

Pantheon Report

Generated at 2018-01-02 09:22:37 (UTC).

Data path: GCE Sydney Ethernet (*local*) → GCE Tokyo Ethernet (*remote*).

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

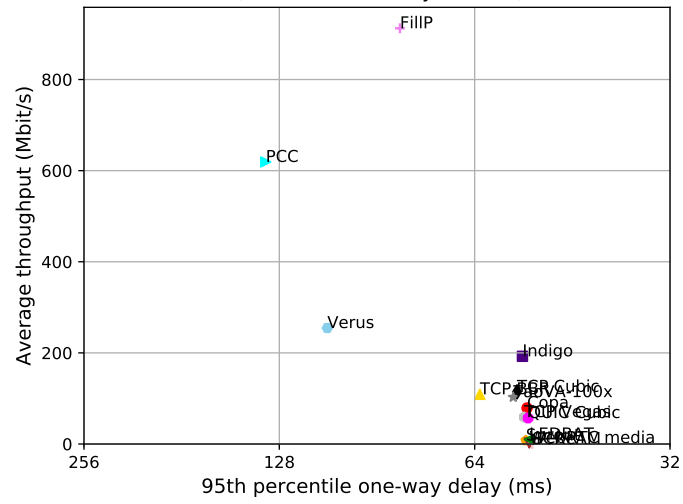
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

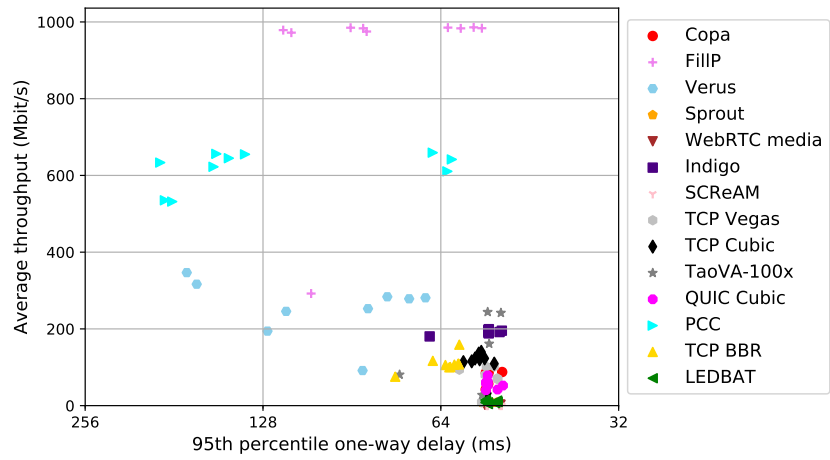
Git summary:

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

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	109.07	62.83	1.90
TCP Cubic	10	114.50	55.07	0.20
LEDBAT	10	10.04	52.74	0.15
PCC	10	619.07	134.29	1.40
QUIC Cubic	10	57.03	52.94	0.00
SCReAM	9	0.22	52.17	0.03
WebRTC media	10	2.25	52.72	0.00
Sprout	10	7.82	53.37	0.11
TaoVA-100x	8	102.86	55.82	0.35
TCP Vegas	10	59.03	53.71	0.04
Verus	9	254.53	107.98	2.64
Copa	10	79.02	53.15	0.01
FillP	10	912.44	83.44	2.86
Indigo	10	192.49	54.02	0.13

Run 1: Statistics of TCP BBR

Start at: 2018-01-02 05:43:27

End at: 2018-01-02 05:43:57

Below is generated by plot.py at 2018-01-02 08:26:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.06 Mbit/s

95th percentile per-packet one-way delay: 61.911 ms

Loss rate: 0.00%

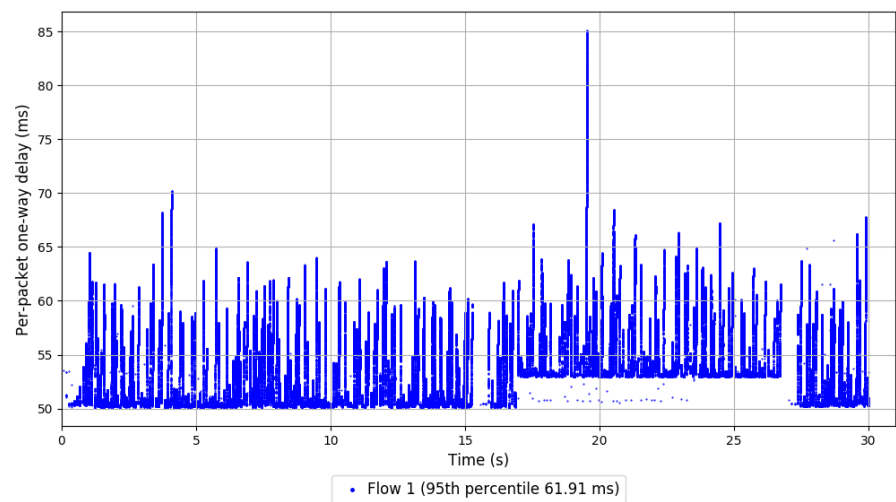
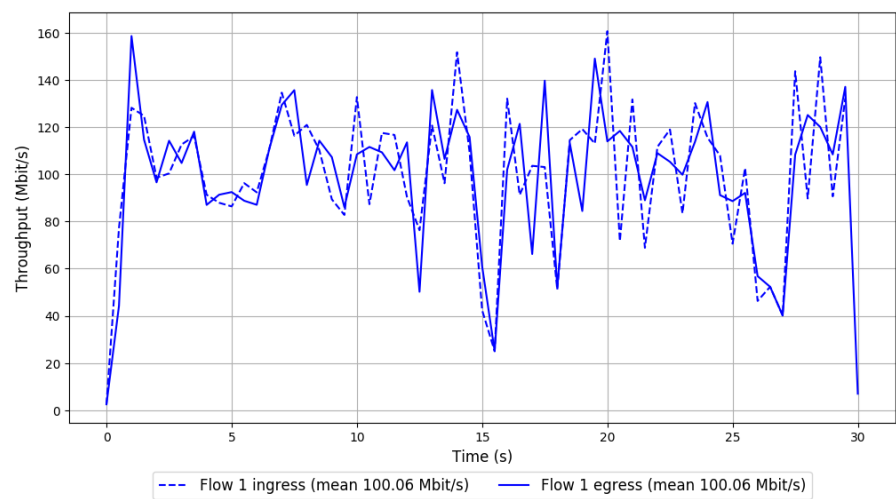
-- Flow 1:

Average throughput: 100.06 Mbit/s

95th percentile per-packet one-way delay: 61.911 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-02 05:54:53

End at: 2018-01-02 05:55:23

Below is generated by plot.py at 2018-01-02 08:27:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 105.89 Mbit/s

95th percentile per-packet one-way delay: 62.860 ms

Loss rate: 0.15%

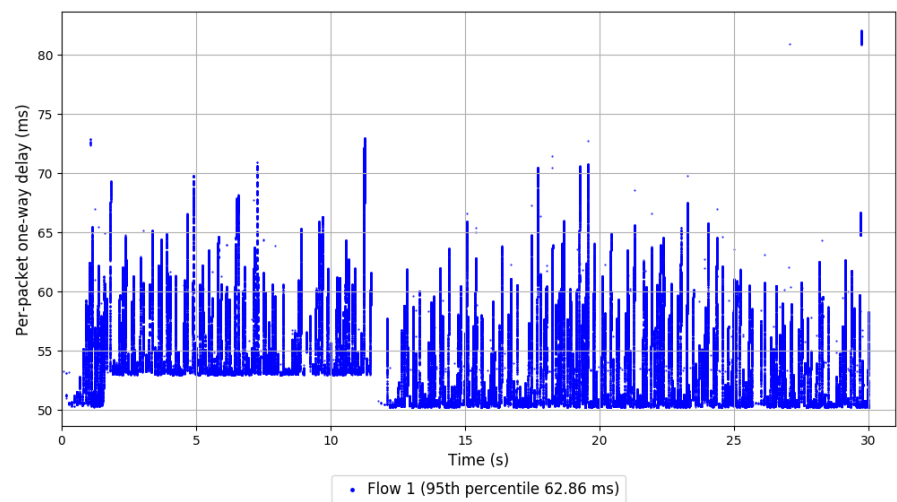
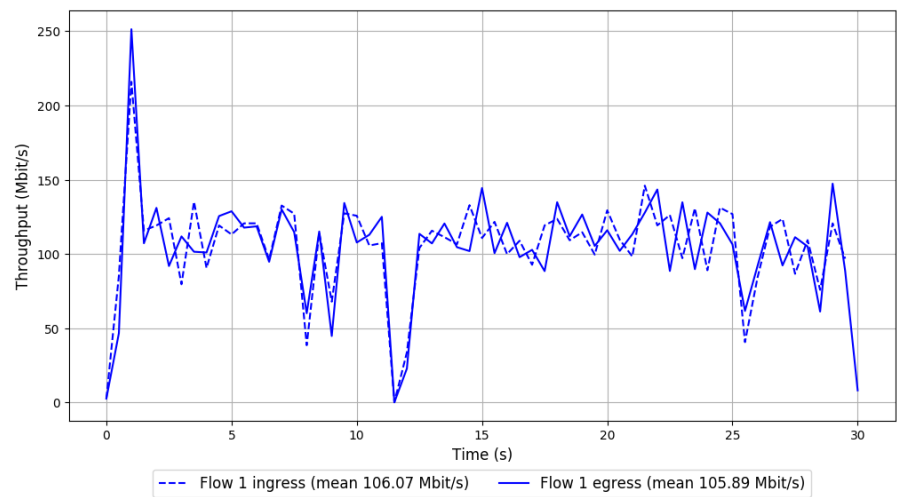
-- Flow 1:

Average throughput: 105.89 Mbit/s

95th percentile per-packet one-way delay: 62.860 ms

Loss rate: 0.15%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-02 06:06:21

End at: 2018-01-02 06:06:51

Below is generated by plot.py at 2018-01-02 08:27:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 106.99 Mbit/s

95th percentile per-packet one-way delay: 60.701 ms

Loss rate: 0.38%

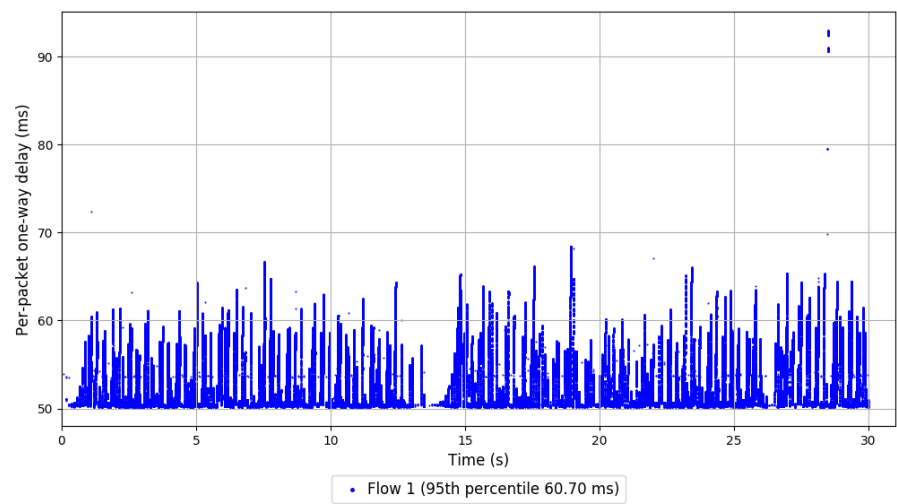
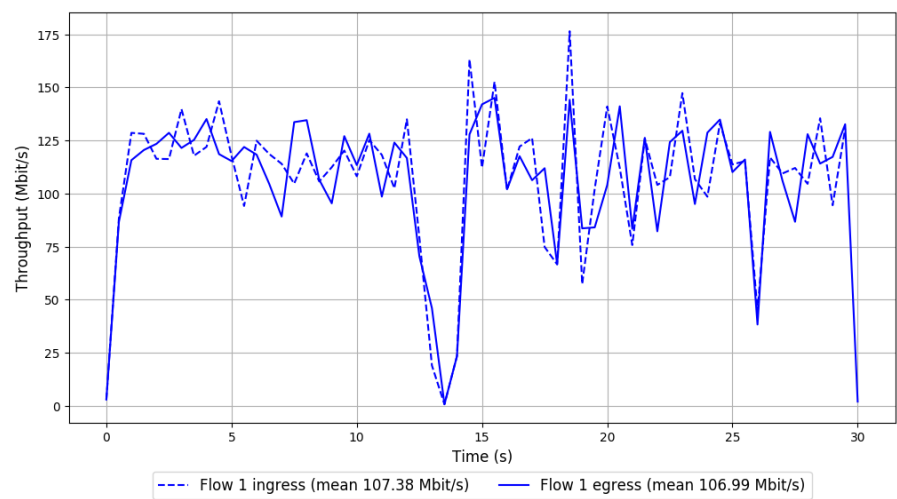
-- Flow 1:

Average throughput: 106.99 Mbit/s

95th percentile per-packet one-way delay: 60.701 ms

Loss rate: 0.38%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-02 06:18:12

End at: 2018-01-02 06:18:42

Below is generated by plot.py at 2018-01-02 08:27:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.50 Mbit/s

95th percentile per-packet one-way delay: 59.680 ms

Loss rate: 0.00%

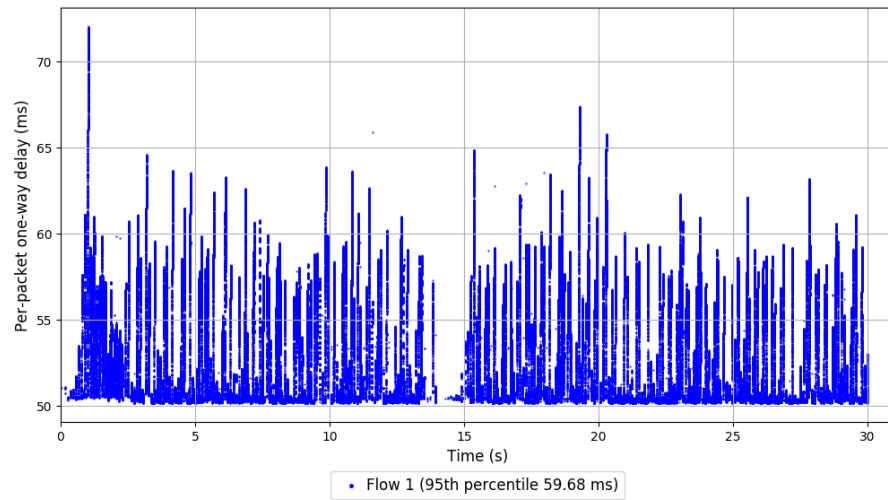
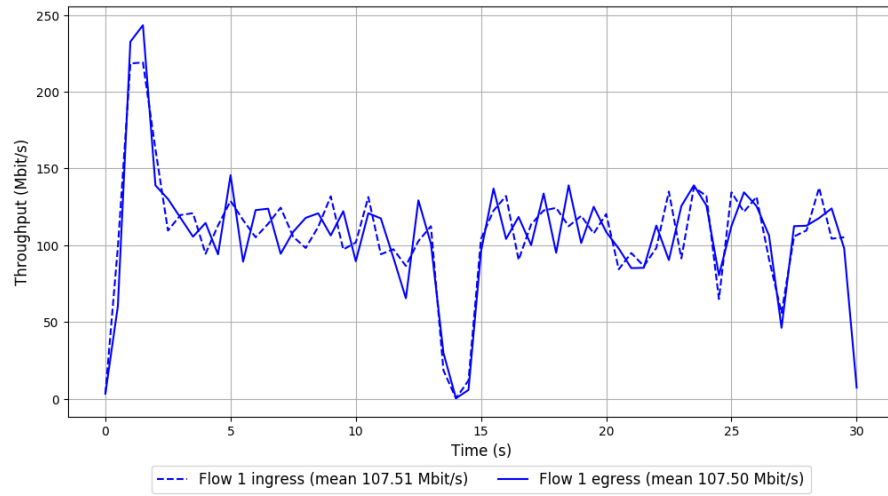
-- Flow 1:

Average throughput: 107.50 Mbit/s

95th percentile per-packet one-way delay: 59.680 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-02 06:29:43

End at: 2018-01-02 06:30:13

Below is generated by plot.py at 2018-01-02 08:27:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 100.73 Mbit/s

95th percentile per-packet one-way delay: 61.675 ms

Loss rate: 0.00%

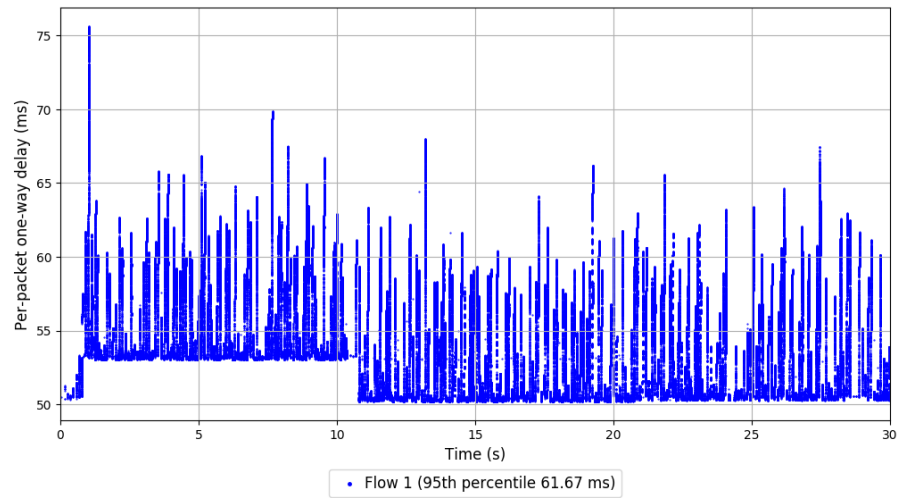
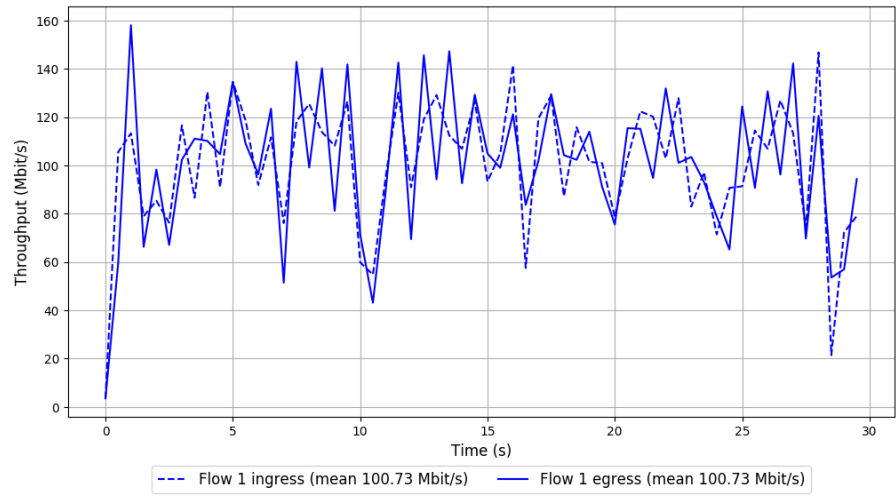
-- Flow 1:

Average throughput: 100.73 Mbit/s

95th percentile per-packet one-way delay: 61.675 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-02 06:41:02

End at: 2018-01-02 06:41:32

Below is generated by plot.py at 2018-01-02 08:27:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.52 Mbit/s

95th percentile per-packet one-way delay: 59.801 ms

Loss rate: 0.00%

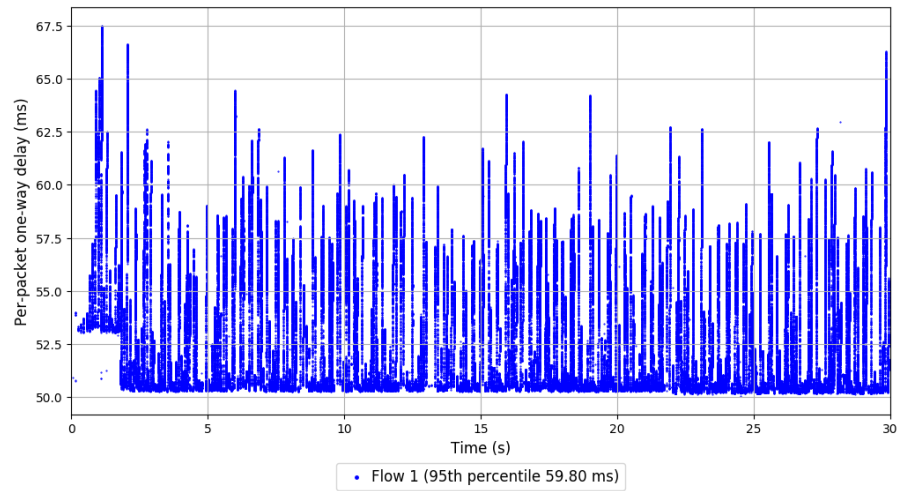
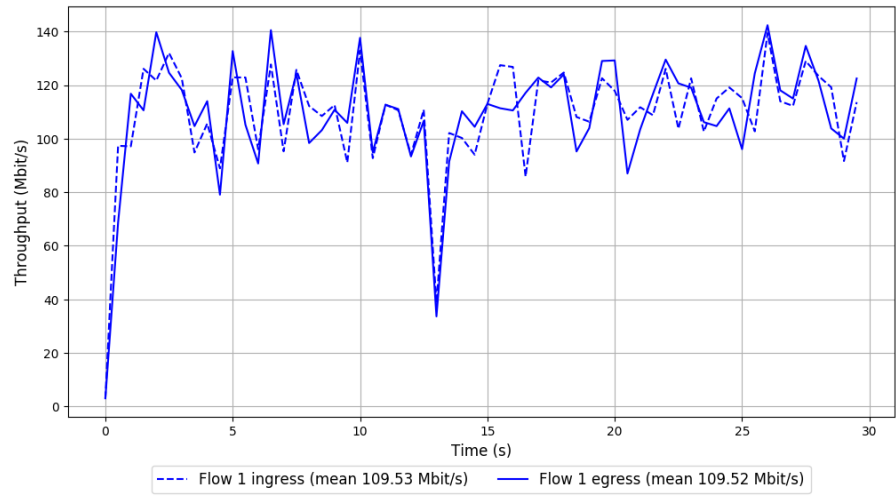
-- Flow 1:

Average throughput: 109.52 Mbit/s

95th percentile per-packet one-way delay: 59.801 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-02 06:52:32

End at: 2018-01-02 06:53:03

Below is generated by plot.py at 2018-01-02 08:27:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 108.78 Mbit/s

95th percentile per-packet one-way delay: 59.673 ms

Loss rate: 0.00%

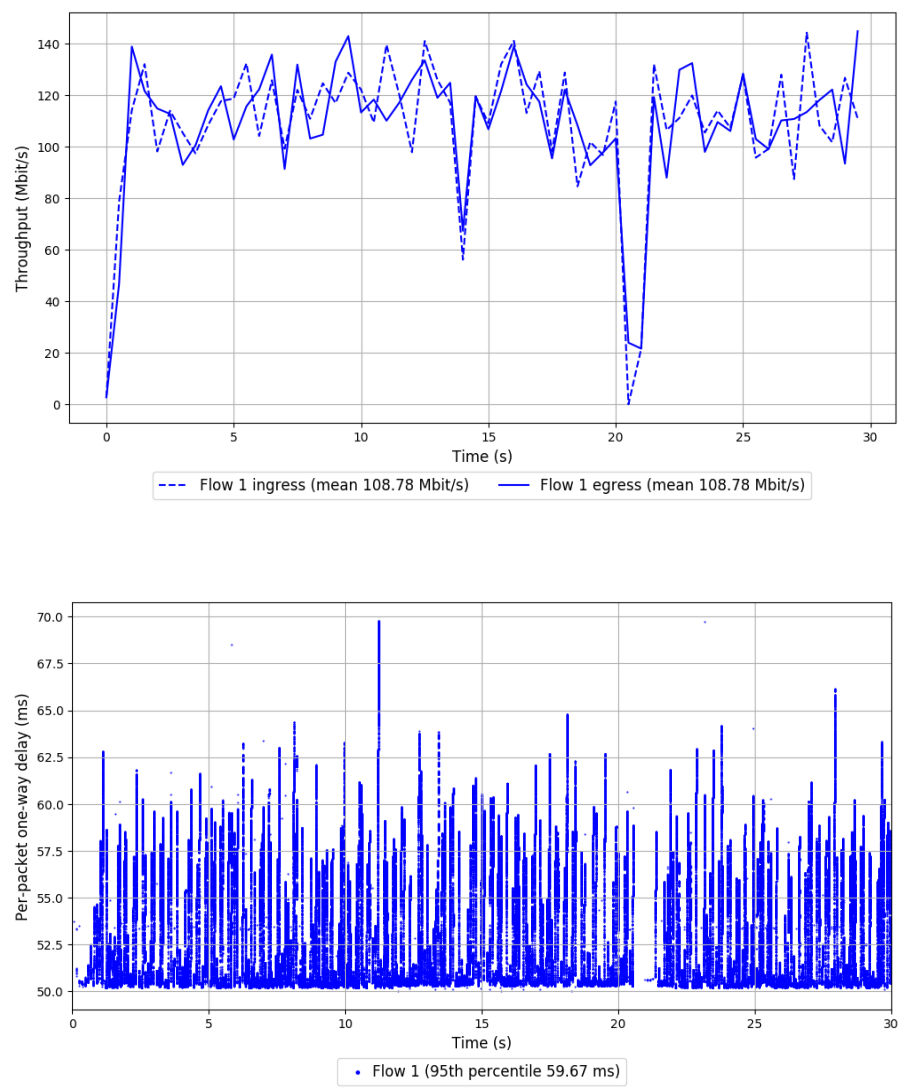
-- Flow 1:

Average throughput: 108.78 Mbit/s

95th percentile per-packet one-way delay: 59.673 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-02 07:04:26

End at: 2018-01-02 07:04:56

Below is generated by plot.py at 2018-01-02 08:28:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 158.95 Mbit/s

95th percentile per-packet one-way delay: 59.547 ms

Loss rate: 0.00%

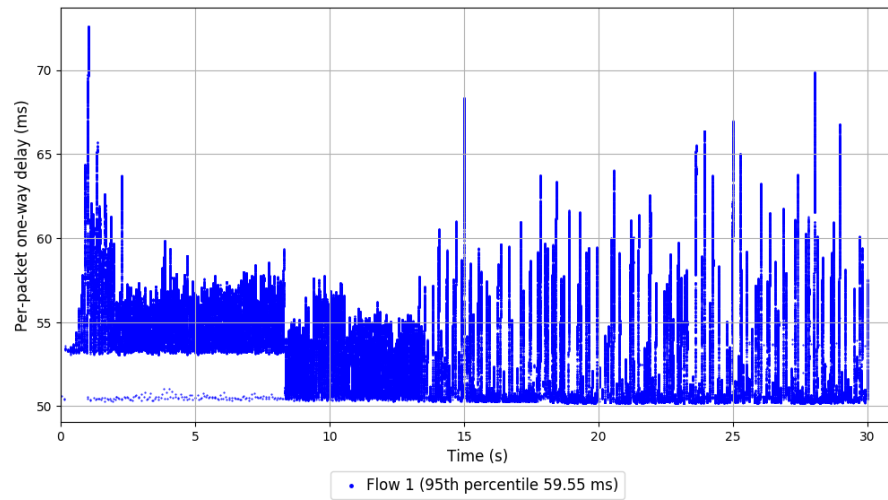
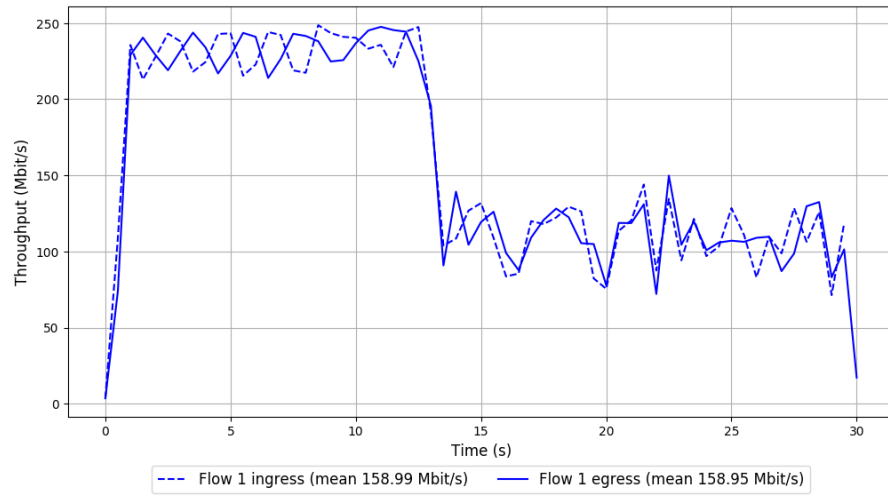
-- Flow 1:

Average throughput: 158.95 Mbit/s

95th percentile per-packet one-way delay: 59.547 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-02 07:16:03

End at: 2018-01-02 07:16:33

Below is generated by plot.py at 2018-01-02 08:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.81 Mbit/s

95th percentile per-packet one-way delay: 66.036 ms

Loss rate: 0.01%

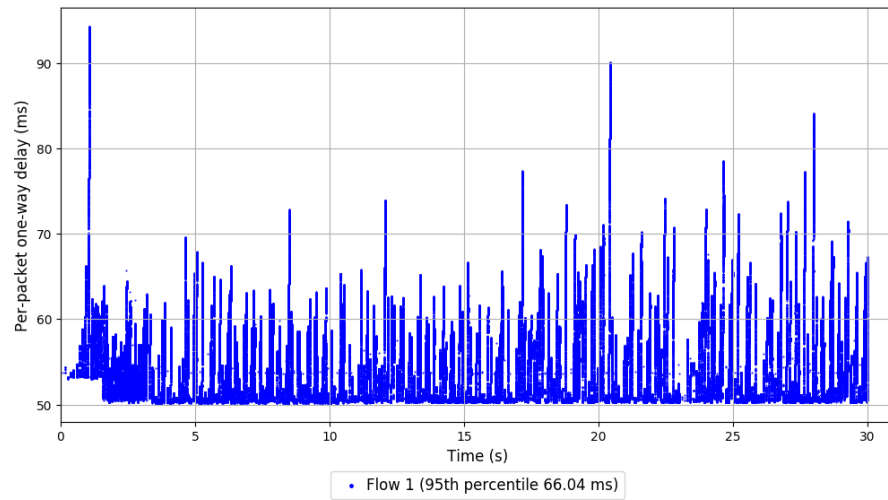
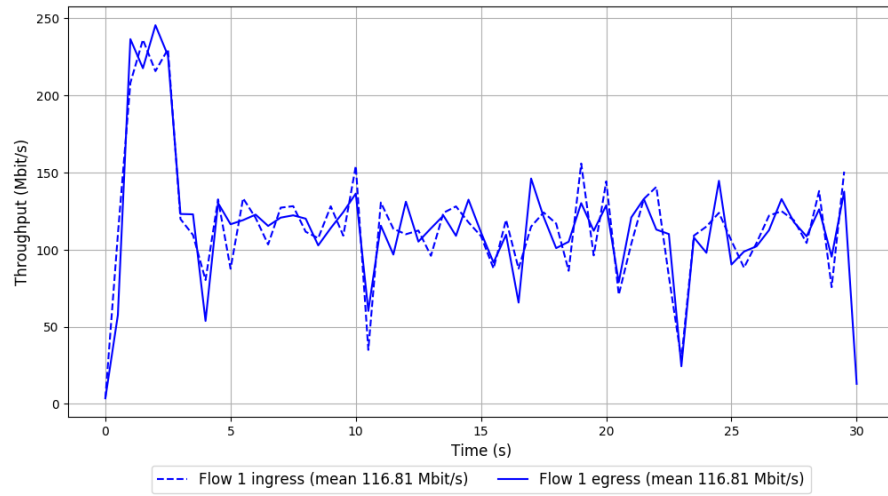
-- Flow 1:

Average throughput: 116.81 Mbit/s

95th percentile per-packet one-way delay: 66.036 ms

Loss rate: 0.01%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-02 07:26:44

End at: 2018-01-02 07:27:14

Below is generated by plot.py at 2018-01-02 08:29:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.42 Mbit/s

95th percentile per-packet one-way delay: 76.454 ms

Loss rate: 18.41%

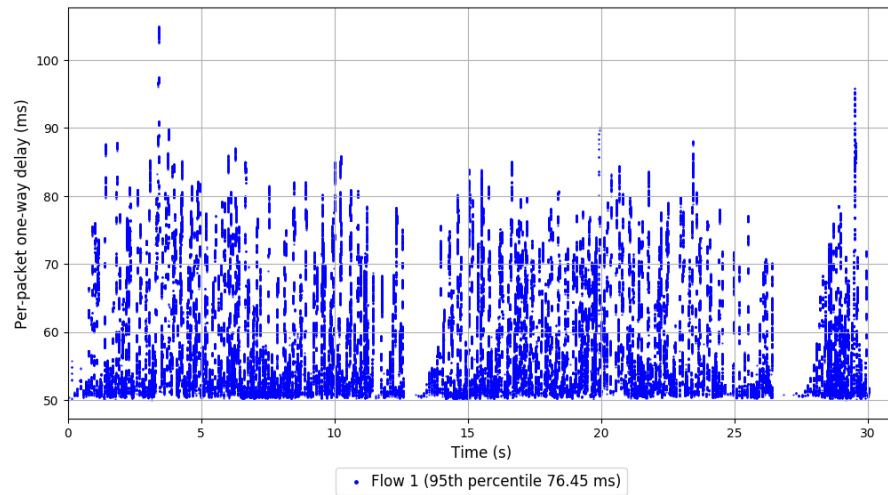
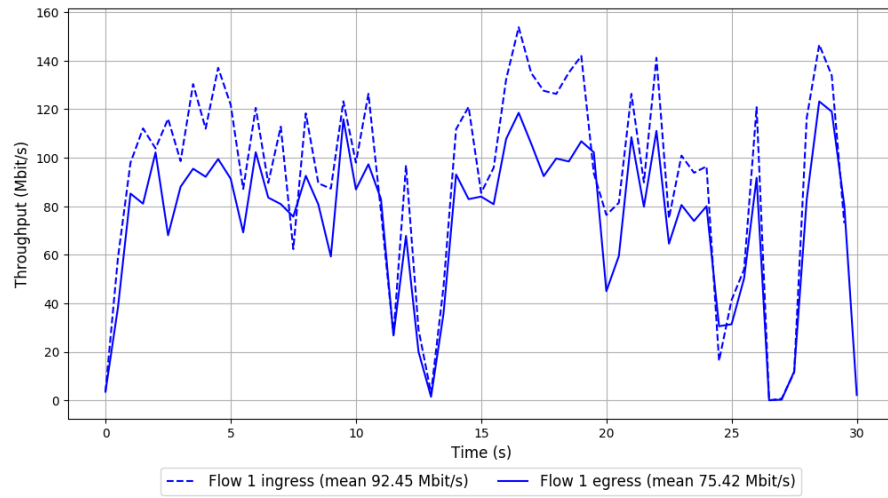
-- Flow 1:

Average throughput: 75.42 Mbit/s

95th percentile per-packet one-way delay: 76.454 ms

Loss rate: 18.41%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-02 05:40:05

End at: 2018-01-02 05:40:35

Below is generated by plot.py at 2018-01-02 08:29:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 120.68 Mbit/s

95th percentile per-packet one-way delay: 55.017 ms

Loss rate: 0.00%

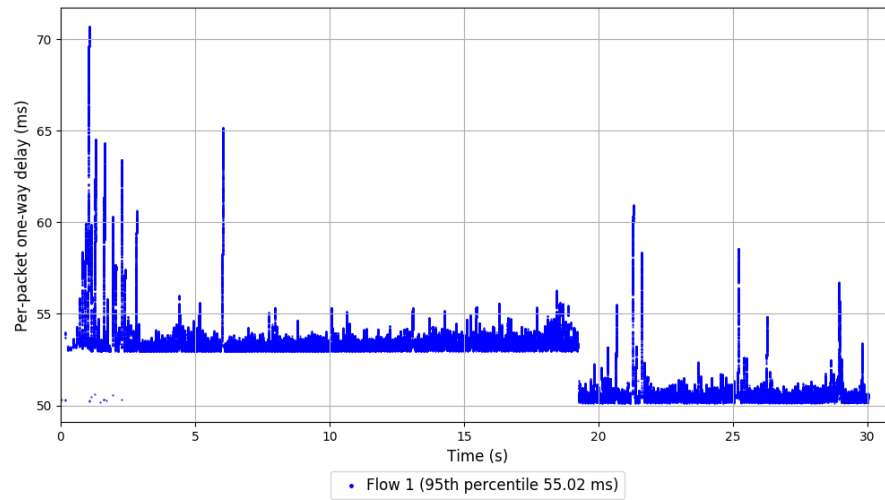
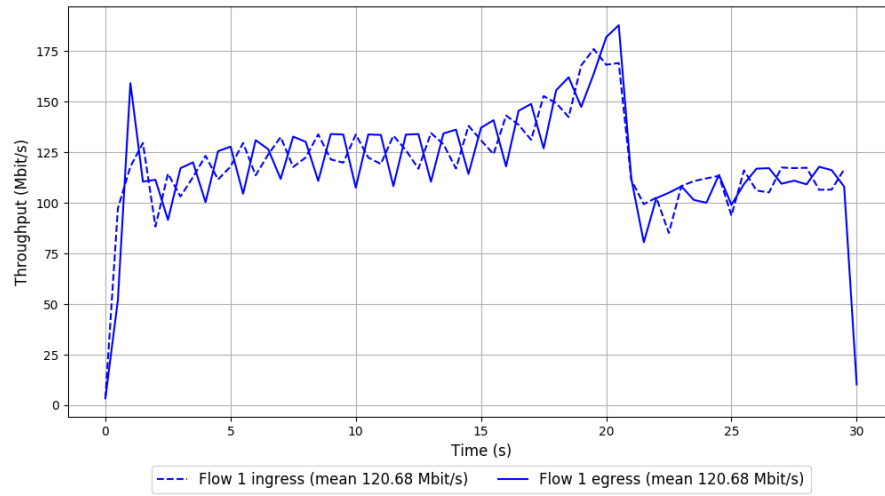
-- Flow 1:

Average throughput: 120.68 Mbit/s

95th percentile per-packet one-way delay: 55.017 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-02 05:51:49

End at: 2018-01-02 05:52:19

Below is generated by plot.py at 2018-01-02 08:29:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 131.92 Mbit/s

95th percentile per-packet one-way delay: 55.117 ms

Loss rate: 0.01%

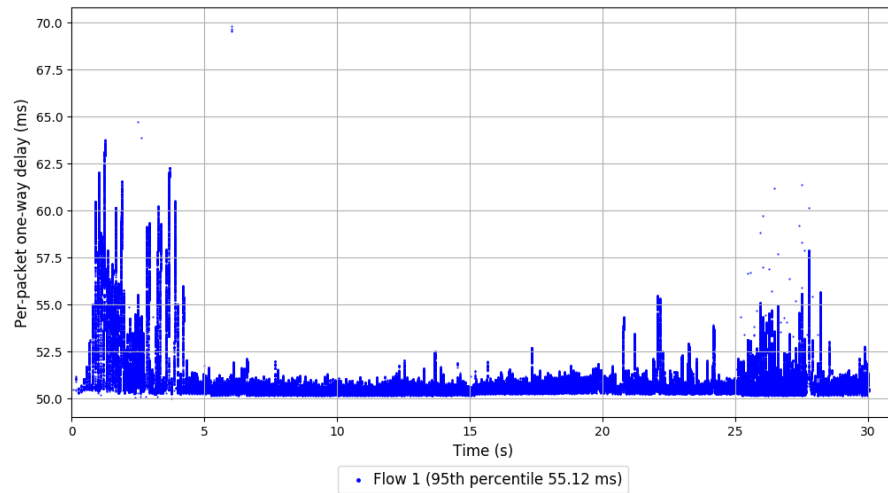
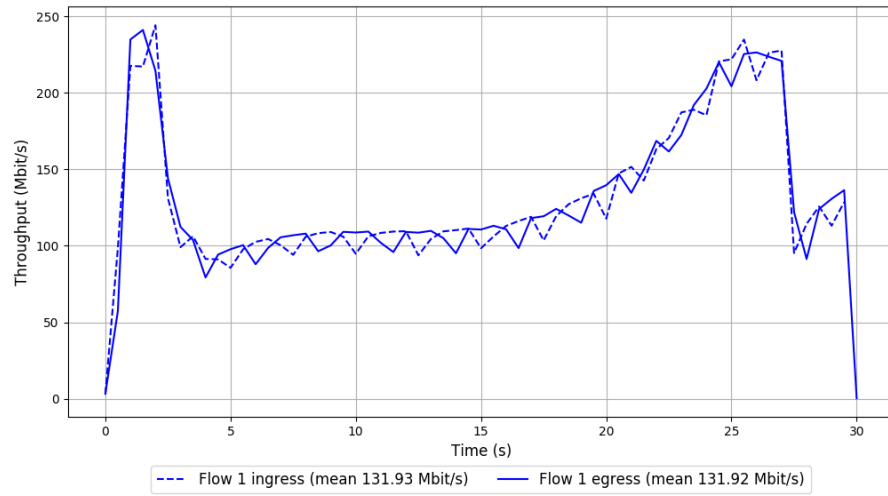
-- Flow 1:

Average throughput: 131.92 Mbit/s

95th percentile per-packet one-way delay: 55.117 ms

Loss rate: 0.01%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-02 06:03:17

End at: 2018-01-02 06:03:47

Below is generated by plot.py at 2018-01-02 08:29:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 109.55 Mbit/s

95th percentile per-packet one-way delay: 51.962 ms

Loss rate: 0.05%

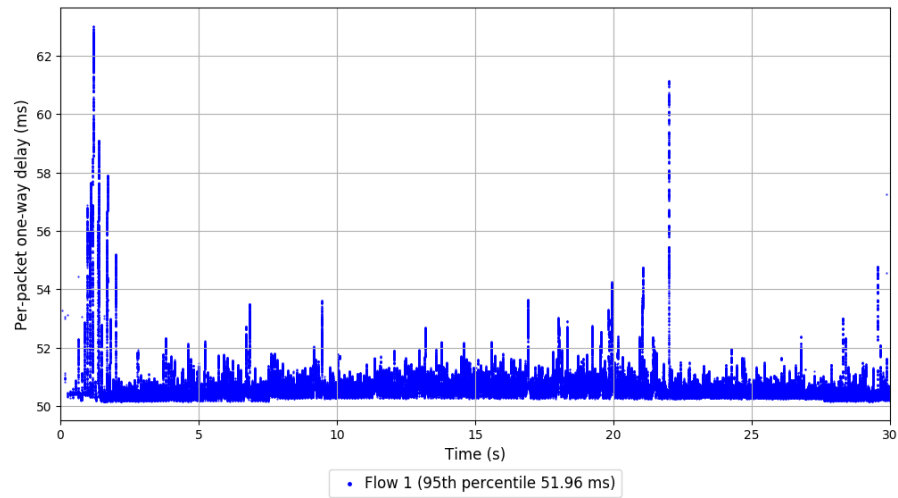
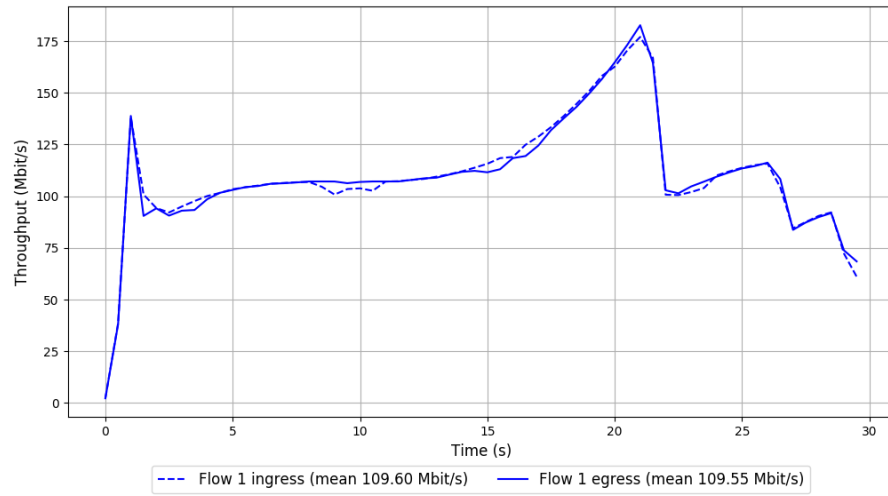
-- Flow 1:

Average throughput: 109.55 Mbit/s

95th percentile per-packet one-way delay: 51.962 ms

Loss rate: 0.05%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-02 06:14:44

End at: 2018-01-02 06:15:14

Below is generated by plot.py at 2018-01-02 08:29:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 135.64 Mbit/s

95th percentile per-packet one-way delay: 55.209 ms

Loss rate: 0.00%

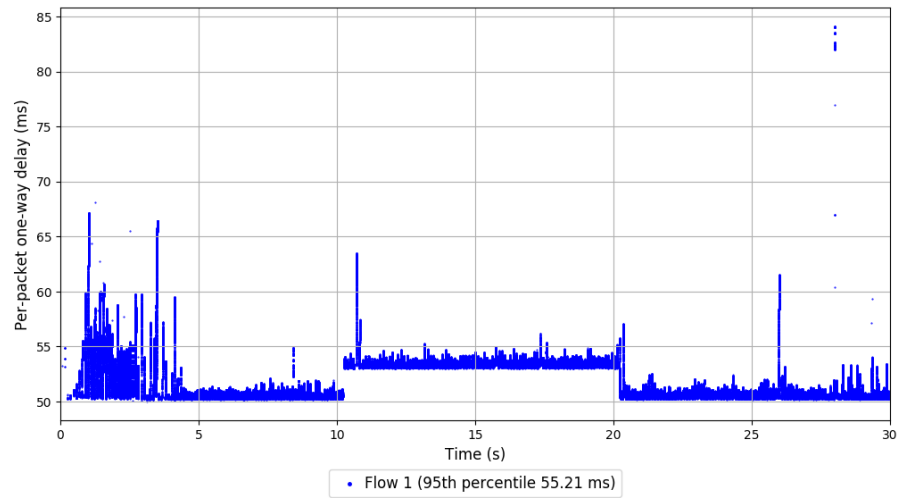
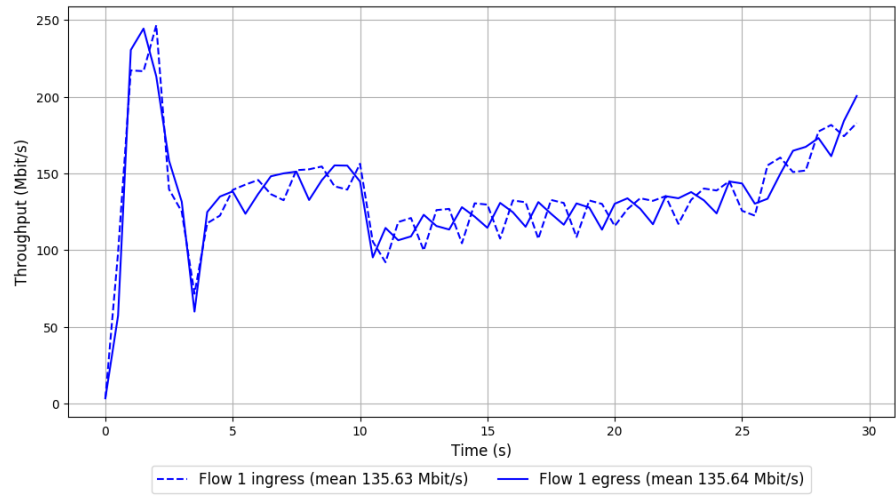
-- Flow 1:

Average throughput: 135.64 Mbit/s

95th percentile per-packet one-way delay: 55.209 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-02 06:26:36

End at: 2018-01-02 06:27:06

Below is generated by plot.py at 2018-01-02 08:29:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 122.91 Mbit/s

95th percentile per-packet one-way delay: 56.003 ms

Loss rate: 0.00%

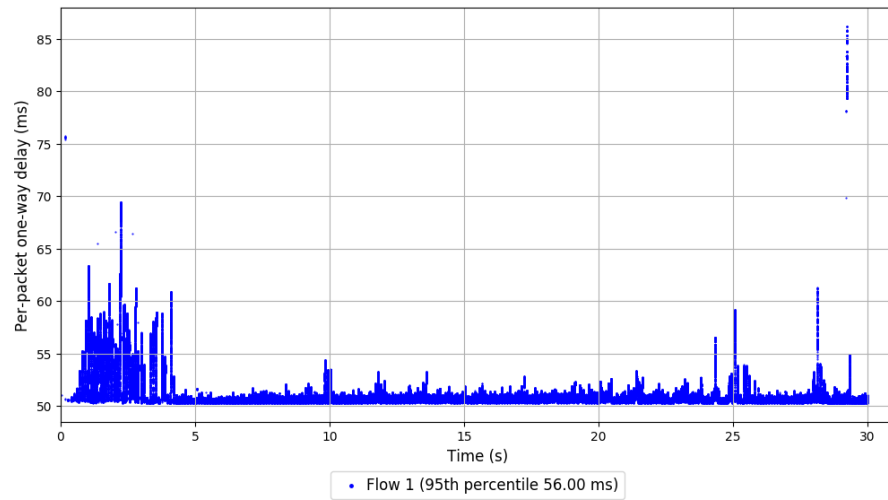
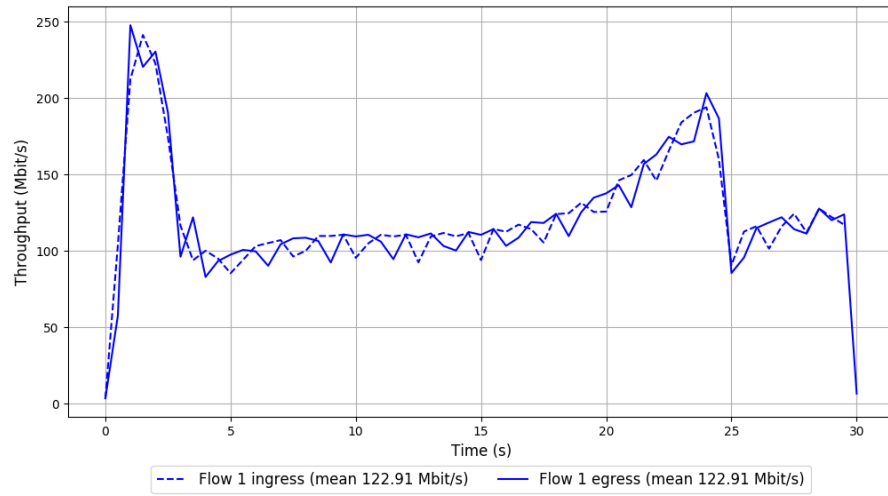
-- Flow 1:

Average throughput: 122.91 Mbit/s

95th percentile per-packet one-way delay: 56.003 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-02 06:38:07

End at: 2018-01-02 06:38:37

Below is generated by plot.py at 2018-01-02 08:30:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 123.13 Mbit/s

95th percentile per-packet one-way delay: 53.954 ms

Loss rate: 0.01%

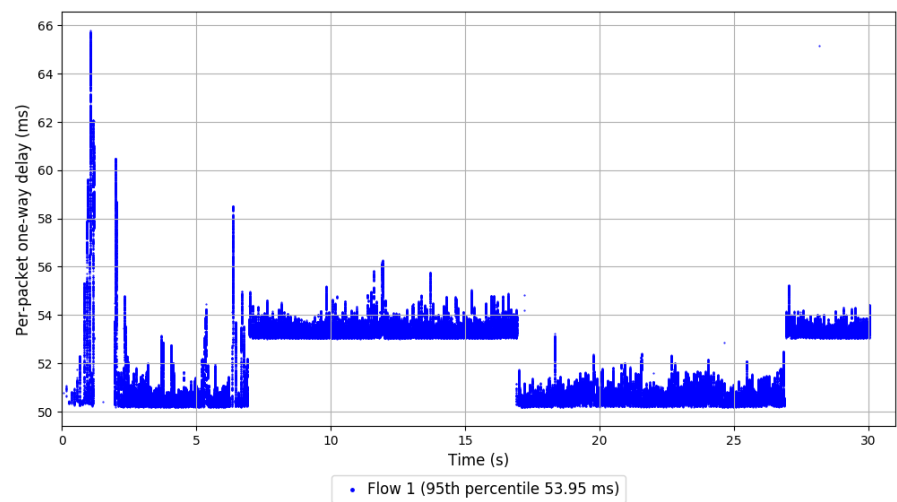
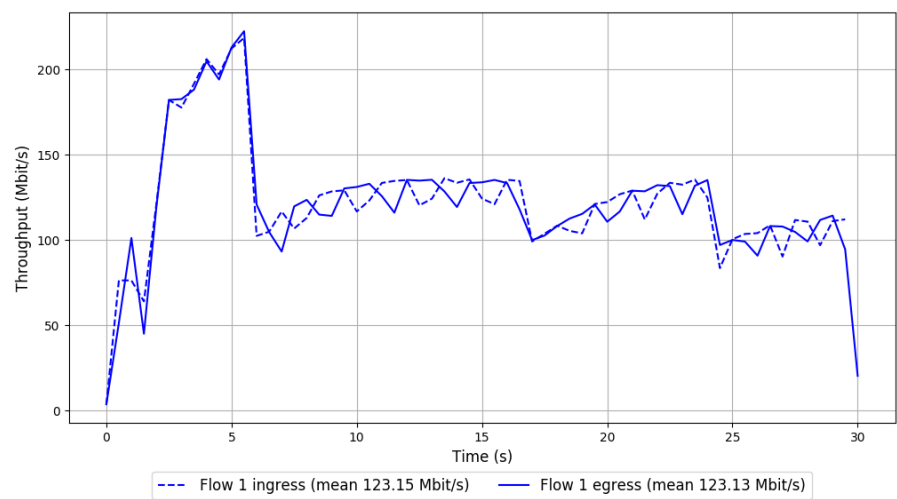
-- Flow 1:

Average throughput: 123.13 Mbit/s

95th percentile per-packet one-way delay: 53.954 ms

Loss rate: 0.01%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-02 06:49:25

End at: 2018-01-02 06:49:55

Below is generated by plot.py at 2018-01-02 08:30:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 113.46 Mbit/s

