

Pantheon Report

Generated at 2018-01-02 09:38:39 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

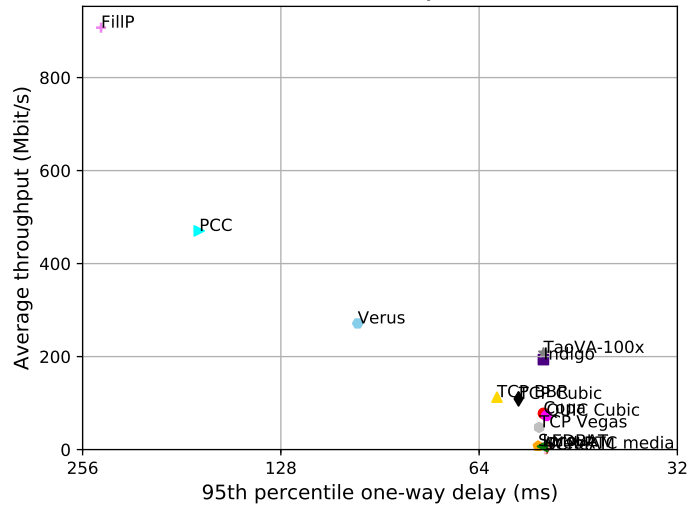
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

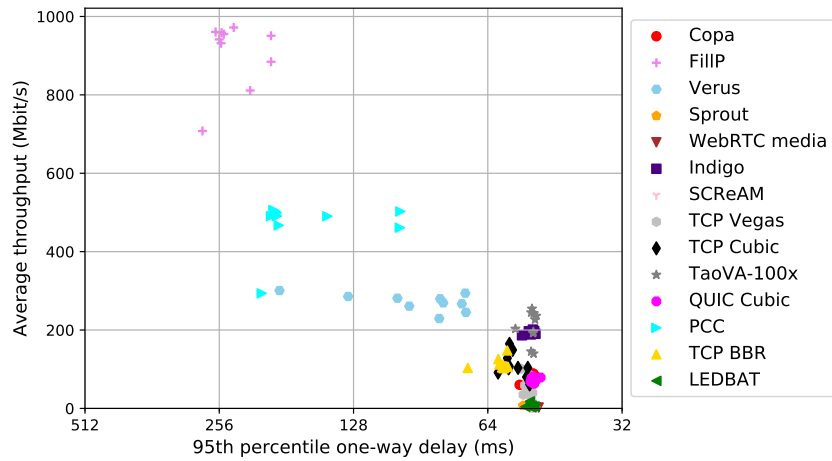
Git summary:

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

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	112.78	60.13	0.46
TCP Cubic	10	109.11	55.76	0.48
LEDBAT	10	6.73	51.29	1.07
PCC	10	470.31	170.27	1.36
QUIC Cubic	10	72.88	50.59	0.00
SCReAM	10	0.22	50.80	0.00
WebRTC media	10	2.25	50.54	0.04
Sprout	6	7.63	52.08	0.88
TaoVA-100x	10	207.97	51.10	0.00
TCP Vegas	10	47.75	51.89	0.29
Verus	10	271.30	97.85	0.24
Copa	10	77.87	51.11	0.04
FillP	10	907.36	240.03	2.17
Indigo	10	193.53	51.12	0.02

Run 1: Statistics of TCP BBR

Start at: 2018-01-02 05:43:06

End at: 2018-01-02 05:43:36

Below is generated by plot.py at 2018-01-02 08:42:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 111.32 Mbit/s

95th percentile per-packet one-way delay: 59.272 ms

Loss rate: 0.30%

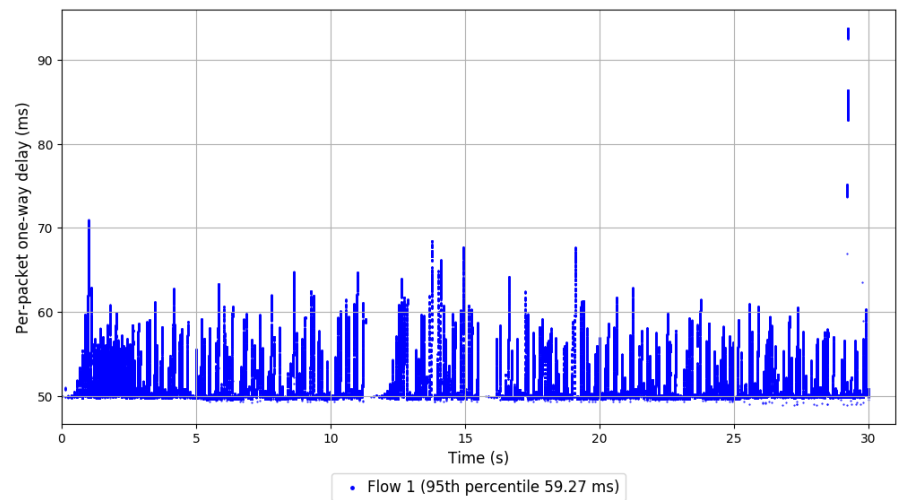
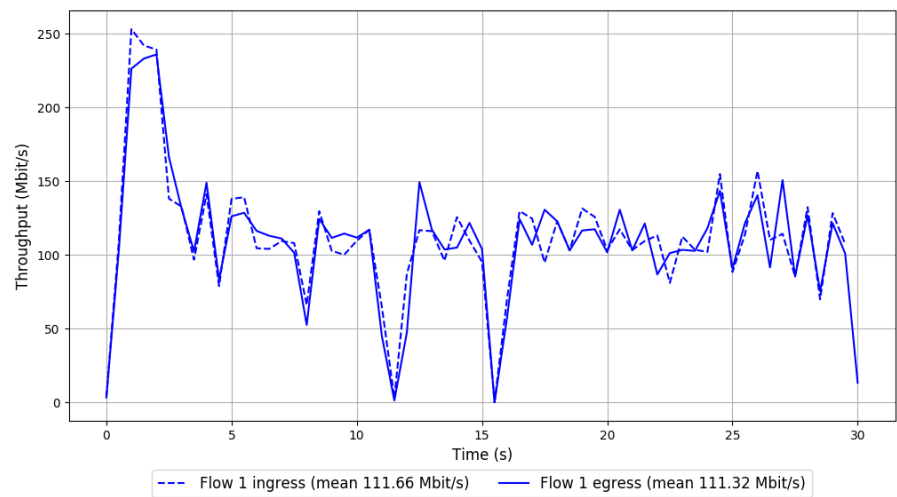
-- Flow 1:

Average throughput: 111.32 Mbit/s

95th percentile per-packet one-way delay: 59.272 ms

Loss rate: 0.30%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-02 05:54:45

End at: 2018-01-02 05:55:15

Below is generated by plot.py at 2018-01-02 08:42:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 104.58 Mbit/s

95th percentile per-packet one-way delay: 59.444 ms

Loss rate: 0.99%

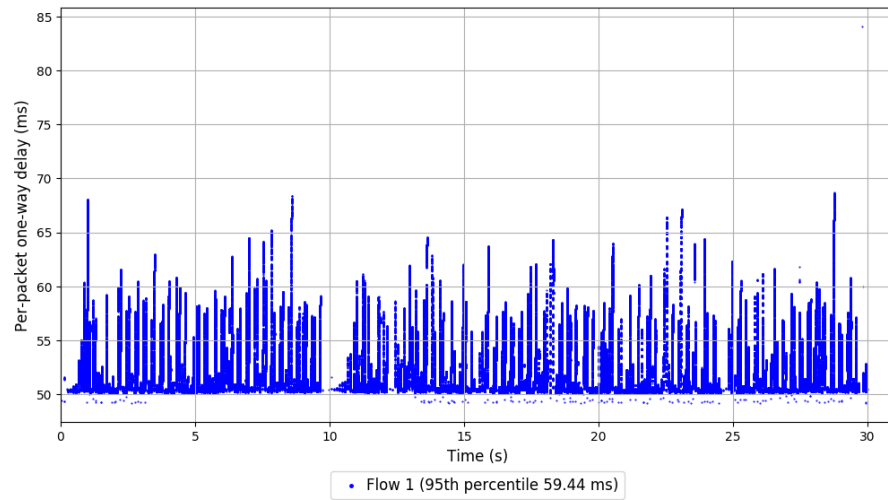
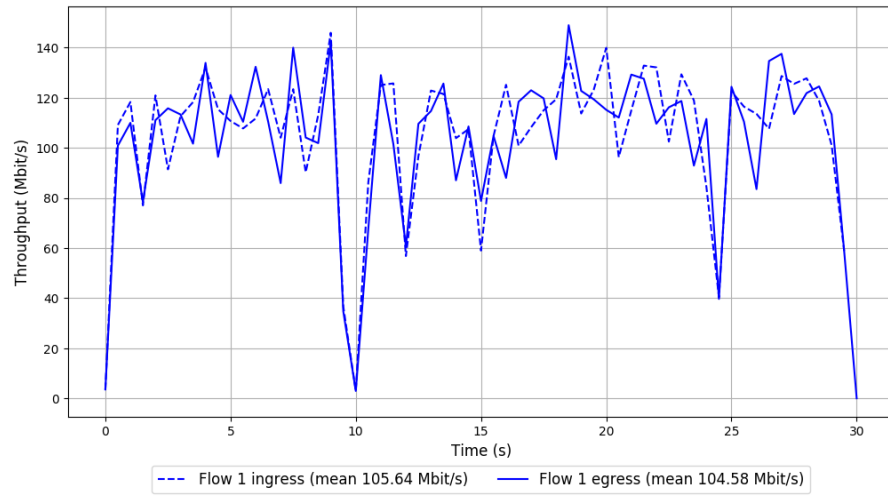
-- Flow 1:

Average throughput: 104.58 Mbit/s

95th percentile per-packet one-way delay: 59.444 ms

Loss rate: 0.99%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

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

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

Below is generated by plot.py at 2018-01-02 08:42:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 125.94 Mbit/s

95th percentile per-packet one-way delay: 60.612 ms

Loss rate: 0.40%

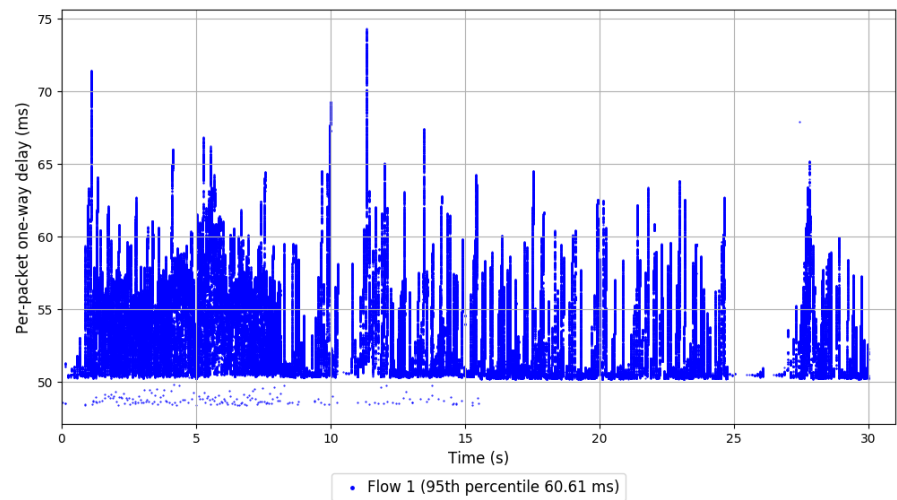
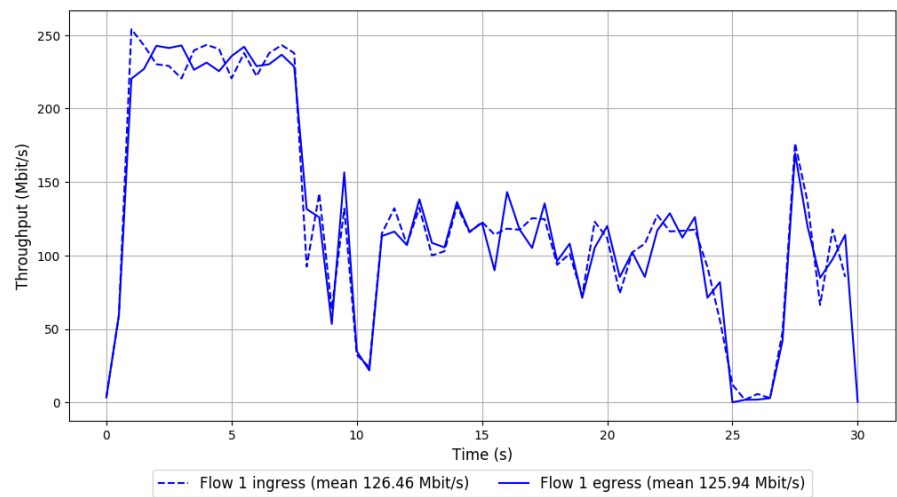
-- Flow 1:

Average throughput: 125.94 Mbit/s

95th percentile per-packet one-way delay: 60.612 ms

Loss rate: 0.40%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

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

End at: 2018-01-02 06:18:31

Below is generated by plot.py at 2018-01-02 08:42:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.84 Mbit/s

95th percentile per-packet one-way delay: 58.293 ms

Loss rate: 0.17%

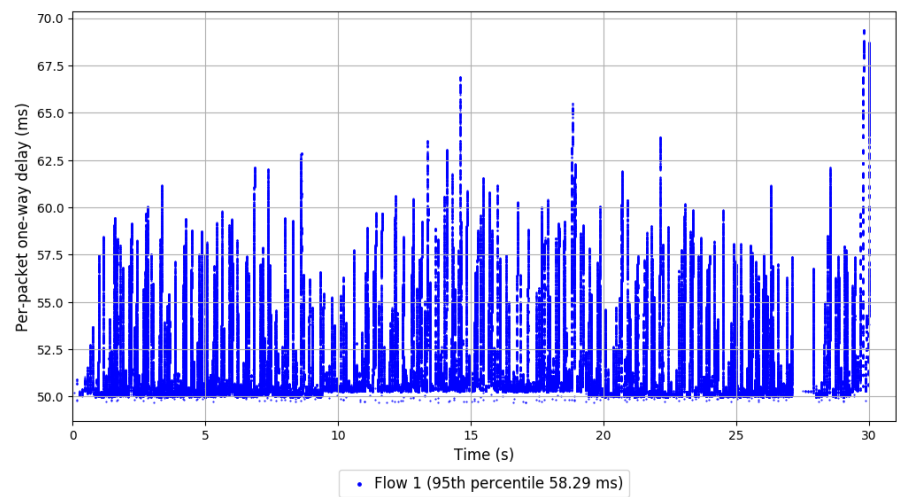
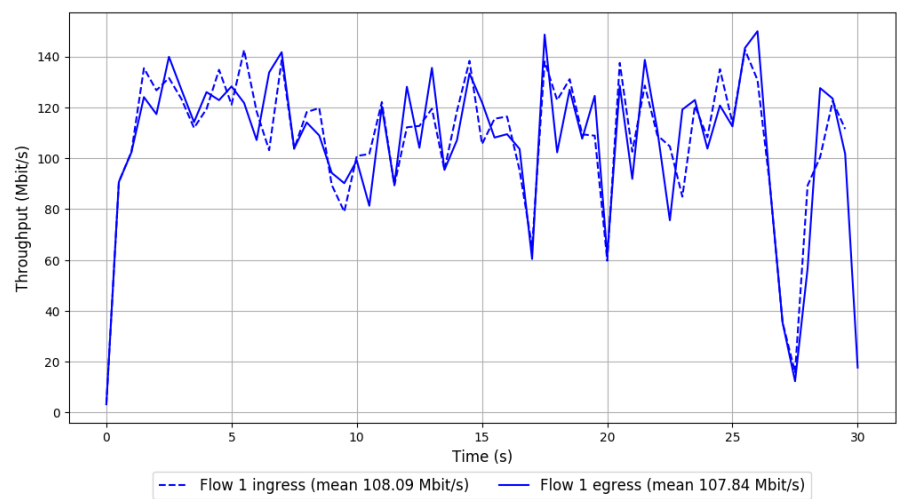
-- Flow 1:

Average throughput: 107.84 Mbit/s

95th percentile per-packet one-way delay: 58.293 ms

Loss rate: 0.17%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-02 06:29:34

End at: 2018-01-02 06:30:04

Below is generated by plot.py at 2018-01-02 08:42:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 106.01 Mbit/s

95th percentile per-packet one-way delay: 57.652 ms

Loss rate: 0.00%

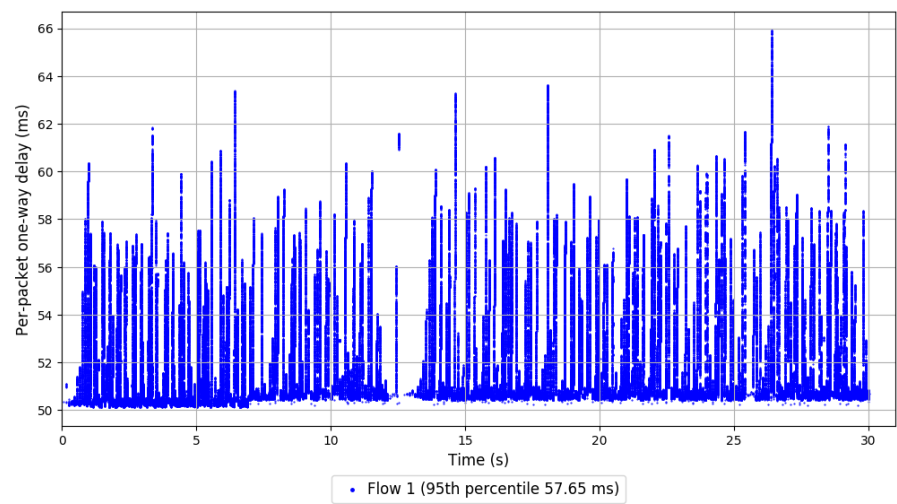
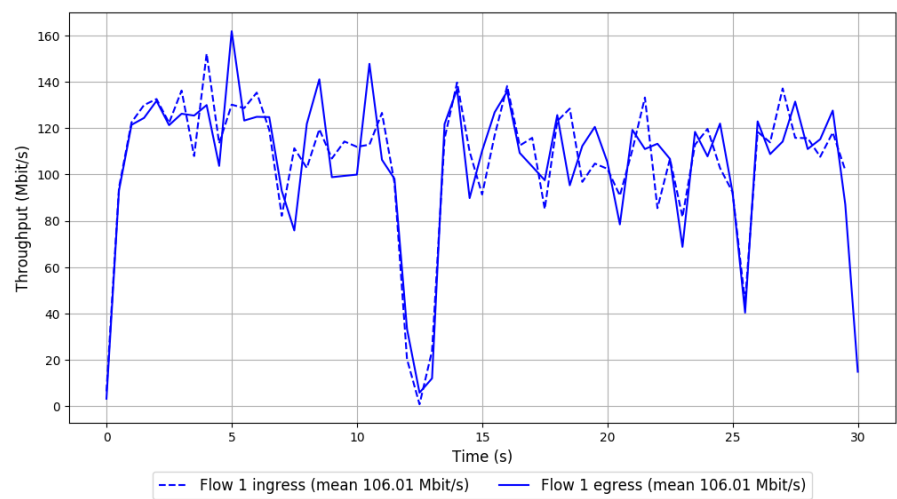
-- Flow 1:

Average throughput: 106.01 Mbit/s

95th percentile per-packet one-way delay: 57.652 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-02 06:41:11

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

Below is generated by plot.py at 2018-01-02 08:42:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 106.18 Mbit/s

95th percentile per-packet one-way delay: 57.884 ms

Loss rate: 0.99%

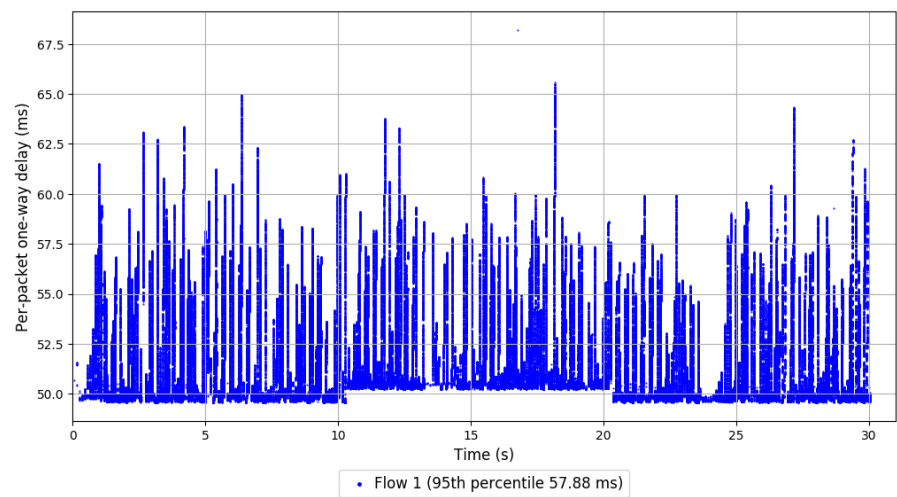
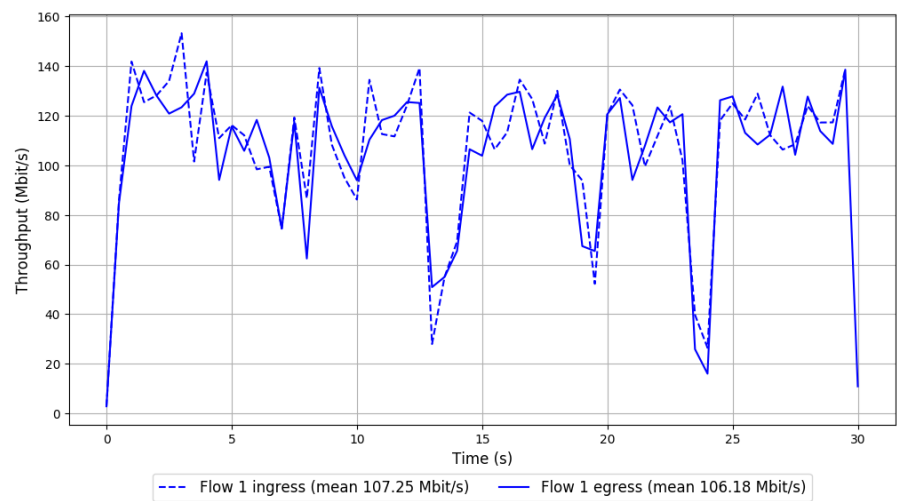
-- Flow 1:

Average throughput: 106.18 Mbit/s

95th percentile per-packet one-way delay: 57.884 ms

Loss rate: 0.99%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-02 06:52:50

End at: 2018-01-02 06:53:20

Below is generated by plot.py at 2018-01-02 08:42:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 147.92 Mbit/s

95th percentile per-packet one-way delay: 57.878 ms

Loss rate: 0.00%

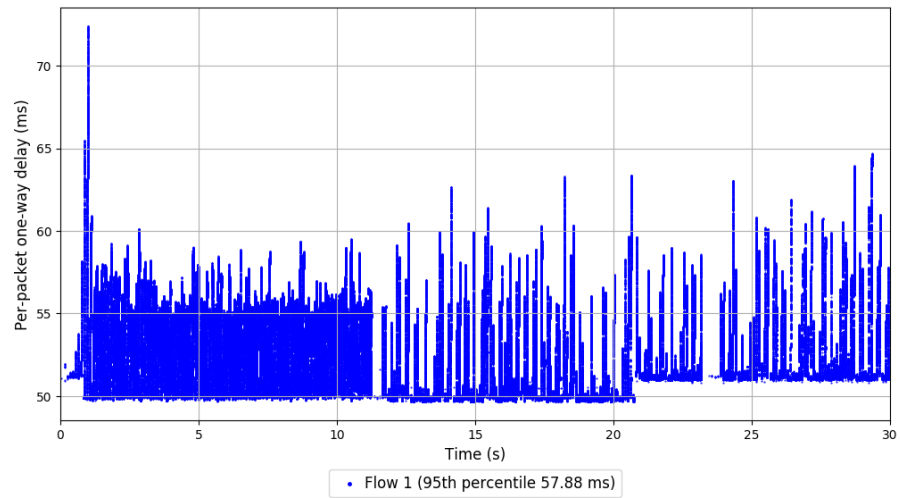
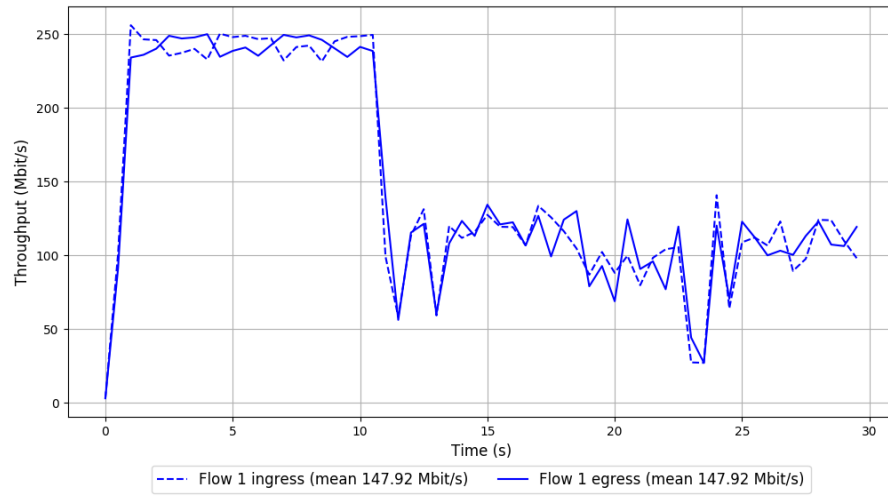
-- Flow 1:

Average throughput: 147.92 Mbit/s

95th percentile per-packet one-way delay: 57.878 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 08:42:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.54 Mbit/s

95th percentile per-packet one-way delay: 58.966 ms

Loss rate: 0.69%

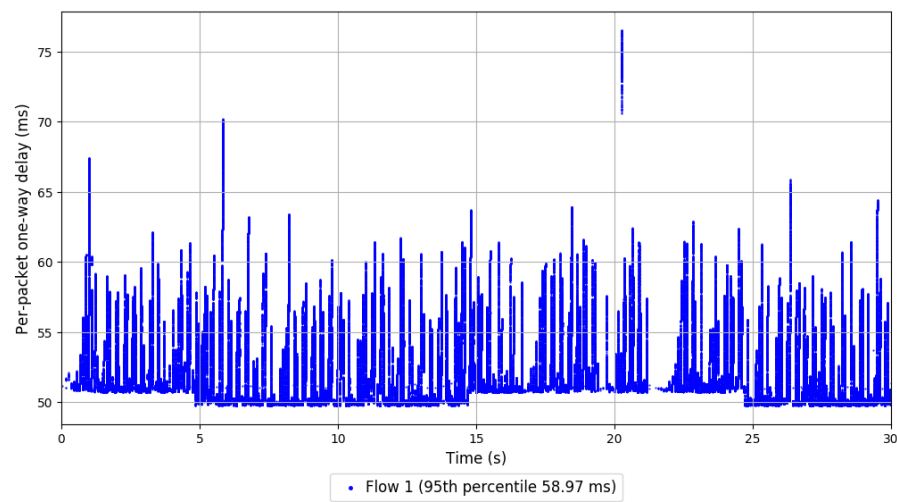
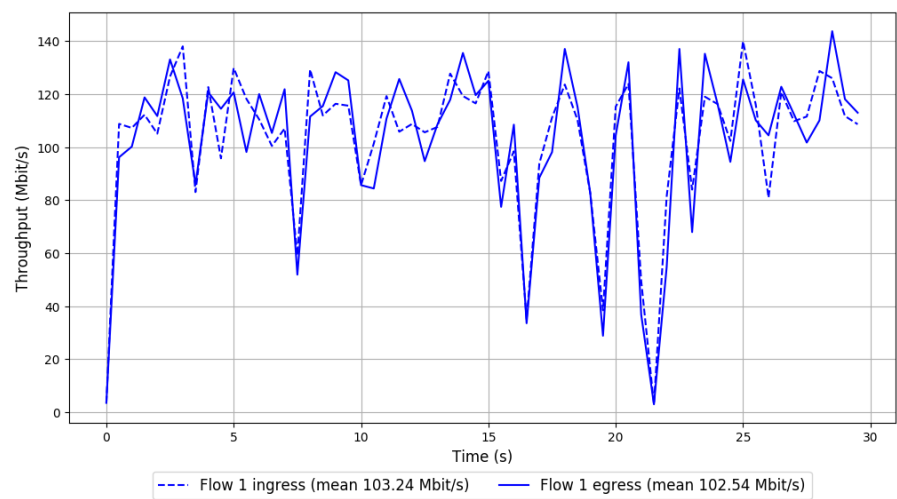
-- Flow 1:

Average throughput: 102.54 Mbit/s

95th percentile per-packet one-way delay: 58.966 ms

Loss rate: 0.69%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-02 07:16:05

End at: 2018-01-02 07:16:35

Below is generated by plot.py at 2018-01-02 08:44:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 112.14 Mbit/s

95th percentile per-packet one-way delay: 60.314 ms

Loss rate: 0.28%

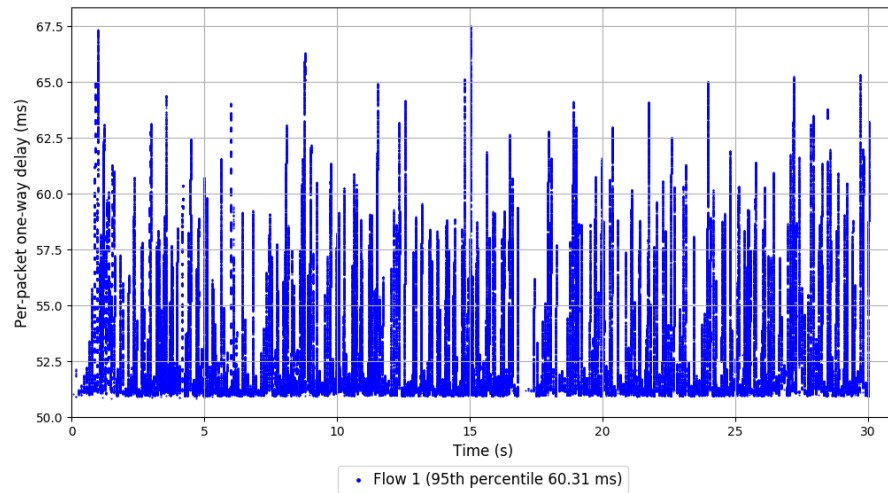
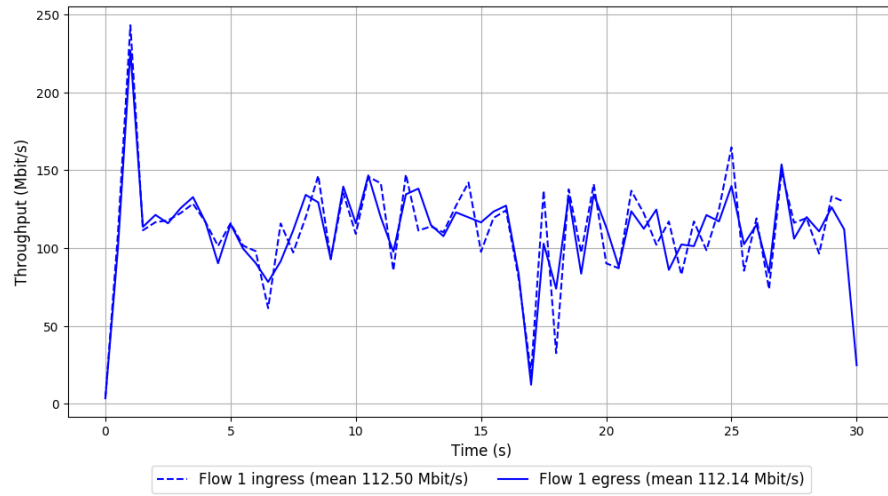
-- Flow 1:

Average throughput: 112.14 Mbit/s

95th percentile per-packet one-way delay: 60.314 ms

Loss rate: 0.28%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-02 07:27:41

End at: 2018-01-02 07:28:11

Below is generated by plot.py at 2018-01-02 08:44:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.28 Mbit/s

95th percentile per-packet one-way delay: 70.963 ms

Loss rate: 0.75%

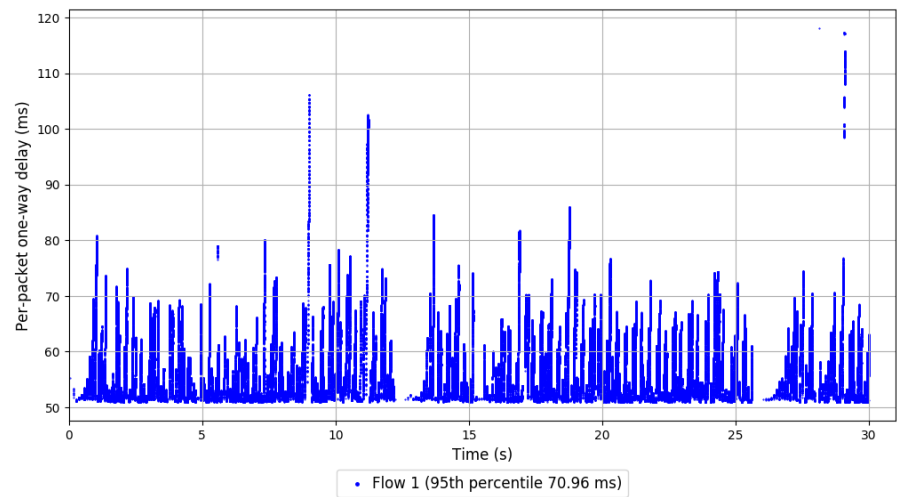
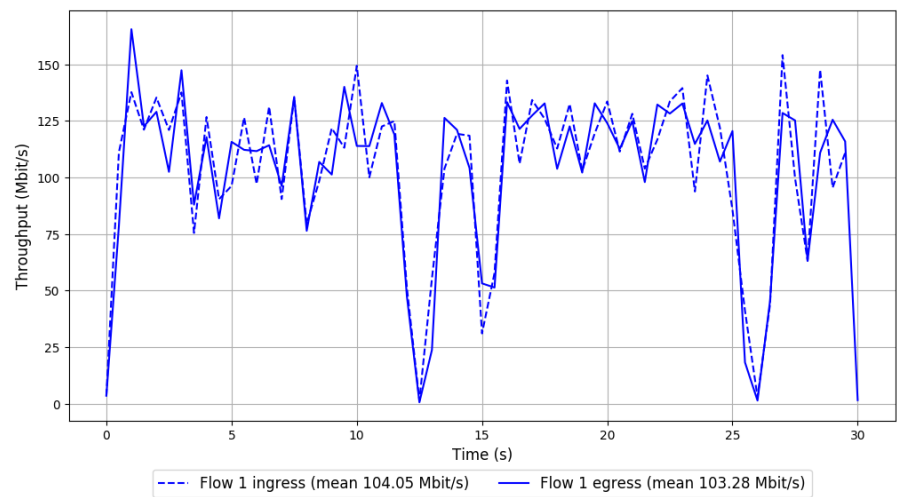
-- Flow 1:

Average throughput: 103.28 Mbit/s

95th percentile per-packet one-way delay: 70.963 ms

Loss rate: 0.75%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-02 05:43:49

End at: 2018-01-02 05:44:19

Below is generated by plot.py at 2018-01-02 08:44:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 149.19 Mbit/s

95th percentile per-packet one-way delay: 56.312 ms

Loss rate: 0.00%

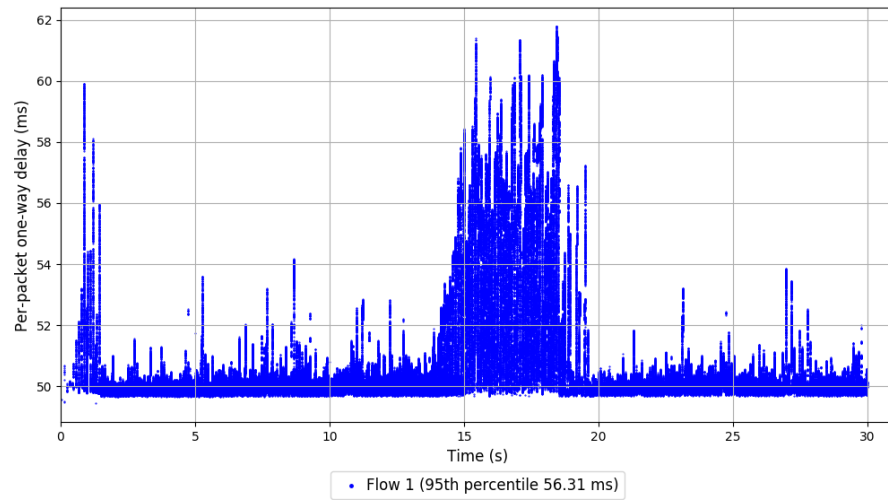
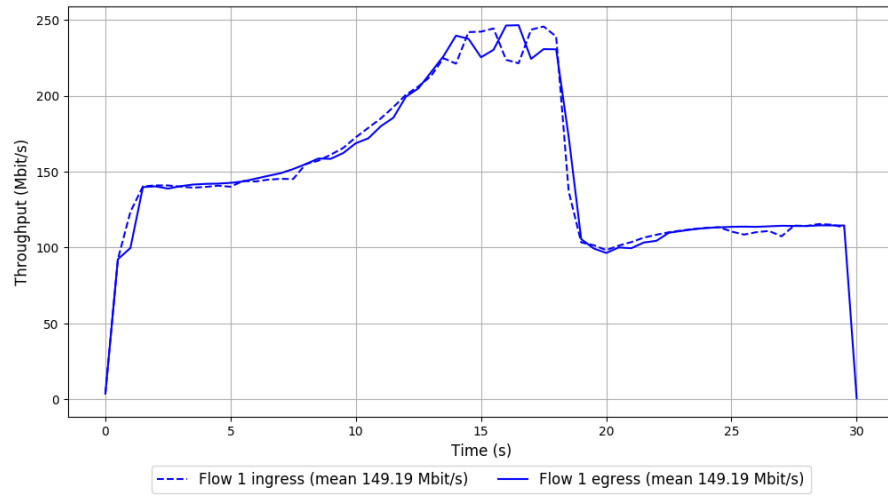
-- Flow 1:

Average throughput: 149.19 Mbit/s

95th percentile per-packet one-way delay: 56.312 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-02 05:55:28

End at: 2018-01-02 05:55:58

Below is generated by plot.py at 2018-01-02 08:44:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.19 Mbit/s

95th percentile per-packet one-way delay: 51.568 ms

Loss rate: 1.73%

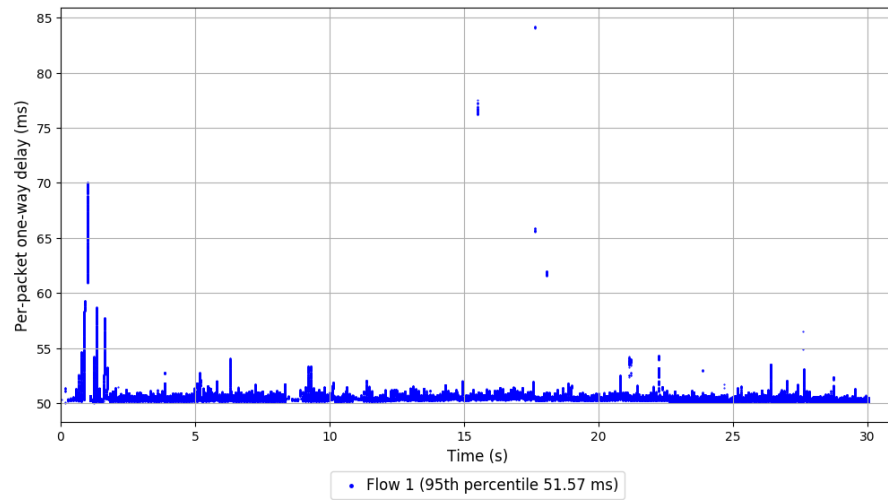
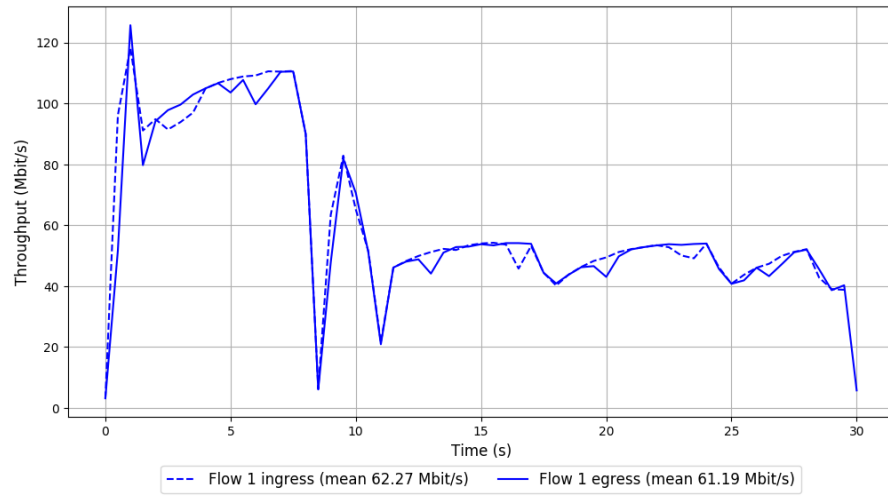
-- Flow 1:

Average throughput: 61.19 Mbit/s

95th percentile per-packet one-way delay: 51.568 ms

Loss rate: 1.73%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-02 06:07:00

End at: 2018-01-02 06:07:30

Below is generated by plot.py at 2018-01-02 08:44:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 128.29 Mbit/s

95th percentile per-packet one-way delay: 57.848 ms

Loss rate: 0.41%

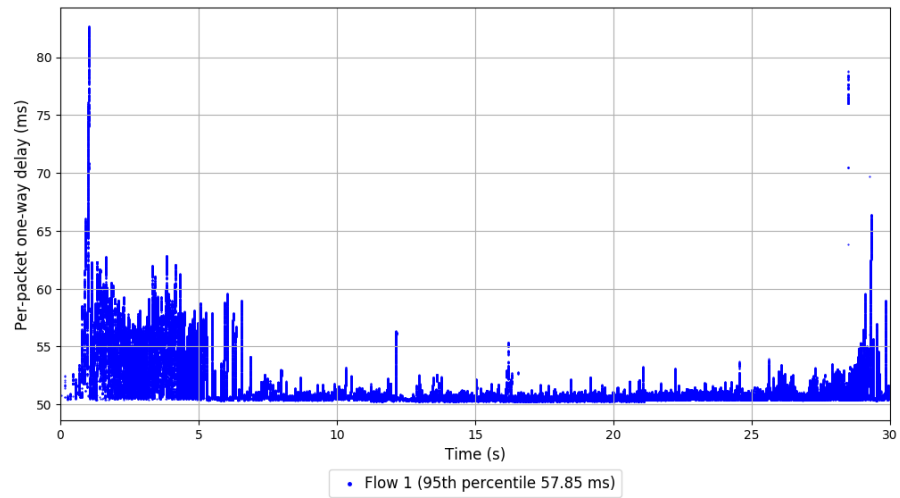
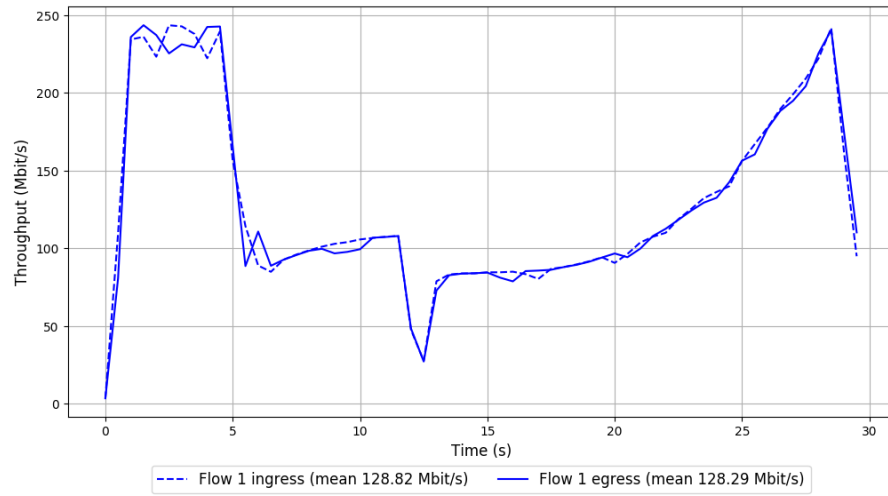
-- Flow 1:

Average throughput: 128.29 Mbit/s

95th percentile per-packet one-way delay: 57.848 ms

Loss rate: 0.41%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-02 06:18:45

End at: 2018-01-02 06:19:15

Below is generated by plot.py at 2018-01-02 08:44:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.49 Mbit/s

95th percentile per-packet one-way delay: 52.057 ms

Loss rate: 0.44%

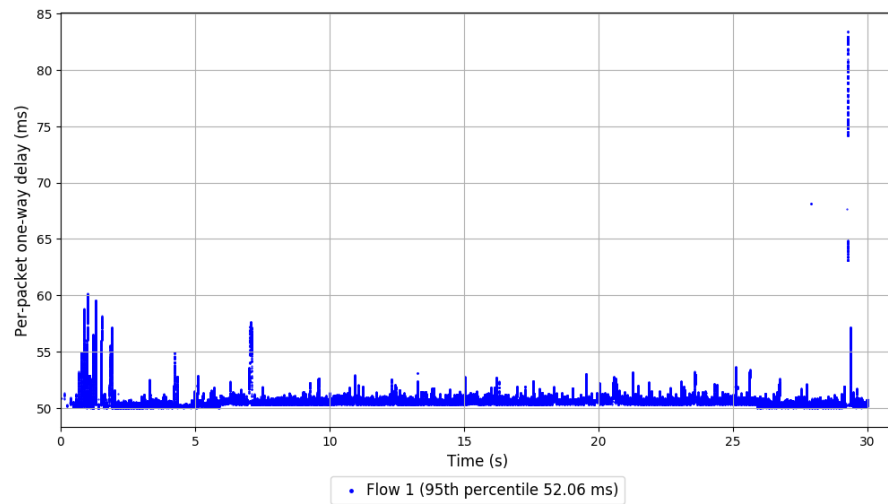
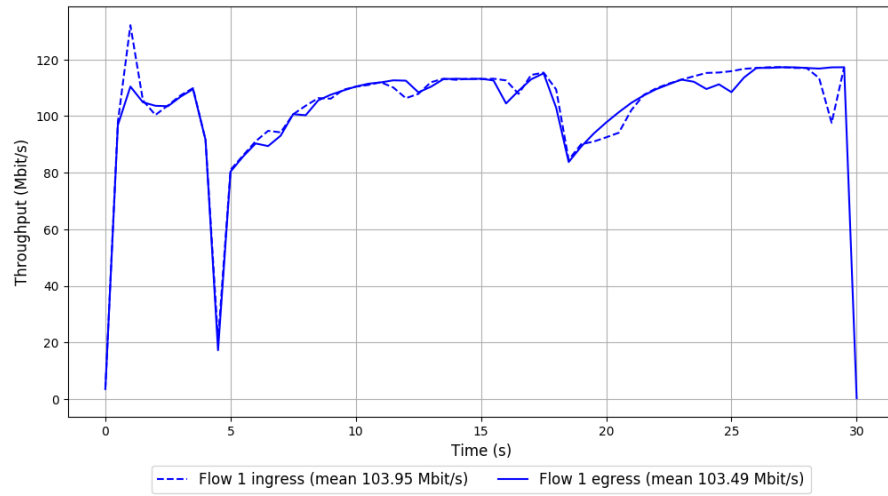
-- Flow 1:

Average throughput: 103.49 Mbit/s

95th percentile per-packet one-way delay: 52.057 ms

Loss rate: 0.44%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-02 06:30:17

End at: 2018-01-02 06:30:47

Below is generated by plot.py at 2018-01-02 08:44:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 102.25 Mbit/s

95th percentile per-packet one-way delay: 57.486 ms

Loss rate: 0.53%

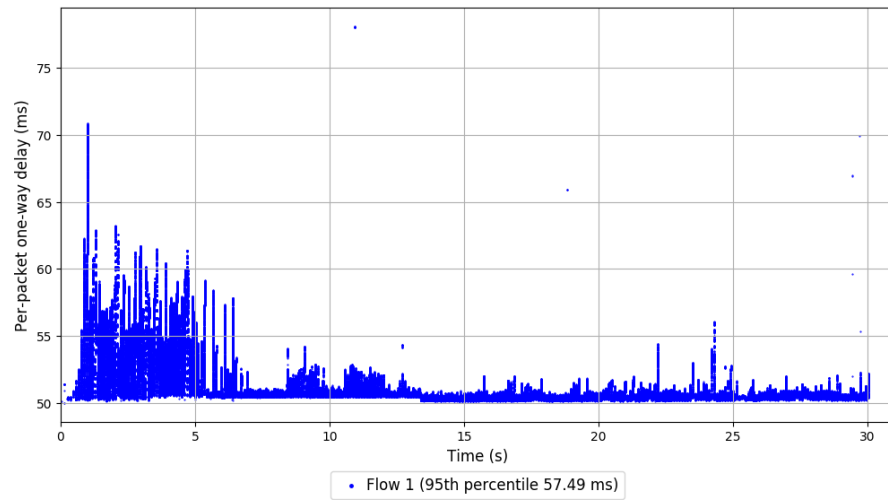
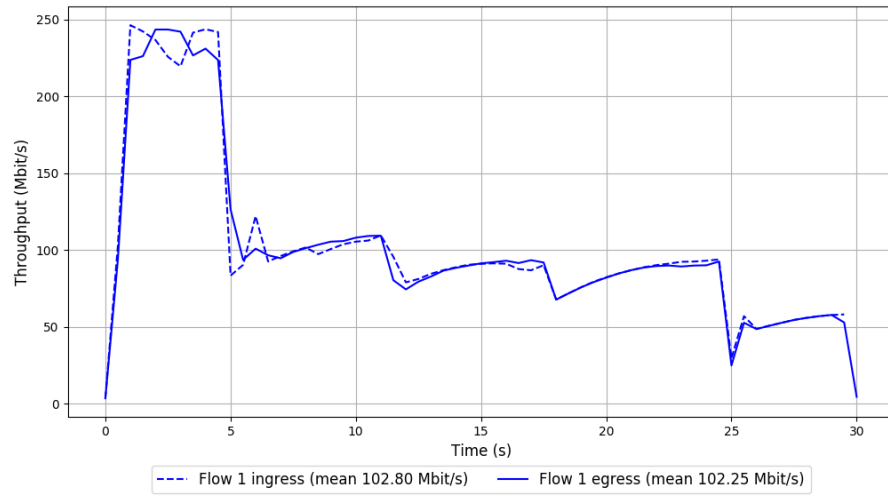
-- Flow 1:

Average throughput: 102.25 Mbit/s

95th percentile per-packet one-way delay: 57.486 ms

Loss rate: 0.53%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-02 06:41:54

End at: 2018-01-02 06:42:24

Below is generated by plot.py at 2018-01-02 08:45:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 107.03 Mbit/s

95th percentile per-packet one-way delay: 57.265 ms

Loss rate: 0.73%

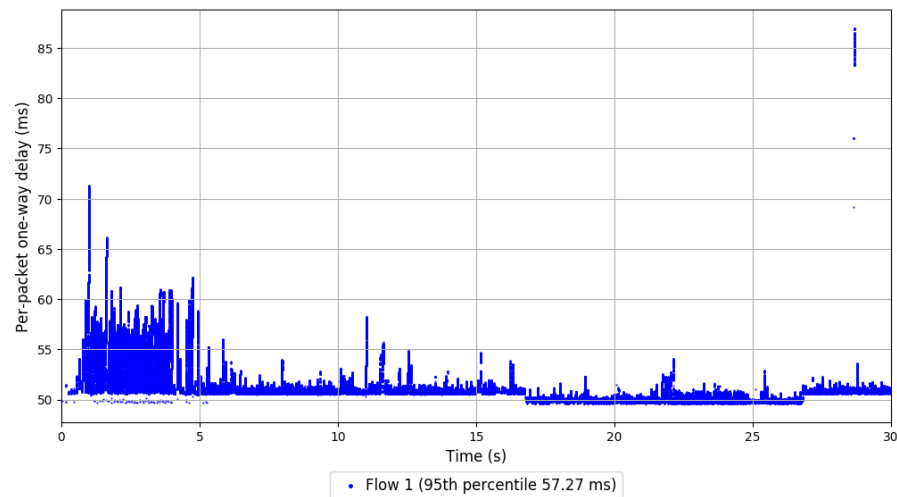
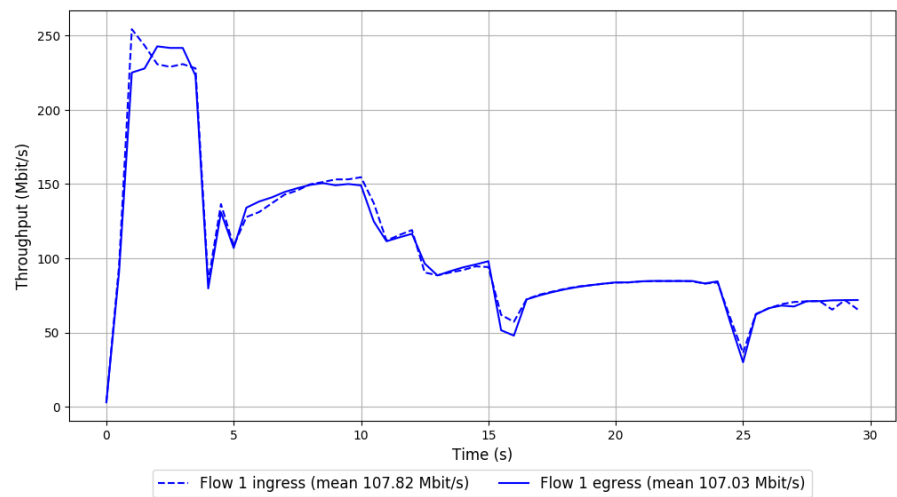
-- Flow 1:

Average throughput: 107.03 Mbit/s

95th percentile per-packet one-way delay: 57.265 ms

Loss rate: 0.73%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-02 06:53:35

End at: 2018-01-02 06:54:05

Below is generated by plot.py at 2018-01-02 08:46:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 164.65 Mbit/s

