

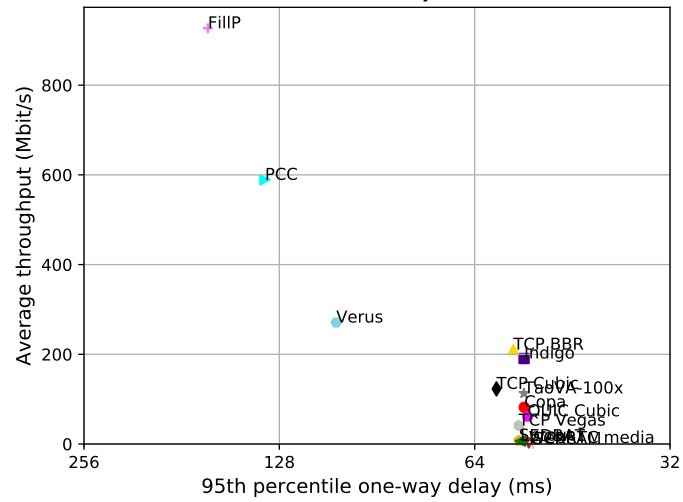
Pantheon Report

Generated at 2017-12-20 05:59:30 (UTC).
Data path: GCE Tokyo Ethernet (*remote*) → GCE Sydney 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**).

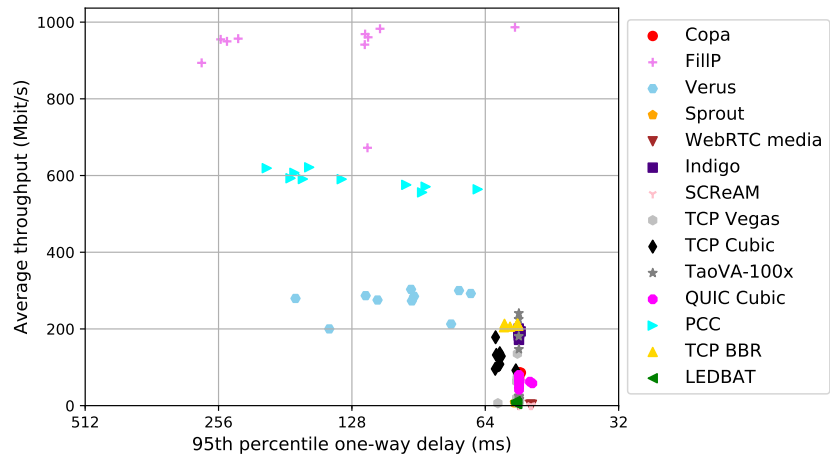
Git summary:

```
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-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from GCE Tokyo Ethernet to GCE Sydney Ethernet, 10 runs of 30s each per scheme



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	8	210.33	55.79	0.39
TCP Cubic	10	122.91	59.23	0.67
LEDBAT	10	6.51	54.45	1.53
PCC	10	588.88	134.69	1.56
QUIC Cubic	10	61.72	53.03	0.53
SCReAM	10	0.21	52.09	0.35
WebRTC media	10	2.29	52.82	0.41
Sprout	9	7.61	54.71	0.93
TaoVA-100x	8	112.83	53.74	0.56
TCP Vegas	10	41.05	54.73	0.70
Verus	10	270.82	104.61	1.23
Copa	10	81.79	53.67	0.43
FillP	10	926.78	164.93	2.43
Indigo	10	190.64	53.71	0.38

Run 1: Statistics of TCP BBR

Start at: 2017-12-20 01:15:46

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

Below is generated by plot.py at 2017-12-20 05:04:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.36 Mbit/s

95th percentile per-packet one-way delay: 54.050 ms

Loss rate: 0.37%

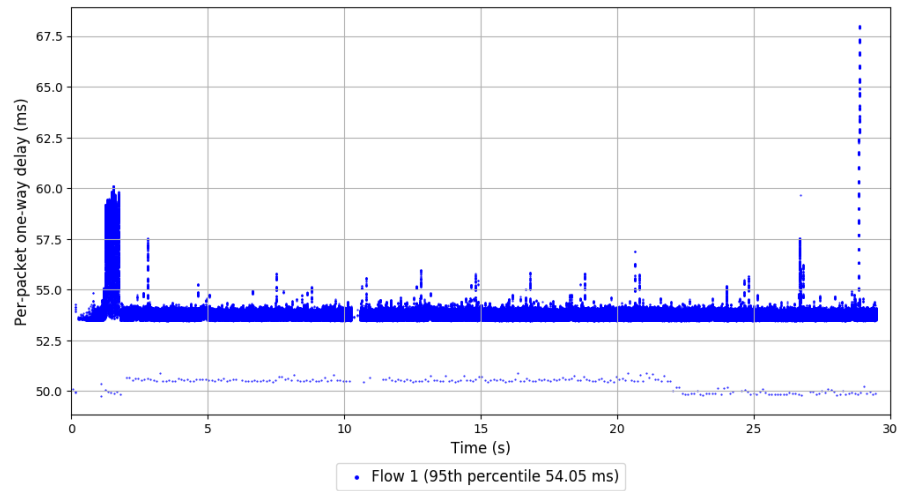
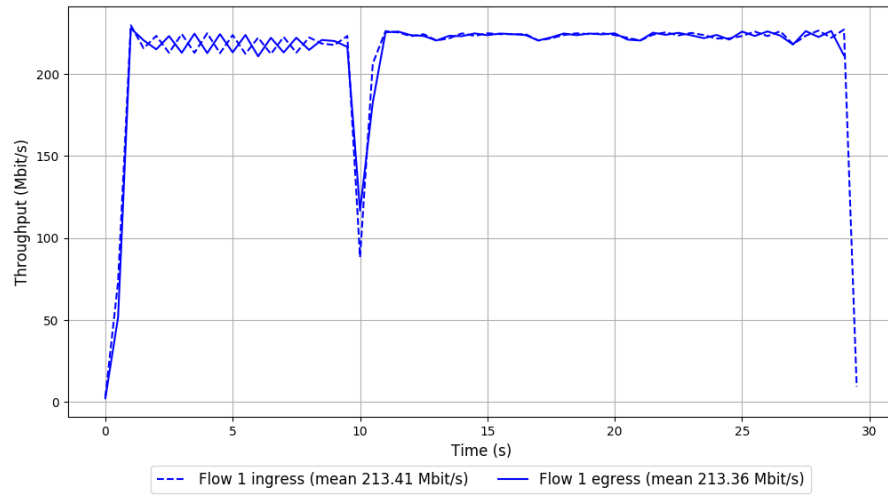
-- Flow 1:

Average throughput: 213.36 Mbit/s

95th percentile per-packet one-way delay: 54.050 ms

Loss rate: 0.37%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-20 01:27:11

End at: 2017-12-20 01:27:41

Below is generated by plot.py at 2017-12-20 05:04:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 205.99 Mbit/s

95th percentile per-packet one-way delay: 56.267 ms

Loss rate: 0.36%

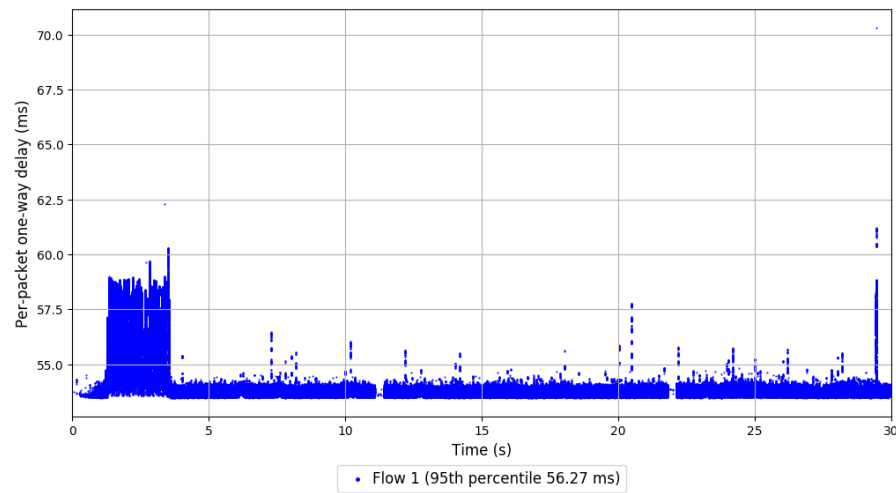
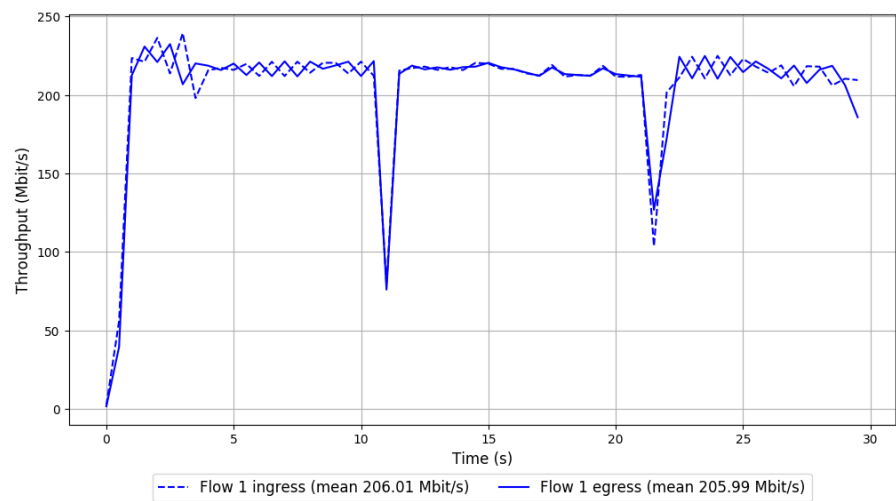
-- Flow 1:

Average throughput: 205.99 Mbit/s

95th percentile per-packet one-way delay: 56.267 ms

Loss rate: 0.36%

Run 2: Report of TCP BBR — Data Link

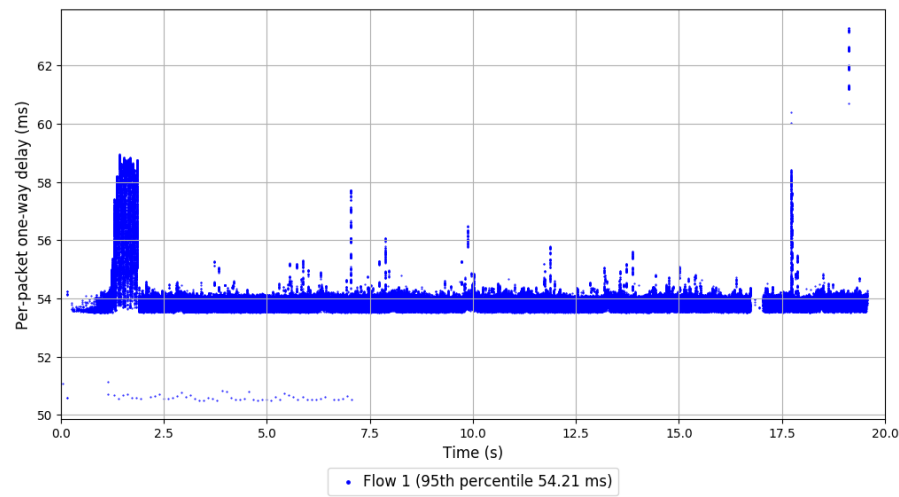
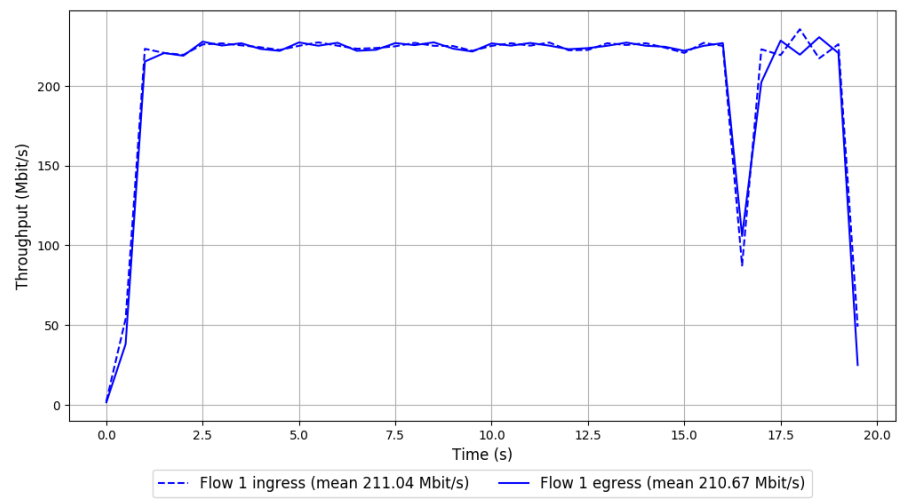


Run 3: Statistics of TCP BBR

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

End at: 2017-12-20 01:39:31

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-20 01:50:24

End at: 2017-12-20 01:50:54

Below is generated by plot.py at 2017-12-20 05:04:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.46 Mbit/s

95th percentile per-packet one-way delay: 57.919 ms

Loss rate: 0.38%

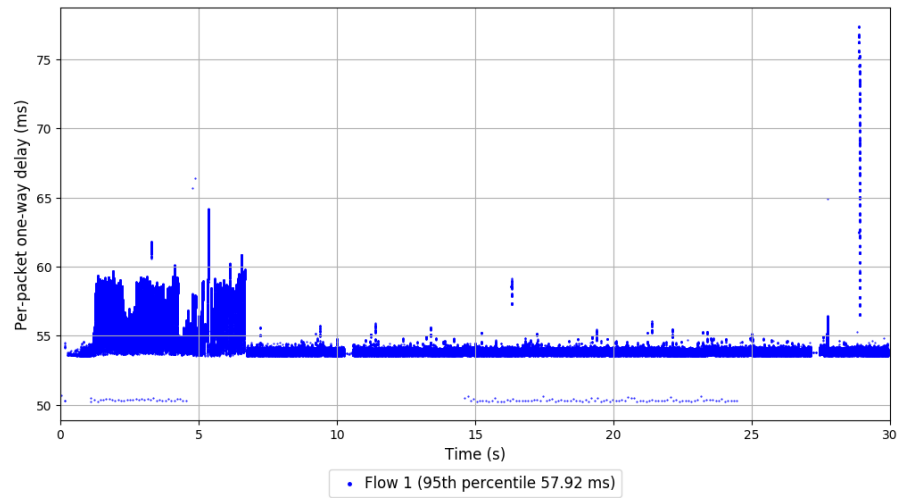
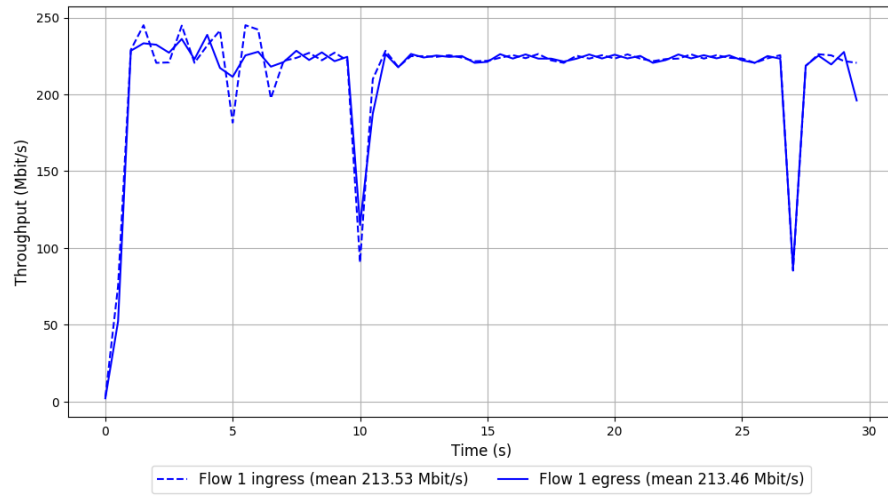
-- Flow 1:

Average throughput: 213.46 Mbit/s

95th percentile per-packet one-way delay: 57.919 ms

Loss rate: 0.38%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-20 02:01:46

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

Below is generated by plot.py at 2017-12-20 05:04:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 204.52 Mbit/s

95th percentile per-packet one-way delay: 58.070 ms

Loss rate: 0.56%

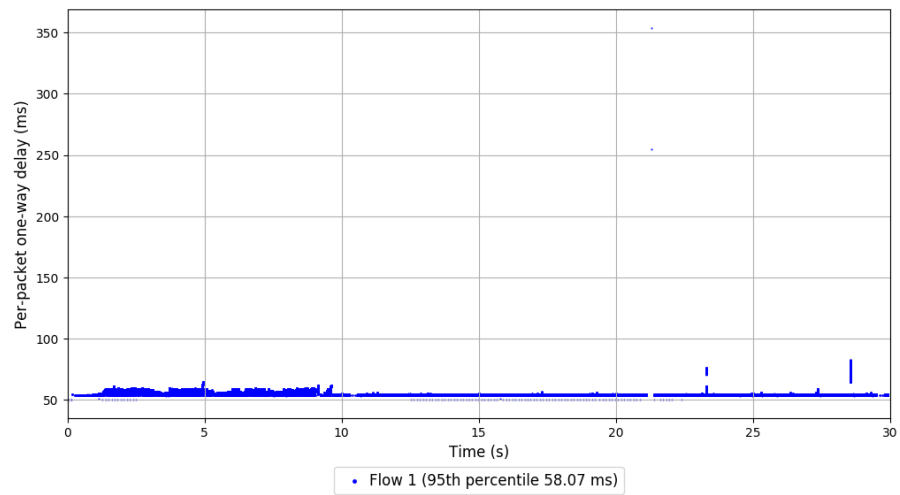
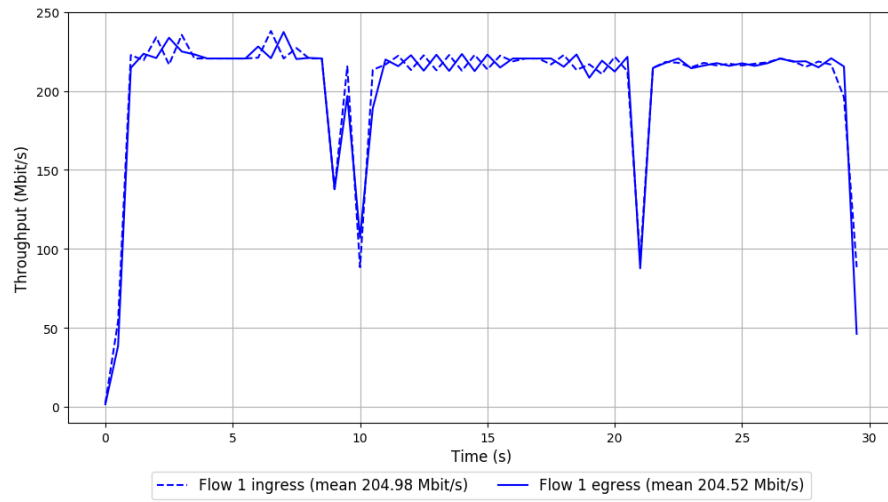
-- Flow 1:

Average throughput: 204.52 Mbit/s

95th percentile per-packet one-way delay: 58.070 ms

Loss rate: 0.56%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

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

End at: 2017-12-20 02:13:26

Below is generated by plot.py at 2017-12-20 05:04:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.63 Mbit/s

95th percentile per-packet one-way delay: 54.133 ms

Loss rate: 0.38%

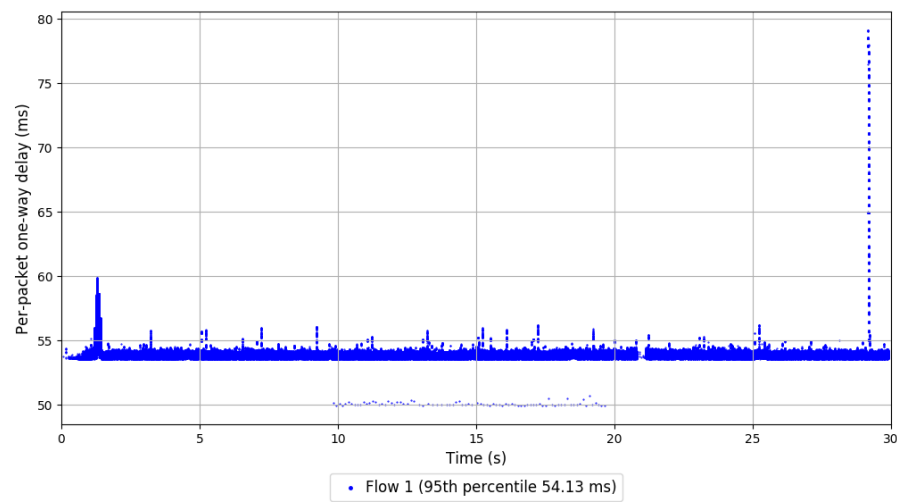
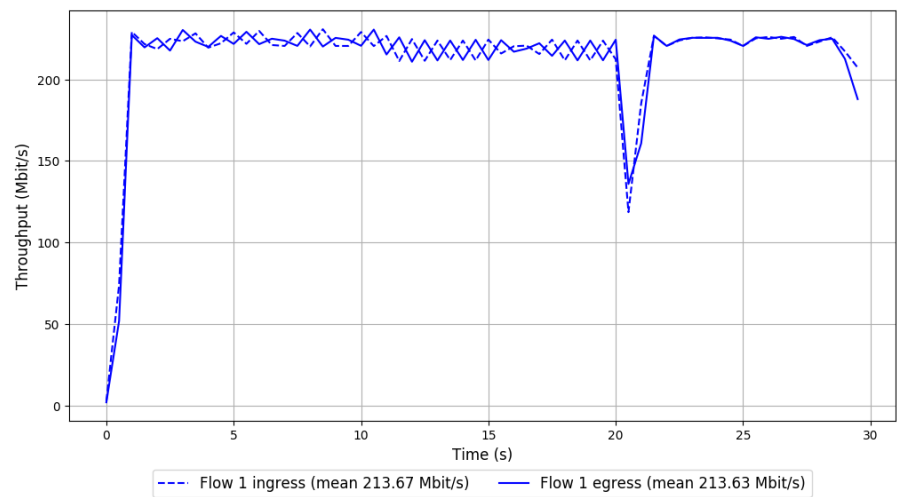
-- Flow 1:

Average throughput: 213.63 Mbit/s

95th percentile per-packet one-way delay: 54.133 ms

Loss rate: 0.38%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-20 02:24:32

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

Below is generated by plot.py at 2017-12-20 05:04:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.78 Mbit/s

95th percentile per-packet one-way delay: 54.174 ms

Loss rate: 0.35%

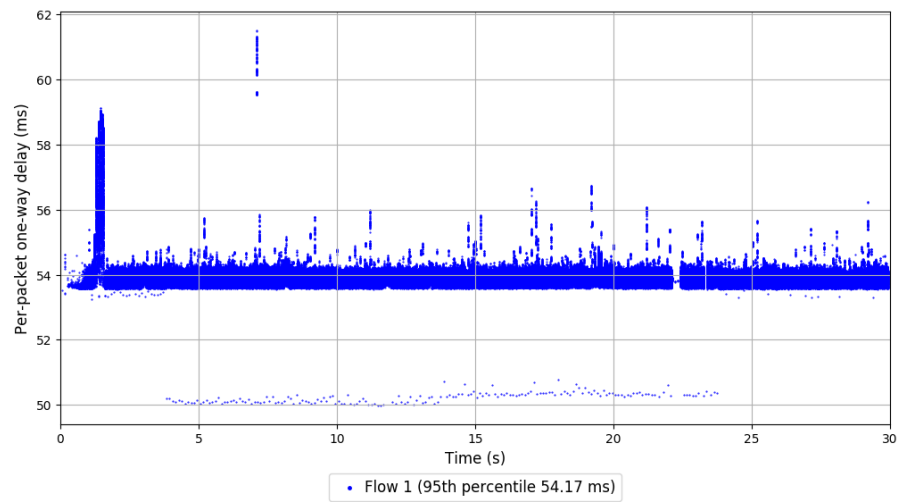
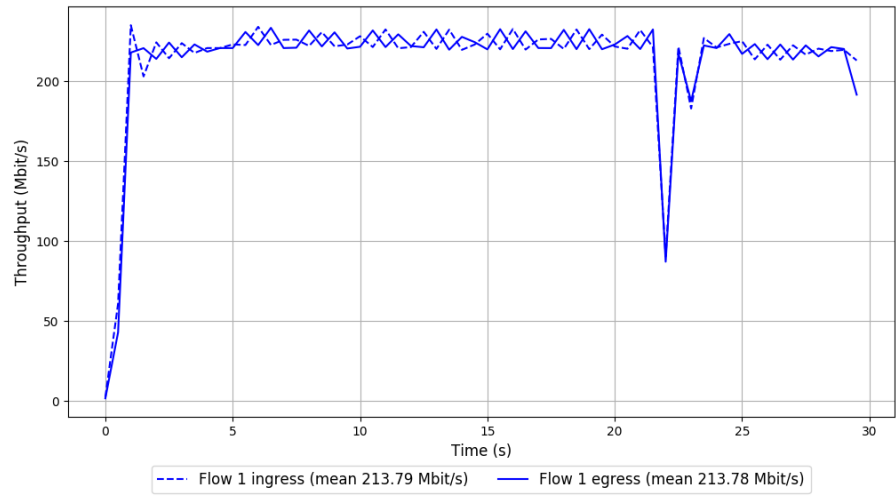
-- Flow 1:

Average throughput: 213.78 Mbit/s

95th percentile per-packet one-way delay: 54.174 ms

Loss rate: 0.35%

Run 7: Report of TCP BBR — Data Link

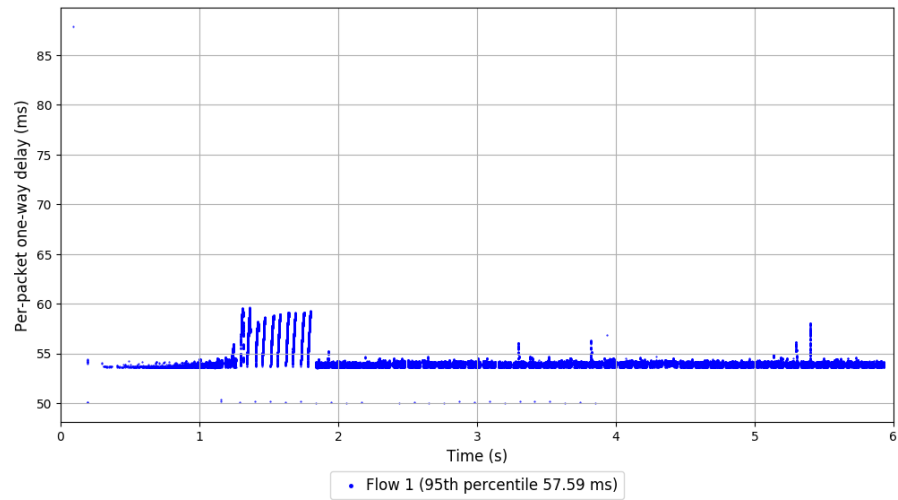
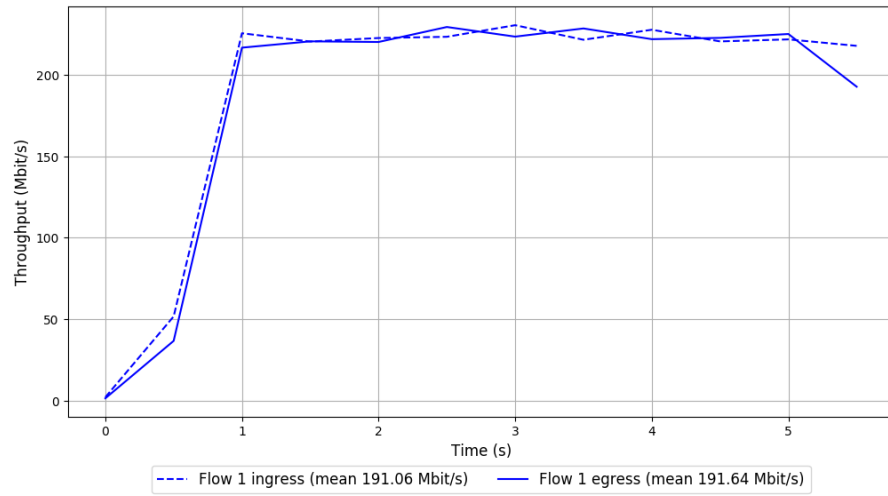


Run 8: Statistics of TCP BBR

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

End at: 2017-12-20 02:36:38

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-20 02:47:26

End at: 2017-12-20 02:47:57

Below is generated by plot.py at 2017-12-20 05:05:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.73 Mbit/s

95th percentile per-packet one-way delay: 57.826 ms

Loss rate: 0.35%

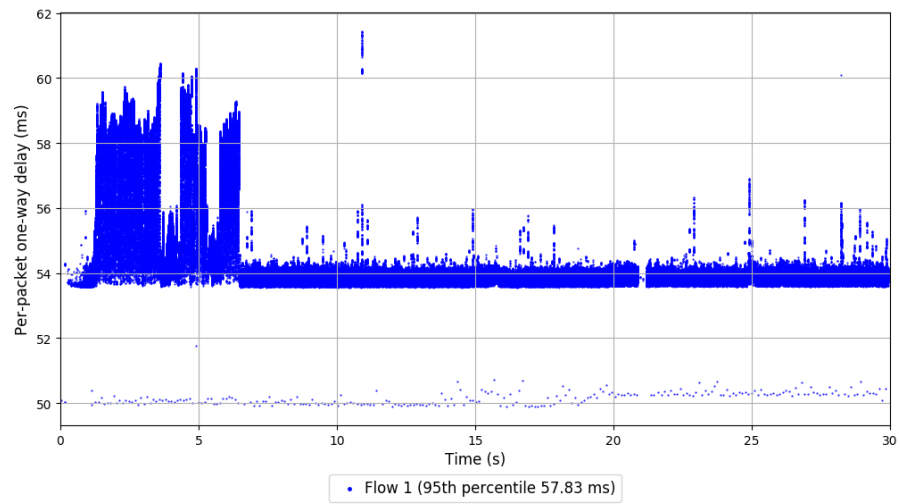
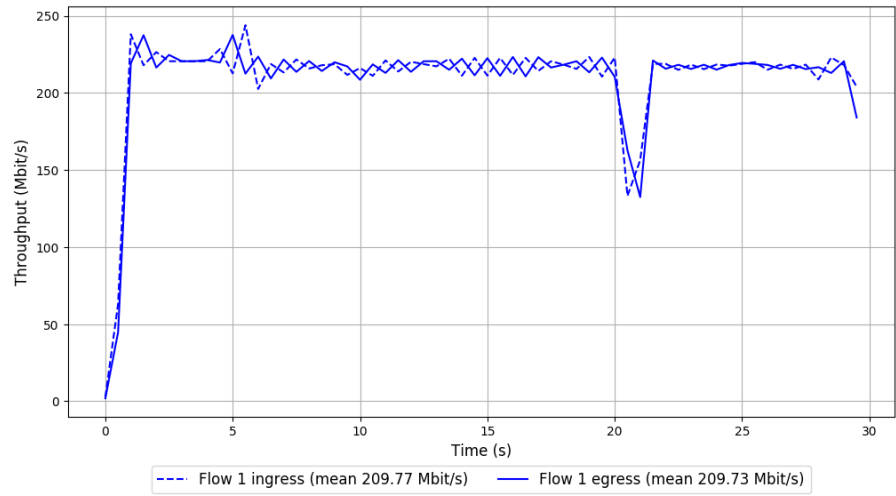
-- Flow 1:

Average throughput: 209.73 Mbit/s

95th percentile per-packet one-way delay: 57.826 ms

Loss rate: 0.35%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-20 02:58:53

End at: 2017-12-20 02:59:23

Below is generated by plot.py at 2017-12-20 05:06:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 208.18 Mbit/s

95th percentile per-packet one-way delay: 53.875 ms

Loss rate: 0.36%

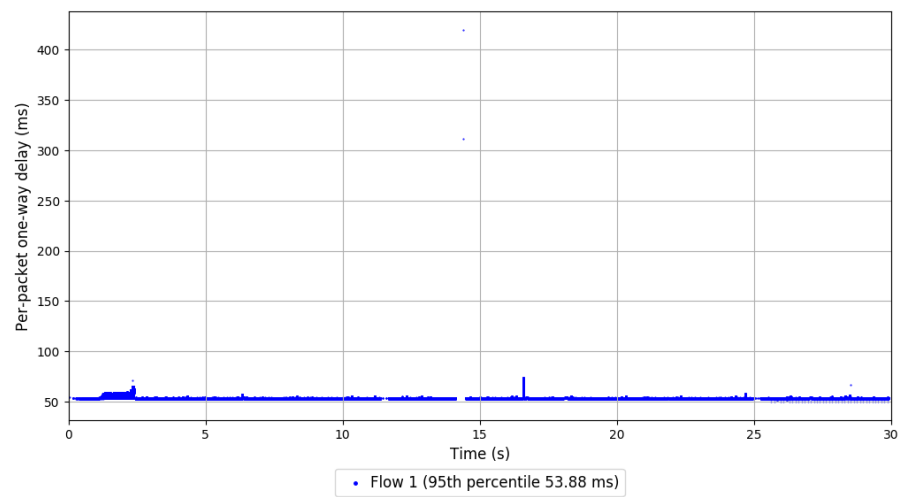
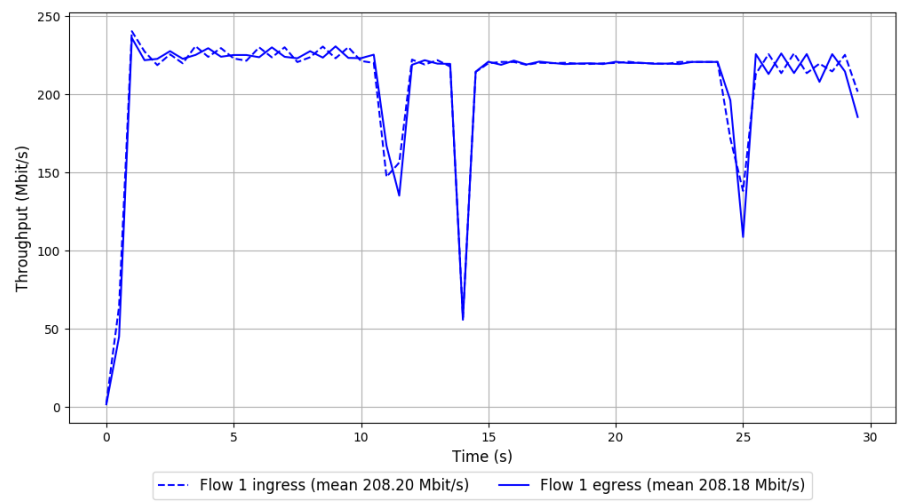
-- Flow 1:

Average throughput: 208.18 Mbit/s

95th percentile per-packet one-way delay: 53.875 ms

Loss rate: 0.36%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-20 01:10:44

End at: 2017-12-20 01:11:14

Below is generated by plot.py at 2017-12-20 05:06:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.43 Mbit/s

95th percentile per-packet one-way delay: 59.678 ms

Loss rate: 0.75%

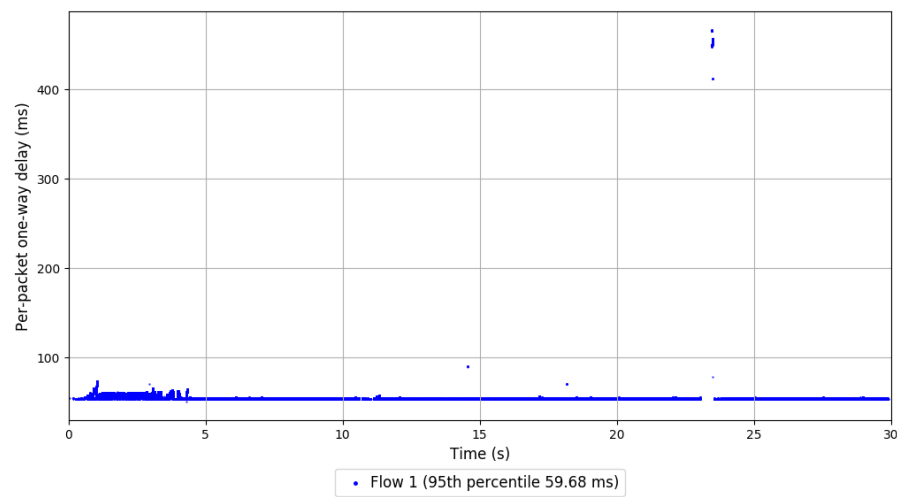
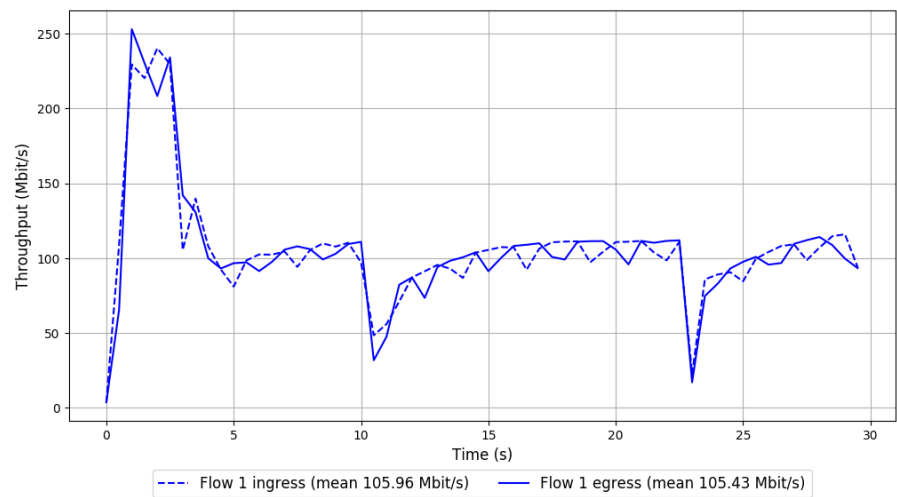
-- Flow 1:

Average throughput: 105.43 Mbit/s

95th percentile per-packet one-way delay: 59.678 ms

Loss rate: 0.75%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-20 01:22:28

End at: 2017-12-20 01:22:58

Below is generated by plot.py at 2017-12-20 05:06:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 124.39 Mbit/s

95th percentile per-packet one-way delay: 59.377 ms

Loss rate: 1.21%

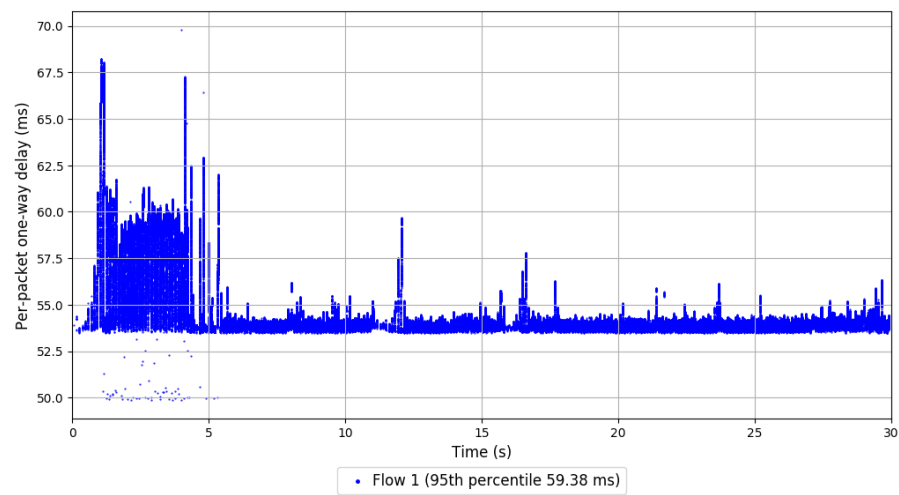
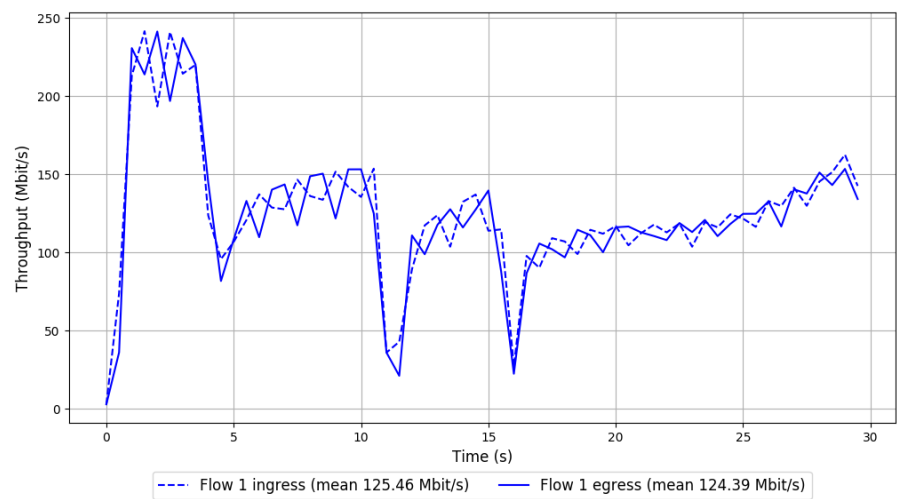
-- Flow 1:

Average throughput: 124.39 Mbit/s

95th percentile per-packet one-way delay: 59.377 ms

Loss rate: 1.21%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-20 01:33:53

End at: 2017-12-20 01:34:23

Below is generated by plot.py at 2017-12-20 05:06:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 128.95 Mbit/s

95th percentile per-packet one-way delay: 58.871 ms

Loss rate: 0.40%

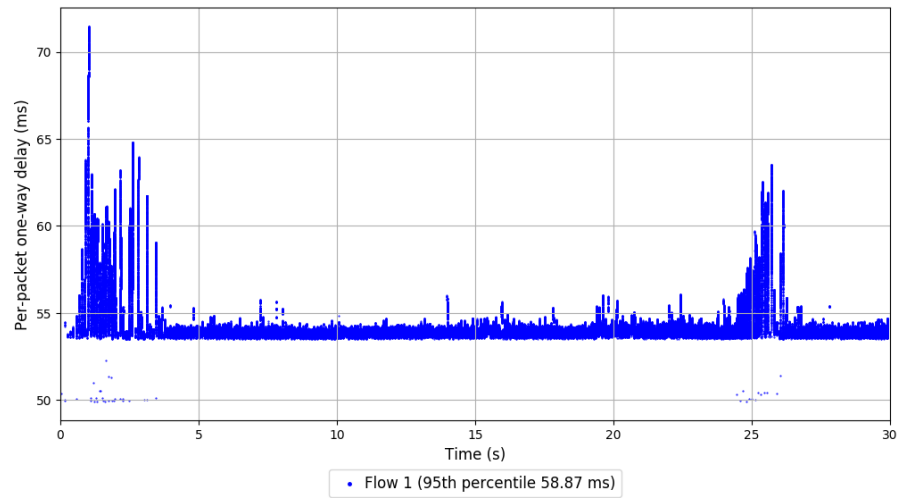
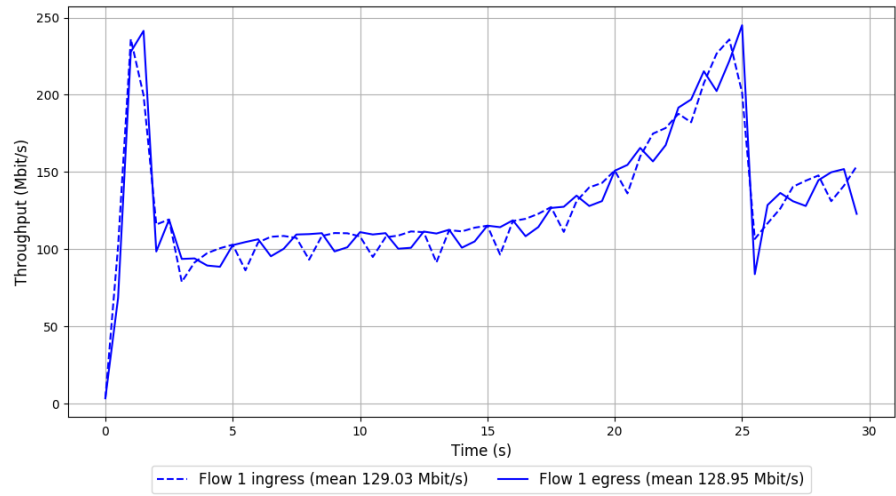
-- Flow 1:

Average throughput: 128.95 Mbit/s

95th percentile per-packet one-way delay: 58.871 ms

Loss rate: 0.40%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-20 01:45:38

End at: 2017-12-20 01:46:08

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 178.35 Mbit/s

95th percentile per-packet one-way delay: 60.665 ms

Loss rate: 0.30%

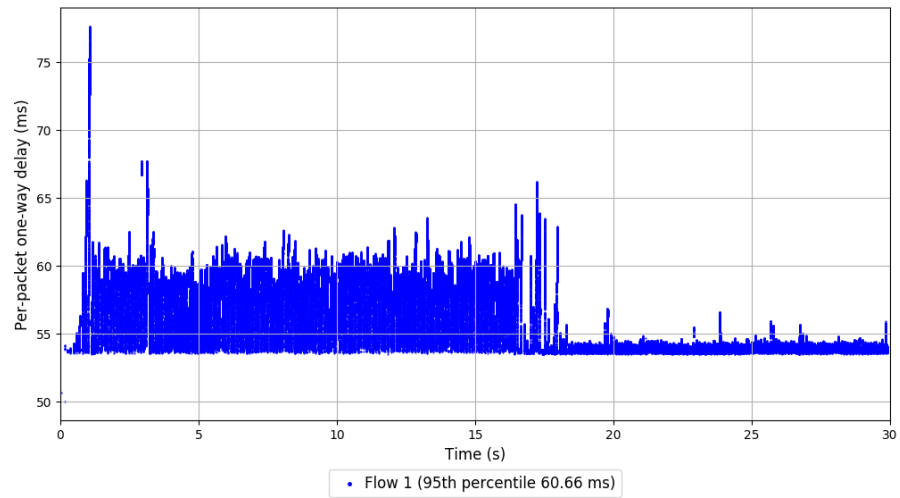
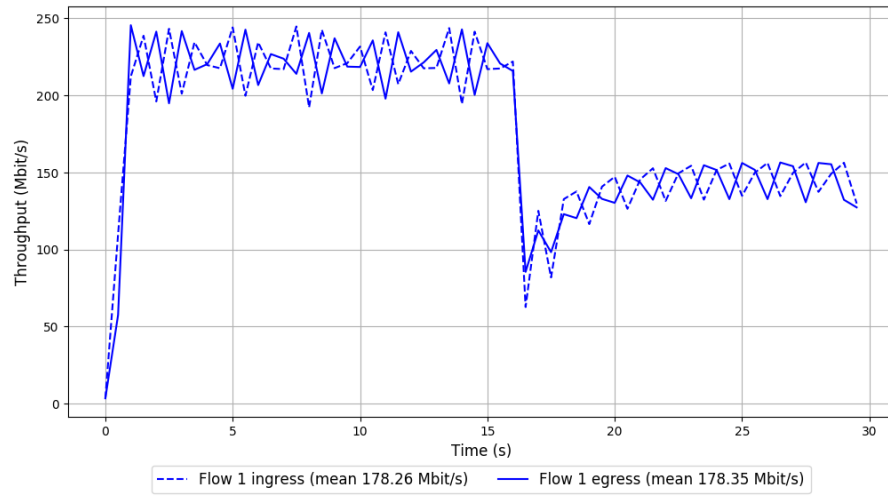
-- Flow 1:

Average throughput: 178.35 Mbit/s

95th percentile per-packet one-way delay: 60.665 ms

Loss rate: 0.30%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-20 01:57:04

End at: 2017-12-20 01:57:34

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 136.75 Mbit/s

95th percentile per-packet one-way delay: 59.351 ms

Loss rate: 0.33%

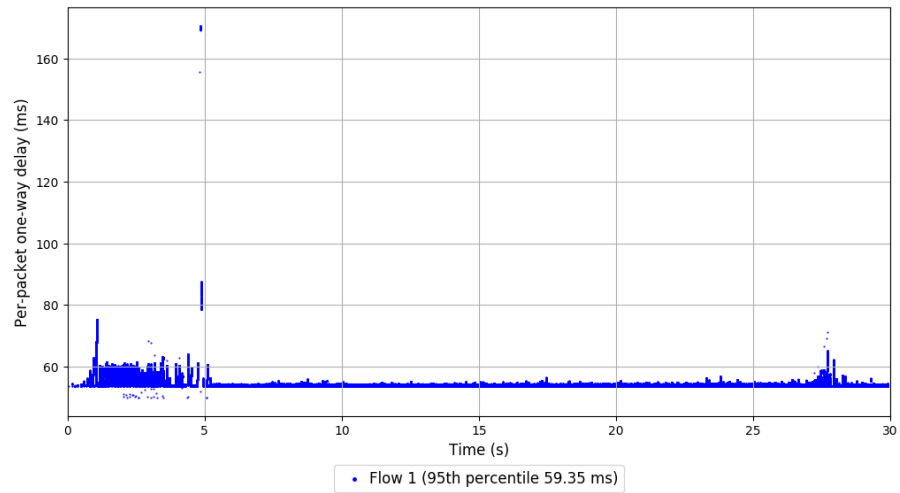
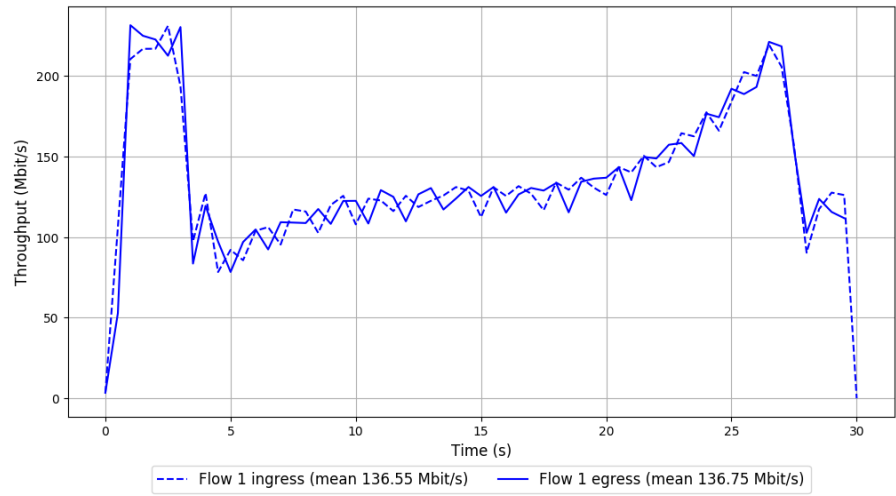
-- Flow 1:

Average throughput: 136.75 Mbit/s

95th percentile per-packet one-way delay: 59.351 ms

Loss rate: 0.33%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-20 02:08:17

End at: 2017-12-20 02:08:47

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 127.01 Mbit/s

95th percentile per-packet one-way delay: 59.271 ms

Loss rate: 1.17%

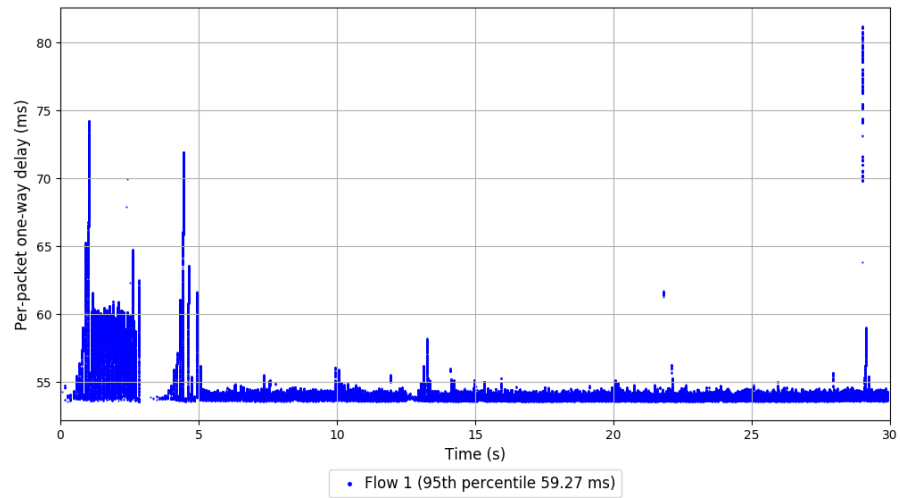
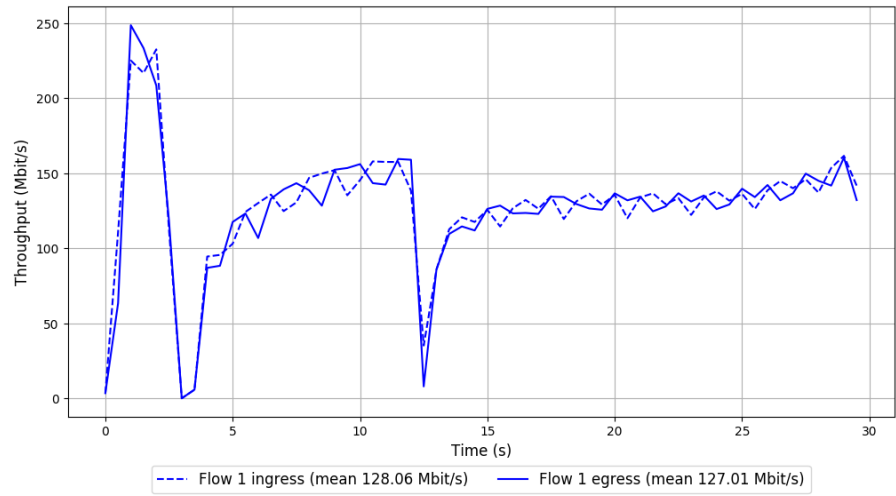
-- Flow 1:

Average throughput: 127.01 Mbit/s

95th percentile per-packet one-way delay: 59.271 ms

Loss rate: 1.17%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-20 02:19:39

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.04 Mbit/s

95th percentile per-packet one-way delay: 59.326 ms

Loss rate: 0.36%

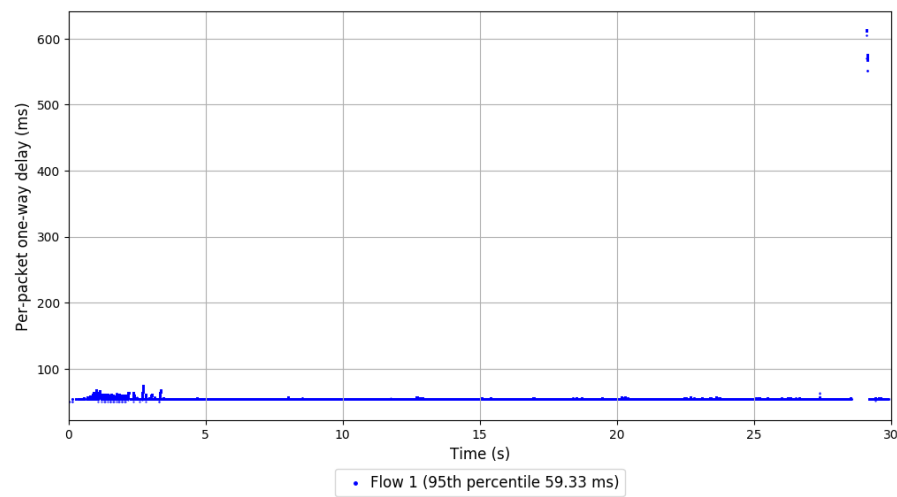
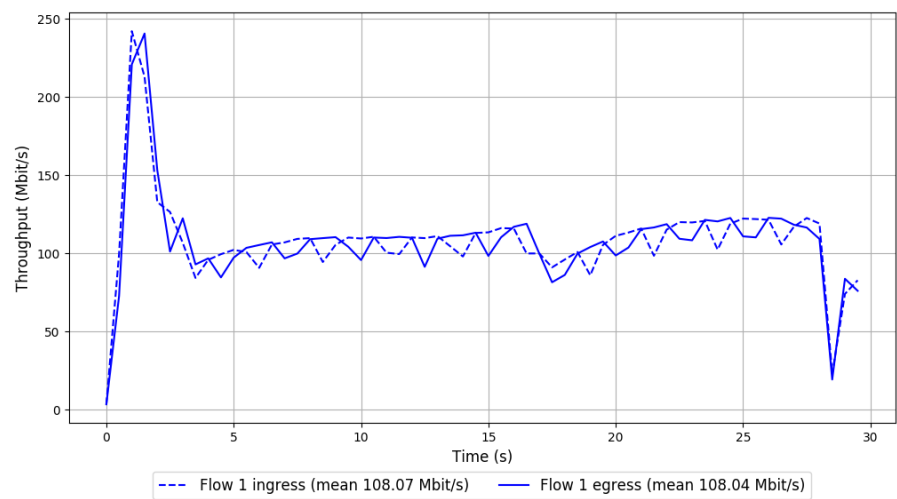
-- Flow 1:

Average throughput: 108.04 Mbit/s

95th percentile per-packet one-way delay: 59.326 ms

Loss rate: 0.36%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-20 02:31:10

End at: 2017-12-20 02:31:40

Below is generated by plot.py at 2017-12-20 05:08:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 132.23 Mbit/s

95th percentile per-packet one-way delay: 60.431 ms

Loss rate: 0.36%

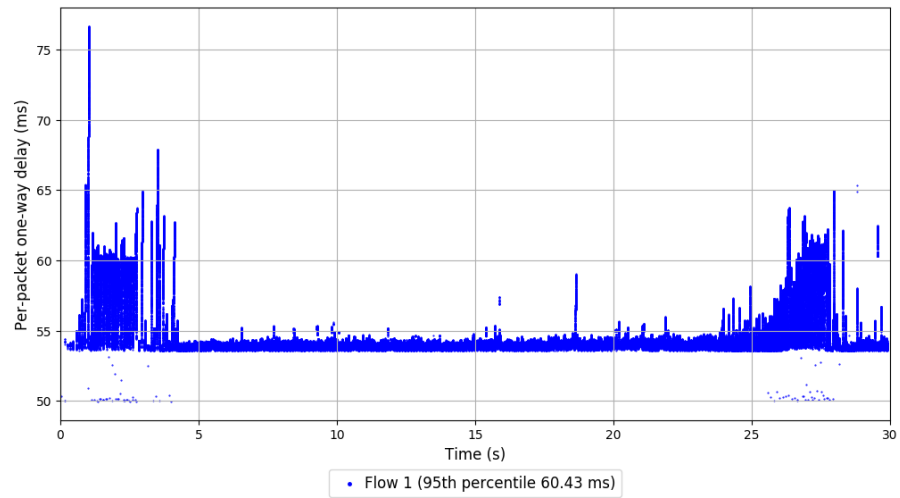
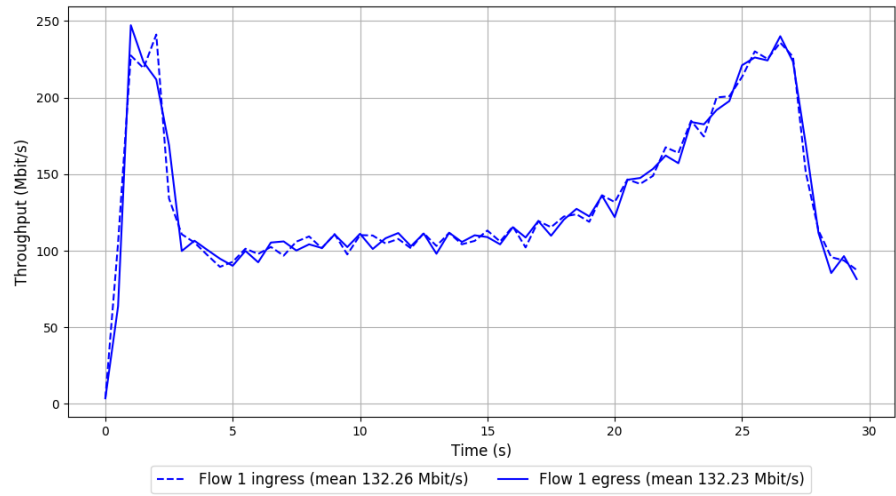
-- Flow 1:

Average throughput: 132.23 Mbit/s

95th percentile per-packet one-way delay: 60.431 ms

Loss rate: 0.36%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-20 02:42:43

End at: 2017-12-20 02:43:13

Below is generated by plot.py at 2017-12-20 05:08:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.03 Mbit/s

95th percentile per-packet one-way delay: 54.605 ms

Loss rate: 0.87%

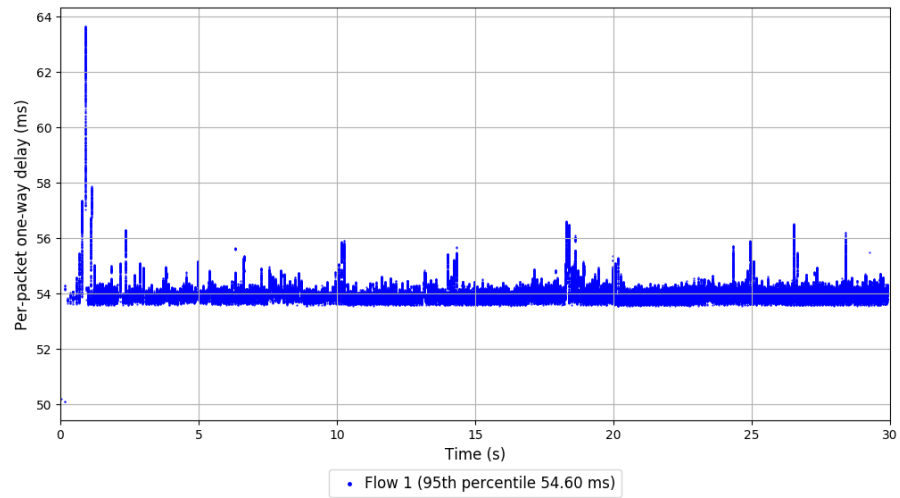
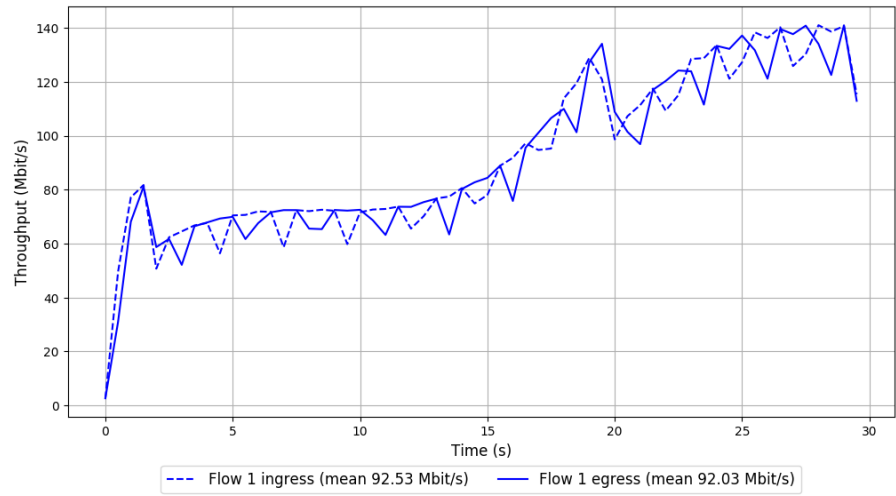
-- Flow 1:

Average throughput: 92.03 Mbit/s

95th percentile per-packet one-way delay: 54.605 ms

Loss rate: 0.87%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-20 02:54:11

End at: 2017-12-20 02:54:41

Below is generated by plot.py at 2017-12-20 05:08:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.97 Mbit/s

95th percentile per-packet one-way delay: 60.769 ms

Loss rate: 0.91%

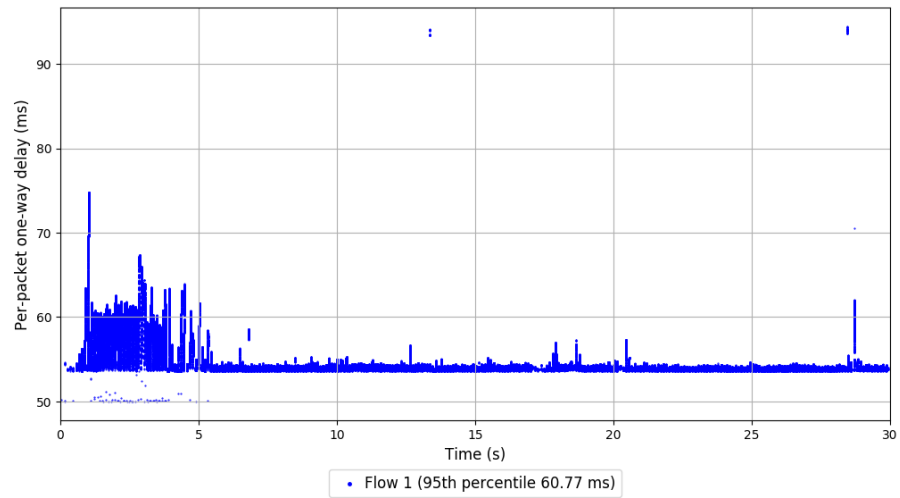
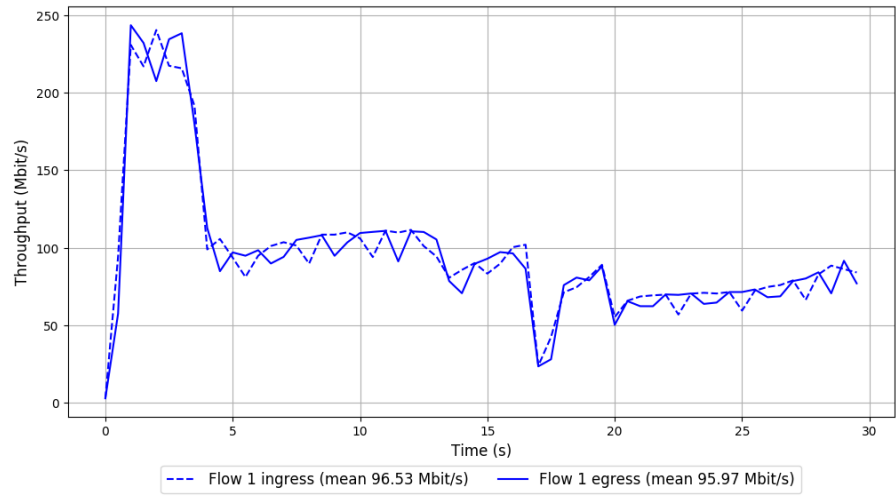
-- Flow 1:

Average throughput: 95.97 Mbit/s

95th percentile per-packet one-way delay: 60.769 ms

Loss rate: 0.91%

Run 10: Report of TCP Cubic — Data Link

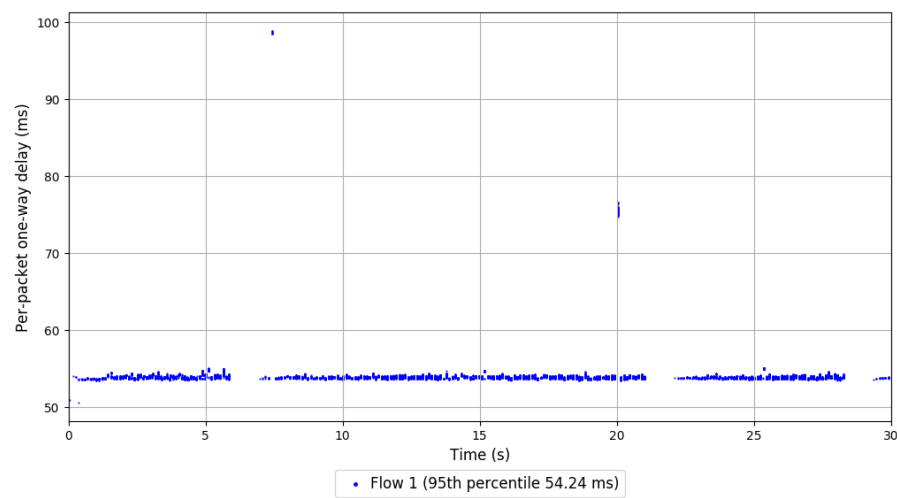
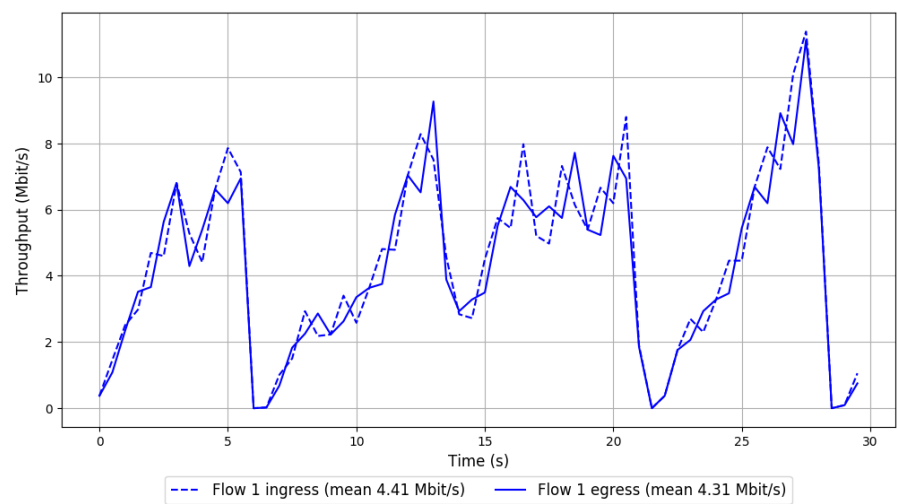


