

Pantheon Report

Generated at 2017-12-20 06:09:03 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

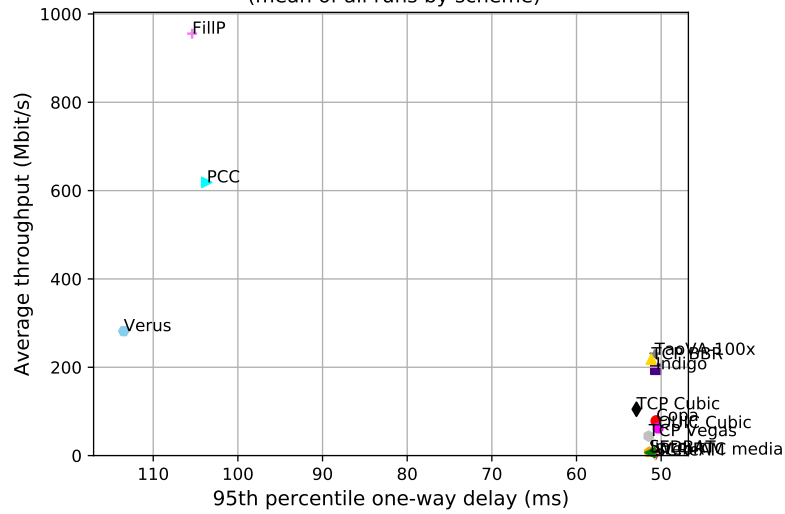
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

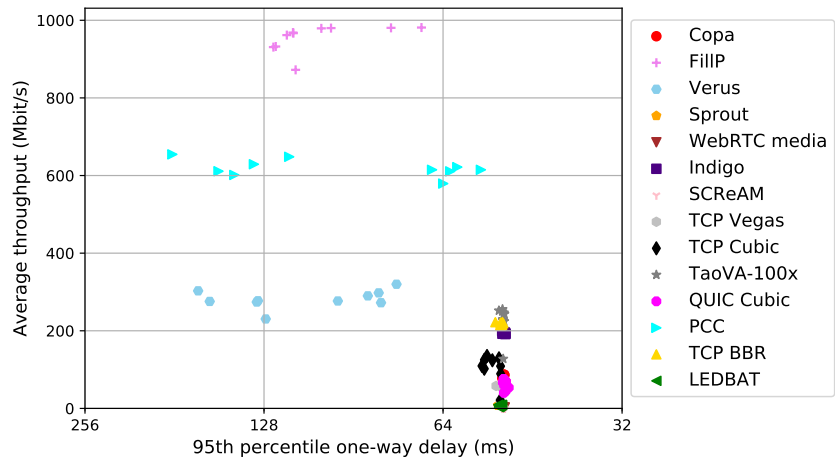
Git summary:

```
branch: 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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeab30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	218.12	51.16	0.40
TCP Cubic	9	104.94	52.92	0.54
LEDBAT	10	6.86	51.32	1.10
PCC	10	618.59	103.68	1.25
QUIC Cubic	10	62.38	50.37	0.37
SCReAM	10	0.22	50.73	0.36
WebRTC media	10	2.26	50.66	0.42
Sprout	10	7.93	51.42	0.66
TaoVA-100x	10	228.19	50.77	0.39
TCP Vegas	3	44.12	51.48	0.66
Verus	10	281.71	113.49	0.74
Copa	10	78.50	50.58	0.32
FillP	10	955.35	105.40	1.66
Indigo	10	195.43	50.63	0.35

Run 1: Statistics of TCP BBR

Start at: 2017-12-20 01:13:32

End at: 2017-12-20 01:14:02

Below is generated by plot.py at 2017-12-20 05:08:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.65 Mbit/s

95th percentile per-packet one-way delay: 51.287 ms

Loss rate: 0.37%

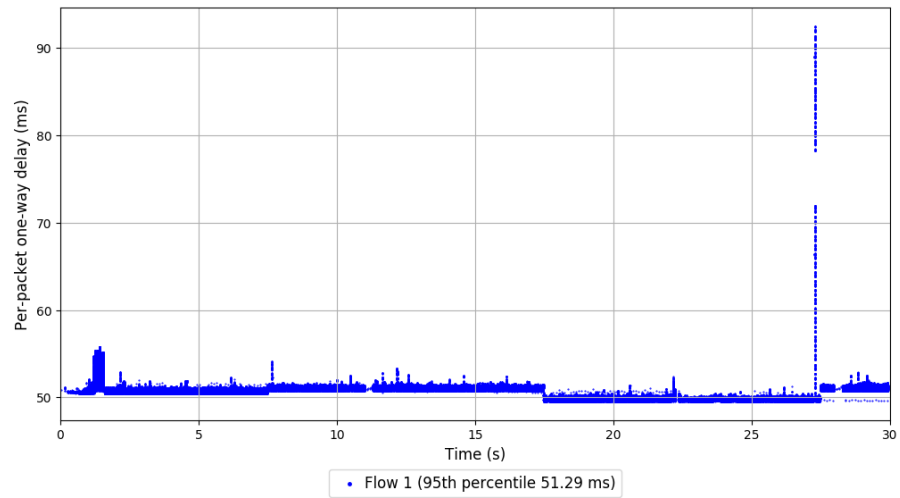
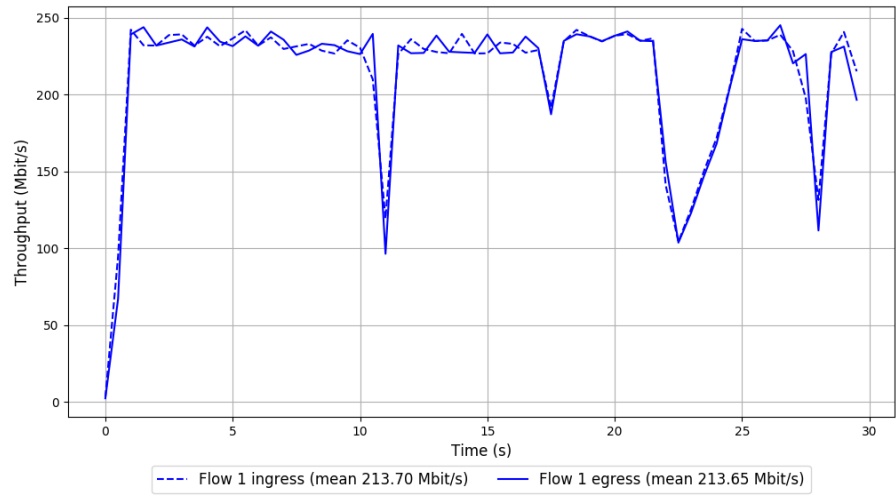
-- Flow 1:

Average throughput: 213.65 Mbit/s

95th percentile per-packet one-way delay: 51.287 ms

Loss rate: 0.37%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-20 01:25:19

End at: 2017-12-20 01:25:49

Below is generated by plot.py at 2017-12-20 05:09:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.96 Mbit/s

95th percentile per-packet one-way delay: 51.166 ms

Loss rate: 0.72%

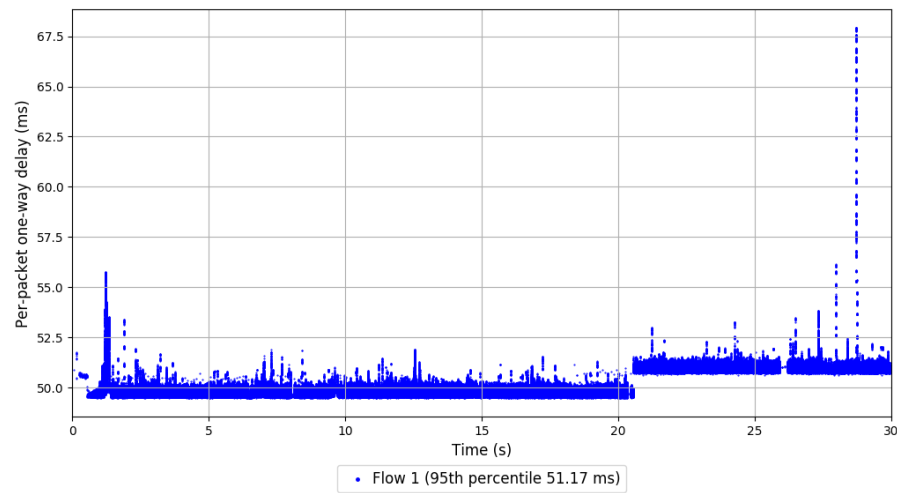
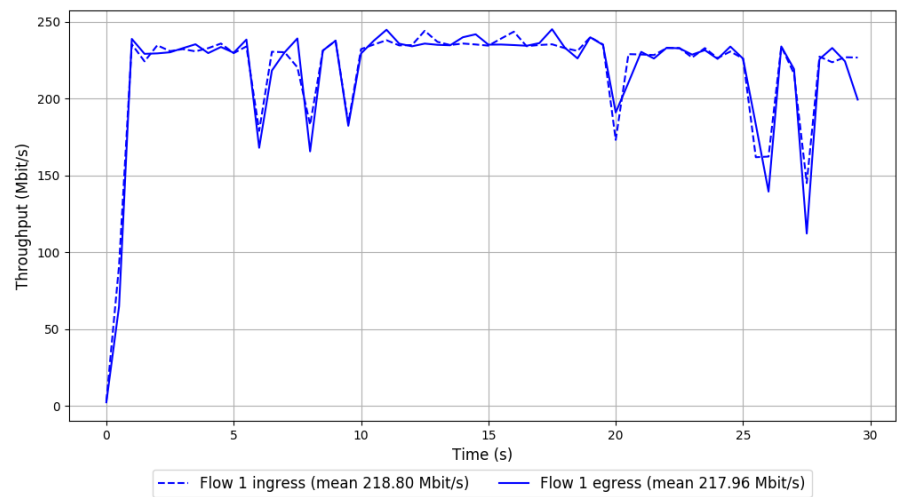
-- Flow 1:

Average throughput: 217.96 Mbit/s

95th percentile per-packet one-way delay: 51.166 ms

Loss rate: 0.72%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-20 01:37:01

End at: 2017-12-20 01:37:31

Below is generated by plot.py at 2017-12-20 05:09:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 220.62 Mbit/s

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

Loss rate: 0.36%

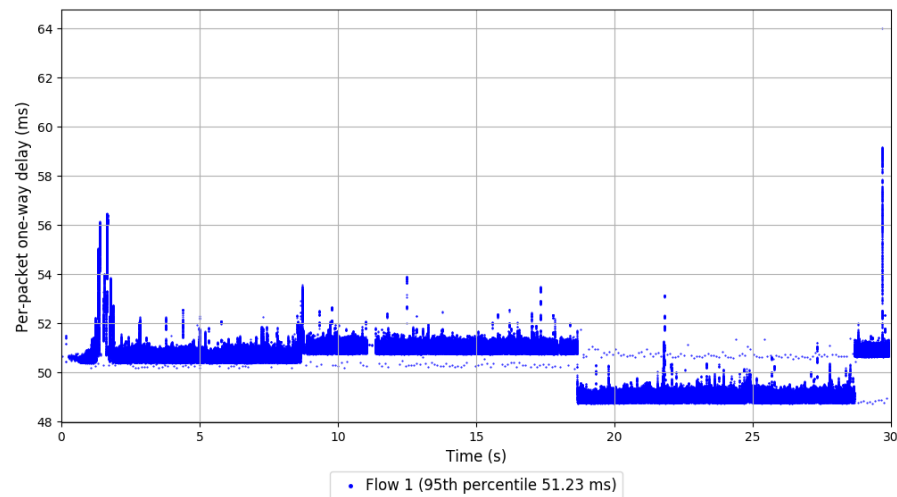
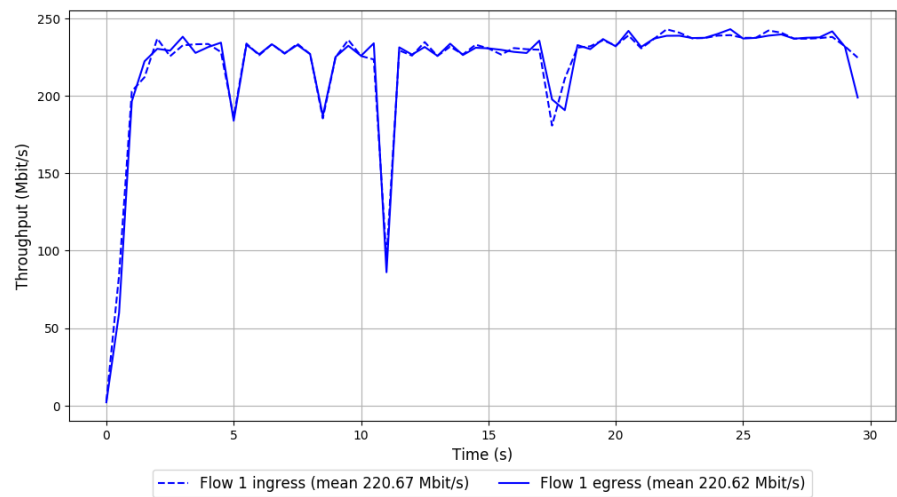
-- Flow 1:

Average throughput: 220.62 Mbit/s

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

Loss rate: 0.36%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-20 01:48:43

End at: 2017-12-20 01:49:13

Below is generated by plot.py at 2017-12-20 05:09:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.76 Mbit/s

95th percentile per-packet one-way delay: 51.099 ms

Loss rate: 0.38%

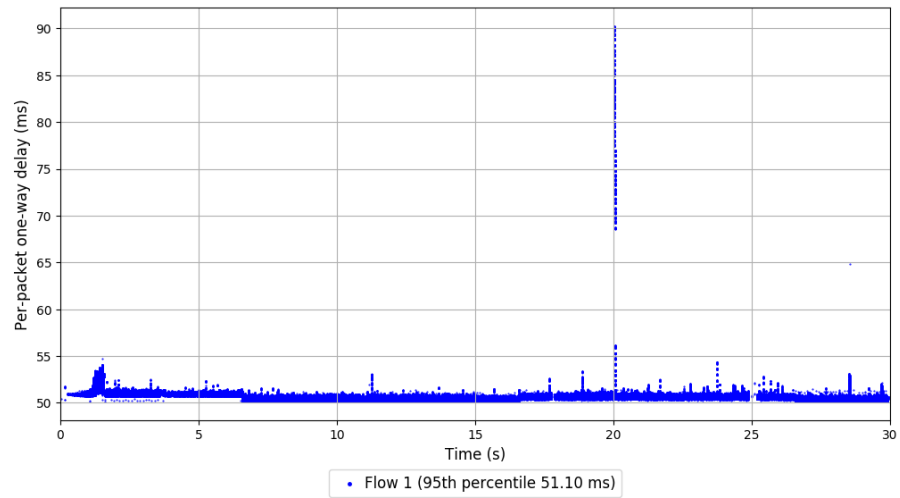
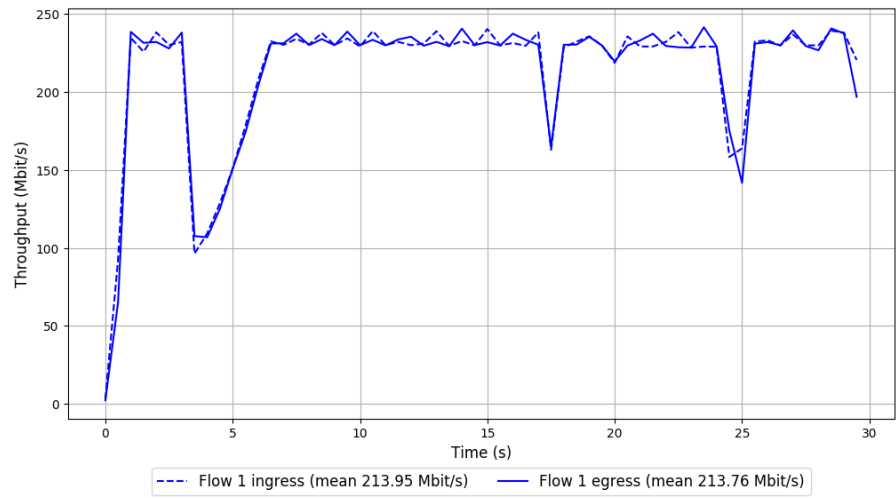
-- Flow 1:

Average throughput: 213.76 Mbit/s

95th percentile per-packet one-way delay: 51.099 ms

Loss rate: 0.38%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-20 02:00:31

End at: 2017-12-20 02:01:01

Below is generated by plot.py at 2017-12-20 05:09:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.38 Mbit/s

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

Loss rate: 0.37%

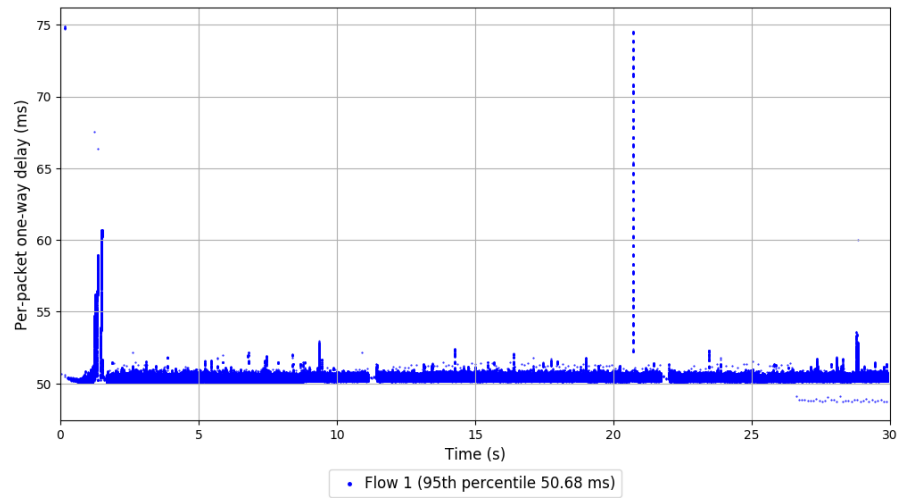
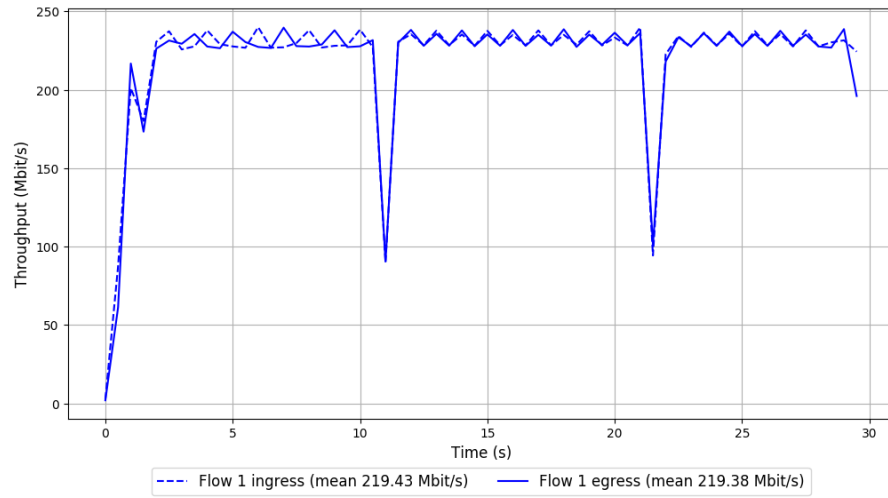
-- Flow 1:

Average throughput: 219.38 Mbit/s

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

Loss rate: 0.37%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-20 02:12:16

End at: 2017-12-20 02:12:46

Below is generated by plot.py at 2017-12-20 05:09:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.45 Mbit/s

95th percentile per-packet one-way delay: 50.954 ms

Loss rate: 0.38%

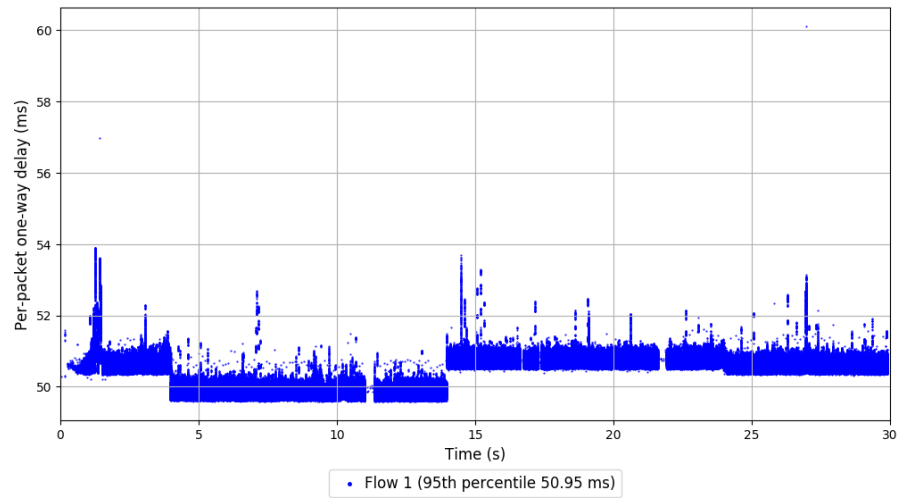
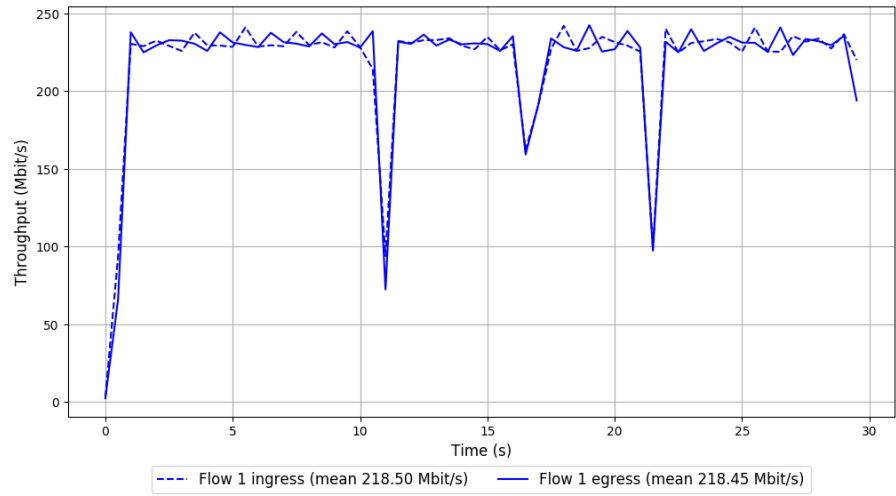
-- Flow 1:

Average throughput: 218.45 Mbit/s

95th percentile per-packet one-way delay: 50.954 ms

Loss rate: 0.38%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-20 02:24:01

End at: 2017-12-20 02:24:31

Below is generated by plot.py at 2017-12-20 05:09:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.17 Mbit/s

95th percentile per-packet one-way delay: 51.151 ms

Loss rate: 0.36%

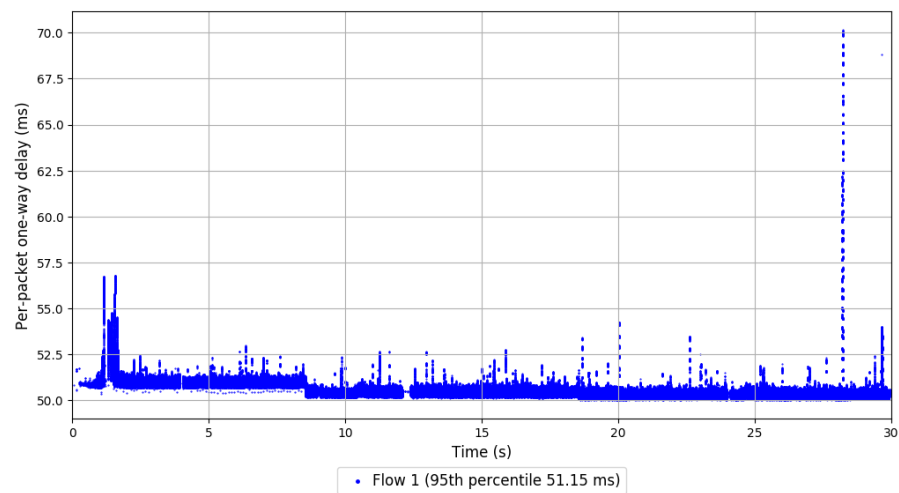
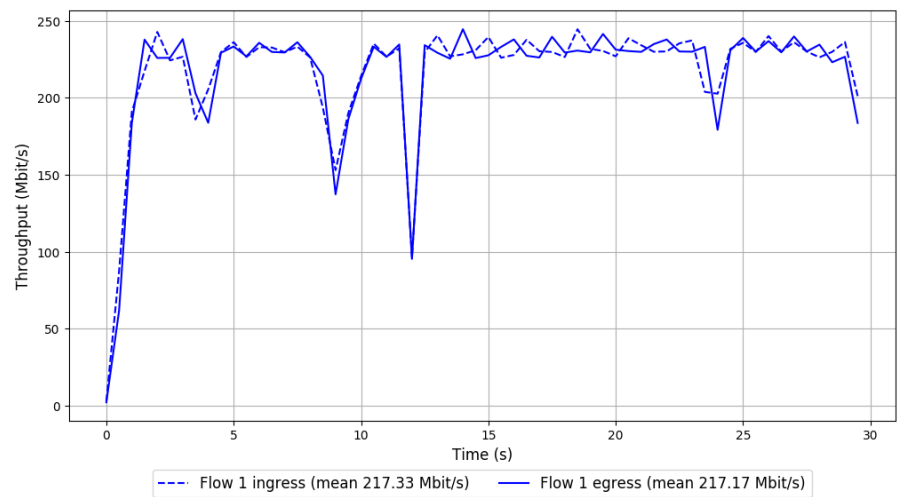
-- Flow 1:

Average throughput: 217.17 Mbit/s

95th percentile per-packet one-way delay: 51.151 ms

Loss rate: 0.36%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-20 02:35:45

End at: 2017-12-20 02:36:15

Below is generated by plot.py at 2017-12-20 05:09:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.39 Mbit/s

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

Loss rate: 0.35%

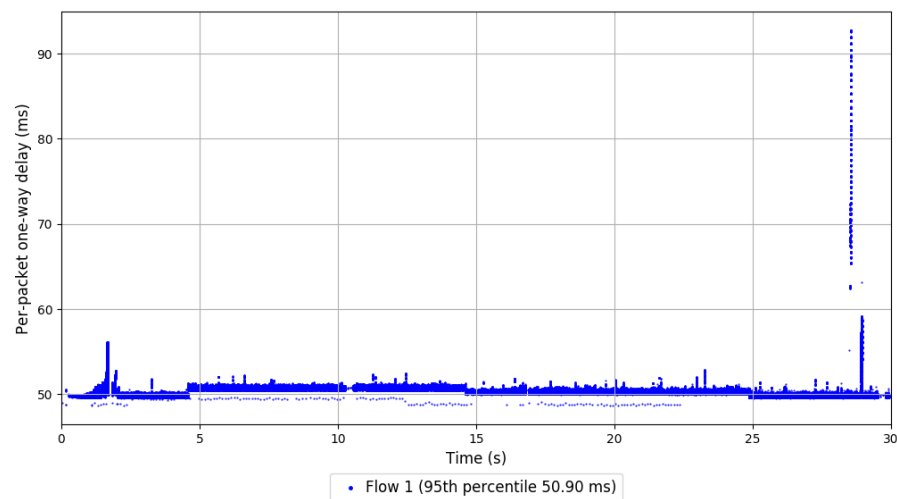
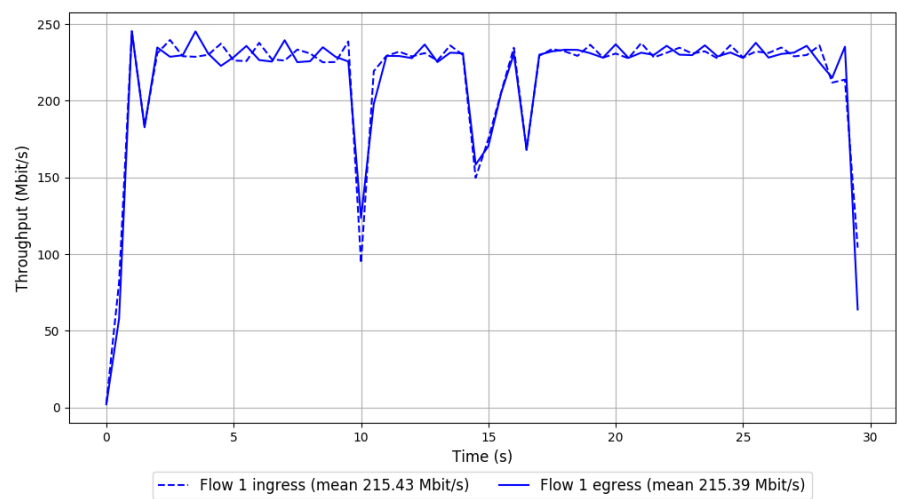
-- Flow 1:

Average throughput: 215.39 Mbit/s

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

Loss rate: 0.35%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-20 02:47:33

End at: 2017-12-20 02:48:03

Below is generated by plot.py at 2017-12-20 05:12:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.70 Mbit/s

95th percentile per-packet one-way delay: 50.862 ms

Loss rate: 0.35%

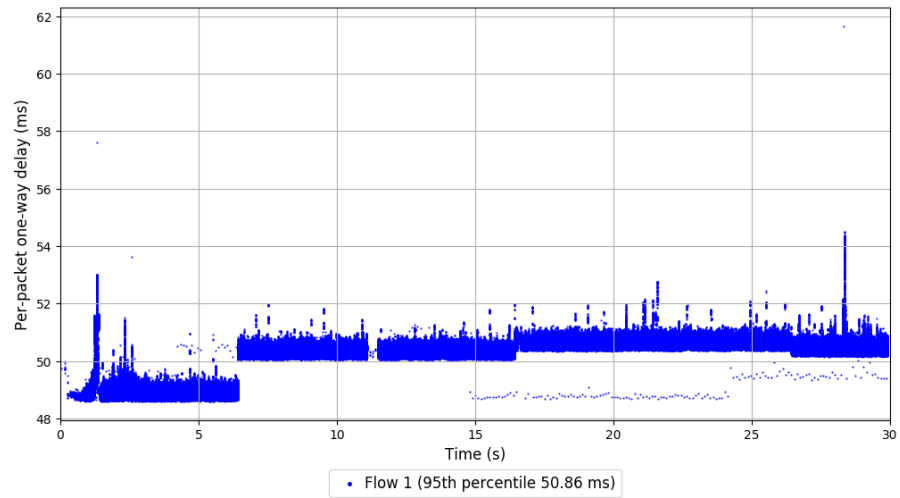
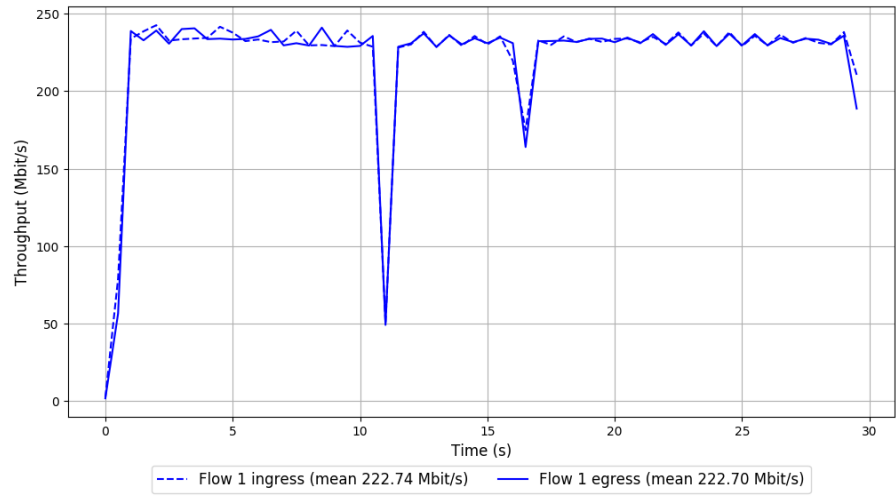
-- Flow 1:

Average throughput: 222.70 Mbit/s

95th percentile per-packet one-way delay: 50.862 ms

Loss rate: 0.35%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-20 02:59:21

End at: 2017-12-20 02:59:51

Below is generated by plot.py at 2017-12-20 05:12:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.17 Mbit/s

95th percentile per-packet one-way delay: 52.265 ms

Loss rate: 0.35%

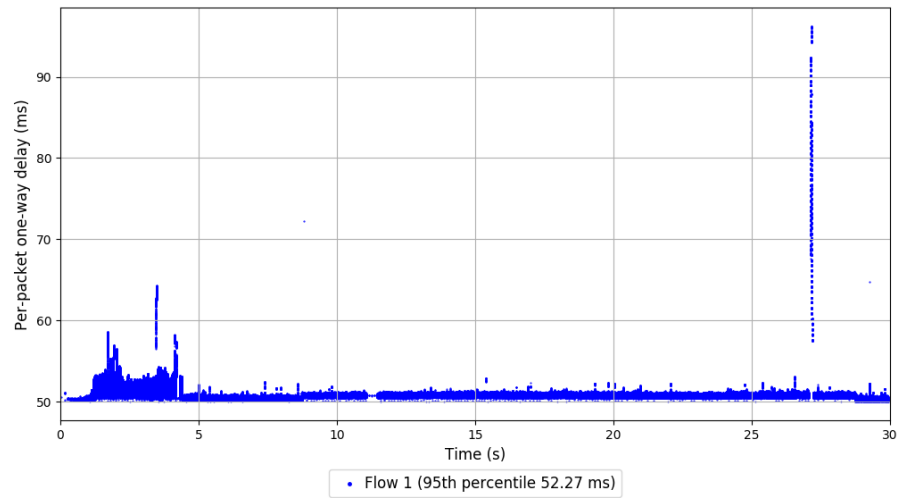
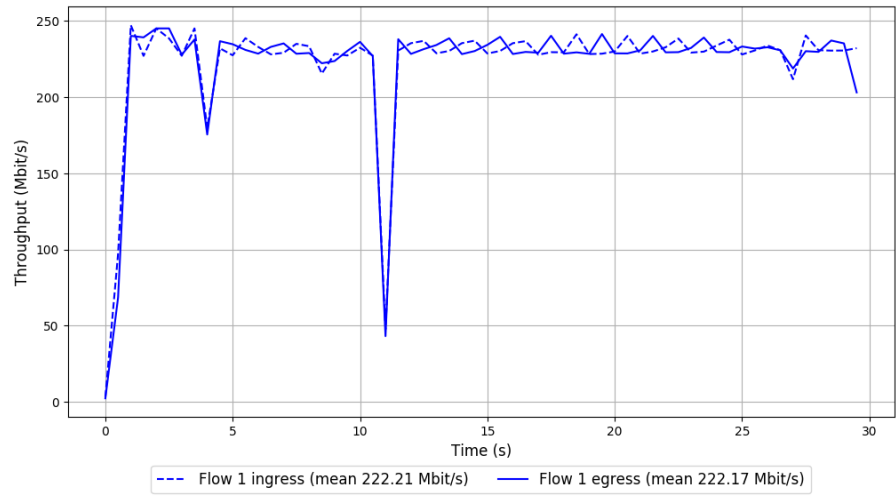
-- Flow 1:

Average throughput: 222.17 Mbit/s

95th percentile per-packet one-way delay: 52.265 ms

Loss rate: 0.35%

Run 10: Report of TCP BBR — Data Link

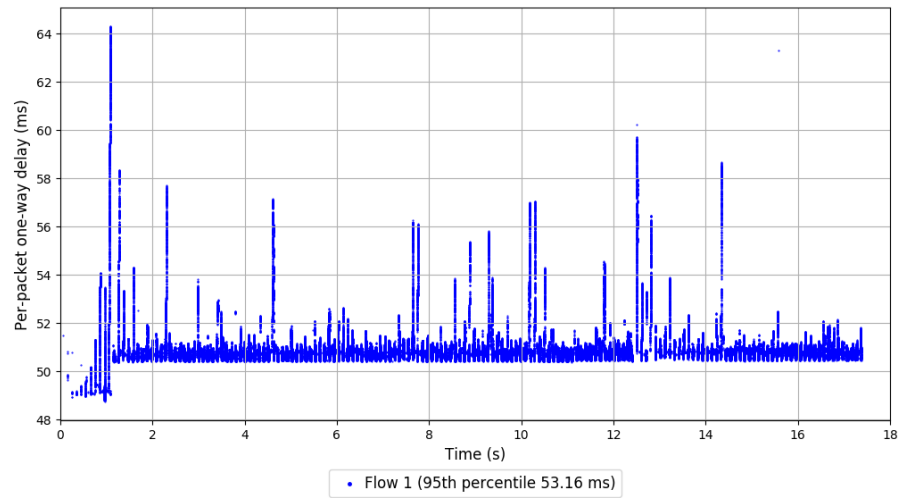
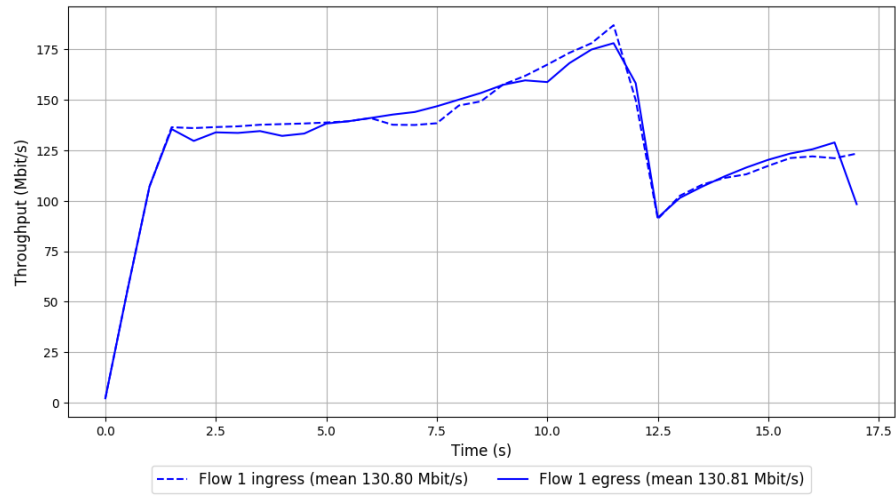


Run 1: Statistics of TCP Cubic

Start at: 2017-12-20 01:17:06

End at: 2017-12-20 01:17:36

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-20 01:28:50

End at: 2017-12-20 01:29:20

Below is generated by plot.py at 2017-12-20 05:12:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 123.98 Mbit/s

95th percentile per-packet one-way delay: 52.871 ms

Loss rate: 0.62%

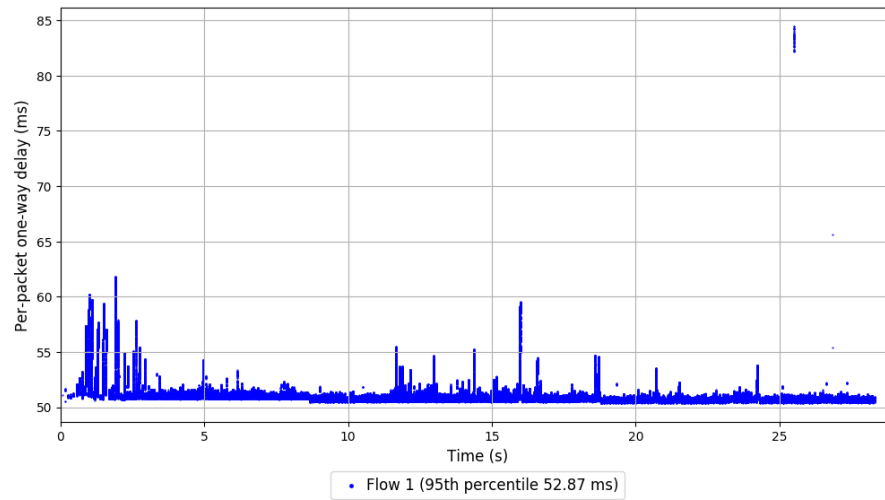
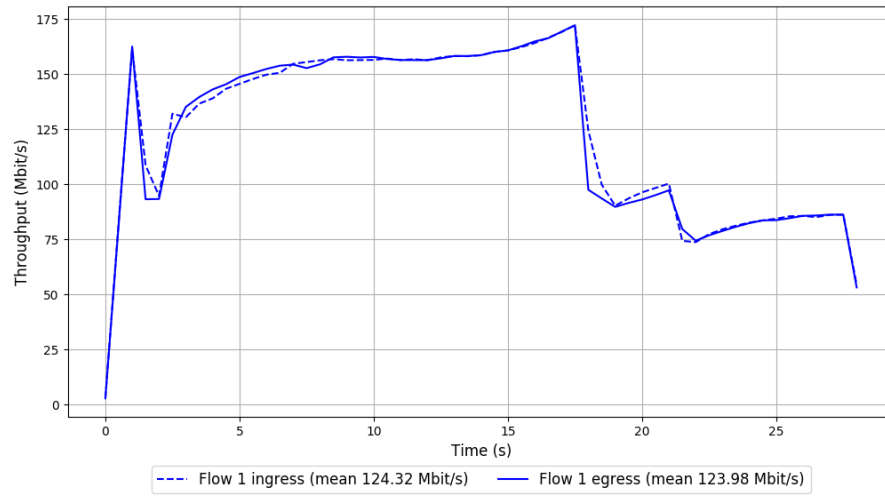
-- Flow 1:

Average throughput: 123.98 Mbit/s

95th percentile per-packet one-way delay: 52.871 ms

Loss rate: 0.62%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-20 01:40:35

End at: 2017-12-20 01:41:05

Below is generated by plot.py at 2017-12-20 05:12:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.22 Mbit/s

95th percentile per-packet one-way delay: 51.295 ms

Loss rate: 1.13%

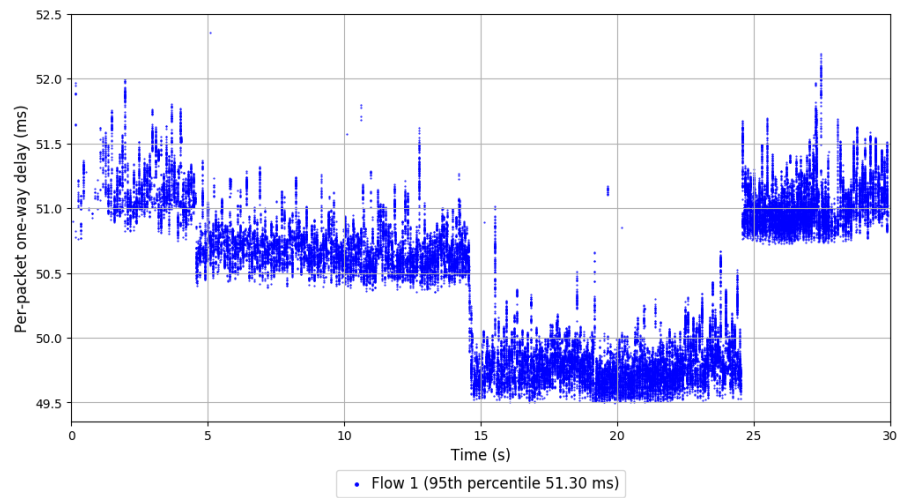
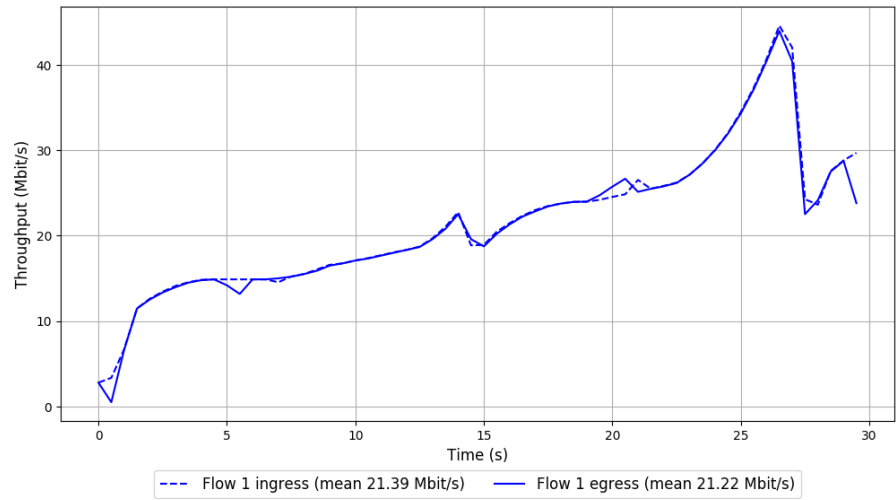
-- Flow 1:

Average throughput: 21.22 Mbit/s

95th percentile per-packet one-way delay: 51.295 ms

Loss rate: 1.13%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-20 01:52:17

End at: 2017-12-20 01:52:47

Below is generated by plot.py at 2017-12-20 05:12:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.82 Mbit/s

95th percentile per-packet one-way delay: 51.222 ms

Loss rate: 0.29%

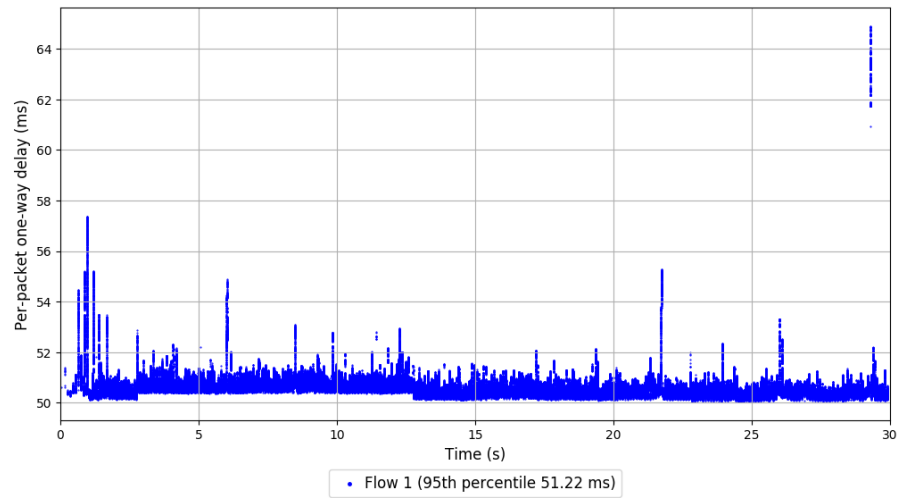
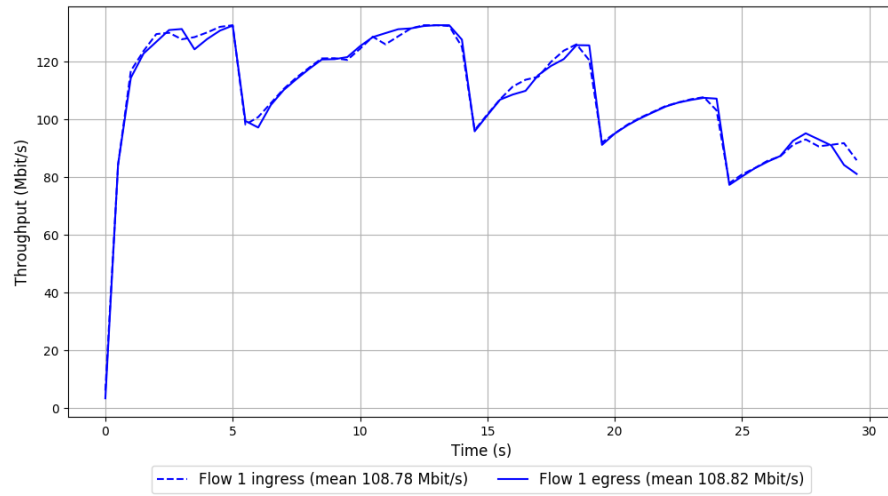
-- Flow 1:

Average throughput: 108.82 Mbit/s

95th percentile per-packet one-way delay: 51.222 ms

Loss rate: 0.29%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-20 02:04:08

End at: 2017-12-20 02:04:38

Below is generated by plot.py at 2017-12-20 05:12:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.27 Mbit/s

95th percentile per-packet one-way delay: 54.550 ms

Loss rate: 0.80%

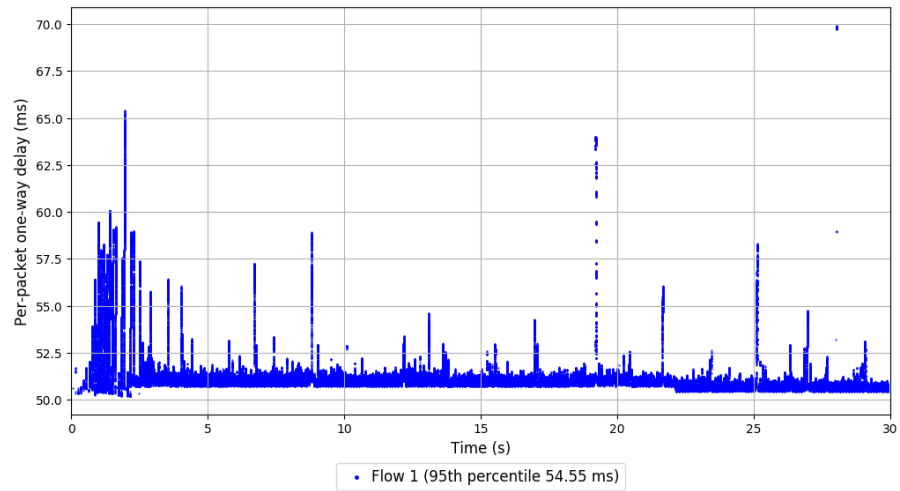
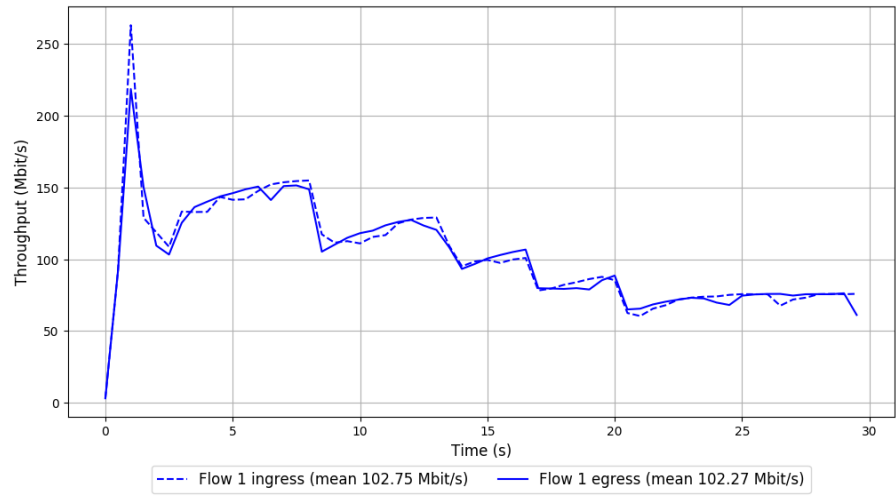
-- Flow 1:

Average throughput: 102.27 Mbit/s

95th percentile per-packet one-way delay: 54.550 ms

Loss rate: 0.80%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-20 02:15:47

End at: 2017-12-20 02:16:17

Below is generated by plot.py at 2017-12-20 05:12:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.24 Mbit/s

95th percentile per-packet one-way delay: 51.212 ms

Loss rate: 0.55%

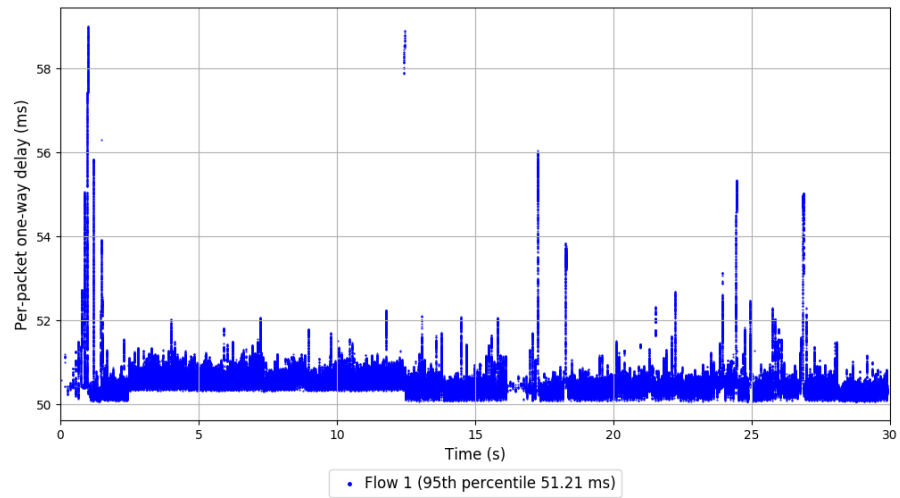
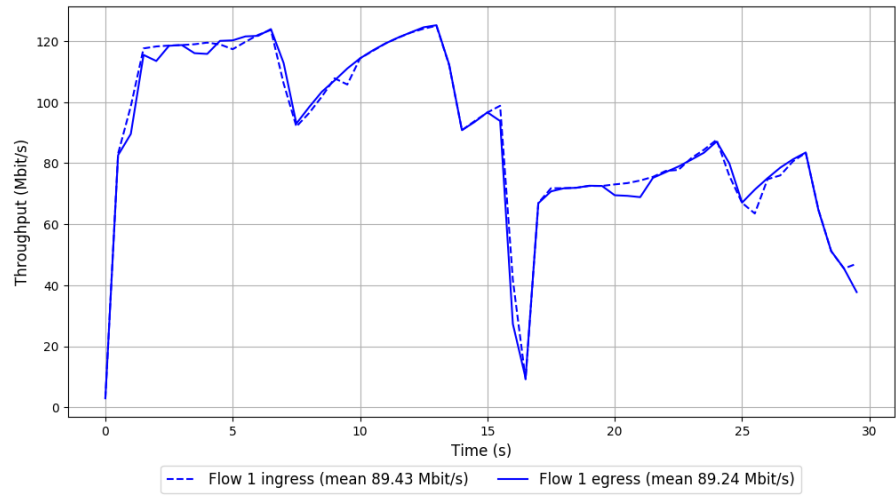
-- Flow 1:

Average throughput: 89.24 Mbit/s

95th percentile per-packet one-way delay: 51.212 ms

Loss rate: 0.55%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-20 02:27:32

End at: 2017-12-20 02:28:02

Below is generated by plot.py at 2017-12-20 05:12:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 129.13 Mbit/s

95th percentile per-packet one-way delay: 51.536 ms

Loss rate: 0.39%

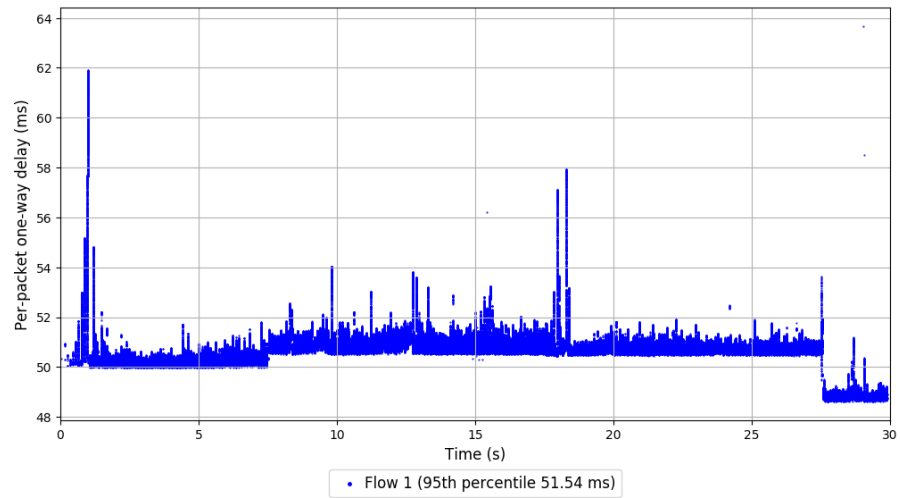
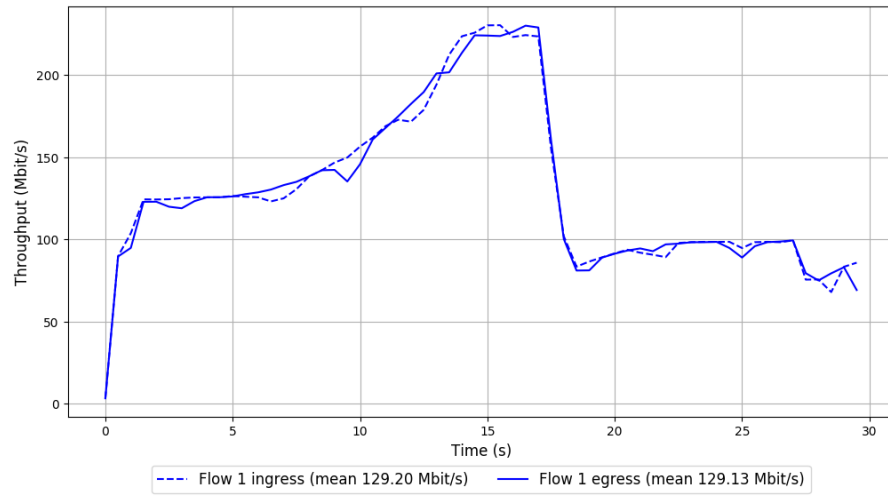
-- Flow 1:

Average throughput: 129.13 Mbit/s

95th percentile per-packet one-way delay: 51.536 ms

Loss rate: 0.39%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-20 02:39:22

End at: 2017-12-20 02:39:52

Below is generated by plot.py at 2017-12-20 05:12:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.41 Mbit/s

95th percentile per-packet one-way delay: 55.051 ms

Loss rate: 0.52%

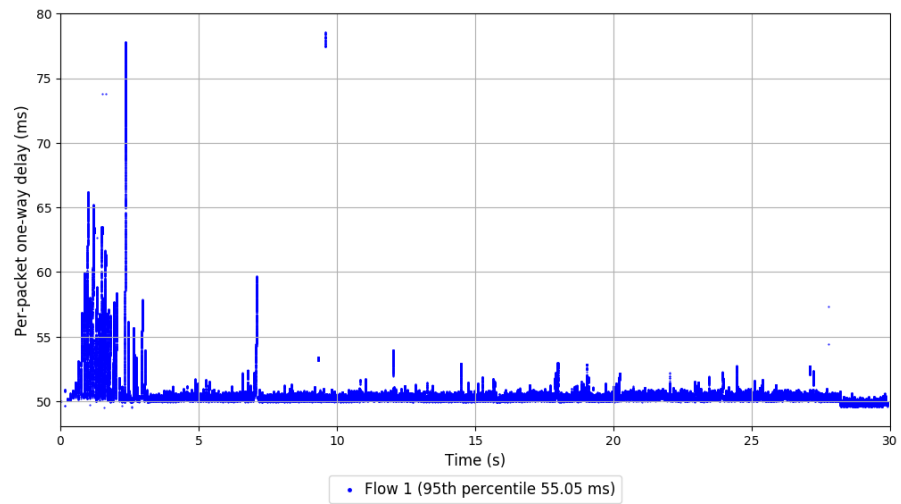
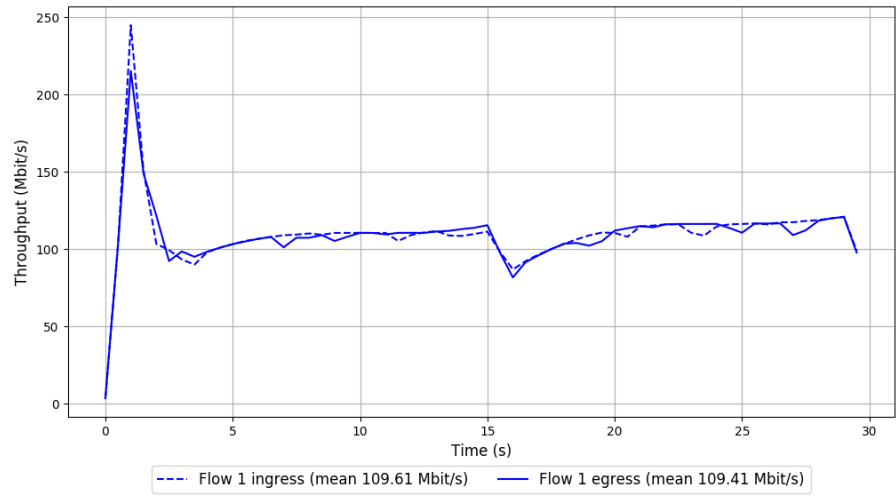
-- Flow 1:

Average throughput: 109.41 Mbit/s

95th percentile per-packet one-way delay: 55.051 ms

Loss rate: 0.52%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-20 02:51:06

End at: 2017-12-20 02:51:36

Below is generated by plot.py at 2017-12-20 05:12:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 135.09 Mbit/s

95th percentile per-packet one-way delay: 53.979 ms

Loss rate: 0.34%

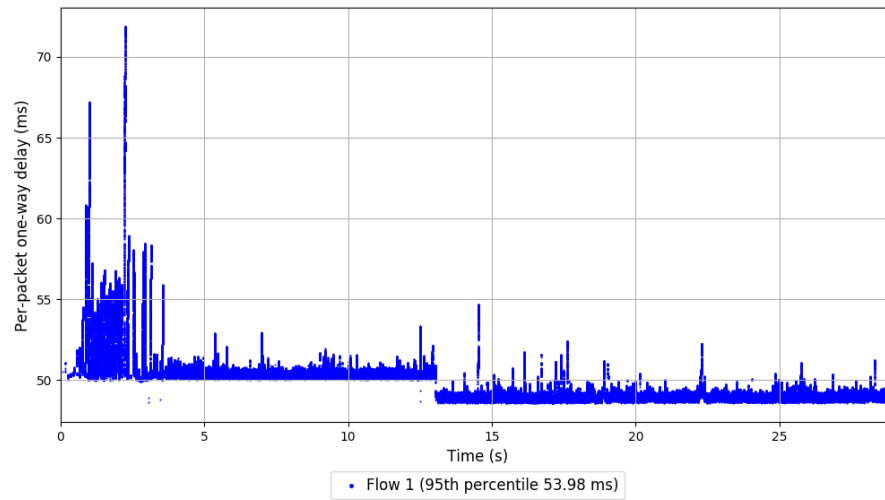
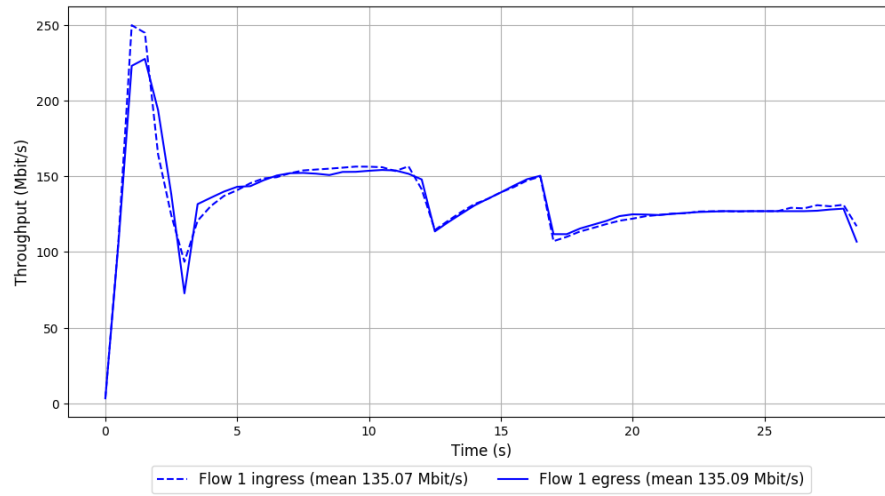
-- Flow 1:

Average throughput: 135.09 Mbit/s

95th percentile per-packet one-way delay: 53.979 ms

Loss rate: 0.34%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-20 03:02:54

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

Below is generated by plot.py at 2017-12-20 05:12:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 125.31 Mbit/s

95th percentile per-packet one-way delay: 54.535 ms

Loss rate: 0.21%

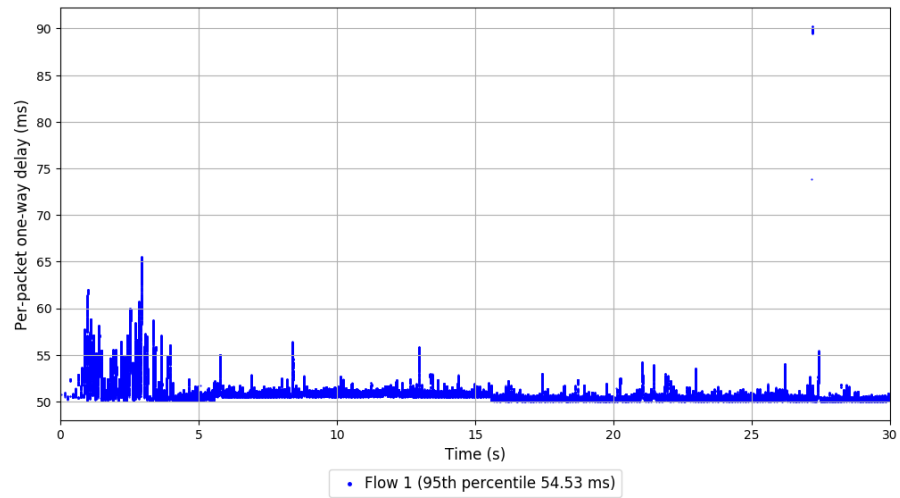
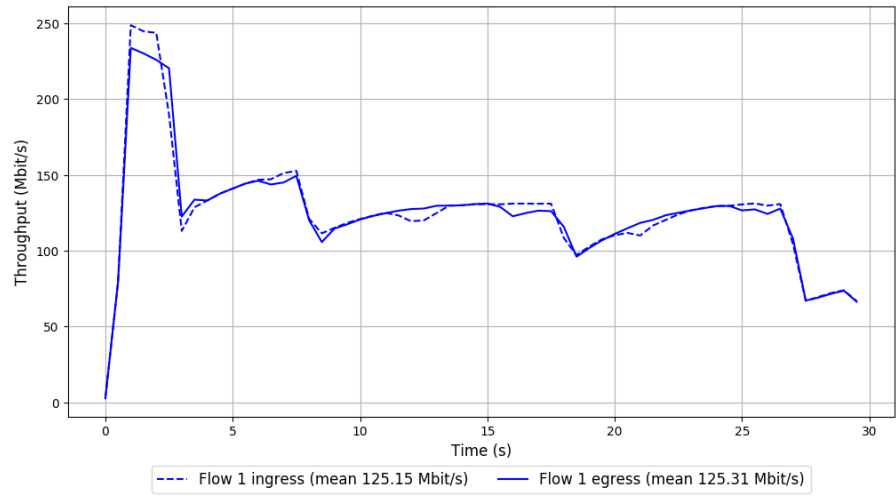
-- Flow 1:

Average throughput: 125.31 Mbit/s

95th percentile per-packet one-way delay: 54.535 ms

Loss rate: 0.21%

Run 10: Report of TCP Cubic — Data Link

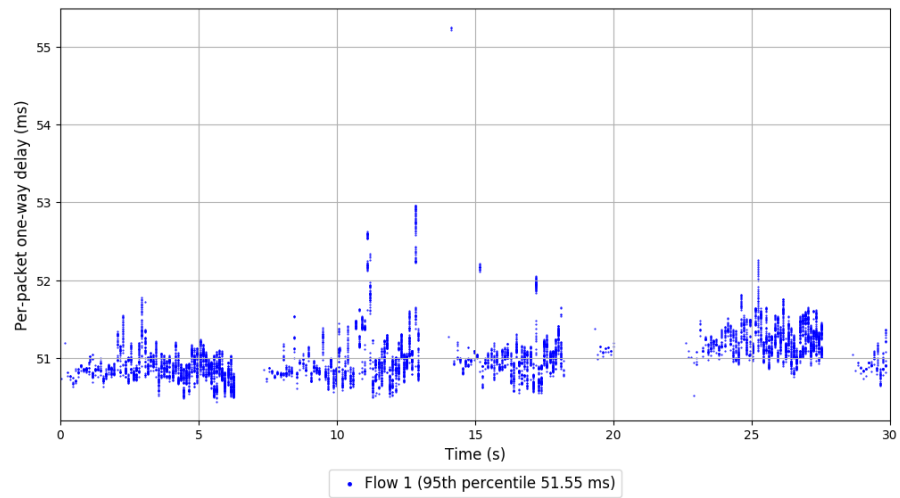
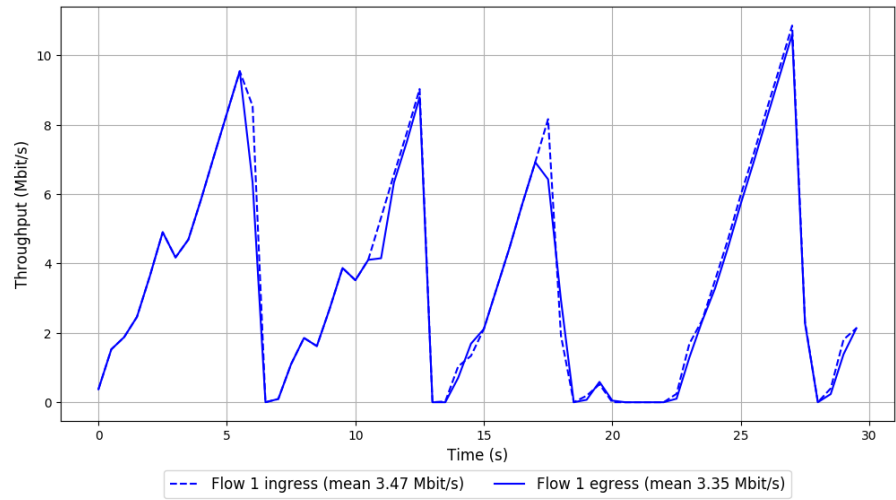


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-20 01:06:11
End at: 2017-12-20 01:06:41

# Below is generated by plot.py at 2017-12-20 05:12:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.35 Mbit/s
95th percentile per-packet one-way delay: 51.546 ms
Loss rate: 3.72%
-- Flow 1:
Average throughput: 3.35 Mbit/s
95th percentile per-packet one-way delay: 51.546 ms
Loss rate: 3.72%
```