95th percentile per-packet one-way delay: 58.607 ms

Loss rate: 0.00%

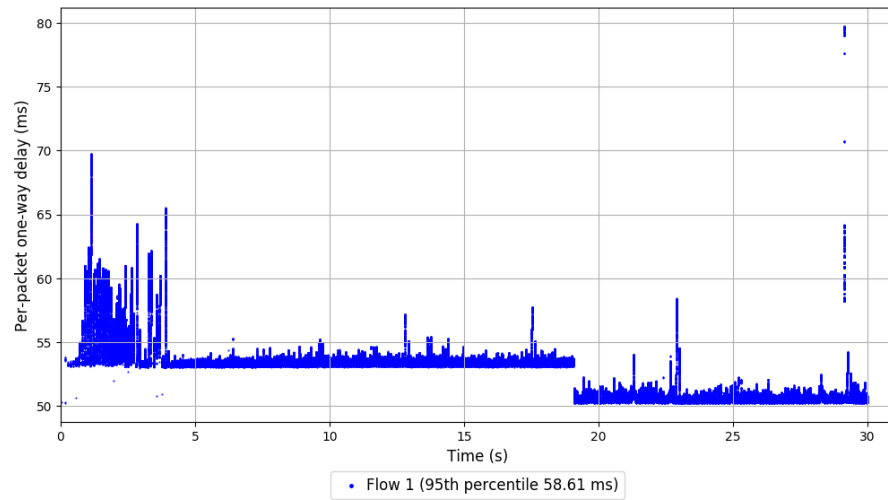
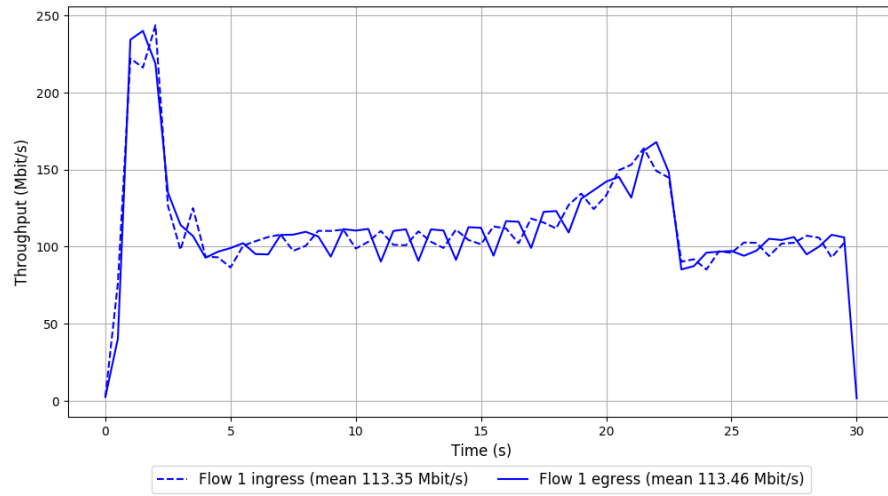
-- Flow 1:

Average throughput: 113.46 Mbit/s

95th percentile per-packet one-way delay: 58.607 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-02 07:00:52

End at: 2018-01-02 07:01:22

Below is generated by plot.py at 2018-01-02 08:31:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 140.18 Mbit/s

95th percentile per-packet one-way delay: 54.661 ms

Loss rate: 0.00%

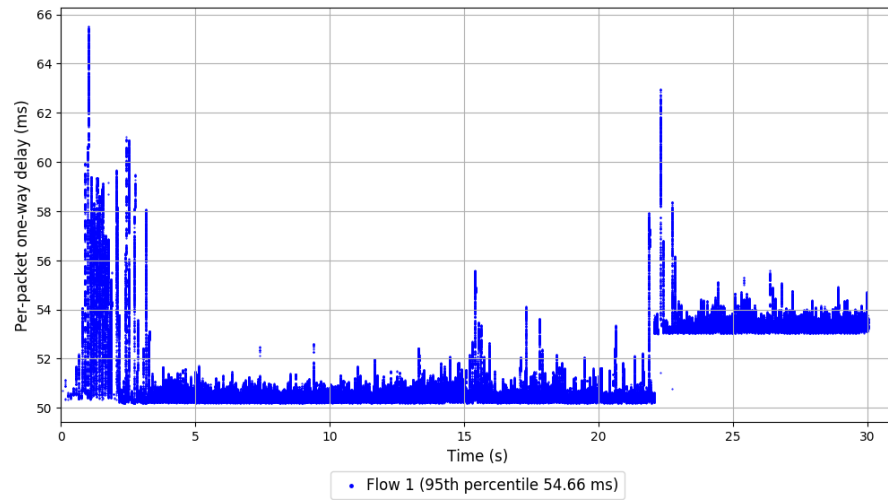
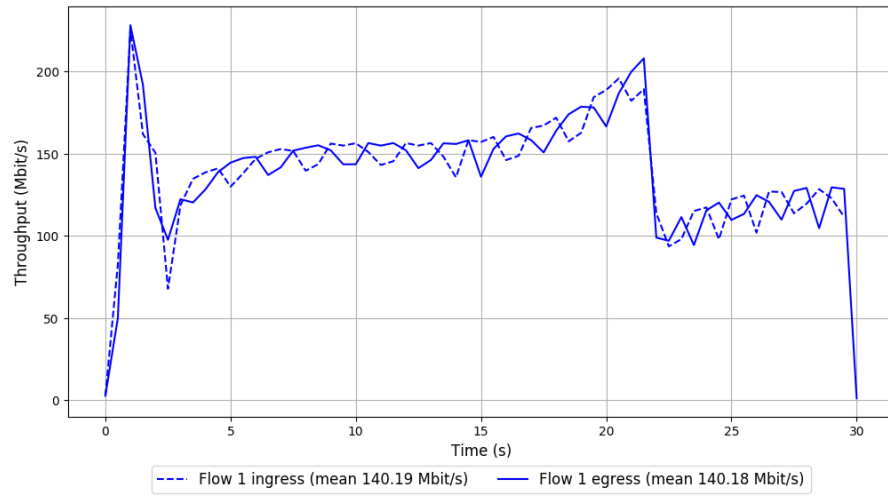
-- Flow 1:

Average throughput: 140.18 Mbit/s

95th percentile per-packet one-way delay: 54.661 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-02 07:12:51

End at: 2018-01-02 07:13:21

Below is generated by plot.py at 2018-01-02 08:31:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 115.45 Mbit/s

95th percentile per-packet one-way delay: 56.745 ms

Loss rate: 0.18%

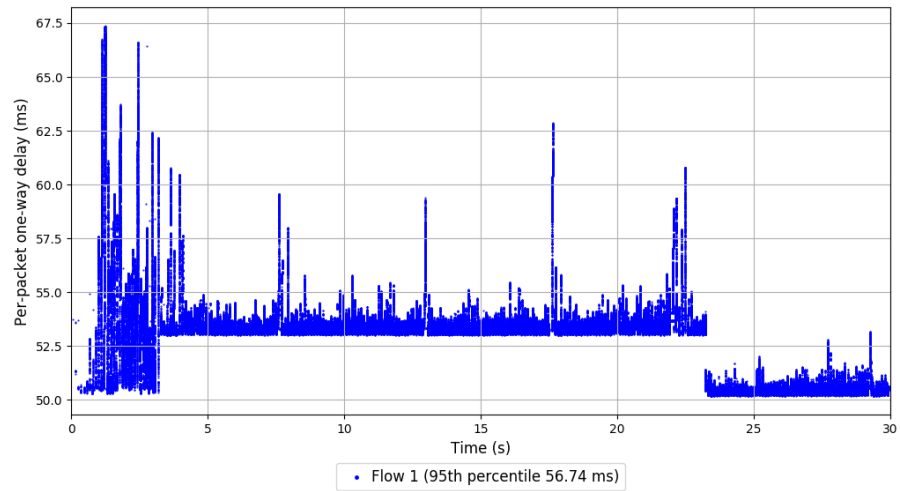
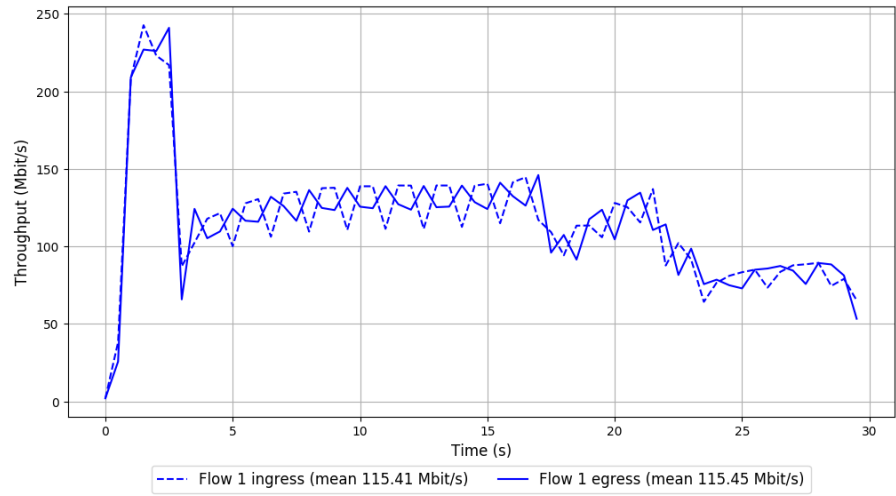
-- Flow 1:

Average throughput: 115.45 Mbit/s

95th percentile per-packet one-way delay: 56.745 ms

Loss rate: 0.18%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-02 07:23:52

End at: 2018-01-02 07:24:22

Below is generated by plot.py at 2018-01-02 08:31:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.10 Mbit/s

95th percentile per-packet one-way delay: 53.424 ms

Loss rate: 1.78%

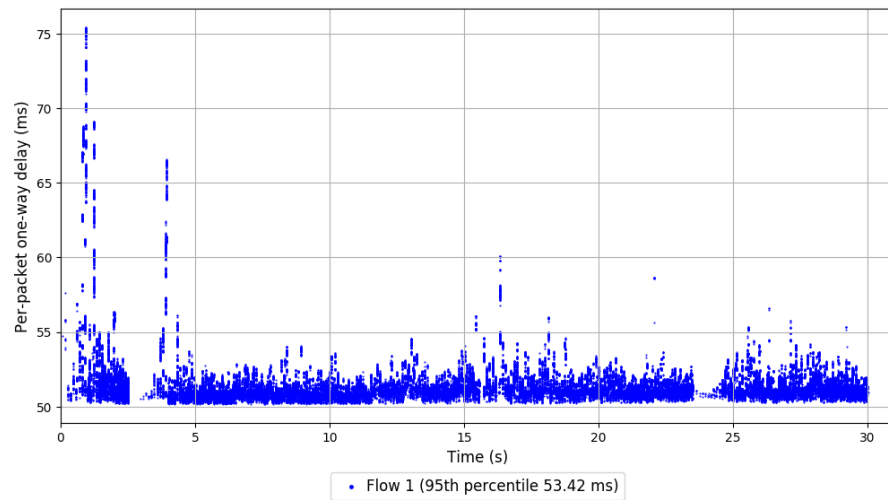
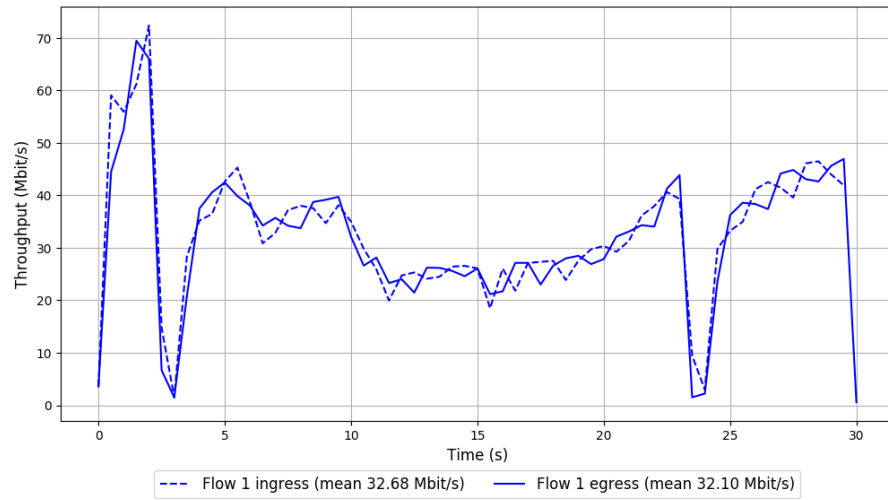
-- Flow 1:

Average throughput: 32.10 Mbit/s

95th percentile per-packet one-way delay: 53.424 ms

Loss rate: 1.78%

Run 10: Report of TCP Cubic — Data Link

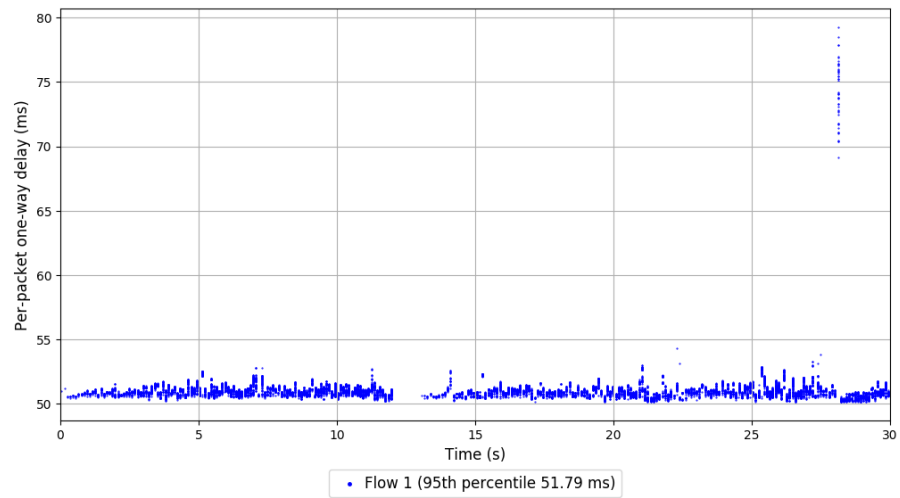
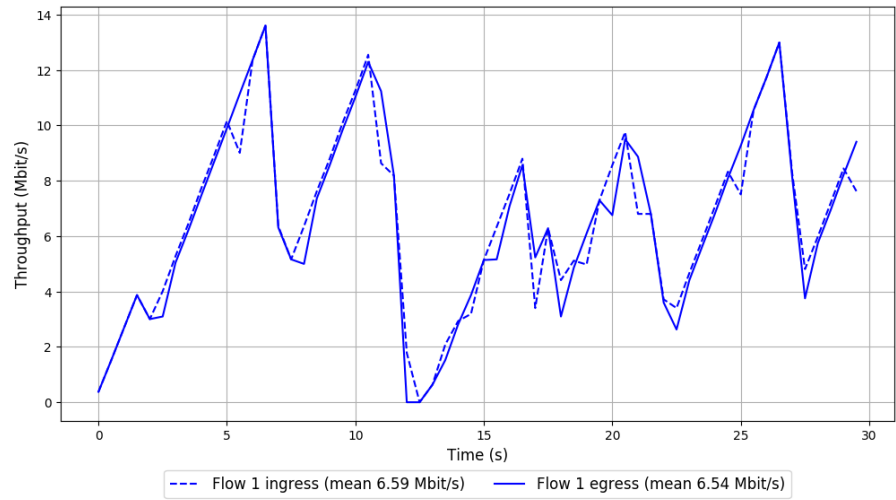


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-02 05:34:43
End at: 2018-01-02 05:35:13

# Below is generated by plot.py at 2018-01-02 08:31:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: 51.789 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: 51.789 ms
Loss rate: 0.65%
```


Run 1: Report of LEDBAT — Data Link

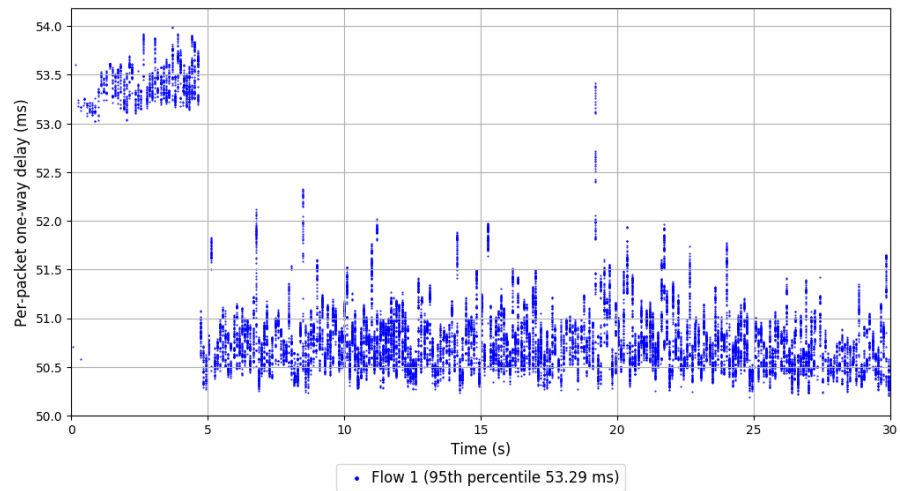
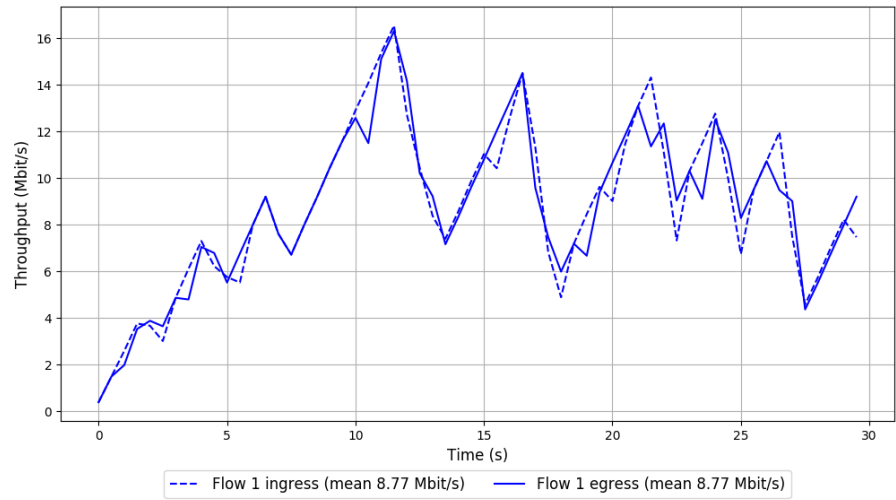


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-02 05:46:29
End at: 2018-01-02 05:46:59

# Below is generated by plot.py at 2018-01-02 08:31:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.77 Mbit/s
95th percentile per-packet one-way delay: 53.288 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 8.77 Mbit/s
95th percentile per-packet one-way delay: 53.288 ms
Loss rate: 0.03%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-02 05:57:54

End at: 2018-01-02 05:58:24

Below is generated by plot.py at 2018-01-02 08:31:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.16 Mbit/s

95th percentile per-packet one-way delay: 53.788 ms

Loss rate: 0.00%

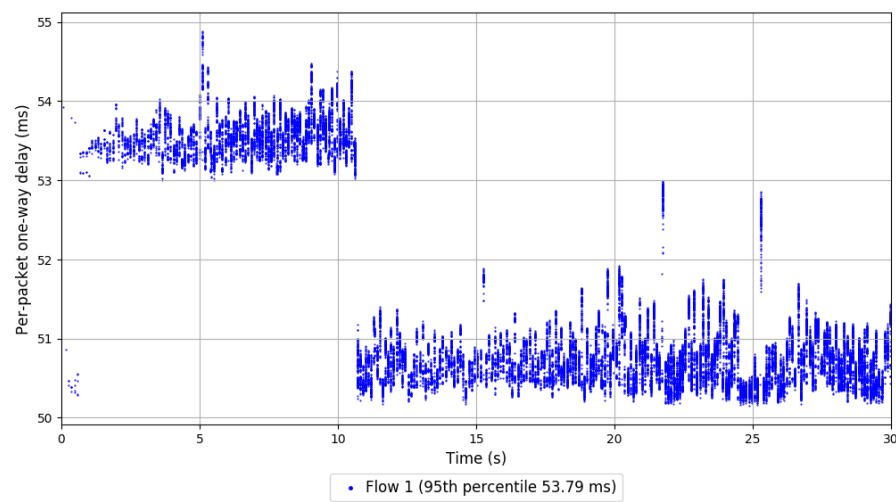
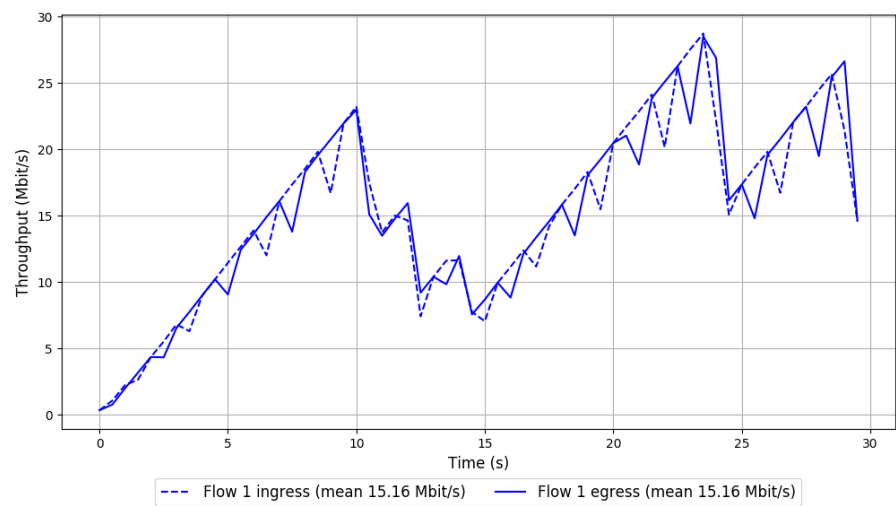
-- Flow 1:

Average throughput: 15.16 Mbit/s

95th percentile per-packet one-way delay: 53.788 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-02 06:09:23

End at: 2018-01-02 06:09:53

Below is generated by plot.py at 2018-01-02 08:31:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.21 Mbit/s

95th percentile per-packet one-way delay: 53.737 ms

Loss rate: 0.00%

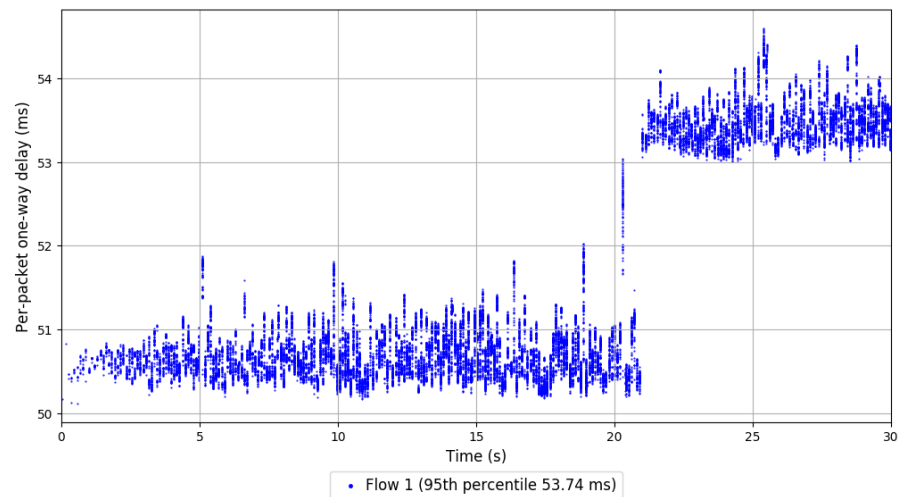
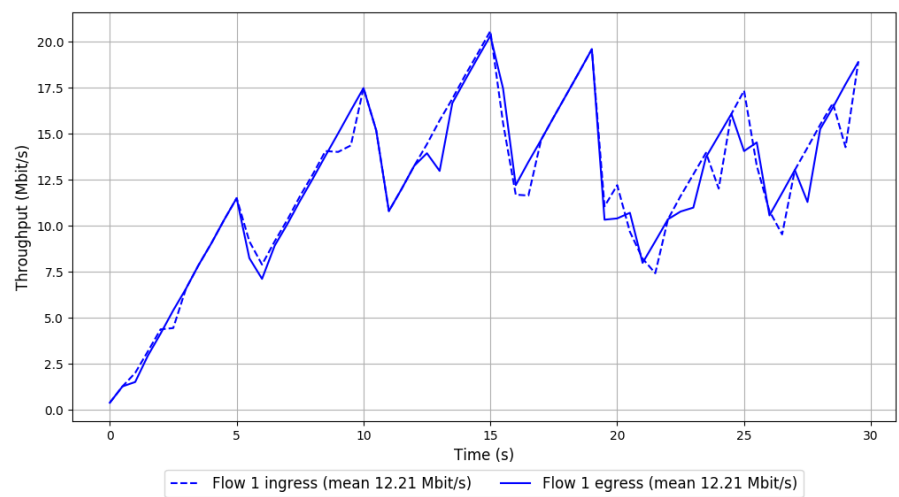
-- Flow 1:

Average throughput: 12.21 Mbit/s

95th percentile per-packet one-way delay: 53.737 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-02 06:21:13

End at: 2018-01-02 06:21:43

Below is generated by plot.py at 2018-01-02 08:31:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.04 Mbit/s

95th percentile per-packet one-way delay: 53.803 ms

Loss rate: 0.00%

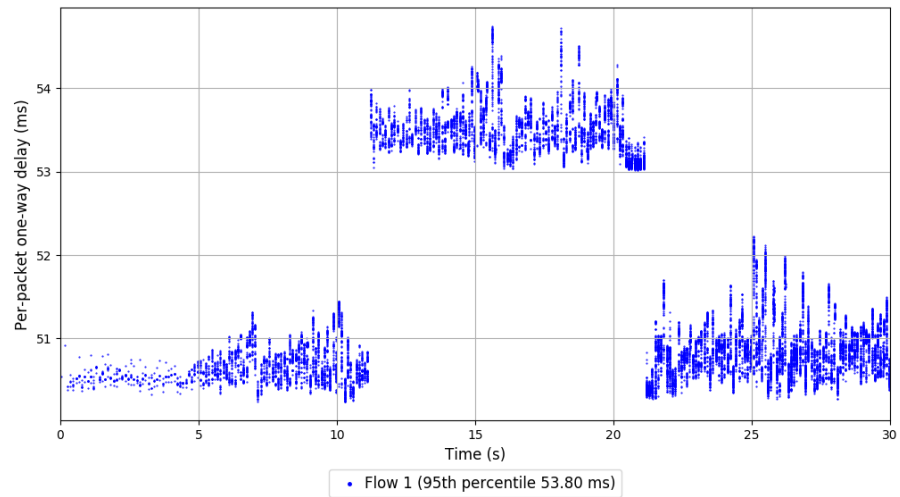
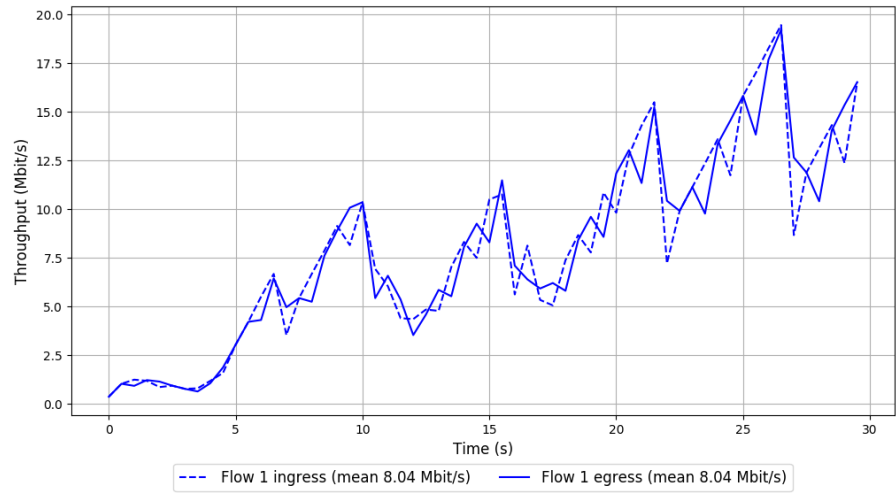
-- Flow 1:

Average throughput: 8.04 Mbit/s

95th percentile per-packet one-way delay: 53.803 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-02 06:32:47

End at: 2018-01-02 06:33:17

Below is generated by plot.py at 2018-01-02 08:31:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.13 Mbit/s

95th percentile per-packet one-way delay: 51.343 ms

Loss rate: 0.00%

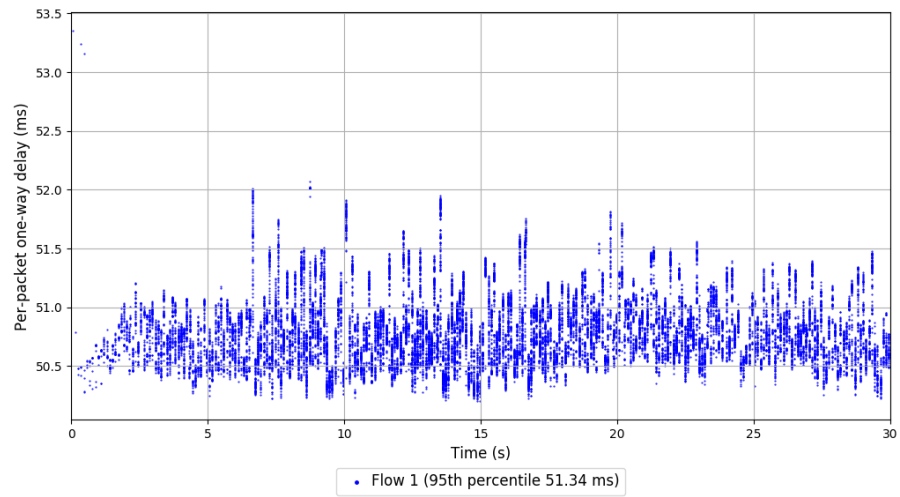
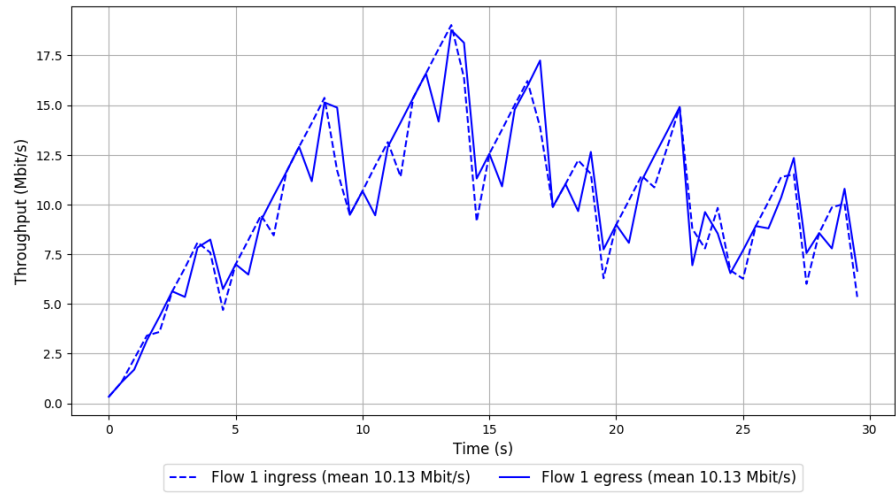
-- Flow 1:

Average throughput: 10.13 Mbit/s

95th percentile per-packet one-way delay: 51.343 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-02 06:44:05

End at: 2018-01-02 06:44:35

Below is generated by plot.py at 2018-01-02 08:31:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.87 Mbit/s

95th percentile per-packet one-way delay: 53.671 ms

Loss rate: 0.00%

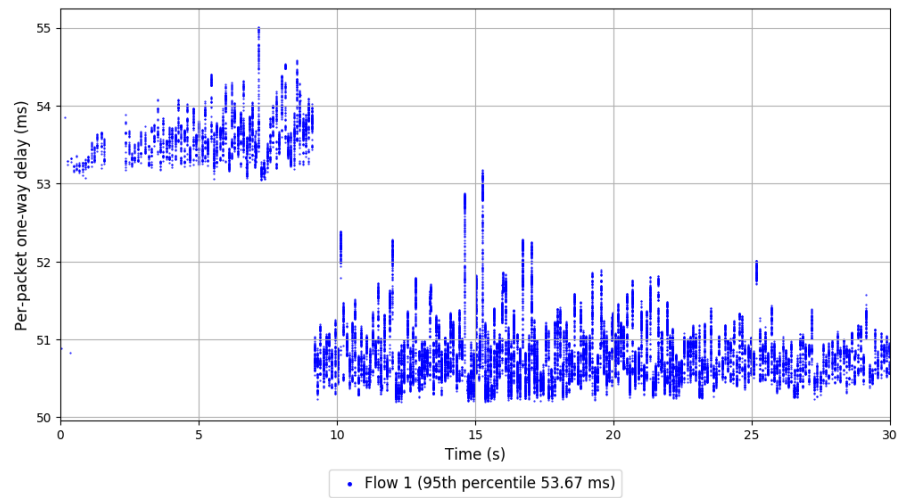
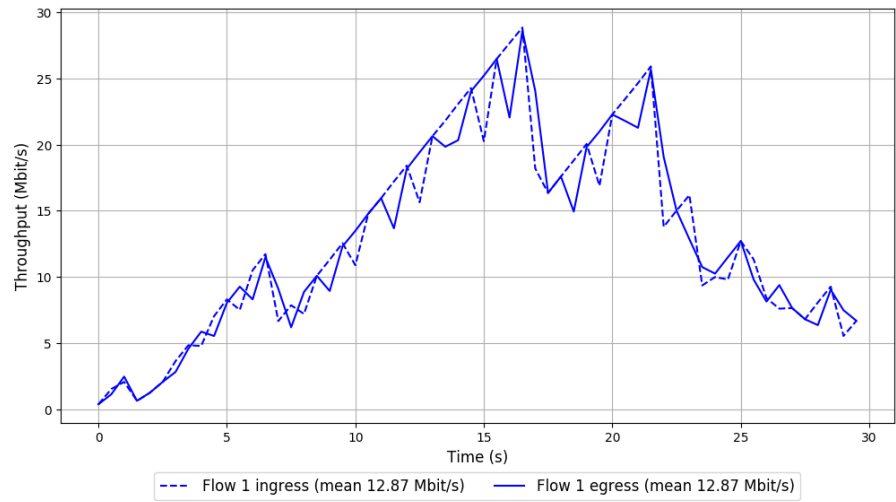
-- Flow 1:

Average throughput: 12.87 Mbit/s

95th percentile per-packet one-way delay: 53.671 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-02 06:55:36

End at: 2018-01-02 06:56:06

Below is generated by plot.py at 2018-01-02 08:31:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.29 Mbit/s

95th percentile per-packet one-way delay: 51.385 ms

Loss rate: 0.00%

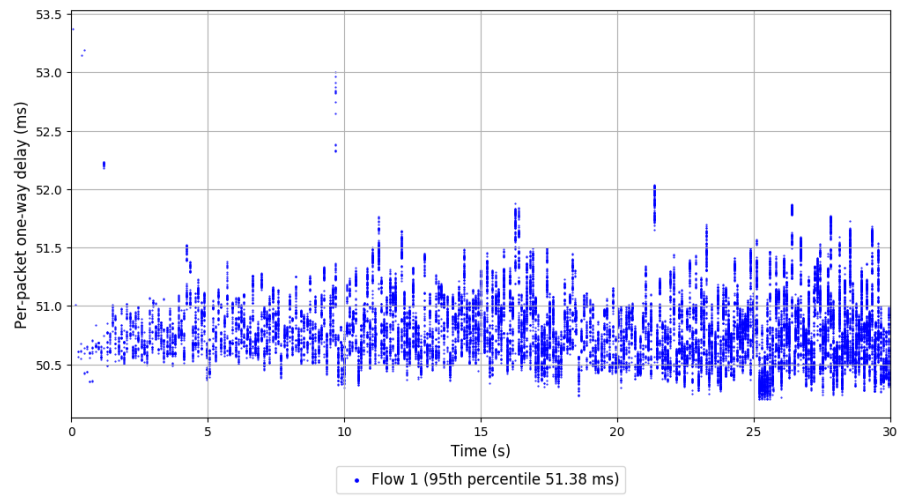
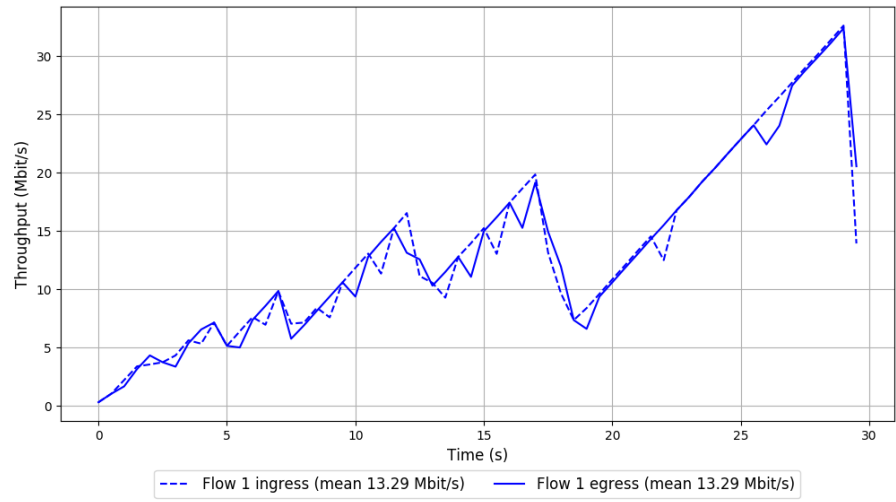
-- Flow 1:

Average throughput: 13.29 Mbit/s

95th percentile per-packet one-way delay: 51.385 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-02 07:07:32

End at: 2018-01-02 07:08:02

Below is generated by plot.py at 2018-01-02 08:31:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.33 Mbit/s

95th percentile per-packet one-way delay: 51.305 ms

Loss rate: 0.00%

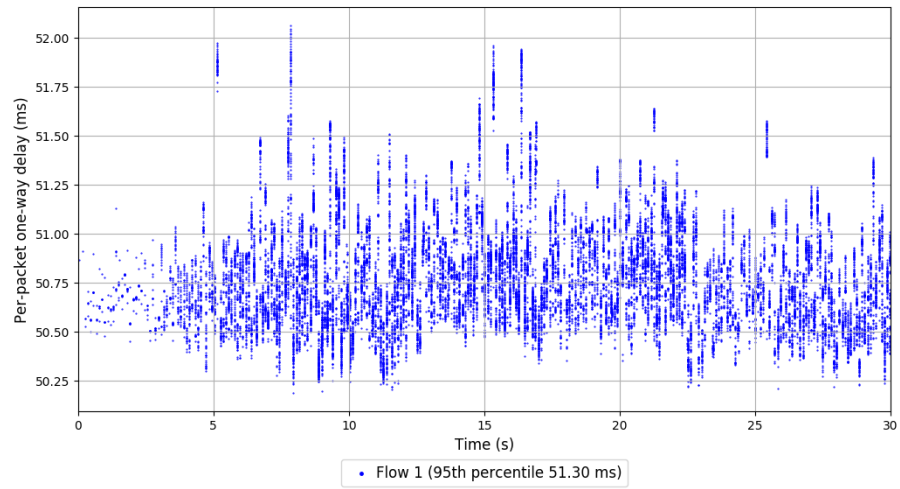
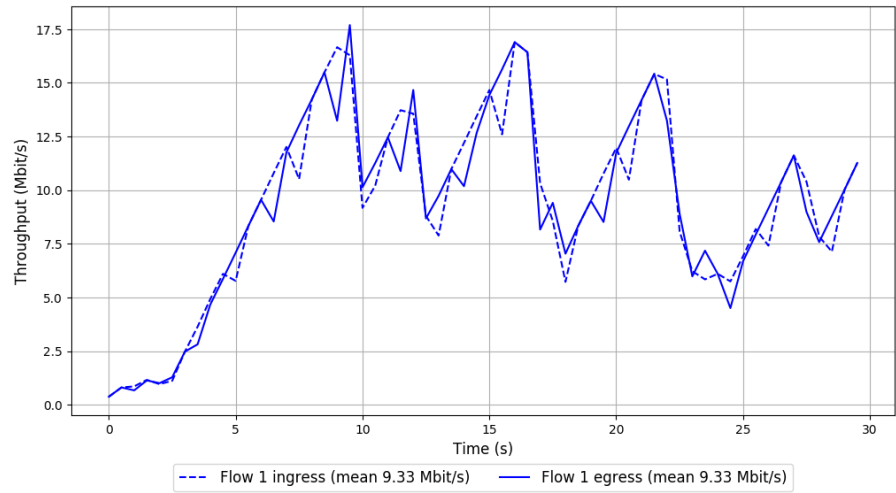
-- Flow 1:

Average throughput: 9.33 Mbit/s

95th percentile per-packet one-way delay: 51.305 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-02 07:19:01

End at: 2018-01-02 07:19:31

Below is generated by plot.py at 2018-01-02 08:31:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 53.260 ms

Loss rate: 0.77%

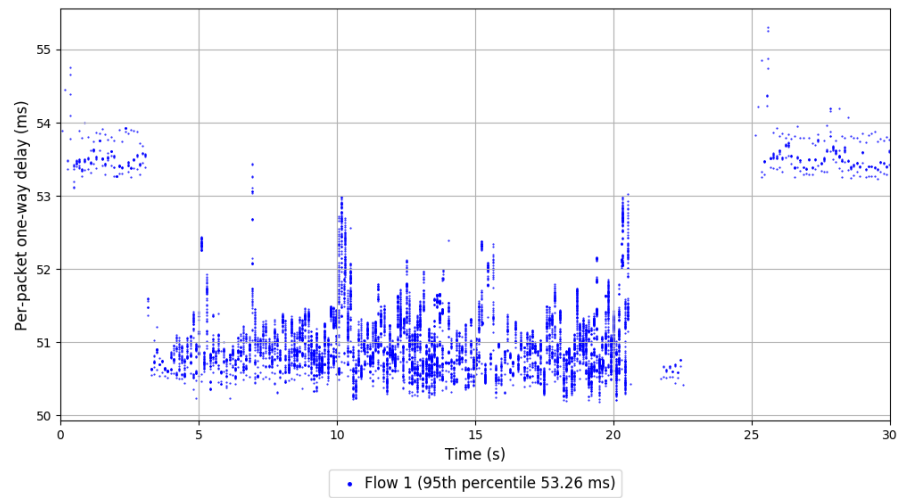
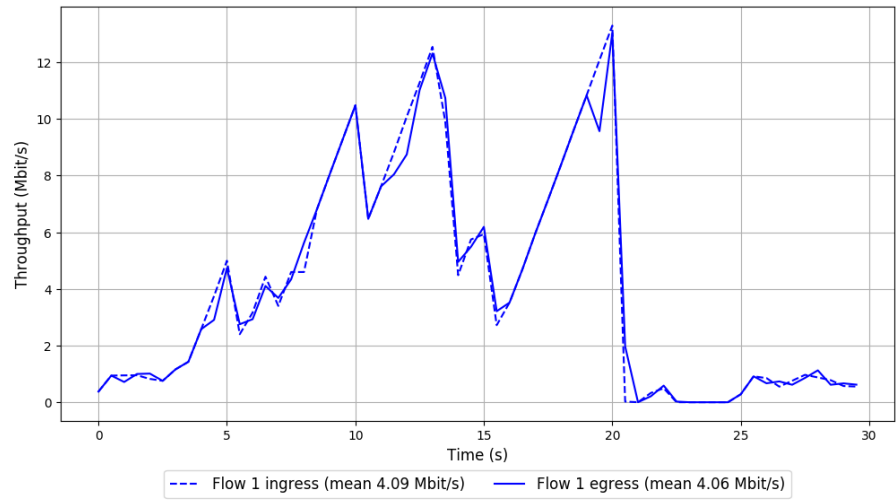
-- Flow 1:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 53.260 ms

Loss rate: 0.77%

Run 10: Report of LEDBAT — Data Link

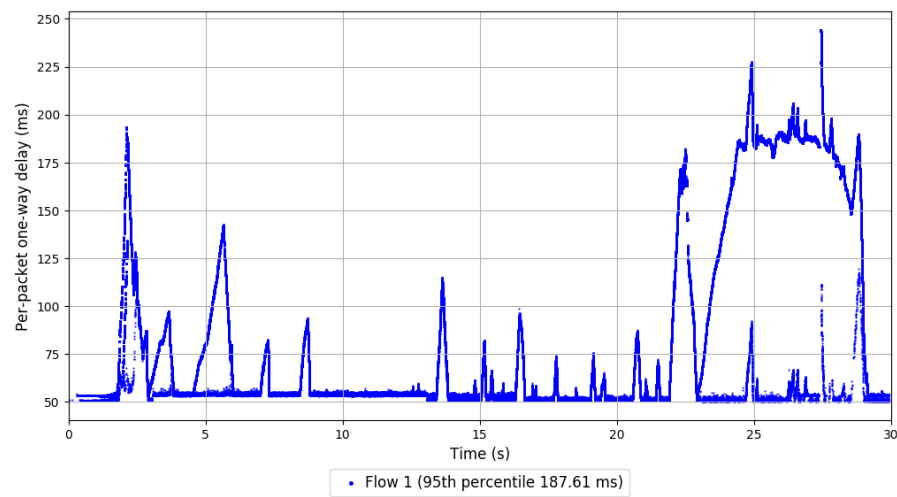
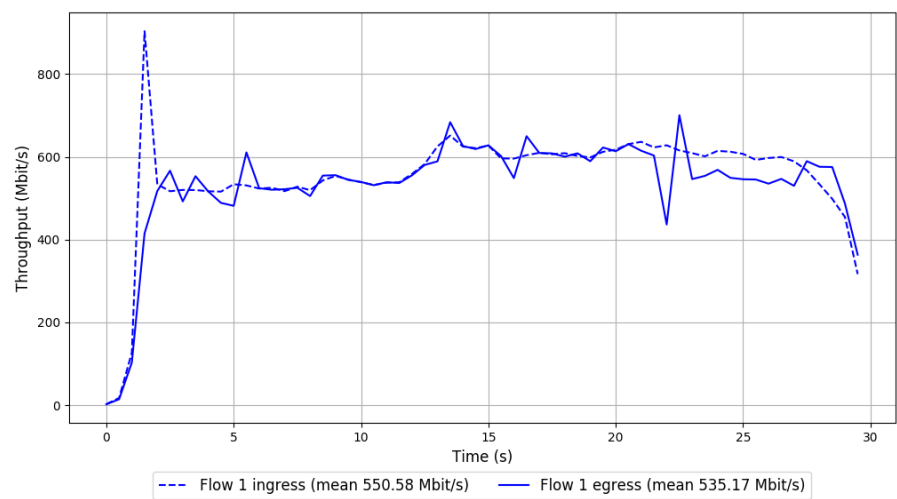


```
Run 1: Statistics of PCC

Start at: 2018-01-02 05:33:08
End at: 2018-01-02 05:33:38

# Below is generated by plot.py at 2018-01-02 08:40:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 535.17 Mbit/s
95th percentile per-packet one-way delay: 187.608 ms
Loss rate: 2.79%
-- Flow 1:
Average throughput: 535.17 Mbit/s
95th percentile per-packet one-way delay: 187.608 ms
Loss rate: 2.79%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-02 05:44:51

End at: 2018-01-02 05:45:21

Below is generated by plot.py at 2018-01-02 08:41:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 644.90 Mbit/s

95th percentile per-packet one-way delay: 146.206 ms

Loss rate: 0.79%

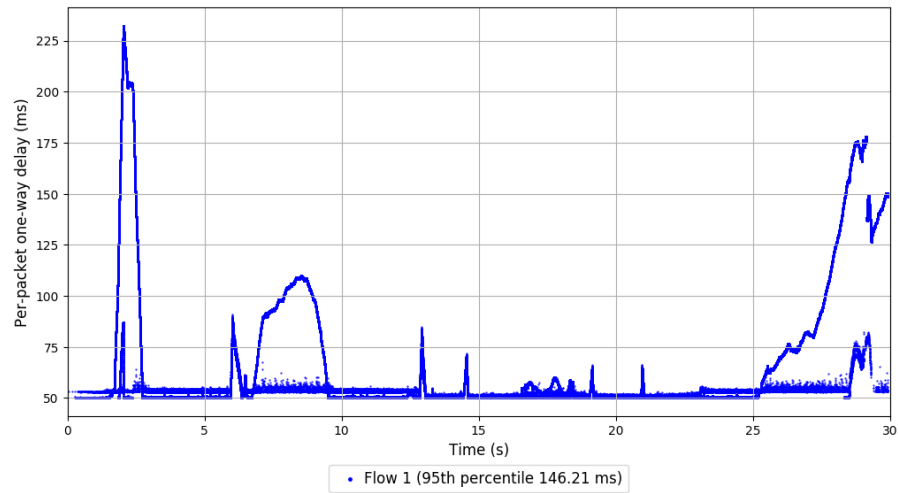
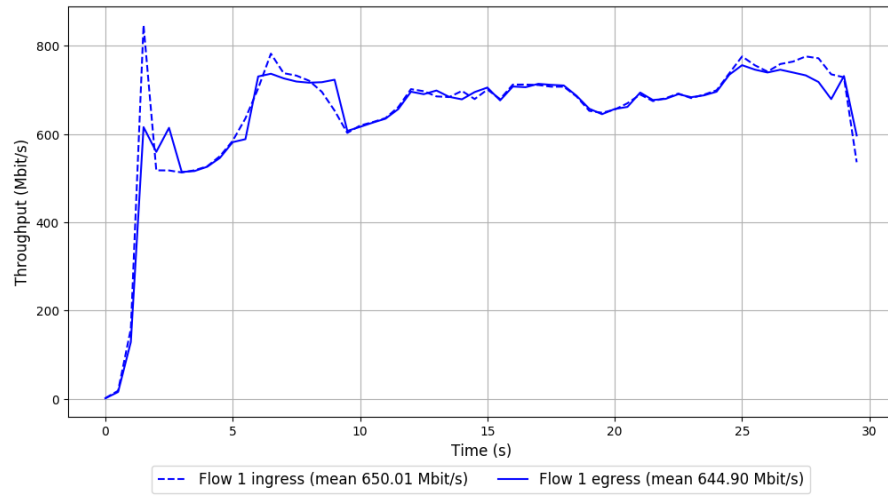
-- Flow 1:

Average throughput: 644.90 Mbit/s

95th percentile per-packet one-way delay: 146.206 ms

Loss rate: 0.79%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-02 05:56:17

End at: 2018-01-02 05:56:47

Below is generated by plot.py at 2018-01-02 08:41:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 610.59 Mbit/s

95th percentile per-packet one-way delay: 62.376 ms

Loss rate: 0.69%

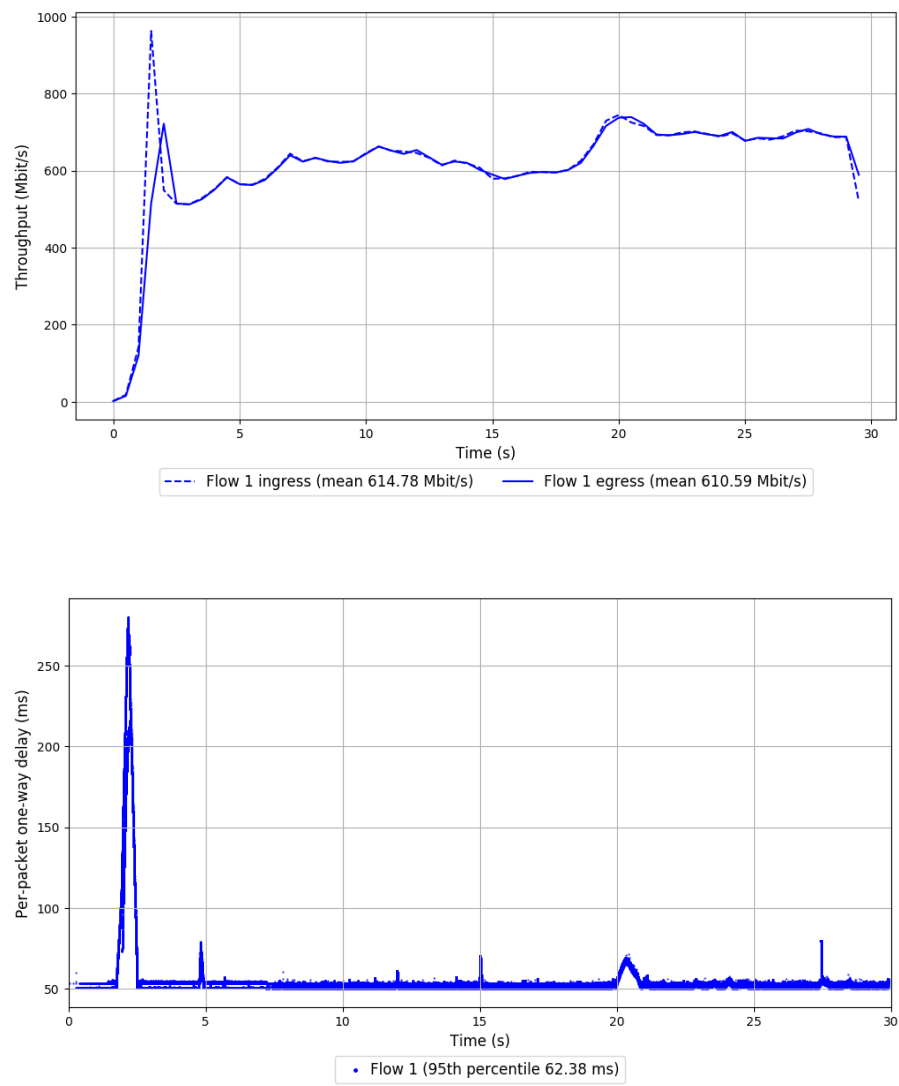
-- Flow 1:

Average throughput: 610.59 Mbit/s

95th percentile per-packet one-way delay: 62.376 ms

Loss rate: 0.69%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-02 06:07:46

End at: 2018-01-02 06:08:16

Below is generated by plot.py at 2018-01-02 08:41:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 633.49 Mbit/s

95th percentile per-packet one-way delay: 191.042 ms

Loss rate: 3.85%

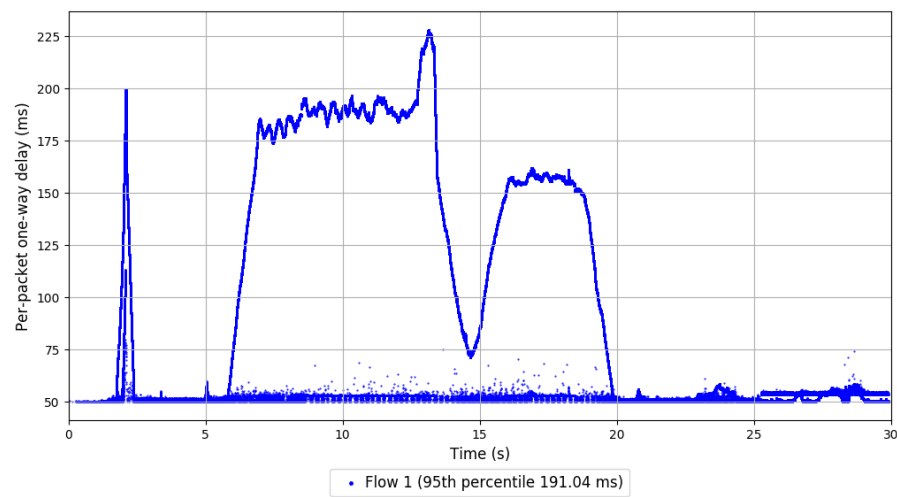
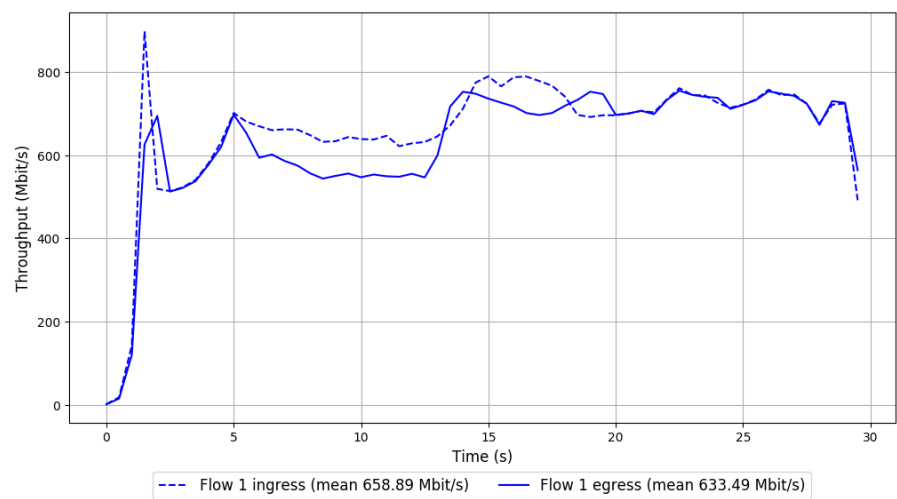
-- Flow 1:

Average throughput: 633.49 Mbit/s

95th percentile per-packet one-way delay: 191.042 ms

Loss rate: 3.85%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-02 06:19:36

End at: 2018-01-02 06:20:06

Below is generated by plot.py at 2018-01-02 08:41:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 622.51 Mbit/s

95th percentile per-packet one-way delay: 155.208 ms

Loss rate: 0.70%

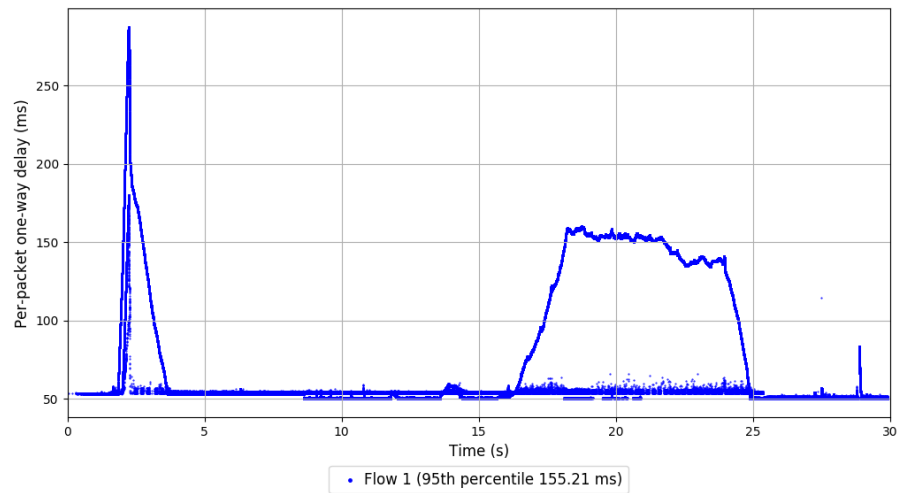
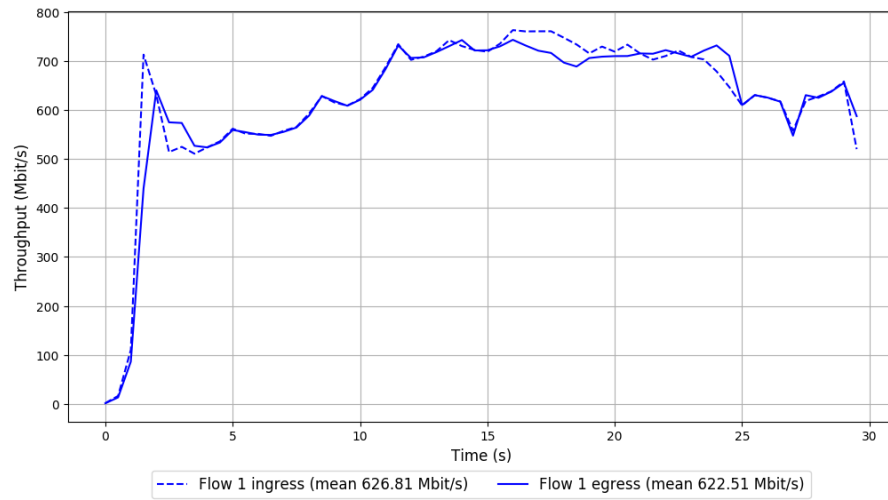
-- Flow 1:

Average throughput: 622.51 Mbit/s

95th percentile per-packet one-way delay: 155.208 ms

Loss rate: 0.70%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-02 06:31:08

End at: 2018-01-02 06:31:38

Below is generated by plot.py at 2018-01-02 08:41:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 659.35 Mbit/s

95th percentile per-packet one-way delay: 66.041 ms

Loss rate: 0.31%

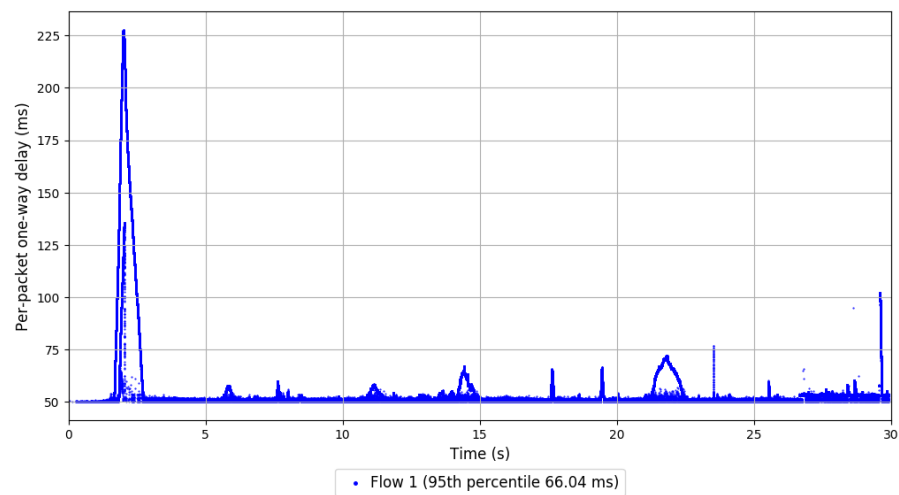
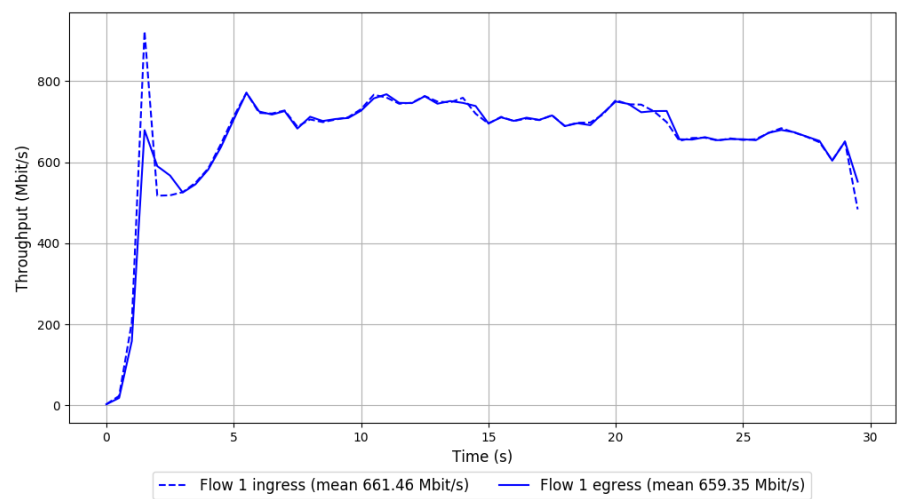
-- Flow 1:

Average throughput: 659.35 Mbit/s

95th percentile per-packet one-way delay: 66.041 ms

Loss rate: 0.31%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-02 06:42:27

End at: 2018-01-02 06:42:57

Below is generated by plot.py at 2018-01-02 08:42:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 654.96 Mbit/s

95th percentile per-packet one-way delay: 137.273 ms

Loss rate: 0.33%

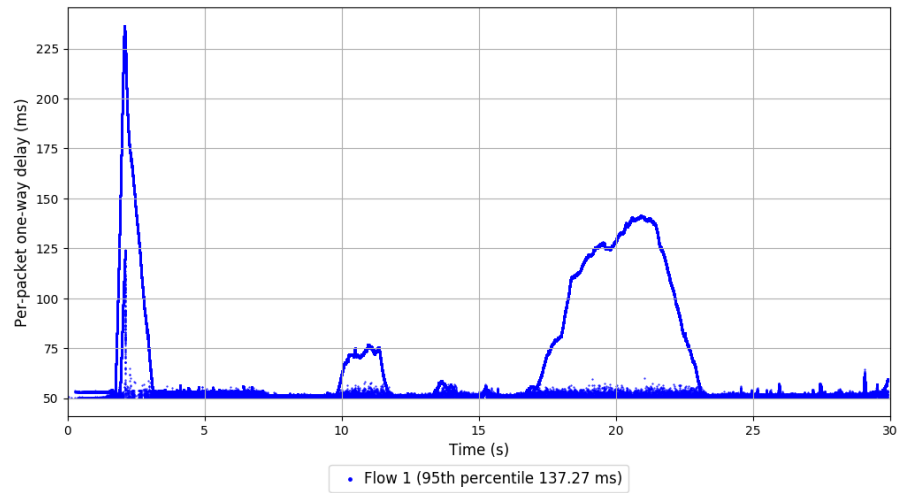
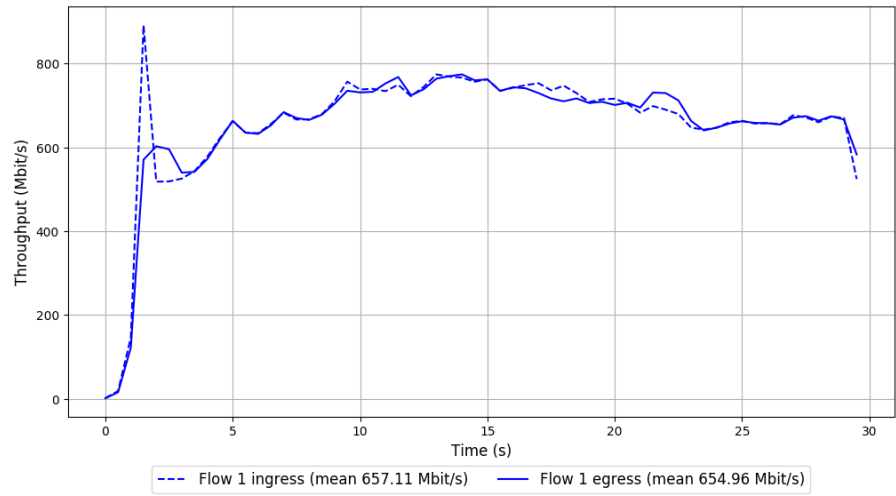
-- Flow 1:

Average throughput: 654.96 Mbit/s

95th percentile per-packet one-way delay: 137.273 ms

Loss rate: 0.33%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-02 06:53:57

End at: 2018-01-02 06:54:27

Below is generated by plot.py at 2018-01-02 08:42:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 656.23 Mbit/s

95th percentile per-packet one-way delay: 153.525 ms

Loss rate: 1.02%

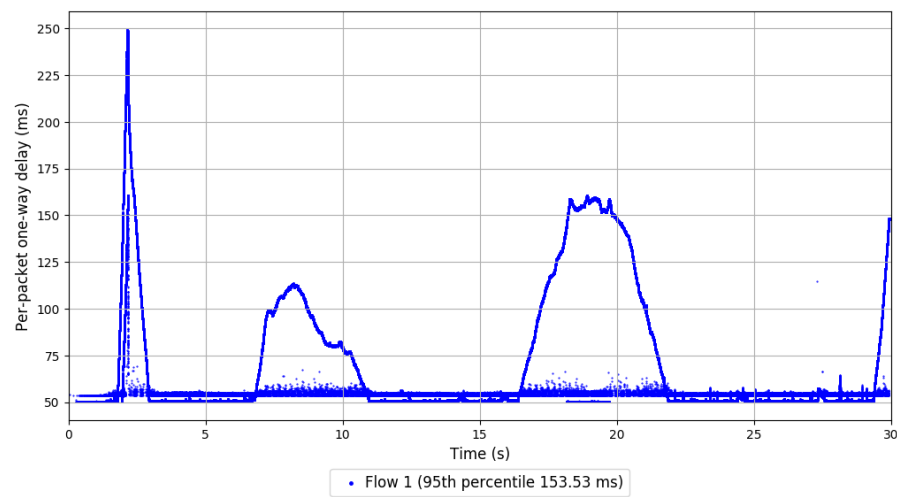
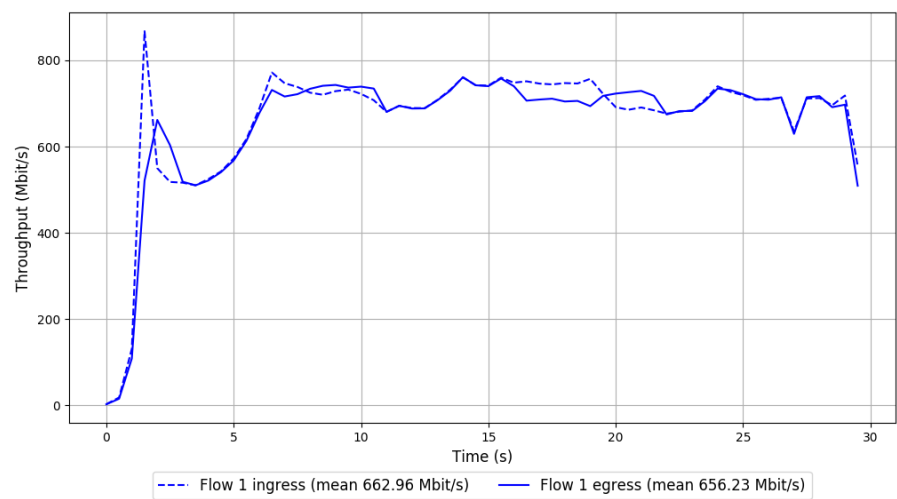
-- Flow 1:

Average throughput: 656.23 Mbit/s

95th percentile per-packet one-way delay: 153.525 ms

Loss rate: 1.02%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-02 07:05:54

End at: 2018-01-02 07:06:24

Below is generated by plot.py at 2018-01-02 08:51:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 641.69 Mbit/s

95th percentile per-packet one-way delay: 61.308 ms

Loss rate: 0.33%

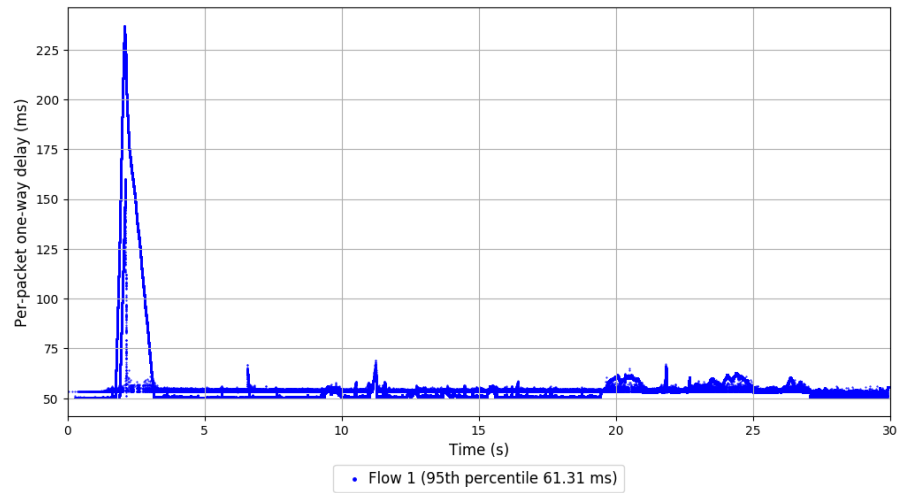
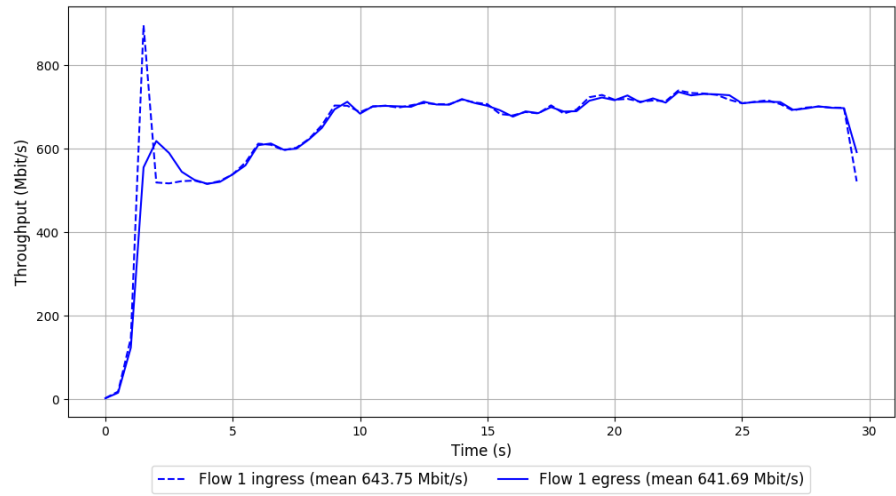
-- Flow 1:

Average throughput: 641.69 Mbit/s

95th percentile per-packet one-way delay: 61.308 ms

Loss rate: 0.33%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-02 07:17:27

End at: 2018-01-02 07:17:57

Below is generated by plot.py at 2018-01-02 08:51:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 531.82 Mbit/s

95th percentile per-packet one-way delay: 182.321 ms

Loss rate: 3.18%

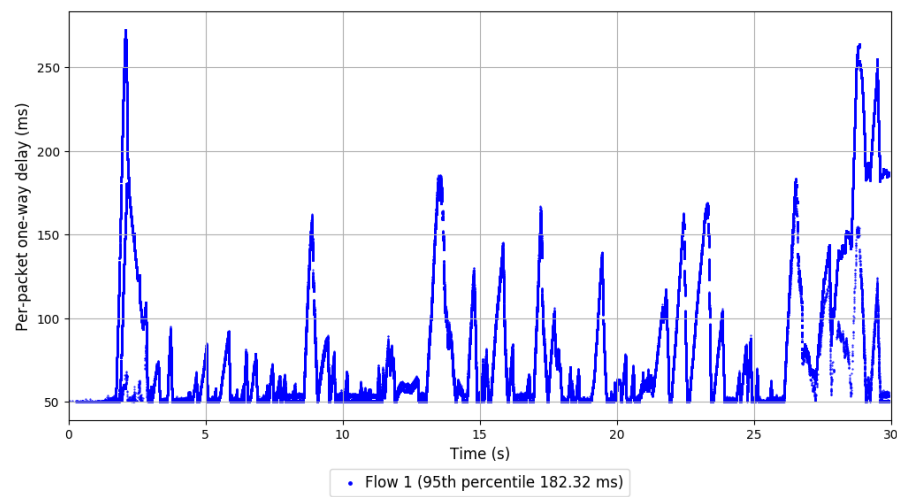
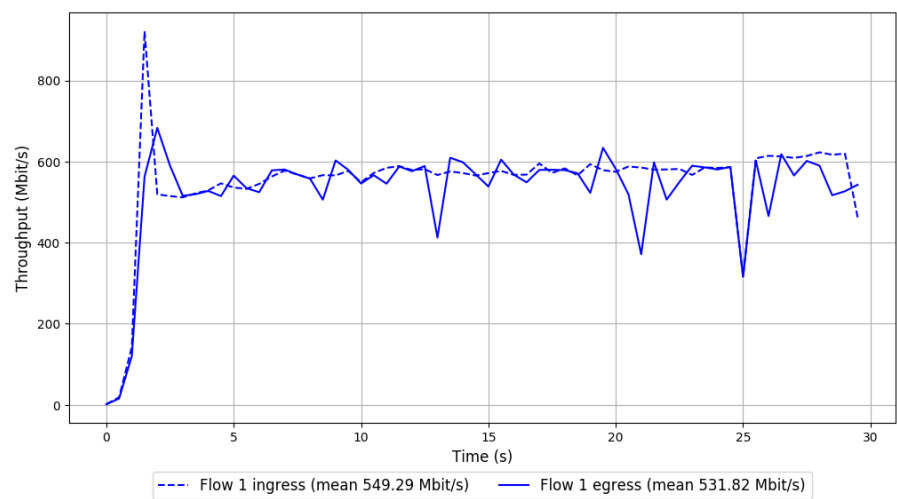
-- Flow 1:

Average throughput: 531.82 Mbit/s

95th percentile per-packet one-way delay: 182.321 ms

Loss rate: 3.18%

Run 10: Report of PCC — Data Link

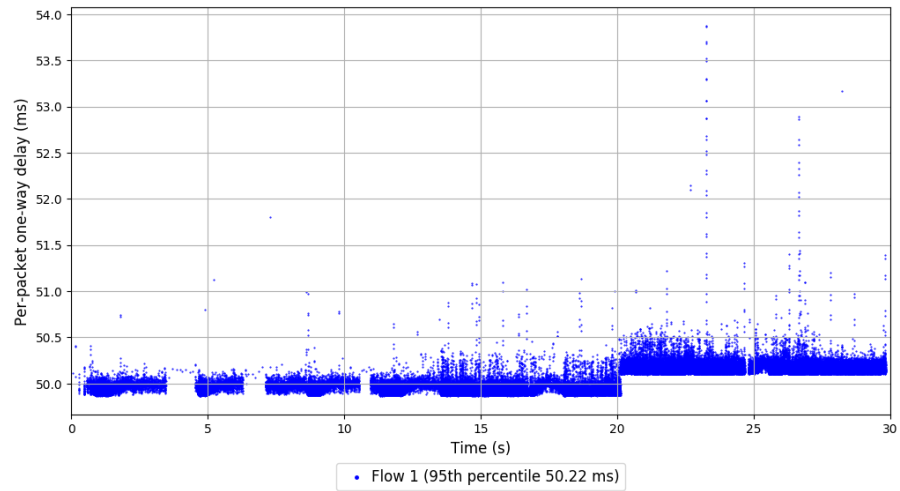
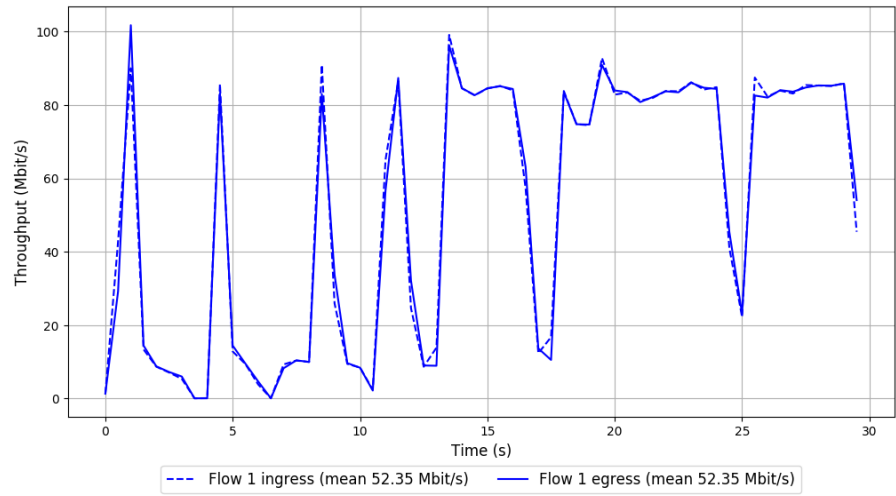


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-02 05:44:11
End at: 2018-01-02 05:44:41

# Below is generated by plot.py at 2018-01-02 08:51:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.35 Mbit/s
95th percentile per-packet one-way delay: 50.219 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.35 Mbit/s
95th percentile per-packet one-way delay: 50.219 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-02 05:55:36

End at: 2018-01-02 05:56:06

Below is generated by plot.py at 2018-01-02 08:51:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.89 Mbit/s

95th percentile per-packet one-way delay: 53.662 ms

Loss rate: 0.01%

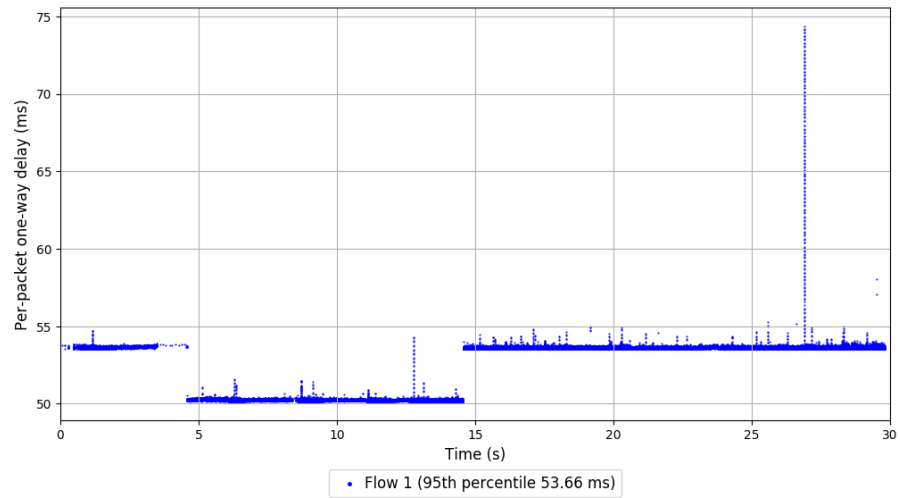
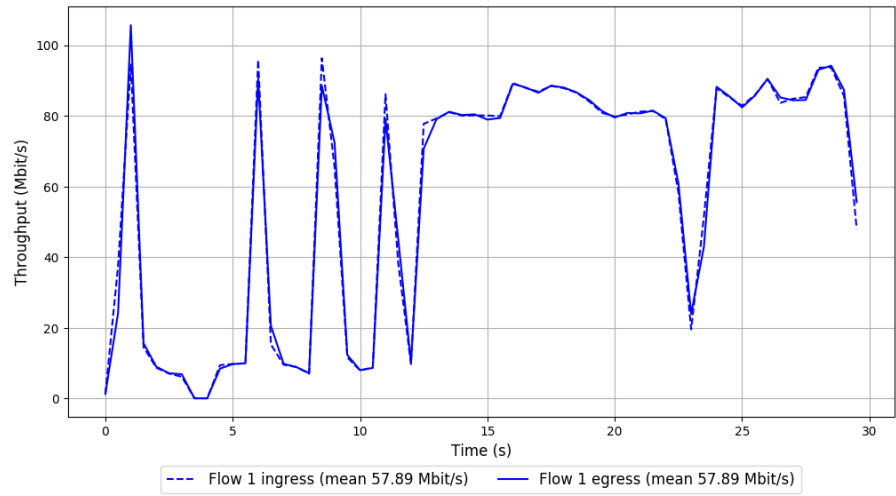
-- Flow 1:

Average throughput: 57.89 Mbit/s

95th percentile per-packet one-way delay: 53.662 ms

Loss rate: 0.01%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-02 06:07:05

End at: 2018-01-02 06:07:35

Below is generated by plot.py at 2018-01-02 08:51:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.53 Mbit/s

95th percentile per-packet one-way delay: 53.648 ms

Loss rate: 0.00%

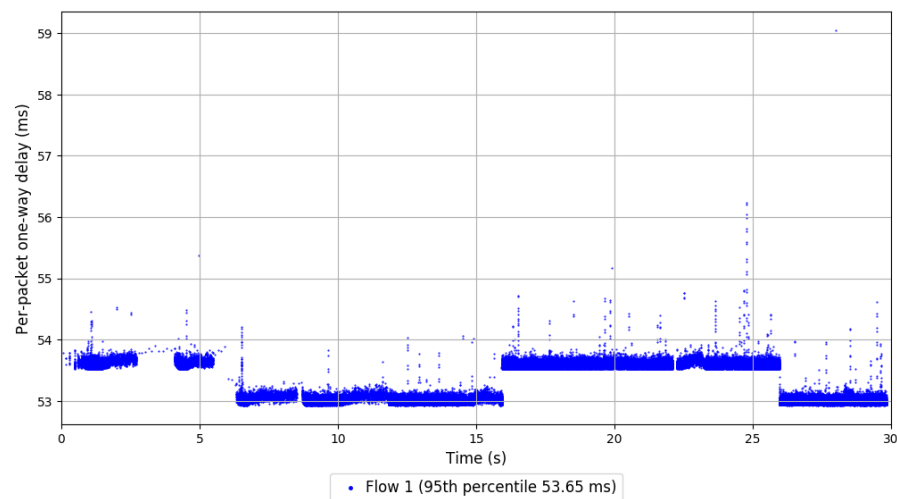
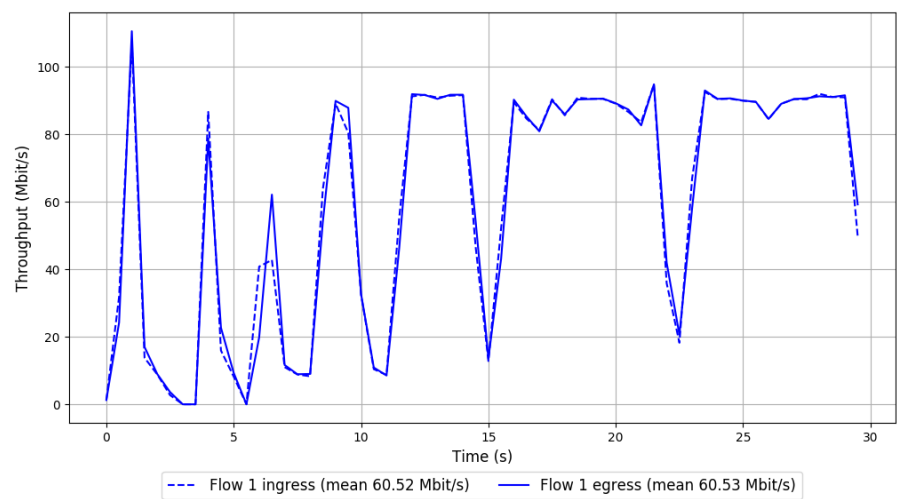
-- Flow 1:

Average throughput: 60.53 Mbit/s

95th percentile per-packet one-way delay: 53.648 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-02 06:18:55

End at: 2018-01-02 06:19:25

Below is generated by plot.py at 2018-01-02 08:51:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.85 Mbit/s

95th percentile per-packet one-way delay: 53.274 ms

Loss rate: 0.01%

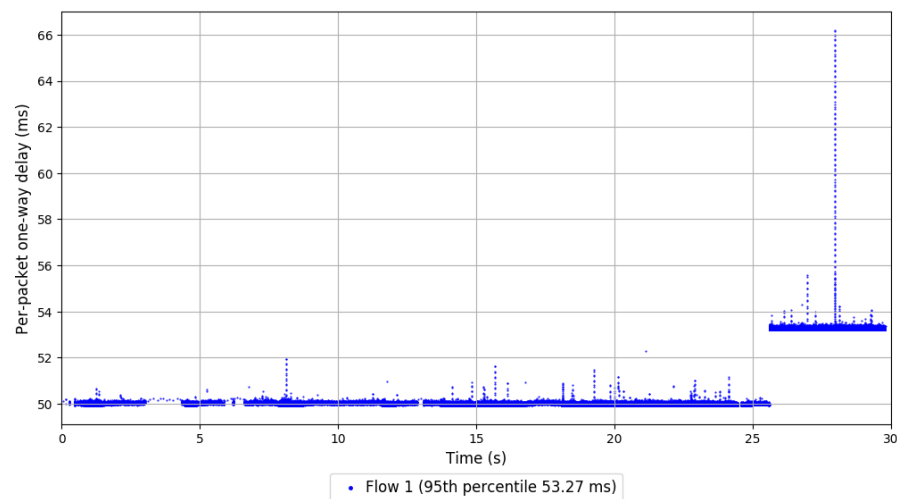
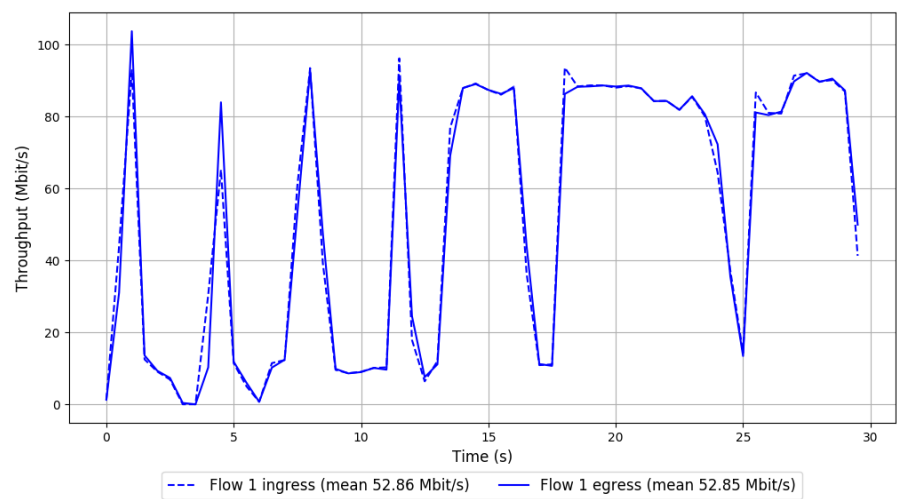
-- Flow 1:

Average throughput: 52.85 Mbit/s

95th percentile per-packet one-way delay: 53.274 ms

Loss rate: 0.01%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-02 06:30:27

End at: 2018-01-02 06:30:57

Below is generated by plot.py at 2018-01-02 08:51:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.65 Mbit/s

95th percentile per-packet one-way delay: 53.305 ms

Loss rate: 0.01%

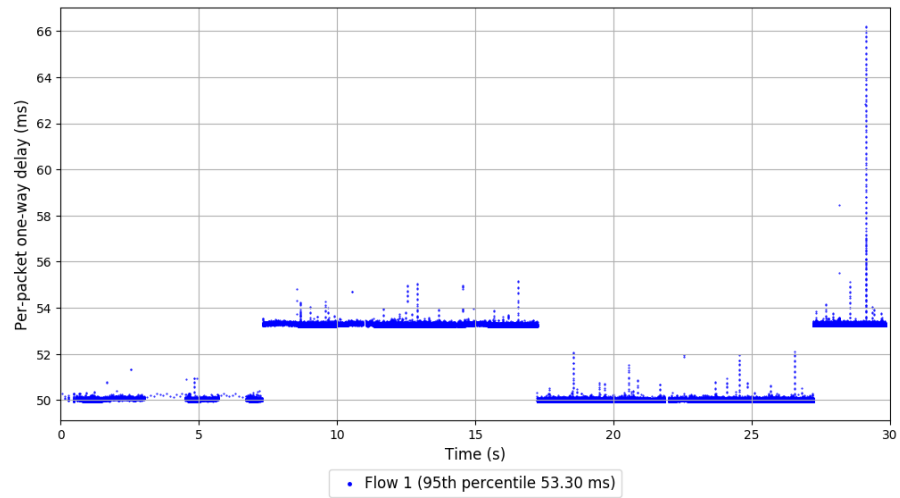
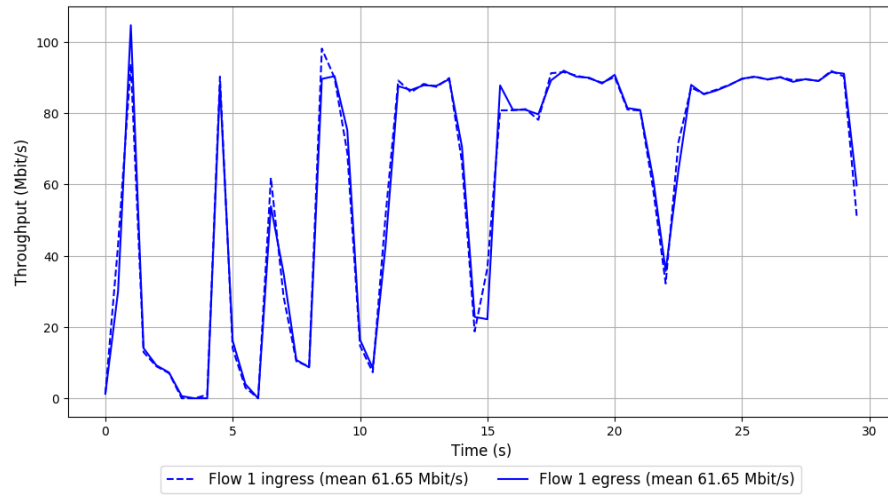
-- Flow 1:

Average throughput: 61.65 Mbit/s

95th percentile per-packet one-way delay: 53.305 ms

Loss rate: 0.01%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-02 06:41:46

End at: 2018-01-02 06:42:16

Below is generated by plot.py at 2018-01-02 08:51:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.70 Mbit/s

95th percentile per-packet one-way delay: 53.370 ms

Loss rate: 0.01%

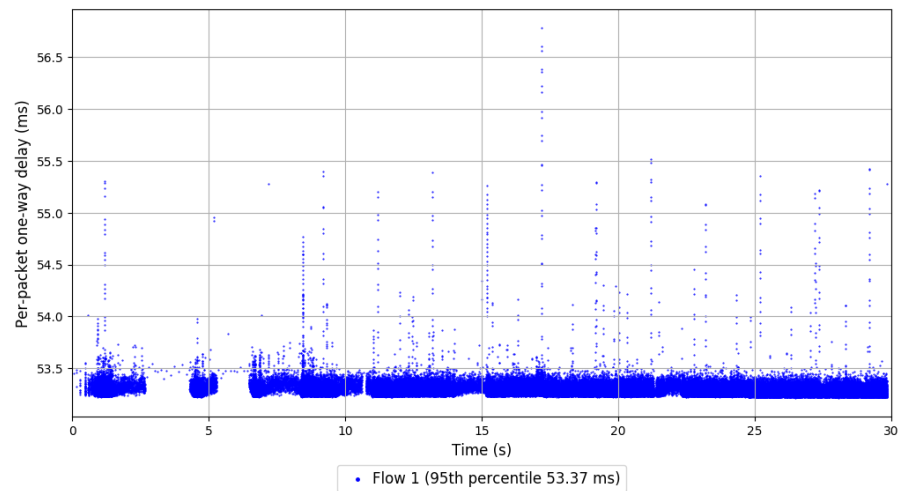
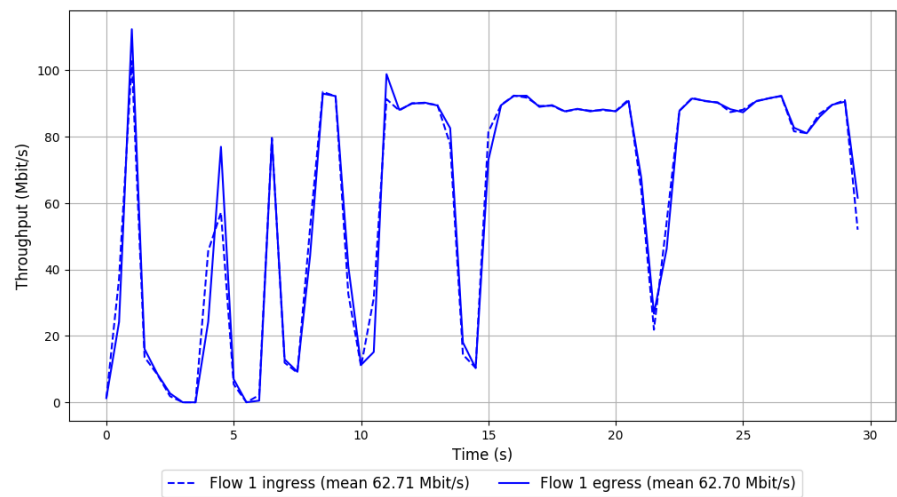
-- Flow 1:

Average throughput: 62.70 Mbit/s

95th percentile per-packet one-way delay: 53.370 ms

Loss rate: 0.01%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-02 06:53:16

End at: 2018-01-02 06:53:46

Below is generated by plot.py at 2018-01-02 08:51:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.25 Mbit/s

95th percentile per-packet one-way delay: 53.597 ms

Loss rate: 0.00%

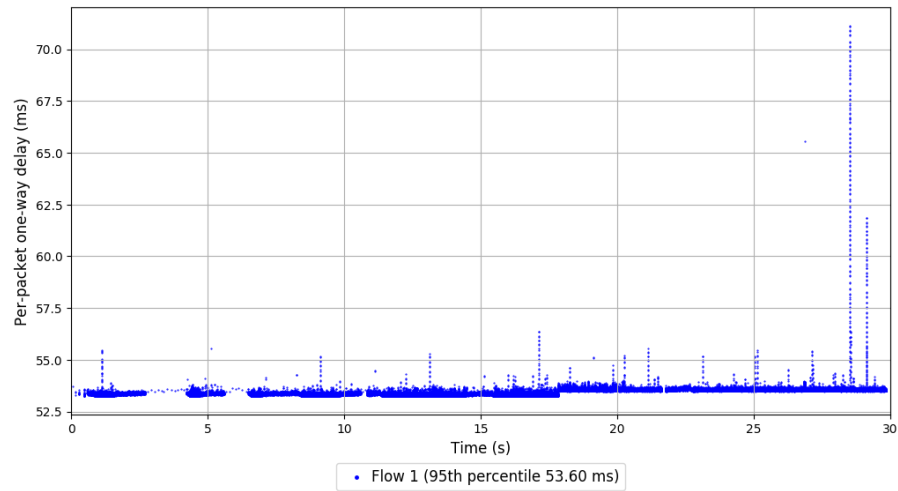
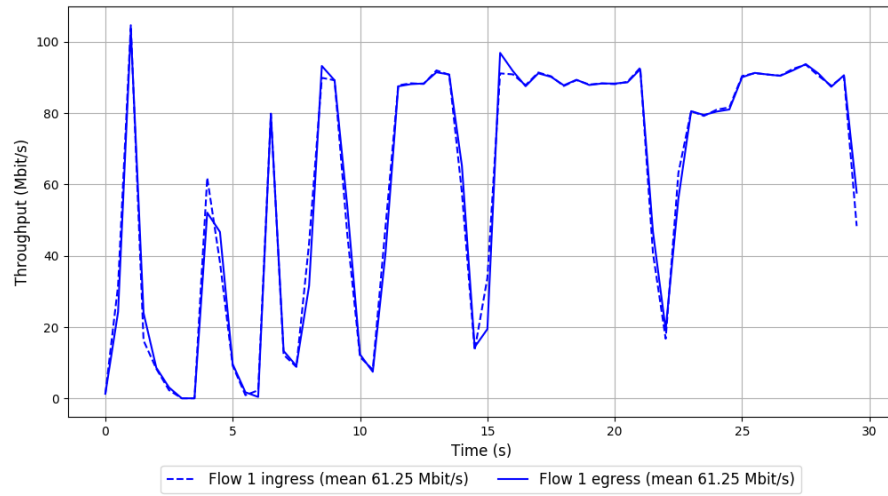
-- Flow 1:

Average throughput: 61.25 Mbit/s

95th percentile per-packet one-way delay: 53.597 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-02 07:05:12

End at: 2018-01-02 07:05:42

Below is generated by plot.py at 2018-01-02 08:51:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.88 Mbit/s

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

Loss rate: 0.00%

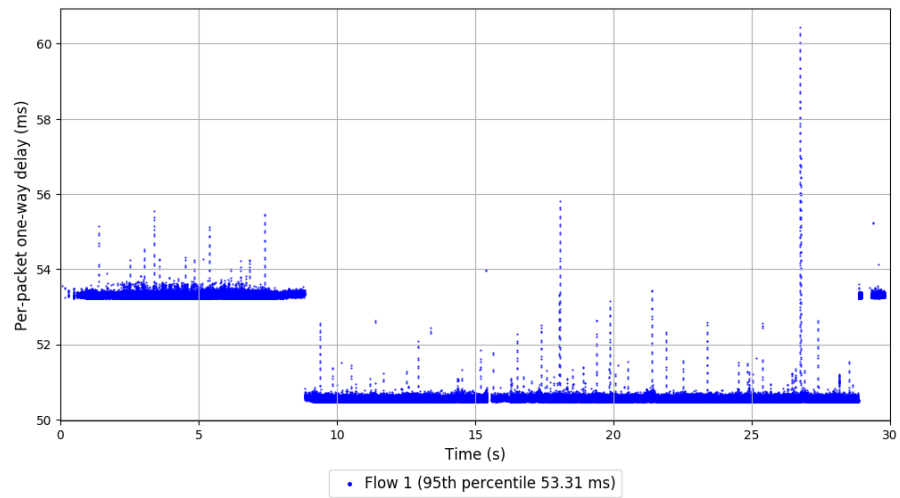
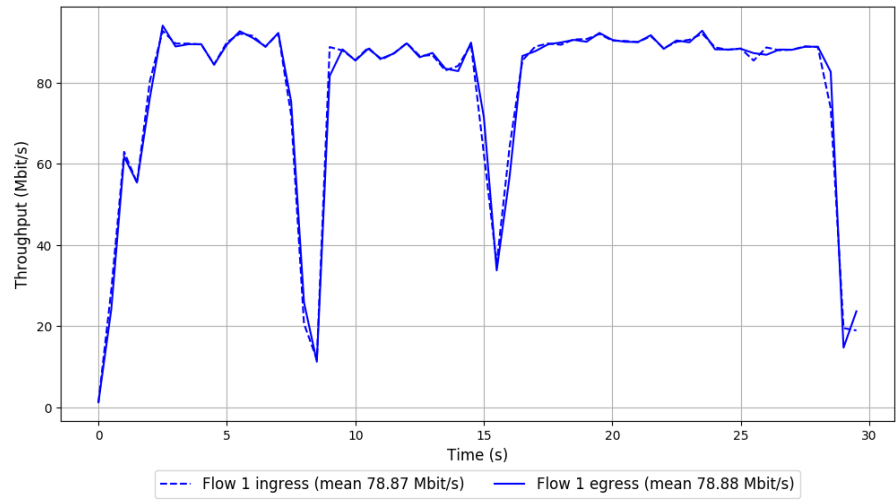
-- Flow 1:

Average throughput: 78.88 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-02 07:16:47

End at: 2018-01-02 07:17:17

Below is generated by plot.py at 2018-01-02 08:51:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 40.23 Mbit/s

95th percentile per-packet one-way delay: 53.676 ms

Loss rate: 0.00%

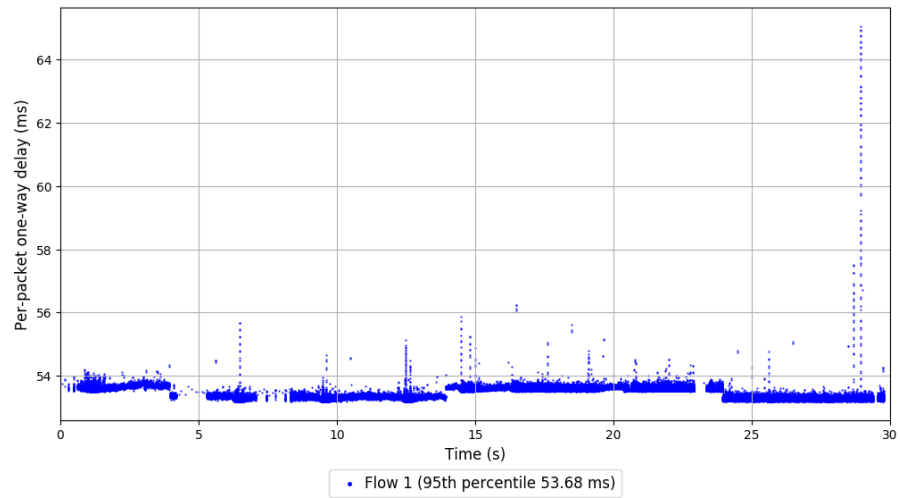
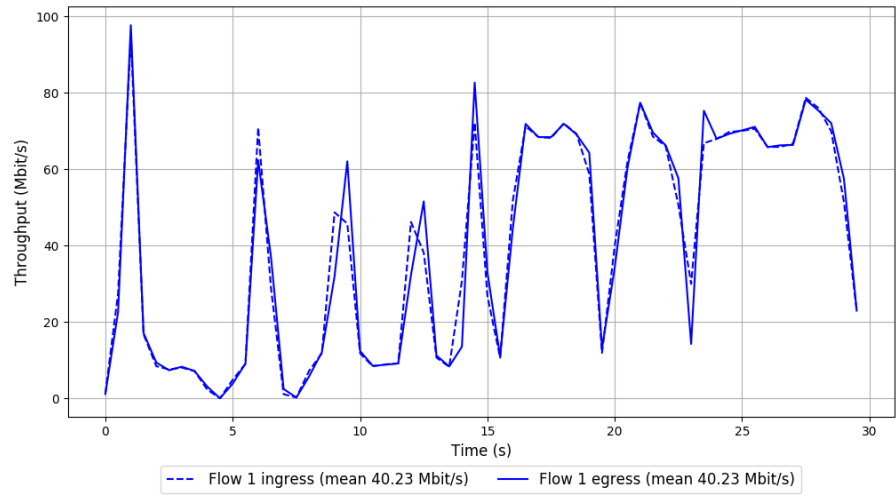
-- Flow 1:

Average throughput: 40.23 Mbit/s

95th percentile per-packet one-way delay: 53.676 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

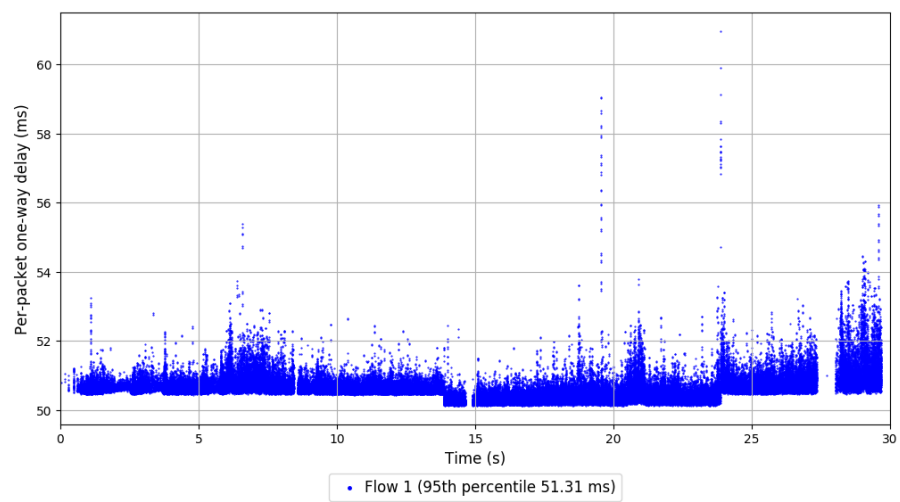
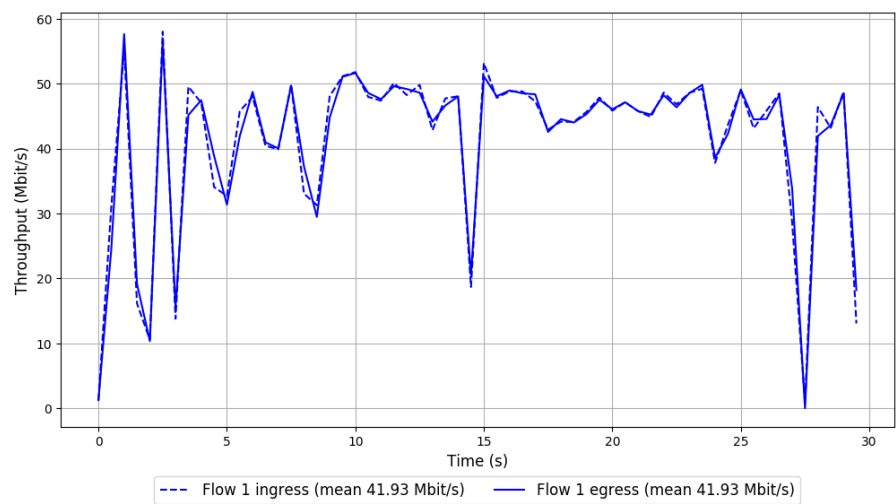


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-02 07:27:27
End at: 2018-01-02 07:27:57

# Below is generated by plot.py at 2018-01-02 08:51:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.93 Mbit/s
95th percentile per-packet one-way delay: 51.312 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.93 Mbit/s
95th percentile per-packet one-way delay: 51.312 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

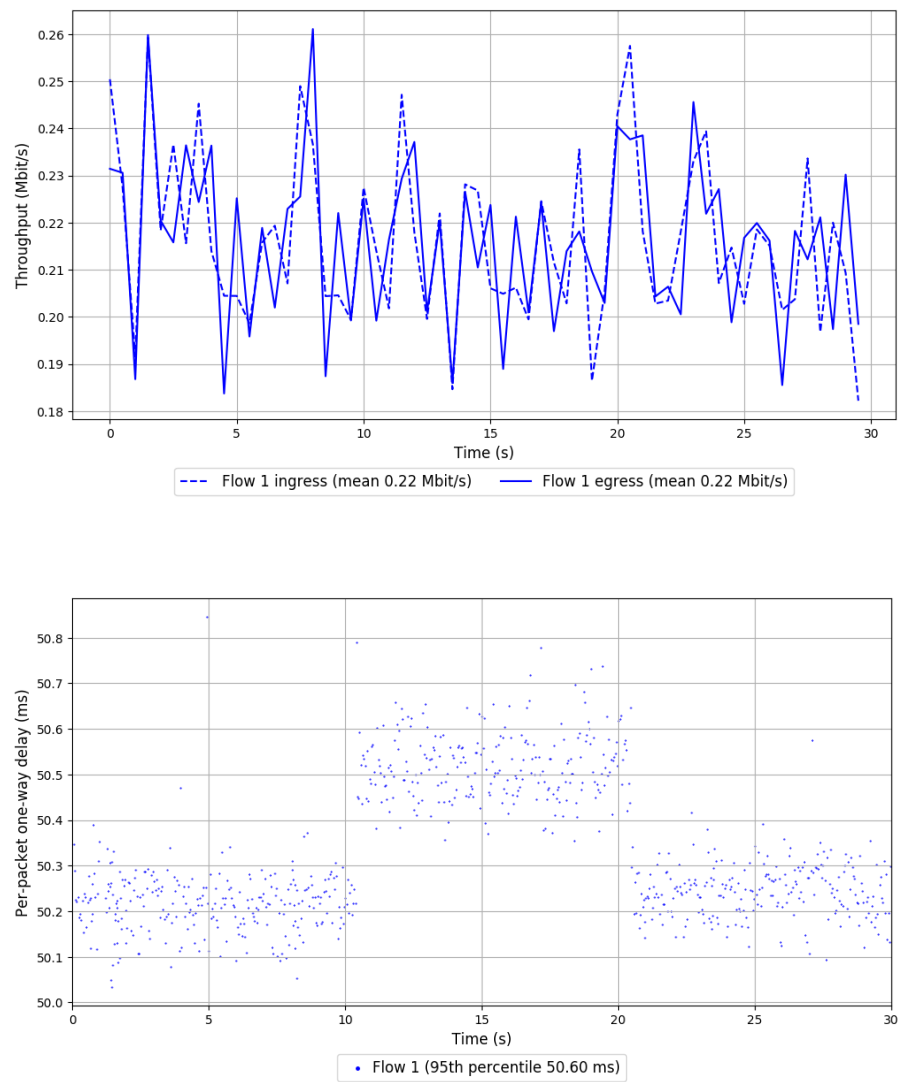


```
Run 1: Statistics of SCReAM

Start at: 2018-01-02 05:35:21
End at: 2018-01-02 05:35:51

# Below is generated by plot.py at 2018-01-02 08:51:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.596 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.596 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

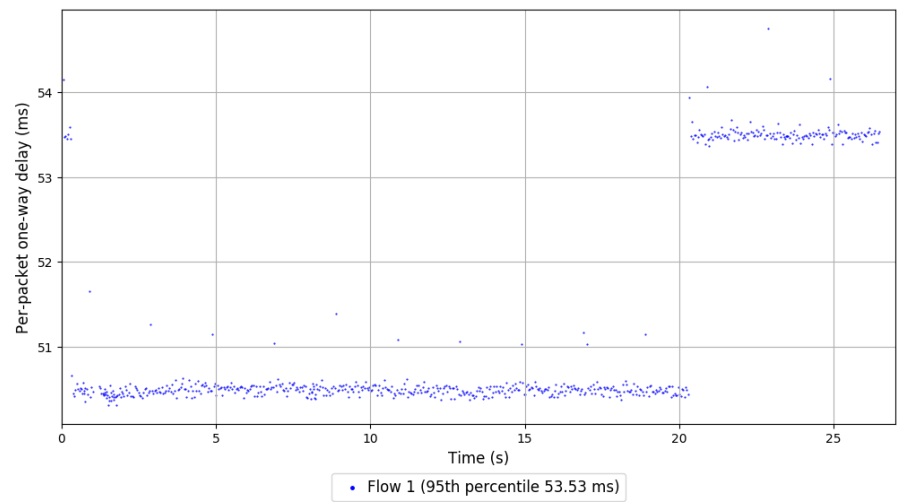
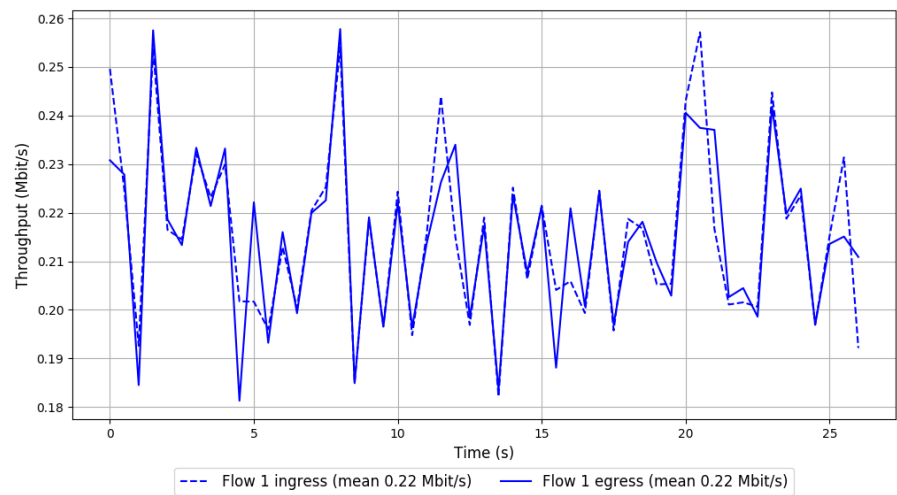


