

Pantheon Report

Generated at 2018-02-20 16:58:57 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

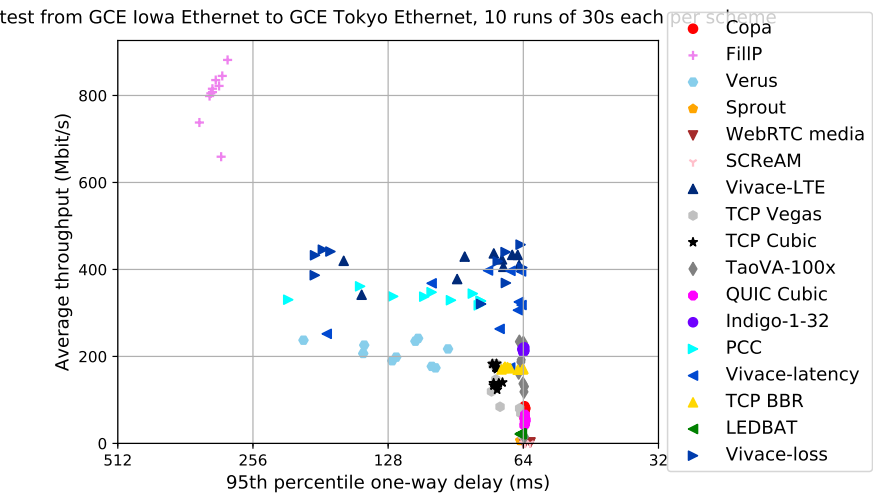
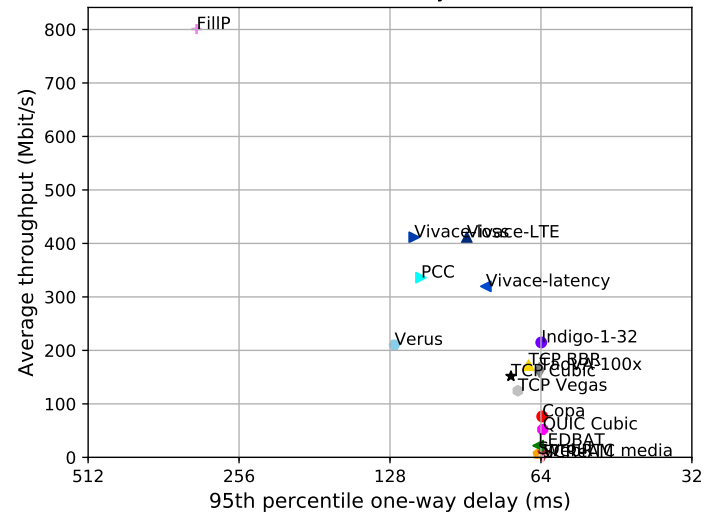
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5ceec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
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 @ f1a14bffe749737437f61b1eaeab30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE Iowa Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme
(mean of all runs by 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	172.44	67.75	0.00
TCP Cubic	10	151.75	73.46	0.02
LEDBAT	10	21.95	64.84	0.01
PCC	10	336.11	111.01	0.15
QUIC Cubic	9	52.19	63.47	0.00
SCReAM	10	0.22	63.45	0.00
WebRTC media	10	2.26	63.32	0.00
Sprout	10	6.49	64.84	0.00
TaoVA-100x	10	163.48	64.40	0.00
TCP Vegas	10	124.51	71.17	0.00
Verus	10	210.32	125.38	0.29
Copa	10	76.52	63.64	0.00
FillP	10	800.80	311.16	9.37
Indigo-1-32	10	214.87	63.91	0.00
Vivace-latency	10	319.73	82.43	0.05
Vivace-loss	10	411.50	114.52	0.70
Vivace-LTE	10	411.25	89.95	0.07

Run 1: Statistics of TCP BBR

Start at: 2018-02-20 11:50:05

End at: 2018-02-20 11:50:35

Below is generated by plot.py at 2018-02-20 15:40:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.50 Mbit/s

95th percentile per-packet one-way delay: 63.979 ms

Loss rate: 0.01%

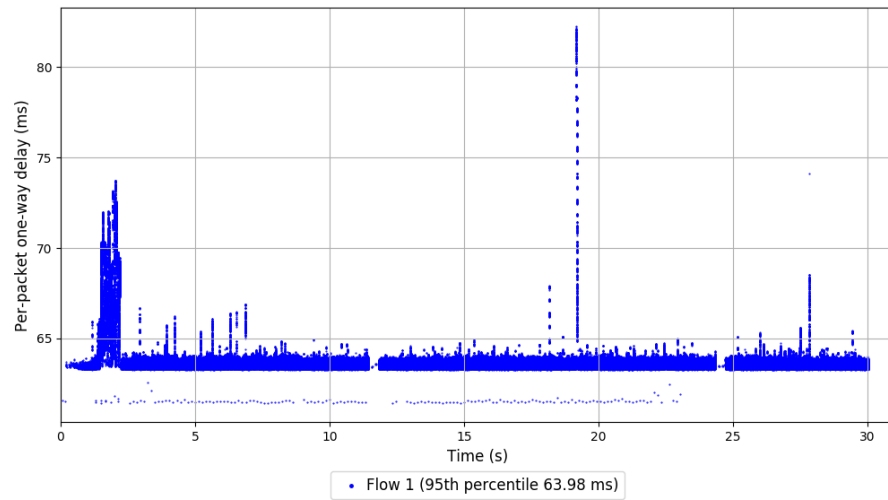
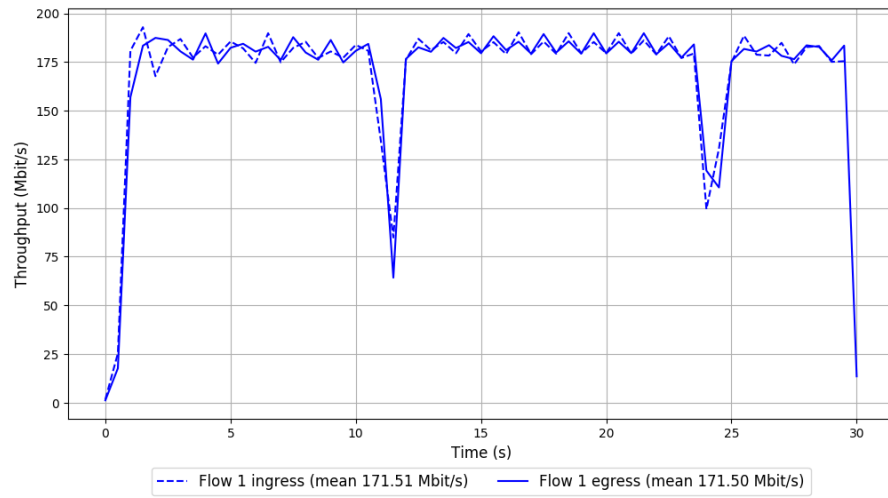
-- Flow 1:

Average throughput: 171.50 Mbit/s

95th percentile per-packet one-way delay: 63.979 ms

Loss rate: 0.01%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-20 12:04:49

End at: 2018-02-20 12:05:19

Below is generated by plot.py at 2018-02-20 15:40:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.53 Mbit/s

95th percentile per-packet one-way delay: 70.678 ms

Loss rate: 0.00%

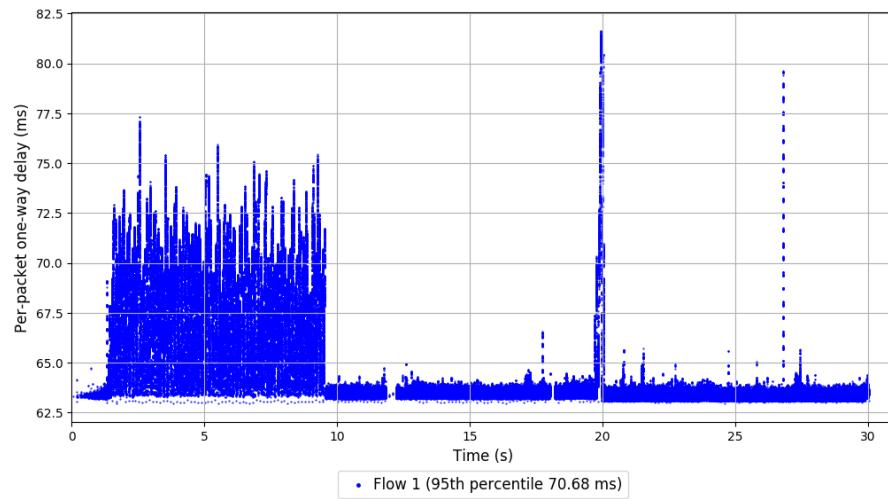
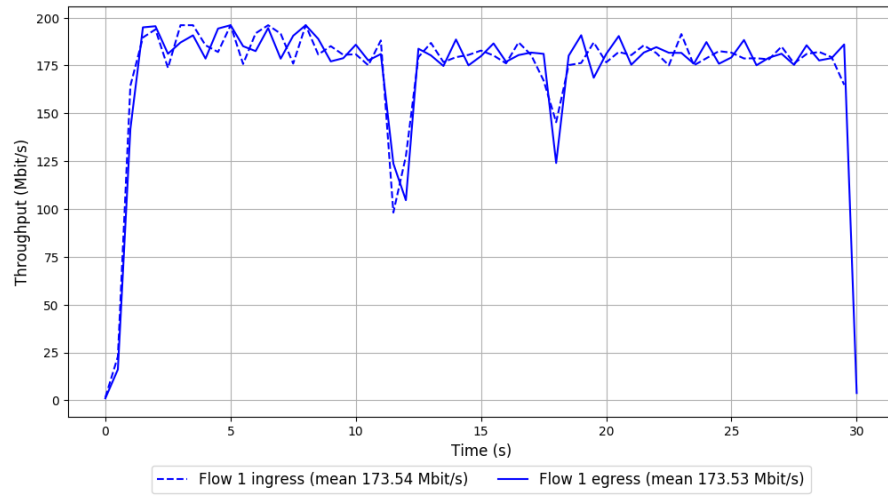
-- Flow 1:

Average throughput: 173.53 Mbit/s

95th percentile per-packet one-way delay: 70.678 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-20 12:19:37

End at: 2018-02-20 12:20:07

Below is generated by plot.py at 2018-02-20 15:40:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 169.43 Mbit/s

95th percentile per-packet one-way delay: 65.857 ms

Loss rate: 0.00%

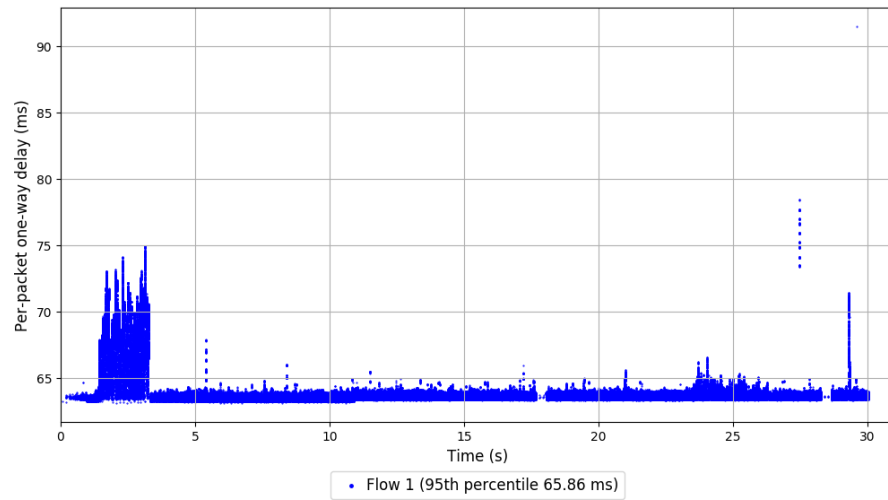
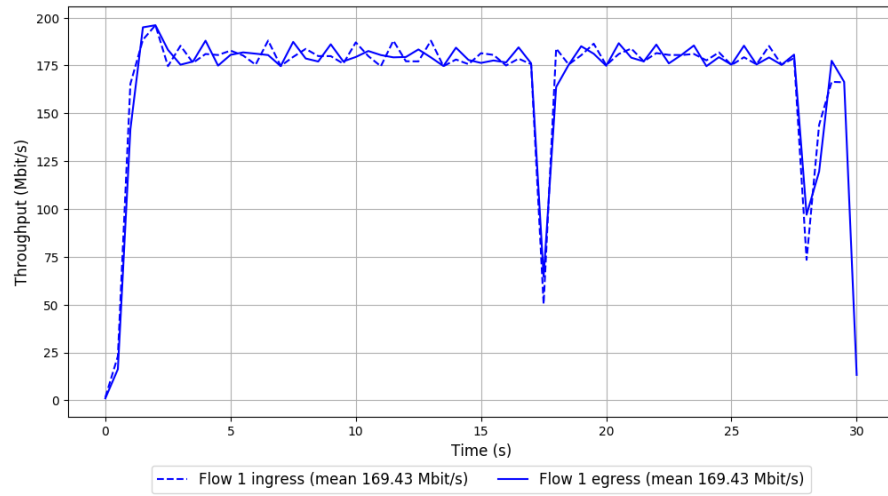
-- Flow 1:

Average throughput: 169.43 Mbit/s

95th percentile per-packet one-way delay: 65.857 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-20 12:34:13

End at: 2018-02-20 12:34:43

Below is generated by plot.py at 2018-02-20 15:40:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.45 Mbit/s

95th percentile per-packet one-way delay: 68.927 ms

Loss rate: 0.00%

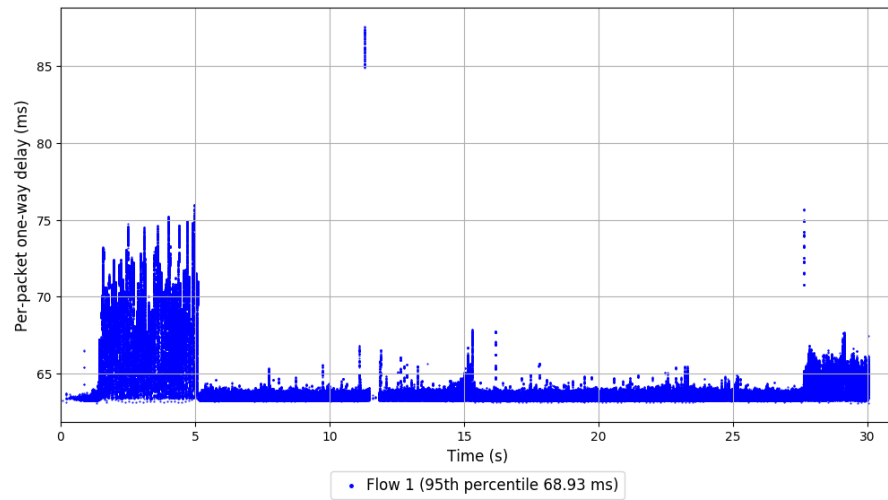
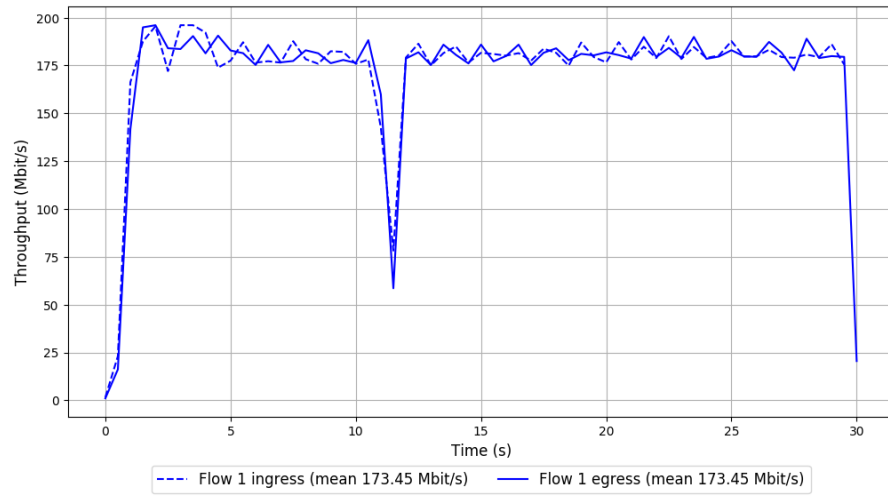
-- Flow 1:

Average throughput: 173.45 Mbit/s

95th percentile per-packet one-way delay: 68.927 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-20 12:48:53

End at: 2018-02-20 12:49:23

Below is generated by plot.py at 2018-02-20 15:40:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 172.99 Mbit/s

95th percentile per-packet one-way delay: 68.424 ms

Loss rate: 0.00%

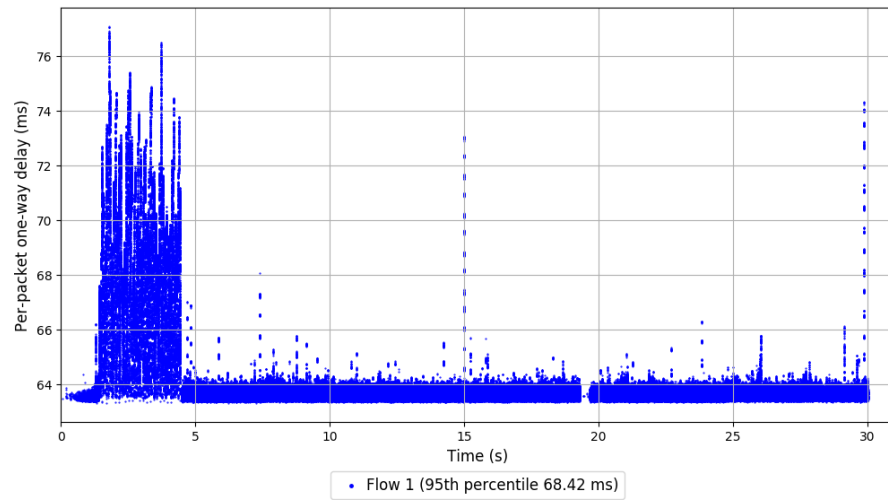
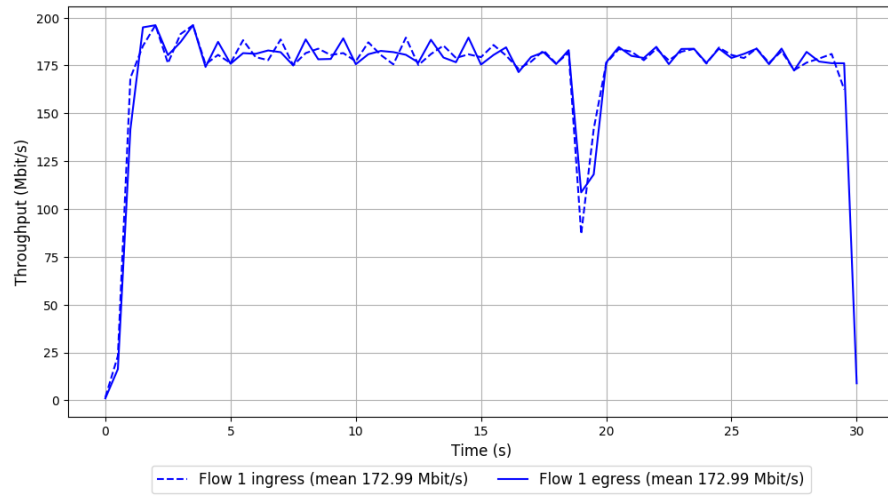
-- Flow 1:

Average throughput: 172.99 Mbit/s

95th percentile per-packet one-way delay: 68.424 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-20 13:03:34

End at: 2018-02-20 13:04:04

Below is generated by plot.py at 2018-02-20 15:40:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 175.52 Mbit/s

95th percentile per-packet one-way delay: 69.424 ms

Loss rate: 0.00%

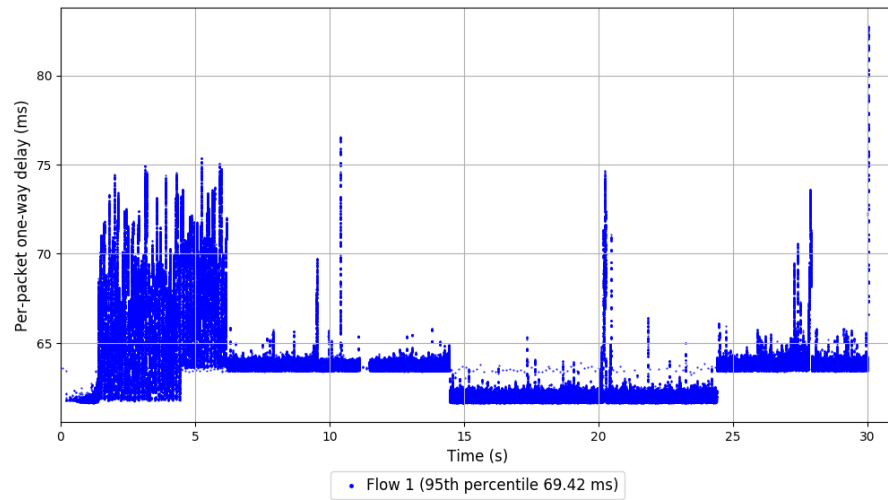
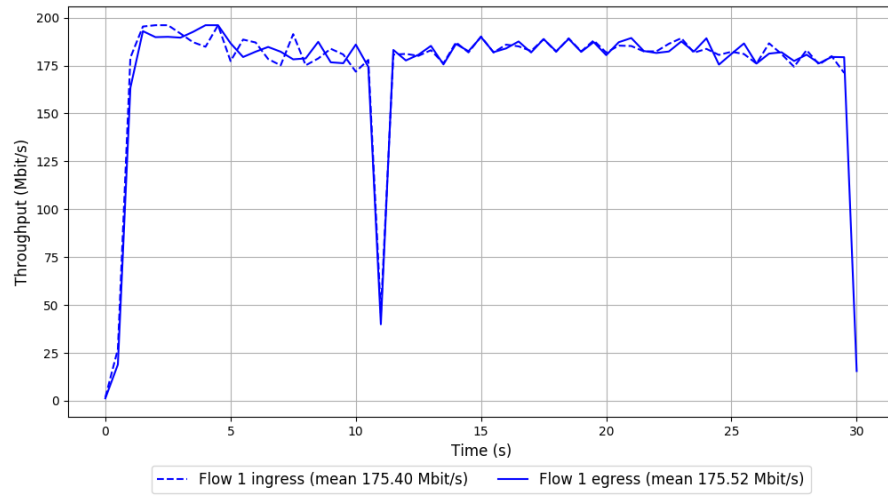
-- Flow 1:

Average throughput: 175.52 Mbit/s

95th percentile per-packet one-way delay: 69.424 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-20 13:18:23

End at: 2018-02-20 13:18:53

Below is generated by plot.py at 2018-02-20 15:40:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 171.06 Mbit/s

95th percentile per-packet one-way delay: 64.150 ms

Loss rate: 0.00%

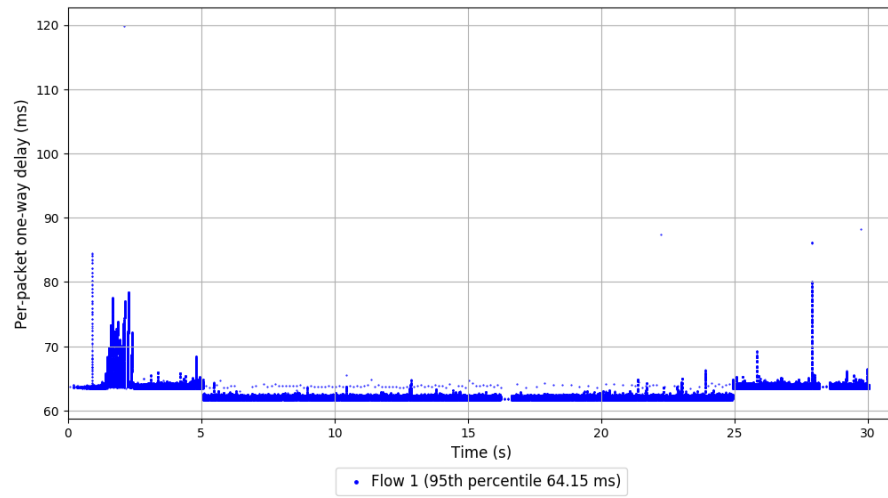
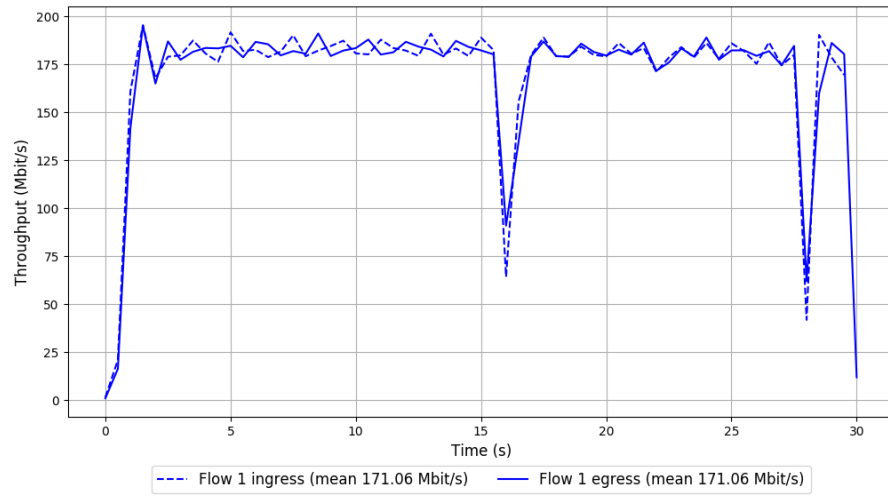
-- Flow 1:

Average throughput: 171.06 Mbit/s

95th percentile per-packet one-way delay: 64.150 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-20 13:33:08

End at: 2018-02-20 13:33:38

Below is generated by plot.py at 2018-02-20 15:41:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.41 Mbit/s

95th percentile per-packet one-way delay: 64.177 ms

Loss rate: 0.00%

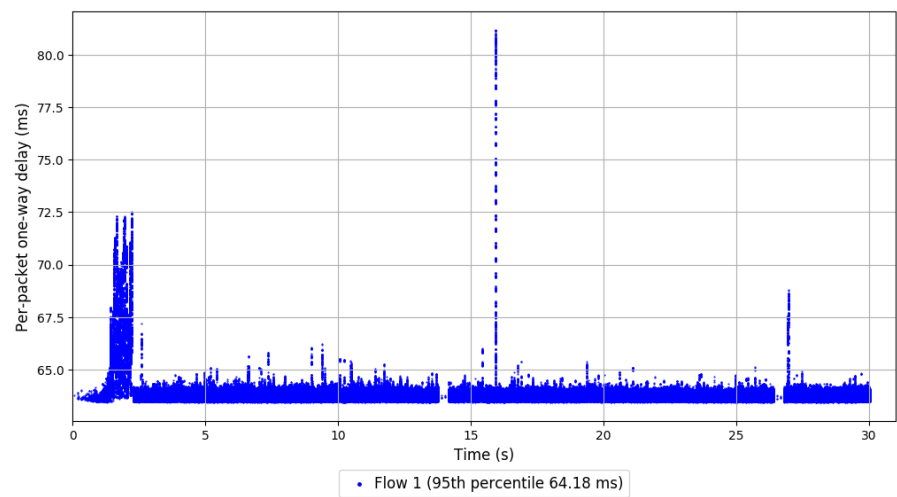
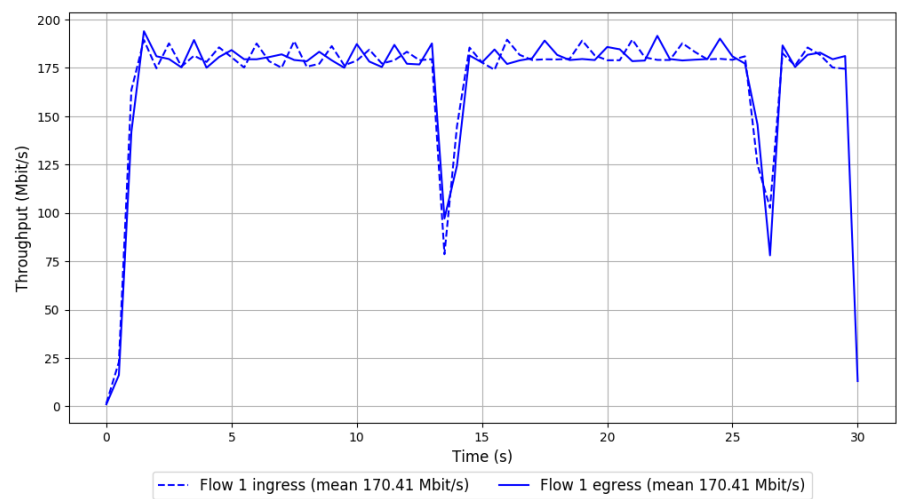
-- Flow 1:

Average throughput: 170.41 Mbit/s

95th percentile per-packet one-way delay: 64.177 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-20 13:47:42

End at: 2018-02-20 13:48:12

Below is generated by plot.py at 2018-02-20 15:43:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.14 Mbit/s

95th percentile per-packet one-way delay: 71.561 ms

Loss rate: 0.00%

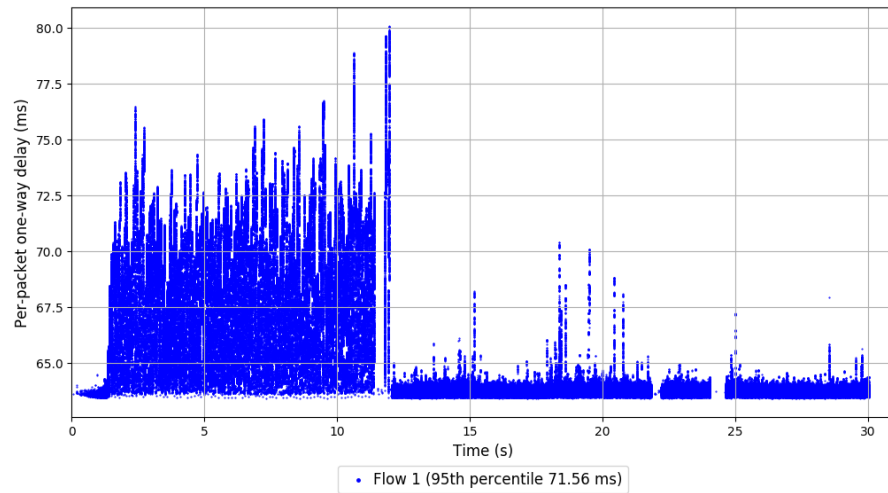
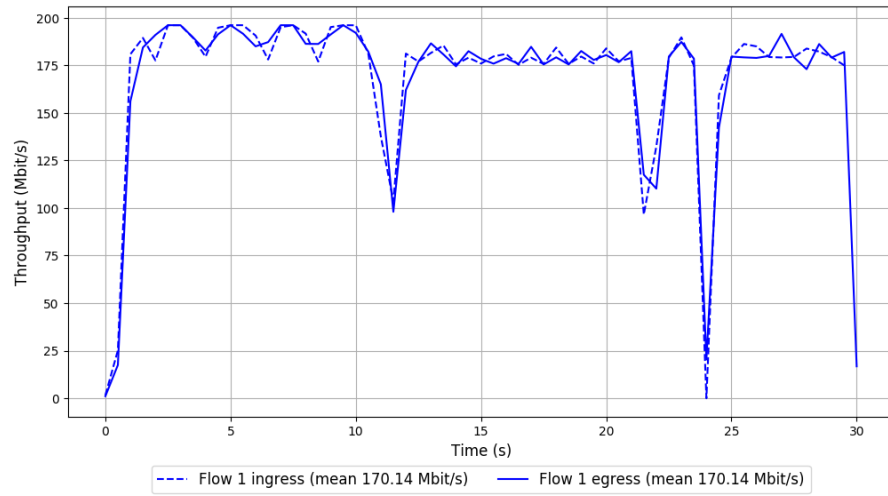
-- Flow 1:

Average throughput: 170.14 Mbit/s

95th percentile per-packet one-way delay: 71.561 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-20 14:02:36

End at: 2018-02-20 14:03:06

Below is generated by plot.py at 2018-02-20 15:43:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 176.42 Mbit/s

95th percentile per-packet one-way delay: 70.321 ms

Loss rate: 0.00%

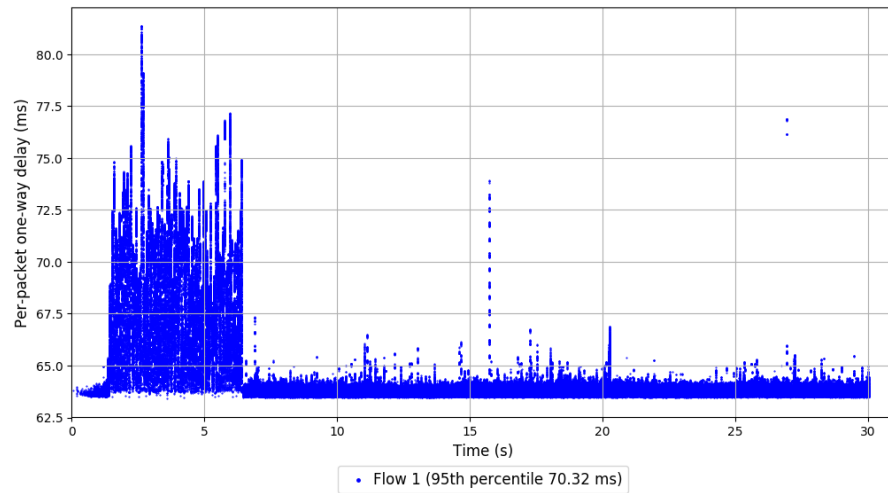
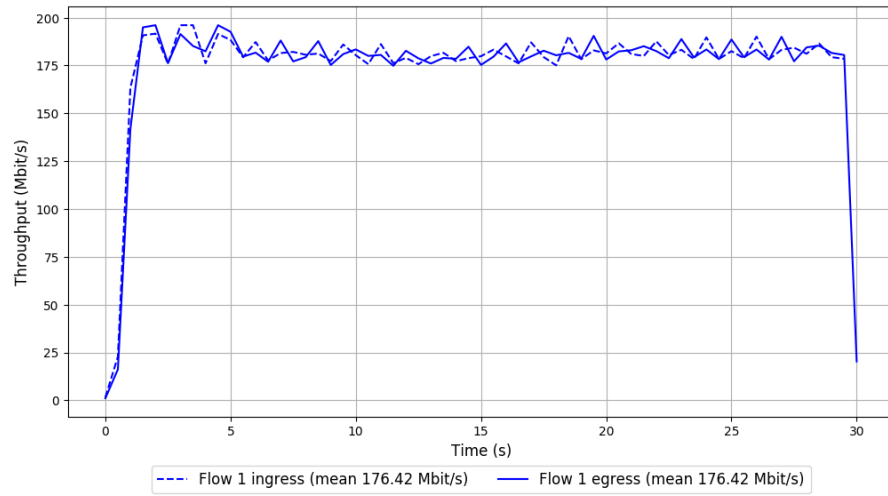
-- Flow 1:

Average throughput: 176.42 Mbit/s

95th percentile per-packet one-way delay: 70.321 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-20 11:49:18

End at: 2018-02-20 11:49:48

Below is generated by plot.py at 2018-02-20 15:43:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.25 Mbit/s

95th percentile per-packet one-way delay: 73.438 ms

Loss rate: 0.00%

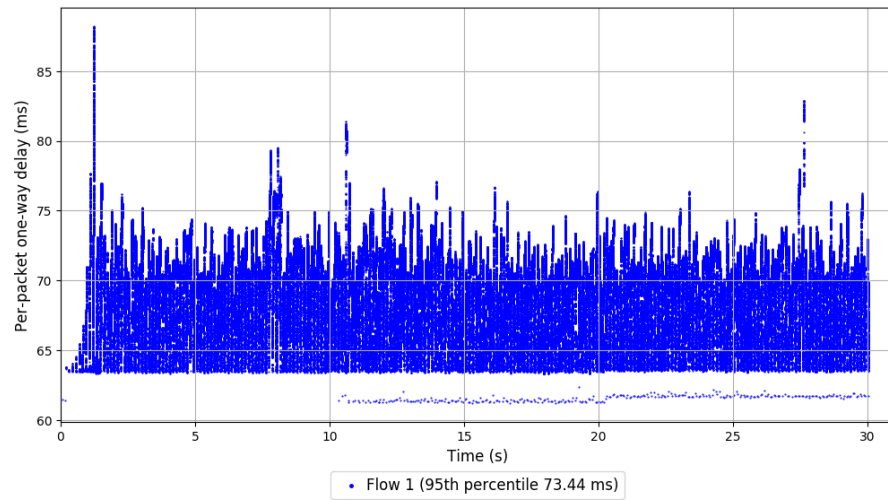
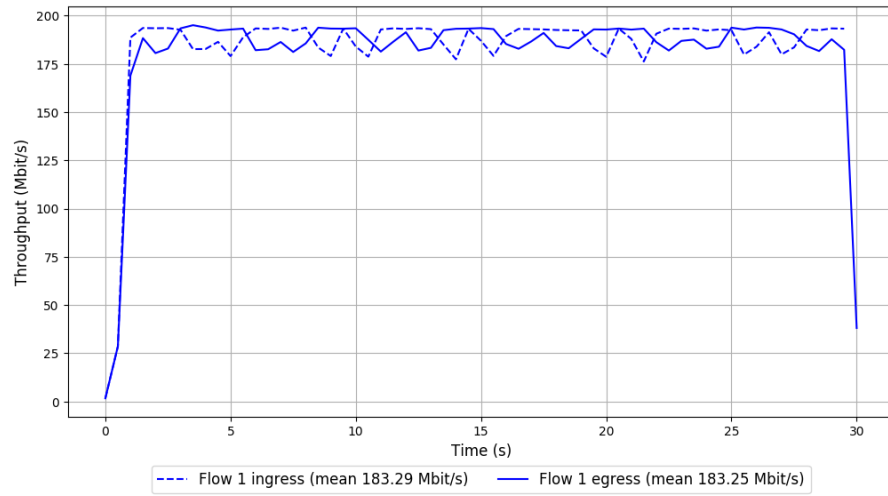
-- Flow 1:

Average throughput: 183.25 Mbit/s

95th percentile per-packet one-way delay: 73.438 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-20 12:04:04

End at: 2018-02-20 12:04:34

Below is generated by plot.py at 2018-02-20 15:43:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 138.26 Mbit/s

95th percentile per-packet one-way delay: 72.579 ms

Loss rate: 0.02%

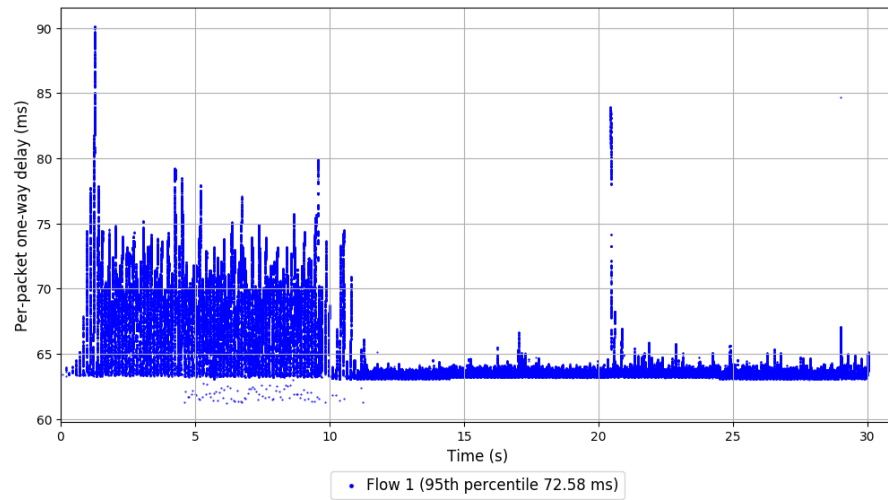
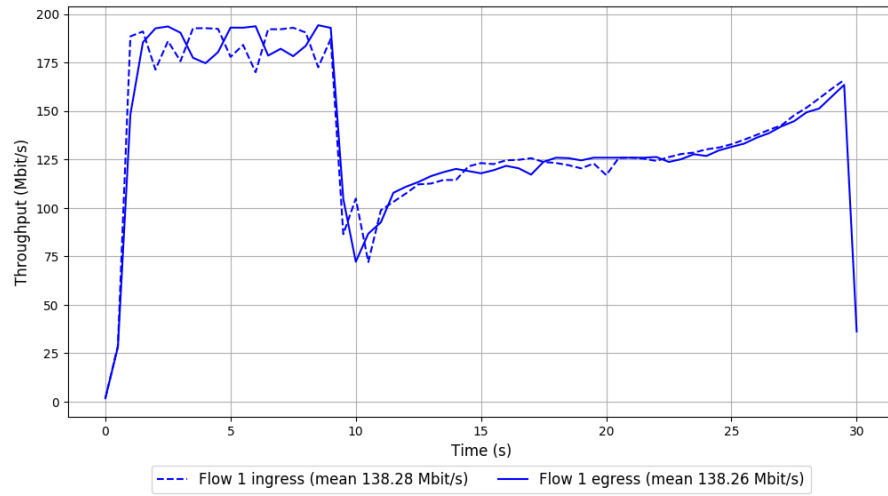
-- Flow 1:

Average throughput: 138.26 Mbit/s

95th percentile per-packet one-way delay: 72.579 ms

Loss rate: 0.02%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-20 12:18:51

End at: 2018-02-20 12:19:21

Below is generated by plot.py at 2018-02-20 15:43:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.29 Mbit/s

95th percentile per-packet one-way delay: 73.809 ms

Loss rate: 0.00%

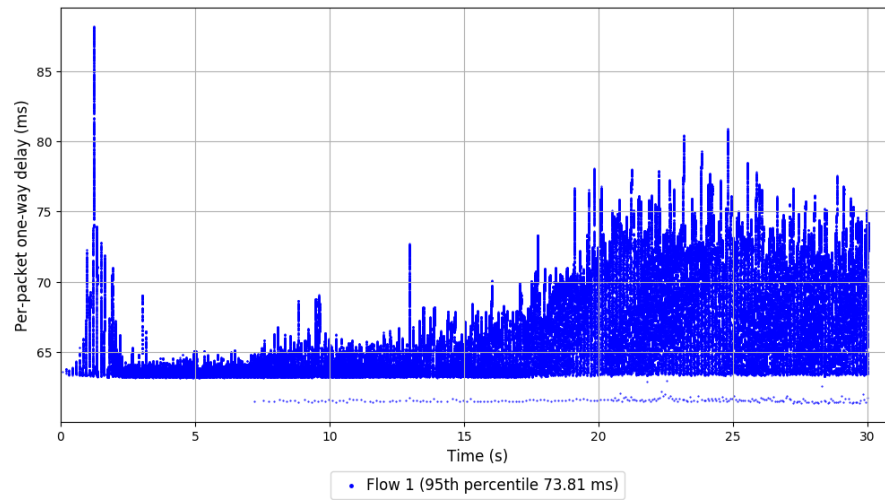
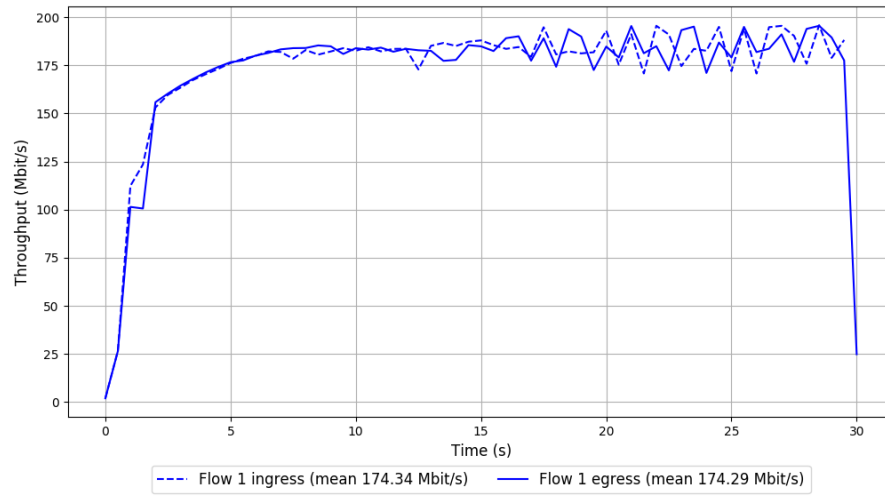
-- Flow 1:

Average throughput: 174.29 Mbit/s

95th percentile per-packet one-way delay: 73.809 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-20 12:33:29

End at: 2018-02-20 12:33:59

Below is generated by plot.py at 2018-02-20 15:43:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 123.59 Mbit/s

95th percentile per-packet one-way delay: 73.206 ms

Loss rate: 0.00%

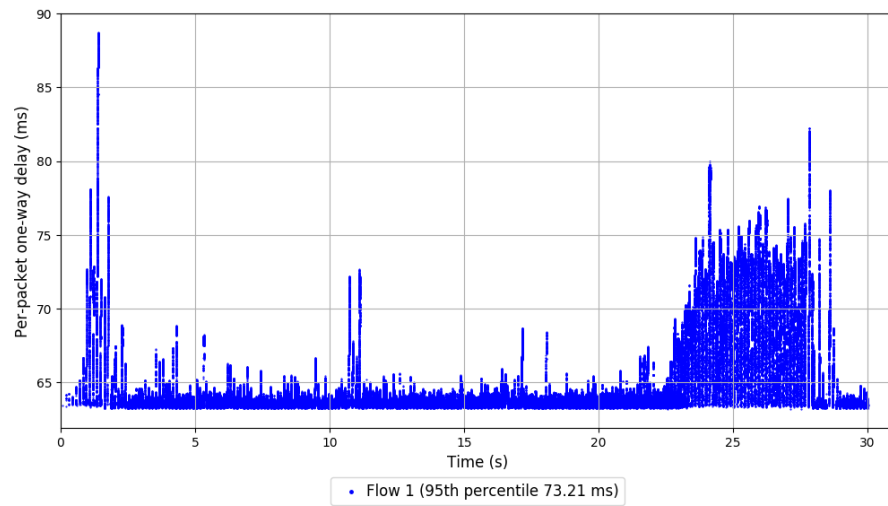
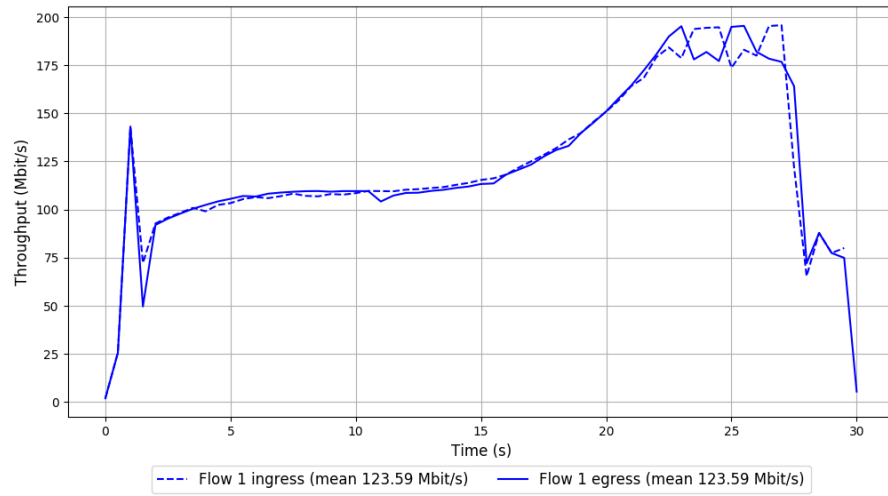
-- Flow 1:

Average throughput: 123.59 Mbit/s

95th percentile per-packet one-way delay: 73.206 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-20 12:48:09

End at: 2018-02-20 12:48:39

Below is generated by plot.py at 2018-02-20 15:43:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 133.04 Mbit/s

95th percentile per-packet one-way delay: 74.555 ms

Loss rate: 0.00%

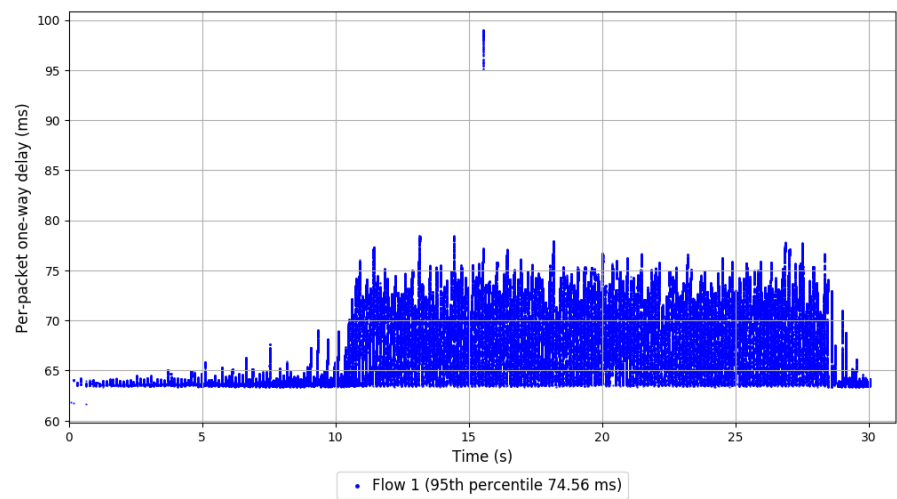
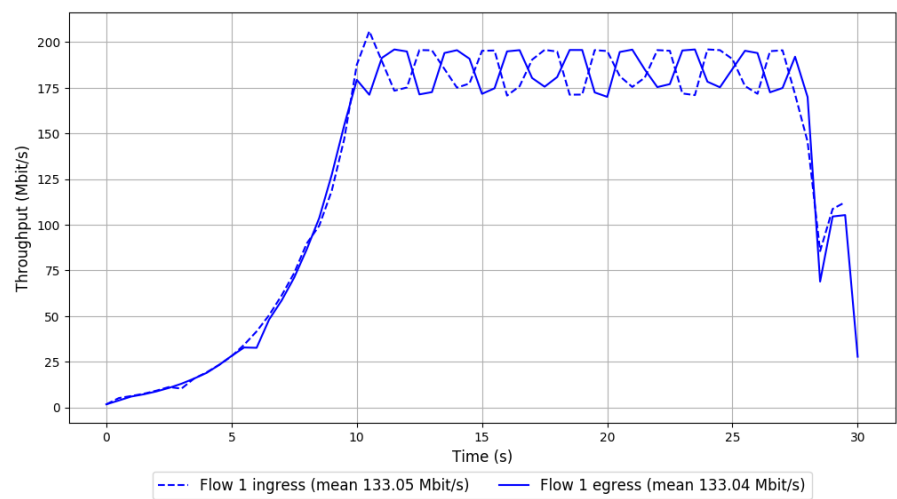
-- Flow 1:

Average throughput: 133.04 Mbit/s

95th percentile per-packet one-way delay: 74.555 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-20 13:02:48

End at: 2018-02-20 13:03:18

Below is generated by plot.py at 2018-02-20 15:43:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 170.97 Mbit/s

95th percentile per-packet one-way delay: 73.265 ms

Loss rate: 0.00%

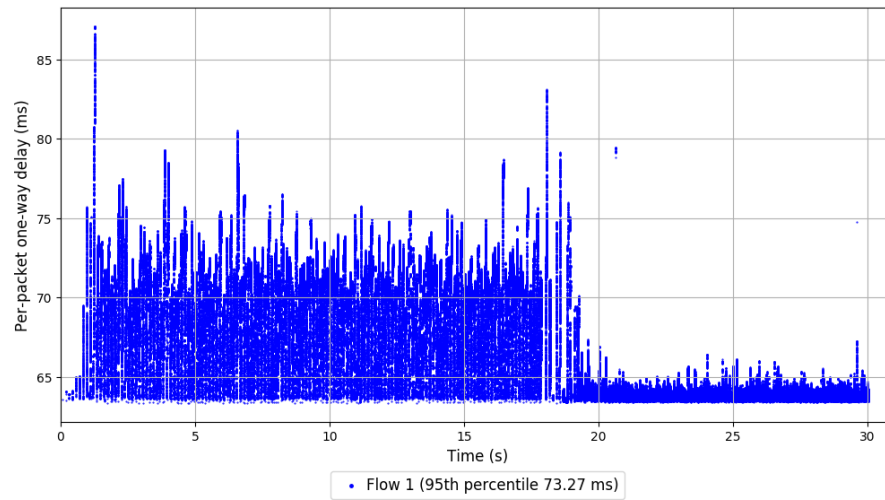
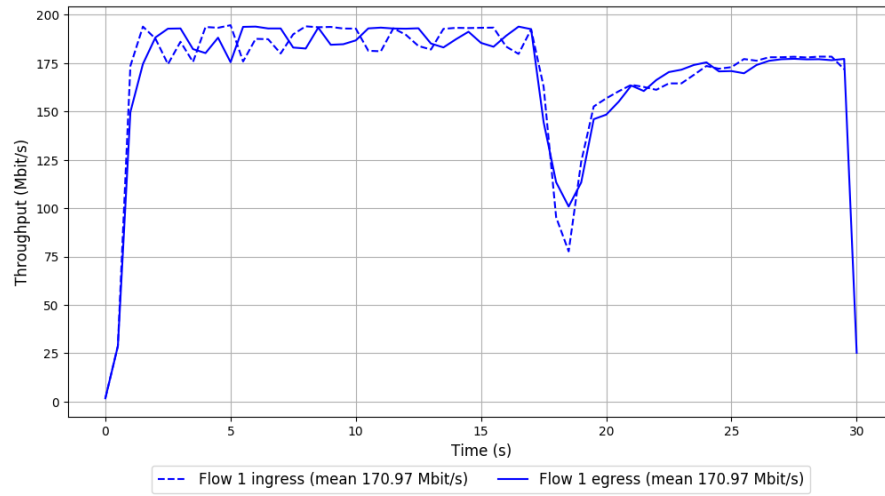
-- Flow 1:

Average throughput: 170.97 Mbit/s

95th percentile per-packet one-way delay: 73.265 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-20 13:17:38

End at: 2018-02-20 13:18:08

Below is generated by plot.py at 2018-02-20 15:45:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 140.15 Mbit/s

95th percentile per-packet one-way delay: 71.214 ms

Loss rate: 0.07%

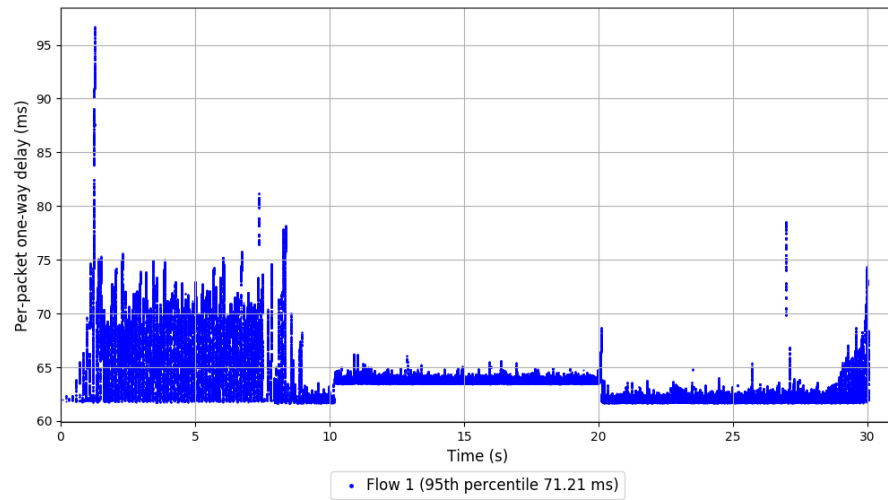
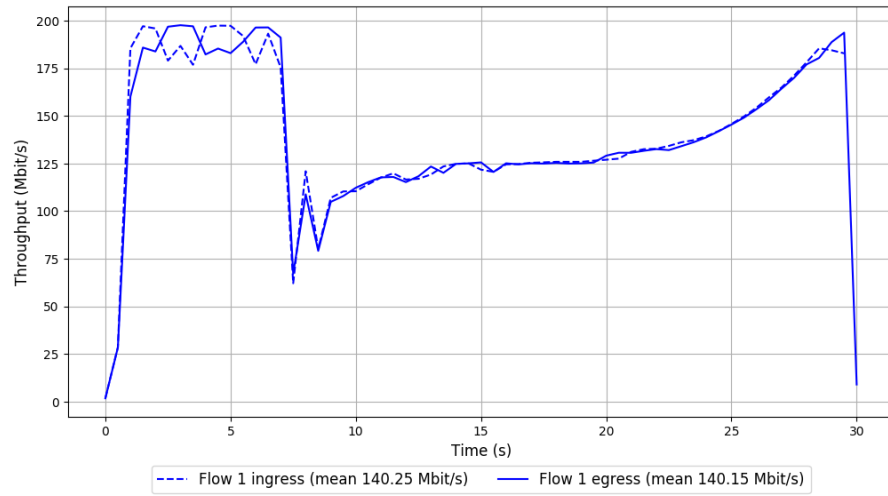
-- Flow 1:

Average throughput: 140.15 Mbit/s

95th percentile per-packet one-way delay: 71.214 ms

Loss rate: 0.07%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-20 13:32:21

End at: 2018-02-20 13:32:51

Below is generated by plot.py at 2018-02-20 15:46:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 183.03 Mbit/s

95th percentile per-packet one-way delay: 75.001 ms

Loss rate: 0.01%

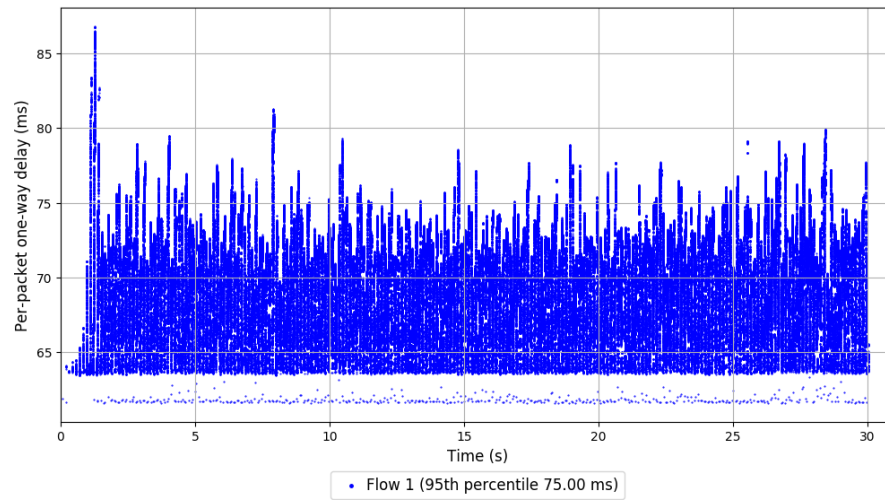
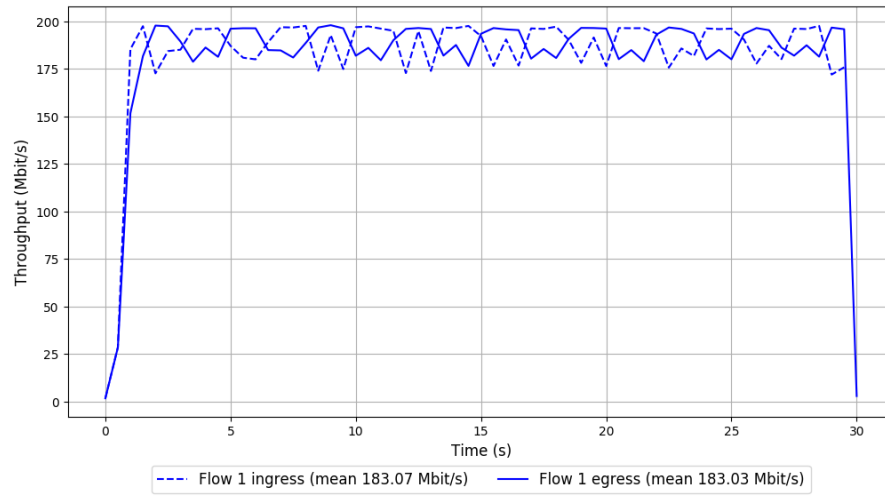
-- Flow 1:

Average throughput: 183.03 Mbit/s

95th percentile per-packet one-way delay: 75.001 ms

Loss rate: 0.01%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-20 13:46:58

End at: 2018-02-20 13:47:28

Below is generated by plot.py at 2018-02-20 15:46:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 138.65 Mbit/s

95th percentile per-packet one-way delay: 74.541 ms

Loss rate: 0.00%

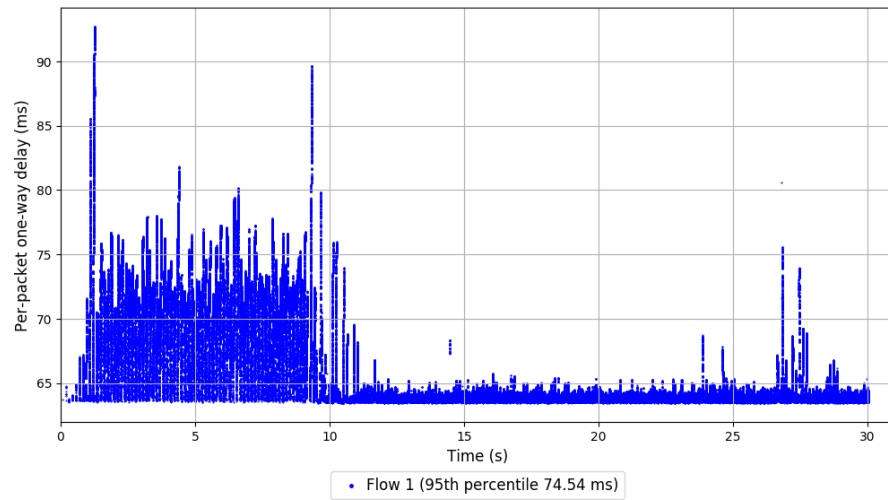
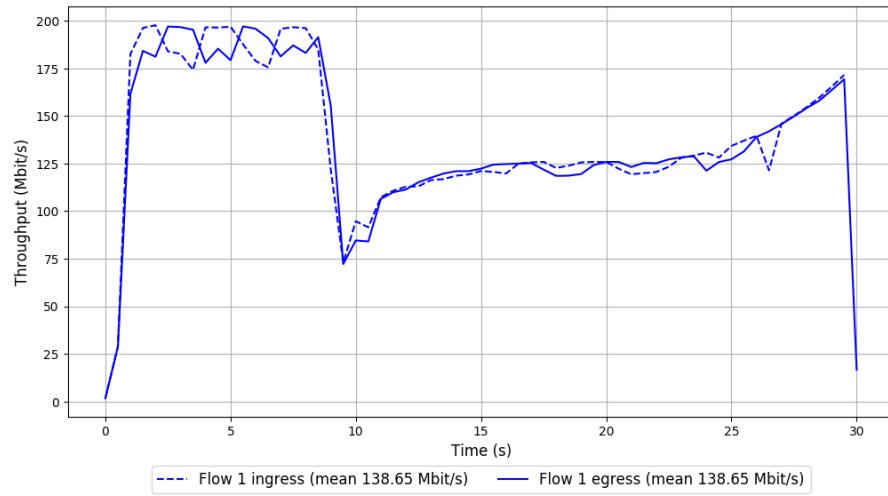
-- Flow 1:

Average throughput: 138.65 Mbit/s

95th percentile per-packet one-way delay: 74.541 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-20 14:01:51

End at: 2018-02-20 14:02:21

Below is generated by plot.py at 2018-02-20 15:46:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 132.23 Mbit/s

95th percentile per-packet one-way delay: 72.992 ms

Loss rate: 0.05%

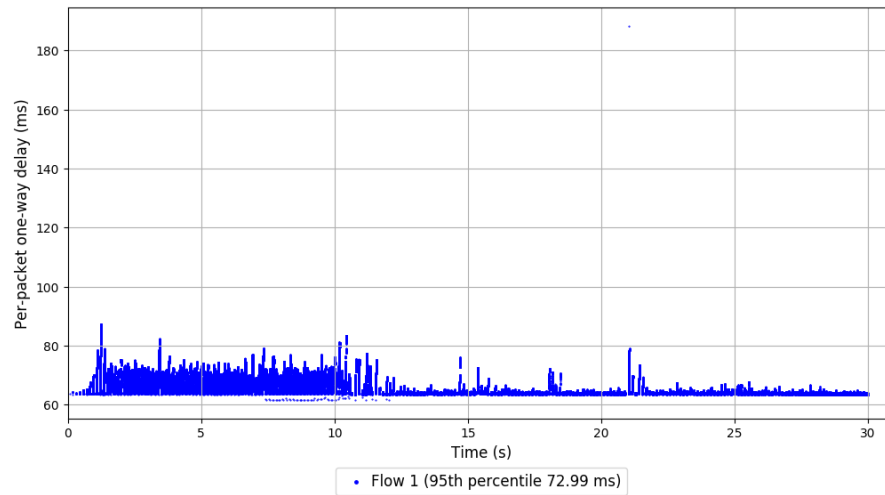
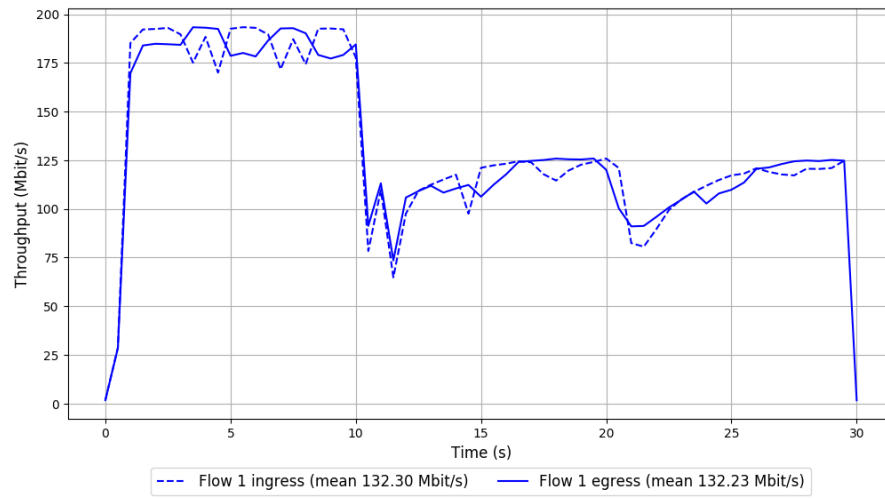
-- Flow 1:

Average throughput: 132.23 Mbit/s

95th percentile per-packet one-way delay: 72.992 ms

Loss rate: 0.05%

Run 10: Report of TCP Cubic — Data Link

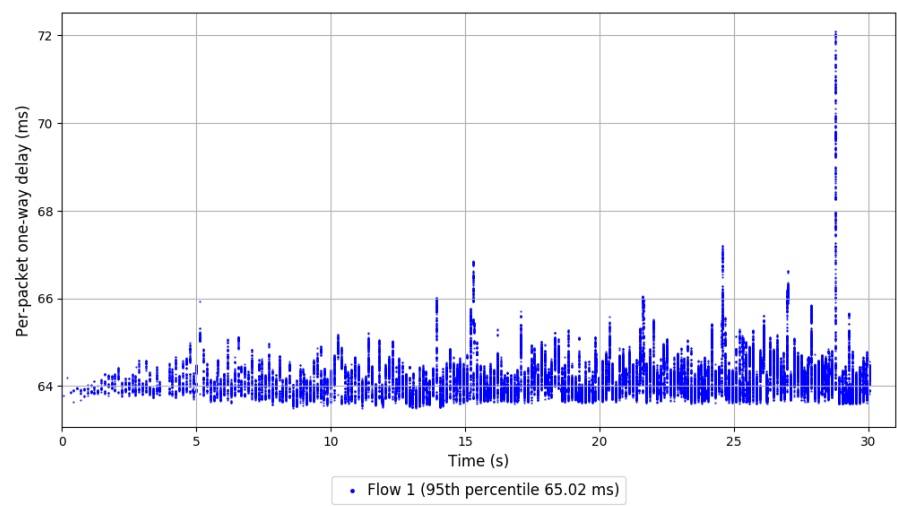
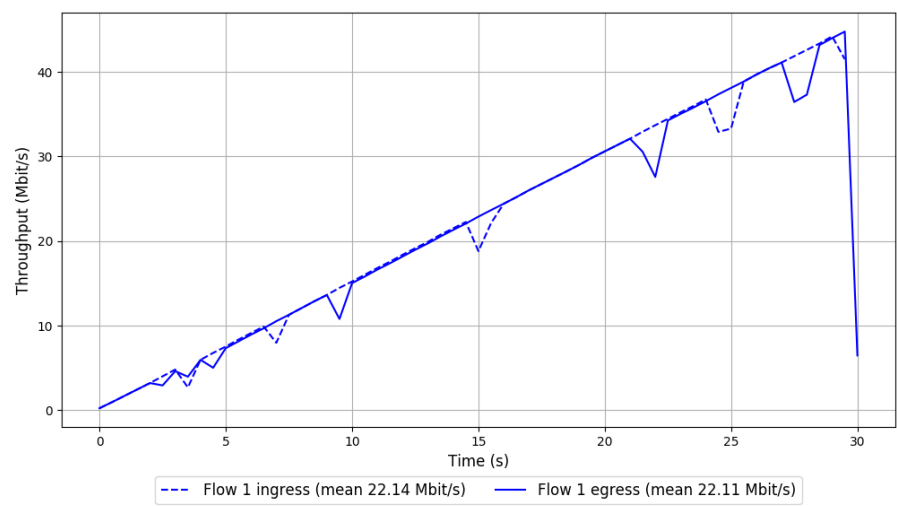


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-20 11:41:03
End at: 2018-02-20 11:41:33

# Below is generated by plot.py at 2018-02-20 15:46:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.11 Mbit/s
95th percentile per-packet one-way delay: 65.024 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 22.11 Mbit/s
95th percentile per-packet one-way delay: 65.024 ms
Loss rate: 0.11%
```


Run 1: Report of LEDBAT — Data Link

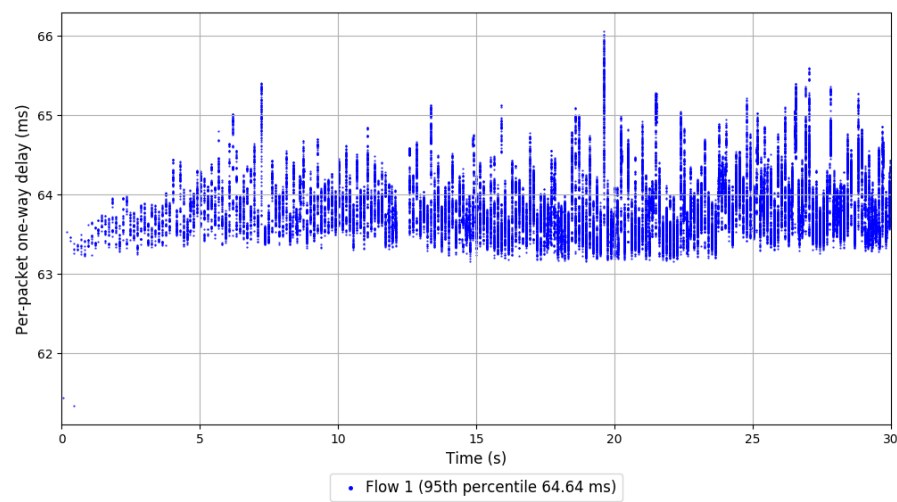
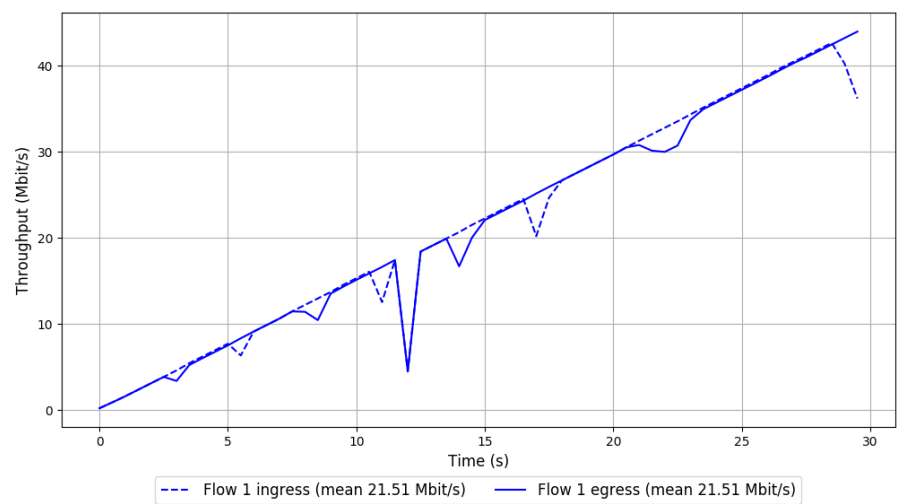


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-20 11:55:55
End at: 2018-02-20 11:56:25

# Below is generated by plot.py at 2018-02-20 15:46:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.51 Mbit/s
95th percentile per-packet one-way delay: 64.636 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 21.51 Mbit/s
95th percentile per-packet one-way delay: 64.636 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-20 12:10:49

End at: 2018-02-20 12:11:19

Below is generated by plot.py at 2018-02-20 15:46:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.29 Mbit/s

95th percentile per-packet one-way delay: 64.642 ms

Loss rate: 0.00%

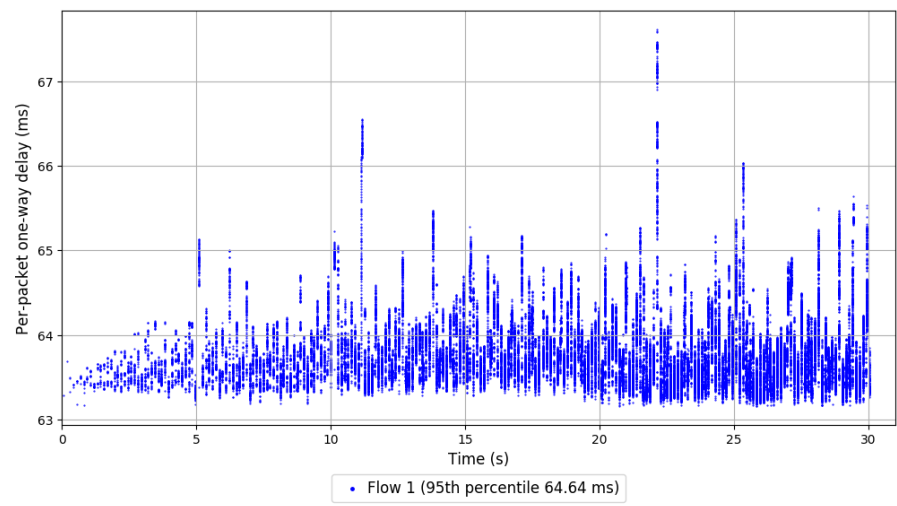
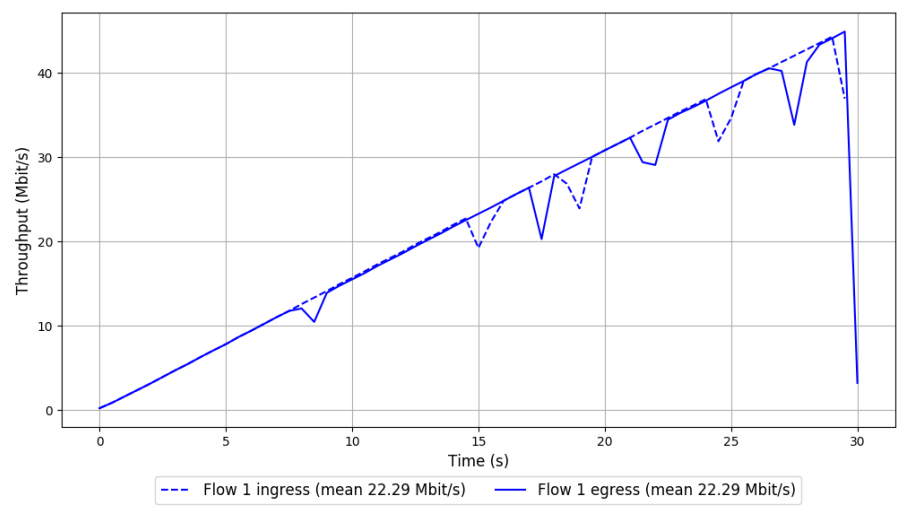
-- Flow 1:

Average throughput: 22.29 Mbit/s

95th percentile per-packet one-way delay: 64.642 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-20 12:25:18

End at: 2018-02-20 12:25:48

Below is generated by plot.py at 2018-02-20 15:46:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.19 Mbit/s

95th percentile per-packet one-way delay: 64.749 ms

Loss rate: 0.00%

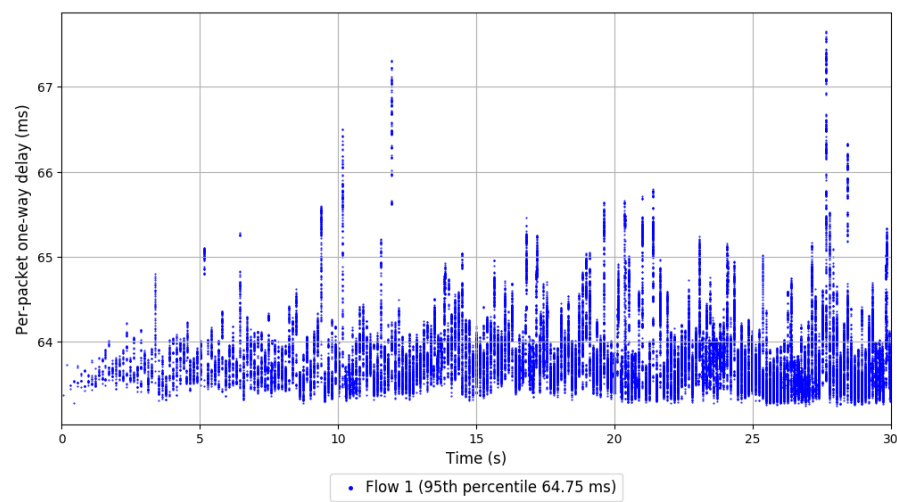
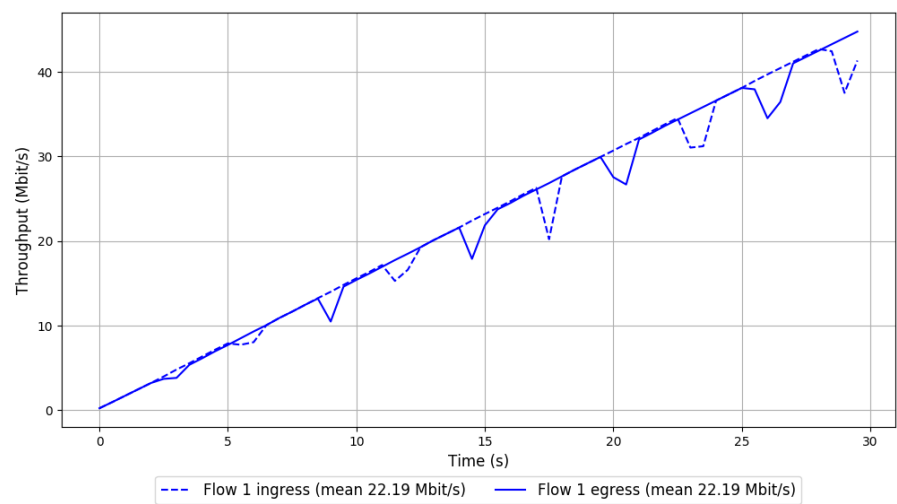
-- Flow 1:

Average throughput: 22.19 Mbit/s

95th percentile per-packet one-way delay: 64.749 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-20 12:40:02

End at: 2018-02-20 12:40:32

Below is generated by plot.py at 2018-02-20 15:46:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.19 Mbit/s

95th percentile per-packet one-way delay: 64.471 ms

Loss rate: 0.00%

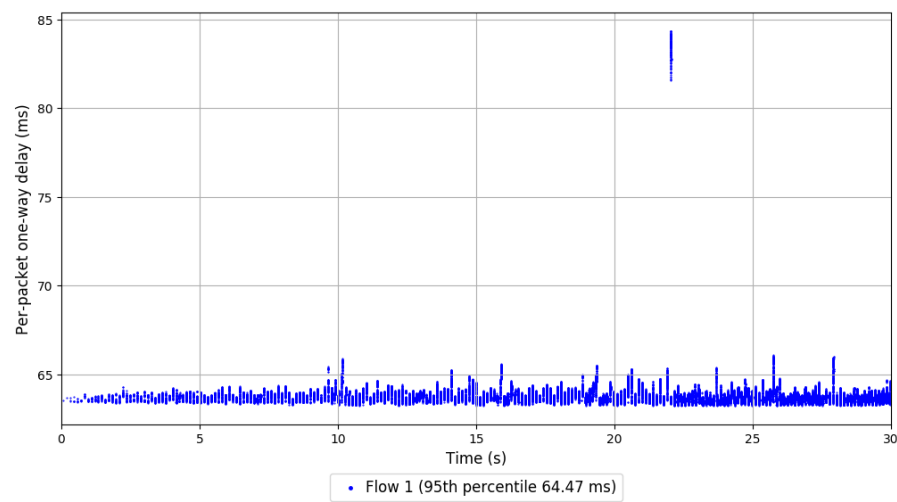
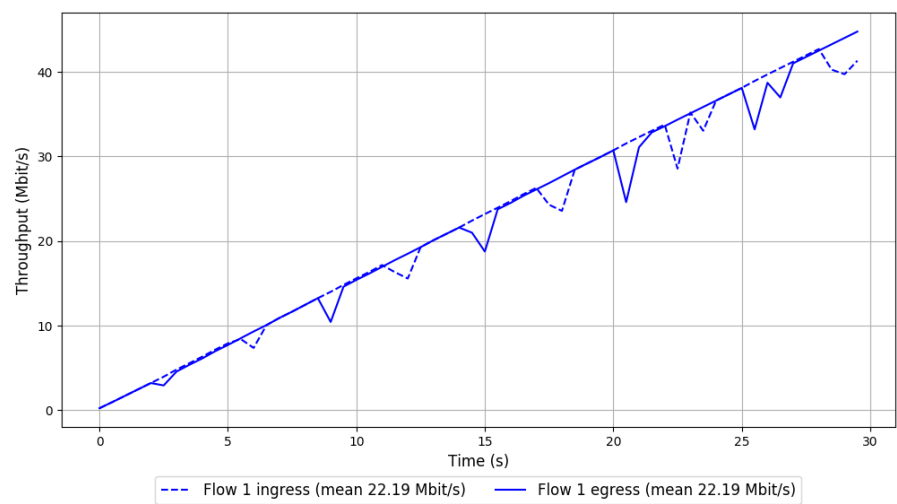
-- Flow 1:

Average throughput: 22.19 Mbit/s

95th percentile per-packet one-way delay: 64.471 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-20 12:54:42

End at: 2018-02-20 12:55:12

Below is generated by plot.py at 2018-02-20 15:46:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.79 Mbit/s

95th percentile per-packet one-way delay: 64.811 ms

Loss rate: 0.00%

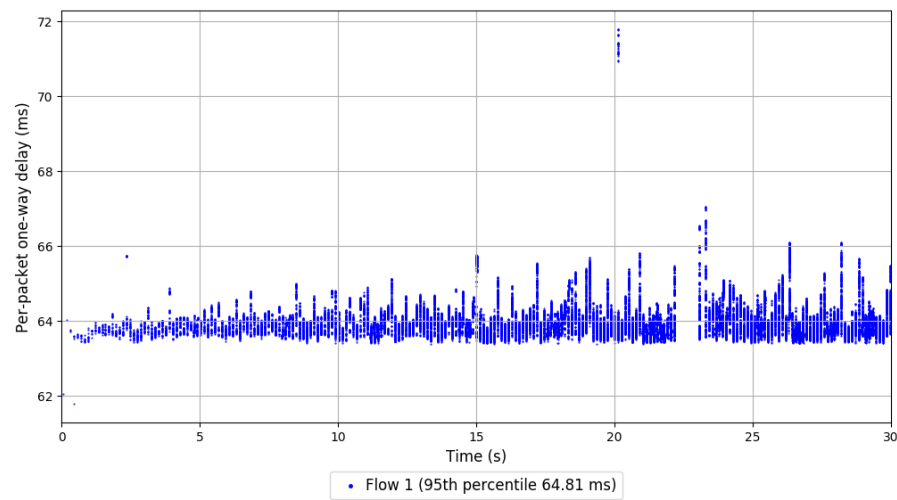
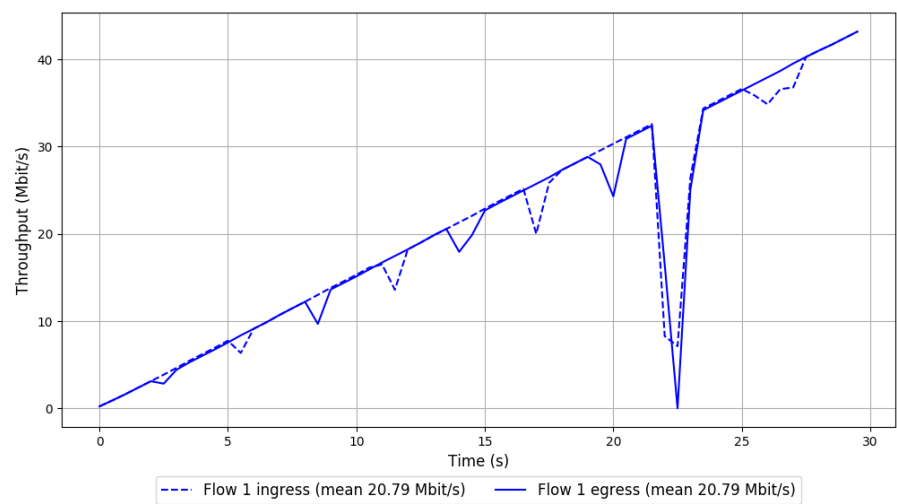
-- Flow 1:

Average throughput: 20.79 Mbit/s

95th percentile per-packet one-way delay: 64.811 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-20 13:09:28

End at: 2018-02-20 13:09:58

Below is generated by plot.py at 2018-02-20 15:46:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.55 Mbit/s

95th percentile per-packet one-way delay: 64.739 ms

Loss rate: 0.00%

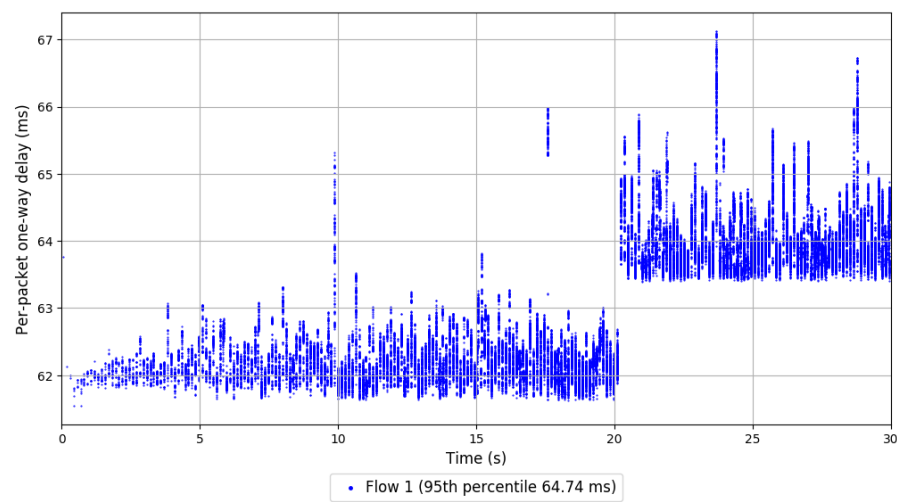
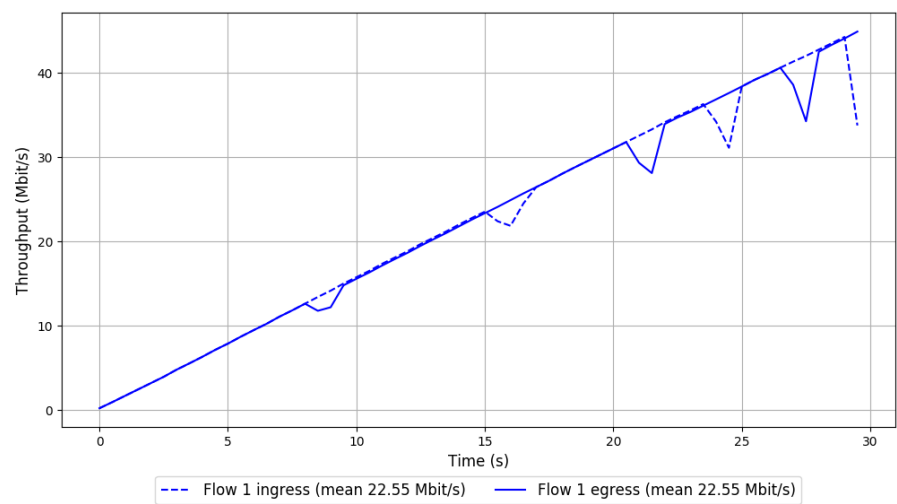
-- Flow 1:

Average throughput: 22.55 Mbit/s

95th percentile per-packet one-way delay: 64.739 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-20 13:24:20

End at: 2018-02-20 13:24:50

Below is generated by plot.py at 2018-02-20 15:46:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.34 Mbit/s

95th percentile per-packet one-way delay: 65.034 ms

Loss rate: 0.00%

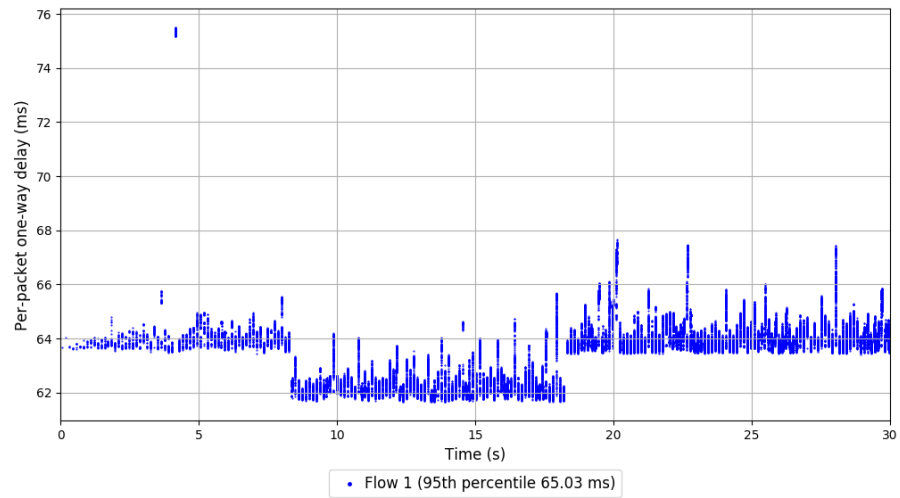
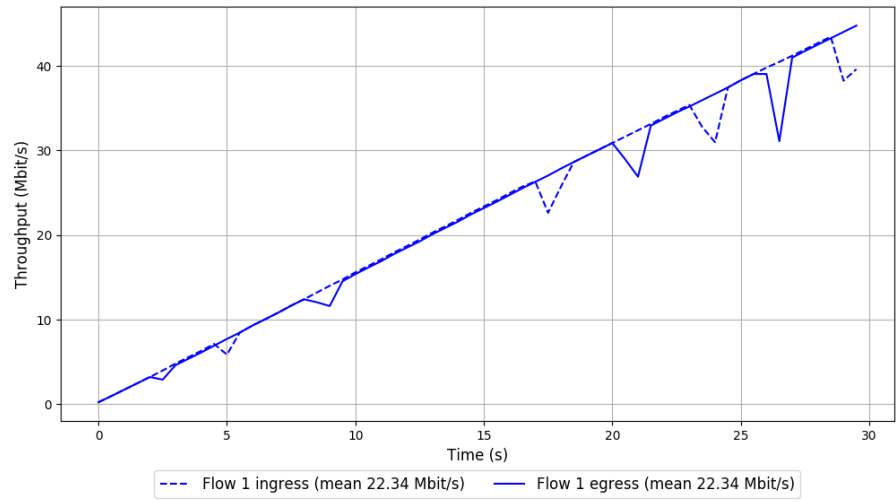
-- Flow 1:

Average throughput: 22.34 Mbit/s

95th percentile per-packet one-way delay: 65.034 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-20 13:39:00

End at: 2018-02-20 13:39:30

Below is generated by plot.py at 2018-02-20 15:46:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.09 Mbit/s

95th percentile per-packet one-way delay: 65.064 ms

Loss rate: 0.00%

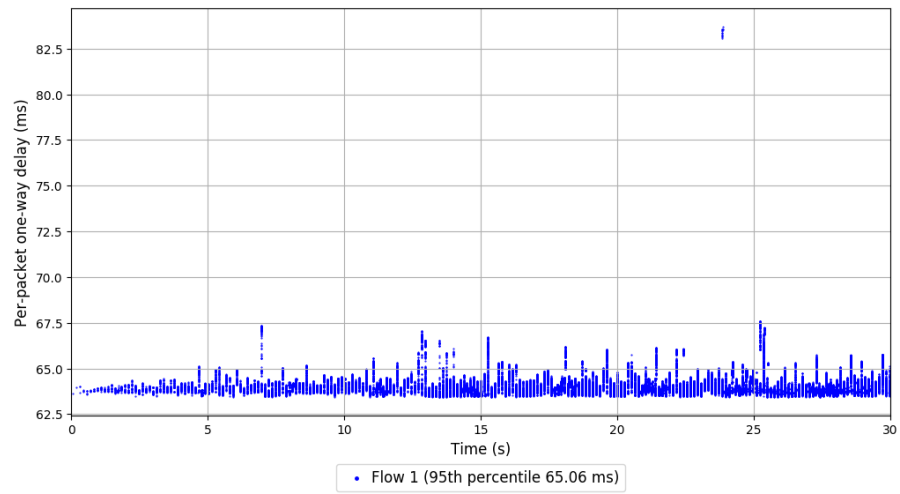
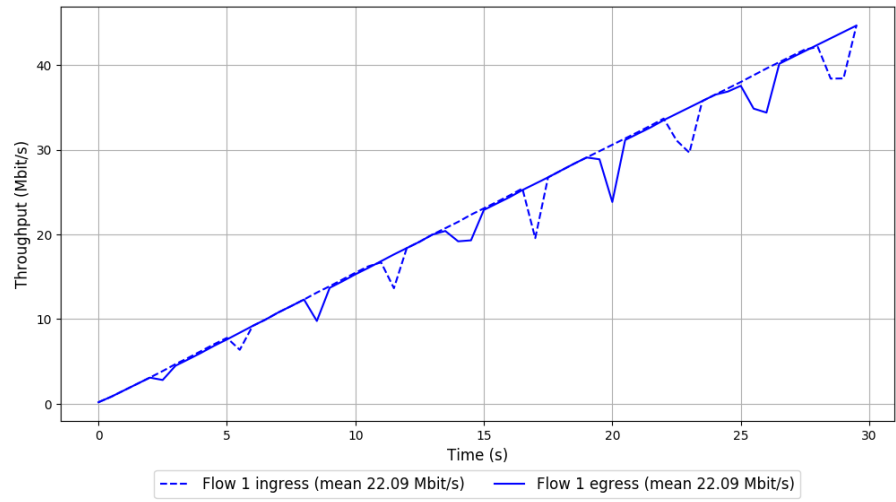
-- Flow 1:

Average throughput: 22.09 Mbit/s

95th percentile per-packet one-way delay: 65.064 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-20 13:53:40

End at: 2018-02-20 13:54:11

Below is generated by plot.py at 2018-02-20 15:46:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 21.41 Mbit/s

95th percentile per-packet one-way delay: 65.208 ms

Loss rate: 0.00%

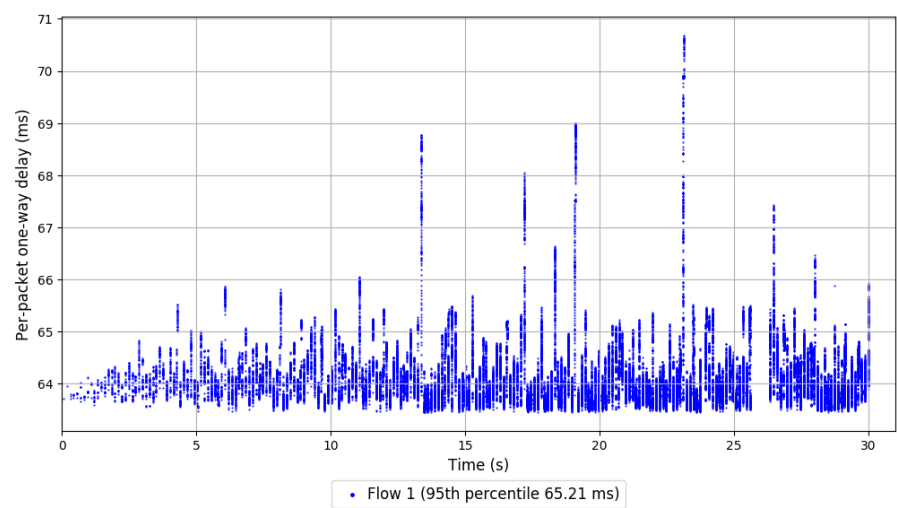
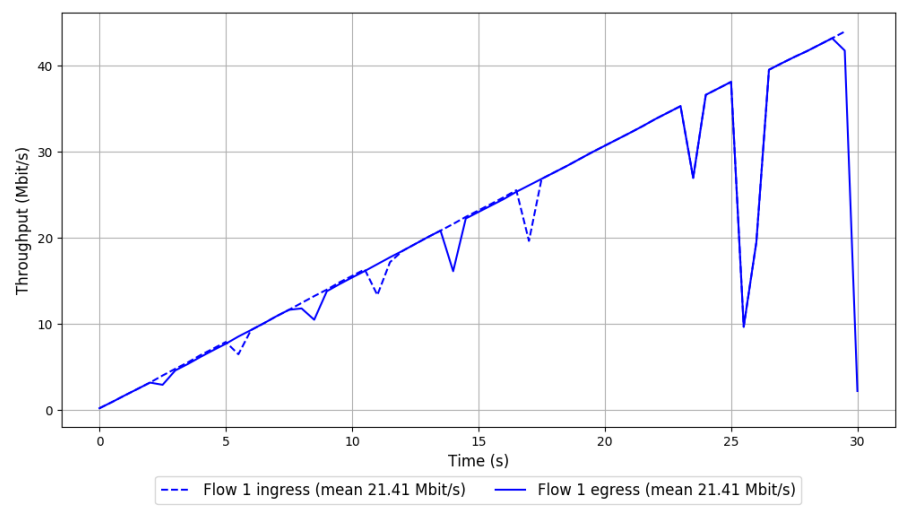
-- Flow 1:

Average throughput: 21.41 Mbit/s

95th percentile per-packet one-way delay: 65.208 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC

Start at: 2018-02-20 11:47:25

End at: 2018-02-20 11:47:55

Below is generated by plot.py at 2018-02-20 15:50:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 338.06 Mbit/s

95th percentile per-packet one-way delay: 124.700 ms

Loss rate: 0.45%

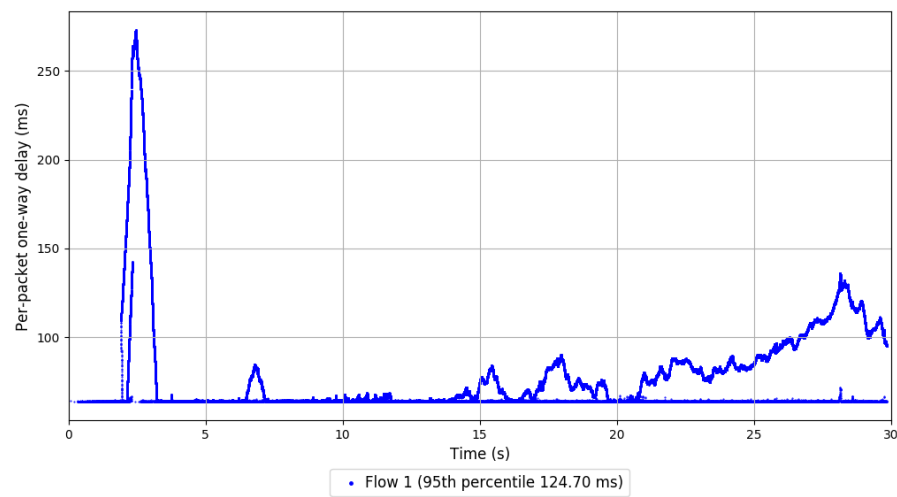
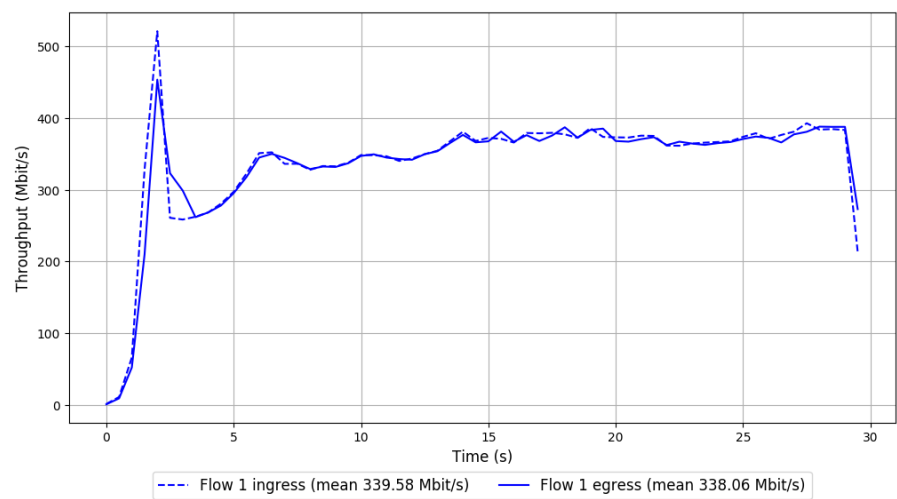
-- Flow 1:

Average throughput: 338.06 Mbit/s

95th percentile per-packet one-way delay: 124.700 ms

Loss rate: 0.45%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-02-20 12:02:20

End at: 2018-02-20 12:02:50

Below is generated by plot.py at 2018-02-20 15:50:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 344.44 Mbit/s

95th percentile per-packet one-way delay: 82.907 ms

Loss rate: 0.06%

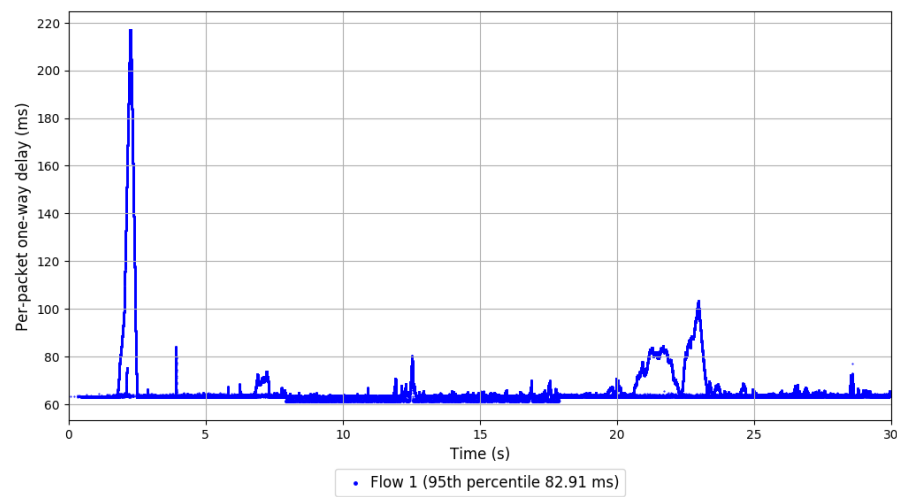
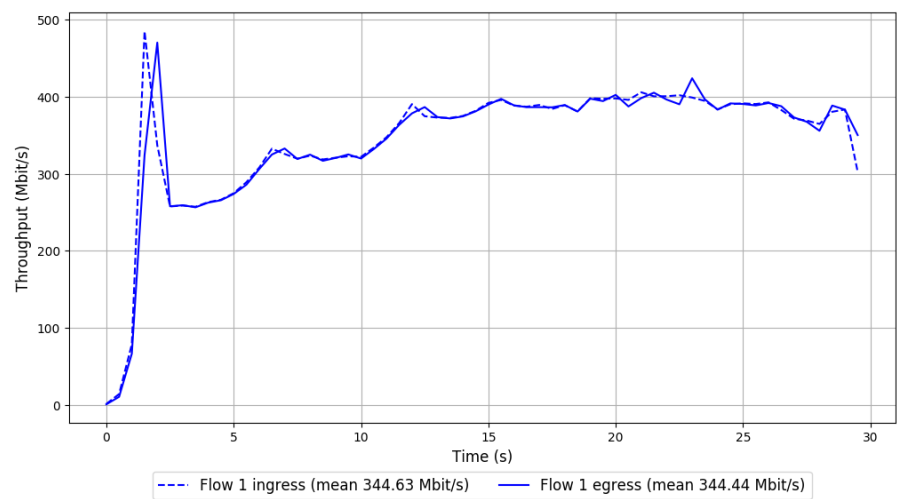
-- Flow 1:

Average throughput: 344.44 Mbit/s

95th percentile per-packet one-way delay: 82.907 ms

Loss rate: 0.06%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-20 12:17:13

End at: 2018-02-20 12:17:43

Below is generated by plot.py at 2018-02-20 15:50:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 327.78 Mbit/s

95th percentile per-packet one-way delay: 79.689 ms

Loss rate: 0.10%

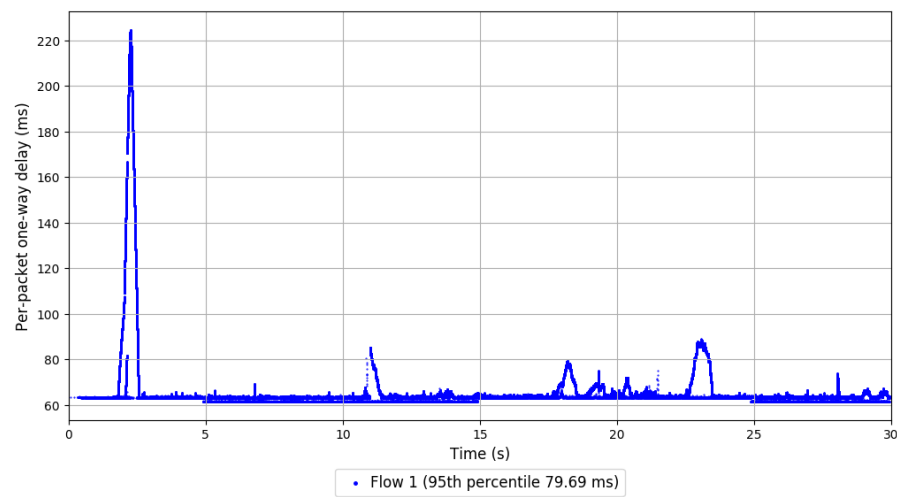
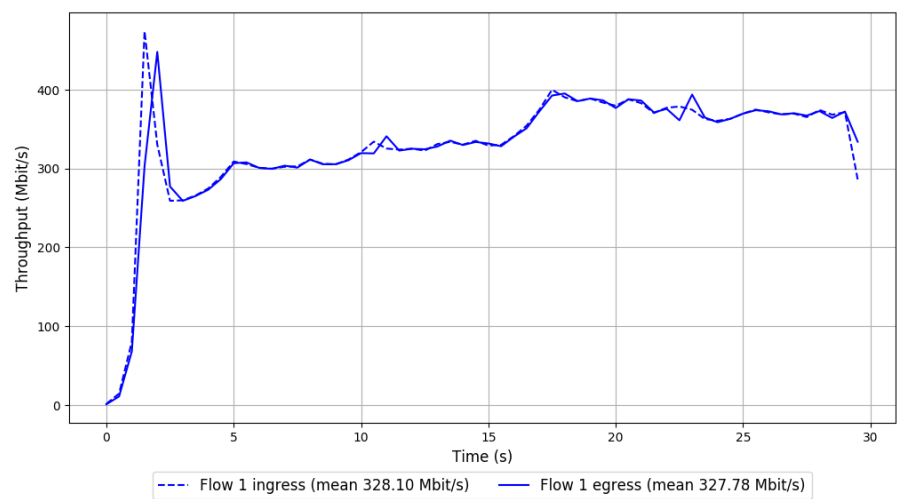
-- Flow 1:

Average throughput: 327.78 Mbit/s

95th percentile per-packet one-way delay: 79.689 ms

Loss rate: 0.10%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-20 12:31:36

End at: 2018-02-20 12:32:06

Below is generated by plot.py at 2018-02-20 15:50:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 327.46 Mbit/s

95th percentile per-packet one-way delay: 79.484 ms

Loss rate: 0.10%

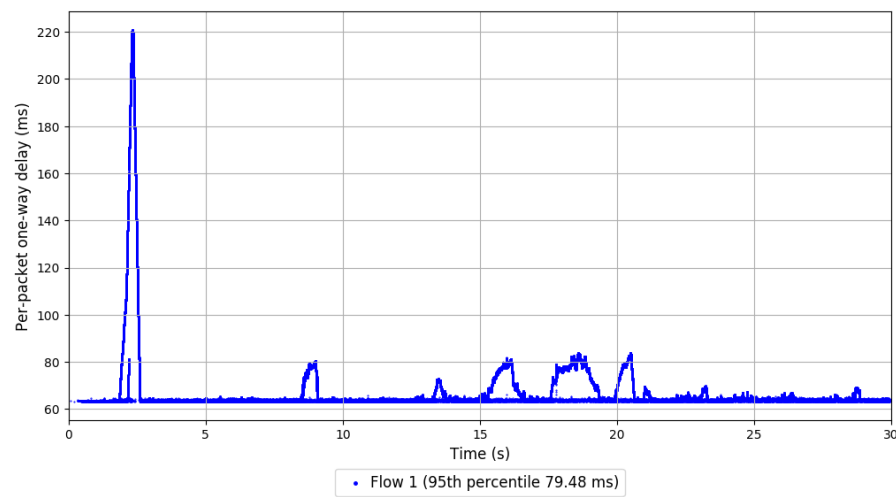
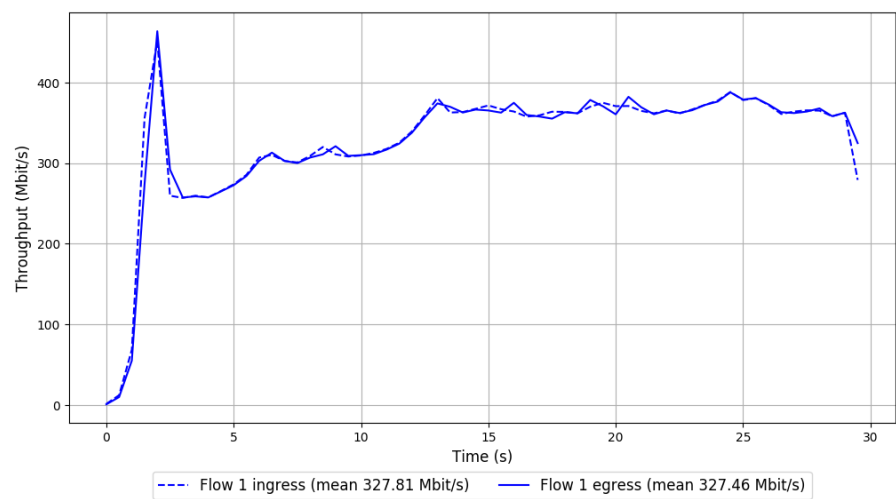
-- Flow 1:

Average throughput: 327.46 Mbit/s

95th percentile per-packet one-way delay: 79.484 ms

Loss rate: 0.10%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-20 12:46:16

End at: 2018-02-20 12:46:46

Below is generated by plot.py at 2018-02-20 15:51:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 337.44 Mbit/s

95th percentile per-packet one-way delay: 106.353 ms

Loss rate: 0.09%

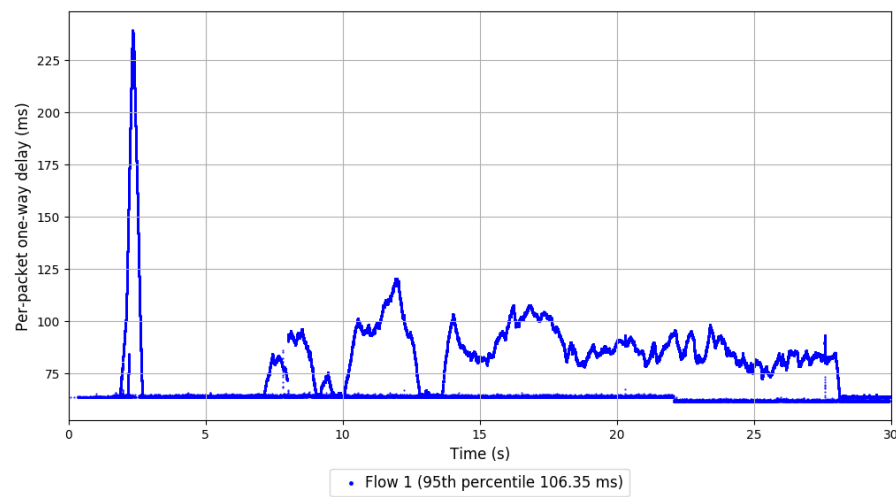
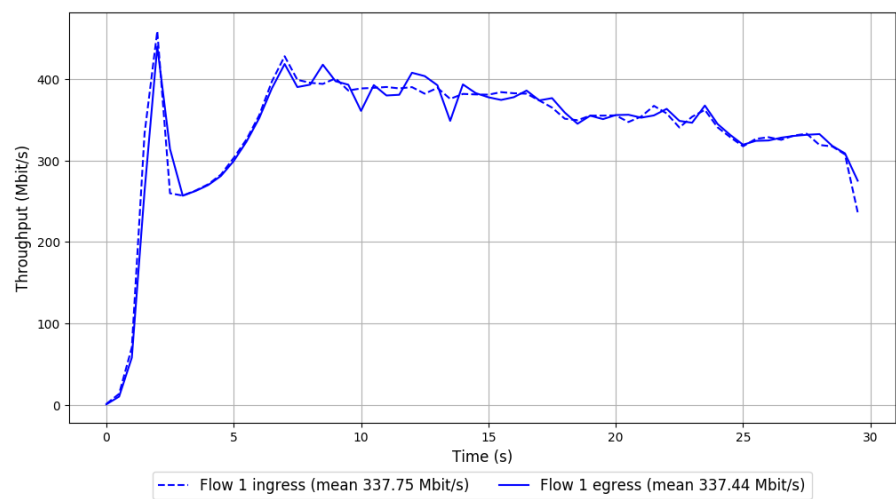
-- Flow 1:

Average throughput: 337.44 Mbit/s

95th percentile per-packet one-way delay: 106.353 ms

Loss rate: 0.09%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-20 13:00:59

End at: 2018-02-20 13:01:29

Below is generated by plot.py at 2018-02-20 15:51:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 347.60 Mbit/s

95th percentile per-packet one-way delay: 102.406 ms

Loss rate: 0.17%

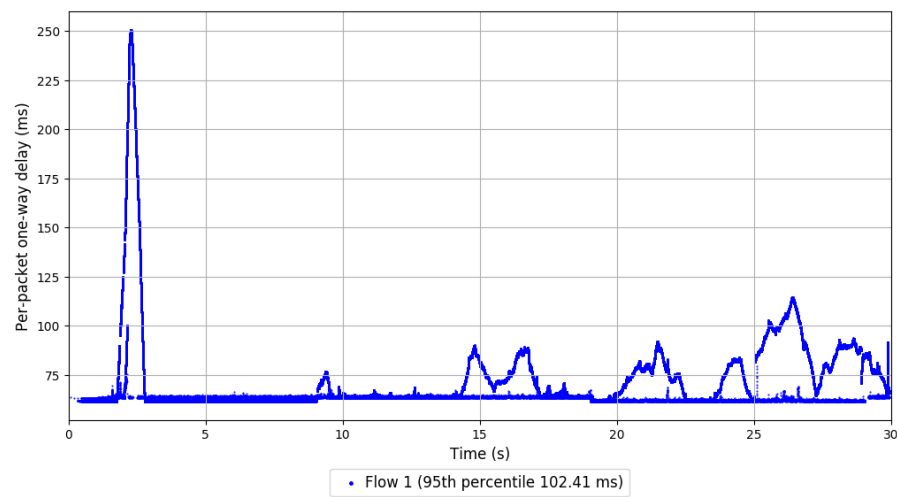
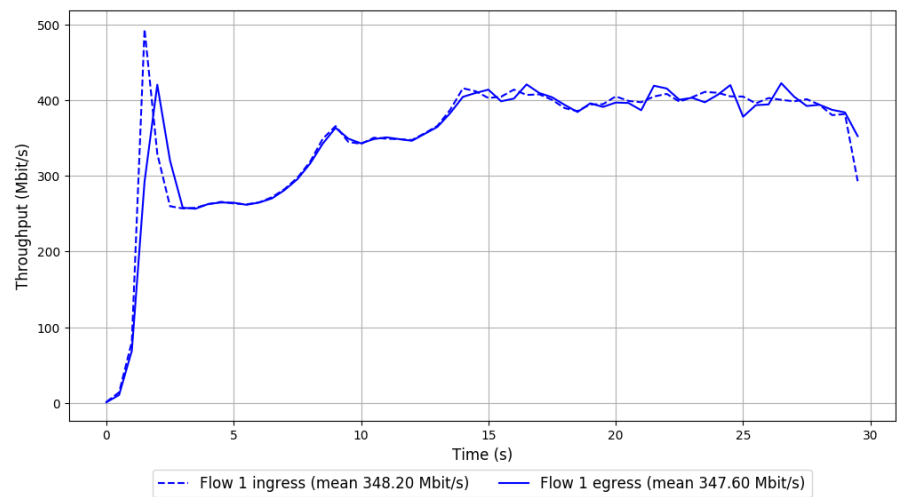
-- Flow 1:

Average throughput: 347.60 Mbit/s

95th percentile per-packet one-way delay: 102.406 ms

Loss rate: 0.17%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-20 13:15:52

End at: 2018-02-20 13:16:22

Below is generated by plot.py at 2018-02-20 15:51:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 317.45 Mbit/s

95th percentile per-packet one-way delay: 80.419 ms

Loss rate: 0.12%

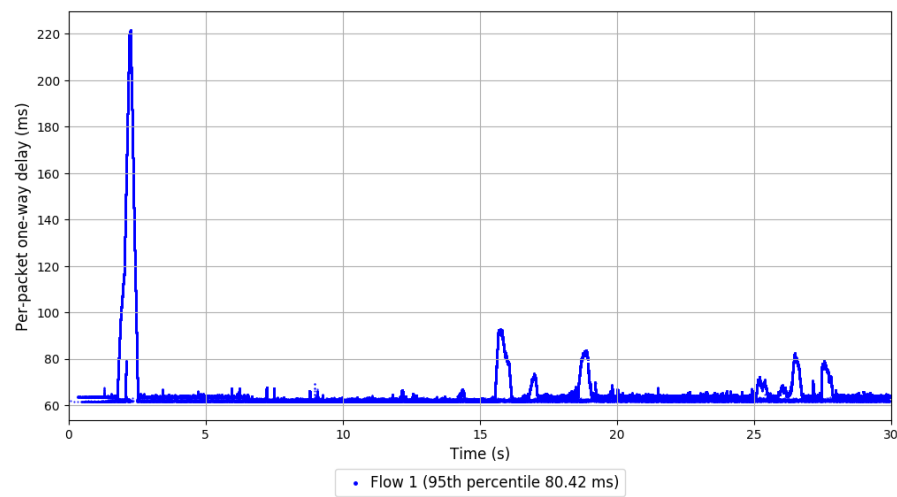
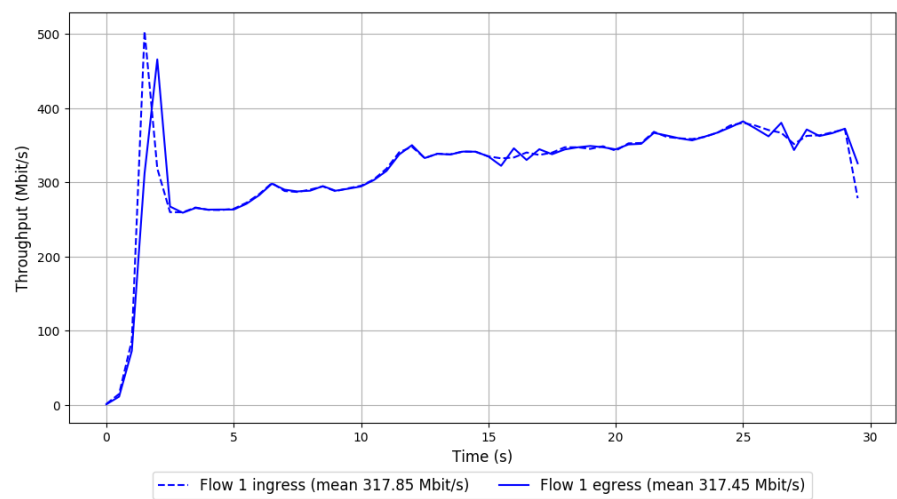
-- Flow 1:

Average throughput: 317.45 Mbit/s

95th percentile per-packet one-way delay: 80.419 ms

Loss rate: 0.12%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-20 13:30:37

End at: 2018-02-20 13:31:07

Below is generated by plot.py at 2018-02-20 15:52:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 330.44 Mbit/s

95th percentile per-packet one-way delay: 213.618 ms

Loss rate: 0.12%

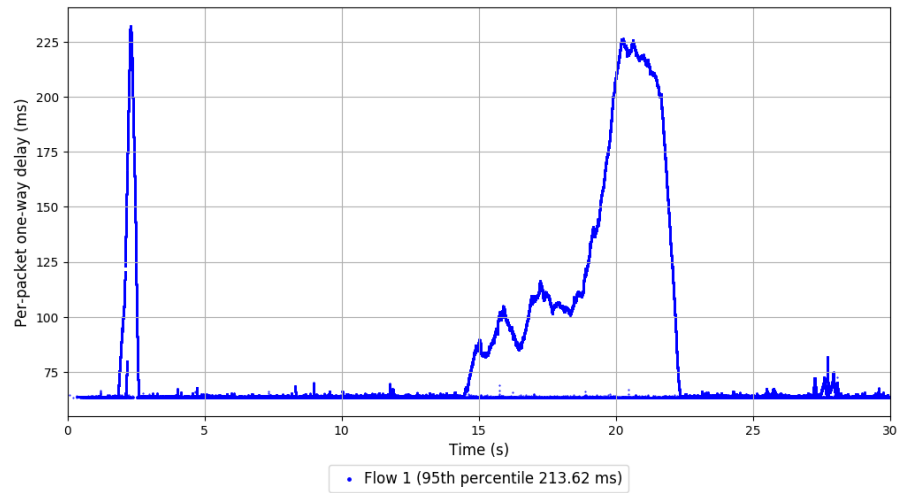
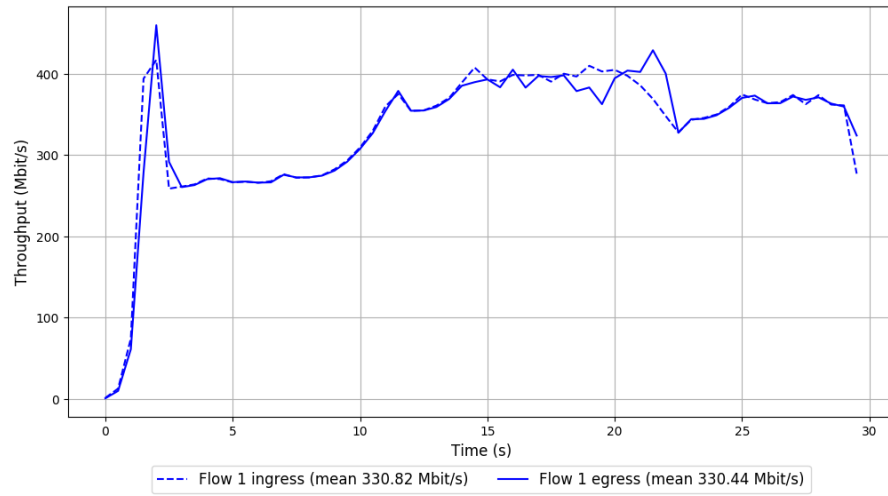
-- Flow 1:

Average throughput: 330.44 Mbit/s

95th percentile per-packet one-way delay: 213.618 ms

Loss rate: 0.12%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-20 13:45:09

End at: 2018-02-20 13:45:39

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 361.21 Mbit/s

95th percentile per-packet one-way delay: 147.763 ms

Loss rate: 0.14%

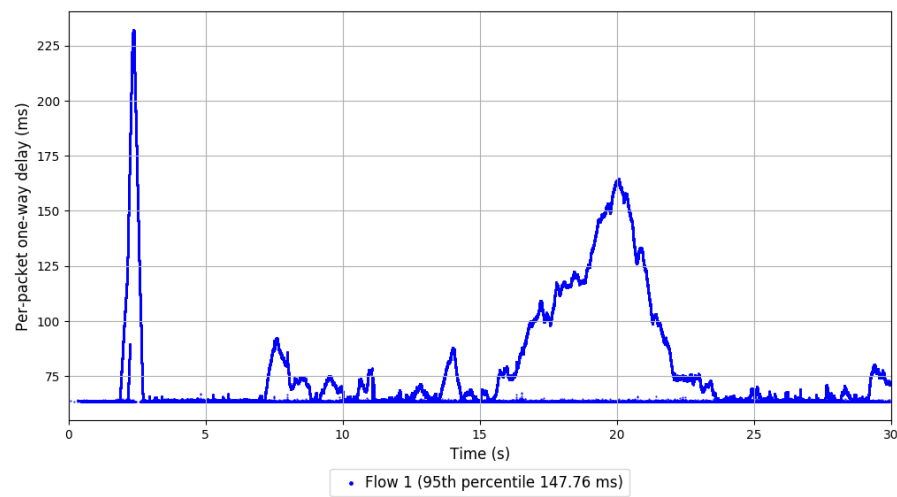
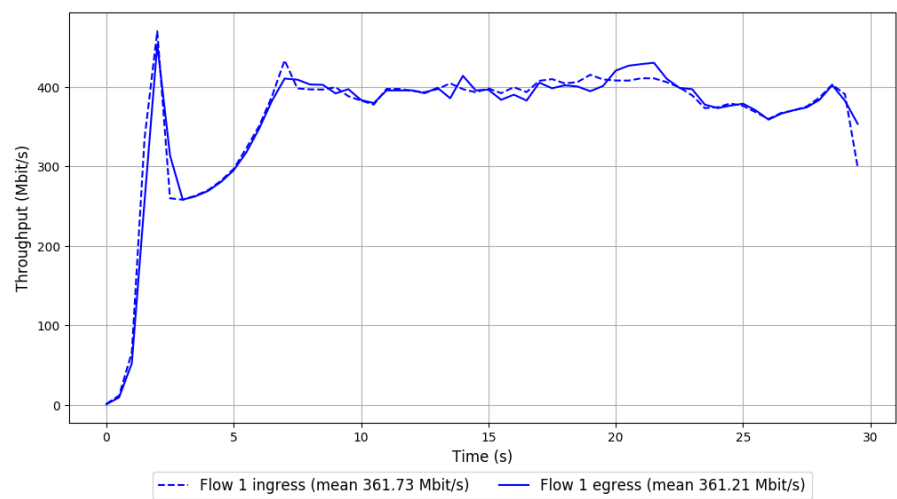
-- Flow 1:

Average throughput: 361.21 Mbit/s

95th percentile per-packet one-way delay: 147.763 ms

Loss rate: 0.14%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-02-20 14:00:00

End at: 2018-02-20 14:00:30

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 329.21 Mbit/s

95th percentile per-packet one-way delay: 92.738 ms

Loss rate: 0.12%

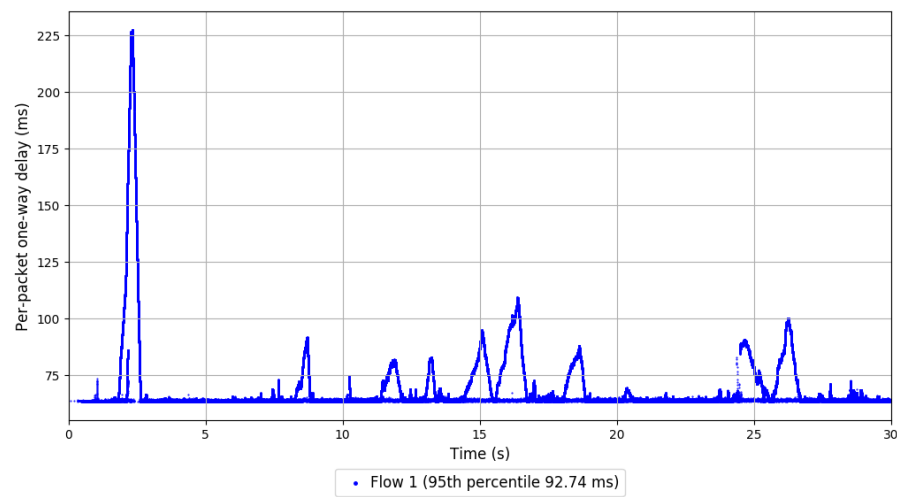
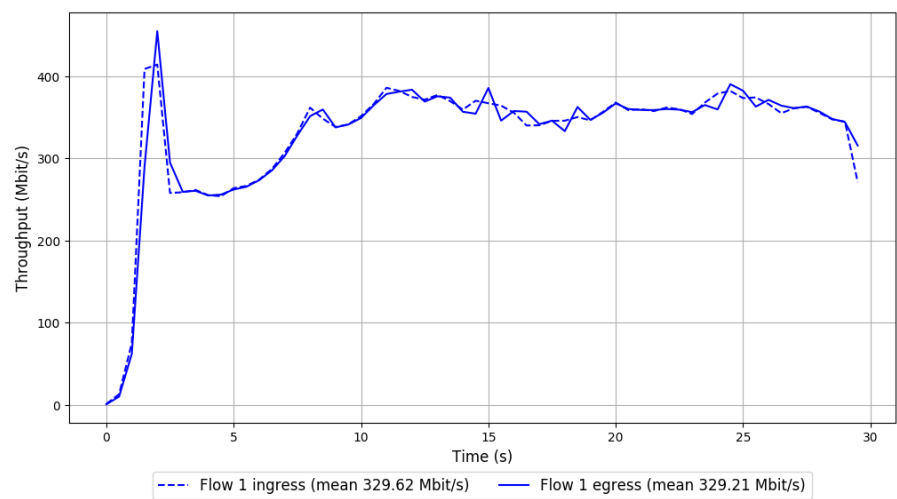
-- Flow 1:

Average throughput: 329.21 Mbit/s

95th percentile per-packet one-way delay: 92.738 ms

Loss rate: 0.12%

Run 10: Report of PCC — Data Link

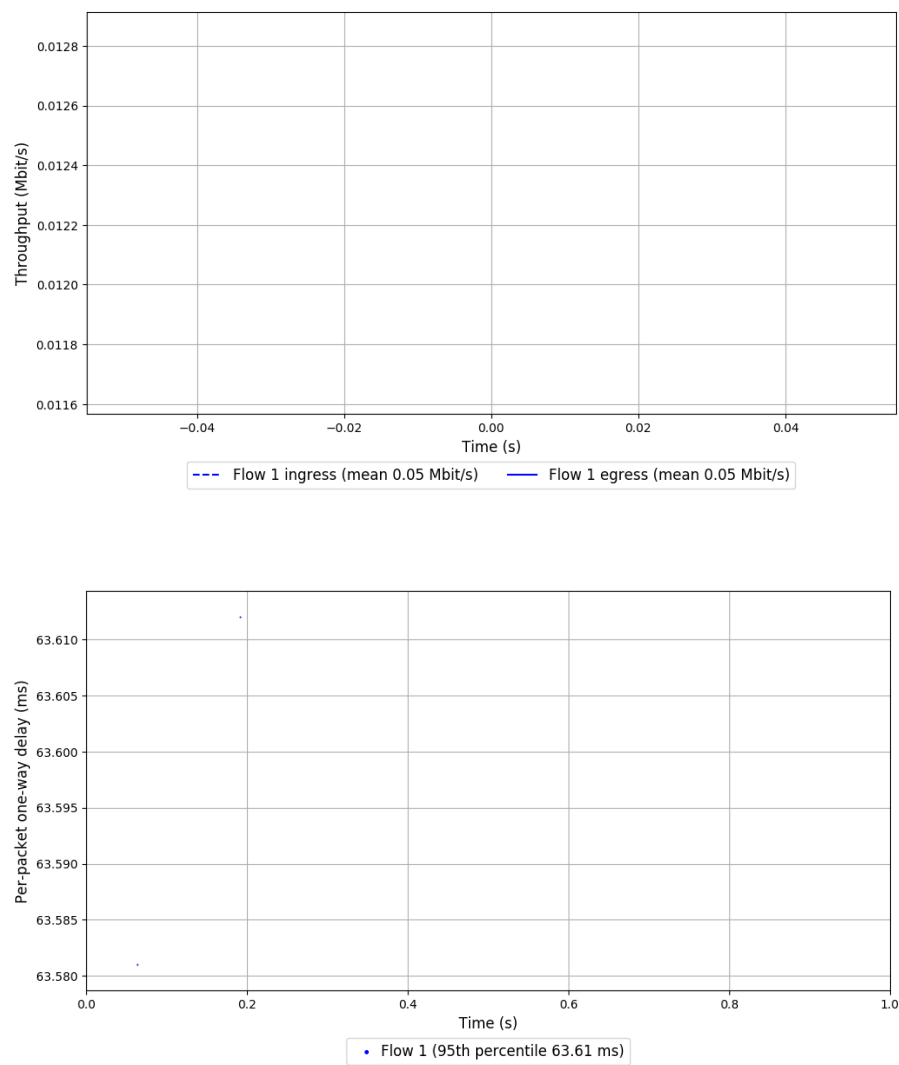


Run 1: Statistics of QUIC Cubic

Start at: 2018-02-20 11:42:47

End at: 2018-02-20 11:43:17

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-20 11:57:41

End at: 2018-02-20 11:58:11

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.25 Mbit/s

95th percentile per-packet one-way delay: 63.221 ms

Loss rate: 0.00%

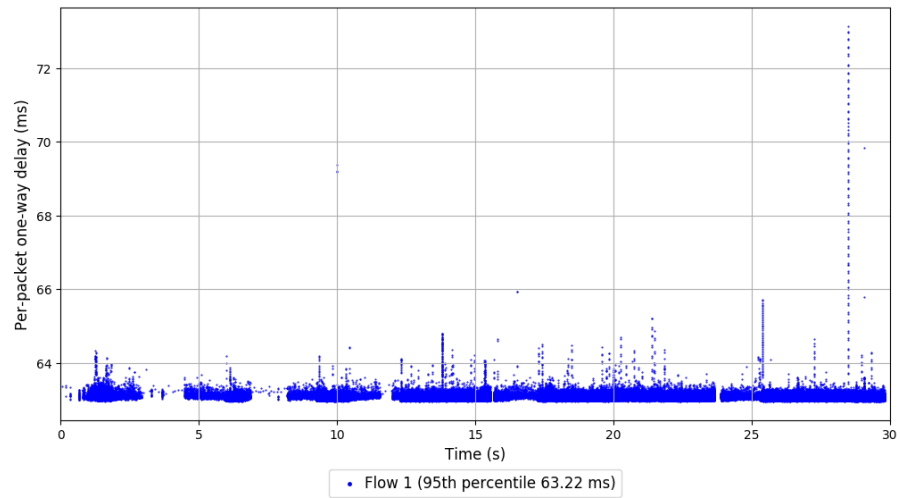
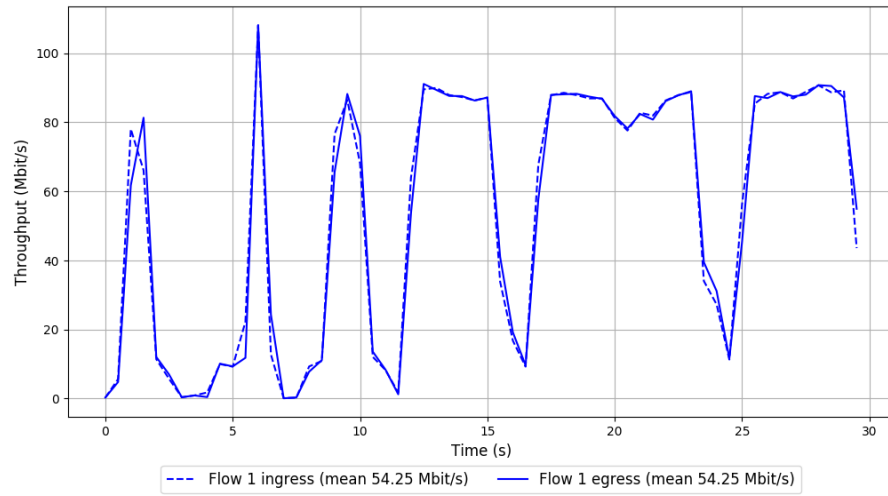
-- Flow 1:

Average throughput: 54.25 Mbit/s

95th percentile per-packet one-way delay: 63.221 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-20 12:12:33

End at: 2018-02-20 12:13:03

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.56 Mbit/s

95th percentile per-packet one-way delay: 63.386 ms

Loss rate: 0.00%

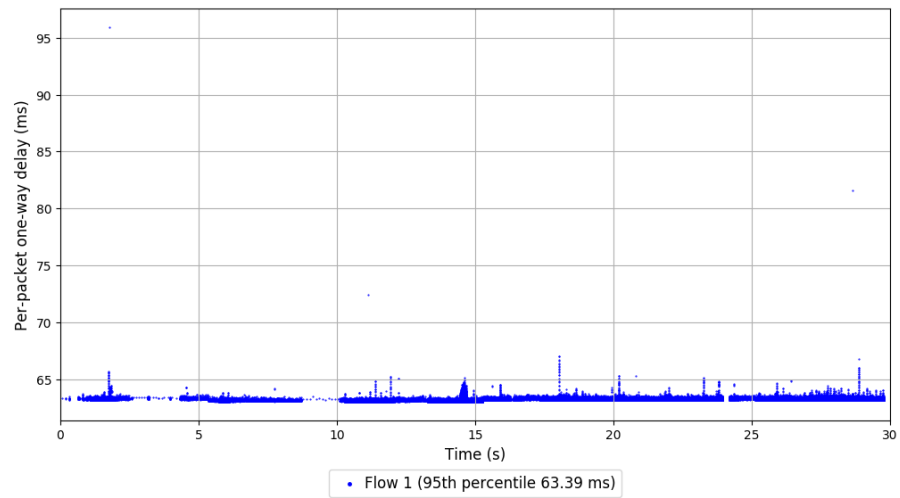
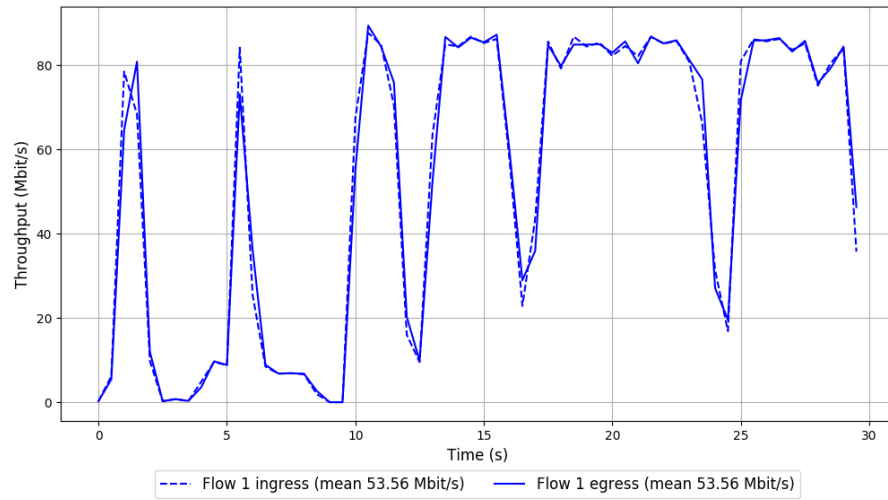
-- Flow 1:

Average throughput: 53.56 Mbit/s

95th percentile per-packet one-way delay: 63.386 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-20 12:27:03

End at: 2018-02-20 12:27:33

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.20 Mbit/s

95th percentile per-packet one-way delay: 63.372 ms

Loss rate: 0.00%

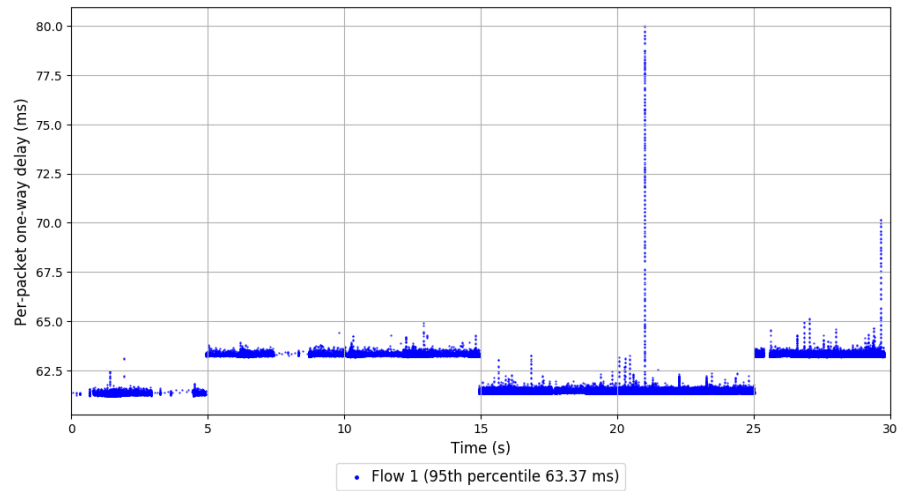
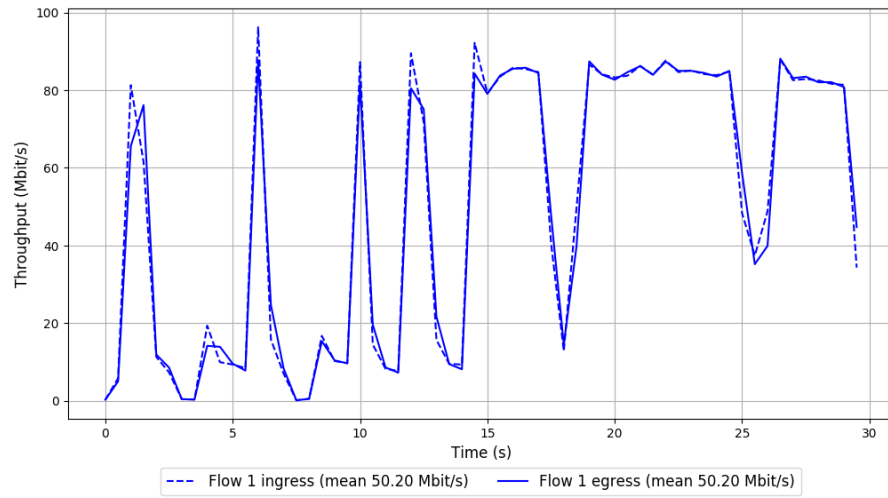
-- Flow 1:

Average throughput: 50.20 Mbit/s

95th percentile per-packet one-way delay: 63.372 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-20 12:41:44

End at: 2018-02-20 12:42:14

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.19 Mbit/s

95th percentile per-packet one-way delay: 63.496 ms

Loss rate: 0.00%

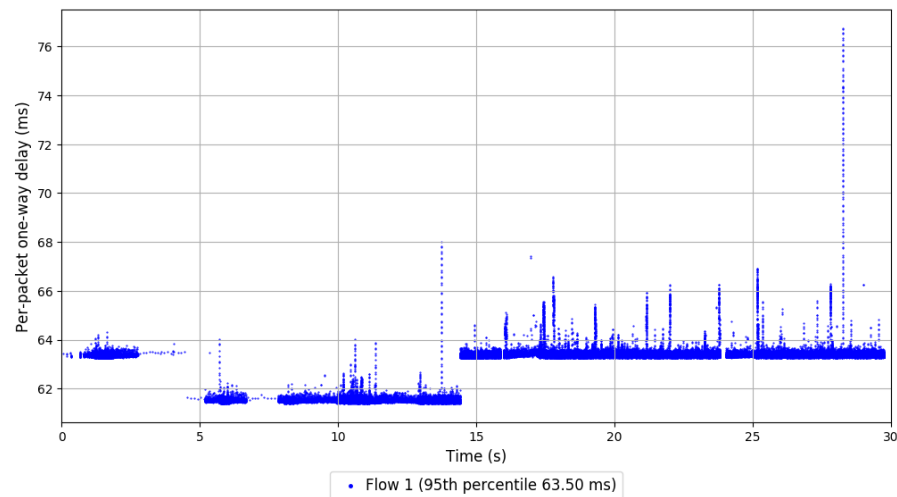
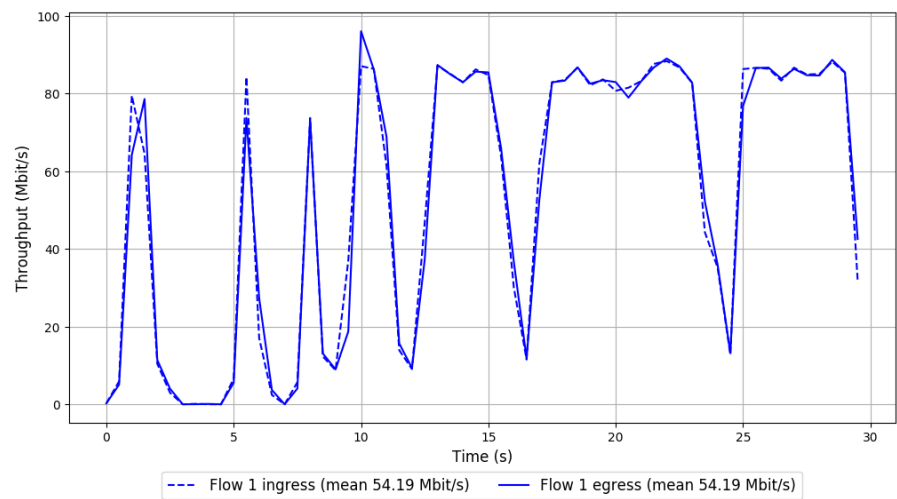
-- Flow 1:

Average throughput: 54.19 Mbit/s

95th percentile per-packet one-way delay: 63.496 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-20 12:56:27

End at: 2018-02-20 12:56:57

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.21 Mbit/s

95th percentile per-packet one-way delay: 63.463 ms

Loss rate: 0.00%

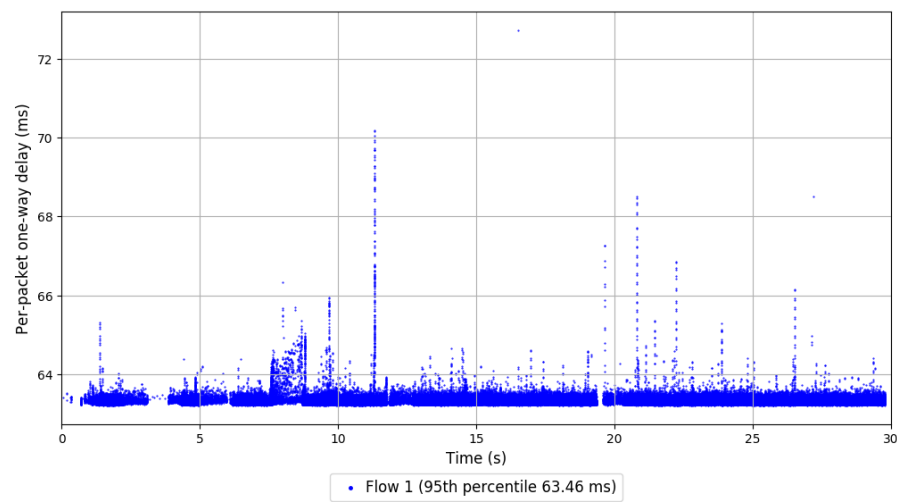
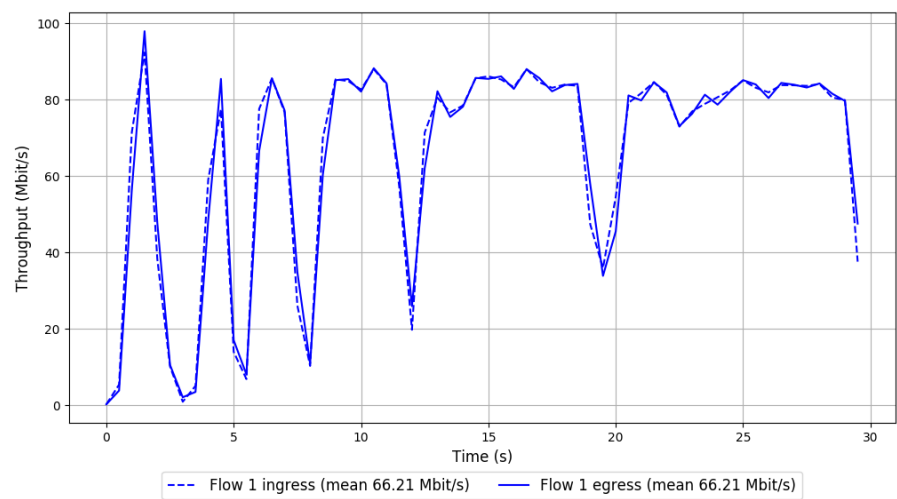
-- Flow 1:

Average throughput: 66.21 Mbit/s

95th percentile per-packet one-way delay: 63.463 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-20 13:11:12

End at: 2018-02-20 13:11:42

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.27 Mbit/s

95th percentile per-packet one-way delay: 63.438 ms

Loss rate: 0.00%

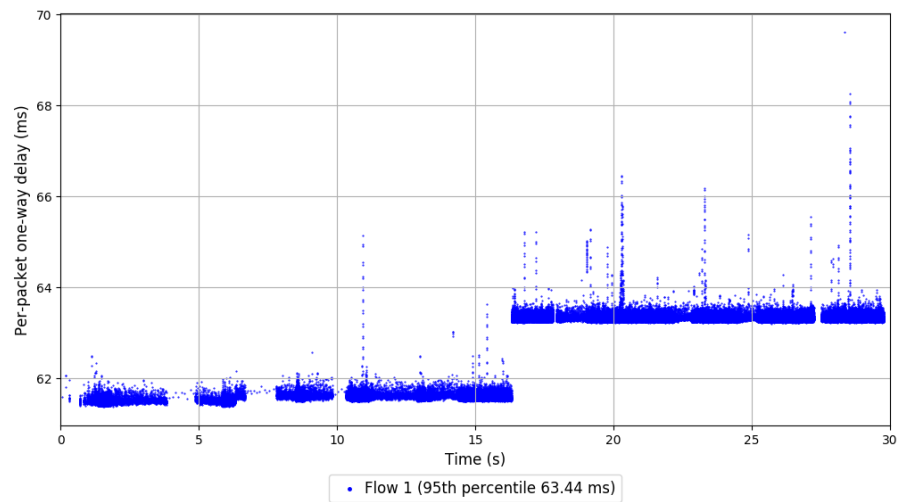
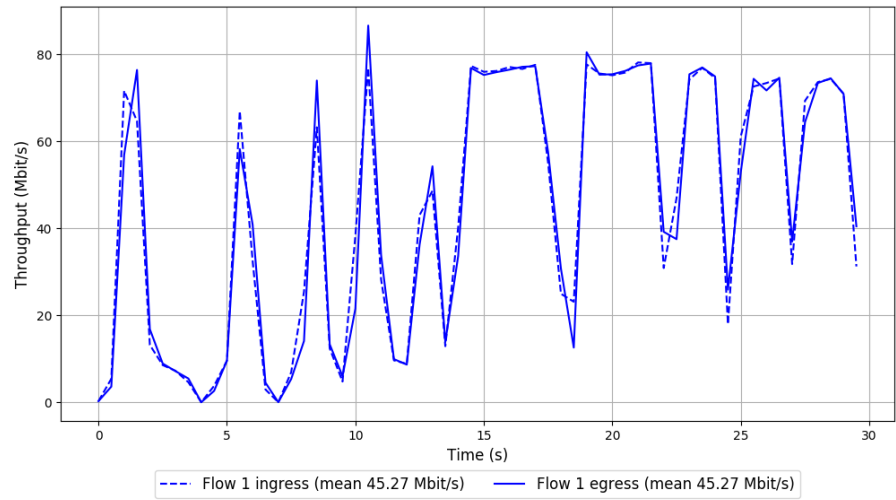
-- Flow 1:

Average throughput: 45.27 Mbit/s

95th percentile per-packet one-way delay: 63.438 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-20 13:26:05

End at: 2018-02-20 13:26:35

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.38 Mbit/s

95th percentile per-packet one-way delay: 63.673 ms

Loss rate: 0.00%

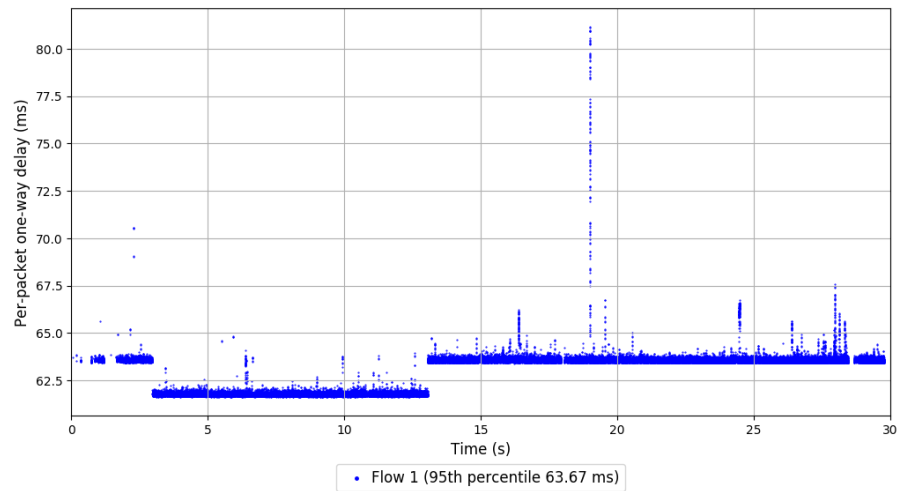
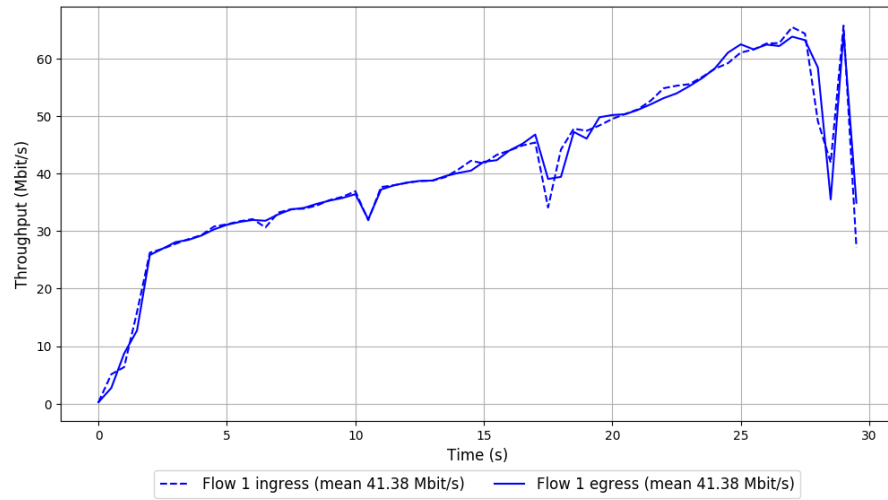
-- Flow 1:

Average throughput: 41.38 Mbit/s

95th percentile per-packet one-way delay: 63.673 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-20 13:40:40

End at: 2018-02-20 13:41:10

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.35 Mbit/s

95th percentile per-packet one-way delay: 63.648 ms

Loss rate: 0.00%

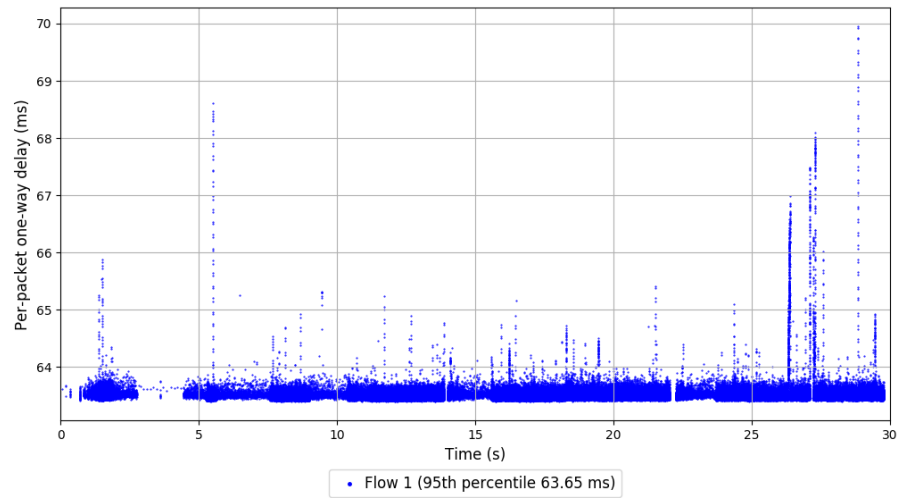
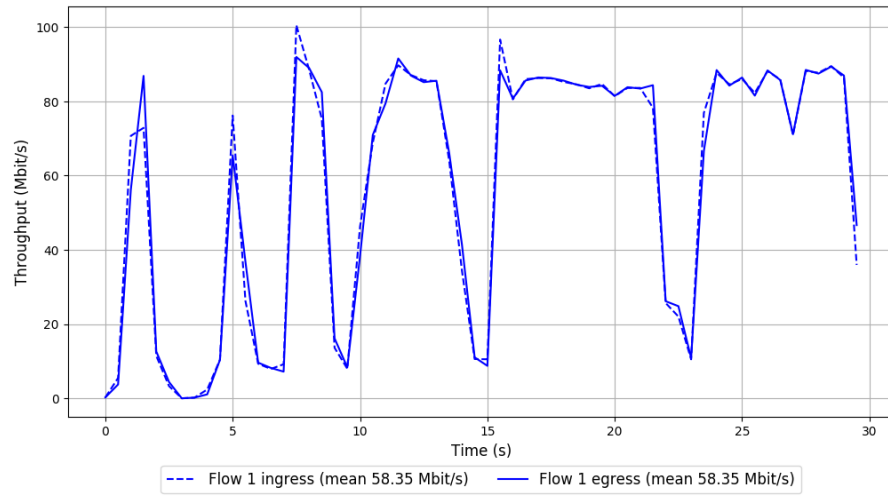
-- Flow 1:

Average throughput: 58.35 Mbit/s

95th percentile per-packet one-way delay: 63.648 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-20 13:55:25

End at: 2018-02-20 13:55:55

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.32 Mbit/s

95th percentile per-packet one-way delay: 63.558 ms

Loss rate: 0.00%

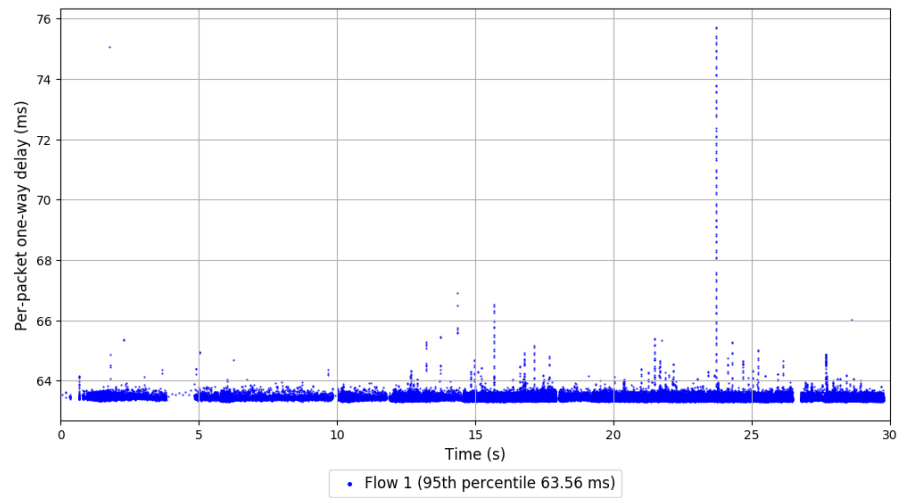
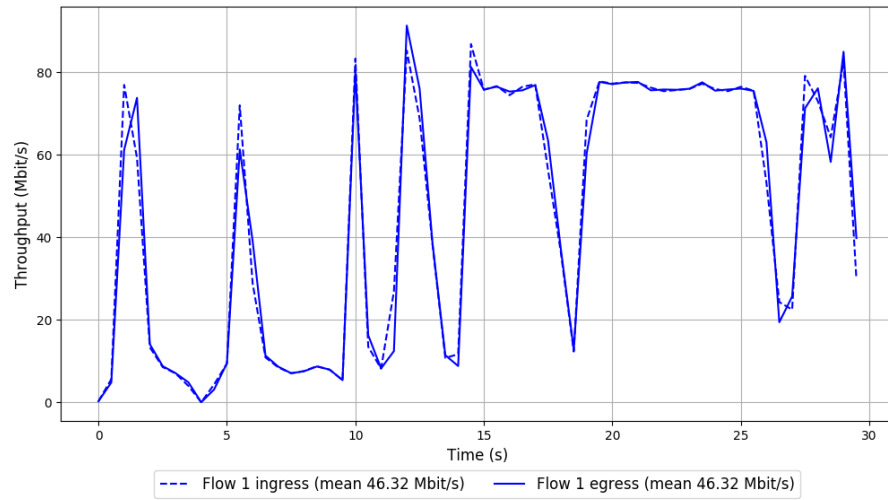
-- Flow 1:

Average throughput: 46.32 Mbit/s

95th percentile per-packet one-way delay: 63.558 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

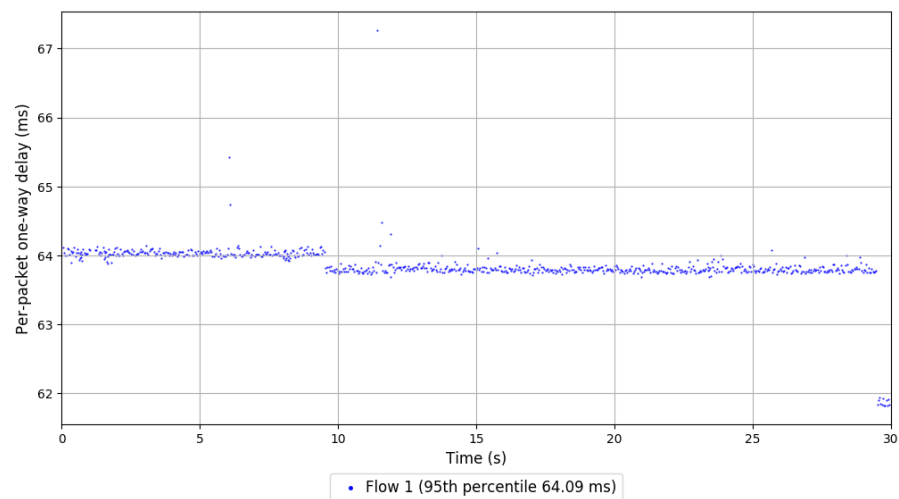
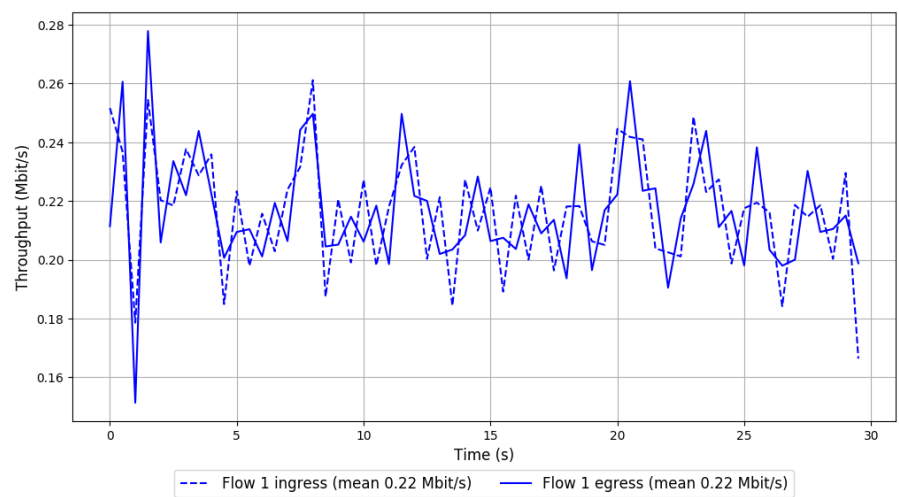


