

Pantheon Report

Generated at 2018-07-10 00:19:45 (UTC).

Data path: AWS California 2 Ethernet (*local*) → Mexico Ethernet (*remote*).

Repeated the test of 17 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

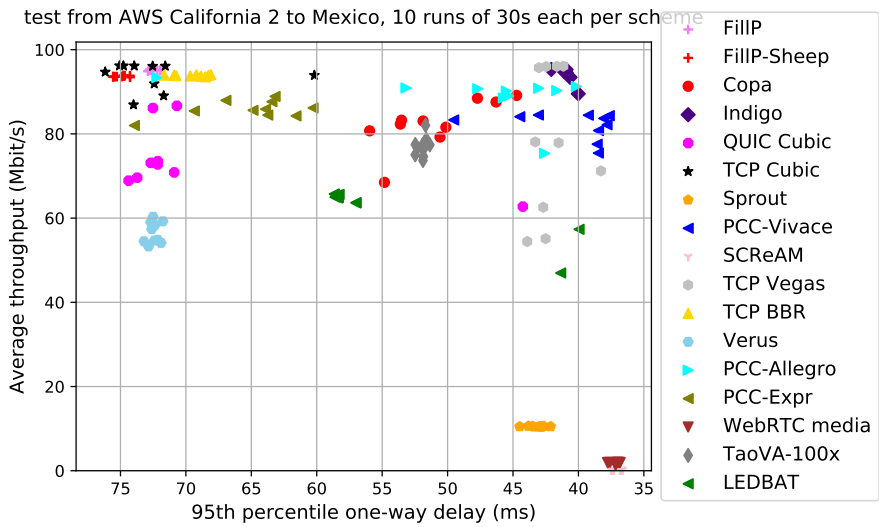
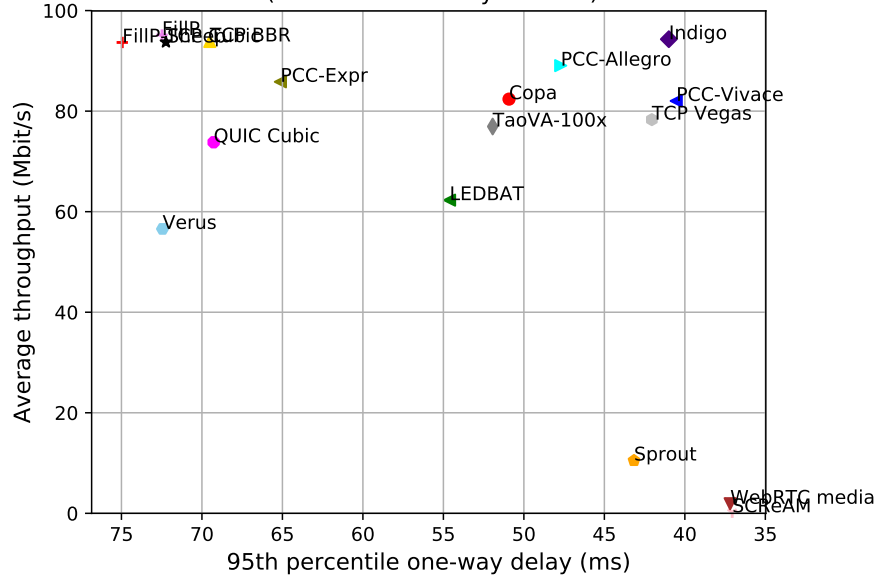
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.