```
Run 2: Statistics of SCReAM

Start at: 2018-01-02 05:47:07
End at: 2018-01-02 05:47:37

# Below is generated by plot.py at 2018-01-02 08:51:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.530 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.530 ms
Loss rate: 0.14%
```

Run 2: Report of SReAM — Data Link

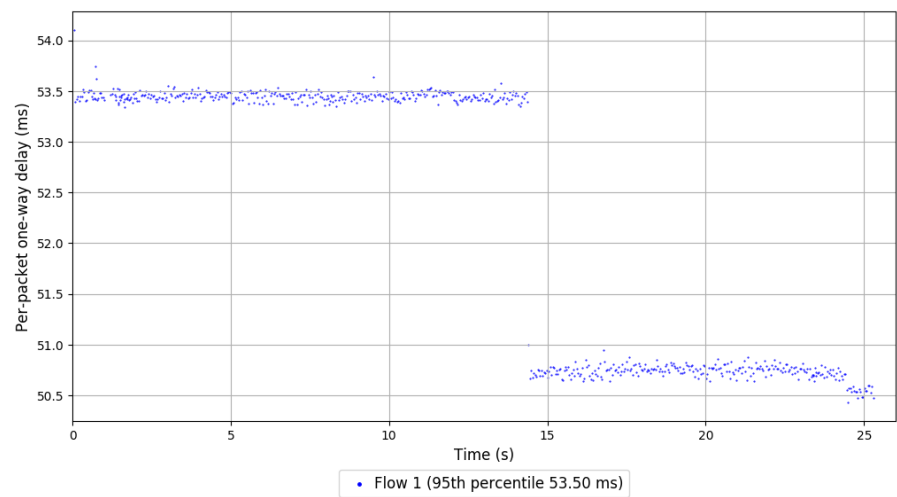
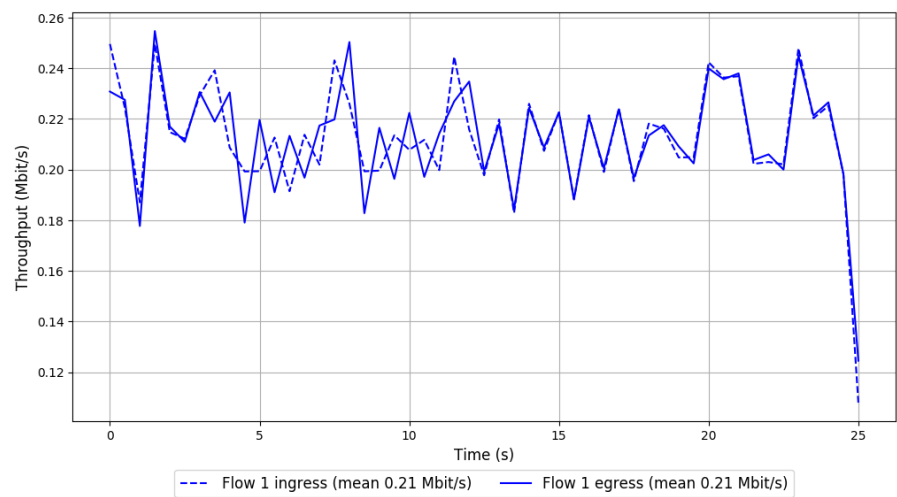


```
Run 3: Statistics of SCReAM

Start at: 2018-01-02 05:58:32
End at: 2018-01-02 05:59:02

# Below is generated by plot.py at 2018-01-02 08:51:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.502 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.502 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

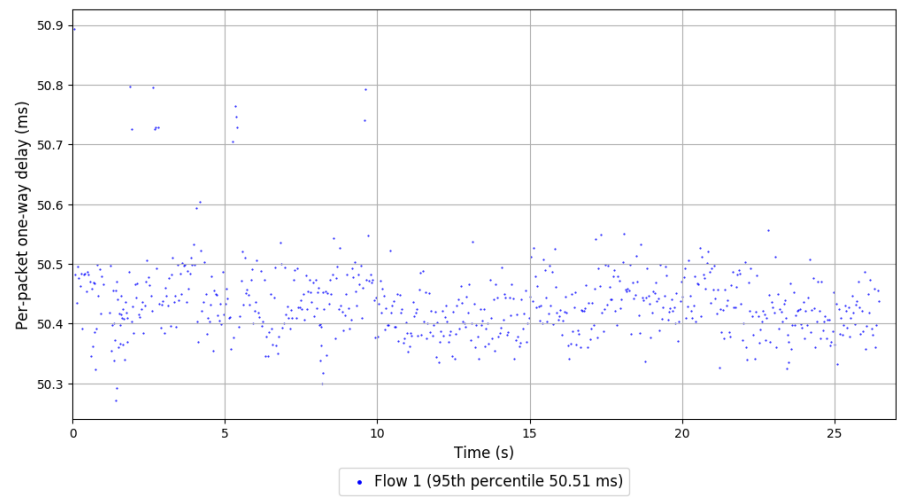
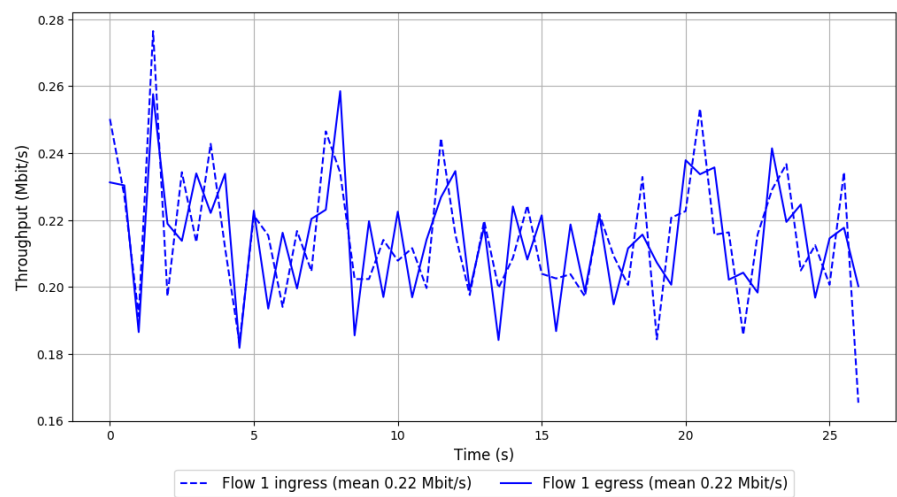


```
Run 4: Statistics of SCReAM

Start at: 2018-01-02 06:10:01
End at: 2018-01-02 06:10:31

# Below is generated by plot.py at 2018-01-02 08:51:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.512 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.512 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link

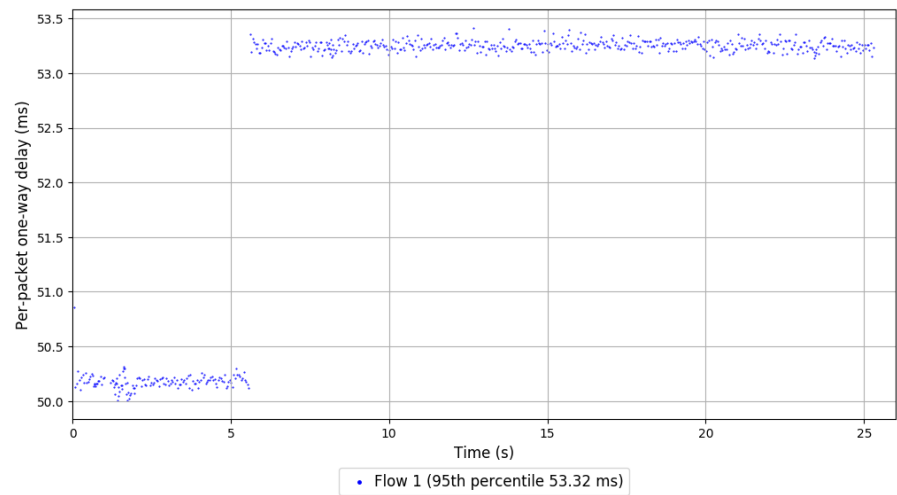
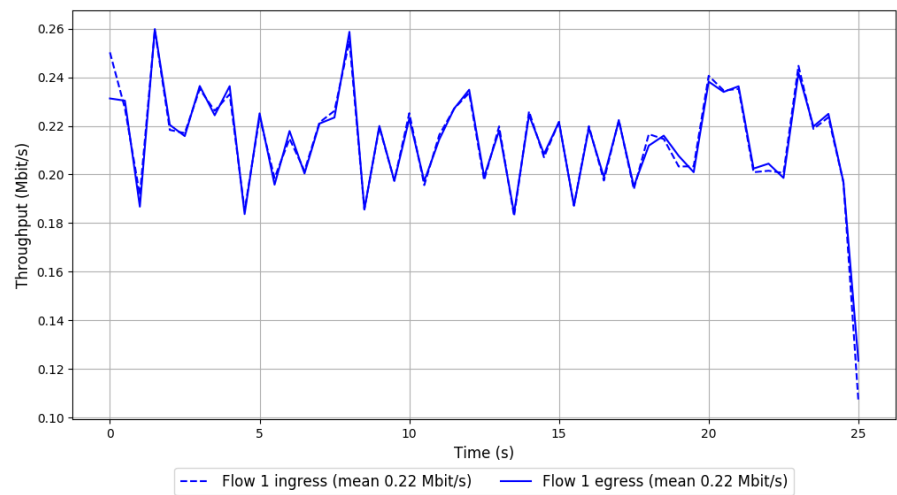


```
Run 5: Statistics of SCReAM

Start at: 2018-01-02 06:21:51
End at: 2018-01-02 06:22:21

# Below is generated by plot.py at 2018-01-02 08:51:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.320 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.320 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link

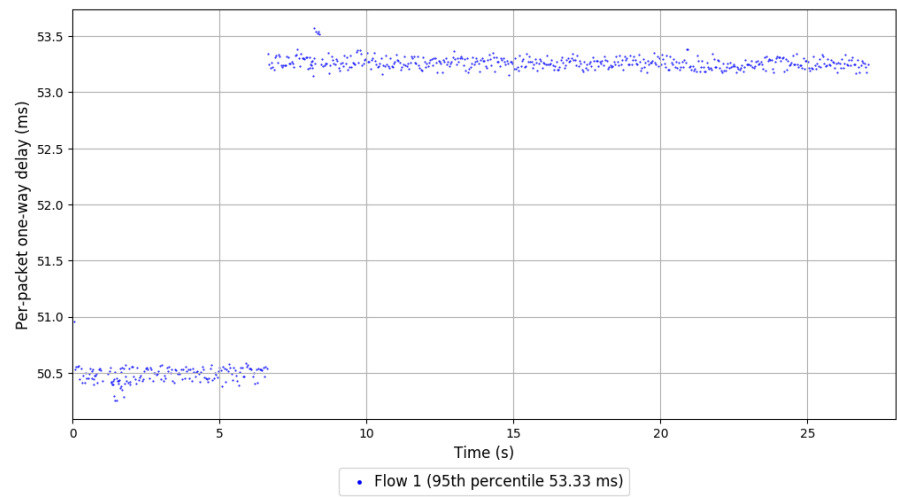
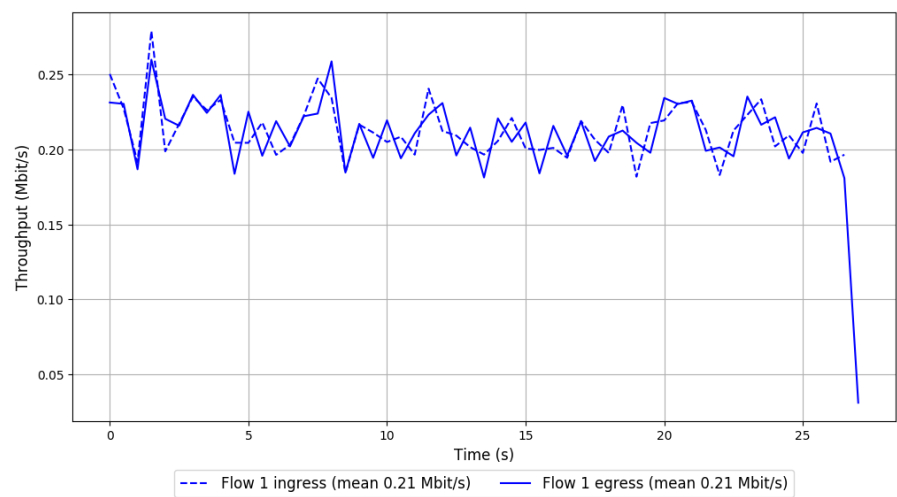


```
Run 6: Statistics of SCReAM

Start at: 2018-01-02 06:33:25
End at: 2018-01-02 06:33:55

# Below is generated by plot.py at 2018-01-02 08:51:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.327 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.327 ms
Loss rate: 0.00%
```

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-01-02 06:44:43

End at: 2018-01-02 06:45:13

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.348 ms

Loss rate: 0.14%

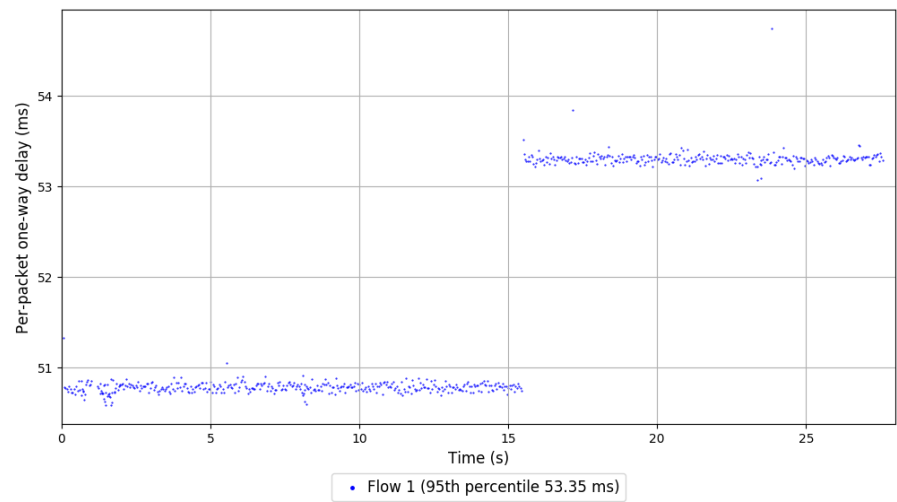
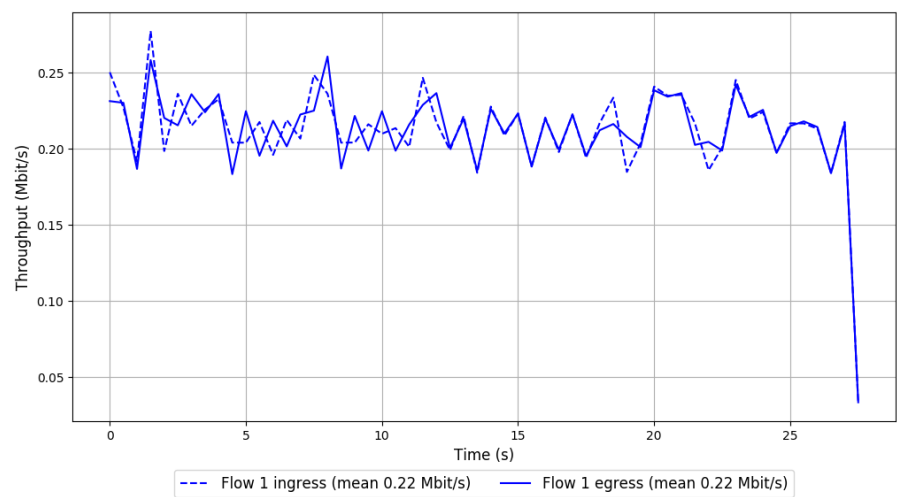
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.348 ms

Loss rate: 0.14%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-02 06:56:14

End at: 2018-01-02 06:56:44

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.881 ms

Loss rate: 0.00%

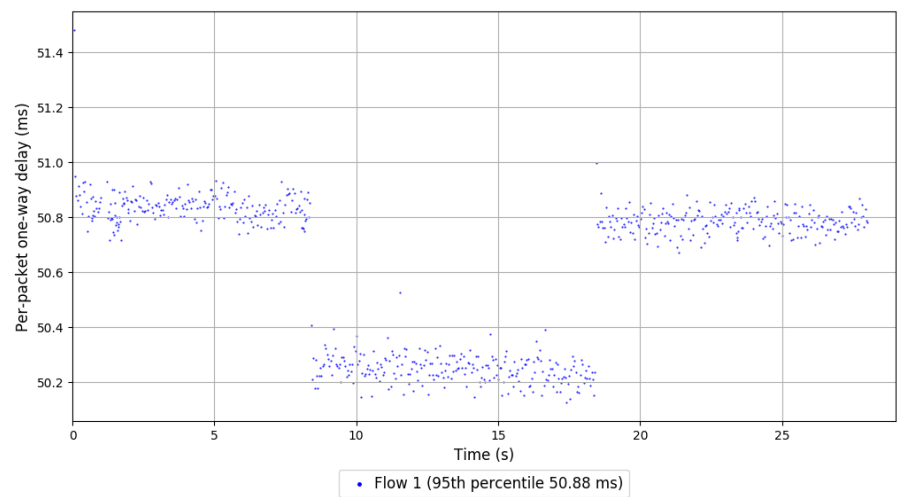
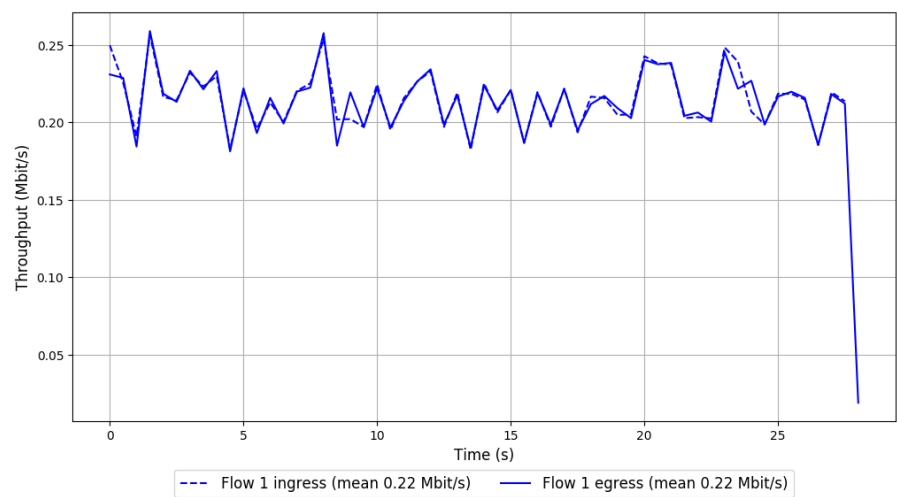
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.881 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-02 07:08:10

End at: 2018-01-02 07:08:40

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.00%

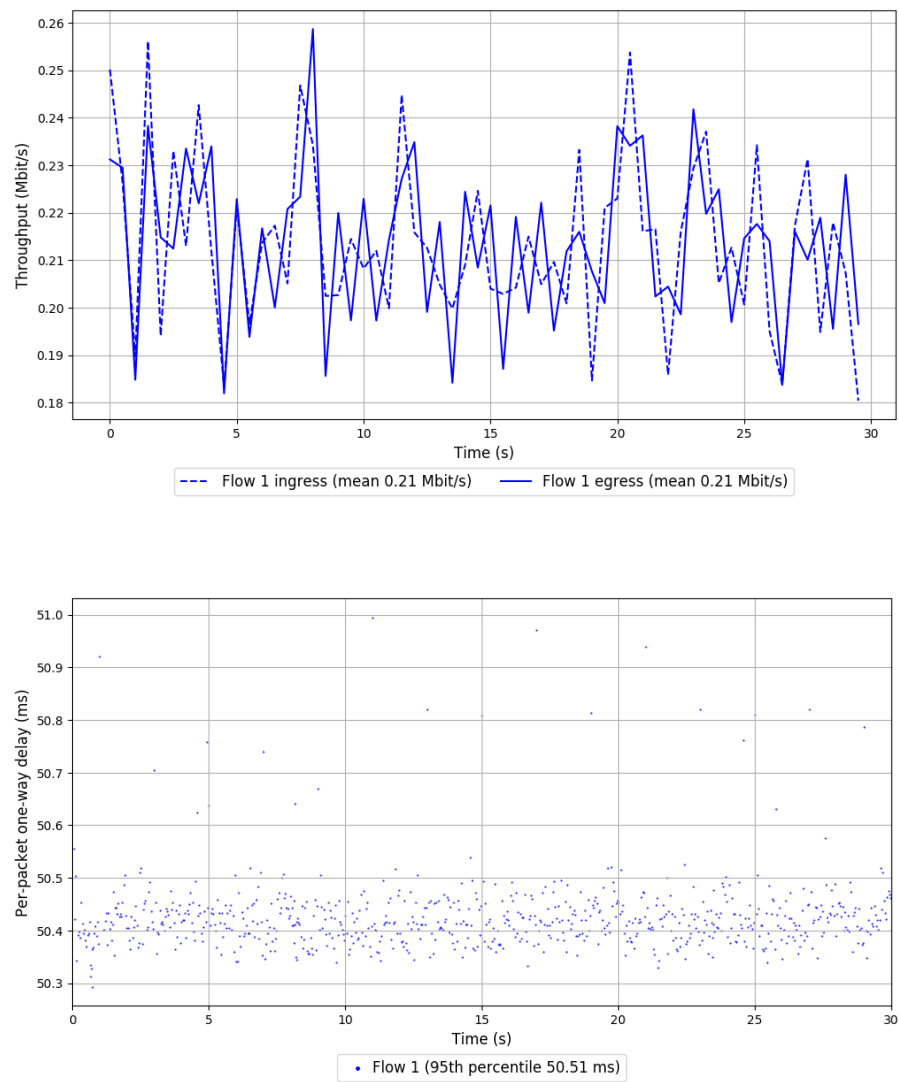
-- Flow 1:

Average throughput: 0.21 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

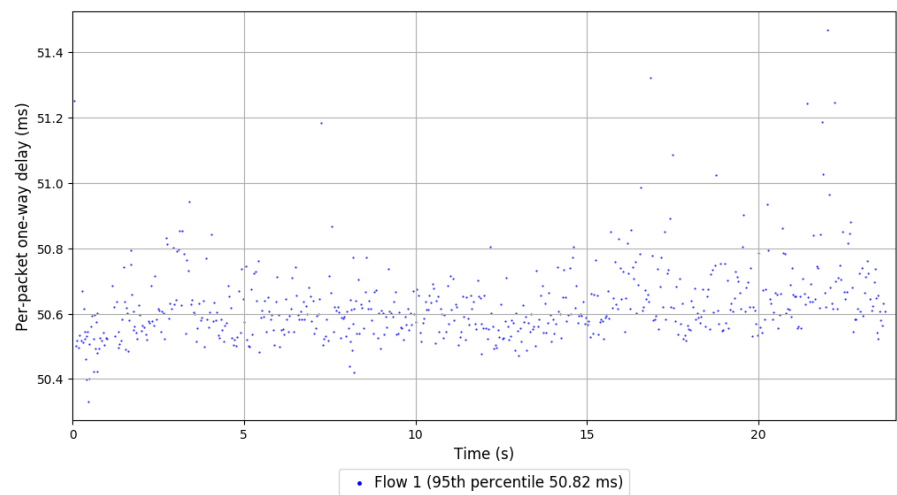
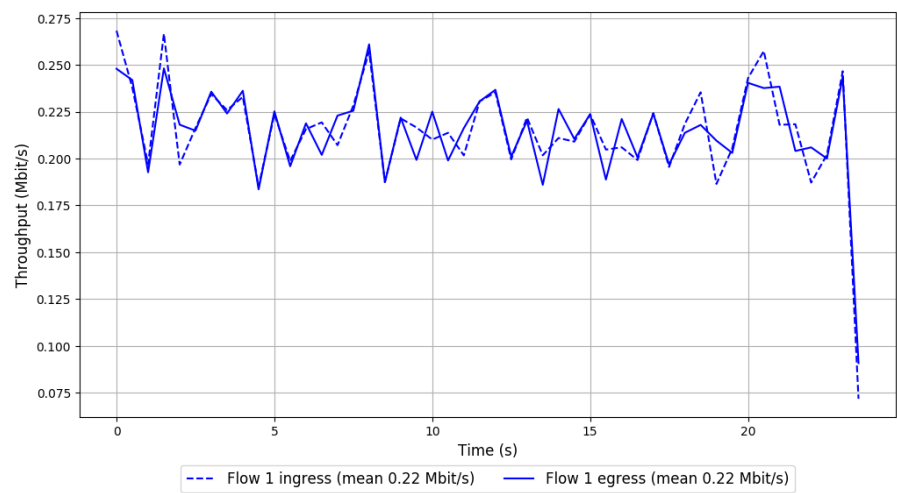


Run 10: Statistics of SCReAM

Start at: 2018-01-02 07:19:39

End at: 2018-01-02 07:20:09

Run 10: Report of SReAM — Data Link

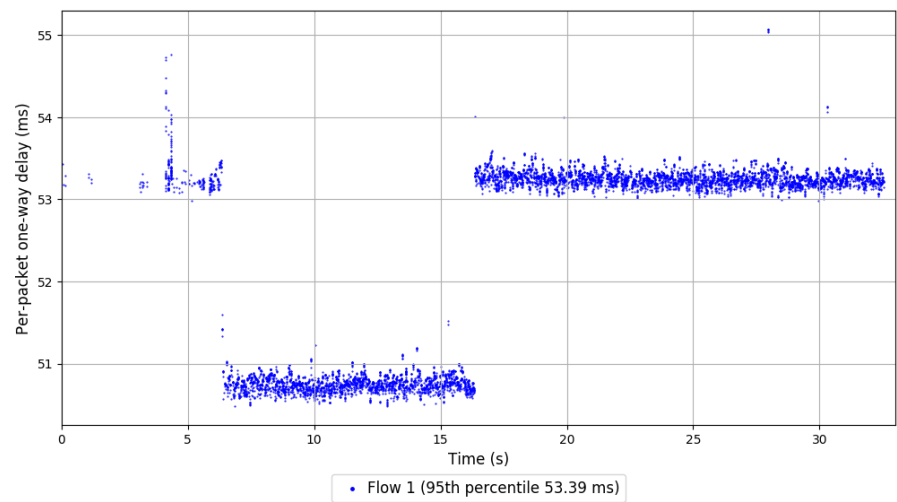
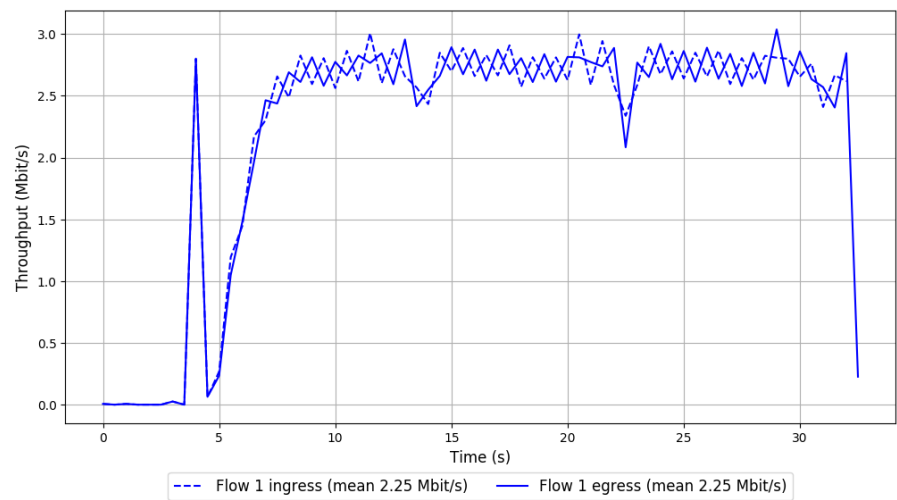


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-02 05:36:47
End at: 2018-01-02 05:37:17

# Below is generated by plot.py at 2018-01-02 08:51:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 53.386 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 53.386 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

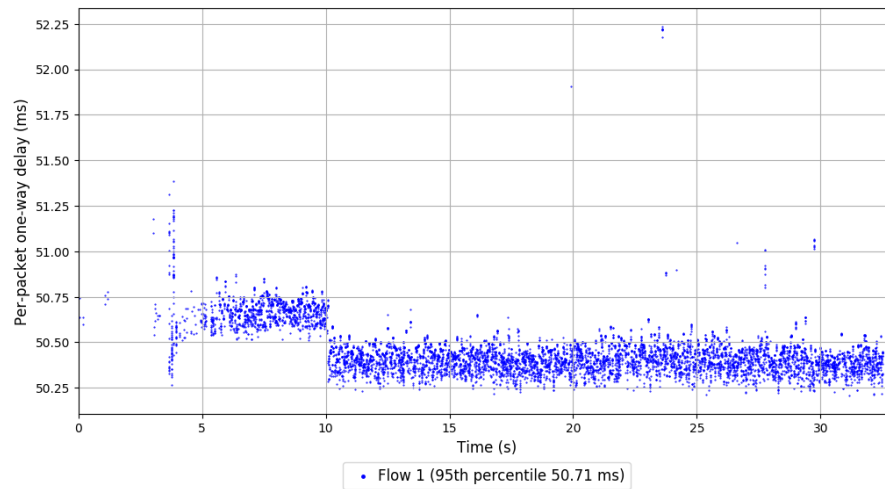
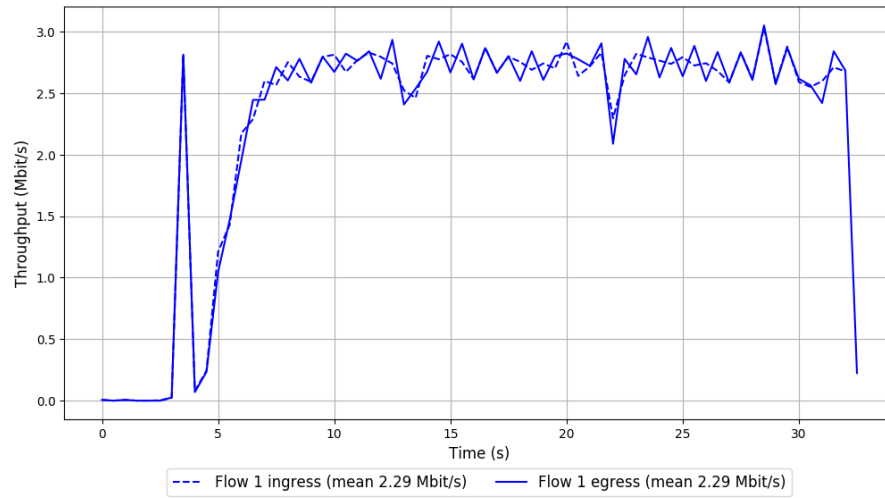


```
Run 2: Statistics of WebRTC media

Start at: 2018-01-02 05:48:33
End at: 2018-01-02 05:49:03

# Below is generated by plot.py at 2018-01-02 08:51:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.711 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 50.711 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-02 05:59:59

End at: 2018-01-02 06:00:29

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.294 ms

Loss rate: 0.00%

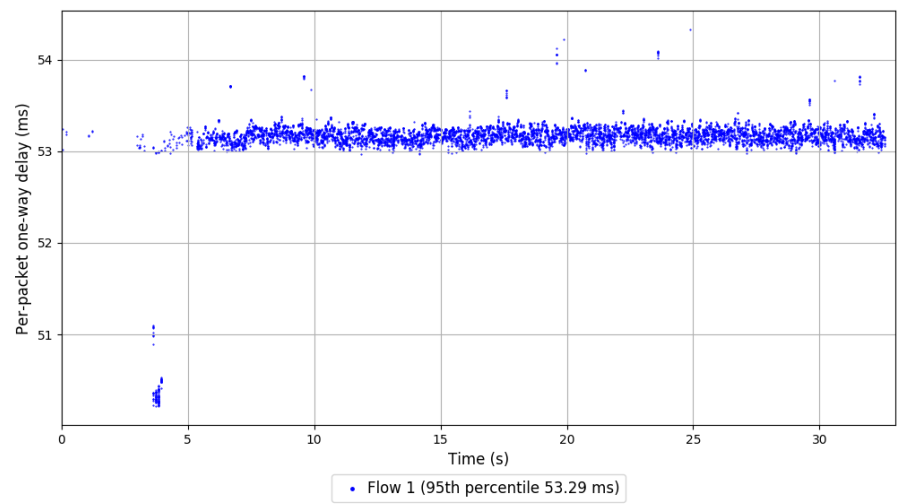
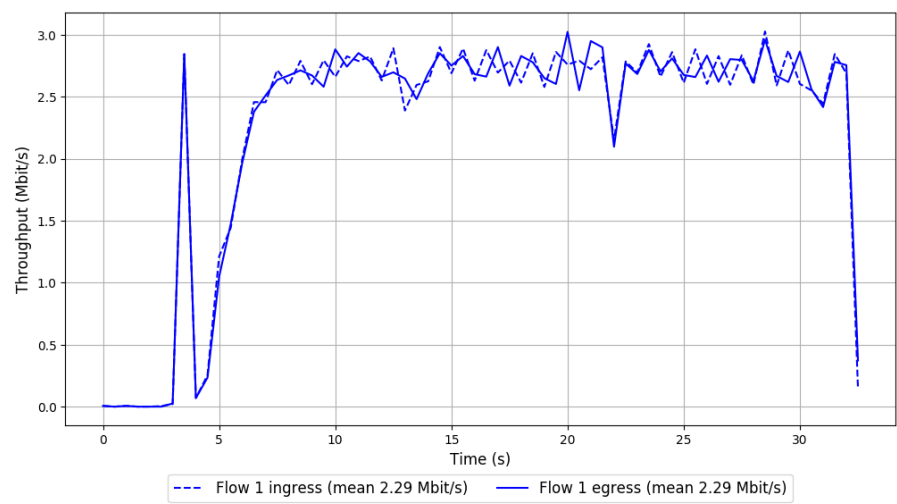
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.294 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-02 06:11:28

End at: 2018-01-02 06:11:58

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.513 ms

Loss rate: 0.00%

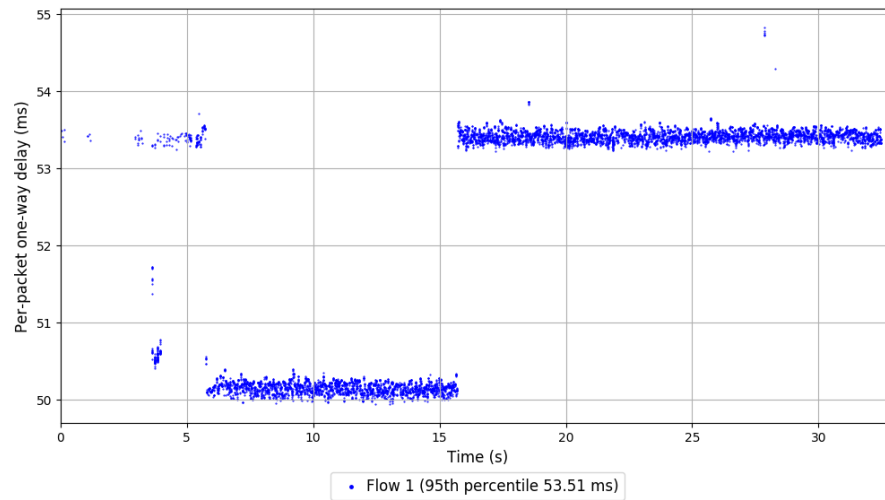
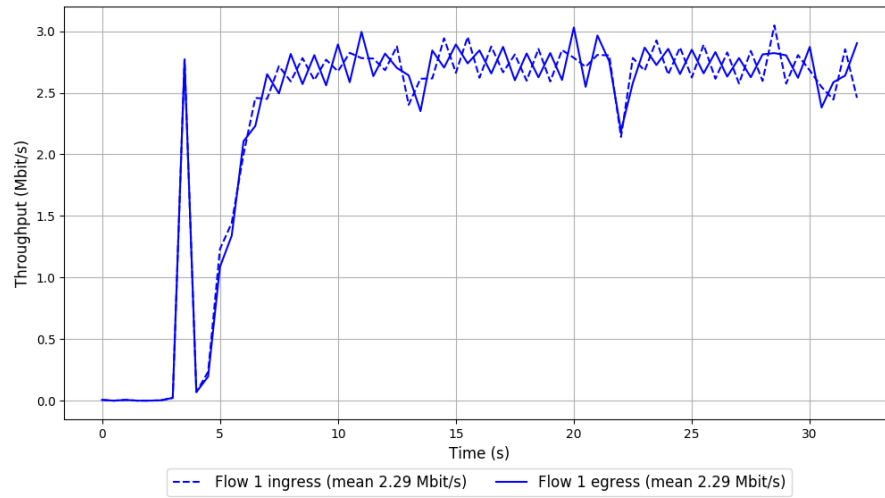
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.513 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-02 06:23:18

End at: 2018-01-02 06:23:48

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.858 ms

Loss rate: 0.00%

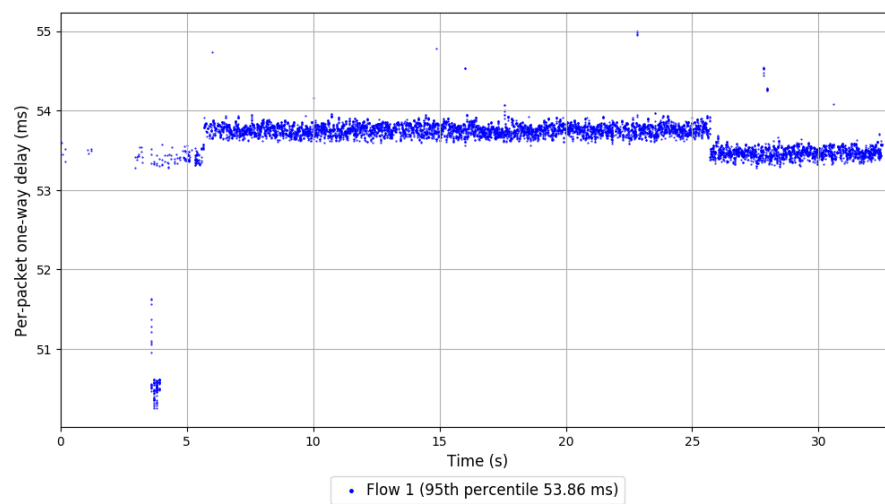
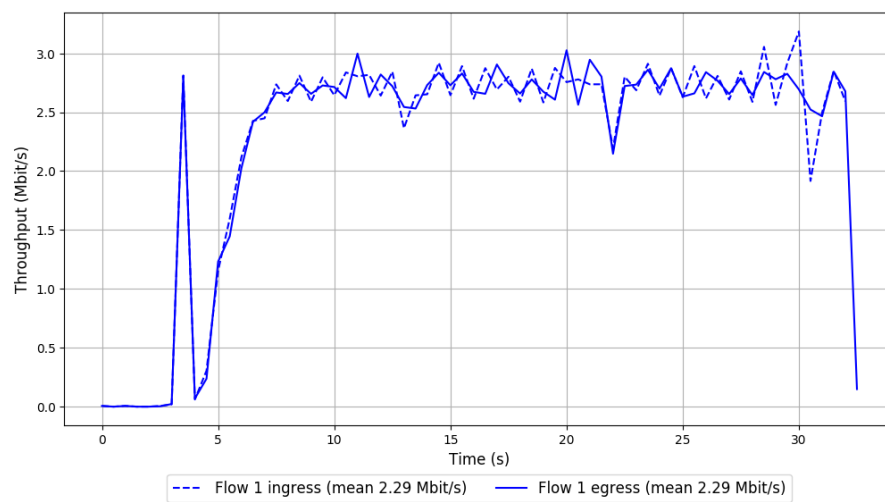
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.858 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-02 06:34:51

End at: 2018-01-02 06:35:21

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 53.850 ms

Loss rate: 0.00%

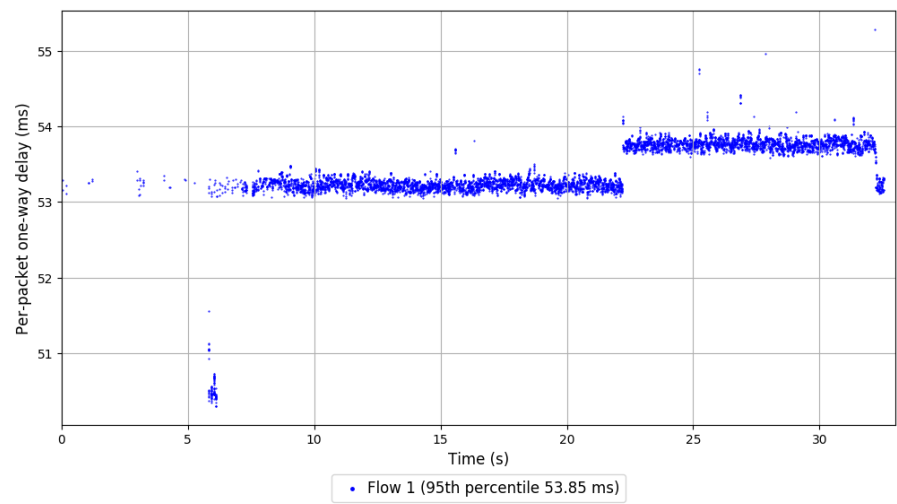
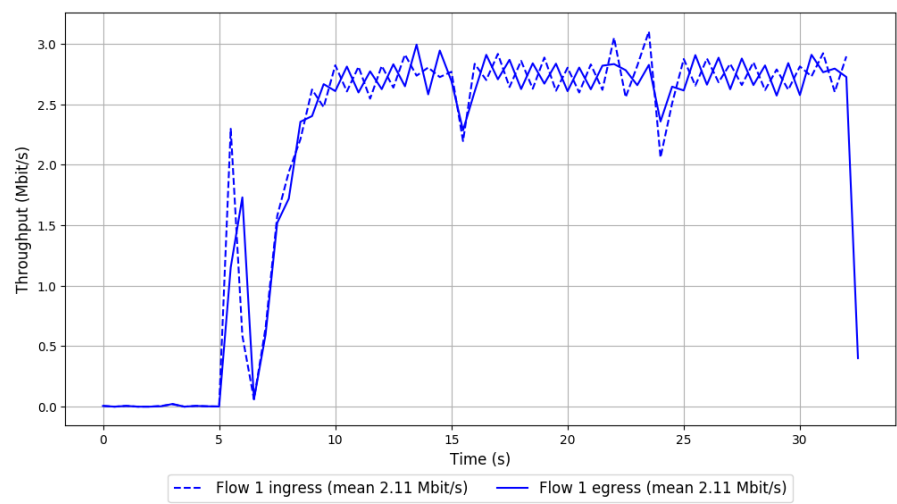
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 53.850 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-02 06:46:10

End at: 2018-01-02 06:46:40

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.356 ms

Loss rate: 0.00%

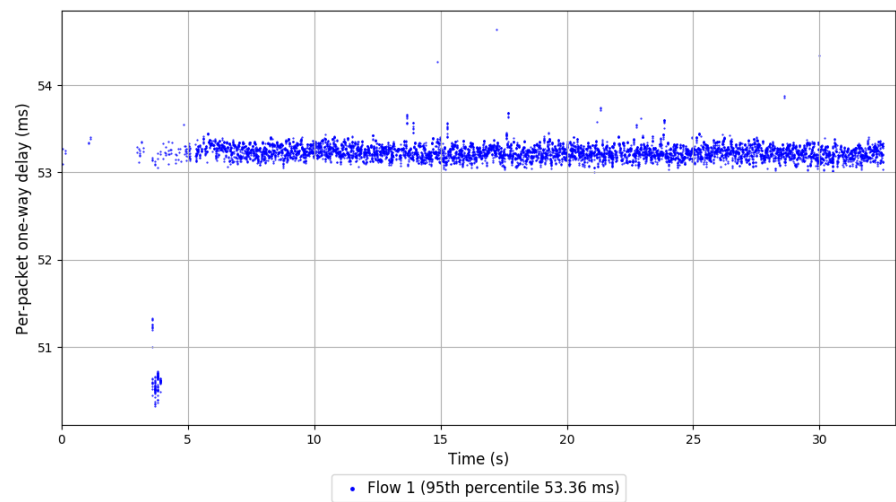
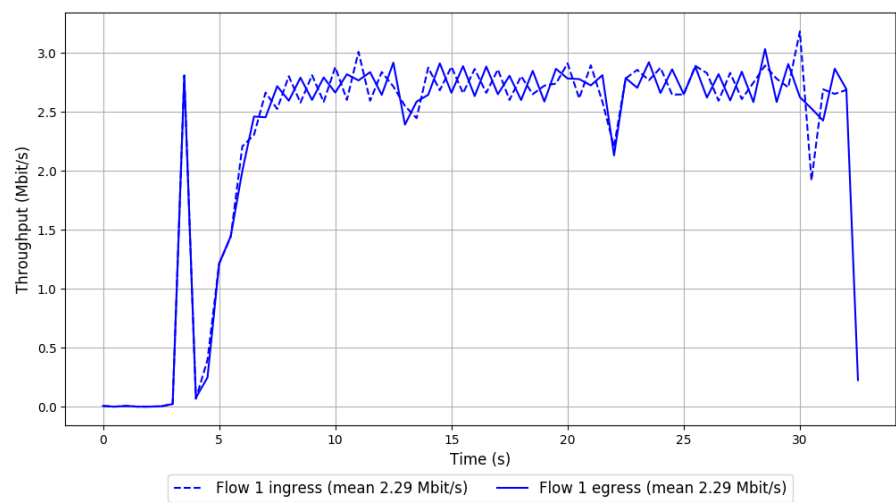
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.356 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-02 06:57:40

End at: 2018-01-02 06:58:11

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.821 ms

Loss rate: 0.00%

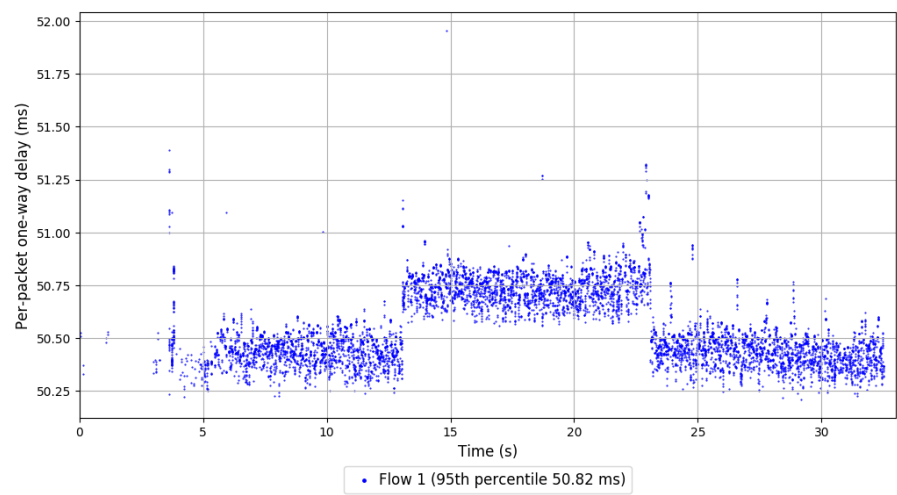
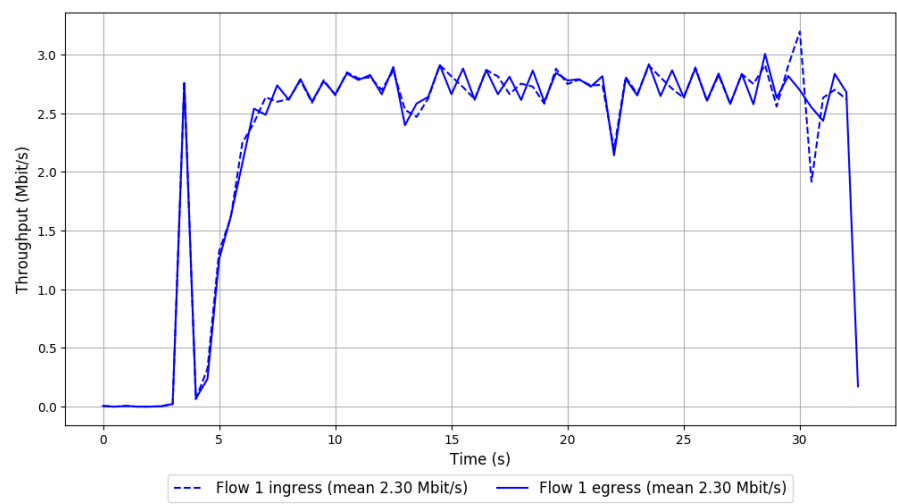
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.821 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-02 07:09:37

End at: 2018-01-02 07:10:07

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.493 ms

Loss rate: 0.00%

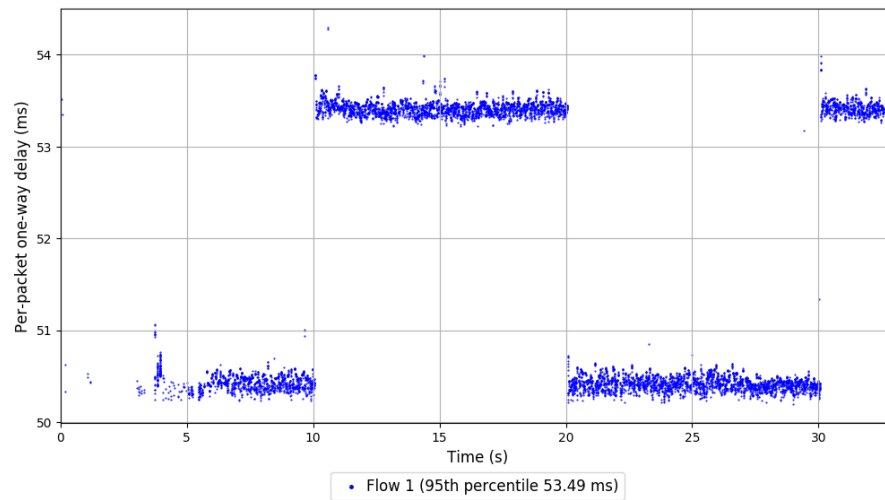
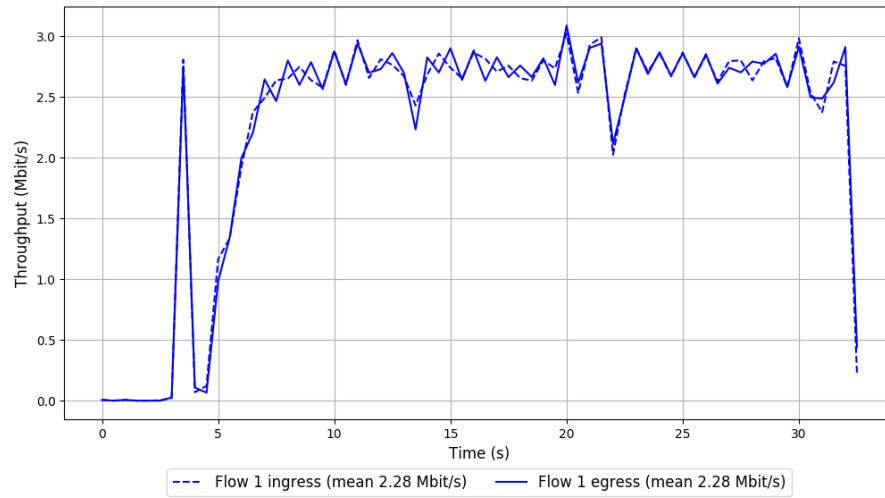
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.493 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-02 07:21:05

End at: 2018-01-02 07:21:35

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 50.884 ms

Loss rate: 0.00%

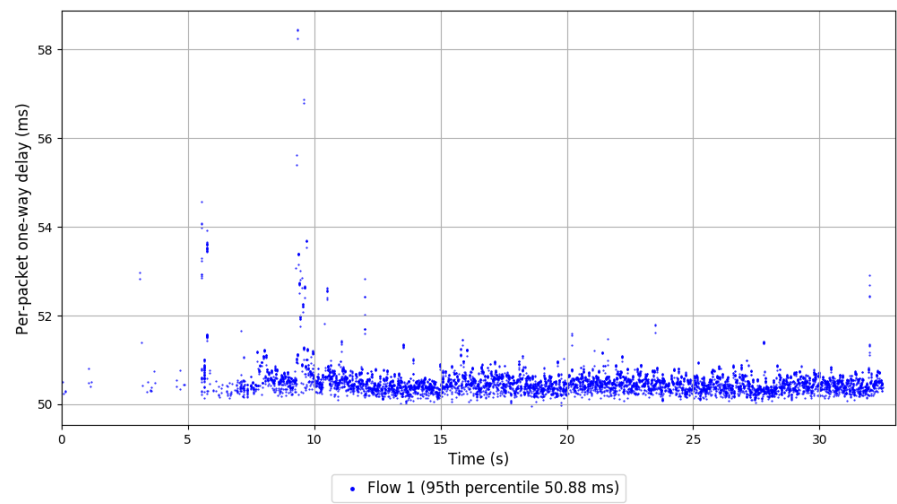
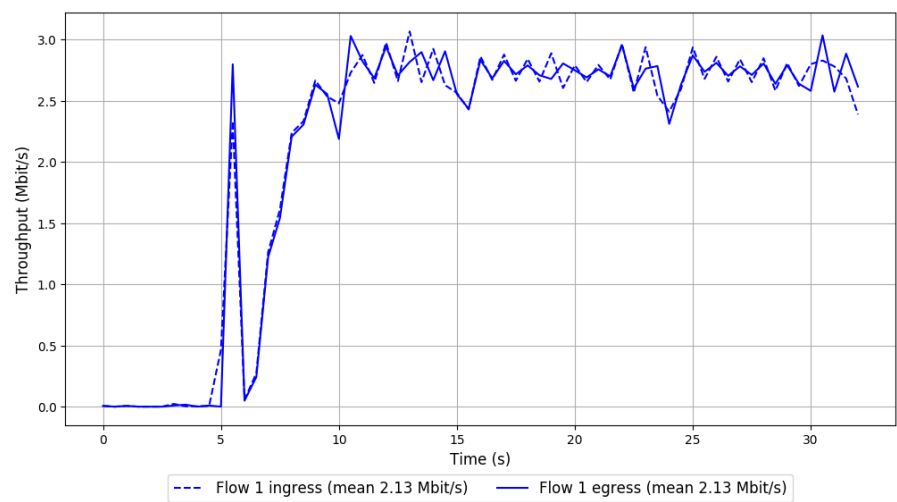
-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 50.884 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

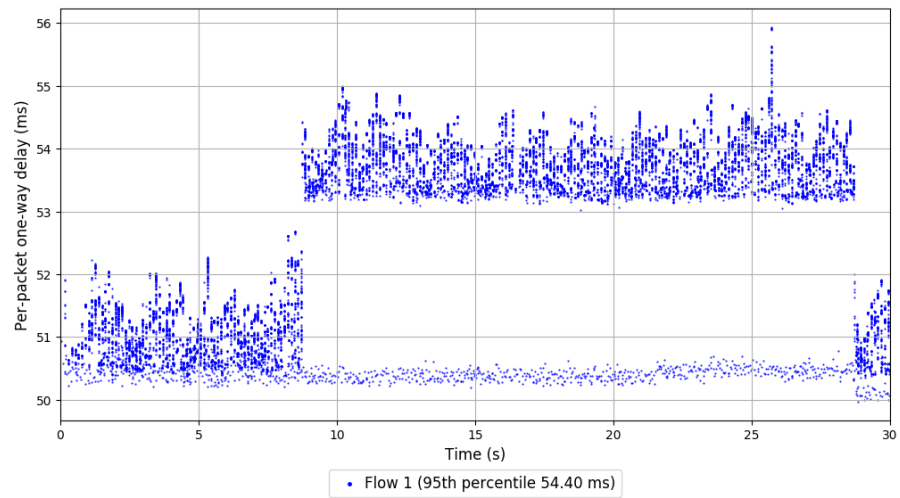
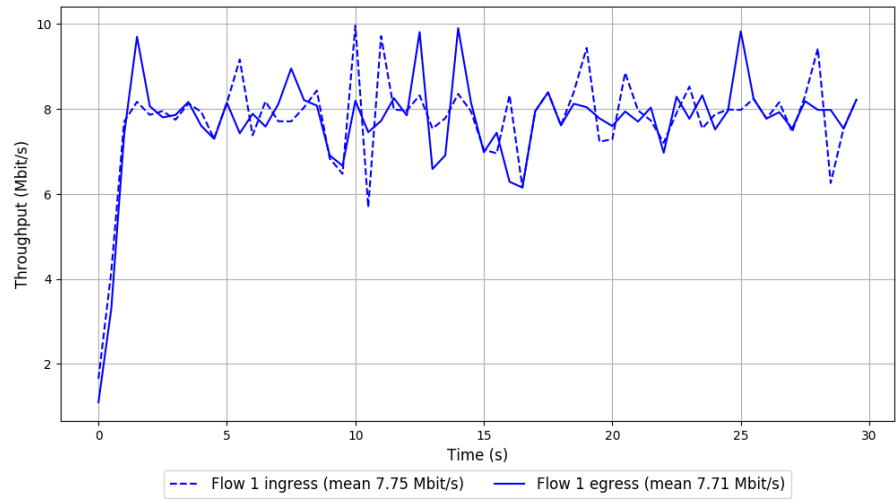