95th percentile per-packet one-way delay: 57.227 ms

Loss rate: 0.16%

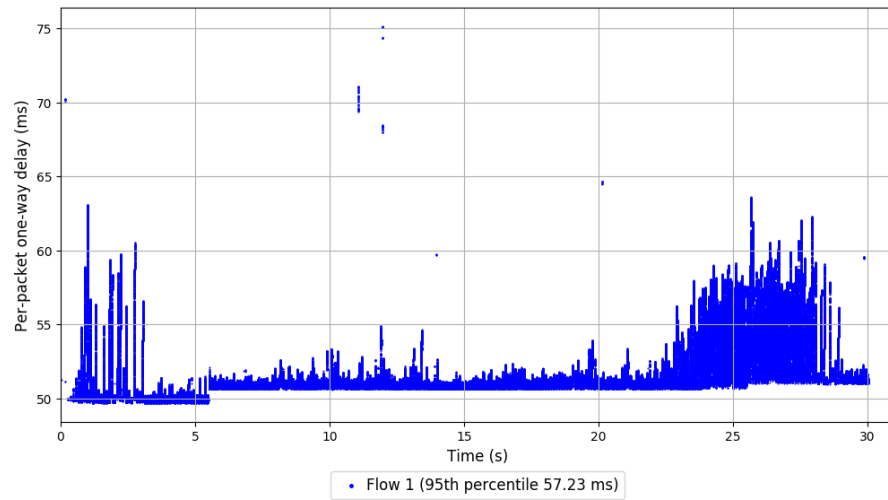
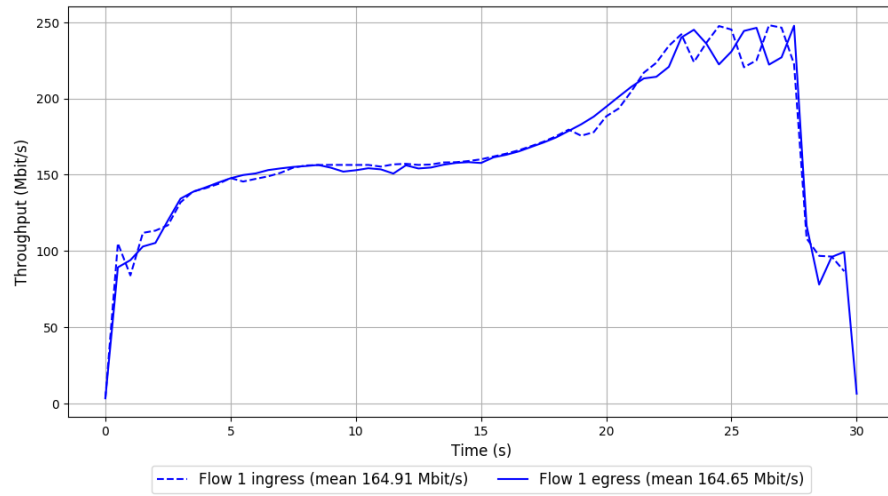
-- Flow 1:

Average throughput: 164.65 Mbit/s

95th percentile per-packet one-way delay: 57.227 ms

Loss rate: 0.16%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-02 07:05:10

End at: 2018-01-02 07:05:40

Below is generated by plot.py at 2018-01-02 08:46:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.14 Mbit/s

95th percentile per-packet one-way delay: 52.408 ms

Loss rate: 0.65%

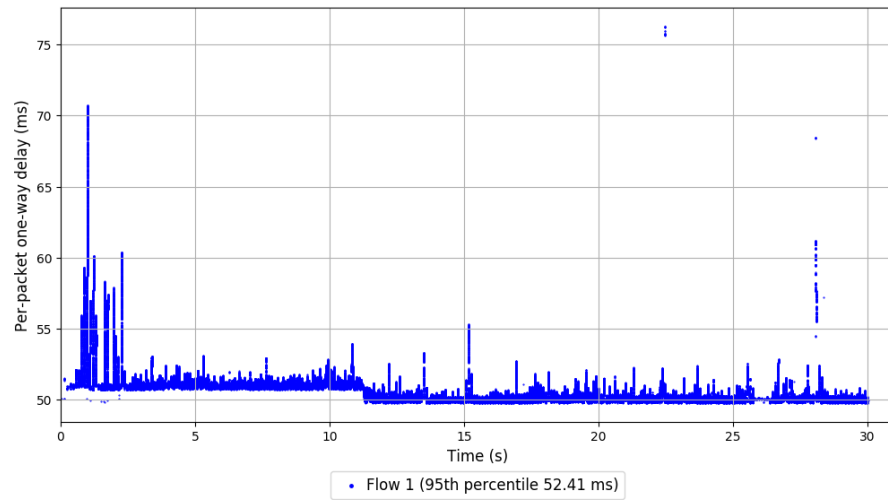
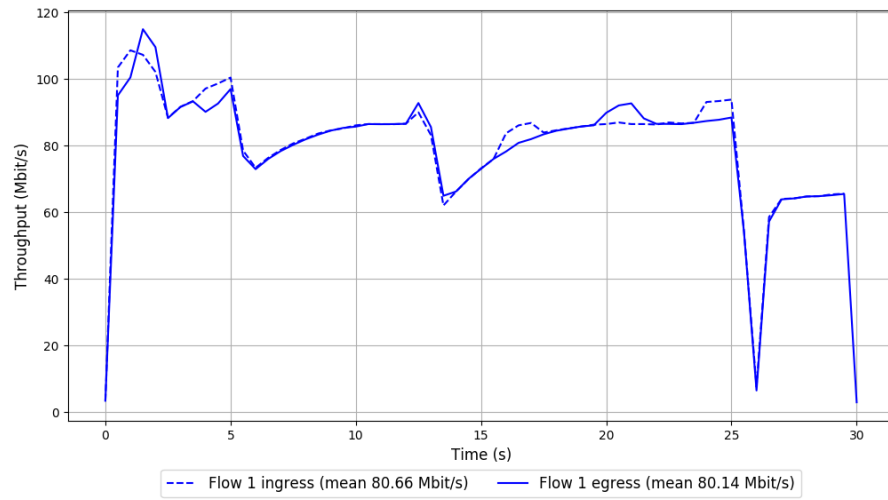
-- Flow 1:

Average throughput: 80.14 Mbit/s

95th percentile per-packet one-way delay: 52.408 ms

Loss rate: 0.65%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-02 07:16:49

End at: 2018-01-02 07:17:19

Below is generated by plot.py at 2018-01-02 08:46:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 103.39 Mbit/s

95th percentile per-packet one-way delay: 54.761 ms

Loss rate: 0.09%

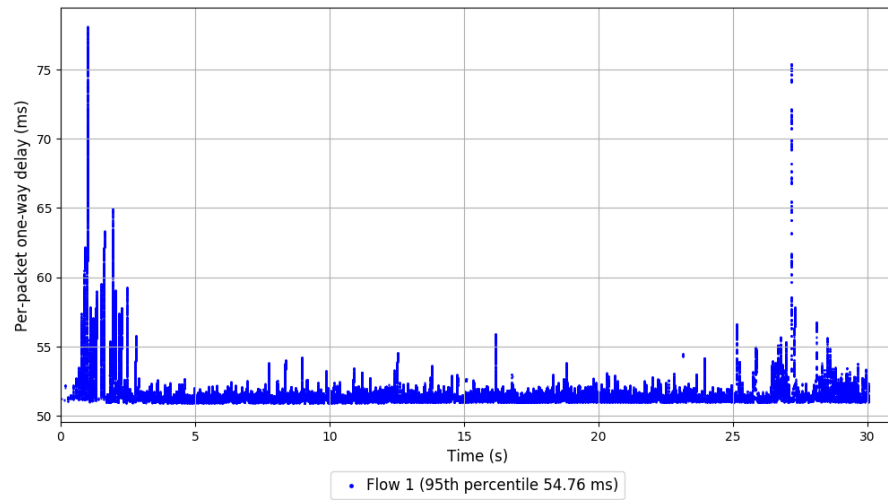
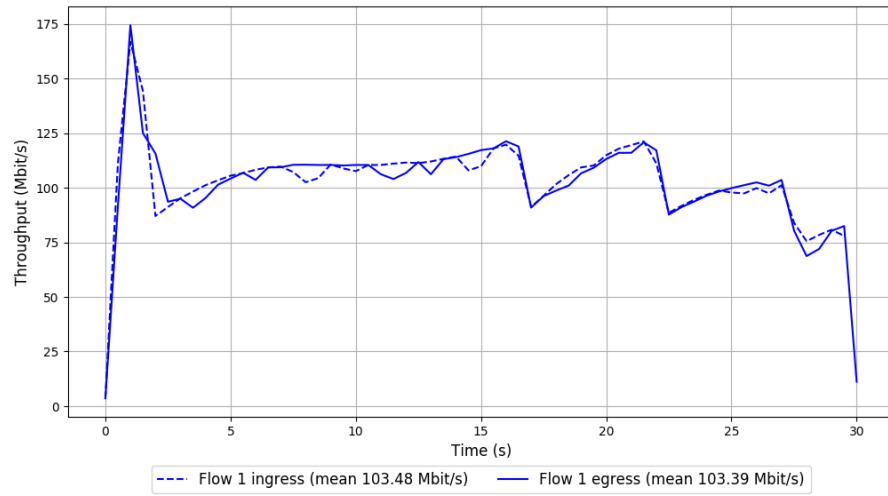
-- Flow 1:

Average throughput: 103.39 Mbit/s

95th percentile per-packet one-way delay: 54.761 ms

Loss rate: 0.09%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-02 07:28:24

End at: 2018-01-02 07:28:54

Below is generated by plot.py at 2018-01-02 08:46:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.47 Mbit/s

95th percentile per-packet one-way delay: 60.695 ms

Loss rate: 0.04%

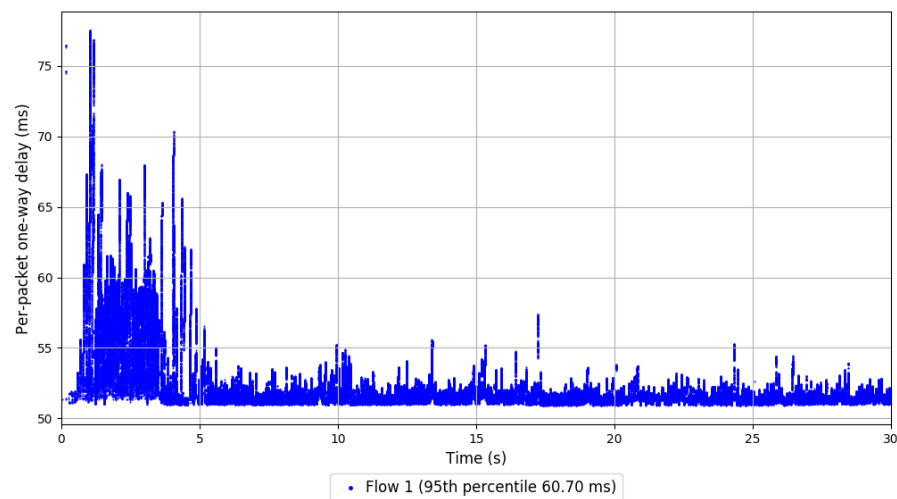
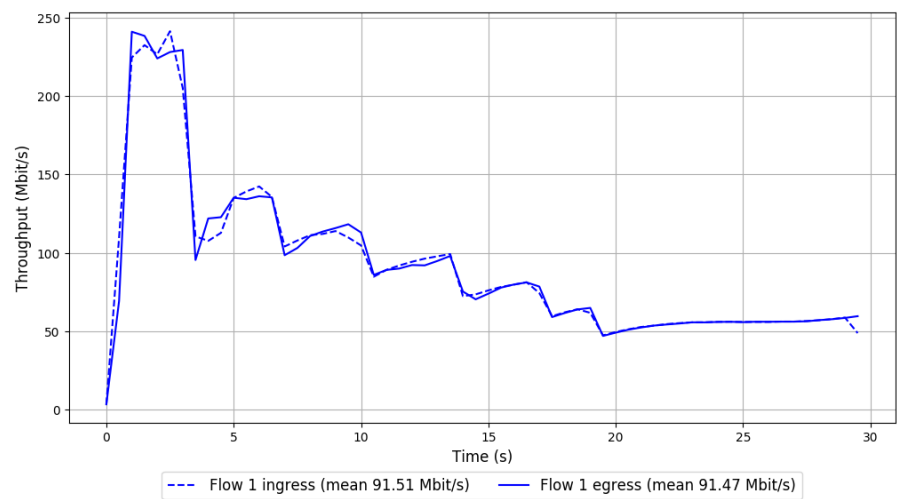
-- Flow 1:

Average throughput: 91.47 Mbit/s

95th percentile per-packet one-way delay: 60.695 ms

Loss rate: 0.04%

Run 10: Report of TCP Cubic — Data Link

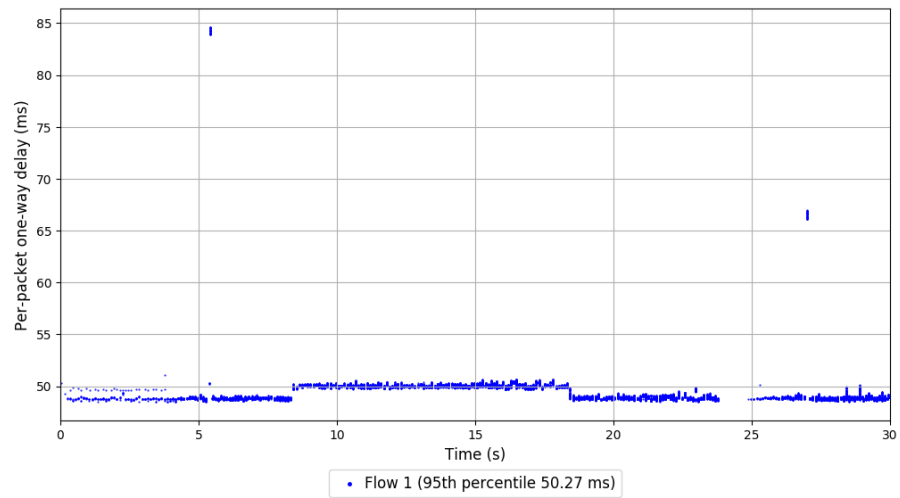
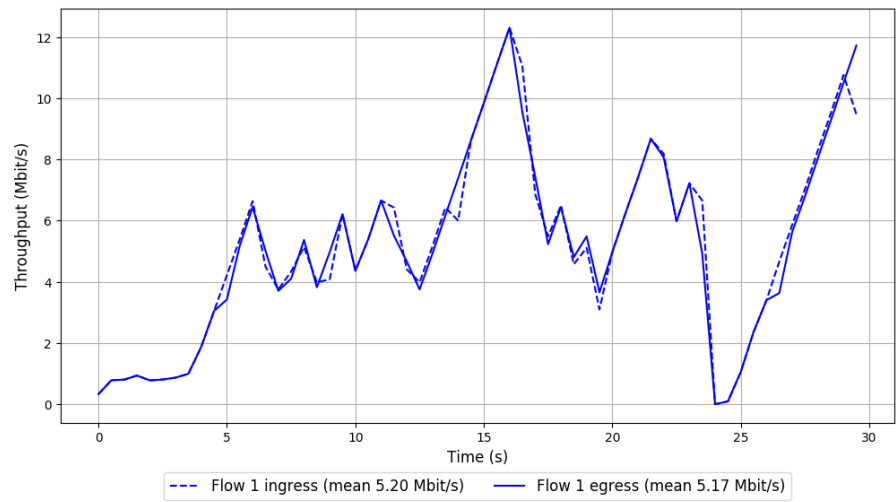


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-02 05:41:12
End at: 2018-01-02 05:41:42

# Below is generated by plot.py at 2018-01-02 08:46:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.17 Mbit/s
95th percentile per-packet one-way delay: 50.271 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 5.17 Mbit/s
95th percentile per-packet one-way delay: 50.271 ms
Loss rate: 0.62%
```

Run 1: Report of LEDBAT — Data Link

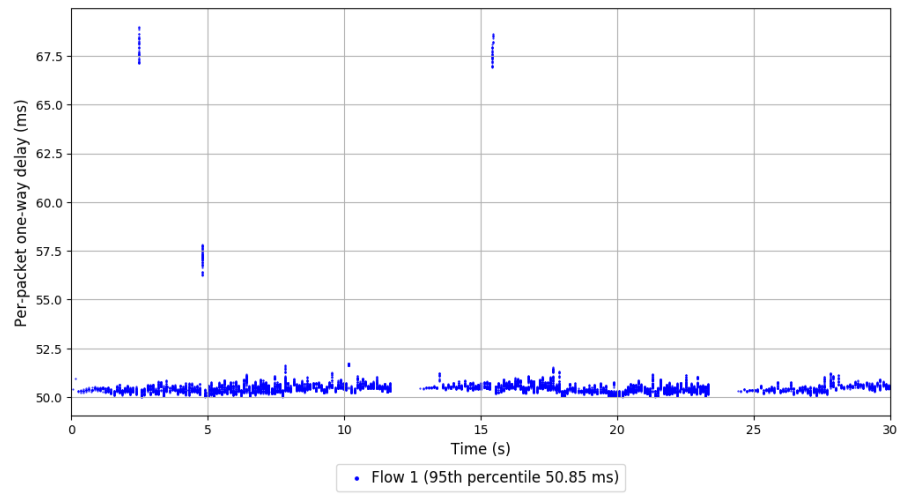
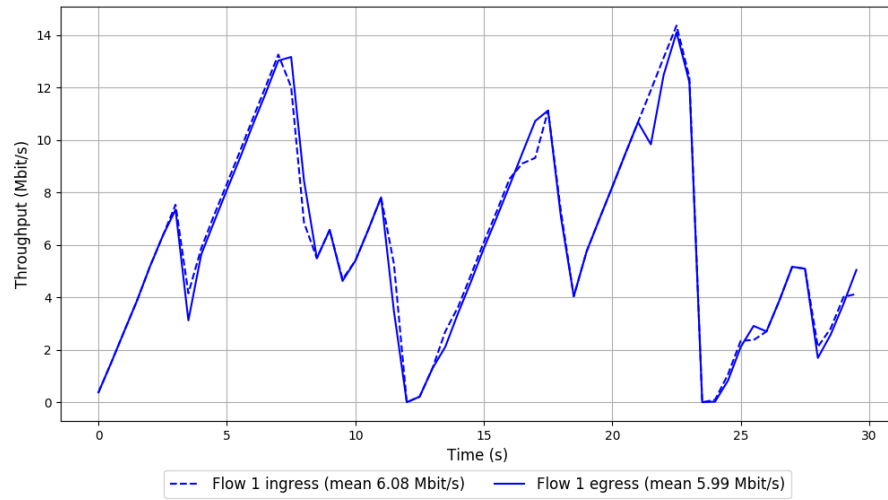


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-02 05:52:53
End at: 2018-01-02 05:53:23

# Below is generated by plot.py at 2018-01-02 08:46:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.99 Mbit/s
95th percentile per-packet one-way delay: 50.849 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 5.99 Mbit/s
95th percentile per-packet one-way delay: 50.849 ms
Loss rate: 1.50%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-02 06:04:21

End at: 2018-01-02 06:04:51

Below is generated by plot.py at 2018-01-02 08:46:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 17.91 Mbit/s

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

Loss rate: 0.19%

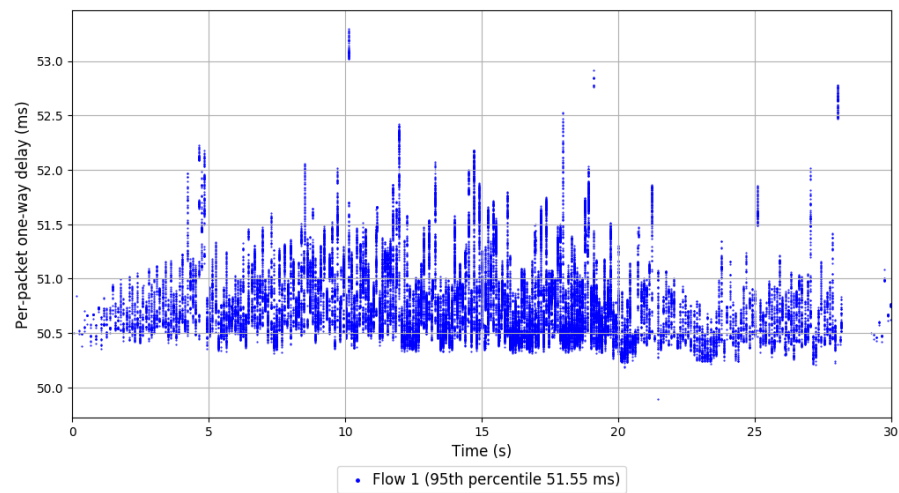
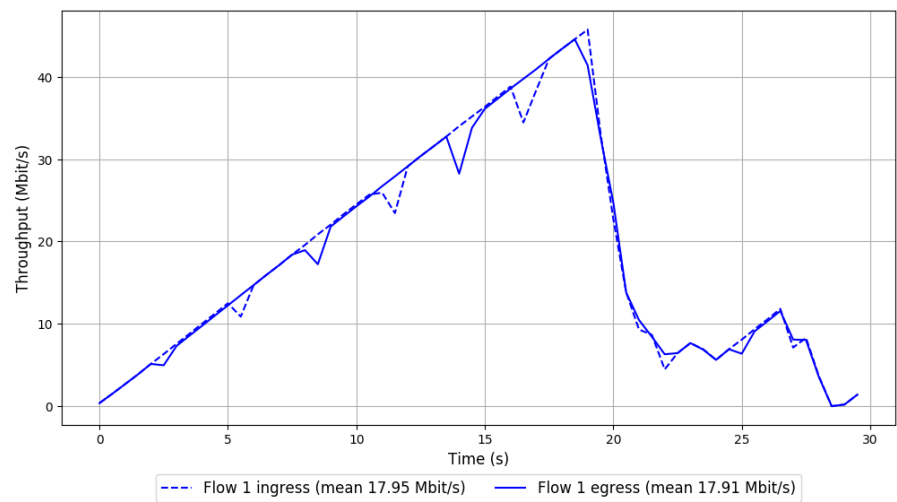
-- Flow 1:

Average throughput: 17.91 Mbit/s

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

Loss rate: 0.19%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

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

End at: 2018-01-02 06:16:39

Below is generated by plot.py at 2018-01-02 08:46:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 50.964 ms

Loss rate: 0.93%

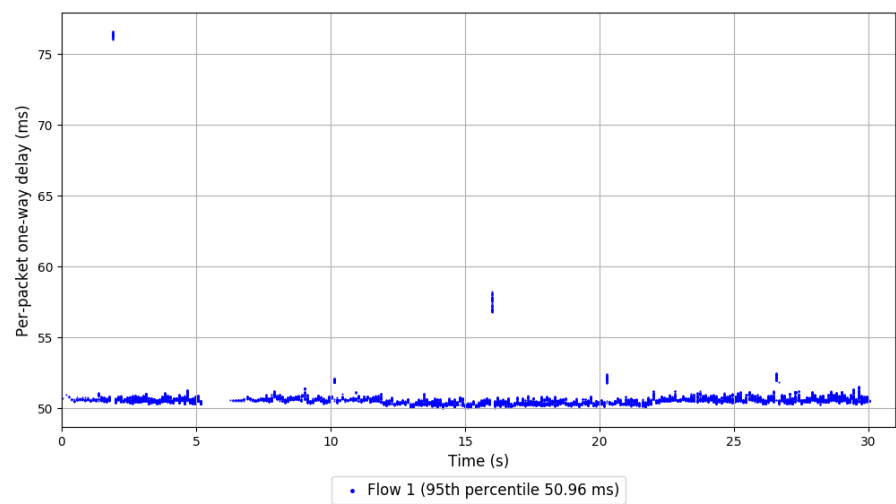
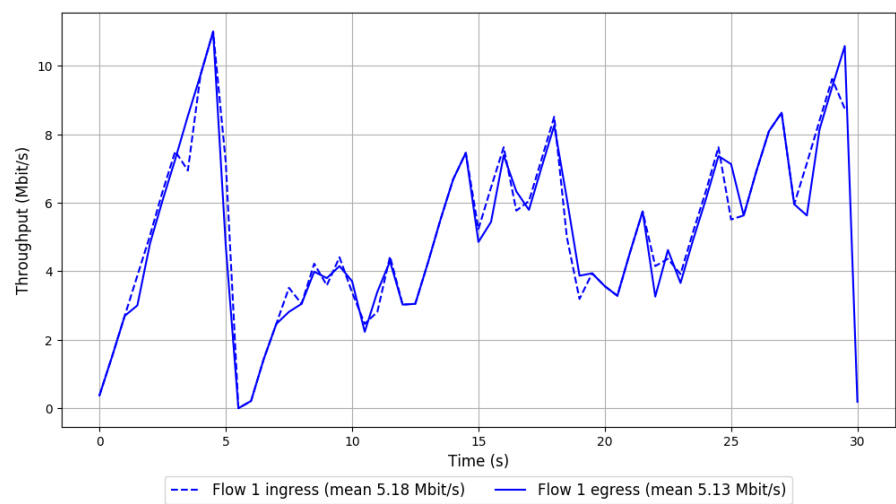
-- Flow 1:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 50.964 ms

Loss rate: 0.93%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-02 06:27:38

End at: 2018-01-02 06:28:08

Below is generated by plot.py at 2018-01-02 08:46:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.13 Mbit/s

95th percentile per-packet one-way delay: 51.098 ms

Loss rate: 0.36%

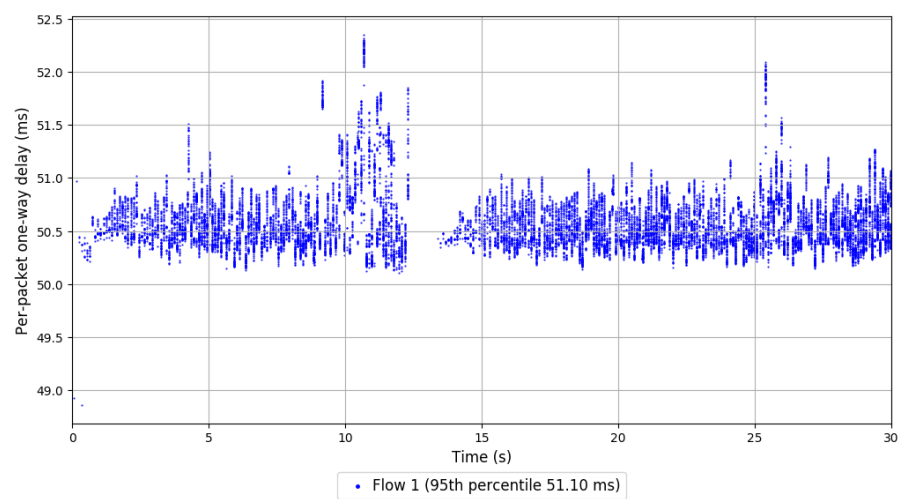
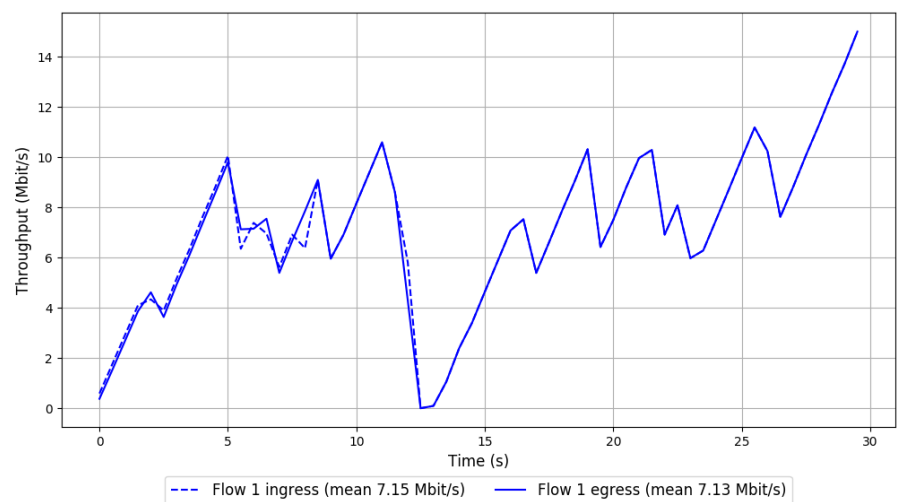
-- Flow 1:

Average throughput: 7.13 Mbit/s

95th percentile per-packet one-way delay: 51.098 ms

Loss rate: 0.36%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-02 06:39:18

End at: 2018-01-02 06:39:48

Below is generated by plot.py at 2018-01-02 08:46:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.32 Mbit/s

95th percentile per-packet one-way delay: 51.149 ms

Loss rate: 2.39%

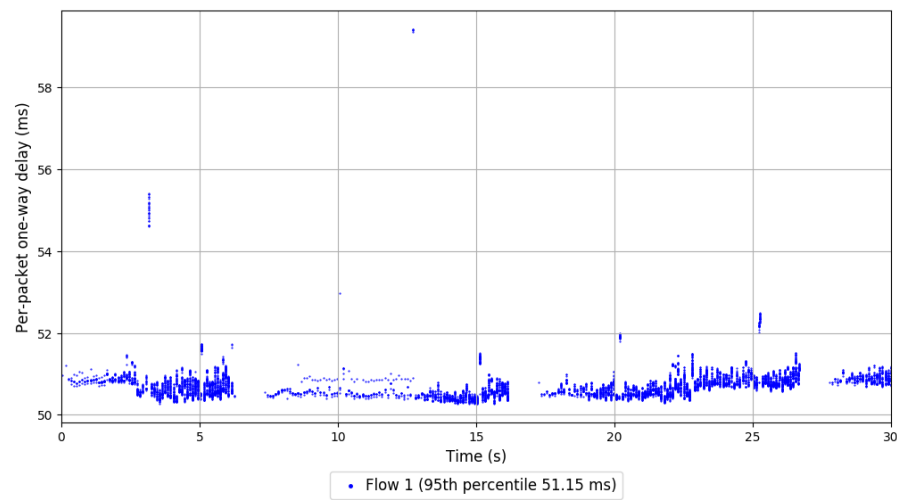
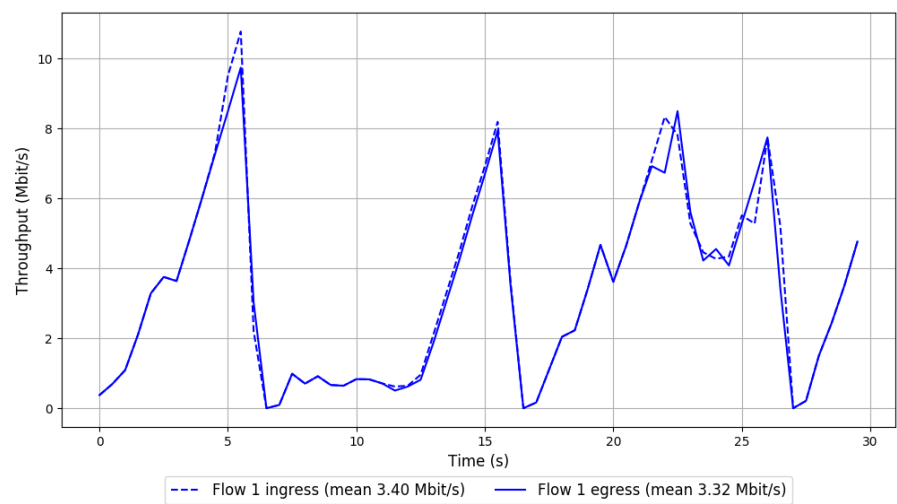
-- Flow 1:

Average throughput: 3.32 Mbit/s

95th percentile per-packet one-way delay: 51.149 ms

Loss rate: 2.39%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-02 06:50:57

End at: 2018-01-02 06:51:27

Below is generated by plot.py at 2018-01-02 08:46:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.27 Mbit/s

95th percentile per-packet one-way delay: 51.438 ms

Loss rate: 0.55%

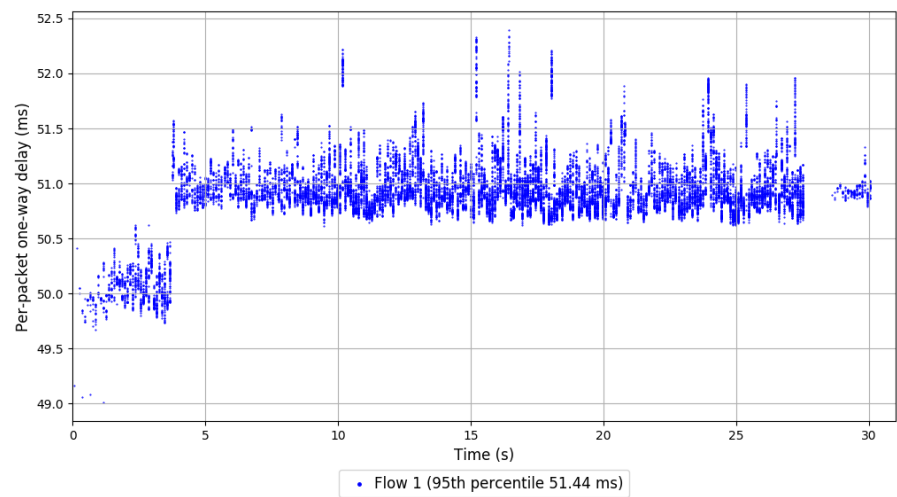
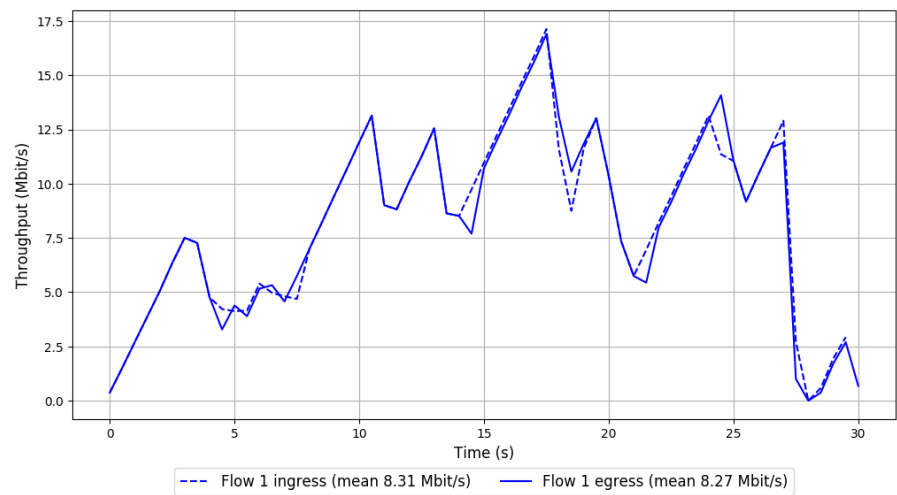
-- Flow 1:

Average throughput: 8.27 Mbit/s

95th percentile per-packet one-way delay: 51.438 ms

Loss rate: 0.55%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-02 07:02:30

End at: 2018-01-02 07:03:00

Below is generated by plot.py at 2018-01-02 08:46:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.60 Mbit/s

95th percentile per-packet one-way delay: 51.206 ms

Loss rate: 1.13%

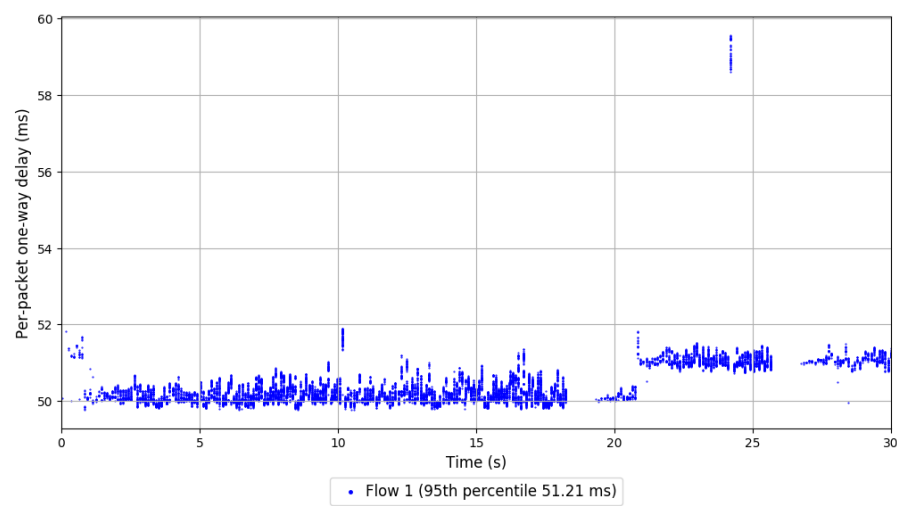
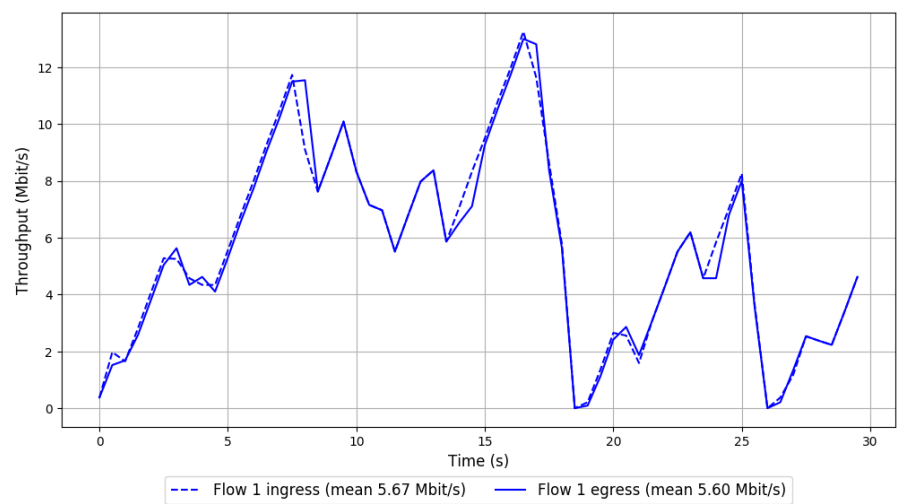
-- Flow 1:

Average throughput: 5.60 Mbit/s

95th percentile per-packet one-way delay: 51.206 ms

Loss rate: 1.13%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-02 07:14:11

End at: 2018-01-02 07:14:41

Below is generated by plot.py at 2018-01-02 08:46:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.64 Mbit/s

95th percentile per-packet one-way delay: 51.678 ms

Loss rate: 1.25%

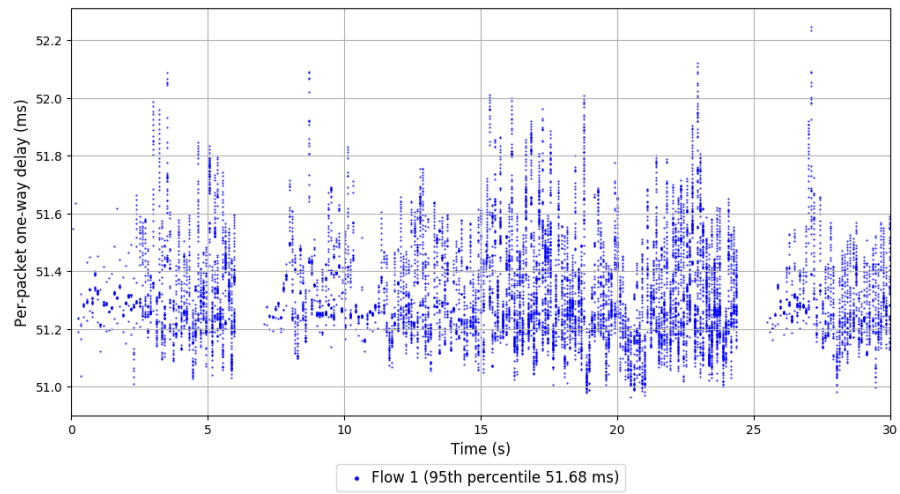
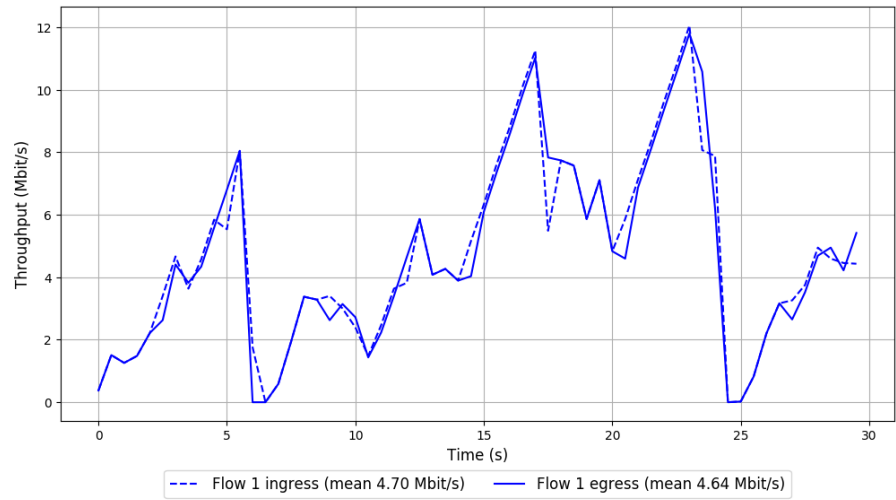
-- Flow 1:

Average throughput: 4.64 Mbit/s

95th percentile per-packet one-way delay: 51.678 ms

Loss rate: 1.25%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-02 07:25:48

End at: 2018-01-02 07:26:18

Below is generated by plot.py at 2018-01-02 08:46:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 52.736 ms

Loss rate: 1.81%

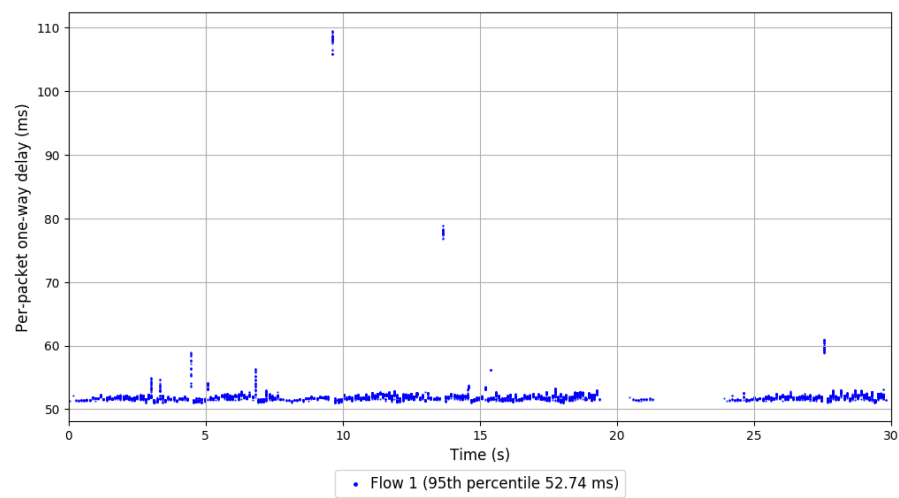
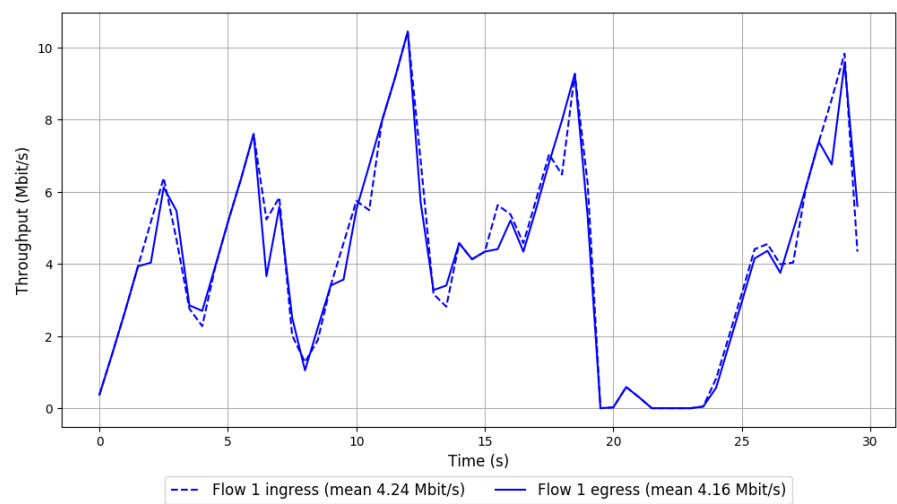
-- Flow 1:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 52.736 ms

Loss rate: 1.81%

Run 10: Report of LEDBAT — Data Link

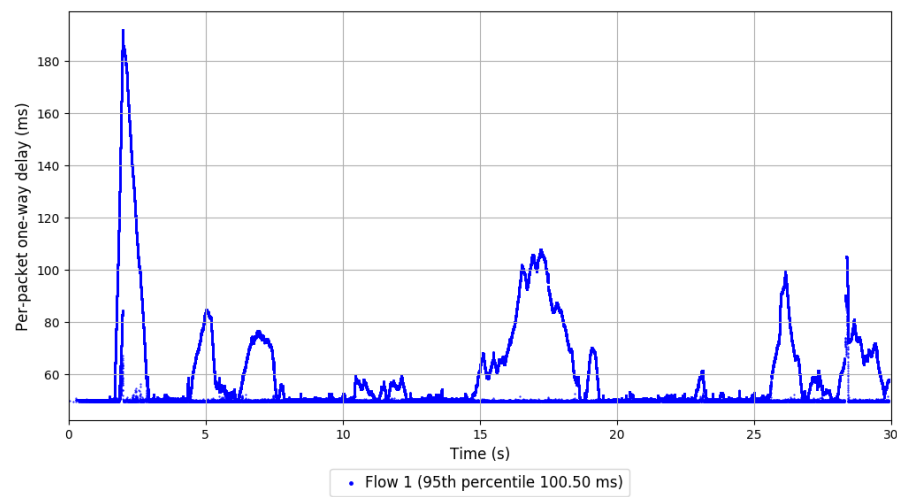
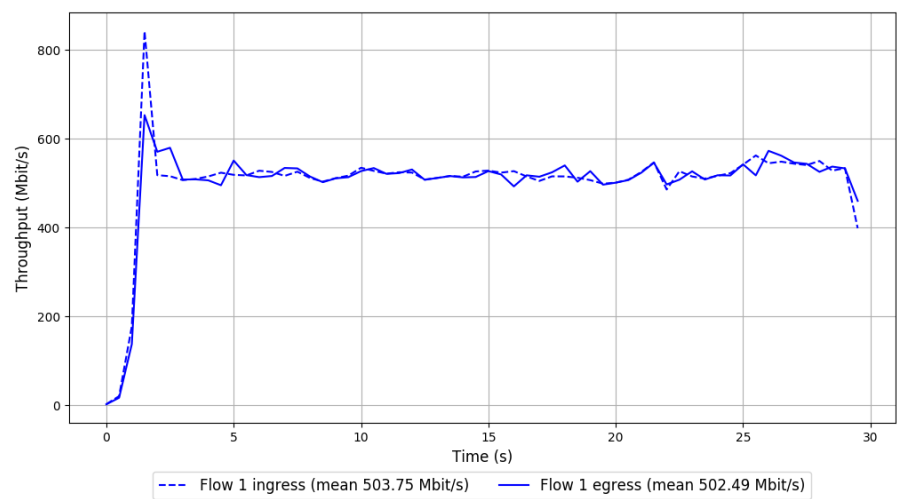


```
Run 1: Statistics of PCC

Start at: 2018-01-02 05:46:06
End at: 2018-01-02 05:46:36

# Below is generated by plot.py at 2018-01-02 08:53:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 502.49 Mbit/s
95th percentile per-packet one-way delay: 100.500 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 502.49 Mbit/s
95th percentile per-packet one-way delay: 100.500 ms
Loss rate: 0.24%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-02 05:57:39

End at: 2018-01-02 05:58:09

Below is generated by plot.py at 2018-01-02 08:53:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 490.28 Mbit/s

95th percentile per-packet one-way delay: 146.480 ms

Loss rate: 0.41%

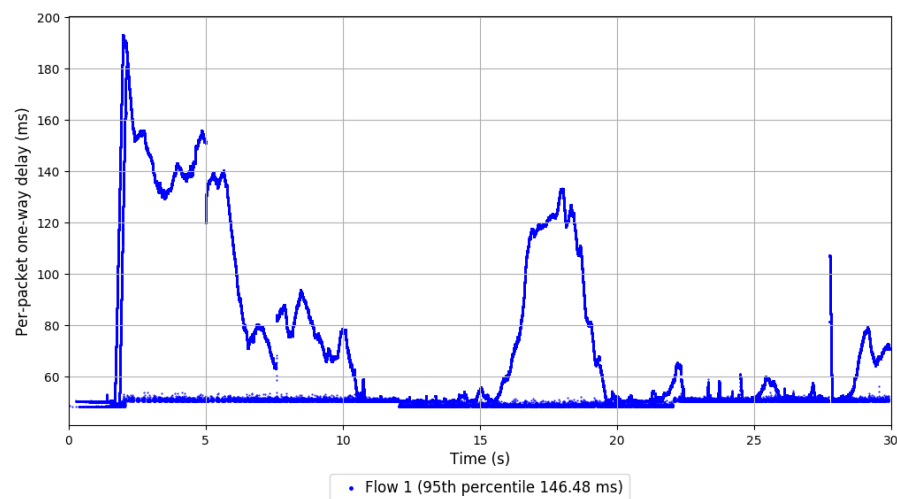
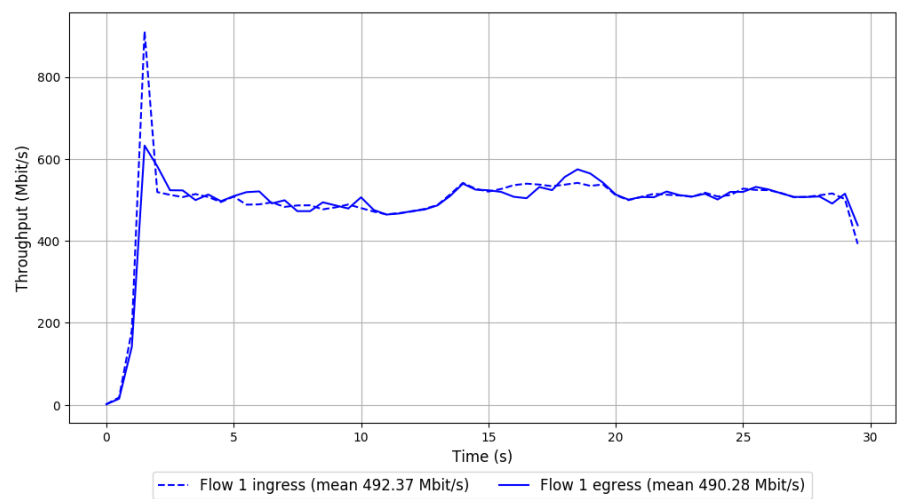
-- Flow 1:

Average throughput: 490.28 Mbit/s

95th percentile per-packet one-way delay: 146.480 ms

Loss rate: 0.41%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-02 06:09:15

End at: 2018-01-02 06:09:45

Below is generated by plot.py at 2018-01-02 08:53:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 506.32 Mbit/s

95th percentile per-packet one-way delay: 193.566 ms

Loss rate: 1.28%

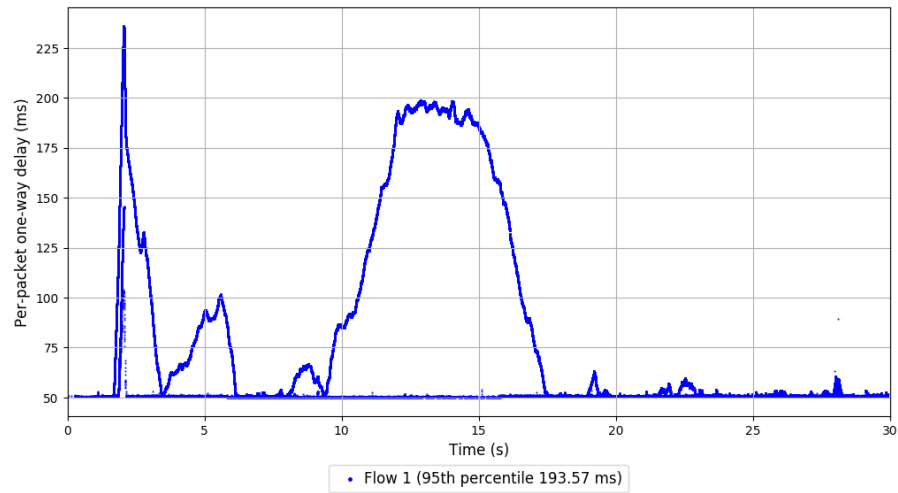
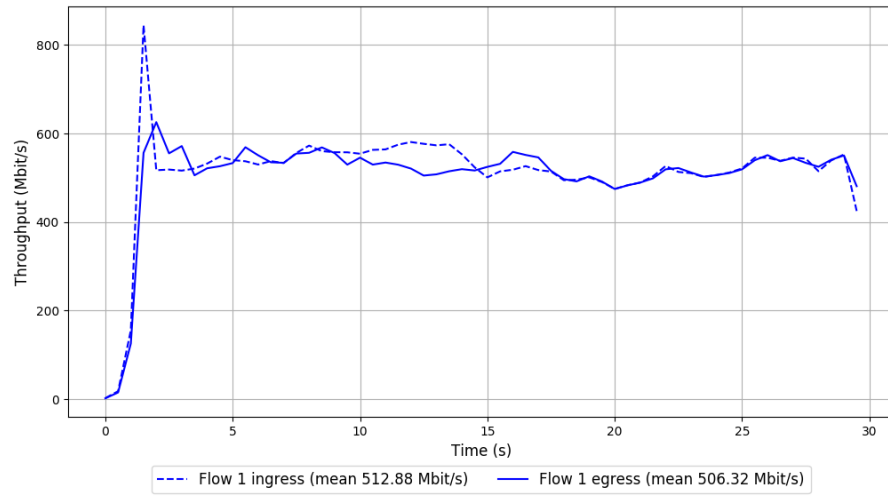
-- Flow 1:

Average throughput: 506.32 Mbit/s

95th percentile per-packet one-way delay: 193.566 ms

Loss rate: 1.28%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-02 06:20:58

End at: 2018-01-02 06:21:28

Below is generated by plot.py at 2018-01-02 08:53:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 461.09 Mbit/s

