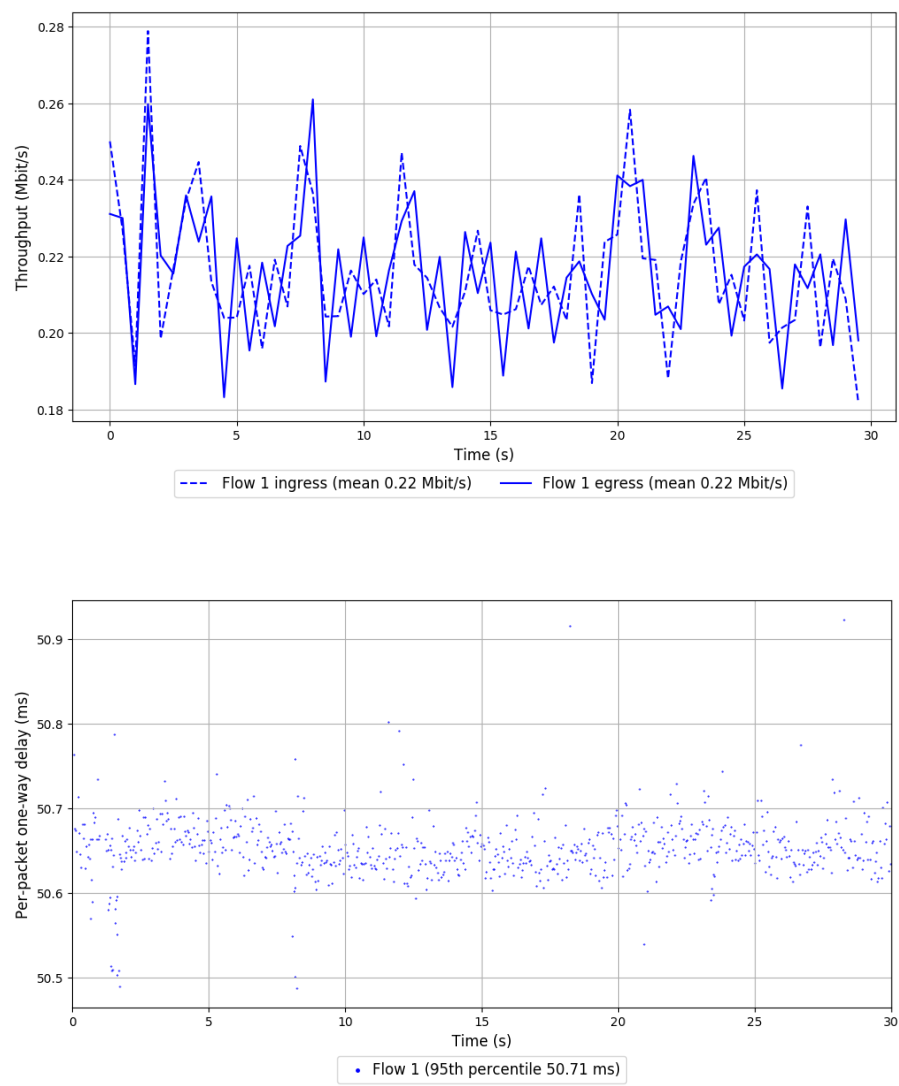
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.707 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

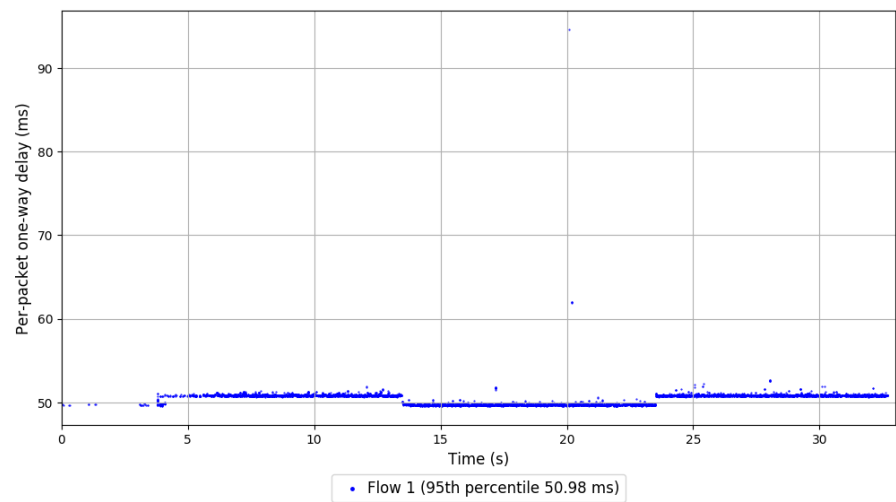
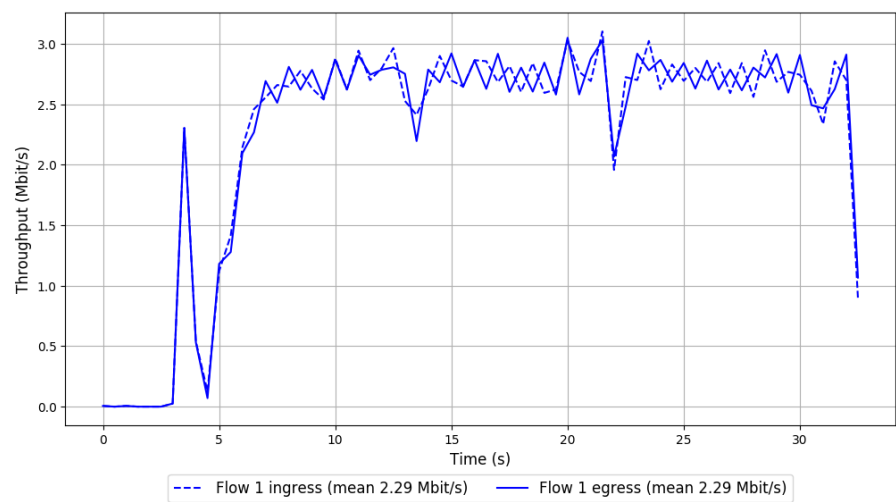


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-20 03:09:29
End at: 2017-12-20 03:09:59

# Below is generated by plot.py at 2017-12-20 06:31:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.976 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.976 ms
Loss rate: 0.04%
```


Run 1: Report of WebRTC media — Data Link

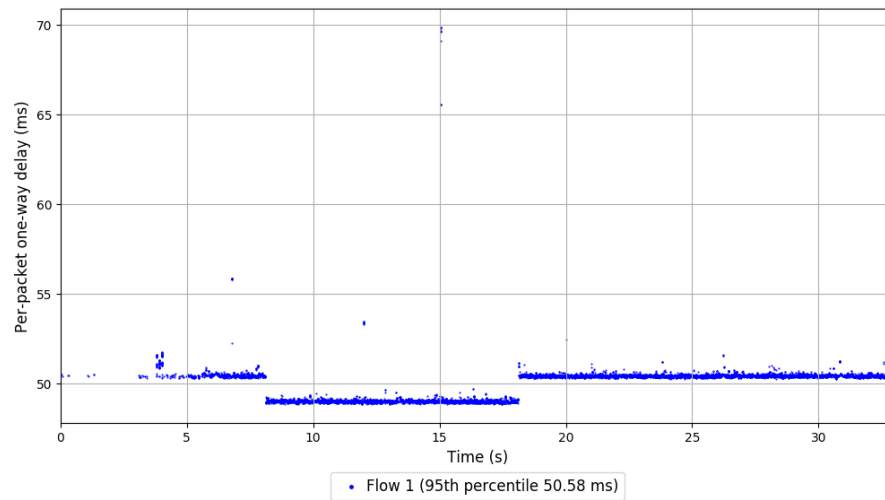
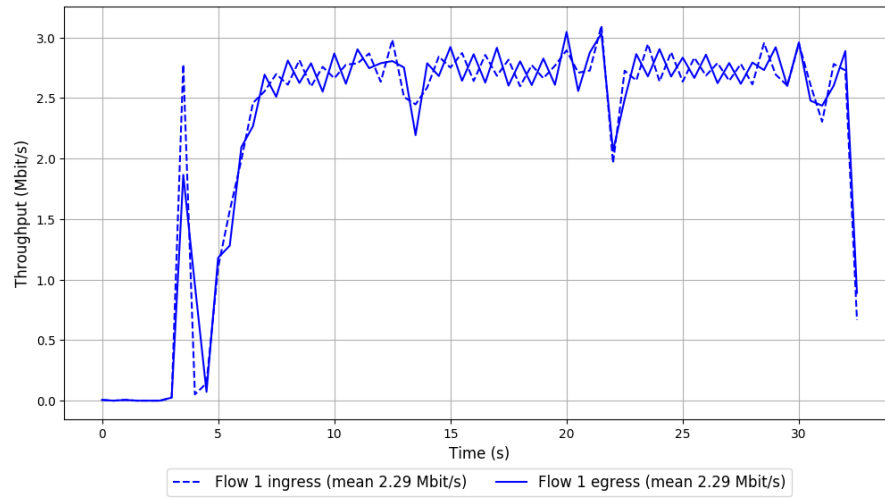


```
Run 2: Statistics of WebRTC media

Start at: 2017-12-20 03:20:37
End at: 2017-12-20 03:21:07

# Below is generated by plot.py at 2017-12-20 06:31:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.579 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.579 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link

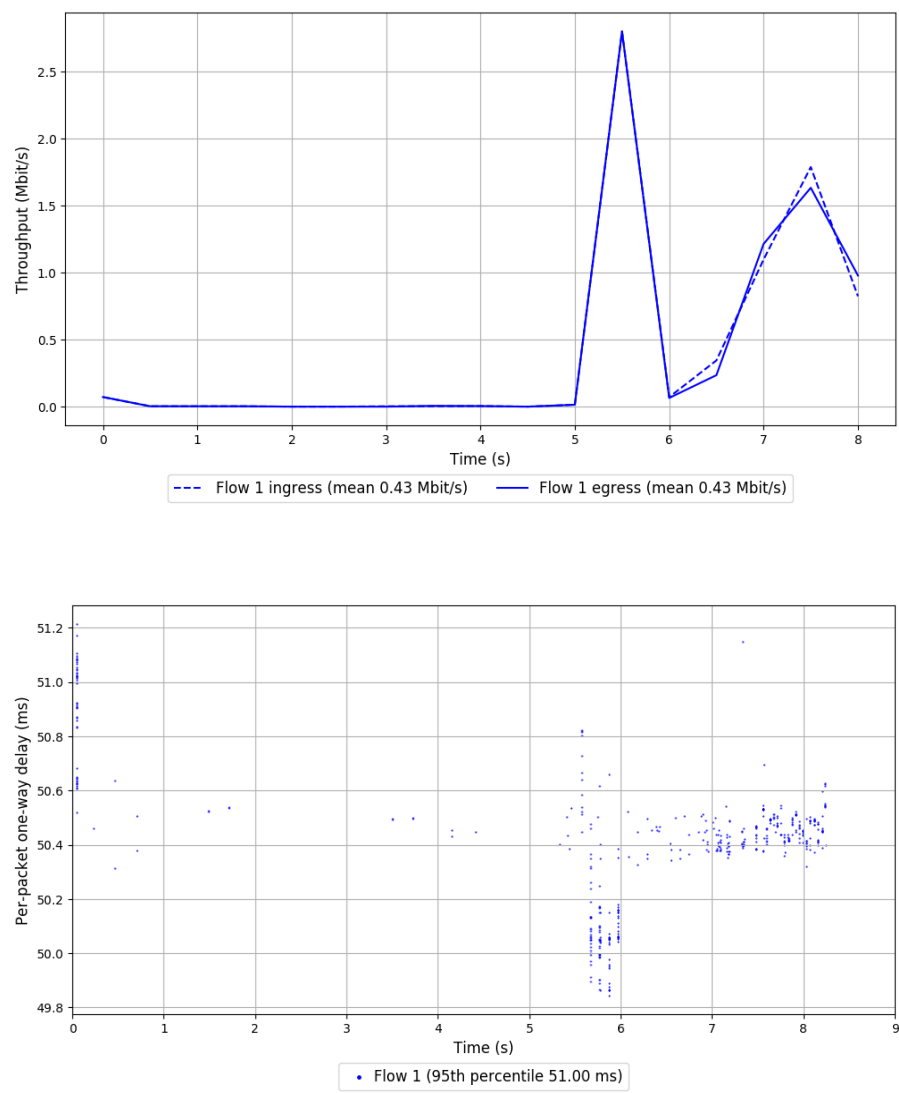


Run 3: Statistics of WebRTC media

Start at: 2017-12-20 03:32:03

End at: 2017-12-20 03:32:33

Run 3: Report of WebRTC media — Data Link

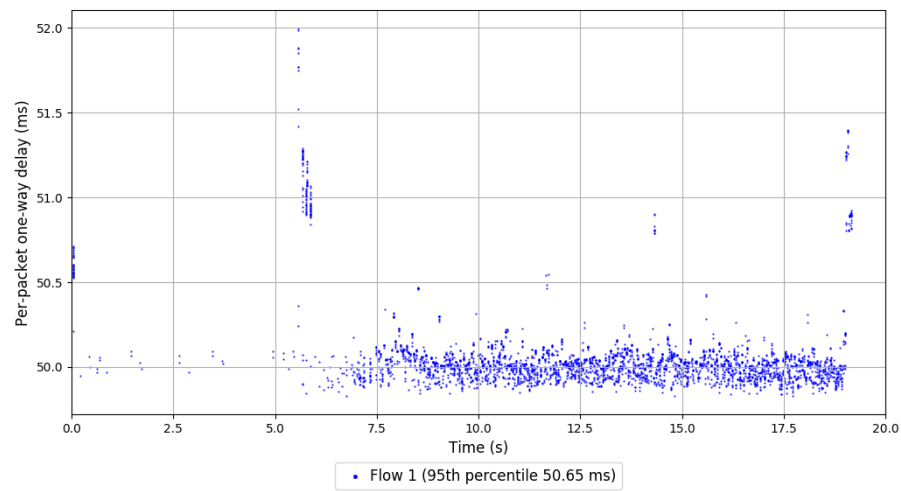
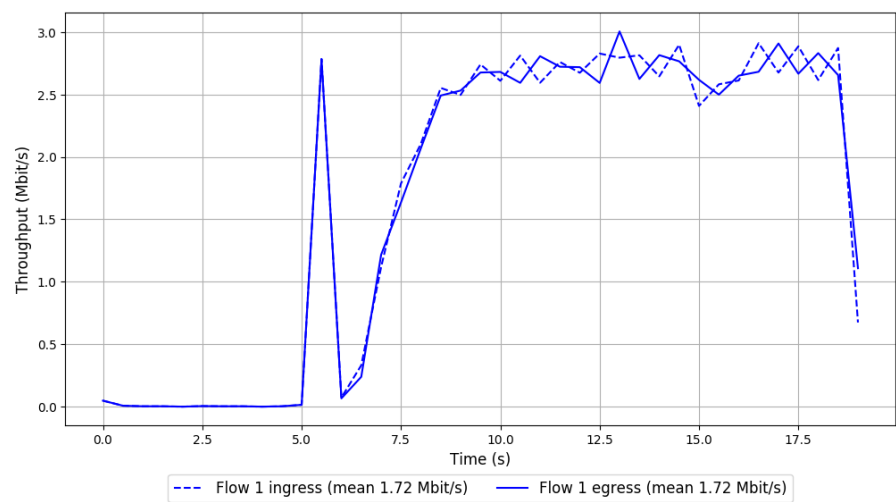


Run 4: Statistics of WebRTC media

Start at: 2017-12-20 03:43:40

End at: 2017-12-20 03:44:10

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-20 03:55:26

End at: 2017-12-20 03:55:56

Below is generated by plot.py at 2017-12-20 06:31:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 50.839 ms

Loss rate: 0.00%

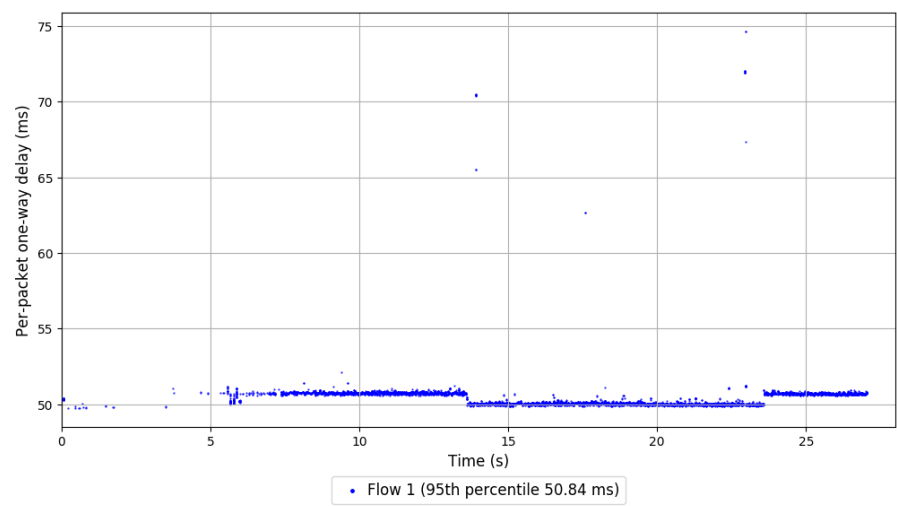
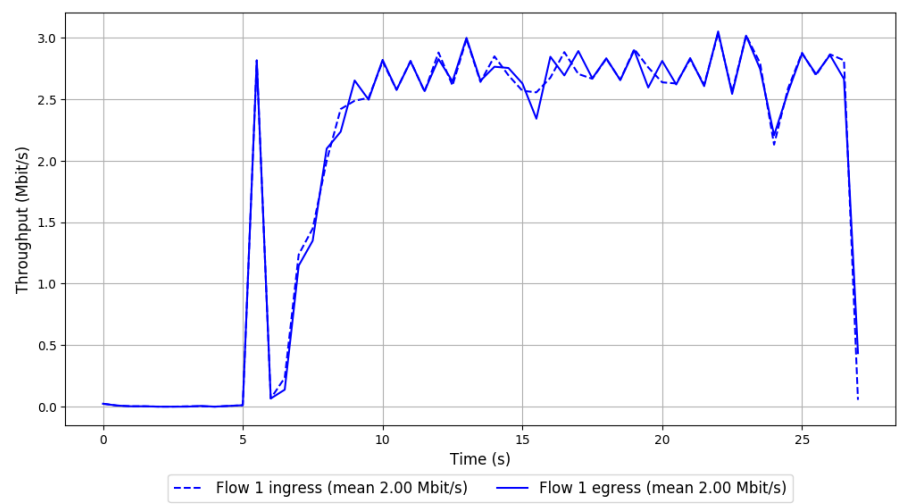
-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 50.839 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-20 04:07:08

End at: 2017-12-20 04:07:38

Below is generated by plot.py at 2017-12-20 06:31:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.99 Mbit/s

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

Loss rate: 0.00%

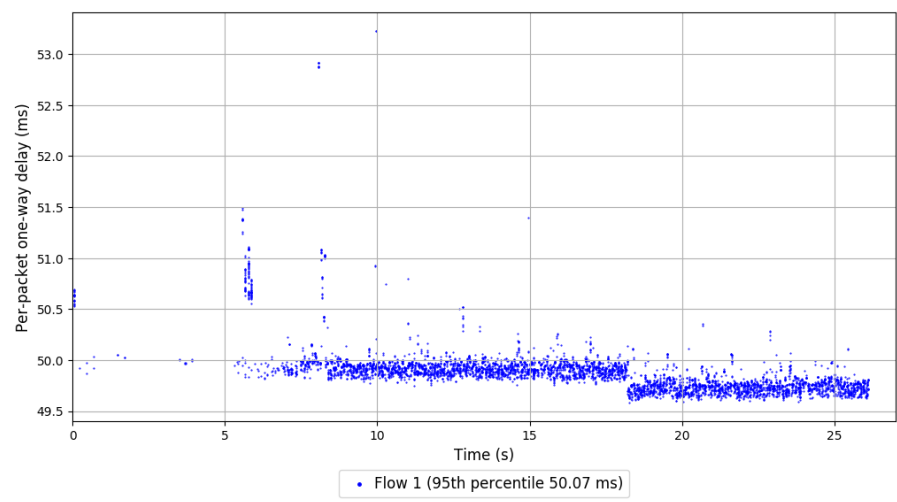
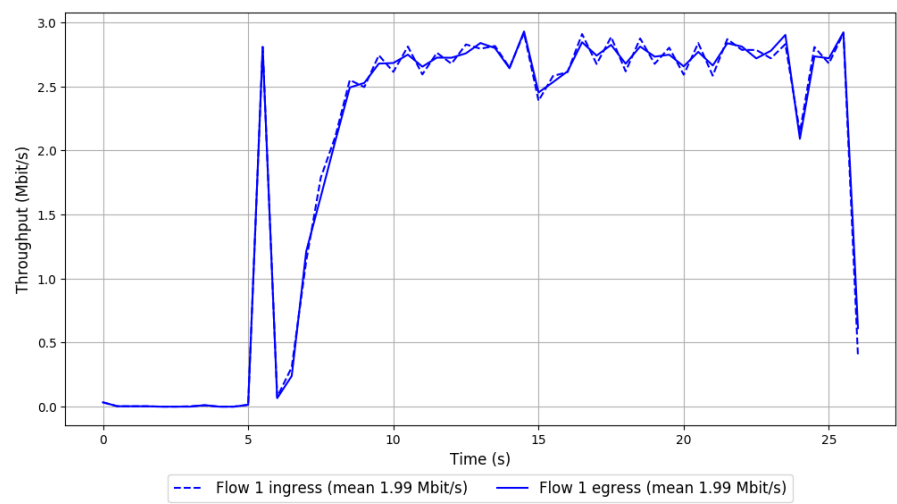
-- Flow 1:

Average throughput: 1.99 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link

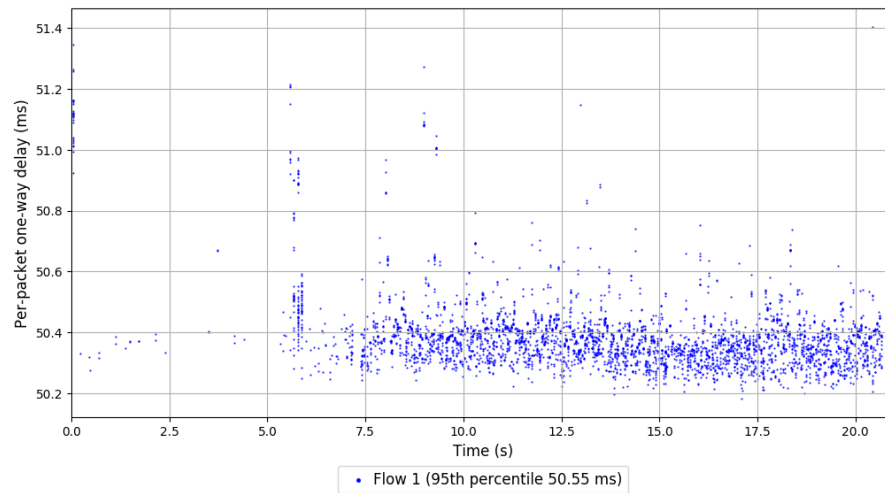
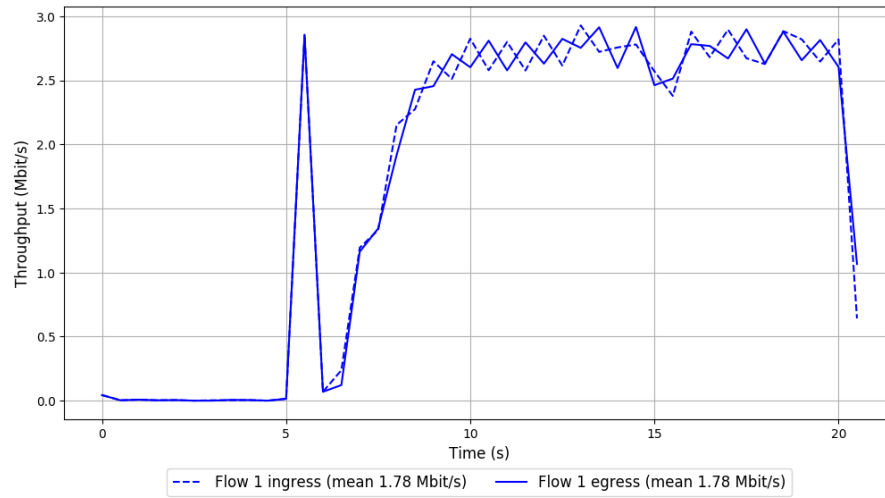


Run 7: Statistics of WebRTC media

Start at: 2017-12-20 04:18:47

End at: 2017-12-20 04:19:17

Run 7: Report of WebRTC media — Data Link

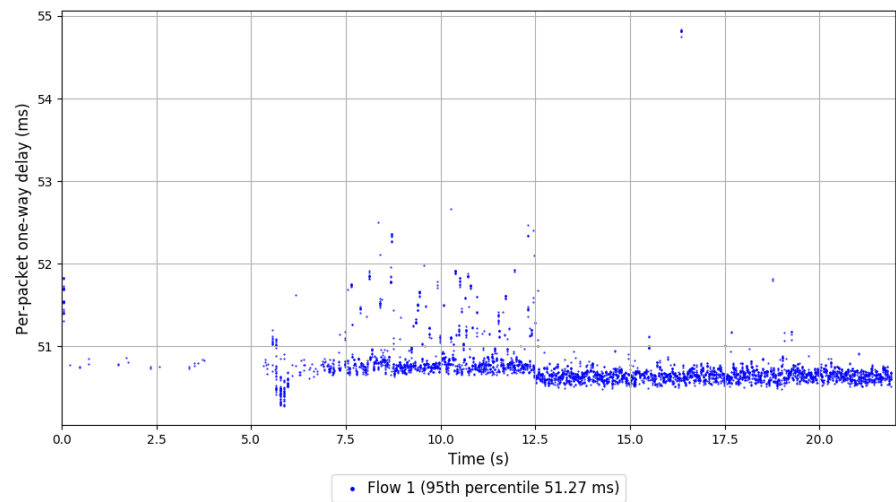
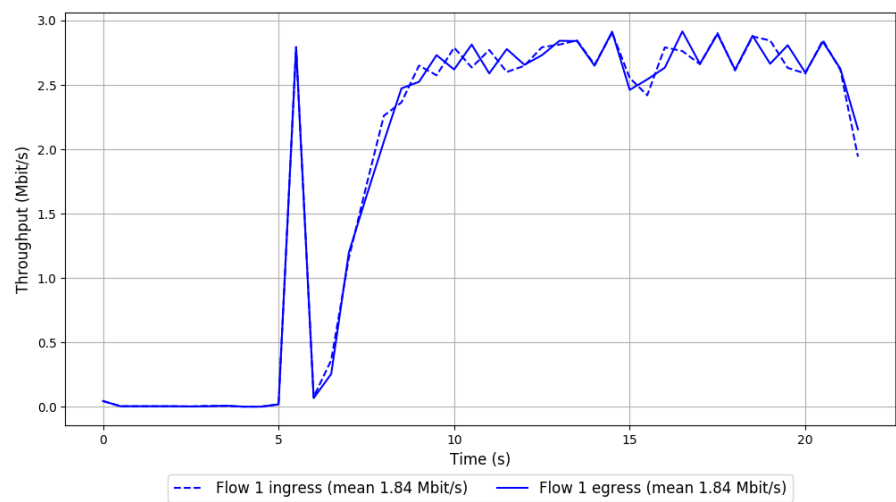


Run 8: Statistics of WebRTC media

Start at: 2017-12-20 04:30:22

End at: 2017-12-20 04:30:52

Run 8: Report of WebRTC media — Data Link

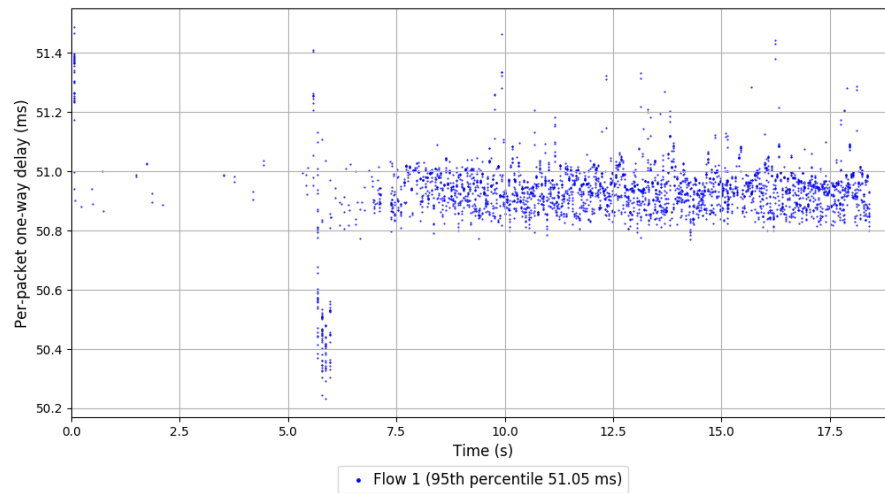
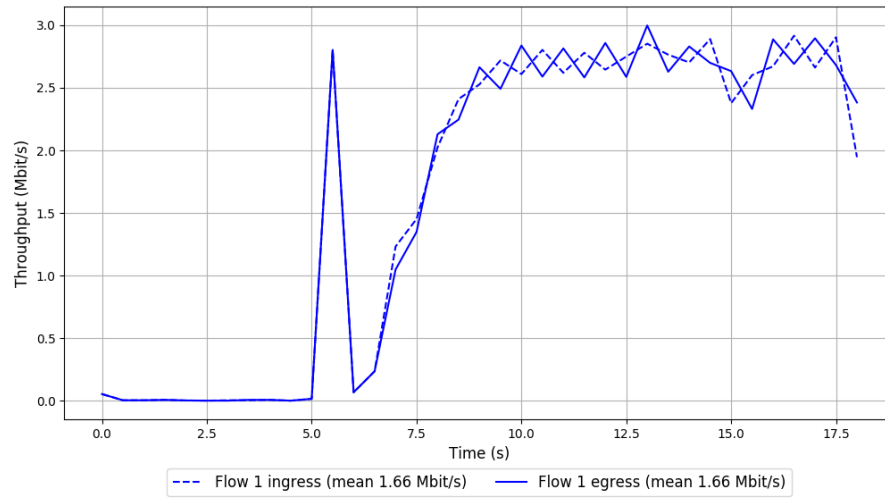