```
Run 1: Statistics of Sprout

Start at: 2018-01-02 05:34:05
End at: 2018-01-02 05:34:35

# Below is generated by plot.py at 2018-01-02 08:51:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 54.403 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 54.403 ms
Loss rate: 0.54%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-02 05:45:52

End at: 2018-01-02 05:46:22

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 53.259 ms

Loss rate: 0.00%

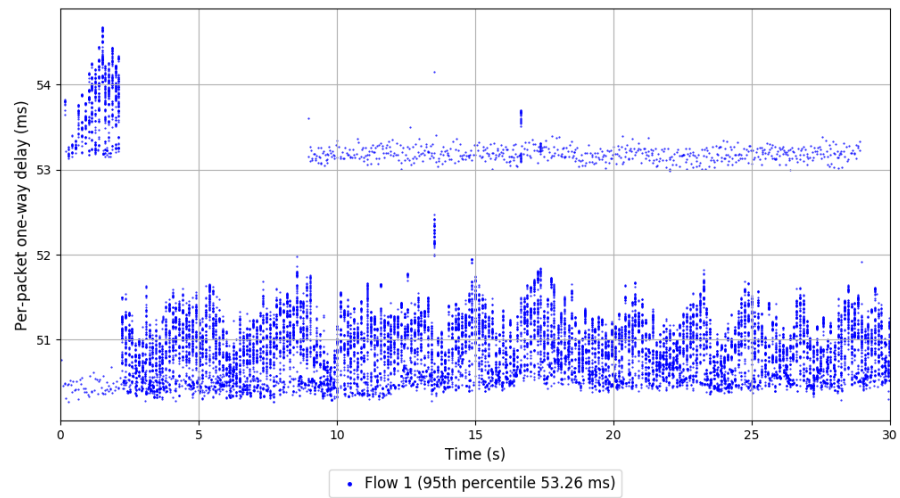
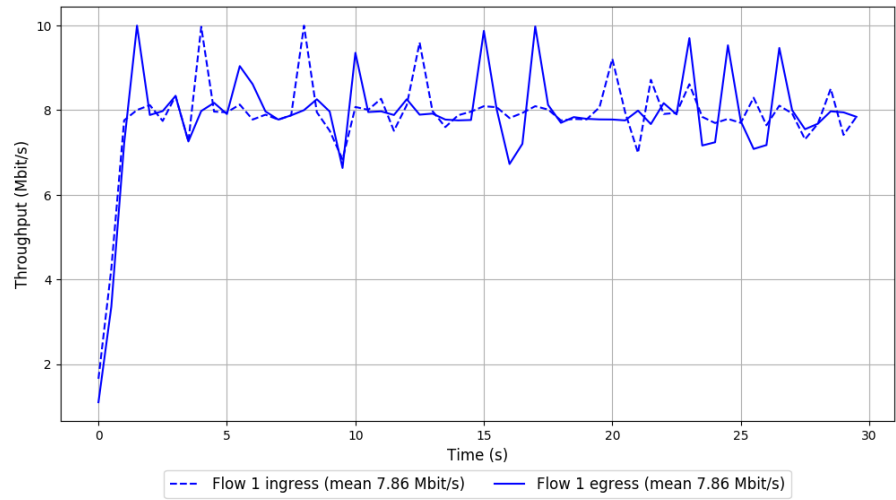
-- Flow 1:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 53.259 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-02 05:57:16

End at: 2018-01-02 05:57:46

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 54.088 ms

Loss rate: 0.02%

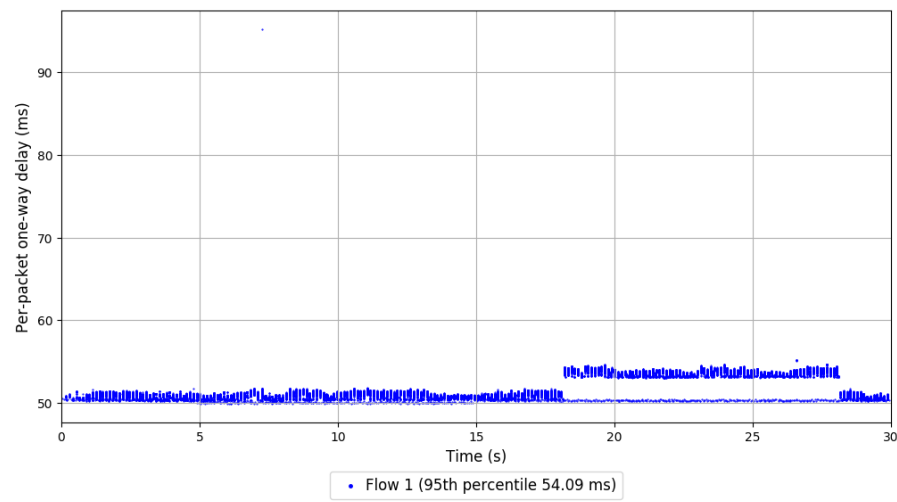
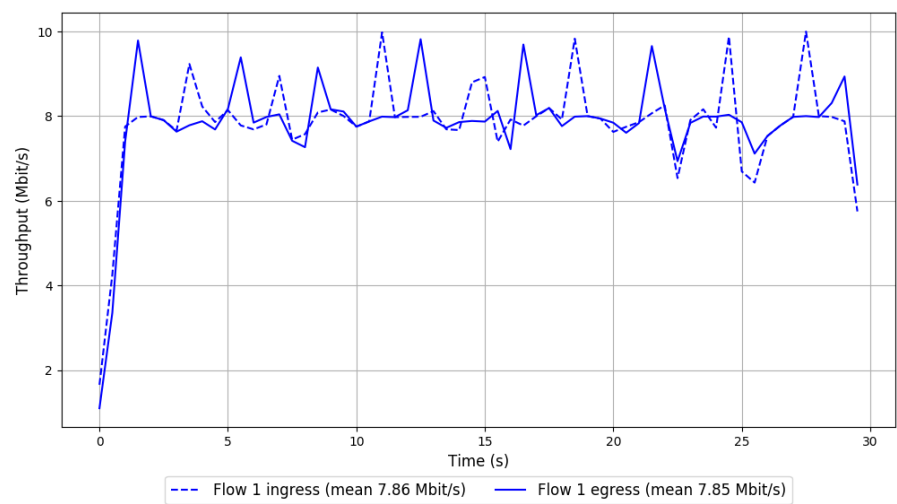
-- Flow 1:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 54.088 ms

Loss rate: 0.02%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-02 06:08:46

End at: 2018-01-02 06:09:16

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 51.362 ms

Loss rate: 0.00%

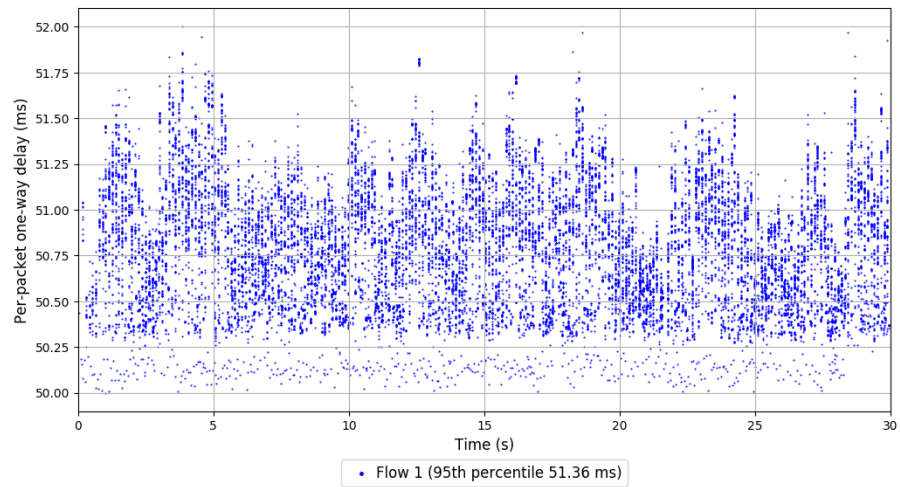
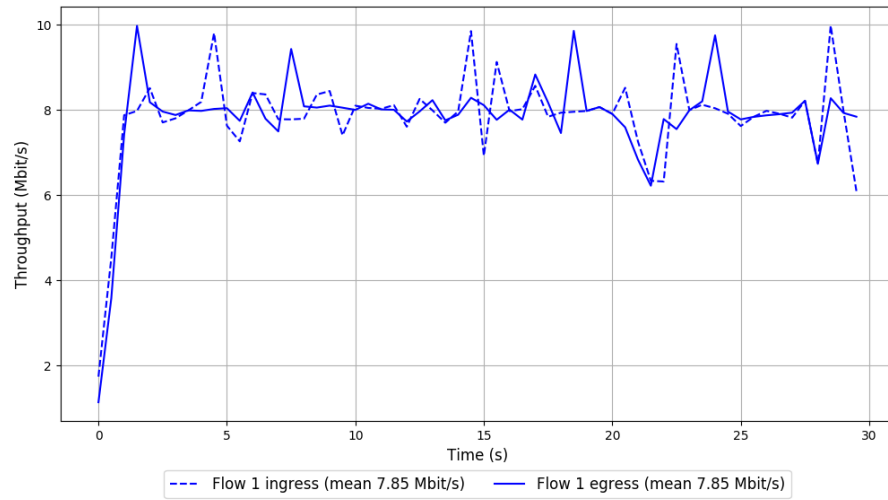
-- Flow 1:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 51.362 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-02 06:20:35

End at: 2018-01-02 06:21:05

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 54.199 ms

Loss rate: 0.00%

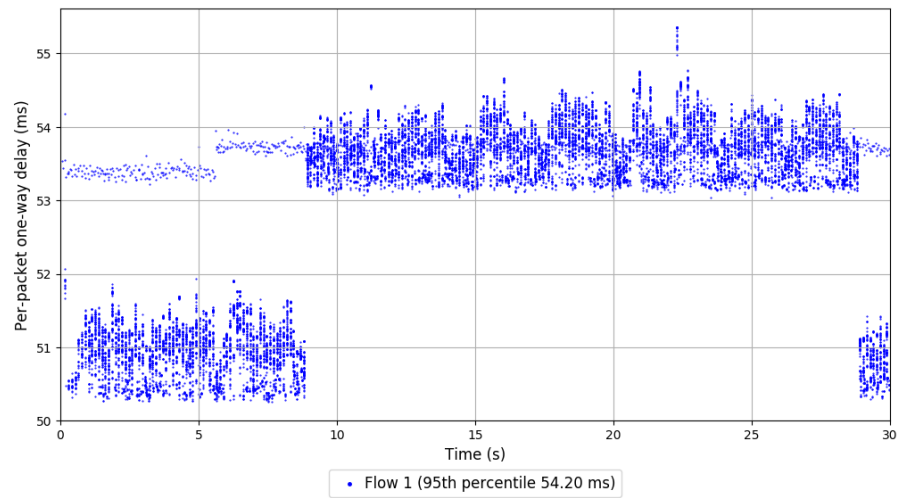
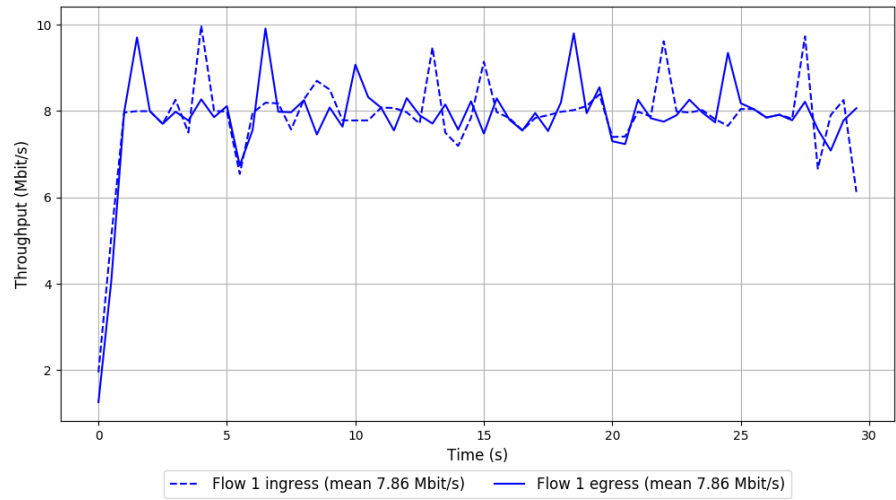
-- Flow 1:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 54.199 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-02 06:32:09

End at: 2018-01-02 06:32:39

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 51.537 ms

Loss rate: 0.00%

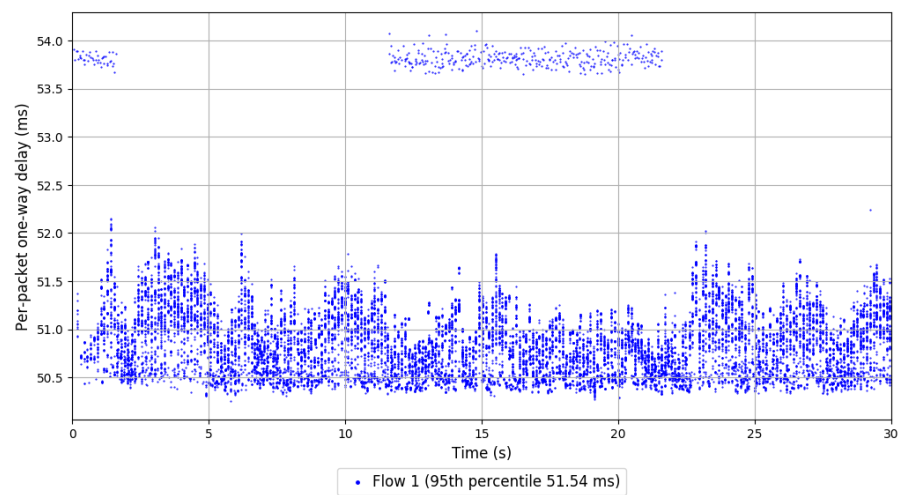
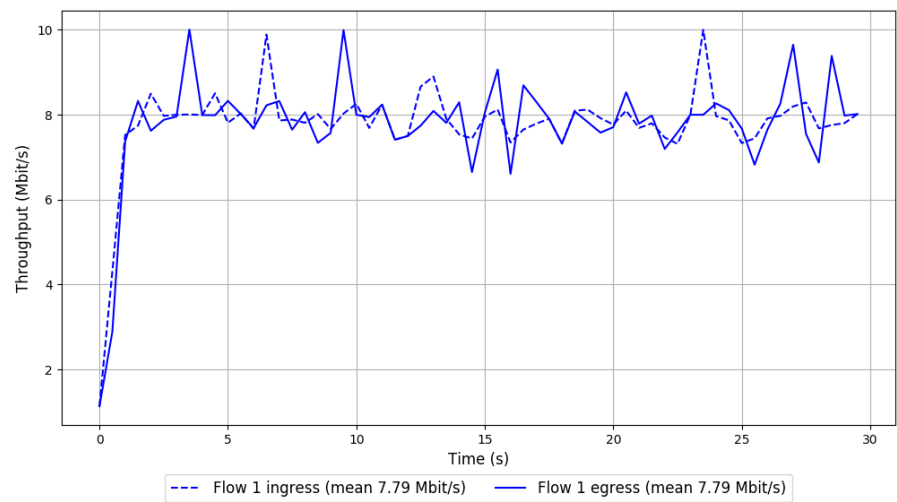
-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 51.537 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-02 06:43:28

End at: 2018-01-02 06:43:58

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 54.181 ms

Loss rate: 0.00%

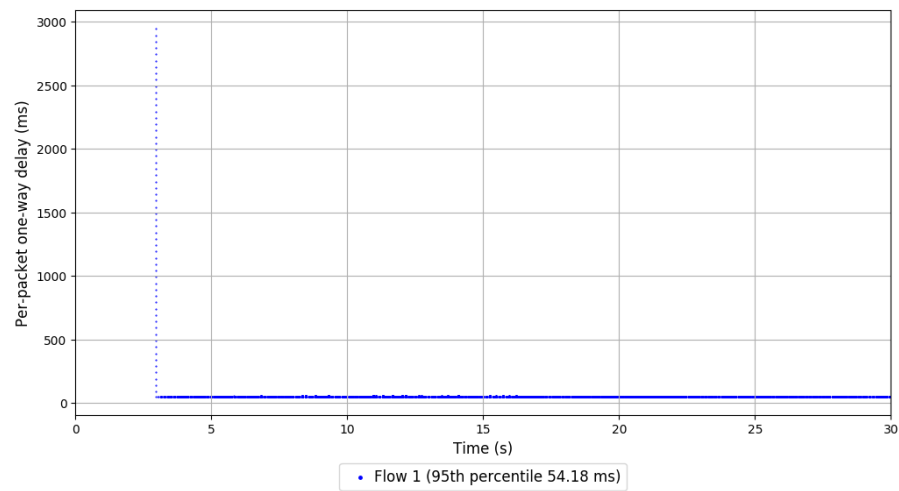
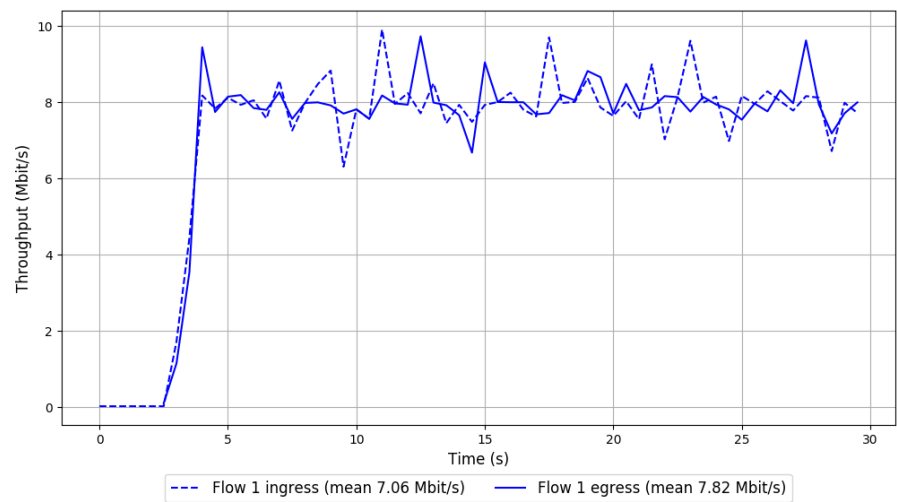
-- Flow 1:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 54.181 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-02 06:54:58

End at: 2018-01-02 06:55:28

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 52.376 ms

Loss rate: 0.00%

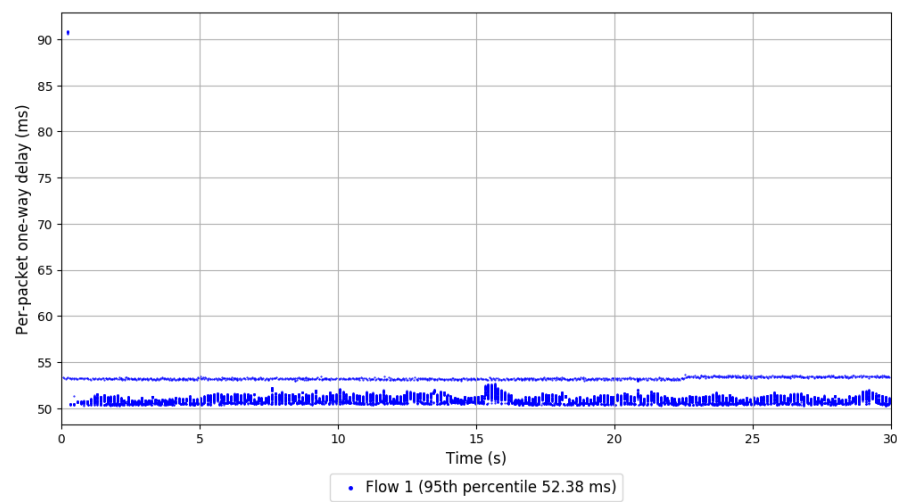
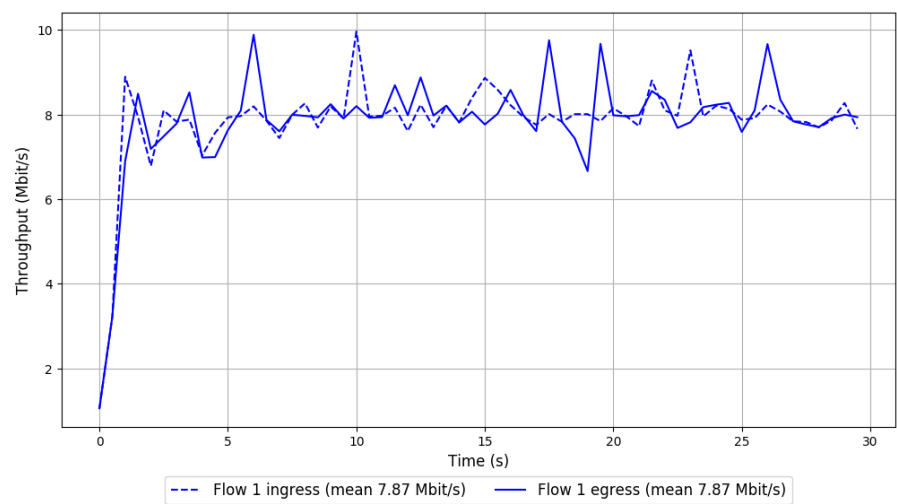
-- Flow 1:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 52.376 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-02 07:06:54

End at: 2018-01-02 07:07:24

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 53.985 ms

Loss rate: 0.00%

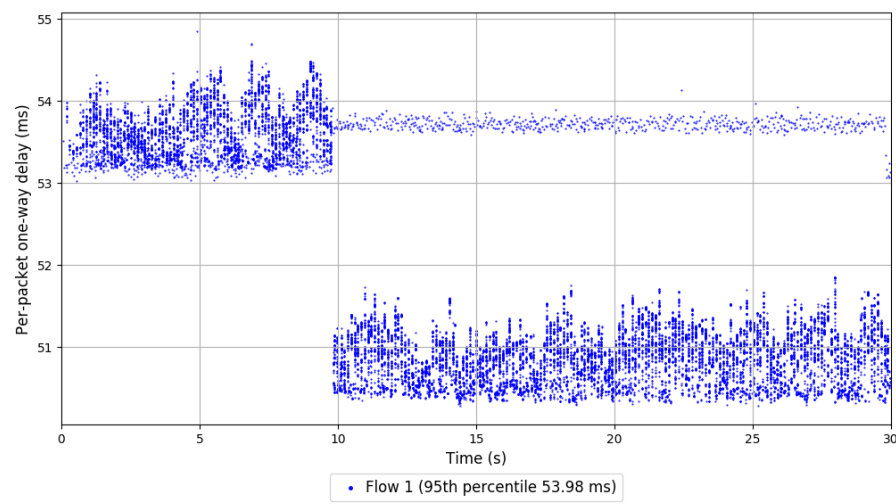
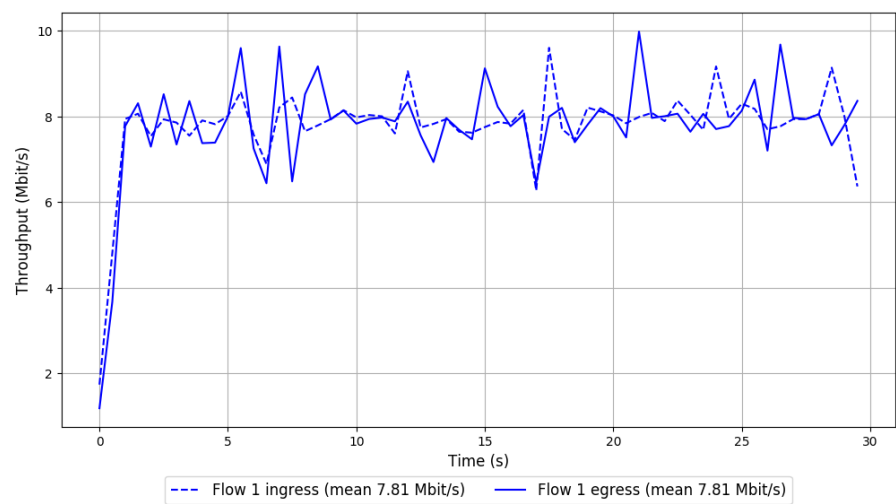
-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 53.985 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-02 07:18:23

End at: 2018-01-02 07:18:54

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 54.262 ms

Loss rate: 0.51%

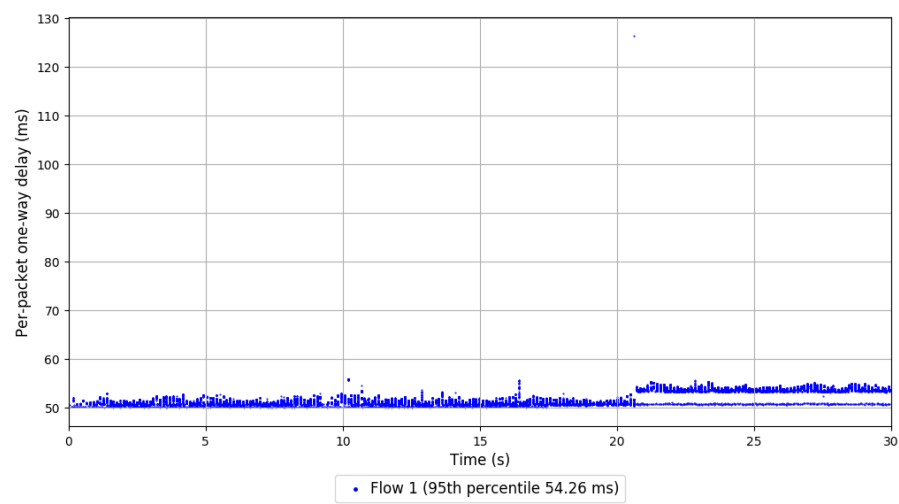
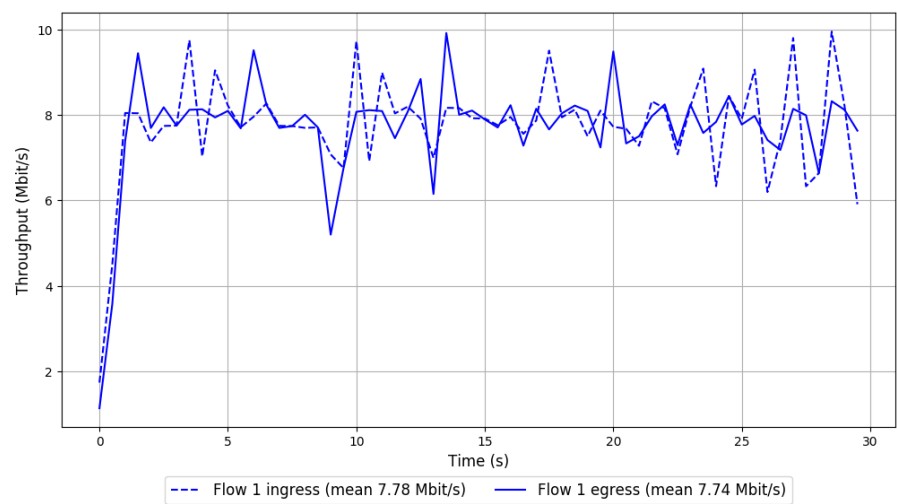
-- Flow 1:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 54.262 ms

Loss rate: 0.51%

Run 10: Report of Sprout — Data Link

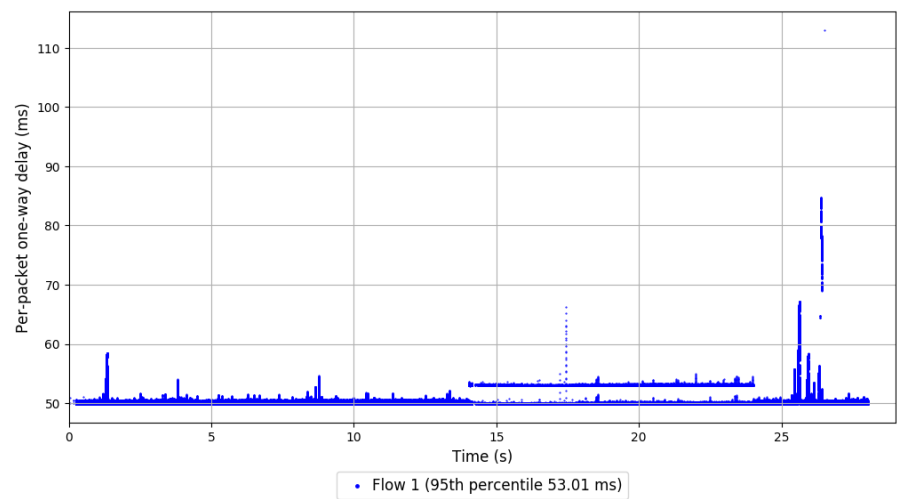
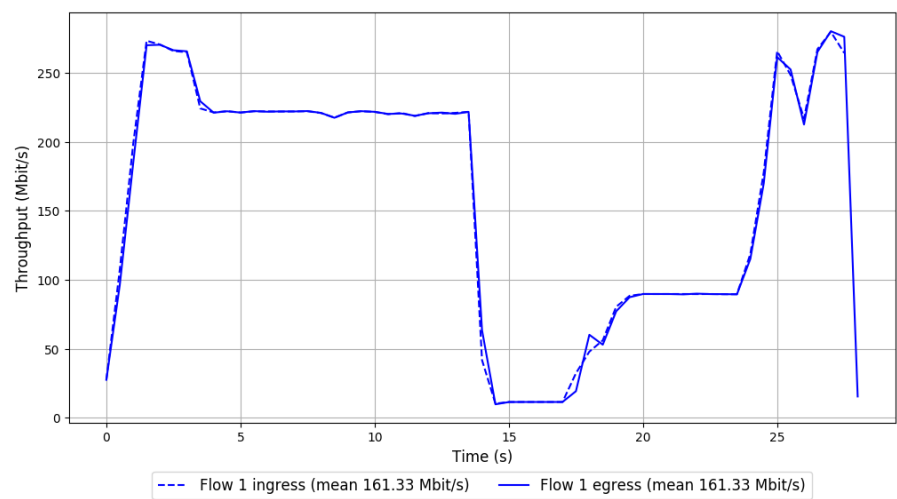


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-02 05:40:48
End at: 2018-01-02 05:41:18

