

Pantheon Report

Generated at 2017-12-11 22:25:34 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

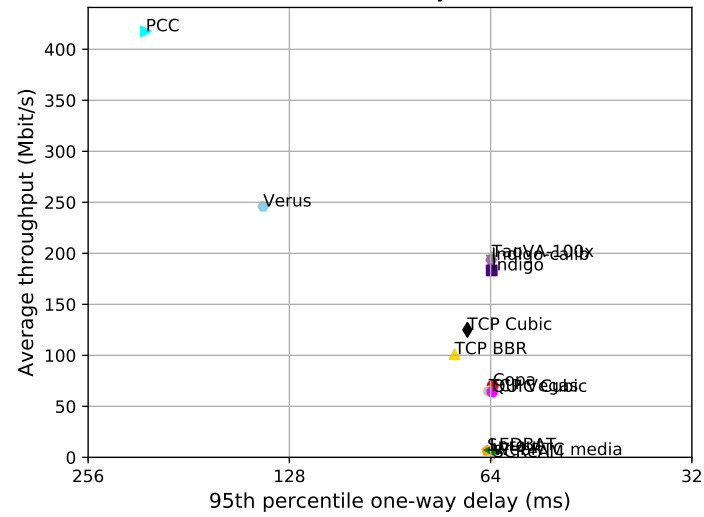
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

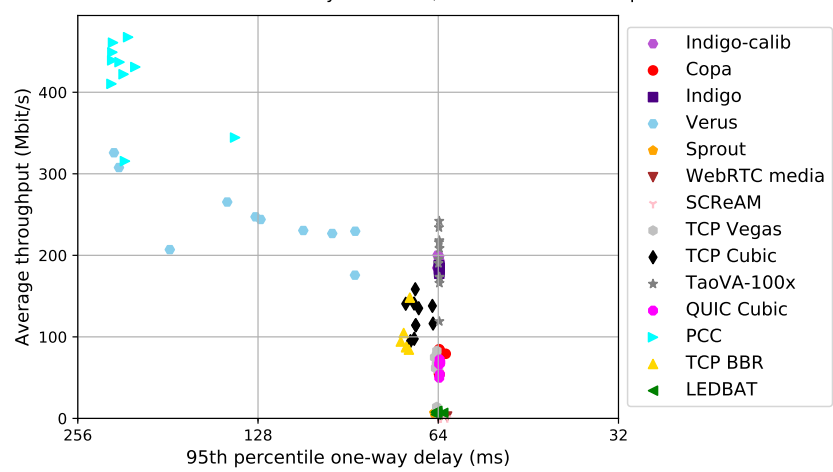
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	6	101.14	72.47	0.00
TCP Cubic	10	125.01	69.34	0.02
LEDBAT	10	7.10	64.24	0.06
PCC	10	417.68	209.89	1.38
QUIC Cubic	8	64.26	63.65	0.04
SCReAM	10	0.22	63.48	0.00
WebRTC media	10	2.26	63.50	0.00
Sprout	10	6.53	64.79	0.00
TaoVA-100x	10	196.31	63.79	0.02
TCP Vegas	10	64.79	64.44	0.00
Verus	10	245.96	140.10	0.58
Copa	8	70.36	63.54	0.03
Indigo	10	183.27	63.76	0.01
Indigo-calib	10	193.65	63.87	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-12-11 19:07:38

End at: 2017-12-11 19:08:08

Below is generated by plot.py at 2017-12-11 21:46:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 148.16 Mbit/s

95th percentile per-packet one-way delay: 71.391 ms

Loss rate: 0.00%

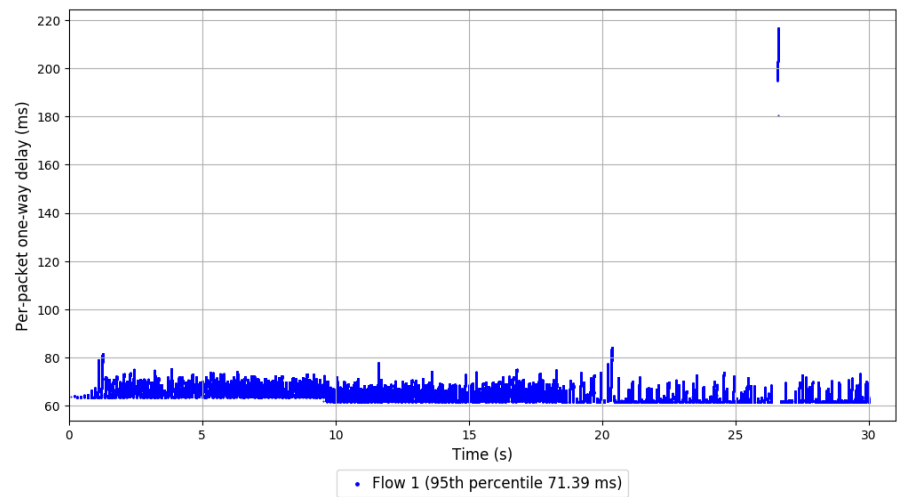
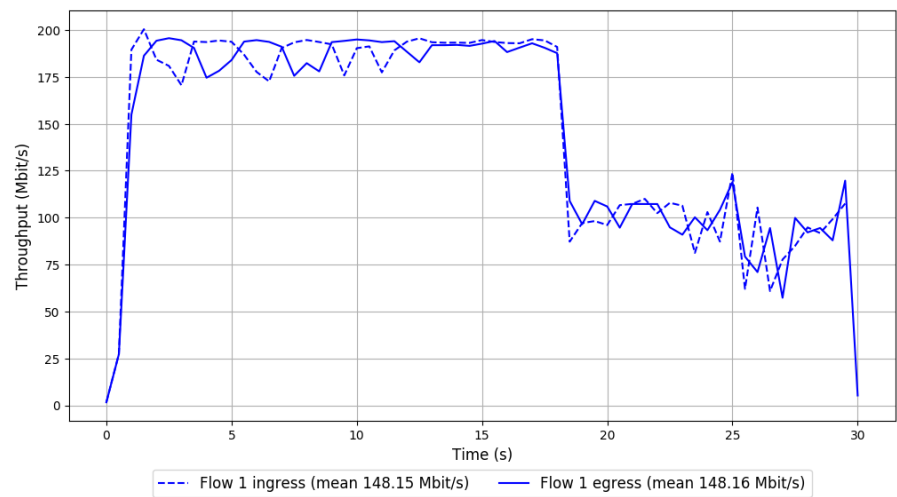
-- Flow 1:

Average throughput: 148.16 Mbit/s

95th percentile per-packet one-way delay: 71.391 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link

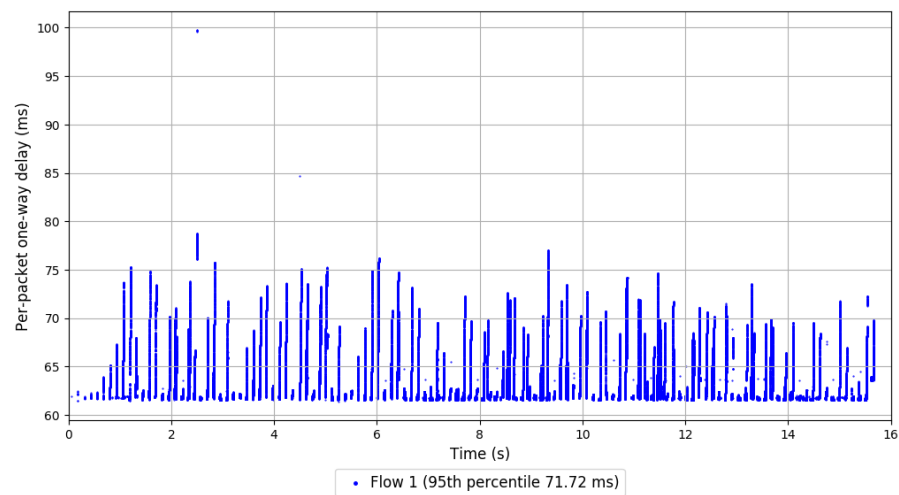
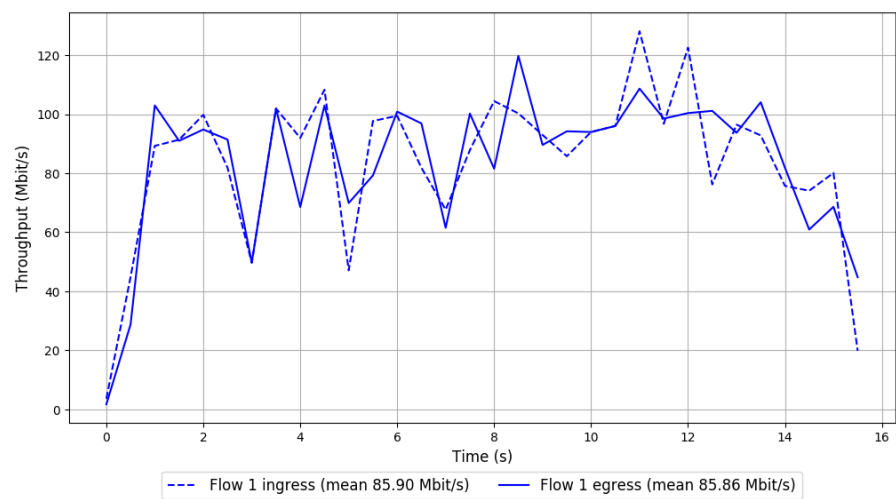


Run 2: Statistics of TCP BBR

Start at: 2017-12-11 19:18:18

End at: 2017-12-11 19:18:48

Run 2: Report of TCP BBR — Data Link

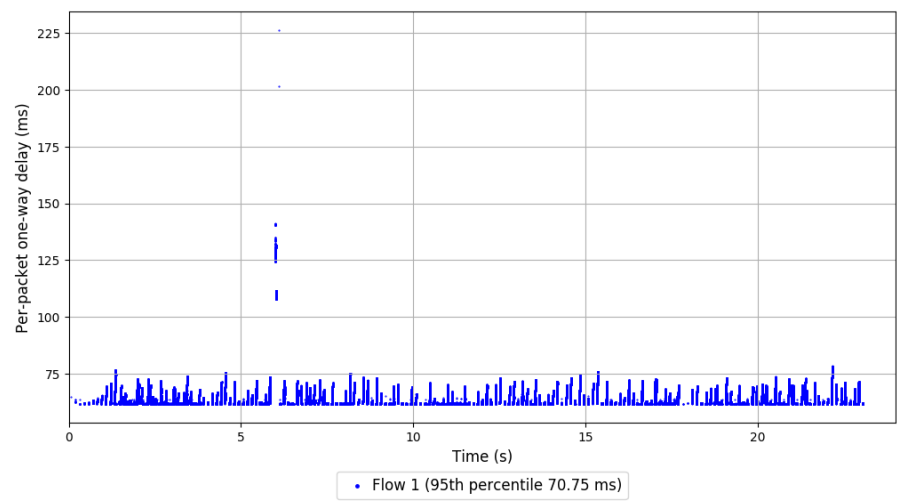
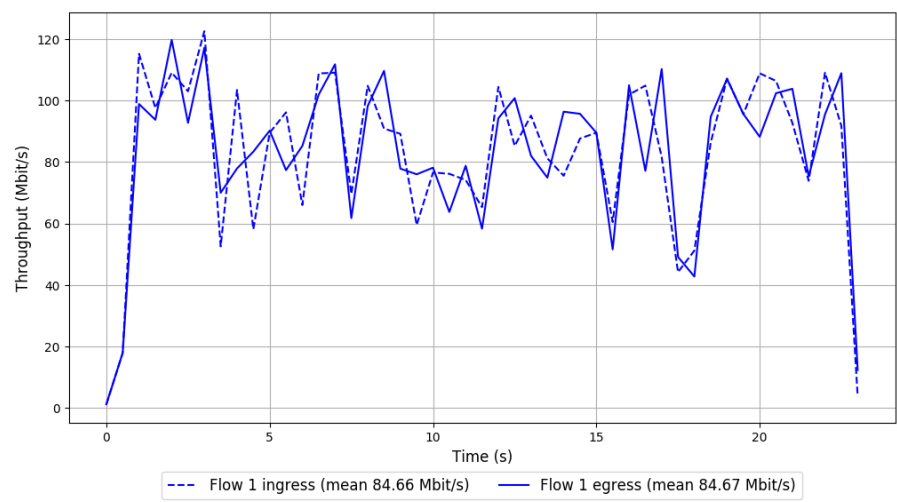


Run 3: Statistics of TCP BBR

Start at: 2017-12-11 19:28:52

End at: 2017-12-11 19:29:22

Run 3: Report of TCP BBR — Data Link

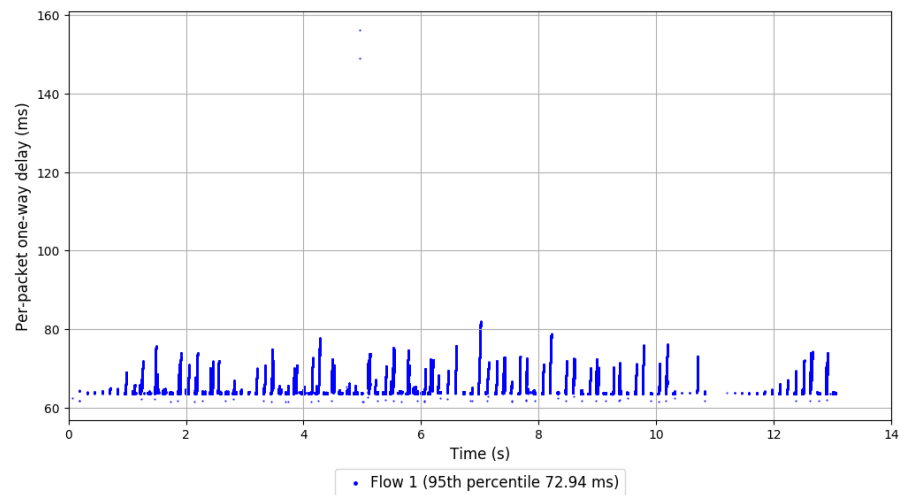
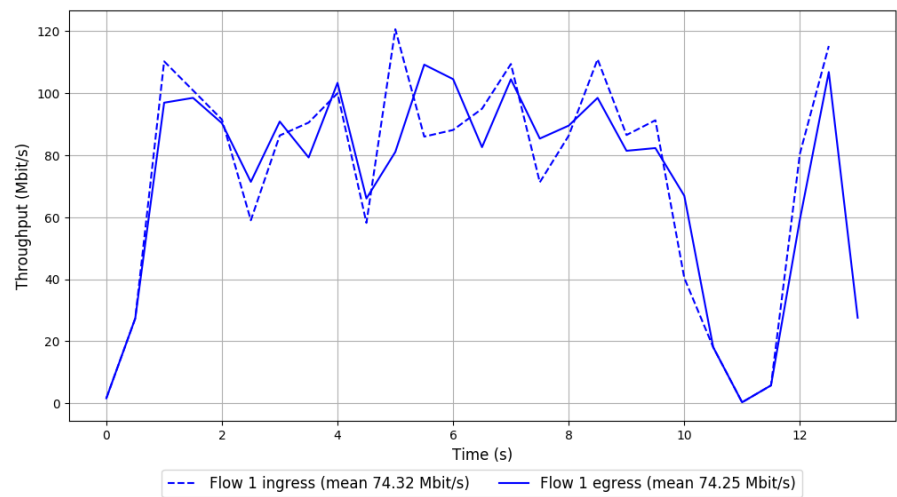


Run 4: Statistics of TCP BBR

Start at: 2017-12-11 19:39:12

End at: 2017-12-11 19:39:42

Run 4: Report of TCP BBR — Data Link

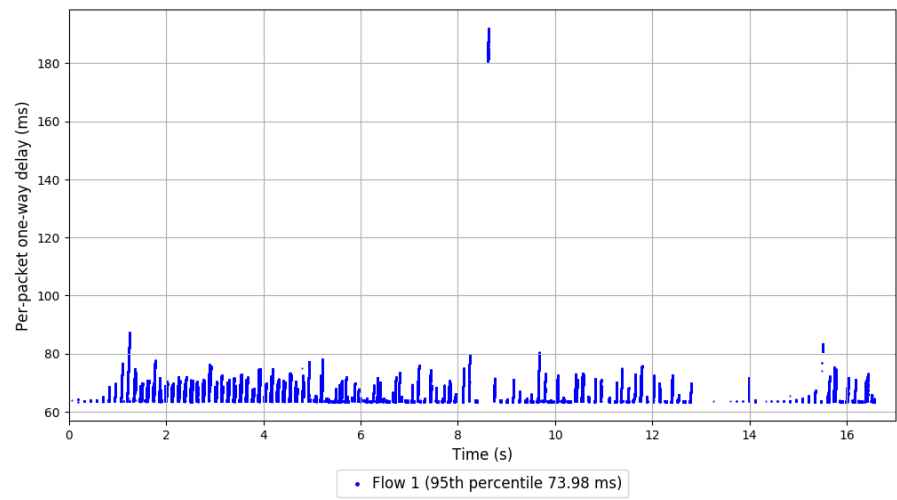
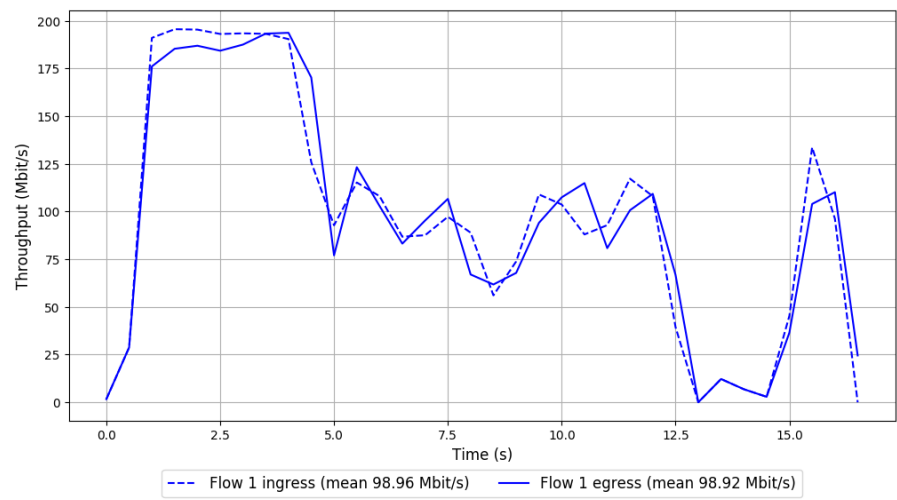


Run 5: Statistics of TCP BBR

Start at: 2017-12-11 19:49:42

End at: 2017-12-11 19:50:12

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-11 20:00:23

End at: 2017-12-11 20:00:53

Below is generated by plot.py at 2017-12-11 21:46:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 104.77 Mbit/s

95th percentile per-packet one-way delay: 73.102 ms

Loss rate: 0.00%

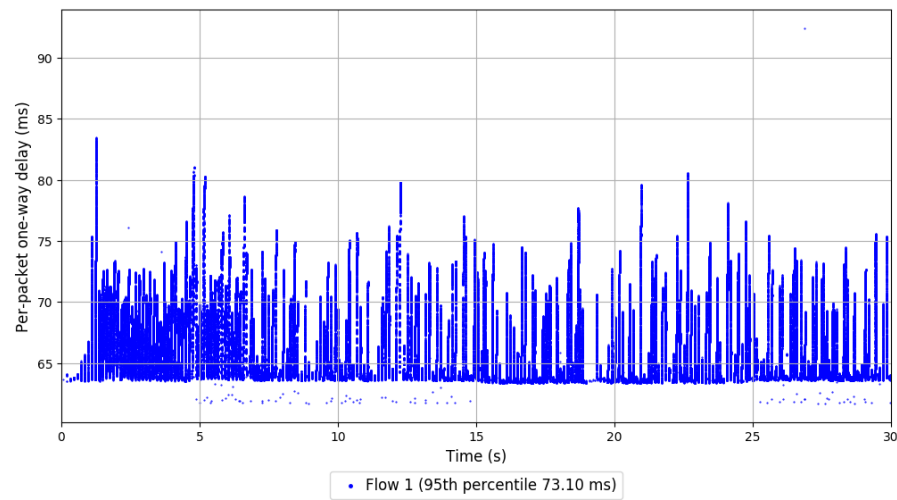
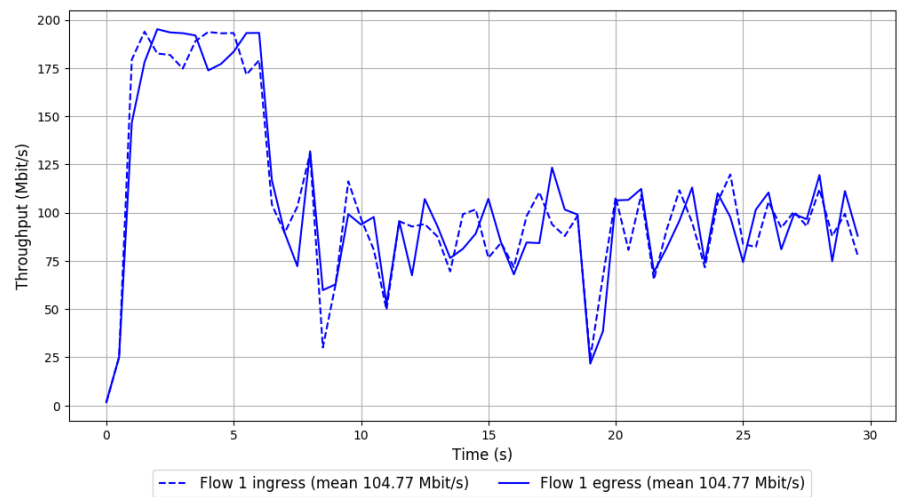
-- Flow 1:

Average throughput: 104.77 Mbit/s

95th percentile per-packet one-way delay: 73.102 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-11 20:10:56

End at: 2017-12-11 20:11:26

Below is generated by plot.py at 2017-12-11 21:46:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.21 Mbit/s

95th percentile per-packet one-way delay: 72.445 ms

Loss rate: 0.00%

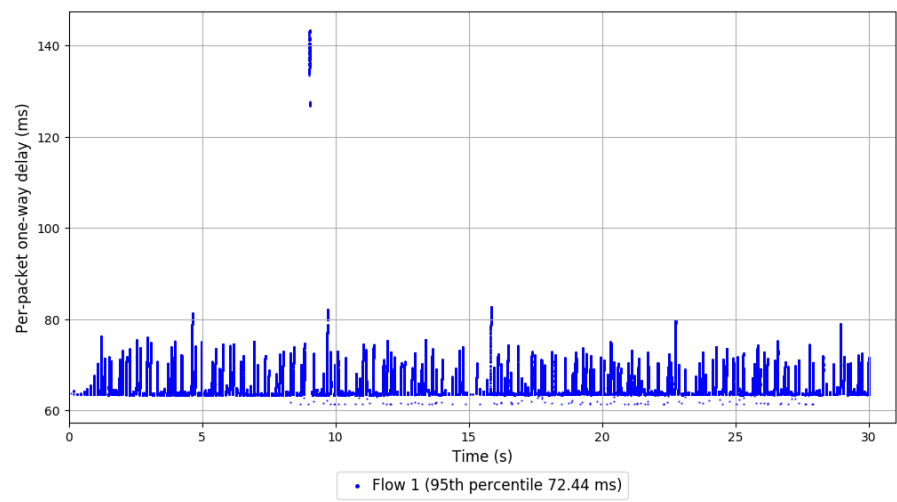
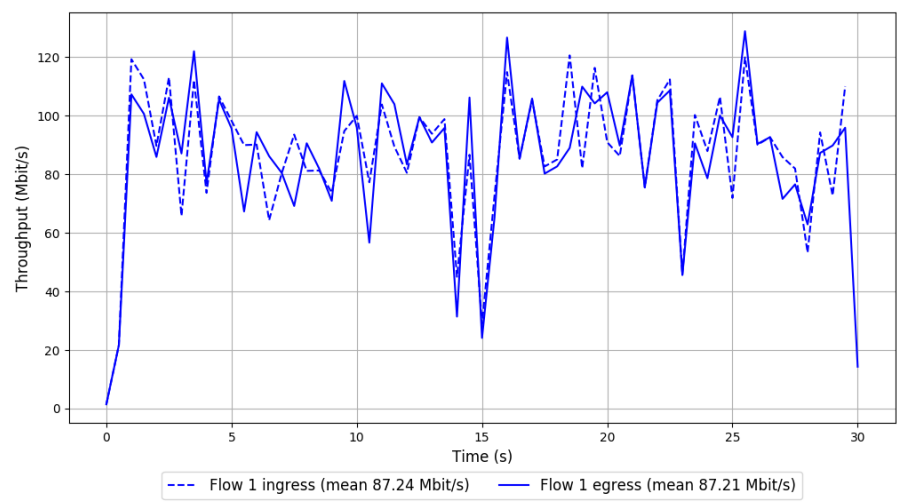
-- Flow 1:

Average throughput: 87.21 Mbit/s

95th percentile per-packet one-way delay: 72.445 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-11 20:21:34

End at: 2017-12-11 20:22:04

Below is generated by plot.py at 2017-12-11 21:46:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.99 Mbit/s

95th percentile per-packet one-way delay: 72.317 ms

Loss rate: 0.00%

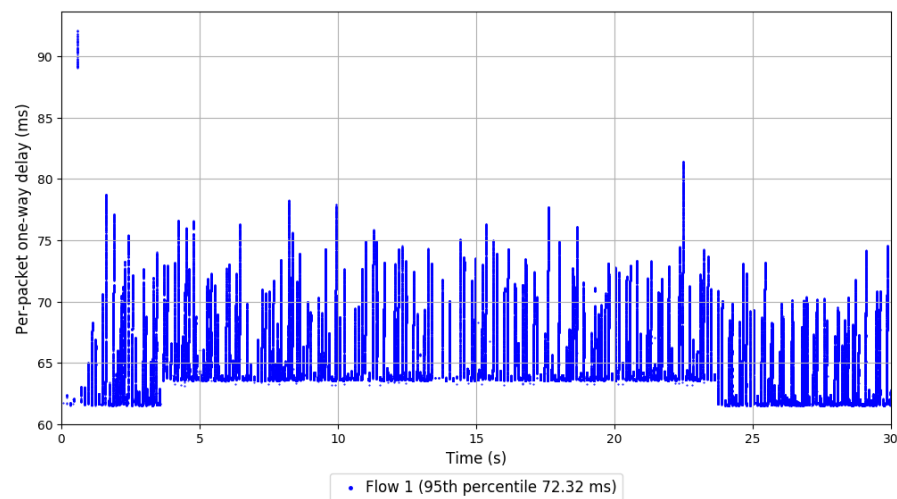
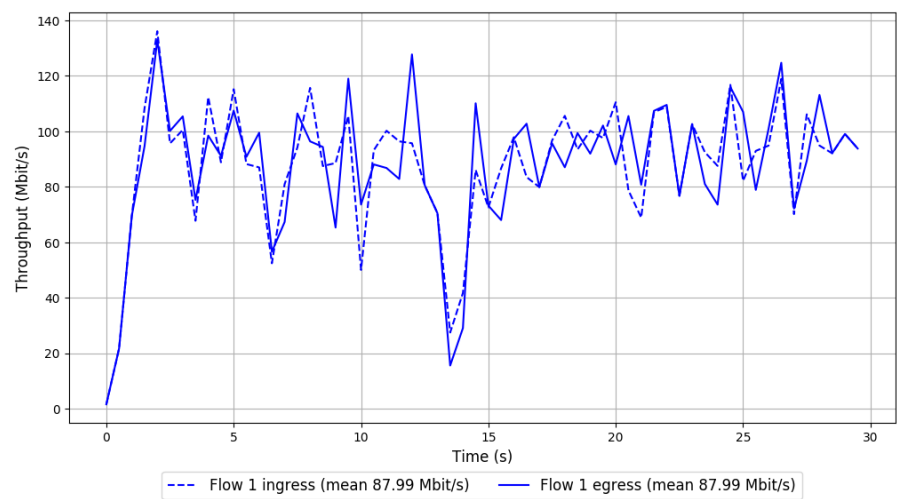
-- Flow 1:

Average throughput: 87.99 Mbit/s

95th percentile per-packet one-way delay: 72.317 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-11 20:32:02

End at: 2017-12-11 20:32:32

Below is generated by plot.py at 2017-12-11 21:46:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.30 Mbit/s

95th percentile per-packet one-way delay: 73.913 ms

Loss rate: 0.00%

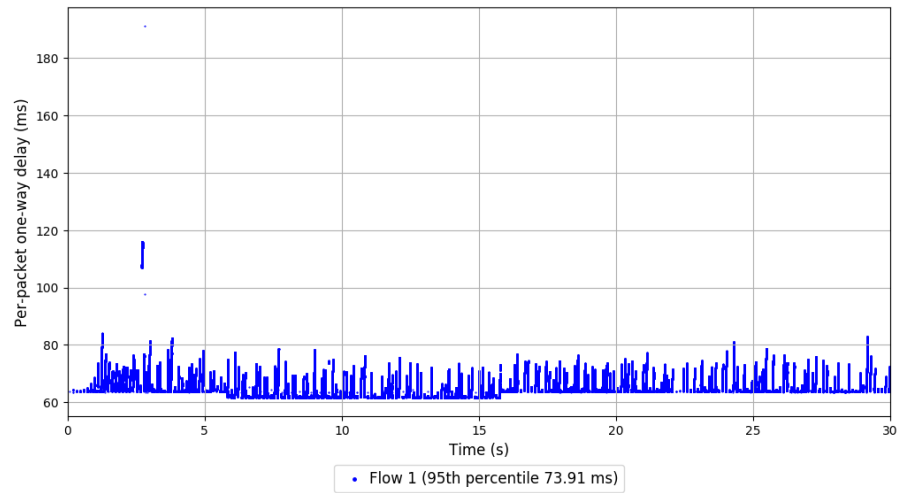
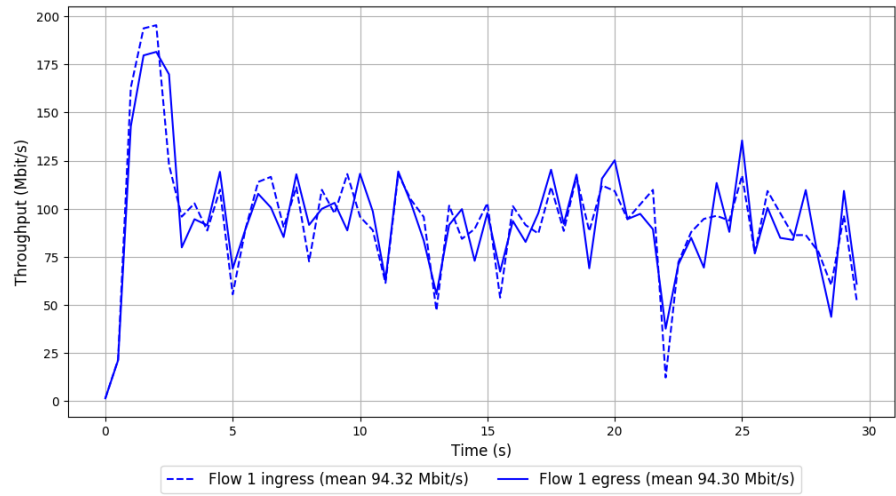
-- Flow 1:

Average throughput: 94.30 Mbit/s

95th percentile per-packet one-way delay: 73.913 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-11 20:42:31

End at: 2017-12-11 20:43:01

Below is generated by plot.py at 2017-12-11 21:46:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.39 Mbit/s

95th percentile per-packet one-way delay: 71.653 ms

Loss rate: 0.00%

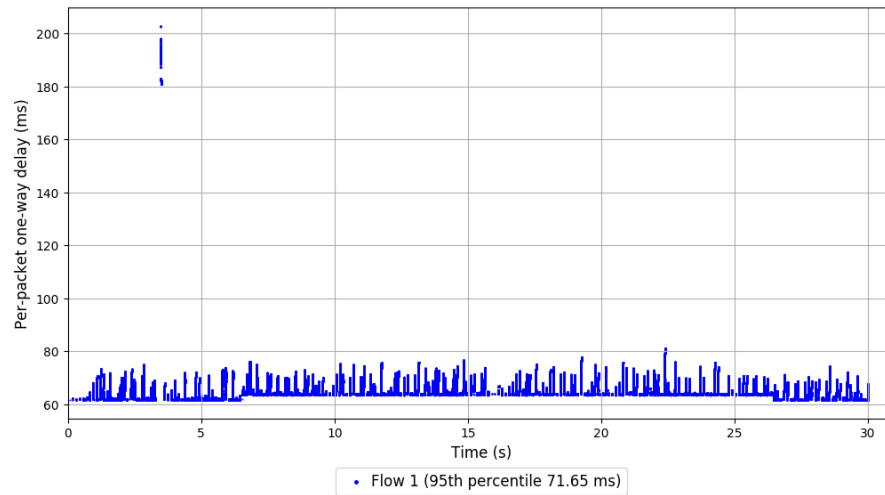
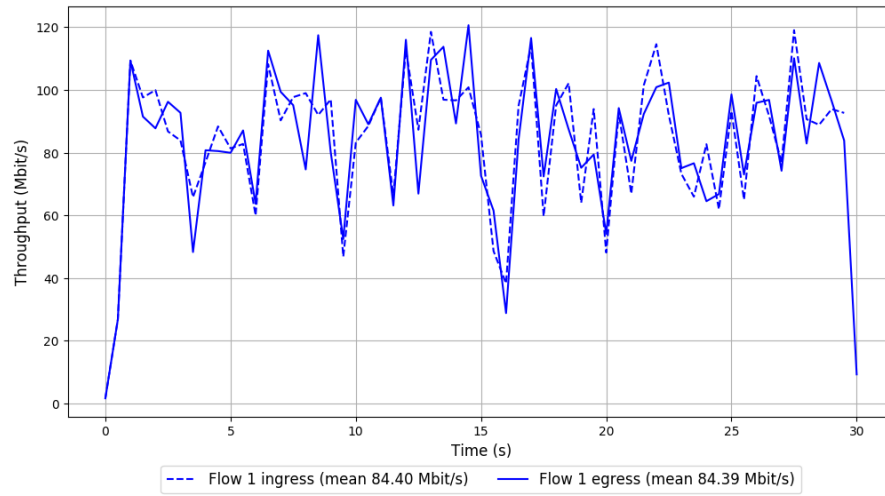
-- Flow 1:

Average throughput: 84.39 Mbit/s

95th percentile per-packet one-way delay: 71.653 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-11 19:09:02

End at: 2017-12-11 19:09:32

Below is generated by plot.py at 2017-12-11 21:46:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 114.23 Mbit/s

95th percentile per-packet one-way delay: 69.758 ms

Loss rate: 0.00%

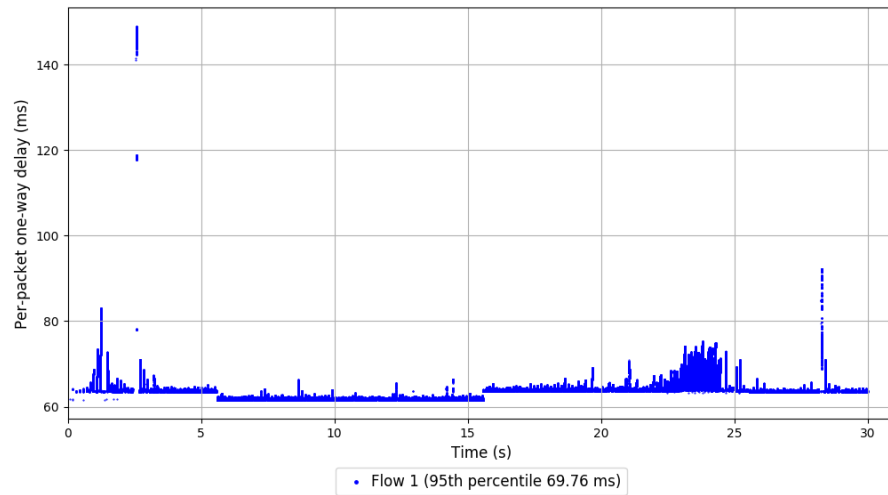
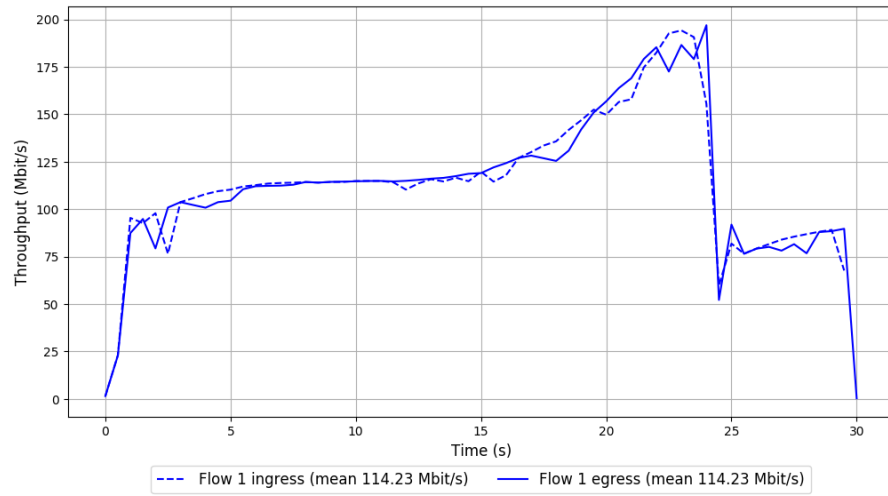
-- Flow 1:

Average throughput: 114.23 Mbit/s

95th percentile per-packet one-way delay: 69.758 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-11 19:19:36

End at: 2017-12-11 19:20:06

Below is generated by plot.py at 2017-12-11 21:47:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 140.58 Mbit/s

95th percentile per-packet one-way delay: 72.531 ms

Loss rate: 0.00%

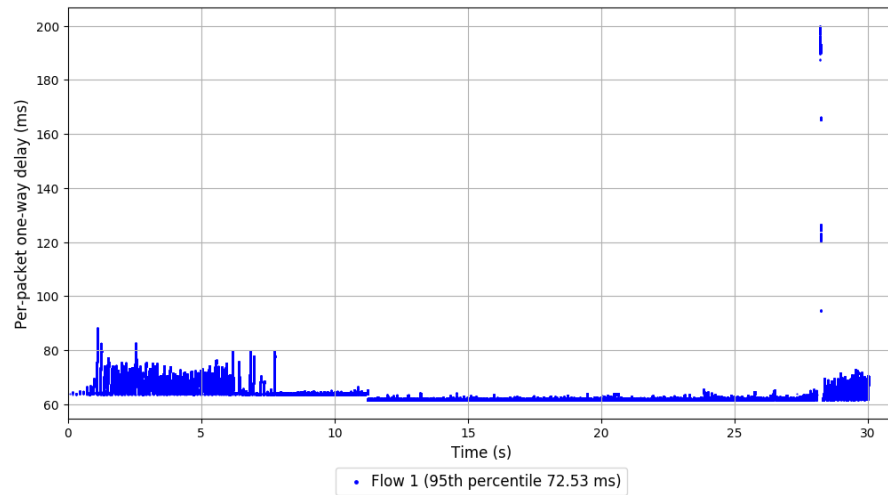
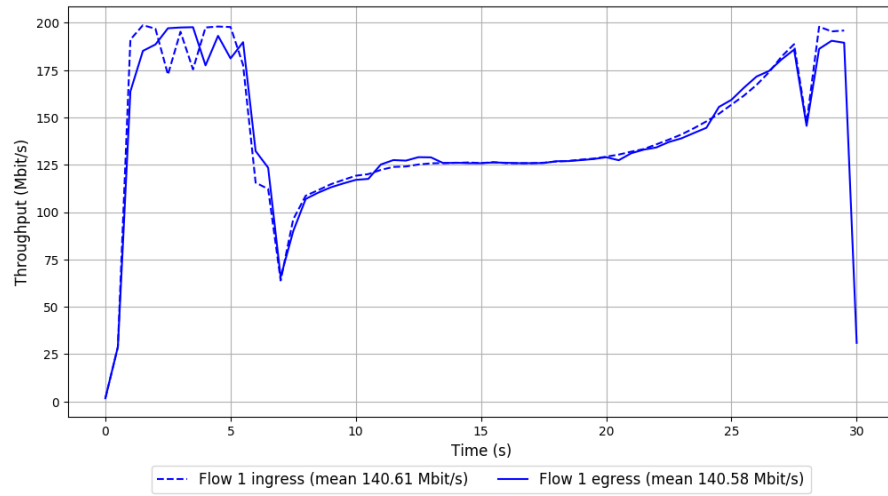
-- Flow 1:

Average throughput: 140.58 Mbit/s

95th percentile per-packet one-way delay: 72.531 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-11 19:30:11

End at: 2017-12-11 19:30:41

Below is generated by plot.py at 2017-12-11 21:47:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.75 Mbit/s

95th percentile per-packet one-way delay: 71.215 ms

Loss rate: 0.00%

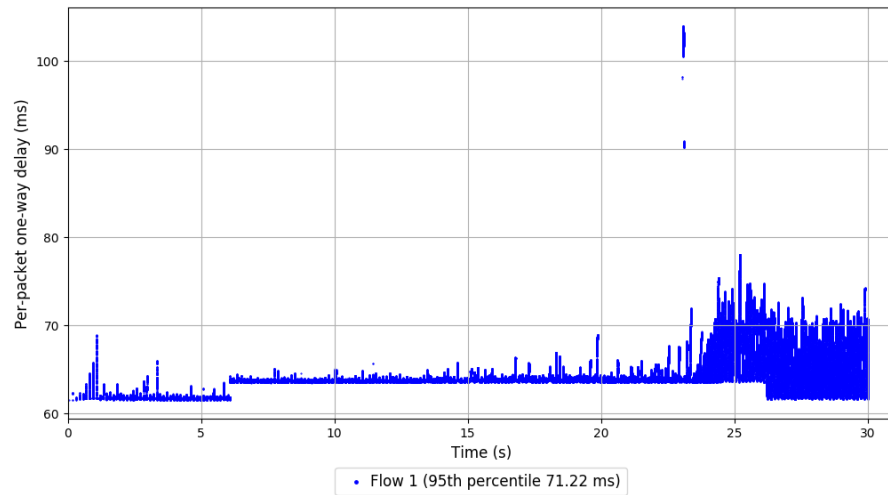
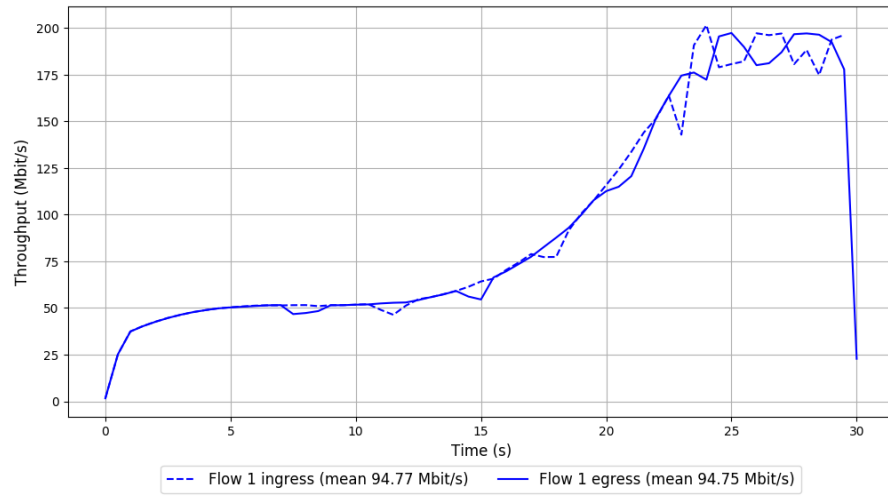
-- Flow 1:

Average throughput: 94.75 Mbit/s

95th percentile per-packet one-way delay: 71.215 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-11 19:40:30

End at: 2017-12-11 19:41:00

Below is generated by plot.py at 2017-12-11 21:47:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 114.27 Mbit/s

95th percentile per-packet one-way delay: 69.819 ms

Loss rate: 0.09%

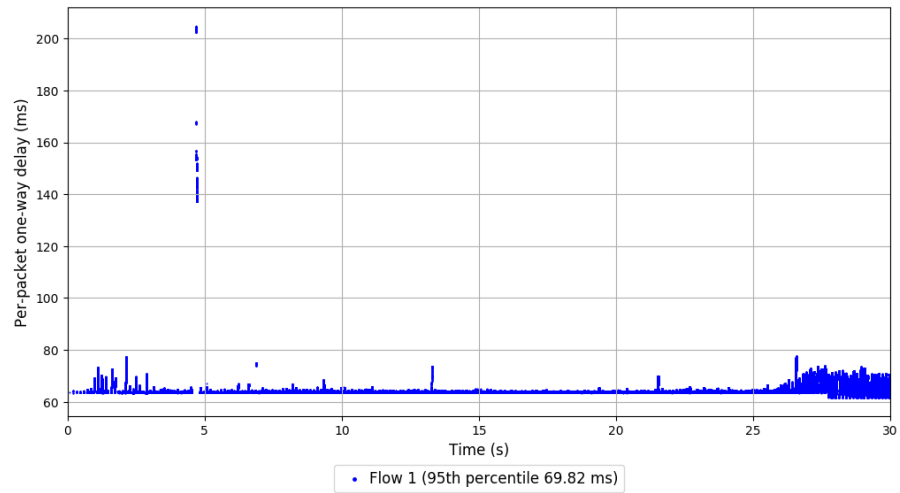
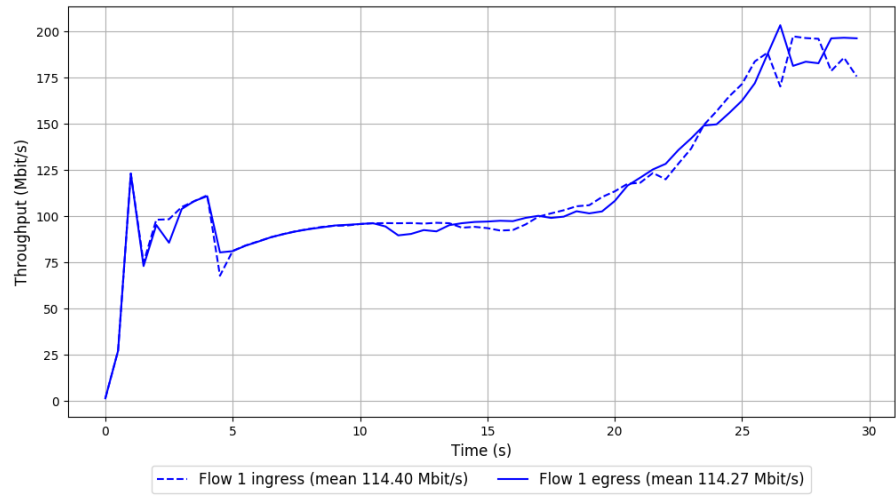
-- Flow 1:

Average throughput: 114.27 Mbit/s

95th percentile per-packet one-way delay: 69.819 ms

Loss rate: 0.09%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-11 19:51:01

End at: 2017-12-11 19:51:31

Below is generated by plot.py at 2017-12-11 21:47:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.60 Mbit/s

95th percentile per-packet one-way delay: 70.191 ms

Loss rate: 0.04%

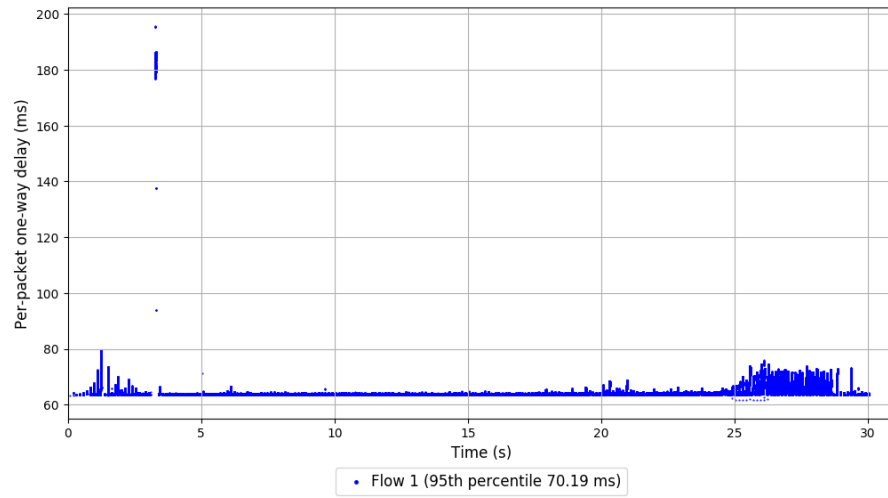
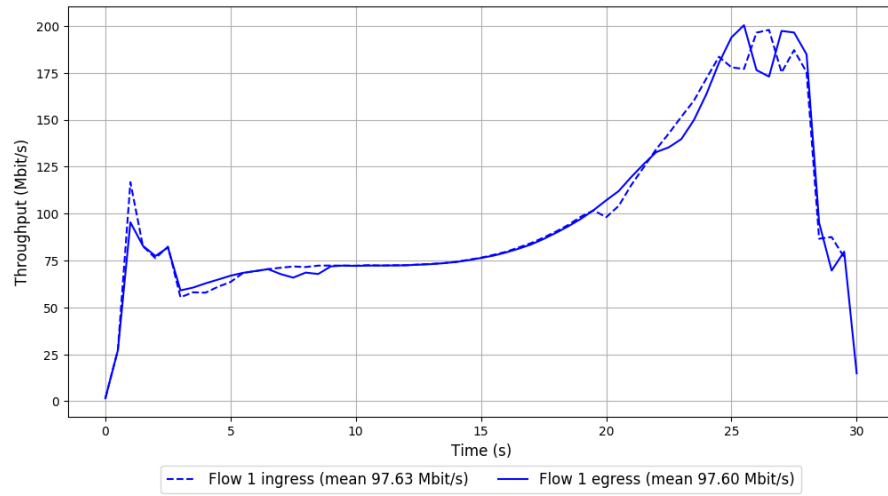
-- Flow 1:

Average throughput: 97.60 Mbit/s

95th percentile per-packet one-way delay: 70.191 ms

Loss rate: 0.04%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-11 20:01:45

End at: 2017-12-11 20:02:15

Below is generated by plot.py at 2017-12-11 21:47:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 116.30 Mbit/s

95th percentile per-packet one-way delay: 65.295 ms

Loss rate: 0.00%

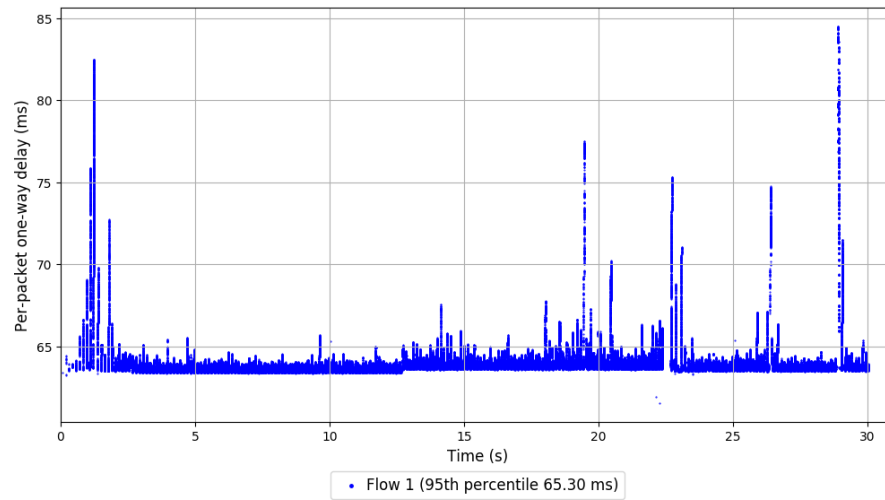
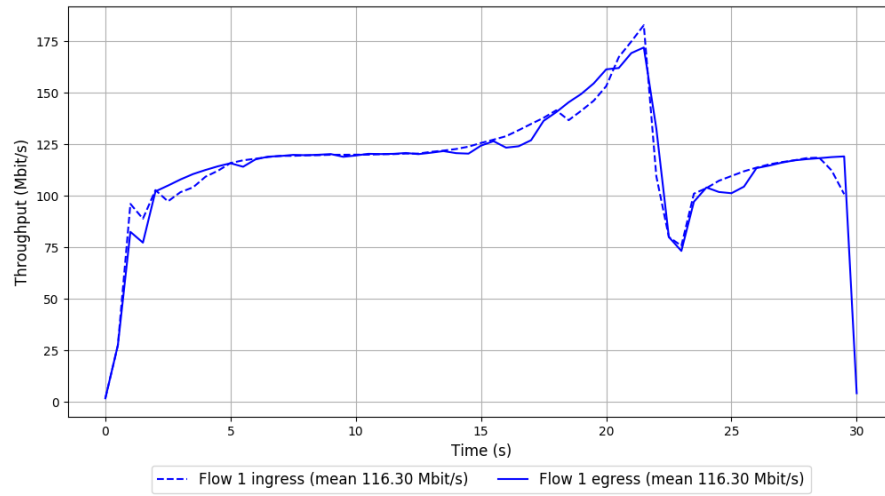
-- Flow 1:

Average throughput: 116.30 Mbit/s

95th percentile per-packet one-way delay: 65.295 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-11 20:12:17

End at: 2017-12-11 20:12:47

Below is generated by plot.py at 2017-12-11 21:48:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 135.10 Mbit/s

95th percentile per-packet one-way delay: 68.998 ms

Loss rate: 0.07%

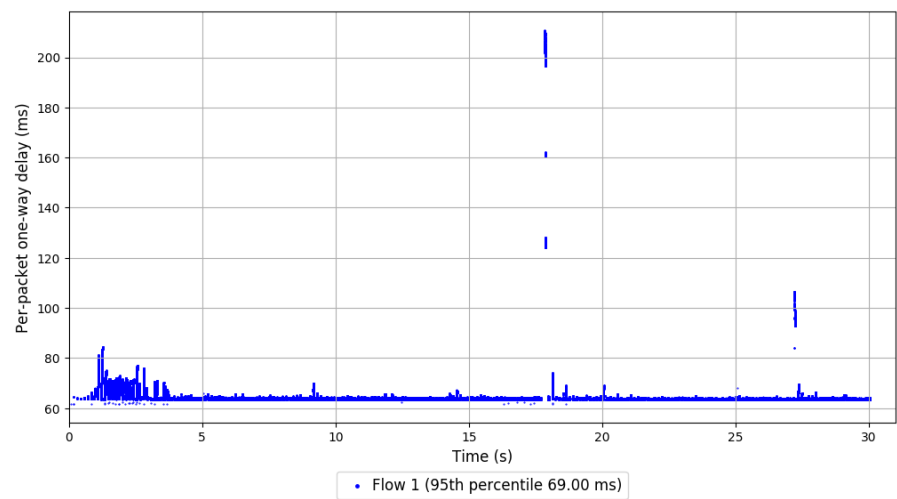
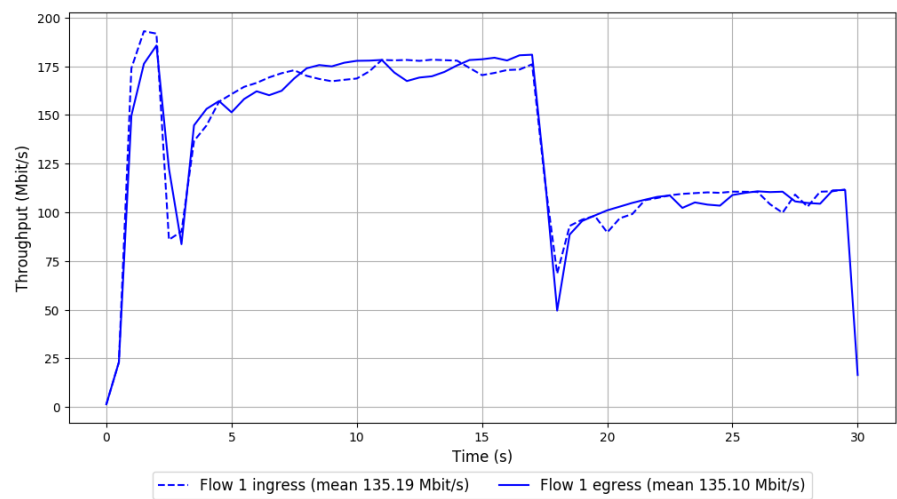
-- Flow 1:

Average throughput: 135.10 Mbit/s

95th percentile per-packet one-way delay: 68.998 ms

Loss rate: 0.07%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-11 20:22:55

End at: 2017-12-11 20:23:25

Below is generated by plot.py at 2017-12-11 21:48:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 158.41 Mbit/s

95th percentile per-packet one-way delay: 69.906 ms

Loss rate: 0.00%

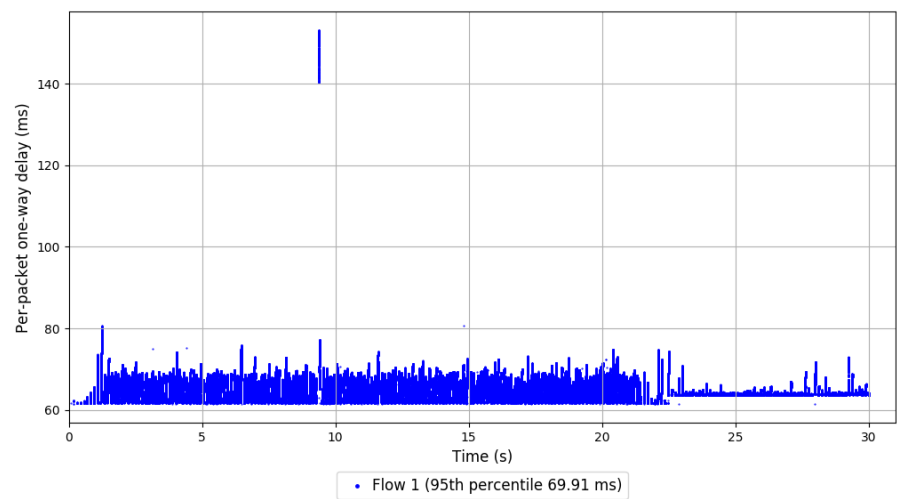
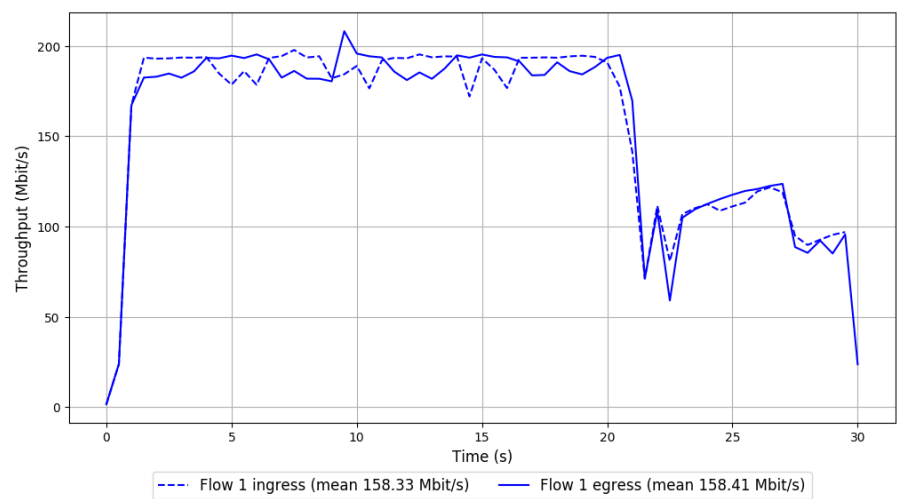
-- Flow 1:

Average throughput: 158.41 Mbit/s

95th percentile per-packet one-way delay: 69.906 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-11 20:33:23

End at: 2017-12-11 20:33:53

Below is generated by plot.py at 2017-12-11 21:48:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 140.87 Mbit/s

95th percentile per-packet one-way delay: 70.235 ms

Loss rate: 0.00%

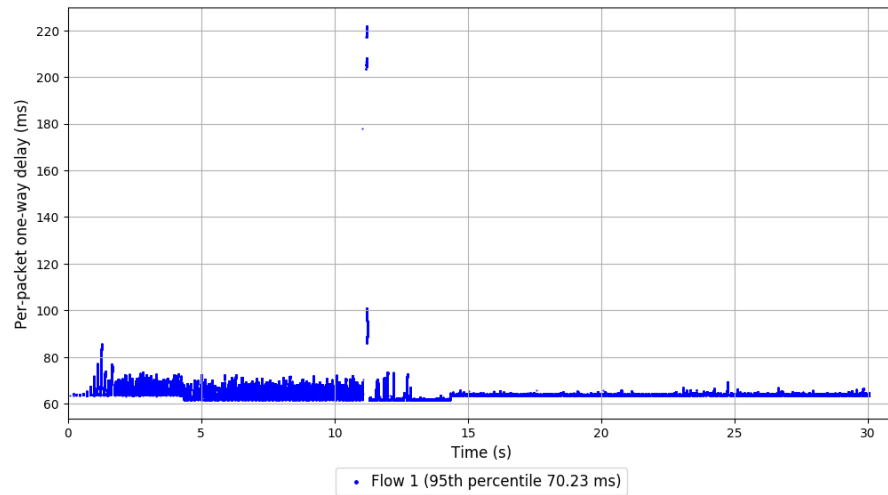
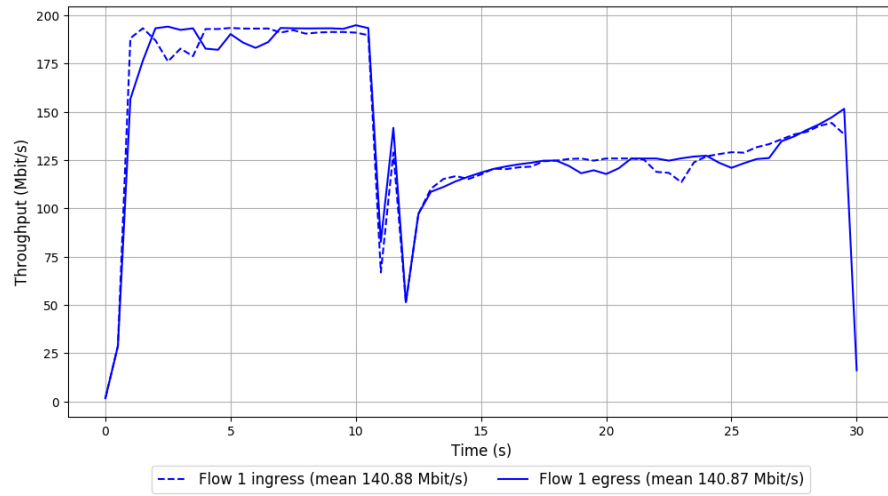
-- Flow 1:

Average throughput: 140.87 Mbit/s

95th percentile per-packet one-way delay: 70.235 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-11 20:43:52

End at: 2017-12-11 20:44:22

Below is generated by plot.py at 2017-12-11 21:49:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 137.99 Mbit/s

95th percentile per-packet one-way delay: 65.459 ms

Loss rate: 0.00%

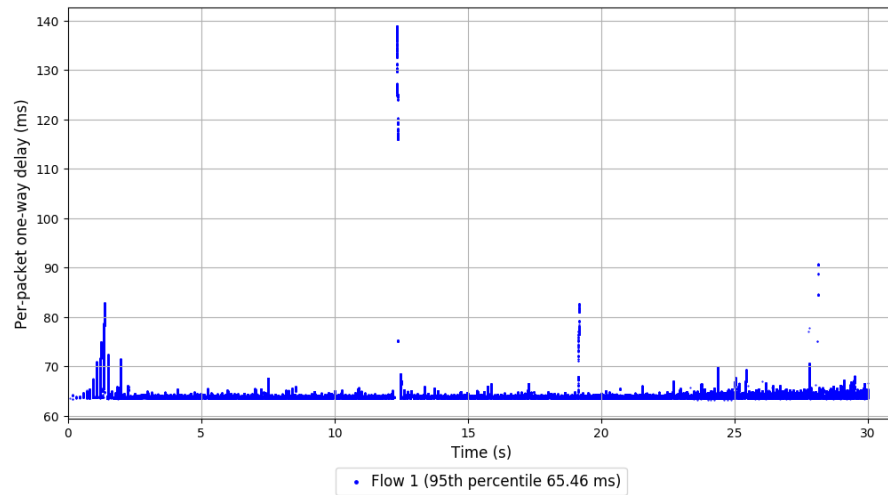
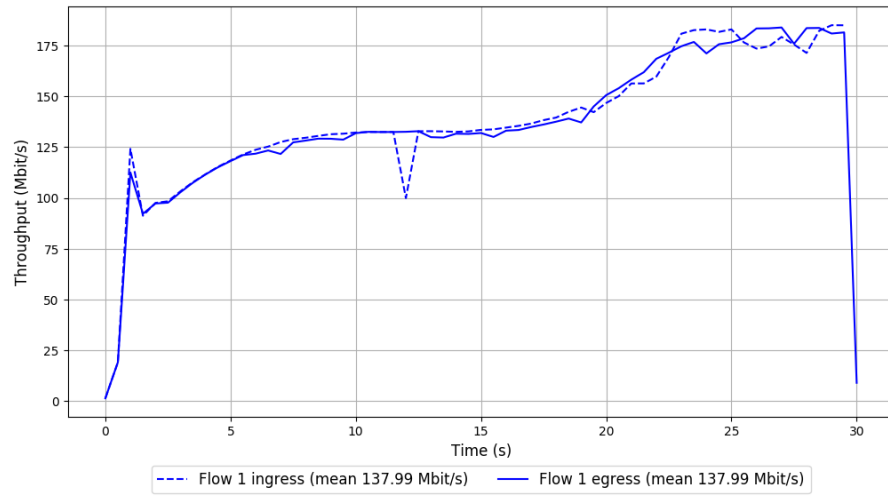
-- Flow 1:

Average throughput: 137.99 Mbit/s

95th percentile per-packet one-way delay: 65.459 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

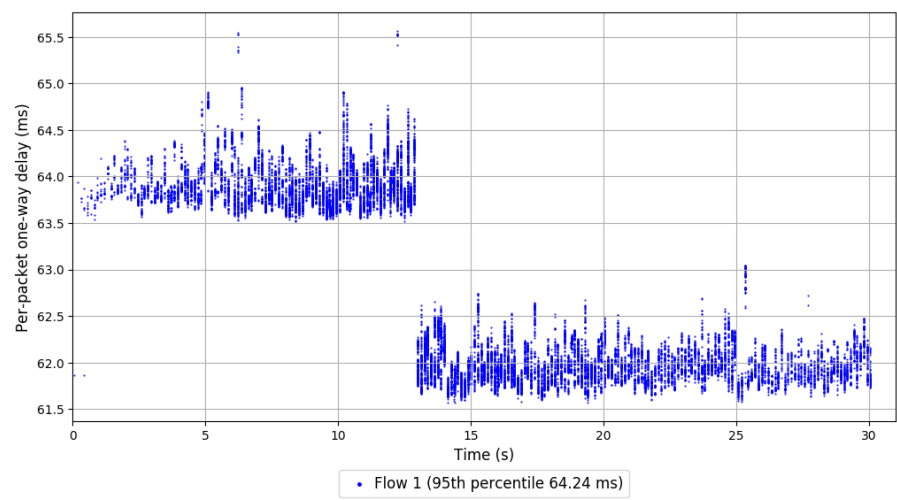
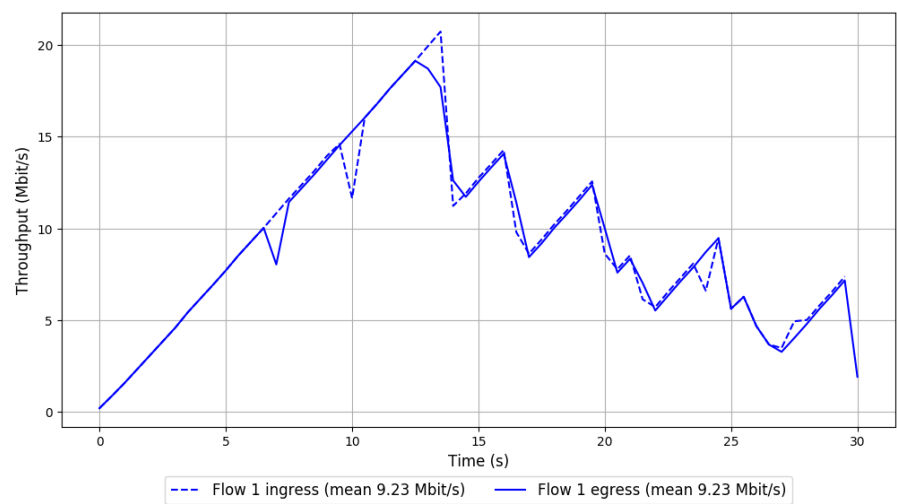


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-11 19:16:05
End at: 2017-12-11 19:16:35

# Below is generated by plot.py at 2017-12-11 21:49:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.23 Mbit/s
95th percentile per-packet one-way delay: 64.240 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.23 Mbit/s
95th percentile per-packet one-way delay: 64.240 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-12-11 19:26:39

End at: 2017-12-11 19:27:09

Below is generated by plot.py at 2017-12-11 21:49:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.84 Mbit/s

95th percentile per-packet one-way delay: 64.304 ms

Loss rate: 0.00%

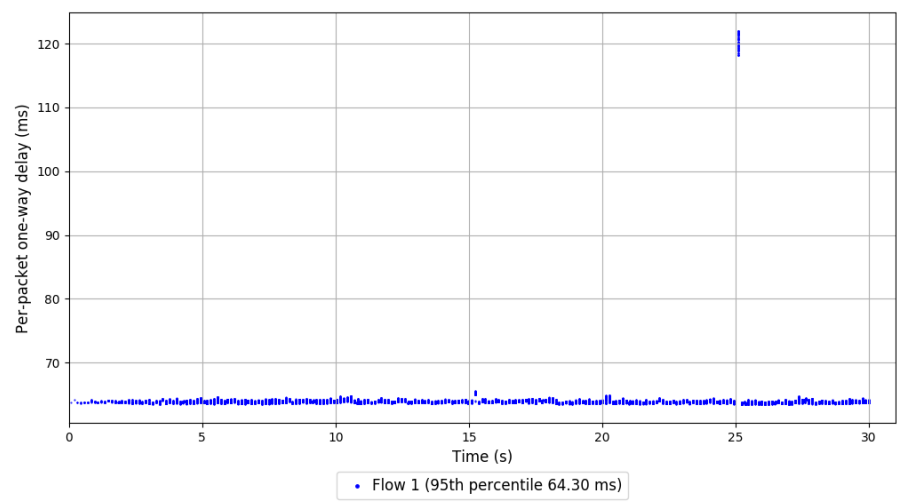
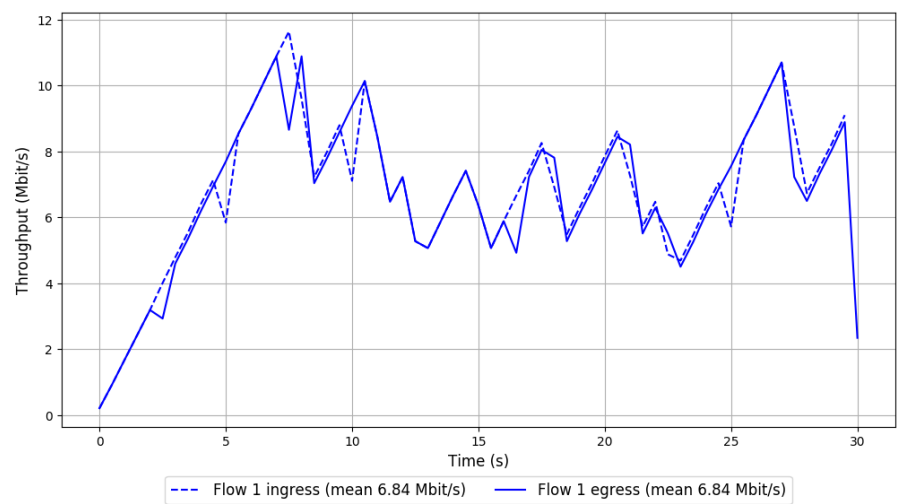
-- Flow 1:

Average throughput: 6.84 Mbit/s

95th percentile per-packet one-way delay: 64.304 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-11 19:37:06

End at: 2017-12-11 19:37:36

Below is generated by plot.py at 2017-12-11 21:49:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.71 Mbit/s

95th percentile per-packet one-way delay: 64.438 ms

Loss rate: 0.00%

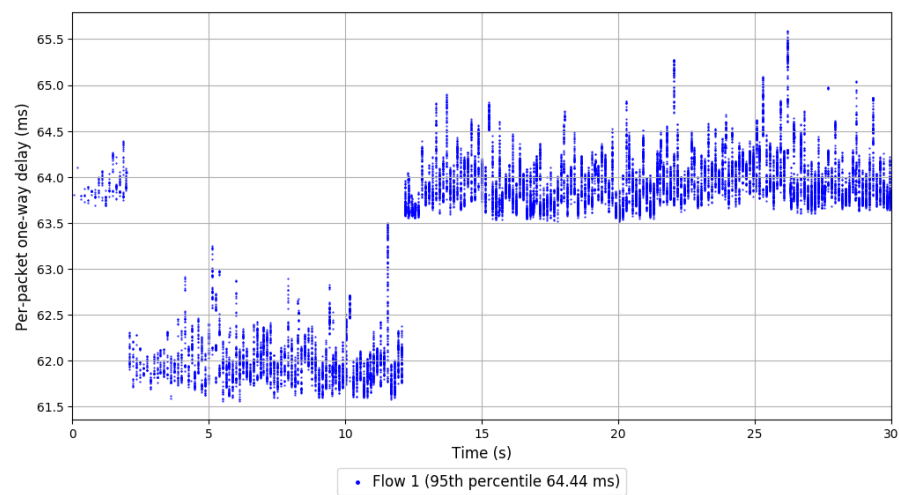
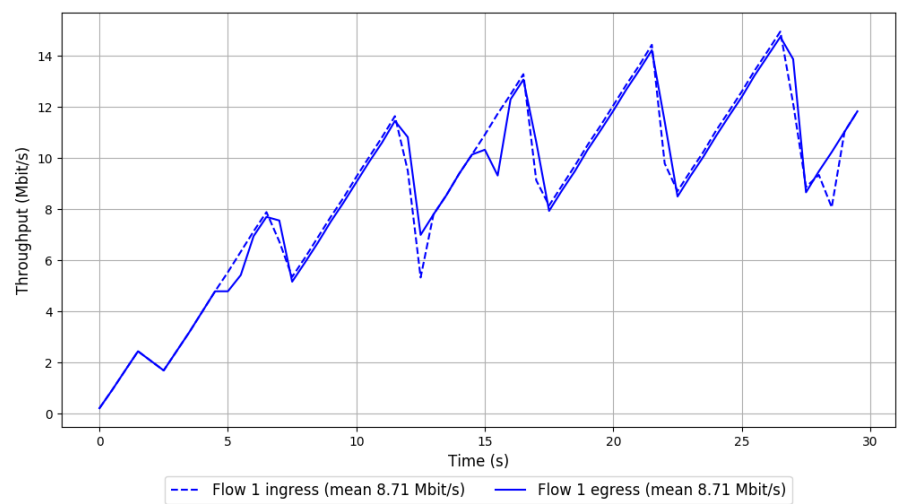
-- Flow 1:

Average throughput: 8.71 Mbit/s

95th percentile per-packet one-way delay: 64.438 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-11 19:47:32

End at: 2017-12-11 19:48:02

Below is generated by plot.py at 2017-12-11 21:49:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.50 Mbit/s

95th percentile per-packet one-way delay: 64.324 ms

Loss rate: 0.01%

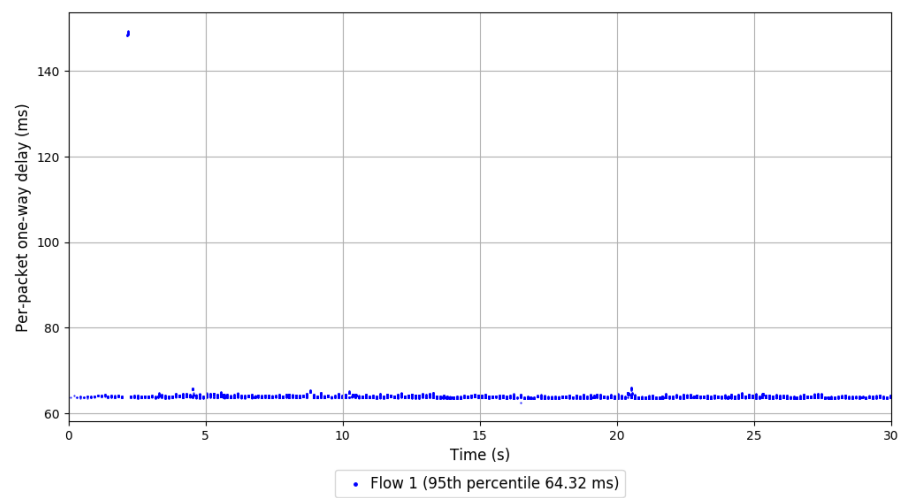
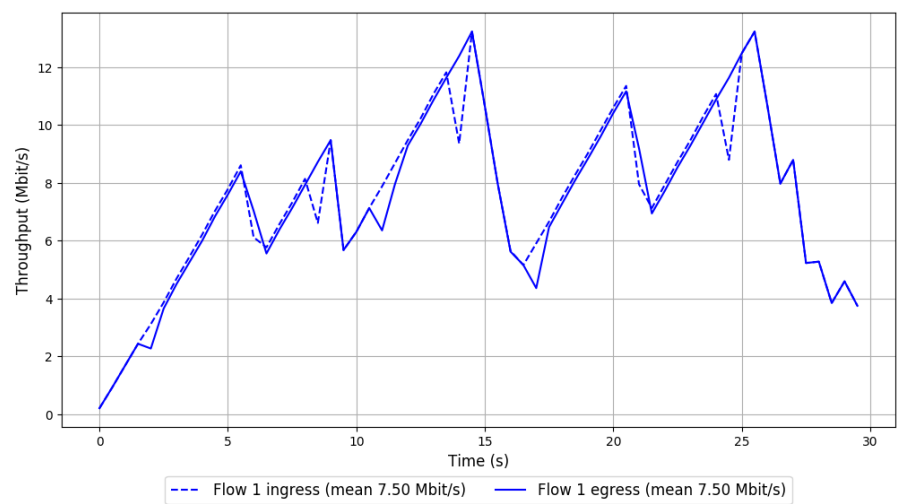
-- Flow 1:

Average throughput: 7.50 Mbit/s

95th percentile per-packet one-way delay: 64.324 ms

Loss rate: 0.01%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-11 19:58:06

End at: 2017-12-11 19:58:36

Below is generated by plot.py at 2017-12-11 21:49:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.46 Mbit/s

95th percentile per-packet one-way delay: 64.627 ms

Loss rate: 0.00%

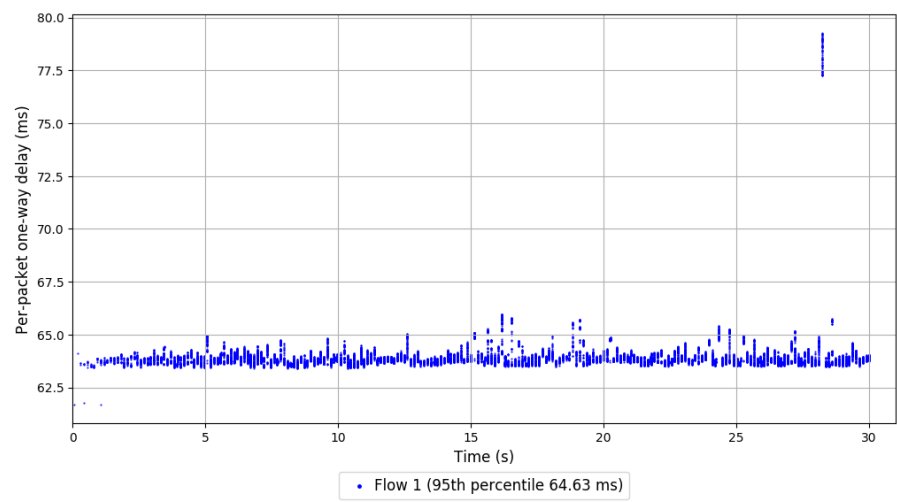
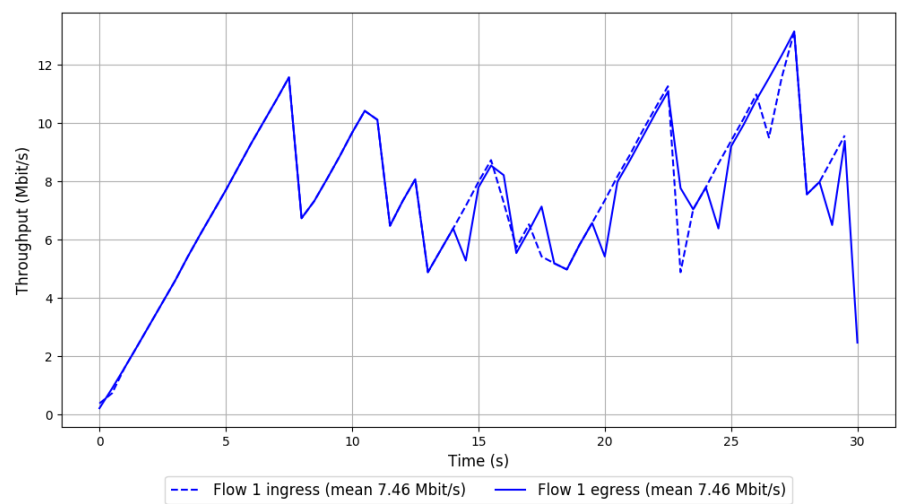
-- Flow 1:

Average throughput: 7.46 Mbit/s

95th percentile per-packet one-way delay: 64.627 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-11 20:08:46

End at: 2017-12-11 20:09:16

Below is generated by plot.py at 2017-12-11 21:49:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.46 Mbit/s

95th percentile per-packet one-way delay: 64.438 ms

Loss rate: 0.00%

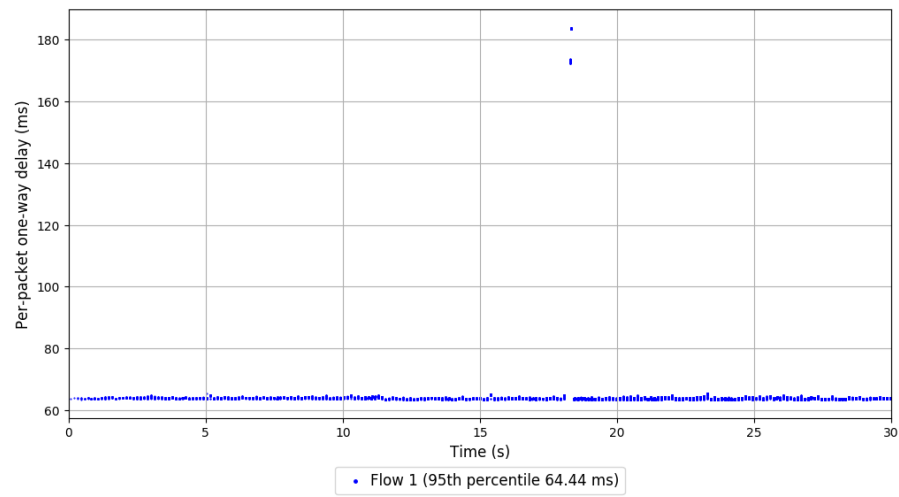
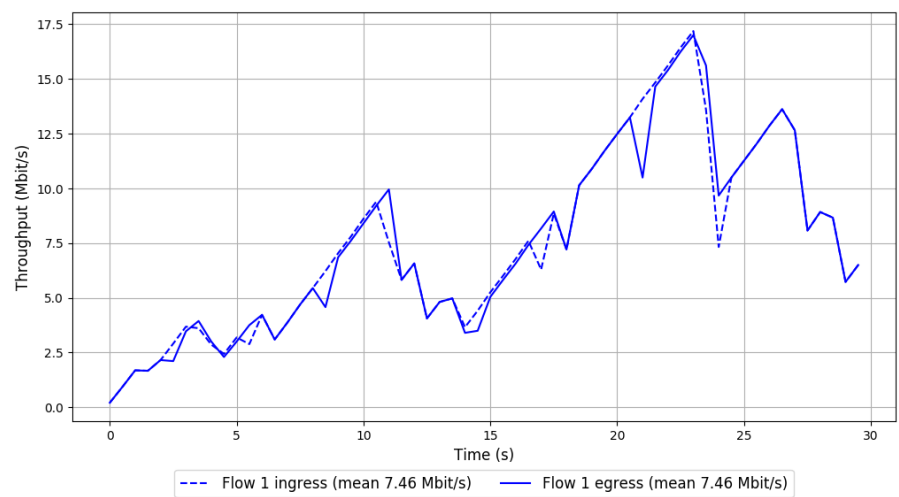
-- Flow 1:

Average throughput: 7.46 Mbit/s

95th percentile per-packet one-way delay: 64.438 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-11 20:19:17

End at: 2017-12-11 20:19:47

Below is generated by plot.py at 2017-12-11 21:49:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.76 Mbit/s

95th percentile per-packet one-way delay: 62.789 ms

Loss rate: 0.00%

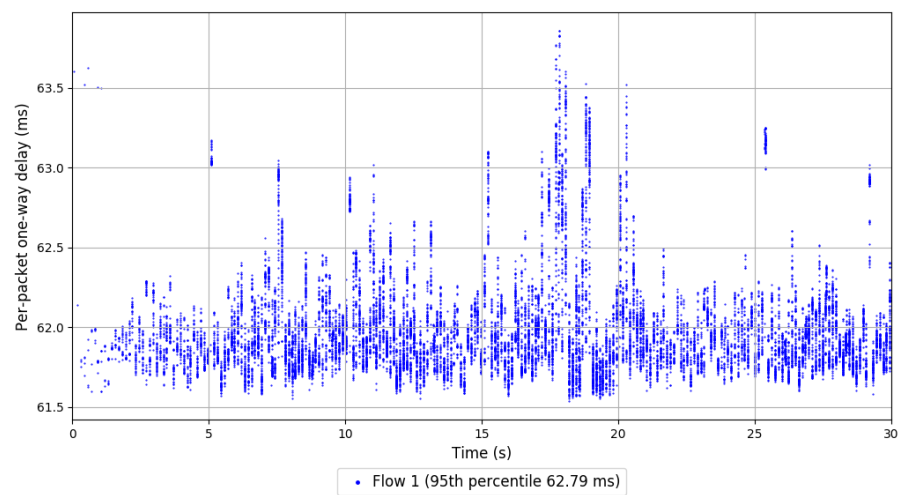
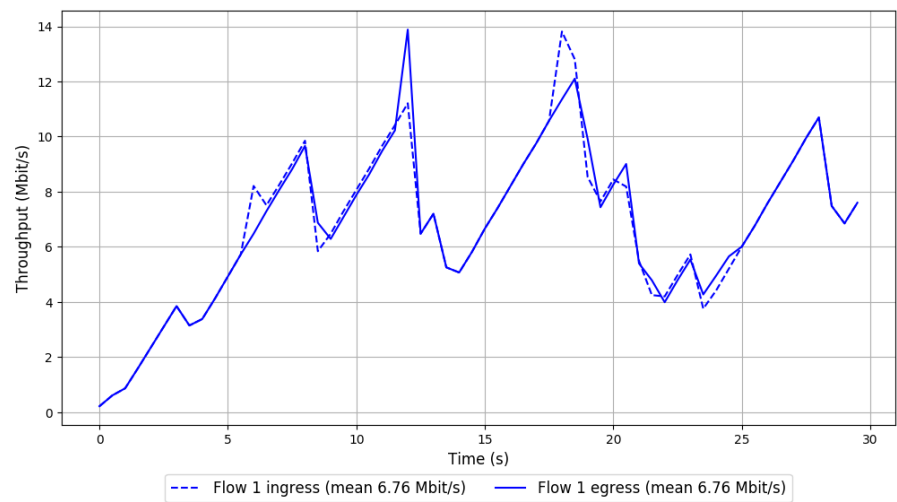
-- Flow 1:

Average throughput: 6.76 Mbit/s

95th percentile per-packet one-way delay: 62.789 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-11 20:29:52

End at: 2017-12-11 20:30:22

Below is generated by plot.py at 2017-12-11 21:49:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.23 Mbit/s

95th percentile per-packet one-way delay: 64.275 ms

Loss rate: 0.60%

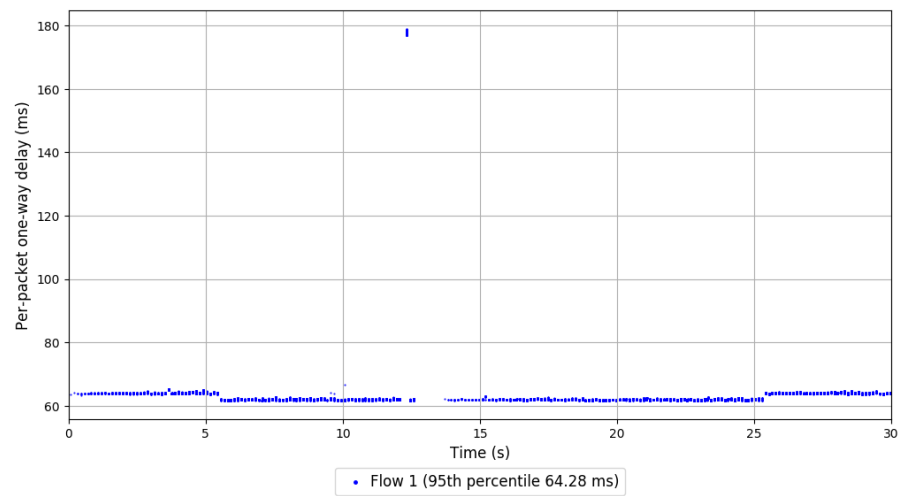
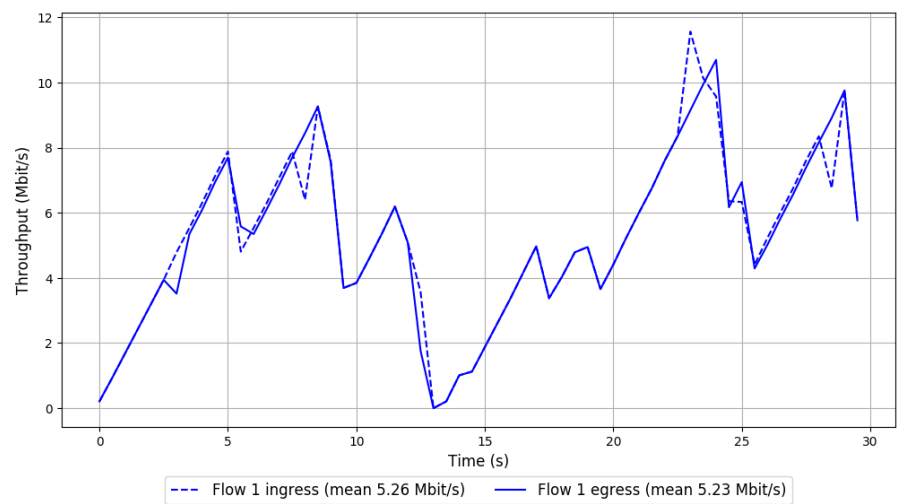
-- Flow 1:

Average throughput: 5.23 Mbit/s

95th percentile per-packet one-way delay: 64.275 ms

Loss rate: 0.60%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-11 20:40:21

End at: 2017-12-11 20:40:51

Below is generated by plot.py at 2017-12-11 21:49:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.02 Mbit/s

95th percentile per-packet one-way delay: 64.445 ms

Loss rate: 0.00%

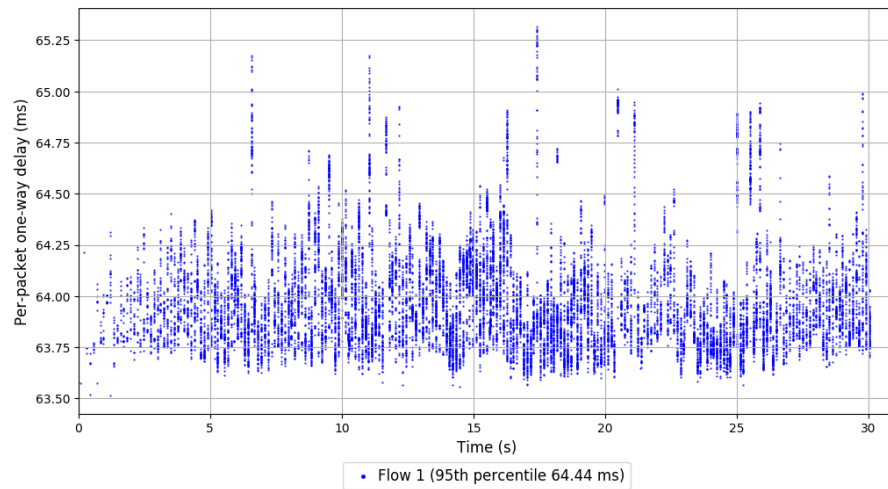
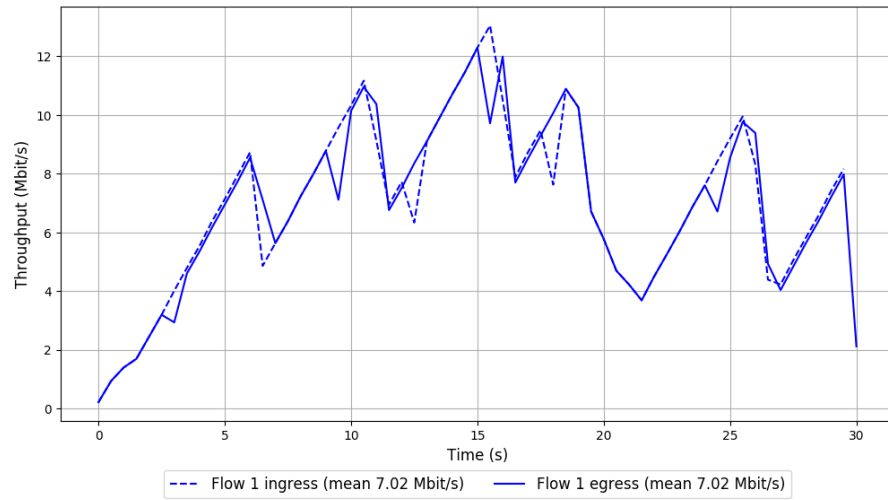
-- Flow 1:

Average throughput: 7.02 Mbit/s

95th percentile per-packet one-way delay: 64.445 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-11 20:50:37

End at: 2017-12-11 20:51:07

Below is generated by plot.py at 2017-12-11 21:49:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.76 Mbit/s

95th percentile per-packet one-way delay: 64.567 ms

Loss rate: 0.00%

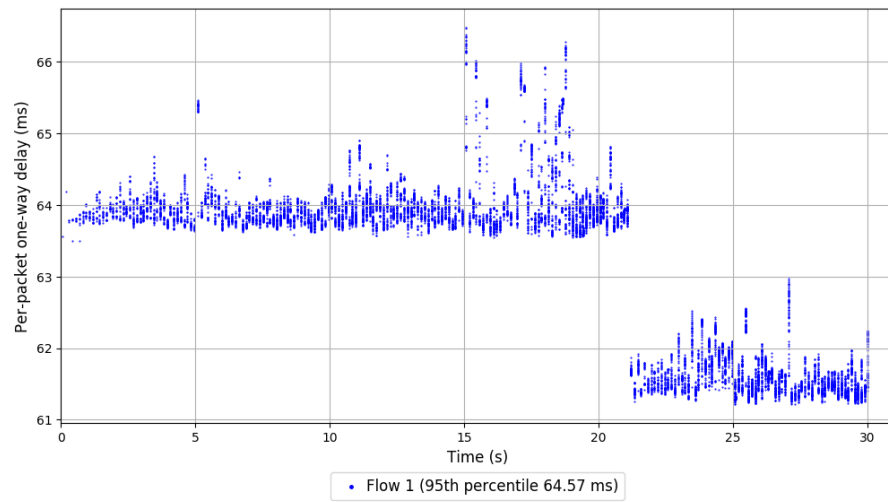
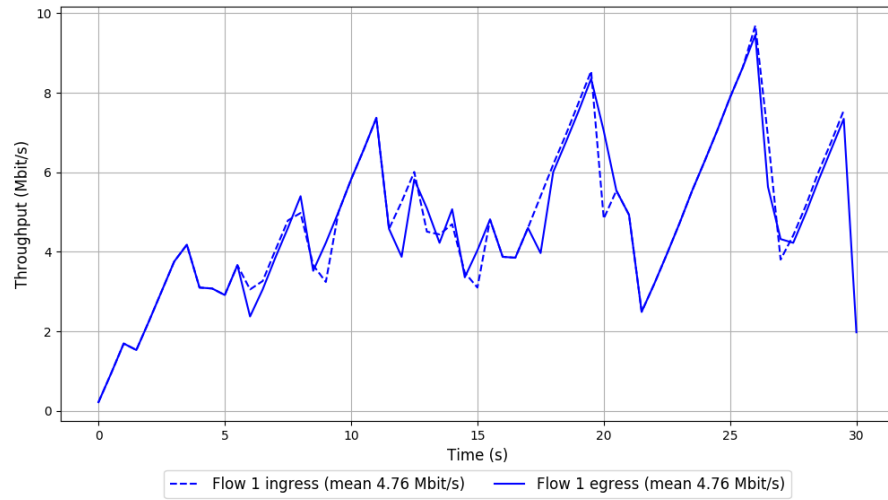
-- Flow 1:

Average throughput: 4.76 Mbit/s

95th percentile per-packet one-way delay: 64.567 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