95th percentile per-packet one-way delay: 100.796 ms

Loss rate: 0.00%

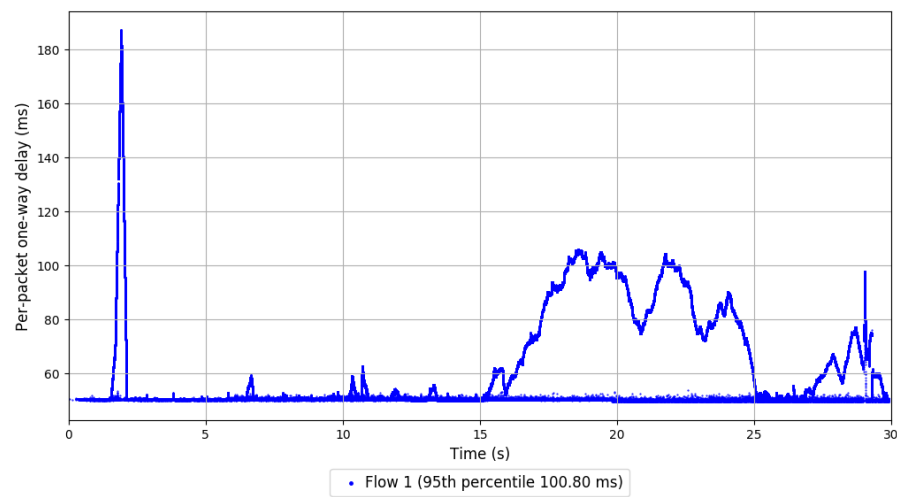
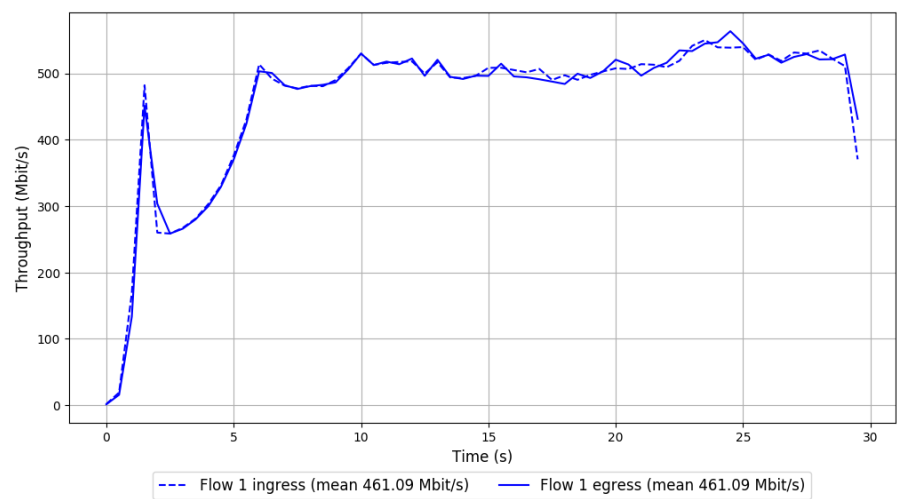
-- Flow 1:

Average throughput: 461.09 Mbit/s

95th percentile per-packet one-way delay: 100.796 ms

Loss rate: 0.00%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-02 06:32:30

End at: 2018-01-02 06:33:00

Below is generated by plot.py at 2018-01-02 08:53:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 502.65 Mbit/s

95th percentile per-packet one-way delay: 191.291 ms

Loss rate: 1.30%

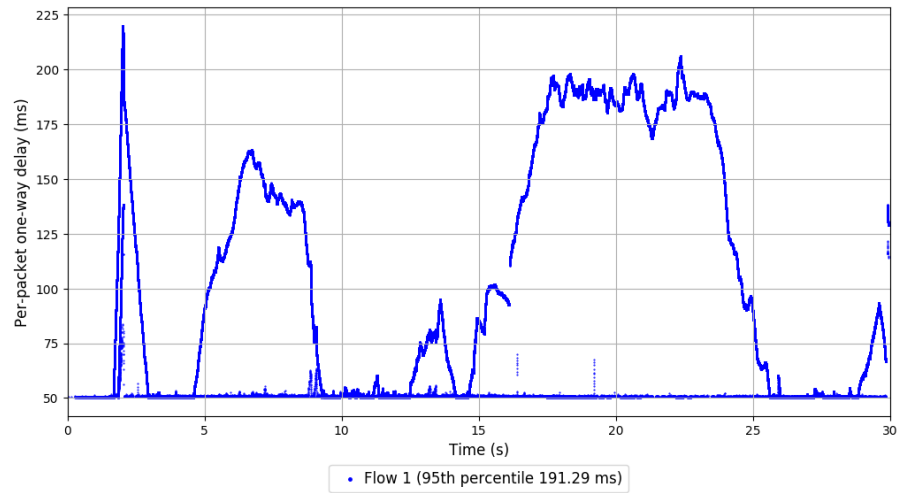
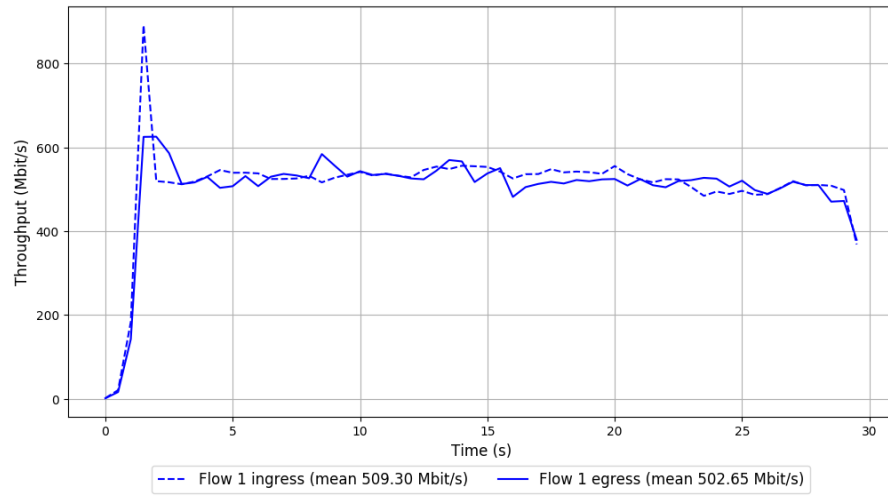
-- Flow 1:

Average throughput: 502.65 Mbit/s

95th percentile per-packet one-way delay: 191.291 ms

Loss rate: 1.30%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-02 06:44:08

End at: 2018-01-02 06:44:38

Below is generated by plot.py at 2018-01-02 08:53:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 490.39 Mbit/s

95th percentile per-packet one-way delay: 195.931 ms

Loss rate: 1.28%

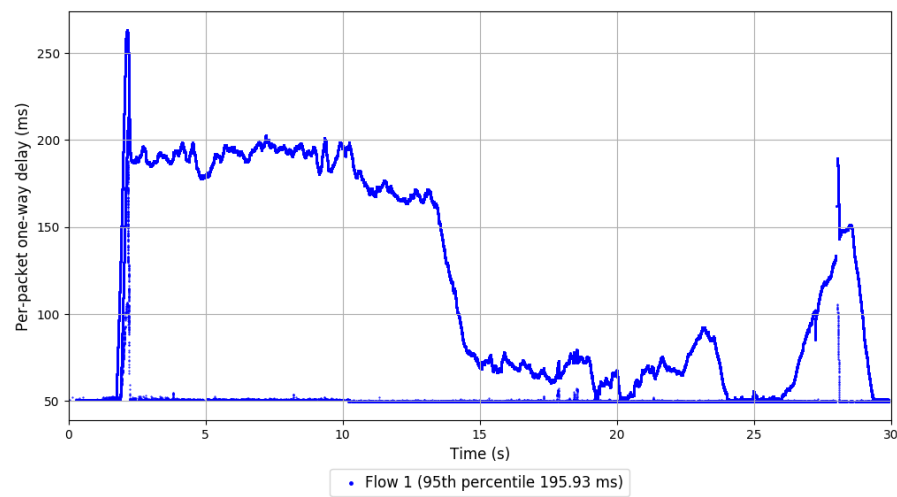
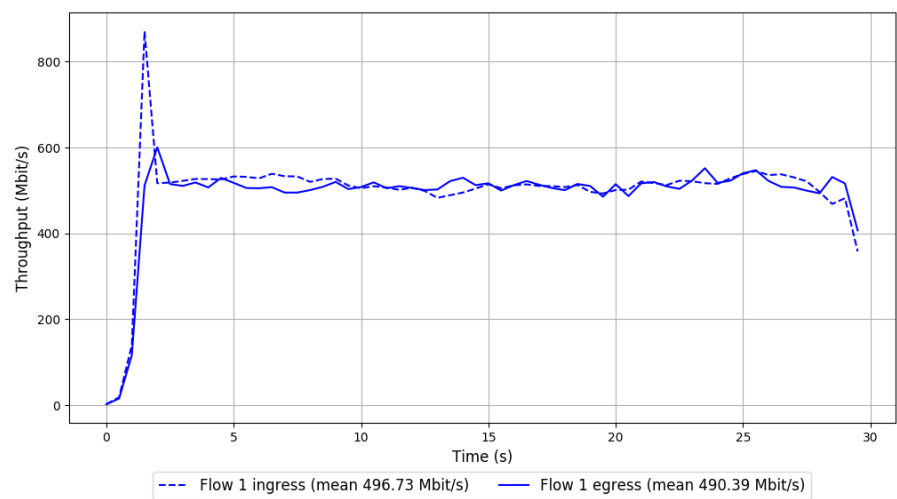
-- Flow 1:

Average throughput: 490.39 Mbit/s

95th percentile per-packet one-way delay: 195.931 ms

Loss rate: 1.28%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-02 06:55:52

End at: 2018-01-02 06:56:22

Below is generated by plot.py at 2018-01-02 08:54:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 498.64 Mbit/s

95th percentile per-packet one-way delay: 190.241 ms

Loss rate: 0.91%

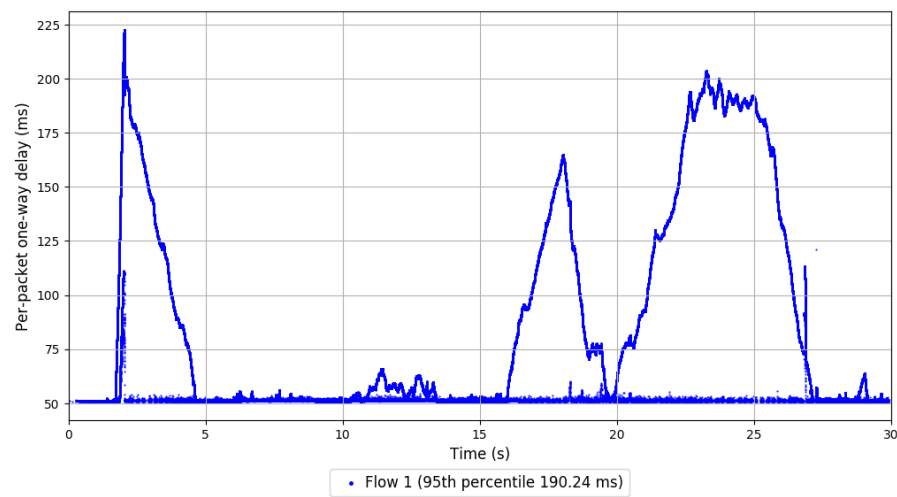
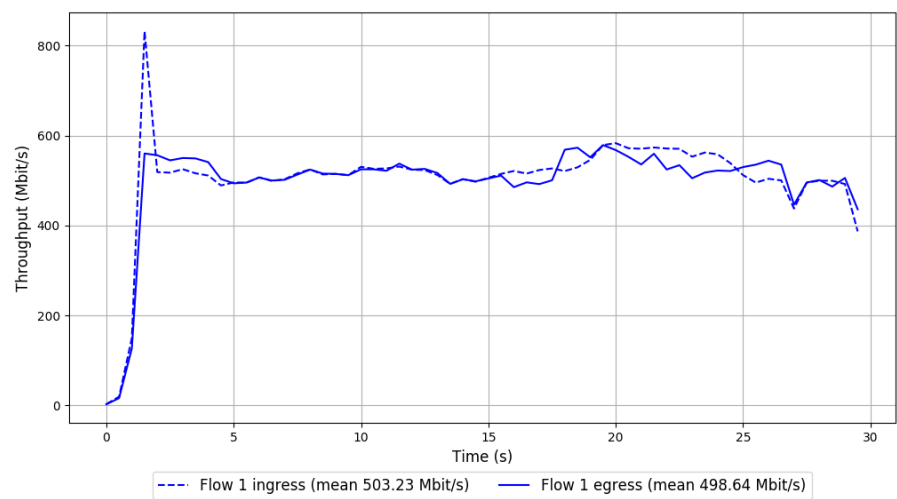
-- Flow 1:

Average throughput: 498.64 Mbit/s

95th percentile per-packet one-way delay: 190.241 ms

Loss rate: 0.91%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

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

End at: 2018-01-02 07:07:51

Below is generated by plot.py at 2018-01-02 08:54:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 467.00 Mbit/s

95th percentile per-packet one-way delay: 188.320 ms

Loss rate: 0.52%

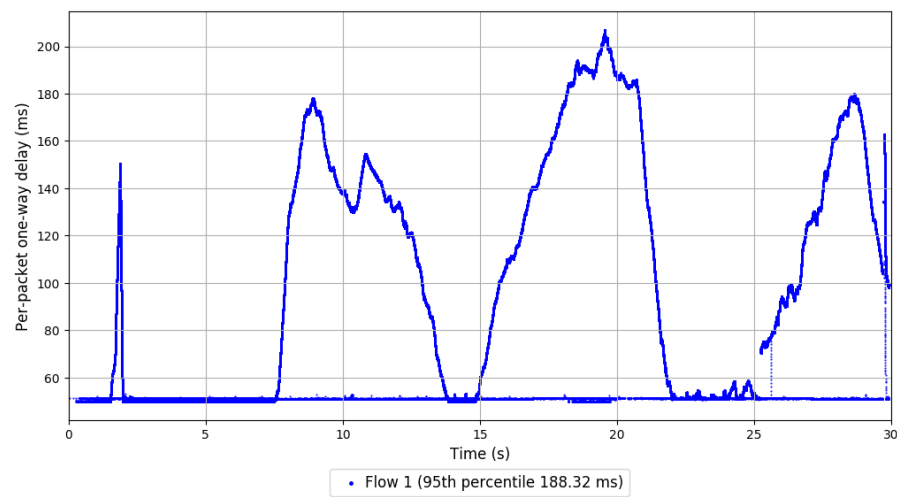
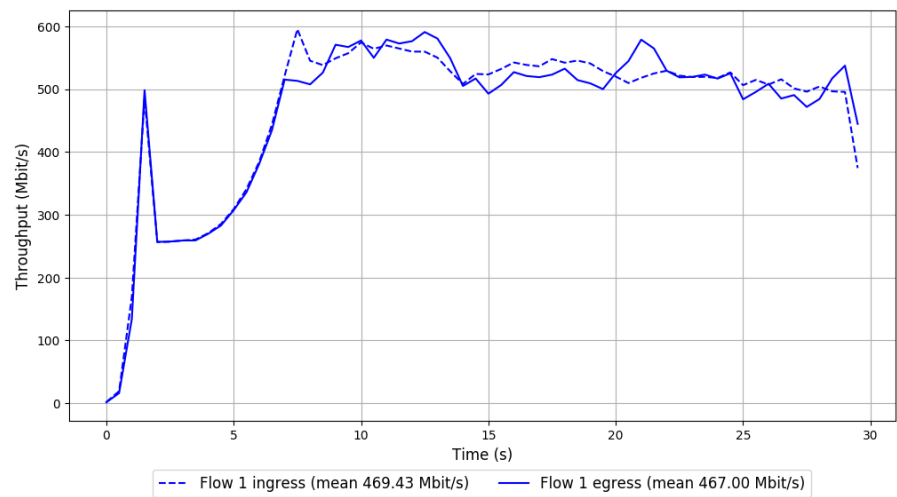
-- Flow 1:

Average throughput: 467.00 Mbit/s

95th percentile per-packet one-way delay: 188.320 ms

Loss rate: 0.52%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

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 09:02:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 490.68 Mbit/s

95th percentile per-packet one-way delay: 190.023 ms

Loss rate: 0.55%

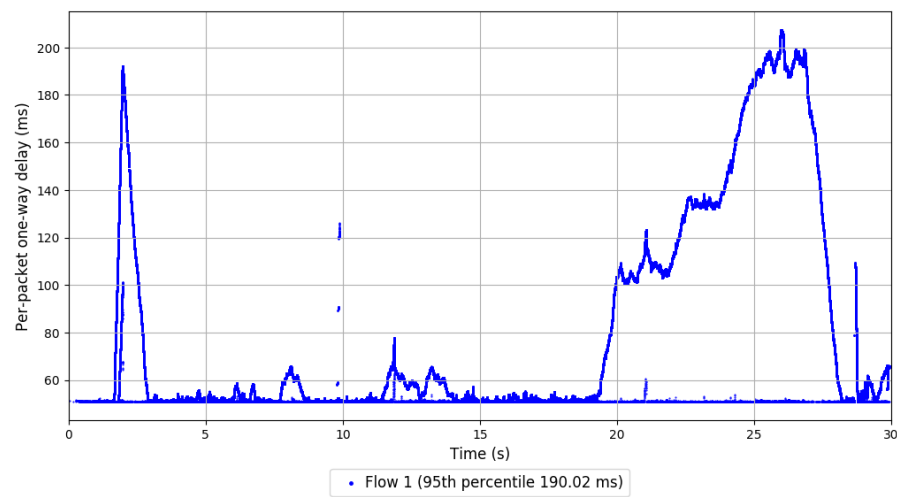
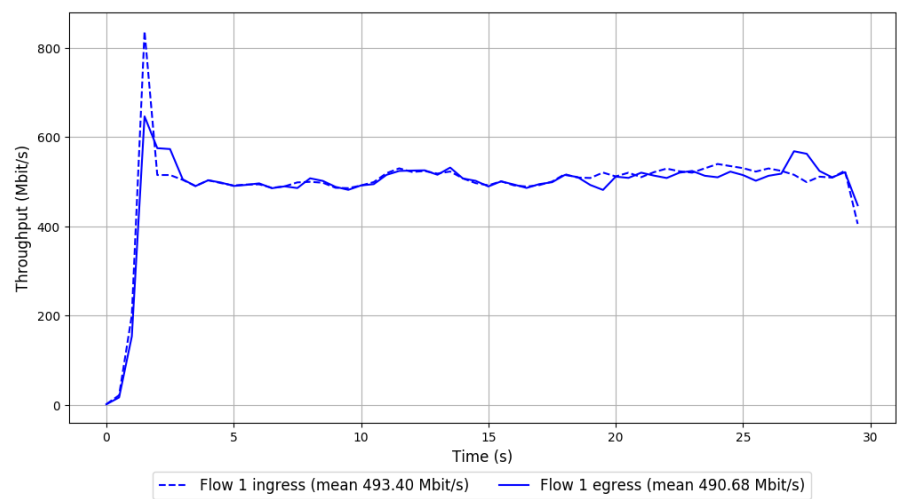
-- Flow 1:

Average throughput: 490.68 Mbit/s

95th percentile per-packet one-way delay: 190.023 ms

Loss rate: 0.55%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-02 07:30:36

End at: 2018-01-02 07:31:06

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 293.60 Mbit/s

95th percentile per-packet one-way delay: 205.573 ms

Loss rate: 7.14%

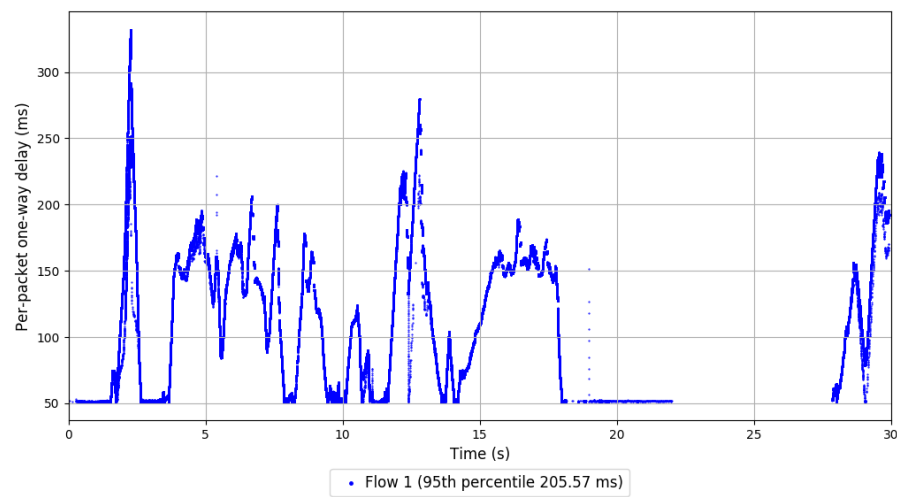
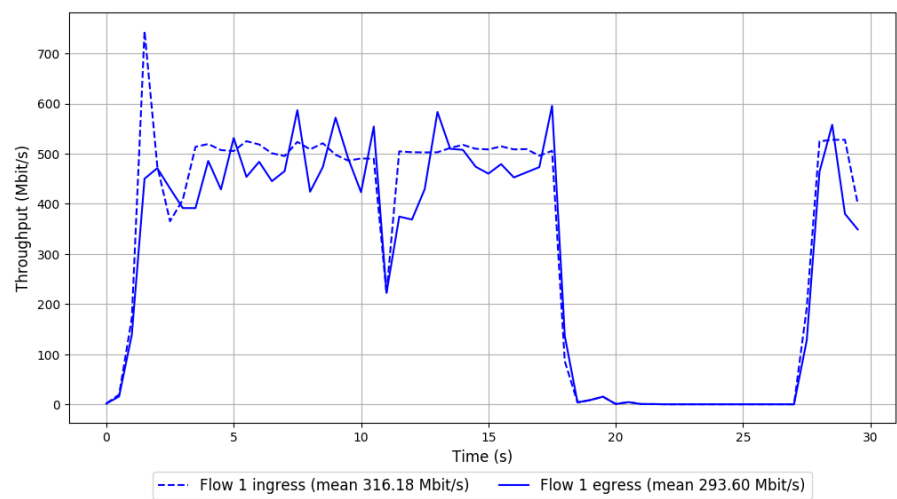
-- Flow 1:

Average throughput: 293.60 Mbit/s

95th percentile per-packet one-way delay: 205.573 ms

Loss rate: 7.14%

Run 10: Report of PCC — Data Link

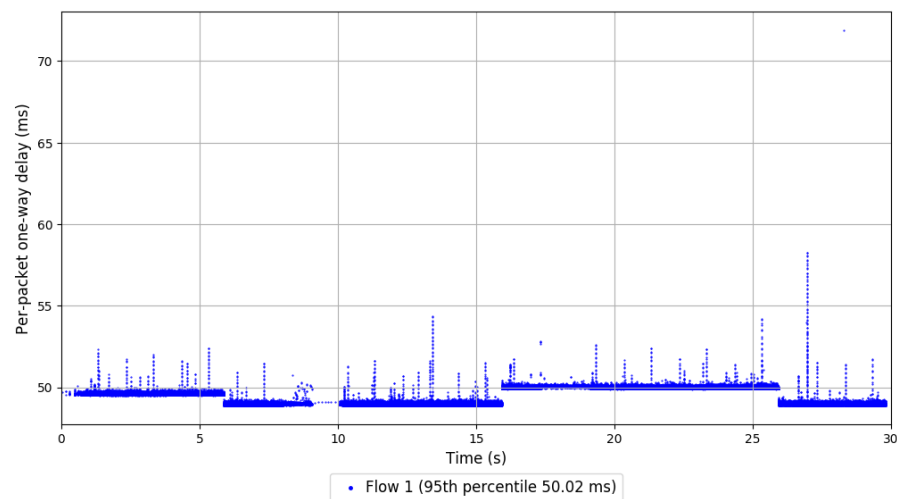
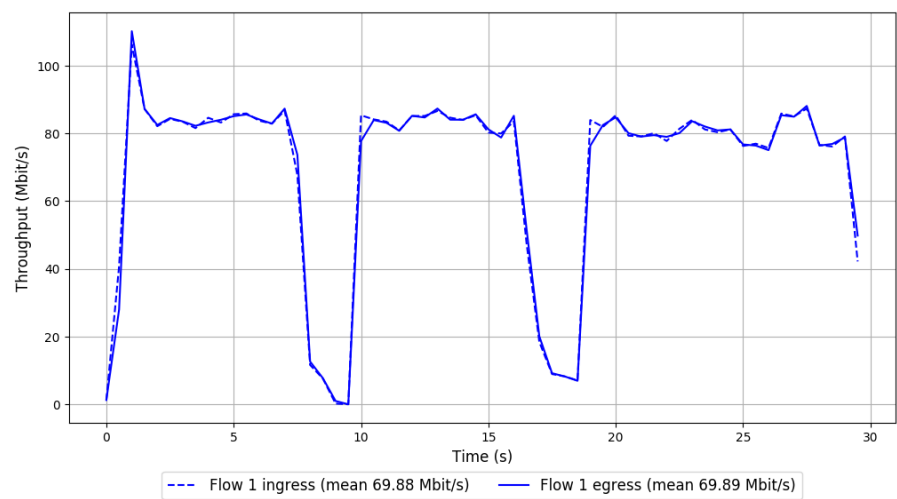


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-02 05:44:35
End at: 2018-01-02 05:45:05

# Below is generated by plot.py at 2018-01-02 09:02:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.89 Mbit/s
95th percentile per-packet one-way delay: 50.019 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.89 Mbit/s
95th percentile per-packet one-way delay: 50.019 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-02 05:56:08

End at: 2018-01-02 05:56:39

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.84 Mbit/s

95th percentile per-packet one-way delay: 50.379 ms

Loss rate: 0.00%

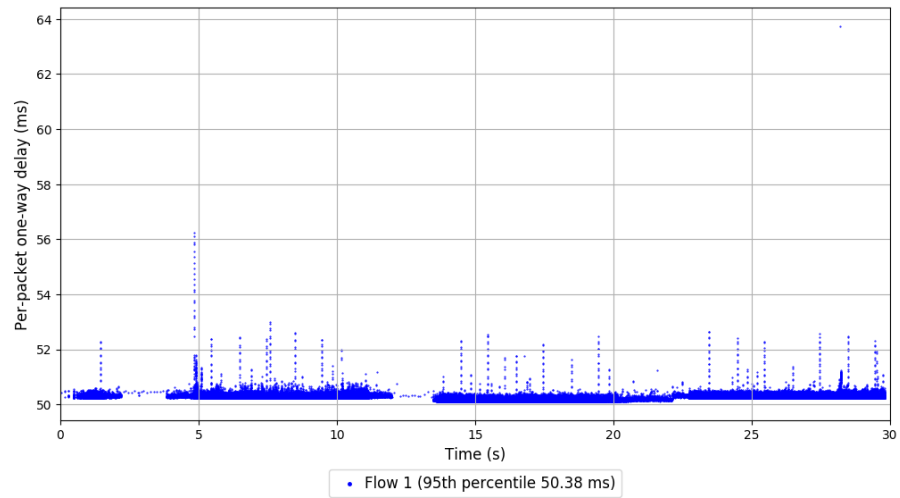
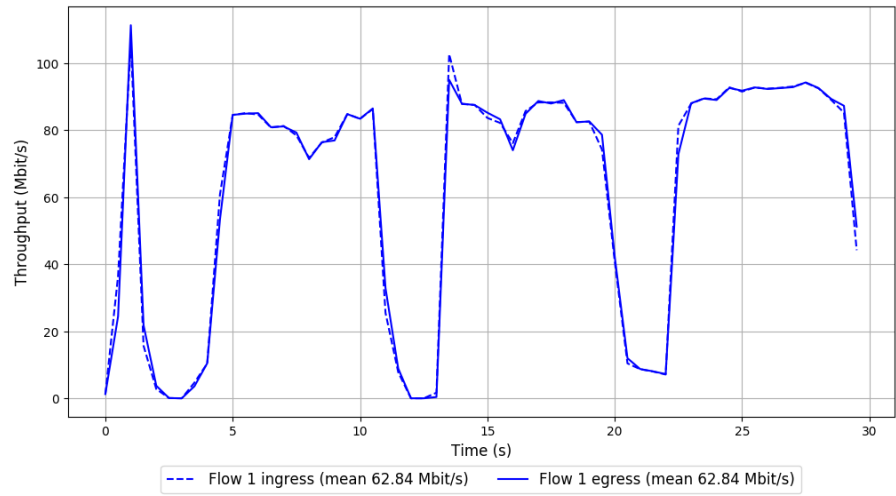
-- Flow 1:

Average throughput: 62.84 Mbit/s

95th percentile per-packet one-way delay: 50.379 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-02 06:07:43

End at: 2018-01-02 06:08:13

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.69 Mbit/s

95th percentile per-packet one-way delay: 50.601 ms

Loss rate: 0.00%

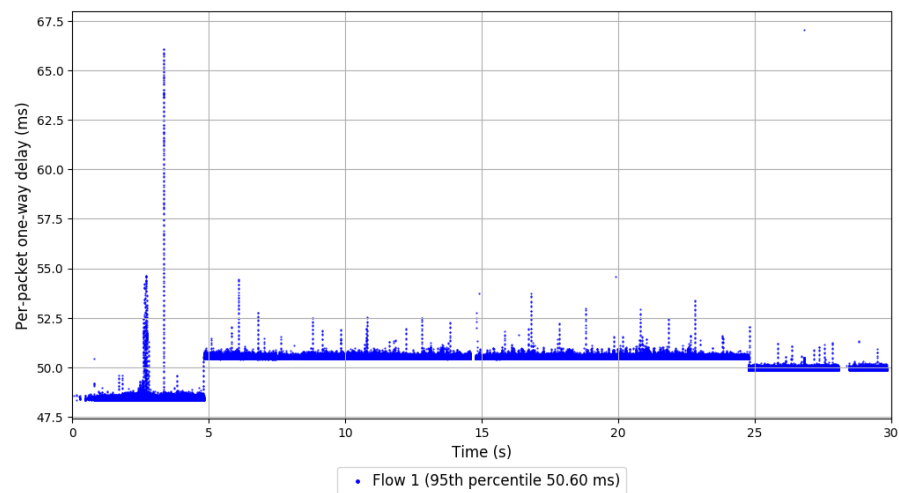
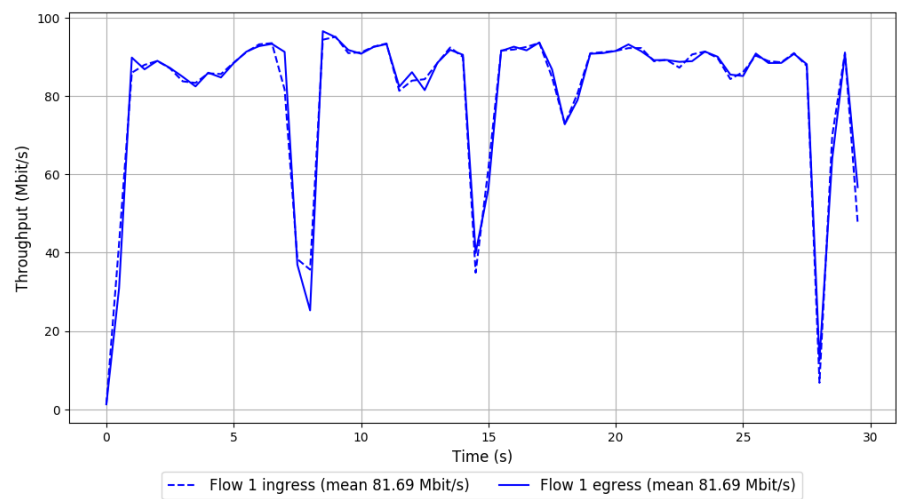
-- Flow 1:

Average throughput: 81.69 Mbit/s

95th percentile per-packet one-way delay: 50.601 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

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

End at: 2018-01-02 06:19:57

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.93 Mbit/s

95th percentile per-packet one-way delay: 48.711 ms

Loss rate: 0.00%

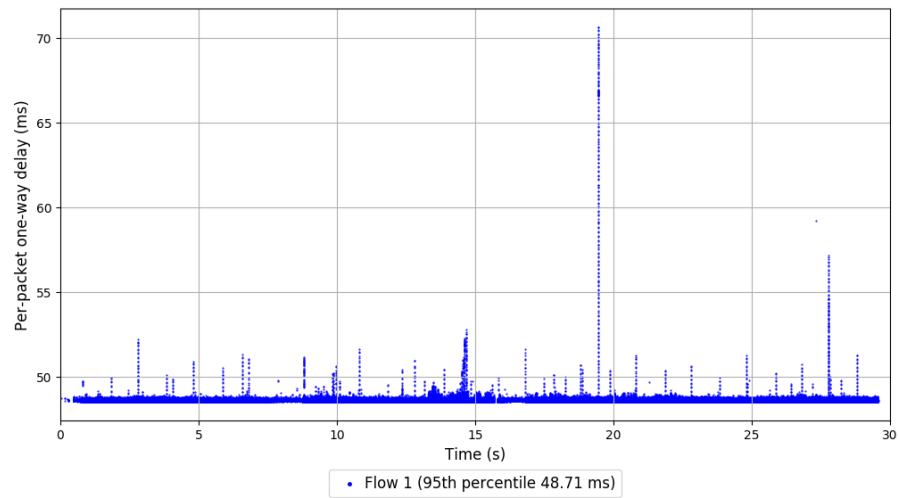
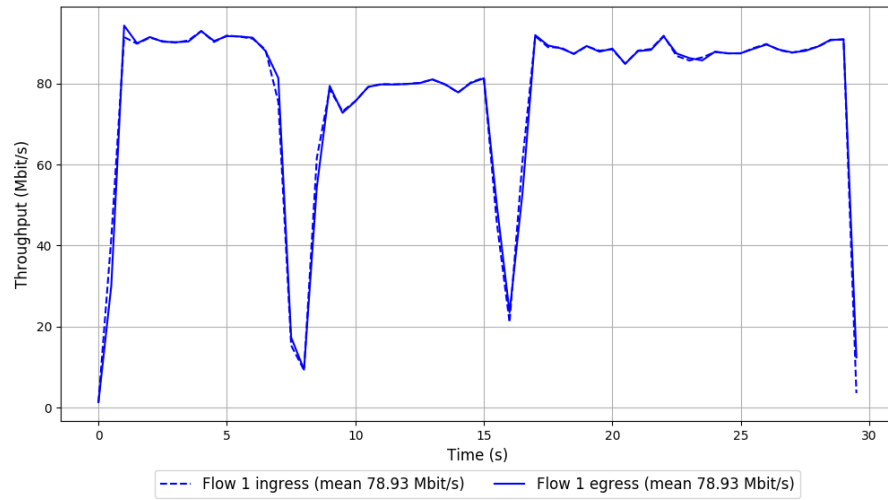
-- Flow 1:

Average throughput: 78.93 Mbit/s

95th percentile per-packet one-way delay: 48.711 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-02 06:31:00

End at: 2018-01-02 06:31:30

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.16 Mbit/s

95th percentile per-packet one-way delay: 50.739 ms

Loss rate: 0.00%

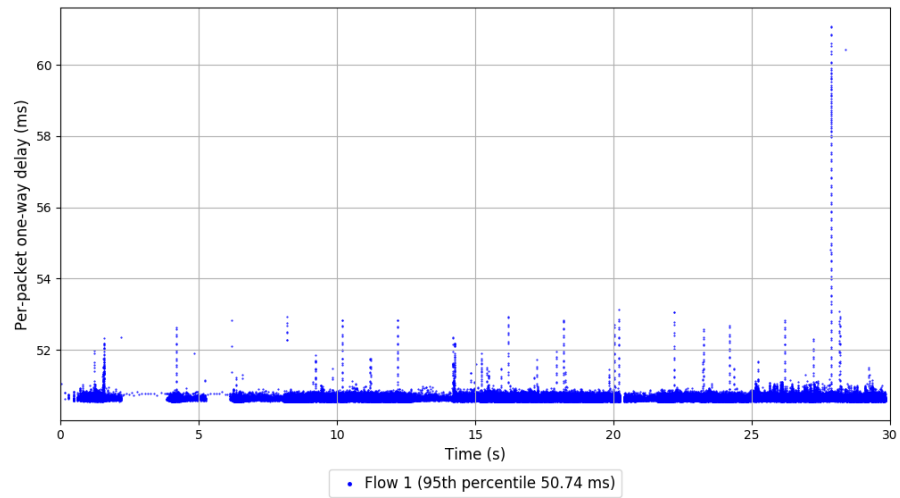
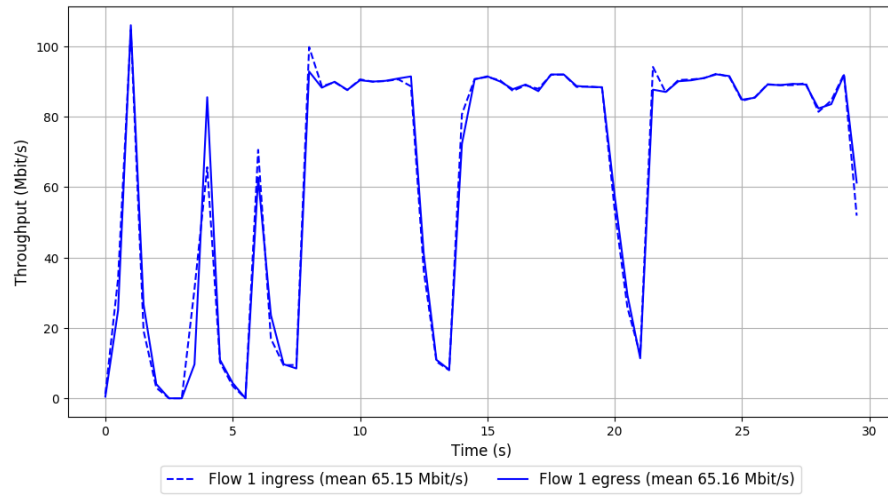
-- Flow 1:

Average throughput: 65.16 Mbit/s

95th percentile per-packet one-way delay: 50.739 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-02 06:42:36

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.95 Mbit/s

95th percentile per-packet one-way delay: 50.841 ms

Loss rate: 0.00%

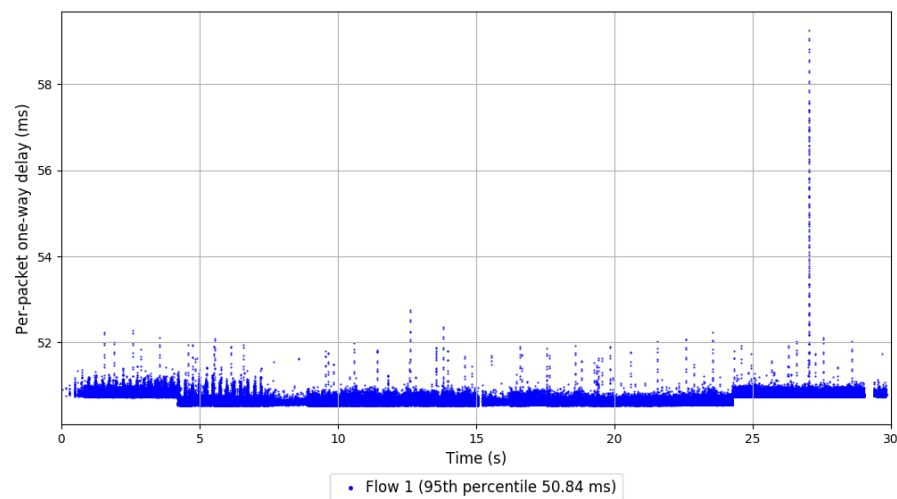
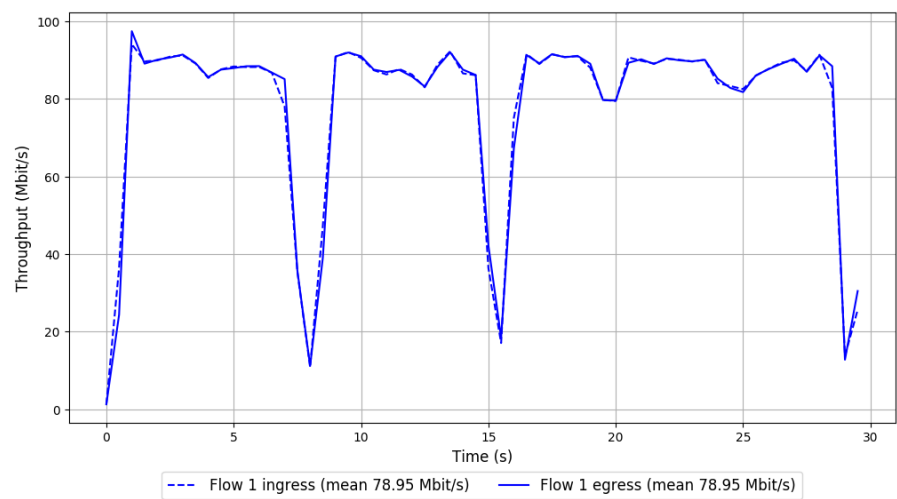
-- Flow 1:

Average throughput: 78.95 Mbit/s

95th percentile per-packet one-way delay: 50.841 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-02 06:54:21

End at: 2018-01-02 06:54:51

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.16 Mbit/s

95th percentile per-packet one-way delay: 51.044 ms

Loss rate: 0.00%

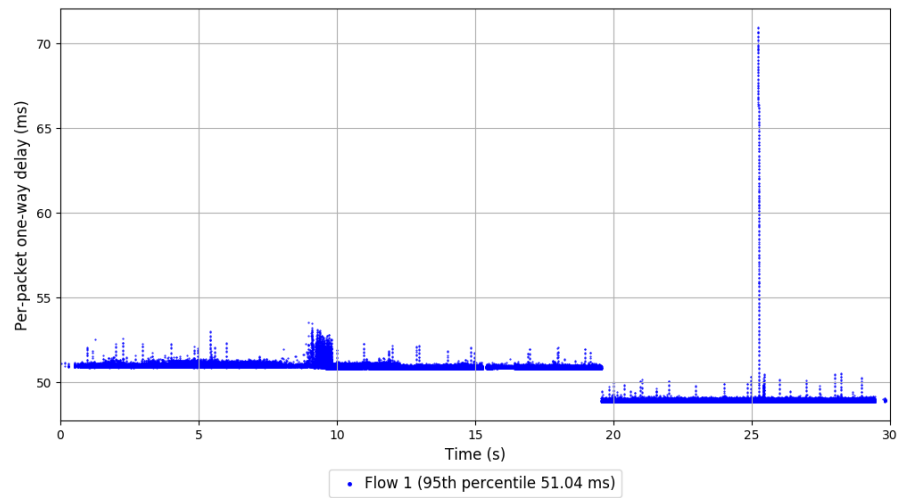
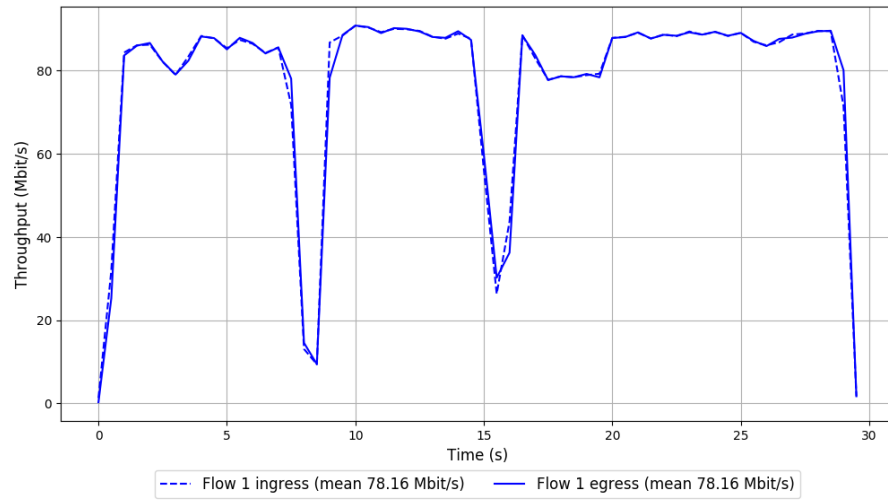
-- Flow 1:

Average throughput: 78.16 Mbit/s

95th percentile per-packet one-way delay: 51.044 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-02 07:05:51

End at: 2018-01-02 07:06:21

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.75 Mbit/s

95th percentile per-packet one-way delay: 51.091 ms

Loss rate: 0.00%

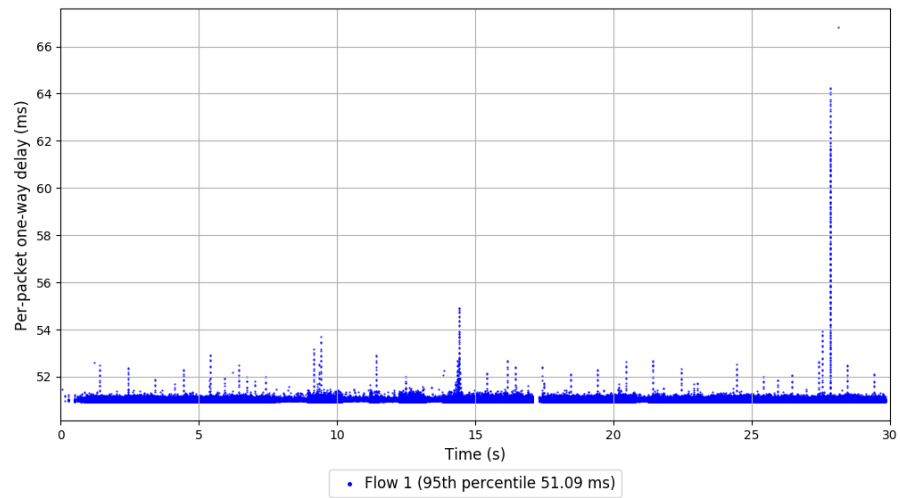
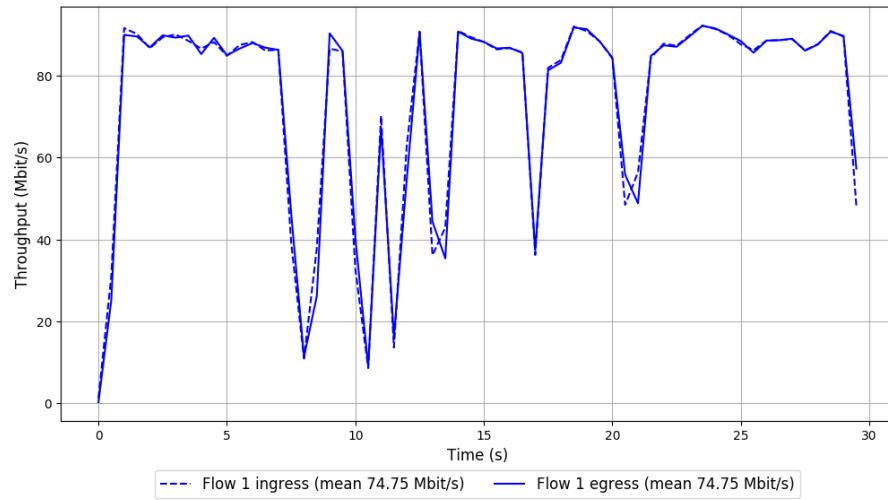
-- Flow 1:

Average throughput: 74.75 Mbit/s

95th percentile per-packet one-way delay: 51.091 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-02 07:17:31

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.33 Mbit/s

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

Loss rate: 0.00%

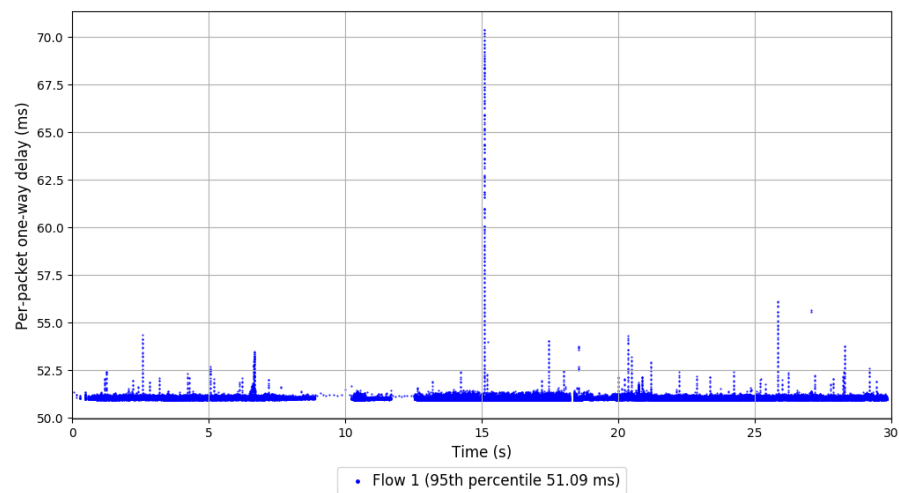
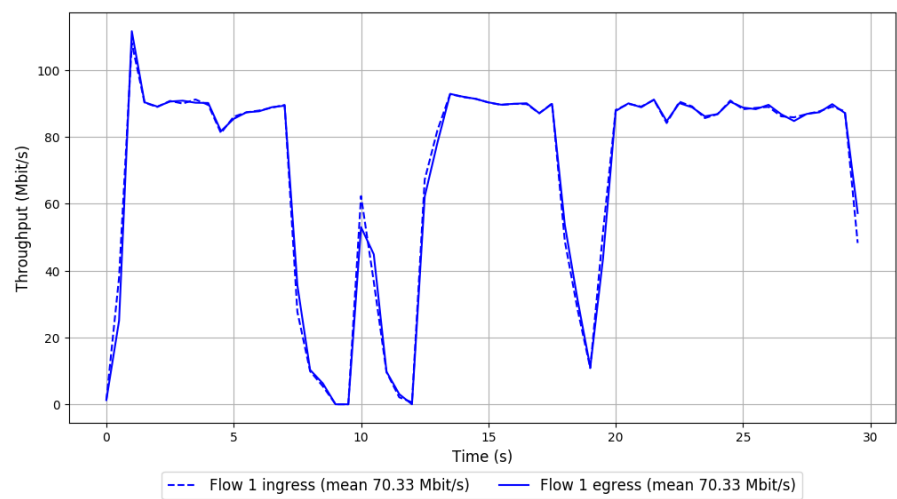
-- Flow 1:

Average throughput: 70.33 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-01-02 07:29:06

End at: 2018-01-02 07:29:36

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.11 Mbit/s

95th percentile per-packet one-way delay: 51.360 ms

Loss rate: 0.00%

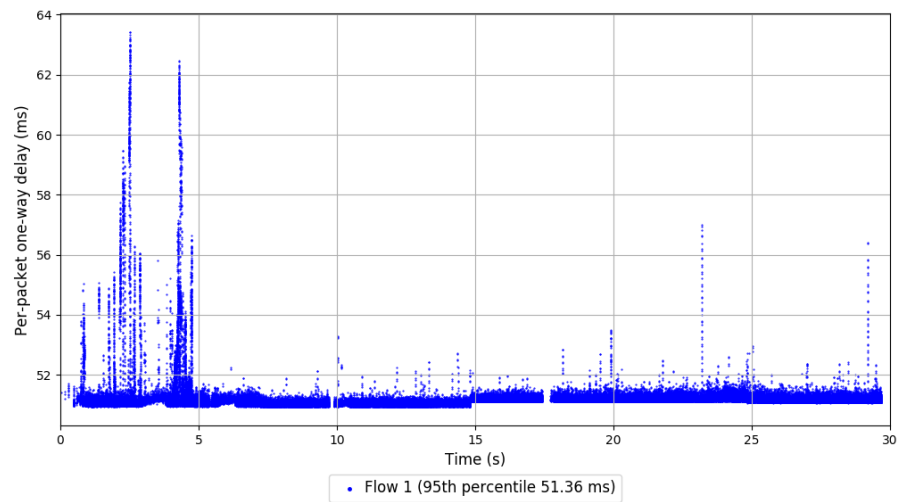
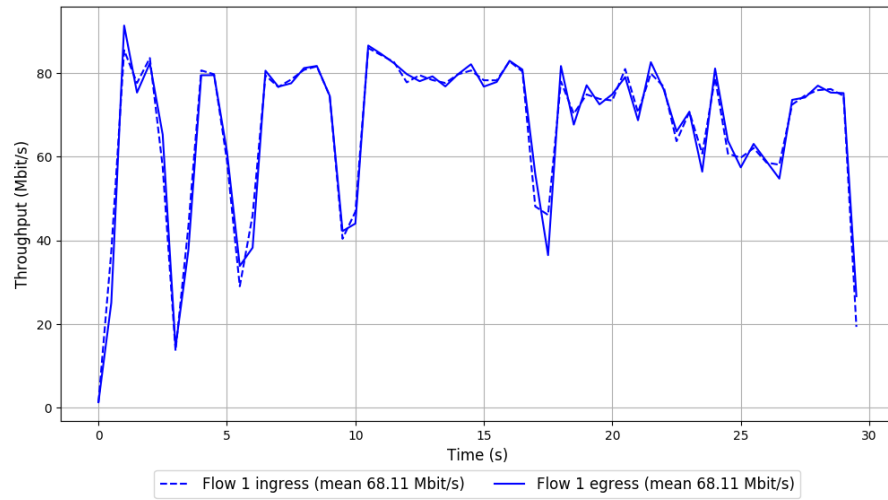
-- Flow 1:

Average throughput: 68.11 Mbit/s

95th percentile per-packet one-way delay: 51.360 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