Run 1: Report of LEDBAT — Data Link

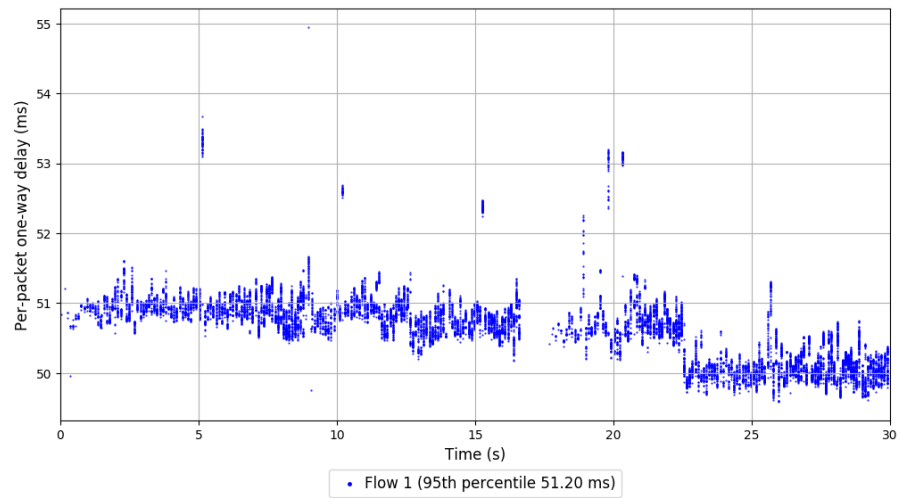
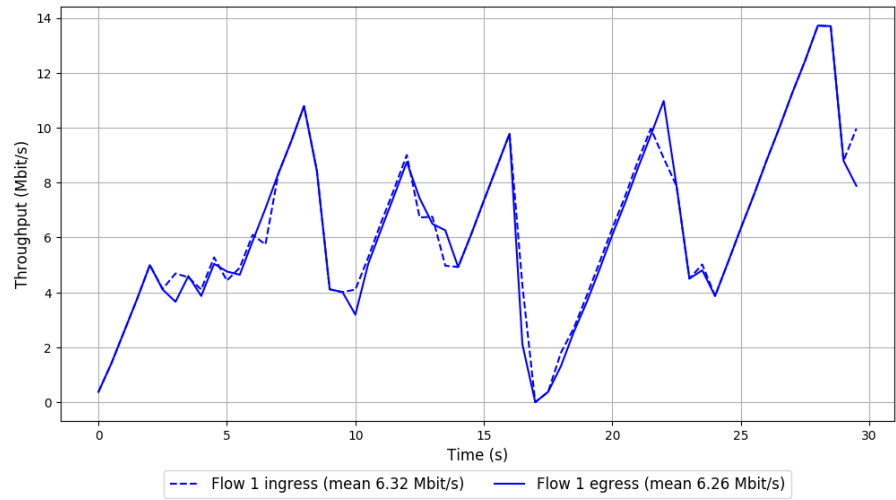


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-20 01:17:47
End at: 2017-12-20 01:18:17

# Below is generated by plot.py at 2017-12-20 05:12:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.26 Mbit/s
95th percentile per-packet one-way delay: 51.200 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 6.26 Mbit/s
95th percentile per-packet one-way delay: 51.200 ms
Loss rate: 1.31%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-20 01:29:33

End at: 2017-12-20 01:30:03

Below is generated by plot.py at 2017-12-20 05:12:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.21 Mbit/s

95th percentile per-packet one-way delay: 51.420 ms

Loss rate: 0.49%

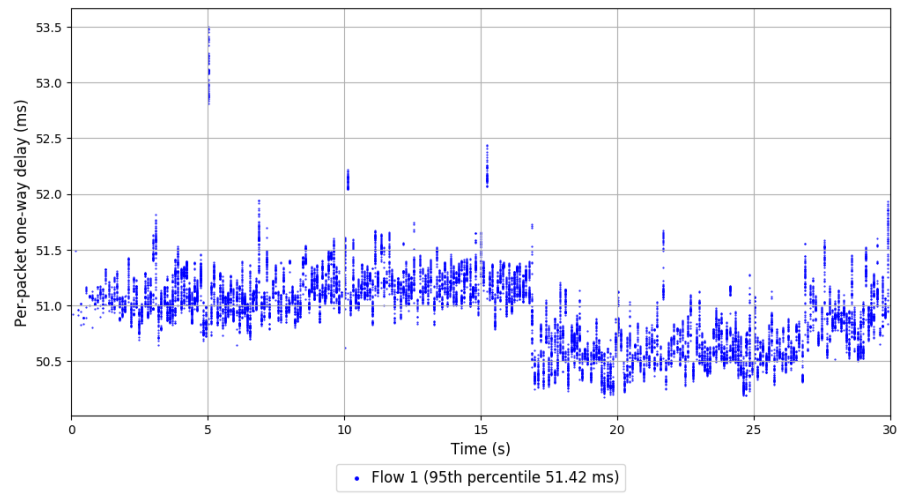
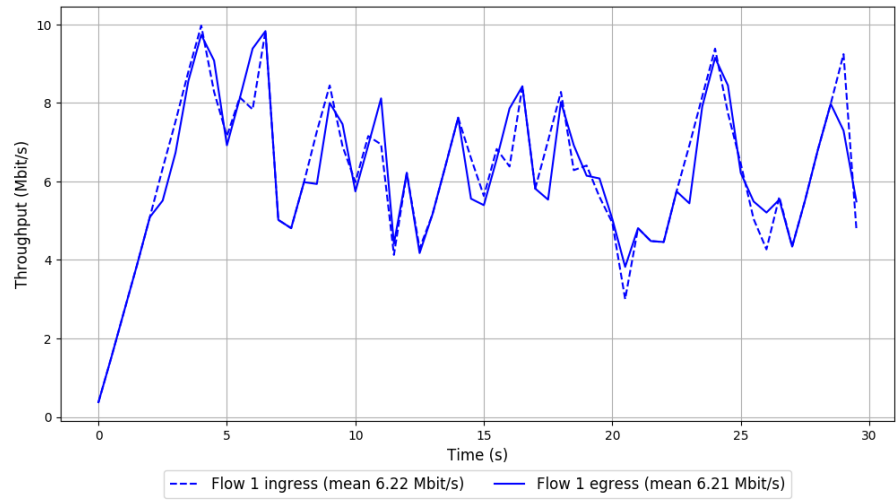
-- Flow 1:

Average throughput: 6.21 Mbit/s

95th percentile per-packet one-way delay: 51.420 ms

Loss rate: 0.49%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-20 01:41:14

End at: 2017-12-20 01:41:44

Below is generated by plot.py at 2017-12-20 05:12:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.52 Mbit/s

95th percentile per-packet one-way delay: 50.989 ms

Loss rate: 0.46%

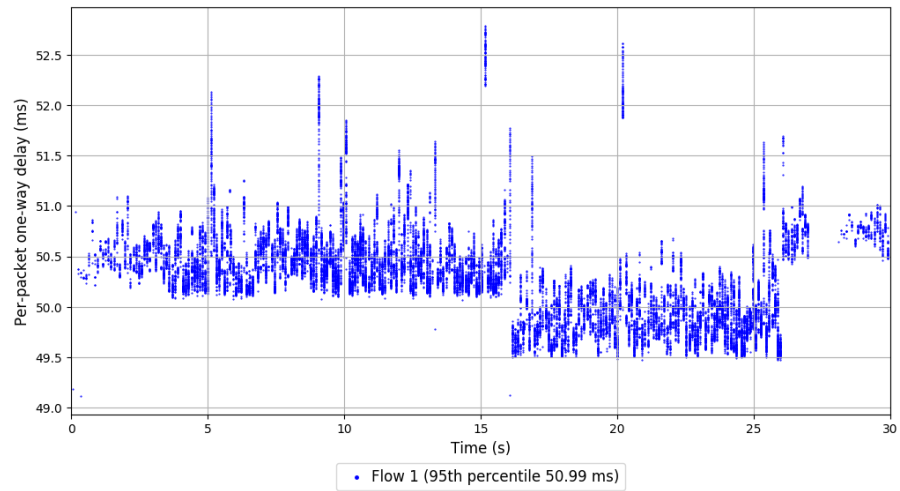
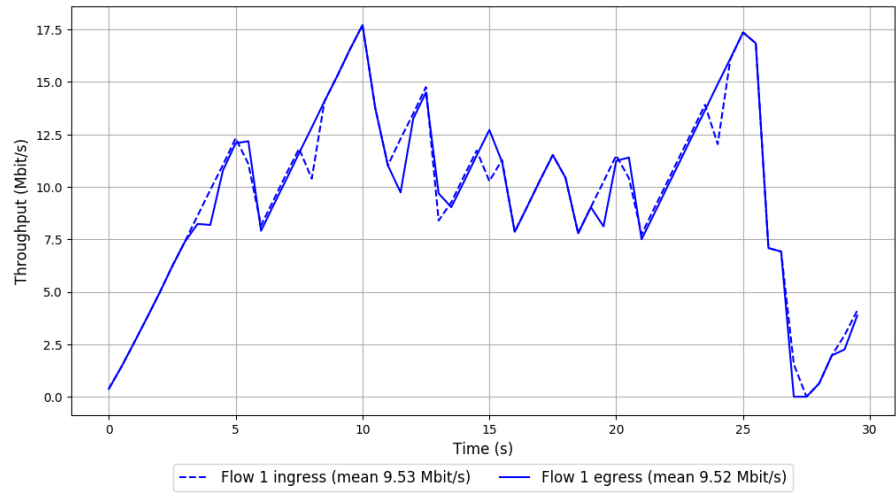
-- Flow 1:

Average throughput: 9.52 Mbit/s

95th percentile per-packet one-way delay: 50.989 ms

Loss rate: 0.46%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-20 01:53:00

End at: 2017-12-20 01:53:30

Below is generated by plot.py at 2017-12-20 05:12:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 51.418 ms

Loss rate: 1.58%

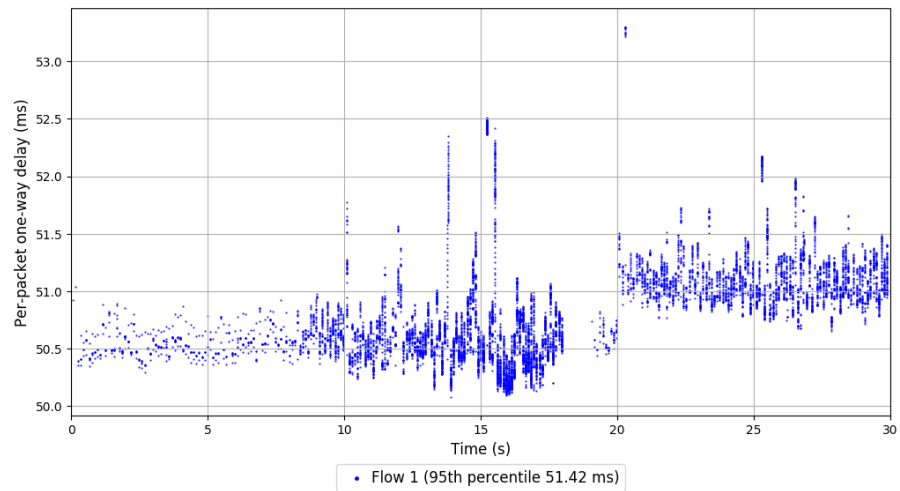
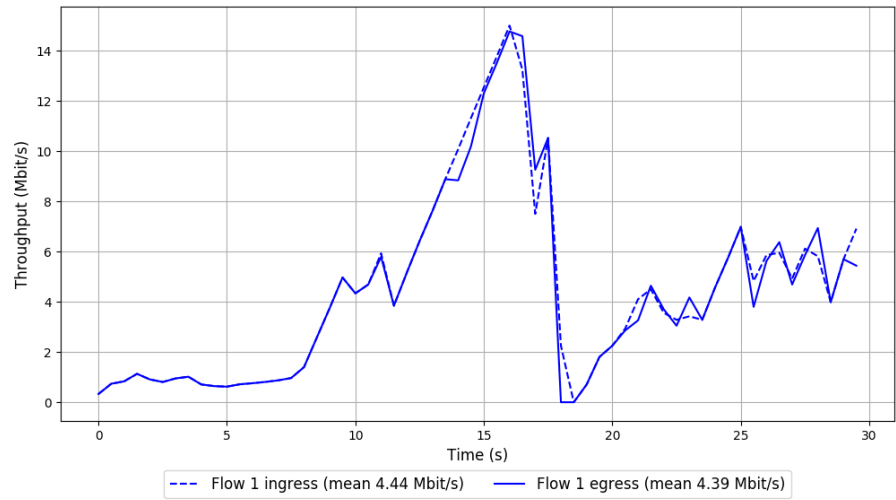
-- Flow 1:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 51.418 ms

Loss rate: 1.58%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-20 02:04:50

End at: 2017-12-20 02:05:20

Below is generated by plot.py at 2017-12-20 05:12:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.72 Mbit/s

95th percentile per-packet one-way delay: 51.485 ms

Loss rate: 0.40%

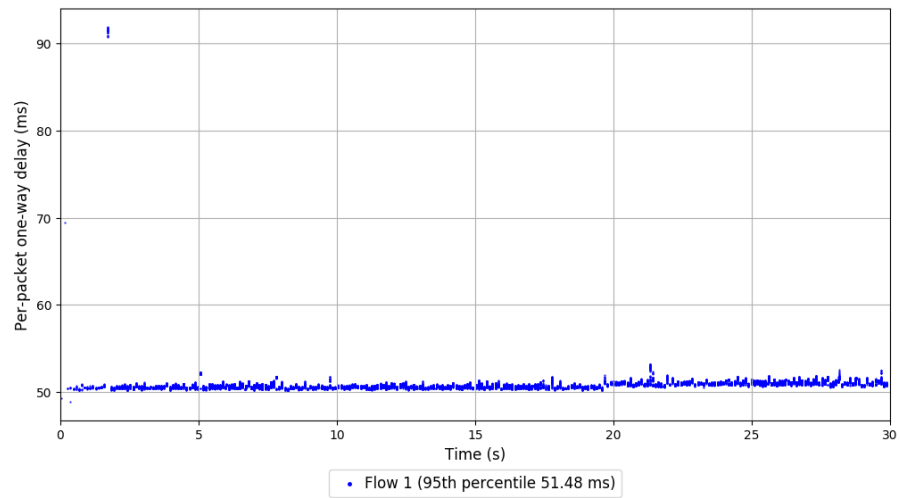
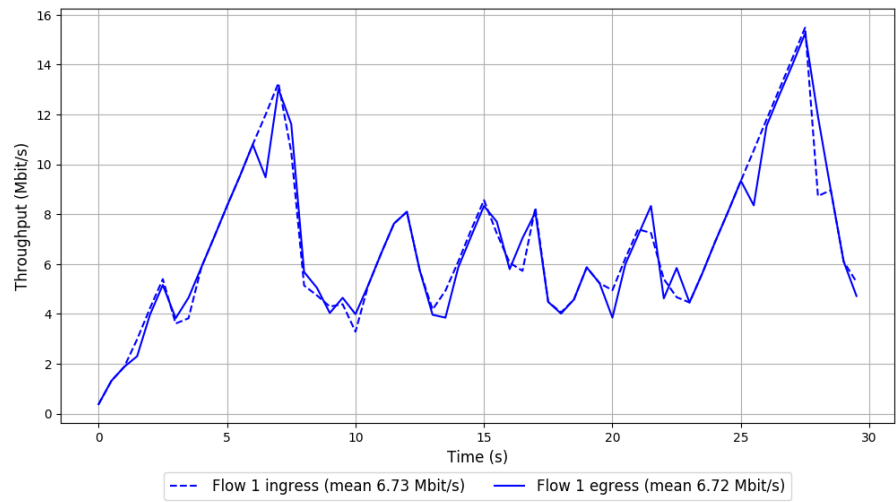
-- Flow 1:

Average throughput: 6.72 Mbit/s

95th percentile per-packet one-way delay: 51.485 ms

Loss rate: 0.40%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-20 02:16:29

End at: 2017-12-20 02:16:59

Below is generated by plot.py at 2017-12-20 05:12:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.28 Mbit/s

95th percentile per-packet one-way delay: 51.688 ms

Loss rate: 0.91%

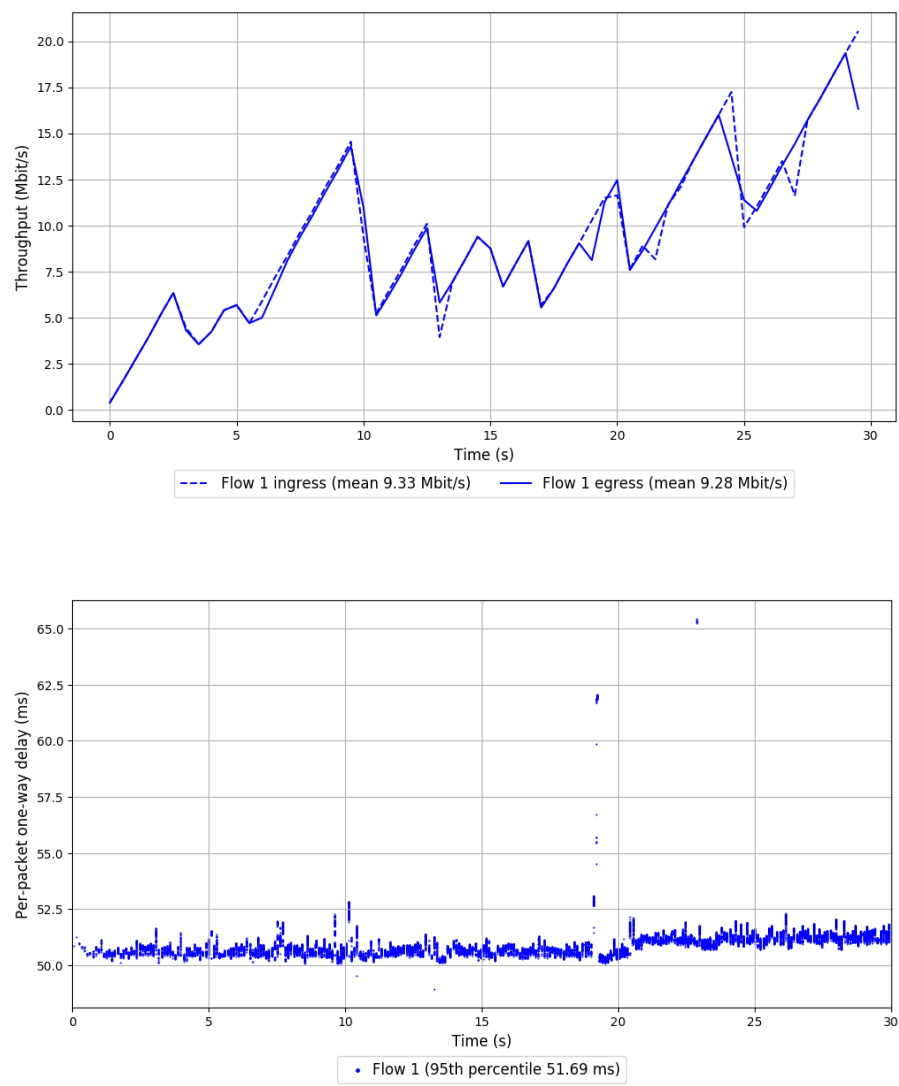
-- Flow 1:

Average throughput: 9.28 Mbit/s

95th percentile per-packet one-way delay: 51.688 ms

Loss rate: 0.91%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-20 02:28:16

End at: 2017-12-20 02:28:46

Below is generated by plot.py at 2017-12-20 05:12:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.49 Mbit/s

95th percentile per-packet one-way delay: 50.894 ms

Loss rate: 0.42%

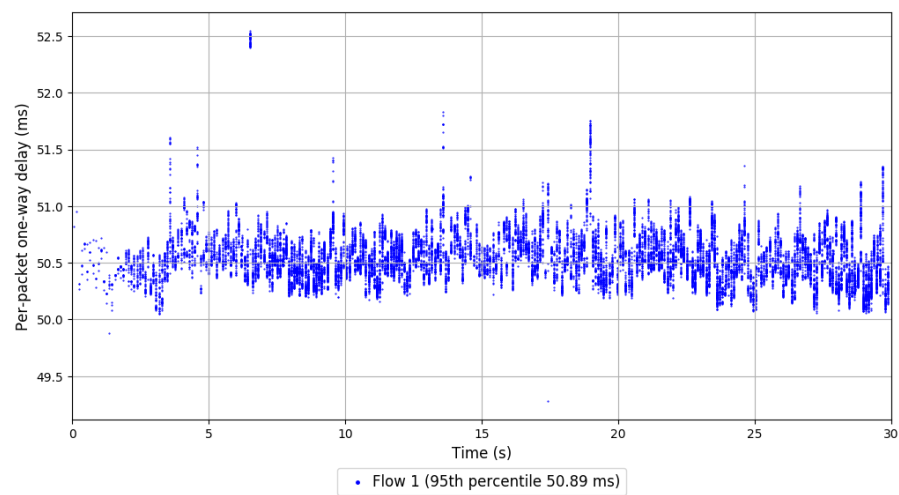
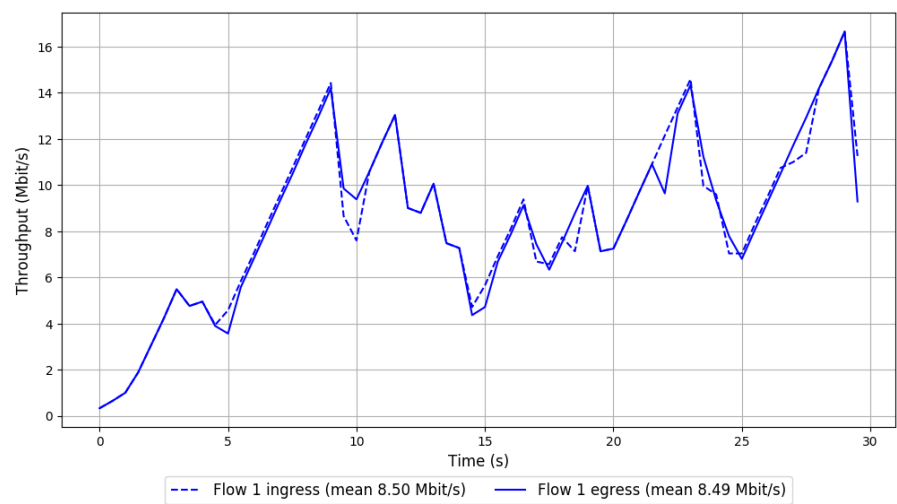
-- Flow 1:

Average throughput: 8.49 Mbit/s

95th percentile per-packet one-way delay: 50.894 ms

Loss rate: 0.42%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

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

End at: 2017-12-20 02:40:34

Below is generated by plot.py at 2017-12-20 05:12:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.01 Mbit/s

95th percentile per-packet one-way delay: 51.348 ms

Loss rate: 1.09%

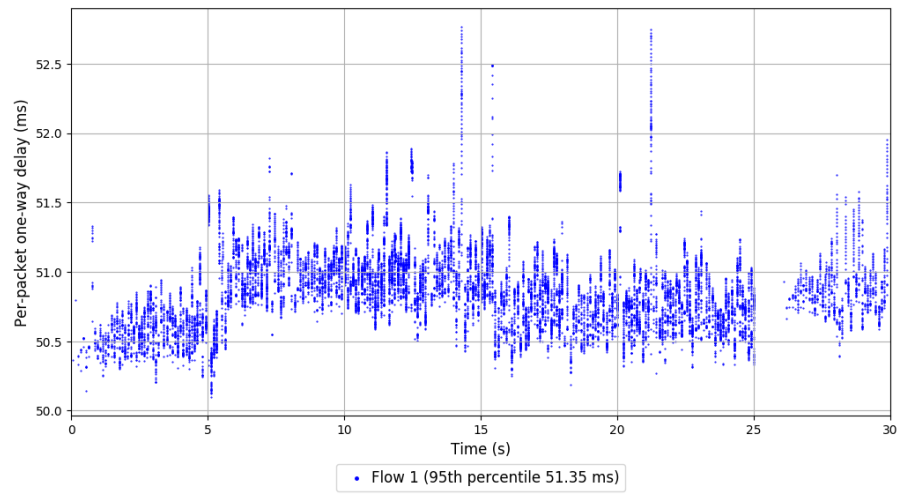
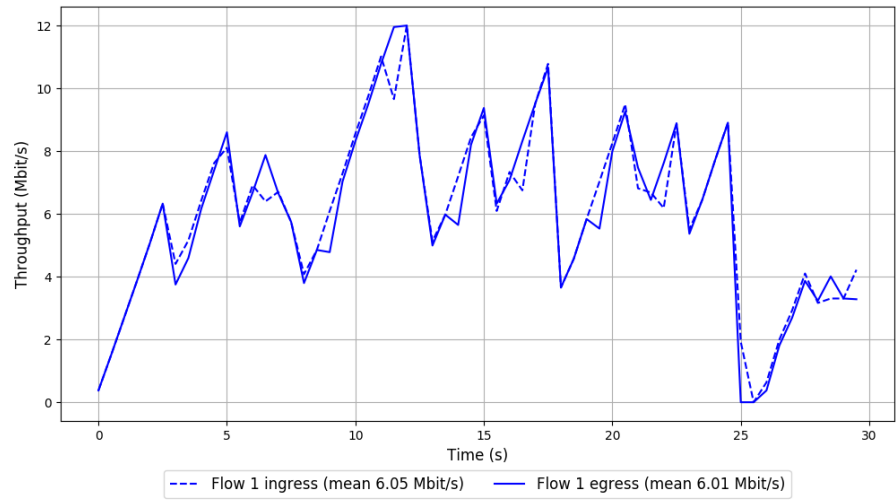
-- Flow 1:

Average throughput: 6.01 Mbit/s

95th percentile per-packet one-way delay: 51.348 ms

Loss rate: 1.09%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-20 02:51:50

End at: 2017-12-20 02:52:20

Below is generated by plot.py at 2017-12-20 05:12:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.42 Mbit/s

95th percentile per-packet one-way delay: 51.214 ms

Loss rate: 0.60%

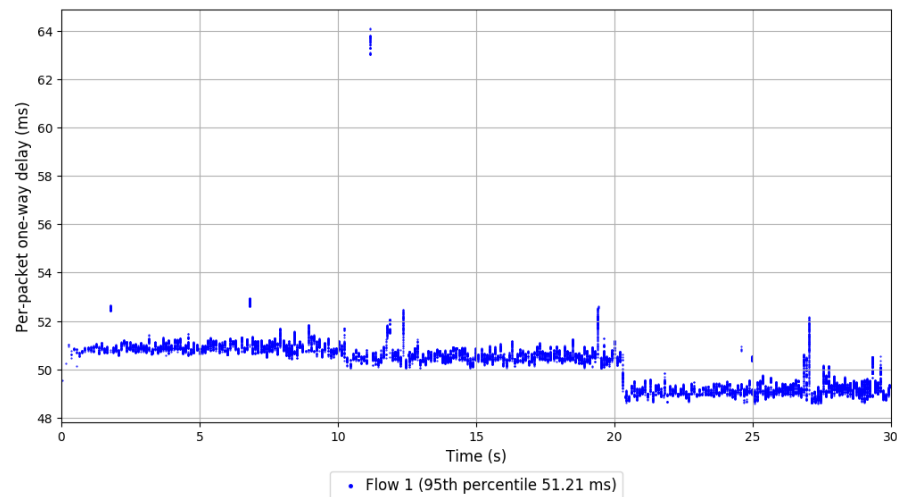
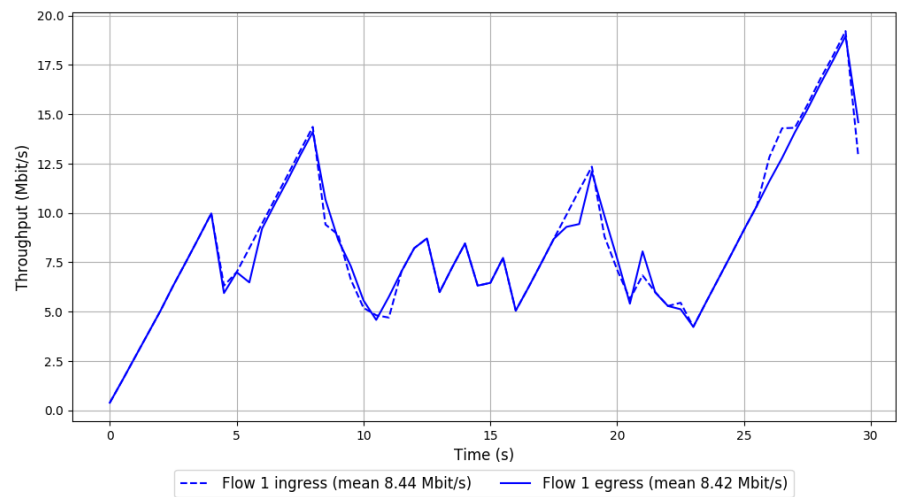
-- Flow 1:

Average throughput: 8.42 Mbit/s

95th percentile per-packet one-way delay: 51.214 ms

Loss rate: 0.60%

Run 10: Report of LEDBAT — Data Link

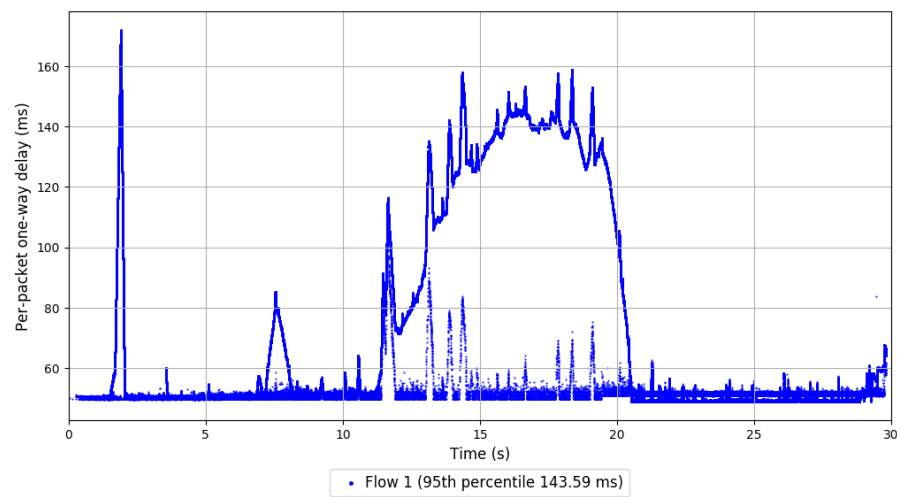
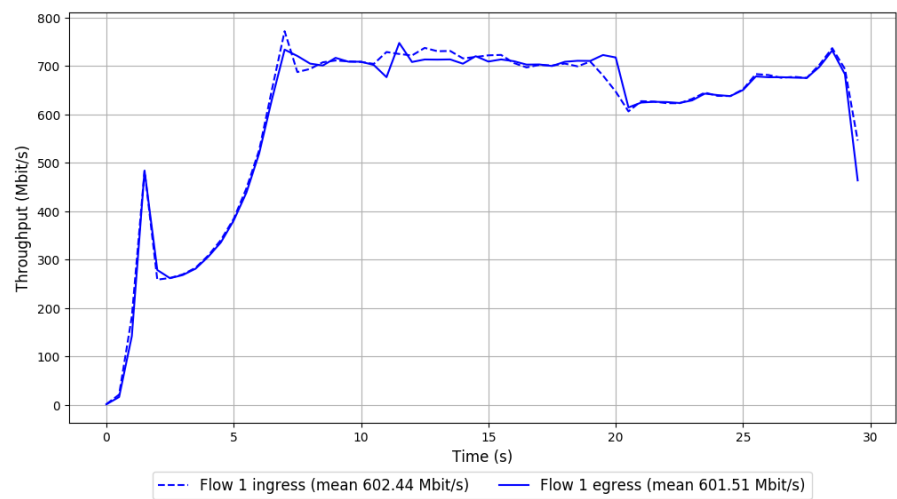


```
Run 1: Statistics of PCC

Start at: 2017-12-20 01:14:20
End at: 2017-12-20 01:14:50

# Below is generated by plot.py at 2017-12-20 05:22:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 601.51 Mbit/s
95th percentile per-packet one-way delay: 143.590 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 601.51 Mbit/s
95th percentile per-packet one-way delay: 143.590 ms
Loss rate: 0.49%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-20 01:26:07

End at: 2017-12-20 01:26:37

Below is generated by plot.py at 2017-12-20 05:22:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 579.28 Mbit/s

95th percentile per-packet one-way delay: 63.951 ms

Loss rate: 0.75%

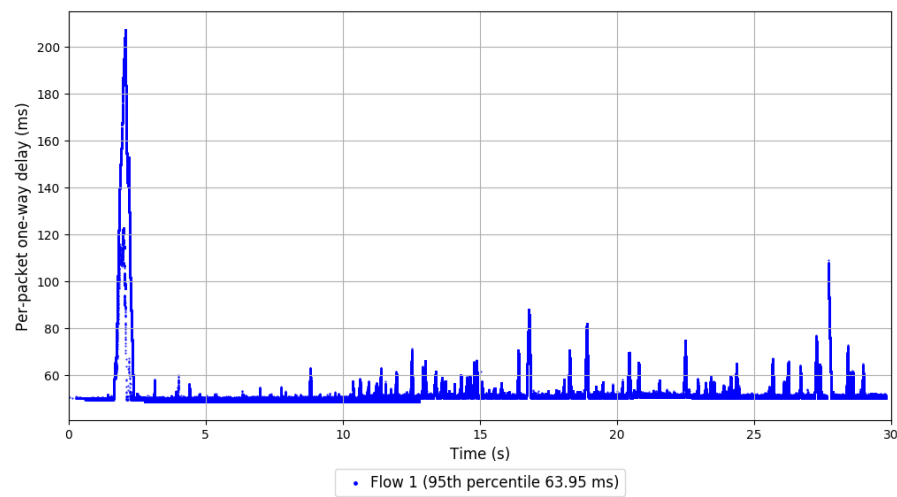
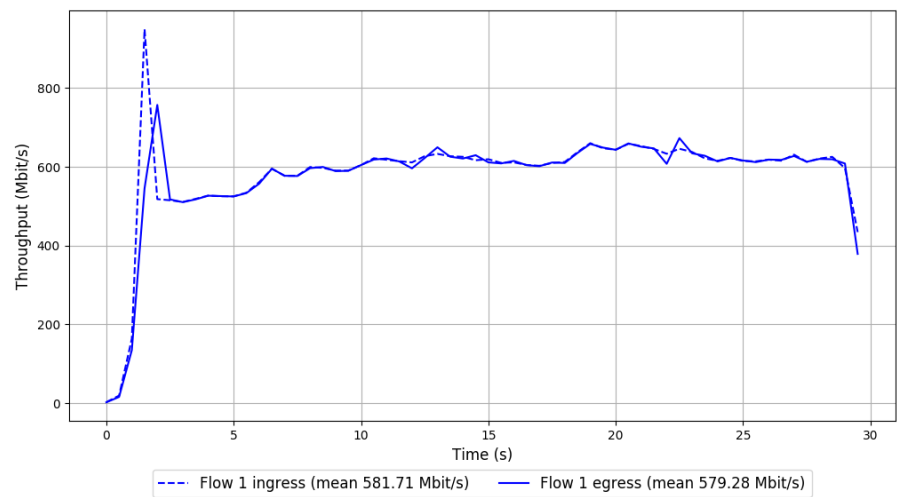
-- Flow 1:

Average throughput: 579.28 Mbit/s

95th percentile per-packet one-way delay: 63.951 ms

Loss rate: 0.75%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-20 01:37:49

End at: 2017-12-20 01:38:19

Below is generated by plot.py at 2017-12-20 05:22:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 629.09 Mbit/s

95th percentile per-packet one-way delay: 133.107 ms

Loss rate: 0.62%

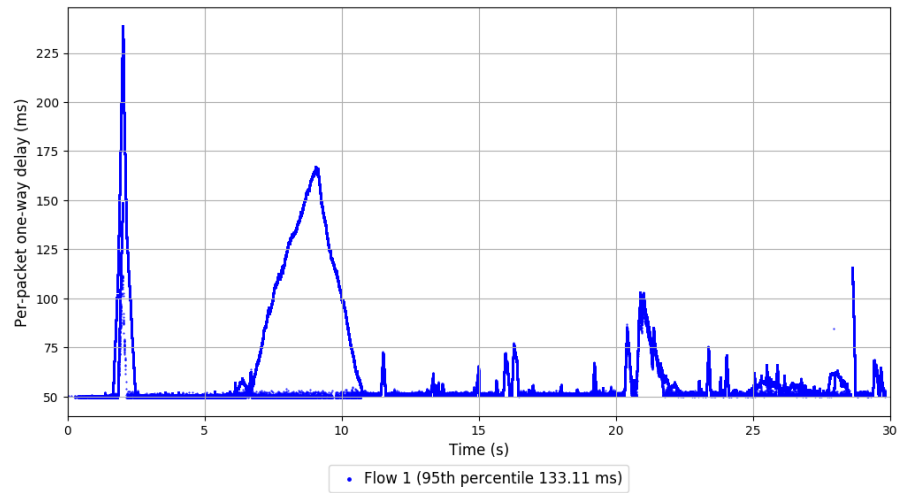
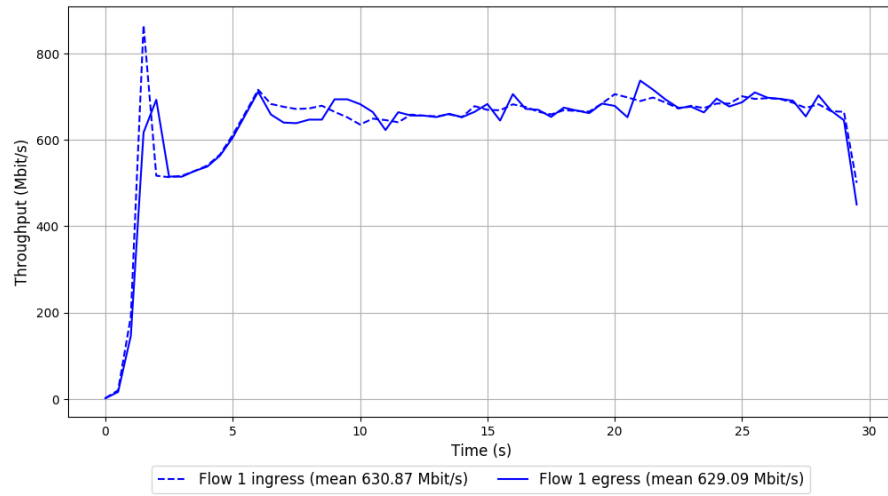
-- Flow 1:

Average throughput: 629.09 Mbit/s

95th percentile per-packet one-way delay: 133.107 ms

Loss rate: 0.62%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-20 01:49:31

End at: 2017-12-20 01:50:01

Below is generated by plot.py at 2017-12-20 05:22:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 621.70 Mbit/s

95th percentile per-packet one-way delay: 60.557 ms

Loss rate: 0.63%

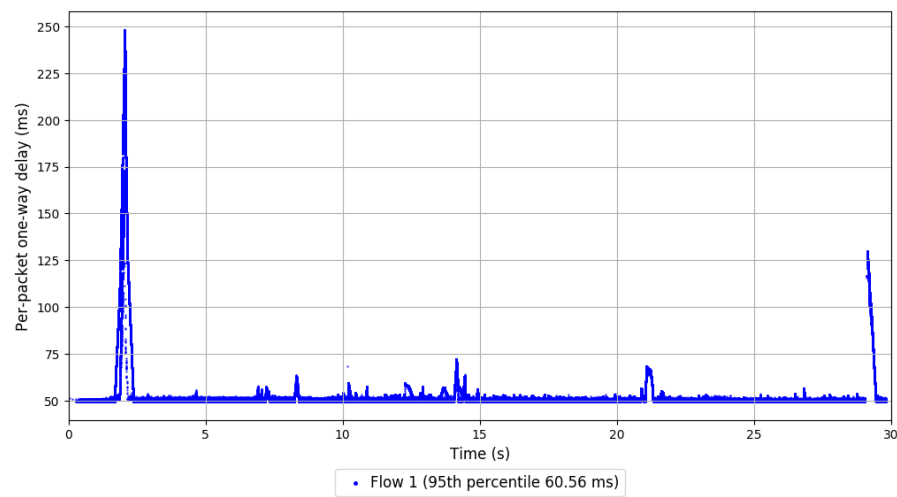
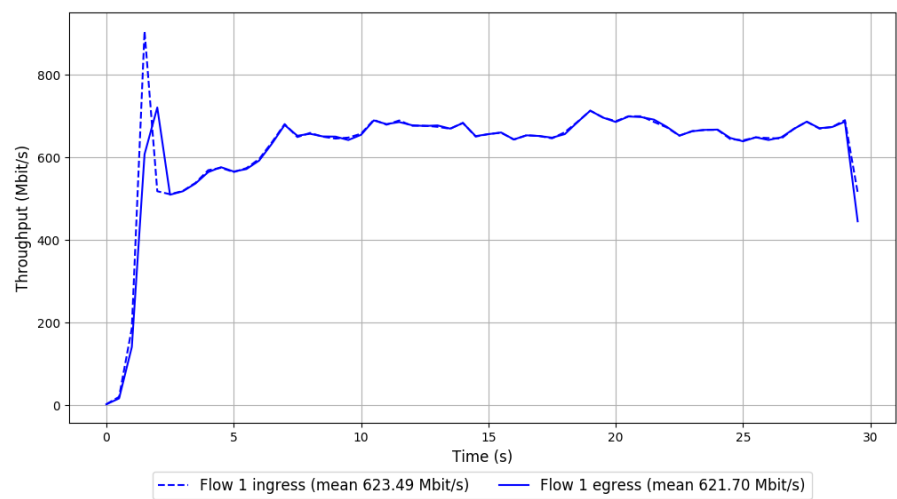
-- Flow 1:

Average throughput: 621.70 Mbit/s

95th percentile per-packet one-way delay: 60.557 ms

Loss rate: 0.63%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-20 02:01:19

End at: 2017-12-20 02:01:49

Below is generated by plot.py at 2017-12-20 05:23:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 654.54 Mbit/s

95th percentile per-packet one-way delay: 182.514 ms

Loss rate: 6.34%

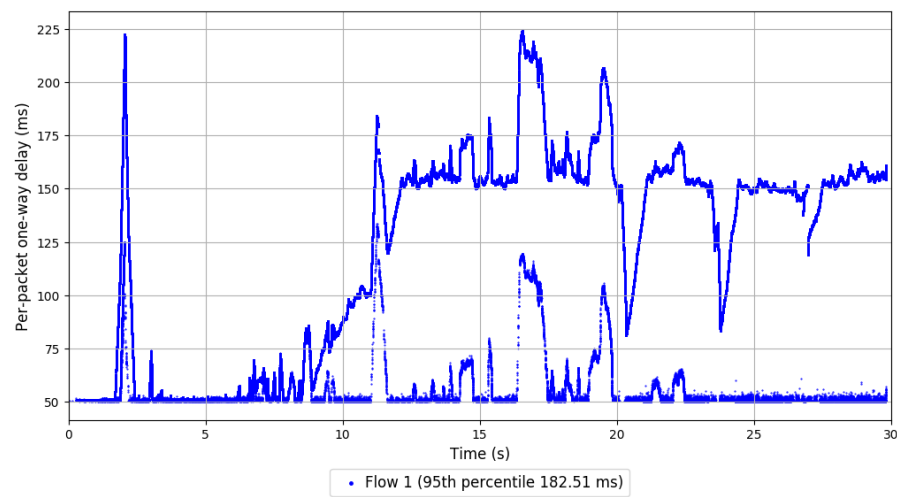
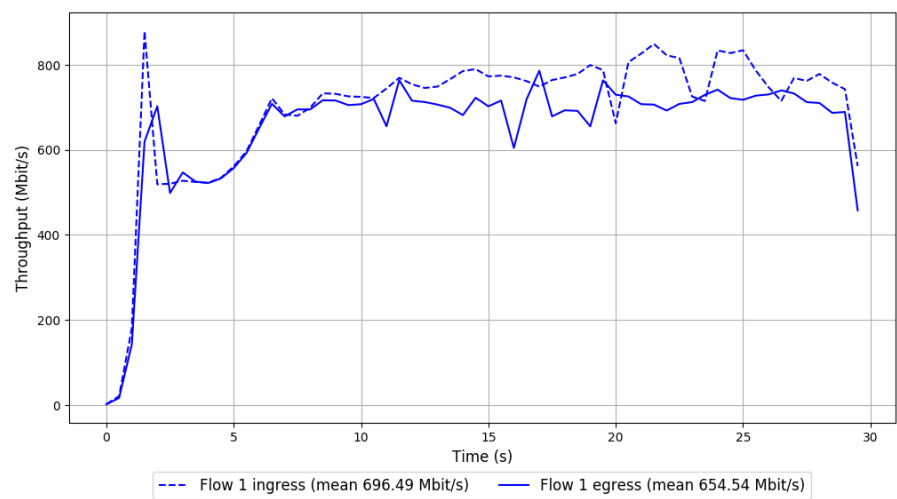
-- Flow 1:

Average throughput: 654.54 Mbit/s

95th percentile per-packet one-way delay: 182.514 ms

Loss rate: 6.34%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-20 02:13:04

End at: 2017-12-20 02:13:34

Below is generated by plot.py at 2017-12-20 05:23:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 614.82 Mbit/s

95th percentile per-packet one-way delay: 66.778 ms

Loss rate: 0.90%

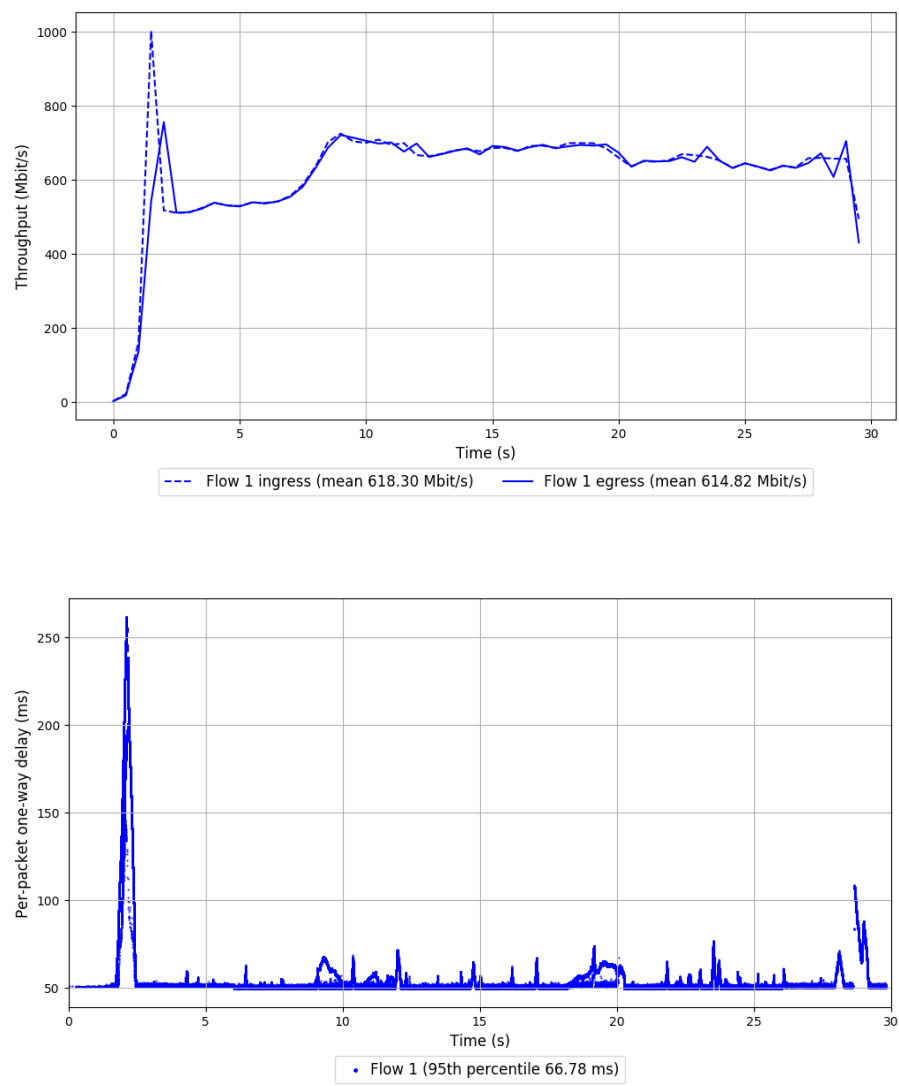
-- Flow 1:

Average throughput: 614.82 Mbit/s

95th percentile per-packet one-way delay: 66.778 ms

Loss rate: 0.90%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-20 02:24:49

End at: 2017-12-20 02:25:19

Below is generated by plot.py at 2017-12-20 05:23:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 648.31 Mbit/s

95th percentile per-packet one-way delay: 116.097 ms

Loss rate: 0.57%

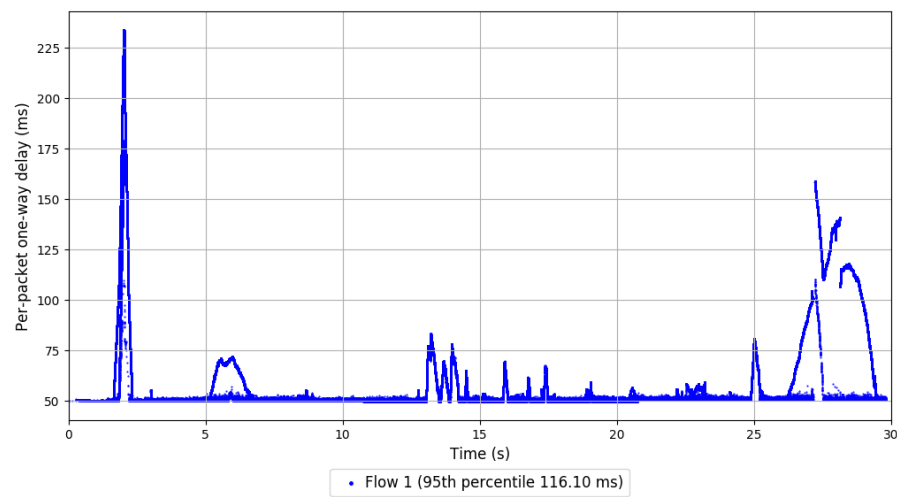
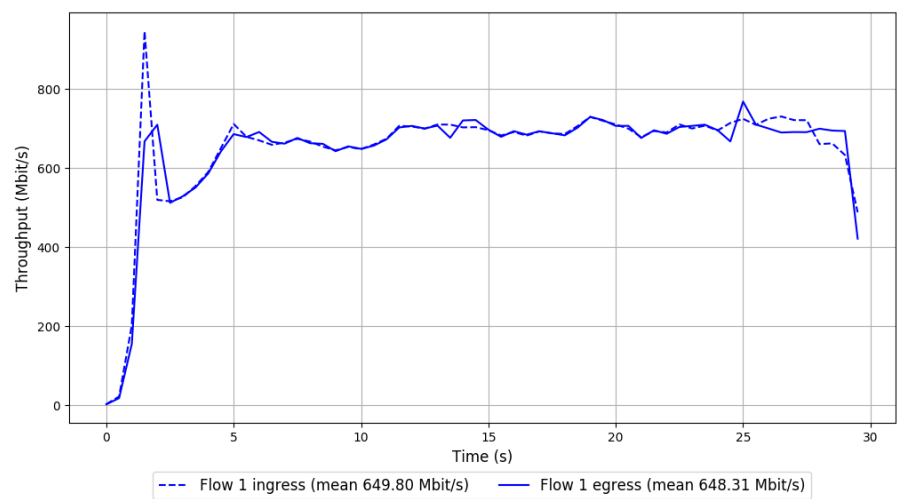
-- Flow 1:

Average throughput: 648.31 Mbit/s

95th percentile per-packet one-way delay: 116.097 ms

Loss rate: 0.57%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-20 02:36:33

End at: 2017-12-20 02:37:03

Below is generated by plot.py at 2017-12-20 05:23:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 611.10 Mbit/s

95th percentile per-packet one-way delay: 152.653 ms

Loss rate: 0.80%

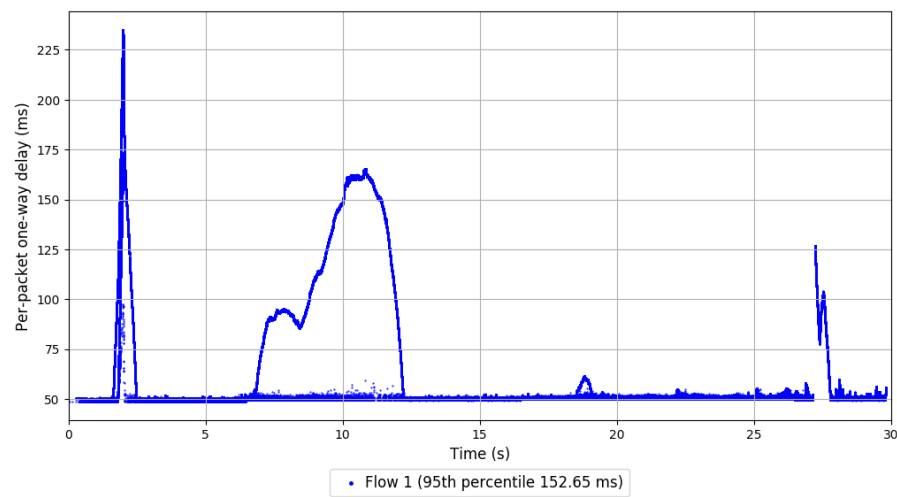
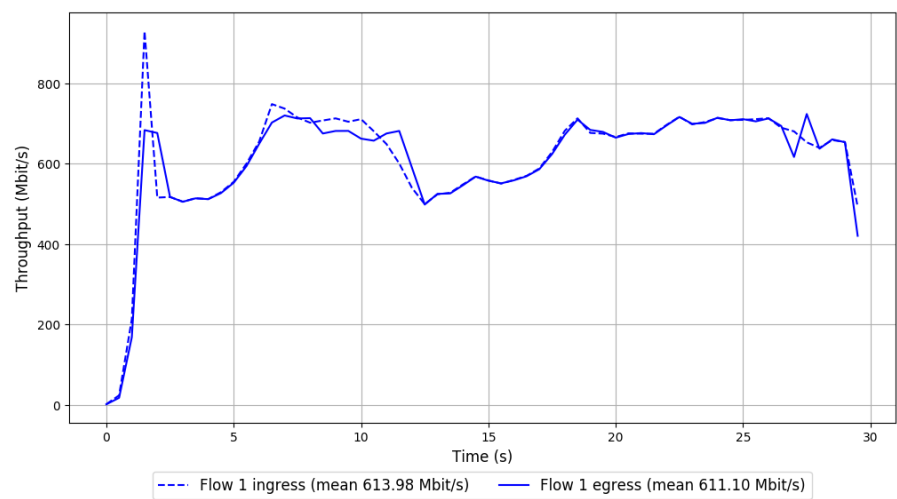
-- Flow 1:

Average throughput: 611.10 Mbit/s

95th percentile per-packet one-way delay: 152.653 ms

Loss rate: 0.80%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-20 02:48:22

End at: 2017-12-20 02:48:52

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 614.77 Mbit/s

95th percentile per-packet one-way delay: 55.275 ms

Loss rate: 0.56%

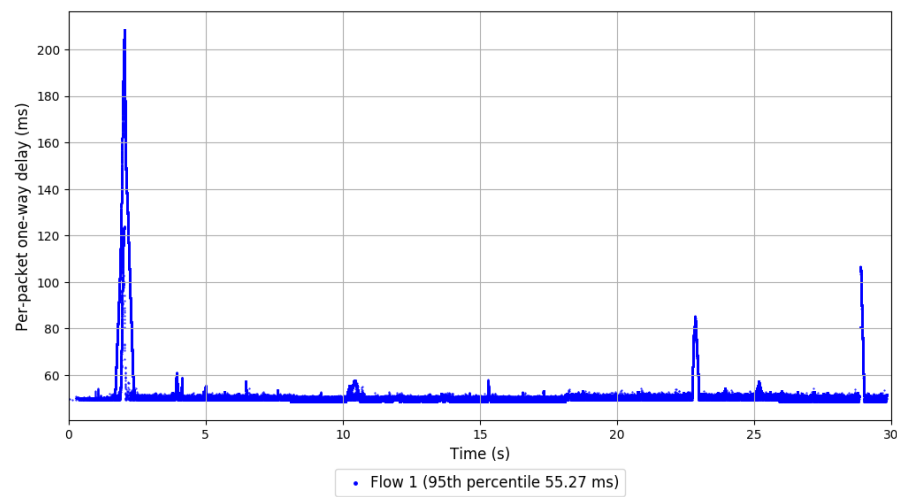
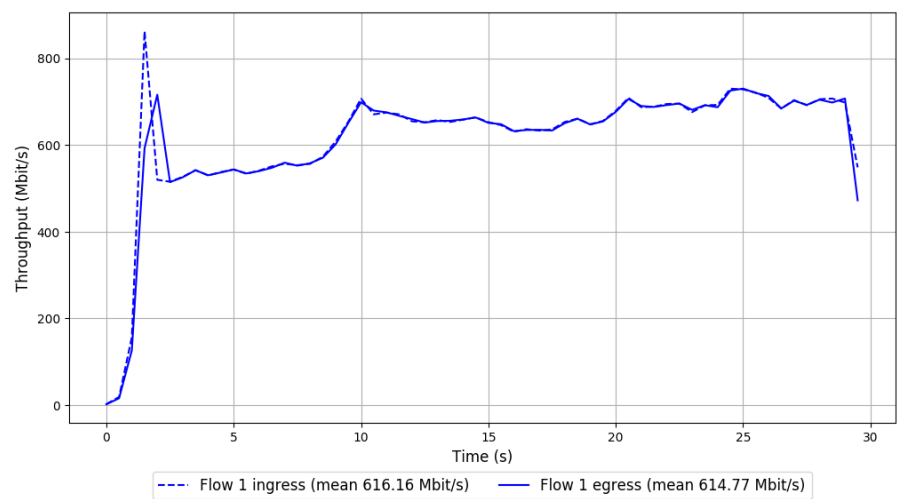
-- Flow 1:

Average throughput: 614.77 Mbit/s

95th percentile per-packet one-way delay: 55.275 ms

Loss rate: 0.56%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-20 03:00:09

End at: 2017-12-20 03:00:39

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 610.78 Mbit/s

95th percentile per-packet one-way delay: 62.245 ms

Loss rate: 0.80%

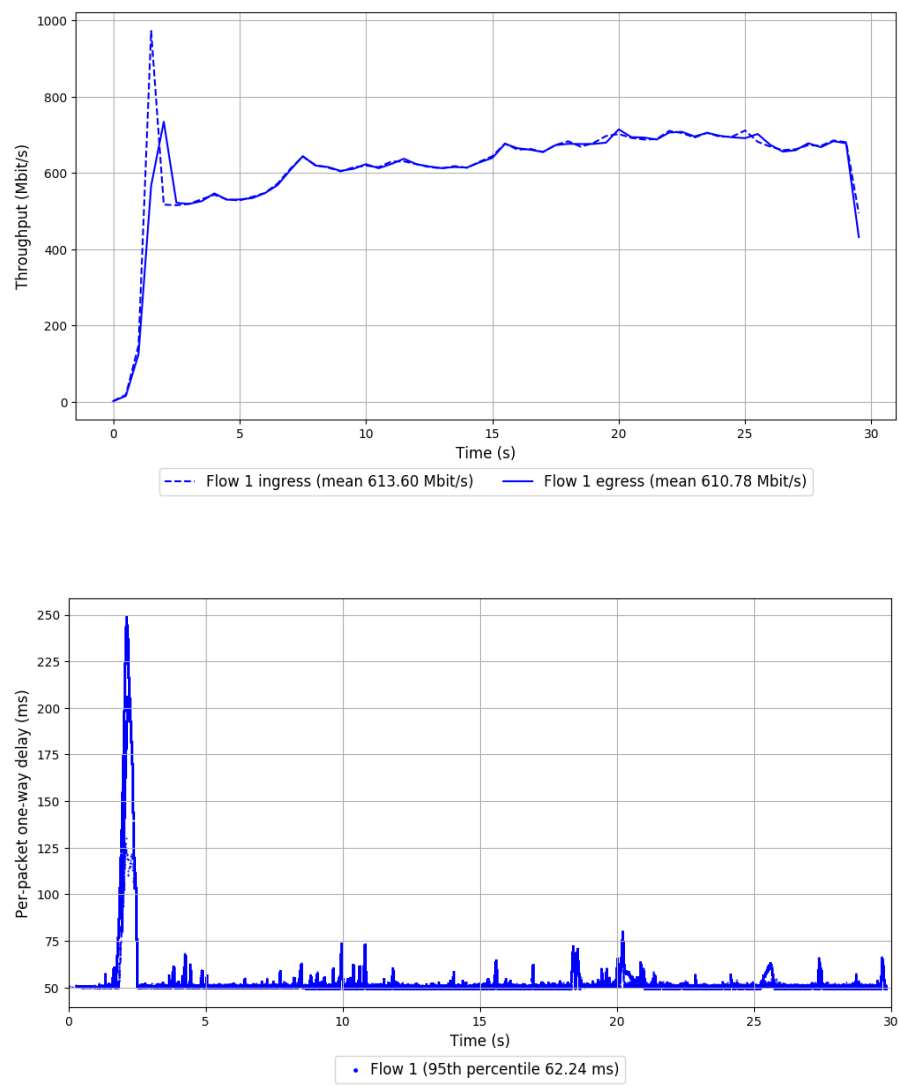
-- Flow 1:

Average throughput: 610.78 Mbit/s

95th percentile per-packet one-way delay: 62.245 ms

Loss rate: 0.80%

Run 10: Report of PCC — Data Link

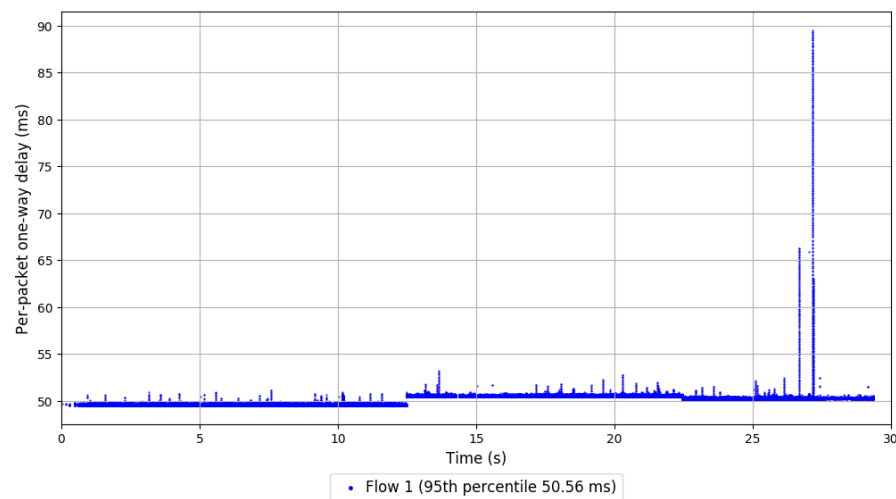
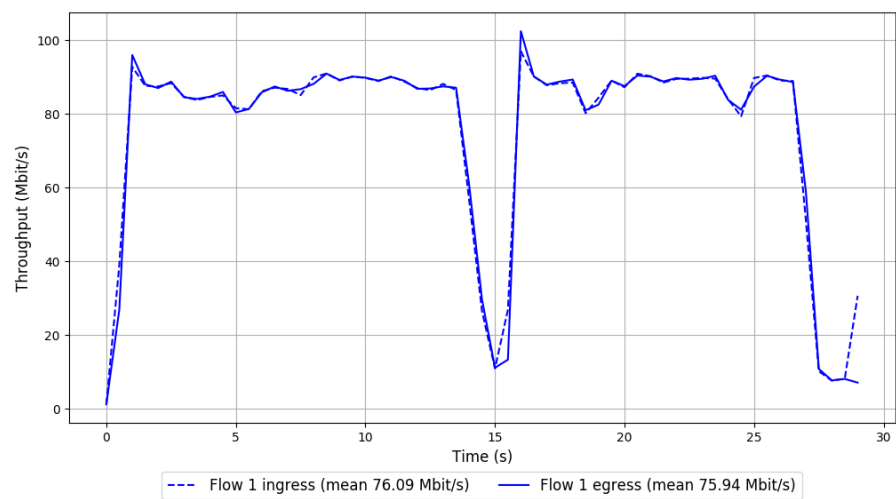


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-20 01:10:37
End at: 2017-12-20 01:11:07

# Below is generated by plot.py at 2017-12-20 05:32:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.94 Mbit/s
95th percentile per-packet one-way delay: 50.564 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 75.94 Mbit/s
95th percentile per-packet one-way delay: 50.564 ms
Loss rate: 0.54%
```


Run 1: Report of QUIC Cubic — Data Link

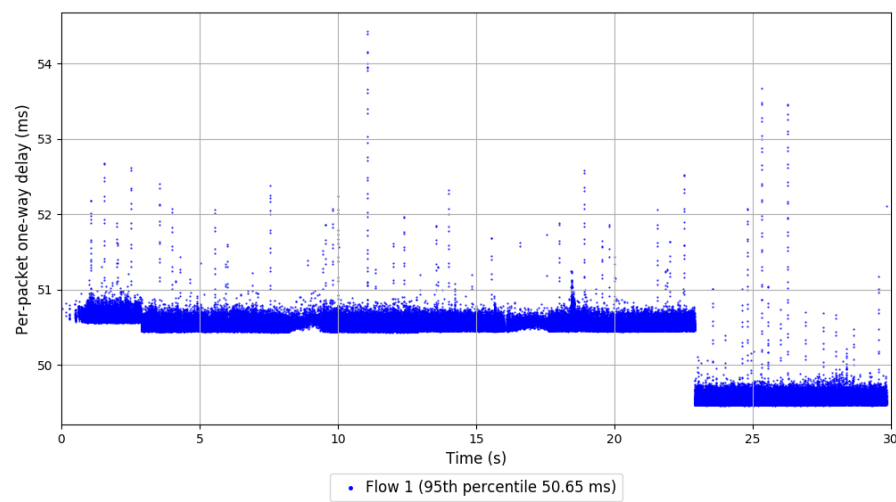
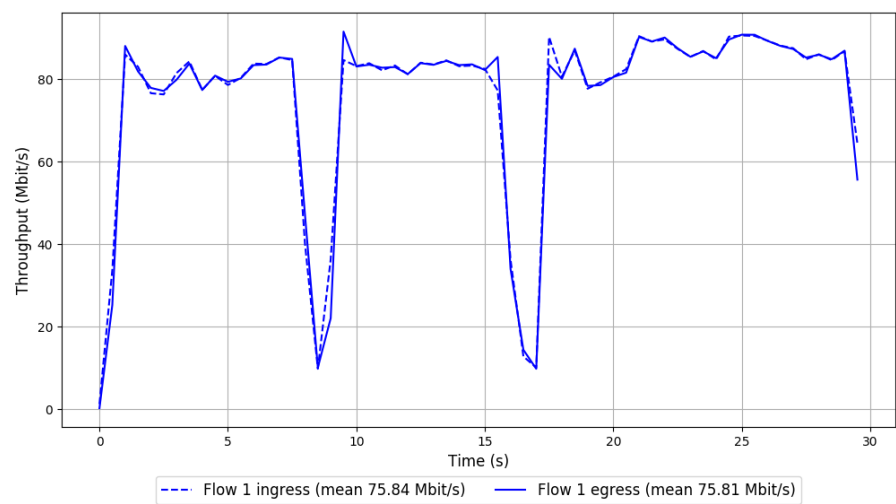


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-12-20 01:22:17
End at: 2017-12-20 01:22:47

# Below is generated by plot.py at 2017-12-20 05:32:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.81 Mbit/s
95th percentile per-packet one-way delay: 50.653 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 75.81 Mbit/s
95th percentile per-packet one-way delay: 50.653 ms
Loss rate: 0.38%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-20 01:33:59

End at: 2017-12-20 01:34:29

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.21 Mbit/s

95th percentile per-packet one-way delay: 50.244 ms

Loss rate: 0.37%

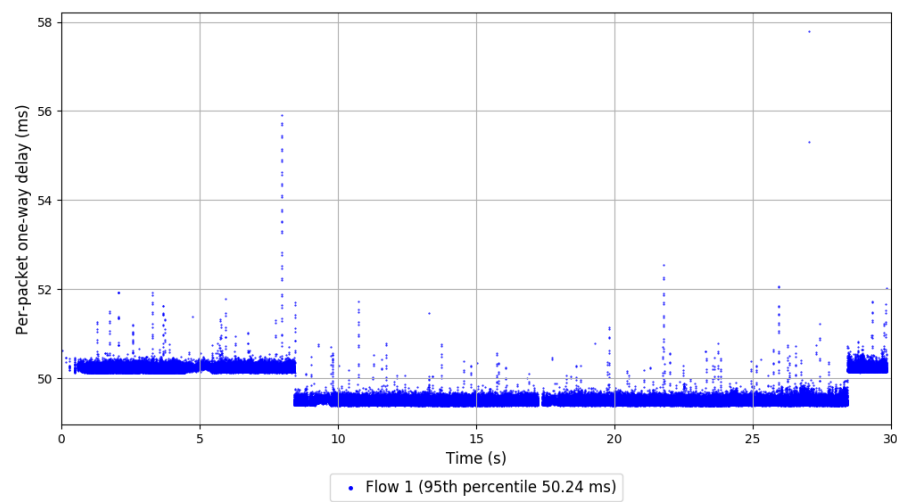
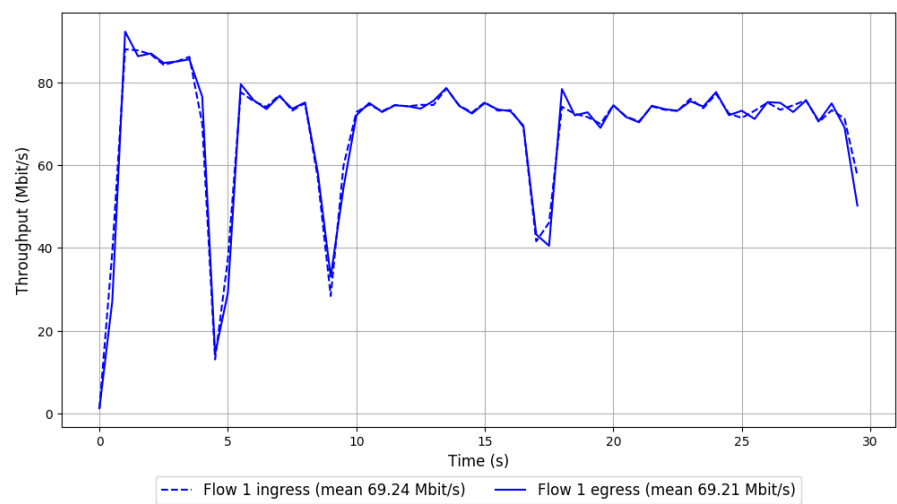
-- Flow 1:

Average throughput: 69.21 Mbit/s

95th percentile per-packet one-way delay: 50.244 ms

Loss rate: 0.37%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-20 01:45:39

End at: 2017-12-20 01:46:09

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.62 Mbit/s

95th percentile per-packet one-way delay: 49.625 ms

Loss rate: 0.52%

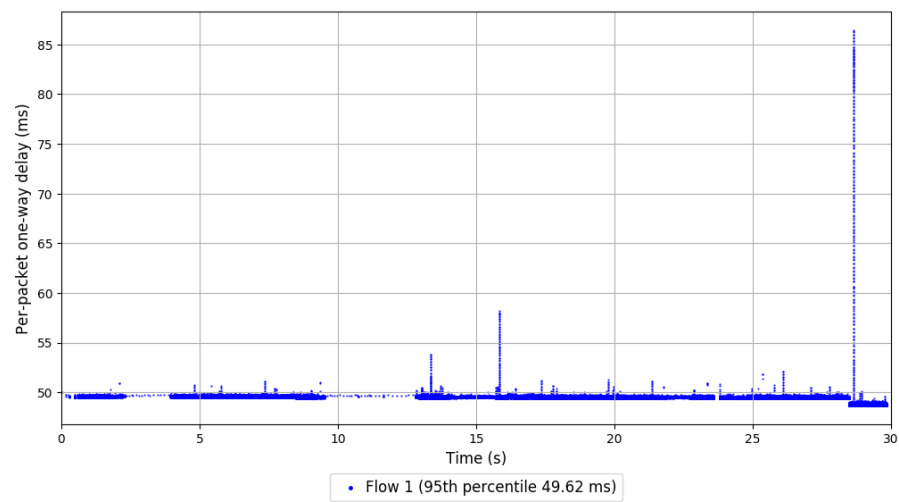
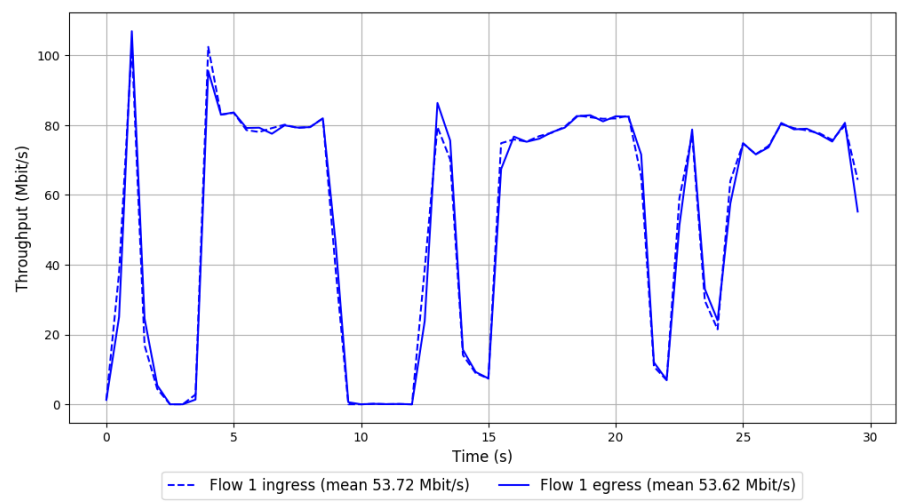
-- Flow 1:

Average throughput: 53.62 Mbit/s

95th percentile per-packet one-way delay: 49.625 ms

Loss rate: 0.52%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-20 01:57:27

End at: 2017-12-20 01:57:57

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.97 Mbit/s

95th percentile per-packet one-way delay: 50.580 ms

Loss rate: 0.00%

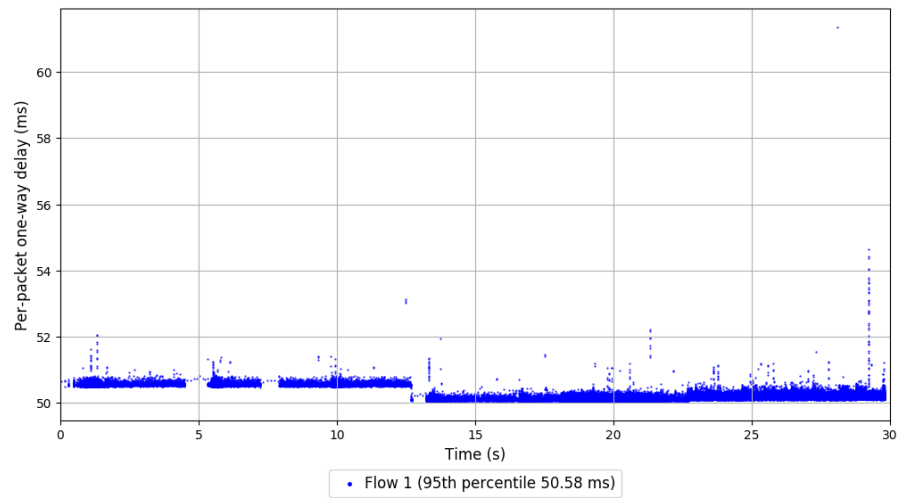
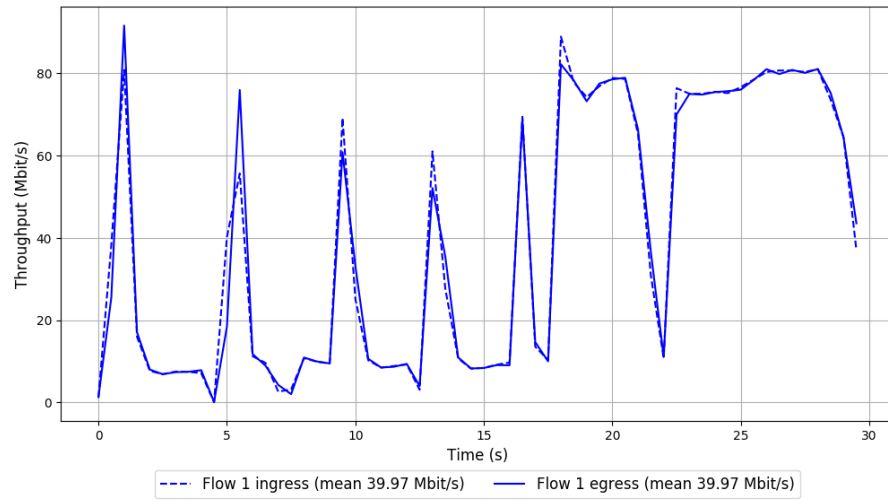
-- Flow 1:

Average throughput: 39.97 Mbit/s

95th percentile per-packet one-way delay: 50.580 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-20 02:09:13

End at: 2017-12-20 02:09:43

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.97 Mbit/s

95th percentile per-packet one-way delay: 50.267 ms

Loss rate: 0.59%

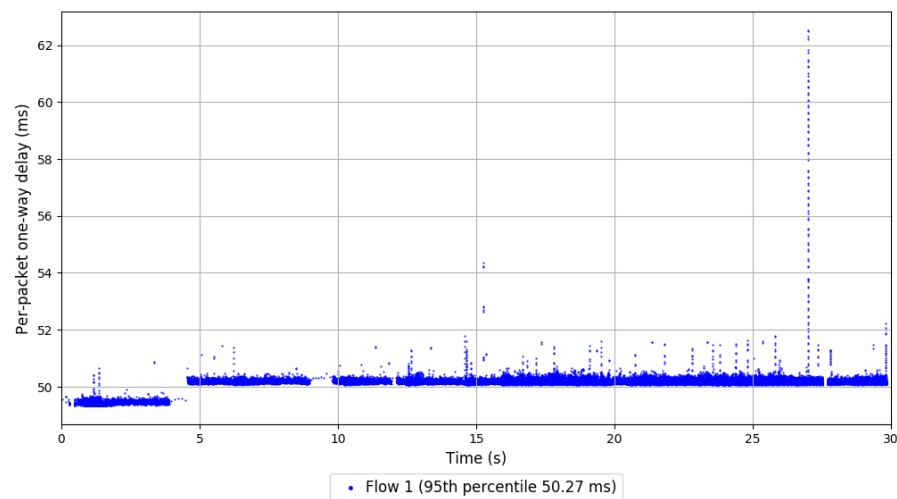
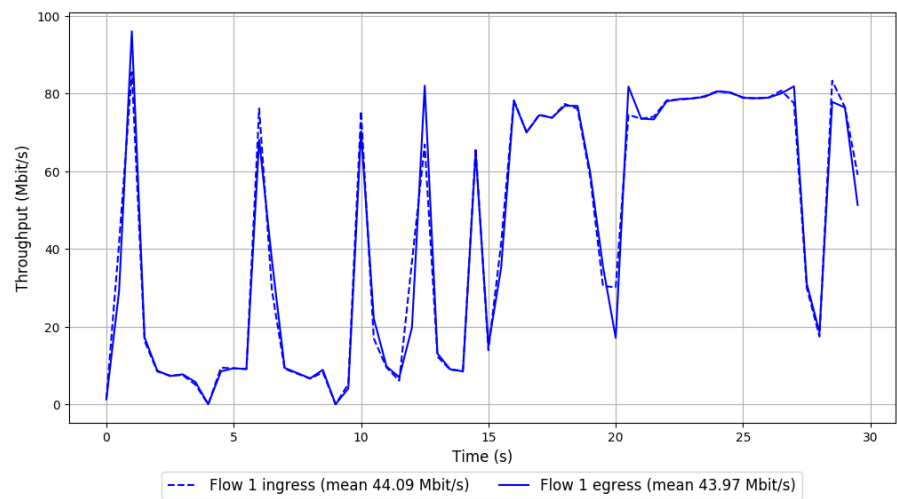
-- Flow 1:

Average throughput: 43.97 Mbit/s

95th percentile per-packet one-way delay: 50.267 ms

Loss rate: 0.59%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-20 02:20:57

End at: 2017-12-20 02:21:27

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.48 Mbit/s

95th percentile per-packet one-way delay: 50.520 ms

Loss rate: 0.44%

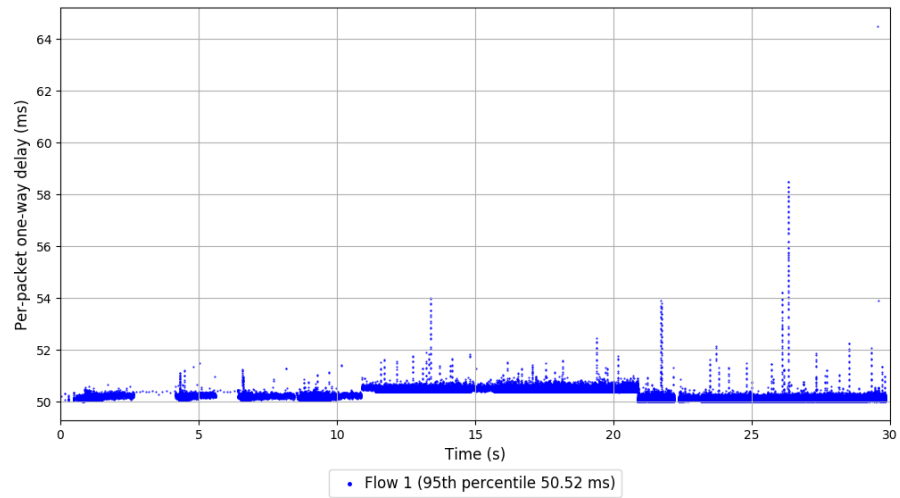
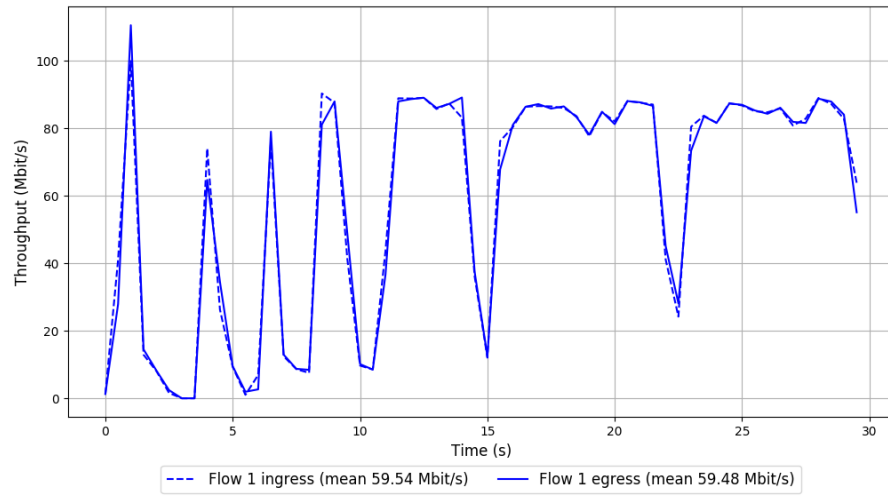
-- Flow 1:

Average throughput: 59.48 Mbit/s

95th percentile per-packet one-way delay: 50.520 ms

Loss rate: 0.44%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-20 02:32:43

End at: 2017-12-20 02:33:13

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.33 Mbit/s

95th percentile per-packet one-way delay: 50.275 ms

Loss rate: 0.05%

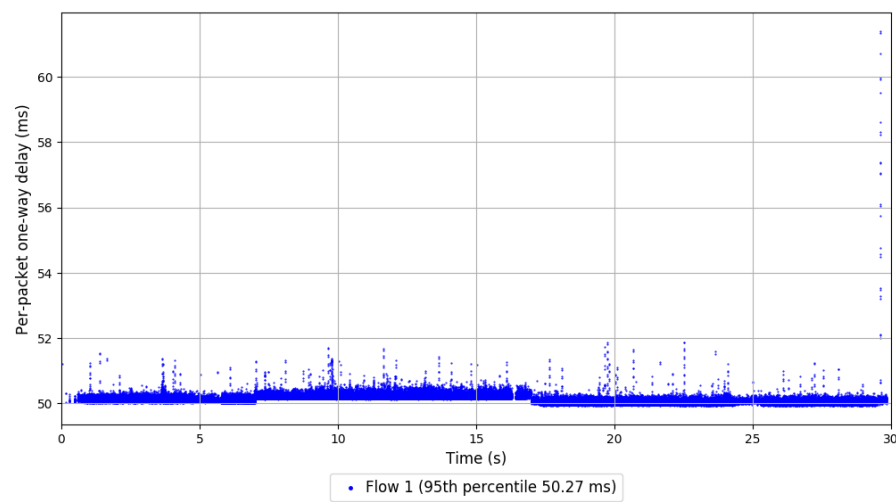
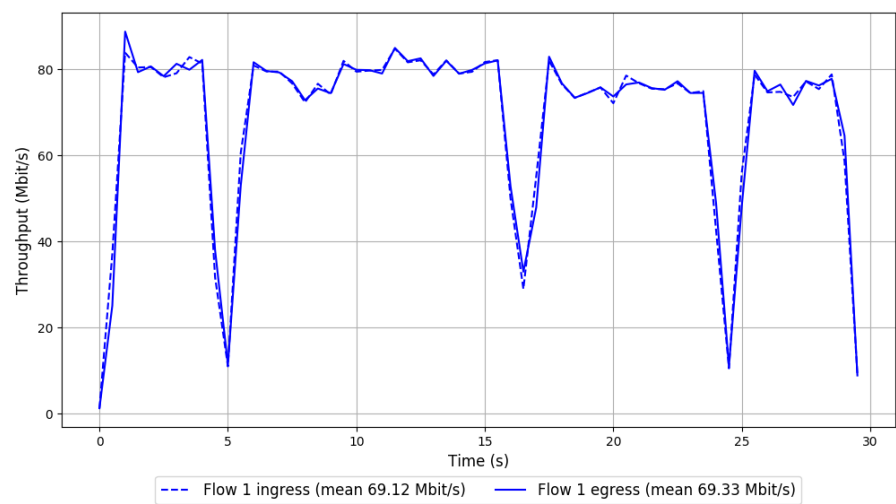
-- Flow 1:

Average throughput: 69.33 Mbit/s

95th percentile per-packet one-way delay: 50.275 ms

Loss rate: 0.05%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-20 02:44:31

End at: 2017-12-20 02:45:01

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.20 Mbit/s

95th percentile per-packet one-way delay: 50.774 ms

Loss rate: 0.42%

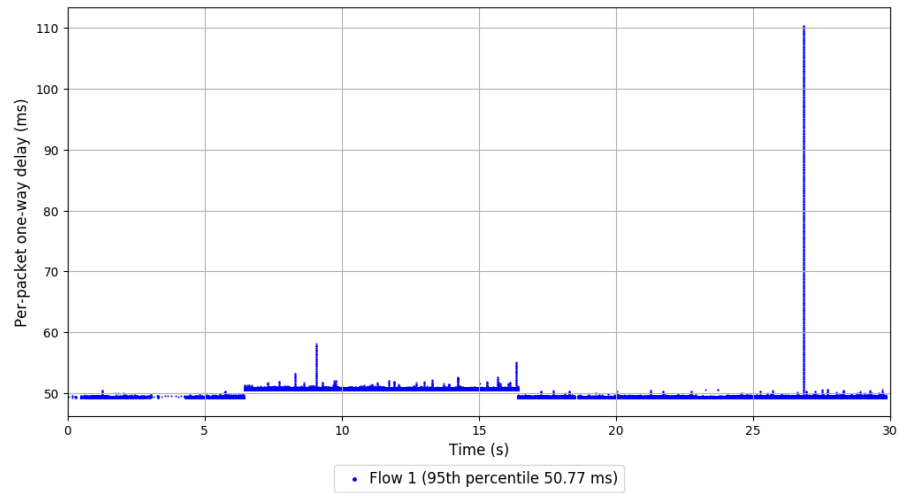
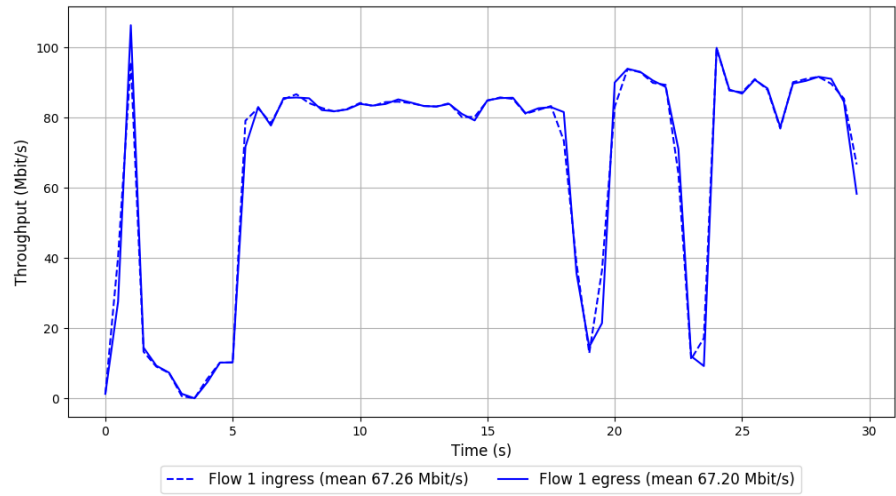
-- Flow 1:

Average throughput: 67.20 Mbit/s

95th percentile per-packet one-way delay: 50.774 ms

Loss rate: 0.42%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-20 02:56:16

End at: 2017-12-20 02:56:46

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.30 Mbit/s

95th percentile per-packet one-way delay: 50.174 ms

Loss rate: 0.39%

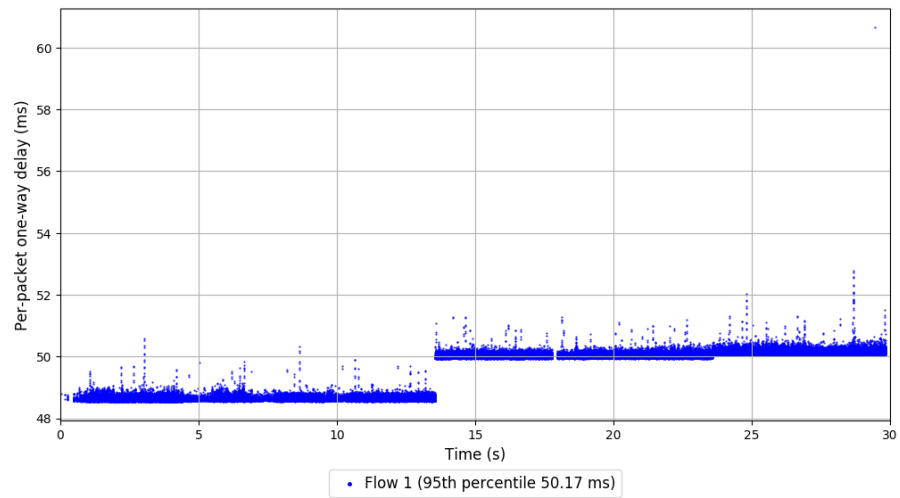
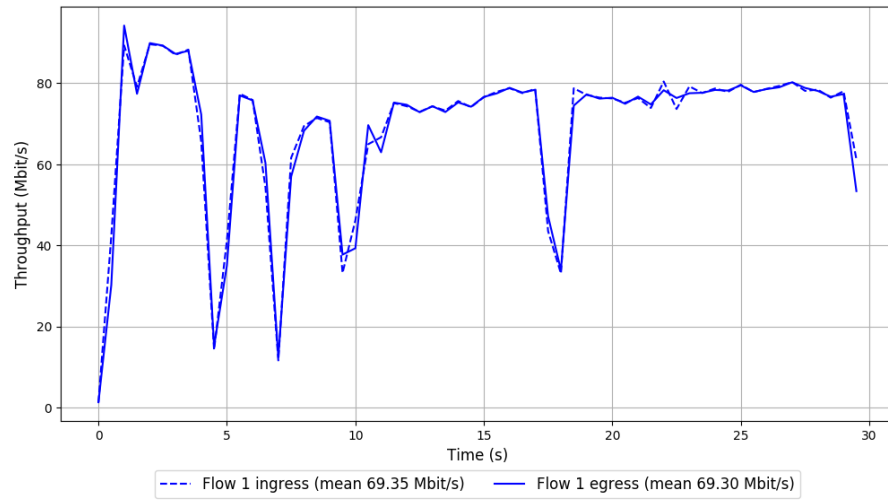
-- Flow 1:

Average throughput: 69.30 Mbit/s

95th percentile per-packet one-way delay: 50.174 ms

Loss rate: 0.39%

Run 10: Report of QUIC Cubic — Data Link

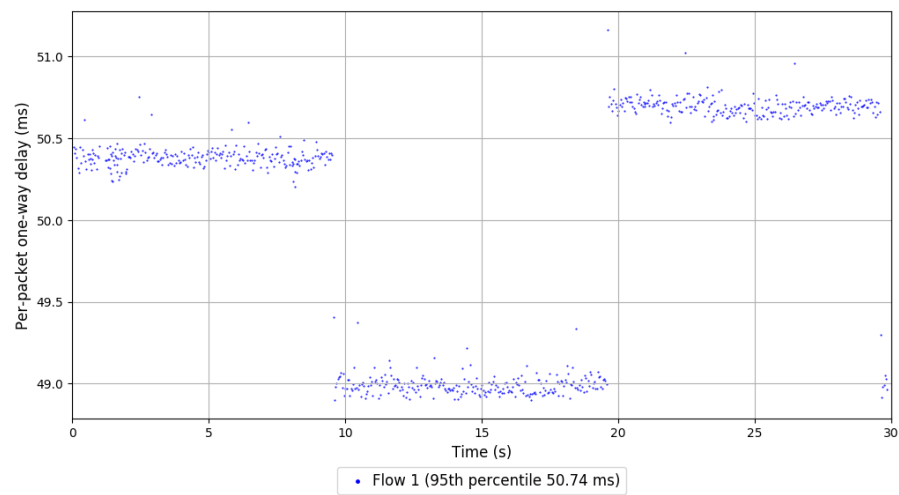
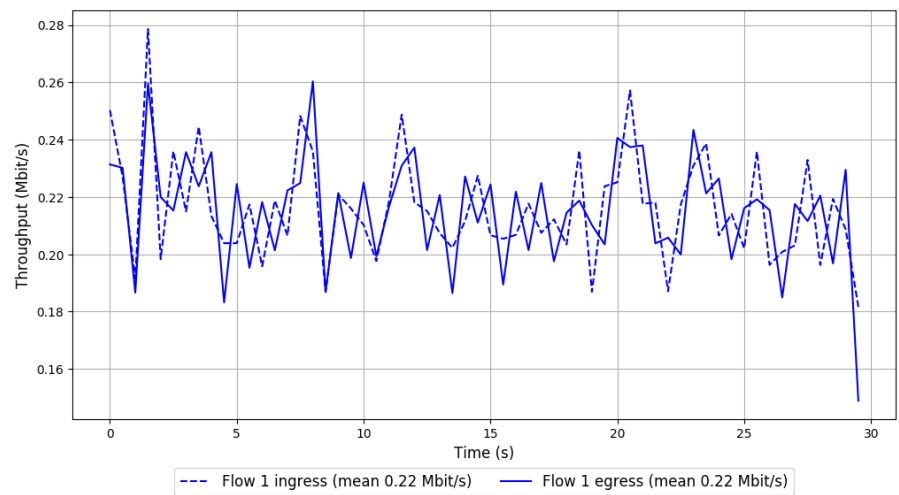


```
Run 1: Statistics of SCReAM

Start at: 2017-12-20 01:11:18
End at: 2017-12-20 01:11:48

# Below is generated by plot.py at 2017-12-20 05:32:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.737 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.737 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link

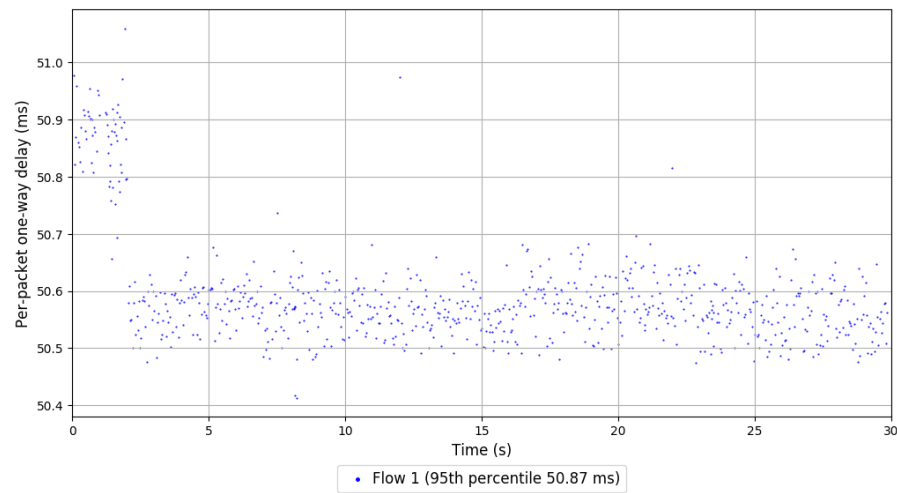
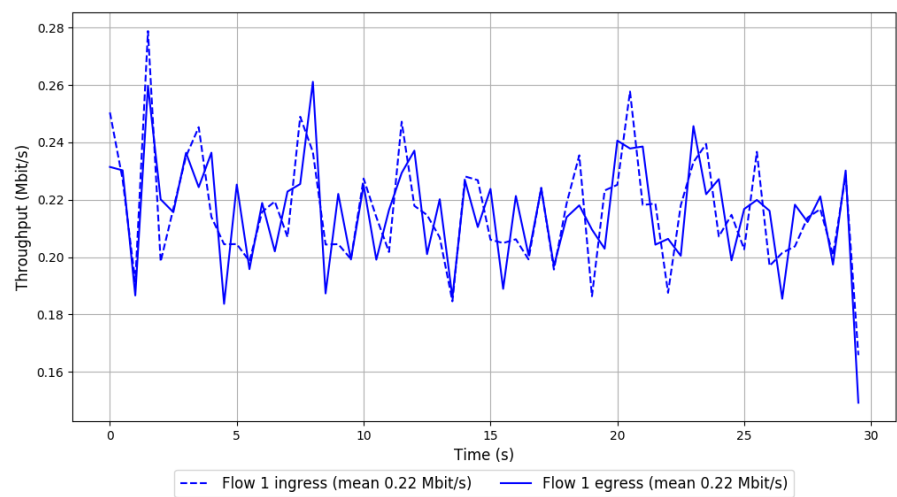