```
Run 1: Statistics of LEDBAT

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

# Below is generated by plot.py at 2017-12-20 05:08:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.31 Mbit/s
95th percentile per-packet one-way delay: 54.245 ms
Loss rate: 2.50%
-- Flow 1:
Average throughput: 4.31 Mbit/s
95th percentile per-packet one-way delay: 54.245 ms
Loss rate: 2.50%
```


Run 1: Report of LEDBAT — Data Link

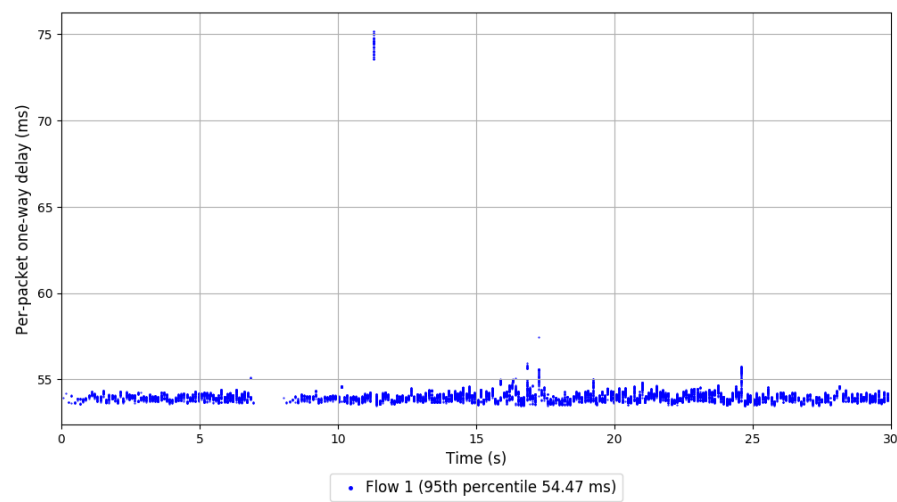
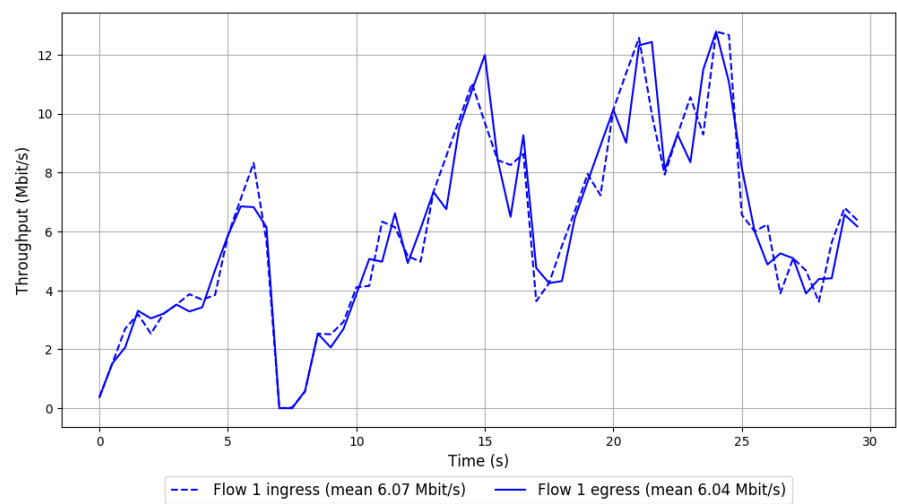


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-20 01:21:50
End at: 2017-12-20 01:22:20

# Below is generated by plot.py at 2017-12-20 05:08:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.04 Mbit/s
95th percentile per-packet one-way delay: 54.469 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 6.04 Mbit/s
95th percentile per-packet one-way delay: 54.469 ms
Loss rate: 0.81%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-20 01:33:16

End at: 2017-12-20 01:33:46

Below is generated by plot.py at 2017-12-20 05:08:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.72 Mbit/s

95th percentile per-packet one-way delay: 54.252 ms

Loss rate: 1.48%

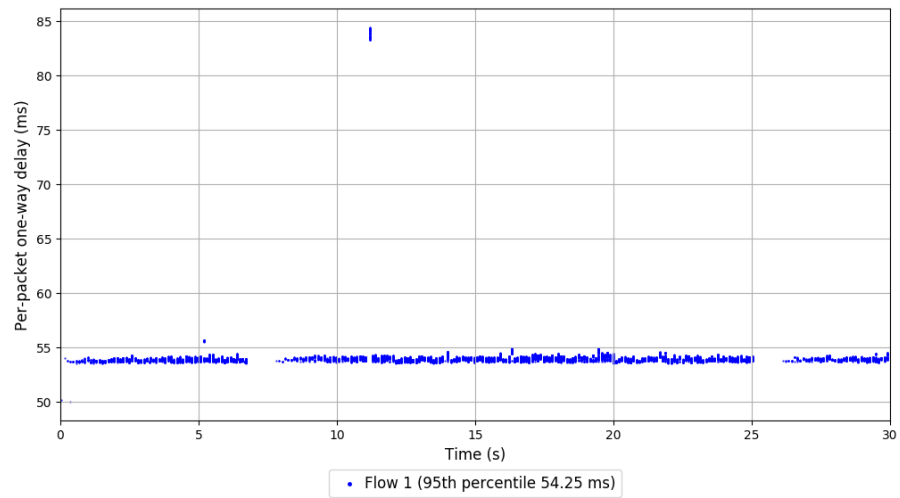
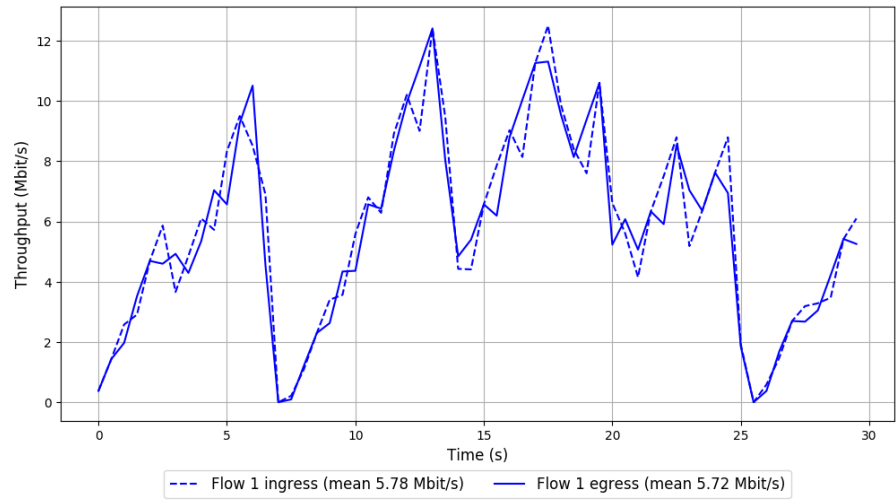
-- Flow 1:

Average throughput: 5.72 Mbit/s

95th percentile per-packet one-way delay: 54.252 ms

Loss rate: 1.48%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-20 01:45:00

End at: 2017-12-20 01:45:30

Below is generated by plot.py at 2017-12-20 05:08:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.18 Mbit/s

95th percentile per-packet one-way delay: 54.512 ms

Loss rate: 0.76%

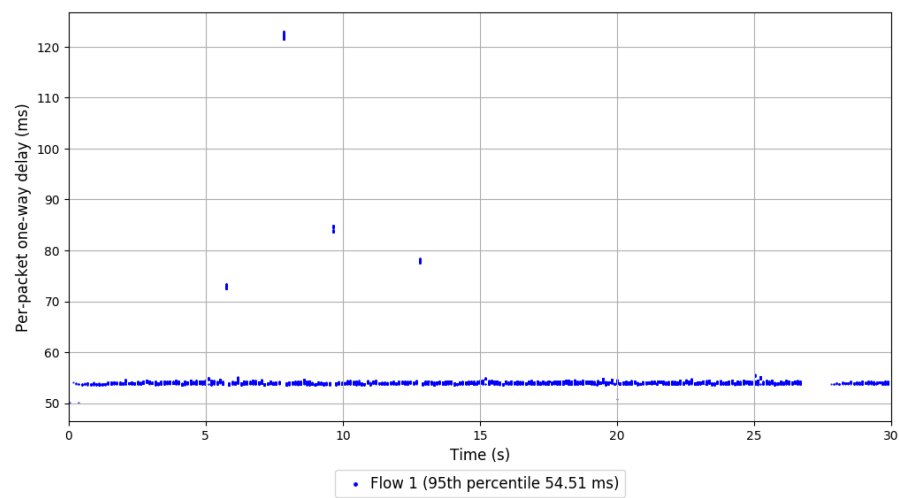
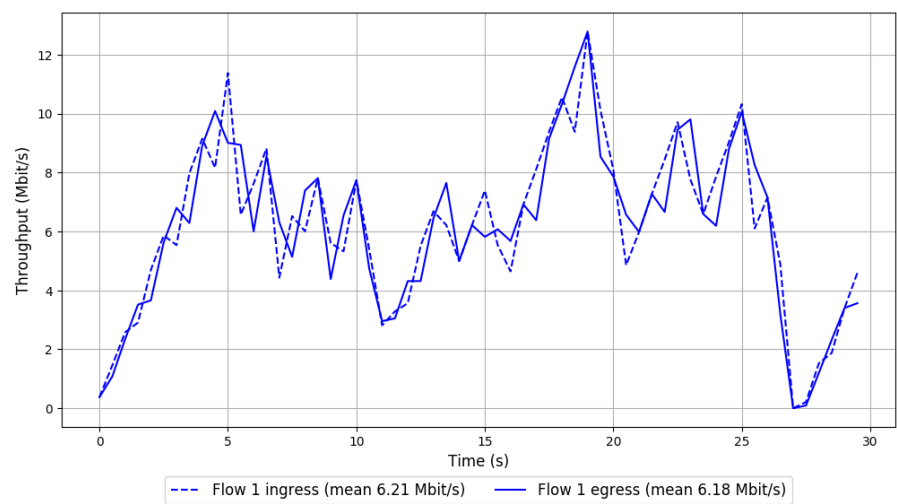
-- Flow 1:

Average throughput: 6.18 Mbit/s

95th percentile per-packet one-way delay: 54.512 ms

Loss rate: 0.76%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-20 01:56:27

End at: 2017-12-20 01:56:57

Below is generated by plot.py at 2017-12-20 05:08:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.21 Mbit/s

95th percentile per-packet one-way delay: 54.358 ms

Loss rate: 3.06%

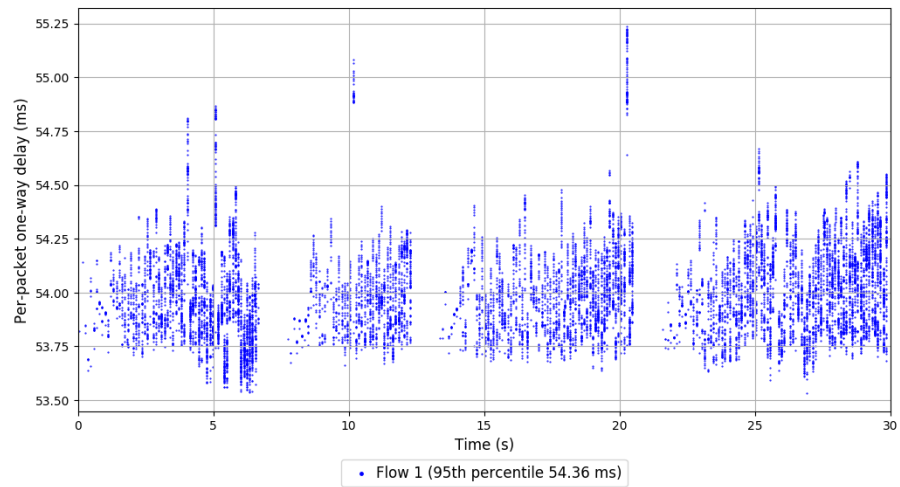
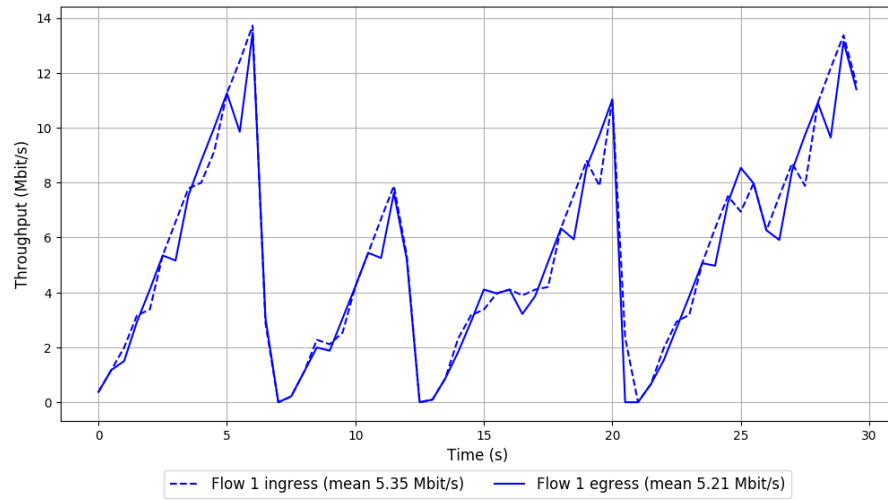
-- Flow 1:

Average throughput: 5.21 Mbit/s

95th percentile per-packet one-way delay: 54.358 ms

Loss rate: 3.06%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-20 02:07:40

End at: 2017-12-20 02:08:10

Below is generated by plot.py at 2017-12-20 05:08:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.00 Mbit/s

95th percentile per-packet one-way delay: 54.364 ms

Loss rate: 1.94%

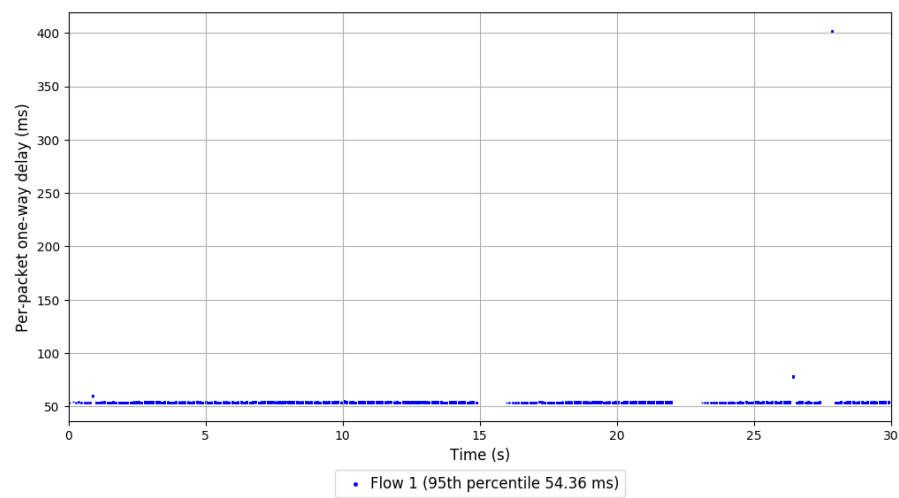
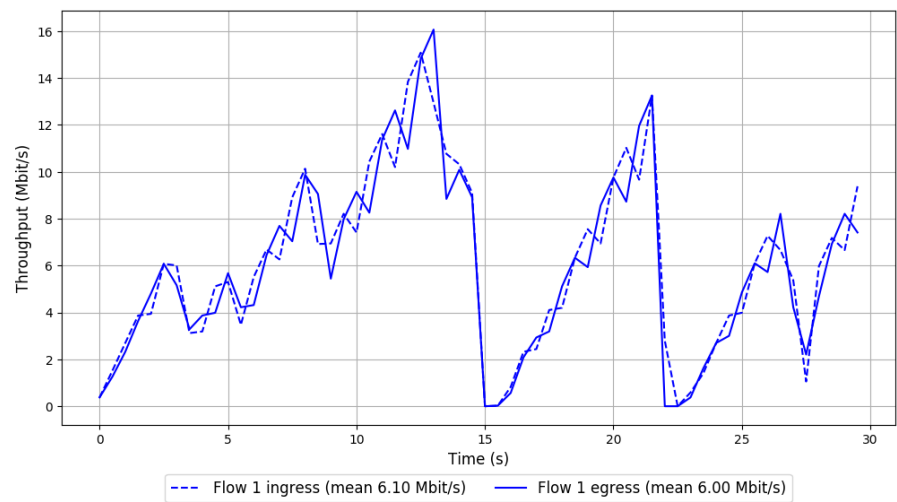
-- Flow 1:

Average throughput: 6.00 Mbit/s

95th percentile per-packet one-way delay: 54.364 ms

Loss rate: 1.94%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

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

End at: 2017-12-20 02:19:31

Below is generated by plot.py at 2017-12-20 05:08:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.01 Mbit/s

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

Loss rate: 1.49%

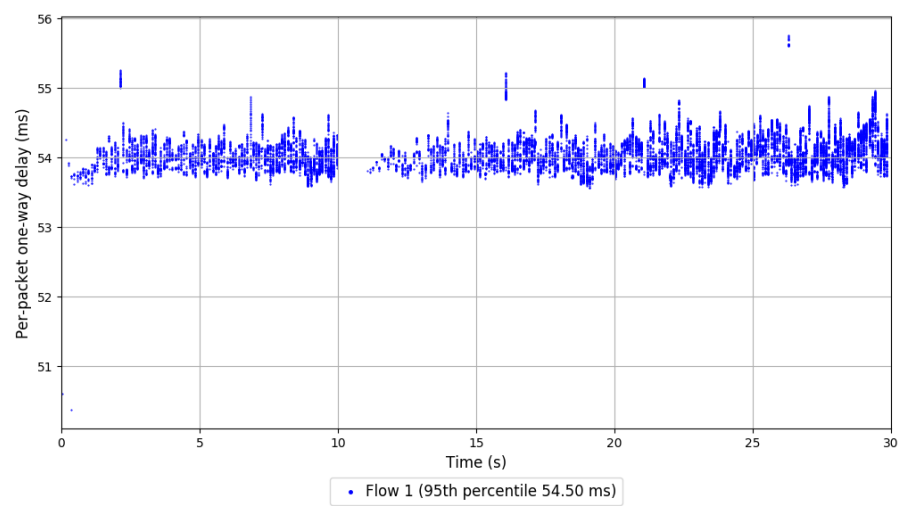
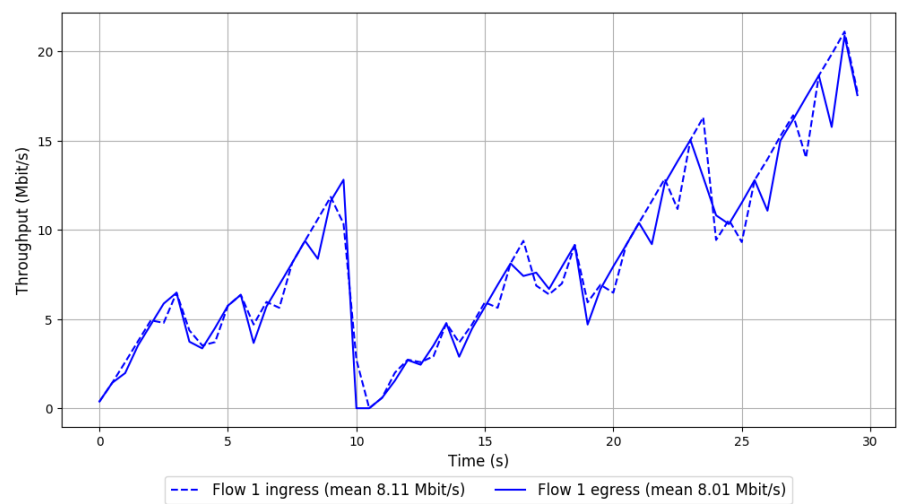
-- Flow 1:

Average throughput: 8.01 Mbit/s

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

Loss rate: 1.49%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-20 02:30:32

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

Below is generated by plot.py at 2017-12-20 05:08:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.94 Mbit/s

95th percentile per-packet one-way delay: 54.635 ms

Loss rate: 0.96%

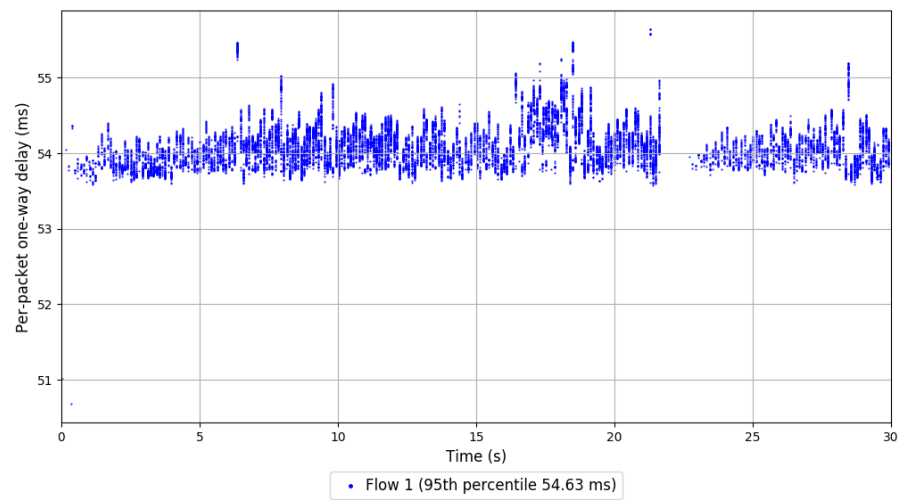
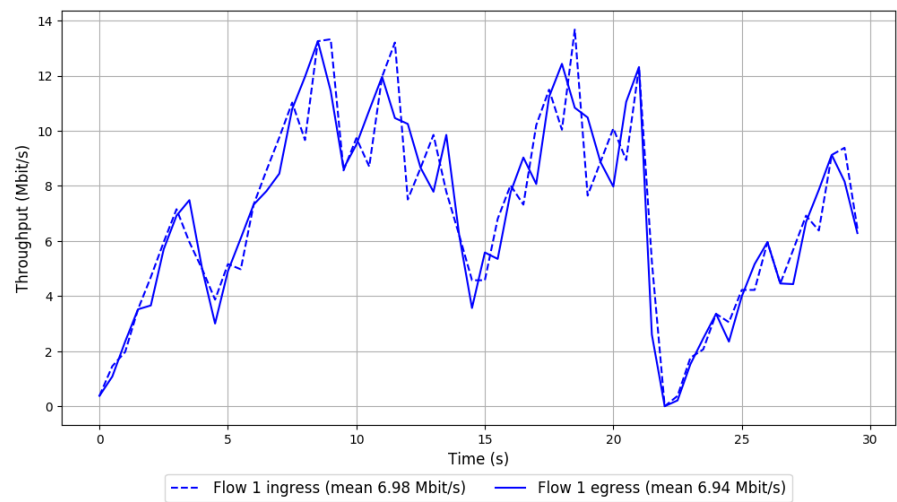
-- Flow 1:

Average throughput: 6.94 Mbit/s

95th percentile per-packet one-way delay: 54.635 ms

Loss rate: 0.96%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-20 02:42:06

End at: 2017-12-20 02:42:36

Below is generated by plot.py at 2017-12-20 05:08:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.70 Mbit/s

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

Loss rate: 2.00%

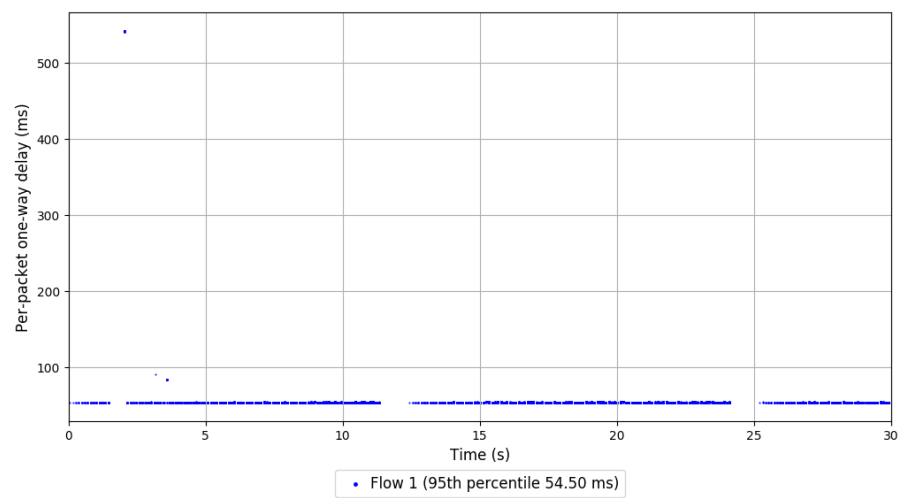
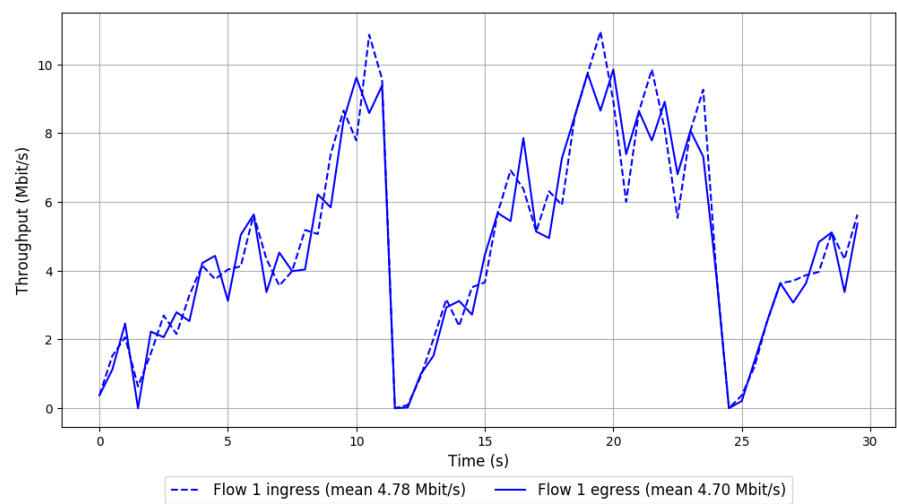
-- Flow 1:

Average throughput: 4.70 Mbit/s

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

Loss rate: 2.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-20 02:53:33

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

Below is generated by plot.py at 2017-12-20 05:08:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.97 Mbit/s

95th percentile per-packet one-way delay: 54.678 ms

Loss rate: 0.35%

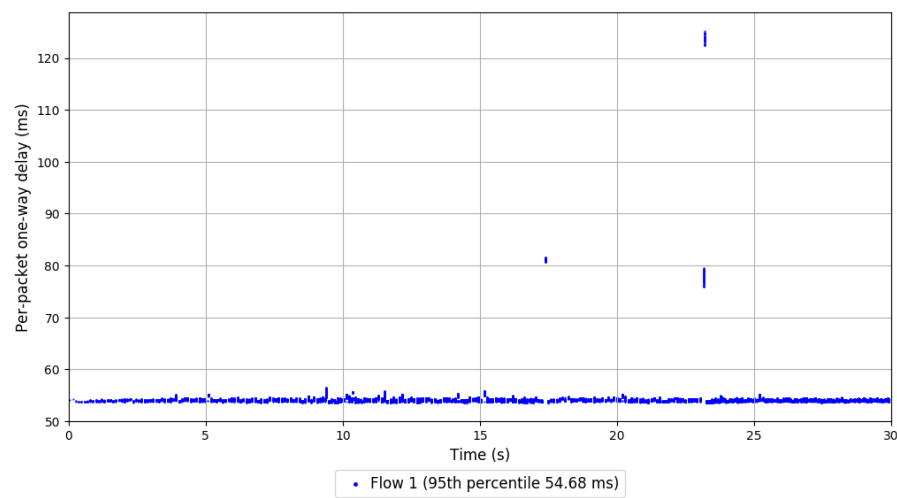
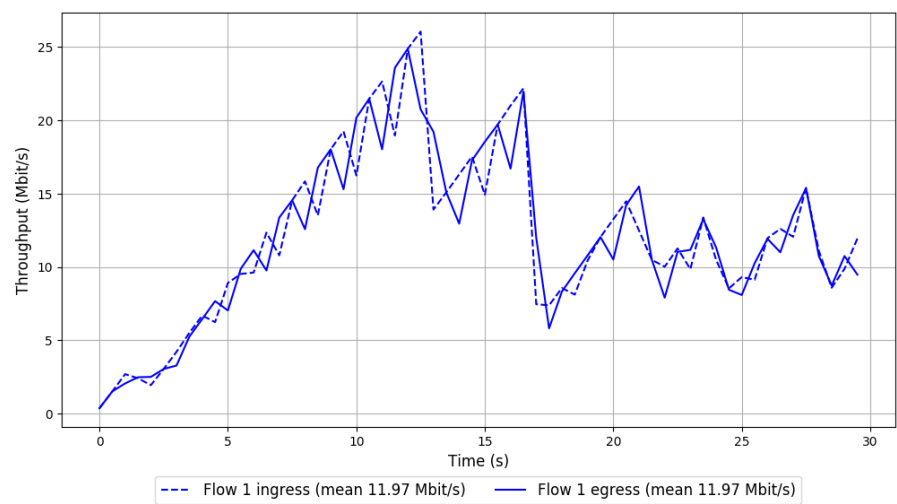
-- Flow 1:

Average throughput: 11.97 Mbit/s

95th percentile per-packet one-way delay: 54.678 ms

Loss rate: 0.35%

Run 10: Report of LEDBAT — Data Link

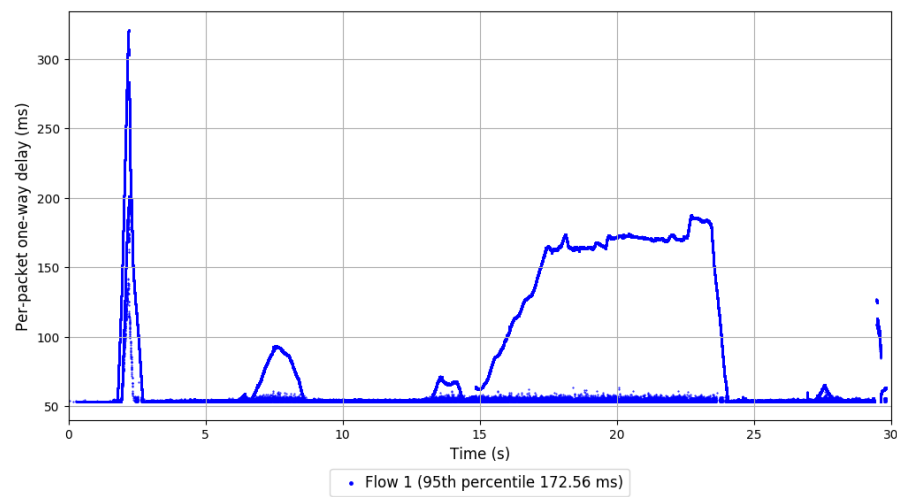
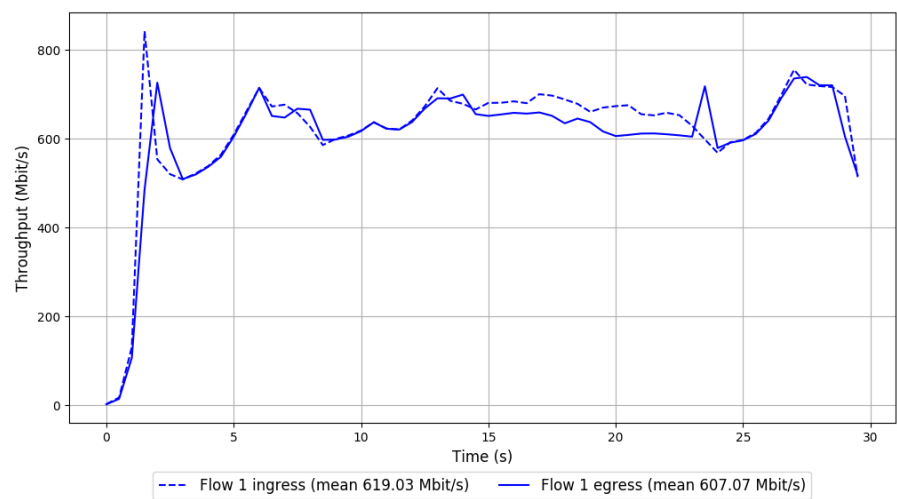


```
Run 1: Statistics of PCC

Start at: 2017-12-20 01:11:27
End at: 2017-12-20 01:11:57

# Below is generated by plot.py at 2017-12-20 05:17:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 607.07 Mbit/s
95th percentile per-packet one-way delay: 172.555 ms
Loss rate: 2.28%
-- Flow 1:
Average throughput: 607.07 Mbit/s
95th percentile per-packet one-way delay: 172.555 ms
Loss rate: 2.28%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-20 01:23:11

End at: 2017-12-20 01:23:41

Below is generated by plot.py at 2017-12-20 05:17:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 564.09 Mbit/s

95th percentile per-packet one-way delay: 66.568 ms

Loss rate: 0.75%

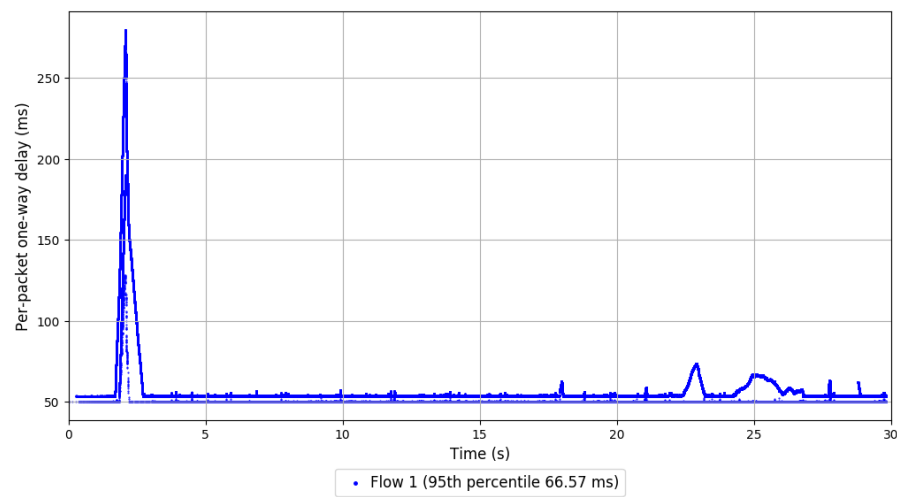
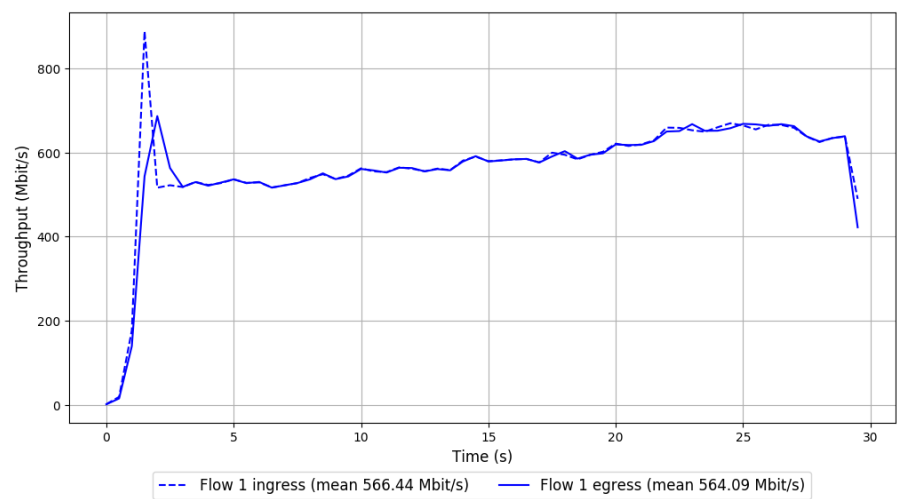
-- Flow 1:

Average throughput: 564.09 Mbit/s

95th percentile per-packet one-way delay: 66.568 ms

Loss rate: 0.75%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-20 01:34:37

End at: 2017-12-20 01:35:07

Below is generated by plot.py at 2017-12-20 05:17:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 592.96 Mbit/s

95th percentile per-packet one-way delay: 176.083 ms

Loss rate: 2.43%

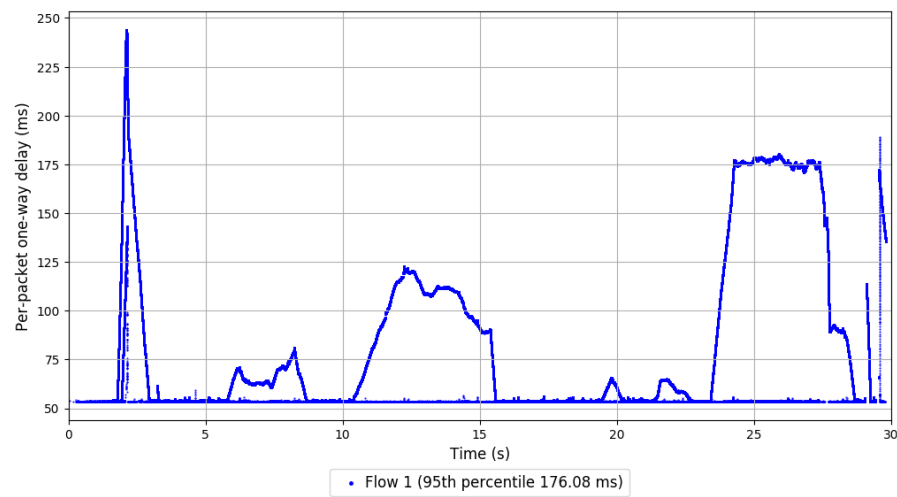
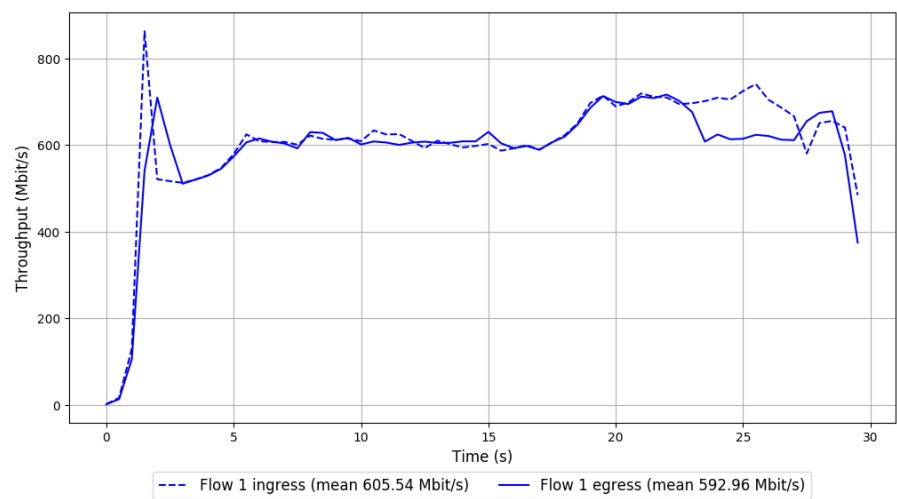
-- Flow 1:

Average throughput: 592.96 Mbit/s

95th percentile per-packet one-way delay: 176.083 ms

Loss rate: 2.43%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-20 01:46:23

End at: 2017-12-20 01:46:53

Below is generated by plot.py at 2017-12-20 05:17:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 570.91 Mbit/s

95th percentile per-packet one-way delay: 87.253 ms

Loss rate: 0.45%

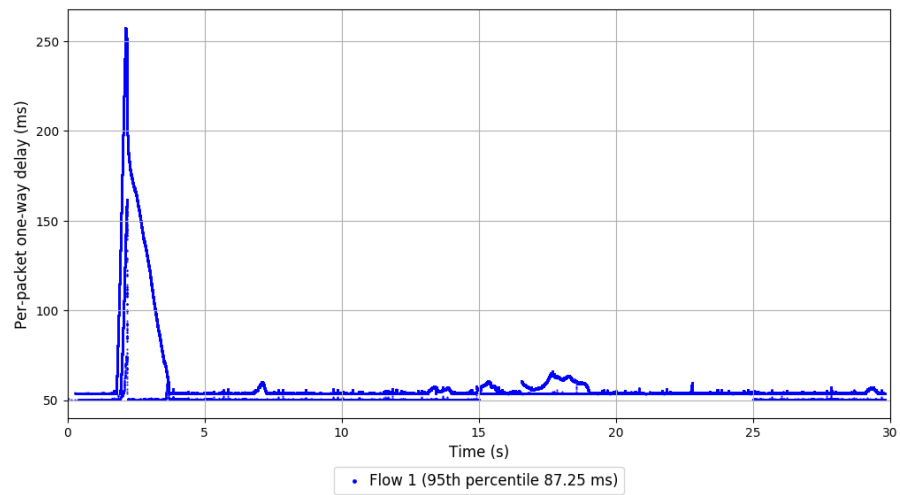
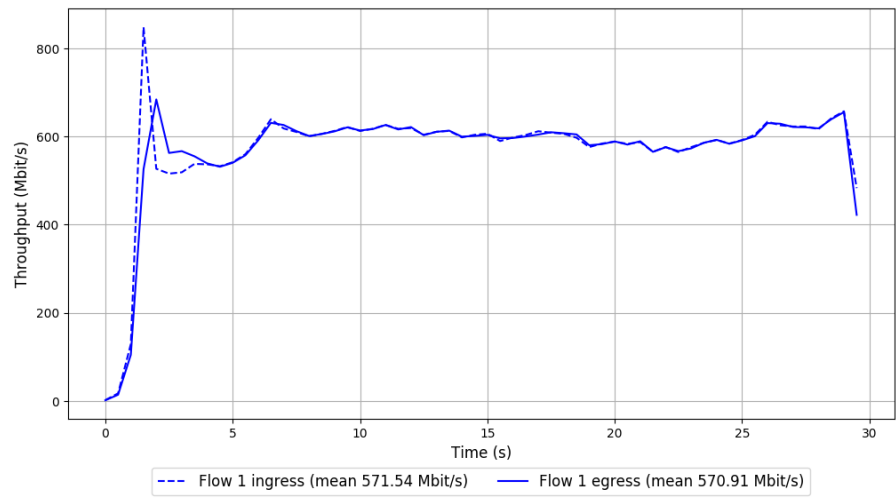
-- Flow 1:

Average throughput: 570.91 Mbit/s

95th percentile per-packet one-way delay: 87.253 ms

Loss rate: 0.45%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-20 01:57:48

End at: 2017-12-20 01:58:18

Below is generated by plot.py at 2017-12-20 05:17:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 575.73 Mbit/s

95th percentile per-packet one-way delay: 96.494 ms

Loss rate: 0.72%

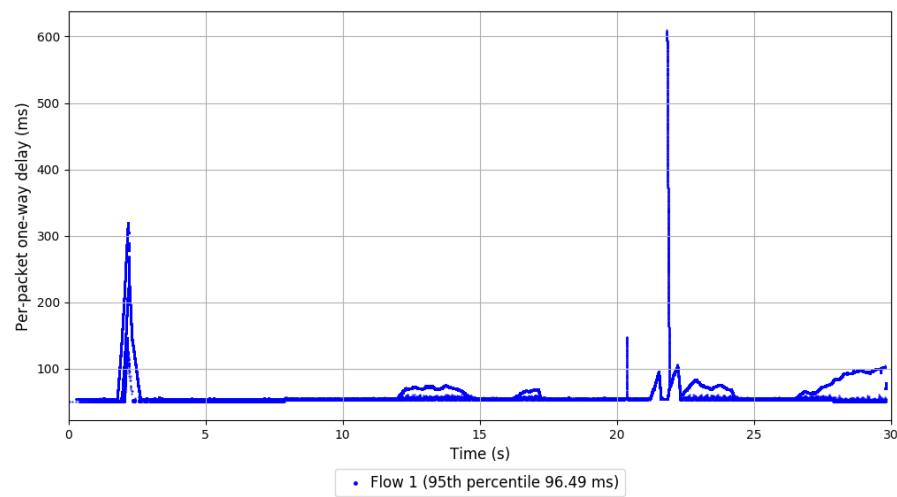
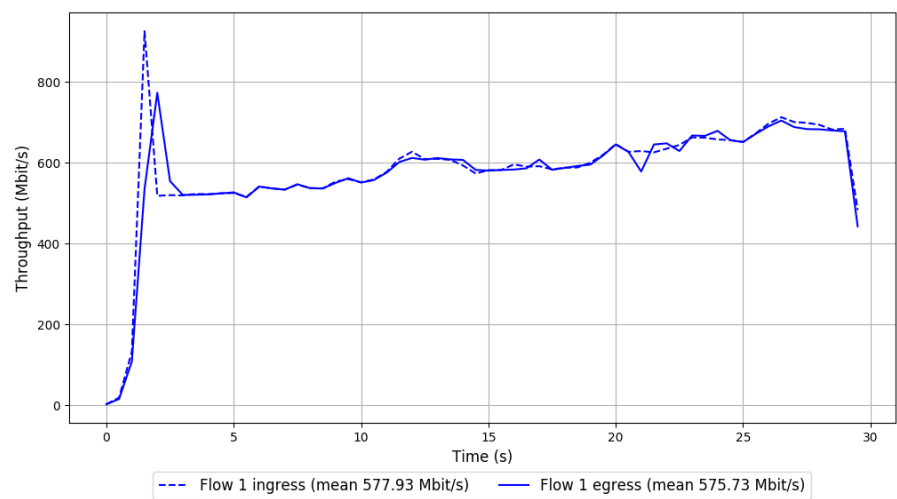
-- Flow 1:

Average throughput: 575.73 Mbit/s

95th percentile per-packet one-way delay: 96.494 ms

Loss rate: 0.72%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-20 02:09:01

End at: 2017-12-20 02:09:31

Below is generated by plot.py at 2017-12-20 05:17:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 590.86 Mbit/s

95th percentile per-packet one-way delay: 165.145 ms

Loss rate: 1.63%

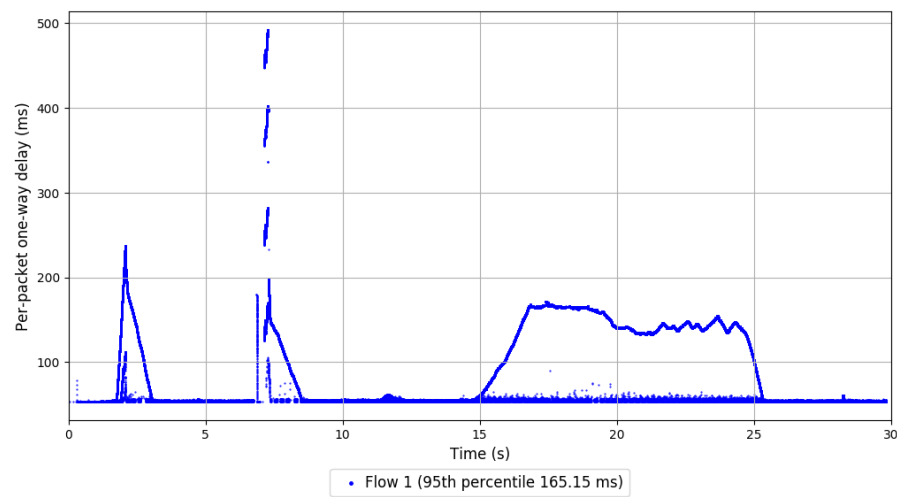
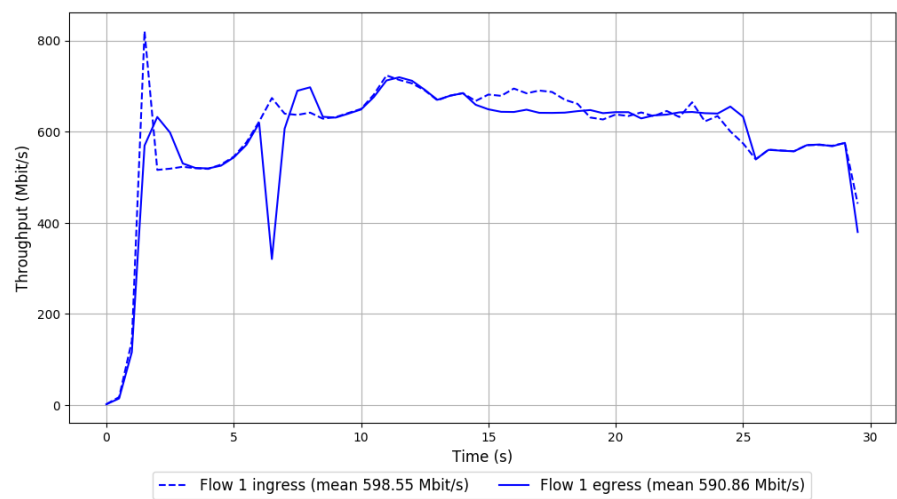
-- Flow 1:

Average throughput: 590.86 Mbit/s

95th percentile per-packet one-way delay: 165.145 ms

Loss rate: 1.63%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

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

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

Below is generated by plot.py at 2017-12-20 05:18:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 621.43 Mbit/s

95th percentile per-packet one-way delay: 159.800 ms

Loss rate: 1.94%

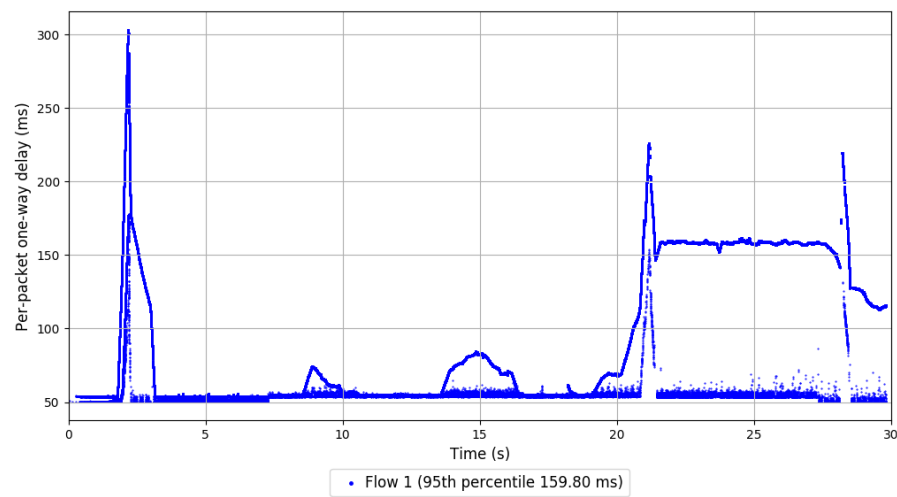
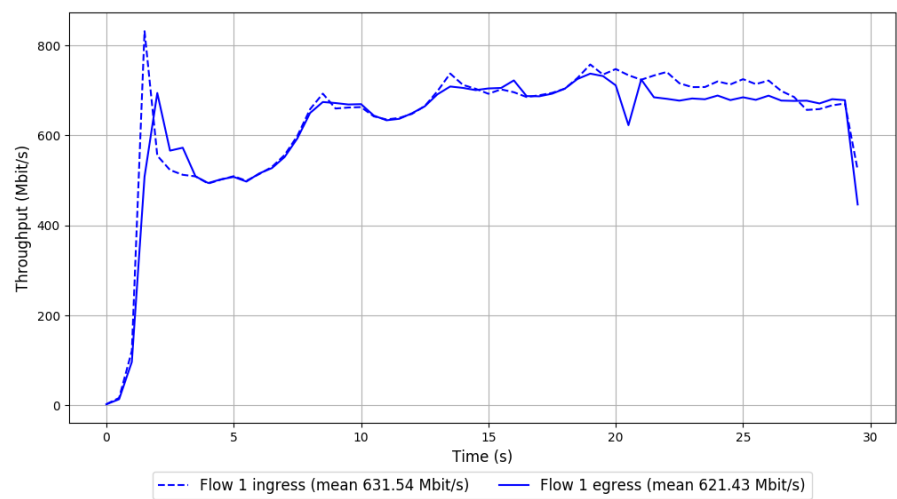
-- Flow 1:

Average throughput: 621.43 Mbit/s

95th percentile per-packet one-way delay: 159.800 ms

Loss rate: 1.94%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-20 02:31:53

End at: 2017-12-20 02:32:23

Below is generated by plot.py at 2017-12-20 05:18:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 590.48 Mbit/s

95th percentile per-packet one-way delay: 134.952 ms

Loss rate: 1.69%

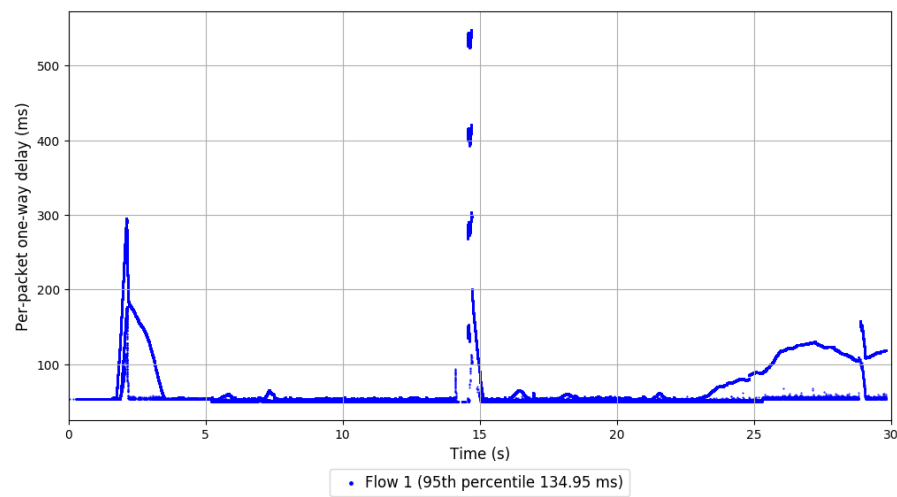
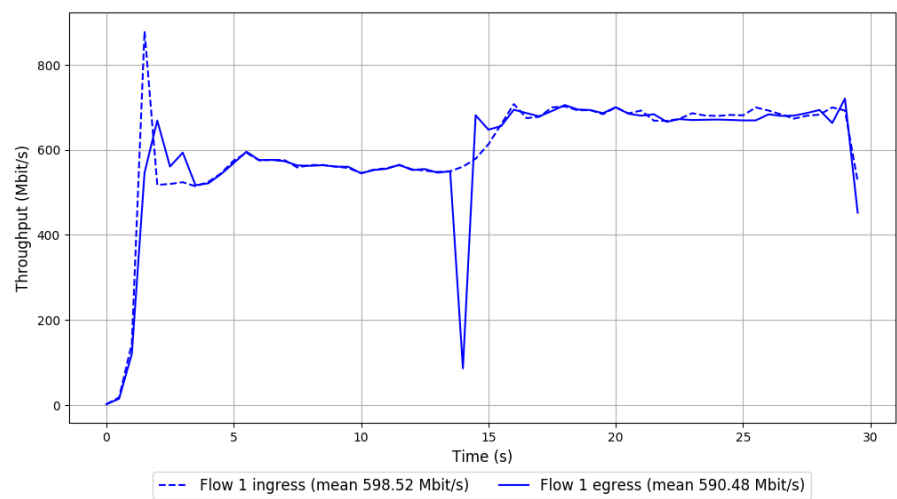
-- Flow 1:

Average throughput: 590.48 Mbit/s

95th percentile per-packet one-way delay: 134.952 ms

Loss rate: 1.69%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-20 02:43:25

End at: 2017-12-20 02:43:55

Below is generated by plot.py at 2017-12-20 05:27:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 619.18 Mbit/s

95th percentile per-packet one-way delay: 199.229 ms

Loss rate: 3.14%

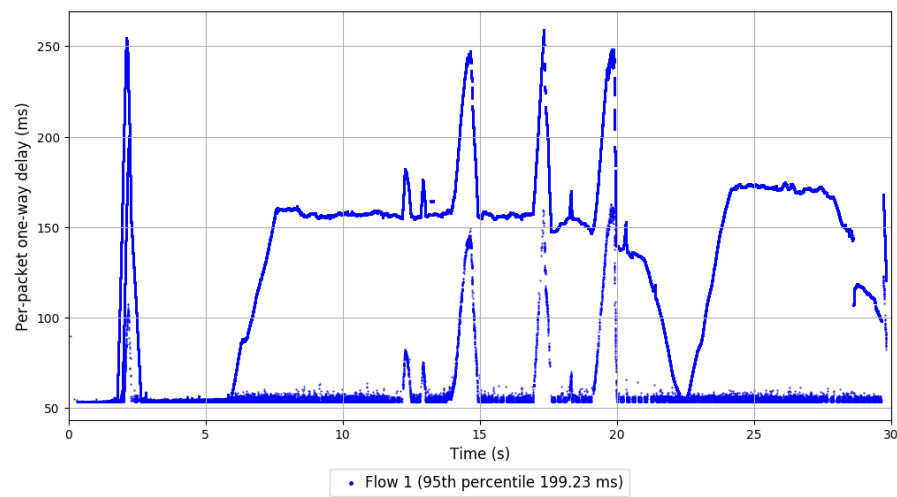
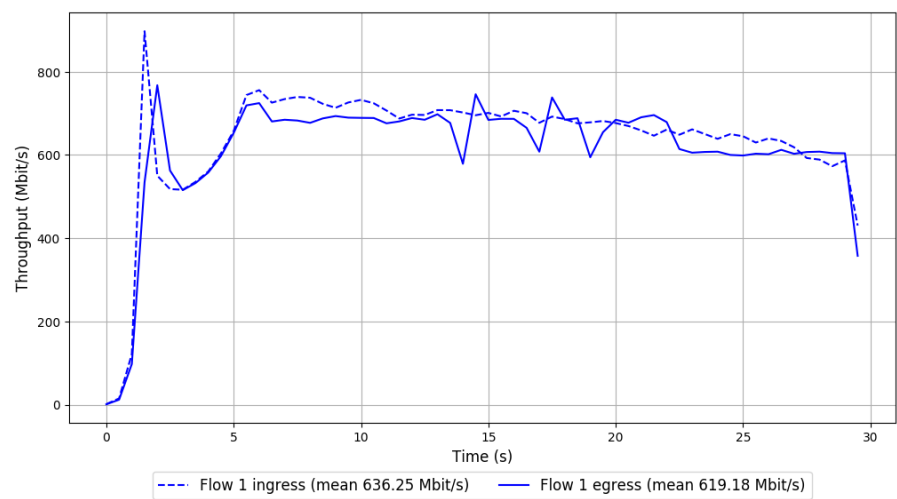
-- Flow 1:

Average throughput: 619.18 Mbit/s

95th percentile per-packet one-way delay: 199.229 ms

Loss rate: 3.14%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-20 02:54:53

End at: 2017-12-20 02:55:23

Below is generated by plot.py at 2017-12-20 05:27:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 556.06 Mbit/s

95th percentile per-packet one-way delay: 88.869 ms

Loss rate: 0.62%

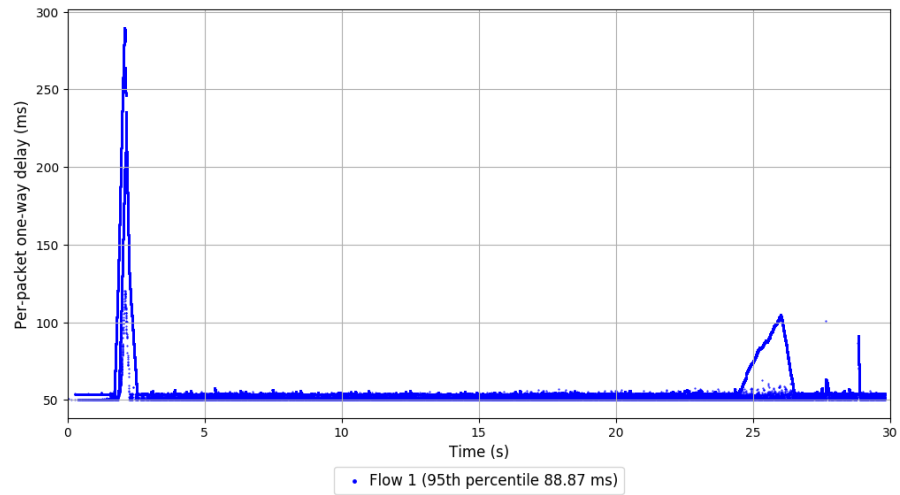
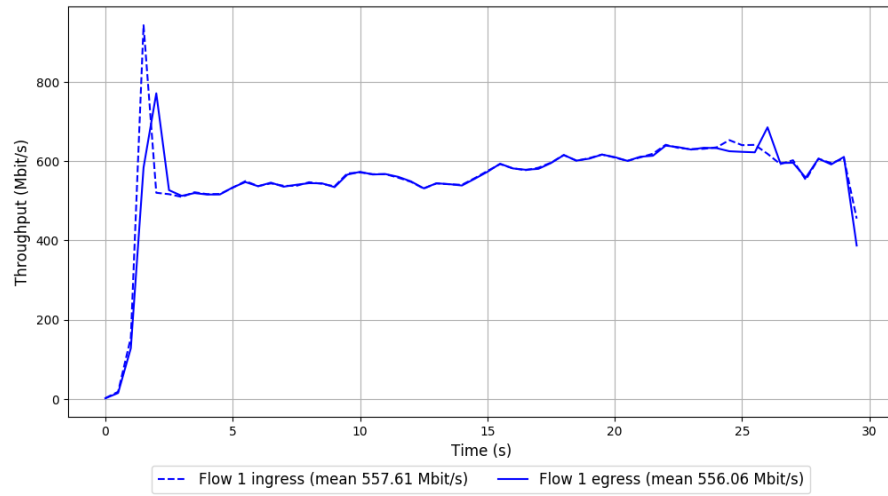
-- Flow 1:

Average throughput: 556.06 Mbit/s

95th percentile per-packet one-way delay: 88.869 ms

Loss rate: 0.62%

Run 10: Report of PCC — Data Link

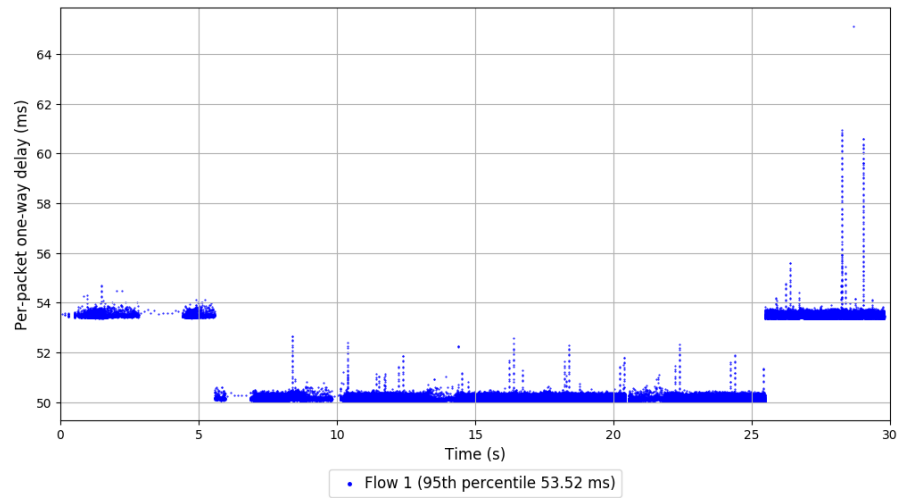
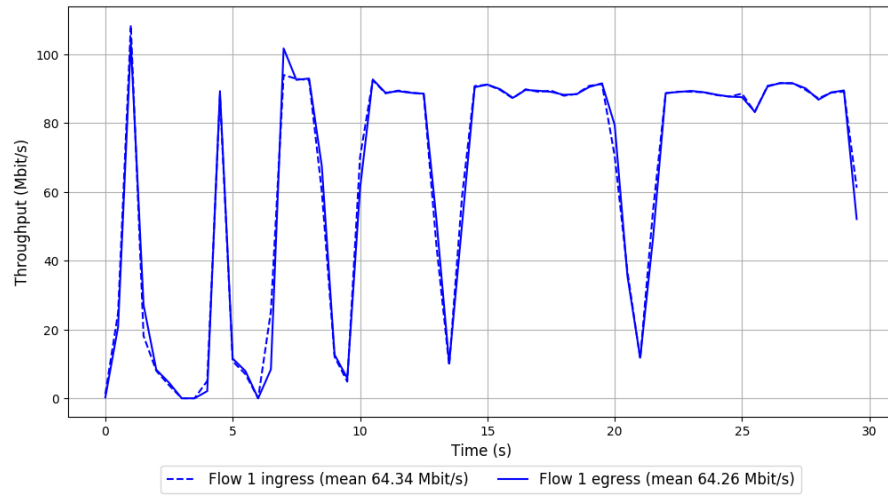


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-20 01:08:13
End at: 2017-12-20 01:08:43

# Below is generated by plot.py at 2017-12-20 05:27:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.26 Mbit/s
95th percentile per-packet one-way delay: 53.523 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 64.26 Mbit/s
95th percentile per-packet one-way delay: 53.523 ms
Loss rate: 0.48%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-20 01:19:56

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

Below is generated by plot.py at 2017-12-20 05:27:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.20 Mbit/s

95th percentile per-packet one-way delay: 53.675 ms

Loss rate: 1.07%

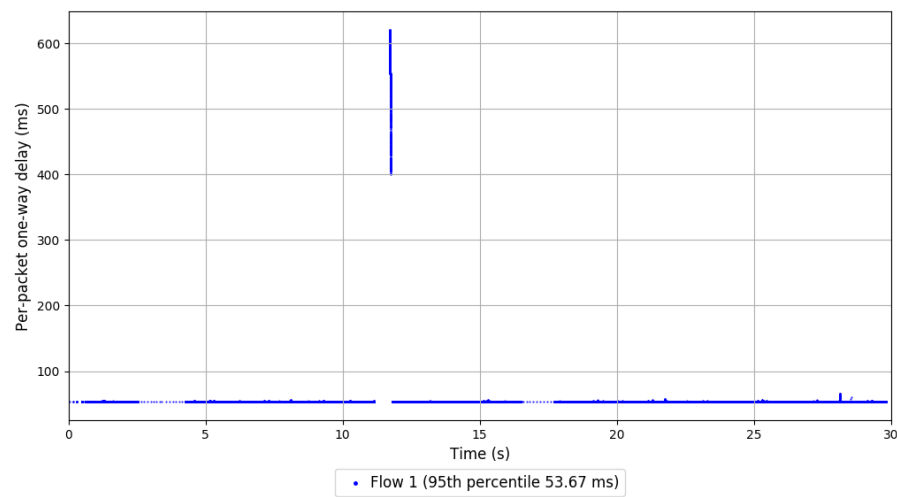
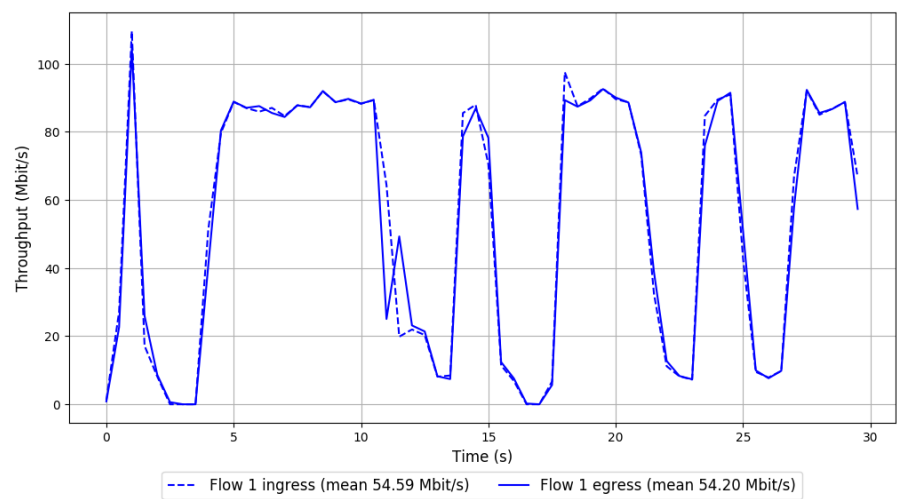
-- Flow 1:

Average throughput: 54.20 Mbit/s

95th percentile per-packet one-way delay: 53.675 ms

Loss rate: 1.07%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-20 01:31:23

End at: 2017-12-20 01:31:53

Below is generated by plot.py at 2017-12-20 05:27:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.07 Mbit/s

95th percentile per-packet one-way delay: 53.687 ms

Loss rate: 0.63%

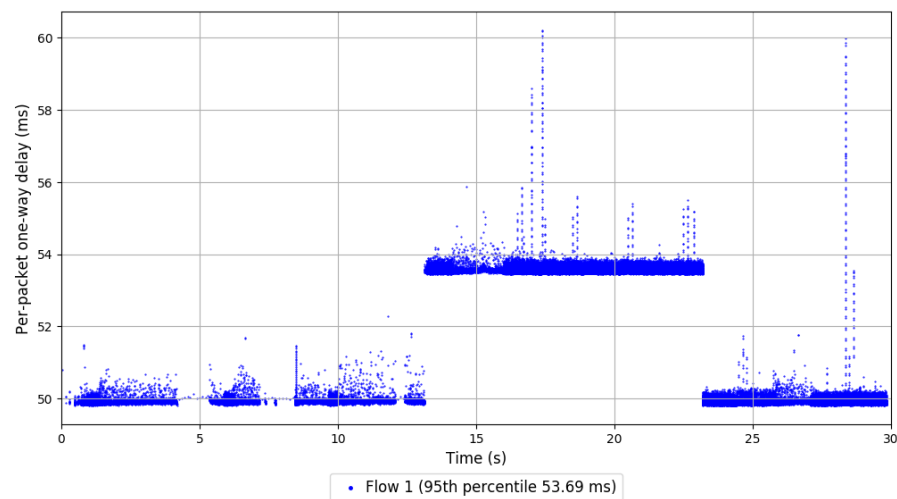
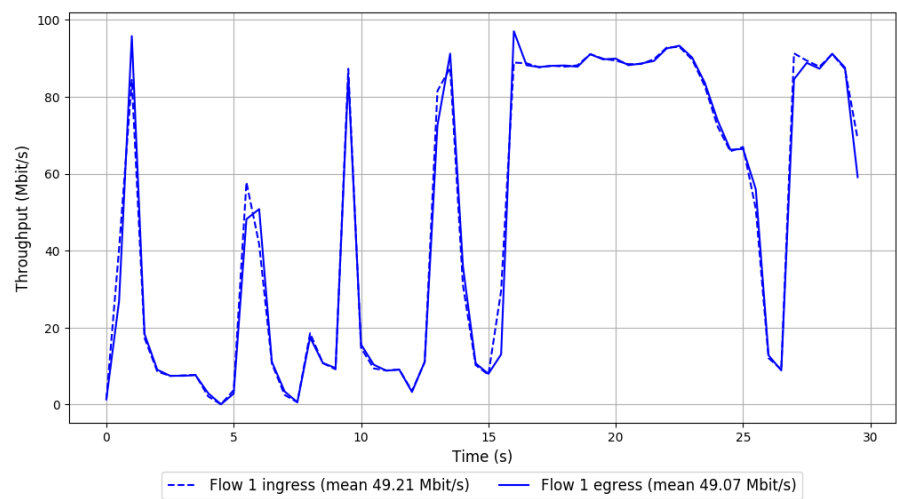
-- Flow 1:

Average throughput: 49.07 Mbit/s

95th percentile per-packet one-way delay: 53.687 ms

Loss rate: 0.63%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-20 01:43:06

End at: 2017-12-20 01:43:36

Below is generated by plot.py at 2017-12-20 05:27:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.68 Mbit/s

95th percentile per-packet one-way delay: 53.682 ms

Loss rate: 0.47%

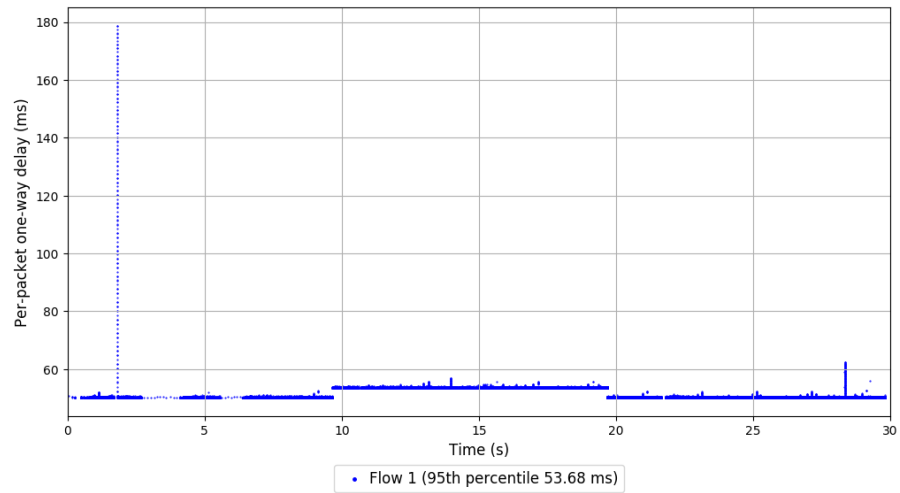
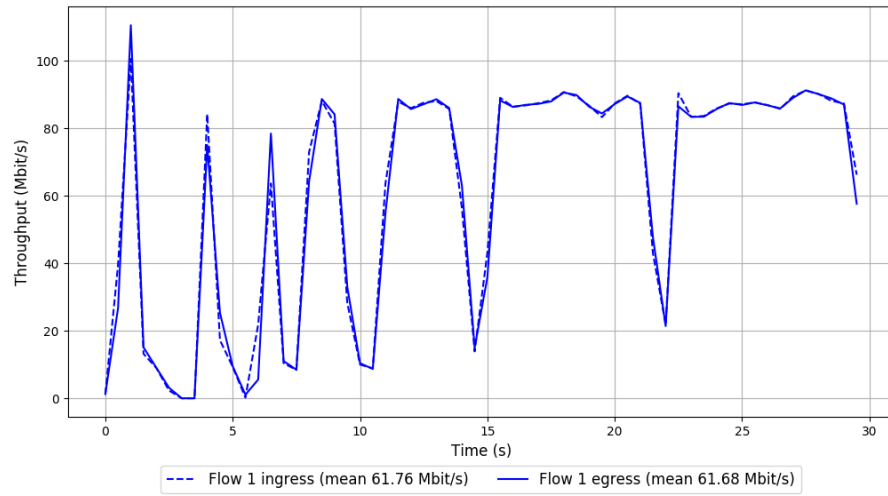
-- Flow 1:

Average throughput: 61.68 Mbit/s

95th percentile per-packet one-way delay: 53.682 ms

Loss rate: 0.47%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-20 01:54:33

End at: 2017-12-20 01:55:04

Below is generated by plot.py at 2017-12-20 05:27:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.69 Mbit/s

95th percentile per-packet one-way delay: 53.708 ms

Loss rate: 0.63%

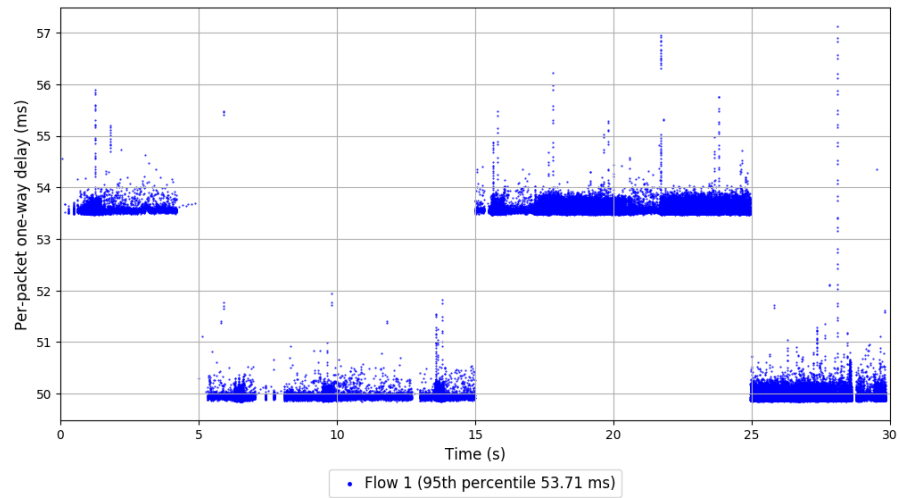
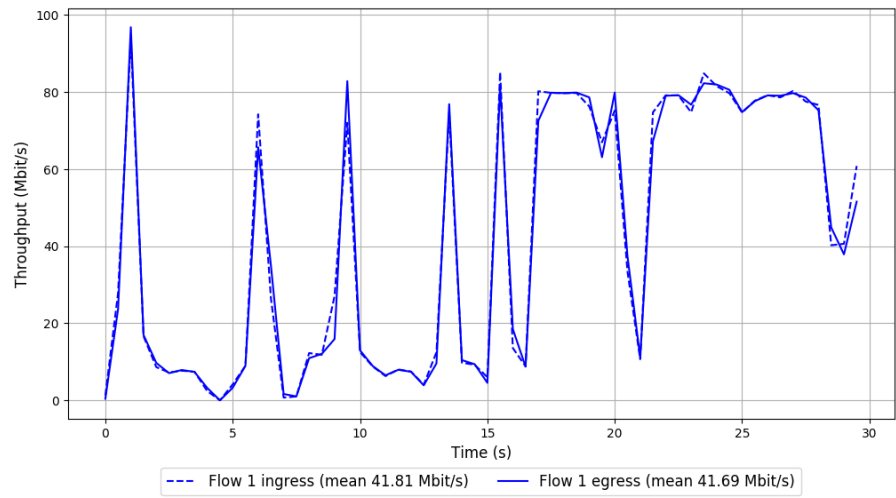
-- Flow 1:

Average throughput: 41.69 Mbit/s

95th percentile per-packet one-way delay: 53.708 ms

Loss rate: 0.63%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-20 02:05:45

End at: 2017-12-20 02:06:15

Below is generated by plot.py at 2017-12-20 05:27:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.06 Mbit/s

95th percentile per-packet one-way delay: 53.774 ms

Loss rate: 0.20%

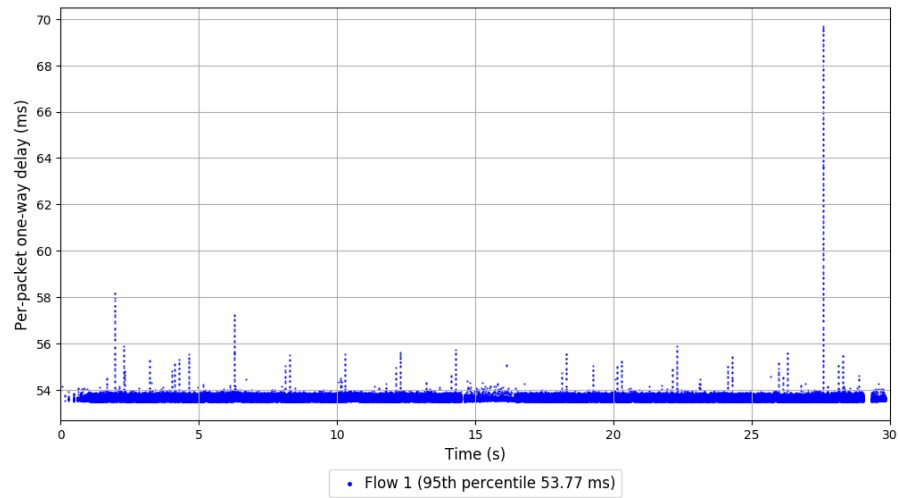
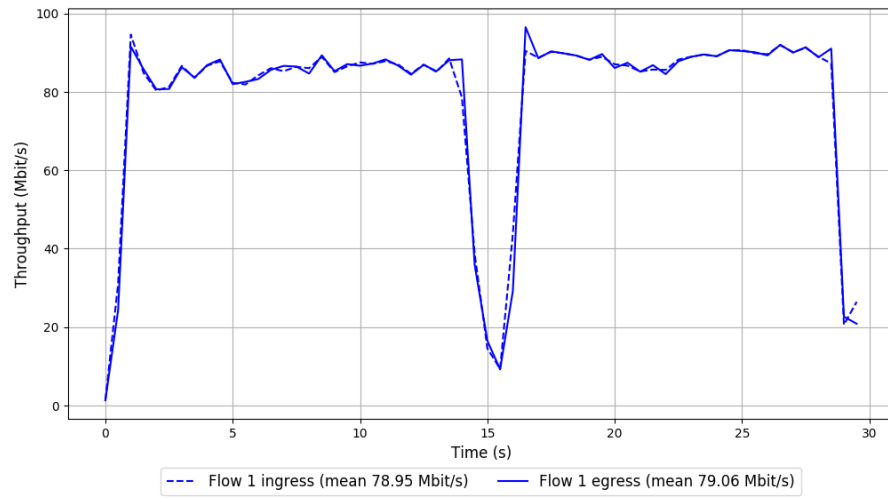
-- Flow 1:

Average throughput: 79.06 Mbit/s

95th percentile per-packet one-way delay: 53.774 ms

Loss rate: 0.20%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-20 02:17:06

End at: 2017-12-20 02:17:36

Below is generated by plot.py at 2017-12-20 05:27:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.71 Mbit/s

95th percentile per-packet one-way delay: 53.697 ms

Loss rate: 0.40%

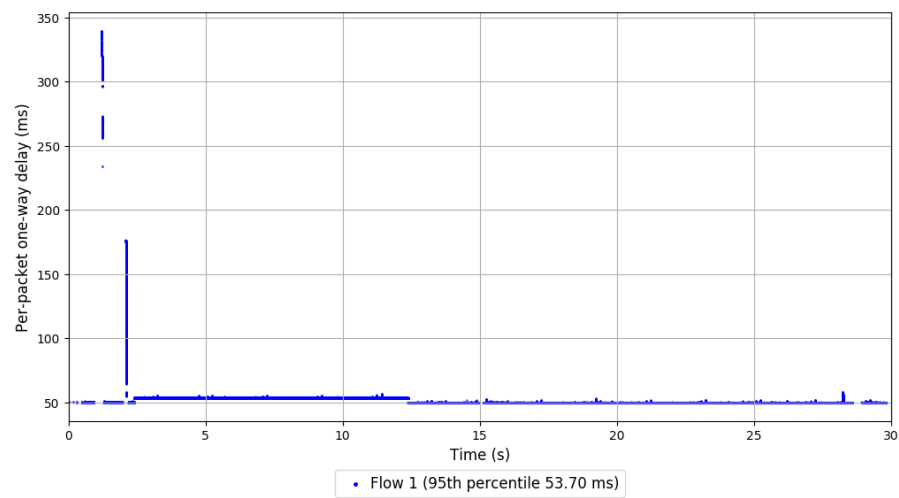
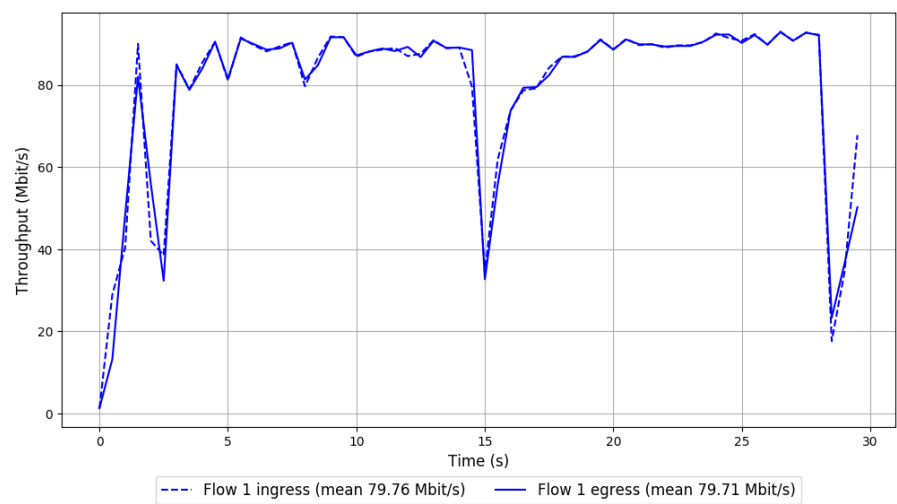
-- Flow 1:

Average throughput: 79.71 Mbit/s

95th percentile per-packet one-way delay: 53.697 ms

Loss rate: 0.40%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-20 02:28:38

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

Below is generated by plot.py at 2017-12-20 05:27:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.84 Mbit/s

95th percentile per-packet one-way delay: 53.733 ms

Loss rate: 0.49%

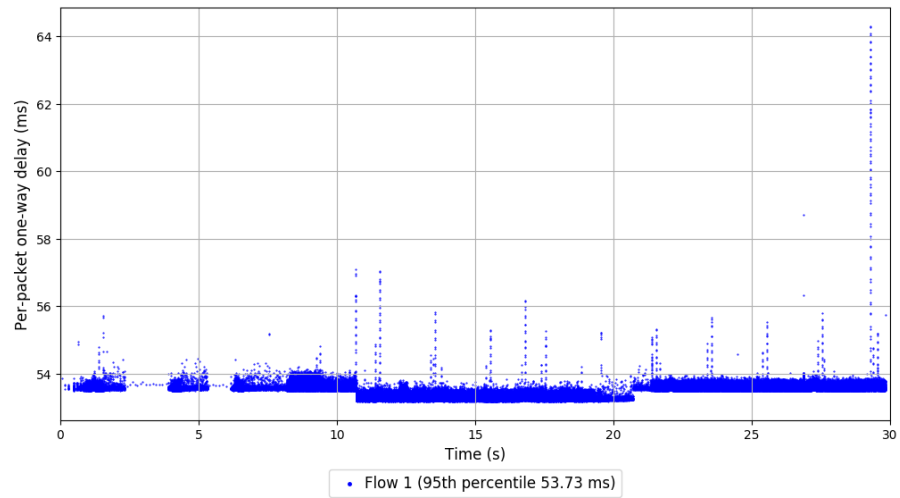
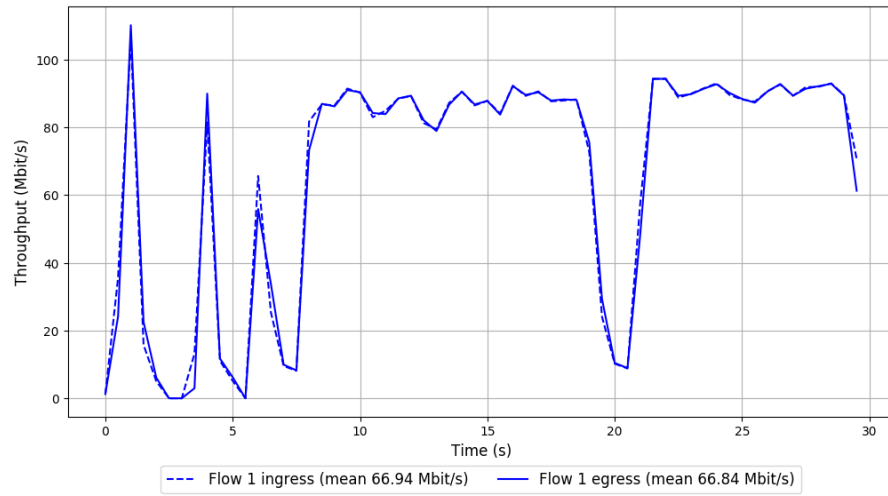
-- Flow 1:

Average throughput: 66.84 Mbit/s

95th percentile per-packet one-way delay: 53.733 ms

Loss rate: 0.49%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

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

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

Below is generated by plot.py at 2017-12-20 05:27:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.47 Mbit/s

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

Loss rate: 0.48%

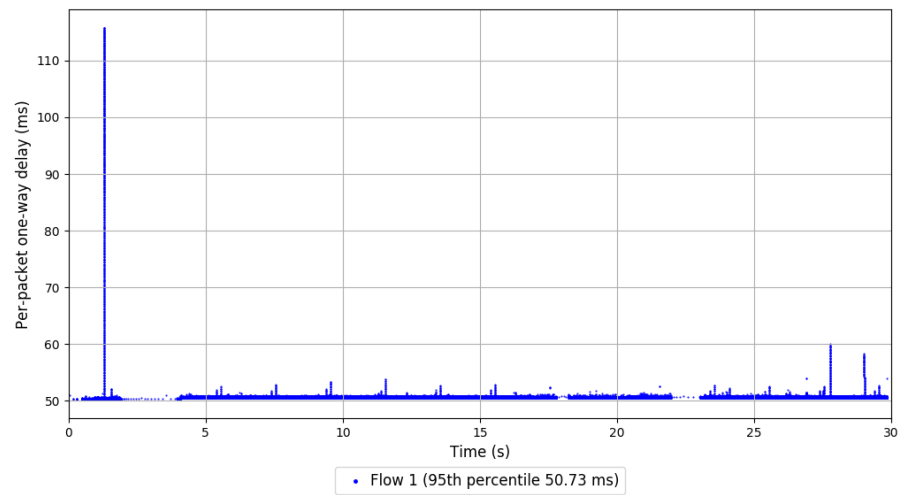
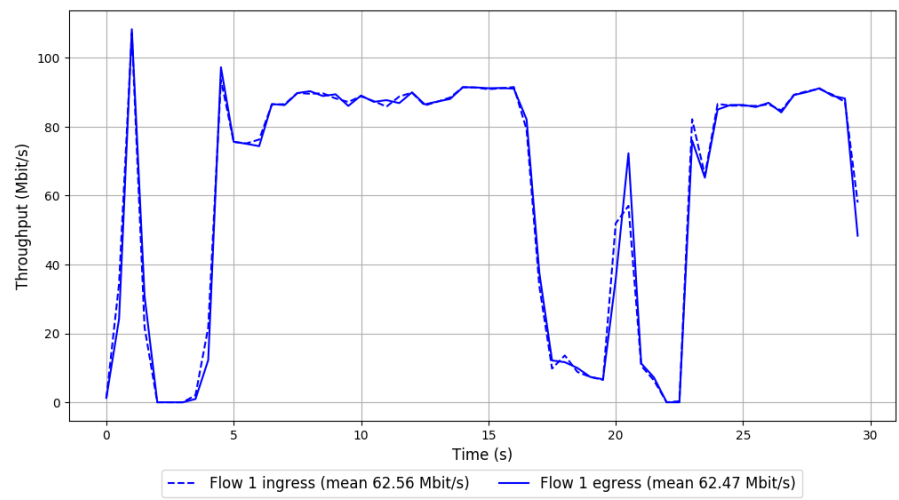
-- Flow 1:

Average throughput: 62.47 Mbit/s

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

Loss rate: 0.48%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-20 02:51:39

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

Below is generated by plot.py at 2017-12-20 05:27:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.20 Mbit/s

95th percentile per-packet one-way delay: 50.121 ms

Loss rate: 0.41%

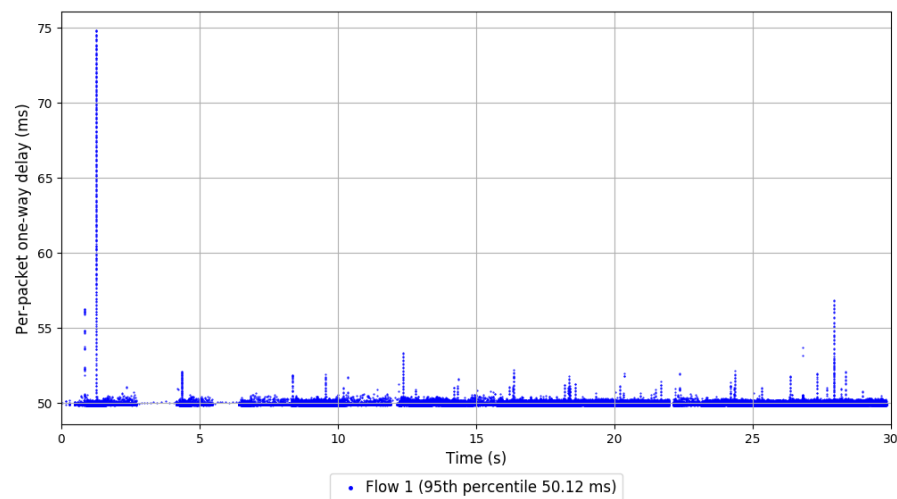
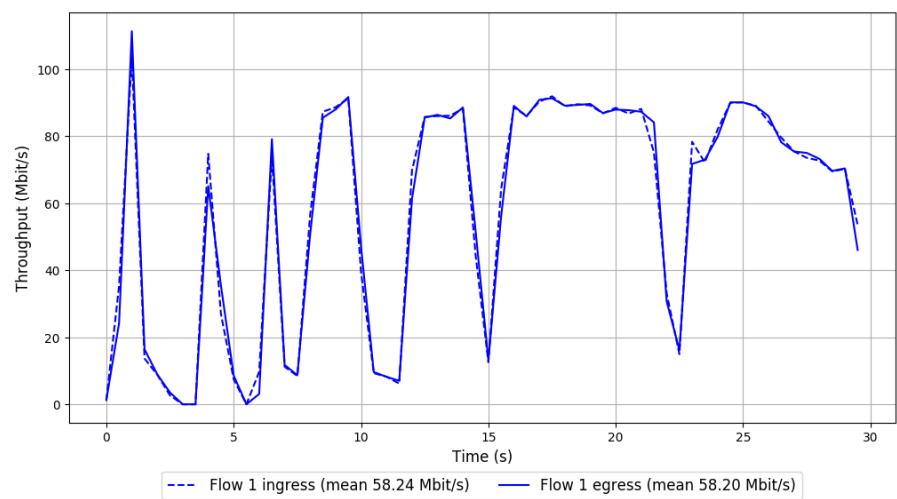
-- Flow 1:

Average throughput: 58.20 Mbit/s

95th percentile per-packet one-way delay: 50.121 ms

Loss rate: 0.41%

Run 10: Report of QUIC Cubic — Data Link

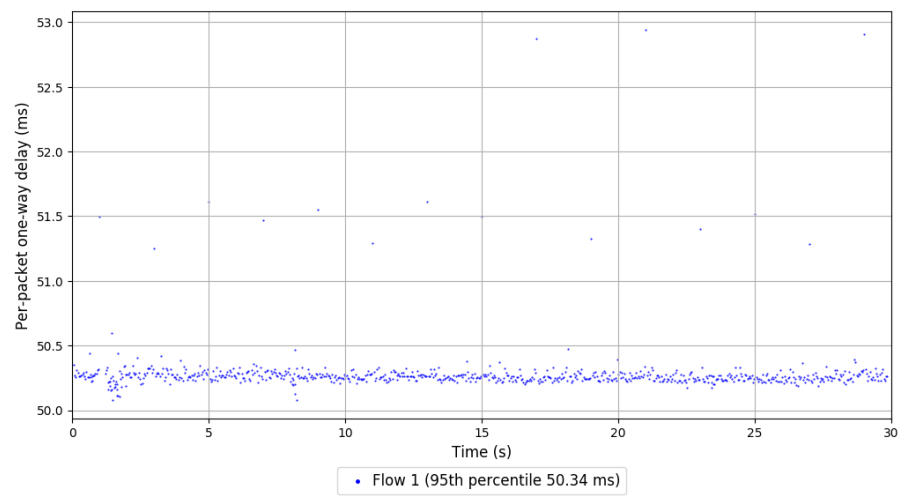
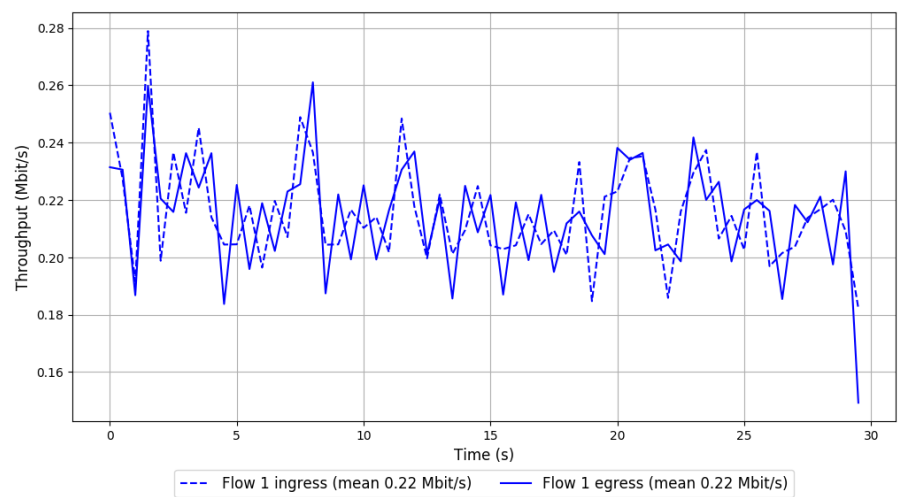


```
Run 1: Statistics of SCReAM

Start at: 2017-12-20 01:09:30
End at: 2017-12-20 01:10:00

# Below is generated by plot.py at 2017-12-20 05:27:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.336 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.336 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link

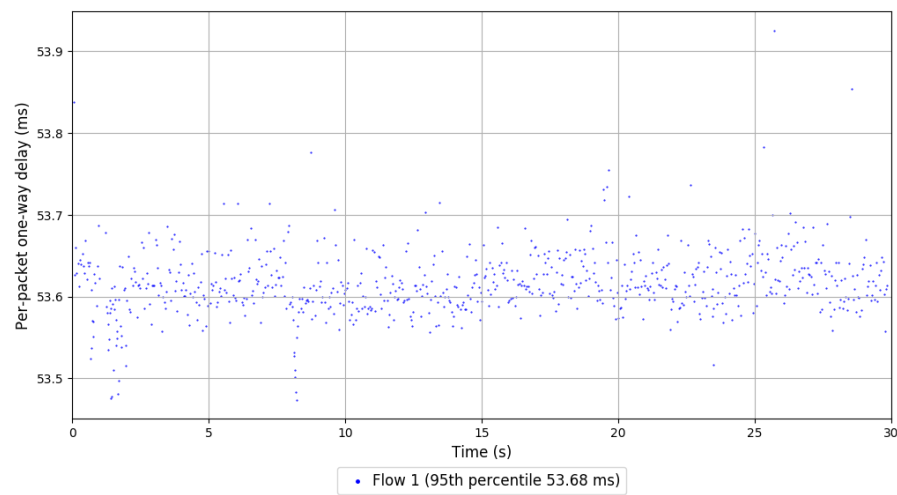
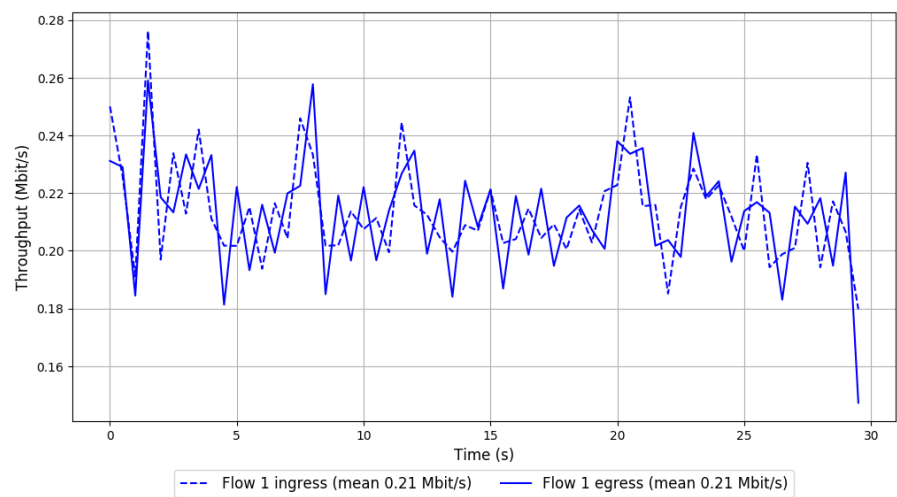