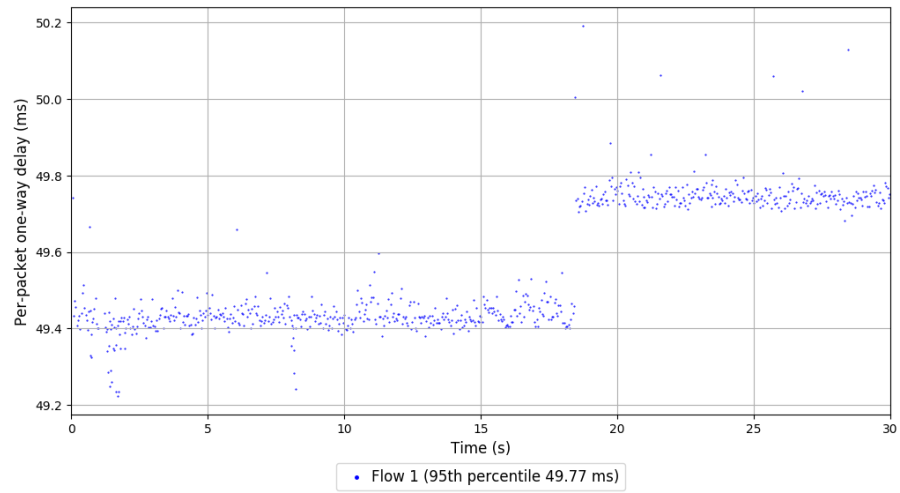
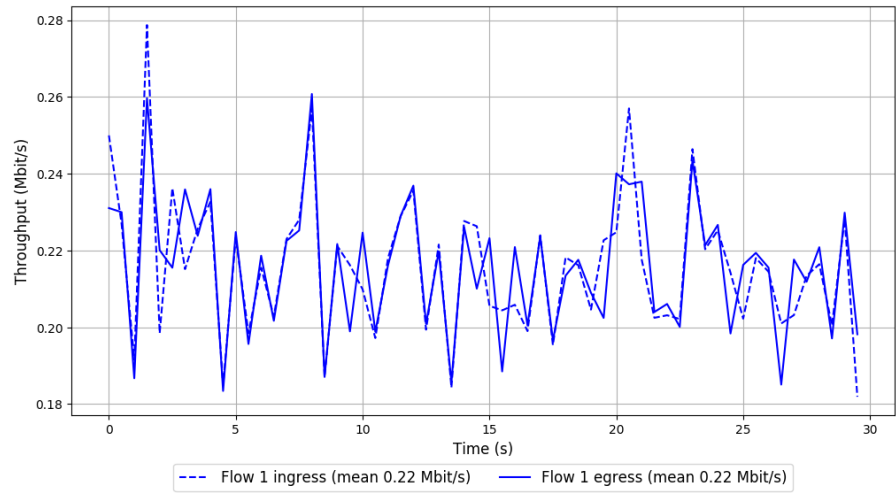


```
Run 1: Statistics of SCReAM

Start at: 2018-01-02 05:41:50
End at: 2018-01-02 05:42:20

# Below is generated by plot.py at 2018-01-02 09:02:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.770 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.770 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

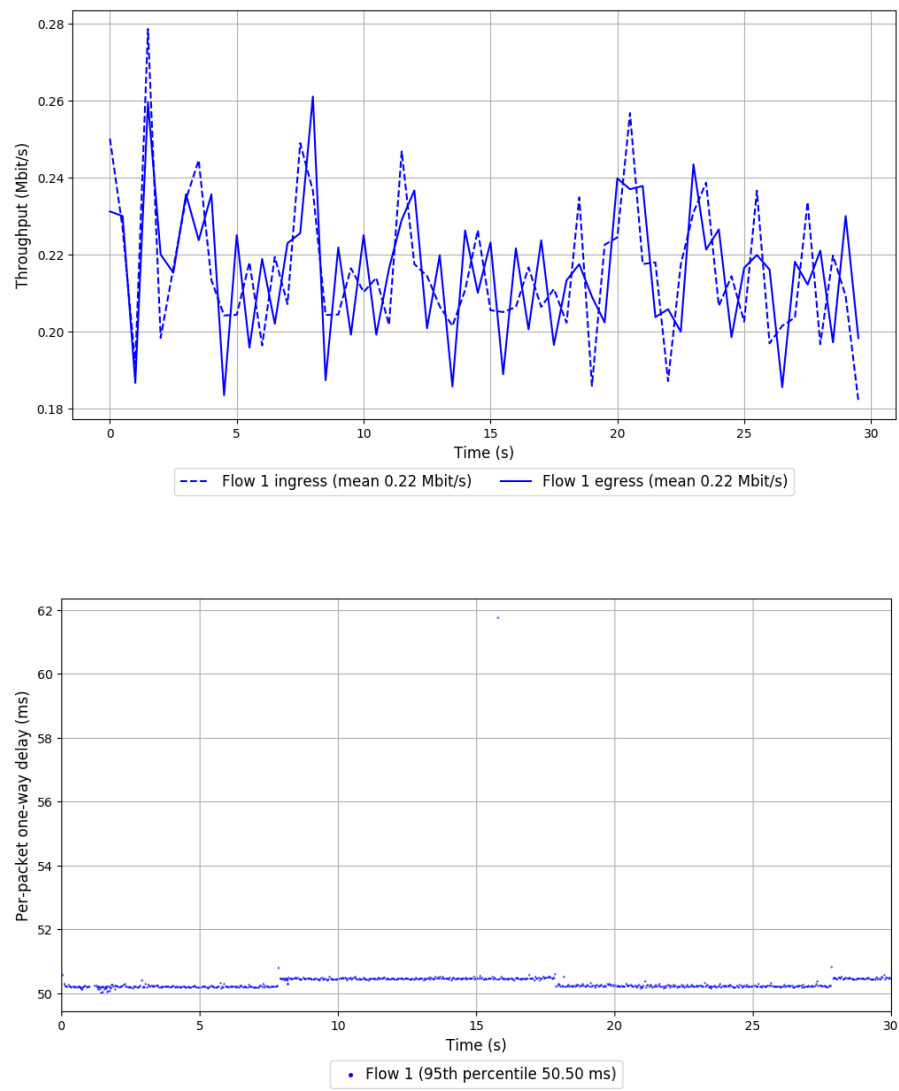


```
Run 2: Statistics of SCReAM

Start at: 2018-01-02 05:53:30
End at: 2018-01-02 05:54:00

# Below is generated by plot.py at 2018-01-02 09:02:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.497 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.497 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-02 06:04:59

End at: 2018-01-02 06:05:29

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.495 ms

Loss rate: 0.00%

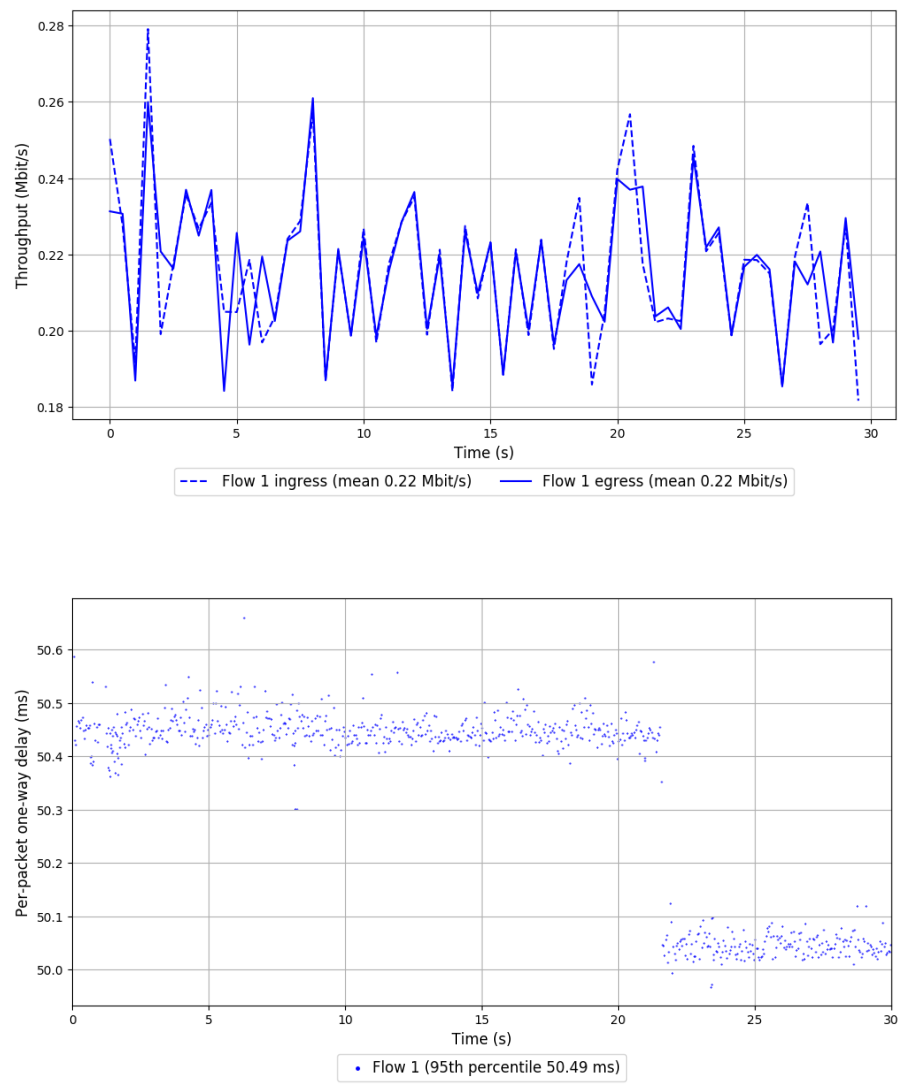
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.495 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

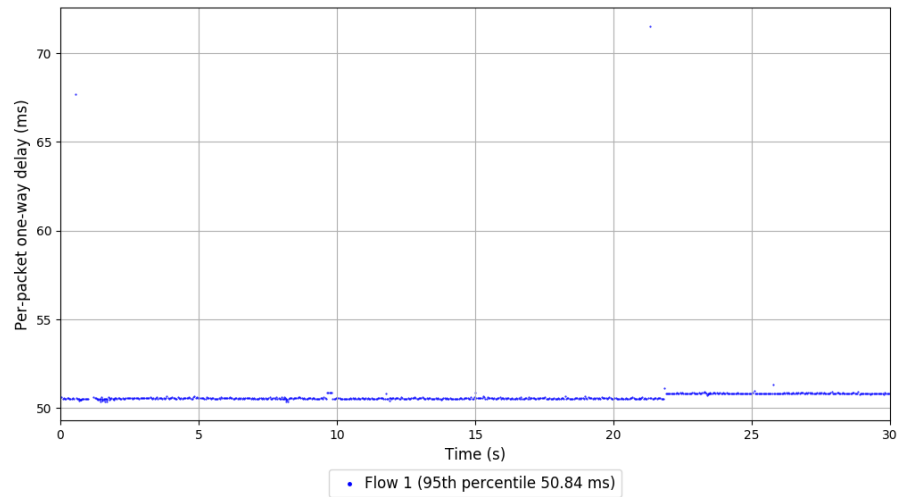
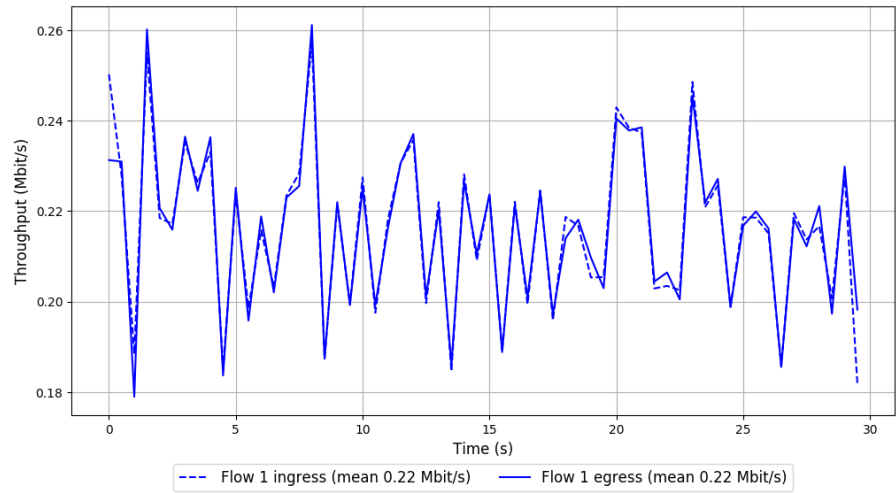


```
Run 4: Statistics of SCReAM

Start at: 2018-01-02 06:16:46
End at: 2018-01-02 06:17:16

# Below is generated by plot.py at 2018-01-02 09:02:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.841 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.841 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link

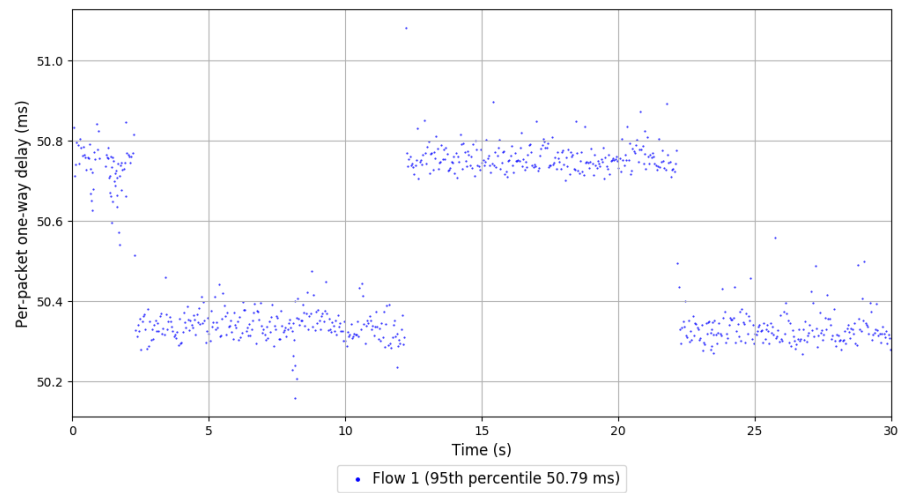
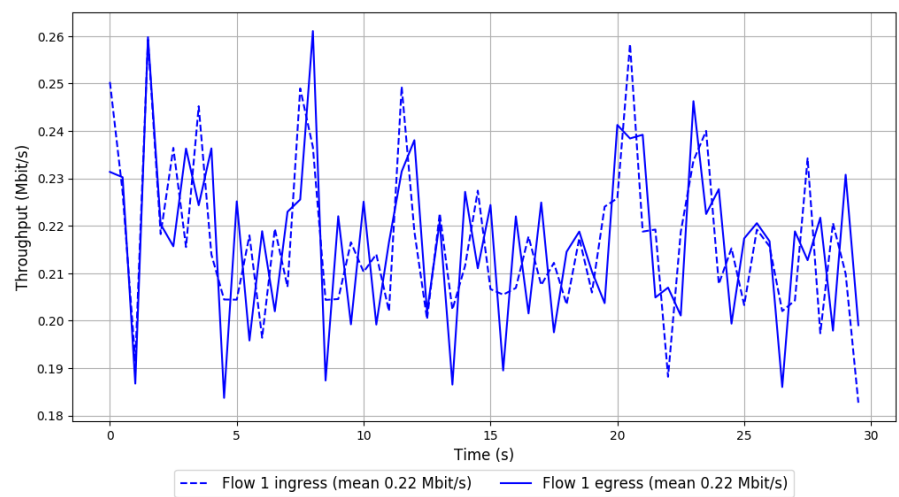


```
Run 5: Statistics of SCReAM

Start at: 2018-01-02 06:28:16
End at: 2018-01-02 06:28:46

# Below is generated by plot.py at 2018-01-02 09:02:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.790 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.790 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-02 06:39:55

End at: 2018-01-02 06:40:25

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

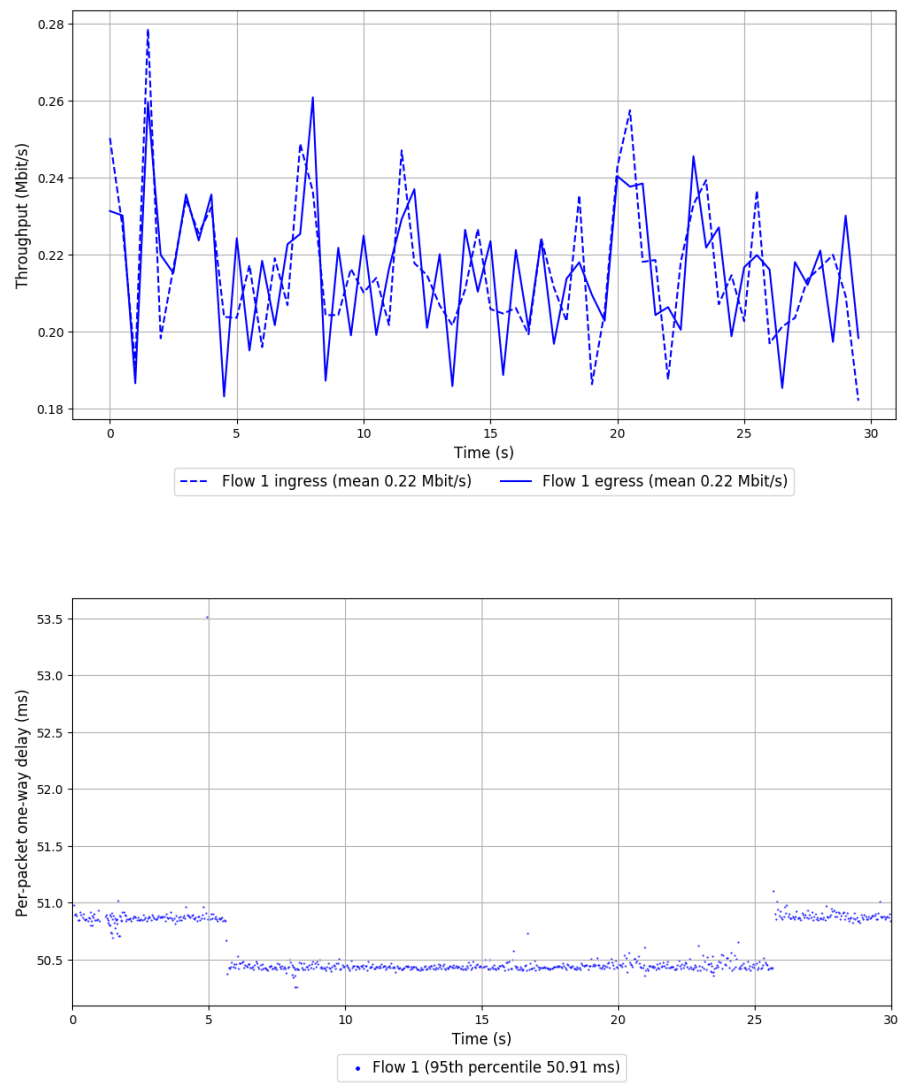
-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-01-02 06:51:35

End at: 2018-01-02 06:52:05

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

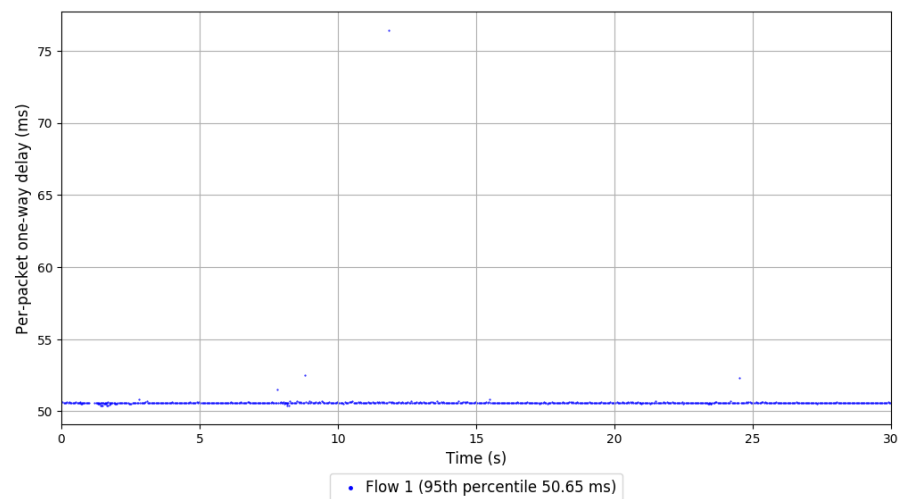
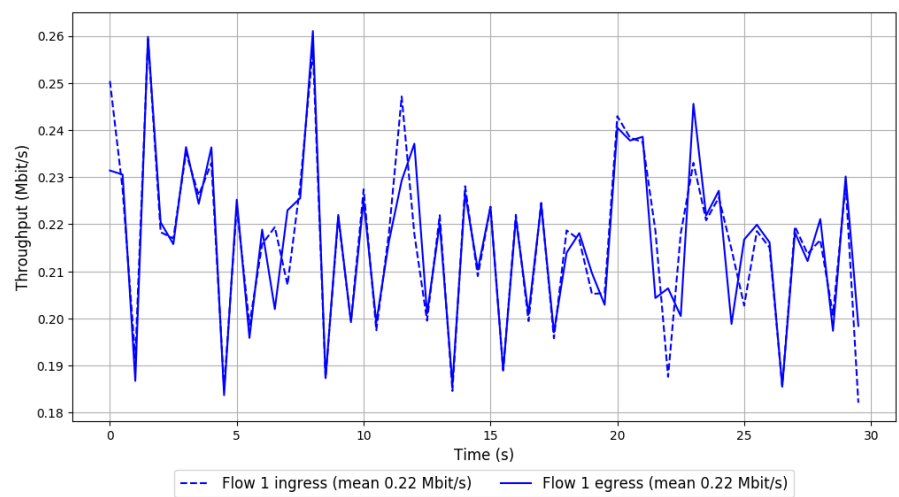
-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

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

End at: 2018-01-02 07:03:37

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.336 ms

Loss rate: 0.00%

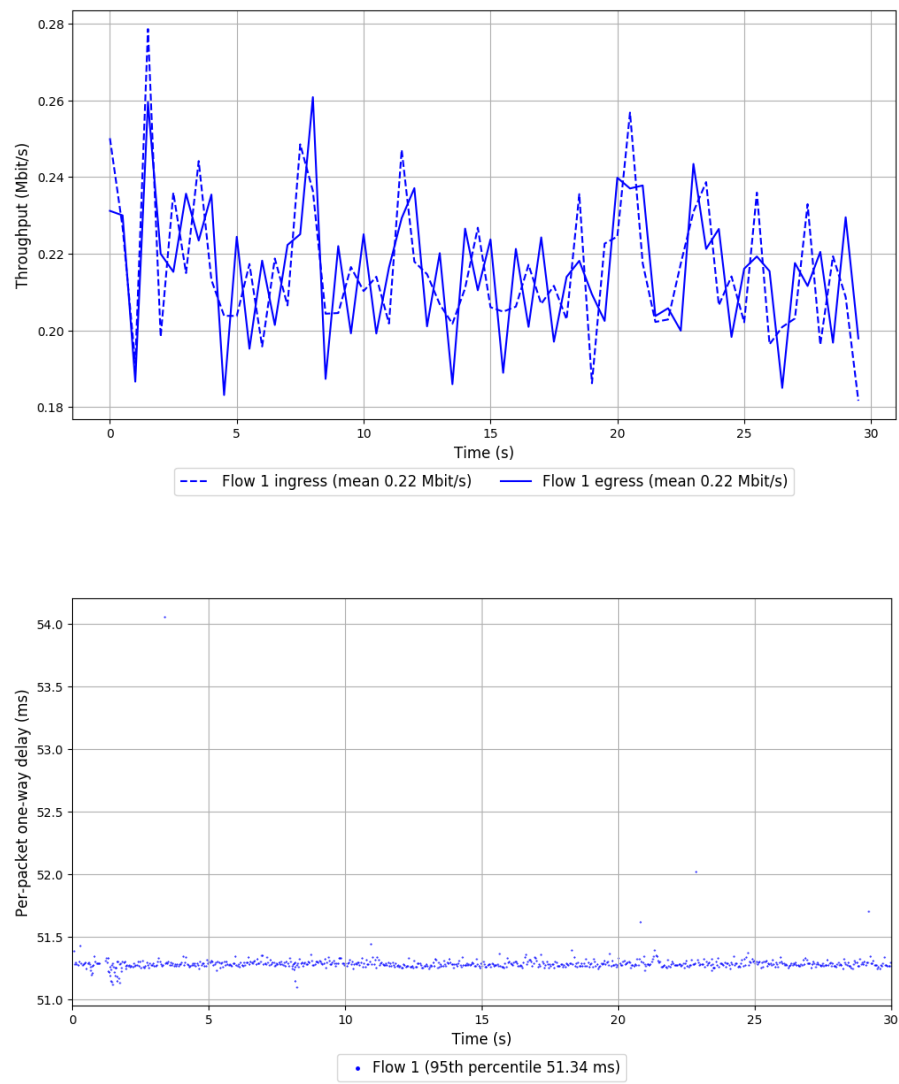
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.336 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-02 07:14:48

End at: 2018-01-02 07:15:18

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

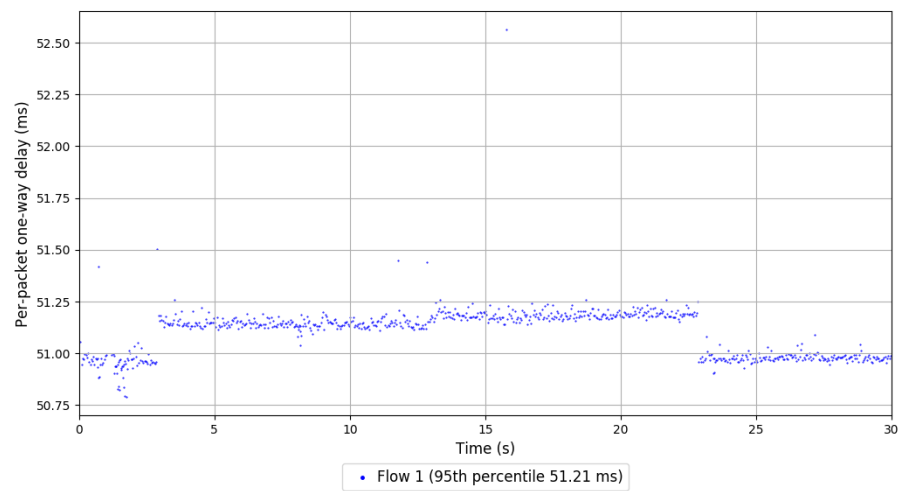
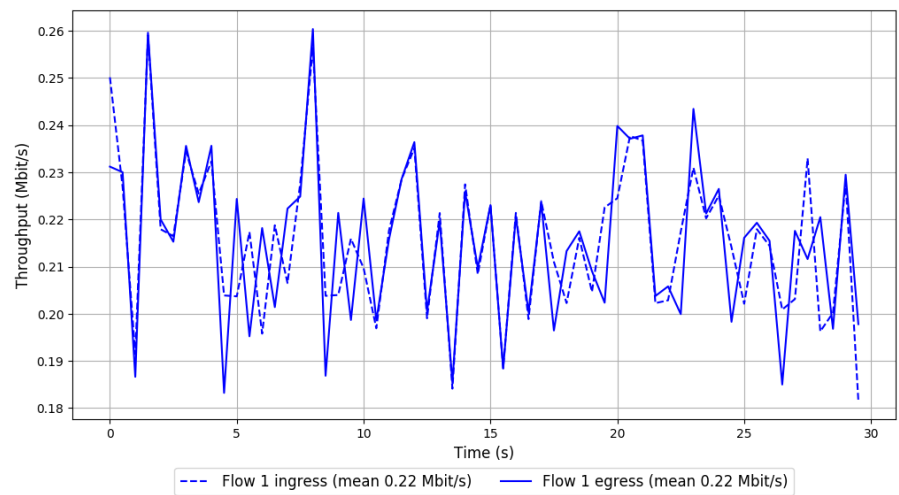
-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-01-02 07:26:25

End at: 2018-01-02 07:26:55

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.465 ms

Loss rate: 0.00%

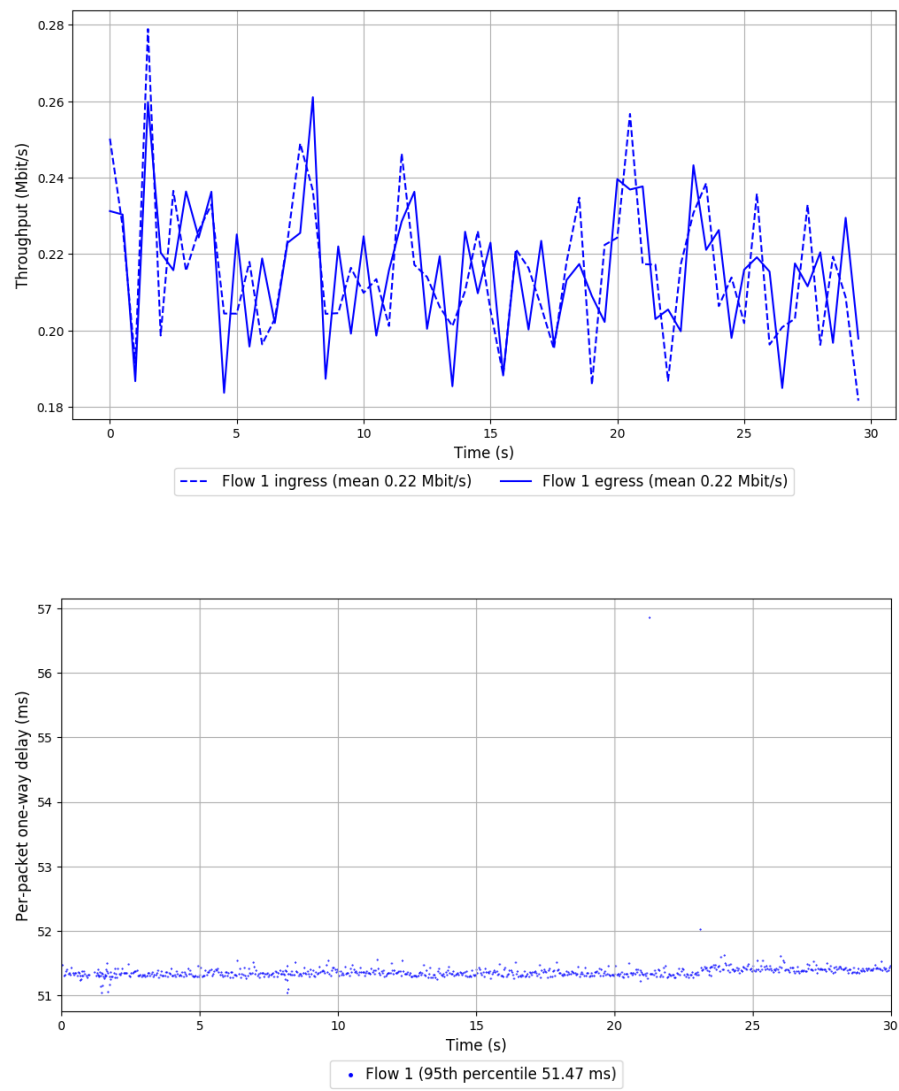
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 51.465 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

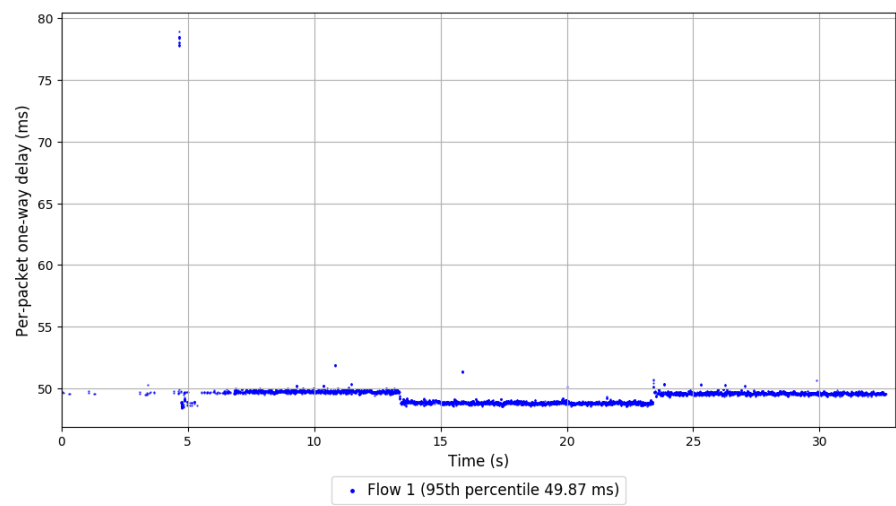
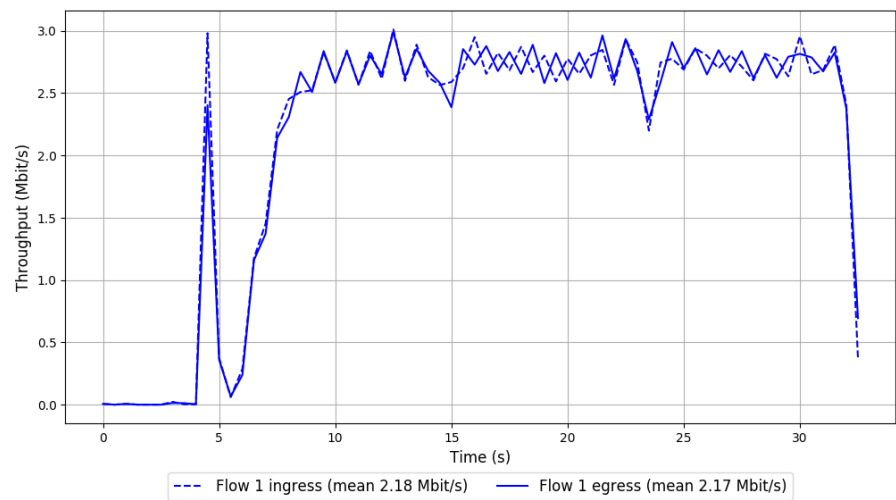


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-02 05:37:50
End at: 2018-01-02 05:38:20

# Below is generated by plot.py at 2018-01-02 09:02:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 49.868 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 49.868 ms
Loss rate: 0.41%
```

Run 1: Report of WebRTC media — Data Link

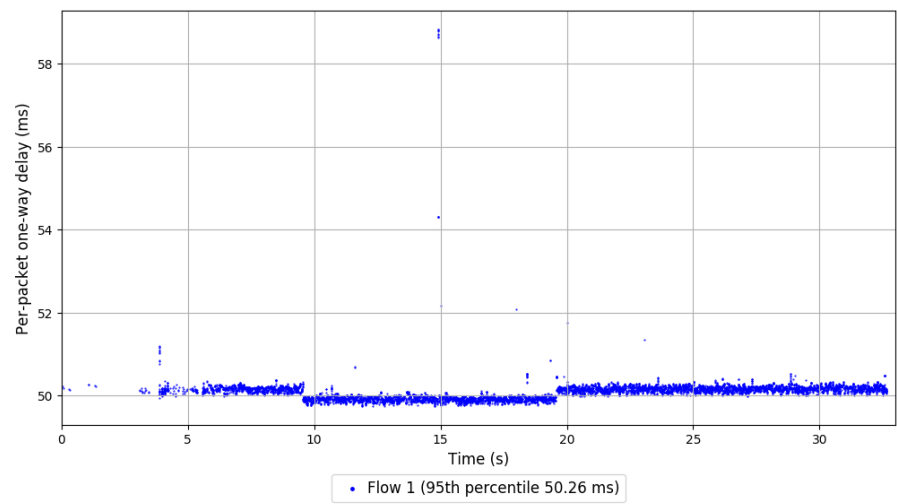
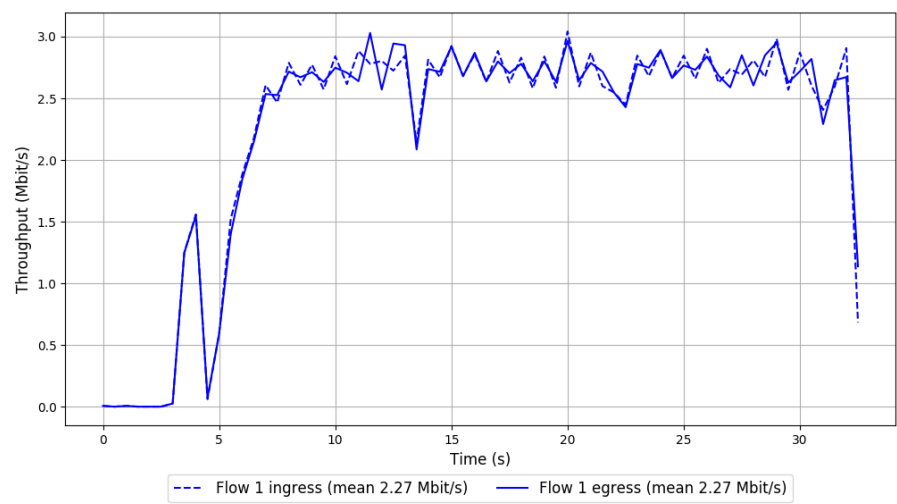


```
Run 2: Statistics of WebRTC media

Start at: 2018-01-02 05:49:34
End at: 2018-01-02 05:50:04

# Below is generated by plot.py at 2018-01-02 09:02:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 50.264 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 50.264 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

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

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.415 ms

Loss rate: 0.00%

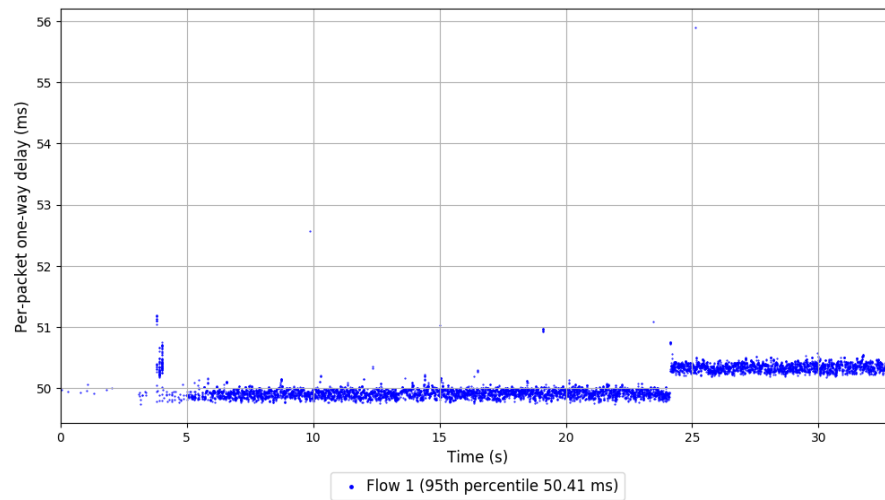
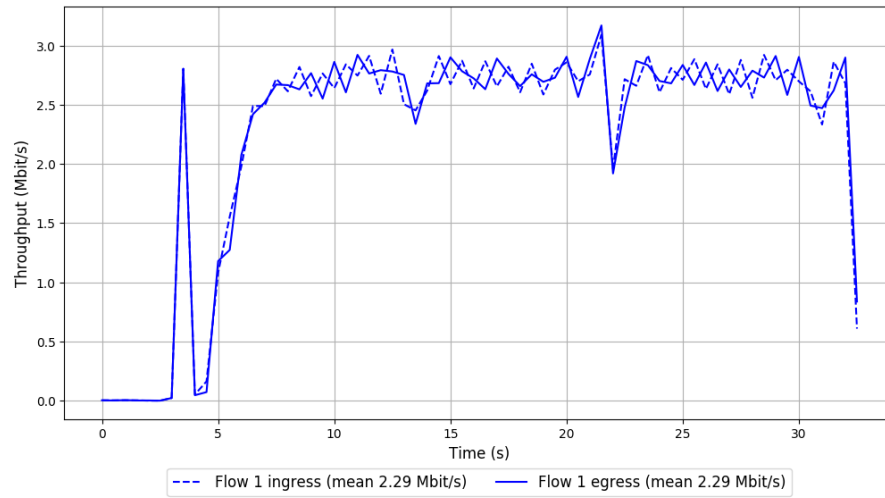
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.415 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

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

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.508 ms

Loss rate: 0.00%

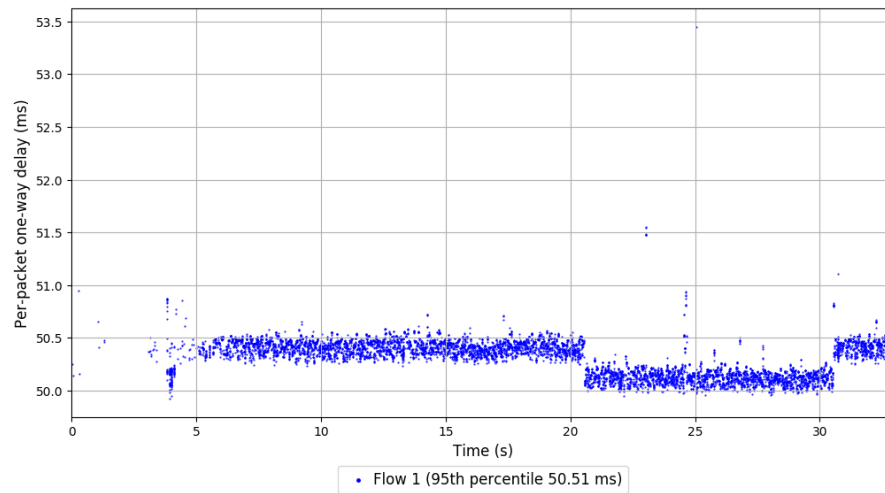
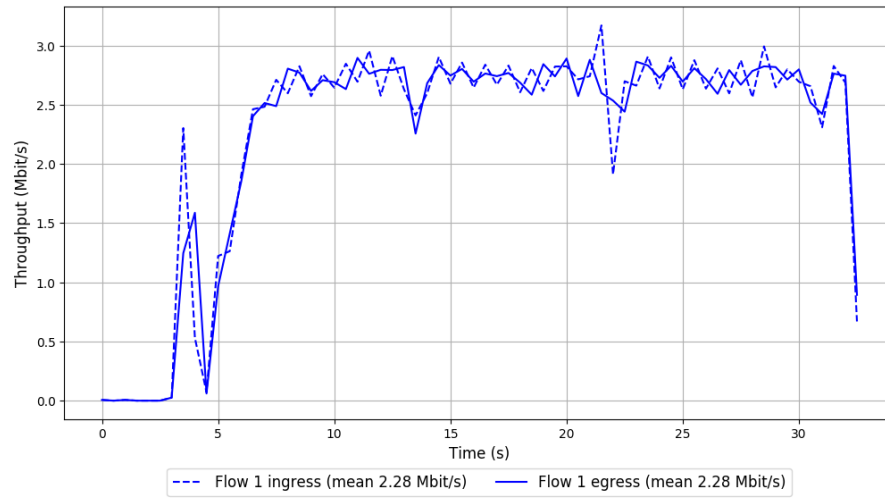
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.508 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-02 06:24:30

End at: 2018-01-02 06:25:00

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.987 ms

Loss rate: 0.00%

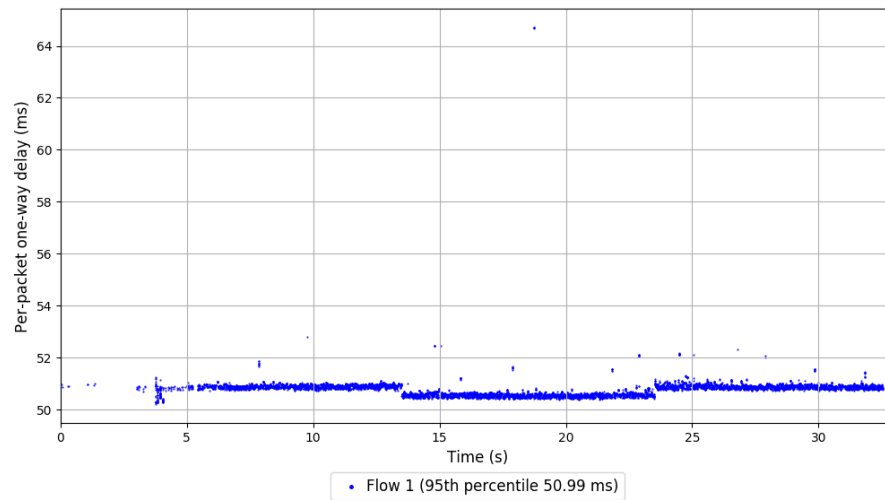
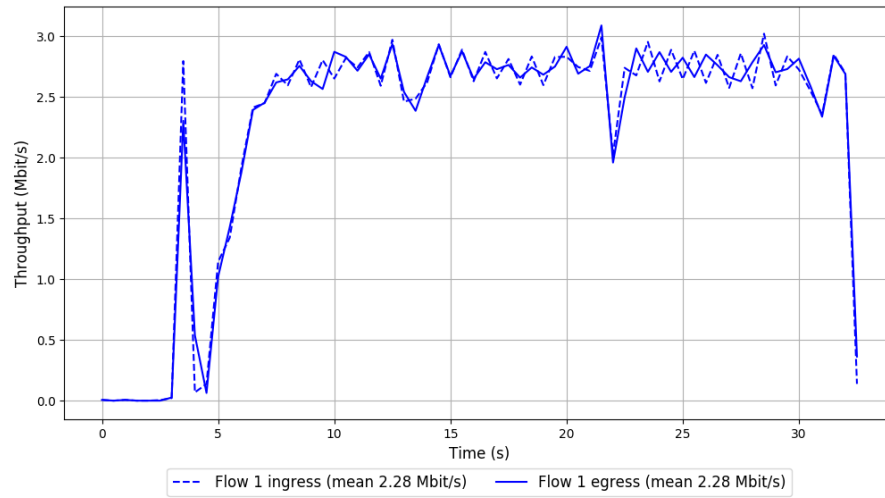
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.987 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-02 06:36:04

End at: 2018-01-02 06:36:34

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 50.717 ms

Loss rate: 0.00%

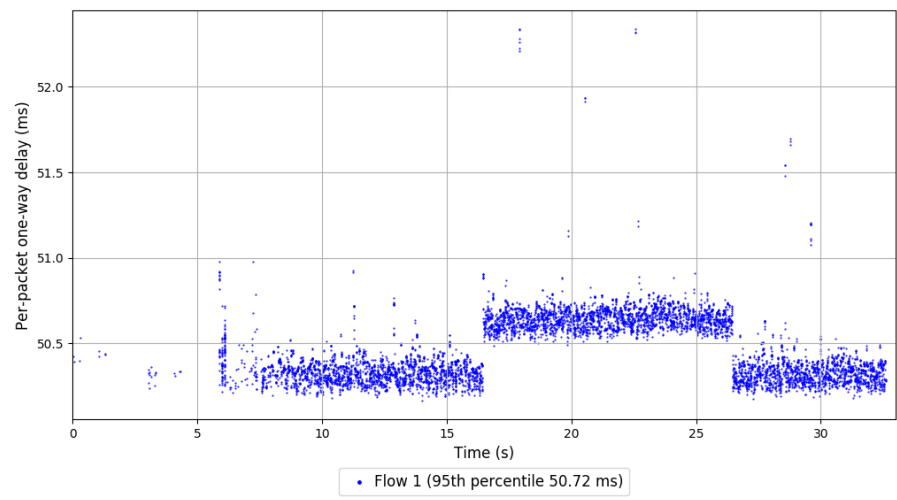
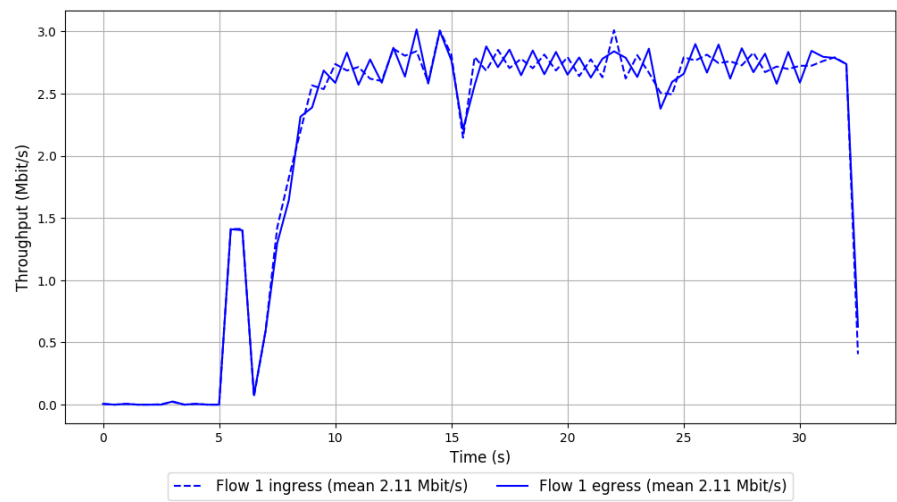
-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 50.717 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-02 06:47:36

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.845 ms

Loss rate: 0.00%

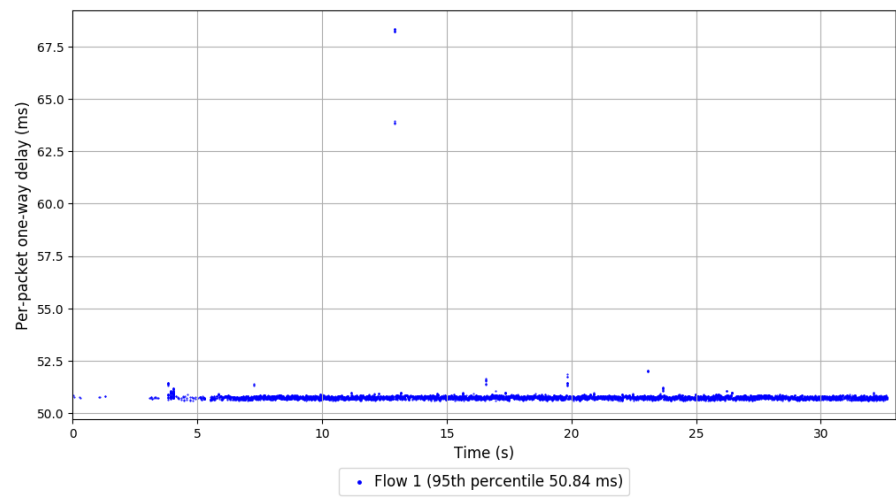
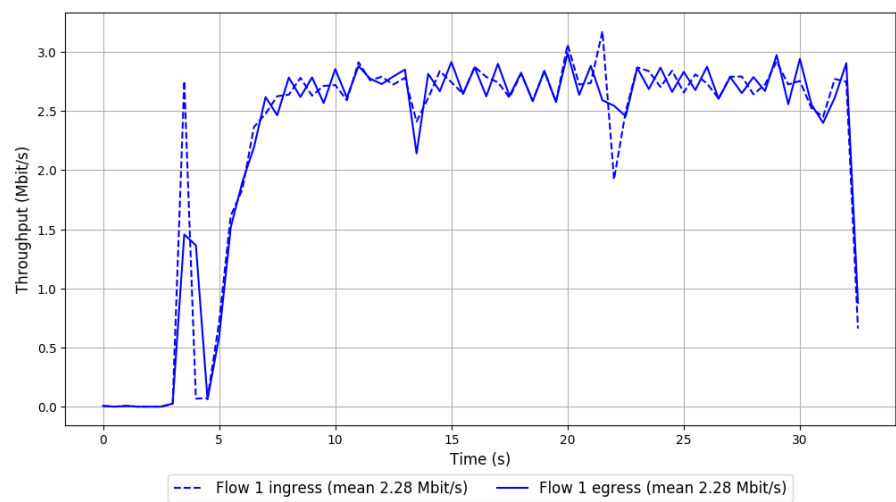
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.845 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-02 06:59:20

End at: 2018-01-02 06:59:50

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.223 ms

Loss rate: 0.00%

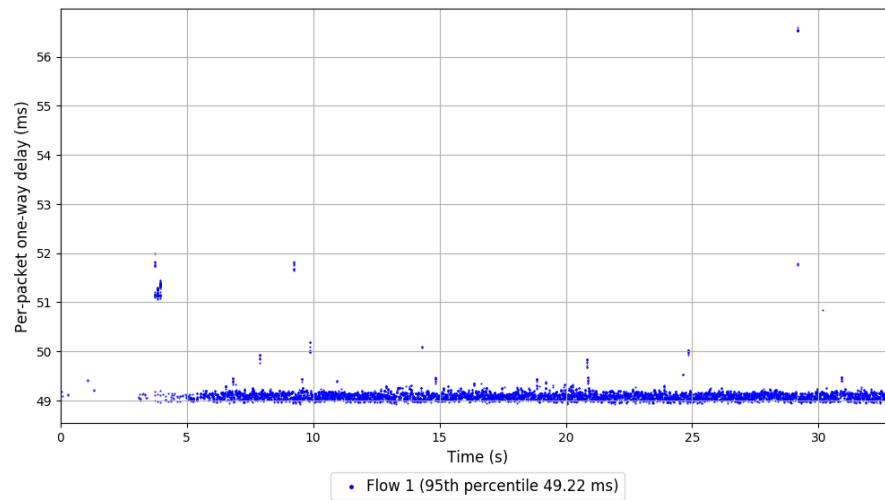
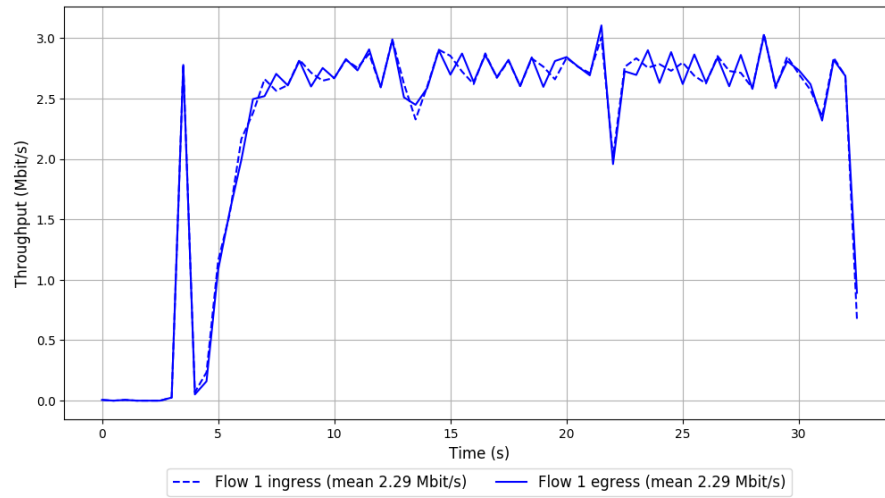
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 49.223 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-02 07:10:50

End at: 2018-01-02 07:11:20

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 51.215 ms

Loss rate: 0.00%

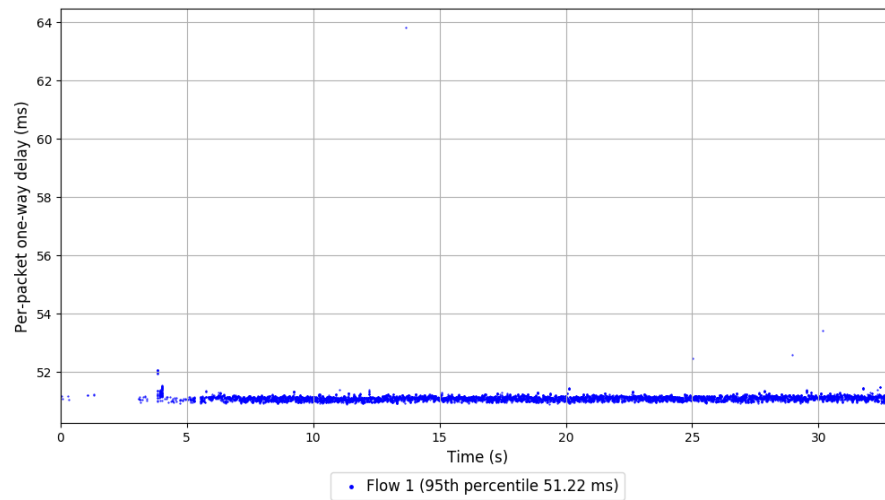
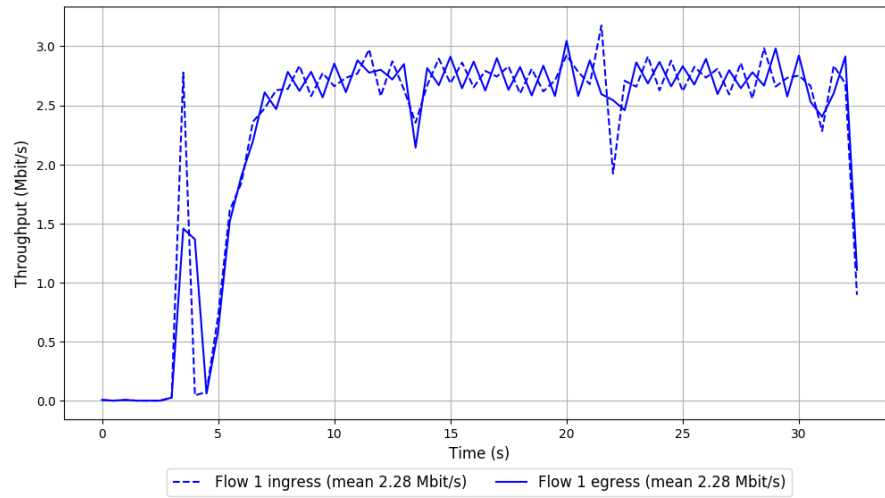
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 51.215 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-02 07:22:32