```
Run 1: Statistics of SCReAM

Start at: 2018-02-20 11:36:49
End at: 2018-02-20 11:37:19

# Below is generated by plot.py at 2018-02-20 15:56:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 64.088 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 64.088 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

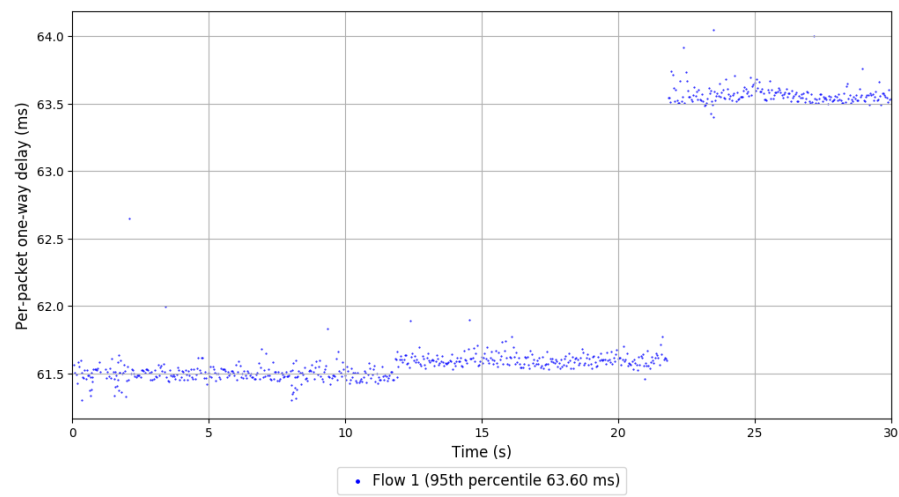
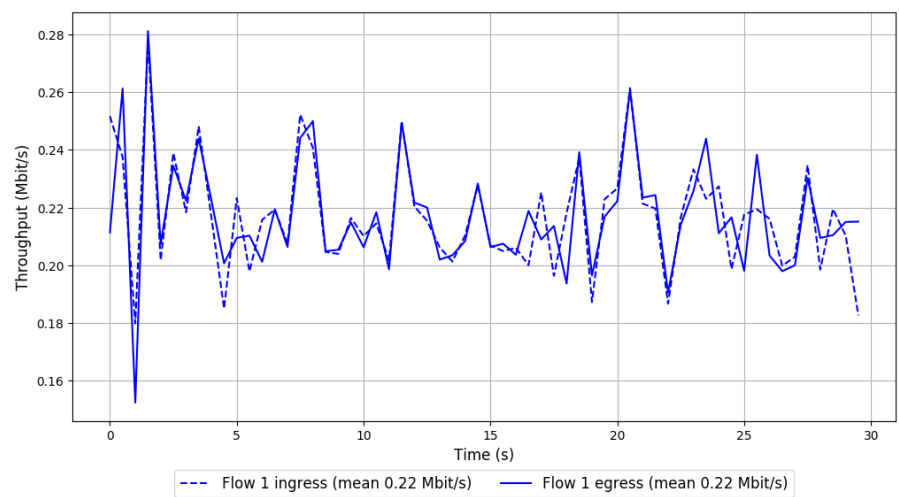


```
Run 2: Statistics of SCReAM

Start at: 2018-02-20 11:51:36
End at: 2018-02-20 11:52:06

# Below is generated by plot.py at 2018-02-20 15:56:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.600 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.600 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-02-20 12:06:20

End at: 2018-02-20 12:06:50

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.438 ms

Loss rate: 0.00%

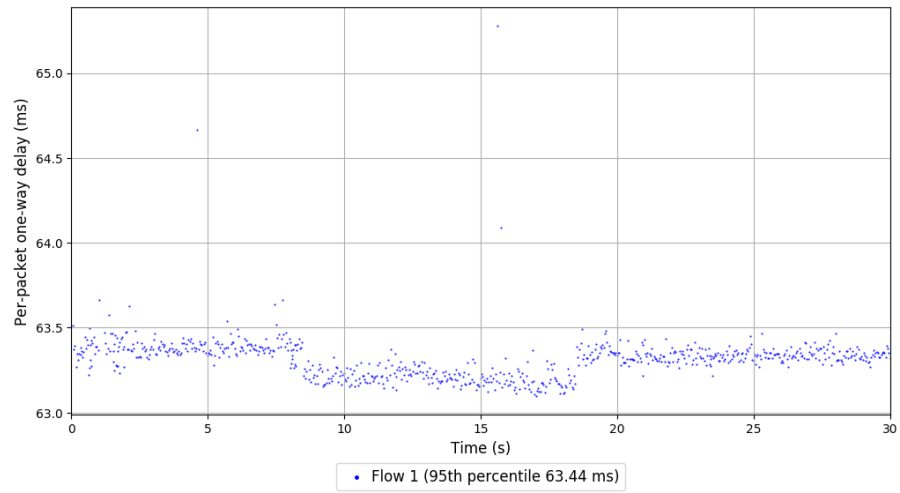
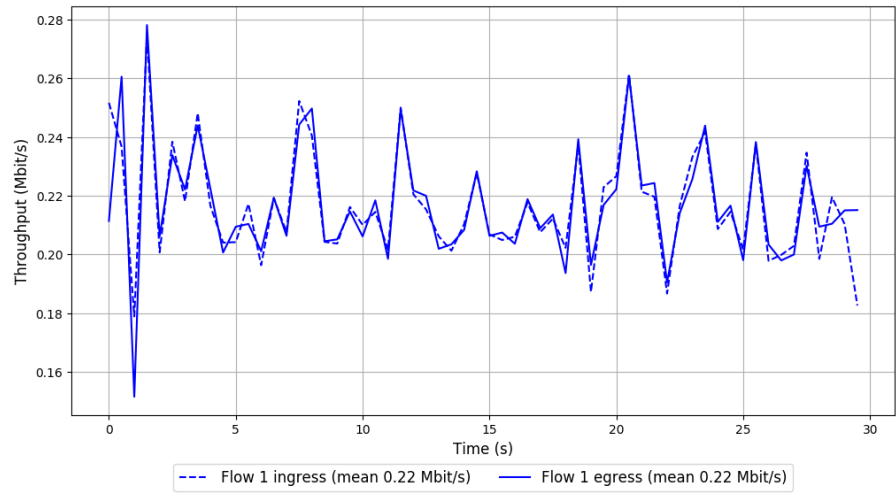
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.438 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-02-20 12:21:09

End at: 2018-02-20 12:21:39

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.812 ms

Loss rate: 0.00%

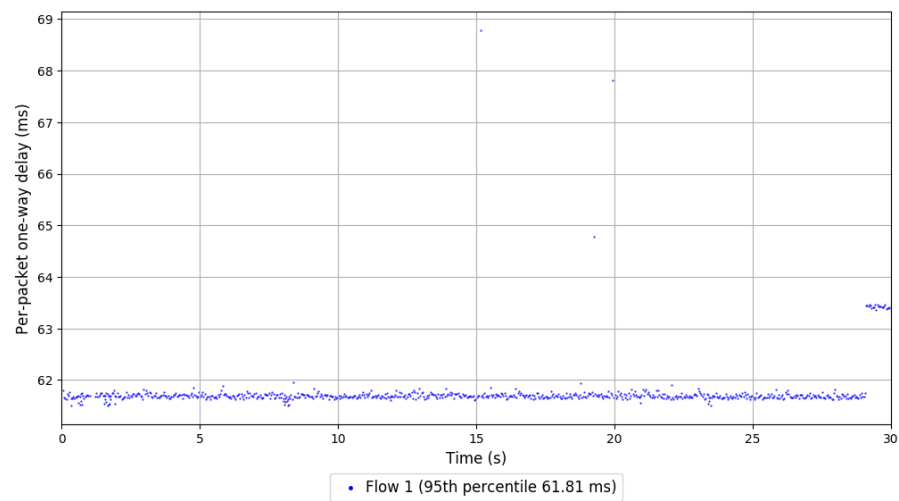
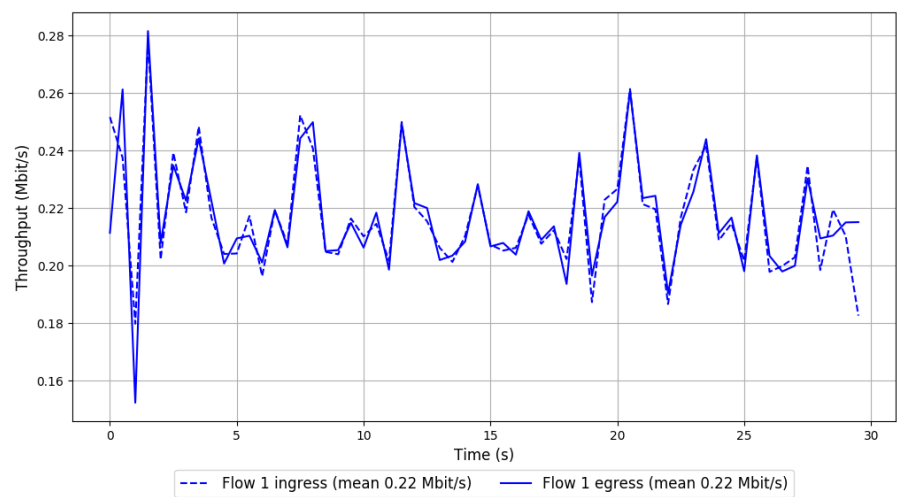
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.812 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-20 12:35:45

End at: 2018-02-20 12:36:15

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.506 ms

Loss rate: 0.00%

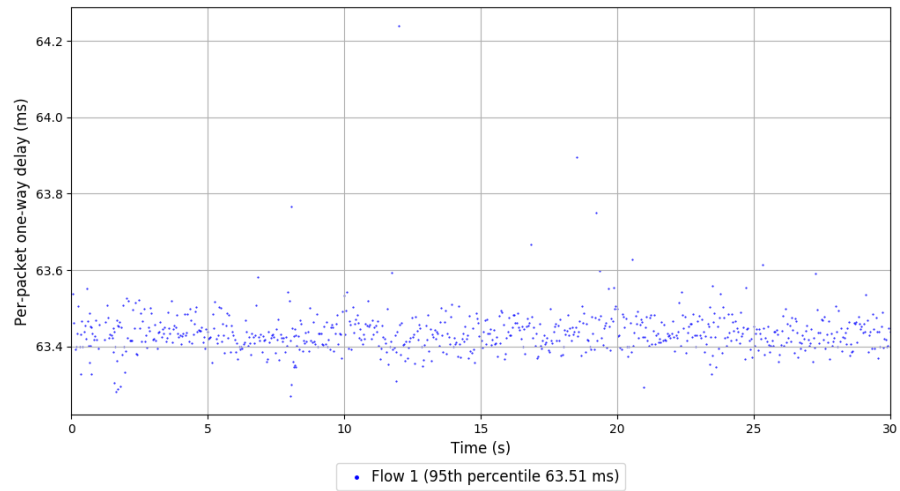
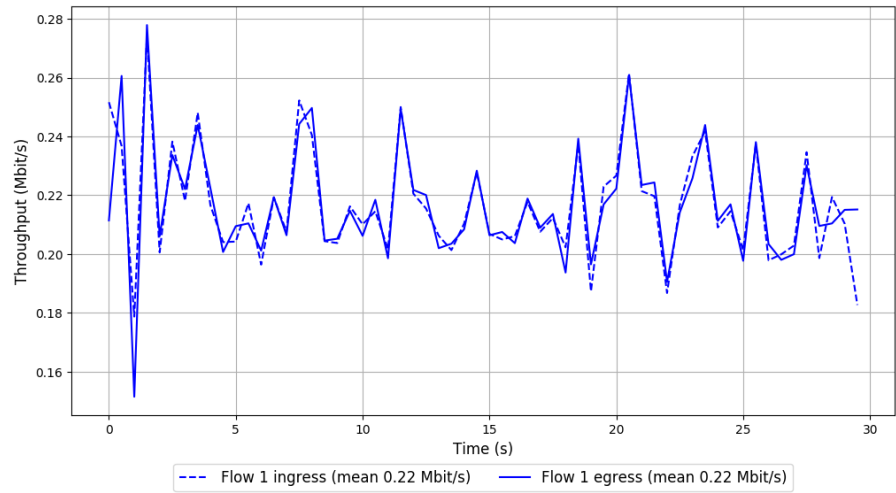
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.506 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-02-20 12:50:24

End at: 2018-02-20 12:50:54

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.545 ms

Loss rate: 0.00%

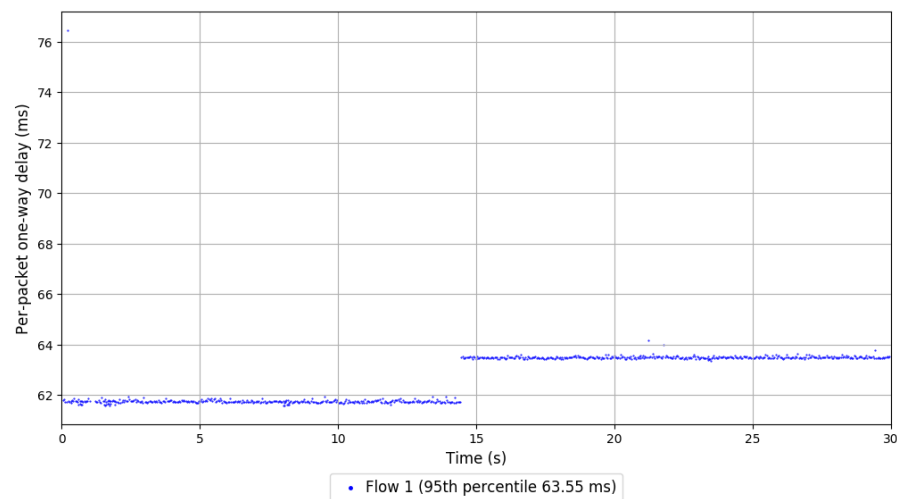
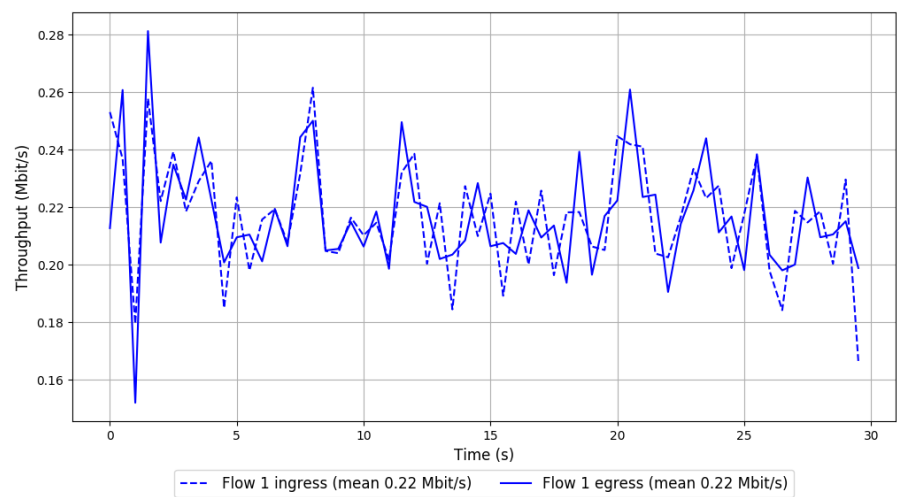
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.545 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-02-20 13:05:05

End at: 2018-02-20 13:05:35

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.649 ms

Loss rate: 0.00%

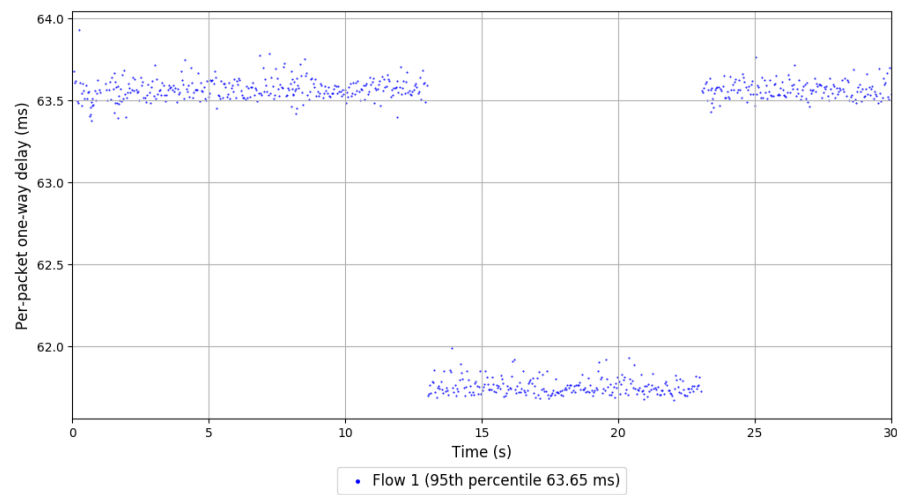
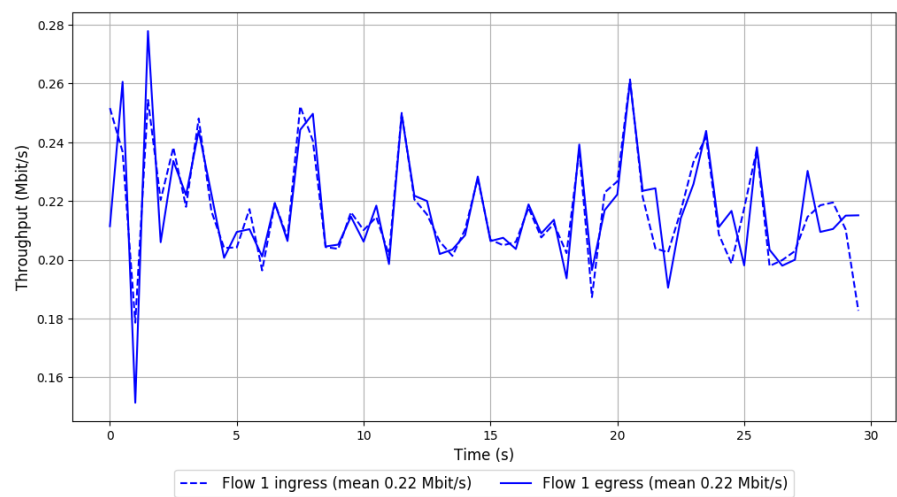
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.649 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-02-20 13:19:54

End at: 2018-02-20 13:20:24

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.554 ms

Loss rate: 0.00%

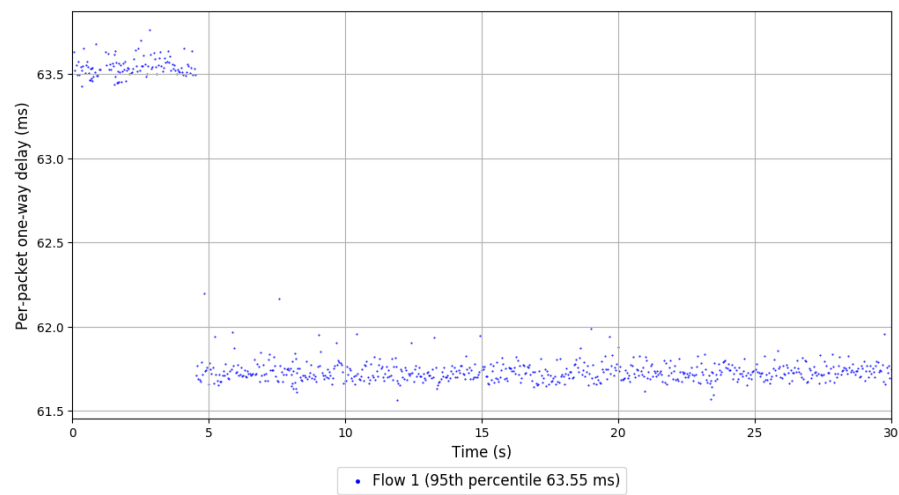
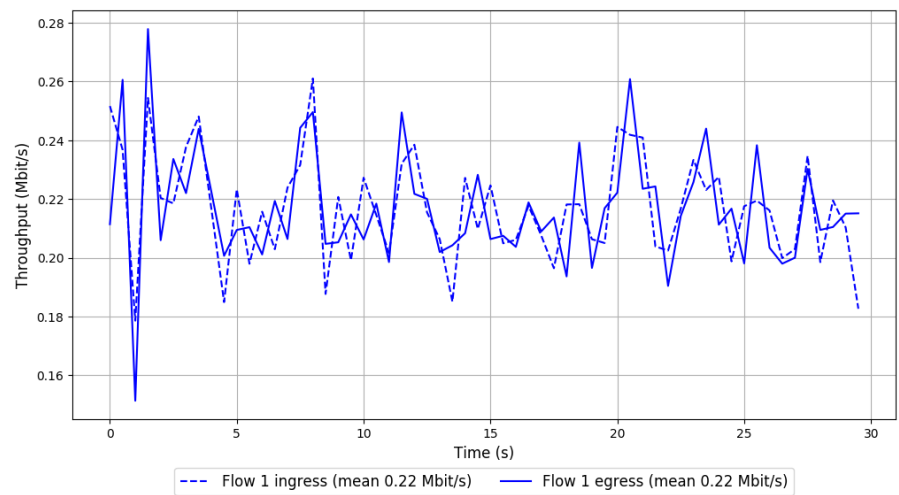
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.554 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-02-20 13:34:39

End at: 2018-02-20 13:35:09

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.650 ms

Loss rate: 0.00%

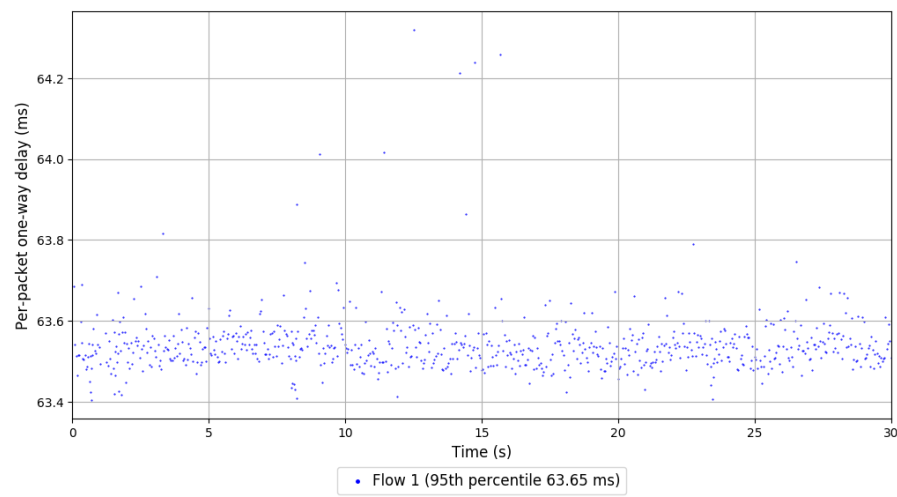
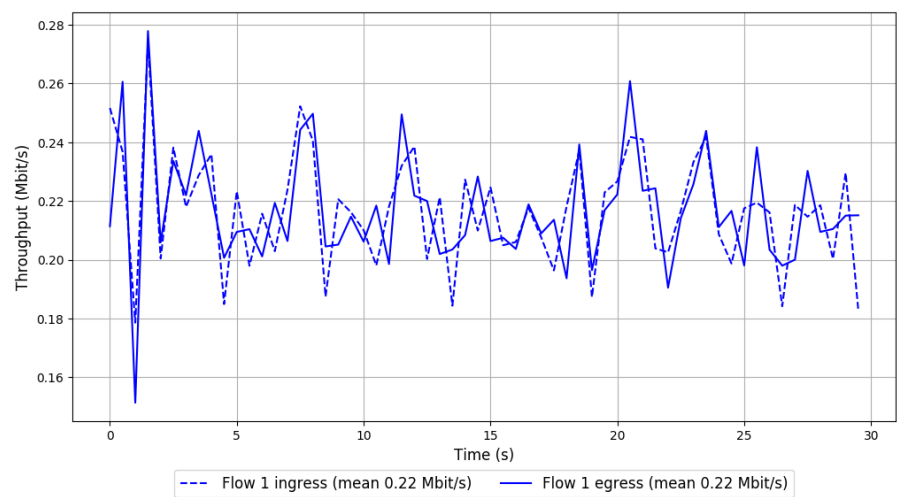
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.650 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-02-20 13:49:13

End at: 2018-02-20 13:49:43

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.622 ms

Loss rate: 0.00%

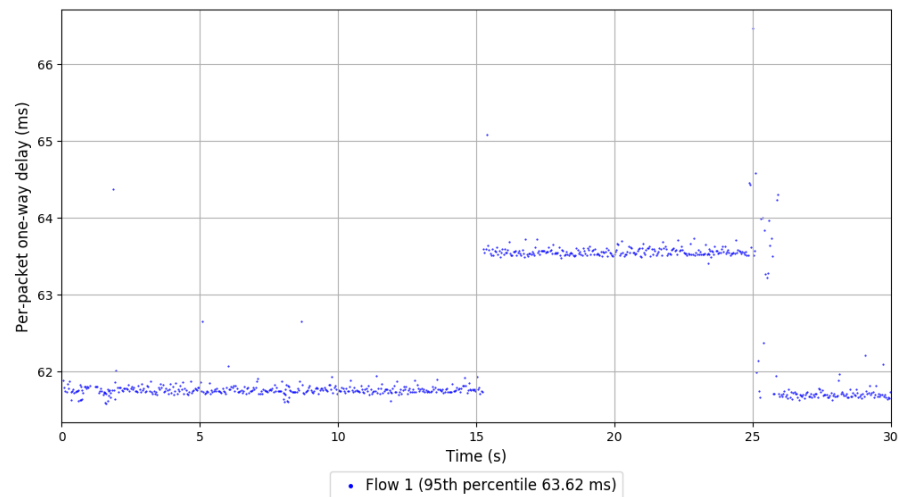
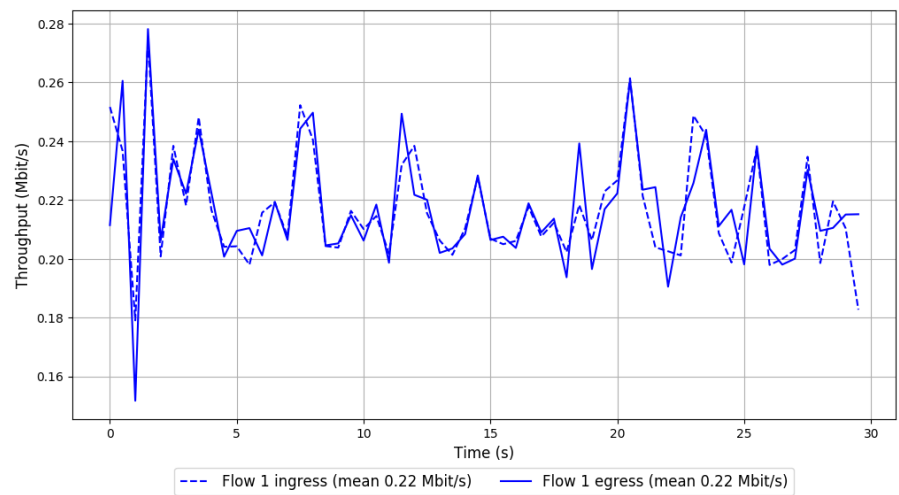
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.622 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

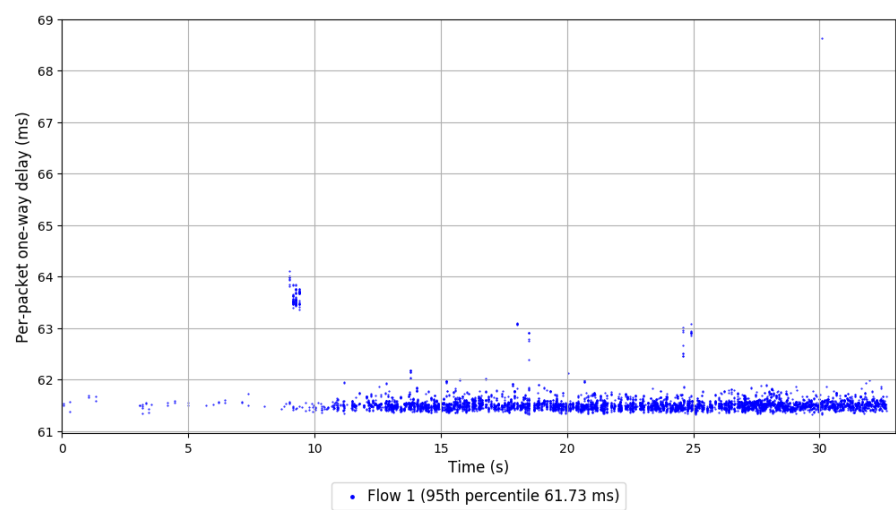
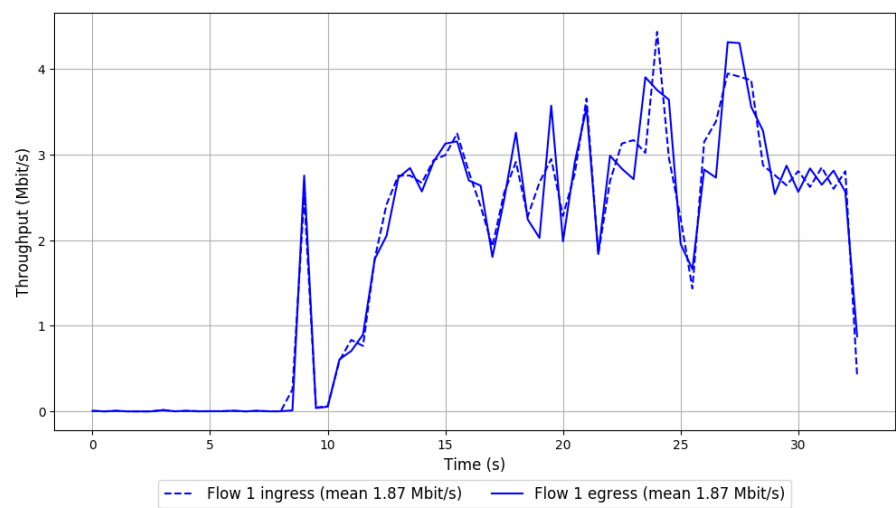


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-20 11:46:10
End at: 2018-02-20 11:46:40

# Below is generated by plot.py at 2018-02-20 15:56:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 61.727 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 61.727 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-20 12:01:05

End at: 2018-02-20 12:01:35

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 63.383 ms

Loss rate: 0.00%

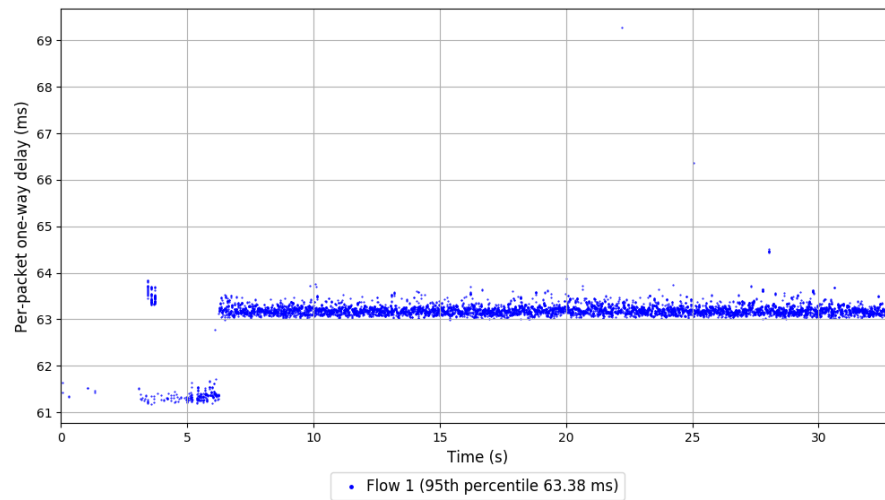
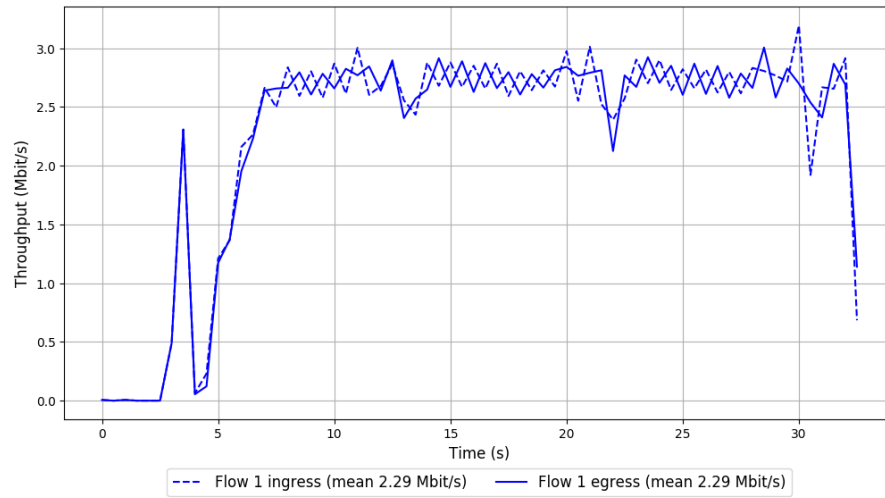
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 63.383 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-20 12:15:58

End at: 2018-02-20 12:16:28

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 63.680 ms

Loss rate: 0.00%

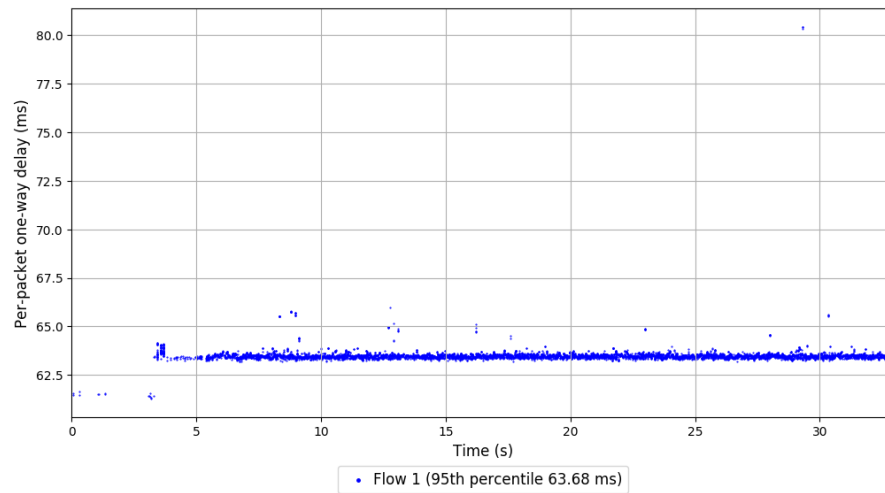
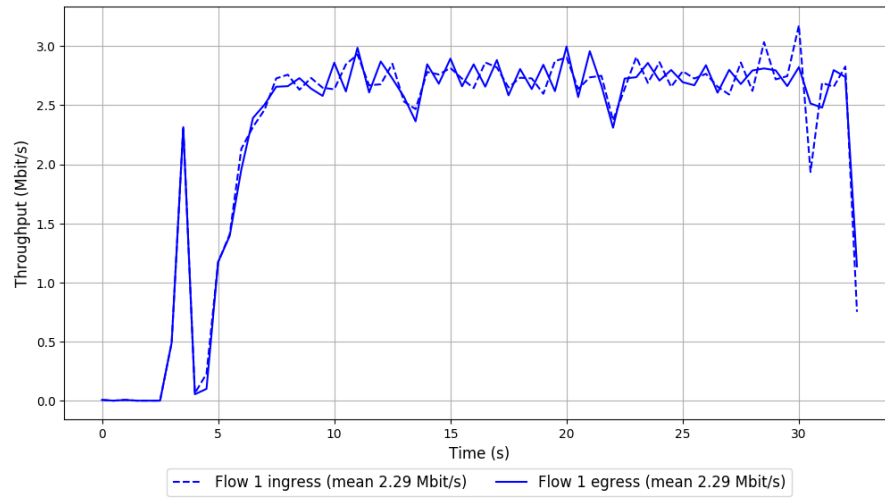
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 63.680 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-20 12:30:21

End at: 2018-02-20 12:30:51

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 63.624 ms

Loss rate: 0.00%

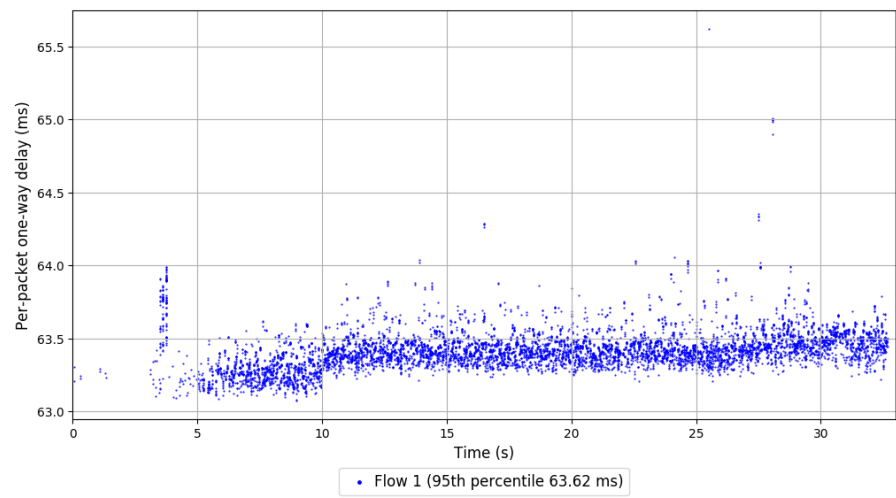
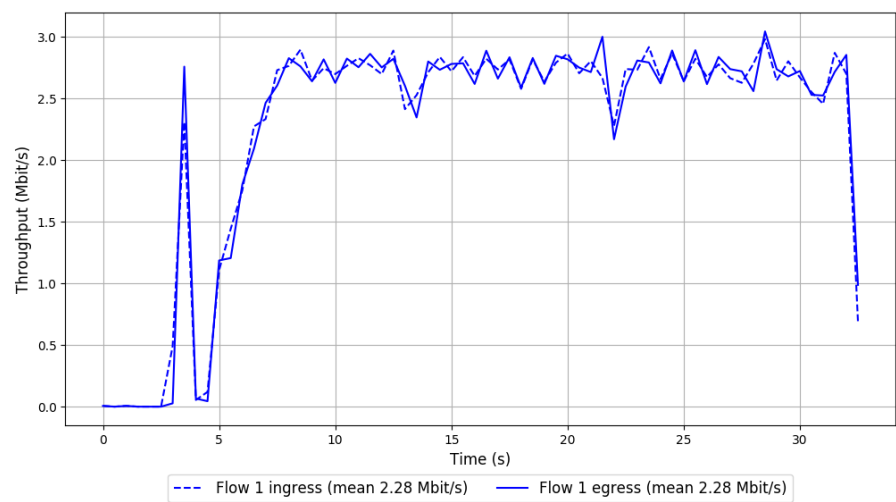
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 63.624 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-20 12:45:01

End at: 2018-02-20 12:45:31

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 61.742 ms

Loss rate: 0.00%

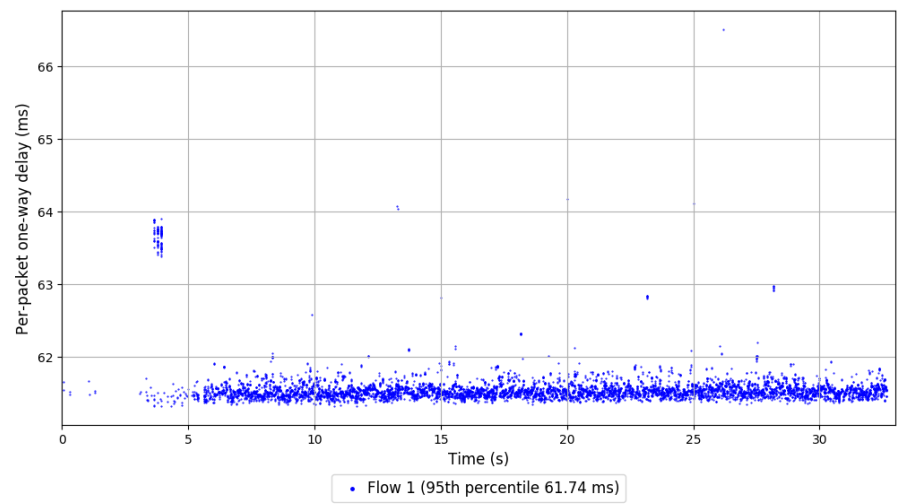
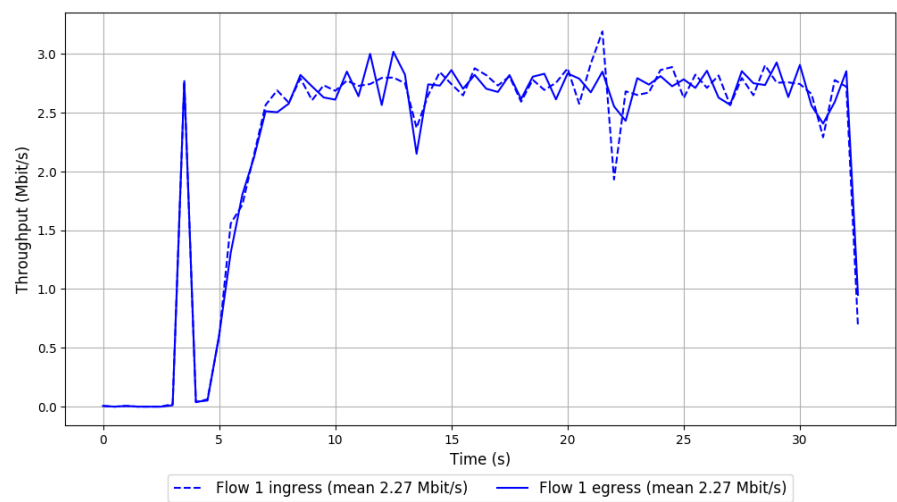
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 61.742 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-20 12:59:44

End at: 2018-02-20 13:00:14

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 63.673 ms

Loss rate: 0.00%

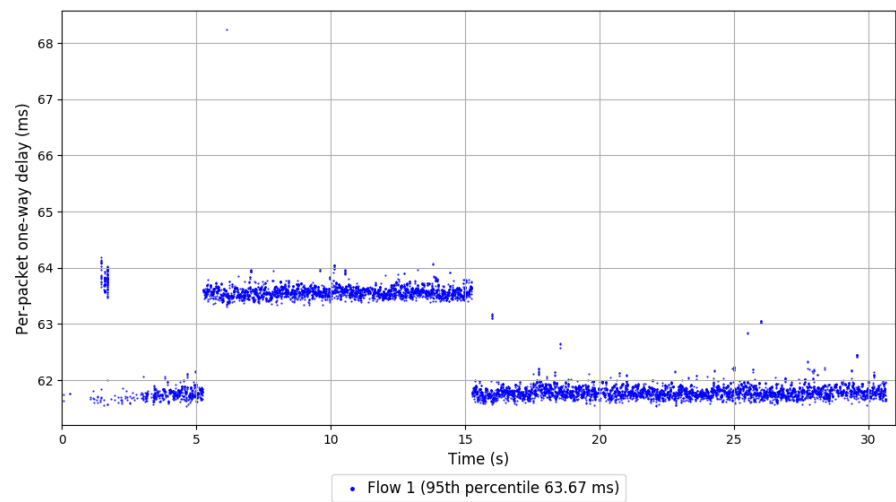
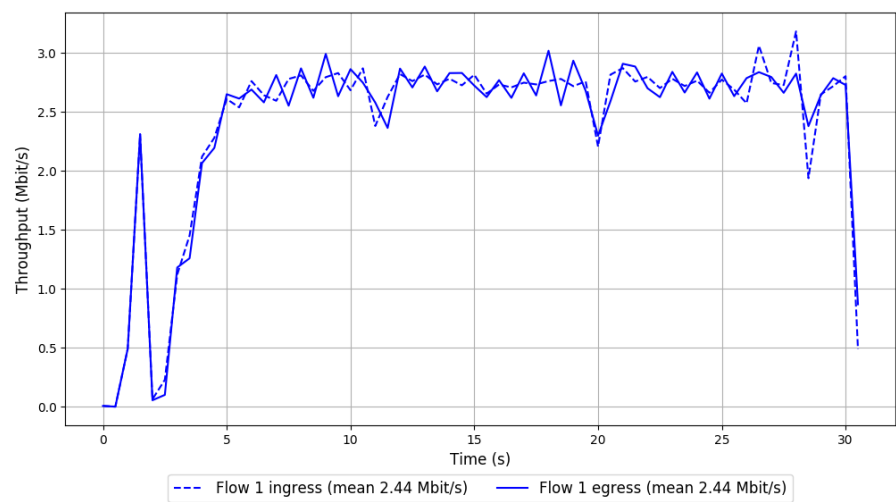
-- Flow 1:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 63.673 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-20 13:14:36

End at: 2018-02-20 13:15:06

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 63.797 ms

Loss rate: 0.00%

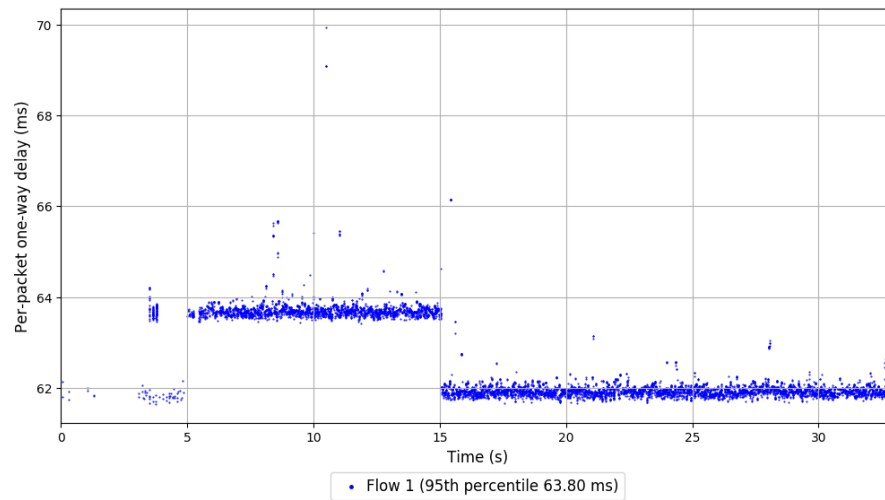
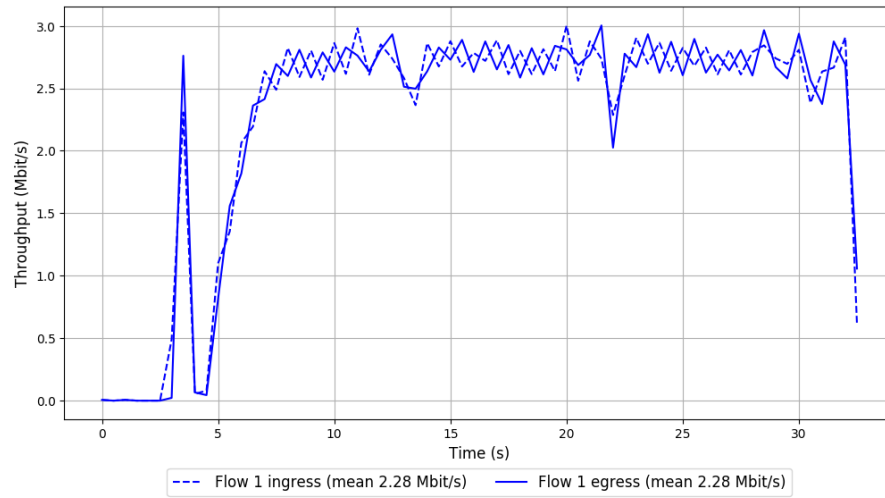
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 63.797 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-20 13:29:22

End at: 2018-02-20 13:29:52

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 63.870 ms

Loss rate: 0.00%

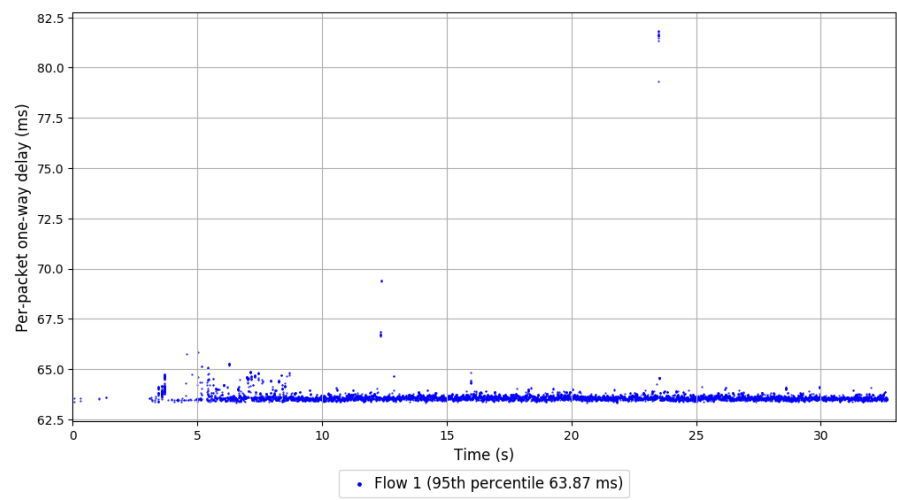
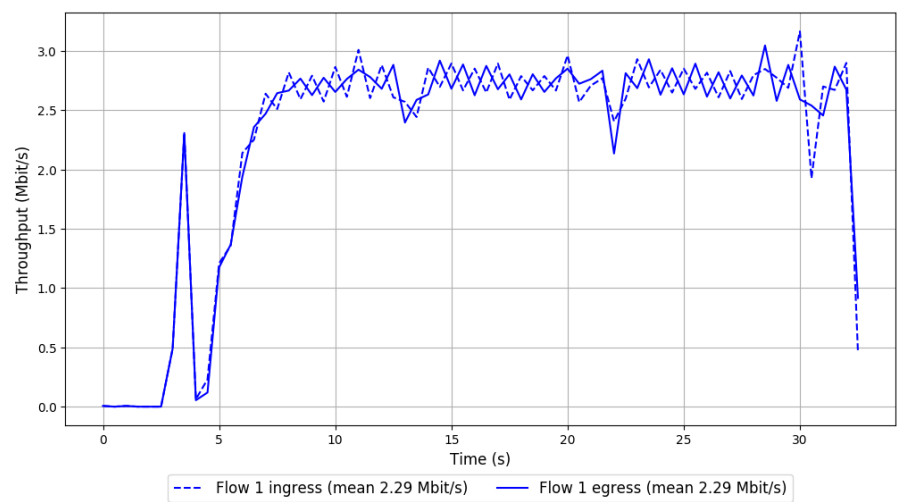
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 63.870 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-20 13:43:53

End at: 2018-02-20 13:44:23

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 63.825 ms

Loss rate: 0.00%

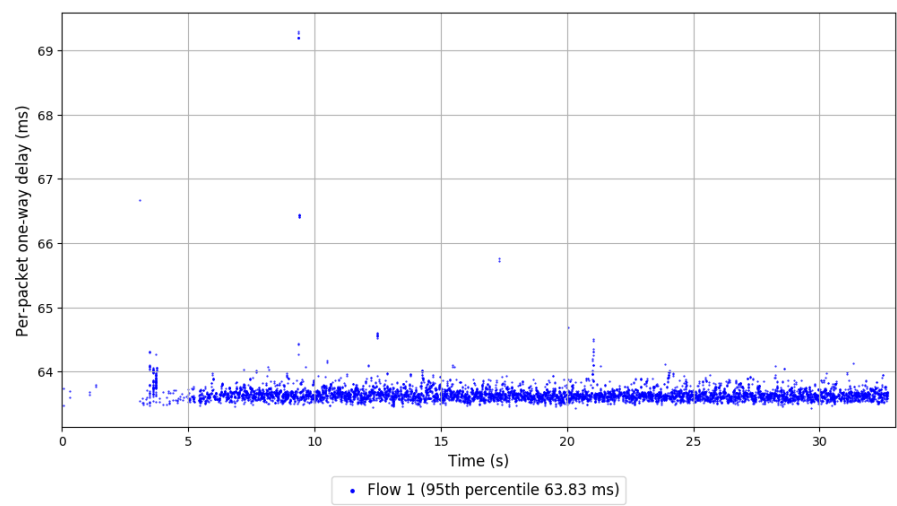
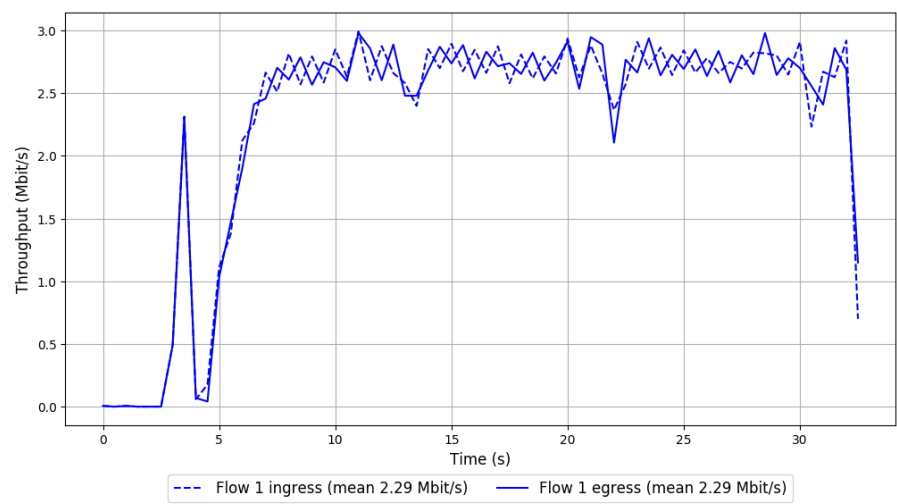
-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 63.825 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-20 13:58:44

End at: 2018-02-20 13:59:14

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 63.860 ms

Loss rate: 0.00%

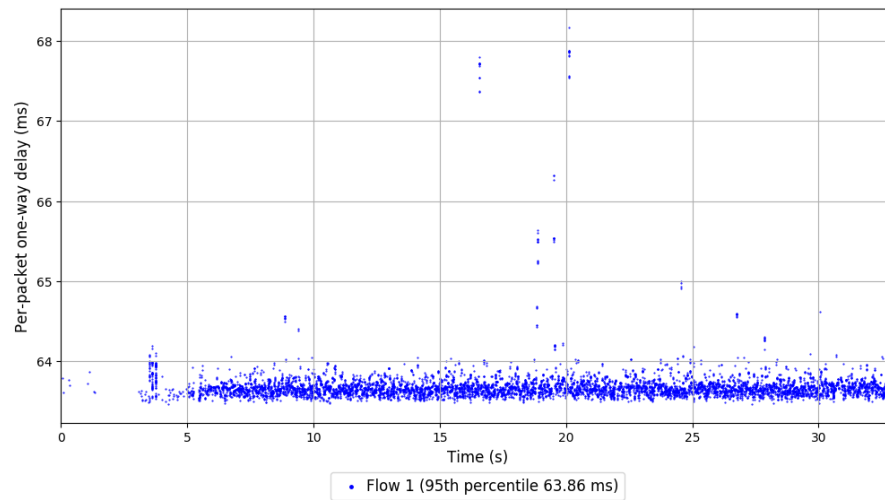
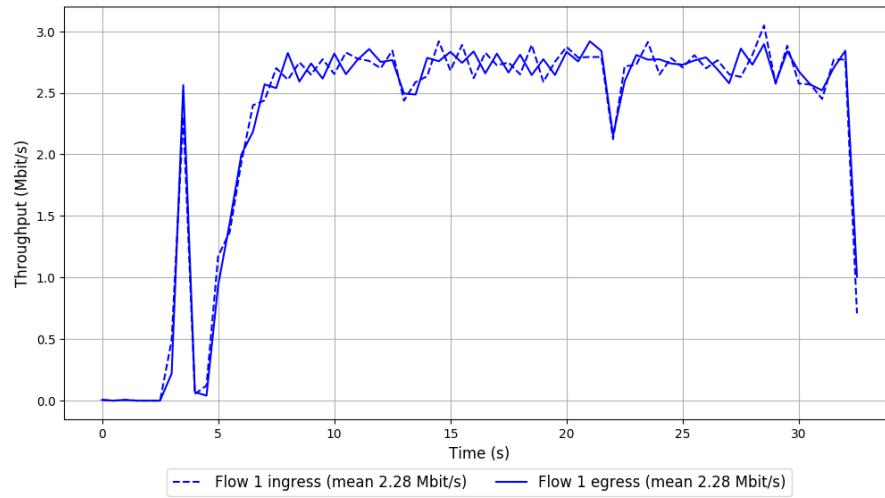
-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 63.860 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-20 11:46:47

End at: 2018-02-20 11:47:17

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.56 Mbit/s

95th percentile per-packet one-way delay: 64.808 ms

Loss rate: 0.00%

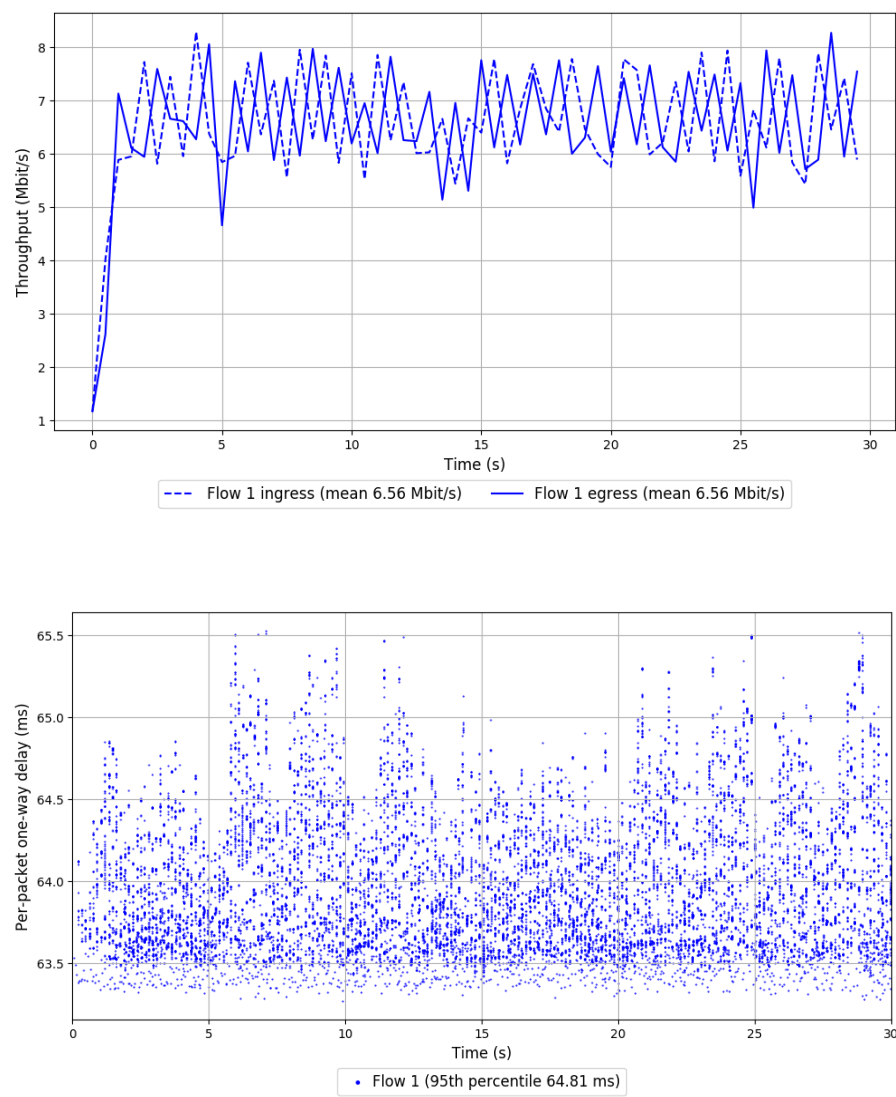
-- Flow 1:

Average throughput: 6.56 Mbit/s

95th percentile per-packet one-way delay: 64.808 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-20 12:01:42

End at: 2018-02-20 12:02:12

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 64.825 ms

Loss rate: 0.00%

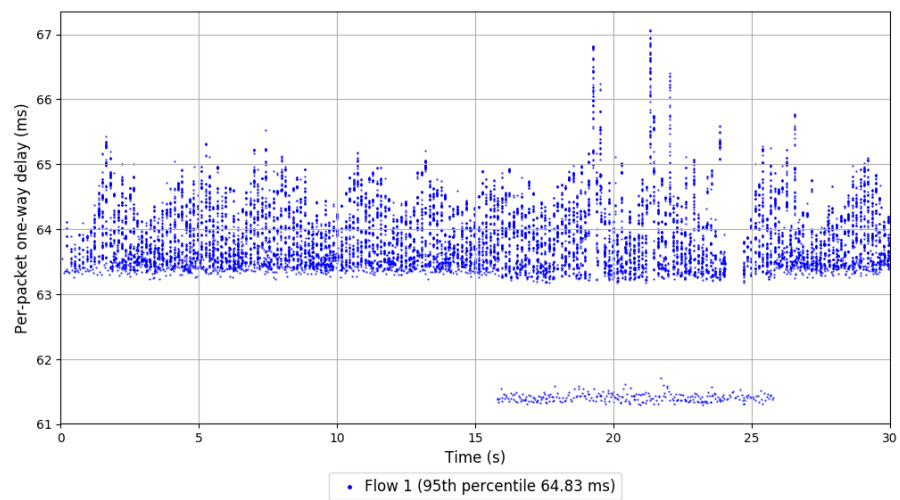
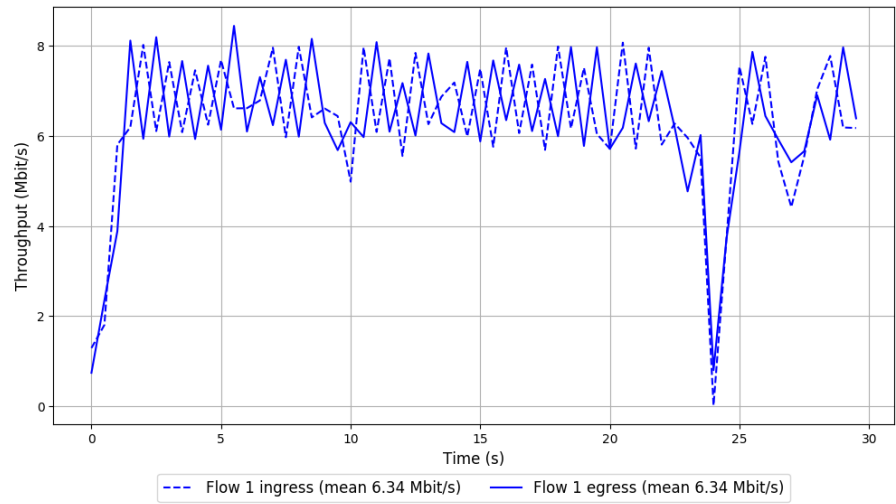
-- Flow 1:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 64.825 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-20 12:16:35

End at: 2018-02-20 12:17:05

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 64.698 ms

Loss rate: 0.00%

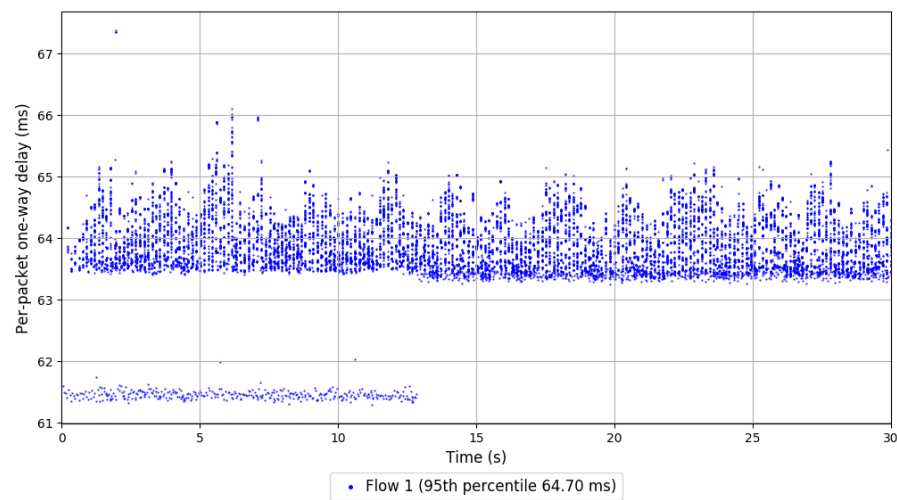
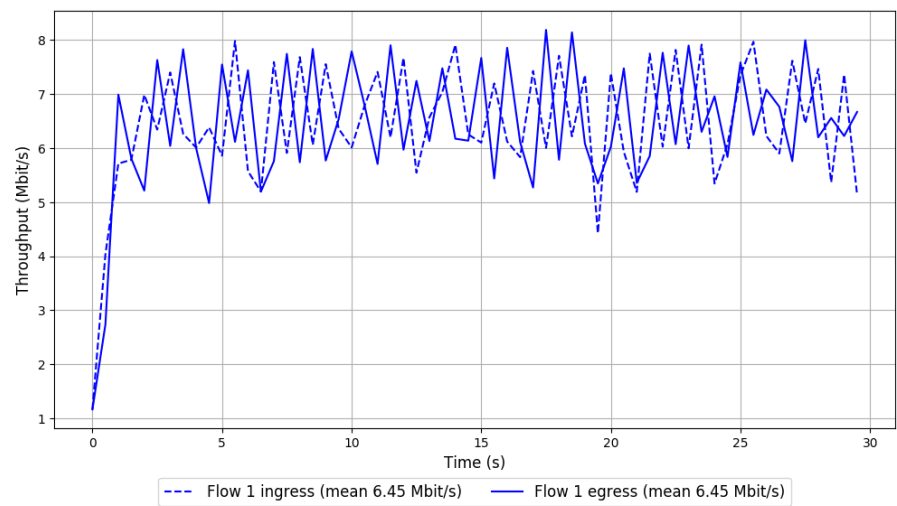
-- Flow 1:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 64.698 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-20 12:30:59

End at: 2018-02-20 12:31:29

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 64.762 ms

Loss rate: 0.00%

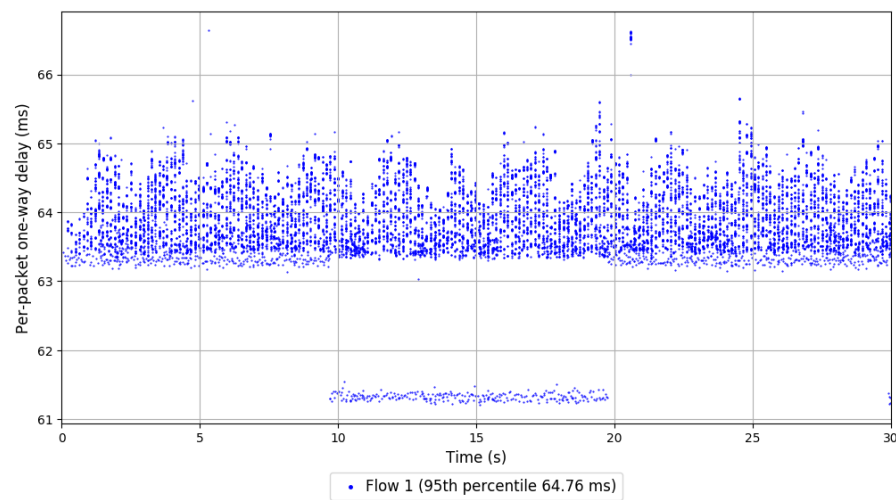
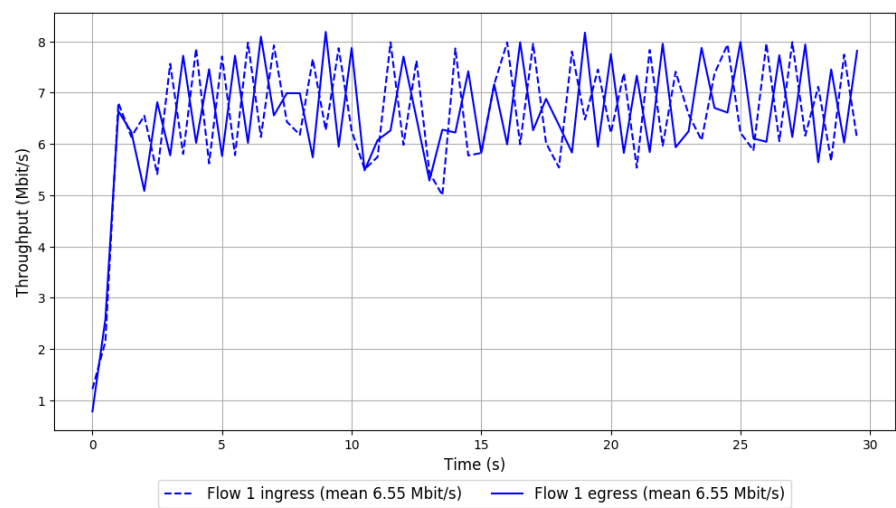
-- Flow 1:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 64.762 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-20 12:45:38

End at: 2018-02-20 12:46:08

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 64.855 ms

Loss rate: 0.00%

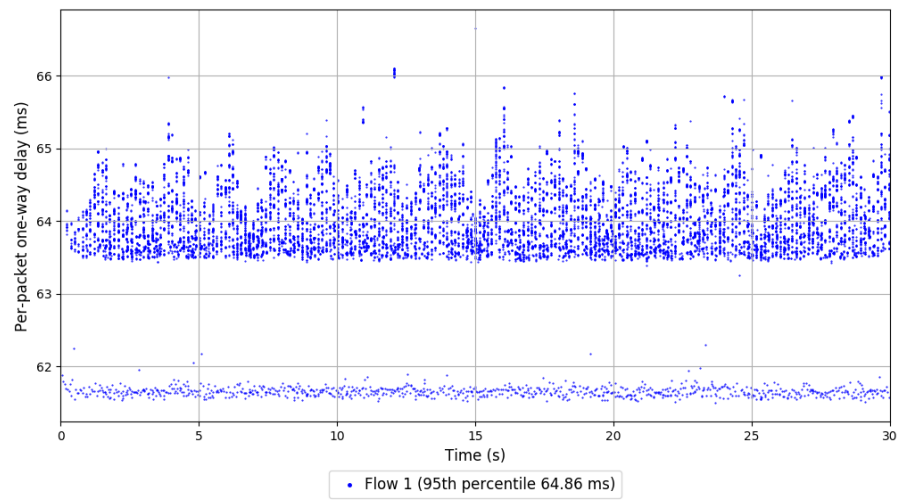
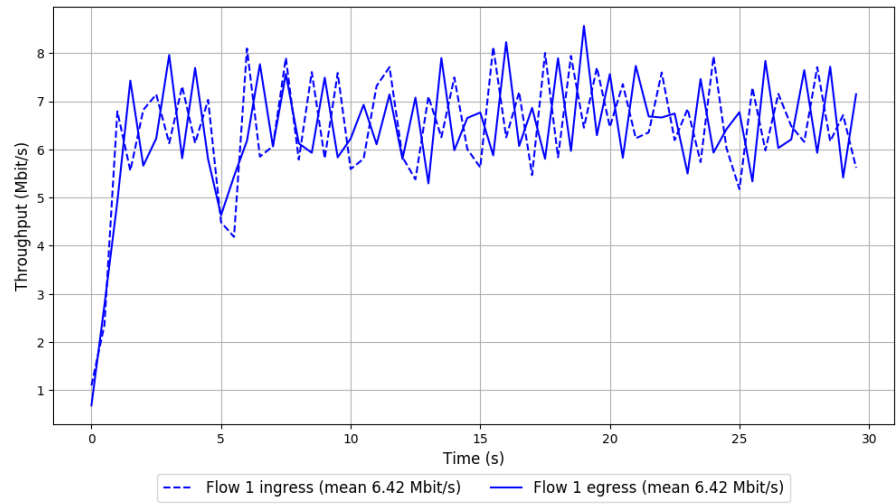
-- Flow 1:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 64.855 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-20 13:00:21

End at: 2018-02-20 13:00:51

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.49 Mbit/s

95th percentile per-packet one-way delay: 64.867 ms

Loss rate: 0.00%

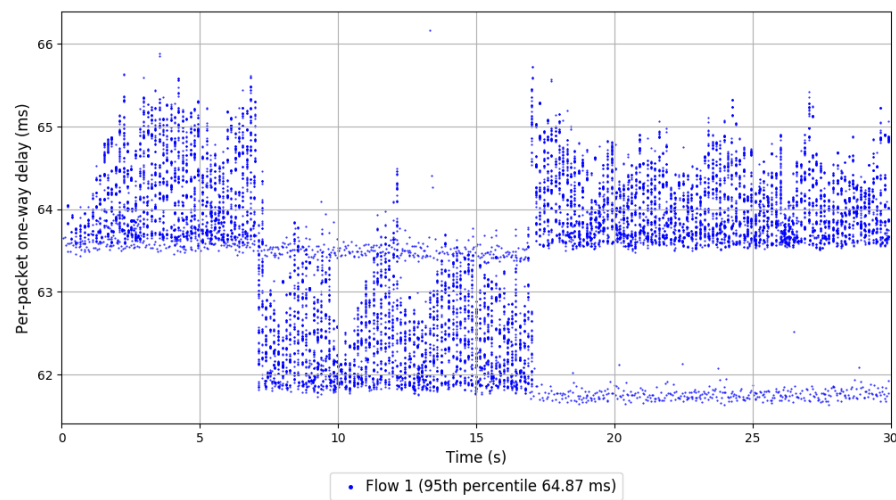
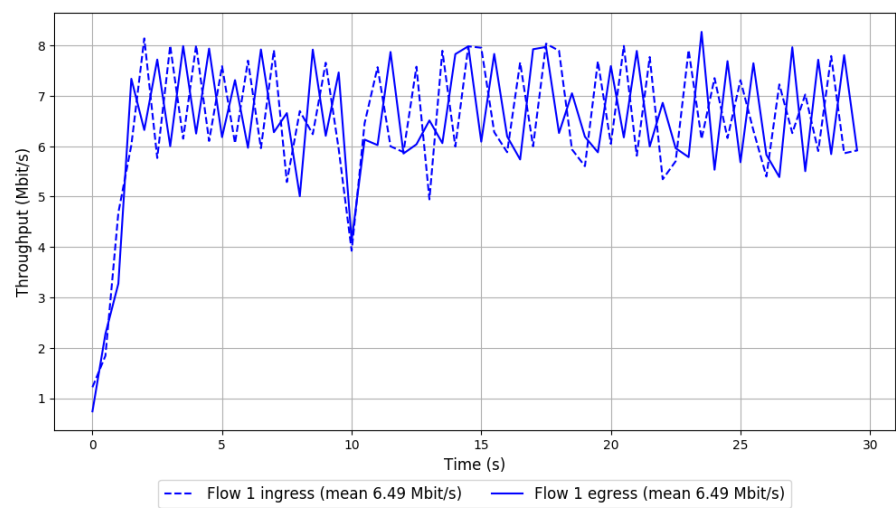
-- Flow 1:

Average throughput: 6.49 Mbit/s

95th percentile per-packet one-way delay: 64.867 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-20 13:15:14

End at: 2018-02-20 13:15:44

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 64.726 ms

Loss rate: 0.00%

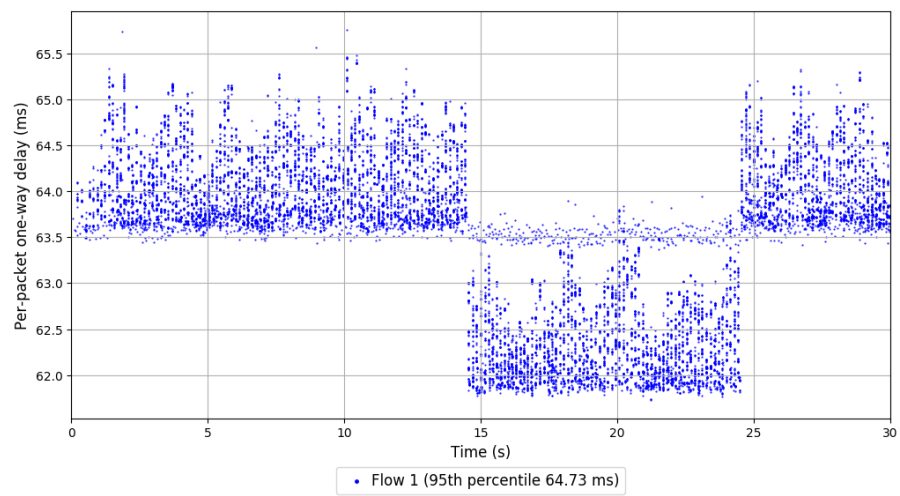
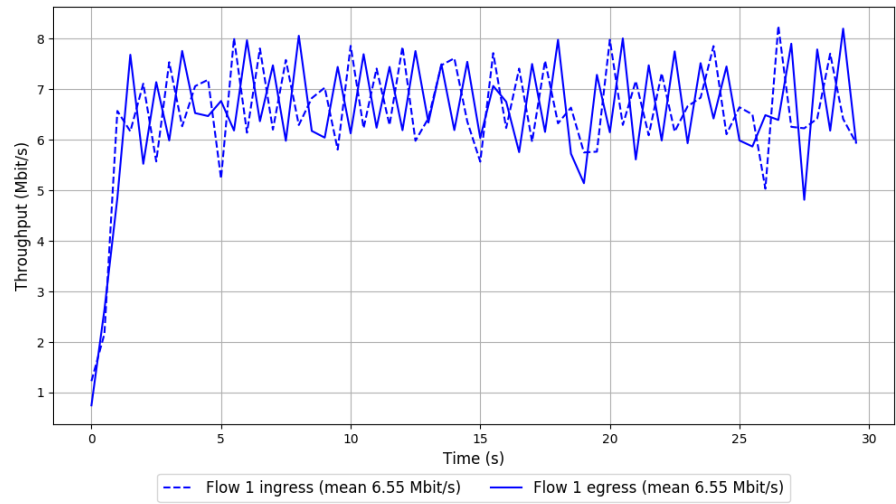
-- Flow 1:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 64.726 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-20 13:29:59

End at: 2018-02-20 13:30:29

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 65.019 ms

Loss rate: 0.00%

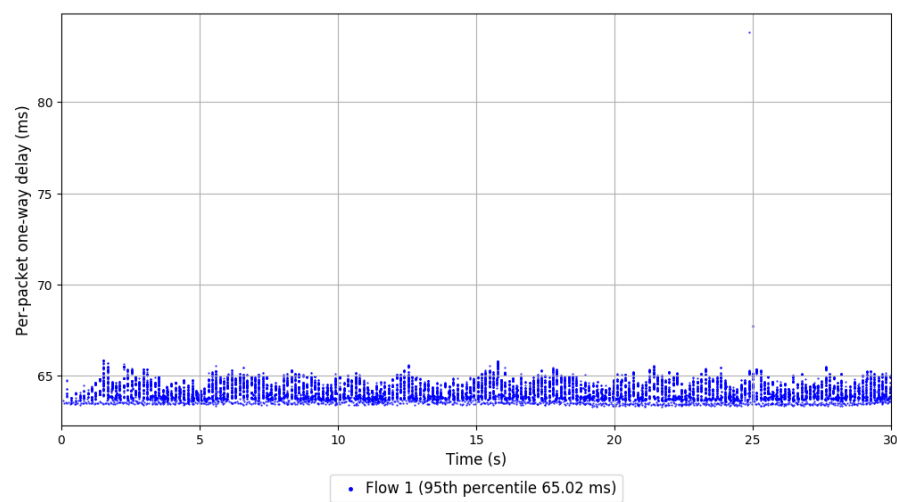
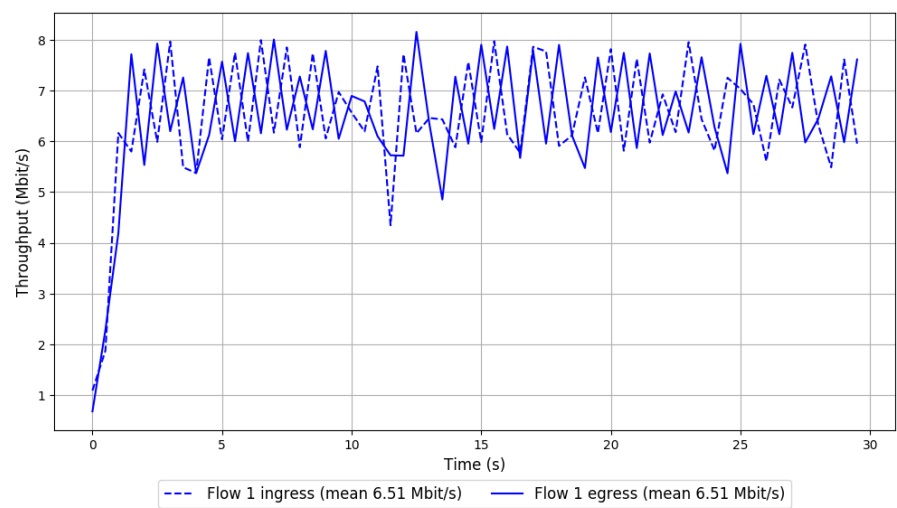
-- Flow 1:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 65.019 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-20 13:44:31

End at: 2018-02-20 13:45:01

Below is generated by plot.py at 2018-02-20 15:56:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.54 Mbit/s

95th percentile per-packet one-way delay: 64.936 ms

Loss rate: 0.00%

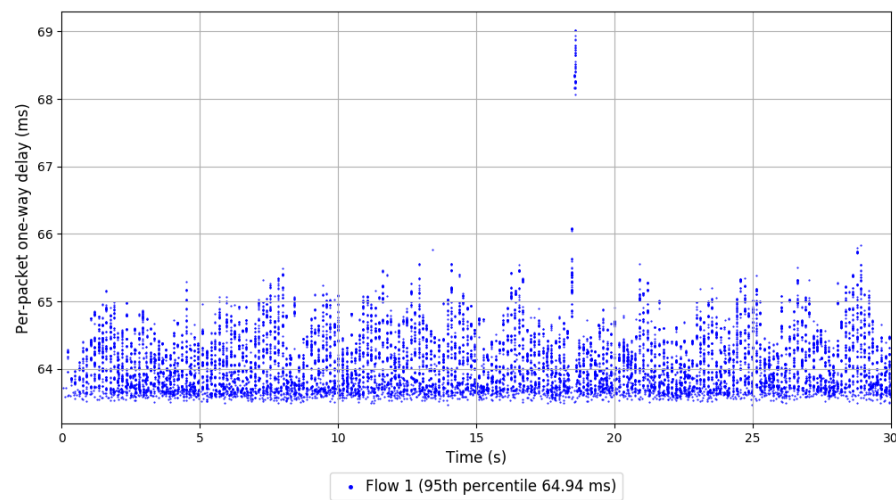
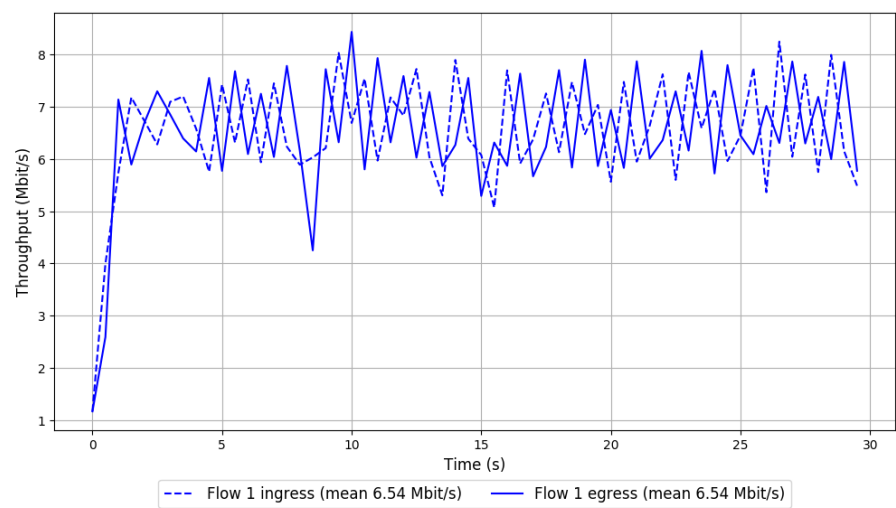
-- Flow 1:

Average throughput: 6.54 Mbit/s

95th percentile per-packet one-way delay: 64.936 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-20 13:59:22

End at: 2018-02-20 13:59:52

Below is generated by plot.py at 2018-02-20 15:56:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 64.900 ms

Loss rate: 0.00%

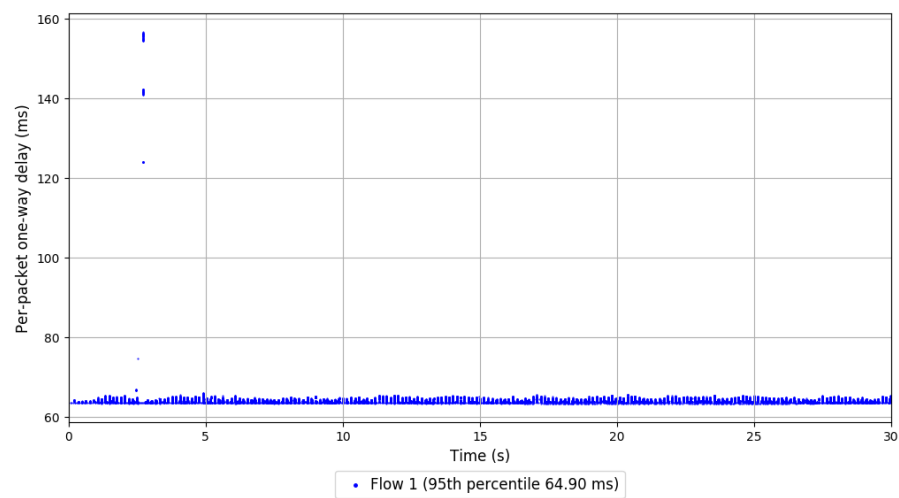
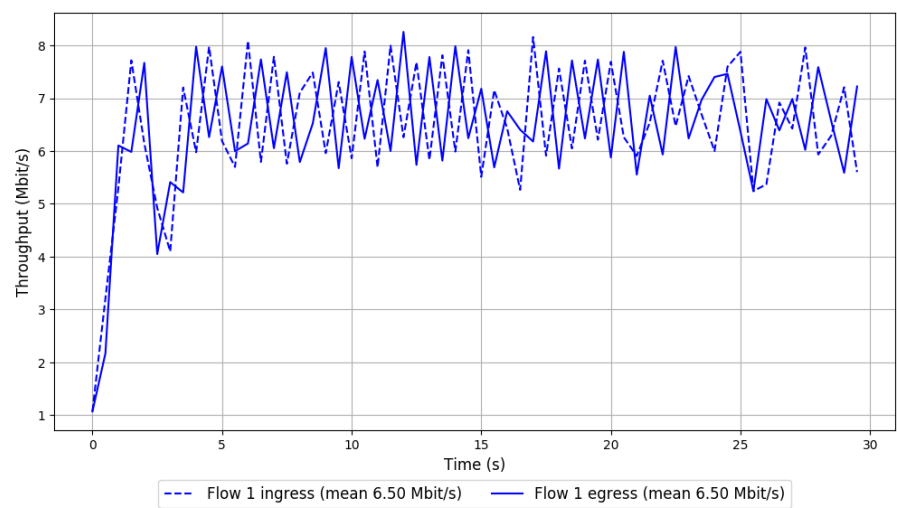
-- Flow 1:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 64.900 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

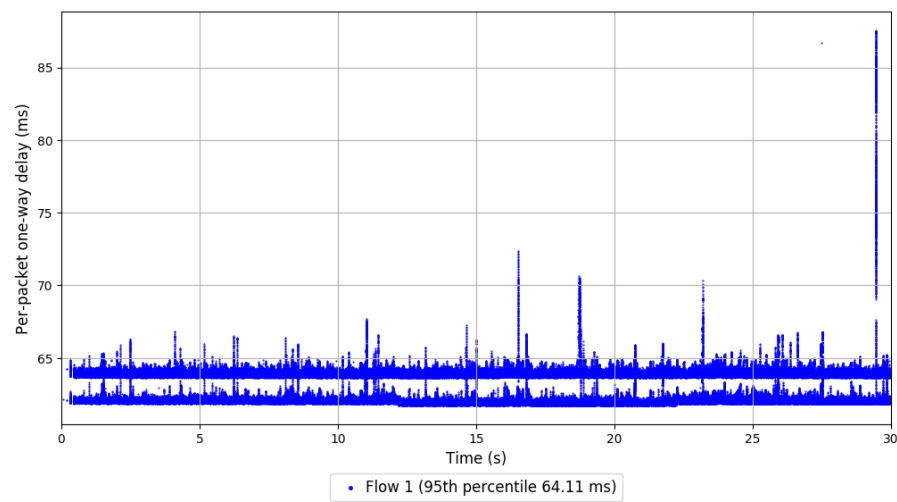
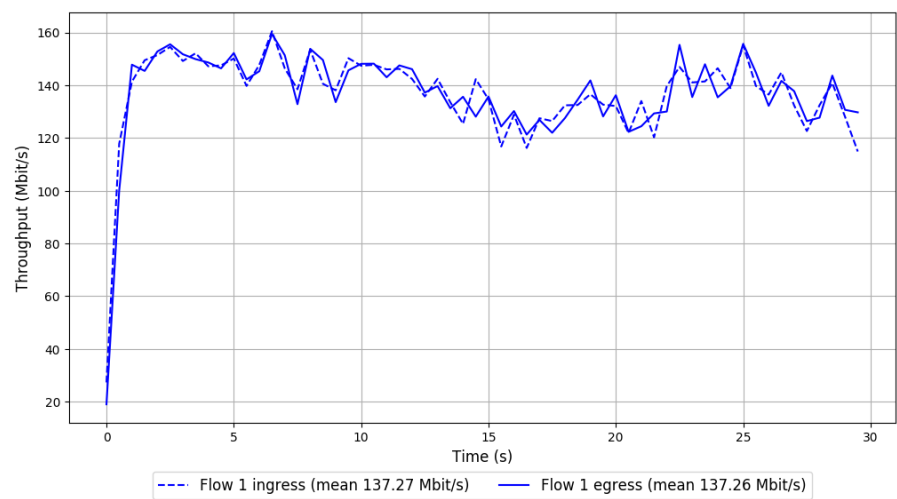


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-20 11:37:26
End at: 2018-02-20 11:37:56

# Below is generated by plot.py at 2018-02-20 15:57:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 137.26 Mbit/s
95th percentile per-packet one-way delay: 64.112 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 137.26 Mbit/s
95th percentile per-packet one-way delay: 64.112 ms
Loss rate: 0.00%
```


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

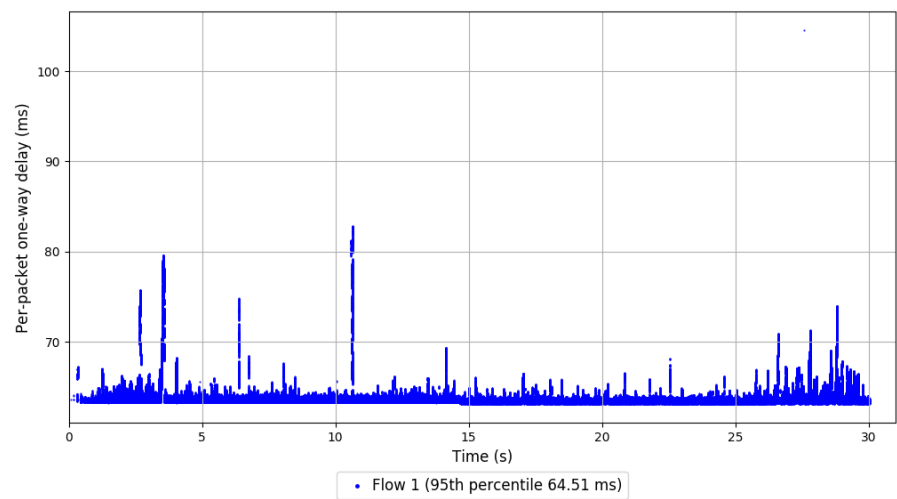
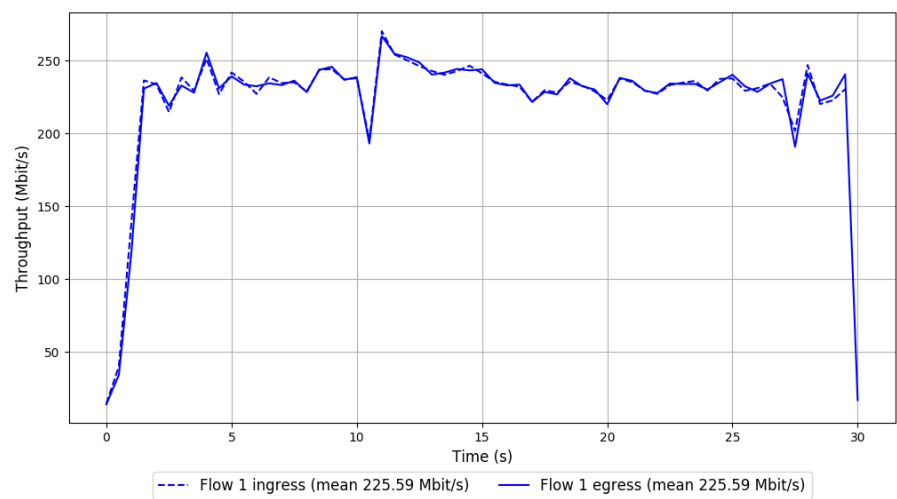


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-20 11:52:14
End at: 2018-02-20 11:52:44

# Below is generated by plot.py at 2018-02-20 16:00:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.59 Mbit/s
95th percentile per-packet one-way delay: 64.514 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 225.59 Mbit/s
95th percentile per-packet one-way delay: 64.514 ms
Loss rate: 0.01%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-02-20 12:06:57

End at: 2018-02-20 12:07:27

Below is generated by plot.py at 2018-02-20 16:00:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 231.31 Mbit/s

95th percentile per-packet one-way delay: 63.981 ms

Loss rate: 0.00%

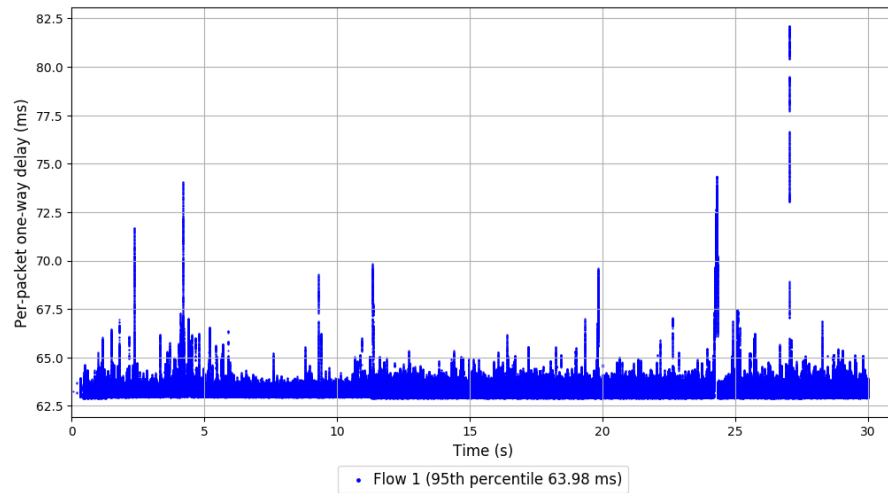
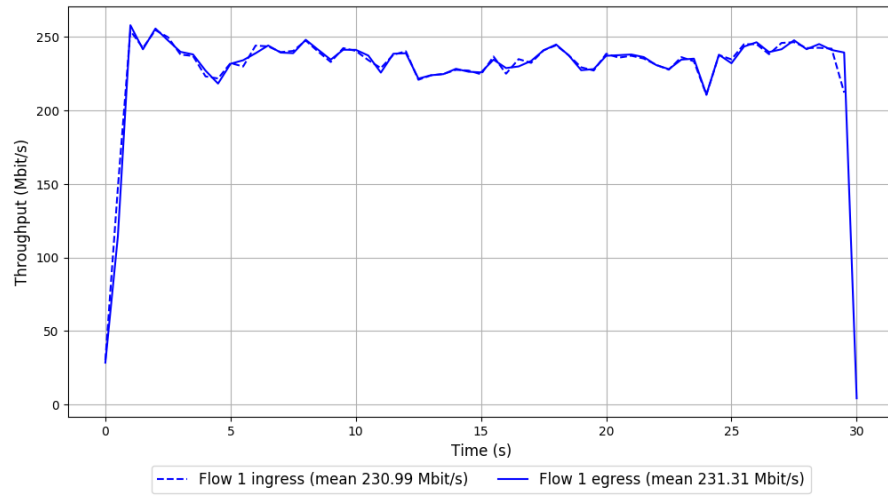
-- Flow 1:

Average throughput: 231.31 Mbit/s

95th percentile per-packet one-way delay: 63.981 ms

Loss rate: 0.00%

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

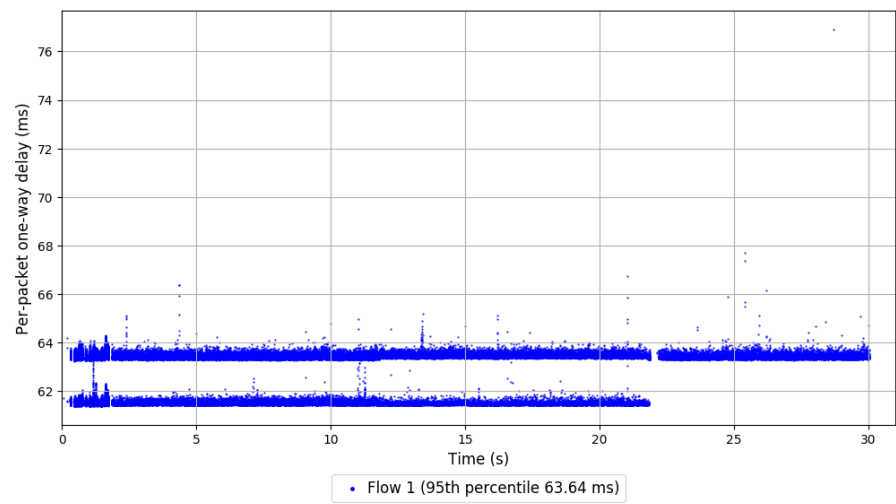
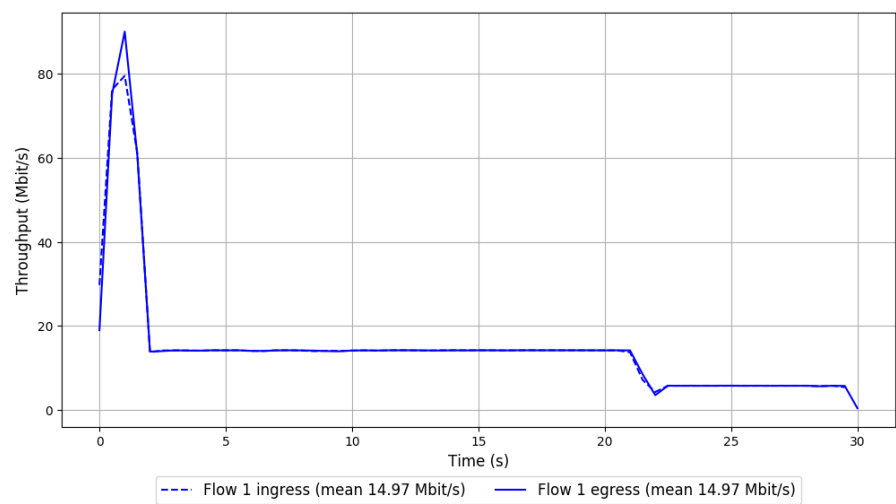


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-20 12:21:47
End at: 2018-02-20 12:22:17

# Below is generated by plot.py at 2018-02-20 16:00:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.97 Mbit/s
95th percentile per-packet one-way delay: 63.641 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 14.97 Mbit/s
95th percentile per-packet one-way delay: 63.641 ms
Loss rate: 0.00%
```

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

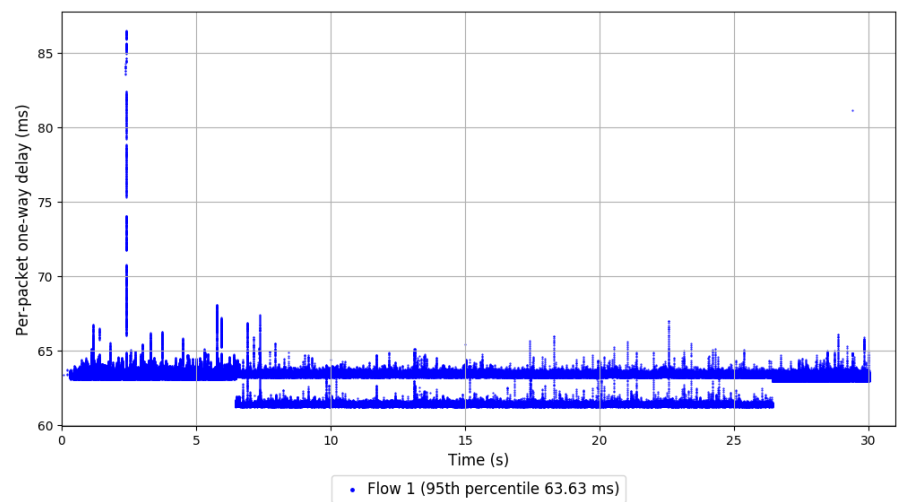
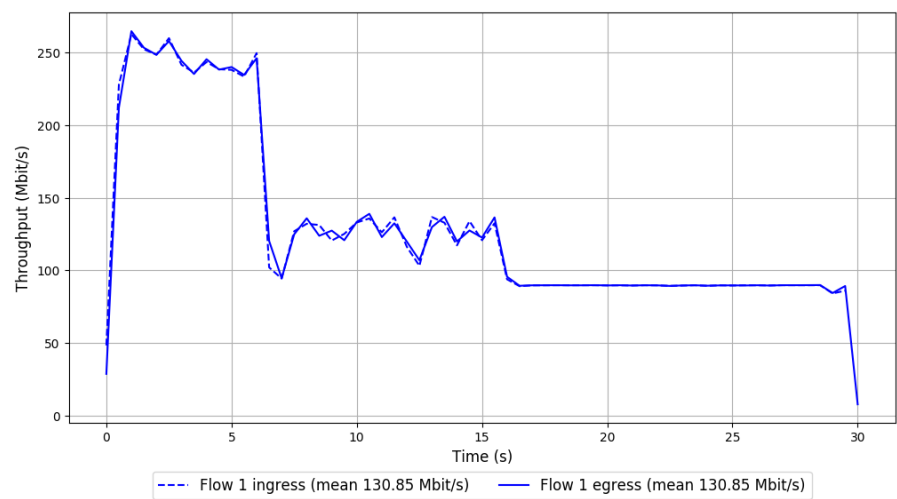