Run 9: Statistics of WebRTC media

Start at: 2017-12-20 04:41:59

End at: 2017-12-20 04:42:29

Run 9: Report of WebRTC media — Data Link

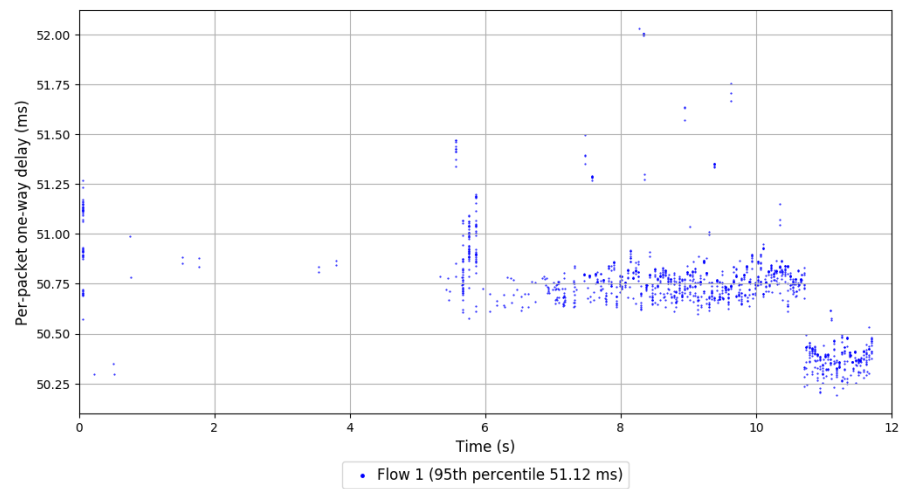
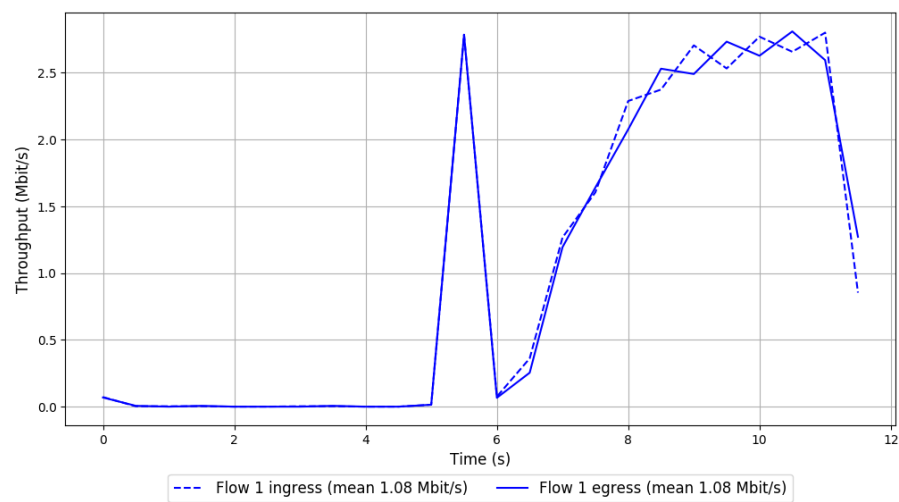


Run 10: Statistics of WebRTC media

Start at: 2017-12-20 04:53:31

End at: 2017-12-20 04:54:01

Run 10: Report of WebRTC media — Data Link

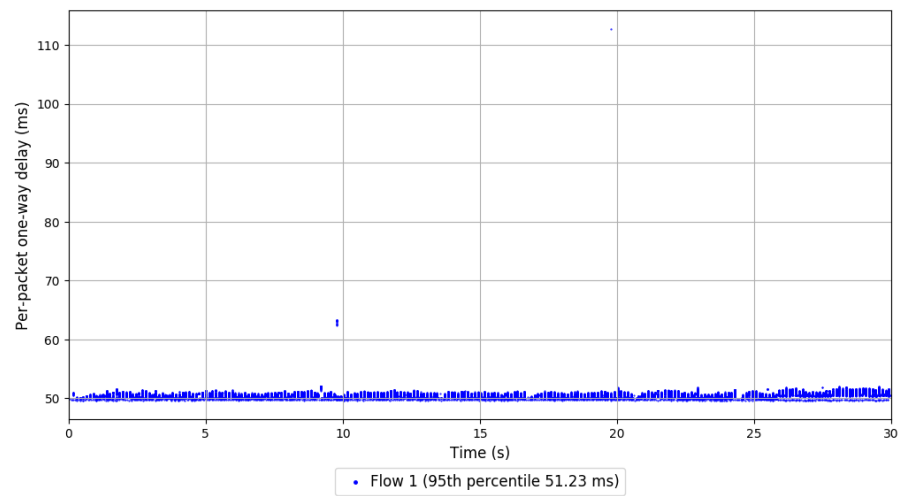
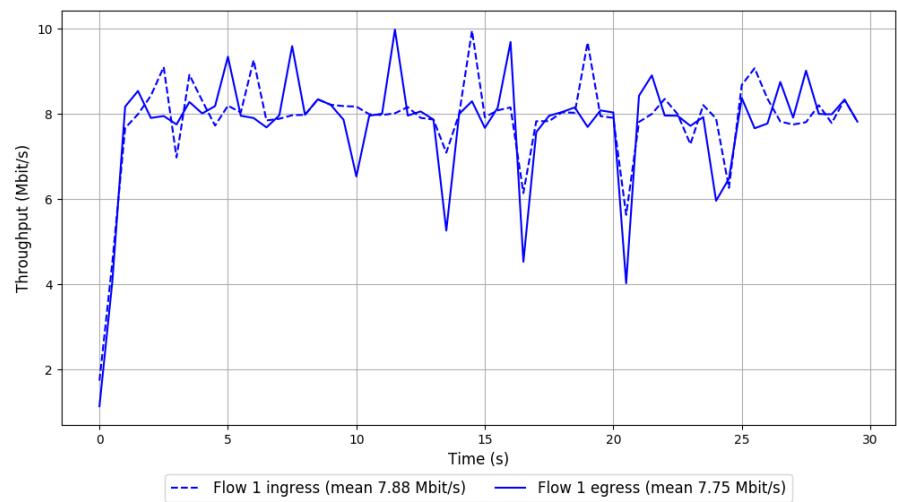


```
Run 1: Statistics of Sprout

Start at: 2017-12-20 03:12:27
End at: 2017-12-20 03:12:57

# Below is generated by plot.py at 2017-12-20 06:31:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.75 Mbit/s
95th percentile per-packet one-way delay: 51.235 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 7.75 Mbit/s
95th percentile per-packet one-way delay: 51.235 ms
Loss rate: 1.64%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-20 03:23:41

End at: 2017-12-20 03:24:11

Below is generated by plot.py at 2017-12-20 06:31:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.49 Mbit/s

95th percentile per-packet one-way delay: 51.608 ms

Loss rate: 1.61%

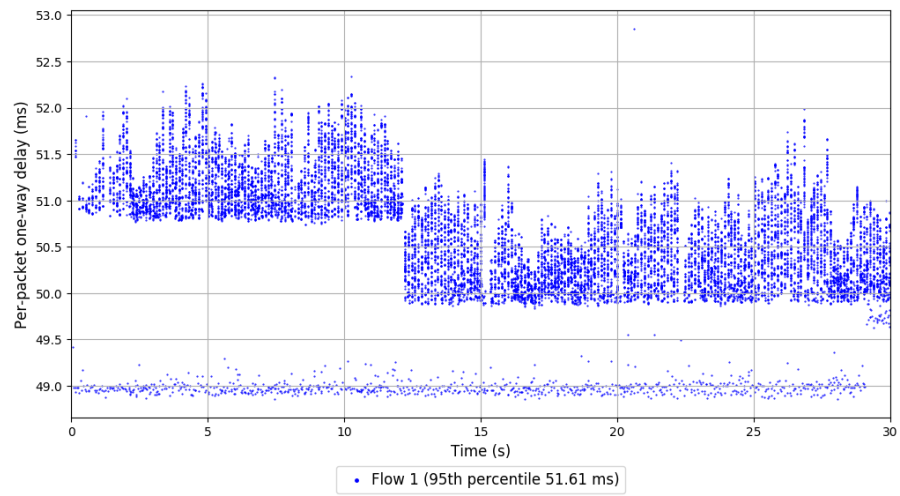
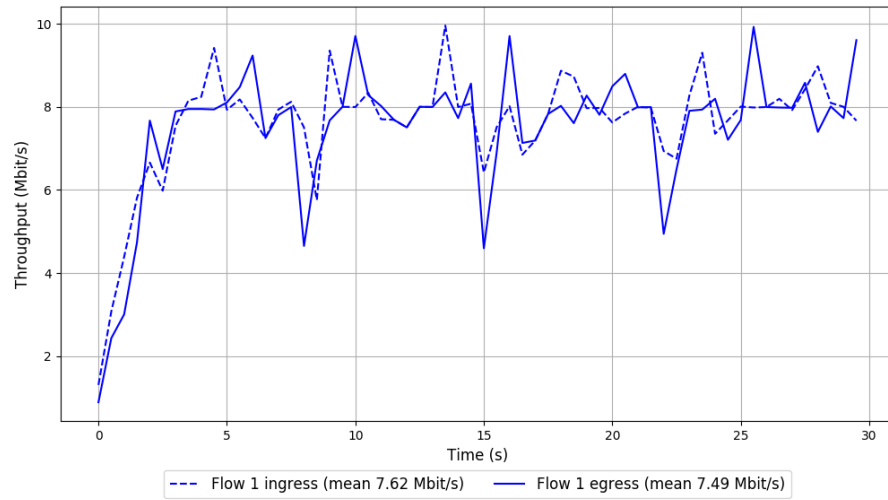
-- Flow 1:

Average throughput: 7.49 Mbit/s

95th percentile per-packet one-way delay: 51.608 ms

Loss rate: 1.61%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-20 03:35:07

End at: 2017-12-20 03:35:37

Below is generated by plot.py at 2017-12-20 06:31:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 51.812 ms

Loss rate: 0.45%

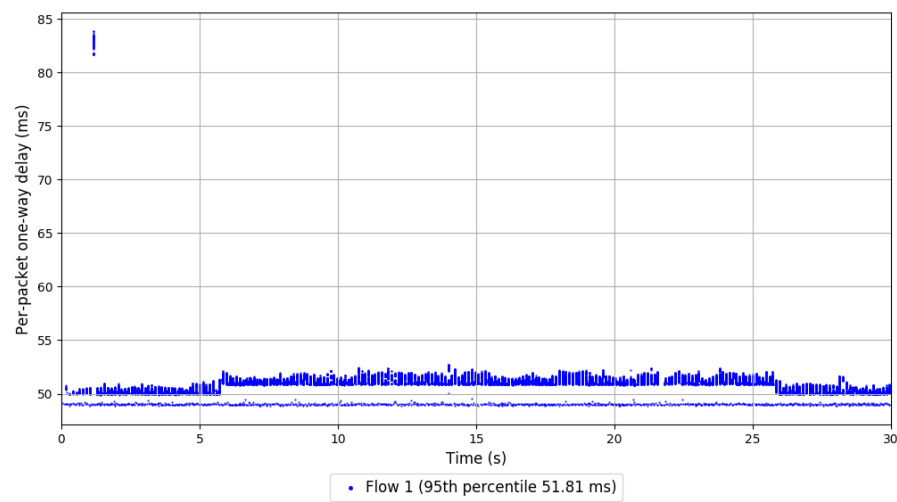
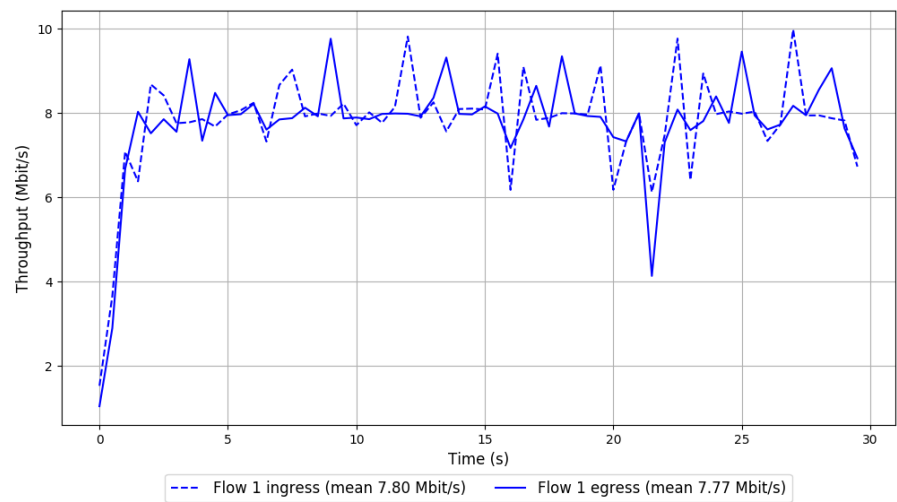
-- Flow 1:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 51.812 ms

Loss rate: 0.45%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-20 03:46:43

End at: 2017-12-20 03:47:13

Below is generated by plot.py at 2017-12-20 06:31:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 51.515 ms

Loss rate: 0.43%

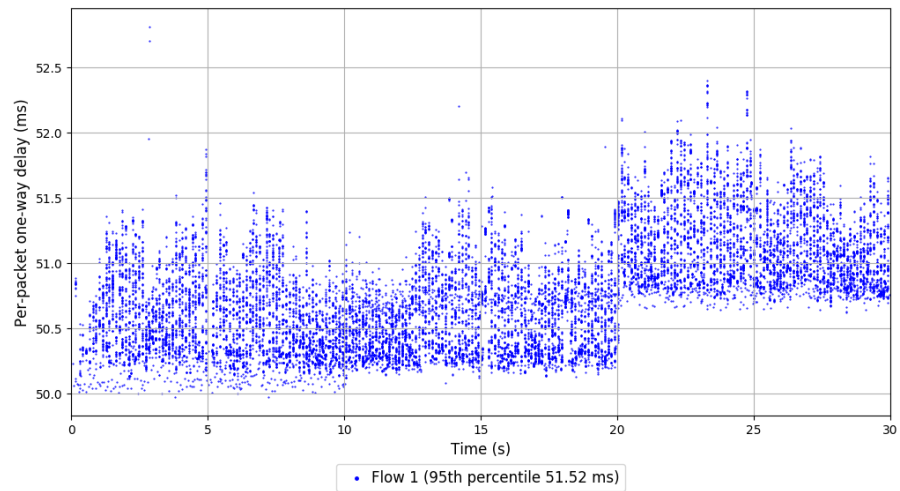
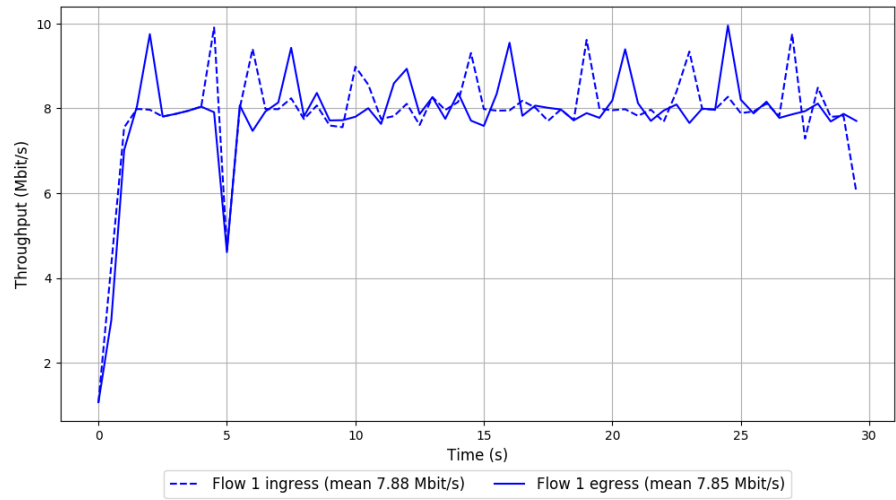
-- Flow 1:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 51.515 ms

Loss rate: 0.43%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-20 03:58:30

End at: 2017-12-20 03:59:00

Below is generated by plot.py at 2017-12-20 06:31:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 51.439 ms

Loss rate: 0.81%

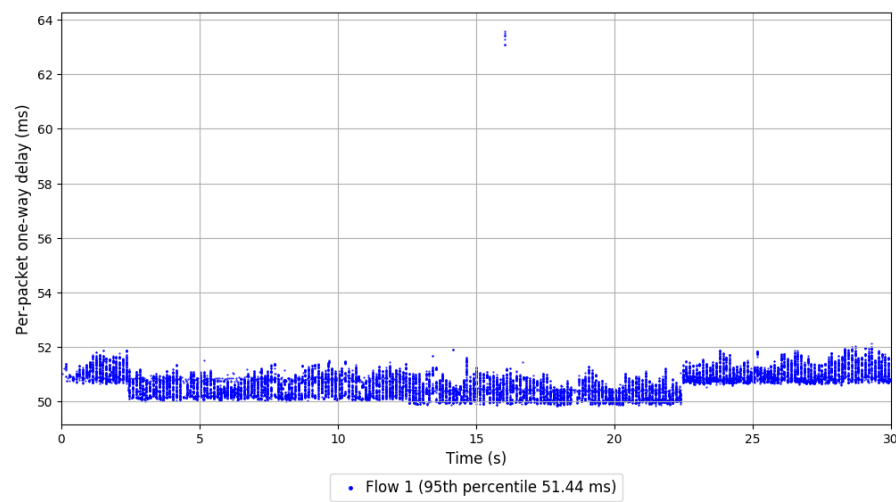
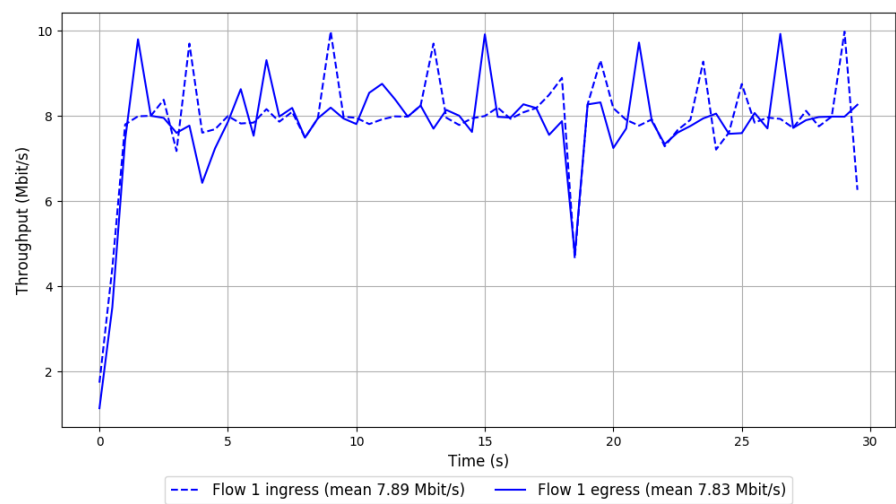
-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 51.439 ms

Loss rate: 0.81%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-20 04:10:12

End at: 2017-12-20 04:10:42

Below is generated by plot.py at 2017-12-20 06:31:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.03 Mbit/s

95th percentile per-packet one-way delay: 51.706 ms

Loss rate: 0.00%

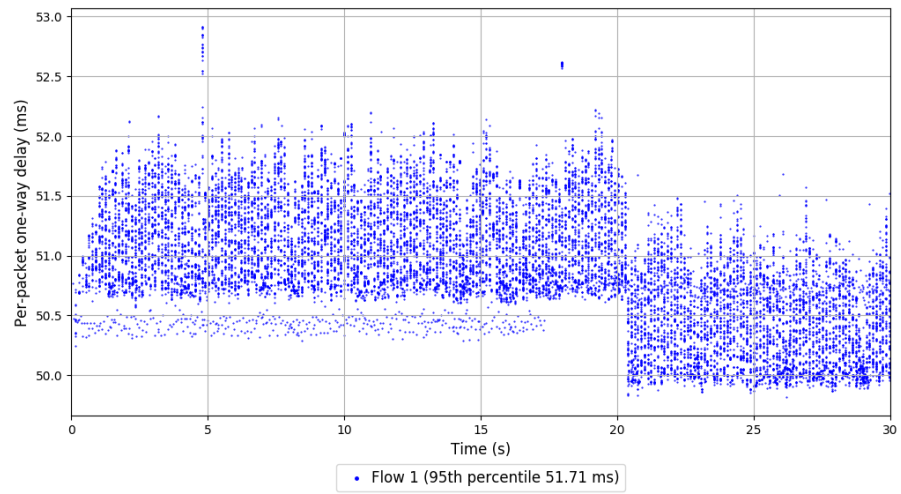
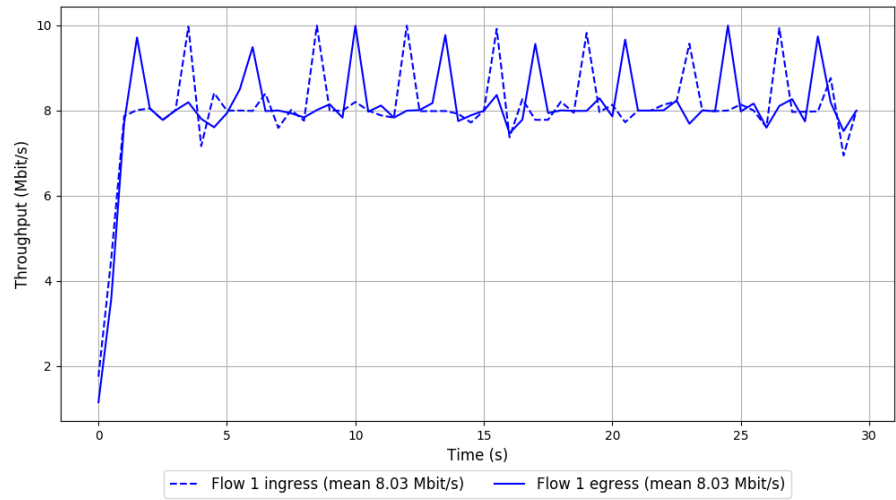
-- Flow 1:

Average throughput: 8.03 Mbit/s

95th percentile per-packet one-way delay: 51.706 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-20 04:21:54

End at: 2017-12-20 04:22:24

Below is generated by plot.py at 2017-12-20 06:31:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 51.477 ms

Loss rate: 0.02%

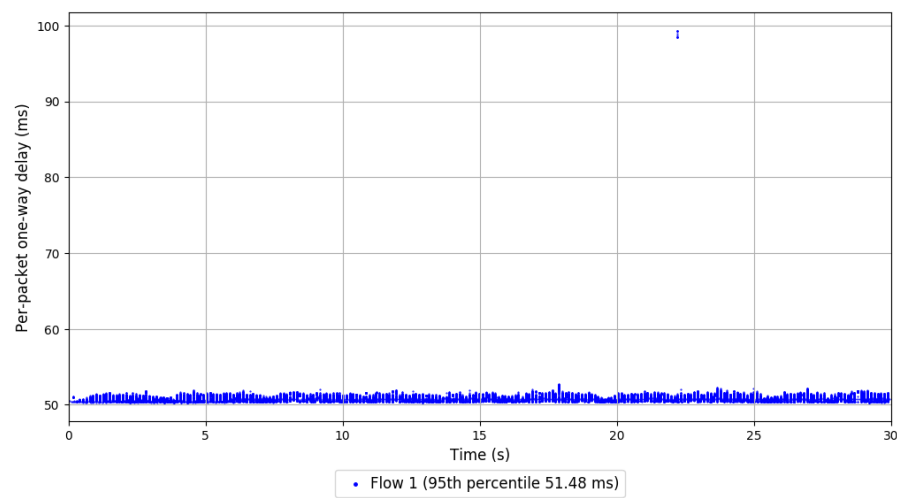
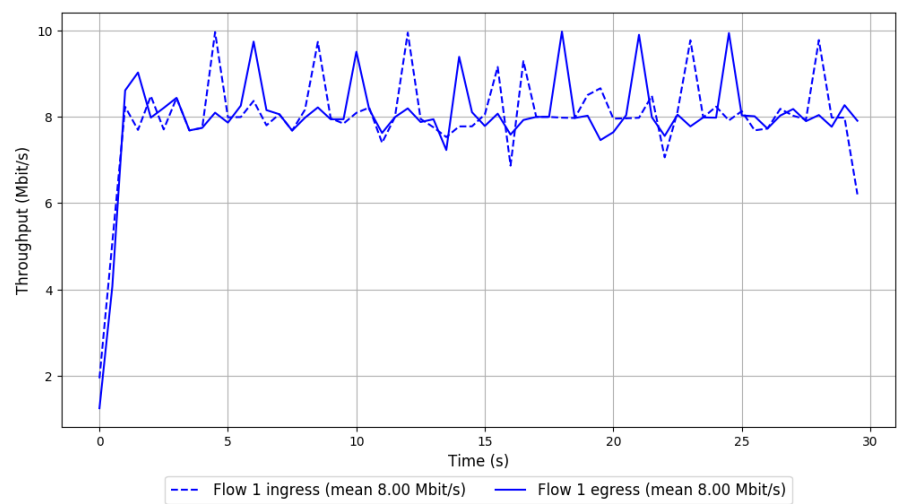
-- Flow 1:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 51.477 ms

Loss rate: 0.02%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-20 04:33:25

End at: 2017-12-20 04:33:55

Below is generated by plot.py at 2017-12-20 06:31:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.435 ms

Loss rate: 0.45%

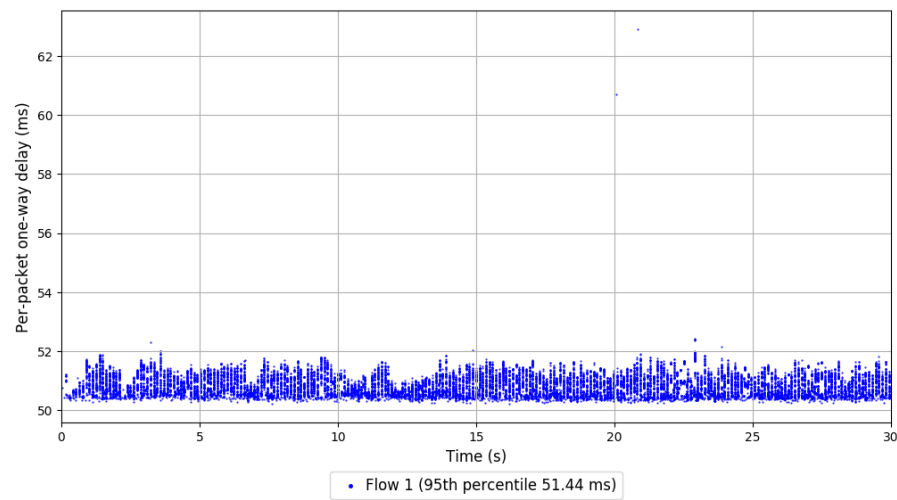
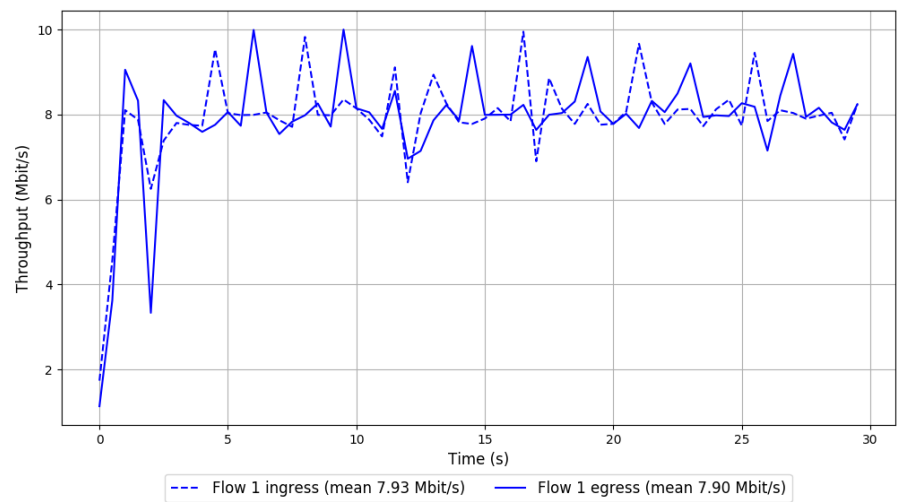
-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.435 ms

Loss rate: 0.45%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-20 04:45:03

End at: 2017-12-20 04:45:33

Below is generated by plot.py at 2017-12-20 06:31:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.768 ms

Loss rate: 0.40%

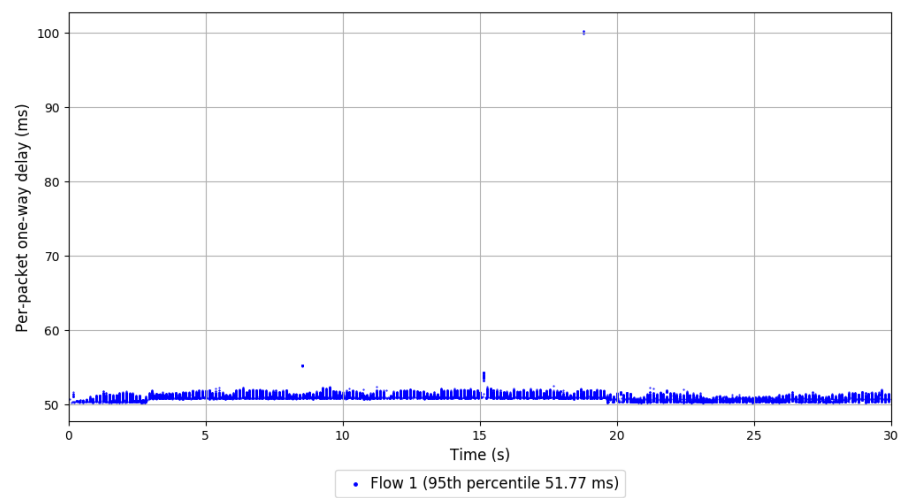
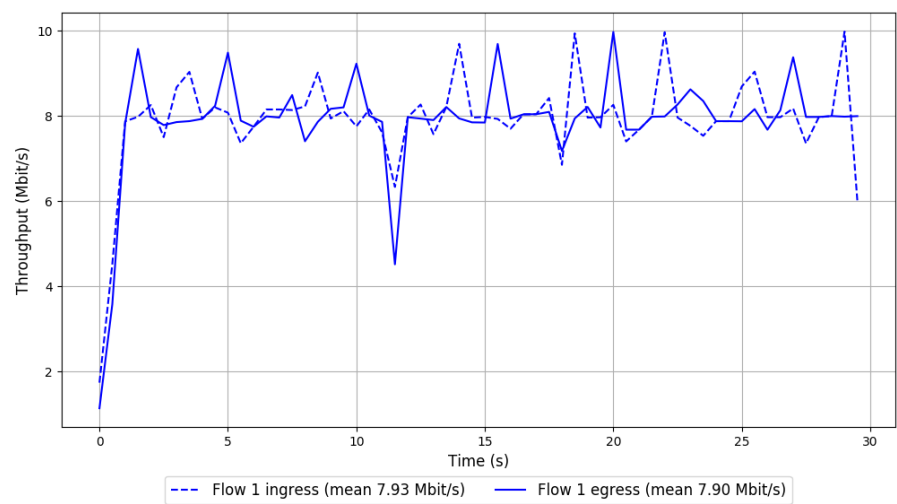
-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.768 ms

Loss rate: 0.40%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-20 04:56:34

End at: 2017-12-20 04:57:04

Below is generated by plot.py at 2017-12-20 06:31:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 51.784 ms

Loss rate: 0.01%

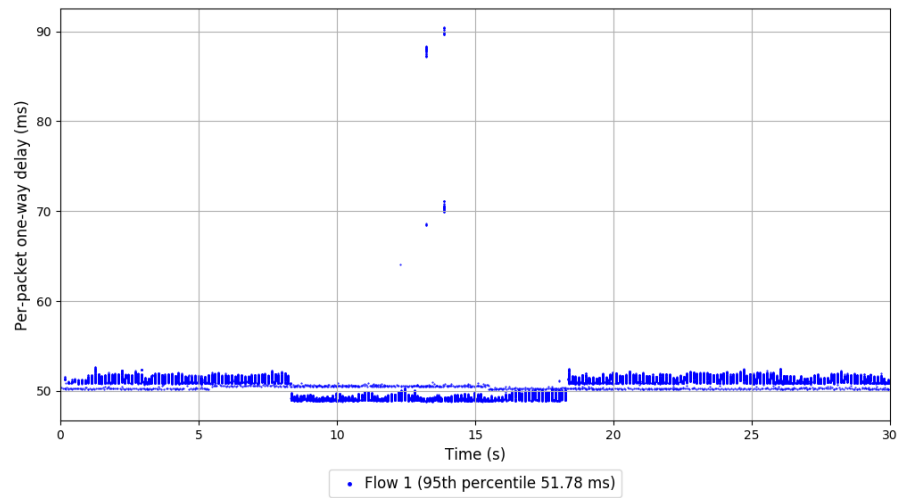
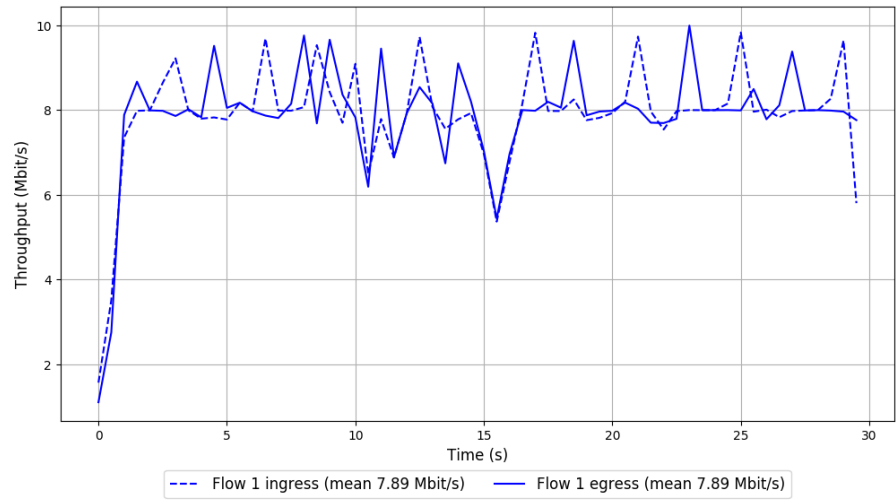
-- Flow 1:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 51.784 ms

Loss rate: 0.01%

Run 10: Report of Sprout — Data Link

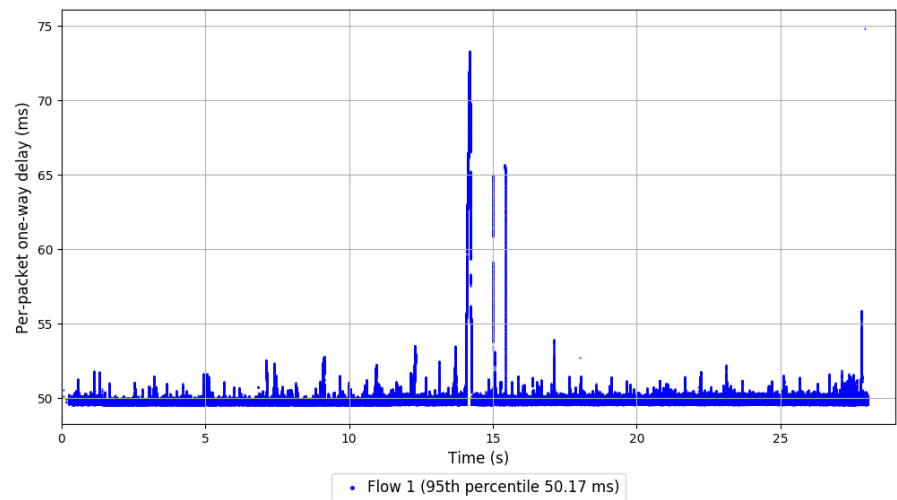
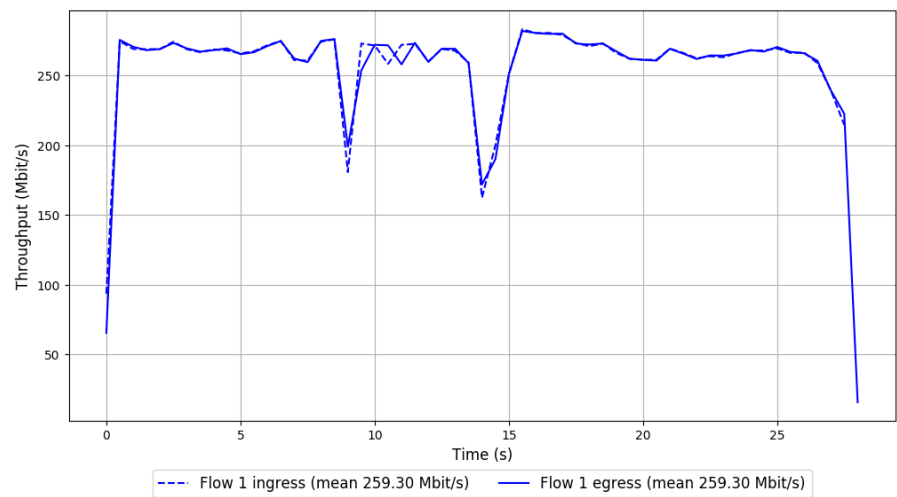


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-20 03:08:29
End at: 2017-12-20 03:08:59

# Below is generated by plot.py at 2017-12-20 06:32:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 259.30 Mbit/s
95th percentile per-packet one-way delay: 50.174 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 259.30 Mbit/s
95th percentile per-packet one-way delay: 50.174 ms
Loss rate: 0.00%
```