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

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 51.324 ms

Loss rate: 0.00%

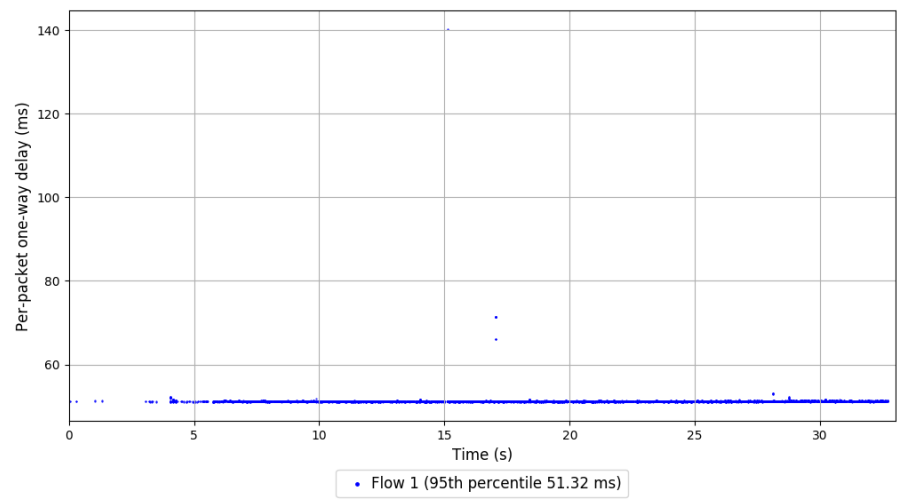
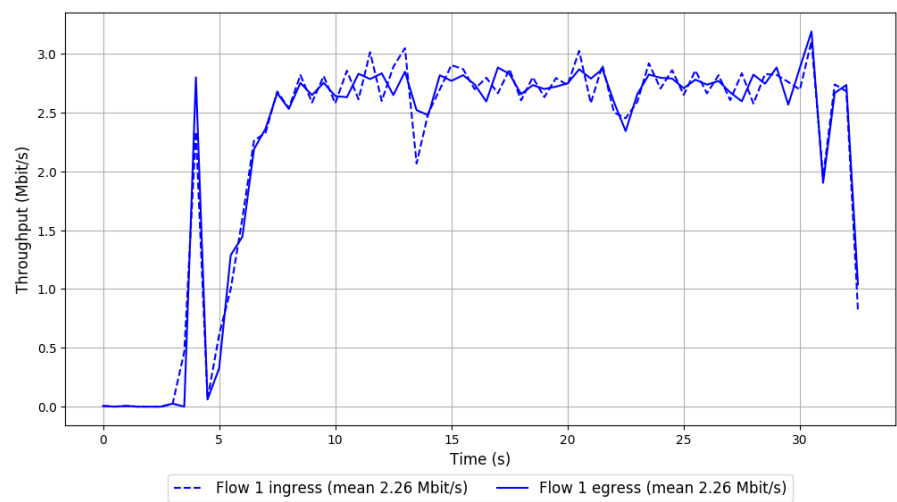
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 51.324 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-01-02 05:47:45

End at: 2018-01-02 05:48:15

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 51.050 ms

Loss rate: 1.37%

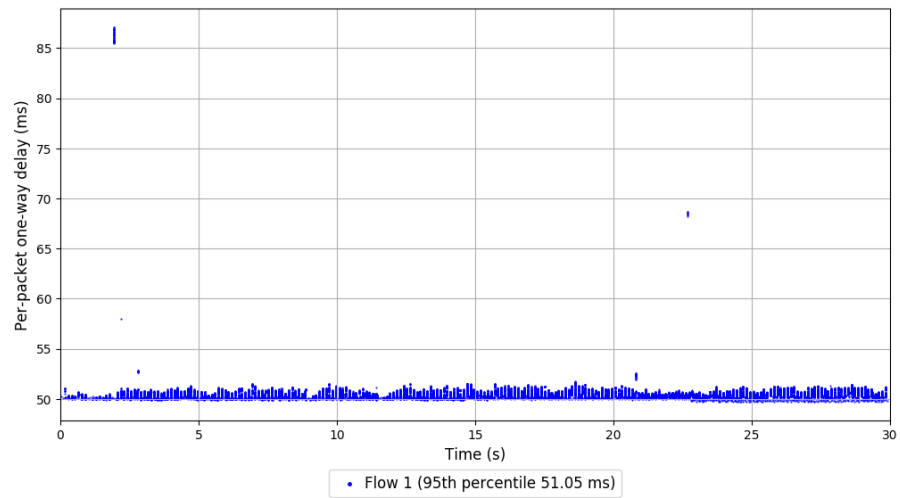
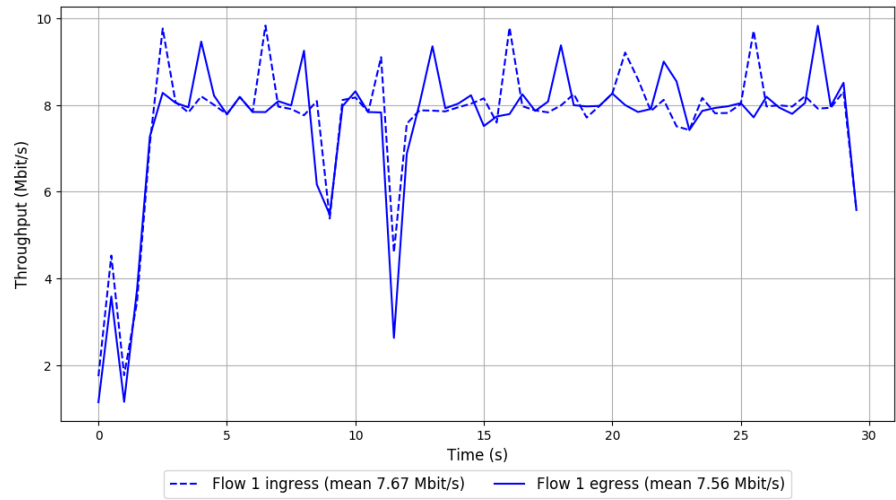
-- Flow 1:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 51.050 ms

Loss rate: 1.37%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-02 05:59:18

End at: 2018-01-02 05:59:48

Run 2: Report of Sprout — Data Link

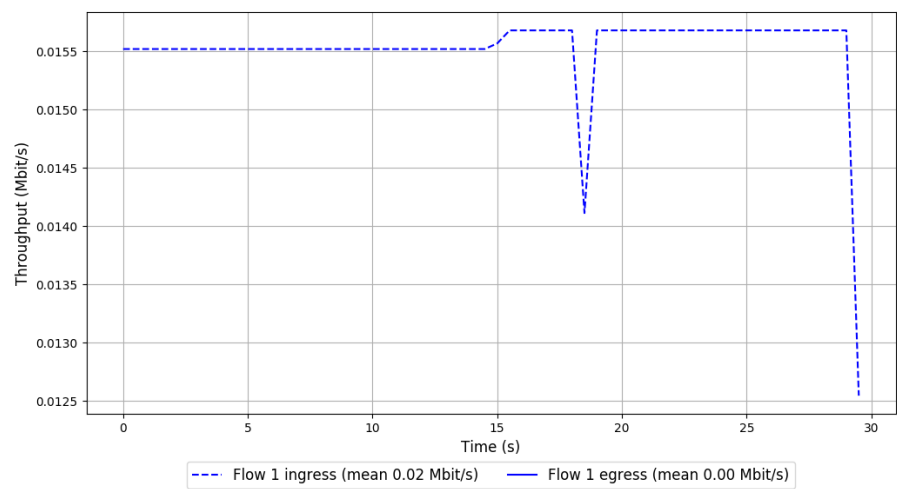


Figure is missing

Run 3: Statistics of Sprout

Start at: 2018-01-02 06:10:56

End at: 2018-01-02 06:11:26

Run 3: Report of Sprout — Data Link

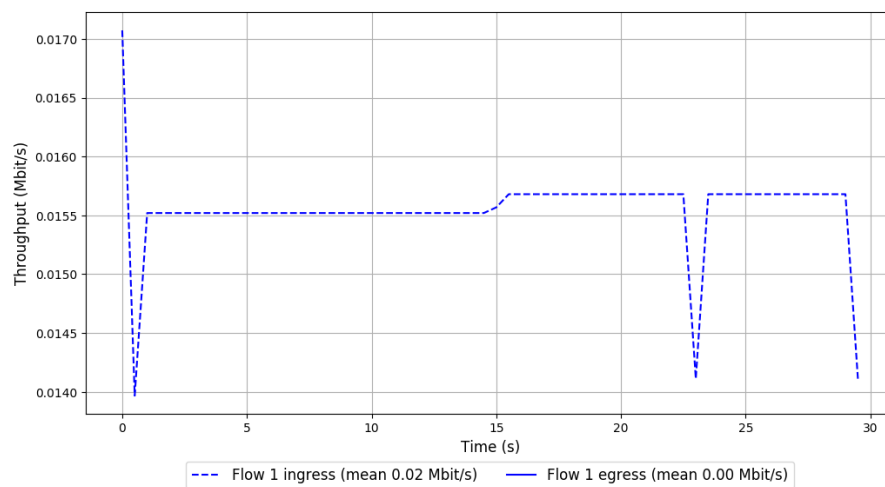


Figure is missing

Run 4: Statistics of Sprout

Start at: 2018-01-02 06:22:36

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

Run 4: Report of Sprout — Data Link

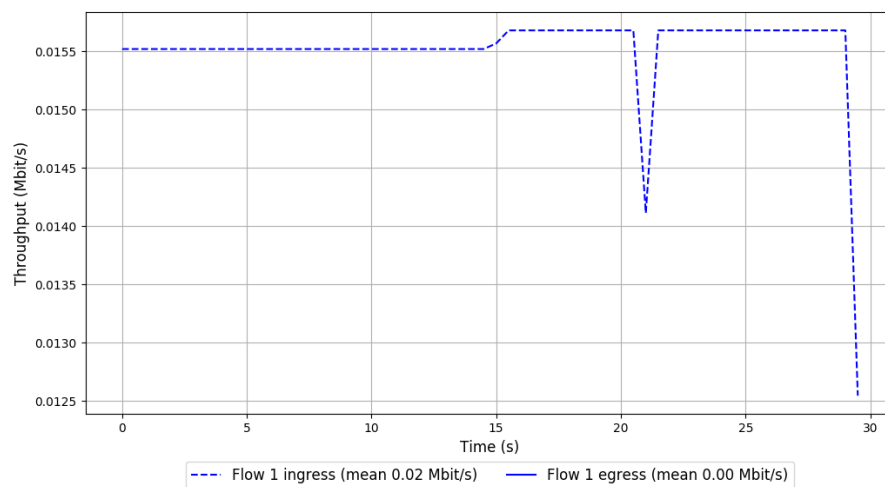


Figure is missing

Run 5: Statistics of Sprout

Start at: 2018-01-02 06:34:10

End at: 2018-01-02 06:34:40

Run 5: Report of Sprout — Data Link

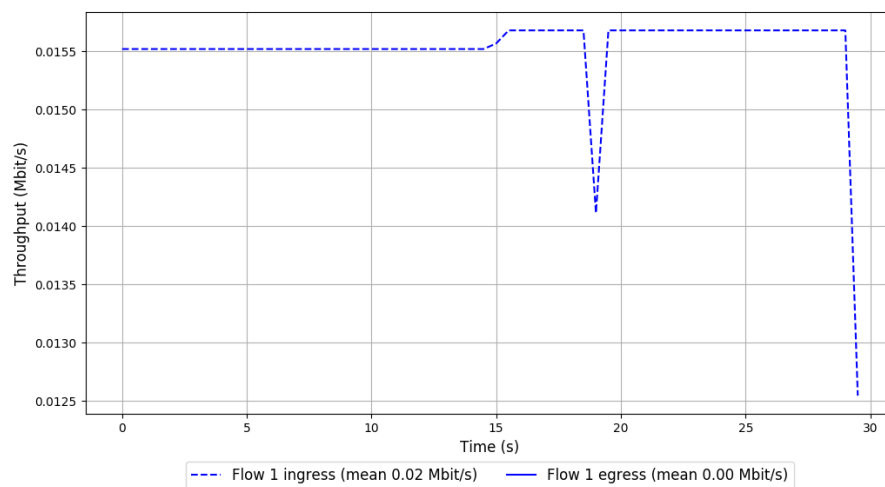


Figure is missing

Run 6: Statistics of Sprout

Start at: 2018-01-02 06:45:46

End at: 2018-01-02 06:46:16

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 52.091 ms

Loss rate: 0.31%

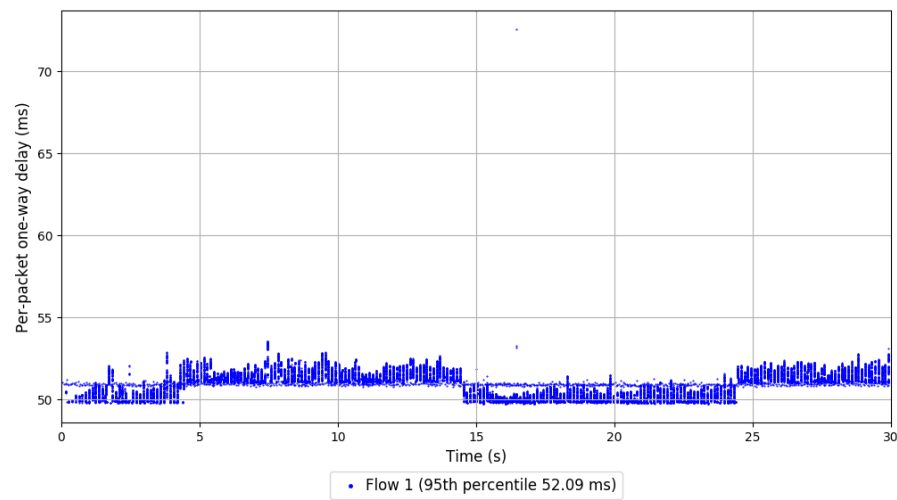
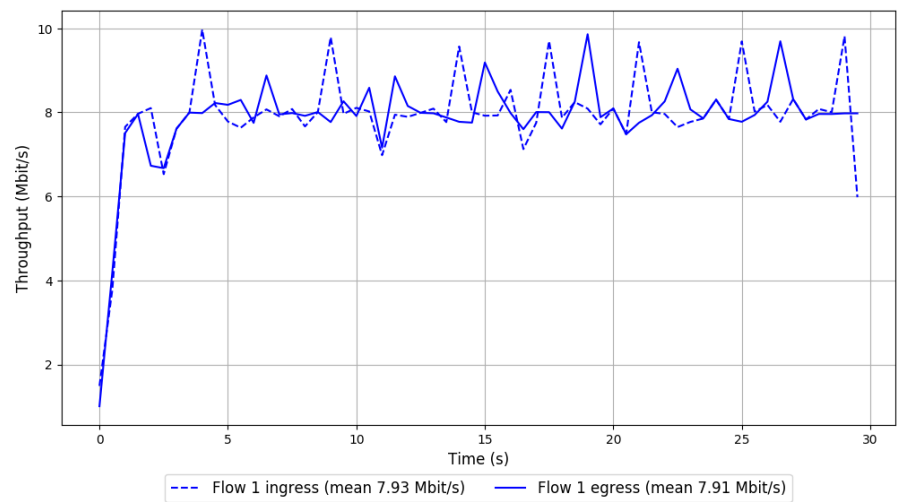
-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 52.091 ms

Loss rate: 0.31%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-02 06:57:29

End at: 2018-01-02 06:57:59

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 52.087 ms

Loss rate: 0.01%

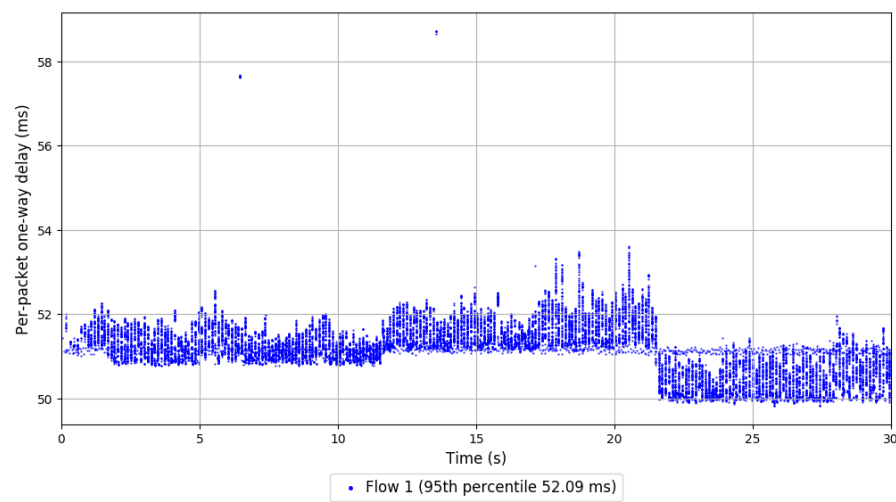
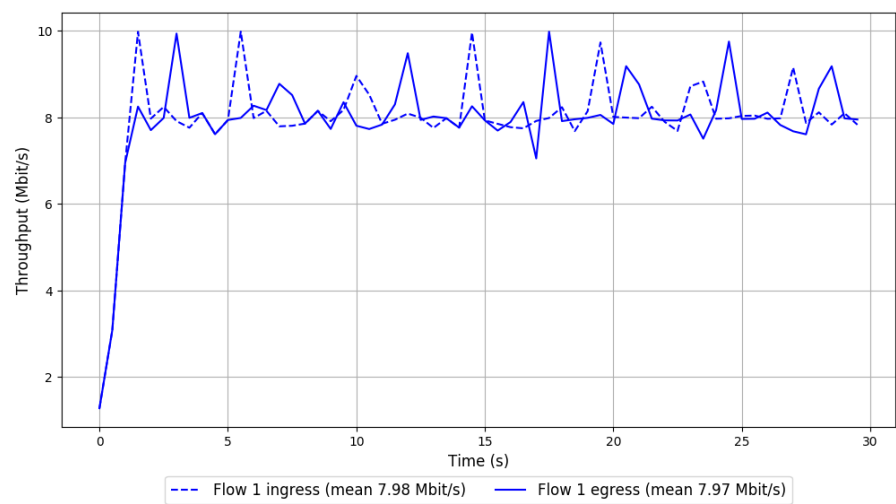
-- Flow 1:

Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 52.087 ms

Loss rate: 0.01%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-02 07:08:58

End at: 2018-01-02 07:09:28

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 51.754 ms

Loss rate: 0.42%

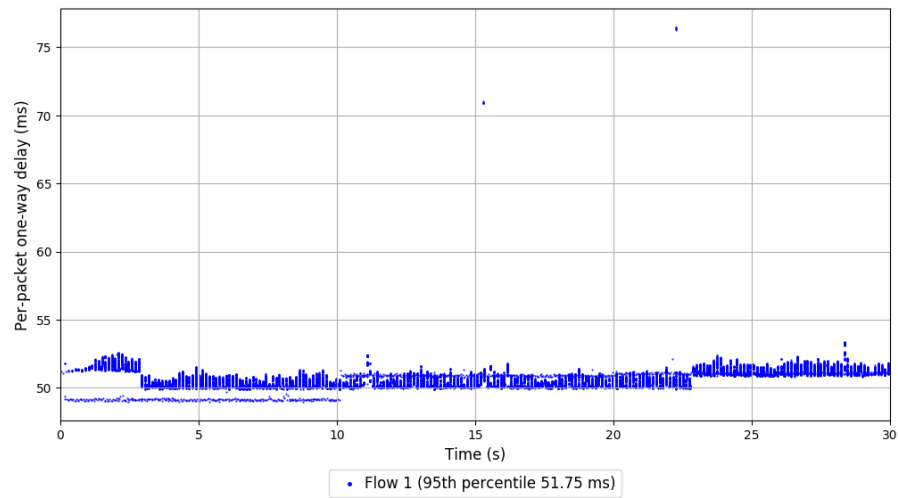
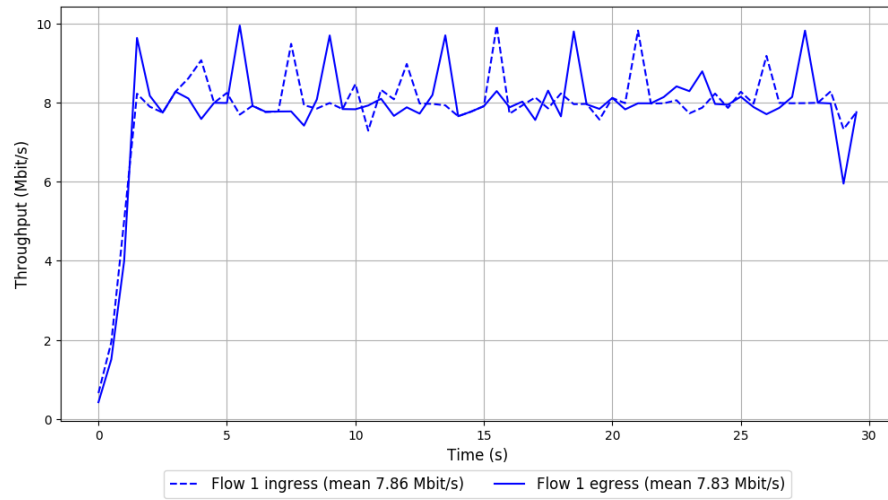
-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 51.754 ms

Loss rate: 0.42%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-02 07:20:40

End at: 2018-01-02 07:21:10

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 52.064 ms

Loss rate: 1.74%

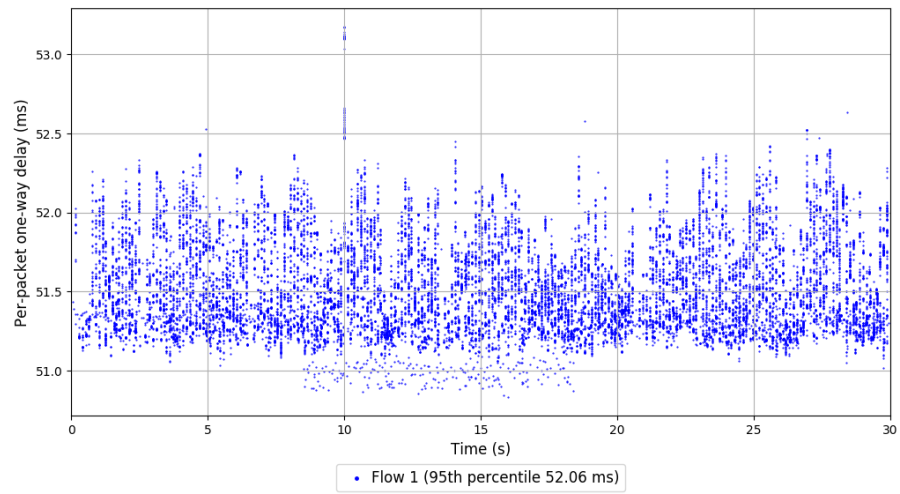
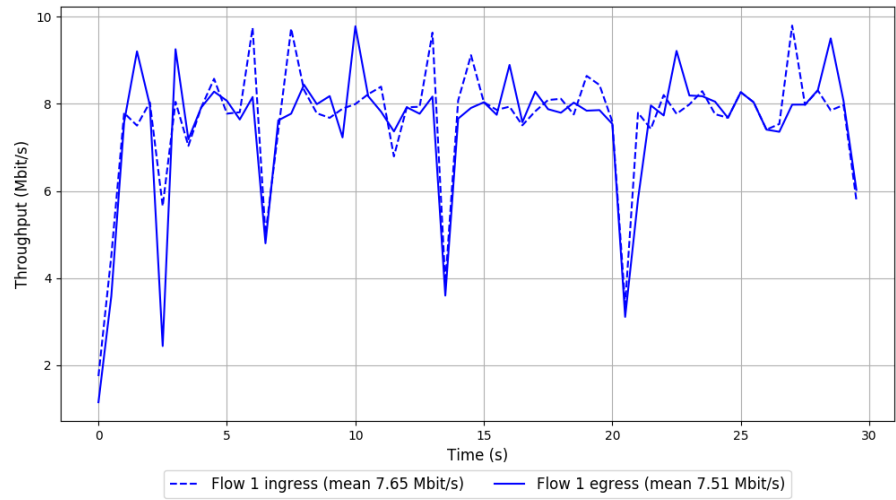
-- Flow 1:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 52.064 ms

Loss rate: 1.74%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-02 07:32:06

End at: 2018-01-02 07:32:36

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

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.99 Mbit/s

95th percentile per-packet one-way delay: 53.416 ms

Loss rate: 1.42%

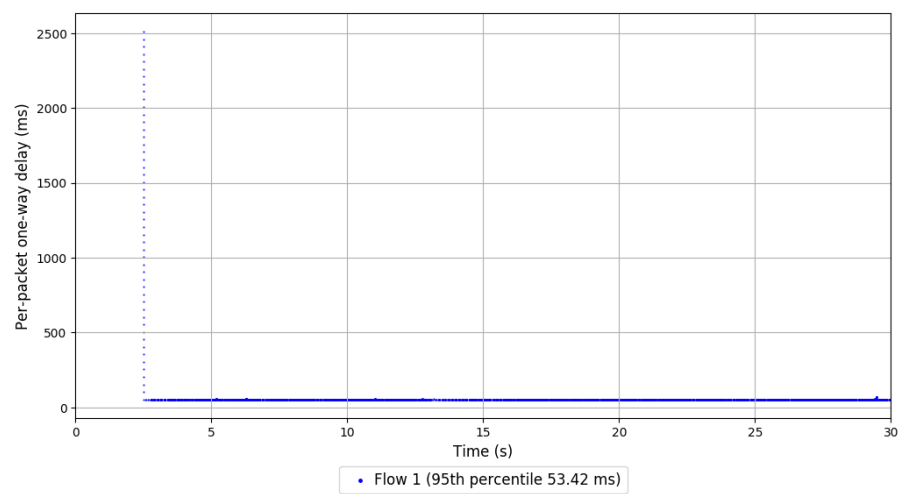
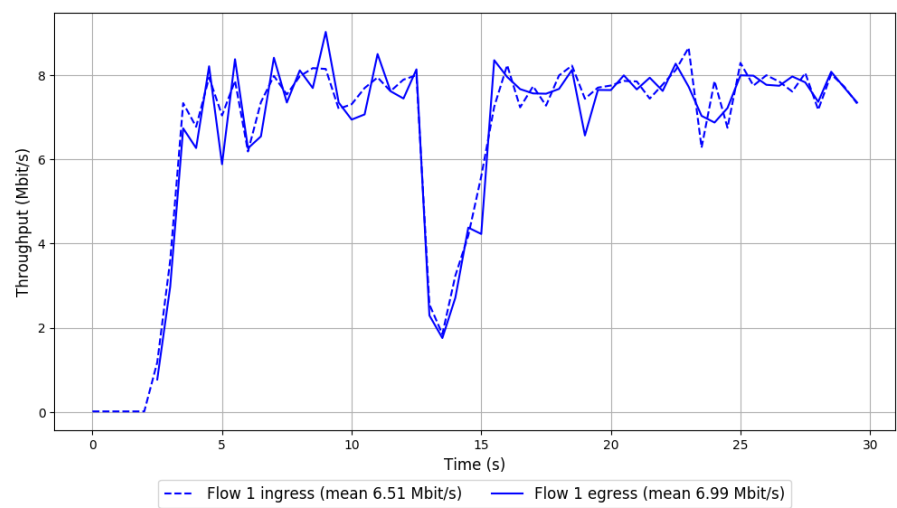
-- Flow 1:

Average throughput: 6.99 Mbit/s

95th percentile per-packet one-way delay: 53.416 ms

Loss rate: 1.42%

Run 10: Report of Sprout — Data Link

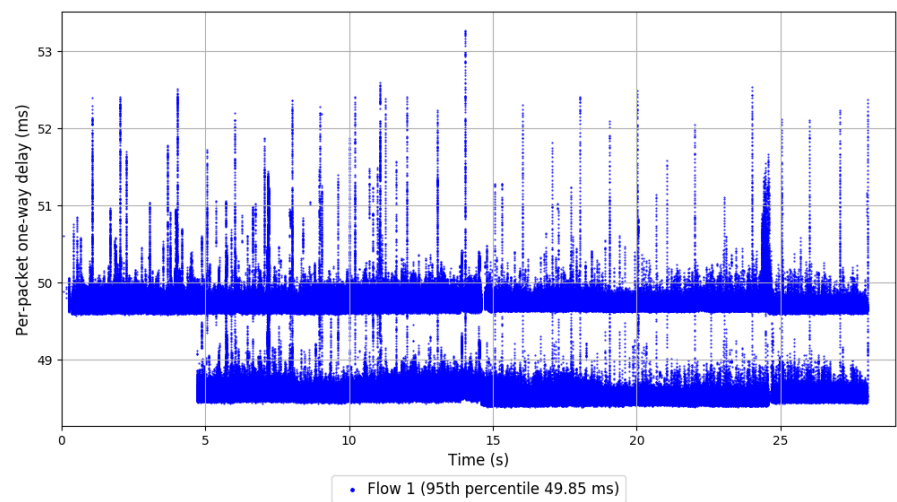
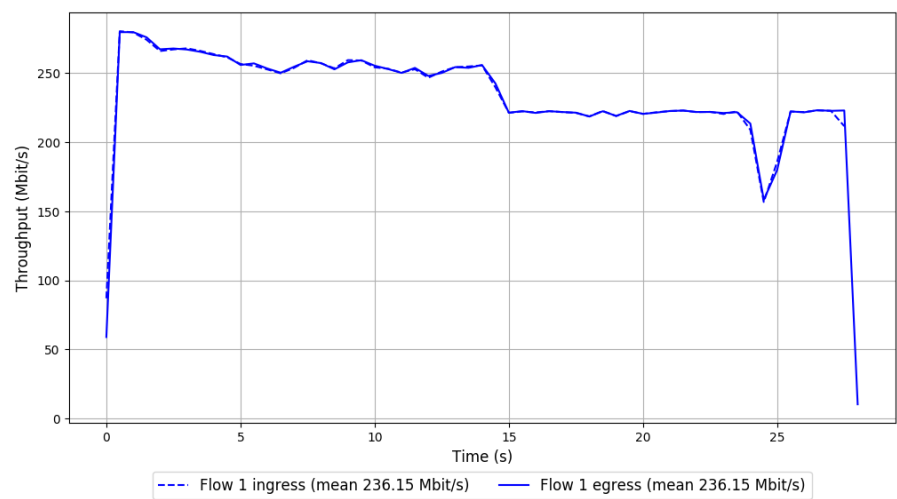


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-02 05:40:14
End at: 2018-01-02 05:40:44

# Below is generated by plot.py at 2018-01-02 09:03:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 236.15 Mbit/s
95th percentile per-packet one-way delay: 49.848 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 236.15 Mbit/s
95th percentile per-packet one-way delay: 49.848 ms
Loss rate: 0.00%
```

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

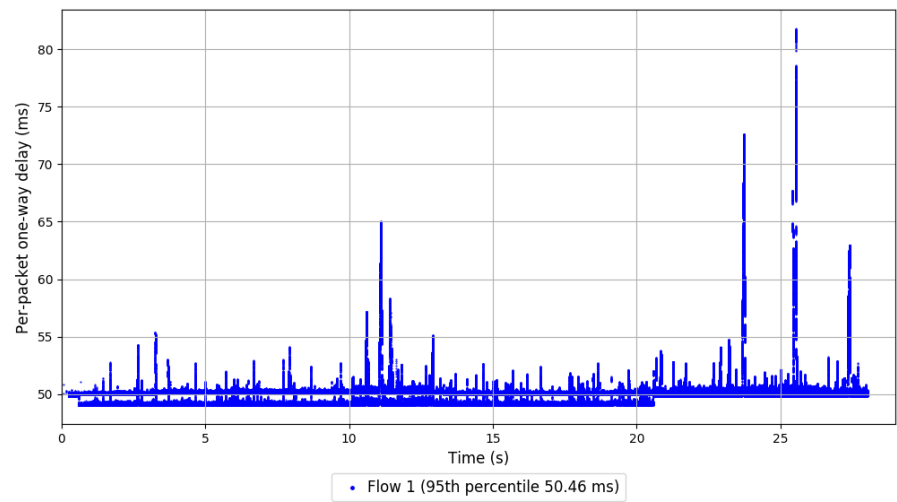
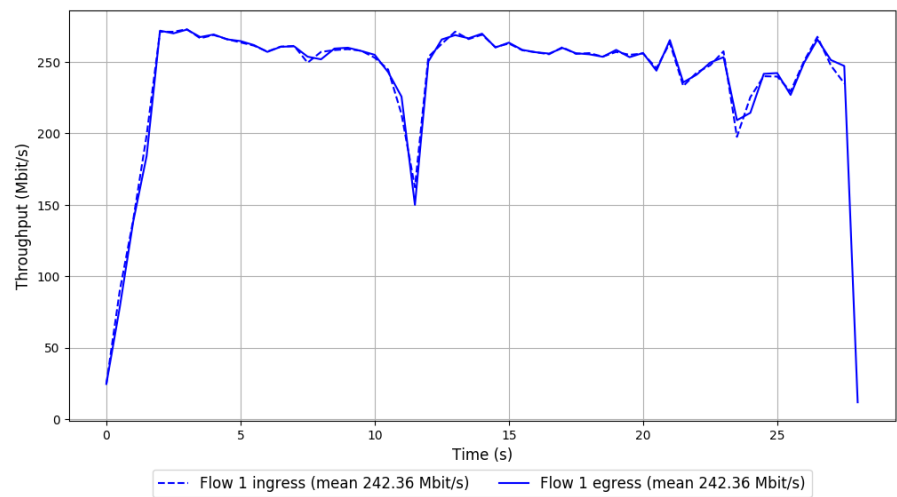


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-02 05:51:55
End at: 2018-01-02 05:52:26

# Below is generated by plot.py at 2018-01-02 09:03:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 242.36 Mbit/s
95th percentile per-packet one-way delay: 50.457 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 242.36 Mbit/s
95th percentile per-packet one-way delay: 50.457 ms
Loss rate: 0.00%
```

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

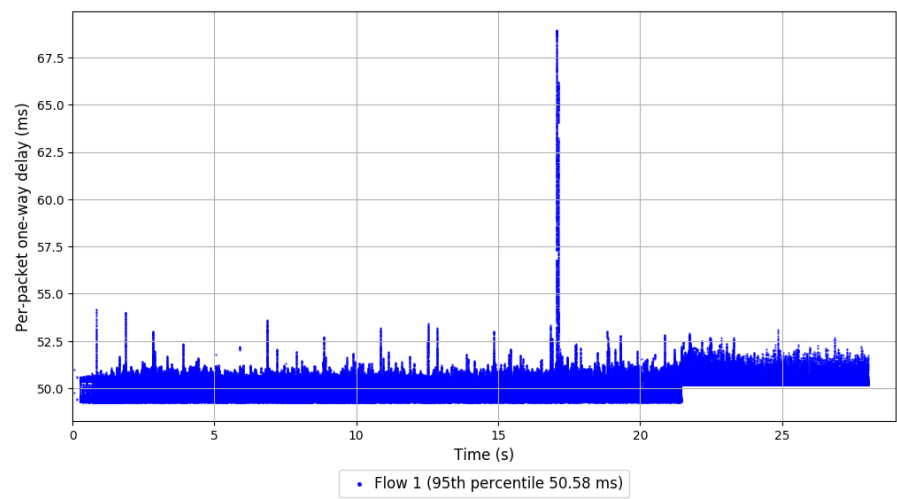
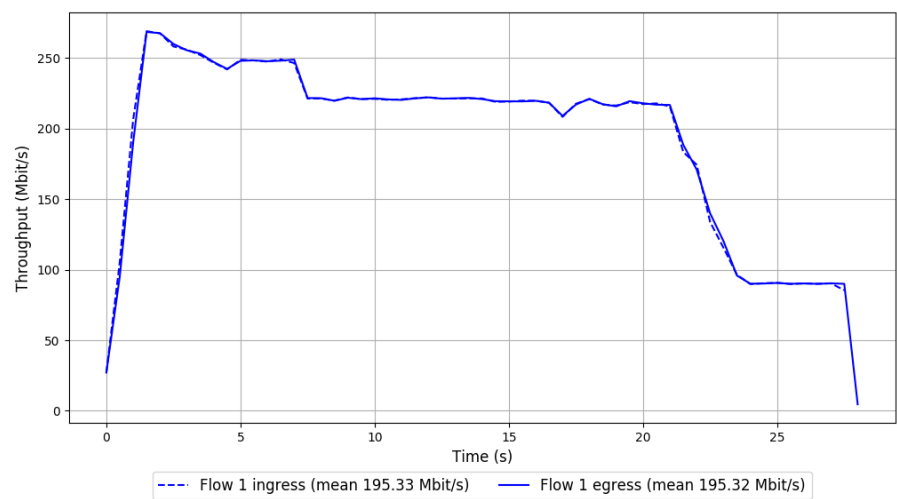


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-02 06:03:27
End at: 2018-01-02 06:03:57