```
Run 5: Statistics of TaoVA-100x

Start at: 2018-02-20 12:36:22
End at: 2018-02-20 12:36:52

# Below is generated by plot.py at 2018-02-20 16:00:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 130.85 Mbit/s
95th percentile per-packet one-way delay: 63.634 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 130.85 Mbit/s
95th percentile per-packet one-way delay: 63.634 ms
Loss rate: 0.00%
```


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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-20 12:51:01

End at: 2018-02-20 12:51:31

Below is generated by plot.py at 2018-02-20 16:00:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 118.74 Mbit/s

95th percentile per-packet one-way delay: 63.790 ms

Loss rate: 0.00%

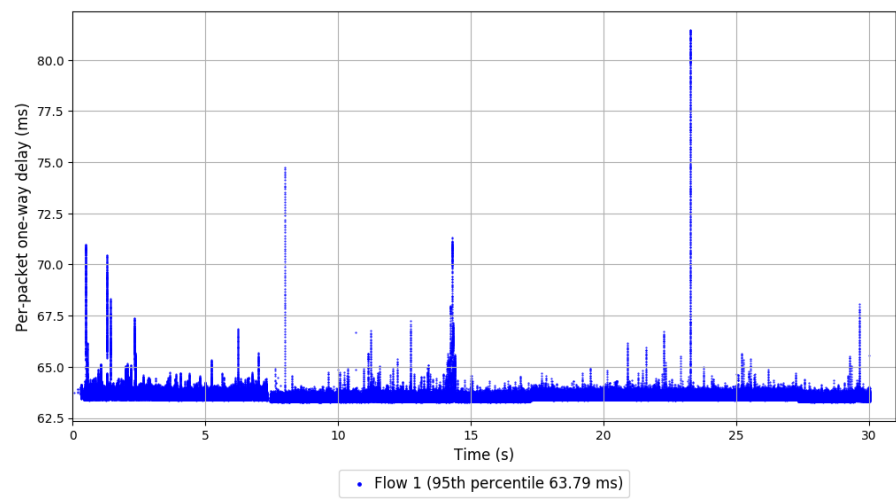
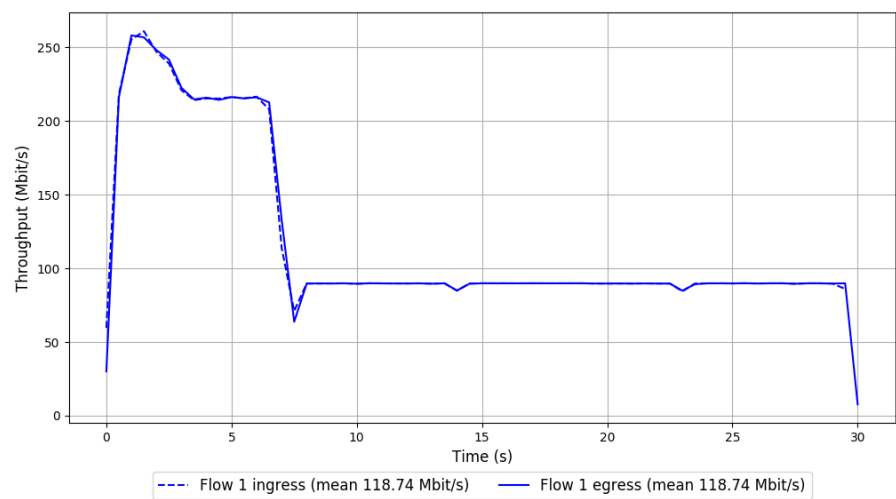
-- Flow 1:

Average throughput: 118.74 Mbit/s

95th percentile per-packet one-way delay: 63.790 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-02-20 13:05:43

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

Below is generated by plot.py at 2018-02-20 16:00:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 192.23 Mbit/s

95th percentile per-packet one-way delay: 64.701 ms

Loss rate: 0.00%

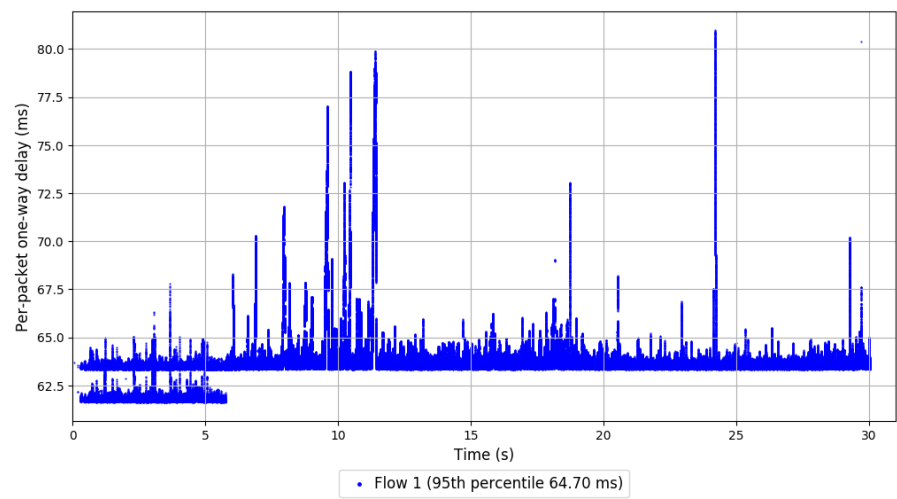
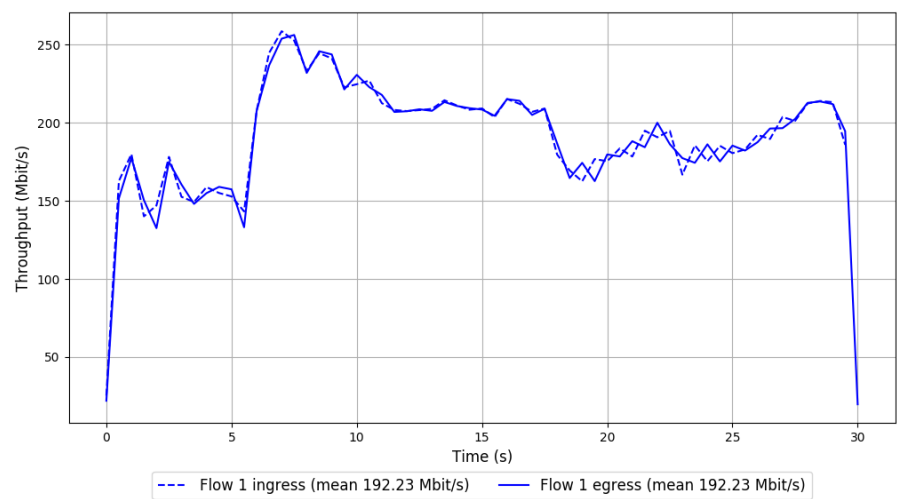
-- Flow 1:

Average throughput: 192.23 Mbit/s

95th percentile per-packet one-way delay: 64.701 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-20 13:20:31

End at: 2018-02-20 13:21:01

Below is generated by plot.py at 2018-02-20 16:02:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.27 Mbit/s

95th percentile per-packet one-way delay: 64.806 ms

Loss rate: 0.00%

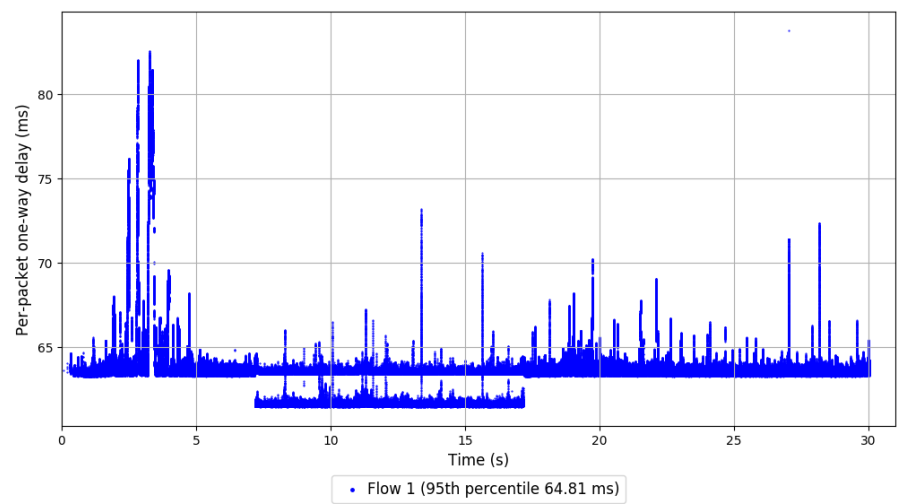
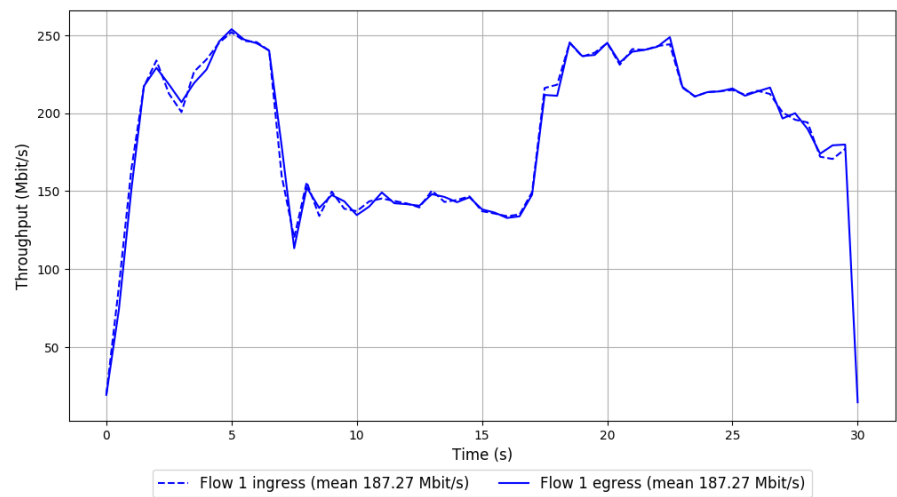
-- Flow 1:

Average throughput: 187.27 Mbit/s

95th percentile per-packet one-way delay: 64.806 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-20 13:35:16

End at: 2018-02-20 13:35:46

Below is generated by plot.py at 2018-02-20 16:02:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 162.61 Mbit/s

95th percentile per-packet one-way delay: 65.542 ms

Loss rate: 0.00%

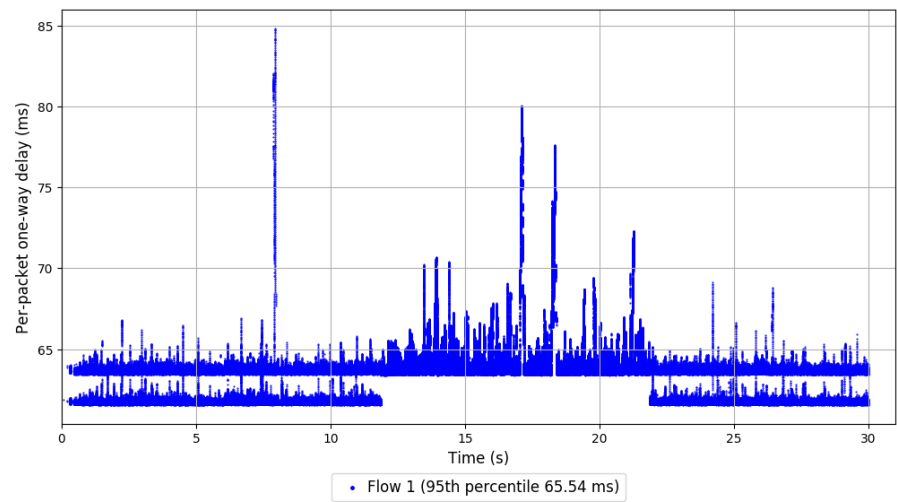
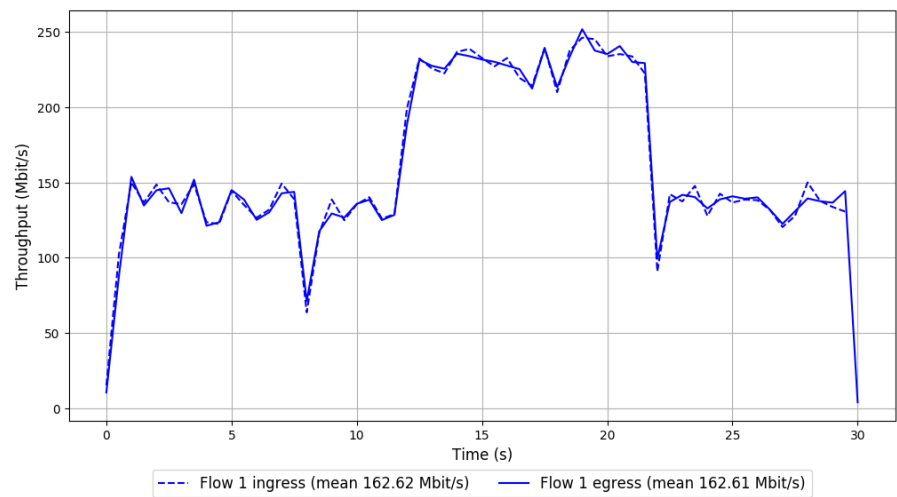
-- Flow 1:

Average throughput: 162.61 Mbit/s

95th percentile per-packet one-way delay: 65.542 ms

Loss rate: 0.00%

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

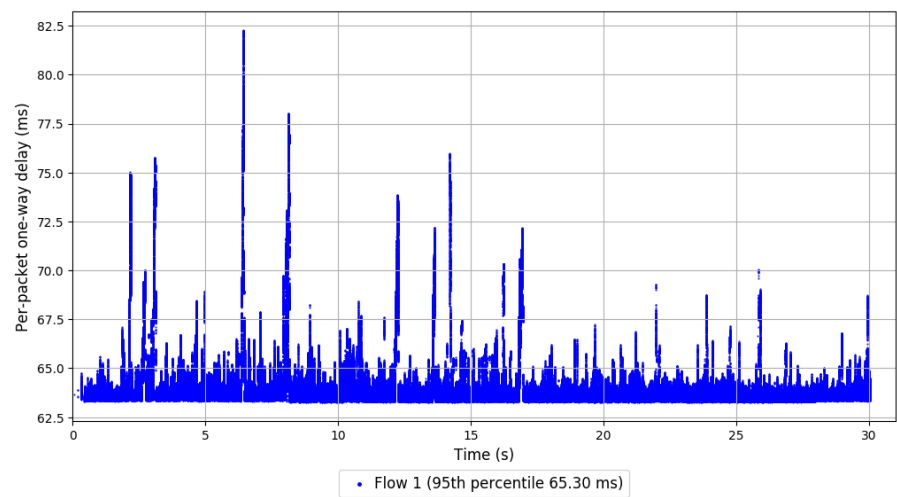
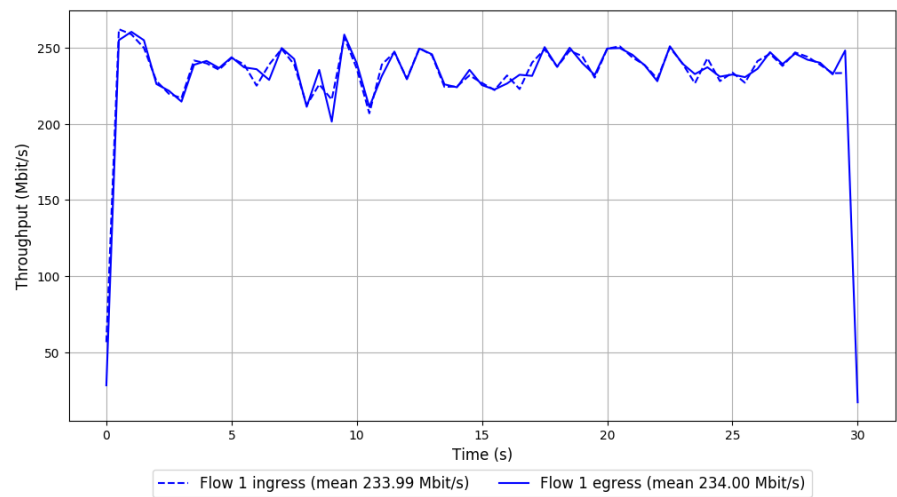


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-20 13:49:50
End at: 2018-02-20 13:50:20

# Below is generated by plot.py at 2018-02-20 16:04:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 234.00 Mbit/s
95th percentile per-packet one-way delay: 65.299 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 234.00 Mbit/s
95th percentile per-packet one-way delay: 65.299 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-20 11:44:15

End at: 2018-02-20 11:44:45

Below is generated by plot.py at 2018-02-20 16:04:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.83 Mbit/s

95th percentile per-packet one-way delay: 74.564 ms

Loss rate: 0.00%

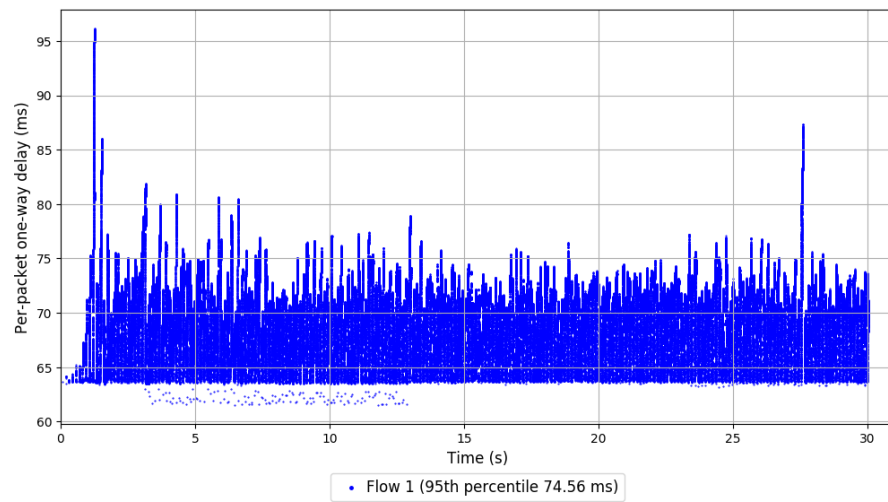
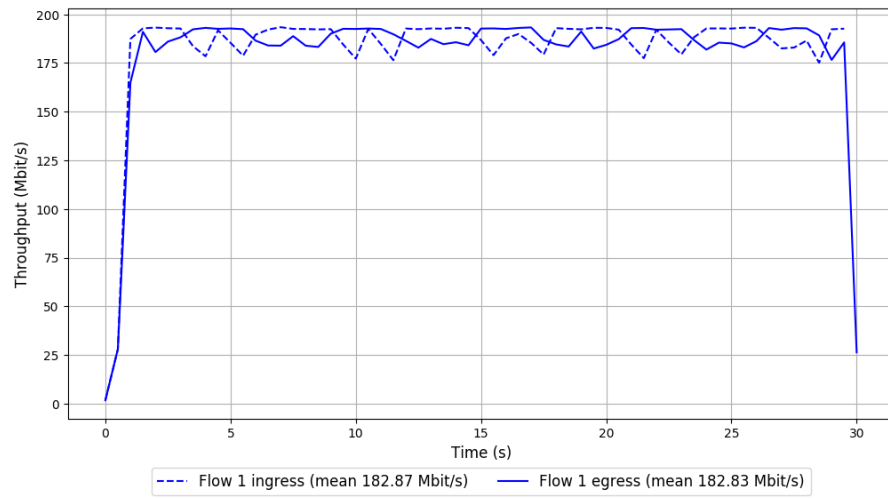
-- Flow 1:

Average throughput: 182.83 Mbit/s

95th percentile per-packet one-way delay: 74.564 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-20 11:59:12

End at: 2018-02-20 11:59:42

Below is generated by plot.py at 2018-02-20 16:04:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.28 Mbit/s

95th percentile per-packet one-way delay: 73.121 ms

Loss rate: 0.00%

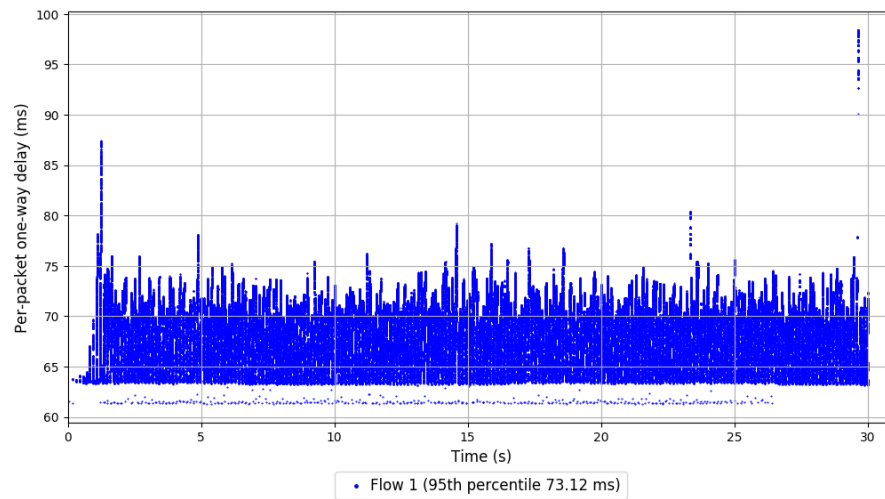
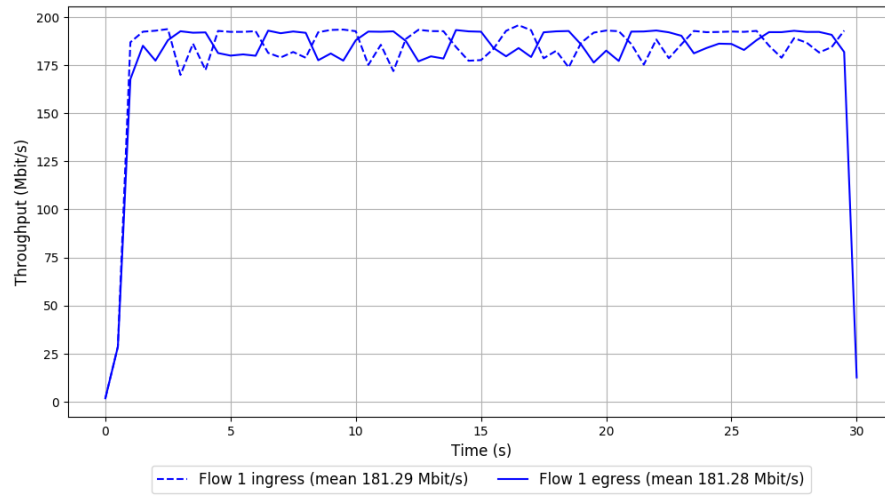
-- Flow 1:

Average throughput: 181.28 Mbit/s

95th percentile per-packet one-way delay: 73.121 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-20 12:14:04

End at: 2018-02-20 12:14:34

Below is generated by plot.py at 2018-02-20 16:04:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 180.11 Mbit/s

95th percentile per-packet one-way delay: 74.794 ms

Loss rate: 0.02%

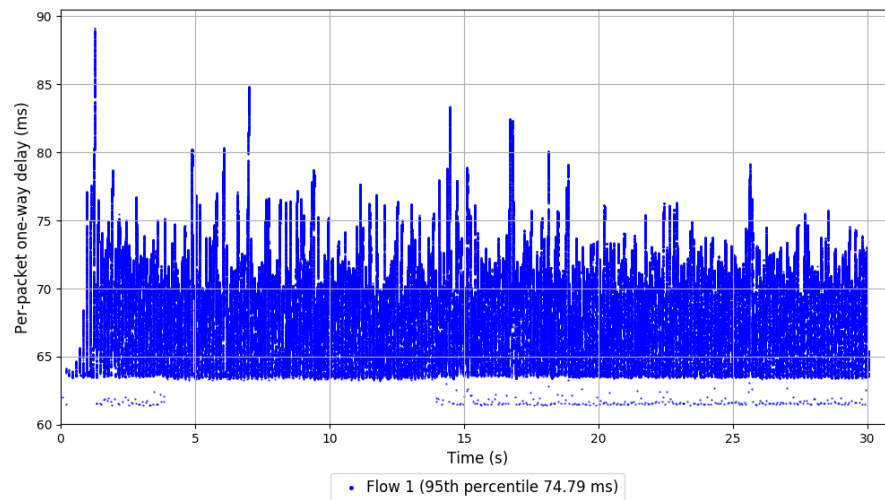
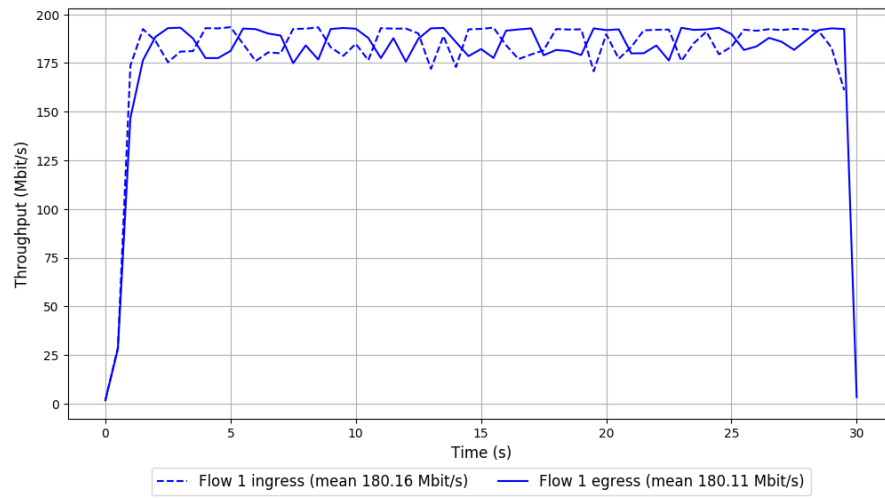
-- Flow 1:

Average throughput: 180.11 Mbit/s

95th percentile per-packet one-way delay: 74.794 ms

Loss rate: 0.02%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-20 12:28:34

End at: 2018-02-20 12:29:04

Below is generated by plot.py at 2018-02-20 16:04:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 146.93 Mbit/s

95th percentile per-packet one-way delay: 73.683 ms

Loss rate: 0.00%

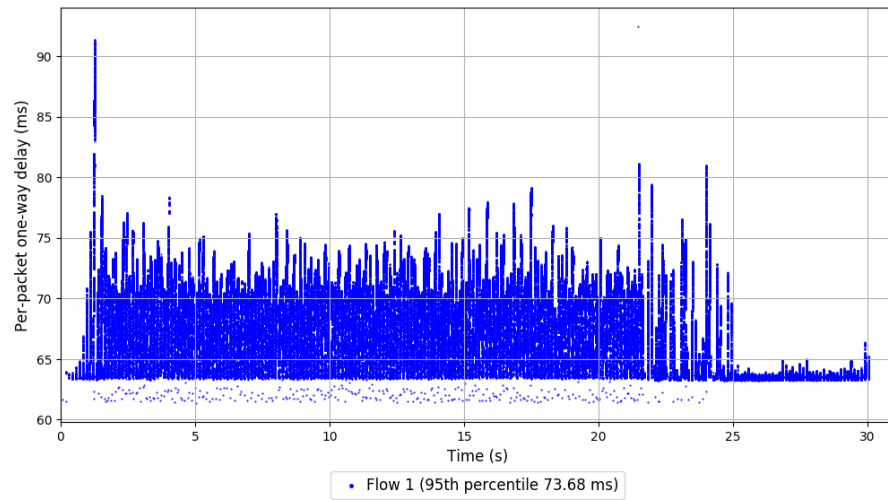
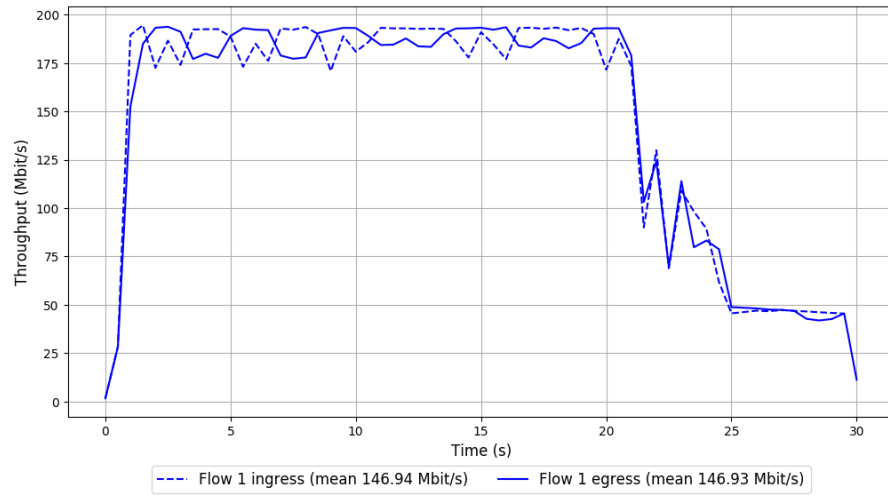
-- Flow 1:

Average throughput: 146.93 Mbit/s

95th percentile per-packet one-way delay: 73.683 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-20 12:43:15

End at: 2018-02-20 12:43:45

Below is generated by plot.py at 2018-02-20 16:04:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 18.37 Mbit/s

95th percentile per-packet one-way delay: 64.372 ms

Loss rate: 0.00%

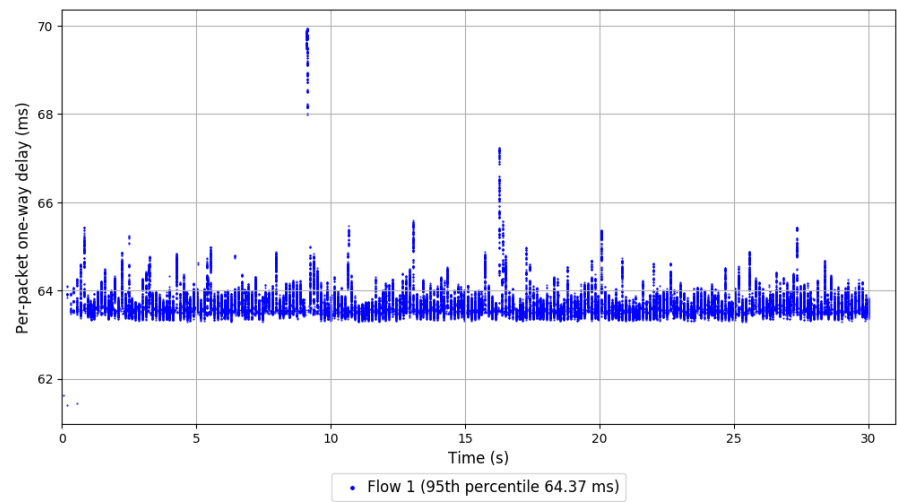
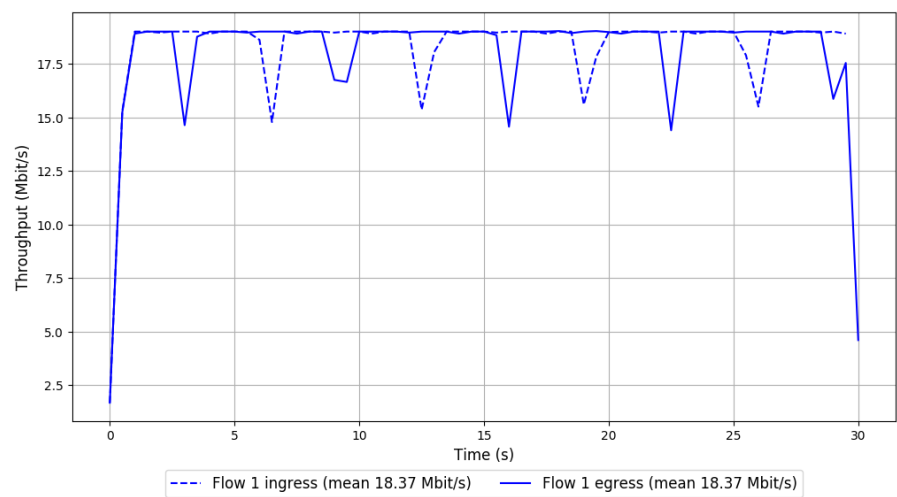
-- Flow 1:

Average throughput: 18.37 Mbit/s

95th percentile per-packet one-way delay: 64.372 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-20 12:57:59

End at: 2018-02-20 12:58:29

Below is generated by plot.py at 2018-02-20 16:04:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.27 Mbit/s

95th percentile per-packet one-way delay: 72.108 ms

Loss rate: 0.00%

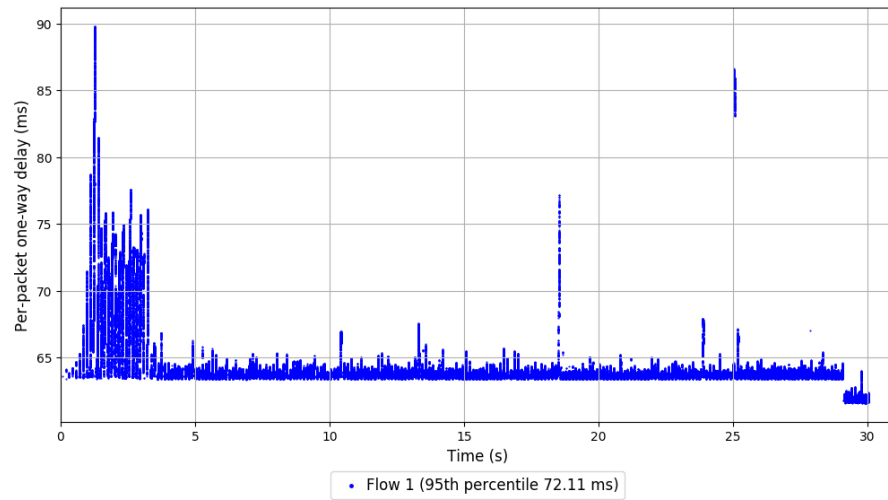
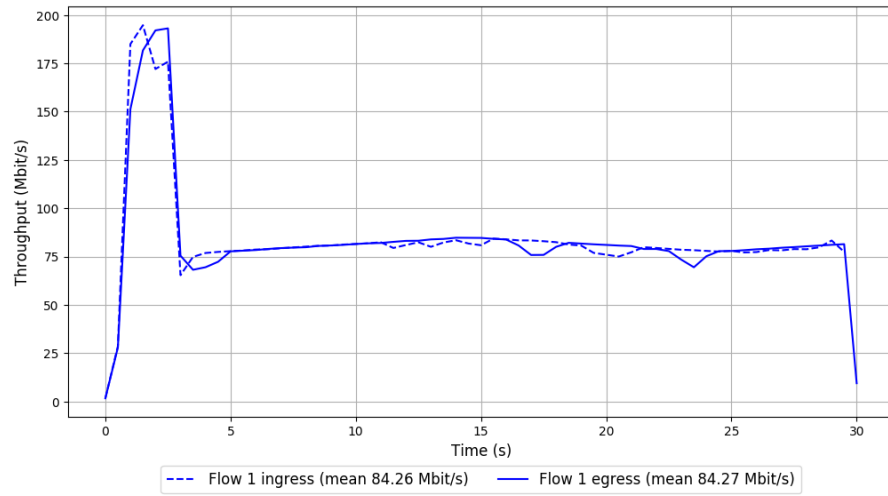
-- Flow 1:

Average throughput: 84.27 Mbit/s

95th percentile per-packet one-way delay: 72.108 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-20 13:12:43

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

Below is generated by plot.py at 2018-02-20 16:04:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.09 Mbit/s

95th percentile per-packet one-way delay: 73.628 ms

Loss rate: 0.02%

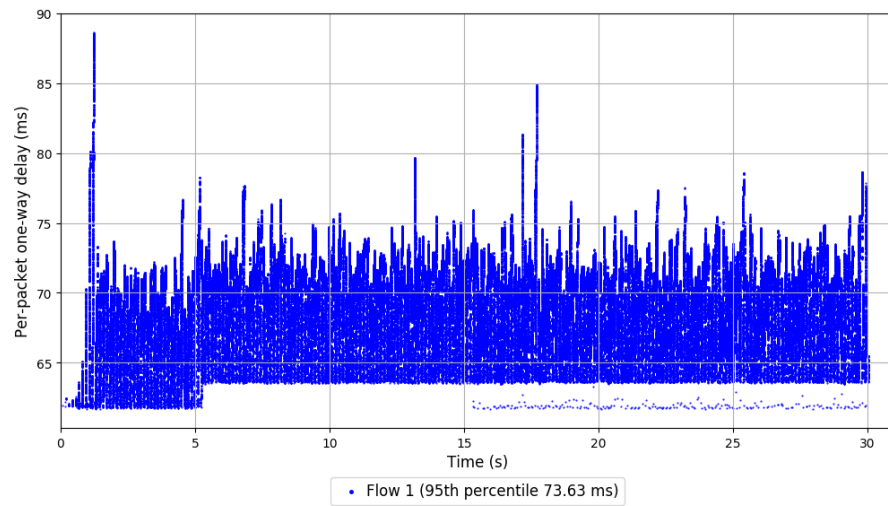
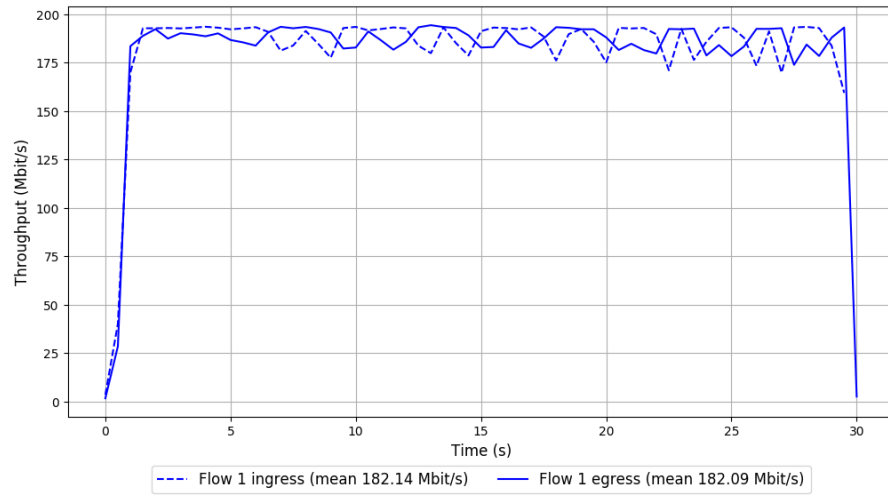
-- Flow 1:

Average throughput: 182.09 Mbit/s

95th percentile per-packet one-way delay: 73.628 ms

Loss rate: 0.02%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-20 13:27:36

End at: 2018-02-20 13:28:06

Below is generated by plot.py at 2018-02-20 16:04:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.23 Mbit/s

95th percentile per-packet one-way delay: 64.828 ms

Loss rate: 0.00%

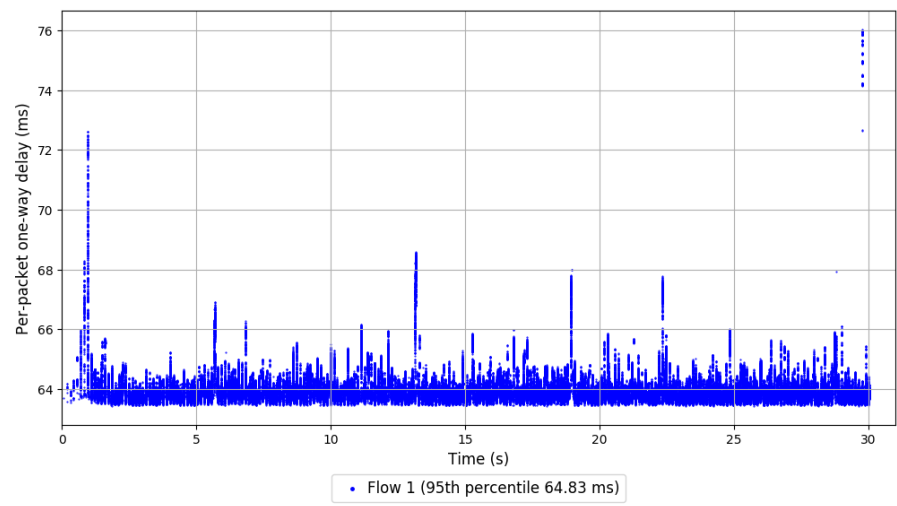
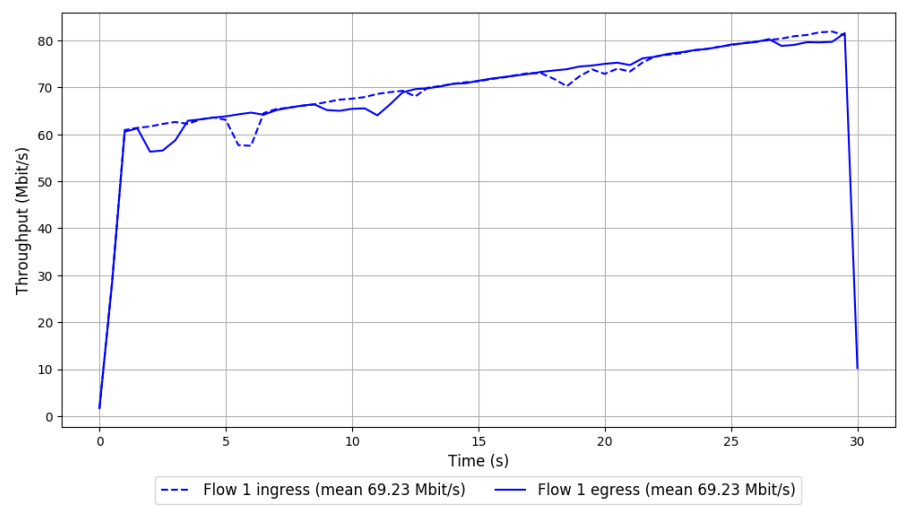
-- Flow 1:

Average throughput: 69.23 Mbit/s

95th percentile per-packet one-way delay: 64.828 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-20 13:42:12

End at: 2018-02-20 13:42:42

Below is generated by plot.py at 2018-02-20 16:04:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.59 Mbit/s

95th percentile per-packet one-way delay: 65.221 ms

Loss rate: 0.00%

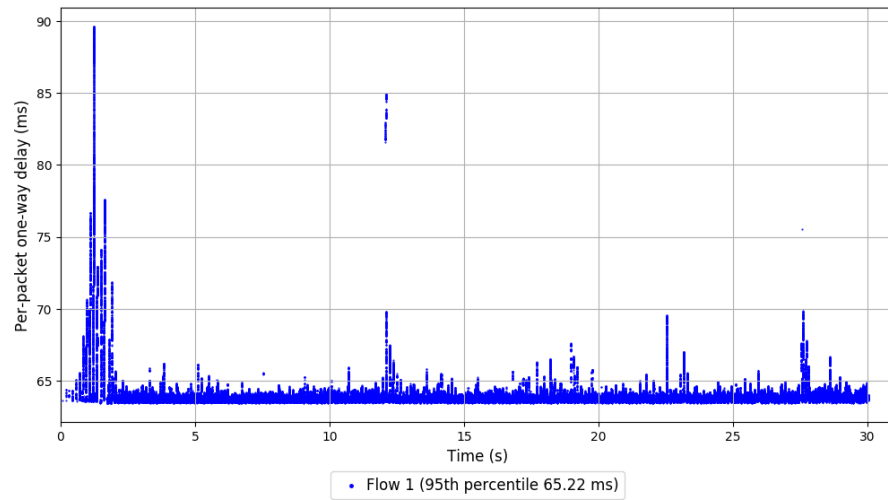
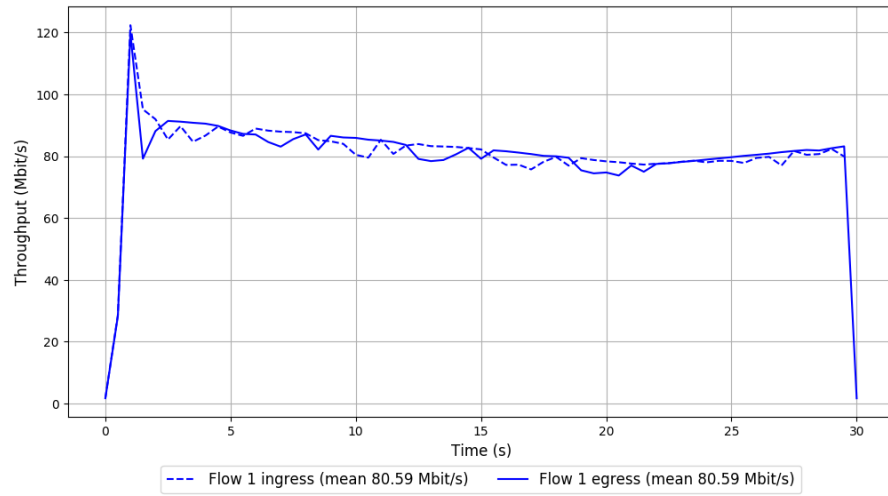
-- Flow 1:

Average throughput: 80.59 Mbit/s

95th percentile per-packet one-way delay: 65.221 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-20 13:56:55

End at: 2018-02-20 13:57:25

Below is generated by plot.py at 2018-02-20 16:04:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 119.40 Mbit/s

95th percentile per-packet one-way delay: 75.351 ms

Loss rate: 0.00%

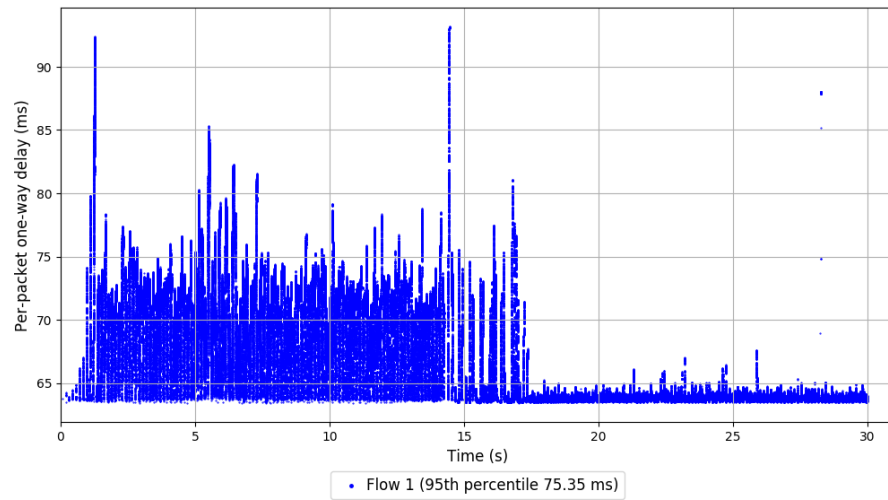
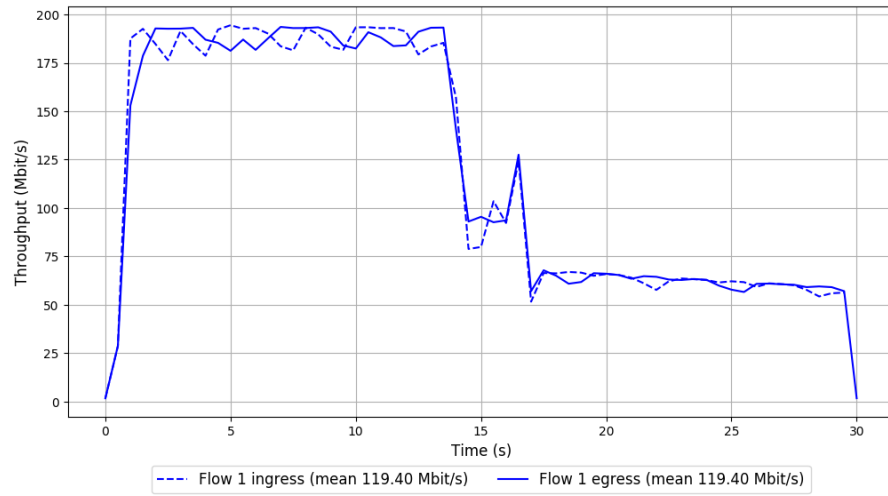
-- Flow 1:

Average throughput: 119.40 Mbit/s

95th percentile per-packet one-way delay: 75.351 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-02-20 11:38:15

End at: 2018-02-20 11:38:45

Below is generated by plot.py at 2018-02-20 16:05:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.08 Mbit/s

95th percentile per-packet one-way delay: 125.361 ms

Loss rate: 0.15%

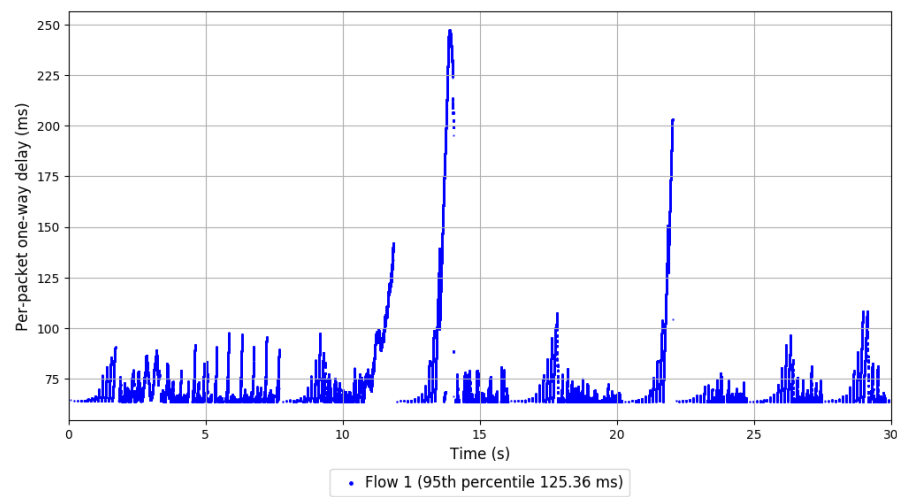
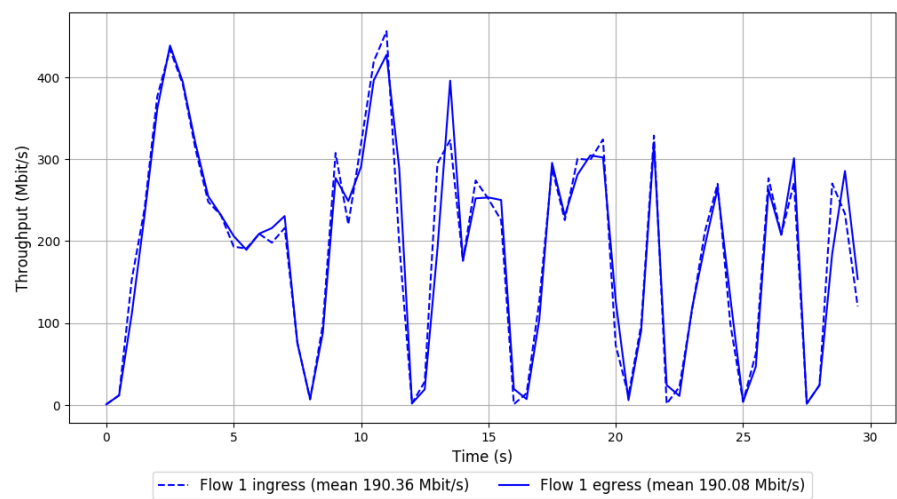
-- Flow 1:

Average throughput: 190.08 Mbit/s

95th percentile per-packet one-way delay: 125.361 ms

Loss rate: 0.15%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-20 11:53:11

End at: 2018-02-20 11:53:41

Below is generated by plot.py at 2018-02-20 16:05:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 198.38 Mbit/s

95th percentile per-packet one-way delay: 122.804 ms

Loss rate: 0.09%

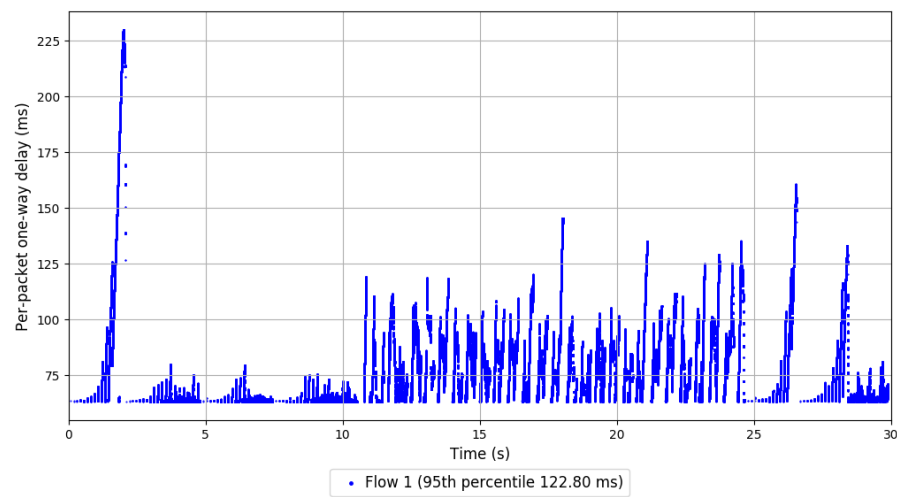
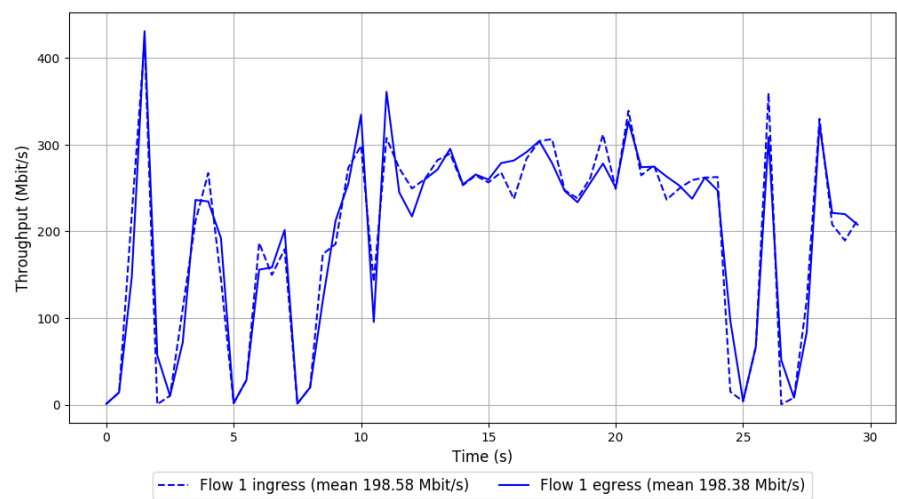
-- Flow 1:

Average throughput: 198.38 Mbit/s

95th percentile per-packet one-way delay: 122.804 ms

Loss rate: 0.09%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-20 12:07:55