```
Run 2: Statistics of SCReAM

Start at: 2017-12-20 01:21:14
End at: 2017-12-20 01:21:44

# Below is generated by plot.py at 2017-12-20 05:27:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.678 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.678 ms
Loss rate: 0.38%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-20 01:32:39

End at: 2017-12-20 01:33:09

Below is generated by plot.py at 2017-12-20 05:27:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.708 ms

Loss rate: 0.51%

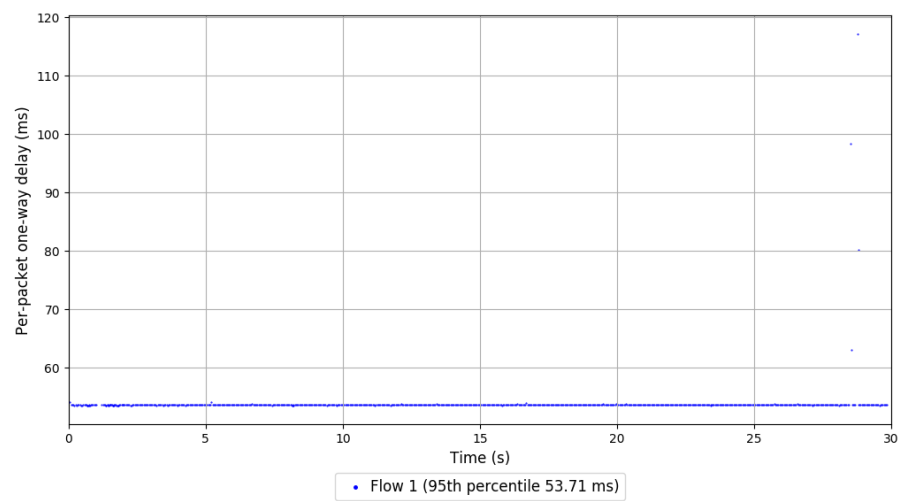
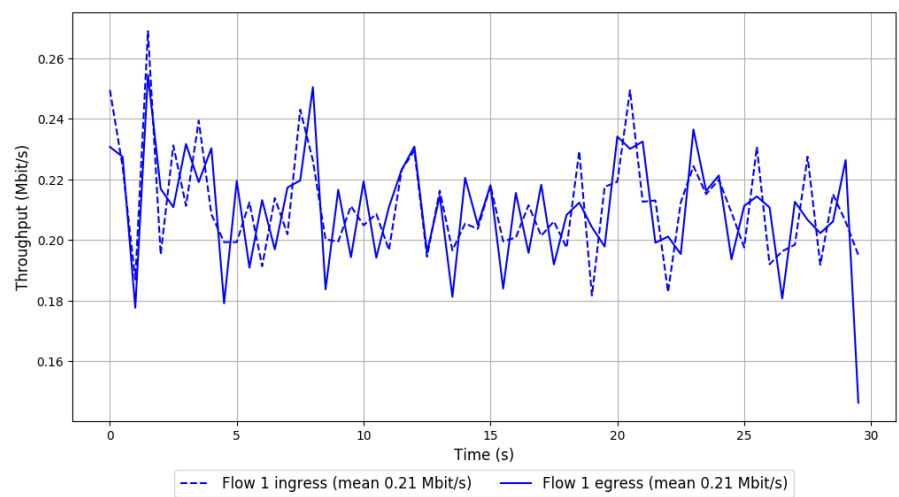
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.708 ms

Loss rate: 0.51%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-20 01:44:23

End at: 2017-12-20 01:44:53

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.489 ms

Loss rate: 0.38%

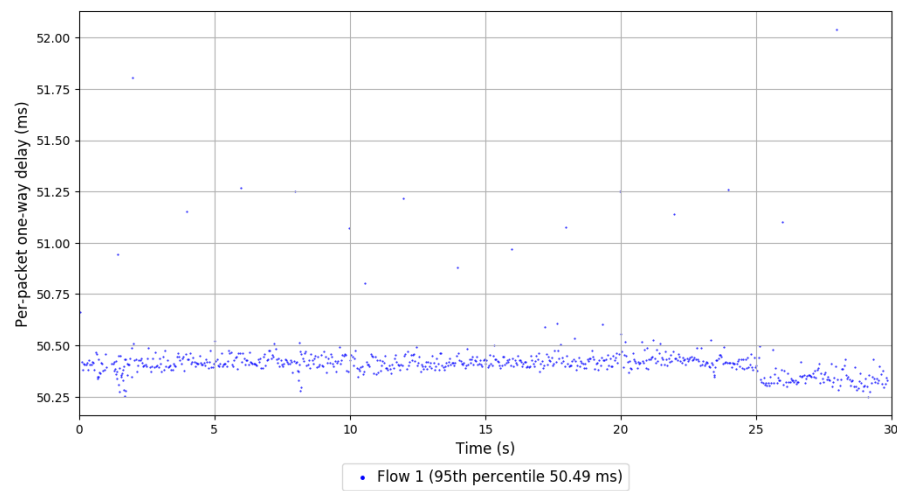
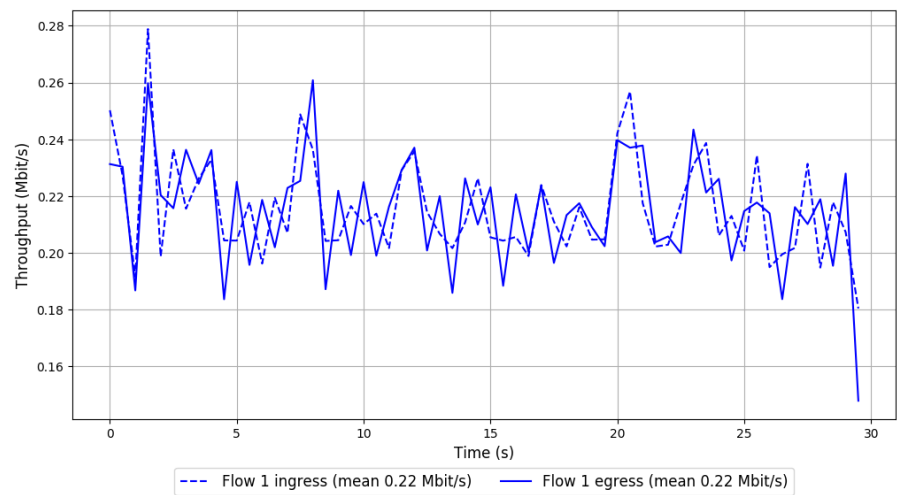
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.489 ms

Loss rate: 0.38%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-20 01:55:50

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

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.16 Mbit/s

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

Loss rate: 0.19%

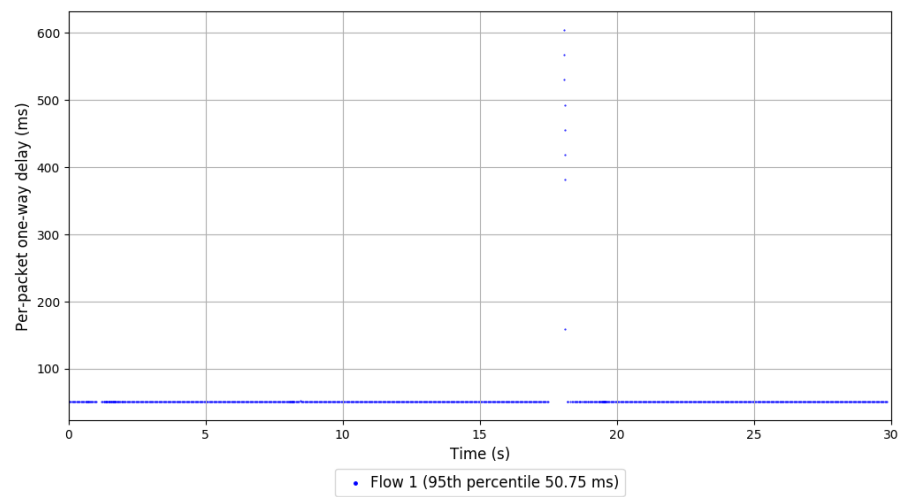
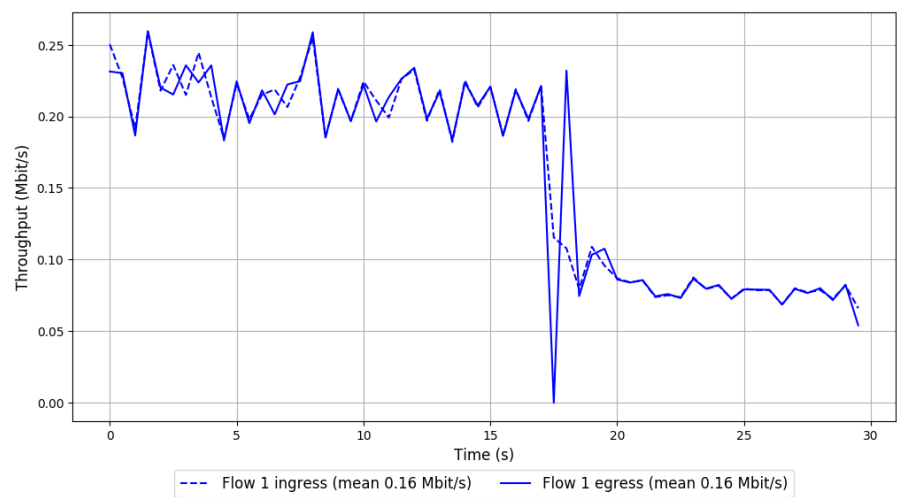
-- Flow 1:

Average throughput: 0.16 Mbit/s

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

Loss rate: 0.19%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-20 02:07:03

End at: 2017-12-20 02:07:33

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.747 ms

Loss rate: 0.38%

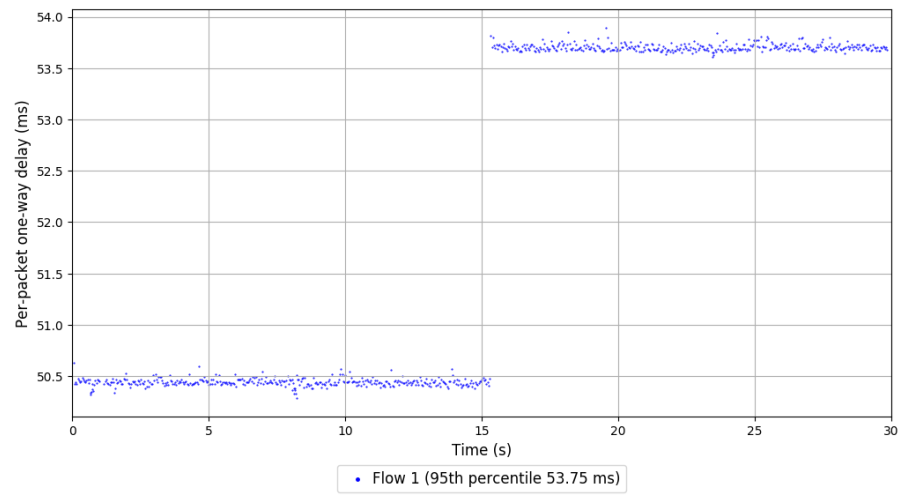
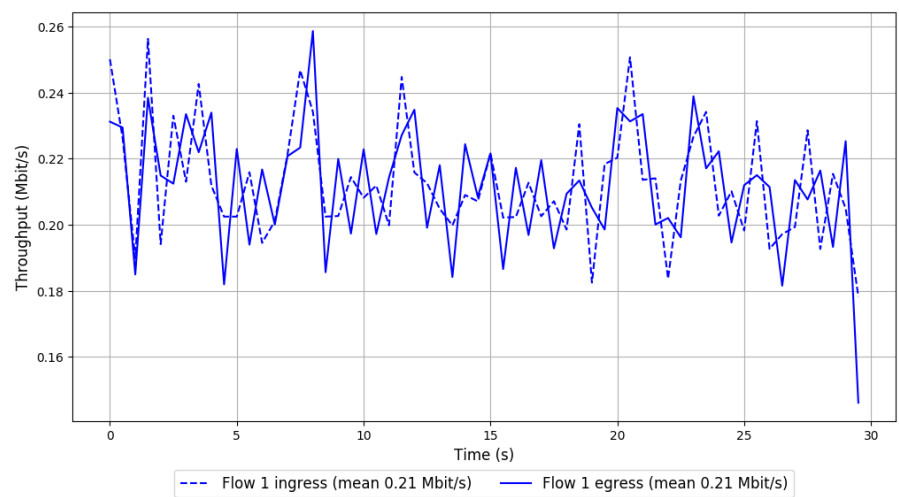
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.747 ms

Loss rate: 0.38%

Run 6: Report of SReAM — Data Link

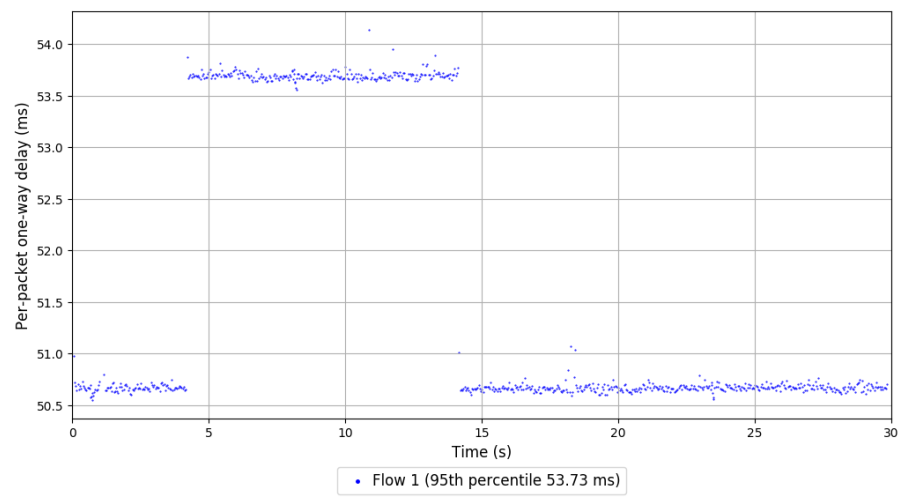
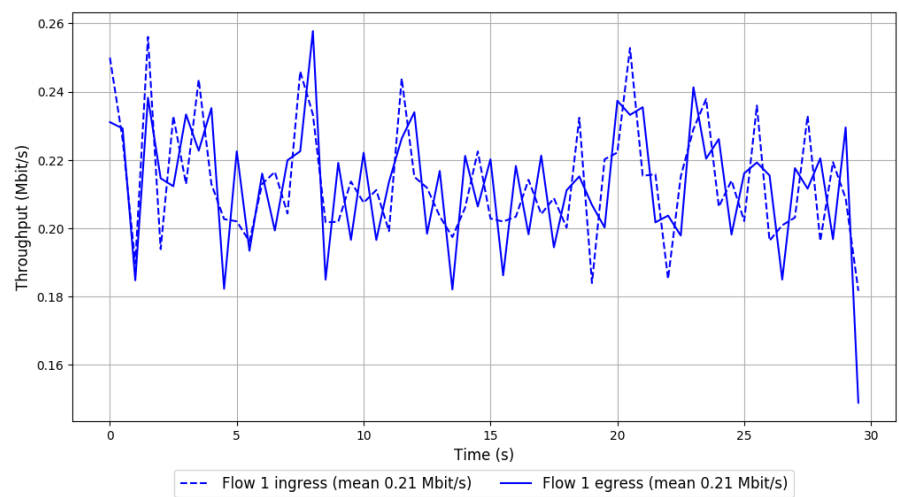


```
Run 7: Statistics of SCReAM

Start at: 2017-12-20 02:18:24
End at: 2017-12-20 02:18:54

# Below is generated by plot.py at 2017-12-20 05:27:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.725 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.725 ms
Loss rate: 0.38%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-20 02:29:55

End at: 2017-12-20 02:30:25

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.388 ms

Loss rate: 0.26%

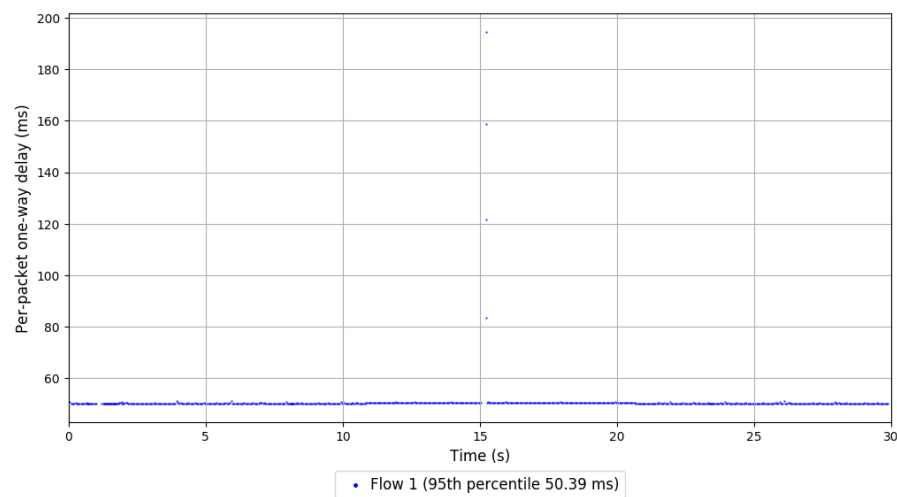
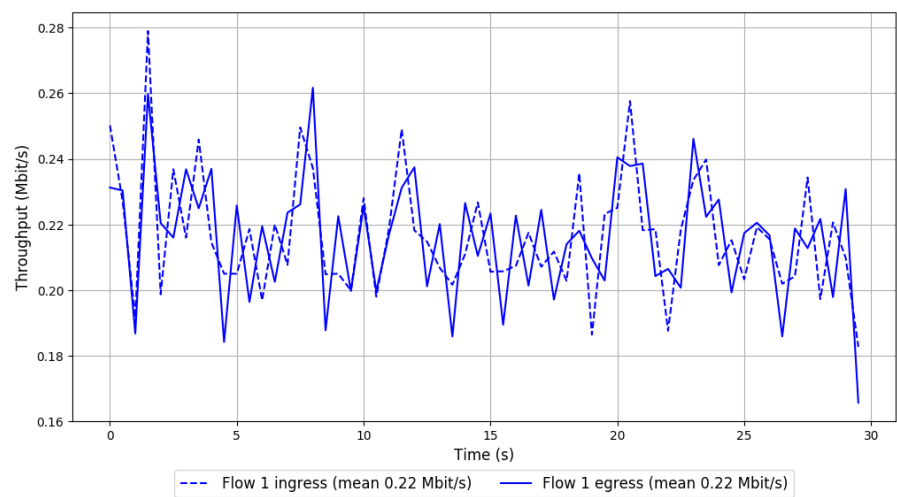
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.388 ms

Loss rate: 0.26%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-20 02:41:29

End at: 2017-12-20 02:41:59

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.807 ms

Loss rate: 0.38%

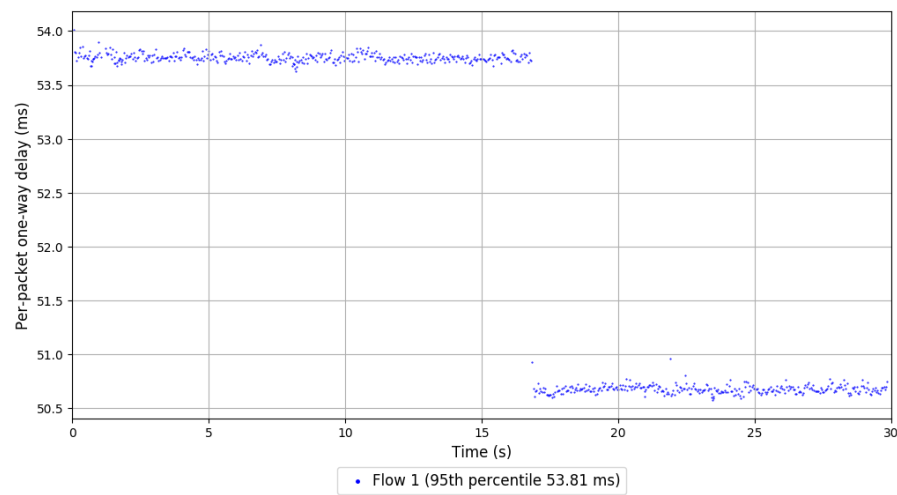
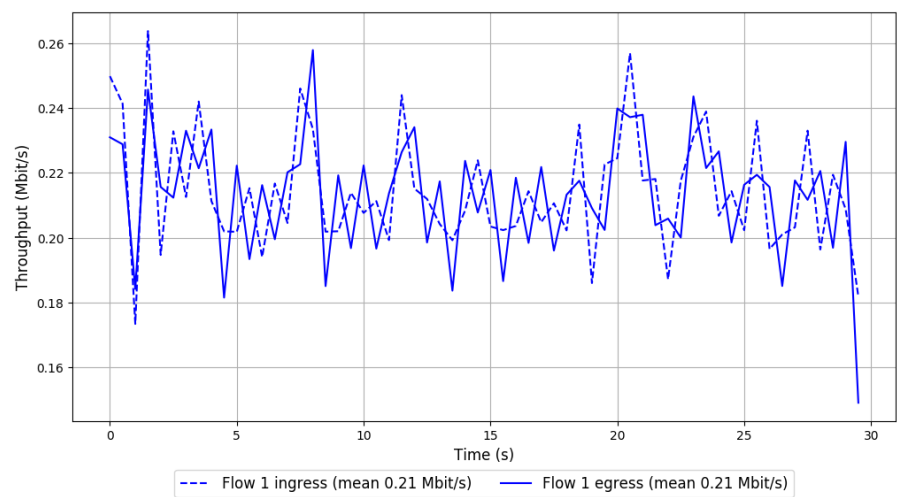
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.807 ms

Loss rate: 0.38%

Run 9: Report of SReAM — Data Link

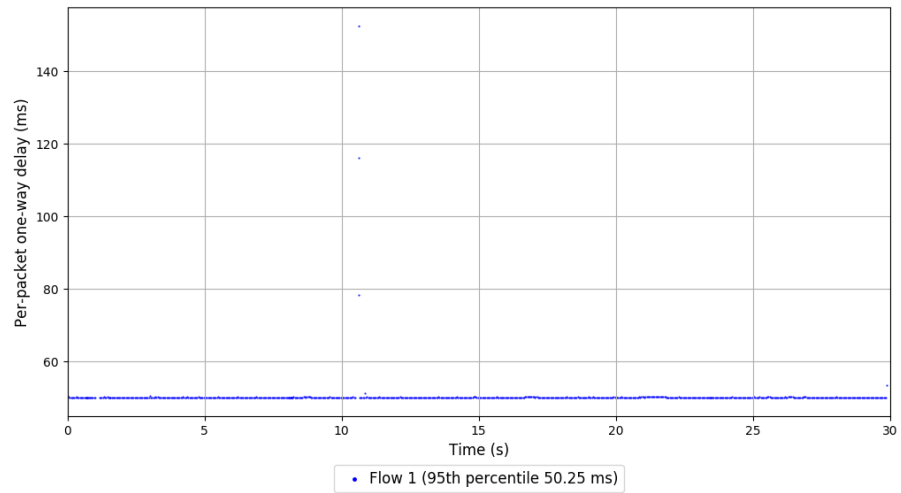
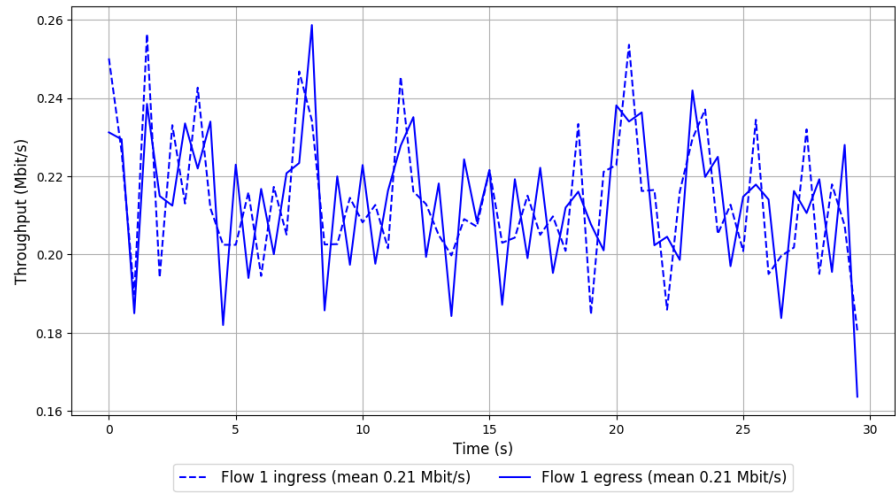


```
Run 10: Statistics of SReAM

Start at: 2017-12-20 02:52:56
End at: 2017-12-20 02:53:26

# Below is generated by plot.py at 2017-12-20 05:27:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.246 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.246 ms
Loss rate: 0.26%
```

Run 10: Report of SCRaM — Data Link

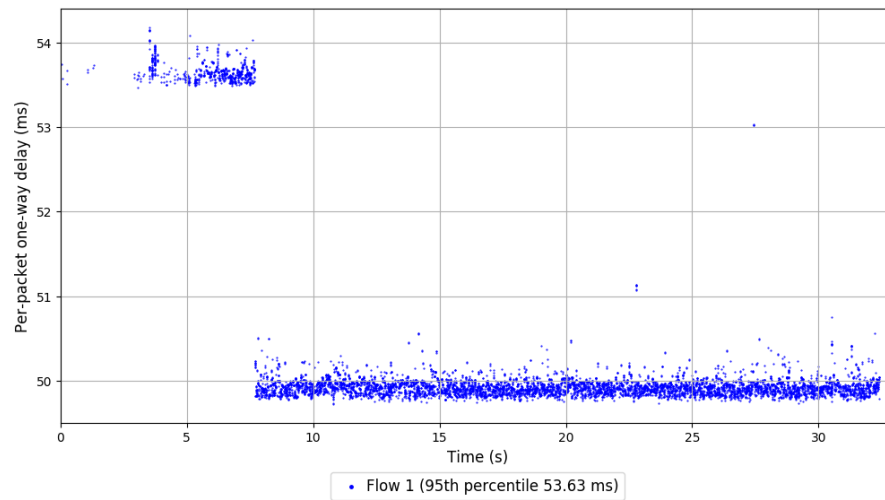
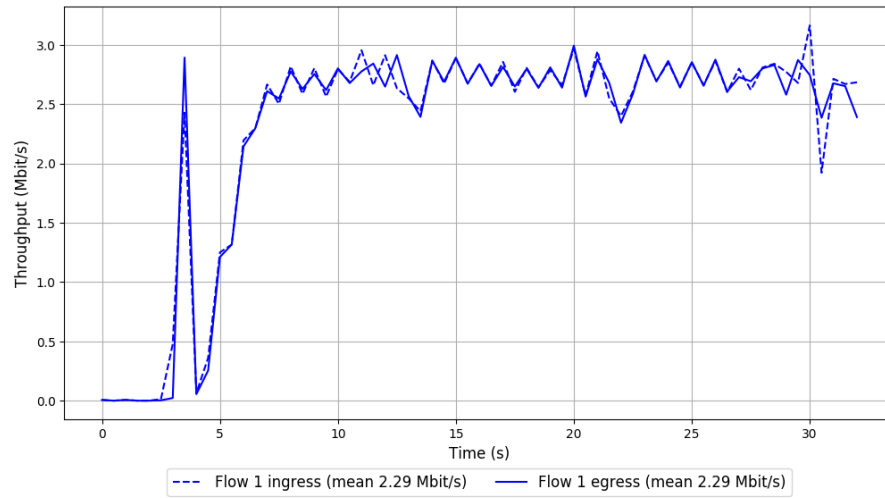


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-20 01:08:53
End at: 2017-12-20 01:09:23

# Below is generated by plot.py at 2017-12-20 05:27:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 53.633 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 53.633 ms
Loss rate: 0.35%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

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

End at: 2017-12-20 01:21:06

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.762 ms

Loss rate: 0.46%

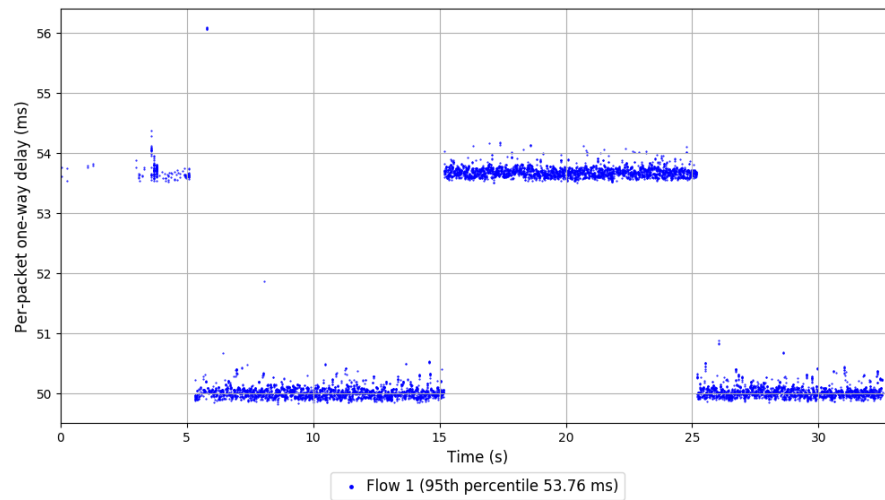
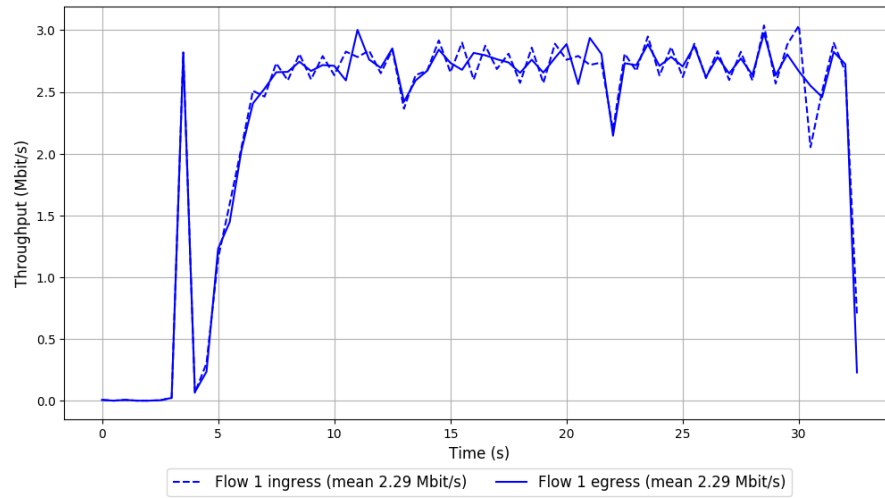
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.762 ms

Loss rate: 0.46%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-20 01:32:02

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

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 50.586 ms

Loss rate: 0.46%

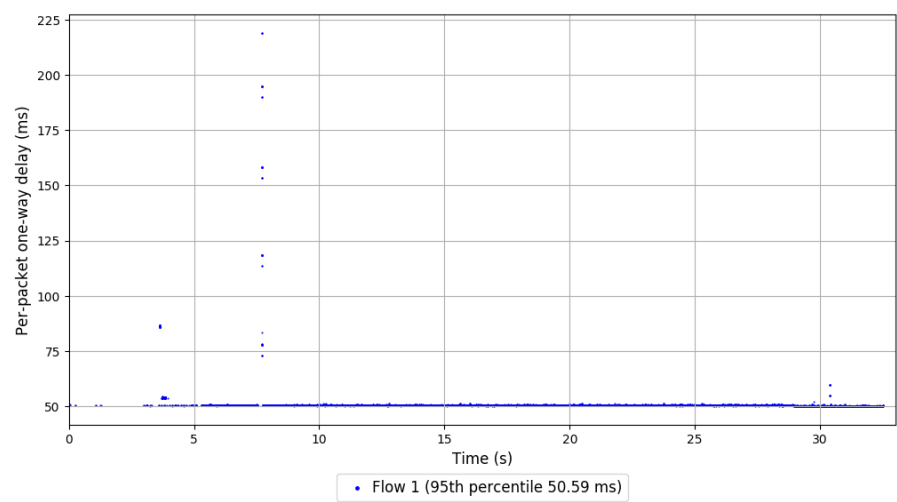
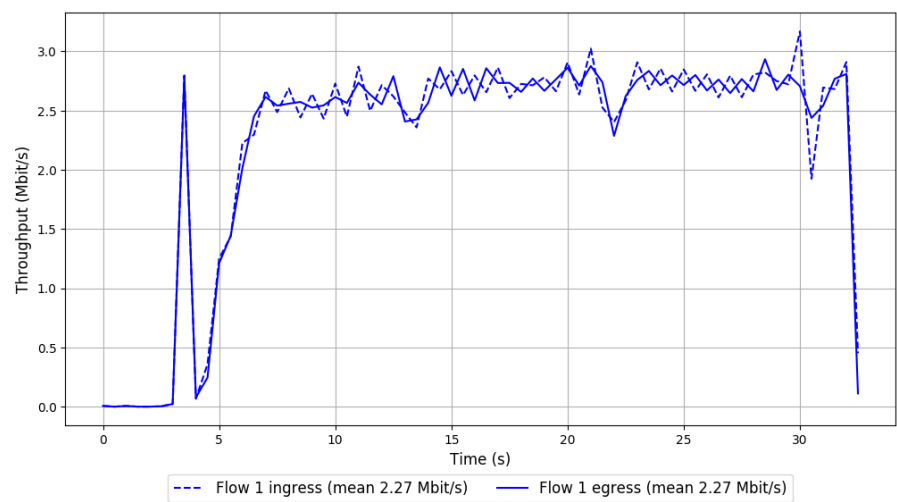
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 50.586 ms

Loss rate: 0.46%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-20 01:43:46

End at: 2017-12-20 01:44:16

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.918 ms

Loss rate: 0.31%

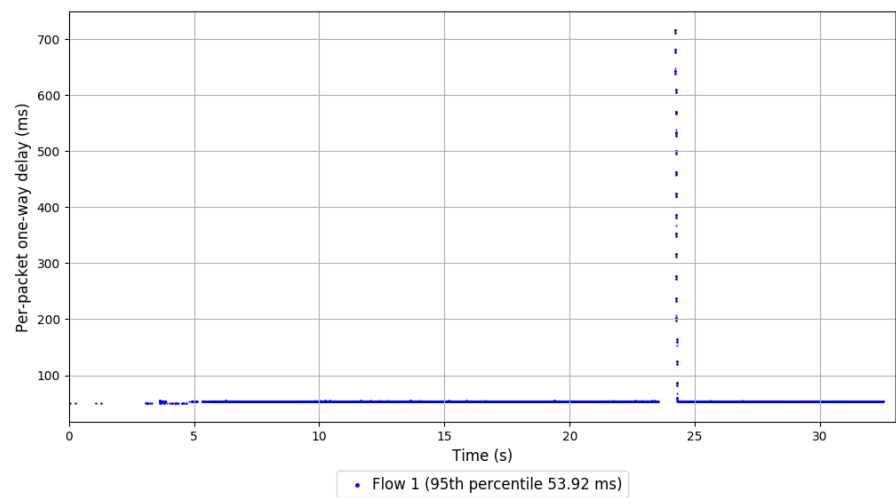
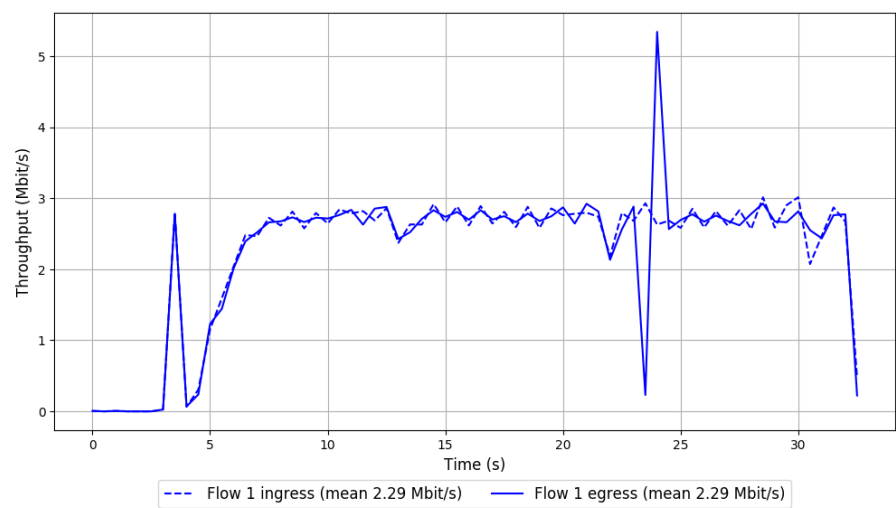
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.918 ms

Loss rate: 0.31%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-20 01:55:13

End at: 2017-12-20 01:55:43

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.227 ms

Loss rate: 0.46%

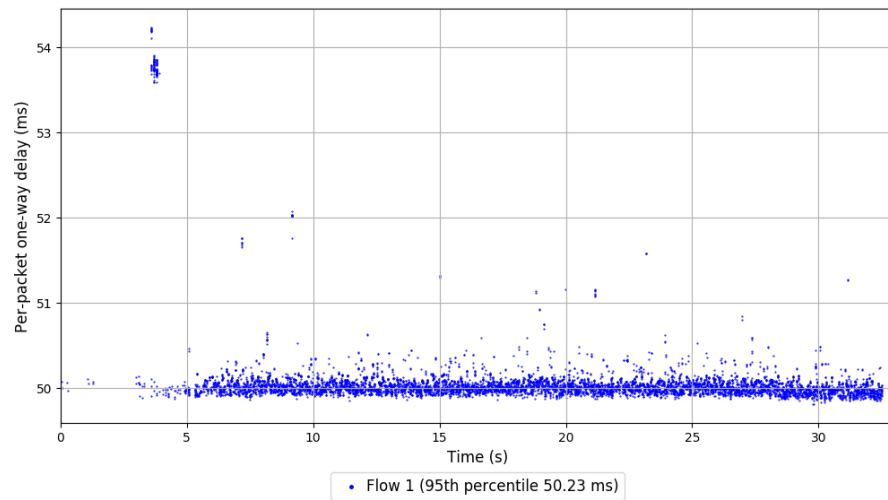
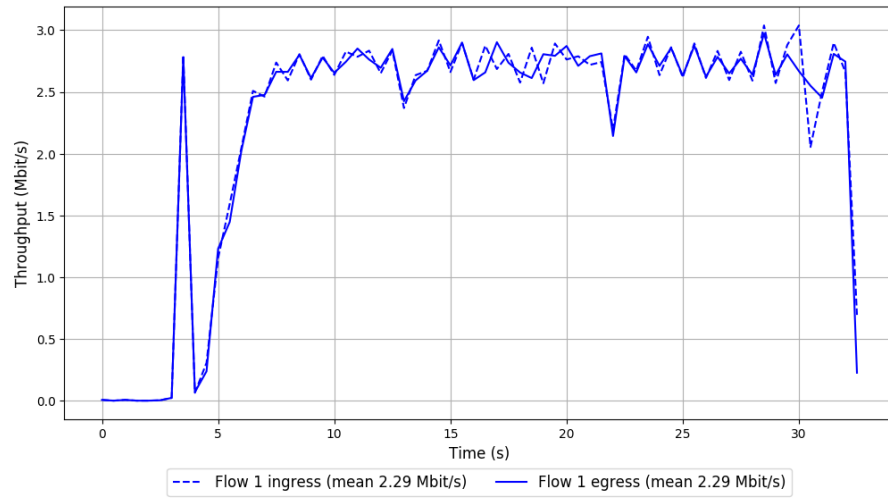
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.227 ms

Loss rate: 0.46%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-20 02:06:26

End at: 2017-12-20 02:06:56

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.798 ms

Loss rate: 0.45%

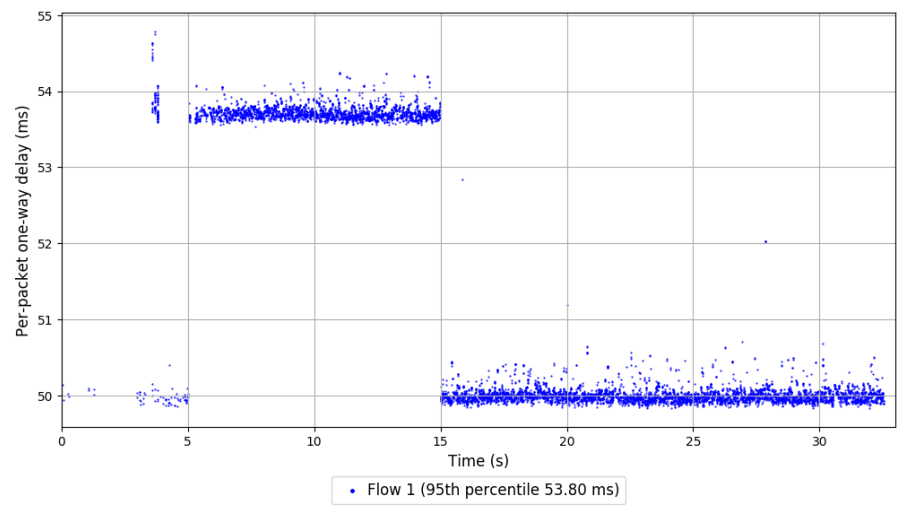
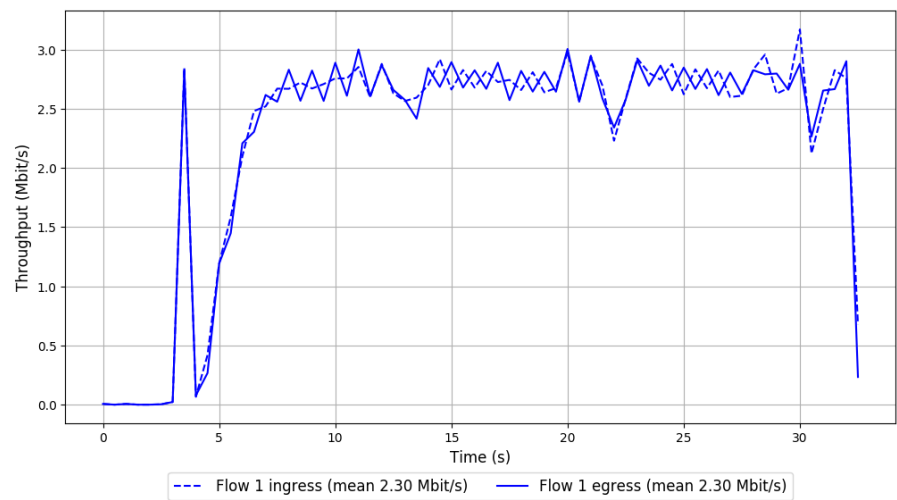
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 53.798 ms

Loss rate: 0.45%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-20 02:17:47

End at: 2017-12-20 02:18:17

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.884 ms

Loss rate: 0.31%

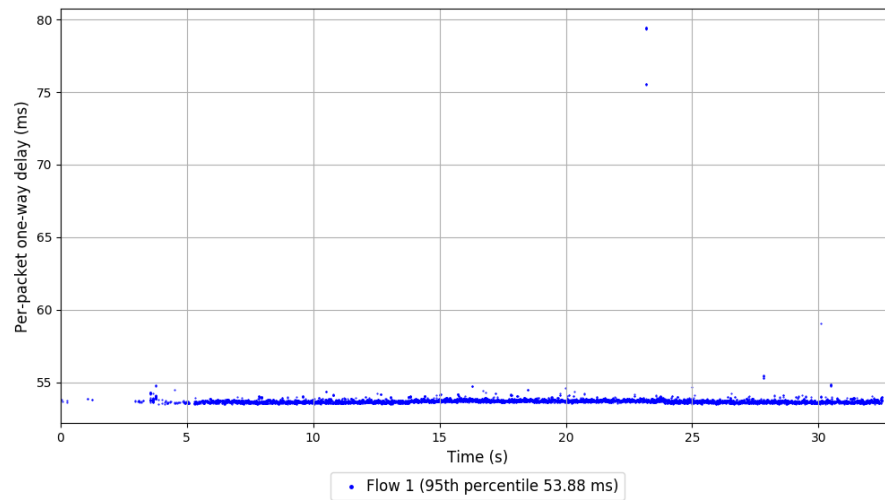
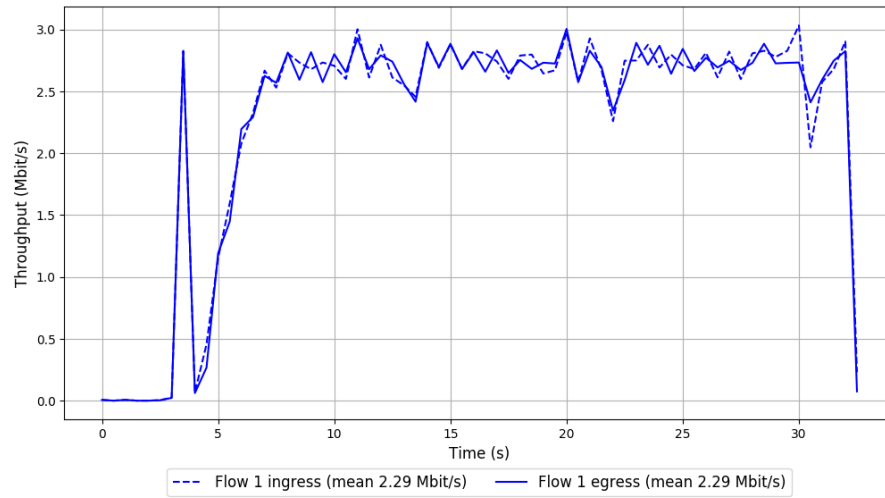
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.884 ms

Loss rate: 0.31%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-20 02:29:18

End at: 2017-12-20 02:29:48

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.646 ms

Loss rate: 0.48%

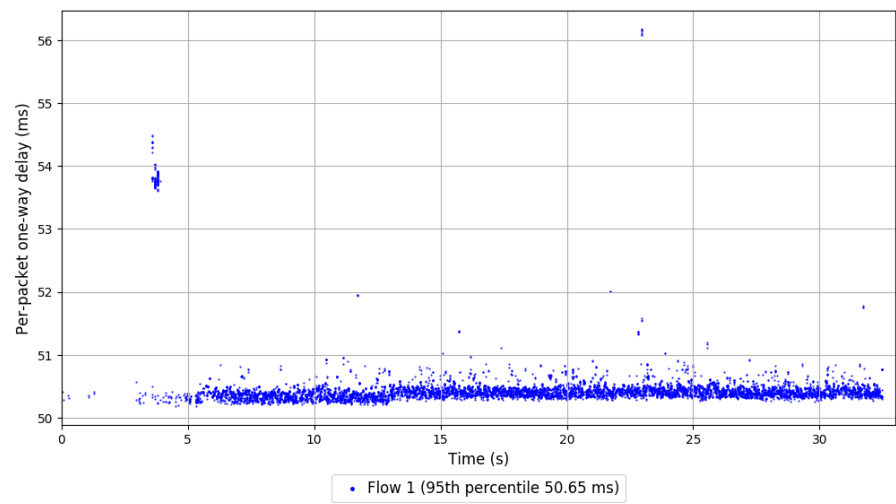
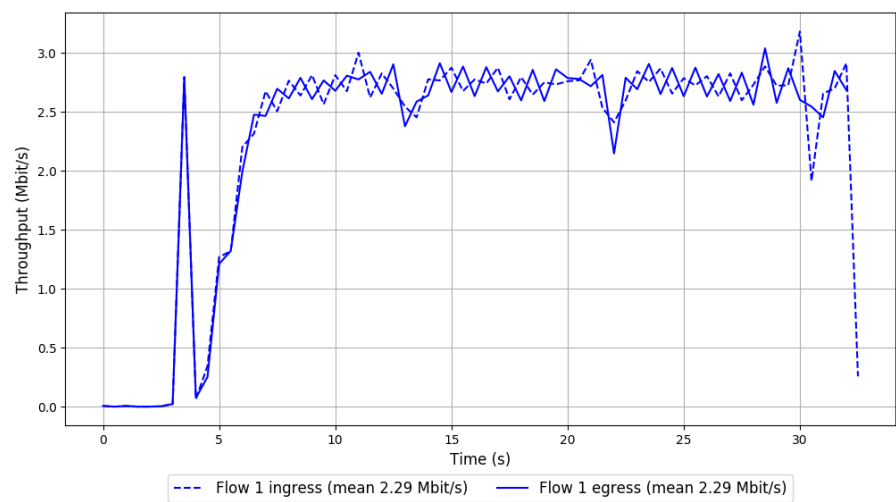
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.646 ms

Loss rate: 0.48%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-20 02:40:52

End at: 2017-12-20 02:41:22

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.914 ms

Loss rate: 0.32%

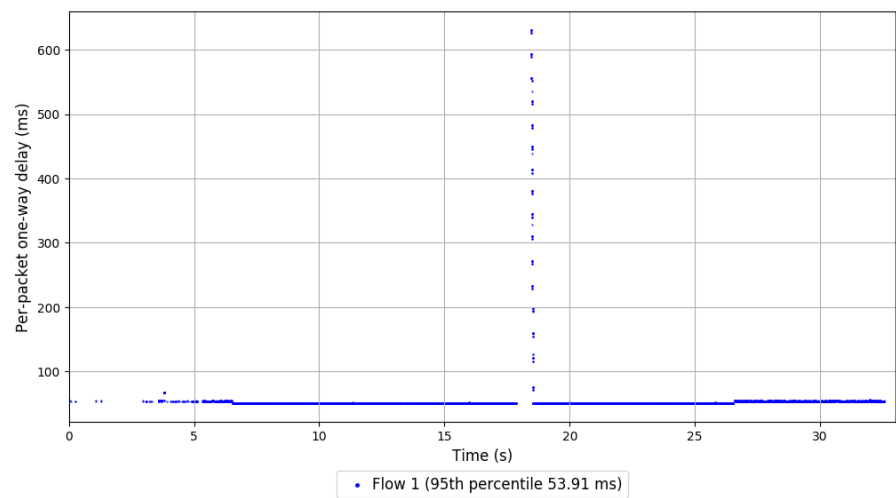
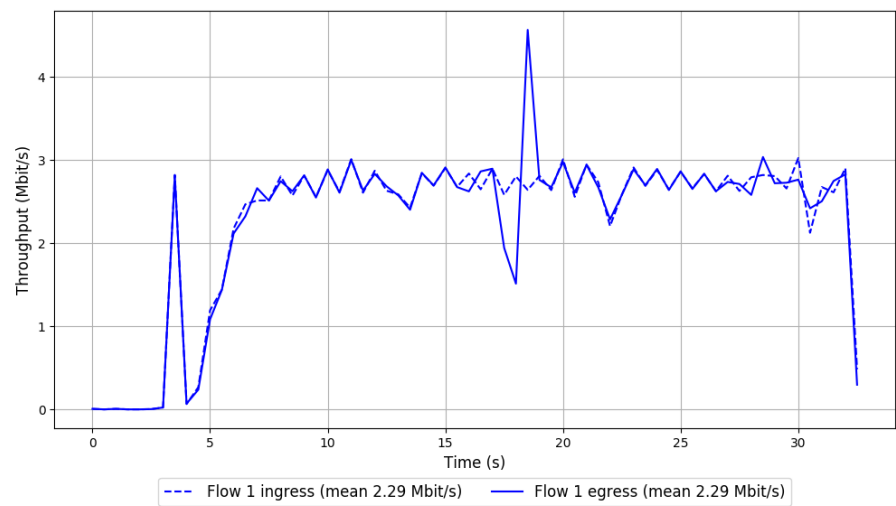
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.914 ms

Loss rate: 0.32%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-20 02:52:19

End at: 2017-12-20 02:52:49

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

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

Loss rate: 0.47%

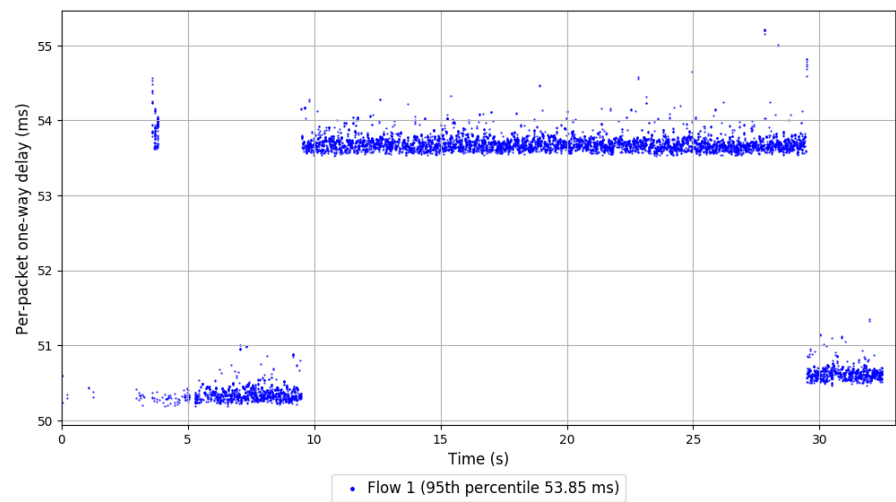
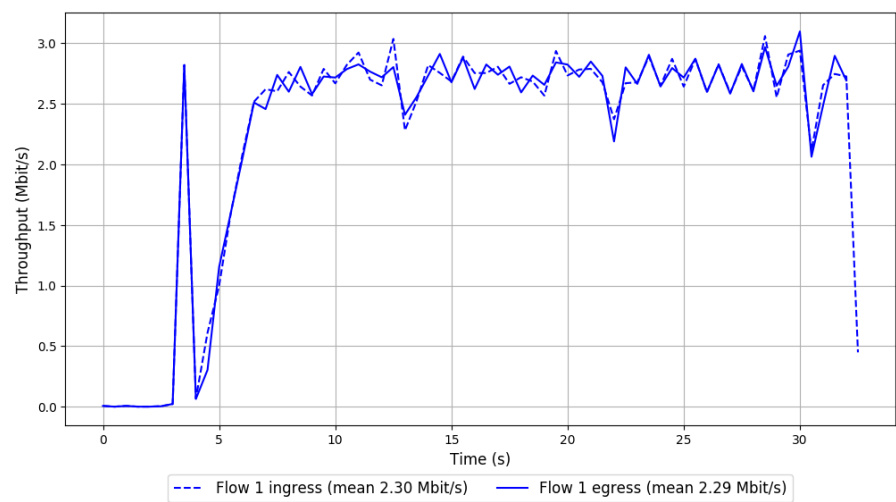
-- Flow 1:

Average throughput: 2.29 Mbit/s

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

Loss rate: 0.47%

Run 10: Report of WebRTC media — Data Link

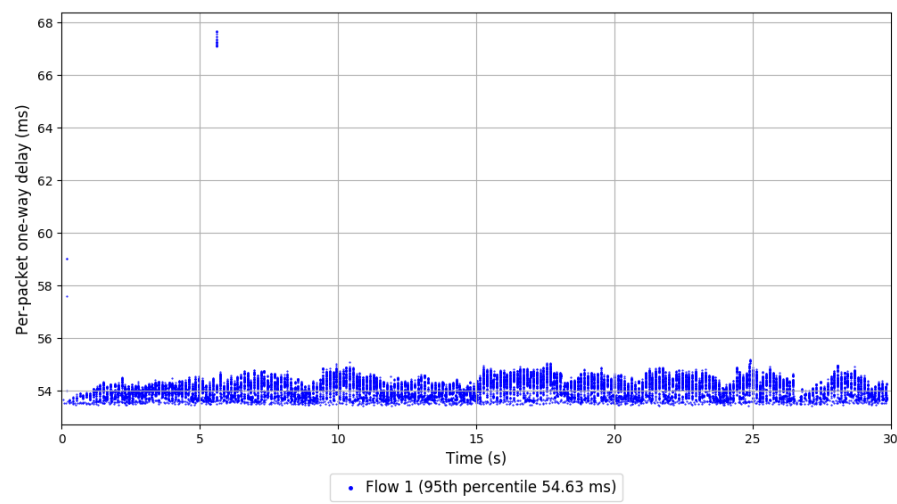
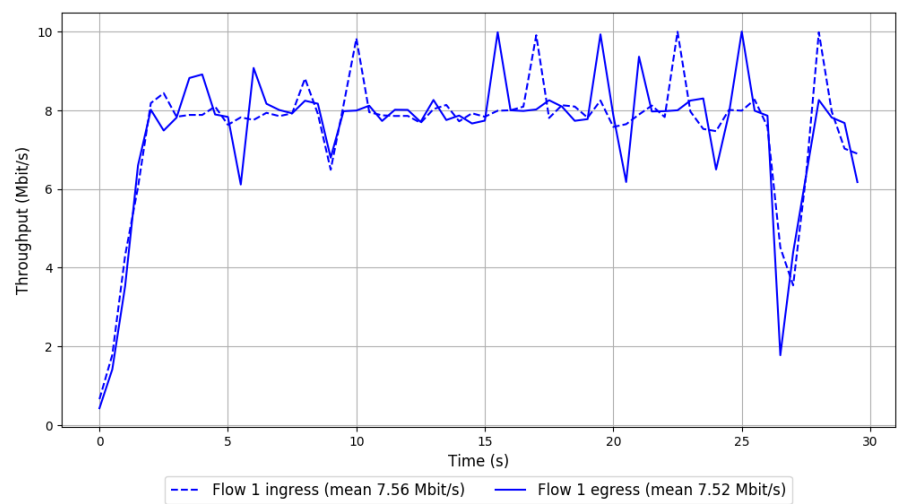