# Below is generated by plot.py at 2018-01-02 09:03:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 195.32 Mbit/s
95th percentile per-packet one-way delay: 50.577 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 195.32 Mbit/s
95th percentile per-packet one-way delay: 50.577 ms
Loss rate: 0.00%
```

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

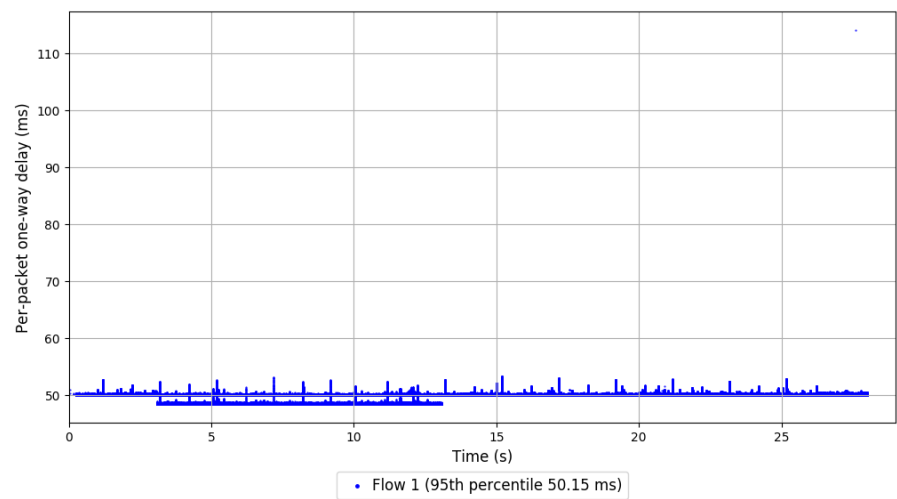
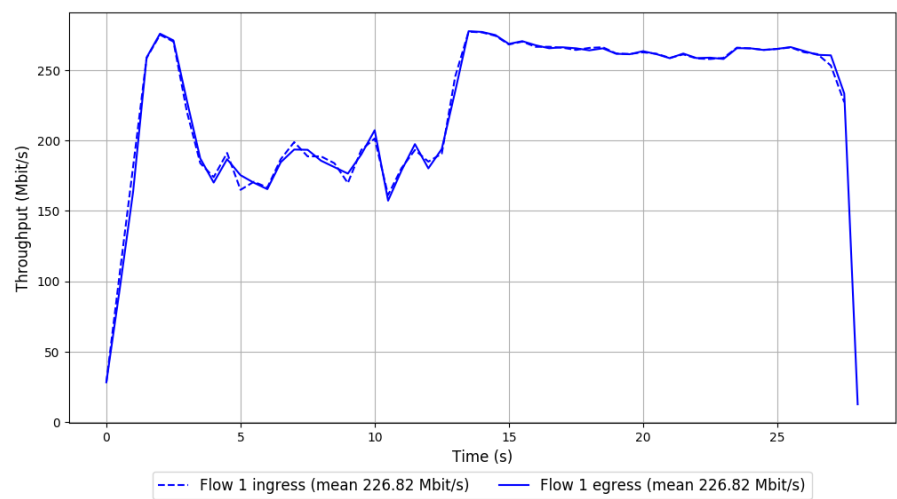


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-02 06:15:13
End at: 2018-01-02 06:15:43

# Below is generated by plot.py at 2018-01-02 09:03:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.82 Mbit/s
95th percentile per-packet one-way delay: 50.152 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 226.82 Mbit/s
95th percentile per-packet one-way delay: 50.152 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-02 06:26:50

End at: 2018-01-02 06:27:20

Below is generated by plot.py at 2018-01-02 09:03:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 139.82 Mbit/s

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

Loss rate: 0.00%

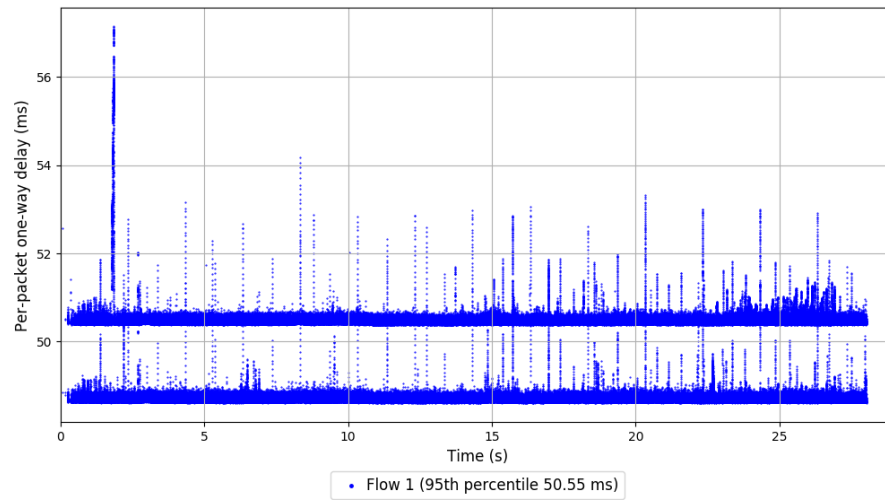
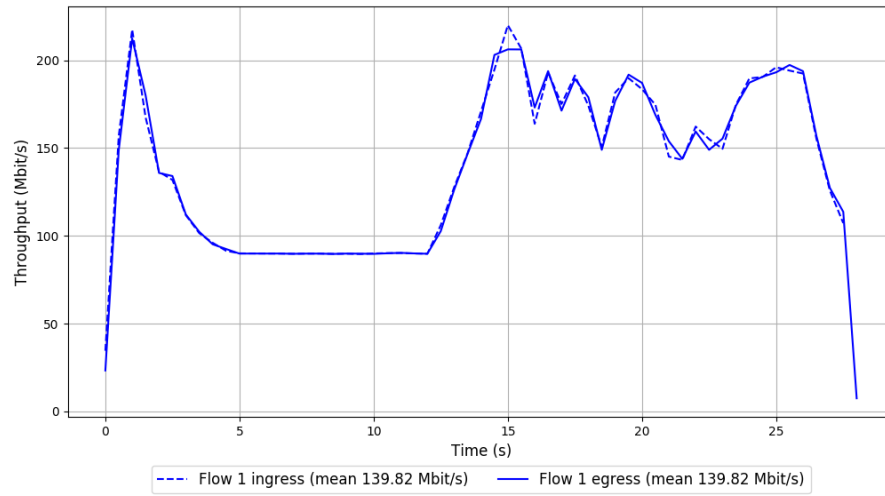
-- Flow 1:

Average throughput: 139.82 Mbit/s

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

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-02 06:38:25

End at: 2018-01-02 06:38:55

Below is generated by plot.py at 2018-01-02 09:03:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.17 Mbit/s

95th percentile per-packet one-way delay: 50.675 ms

Loss rate: 0.00%

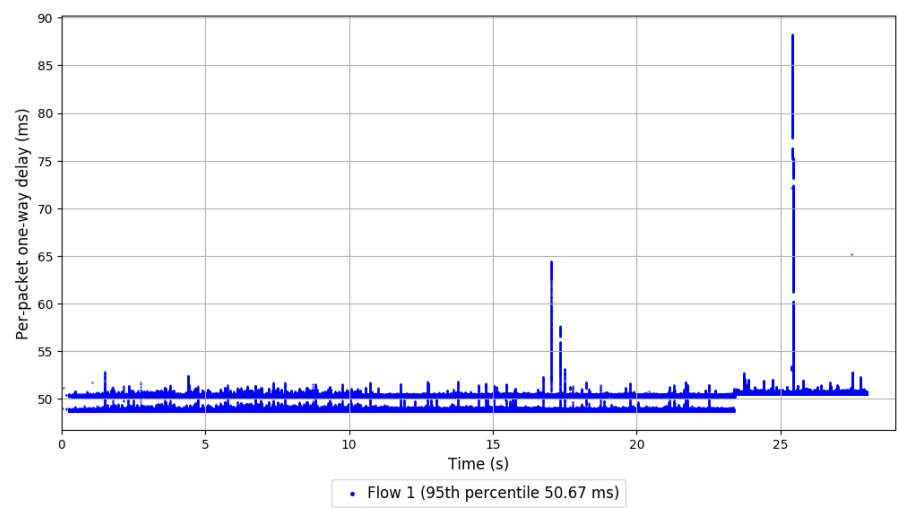
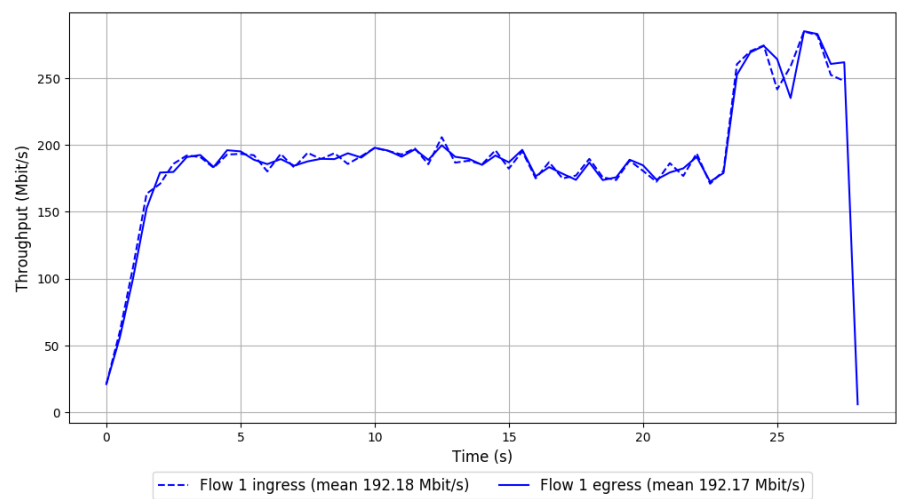
-- Flow 1:

Average throughput: 192.17 Mbit/s

95th percentile per-packet one-way delay: 50.675 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-02 06:49:59

End at: 2018-01-02 06:50:29

Below is generated by plot.py at 2018-01-02 09:06:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 254.34 Mbit/s

95th percentile per-packet one-way delay: 50.947 ms

Loss rate: 0.00%

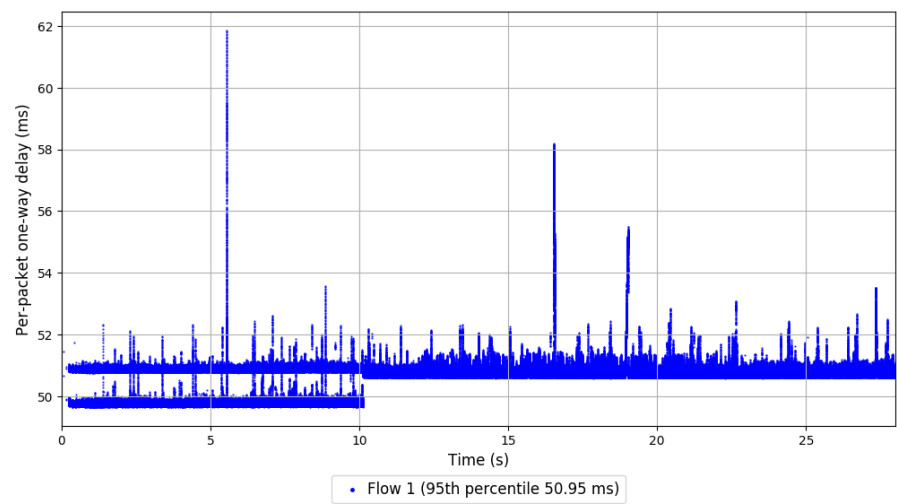
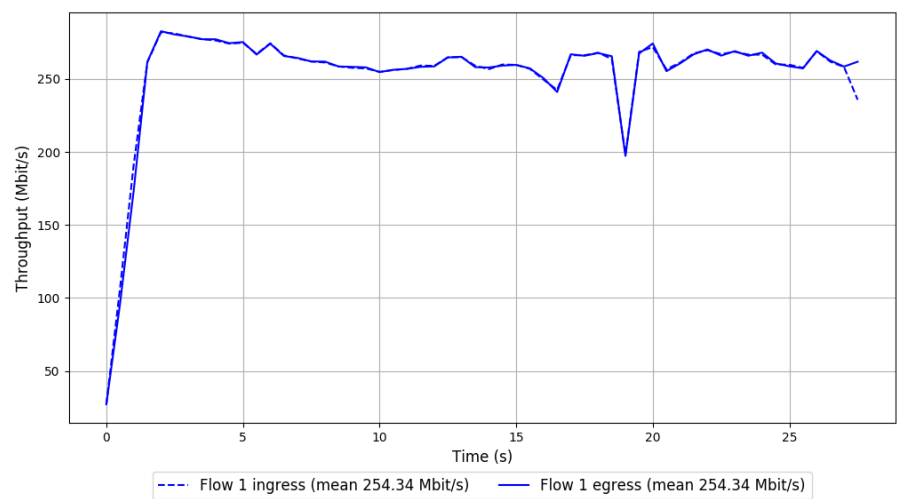
-- Flow 1:

Average throughput: 254.34 Mbit/s

95th percentile per-packet one-way delay: 50.947 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-02 07:01:41

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

Below is generated by plot.py at 2018-01-02 09:06:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 145.07 Mbit/s

95th percentile per-packet one-way delay: 51.171 ms

Loss rate: 0.00%

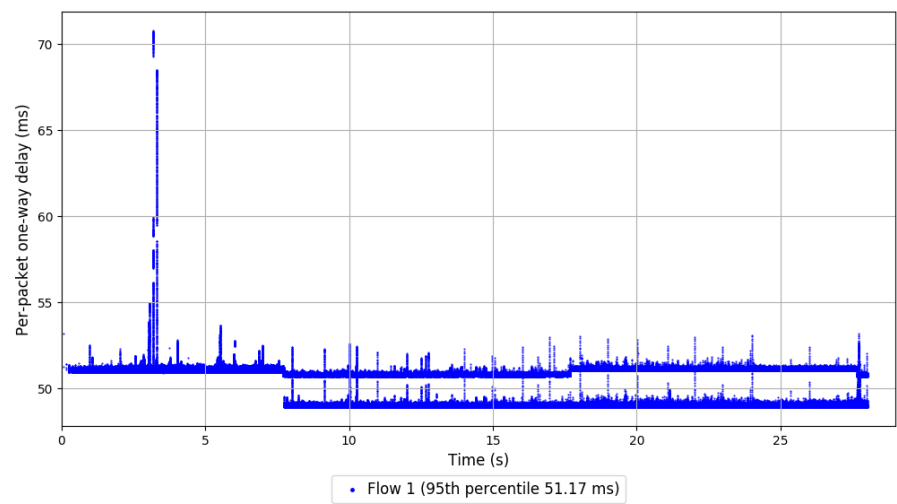
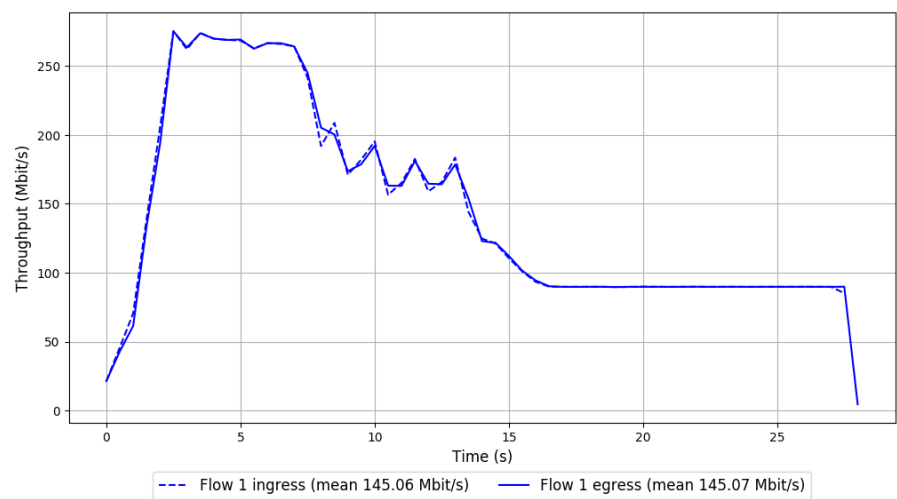
-- Flow 1:

Average throughput: 145.07 Mbit/s

95th percentile per-packet one-way delay: 51.171 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

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

End at: 2018-01-02 07:13:43

Below is generated by plot.py at 2018-01-02 09:09:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 244.57 Mbit/s

95th percentile per-packet one-way delay: 51.163 ms

Loss rate: 0.00%

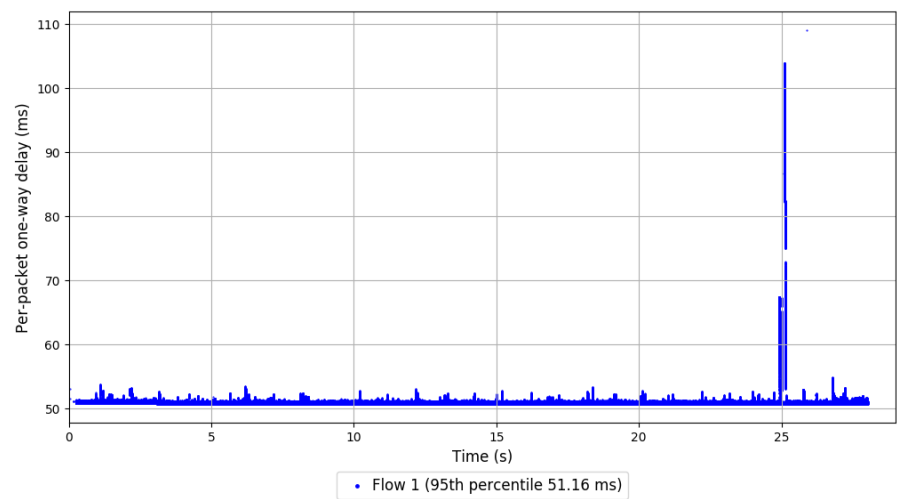
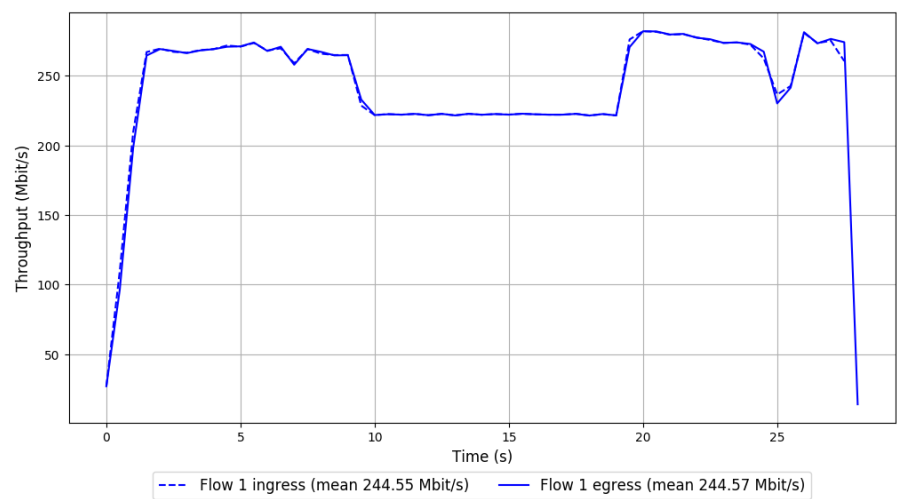
-- Flow 1:

Average throughput: 244.57 Mbit/s

95th percentile per-packet one-way delay: 51.163 ms

Loss rate: 0.00%

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

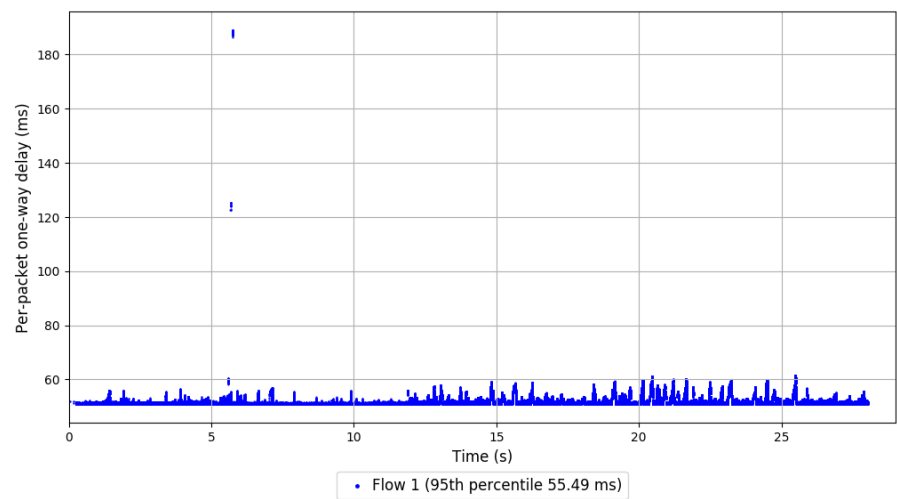
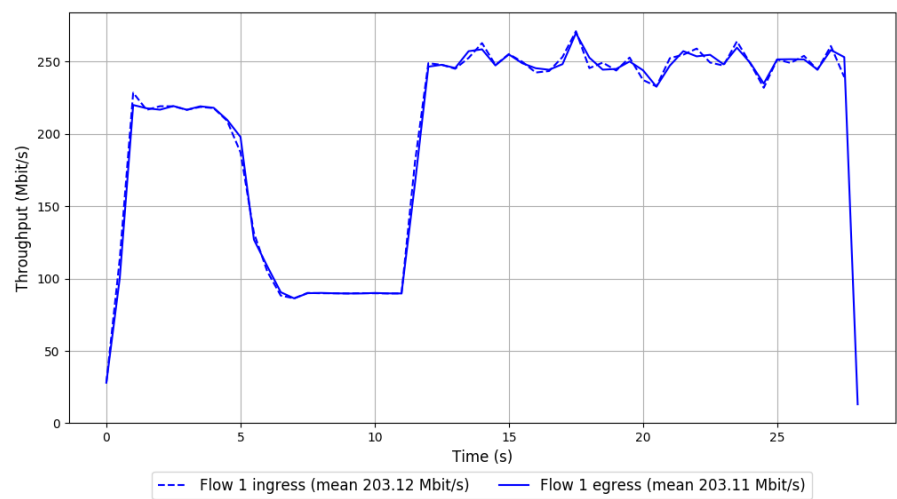


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-02 07:24:53
End at: 2018-01-02 07:25:23

# Below is generated by plot.py at 2018-01-02 09:09:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.11 Mbit/s
95th percentile per-packet one-way delay: 55.491 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 203.11 Mbit/s
95th percentile per-packet one-way delay: 55.491 ms
Loss rate: 0.01%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-02 05:42:26

End at: 2018-01-02 05:42:56

Below is generated by plot.py at 2018-01-02 09:09:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.54 Mbit/s

95th percentile per-packet one-way delay: 50.797 ms

Loss rate: 0.00%

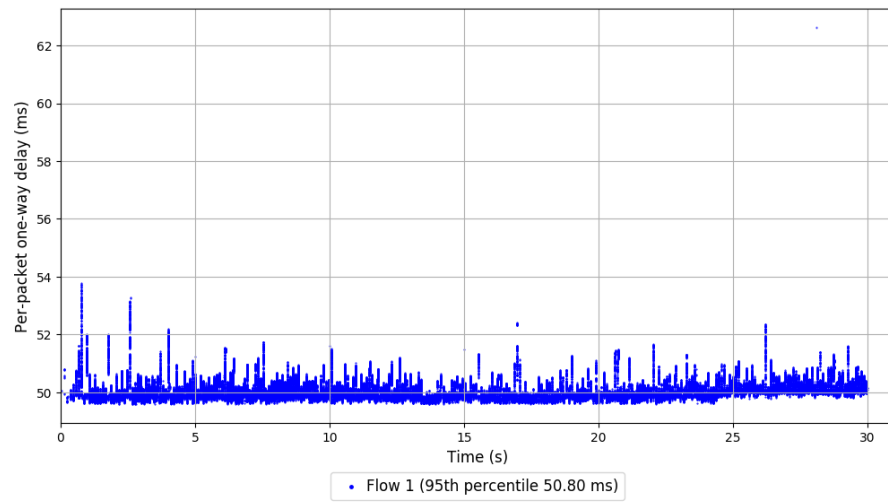
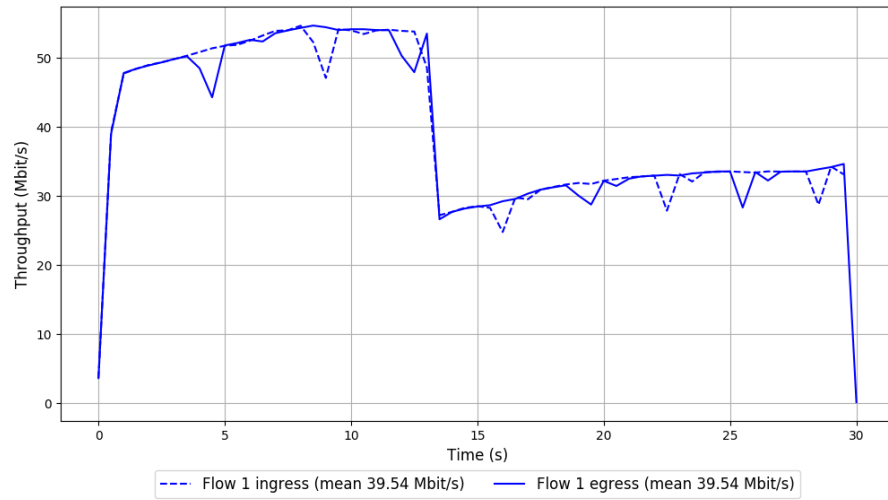
-- Flow 1:

Average throughput: 39.54 Mbit/s

95th percentile per-packet one-way delay: 50.797 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

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

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

Below is generated by plot.py at 2018-01-02 09:09:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 16.51 Mbit/s

95th percentile per-packet one-way delay: 50.940 ms

Loss rate: 0.38%

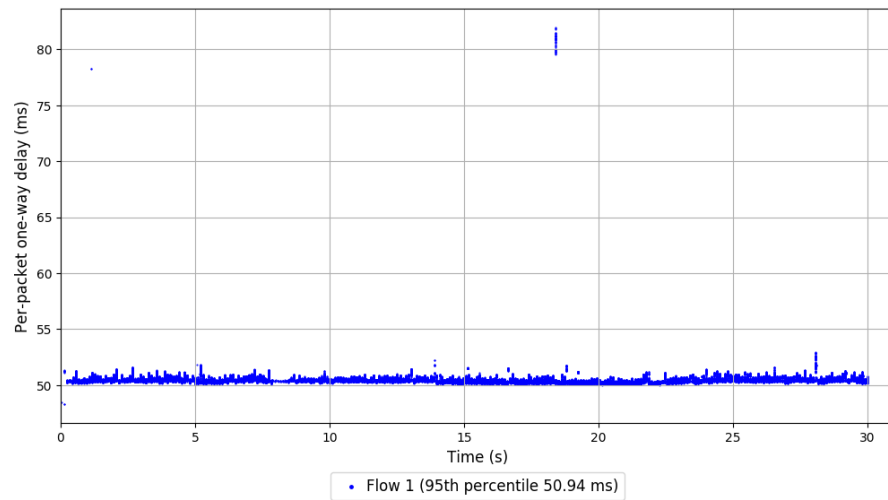
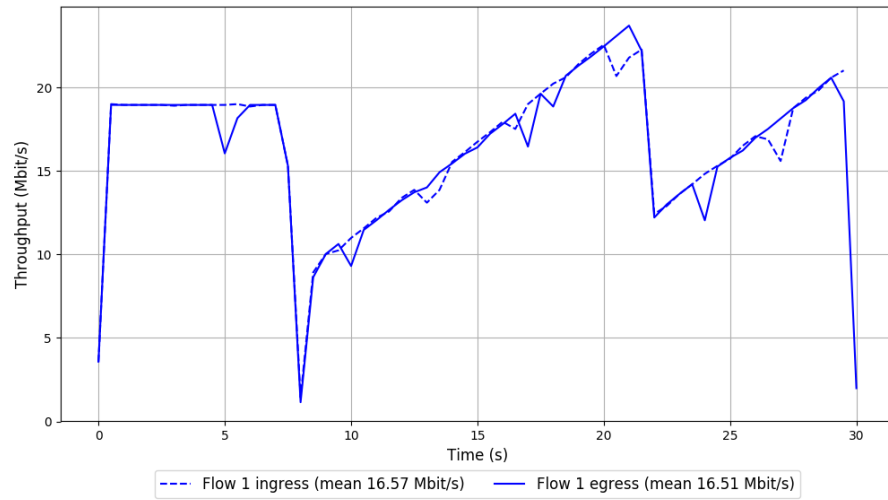
-- Flow 1:

Average throughput: 16.51 Mbit/s

95th percentile per-packet one-way delay: 50.940 ms

Loss rate: 0.38%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-02 06:05:36

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

Below is generated by plot.py at 2018-01-02 09:09:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 42.26 Mbit/s

95th percentile per-packet one-way delay: 51.419 ms

Loss rate: 0.50%

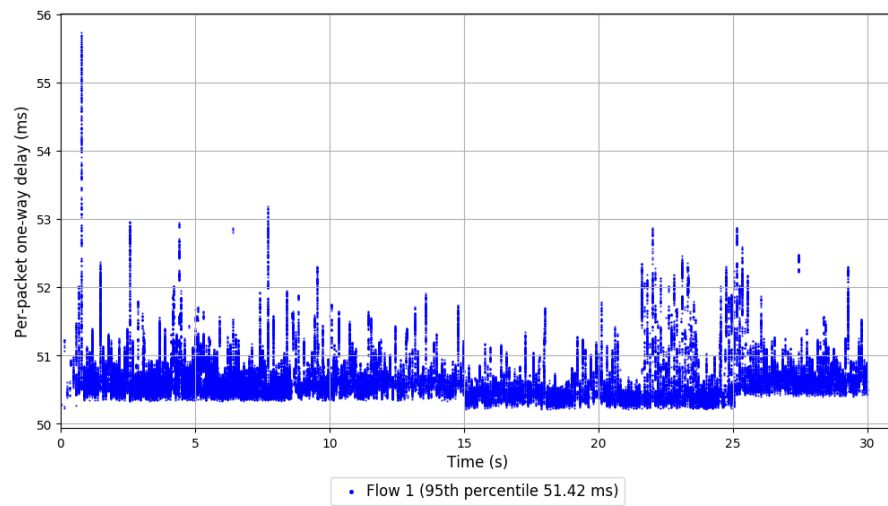
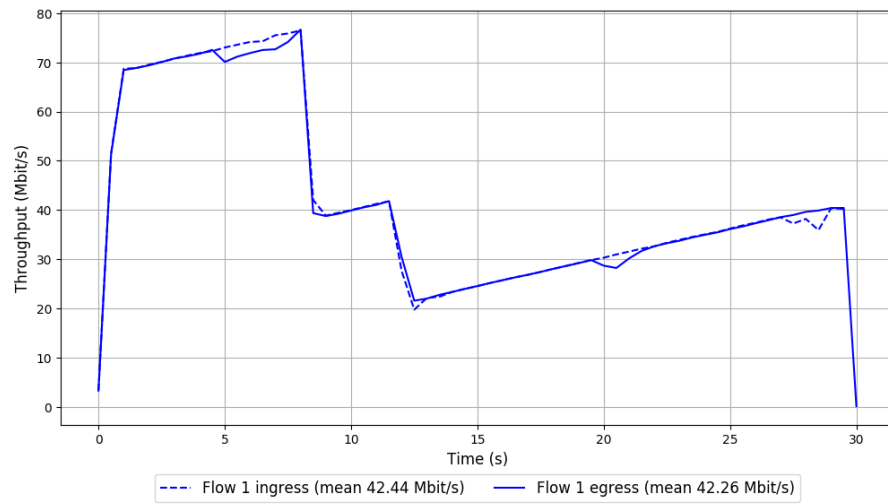
-- Flow 1:

Average throughput: 42.26 Mbit/s

95th percentile per-packet one-way delay: 51.419 ms

Loss rate: 0.50%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-02 06:17:23

End at: 2018-01-02 06:17:53

Below is generated by plot.py at 2018-01-02 09:09:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.00 Mbit/s

95th percentile per-packet one-way delay: 51.112 ms

Loss rate: 0.00%

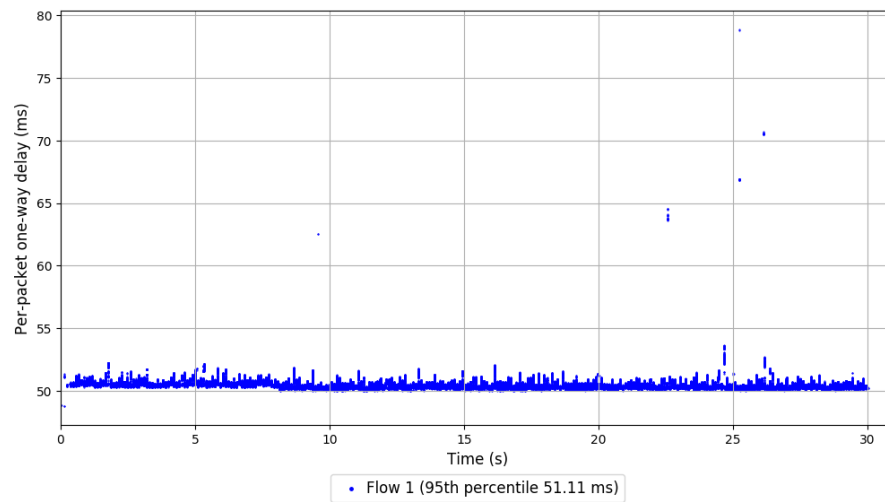
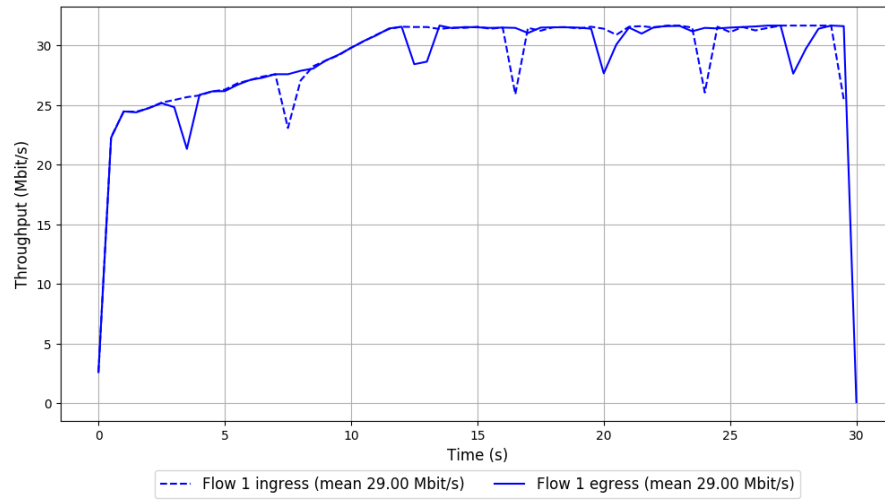
-- Flow 1:

Average throughput: 29.00 Mbit/s

95th percentile per-packet one-way delay: 51.112 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-02 06:28:52

End at: 2018-01-02 06:29:22

Below is generated by plot.py at 2018-01-02 09:09:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.29 Mbit/s

95th percentile per-packet one-way delay: 51.671 ms

Loss rate: 0.54%

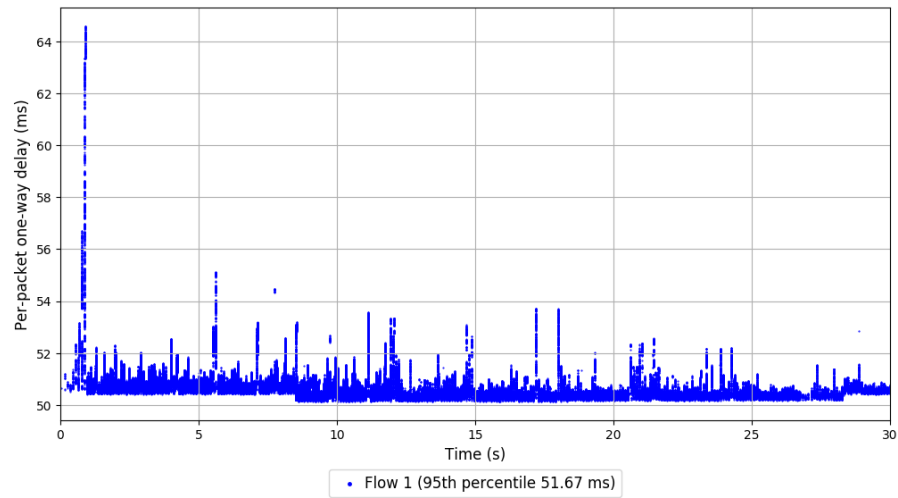
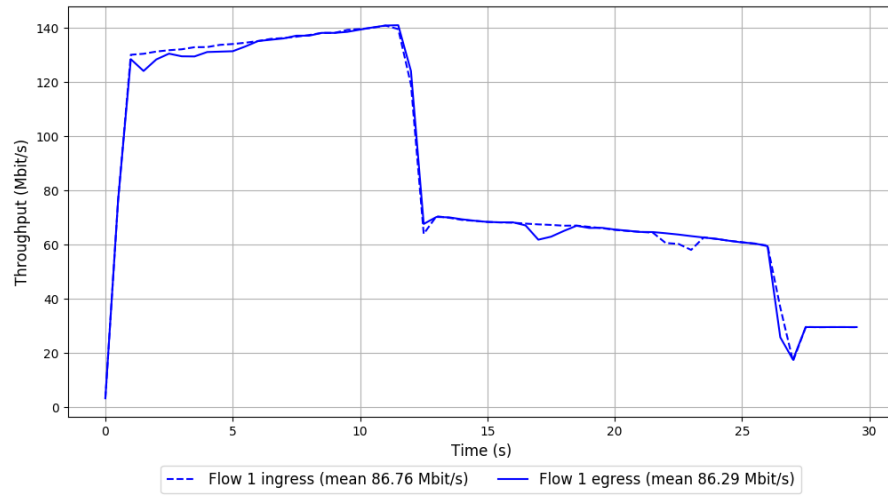
-- Flow 1:

Average throughput: 86.29 Mbit/s

95th percentile per-packet one-way delay: 51.671 ms

Loss rate: 0.54%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-02 06:40:32

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

Below is generated by plot.py at 2018-01-02 09:09:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.89 Mbit/s

95th percentile per-packet one-way delay: 51.433 ms

Loss rate: 0.43%

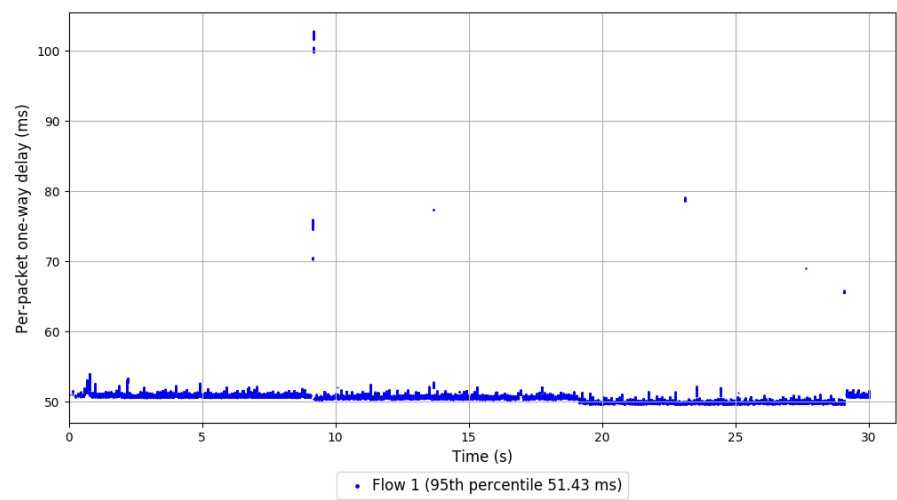
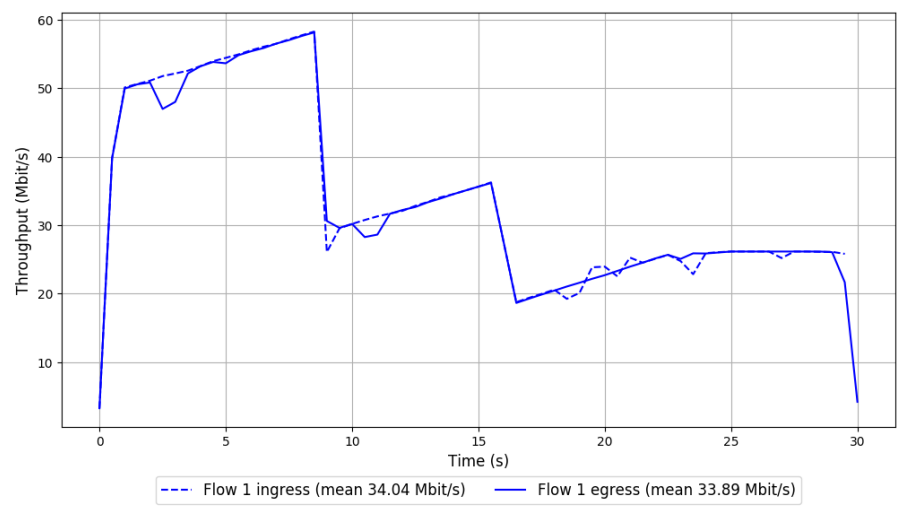
-- Flow 1:

Average throughput: 33.89 Mbit/s

95th percentile per-packet one-way delay: 51.433 ms

Loss rate: 0.43%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-02 06:52:11

End at: 2018-01-02 06:52:41

Below is generated by plot.py at 2018-01-02 09:09:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 34.68 Mbit/s

95th percentile per-packet one-way delay: 51.520 ms

Loss rate: 0.45%

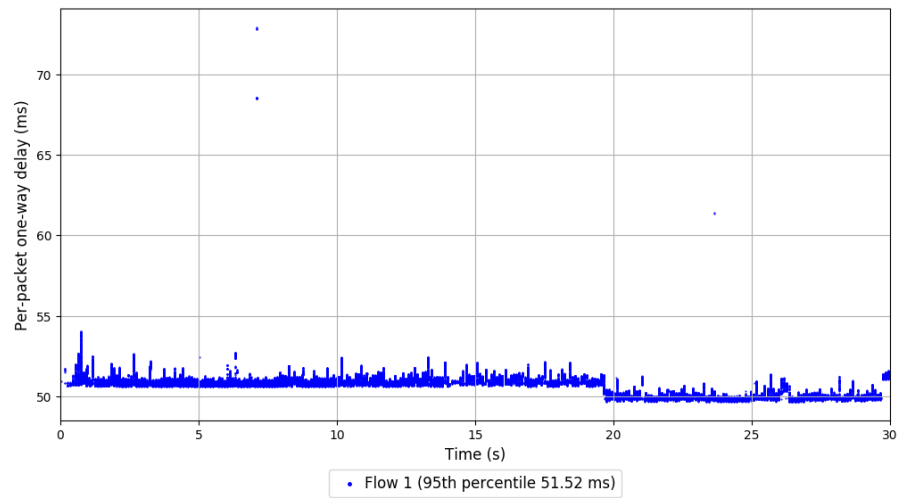
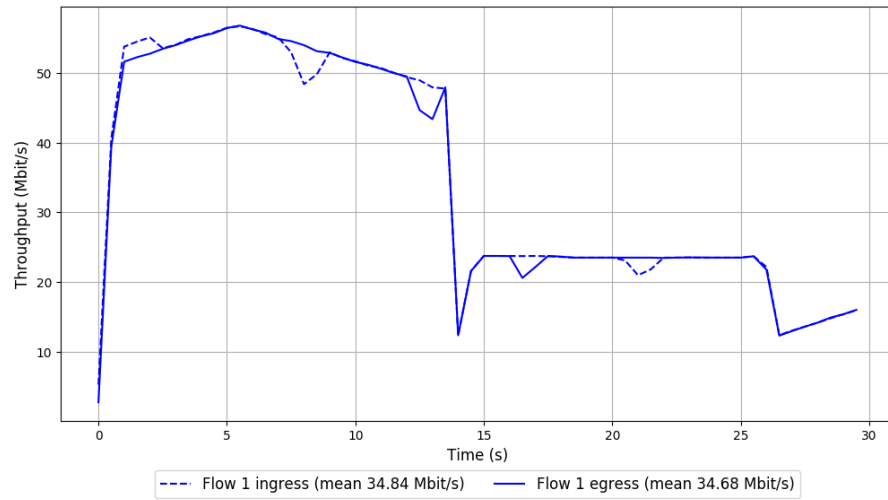
-- Flow 1:

Average throughput: 34.68 Mbit/s

95th percentile per-packet one-way delay: 51.520 ms

Loss rate: 0.45%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-02 07:03:44

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

Below is generated by plot.py at 2018-01-02 09:09:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 101.31 Mbit/s

95th percentile per-packet one-way delay: 53.868 ms

Loss rate: 0.35%

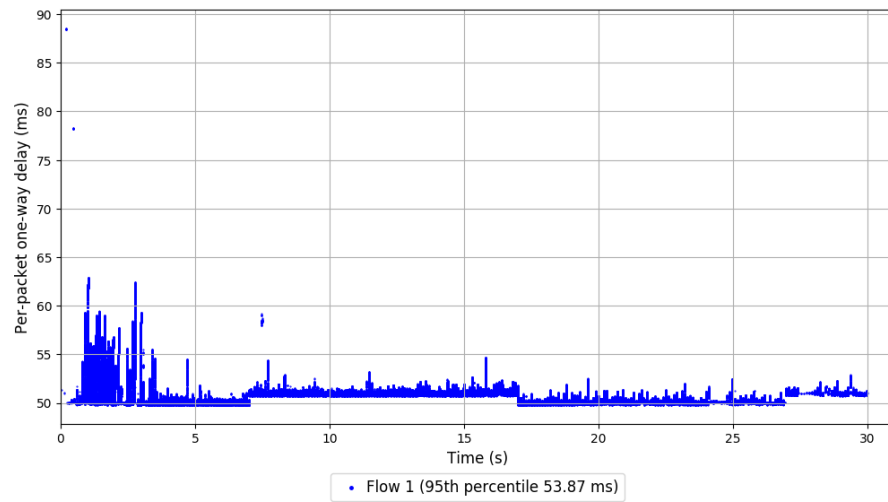
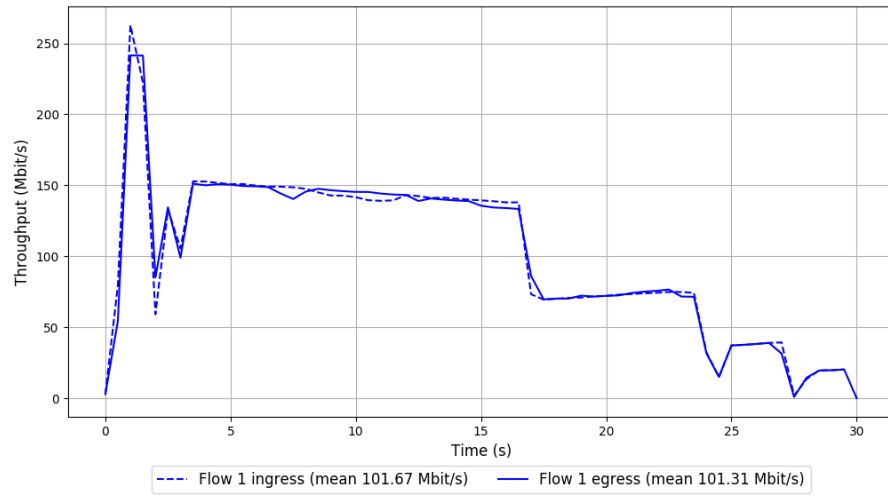
-- Flow 1:

Average throughput: 101.31 Mbit/s

95th percentile per-packet one-way delay: 53.868 ms

Loss rate: 0.35%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-02 07:15:25

End at: 2018-01-02 07:15:55

Below is generated by plot.py at 2018-01-02 09:09:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.01 Mbit/s

95th percentile per-packet one-way delay: 52.867 ms

Loss rate: 0.05%

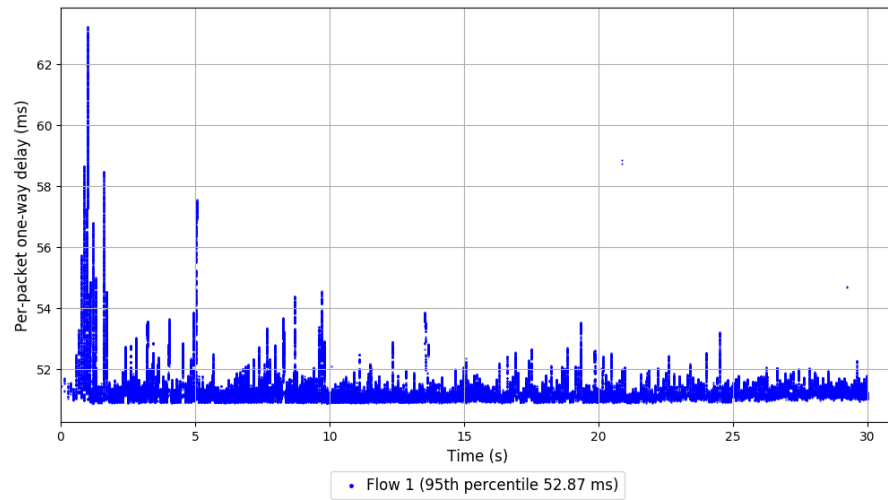
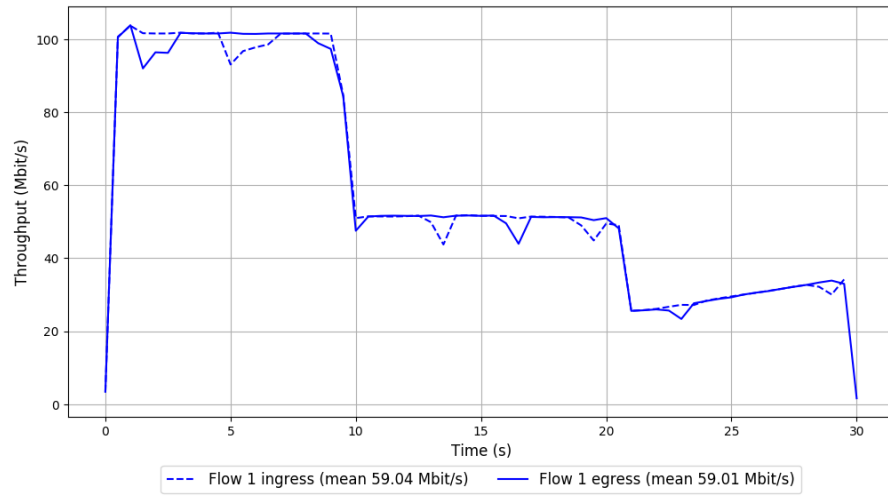
-- Flow 1:

Average throughput: 59.01 Mbit/s

95th percentile per-packet one-way delay: 52.867 ms

Loss rate: 0.05%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

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

End at: 2018-01-02 07:27:32

Below is generated by plot.py at 2018-01-02 09:09:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.00 Mbit/s

95th percentile per-packet one-way delay: 53.301 ms

Loss rate: 0.19%

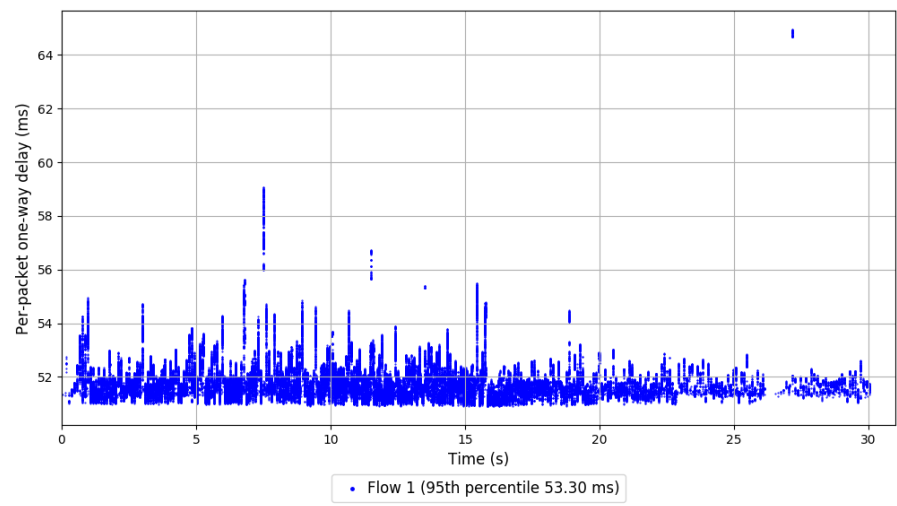
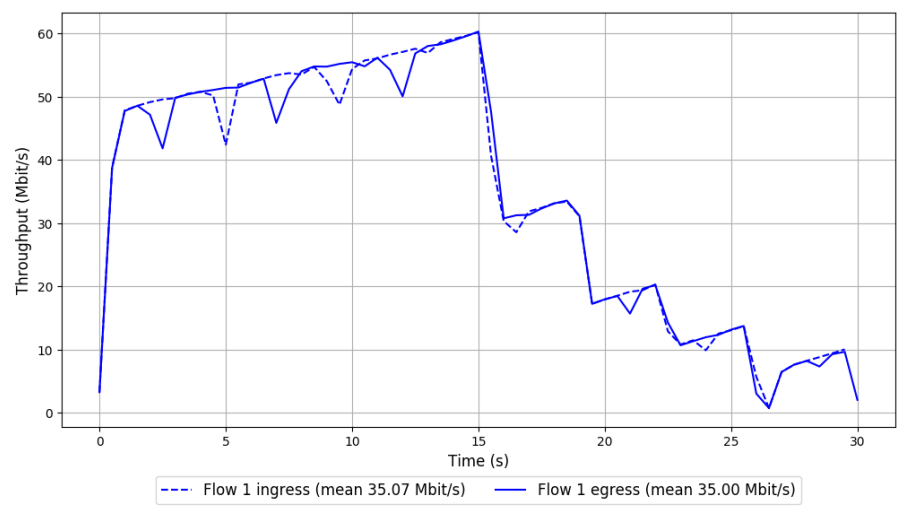
-- Flow 1:

Average throughput: 35.00 Mbit/s

95th percentile per-packet one-way delay: 53.301 ms

Loss rate: 0.19%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-02 05:38:27

End at: 2018-01-02 05:38:57

Below is generated by plot.py at 2018-01-02 09:09:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 285.70 Mbit/s

95th percentile per-packet one-way delay: 131.612 ms

Loss rate: 0.30%

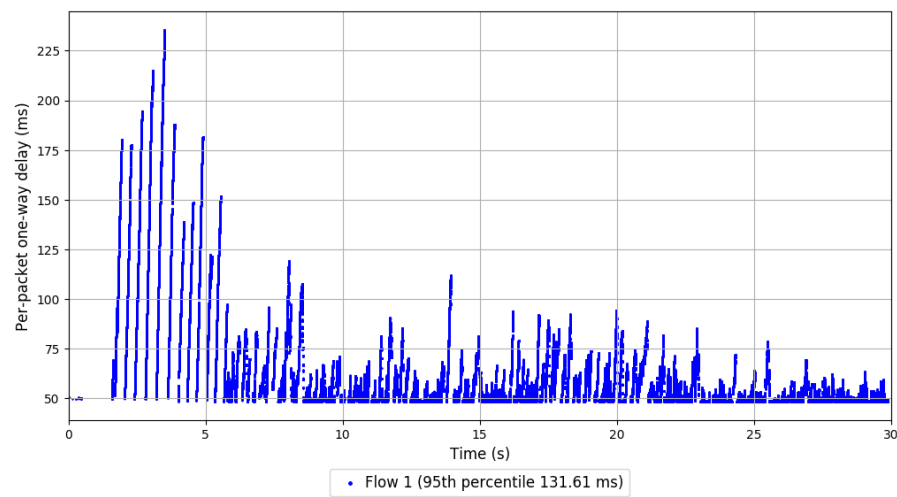
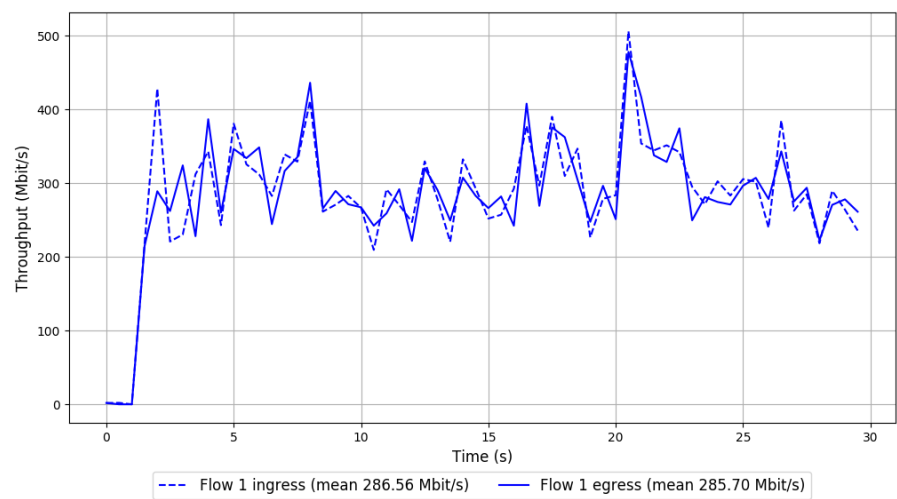
-- Flow 1:

Average throughput: 285.70 Mbit/s

95th percentile per-packet one-way delay: 131.612 ms

Loss rate: 0.30%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-02 05:50:11

End at: 2018-01-02 05:50:41

Below is generated by plot.py at 2018-01-02 09:09:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 279.75 Mbit/s

95th percentile per-packet one-way delay: 81.855 ms

Loss rate: 0.01%

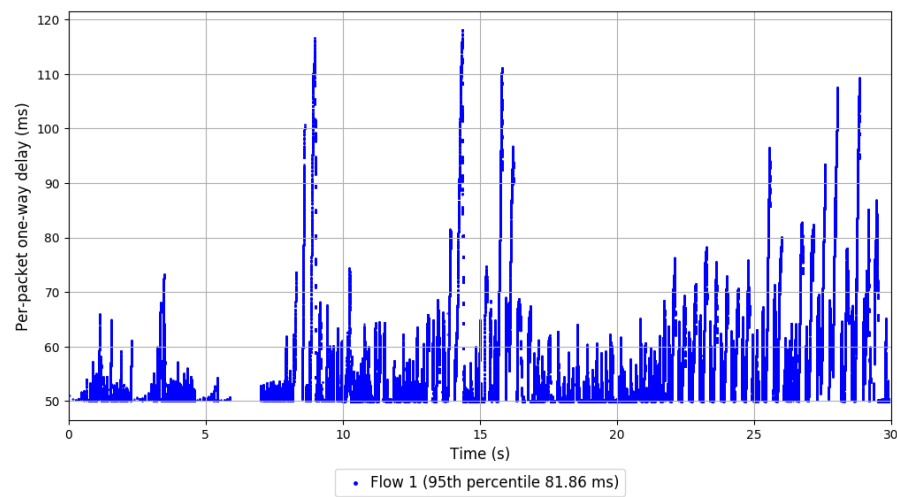
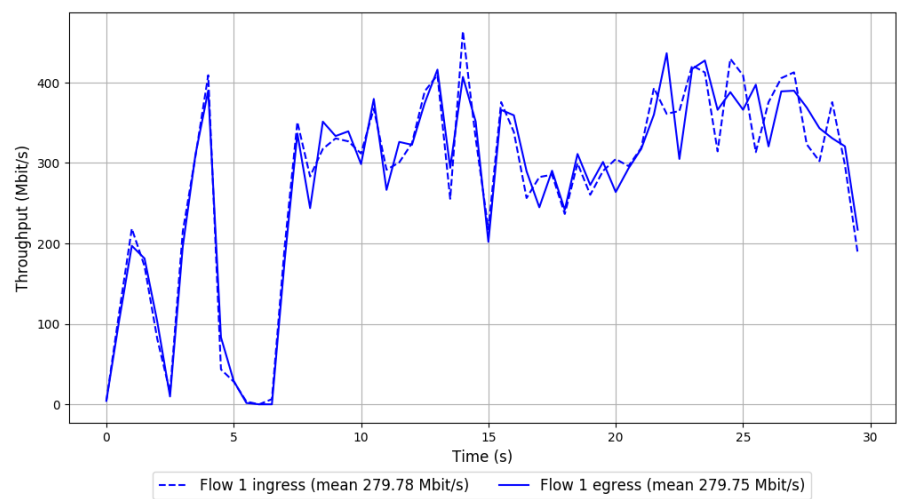
-- Flow 1:

Average throughput: 279.75 Mbit/s

95th percentile per-packet one-way delay: 81.855 ms

Loss rate: 0.01%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

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

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

Below is generated by plot.py at 2018-01-02 09:09:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 229.42 Mbit/s

95th percentile per-packet one-way delay: 82.228 ms

Loss rate: 0.42%

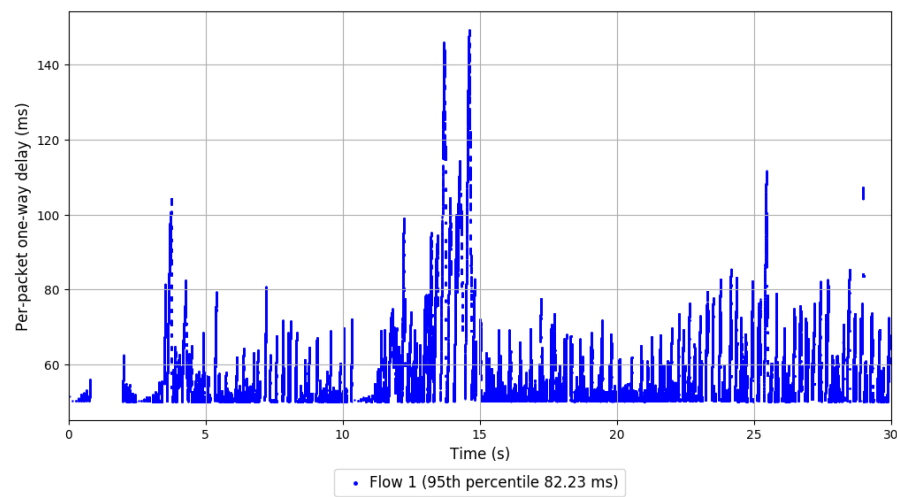
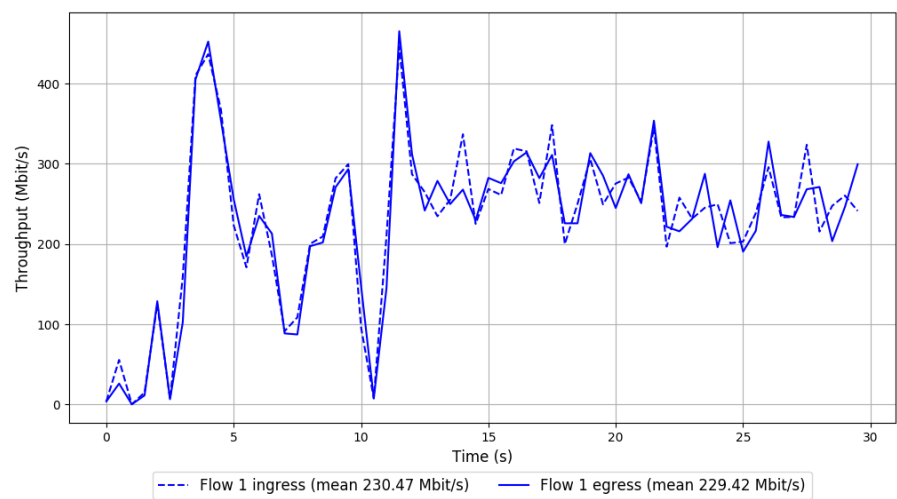
-- Flow 1:

Average throughput: 229.42 Mbit/s

95th percentile per-packet one-way delay: 82.228 ms

Loss rate: 0.42%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-02 06:13:27

End at: 2018-01-02 06:13:57

Below is generated by plot.py at 2018-01-02 09:10:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 281.19 Mbit/s

95th percentile per-packet one-way delay: 102.045 ms

Loss rate: 0.39%

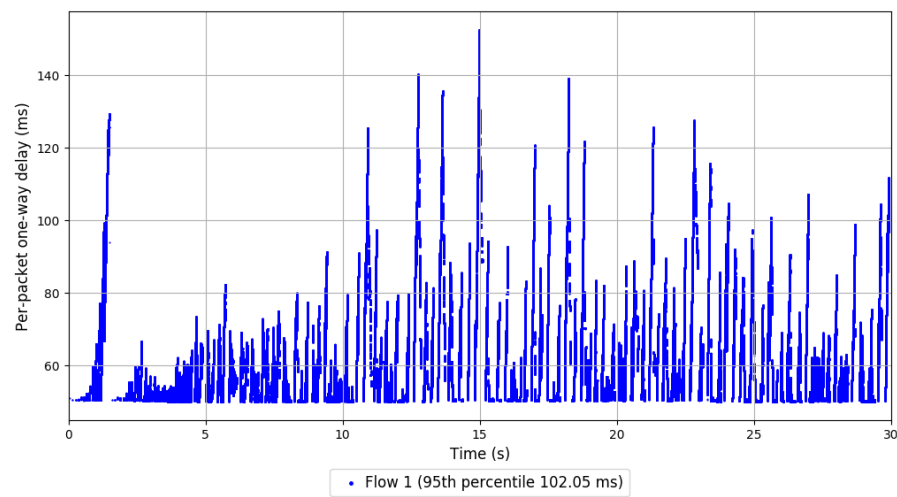
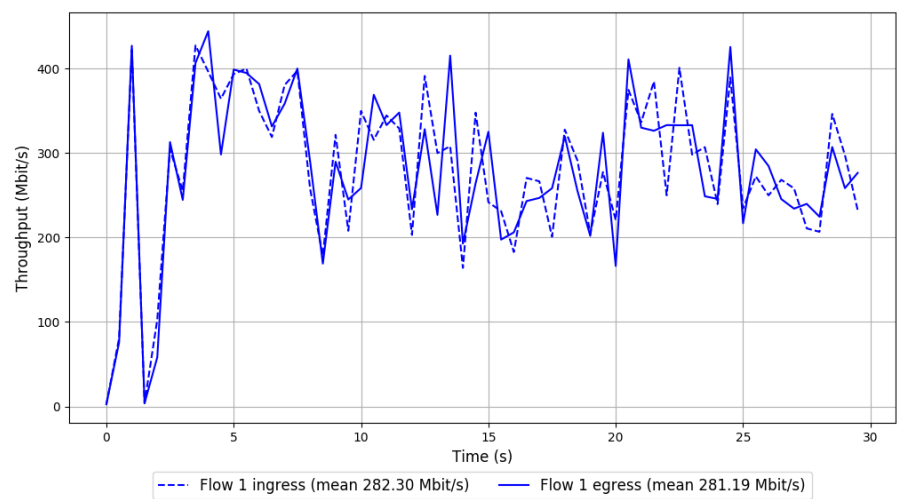
-- Flow 1:

Average throughput: 281.19 Mbit/s

95th percentile per-packet one-way delay: 102.045 ms

Loss rate: 0.39%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-02 06:25:07

End at: 2018-01-02 06:25:37

Below is generated by plot.py at 2018-01-02 09:10:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 245.15 Mbit/s

95th percentile per-packet one-way delay: 71.640 ms

Loss rate: 0.00%

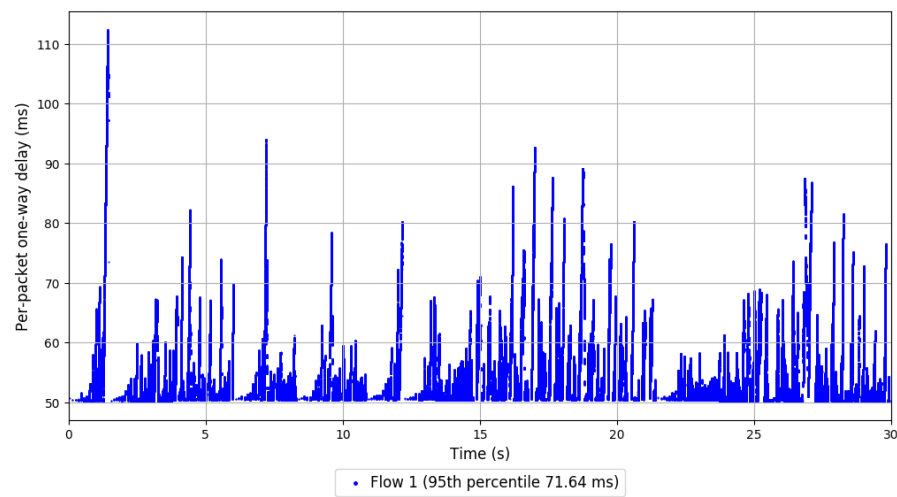
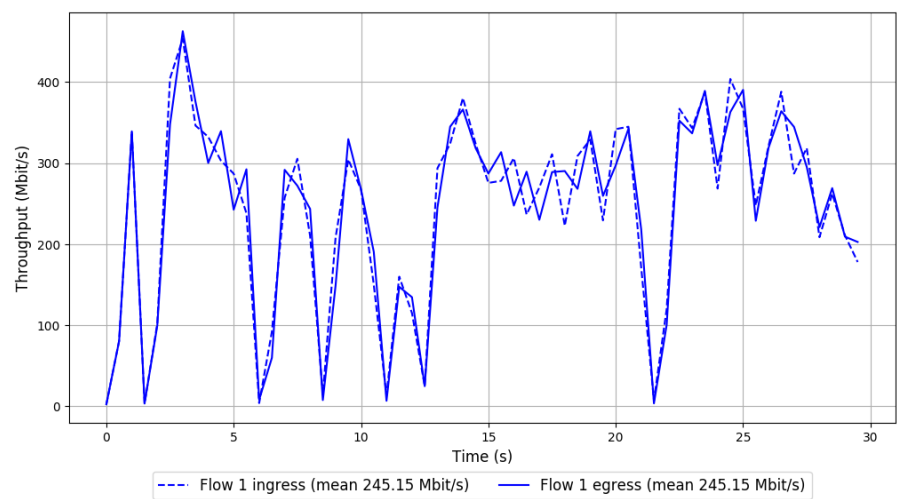
-- Flow 1:

Average throughput: 245.15 Mbit/s

95th percentile per-packet one-way delay: 71.640 ms

Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-02 06:36:41

End at: 2018-01-02 06:37:11

Below is generated by plot.py at 2018-01-02 09:11:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 266.90 Mbit/s

95th percentile per-packet one-way delay: 73.172 ms

Loss rate: 0.01%

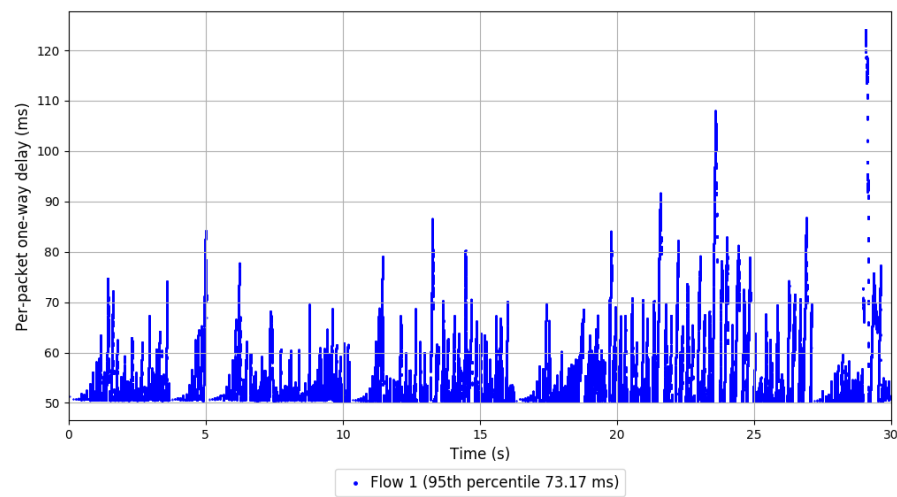
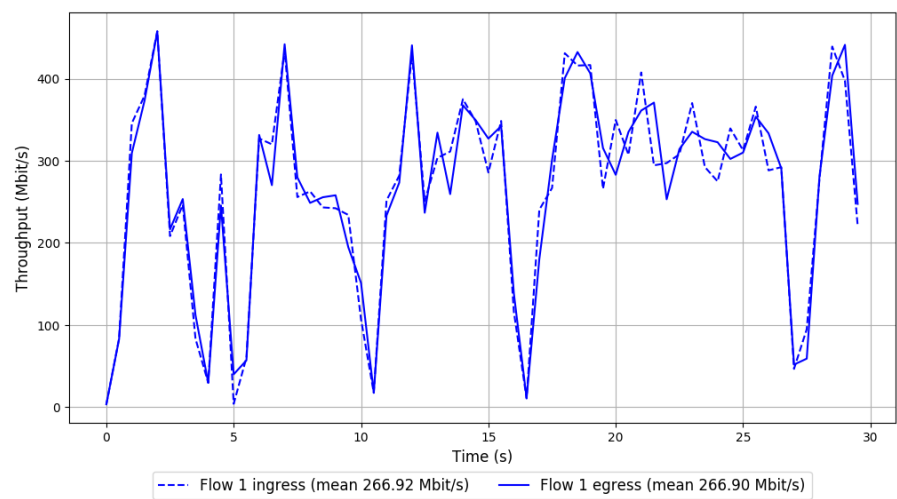
-- Flow 1:

Average throughput: 266.90 Mbit/s

95th percentile per-packet one-way delay: 73.172 ms

Loss rate: 0.01%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-02 06:48:13

End at: 2018-01-02 06:48:43

Below is generated by plot.py at 2018-01-02 09:13:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 294.12 Mbit/s

95th percentile per-packet one-way delay: 71.883 ms

Loss rate: 0.03%

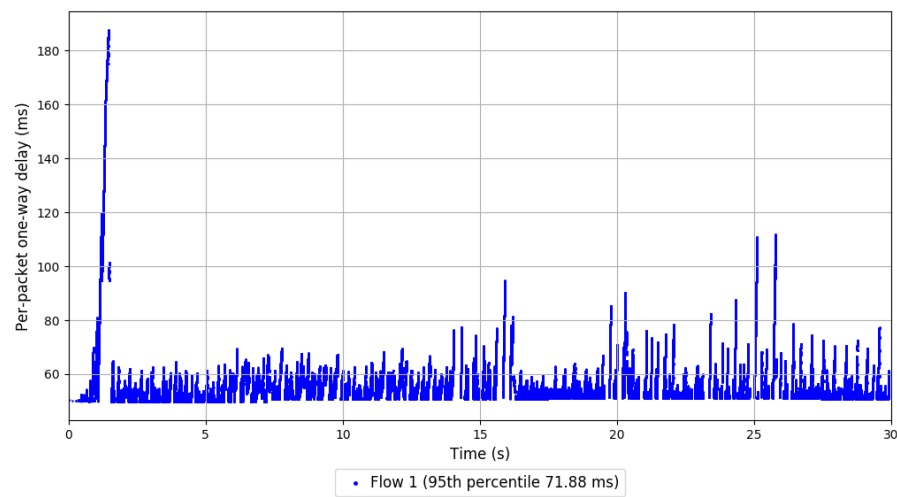
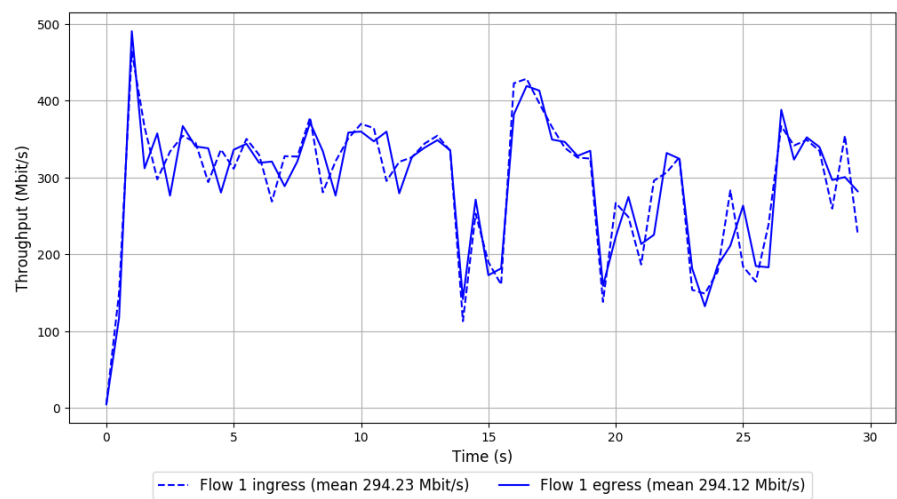
-- Flow 1:

Average throughput: 294.12 Mbit/s

95th percentile per-packet one-way delay: 71.883 ms

Loss rate: 0.03%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-02 06:59:57

End at: 2018-01-02 07:00:27

Below is generated by plot.py at 2018-01-02 09:13:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 269.22 Mbit/s

95th percentile per-packet one-way delay: 80.548 ms

Loss rate: 0.02%

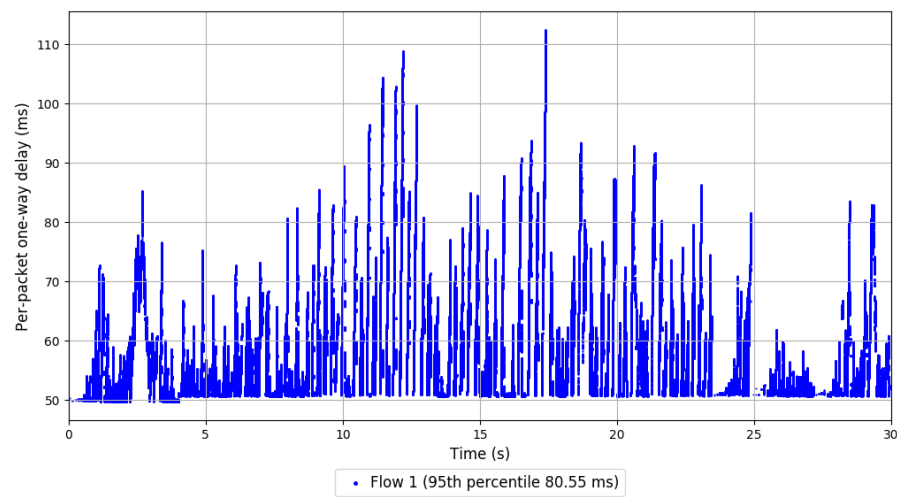
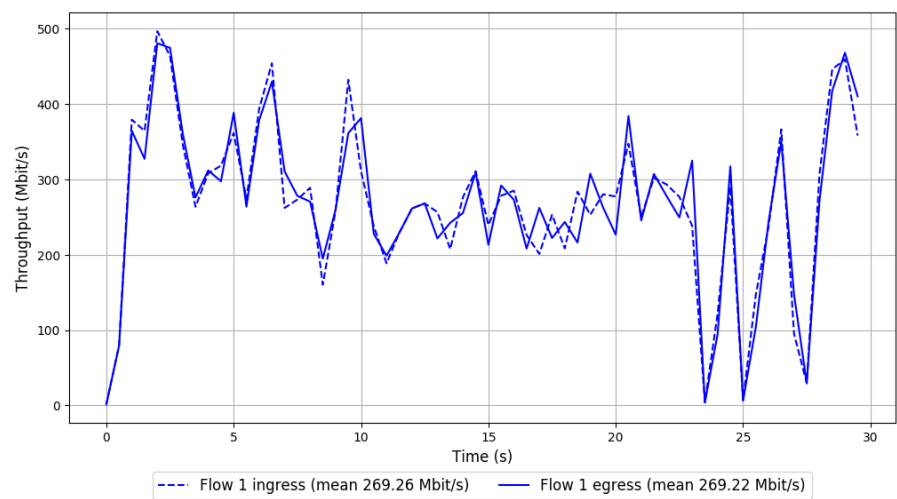
-- Flow 1:

Average throughput: 269.22 Mbit/s

95th percentile per-packet one-way delay: 80.548 ms

Loss rate: 0.02%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-02 07:11:27

End at: 2018-01-02 07:11:57

Below is generated by plot.py at 2018-01-02 09:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 300.69 Mbit/s

95th percentile per-packet one-way delay: 187.569 ms

Loss rate: 0.77%

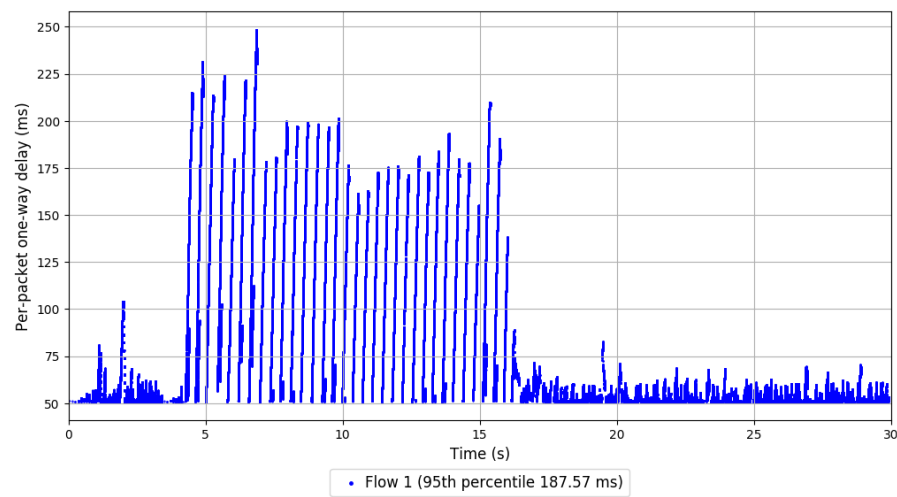
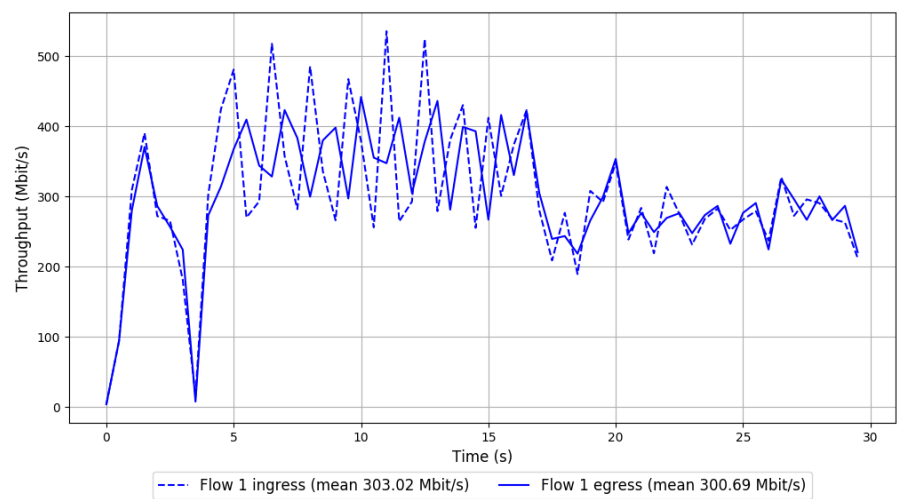
-- Flow 1:

Average throughput: 300.69 Mbit/s

95th percentile per-packet one-way delay: 187.569 ms

Loss rate: 0.77%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-02 07:23:09

End at: 2018-01-02 07:23:39

Below is generated by plot.py at 2018-01-02 09:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 260.88 Mbit/s

95th percentile per-packet one-way delay: 95.980 ms

Loss rate: 0.40%

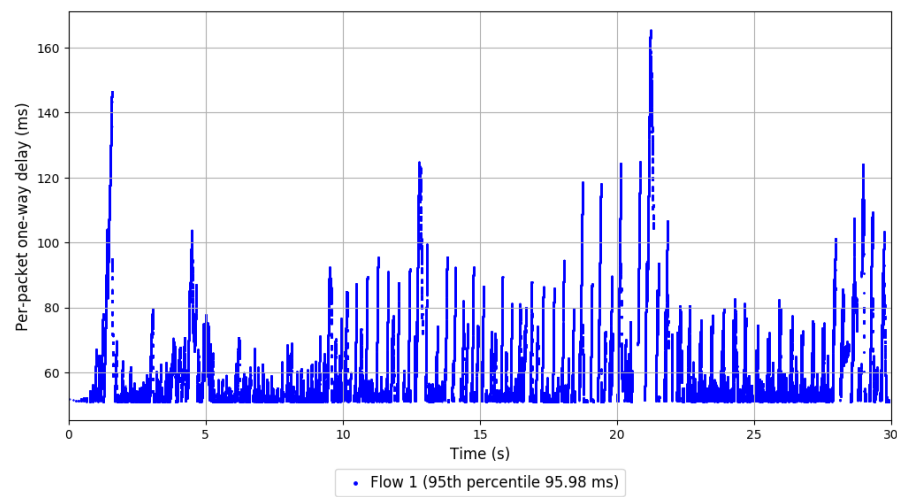
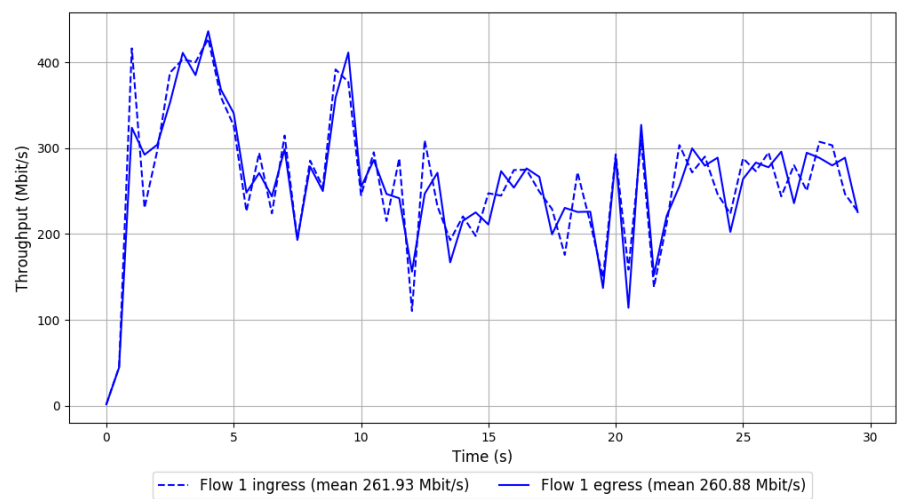
-- Flow 1:

Average throughput: 260.88 Mbit/s

95th percentile per-packet one-way delay: 95.980 ms

Loss rate: 0.40%

Run 10: Report of Verus — Data Link

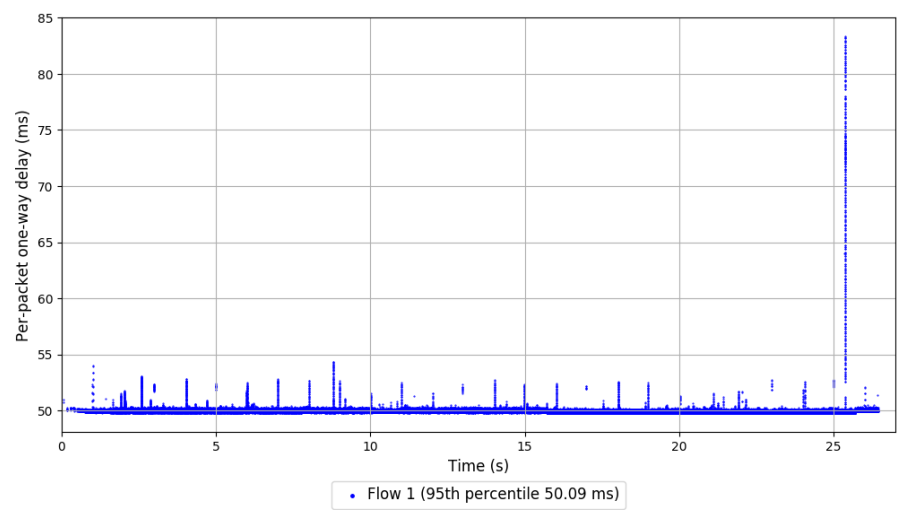
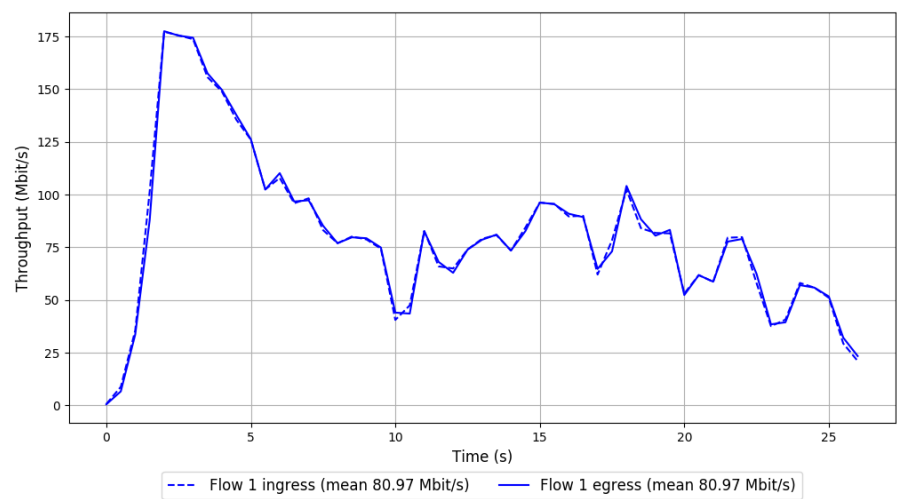