End at: 2018-02-20 12:08:25

Below is generated by plot.py at 2018-02-20 16:06:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 237.31 Mbit/s

95th percentile per-packet one-way delay: 197.568 ms

Loss rate: 0.38%

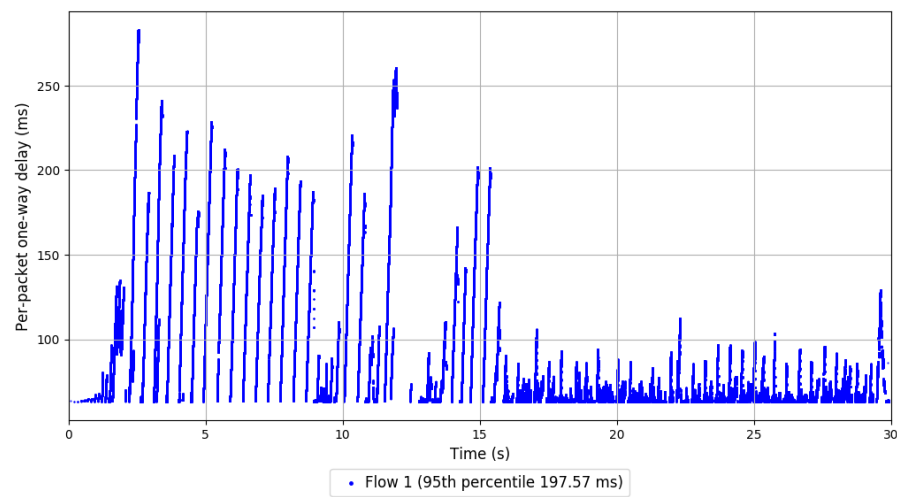
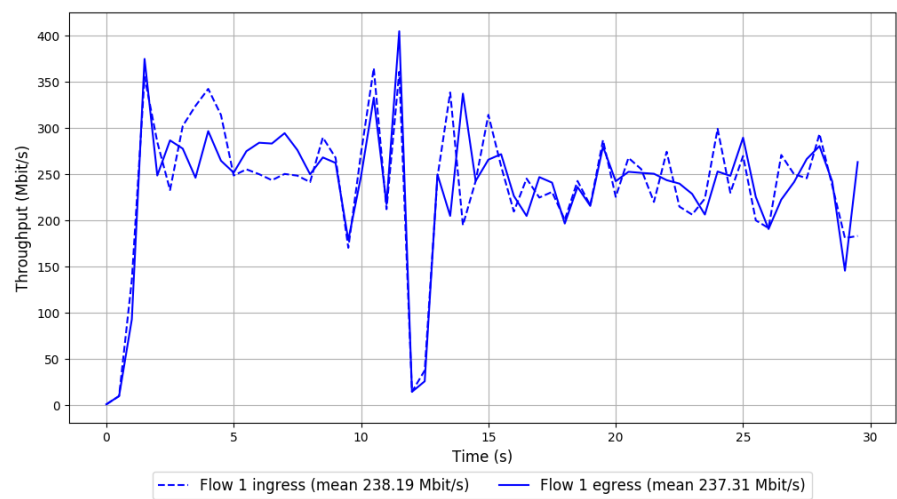
-- Flow 1:

Average throughput: 237.31 Mbit/s

95th percentile per-packet one-way delay: 197.568 ms

Loss rate: 0.38%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-20 12:22:26

End at: 2018-02-20 12:22:56

Below is generated by plot.py at 2018-02-20 16:06:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.13 Mbit/s

95th percentile per-packet one-way delay: 102.338 ms

Loss rate: 0.06%

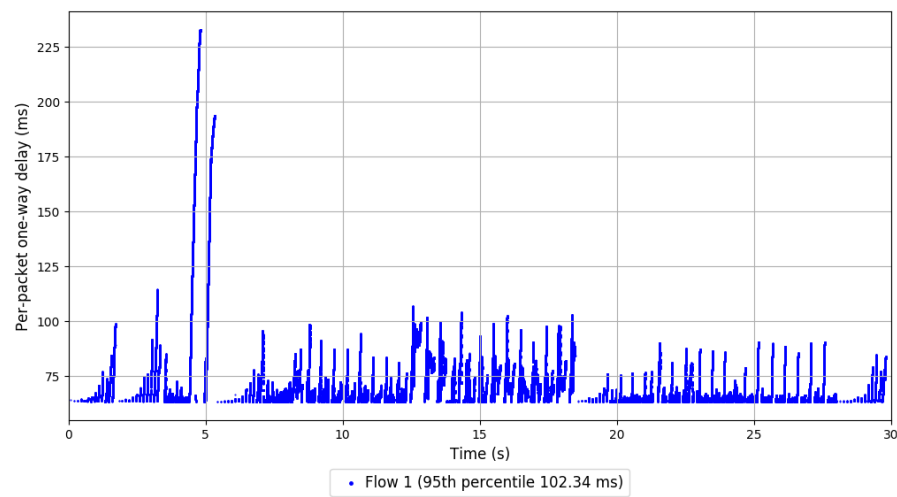
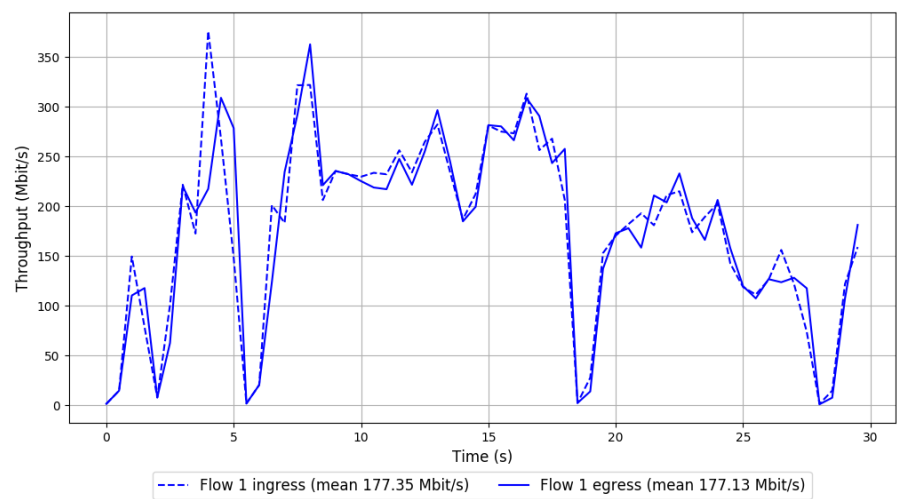
-- Flow 1:

Average throughput: 177.13 Mbit/s

95th percentile per-packet one-way delay: 102.338 ms

Loss rate: 0.06%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-20 12:37:11

End at: 2018-02-20 12:37:41

Below is generated by plot.py at 2018-02-20 16:06:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.72 Mbit/s

95th percentile per-packet one-way delay: 100.397 ms

Loss rate: 0.35%

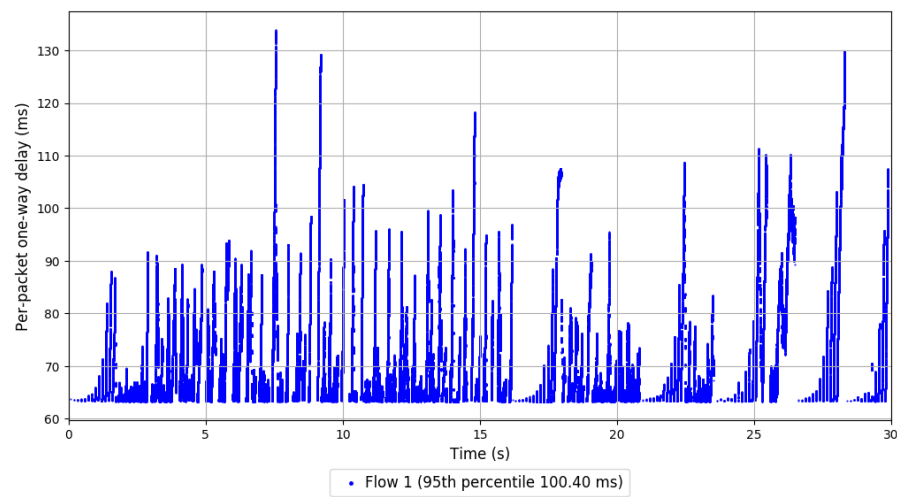
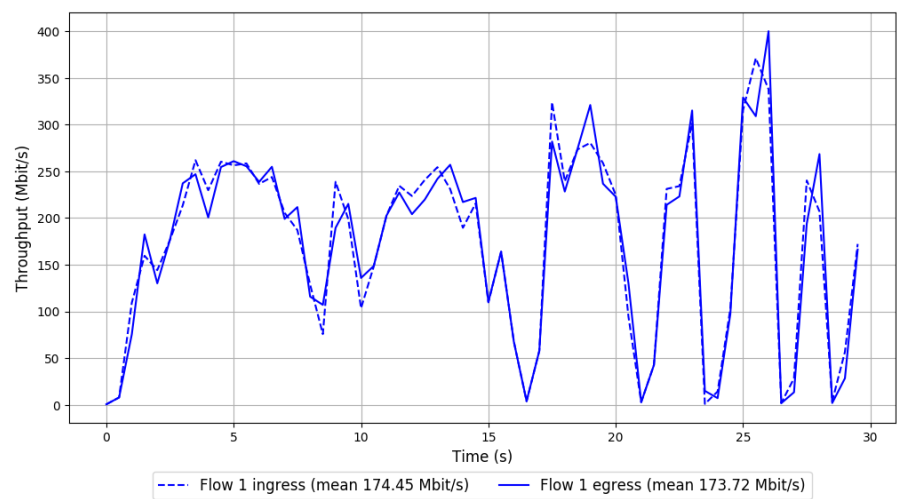
-- Flow 1:

Average throughput: 173.72 Mbit/s

95th percentile per-packet one-way delay: 100.397 ms

Loss rate: 0.35%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-20 12:51:49

End at: 2018-02-20 12:52:19

Below is generated by plot.py at 2018-02-20 16:07:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 217.25 Mbit/s

95th percentile per-packet one-way delay: 94.151 ms

Loss rate: 0.52%

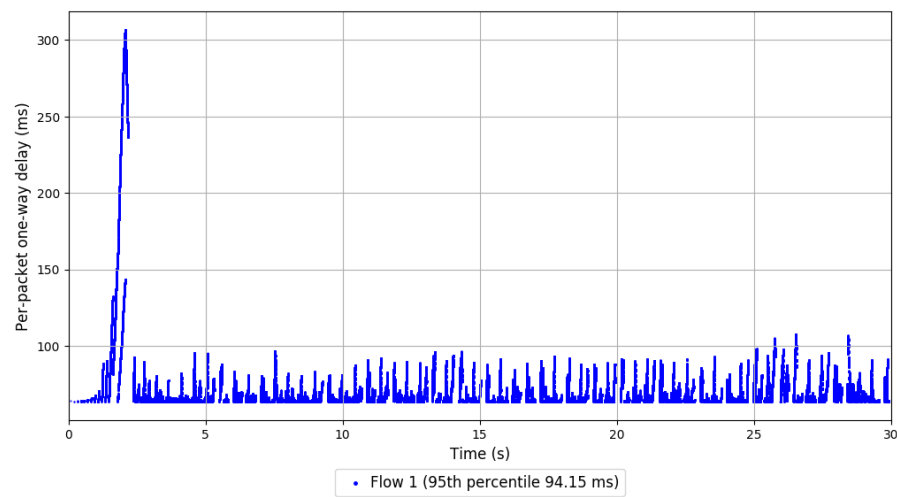
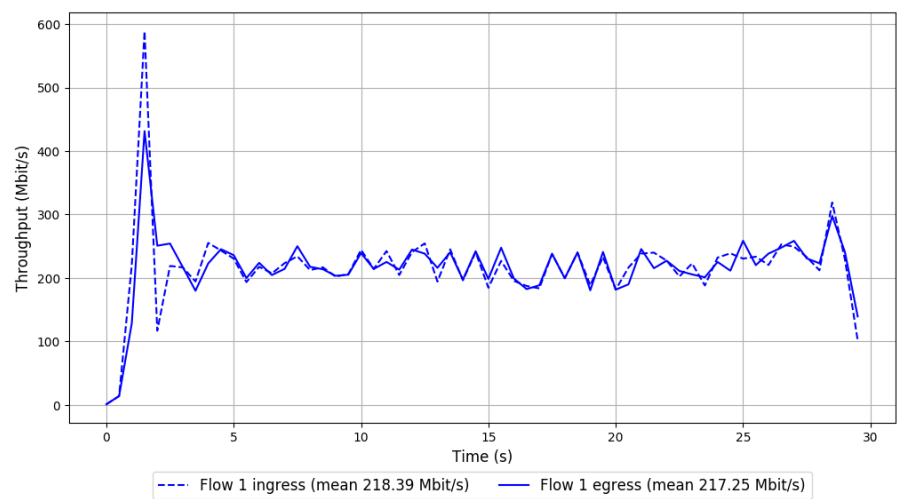
-- Flow 1:

Average throughput: 217.25 Mbit/s

95th percentile per-packet one-way delay: 94.151 ms

Loss rate: 0.52%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-20 13:06:37

End at: 2018-02-20 13:07:07

Below is generated by plot.py at 2018-02-20 16:08:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 241.58 Mbit/s

95th percentile per-packet one-way delay: 109.770 ms

Loss rate: 0.00%

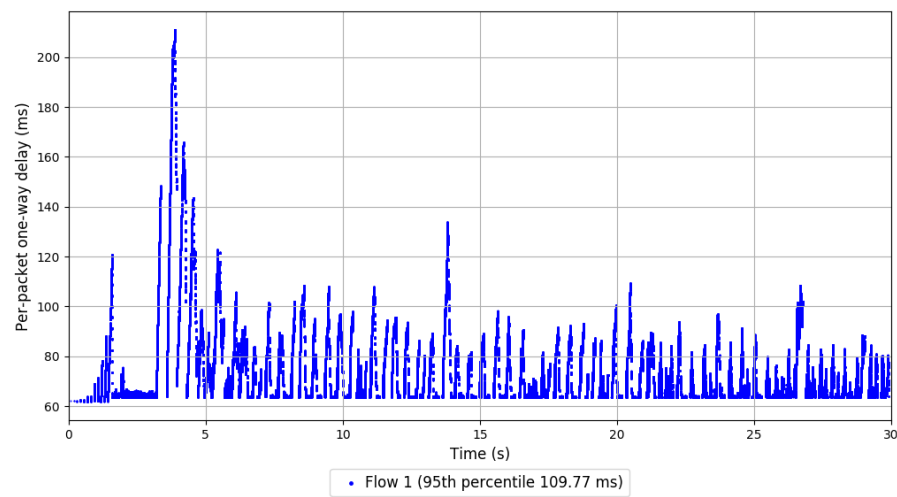
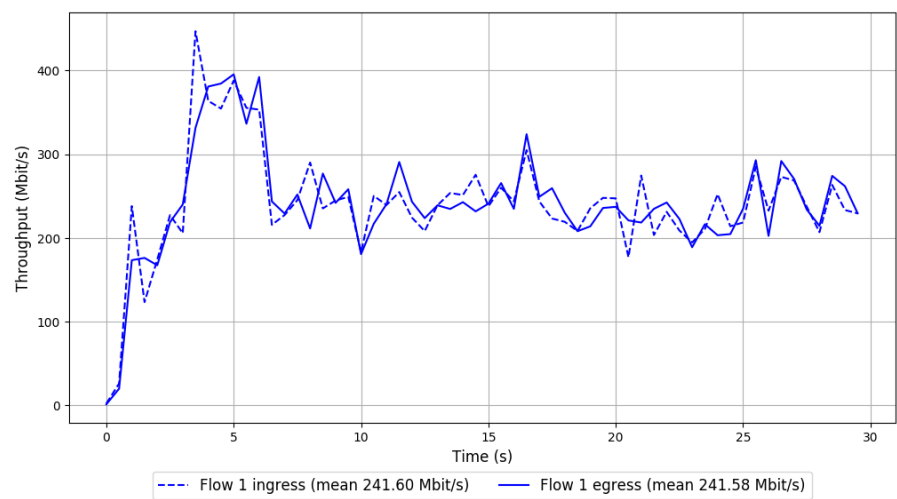
-- Flow 1:

Average throughput: 241.58 Mbit/s

95th percentile per-packet one-way delay: 109.770 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-20 13:21:26

End at: 2018-02-20 13:21:56

Below is generated by plot.py at 2018-02-20 16:08:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 225.97 Mbit/s

95th percentile per-packet one-way delay: 144.698 ms

Loss rate: 0.42%

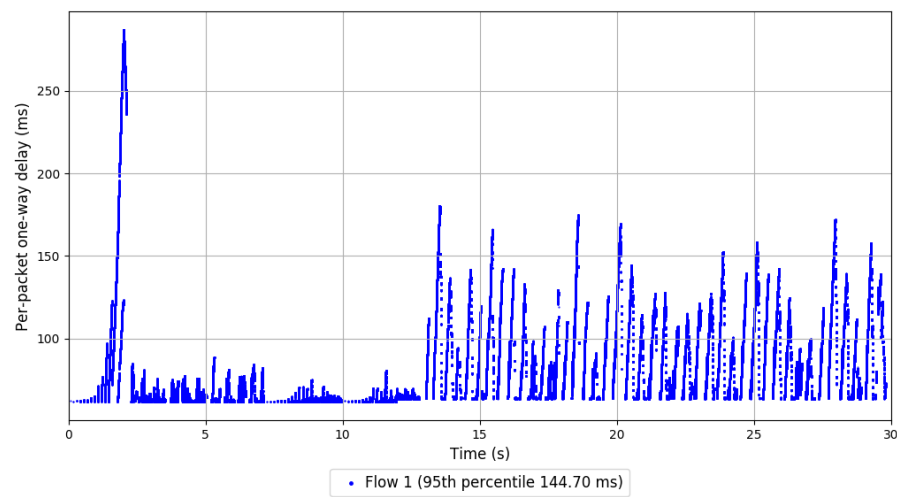
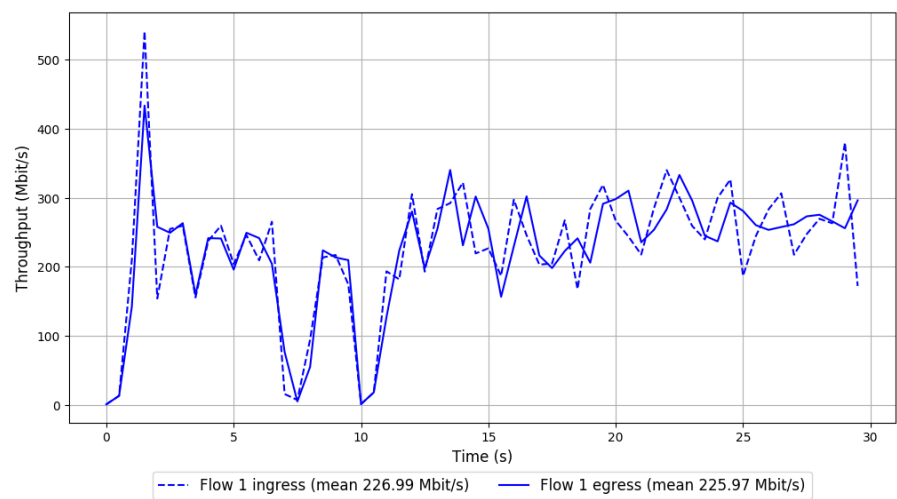
-- Flow 1:

Average throughput: 225.97 Mbit/s

95th percentile per-packet one-way delay: 144.698 ms

Loss rate: 0.42%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-20 13:36:08

End at: 2018-02-20 13:36:38

Below is generated by plot.py at 2018-02-20 16:09:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 235.03 Mbit/s

95th percentile per-packet one-way delay: 111.301 ms

Loss rate: 0.89%

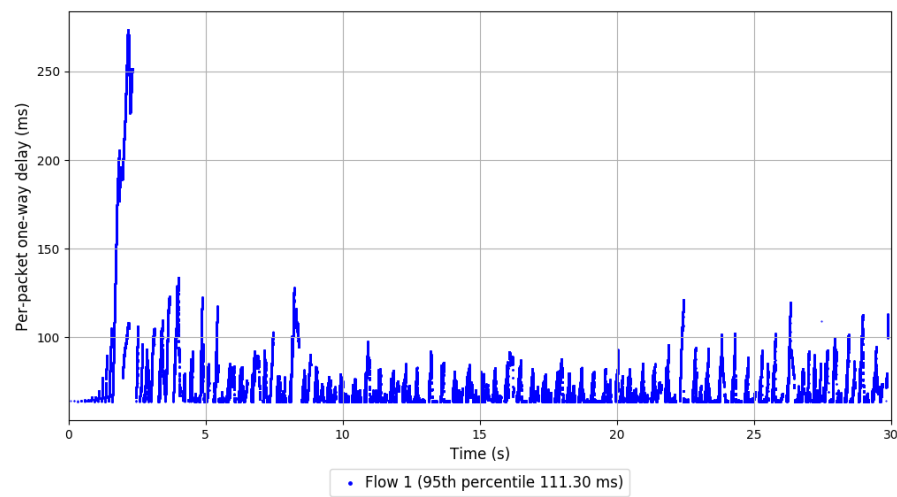
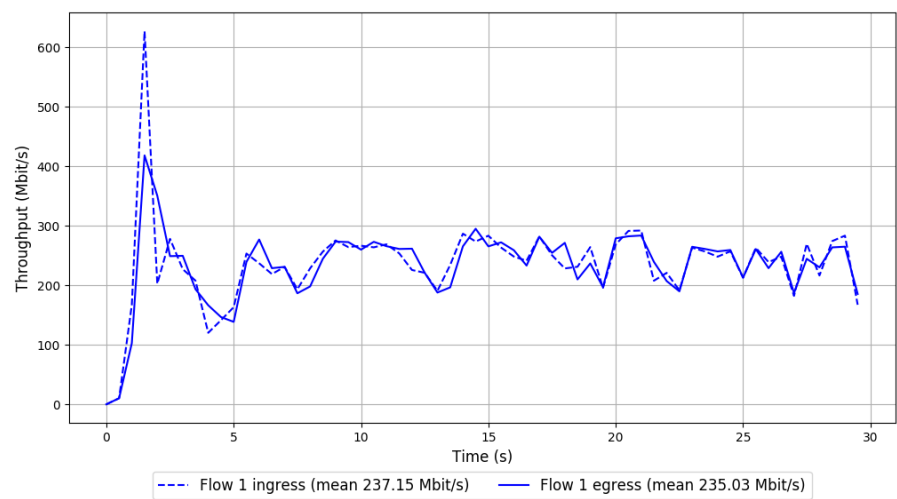
-- Flow 1:

Average throughput: 235.03 Mbit/s

95th percentile per-packet one-way delay: 111.301 ms

Loss rate: 0.89%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-20 13:50:48

End at: 2018-02-20 13:51:18

Below is generated by plot.py at 2018-02-20 16:09:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 206.78 Mbit/s

95th percentile per-packet one-way delay: 145.452 ms

Loss rate: 0.03%

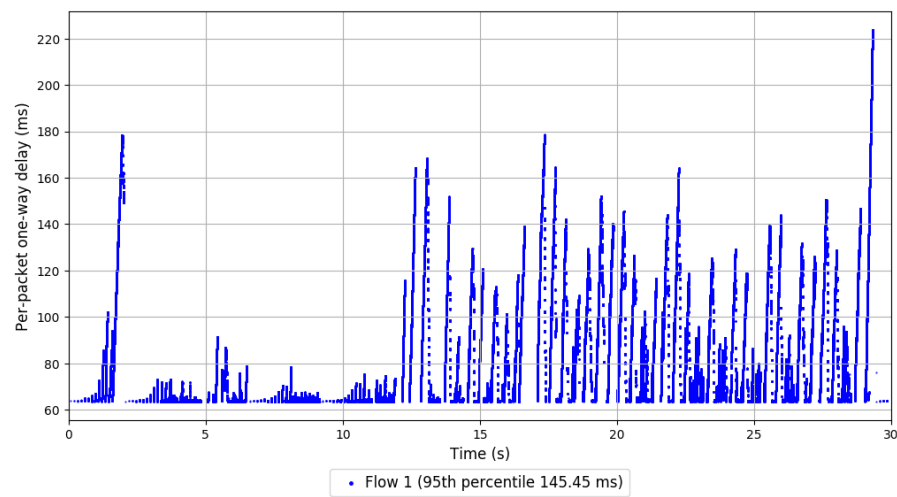
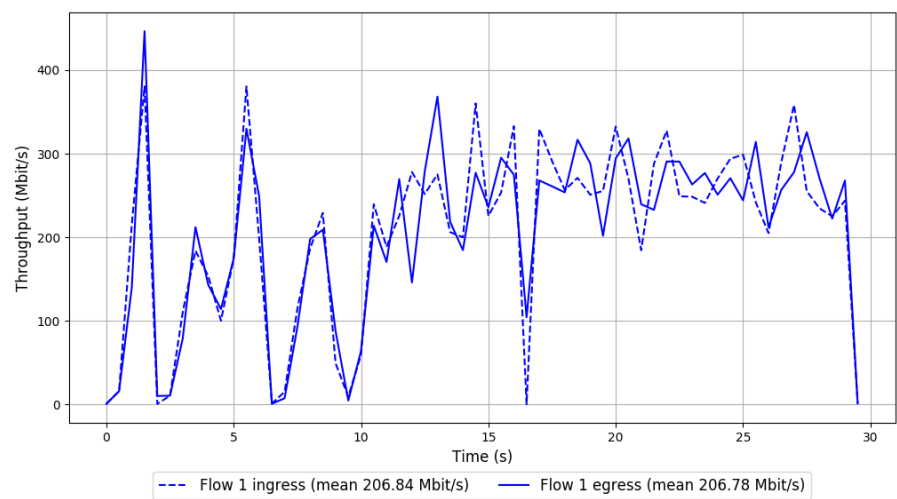
-- Flow 1:

Average throughput: 206.78 Mbit/s

95th percentile per-packet one-way delay: 145.452 ms

Loss rate: 0.03%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-20 11:50:51

End at: 2018-02-20 11:51:21

Below is generated by plot.py at 2018-02-20 16:09:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.29 Mbit/s

95th percentile per-packet one-way delay: 63.650 ms

Loss rate: 0.00%

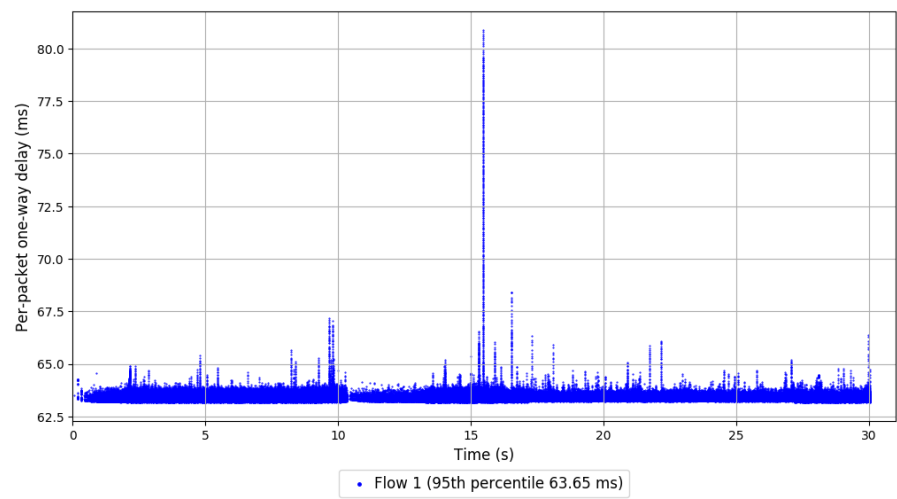
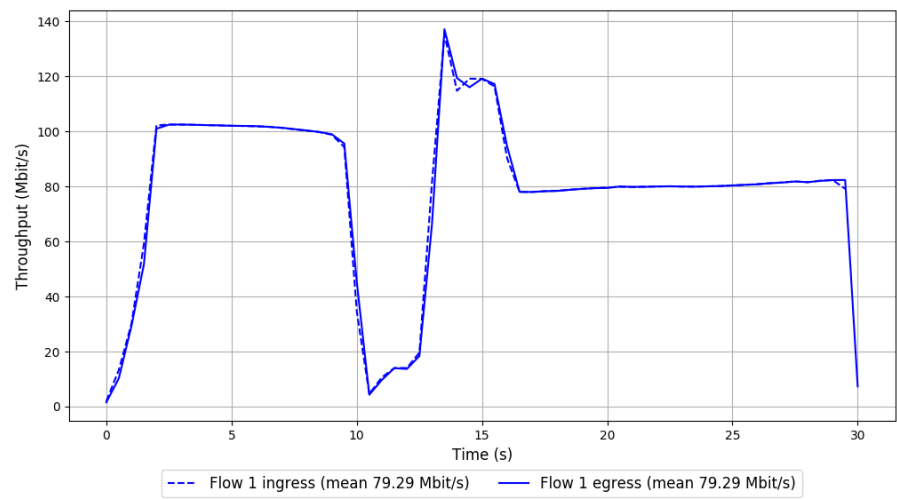
-- Flow 1:

Average throughput: 79.29 Mbit/s

95th percentile per-packet one-way delay: 63.650 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-20 12:05:34

End at: 2018-02-20 12:06:04

Below is generated by plot.py at 2018-02-20 16:09:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.50 Mbit/s

95th percentile per-packet one-way delay: 63.357 ms

Loss rate: 0.00%

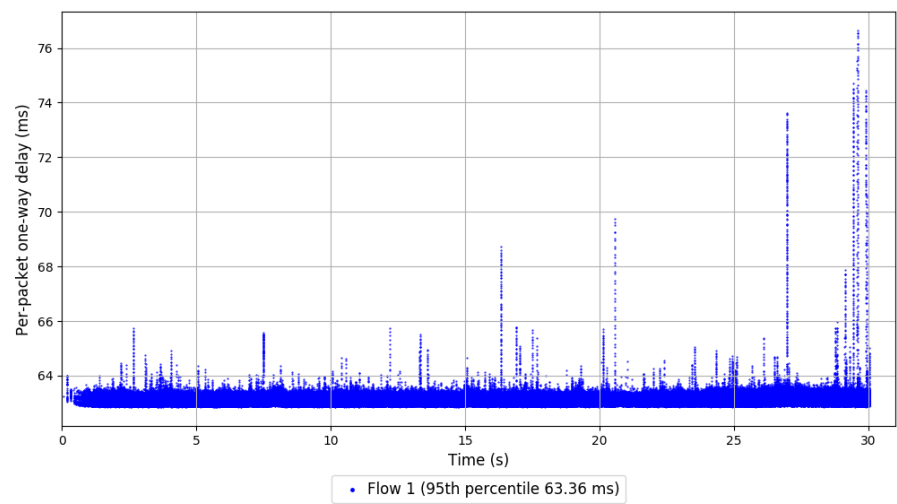
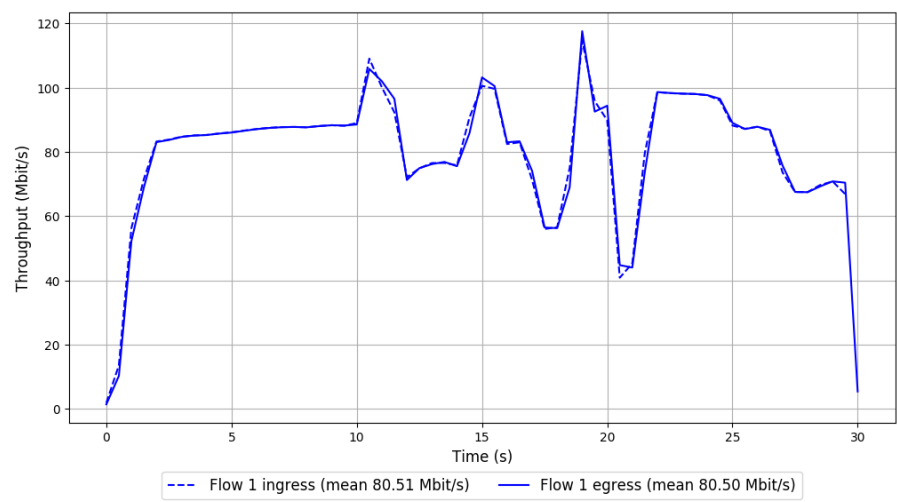
-- Flow 1:

Average throughput: 80.50 Mbit/s

95th percentile per-packet one-way delay: 63.357 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-20 12:20:23

End at: 2018-02-20 12:20:53

Below is generated by plot.py at 2018-02-20 16:09:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.43 Mbit/s

95th percentile per-packet one-way delay: 63.600 ms

Loss rate: 0.00%

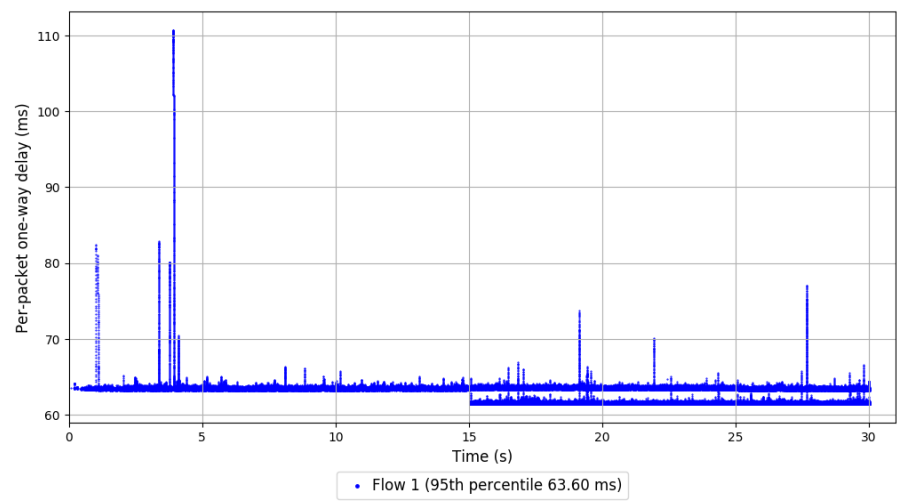
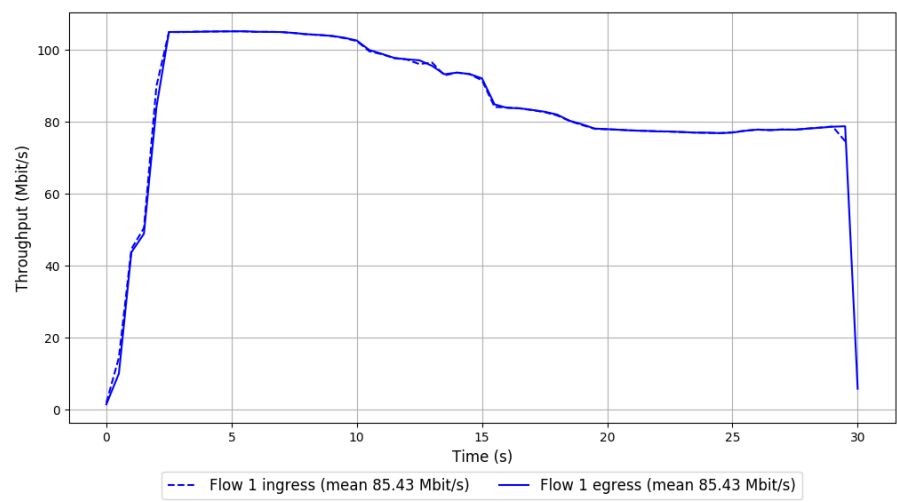
-- Flow 1:

Average throughput: 85.43 Mbit/s

95th percentile per-packet one-way delay: 63.600 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-20 12:34:59

End at: 2018-02-20 12:35:29

Below is generated by plot.py at 2018-02-20 16:10:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.64 Mbit/s

95th percentile per-packet one-way delay: 63.484 ms

Loss rate: 0.00%

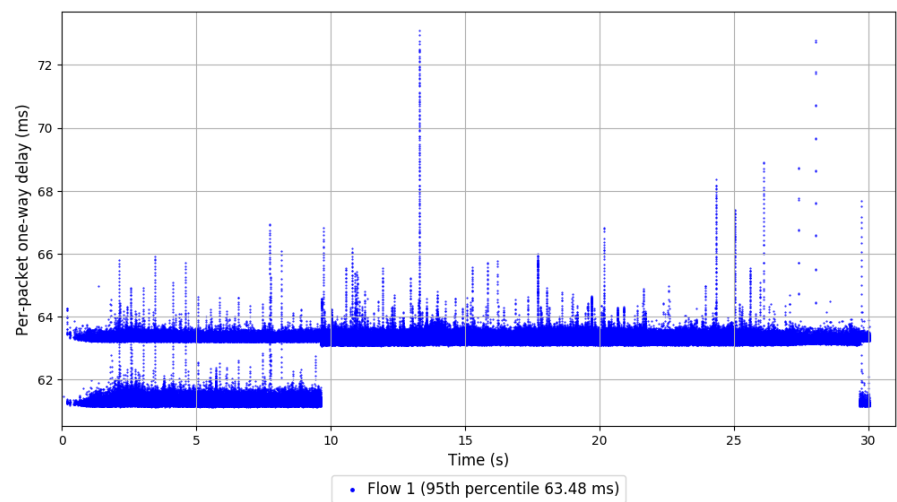
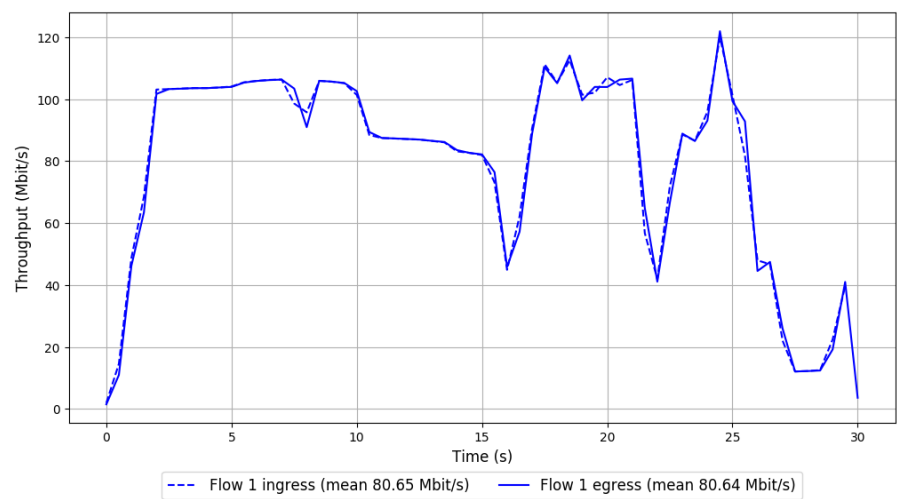
-- Flow 1:

Average throughput: 80.64 Mbit/s

95th percentile per-packet one-way delay: 63.484 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-20 12:49:39

End at: 2018-02-20 12:50:09

Below is generated by plot.py at 2018-02-20 16:10:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.82 Mbit/s

95th percentile per-packet one-way delay: 63.670 ms

Loss rate: 0.00%

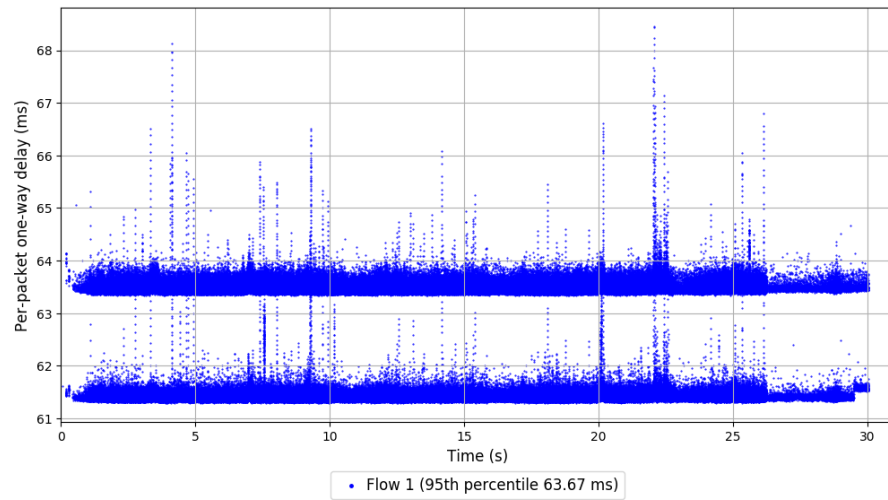
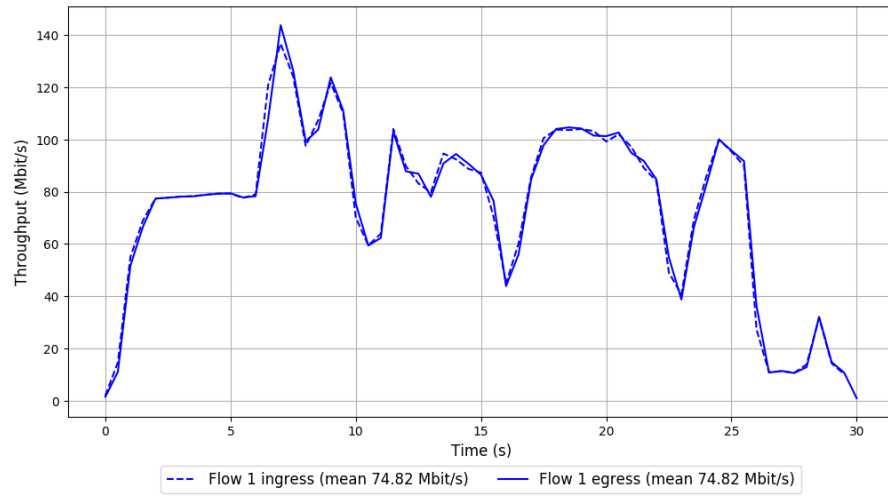
-- Flow 1:

Average throughput: 74.82 Mbit/s

95th percentile per-packet one-way delay: 63.670 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-20 13:04:20

End at: 2018-02-20 13:04:50

Below is generated by plot.py at 2018-02-20 16:10:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.34 Mbit/s

95th percentile per-packet one-way delay: 63.730 ms

Loss rate: 0.00%

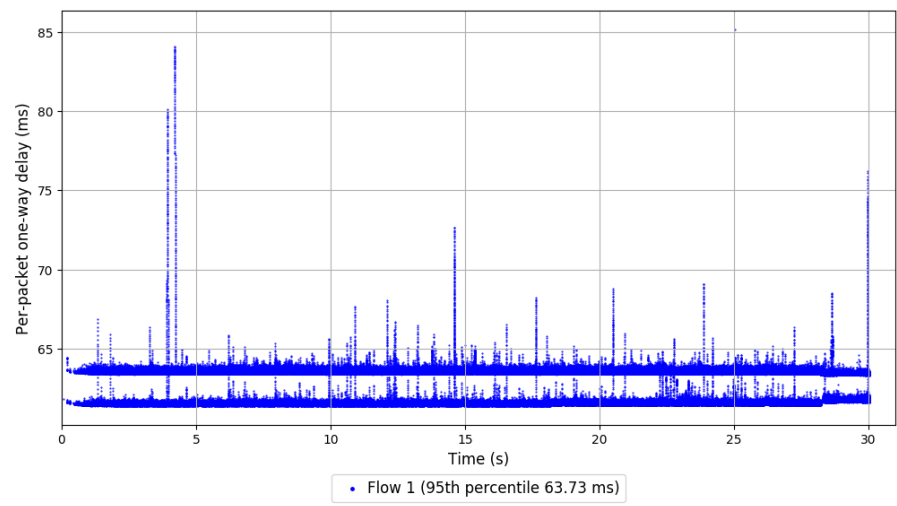
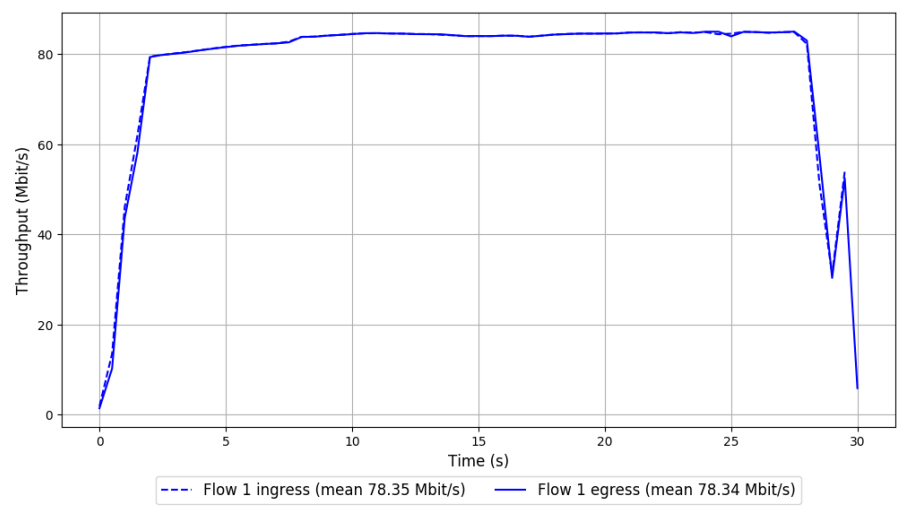
-- Flow 1:

Average throughput: 78.34 Mbit/s

95th percentile per-packet one-way delay: 63.730 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-20 13:19:09

End at: 2018-02-20 13:19:39

Below is generated by plot.py at 2018-02-20 16:10:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.93 Mbit/s

95th percentile per-packet one-way delay: 63.754 ms

Loss rate: 0.00%

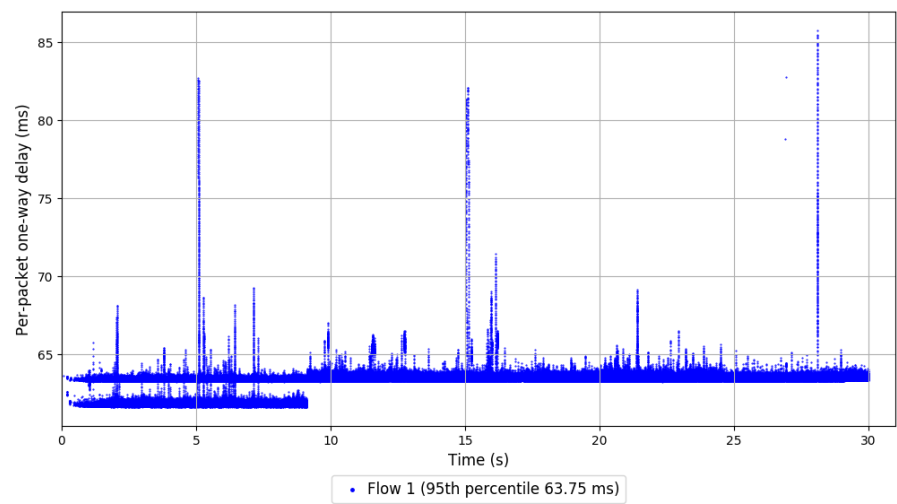
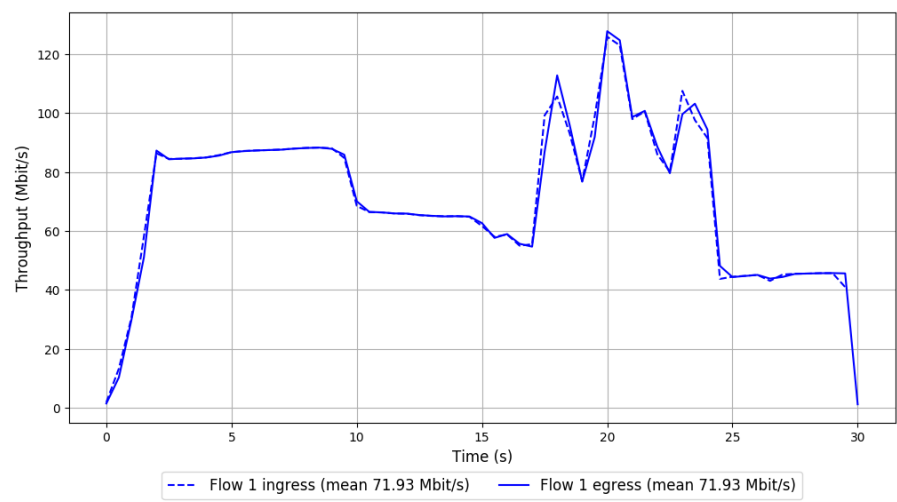
-- Flow 1:

Average throughput: 71.93 Mbit/s

95th percentile per-packet one-way delay: 63.754 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-20 13:33:54

End at: 2018-02-20 13:34:24

Below is generated by plot.py at 2018-02-20 16:11:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.86 Mbit/s

95th percentile per-packet one-way delay: 63.739 ms

Loss rate: 0.00%

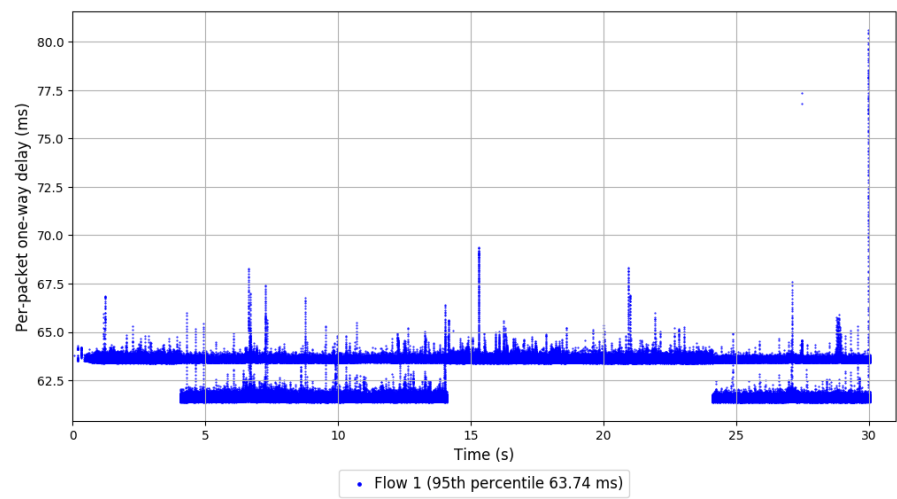
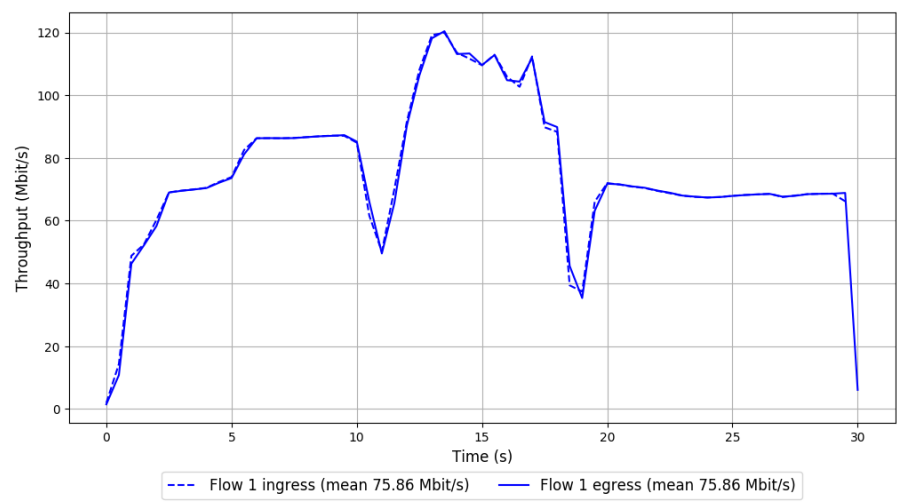
-- Flow 1:

Average throughput: 75.86 Mbit/s

95th percentile per-packet one-way delay: 63.739 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-20 13:48:28

End at: 2018-02-20 13:48:58

Below is generated by plot.py at 2018-02-20 16:11:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.35 Mbit/s

95th percentile per-packet one-way delay: 63.751 ms

Loss rate: 0.00%

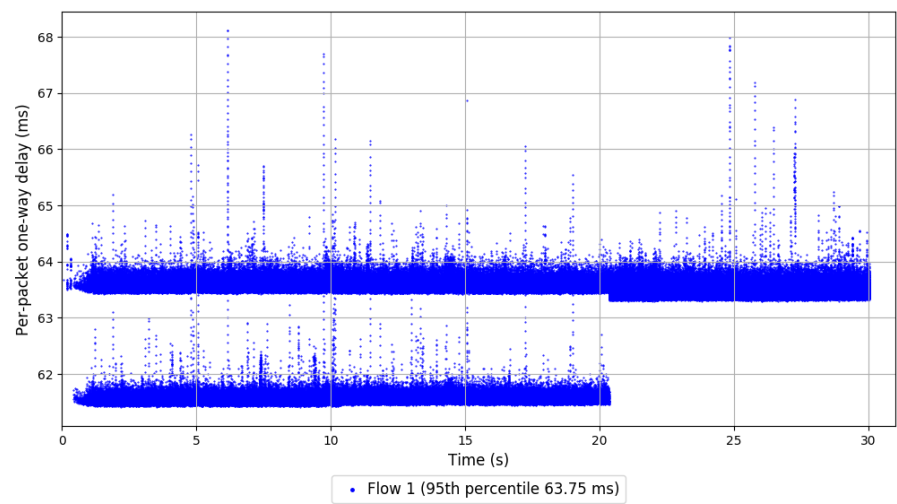
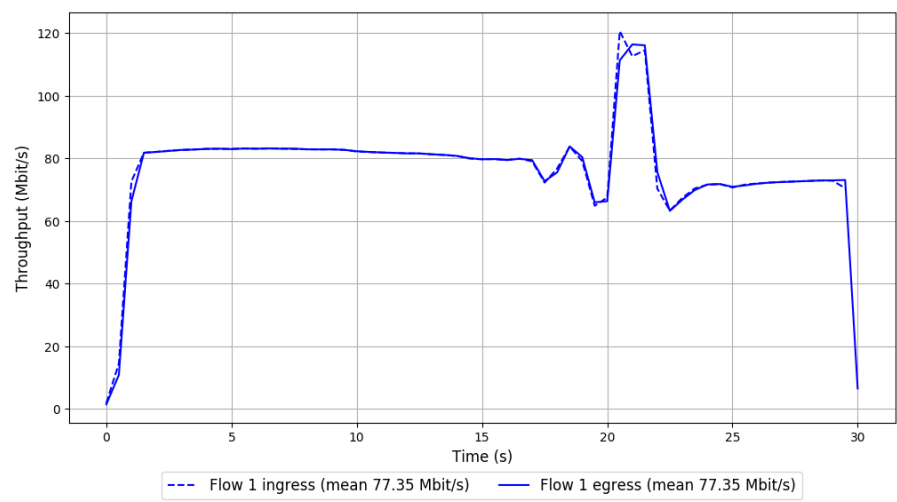
-- Flow 1:

Average throughput: 77.35 Mbit/s

95th percentile per-packet one-way delay: 63.751 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-20 14:03:22

End at: 2018-02-20 14:03:52

Below is generated by plot.py at 2018-02-20 16:11:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.01 Mbit/s

95th percentile per-packet one-way delay: 63.653 ms

Loss rate: 0.00%

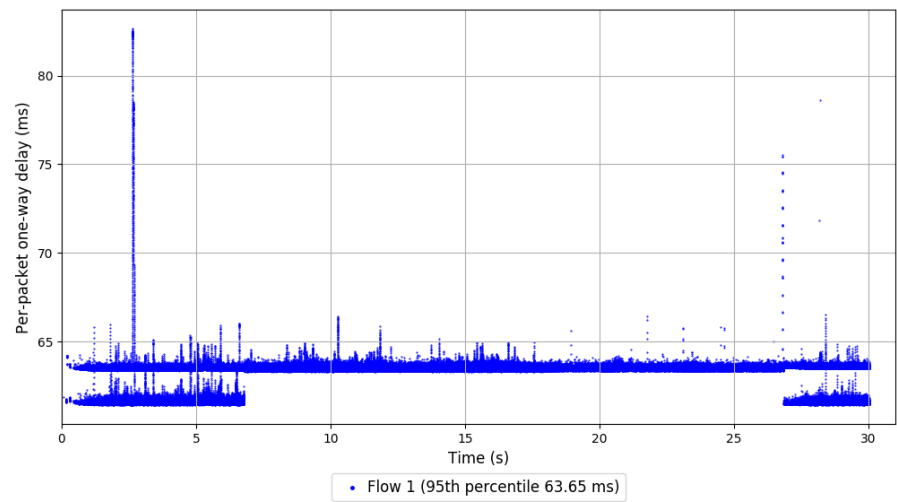
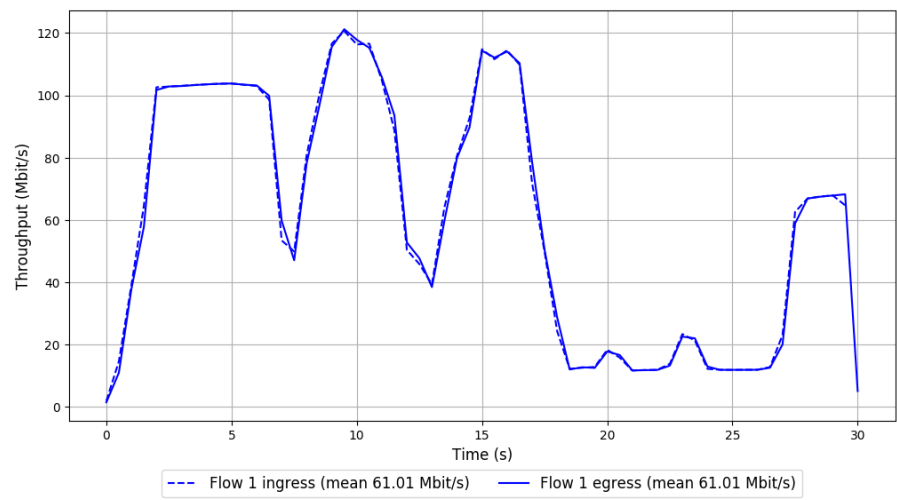
-- Flow 1:

Average throughput: 61.01 Mbit/s

95th percentile per-packet one-way delay: 63.653 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

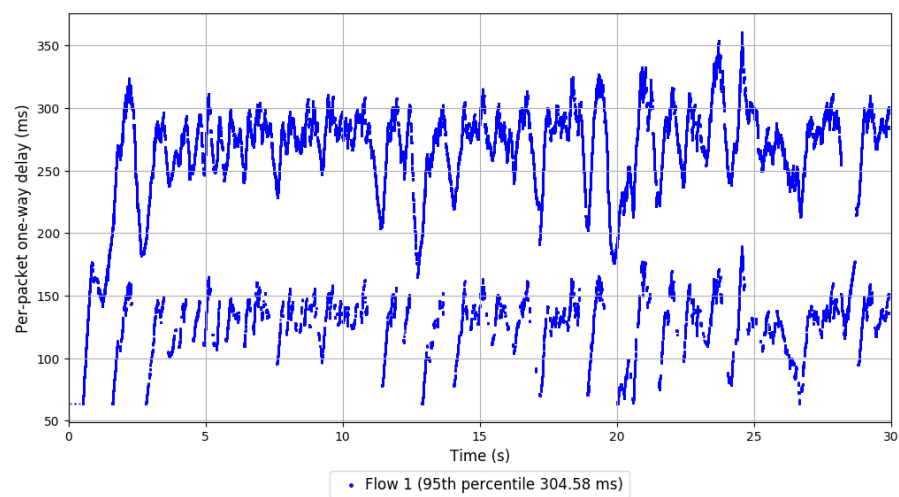
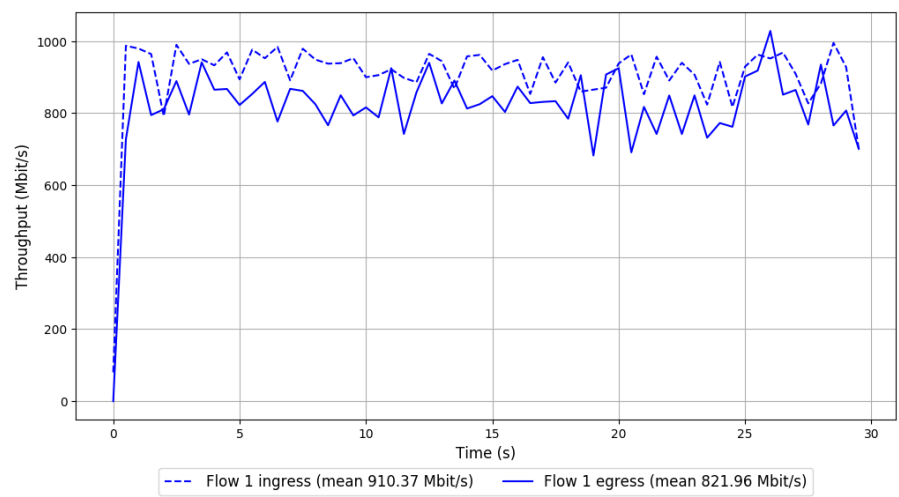