```
Run 1: Statistics of Sprout

Start at: 2017-12-20 01:16:34
End at: 2017-12-20 01:17:04

# Below is generated by plot.py at 2017-12-20 05:27:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 54.632 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 54.632 ms
Loss rate: 0.85%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-20 01:27:58

End at: 2017-12-20 01:28:28

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 54.691 ms

Loss rate: 0.48%

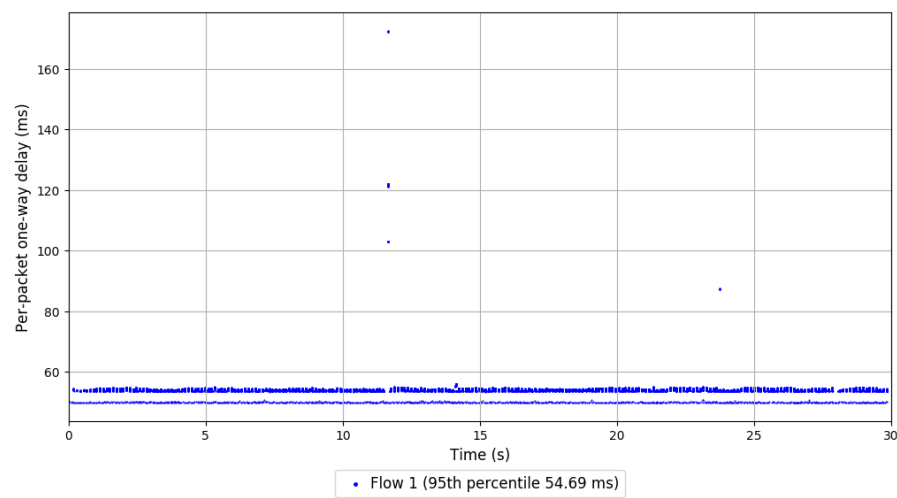
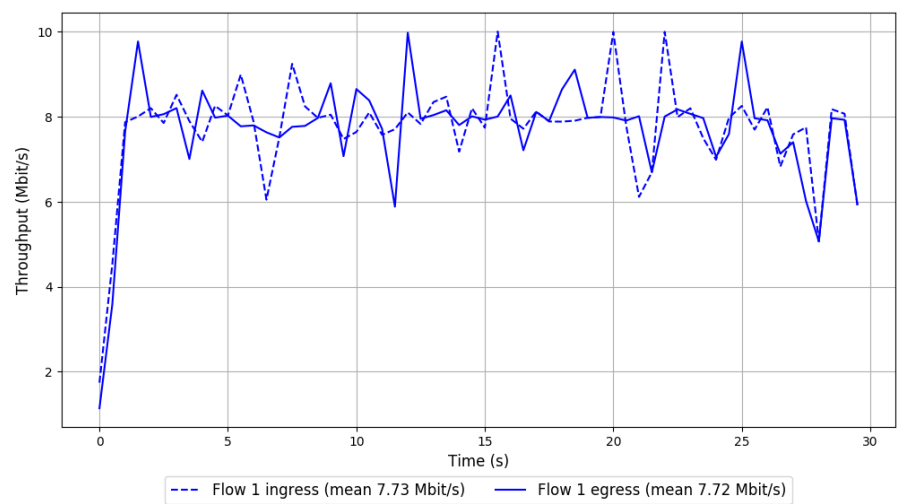
-- Flow 1:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 54.691 ms

Loss rate: 0.48%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

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 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 54.757 ms

Loss rate: 0.37%

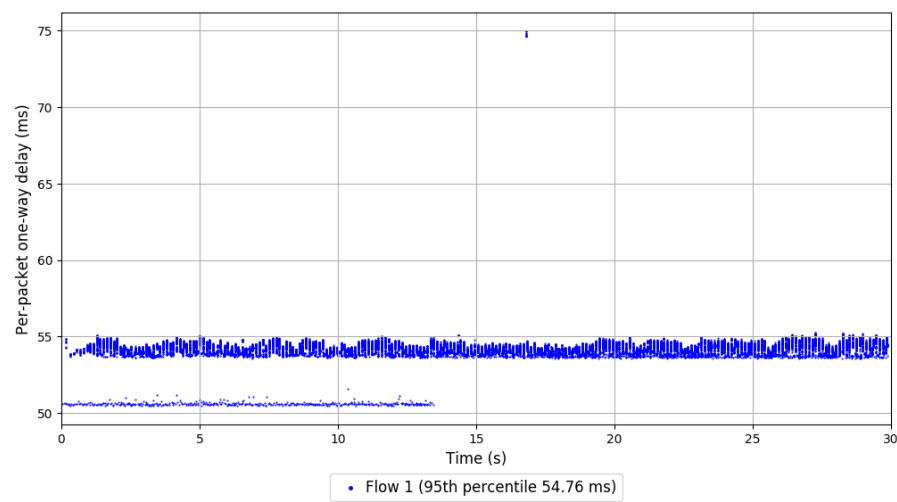
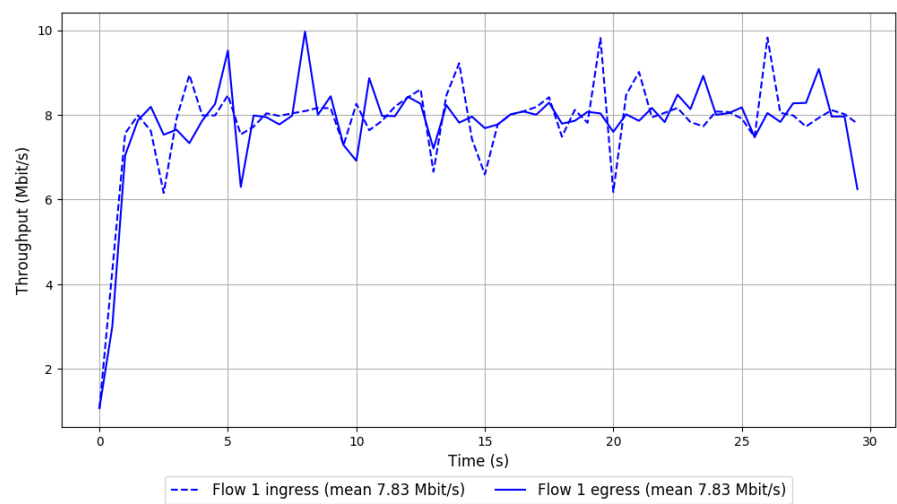
-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 54.757 ms

Loss rate: 0.37%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

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

End at: 2017-12-20 01:51:42

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 54.758 ms

Loss rate: 0.40%

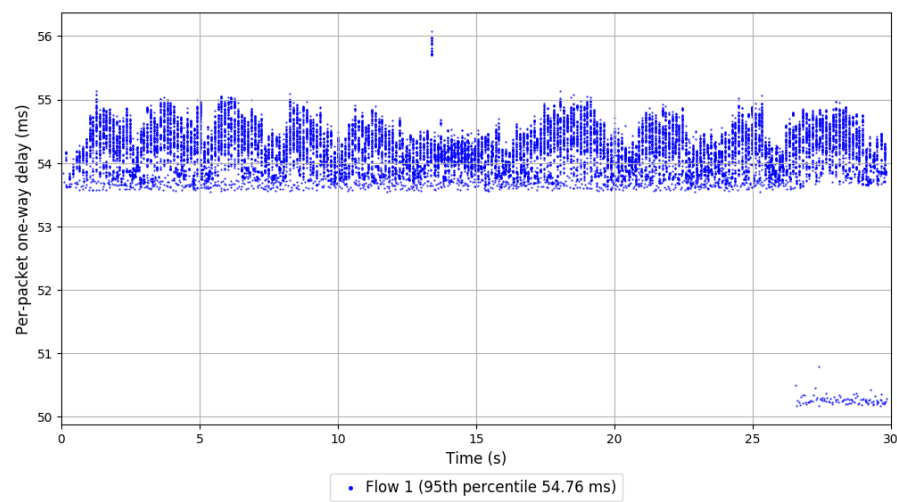
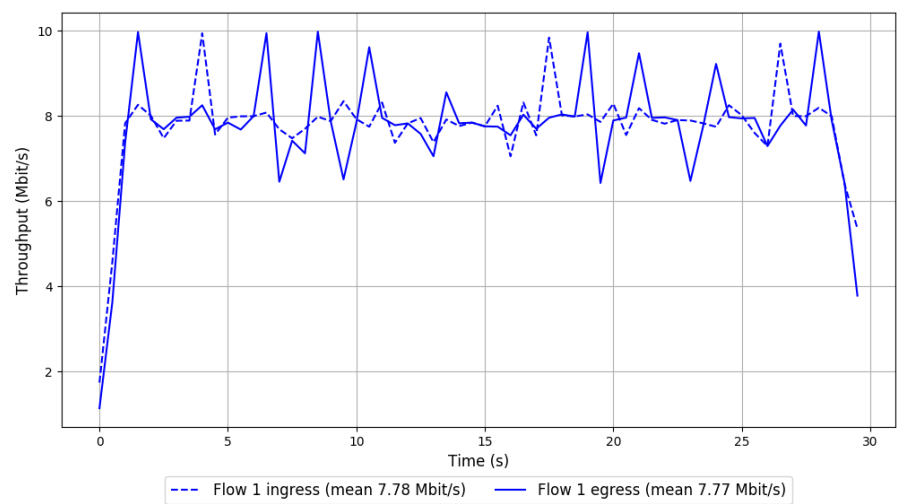
-- Flow 1:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 54.758 ms

Loss rate: 0.40%

Run 4: Report of Sprout — Data Link

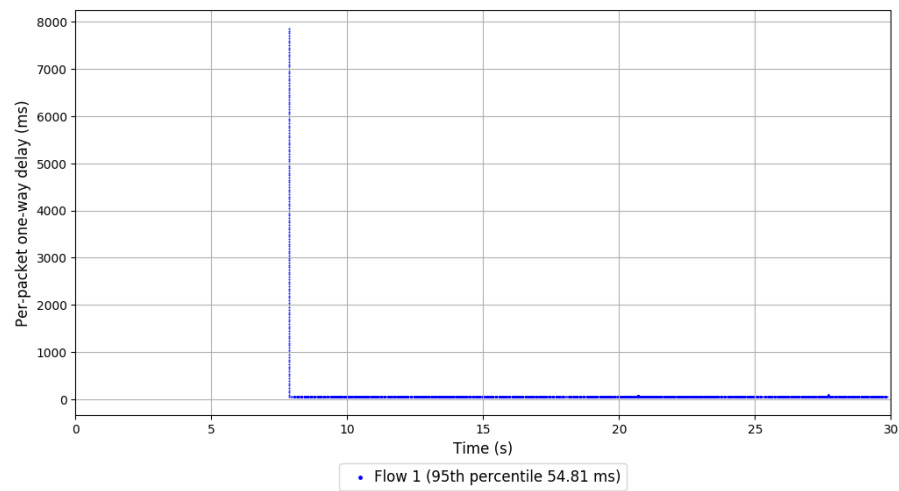
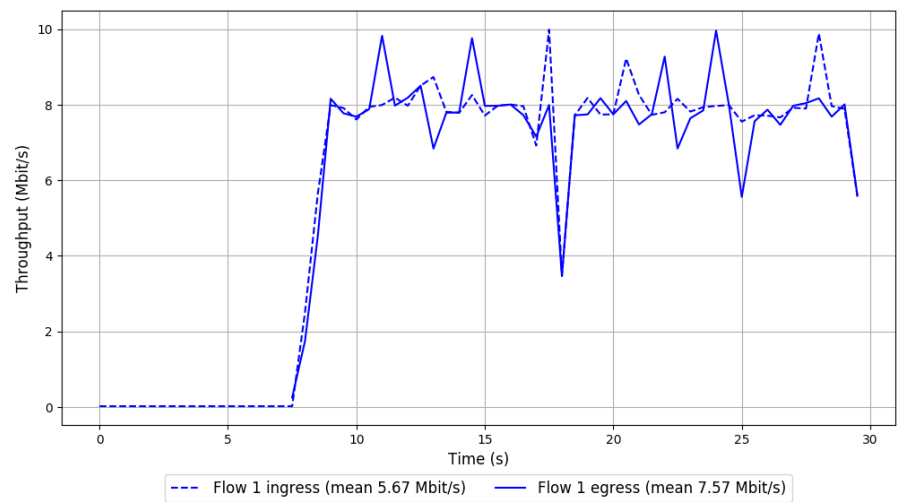


Run 5: Statistics of Sprout

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

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

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-20 02:13:44

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

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.54 Mbit/s

95th percentile per-packet one-way delay: 54.790 ms

Loss rate: 1.64%

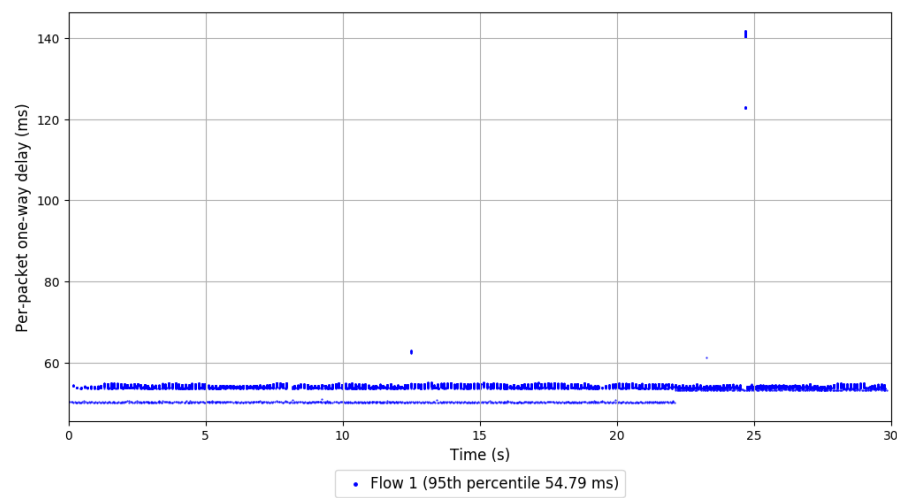
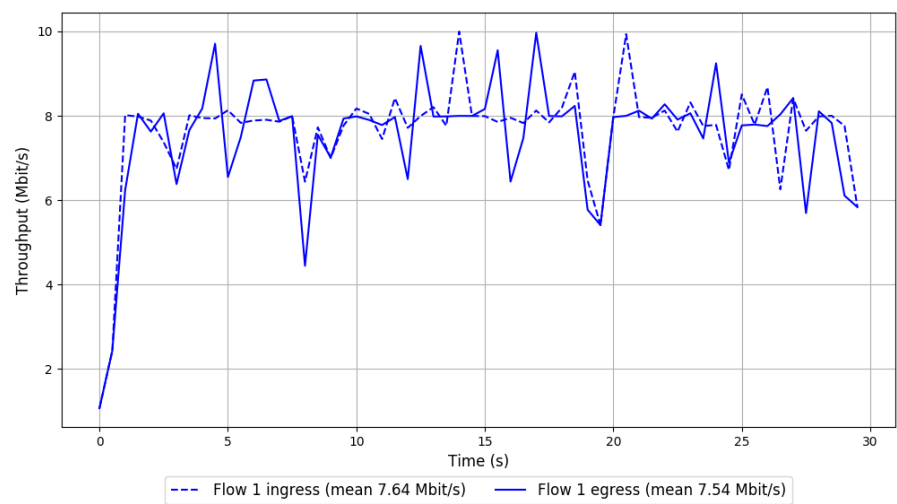
-- Flow 1:

Average throughput: 7.54 Mbit/s

95th percentile per-packet one-way delay: 54.790 ms

Loss rate: 1.64%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

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

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

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 54.787 ms

Loss rate: 1.30%

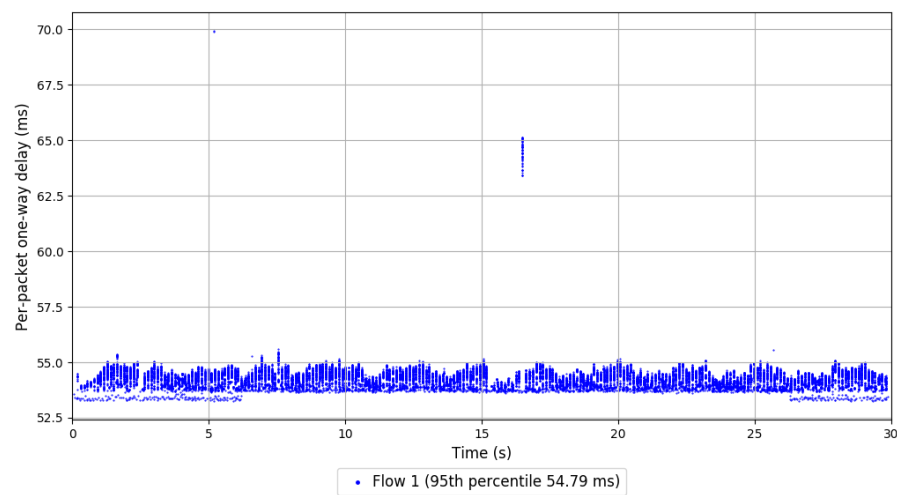
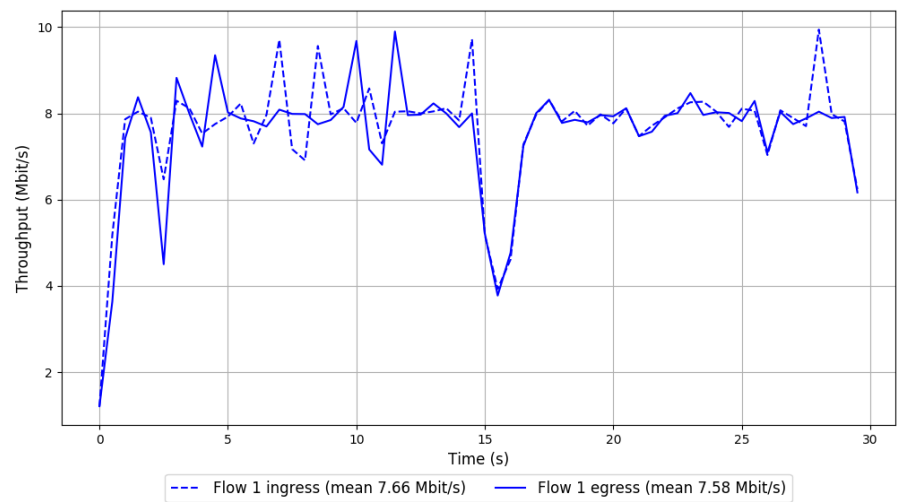
-- Flow 1:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 54.787 ms

Loss rate: 1.30%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-20 02:36:47

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

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 54.932 ms

Loss rate: 1.67%

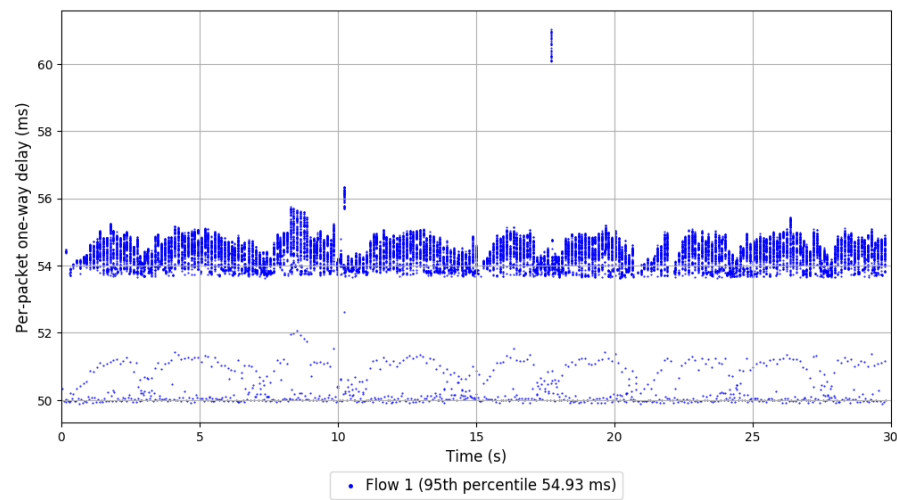
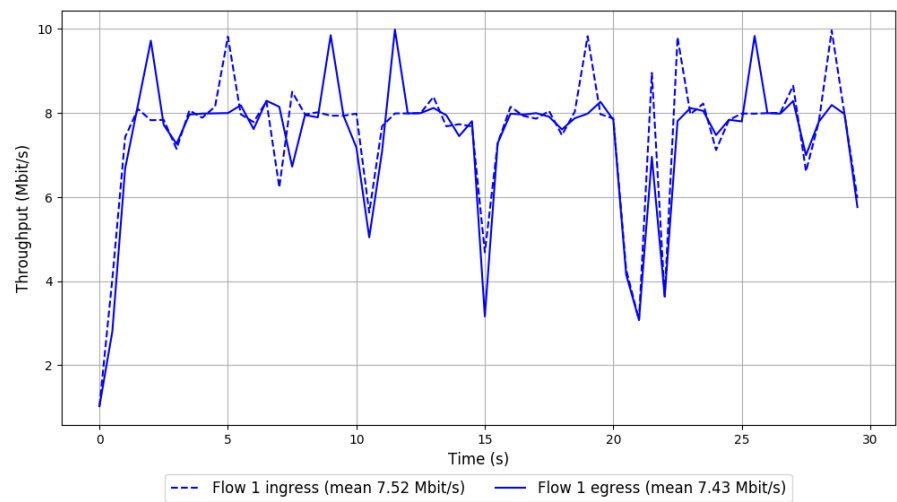
-- Flow 1:

Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 54.932 ms

Loss rate: 1.67%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-20 02:48:14

End at: 2017-12-20 02:48:44

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 54.815 ms

Loss rate: 0.76%

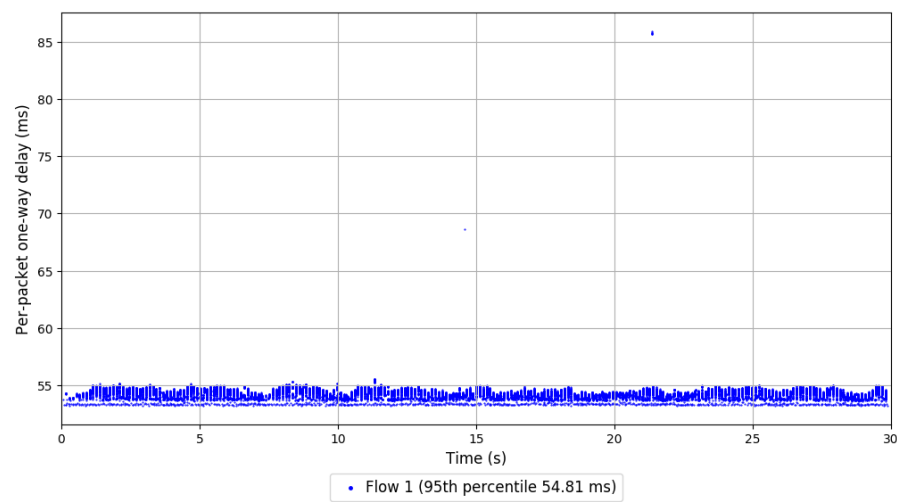
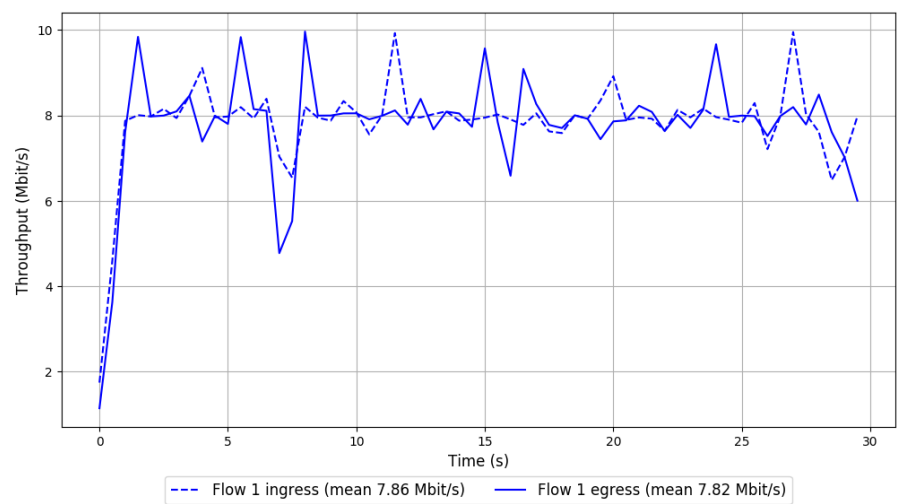
-- Flow 1:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 54.815 ms

Loss rate: 0.76%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-20 02:59:41

End at: 2017-12-20 03:00:11

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 54.232 ms

Loss rate: 0.88%

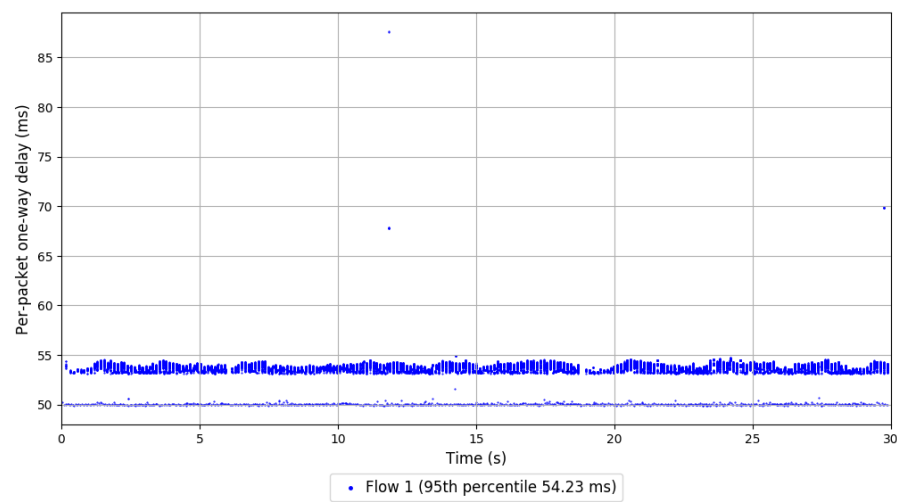
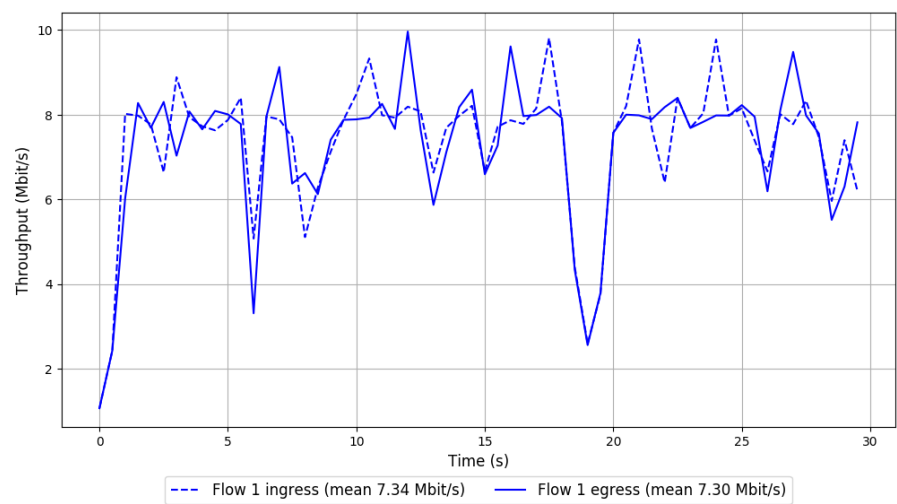
-- Flow 1:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 54.232 ms

Loss rate: 0.88%

Run 10: Report of Sprout — Data Link

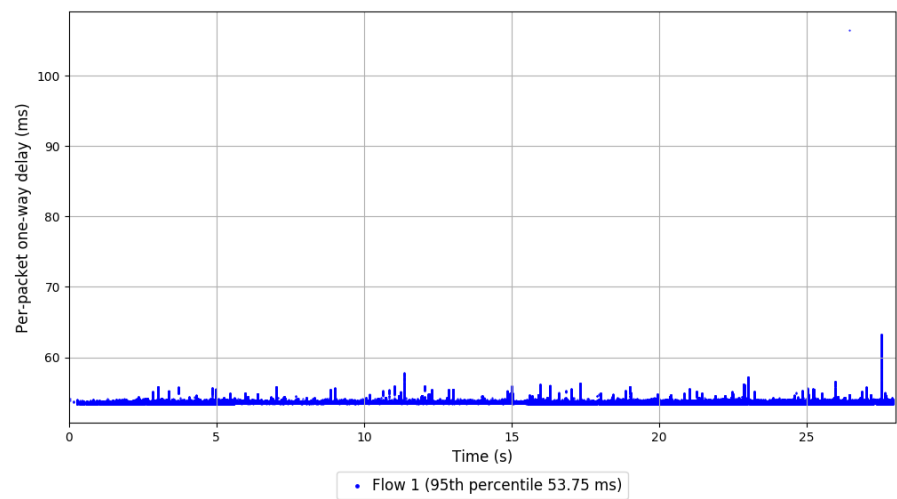
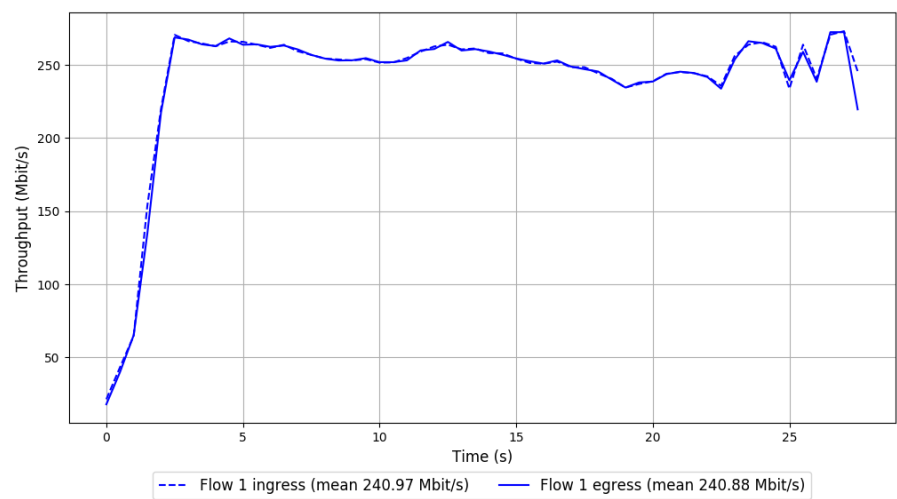


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-20 01:14:48
End at: 2017-12-20 01:15:18

# Below is generated by plot.py at 2017-12-20 05:27:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 240.88 Mbit/s
95th percentile per-packet one-way delay: 53.753 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 240.88 Mbit/s
95th percentile per-packet one-way delay: 53.753 ms
Loss rate: 0.41%
```


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

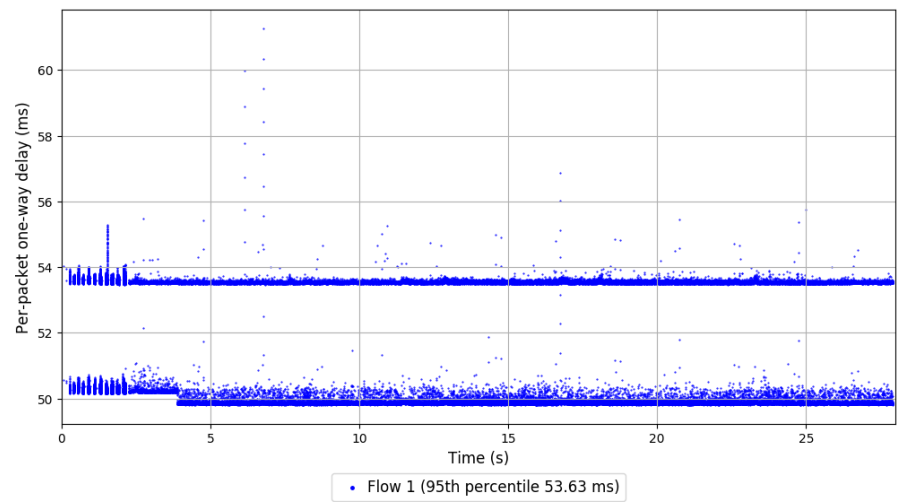
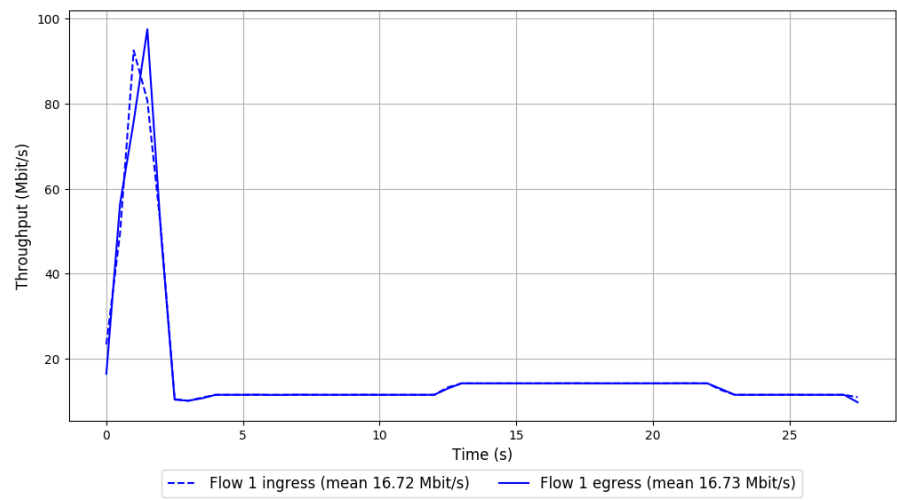


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-20 01:26:33
End at: 2017-12-20 01:27:03

# Below is generated by plot.py at 2017-12-20 05:27:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.73 Mbit/s
95th percentile per-packet one-way delay: 53.631 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 16.73 Mbit/s
95th percentile per-packet one-way delay: 53.631 ms
Loss rate: 0.26%
```

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

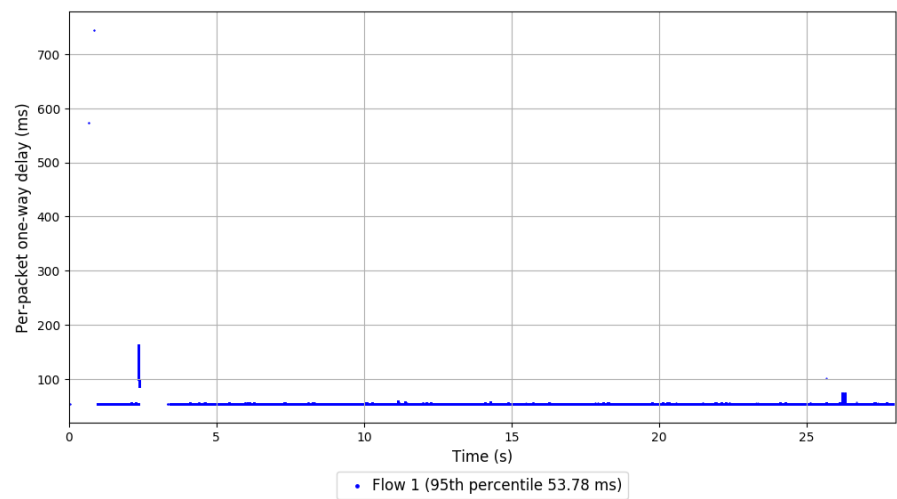
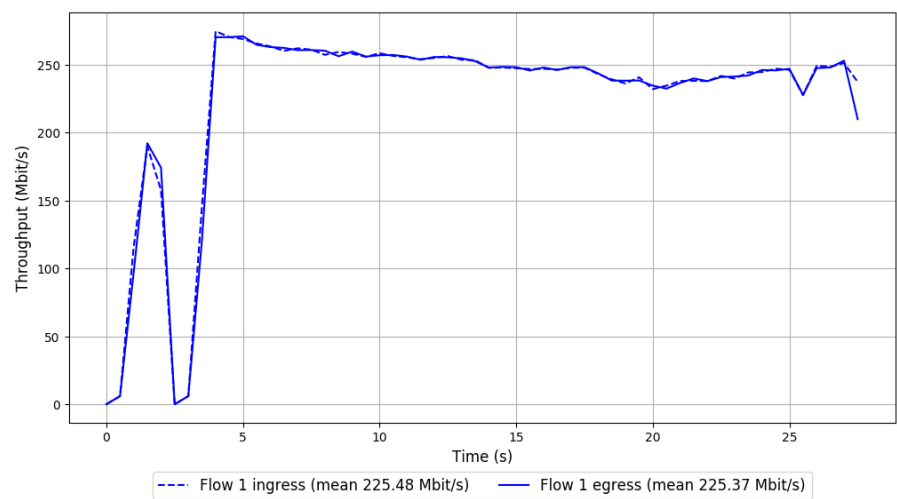


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-20 01:38:05
End at: 2017-12-20 01:38:35

# Below is generated by plot.py at 2017-12-20 05:27:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.37 Mbit/s
95th percentile per-packet one-way delay: 53.783 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 225.37 Mbit/s
95th percentile per-packet one-way delay: 53.783 ms
Loss rate: 0.43%
```

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

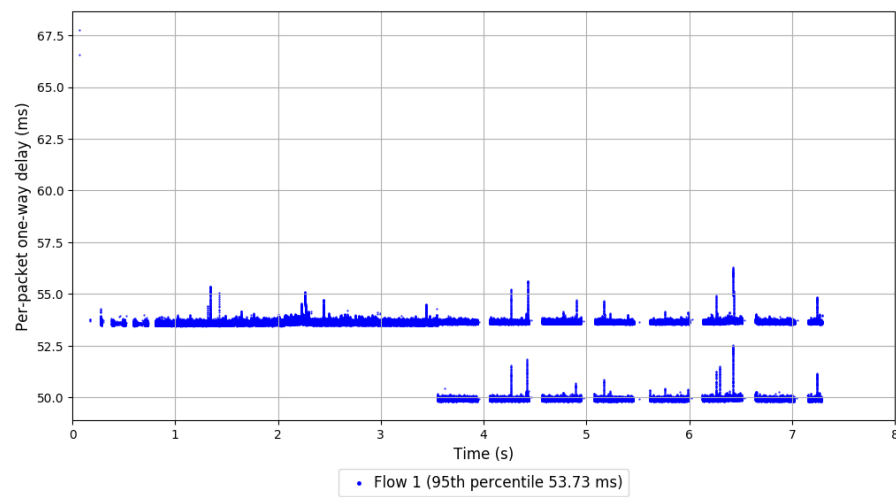
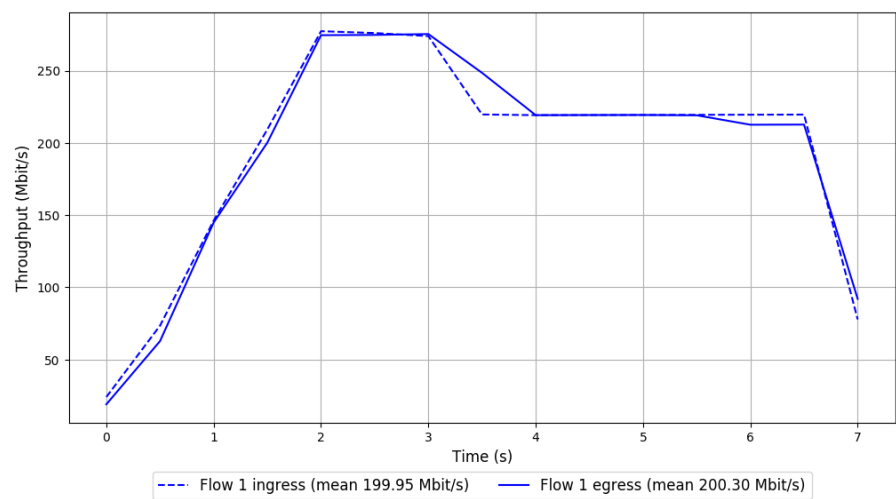


Run 4: Statistics of TaoVA-100x

Start at: 2017-12-20 01:49:43

End at: 2017-12-20 01:50:13

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-20 02:01:07

End at: 2017-12-20 02:01:37

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.39 Mbit/s

95th percentile per-packet one-way delay: 53.699 ms

Loss rate: 0.10%

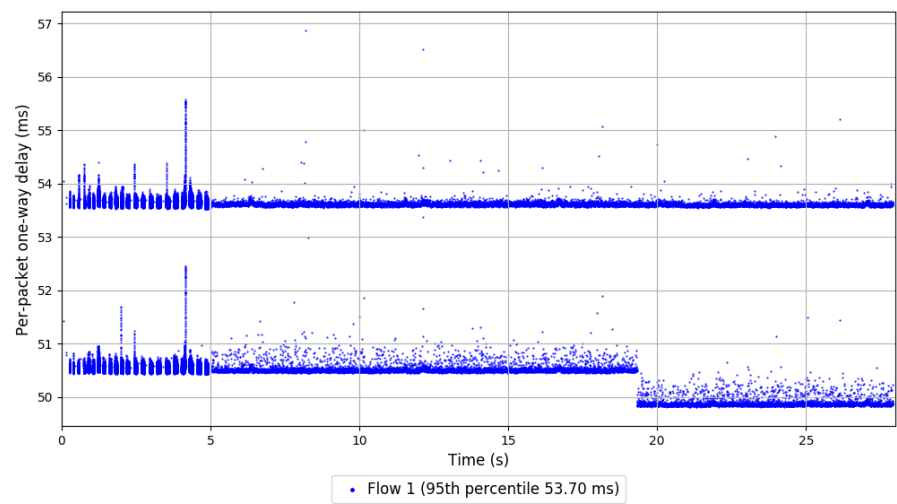
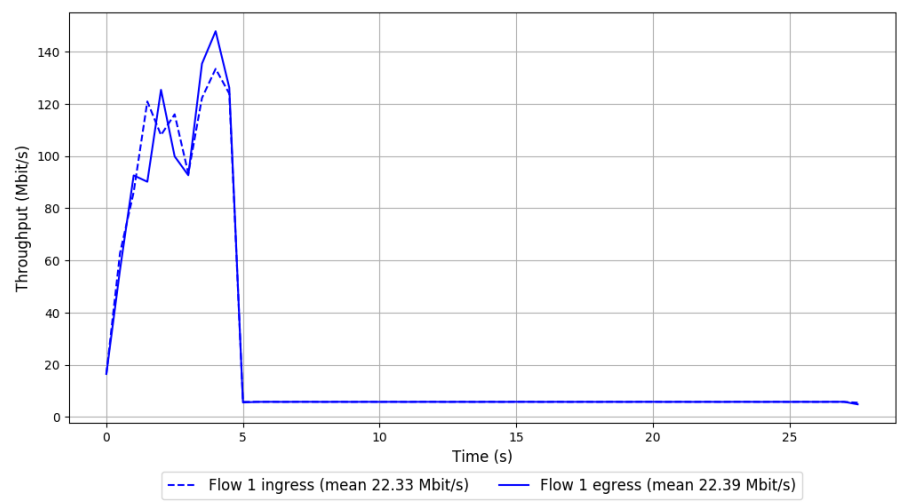
-- Flow 1:

Average throughput: 22.39 Mbit/s

95th percentile per-packet one-way delay: 53.699 ms

Loss rate: 0.10%

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



Run 6: Statistics of TaoVA-100x

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

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

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 25.87 Mbit/s

95th percentile per-packet one-way delay: 53.746 ms

Loss rate: 0.64%

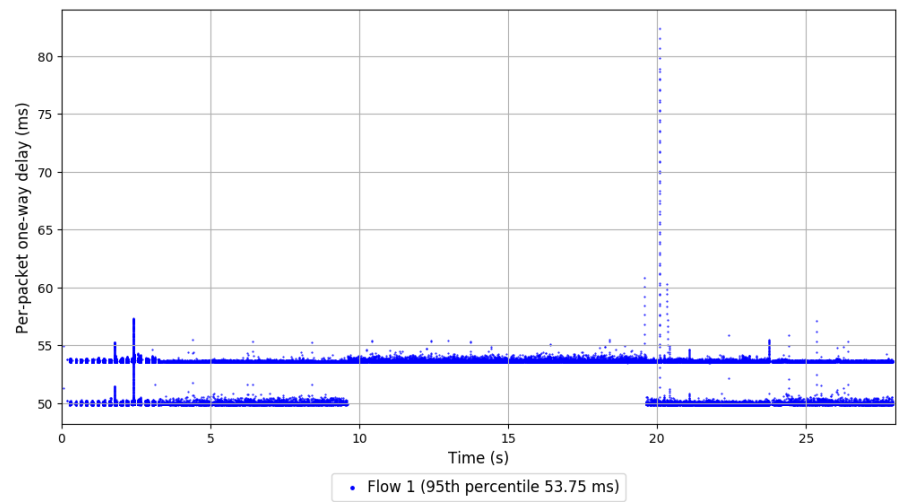
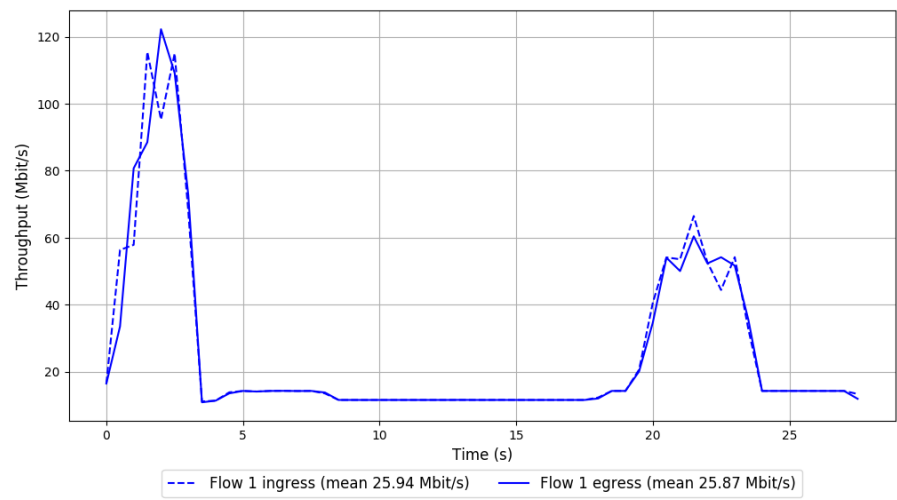
-- Flow 1:

Average throughput: 25.87 Mbit/s

95th percentile per-packet one-way delay: 53.746 ms

Loss rate: 0.64%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-20 02:23:43

End at: 2017-12-20 02:24:13

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 147.21 Mbit/s

95th percentile per-packet one-way delay: 53.740 ms

Loss rate: 0.08%

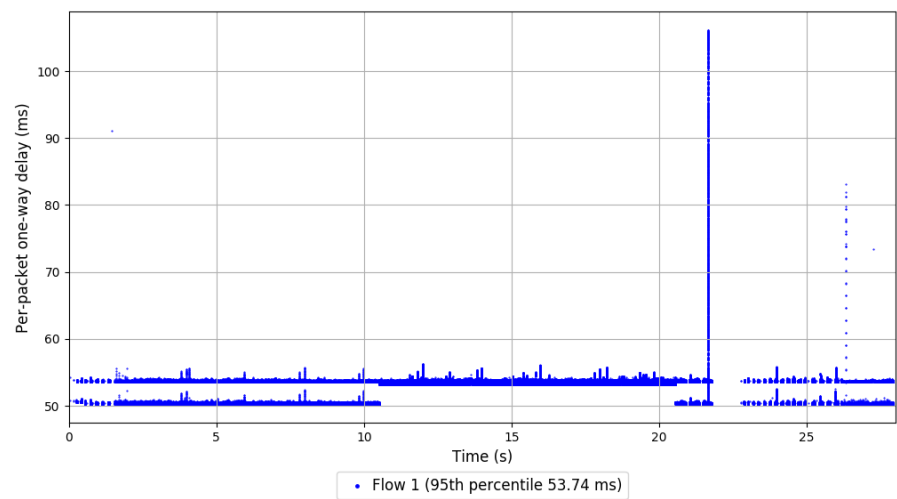
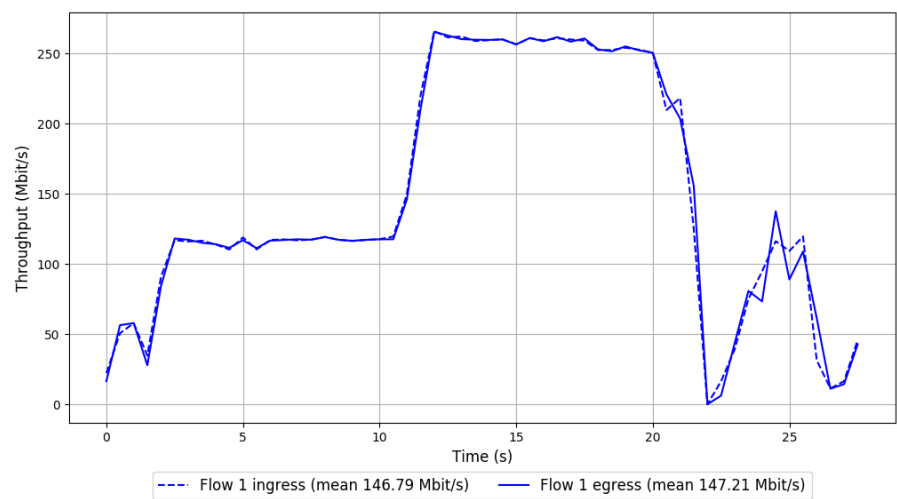
-- Flow 1:

Average throughput: 147.21 Mbit/s

95th percentile per-packet one-way delay: 53.740 ms

Loss rate: 0.08%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-20 02:35:16

End at: 2017-12-20 02:35:46

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.95 Mbit/s

95th percentile per-packet one-way delay: 53.786 ms

Loss rate: 0.02%

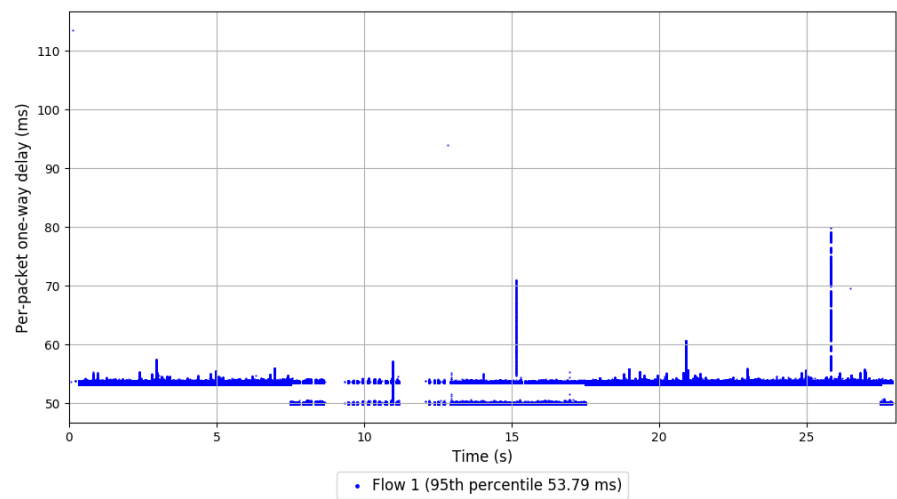
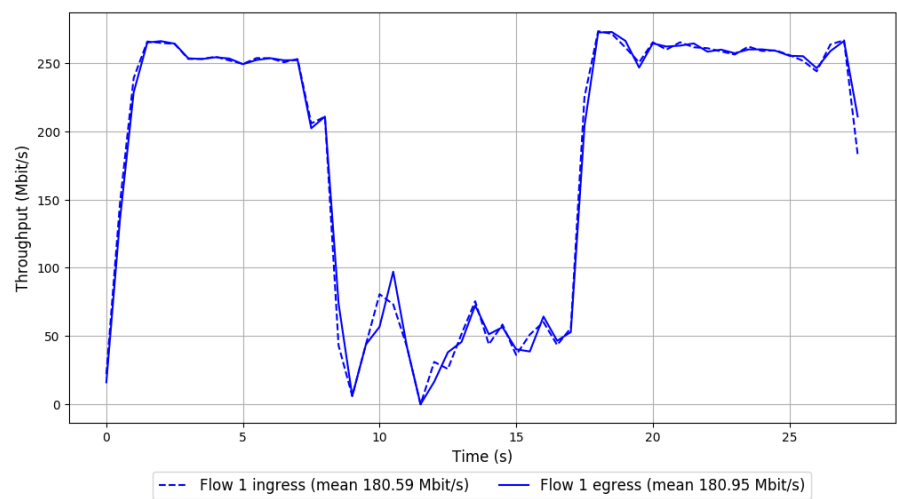
-- Flow 1:

Average throughput: 180.95 Mbit/s

95th percentile per-packet one-way delay: 53.786 ms

Loss rate: 0.02%

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

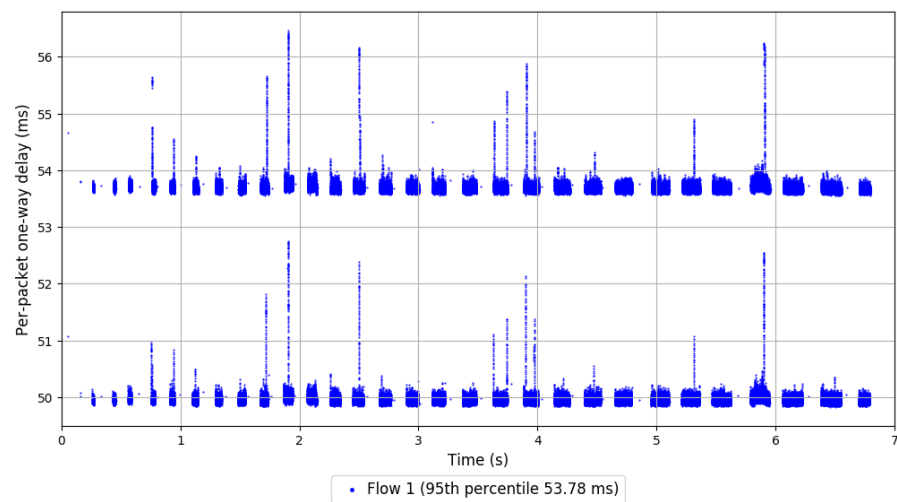
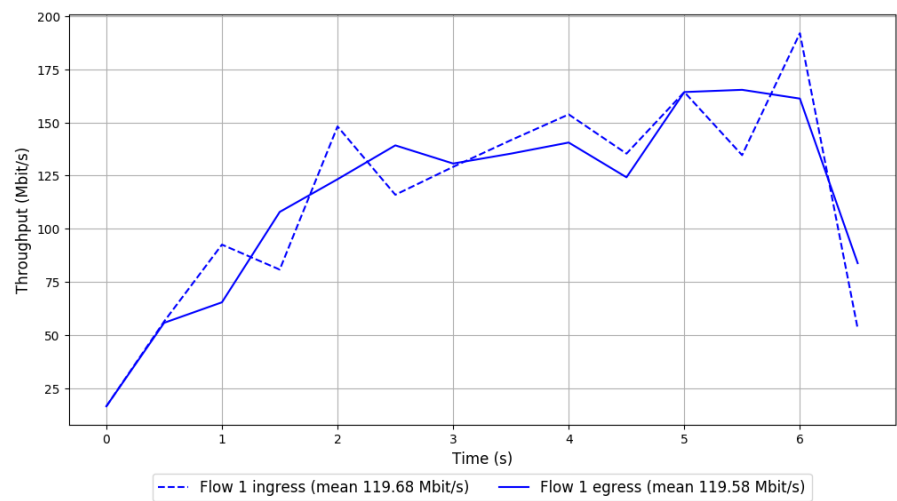


Run 9: Statistics of TaoVA-100x

Start at: 2017-12-20 02:46:47

End at: 2017-12-20 02:47:18

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

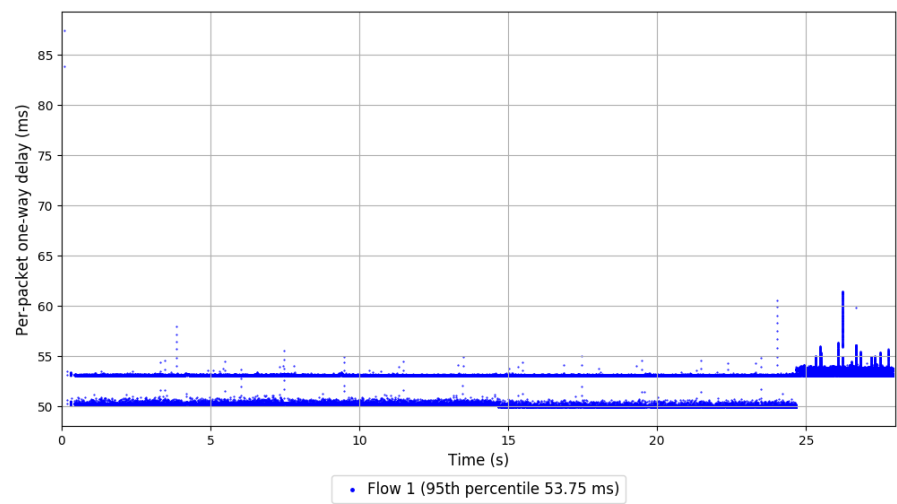
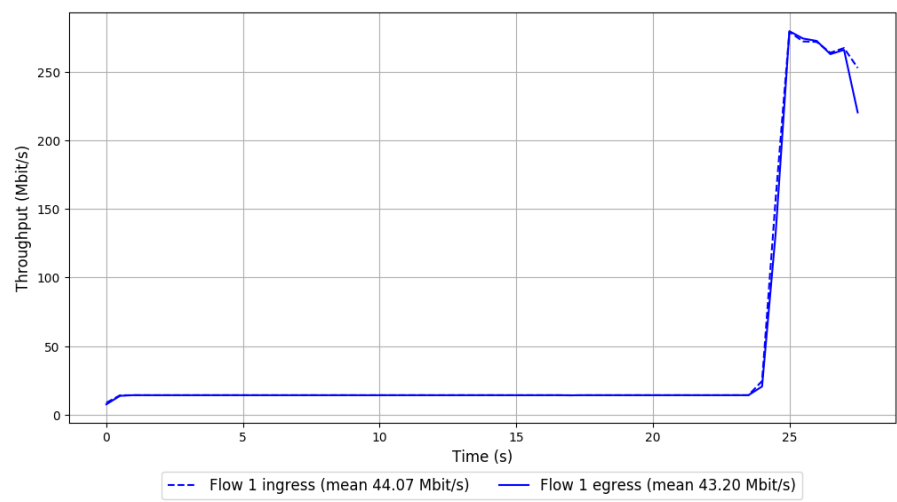


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-20 02:58:12
End at: 2017-12-20 02:58:42

# Below is generated by plot.py at 2017-12-20 05:27:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.20 Mbit/s
95th percentile per-packet one-way delay: 53.751 ms
Loss rate: 2.51%
-- Flow 1:
Average throughput: 43.20 Mbit/s
95th percentile per-packet one-way delay: 53.751 ms
Loss rate: 2.51%
```