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

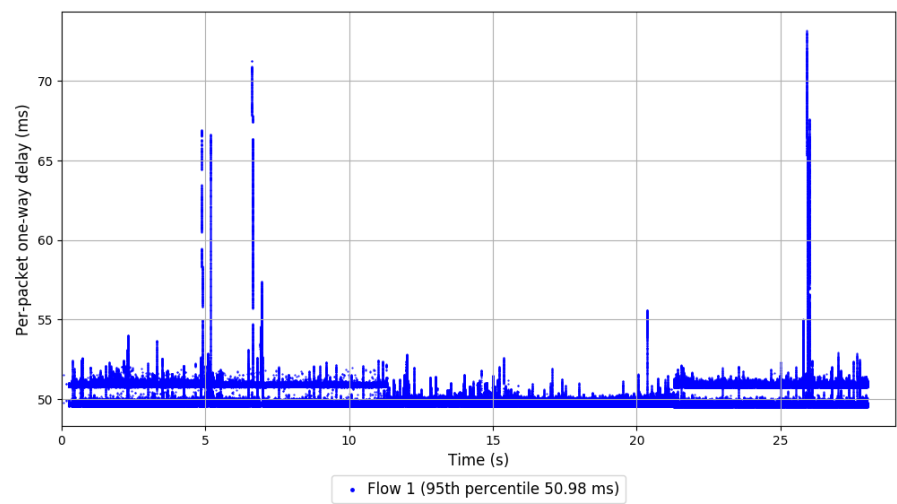
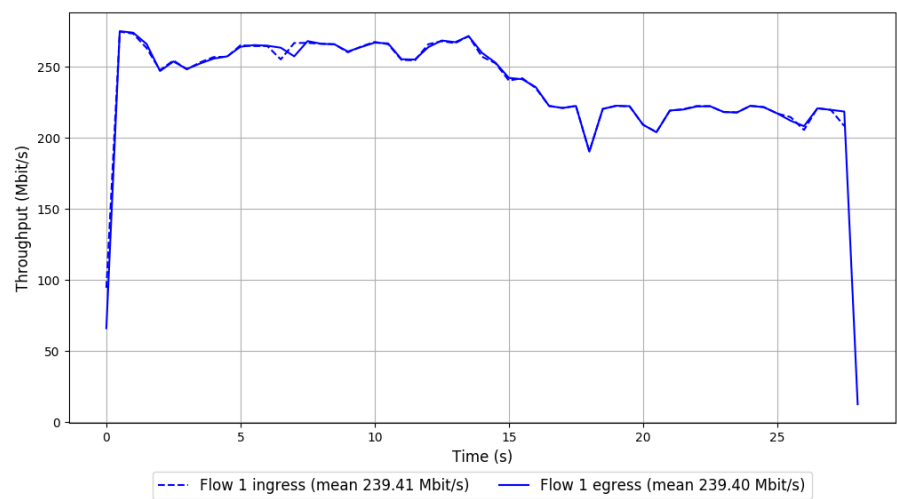


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-20 03:19:39
End at: 2017-12-20 03:20:10

# Below is generated by plot.py at 2017-12-20 06:32:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 239.40 Mbit/s
95th percentile per-packet one-way delay: 50.980 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 239.40 Mbit/s
95th percentile per-packet one-way delay: 50.980 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-20 03:31:18

End at: 2017-12-20 03:31:48

Below is generated by plot.py at 2017-12-20 06:32:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.28 Mbit/s

95th percentile per-packet one-way delay: 50.955 ms

Loss rate: 0.00%

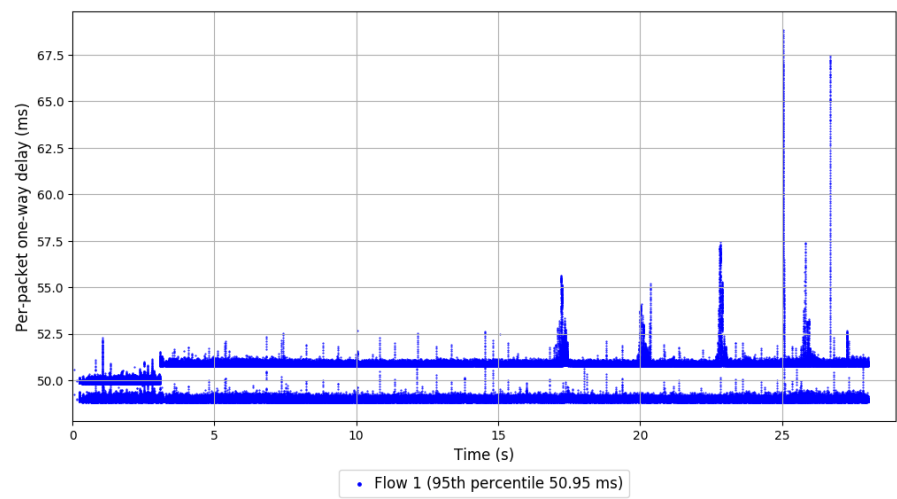
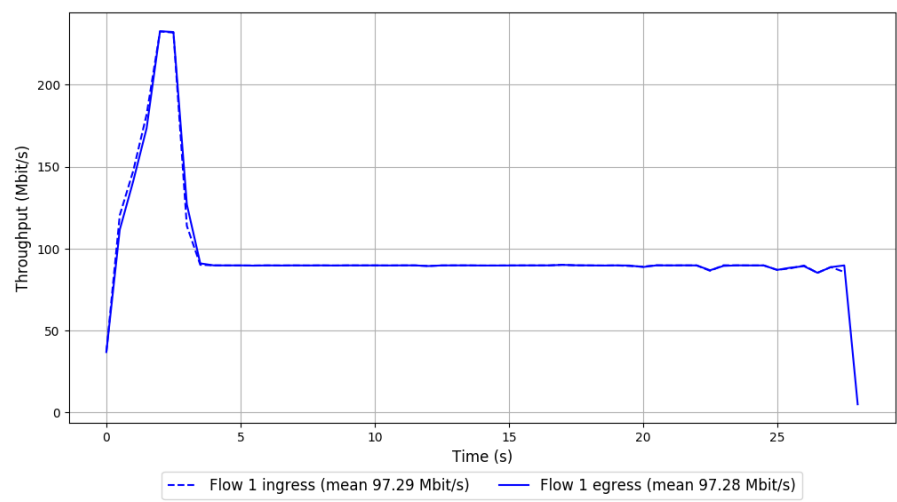
-- Flow 1:

Average throughput: 97.28 Mbit/s

95th percentile per-packet one-way delay: 50.955 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-20 03:42:41

End at: 2017-12-20 03:43:11

Below is generated by plot.py at 2017-12-20 06:32:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 256.19 Mbit/s

95th percentile per-packet one-way delay: 51.072 ms

Loss rate: 0.00%

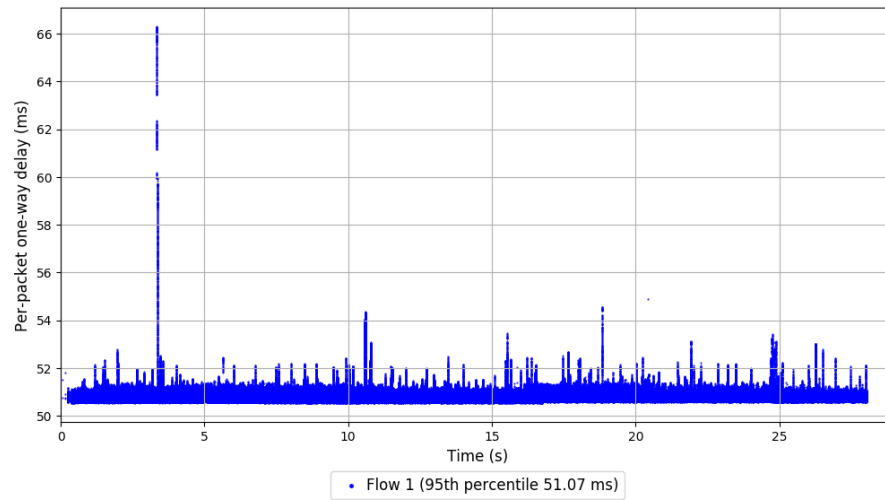
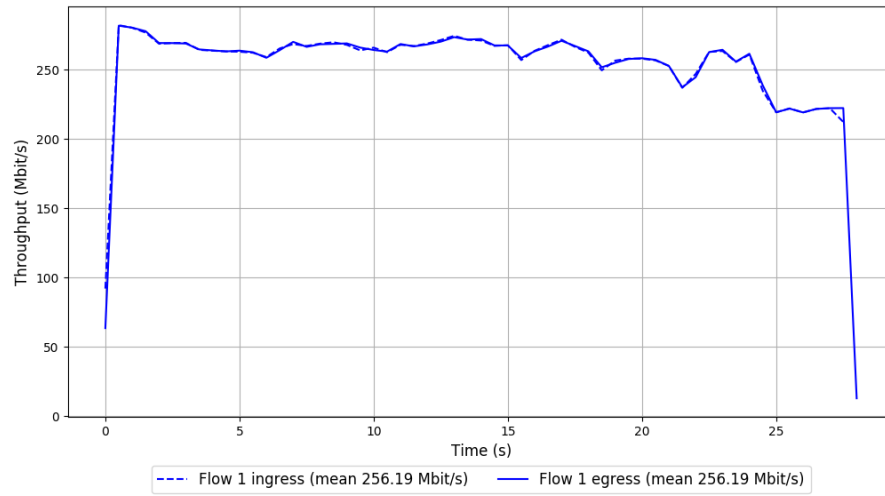
-- Flow 1:

Average throughput: 256.19 Mbit/s

95th percentile per-packet one-way delay: 51.072 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-20 03:54:26

End at: 2017-12-20 03:54:56

Below is generated by plot.py at 2017-12-20 06:32:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 260.11 Mbit/s

95th percentile per-packet one-way delay: 50.499 ms

Loss rate: 0.00%

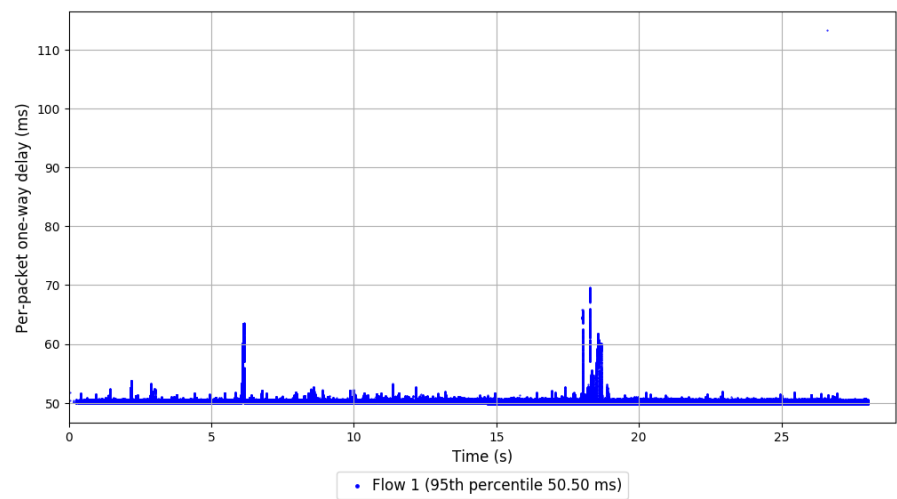
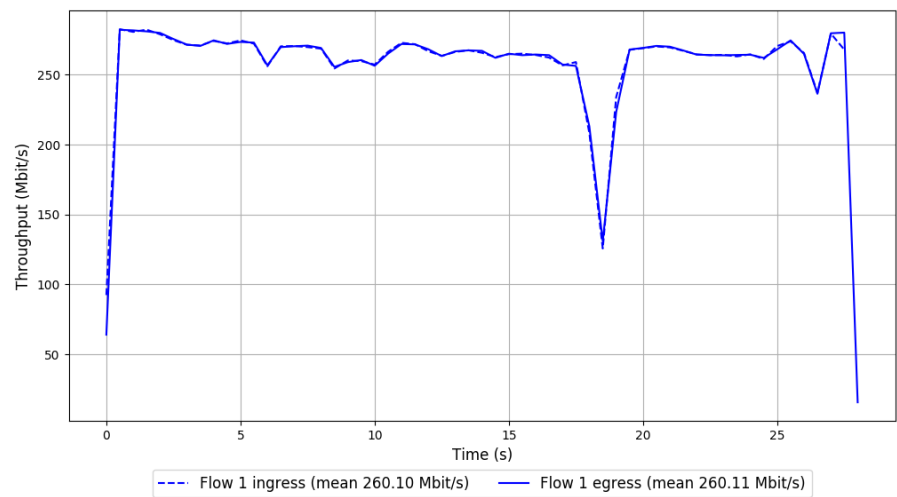
-- Flow 1:

Average throughput: 260.11 Mbit/s

95th percentile per-packet one-way delay: 50.499 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-20 04:06:09

End at: 2017-12-20 04:06:39

Below is generated by plot.py at 2017-12-20 06:32:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 256.57 Mbit/s

95th percentile per-packet one-way delay: 50.545 ms

Loss rate: 0.00%

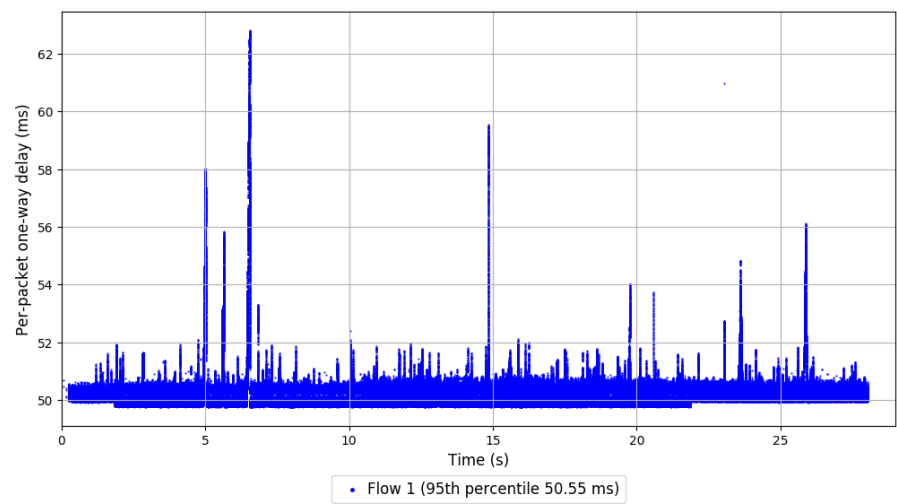
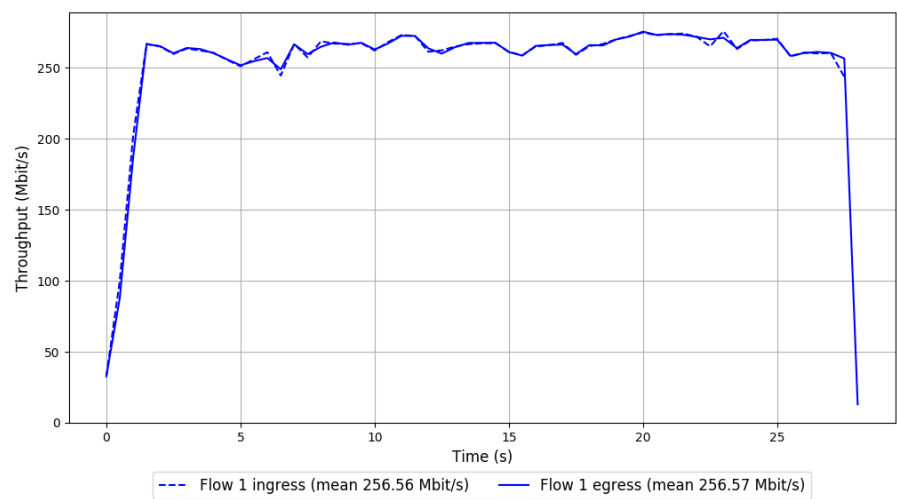
-- Flow 1:

Average throughput: 256.57 Mbit/s

95th percentile per-packet one-way delay: 50.545 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-20 04:17:47

End at: 2017-12-20 04:18:17

Below is generated by plot.py at 2017-12-20 06:36:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 264.84 Mbit/s

95th percentile per-packet one-way delay: 50.933 ms

Loss rate: 0.00%

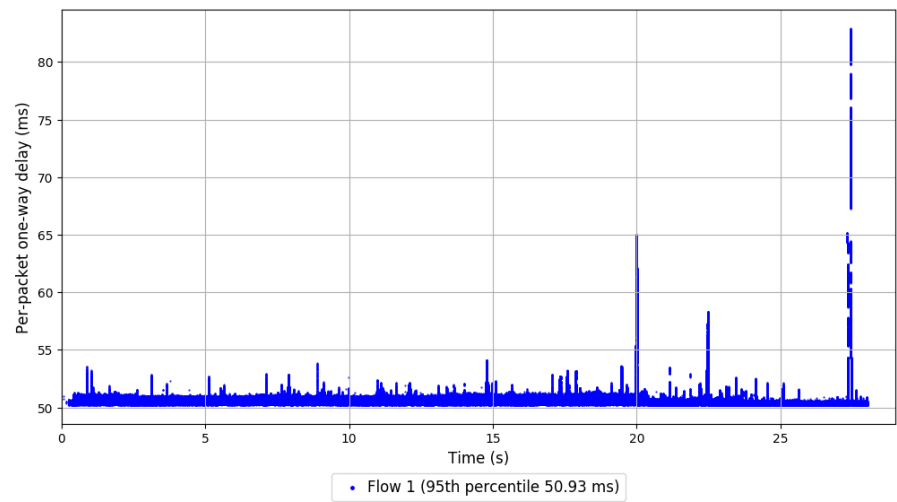
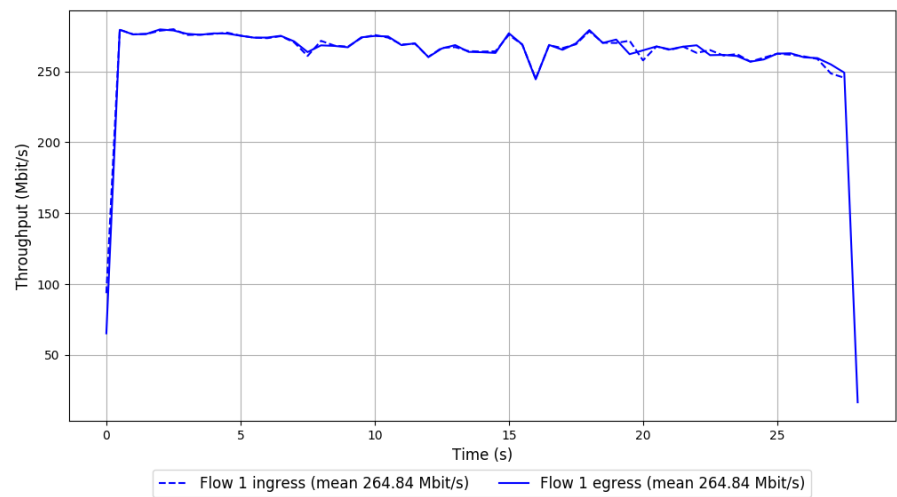
-- Flow 1:

Average throughput: 264.84 Mbit/s

95th percentile per-packet one-way delay: 50.933 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-20 04:29:24

End at: 2017-12-20 04:29:54

Below is generated by plot.py at 2017-12-20 06:38:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 244.85 Mbit/s

95th percentile per-packet one-way delay: 50.743 ms

Loss rate: 0.00%

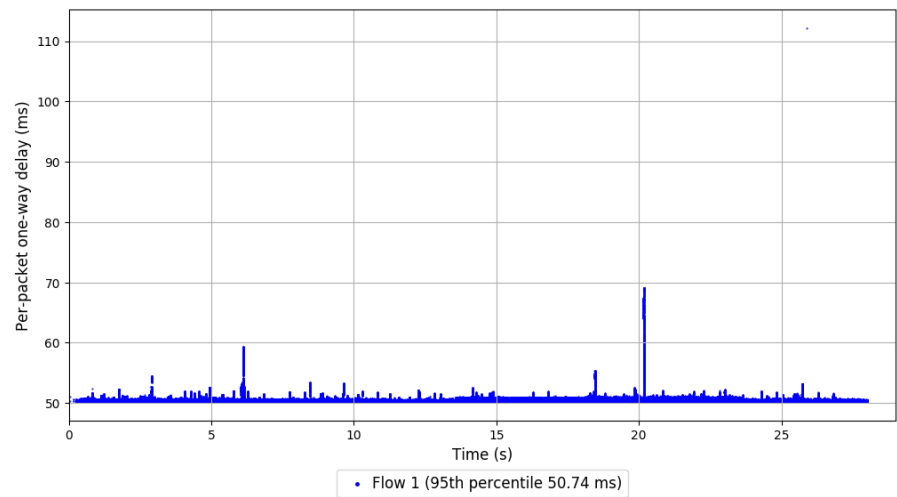
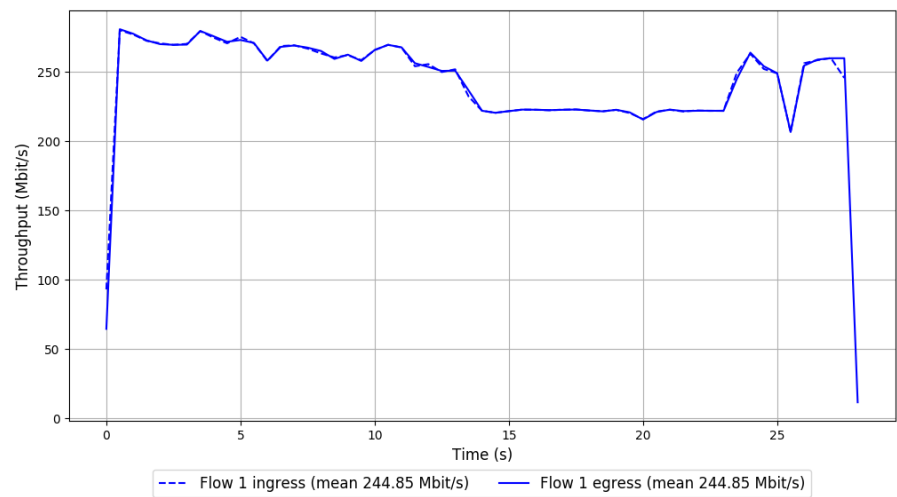
-- Flow 1:

Average throughput: 244.85 Mbit/s

95th percentile per-packet one-way delay: 50.743 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-20 04:41:03

End at: 2017-12-20 04:41:33

Below is generated by plot.py at 2017-12-20 06:38:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 229.39 Mbit/s

95th percentile per-packet one-way delay: 50.680 ms

Loss rate: 0.00%

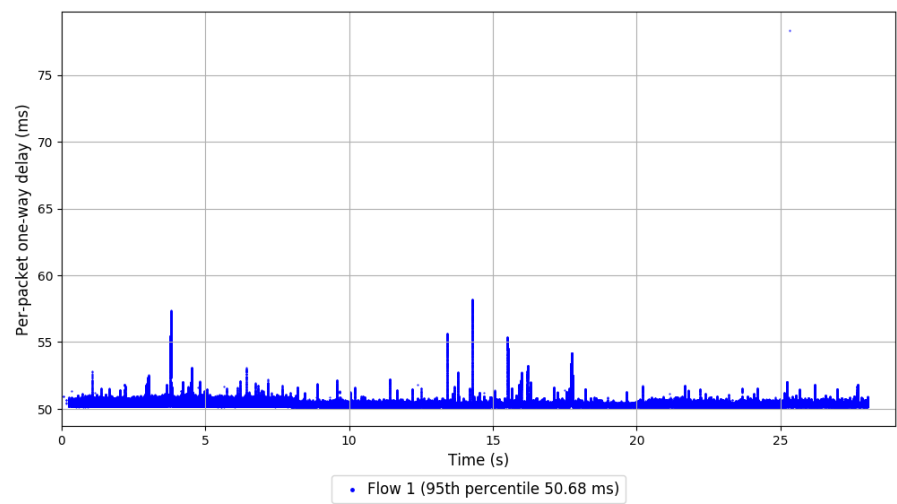
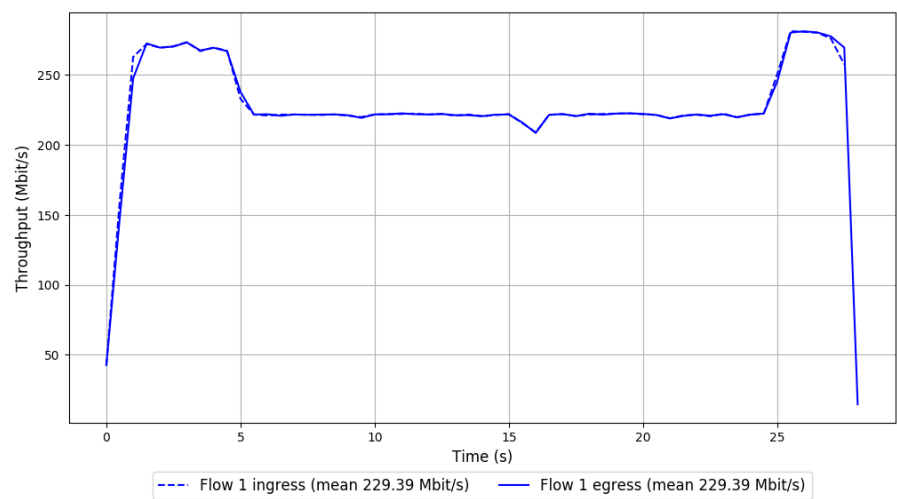
-- Flow 1:

Average throughput: 229.39 Mbit/s

95th percentile per-packet one-way delay: 50.680 ms

Loss rate: 0.00%

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

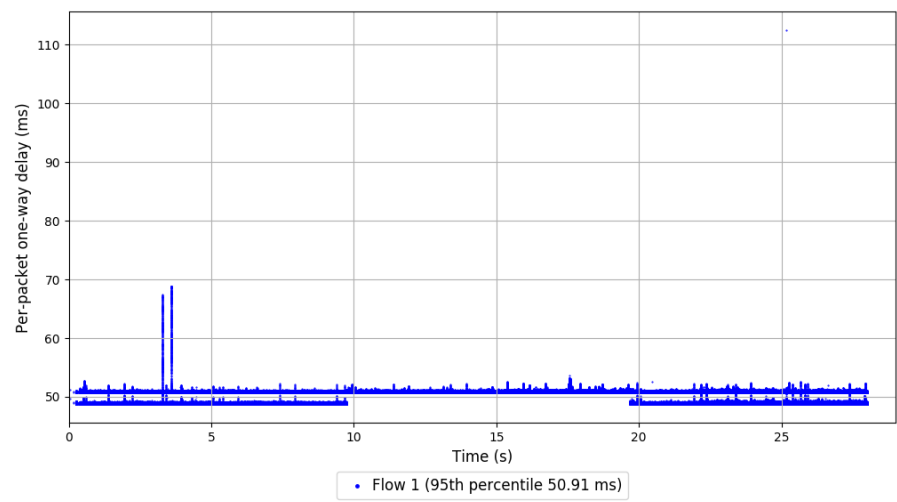
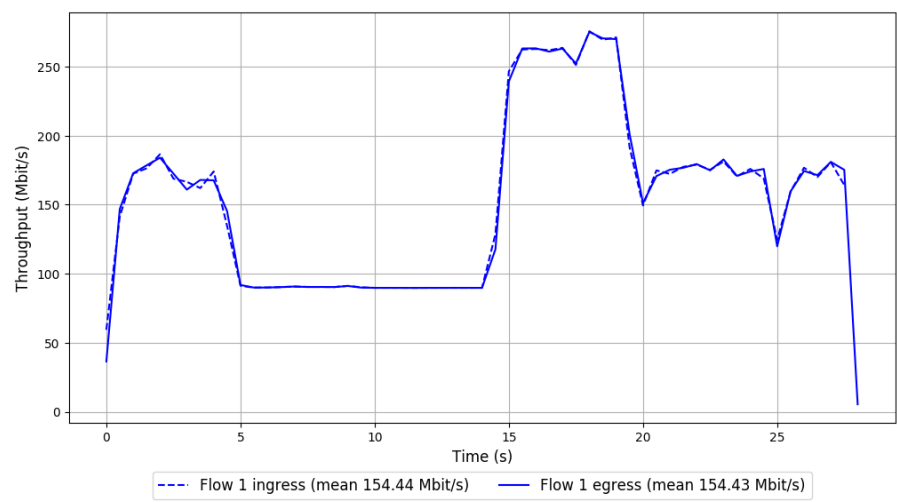