```
Run 2: Statistics of SCReAM

Start at: 2017-12-20 01:22:58
End at: 2017-12-20 01:23:28

# Below is generated by plot.py at 2017-12-20 05:32:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.866 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.866 ms
Loss rate: 0.25%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-20 01:34:40

End at: 2017-12-20 01:35:10

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.918 ms

Loss rate: 0.38%

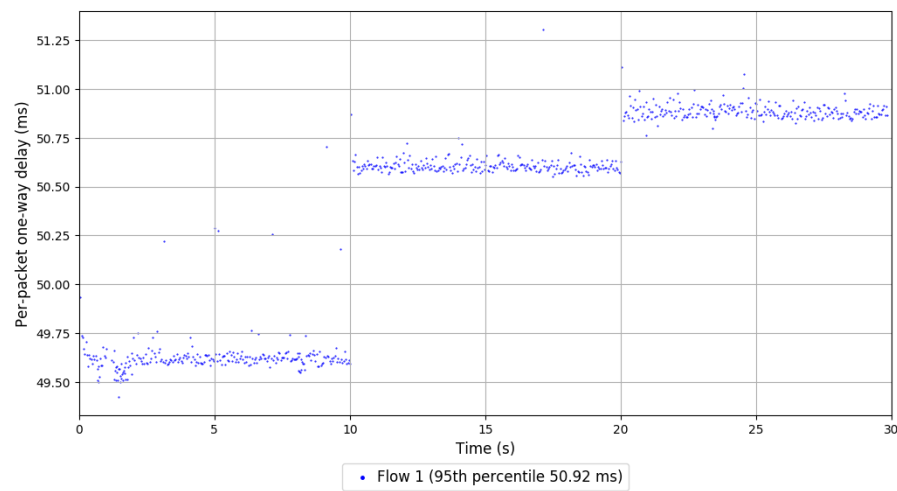
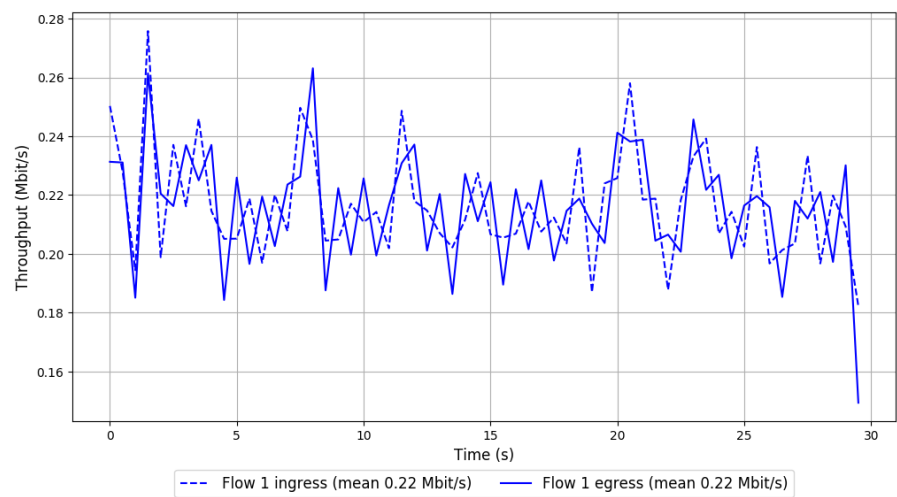
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.918 ms

Loss rate: 0.38%

Run 3: Report of SReAM — Data Link

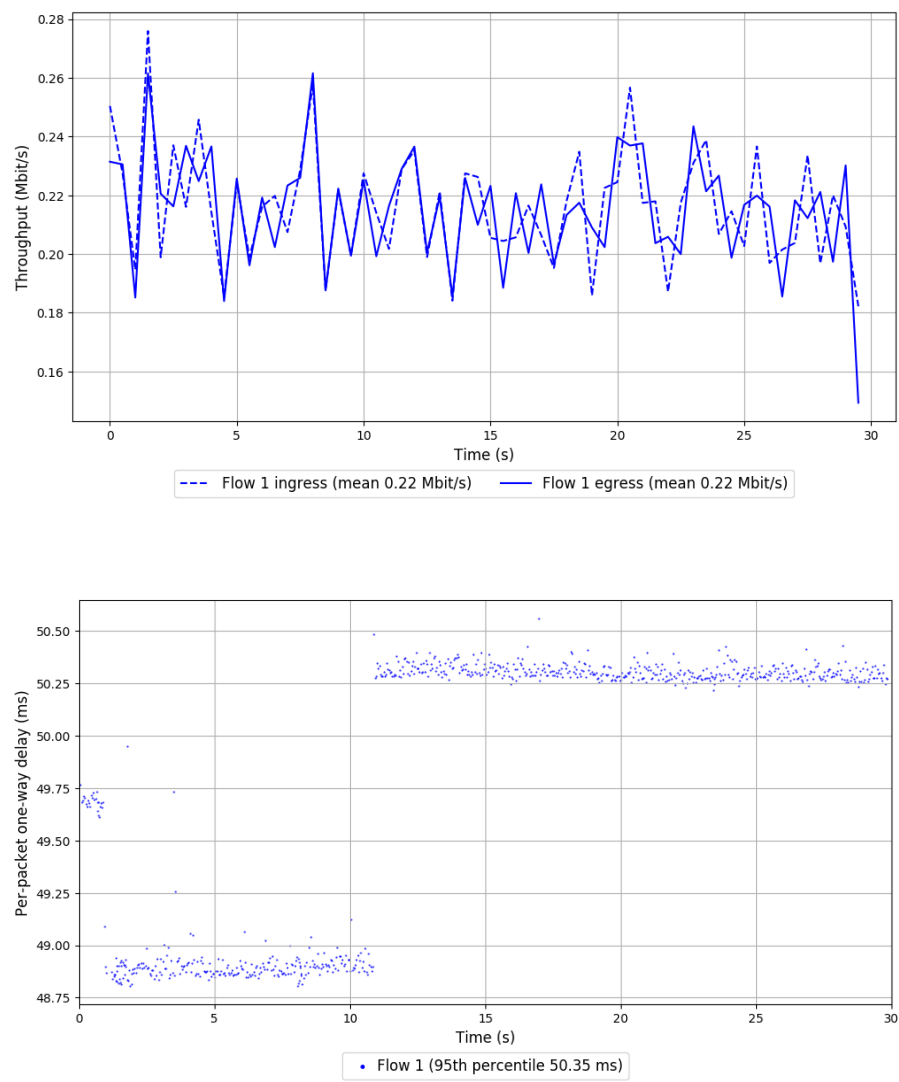


```
Run 4: Statistics of SCReAM

Start at: 2017-12-20 01:46:19
End at: 2017-12-20 01:46:49

# Below is generated by plot.py at 2017-12-20 05:32:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.355 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.355 ms
Loss rate: 0.38%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-20 01:58:06

End at: 2017-12-20 01:58:36

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.732 ms

Loss rate: 0.38%

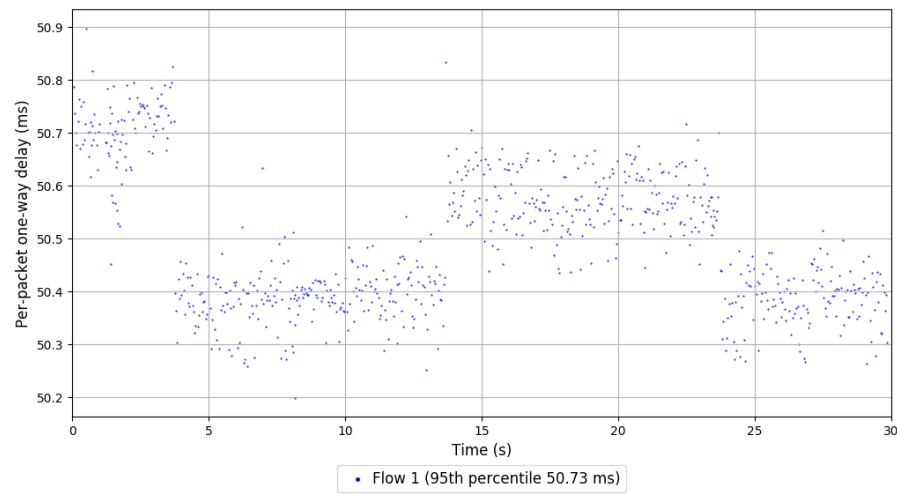
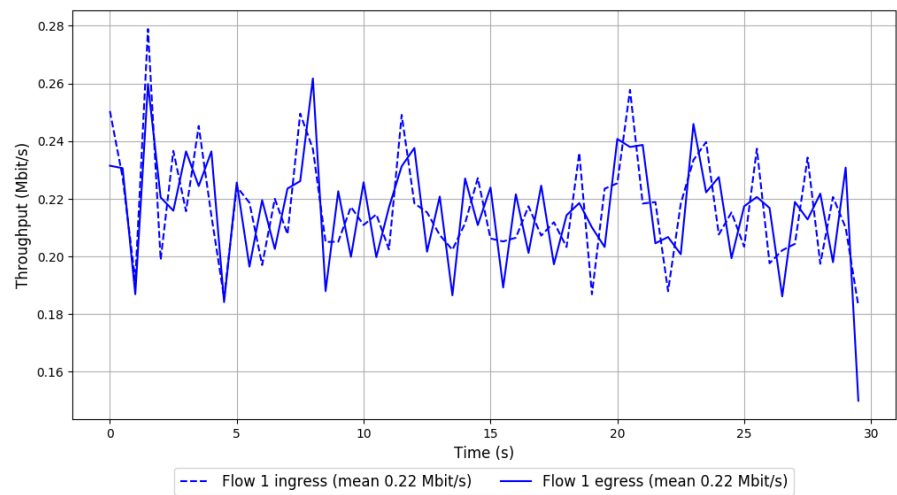
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.732 ms

Loss rate: 0.38%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-20 02:09:52

End at: 2017-12-20 02:10:22

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.778 ms

Loss rate: 0.26%

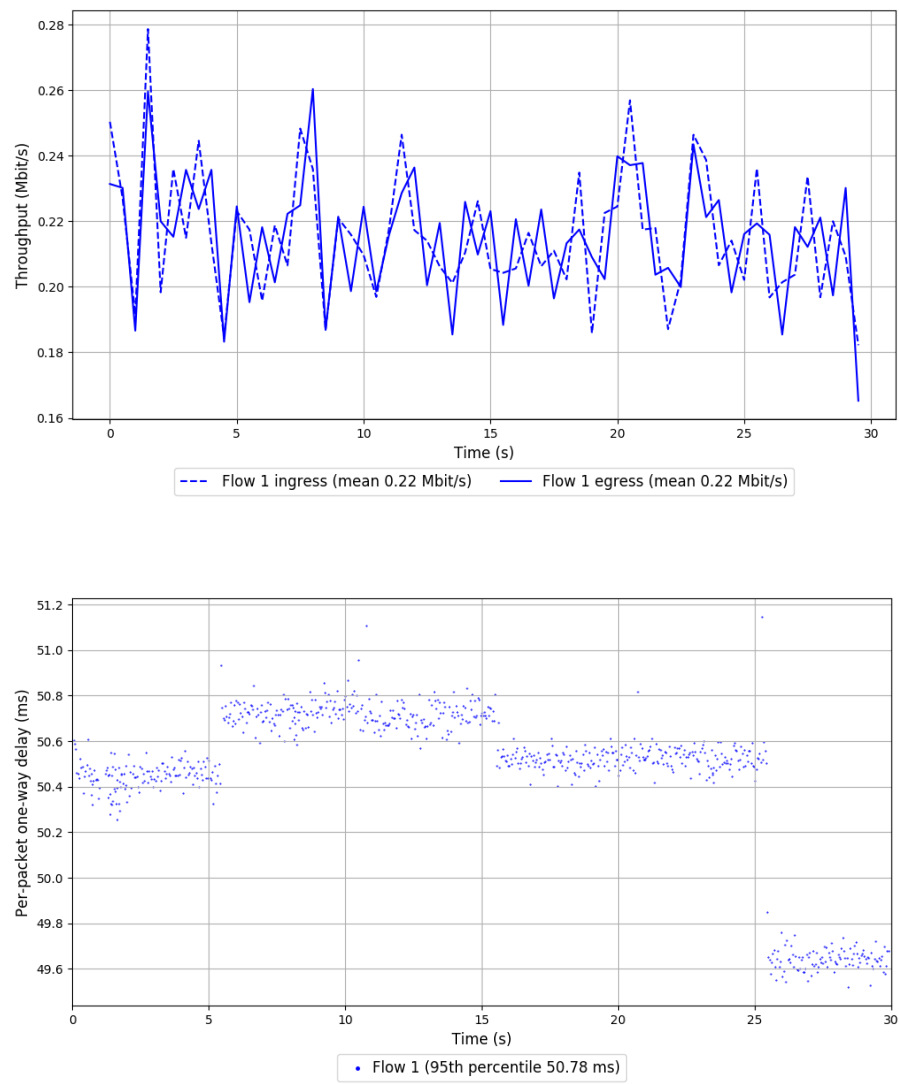
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.778 ms

Loss rate: 0.26%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-20 02:21:37

End at: 2017-12-20 02:22:07

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.627 ms

Loss rate: 0.26%

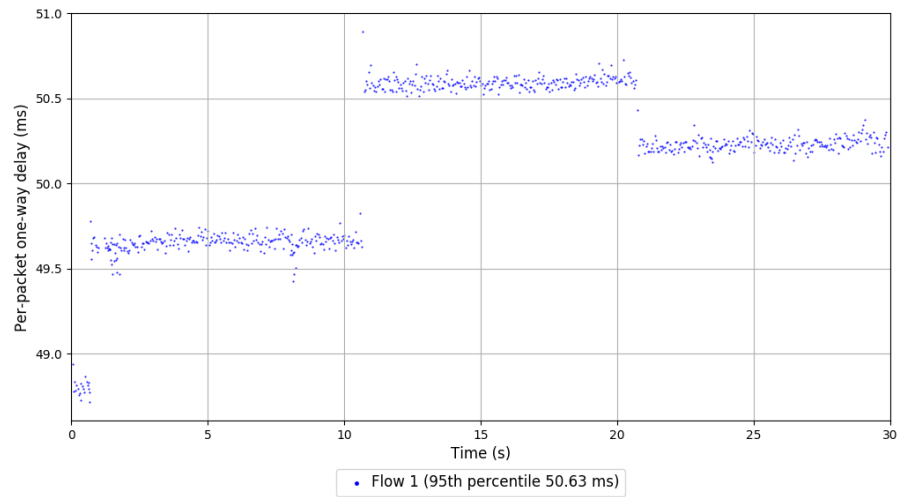
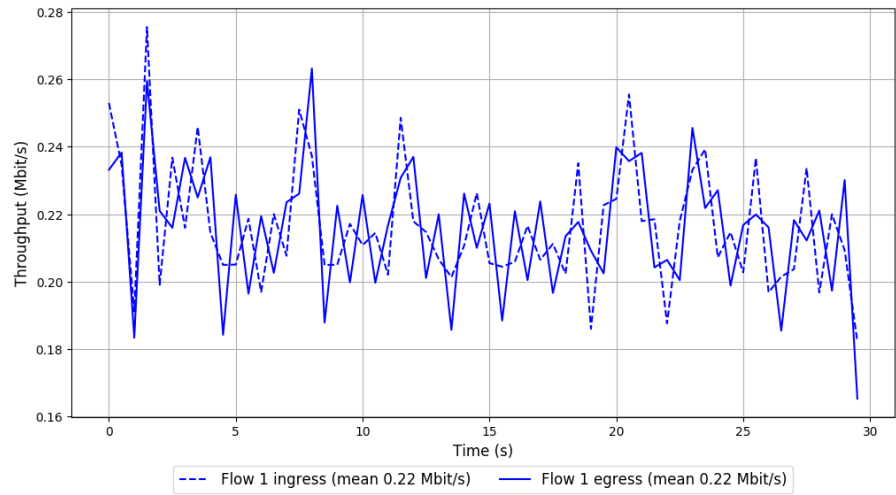
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.627 ms

Loss rate: 0.26%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-20 02:33:24

End at: 2017-12-20 02:33:54

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.38%

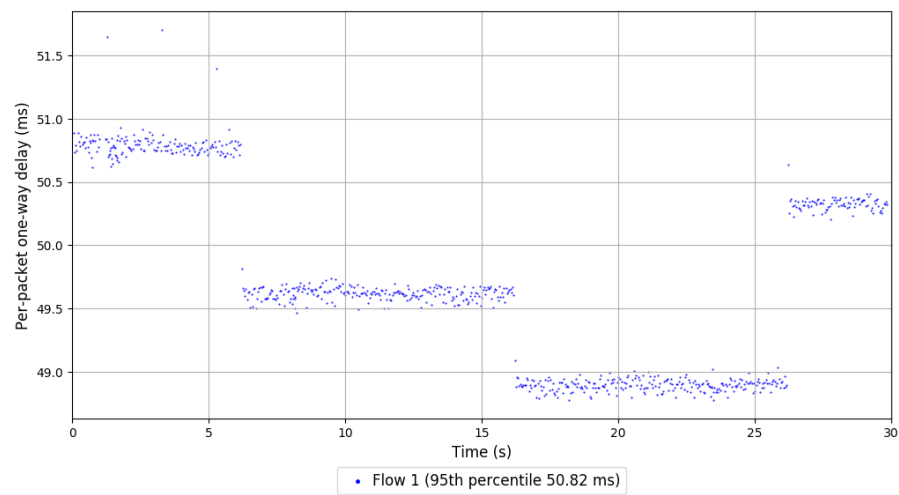
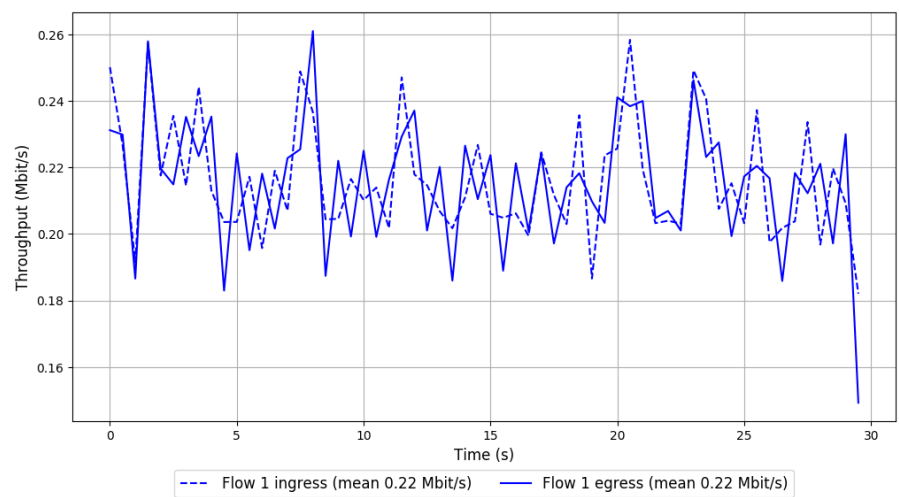
-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.38%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-20 02:45:12

End at: 2017-12-20 02:45:42

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.747 ms

Loss rate: 0.38%

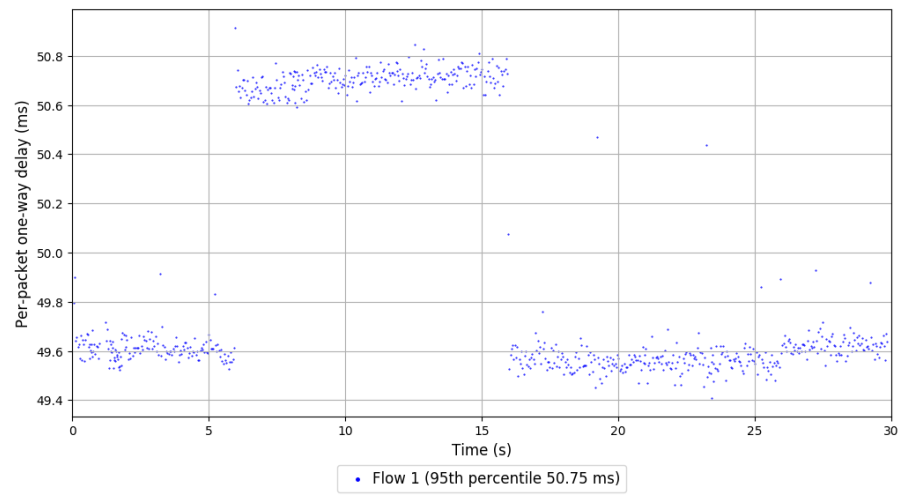
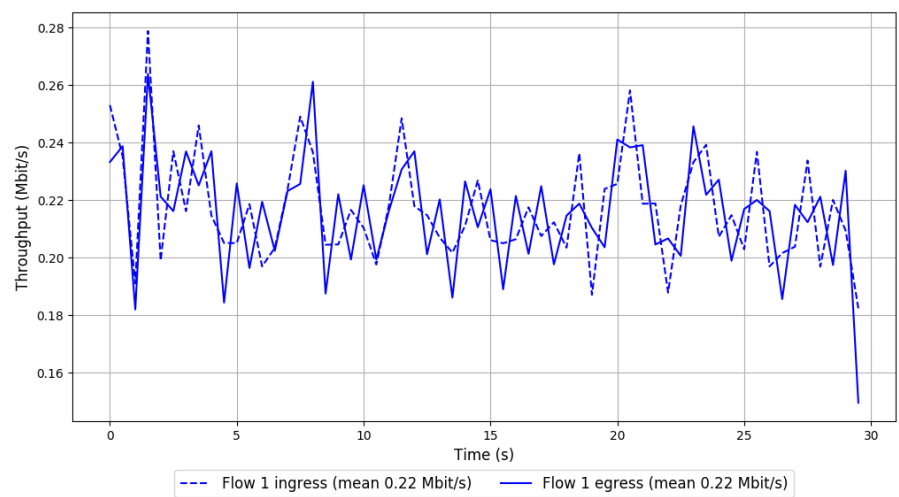
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.747 ms

Loss rate: 0.38%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-20 02:56:57

End at: 2017-12-20 02:57:27

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.708 ms

Loss rate: 0.51%

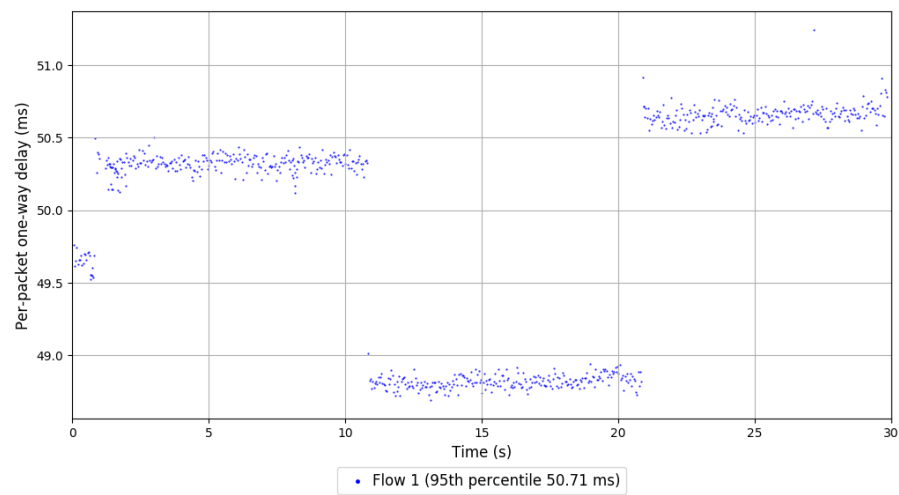
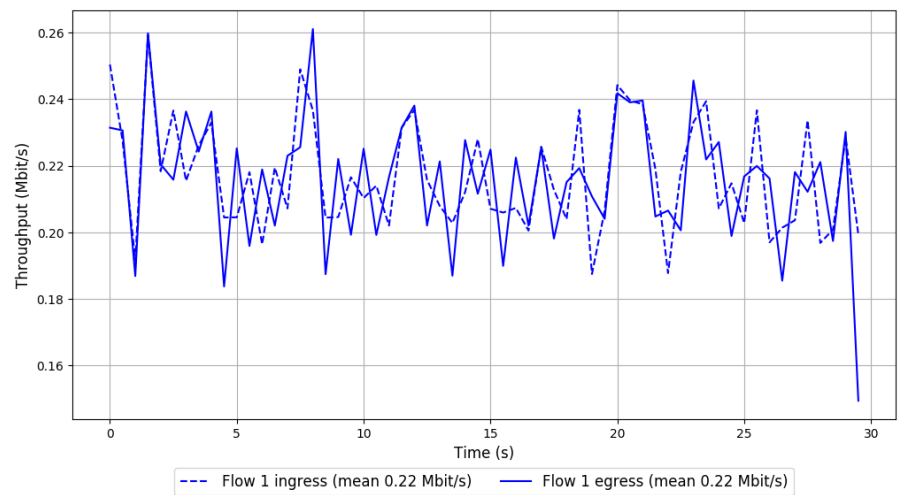
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.708 ms

Loss rate: 0.51%

Run 10: Report of SReAM — Data Link

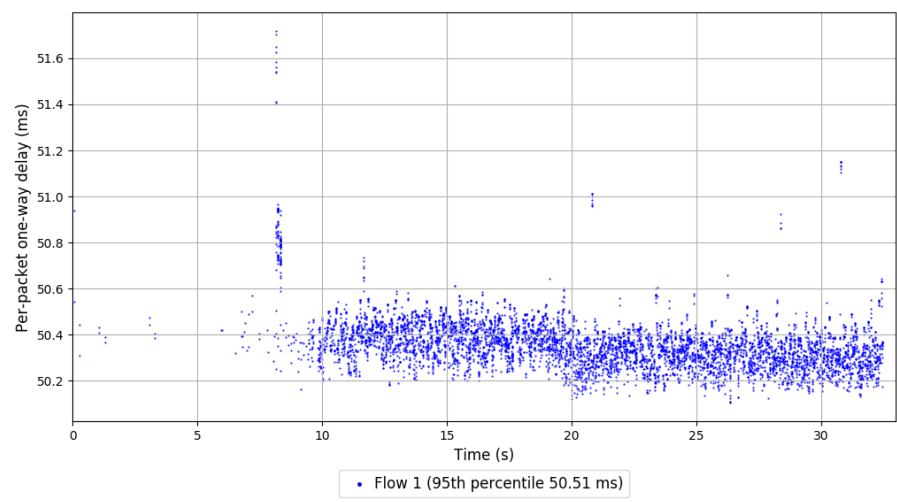
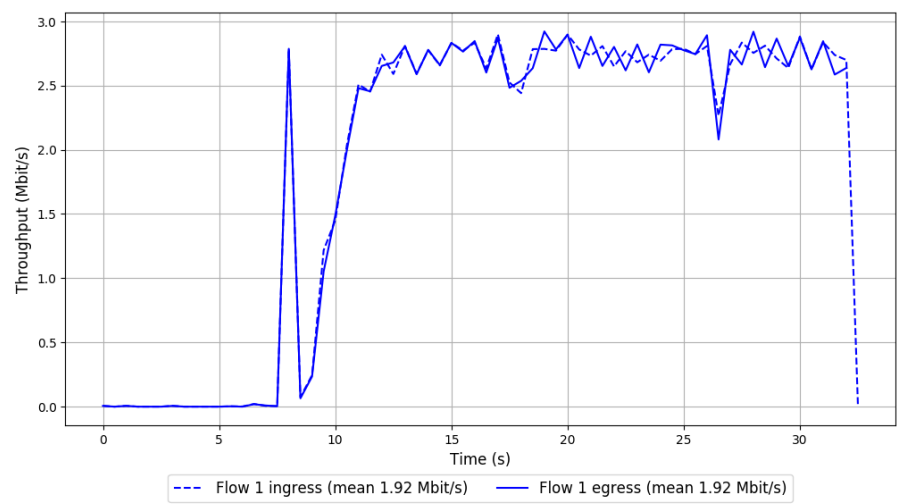


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-20 01:09:23
End at: 2017-12-20 01:09:53

# Below is generated by plot.py at 2017-12-20 05:32:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 50.505 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 50.505 ms
Loss rate: 0.35%
```