```
Run 1: Statistics of FillP

Start at: 2018-02-20 11:39:04
End at: 2018-02-20 11:39:34

# Below is generated by plot.py at 2018-02-20 16:25:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 821.96 Mbit/s
95th percentile per-packet one-way delay: 304.579 ms
Loss rate: 9.71%
-- Flow 1:
Average throughput: 821.96 Mbit/s
95th percentile per-packet one-way delay: 304.579 ms
Loss rate: 9.71%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-20 11:54:01

End at: 2018-02-20 11:54:31

Below is generated by plot.py at 2018-02-20 16:25:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 659.21 Mbit/s

95th percentile per-packet one-way delay: 301.368 ms

Loss rate: 7.86%

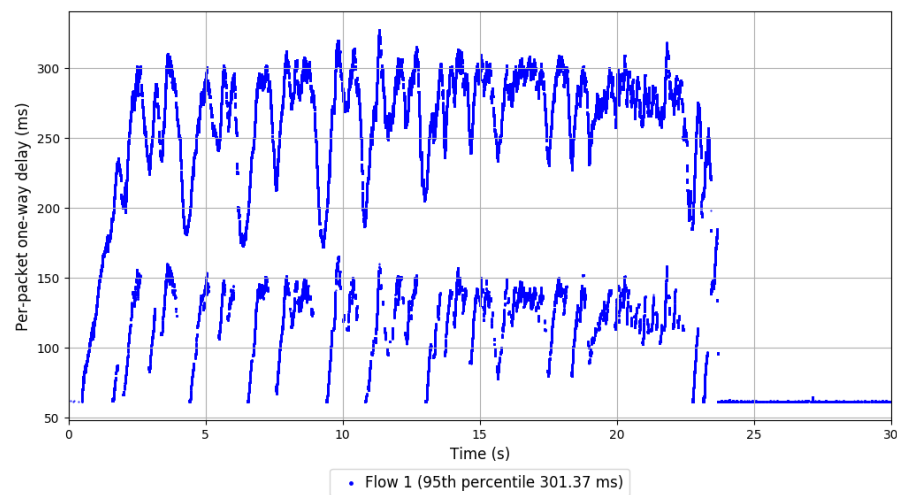
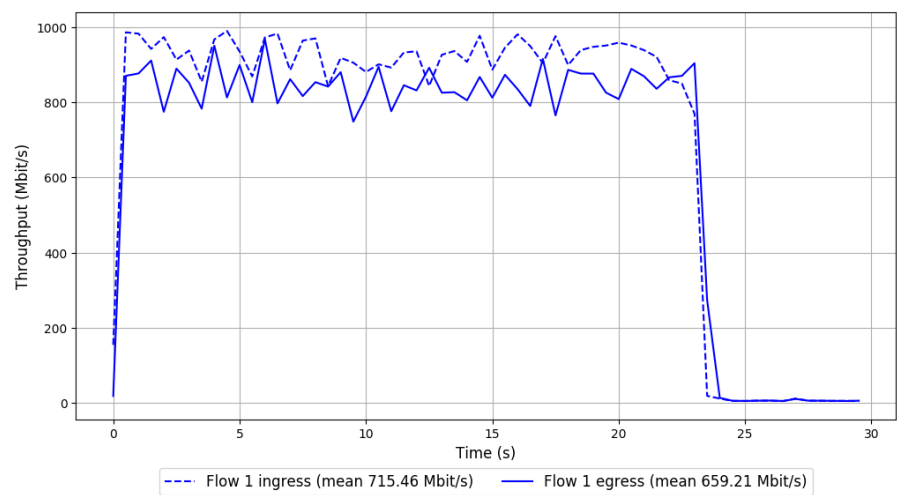
-- Flow 1:

Average throughput: 659.21 Mbit/s

95th percentile per-packet one-way delay: 301.368 ms

Loss rate: 7.86%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-20 12:08:47

End at: 2018-02-20 12:09:17

Below is generated by plot.py at 2018-02-20 16:25:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 815.50 Mbit/s

95th percentile per-packet one-way delay: 315.165 ms

Loss rate: 10.68%

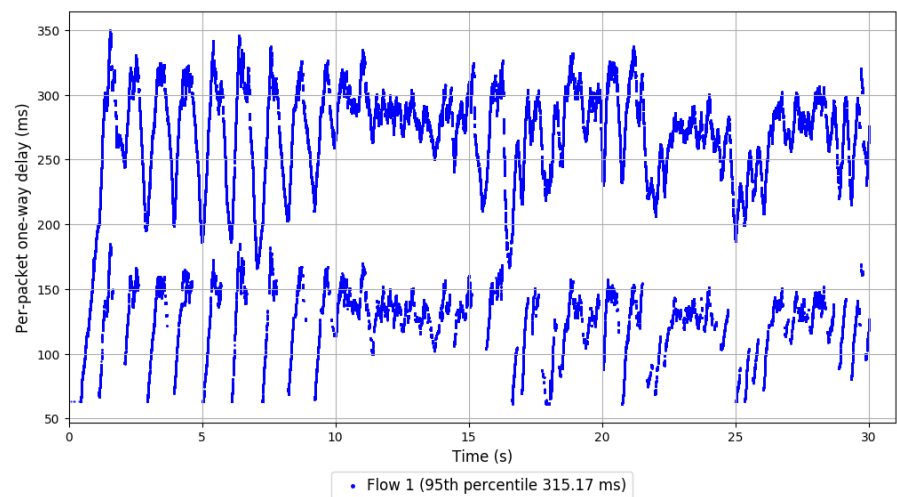
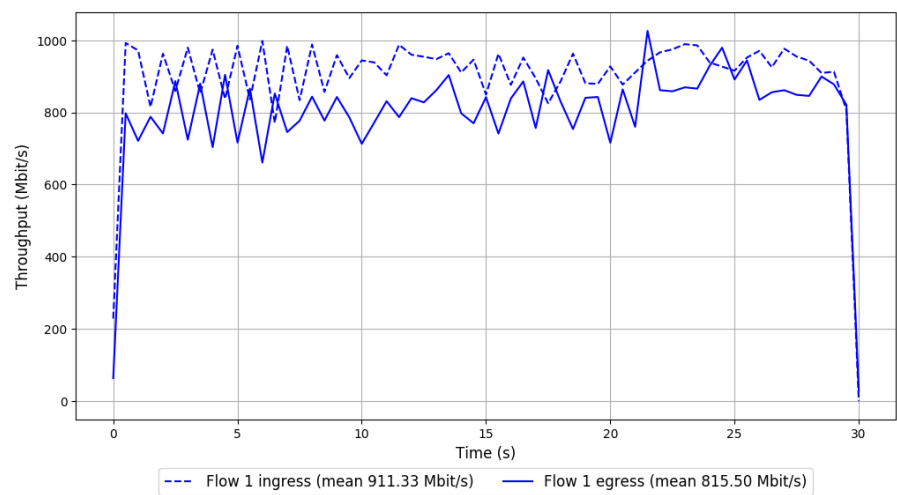
-- Flow 1:

Average throughput: 815.50 Mbit/s

95th percentile per-packet one-way delay: 315.165 ms

Loss rate: 10.68%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-20 12:23:15

End at: 2018-02-20 12:23:45

Below is generated by plot.py at 2018-02-20 16:25:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 835.44 Mbit/s

95th percentile per-packet one-way delay: 309.829 ms

Loss rate: 9.12%

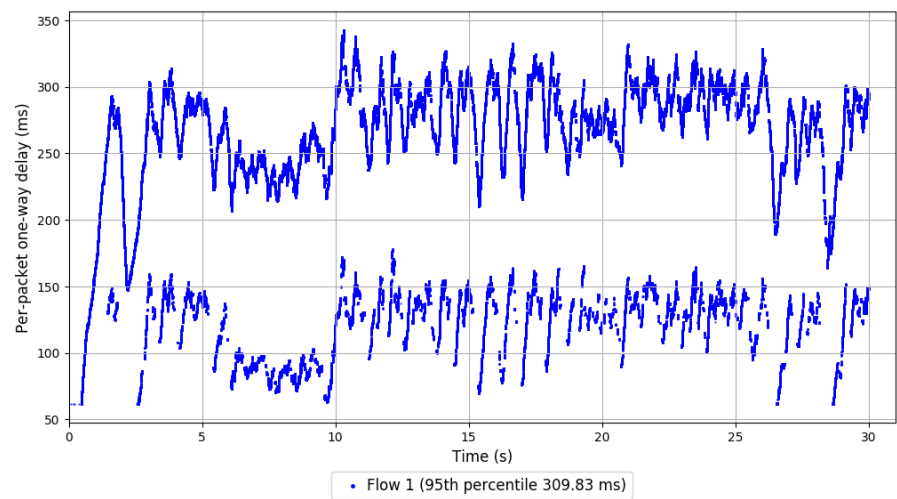
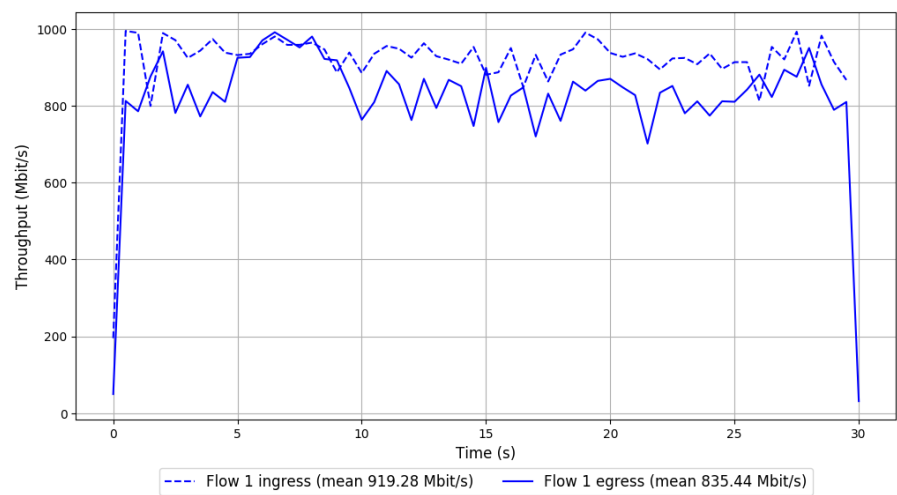
-- Flow 1:

Average throughput: 835.44 Mbit/s

95th percentile per-packet one-way delay: 309.829 ms

Loss rate: 9.12%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-20 12:37:59

End at: 2018-02-20 12:38:29

Below is generated by plot.py at 2018-02-20 16:26:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 881.72 Mbit/s

95th percentile per-packet one-way delay: 291.572 ms

Loss rate: 3.72%

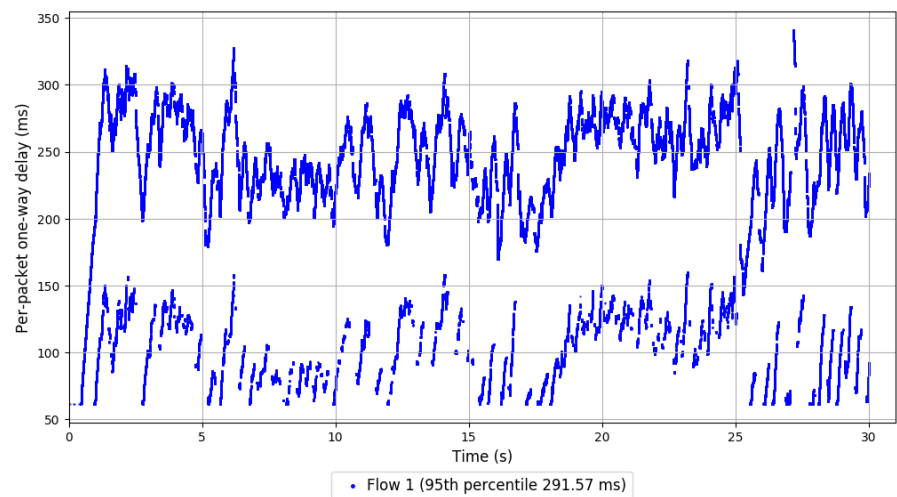
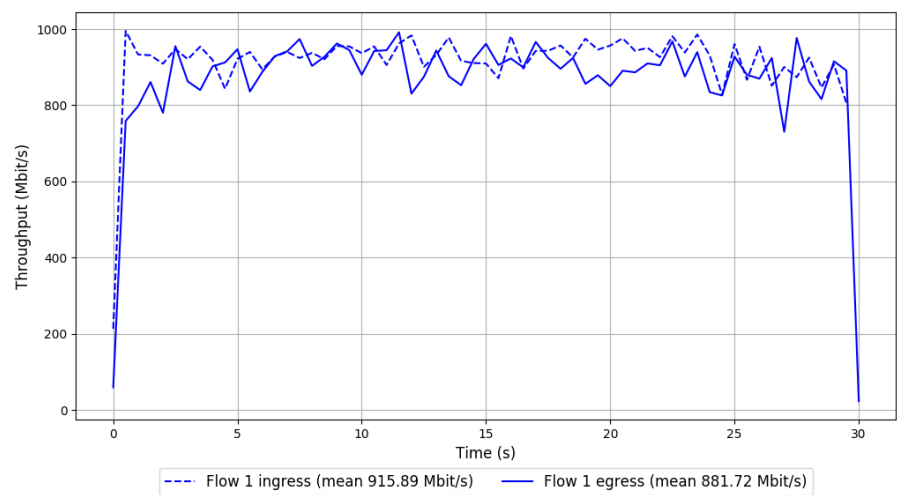
-- Flow 1:

Average throughput: 881.72 Mbit/s

95th percentile per-packet one-way delay: 291.572 ms

Loss rate: 3.72%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-20 12:52:40

End at: 2018-02-20 12:53:10

Below is generated by plot.py at 2018-02-20 16:26:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 807.80 Mbit/s

95th percentile per-packet one-way delay: 315.050 ms

Loss rate: 9.82%

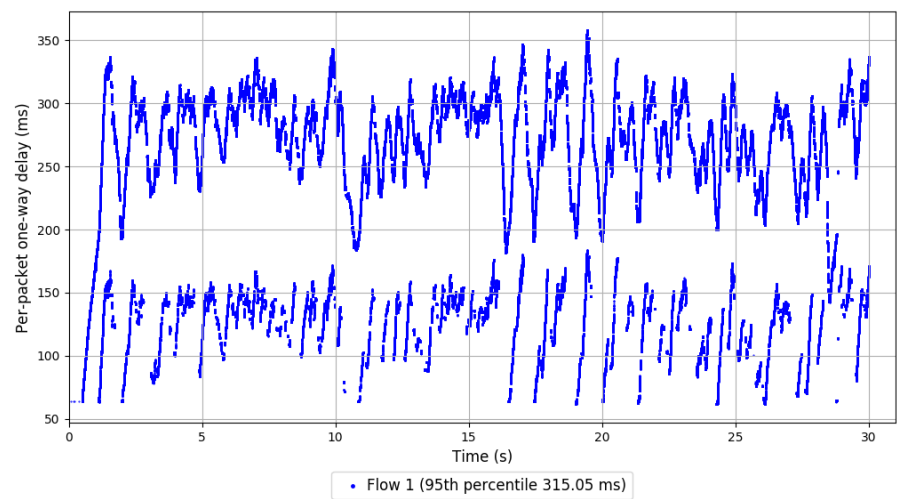
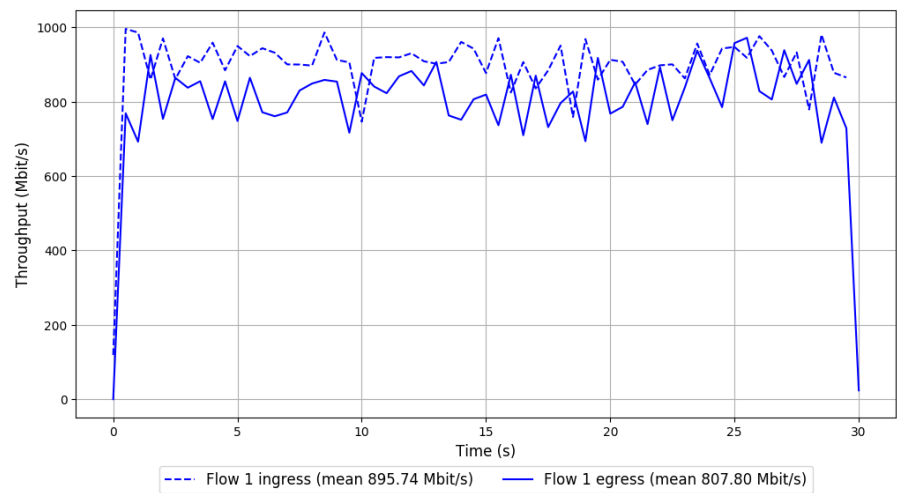
-- Flow 1:

Average throughput: 807.80 Mbit/s

95th percentile per-packet one-way delay: 315.050 ms

Loss rate: 9.82%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-20 13:07:29

End at: 2018-02-20 13:07:59

Below is generated by plot.py at 2018-02-20 16:26:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 737.83 Mbit/s

95th percentile per-packet one-way delay: 336.925 ms

Loss rate: 14.12%

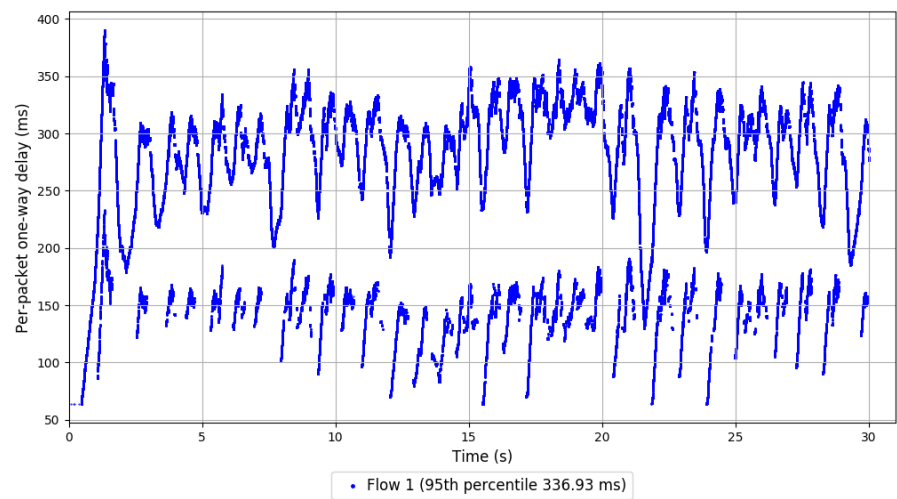
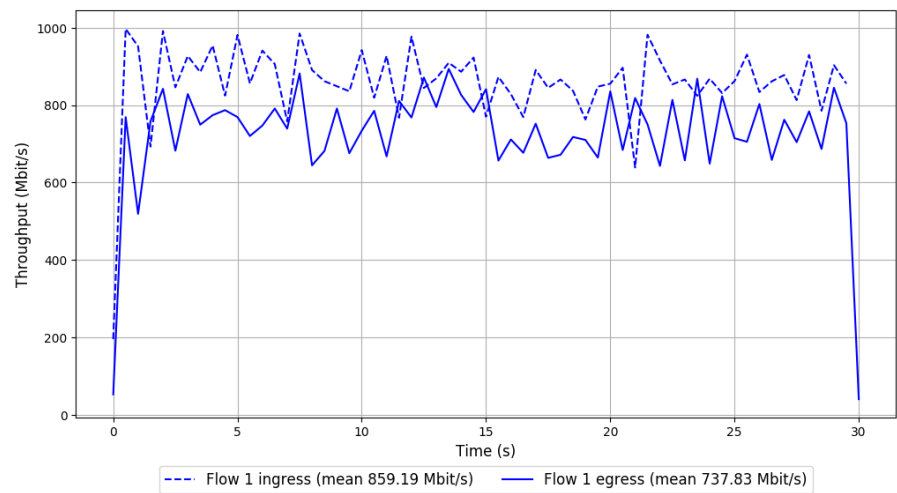
-- Flow 1:

Average throughput: 737.83 Mbit/s

95th percentile per-packet one-way delay: 336.925 ms

Loss rate: 14.12%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-20 13:22:18

End at: 2018-02-20 13:22:48

Below is generated by plot.py at 2018-02-20 16:26:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 798.70 Mbit/s