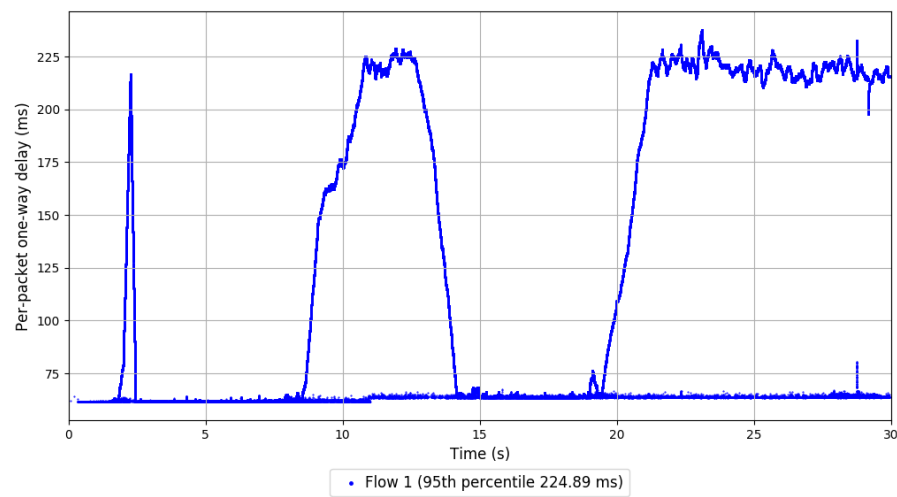
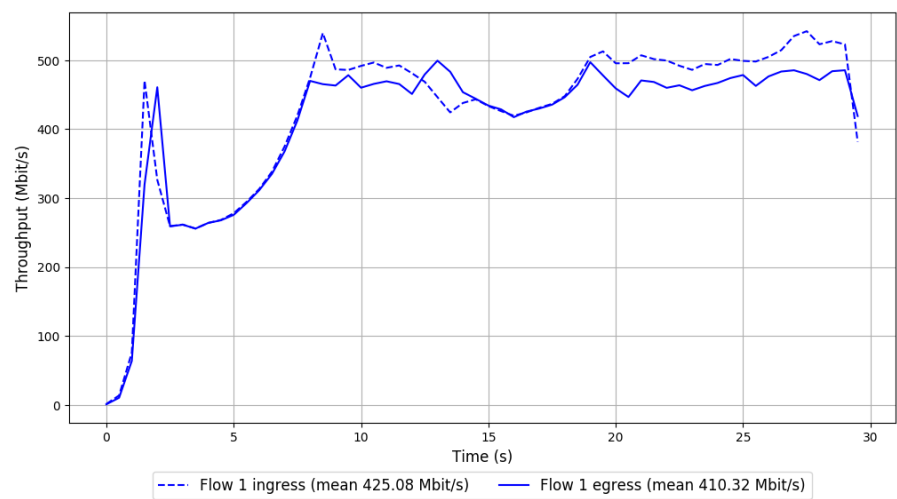


```
Run 1: Statistics of PCC

Start at: 2017-12-11 19:12:26
End at: 2017-12-11 19:12:57

# Below is generated by plot.py at 2017-12-11 21:55:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 410.32 Mbit/s
95th percentile per-packet one-way delay: 224.893 ms
Loss rate: 3.47%
-- Flow 1:
Average throughput: 410.32 Mbit/s
95th percentile per-packet one-way delay: 224.893 ms
Loss rate: 3.47%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-11 19:22:59

End at: 2017-12-11 19:23:29

Below is generated by plot.py at 2017-12-11 21:56:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 467.55 Mbit/s

95th percentile per-packet one-way delay: 210.948 ms

Loss rate: 1.36%

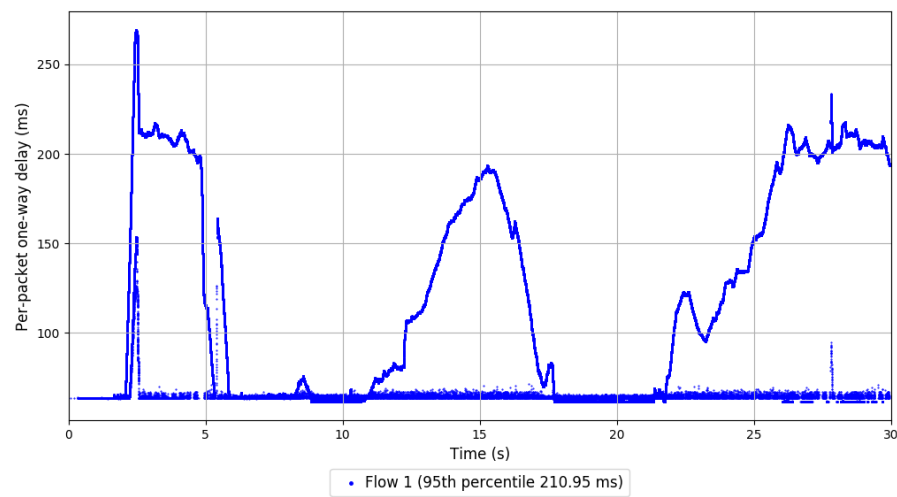
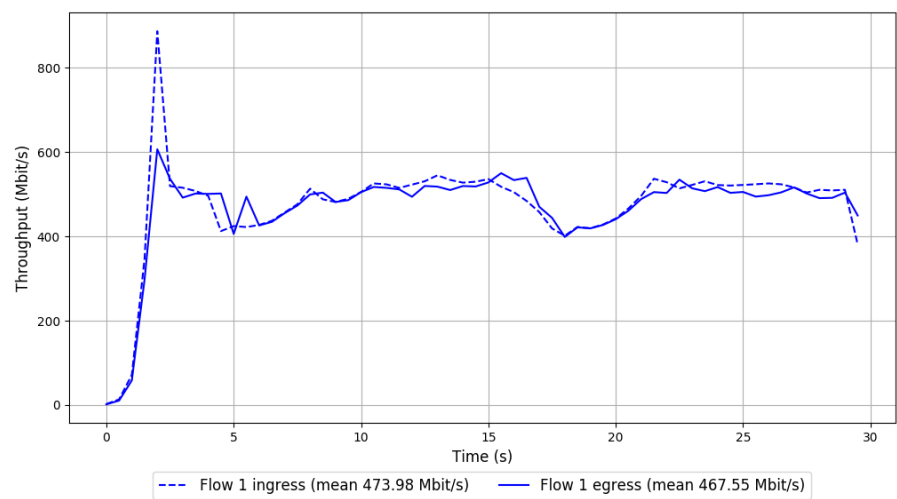
-- Flow 1:

Average throughput: 467.55 Mbit/s

95th percentile per-packet one-way delay: 210.948 ms

Loss rate: 1.36%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-11 19:33:33

End at: 2017-12-11 19:34:03

Below is generated by plot.py at 2017-12-11 21:56:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 344.43 Mbit/s

95th percentile per-packet one-way delay: 139.794 ms

Loss rate: 0.39%

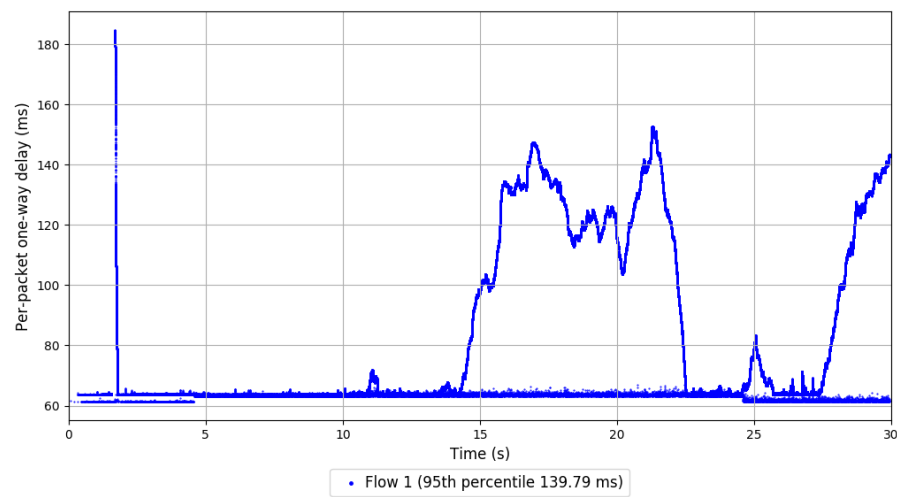
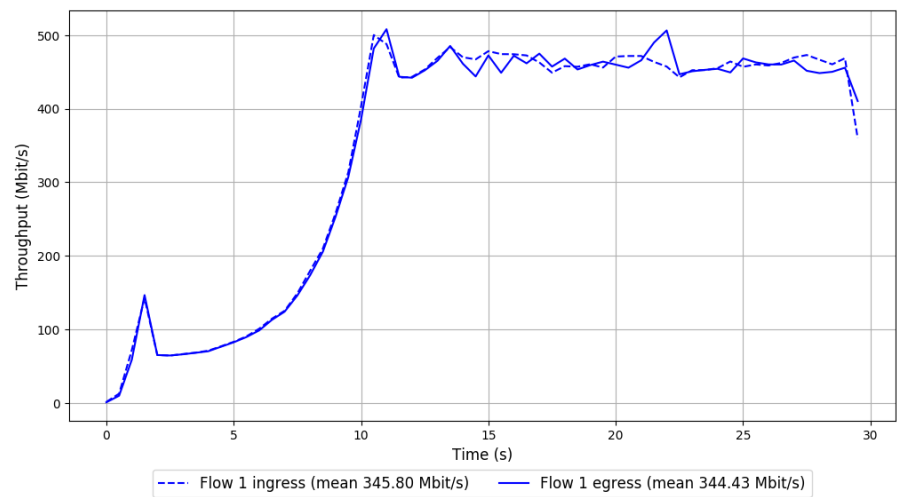
-- Flow 1:

Average throughput: 344.43 Mbit/s

95th percentile per-packet one-way delay: 139.794 ms

Loss rate: 0.39%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-11 19:43:51

End at: 2017-12-11 19:44:21

Below is generated by plot.py at 2017-12-11 21:56:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 430.98 Mbit/s

95th percentile per-packet one-way delay: 205.172 ms

Loss rate: 0.69%

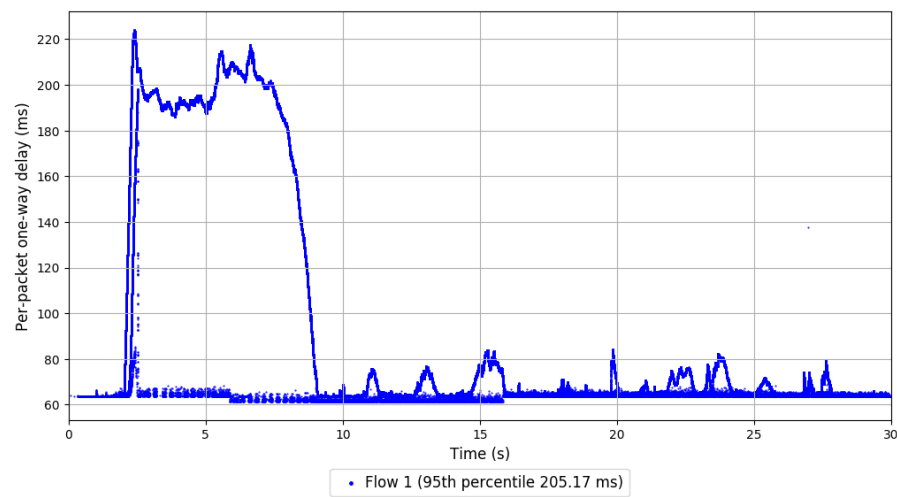
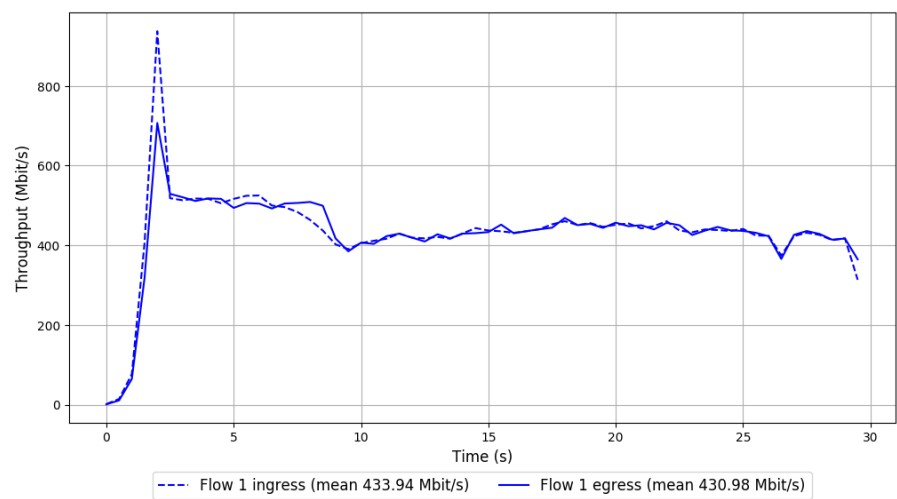
-- Flow 1:

Average throughput: 430.98 Mbit/s

95th percentile per-packet one-way delay: 205.172 ms

Loss rate: 0.69%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-11 19:54:26

End at: 2017-12-11 19:54:56

Below is generated by plot.py at 2017-12-11 21:56:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 449.02 Mbit/s

95th percentile per-packet one-way delay: 224.082 ms

Loss rate: 1.94%

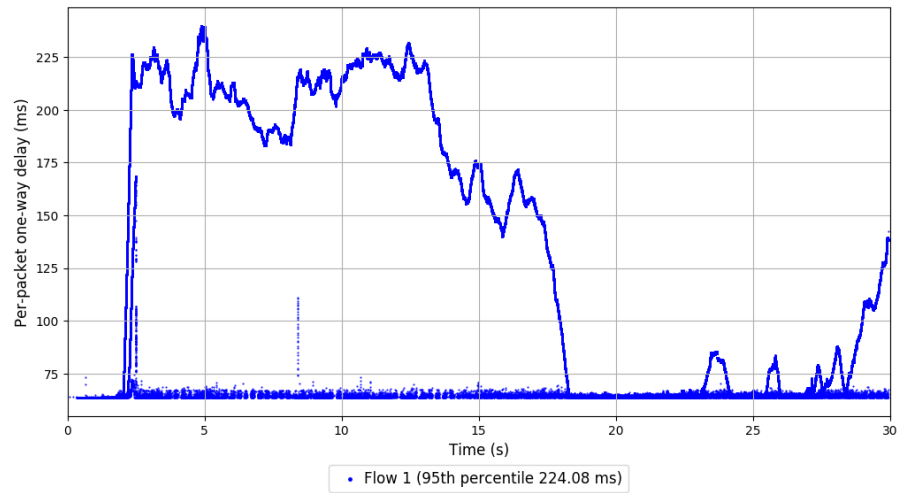
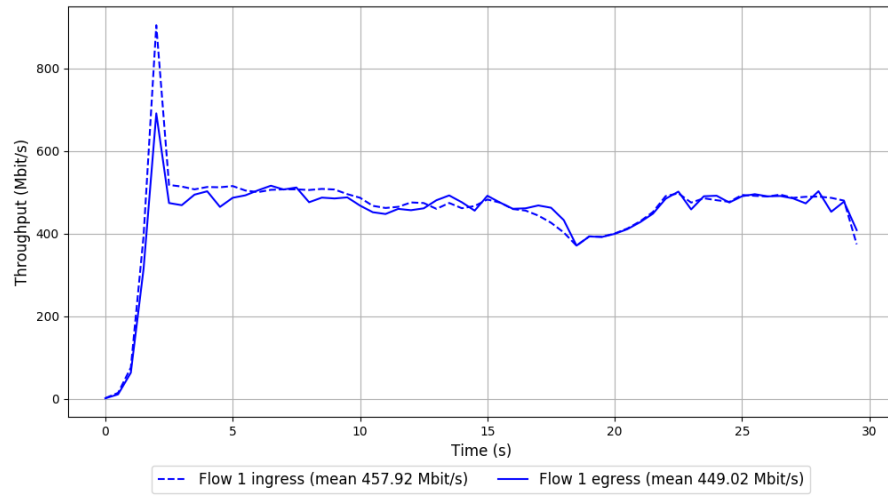
-- Flow 1:

Average throughput: 449.02 Mbit/s

95th percentile per-packet one-way delay: 224.082 ms

Loss rate: 1.94%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-11 20:05:04

End at: 2017-12-11 20:05:34

Below is generated by plot.py at 2017-12-11 21:57:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 460.85 Mbit/s

95th percentile per-packet one-way delay: 223.544 ms

Loss rate: 0.88%

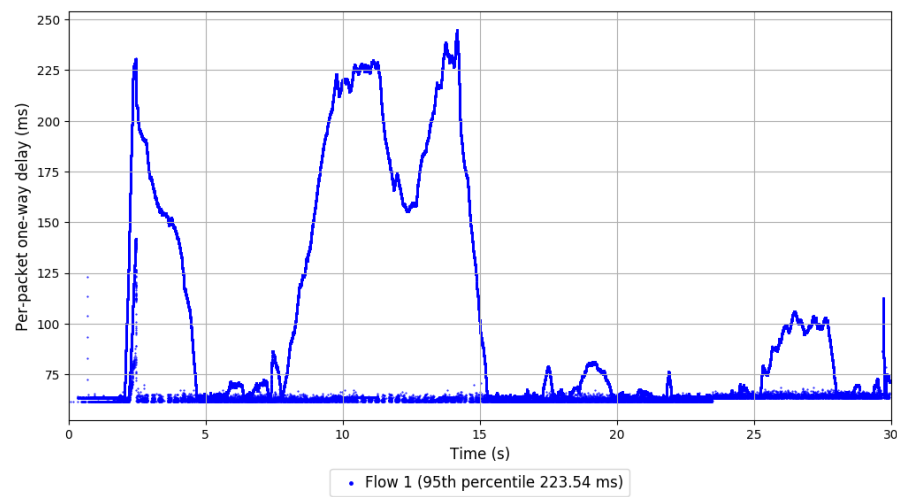
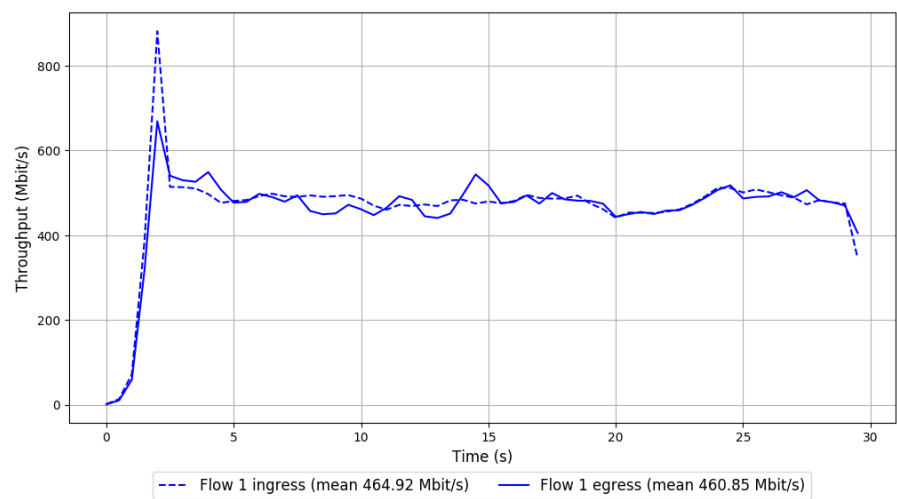
-- Flow 1:

Average throughput: 460.85 Mbit/s

95th percentile per-packet one-way delay: 223.544 ms

Loss rate: 0.88%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-11 20:15:37

End at: 2017-12-11 20:16:07

Below is generated by plot.py at 2017-12-11 21:57:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 422.08 Mbit/s

95th percentile per-packet one-way delay: 214.643 ms

Loss rate: 1.40%

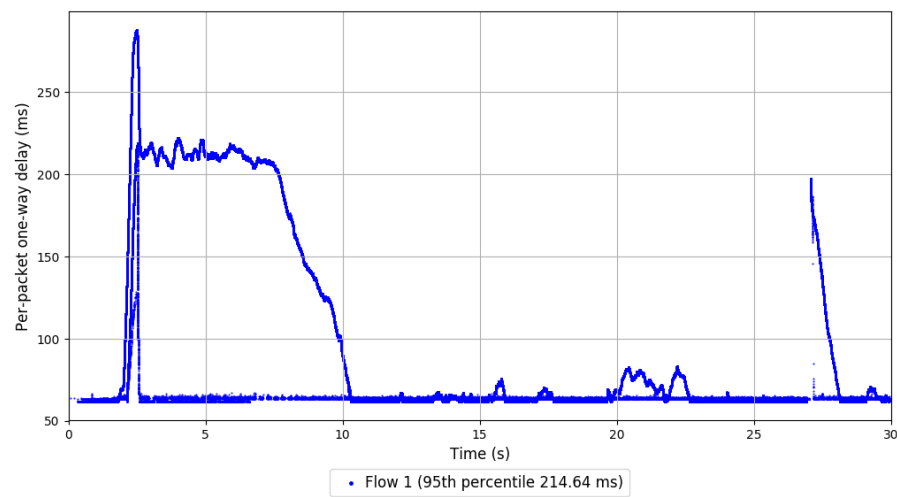
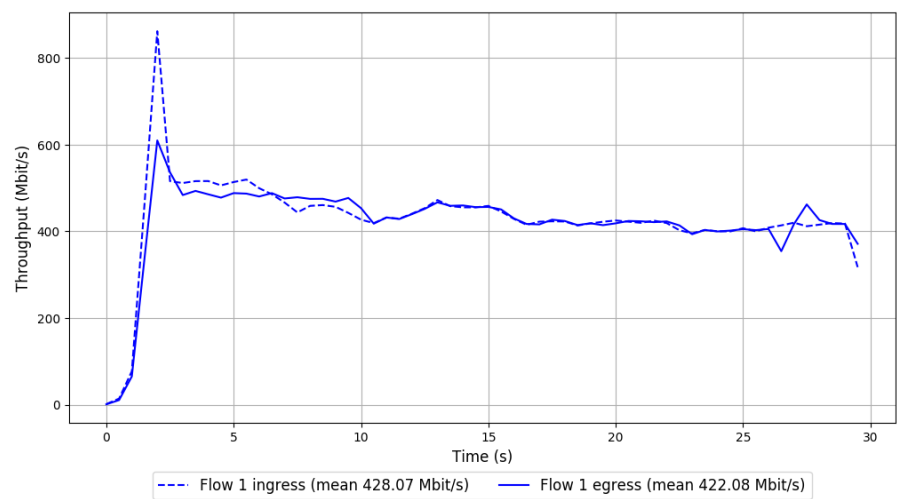
-- Flow 1:

Average throughput: 422.08 Mbit/s

95th percentile per-packet one-way delay: 214.643 ms

Loss rate: 1.40%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-11 20:26:20

End at: 2017-12-11 20:26:50

Below is generated by plot.py at 2017-12-11 21:57:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 436.95 Mbit/s

95th percentile per-packet one-way delay: 217.997 ms

Loss rate: 1.13%

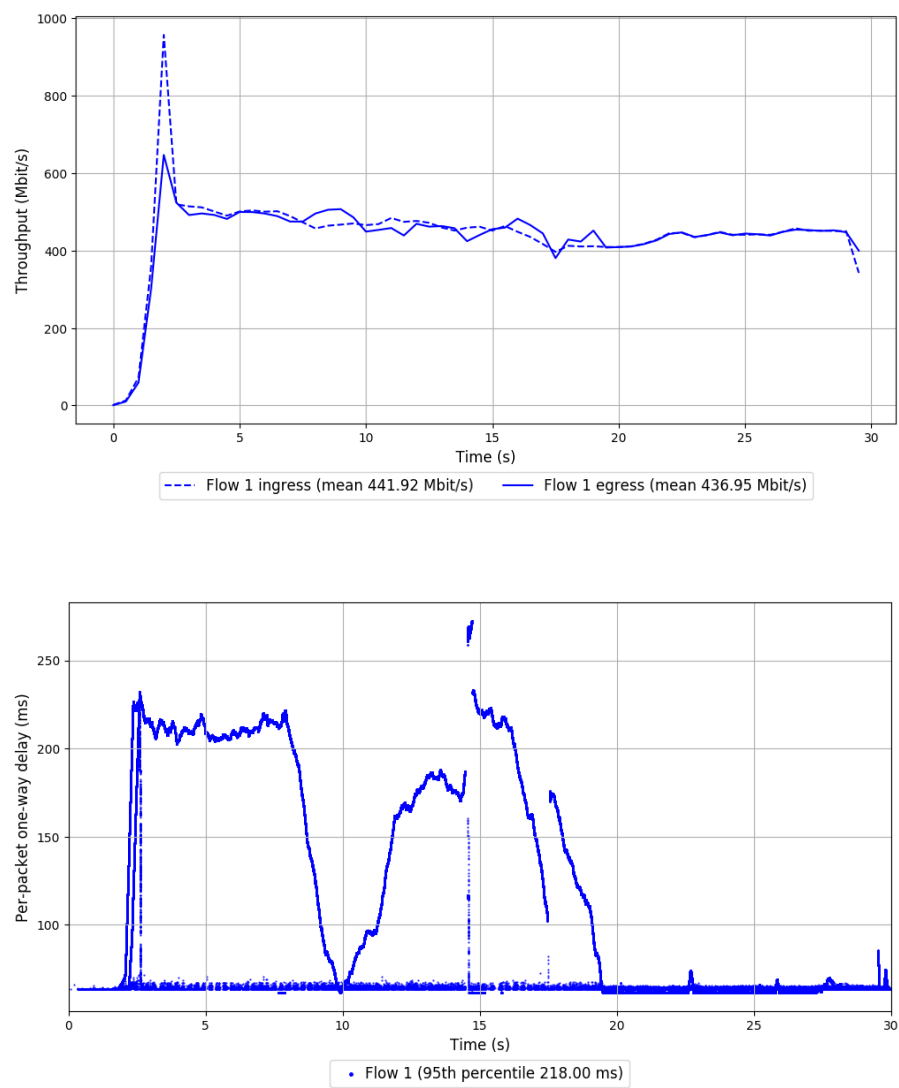
-- Flow 1:

Average throughput: 436.95 Mbit/s

95th percentile per-packet one-way delay: 217.997 ms

Loss rate: 1.13%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-11 20:36:48

End at: 2017-12-11 20:37:18

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 439.10 Mbit/s

95th percentile per-packet one-way delay: 224.256 ms

Loss rate: 1.60%

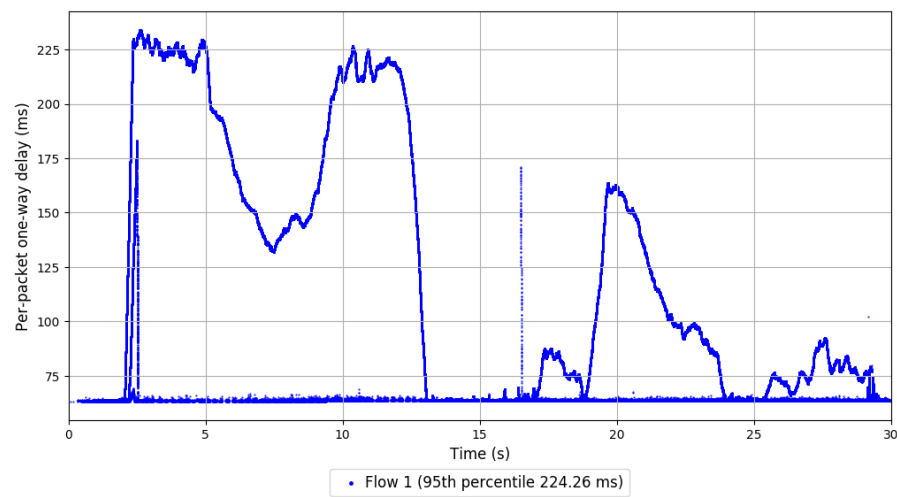
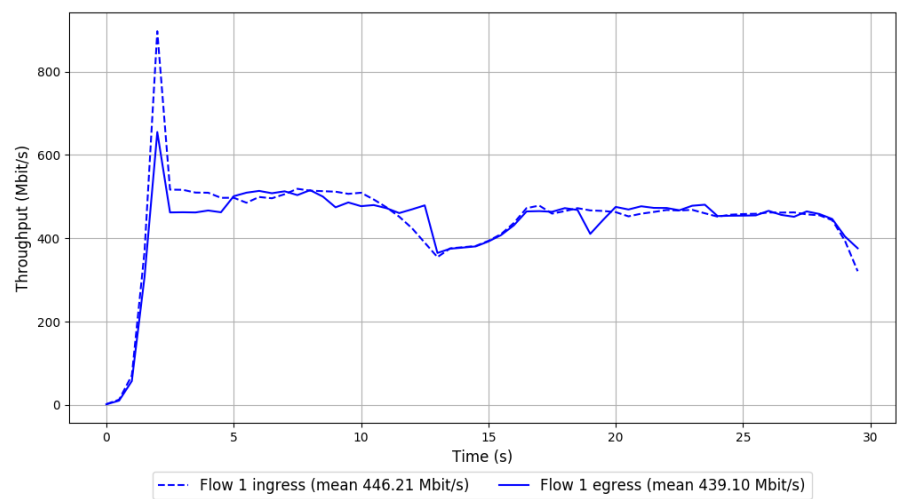
-- Flow 1:

Average throughput: 439.10 Mbit/s

95th percentile per-packet one-way delay: 224.256 ms

Loss rate: 1.60%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-11 20:47:06

End at: 2017-12-11 20:47:36

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 315.52 Mbit/s

95th percentile per-packet one-way delay: 213.527 ms

Loss rate: 0.97%

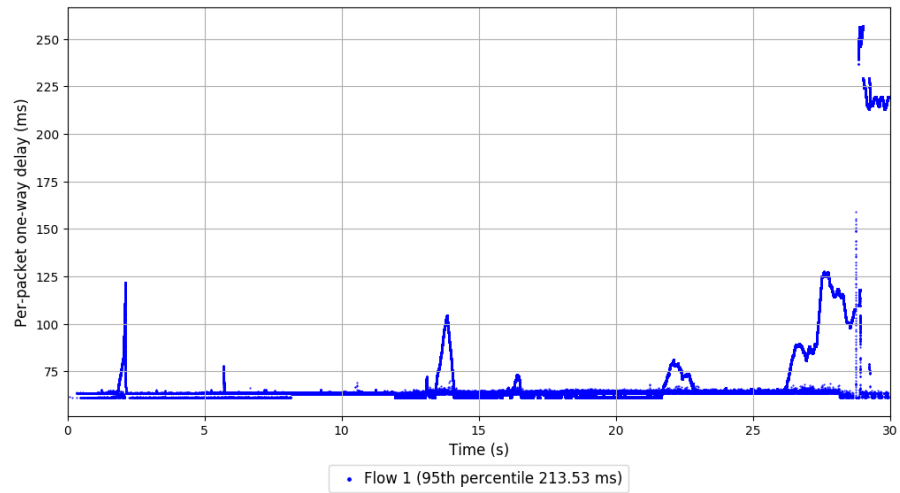
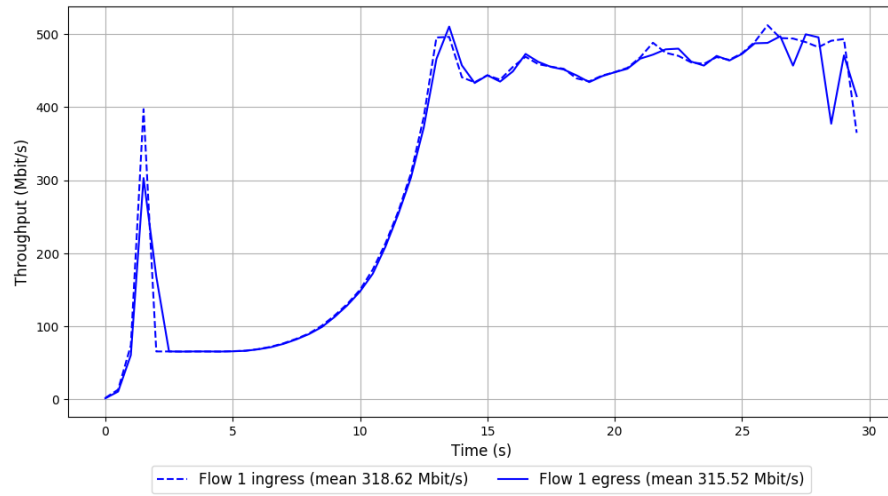
-- Flow 1:

Average throughput: 315.52 Mbit/s

95th percentile per-packet one-way delay: 213.527 ms

Loss rate: 0.97%

Run 10: Report of PCC — Data Link

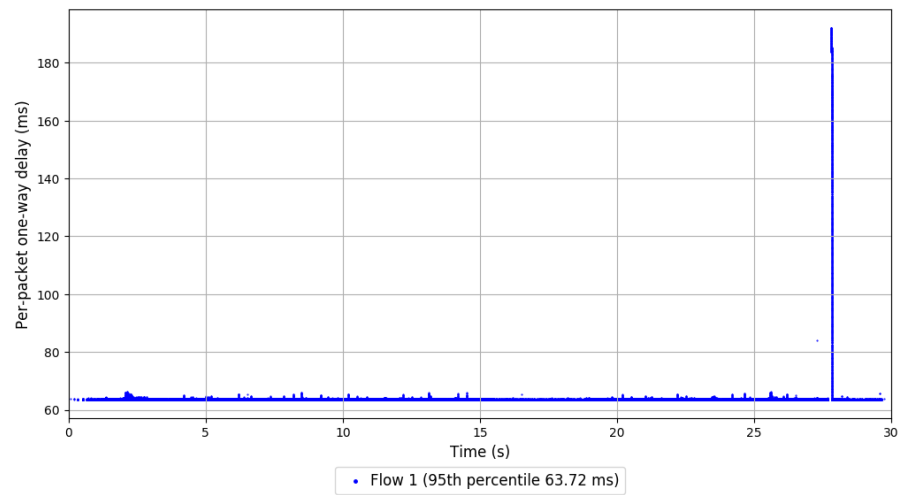
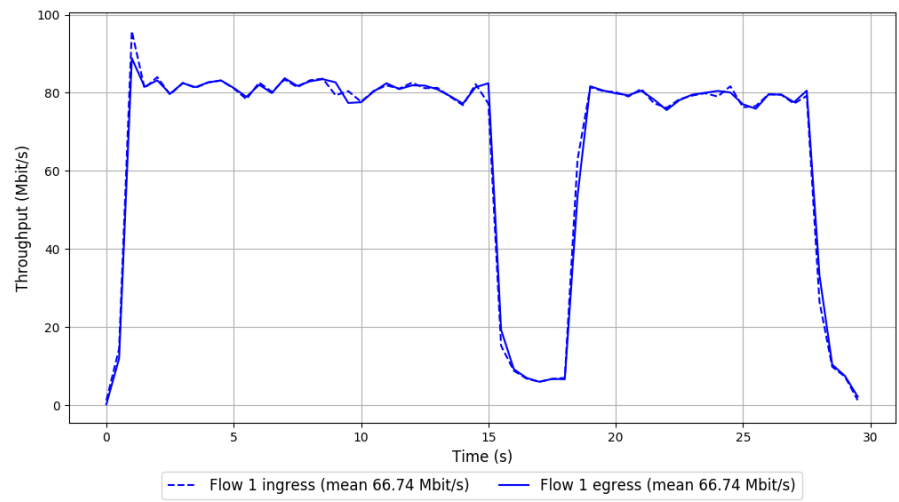


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-11 19:14:06
End at: 2017-12-11 19:14:37

# Below is generated by plot.py at 2017-12-11 22:02:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.74 Mbit/s
95th percentile per-packet one-way delay: 63.719 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.74 Mbit/s
95th percentile per-packet one-way delay: 63.719 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-11 19:24:38

End at: 2017-12-11 19:25:08

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.21 Mbit/s

95th percentile per-packet one-way delay: 63.610 ms

Loss rate: 0.01%

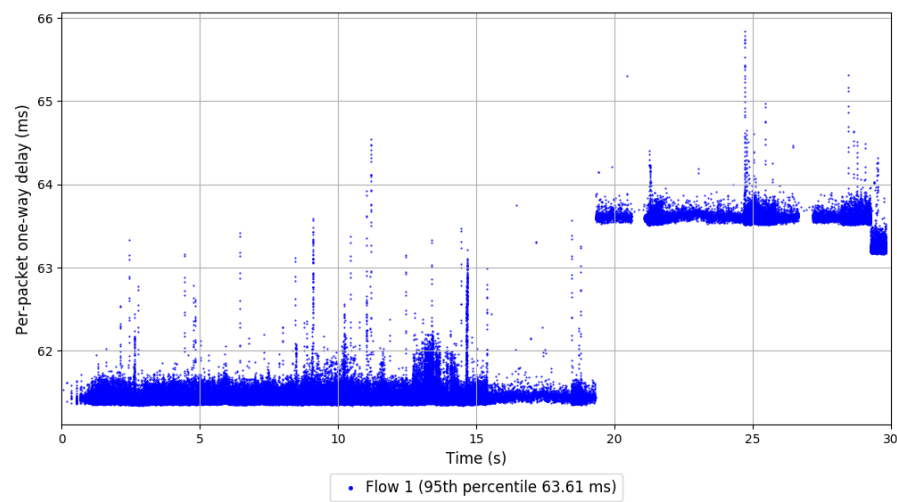
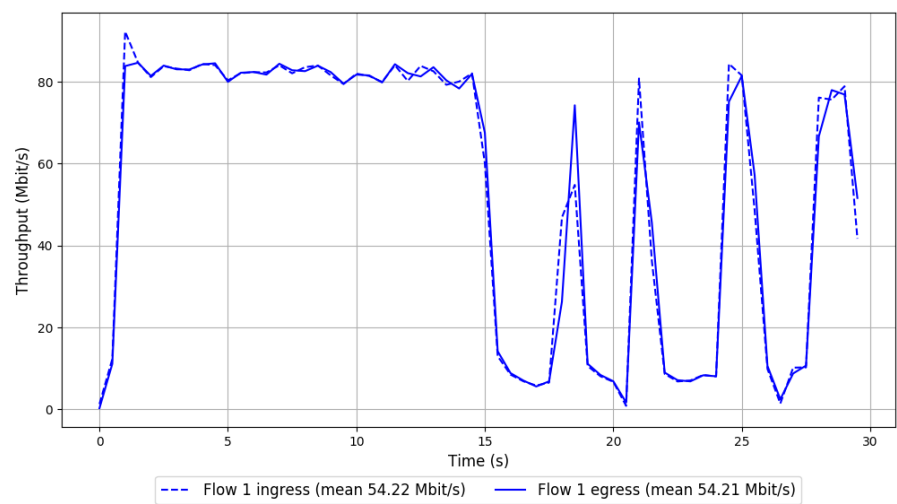
-- Flow 1:

Average throughput: 54.21 Mbit/s

95th percentile per-packet one-way delay: 63.610 ms

Loss rate: 0.01%

Run 2: Report of QUIC Cubic — Data Link

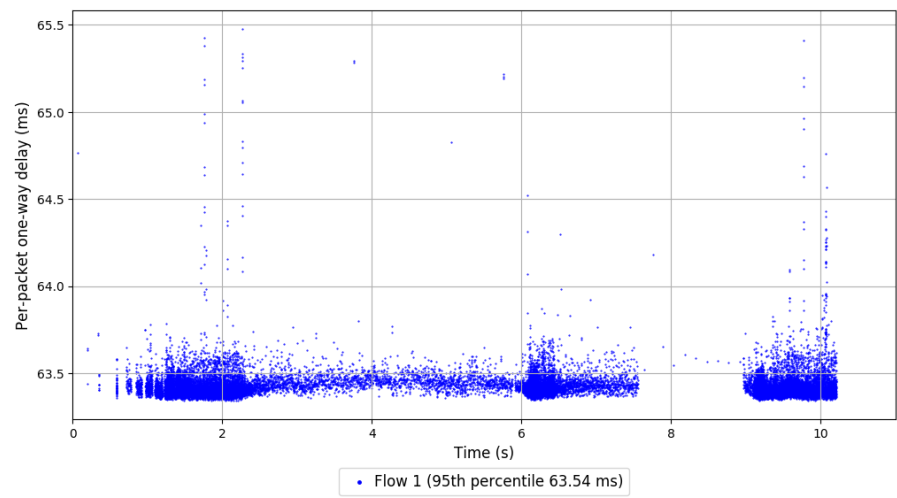
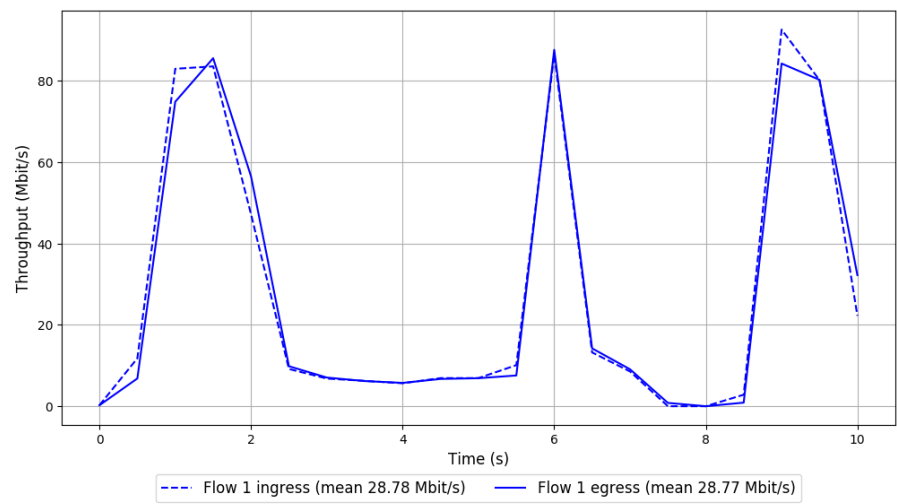


Run 3: Statistics of QUIC Cubic

Start at: 2017-12-11 19:35:07

End at: 2017-12-11 19:35:37

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-11 19:45:31

End at: 2017-12-11 19:46:01

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.36 Mbit/s

95th percentile per-packet one-way delay: 63.661 ms

Loss rate: 0.00%

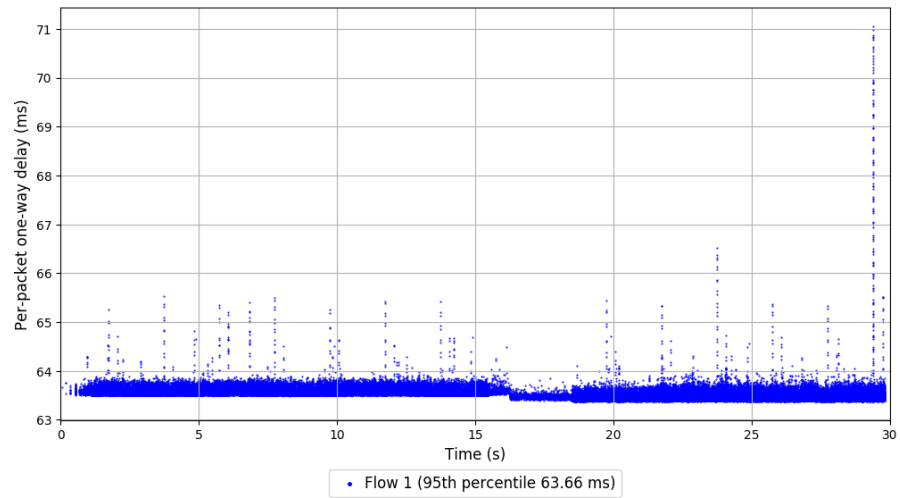
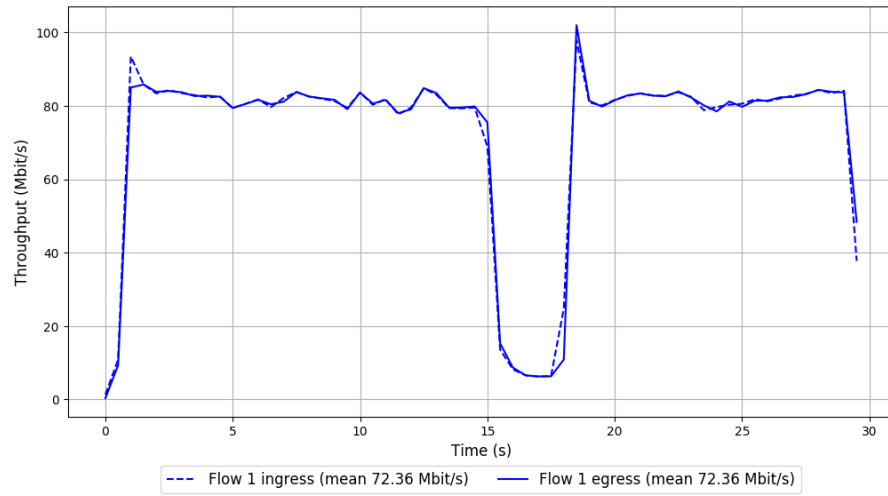
-- Flow 1:

Average throughput: 72.36 Mbit/s

95th percentile per-packet one-way delay: 63.661 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-11 19:56:05

End at: 2017-12-11 19:56:35

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.89 Mbit/s

95th percentile per-packet one-way delay: 63.614 ms

Loss rate: 0.12%

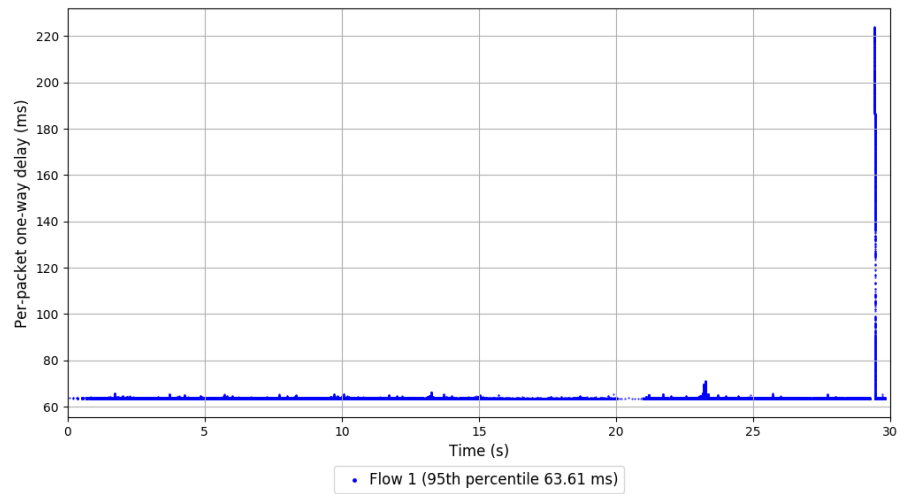
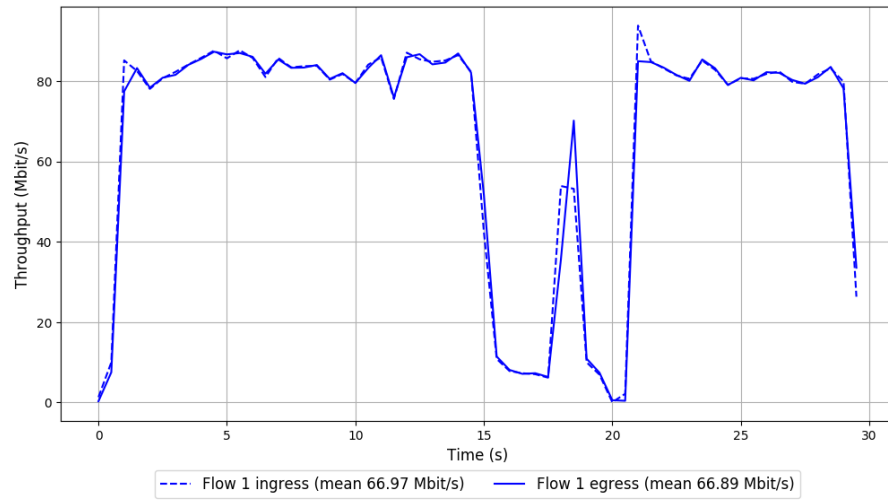
-- Flow 1:

Average throughput: 66.89 Mbit/s

95th percentile per-packet one-way delay: 63.614 ms

Loss rate: 0.12%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-11 20:06:45

End at: 2017-12-11 20:07:15

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.48 Mbit/s

95th percentile per-packet one-way delay: 63.628 ms

Loss rate: 0.00%

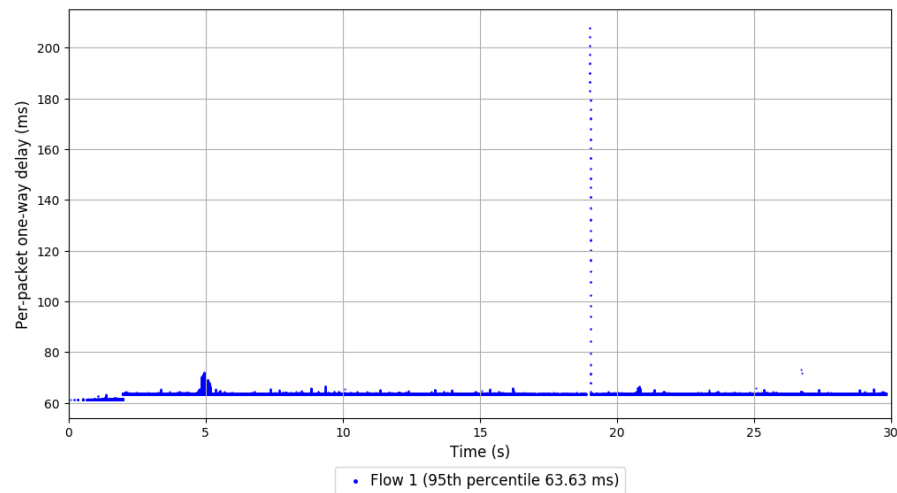
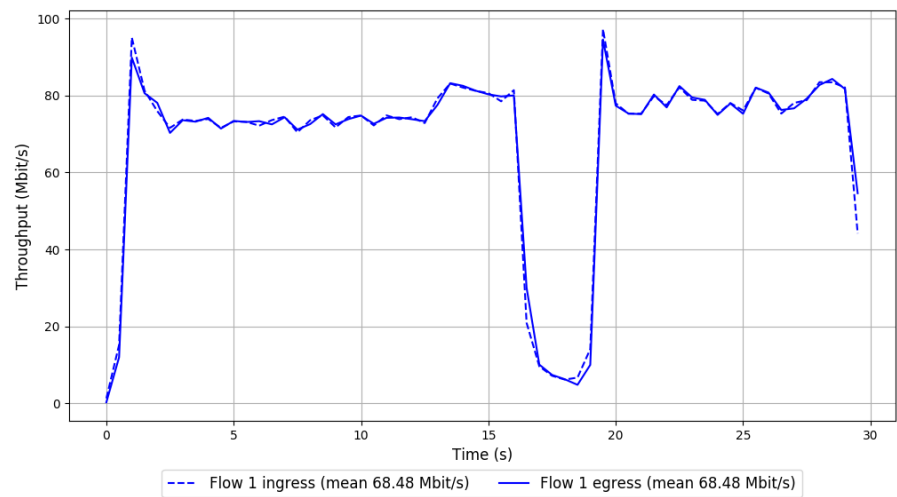
-- Flow 1:

Average throughput: 68.48 Mbit/s

95th percentile per-packet one-way delay: 63.628 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-11 20:17:17

End at: 2017-12-11 20:17:47

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.84 Mbit/s

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

Loss rate: 0.17%

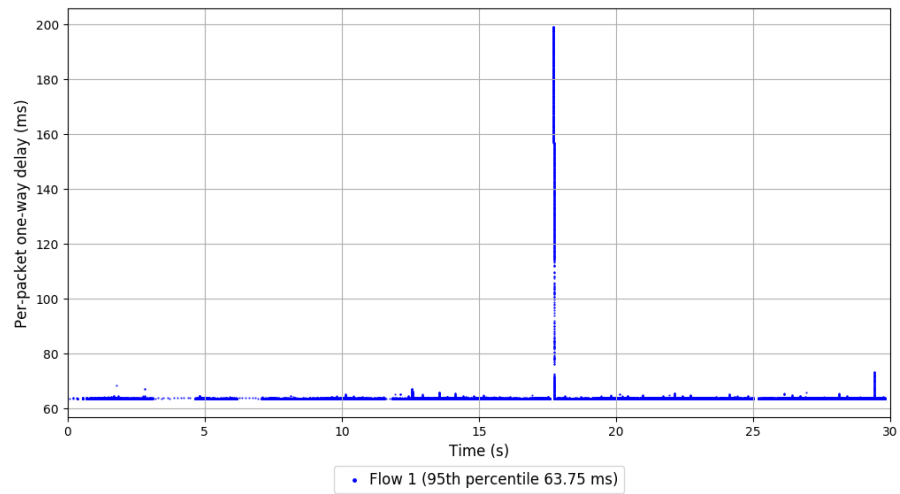
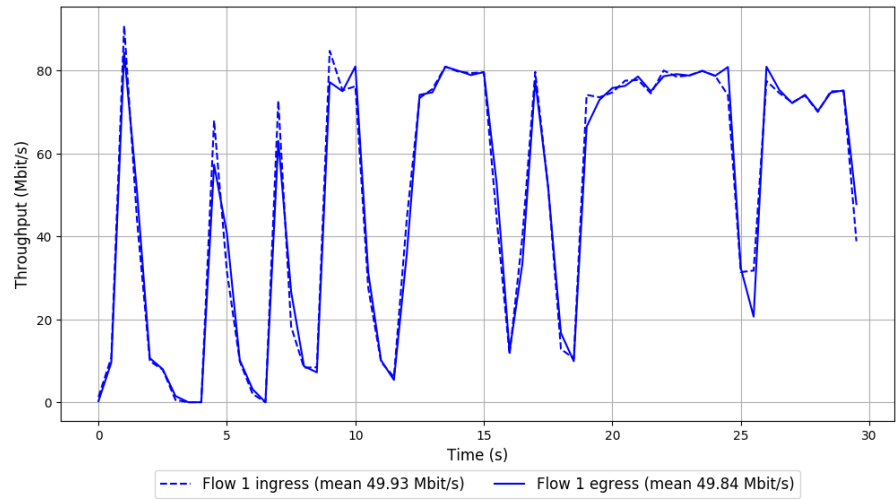
-- Flow 1:

Average throughput: 49.84 Mbit/s

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

Loss rate: 0.17%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-11 20:27:52

End at: 2017-12-11 20:28:22

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.81 Mbit/s

95th percentile per-packet one-way delay: 63.494 ms

Loss rate: 0.00%

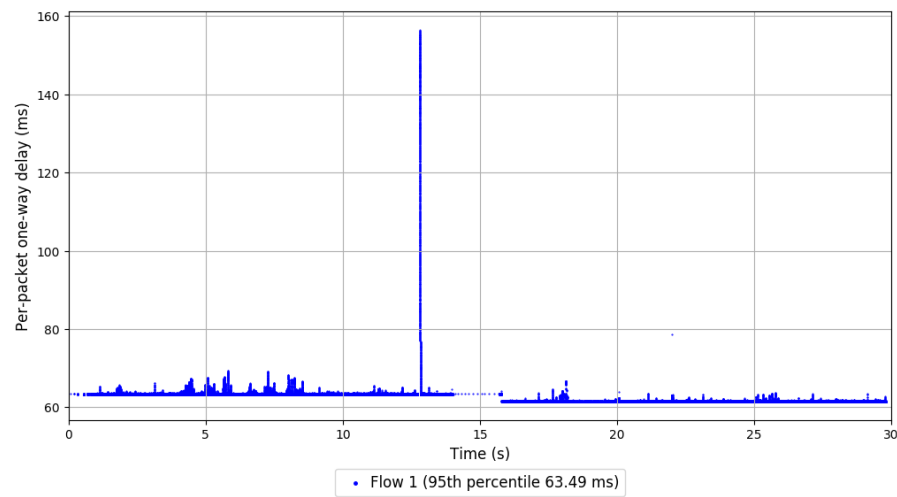
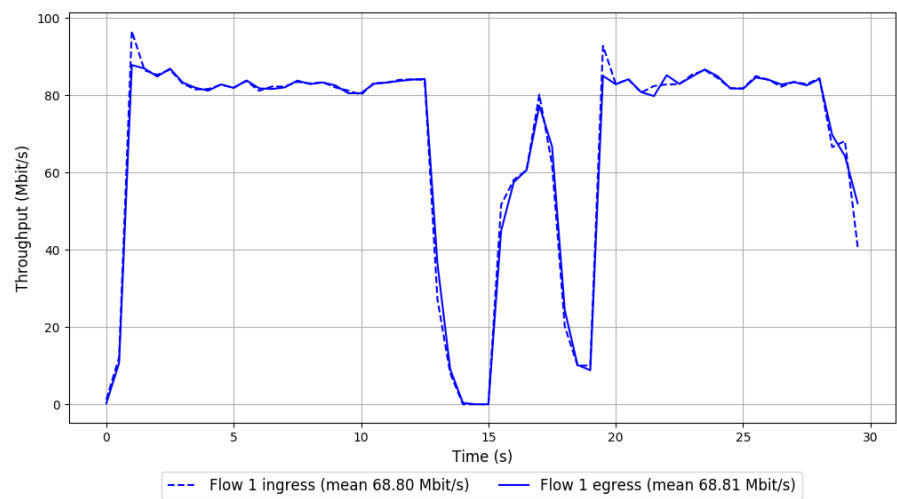
-- Flow 1:

Average throughput: 68.81 Mbit/s

95th percentile per-packet one-way delay: 63.494 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-11 20:38:20

End at: 2017-12-11 20:38:50

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.77 Mbit/s

95th percentile per-packet one-way delay: 63.746 ms

Loss rate: 0.01%

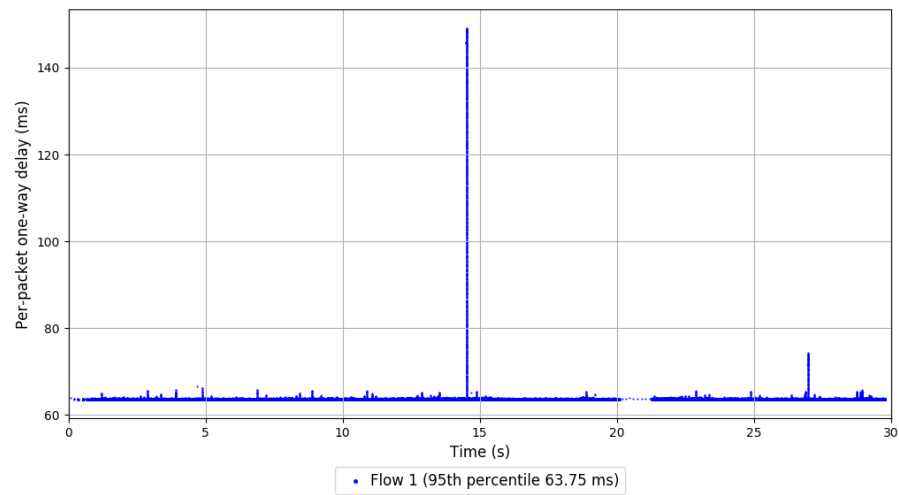
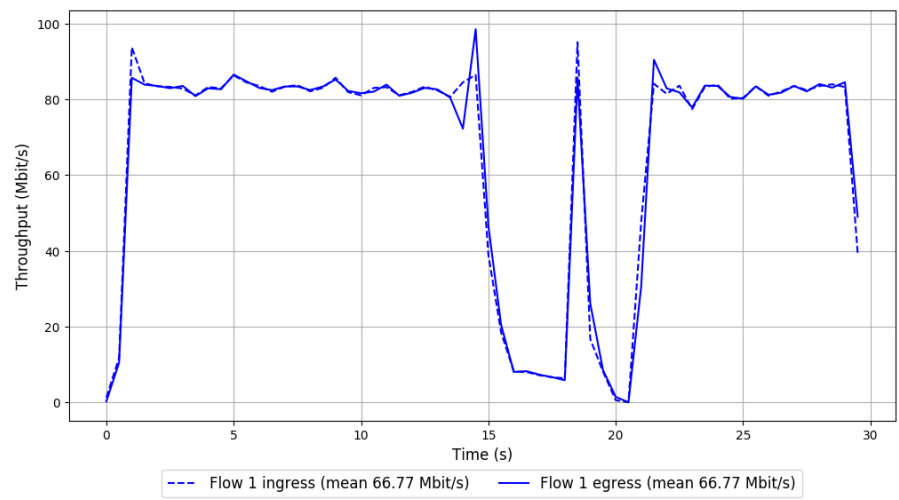
-- Flow 1:

Average throughput: 66.77 Mbit/s

95th percentile per-packet one-way delay: 63.746 ms

Loss rate: 0.01%

Run 9: Report of QUIC Cubic — Data Link

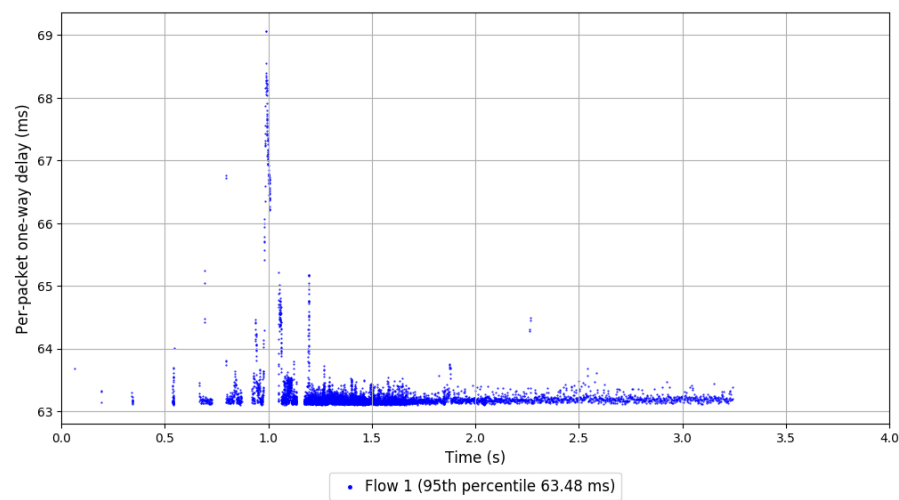
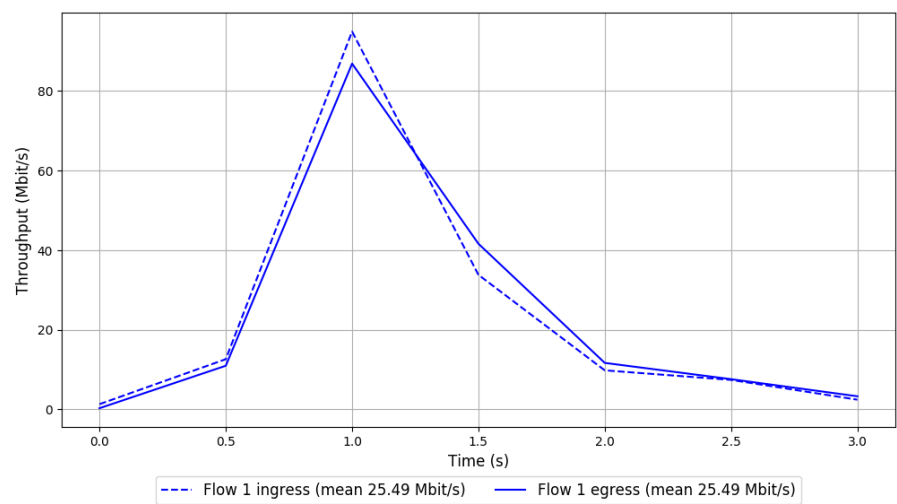


Run 10: Statistics of QUIC Cubic

Start at: 2017-12-11 20:48:40

End at: 2017-12-11 20:49:10

Run 10: Report of QUIC Cubic — Data Link

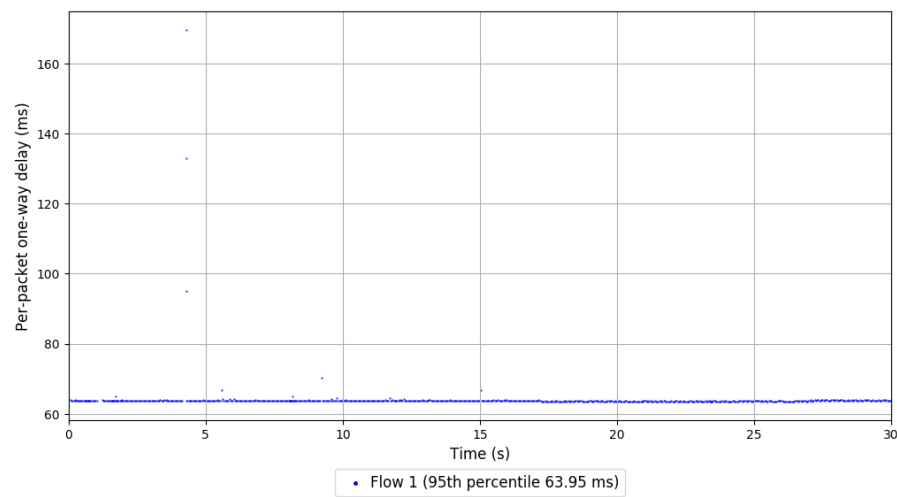
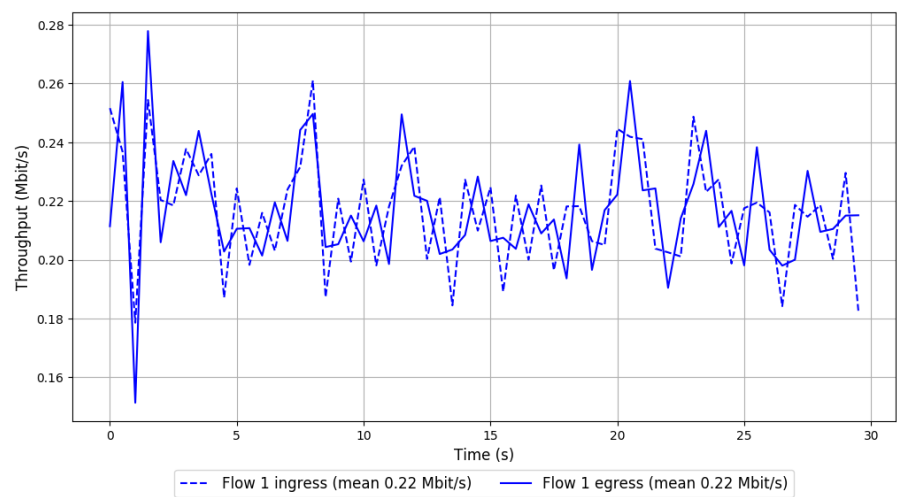


```
Run 1: Statistics of SCReAM

Start at: 2017-12-11 19:07:00
End at: 2017-12-11 19:07:30

# Below is generated by plot.py at 2017-12-11 22:02:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.950 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.950 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2017-12-11 19:17:40