Git summary:

```
branch: master @ 9250dbeec7fb57193cdff1ba8c440b4e16ab30f0
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ 37162fe9af85249aeccac061c93e75640ef710b5
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
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/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS California 2 to Mexico, 10 runs of 30s each per scheme
(mean of all runs by scheme)



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	93.86	69.51	4.82
Copa	10	82.39	50.92	0.67
TCP Cubic	10	93.72	72.24	0.37
FillP	10	95.14	72.48	8.31
FillP-Sheep	10	93.66	74.95	4.10
Indigo	10	94.31	41.00	0.04
LEDBAT	10	62.30	54.62	0.01
PCC-Allegro	10	89.05	47.71	1.77
PCC-Expr	10	85.83	65.13	2.29
QUIC Cubic	9	73.81	69.27	2.34
SCReAM	10	0.22	37.06	0.00
Sprout	10	10.51	43.16	0.02
TaoVA-100x	10	76.94	51.94	0.03
TCP Vegas	10	78.31	42.05	0.36
Verus	10	56.57	72.45	25.03
PCC-Vivace	10	82.03	40.54	0.02
WebRTC media	10	1.90	37.19	0.00

Run 1: Statistics of TCP BBR

Start at: 2018-07-09 20:01:24

End at: 2018-07-09 20:01:54

Local clock offset: -2.314 ms

Remote clock offset: 5.137 ms

Below is generated by plot.py at 2018-07-09 23:57:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.69 Mbit/s

95th percentile per-packet one-way delay: 68.849 ms

Loss rate: 4.53%

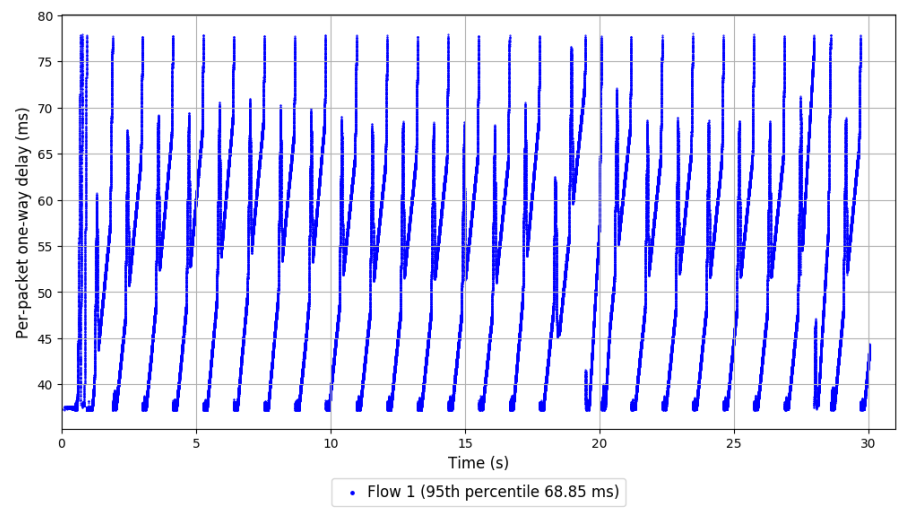
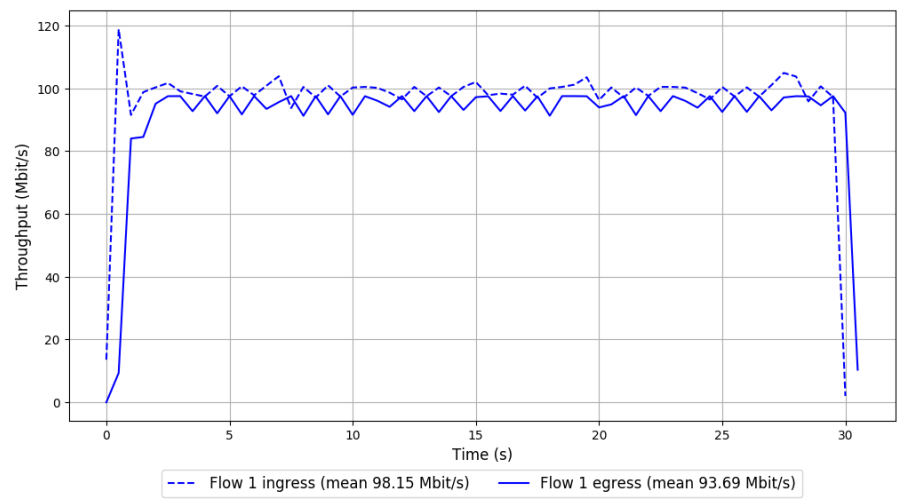
-- Flow 1:

Average throughput: 93.69 Mbit/s

95th percentile per-packet one-way delay: 68.849 ms

Loss rate: 4.53%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-07-09 20:24:39

End at: 2018-07-09 20:25:09

Local clock offset: -2.253 ms

Remote clock offset: 5.685 ms

Below is generated by plot.py at 2018-07-09 23:57:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.92 Mbit/s

95th percentile per-packet one-way delay: 70.906 ms

Loss rate: 5.33%

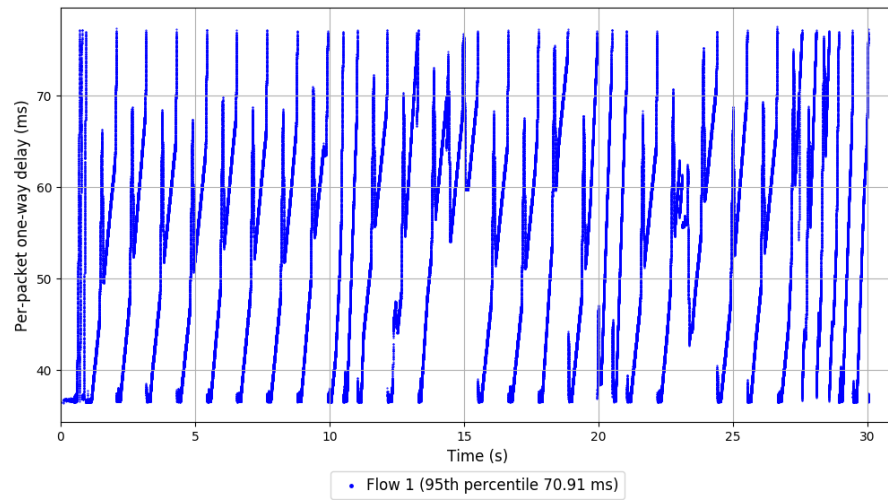
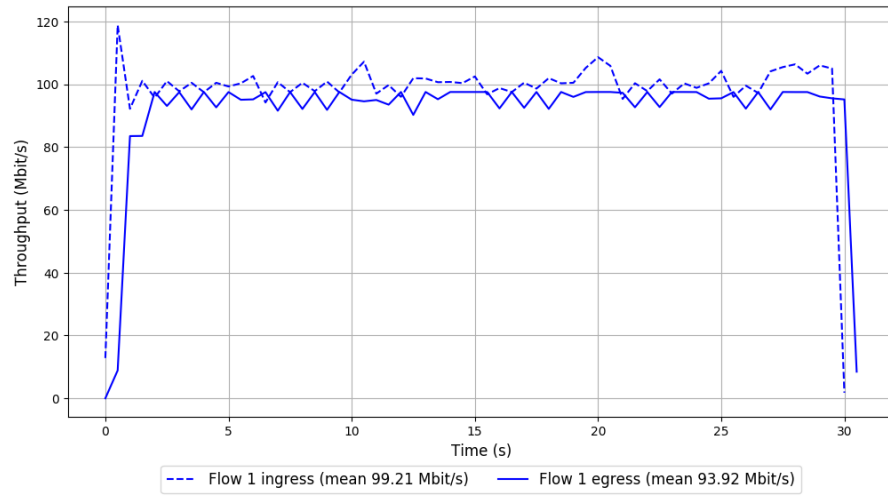
-- Flow 1:

Average throughput: 93.92 Mbit/s

95th percentile per-packet one-way delay: 70.906 ms

Loss rate: 5.33%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-07-09 20:48:24

End at: 2018-07-09 20:48:54

Local clock offset: -3.433 ms

Remote clock offset: 3.732 ms

Below is generated by plot.py at 2018-07-09 23:57:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.08 Mbit/s

95th percentile per-packet one-way delay: 68.100 ms

Loss rate: 4.30%

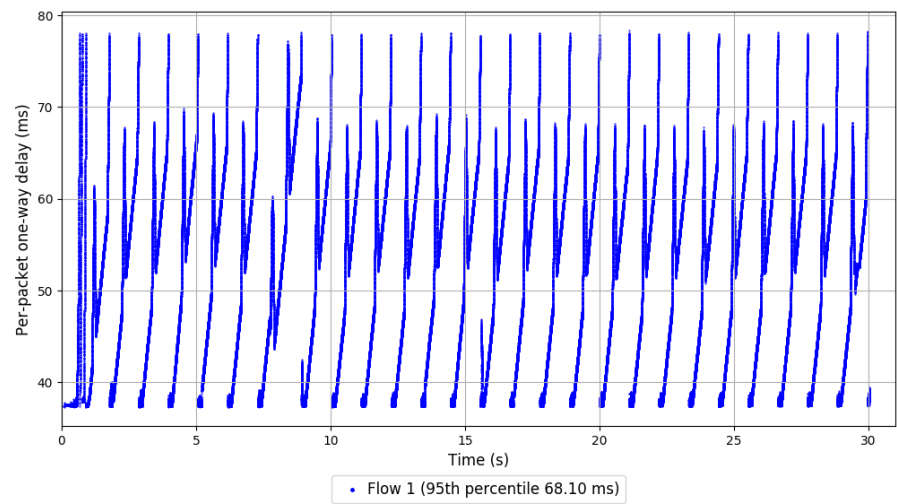
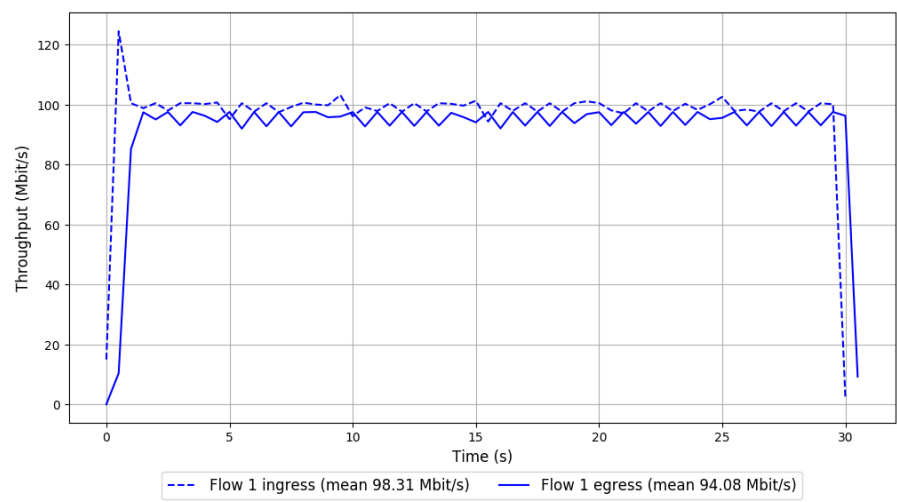
-- Flow 1:

Average throughput: 94.08 Mbit/s

95th percentile per-packet one-way delay: 68.100 ms

Loss rate: 4.30%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-07-09 21:11:17

End at: 2018-07-09 21:11:47

Local clock offset: -2.061 ms

Remote clock offset: 3.393 ms

Below is generated by plot.py at 2018-07-09 23:57:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.91 Mbit/s

95th percentile per-packet one-way delay: 69.194 ms

Loss rate: 4.38%

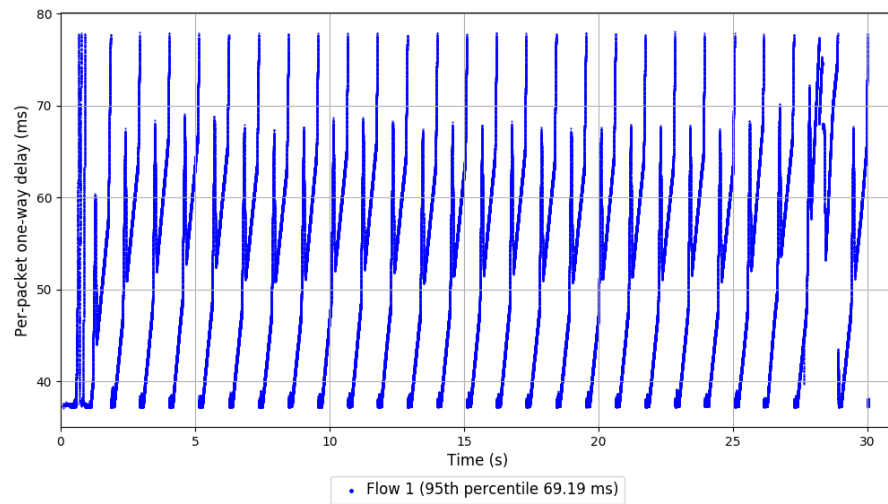
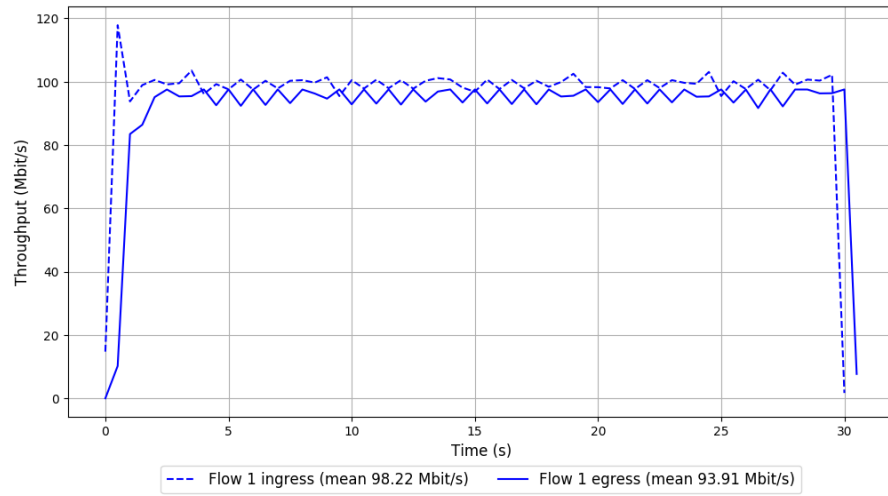
-- Flow 1:

Average throughput: 93.91 Mbit/s

95th percentile per-packet one-way delay: 69.194 ms

Loss rate: 4.38%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-07-09 21:34:24

End at: 2018-07-09 21:34:54

Local clock offset: -0.802 ms

Remote clock offset: 3.519 ms

Below is generated by plot.py at 2018-07-09 23:57:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.00 Mbit/s

95th percentile per-packet one-way delay: 69.215 ms

Loss rate: 4.39%

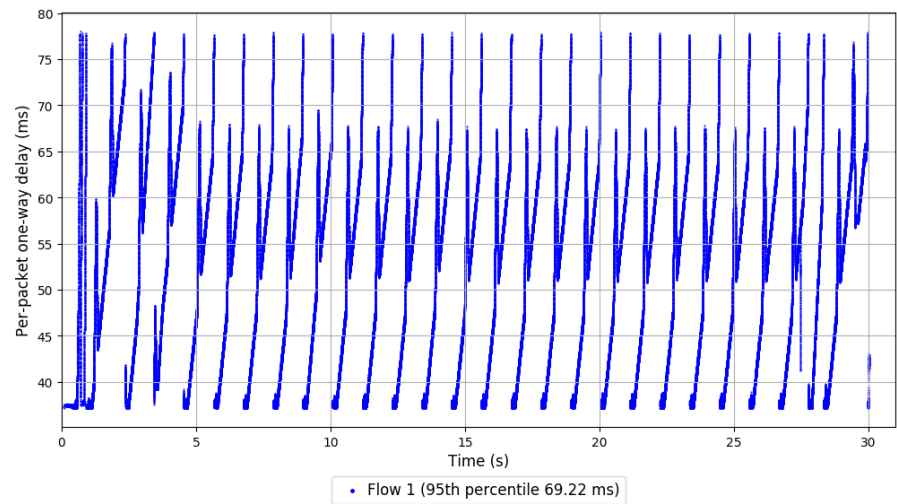
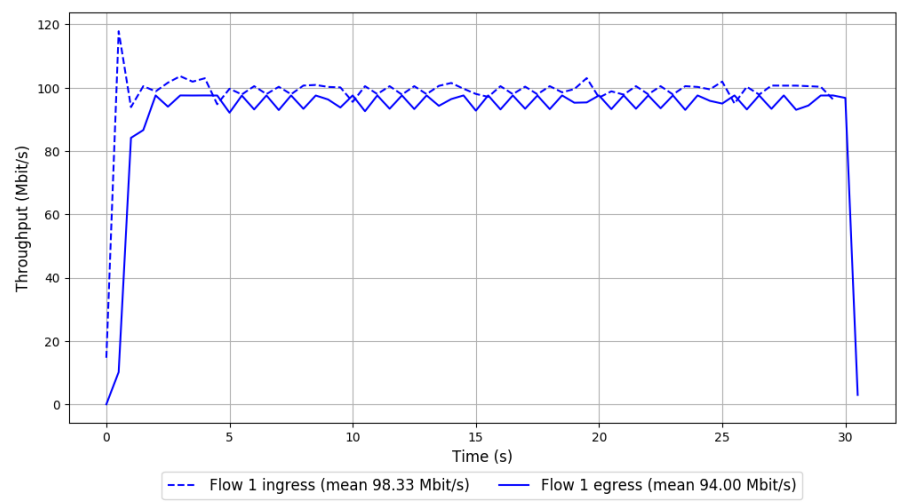
-- Flow 1:

Average throughput: 94.00 Mbit/s

95th percentile per-packet one-way delay: 69.215 ms

Loss rate: 4.39%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-07-09 21:57:51

End at: 2018-07-09 21:58:21

Local clock offset: -0.756 ms

Remote clock offset: 3.92 ms

Below is generated by plot.py at 2018-07-09 23:57:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.91 Mbit/s

95th percentile per-packet one-way delay: 68.282 ms

Loss rate: 4.41%

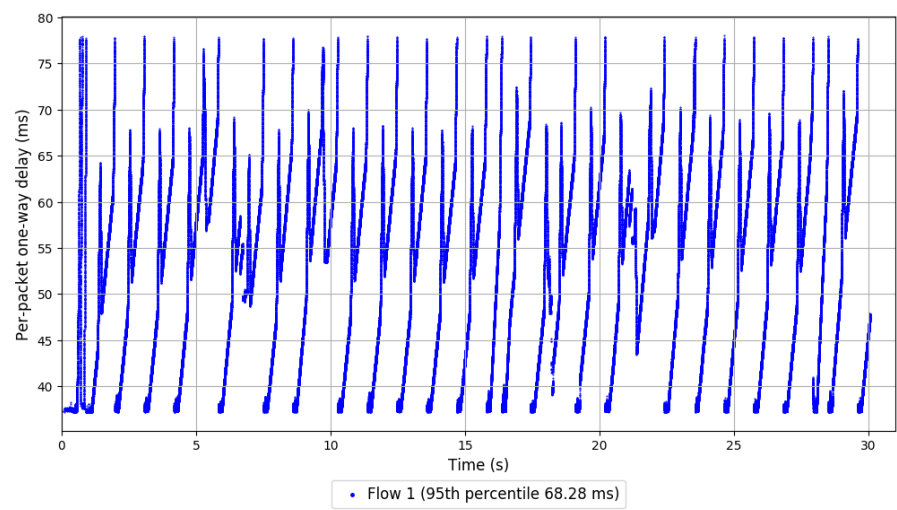
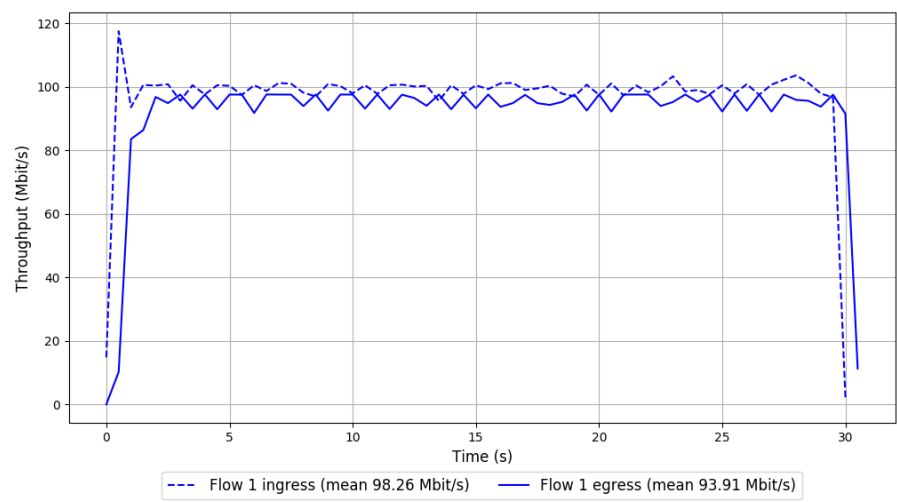
-- Flow 1:

Average throughput: 93.91 Mbit/s

95th percentile per-packet one-way delay: 68.282 ms

Loss rate: 4.41%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-07-09 22:21:02

End at: 2018-07-09 22:21:32

Local clock offset: -1.102 ms

Remote clock offset: 4.008 ms

Below is generated by plot.py at 2018-07-09 23:57:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.75 Mbit/s

95th percentile per-packet one-way delay: 69.669 ms

Loss rate: 4.80%

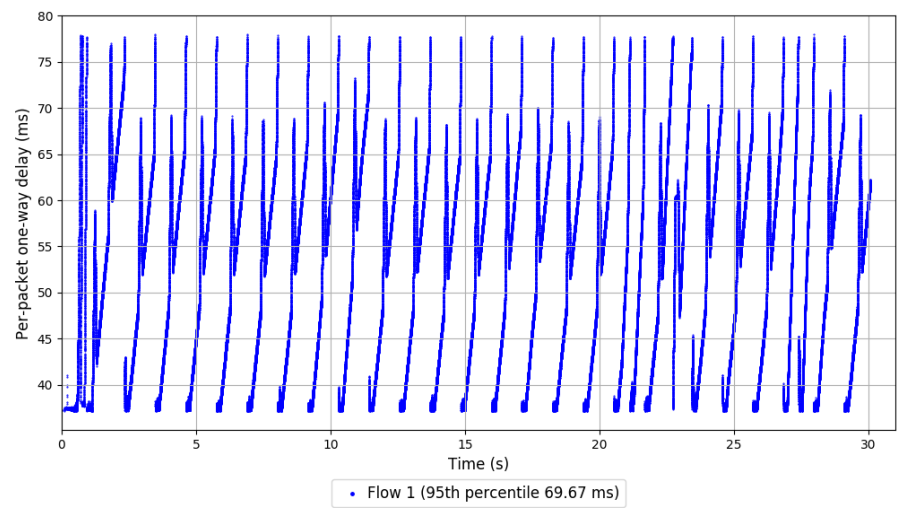
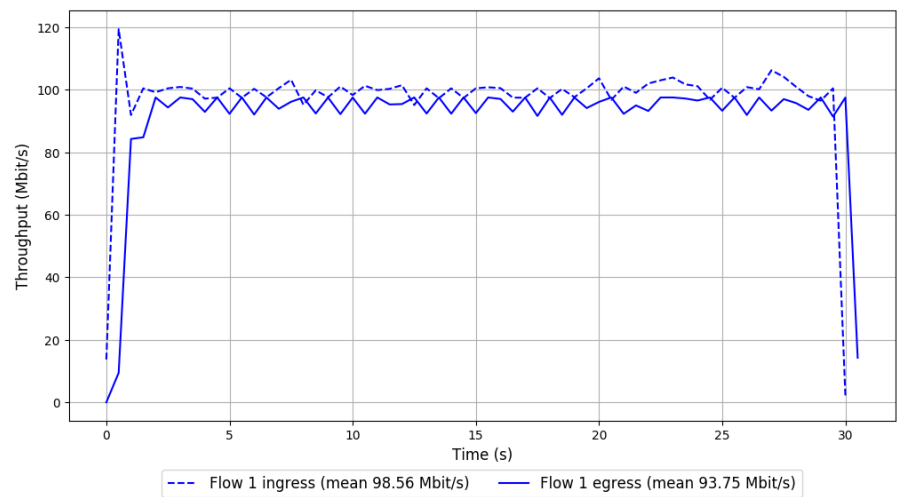
-- Flow 1:

Average throughput: 93.75 Mbit/s

95th percentile per-packet one-way delay: 69.669 ms

Loss rate: 4.80%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-07-09 22:44:47

End at: 2018-07-09 22:45:17

Local clock offset: -1.558 ms

Remote clock offset: 3.762 ms

Below is generated by plot.py at 2018-07-09 23:57:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.95 Mbit/s

95th percentile per-packet one-way delay: 71.654 ms

Loss rate: 6.30%

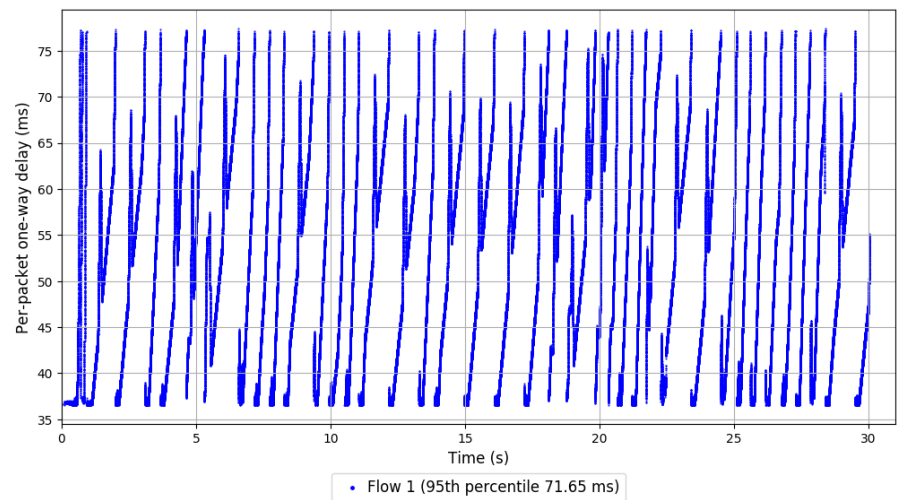
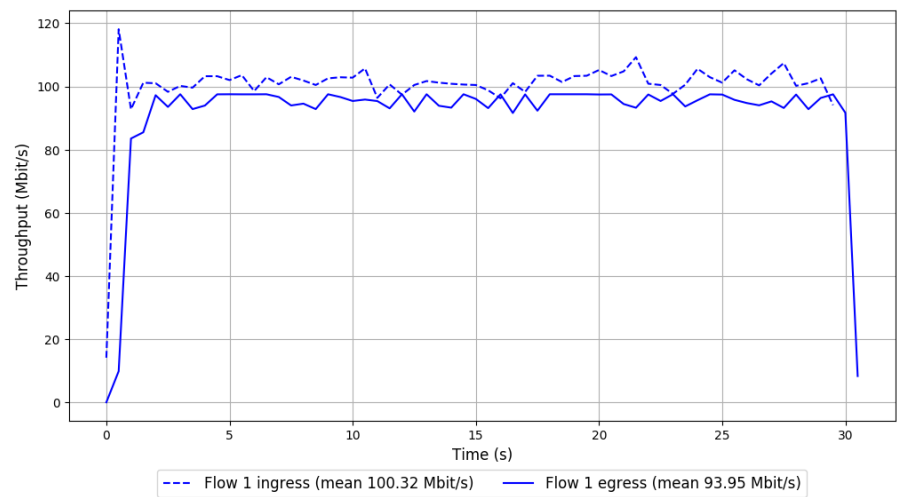
-- Flow 1:

Average throughput: 93.95 Mbit/s

95th percentile per-packet one-way delay: 71.654 ms

Loss rate: 6.30%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-07-09 23:09:06

End at: 2018-07-09 23:09:36

Local clock offset: -1.635 ms

Remote clock offset: 3.287 ms

Below is generated by plot.py at 2018-07-09 23:58:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.56 Mbit/s

95th percentile per-packet one-way delay: 68.500 ms

Loss rate: 4.56%

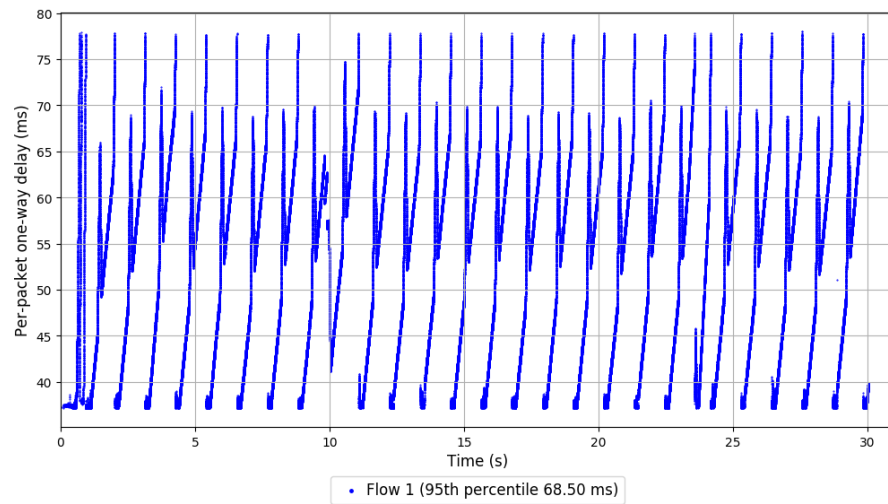
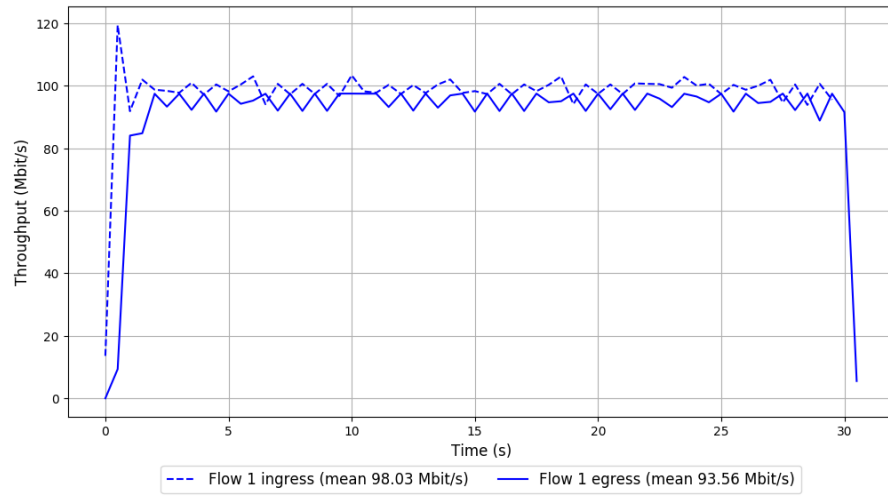
-- Flow 1:

Average throughput: 93.56 Mbit/s

95th percentile per-packet one-way delay: 68.500 ms

Loss rate: 4.56%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-07-09 23:33:56

End at: 2018-07-09 23:34:26

Local clock offset: -1.661 ms

Remote clock offset: 3.62 ms

Below is generated by plot.py at 2018-07-09 23:58:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.82 Mbit/s

95th percentile per-packet one-way delay: 70.754 ms

Loss rate: 5.17%

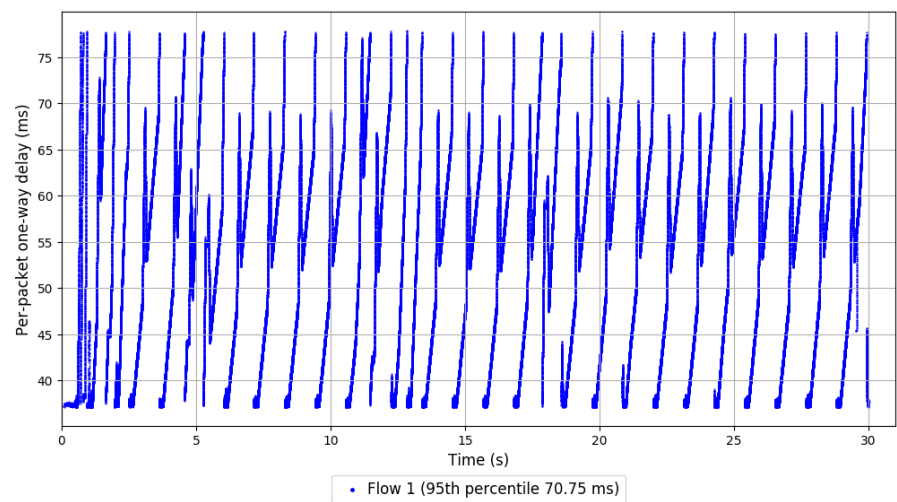
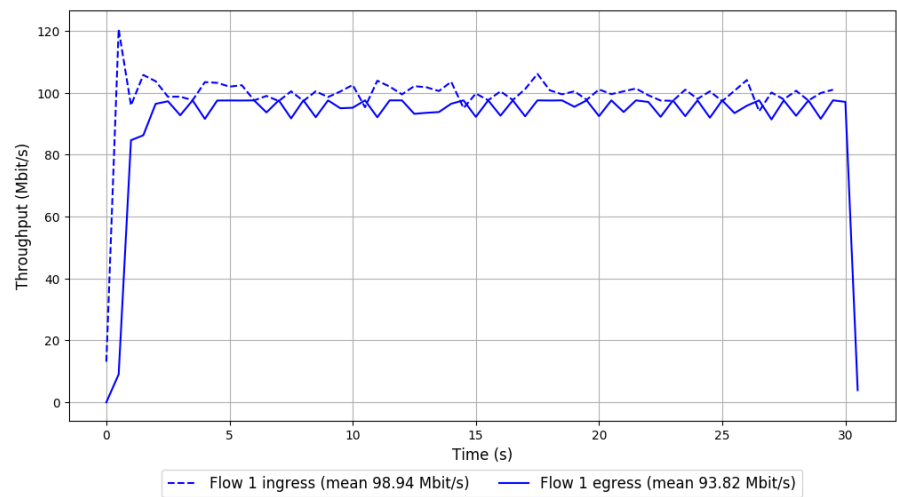
-- Flow 1:

Average throughput: 93.82 Mbit/s

95th percentile per-packet one-way delay: 70.754 ms

Loss rate: 5.17%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-07-09 20:14:41

End at: 2018-07-09 20:15:11

Local clock offset: -2.166 ms

Remote clock offset: 5.505 ms

Below is generated by plot.py at 2018-07-09 23:59:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.57 Mbit/s

95th percentile per-packet one-way delay: 46.297 ms

Loss rate: 0.87%

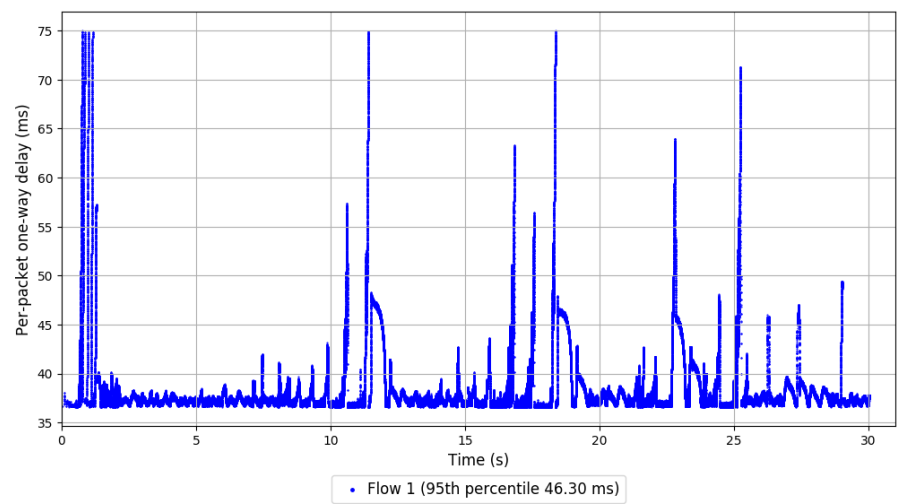
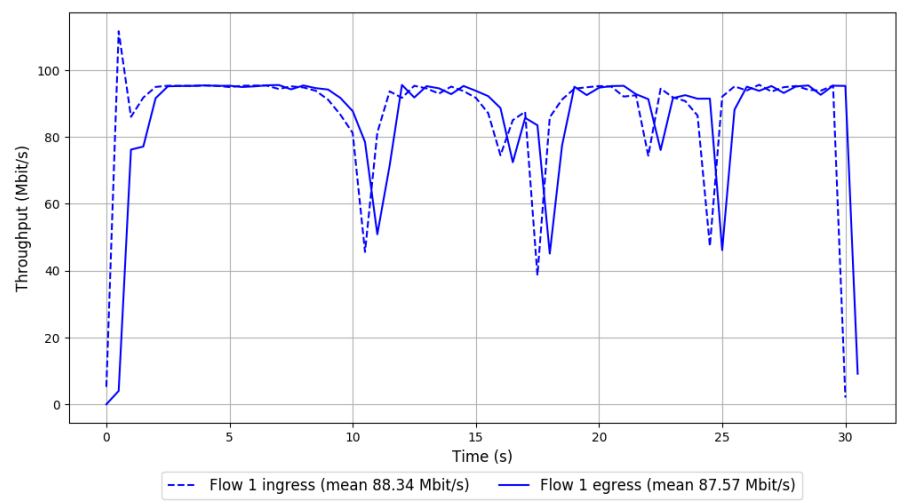
-- Flow 1:

Average throughput: 87.57 Mbit/s

95th percentile per-packet one-way delay: 46.297 ms

Loss rate: 0.87%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-07-09 20:38:47

End at: 2018-07-09 20:39:17

Local clock offset: -2.916 ms

Remote clock offset: 4.46 ms

Below is generated by plot.py at 2018-07-09 23:59:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.25 Mbit/s

95th percentile per-packet one-way delay: 50.578 ms

Loss rate: 0.44%

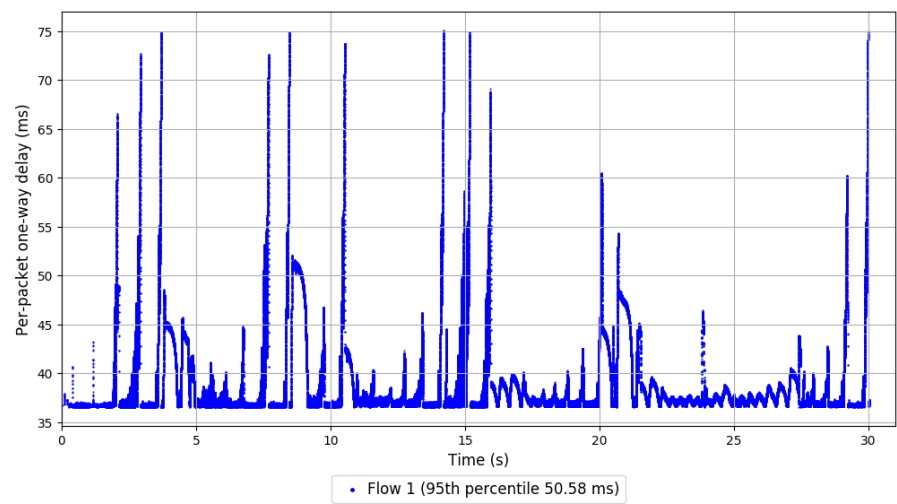
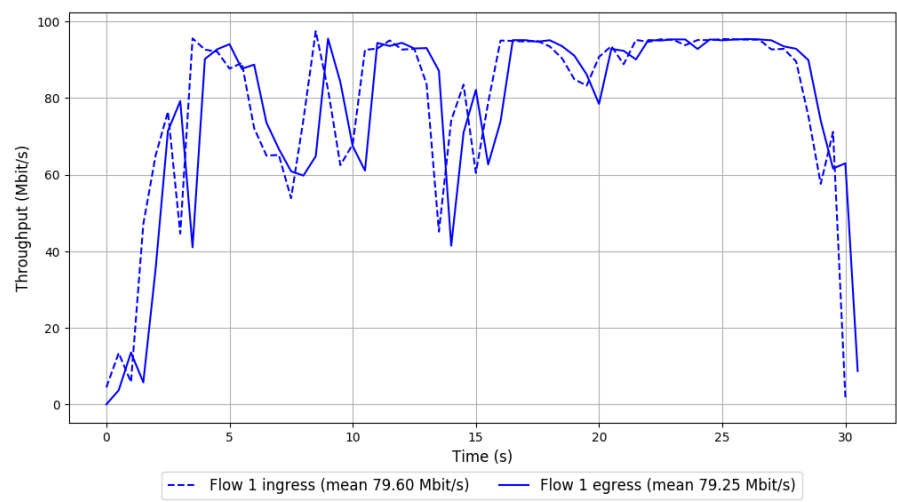
-- Flow 1:

Average throughput: 79.25 Mbit/s

95th percentile per-packet one-way delay: 50.578 ms

Loss rate: 0.44%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-07-09 21:01:56

End at: 2018-07-09 21:02:26

Local clock offset: -2.362 ms

Remote clock offset: 3.328 ms

Below is generated by plot.py at 2018-07-09 23:59:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.25 Mbit/s

95th percentile per-packet one-way delay: 53.519 ms

Loss rate: 0.61%

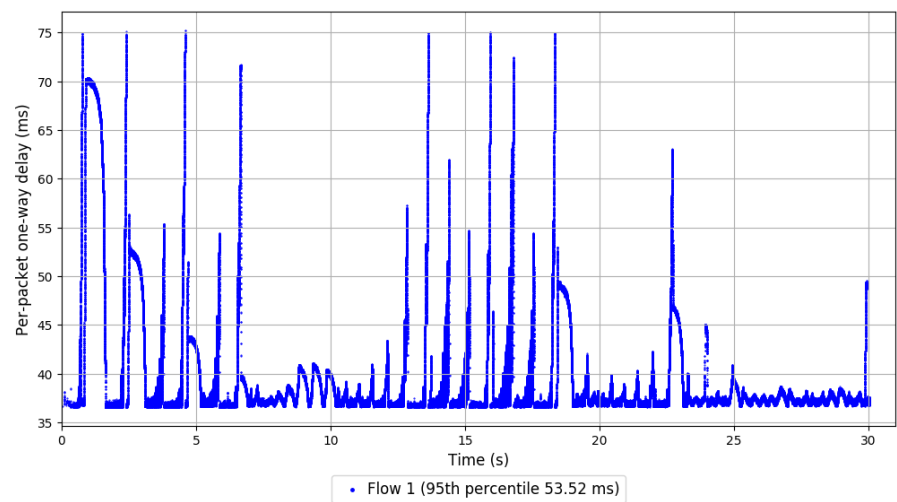
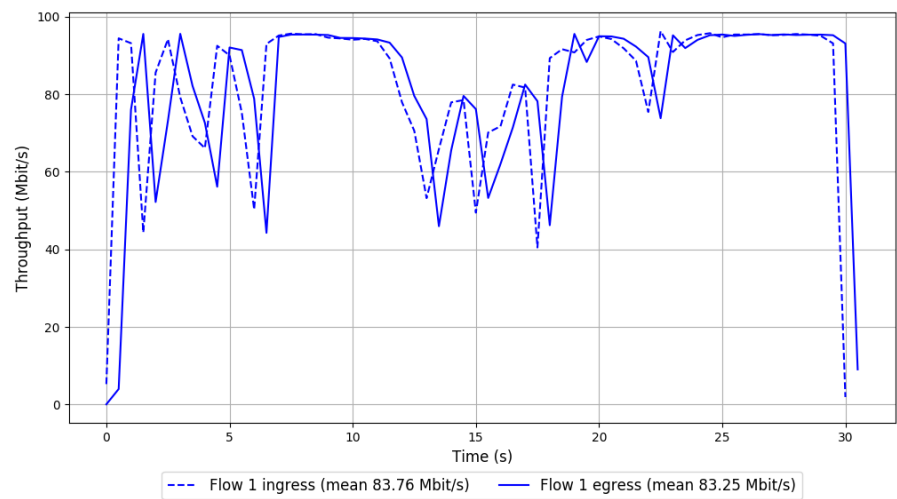
-- Flow 1:

Average throughput: 83.25 Mbit/s

95th percentile per-packet one-way delay: 53.519 ms

Loss rate: 0.61%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-07-09 21:24:41

End at: 2018-07-09 21:25:11

Local clock offset: -1.118 ms

Remote clock offset: 3.552 ms

Below is generated by plot.py at 2018-07-09 23:59:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.73 Mbit/s

95th percentile per-packet one-way delay: 55.960 ms

Loss rate: 0.45%

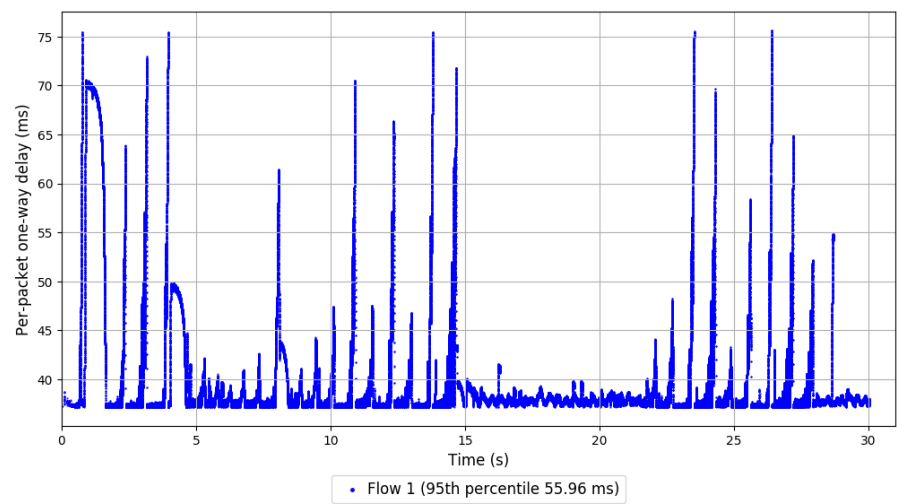
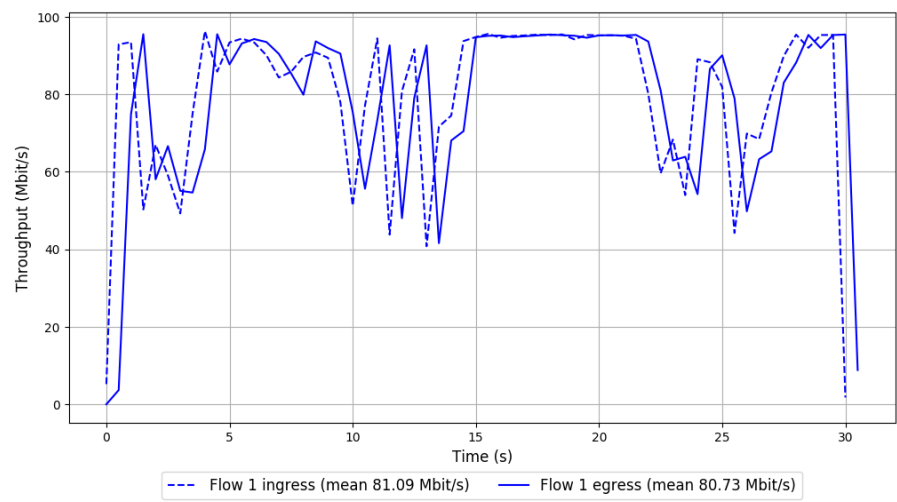
-- Flow 1:

Average throughput: 80.73 Mbit/s

95th percentile per-packet one-way delay: 55.960 ms

Loss rate: 0.45%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-07-09 21:48:05

End at: 2018-07-09 21:48:35

Local clock offset: -0.627 ms

Remote clock offset: 3.84 ms

Below is generated by plot.py at 2018-07-09 23:59:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.48 Mbit/s

95th percentile per-packet one-way delay: 47.720 ms

Loss rate: 0.50%

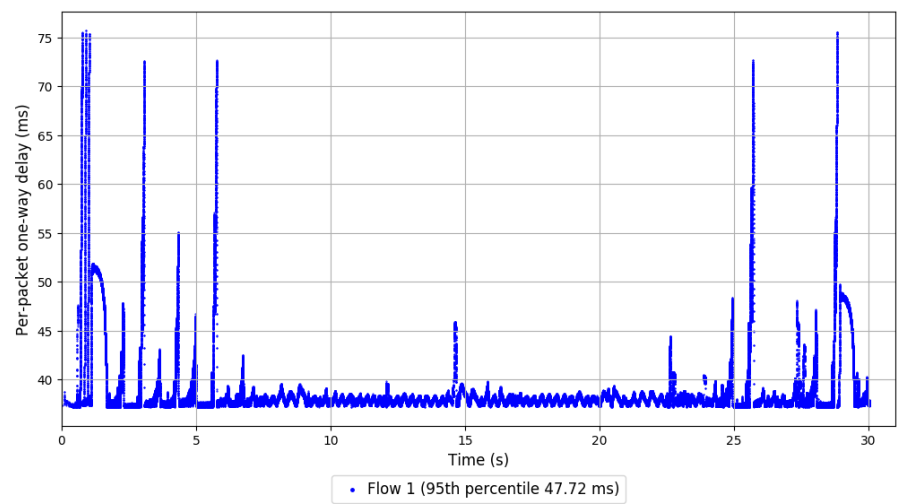
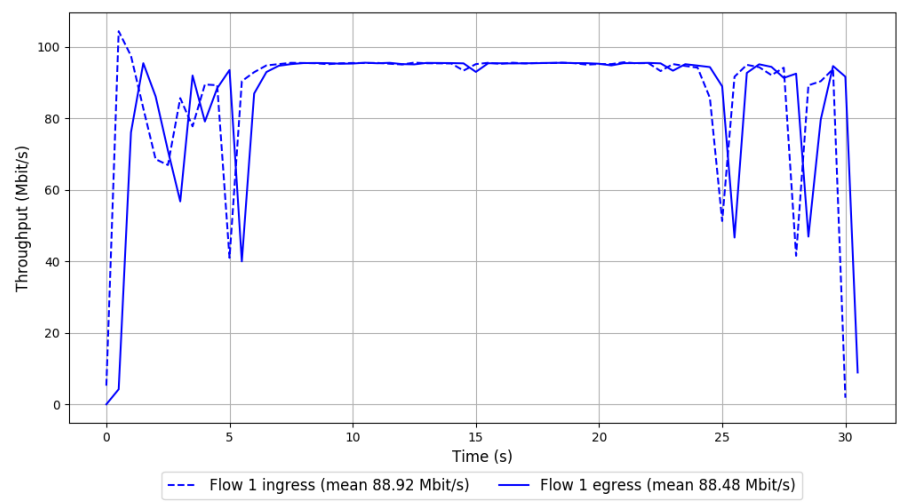
-- Flow 1:

Average throughput: 88.48 Mbit/s

95th percentile per-packet one-way delay: 47.720 ms

Loss rate: 0.50%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-07-09 22:11:43

End at: 2018-07-09 22:12:13

Local clock offset: -0.896 ms

Remote clock offset: 3.768 ms

Below is generated by plot.py at 2018-07-09 23:59:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.33 Mbit/s

95th percentile per-packet one-way delay: 53.610 ms

Loss rate: 0.57%

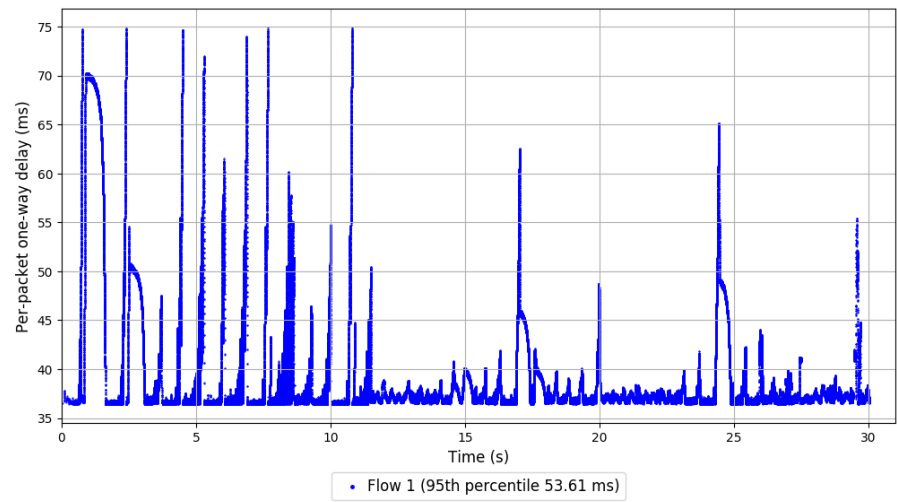