# Below is generated by plot.py at 2018-01-02 08:51:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 161.33 Mbit/s
95th percentile per-packet one-way delay: 53.009 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 161.33 Mbit/s
95th percentile per-packet one-way delay: 53.009 ms
Loss rate: 0.00%
```


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

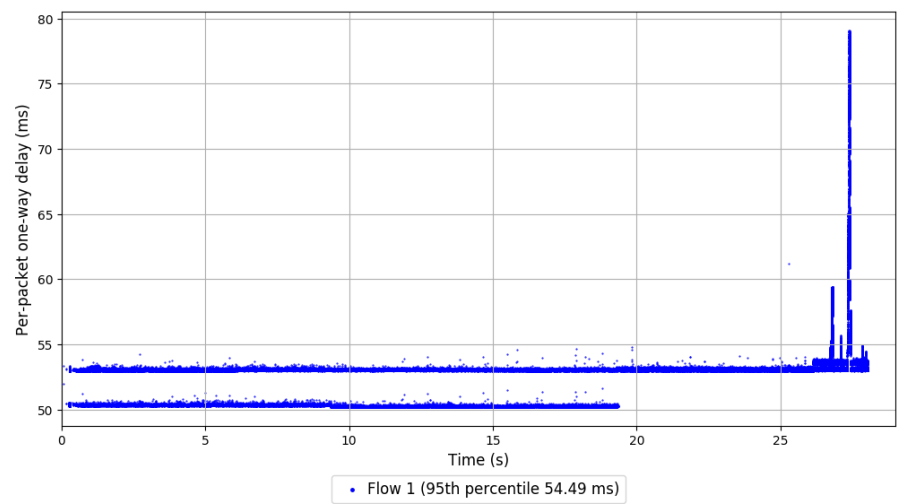
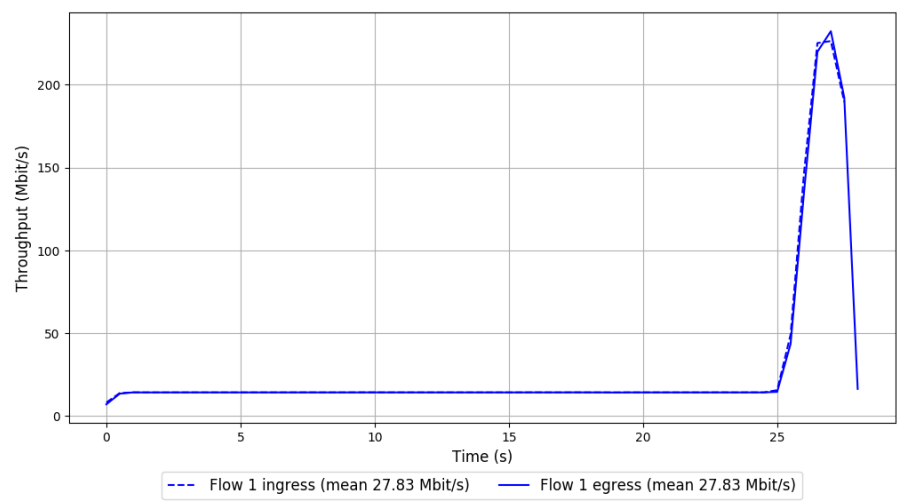


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-02 05:52:33
End at: 2018-01-02 05:53:03

# Below is generated by plot.py at 2018-01-02 08:51:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 27.83 Mbit/s
95th percentile per-packet one-way delay: 54.492 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 27.83 Mbit/s
95th percentile per-packet one-way delay: 54.492 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-01-02 06:03:59

End at: 2018-01-02 06:04:29

Below is generated by plot.py at 2018-01-02 08:51:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.18 Mbit/s

95th percentile per-packet one-way delay: 53.104 ms

Loss rate: 0.00%

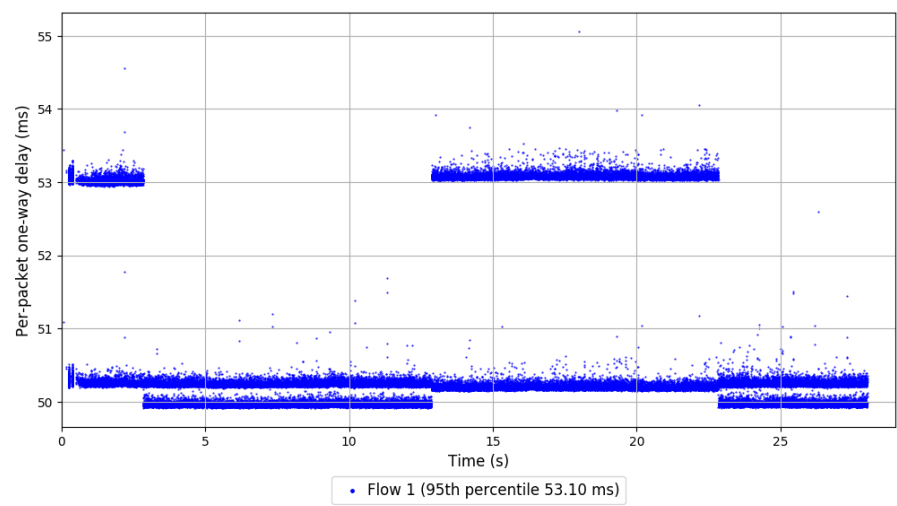
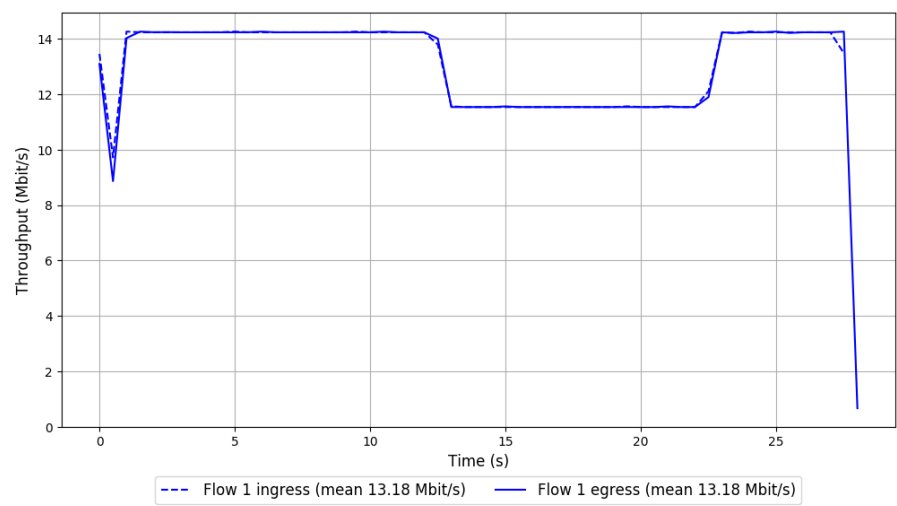
-- Flow 1:

Average throughput: 13.18 Mbit/s

95th percentile per-packet one-way delay: 53.104 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-02 06:15:28

End at: 2018-01-02 06:15:58

Below is generated by plot.py at 2018-01-02 08:51:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 244.13 Mbit/s

95th percentile per-packet one-way delay: 53.323 ms

Loss rate: 0.01%

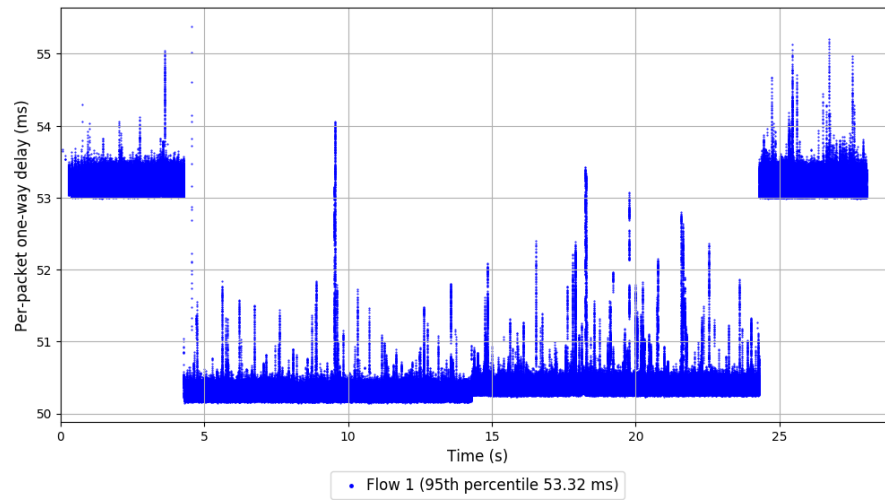
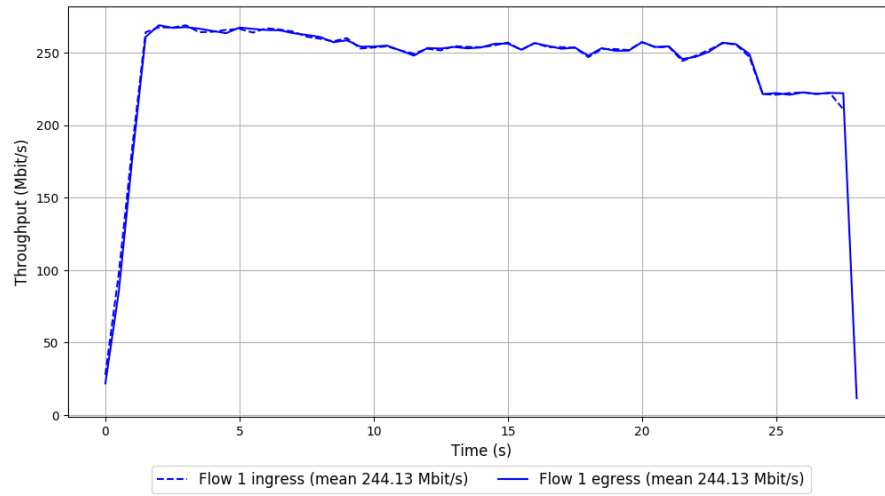
-- Flow 1:

Average throughput: 244.13 Mbit/s

95th percentile per-packet one-way delay: 53.323 ms

Loss rate: 0.01%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-02 06:27:19

End at: 2018-01-02 06:27:49

Below is generated by plot.py at 2018-01-02 08:51:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.65 Mbit/s

95th percentile per-packet one-way delay: 53.169 ms

Loss rate: 0.00%

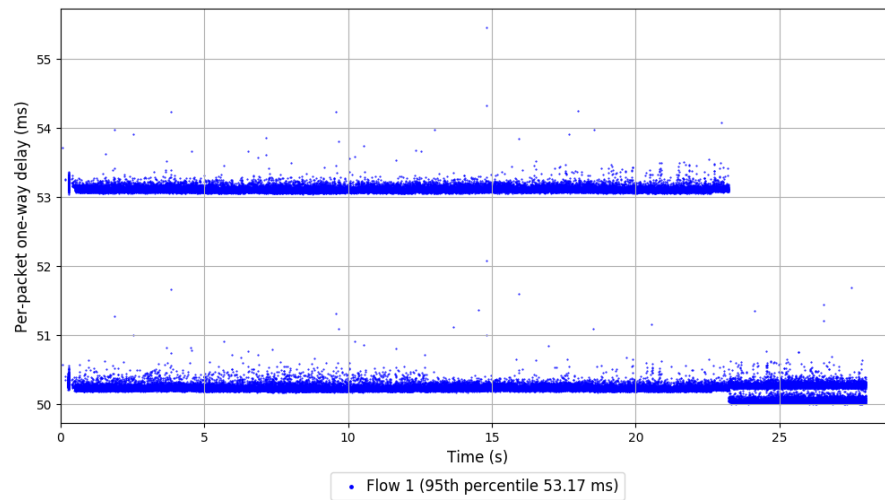
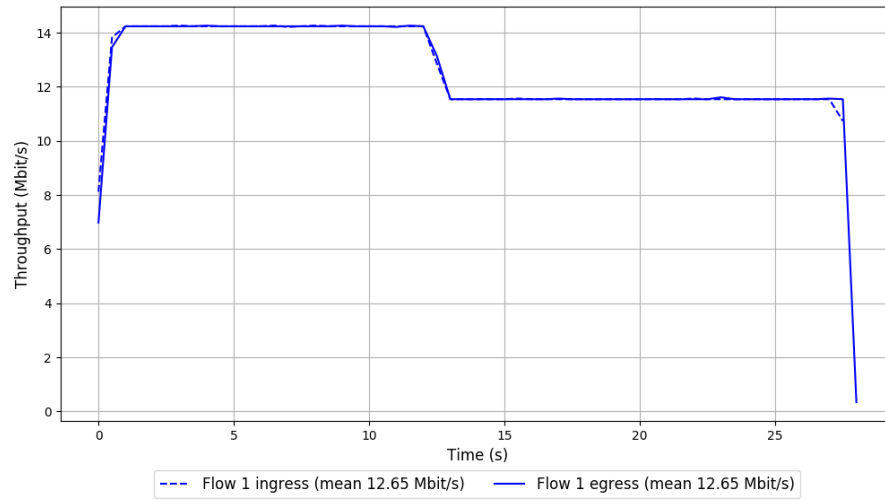
-- Flow 1:

Average throughput: 12.65 Mbit/s

95th percentile per-packet one-way delay: 53.169 ms

Loss rate: 0.00%

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

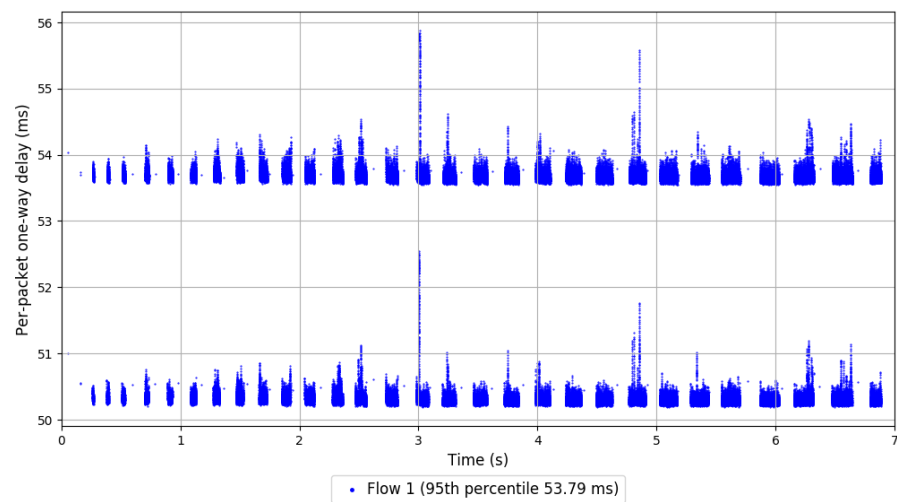
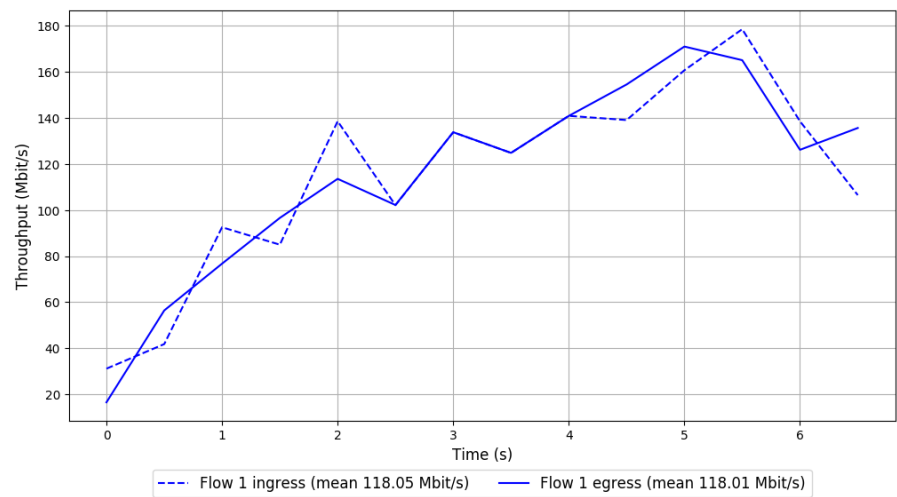


Run 6: Statistics of TaoVA-100x

Start at: 2018-01-02 06:38:51

End at: 2018-01-02 06:39:21

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

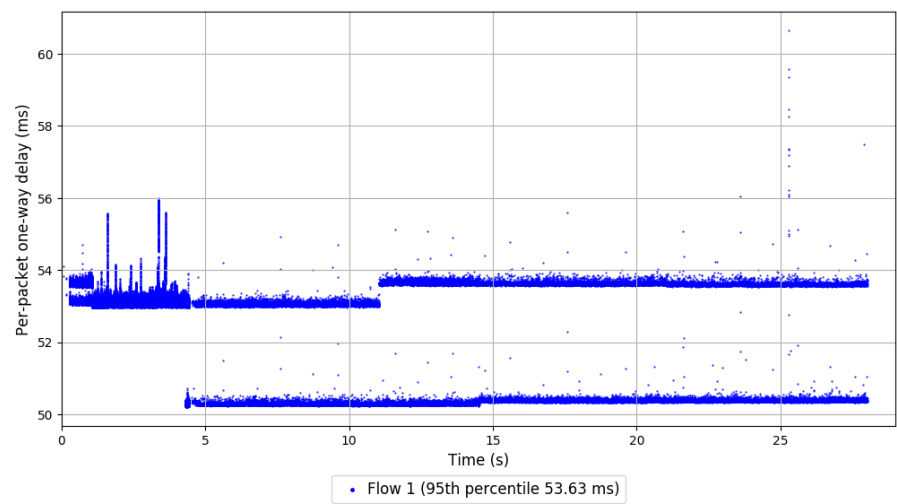
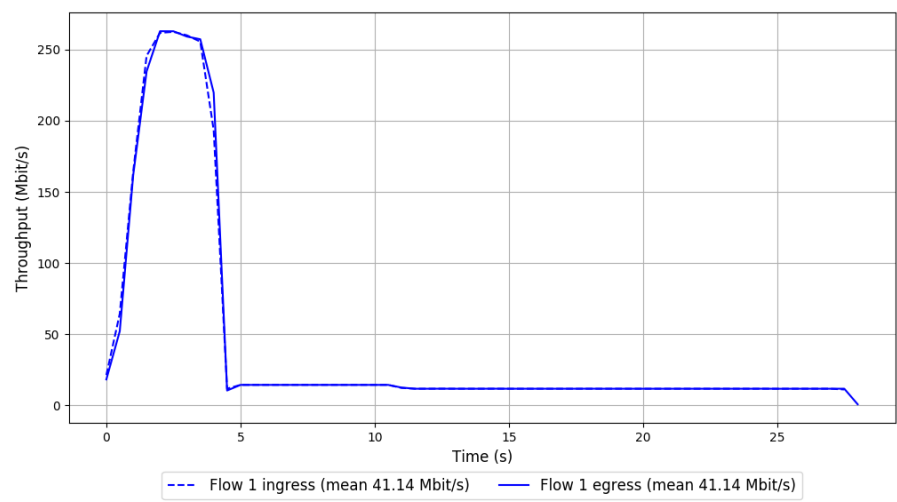


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-02 06:50:08
End at: 2018-01-02 06:50:38

# Below is generated by plot.py at 2018-01-02 08:51:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.14 Mbit/s
95th percentile per-packet one-way delay: 53.629 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.14 Mbit/s
95th percentile per-packet one-way delay: 53.629 ms
Loss rate: 0.00%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-02 07:01:36

End at: 2018-01-02 07:02:06

Below is generated by plot.py at 2018-01-02 08:51:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 241.86 Mbit/s

95th percentile per-packet one-way delay: 50.640 ms

Loss rate: 0.00%

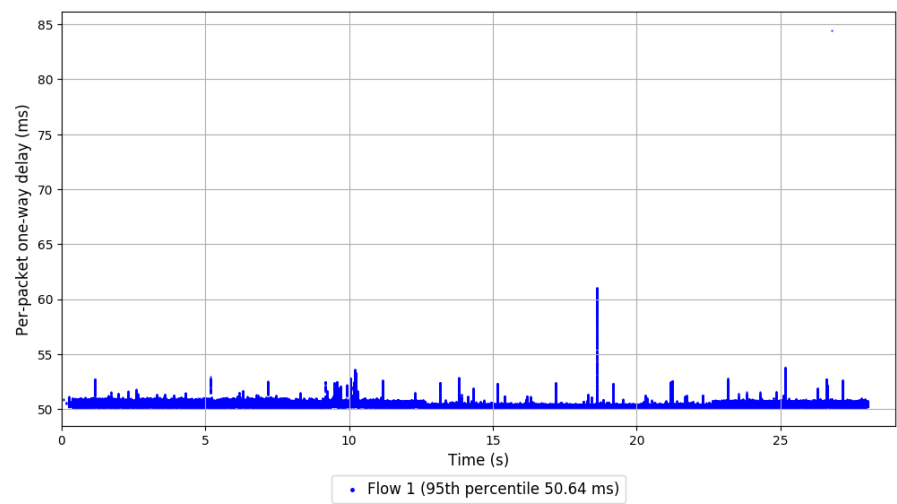
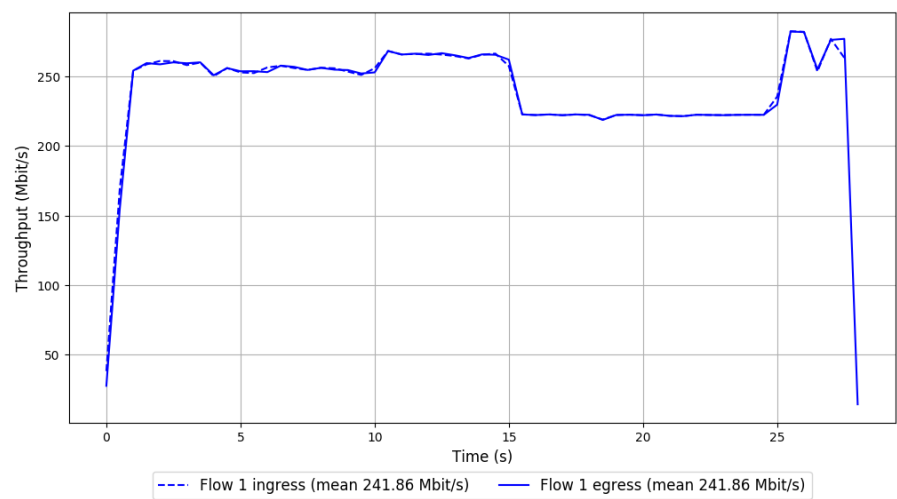
-- Flow 1:

Average throughput: 241.86 Mbit/s

95th percentile per-packet one-way delay: 50.640 ms

Loss rate: 0.00%

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

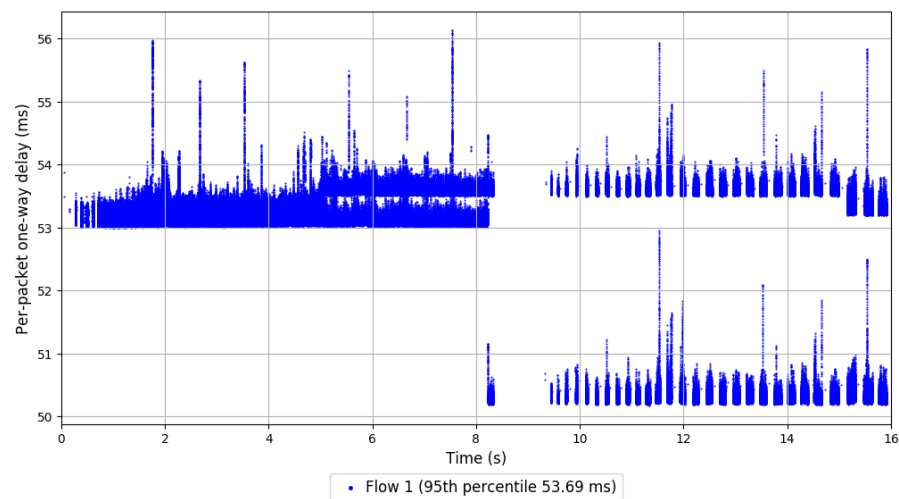
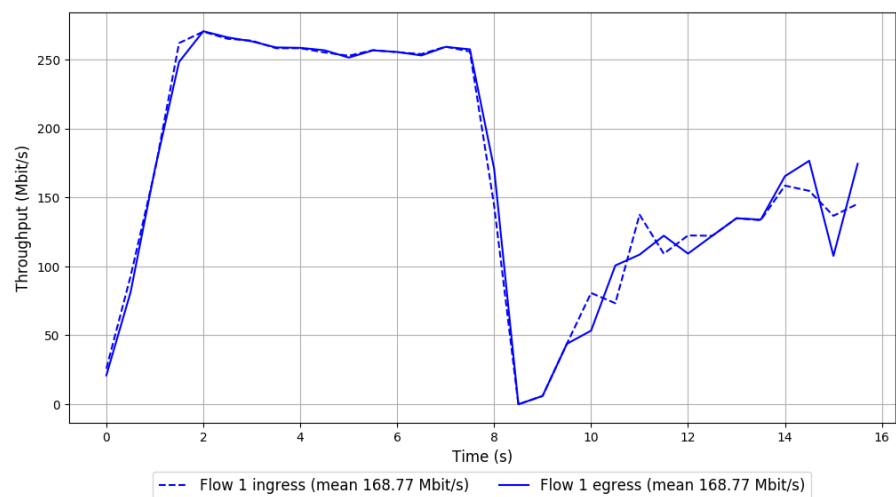


Run 9: Statistics of TaoVA-100x

Start at: 2018-01-02 07:13:34

End at: 2018-01-02 07:14:04

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

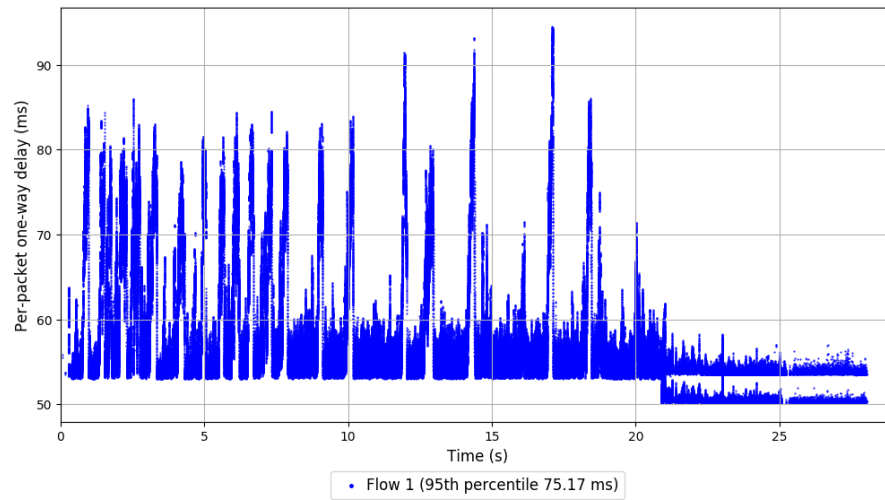
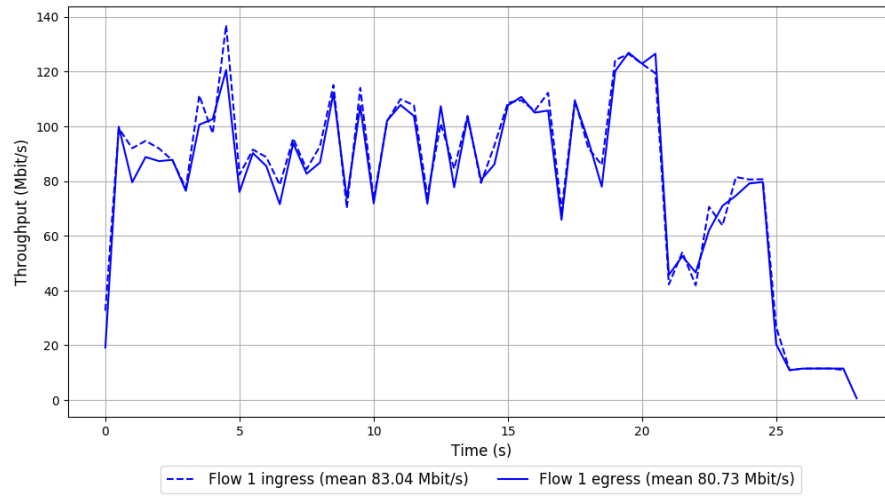


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-02 07:24:31
End at: 2018-01-02 07:25:01

# Below is generated by plot.py at 2018-01-02 08:51:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.73 Mbit/s
95th percentile per-packet one-way delay: 75.167 ms
Loss rate: 2.80%
-- Flow 1:
Average throughput: 80.73 Mbit/s
95th percentile per-packet one-way delay: 75.167 ms
Loss rate: 2.80%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-02 05:39:23

End at: 2018-01-02 05:39:53

Below is generated by plot.py at 2018-01-02 08:51:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.77 Mbit/s

95th percentile per-packet one-way delay: 51.985 ms

Loss rate: 0.00%

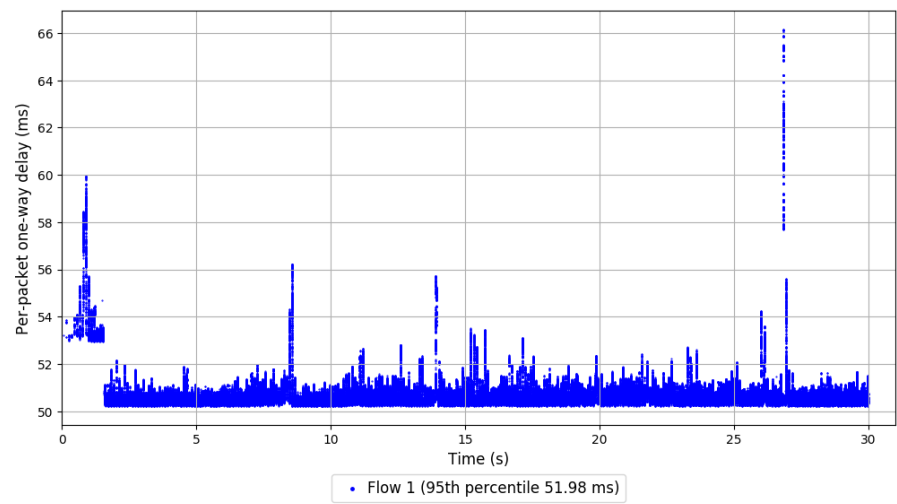
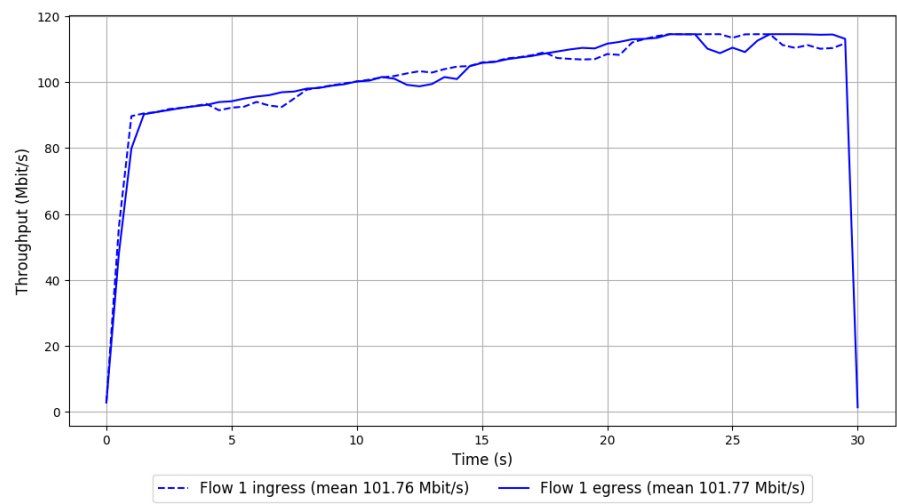
-- Flow 1:

Average throughput: 101.77 Mbit/s

95th percentile per-packet one-way delay: 51.985 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-02 05:51:10

End at: 2018-01-02 05:51:40

Below is generated by plot.py at 2018-01-02 08:51:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 30.64 Mbit/s

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

Loss rate: 0.02%

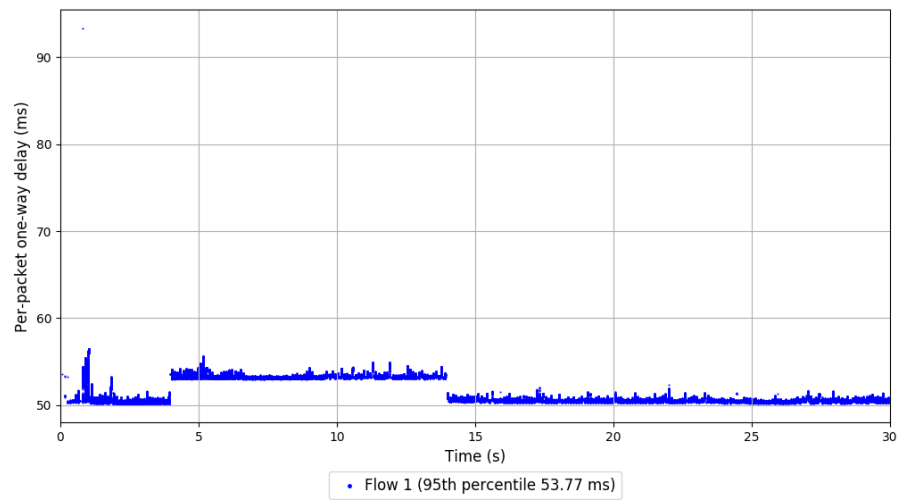
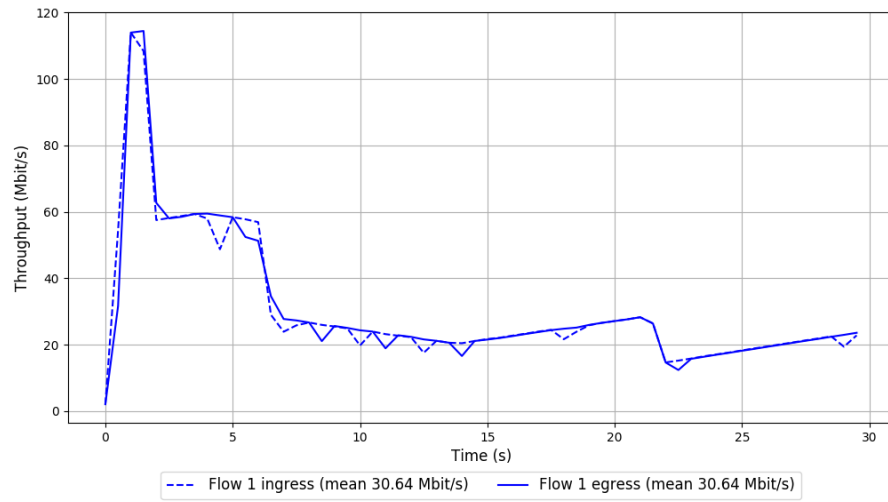
-- Flow 1:

Average throughput: 30.64 Mbit/s

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

Loss rate: 0.02%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-02 06:02:34

End at: 2018-01-02 06:03:04

Below is generated by plot.py at 2018-01-02 08:51:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.63 Mbit/s

95th percentile per-packet one-way delay: 53.593 ms

Loss rate: 0.00%

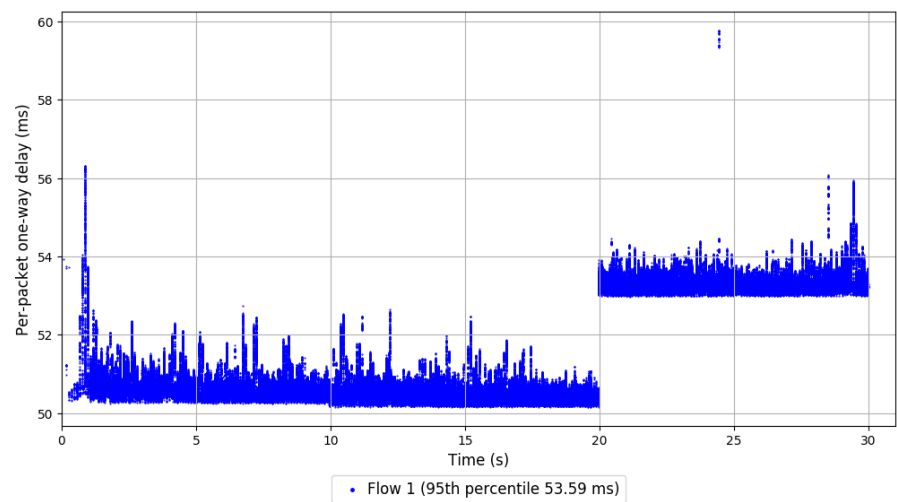
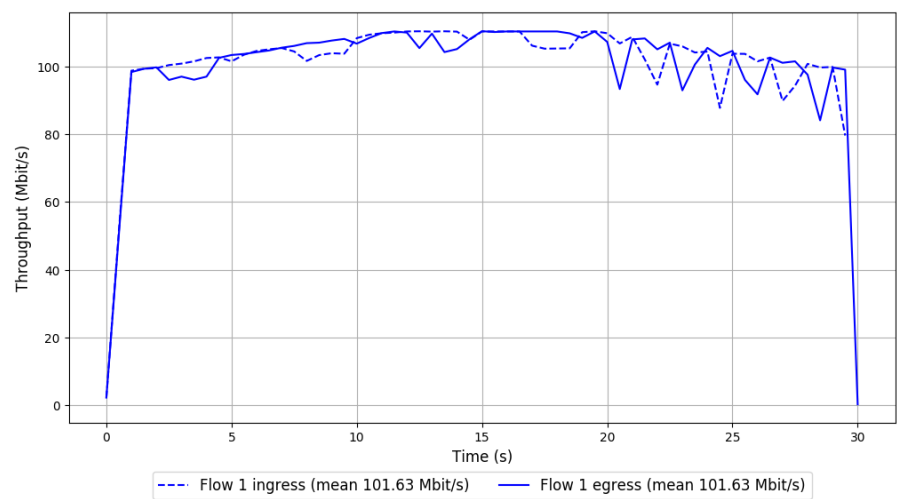
-- Flow 1:

Average throughput: 101.63 Mbit/s

95th percentile per-packet one-way delay: 53.593 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-02 06:14:03

End at: 2018-01-02 06:14:33

Below is generated by plot.py at 2018-01-02 08:51:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.11 Mbit/s

95th percentile per-packet one-way delay: 53.849 ms

Loss rate: 0.00%

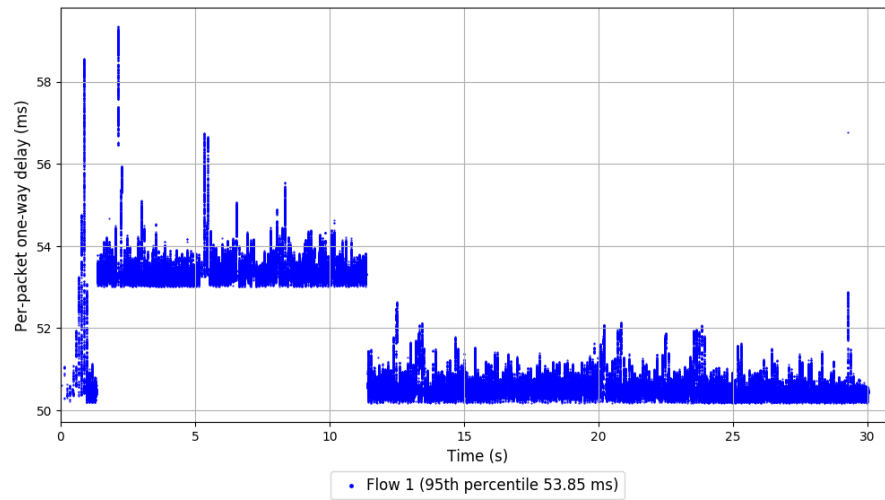
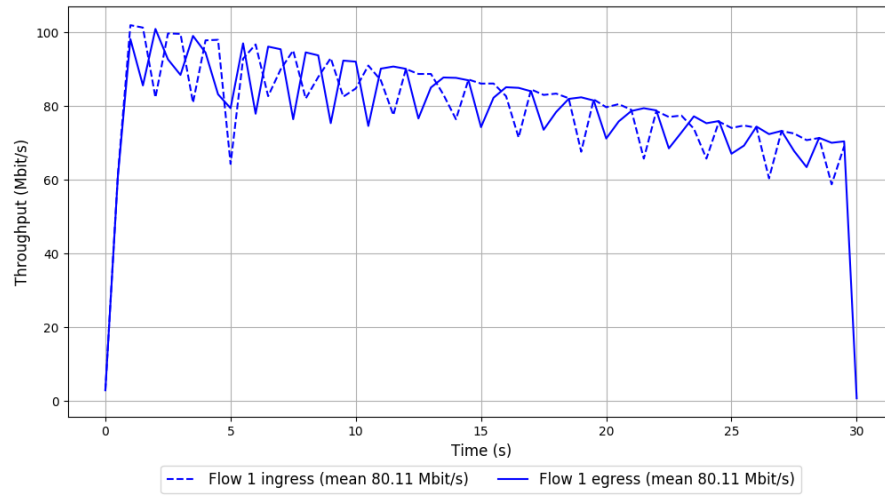
-- Flow 1:

Average throughput: 80.11 Mbit/s

95th percentile per-packet one-way delay: 53.849 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-02 06:25:54

End at: 2018-01-02 06:26:24

Below is generated by plot.py at 2018-01-02 08:51:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.61 Mbit/s

95th percentile per-packet one-way delay: 59.543 ms

Loss rate: 0.00%

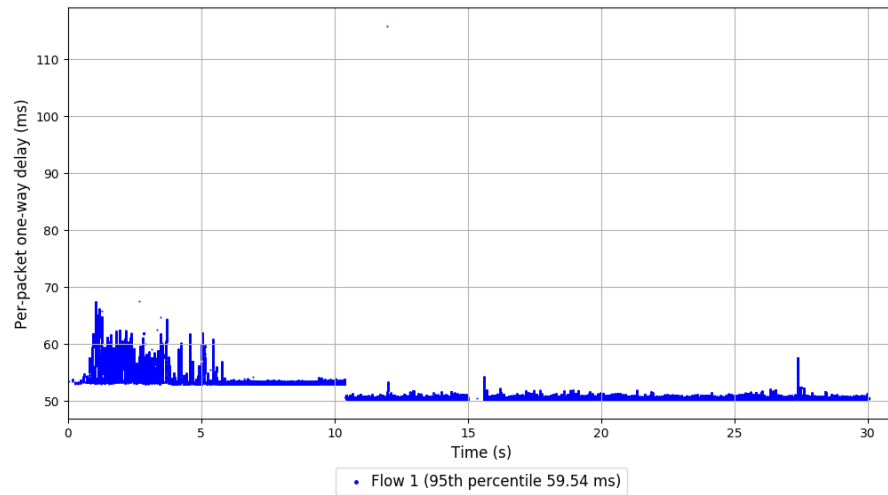
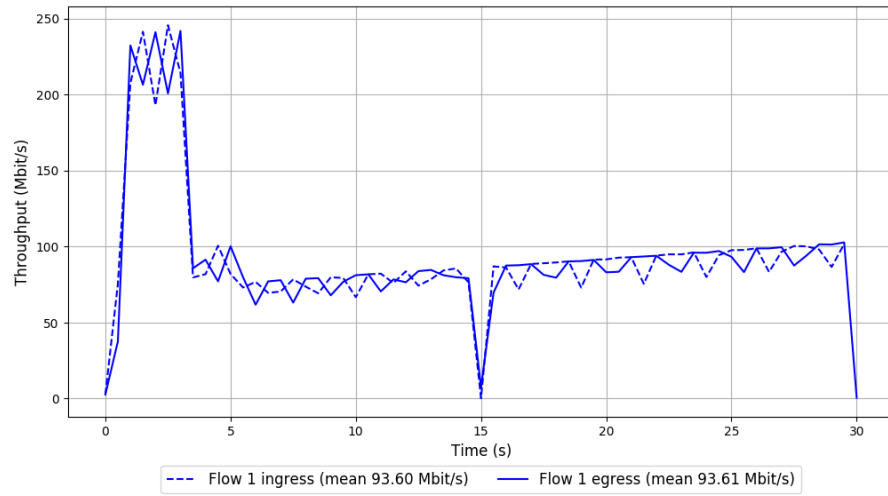
-- Flow 1:

Average throughput: 93.61 Mbit/s

95th percentile per-packet one-way delay: 59.543 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-02 06:37:27

End at: 2018-01-02 06:37:57

Below is generated by plot.py at 2018-01-02 08:51:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.30 Mbit/s

95th percentile per-packet one-way delay: 51.228 ms

Loss rate: 0.00%

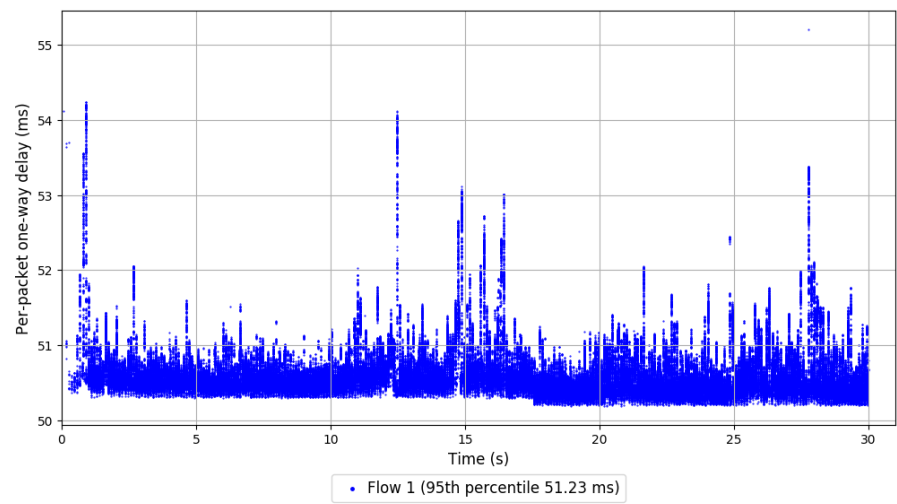
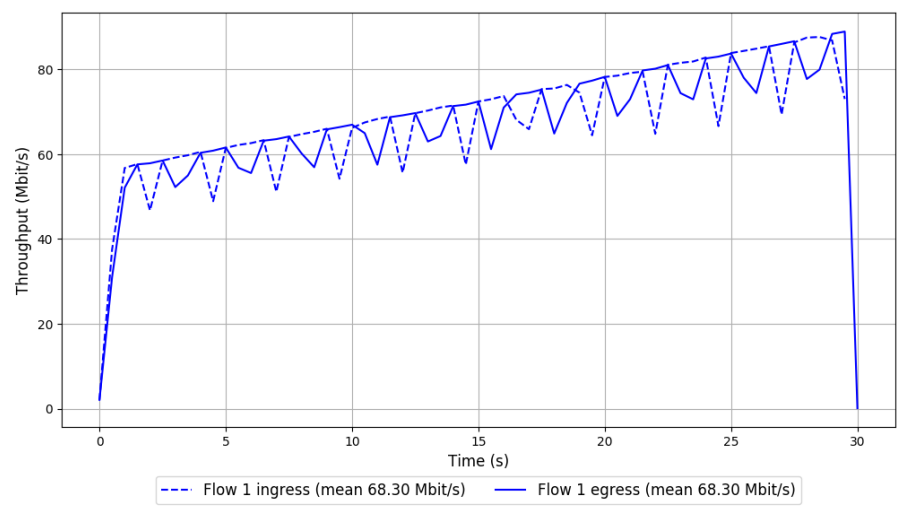
-- Flow 1:

Average throughput: 68.30 Mbit/s

95th percentile per-packet one-way delay: 51.228 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-02 06:48:45

End at: 2018-01-02 06:49:15

Below is generated by plot.py at 2018-01-02 08:51:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.98 Mbit/s

95th percentile per-packet one-way delay: 51.366 ms

Loss rate: 0.00%

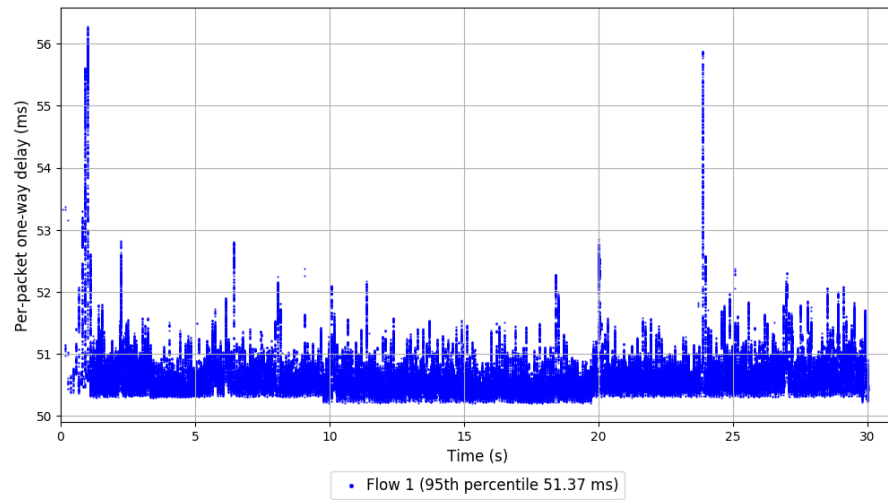
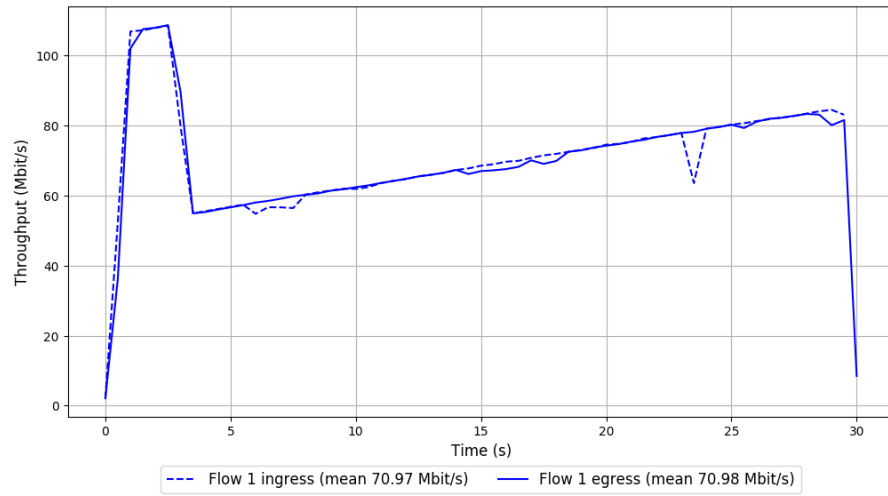
-- Flow 1:

Average throughput: 70.98 Mbit/s

95th percentile per-packet one-way delay: 51.366 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-02 07:00:14

End at: 2018-01-02 07:00:44

Below is generated by plot.py at 2018-01-02 08:51:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.51 Mbit/s

95th percentile per-packet one-way delay: 53.593 ms

Loss rate: 0.00%

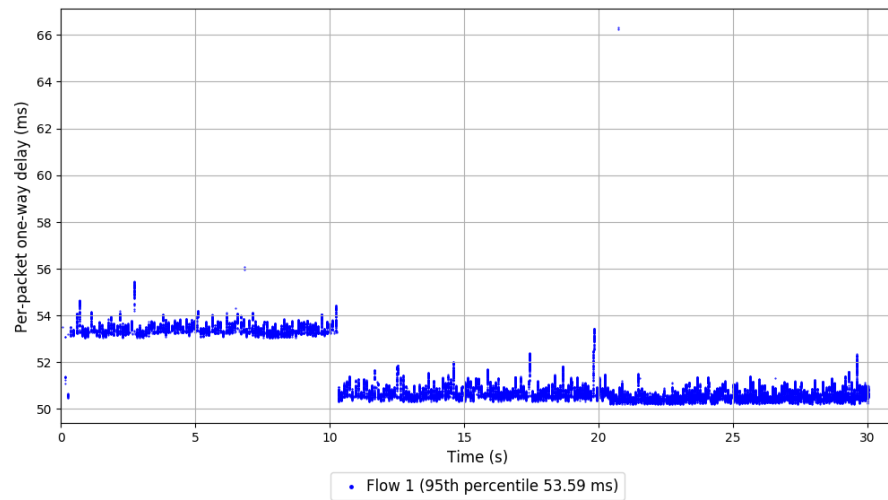
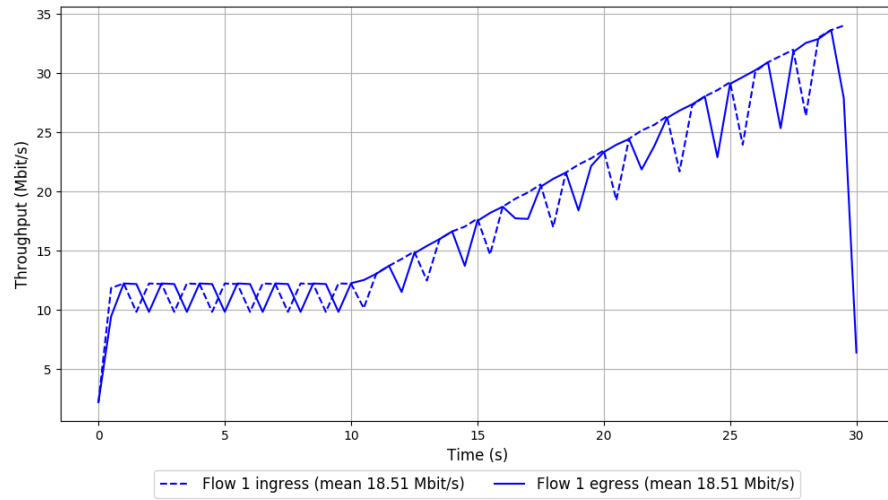
-- Flow 1:

Average throughput: 18.51 Mbit/s

95th percentile per-packet one-way delay: 53.593 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-02 07:12:13

End at: 2018-01-02 07:12:43

Below is generated by plot.py at 2018-01-02 08:51:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 15.84 Mbit/s

95th percentile per-packet one-way delay: 53.550 ms

Loss rate: 0.37%

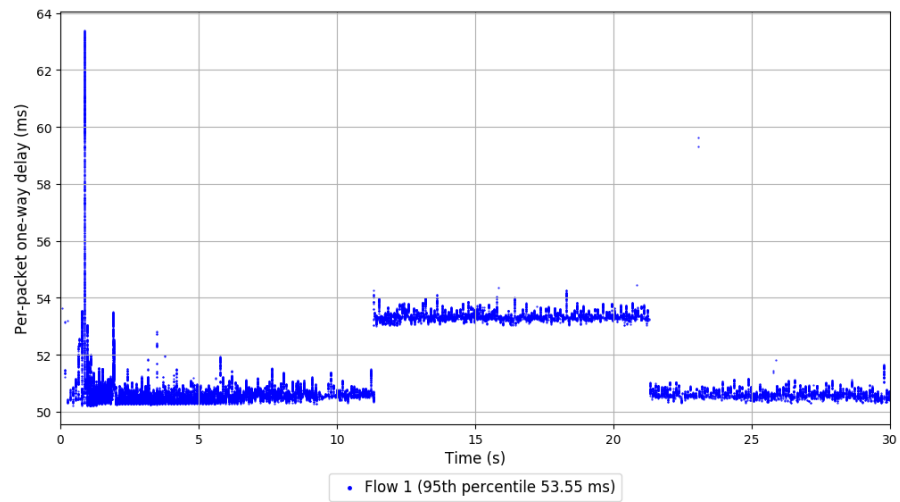
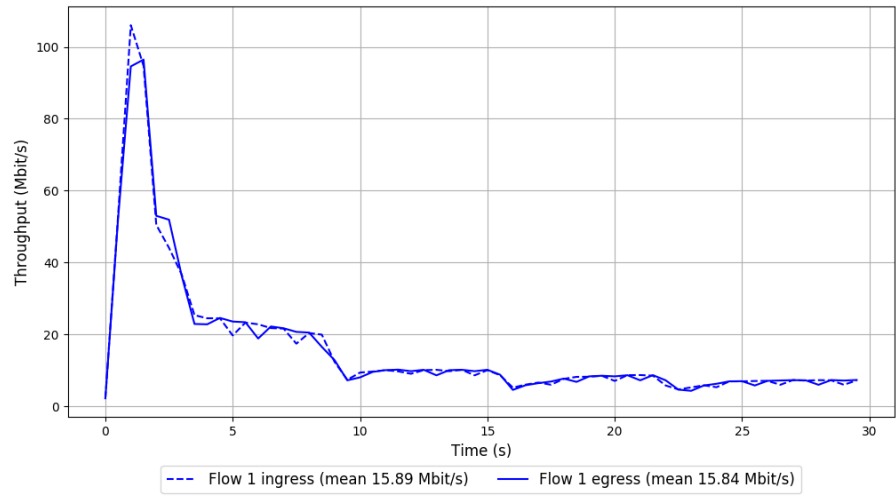
-- Flow 1:

Average throughput: 15.84 Mbit/s

95th percentile per-packet one-way delay: 53.550 ms

Loss rate: 0.37%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-02 07:23:14

End at: 2018-01-02 07:23:44

Below is generated by plot.py at 2018-01-02 08:51:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.95 Mbit/s

95th percentile per-packet one-way delay: 54.604 ms

Loss rate: 0.06%

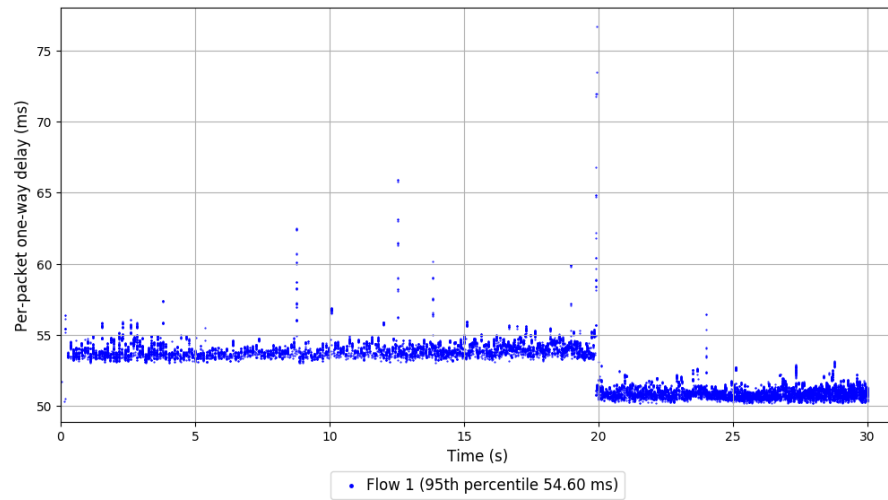
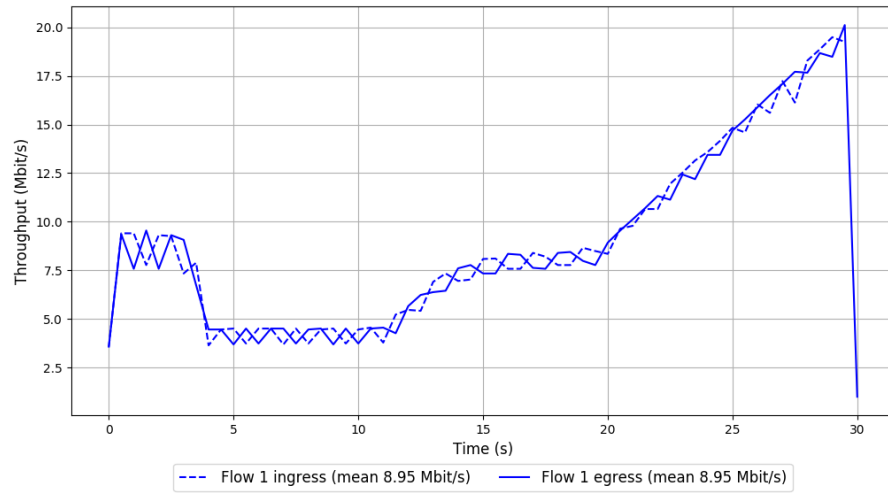
-- Flow 1:

Average throughput: 8.95 Mbit/s

95th percentile per-packet one-way delay: 54.604 ms

Loss rate: 0.06%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-02 05:42:29

End at: 2018-01-02 05:42:59

Below is generated by plot.py at 2018-01-02 08:55:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 316.53 Mbit/s

95th percentile per-packet one-way delay: 165.733 ms

Loss rate: 0.46%

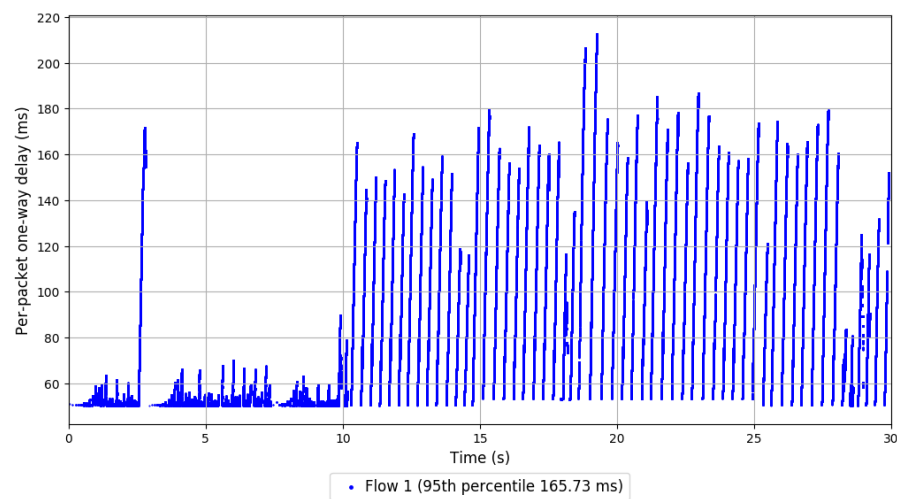
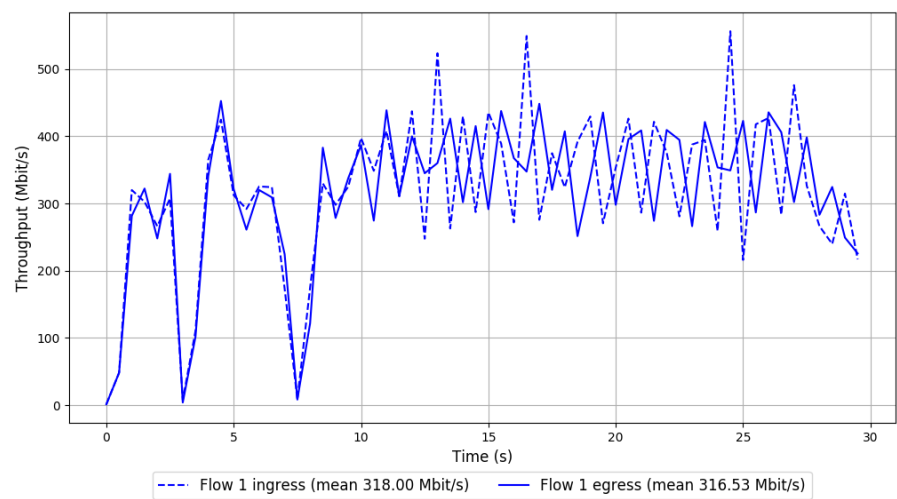
-- Flow 1:

Average throughput: 316.53 Mbit/s

95th percentile per-packet one-way delay: 165.733 ms

Loss rate: 0.46%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-02 05:54:02

End at: 2018-01-02 05:54:32

Below is generated by plot.py at 2018-01-02 08:55:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.22 Mbit/s

95th percentile per-packet one-way delay: 125.793 ms

Loss rate: 0.41%

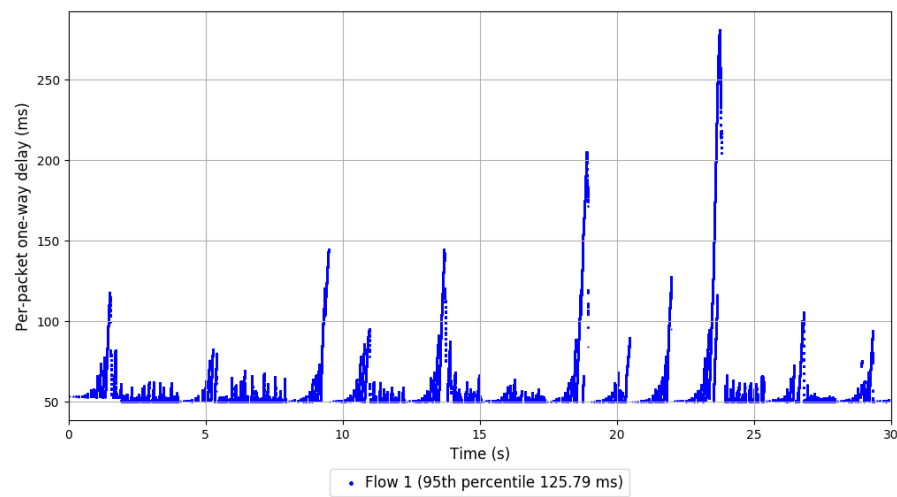
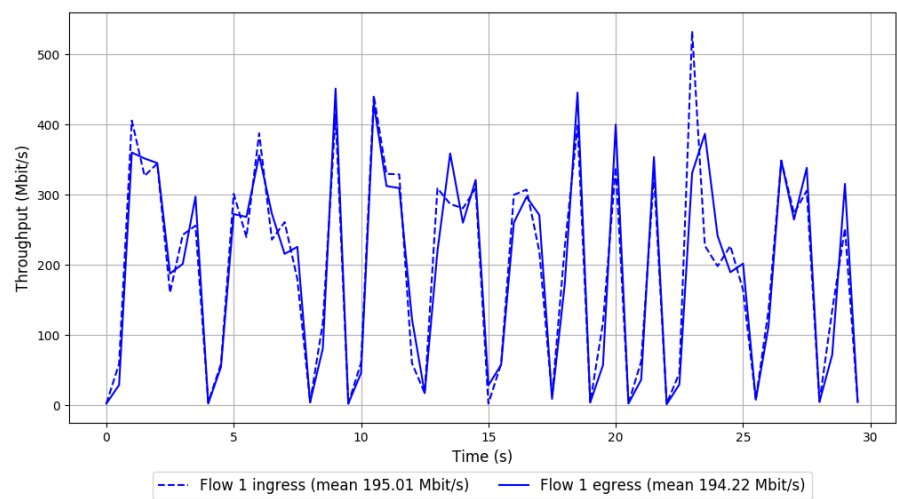
-- Flow 1:

Average throughput: 194.22 Mbit/s

95th percentile per-packet one-way delay: 125.793 ms

Loss rate: 0.41%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-02 06:05:27

End at: 2018-01-02 06:05:57

Below is generated by plot.py at 2018-01-02 08:55:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 245.76 Mbit/s

95th percentile per-packet one-way delay: 116.946 ms

Loss rate: 0.85%

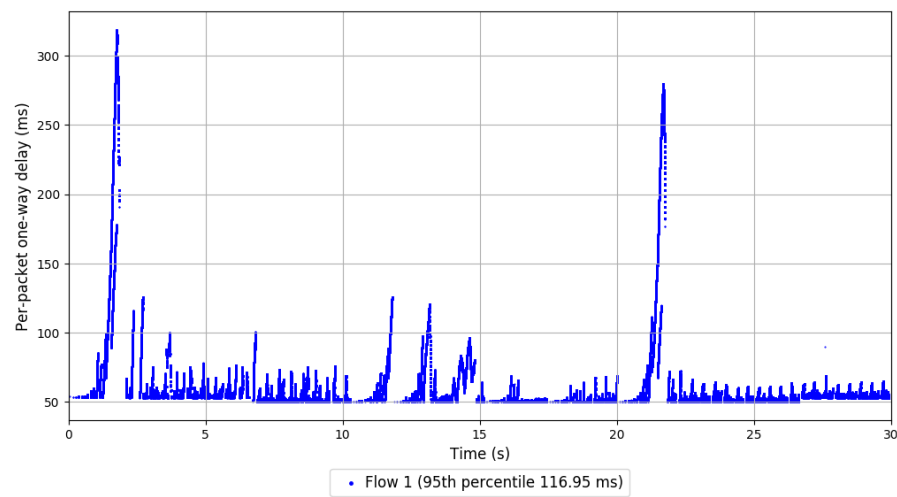
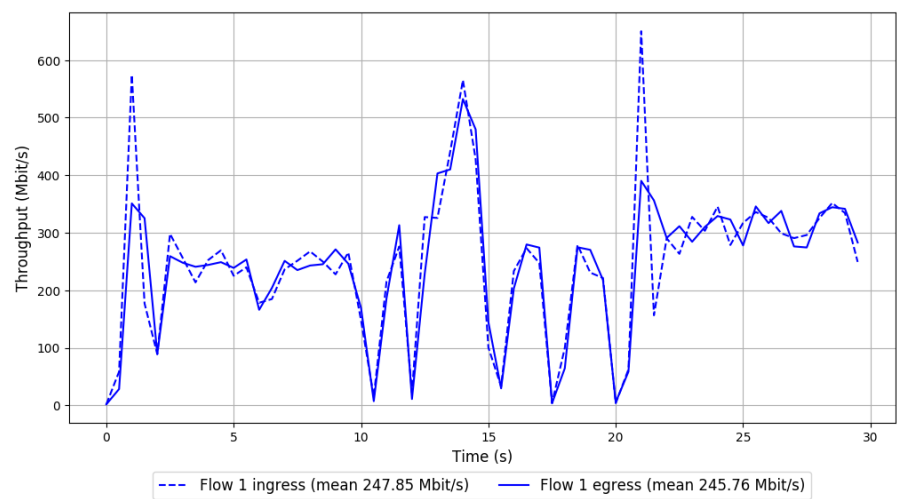
-- Flow 1:

Average throughput: 245.76 Mbit/s

95th percentile per-packet one-way delay: 116.946 ms

Loss rate: 0.85%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-02 06:17:16

End at: 2018-01-02 06:17:46

Below is generated by plot.py at 2018-01-02 08:55:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 278.49 Mbit/s

95th percentile per-packet one-way delay: 72.406 ms

Loss rate: 0.04%

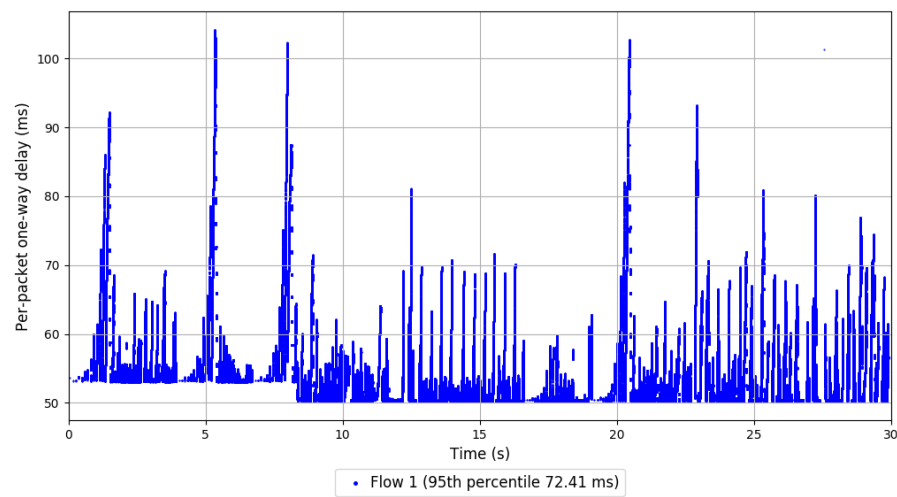
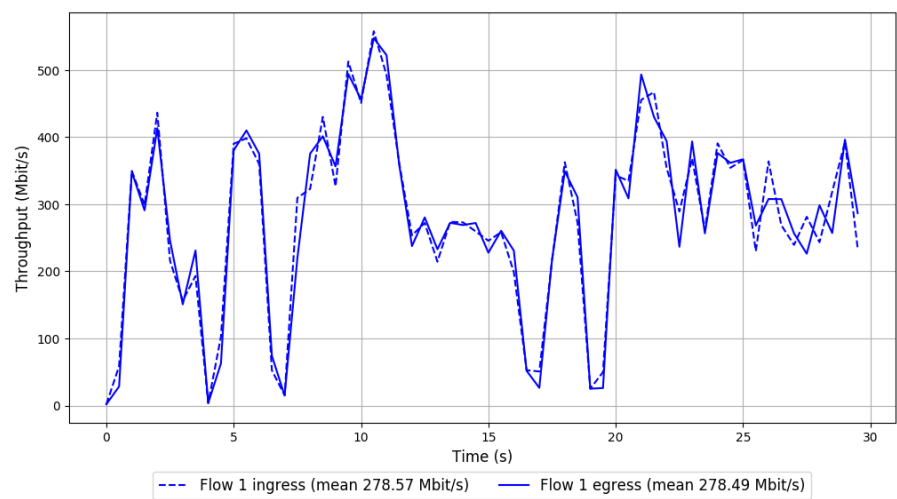
-- Flow 1:

Average throughput: 278.49 Mbit/s

95th percentile per-packet one-way delay: 72.406 ms

Loss rate: 0.04%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-02 06:28:47

End at: 2018-01-02 06:29:17

Below is generated by plot.py at 2018-01-02 08:55:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 283.72 Mbit/s

95th percentile per-packet one-way delay: 78.844 ms

Loss rate: 0.05%

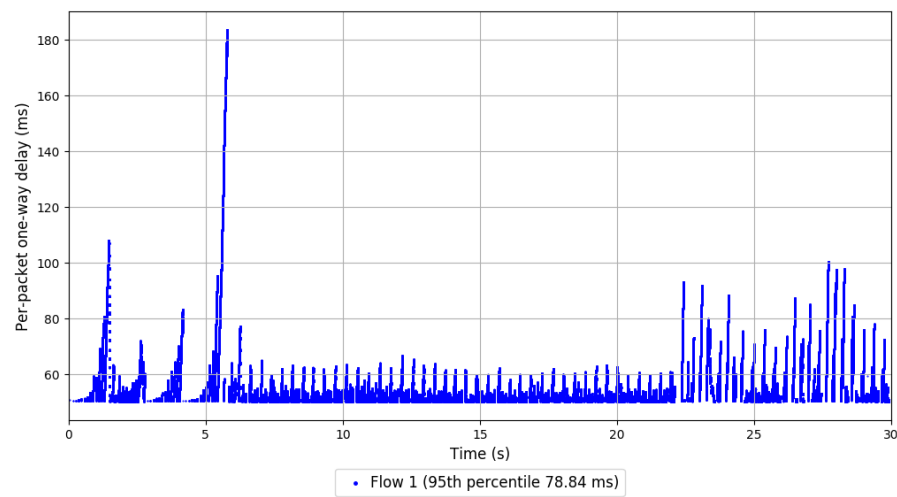
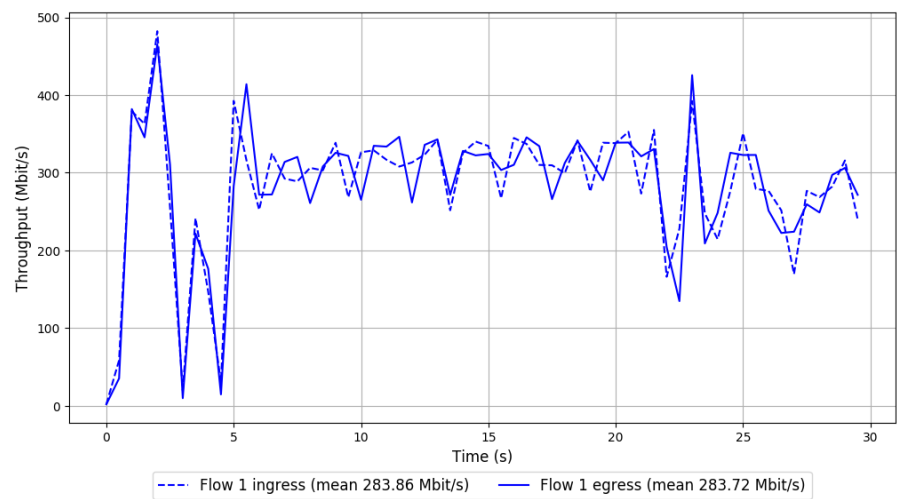
-- Flow 1:

Average throughput: 283.72 Mbit/s

95th percentile per-packet one-way delay: 78.844 ms

Loss rate: 0.05%

Run 5: Report of Verus — Data Link

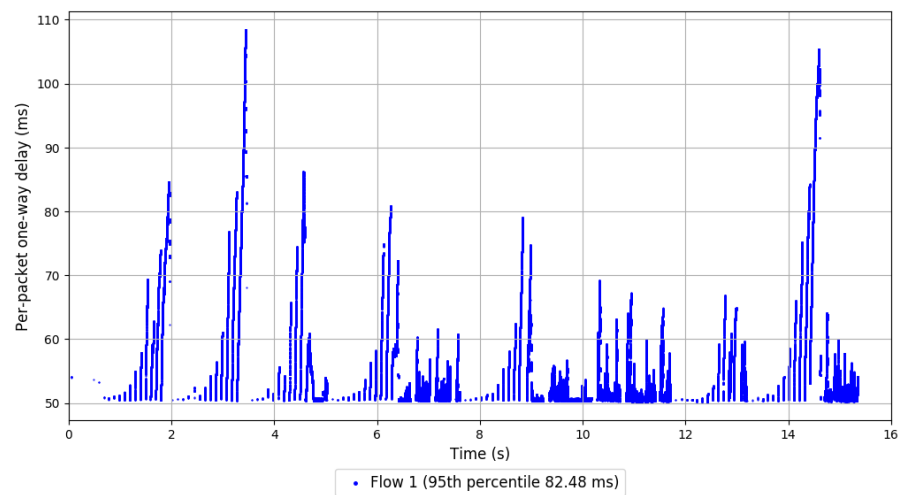
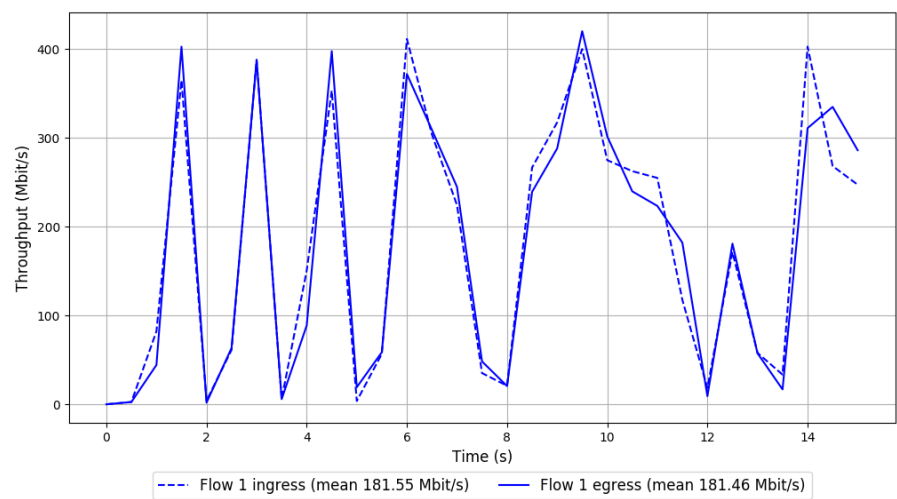


Run 6: Statistics of Verus

Start at: 2018-01-02 06:40:19

End at: 2018-01-02 06:40:49

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-02 06:51:36

End at: 2018-01-02 06:52:06

Below is generated by plot.py at 2018-01-02 08:56:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 281.09 Mbit/s

95th percentile per-packet one-way delay: 67.949 ms

Loss rate: 0.00%

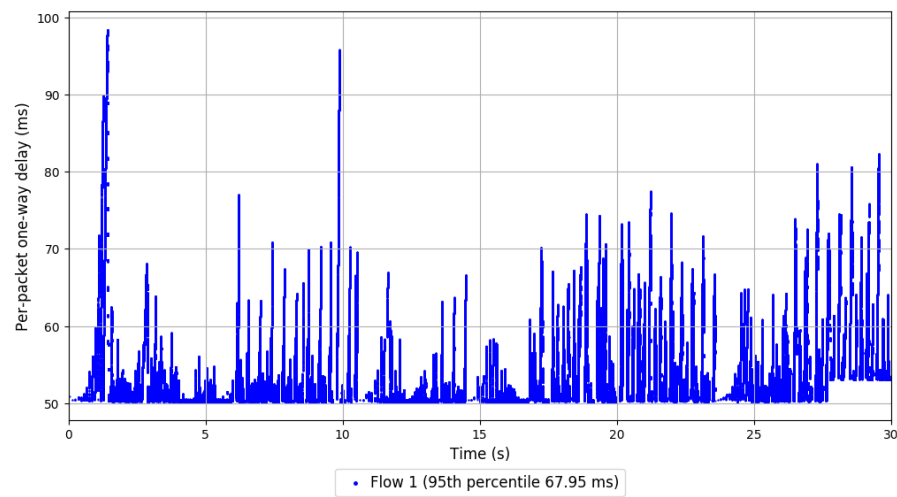
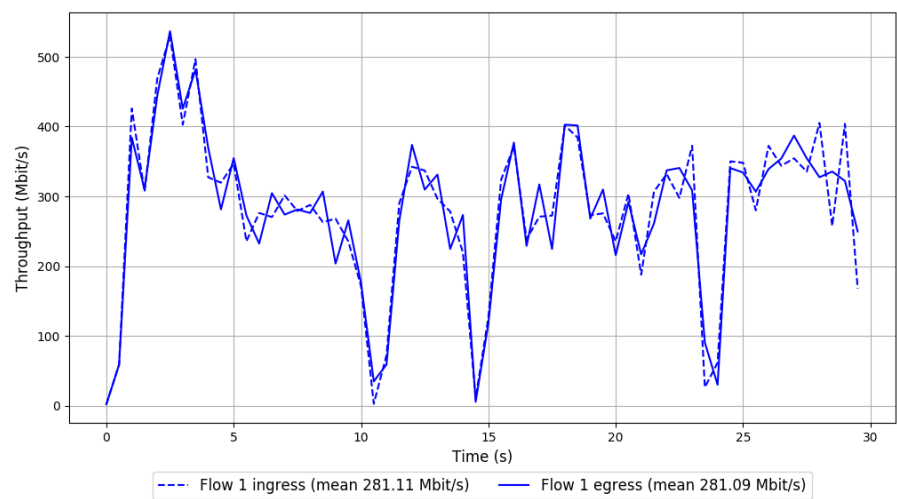
-- Flow 1:

Average throughput: 281.09 Mbit/s

95th percentile per-packet one-way delay: 67.949 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-02 07:03:26

End at: 2018-01-02 07:03:56

Below is generated by plot.py at 2018-01-02 08:57:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 346.71 Mbit/s

95th percentile per-packet one-way delay: 172.289 ms

Loss rate: 0.73%

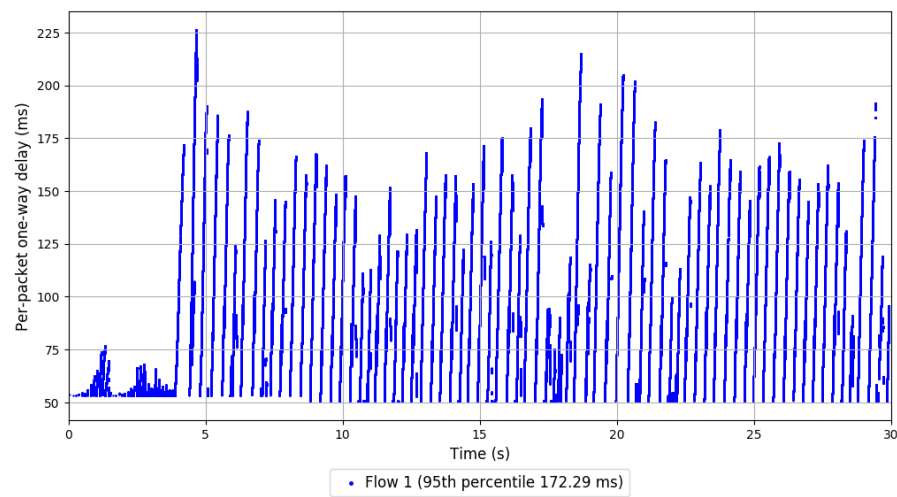
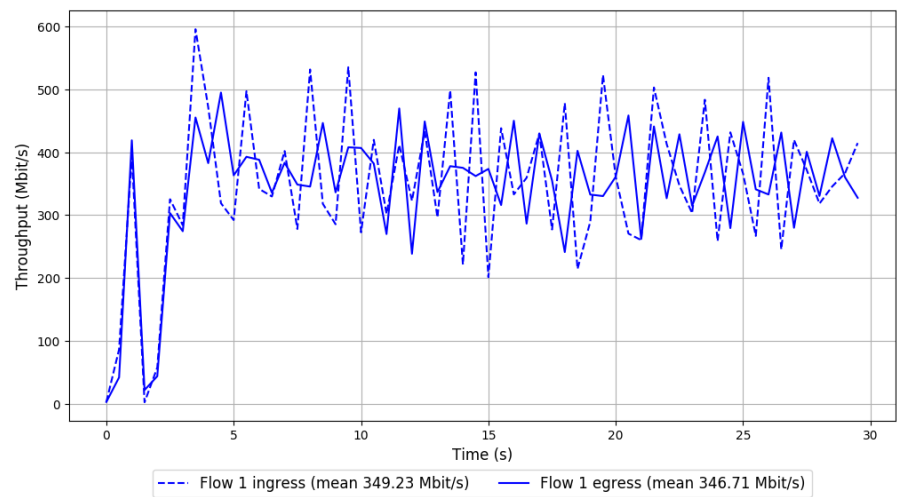
-- Flow 1:

Average throughput: 346.71 Mbit/s

95th percentile per-packet one-way delay: 172.289 ms

Loss rate: 0.73%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-02 07:15:09

End at: 2018-01-02 07:15:39

Below is generated by plot.py at 2018-01-02 08:57:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 252.74 Mbit/s

95th percentile per-packet one-way delay: 85.008 ms

Loss rate: 0.21%

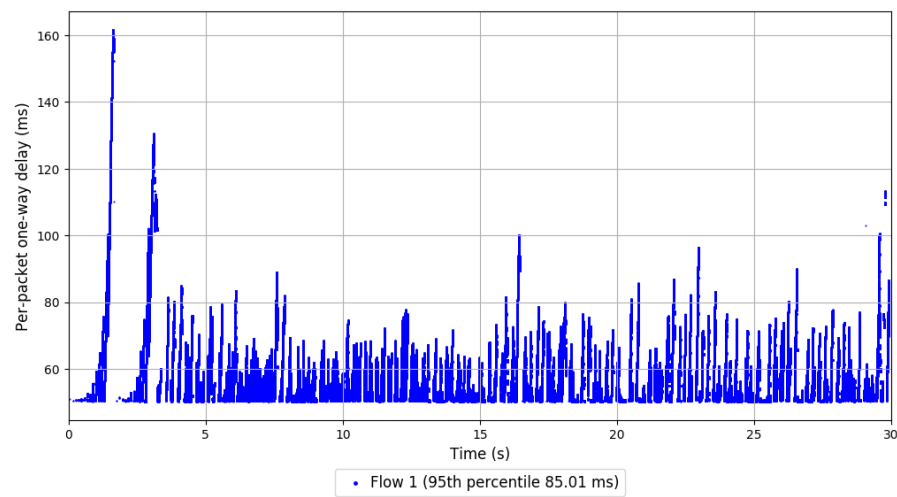
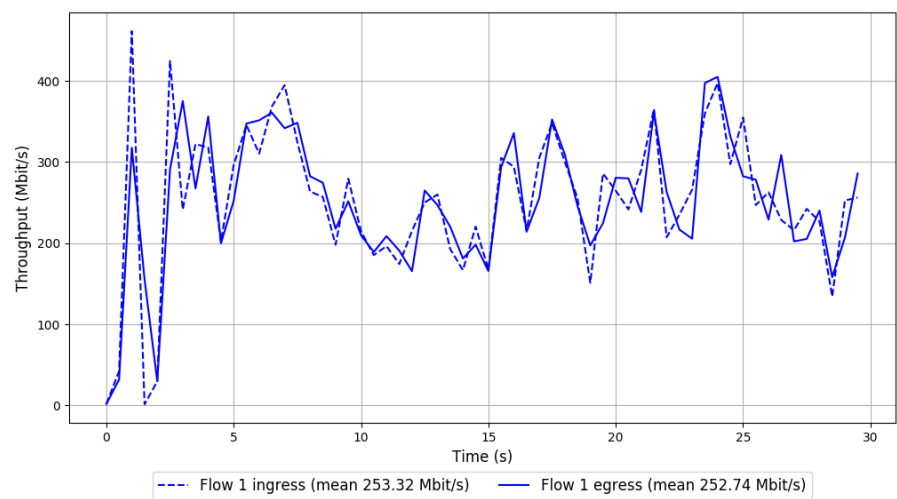
-- Flow 1:

Average throughput: 252.74 Mbit/s

95th percentile per-packet one-way delay: 85.008 ms

Loss rate: 0.21%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-02 07:26:00

End at: 2018-01-02 07:26:30

Below is generated by plot.py at 2018-01-02 08:57:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.48 Mbit/s

95th percentile per-packet one-way delay: 86.823 ms

Loss rate: 20.99%

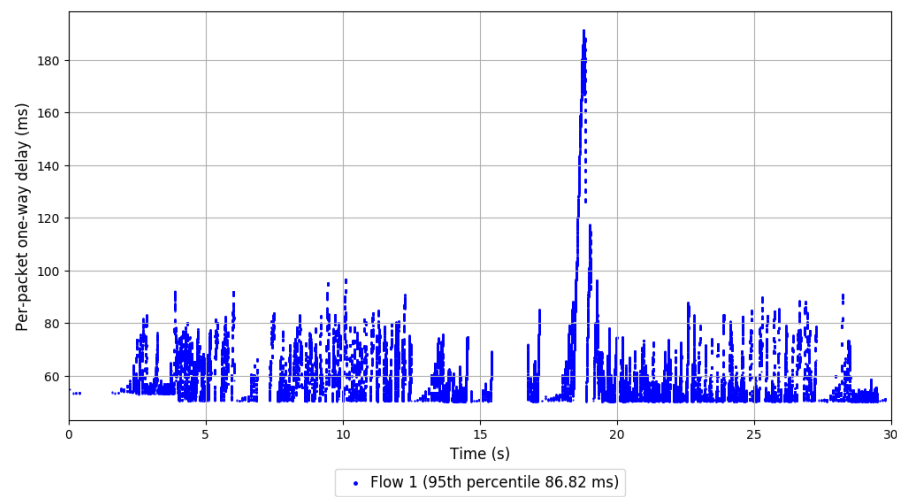
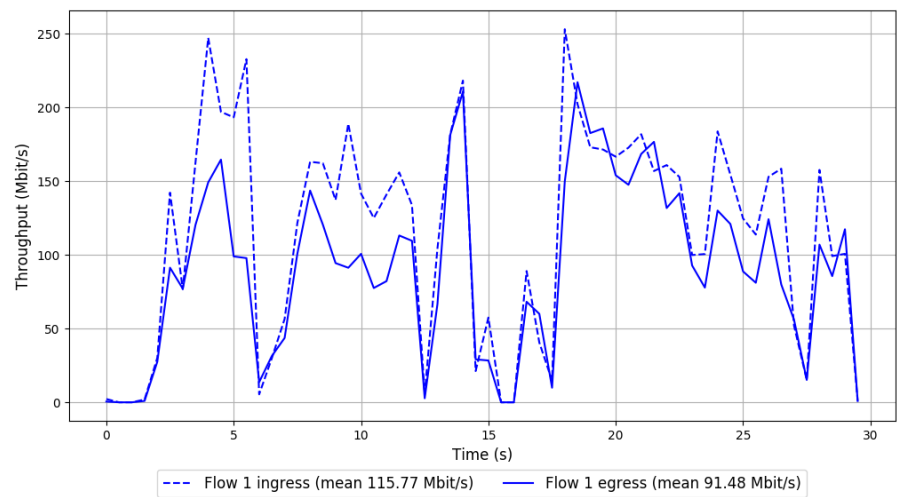
-- Flow 1:

Average throughput: 91.48 Mbit/s

95th percentile per-packet one-way delay: 86.823 ms

Loss rate: 20.99%

Run 10: Report of Verus — Data Link

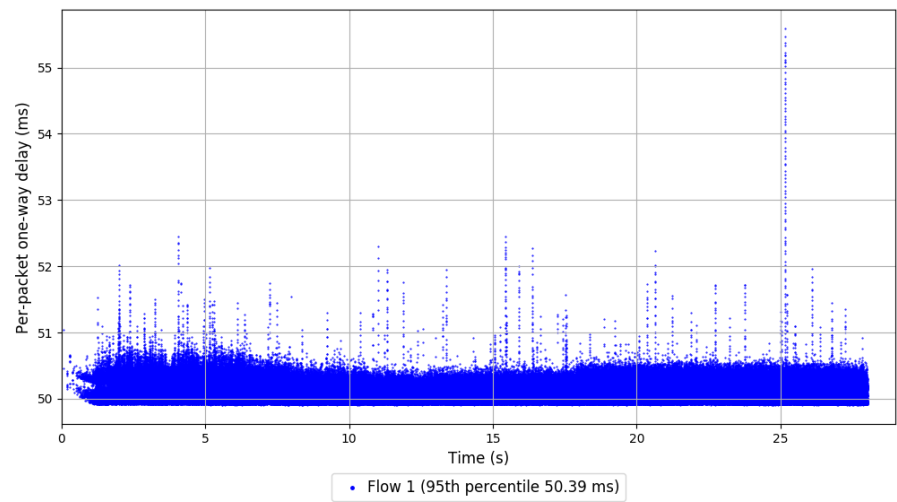
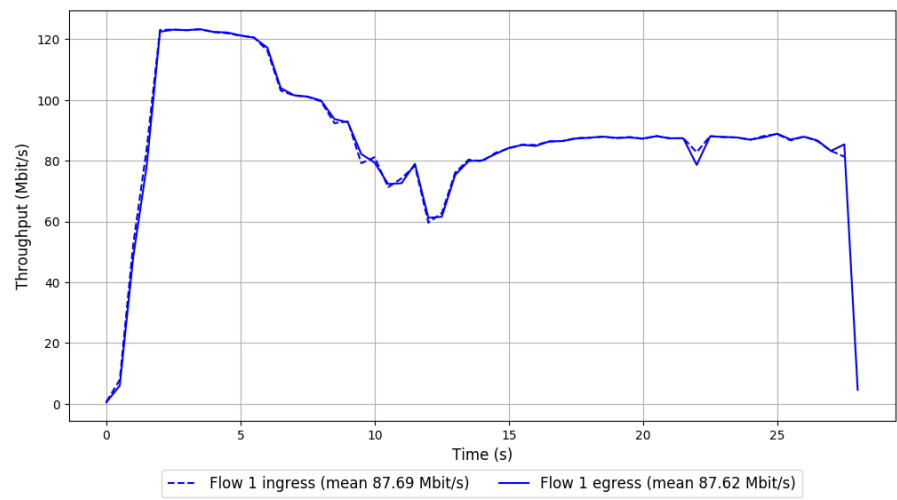