Run 1: Report of WebRTC media — Data Link

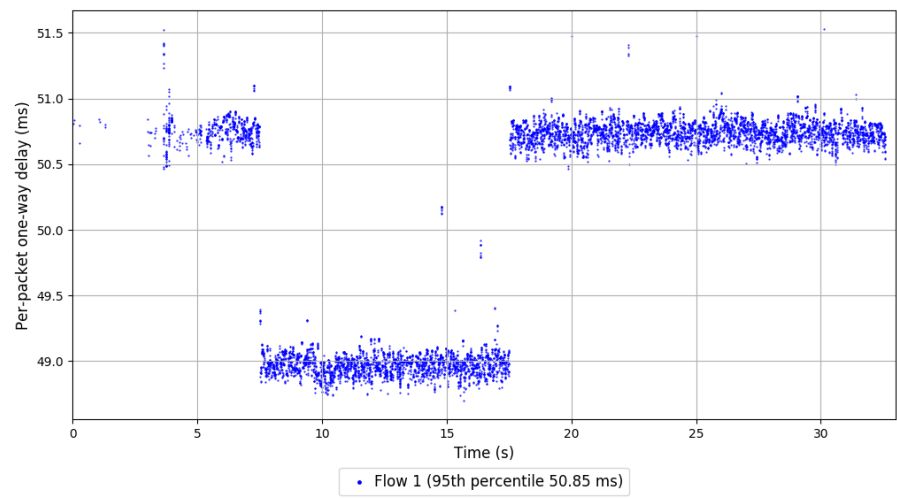
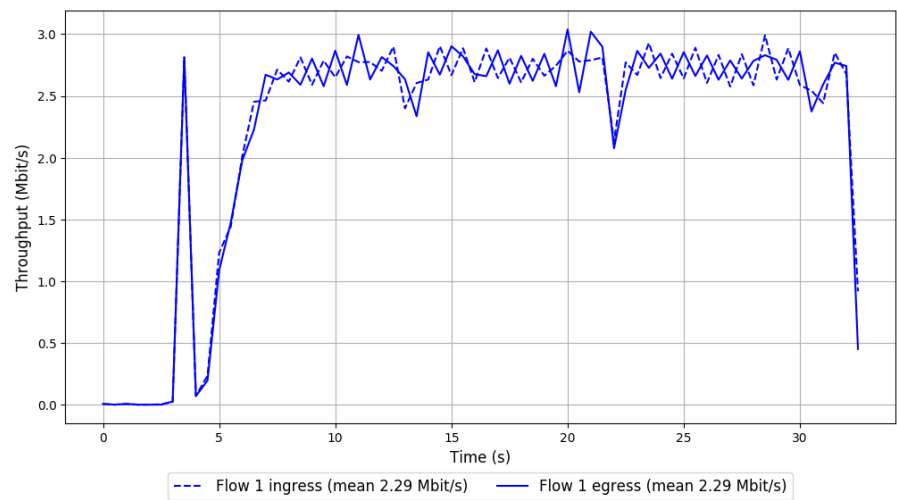


```
Run 2: Statistics of WebRTC media

Start at: 2017-12-20 01:21:03
End at: 2017-12-20 01:21:33

# Below is generated by plot.py at 2017-12-20 05:32:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.854 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.854 ms
Loss rate: 0.46%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-20 01:32:45

End at: 2017-12-20 01:33:15

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.911 ms

Loss rate: 0.46%

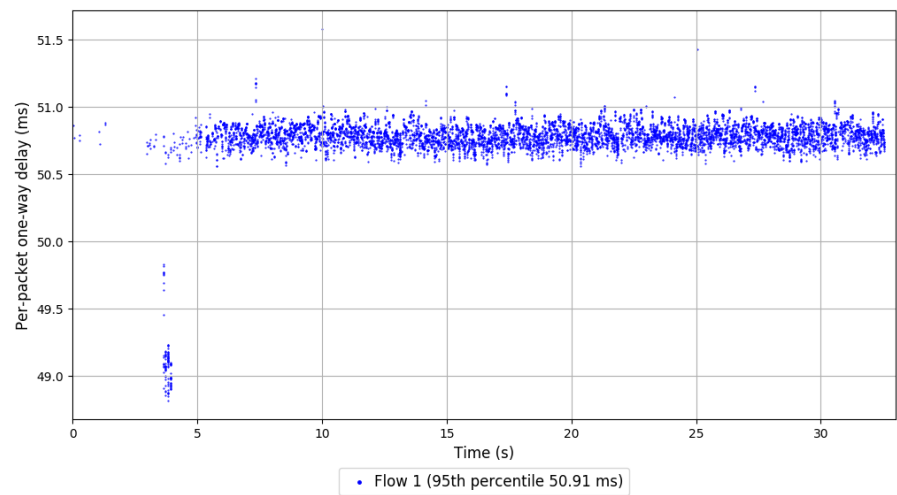
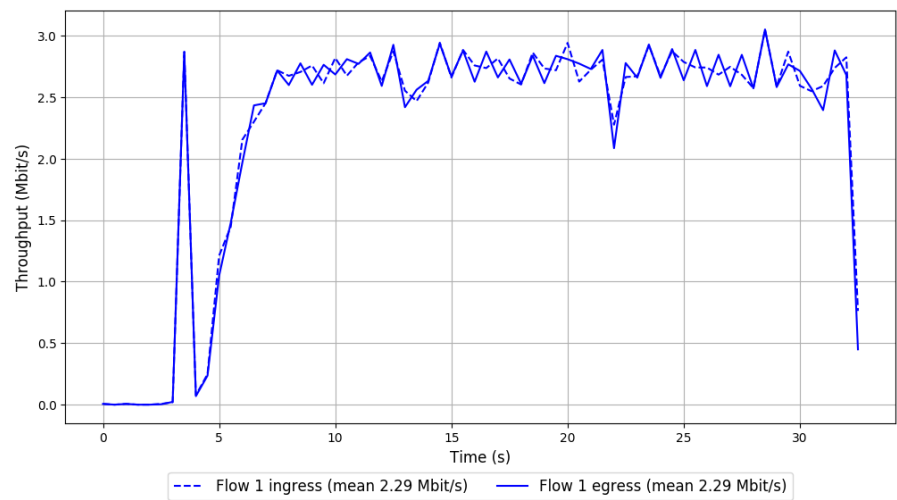
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.911 ms

Loss rate: 0.46%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-20 01:44:25

End at: 2017-12-20 01:44:55

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.497 ms

Loss rate: 0.45%

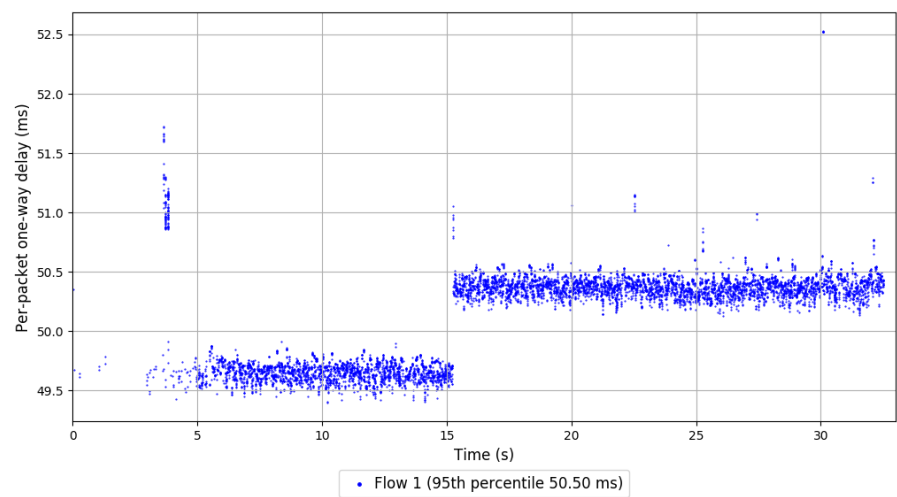
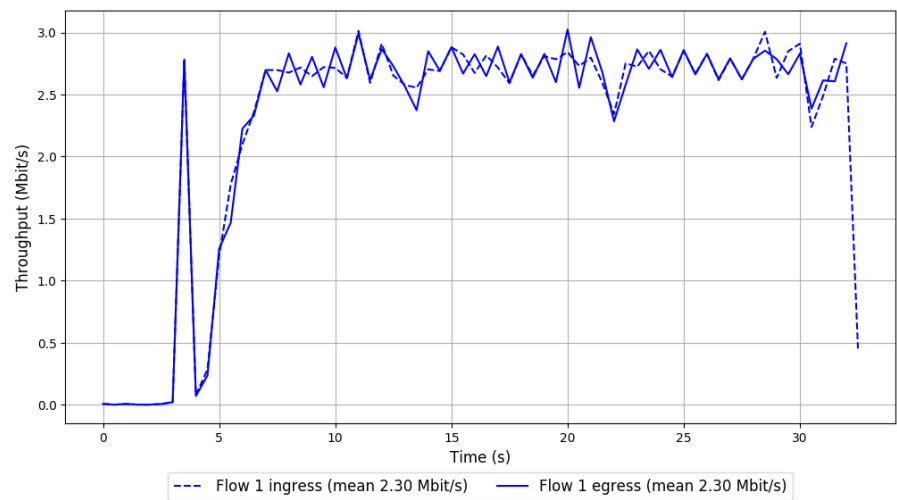
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.497 ms

Loss rate: 0.45%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-20 01:56:13

End at: 2017-12-20 01:56:43

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.806 ms

Loss rate: 0.31%

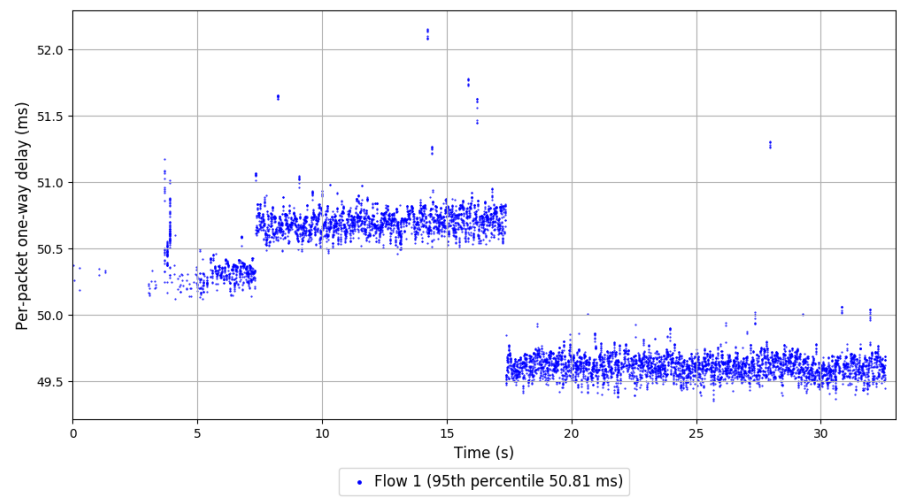
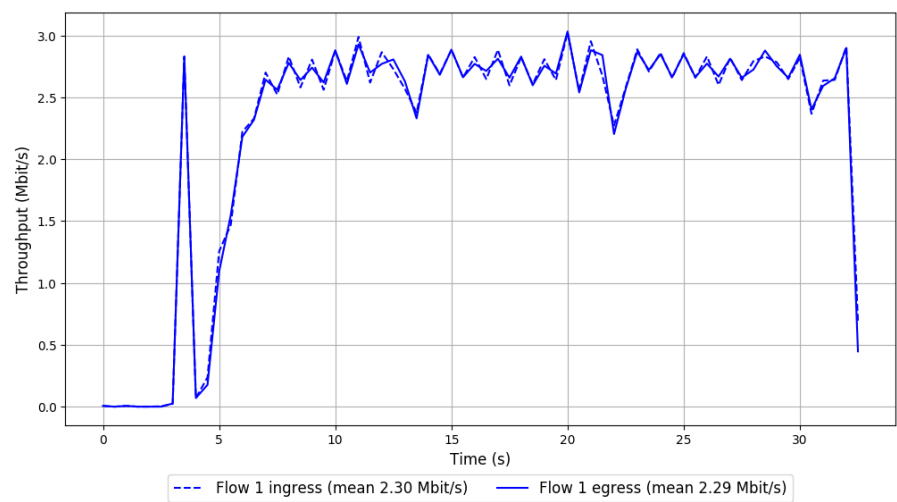
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.806 ms

Loss rate: 0.31%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-20 02:07:59

End at: 2017-12-20 02:08:29

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.748 ms

Loss rate: 0.47%

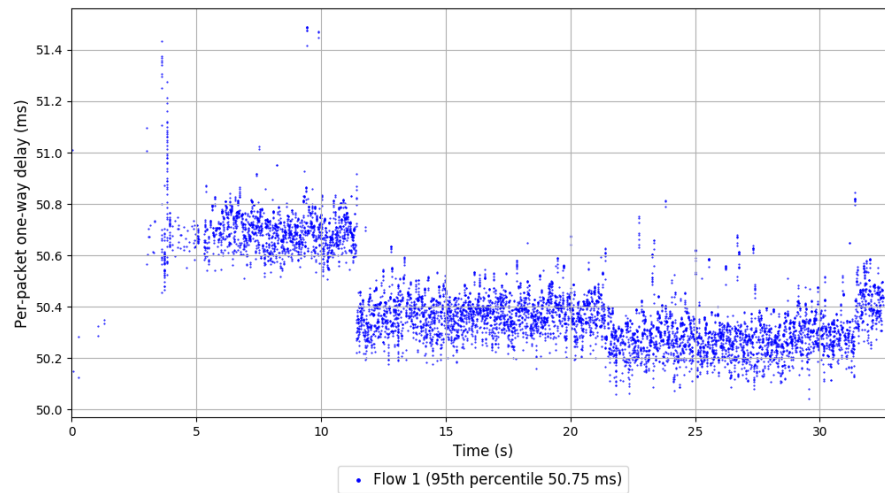
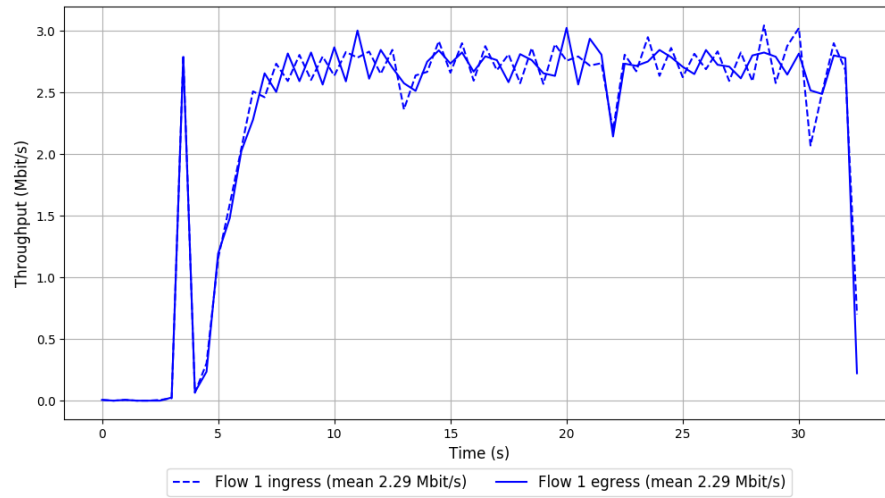
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.748 ms

Loss rate: 0.47%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-20 02:19:43

End at: 2017-12-20 02:20:13

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.600 ms

Loss rate: 0.44%

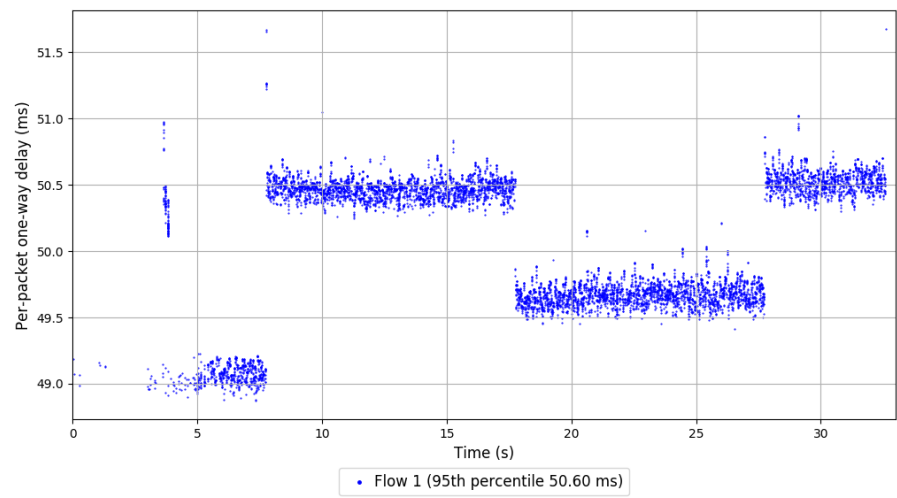
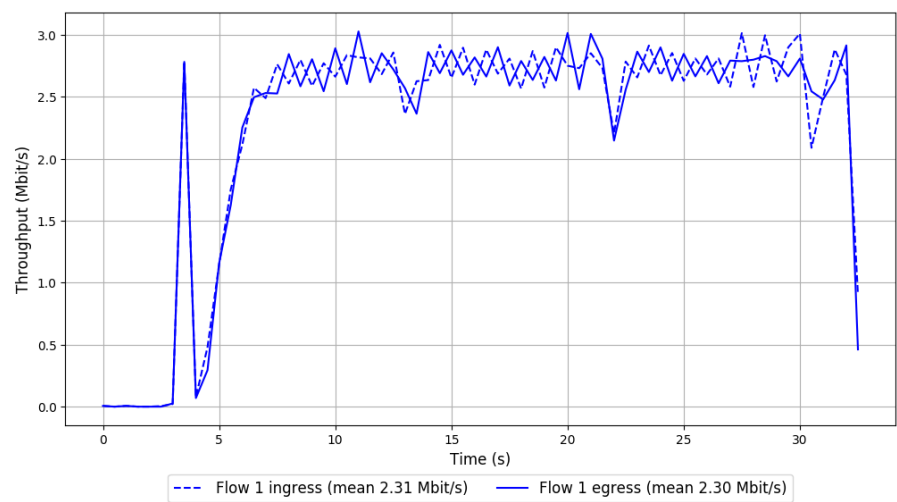
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.600 ms

Loss rate: 0.44%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-20 02:31:29

End at: 2017-12-20 02:31:59

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

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

Loss rate: 0.46%

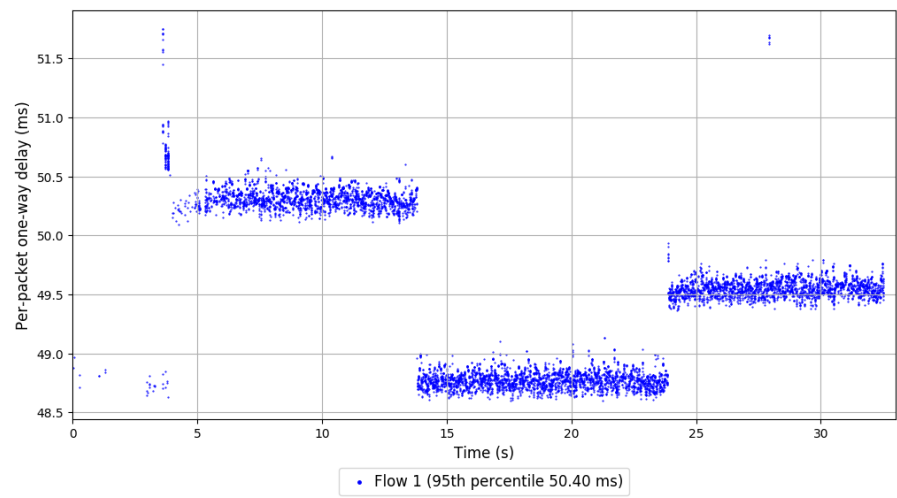
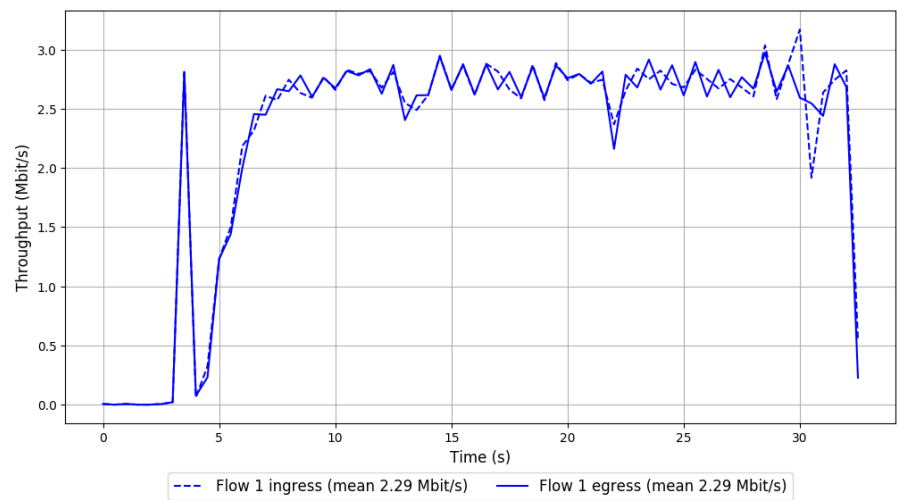
-- Flow 1:

Average throughput: 2.29 Mbit/s

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

Loss rate: 0.46%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-20 02:43:17

End at: 2017-12-20 02:43:47

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.819 ms

Loss rate: 0.46%

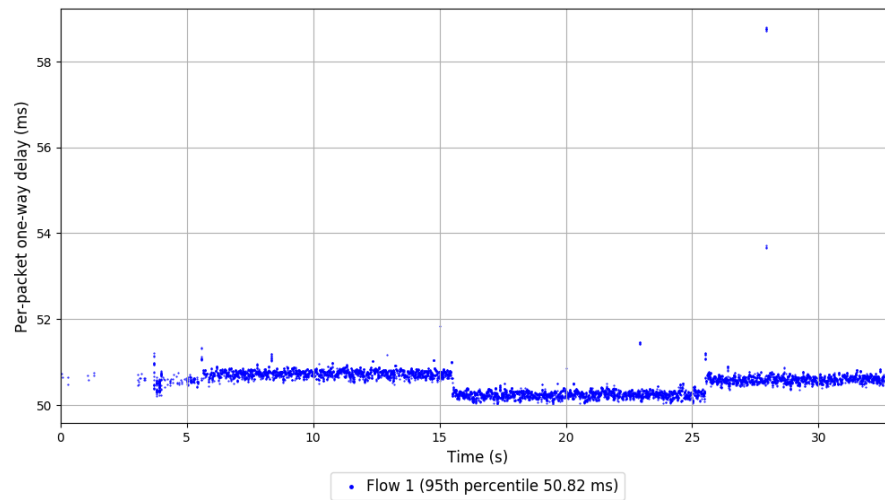
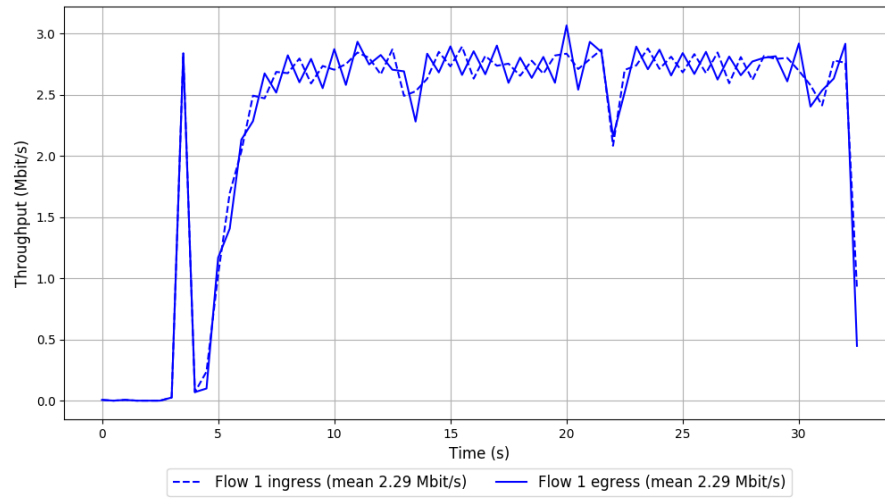
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.819 ms

Loss rate: 0.46%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

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

End at: 2017-12-20 02:55:32

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.505 ms

Loss rate: 0.31%

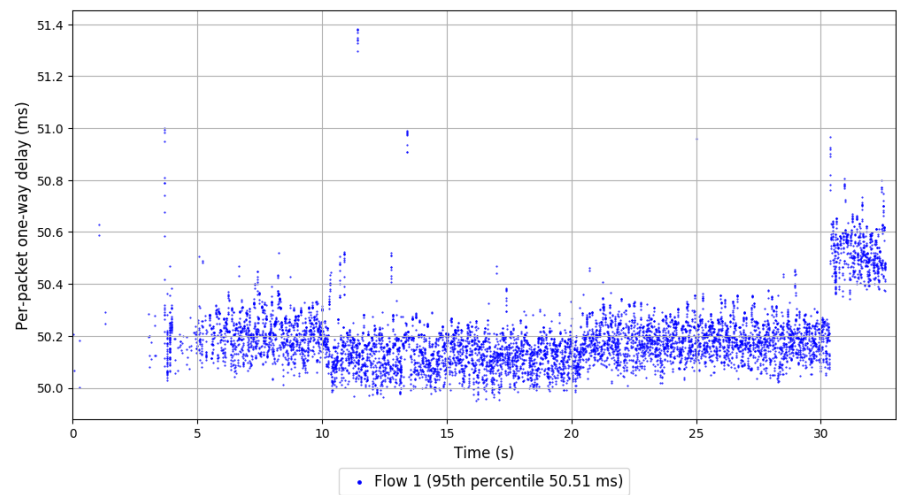
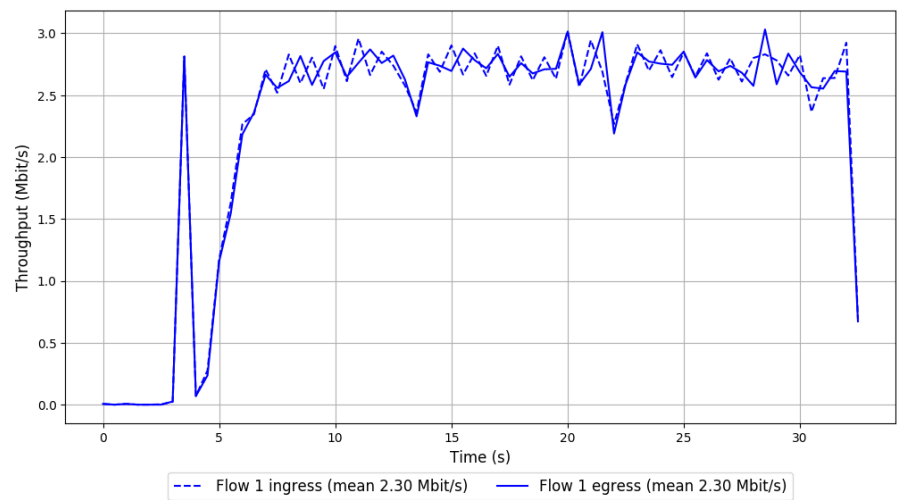
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.505 ms

Loss rate: 0.31%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-20 01:09:59

End at: 2017-12-20 01:10:30

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 51.448 ms

Loss rate: 0.84%

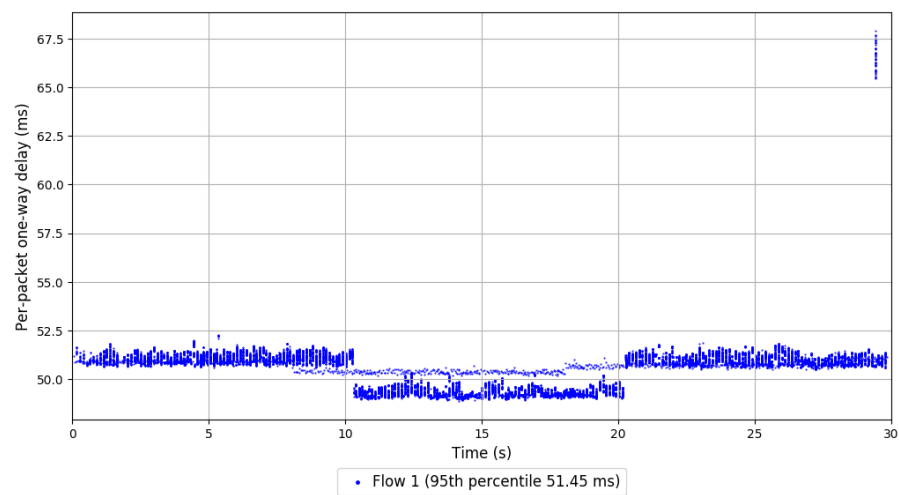
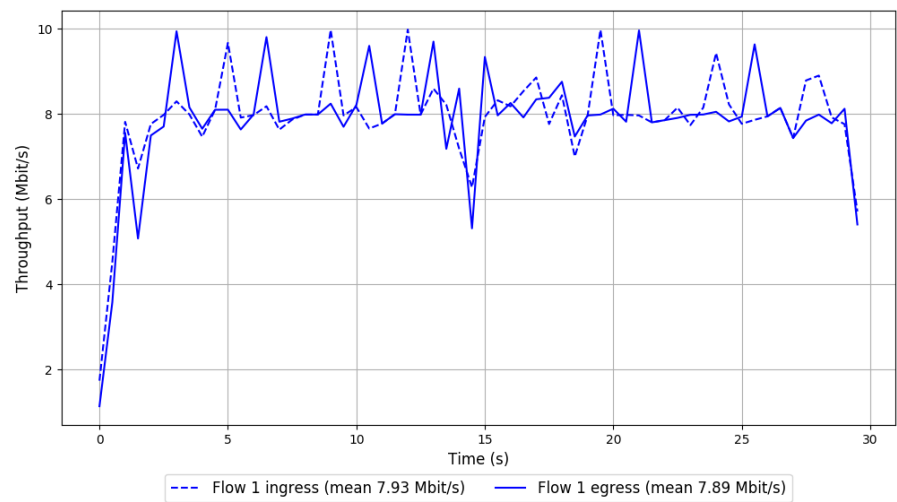
-- Flow 1:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 51.448 ms

Loss rate: 0.84%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-20 01:21:40

End at: 2017-12-20 01:22:10

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 51.505 ms

Loss rate: 0.83%

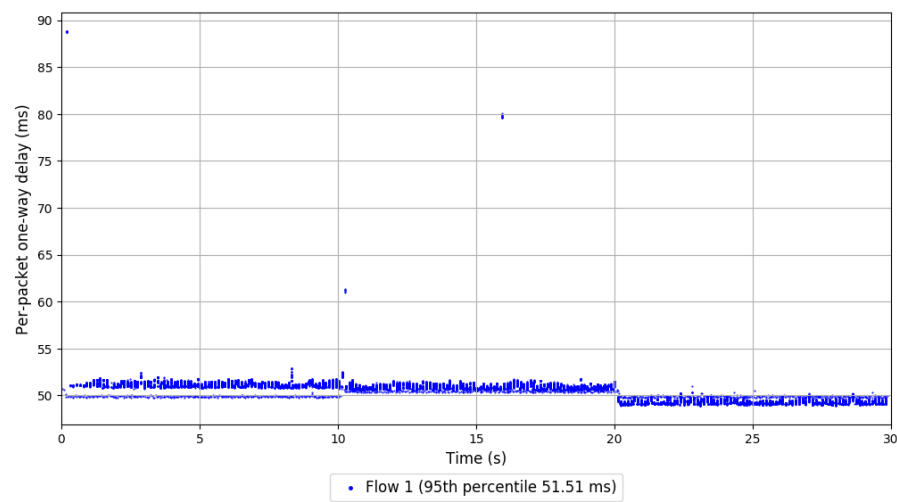
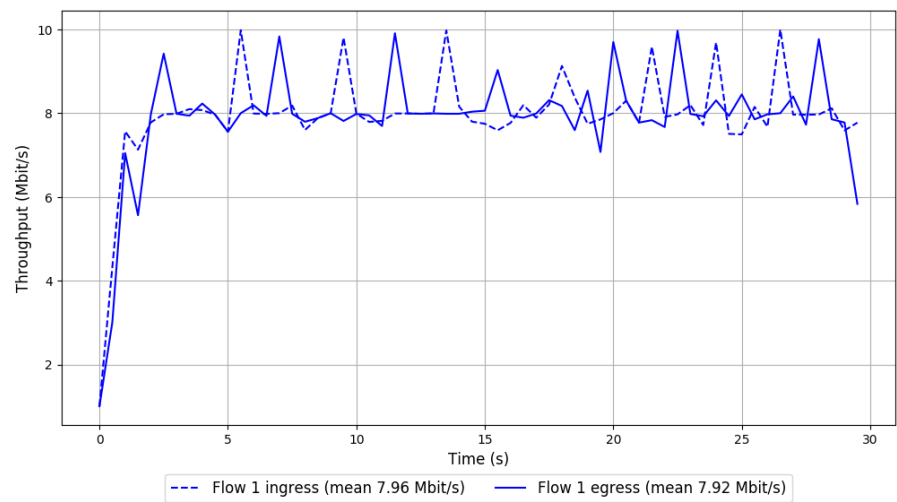
-- Flow 1:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 51.505 ms

Loss rate: 0.83%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-20 01:33:22

End at: 2017-12-20 01:33:52

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 51.709 ms

Loss rate: 1.15%

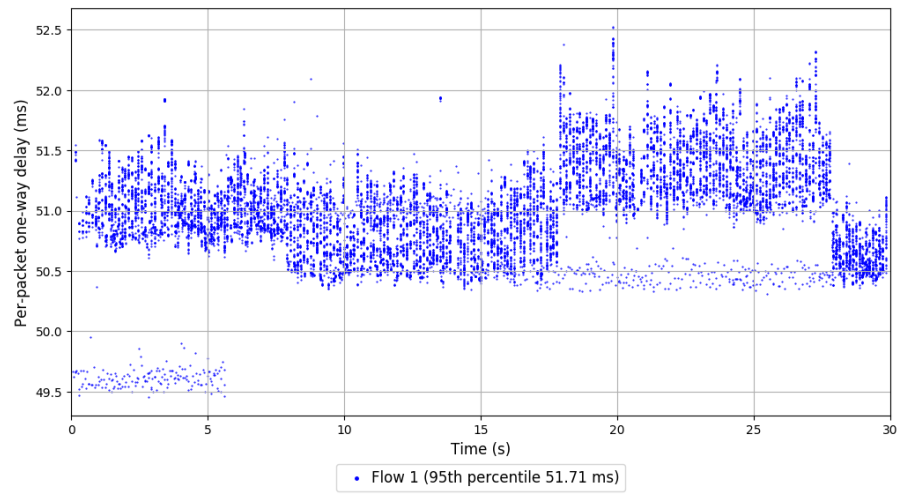
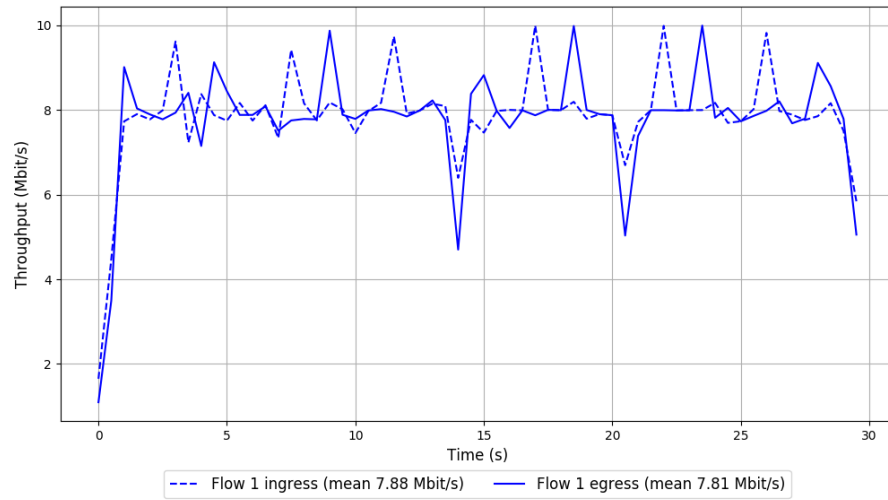
-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 51.709 ms

Loss rate: 1.15%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-20 01:45:02

End at: 2017-12-20 01:45:32

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 51.683 ms

Loss rate: 0.47%

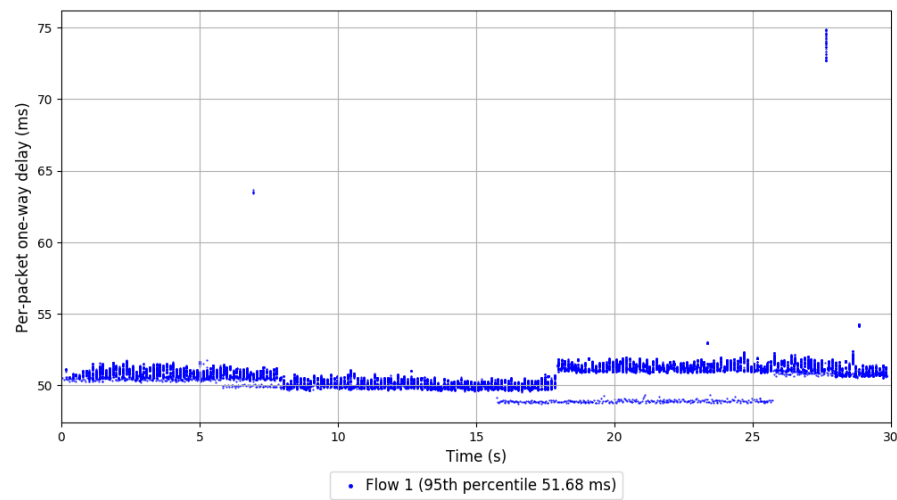
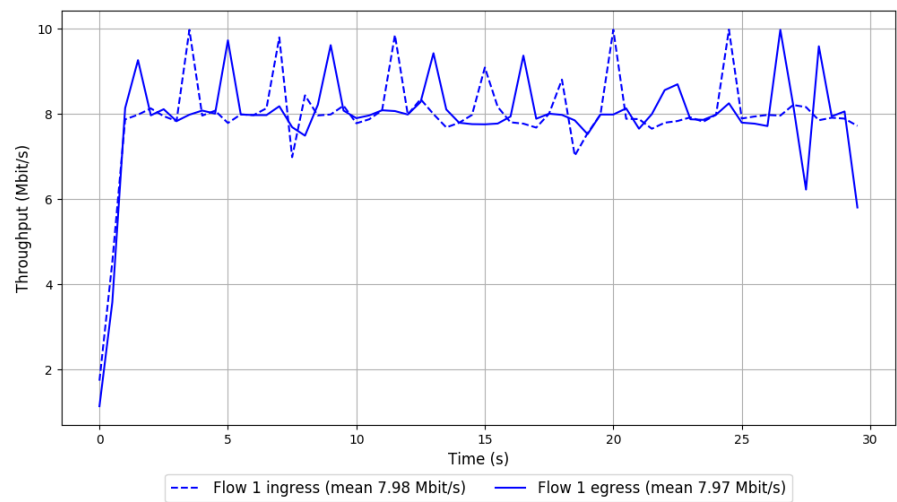
-- Flow 1:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 51.683 ms

Loss rate: 0.47%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-20 01:56:50

End at: 2017-12-20 01:57:20

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 51.409 ms

Loss rate: 0.37%

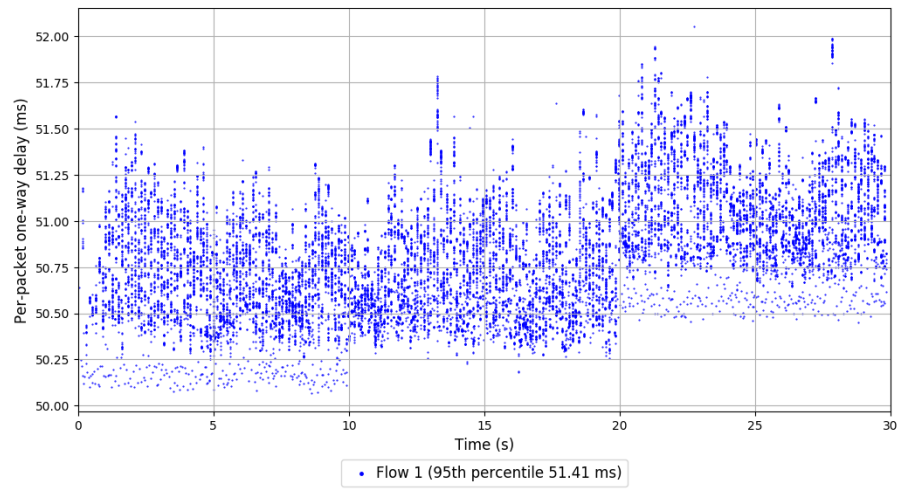
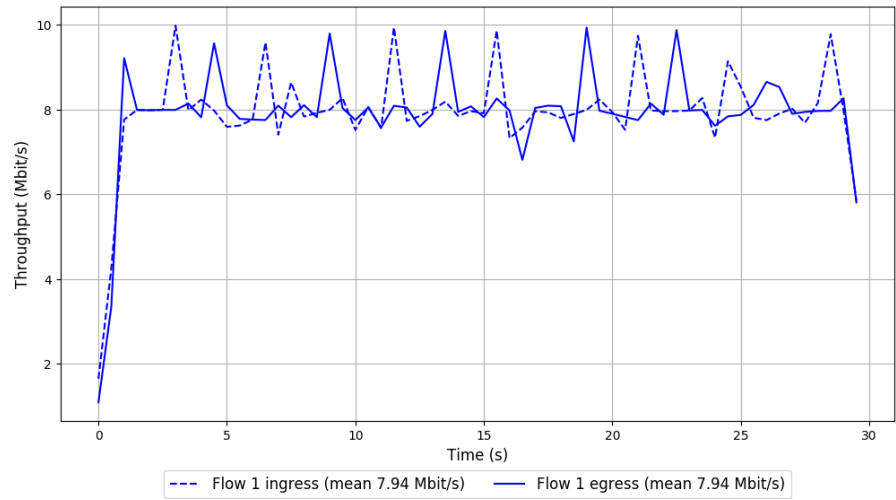
-- Flow 1:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 51.409 ms

Loss rate: 0.37%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-20 02:08:36

End at: 2017-12-20 02:09:06

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 51.354 ms

Loss rate: 0.48%

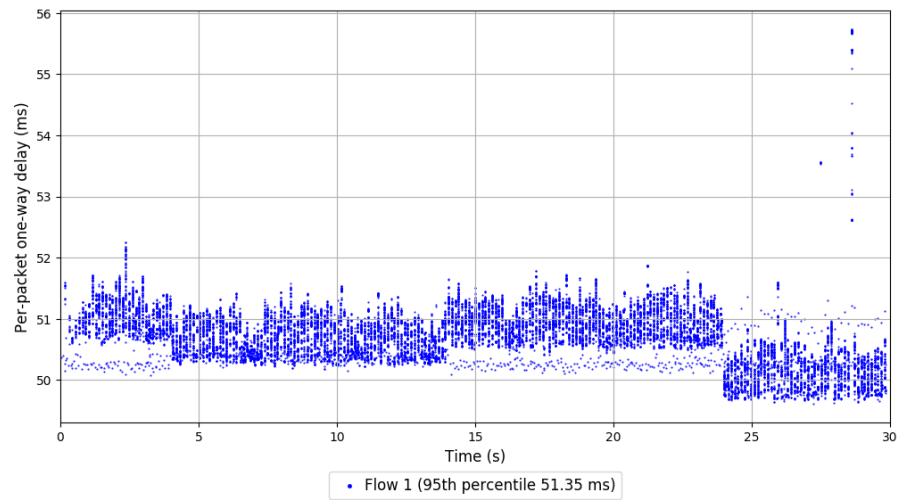
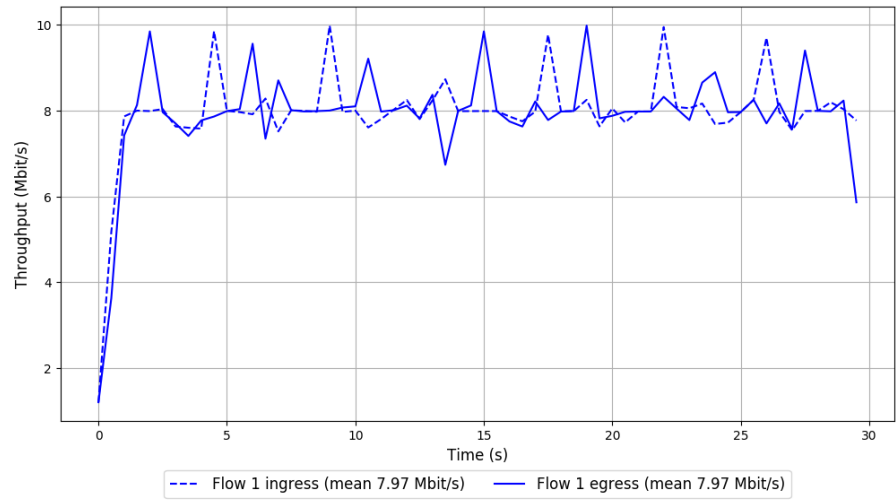
-- Flow 1:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 51.354 ms

Loss rate: 0.48%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-20 02:20:19

End at: 2017-12-20 02:20:49

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.564 ms

Loss rate: 0.90%

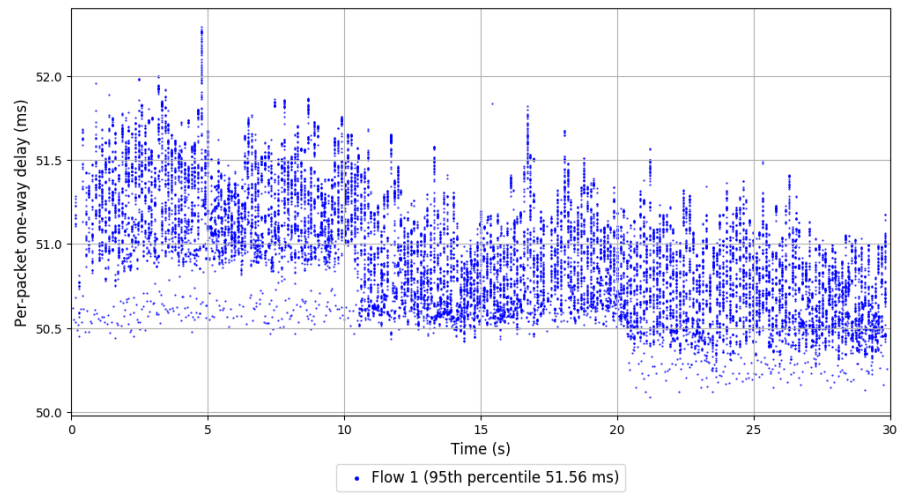
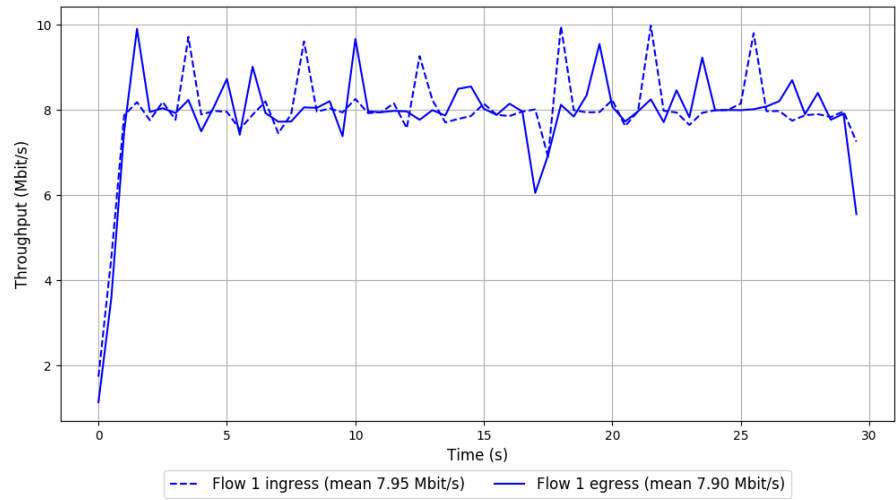
-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 51.564 ms

Loss rate: 0.90%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-20 02:32:06

End at: 2017-12-20 02:32:36

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 51.128 ms

Loss rate: 0.47%

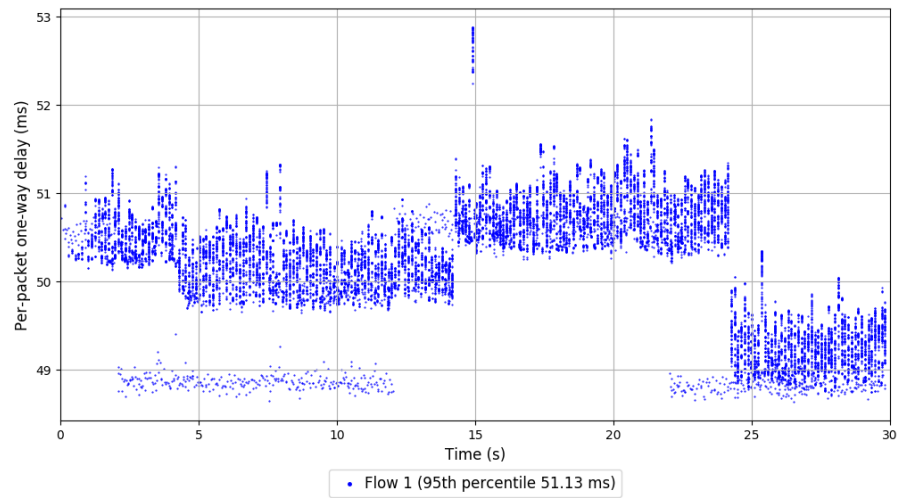
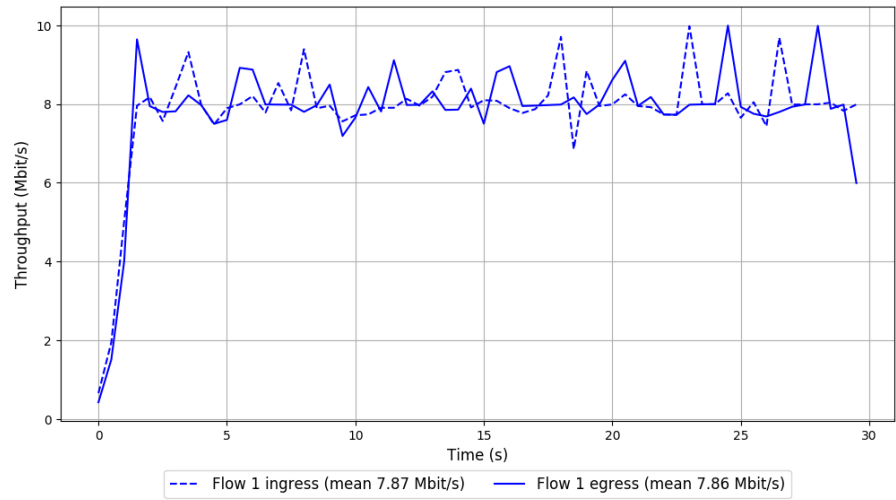
-- Flow 1:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 51.128 ms

Loss rate: 0.47%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-20 02:43:54

End at: 2017-12-20 02:44:24

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 51.200 ms

Loss rate: 0.59%

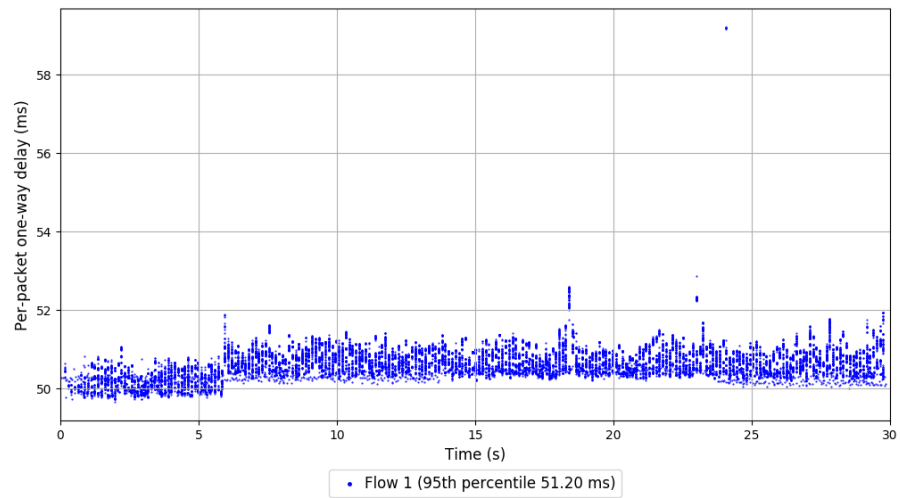
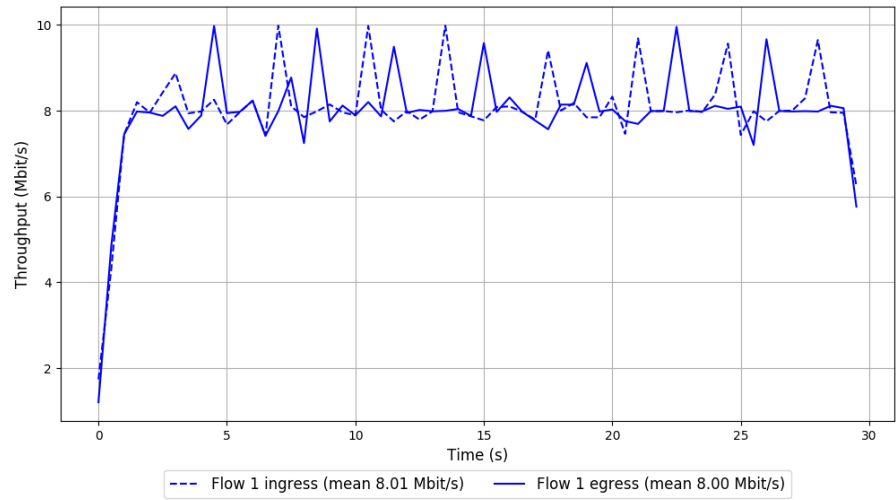
-- Flow 1:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 51.200 ms

Loss rate: 0.59%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-20 02:55:39

End at: 2017-12-20 02:56:09

Below is generated by plot.py at 2017-12-20 05:32:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 51.209 ms

Loss rate: 0.46%

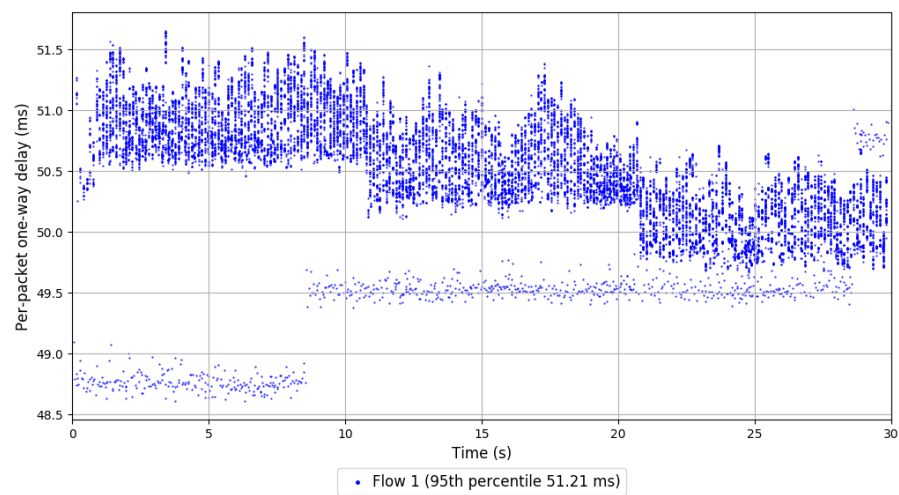
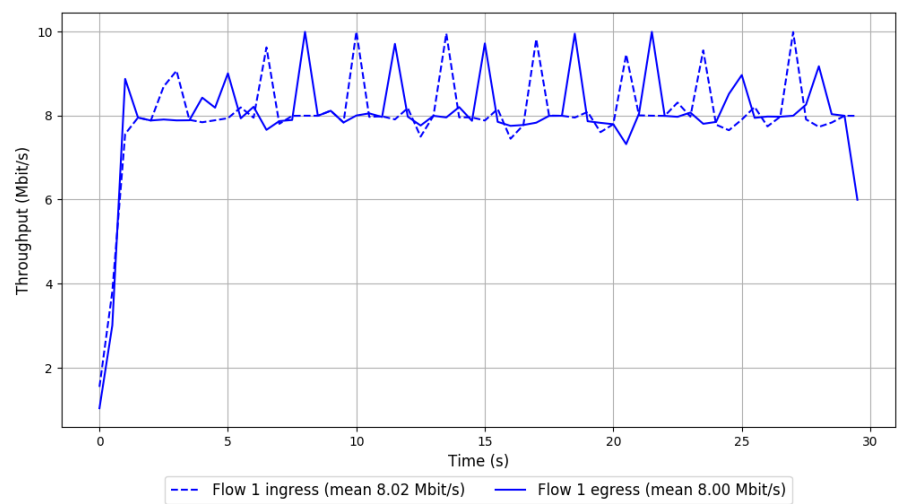
-- Flow 1:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 51.209 ms

Loss rate: 0.46%

Run 10: Report of Sprout — Data Link

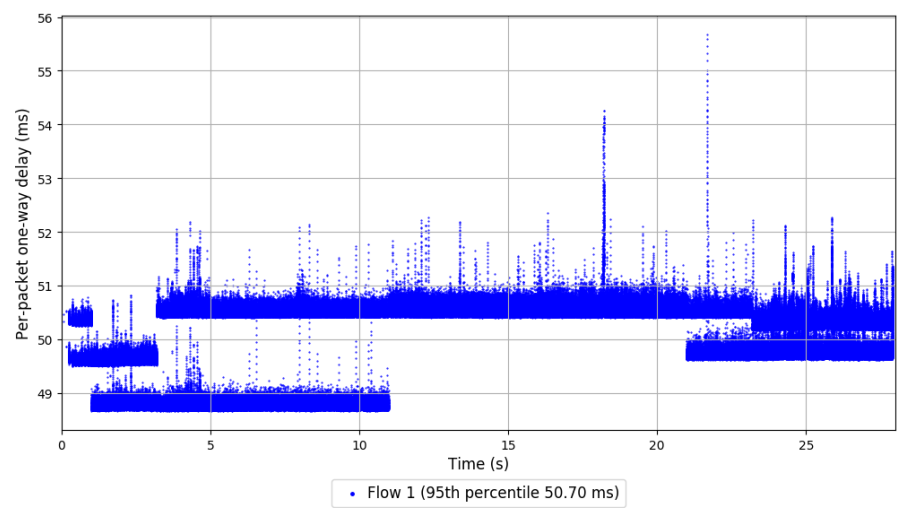
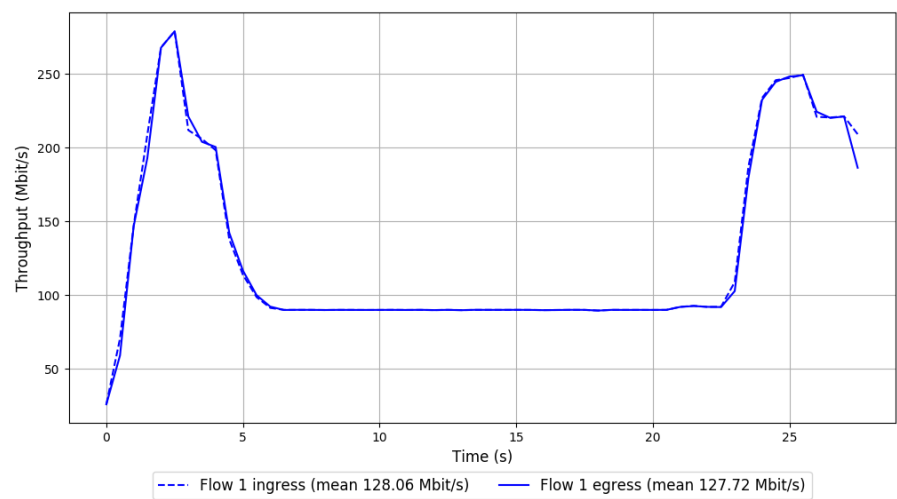


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-20 01:11:55
End at: 2017-12-20 01:12:25

# Below is generated by plot.py at 2017-12-20 05:32:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 127.72 Mbit/s
95th percentile per-packet one-way delay: 50.700 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 127.72 Mbit/s
95th percentile per-packet one-way delay: 50.700 ms
Loss rate: 0.62%
```


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

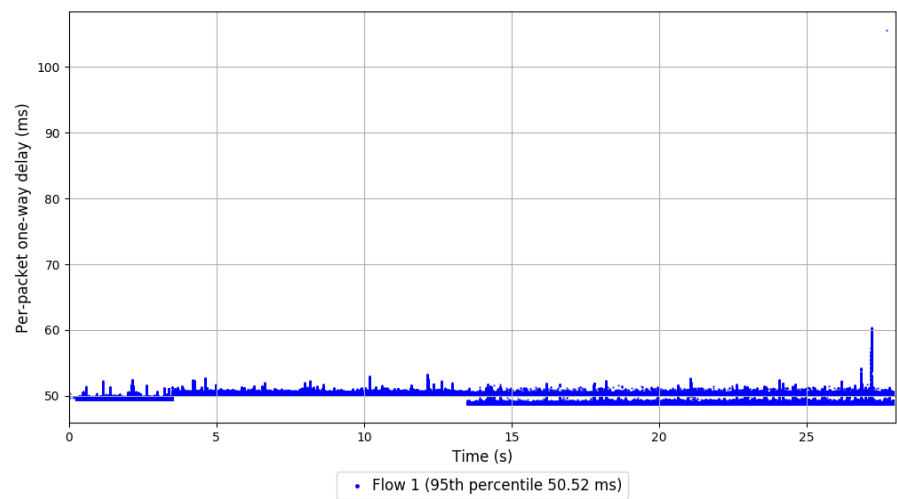
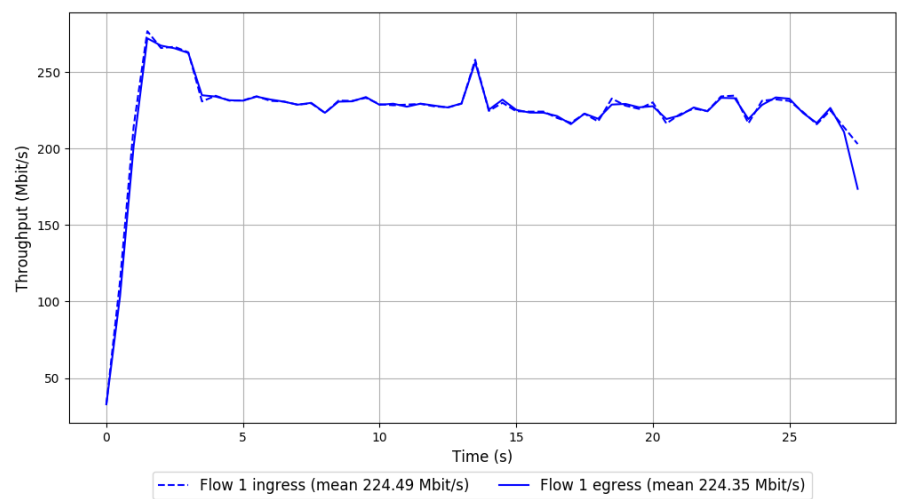


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-20 01:23:34
End at: 2017-12-20 01:24:04