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-20 04:52:41
End at: 2017-12-20 04:53:11

# Below is generated by plot.py at 2017-12-20 06:38:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 154.43 Mbit/s
95th percentile per-packet one-way delay: 50.912 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 154.43 Mbit/s
95th percentile per-packet one-way delay: 50.912 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-20 03:05:49

End at: 2017-12-20 03:06:19

Below is generated by plot.py at 2017-12-20 06:38:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.98 Mbit/s

95th percentile per-packet one-way delay: 51.230 ms

Loss rate: 0.00%

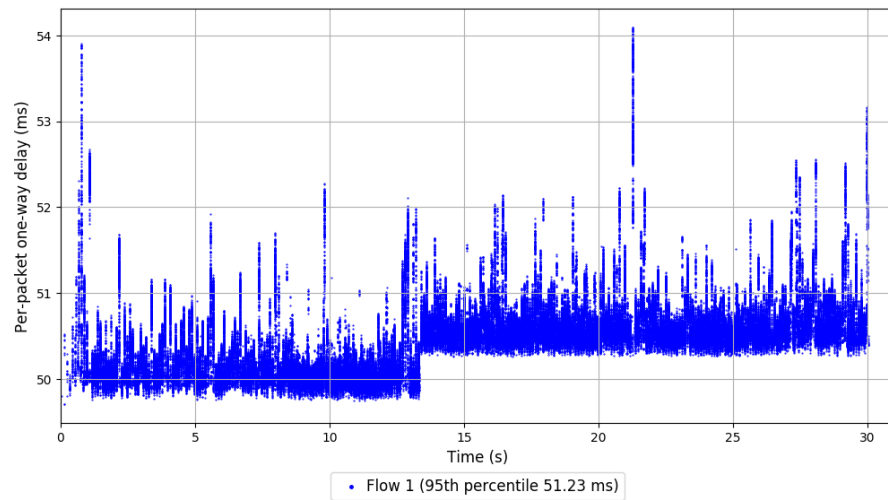
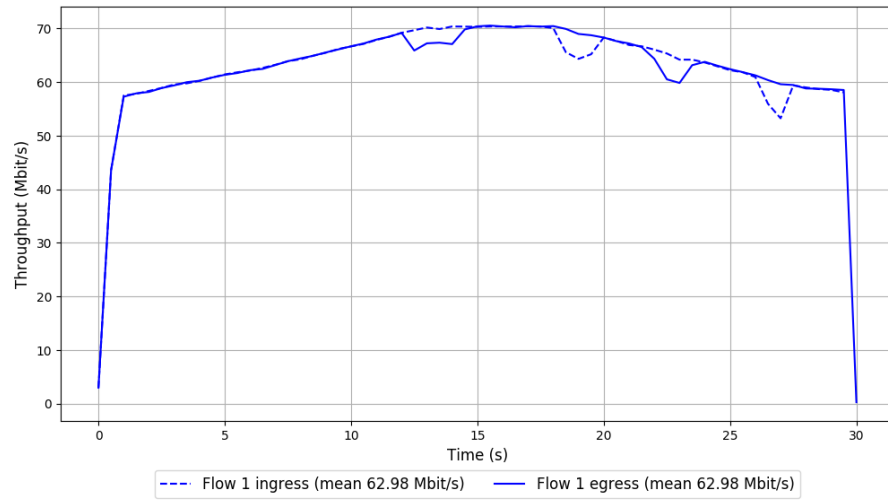
-- Flow 1:

Average throughput: 62.98 Mbit/s

95th percentile per-packet one-way delay: 51.230 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-20 03:17:28

End at: 2017-12-20 03:17:58

Below is generated by plot.py at 2017-12-20 06:38:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.22 Mbit/s

95th percentile per-packet one-way delay: 52.017 ms

Loss rate: 0.90%

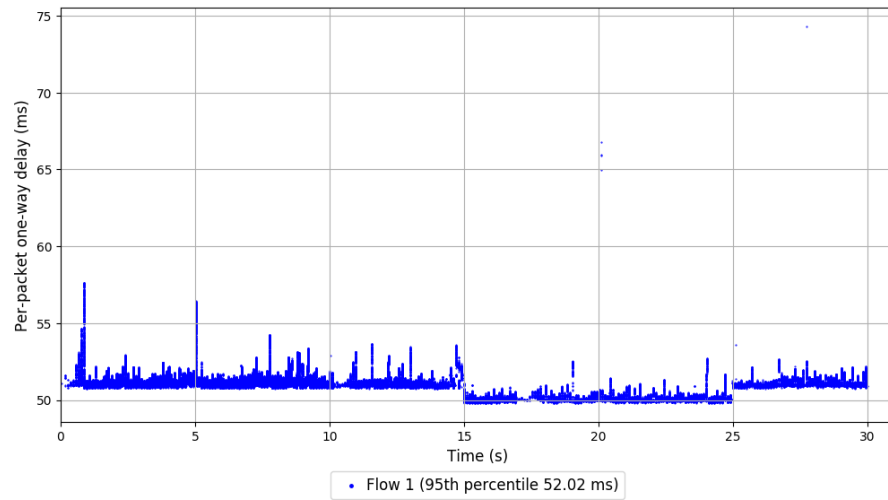
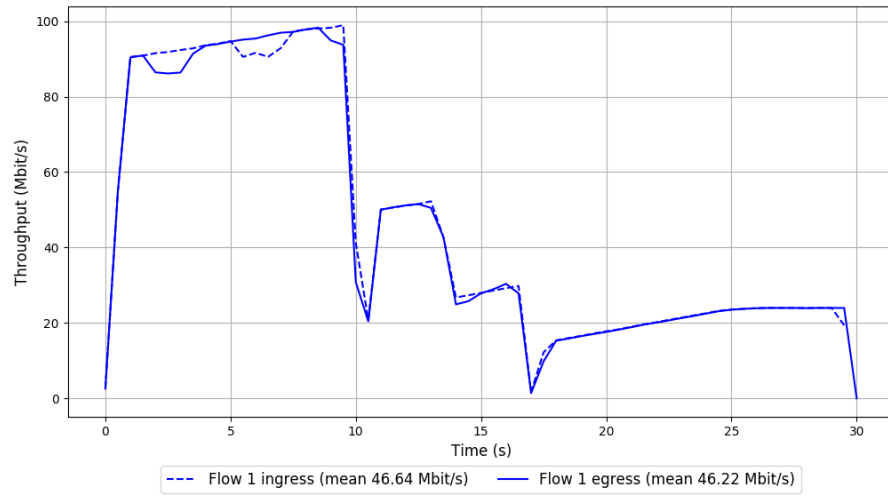
-- Flow 1:

Average throughput: 46.22 Mbit/s

95th percentile per-packet one-way delay: 52.017 ms

Loss rate: 0.90%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-20 03:28:45

End at: 2017-12-20 03:29:15

Below is generated by plot.py at 2017-12-20 06:38:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.85 Mbit/s

95th percentile per-packet one-way delay: 51.913 ms

Loss rate: 0.90%

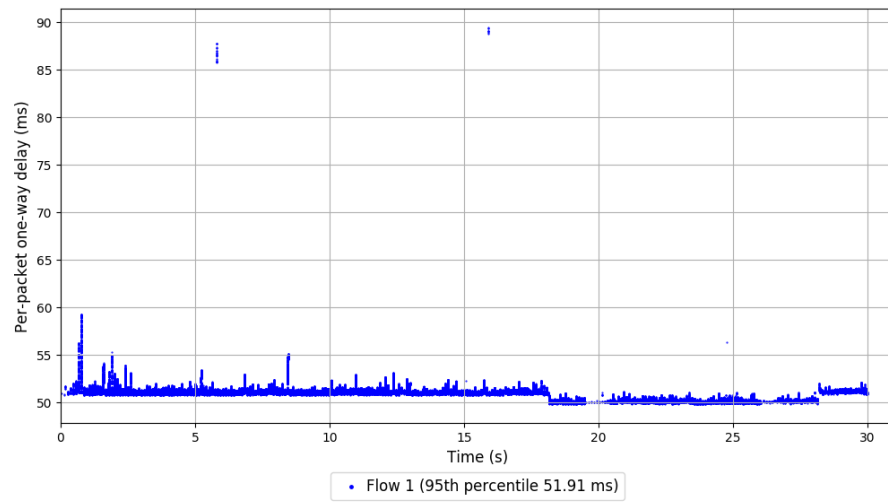
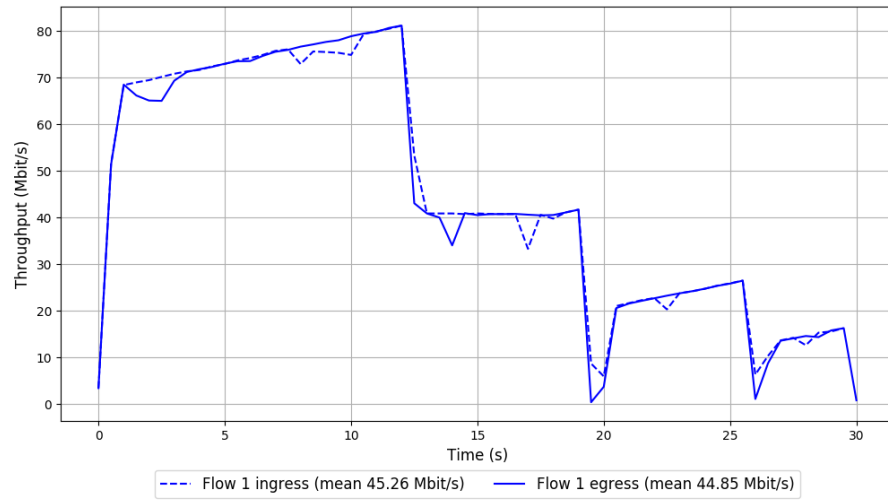
-- Flow 1:

Average throughput: 44.85 Mbit/s

95th percentile per-packet one-way delay: 51.913 ms

Loss rate: 0.90%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-20 03:40:09

End at: 2017-12-20 03:40:39

Below is generated by plot.py at 2017-12-20 06:38:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.53 Mbit/s

95th percentile per-packet one-way delay: 51.569 ms

Loss rate: 0.47%

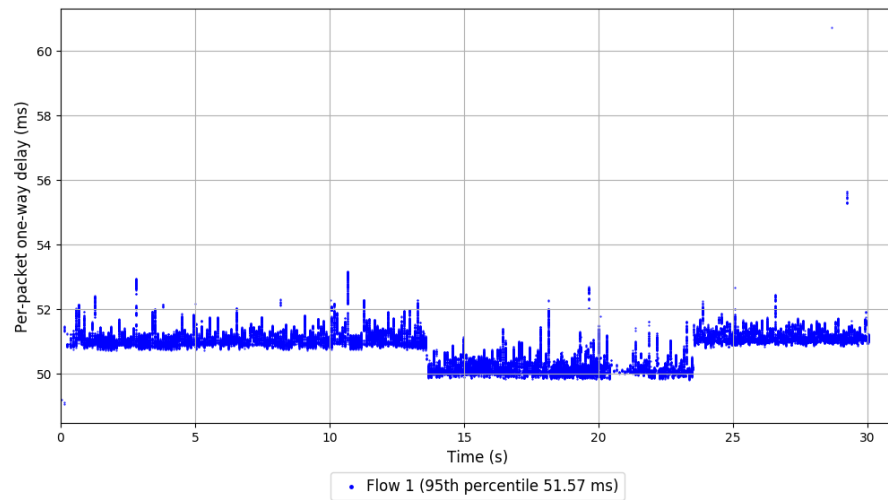
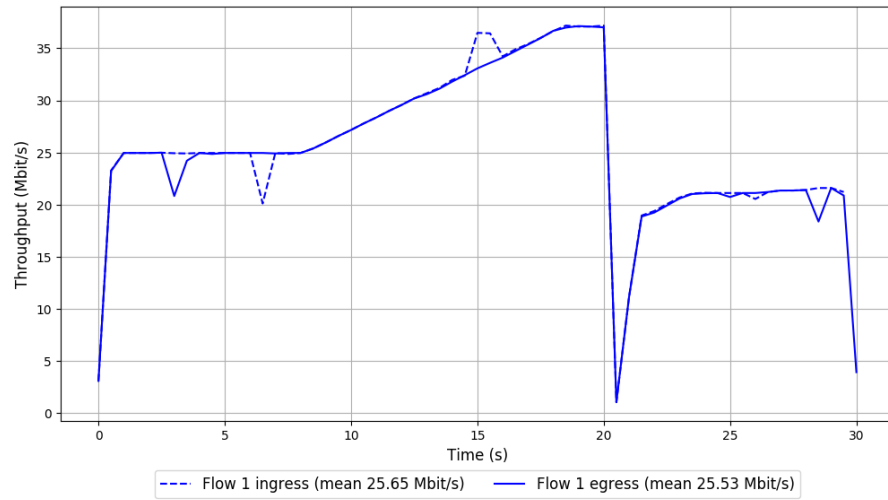
-- Flow 1:

Average throughput: 25.53 Mbit/s

95th percentile per-packet one-way delay: 51.569 ms

Loss rate: 0.47%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-20 03:51:49

End at: 2017-12-20 03:52:19

Below is generated by plot.py at 2017-12-20 06:38:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.87 Mbit/s

95th percentile per-packet one-way delay: 50.926 ms

Loss rate: 0.14%

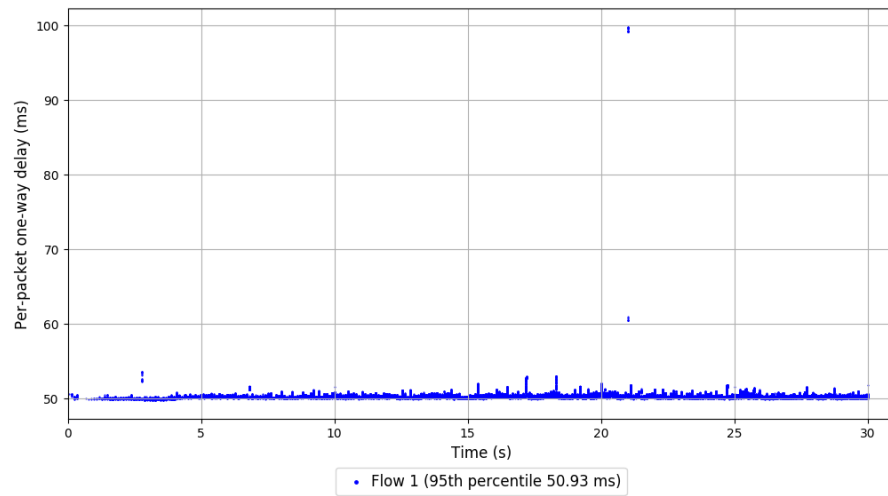
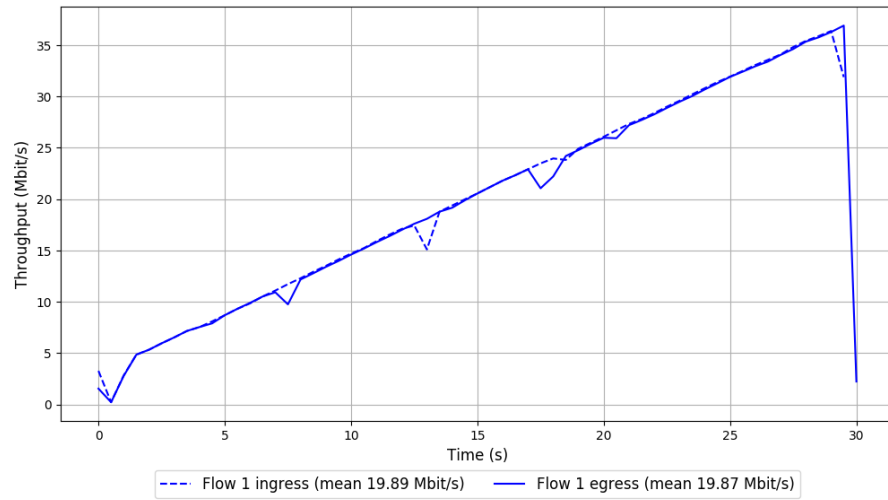
-- Flow 1:

Average throughput: 19.87 Mbit/s

95th percentile per-packet one-way delay: 50.926 ms

Loss rate: 0.14%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-20 04:03:29

End at: 2017-12-20 04:04:00

Below is generated by plot.py at 2017-12-20 06:38:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.16 Mbit/s

95th percentile per-packet one-way delay: 52.118 ms

Loss rate: 0.00%

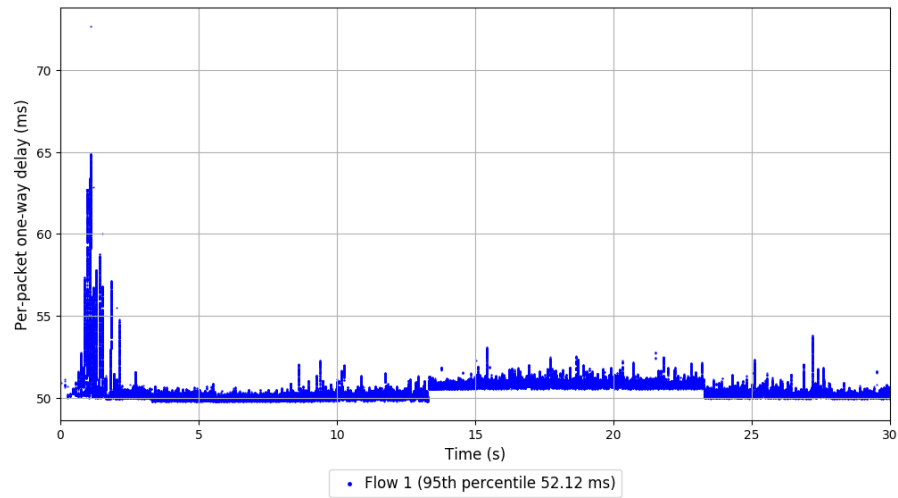
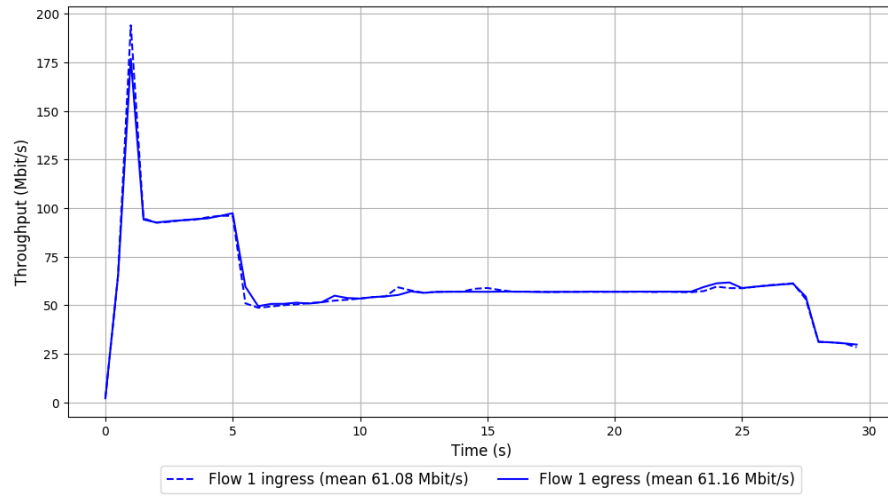
-- Flow 1:

Average throughput: 61.16 Mbit/s

95th percentile per-packet one-way delay: 52.118 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-20 04:15:12

End at: 2017-12-20 04:15:42

Below is generated by plot.py at 2017-12-20 06:38:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 24.46 Mbit/s

95th percentile per-packet one-way delay: 51.276 ms

Loss rate: 0.21%

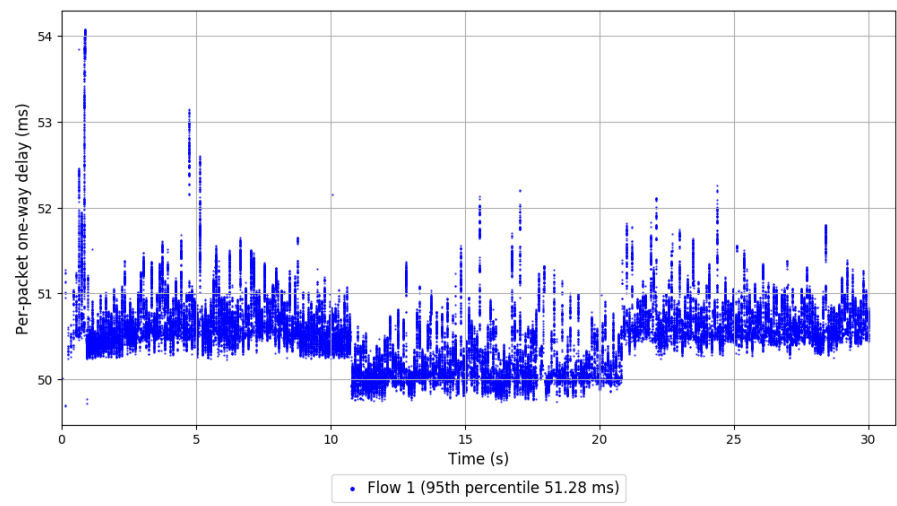
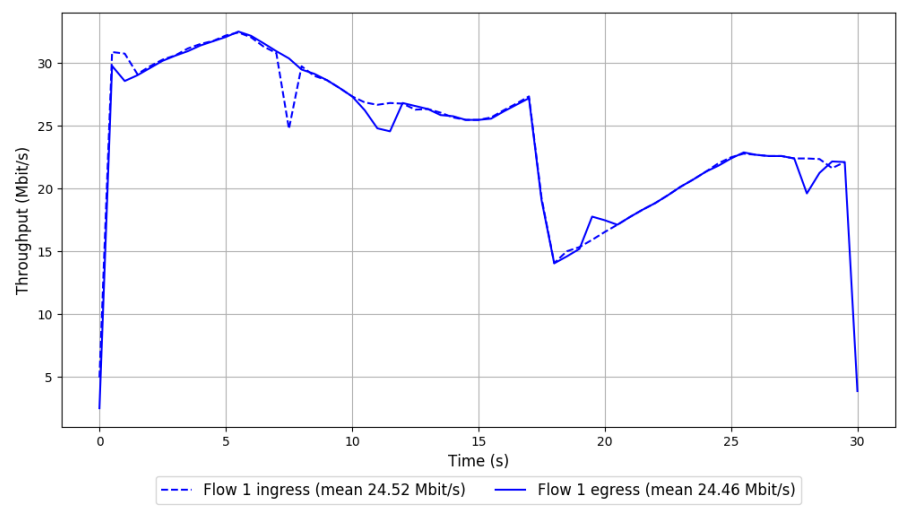
-- Flow 1:

Average throughput: 24.46 Mbit/s

95th percentile per-packet one-way delay: 51.276 ms

Loss rate: 0.21%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-20 04:26:47

End at: 2017-12-20 04:27:17

Below is generated by plot.py at 2017-12-20 06:38:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.80 Mbit/s

95th percentile per-packet one-way delay: 51.633 ms

Loss rate: 0.44%

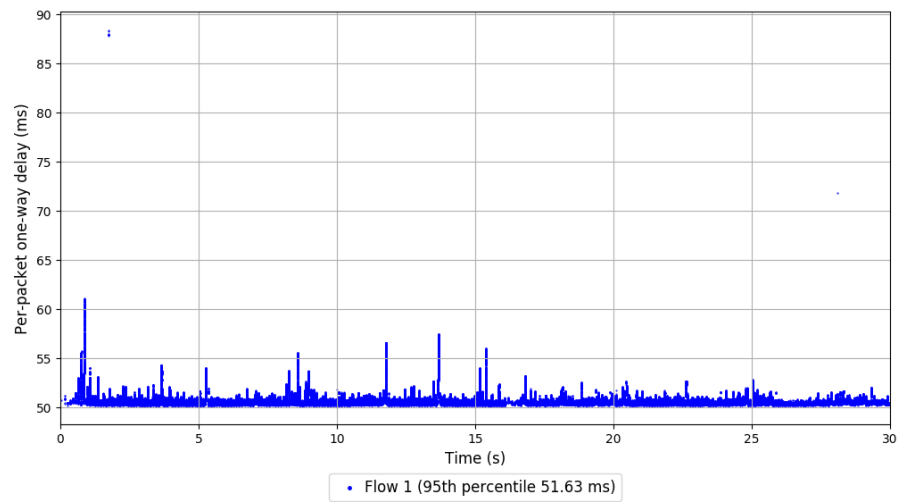
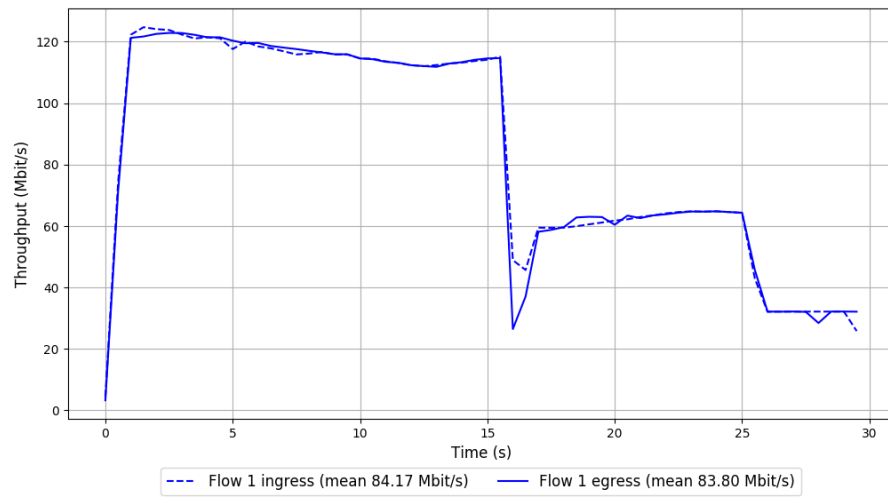
-- Flow 1:

Average throughput: 83.80 Mbit/s

95th percentile per-packet one-way delay: 51.633 ms

Loss rate: 0.44%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-20 04:38:27

End at: 2017-12-20 04:38:57

Below is generated by plot.py at 2017-12-20 06:38:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.83 Mbit/s

95th percentile per-packet one-way delay: 51.976 ms

Loss rate: 0.29%

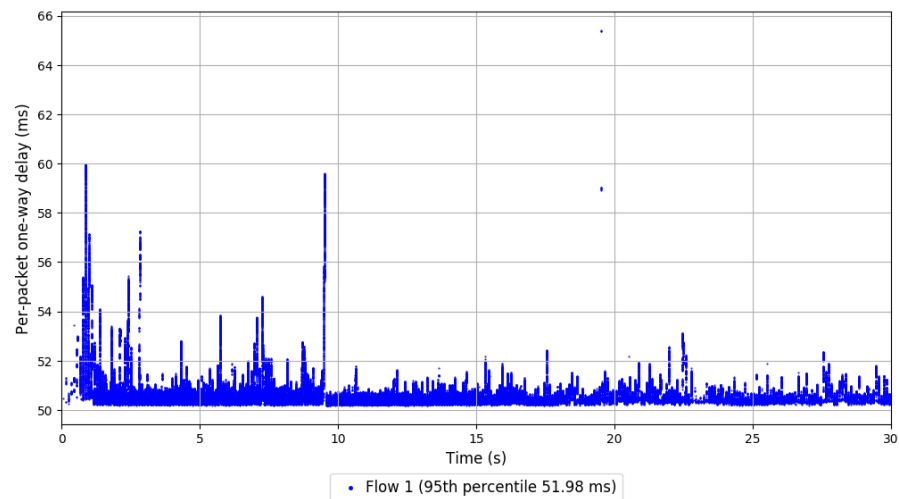
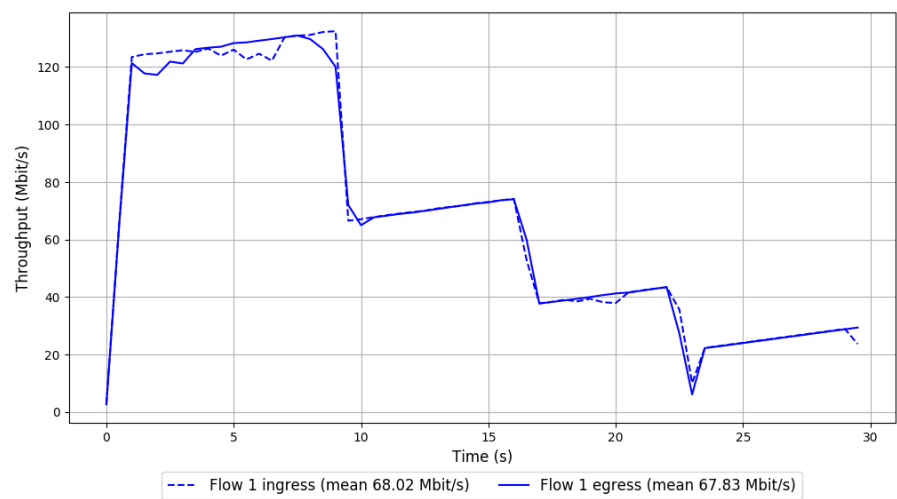
-- Flow 1:

Average throughput: 67.83 Mbit/s

95th percentile per-packet one-way delay: 51.976 ms

Loss rate: 0.29%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-20 04:50:06

End at: 2017-12-20 04:50:36

Below is generated by plot.py at 2017-12-20 06:38:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.44 Mbit/s

95th percentile per-packet one-way delay: 51.316 ms

Loss rate: 0.03%

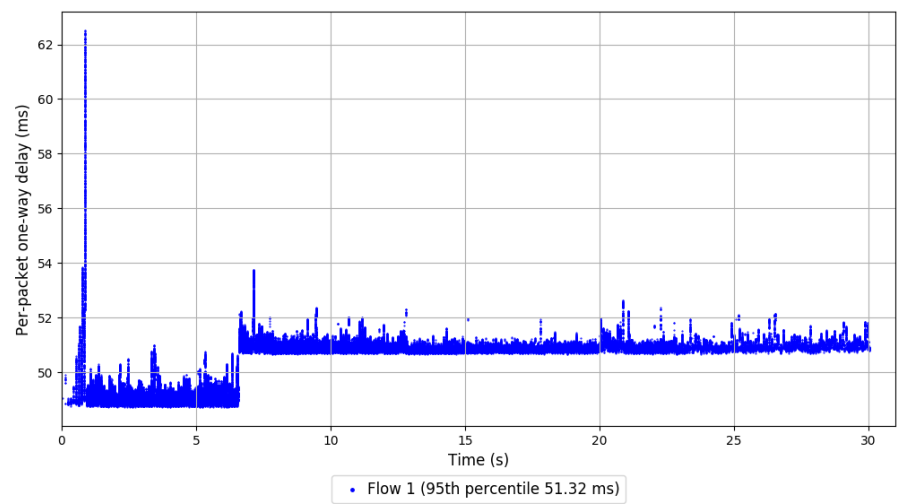
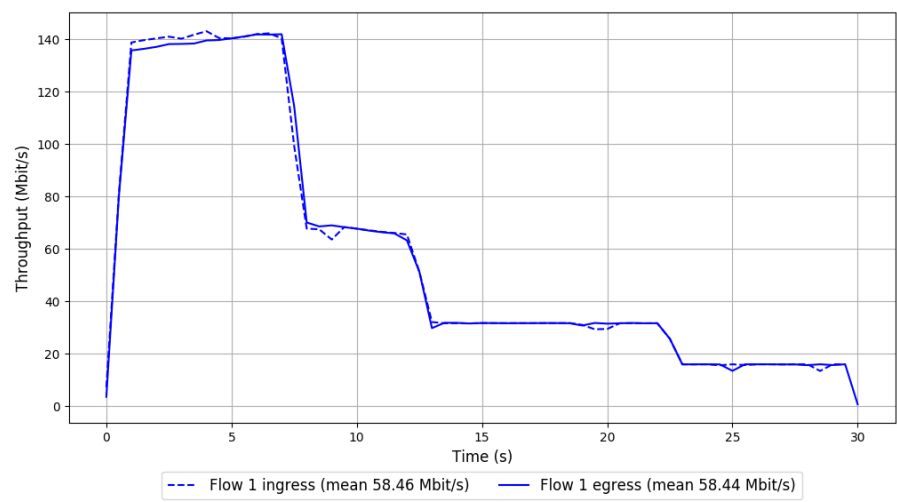
-- Flow 1:

Average throughput: 58.44 Mbit/s

95th percentile per-packet one-way delay: 51.316 ms

Loss rate: 0.03%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-20 03:14:24

End at: 2017-12-20 03:14:54

Below is generated by plot.py at 2017-12-20 06:38:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 252.39 Mbit/s

95th percentile per-packet one-way delay: 96.615 ms

Loss rate: 0.02%

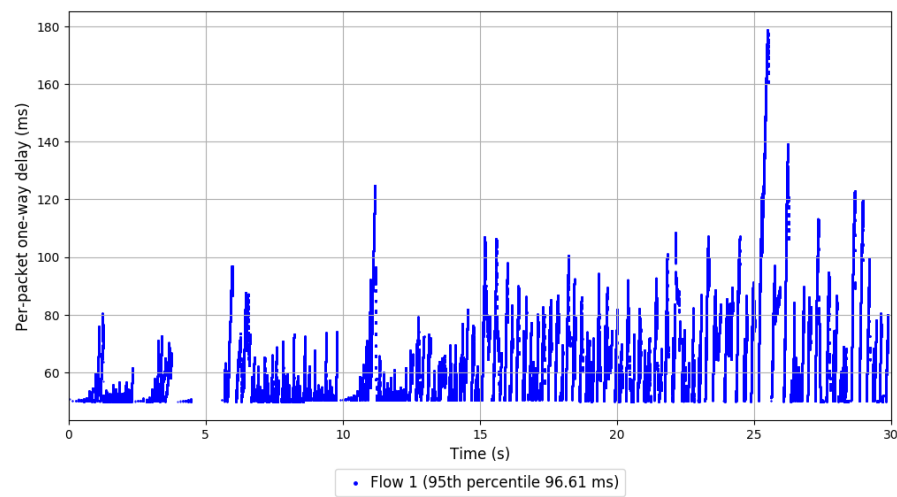
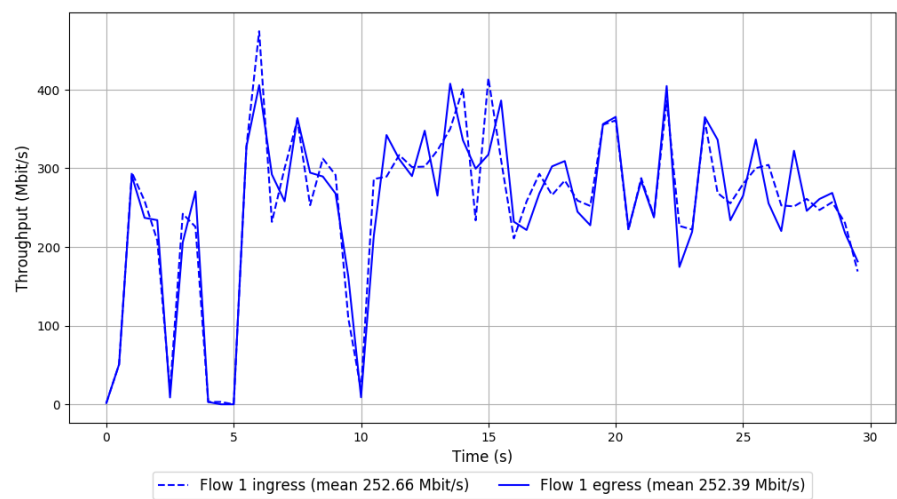
-- Flow 1:

Average throughput: 252.39 Mbit/s

95th percentile per-packet one-way delay: 96.615 ms

Loss rate: 0.02%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-20 03:25:38

End at: 2017-12-20 03:26:08

Below is generated by plot.py at 2017-12-20 06:39:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 264.64 Mbit/s

95th percentile per-packet one-way delay: 144.469 ms

Loss rate: 0.22%

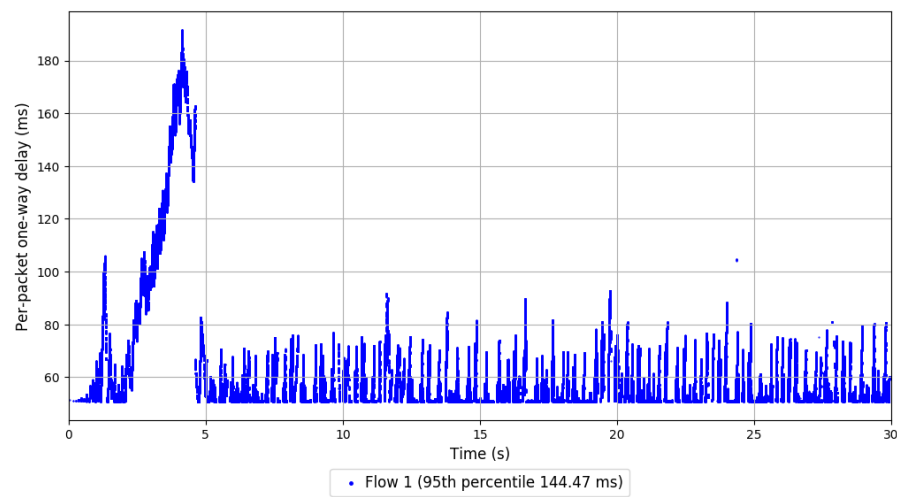
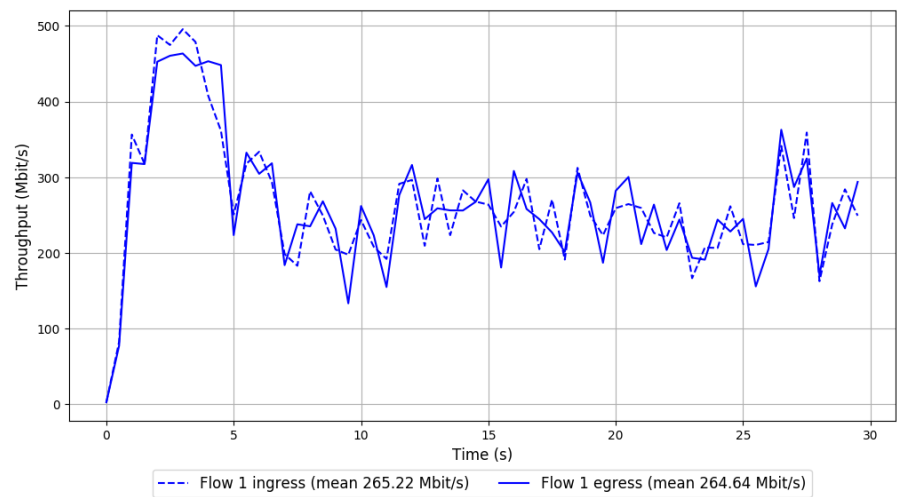
-- Flow 1:

Average throughput: 264.64 Mbit/s

95th percentile per-packet one-way delay: 144.469 ms

Loss rate: 0.22%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-20 03:37:05

End at: 2017-12-20 03:37:35

Below is generated by plot.py at 2017-12-20 06:39:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 247.20 Mbit/s

95th percentile per-packet one-way delay: 100.820 ms

Loss rate: 0.25%

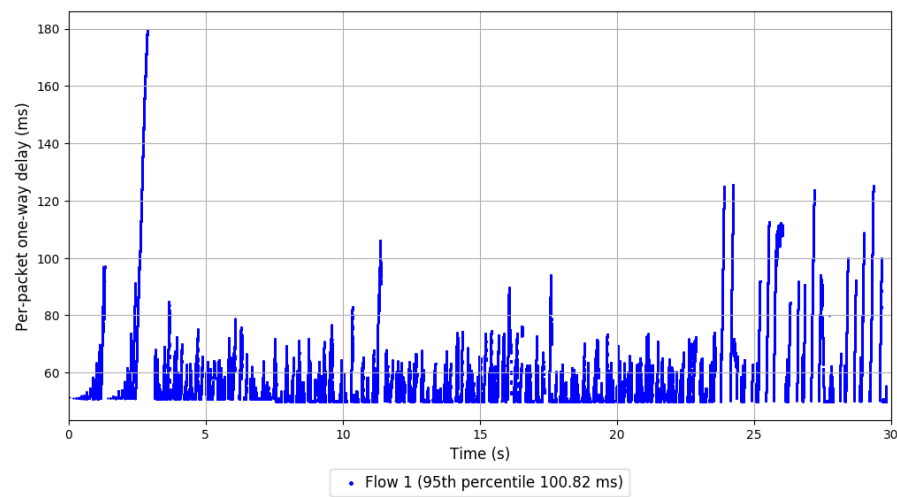
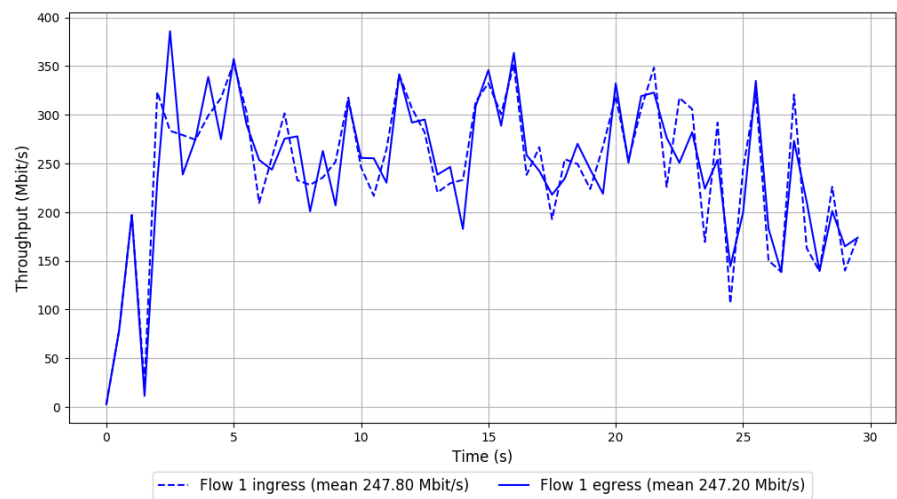
-- Flow 1:

Average throughput: 247.20 Mbit/s

95th percentile per-packet one-way delay: 100.820 ms

Loss rate: 0.25%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-20 03:48:41

End at: 2017-12-20 03:49:11

Below is generated by plot.py at 2017-12-20 06:40:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 297.93 Mbit/s

95th percentile per-packet one-way delay: 73.362 ms

Loss rate: 1.71%

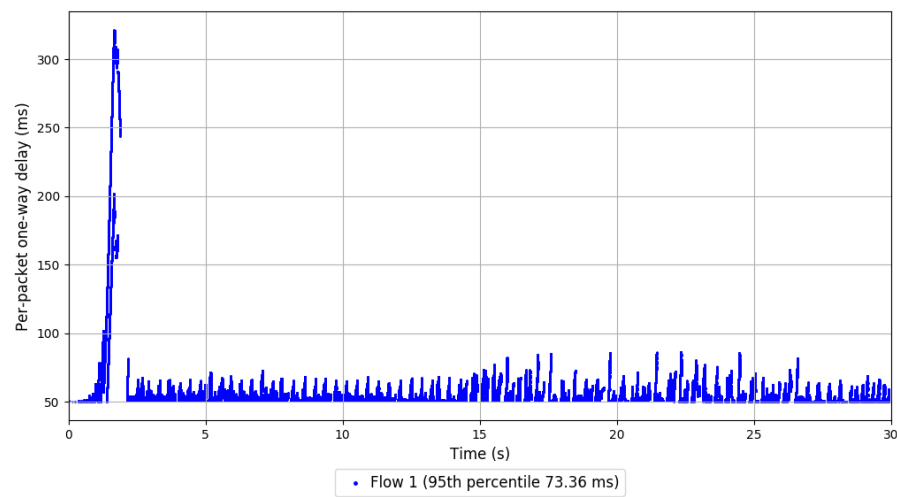
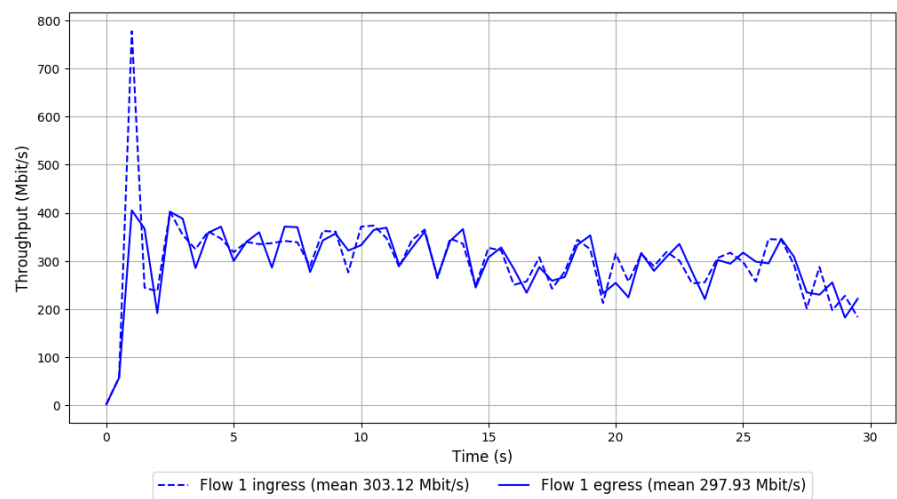
-- Flow 1:

Average throughput: 297.93 Mbit/s

95th percentile per-packet one-way delay: 73.362 ms

Loss rate: 1.71%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-20 04:00:29

End at: 2017-12-20 04:00:59

Below is generated by plot.py at 2017-12-20 06:41:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 283.30 Mbit/s

95th percentile per-packet one-way delay: 181.986 ms

Loss rate: 0.63%

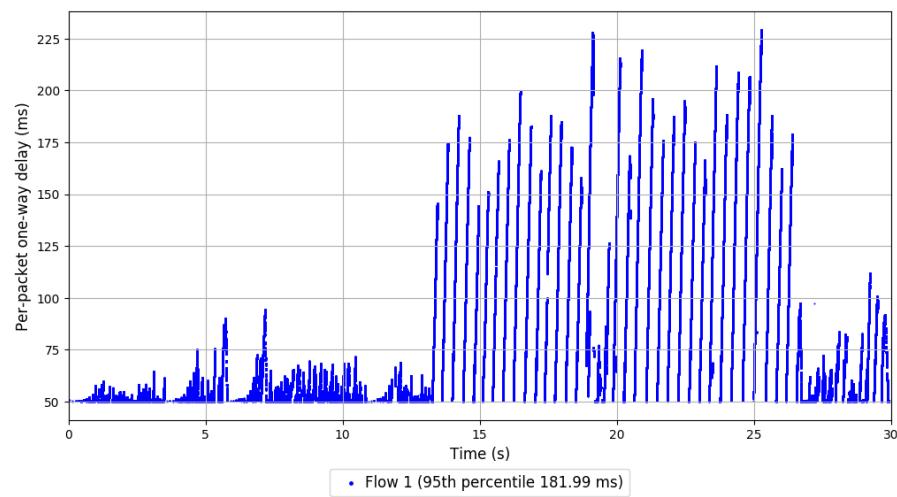
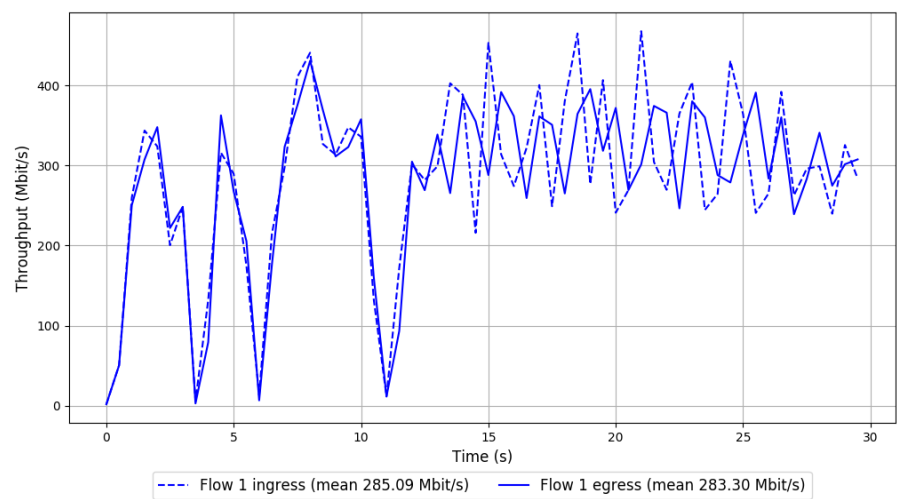
-- Flow 1:

Average throughput: 283.30 Mbit/s

95th percentile per-packet one-way delay: 181.986 ms

Loss rate: 0.63%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-20 04:12:10

End at: 2017-12-20 04:12:40

Below is generated by plot.py at 2017-12-20 06:41:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.59 Mbit/s

95th percentile per-packet one-way delay: 81.280 ms

Loss rate: 0.20%

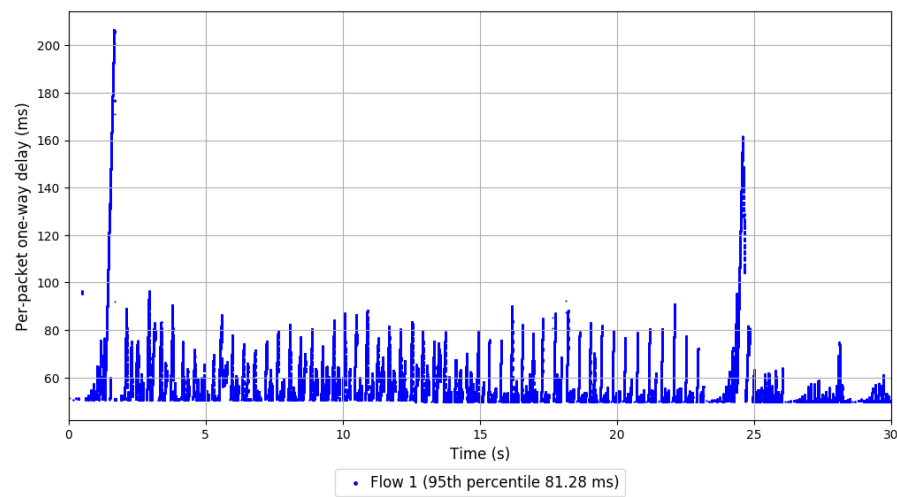
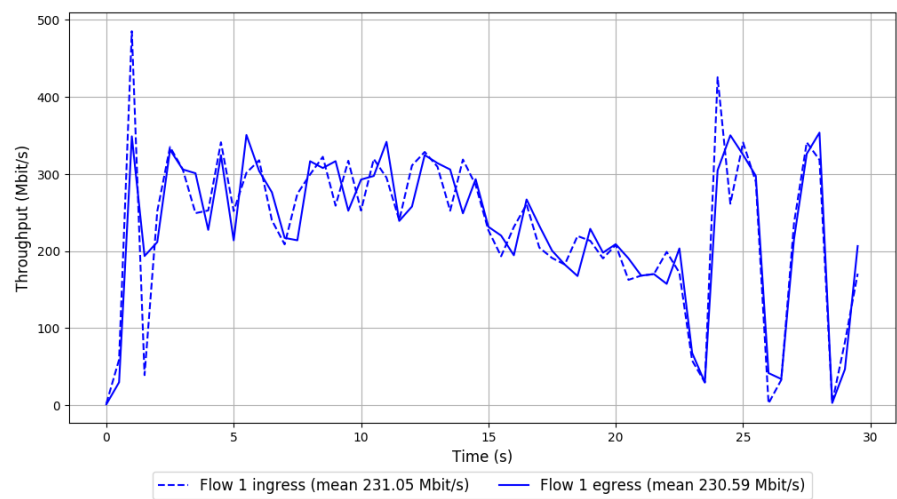
-- Flow 1:

Average throughput: 230.59 Mbit/s

95th percentile per-packet one-way delay: 81.280 ms

Loss rate: 0.20%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-20 04:23:52

End at: 2017-12-20 04:24:22

Below is generated by plot.py at 2017-12-20 06:41:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 227.81 Mbit/s

95th percentile per-packet one-way delay: 84.690 ms

Loss rate: 0.19%

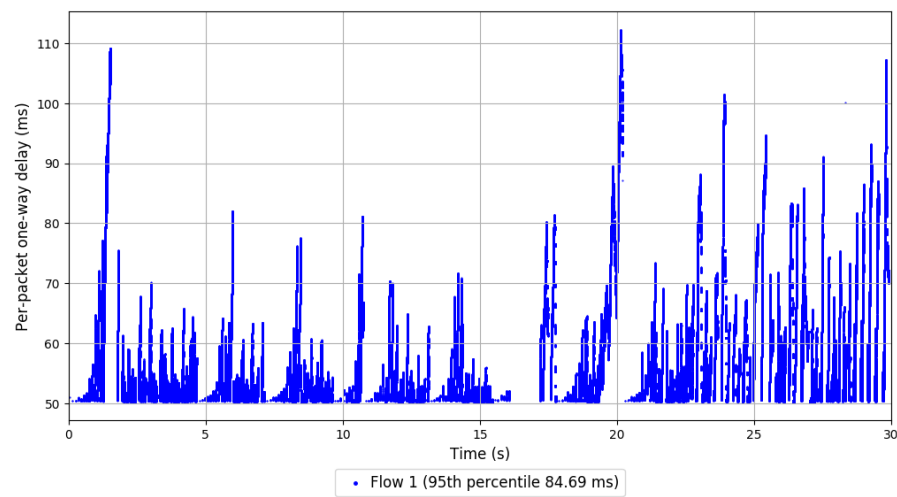
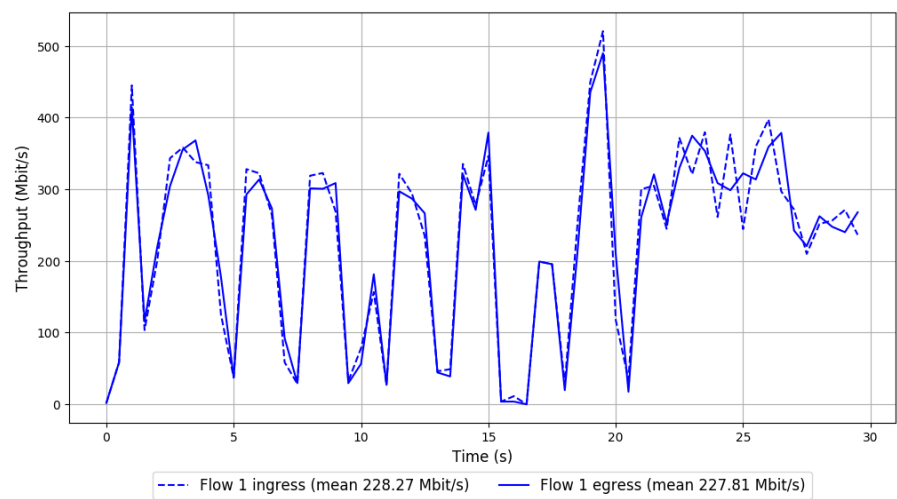
-- Flow 1:

Average throughput: 227.81 Mbit/s

95th percentile per-packet one-way delay: 84.690 ms

Loss rate: 0.19%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-20 04:35:23

End at: 2017-12-20 04:35:53

Below is generated by plot.py at 2017-12-20 06:42:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 279.04 Mbit/s

95th percentile per-packet one-way delay: 81.504 ms

Loss rate: 0.41%

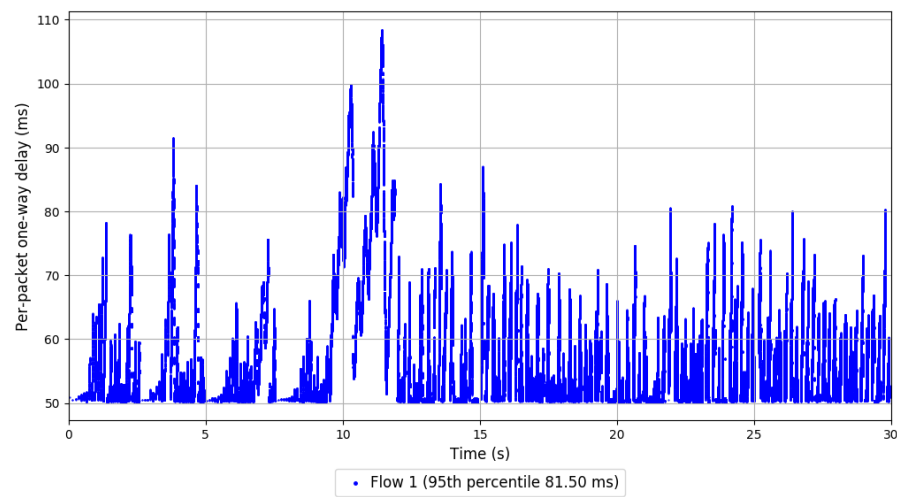
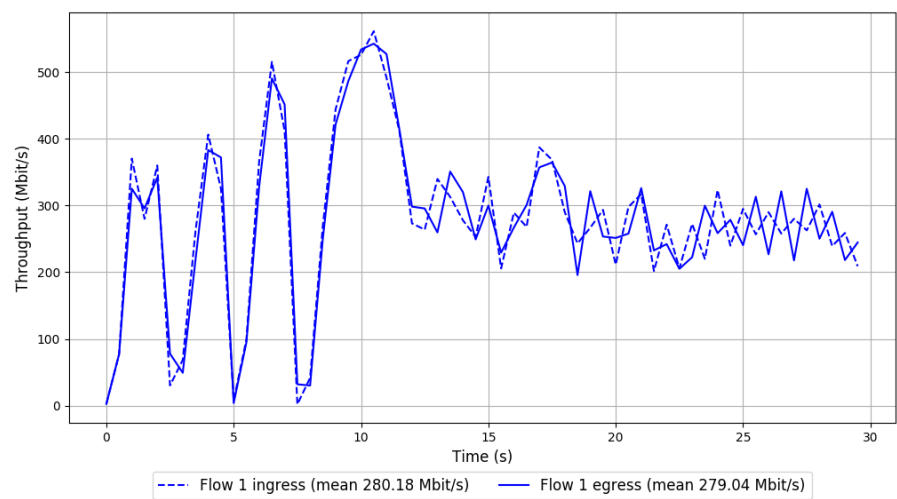
-- Flow 1:

Average throughput: 279.04 Mbit/s

95th percentile per-packet one-way delay: 81.504 ms

Loss rate: 0.41%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-20 04:47:00

End at: 2017-12-20 04:47:30

Below is generated by plot.py at 2017-12-20 06:43:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 272.39 Mbit/s

95th percentile per-packet one-way delay: 79.547 ms

Loss rate: 1.47%

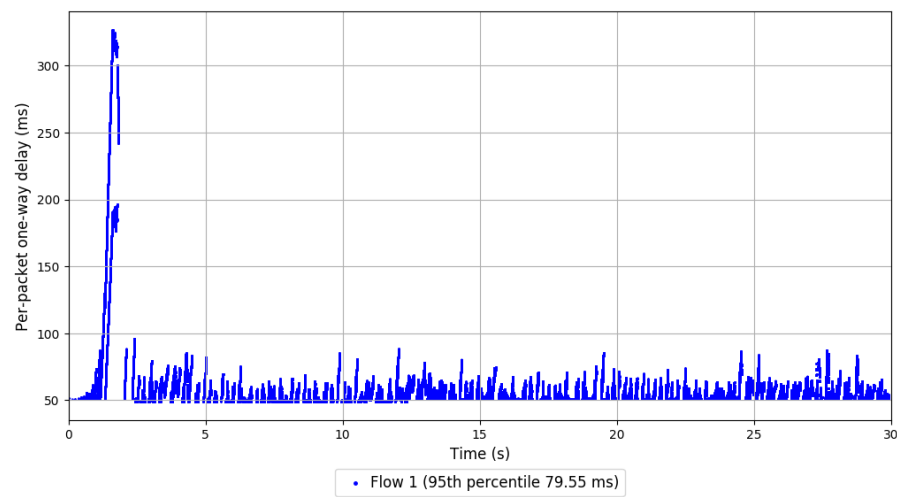
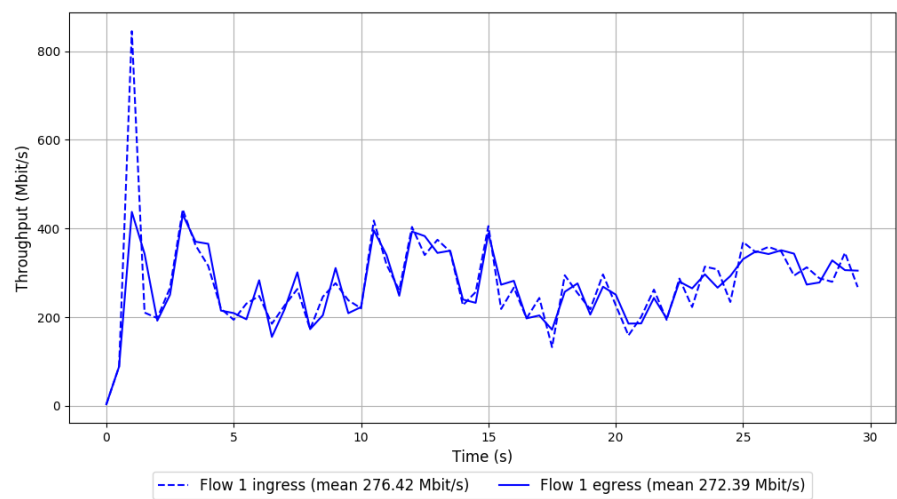
-- Flow 1:

Average throughput: 272.39 Mbit/s

95th percentile per-packet one-way delay: 79.547 ms

Loss rate: 1.47%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-20 04:58:32

End at: 2017-12-20 04:59:02

Below is generated by plot.py at 2017-12-20 06:44:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 313.82 Mbit/s