95th percentile per-packet one-way delay: 319.790 ms

Loss rate: 11.17%

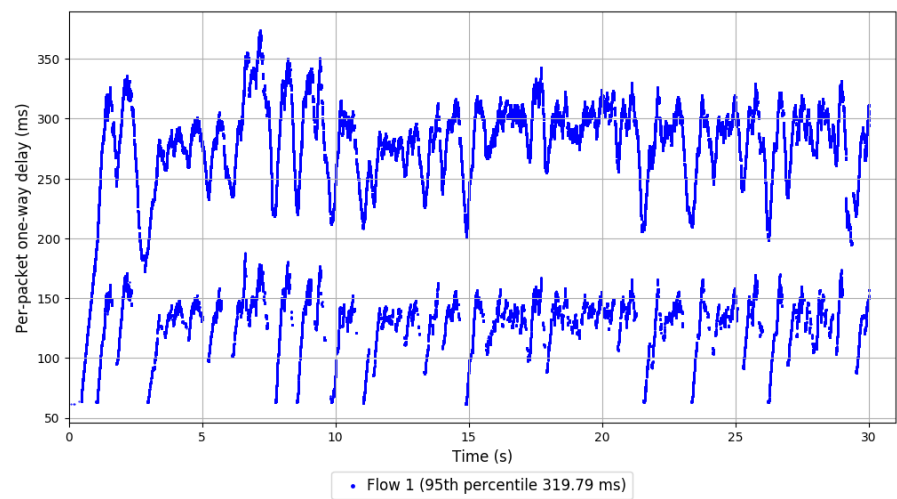
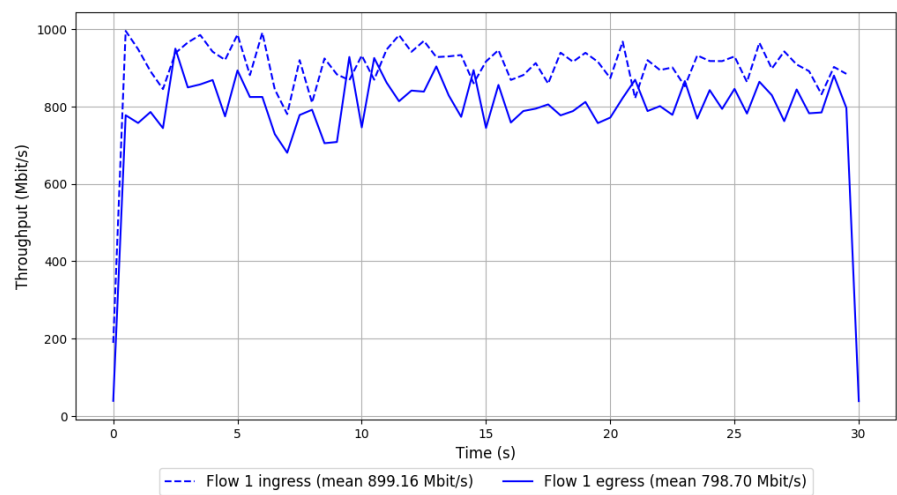
-- Flow 1:

Average throughput: 798.70 Mbit/s

95th percentile per-packet one-way delay: 319.790 ms

Loss rate: 11.17%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-20 13:37:00

End at: 2018-02-20 13:37:30

Below is generated by plot.py at 2018-02-20 16:38:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 804.90 Mbit/s

95th percentile per-packet one-way delay: 317.712 ms

Loss rate: 11.92%

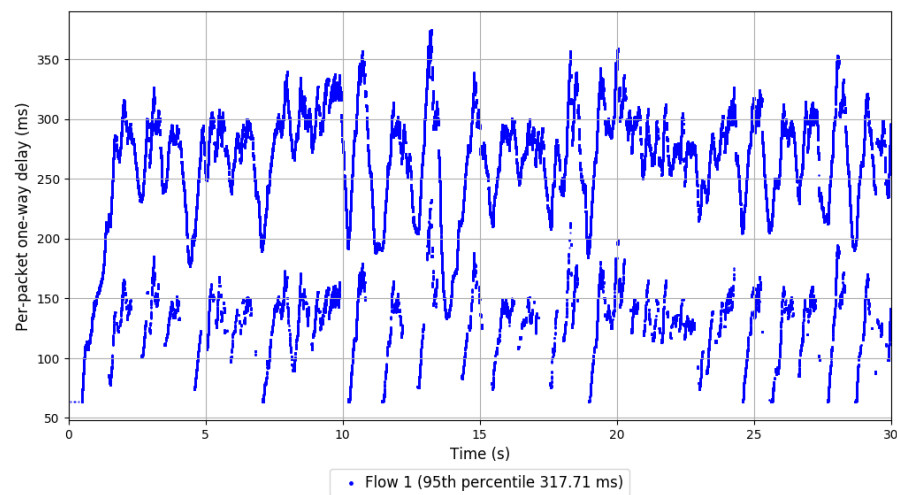
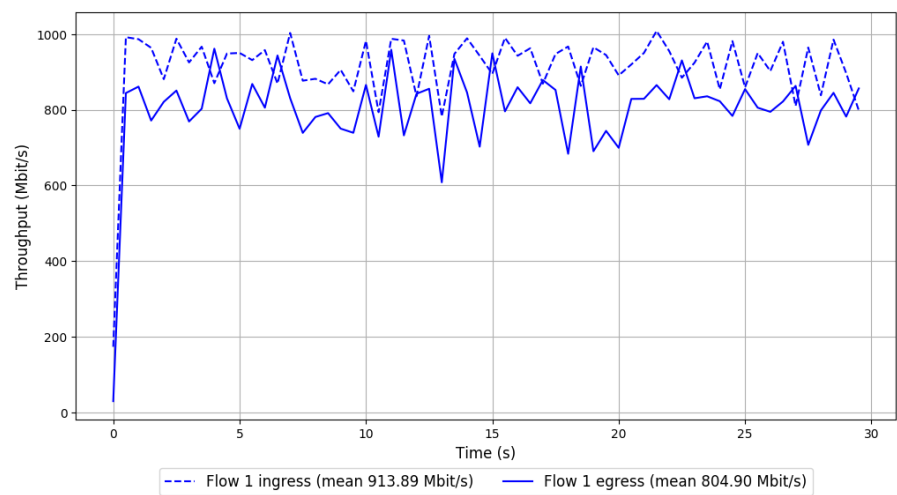
-- Flow 1:

Average throughput: 804.90 Mbit/s

95th percentile per-packet one-way delay: 317.712 ms

Loss rate: 11.92%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-20 13:51:39

End at: 2018-02-20 13:52:09

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 844.92 Mbit/s

95th percentile per-packet one-way delay: 299.637 ms

Loss rate: 5.55%

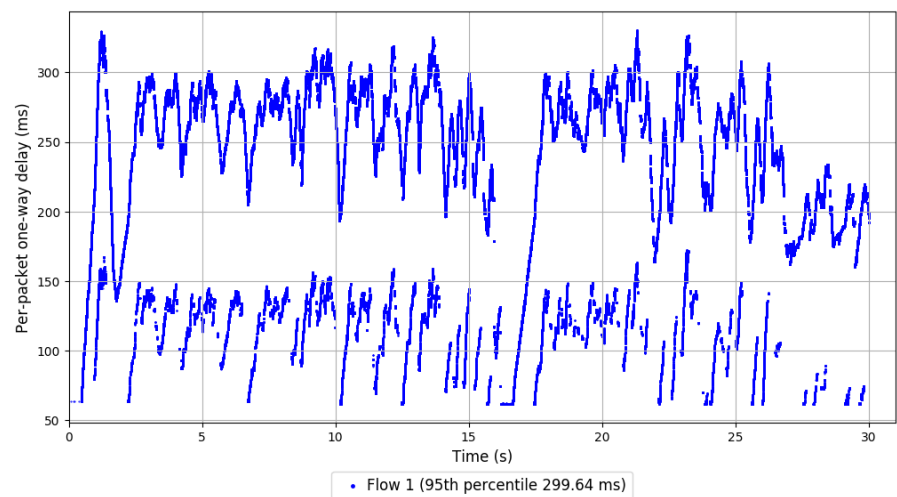
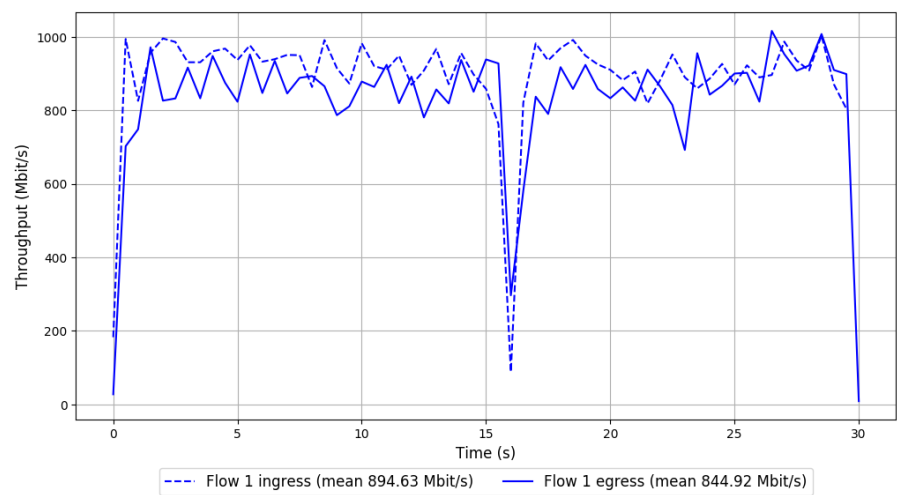
-- Flow 1:

Average throughput: 844.92 Mbit/s

95th percentile per-packet one-way delay: 299.637 ms

Loss rate: 5.55%

Run 10: Report of FillP — Data Link

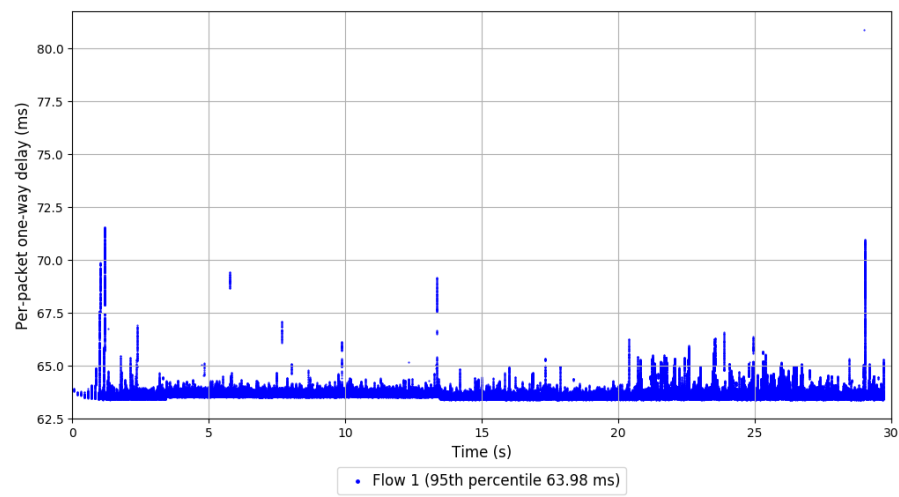
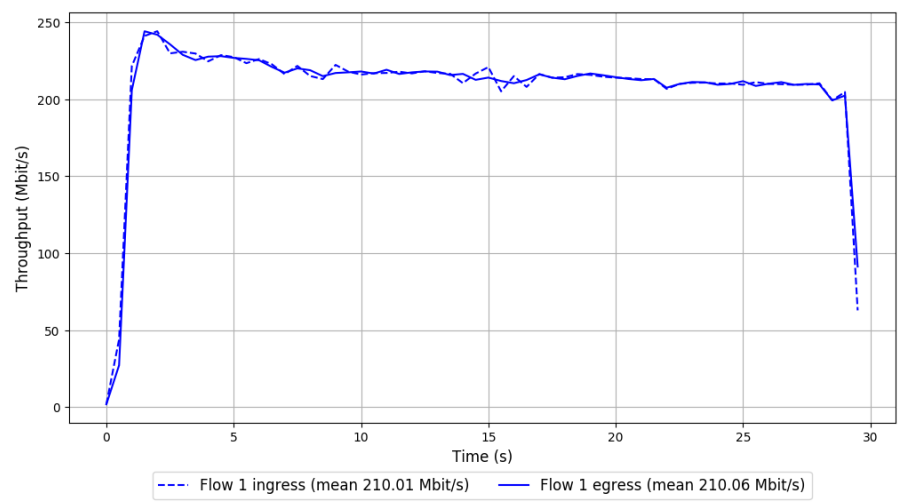


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-20 11:43:25
End at: 2018-02-20 11:43:55

# Below is generated by plot.py at 2018-02-20 16:40:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 210.06 Mbit/s
95th percentile per-packet one-way delay: 63.979 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 210.06 Mbit/s
95th percentile per-packet one-way delay: 63.979 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-1-32 — Data Link

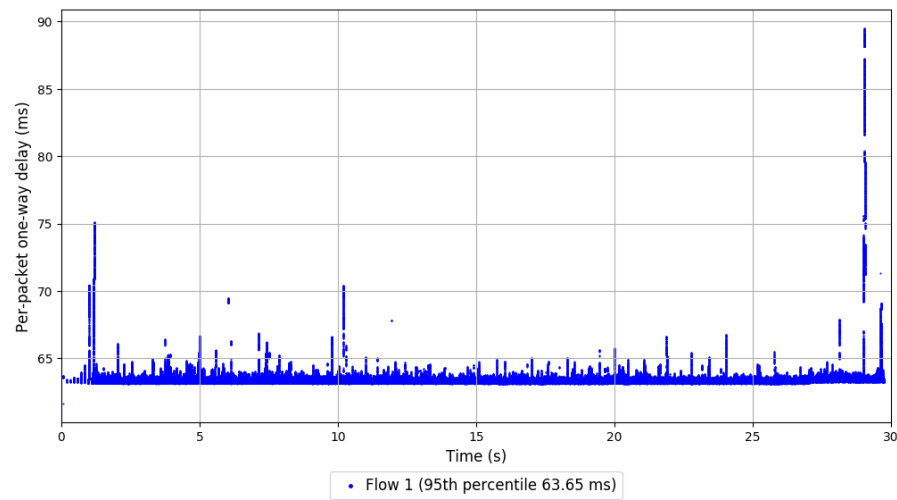
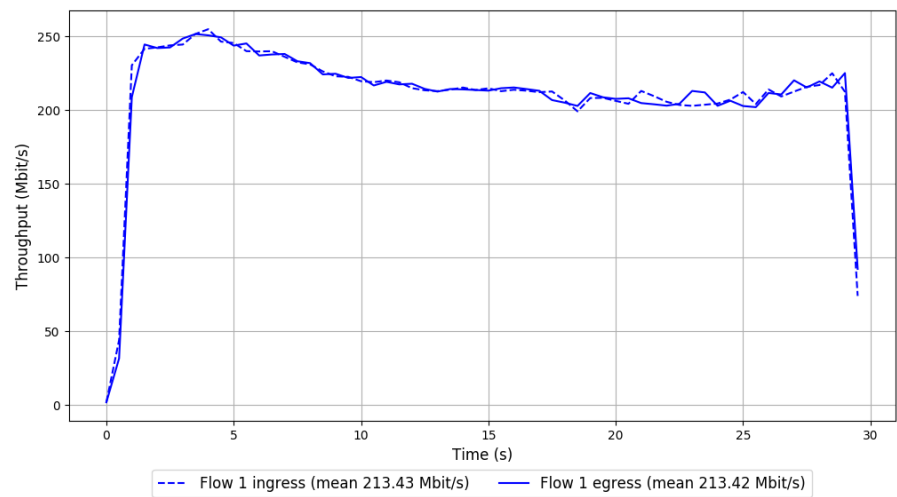


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-20 11:58:21
End at: 2018-02-20 11:58:51

# Below is generated by plot.py at 2018-02-20 16:40:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.42 Mbit/s
95th percentile per-packet one-way delay: 63.650 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 213.42 Mbit/s
95th percentile per-packet one-way delay: 63.650 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-20 12:13:13

End at: 2018-02-20 12:13:43

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.70 Mbit/s

95th percentile per-packet one-way delay: 64.003 ms

Loss rate: 0.00%

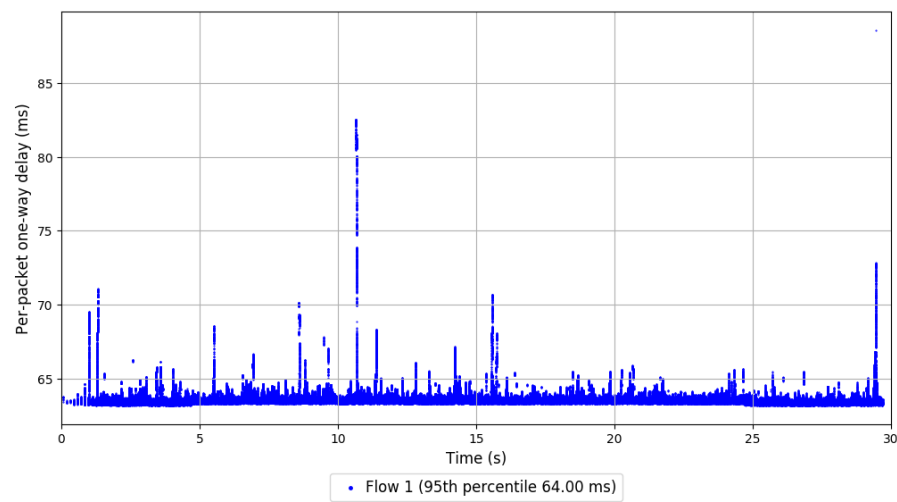
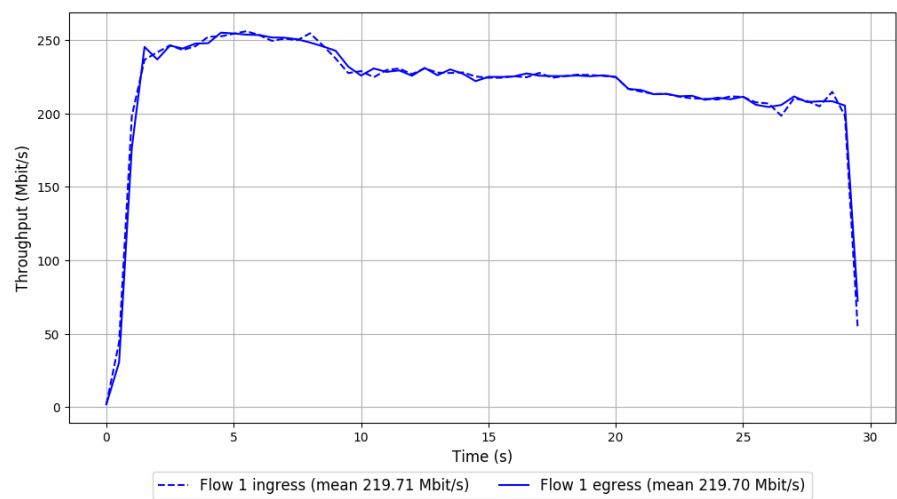
-- Flow 1:

Average throughput: 219.70 Mbit/s

95th percentile per-packet one-way delay: 64.003 ms

Loss rate: 0.00%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-20 12:27:43

End at: 2018-02-20 12:28:13

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 212.91 Mbit/s

95th percentile per-packet one-way delay: 63.816 ms

Loss rate: 0.00%

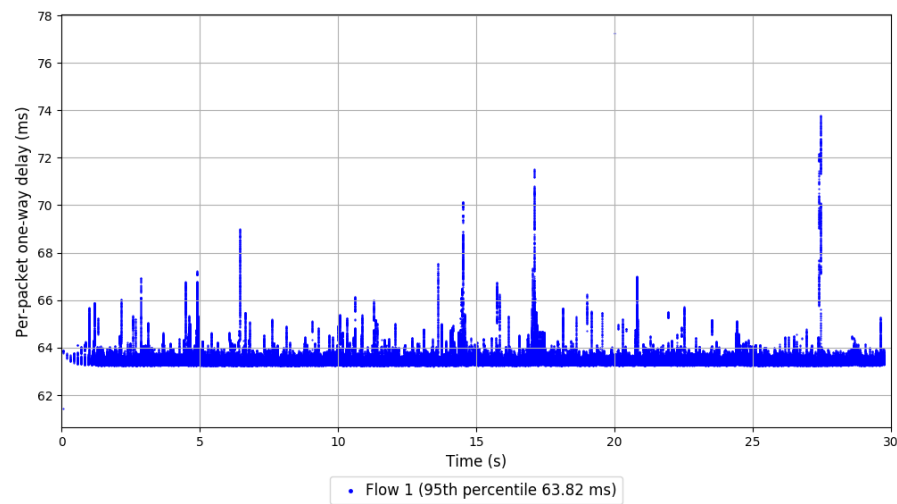
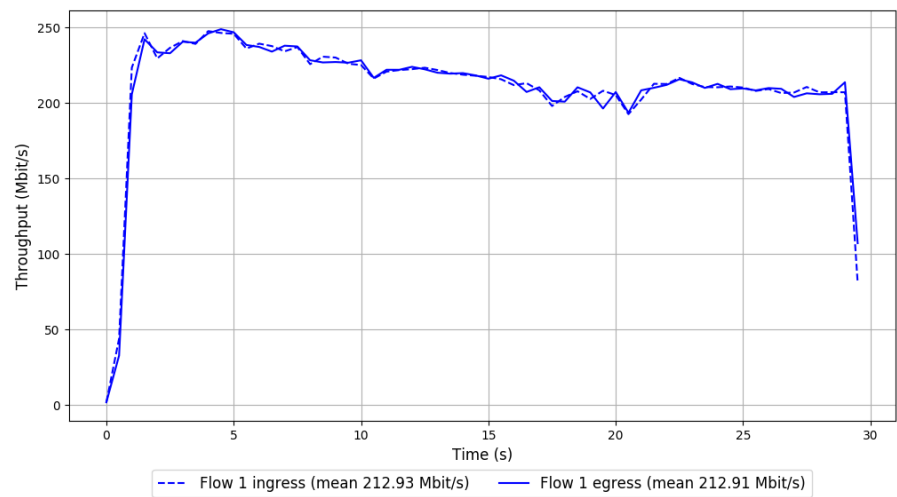
-- Flow 1:

Average throughput: 212.91 Mbit/s

95th percentile per-packet one-way delay: 63.816 ms

Loss rate: 0.00%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-20 12:42:24

End at: 2018-02-20 12:42:54

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 216.68 Mbit/s

95th percentile per-packet one-way delay: 63.857 ms

Loss rate: 0.00%

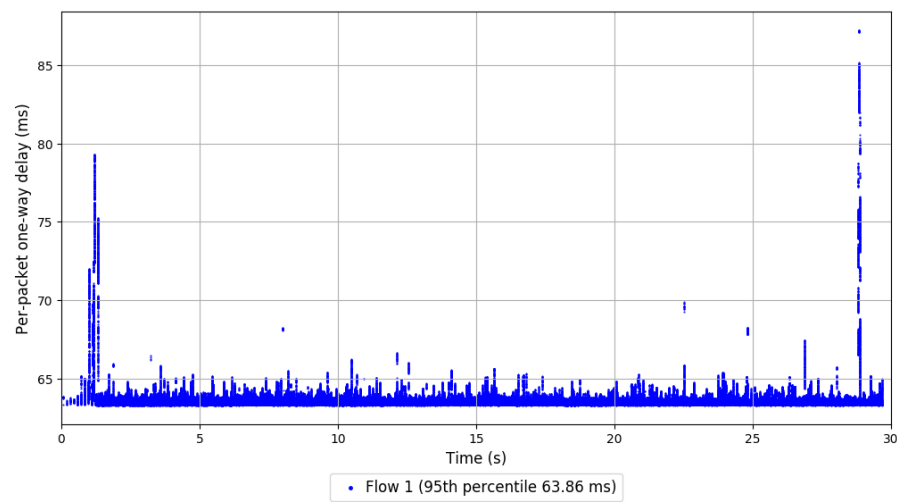
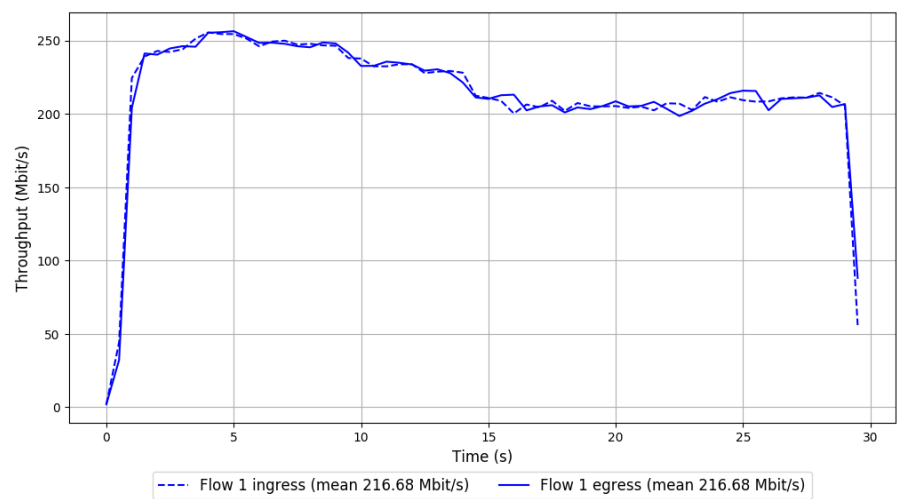
-- Flow 1:

Average throughput: 216.68 Mbit/s

95th percentile per-packet one-way delay: 63.857 ms

Loss rate: 0.00%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-20 12:57:08

End at: 2018-02-20 12:57:38

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 210.61 Mbit/s

95th percentile per-packet one-way delay: 63.979 ms

Loss rate: 0.00%

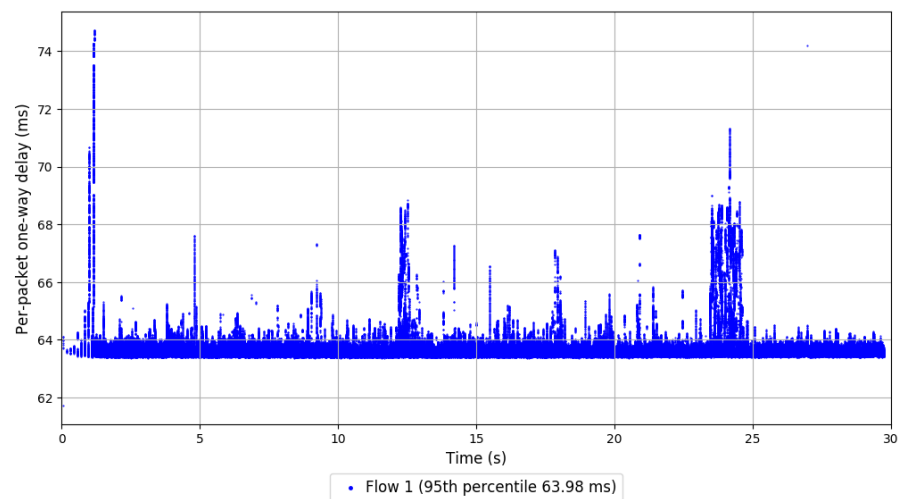
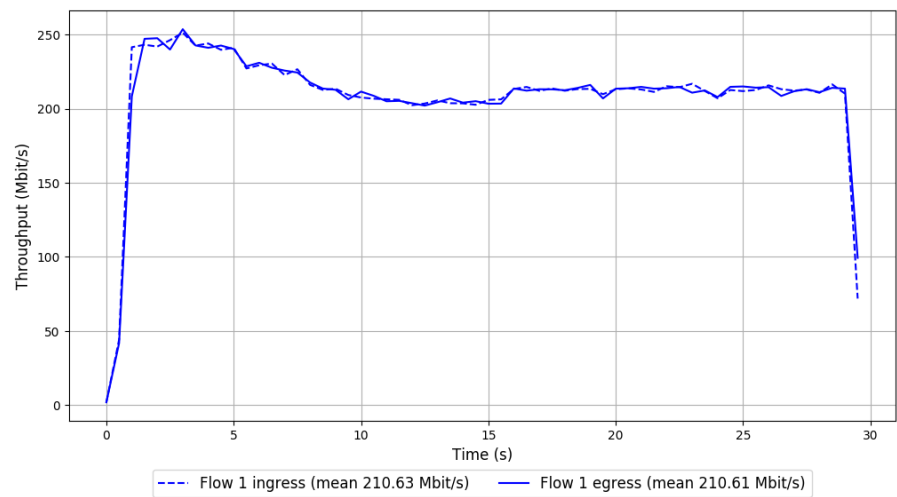
-- Flow 1:

Average throughput: 210.61 Mbit/s

95th percentile per-packet one-way delay: 63.979 ms

Loss rate: 0.00%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-20 13:11:52

End at: 2018-02-20 13:12:22

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 220.85 Mbit/s

95th percentile per-packet one-way delay: 63.673 ms

Loss rate: 0.00%

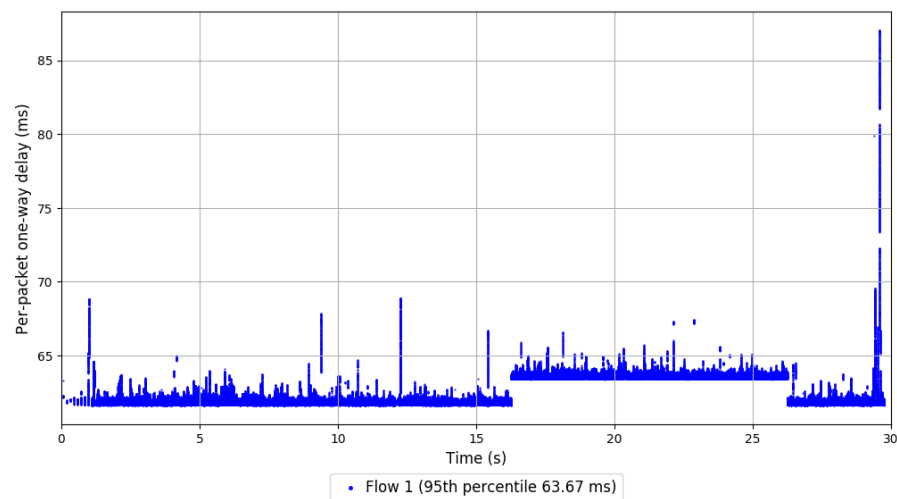
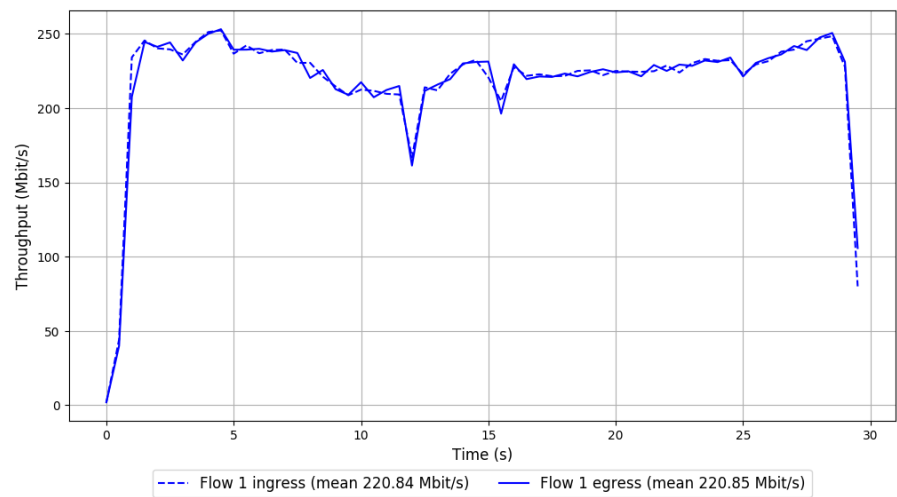
-- Flow 1:

Average throughput: 220.85 Mbit/s

95th percentile per-packet one-way delay: 63.673 ms

Loss rate: 0.00%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-20 13:26:45

End at: 2018-02-20 13:27:15

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.10 Mbit/s

95th percentile per-packet one-way delay: 63.869 ms

Loss rate: 0.00%

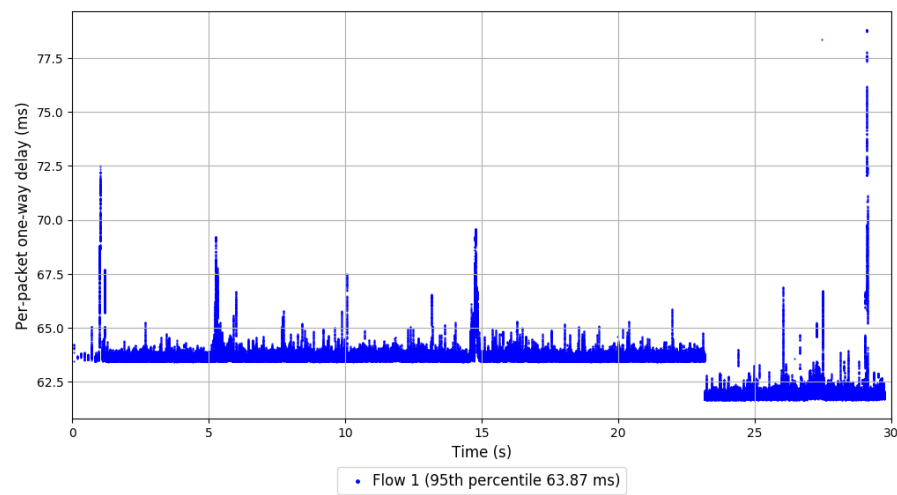
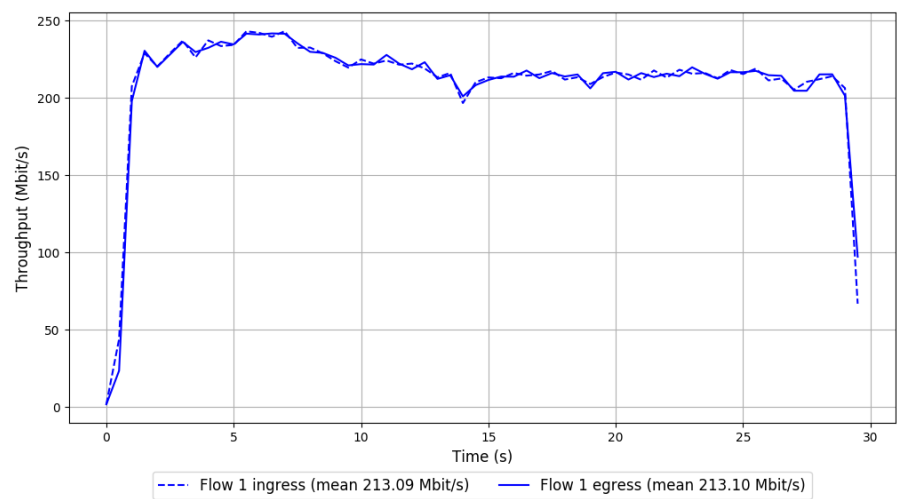
-- Flow 1:

Average throughput: 213.10 Mbit/s

95th percentile per-packet one-way delay: 63.869 ms

Loss rate: 0.00%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-20 13:41:21

End at: 2018-02-20 13:41:51

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 216.59 Mbit/s

95th percentile per-packet one-way delay: 64.329 ms

Loss rate: 0.00%

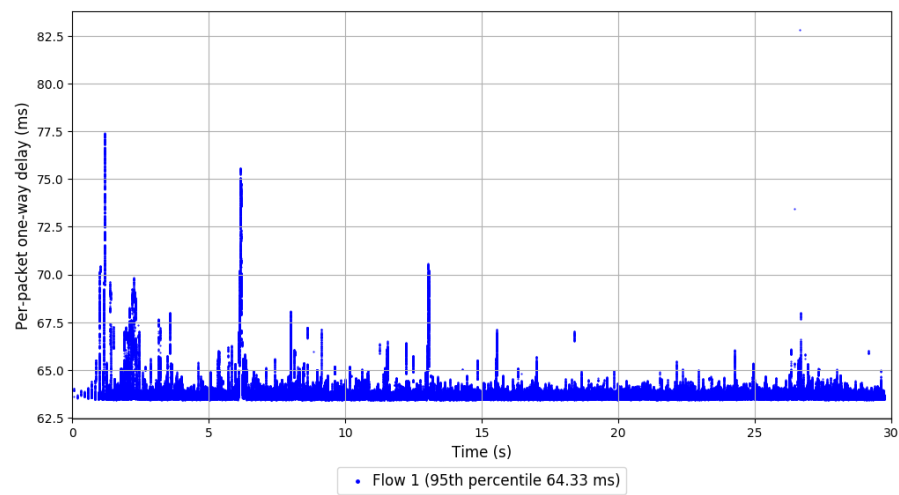
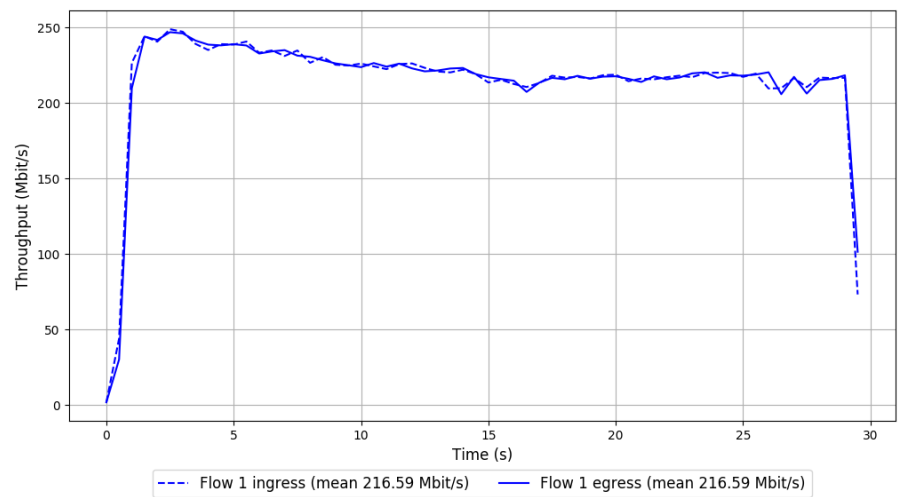
-- Flow 1:

Average throughput: 216.59 Mbit/s

95th percentile per-packet one-way delay: 64.329 ms

Loss rate: 0.00%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-20 13:56:05

End at: 2018-02-20 13:56:35

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 214.80 Mbit/s

95th percentile per-packet one-way delay: 63.965 ms

Loss rate: 0.00%

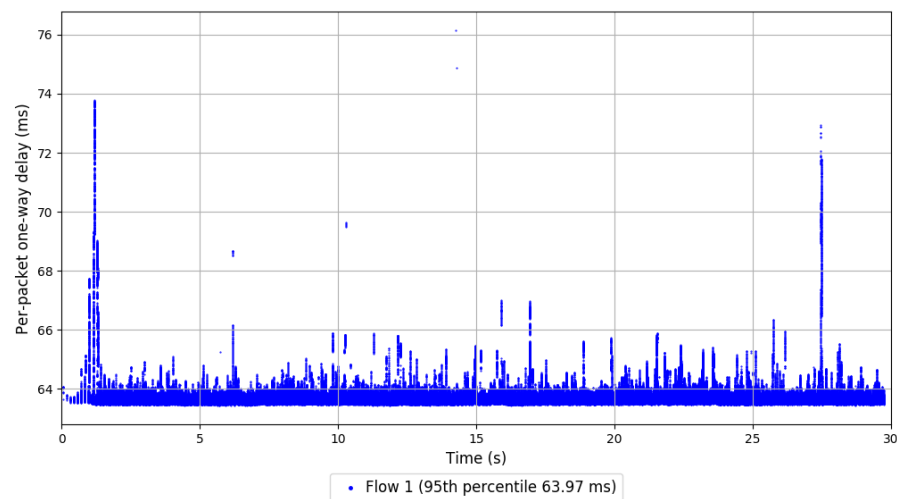
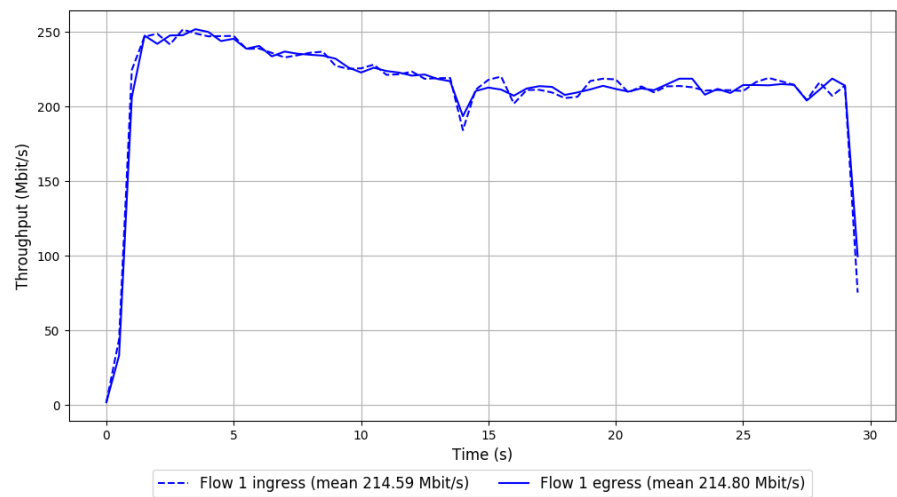
-- Flow 1:

Average throughput: 214.80 Mbit/s

95th percentile per-packet one-way delay: 63.965 ms

Loss rate: 0.00%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-02-20 11:48:15

End at: 2018-02-20 11:48:45

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 395.43 Mbit/s

95th percentile per-packet one-way delay: 64.743 ms

Loss rate: 0.00%

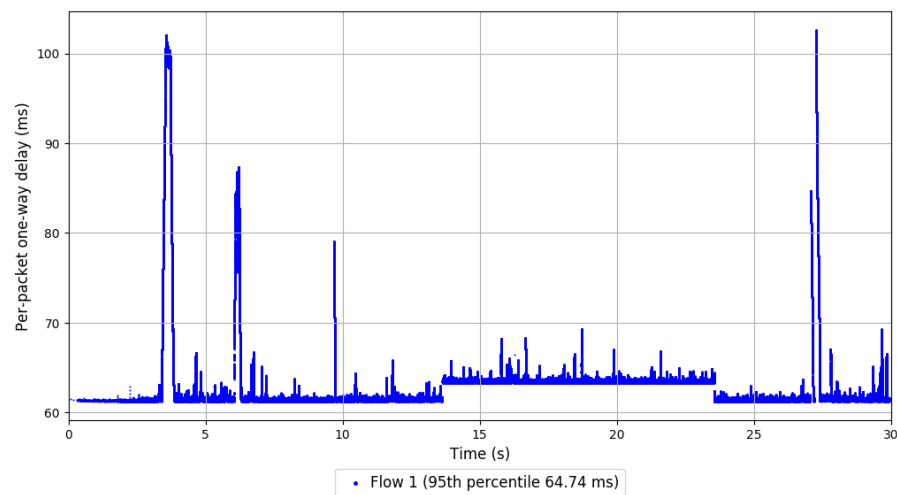
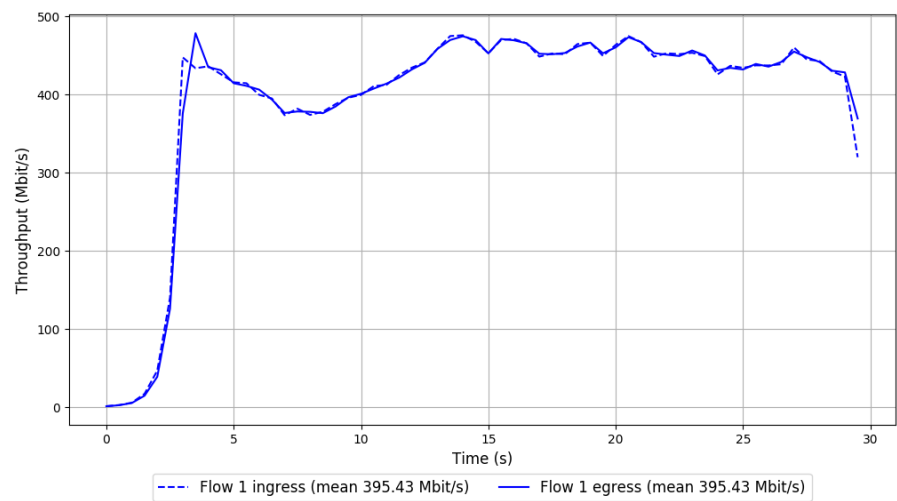
-- Flow 1:

Average throughput: 395.43 Mbit/s

95th percentile per-packet one-way delay: 64.743 ms

Loss rate: 0.00%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-20 12:03:10

End at: 2018-02-20 12:03:40

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 251.94 Mbit/s

95th percentile per-packet one-way delay: 175.377 ms

Loss rate: 0.40%

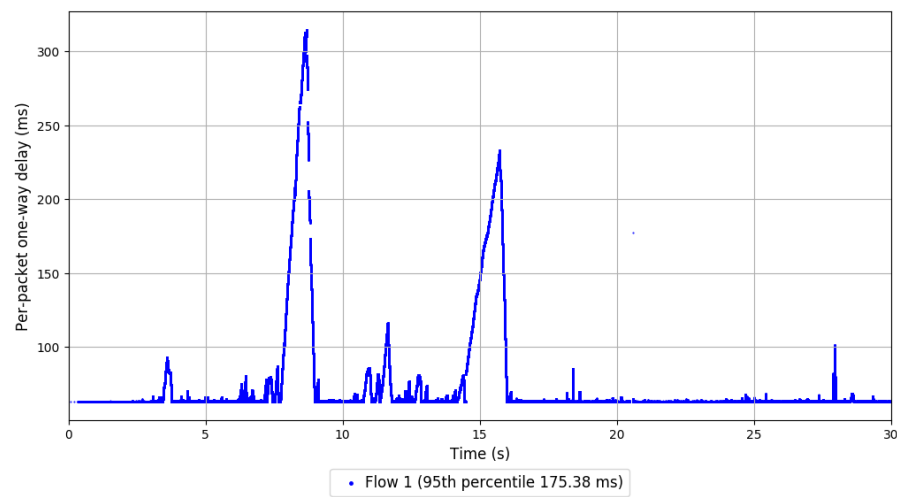
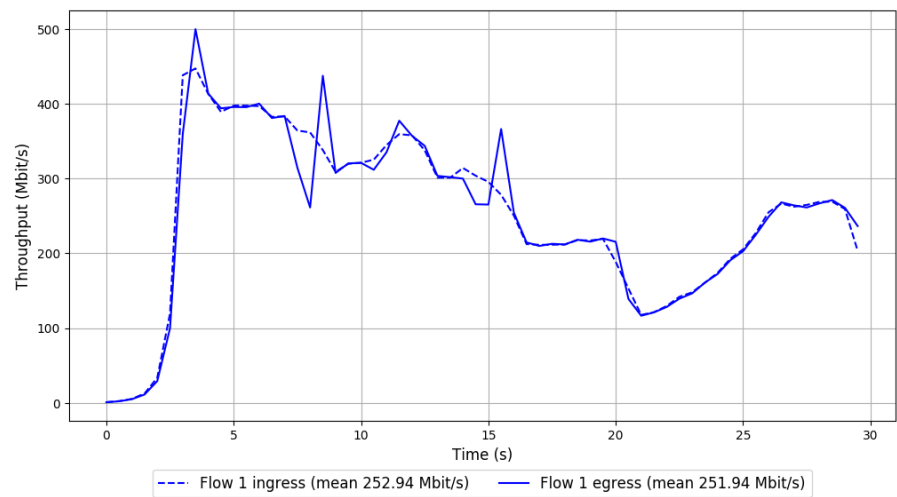
-- Flow 1:

Average throughput: 251.94 Mbit/s

95th percentile per-packet one-way delay: 175.377 ms

Loss rate: 0.40%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-20 12:18:02

End at: 2018-02-20 12:18:32

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 174.45 Mbit/s

95th percentile per-packet one-way delay: 68.454 ms

Loss rate: 0.00%

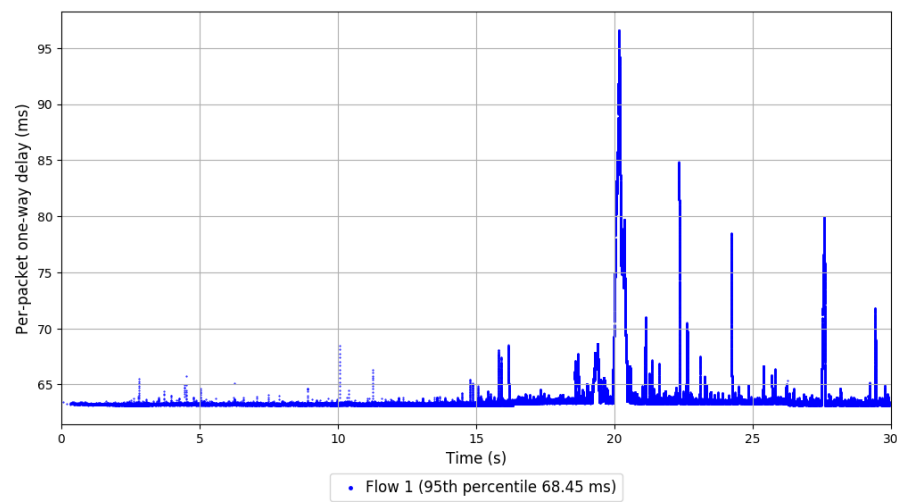
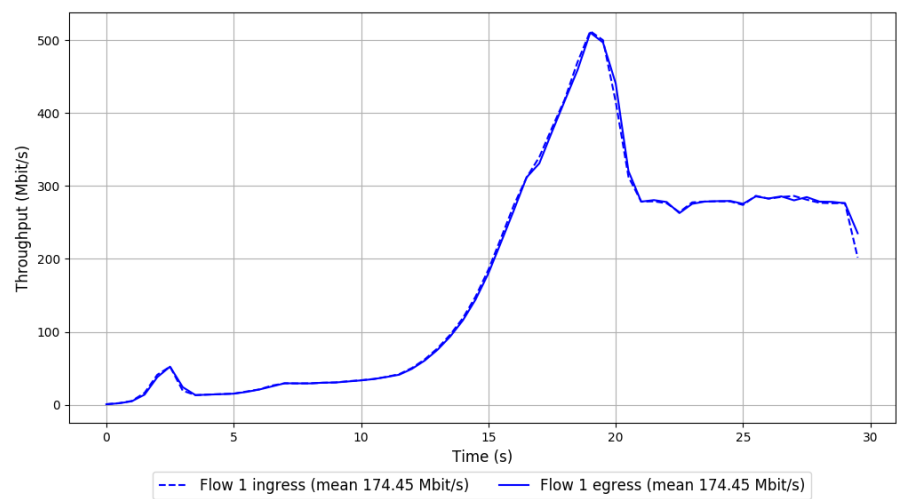
-- Flow 1:

Average throughput: 174.45 Mbit/s

95th percentile per-packet one-way delay: 68.454 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-20 12:32:26

End at: 2018-02-20 12:32:56

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 397.62 Mbit/s

95th percentile per-packet one-way delay: 76.706 ms

Loss rate: 0.00%

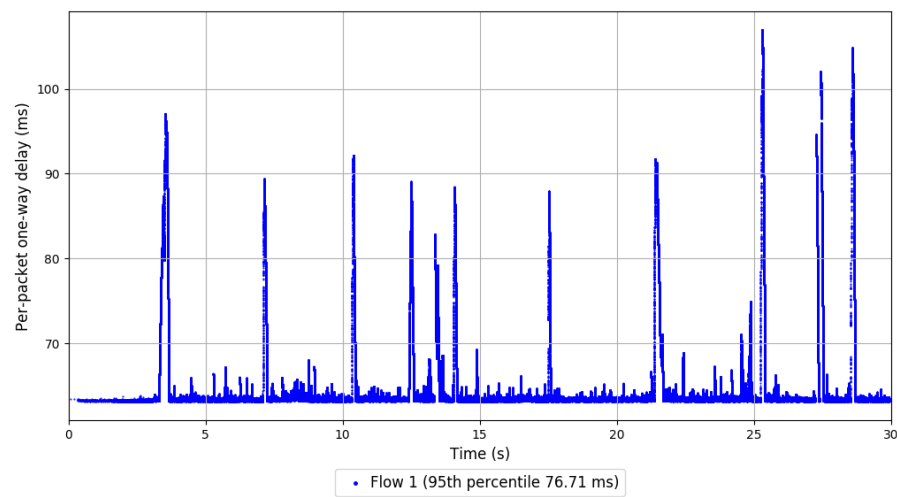
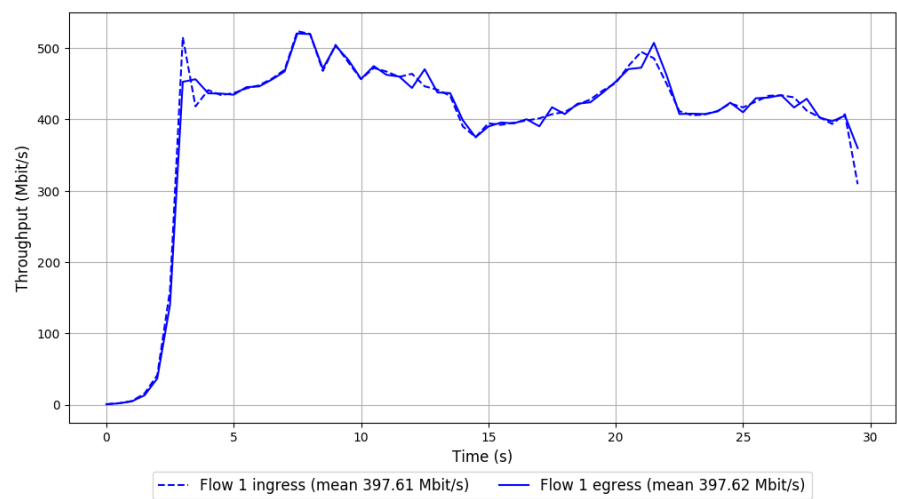
-- Flow 1:

Average throughput: 397.62 Mbit/s

95th percentile per-packet one-way delay: 76.706 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-20 12:47:05

End at: 2018-02-20 12:47:35

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 396.74 Mbit/s

95th percentile per-packet one-way delay: 68.374 ms

Loss rate: 0.00%

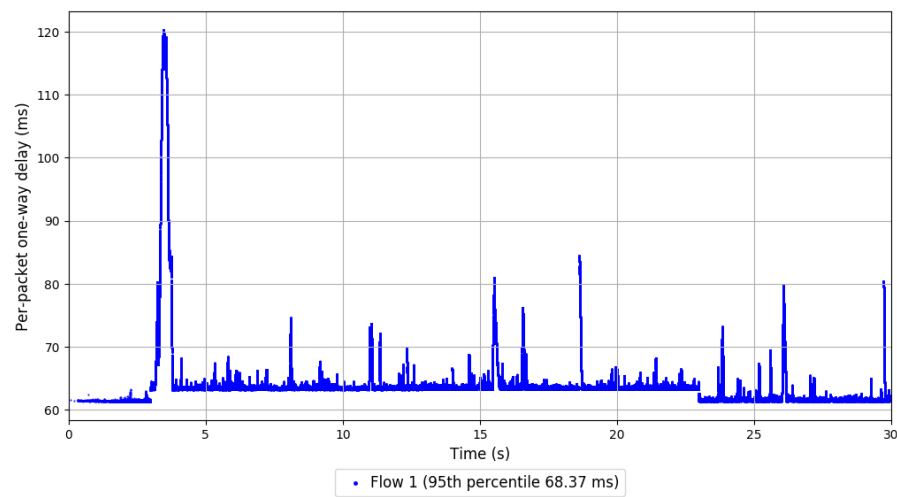
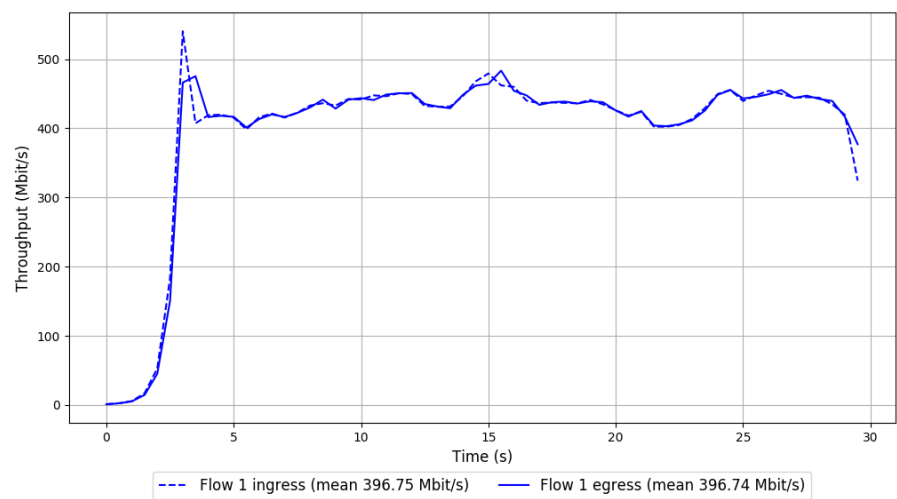
-- Flow 1:

Average throughput: 396.74 Mbit/s

95th percentile per-packet one-way delay: 68.374 ms

Loss rate: 0.00%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-20 13:01:49

End at: 2018-02-20 13:02:19

Below is generated by plot.py at 2018-02-20 16:40:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 325.29 Mbit/s

95th percentile per-packet one-way delay: 65.501 ms

Loss rate: 0.00%

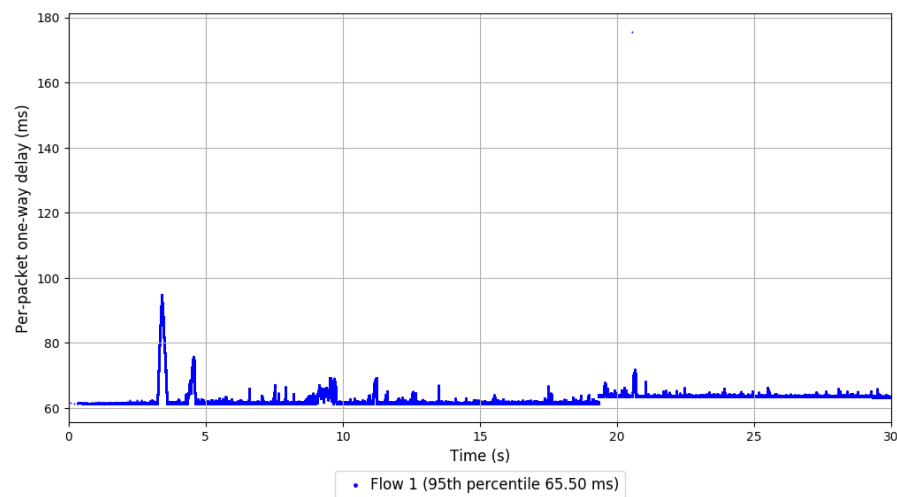
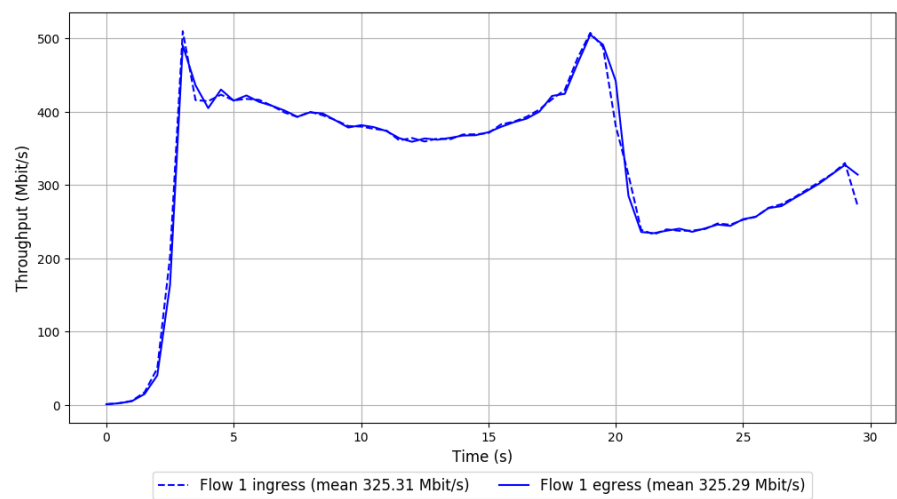
-- Flow 1:

Average throughput: 325.29 Mbit/s

95th percentile per-packet one-way delay: 65.501 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-20 13:16:40

End at: 2018-02-20 13:17:10

Below is generated by plot.py at 2018-02-20 16:40:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 306.26 Mbit/s

95th percentile per-packet one-way delay: 65.807 ms

Loss rate: 0.00%

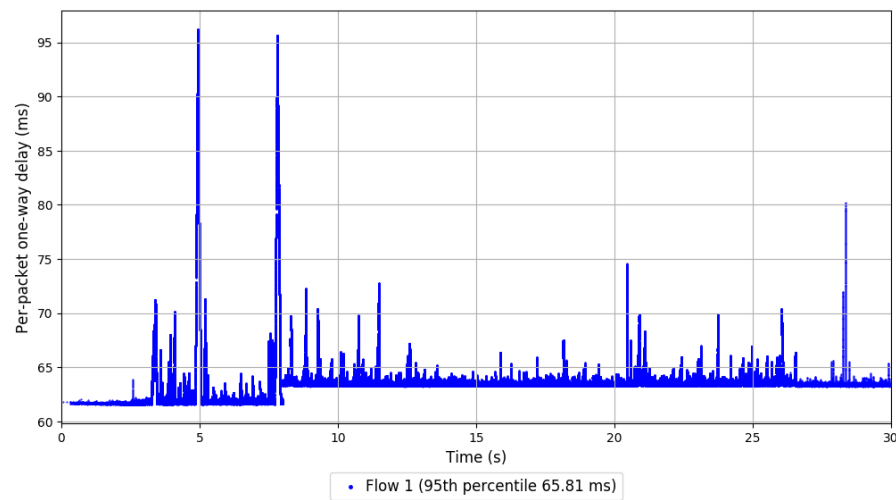
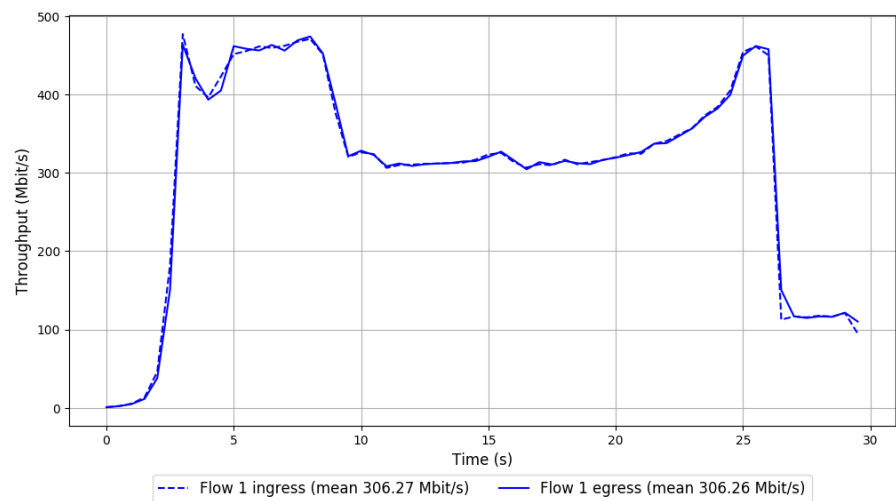
-- Flow 1:

Average throughput: 306.26 Mbit/s

95th percentile per-packet one-way delay: 65.807 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-20 13:31:26

End at: 2018-02-20 13:31:56

Below is generated by plot.py at 2018-02-20 16:40:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 263.30 Mbit/s

95th percentile per-packet one-way delay: 72.284 ms

Loss rate: 0.06%

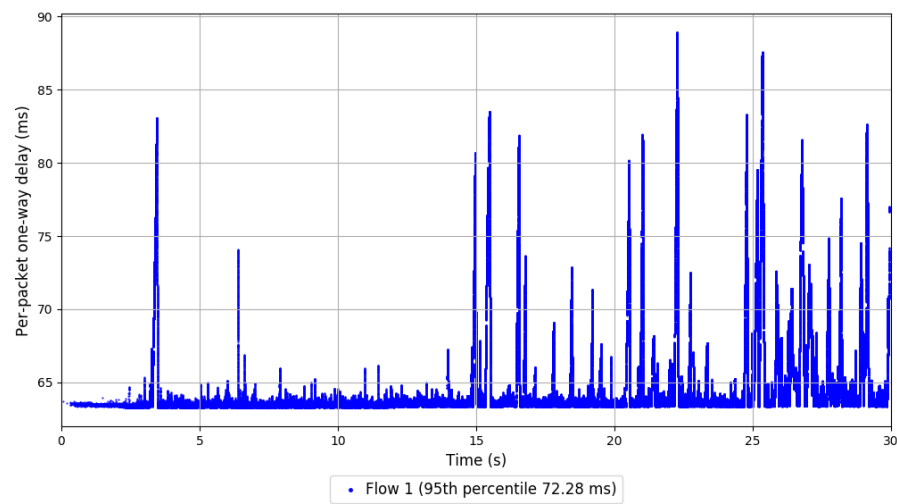
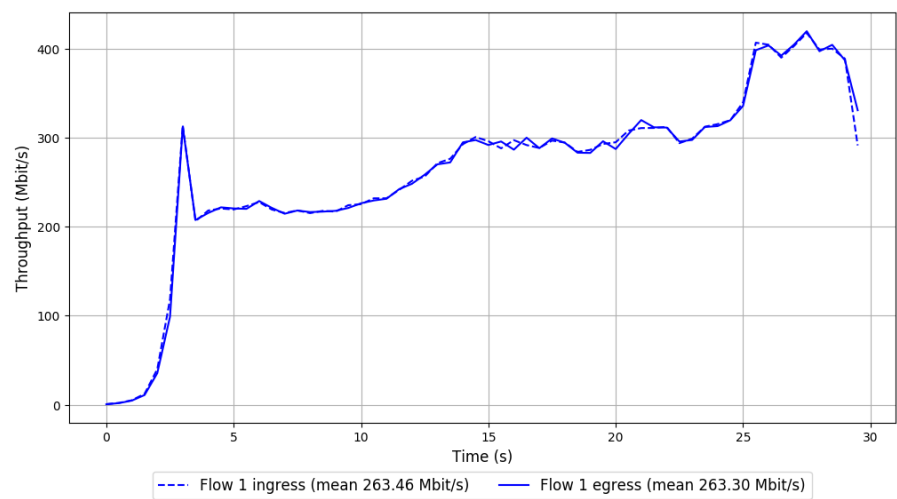
-- Flow 1:

Average throughput: 263.30 Mbit/s

95th percentile per-packet one-way delay: 72.284 ms

Loss rate: 0.06%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-20 13:45:59

End at: 2018-02-20 13:46:29

Below is generated by plot.py at 2018-02-20 16:42:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 318.19 Mbit/s