# Below is generated by plot.py at 2017-12-20 05:32:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.35 Mbit/s
95th percentile per-packet one-way delay: 50.523 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 224.35 Mbit/s
95th percentile per-packet one-way delay: 50.523 ms
Loss rate: 0.42%
```

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

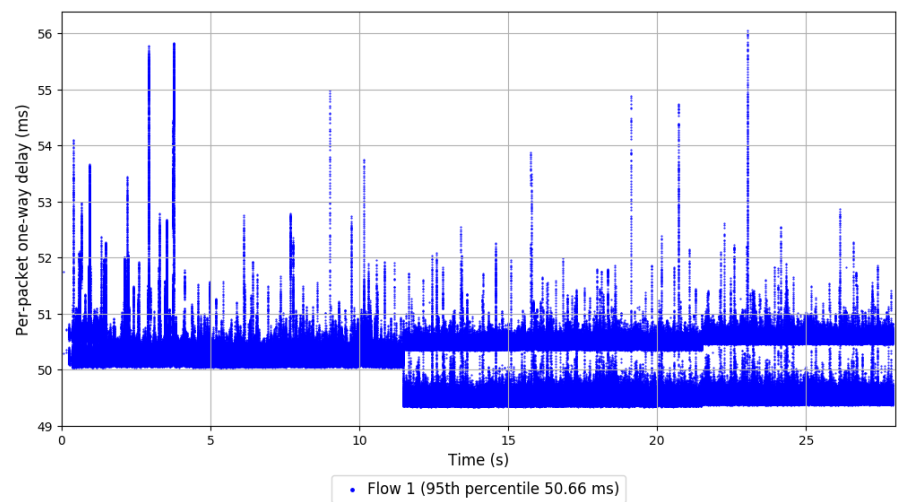
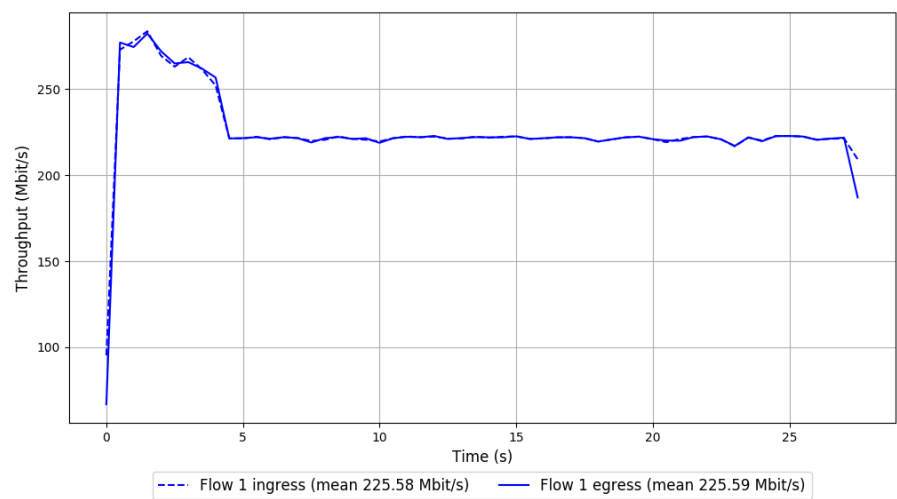


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-20 01:35:16
End at: 2017-12-20 01:35:46

# Below is generated by plot.py at 2017-12-20 05:32:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.59 Mbit/s
95th percentile per-packet one-way delay: 50.659 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 225.59 Mbit/s
95th percentile per-packet one-way delay: 50.659 ms
Loss rate: 0.35%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-20 01:46:55

End at: 2017-12-20 01:47:25

Below is generated by plot.py at 2017-12-20 05:32:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 252.03 Mbit/s

95th percentile per-packet one-way delay: 51.552 ms

Loss rate: 0.32%

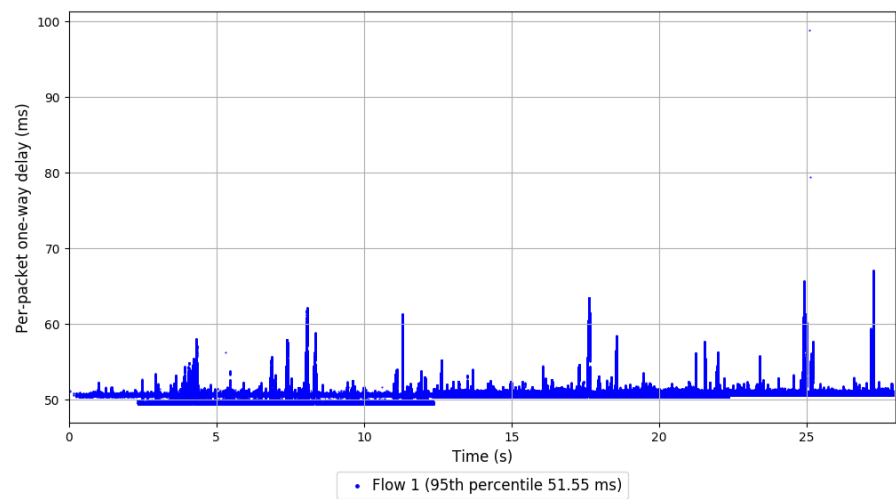
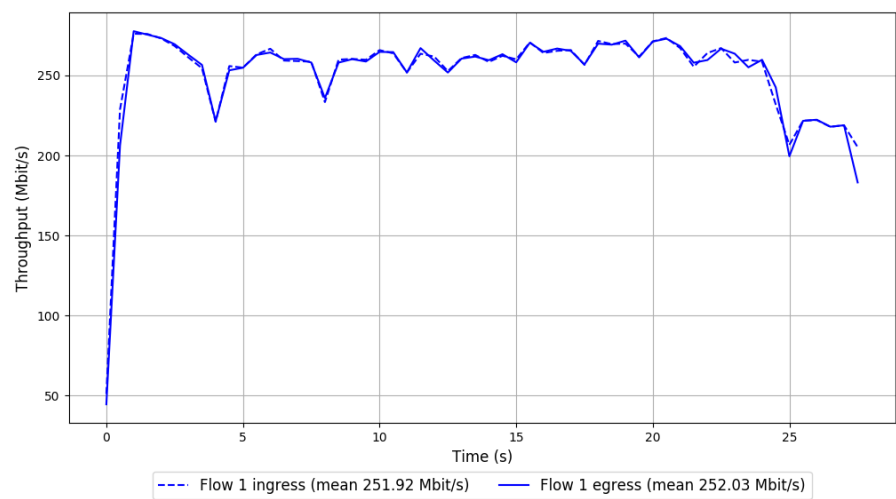
-- Flow 1:

Average throughput: 252.03 Mbit/s

95th percentile per-packet one-way delay: 51.552 ms

Loss rate: 0.32%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-20 01:58:43

End at: 2017-12-20 01:59:13

Below is generated by plot.py at 2017-12-20 05:32:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 255.46 Mbit/s

95th percentile per-packet one-way delay: 50.838 ms

Loss rate: 0.36%

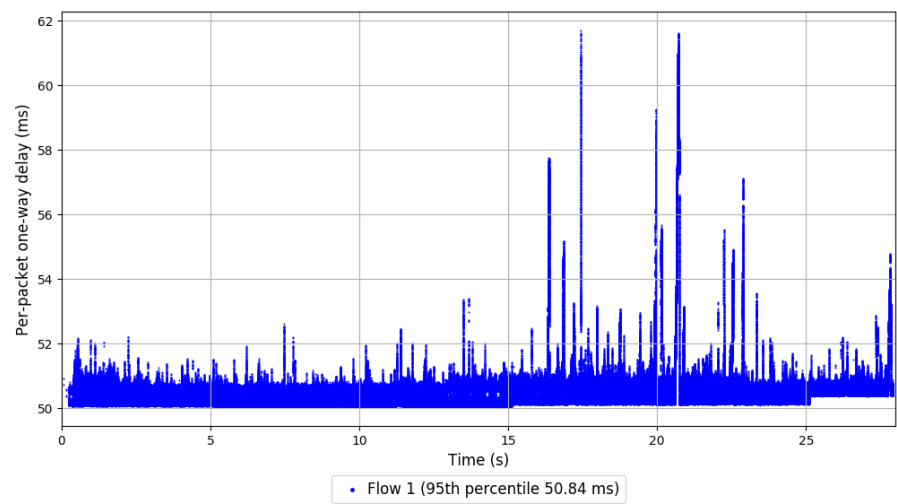
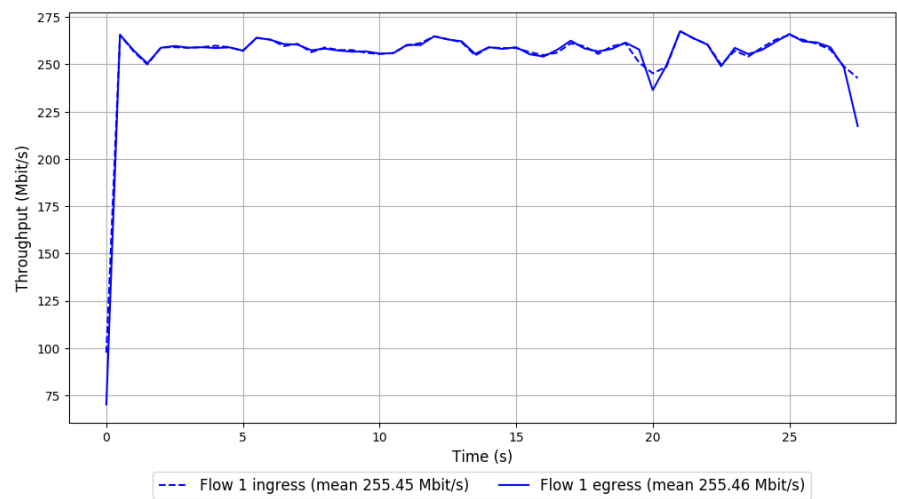
-- Flow 1:

Average throughput: 255.46 Mbit/s

95th percentile per-packet one-way delay: 50.838 ms

Loss rate: 0.36%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-20 02:10:29

End at: 2017-12-20 02:10:59

Below is generated by plot.py at 2017-12-20 05:32:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 243.25 Mbit/s

95th percentile per-packet one-way delay: 50.476 ms

Loss rate: 0.39%

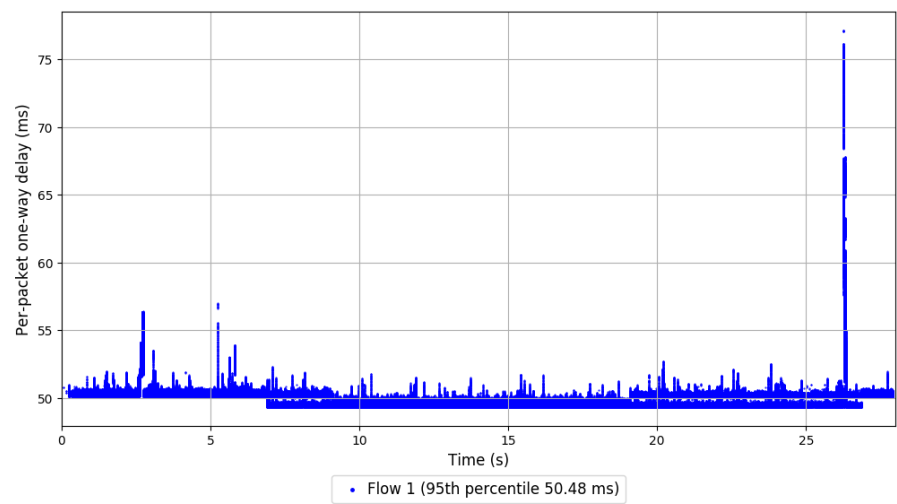
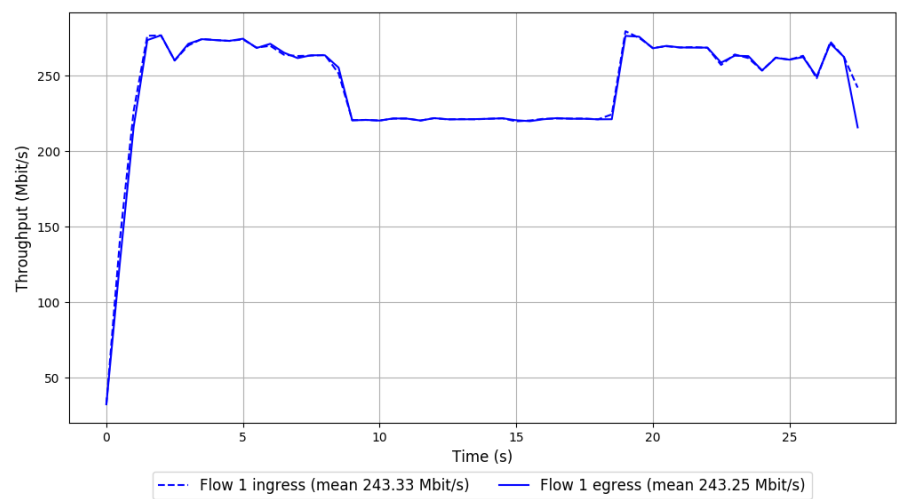
-- Flow 1:

Average throughput: 243.25 Mbit/s

95th percentile per-packet one-way delay: 50.476 ms

Loss rate: 0.39%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-20 02:22:13

End at: 2017-12-20 02:22:44

Below is generated by plot.py at 2017-12-20 05:37:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 249.76 Mbit/s

95th percentile per-packet one-way delay: 50.892 ms

Loss rate: 0.38%

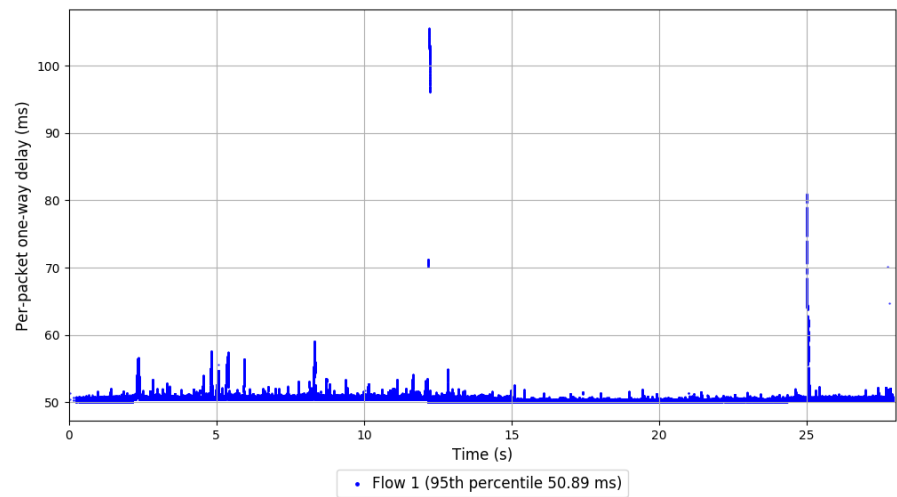
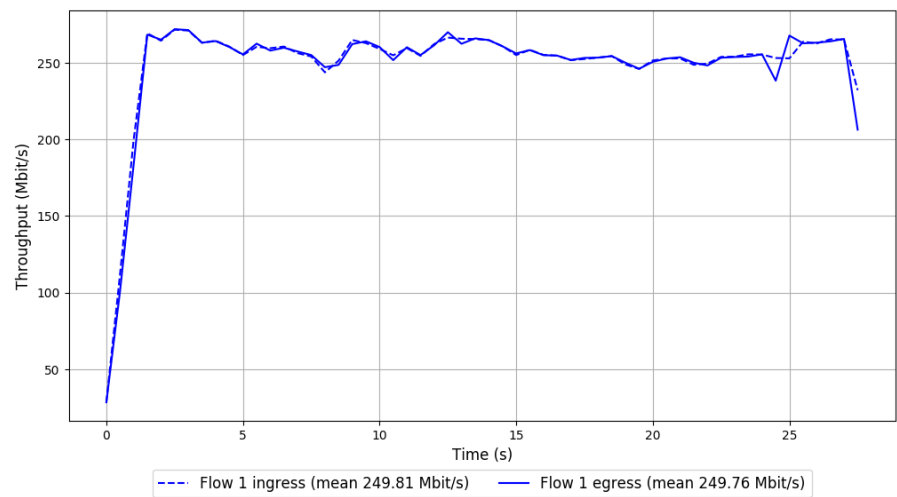
-- Flow 1:

Average throughput: 249.76 Mbit/s

95th percentile per-packet one-way delay: 50.892 ms

Loss rate: 0.38%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-20 02:34:00

End at: 2017-12-20 02:34:30

Below is generated by plot.py at 2017-12-20 05:38:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 227.47 Mbit/s

95th percentile per-packet one-way delay: 50.763 ms

Loss rate: 0.41%

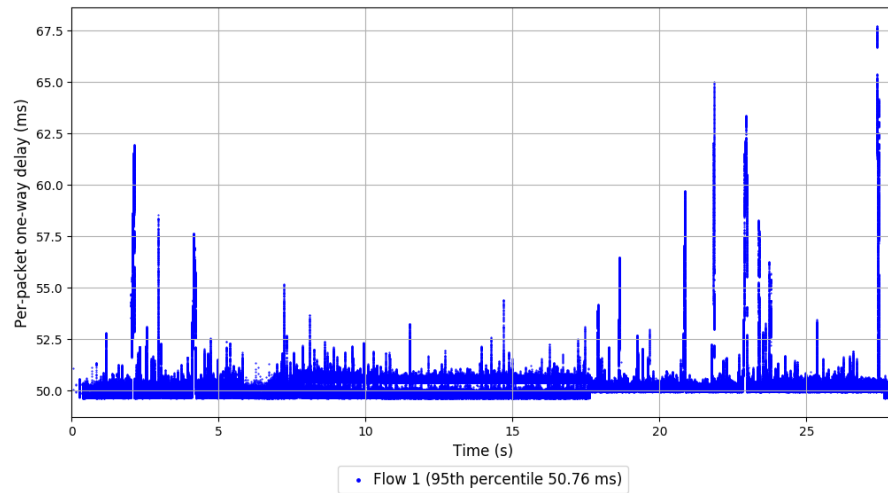
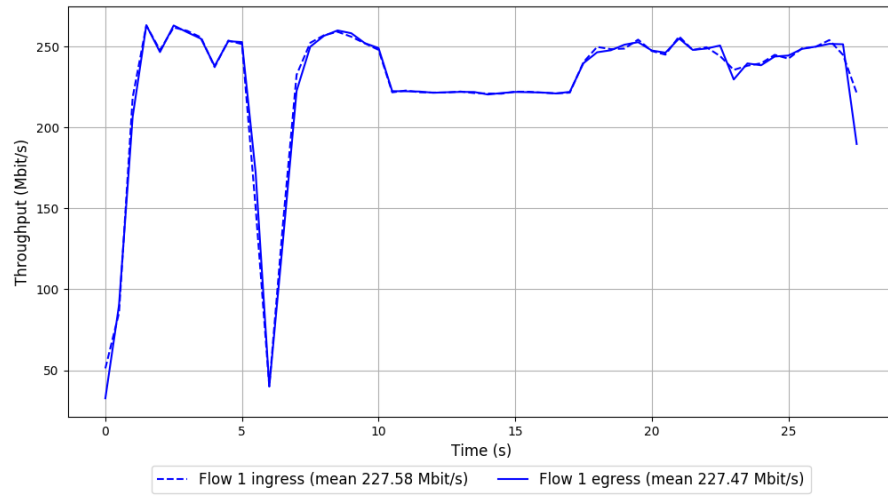
-- Flow 1:

Average throughput: 227.47 Mbit/s

95th percentile per-packet one-way delay: 50.763 ms

Loss rate: 0.41%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-20 02:45:48

End at: 2017-12-20 02:46:18

Below is generated by plot.py at 2017-12-20 05:38:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 229.57 Mbit/s

95th percentile per-packet one-way delay: 50.767 ms

Loss rate: 0.27%

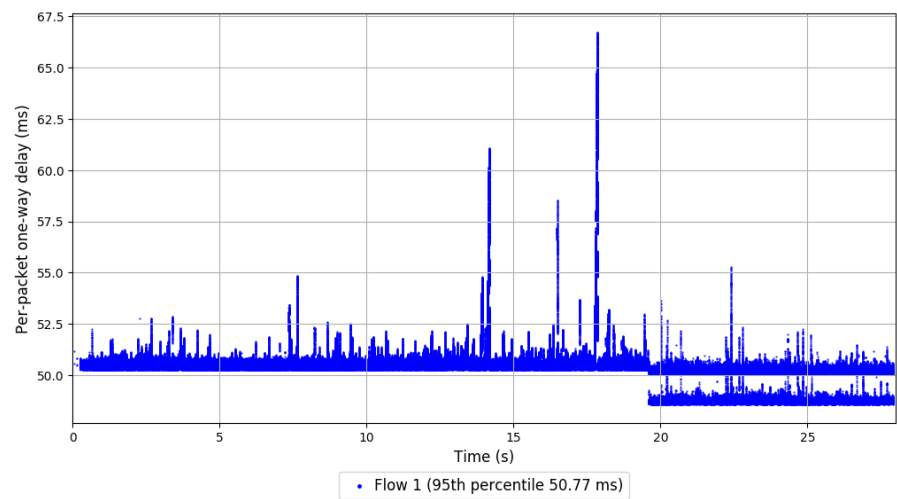
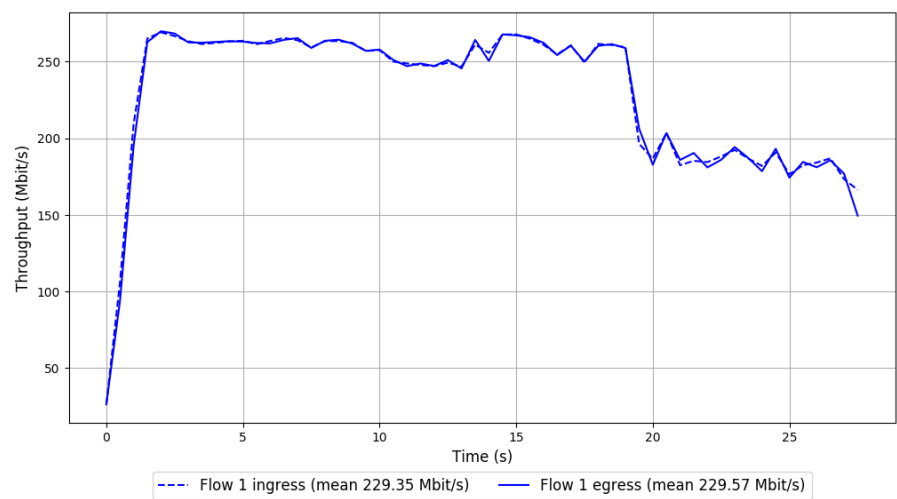
-- Flow 1:

Average throughput: 229.57 Mbit/s

95th percentile per-packet one-way delay: 50.767 ms

Loss rate: 0.27%

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

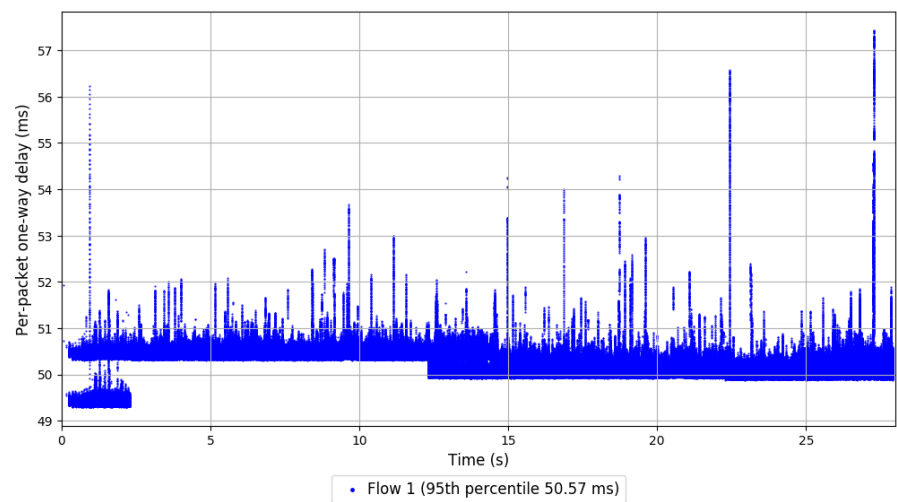
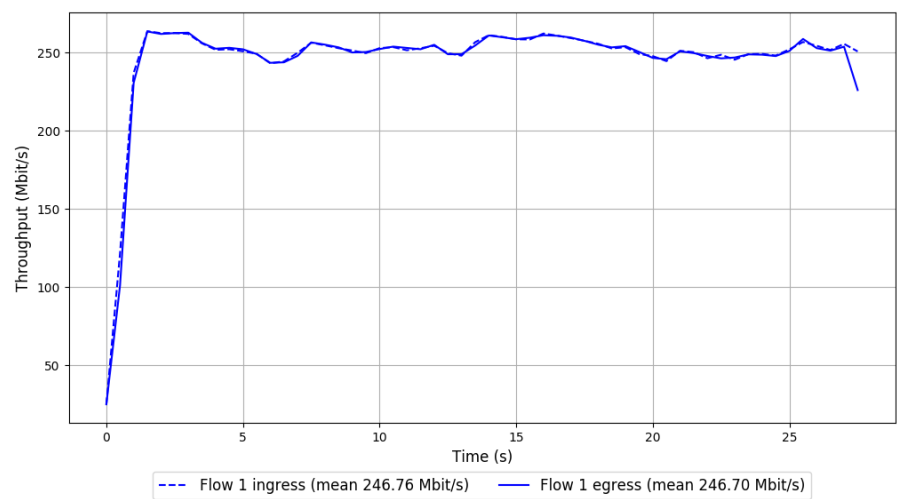


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-20 02:57:33
End at: 2017-12-20 02:58:03

# Below is generated by plot.py at 2017-12-20 05:39:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 246.70 Mbit/s
95th percentile per-packet one-way delay: 50.573 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 246.70 Mbit/s
95th percentile per-packet one-way delay: 50.573 ms
Loss rate: 0.38%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-20 01:08:45

End at: 2017-12-20 01:09:15

Below is generated by plot.py at 2017-12-20 05:39:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.63 Mbit/s

95th percentile per-packet one-way delay: 51.246 ms

Loss rate: 0.51%

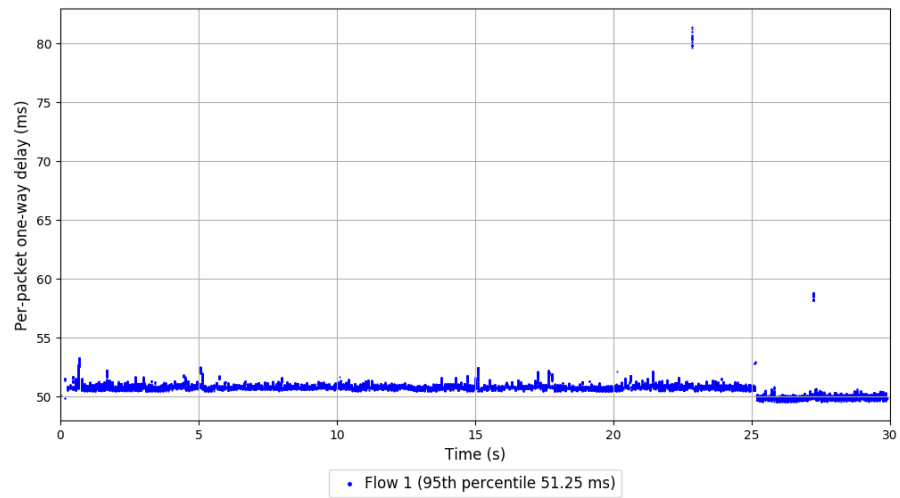
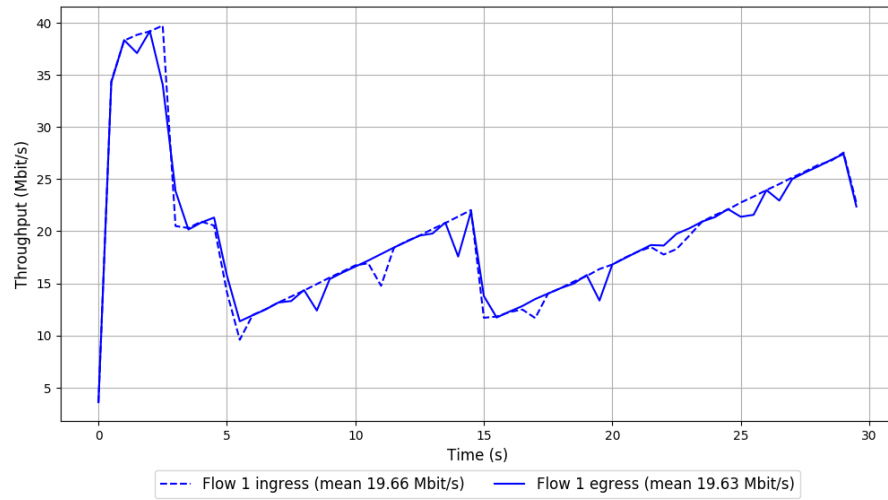
-- Flow 1:

Average throughput: 19.63 Mbit/s

95th percentile per-packet one-way delay: 51.246 ms

Loss rate: 0.51%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-20 01:20:23

End at: 2017-12-20 01:20:53

Below is generated by plot.py at 2017-12-20 05:39:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.91 Mbit/s

95th percentile per-packet one-way delay: 52.115 ms

Loss rate: 0.80%

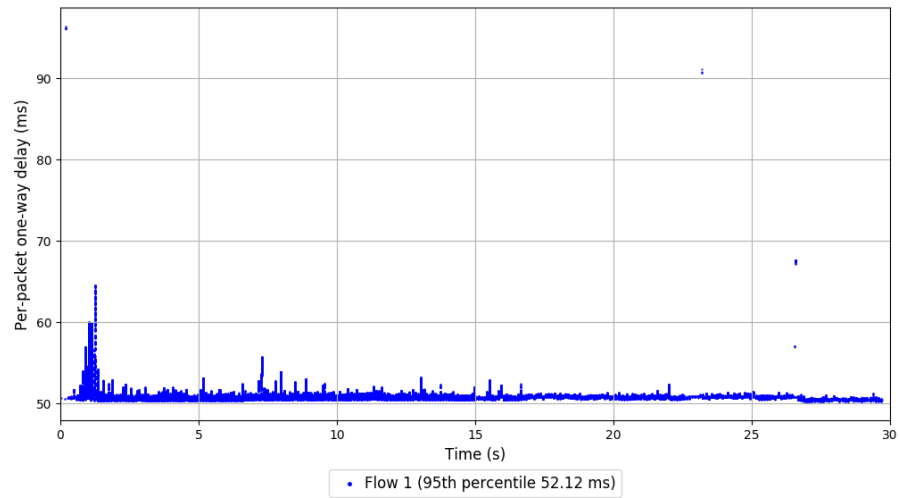
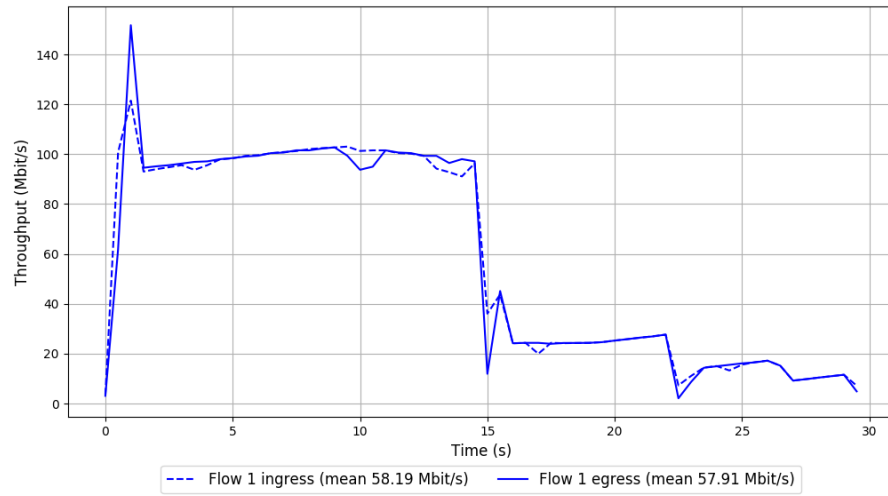
-- Flow 1:

Average throughput: 57.91 Mbit/s

95th percentile per-packet one-way delay: 52.115 ms

Loss rate: 0.80%

Run 2: Report of TCP Vegas — Data Link

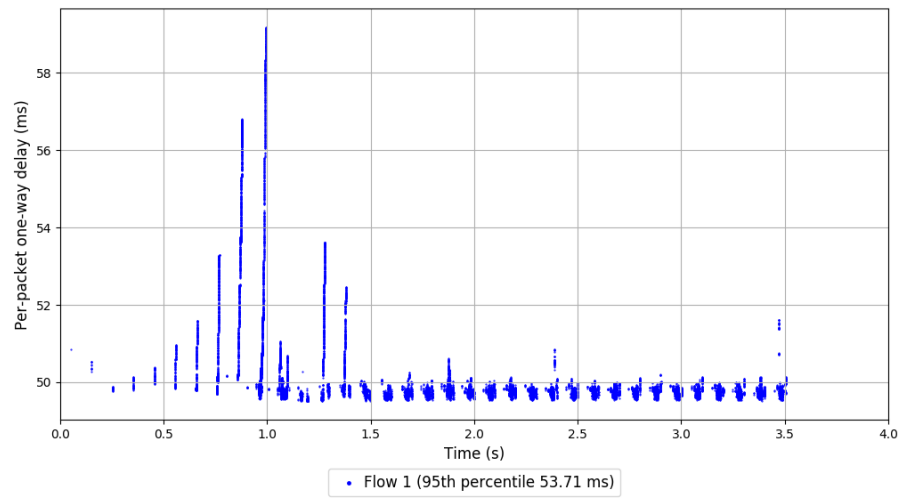
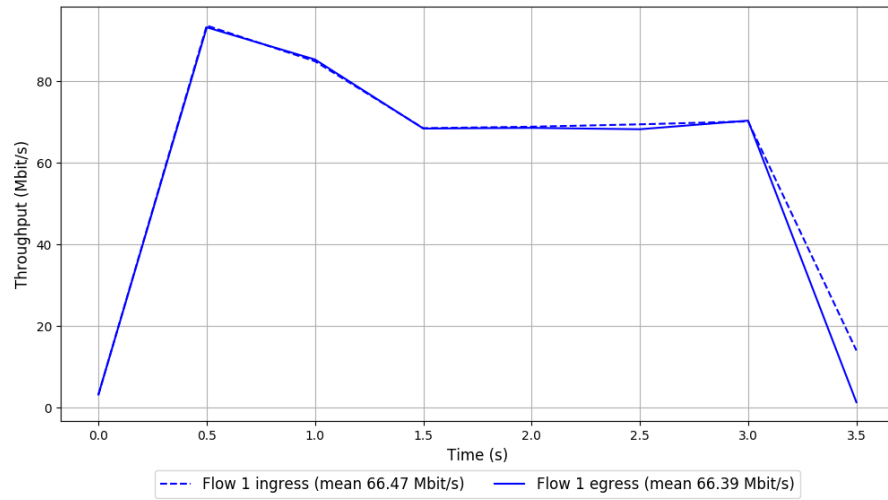


Run 3: Statistics of TCP Vegas

Start at: 2017-12-20 01:32:08

End at: 2017-12-20 01:32:38

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-20 01:43:45

End at: 2017-12-20 01:44:15

Below is generated by plot.py at 2017-12-20 05:39:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.81 Mbit/s

95th percentile per-packet one-way delay: 51.074 ms

Loss rate: 0.68%

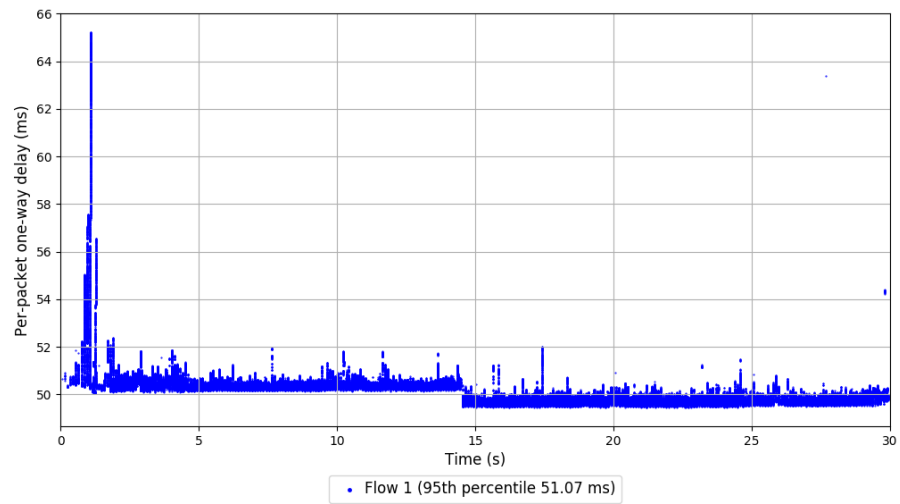
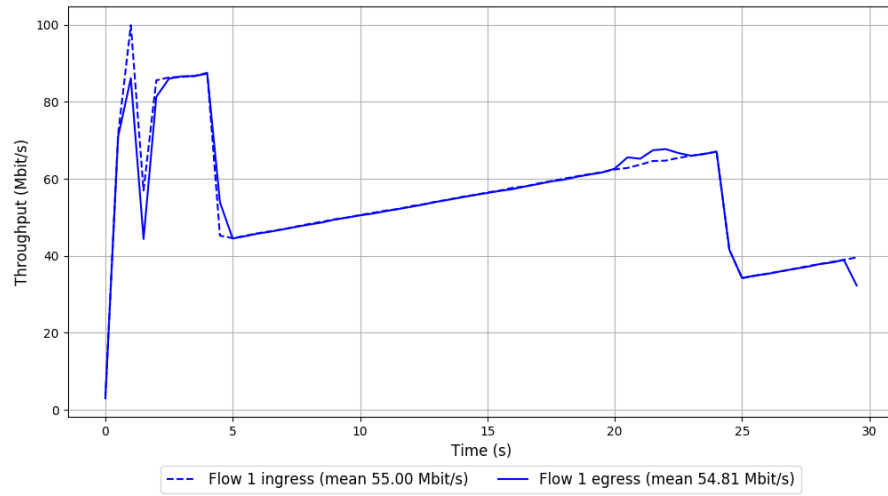
-- Flow 1:

Average throughput: 54.81 Mbit/s

95th percentile per-packet one-way delay: 51.074 ms

Loss rate: 0.68%

Run 4: Report of TCP Vegas — Data Link

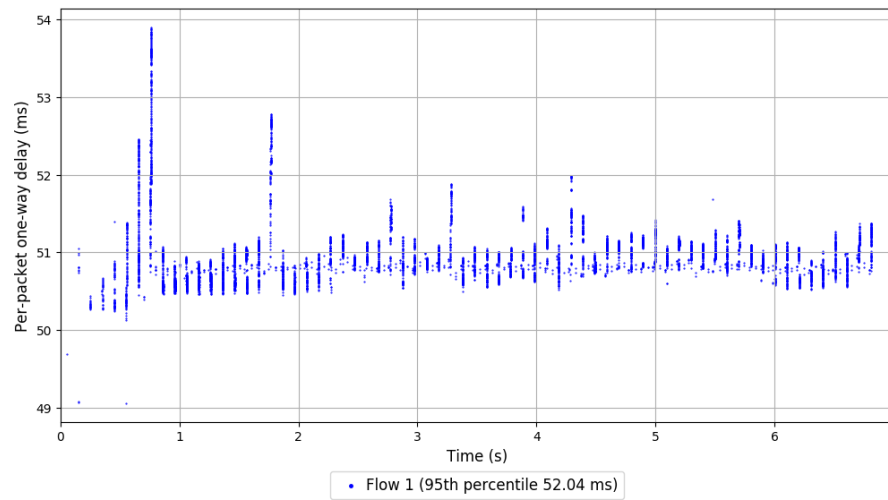
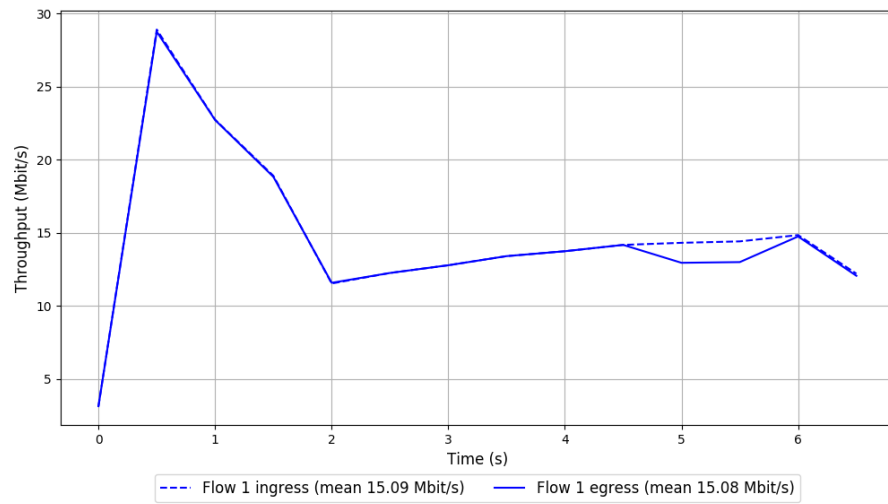


Run 5: Statistics of TCP Vegas

Start at: 2017-12-20 01:55:36

End at: 2017-12-20 01:56:06

Run 5: Report of TCP Vegas — Data Link

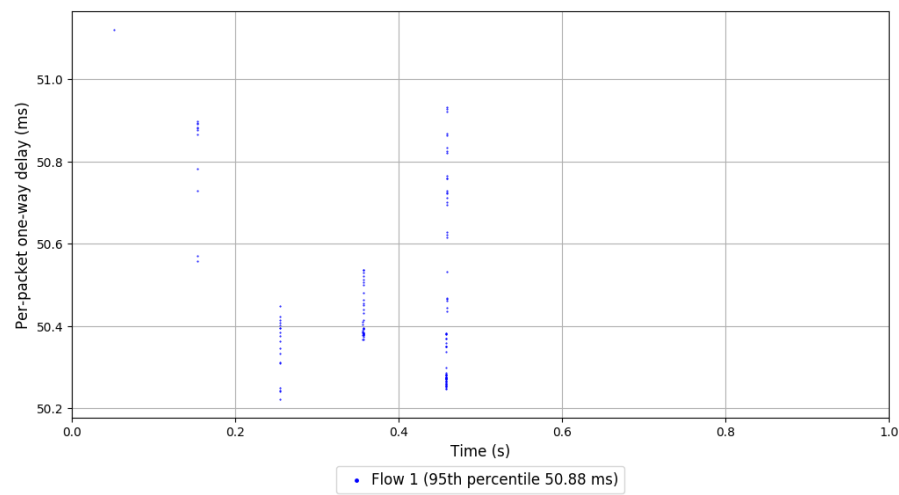
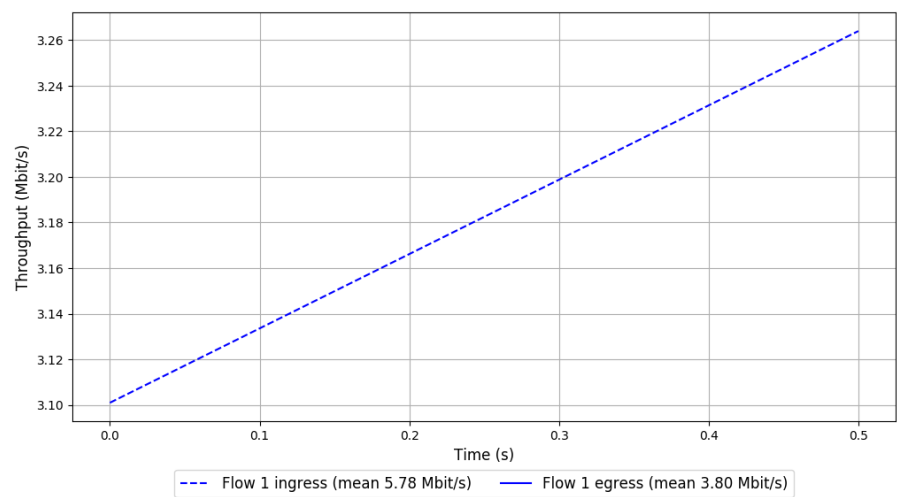


Run 6: Statistics of TCP Vegas

Start at: 2017-12-20 02:07:22

End at: 2017-12-20 02:07:52

Run 6: Report of TCP Vegas — Data Link

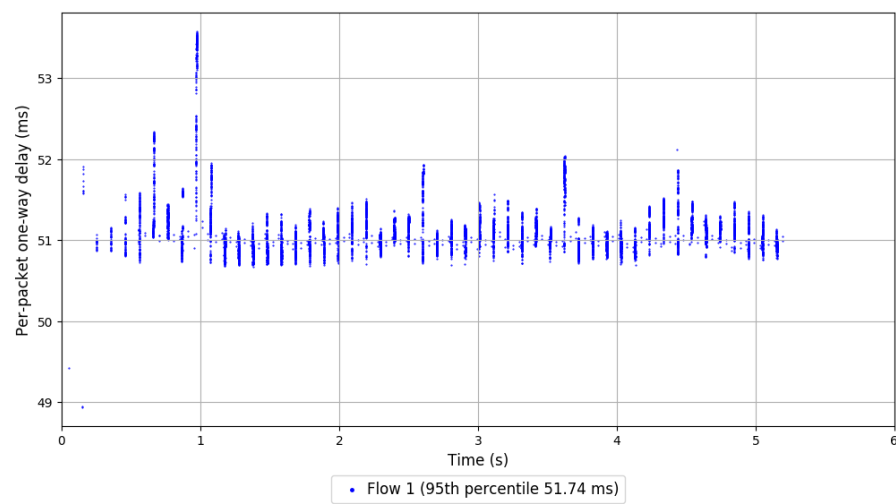
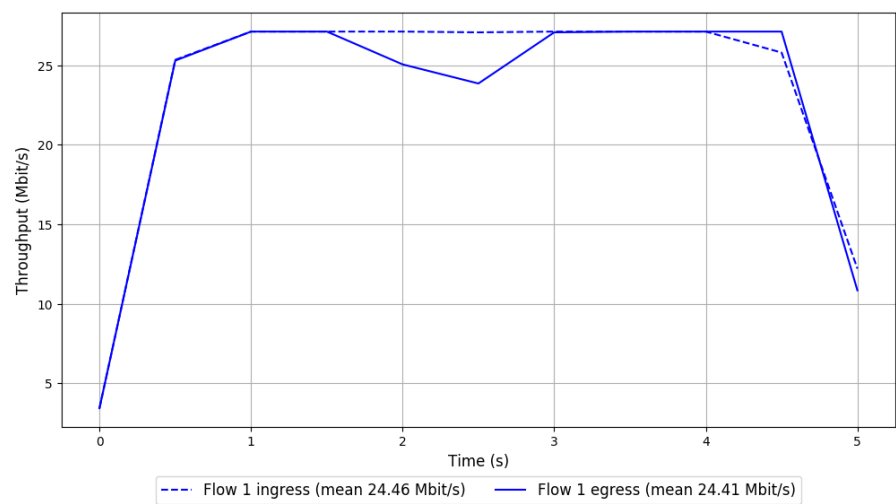


Run 7: Statistics of TCP Vegas

Start at: 2017-12-20 02:19:05

End at: 2017-12-20 02:19:36

Run 7: Report of TCP Vegas — Data Link

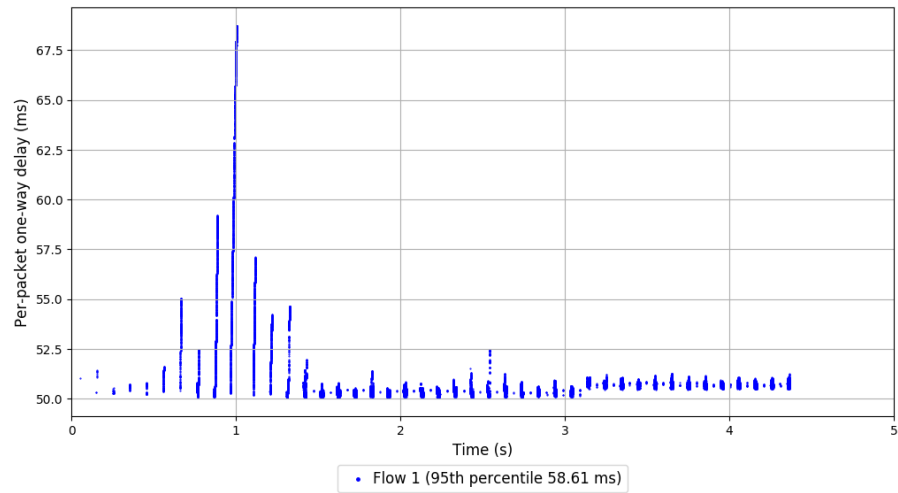
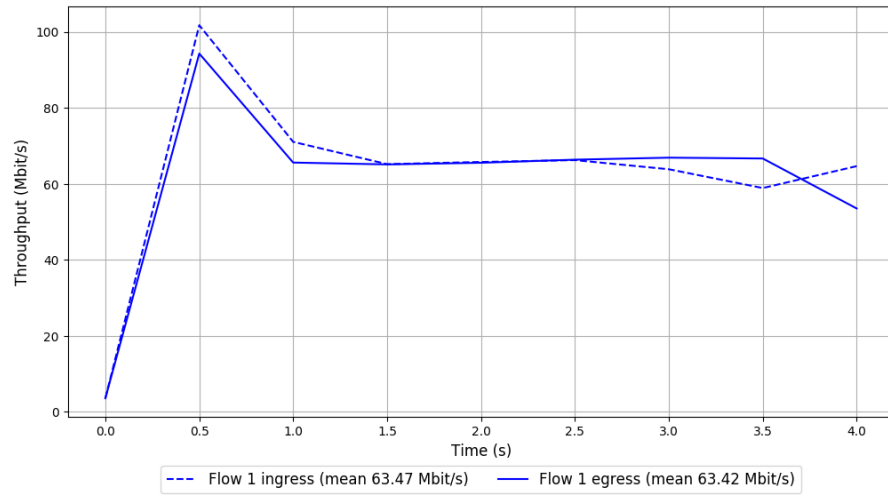


Run 8: Statistics of TCP Vegas

Start at: 2017-12-20 02:30:51

End at: 2017-12-20 02:31:21

Run 8: Report of TCP Vegas — Data Link

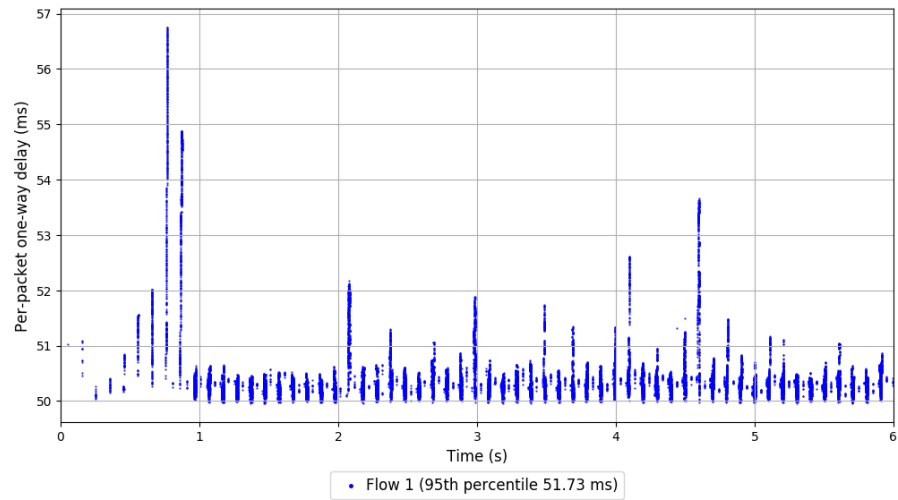
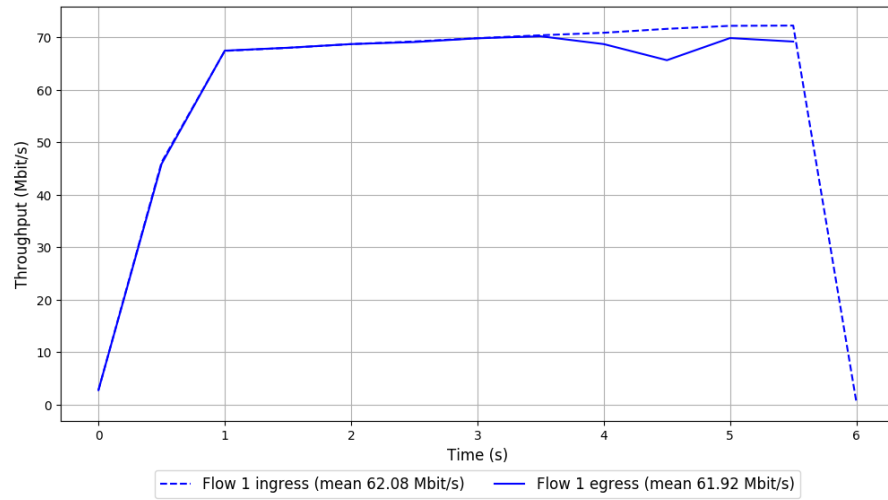


Run 9: Statistics of TCP Vegas

Start at: 2017-12-20 02:42:39

End at: 2017-12-20 02:43:09

Run 9: Report of TCP Vegas — Data Link

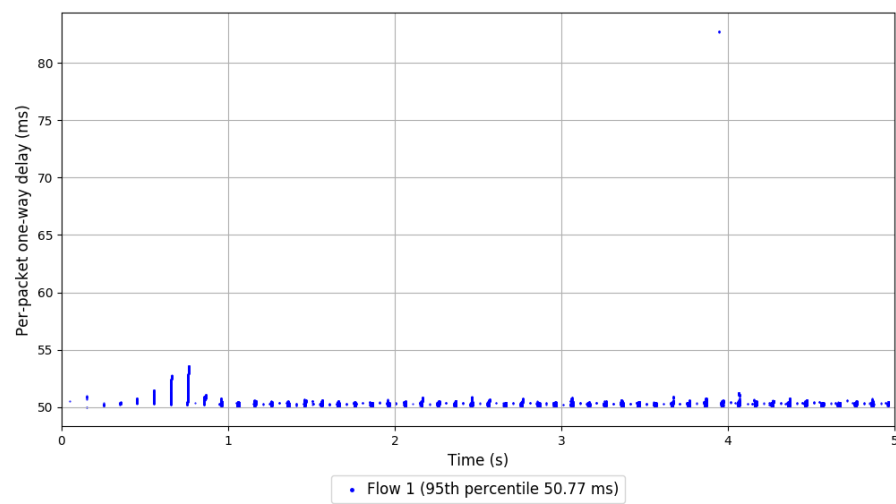
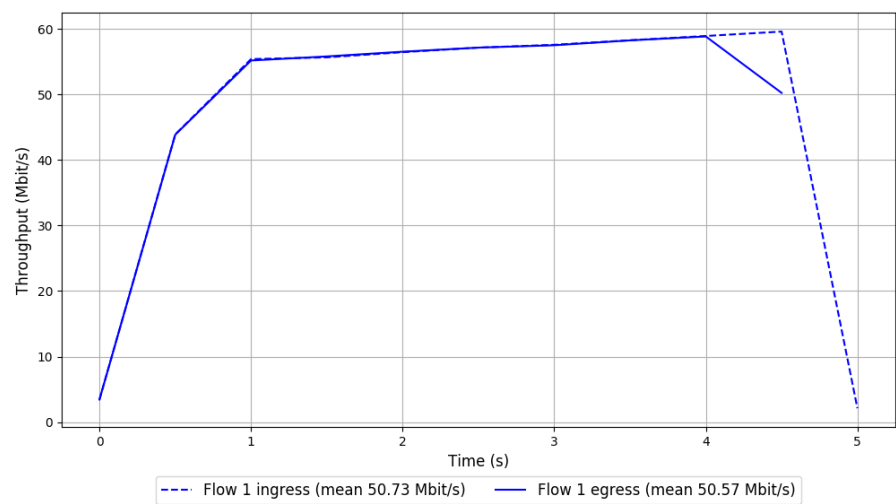


Run 10: Statistics of TCP Vegas

Start at: 2017-12-20 02:54:25

End at: 2017-12-20 02:54:55

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-20 01:15:19

End at: 2017-12-20 01:15:49

Below is generated by plot.py at 2017-12-20 05:39:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 302.93 Mbit/s

95th percentile per-packet one-way delay: 165.195 ms

Loss rate: 0.29%

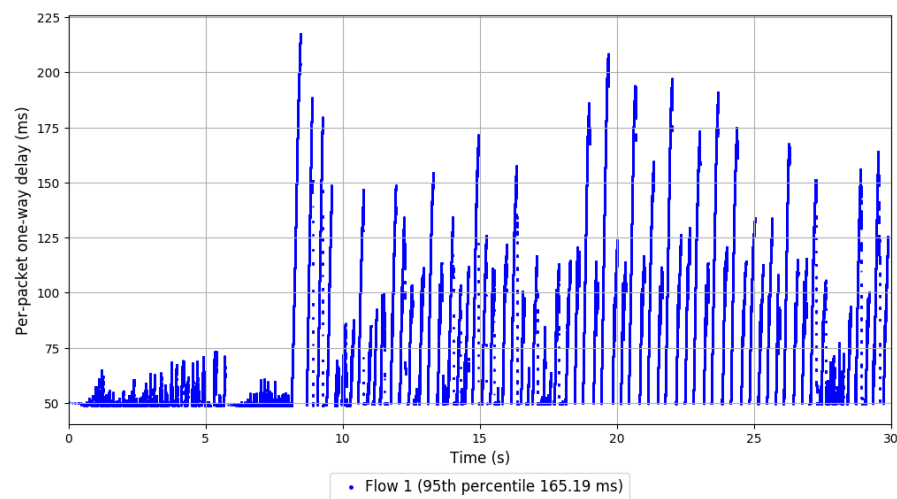
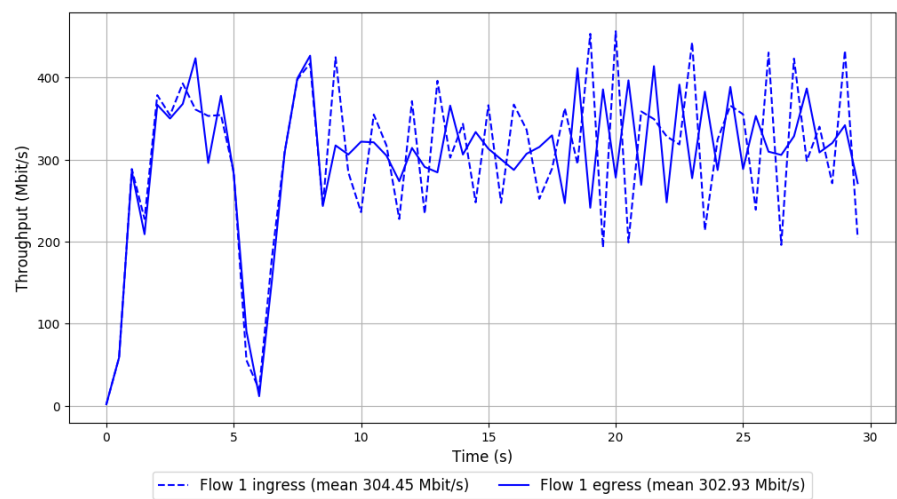
-- Flow 1:

Average throughput: 302.93 Mbit/s

95th percentile per-packet one-way delay: 165.195 ms

Loss rate: 0.29%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-20 01:27:05

End at: 2017-12-20 01:27:35

Below is generated by plot.py at 2017-12-20 05:39:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 272.32 Mbit/s

95th percentile per-packet one-way delay: 81.372 ms

Loss rate: 0.69%

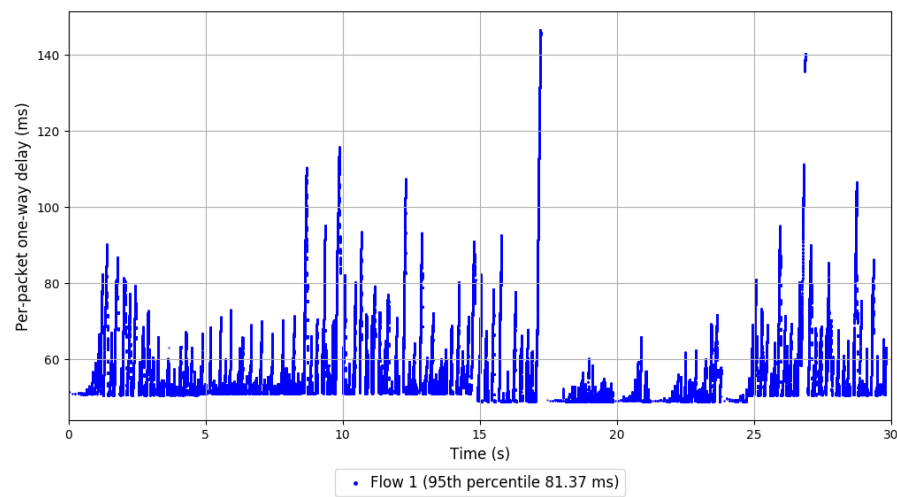
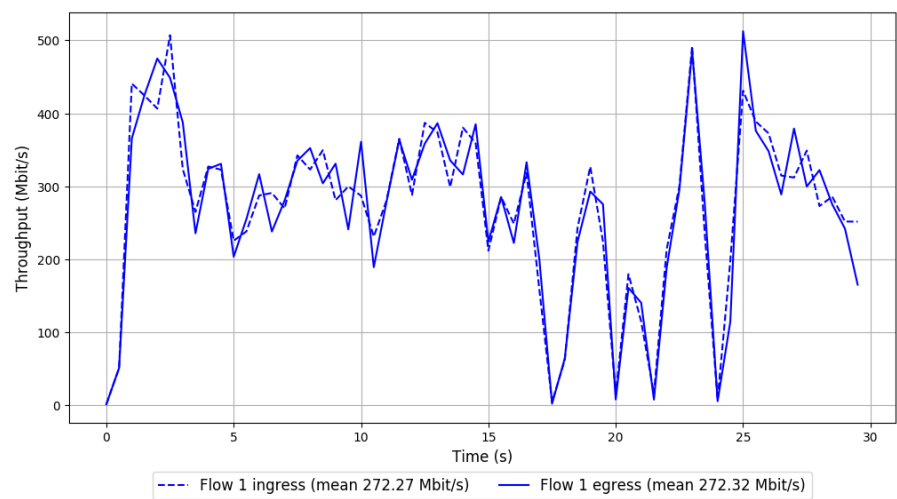
-- Flow 1:

Average throughput: 272.32 Mbit/s

95th percentile per-packet one-way delay: 81.372 ms

Loss rate: 0.69%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-20 01:38:49

End at: 2017-12-20 01:39:19

Below is generated by plot.py at 2017-12-20 05:39:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 275.66 Mbit/s

95th percentile per-packet one-way delay: 157.950 ms

Loss rate: 0.67%

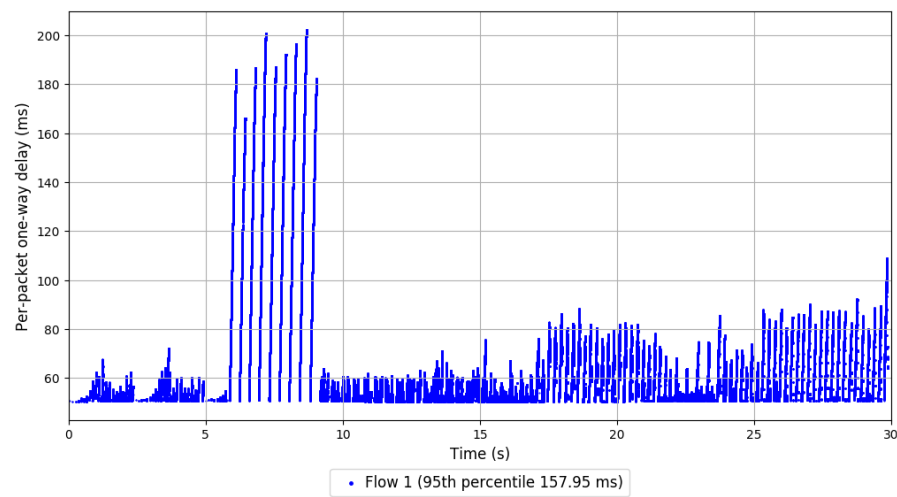
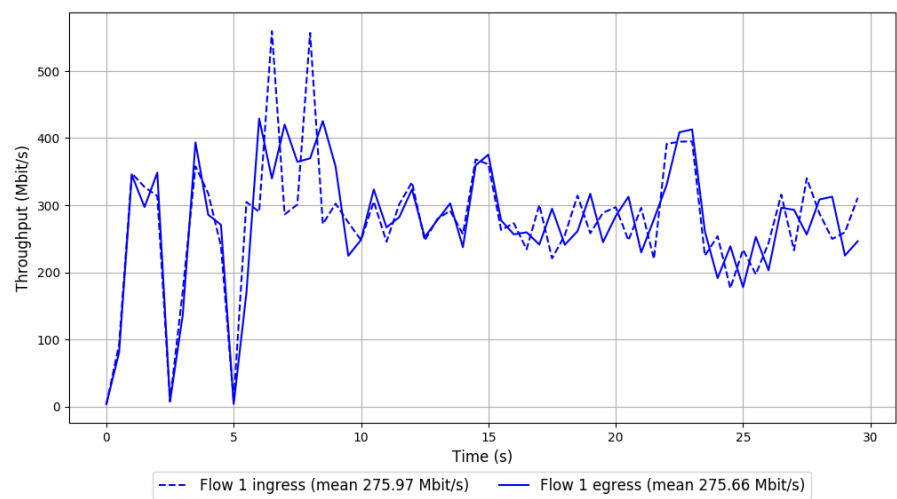
-- Flow 1:

Average throughput: 275.66 Mbit/s

95th percentile per-packet one-way delay: 157.950 ms

Loss rate: 0.67%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-20 01:50:31

End at: 2017-12-20 01:51:01

Below is generated by plot.py at 2017-12-20 05:39:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 277.32 Mbit/s

95th percentile per-packet one-way delay: 131.010 ms

Loss rate: 0.34%

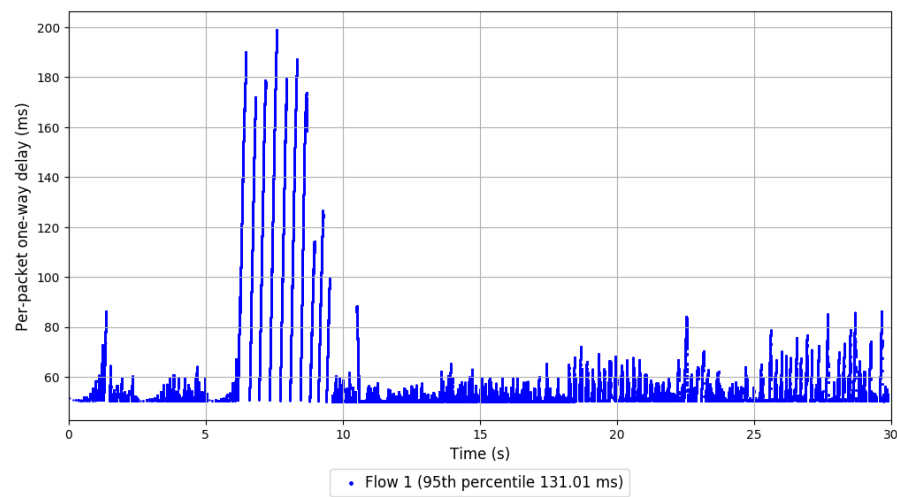
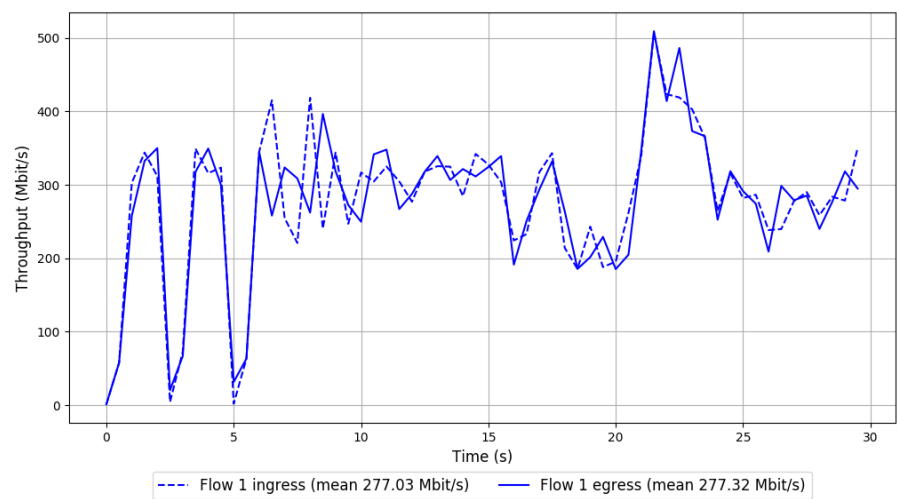
-- Flow 1:

Average throughput: 277.32 Mbit/s

95th percentile per-packet one-way delay: 131.010 ms

Loss rate: 0.34%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-20 02:02:21

End at: 2017-12-20 02:02:51

Below is generated by plot.py at 2017-12-20 05:42:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 289.98 Mbit/s

95th percentile per-packet one-way delay: 85.632 ms

Loss rate: 1.22%

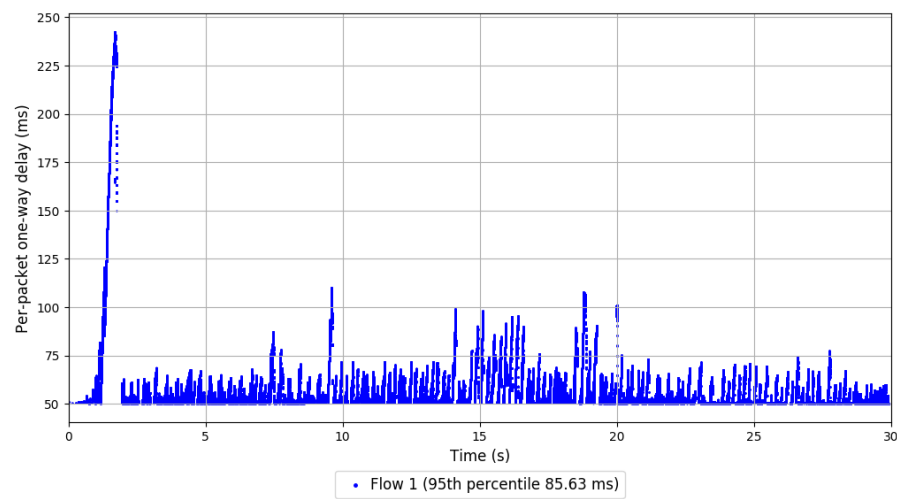
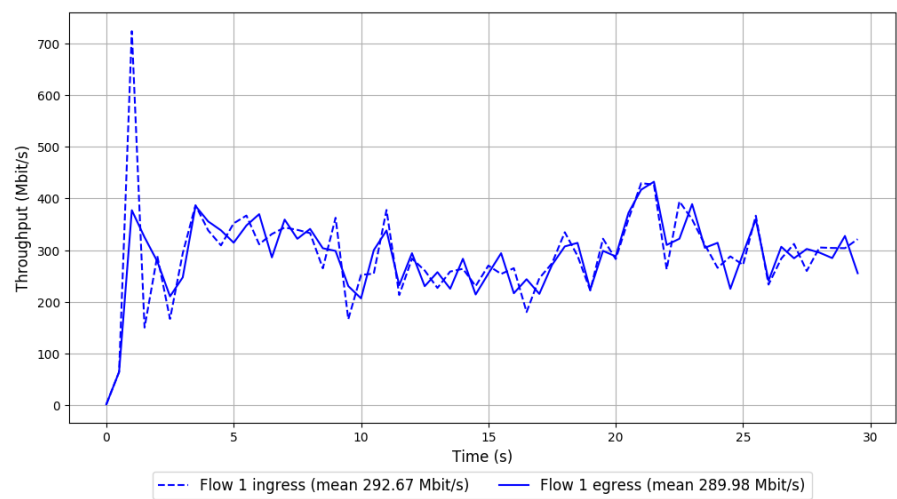
-- Flow 1:

Average throughput: 289.98 Mbit/s

95th percentile per-packet one-way delay: 85.632 ms

Loss rate: 1.22%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-20 02:14:03

End at: 2017-12-20 02:14:33

Below is generated by plot.py at 2017-12-20 05:42:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 276.78 Mbit/s

95th percentile per-packet one-way delay: 96.178 ms

Loss rate: 0.15%

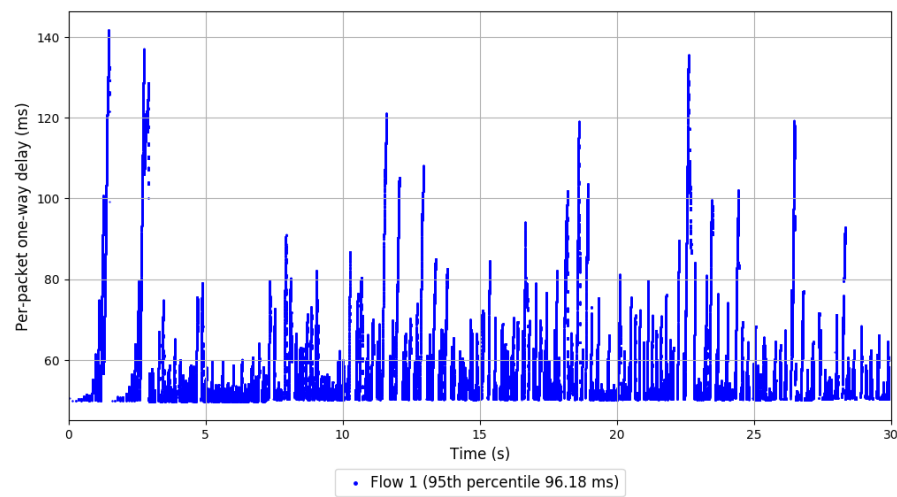
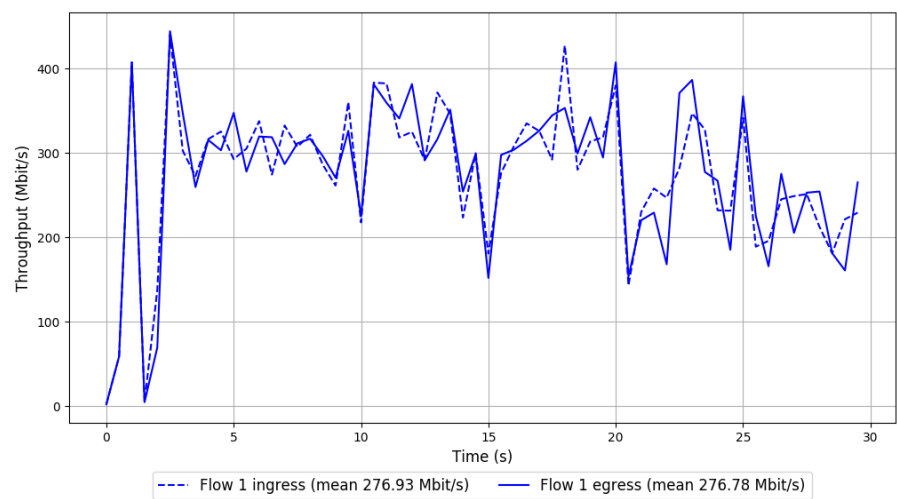
-- Flow 1:

Average throughput: 276.78 Mbit/s

95th percentile per-packet one-way delay: 96.178 ms

Loss rate: 0.15%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-20 02:25:50

End at: 2017-12-20 02:26:20

Below is generated by plot.py at 2017-12-20 05:42:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.48 Mbit/s

95th percentile per-packet one-way delay: 127.151 ms

Loss rate: 2.25%

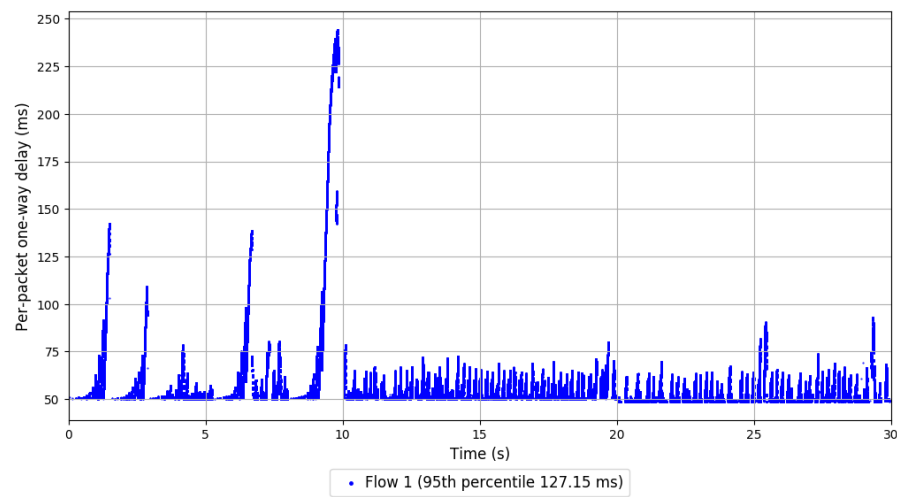
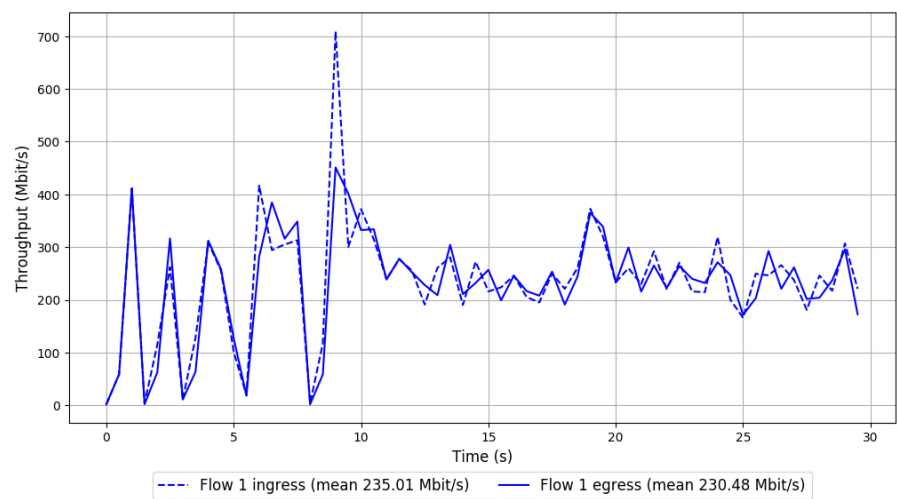
-- Flow 1:

Average throughput: 230.48 Mbit/s

95th percentile per-packet one-way delay: 127.151 ms

Loss rate: 2.25%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-20 02:37:33

End at: 2017-12-20 02:38:03

Below is generated by plot.py at 2017-12-20 05:43:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 319.94 Mbit/s

95th percentile per-packet one-way delay: 76.631 ms

Loss rate: 0.76%

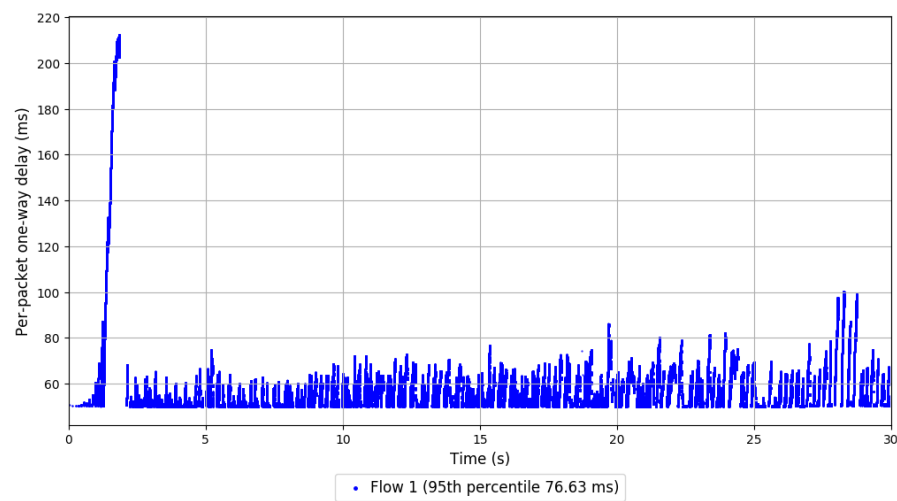
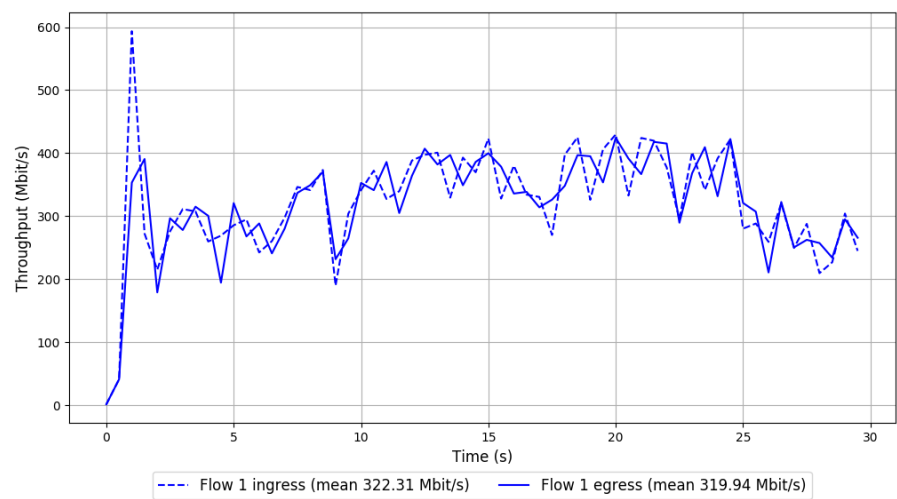
-- Flow 1:

Average throughput: 319.94 Mbit/s

95th percentile per-packet one-way delay: 76.631 ms

Loss rate: 0.76%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-20 02:49:21

End at: 2017-12-20 02:49:51

Below is generated by plot.py at 2017-12-20 05:43:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 274.08 Mbit/s

95th percentile per-packet one-way delay: 131.644 ms

Loss rate: 0.69%

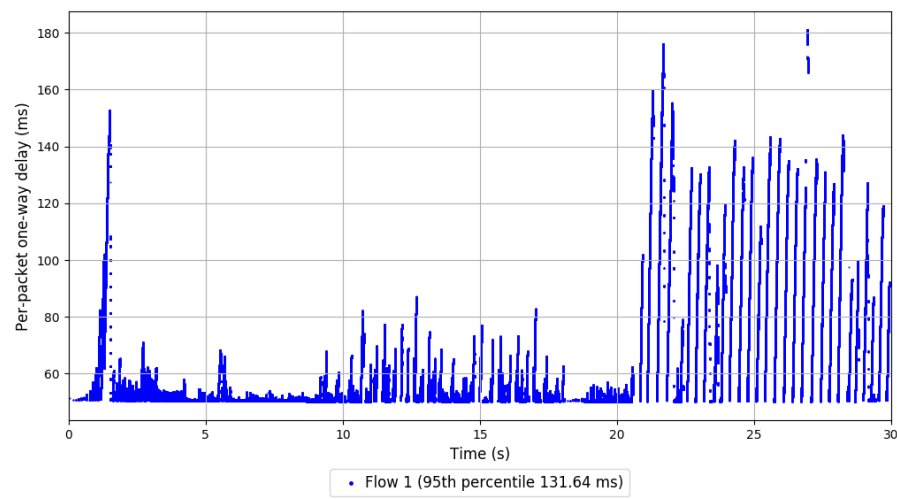
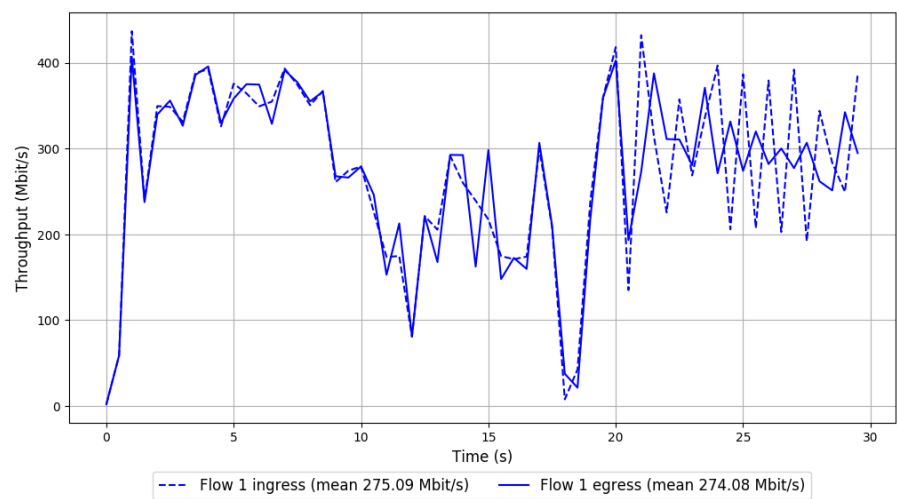
-- Flow 1:

Average throughput: 274.08 Mbit/s

95th percentile per-packet one-way delay: 131.644 ms

Loss rate: 0.69%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-20 03:01:08

End at: 2017-12-20 03:01:38

Below is generated by plot.py at 2017-12-20 05:43:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 297.66 Mbit/s

95th percentile per-packet one-way delay: 82.101 ms

Loss rate: 0.29%

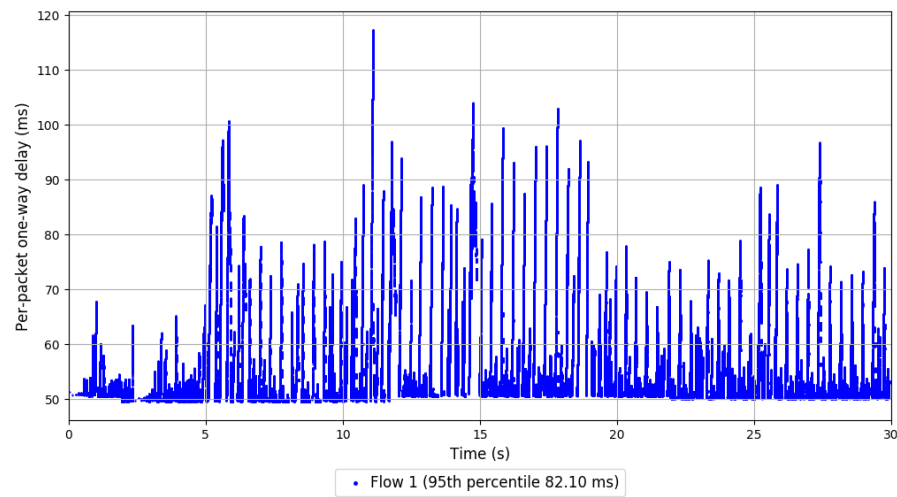
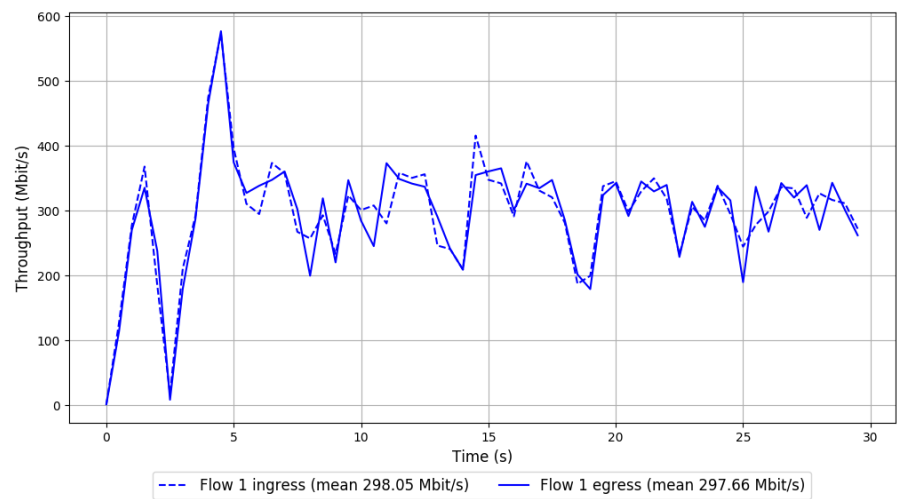
-- Flow 1:

Average throughput: 297.66 Mbit/s

95th percentile per-packet one-way delay: 82.101 ms

Loss rate: 0.29%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-20 01:08:02

End at: 2017-12-20 01:08:32

Below is generated by plot.py at 2017-12-20 05:43:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.47 Mbit/s

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

Loss rate: 0.14%

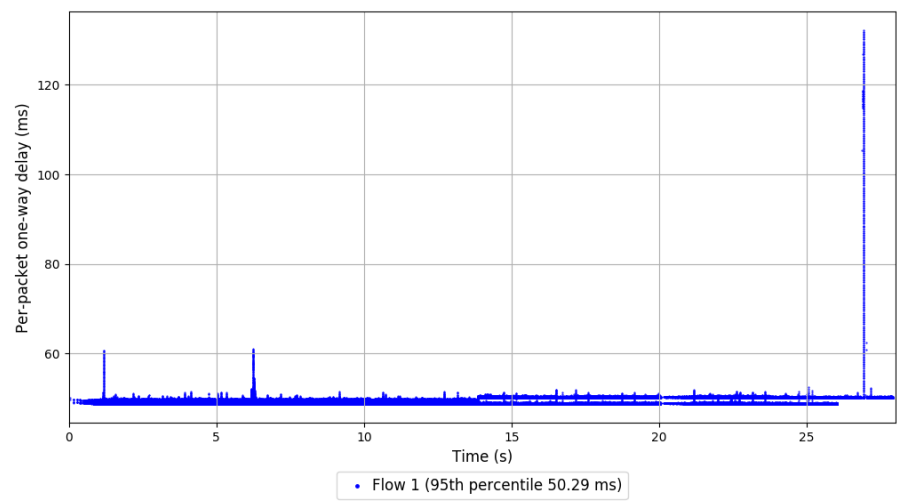
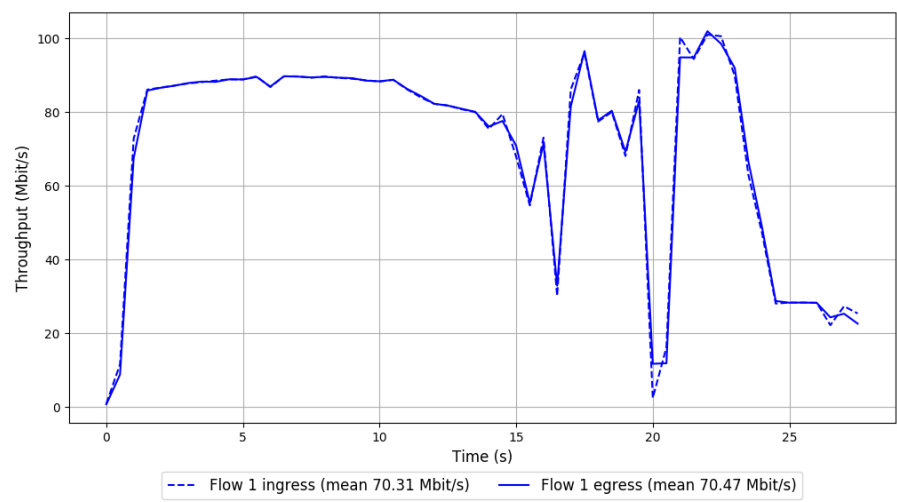
-- Flow 1:

Average throughput: 70.47 Mbit/s

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

Loss rate: 0.14%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-20 01:19:39

End at: 2017-12-20 01:20:09

Below is generated by plot.py at 2017-12-20 05:43:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.97 Mbit/s

95th percentile per-packet one-way delay: 50.887 ms

Loss rate: 0.32%

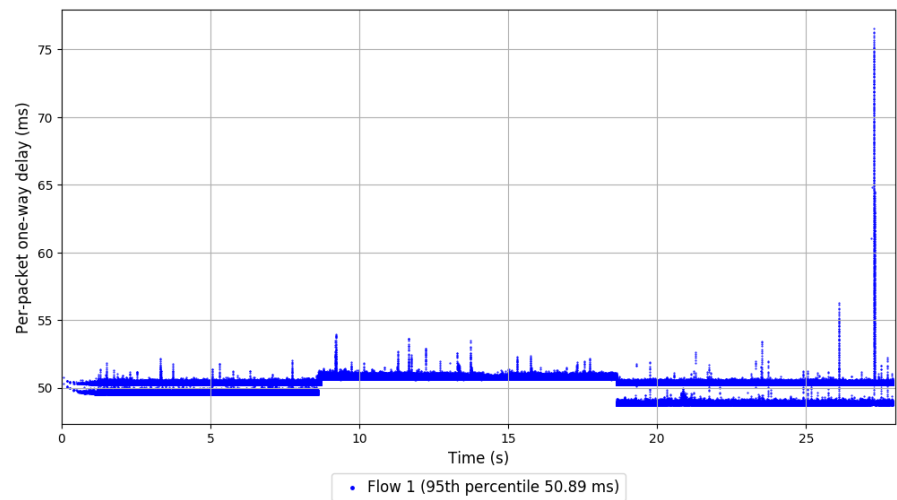
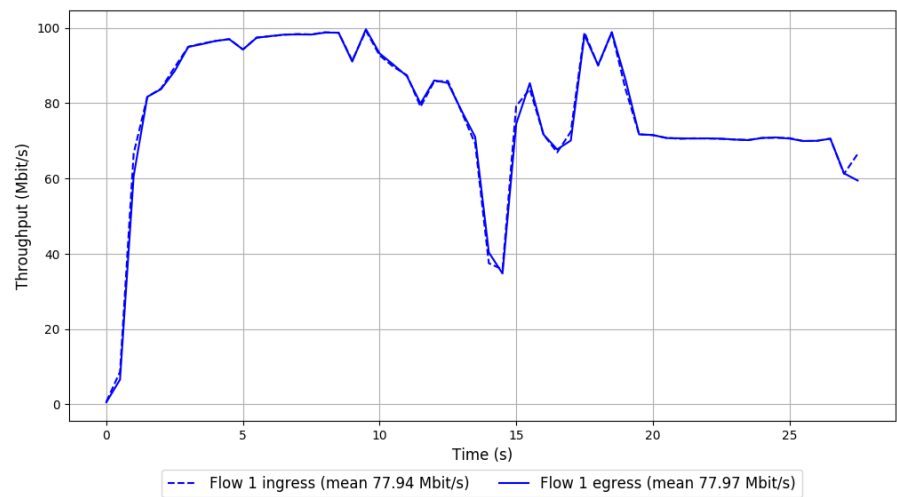
-- Flow 1:

Average throughput: 77.97 Mbit/s

95th percentile per-packet one-way delay: 50.887 ms

Loss rate: 0.32%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-20 01:31:24

End at: 2017-12-20 01:31:54

Below is generated by plot.py at 2017-12-20 05:43:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.01 Mbit/s

95th percentile per-packet one-way delay: 50.551 ms

Loss rate: 0.33%

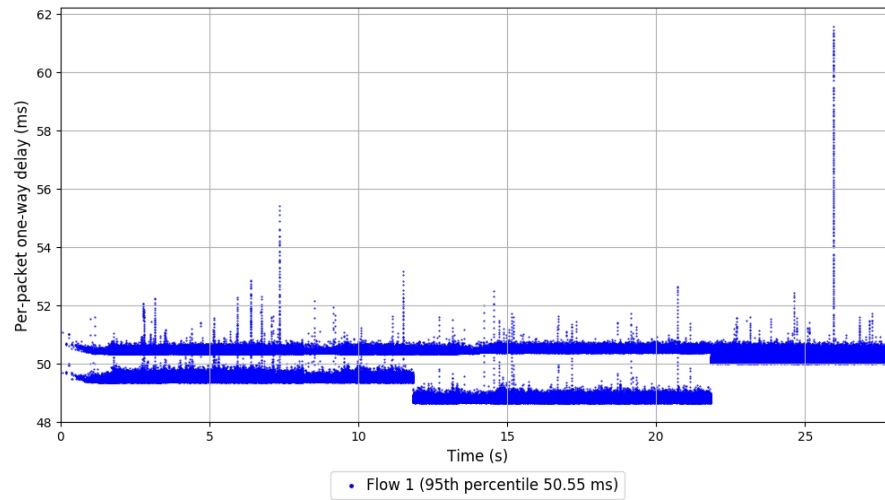
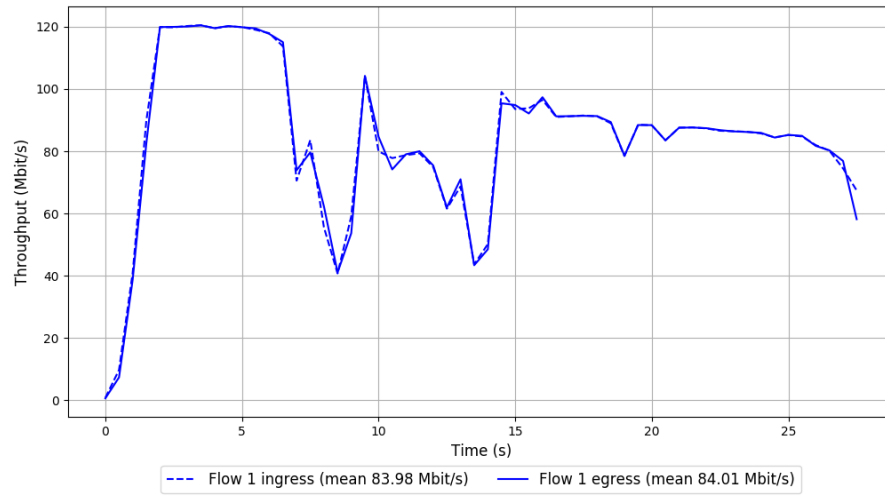
-- Flow 1:

Average throughput: 84.01 Mbit/s

95th percentile per-packet one-way delay: 50.551 ms

Loss rate: 0.33%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-20 01:43:02

End at: 2017-12-20 01:43:32

Below is generated by plot.py at 2017-12-20 05:44:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.45 Mbit/s

95th percentile per-packet one-way delay: 50.686 ms

Loss rate: 0.48%

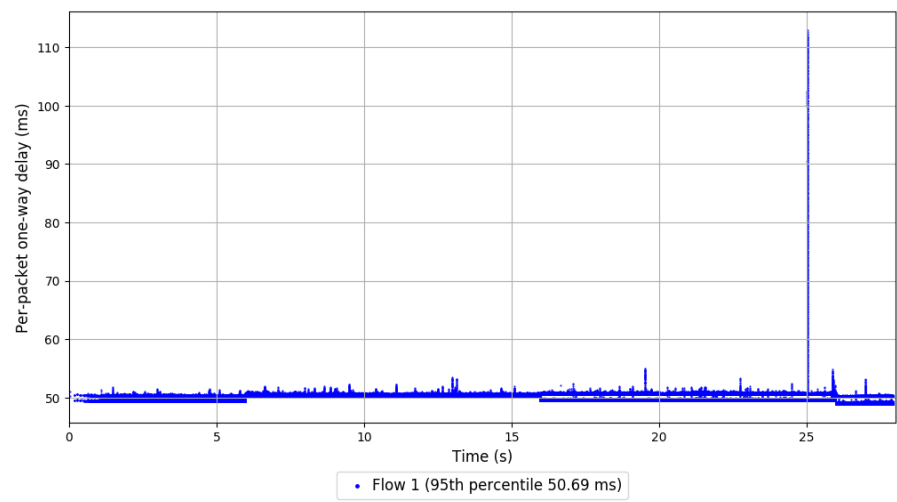
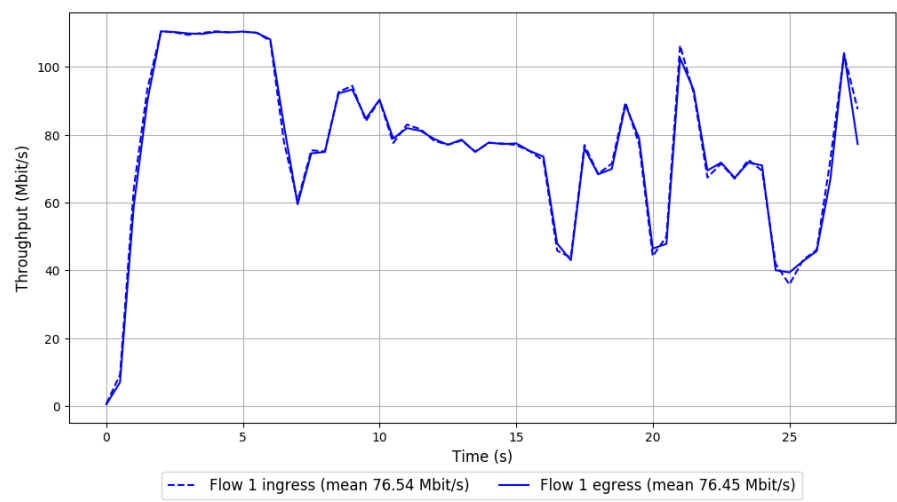
-- Flow 1:

Average throughput: 76.45 Mbit/s

95th percentile per-packet one-way delay: 50.686 ms

Loss rate: 0.48%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-20 01:54:51

End at: 2017-12-20 01:55:21

Below is generated by plot.py at 2017-12-20 05:44:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.79 Mbit/s

95th percentile per-packet one-way delay: 50.631 ms

Loss rate: 0.30%

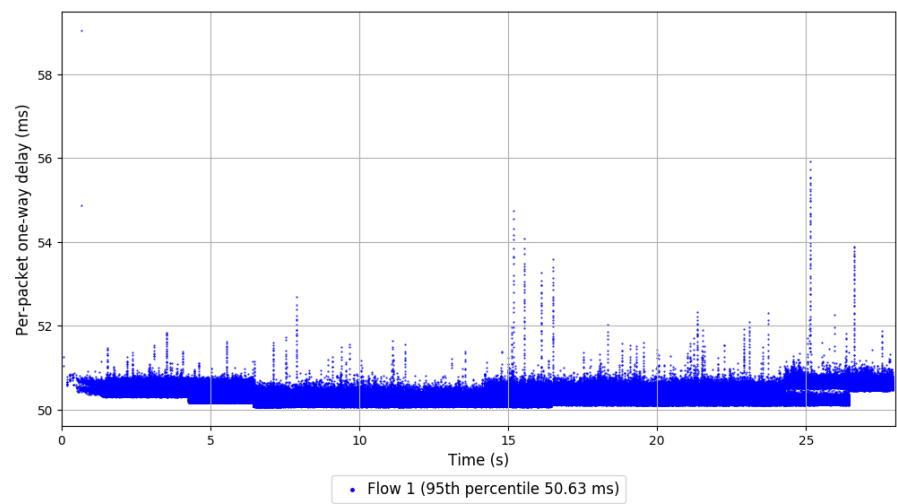
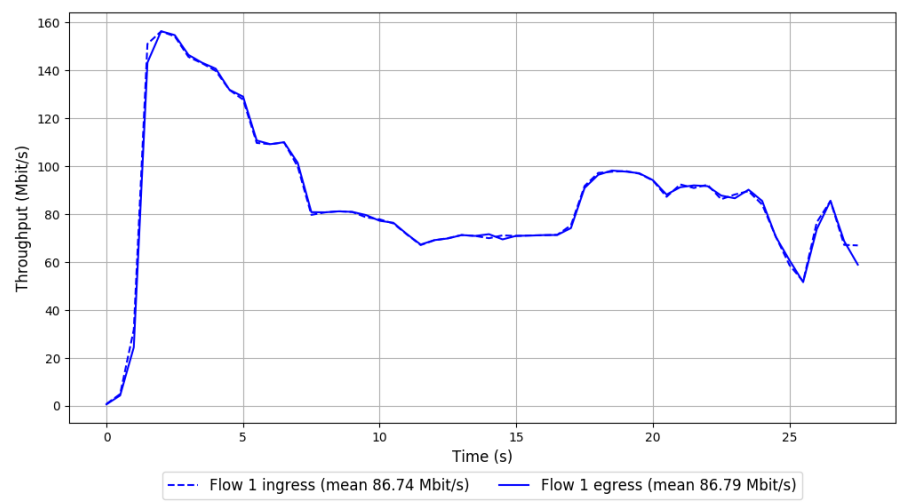
-- Flow 1:

Average throughput: 86.79 Mbit/s

95th percentile per-packet one-way delay: 50.631 ms

Loss rate: 0.30%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-20 02:06:41

End at: 2017-12-20 02:07:11

Below is generated by plot.py at 2017-12-20 05:44:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.59 Mbit/s

95th percentile per-packet one-way delay: 50.504 ms

Loss rate: 0.41%

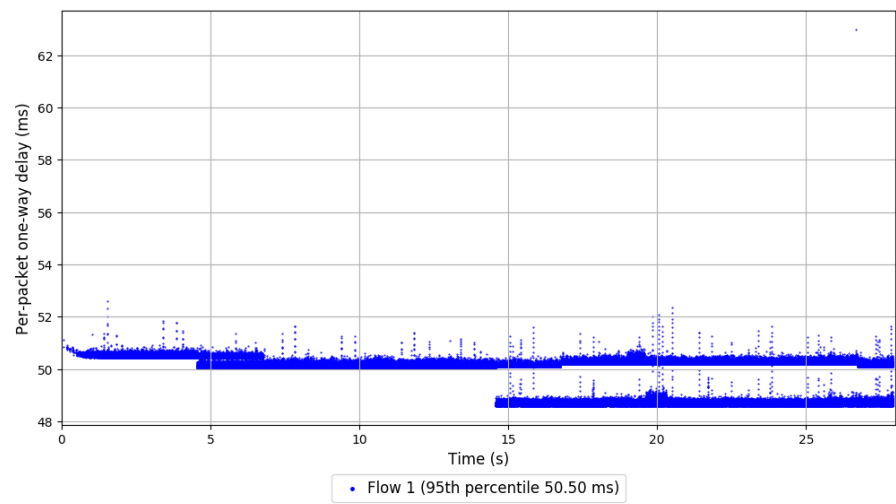
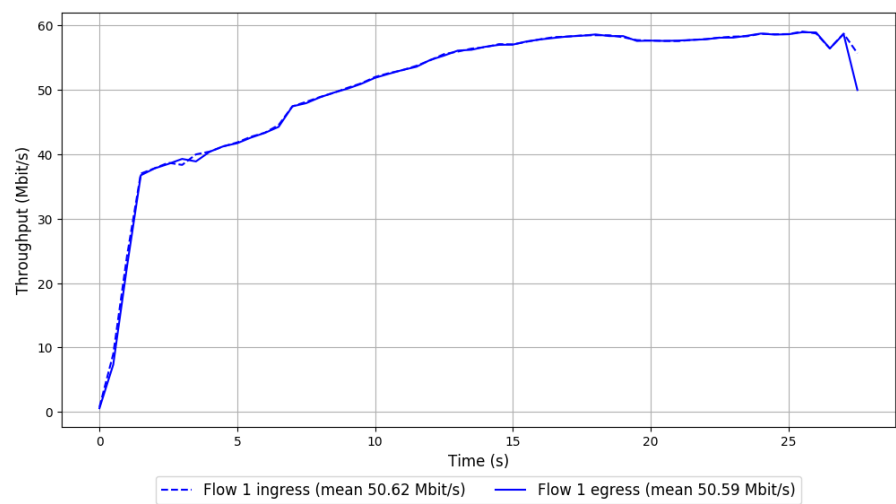
-- Flow 1:

Average throughput: 50.59 Mbit/s

95th percentile per-packet one-way delay: 50.504 ms

Loss rate: 0.41%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-20 02:18:21

End at: 2017-12-20 02:18:51

Below is generated by plot.py at 2017-12-20 05:44:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.94 Mbit/s

95th percentile per-packet one-way delay: 50.491 ms

Loss rate: 0.38%

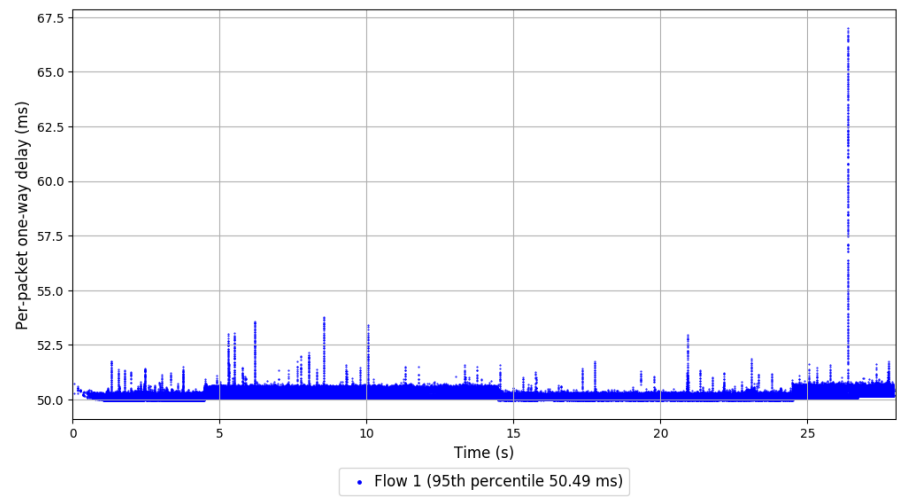
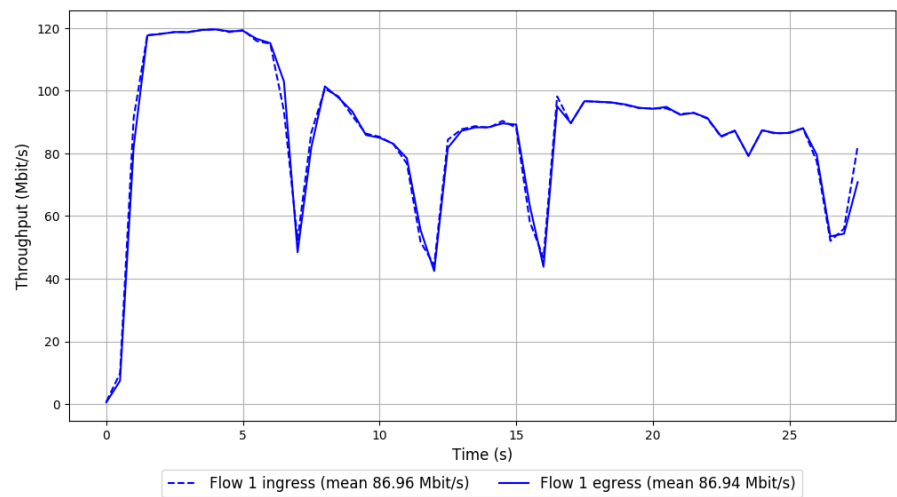
-- Flow 1:

Average throughput: 86.94 Mbit/s

95th percentile per-packet one-way delay: 50.491 ms

Loss rate: 0.38%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-20 02:30:07

End at: 2017-12-20 02:30:37

Below is generated by plot.py at 2017-12-20 05:45:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.71 Mbit/s

95th percentile per-packet one-way delay: 50.621 ms

Loss rate: 0.35%

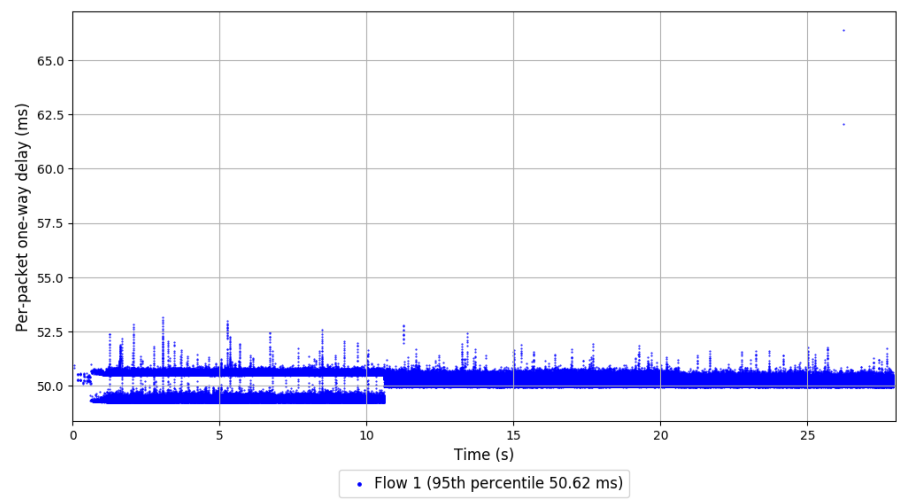
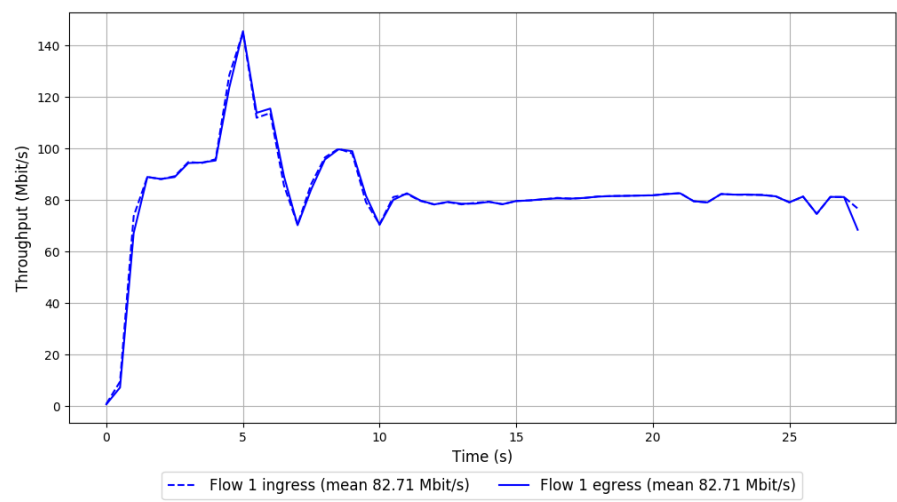
-- Flow 1:

Average throughput: 82.71 Mbit/s

95th percentile per-packet one-way delay: 50.621 ms

Loss rate: 0.35%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-20 02:41:55

End at: 2017-12-20 02:42:25

Below is generated by plot.py at 2017-12-20 05:45:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.85 Mbit/s

95th percentile per-packet one-way delay: 50.609 ms

Loss rate: 0.22%

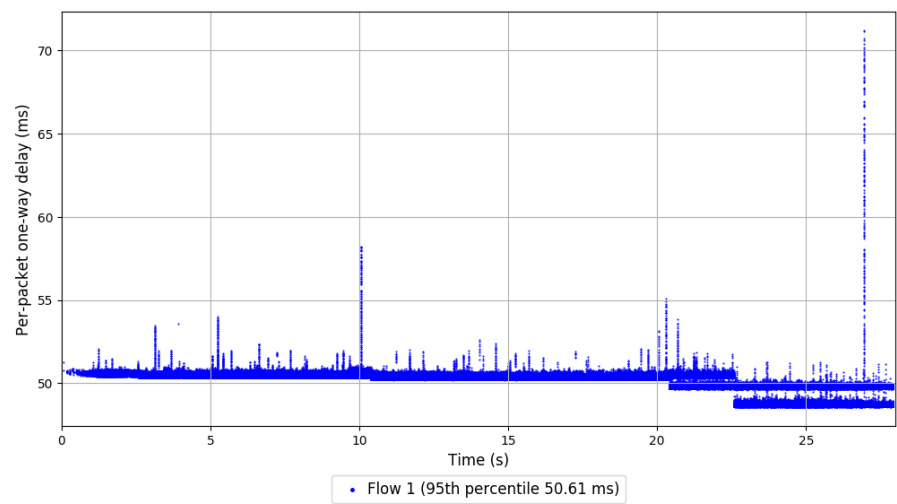
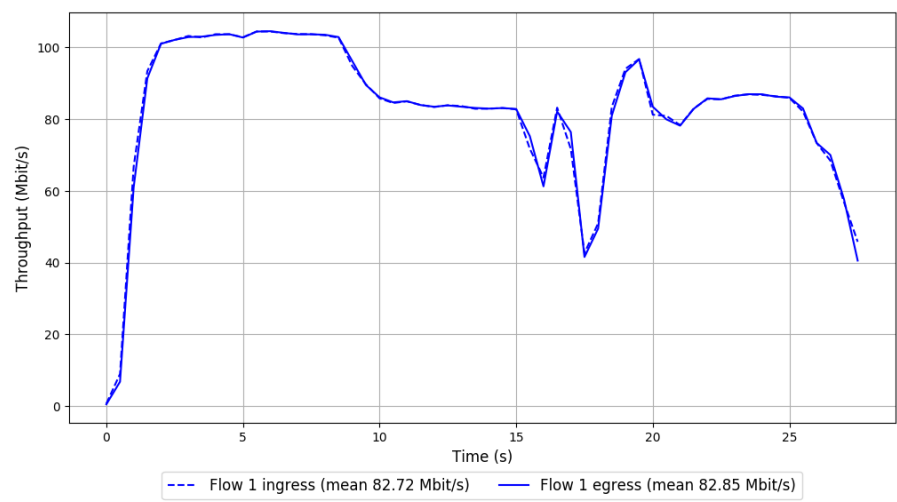
-- Flow 1:

Average throughput: 82.85 Mbit/s

95th percentile per-packet one-way delay: 50.609 ms

Loss rate: 0.22%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-20 02:53:40

End at: 2017-12-20 02:54:10

Below is generated by plot.py at 2017-12-20 05:45:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.21 Mbit/s

95th percentile per-packet one-way delay: 50.498 ms

Loss rate: 0.30%

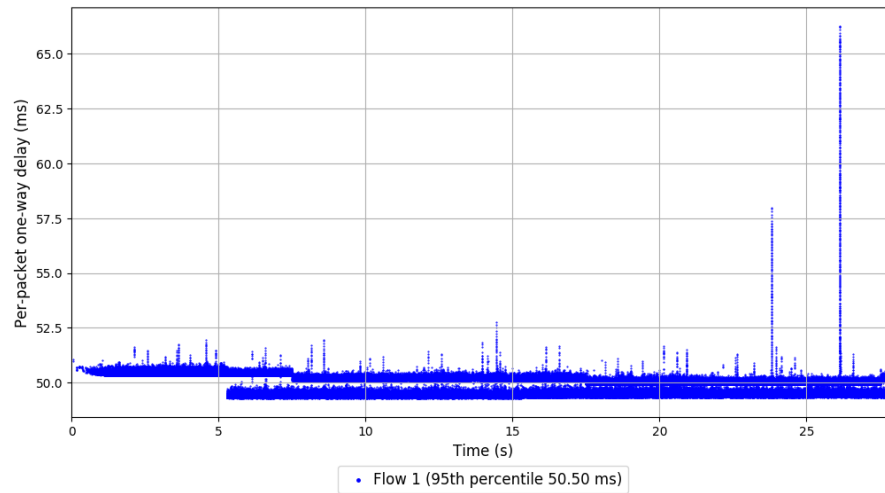
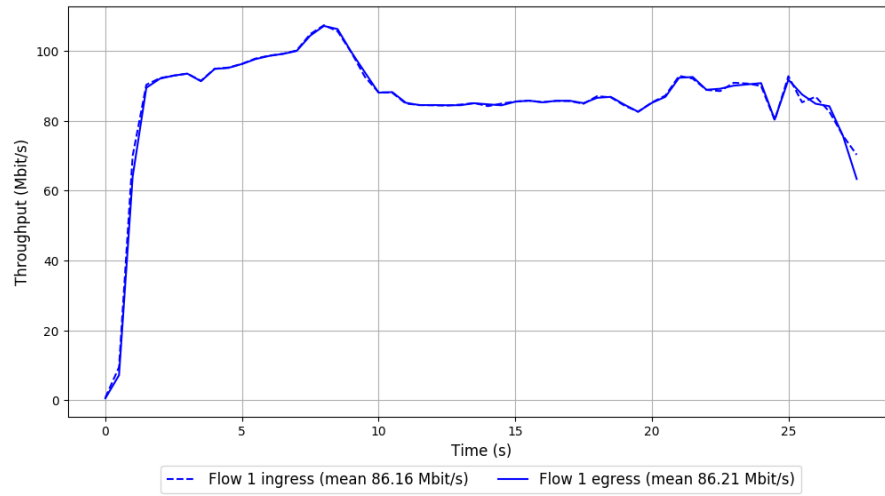
-- Flow 1:

Average throughput: 86.21 Mbit/s

95th percentile per-packet one-way delay: 50.498 ms

Loss rate: 0.30%

Run 10: Report of Copa — Data Link

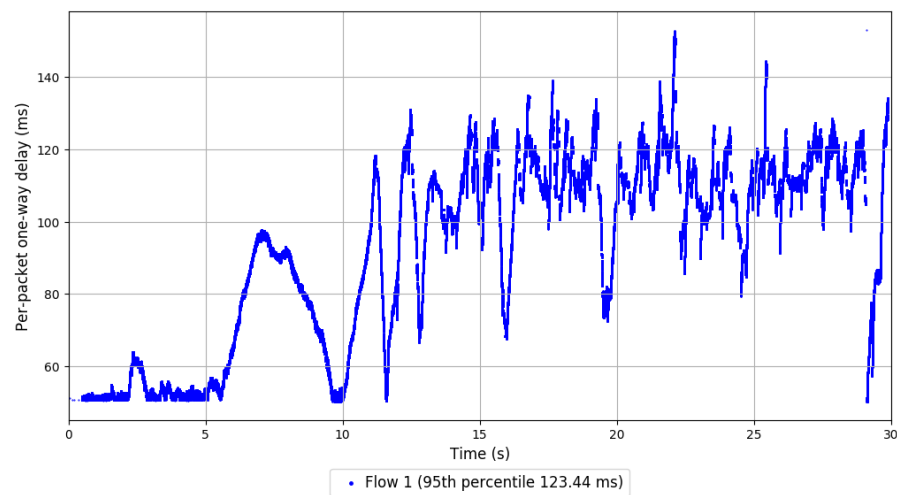
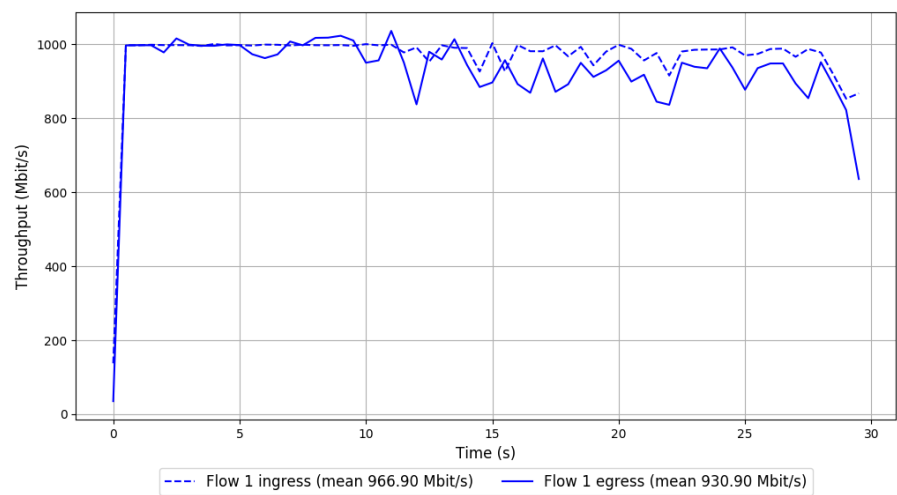