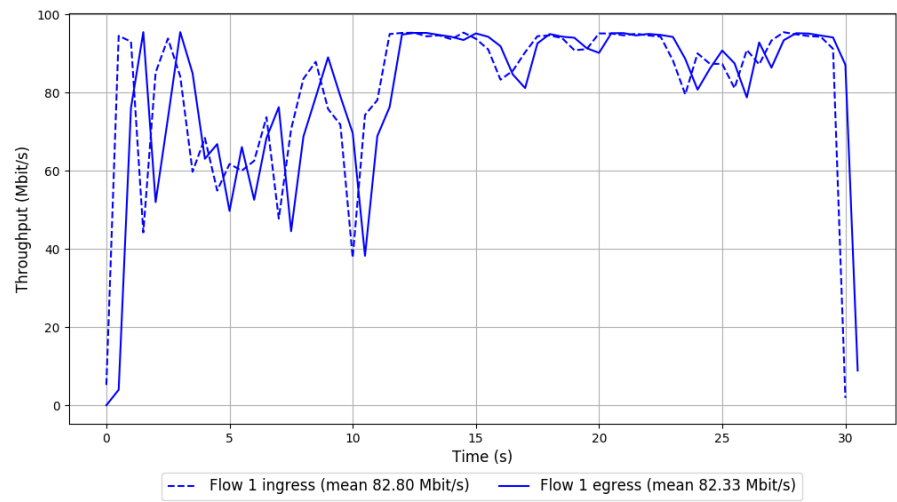
-- Flow 1:

Average throughput: 82.33 Mbit/s

95th percentile per-packet one-way delay: 53.610 ms

Loss rate: 0.57%

Run 6: Report of Copa — Data Link

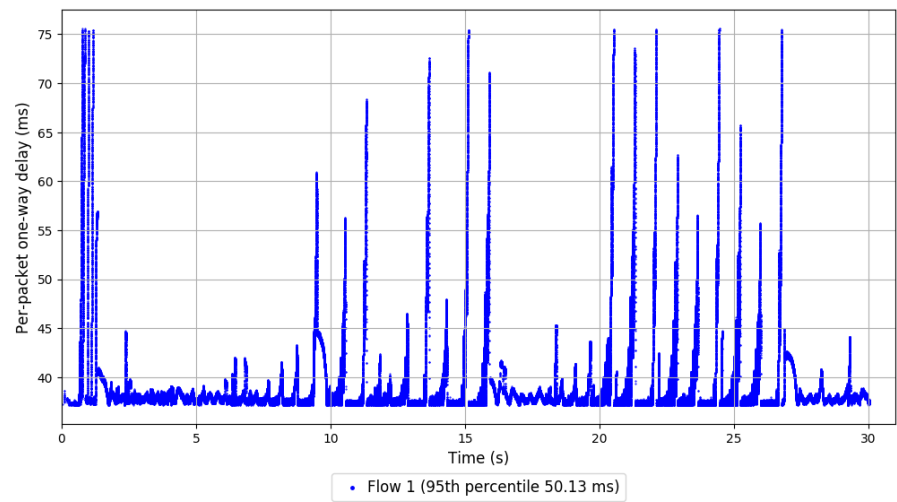
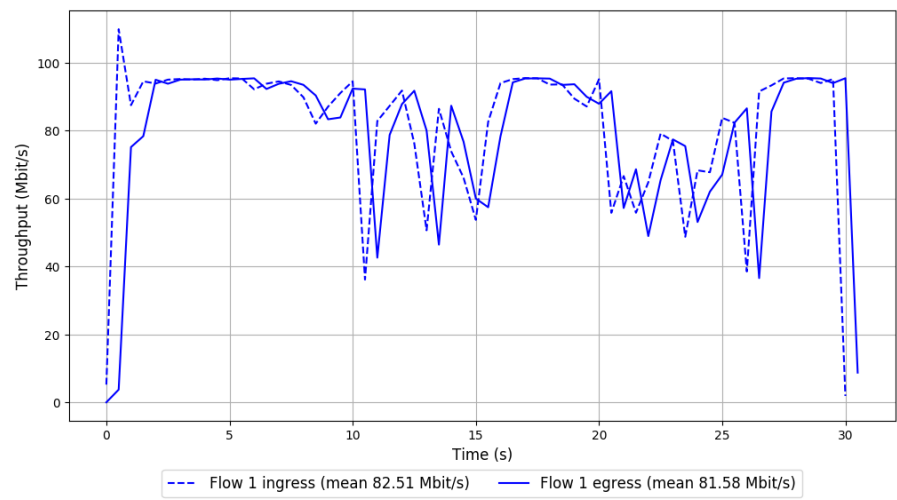


Run 7: Statistics of Copa

Start at: 2018-07-09 22:34:52
End at: 2018-07-09 22:35:22
Local clock offset: -1.458 ms
Remote clock offset: 3.894 ms

Below is generated by plot.py at 2018-07-10 00:00:19
Datalink statistics
-- Total of 1 flow:
Average throughput: 81.58 Mbit/s
95th percentile per-packet one-way delay: 50.133 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 81.58 Mbit/s
95th percentile per-packet one-way delay: 50.133 ms
Loss rate: 1.12%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-07-09 22:59:14

End at: 2018-07-09 22:59:44

Local clock offset: -1.683 ms

Remote clock offset: 3.42 ms

Below is generated by plot.py at 2018-07-10 00:00:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.06 Mbit/s

95th percentile per-packet one-way delay: 51.875 ms

Loss rate: 0.34%

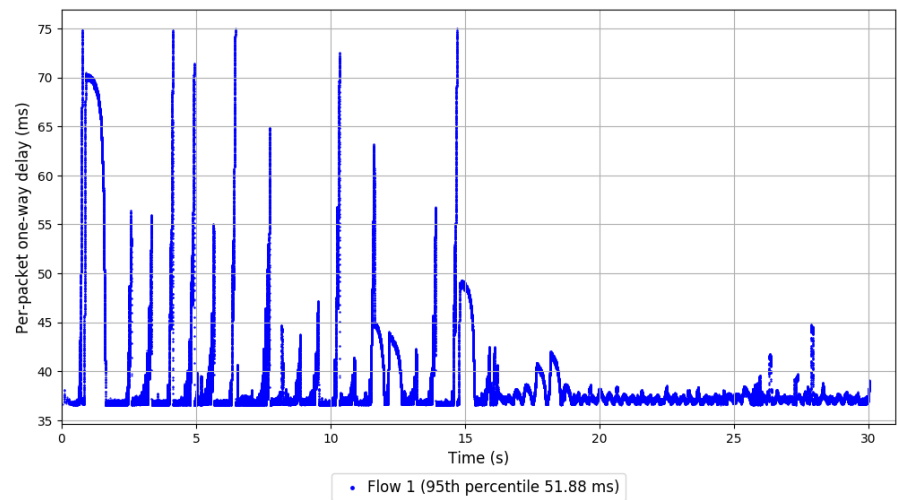
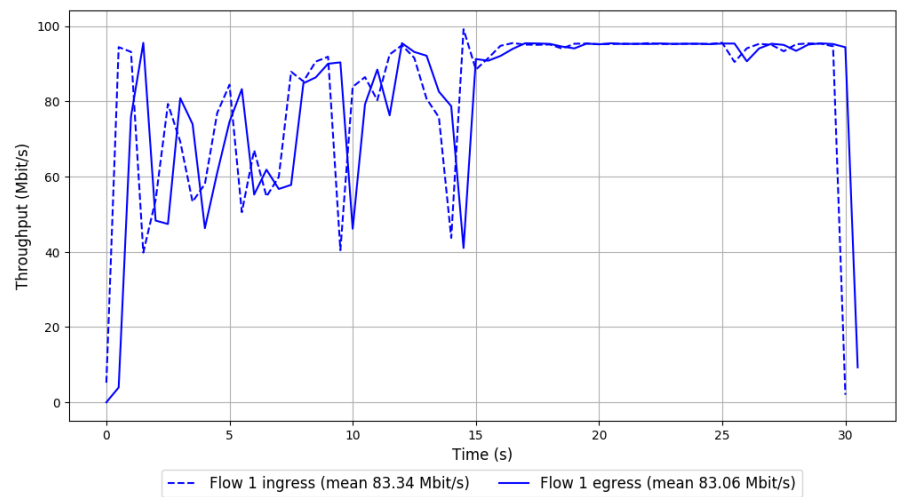
-- Flow 1:

Average throughput: 83.06 Mbit/s

95th percentile per-packet one-way delay: 51.875 ms

Loss rate: 0.34%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-07-09 23:23:28

End at: 2018-07-09 23:23:58

Local clock offset: -1.786 ms

Remote clock offset: 3.259 ms

Below is generated by plot.py at 2018-07-10 00:01:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.13 Mbit/s

95th percentile per-packet one-way delay: 44.723 ms

Loss rate: 0.85%

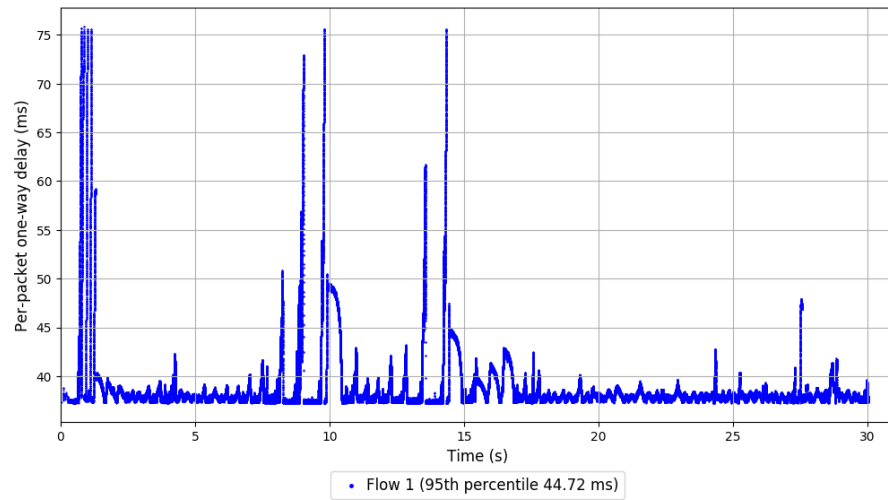
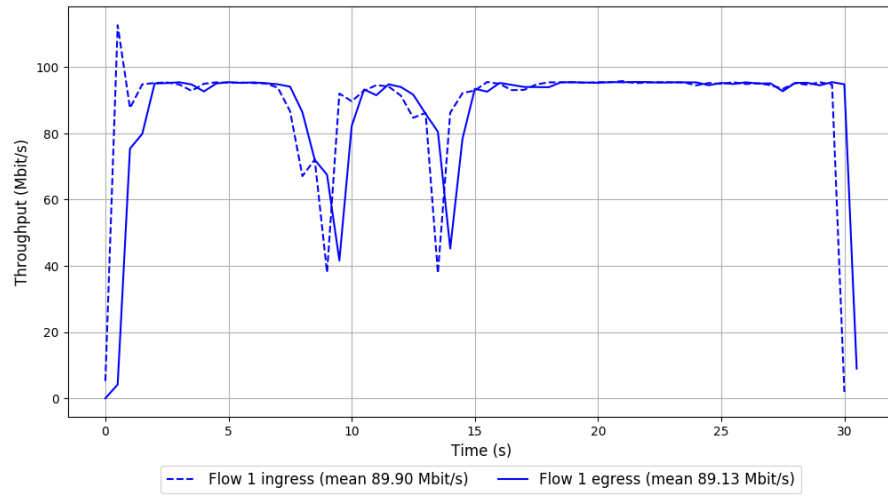
-- Flow 1:

Average throughput: 89.13 Mbit/s

95th percentile per-packet one-way delay: 44.723 ms

Loss rate: 0.85%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-07-09 23:48:03

End at: 2018-07-09 23:48:33

Local clock offset: -1.558 ms

Remote clock offset: 3.752 ms

Below is generated by plot.py at 2018-07-10 00:01:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.50 Mbit/s

95th percentile per-packet one-way delay: 54.827 ms

Loss rate: 0.91%

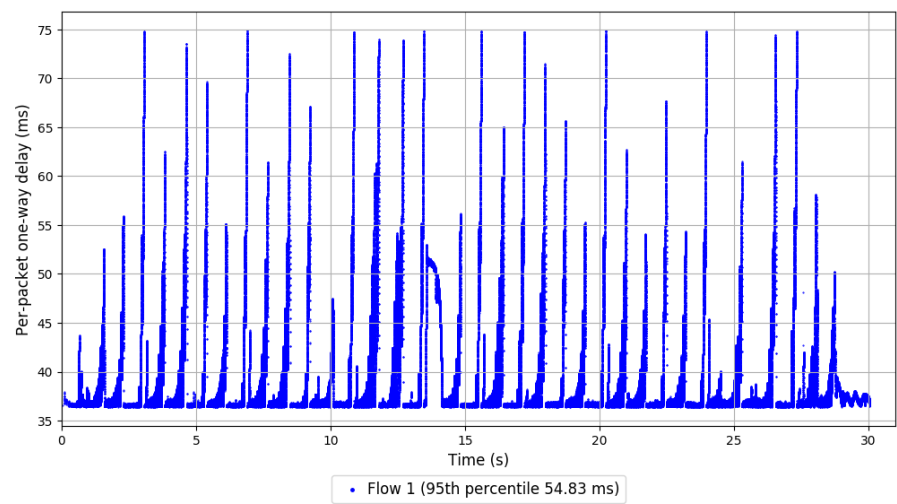
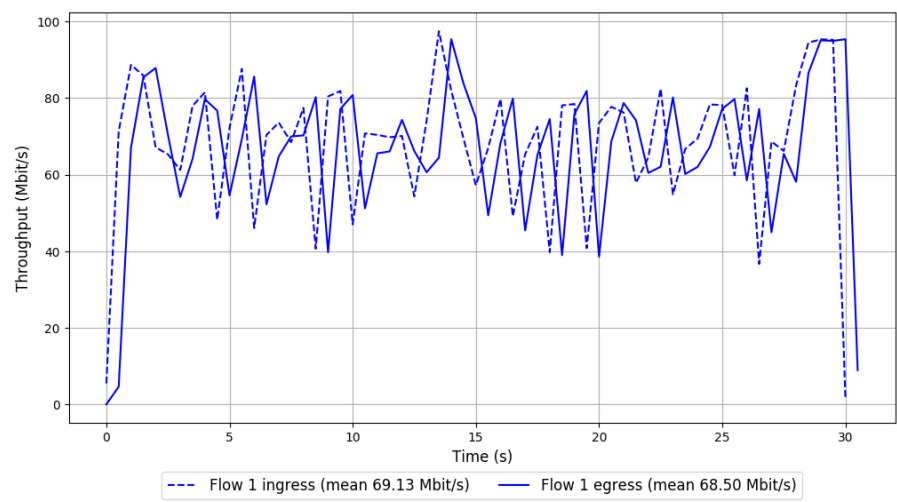
-- Flow 1:

Average throughput: 68.50 Mbit/s

95th percentile per-packet one-way delay: 54.827 ms

Loss rate: 0.91%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-07-09 20:08:08

End at: 2018-07-09 20:08:38

Local clock offset: -2.044 ms

Remote clock offset: 5.293 ms

Below is generated by plot.py at 2018-07-10 00:01:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.17 Mbit/s

95th percentile per-packet one-way delay: 74.775 ms

Loss rate: 0.32%

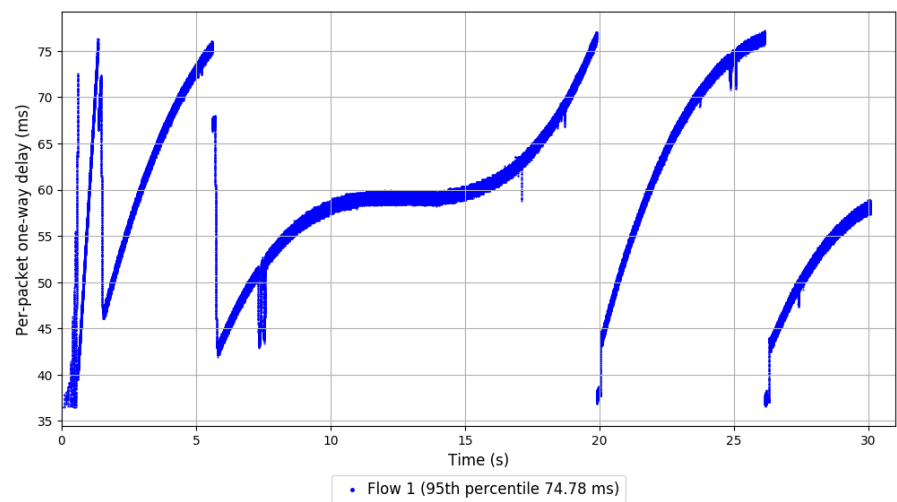
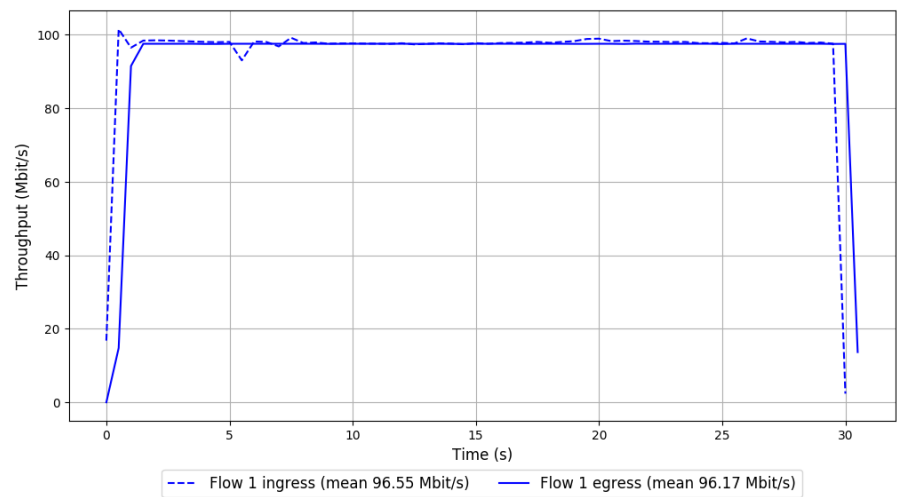
-- Flow 1:

Average throughput: 96.17 Mbit/s

95th percentile per-packet one-way delay: 74.775 ms

Loss rate: 0.32%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-07-09 20:32:04

End at: 2018-07-09 20:32:34

Local clock offset: -2.559 ms

Remote clock offset: 5.669 ms

Below is generated by plot.py at 2018-07-10 00:01:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.08 Mbit/s

95th percentile per-packet one-way delay: 72.542 ms

Loss rate: 0.27%

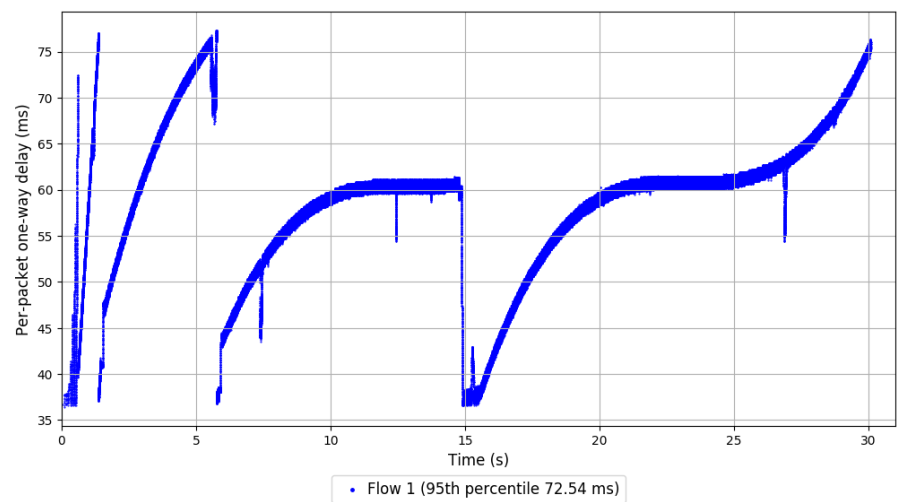
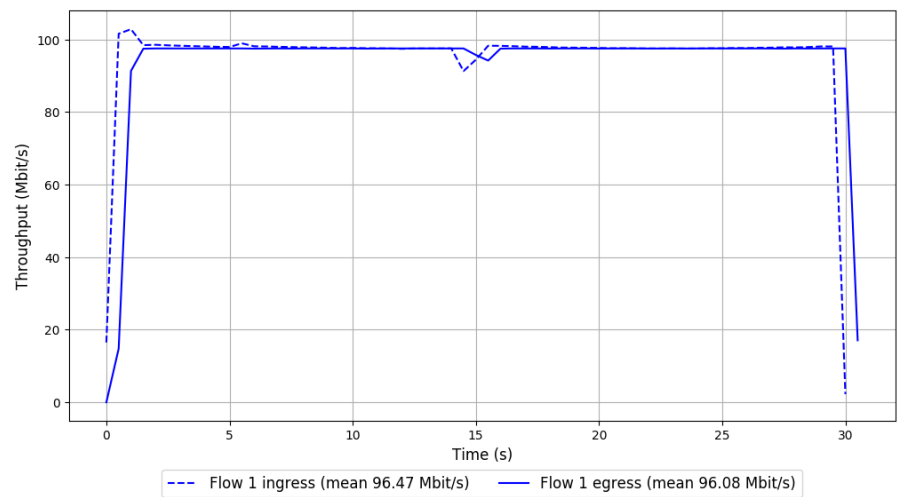
-- Flow 1:

Average throughput: 96.08 Mbit/s

95th percentile per-packet one-way delay: 72.542 ms

Loss rate: 0.27%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-07-09 20:55:14

End at: 2018-07-09 20:55:44

Local clock offset: -2.805 ms

Remote clock offset: 3.407 ms

Below is generated by plot.py at 2018-07-10 00:01:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.71 Mbit/s

95th percentile per-packet one-way delay: 76.166 ms

Loss rate: 0.68%

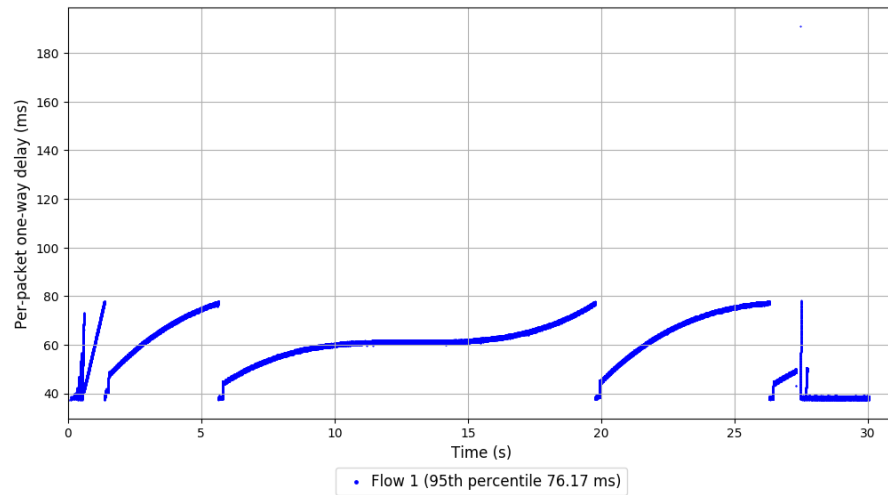
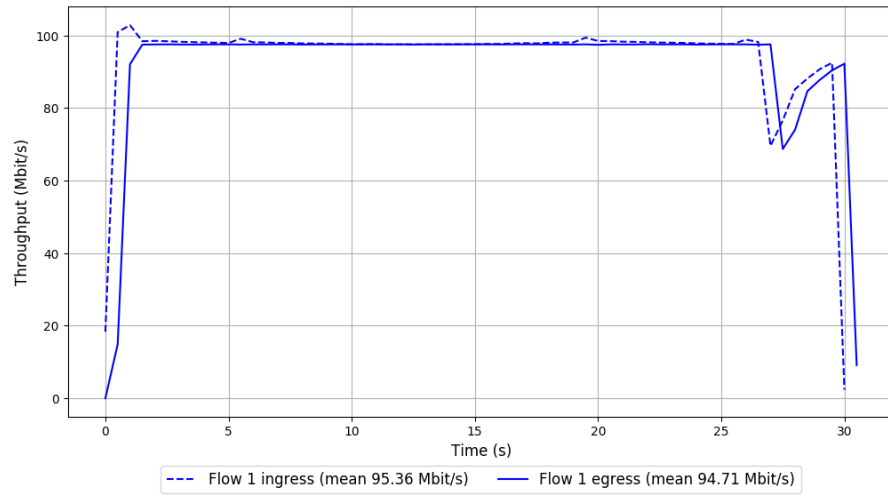
-- Flow 1:

Average throughput: 94.71 Mbit/s

95th percentile per-packet one-way delay: 76.166 ms

Loss rate: 0.68%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-07-09 21:18:11

End at: 2018-07-09 21:18:41

Local clock offset: -1.573 ms

Remote clock offset: 3.583 ms

Below is generated by plot.py at 2018-07-10 00:01:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.11 Mbit/s

95th percentile per-packet one-way delay: 71.574 ms

Loss rate: 0.29%

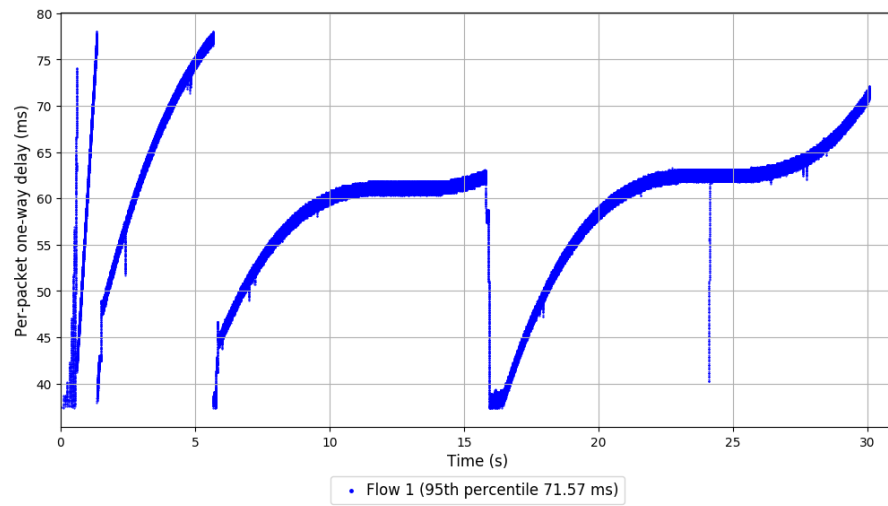
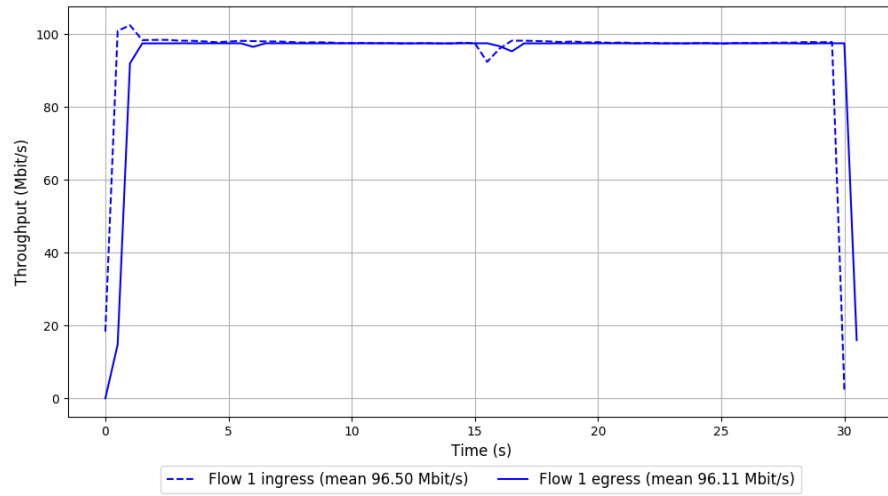
-- Flow 1:

Average throughput: 96.11 Mbit/s

95th percentile per-packet one-way delay: 71.574 ms

Loss rate: 0.29%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-07-09 21:41:30

End at: 2018-07-09 21:42:00

Local clock offset: -0.701 ms

Remote clock offset: 3.624 ms

Below is generated by plot.py at 2018-07-10 00:01:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.91 Mbit/s

95th percentile per-packet one-way delay: 72.420 ms

Loss rate: 0.33%

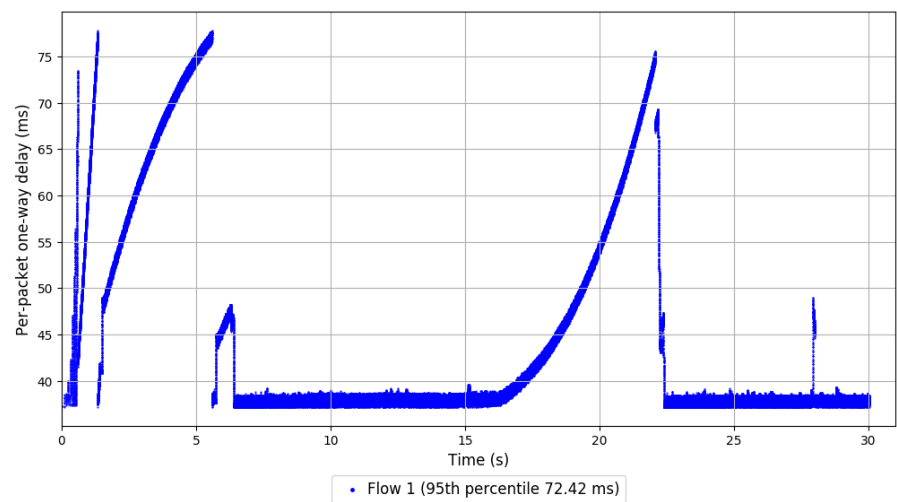
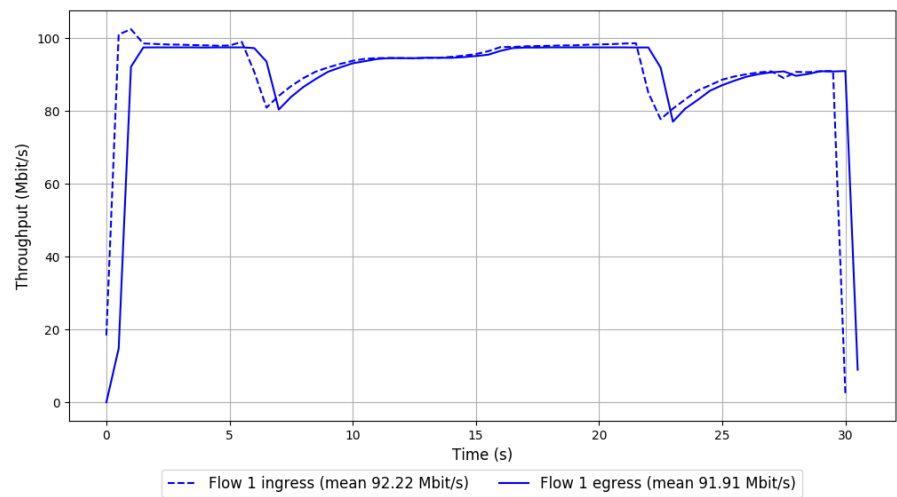
-- Flow 1:

Average throughput: 91.91 Mbit/s

95th percentile per-packet one-way delay: 72.420 ms

Loss rate: 0.33%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-07-09 22:05:02

End at: 2018-07-09 22:05:32

Local clock offset: -0.793 ms

Remote clock offset: 3.838 ms

Below is generated by plot.py at 2018-07-10 00:01:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.92 Mbit/s

95th percentile per-packet one-way delay: 74.002 ms

Loss rate: 0.38%

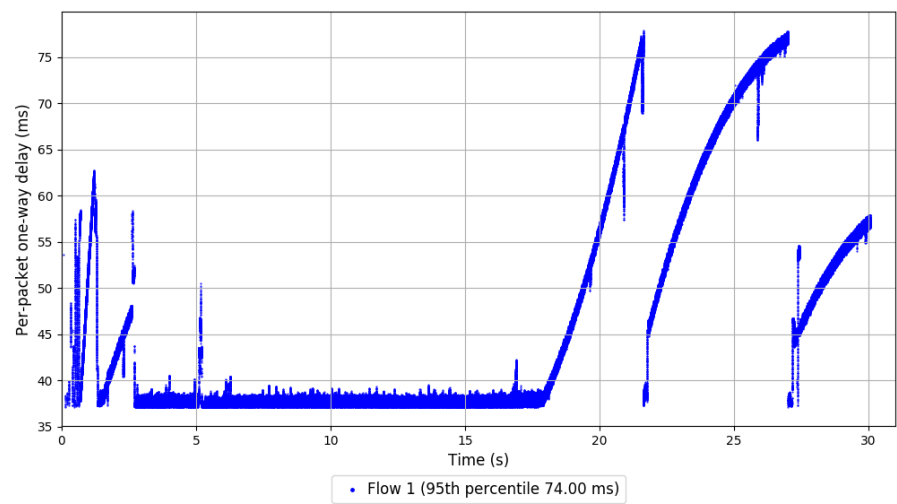
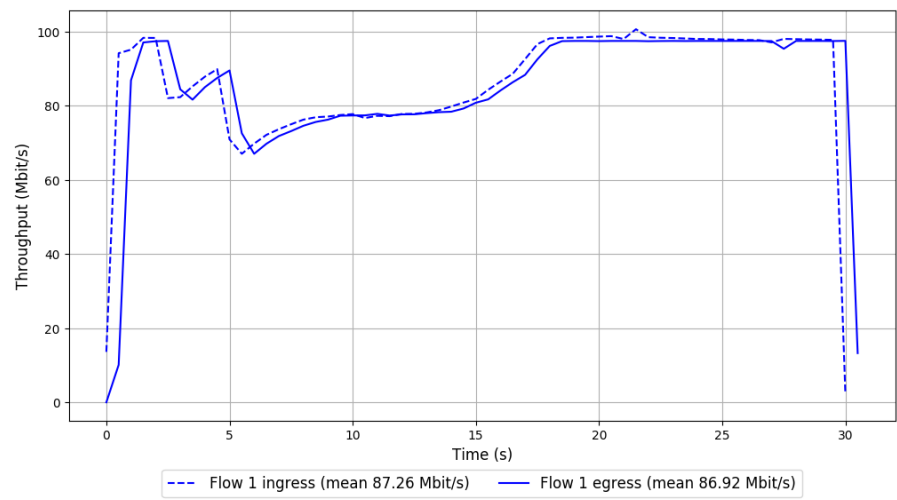
-- Flow 1:

Average throughput: 86.92 Mbit/s

95th percentile per-packet one-way delay: 74.002 ms

Loss rate: 0.38%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-07-09 22:28:15

End at: 2018-07-09 22:28:45

Local clock offset: -1.281 ms

Remote clock offset: 3.994 ms

Below is generated by plot.py at 2018-07-10 00:01:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.06 Mbit/s

95th percentile per-packet one-way delay: 71.700 ms

Loss rate: 0.33%

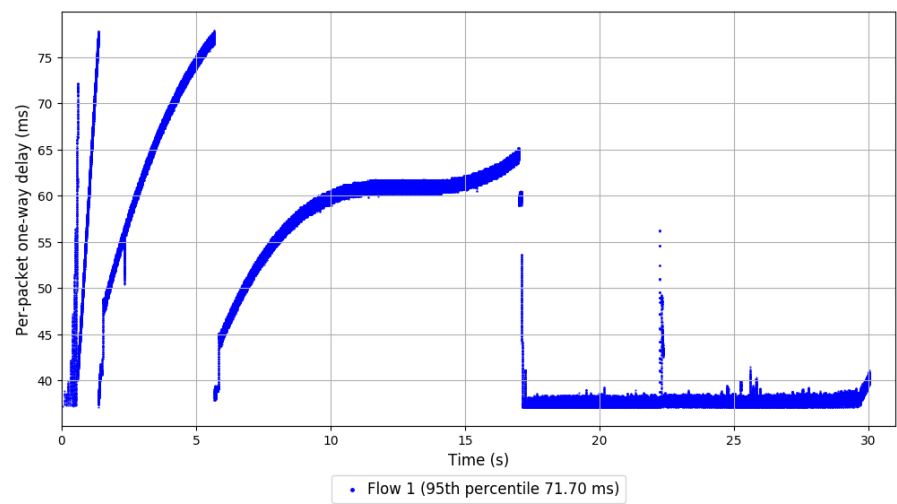
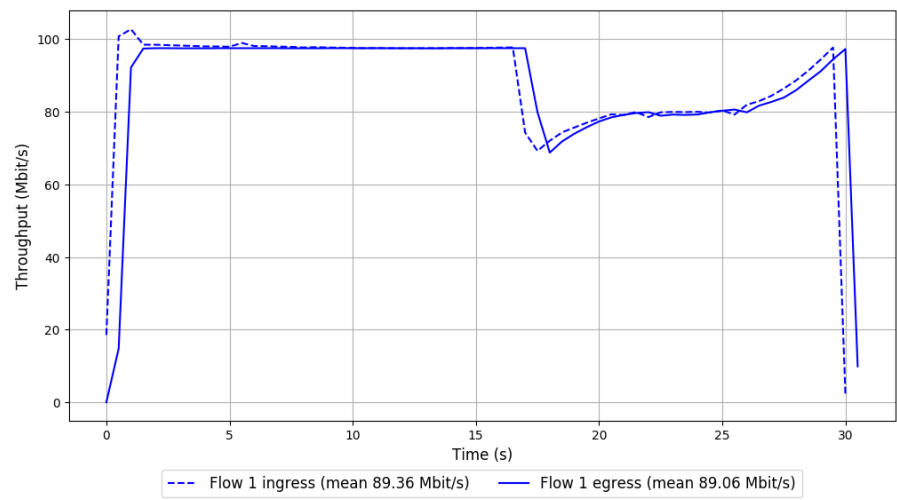
-- Flow 1:

Average throughput: 89.06 Mbit/s

95th percentile per-packet one-way delay: 71.700 ms

Loss rate: 0.33%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-07-09 22:52:25

End at: 2018-07-09 22:52:55

Local clock offset: -1.54 ms

Remote clock offset: 3.562 ms

Below is generated by plot.py at 2018-07-10 00:01:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.92 Mbit/s

95th percentile per-packet one-way delay: 60.181 ms

Loss rate: 0.17%

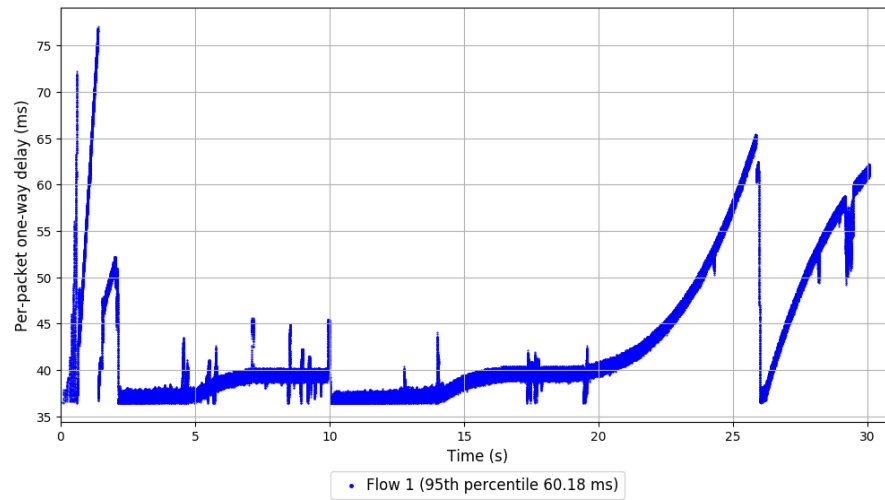
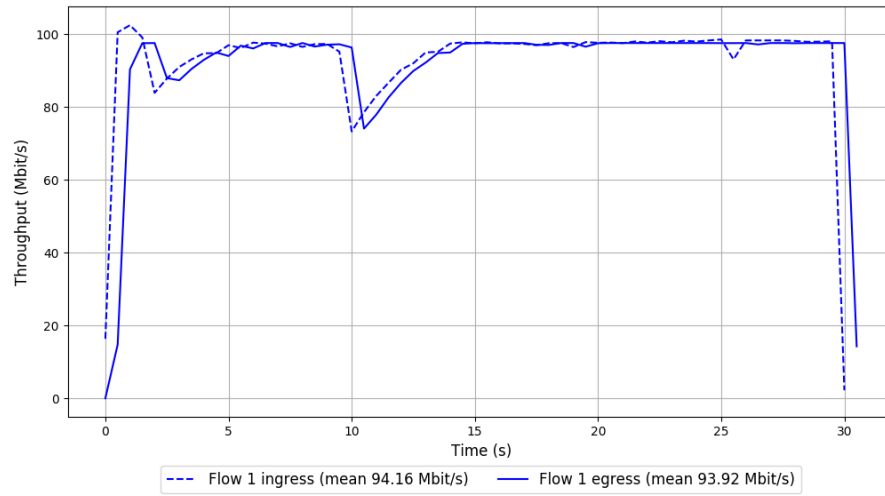
-- Flow 1:

Average throughput: 93.92 Mbit/s

95th percentile per-packet one-way delay: 60.181 ms

Loss rate: 0.17%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-07-09 23:16:34

End at: 2018-07-09 23:17:04

Local clock offset: -1.716 ms

Remote clock offset: 3.168 ms

Below is generated by plot.py at 2018-07-10 00:01:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.15 Mbit/s

95th percentile per-packet one-way delay: 73.947 ms

Loss rate: 0.43%

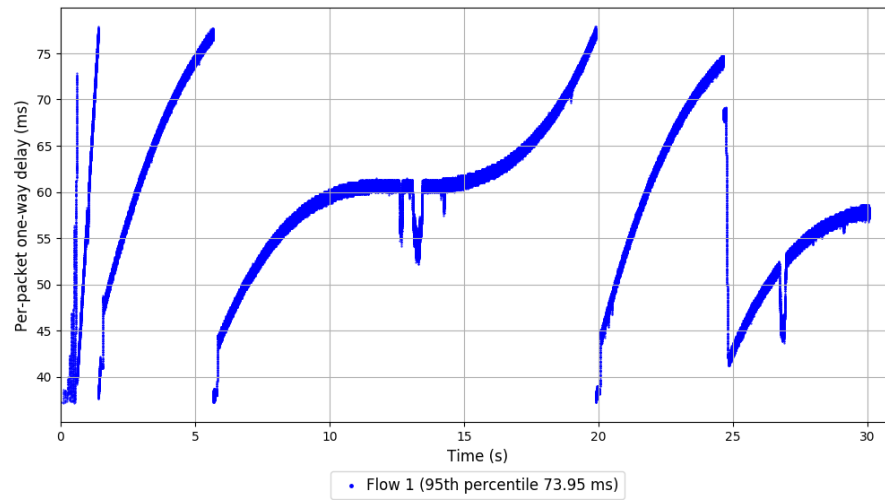
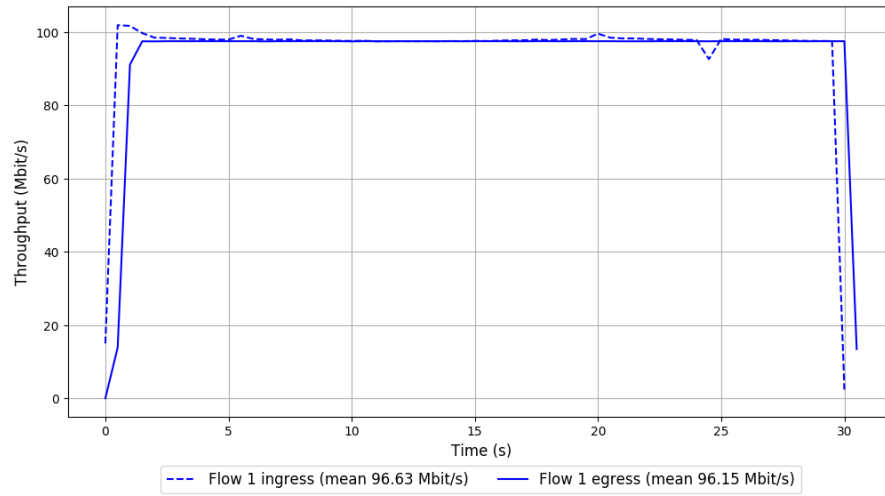
-- Flow 1:

Average throughput: 96.15 Mbit/s

95th percentile per-packet one-way delay: 73.947 ms

Loss rate: 0.43%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-07-09 23:41:07

End at: 2018-07-09 23:41:37

Local clock offset: -1.6 ms

Remote clock offset: 3.762 ms

Below is generated by plot.py at 2018-07-10 00:01:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.18 Mbit/s

95th percentile per-packet one-way delay: 75.072 ms

Loss rate: 0.54%

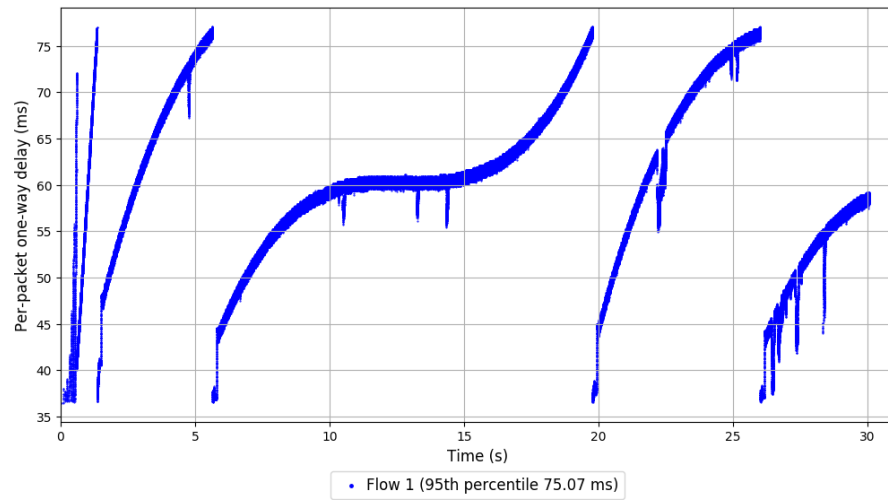
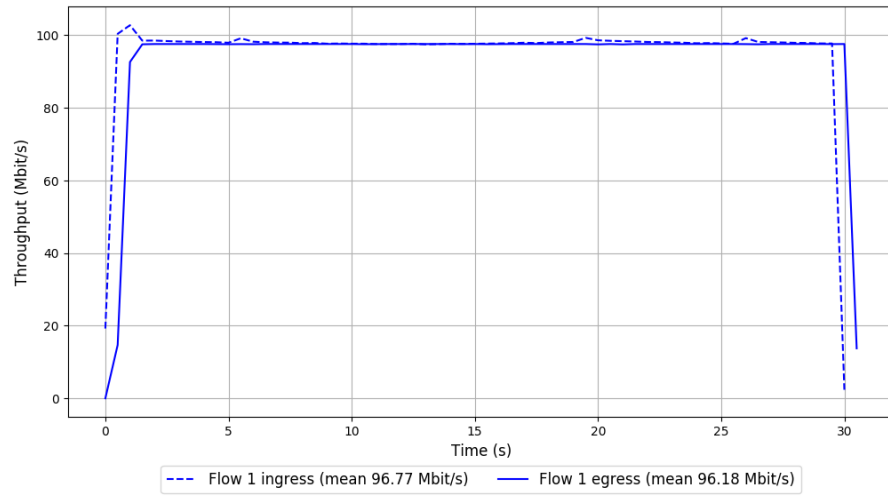
-- Flow 1:

Average throughput: 96.18 Mbit/s

95th percentile per-packet one-way delay: 75.072 ms

Loss rate: 0.54%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-07-09 20:02:44

End at: 2018-07-09 20:03:14

Local clock offset: -2.222 ms

Remote clock offset: 5.189 ms

Below is generated by plot.py at 2018-07-10 00:02:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.88 Mbit/s

95th percentile per-packet one-way delay: 72.902 ms

Loss rate: 8.12%

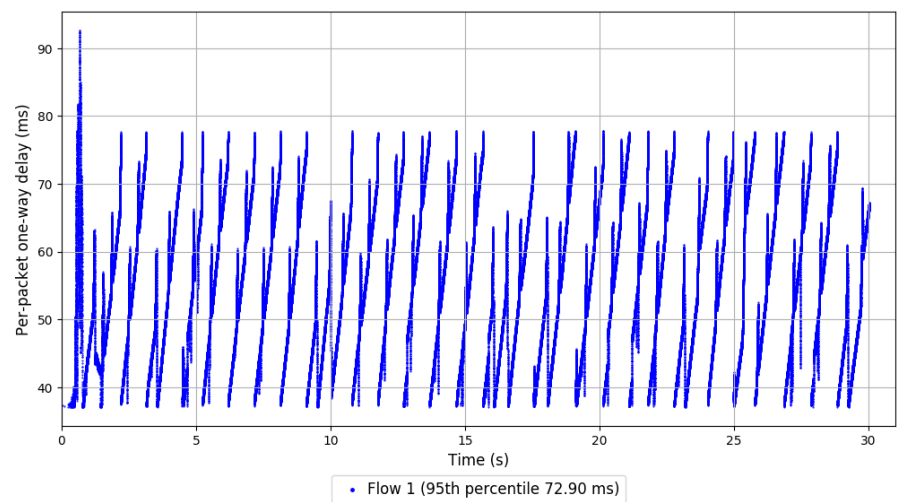
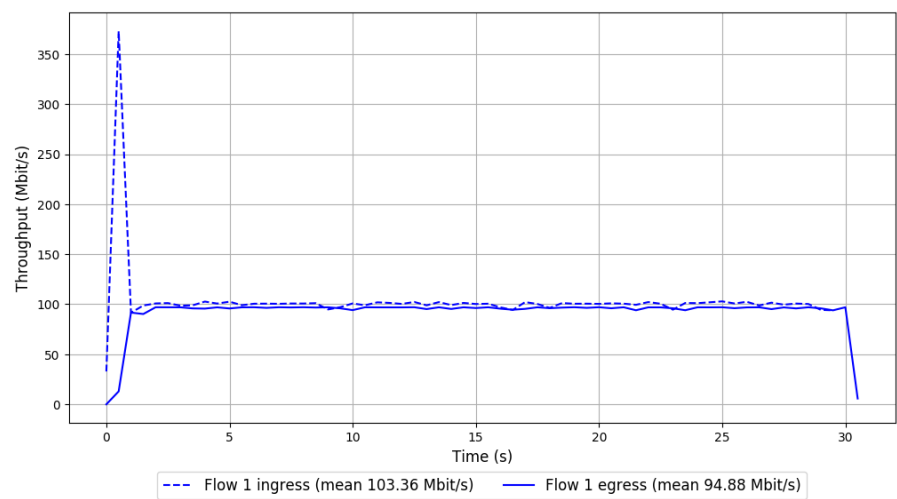
-- Flow 1:

Average throughput: 94.88 Mbit/s

95th percentile per-packet one-way delay: 72.902 ms

Loss rate: 8.12%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-07-09 20:26:04

End at: 2018-07-09 20:26:34

Local clock offset: -2.216 ms

Remote clock offset: 5.735 ms

Below is generated by plot.py at 2018-07-10 00:02:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.00 Mbit/s

95th percentile per-packet one-way delay: 72.207 ms

Loss rate: 8.30%

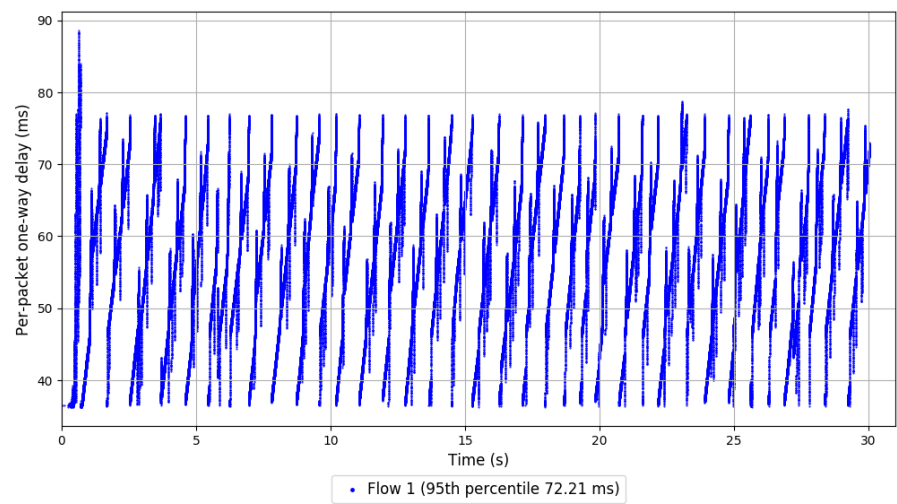
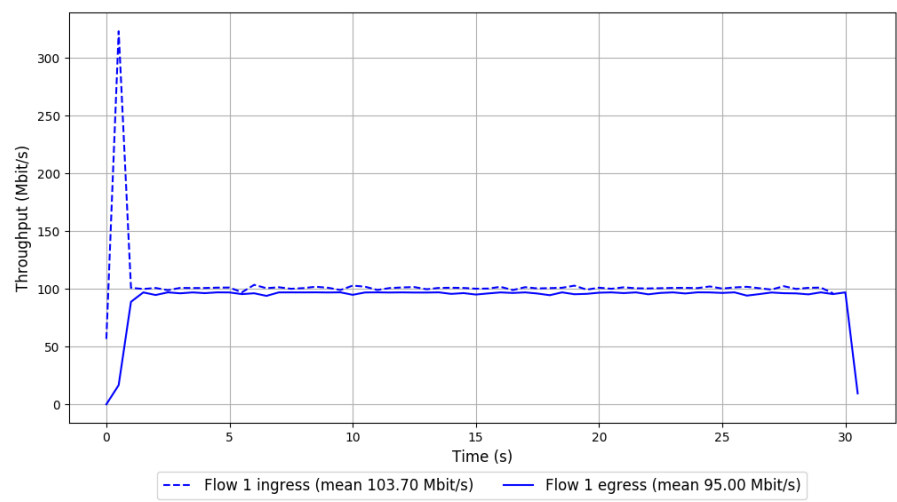
-- Flow 1:

Average throughput: 95.00 Mbit/s

95th percentile per-packet one-way delay: 72.207 ms

Loss rate: 8.30%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-07-09 20:49:44

End at: 2018-07-09 20:50:14

Local clock offset: -3.253 ms

Remote clock offset: 3.566 ms

Below is generated by plot.py at 2018-07-10 00:02:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.25 Mbit/s

95th percentile per-packet one-way delay: 72.732 ms

Loss rate: 8.64%

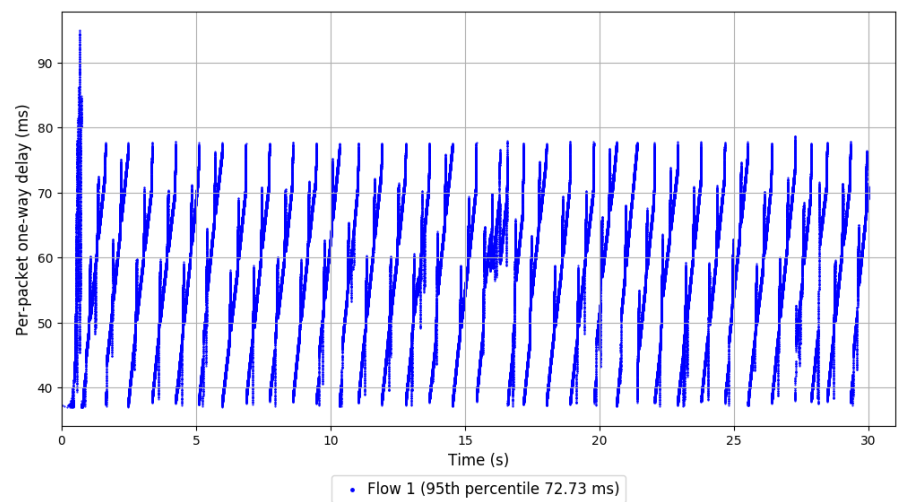
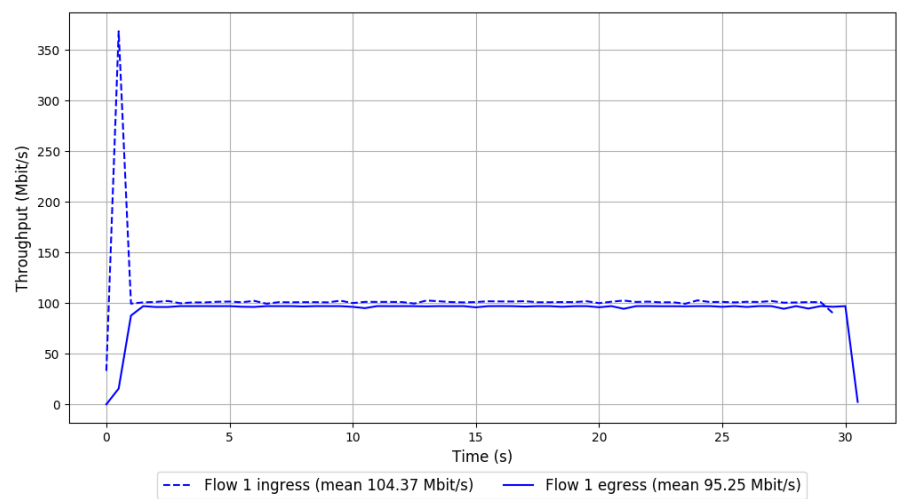
-- Flow 1:

Average throughput: 95.25 Mbit/s

95th percentile per-packet one-way delay: 72.732 ms

Loss rate: 8.64%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-07-09 21:12:44

End at: 2018-07-09 21:13:14