End at: 2017-12-11 19:18:10

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.792 ms

Loss rate: 0.00%

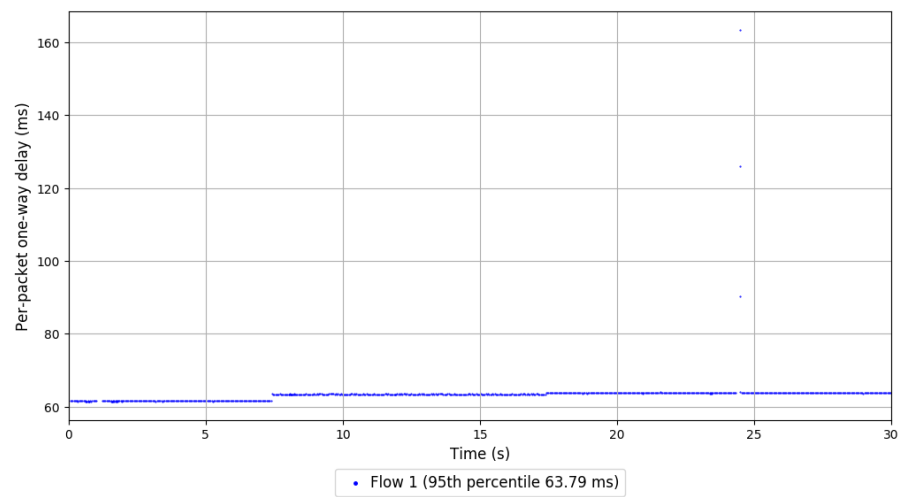
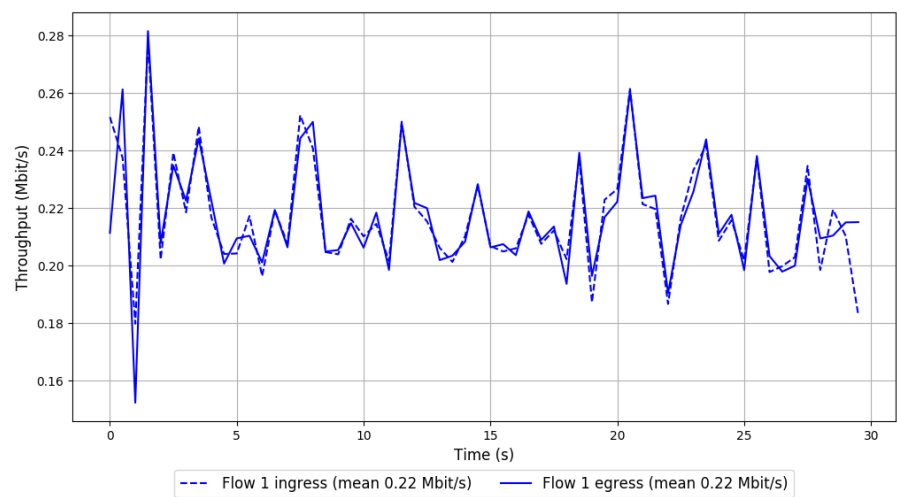
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.792 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-11 19:28:14

End at: 2017-12-11 19:28:44

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.417 ms

Loss rate: 0.00%

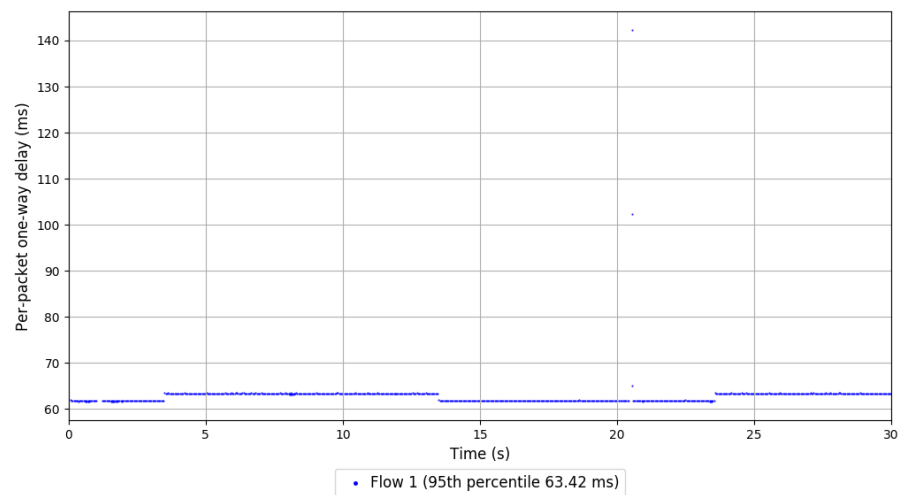
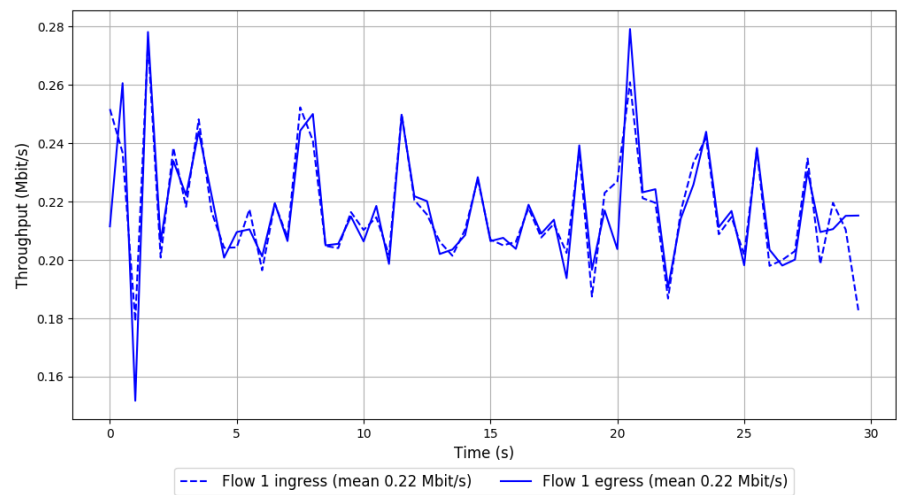
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.417 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-11 19:38:34

End at: 2017-12-11 19:39:04

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.637 ms

Loss rate: 0.00%

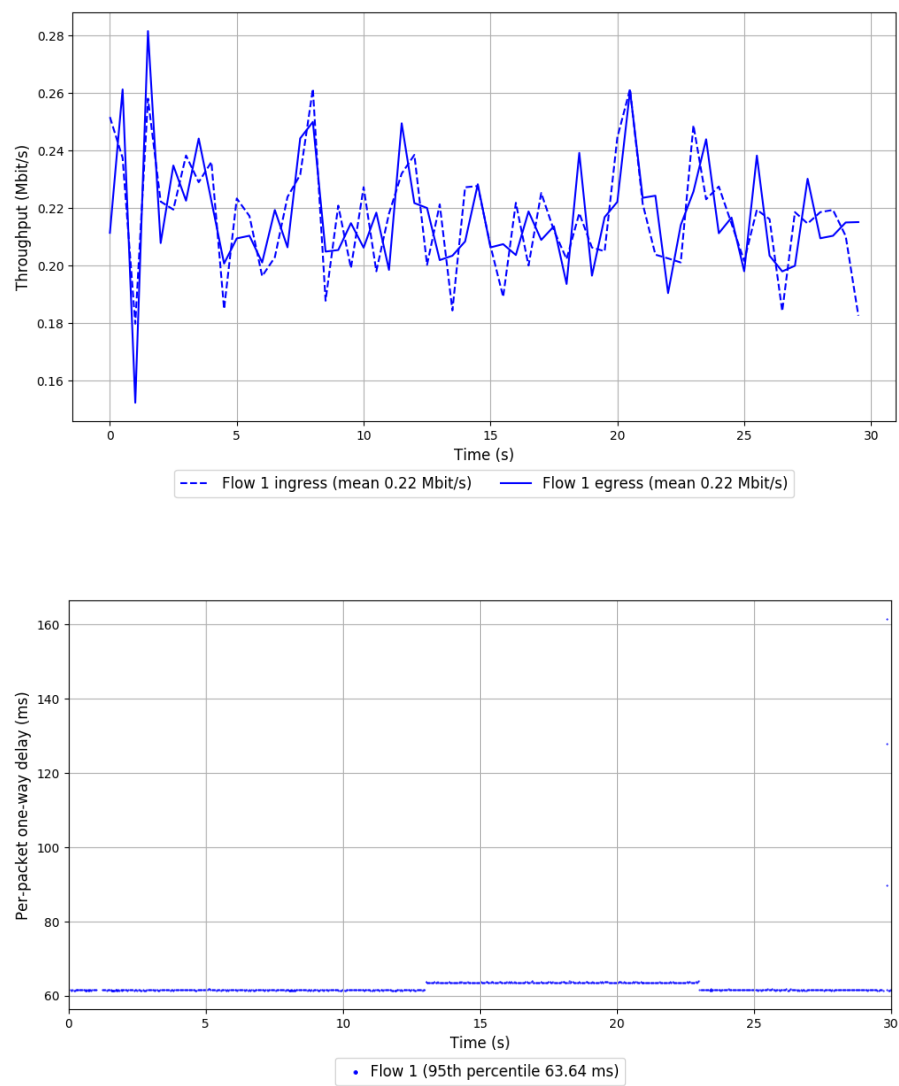
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.637 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-11 19:49:05

End at: 2017-12-11 19:49:35

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.744 ms

Loss rate: 0.00%

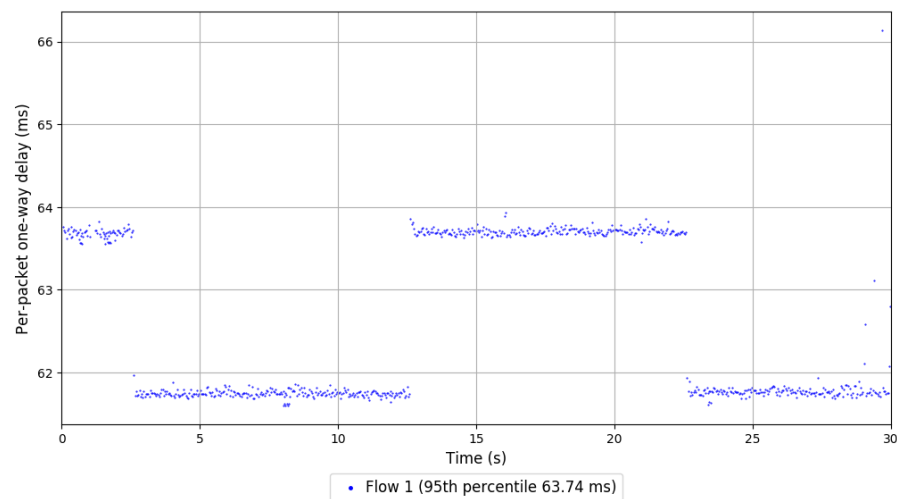
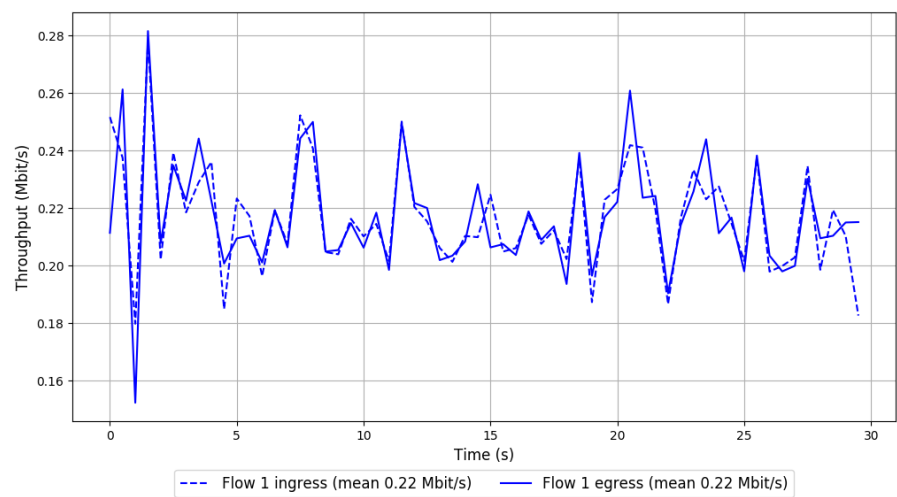
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.744 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-11 19:59:45

End at: 2017-12-11 20:00:15

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.415 ms

Loss rate: 0.00%

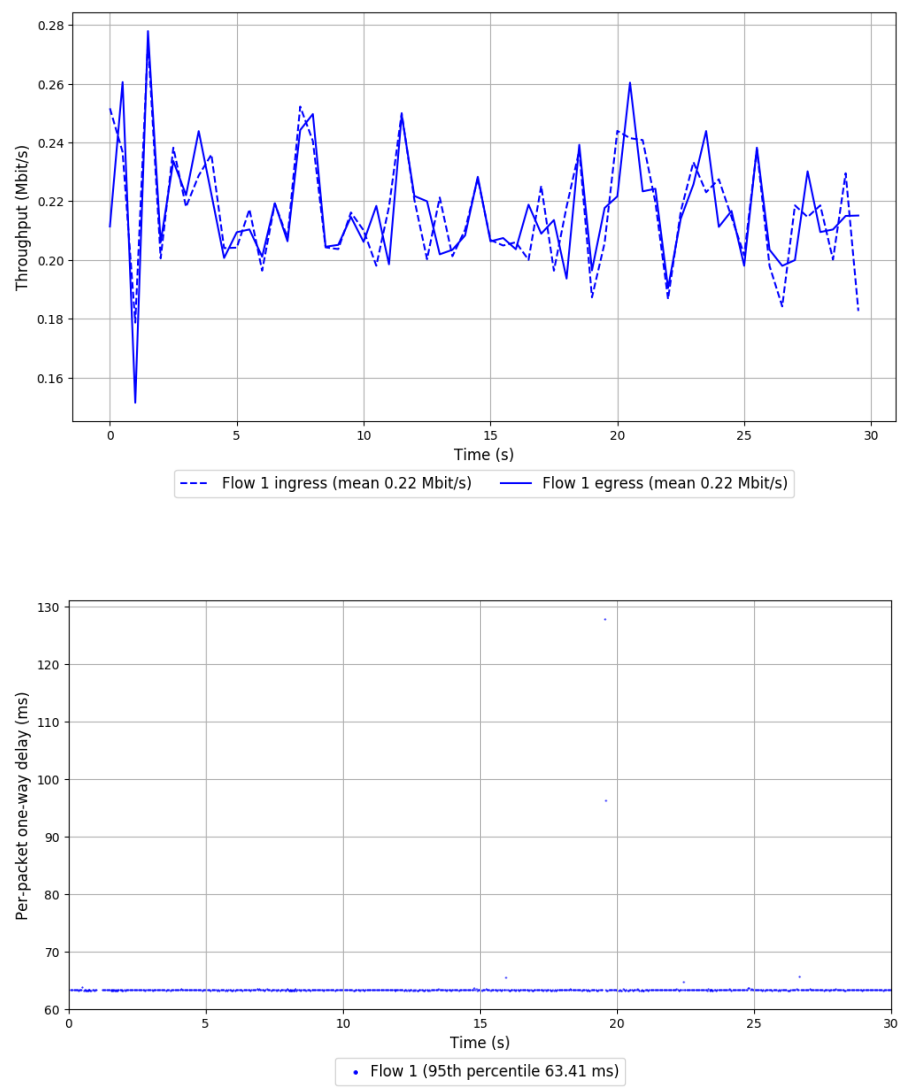
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.415 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-11 20:10:18

End at: 2017-12-11 20:10:48

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.808 ms

Loss rate: 0.00%

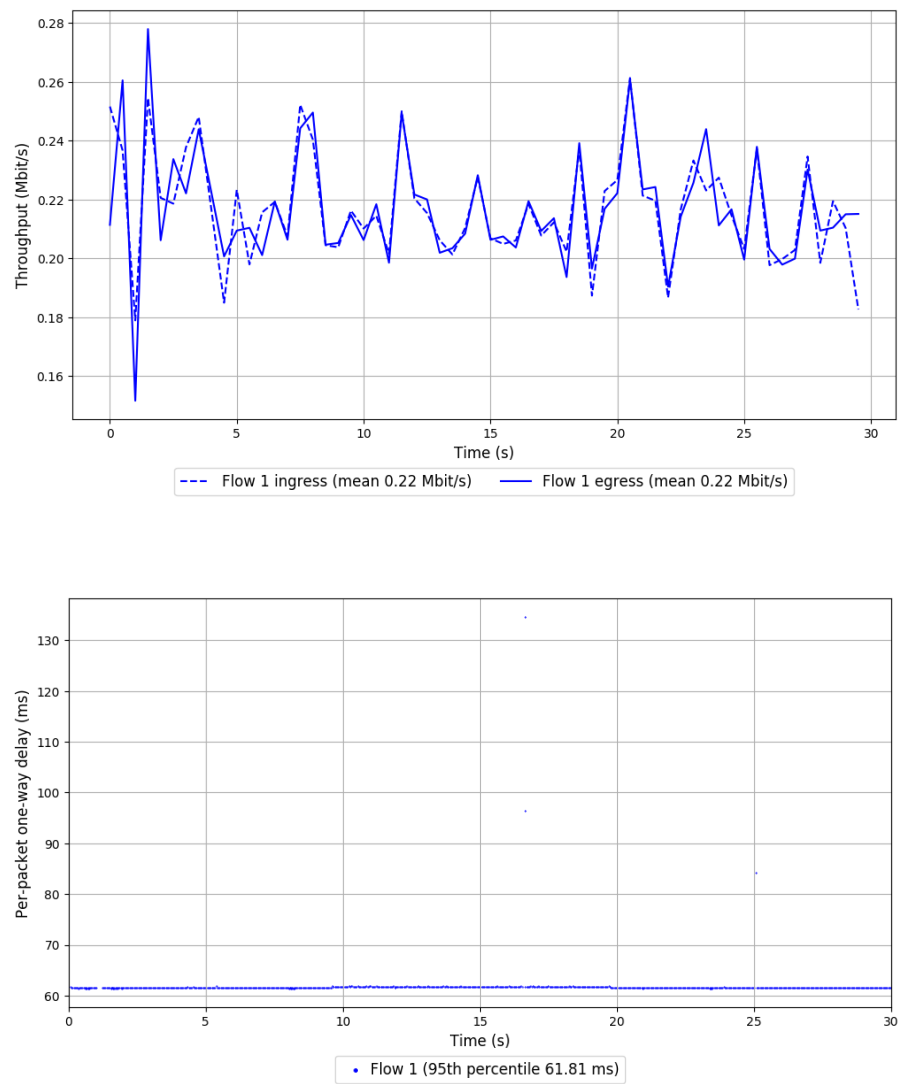
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.808 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-11 20:20:56

End at: 2017-12-11 20:21:26

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.422 ms

Loss rate: 0.00%

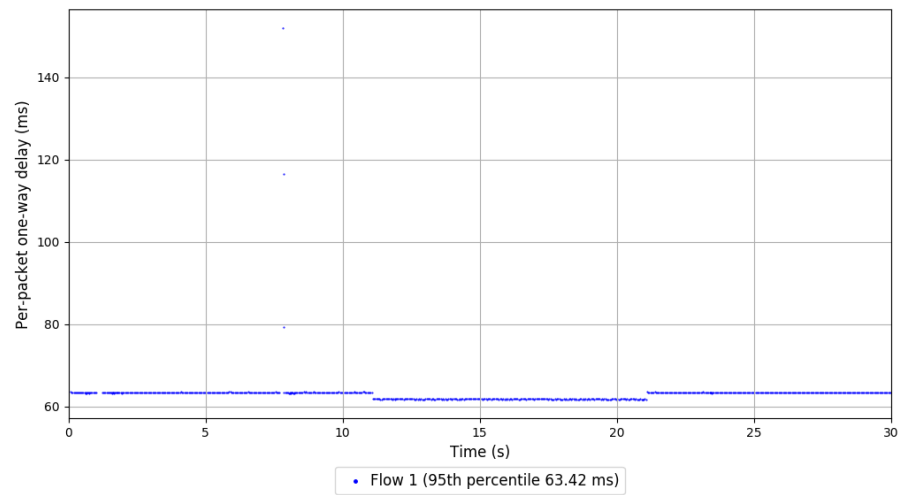
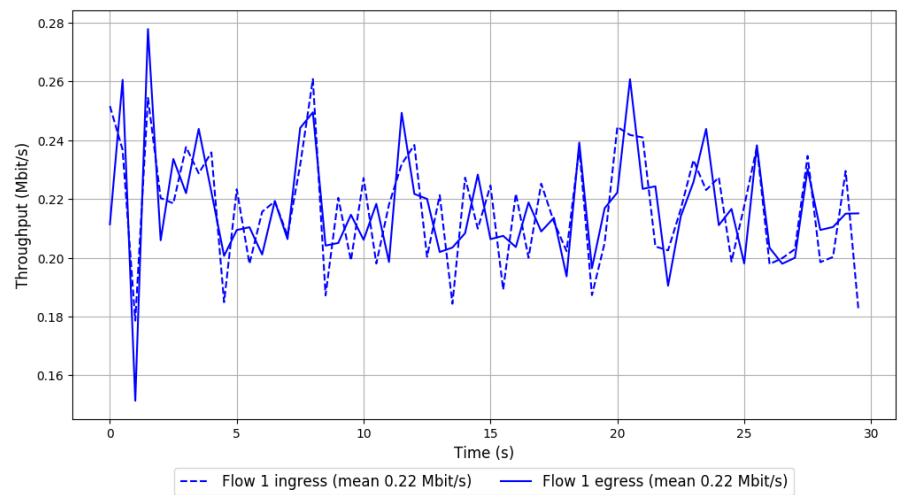
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.422 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-11 20:31:24

End at: 2017-12-11 20:31:54

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.856 ms

Loss rate: 0.00%

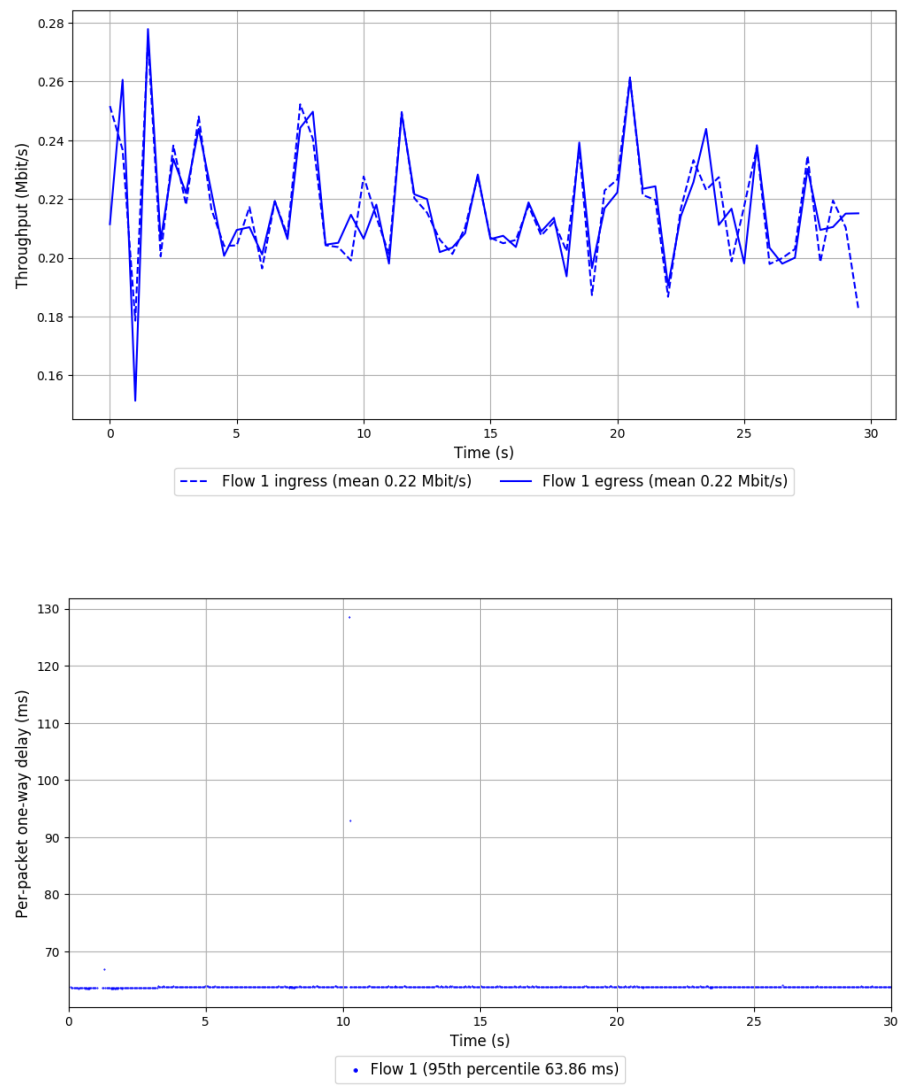
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.856 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-11 20:41:53

End at: 2017-12-11 20:42:23

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.769 ms

Loss rate: 0.00%

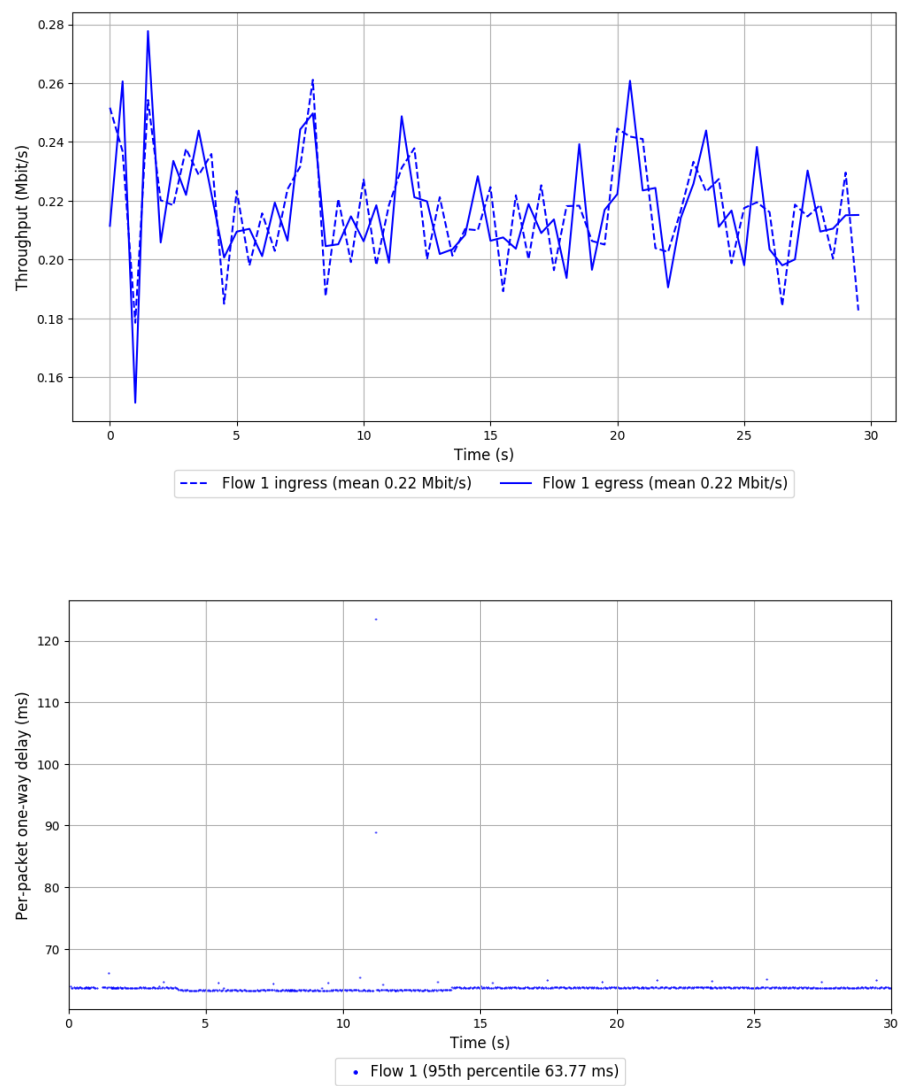
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.769 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

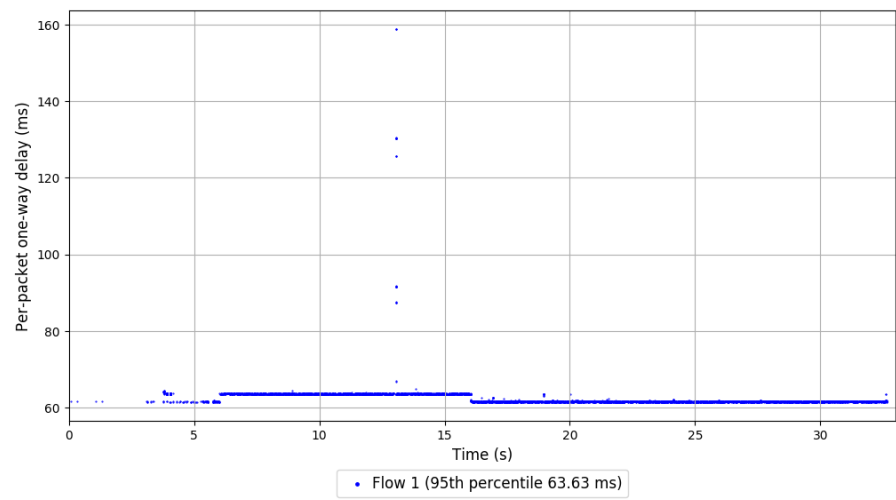
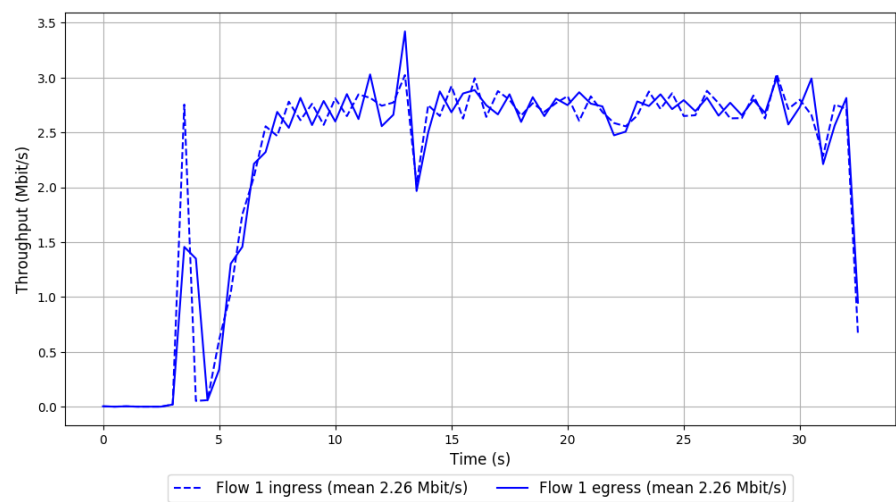


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-11 19:08:24
End at: 2017-12-11 19:08:54

# Below is generated by plot.py at 2017-12-11 22:02:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 63.632 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 63.632 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-11 19:18:59

End at: 2017-12-11 19:19:29

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 61.859 ms

Loss rate: 0.00%

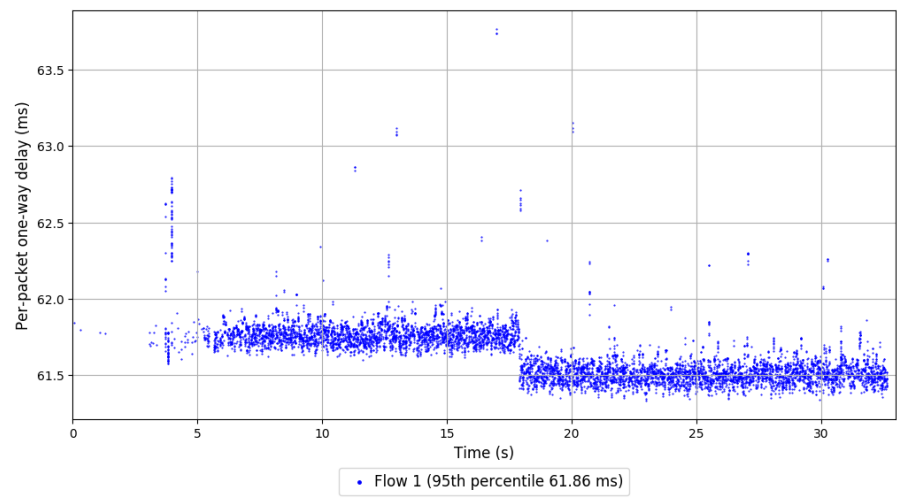
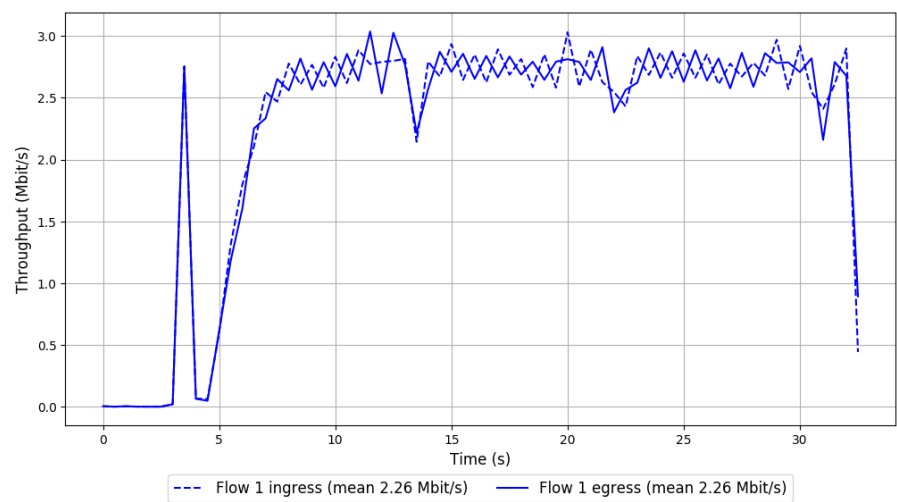
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 61.859 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-11 19:29:34

End at: 2017-12-11 19:30:04

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.380 ms

Loss rate: 0.00%

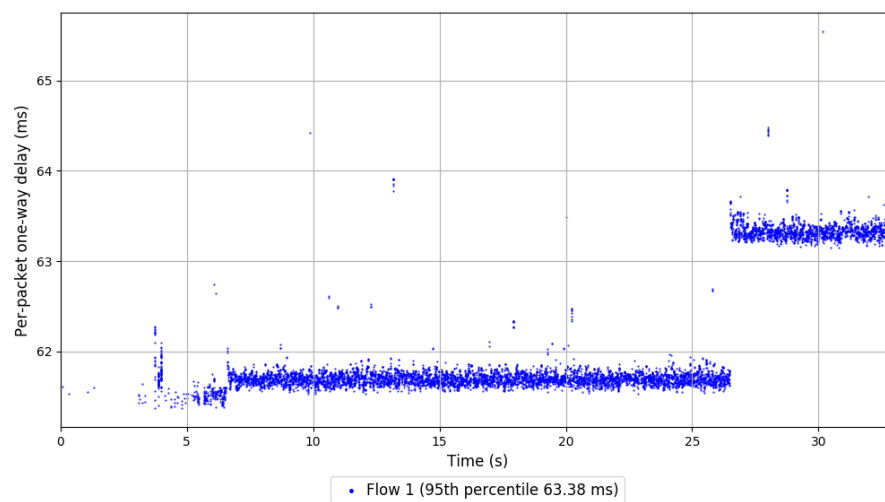
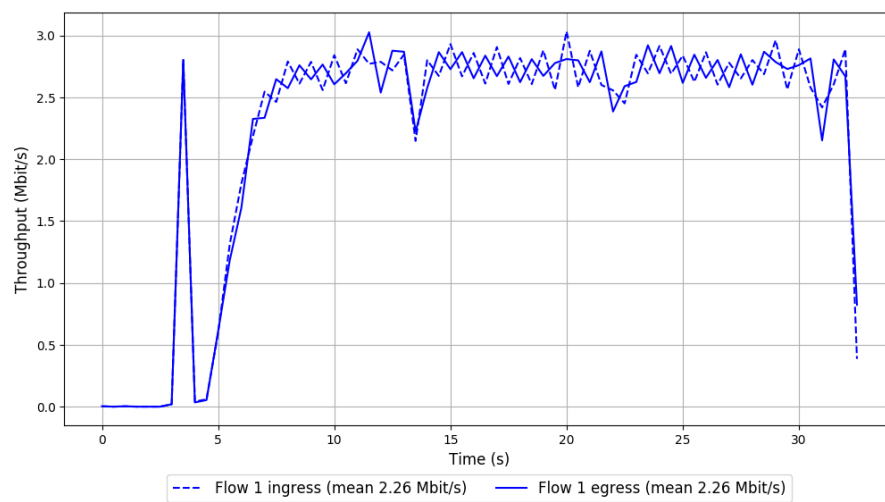
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.380 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-11 19:39:52

End at: 2017-12-11 19:40:22

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.708 ms

Loss rate: 0.00%

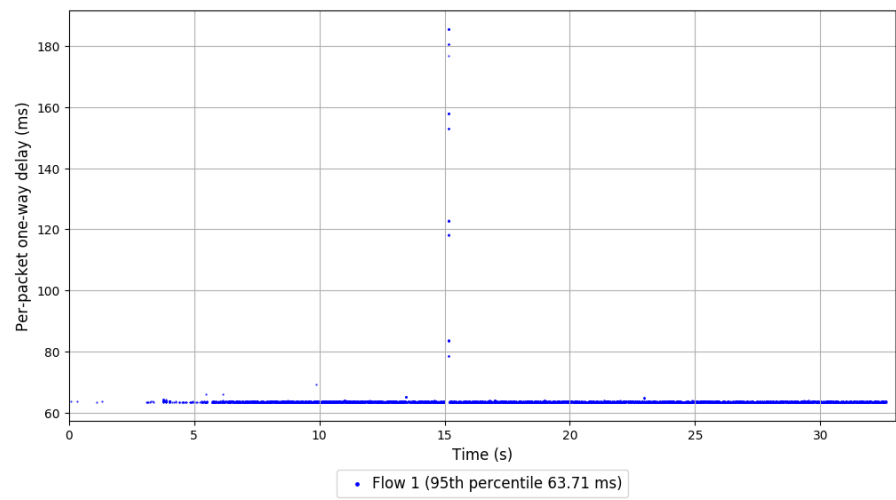
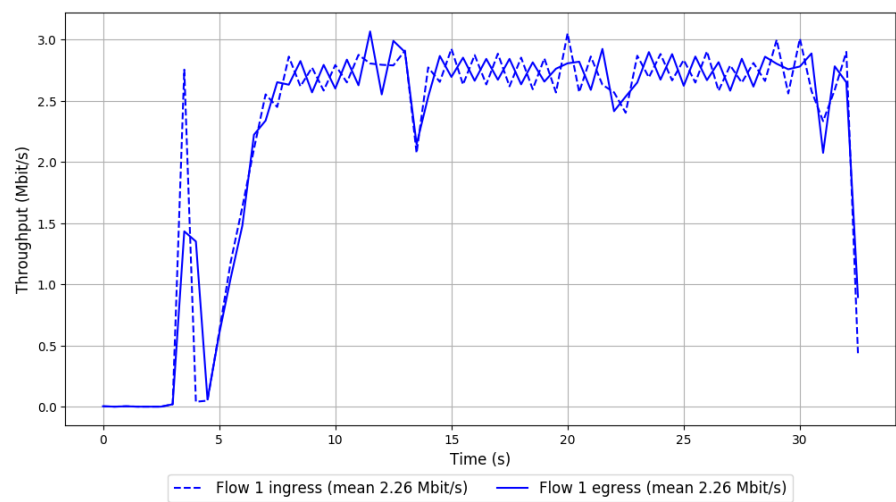
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.708 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-11 19:50:24

End at: 2017-12-11 19:50:54

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.508 ms

Loss rate: 0.00%

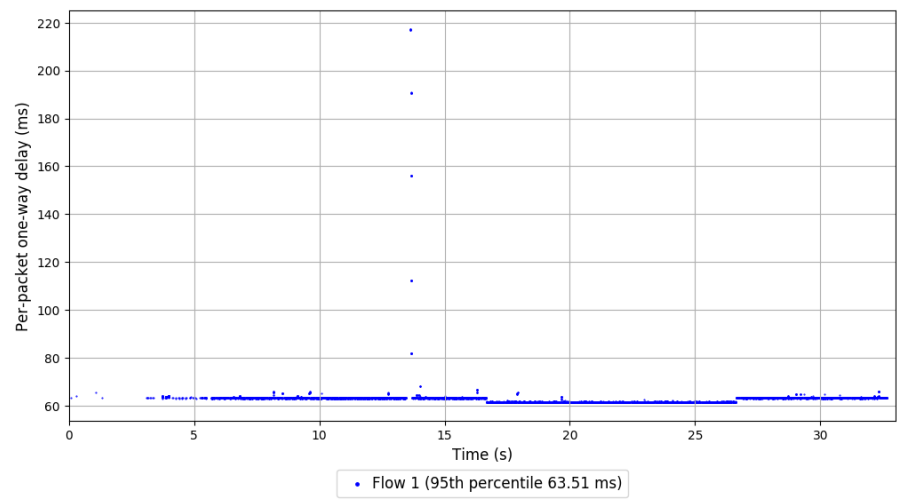
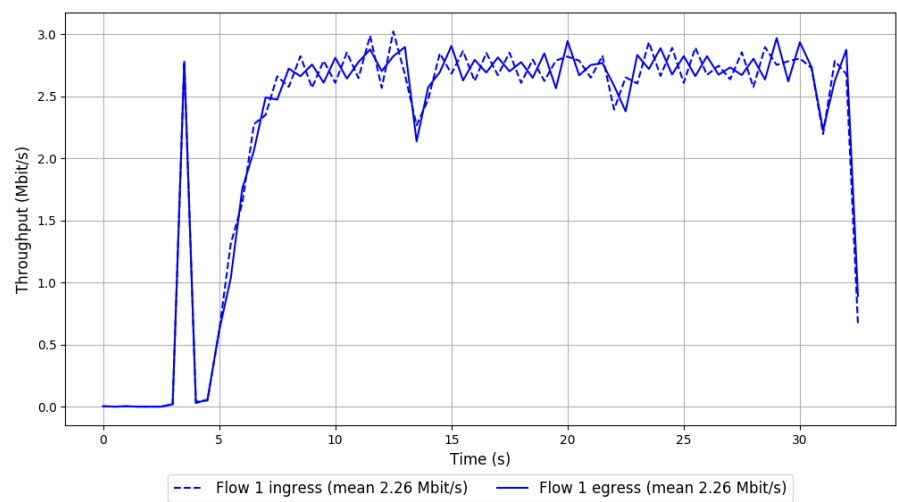
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.508 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-11 20:01:07

End at: 2017-12-11 20:01:37

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.850 ms

Loss rate: 0.00%

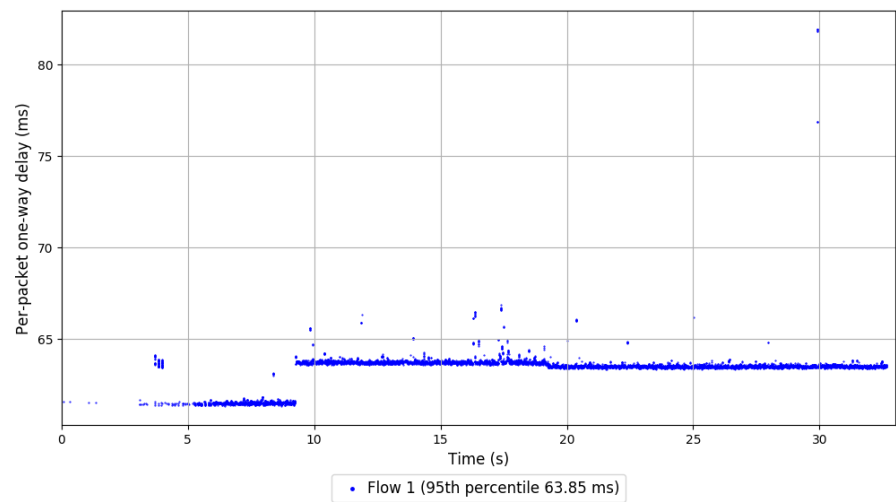
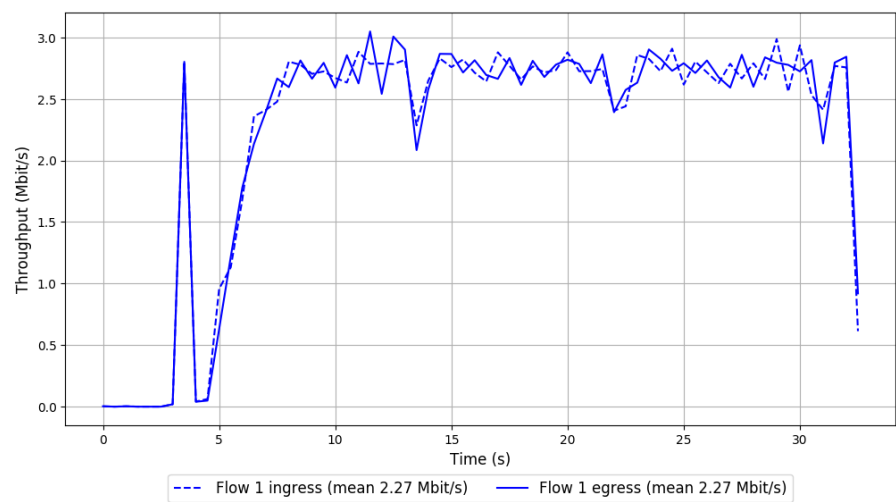
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.850 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-11 20:11:39

End at: 2017-12-11 20:12:09

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.530 ms

Loss rate: 0.00%

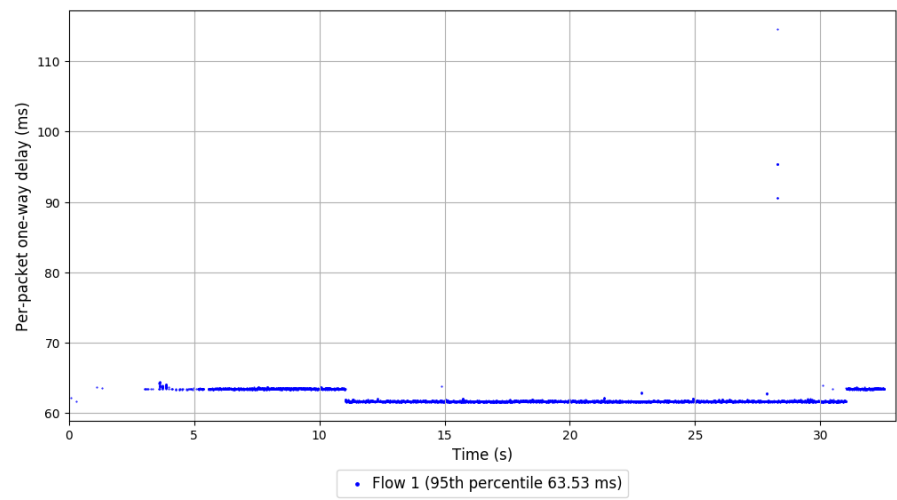
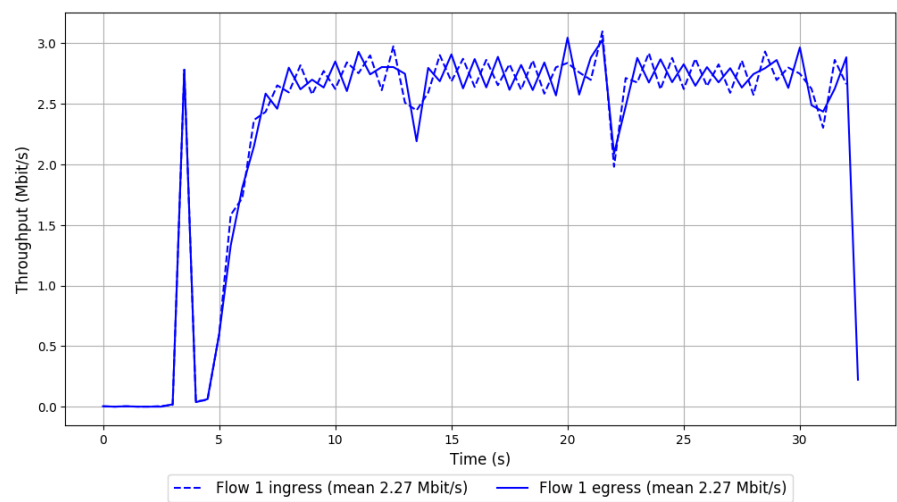
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.530 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-11 20:22:17

End at: 2017-12-11 20:22:47

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.848 ms

Loss rate: 0.00%

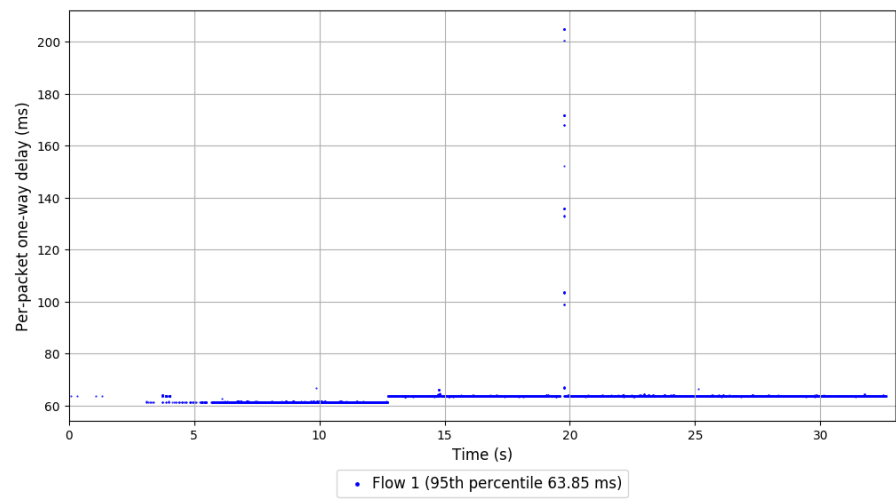
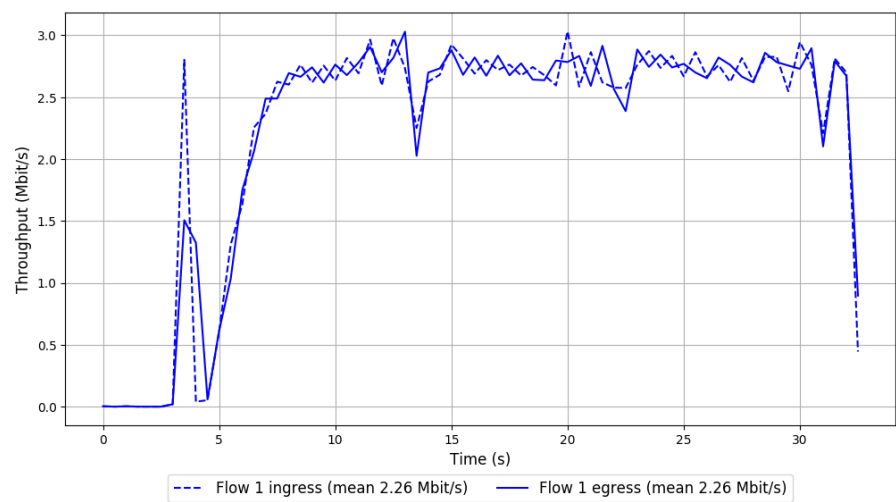
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.848 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-11 20:32:46

End at: 2017-12-11 20:33:16

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.838 ms

Loss rate: 0.00%

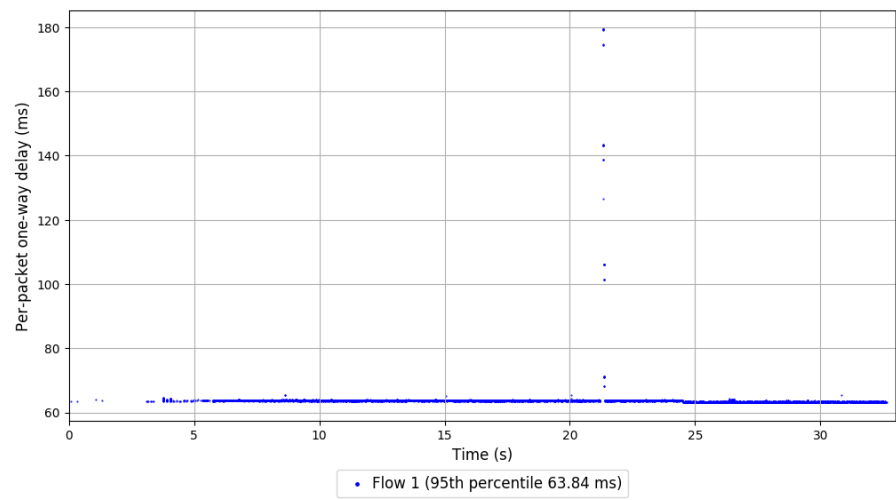
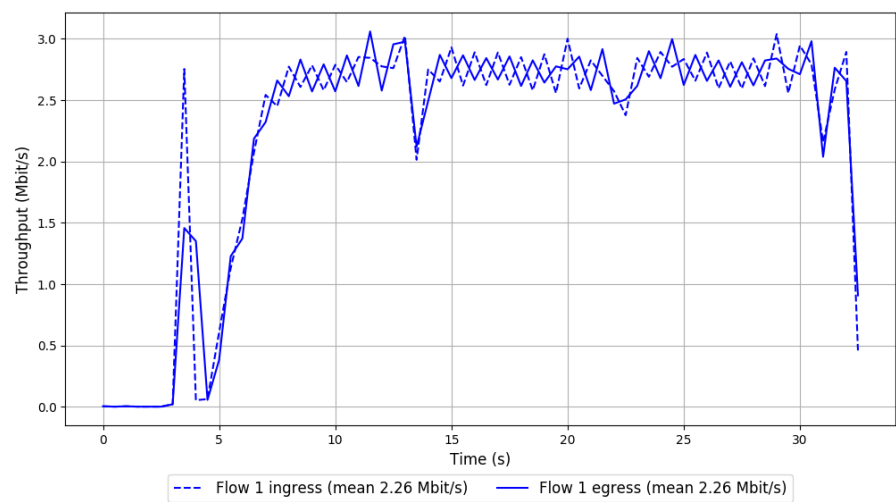
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.838 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-11 20:43:14

End at: 2017-12-11 20:43:44

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.811 ms

Loss rate: 0.00%

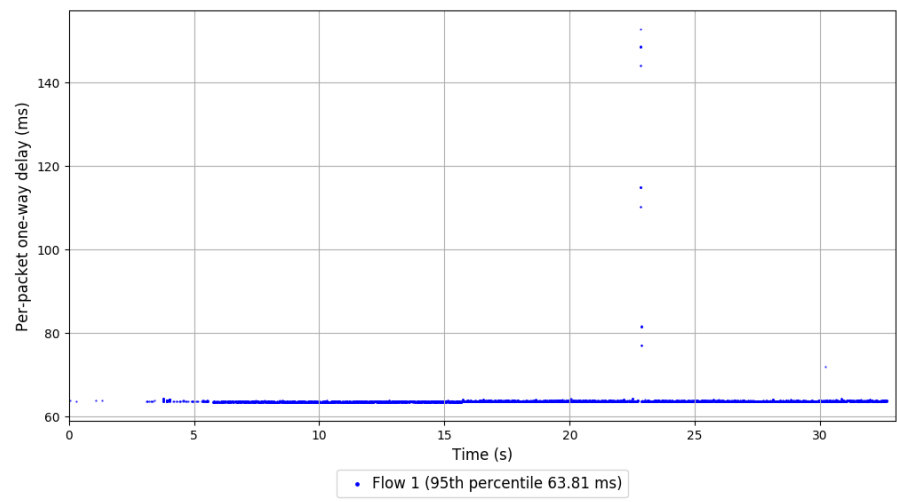
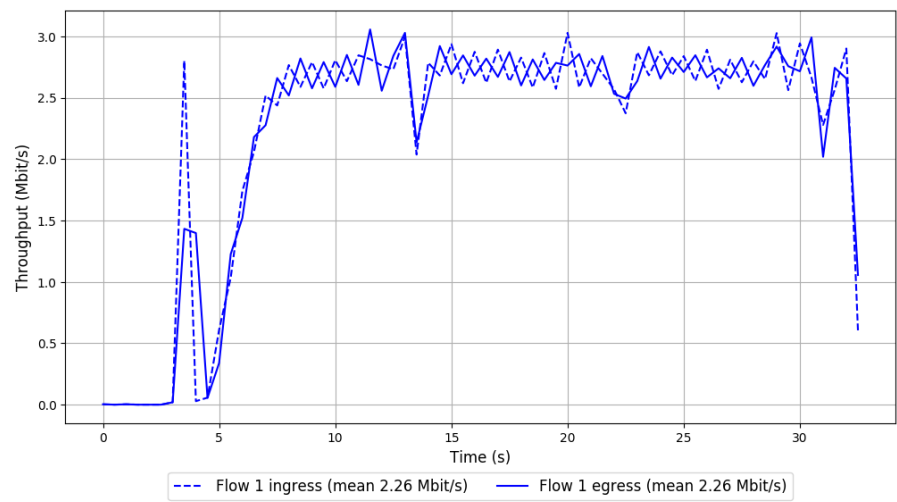
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 63.811 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-11 19:15:27