```
Run 1: Statistics of Copa

Start at: 2018-01-02 05:47:02
End at: 2018-01-02 05:47:32

# Below is generated by plot.py at 2018-01-02 09:14:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.97 Mbit/s
95th percentile per-packet one-way delay: 50.088 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 80.97 Mbit/s
95th percentile per-packet one-way delay: 50.088 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-02 05:58:33

End at: 2018-01-02 05:59:03

Below is generated by plot.py at 2018-01-02 09:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.20 Mbit/s

95th percentile per-packet one-way delay: 50.363 ms

Loss rate: 0.00%

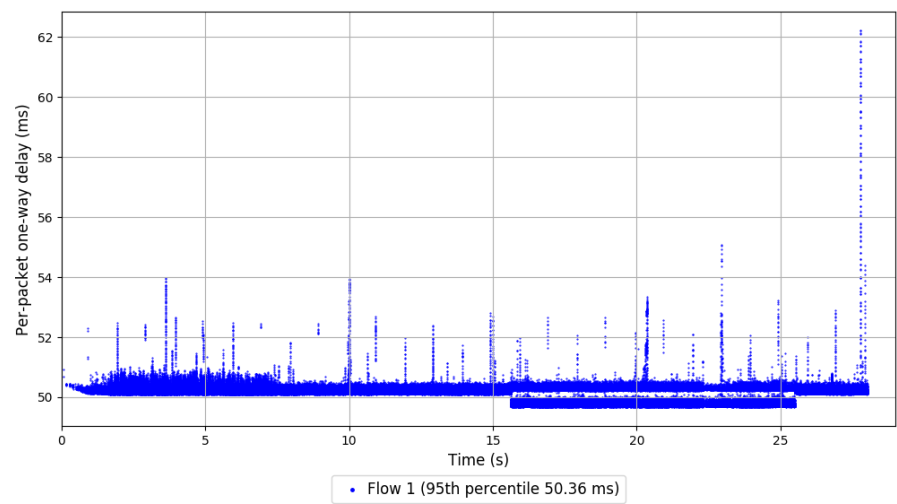
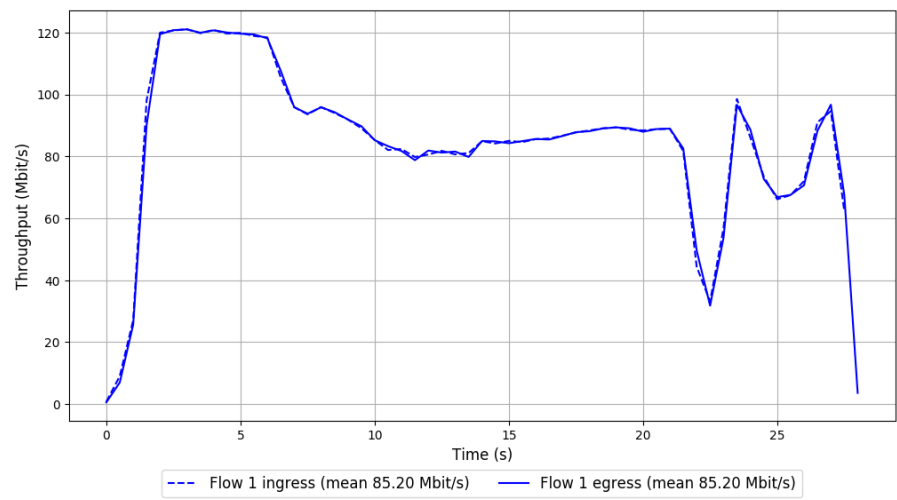
-- Flow 1:

Average throughput: 85.20 Mbit/s

95th percentile per-packet one-way delay: 50.363 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-02 06:10:11

End at: 2018-01-02 06:10:41

Below is generated by plot.py at 2018-01-02 09:14:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.57 Mbit/s

95th percentile per-packet one-way delay: 50.554 ms

Loss rate: 0.04%

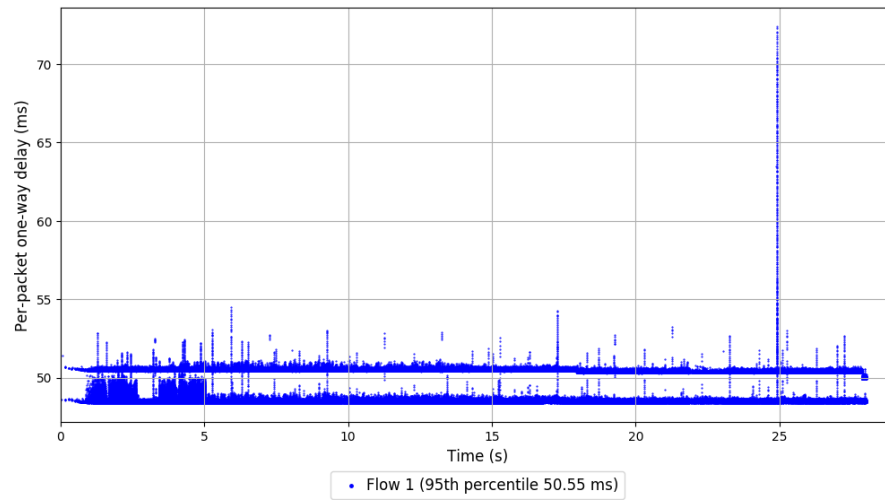
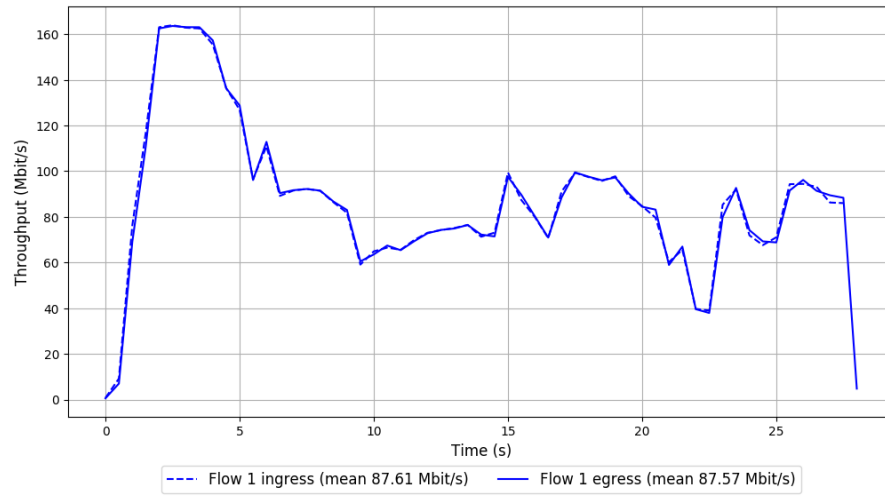
-- Flow 1:

Average throughput: 87.57 Mbit/s

95th percentile per-packet one-way delay: 50.554 ms

Loss rate: 0.04%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-02 06:21:52

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

Below is generated by plot.py at 2018-01-02 09:14:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.05 Mbit/s

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

Loss rate: 0.00%

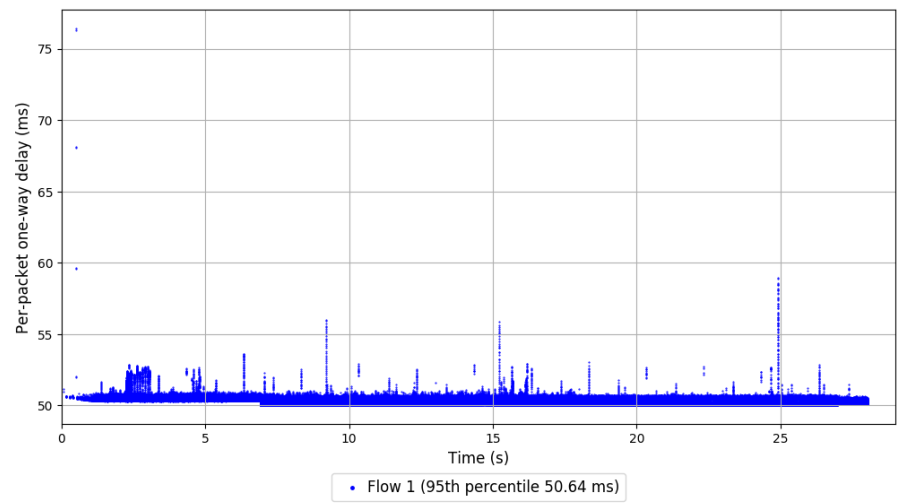
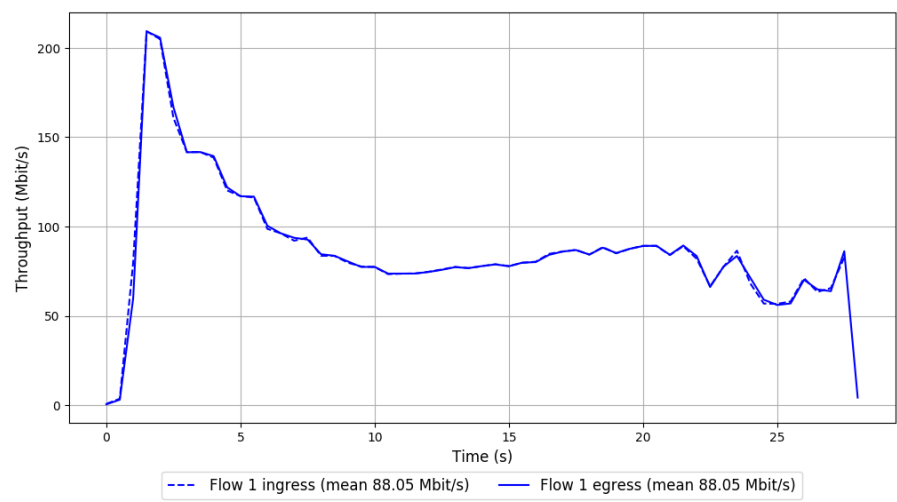
-- Flow 1:

Average throughput: 88.05 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-02 06:33:26

End at: 2018-01-02 06:33:56

Below is generated by plot.py at 2018-01-02 09:14:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.00 Mbit/s

95th percentile per-packet one-way delay: 50.659 ms

Loss rate: 0.00%

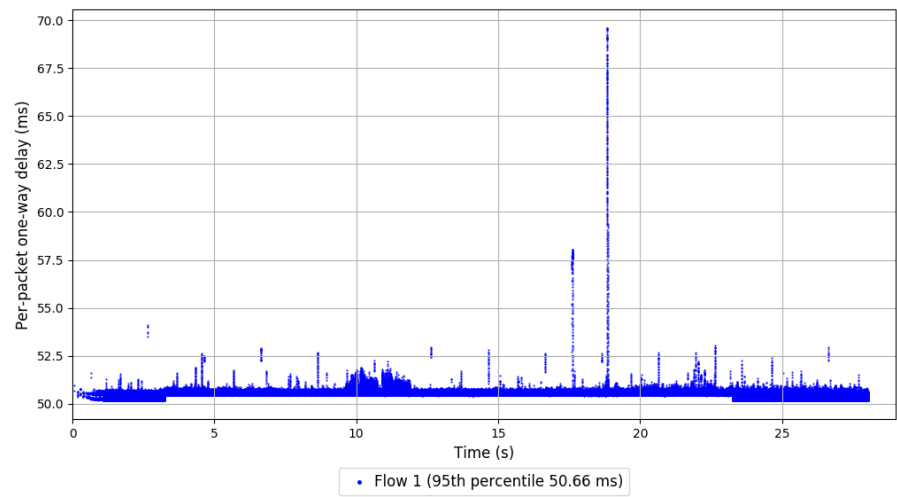
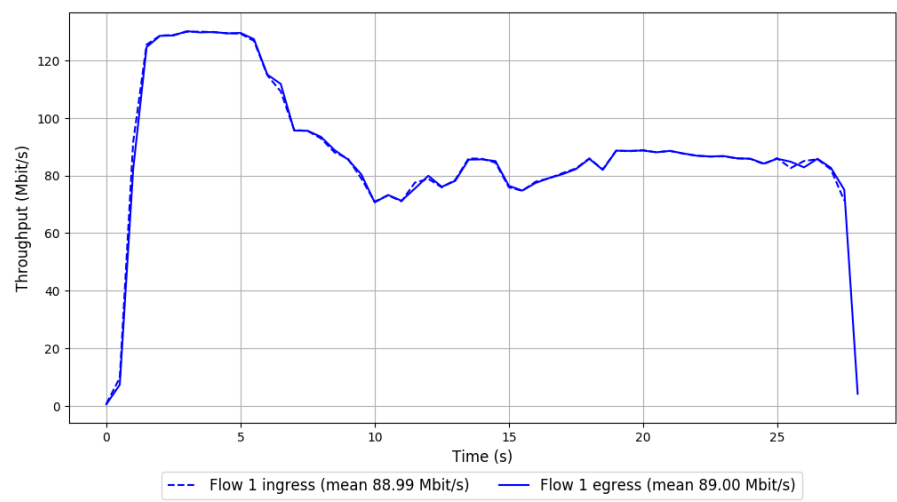
-- Flow 1:

Average throughput: 89.00 Mbit/s

95th percentile per-packet one-way delay: 50.659 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-02 06:45:03

End at: 2018-01-02 06:45:33

Below is generated by plot.py at 2018-01-02 09:14:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.89 Mbit/s

95th percentile per-packet one-way delay: 50.888 ms

Loss rate: 0.00%

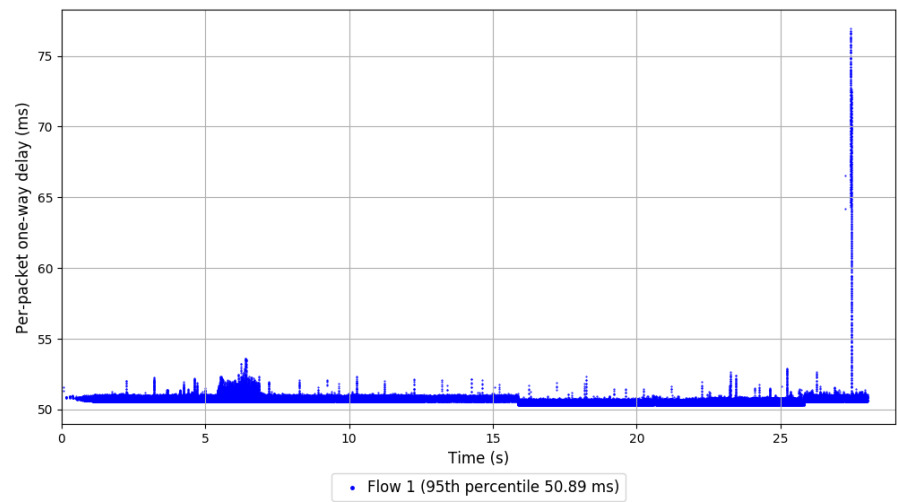
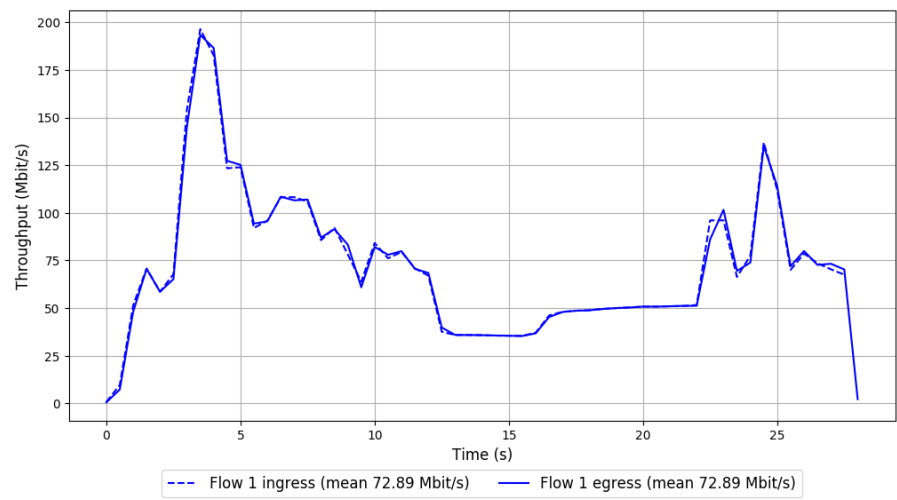
-- Flow 1:

Average throughput: 72.89 Mbit/s

95th percentile per-packet one-way delay: 50.888 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-02 06:56:47

End at: 2018-01-02 06:57:17

Below is generated by plot.py at 2018-01-02 09:14:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.32 Mbit/s

95th percentile per-packet one-way delay: 51.116 ms

Loss rate: 0.00%

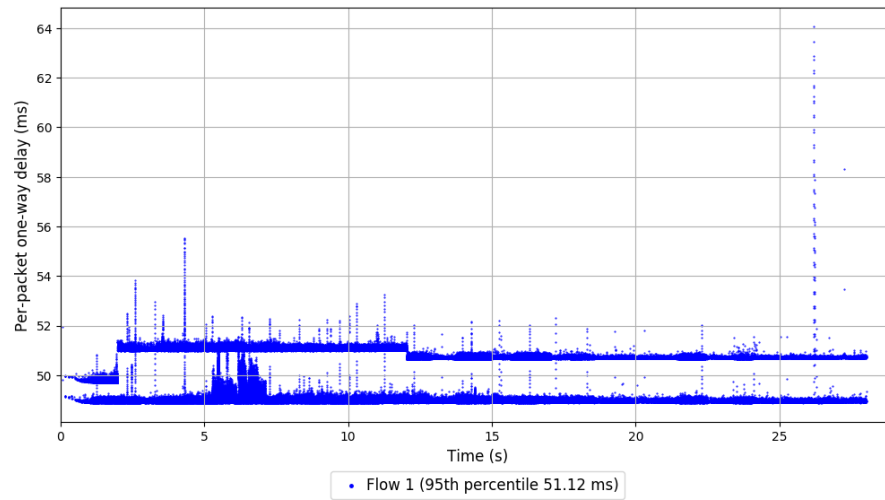
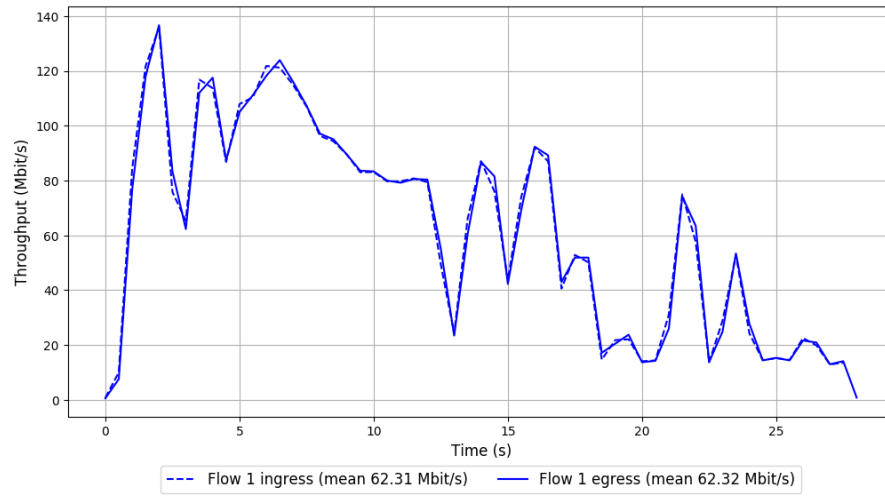
-- Flow 1:

Average throughput: 62.32 Mbit/s

95th percentile per-packet one-way delay: 51.116 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-02 07:08:15

End at: 2018-01-02 07:08:45

Below is generated by plot.py at 2018-01-02 09:15:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.62 Mbit/s

95th percentile per-packet one-way delay: 51.237 ms

Loss rate: 0.00%

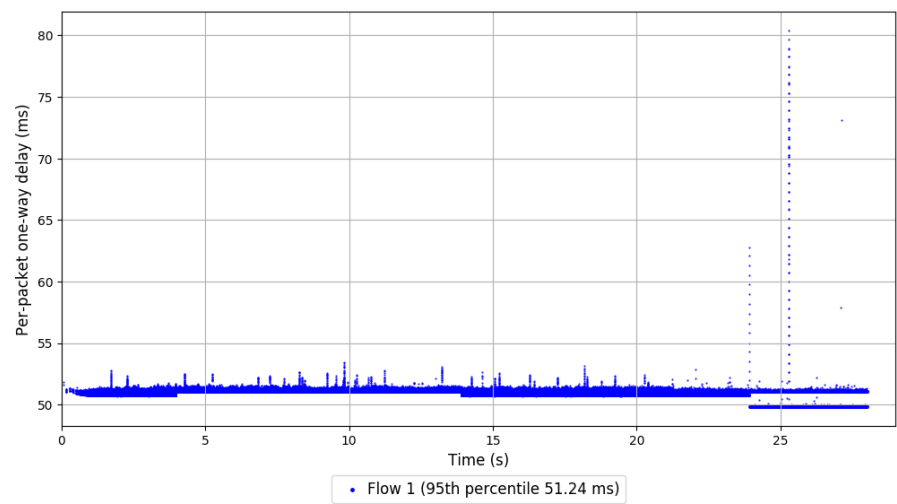
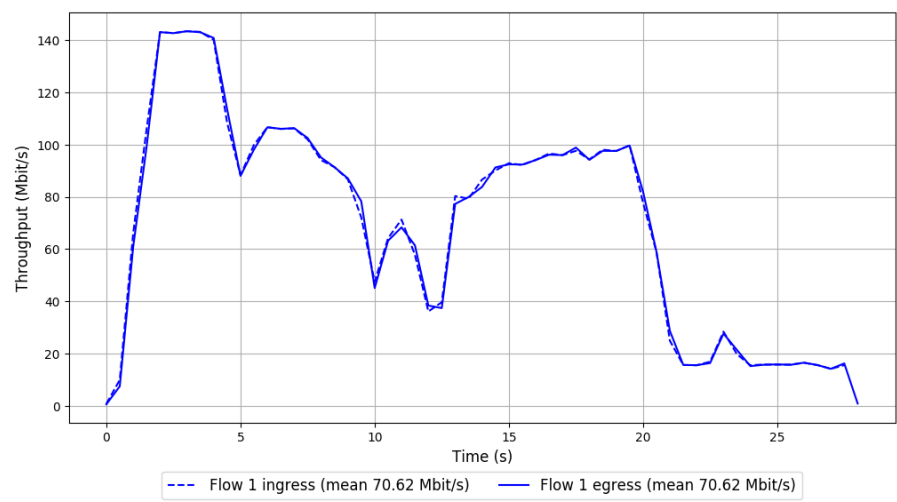
-- Flow 1:

Average throughput: 70.62 Mbit/s

95th percentile per-packet one-way delay: 51.237 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-02 07:19:56

End at: 2018-01-02 07:20:26

Below is generated by plot.py at 2018-01-02 09:15:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.84 Mbit/s

95th percentile per-packet one-way delay: 51.236 ms

Loss rate: 0.26%

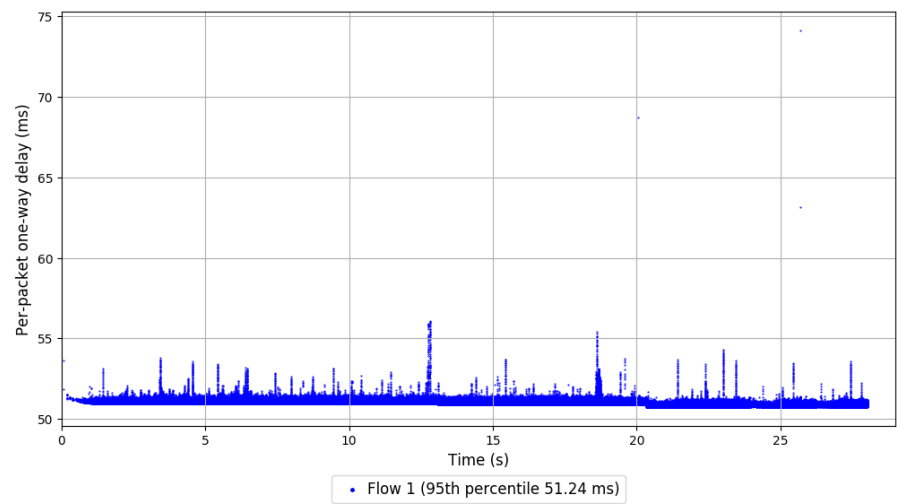
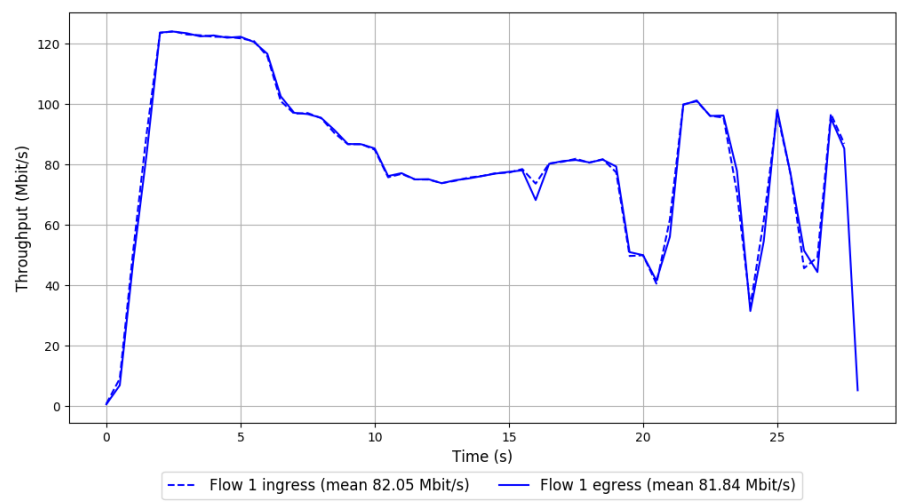
-- Flow 1:

Average throughput: 81.84 Mbit/s

95th percentile per-packet one-way delay: 51.236 ms

Loss rate: 0.26%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

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

End at: 2018-01-02 07:31:54

Below is generated by plot.py at 2018-01-02 09:15:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.24 Mbit/s

95th percentile per-packet one-way delay: 54.300 ms

Loss rate: 0.10%

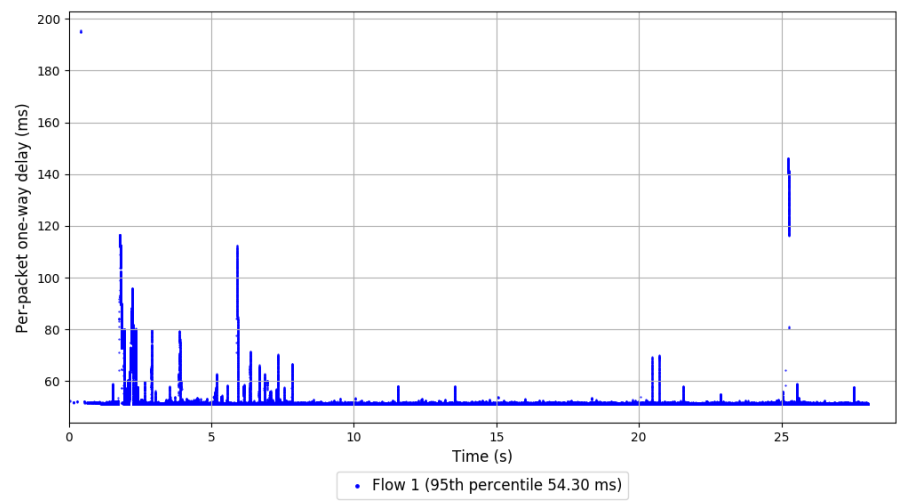
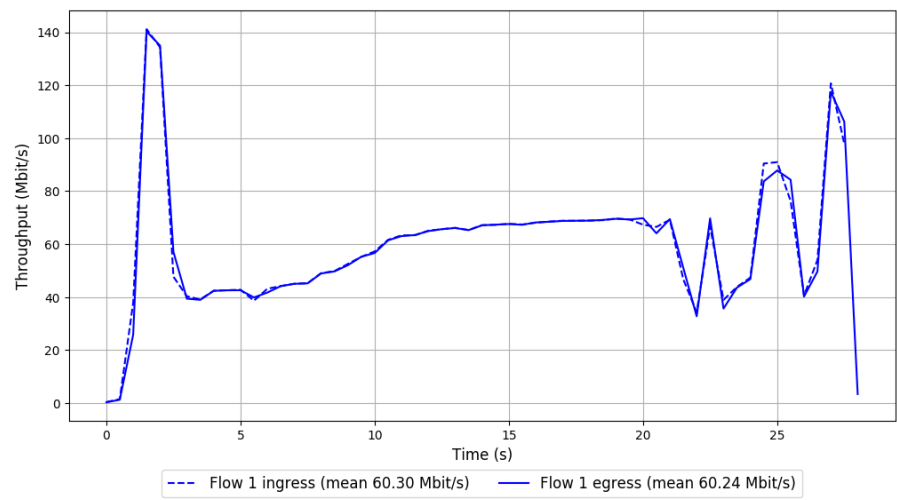
-- Flow 1:

Average throughput: 60.24 Mbit/s

95th percentile per-packet one-way delay: 54.300 ms

Loss rate: 0.10%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-01-02 05:36:41

End at: 2018-01-02 05:37:11

Below is generated by plot.py at 2018-01-02 09:29:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 707.91 Mbit/s

95th percentile per-packet one-way delay: 279.200 ms

Loss rate: 12.99%

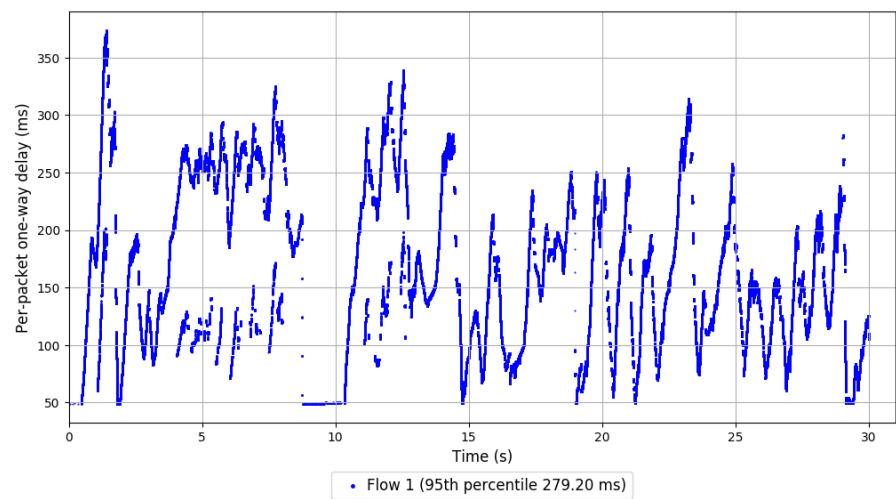
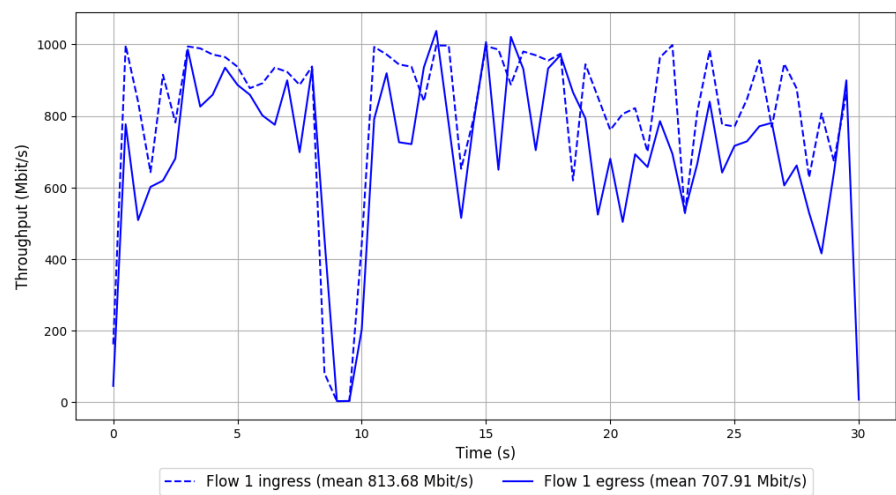
-- Flow 1:

Average throughput: 707.91 Mbit/s

95th percentile per-packet one-way delay: 279.200 ms

Loss rate: 12.99%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-02 05:48:23

End at: 2018-01-02 05:48:53

Below is generated by plot.py at 2018-01-02 09:30:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 811.09 Mbit/s

95th percentile per-packet one-way delay: 218.194 ms

Loss rate: 0.32%

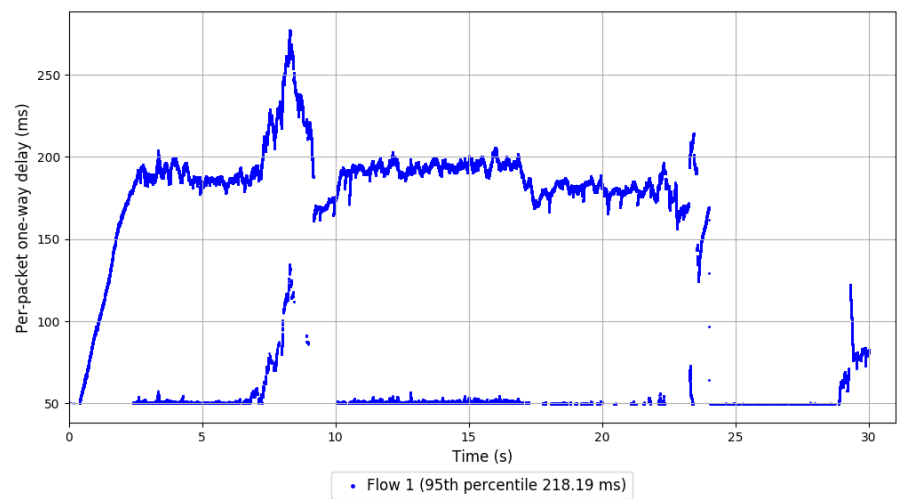
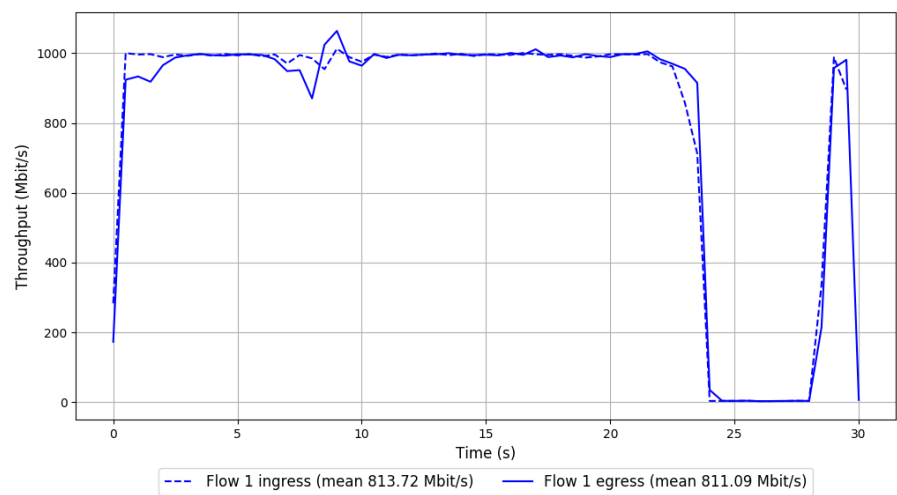
-- Flow 1:

Average throughput: 811.09 Mbit/s

95th percentile per-packet one-way delay: 218.194 ms

Loss rate: 0.32%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-02 05:59:55

End at: 2018-01-02 06:00:25

Below is generated by plot.py at 2018-01-02 09:31:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 958.74 Mbit/s