Local clock offset: -1.92 ms

Remote clock offset: 3.477 ms

Below is generated by plot.py at 2018-07-10 00:02:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.17 Mbit/s

95th percentile per-packet one-way delay: 72.513 ms

Loss rate: 8.30%

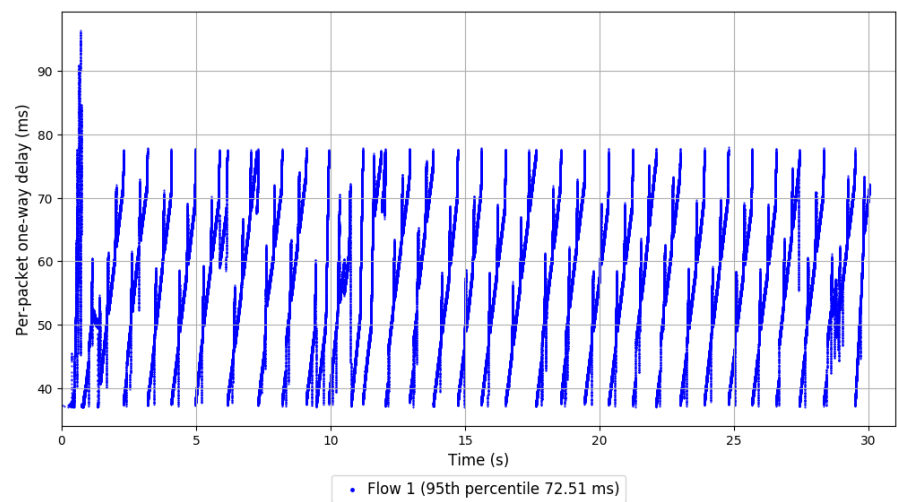
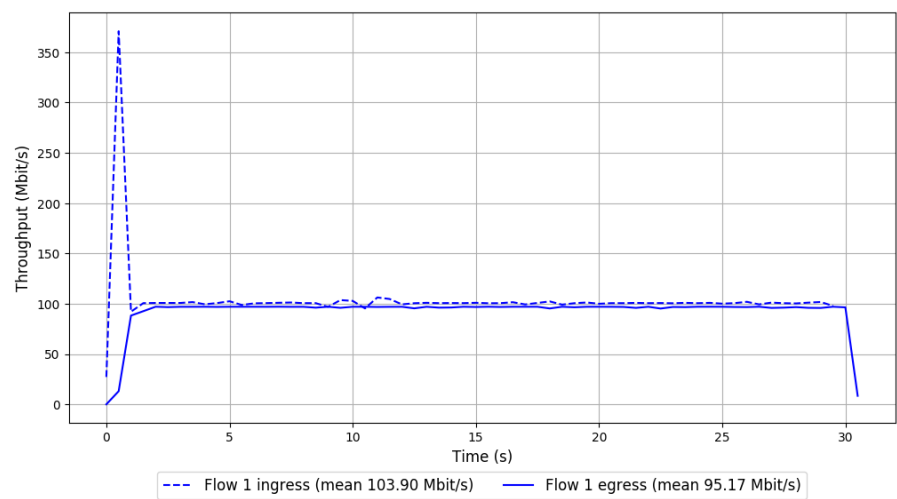
-- Flow 1:

Average throughput: 95.17 Mbit/s

95th percentile per-packet one-way delay: 72.513 ms

Loss rate: 8.30%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-07-09 21:35:47

End at: 2018-07-09 21:36:17

Local clock offset: -0.781 ms

Remote clock offset: 3.55 ms

Below is generated by plot.py at 2018-07-10 00:02:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.05 Mbit/s

95th percentile per-packet one-way delay: 71.999 ms

Loss rate: 7.98%

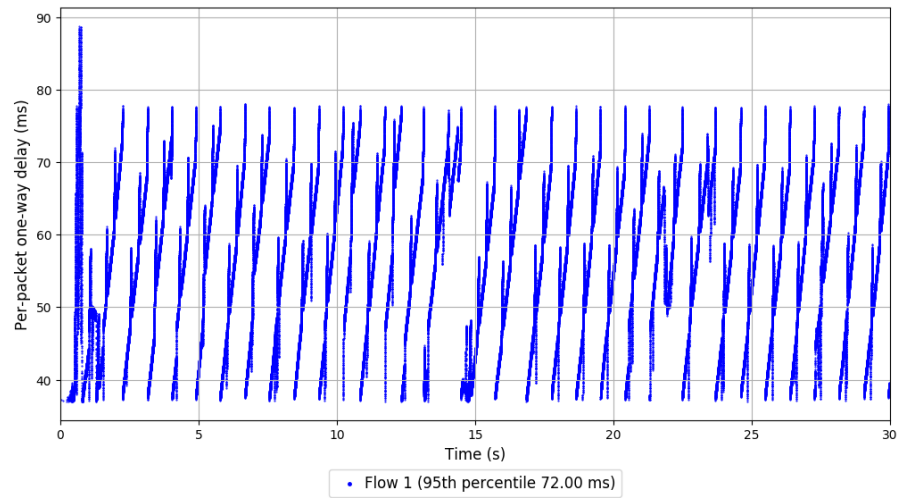
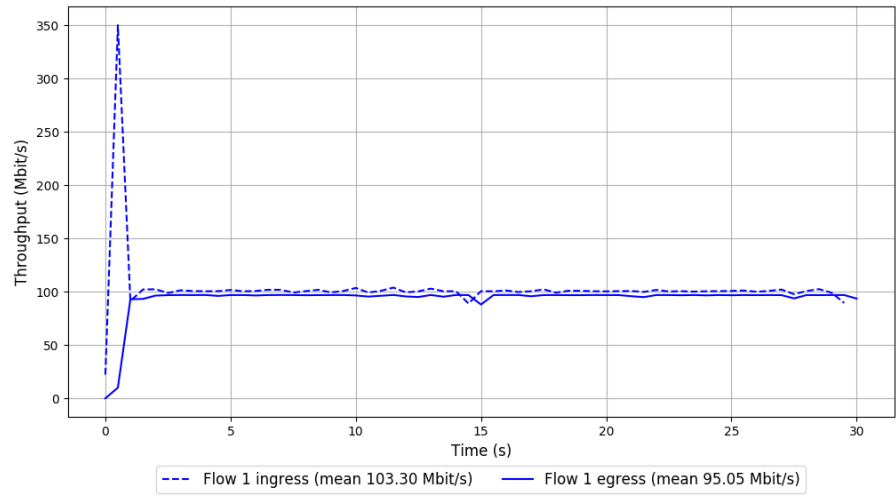
-- Flow 1:

Average throughput: 95.05 Mbit/s

95th percentile per-packet one-way delay: 71.999 ms

Loss rate: 7.98%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-07-09 21:59:18

End at: 2018-07-09 21:59:48

Local clock offset: -0.717 ms

Remote clock offset: 3.905 ms

Below is generated by plot.py at 2018-07-10 00:03:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.11 Mbit/s

95th percentile per-packet one-way delay: 72.639 ms

Loss rate: 8.73%

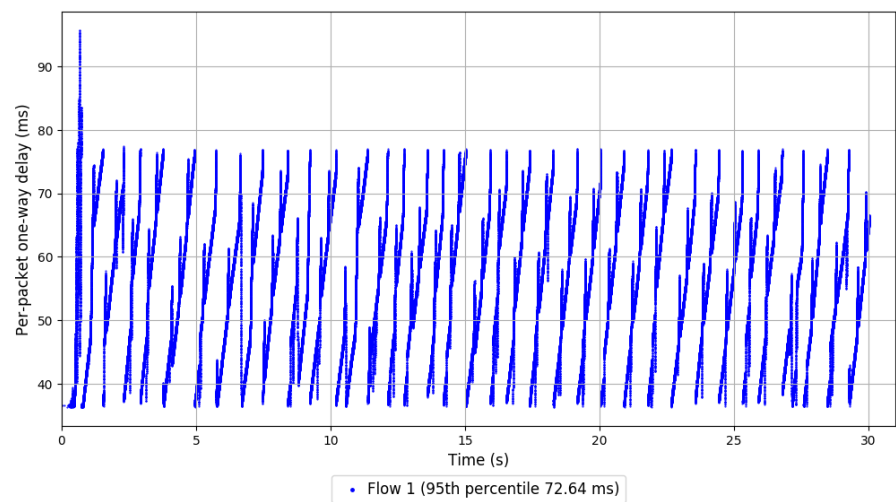
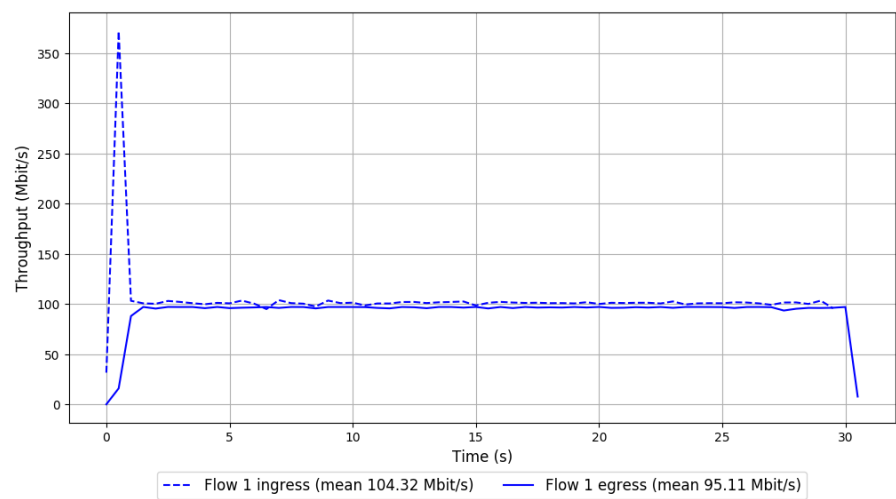
-- Flow 1:

Average throughput: 95.11 Mbit/s

95th percentile per-packet one-way delay: 72.639 ms

Loss rate: 8.73%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-07-09 22:22:24

End at: 2018-07-09 22:22:54

Local clock offset: -1.138 ms

Remote clock offset: 3.986 ms

Below is generated by plot.py at 2018-07-10 00:03:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.21 Mbit/s

95th percentile per-packet one-way delay: 72.481 ms

Loss rate: 8.09%

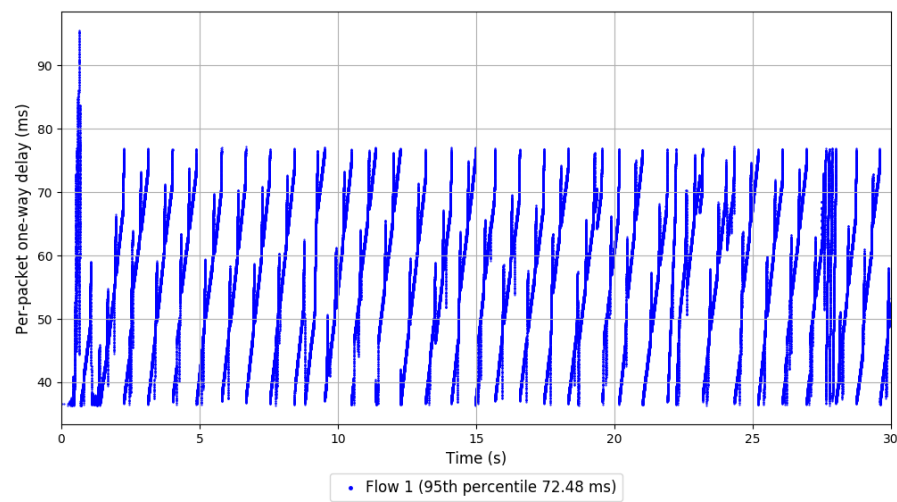
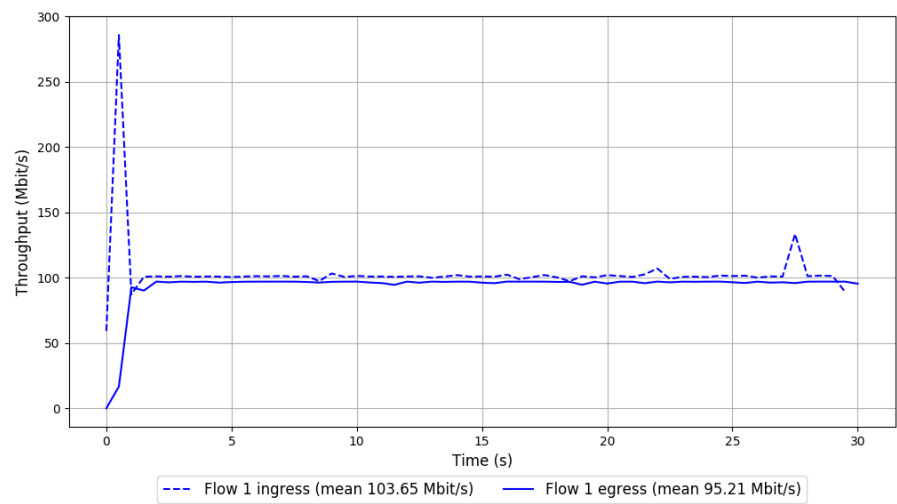
-- Flow 1:

Average throughput: 95.21 Mbit/s

95th percentile per-packet one-way delay: 72.481 ms

Loss rate: 8.09%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-07-09 22:46:21

End at: 2018-07-09 22:46:51

Local clock offset: -1.476 ms

Remote clock offset: 3.813 ms

Below is generated by plot.py at 2018-07-10 00:03:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.29 Mbit/s

95th percentile per-packet one-way delay: 72.618 ms

Loss rate: 8.65%

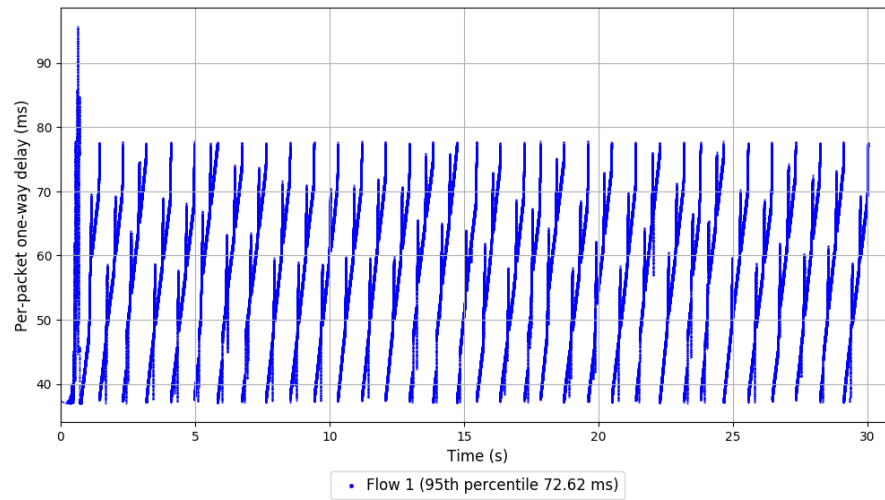
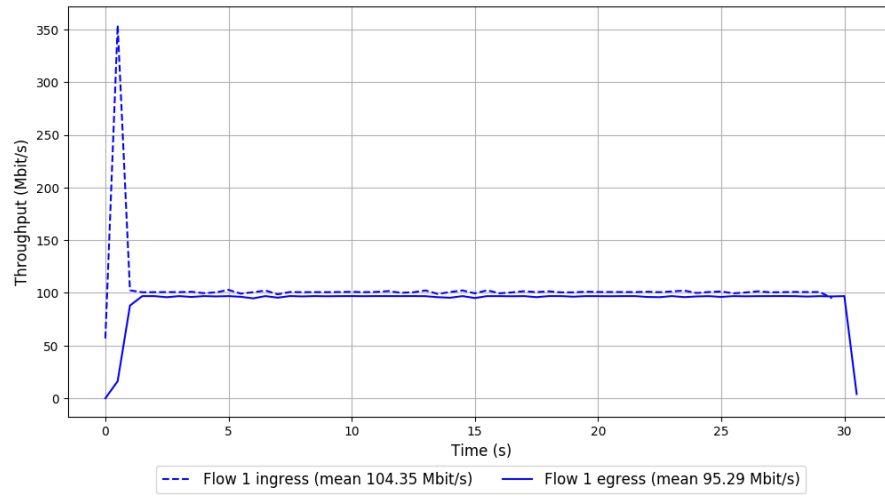
-- Flow 1:

Average throughput: 95.29 Mbit/s

95th percentile per-packet one-way delay: 72.618 ms

Loss rate: 8.65%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-07-09 23:10:35

End at: 2018-07-09 23:11:05

Local clock offset: -1.659 ms

Remote clock offset: 3.226 ms

Below is generated by plot.py at 2018-07-10 00:03:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.20 Mbit/s

95th percentile per-packet one-way delay: 72.787 ms

Loss rate: 8.65%

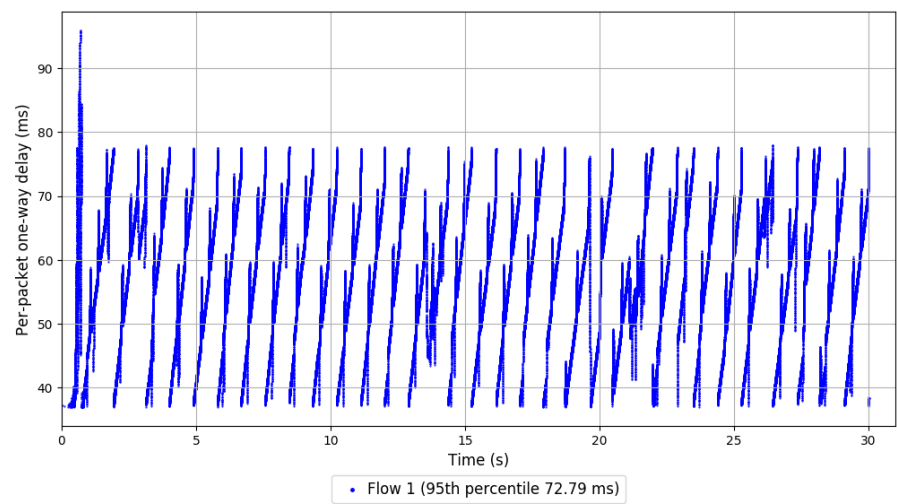
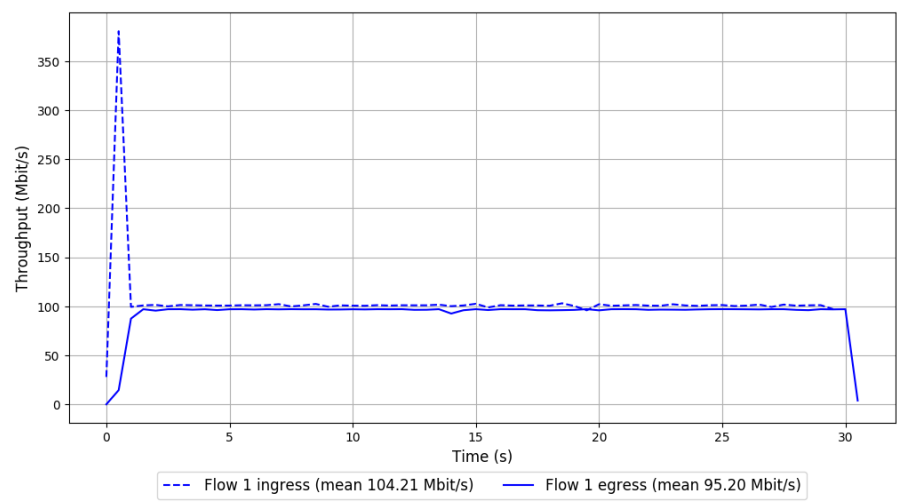
-- Flow 1:

Average throughput: 95.20 Mbit/s

95th percentile per-packet one-way delay: 72.787 ms

Loss rate: 8.65%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-07-09 23:35:24

End at: 2018-07-09 23:35:54

Local clock offset: -1.758 ms

Remote clock offset: 3.698 ms

Below is generated by plot.py at 2018-07-10 00:04:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.20 Mbit/s

95th percentile per-packet one-way delay: 71.935 ms

Loss rate: 7.66%

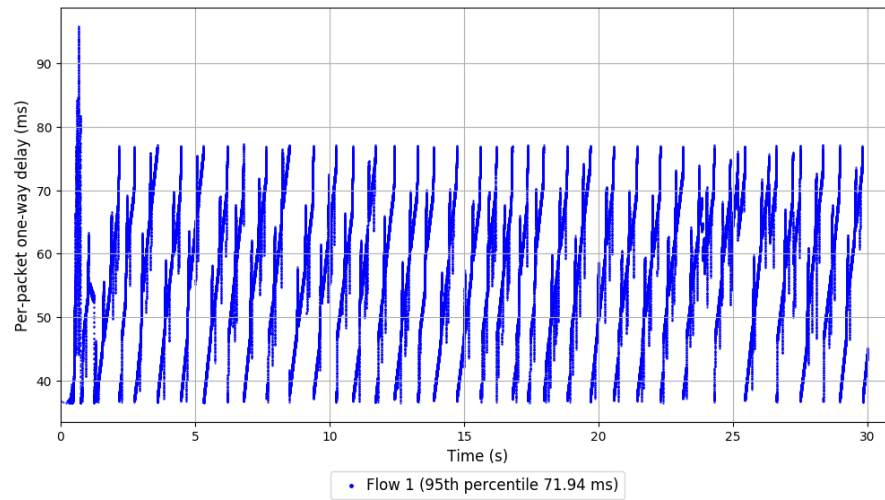
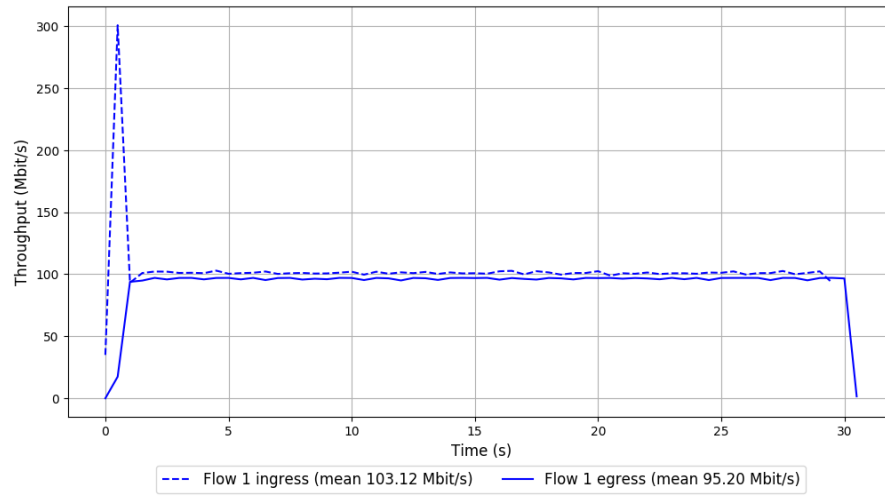
-- Flow 1:

Average throughput: 95.20 Mbit/s

95th percentile per-packet one-way delay: 71.935 ms

Loss rate: 7.66%

Run 10: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2018-07-09 20:04:03

End at: 2018-07-09 20:04:34

Local clock offset: -2.081 ms

Remote clock offset: 5.146 ms

Below is generated by plot.py at 2018-07-10 00:04:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.61 Mbit/s

95th percentile per-packet one-way delay: 75.274 ms

Loss rate: 3.96%

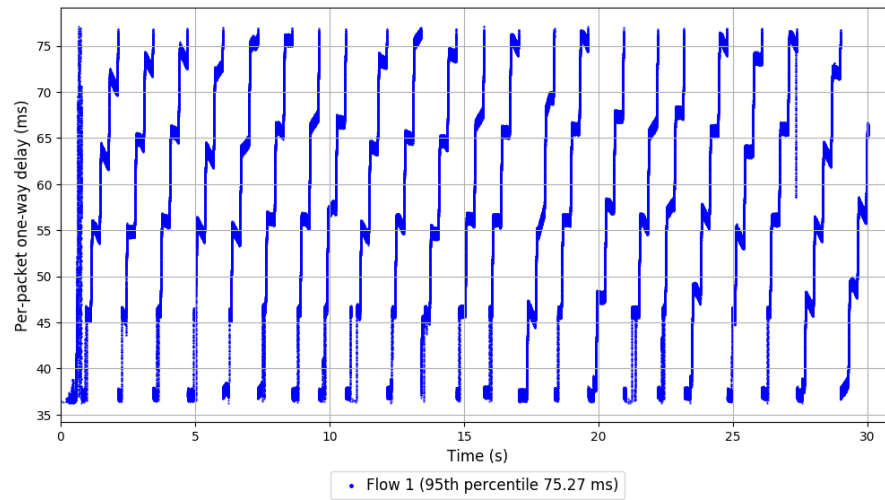
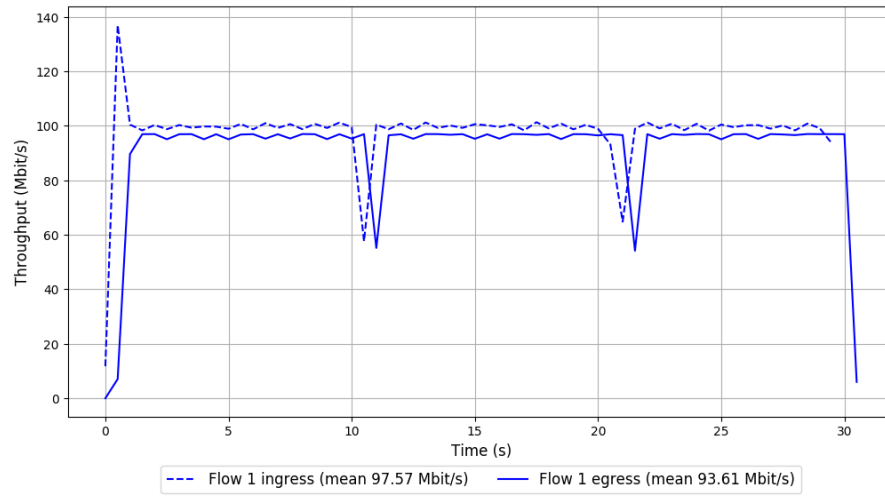
-- Flow 1:

Average throughput: 93.61 Mbit/s

95th percentile per-packet one-way delay: 75.274 ms

Loss rate: 3.96%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2018-07-09 20:27:34

End at: 2018-07-09 20:28:04

Local clock offset: -2.26 ms

Remote clock offset: 5.756 ms

Below is generated by plot.py at 2018-07-10 00:04:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.45 Mbit/s

95th percentile per-packet one-way delay: 74.270 ms

Loss rate: 3.93%

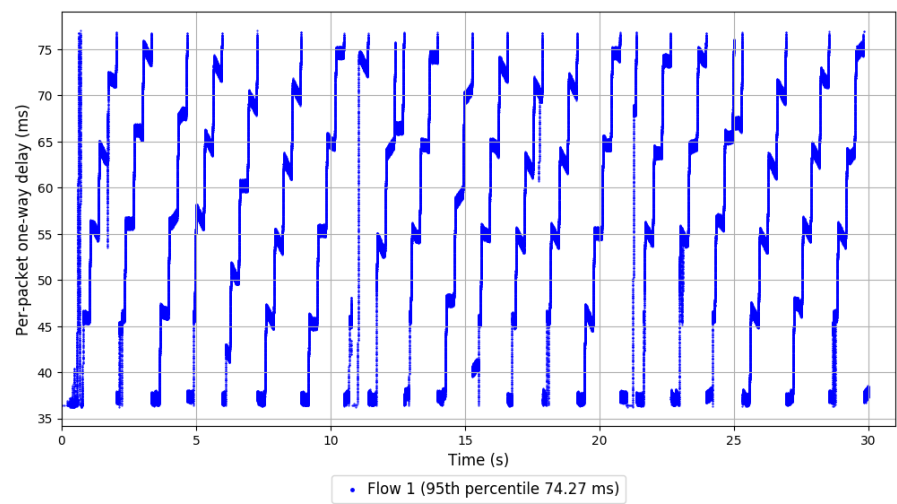
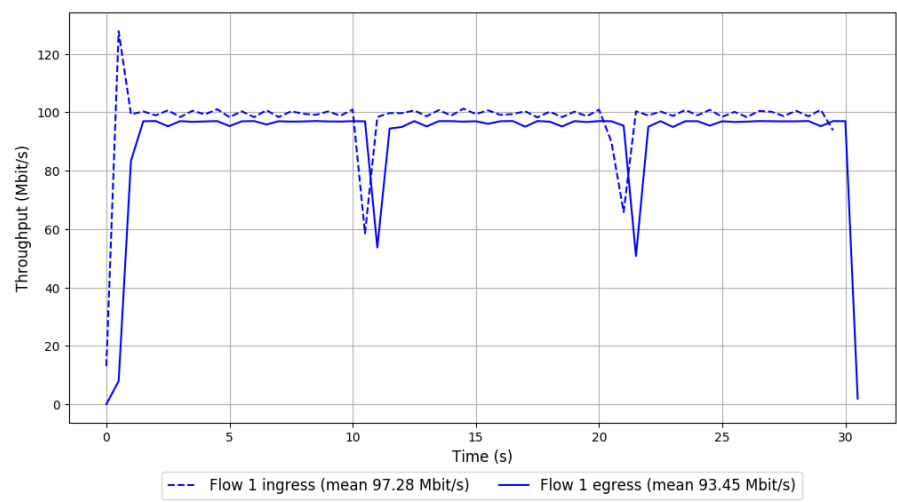
-- Flow 1:

Average throughput: 93.45 Mbit/s

95th percentile per-packet one-way delay: 74.270 ms

Loss rate: 3.93%

Run 2: Report of FillP-Sheep — Data Link

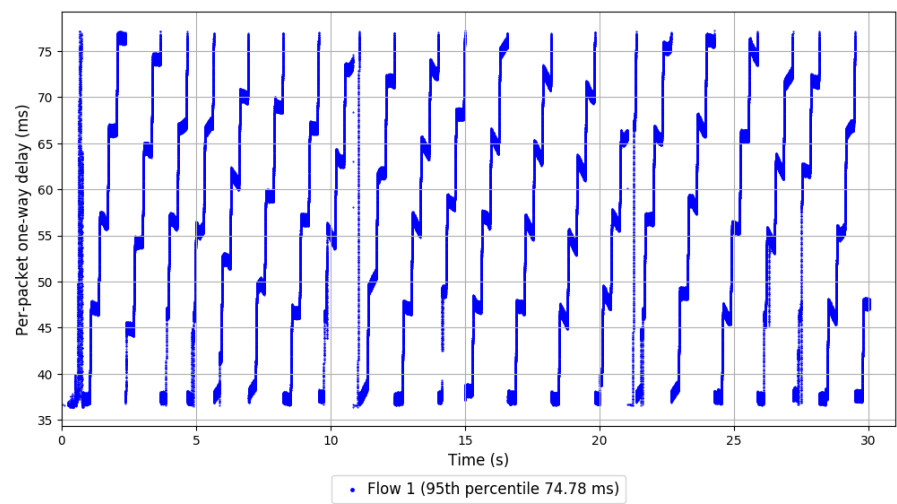
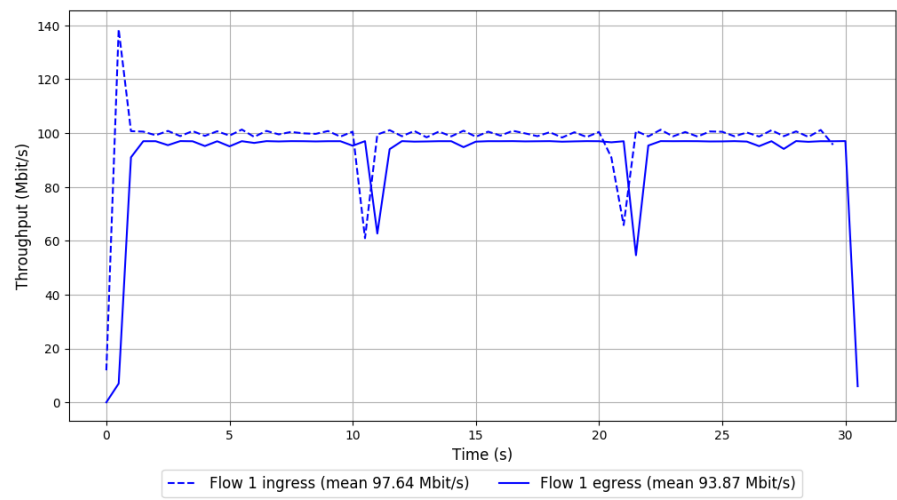


Run 3: Statistics of FillP-Sheep

Start at: 2018-07-09 20:51:04
End at: 2018-07-09 20:51:34
Local clock offset: -3.096 ms
Remote clock offset: 3.594 ms

Below is generated by plot.py at 2018-07-10 00:04:29
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.87 Mbit/s
95th percentile per-packet one-way delay: 74.777 ms
Loss rate: 3.83%
-- Flow 1:
Average throughput: 93.87 Mbit/s
95th percentile per-packet one-way delay: 74.777 ms
Loss rate: 3.83%

Run 3: Report of FillP-Sheep — Data Link

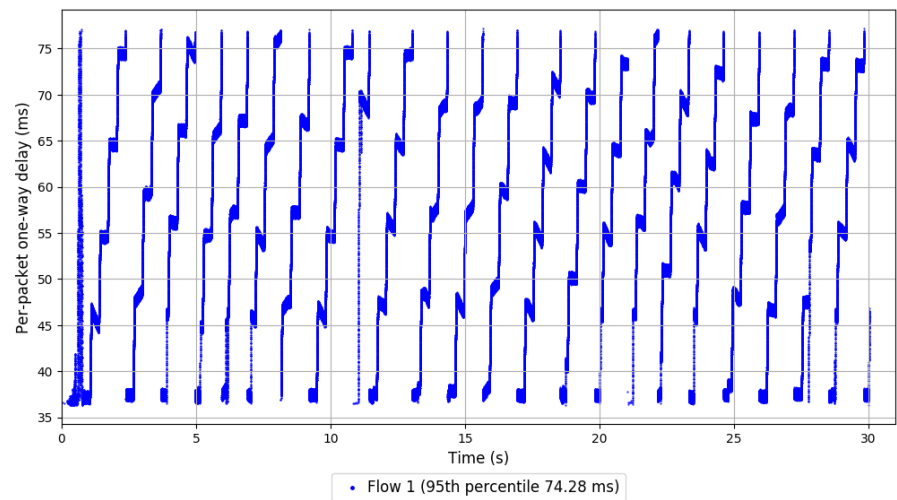
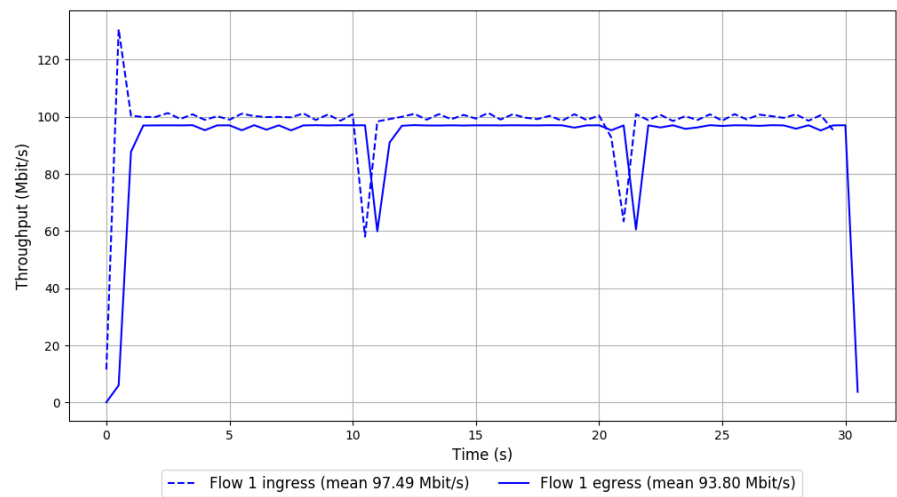


Run 4: Statistics of FillP-Sheep

Start at: 2018-07-09 21:14:06
End at: 2018-07-09 21:14:36
Local clock offset: -1.785 ms
Remote clock offset: 3.478 ms

Below is generated by plot.py at 2018-07-10 00:04:35
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 74.276 ms
Loss rate: 3.74%
-- Flow 1:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 74.276 ms
Loss rate: 3.74%

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2018-07-09 21:37:08

End at: 2018-07-09 21:37:38

Local clock offset: -0.755 ms

Remote clock offset: 3.623 ms

Below is generated by plot.py at 2018-07-10 00:04:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.63 Mbit/s

95th percentile per-packet one-way delay: 75.566 ms

Loss rate: 4.14%

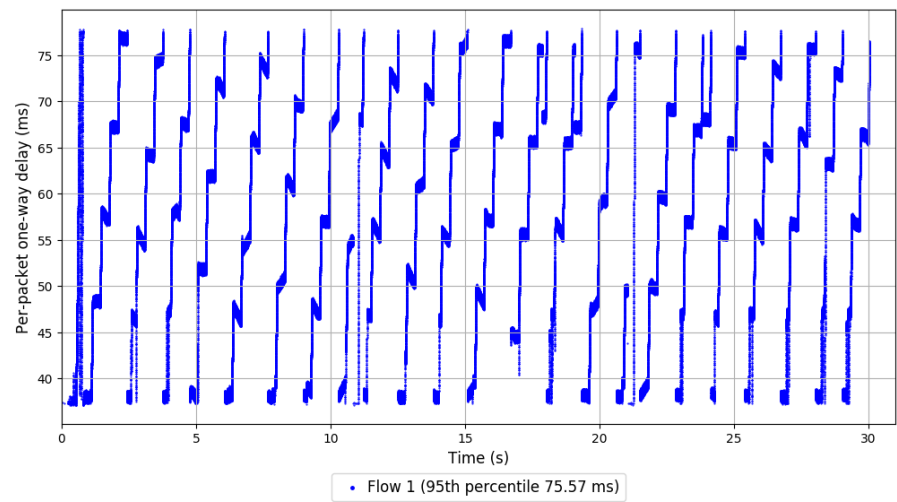
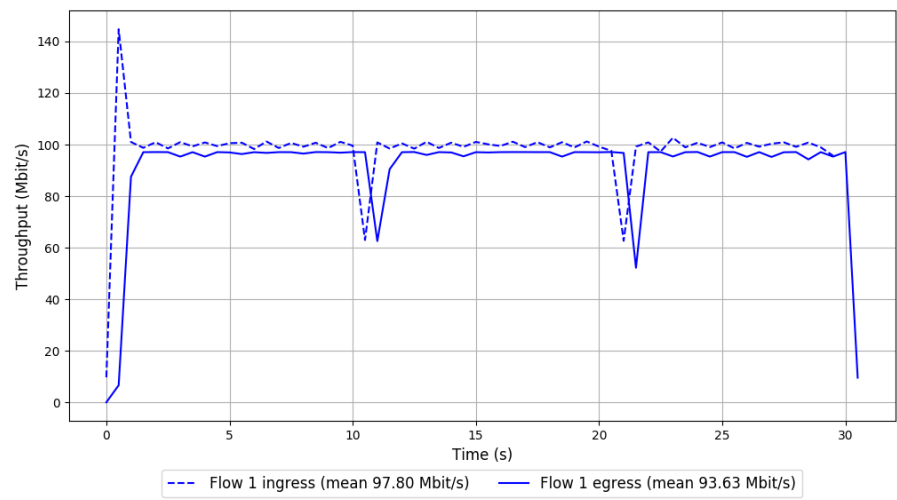
-- Flow 1:

Average throughput: 93.63 Mbit/s

95th percentile per-packet one-way delay: 75.566 ms

Loss rate: 4.14%

Run 5: Report of FillP-Sheep — Data Link



Run 6: Statistics of FillP-Sheep

Start at: 2018-07-09 22:00:41

End at: 2018-07-09 22:01:11

Local clock offset: -0.72 ms

Remote clock offset: 3.872 ms

Below is generated by plot.py at 2018-07-10 00:04:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.71 Mbit/s

95th percentile per-packet one-way delay: 74.764 ms

Loss rate: 3.95%

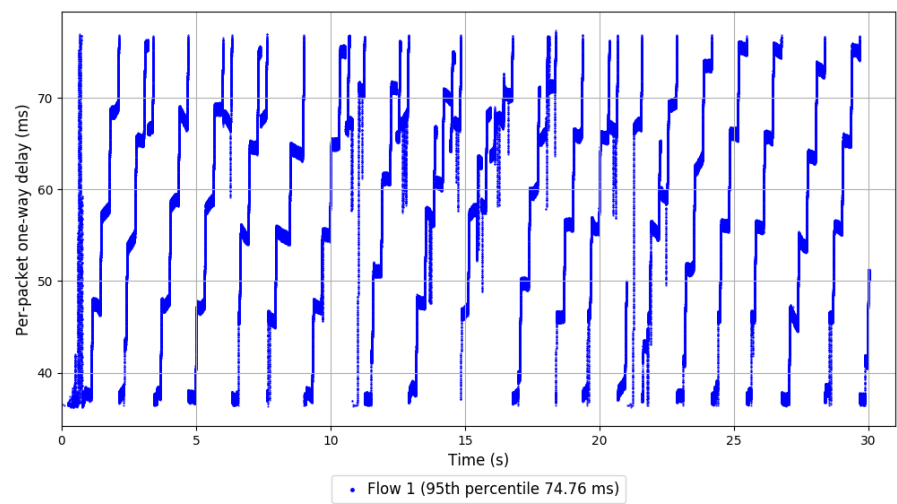
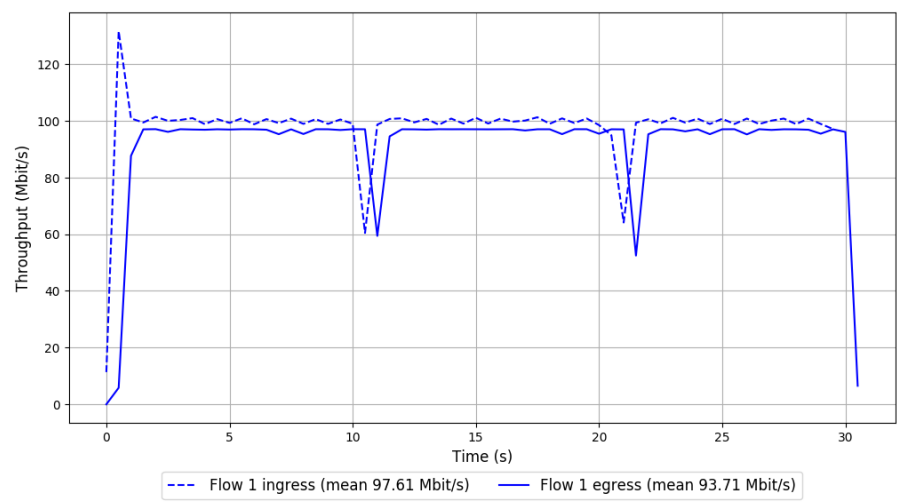
-- Flow 1:

Average throughput: 93.71 Mbit/s

95th percentile per-packet one-way delay: 74.764 ms

Loss rate: 3.95%

Run 6: Report of FillP-Sheep — Data Link



Run 7: Statistics of FillP-Sheep

Start at: 2018-07-09 22:23:47

End at: 2018-07-09 22:24:17

Local clock offset: -1.154 ms

Remote clock offset: 3.958 ms

Below is generated by plot.py at 2018-07-10 00:05:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.53 Mbit/s

95th percentile per-packet one-way delay: 75.548 ms

Loss rate: 4.10%

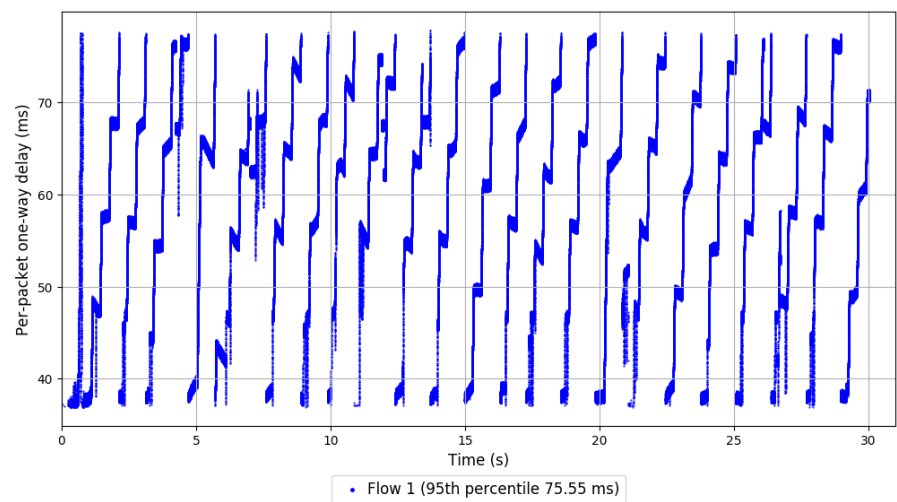
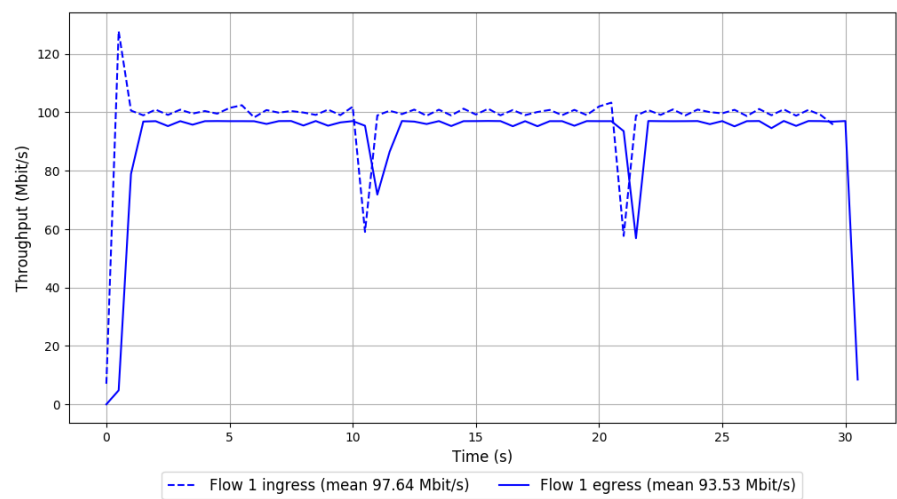
-- Flow 1:

Average throughput: 93.53 Mbit/s

95th percentile per-packet one-way delay: 75.548 ms

Loss rate: 4.10%

Run 7: Report of FillP-Sheep — Data Link



Run 8: Statistics of FillP-Sheep

Start at: 2018-07-09 22:47:48

End at: 2018-07-09 22:48:18

Local clock offset: -1.473 ms

Remote clock offset: 3.734 ms

Below is generated by plot.py at 2018-07-10 00:05:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.82 Mbit/s

95th percentile per-packet one-way delay: 74.673 ms

Loss rate: 4.51%

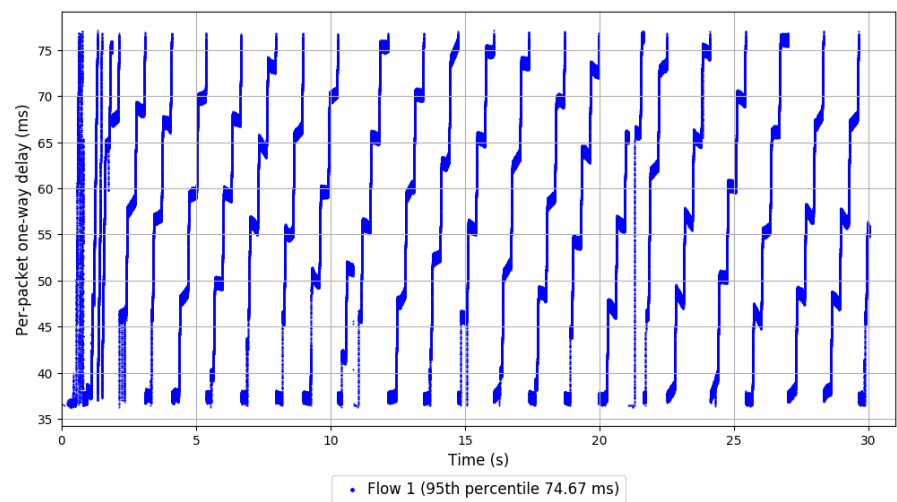
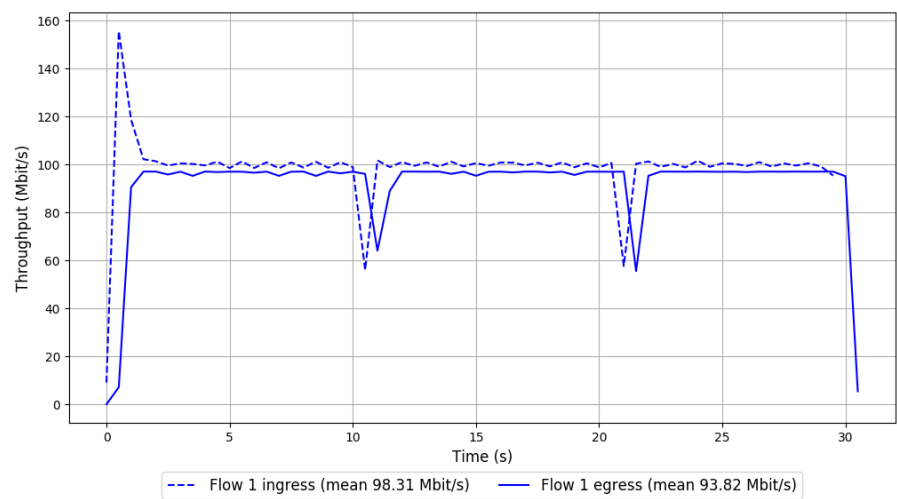
-- Flow 1:

Average throughput: 93.82 Mbit/s

95th percentile per-packet one-way delay: 74.673 ms

Loss rate: 4.51%

Run 8: Report of FillP-Sheep — Data Link

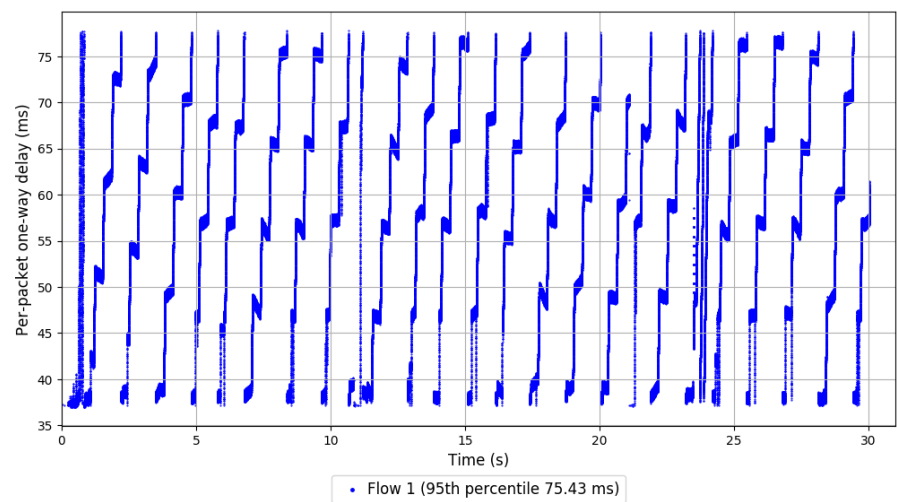
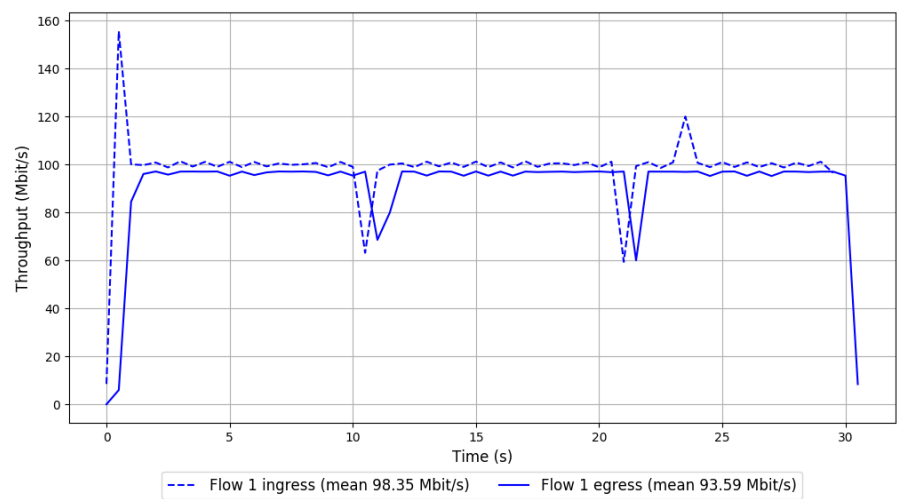


Run 9: Statistics of FillP-Sheep

Start at: 2018-07-09 23:12:03
End at: 2018-07-09 23:12:33
Local clock offset: -1.675 ms
Remote clock offset: 3.252 ms

Below is generated by plot.py at 2018-07-10 00:05:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.59 Mbit/s
95th percentile per-packet one-way delay: 75.432 ms
Loss rate: 4.76%
-- Flow 1:
Average throughput: 93.59 Mbit/s
95th percentile per-packet one-way delay: 75.432 ms
Loss rate: 4.76%

Run 9: Report of FillP-Sheep — Data Link



Run 10: Statistics of FillP-Sheep

Start at: 2018-07-09 23:36:46

End at: 2018-07-09 23:37:16

Local clock offset: -1.676 ms

Remote clock offset: 3.687 ms

Below is generated by plot.py at 2018-07-10 00:05:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.60 Mbit/s

95th percentile per-packet one-way delay: 74.904 ms

Loss rate: 4.07%

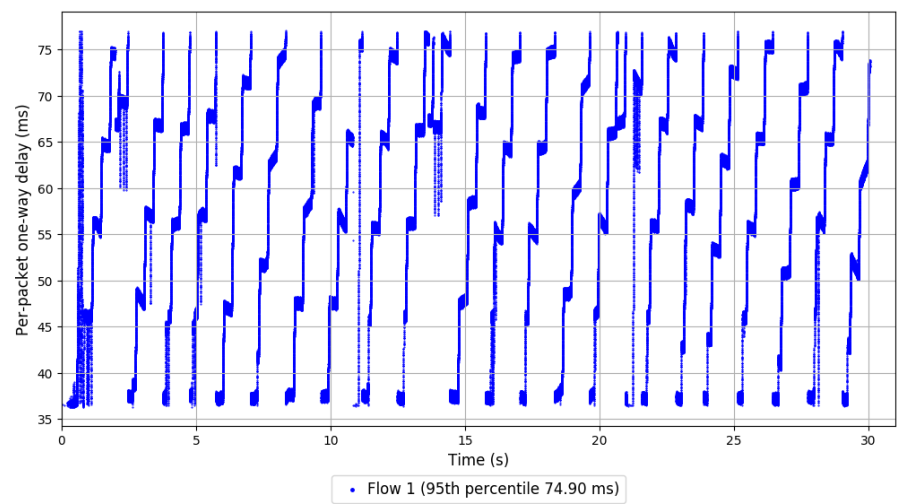
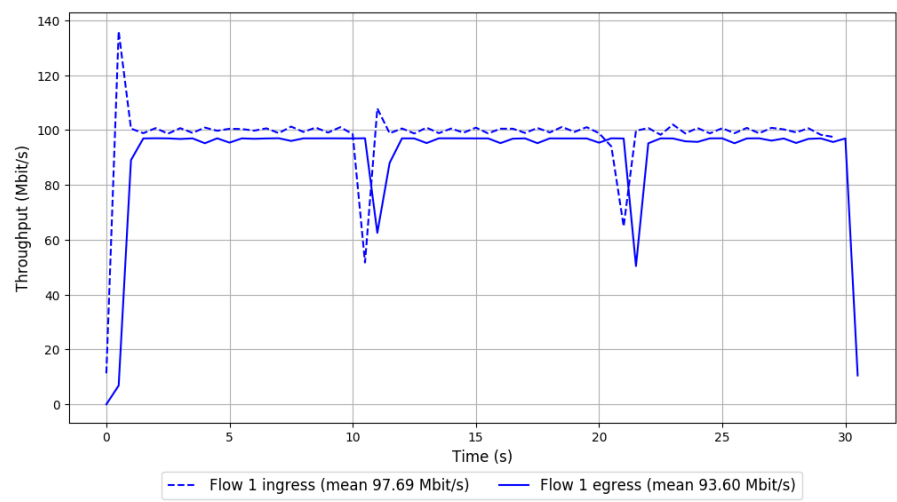
-- Flow 1:

Average throughput: 93.60 Mbit/s

95th percentile per-packet one-way delay: 74.904 ms

Loss rate: 4.07%

Run 10: Report of FillP-Sheep — Data Link

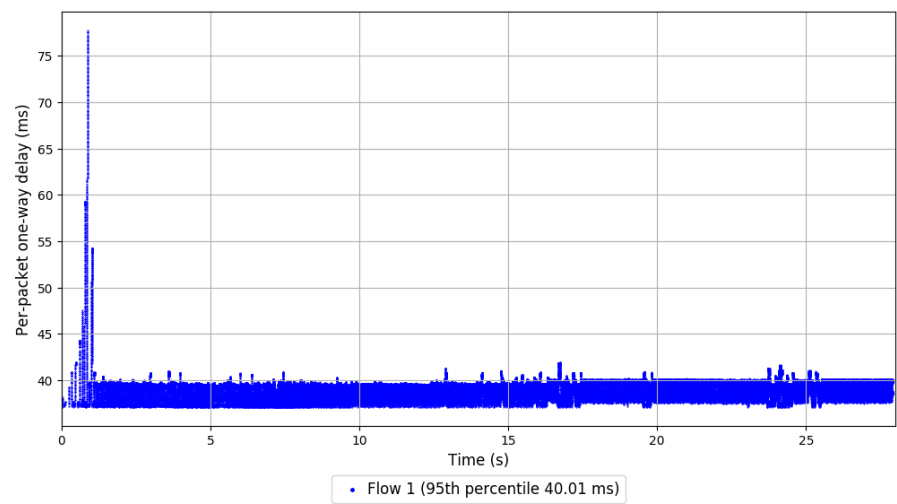
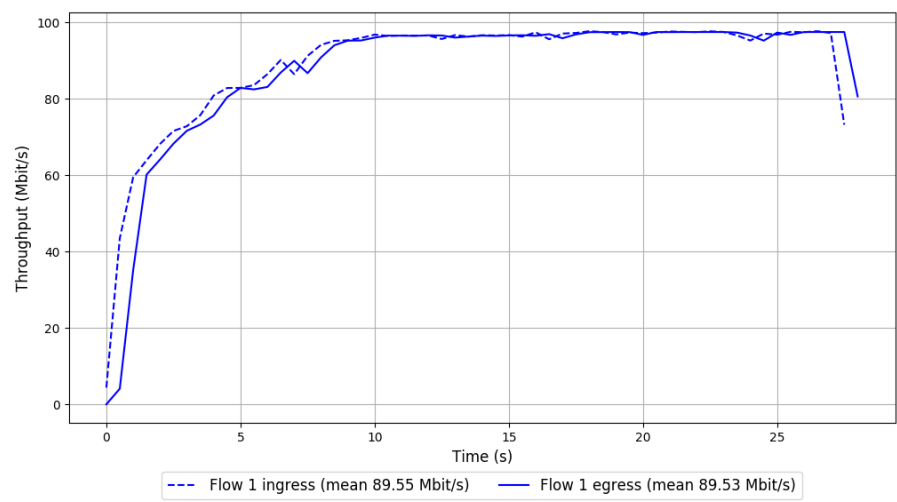