End at: 2017-12-11 19:15:57

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.49 Mbit/s

95th percentile per-packet one-way delay: 64.635 ms

Loss rate: 0.00%

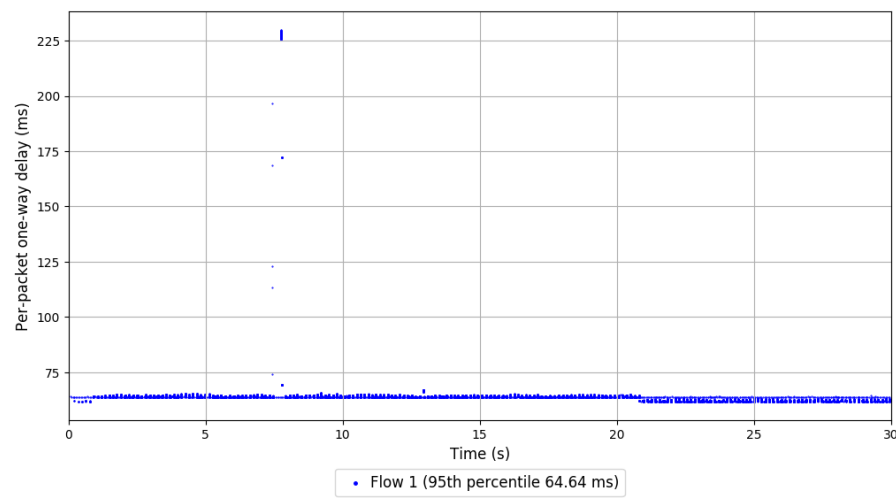
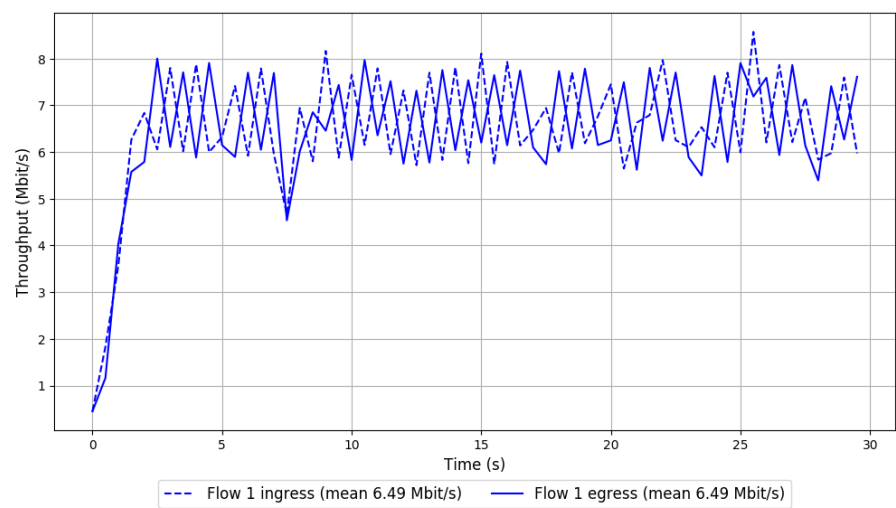
-- Flow 1:

Average throughput: 6.49 Mbit/s

95th percentile per-packet one-way delay: 64.635 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-11 19:26:01

End at: 2017-12-11 19:26:31

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 64.723 ms

Loss rate: 0.00%

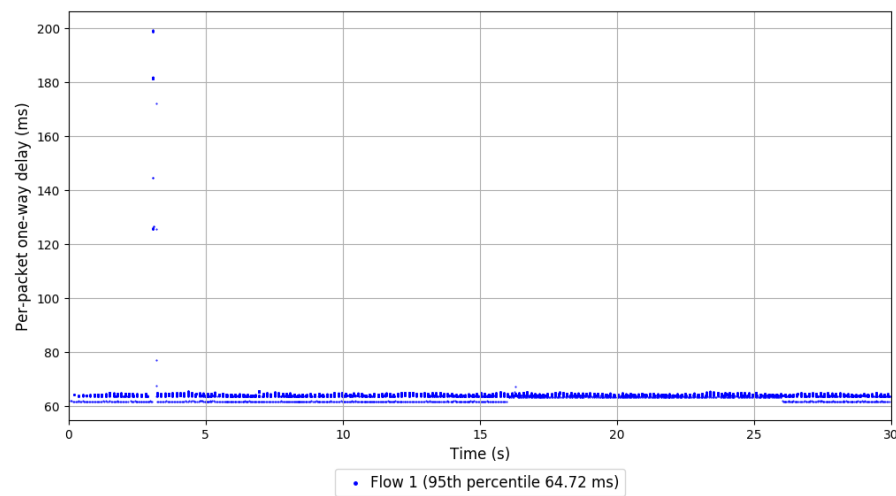
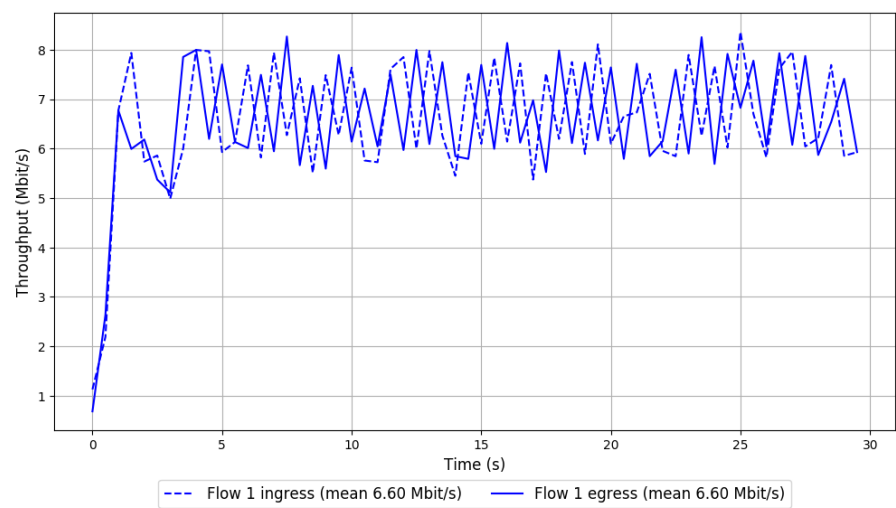
-- Flow 1:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 64.723 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-11 19:36:28

End at: 2017-12-11 19:36:58

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 64.813 ms

Loss rate: 0.00%

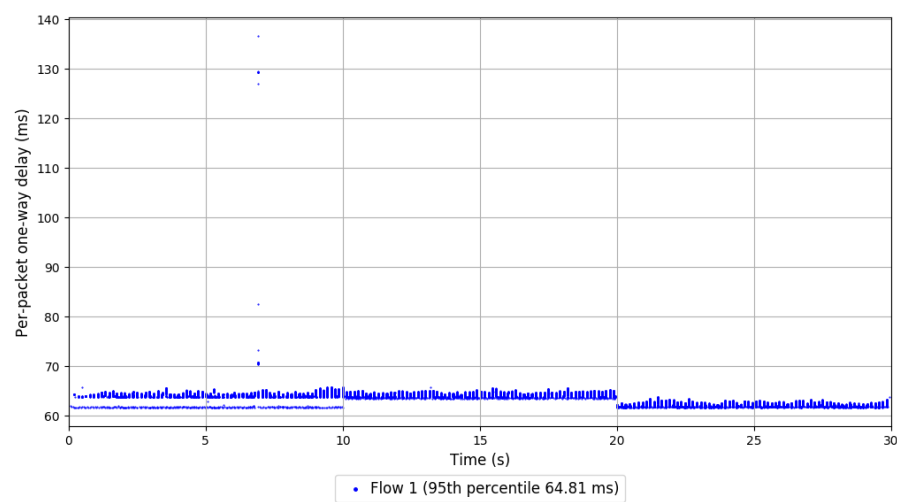
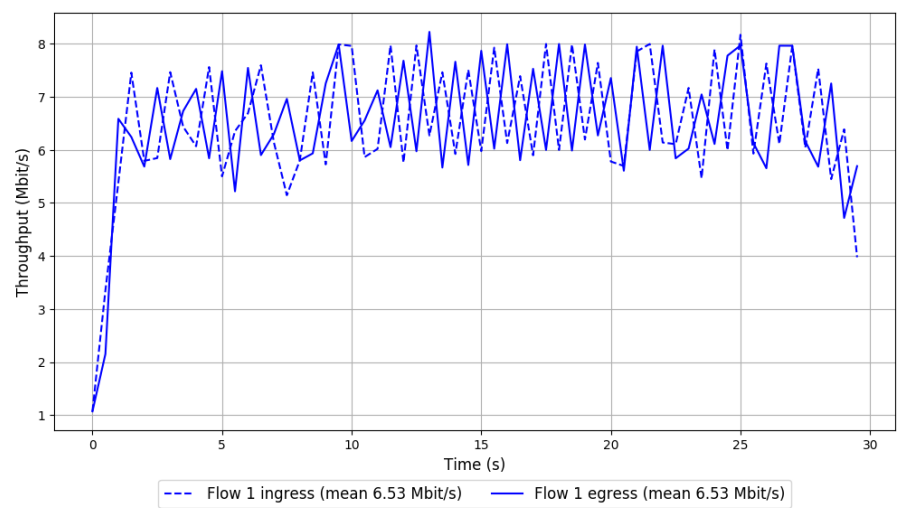
-- Flow 1:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 64.813 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-11 19:46:54

End at: 2017-12-11 19:47:24

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.39 Mbit/s

95th percentile per-packet one-way delay: 64.768 ms

Loss rate: 0.00%

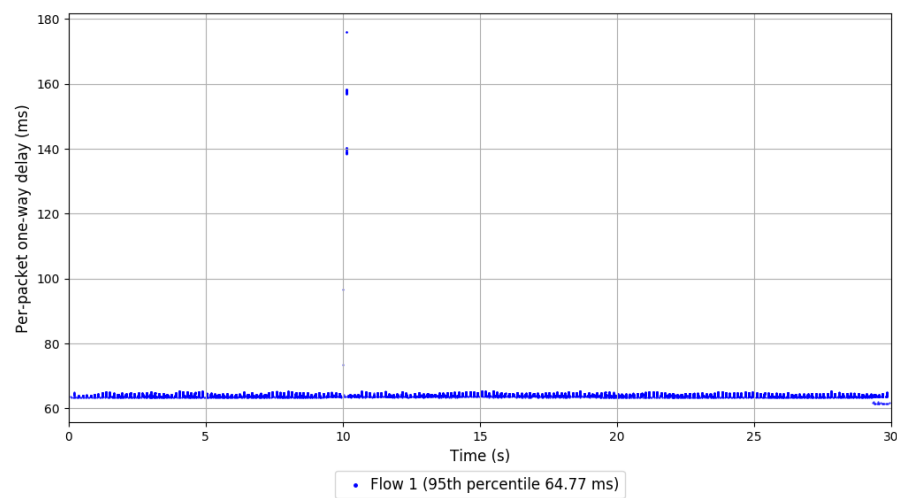
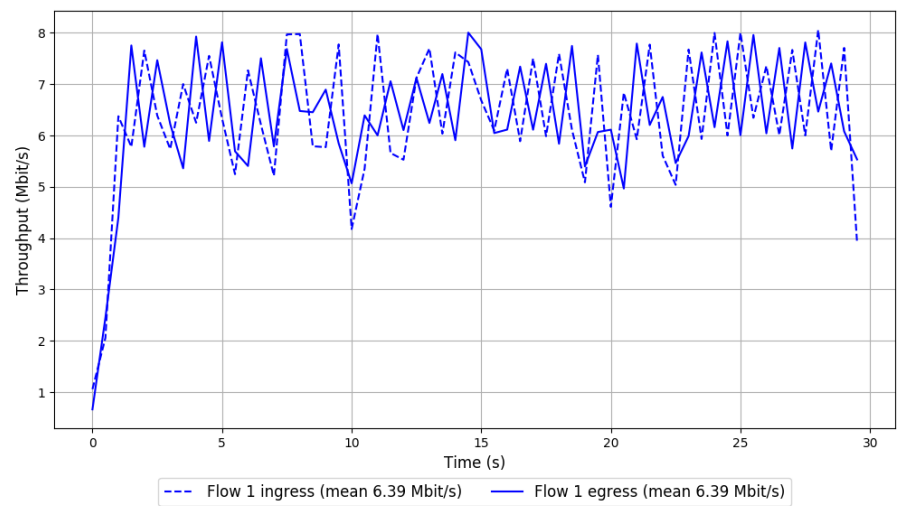
-- Flow 1:

Average throughput: 6.39 Mbit/s

95th percentile per-packet one-way delay: 64.768 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-11 19:57:28

End at: 2017-12-11 19:57:58

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 64.733 ms

Loss rate: 0.00%

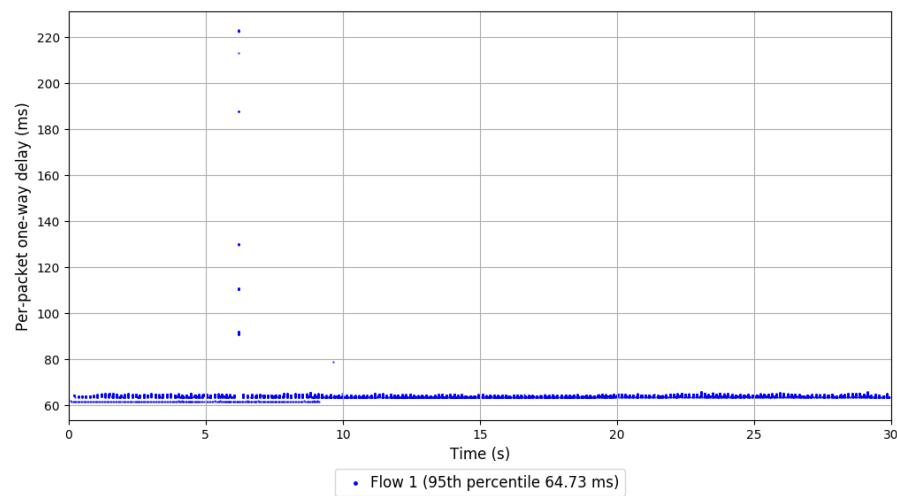
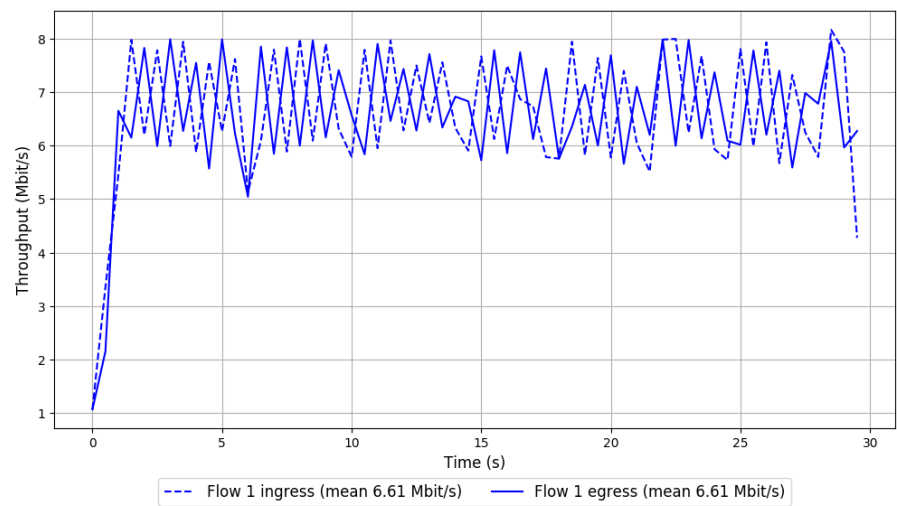
-- Flow 1:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 64.733 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-11 20:08:08

End at: 2017-12-11 20:08:38

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 64.804 ms

Loss rate: 0.00%

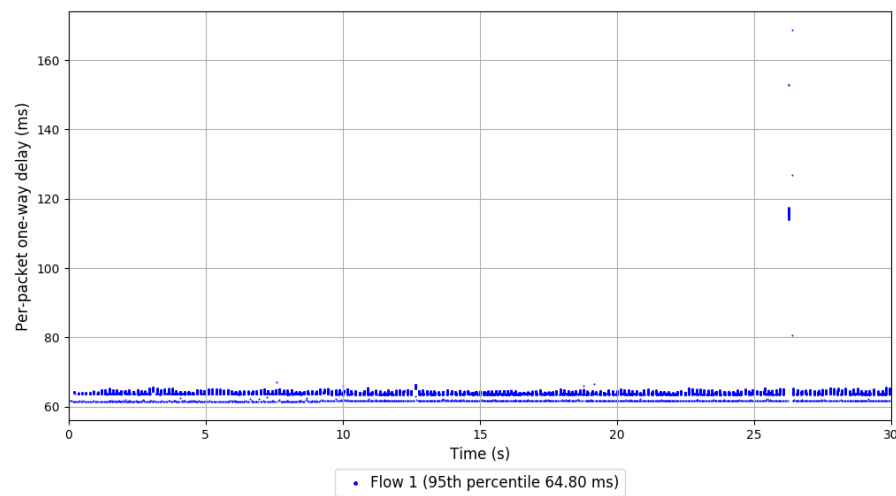
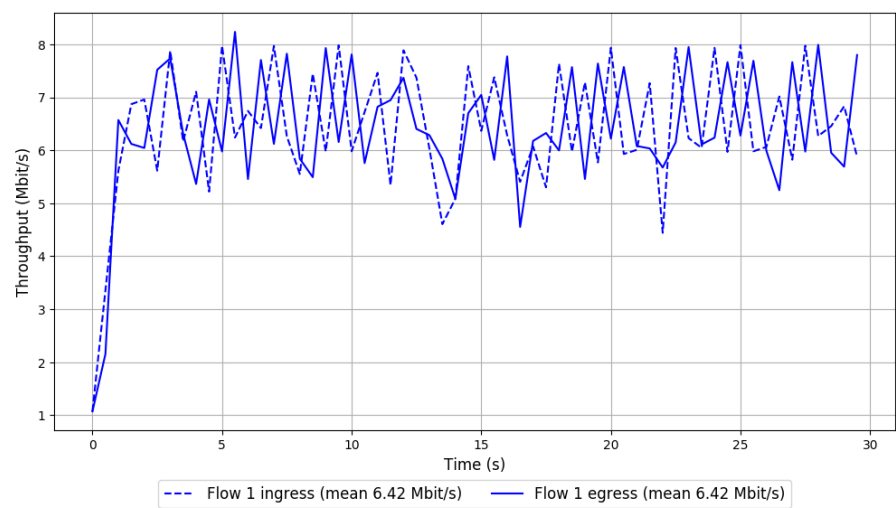
-- Flow 1:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 64.804 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-11 20:18:39

End at: 2017-12-11 20:19:09

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 64.915 ms

Loss rate: 0.00%

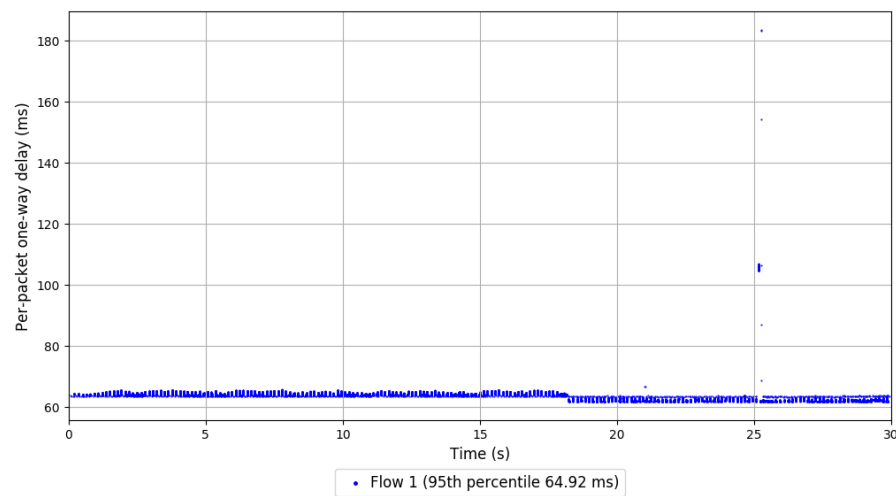
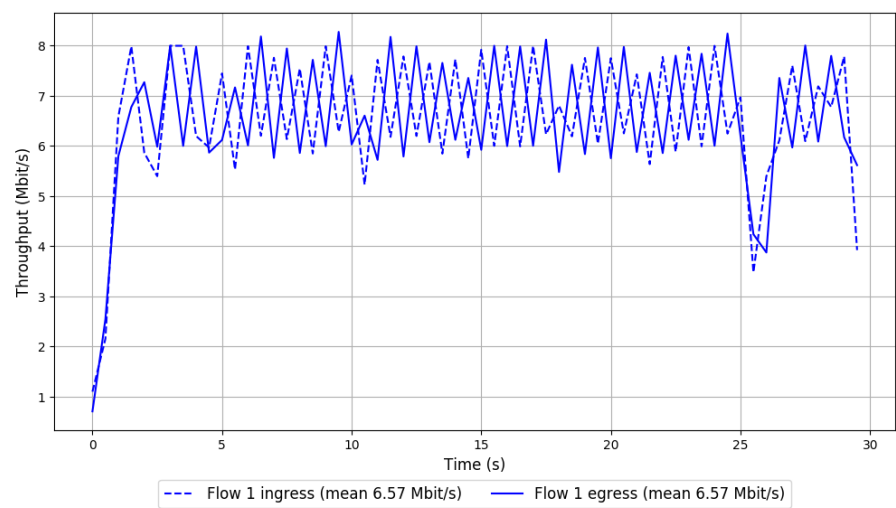
-- Flow 1:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 64.915 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-11 20:29:14

End at: 2017-12-11 20:29:44

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 64.603 ms

Loss rate: 0.00%

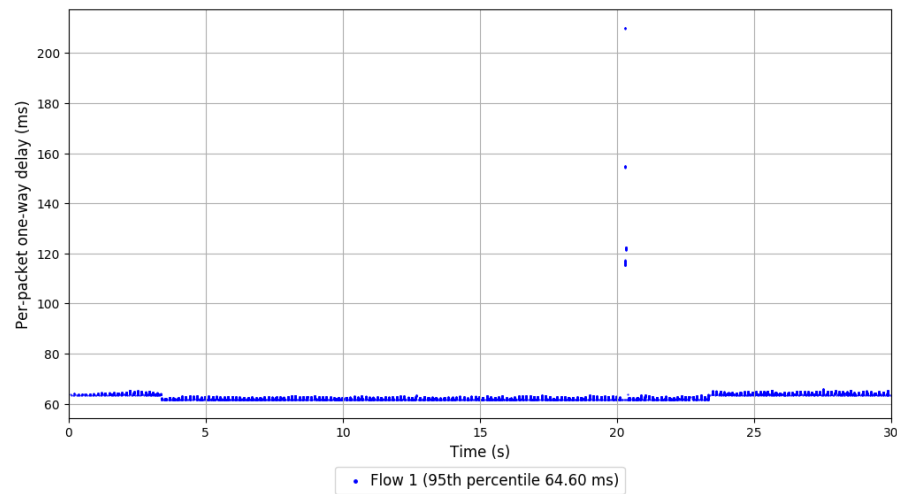
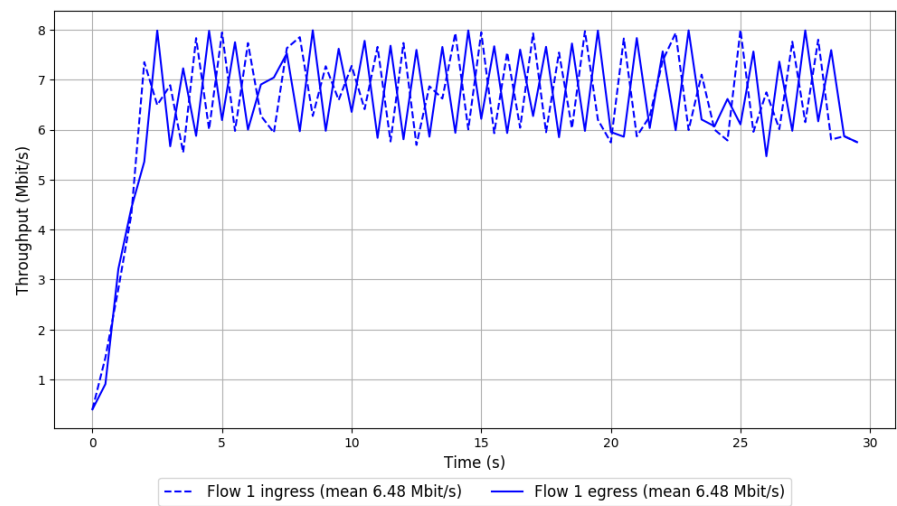
-- Flow 1:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 64.603 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-11 20:39:43

End at: 2017-12-11 20:40:13

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 64.954 ms

Loss rate: 0.00%

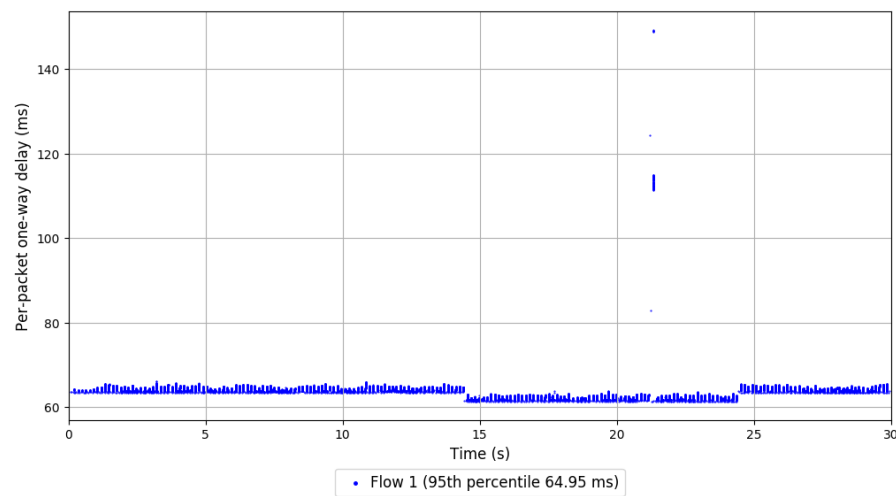
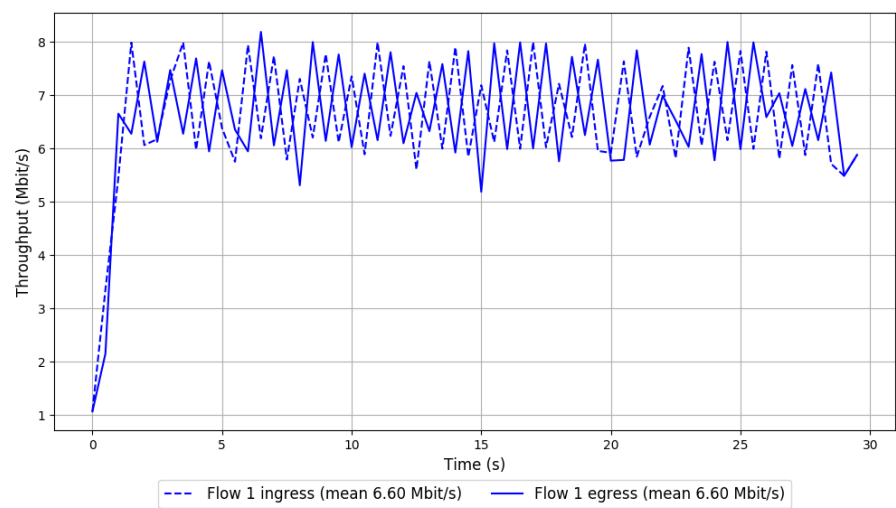
-- Flow 1:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 64.954 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-11 20:49:59

End at: 2017-12-11 20:50:29

Below is generated by plot.py at 2017-12-11 22:02:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.62 Mbit/s

95th percentile per-packet one-way delay: 64.989 ms

Loss rate: 0.00%

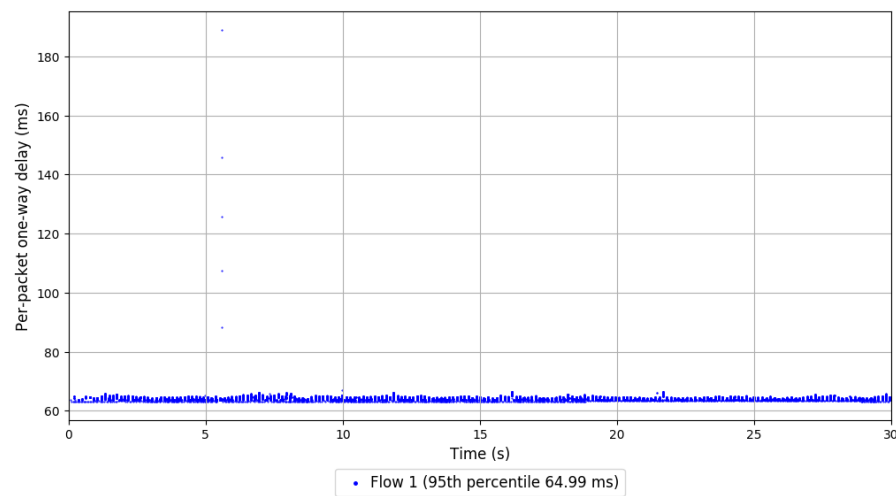
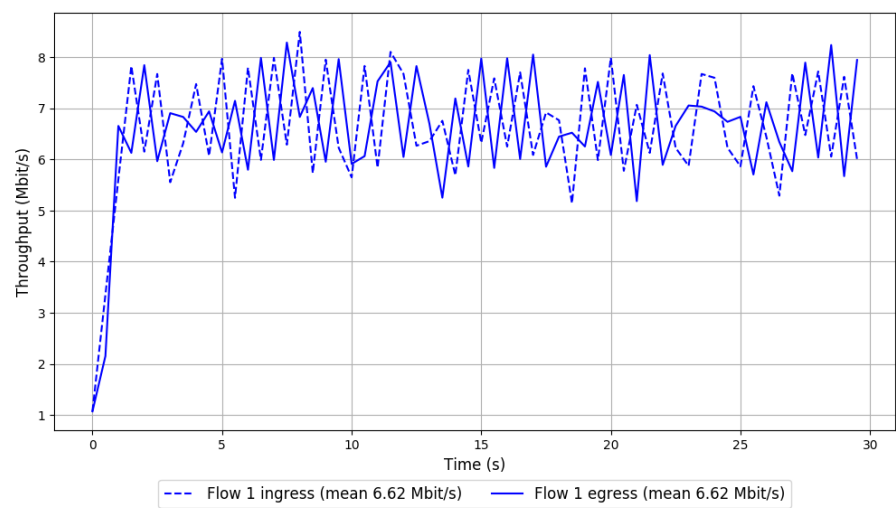
-- Flow 1:

Average throughput: 6.62 Mbit/s

95th percentile per-packet one-way delay: 64.989 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

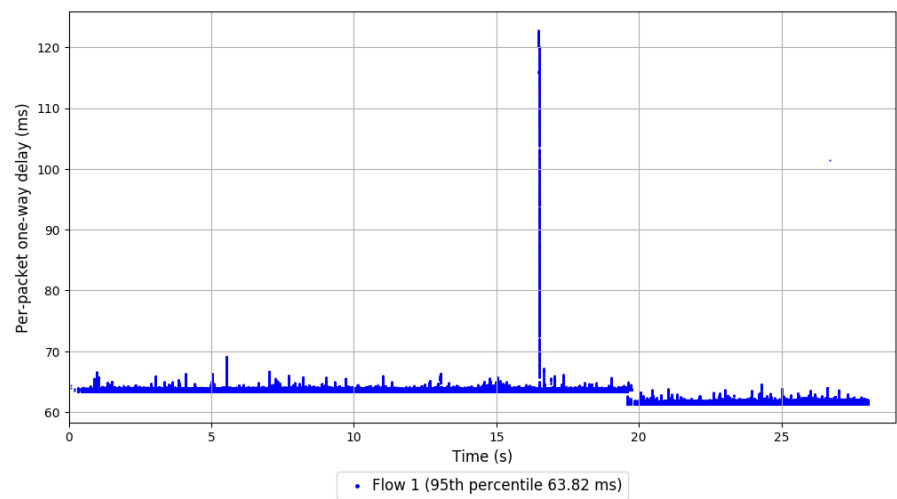
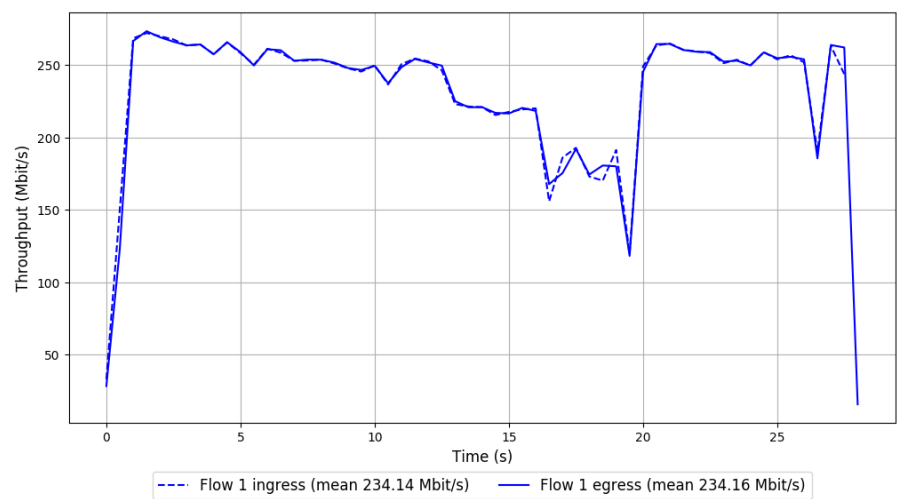


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-11 19:09:46
End at: 2017-12-11 19:10:16