95th percentile per-packet one-way delay: 252.935 ms

Loss rate: 0.83%

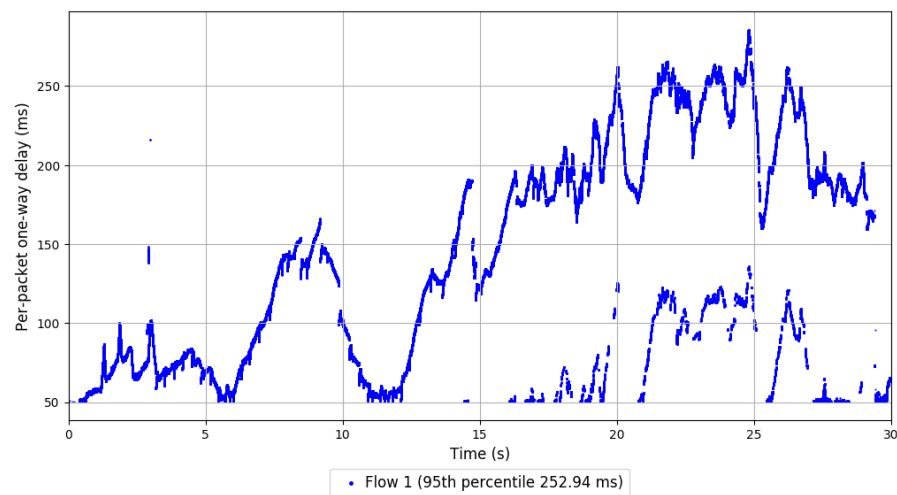
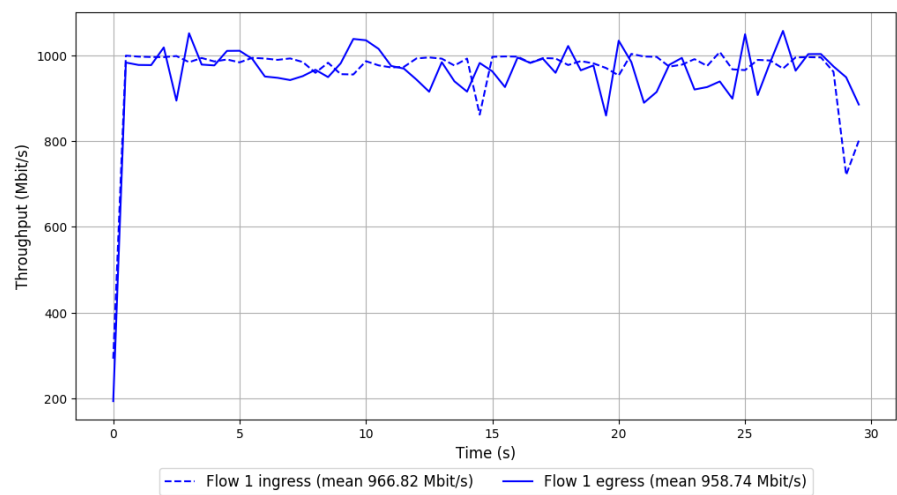
-- Flow 1:

Average throughput: 958.74 Mbit/s

95th percentile per-packet one-way delay: 252.935 ms

Loss rate: 0.83%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-02 06:11:33

End at: 2018-01-02 06:12:03

Below is generated by plot.py at 2018-01-02 09:31:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 931.65 Mbit/s

95th percentile per-packet one-way delay: 253.618 ms

Loss rate: 0.65%

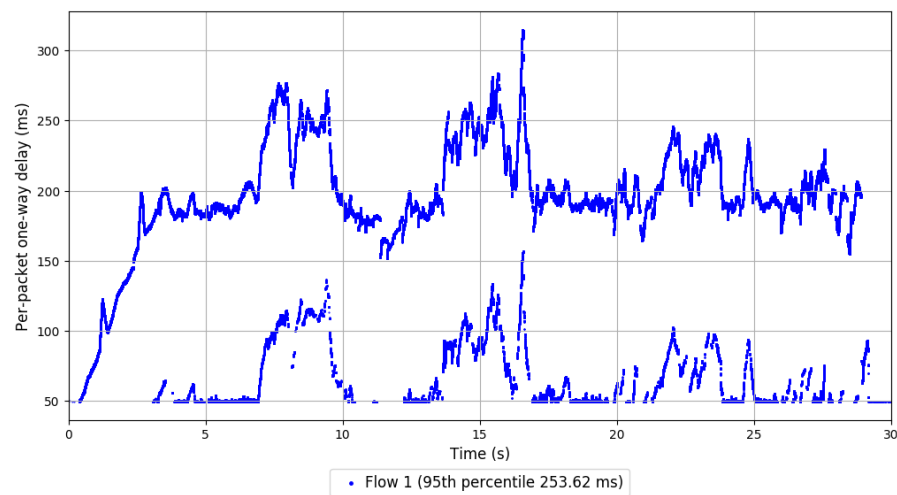
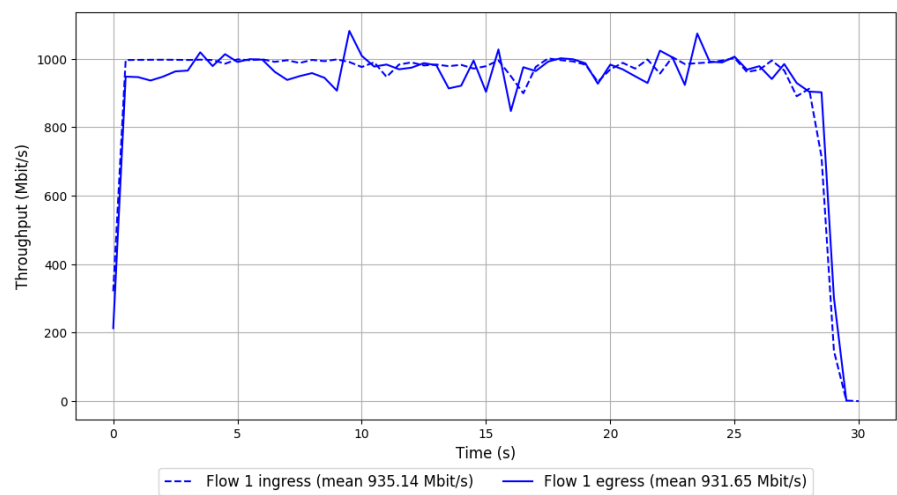
-- Flow 1:

Average throughput: 931.65 Mbit/s

95th percentile per-packet one-way delay: 253.618 ms

Loss rate: 0.65%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-02 06:23:14

End at: 2018-01-02 06:23:44

Below is generated by plot.py at 2018-01-02 09:32:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 971.86 Mbit/s

95th percentile per-packet one-way delay: 237.609 ms

Loss rate: 0.97%

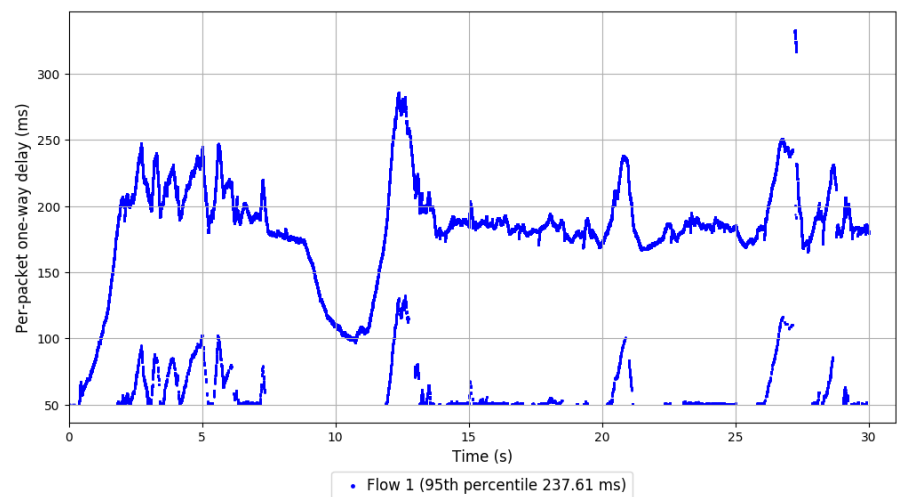
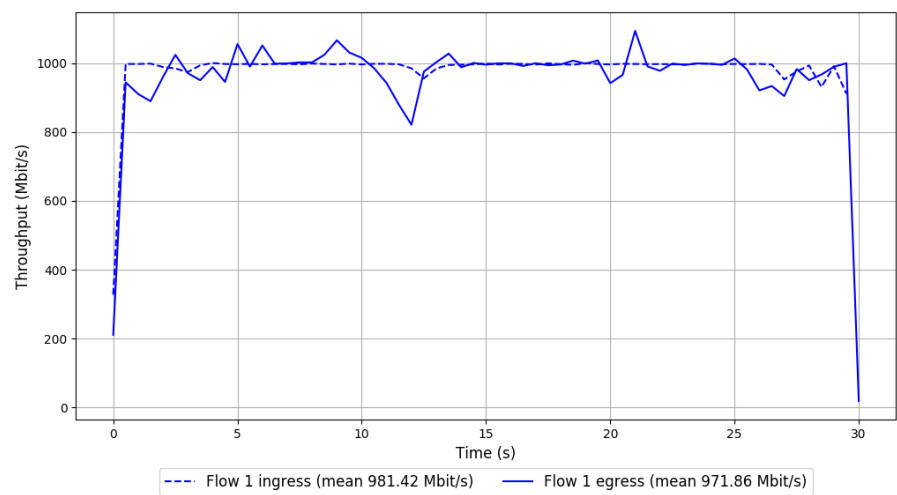
-- Flow 1:

Average throughput: 971.86 Mbit/s

95th percentile per-packet one-way delay: 237.609 ms

Loss rate: 0.97%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-02 06:34:48

End at: 2018-01-02 06:35:18

Below is generated by plot.py at 2018-01-02 09:32:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 960.48 Mbit/s

95th percentile per-packet one-way delay: 260.862 ms

Loss rate: 1.02%

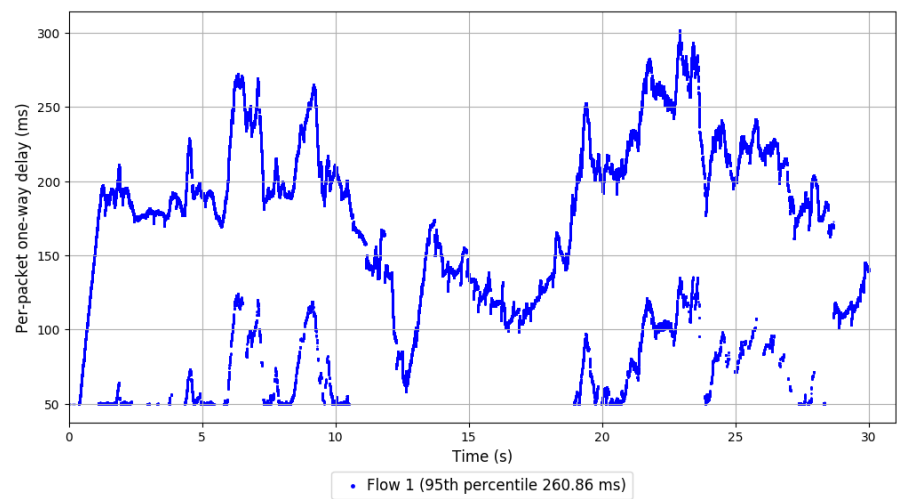
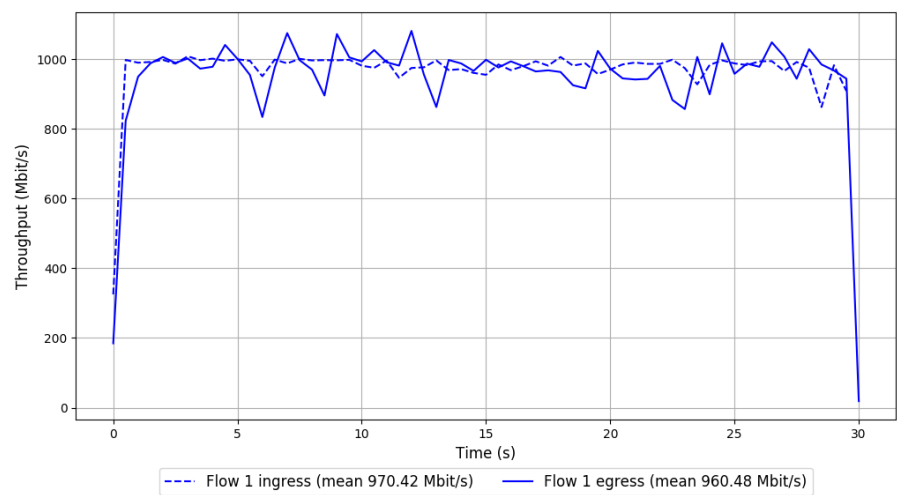
-- Flow 1:

Average throughput: 960.48 Mbit/s

95th percentile per-packet one-way delay: 260.862 ms

Loss rate: 1.02%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-02 06:46:24

End at: 2018-01-02 06:46:55

Below is generated by plot.py at 2018-01-02 09:32:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 884.57 Mbit/s

95th percentile per-packet one-way delay: 195.923 ms

Loss rate: 0.12%

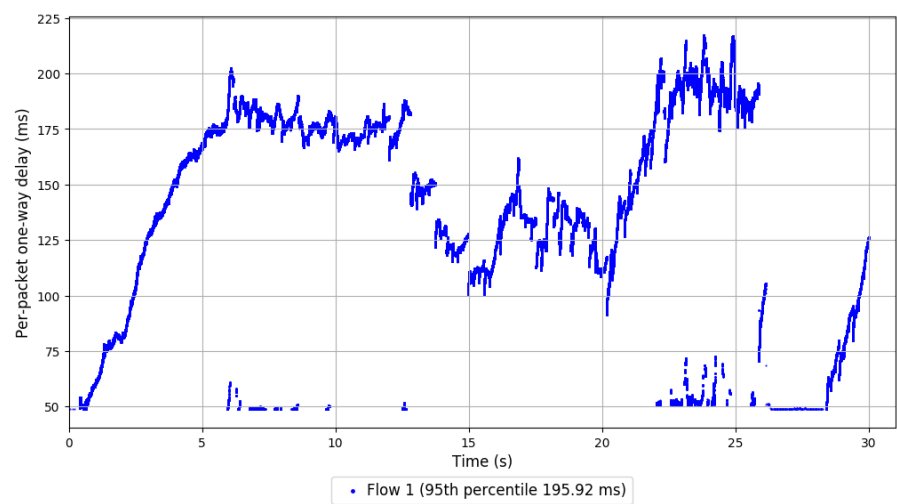
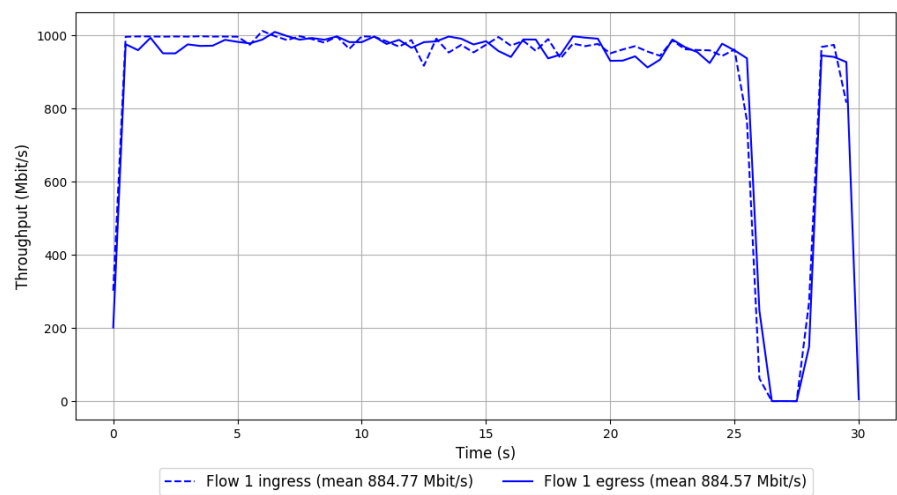
-- Flow 1:

Average throughput: 884.57 Mbit/s

95th percentile per-packet one-way delay: 195.923 ms

Loss rate: 0.12%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-02 06:58:07

End at: 2018-01-02 06:58:37

Below is generated by plot.py at 2018-01-02 09:32:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 950.88 Mbit/s

95th percentile per-packet one-way delay: 195.925 ms

Loss rate: 0.92%

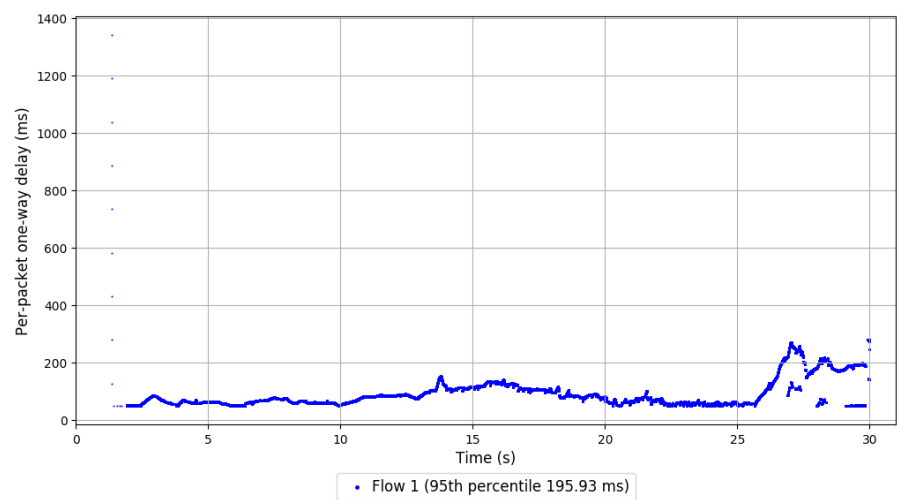
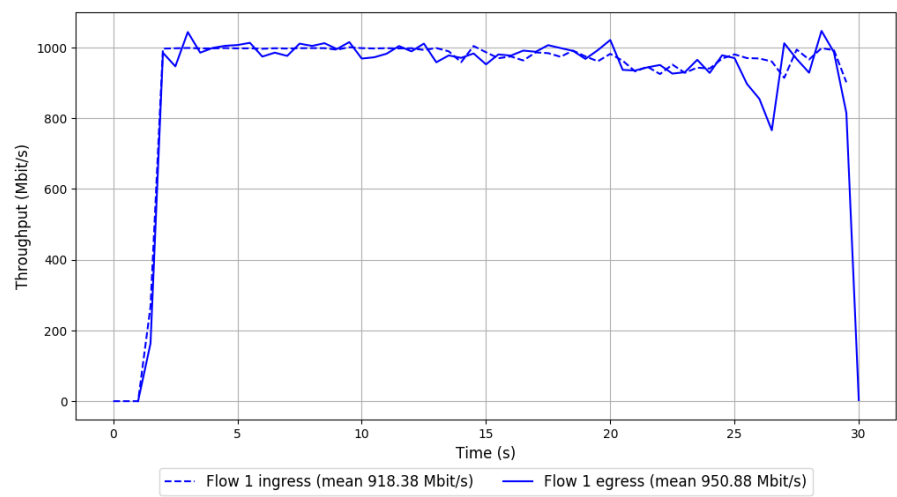
-- Flow 1:

Average throughput: 950.88 Mbit/s

95th percentile per-packet one-way delay: 195.925 ms

Loss rate: 0.92%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-02 07:09:36

End at: 2018-01-02 07:10:06

Below is generated by plot.py at 2018-01-02 09:38:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 954.88 Mbit/s

95th percentile per-packet one-way delay: 250.053 ms

Loss rate: 1.54%

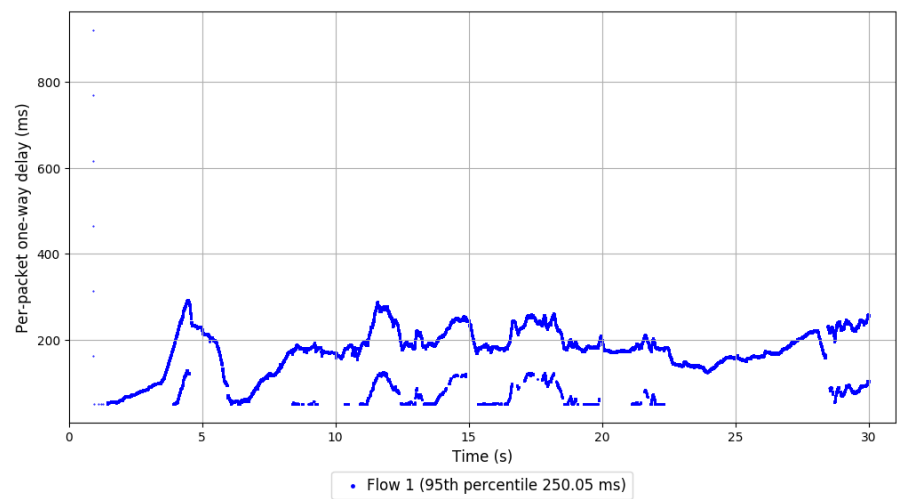
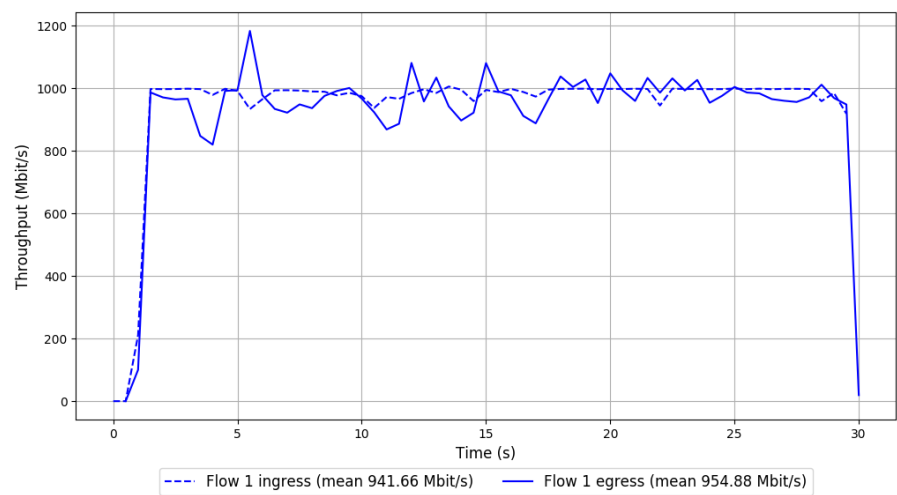
-- Flow 1:

Average throughput: 954.88 Mbit/s

95th percentile per-packet one-way delay: 250.053 ms

Loss rate: 1.54%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-02 07:21:18

End at: 2018-01-02 07:21:48

Below is generated by plot.py at 2018-01-02 09:38:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 941.56 Mbit/s

95th percentile per-packet one-way delay: 255.976 ms

Loss rate: 2.32%

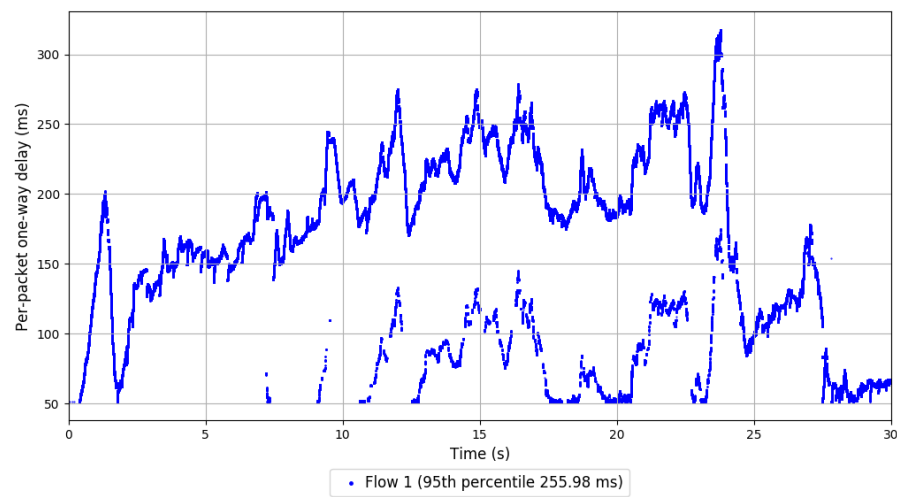
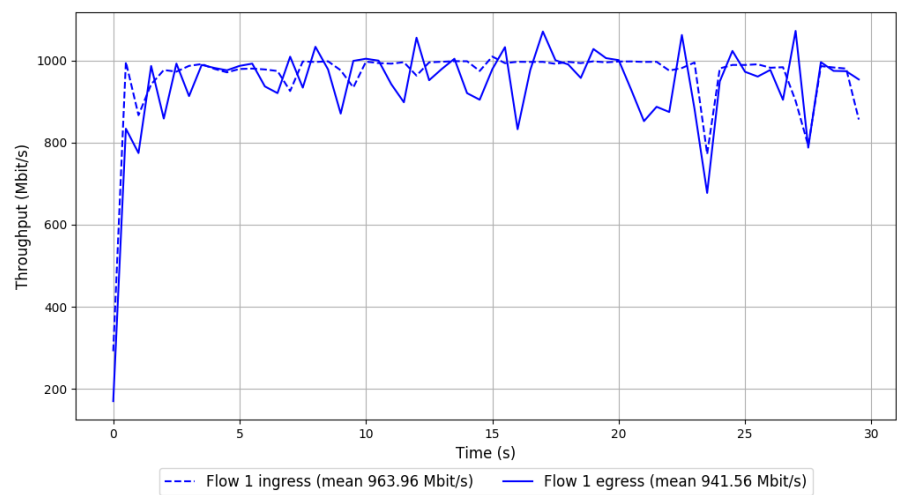
-- Flow 1:

Average throughput: 941.56 Mbit/s

95th percentile per-packet one-way delay: 255.976 ms

Loss rate: 2.32%

Run 10: Report of FillP — Data Link

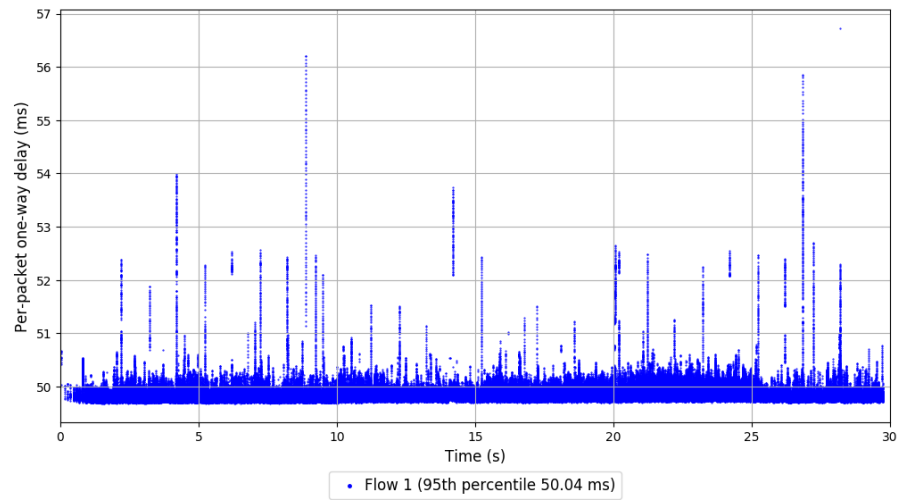
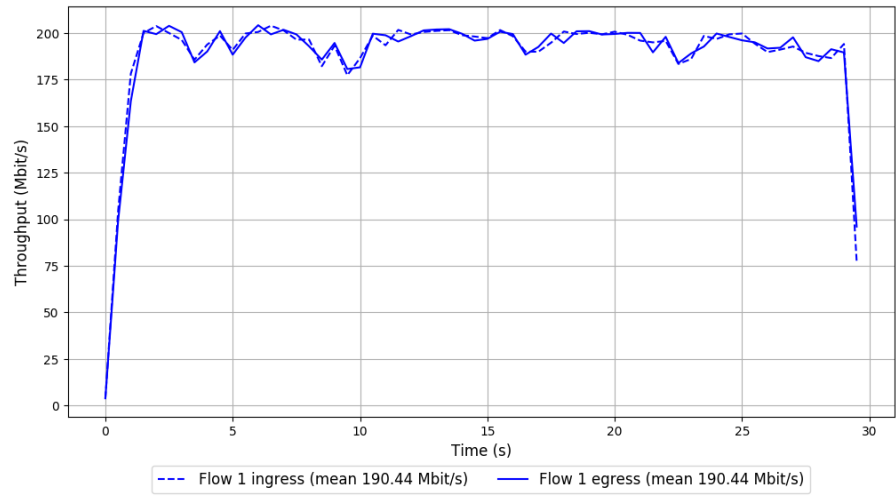


```
Run 1: Statistics of Indigo

Start at: 2018-01-02 05:45:16
End at: 2018-01-02 05:45:46

# Below is generated by plot.py at 2018-01-02 09:38:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.44 Mbit/s
95th percentile per-packet one-way delay: 50.037 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 190.44 Mbit/s
95th percentile per-packet one-way delay: 50.037 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

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

End at: 2018-01-02 05:57:19

Below is generated by plot.py at 2018-01-02 09:38:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 197.48 Mbit/s

95th percentile per-packet one-way delay: 50.374 ms

Loss rate: 0.00%

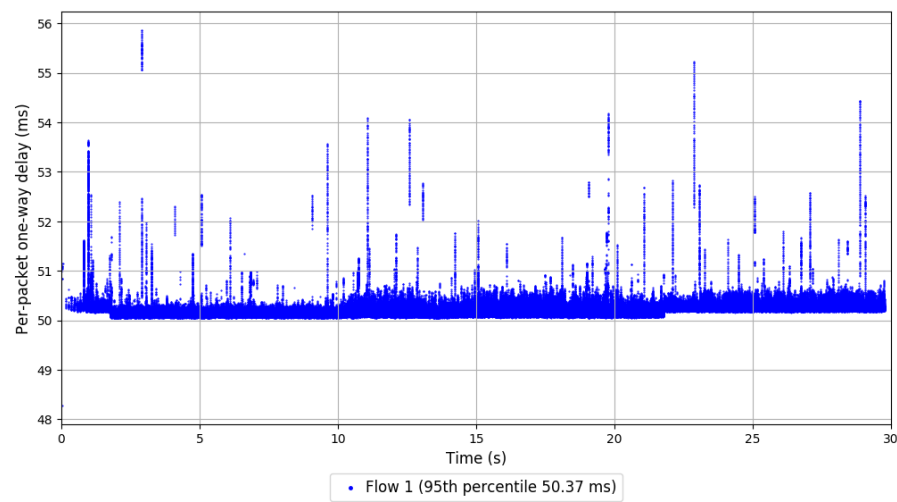
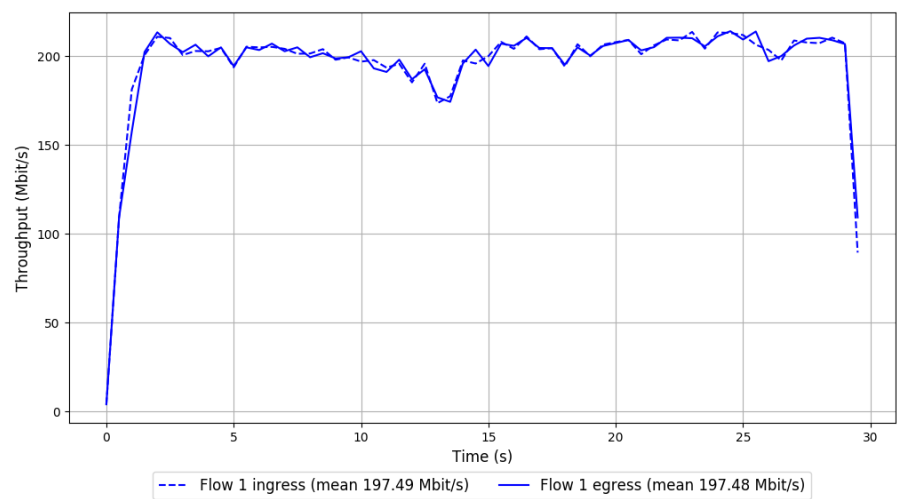
-- Flow 1:

Average throughput: 197.48 Mbit/s

95th percentile per-packet one-way delay: 50.374 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-02 06:08:24

End at: 2018-01-02 06:08:55

Below is generated by plot.py at 2018-01-02 09:38:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 195.35 Mbit/s

95th percentile per-packet one-way delay: 50.641 ms

Loss rate: 0.00%

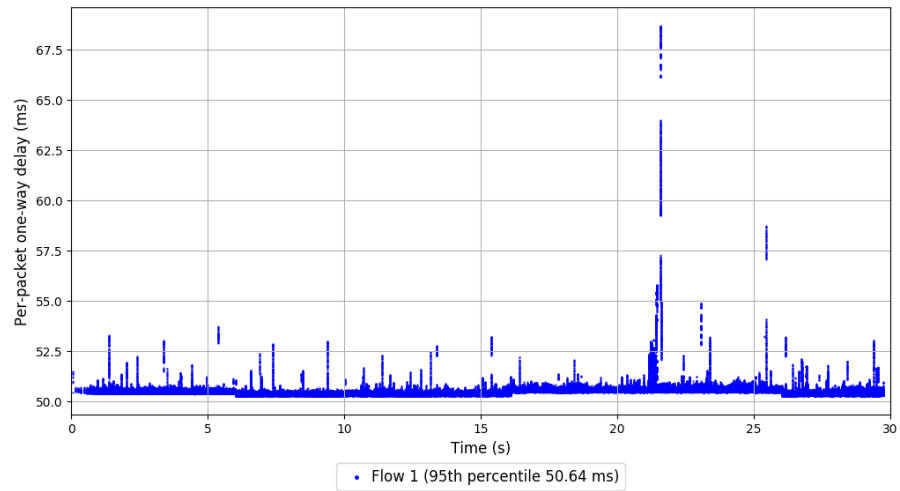
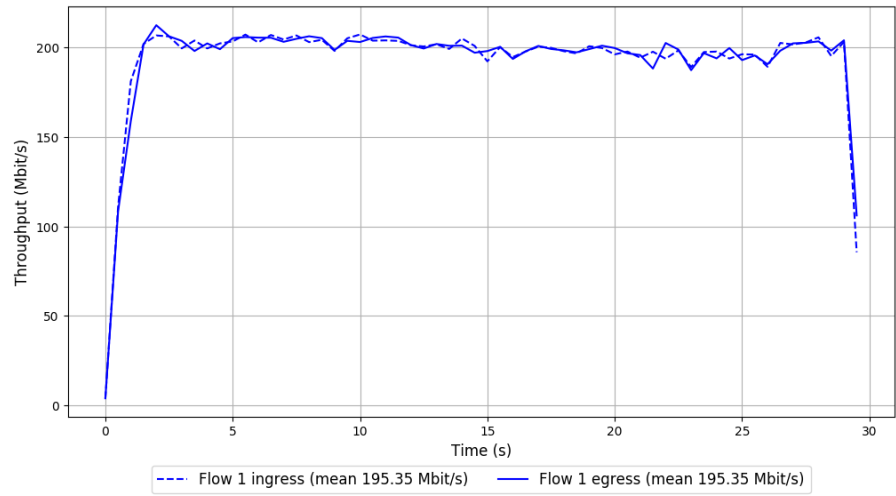
-- Flow 1:

Average throughput: 195.35 Mbit/s

95th percentile per-packet one-way delay: 50.641 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-02 06:20:08

End at: 2018-01-02 06:20:38

Below is generated by plot.py at 2018-01-02 09:38:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.68 Mbit/s

95th percentile per-packet one-way delay: 50.483 ms

Loss rate: 0.09%

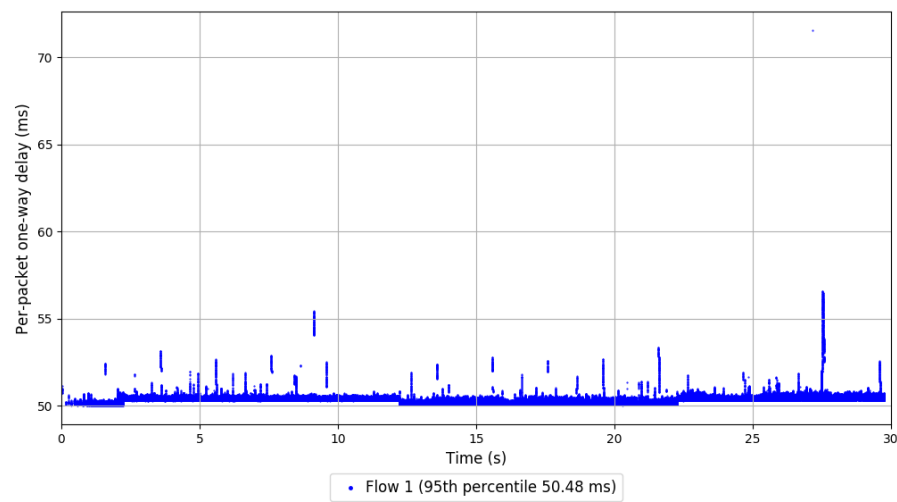
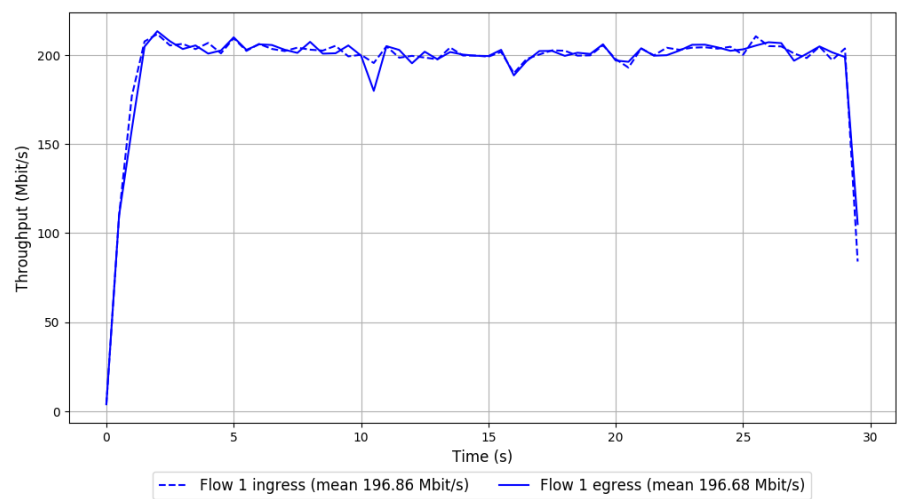
-- Flow 1:

Average throughput: 196.68 Mbit/s

95th percentile per-packet one-way delay: 50.483 ms

Loss rate: 0.09%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-02 06:31:40

End at: 2018-01-02 06:32:10

Below is generated by plot.py at 2018-01-02 09:38:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.78 Mbit/s

95th percentile per-packet one-way delay: 51.788 ms

Loss rate: 0.00%

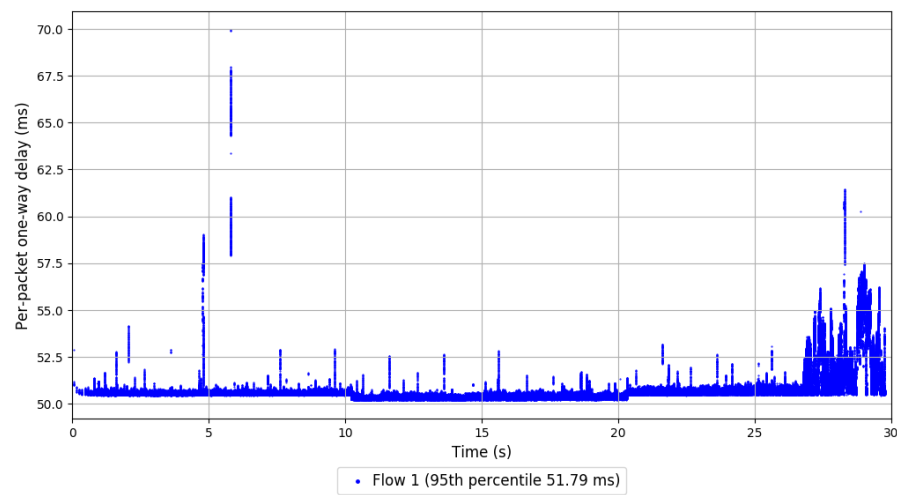
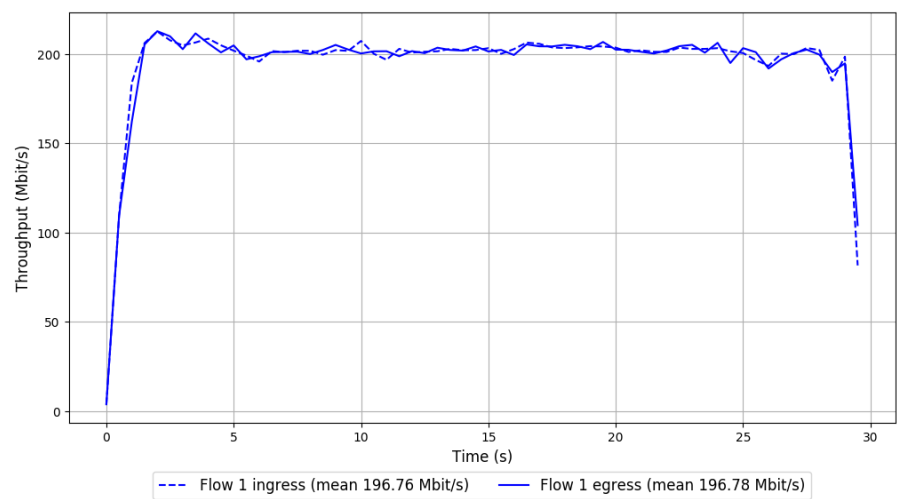
-- Flow 1:

Average throughput: 196.78 Mbit/s

95th percentile per-packet one-way delay: 51.788 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-02 06:43:17

End at: 2018-01-02 06:43:48

Below is generated by plot.py at 2018-01-02 09:38:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 201.13 Mbit/s

95th percentile per-packet one-way delay: 50.724 ms

Loss rate: 0.00%

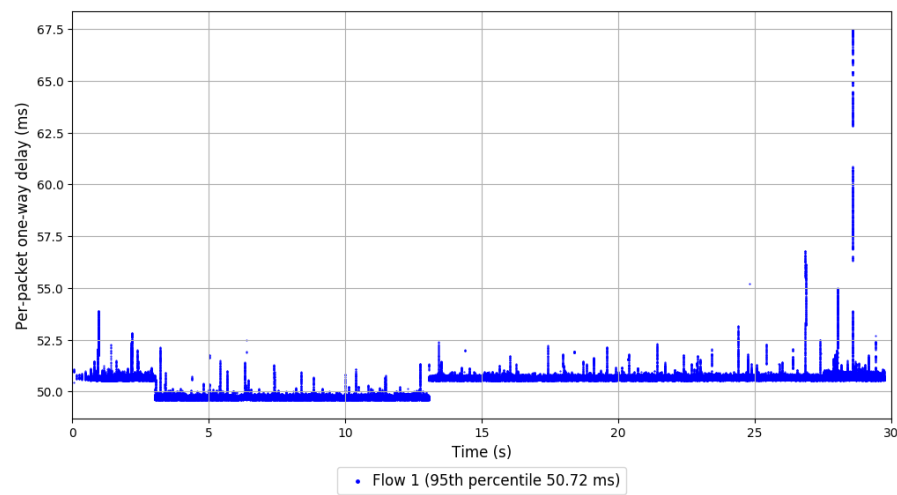
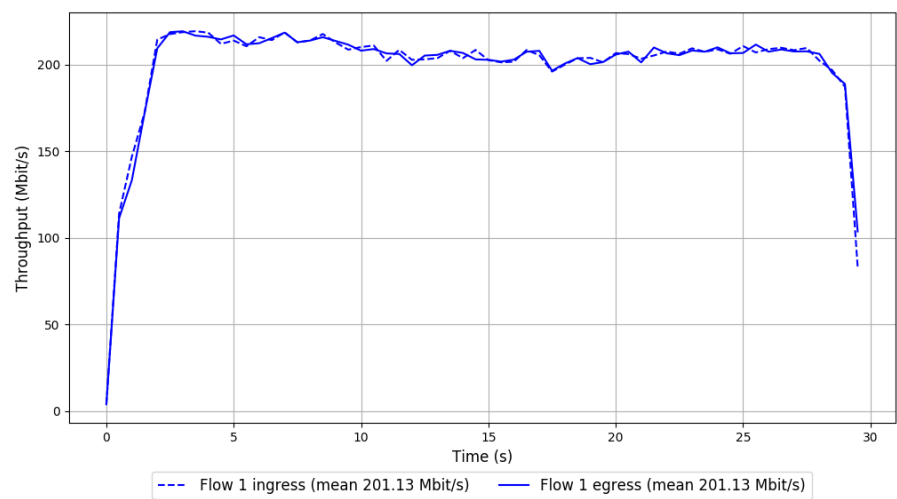
-- Flow 1:

Average throughput: 201.13 Mbit/s

95th percentile per-packet one-way delay: 50.724 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

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

End at: 2018-01-02 06:55:32

Below is generated by plot.py at 2018-01-02 09:38:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.43 Mbit/s

95th percentile per-packet one-way delay: 51.115 ms

Loss rate: 0.00%

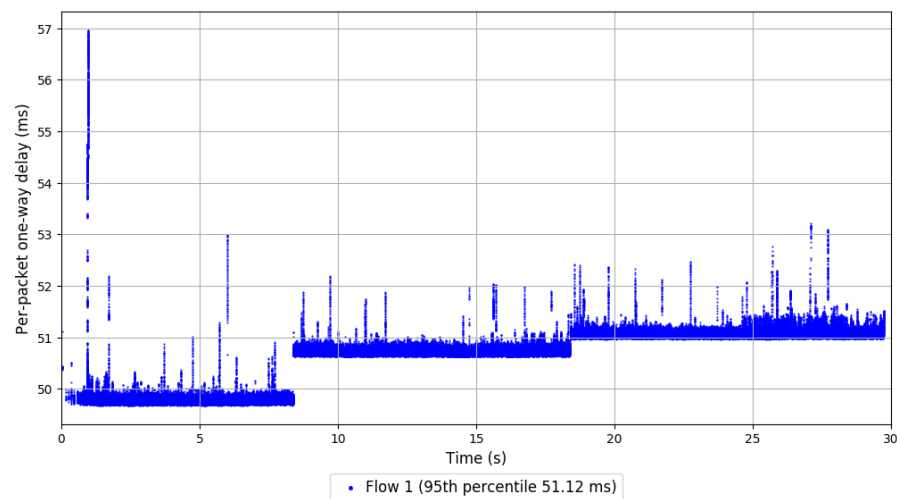
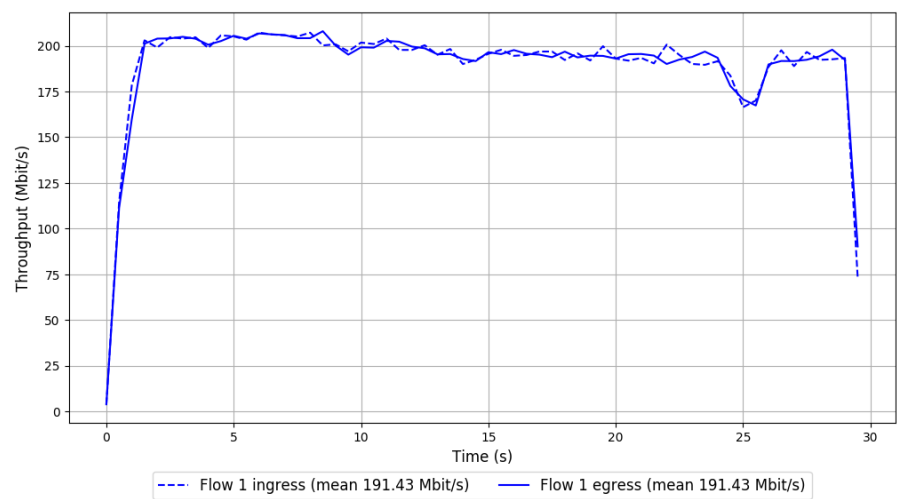
-- Flow 1:

Average throughput: 191.43 Mbit/s

95th percentile per-packet one-way delay: 51.115 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-02 07:06:31

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

Below is generated by plot.py at 2018-01-02 09:38:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 188.86 Mbit/s

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

Loss rate: 0.00%

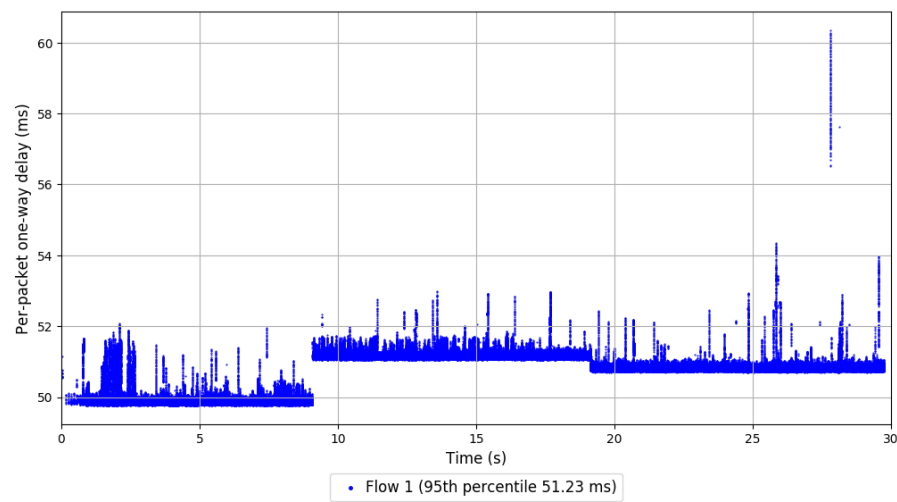
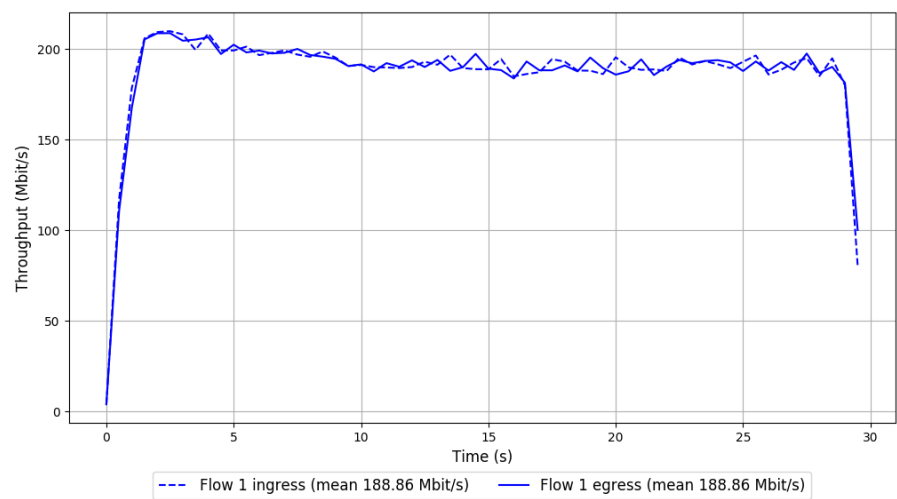
-- Flow 1:

Average throughput: 188.86 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-02 07:18:12

End at: 2018-01-02 07:18:42

Below is generated by plot.py at 2018-01-02 09:38:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.57 Mbit/s

95th percentile per-packet one-way delay: 51.148 ms

Loss rate: 0.02%

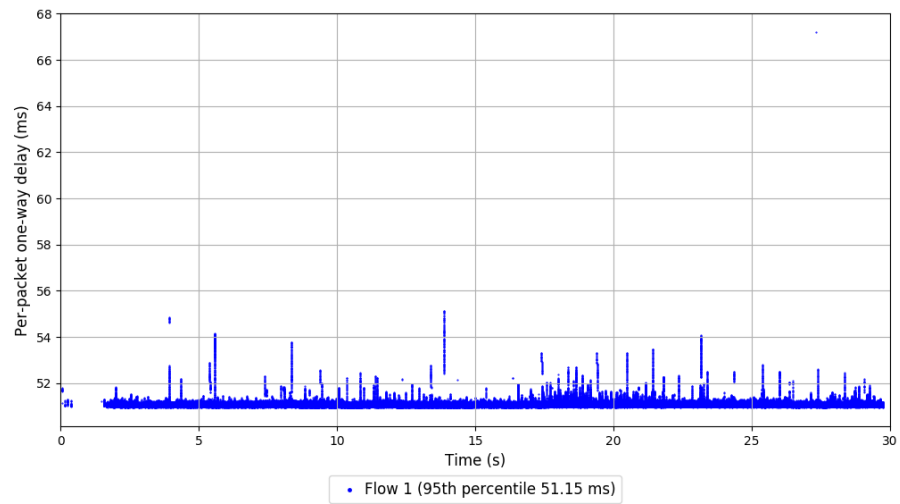
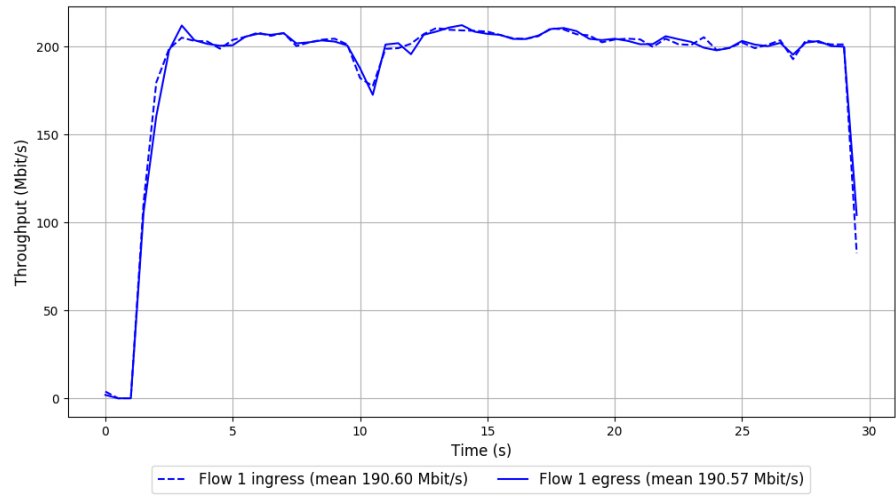
-- Flow 1:

Average throughput: 190.57 Mbit/s

95th percentile per-packet one-way delay: 51.148 ms

Loss rate: 0.02%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-02 07:29:46

End at: 2018-01-02 07:30:16

Below is generated by plot.py at 2018-01-02 09:38:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 186.62 Mbit/s

95th percentile per-packet one-way delay: 53.638 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 186.62 Mbit/s

95th percentile per-packet one-way delay: 53.638 ms

Loss rate: 0.10%

Run 10: Report of Indigo — Data Link