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



Run 1: Statistics of TCP Vegas

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

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

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 19.99 Mbit/s

95th percentile per-packet one-way delay: 54.354 ms

Loss rate: 0.62%

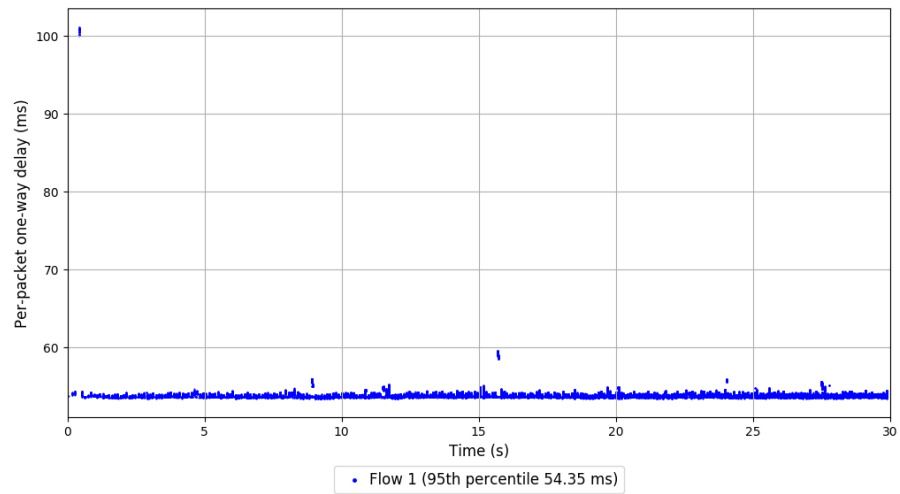
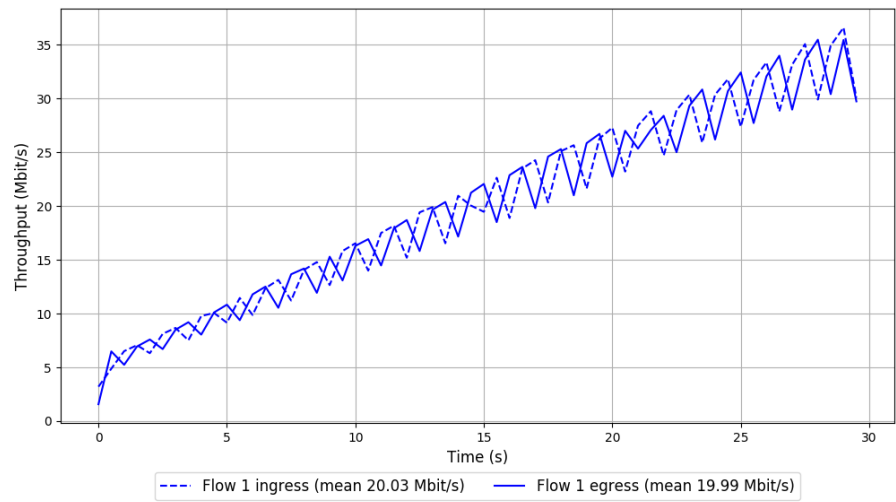
-- Flow 1:

Average throughput: 19.99 Mbit/s

95th percentile per-packet one-way delay: 54.354 ms

Loss rate: 0.62%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-20 01:24:09

End at: 2017-12-20 01:24:39

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.65 Mbit/s

95th percentile per-packet one-way delay: 54.380 ms

Loss rate: 0.42%

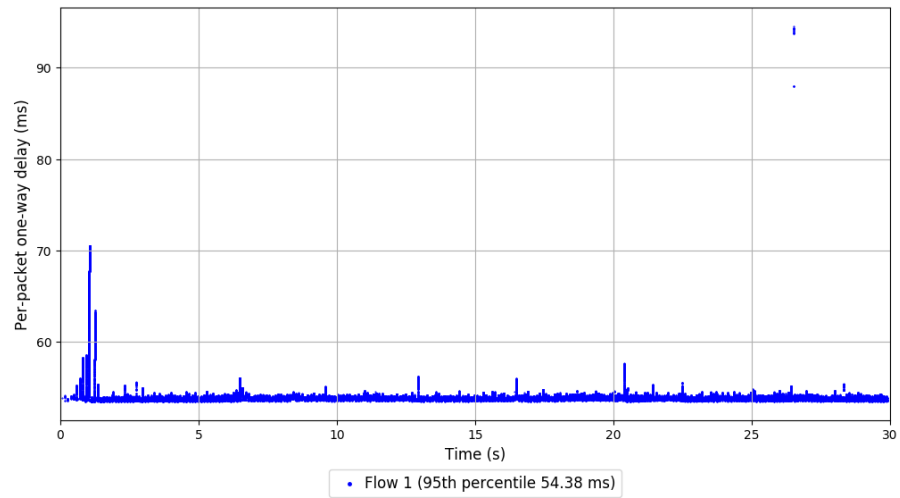
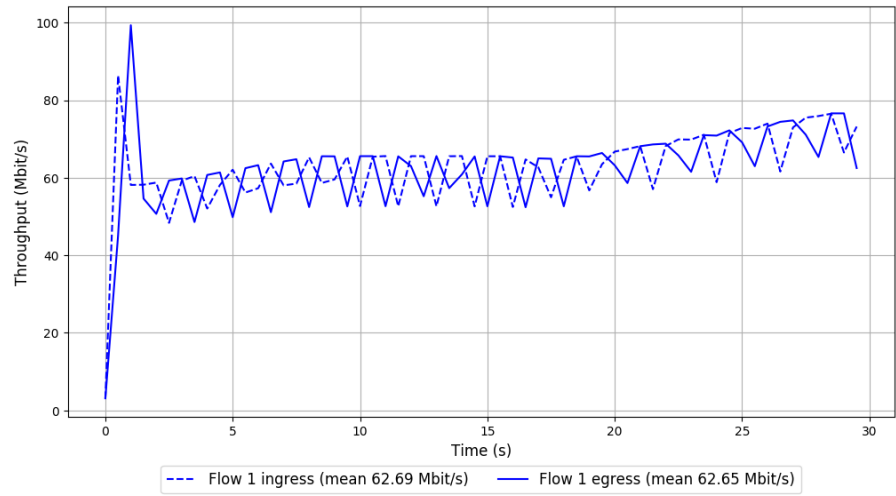
-- Flow 1:

Average throughput: 62.65 Mbit/s

95th percentile per-packet one-way delay: 54.380 ms

Loss rate: 0.42%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

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

End at: 2017-12-20 01:36:05

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 135.51 Mbit/s

95th percentile per-packet one-way delay: 54.162 ms

Loss rate: 0.37%

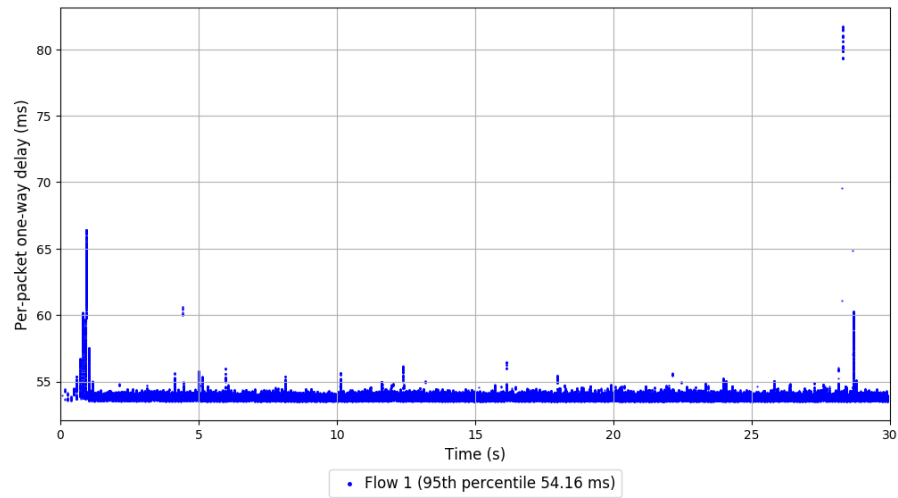
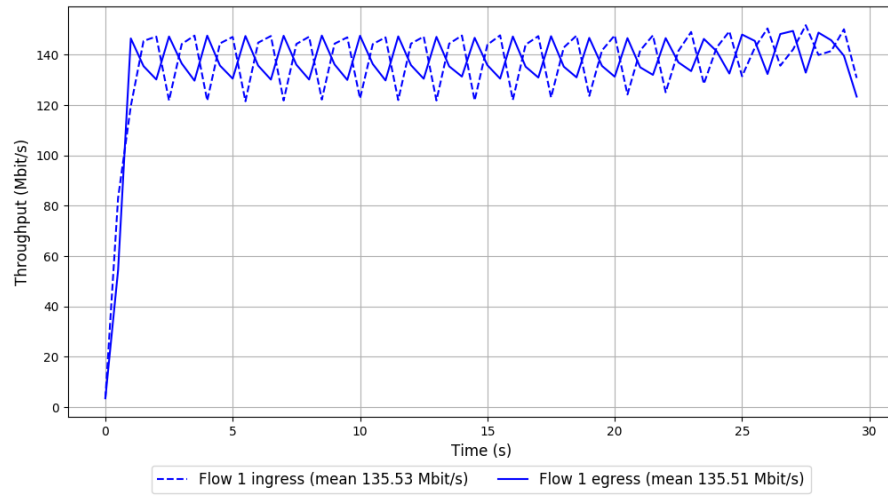
-- Flow 1:

Average throughput: 135.51 Mbit/s

95th percentile per-packet one-way delay: 54.162 ms

Loss rate: 0.37%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-20 01:47:21

End at: 2017-12-20 01:47:51

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.40 Mbit/s

95th percentile per-packet one-way delay: 54.236 ms

Loss rate: 1.78%

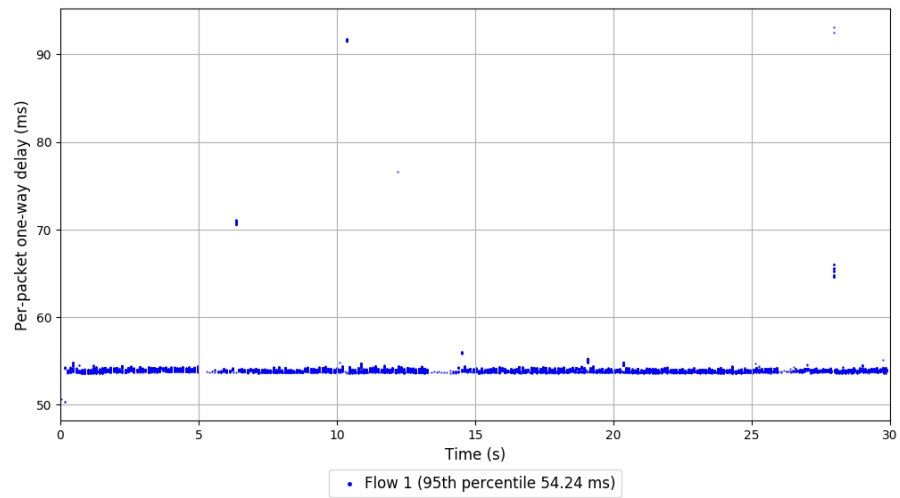
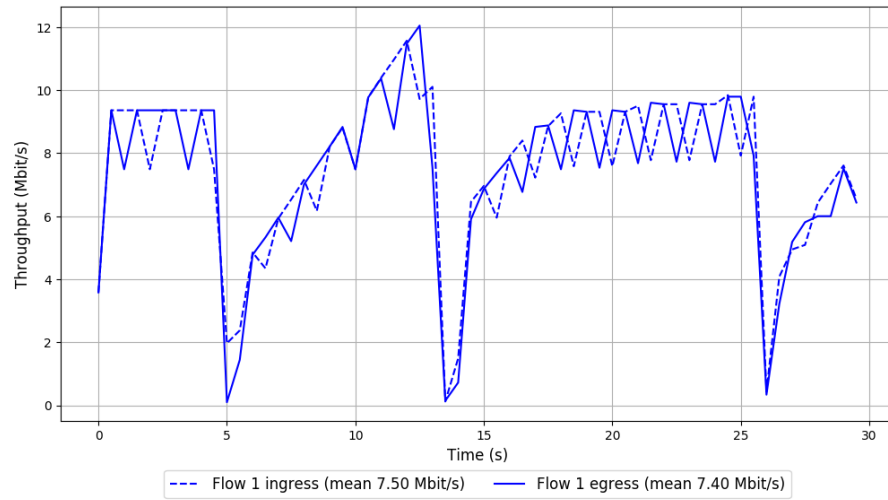
-- Flow 1:

Average throughput: 7.40 Mbit/s

95th percentile per-packet one-way delay: 54.236 ms

Loss rate: 1.78%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-20 01:58:46

End at: 2017-12-20 01:59:16

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.37 Mbit/s

95th percentile per-packet one-way delay: 54.178 ms

Loss rate: 0.42%

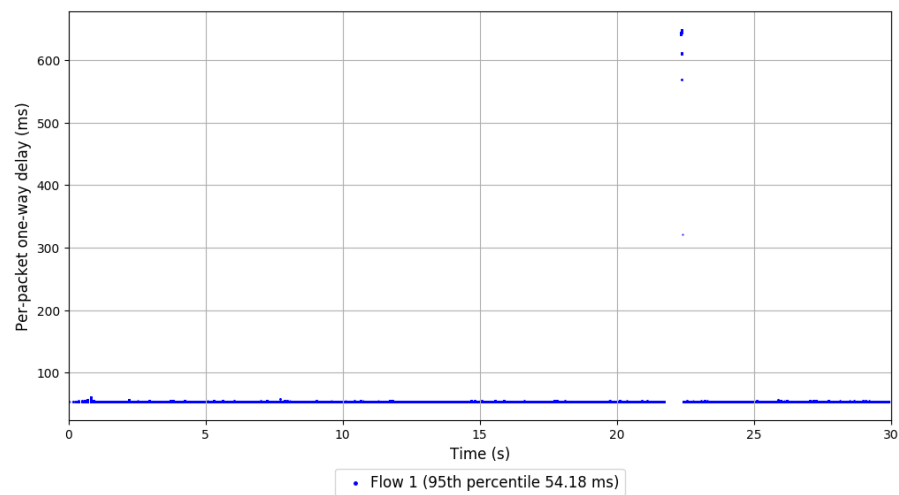
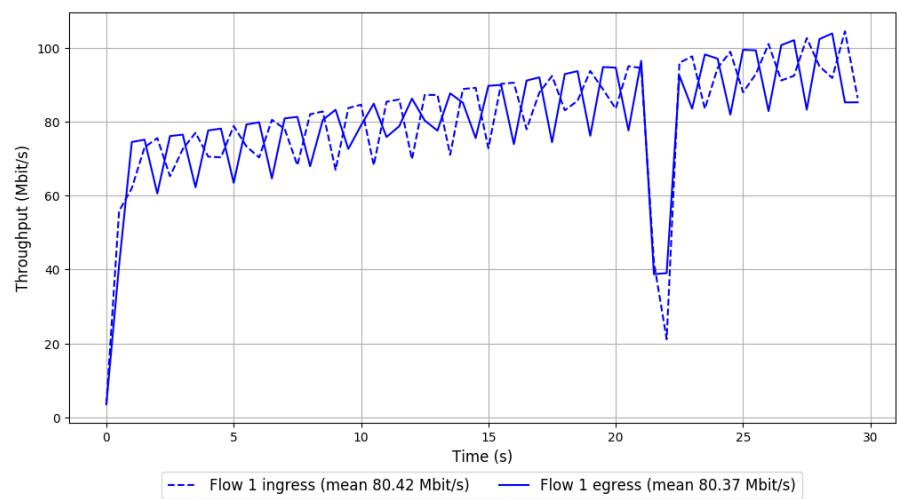
-- Flow 1:

Average throughput: 80.37 Mbit/s

95th percentile per-packet one-way delay: 54.178 ms

Loss rate: 0.42%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-20 02:09:59

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

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.25 Mbit/s

95th percentile per-packet one-way delay: 59.942 ms

Loss rate: 0.94%

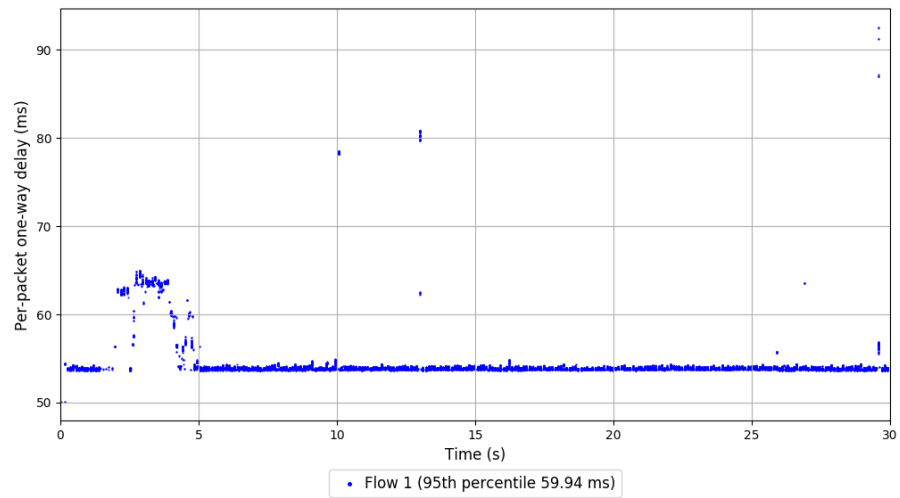
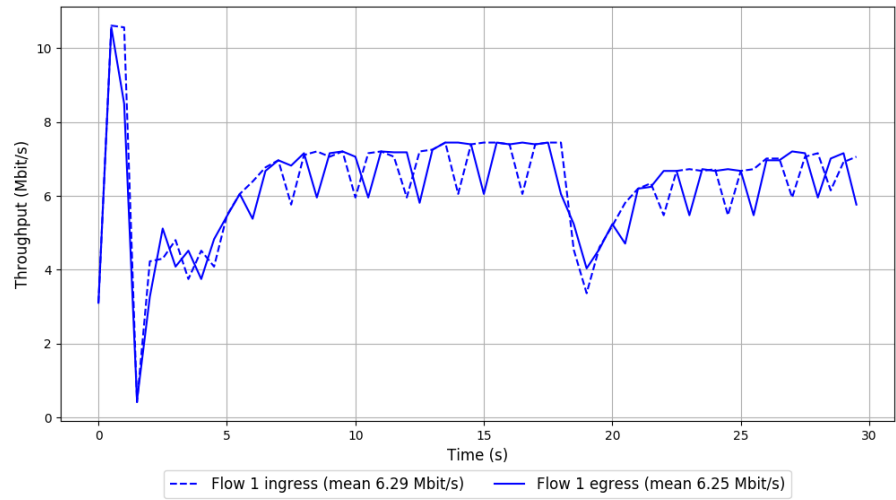
-- Flow 1:

Average throughput: 6.25 Mbit/s

95th percentile per-packet one-way delay: 59.942 ms

Loss rate: 0.94%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

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

End at: 2017-12-20 02:21:50

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.38 Mbit/s

95th percentile per-packet one-way delay: 54.103 ms

Loss rate: 0.35%

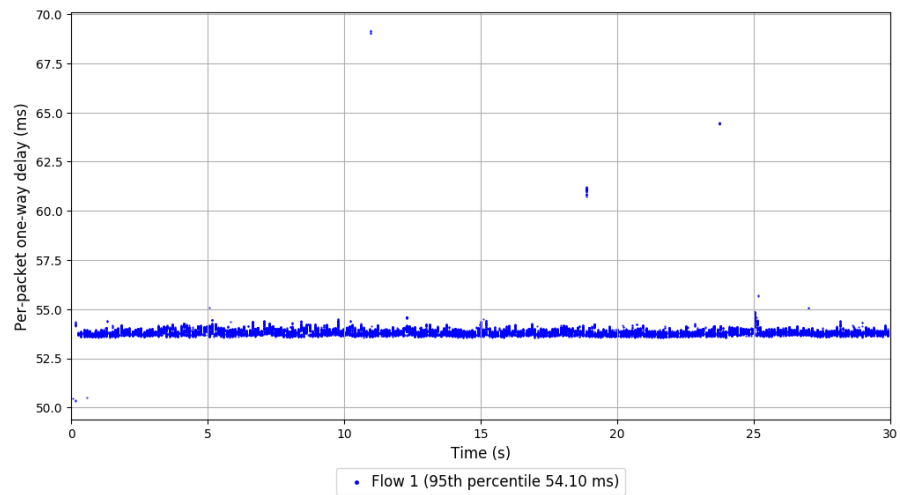
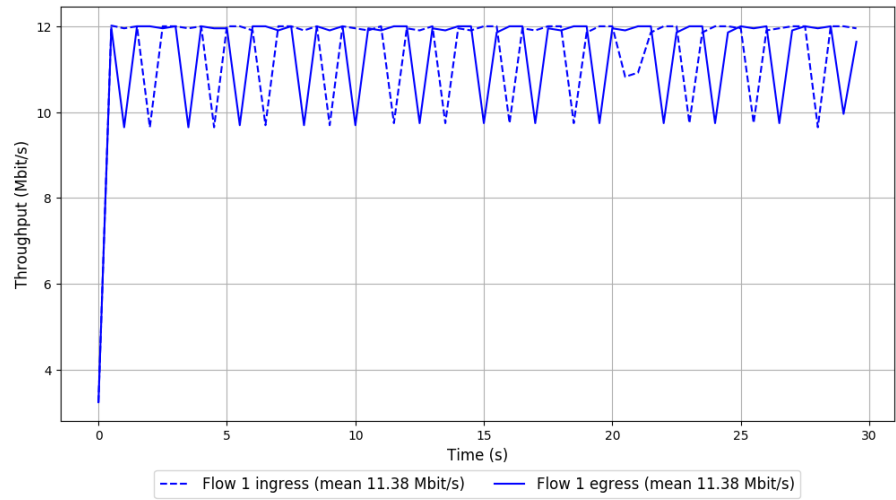
-- Flow 1:

Average throughput: 11.38 Mbit/s

95th percentile per-packet one-way delay: 54.103 ms

Loss rate: 0.35%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-20 02:32:51

End at: 2017-12-20 02:33:21

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.27 Mbit/s

95th percentile per-packet one-way delay: 54.251 ms

Loss rate: 0.43%

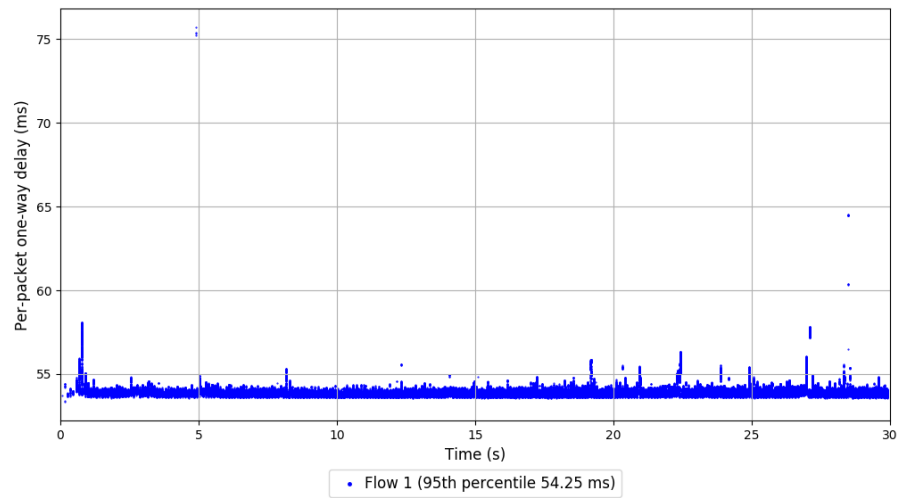
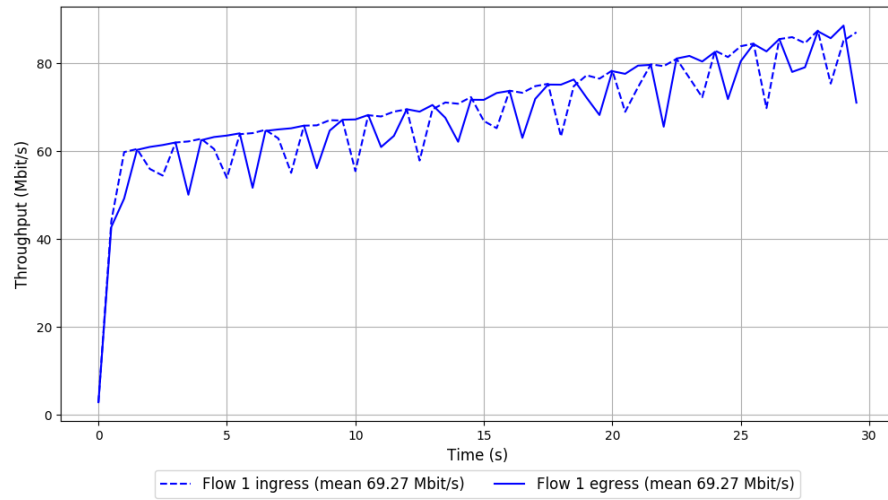
-- Flow 1:

Average throughput: 69.27 Mbit/s

95th percentile per-packet one-way delay: 54.251 ms

Loss rate: 0.43%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

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

End at: 2017-12-20 02:44:54

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.12 Mbit/s

95th percentile per-packet one-way delay: 54.124 ms

Loss rate: 0.75%

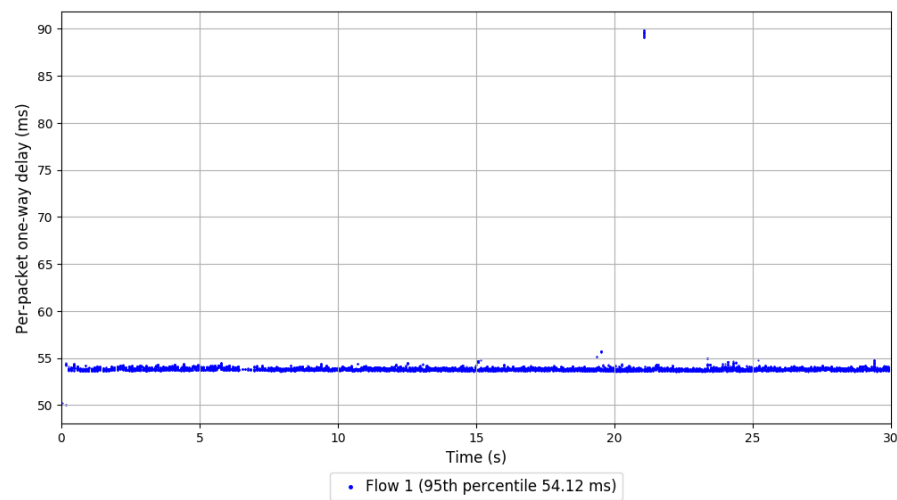
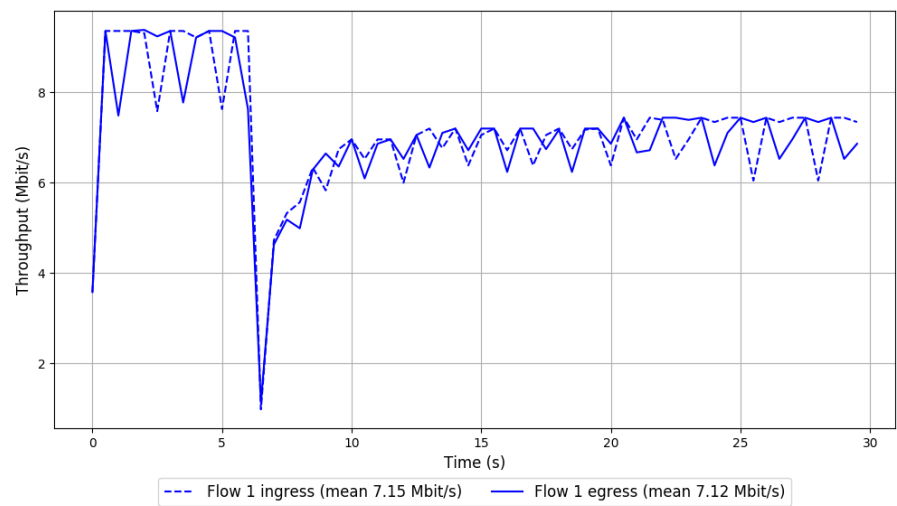
-- Flow 1:

Average throughput: 7.12 Mbit/s

95th percentile per-packet one-way delay: 54.124 ms

Loss rate: 0.75%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-20 02:55:49

End at: 2017-12-20 02:56:19

Below is generated by plot.py at 2017-12-20 05:27:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.56 Mbit/s

95th percentile per-packet one-way delay: 53.599 ms

Loss rate: 0.92%

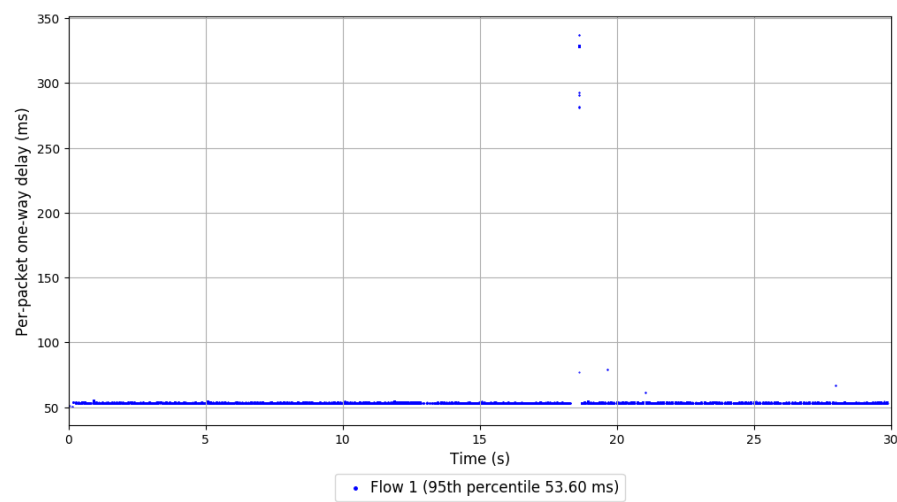
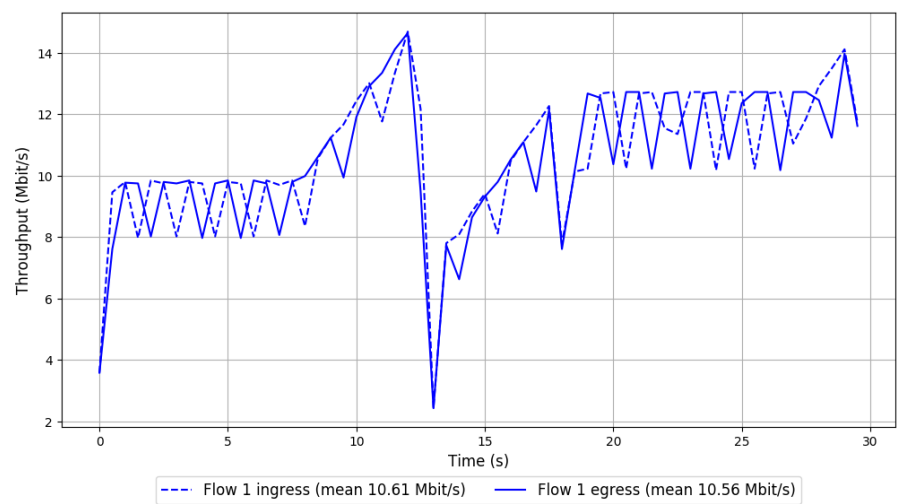
-- Flow 1:

Average throughput: 10.56 Mbit/s

95th percentile per-packet one-way delay: 53.599 ms

Loss rate: 0.92%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-20 01:13:04

End at: 2017-12-20 01:13:34

Below is generated by plot.py at 2017-12-20 05:30:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 279.52 Mbit/s

95th percentile per-packet one-way delay: 171.592 ms

Loss rate: 1.30%

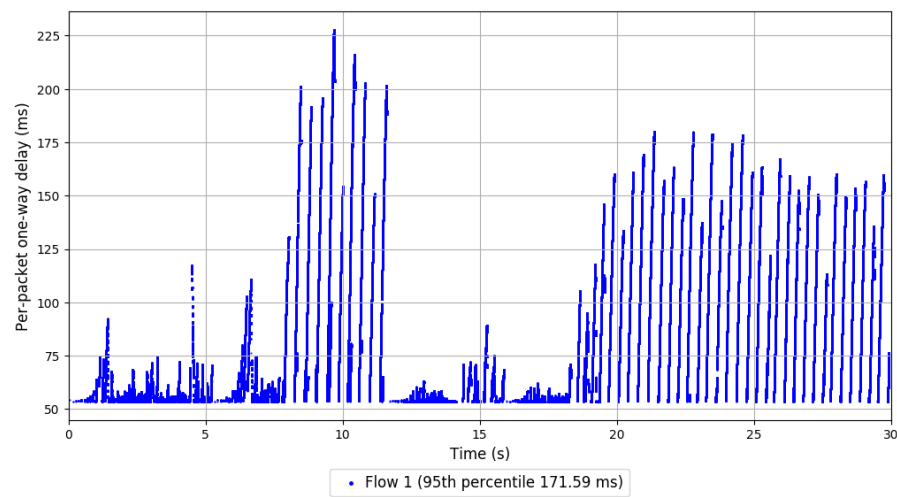
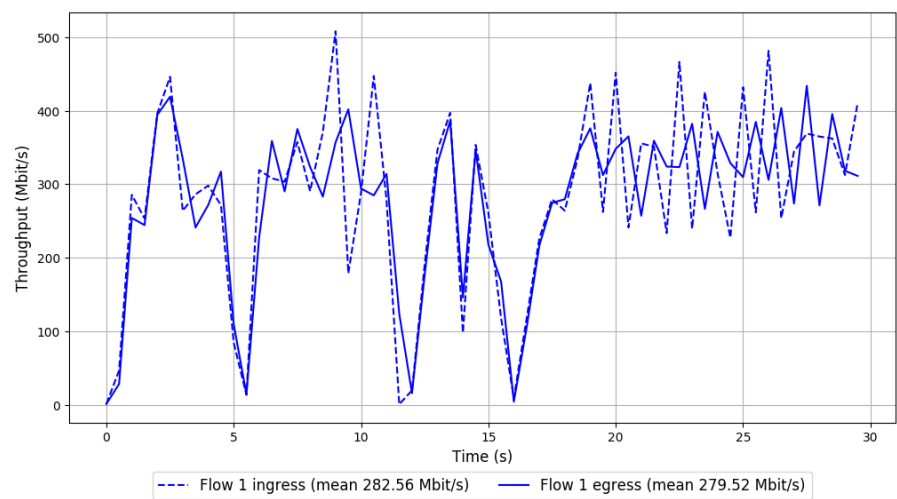
-- Flow 1:

Average throughput: 279.52 Mbit/s

95th percentile per-packet one-way delay: 171.592 ms

Loss rate: 1.30%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-20 01:24:49

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

Below is generated by plot.py at 2017-12-20 05:30:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 275.41 Mbit/s

95th percentile per-packet one-way delay: 112.038 ms

Loss rate: 2.38%

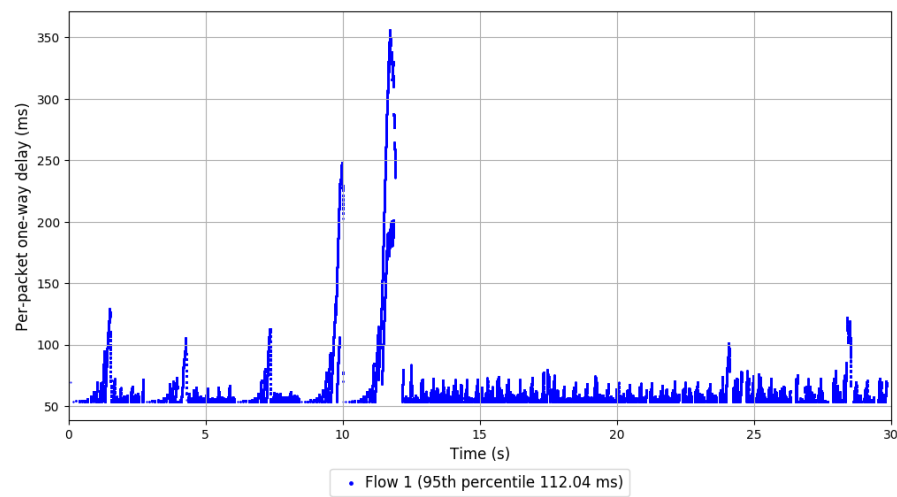
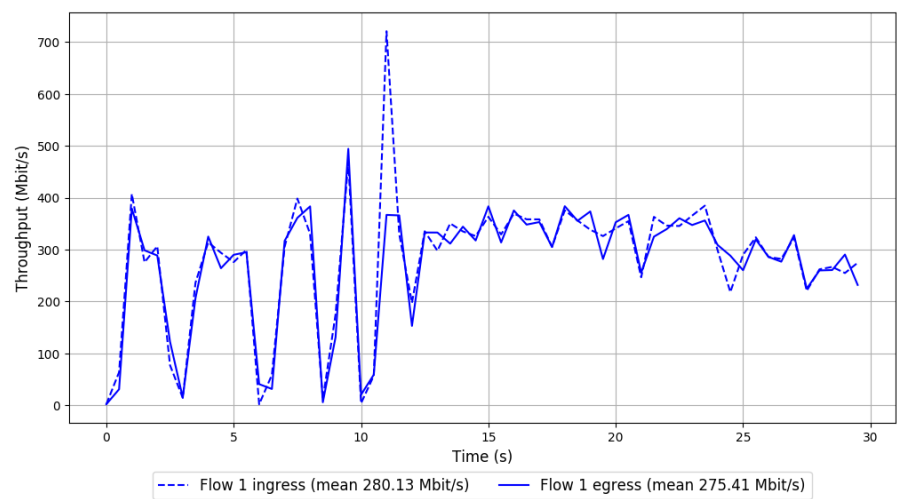
-- Flow 1:

Average throughput: 275.41 Mbit/s

95th percentile per-packet one-way delay: 112.038 ms

Loss rate: 2.38%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-20 01:36:19

End at: 2017-12-20 01:36:49

Below is generated by plot.py at 2017-12-20 05:31:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 292.40 Mbit/s

95th percentile per-packet one-way delay: 68.996 ms

Loss rate: 1.44%

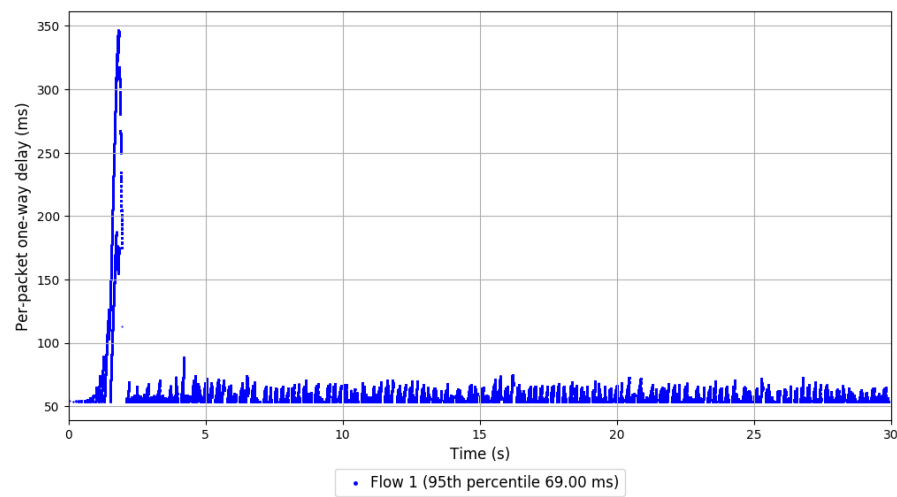
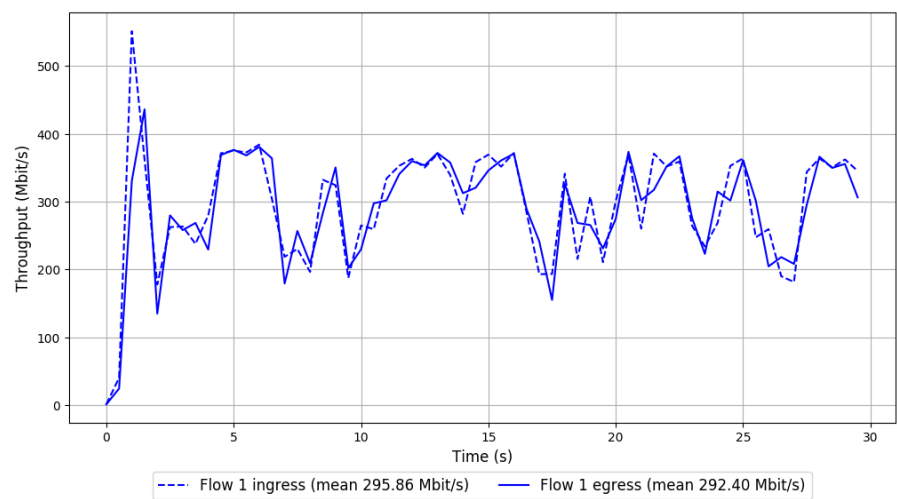
-- Flow 1:

Average throughput: 292.40 Mbit/s

95th percentile per-packet one-way delay: 68.996 ms

Loss rate: 1.44%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-20 01:47:59

End at: 2017-12-20 01:48:29

Below is generated by plot.py at 2017-12-20 05:31:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 286.78 Mbit/s

95th percentile per-packet one-way delay: 119.162 ms

Loss rate: 0.41%

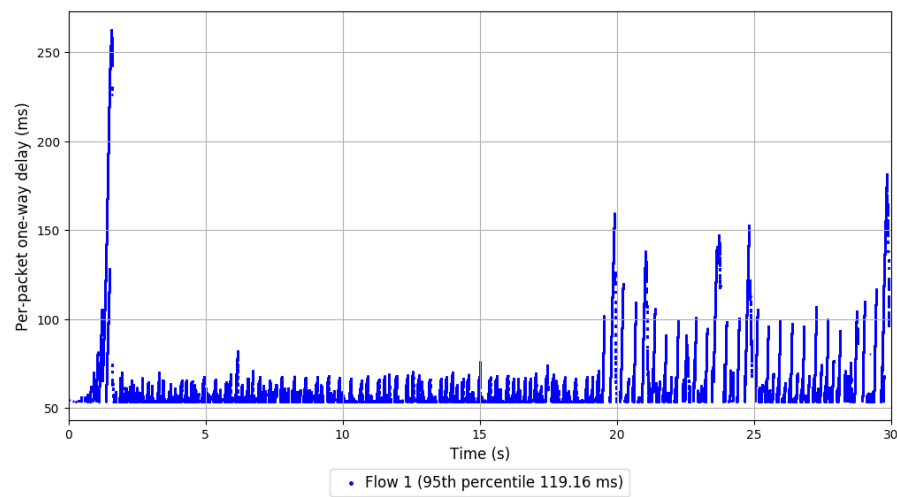
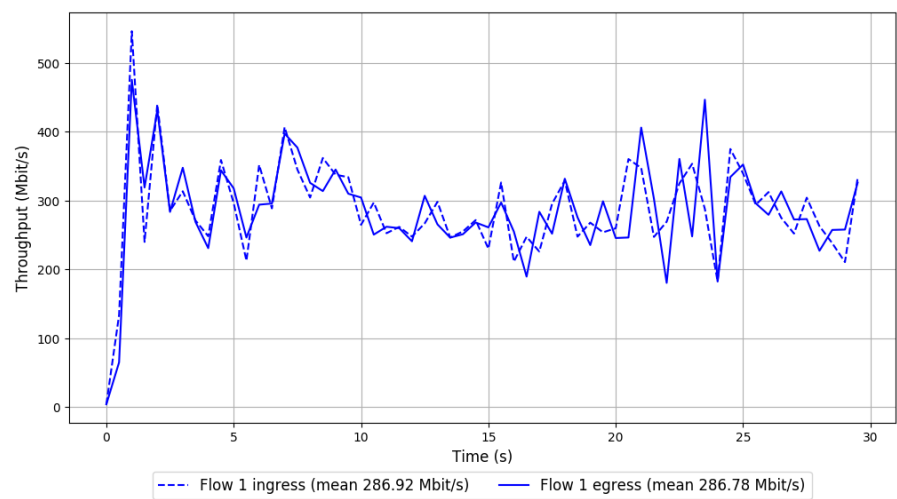
-- Flow 1:

Average throughput: 286.78 Mbit/s

95th percentile per-packet one-way delay: 119.162 ms

Loss rate: 0.41%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-20 01:59:27

End at: 2017-12-20 01:59:57

Below is generated by plot.py at 2017-12-20 05:31:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.73 Mbit/s

95th percentile per-packet one-way delay: 76.423 ms

Loss rate: 0.44%

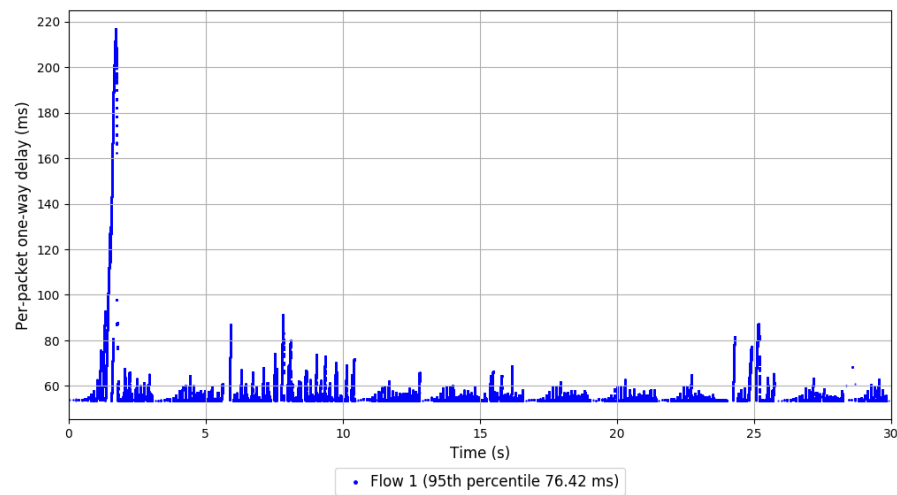
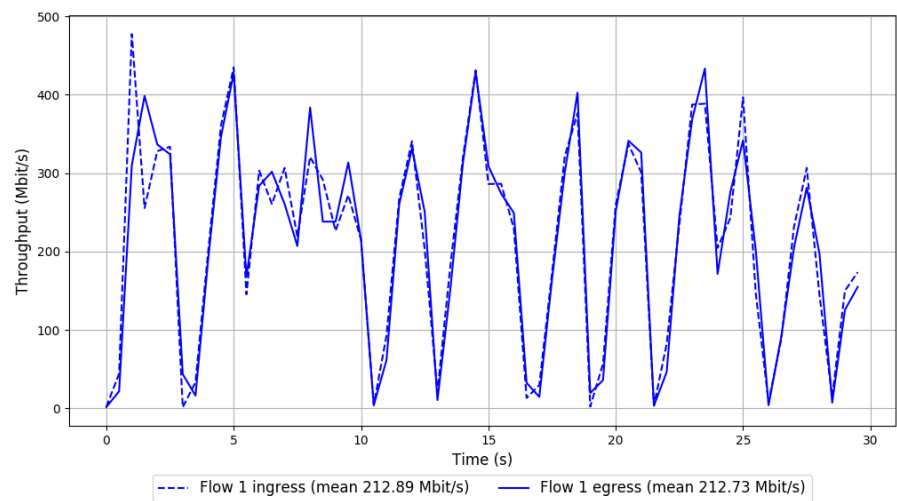
-- Flow 1:

Average throughput: 212.73 Mbit/s

95th percentile per-packet one-way delay: 76.423 ms

Loss rate: 0.44%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-20 02:10:37

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

Below is generated by plot.py at 2017-12-20 05:31:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.09 Mbit/s

95th percentile per-packet one-way delay: 143.972 ms

Loss rate: 1.37%

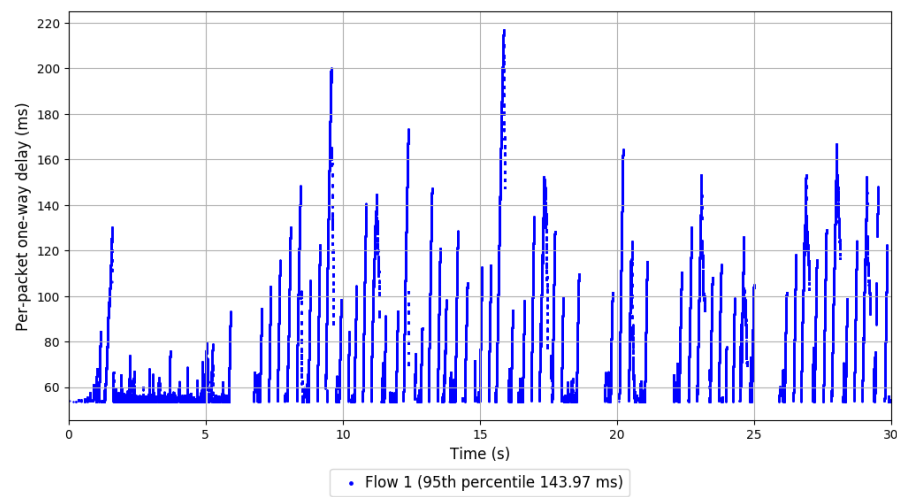
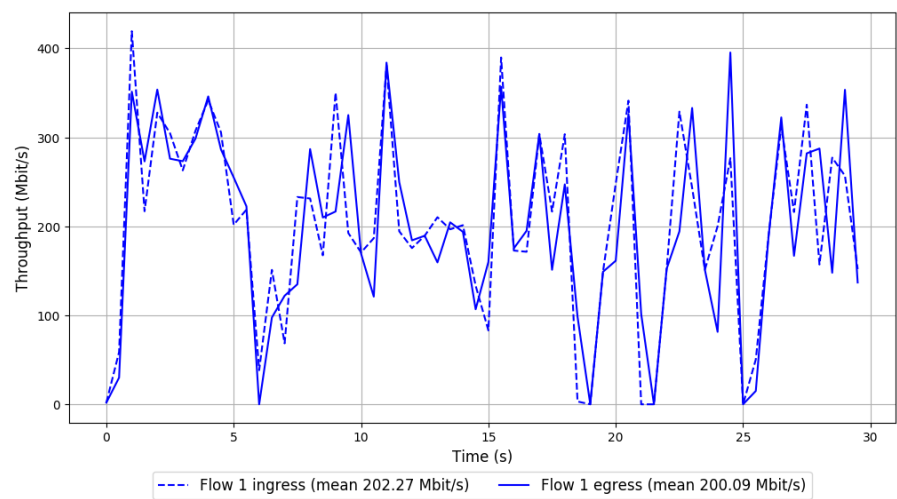
-- Flow 1:

Average throughput: 200.09 Mbit/s

95th percentile per-packet one-way delay: 143.972 ms

Loss rate: 1.37%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-20 02:21:58

End at: 2017-12-20 02:22:28

Below is generated by plot.py at 2017-12-20 05:32:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 303.16 Mbit/s

95th percentile per-packet one-way delay: 94.138 ms

Loss rate: 0.95%

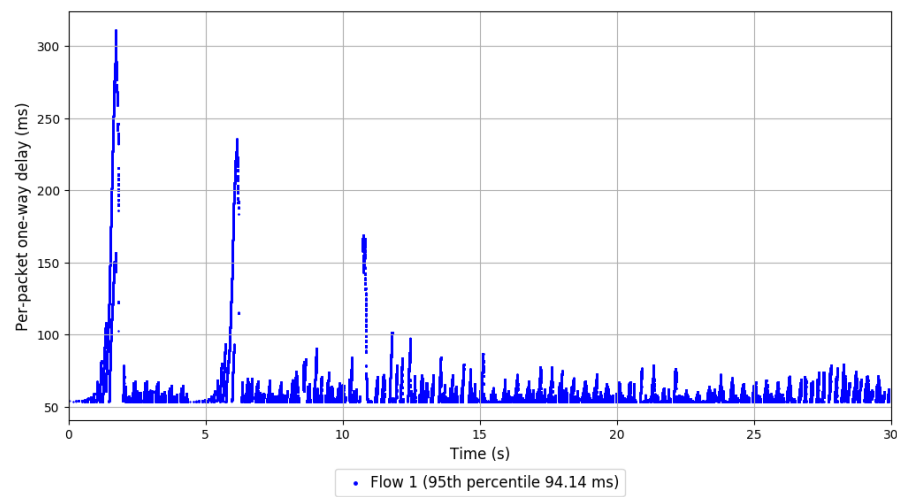
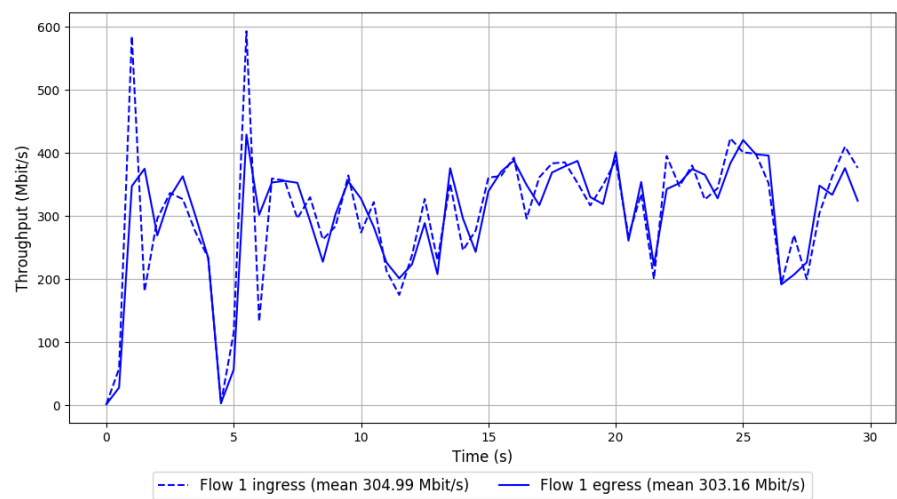
-- Flow 1:

Average throughput: 303.16 Mbit/s

95th percentile per-packet one-way delay: 94.138 ms

Loss rate: 0.95%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-20 02:33:31

End at: 2017-12-20 02:34:01

Below is generated by plot.py at 2017-12-20 05:32:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 273.12 Mbit/s

95th percentile per-packet one-way delay: 93.743 ms

Loss rate: 2.07%

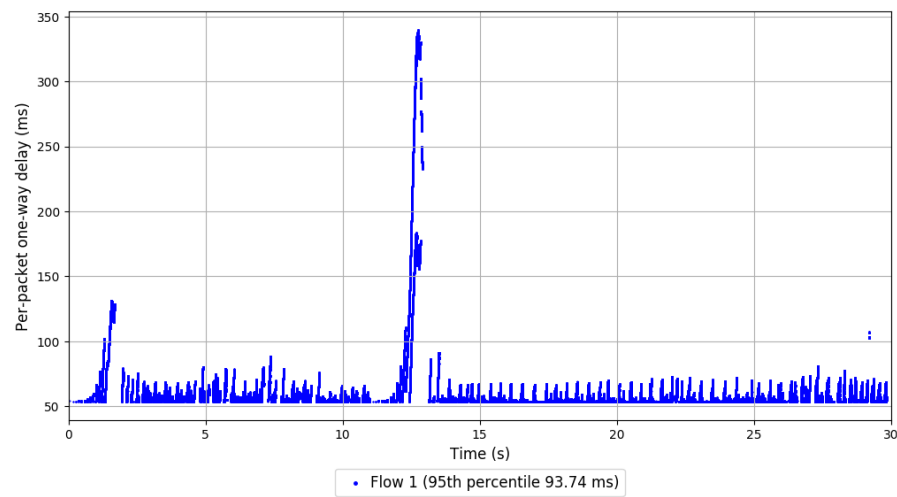
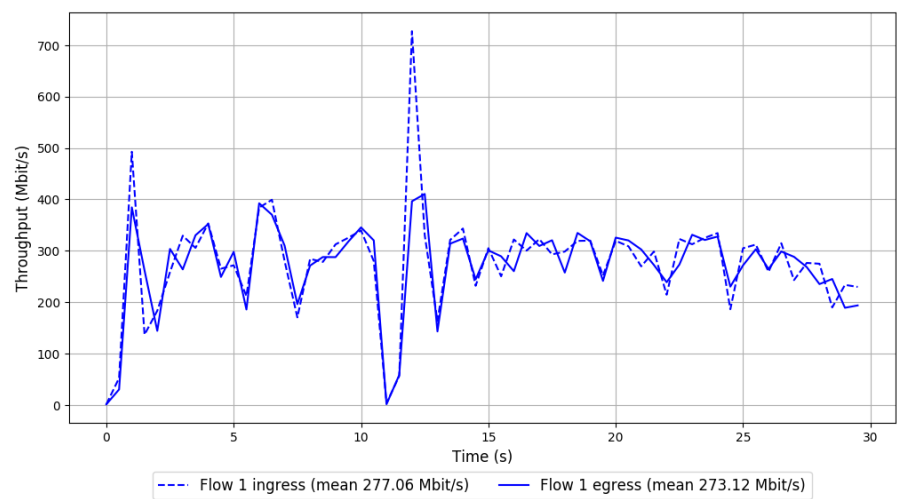
-- Flow 1:

Average throughput: 273.12 Mbit/s

95th percentile per-packet one-way delay: 93.743 ms

Loss rate: 2.07%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

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

End at: 2017-12-20 02:45:31

Below is generated by plot.py at 2017-12-20 05:35:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 300.04 Mbit/s

95th percentile per-packet one-way delay: 73.360 ms

Loss rate: 1.16%

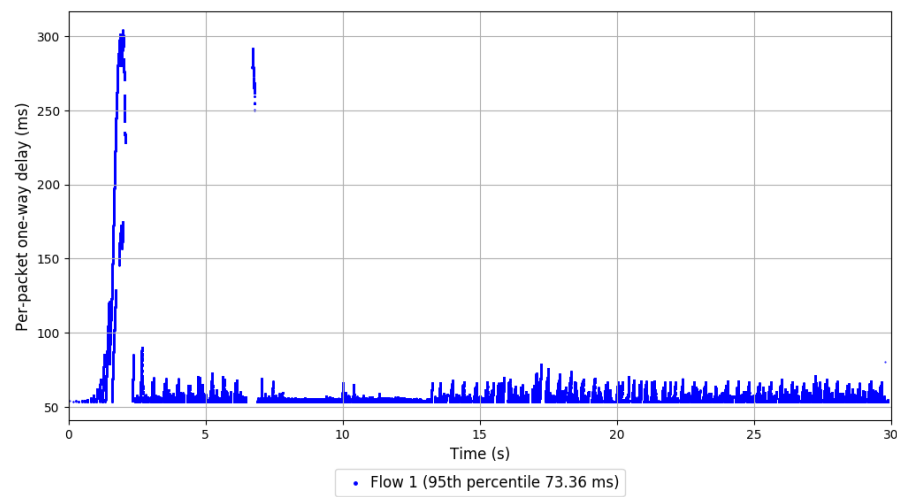
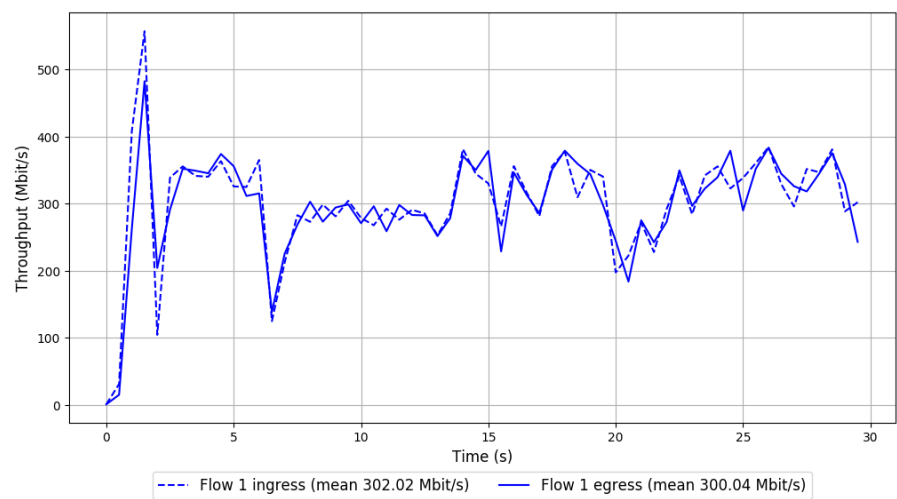
-- Flow 1:

Average throughput: 300.04 Mbit/s

95th percentile per-packet one-way delay: 73.360 ms

Loss rate: 1.16%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-20 02:56:27

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

Below is generated by plot.py at 2017-12-20 05:35:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 284.98 Mbit/s

95th percentile per-packet one-way delay: 92.674 ms

Loss rate: 0.77%

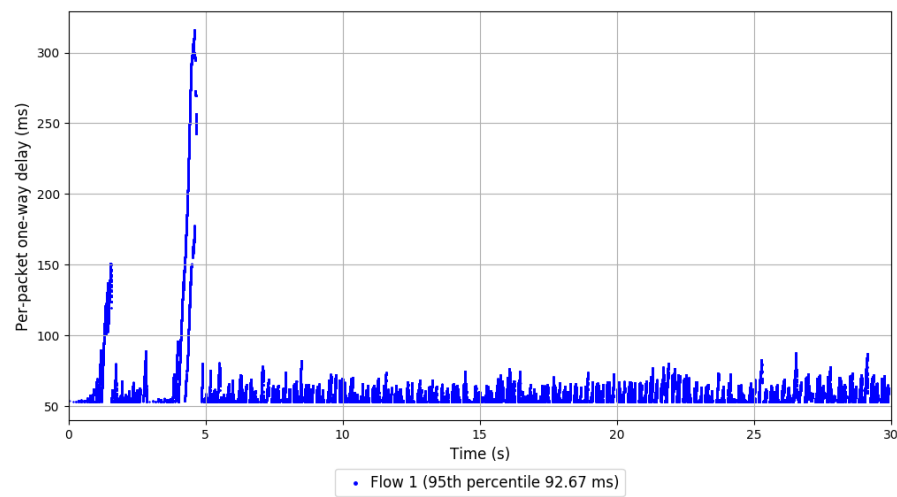
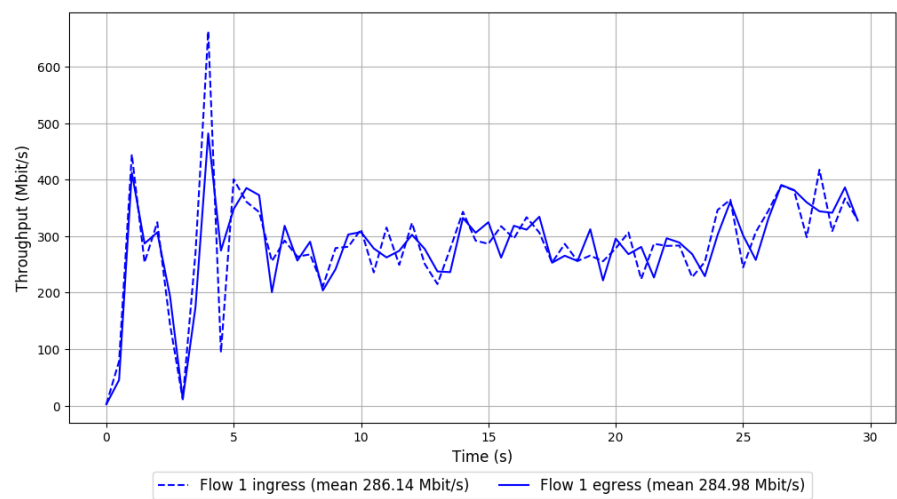
-- Flow 1:

Average throughput: 284.98 Mbit/s

95th percentile per-packet one-way delay: 92.674 ms

Loss rate: 0.77%

Run 10: Report of Verus — Data Link

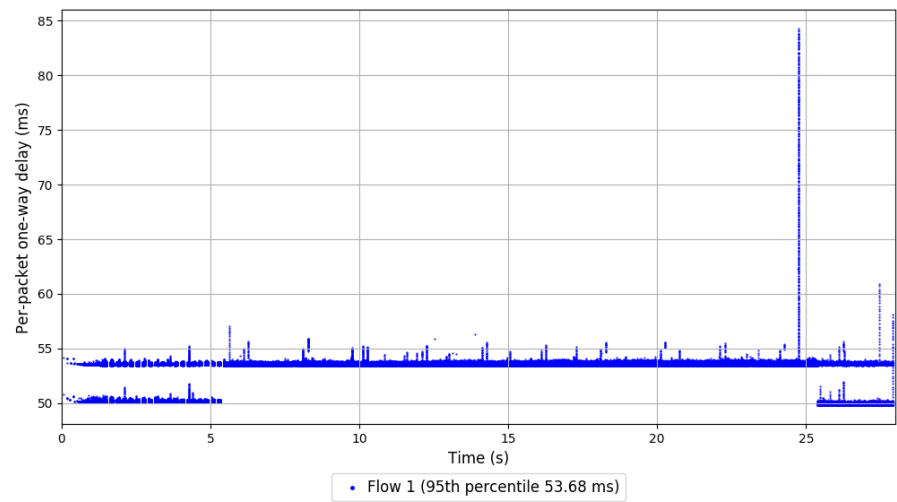
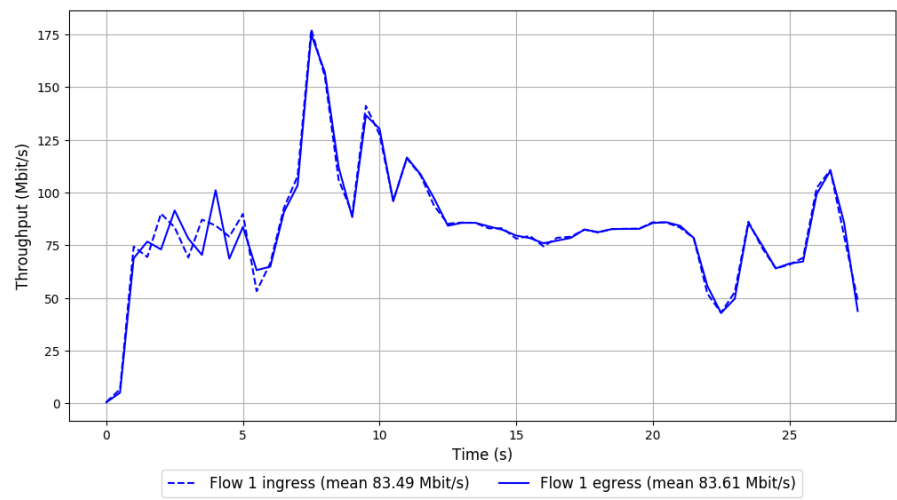


```
Run 1: Statistics of Copa

Start at: 2017-12-20 01:17:11
End at: 2017-12-20 01:17:41

# Below is generated by plot.py at 2017-12-20 05:35:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.61 Mbit/s
95th percentile per-packet one-way delay: 53.681 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 83.61 Mbit/s
95th percentile per-packet one-way delay: 53.681 ms
Loss rate: 0.23%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-20 01:28:36

End at: 2017-12-20 01:29:06

Below is generated by plot.py at 2017-12-20 05:35:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.93 Mbit/s

95th percentile per-packet one-way delay: 53.693 ms

Loss rate: 0.67%

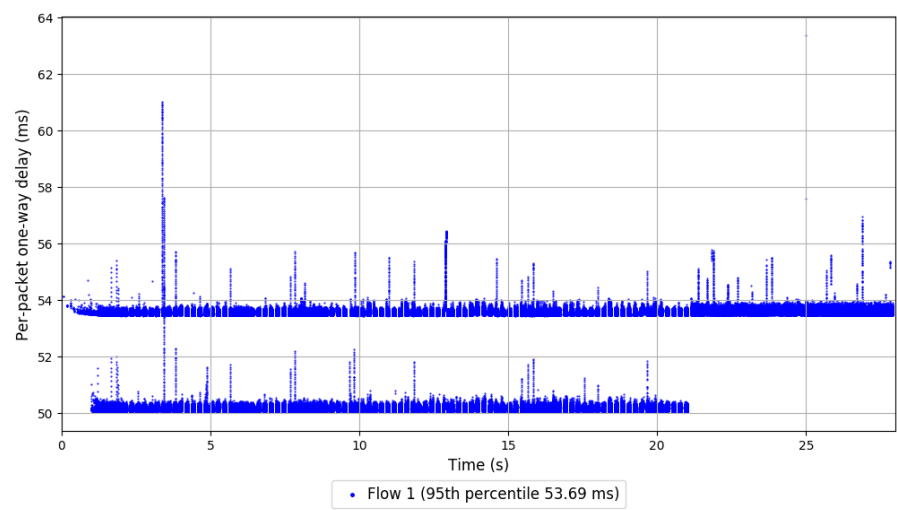
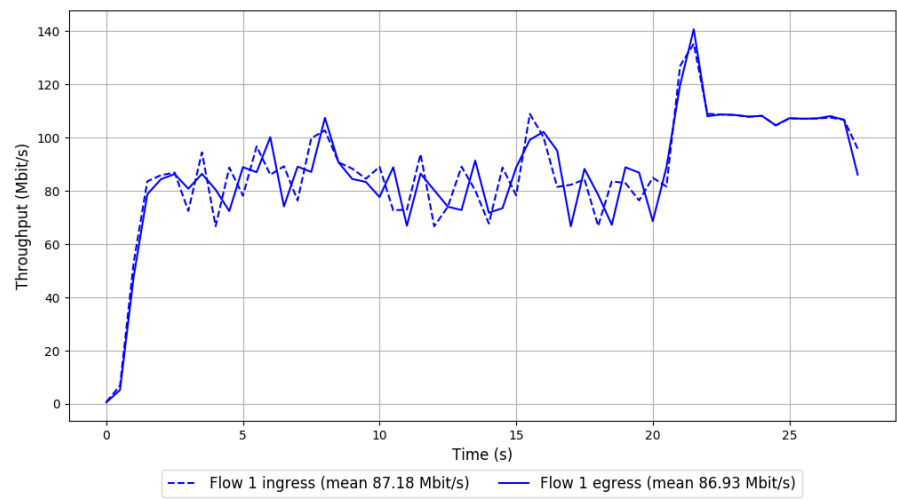
-- Flow 1:

Average throughput: 86.93 Mbit/s

95th percentile per-packet one-way delay: 53.693 ms

Loss rate: 0.67%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-20 01:40:22

End at: 2017-12-20 01:40:52

Below is generated by plot.py at 2017-12-20 05:35:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.63 Mbit/s

95th percentile per-packet one-way delay: 53.690 ms

Loss rate: 0.07%

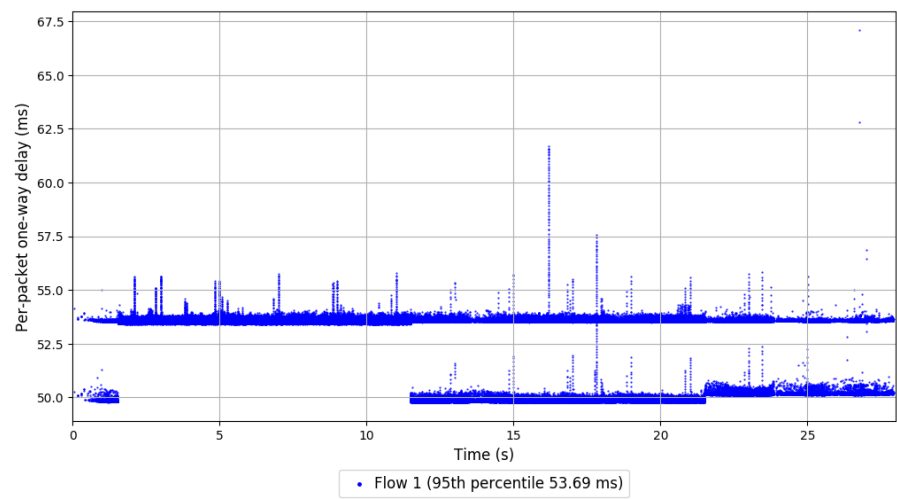
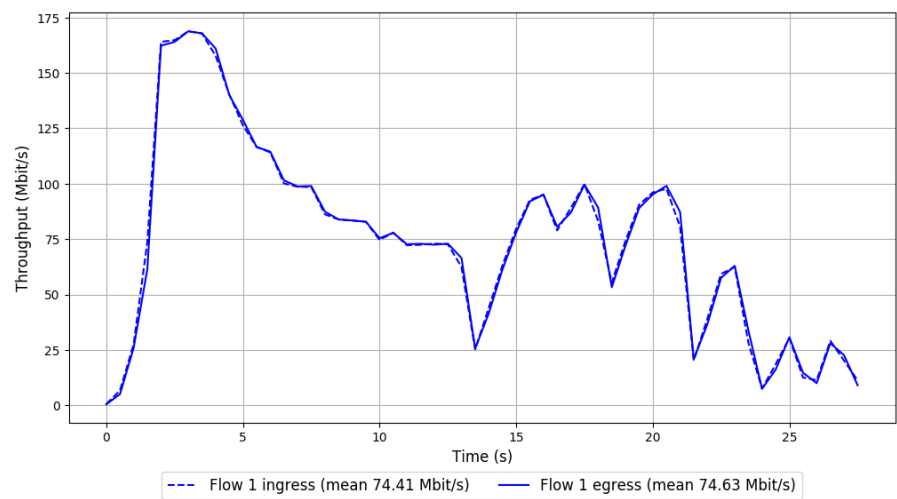
-- Flow 1:

Average throughput: 74.63 Mbit/s

95th percentile per-packet one-way delay: 53.690 ms

Loss rate: 0.07%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-20 01:51:49

End at: 2017-12-20 01:52:19

Below is generated by plot.py at 2017-12-20 05:35:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.65 Mbit/s

95th percentile per-packet one-way delay: 53.712 ms

Loss rate: 0.74%

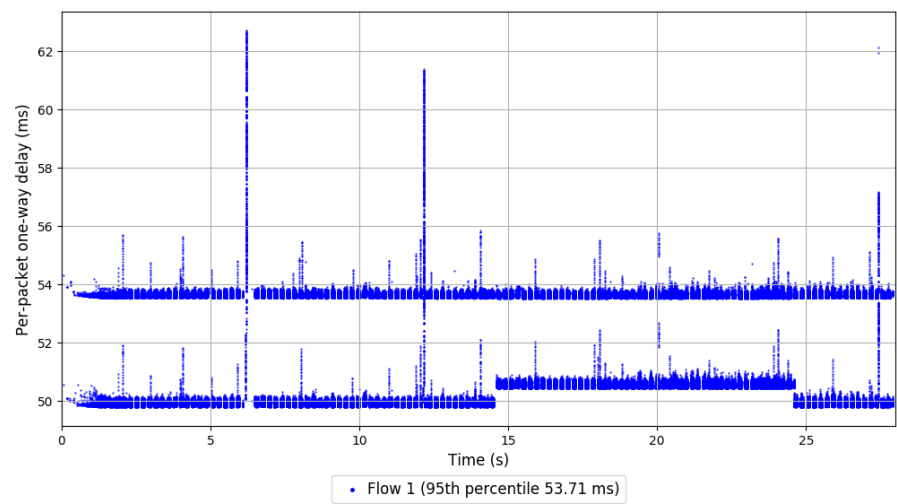
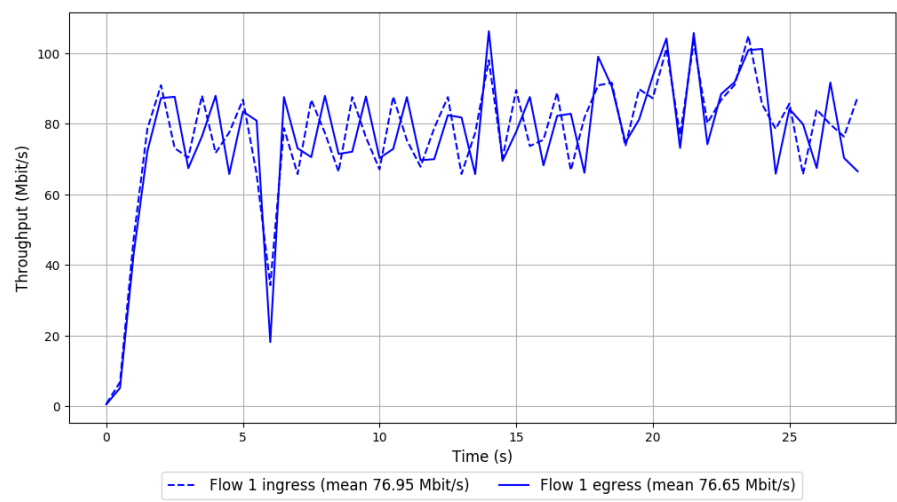
-- Flow 1:

Average throughput: 76.65 Mbit/s

95th percentile per-packet one-way delay: 53.712 ms

Loss rate: 0.74%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-20 02:03:10

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

Below is generated by plot.py at 2017-12-20 05:35:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.34 Mbit/s

95th percentile per-packet one-way delay: 53.697 ms

Loss rate: 0.40%

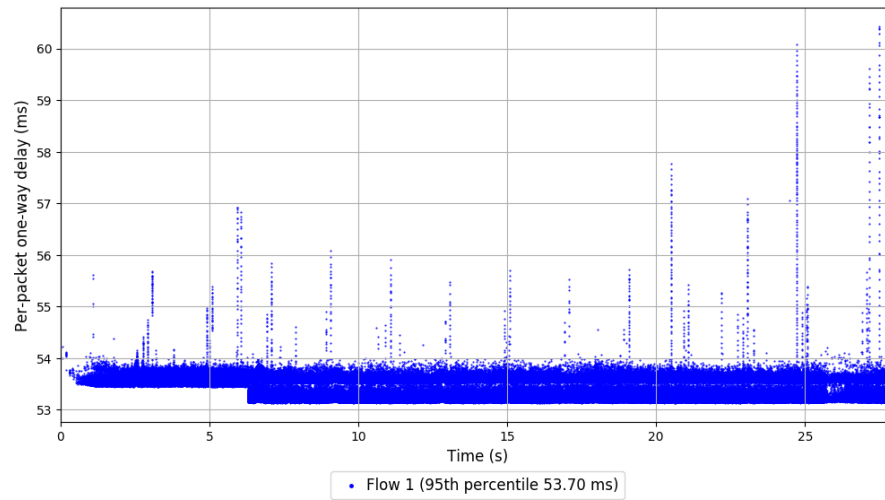
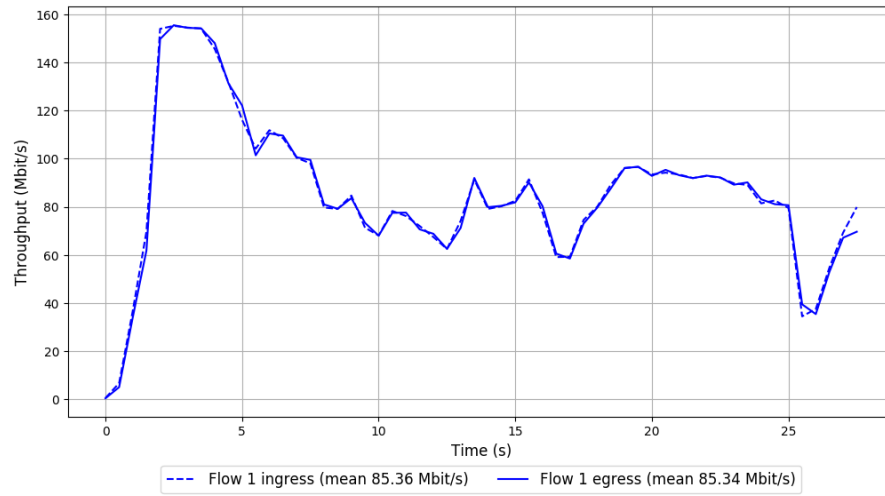
-- Flow 1:

Average throughput: 85.34 Mbit/s

95th percentile per-packet one-way delay: 53.697 ms

Loss rate: 0.40%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-20 02:14:21

End at: 2017-12-20 02:14:51

Below is generated by plot.py at 2017-12-20 05:35:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.88 Mbit/s

95th percentile per-packet one-way delay: 53.709 ms

Loss rate: 0.64%

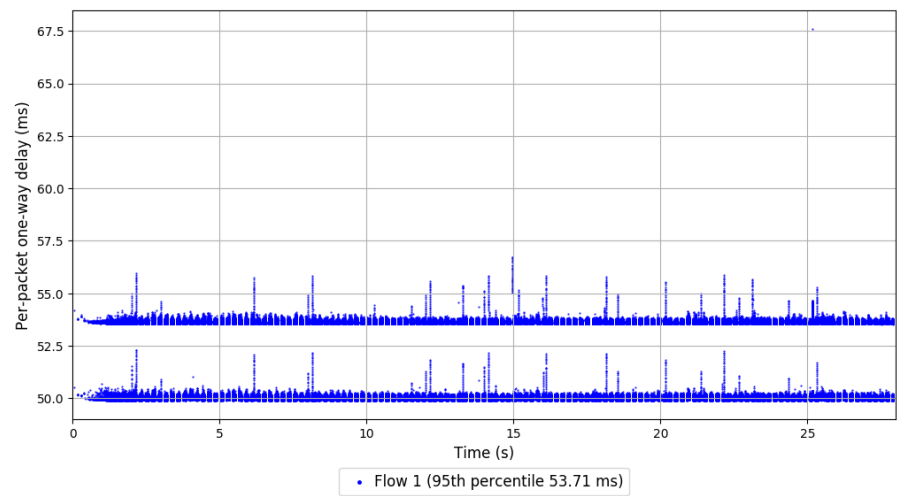
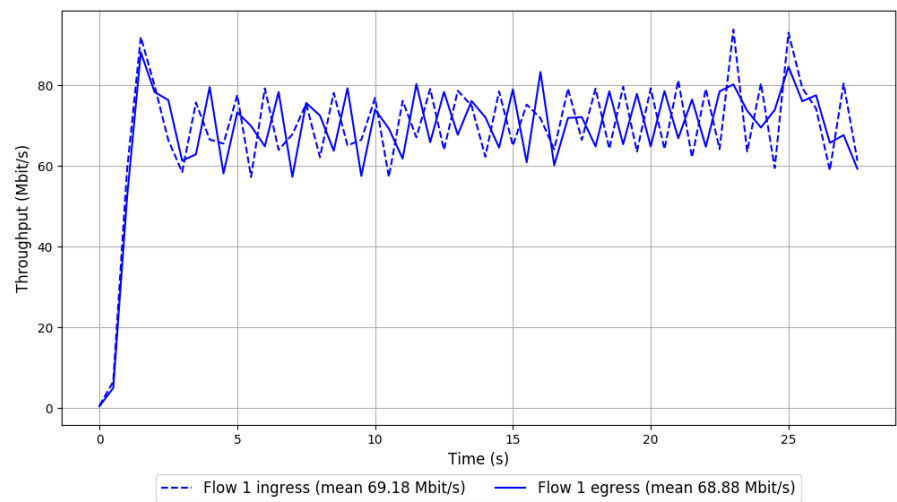
-- Flow 1:

Average throughput: 68.88 Mbit/s

95th percentile per-packet one-way delay: 53.709 ms

Loss rate: 0.64%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-20 02:25:57

End at: 2017-12-20 02:26:27

Below is generated by plot.py at 2017-12-20 05:35:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.00 Mbit/s

95th percentile per-packet one-way delay: 53.752 ms

Loss rate: 0.37%

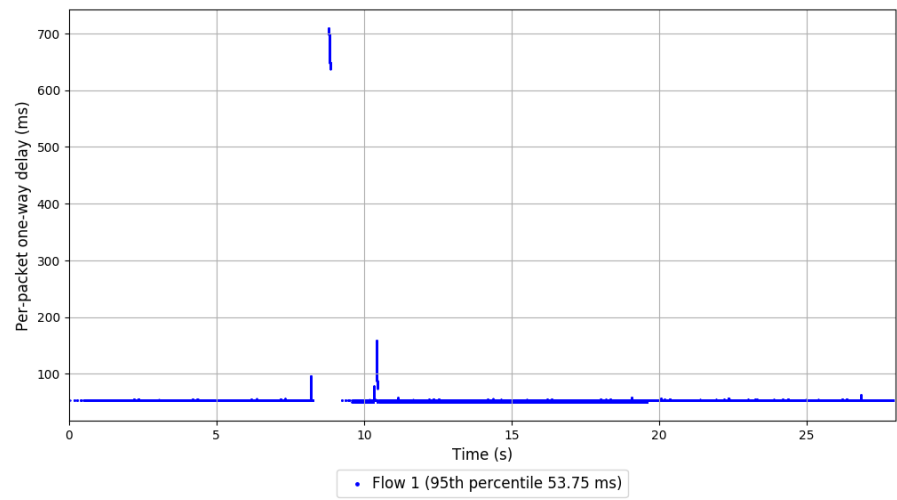
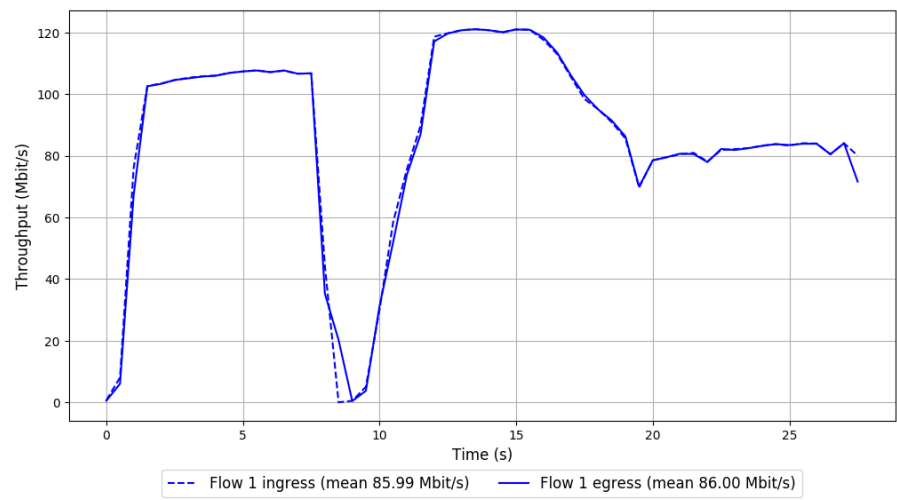
-- Flow 1:

Average throughput: 86.00 Mbit/s

95th percentile per-packet one-way delay: 53.752 ms

Loss rate: 0.37%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-20 02:37:24

End at: 2017-12-20 02:37:54

Below is generated by plot.py at 2017-12-20 05:35:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.86 Mbit/s

95th percentile per-packet one-way delay: 53.783 ms

Loss rate: 0.56%

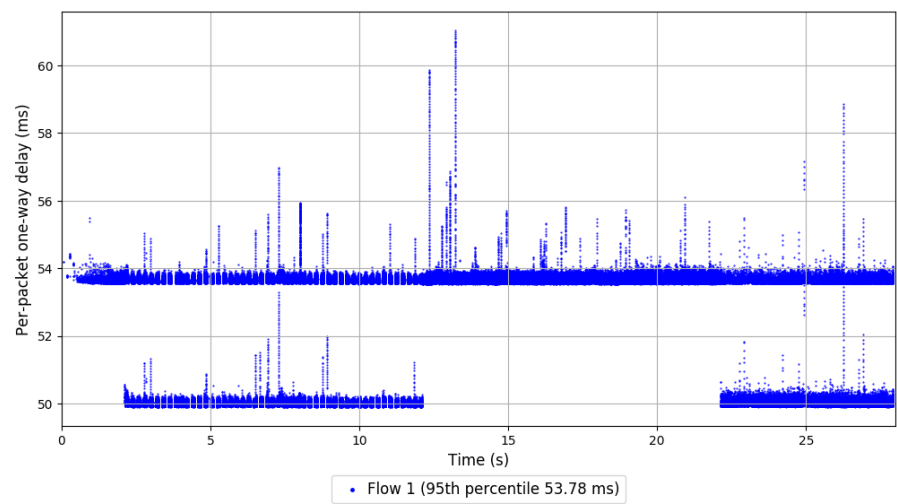
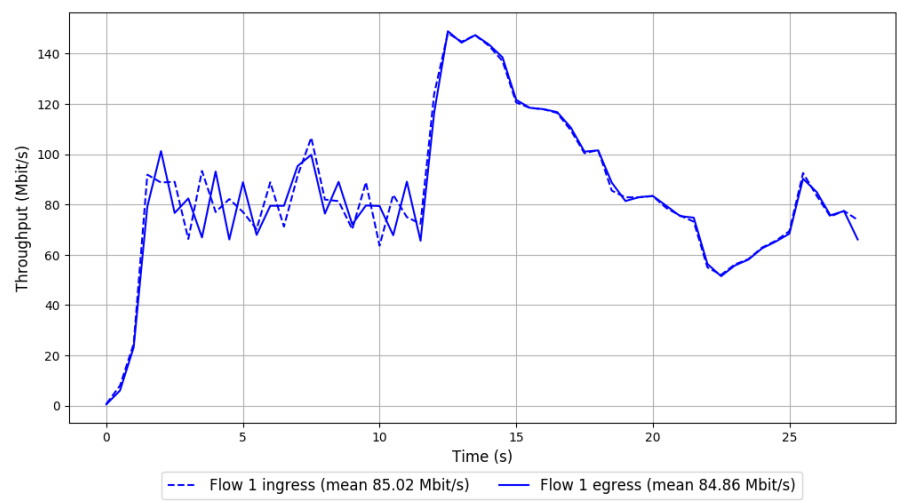
-- Flow 1:

Average throughput: 84.86 Mbit/s

95th percentile per-packet one-way delay: 53.783 ms

Loss rate: 0.56%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-20 02:48:51

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

Below is generated by plot.py at 2017-12-20 05:35:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.94 Mbit/s

95th percentile per-packet one-way delay: 53.804 ms

Loss rate: 0.26%

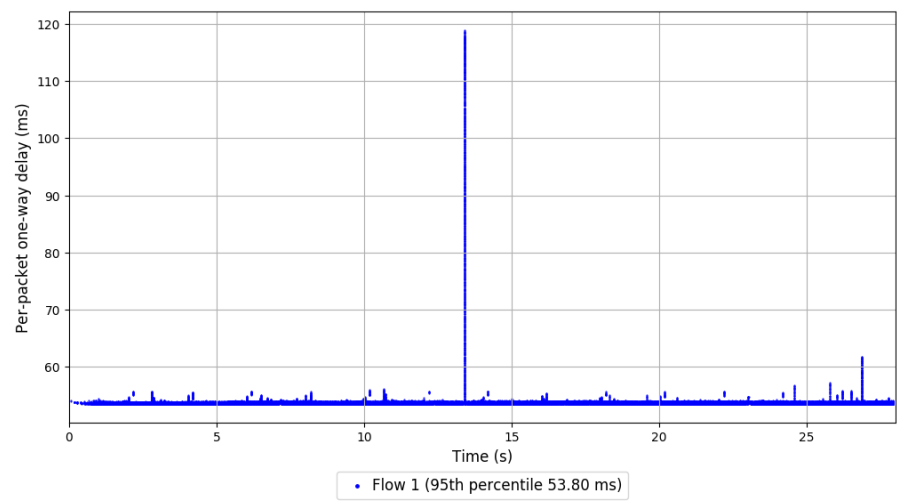
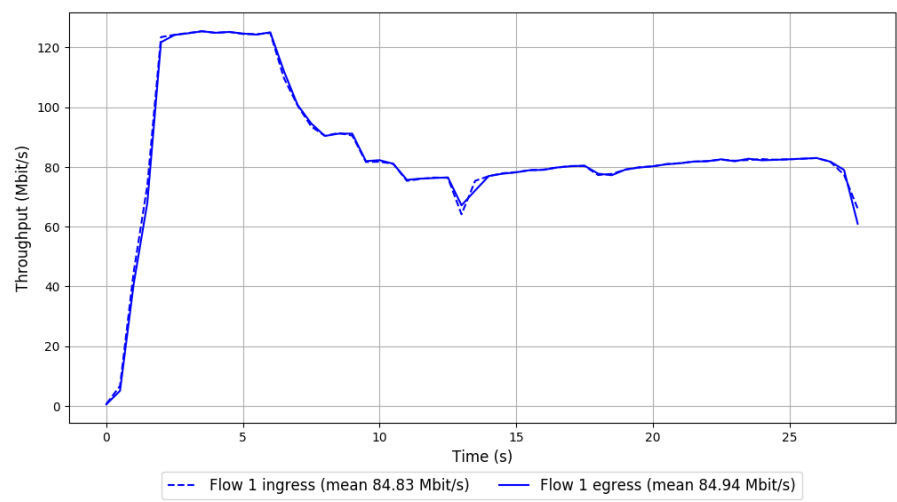
-- Flow 1:

Average throughput: 84.94 Mbit/s

95th percentile per-packet one-way delay: 53.804 ms

Loss rate: 0.26%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-20 03:00:18

End at: 2017-12-20 03:00:48

Below is generated by plot.py at 2017-12-20 05:36:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.01 Mbit/s

95th percentile per-packet one-way delay: 53.192 ms

Loss rate: 0.32%

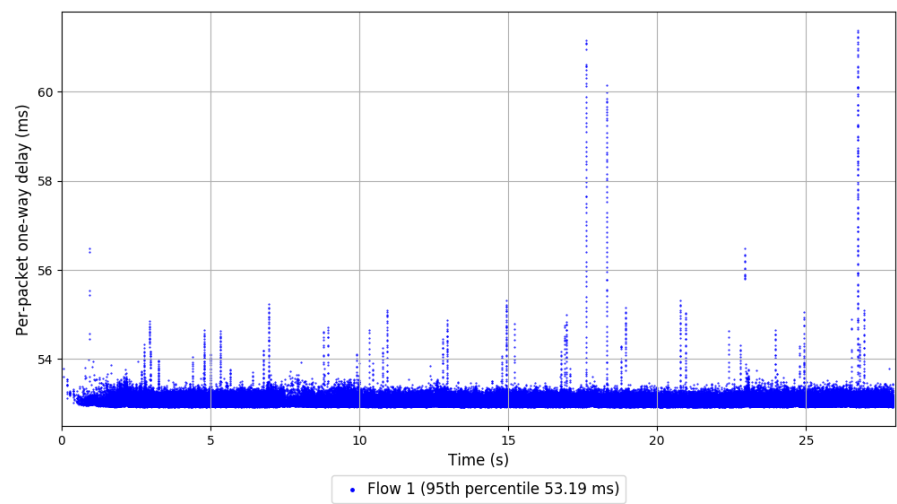
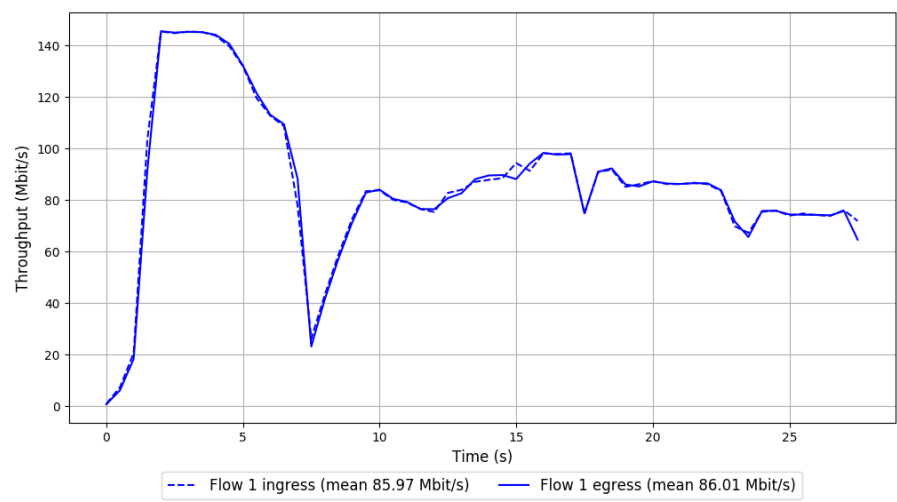
-- Flow 1:

Average throughput: 86.01 Mbit/s

95th percentile per-packet one-way delay: 53.192 ms

Loss rate: 0.32%

Run 10: Report of Copa — Data Link

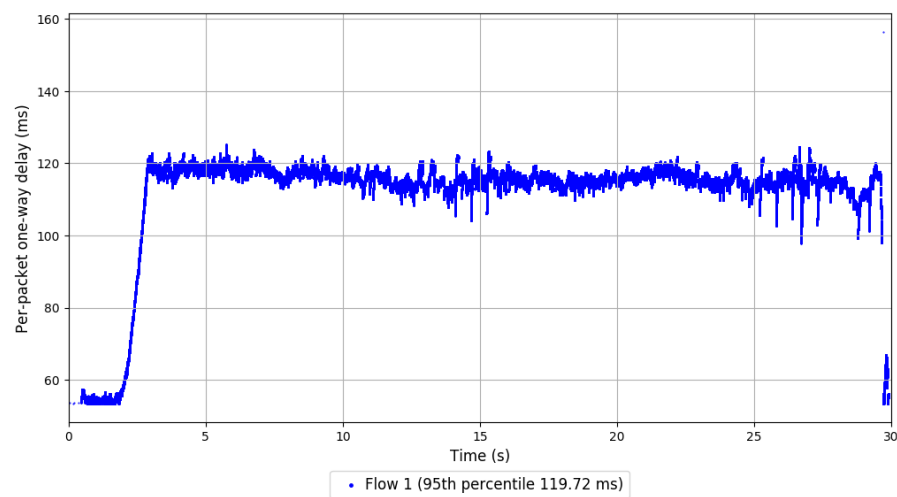
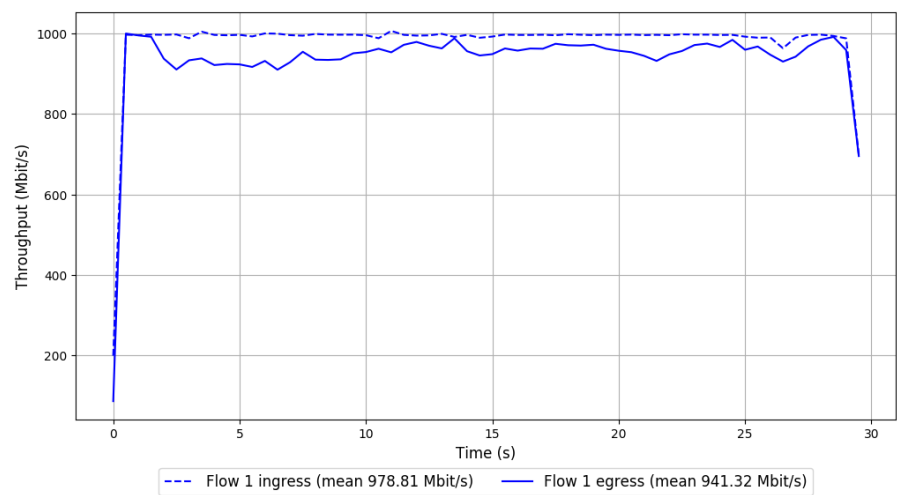


```
Run 1: Statistics of FillP

Start at: 2017-12-20 01:07:00
End at: 2017-12-20 01:07:30

# Below is generated by plot.py at 2017-12-20 05:52:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 941.32 Mbit/s
95th percentile per-packet one-way delay: 119.723 ms
Loss rate: 4.17%
-- Flow 1:
Average throughput: 941.32 Mbit/s
95th percentile per-packet one-way delay: 119.723 ms
Loss rate: 4.17%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2017-12-20 01:18:43

End at: 2017-12-20 01:19:13

Below is generated by plot.py at 2017-12-20 05:52:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 960.52 Mbit/s

95th percentile per-packet one-way delay: 117.689 ms

Loss rate: 2.26%

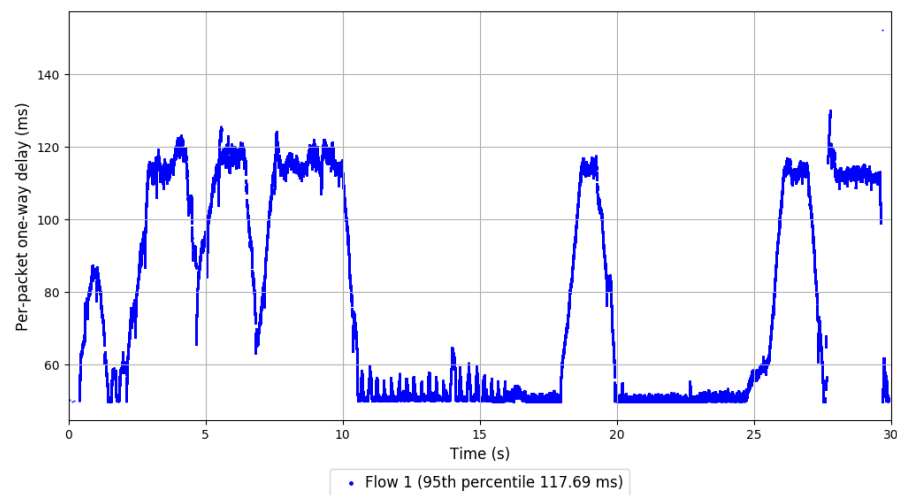
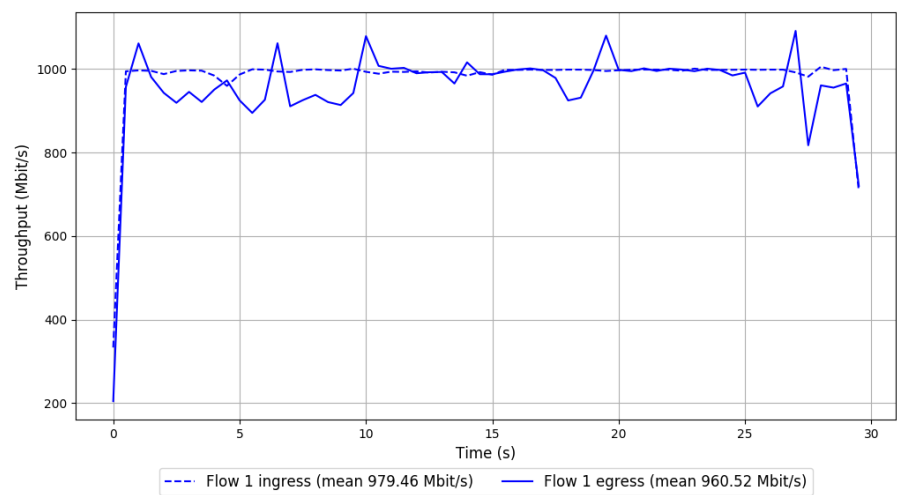
-- Flow 1:

Average throughput: 960.52 Mbit/s

95th percentile per-packet one-way delay: 117.689 ms

Loss rate: 2.26%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2017-12-20 01:30:09