95th percentile per-packet one-way delay: 64.599 ms

Loss rate: 0.00%

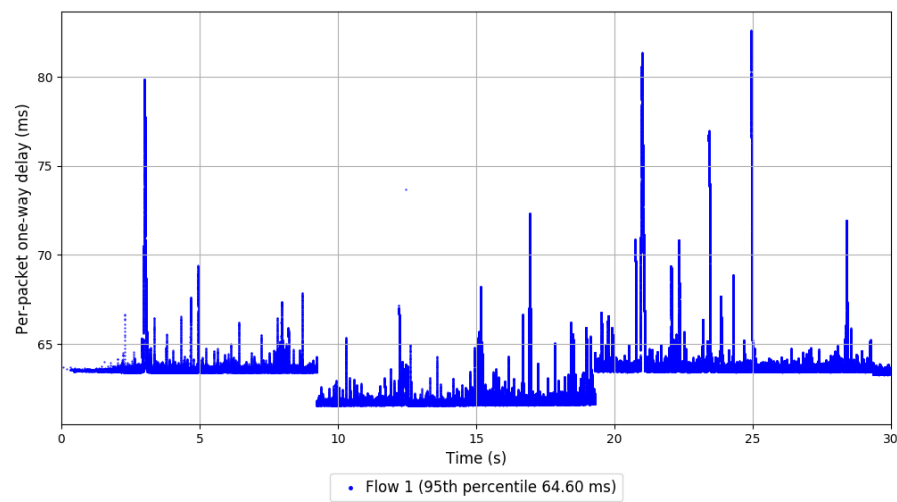
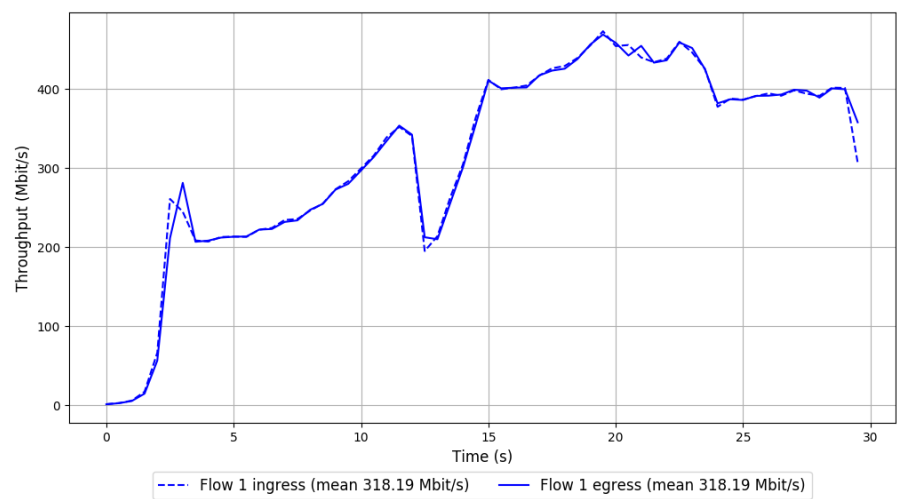
-- Flow 1:

Average throughput: 318.19 Mbit/s

95th percentile per-packet one-way delay: 64.599 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-20 14:00:49

End at: 2018-02-20 14:01:19

Below is generated by plot.py at 2018-02-20 16:44:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 368.11 Mbit/s

95th percentile per-packet one-way delay: 102.433 ms

Loss rate: 0.02%

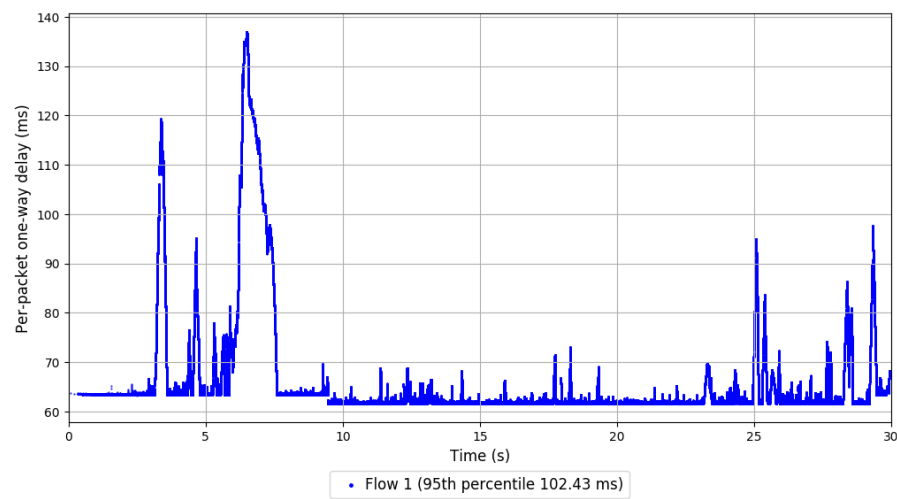
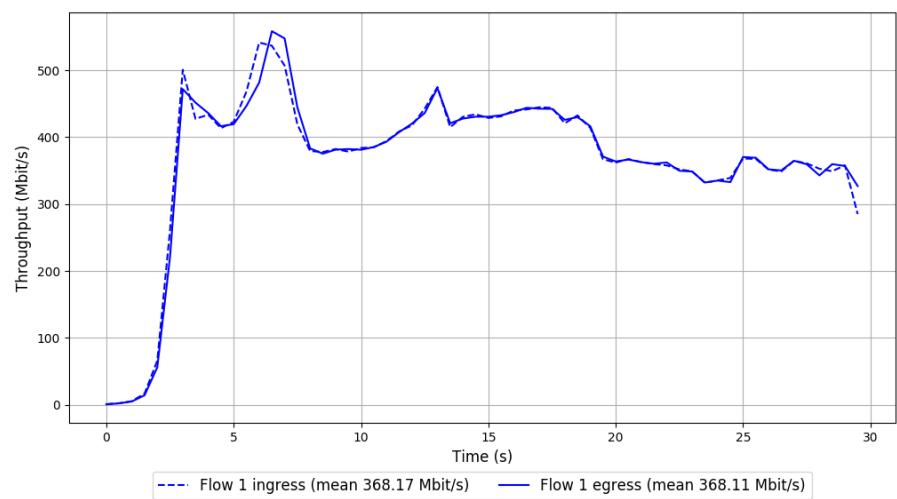
-- Flow 1:

Average throughput: 368.11 Mbit/s

95th percentile per-packet one-way delay: 102.433 ms

Loss rate: 0.02%

Run 10: Report of Vivace-latency — Data Link

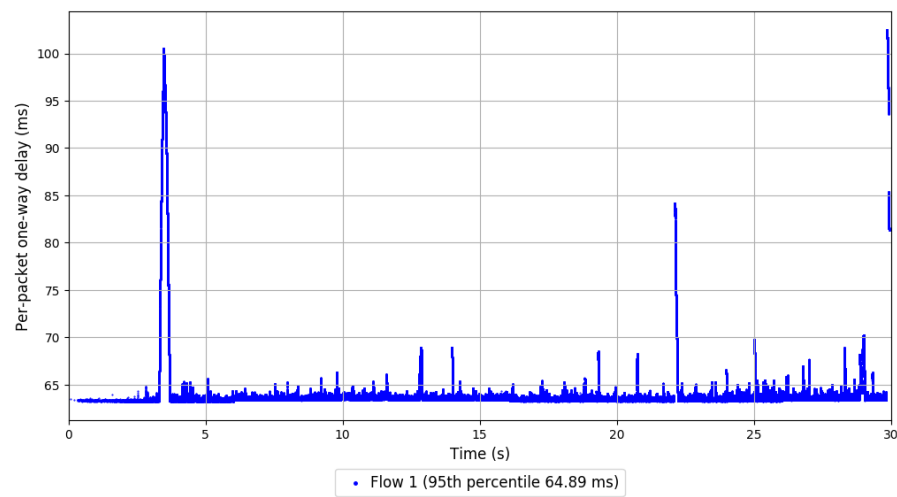
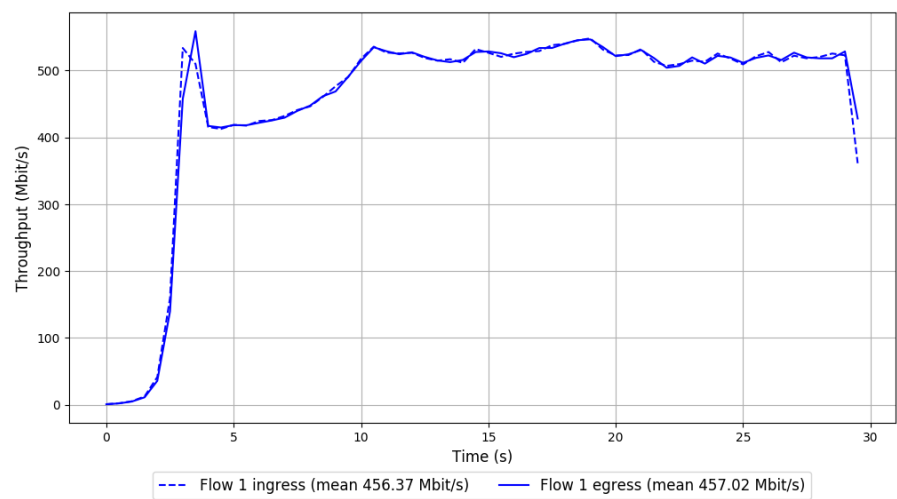


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-20 11:45:02
End at: 2018-02-20 11:45:32

# Below is generated by plot.py at 2018-02-20 16:46:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 457.02 Mbit/s
95th percentile per-packet one-way delay: 64.890 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 457.02 Mbit/s
95th percentile per-packet one-way delay: 64.890 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-20 11:59:58

End at: 2018-02-20 12:00:28

Below is generated by plot.py at 2018-02-20 16:47:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 441.19 Mbit/s

95th percentile per-packet one-way delay: 172.038 ms

Loss rate: 0.44%

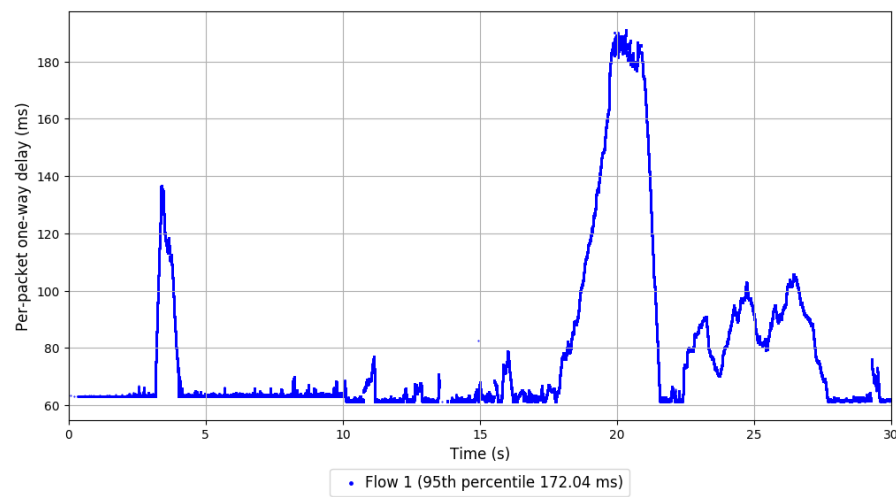
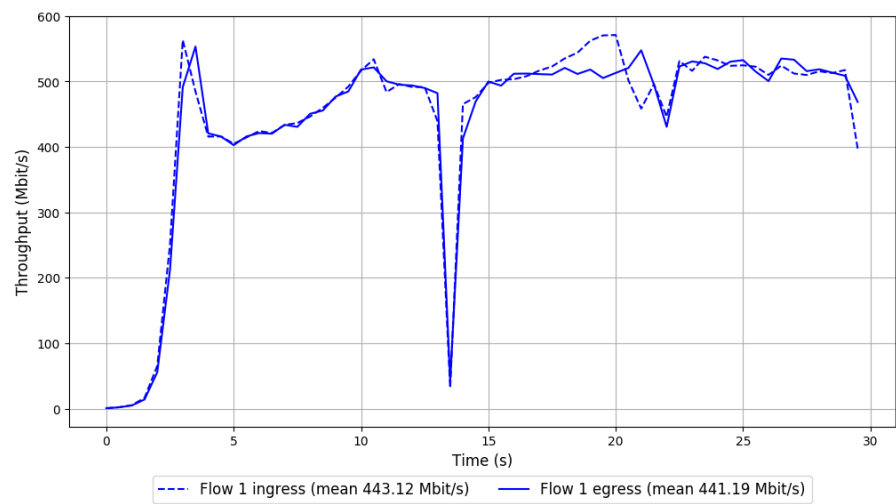
-- Flow 1:

Average throughput: 441.19 Mbit/s

95th percentile per-packet one-way delay: 172.038 ms

Loss rate: 0.44%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-20 12:14:51

End at: 2018-02-20 12:15:21

Below is generated by plot.py at 2018-02-20 16:47:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 445.46 Mbit/s

95th percentile per-packet one-way delay: 178.862 ms

Loss rate: 0.61%

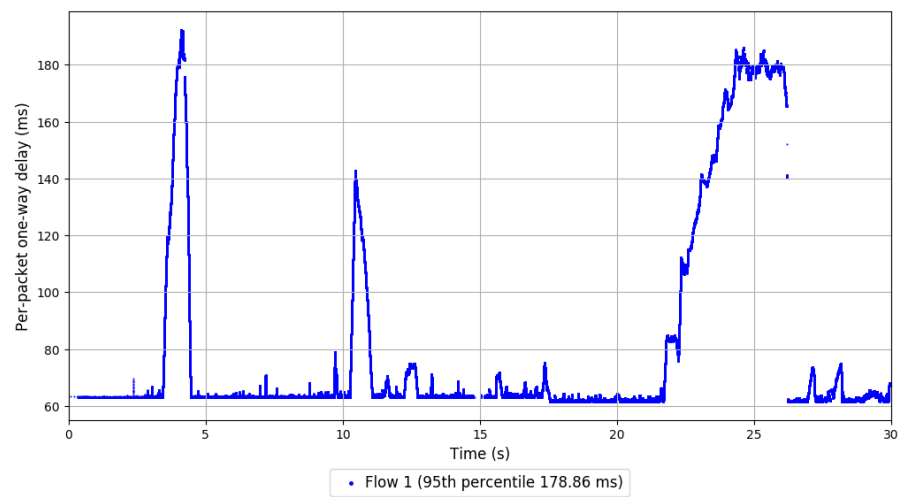
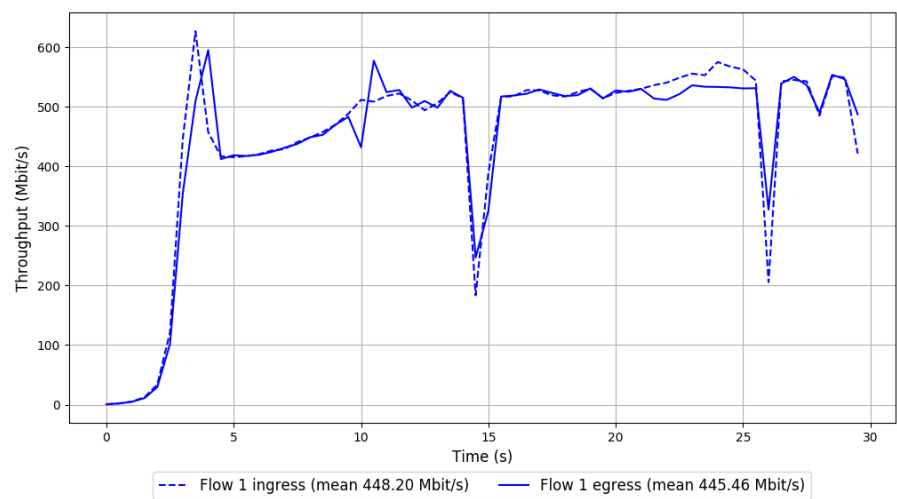
-- Flow 1:

Average throughput: 445.46 Mbit/s

95th percentile per-packet one-way delay: 178.862 ms

Loss rate: 0.61%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-20 12:29:19

End at: 2018-02-20 12:29:49

Below is generated by plot.py at 2018-02-20 16:47:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 368.88 Mbit/s

95th percentile per-packet one-way delay: 69.978 ms

Loss rate: 0.00%

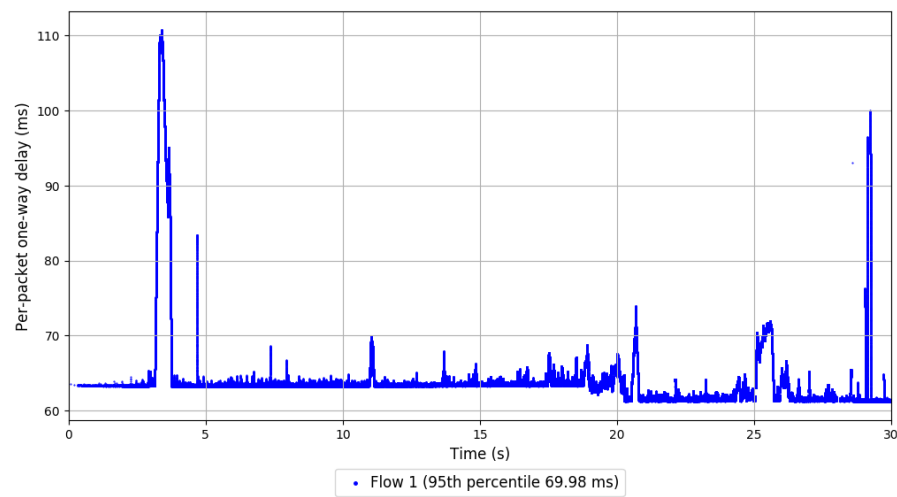
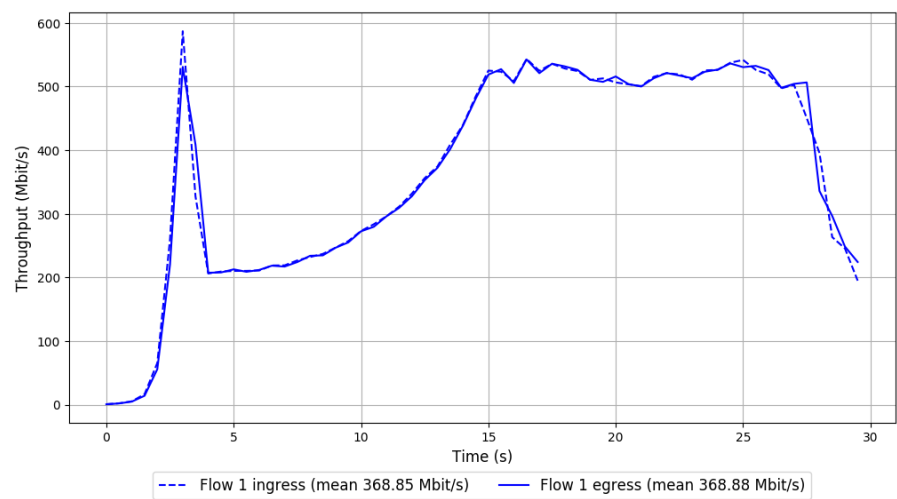
-- Flow 1:

Average throughput: 368.88 Mbit/s

95th percentile per-packet one-way delay: 69.978 ms

Loss rate: 0.00%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-20 12:43:54

End at: 2018-02-20 12:44:24

Below is generated by plot.py at 2018-02-20 16:48:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 439.87 Mbit/s

95th percentile per-packet one-way delay: 70.083 ms

Loss rate: 0.00%

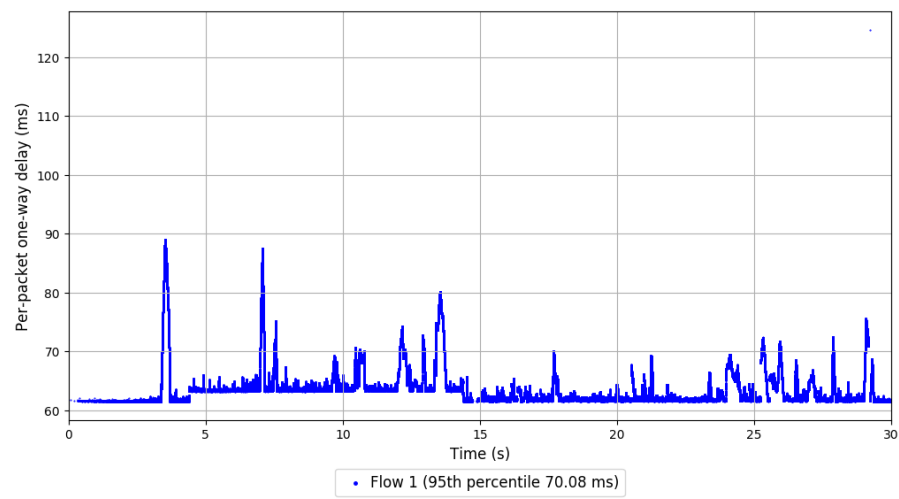
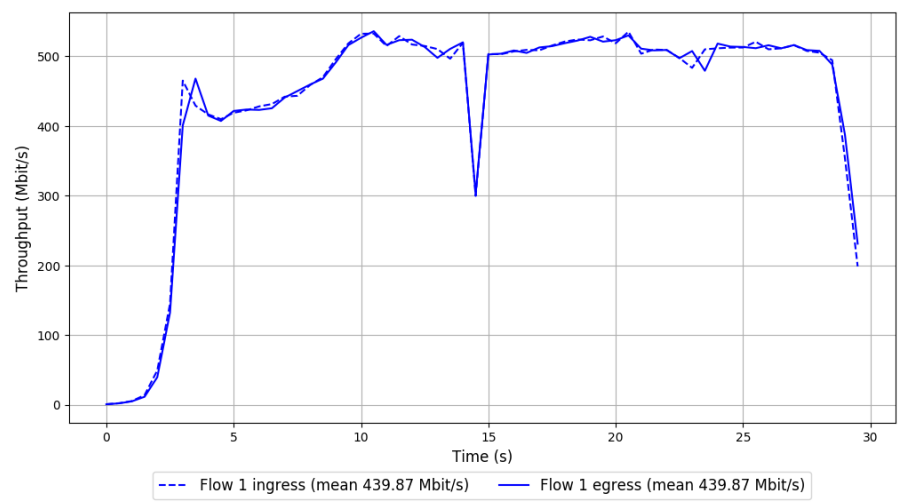
-- Flow 1:

Average throughput: 439.87 Mbit/s

95th percentile per-packet one-way delay: 70.083 ms

Loss rate: 0.00%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-20 12:58:41

End at: 2018-02-20 12:59:11

Below is generated by plot.py at 2018-02-20 16:48:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 386.64 Mbit/s

95th percentile per-packet one-way delay: 186.443 ms

Loss rate: 3.57%

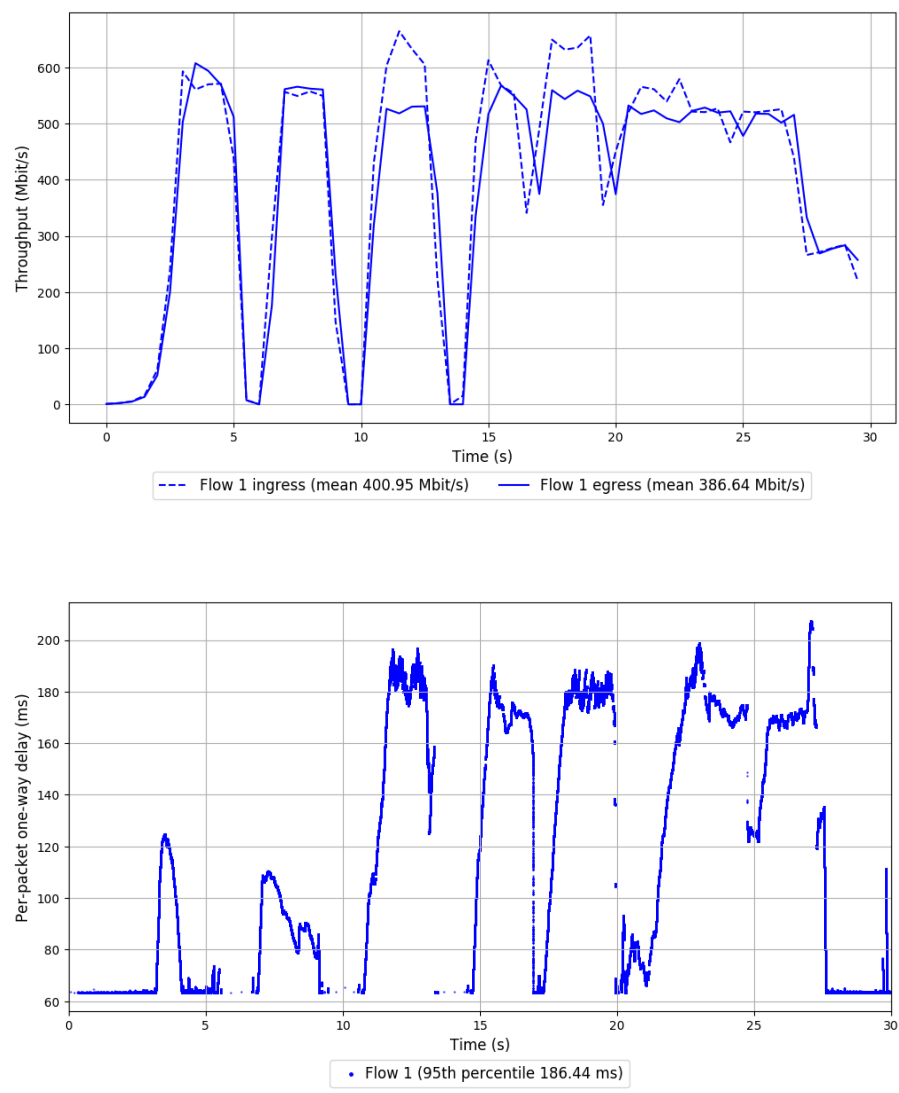
-- Flow 1:

Average throughput: 386.64 Mbit/s

95th percentile per-packet one-way delay: 186.443 ms

Loss rate: 3.57%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-20 13:13:30

End at: 2018-02-20 13:14:00

Below is generated by plot.py at 2018-02-20 16:51:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 432.60 Mbit/s

95th percentile per-packet one-way delay: 186.207 ms

Loss rate: 1.73%

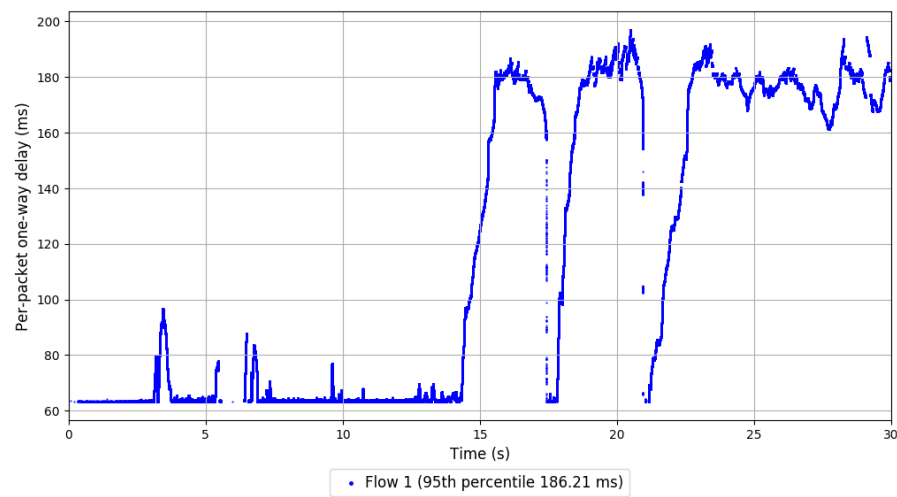
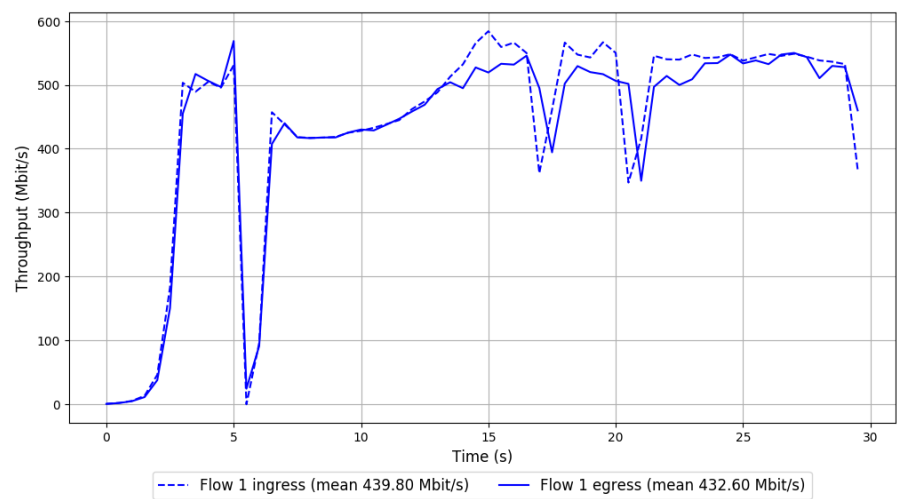
-- Flow 1:

Average throughput: 432.60 Mbit/s

95th percentile per-packet one-way delay: 186.207 ms

Loss rate: 1.73%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-20 13:28:17

End at: 2018-02-20 13:28:47

Below is generated by plot.py at 2018-02-20 16:51:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 404.25 Mbit/s

95th percentile per-packet one-way delay: 64.319 ms

Loss rate: 0.00%

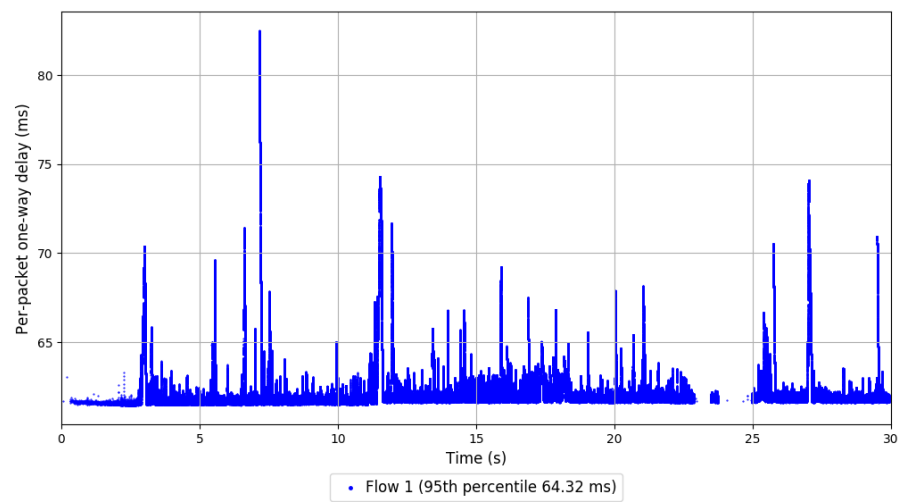
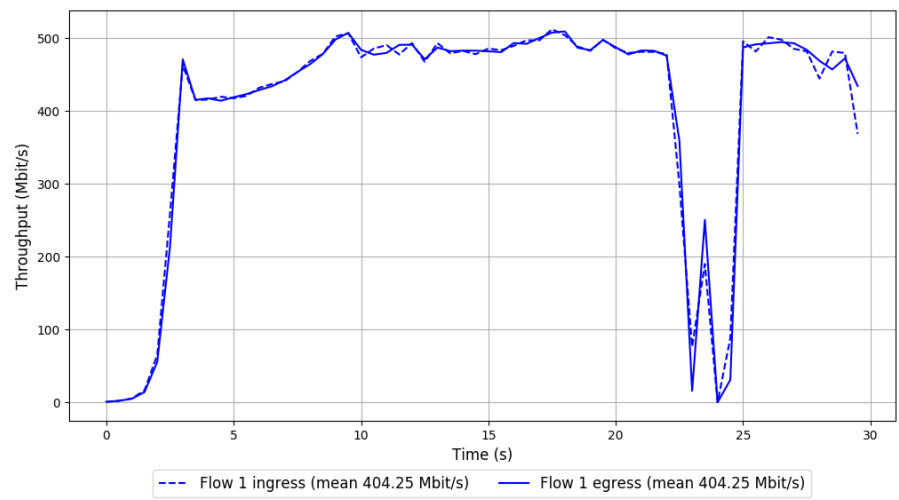
-- Flow 1:

Average throughput: 404.25 Mbit/s

95th percentile per-packet one-way delay: 64.319 ms

Loss rate: 0.00%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-20 13:42:54

End at: 2018-02-20 13:43:24

Below is generated by plot.py at 2018-02-20 16:51:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 320.54 Mbit/s

95th percentile per-packet one-way delay: 79.464 ms

Loss rate: 0.61%

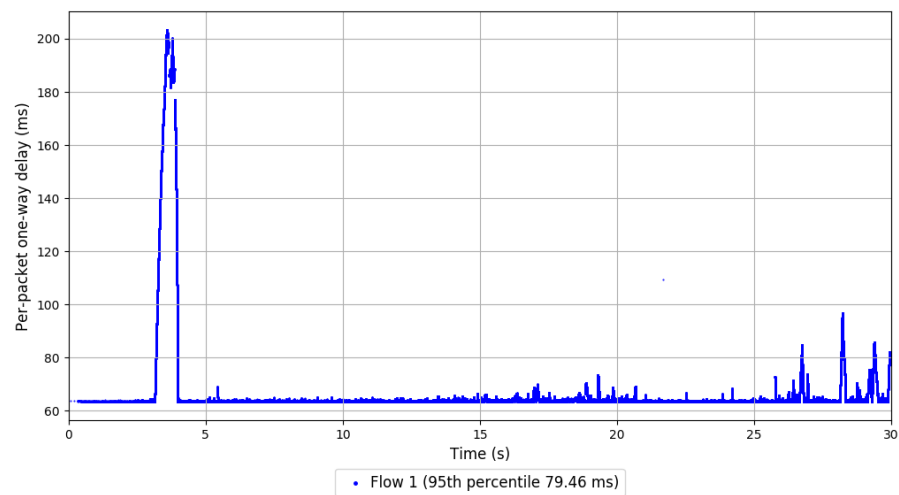
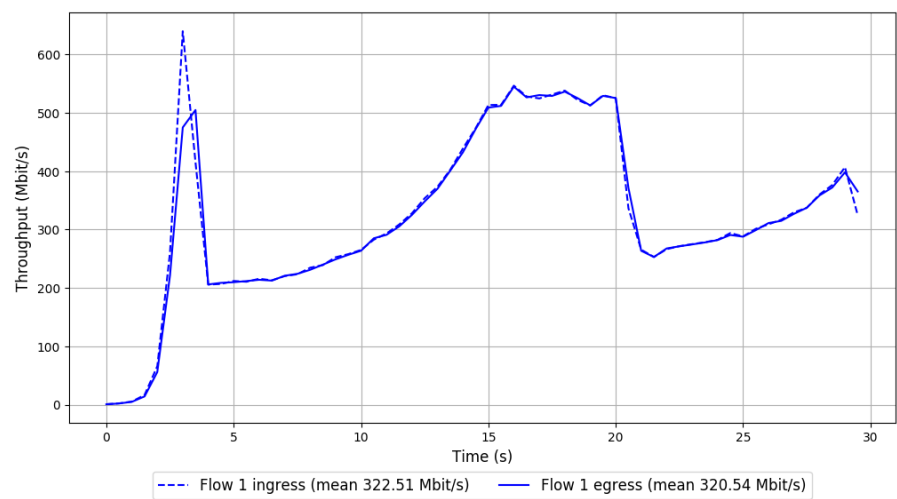
-- Flow 1:

Average throughput: 320.54 Mbit/s

95th percentile per-packet one-way delay: 79.464 ms

Loss rate: 0.61%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-20 13:57:39

End at: 2018-02-20 13:58:09

Below is generated by plot.py at 2018-02-20 16:54:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 418.52 Mbit/s

95th percentile per-packet one-way delay: 72.955 ms

Loss rate: 0.00%

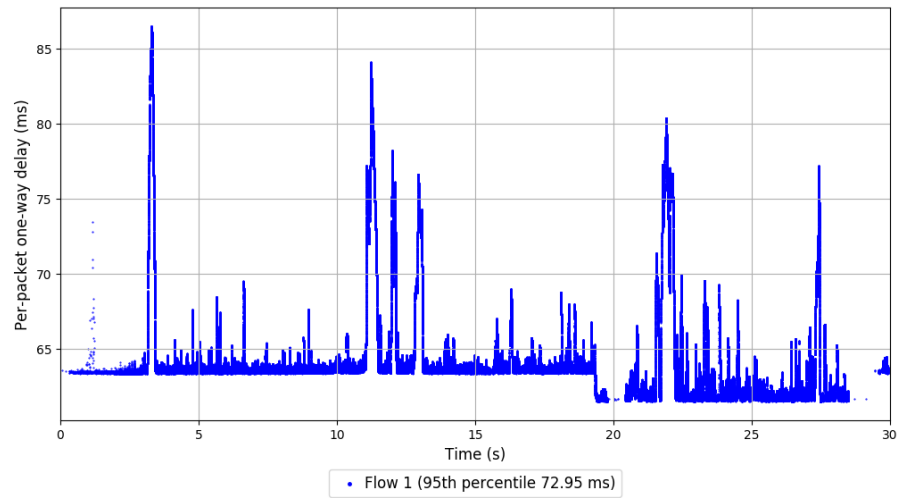
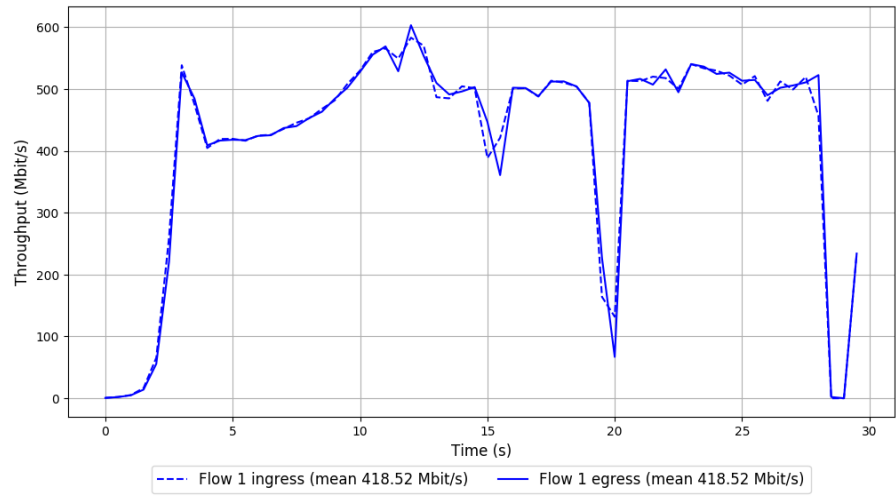
-- Flow 1:

Average throughput: 418.52 Mbit/s

95th percentile per-packet one-way delay: 72.955 ms

Loss rate: 0.00%

Run 10: Report of Vivace-loss — Data Link

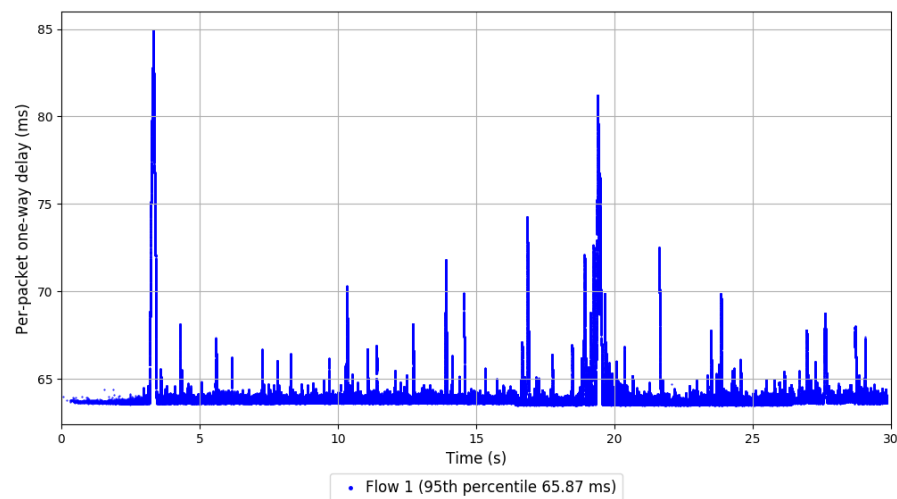
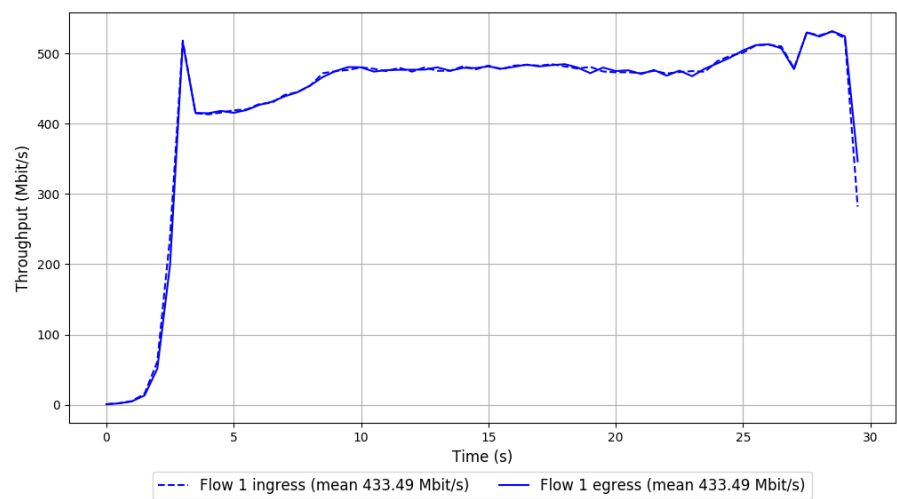


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-20 11:41:42
End at: 2018-02-20 11:42:12

# Below is generated by plot.py at 2018-02-20 16:54:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 433.49 Mbit/s
95th percentile per-packet one-way delay: 65.867 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 433.49 Mbit/s
95th percentile per-packet one-way delay: 65.867 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-20 11:56:34

End at: 2018-02-20 11:57:04

Below is generated by plot.py at 2018-02-20 16:54:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 436.94 Mbit/s

95th percentile per-packet one-way delay: 74.460 ms

Loss rate: 0.00%

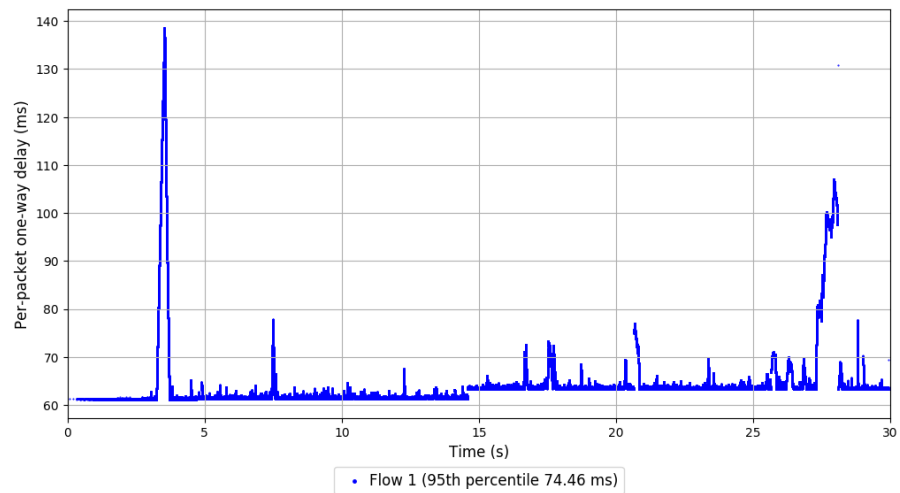
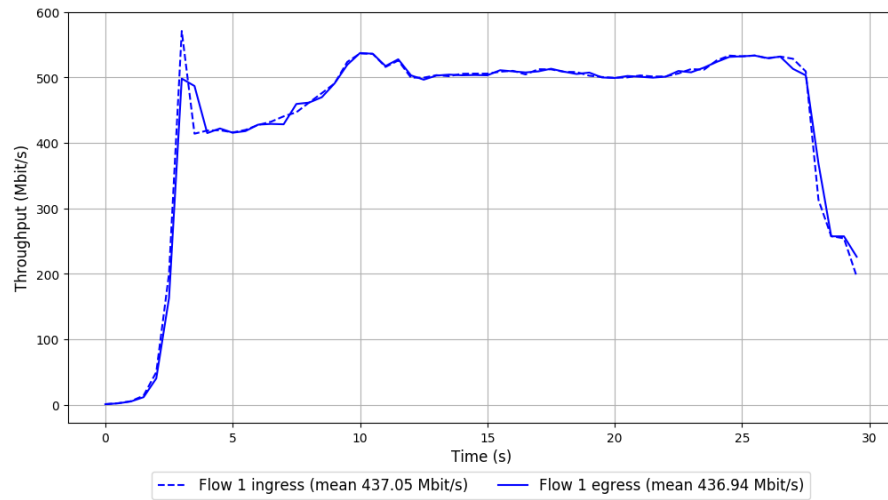
-- Flow 1:

Average throughput: 436.94 Mbit/s

95th percentile per-packet one-way delay: 74.460 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-20 12:11:28

End at: 2018-02-20 12:11:58

Below is generated by plot.py at 2018-02-20 16:54:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 409.93 Mbit/s

95th percentile per-packet one-way delay: 65.403 ms

Loss rate: 0.00%

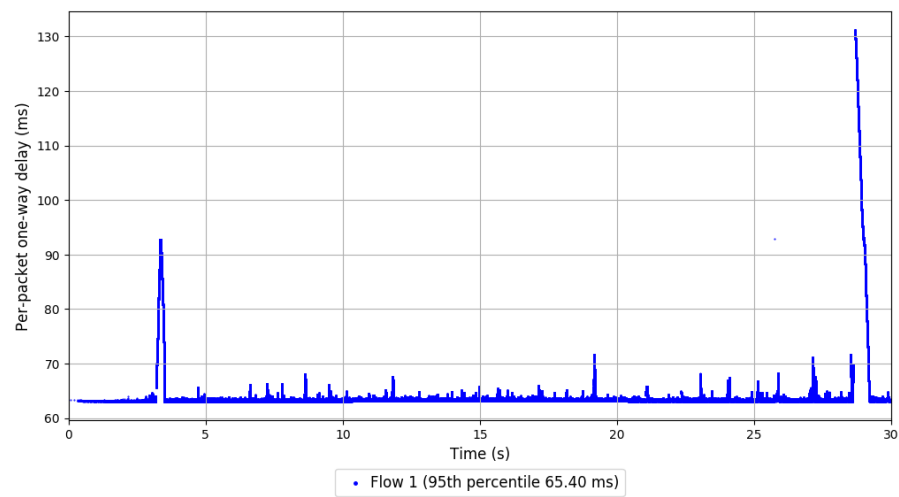
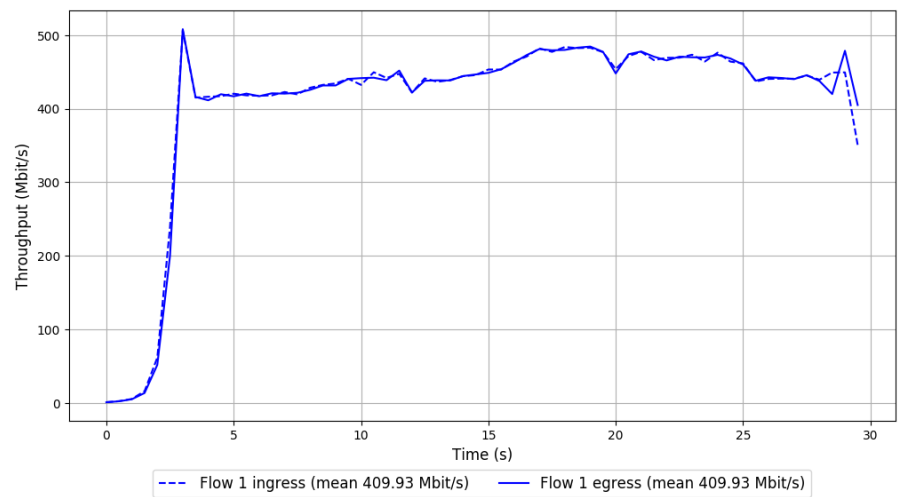
-- Flow 1:

Average throughput: 409.93 Mbit/s

95th percentile per-packet one-way delay: 65.403 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-20 12:25:57

End at: 2018-02-20 12:26:27

Below is generated by plot.py at 2018-02-20 16:55:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 433.55 Mbit/s

95th percentile per-packet one-way delay: 67.735 ms

Loss rate: 0.13%

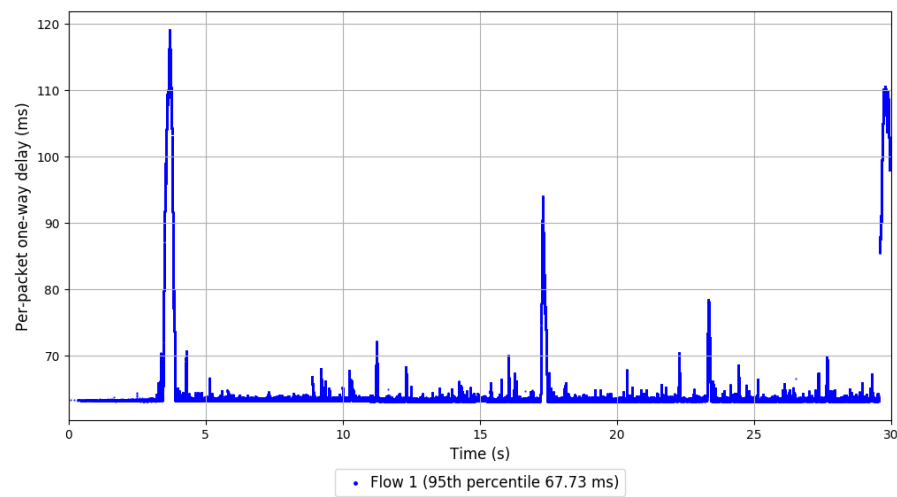
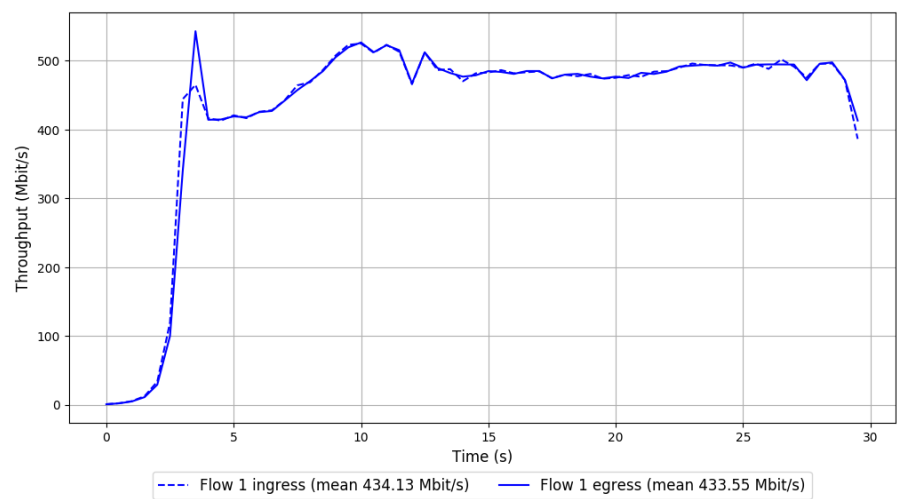
-- Flow 1:

Average throughput: 433.55 Mbit/s

95th percentile per-packet one-way delay: 67.735 ms

Loss rate: 0.13%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-20 12:40:41

End at: 2018-02-20 12:41:11

Below is generated by plot.py at 2018-02-20 16:57:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 377.93 Mbit/s

95th percentile per-packet one-way delay: 89.851 ms

Loss rate: 0.01%

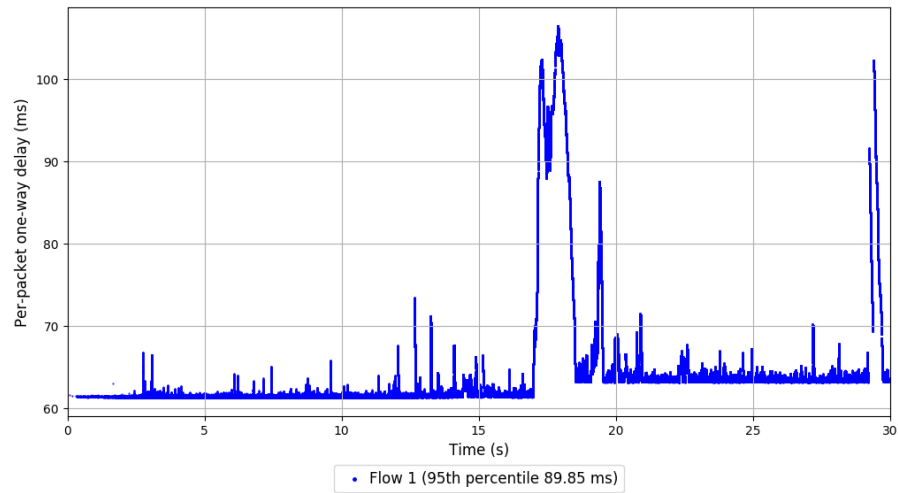
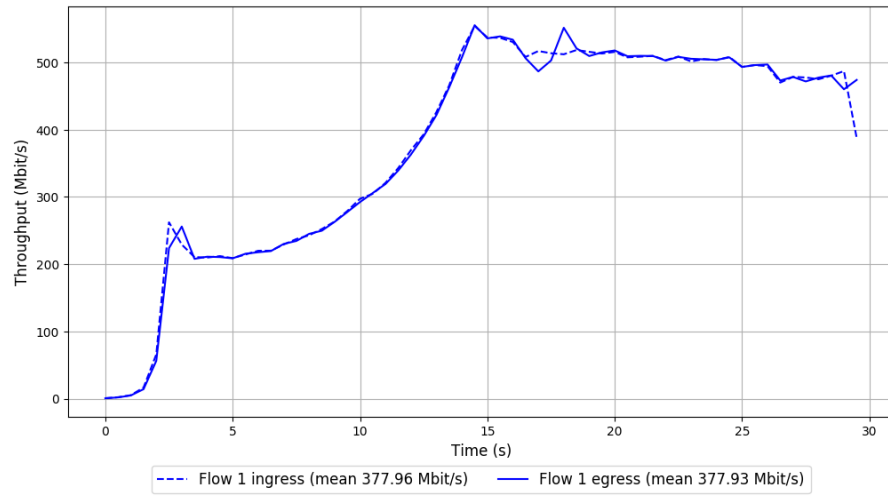
-- Flow 1:

Average throughput: 377.93 Mbit/s

95th percentile per-packet one-way delay: 89.851 ms

Loss rate: 0.01%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-20 12:55:21

End at: 2018-02-20 12:55:51

Below is generated by plot.py at 2018-02-20 16:58:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 423.20 Mbit/s

95th percentile per-packet one-way delay: 71.390 ms

Loss rate: 0.00%

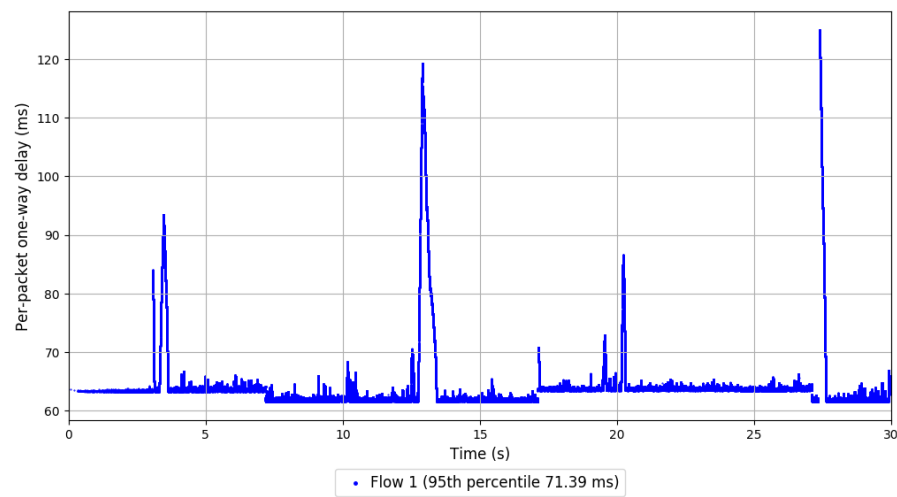
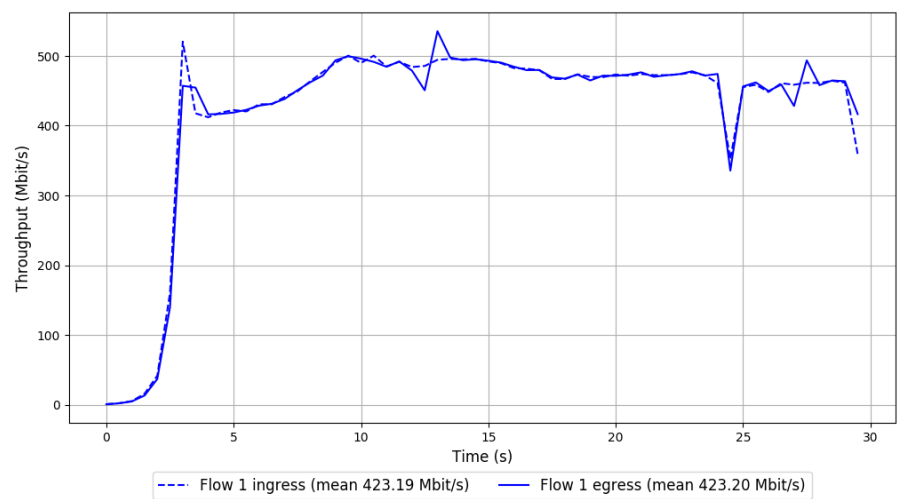
-- Flow 1:

Average throughput: 423.20 Mbit/s

95th percentile per-packet one-way delay: 71.390 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-20 13:10:07

End at: 2018-02-20 13:10:37

Below is generated by plot.py at 2018-02-20 16:58:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 406.08 Mbit/s

95th percentile per-packet one-way delay: 70.909 ms

Loss rate: 0.10%

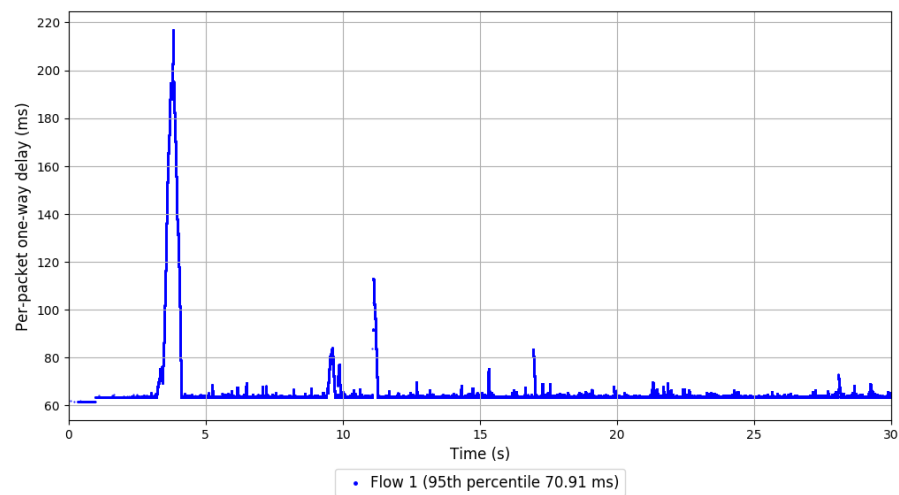
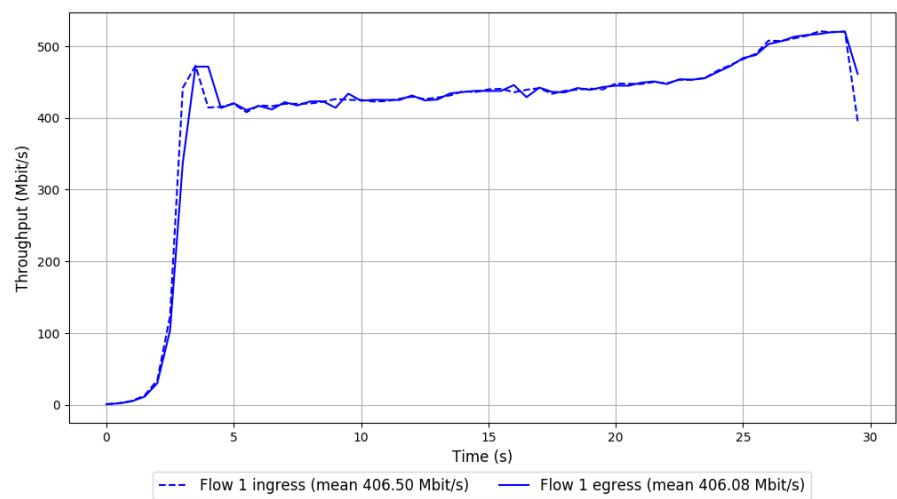
-- Flow 1:

Average throughput: 406.08 Mbit/s

95th percentile per-packet one-way delay: 70.909 ms

Loss rate: 0.10%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-20 13:24:59

End at: 2018-02-20 13:25:29

Below is generated by plot.py at 2018-02-20 16:58:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 429.57 Mbit/s

95th percentile per-packet one-way delay: 86.440 ms

Loss rate: 0.00%

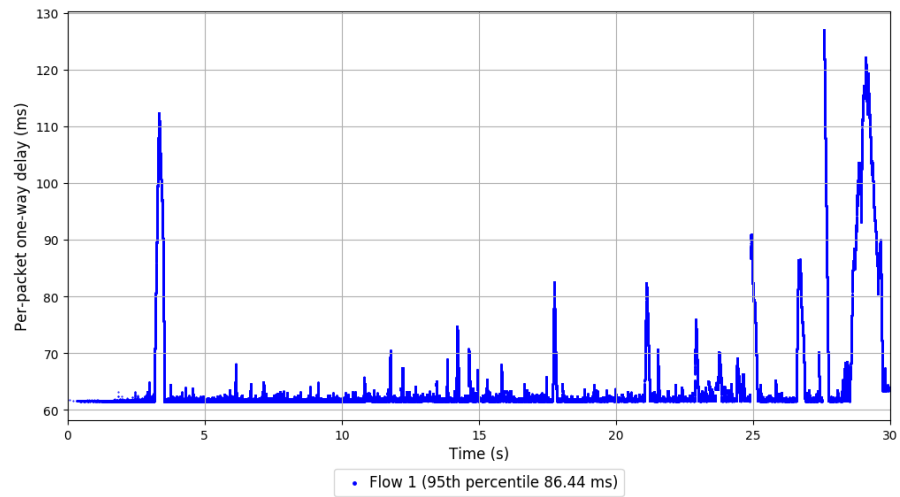
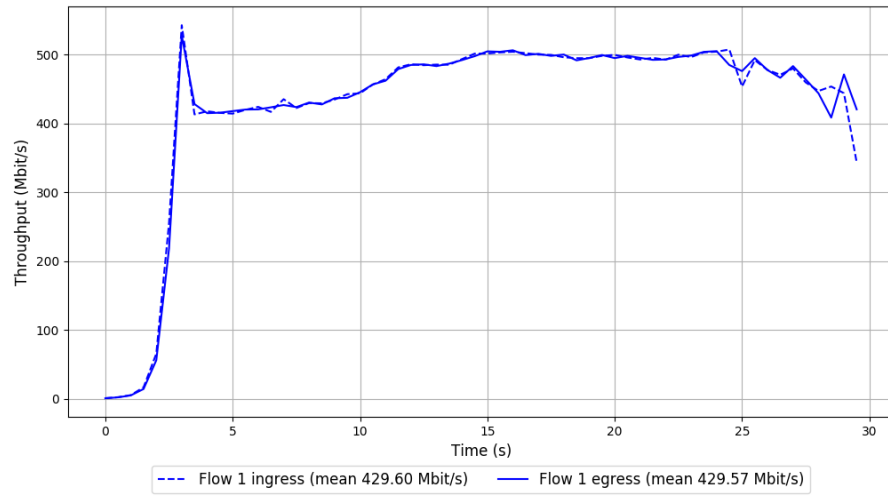
-- Flow 1:

Average throughput: 429.57 Mbit/s

95th percentile per-packet one-way delay: 86.440 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-20 13:39:40

End at: 2018-02-20 13:40:10

Below is generated by plot.py at 2018-02-20 16:58:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 341.88 Mbit/s

95th percentile per-packet one-way delay: 146.629 ms

Loss rate: 0.38%

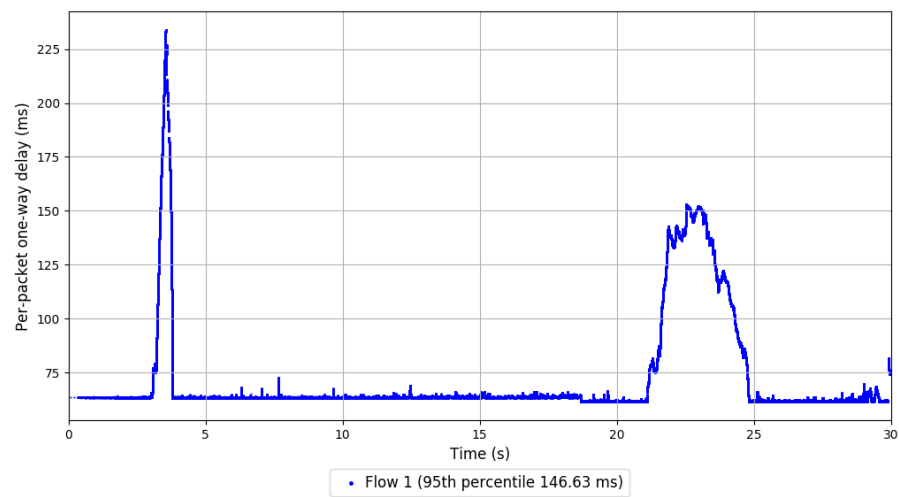
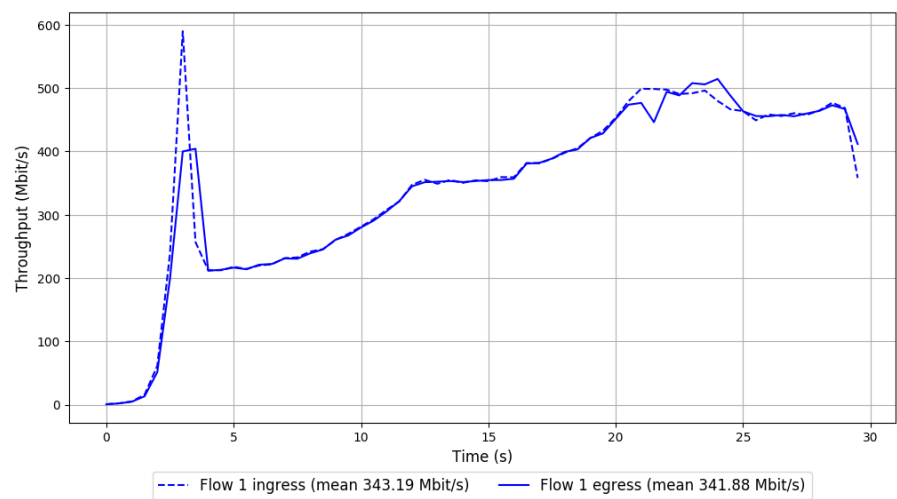
-- Flow 1:

Average throughput: 341.88 Mbit/s

95th percentile per-packet one-way delay: 146.629 ms

Loss rate: 0.38%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-20 13:54:20

End at: 2018-02-20 13:54:50

Below is generated by plot.py at 2018-02-20 16:58:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 419.90 Mbit/s

95th percentile per-packet one-way delay: 160.769 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 419.90 Mbit/s

95th percentile per-packet one-way delay: 160.769 ms

Loss rate: 0.09%

Run 10: Report of Vivace-LTE — Data Link