```
Run 1: Statistics of FillP

Start at: 2017-12-20 01:06:49
End at: 2017-12-20 01:07:19

# Below is generated by plot.py at 2017-12-20 06:01:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 930.90 Mbit/s
95th percentile per-packet one-way delay: 123.444 ms
Loss rate: 4.05%
-- Flow 1:
Average throughput: 930.90 Mbit/s
95th percentile per-packet one-way delay: 123.444 ms
Loss rate: 4.05%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2017-12-20 01:18:25

End at: 2017-12-20 01:18:55

Below is generated by plot.py at 2017-12-20 06:01:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 966.79 Mbit/s

95th percentile per-packet one-way delay: 114.276 ms

Loss rate: 1.38%

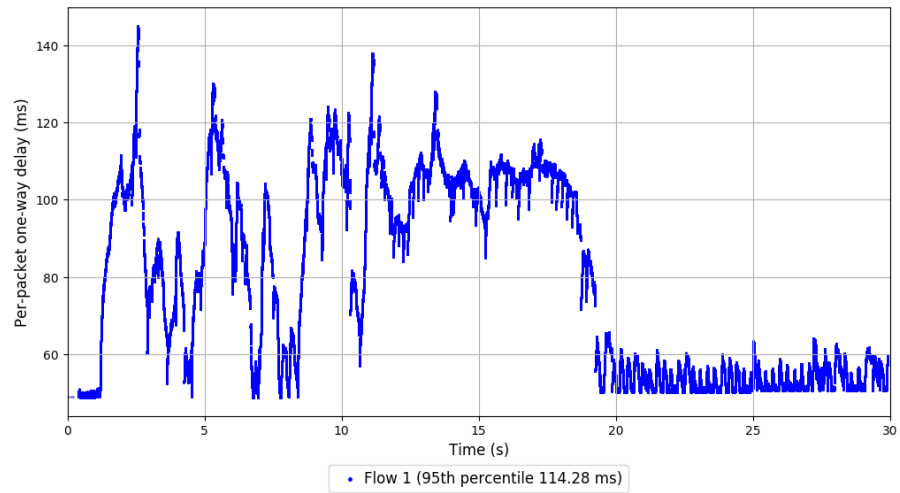
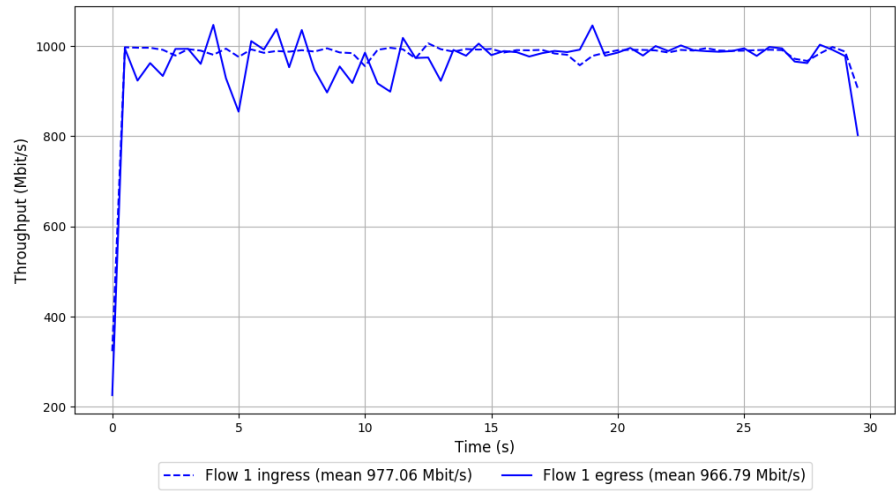
-- Flow 1:

Average throughput: 966.79 Mbit/s

95th percentile per-packet one-way delay: 114.276 ms

Loss rate: 1.38%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2017-12-20 01:30:11

End at: 2017-12-20 01:30:41

Below is generated by plot.py at 2017-12-20 06:01:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 981.30 Mbit/s

95th percentile per-packet one-way delay: 69.575 ms

Loss rate: 0.23%

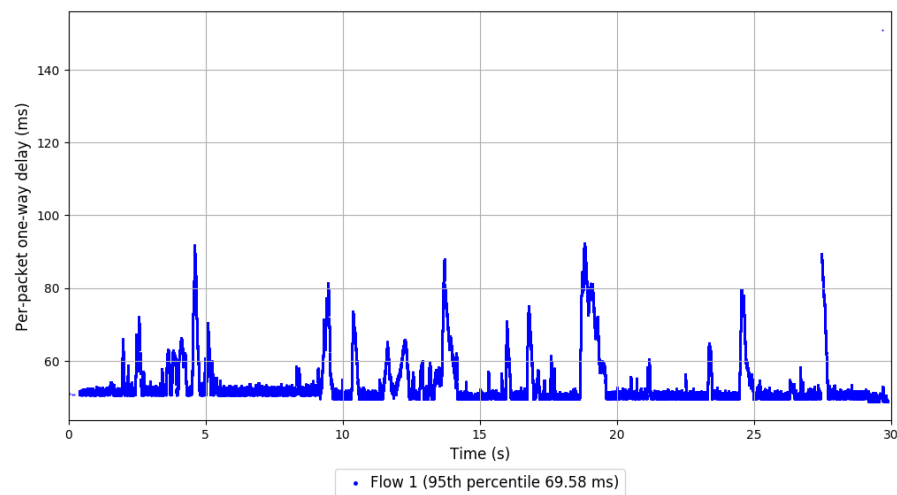
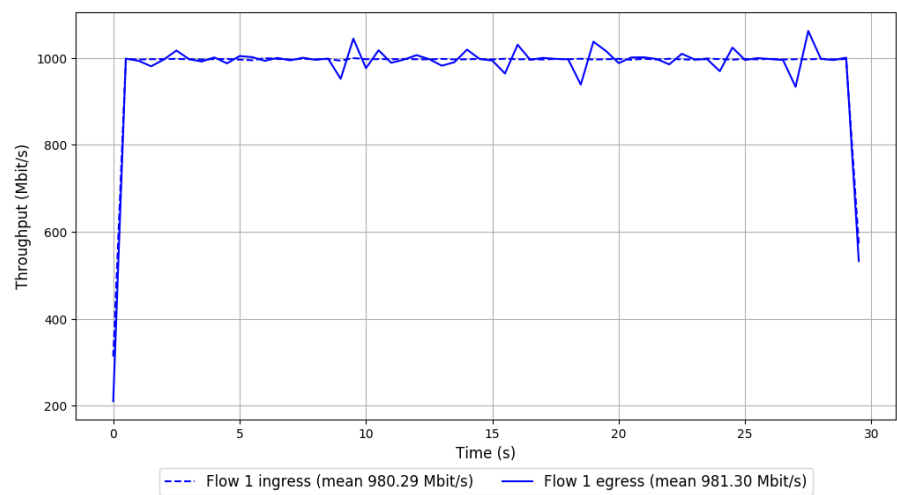
-- Flow 1:

Average throughput: 981.30 Mbit/s

95th percentile per-packet one-way delay: 69.575 ms

Loss rate: 0.23%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2017-12-20 01:41:52

End at: 2017-12-20 01:42:22

Below is generated by plot.py at 2017-12-20 06:01:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 872.30 Mbit/s

95th percentile per-packet one-way delay: 113.262 ms

Loss rate: 1.32%

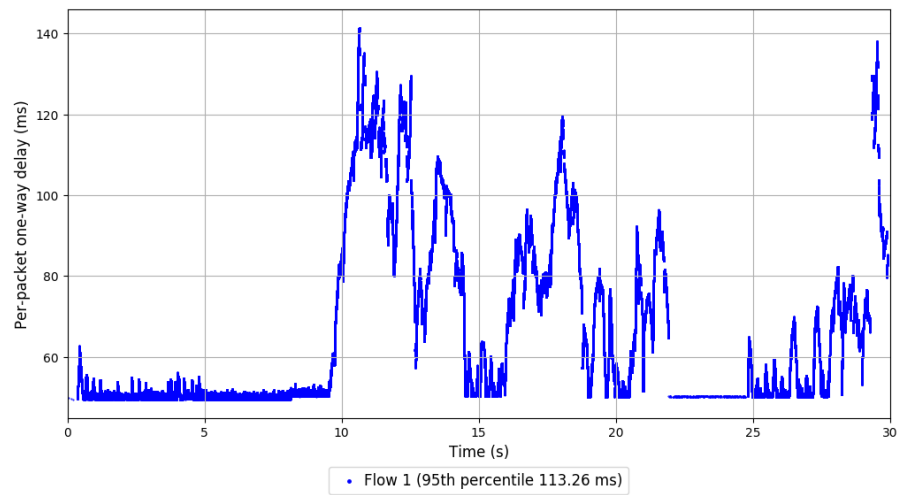
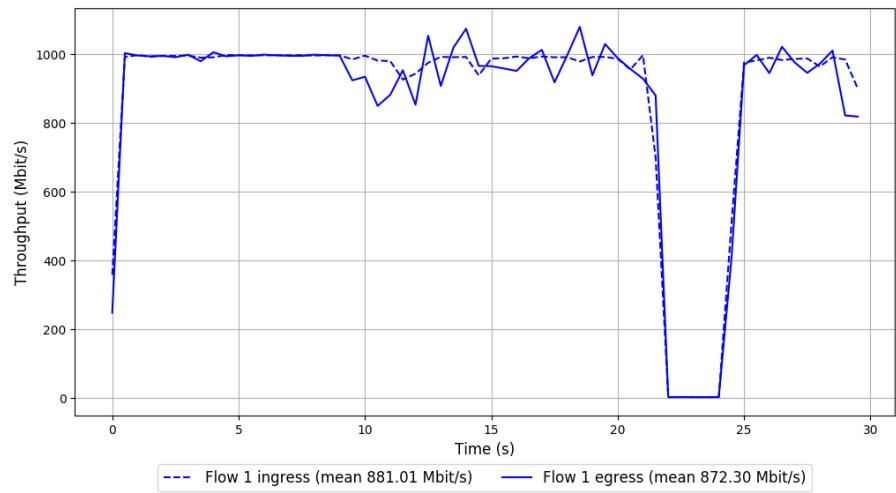
-- Flow 1:

Average throughput: 872.30 Mbit/s

95th percentile per-packet one-way delay: 113.262 ms

Loss rate: 1.32%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2017-12-20 01:53:37

End at: 2017-12-20 01:54:07

Below is generated by plot.py at 2017-12-20 06:02:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 979.22 Mbit/s

95th percentile per-packet one-way delay: 102.531 ms

Loss rate: 0.66%

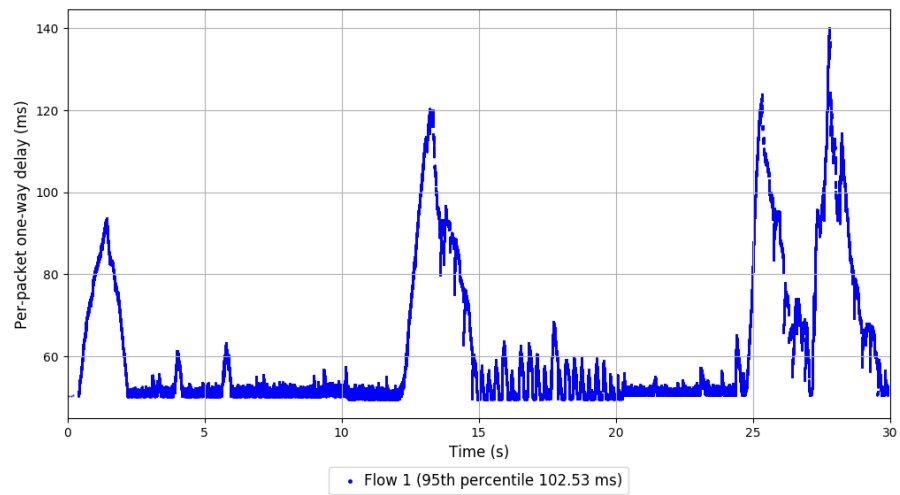
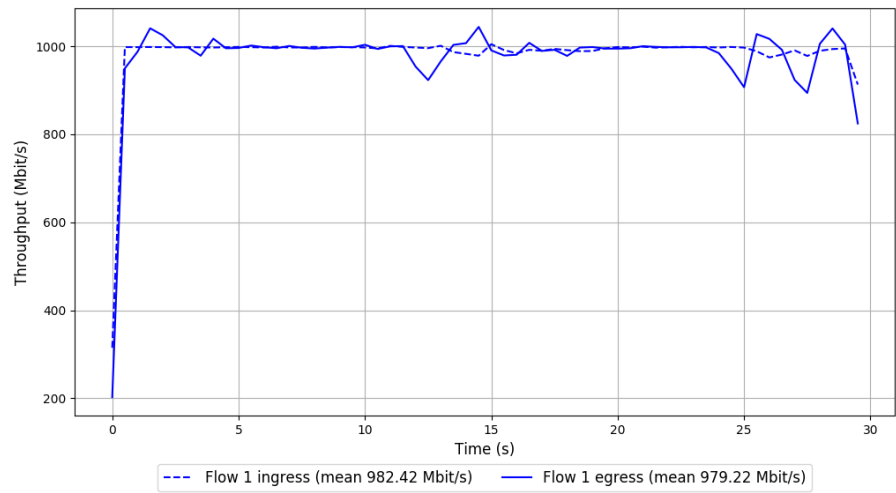
-- Flow 1:

Average throughput: 979.22 Mbit/s

95th percentile per-packet one-way delay: 102.531 ms

Loss rate: 0.66%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2017-12-20 02:05:28

End at: 2017-12-20 02:05:58

Below is generated by plot.py at 2017-12-20 06:02:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 980.53 Mbit/s

95th percentile per-packet one-way delay: 78.285 ms

Loss rate: 0.48%

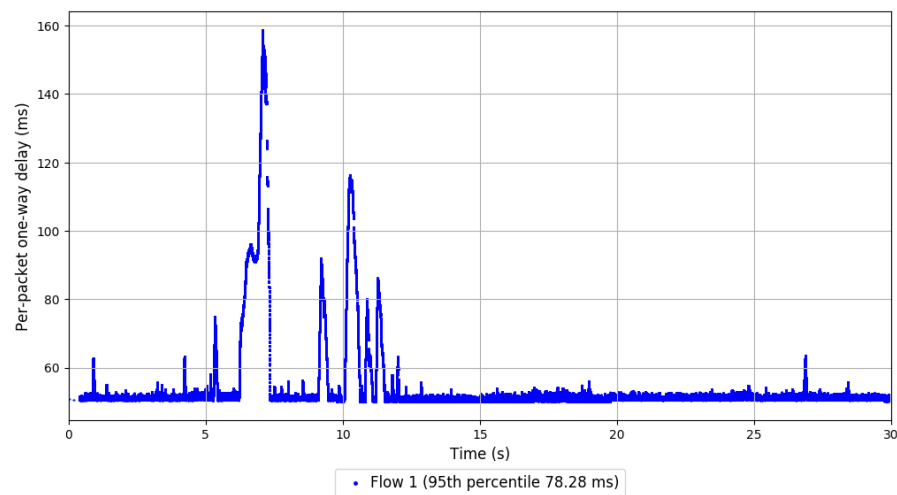
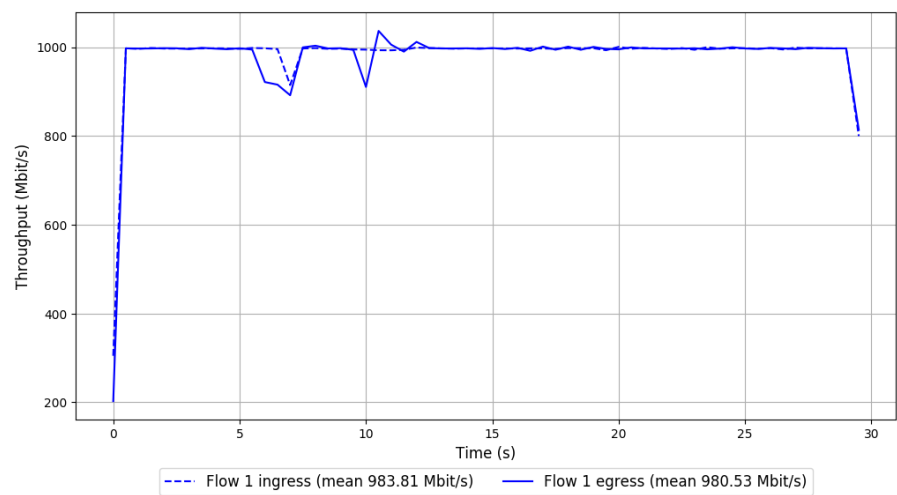
-- Flow 1:

Average throughput: 980.53 Mbit/s

95th percentile per-packet one-way delay: 78.285 ms

Loss rate: 0.48%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2017-12-20 02:17:07

End at: 2017-12-20 02:17:37

Below is generated by plot.py at 2017-12-20 06:02:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 979.90 Mbit/s

95th percentile per-packet one-way delay: 98.750 ms

Loss rate: 0.76%

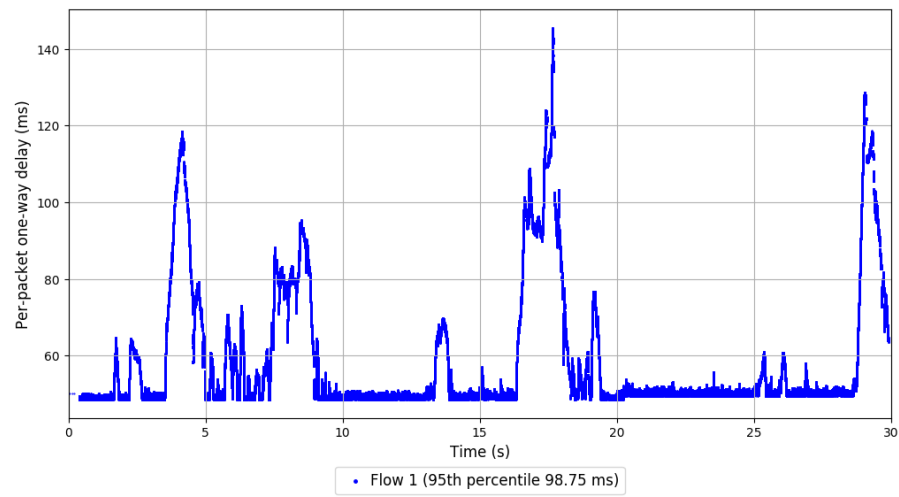
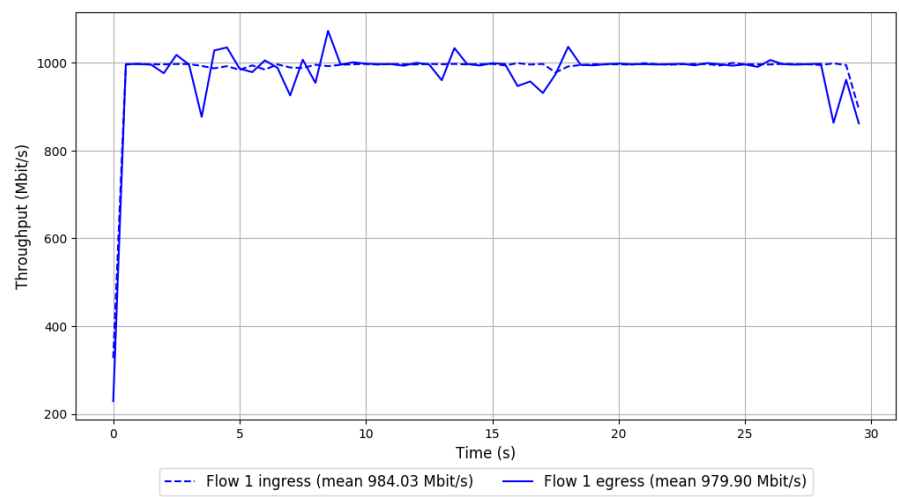
-- Flow 1:

Average throughput: 979.90 Mbit/s

95th percentile per-packet one-way delay: 98.750 ms

Loss rate: 0.76%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2017-12-20 02:28:54

End at: 2017-12-20 02:29:24

Below is generated by plot.py at 2017-12-20 06:03:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 968.31 Mbit/s

95th percentile per-packet one-way delay: 114.417 ms

Loss rate: 1.44%

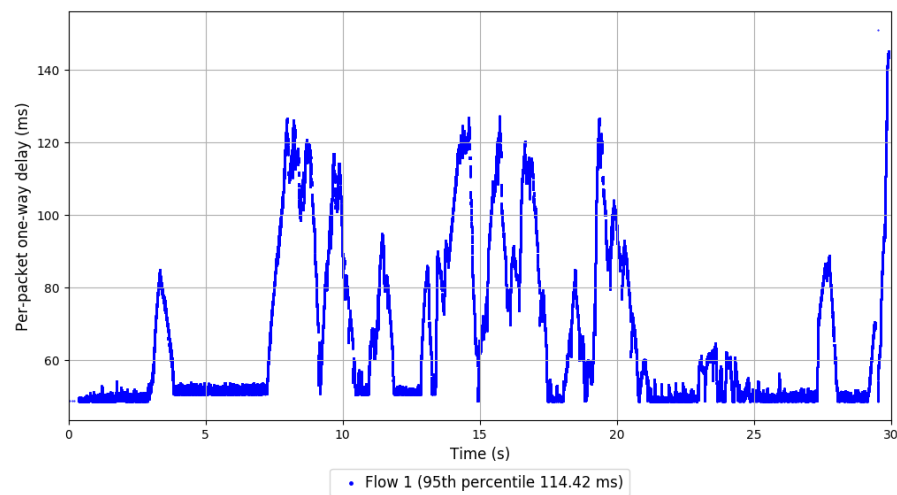
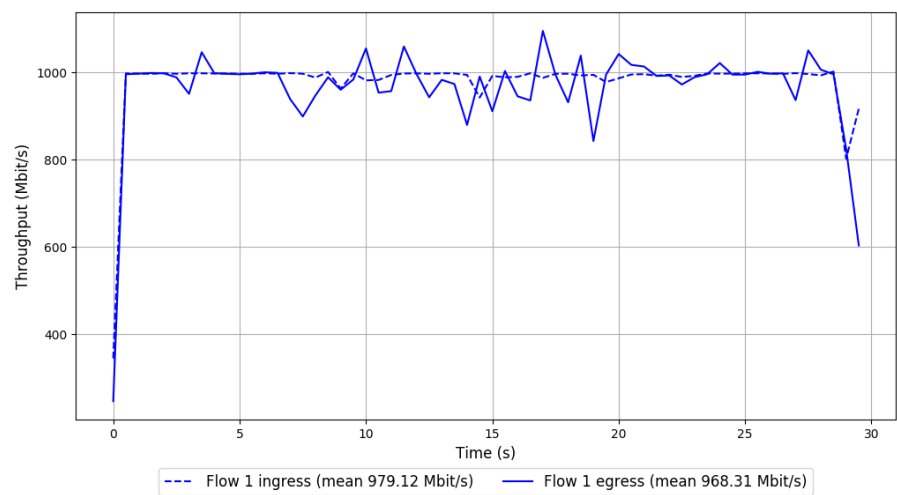
-- Flow 1:

Average throughput: 968.31 Mbit/s

95th percentile per-packet one-way delay: 114.417 ms

Loss rate: 1.44%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2017-12-20 02:40:42

End at: 2017-12-20 02:41:12

Below is generated by plot.py at 2017-12-20 06:08:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 961.81 Mbit/s

95th percentile per-packet one-way delay: 117.181 ms

Loss rate: 1.85%

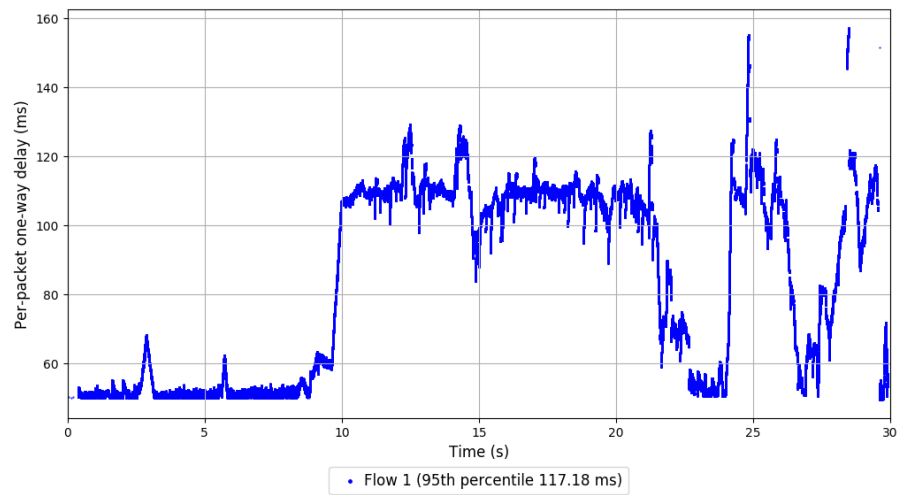
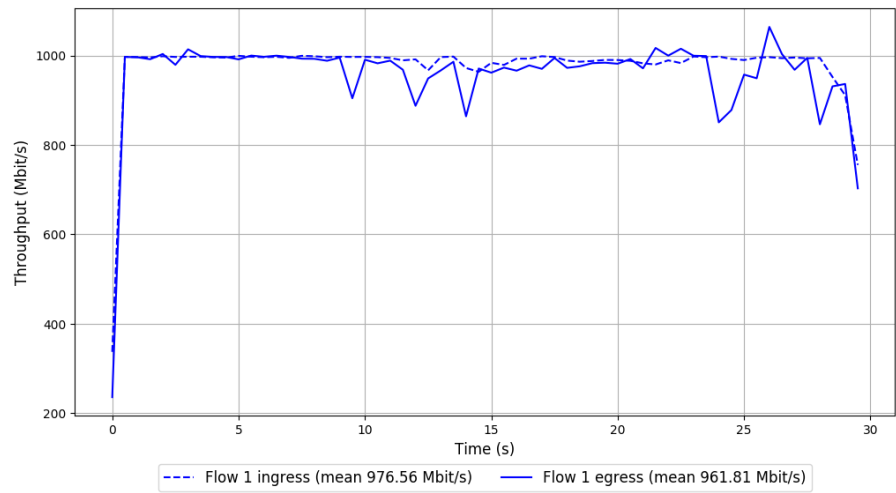
-- Flow 1:

Average throughput: 961.81 Mbit/s

95th percentile per-packet one-way delay: 117.181 ms

Loss rate: 1.85%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2017-12-20 02:52:27

End at: 2017-12-20 02:52:57

Below is generated by plot.py at 2017-12-20 06:09:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 932.43 Mbit/s

95th percentile per-packet one-way delay: 122.321 ms

Loss rate: 4.39%

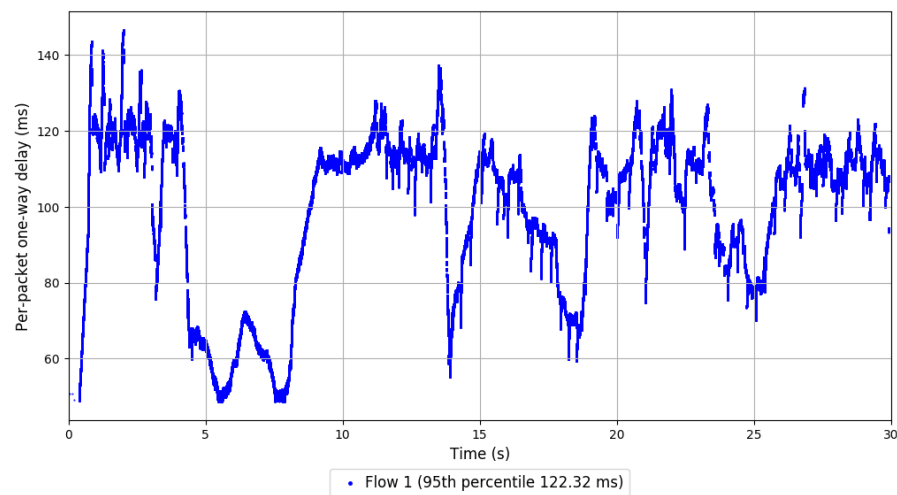
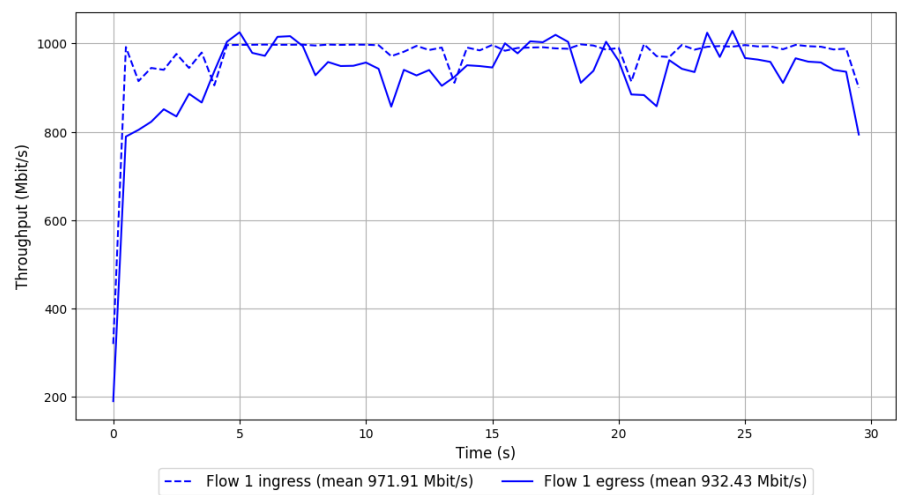
-- Flow 1:

Average throughput: 932.43 Mbit/s

95th percentile per-packet one-way delay: 122.321 ms

Loss rate: 4.39%

Run 10: Report of FillP — Data Link

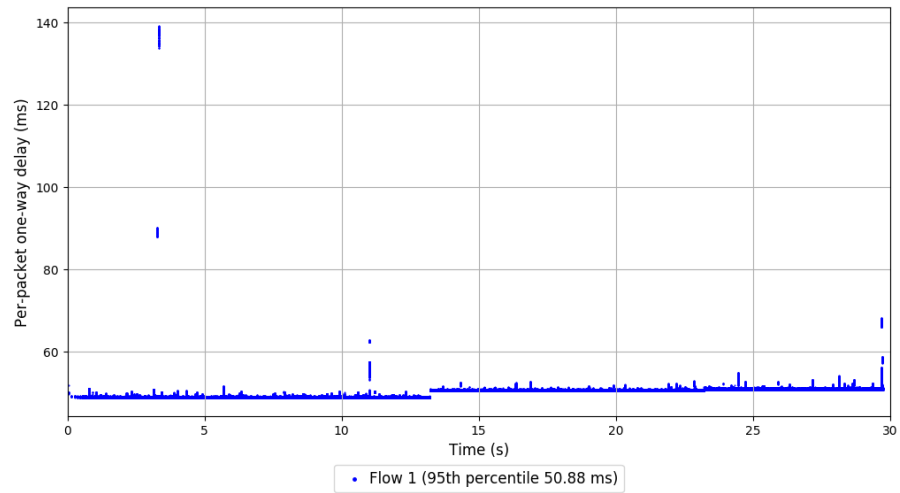
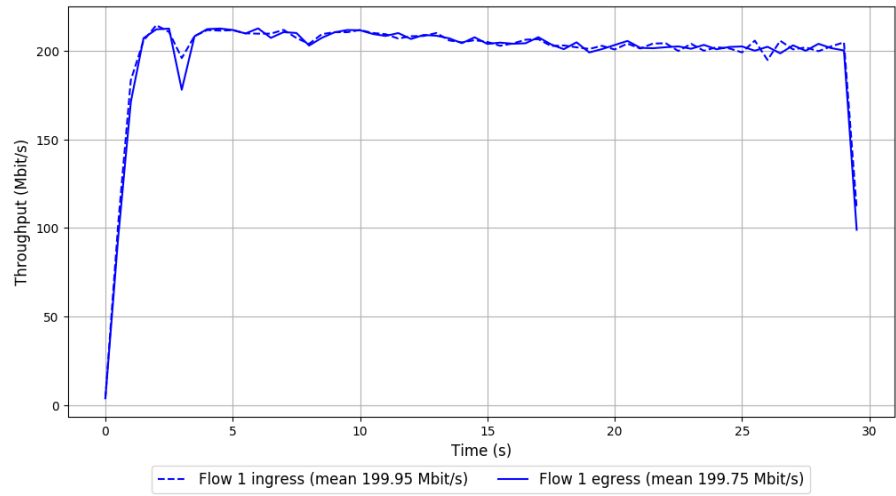


```
Run 1: Statistics of Indigo

Start at: 2017-12-20 01:16:16
End at: 2017-12-20 01:16:46

# Below is generated by plot.py at 2017-12-20 06:09:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 199.75 Mbit/s
95th percentile per-packet one-way delay: 50.885 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 199.75 Mbit/s
95th percentile per-packet one-way delay: 50.885 ms
Loss rate: 0.41%
```

Run 1: Report of Indigo — Data Link

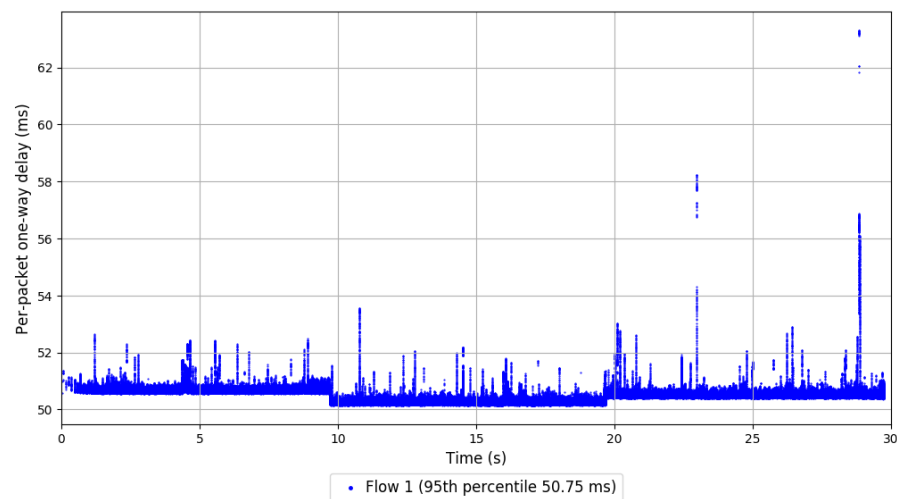
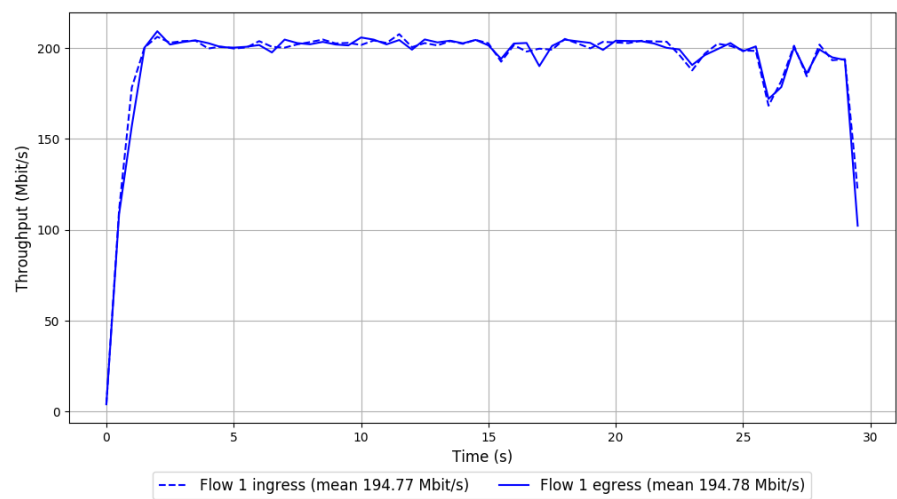


```
Run 2: Statistics of Indigo

Start at: 2017-12-20 01:28:00
End at: 2017-12-20 01:28:30

# Below is generated by plot.py at 2017-12-20 06:09:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 194.78 Mbit/s
95th percentile per-packet one-way delay: 50.752 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 194.78 Mbit/s
95th percentile per-packet one-way delay: 50.752 ms
Loss rate: 0.33%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-20 01:39:45

End at: 2017-12-20 01:40:15

Below is generated by plot.py at 2017-12-20 06:09:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.49 Mbit/s

95th percentile per-packet one-way delay: 50.280 ms

Loss rate: 0.35%

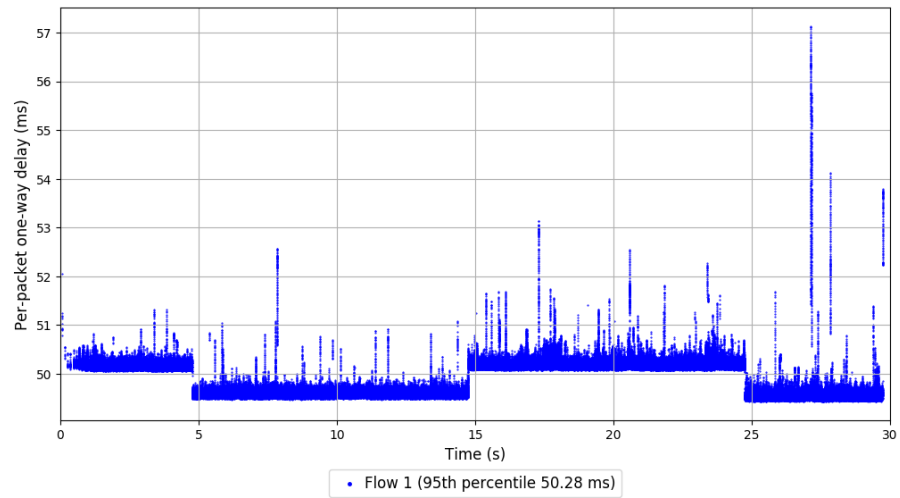
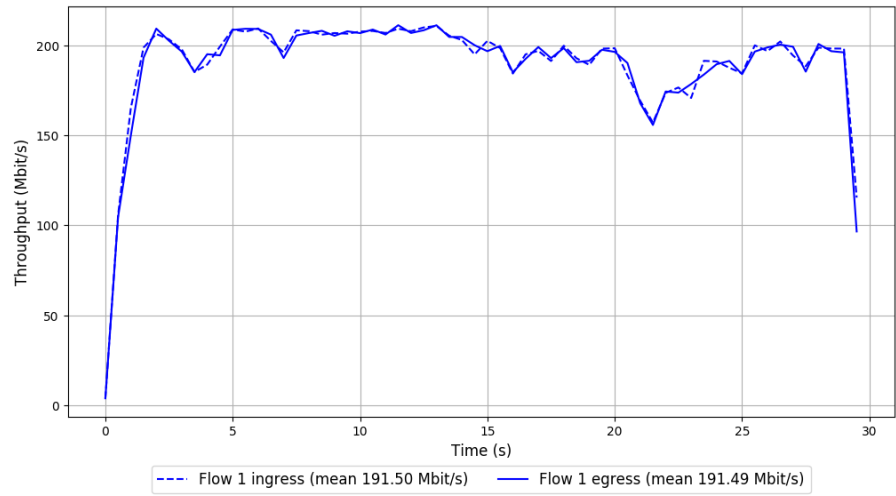
-- Flow 1:

Average throughput: 191.49 Mbit/s

95th percentile per-packet one-way delay: 50.280 ms

Loss rate: 0.35%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-20 01:51:27

End at: 2017-12-20 01:51:57

Below is generated by plot.py at 2017-12-20 06:09:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.30 Mbit/s

95th percentile per-packet one-way delay: 50.860 ms

Loss rate: 0.36%

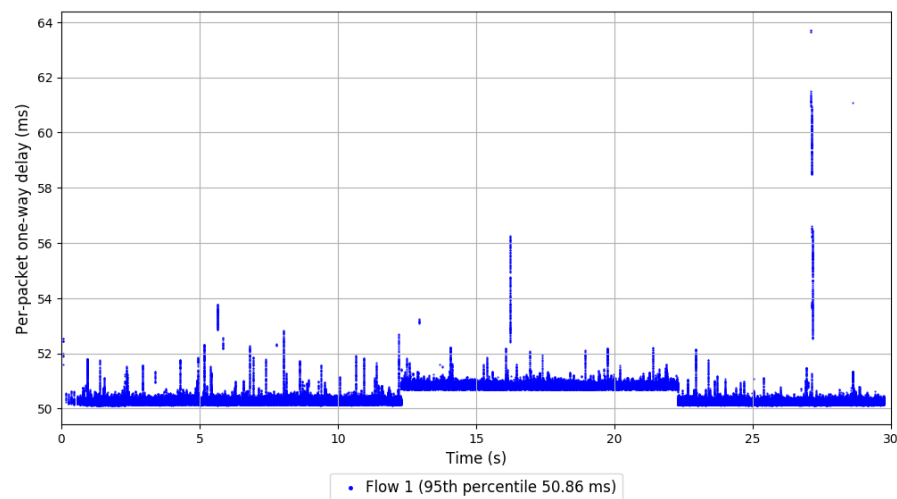
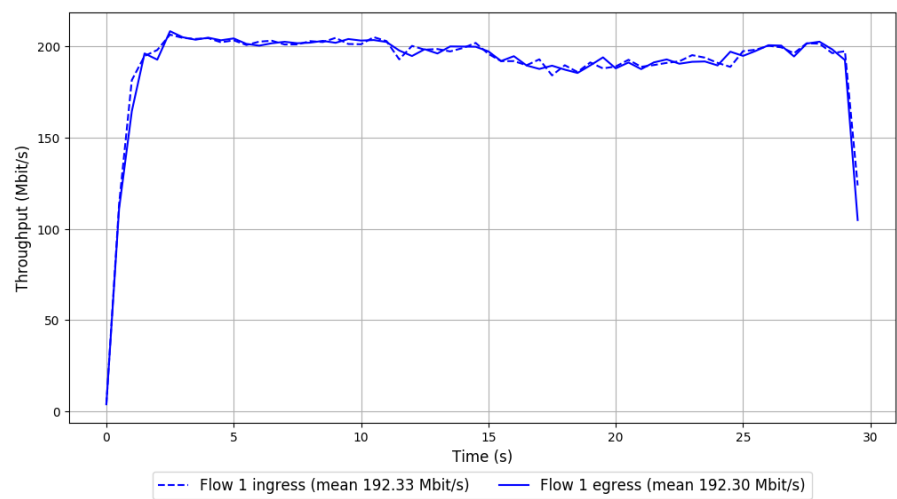
-- Flow 1:

Average throughput: 192.30 Mbit/s

95th percentile per-packet one-way delay: 50.860 ms

Loss rate: 0.36%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-20 02:03:18

End at: 2017-12-20 02:03:48

Below is generated by plot.py at 2017-12-20 06:09:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.45 Mbit/s

95th percentile per-packet one-way delay: 50.905 ms

Loss rate: 0.35%

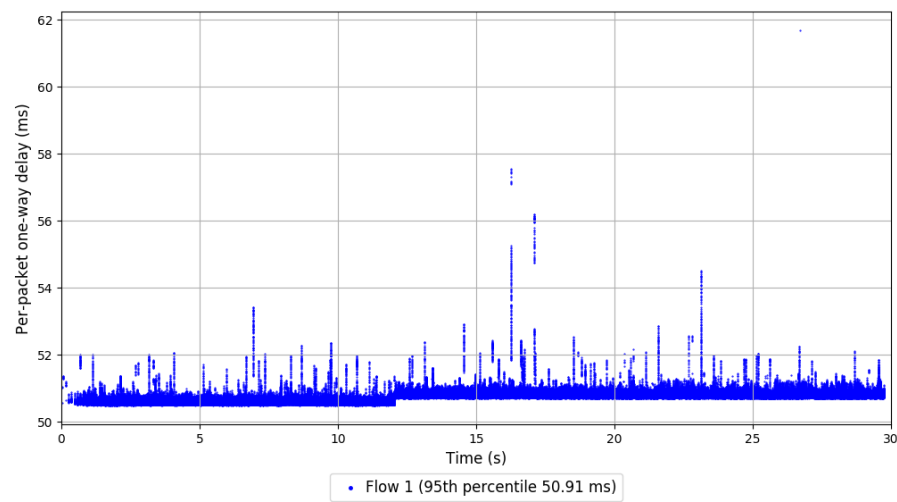
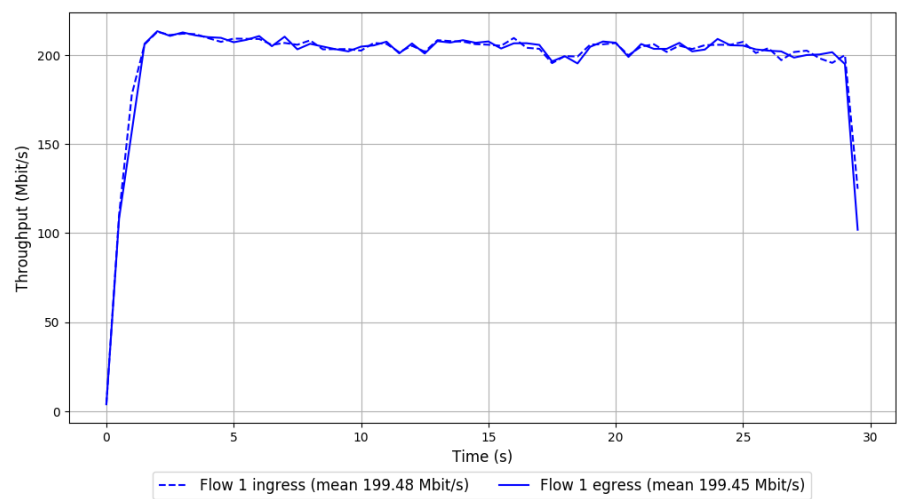
-- Flow 1:

Average throughput: 199.45 Mbit/s

95th percentile per-packet one-way delay: 50.905 ms

Loss rate: 0.35%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-20 02:14:58

End at: 2017-12-20 02:15:28

Below is generated by plot.py at 2017-12-20 06:09:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.86 Mbit/s

95th percentile per-packet one-way delay: 50.681 ms

Loss rate: 0.31%

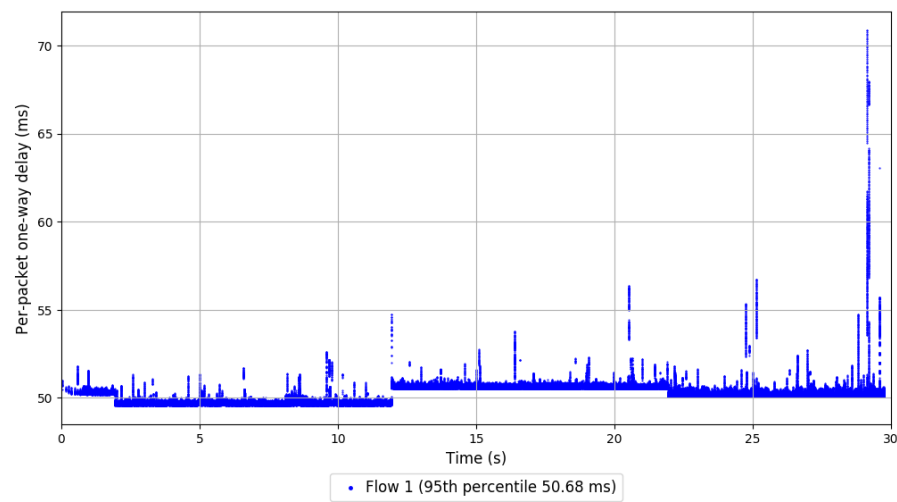
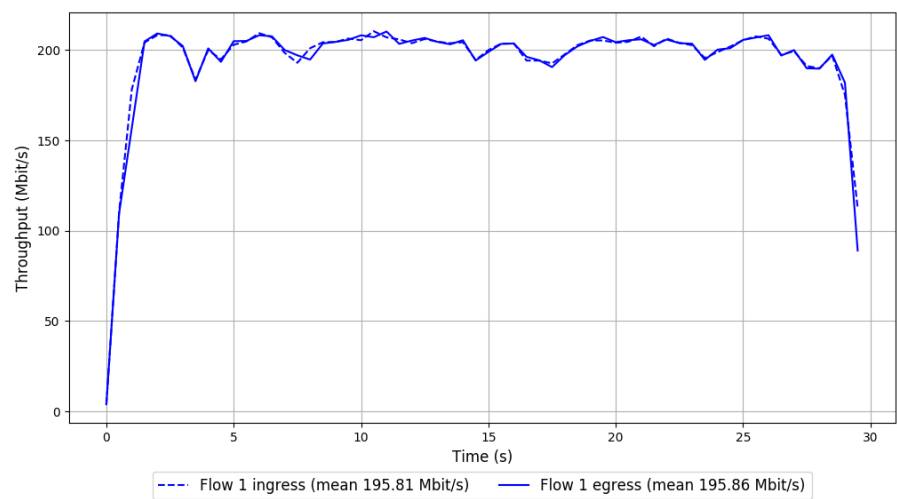
-- Flow 1:

Average throughput: 195.86 Mbit/s

95th percentile per-packet one-way delay: 50.681 ms

Loss rate: 0.31%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-20 02:26:42

End at: 2017-12-20 02:27:12

Below is generated by plot.py at 2017-12-20 06:09:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.64 Mbit/s

95th percentile per-packet one-way delay: 50.362 ms

Loss rate: 0.36%

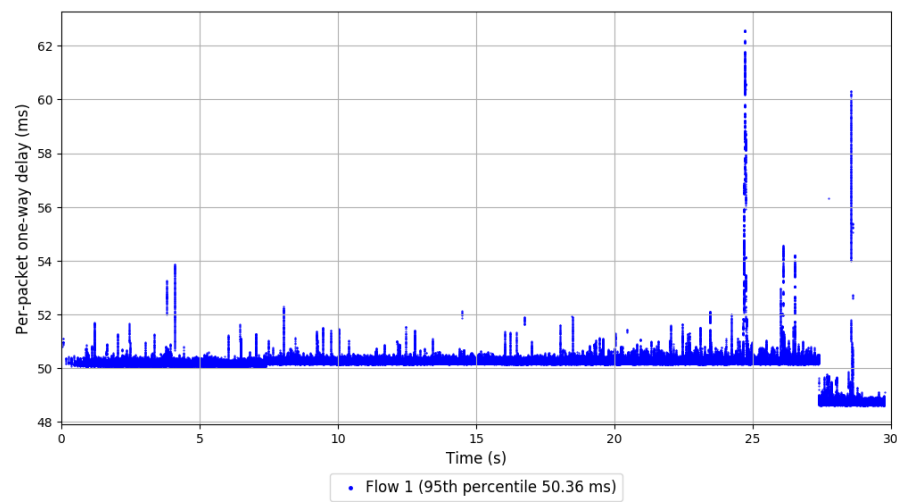
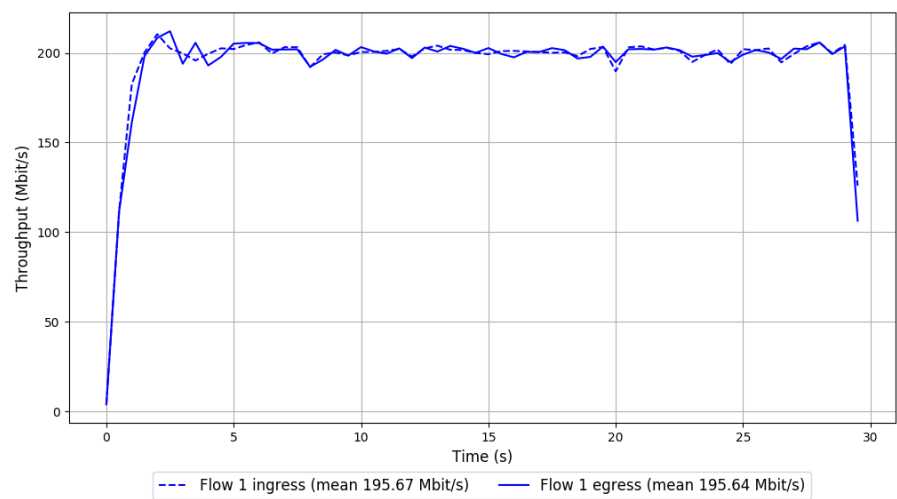
-- Flow 1:

Average throughput: 195.64 Mbit/s

95th percentile per-packet one-way delay: 50.362 ms

Loss rate: 0.36%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-20 02:38:31

End at: 2017-12-20 02:39:01

Below is generated by plot.py at 2017-12-20 06:09:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.69 Mbit/s

95th percentile per-packet one-way delay: 50.657 ms

Loss rate: 0.35%

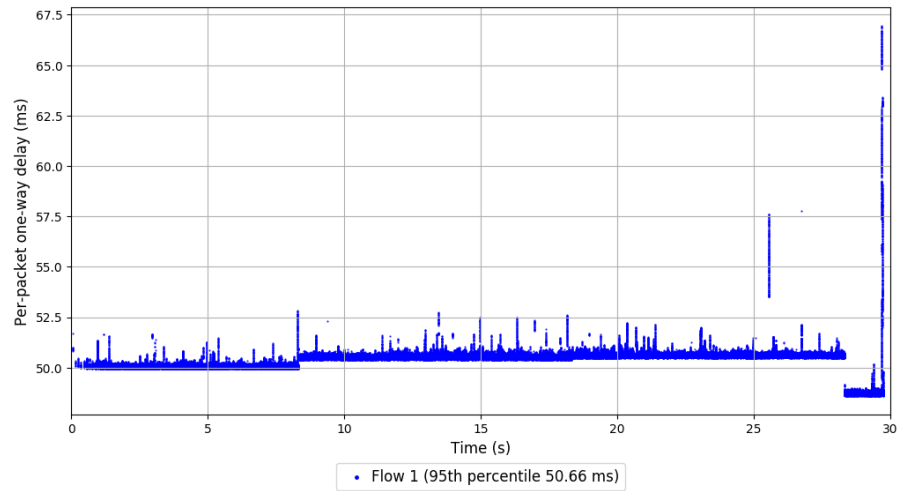
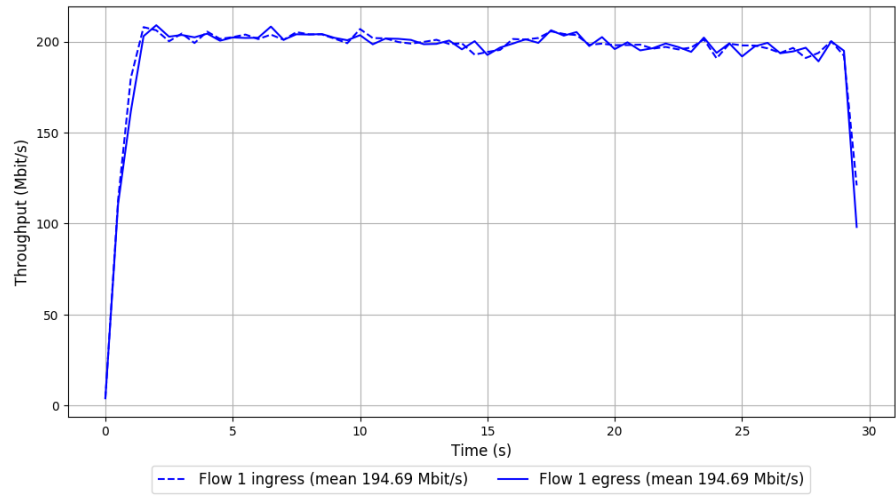
-- Flow 1:

Average throughput: 194.69 Mbit/s

95th percentile per-packet one-way delay: 50.657 ms

Loss rate: 0.35%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-20 02:50:16

End at: 2017-12-20 02:50:46

Below is generated by plot.py at 2017-12-20 06:09:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.93 Mbit/s

95th percentile per-packet one-way delay: 50.240 ms

Loss rate: 0.33%

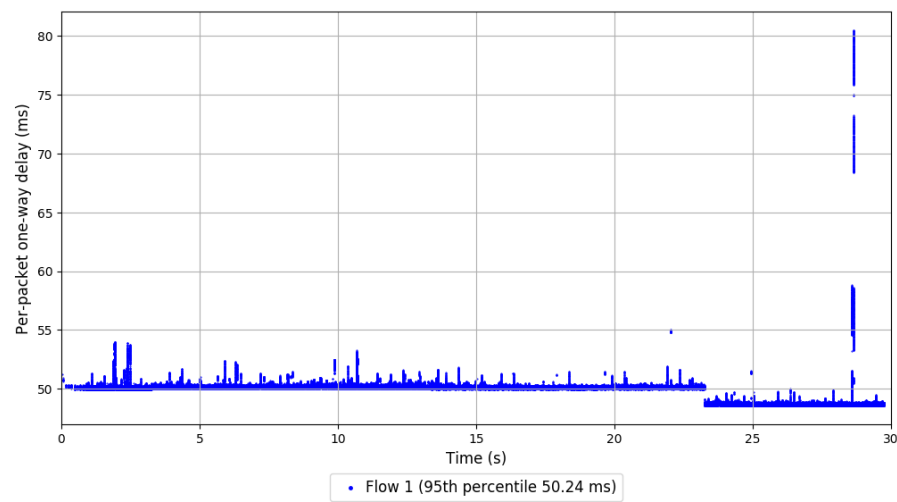
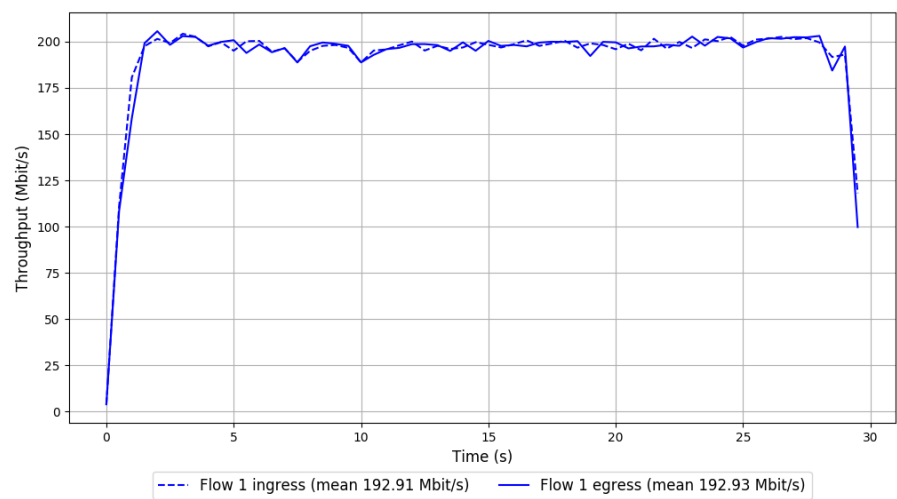
-- Flow 1:

Average throughput: 192.93 Mbit/s

95th percentile per-packet one-way delay: 50.240 ms

Loss rate: 0.33%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-20 03:02:04

End at: 2017-12-20 03:02:35

Below is generated by plot.py at 2017-12-20 06:09:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.41 Mbit/s

95th percentile per-packet one-way delay: 50.679 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 197.41 Mbit/s

95th percentile per-packet one-way delay: 50.679 ms

Loss rate: 0.32%

Run 10: Report of Indigo — Data Link