95th percentile per-packet one-way delay: 171.736 ms

Loss rate: 0.68%

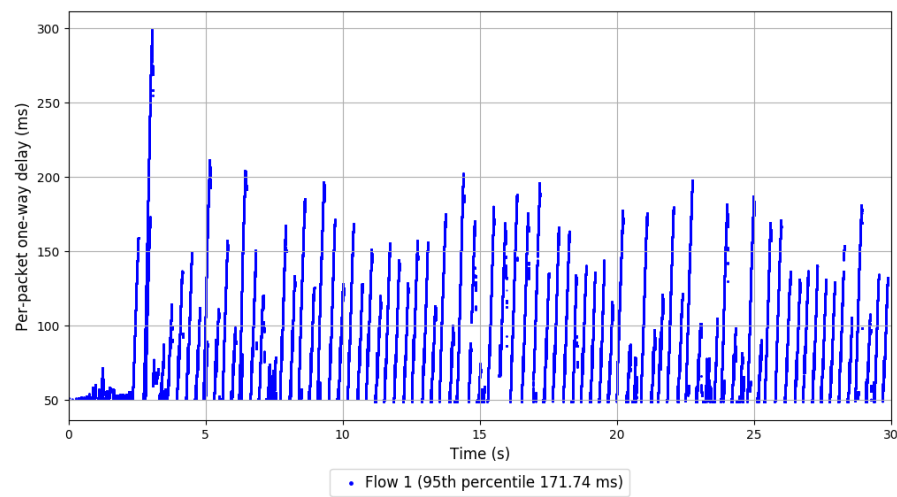
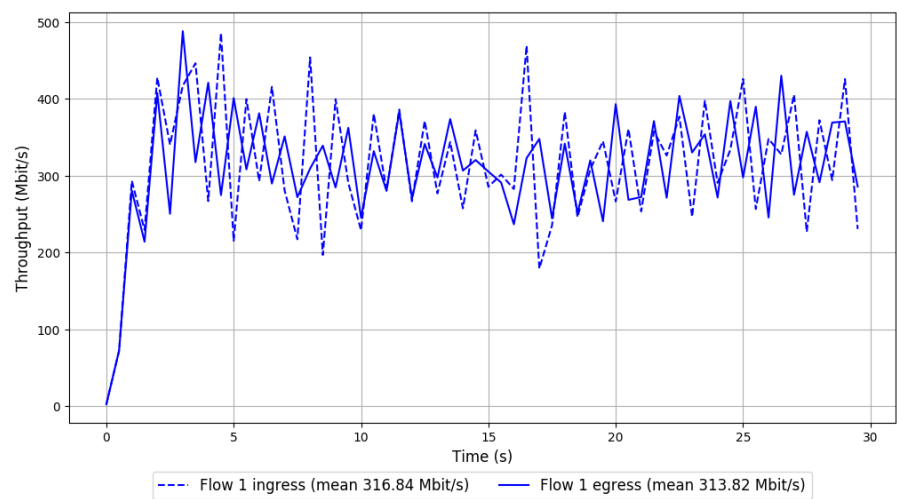
-- Flow 1:

Average throughput: 313.82 Mbit/s

95th percentile per-packet one-way delay: 171.736 ms

Loss rate: 0.68%

Run 10: Report of Verus — Data Link

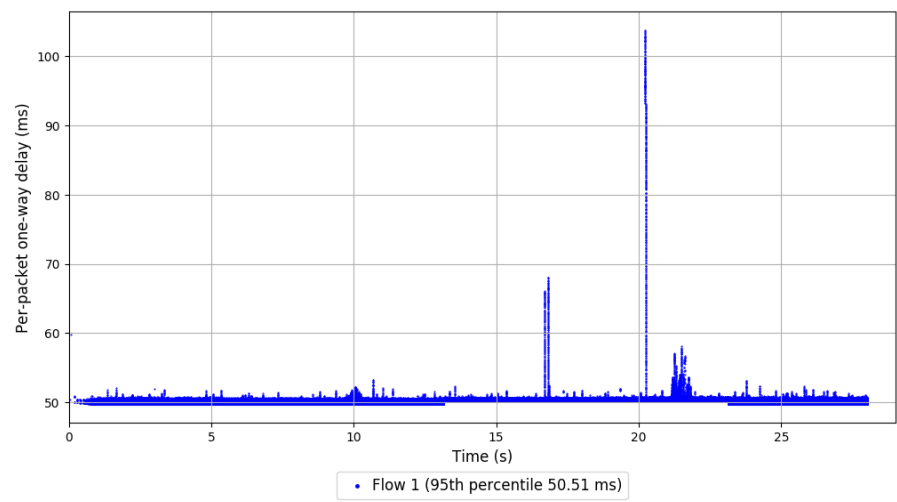
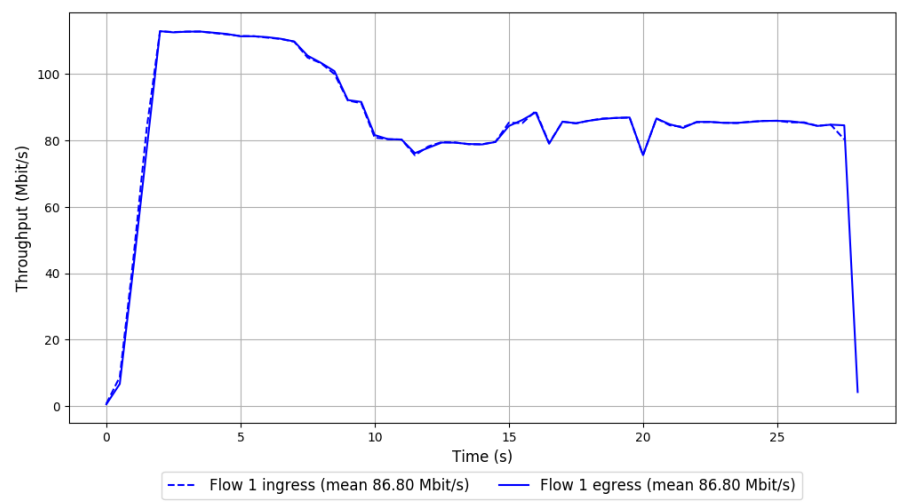


```
Run 1: Statistics of Copa

Start at: 2017-12-20 03:04:28
End at: 2017-12-20 03:04:58

# Below is generated by plot.py at 2017-12-20 06:44:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.80 Mbit/s
95th percentile per-packet one-way delay: 50.507 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 86.80 Mbit/s
95th percentile per-packet one-way delay: 50.507 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-20 03:16:07

End at: 2017-12-20 03:16:37

Below is generated by plot.py at 2017-12-20 06:44:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.34 Mbit/s

95th percentile per-packet one-way delay: 50.971 ms

Loss rate: 0.00%

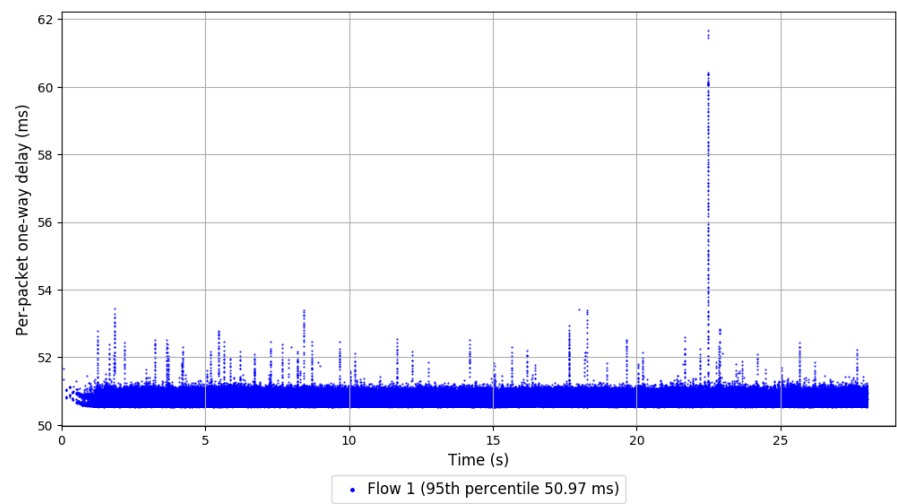
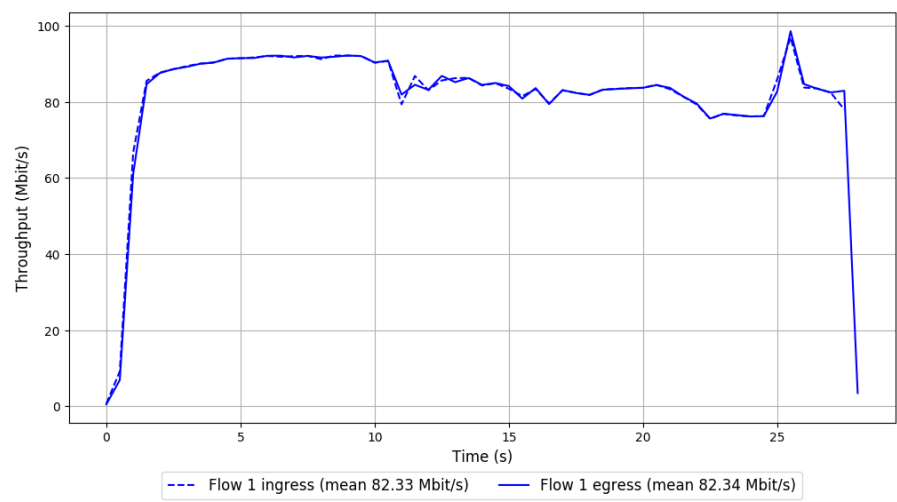
-- Flow 1:

Average throughput: 82.34 Mbit/s

95th percentile per-packet one-way delay: 50.971 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-20 03:27:23

End at: 2017-12-20 03:27:53

Below is generated by plot.py at 2017-12-20 06:44:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.25 Mbit/s

95th percentile per-packet one-way delay: 50.974 ms

Loss rate: 0.00%

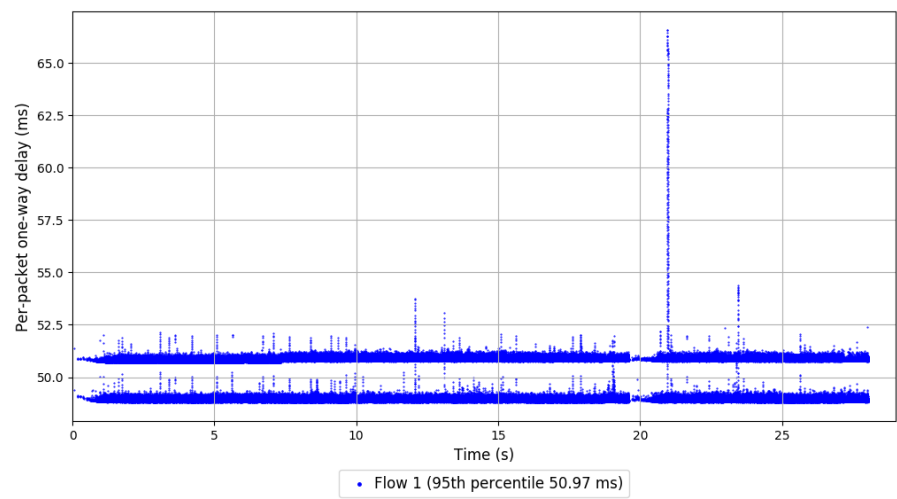
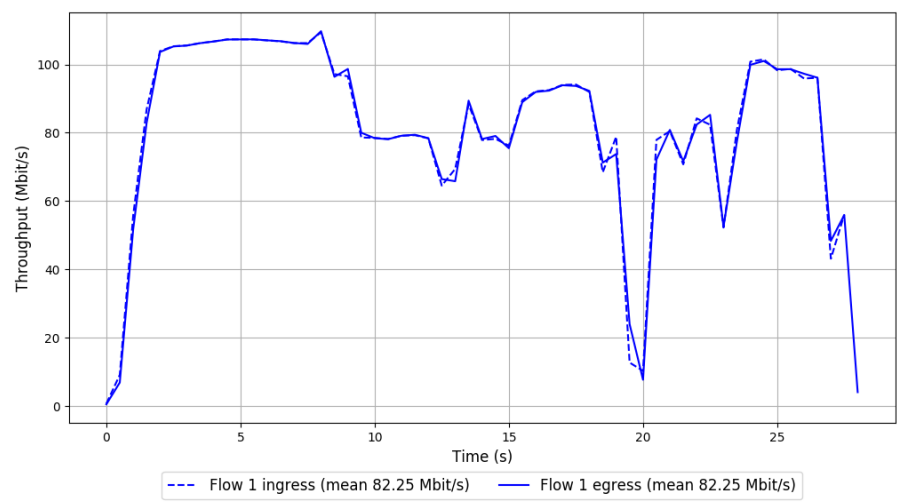
-- Flow 1:

Average throughput: 82.25 Mbit/s

95th percentile per-packet one-way delay: 50.974 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-20 03:38:48

End at: 2017-12-20 03:39:18

Below is generated by plot.py at 2017-12-20 06:44:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.18 Mbit/s

95th percentile per-packet one-way delay: 50.952 ms

Loss rate: 0.06%

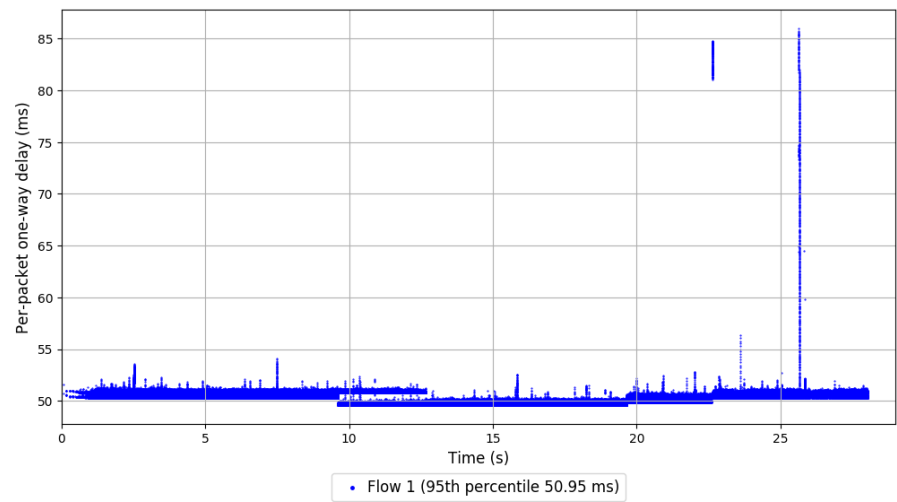
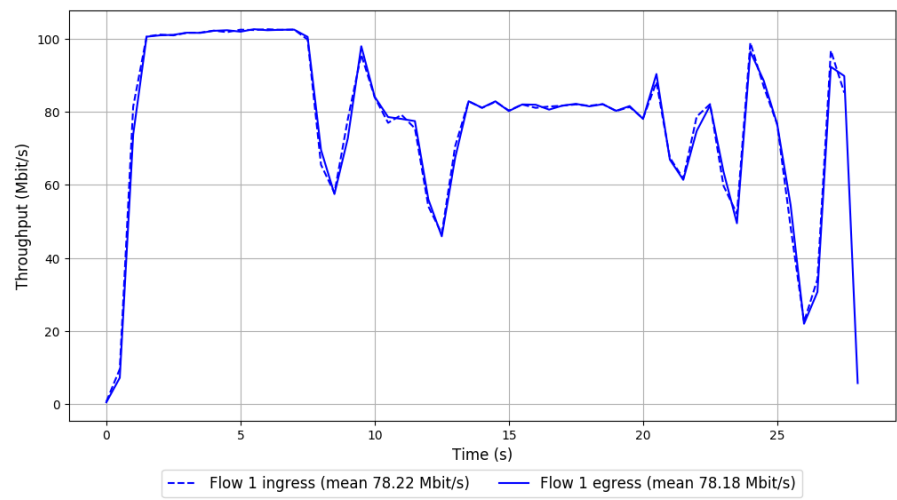
-- Flow 1:

Average throughput: 78.18 Mbit/s

95th percentile per-packet one-way delay: 50.952 ms

Loss rate: 0.06%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-20 03:50:27

End at: 2017-12-20 03:50:57

Below is generated by plot.py at 2017-12-20 06:44:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.28 Mbit/s

95th percentile per-packet one-way delay: 50.734 ms

Loss rate: 0.00%

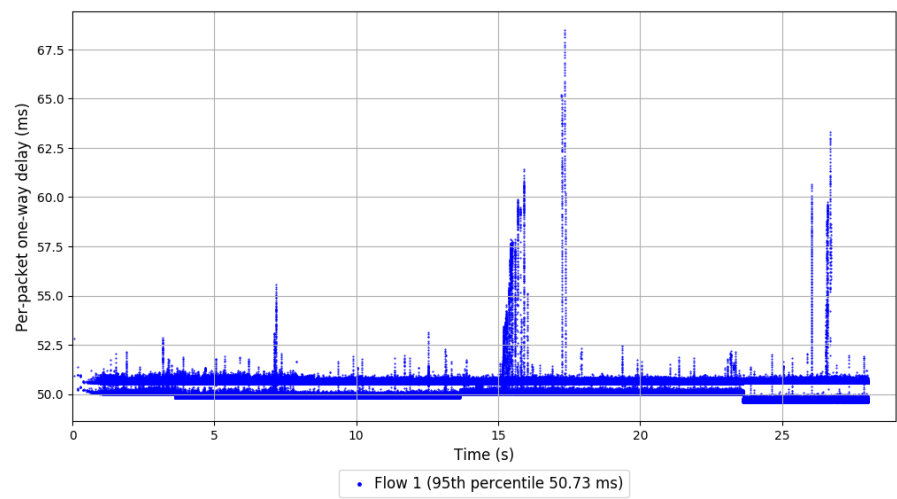
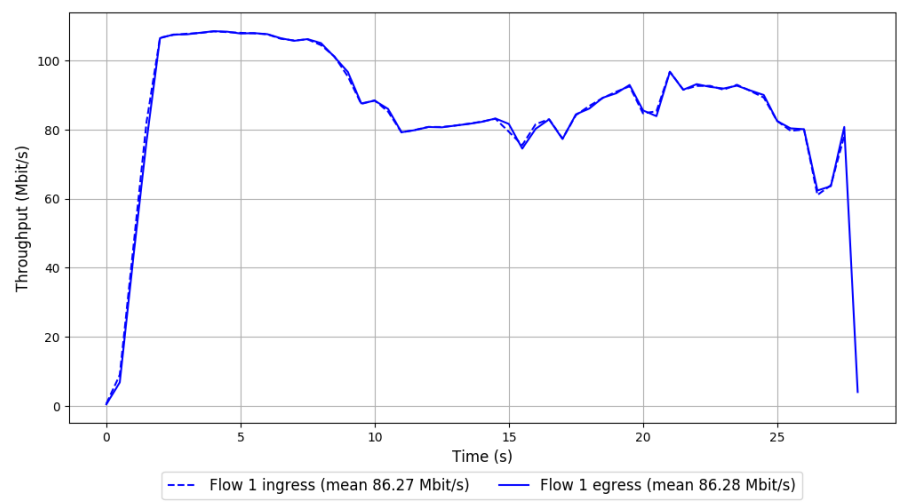
-- Flow 1:

Average throughput: 86.28 Mbit/s

95th percentile per-packet one-way delay: 50.734 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-20 04:02:10

End at: 2017-12-20 04:02:40

Below is generated by plot.py at 2017-12-20 06:44:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.77 Mbit/s

95th percentile per-packet one-way delay: 50.475 ms

Loss rate: 0.00%

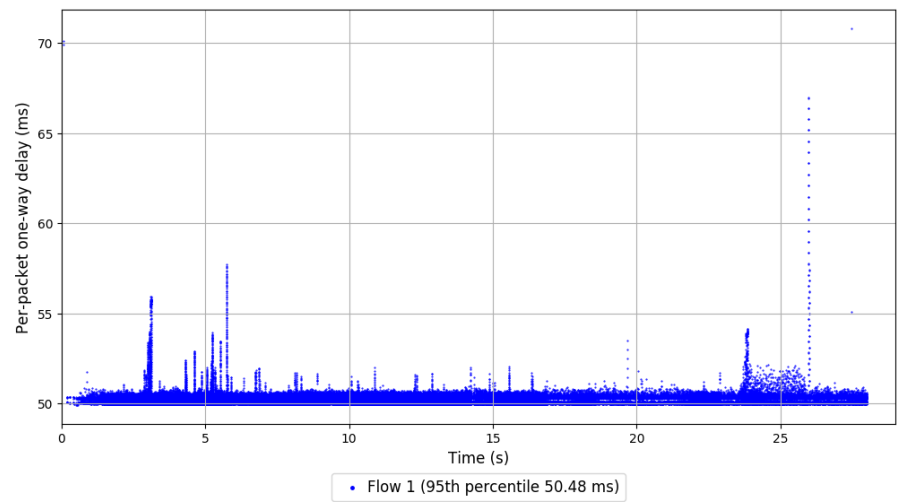
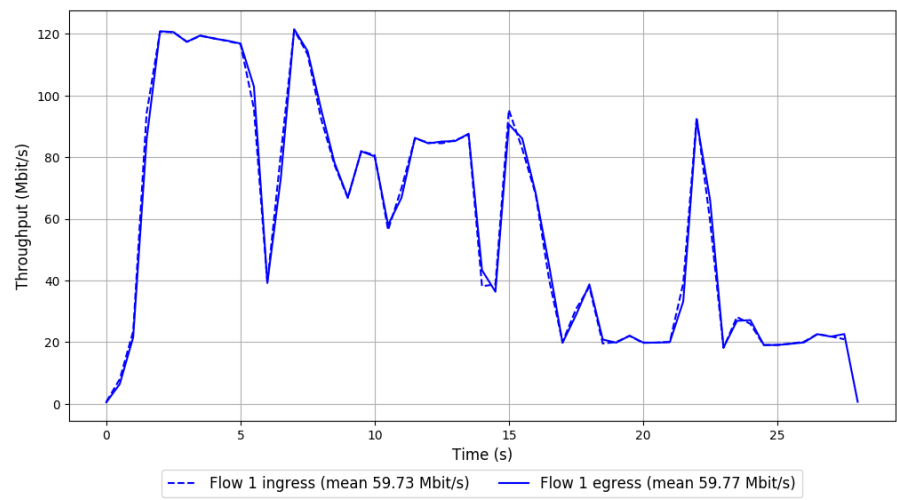
-- Flow 1:

Average throughput: 59.77 Mbit/s

95th percentile per-packet one-way delay: 50.475 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-20 04:13:51

End at: 2017-12-20 04:14:21

Below is generated by plot.py at 2017-12-20 06:44:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.67 Mbit/s

95th percentile per-packet one-way delay: 50.395 ms

Loss rate: 0.00%

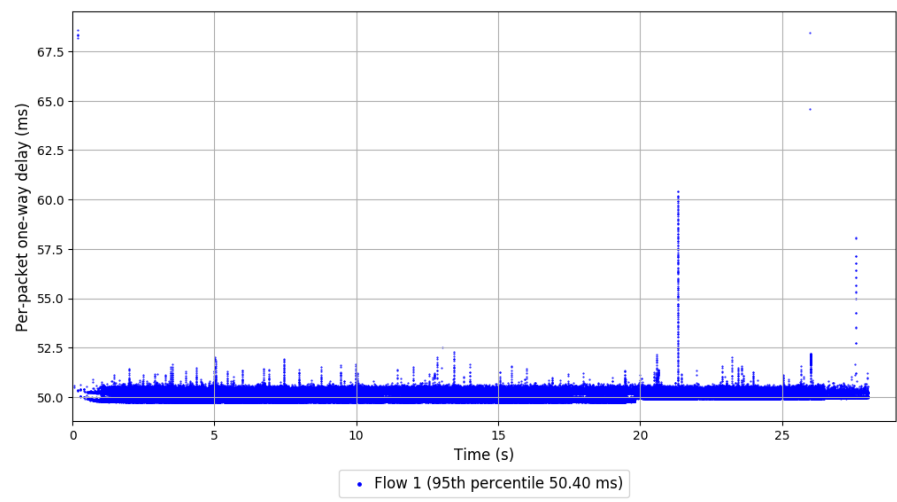
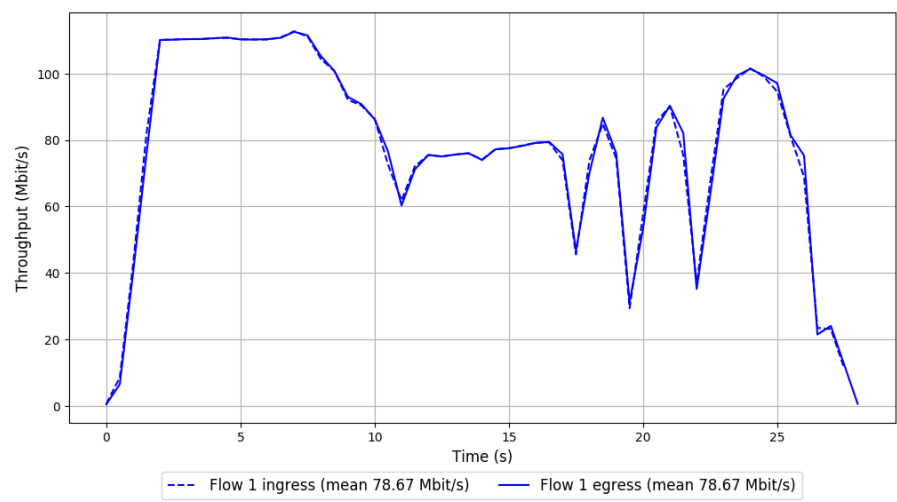
-- Flow 1:

Average throughput: 78.67 Mbit/s

95th percentile per-packet one-way delay: 50.395 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link

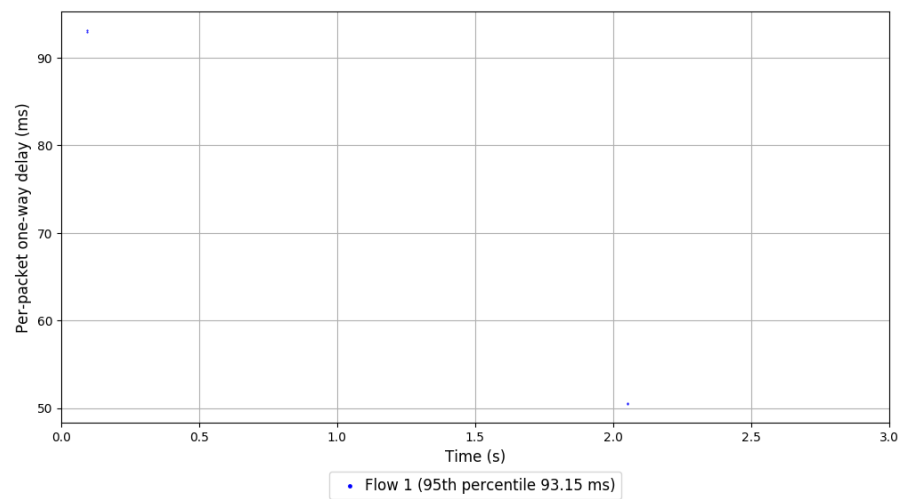
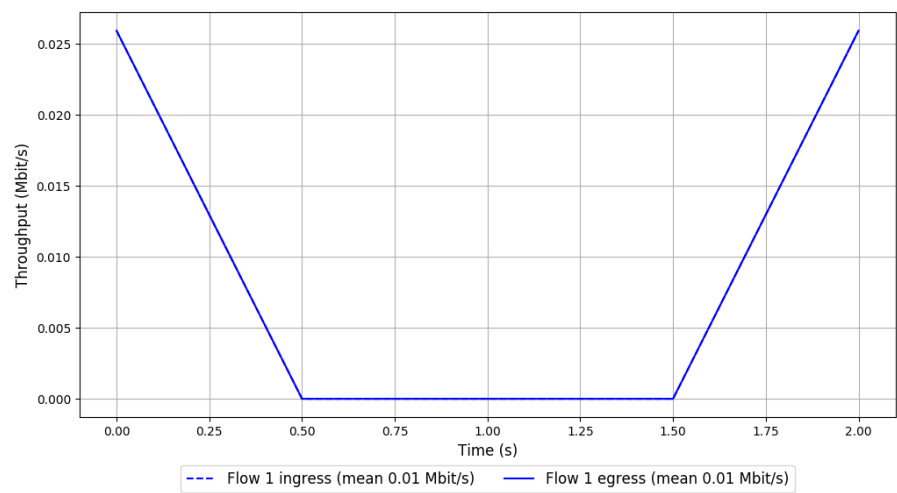


Run 8: Statistics of Copa

Start at: 2017-12-20 04:25:34

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

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-20 04:37:06

End at: 2017-12-20 04:37:36

Below is generated by plot.py at 2017-12-20 06:44:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.13 Mbit/s

95th percentile per-packet one-way delay: 50.872 ms

Loss rate: 0.00%

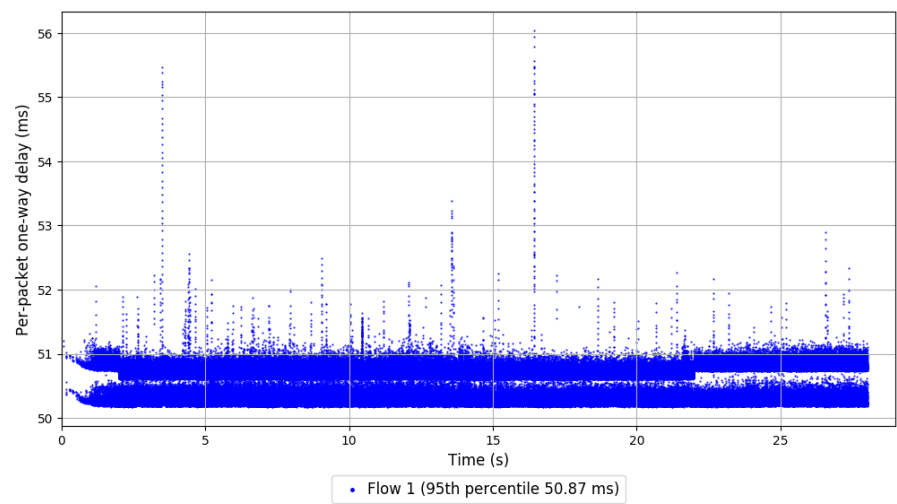
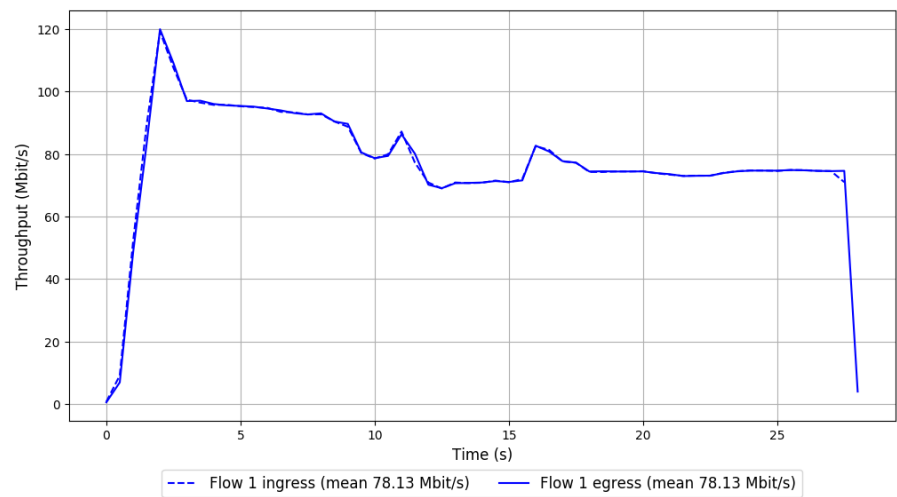
-- Flow 1:

Average throughput: 78.13 Mbit/s

95th percentile per-packet one-way delay: 50.872 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-20 04:48:44

End at: 2017-12-20 04:49:14

Below is generated by plot.py at 2017-12-20 06:45:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.98 Mbit/s

95th percentile per-packet one-way delay: 50.889 ms

Loss rate: 0.00%

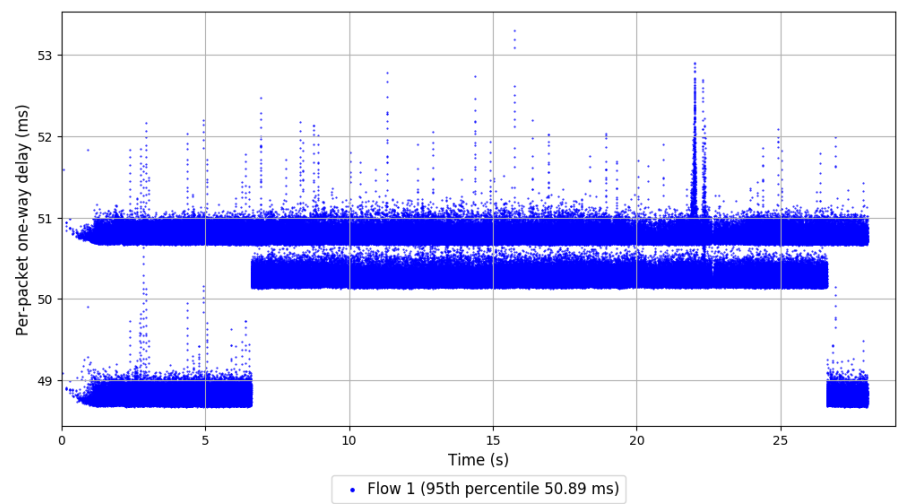
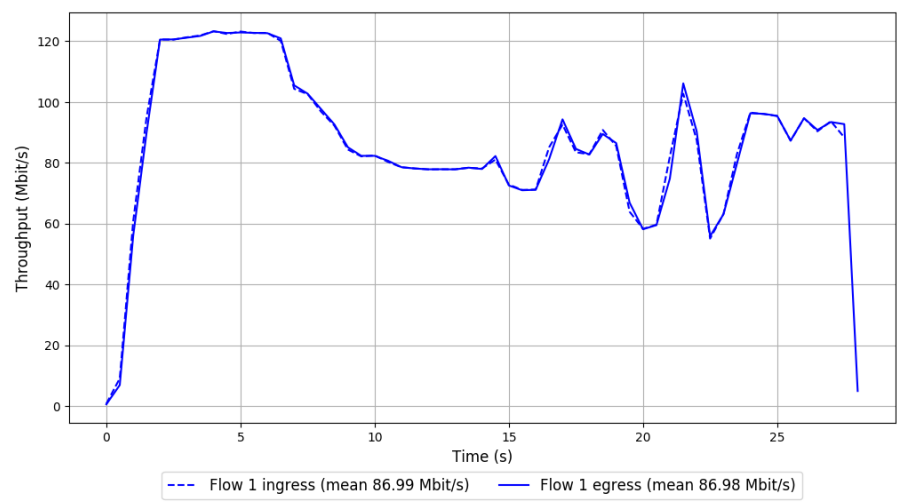
-- Flow 1:

Average throughput: 86.98 Mbit/s

95th percentile per-packet one-way delay: 50.889 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

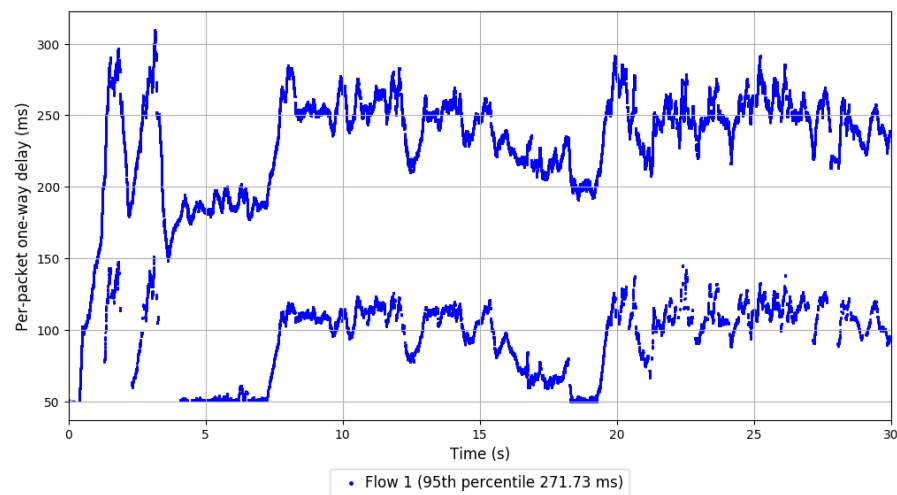
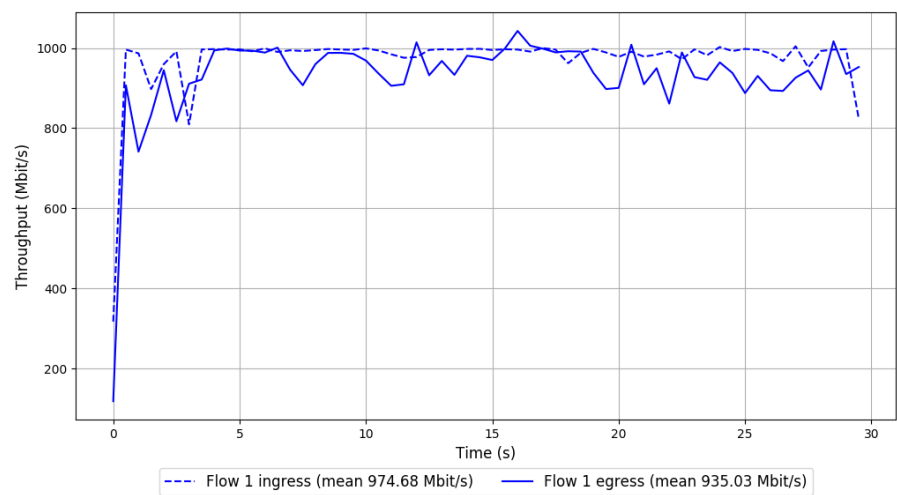