End at: 2017-12-20 01:30:39

Below is generated by plot.py at 2017-12-20 05:52:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 955.03 Mbit/s

95th percentile per-packet one-way delay: 253.184 ms

Loss rate: 2.69%

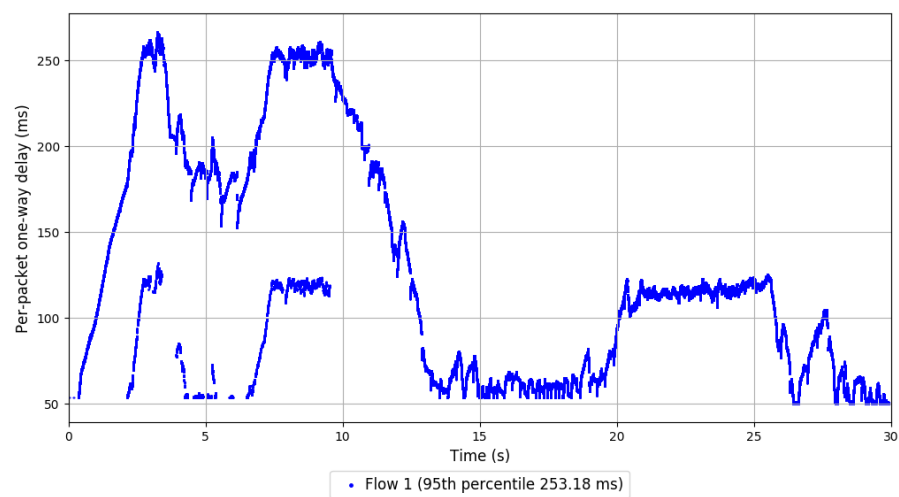
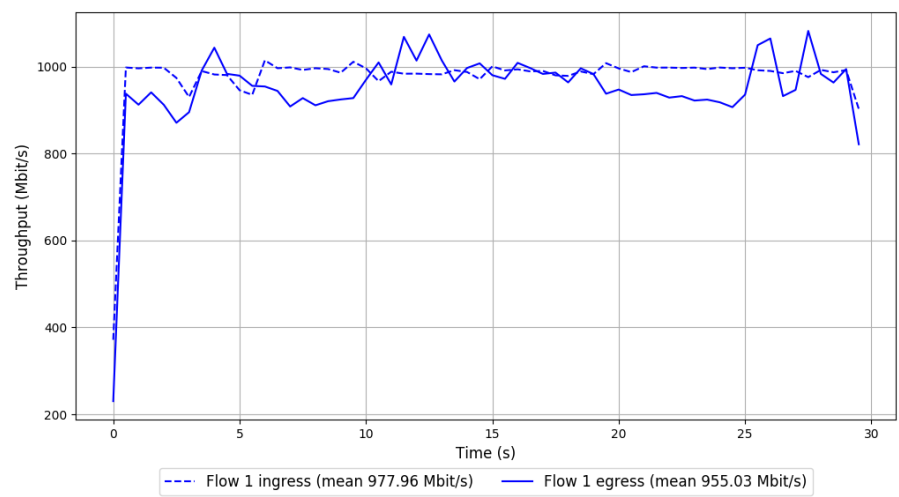
-- Flow 1:

Average throughput: 955.03 Mbit/s

95th percentile per-packet one-way delay: 253.184 ms

Loss rate: 2.69%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2017-12-20 01:41:53

End at: 2017-12-20 01:42:24

Below is generated by plot.py at 2017-12-20 05:52:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 949.85 Mbit/s

95th percentile per-packet one-way delay: 245.016 ms

Loss rate: 3.18%

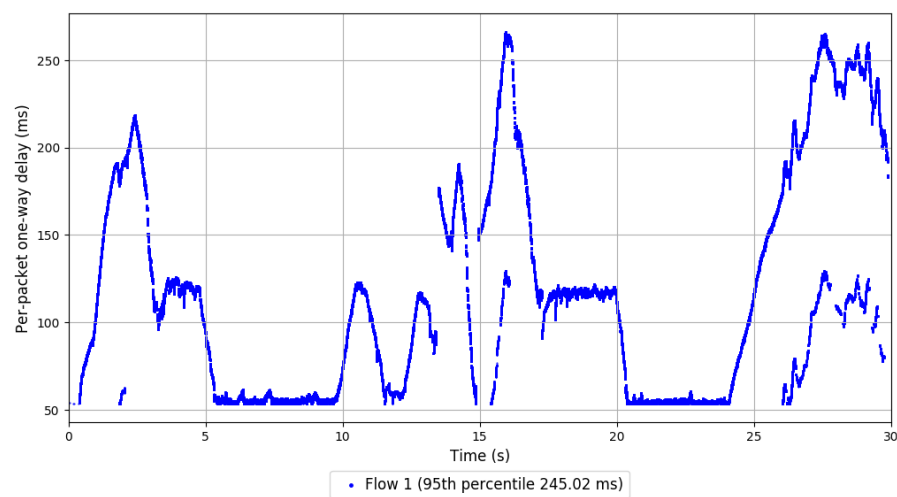
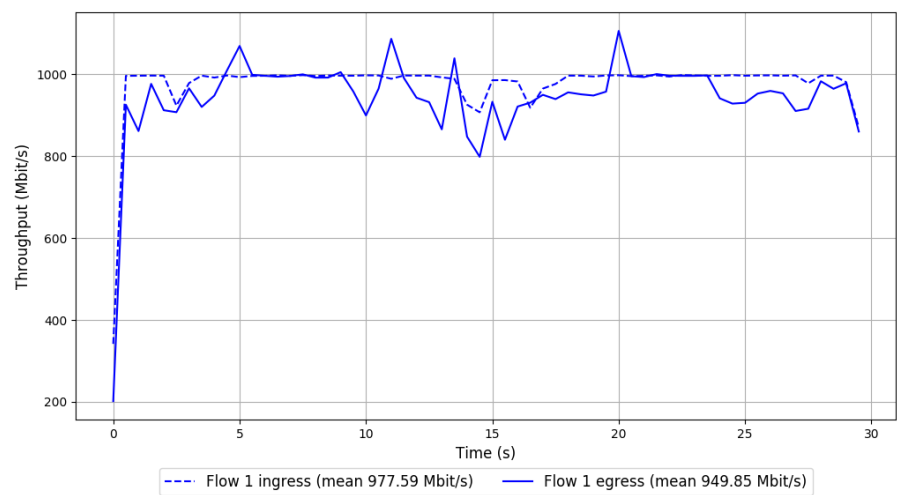
-- Flow 1:

Average throughput: 949.85 Mbit/s

95th percentile per-packet one-way delay: 245.016 ms

Loss rate: 3.18%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2017-12-20 01:53:22

End at: 2017-12-20 01:53:52

Below is generated by plot.py at 2017-12-20 05:52:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 893.76 Mbit/s

95th percentile per-packet one-way delay: 279.498 ms

Loss rate: 5.49%

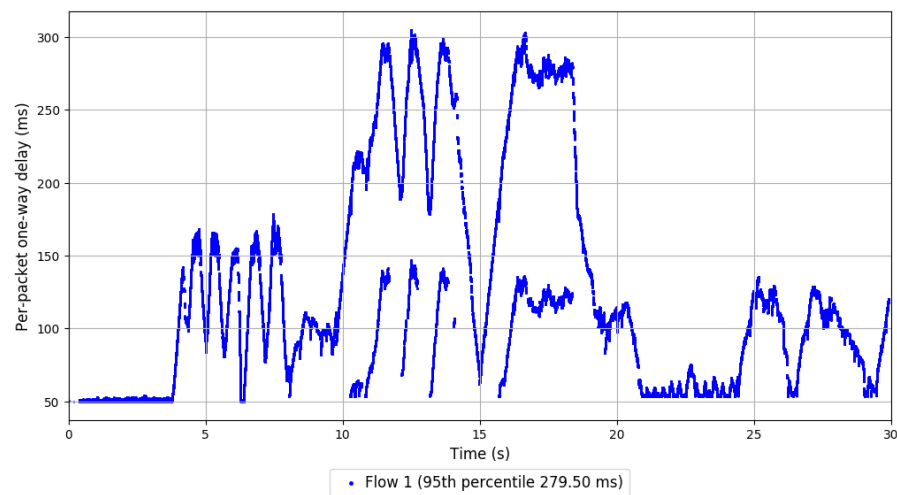
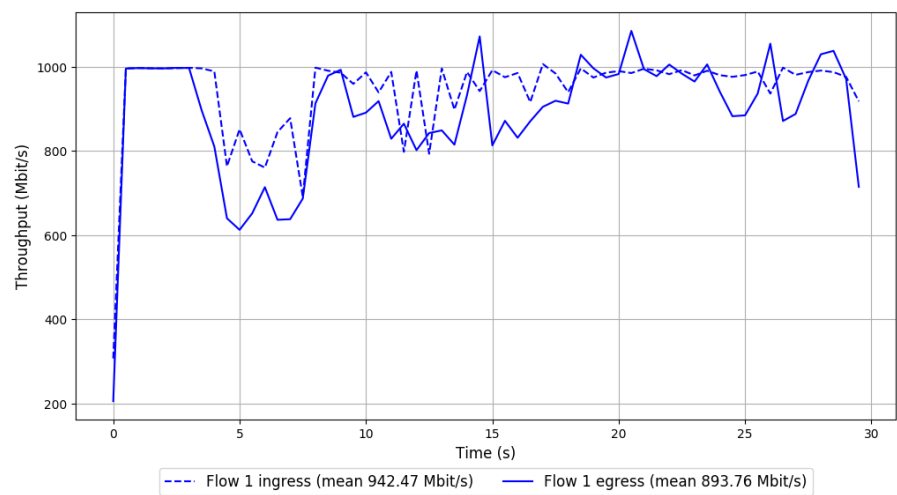
-- Flow 1:

Average throughput: 893.76 Mbit/s

95th percentile per-packet one-way delay: 279.498 ms

Loss rate: 5.49%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2017-12-20 02:04:43

End at: 2017-12-20 02:05:13

Below is generated by plot.py at 2017-12-20 05:52:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 672.31 Mbit/s

95th percentile per-packet one-way delay: 118.043 ms

Loss rate: 1.33%

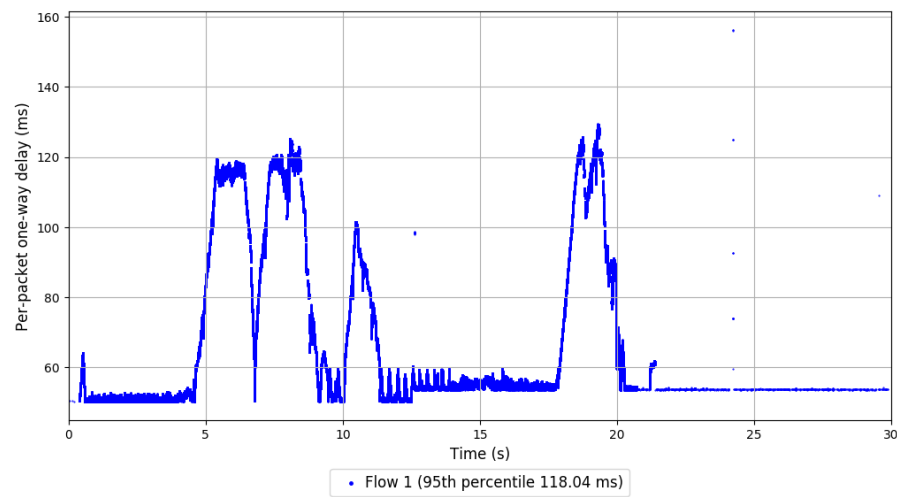
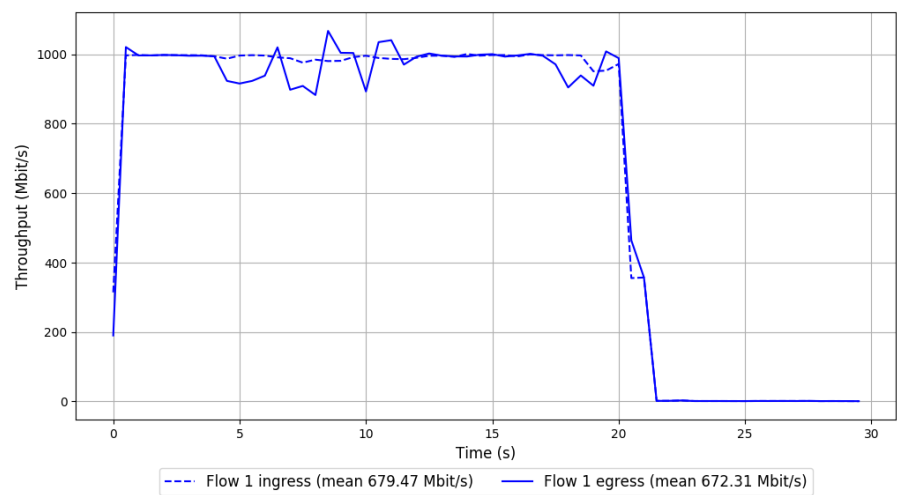
-- Flow 1:

Average throughput: 672.31 Mbit/s

95th percentile per-packet one-way delay: 118.043 ms

Loss rate: 1.33%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2017-12-20 02:15:52

End at: 2017-12-20 02:16:22

Below is generated by plot.py at 2017-12-20 05:53:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 986.61 Mbit/s

95th percentile per-packet one-way delay: 54.843 ms

Loss rate: 0.34%

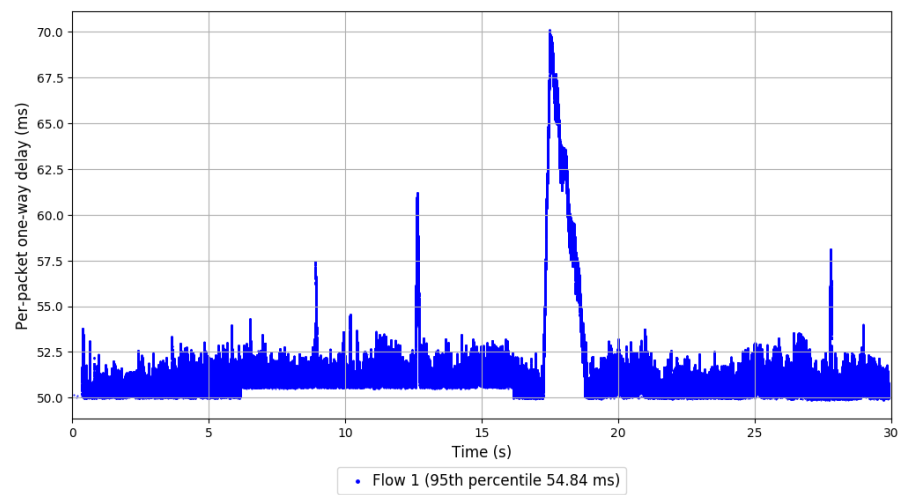
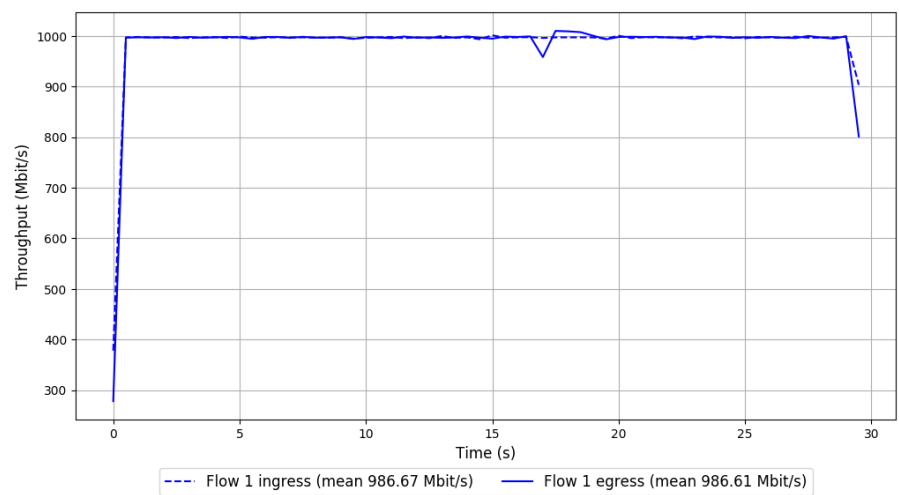
-- Flow 1:

Average throughput: 986.61 Mbit/s

95th percentile per-packet one-way delay: 54.843 ms

Loss rate: 0.34%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2017-12-20 02:27:25

End at: 2017-12-20 02:27:55

Below is generated by plot.py at 2017-12-20 05:53:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 968.76 Mbit/s

95th percentile per-packet one-way delay: 119.518 ms

Loss rate: 1.90%

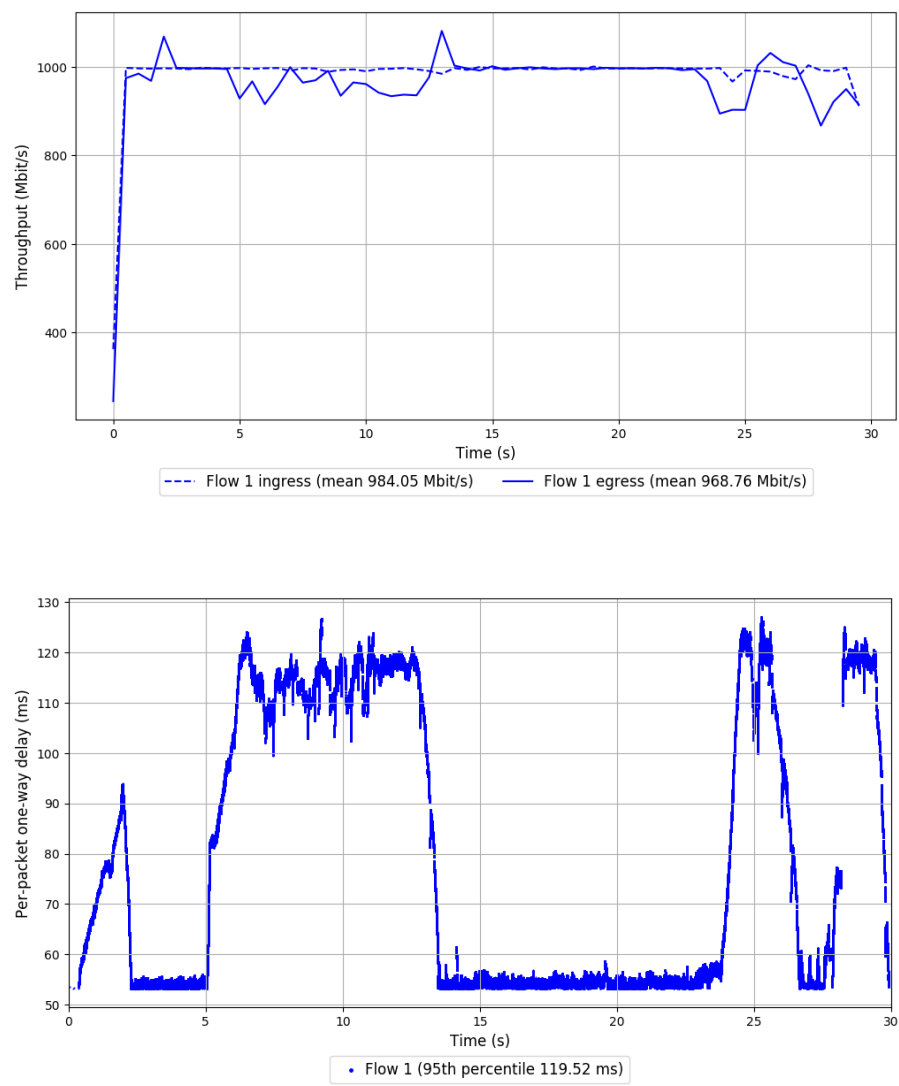
-- Flow 1:

Average throughput: 968.76 Mbit/s

95th percentile per-packet one-way delay: 119.518 ms

Loss rate: 1.90%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2017-12-20 02:38:59

End at: 2017-12-20 02:39:29

Below is generated by plot.py at 2017-12-20 05:59:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 982.73 Mbit/s

95th percentile per-packet one-way delay: 110.611 ms

Loss rate: 0.57%

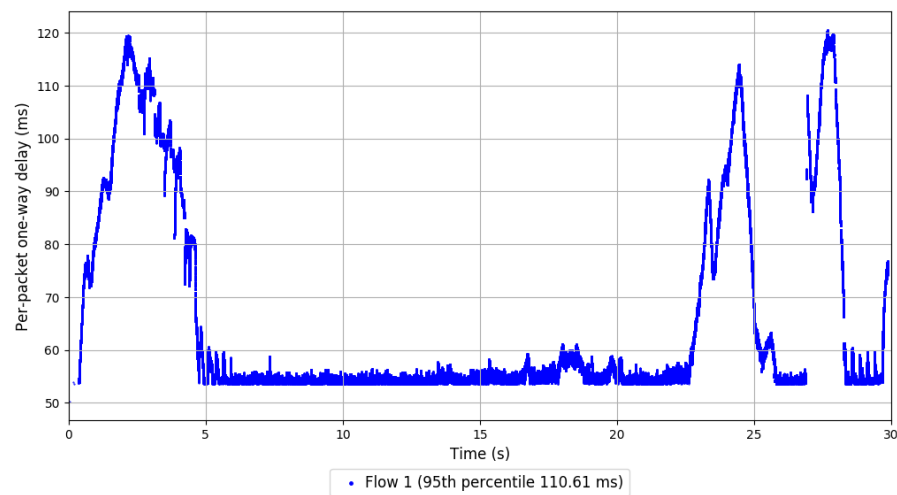
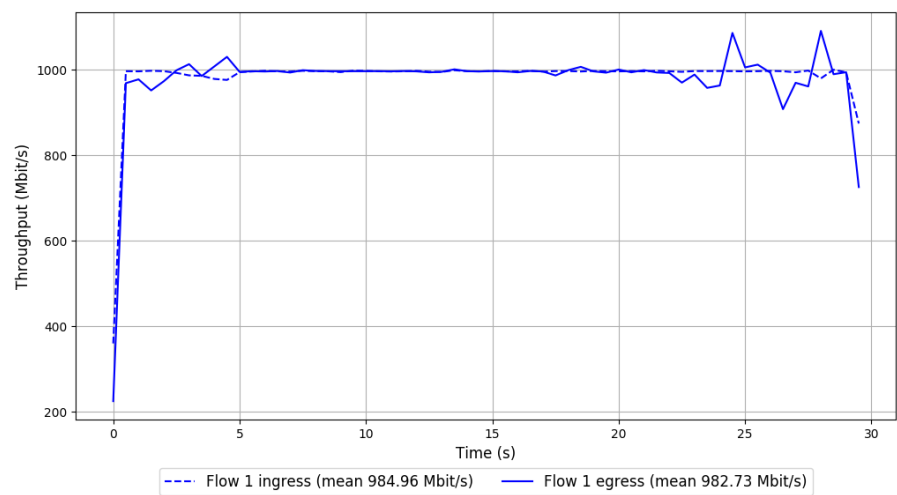
-- Flow 1:

Average throughput: 982.73 Mbit/s

95th percentile per-packet one-way delay: 110.611 ms

Loss rate: 0.57%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2017-12-20 02:50:26

End at: 2017-12-20 02:50:56

Below is generated by plot.py at 2017-12-20 05:59:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 956.92 Mbit/s

95th percentile per-packet one-way delay: 231.165 ms

Loss rate: 2.35%

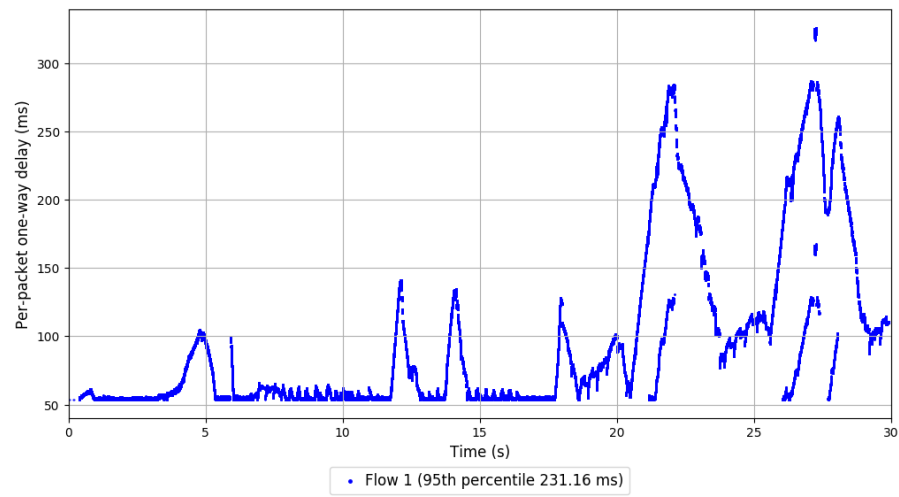
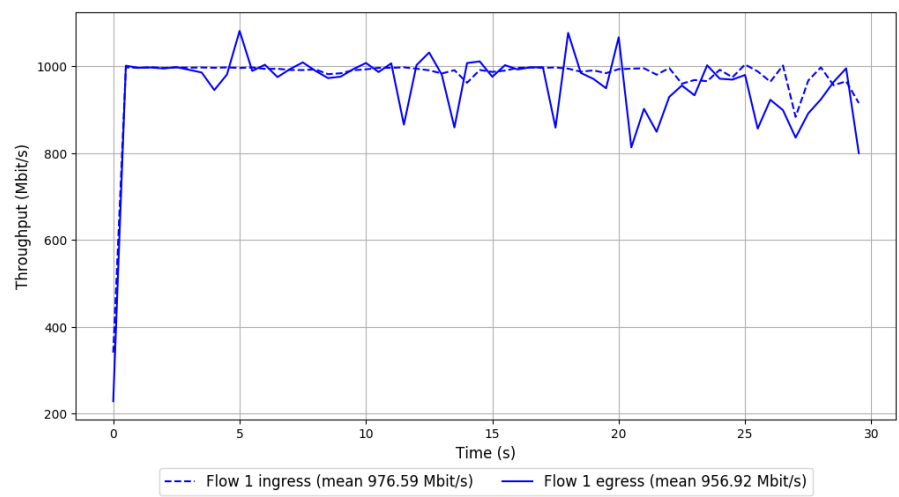
-- Flow 1:

Average throughput: 956.92 Mbit/s

95th percentile per-packet one-way delay: 231.165 ms

Loss rate: 2.35%

Run 10: Report of FillP — Data Link

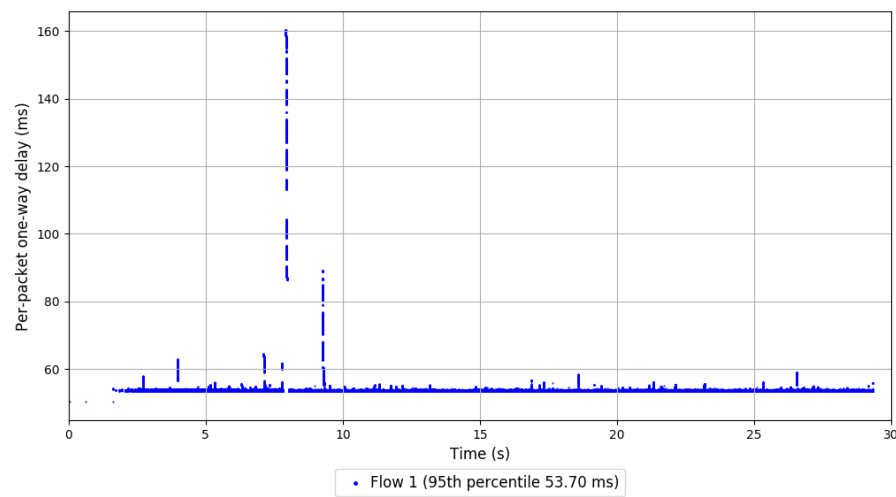
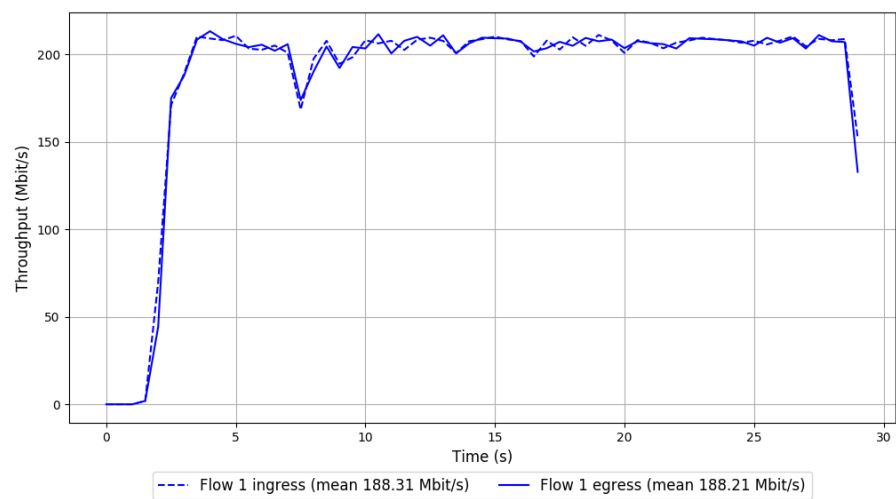


```
Run 1: Statistics of Indigo

Start at: 2017-12-20 01:13:59
End at: 2017-12-20 01:14:30

# Below is generated by plot.py at 2017-12-20 05:59:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 188.21 Mbit/s
95th percentile per-packet one-way delay: 53.696 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 188.21 Mbit/s
95th percentile per-packet one-way delay: 53.696 ms
Loss rate: 0.39%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

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

End at: 2017-12-20 01:26:15

Below is generated by plot.py at 2017-12-20 05:59:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.50 Mbit/s

95th percentile per-packet one-way delay: 53.718 ms

Loss rate: 0.58%

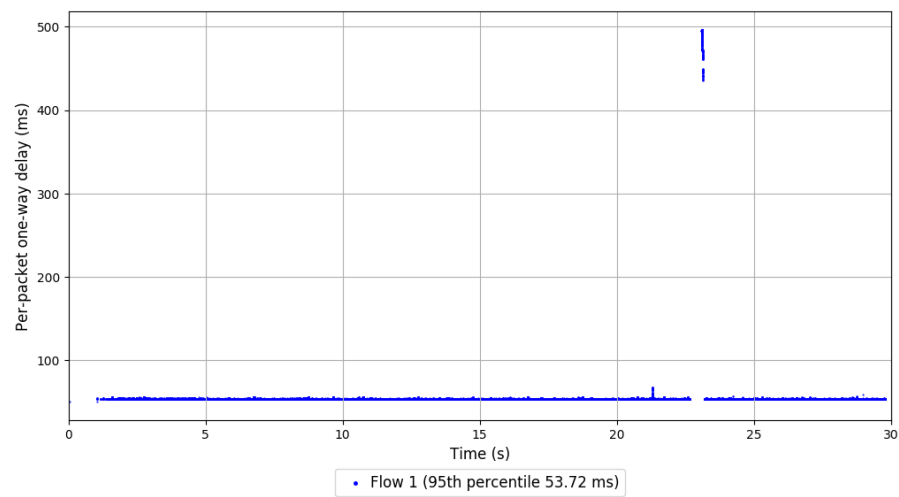
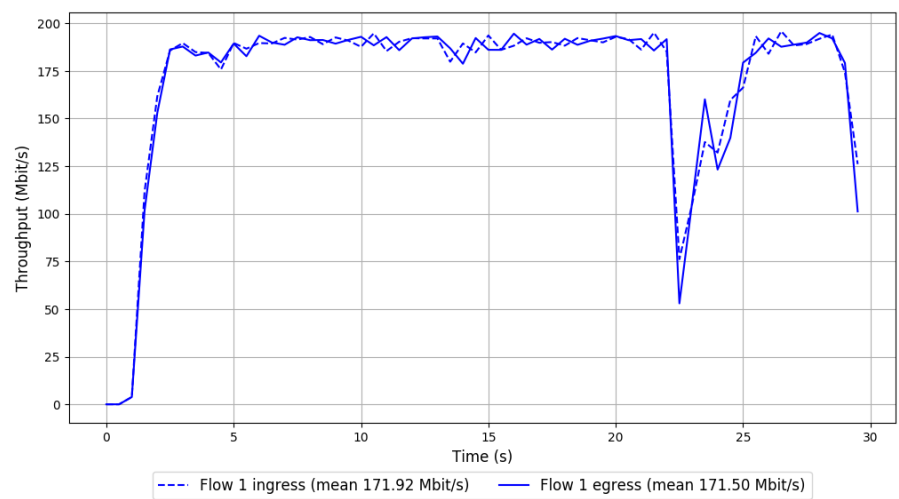
-- Flow 1:

Average throughput: 171.50 Mbit/s

95th percentile per-packet one-way delay: 53.718 ms

Loss rate: 0.58%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-20 01:37:15

End at: 2017-12-20 01:37:45

Below is generated by plot.py at 2017-12-20 05:59:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.19 Mbit/s

95th percentile per-packet one-way delay: 53.733 ms

Loss rate: 0.35%

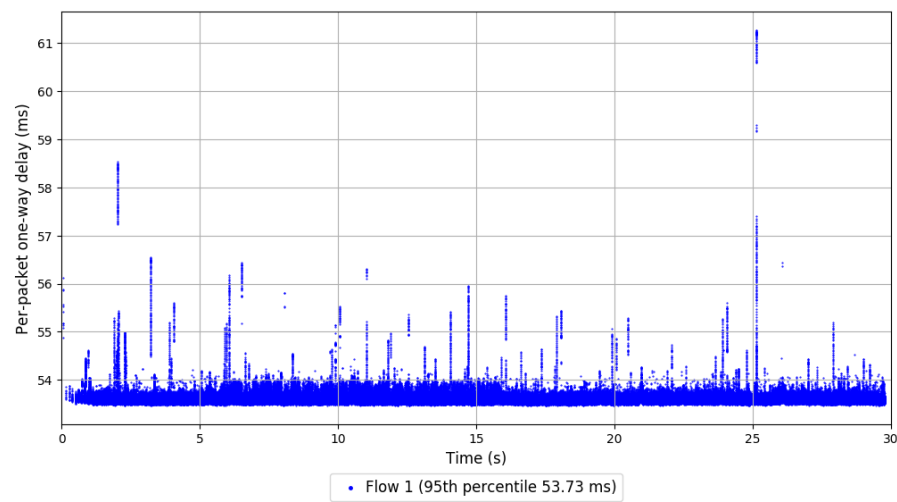
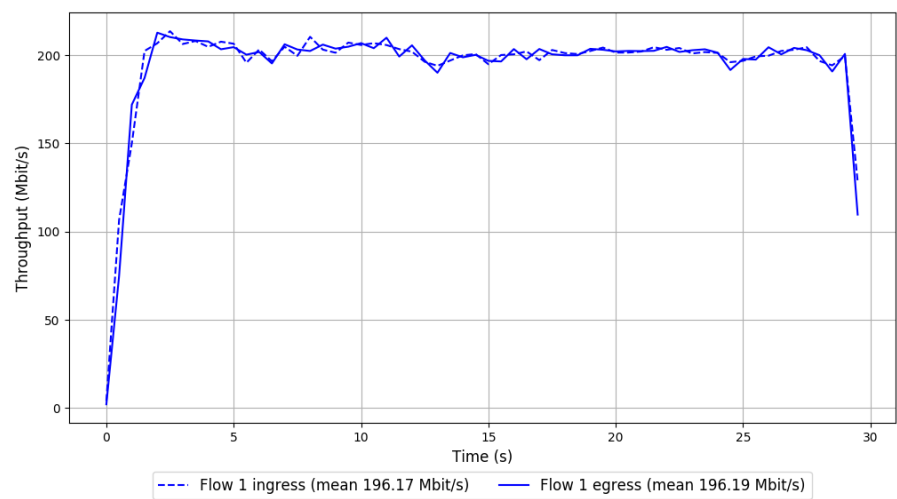
-- Flow 1:

Average throughput: 196.19 Mbit/s

95th percentile per-packet one-way delay: 53.733 ms

Loss rate: 0.35%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-20 01:48:54

End at: 2017-12-20 01:49:24

Below is generated by plot.py at 2017-12-20 05:59:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.41 Mbit/s

95th percentile per-packet one-way delay: 53.784 ms

Loss rate: 0.40%

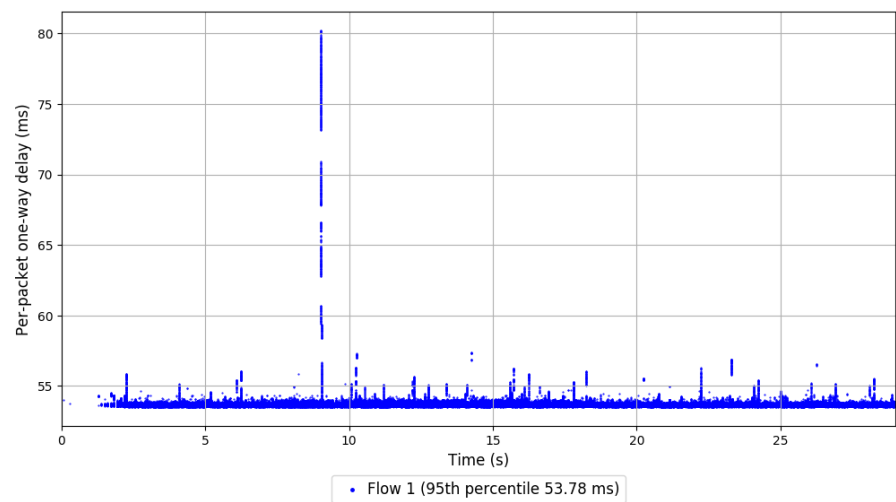
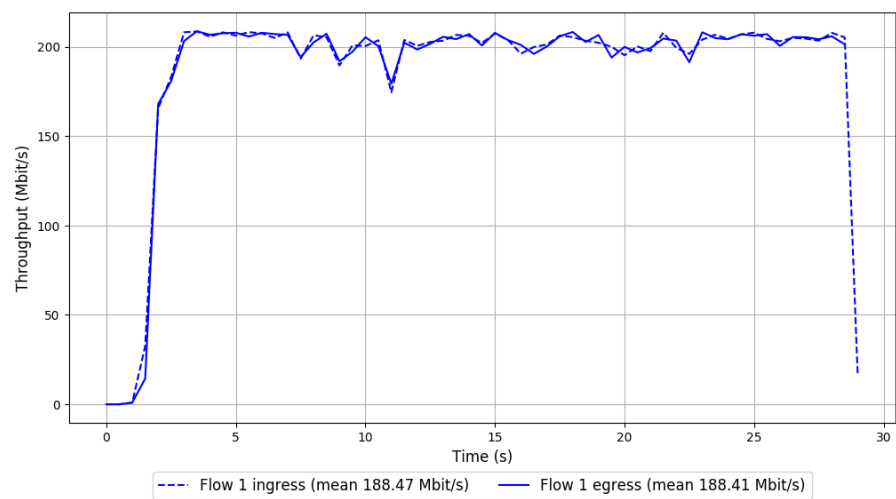
-- Flow 1:

Average throughput: 188.41 Mbit/s

95th percentile per-packet one-way delay: 53.784 ms

Loss rate: 0.40%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-20 02:00:18

End at: 2017-12-20 02:00:48

Below is generated by plot.py at 2017-12-20 05:59:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.62 Mbit/s

95th percentile per-packet one-way delay: 53.765 ms

Loss rate: 0.35%

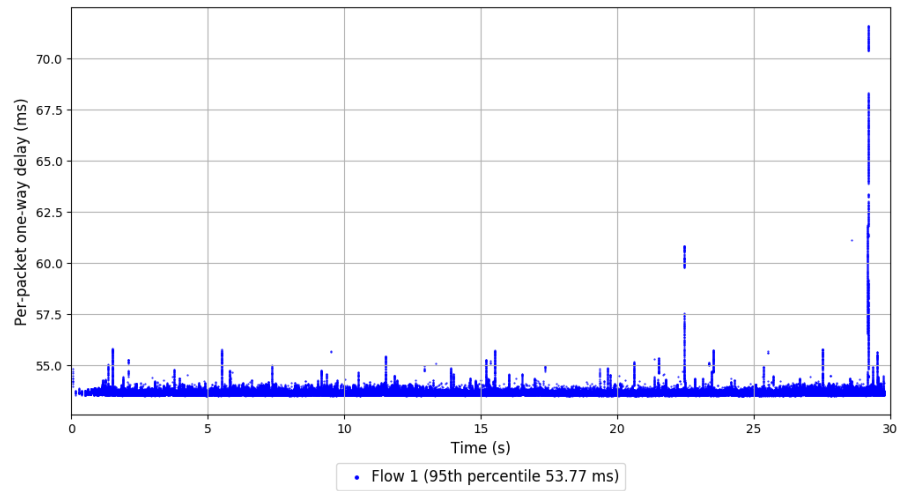
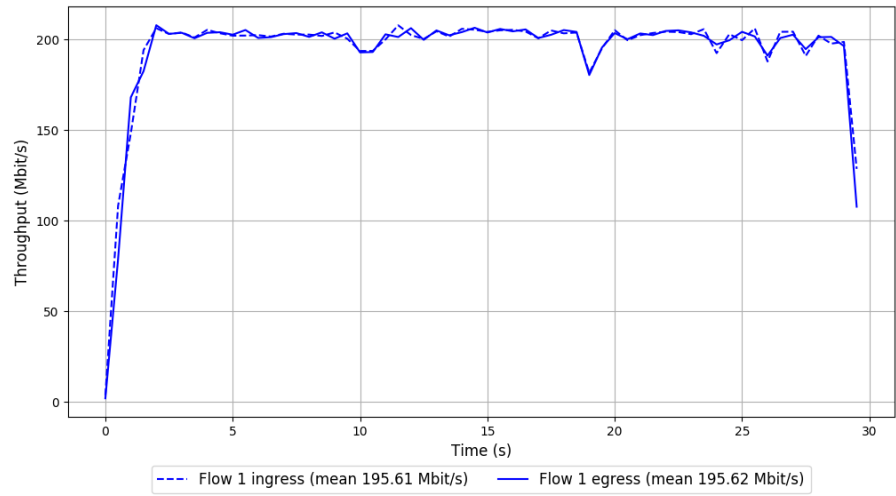
-- Flow 1:

Average throughput: 195.62 Mbit/s

95th percentile per-packet one-way delay: 53.765 ms

Loss rate: 0.35%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-20 02:11:27

End at: 2017-12-20 02:11:57

Below is generated by plot.py at 2017-12-20 05:59:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.96 Mbit/s

95th percentile per-packet one-way delay: 53.781 ms

Loss rate: 0.34%

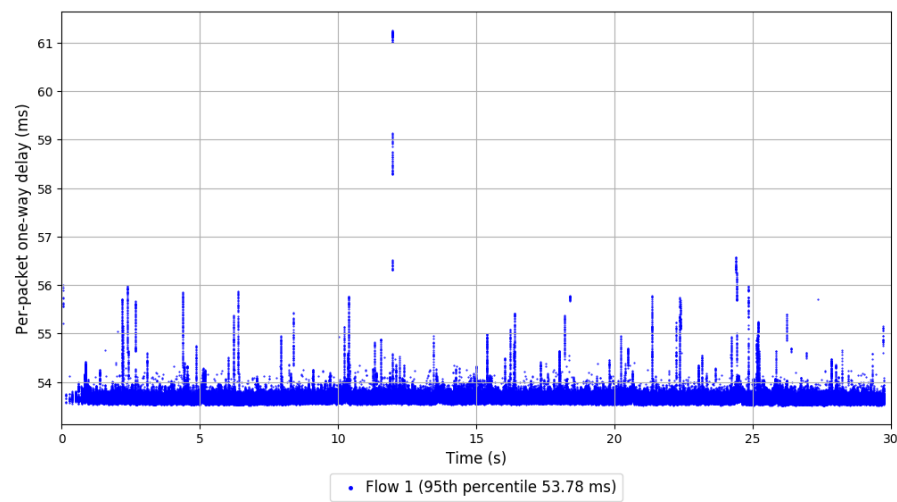
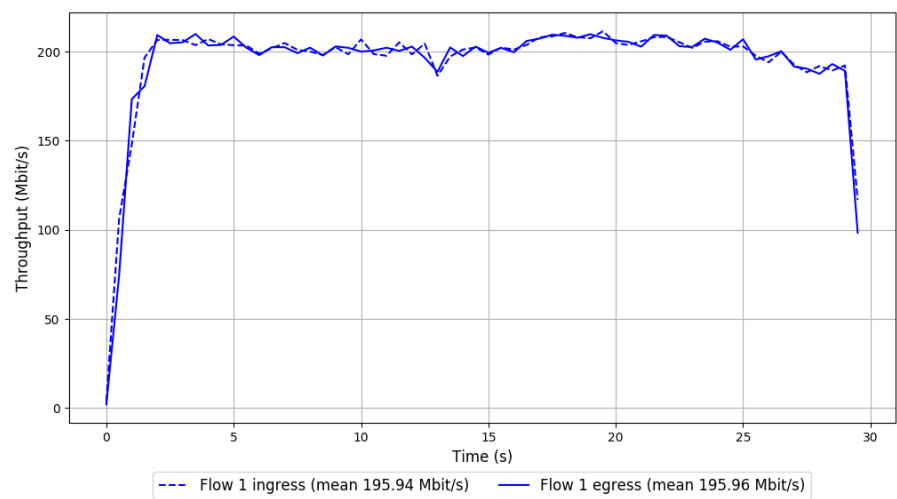
-- Flow 1:

Average throughput: 195.96 Mbit/s

95th percentile per-packet one-way delay: 53.781 ms

Loss rate: 0.34%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-20 02:22:55

End at: 2017-12-20 02:23:25

Below is generated by plot.py at 2017-12-20 05:59:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.40 Mbit/s

95th percentile per-packet one-way delay: 53.780 ms

Loss rate: 0.37%

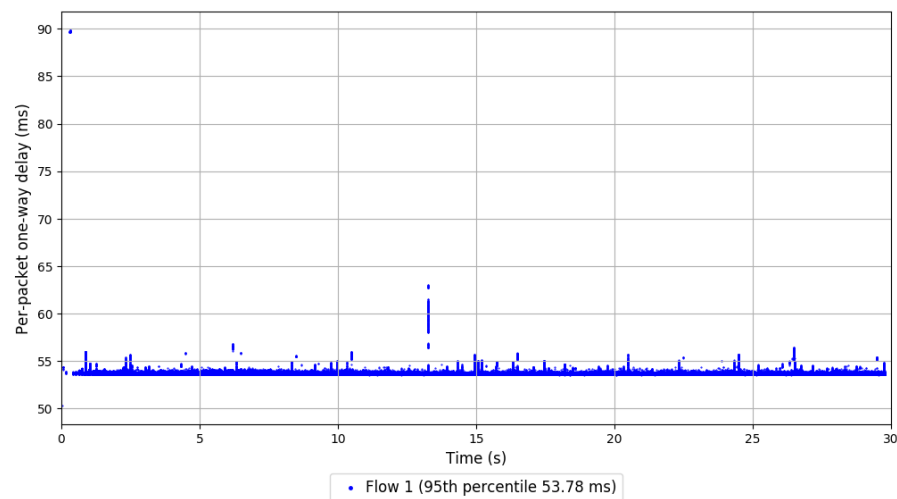
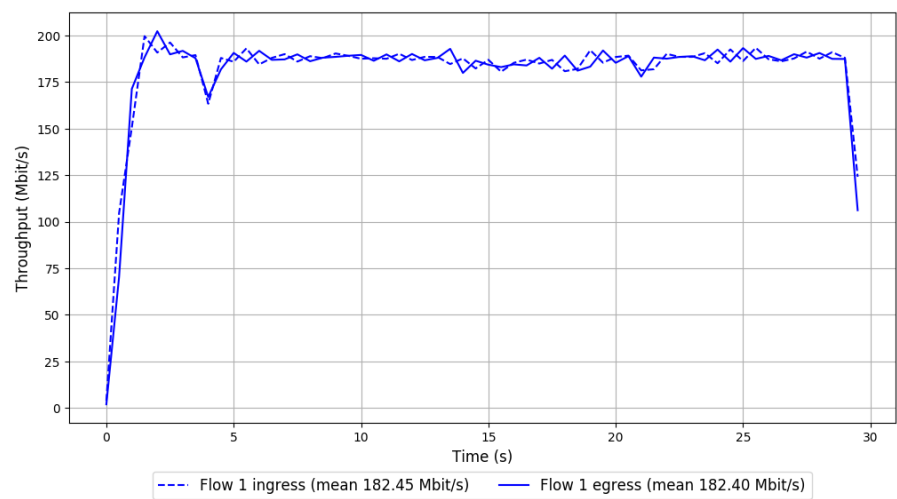
-- Flow 1:

Average throughput: 182.40 Mbit/s

95th percentile per-packet one-way delay: 53.780 ms

Loss rate: 0.37%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-20 02:34:26

End at: 2017-12-20 02:34:57

Below is generated by plot.py at 2017-12-20 05:59:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.21 Mbit/s

95th percentile per-packet one-way delay: 53.790 ms

Loss rate: 0.36%

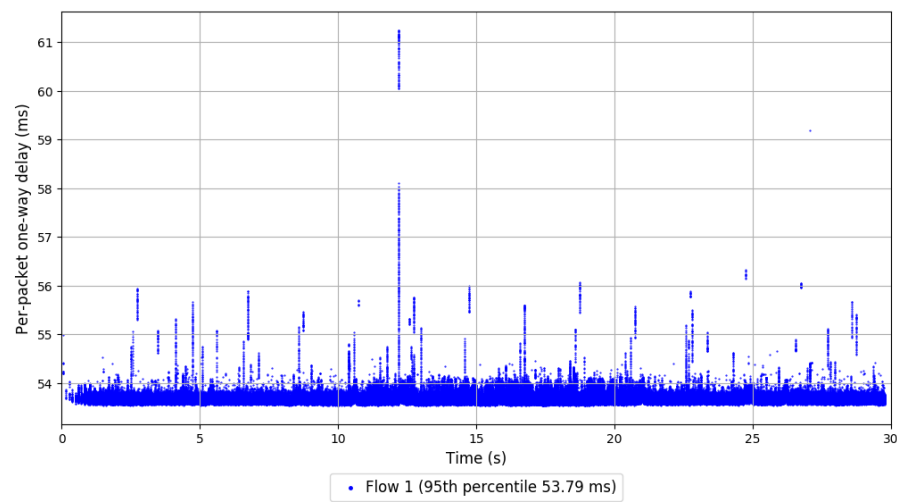
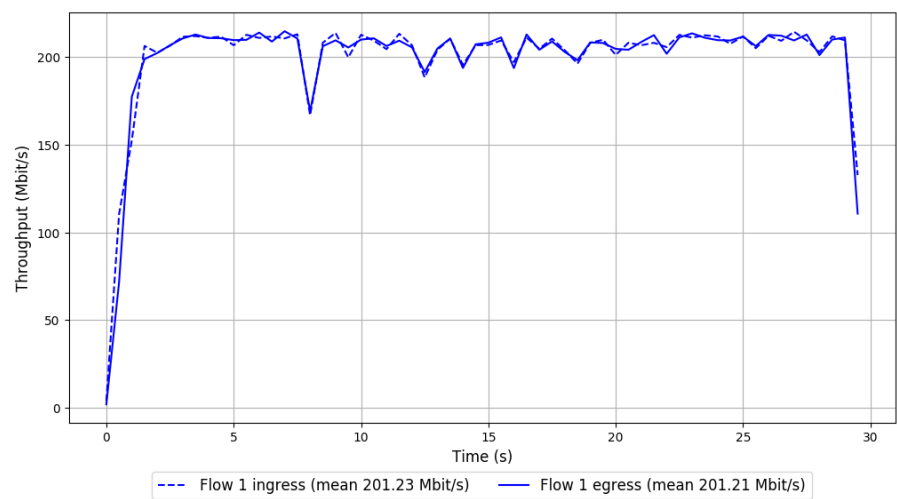
-- Flow 1:

Average throughput: 201.21 Mbit/s

95th percentile per-packet one-way delay: 53.790 ms

Loss rate: 0.36%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-20 02:45:58

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

Below is generated by plot.py at 2017-12-20 05:59:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.37 Mbit/s

95th percentile per-packet one-way delay: 53.801 ms

Loss rate: 0.35%

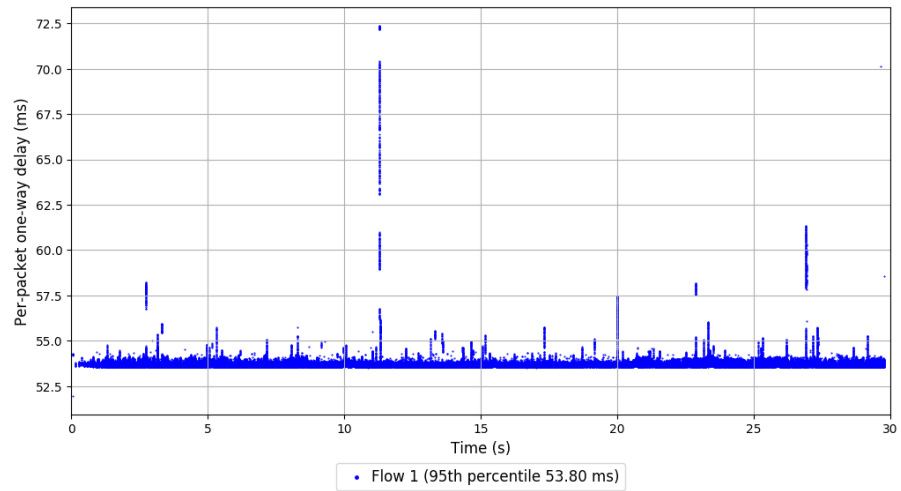
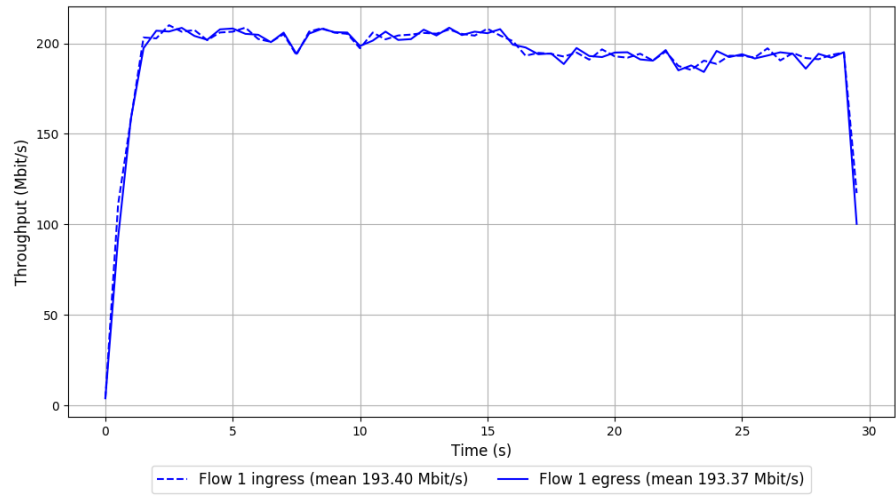
-- Flow 1:

Average throughput: 193.37 Mbit/s

95th percentile per-packet one-way delay: 53.801 ms

Loss rate: 0.35%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-20 02:57:22

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

Below is generated by plot.py at 2017-12-20 05:59:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.54 Mbit/s

95th percentile per-packet one-way delay: 53.251 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 193.54 Mbit/s

95th percentile per-packet one-way delay: 53.251 ms

Loss rate: 0.33%

Run 10: Report of Indigo — Data Link