# Below is generated by plot.py at 2017-12-11 22:06:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 234.16 Mbit/s
95th percentile per-packet one-way delay: 63.824 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 234.16 Mbit/s
95th percentile per-packet one-way delay: 63.824 ms
Loss rate: 0.00%
```


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

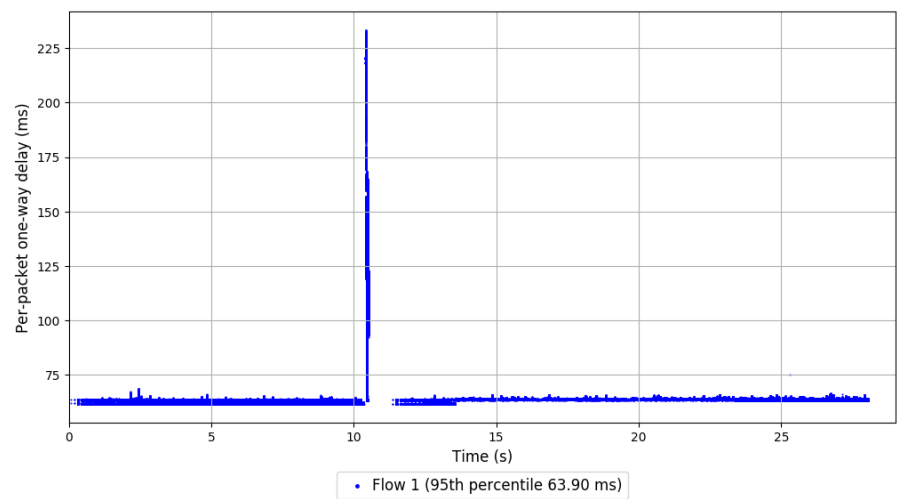
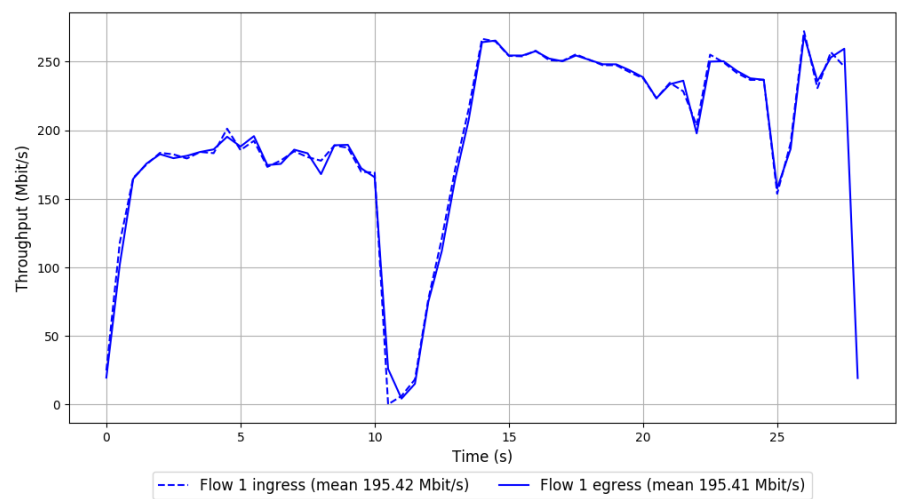


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-11 19:20:22
End at: 2017-12-11 19:20:52

# Below is generated by plot.py at 2017-12-11 22:06:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 195.41 Mbit/s
95th percentile per-packet one-way delay: 63.895 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 195.41 Mbit/s
95th percentile per-packet one-way delay: 63.895 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-11 19:30:54

End at: 2017-12-11 19:31:24

Below is generated by plot.py at 2017-12-11 22:06:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.93 Mbit/s

95th percentile per-packet one-way delay: 63.815 ms

Loss rate: 0.00%

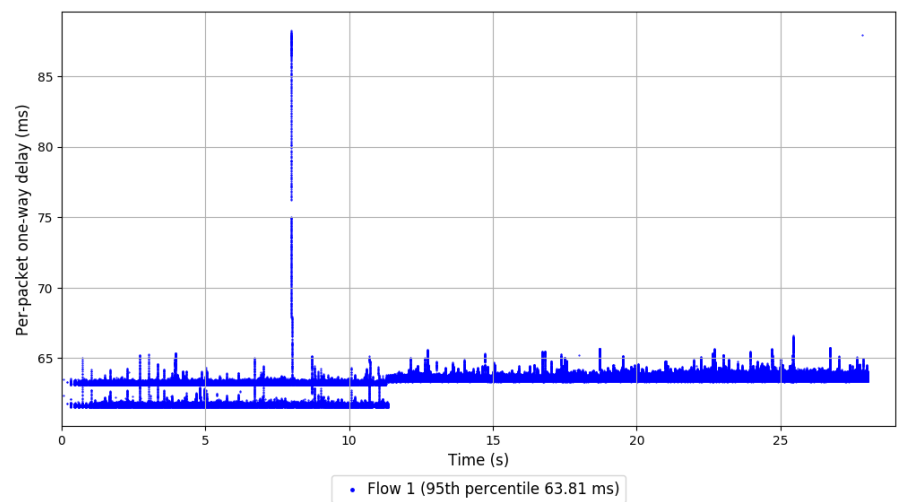
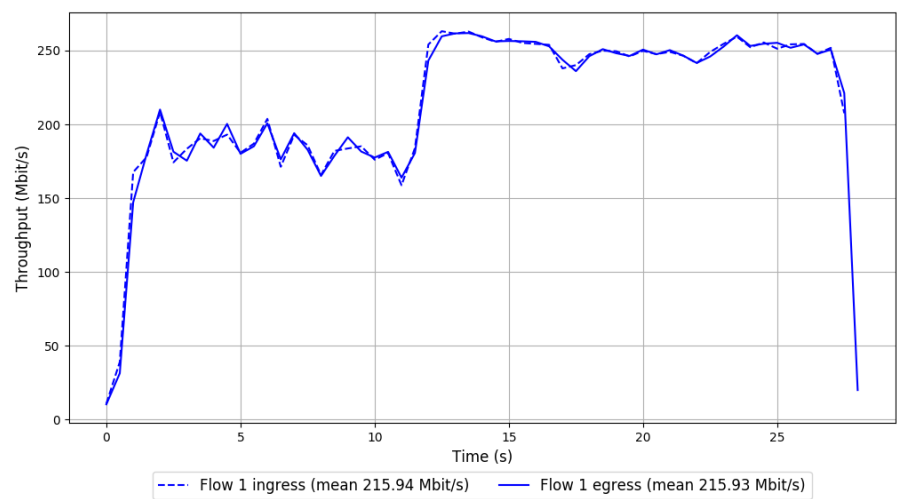
-- Flow 1:

Average throughput: 215.93 Mbit/s

95th percentile per-packet one-way delay: 63.815 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-11 19:41:14

End at: 2017-12-11 19:41:44

Below is generated by plot.py at 2017-12-11 22:06:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 190.25 Mbit/s

95th percentile per-packet one-way delay: 63.957 ms

Loss rate: 0.01%

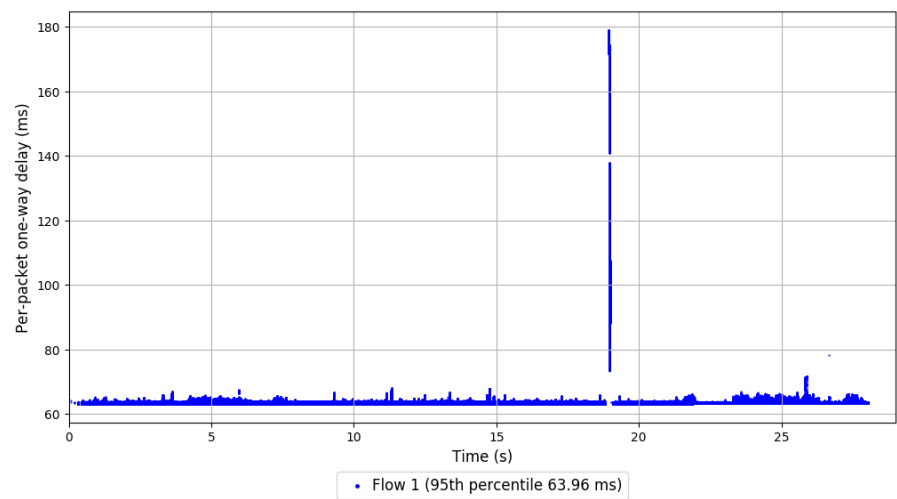
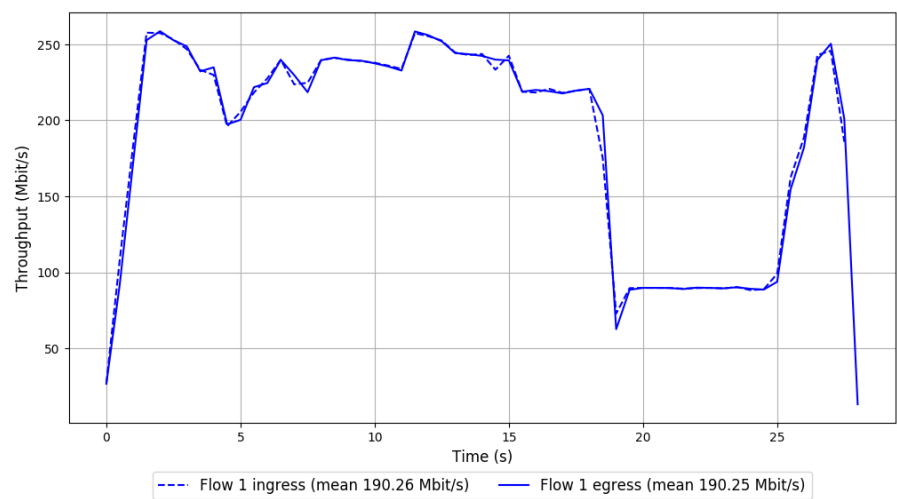
-- Flow 1:

Average throughput: 190.25 Mbit/s

95th percentile per-packet one-way delay: 63.957 ms

Loss rate: 0.01%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-11 19:51:44

End at: 2017-12-11 19:52:14

Below is generated by plot.py at 2017-12-11 22:06:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 242.07 Mbit/s

95th percentile per-packet one-way delay: 63.771 ms

Loss rate: 0.08%

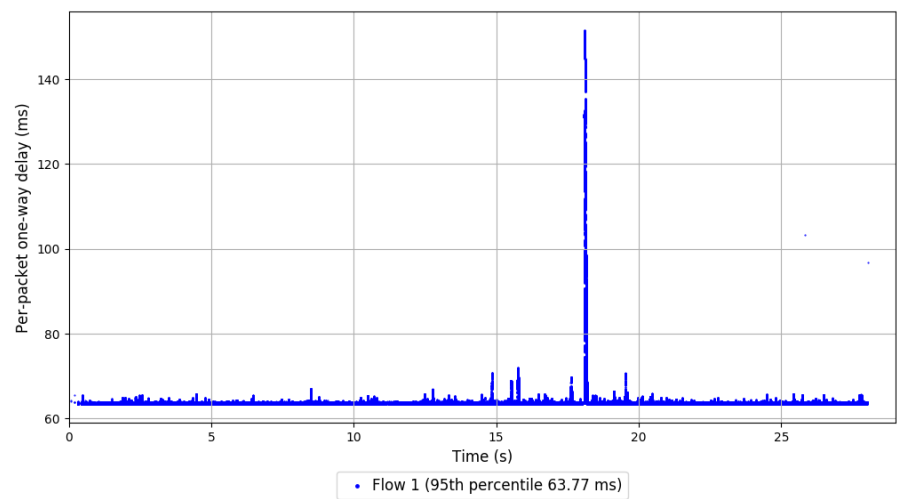
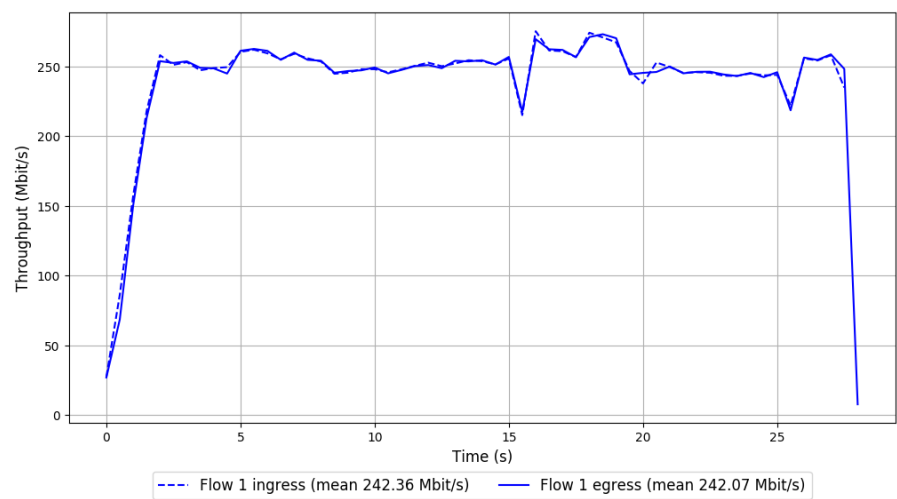
-- Flow 1:

Average throughput: 242.07 Mbit/s

95th percentile per-packet one-way delay: 63.771 ms

Loss rate: 0.08%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-11 20:02:29

End at: 2017-12-11 20:02:59

Below is generated by plot.py at 2017-12-11 22:06:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 173.46 Mbit/s

95th percentile per-packet one-way delay: 63.686 ms

Loss rate: 0.00%

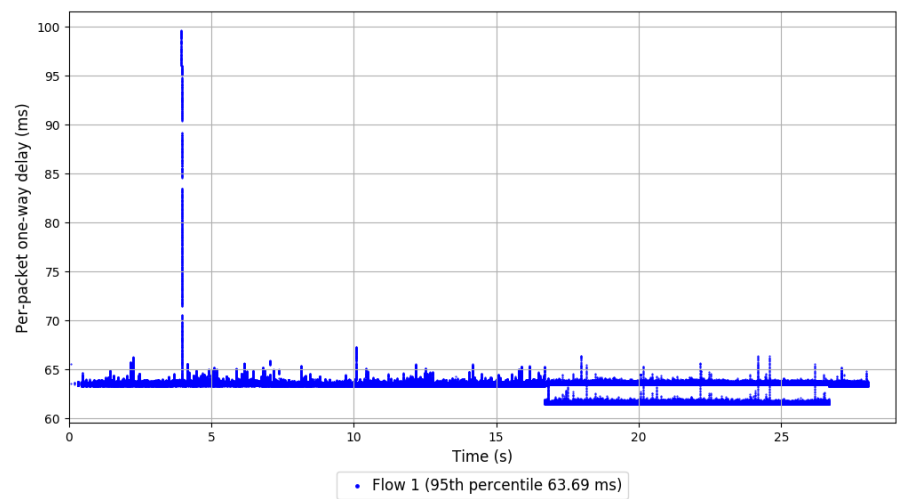
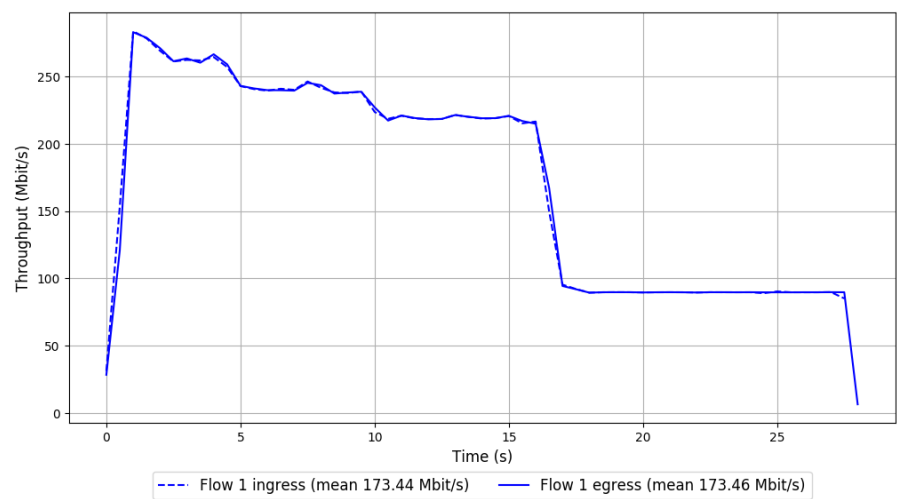
-- Flow 1:

Average throughput: 173.46 Mbit/s

95th percentile per-packet one-way delay: 63.686 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-11 20:13:01

End at: 2017-12-11 20:13:31

Below is generated by plot.py at 2017-12-11 22:06:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.01 Mbit/s

95th percentile per-packet one-way delay: 63.714 ms

Loss rate: 0.06%

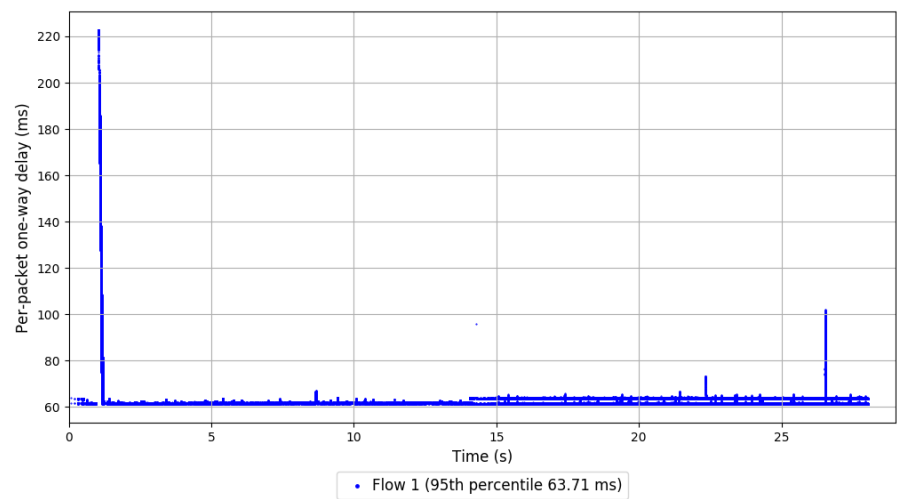
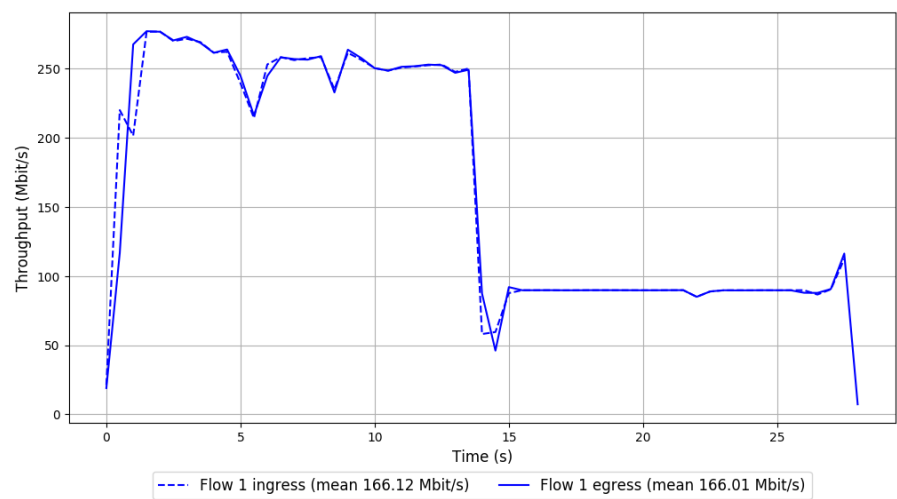
-- Flow 1:

Average throughput: 166.01 Mbit/s

95th percentile per-packet one-way delay: 63.714 ms

Loss rate: 0.06%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-11 20:23:42

End at: 2017-12-11 20:24:12

Below is generated by plot.py at 2017-12-11 22:09:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 208.63 Mbit/s

95th percentile per-packet one-way delay: 63.701 ms

Loss rate: 0.00%

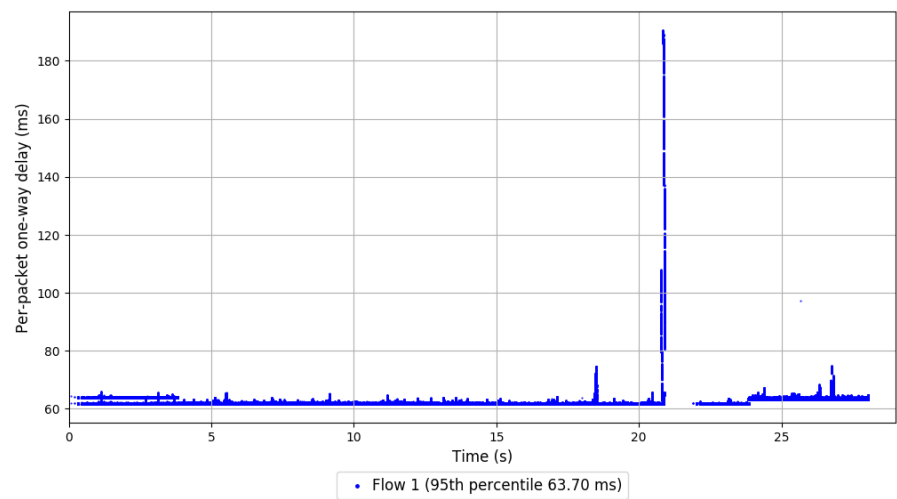
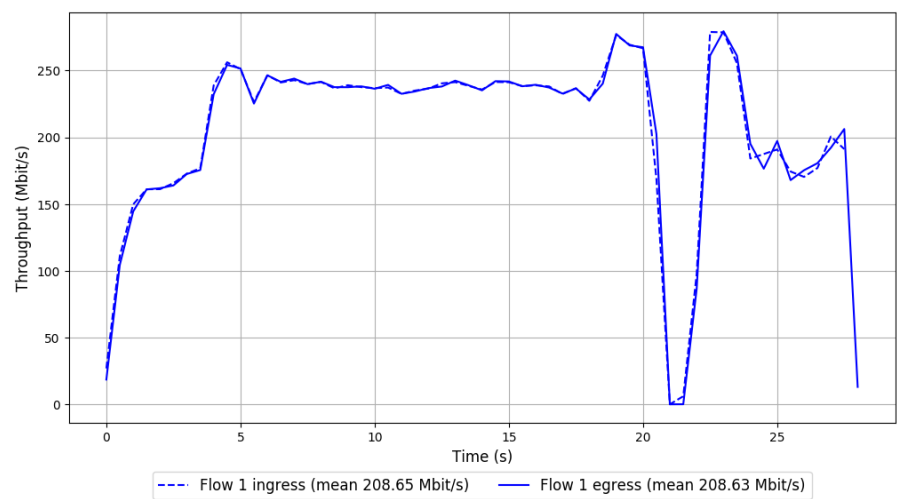
-- Flow 1:

Average throughput: 208.63 Mbit/s

95th percentile per-packet one-way delay: 63.701 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-11 20:34:09

End at: 2017-12-11 20:34:39

Below is generated by plot.py at 2017-12-11 22:12:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.22 Mbit/s

95th percentile per-packet one-way delay: 63.746 ms

Loss rate: 0.00%

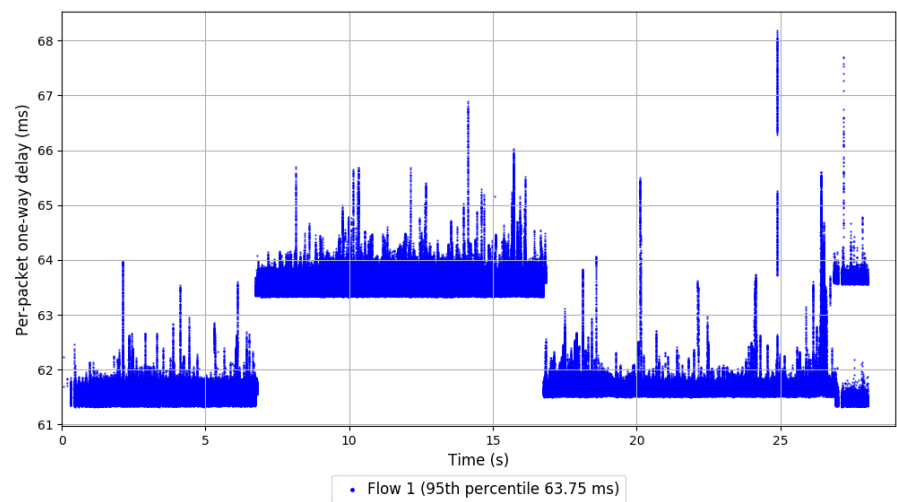
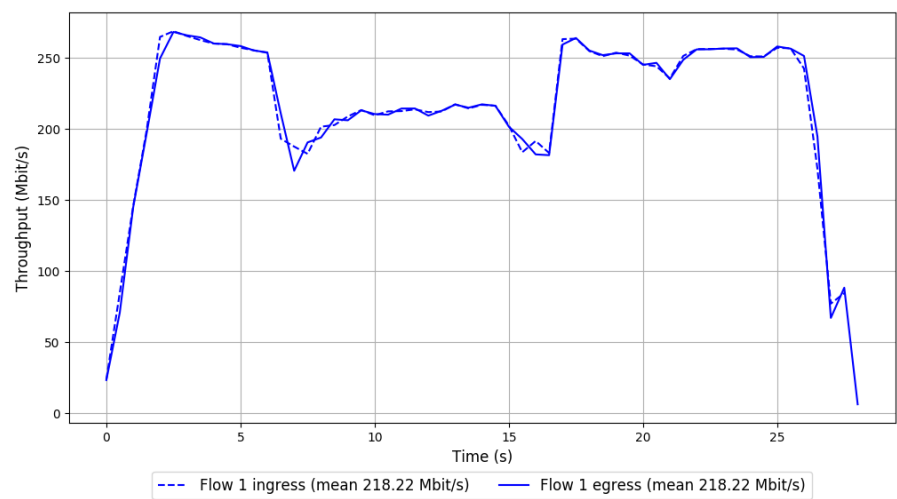
-- Flow 1:

Average throughput: 218.22 Mbit/s

95th percentile per-packet one-way delay: 63.746 ms

Loss rate: 0.00%

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

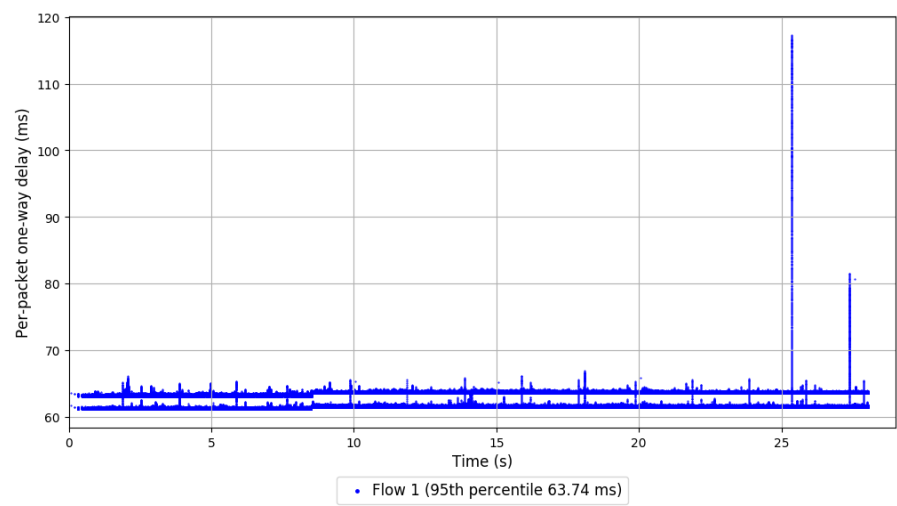
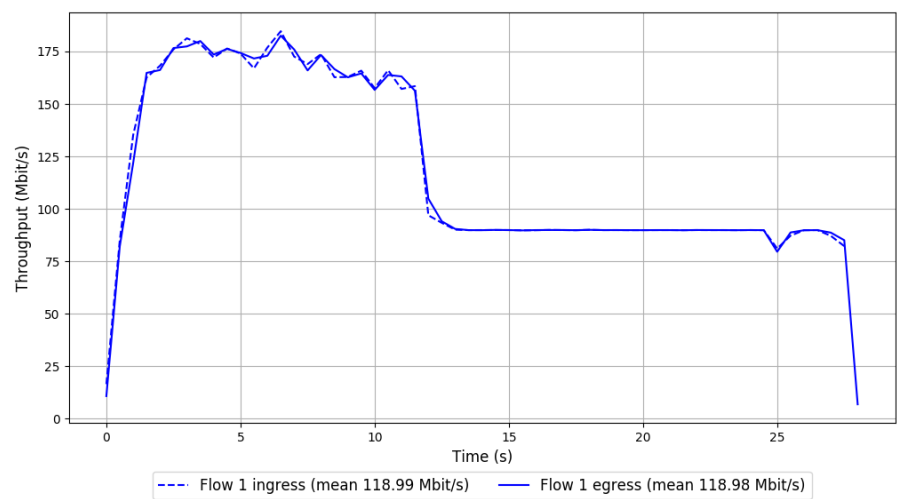


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-11 20:44:37
End at: 2017-12-11 20:45:07

# Below is generated by plot.py at 2017-12-11 22:12:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 118.98 Mbit/s
95th percentile per-packet one-way delay: 63.745 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 118.98 Mbit/s
95th percentile per-packet one-way delay: 63.745 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-11 19:14:48

End at: 2017-12-11 19:15:18

Below is generated by plot.py at 2017-12-11 22:12:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.09 Mbit/s

95th percentile per-packet one-way delay: 64.391 ms

Loss rate: 0.00%

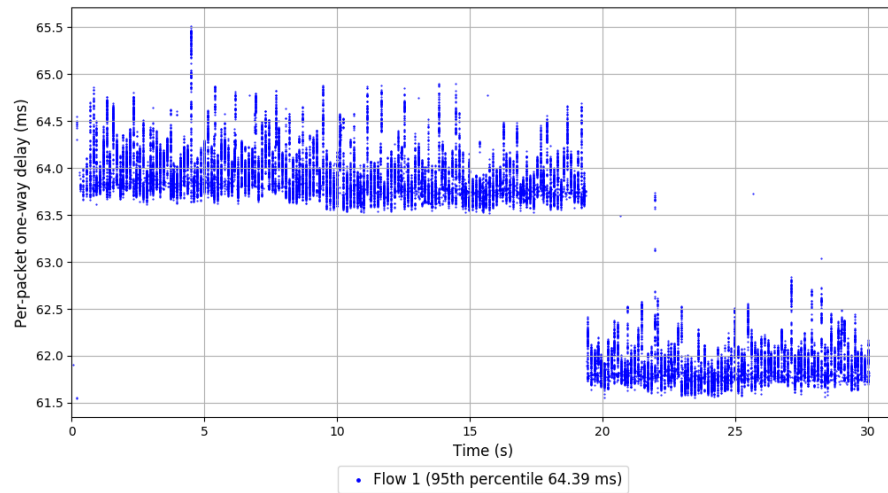
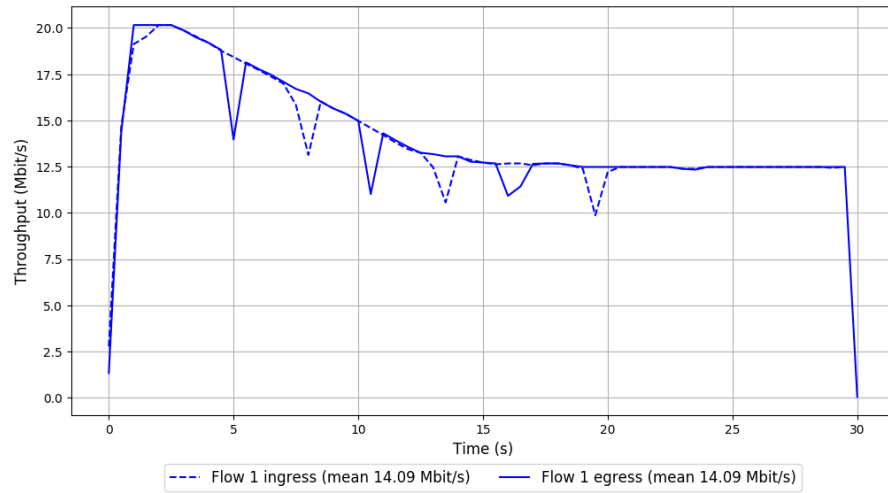
-- Flow 1:

Average throughput: 14.09 Mbit/s

95th percentile per-packet one-way delay: 64.391 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-11 19:25:19

End at: 2017-12-11 19:25:49

Below is generated by plot.py at 2017-12-11 22:12:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.70 Mbit/s

95th percentile per-packet one-way delay: 64.455 ms

Loss rate: 0.00%

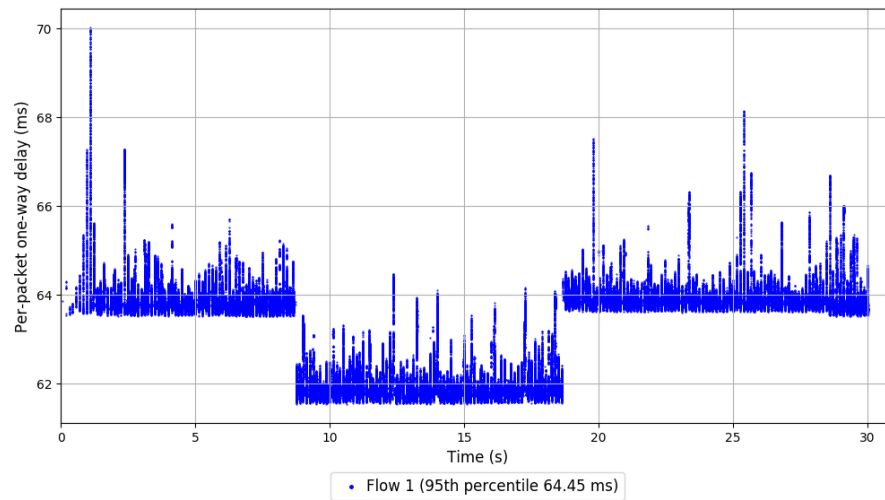
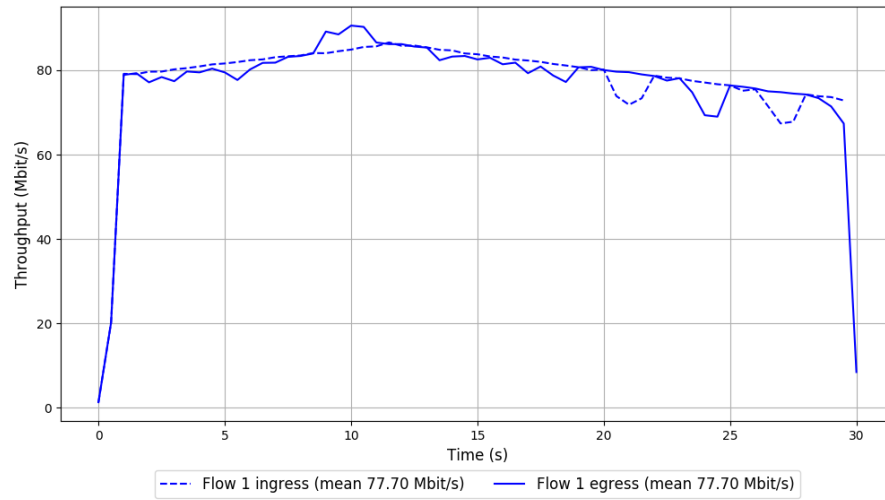
-- Flow 1:

Average throughput: 77.70 Mbit/s

95th percentile per-packet one-way delay: 64.455 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-11 19:35:46

End at: 2017-12-11 19:36:16

Below is generated by plot.py at 2017-12-11 22:12:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.78 Mbit/s

95th percentile per-packet one-way delay: 64.507 ms

Loss rate: 0.00%

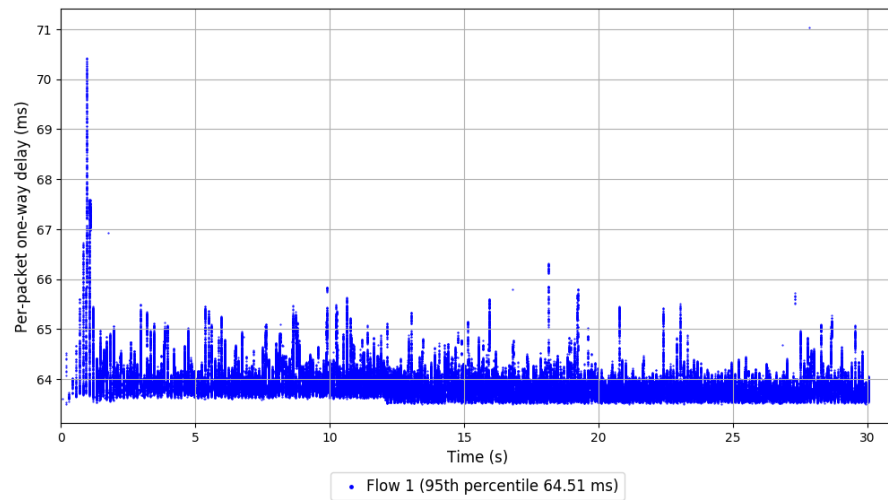
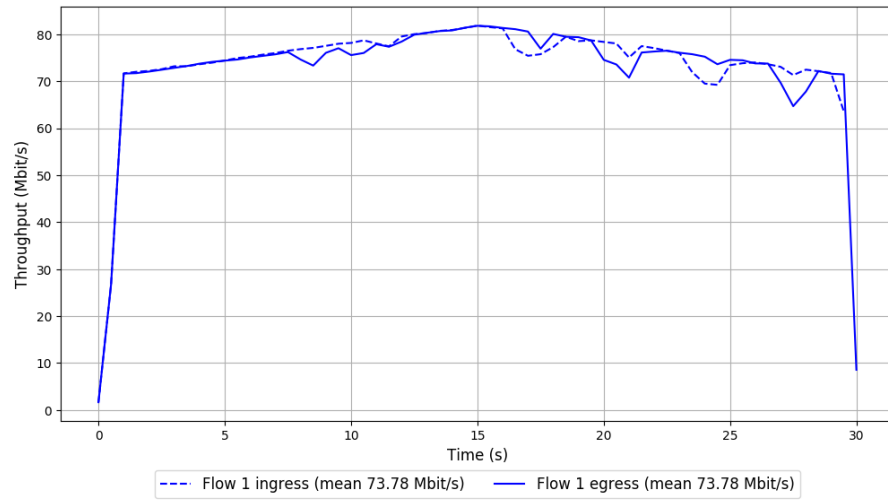
-- Flow 1:

Average throughput: 73.78 Mbit/s

95th percentile per-packet one-way delay: 64.507 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-11 19:46:13

End at: 2017-12-11 19:46:43

Below is generated by plot.py at 2017-12-11 22:12:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.22 Mbit/s

95th percentile per-packet one-way delay: 64.460 ms

Loss rate: 0.00%

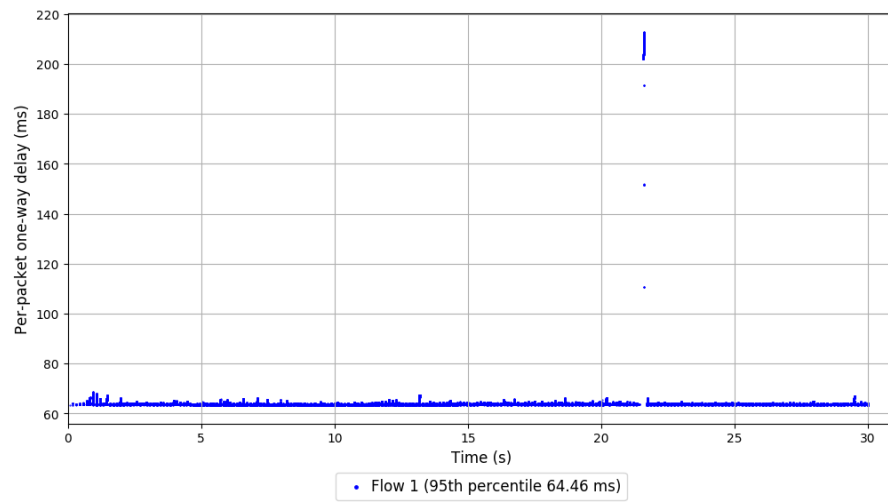
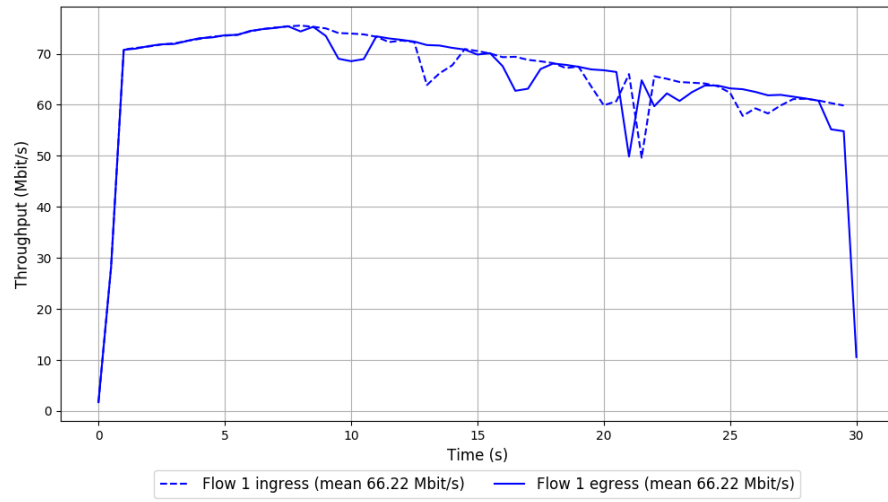
-- Flow 1:

Average throughput: 66.22 Mbit/s

95th percentile per-packet one-way delay: 64.460 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-11 19:56:46

End at: 2017-12-11 19:57:17

Below is generated by plot.py at 2017-12-11 22:12:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.77 Mbit/s

95th percentile per-packet one-way delay: 64.914 ms

Loss rate: 0.00%

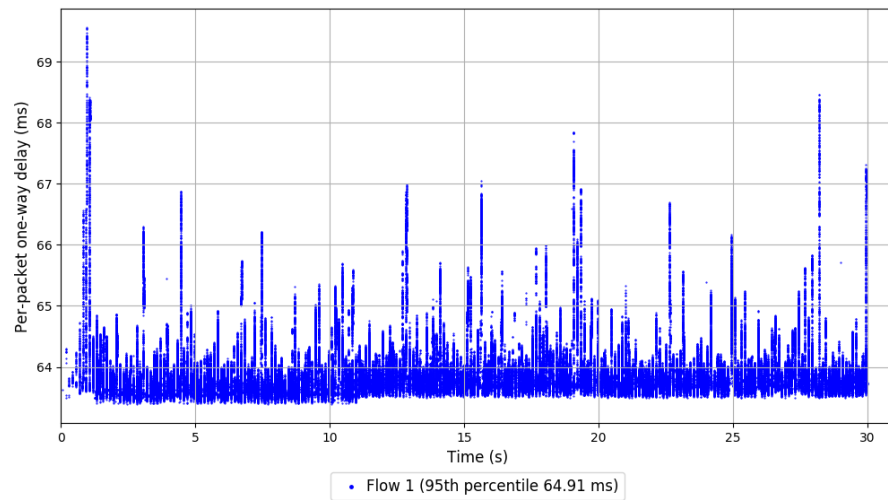
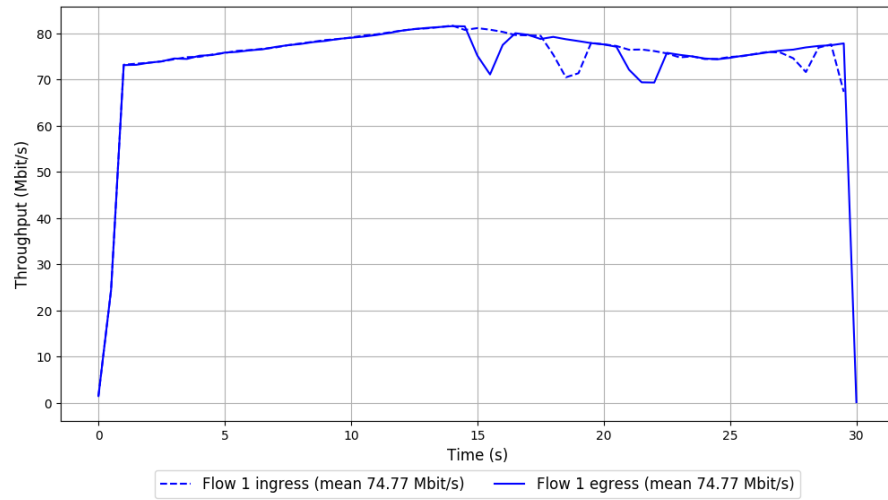
-- Flow 1:

Average throughput: 74.77 Mbit/s

95th percentile per-packet one-way delay: 64.914 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-11 20:07:27

End at: 2017-12-11 20:07:57

Below is generated by plot.py at 2017-12-11 22:12:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.58 Mbit/s

95th percentile per-packet one-way delay: 64.665 ms

Loss rate: 0.00%

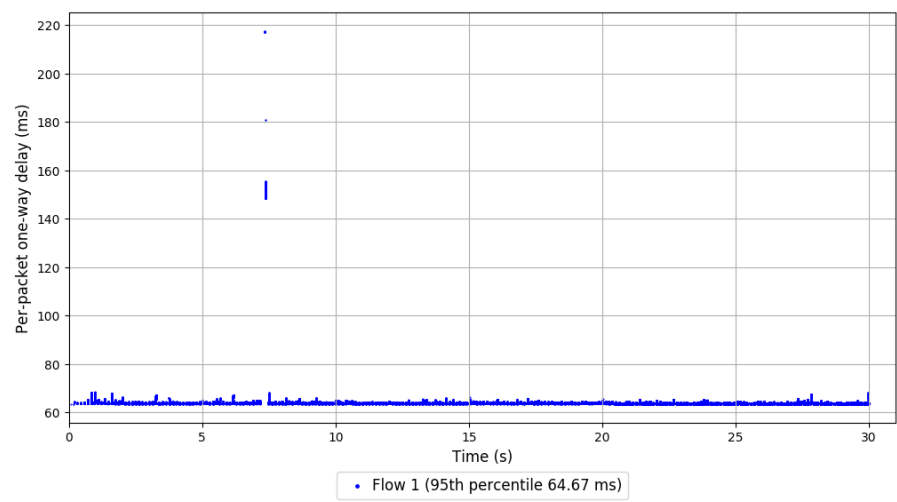
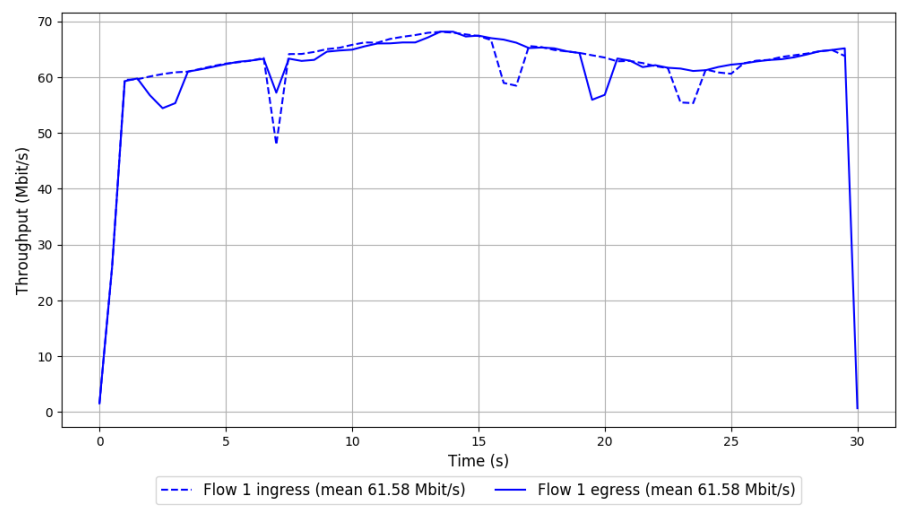
-- Flow 1:

Average throughput: 61.58 Mbit/s

95th percentile per-packet one-way delay: 64.665 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-11 20:17:57

End at: 2017-12-11 20:18:27

Below is generated by plot.py at 2017-12-11 22:12:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.95 Mbit/s

95th percentile per-packet one-way delay: 64.341 ms

Loss rate: 0.00%

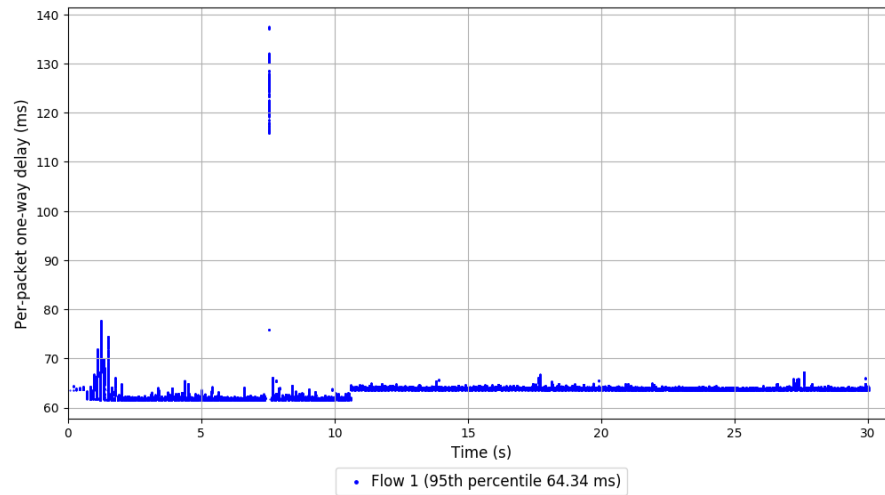
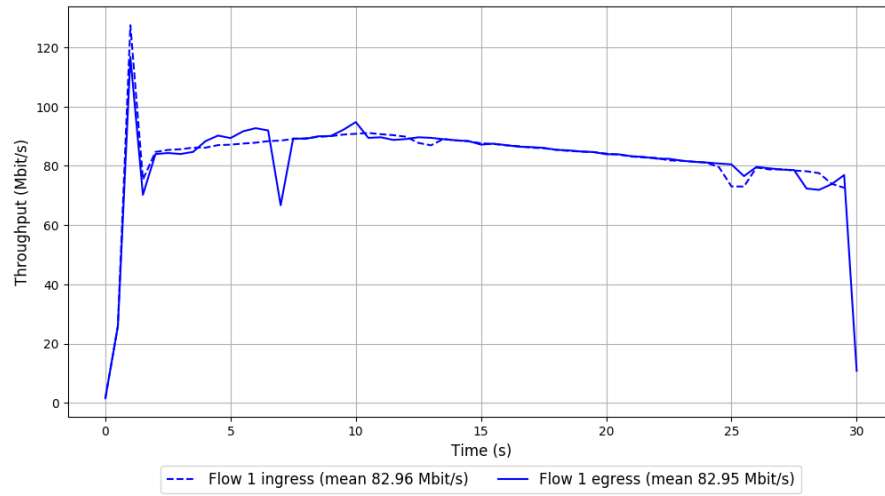
-- Flow 1:

Average throughput: 82.95 Mbit/s

95th percentile per-packet one-way delay: 64.341 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-11 20:28:33

End at: 2017-12-11 20:29:03

Below is generated by plot.py at 2017-12-11 22:12:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.77 Mbit/s

95th percentile per-packet one-way delay: 63.919 ms

Loss rate: 0.00%

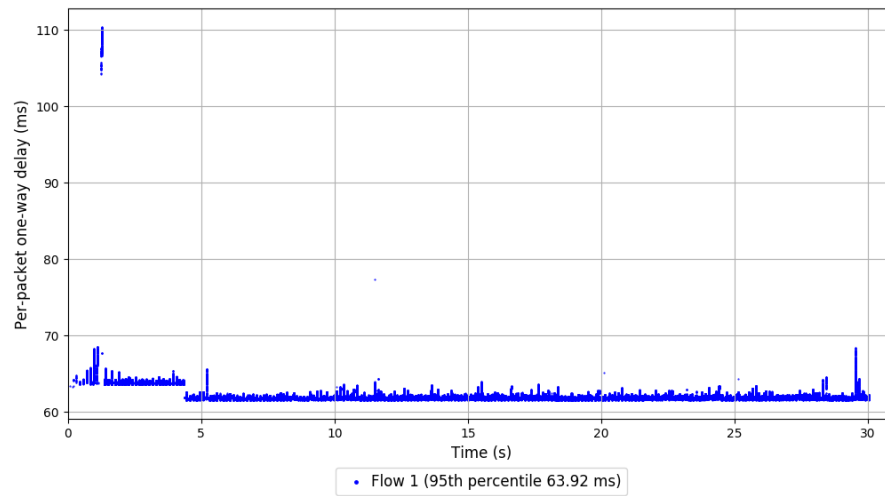
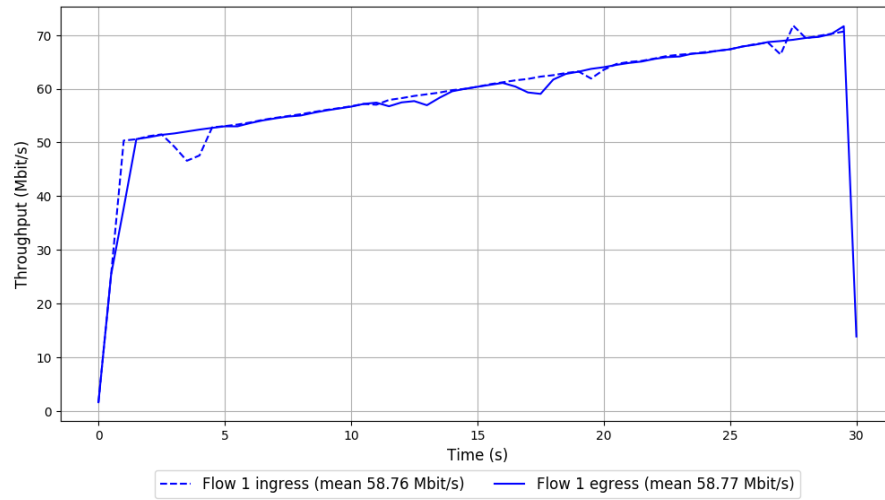
-- Flow 1:

Average throughput: 58.77 Mbit/s

95th percentile per-packet one-way delay: 63.919 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-11 20:39:01

End at: 2017-12-11 20:39:31

Below is generated by plot.py at 2017-12-11 22:12:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.67 Mbit/s

95th percentile per-packet one-way delay: 64.350 ms

Loss rate: 0.00%

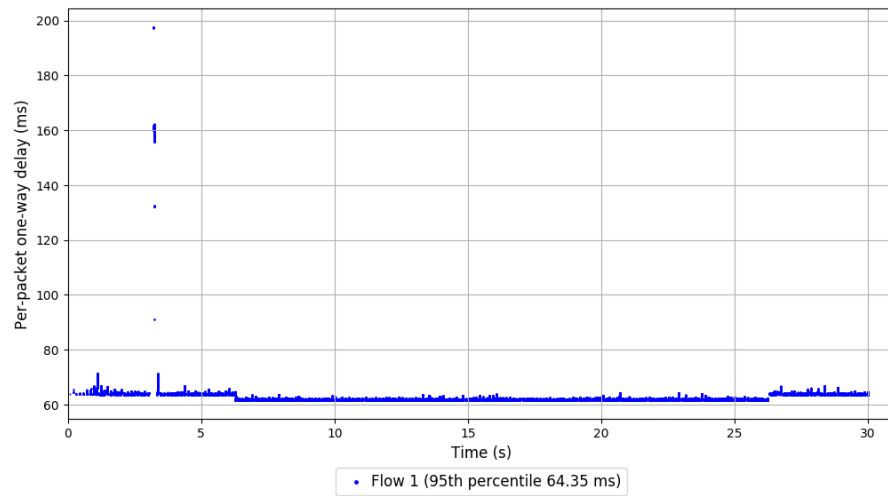
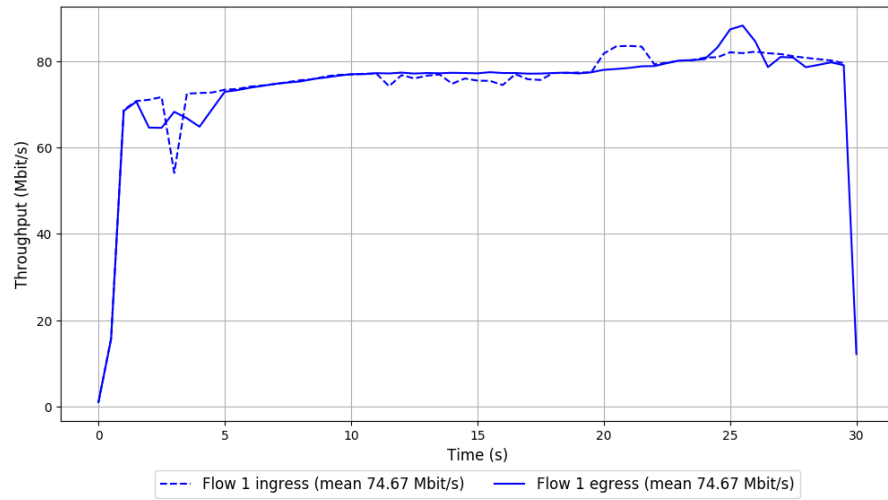
-- Flow 1:

Average throughput: 74.67 Mbit/s

95th percentile per-packet one-way delay: 64.350 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-11 20:49:18

End at: 2017-12-11 20:49:48

Below is generated by plot.py at 2017-12-11 22:12:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.38 Mbit/s

95th percentile per-packet one-way delay: 64.407 ms

Loss rate: 0.01%

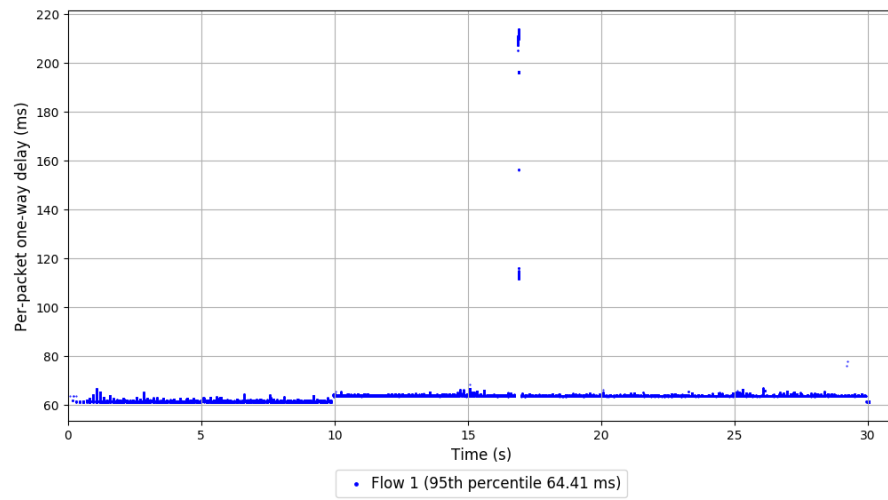
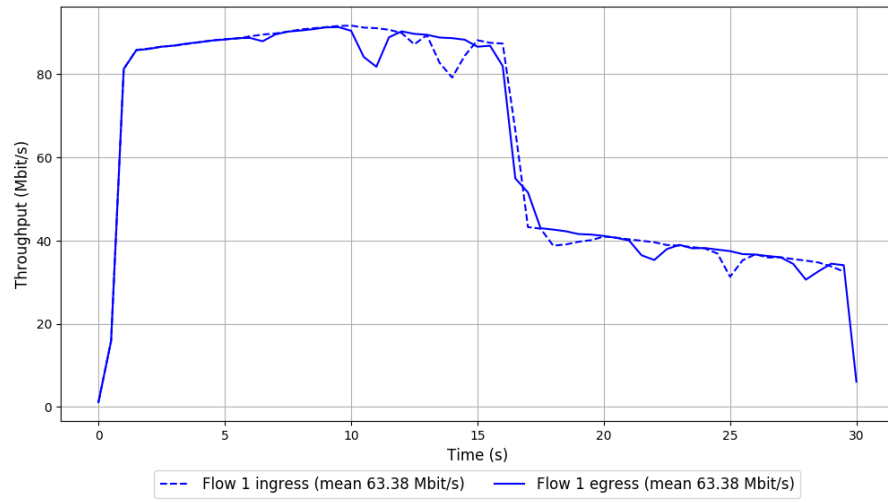
-- Flow 1:

Average throughput: 63.38 Mbit/s

95th percentile per-packet one-way delay: 64.407 ms

Loss rate: 0.01%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-11 19:06:05

End at: 2017-12-11 19:06:35

Below is generated by plot.py at 2017-12-11 22:12:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 243.98 Mbit/s

95th percentile per-packet one-way delay: 126.724 ms

Loss rate: 0.06%

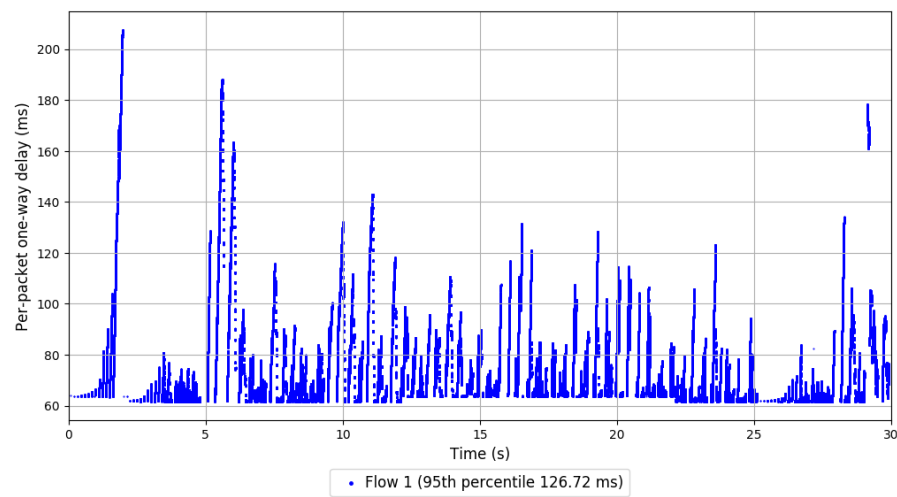
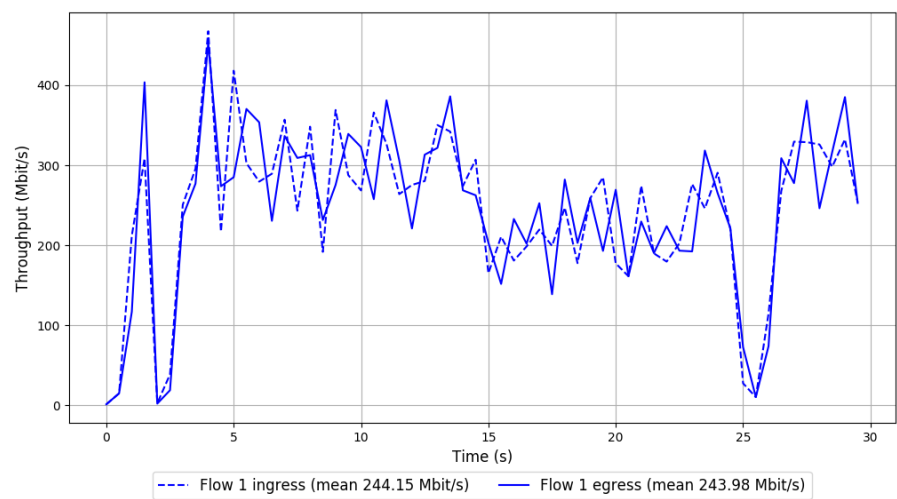
-- Flow 1:

Average throughput: 243.98 Mbit/s

95th percentile per-packet one-way delay: 126.724 ms

Loss rate: 0.06%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-11 19:16:44

End at: 2017-12-11 19:17:14

Below is generated by plot.py at 2017-12-11 22:13:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 265.38 Mbit/s

95th percentile per-packet one-way delay: 144.085 ms

Loss rate: 0.02%

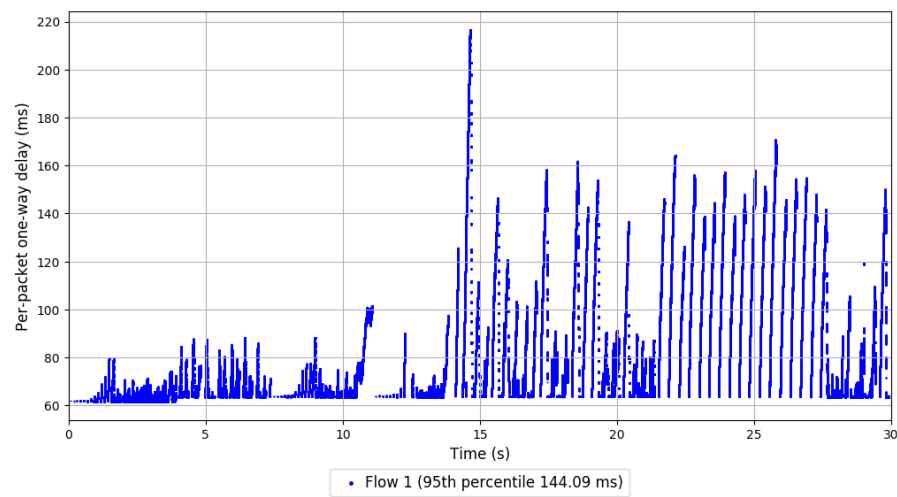
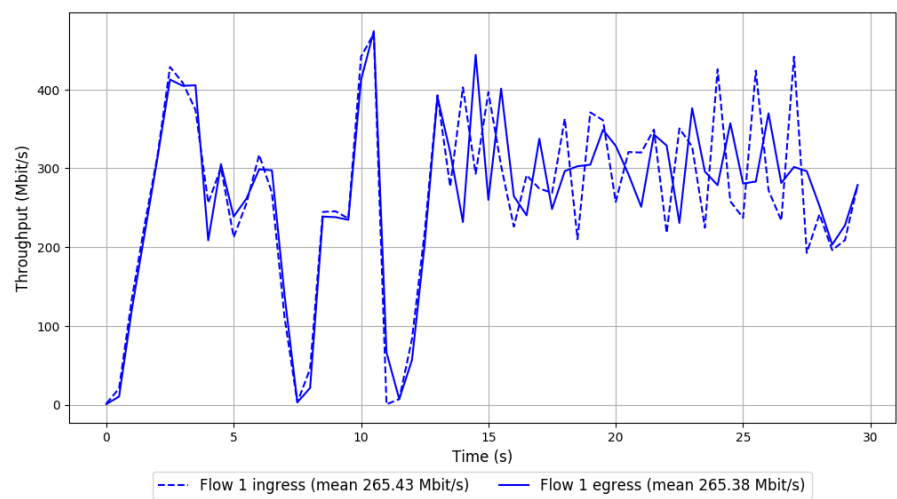
-- Flow 1:

Average throughput: 265.38 Mbit/s

95th percentile per-packet one-way delay: 144.085 ms

Loss rate: 0.02%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-11 19:27:18

End at: 2017-12-11 19:27:48

Below is generated by plot.py at 2017-12-11 22:13:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 247.21 Mbit/s

95th percentile per-packet one-way delay: 129.235 ms

Loss rate: 0.03%

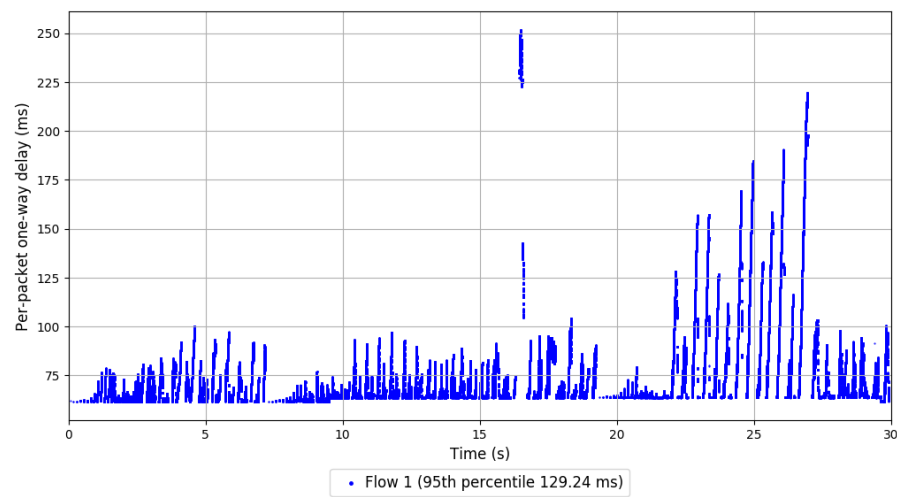
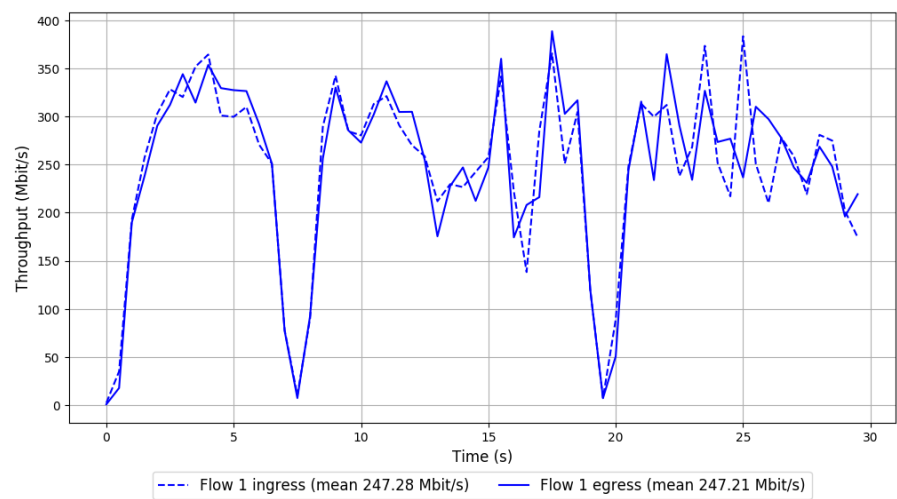
-- Flow 1:

Average throughput: 247.21 Mbit/s

95th percentile per-packet one-way delay: 129.235 ms

Loss rate: 0.03%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-11 19:37:44

End at: 2017-12-11 19:38:14

Below is generated by plot.py at 2017-12-11 22:13:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 175.68 Mbit/s

95th percentile per-packet one-way delay: 88.168 ms

Loss rate: 0.00%

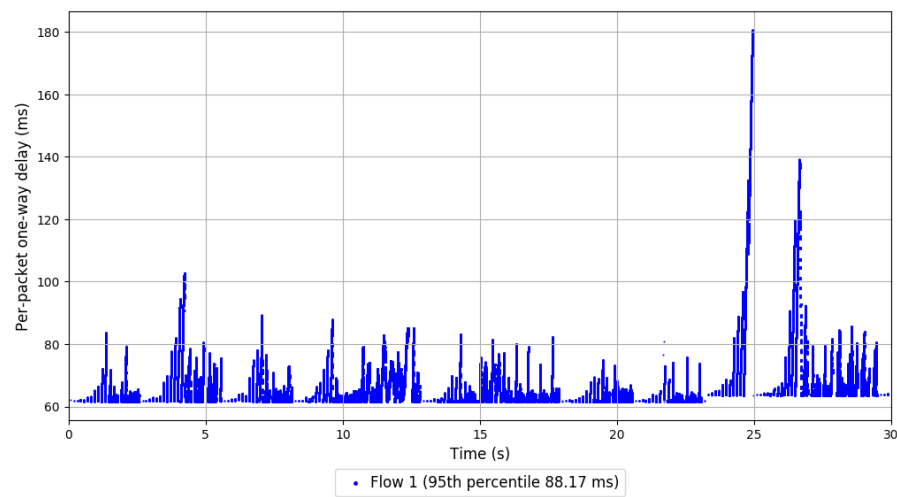
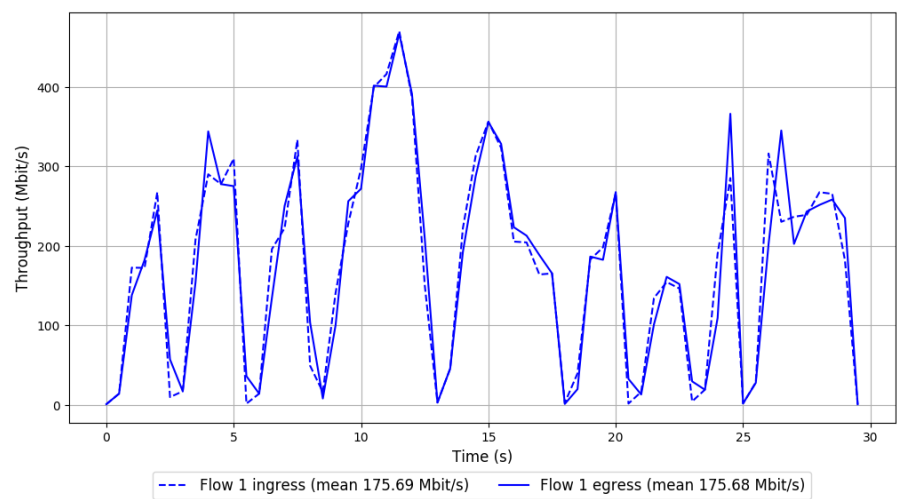
-- Flow 1:

Average throughput: 175.68 Mbit/s

95th percentile per-packet one-way delay: 88.168 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-11 19:48:11

End at: 2017-12-11 19:48:41

Below is generated by plot.py at 2017-12-11 22:13:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 226.79 Mbit/s

95th percentile per-packet one-way delay: 96.221 ms

Loss rate: 0.04%

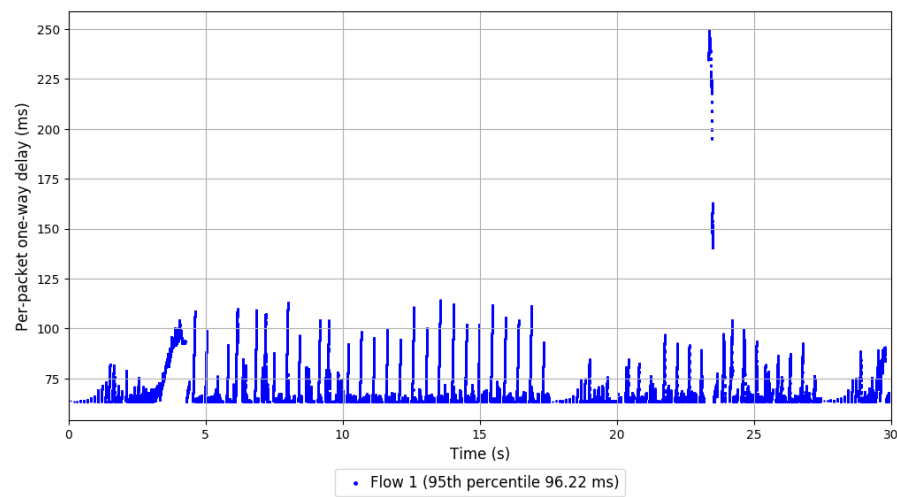
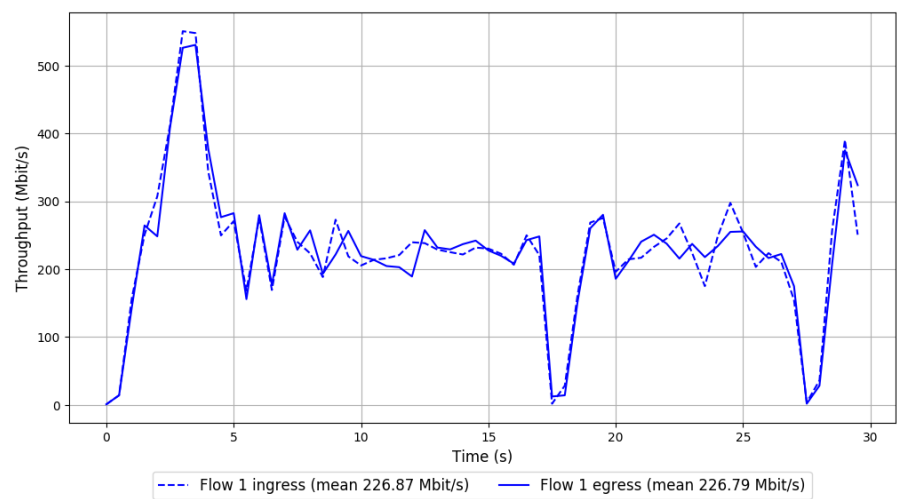
-- Flow 1:

Average throughput: 226.79 Mbit/s

95th percentile per-packet one-way delay: 96.221 ms

Loss rate: 0.04%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-11 19:58:45

End at: 2017-12-11 19:59:15

Below is generated by plot.py at 2017-12-11 22:14:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 307.69 Mbit/s

95th percentile per-packet one-way delay: 218.518 ms

Loss rate: 1.35%

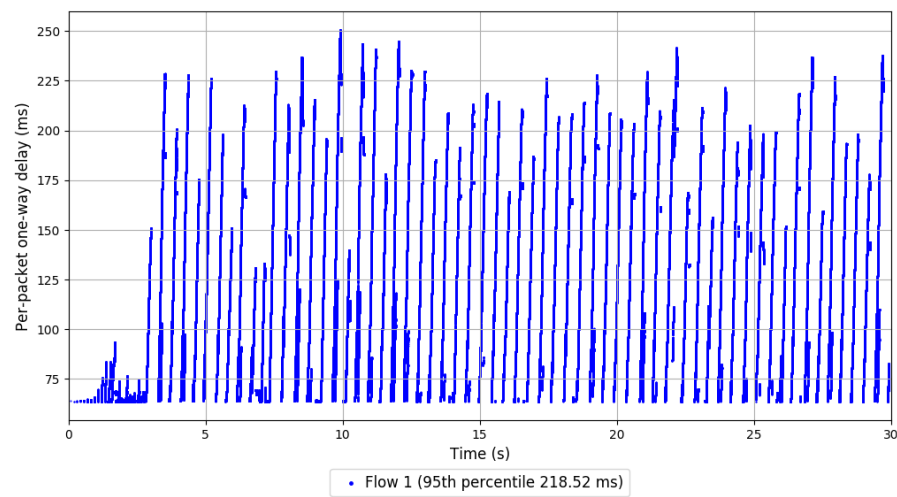
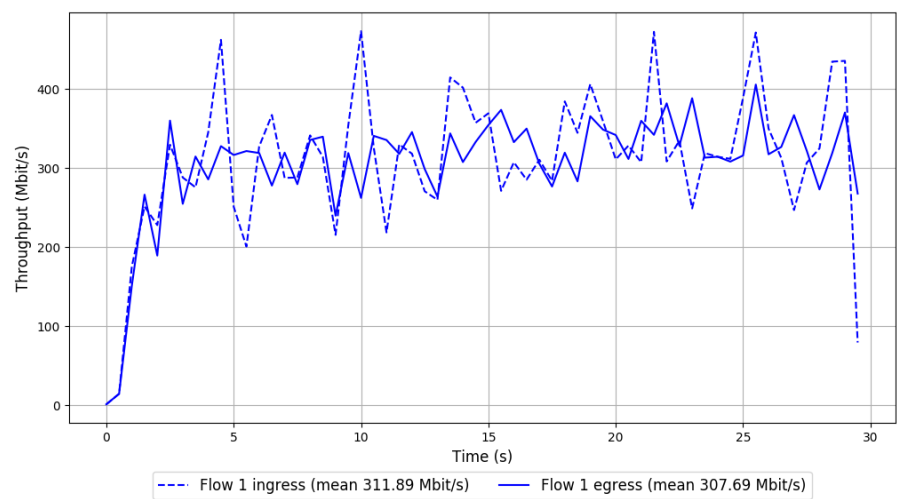
-- Flow 1:

Average throughput: 307.69 Mbit/s

95th percentile per-packet one-way delay: 218.518 ms

Loss rate: 1.35%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-11 20:09:25

End at: 2017-12-11 20:09:55

Below is generated by plot.py at 2017-12-11 22:14:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 207.01 Mbit/s

95th percentile per-packet one-way delay: 179.694 ms

Loss rate: 1.23%

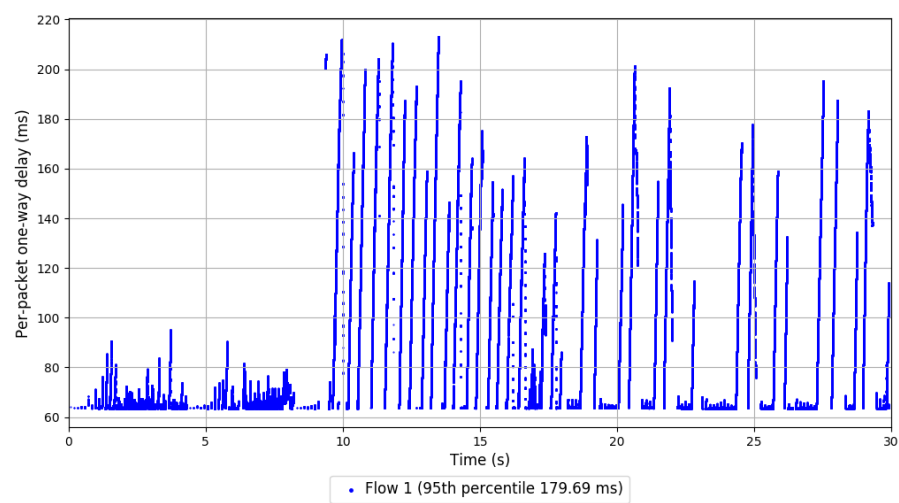
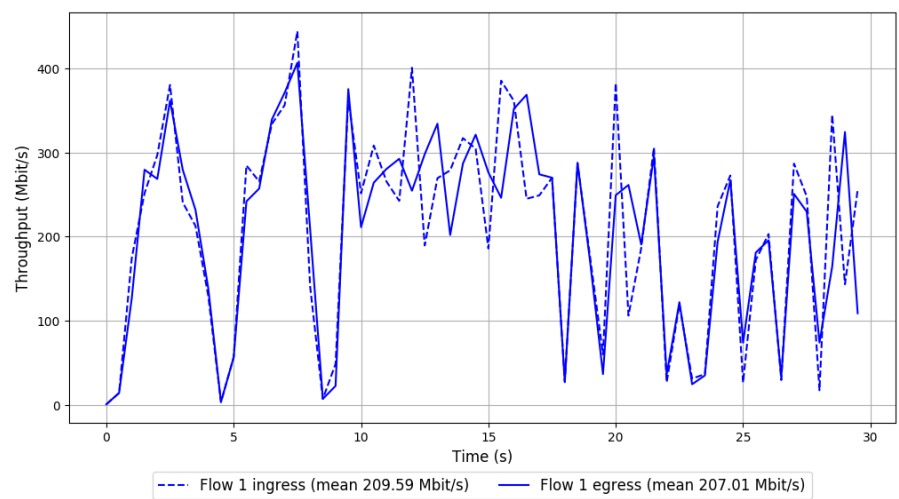
-- Flow 1:

Average throughput: 207.01 Mbit/s

95th percentile per-packet one-way delay: 179.694 ms

Loss rate: 1.23%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-11 20:19:56

End at: 2017-12-11 20:20:26

Below is generated by plot.py at 2017-12-11 22:17:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 325.81 Mbit/s

95th percentile per-packet one-way delay: 222.731 ms

Loss rate: 2.89%

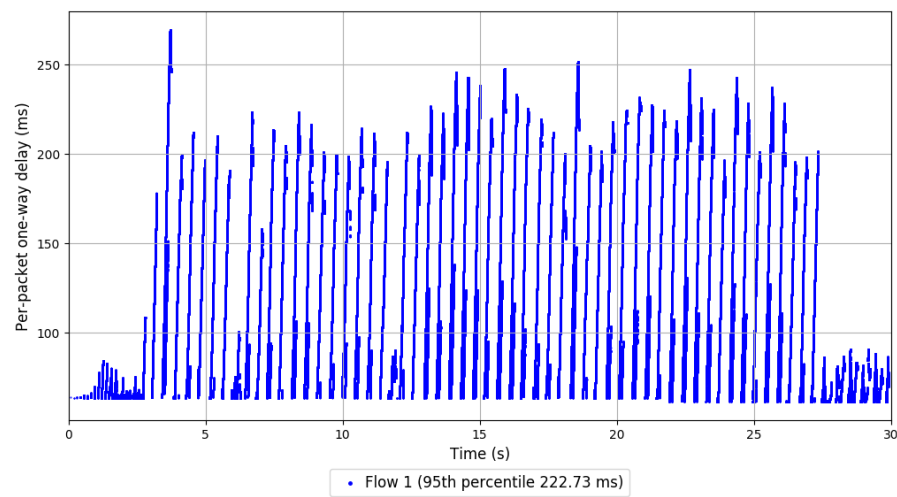
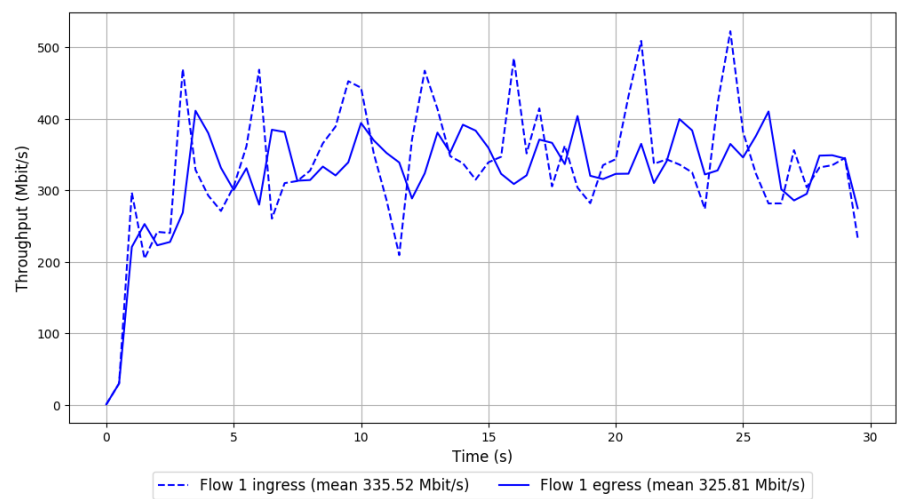
-- Flow 1:

Average throughput: 325.81 Mbit/s

95th percentile per-packet one-way delay: 222.731 ms

Loss rate: 2.89%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-11 20:30:31

End at: 2017-12-11 20:31:01

Below is generated by plot.py at 2017-12-11 22:17:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 230.45 Mbit/s

95th percentile per-packet one-way delay: 107.552 ms

Loss rate: 0.05%

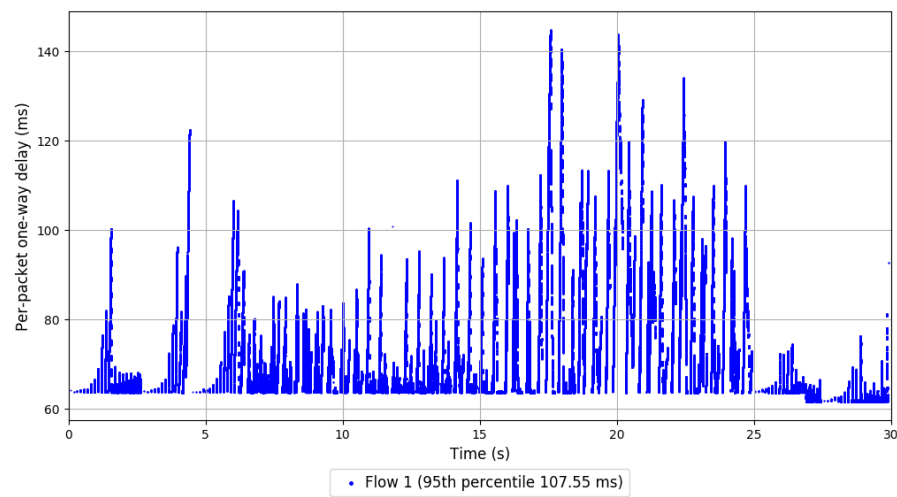
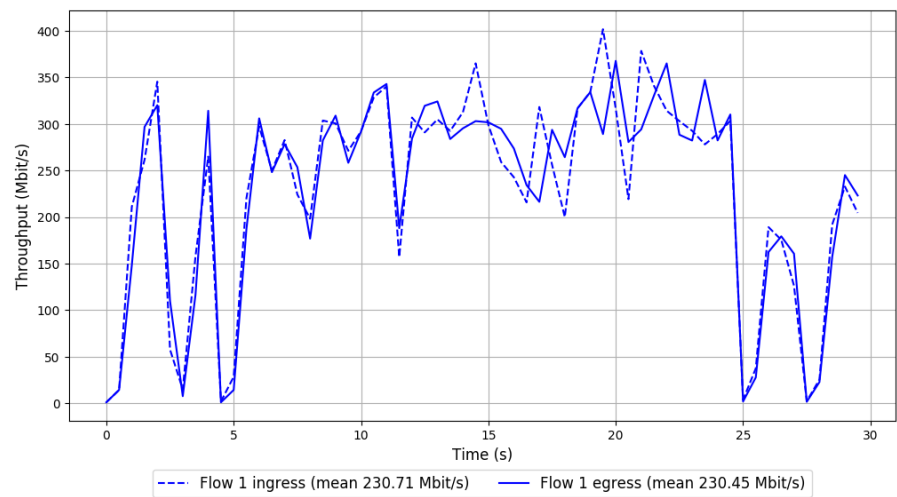
-- Flow 1:

Average throughput: 230.45 Mbit/s

95th percentile per-packet one-way delay: 107.552 ms

Loss rate: 0.05%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-11 20:41:00

End at: 2017-12-11 20:41:30

Below is generated by plot.py at 2017-12-11 22:17:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 229.56 Mbit/s

95th percentile per-packet one-way delay: 88.077 ms

Loss rate: 0.11%

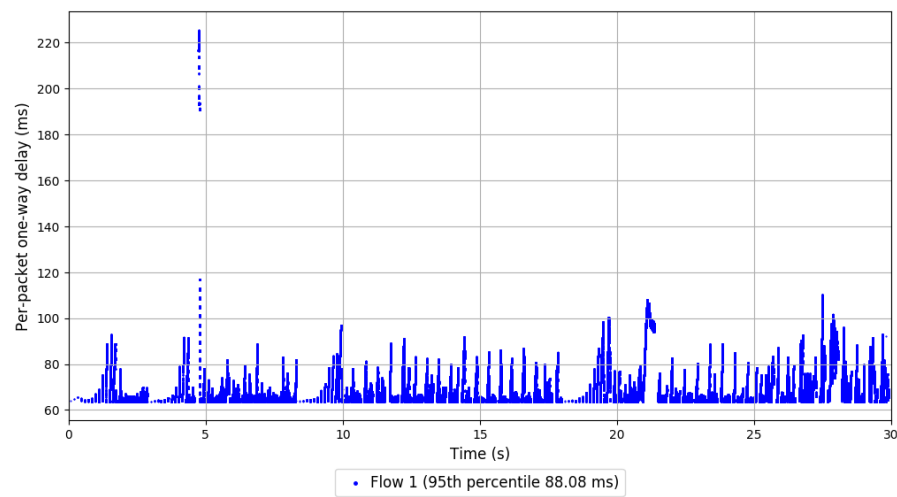
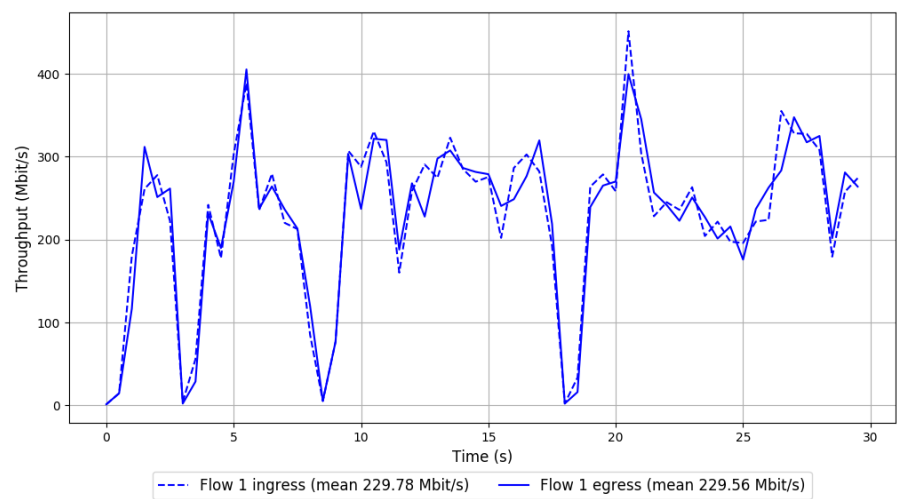
-- Flow 1:

Average throughput: 229.56 Mbit/s

95th percentile per-packet one-way delay: 88.077 ms

Loss rate: 0.11%

Run 10: Report of Verus — Data Link

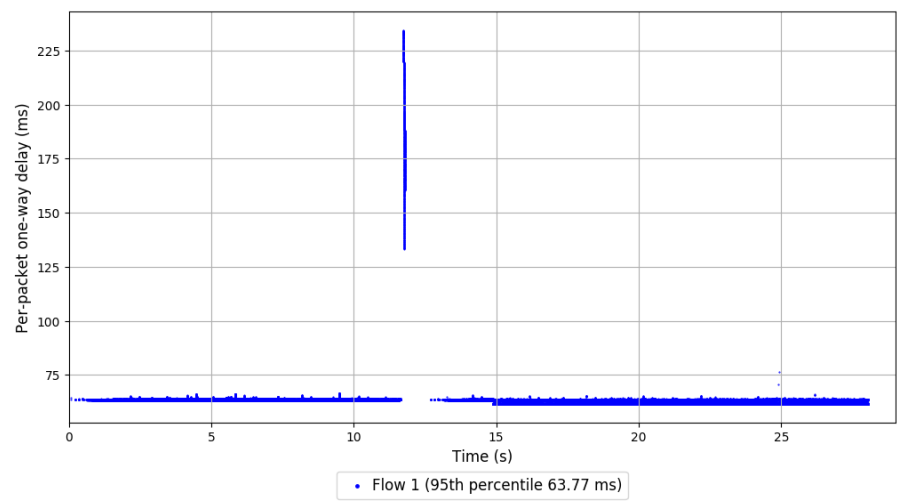
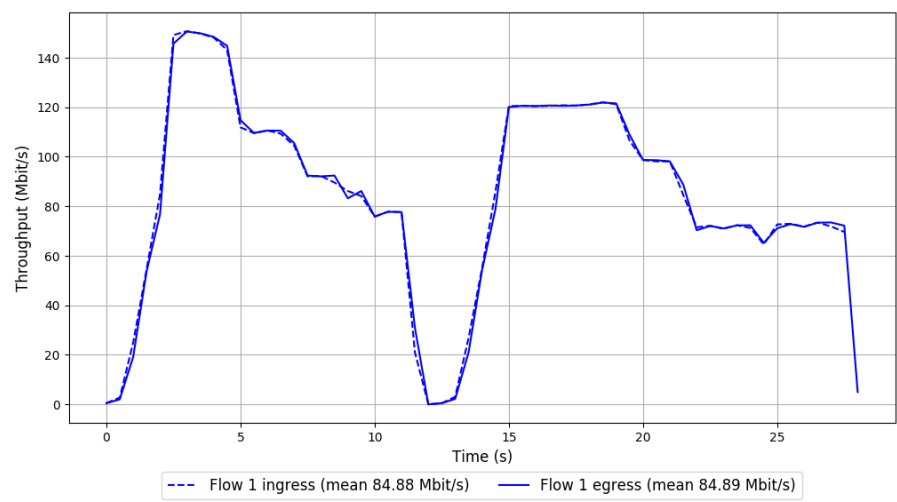