```
Run 1: Statistics of FillP

Start at: 2017-12-20 03:06:30
End at: 2017-12-20 03:07:00

# Below is generated by plot.py at 2017-12-20 07:00:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 935.03 Mbit/s
95th percentile per-packet one-way delay: 271.730 ms
Loss rate: 4.07%
-- Flow 1:
Average throughput: 935.03 Mbit/s
95th percentile per-packet one-way delay: 271.730 ms
Loss rate: 4.07%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2017-12-20 03:18:07

End at: 2017-12-20 03:18:38

Below is generated by plot.py at 2017-12-20 07:00:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 356.95 Mbit/s

95th percentile per-packet one-way delay: 278.847 ms

Loss rate: 3.81%

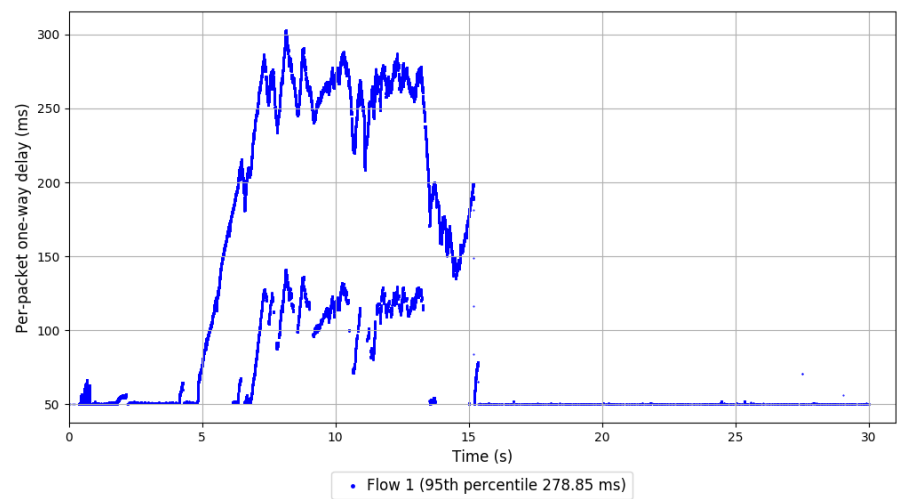
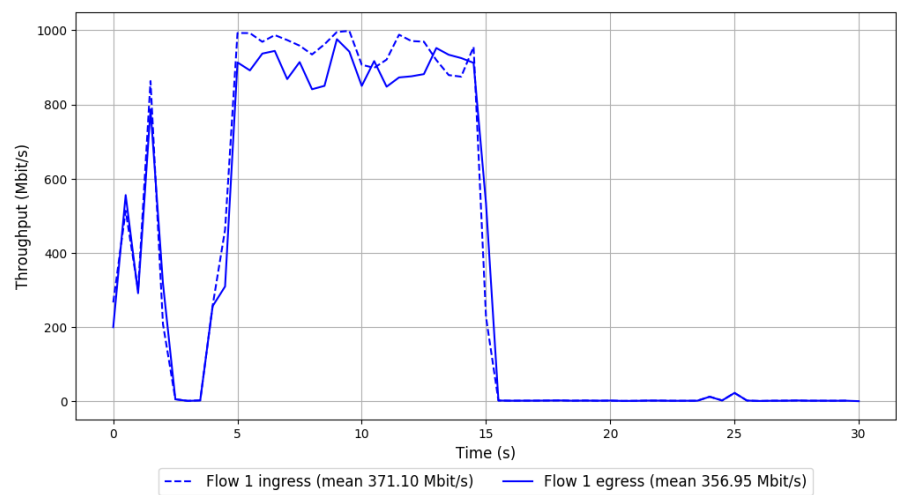
-- Flow 1:

Average throughput: 356.95 Mbit/s

95th percentile per-packet one-way delay: 278.847 ms

Loss rate: 3.81%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2017-12-20 03:29:24

End at: 2017-12-20 03:29:54

Below is generated by plot.py at 2017-12-20 07:00:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 938.46 Mbit/s

95th percentile per-packet one-way delay: 241.997 ms

Loss rate: 2.85%

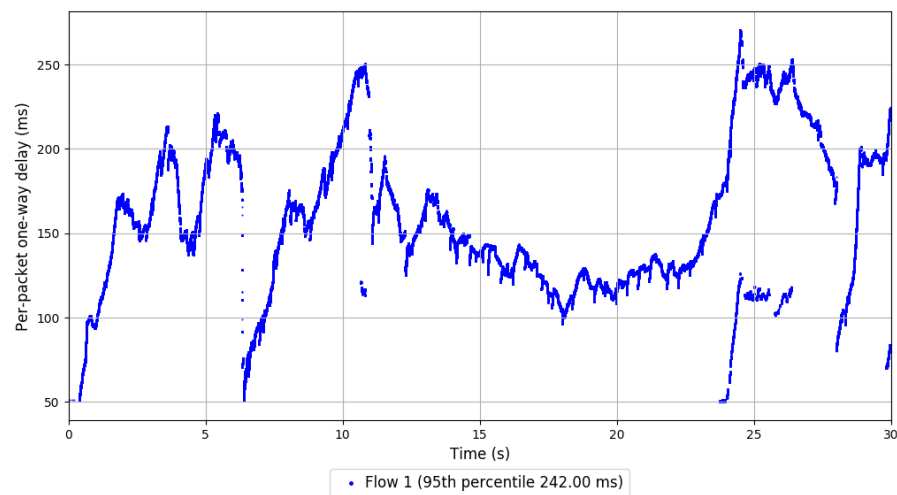
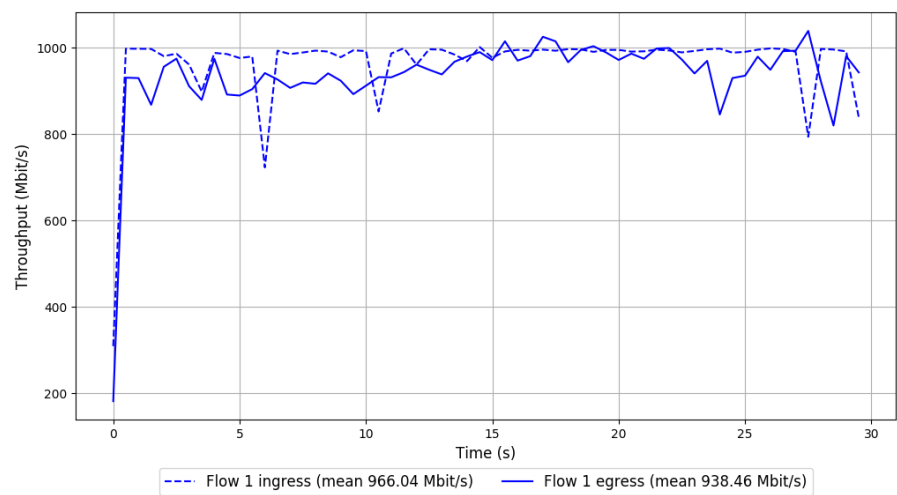
-- Flow 1:

Average throughput: 938.46 Mbit/s

95th percentile per-packet one-way delay: 241.997 ms

Loss rate: 2.85%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2017-12-20 03:40:48

End at: 2017-12-20 03:41:18

Below is generated by plot.py at 2017-12-20 07:01:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 968.31 Mbit/s

95th percentile per-packet one-way delay: 240.445 ms

Loss rate: 1.24%

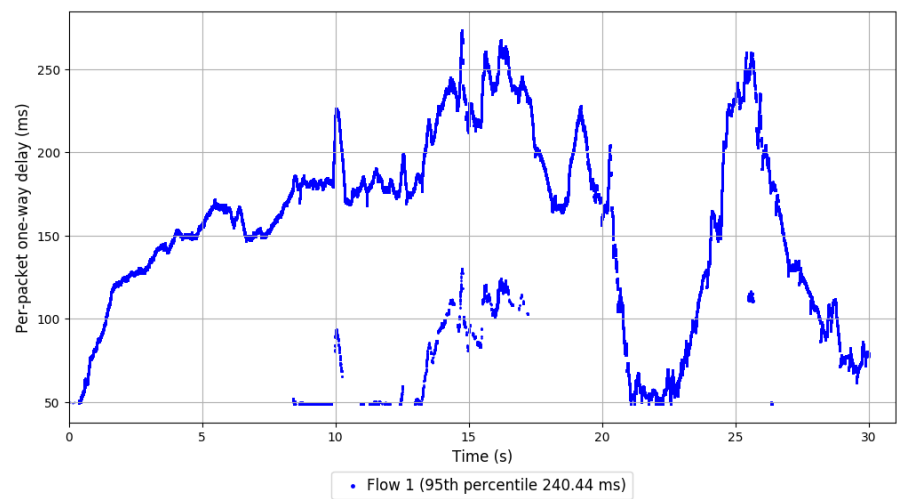
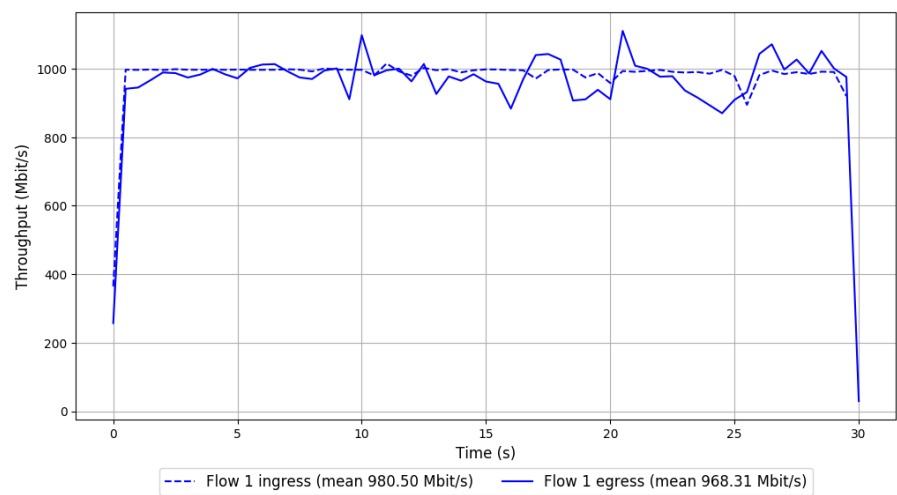
-- Flow 1:

Average throughput: 968.31 Mbit/s

95th percentile per-packet one-way delay: 240.445 ms

Loss rate: 1.24%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2017-12-20 03:52:27

End at: 2017-12-20 03:52:57

Below is generated by plot.py at 2017-12-20 07:01:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 969.17 Mbit/s

95th percentile per-packet one-way delay: 259.080 ms

Loss rate: 1.54%

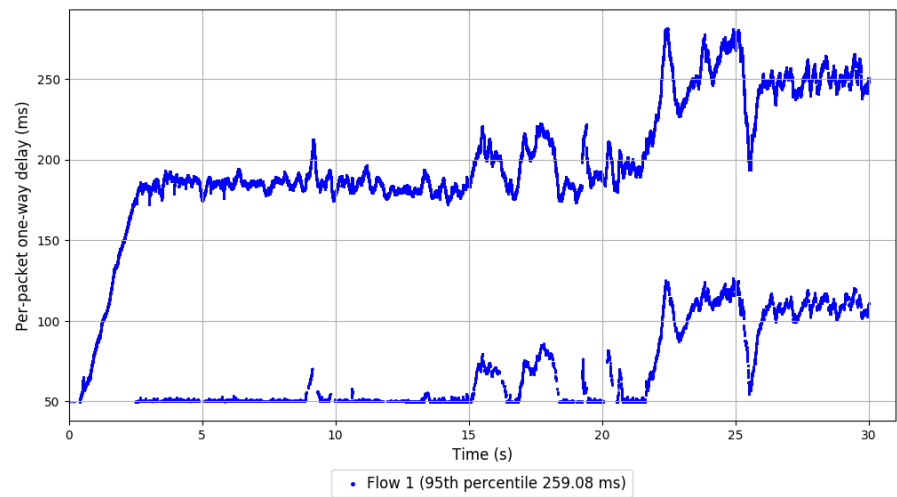
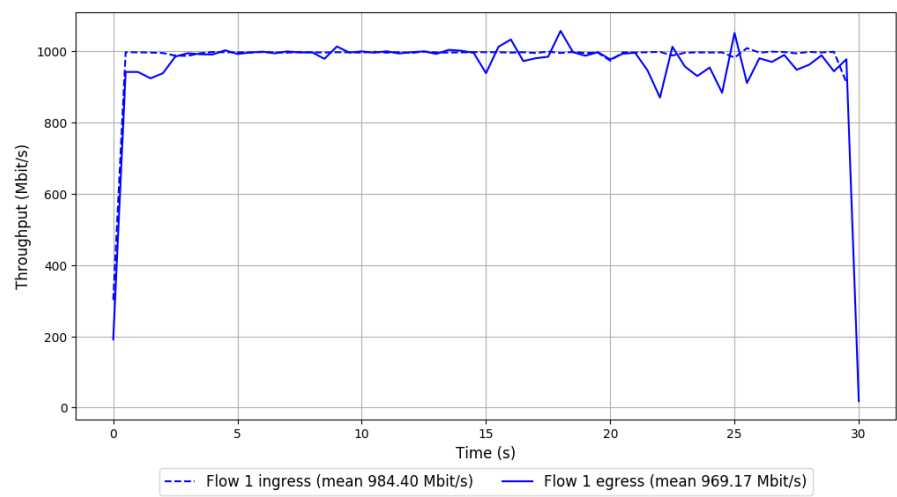
-- Flow 1:

Average throughput: 969.17 Mbit/s

95th percentile per-packet one-way delay: 259.080 ms

Loss rate: 1.54%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2017-12-20 04:04:10

End at: 2017-12-20 04:04:40

Below is generated by plot.py at 2017-12-20 07:01:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 950.71 Mbit/s

95th percentile per-packet one-way delay: 264.354 ms

Loss rate: 2.73%

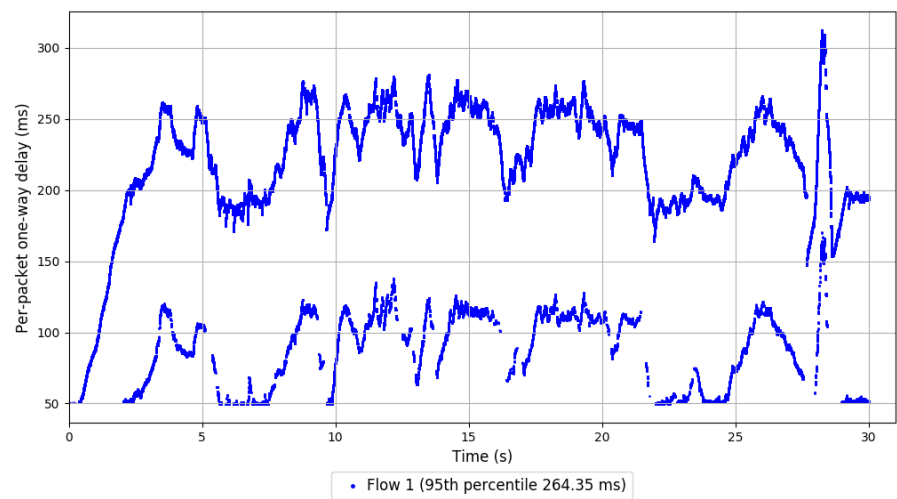
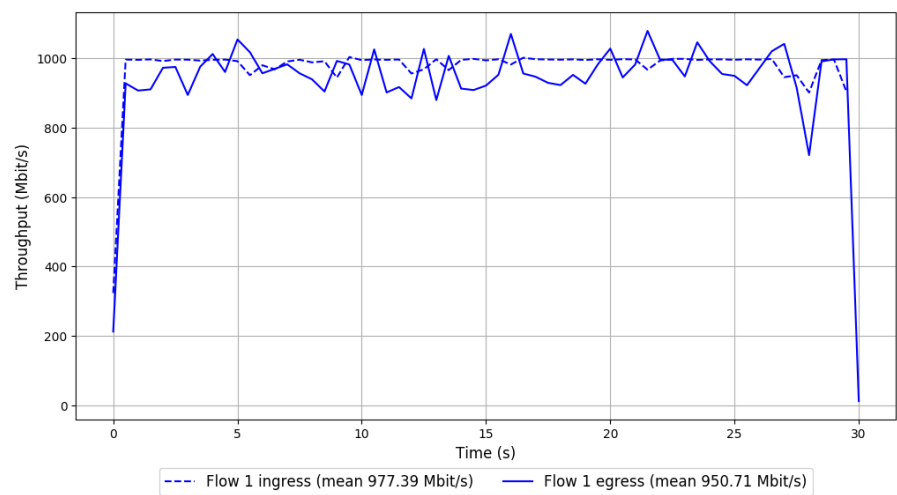
-- Flow 1:

Average throughput: 950.71 Mbit/s

95th percentile per-packet one-way delay: 264.354 ms

Loss rate: 2.73%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2017-12-20 04:15:51

End at: 2017-12-20 04:16:21

Below is generated by plot.py at 2017-12-20 07:02:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 966.40 Mbit/s

95th percentile per-packet one-way delay: 269.099 ms

Loss rate: 1.65%

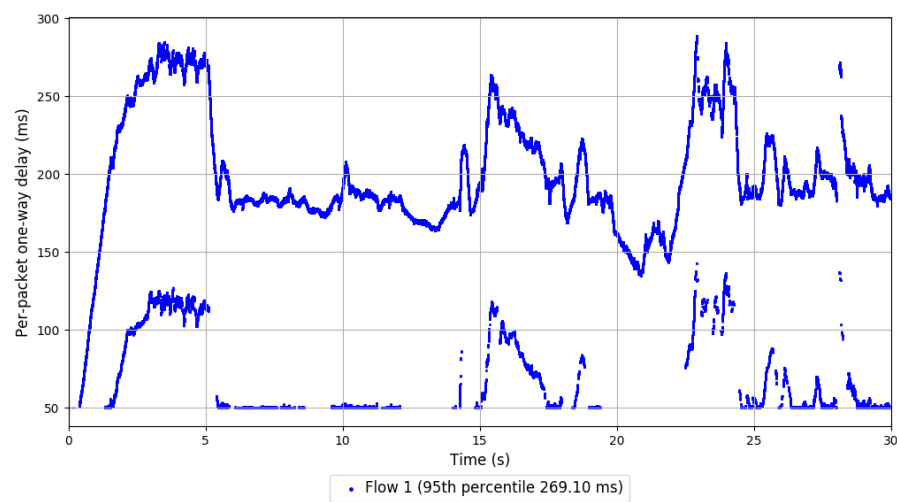
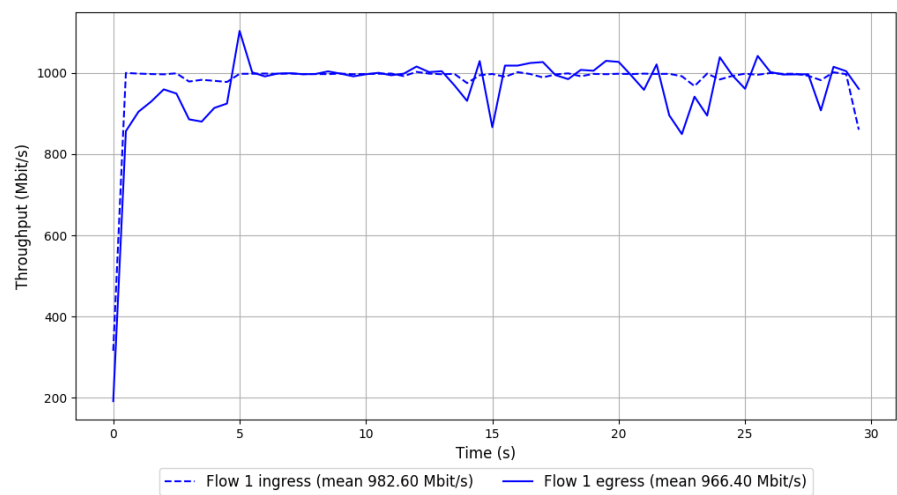
-- Flow 1:

Average throughput: 966.40 Mbit/s

95th percentile per-packet one-way delay: 269.099 ms

Loss rate: 1.65%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2017-12-20 04:27:29

End at: 2017-12-20 04:27:59

Below is generated by plot.py at 2017-12-20 07:03:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 966.00 Mbit/s

95th percentile per-packet one-way delay: 258.813 ms

Loss rate: 1.84%

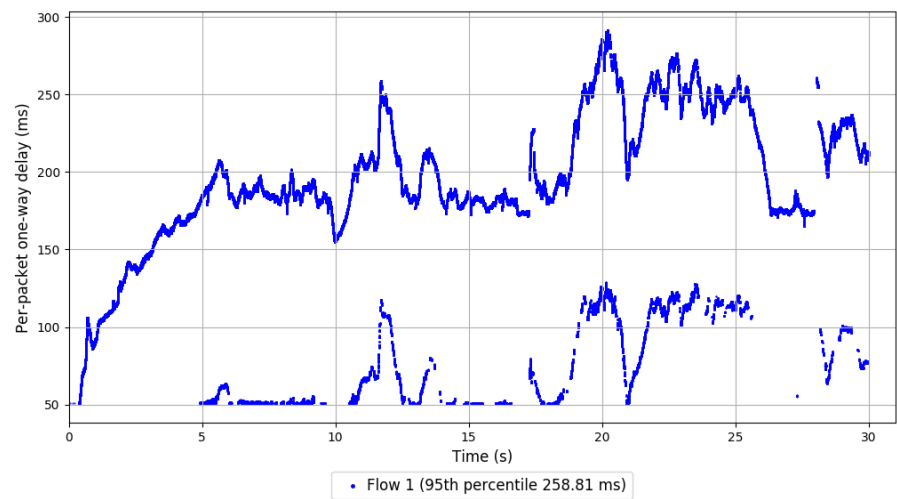
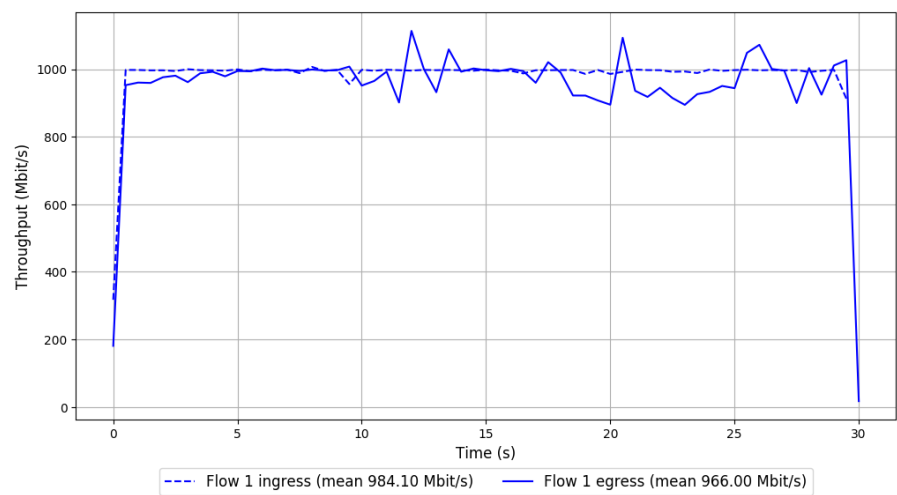
-- Flow 1:

Average throughput: 966.00 Mbit/s

95th percentile per-packet one-way delay: 258.813 ms

Loss rate: 1.84%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2017-12-20 04:39:08

End at: 2017-12-20 04:39:38

Below is generated by plot.py at 2017-12-20 07:07:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 975.96 Mbit/s

95th percentile per-packet one-way delay: 195.710 ms

Loss rate: 0.54%

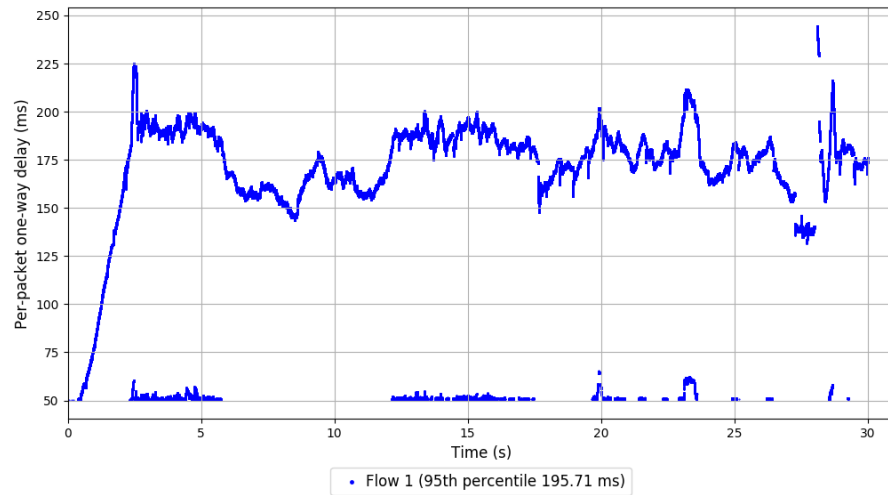
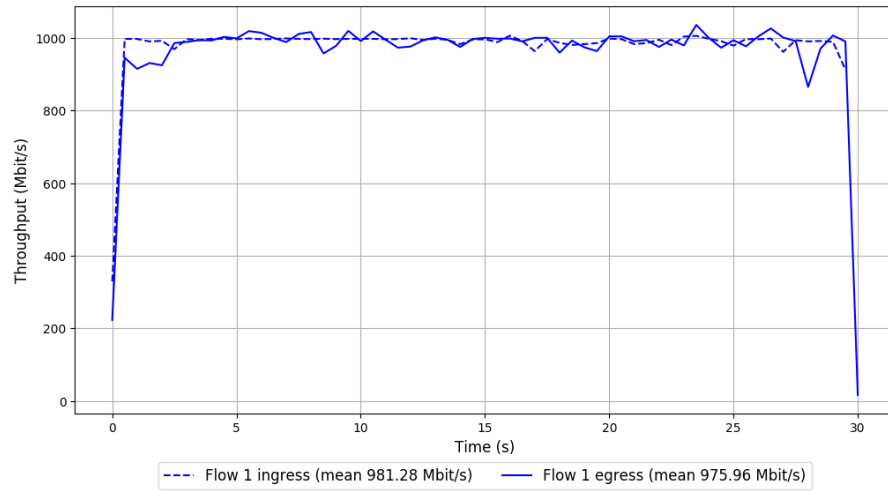
-- Flow 1:

Average throughput: 975.96 Mbit/s

95th percentile per-packet one-way delay: 195.710 ms

Loss rate: 0.54%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2017-12-20 04:50:46

End at: 2017-12-20 04:51:16

Below is generated by plot.py at 2017-12-20 07:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 916.19 Mbit/s