```
Run 1: Statistics of Copa

Start at: 2018-01-02 05:37:24
End at: 2018-01-02 05:37:54

# Below is generated by plot.py at 2018-01-02 08:57:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.62 Mbit/s
95th percentile per-packet one-way delay: 50.388 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 87.62 Mbit/s
95th percentile per-packet one-way delay: 50.388 ms
Loss rate: 0.09%
```

Run 1: Report of Copa — Data Link

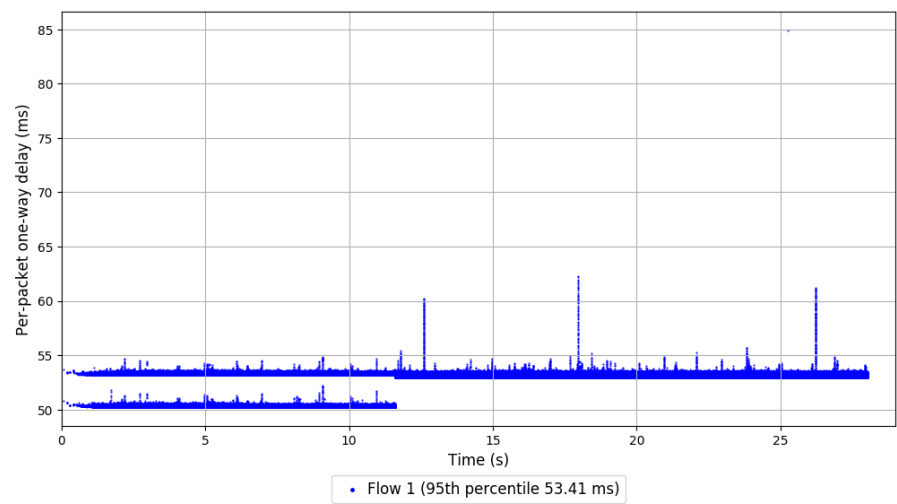
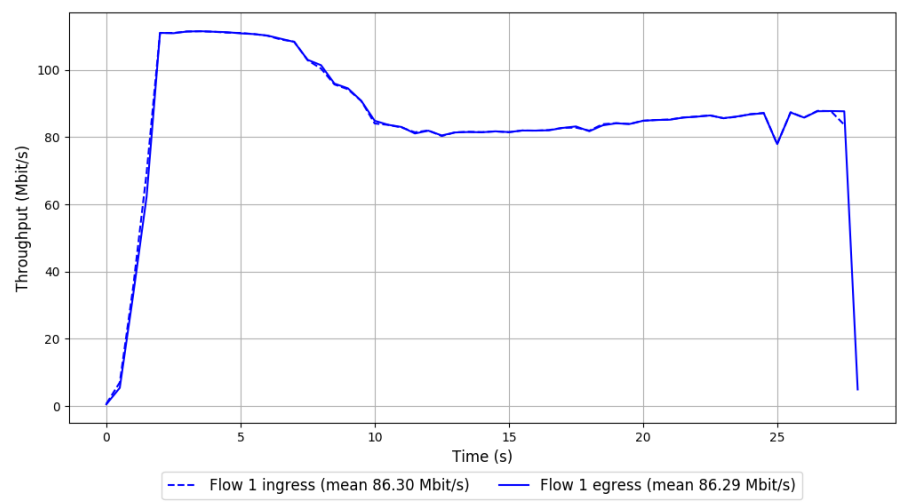


```
Run 2: Statistics of Copa

Start at: 2018-01-02 05:49:11
End at: 2018-01-02 05:49:41

# Below is generated by plot.py at 2018-01-02 08:57:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.29 Mbit/s
95th percentile per-packet one-way delay: 53.406 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 86.29 Mbit/s
95th percentile per-packet one-way delay: 53.406 ms
Loss rate: 0.01%
```

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-02 06:00:36

End at: 2018-01-02 06:01:06

Below is generated by plot.py at 2018-01-02 08:57:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.90 Mbit/s

95th percentile per-packet one-way delay: 53.123 ms

Loss rate: 0.00%

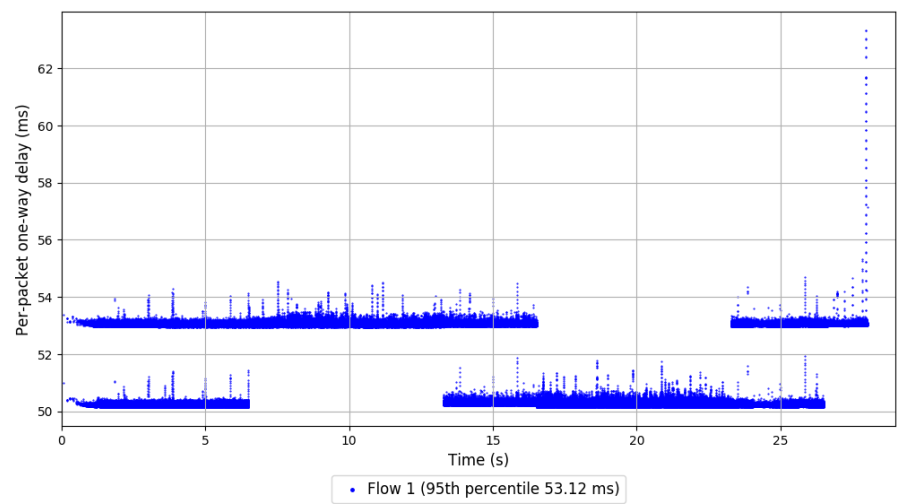
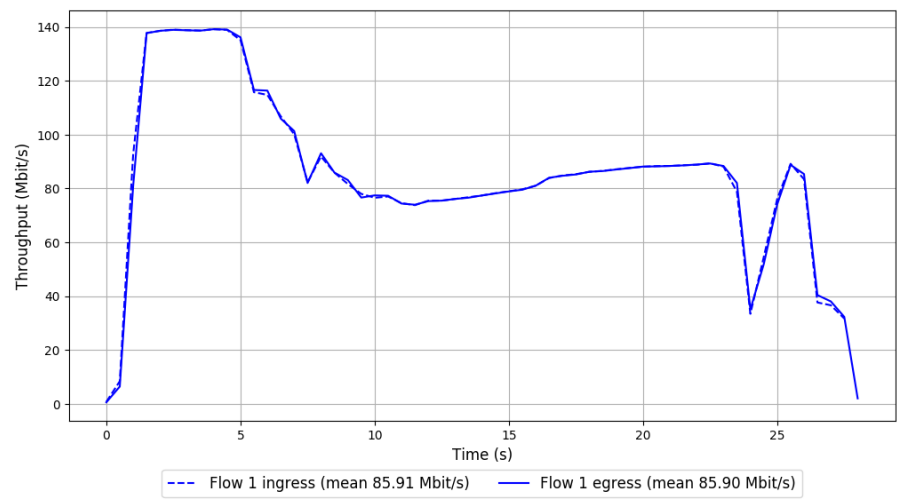
-- Flow 1:

Average throughput: 85.90 Mbit/s

95th percentile per-packet one-way delay: 53.123 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-02 06:12:05

End at: 2018-01-02 06:12:35

Below is generated by plot.py at 2018-01-02 08:57:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.15 Mbit/s

95th percentile per-packet one-way delay: 53.357 ms

Loss rate: 0.00%

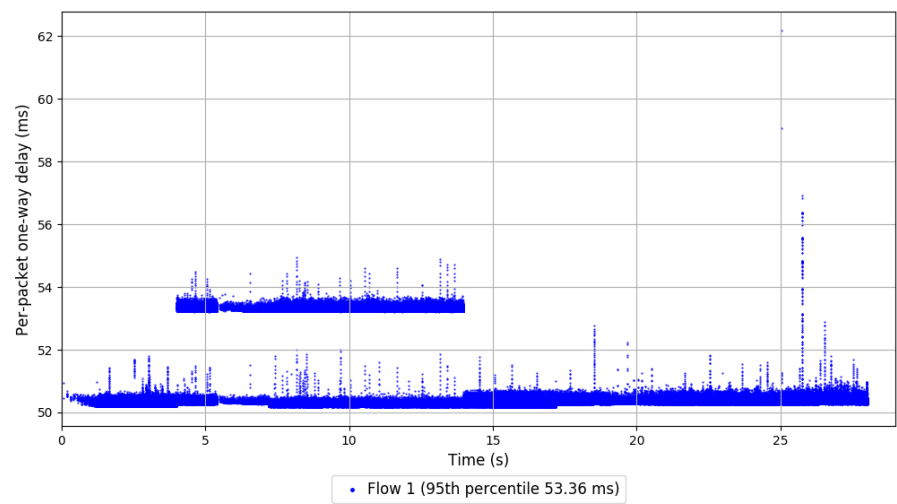
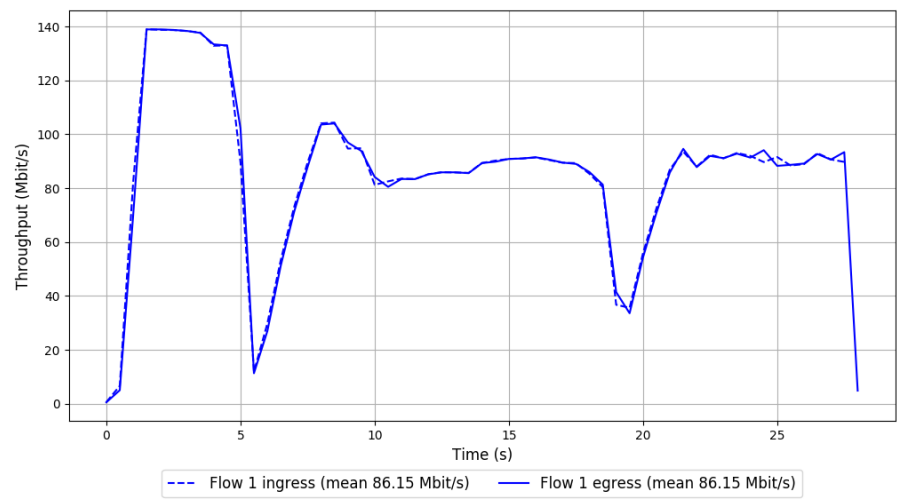
-- Flow 1:

Average throughput: 86.15 Mbit/s

95th percentile per-packet one-way delay: 53.357 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-02 06:23:55

End at: 2018-01-02 06:24:25

Below is generated by plot.py at 2018-01-02 08:57:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.61 Mbit/s

95th percentile per-packet one-way delay: 53.556 ms

Loss rate: 0.00%

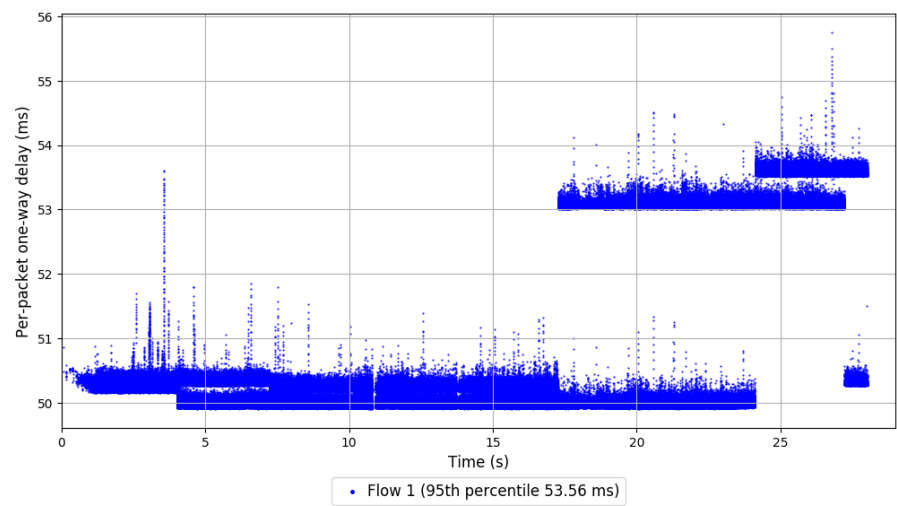
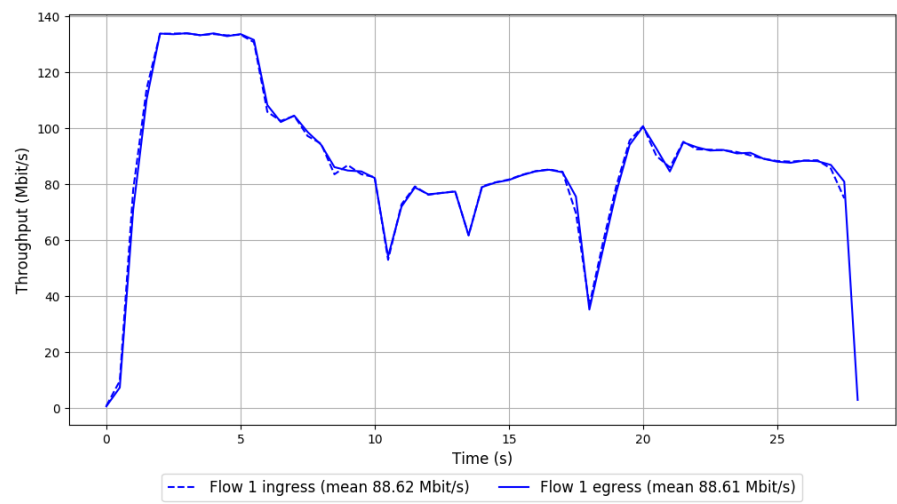
-- Flow 1:

Average throughput: 88.61 Mbit/s

95th percentile per-packet one-way delay: 53.556 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-02 06:35:28

End at: 2018-01-02 06:35:58

Below is generated by plot.py at 2018-01-02 08:59:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.95 Mbit/s

95th percentile per-packet one-way delay: 53.370 ms

Loss rate: 0.02%

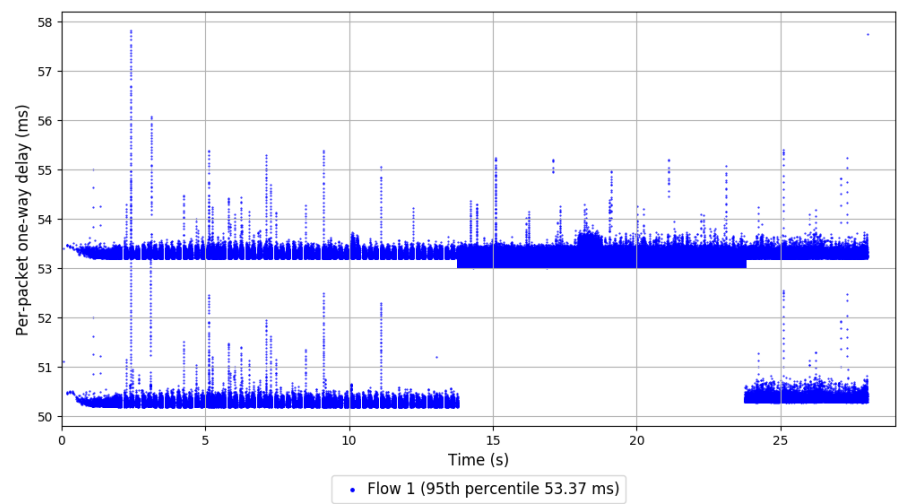
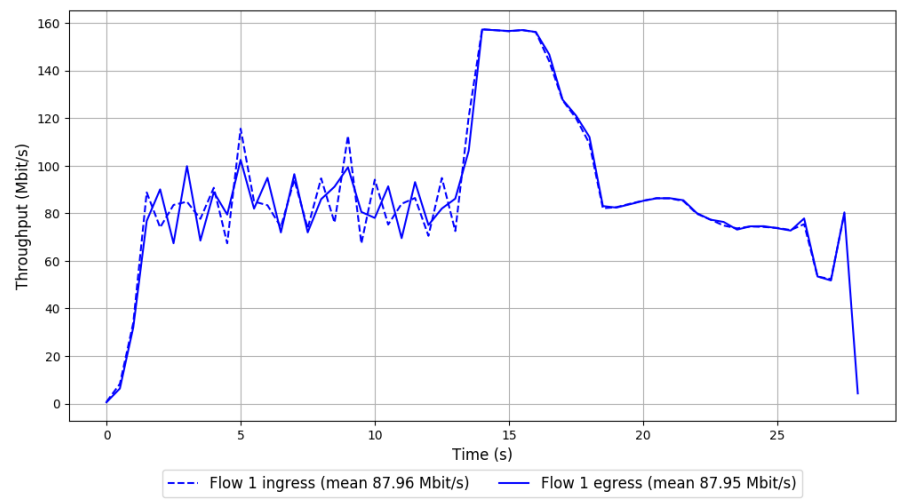
-- Flow 1:

Average throughput: 87.95 Mbit/s

95th percentile per-packet one-way delay: 53.370 ms

Loss rate: 0.02%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-02 06:46:47

End at: 2018-01-02 06:47:17

Below is generated by plot.py at 2018-01-02 08:59:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.13 Mbit/s

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

Loss rate: 0.01%

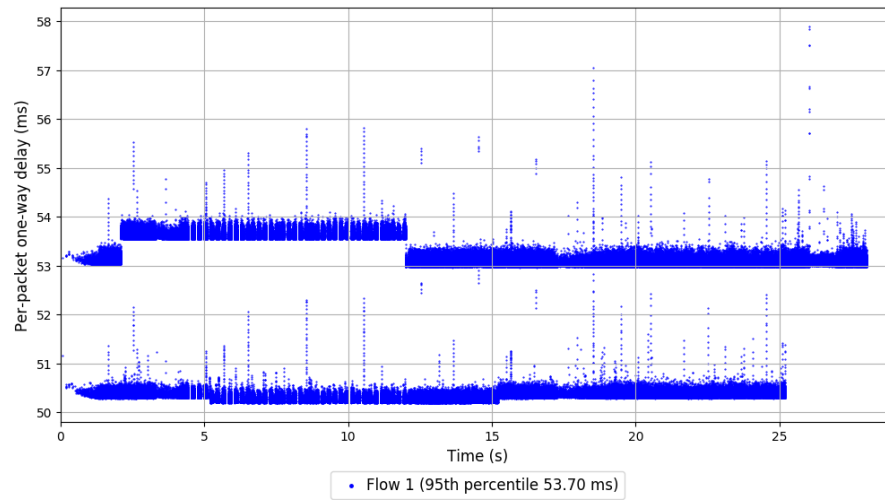
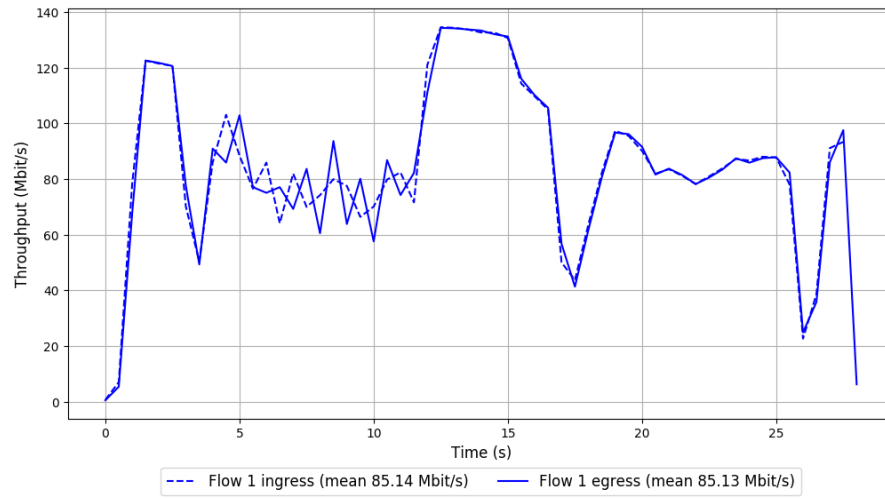
-- Flow 1:

Average throughput: 85.13 Mbit/s

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

Loss rate: 0.01%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-02 06:58:18

End at: 2018-01-02 06:58:48

Below is generated by plot.py at 2018-01-02 08:59:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.82 Mbit/s

95th percentile per-packet one-way delay: 53.197 ms

Loss rate: 0.00%

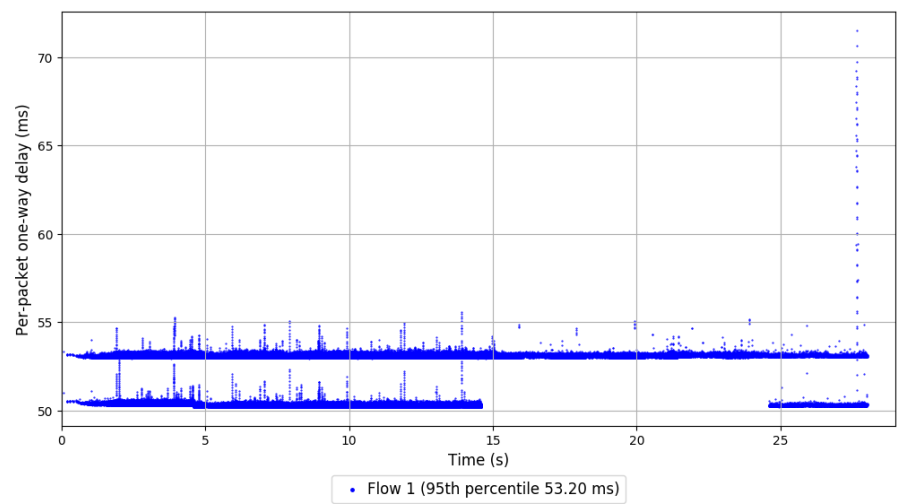
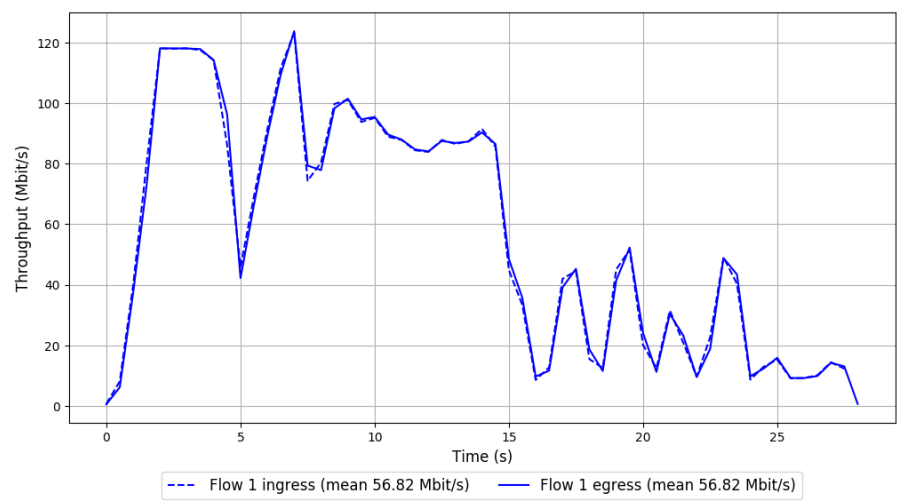
-- Flow 1:

Average throughput: 56.82 Mbit/s

95th percentile per-packet one-way delay: 53.197 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-02 07:10:14

End at: 2018-01-02 07:10:44

Below is generated by plot.py at 2018-01-02 08:59:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.60 Mbit/s

95th percentile per-packet one-way delay: 53.627 ms

Loss rate: 0.00%

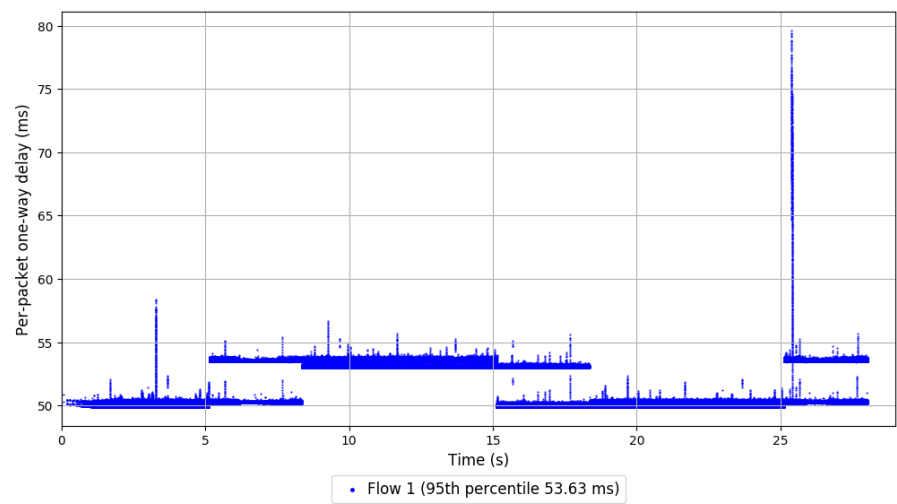
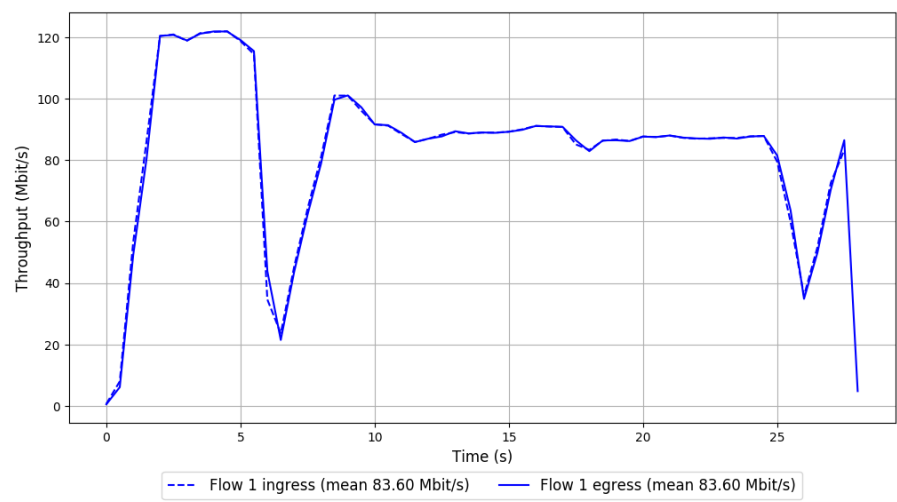
-- Flow 1:

Average throughput: 83.60 Mbit/s

95th percentile per-packet one-way delay: 53.627 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-02 07:21:42

End at: 2018-01-02 07:22:12

Below is generated by plot.py at 2018-01-02 08:59:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.12 Mbit/s

95th percentile per-packet one-way delay: 53.732 ms

Loss rate: 0.02%

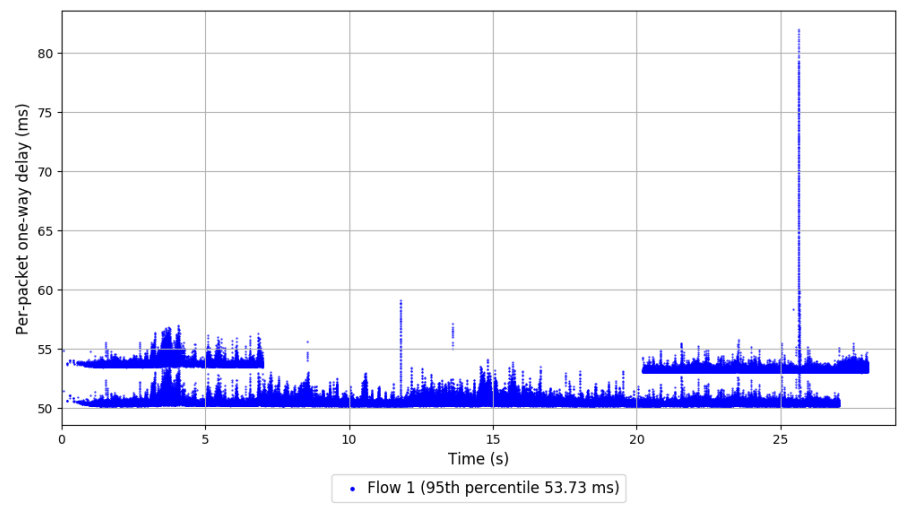
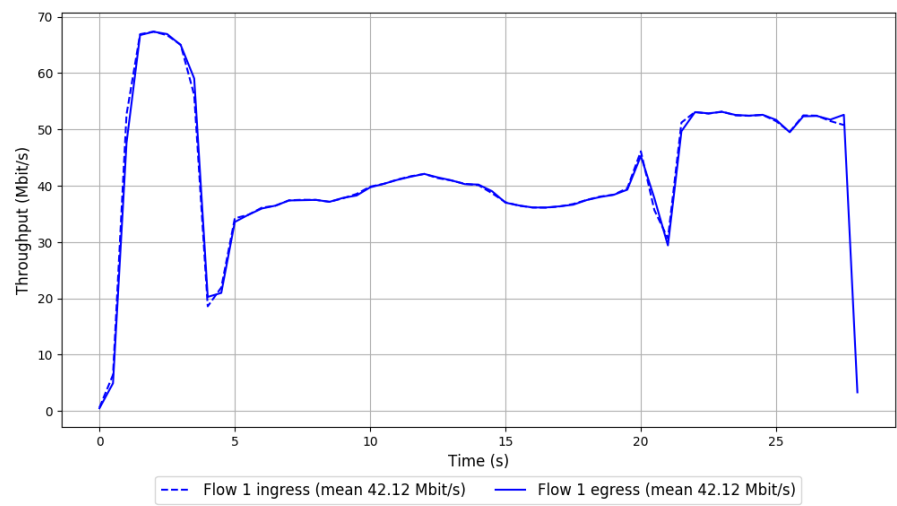
-- Flow 1:

Average throughput: 42.12 Mbit/s

95th percentile per-packet one-way delay: 53.732 ms

Loss rate: 0.02%

Run 10: Report of Copa — Data Link

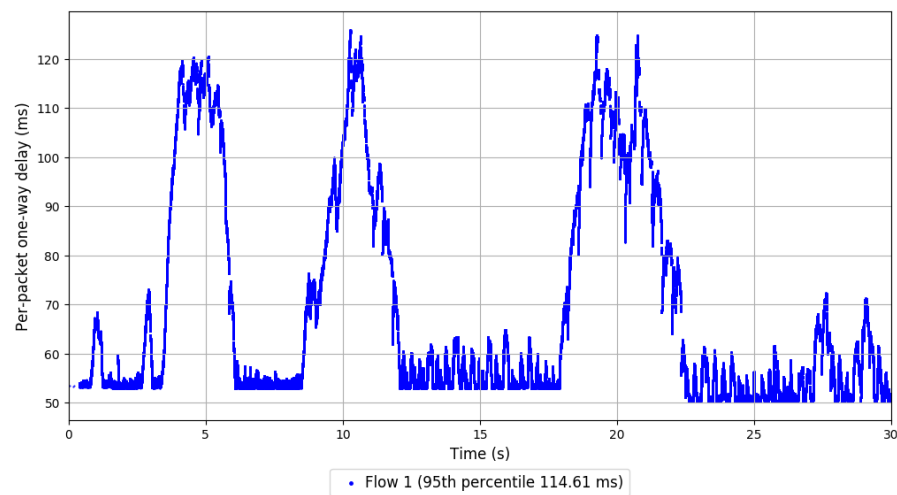
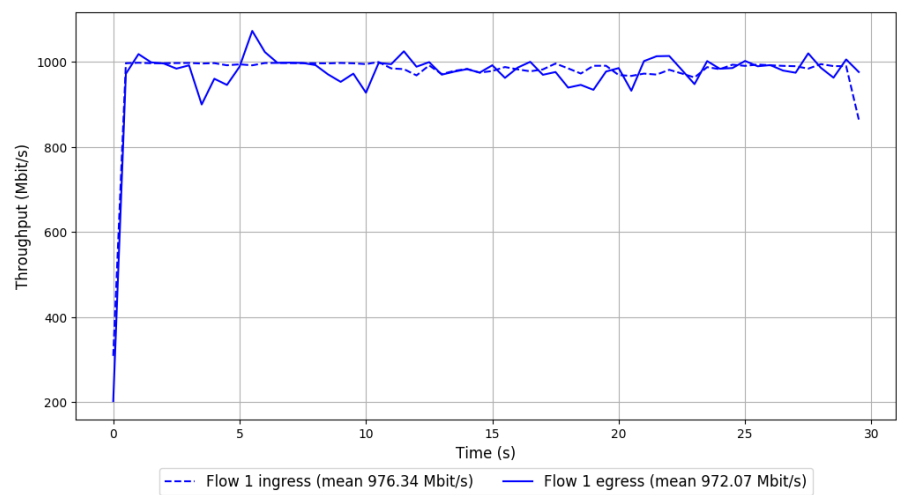


```
Run 1: Statistics of FillP

Start at: 2018-01-02 05:38:10
End at: 2018-01-02 05:38:40

# Below is generated by plot.py at 2018-01-02 09:15:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 972.07 Mbit/s
95th percentile per-packet one-way delay: 114.614 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 972.07 Mbit/s
95th percentile per-packet one-way delay: 114.614 ms
Loss rate: 0.45%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-02 05:49:56

End at: 2018-01-02 05:50:26

Below is generated by plot.py at 2018-01-02 09:15:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 983.70 Mbit/s

95th percentile per-packet one-way delay: 54.536 ms

Loss rate: 0.02%

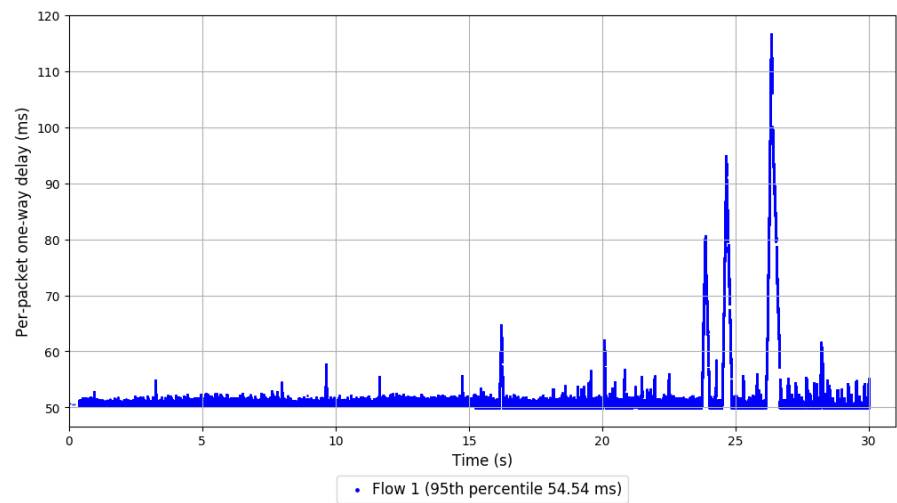
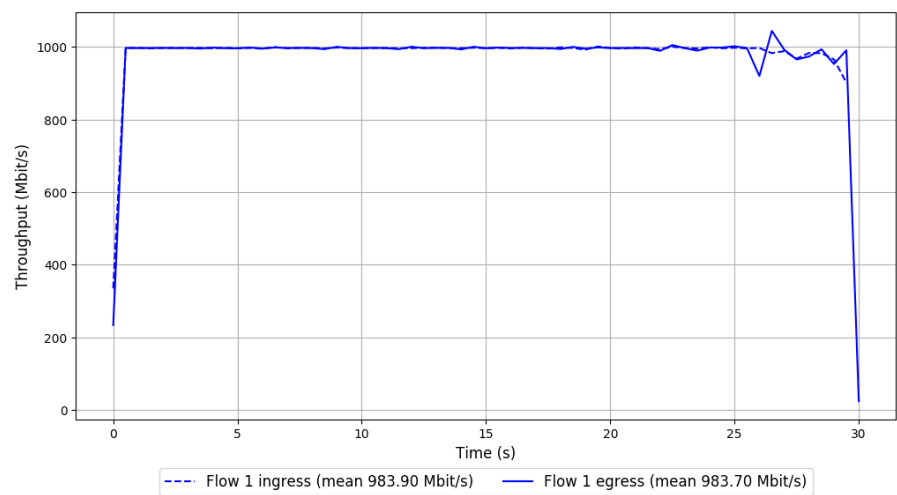
-- Flow 1:

Average throughput: 983.70 Mbit/s

95th percentile per-packet one-way delay: 54.536 ms

Loss rate: 0.02%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-02 06:01:21

End at: 2018-01-02 06:01:51

Below is generated by plot.py at 2018-01-02 09:16:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 985.90 Mbit/s