```
Run 1: Statistics of Copa

Start at: 2017-12-11 19:13:21
End at: 2017-12-11 19:13:51

# Below is generated by plot.py at 2017-12-11 22:17:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.89 Mbit/s
95th percentile per-packet one-way delay: 63.774 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.89 Mbit/s
95th percentile per-packet one-way delay: 63.774 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-11 19:23:55

End at: 2017-12-11 19:24:25

Below is generated by plot.py at 2017-12-11 22:17:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 55.10 Mbit/s

95th percentile per-packet one-way delay: 63.811 ms

Loss rate: 0.01%

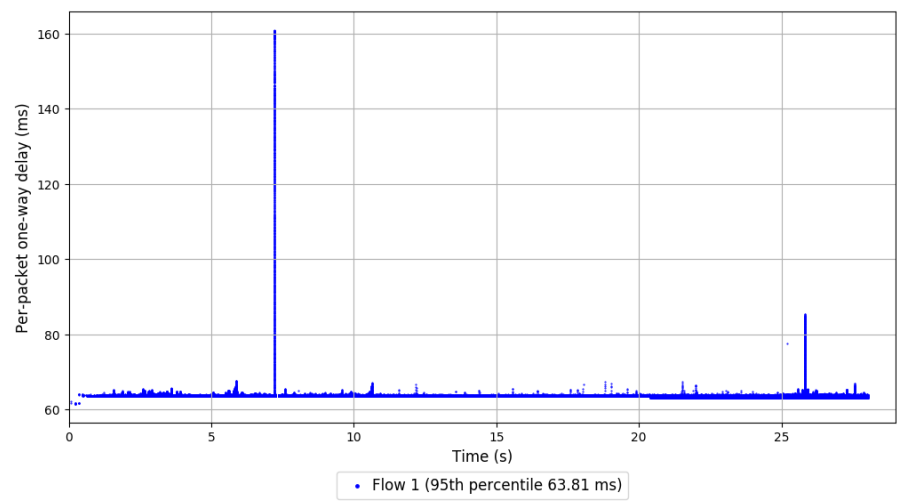
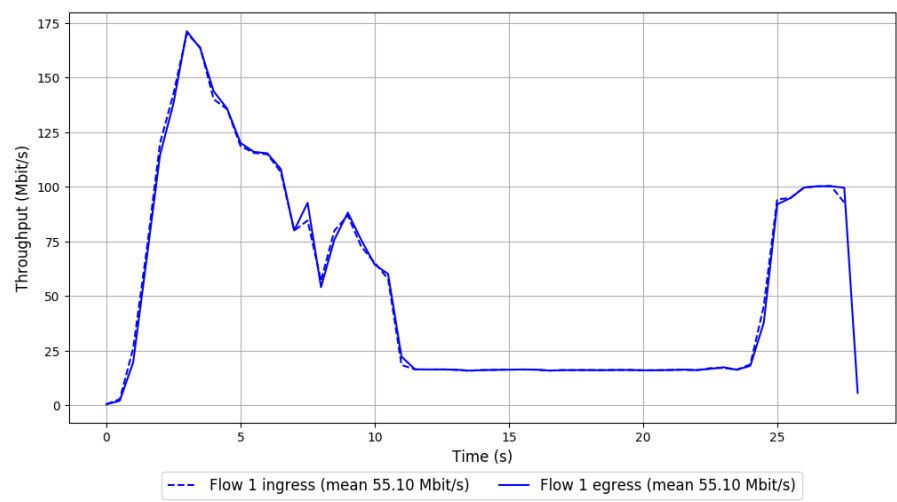
-- Flow 1:

Average throughput: 55.10 Mbit/s

95th percentile per-packet one-way delay: 63.811 ms

Loss rate: 0.01%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-11 19:34:24

End at: 2017-12-11 19:34:54

Below is generated by plot.py at 2017-12-11 22:17:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.84 Mbit/s

95th percentile per-packet one-way delay: 63.720 ms

Loss rate: 0.01%

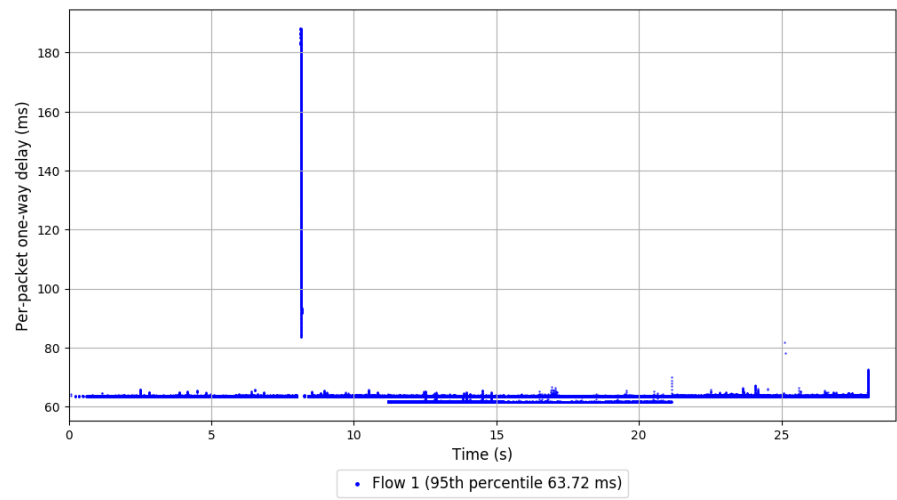
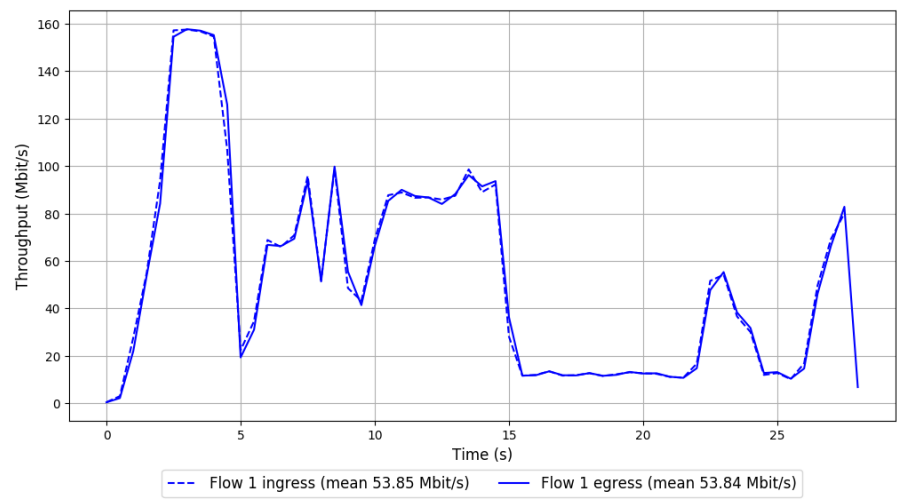
-- Flow 1:

Average throughput: 53.84 Mbit/s

95th percentile per-packet one-way delay: 63.720 ms

Loss rate: 0.01%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-11 19:44:46

End at: 2017-12-11 19:45:16

Below is generated by plot.py at 2017-12-11 22:17:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.62 Mbit/s

95th percentile per-packet one-way delay: 63.753 ms

Loss rate: 0.00%

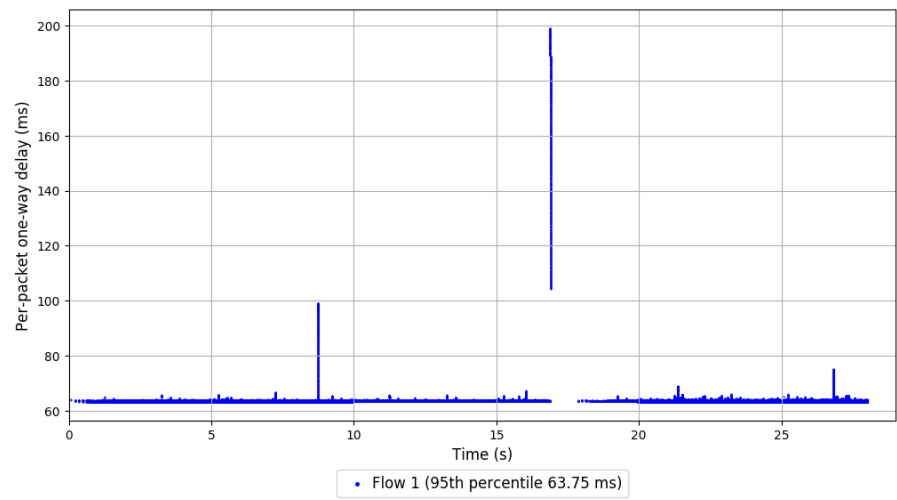
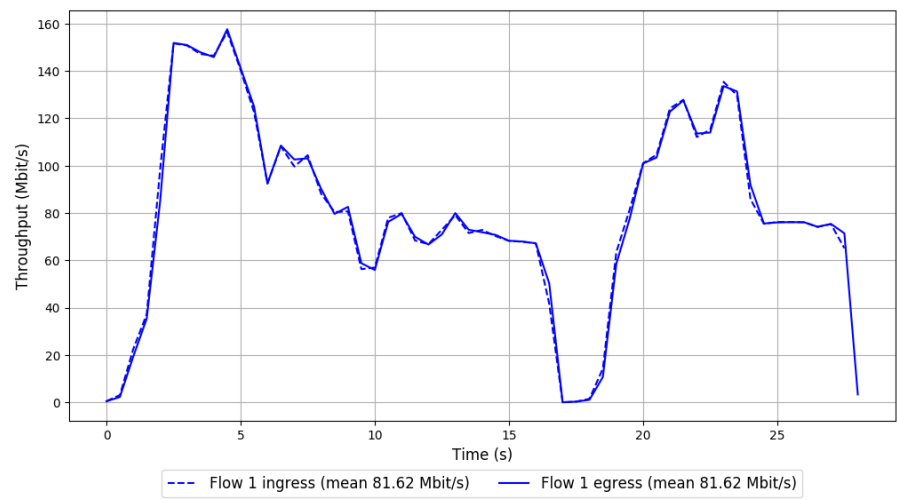
-- Flow 1:

Average throughput: 81.62 Mbit/s

95th percentile per-packet one-way delay: 63.753 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-11 19:55:22

End at: 2017-12-11 19:55:52

Below is generated by plot.py at 2017-12-11 22:17:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.66 Mbit/s

95th percentile per-packet one-way delay: 63.768 ms

Loss rate: 0.00%

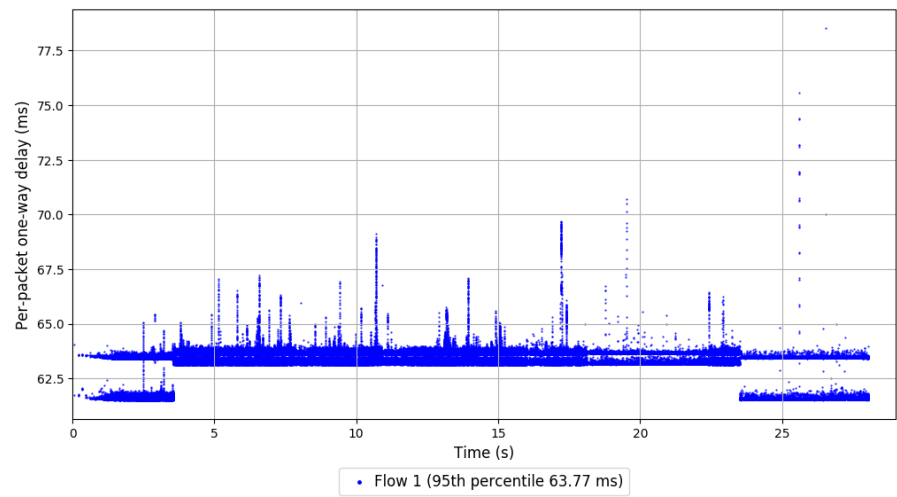
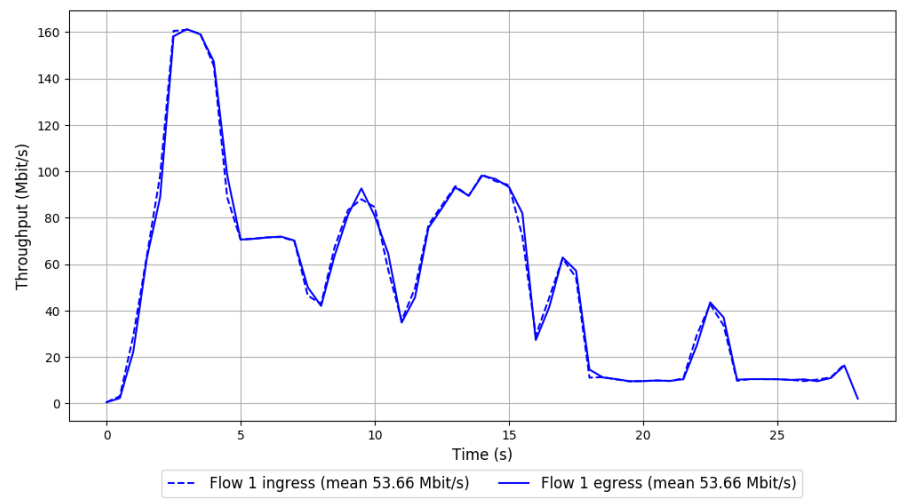
-- Flow 1:

Average throughput: 53.66 Mbit/s

95th percentile per-packet one-way delay: 63.768 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-11 20:06:00

End at: 2017-12-11 20:06:30

Below is generated by plot.py at 2017-12-11 22:17:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.54 Mbit/s

95th percentile per-packet one-way delay: 63.610 ms

Loss rate: 0.01%

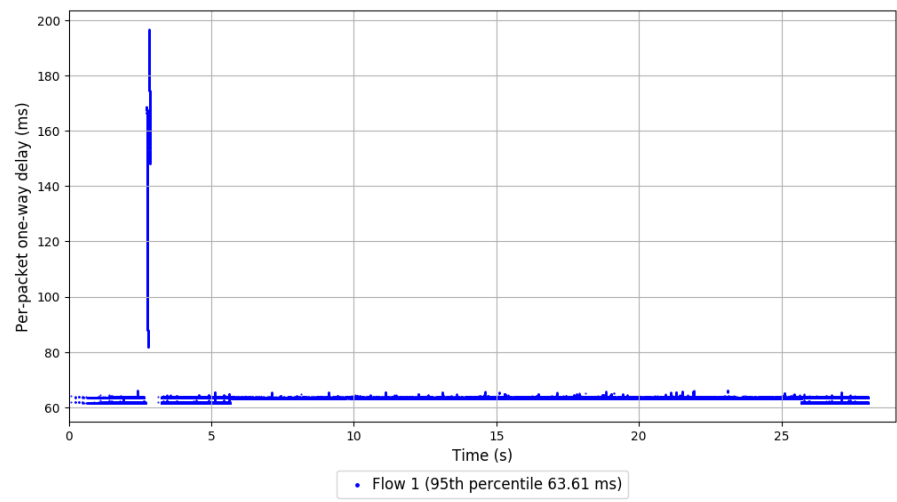
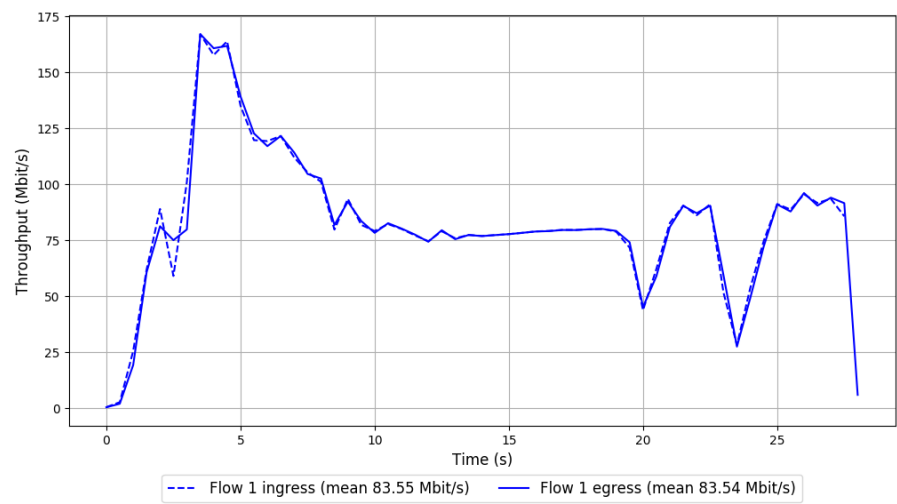
-- Flow 1:

Average throughput: 83.54 Mbit/s

95th percentile per-packet one-way delay: 63.610 ms

Loss rate: 0.01%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-11 20:16:31

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

Below is generated by plot.py at 2017-12-11 22:17:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.24 Mbit/s

95th percentile per-packet one-way delay: 62.187 ms

Loss rate: 0.00%

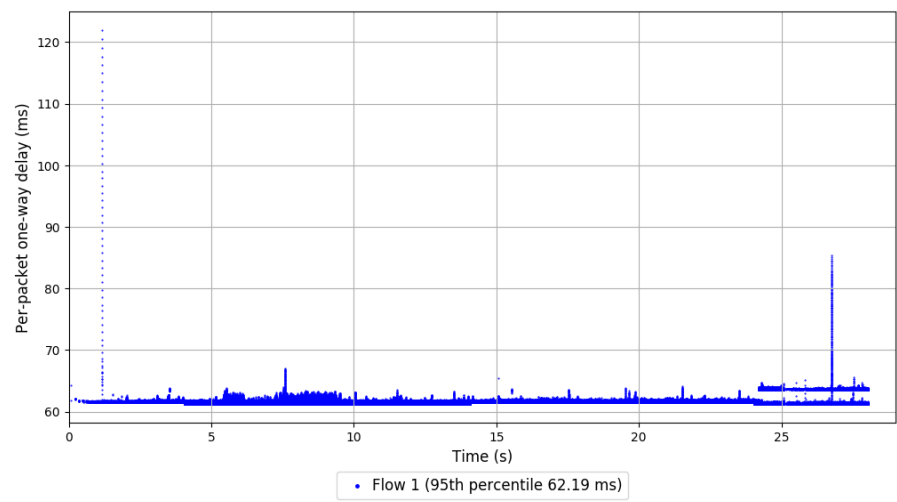
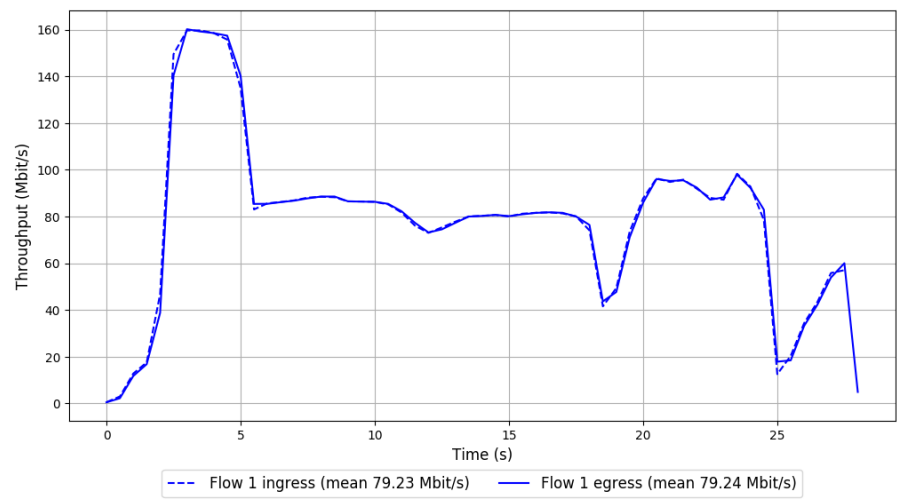
-- Flow 1:

Average throughput: 79.24 Mbit/s

95th percentile per-packet one-way delay: 62.187 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link

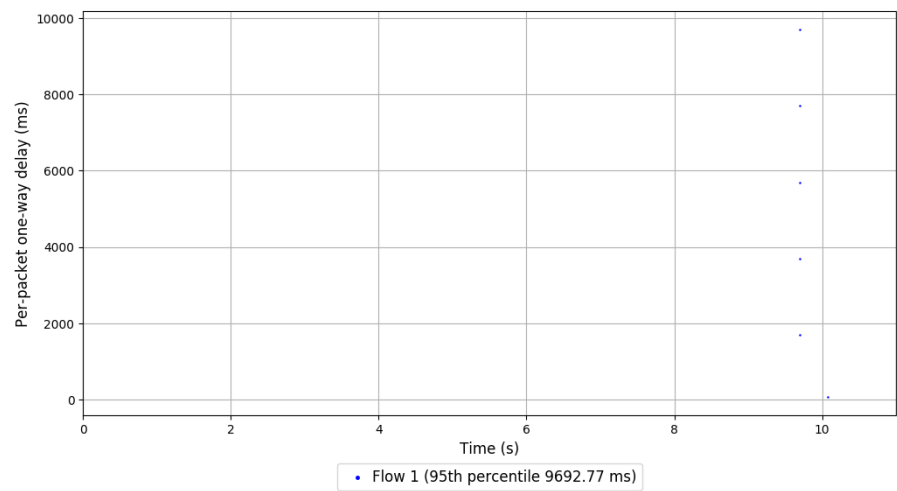
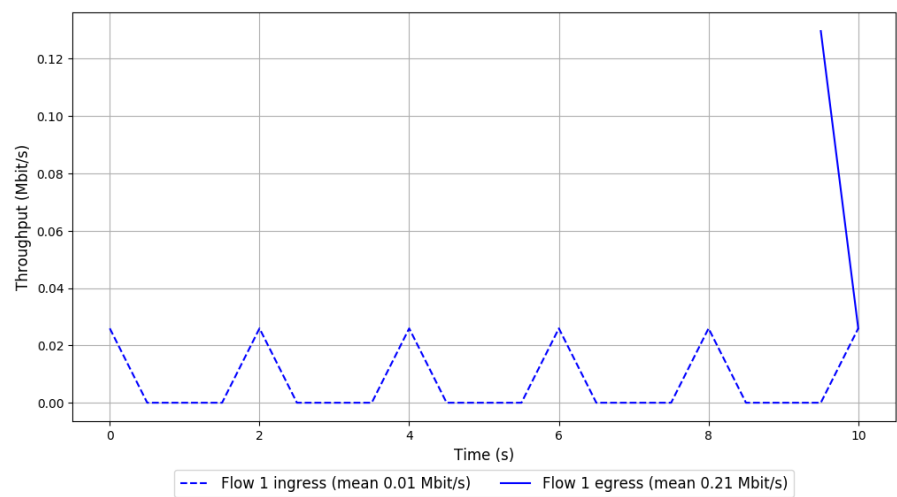


Run 8: Statistics of Copa

Start at: 2017-12-11 20:27:14

End at: 2017-12-11 20:27:44

Run 8: Report of Copa — Data Link

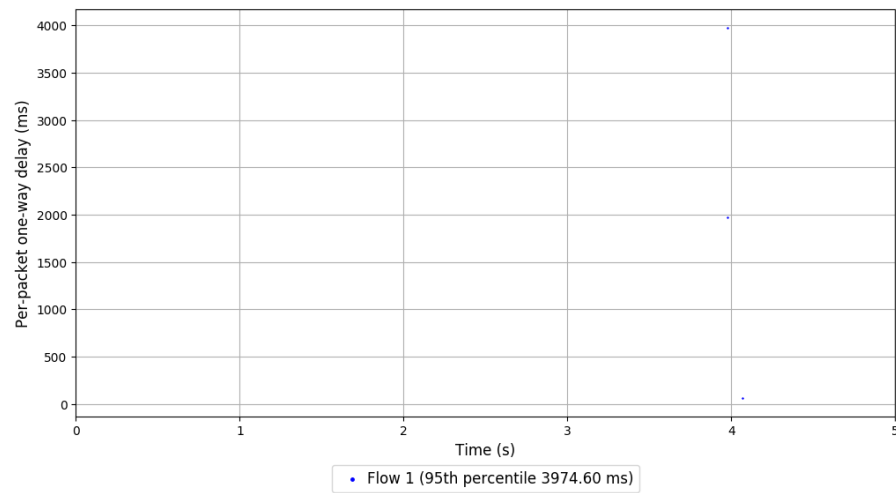
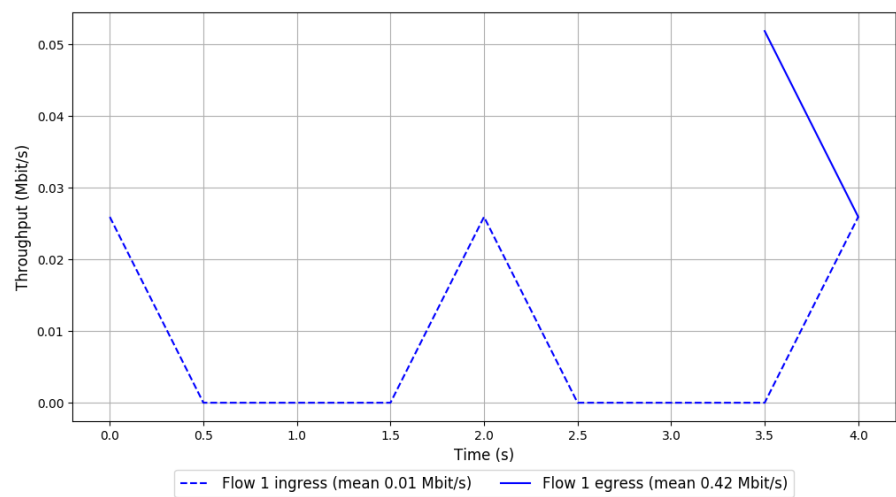


Run 9: Statistics of Copa

Start at: 2017-12-11 20:37:42

End at: 2017-12-11 20:38:13

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-11 20:47:56

End at: 2017-12-11 20:48:26

Below is generated by plot.py at 2017-12-11 22:17:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.02 Mbit/s

95th percentile per-packet one-way delay: 63.708 ms

Loss rate: 0.17%

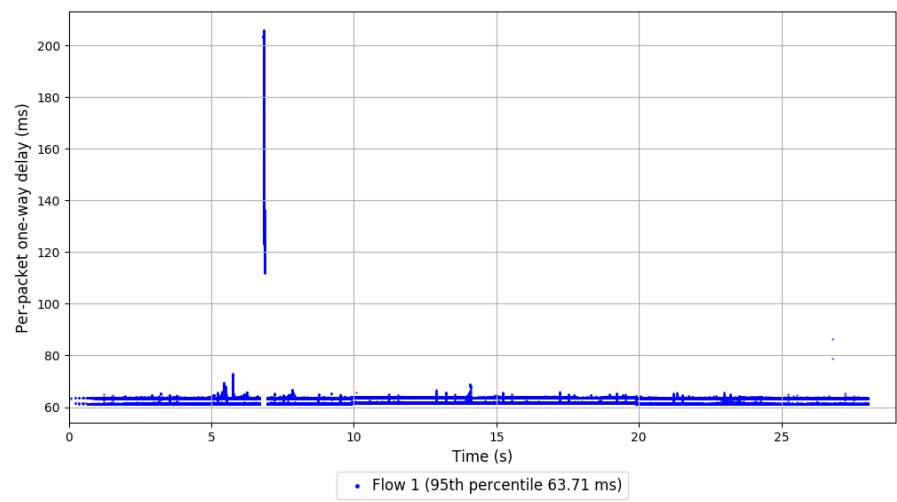
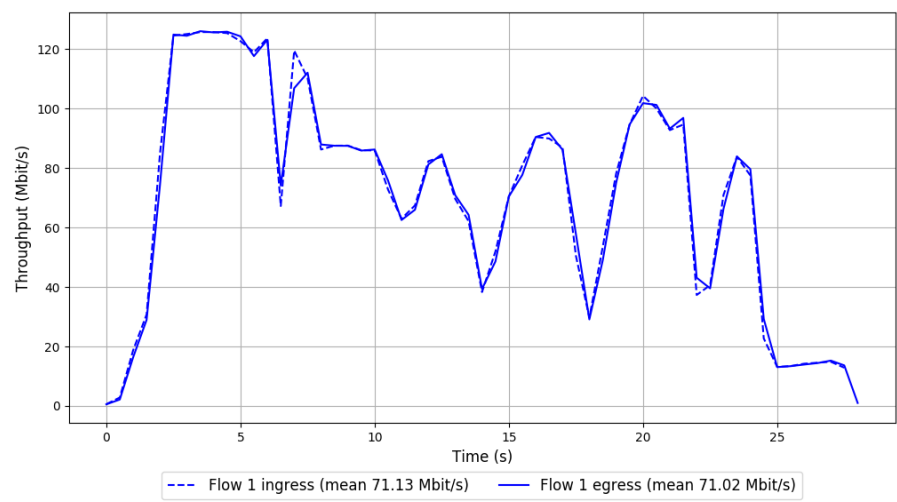
-- Flow 1:

Average throughput: 71.02 Mbit/s

95th percentile per-packet one-way delay: 63.708 ms

Loss rate: 0.17%

Run 10: Report of Copa — Data Link

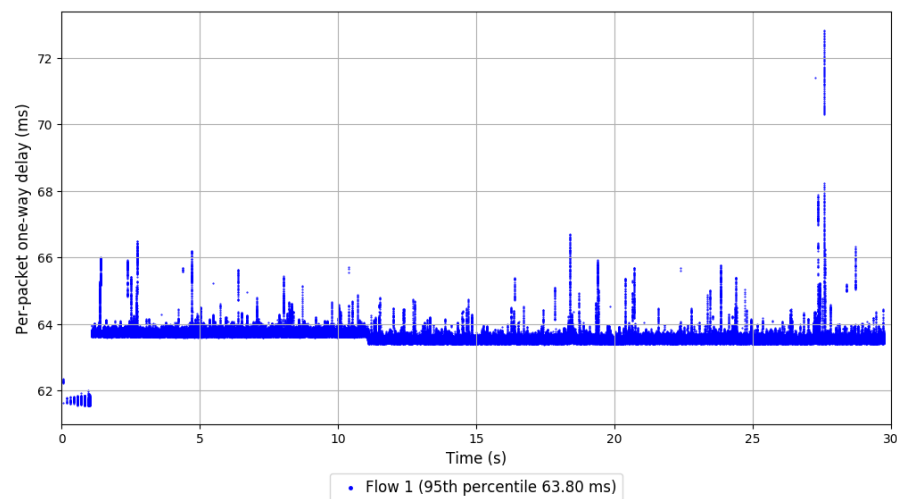
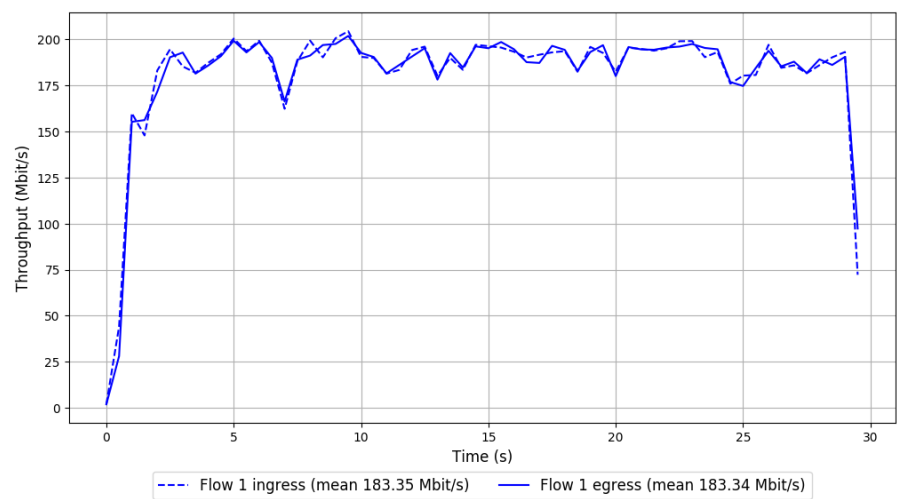


```
Run 1: Statistics of Indigo

Start at: 2017-12-11 19:11:36
End at: 2017-12-11 19:12:06

# Below is generated by plot.py at 2017-12-11 22:19:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.34 Mbit/s
95th percentile per-packet one-way delay: 63.799 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 183.34 Mbit/s
95th percentile per-packet one-way delay: 63.799 ms
Loss rate: 0.01%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-11 19:22:08

End at: 2017-12-11 19:22:38

Below is generated by plot.py at 2017-12-11 22:19:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.26 Mbit/s

95th percentile per-packet one-way delay: 63.672 ms

Loss rate: 0.00%

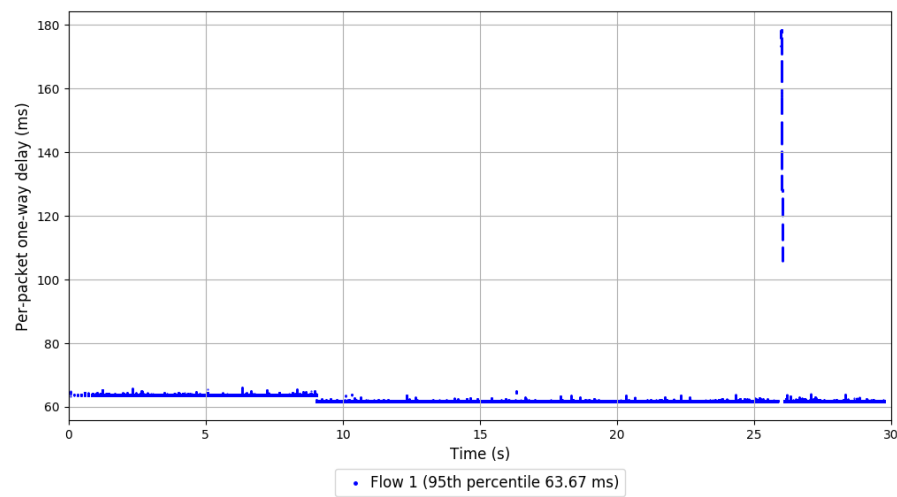
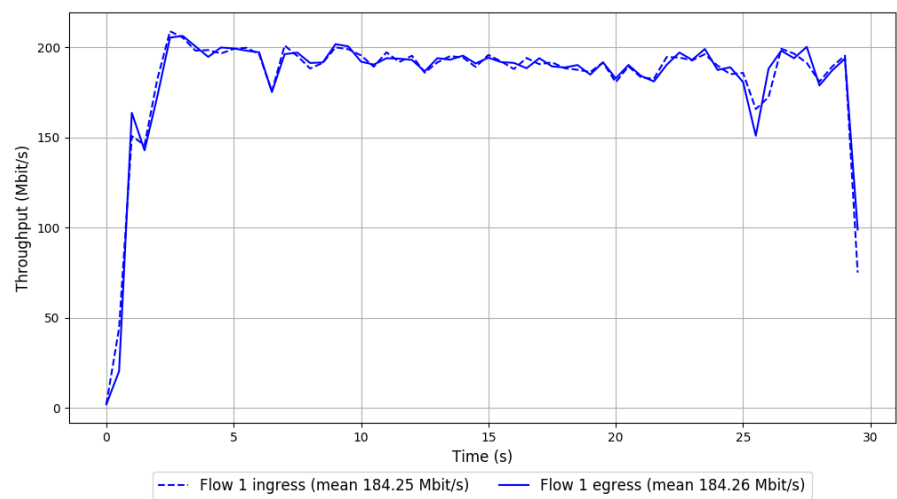
-- Flow 1:

Average throughput: 184.26 Mbit/s

95th percentile per-packet one-way delay: 63.672 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-11 19:32:42

End at: 2017-12-11 19:33:12

Below is generated by plot.py at 2017-12-11 22:20:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 181.32 Mbit/s

95th percentile per-packet one-way delay: 63.764 ms

Loss rate: 0.00%

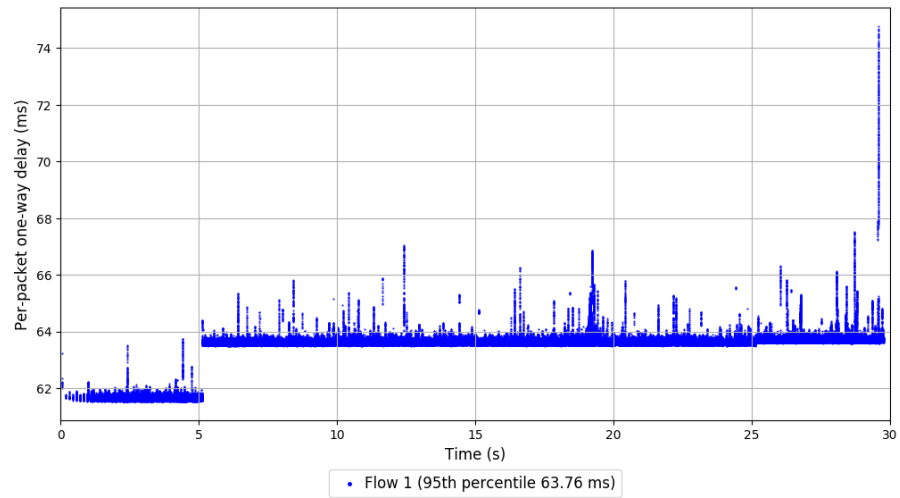
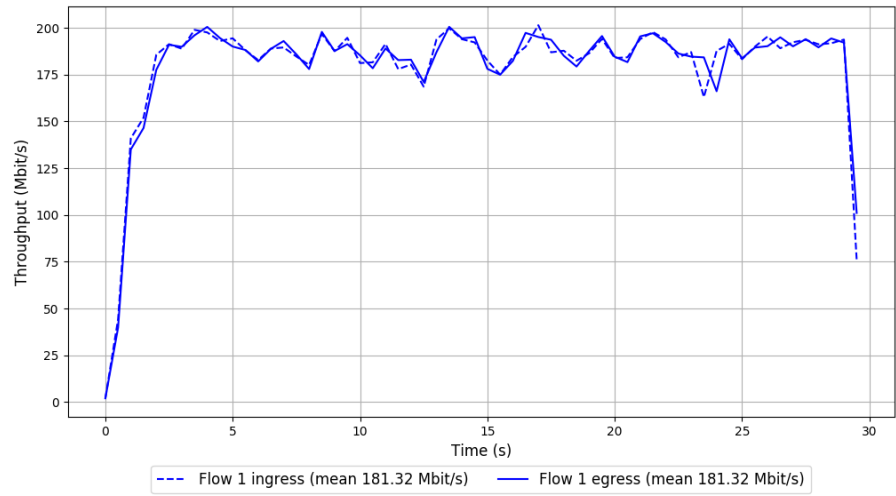
-- Flow 1:

Average throughput: 181.32 Mbit/s

95th percentile per-packet one-way delay: 63.764 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-11 19:43:01

End at: 2017-12-11 19:43:31

Below is generated by plot.py at 2017-12-11 22:20:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.95 Mbit/s

95th percentile per-packet one-way delay: 63.865 ms

Loss rate: 0.00%

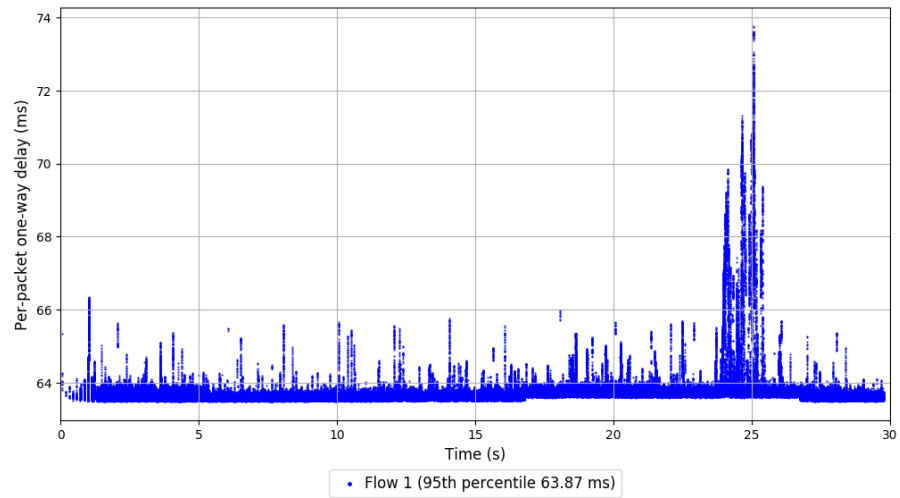
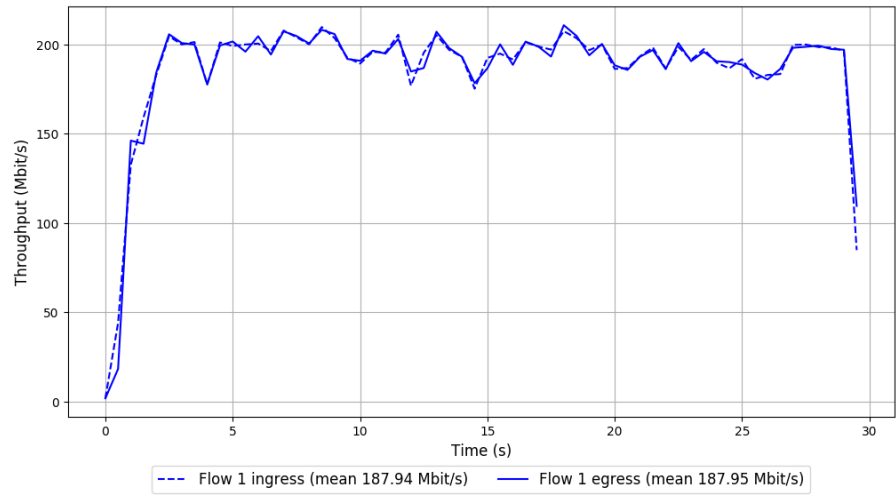
-- Flow 1:

Average throughput: 187.95 Mbit/s

95th percentile per-packet one-way delay: 63.865 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-11 19:53:36

End at: 2017-12-11 19:54:06

Below is generated by plot.py at 2017-12-11 22:21:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.95 Mbit/s

95th percentile per-packet one-way delay: 63.712 ms

Loss rate: 0.03%

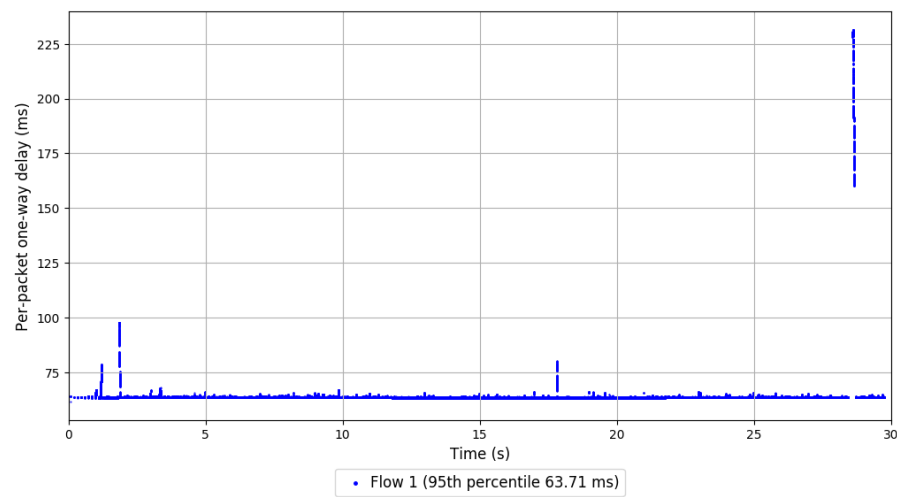
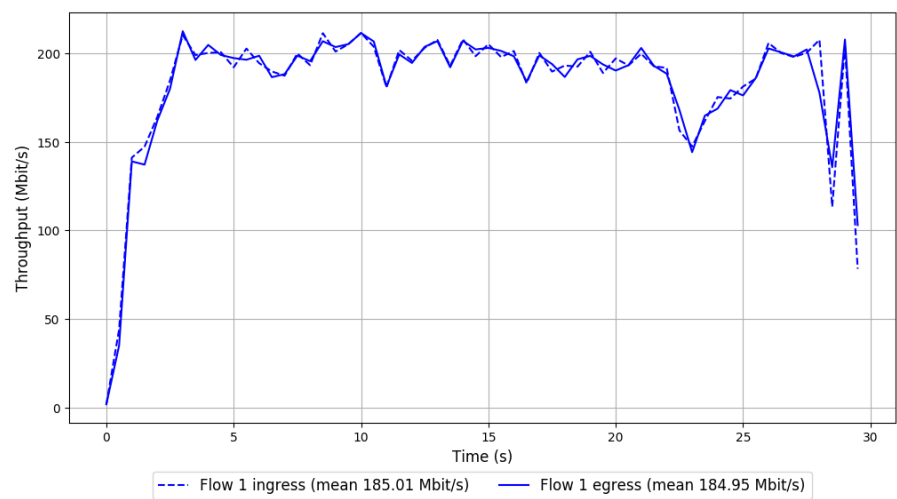
-- Flow 1:

Average throughput: 184.95 Mbit/s

95th percentile per-packet one-way delay: 63.712 ms

Loss rate: 0.03%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-11 20:04:13

End at: 2017-12-11 20:04:43

Below is generated by plot.py at 2017-12-11 22:21:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 179.58 Mbit/s

95th percentile per-packet one-way delay: 63.783 ms

Loss rate: 0.02%

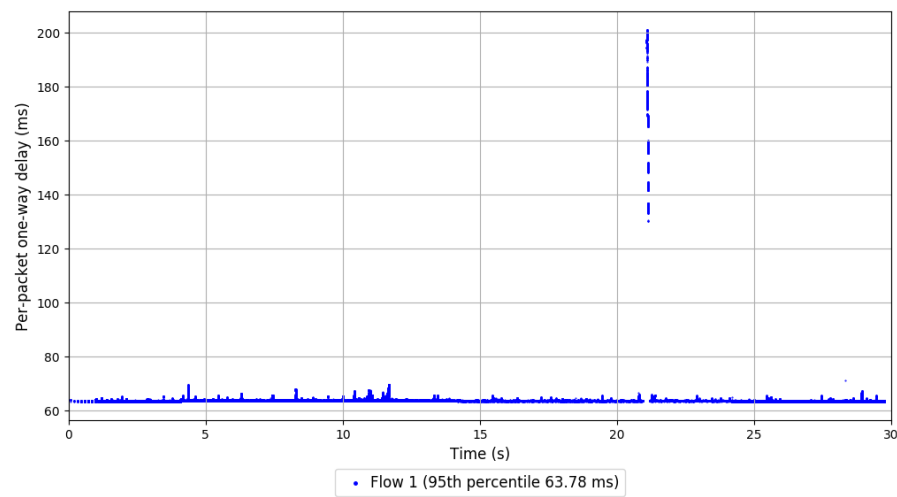
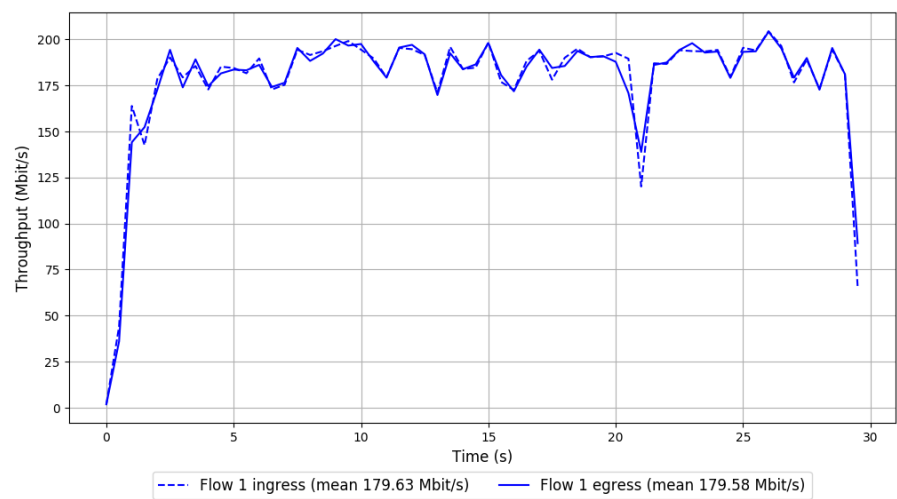
-- Flow 1:

Average throughput: 179.58 Mbit/s

95th percentile per-packet one-way delay: 63.783 ms

Loss rate: 0.02%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-11 20:14:46

End at: 2017-12-11 20:15:16

Below is generated by plot.py at 2017-12-11 22:21:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 187.36 Mbit/s

95th percentile per-packet one-way delay: 63.779 ms

Loss rate: 0.00%

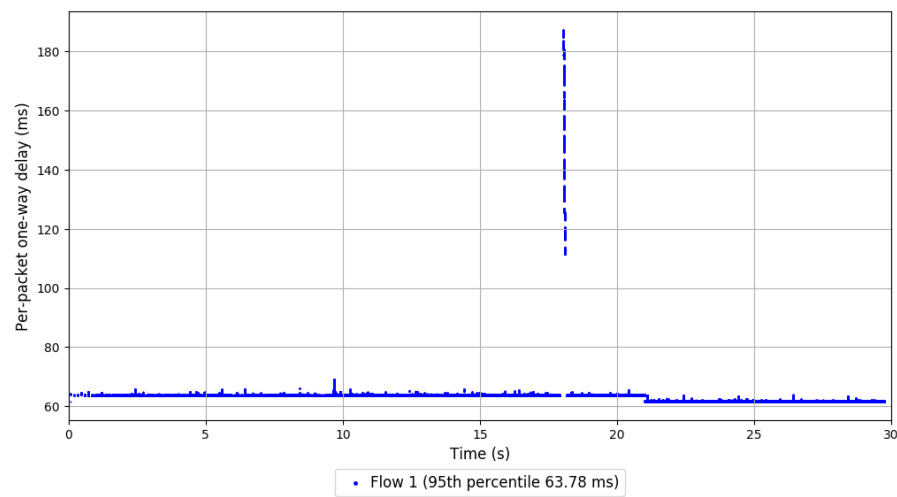
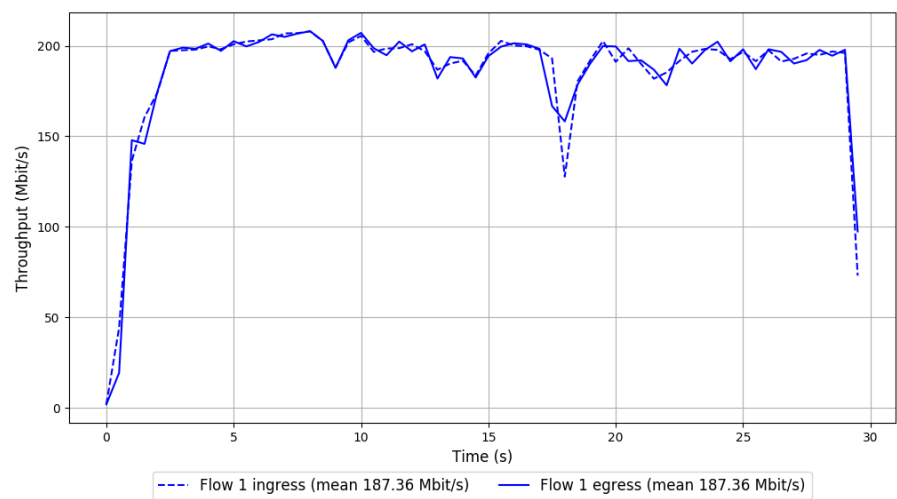
-- Flow 1:

Average throughput: 187.36 Mbit/s

95th percentile per-packet one-way delay: 63.779 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-11 20:25:29

End at: 2017-12-11 20:25:59

Below is generated by plot.py at 2017-12-11 22:21:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.19 Mbit/s

95th percentile per-packet one-way delay: 63.745 ms

Loss rate: 0.00%

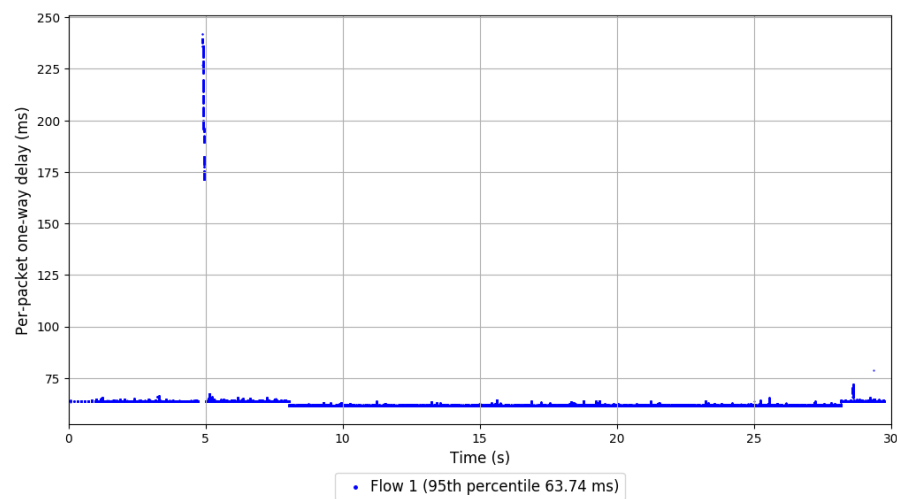
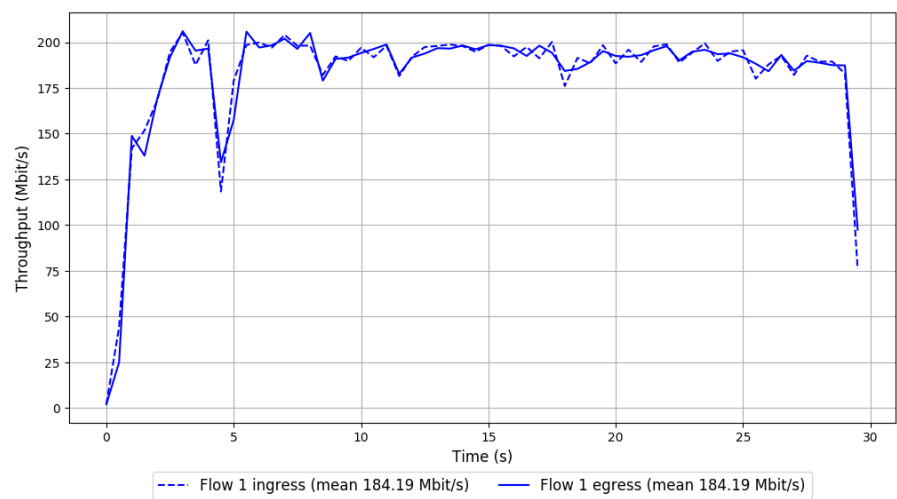
-- Flow 1:

Average throughput: 184.19 Mbit/s

95th percentile per-packet one-way delay: 63.745 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-11 20:35:58

End at: 2017-12-11 20:36:28

Below is generated by plot.py at 2017-12-11 22:22:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 182.37 Mbit/s

95th percentile per-packet one-way delay: 63.773 ms

Loss rate: 0.00%

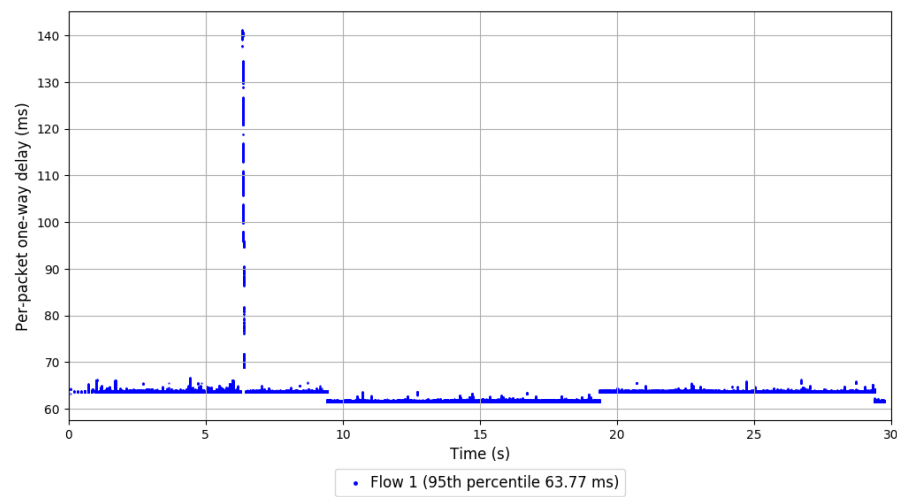
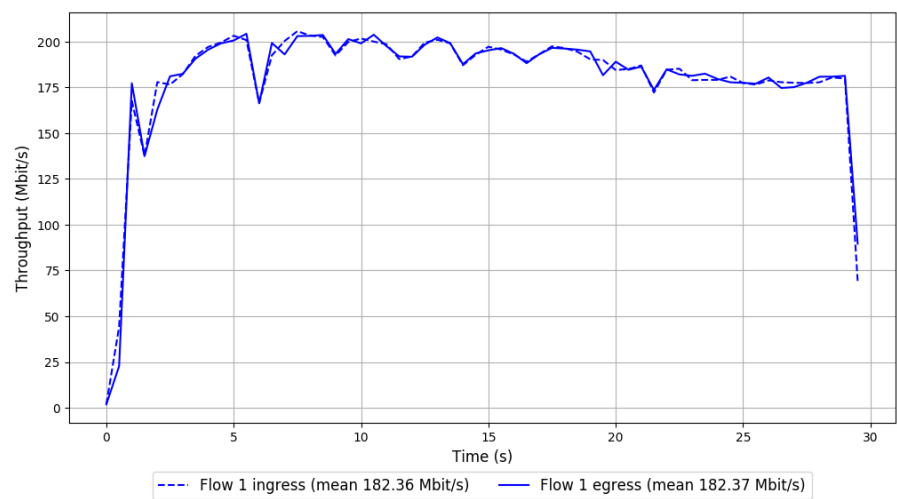
-- Flow 1:

Average throughput: 182.37 Mbit/s

95th percentile per-packet one-way delay: 63.773 ms

Loss rate: 0.00%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-11 20:46:16

End at: 2017-12-11 20:46:46

Below is generated by plot.py at 2017-12-11 22:22:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 177.41 Mbit/s

95th percentile per-packet one-way delay: 63.749 ms

Loss rate: 0.00%

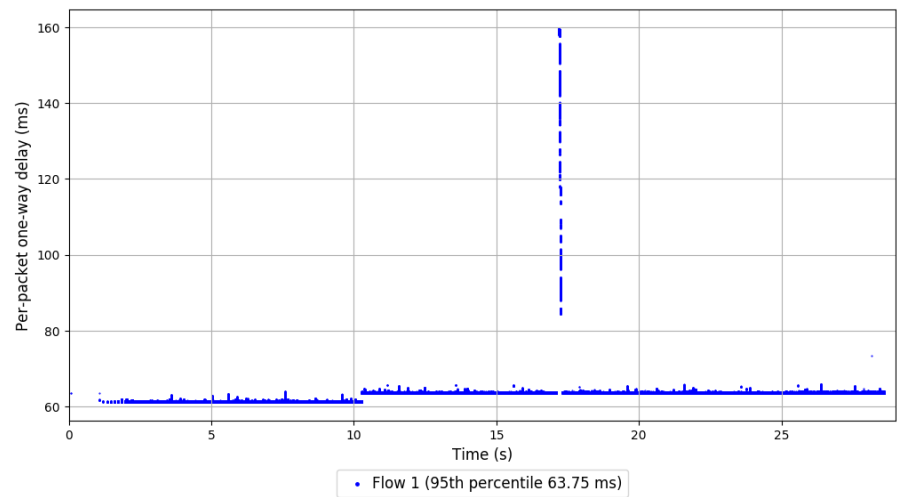
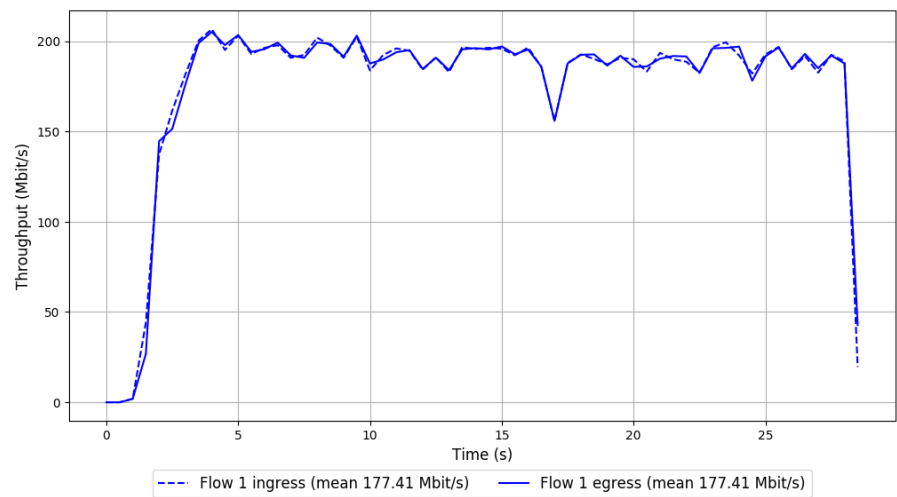
-- Flow 1:

Average throughput: 177.41 Mbit/s

95th percentile per-packet one-way delay: 63.749 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link

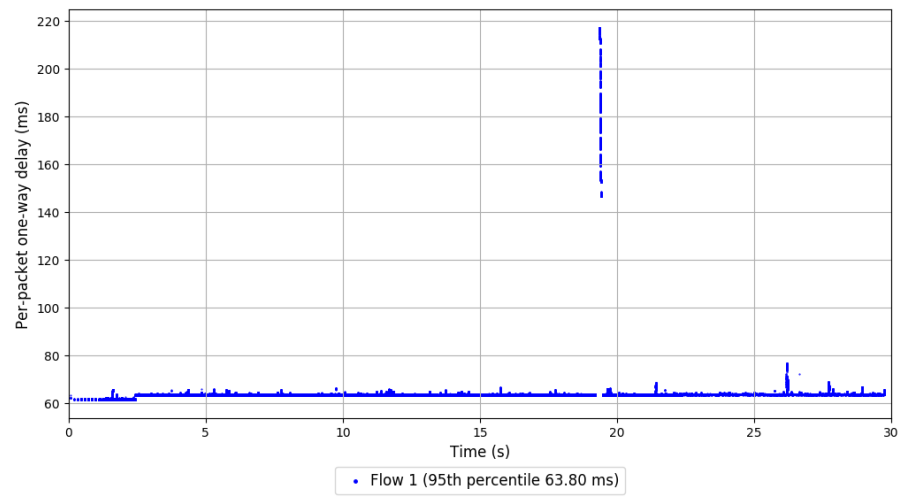
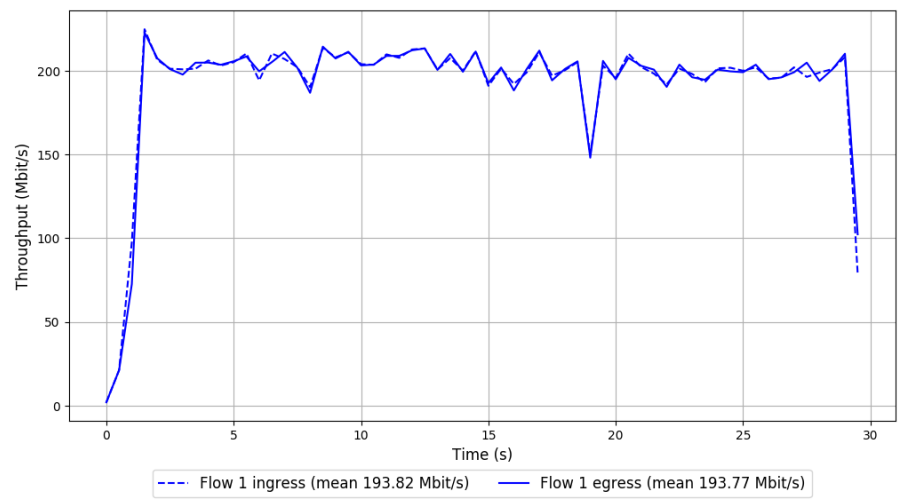


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-11 19:10:45
End at: 2017-12-11 19:11:15

# Below is generated by plot.py at 2017-12-11 22:23:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 193.77 Mbit/s
95th percentile per-packet one-way delay: 63.799 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 193.77 Mbit/s
95th percentile per-packet one-way delay: 63.799 ms
Loss rate: 0.02%
```

Run 1: Report of Indigo-calib — Data Link

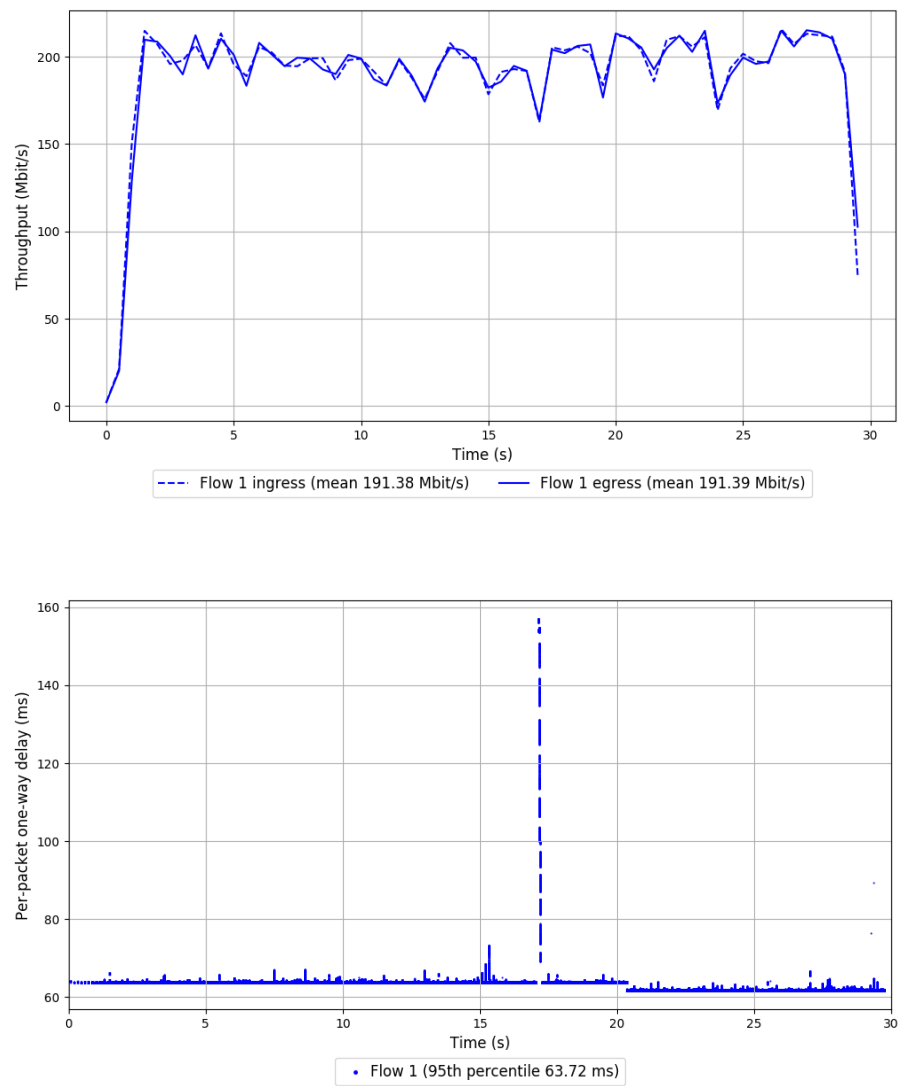


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-11 19:21:17
End at: 2017-12-11 19:21:47

# Below is generated by plot.py at 2017-12-11 22:24:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.39 Mbit/s
95th percentile per-packet one-way delay: 63.718 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 191.39 Mbit/s
95th percentile per-packet one-way delay: 63.718 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link

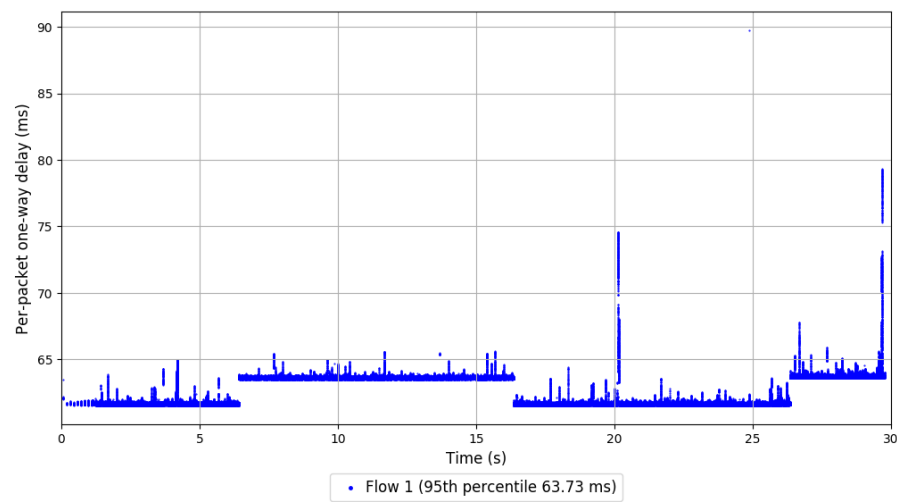
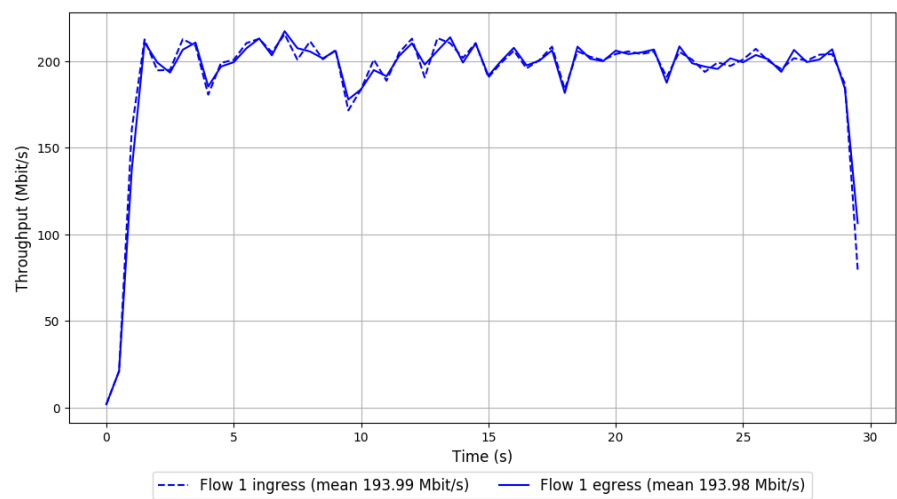


```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-11 19:31:51
End at: 2017-12-11 19:32:21

# Below is generated by plot.py at 2017-12-11 22:24:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 193.98 Mbit/s
95th percentile per-packet one-way delay: 63.730 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 193.98 Mbit/s
95th percentile per-packet one-way delay: 63.730 ms
Loss rate: 0.00%
```


Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-11 19:42:09

End at: 2017-12-11 19:42:39

Below is generated by plot.py at 2017-12-11 22:24:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 199.00 Mbit/s

95th percentile per-packet one-way delay: 63.769 ms

Loss rate: 0.00%

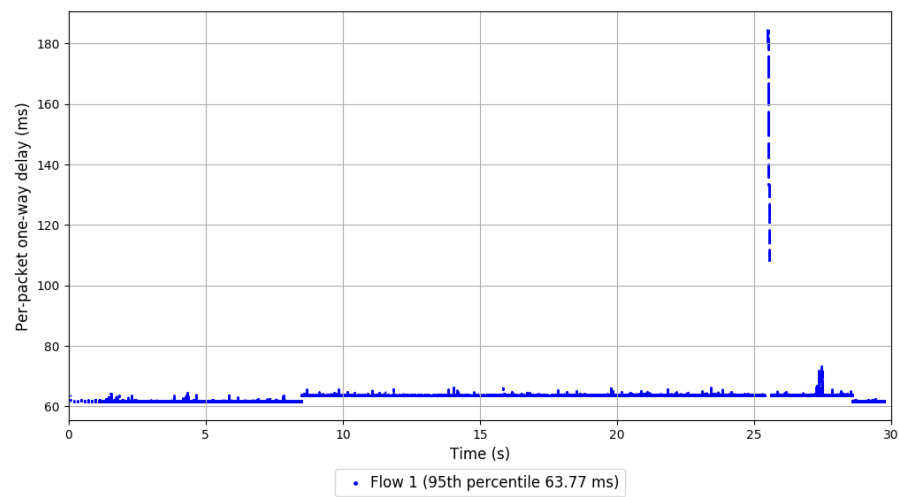
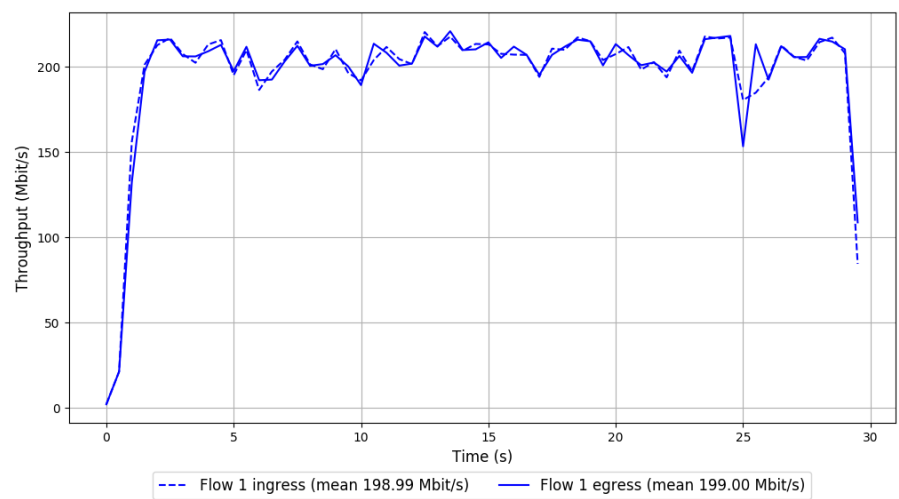
-- Flow 1:

Average throughput: 199.00 Mbit/s

95th percentile per-packet one-way delay: 63.769 ms

Loss rate: 0.00%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-12-11 19:52:44

End at: 2017-12-11 19:53:14

Below is generated by plot.py at 2017-12-11 22:24:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.92 Mbit/s

95th percentile per-packet one-way delay: 63.763 ms

Loss rate: 0.00%

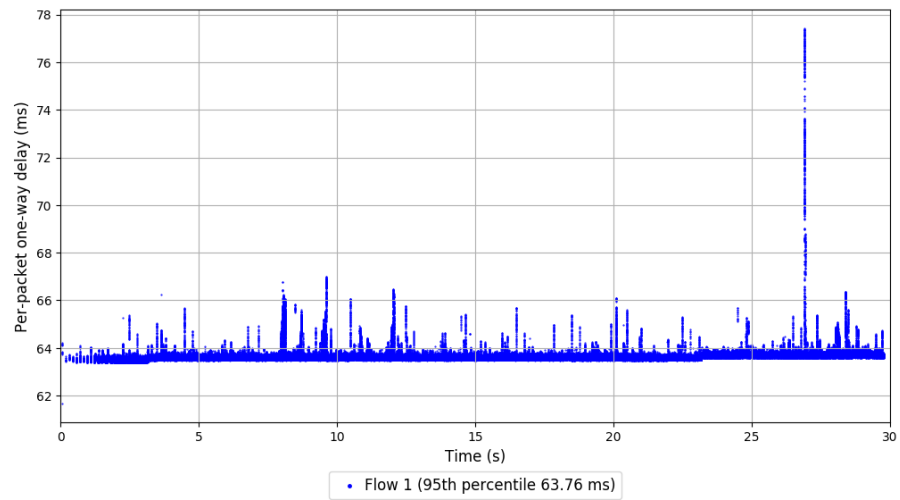
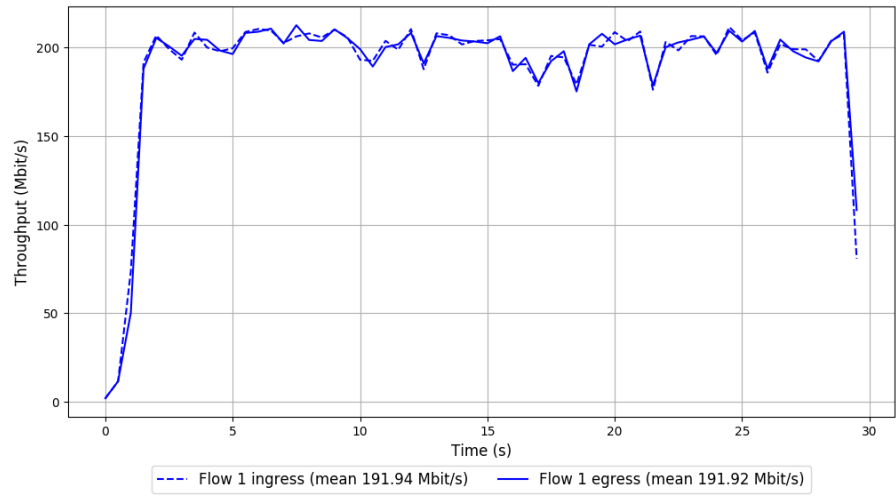
-- Flow 1:

Average throughput: 191.92 Mbit/s

95th percentile per-packet one-way delay: 63.763 ms

Loss rate: 0.00%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-11 20:03:22

End at: 2017-12-11 20:03:52

Below is generated by plot.py at 2017-12-11 22:24:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 184.57 Mbit/s

95th percentile per-packet one-way delay: 64.262 ms

Loss rate: 0.00%

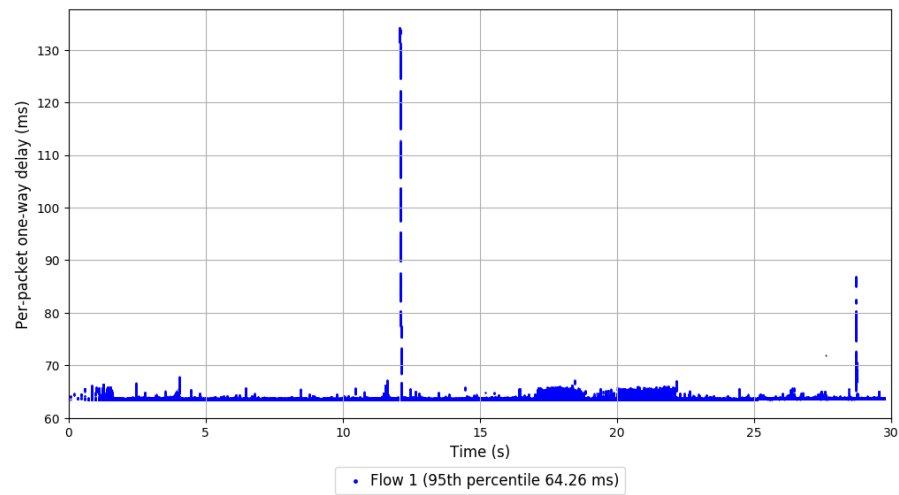
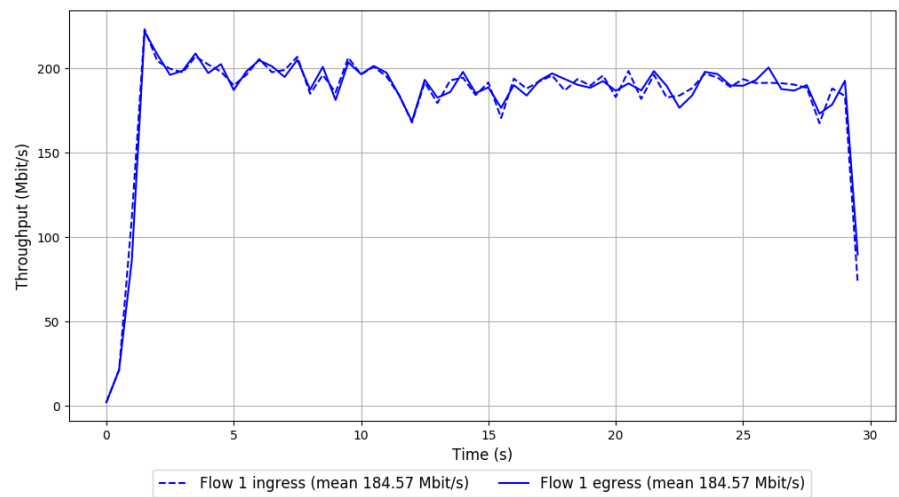
-- Flow 1:

Average throughput: 184.57 Mbit/s

95th percentile per-packet one-way delay: 64.262 ms

Loss rate: 0.00%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-12-11 20:13:54

End at: 2017-12-11 20:14:24

Below is generated by plot.py at 2017-12-11 22:25:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 200.23 Mbit/s

95th percentile per-packet one-way delay: 64.197 ms

Loss rate: 0.00%

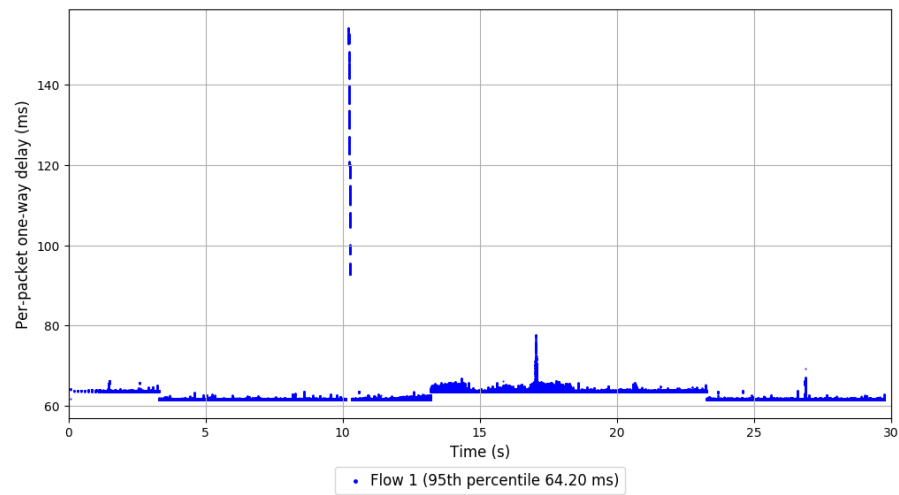
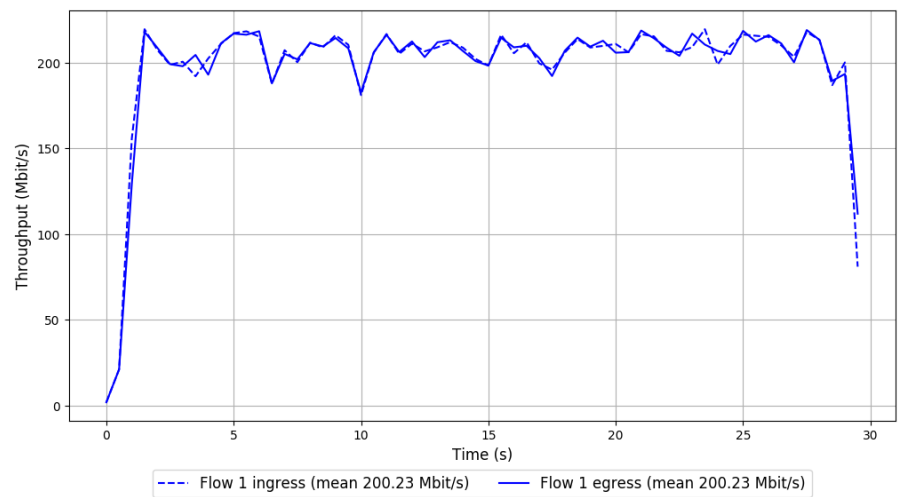
-- Flow 1:

Average throughput: 200.23 Mbit/s

95th percentile per-packet one-way delay: 64.197 ms

Loss rate: 0.00%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-11 20:24:38

End at: 2017-12-11 20:25:08

Below is generated by plot.py at 2017-12-11 22:25:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 196.20 Mbit/s

95th percentile per-packet one-way delay: 63.846 ms

Loss rate: 0.00%

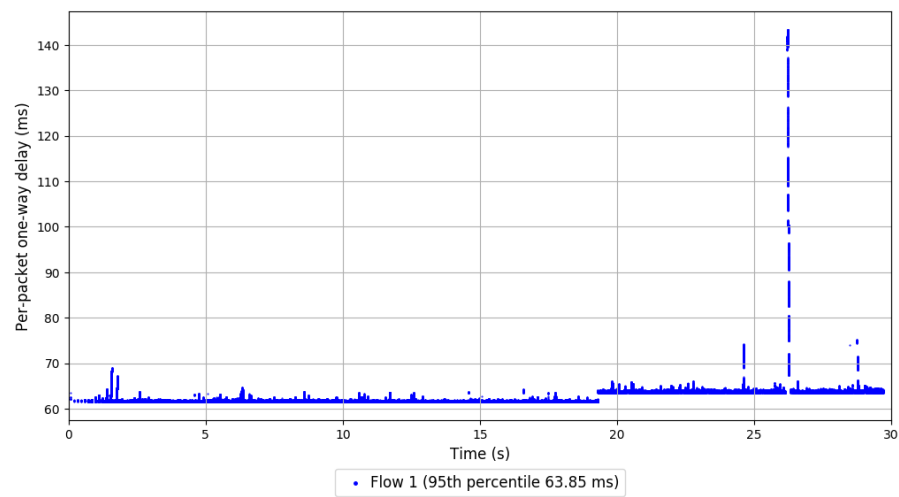
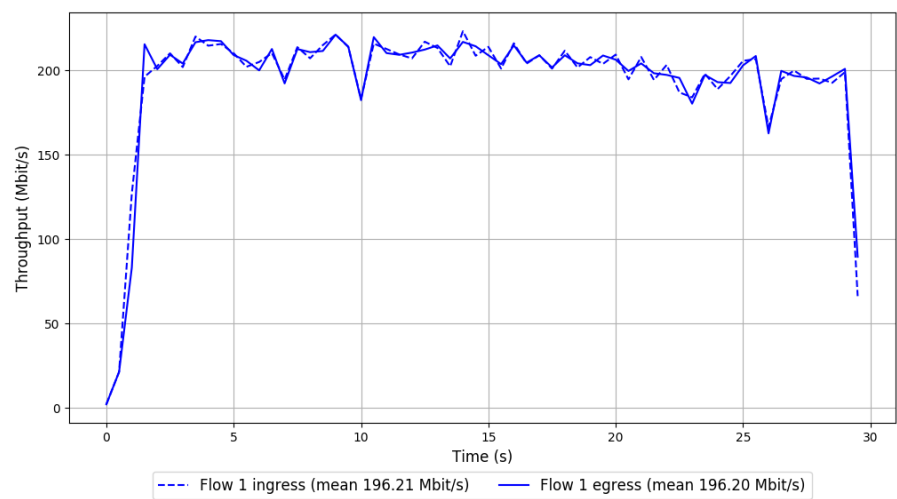
-- Flow 1:

Average throughput: 196.20 Mbit/s

95th percentile per-packet one-way delay: 63.846 ms

Loss rate: 0.00%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-11 20:35:06

End at: 2017-12-11 20:35:36

Below is generated by plot.py at 2017-12-11 22:25:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 194.31 Mbit/s

95th percentile per-packet one-way delay: 63.831 ms

Loss rate: 0.01%

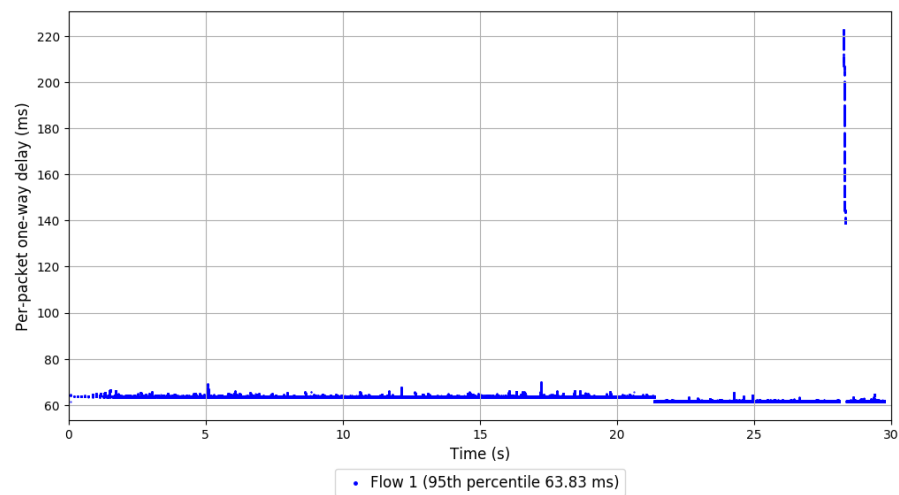
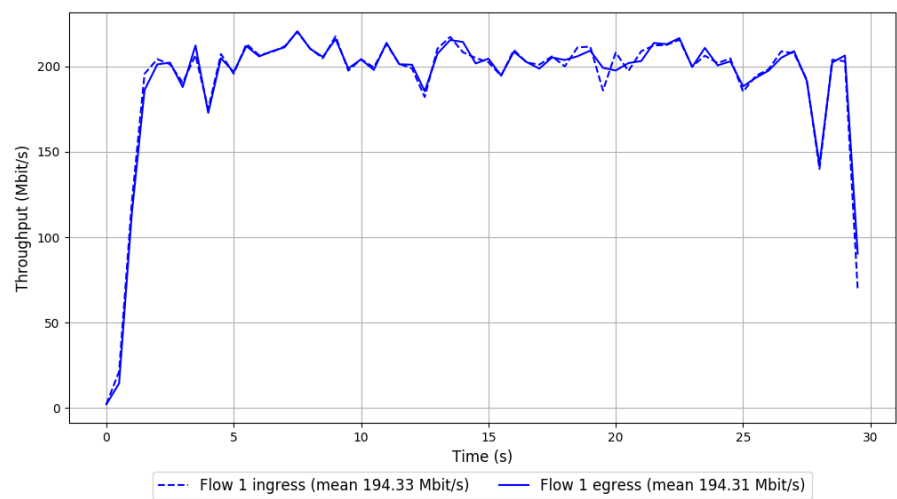
-- Flow 1:

Average throughput: 194.31 Mbit/s

95th percentile per-packet one-way delay: 63.831 ms

Loss rate: 0.01%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-11 20:45:25

End at: 2017-12-11 20:45:55

Below is generated by plot.py at 2017-12-11 22:25:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 191.17 Mbit/s

95th percentile per-packet one-way delay: 63.738 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 191.17 Mbit/s

95th percentile per-packet one-way delay: 63.738 ms

Loss rate: 0.00%

Run 10: Report of Indigo-calib — Data Link