95th percentile per-packet one-way delay: 261.443 ms

Loss rate: 2.98%

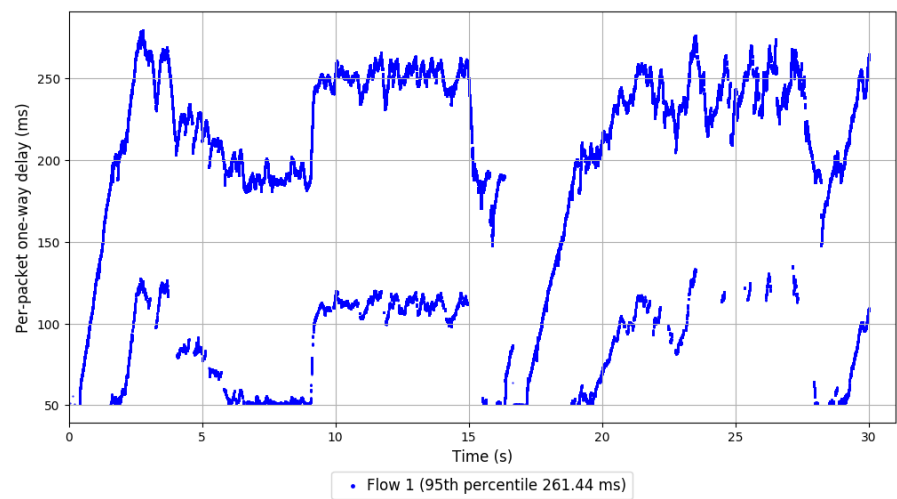
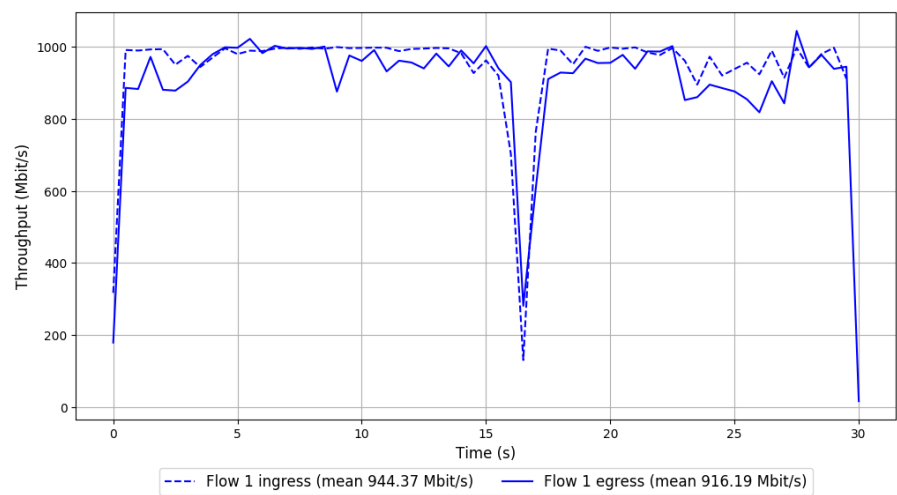
-- Flow 1:

Average throughput: 916.19 Mbit/s

95th percentile per-packet one-way delay: 261.443 ms

Loss rate: 2.98%

Run 10: Report of FillP — Data Link

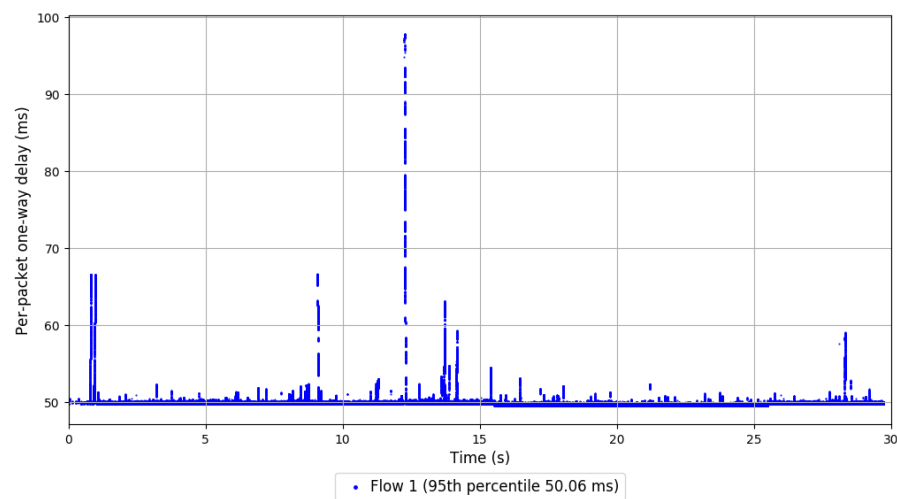
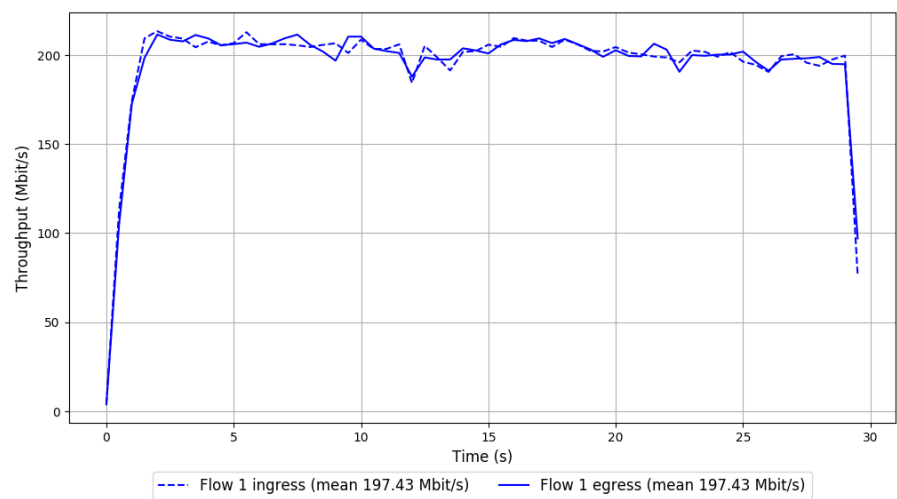


```
Run 1: Statistics of Indigo

Start at: 2017-12-20 03:11:37
End at: 2017-12-20 03:12:07

# Below is generated by plot.py at 2017-12-20 07:08:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 197.43 Mbit/s
95th percentile per-packet one-way delay: 50.063 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 197.43 Mbit/s
95th percentile per-packet one-way delay: 50.063 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-20 03:22:51

End at: 2017-12-20 03:23:21

Below is generated by plot.py at 2017-12-20 07:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.88 Mbit/s

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

Loss rate: 0.00%

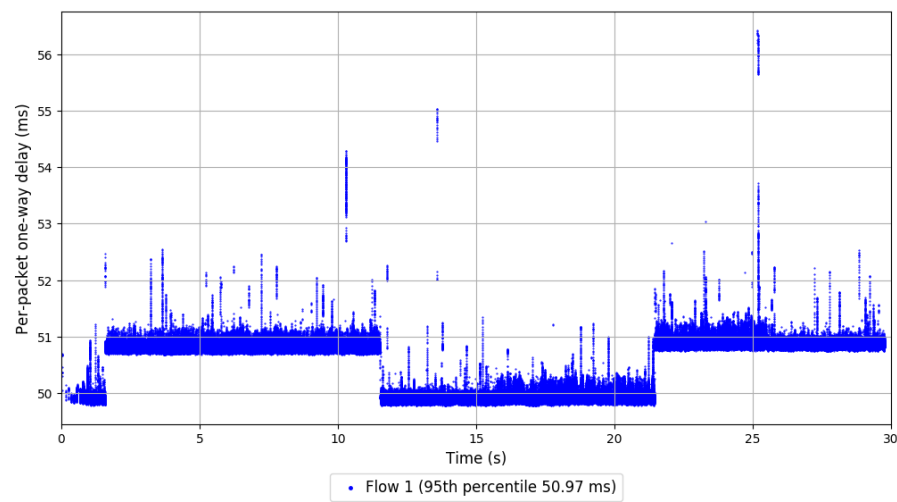
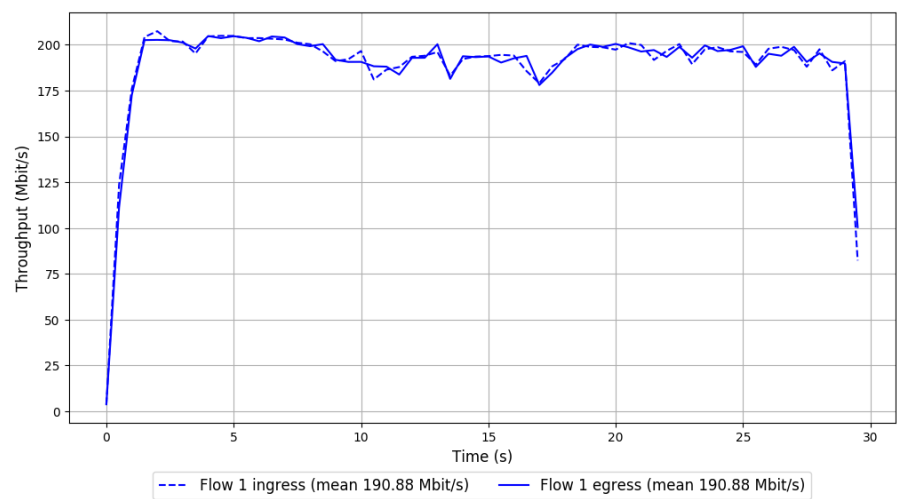
-- Flow 1:

Average throughput: 190.88 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-20 03:34:17

End at: 2017-12-20 03:34:47

Below is generated by plot.py at 2017-12-20 07:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.40 Mbit/s

95th percentile per-packet one-way delay: 50.980 ms

Loss rate: 0.00%

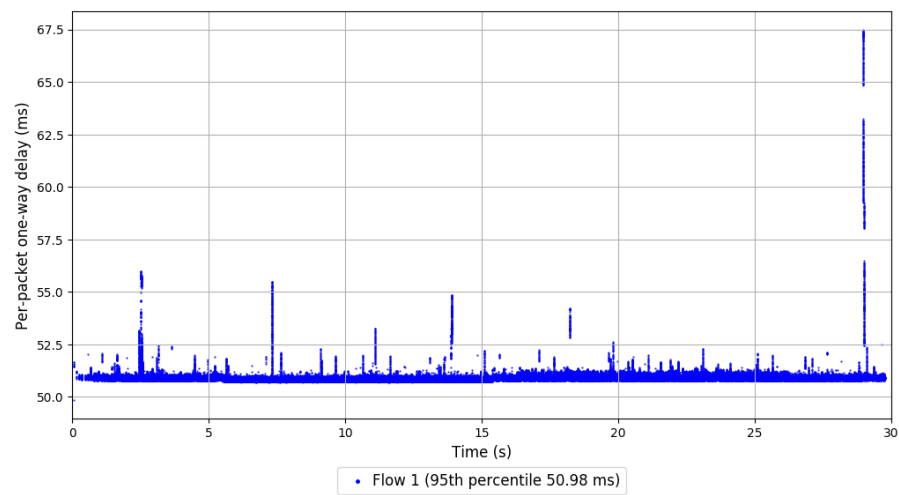
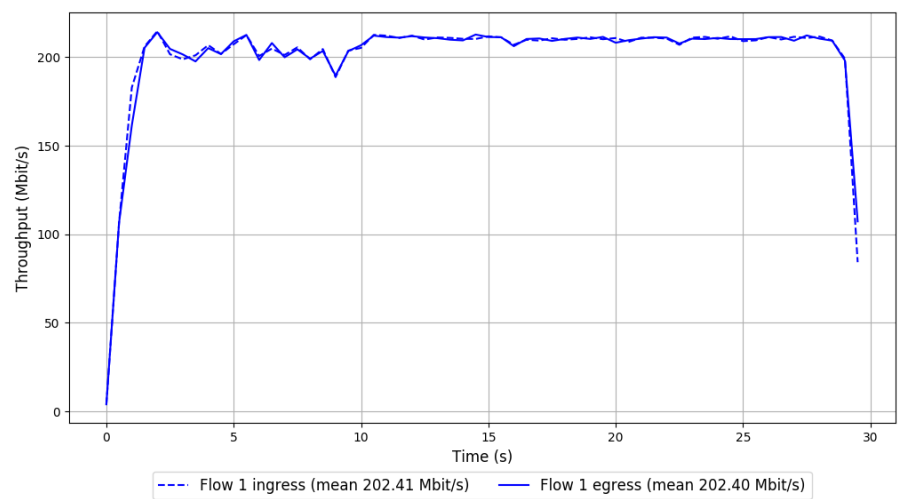
-- Flow 1:

Average throughput: 202.40 Mbit/s

95th percentile per-packet one-way delay: 50.980 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-20 03:45:53

End at: 2017-12-20 03:46:23

Below is generated by plot.py at 2017-12-20 07:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.21 Mbit/s

95th percentile per-packet one-way delay: 50.263 ms

Loss rate: 0.00%

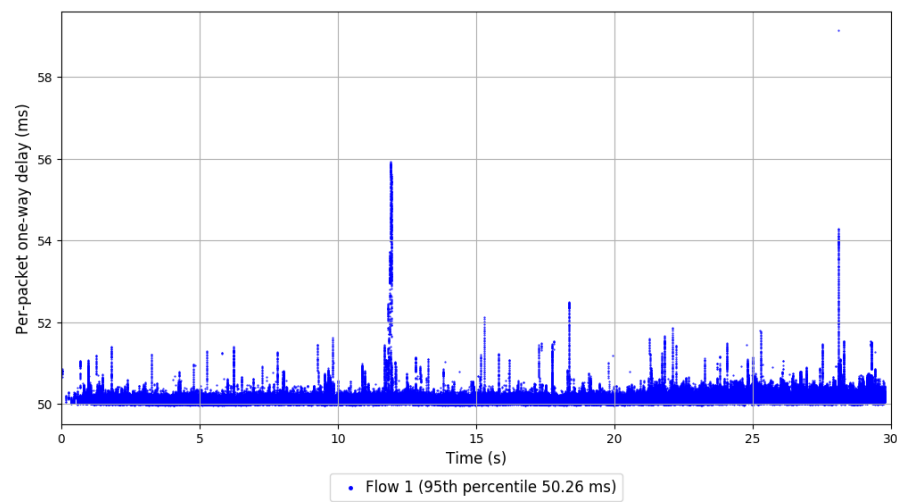
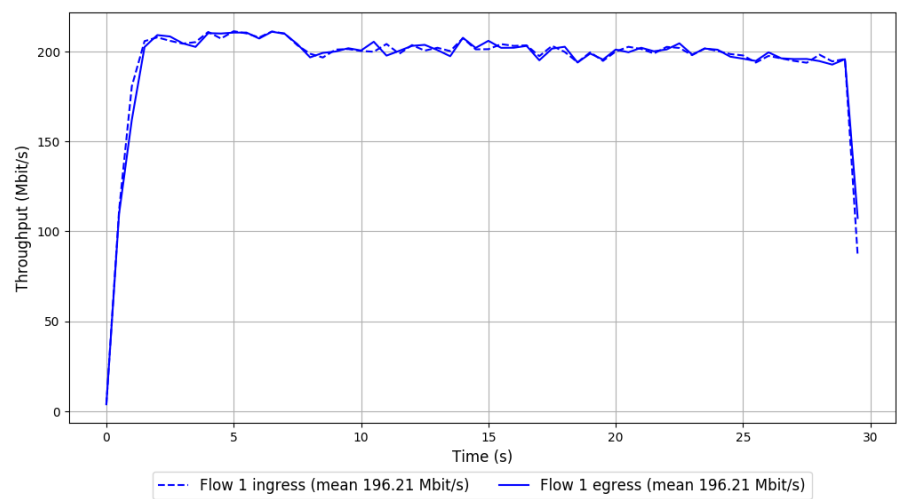
-- Flow 1:

Average throughput: 196.21 Mbit/s

95th percentile per-packet one-way delay: 50.263 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-20 03:57:40

End at: 2017-12-20 03:58:10

Below is generated by plot.py at 2017-12-20 07:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.04 Mbit/s

95th percentile per-packet one-way delay: 50.706 ms

Loss rate: 0.00%

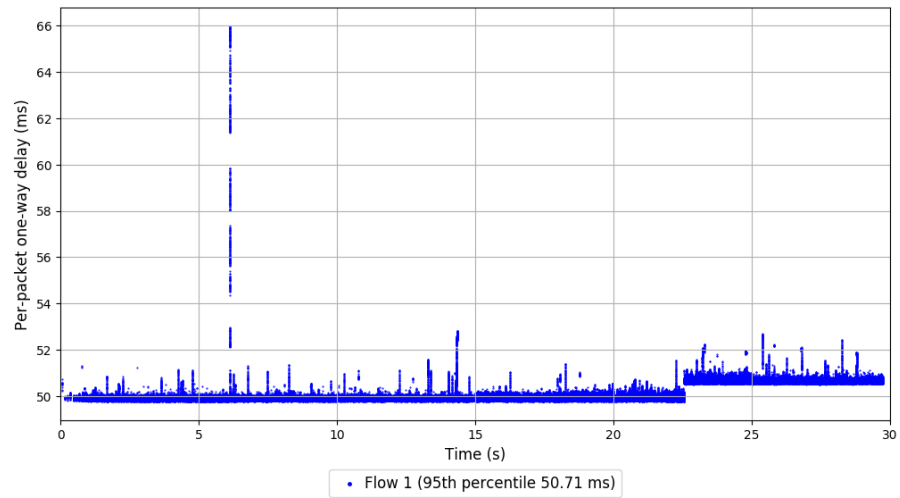
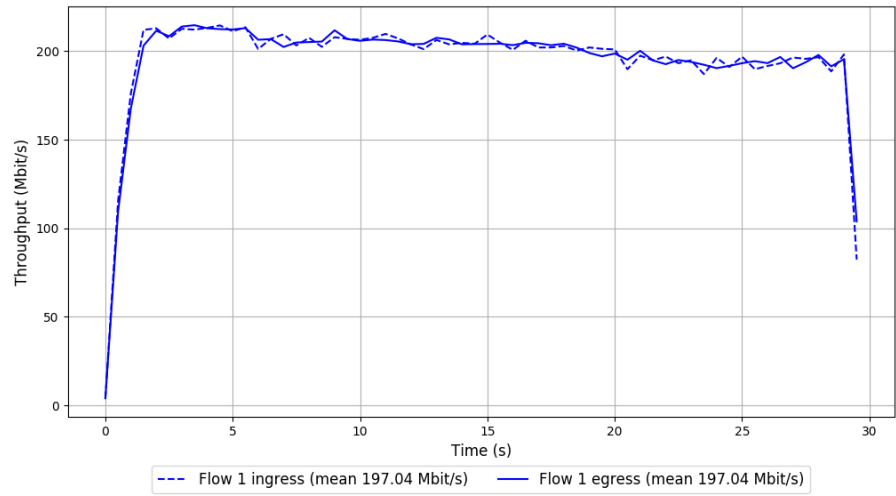
-- Flow 1:

Average throughput: 197.04 Mbit/s

95th percentile per-packet one-way delay: 50.706 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-20 04:09:23

End at: 2017-12-20 04:09:53

Below is generated by plot.py at 2017-12-20 07:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.65 Mbit/s

95th percentile per-packet one-way delay: 50.322 ms

Loss rate: 0.00%

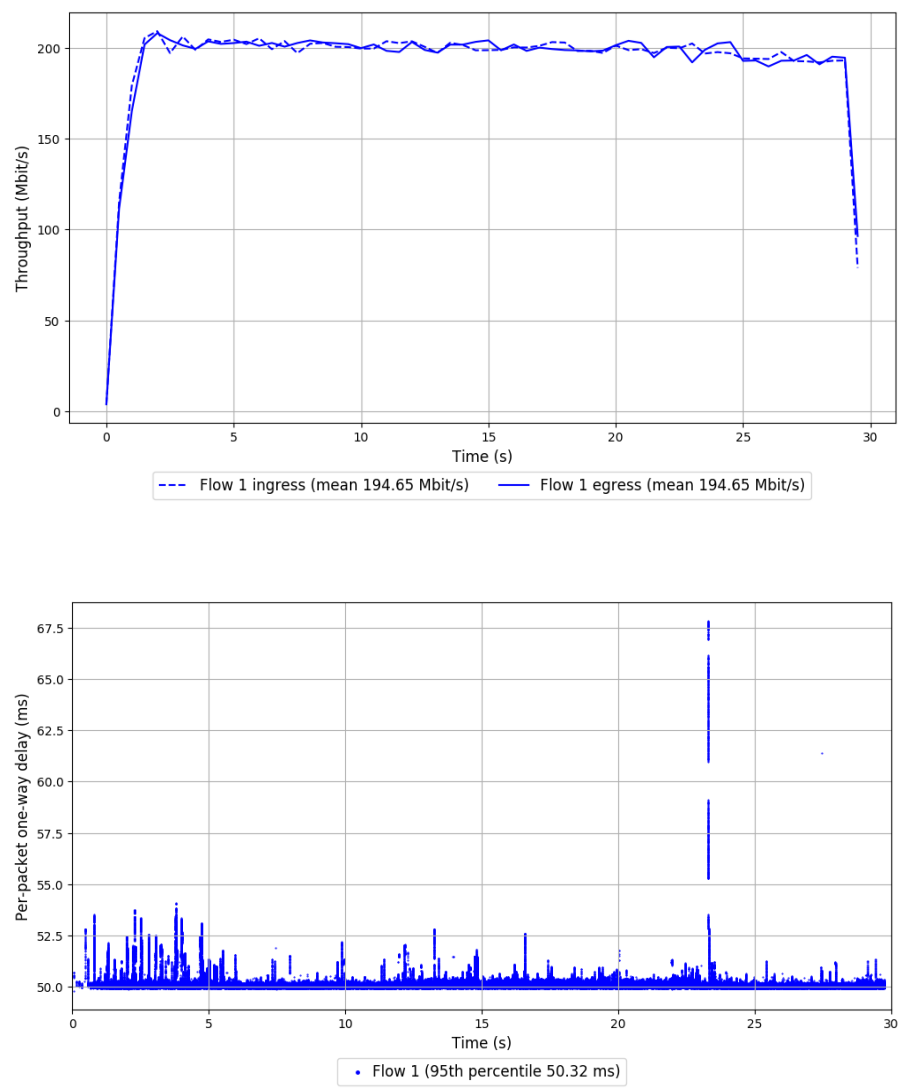
-- Flow 1:

Average throughput: 194.65 Mbit/s

95th percentile per-packet one-way delay: 50.322 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-20 04:21:04

End at: 2017-12-20 04:21:34

Below is generated by plot.py at 2017-12-20 07:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.17 Mbit/s

95th percentile per-packet one-way delay: 50.473 ms

Loss rate: 0.00%

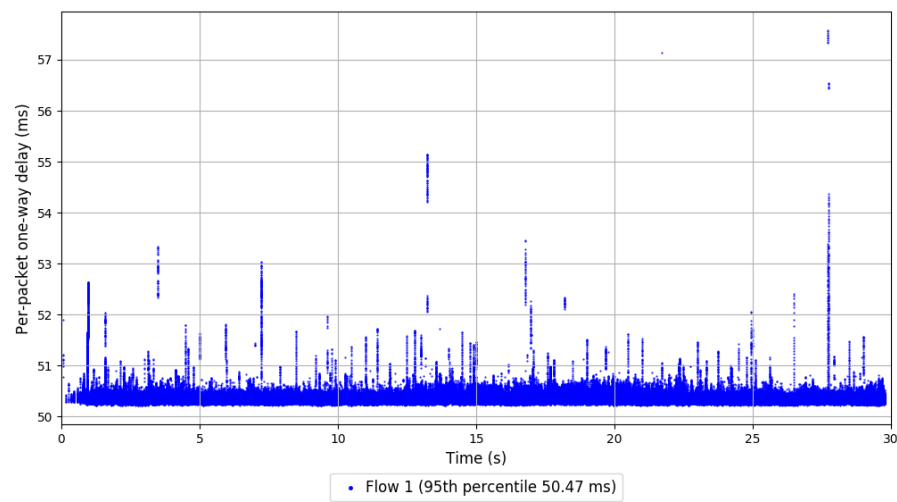
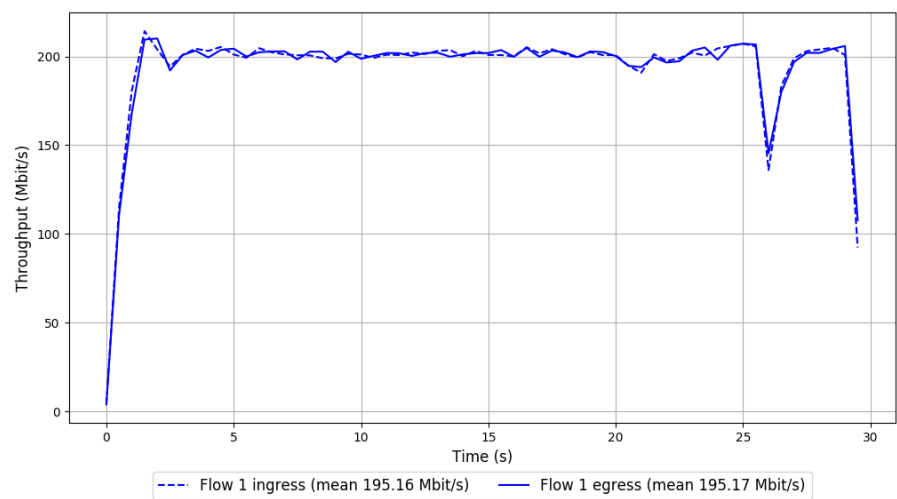
-- Flow 1:

Average throughput: 195.17 Mbit/s

95th percentile per-packet one-way delay: 50.473 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-20 04:32:36

End at: 2017-12-20 04:33:06

Below is generated by plot.py at 2017-12-20 07:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.60 Mbit/s

95th percentile per-packet one-way delay: 50.566 ms

Loss rate: 0.00%

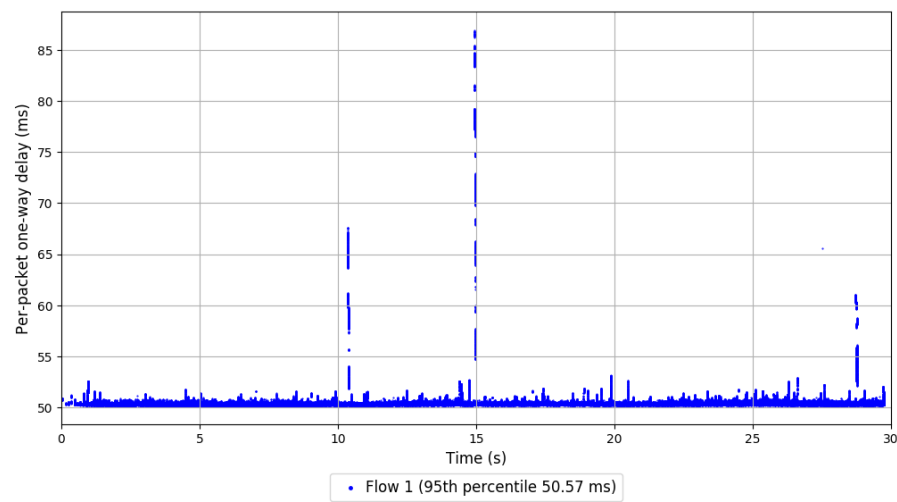
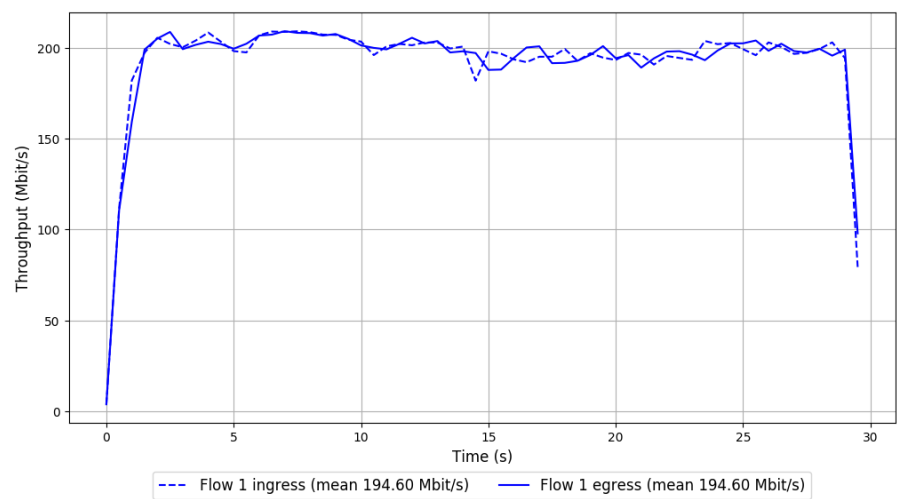
-- Flow 1:

Average throughput: 194.60 Mbit/s

95th percentile per-packet one-way delay: 50.566 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-20 04:44:14

End at: 2017-12-20 04:44:44

Below is generated by plot.py at 2017-12-20 07:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.58 Mbit/s

95th percentile per-packet one-way delay: 50.396 ms

Loss rate: 0.00%

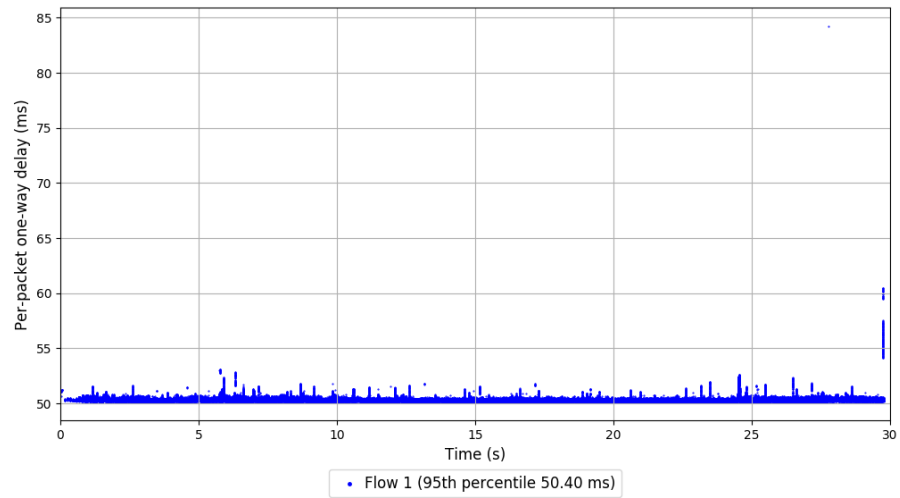
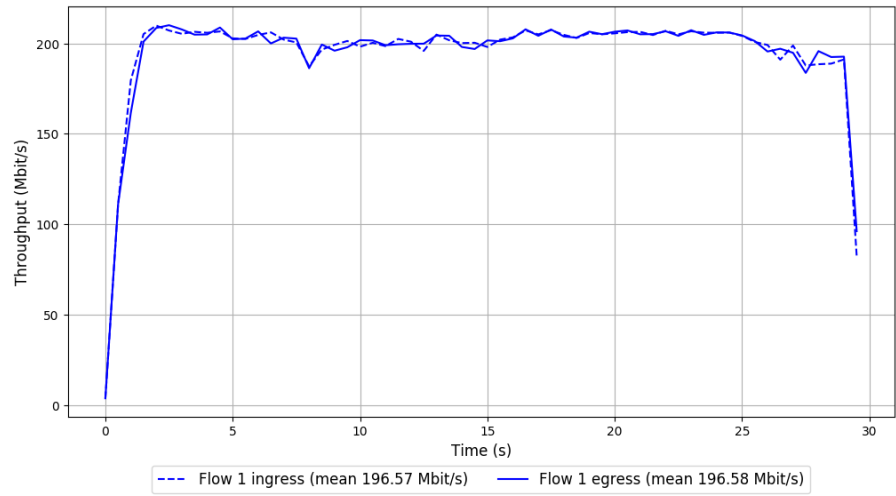
-- Flow 1:

Average throughput: 196.58 Mbit/s

95th percentile per-packet one-way delay: 50.396 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-20 04:55:44

End at: 2017-12-20 04:56:14

Below is generated by plot.py at 2017-12-20 07:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.13 Mbit/s

95th percentile per-packet one-way delay: 50.753 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 199.13 Mbit/s

95th percentile per-packet one-way delay: 50.753 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