95th percentile per-packet one-way delay: 56.307 ms

Loss rate: 0.00%

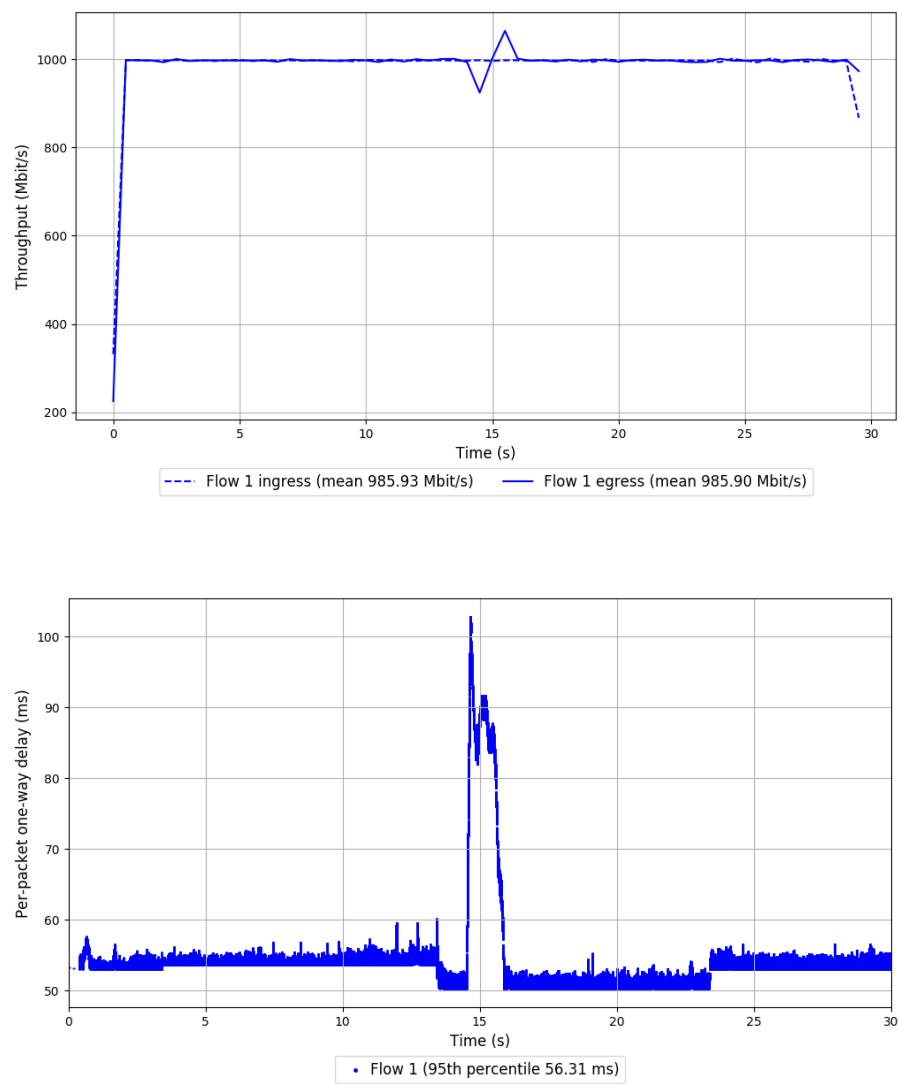
-- Flow 1:

Average throughput: 985.90 Mbit/s

95th percentile per-packet one-way delay: 56.307 ms

Loss rate: 0.00%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-02 06:12:50

End at: 2018-01-02 06:13:20

Below is generated by plot.py at 2018-01-02 09:16:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 983.33 Mbit/s

95th percentile per-packet one-way delay: 86.626 ms

Loss rate: 0.20%

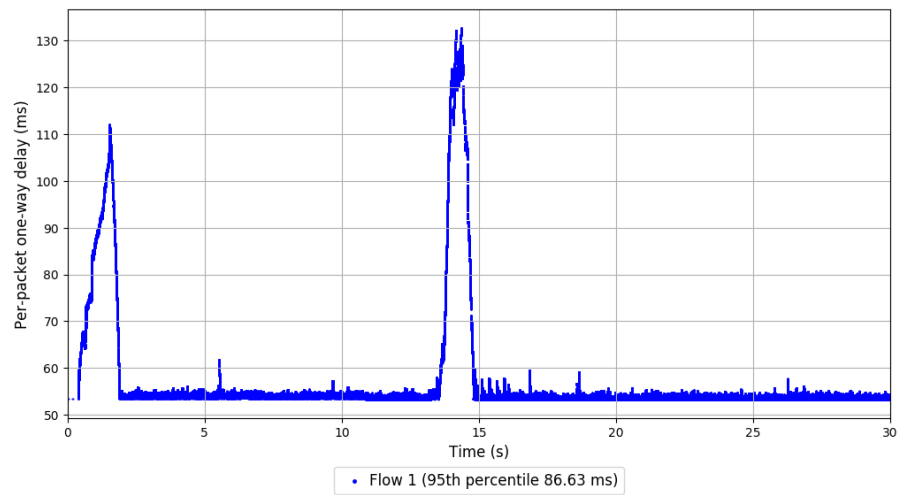
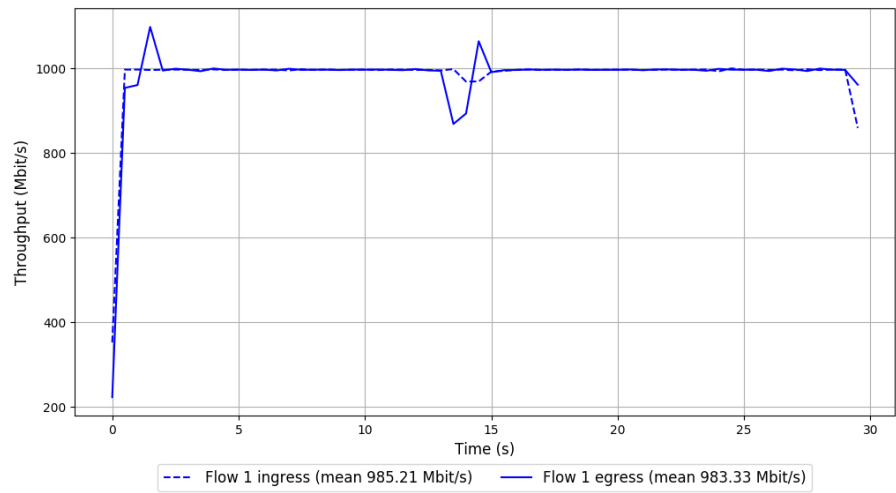
-- Flow 1:

Average throughput: 983.33 Mbit/s

95th percentile per-packet one-way delay: 86.626 ms

Loss rate: 0.20%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-02 06:24:40

End at: 2018-01-02 06:25:10

Below is generated by plot.py at 2018-01-02 09:16:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 978.70 Mbit/s

95th percentile per-packet one-way delay: 118.298 ms

Loss rate: 0.42%

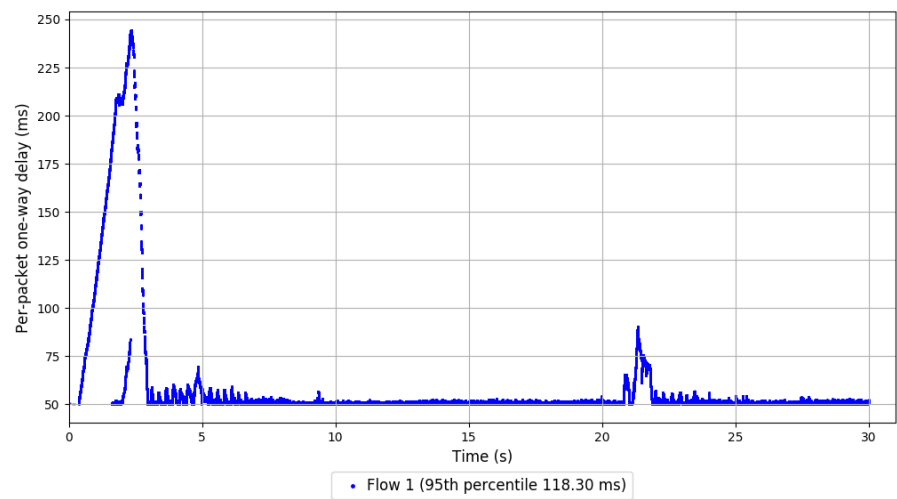
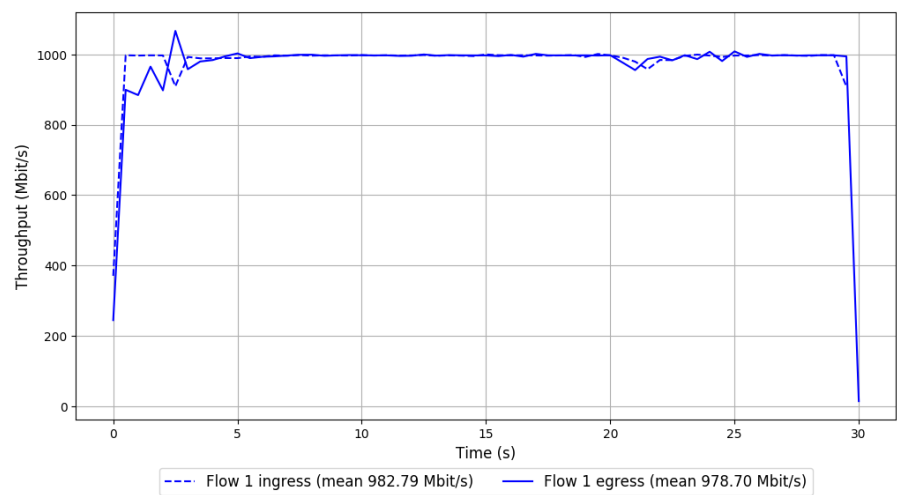
-- Flow 1:

Average throughput: 978.70 Mbit/s

95th percentile per-packet one-way delay: 118.298 ms

Loss rate: 0.42%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-02 06:36:13

End at: 2018-01-02 06:36:43

Below is generated by plot.py at 2018-01-02 09:16:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 975.03 Mbit/s

95th percentile per-packet one-way delay: 85.458 ms

Loss rate: 0.01%

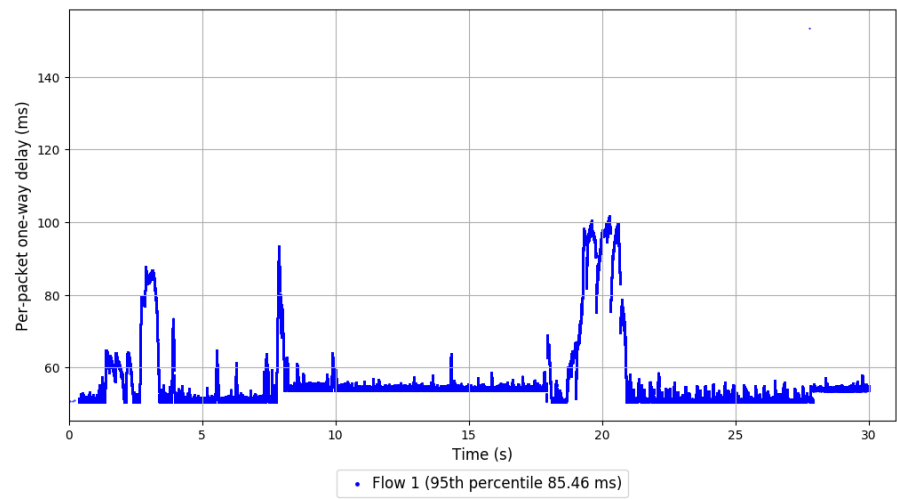
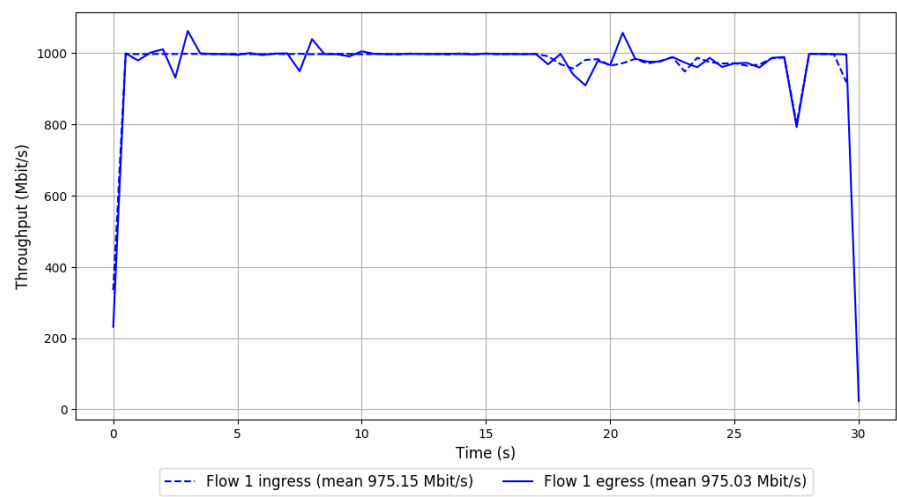
-- Flow 1:

Average throughput: 975.03 Mbit/s

95th percentile per-packet one-way delay: 85.458 ms

Loss rate: 0.01%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-02 06:47:31

End at: 2018-01-02 06:48:01

Below is generated by plot.py at 2018-01-02 09:17:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 985.24 Mbit/s

95th percentile per-packet one-way delay: 62.263 ms

Loss rate: 0.17%

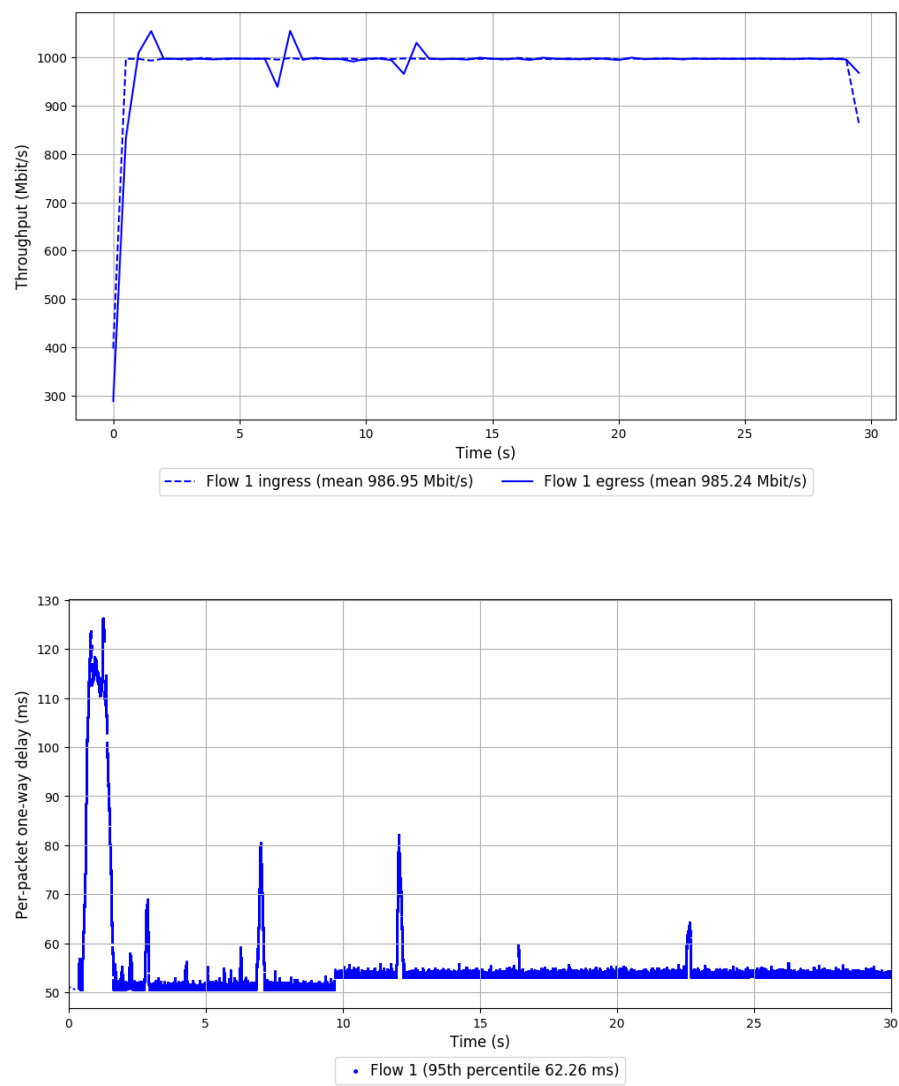
-- Flow 1:

Average throughput: 985.24 Mbit/s

95th percentile per-packet one-way delay: 62.263 ms

Loss rate: 0.17%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-02 06:59:00

End at: 2018-01-02 06:59:30

Below is generated by plot.py at 2018-01-02 09:17:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 983.31 Mbit/s

95th percentile per-packet one-way delay: 59.216 ms

Loss rate: 0.01%

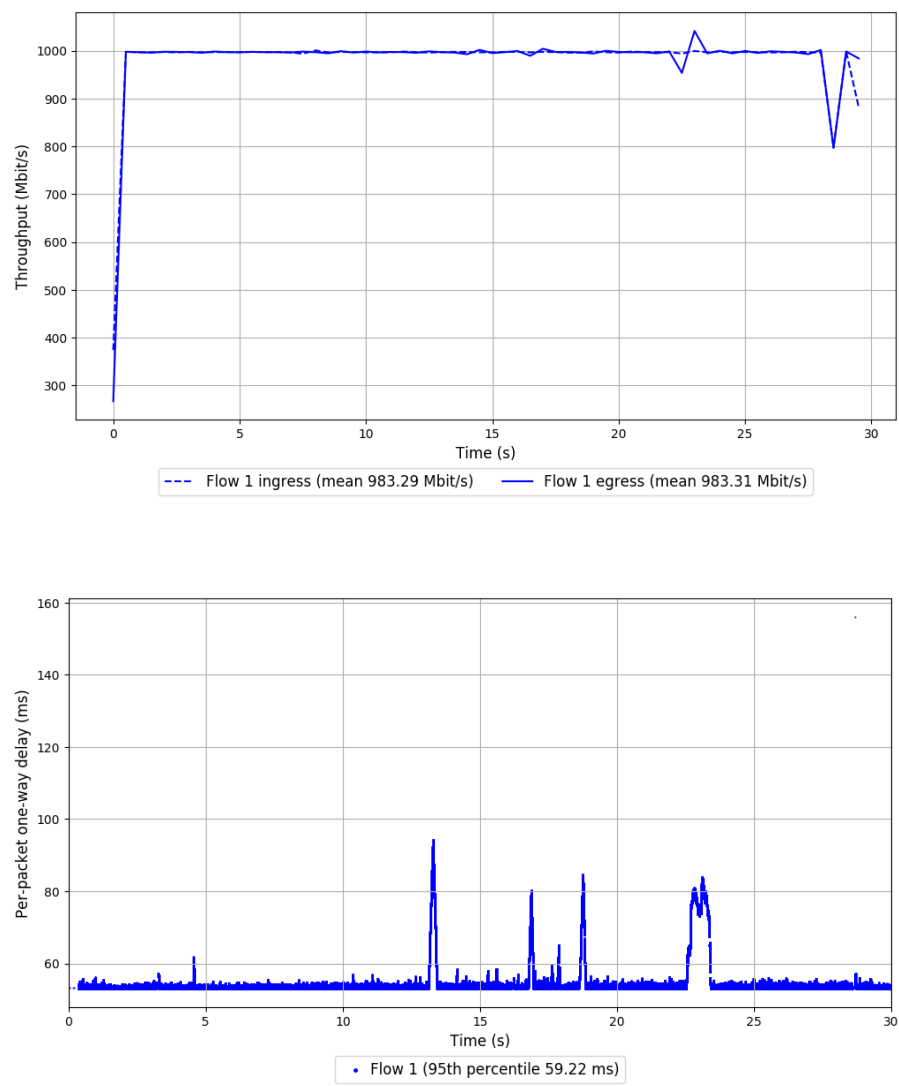
-- Flow 1:

Average throughput: 983.31 Mbit/s

95th percentile per-packet one-way delay: 59.216 ms

Loss rate: 0.01%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-02 07:10:59

End at: 2018-01-02 07:11:29

Below is generated by plot.py at 2018-01-02 09:22:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 984.94 Mbit/s

95th percentile per-packet one-way delay: 90.971 ms

Loss rate: 0.08%

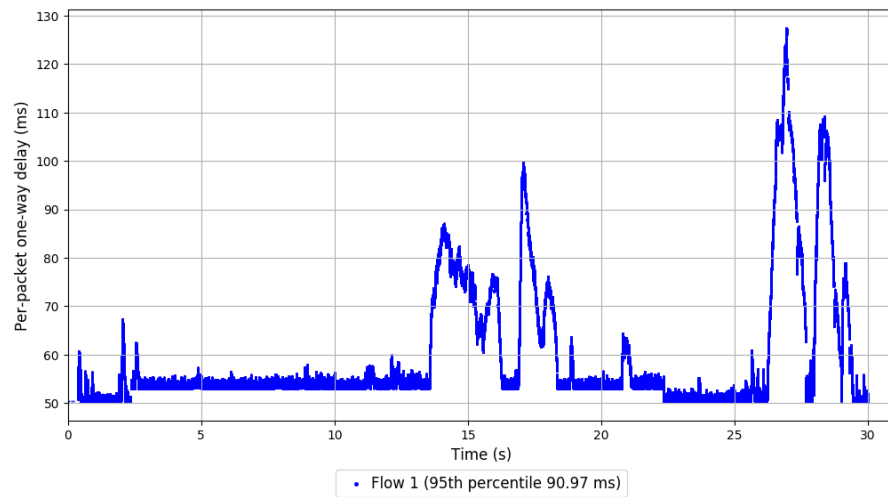
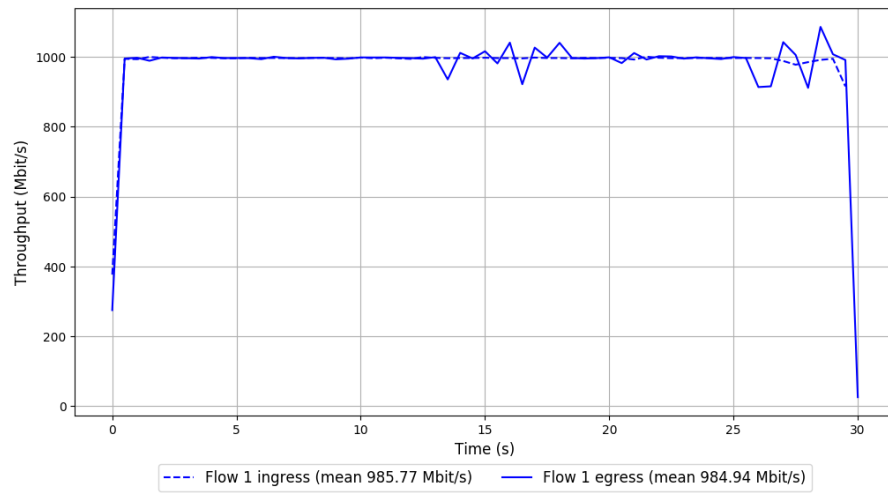
-- Flow 1:

Average throughput: 984.94 Mbit/s

95th percentile per-packet one-way delay: 90.971 ms

Loss rate: 0.08%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-02 07:22:24

End at: 2018-01-02 07:22:54

Below is generated by plot.py at 2018-01-02 09:22:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 292.18 Mbit/s

95th percentile per-packet one-way delay: 106.107 ms

Loss rate: 27.24%

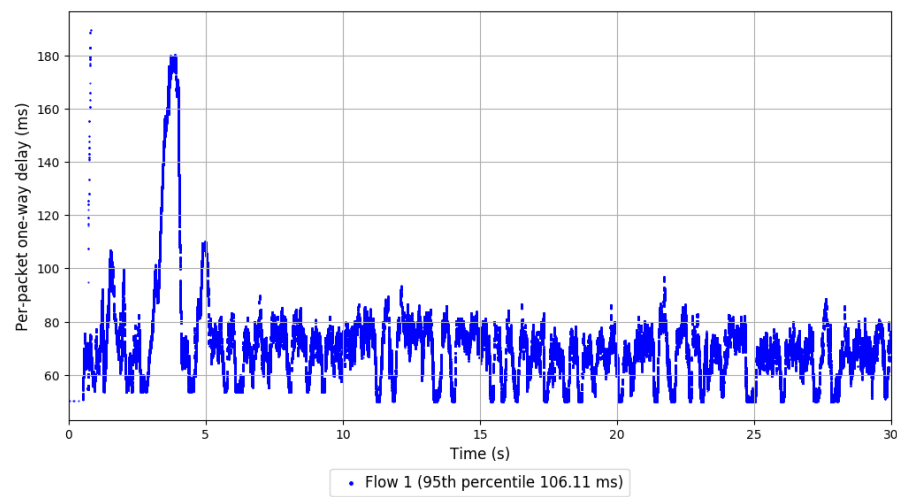
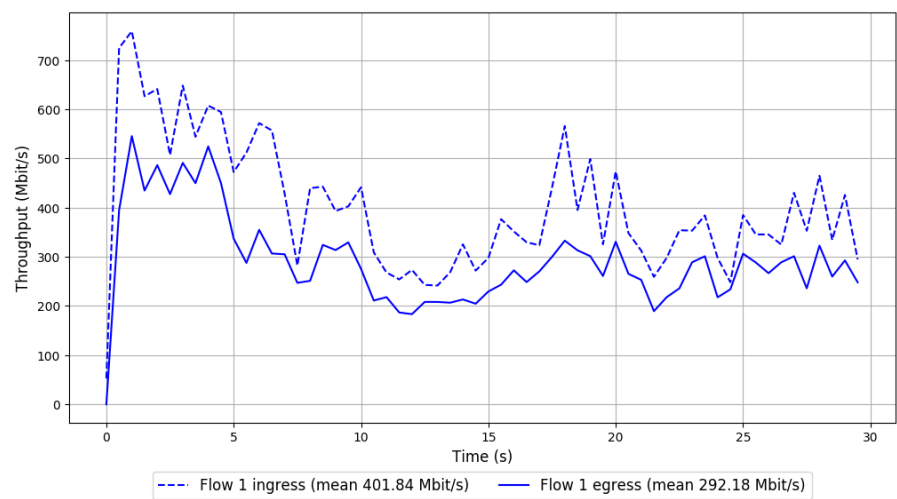
-- Flow 1:

Average throughput: 292.18 Mbit/s

95th percentile per-packet one-way delay: 106.107 ms

Loss rate: 27.24%

Run 10: Report of FillP — Data Link

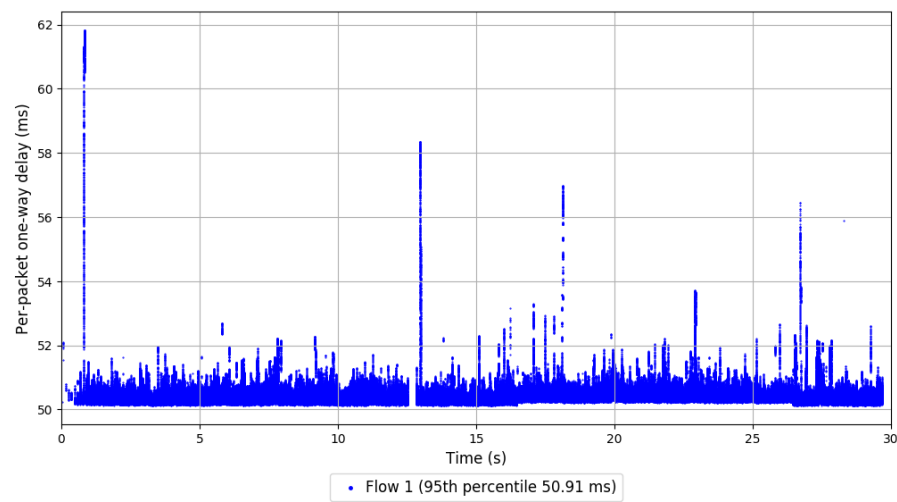
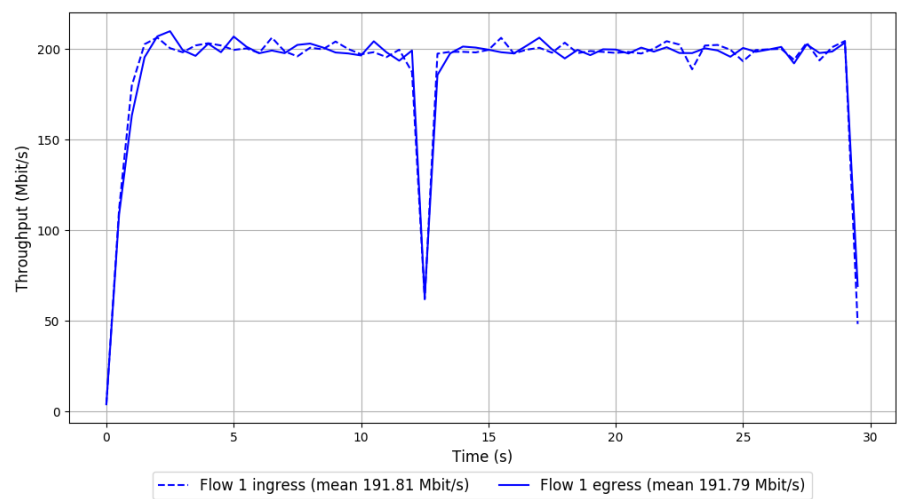


```
Run 1: Statistics of Indigo

Start at: 2018-01-02 05:35:57
End at: 2018-01-02 05:36:27

# Below is generated by plot.py at 2018-01-02 09:22:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.79 Mbit/s
95th percentile per-packet one-way delay: 50.905 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 191.79 Mbit/s
95th percentile per-packet one-way delay: 50.905 ms
Loss rate: 0.01%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-01-02 05:47:44

End at: 2018-01-02 05:48:14

Below is generated by plot.py at 2018-01-02 09:22:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.28 Mbit/s

95th percentile per-packet one-way delay: 53.099 ms

Loss rate: 0.00%

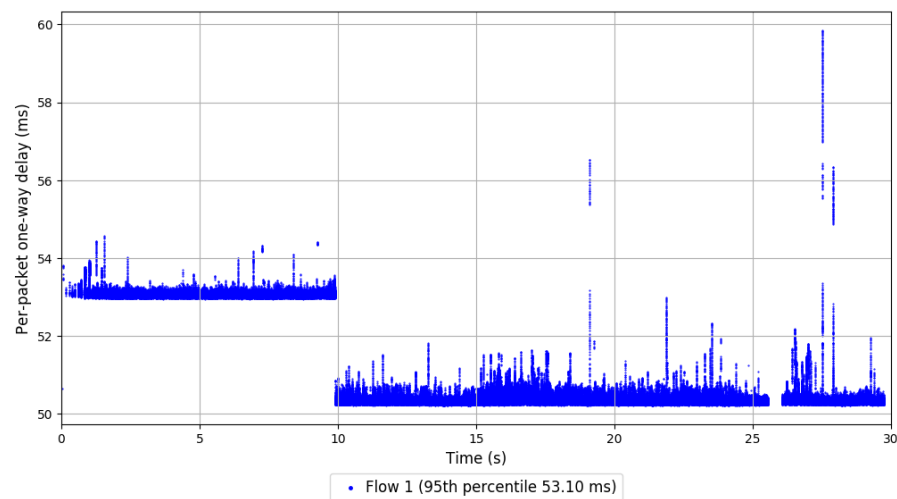
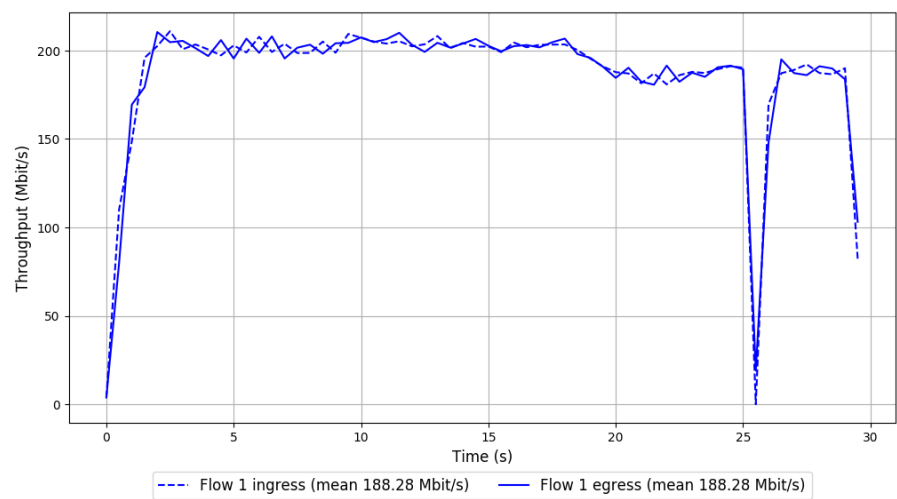
-- Flow 1:

Average throughput: 188.28 Mbit/s

95th percentile per-packet one-way delay: 53.099 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-02 05:59:09

End at: 2018-01-02 05:59:39

Below is generated by plot.py at 2018-01-02 09:22:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.48 Mbit/s

95th percentile per-packet one-way delay: 53.147 ms

Loss rate: 0.00%

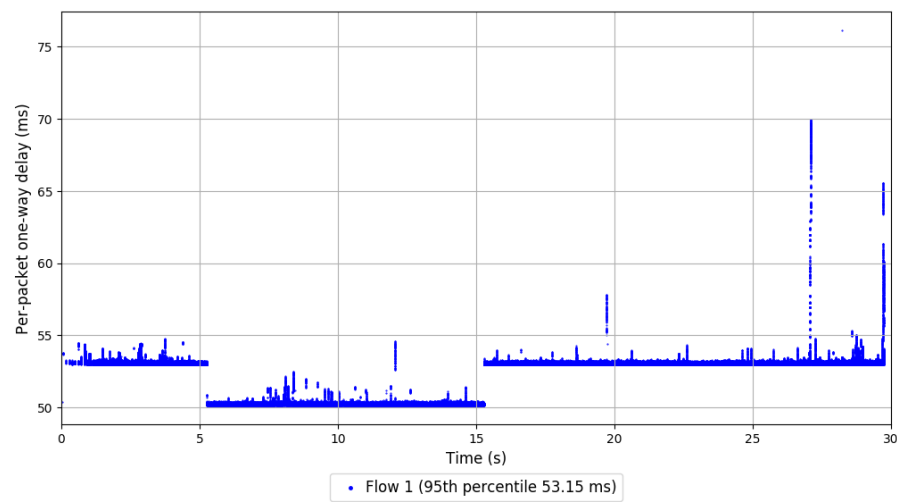
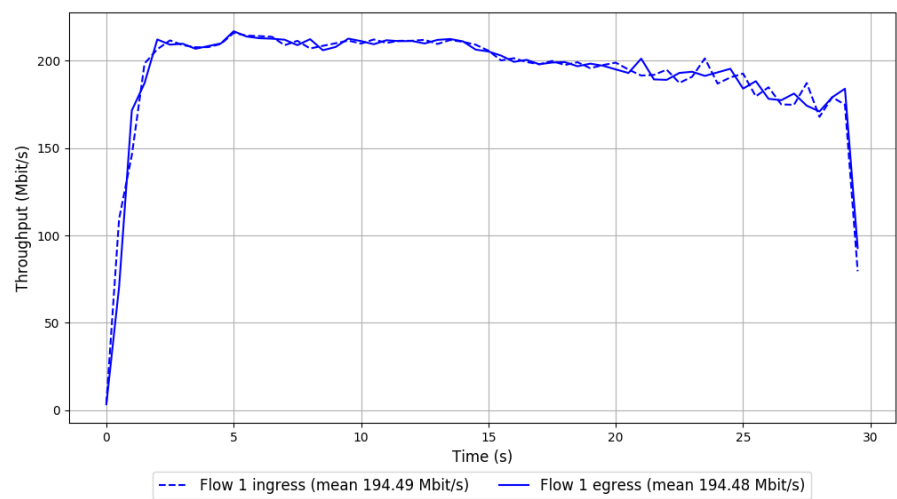
-- Flow 1:

Average throughput: 194.48 Mbit/s

95th percentile per-packet one-way delay: 53.147 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-02 06:10:38

End at: 2018-01-02 06:11:08

Below is generated by plot.py at 2018-01-02 09:22:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 189.95 Mbit/s

95th percentile per-packet one-way delay: 53.153 ms

Loss rate: 0.00%

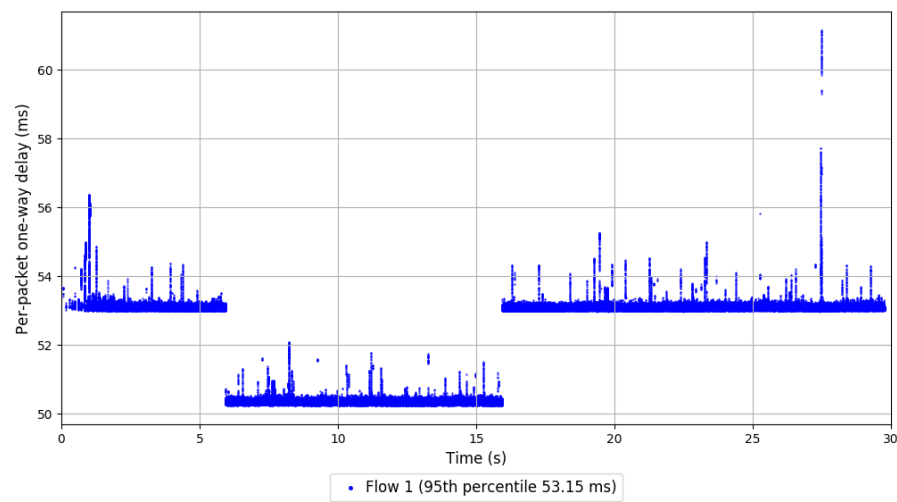
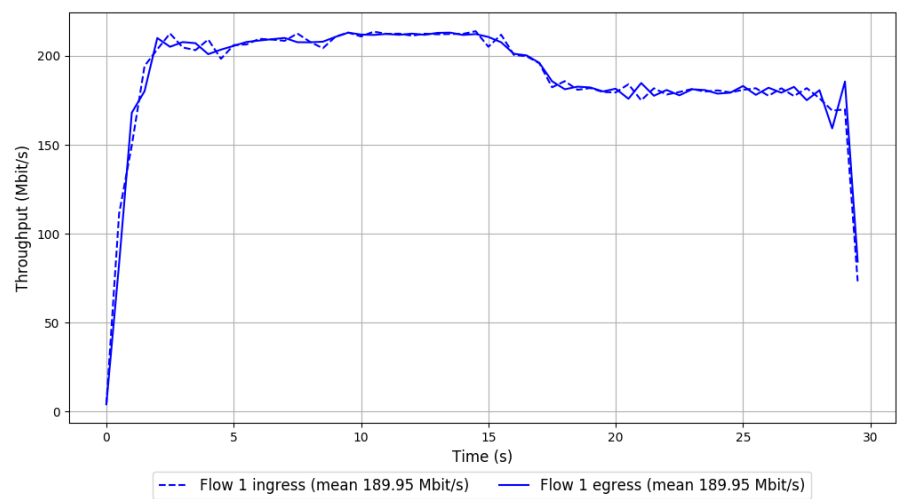
-- Flow 1:

Average throughput: 189.95 Mbit/s

95th percentile per-packet one-way delay: 53.153 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-02 06:22:28

End at: 2018-01-02 06:22:58

Below is generated by plot.py at 2018-01-02 09:22:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.00 Mbit/s

95th percentile per-packet one-way delay: 53.161 ms

Loss rate: 0.00%

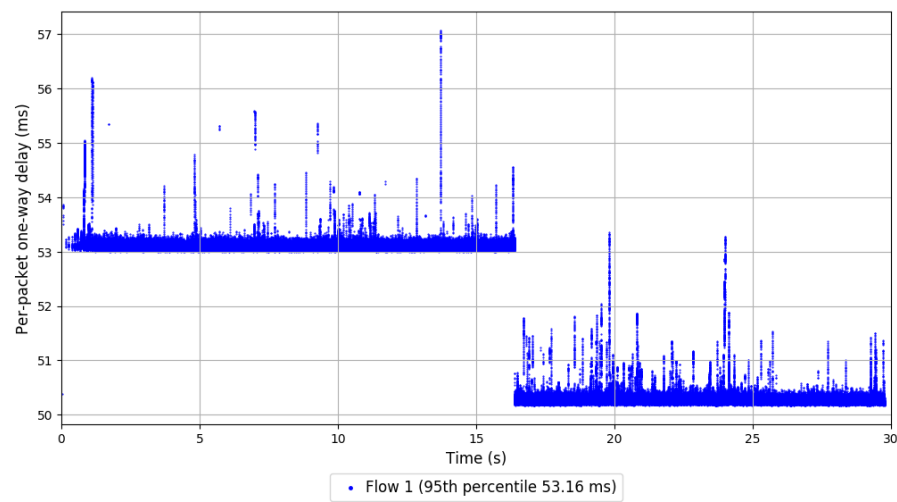
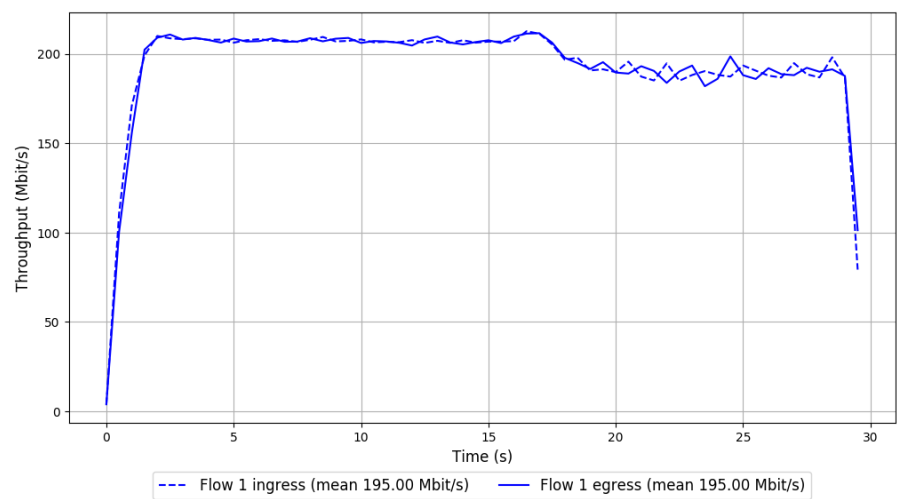
-- Flow 1:

Average throughput: 195.00 Mbit/s

95th percentile per-packet one-way delay: 53.161 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-02 06:34:01

End at: 2018-01-02 06:34:31

Below is generated by plot.py at 2018-01-02 09:22:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.33 Mbit/s

95th percentile per-packet one-way delay: 50.457 ms

Loss rate: 0.00%

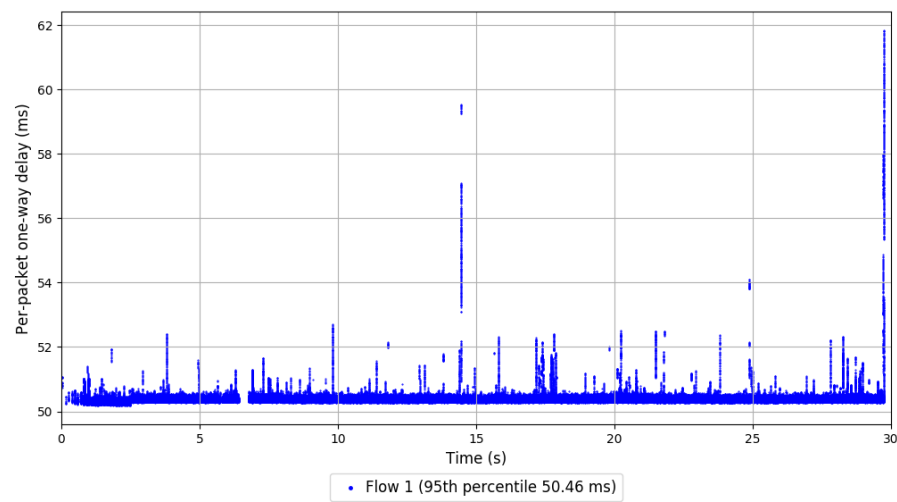
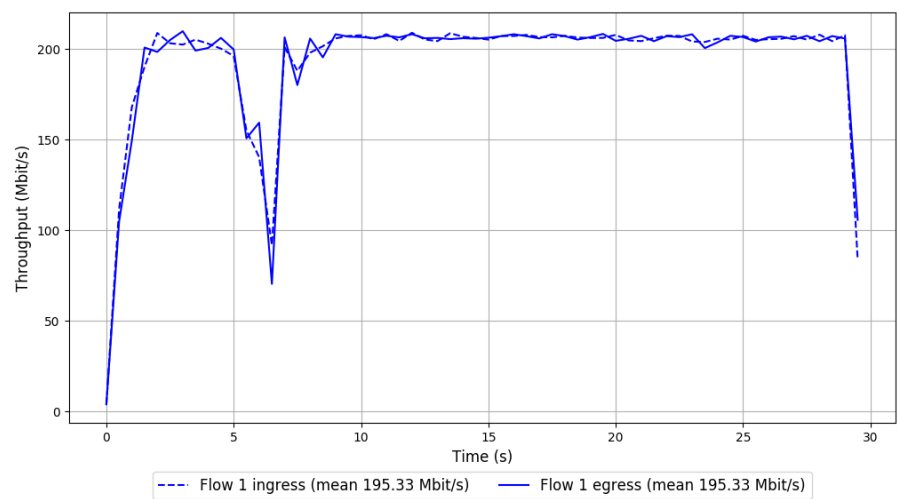
-- Flow 1:

Average throughput: 195.33 Mbit/s

95th percentile per-packet one-way delay: 50.457 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-02 06:45:20

End at: 2018-01-02 06:45:50

Below is generated by plot.py at 2018-01-02 09:22:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.49 Mbit/s

95th percentile per-packet one-way delay: 53.185 ms

Loss rate: 0.00%

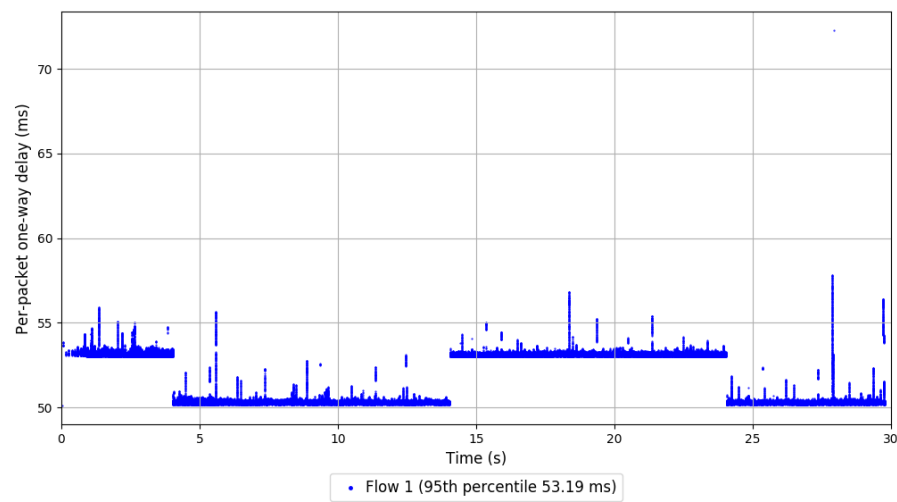
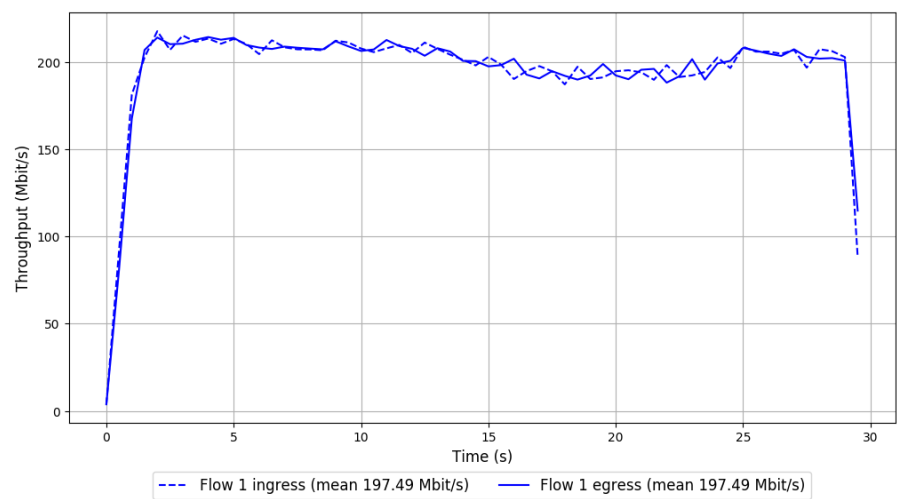
-- Flow 1:

Average throughput: 197.49 Mbit/s

95th percentile per-packet one-way delay: 53.185 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-02 06:56:51

End at: 2018-01-02 06:57:21

Below is generated by plot.py at 2018-01-02 09:22:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.82 Mbit/s

95th percentile per-packet one-way delay: 53.176 ms

Loss rate: 0.01%

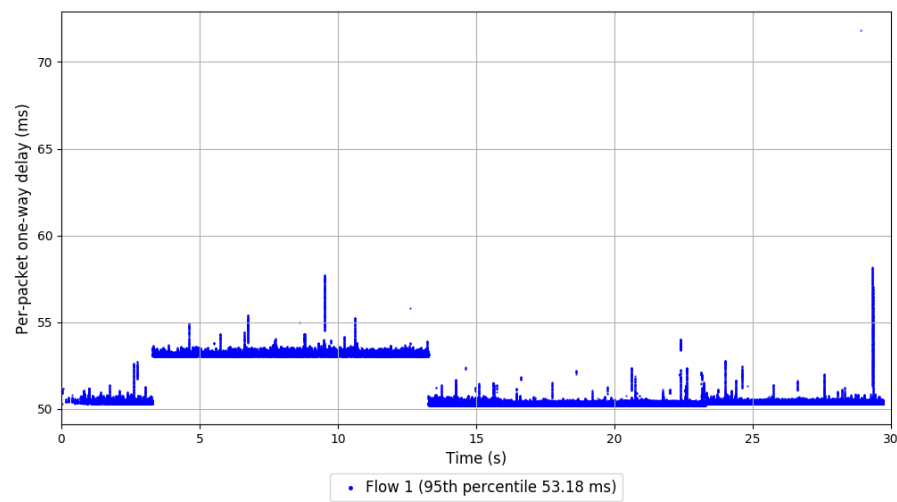
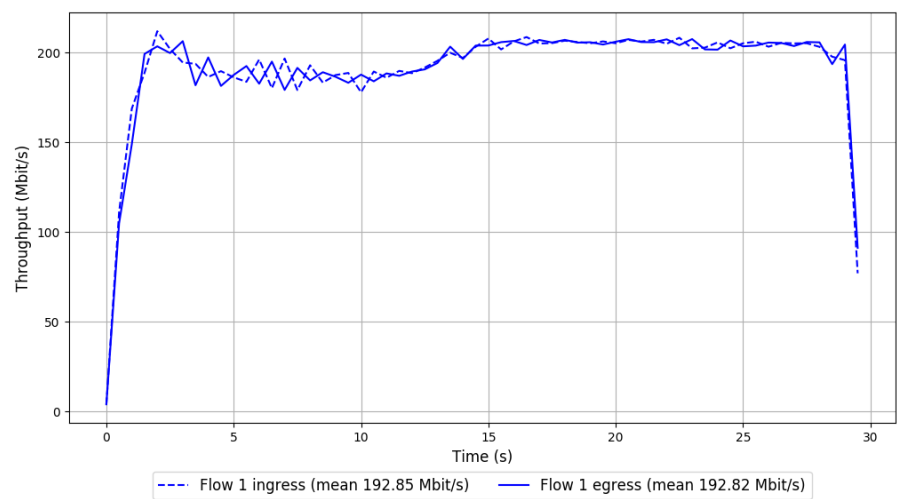
-- Flow 1:

Average throughput: 192.82 Mbit/s

95th percentile per-packet one-way delay: 53.176 ms

Loss rate: 0.01%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-02 07:08:47

End at: 2018-01-02 07:09:17

Below is generated by plot.py at 2018-01-02 09:22:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.30 Mbit/s

95th percentile per-packet one-way delay: 53.079 ms

Loss rate: 0.00%

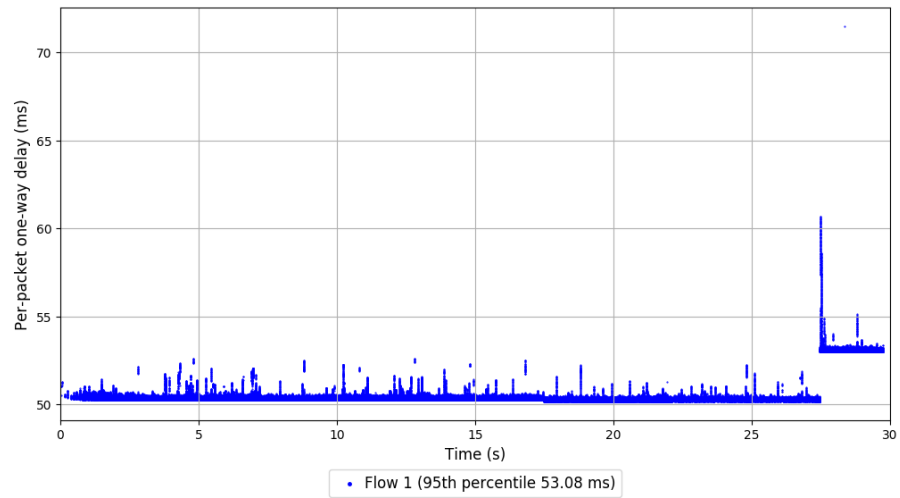
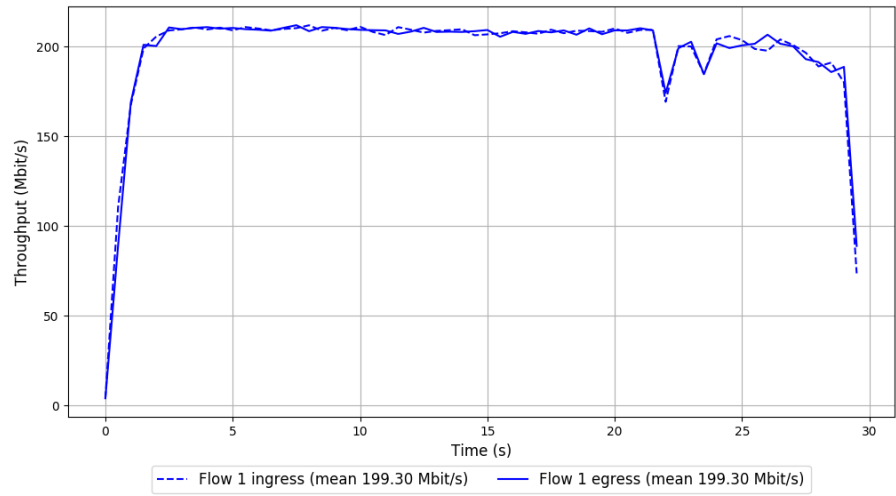
-- Flow 1:

Average throughput: 199.30 Mbit/s

95th percentile per-packet one-way delay: 53.079 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-02 07:20:16

End at: 2018-01-02 07:20:46

Below is generated by plot.py at 2018-01-02 09:22:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.43 Mbit/s

95th percentile per-packet one-way delay: 66.851 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 180.43 Mbit/s

95th percentile per-packet one-way delay: 66.851 ms

Loss rate: 1.24%

Run 10: Report of Indigo — Data Link