```
Run 1: Statistics of Indigo

Start at: 2018-07-09 19:57:24
End at: 2018-07-09 19:57:54
Local clock offset: -1.905 ms
Remote clock offset: 5.076 ms

# Below is generated by plot.py at 2018-07-10 00:05:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.53 Mbit/s
95th percentile per-packet one-way delay: 40.013 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 89.53 Mbit/s
95th percentile per-packet one-way delay: 40.013 ms
Loss rate: 0.03%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-07-09 20:20:17

End at: 2018-07-09 20:20:47

Local clock offset: -2.076 ms

Remote clock offset: 5.563 ms

Below is generated by plot.py at 2018-07-10 00:05:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.78 Mbit/s

95th percentile per-packet one-way delay: 41.050 ms

Loss rate: 0.12%

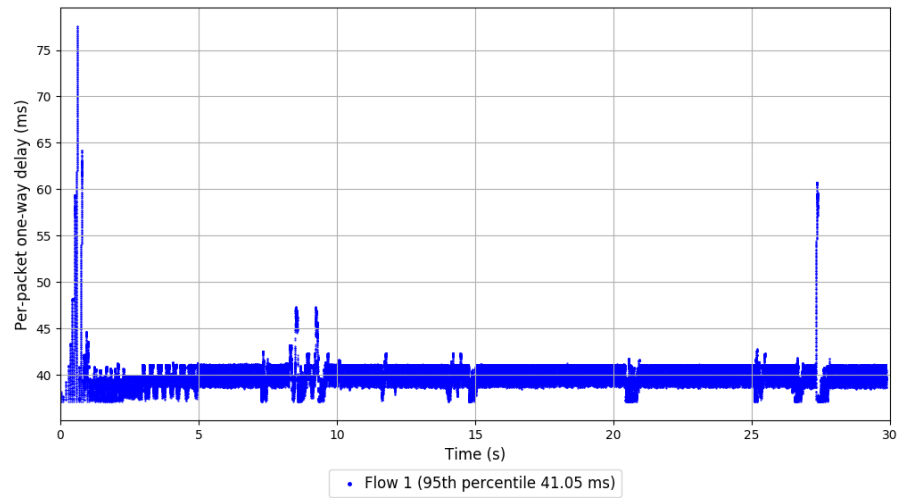
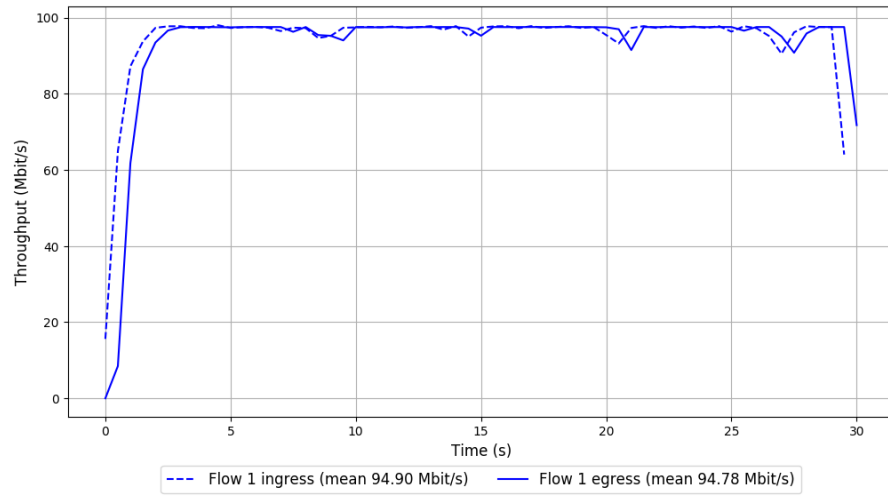
-- Flow 1:

Average throughput: 94.78 Mbit/s

95th percentile per-packet one-way delay: 41.050 ms

Loss rate: 0.12%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-07-09 20:44:24

End at: 2018-07-09 20:44:54

Local clock offset: -3.196 ms

Remote clock offset: 3.893 ms

Below is generated by plot.py at 2018-07-10 00:05:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.91 Mbit/s

95th percentile per-packet one-way delay: 40.977 ms

Loss rate: 0.02%

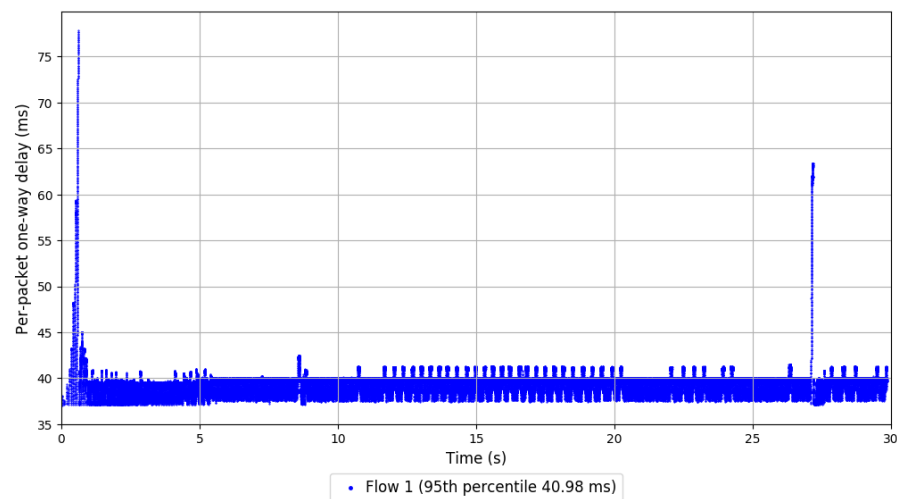
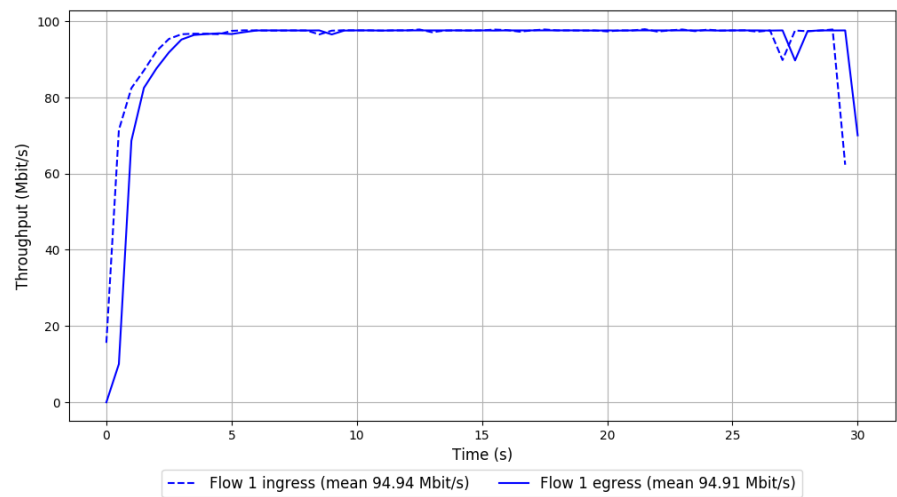
-- Flow 1:

Average throughput: 94.91 Mbit/s

95th percentile per-packet one-way delay: 40.977 ms

Loss rate: 0.02%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-07-09 21:07:13

End at: 2018-07-09 21:07:43

Local clock offset: -2.203 ms

Remote clock offset: 3.293 ms

Below is generated by plot.py at 2018-07-10 00:06:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.09 Mbit/s

95th percentile per-packet one-way delay: 41.098 ms

Loss rate: 0.01%

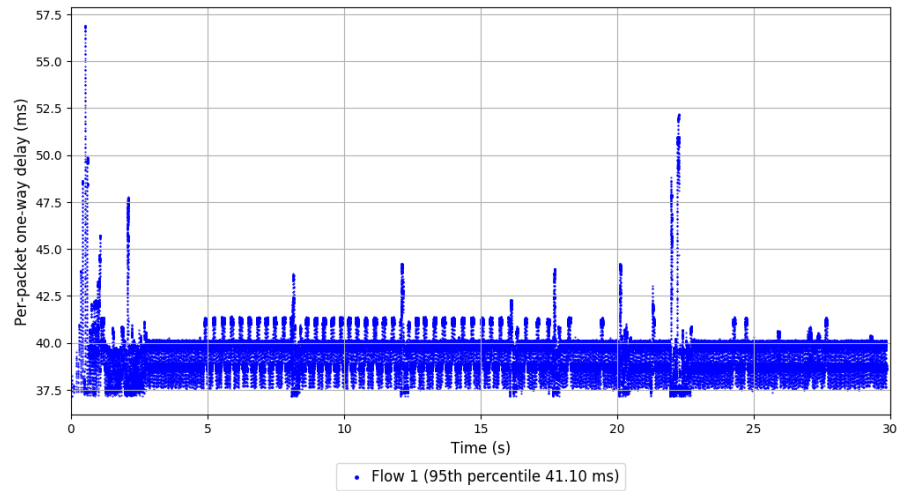
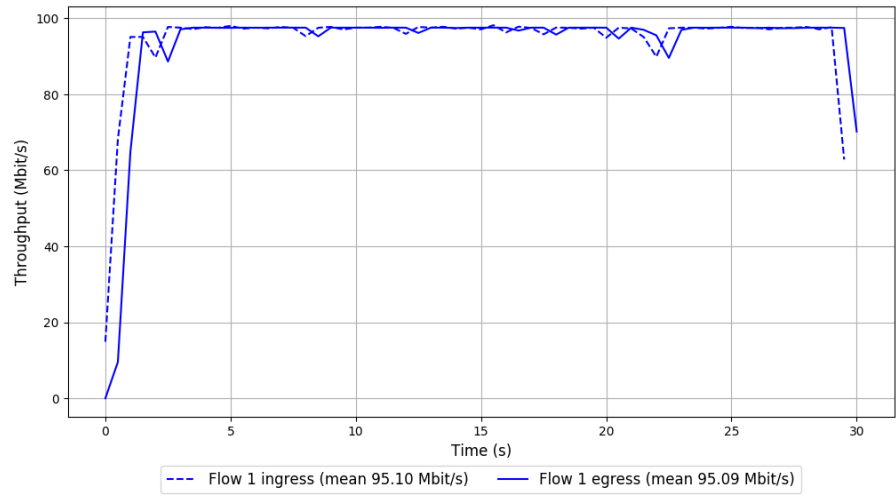
-- Flow 1:

Average throughput: 95.09 Mbit/s

95th percentile per-packet one-way delay: 41.098 ms

Loss rate: 0.01%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-07-09 21:30:16

End at: 2018-07-09 21:30:46

Local clock offset: -0.91 ms

Remote clock offset: 3.52 ms

Below is generated by plot.py at 2018-07-10 00:06:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.44 Mbit/s

95th percentile per-packet one-way delay: 41.180 ms

Loss rate: 0.00%

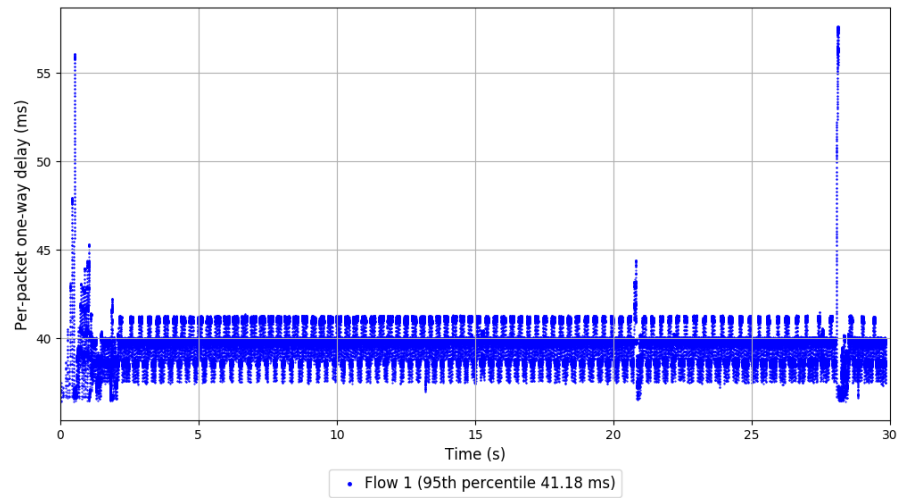
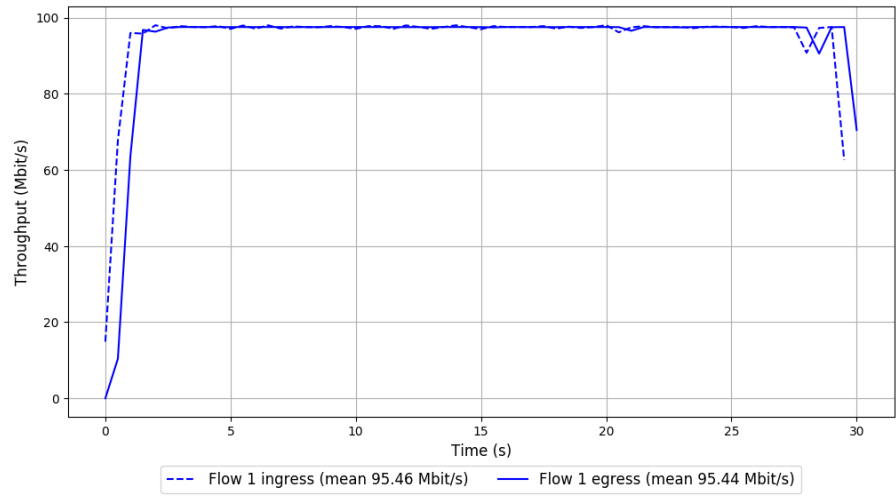
-- Flow 1:

Average throughput: 95.44 Mbit/s

95th percentile per-packet one-way delay: 41.180 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-07-09 21:53:35

End at: 2018-07-09 21:54:05

Local clock offset: -0.639 ms

Remote clock offset: 3.837 ms

Below is generated by plot.py at 2018-07-10 00:06:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.43 Mbit/s

95th percentile per-packet one-way delay: 40.636 ms

Loss rate: 0.15%

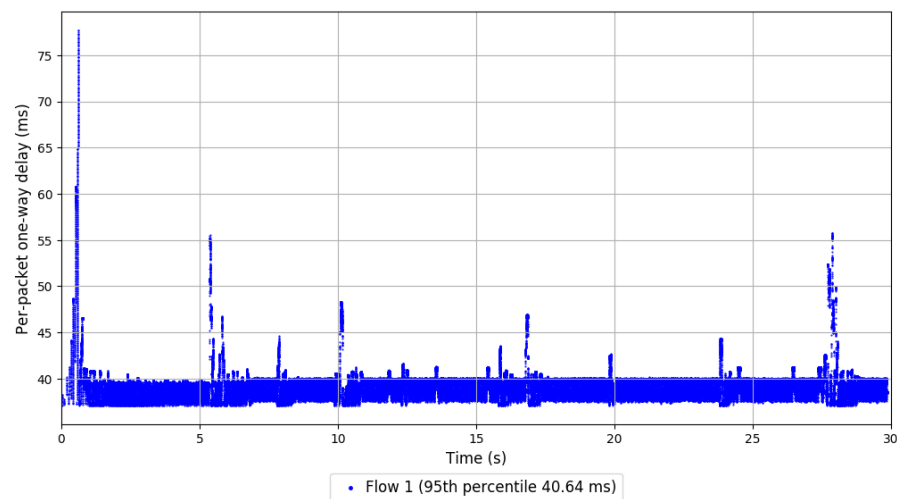
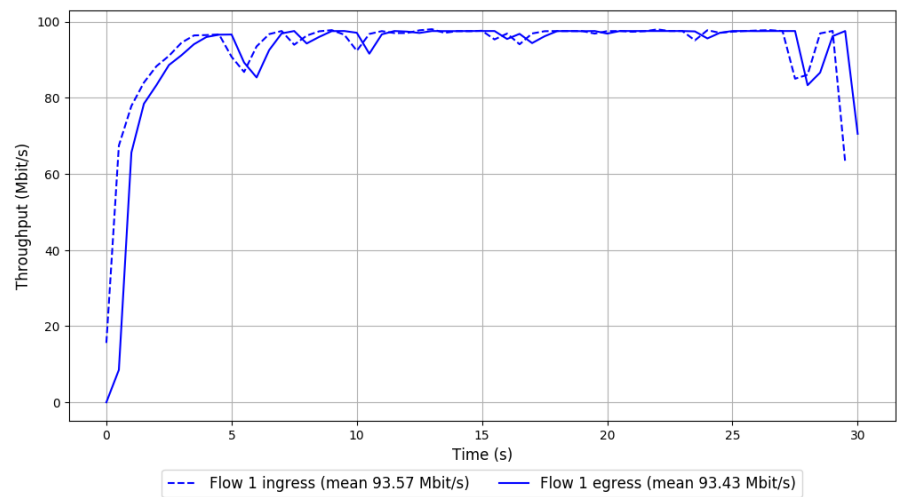
-- Flow 1:

Average throughput: 93.43 Mbit/s

95th percentile per-packet one-way delay: 40.636 ms

Loss rate: 0.15%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-07-09 22:17:01

End at: 2018-07-09 22:17:31

Local clock offset: -0.991 ms

Remote clock offset: 3.91 ms

Below is generated by plot.py at 2018-07-10 00:07:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.29 Mbit/s

95th percentile per-packet one-way delay: 40.942 ms

Loss rate: 0.00%

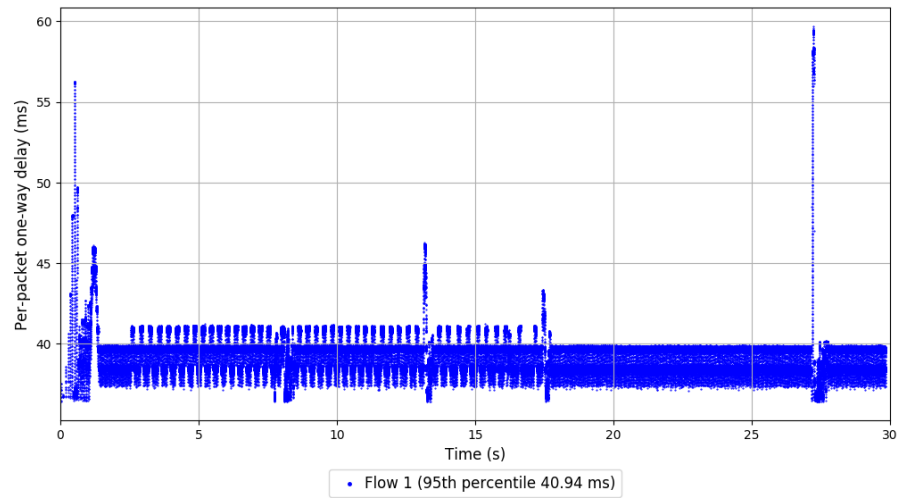
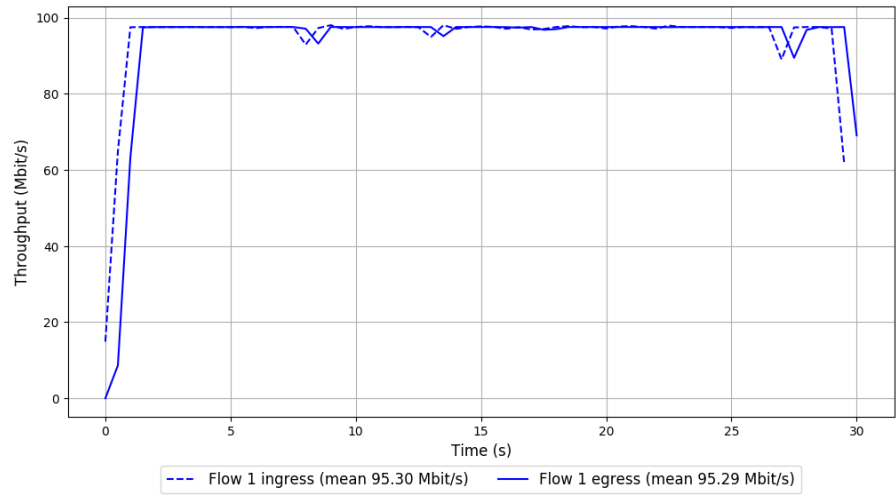
-- Flow 1:

Average throughput: 95.29 Mbit/s

95th percentile per-packet one-way delay: 40.942 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-07-09 22:40:21

End at: 2018-07-09 22:40:51

Local clock offset: -1.447 ms

Remote clock offset: 3.808 ms

Below is generated by plot.py at 2018-07-10 00:07:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.31 Mbit/s

95th percentile per-packet one-way delay: 42.075 ms

Loss rate: 0.00%

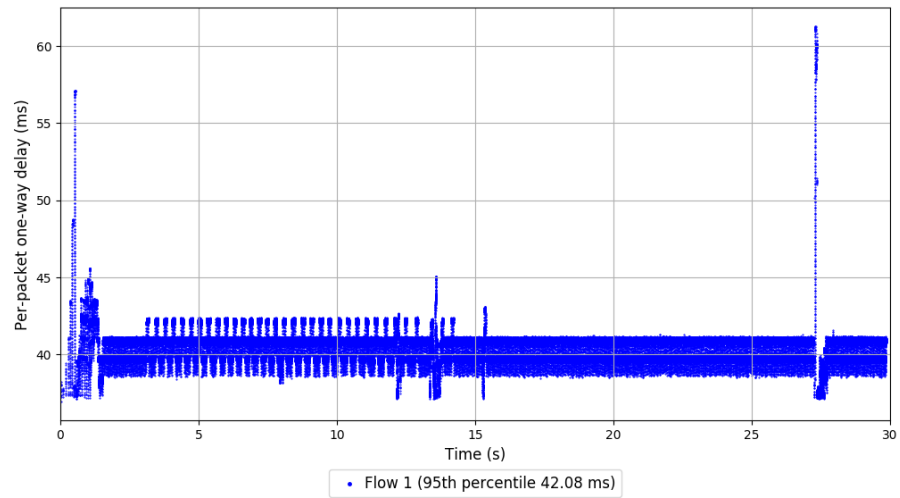
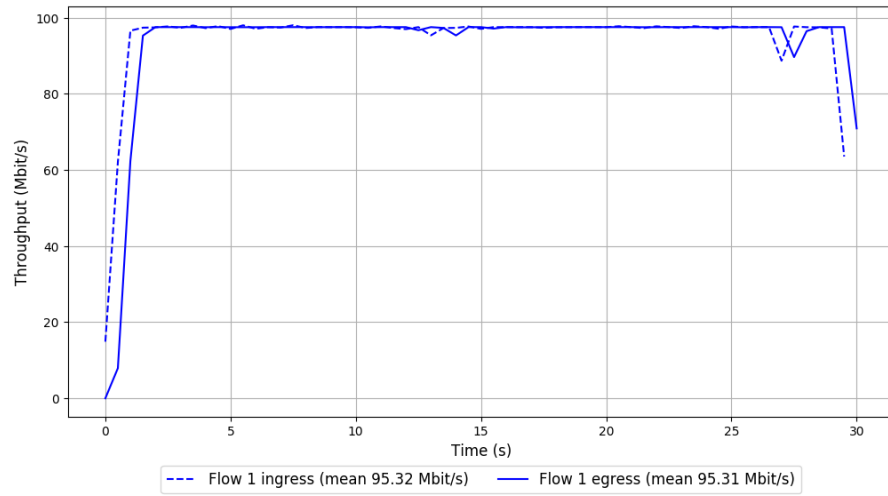
-- Flow 1:

Average throughput: 95.31 Mbit/s

95th percentile per-packet one-way delay: 42.075 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-07-09 23:04:52

End at: 2018-07-09 23:05:22

Local clock offset: -1.646 ms

Remote clock offset: 3.378 ms

Below is generated by plot.py at 2018-07-10 00:07:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.82 Mbit/s

95th percentile per-packet one-way delay: 41.063 ms

Loss rate: 0.02%

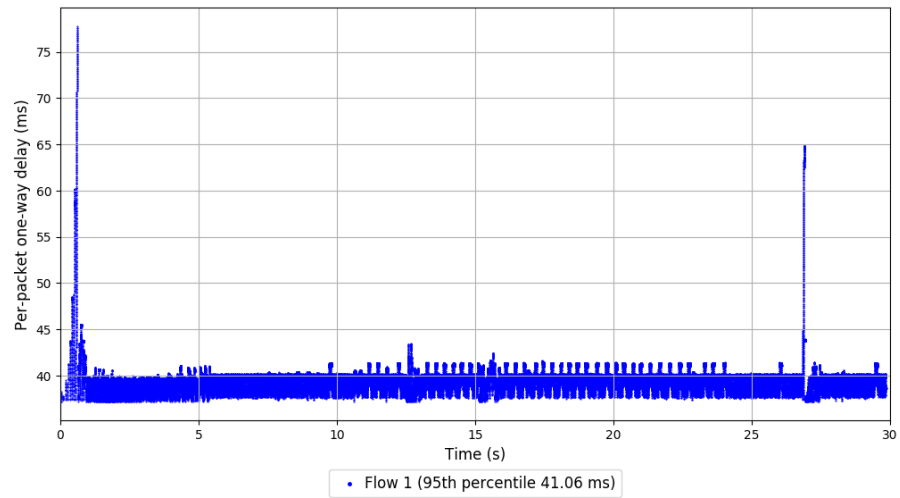
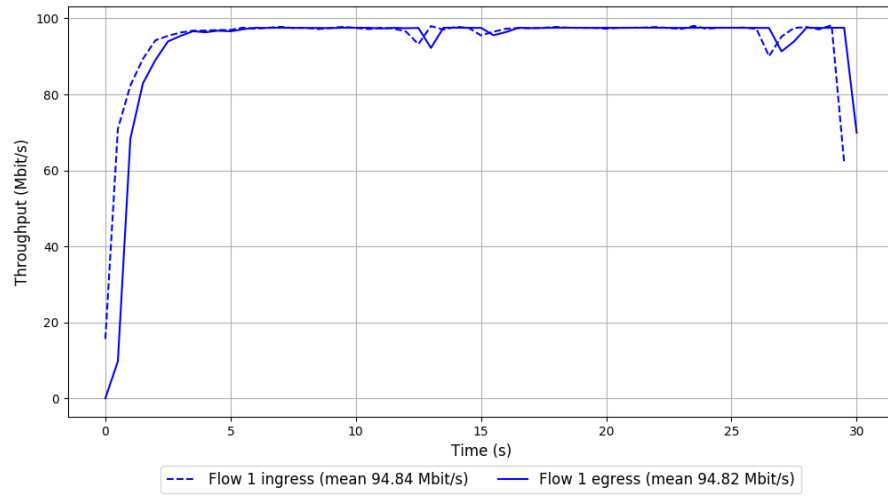
-- Flow 1:

Average throughput: 94.82 Mbit/s

95th percentile per-packet one-way delay: 41.063 ms

Loss rate: 0.02%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-07-09 23:29:09

End at: 2018-07-09 23:29:39

Local clock offset: -1.656 ms

Remote clock offset: 3.497 ms

Below is generated by plot.py at 2018-07-10 00:07:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.48 Mbit/s

95th percentile per-packet one-way delay: 40.924 ms

Loss rate: 0.02%

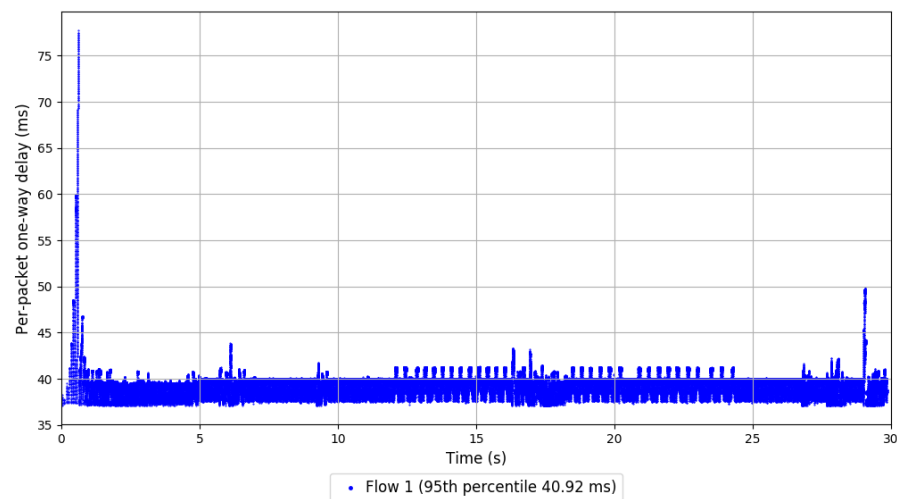
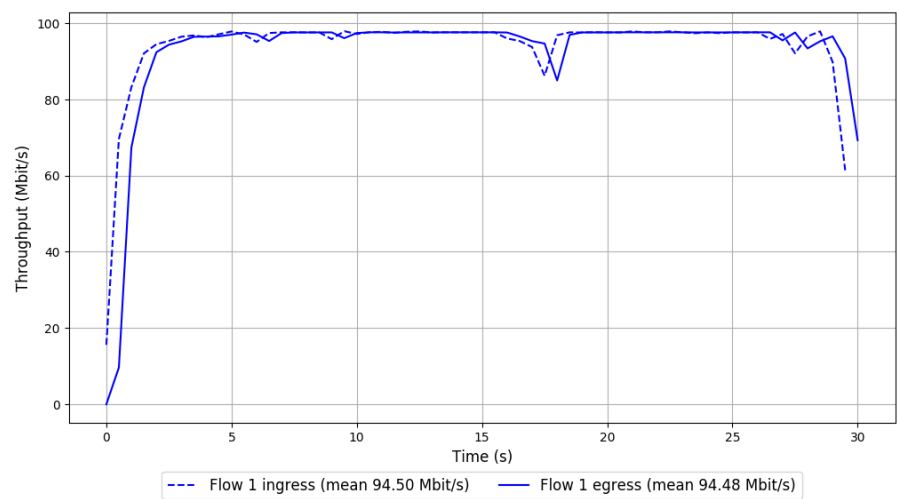
-- Flow 1:

Average throughput: 94.48 Mbit/s

95th percentile per-packet one-way delay: 40.924 ms

Loss rate: 0.02%

Run 10: Report of Indigo — Data Link

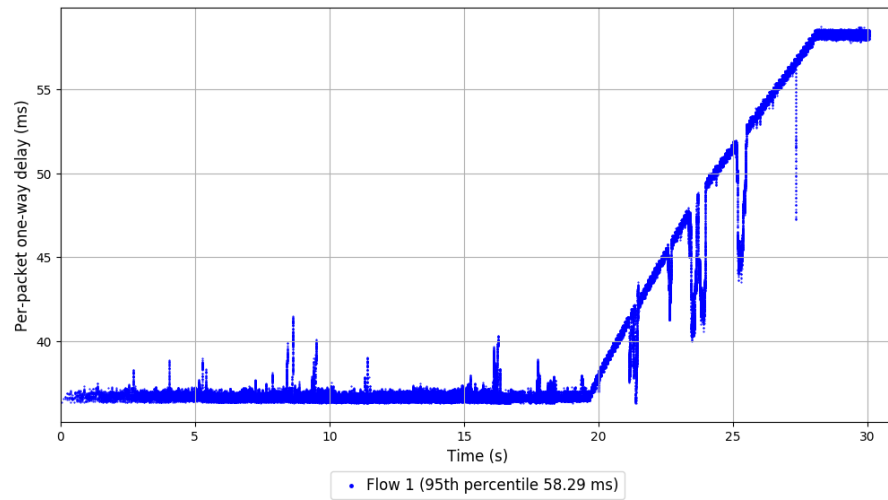
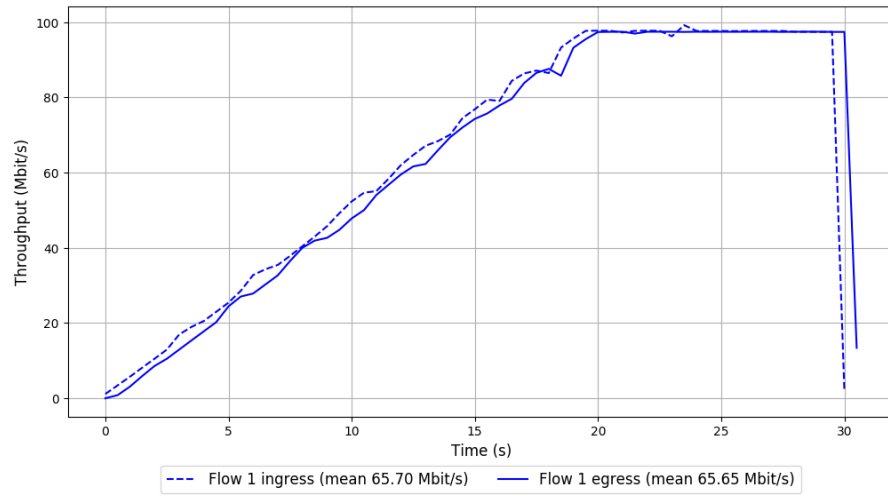


```
Run 1: Statistics of LEDBAT

Start at: 2018-07-09 20:00:05
End at: 2018-07-09 20:00:35
Local clock offset: -2.092 ms
Remote clock offset: 5.053 ms

# Below is generated by plot.py at 2018-07-10 00:07:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.65 Mbit/s
95th percentile per-packet one-way delay: 58.292 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 65.65 Mbit/s
95th percentile per-packet one-way delay: 58.292 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-07-09 20:23:14

End at: 2018-07-09 20:23:44

Local clock offset: -2.131 ms

Remote clock offset: 5.697 ms

Below is generated by plot.py at 2018-07-10 00:07:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.68 Mbit/s

95th percentile per-packet one-way delay: 56.998 ms

Loss rate: 0.00%

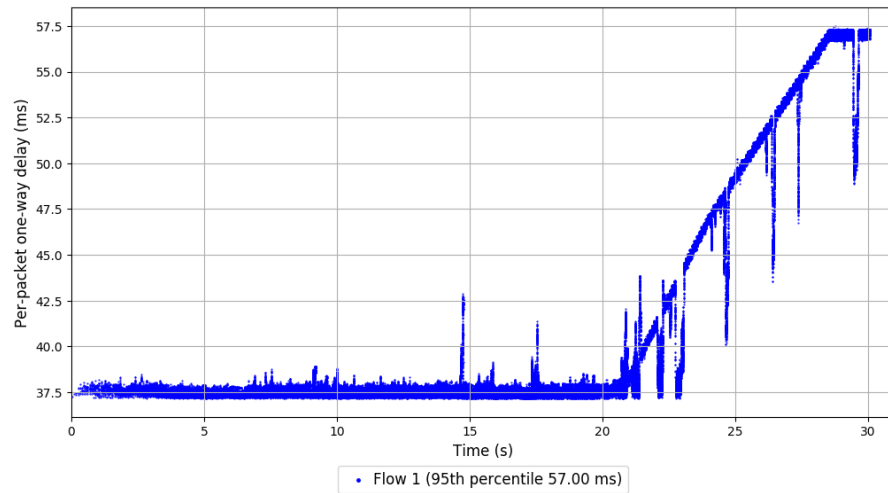
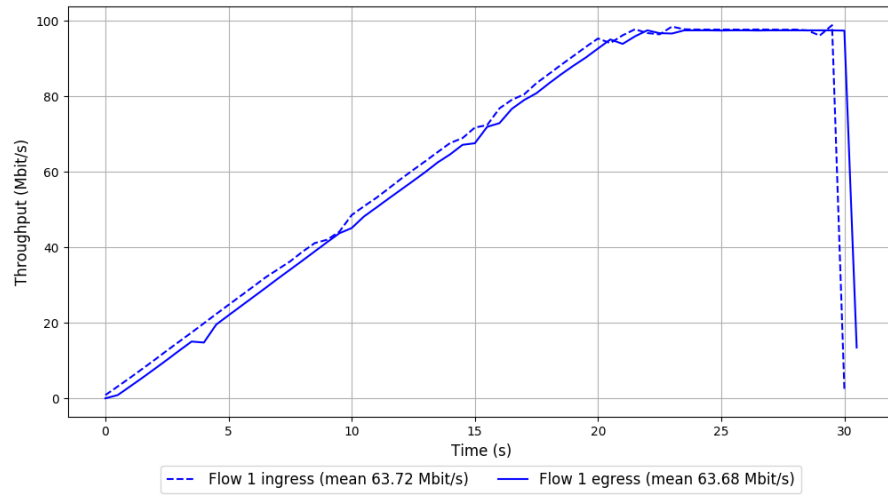
-- Flow 1:

Average throughput: 63.68 Mbit/s

95th percentile per-packet one-way delay: 56.998 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-07-09 20:47:06

End at: 2018-07-09 20:47:36

Local clock offset: -3.361 ms

Remote clock offset: 3.762 ms

Below is generated by plot.py at 2018-07-10 00:07:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.34 Mbit/s

95th percentile per-packet one-way delay: 39.955 ms

Loss rate: 0.01%

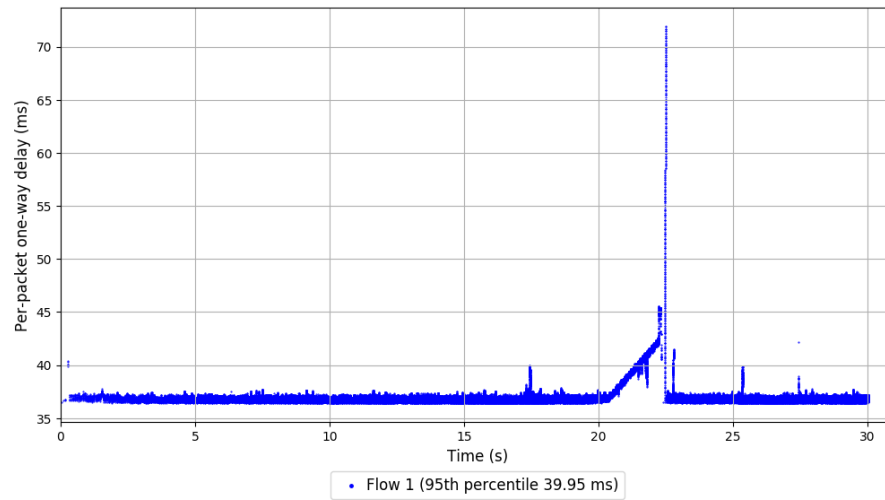
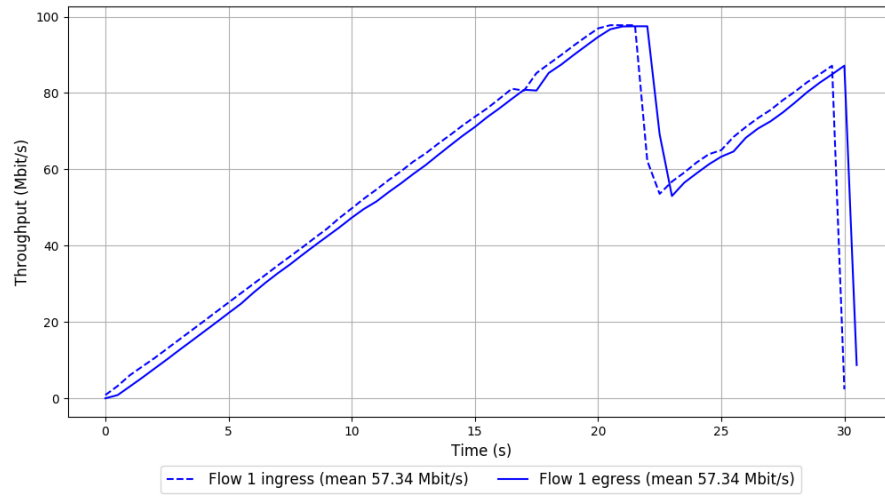
-- Flow 1:

Average throughput: 57.34 Mbit/s

95th percentile per-packet one-way delay: 39.955 ms

Loss rate: 0.01%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-07-09 21:09:57

End at: 2018-07-09 21:10:27

Local clock offset: -2.255 ms

Remote clock offset: 3.408 ms

Below is generated by plot.py at 2018-07-10 00:07:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.73 Mbit/s

95th percentile per-packet one-way delay: 58.668 ms

Loss rate: 0.00%

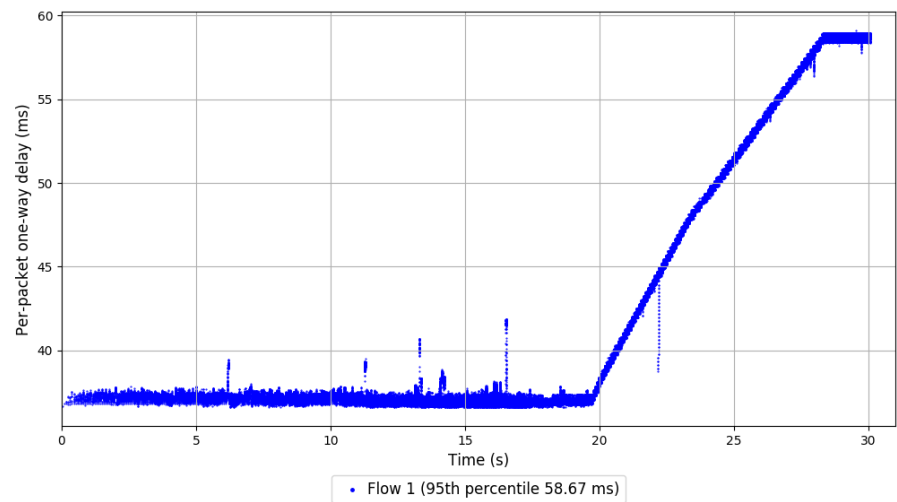
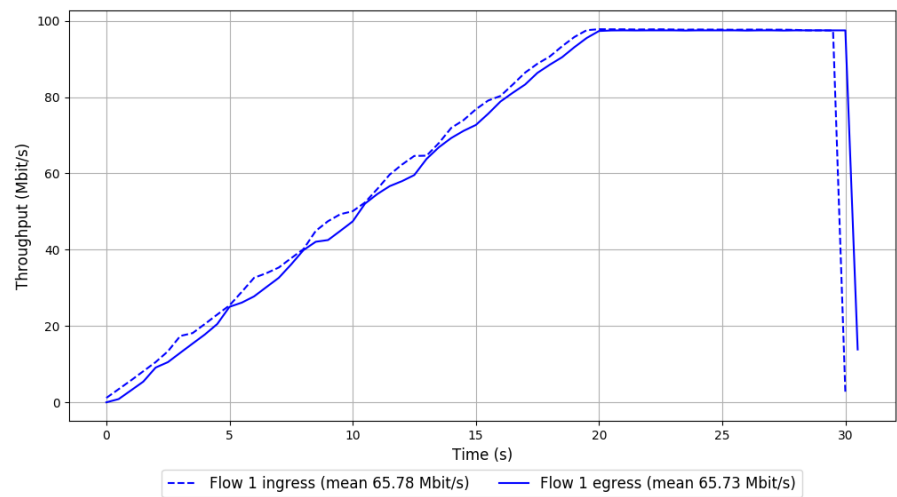
-- Flow 1:

Average throughput: 65.73 Mbit/s

95th percentile per-packet one-way delay: 58.668 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-07-09 21:33:01

End at: 2018-07-09 21:33:31

Local clock offset: -0.937 ms

Remote clock offset: 3.638 ms

Below is generated by plot.py at 2018-07-10 00:07:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.97 Mbit/s

95th percentile per-packet one-way delay: 58.610 ms

Loss rate: 0.00%

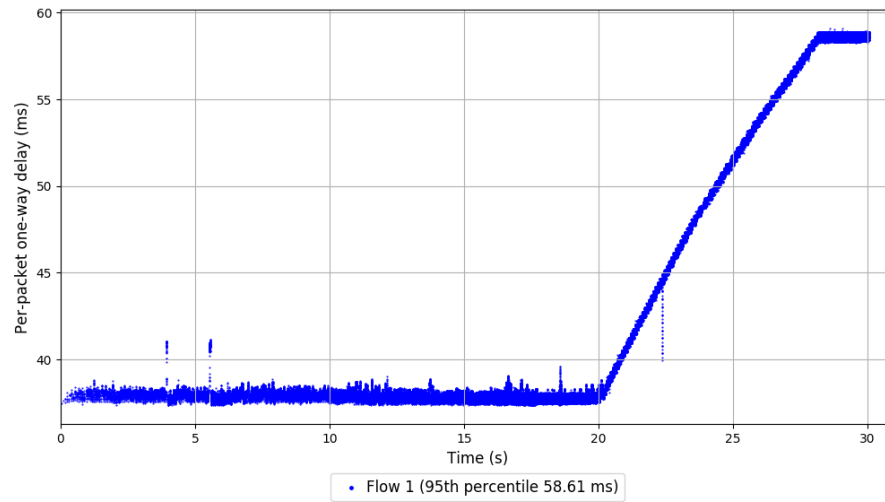
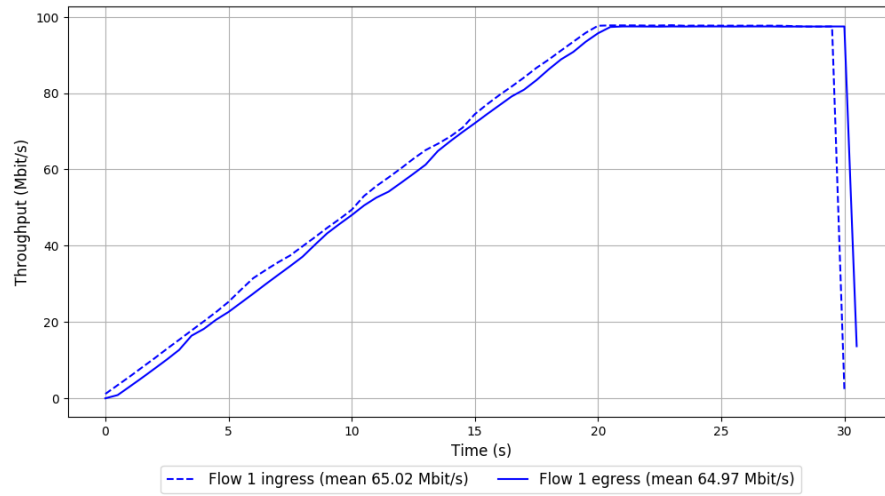
-- Flow 1:

Average throughput: 64.97 Mbit/s

95th percentile per-packet one-way delay: 58.610 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-07-09 21:56:30

End at: 2018-07-09 21:57:00

Local clock offset: -0.668 ms

Remote clock offset: 4.041 ms

Below is generated by plot.py at 2018-07-10 00:07:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.96 Mbit/s

95th percentile per-packet one-way delay: 41.359 ms

Loss rate: 0.05%

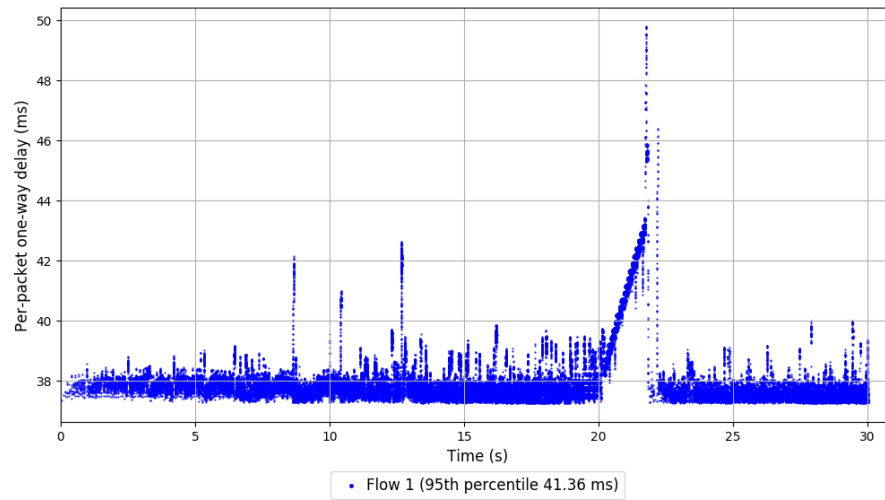
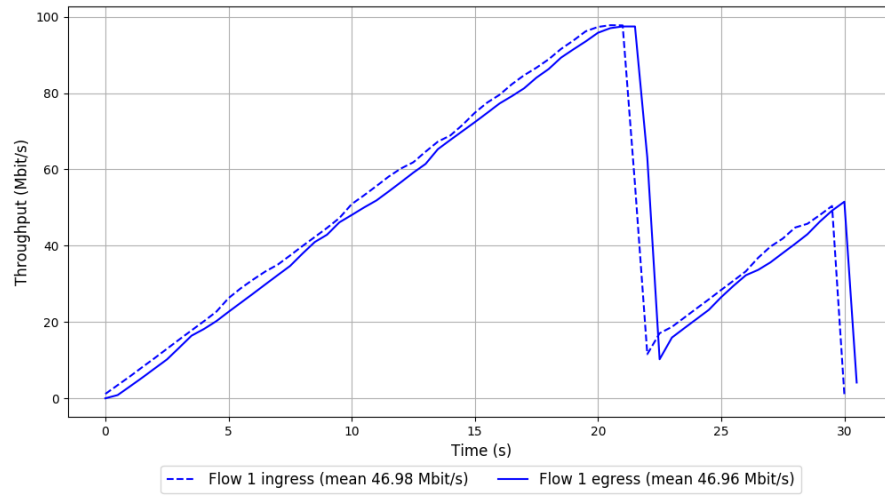
-- Flow 1:

Average throughput: 46.96 Mbit/s

95th percentile per-packet one-way delay: 41.359 ms

Loss rate: 0.05%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-07-09 22:19:42

End at: 2018-07-09 22:20:12

Local clock offset: -1.039 ms

Remote clock offset: 3.948 ms

Below is generated by plot.py at 2018-07-10 00:07:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.90 Mbit/s

95th percentile per-packet one-way delay: 58.354 ms

Loss rate: 0.00%

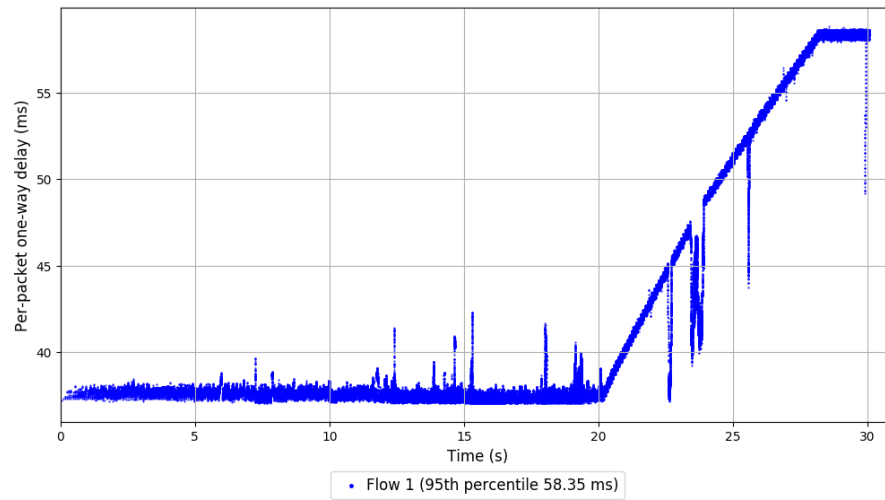
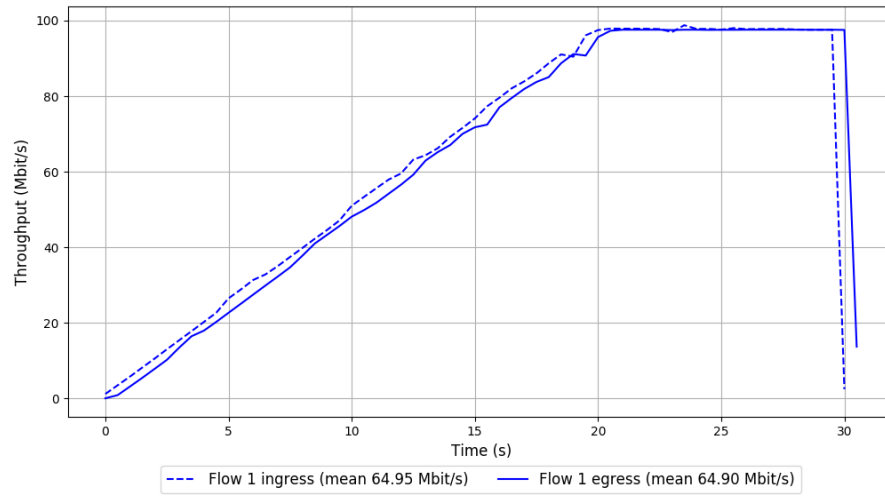
-- Flow 1:

Average throughput: 64.90 Mbit/s

95th percentile per-packet one-way delay: 58.354 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-07-09 22:43:17

End at: 2018-07-09 22:43:47

Local clock offset: -1.448 ms

Remote clock offset: 3.825 ms

Below is generated by plot.py at 2018-07-10 00:07:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.32 Mbit/s

95th percentile per-packet one-way delay: 58.543 ms

Loss rate: 0.00%

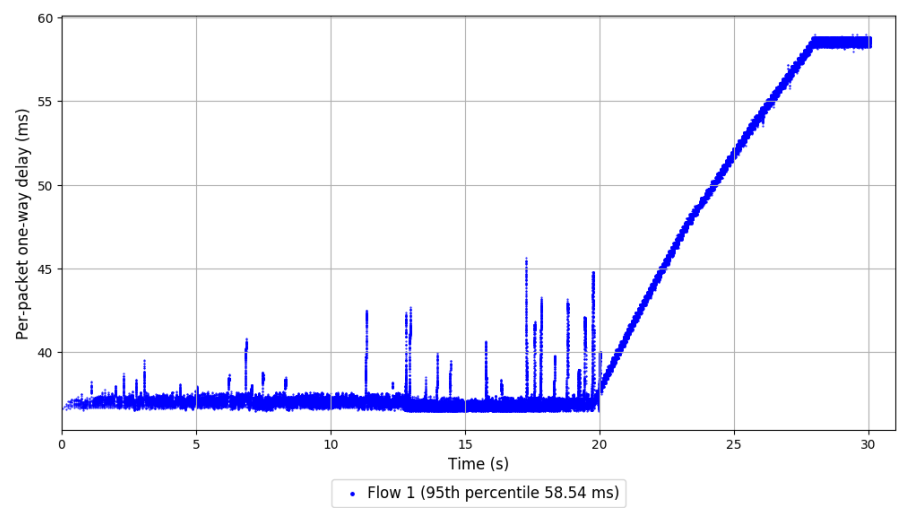
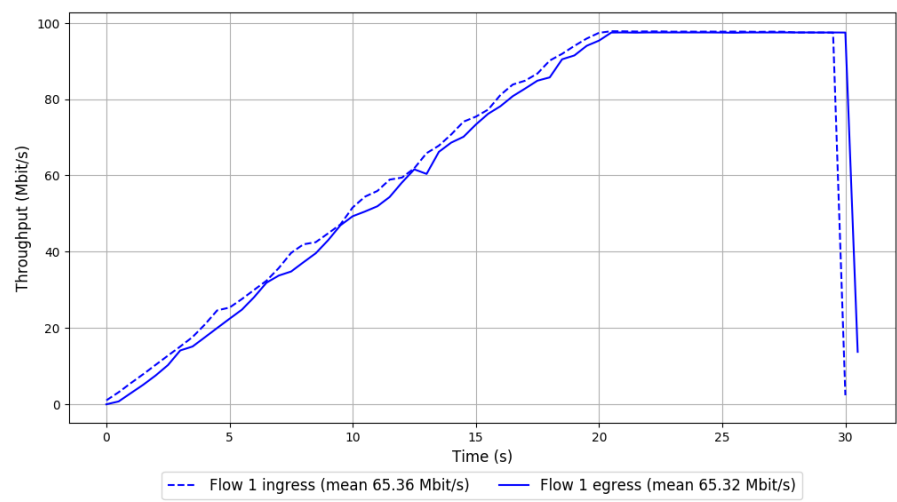
-- Flow 1:

Average throughput: 65.32 Mbit/s

95th percentile per-packet one-way delay: 58.543 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-07-09 23:07:46

End at: 2018-07-09 23:08:16

Local clock offset: -1.658 ms

Remote clock offset: 3.24 ms

Below is generated by plot.py at 2018-07-10 00:08:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.60 Mbit/s

95th percentile per-packet one-way delay: 57.009 ms

Loss rate: 0.00%

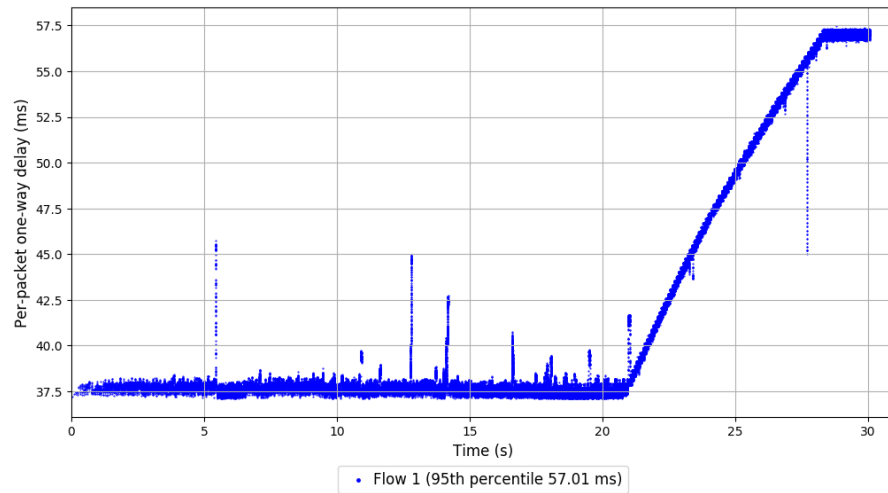
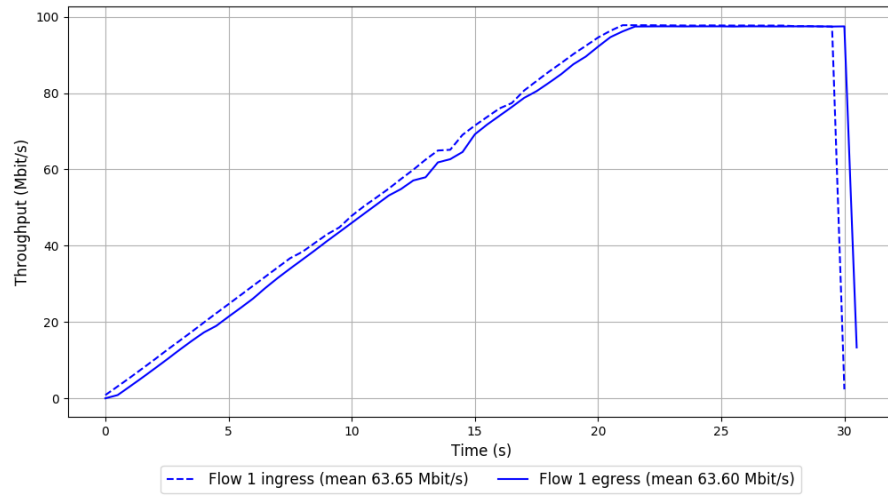
-- Flow 1:

Average throughput: 63.60 Mbit/s

95th percentile per-packet one-way delay: 57.009 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-07-09 23:32:24

End at: 2018-07-09 23:32:54

Local clock offset: -1.657 ms

Remote clock offset: 3.574 ms

Below is generated by plot.py at 2018-07-10 00:08:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.80 Mbit/s

95th percentile per-packet one-way delay: 58.400 ms

Loss rate: 0.00%

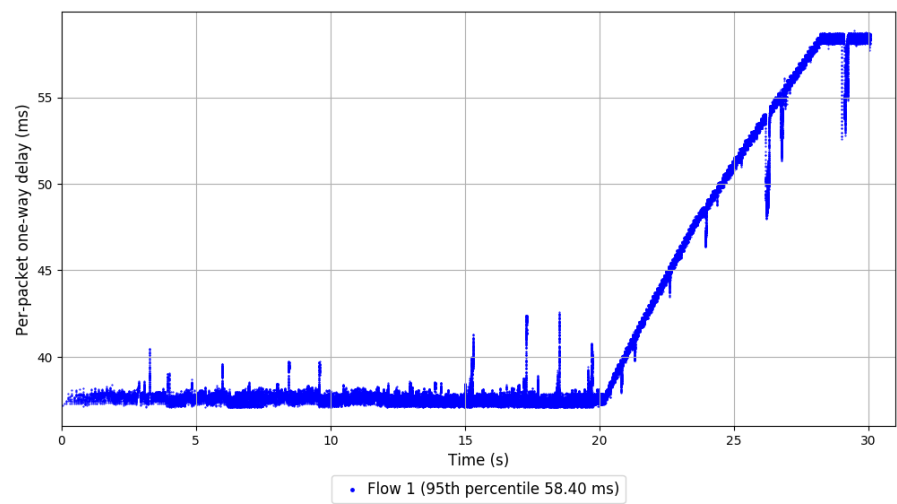
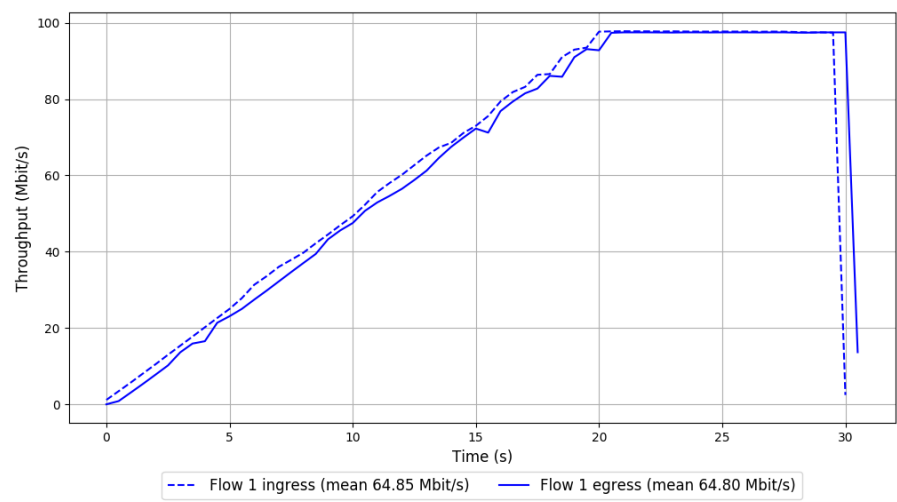
-- Flow 1:

Average throughput: 64.80 Mbit/s

95th percentile per-packet one-way delay: 58.400 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

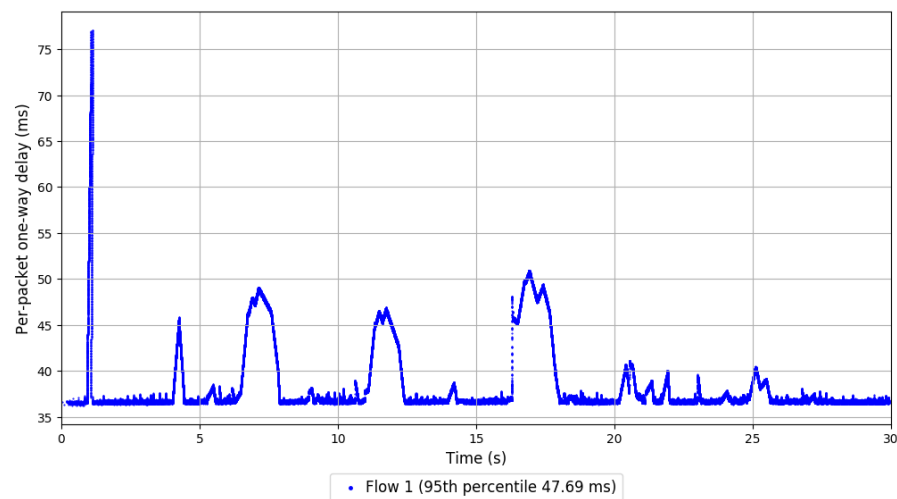
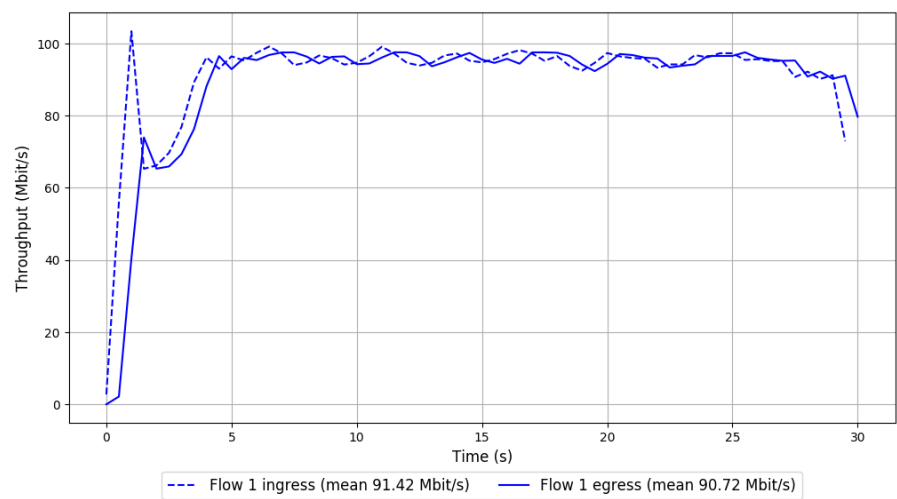


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-07-09 20:16:17
End at: 2018-07-09 20:16:47
Local clock offset: -2.035 ms
Remote clock offset: 5.495 ms

# Below is generated by plot.py at 2018-07-10 00:08:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.72 Mbit/s
95th percentile per-packet one-way delay: 47.693 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 90.72 Mbit/s
95th percentile per-packet one-way delay: 47.693 ms
Loss rate: 0.76%
```

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-07-09 20:40:20

End at: 2018-07-09 20:40:50

Local clock offset: -2.915 ms

Remote clock offset: 4.229 ms

Below is generated by plot.py at 2018-07-10 00:08:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.37 Mbit/s

95th percentile per-packet one-way delay: 42.585 ms

Loss rate: 0.03%

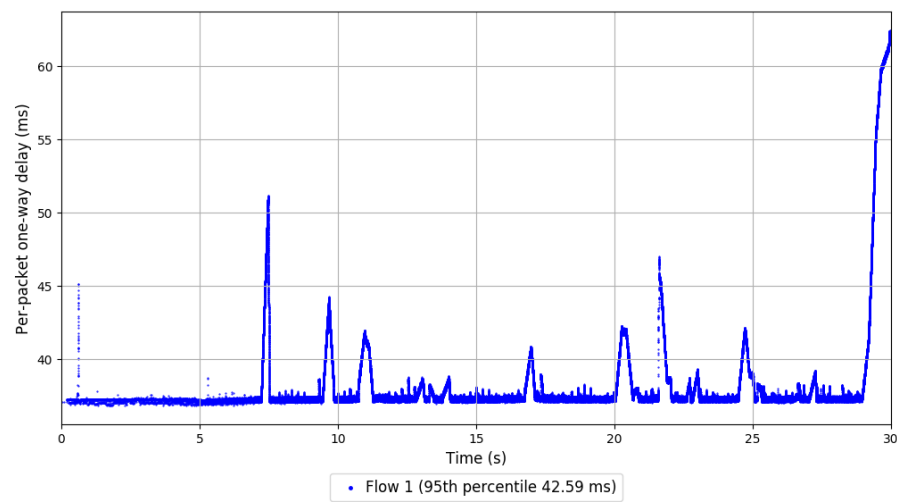
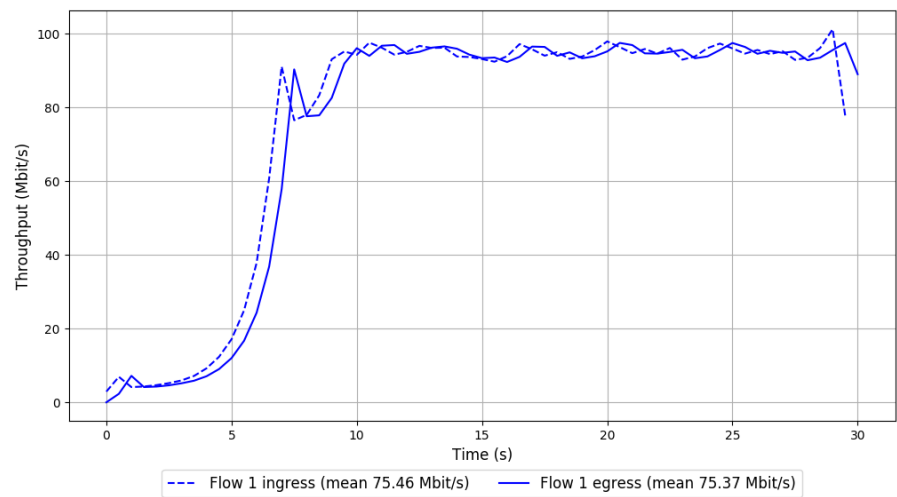
-- Flow 1:

Average throughput: 75.37 Mbit/s

95th percentile per-packet one-way delay: 42.585 ms

Loss rate: 0.03%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-07-09 21:03:21

End at: 2018-07-09 21:03:51

Local clock offset: -2.305 ms

Remote clock offset: 3.181 ms

Below is generated by plot.py at 2018-07-10 00:08:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.30 Mbit/s

95th percentile per-packet one-way delay: 41.656 ms

Loss rate: 0.79%

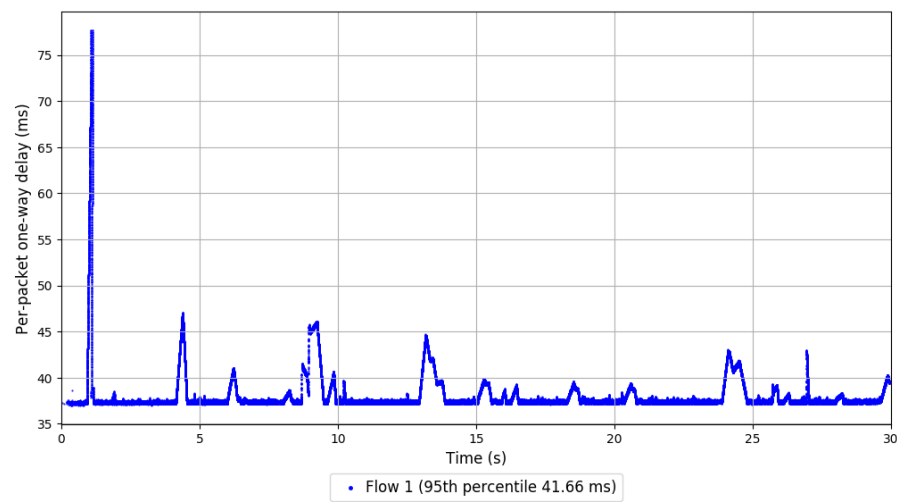
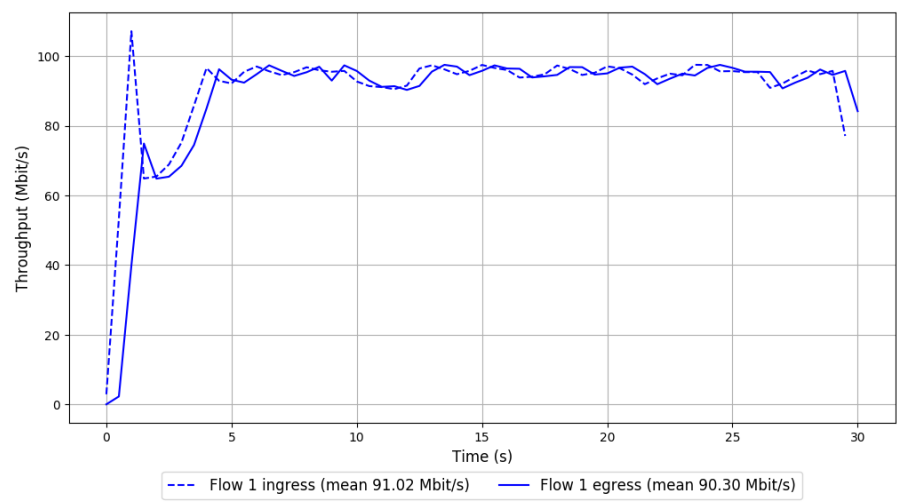
-- Flow 1:

Average throughput: 90.30 Mbit/s

95th percentile per-packet one-way delay: 41.656 ms

Loss rate: 0.79%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-07-09 21:26:17

End at: 2018-07-09 21:26:47

Local clock offset: -1.084 ms

Remote clock offset: 3.615 ms

Below is generated by plot.py at 2018-07-10 00:09:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.83 Mbit/s

95th percentile per-packet one-way delay: 43.046 ms

Loss rate: 0.74%

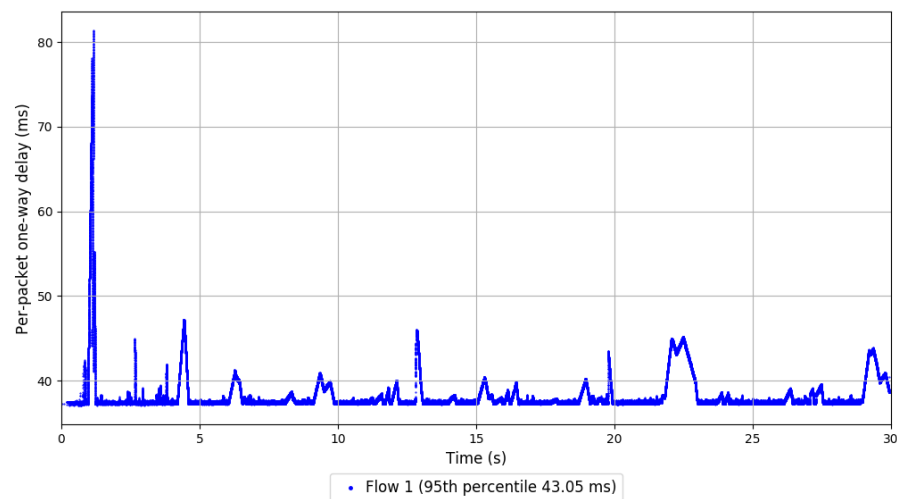
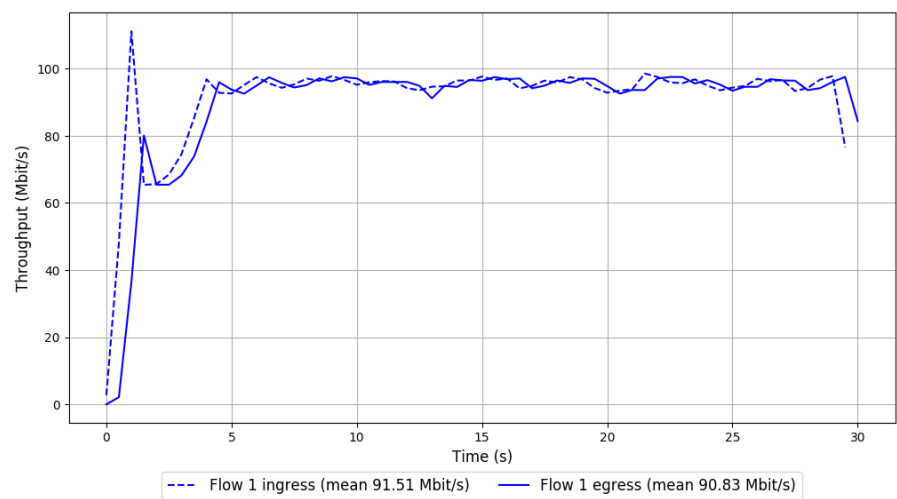
-- Flow 1:

Average throughput: 90.83 Mbit/s

95th percentile per-packet one-way delay: 43.046 ms

Loss rate: 0.74%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-07-09 21:49:36

End at: 2018-07-09 21:50:06

Local clock offset: -0.629 ms

Remote clock offset: 3.829 ms

Below is generated by plot.py at 2018-07-10 00:09:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.02 Mbit/s

95th percentile per-packet one-way delay: 45.334 ms

Loss rate: 0.78%

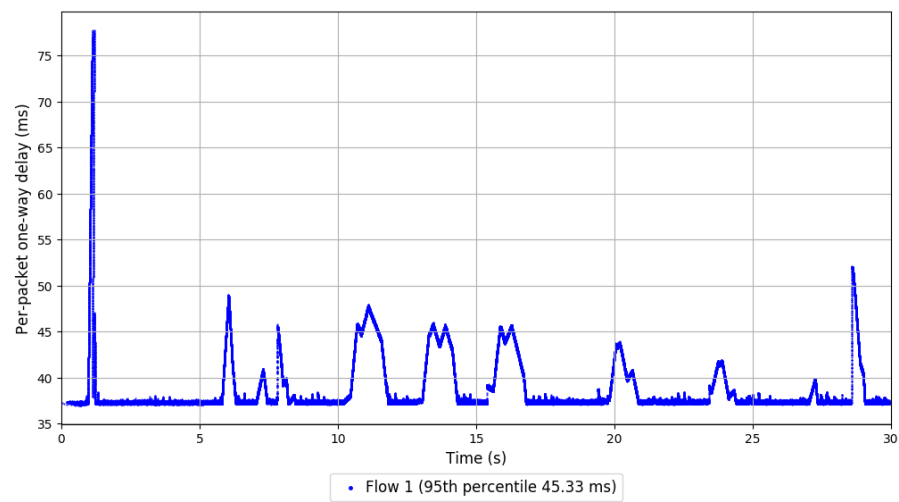
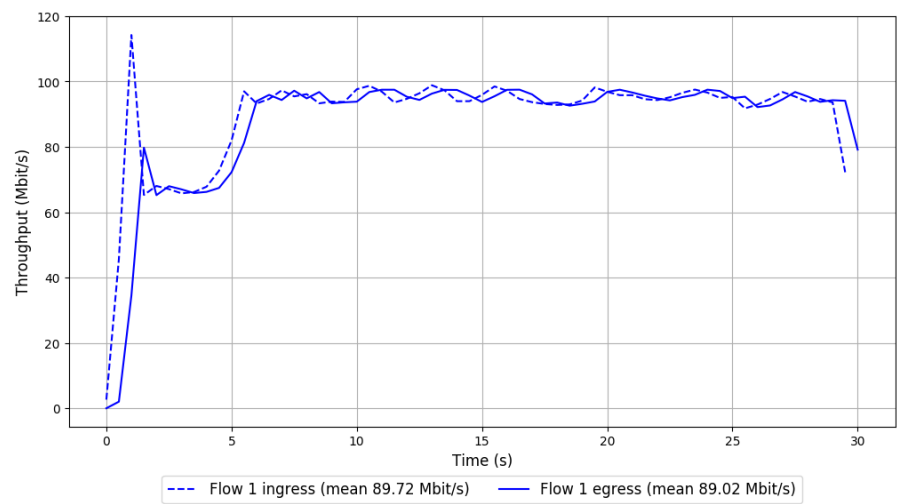
-- Flow 1:

Average throughput: 89.02 Mbit/s

95th percentile per-packet one-way delay: 45.334 ms

Loss rate: 0.78%

Run 5: Report of PCC-Allegro — Data Link



Run 6: Statistics of PCC-Allegro

Start at: 2018-07-09 22:13:07

End at: 2018-07-09 22:13:37

Local clock offset: -0.908 ms

Remote clock offset: 3.782 ms

Below is generated by plot.py at 2018-07-10 00:09:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.91 Mbit/s

95th percentile per-packet one-way delay: 53.182 ms

Loss rate: 0.76%

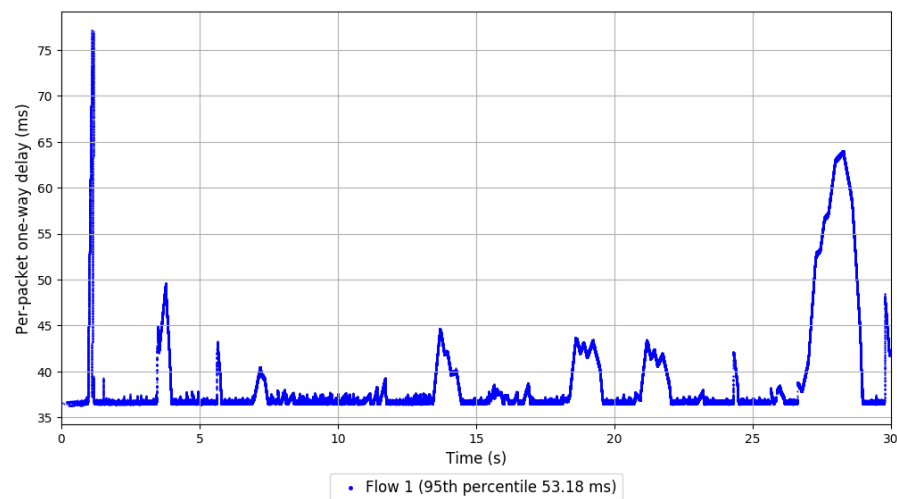
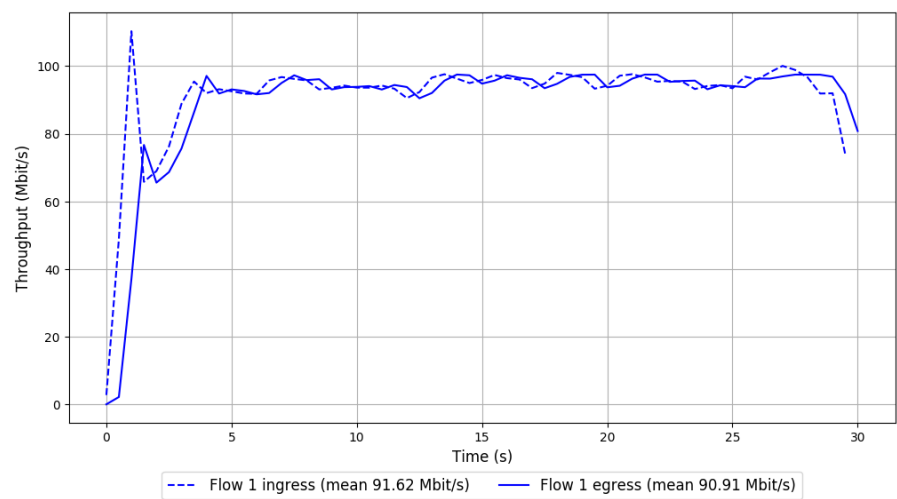
-- Flow 1:

Average throughput: 90.91 Mbit/s

95th percentile per-packet one-way delay: 53.182 ms

Loss rate: 0.76%

Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

Start at: 2018-07-09 22:36:21

End at: 2018-07-09 22:36:51

Local clock offset: -1.46 ms

Remote clock offset: 3.794 ms

Below is generated by plot.py at 2018-07-10 00:09:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.19 Mbit/s

95th percentile per-packet one-way delay: 45.510 ms

Loss rate: 0.76%

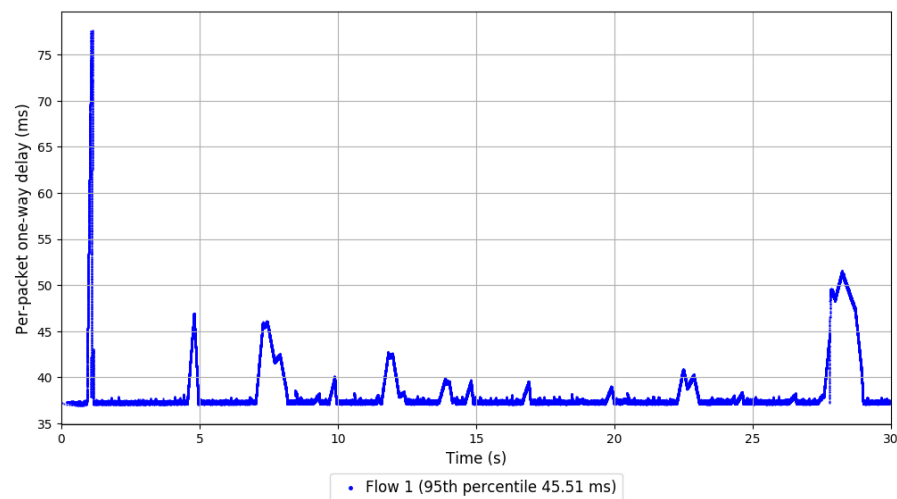
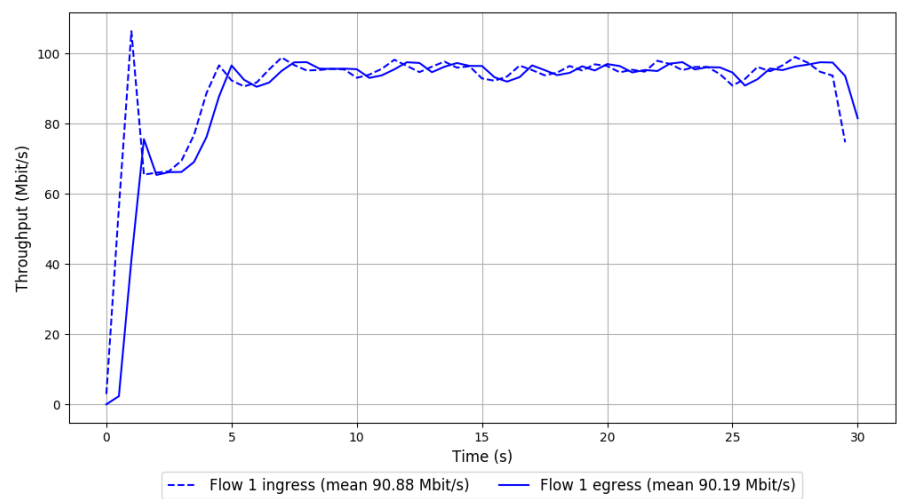
-- Flow 1:

Average throughput: 90.19 Mbit/s

95th percentile per-packet one-way delay: 45.510 ms

Loss rate: 0.76%

Run 7: Report of PCC-Allegro — Data Link



Run 8: Statistics of PCC-Allegro

Start at: 2018-07-09 23:00:50

End at: 2018-07-09 23:01:20

Local clock offset: -1.584 ms

Remote clock offset: 3.425 ms

Below is generated by plot.py at 2018-07-10 00:09:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.54 Mbit/s

95th percentile per-packet one-way delay: 45.734 ms

Loss rate: 0.78%

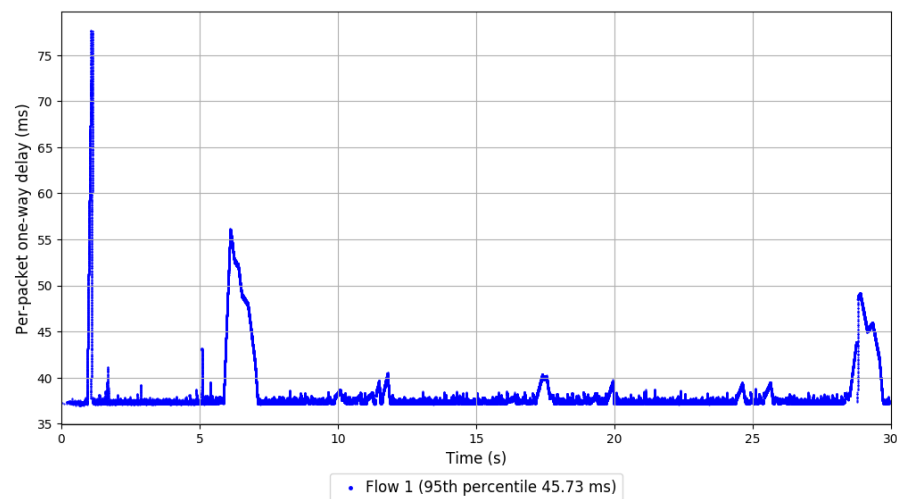
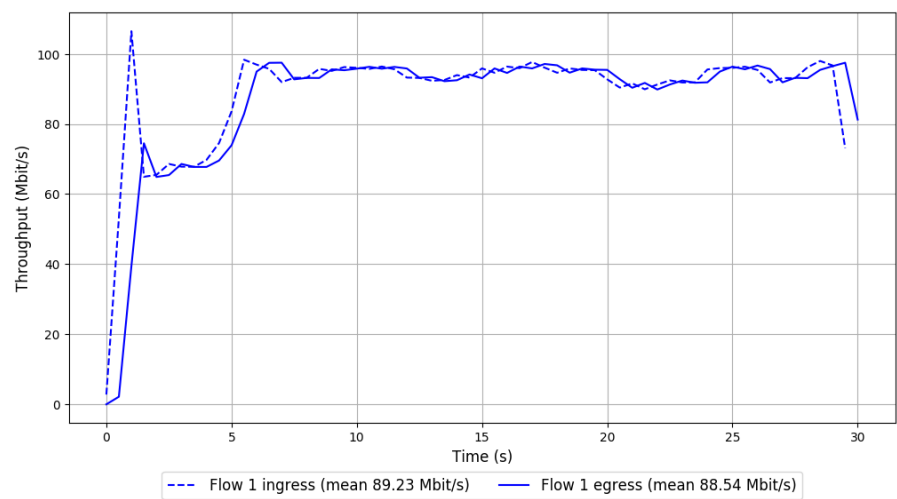
-- Flow 1:

Average throughput: 88.54 Mbit/s

95th percentile per-packet one-way delay: 45.734 ms

Loss rate: 0.78%

Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-07-09 23:25:00

End at: 2018-07-09 23:25:30

Local clock offset: -1.787 ms

Remote clock offset: 3.336 ms

Below is generated by plot.py at 2018-07-10 00:09:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.26 Mbit/s

95th percentile per-packet one-way delay: 40.156 ms

Loss rate: 0.76%

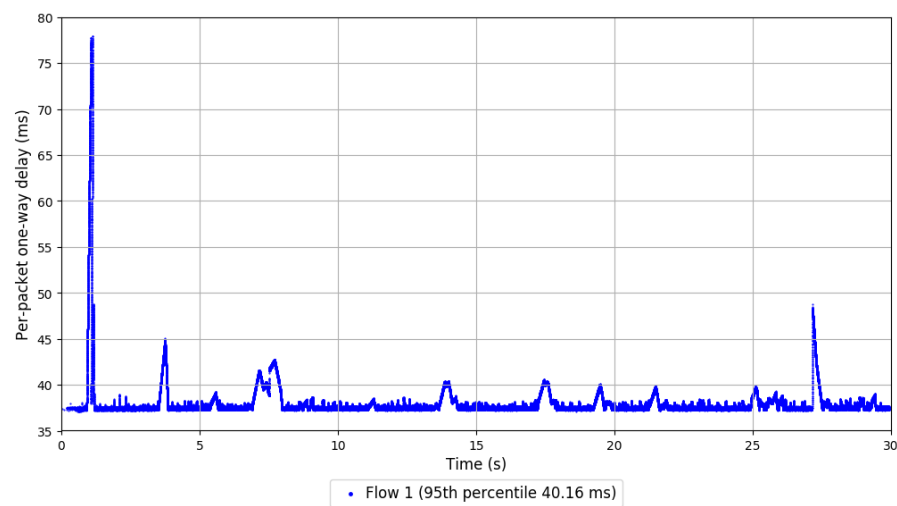
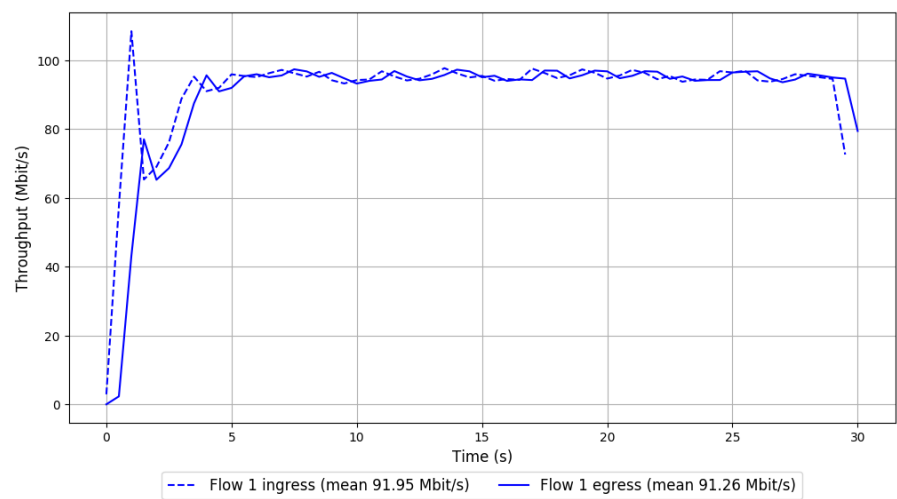
-- Flow 1:

Average throughput: 91.26 Mbit/s

95th percentile per-packet one-way delay: 40.156 ms

Loss rate: 0.76%

Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-07-09 23:49:29

End at: 2018-07-09 23:49:59

Local clock offset: -1.564 ms

Remote clock offset: 3.749 ms

Below is generated by plot.py at 2018-07-10 00:09:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.36 Mbit/s

95th percentile per-packet one-way delay: 72.215 ms

Loss rate: 11.52%

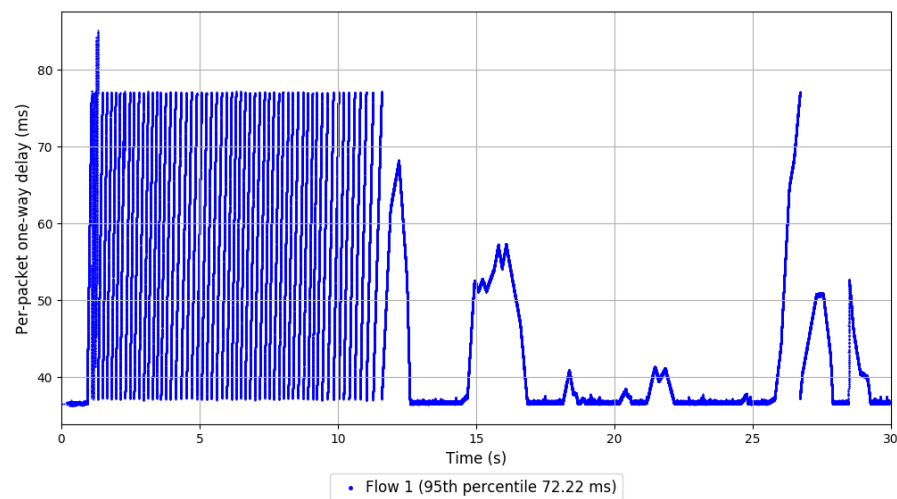
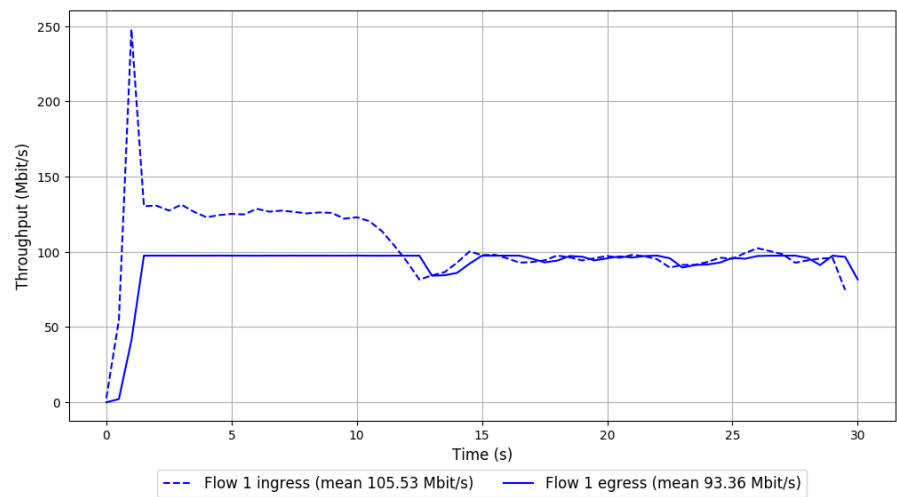
-- Flow 1:

Average throughput: 93.36 Mbit/s

95th percentile per-packet one-way delay: 72.215 ms

Loss rate: 11.52%

Run 10: Report of PCC-Allegro — Data Link

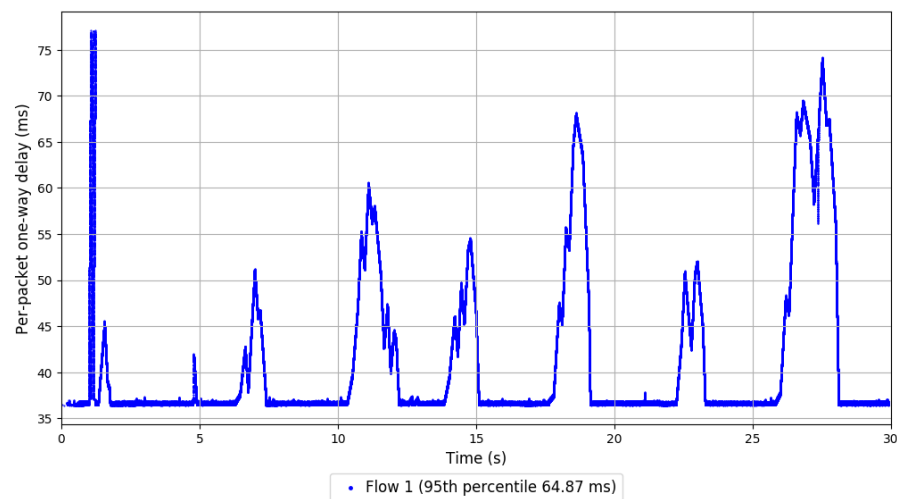
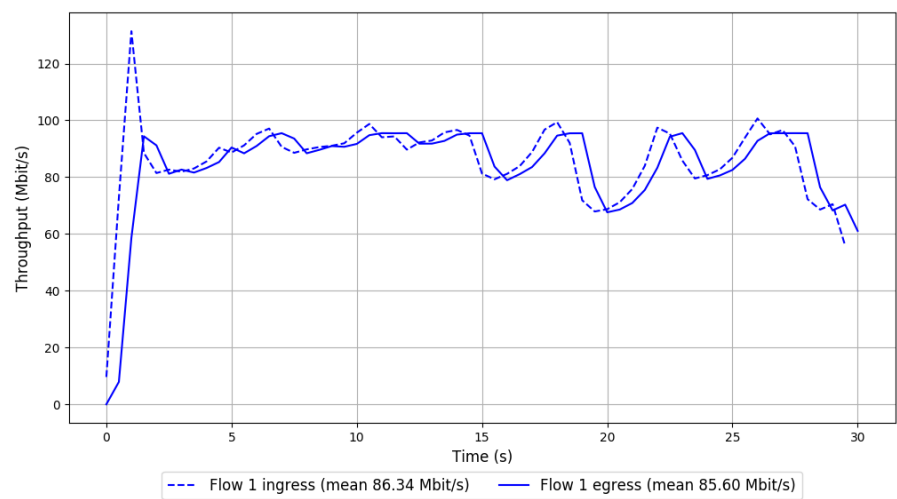


```
Run 1: Statistics of PCC-Expr

Start at: 2018-07-09 20:05:23
End at: 2018-07-09 20:05:53
Local clock offset: -2.053 ms
Remote clock offset: 5.151 ms

# Below is generated by plot.py at 2018-07-10 00:11:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.60 Mbit/s
95th percentile per-packet one-way delay: 64.873 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 85.60 Mbit/s
95th percentile per-packet one-way delay: 64.873 ms
Loss rate: 0.86%
```


Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2018-07-09 20:28:58

End at: 2018-07-09 20:29:28

Local clock offset: -2.331 ms

Remote clock offset: 5.837 ms

Below is generated by plot.py at 2018-07-10 00:11:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.00 Mbit/s

95th percentile per-packet one-way delay: 73.940 ms

Loss rate: 12.08%

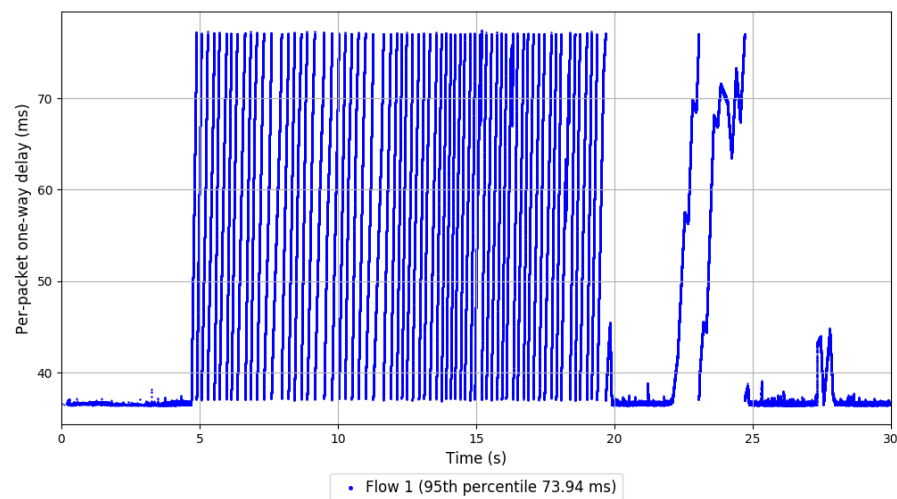
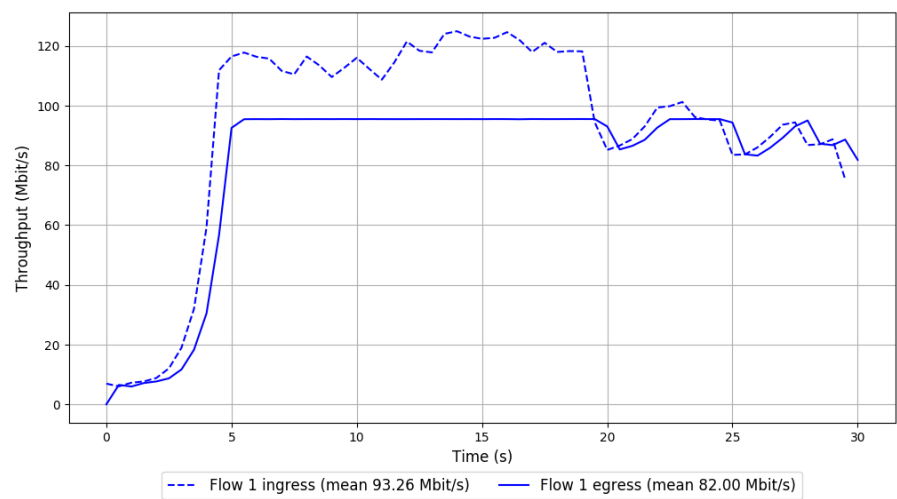
-- Flow 1:

Average throughput: 82.00 Mbit/s

95th percentile per-packet one-way delay: 73.940 ms

Loss rate: 12.08%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-07-09 20:52:23

End at: 2018-07-09 20:52:53

Local clock offset: -2.964 ms

Remote clock offset: 3.568 ms

Below is generated by plot.py at 2018-07-10 00:11:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.44 Mbit/s

95th percentile per-packet one-way delay: 69.358 ms

Loss rate: 1.19%

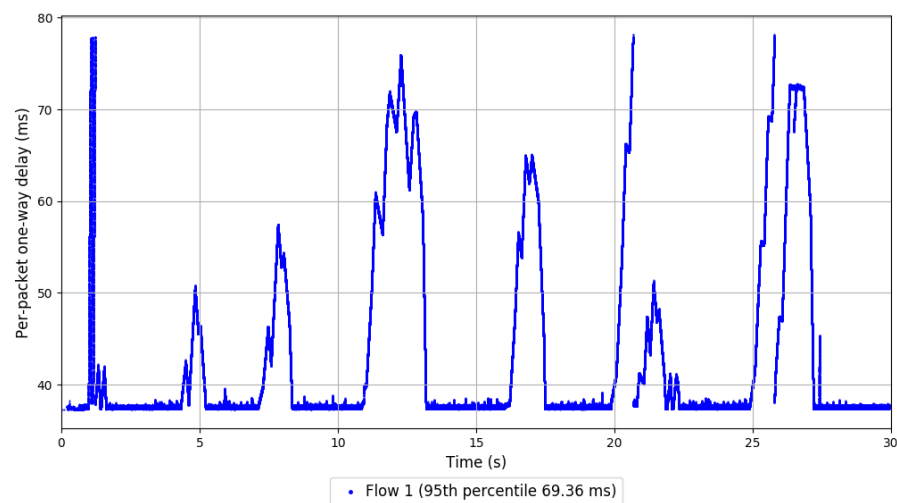
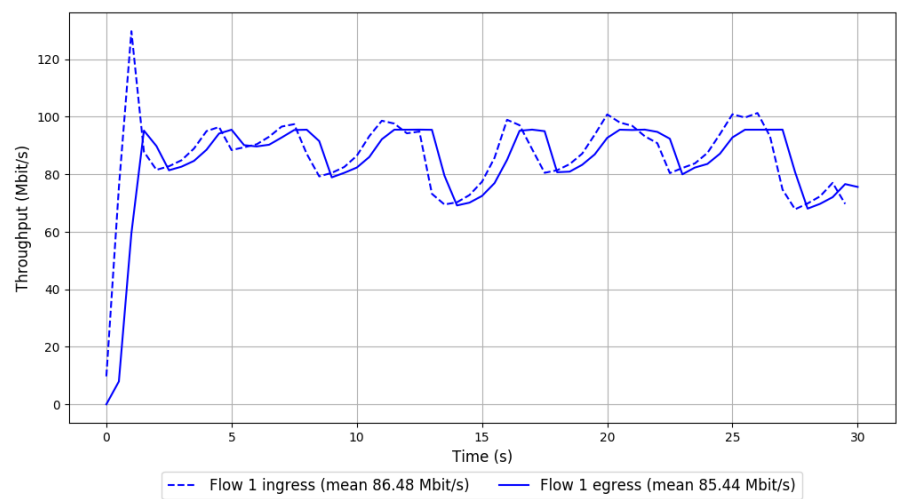
-- Flow 1:

Average throughput: 85.44 Mbit/s

95th percentile per-packet one-way delay: 69.358 ms

Loss rate: 1.19%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-07-09 21:15:26

End at: 2018-07-09 21:15:56

Local clock offset: -1.684 ms

Remote clock offset: 3.482 ms

Below is generated by plot.py at 2018-07-10 00:11:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.95 Mbit/s

95th percentile per-packet one-way delay: 66.944 ms

Loss rate: 1.05%

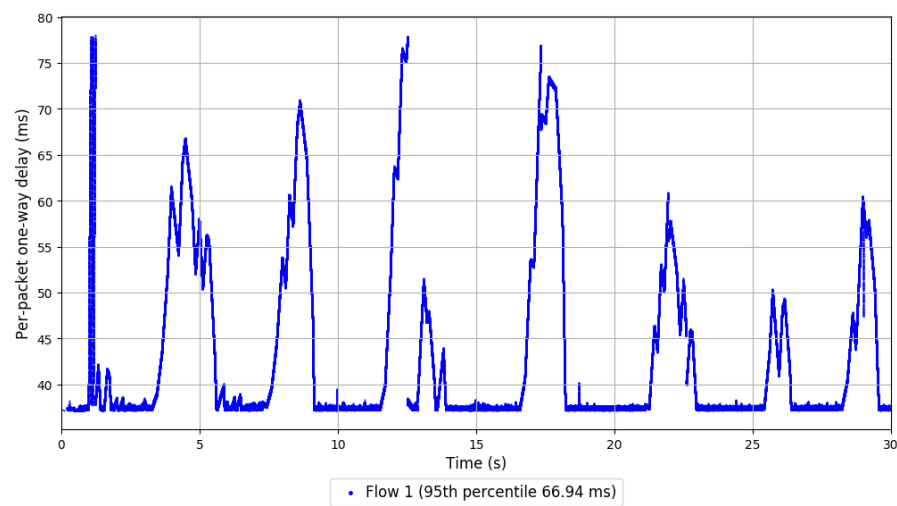
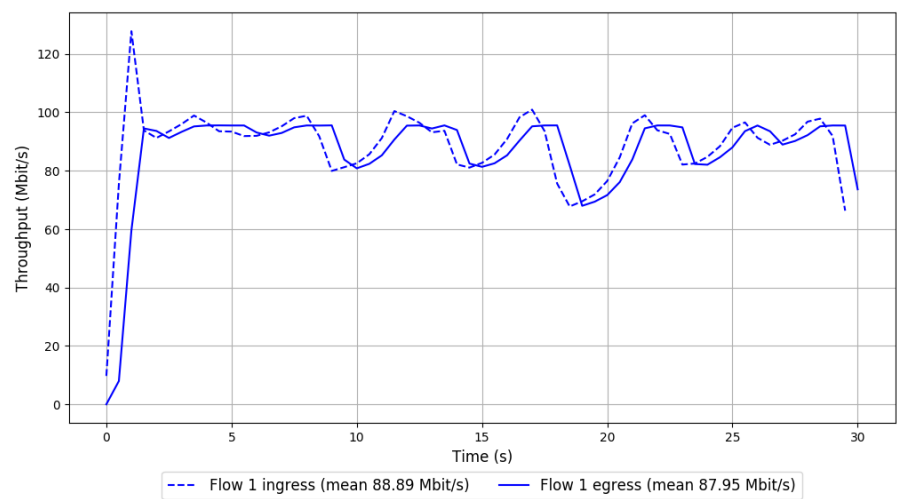
-- Flow 1:

Average throughput: 87.95 Mbit/s

95th percentile per-packet one-way delay: 66.944 ms

Loss rate: 1.05%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-07-09 21:38:29

End at: 2018-07-09 21:38:59

Local clock offset: -0.73 ms

Remote clock offset: 3.511 ms

Below is generated by plot.py at 2018-07-10 00:11:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.90 Mbit/s

95th percentile per-packet one-way delay: 63.187 ms

Loss rate: 1.43%

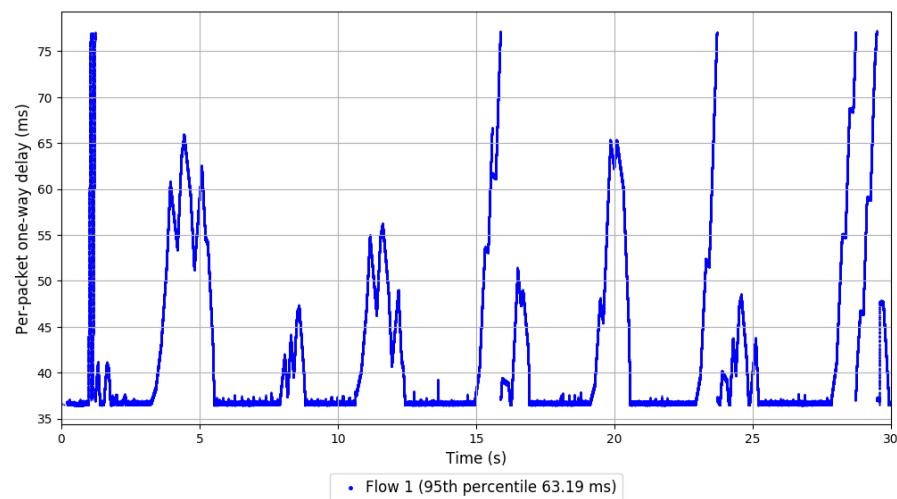
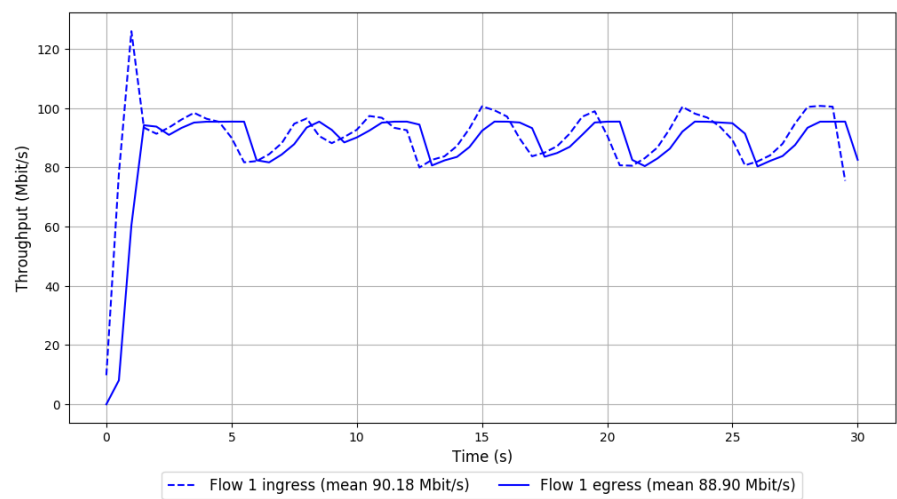
-- Flow 1:

Average throughput: 88.90 Mbit/s

95th percentile per-packet one-way delay: 63.187 ms

Loss rate: 1.43%

Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

Start at: 2018-07-09 22:02:05

End at: 2018-07-09 22:02:35

Local clock offset: -0.75 ms

Remote clock offset: 3.874 ms

Below is generated by plot.py at 2018-07-10 00:11:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.16 Mbit/s

95th percentile per-packet one-way delay: 60.286 ms

Loss rate: 0.85%

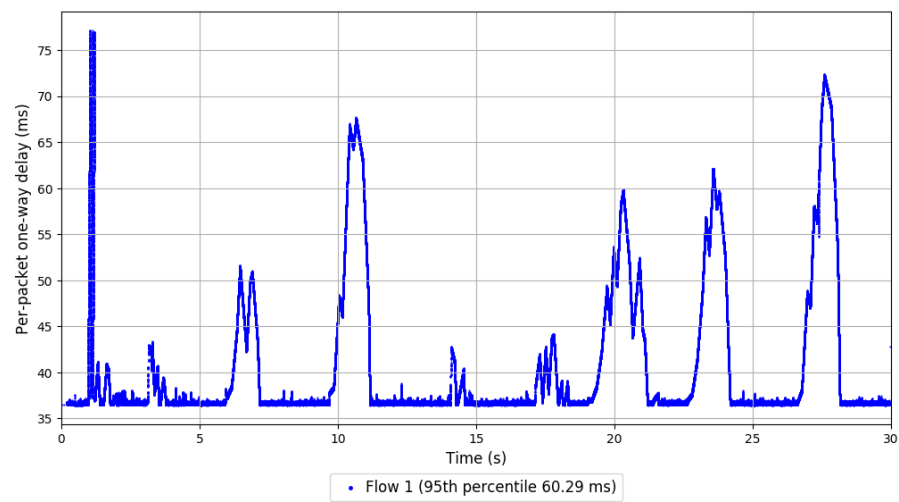
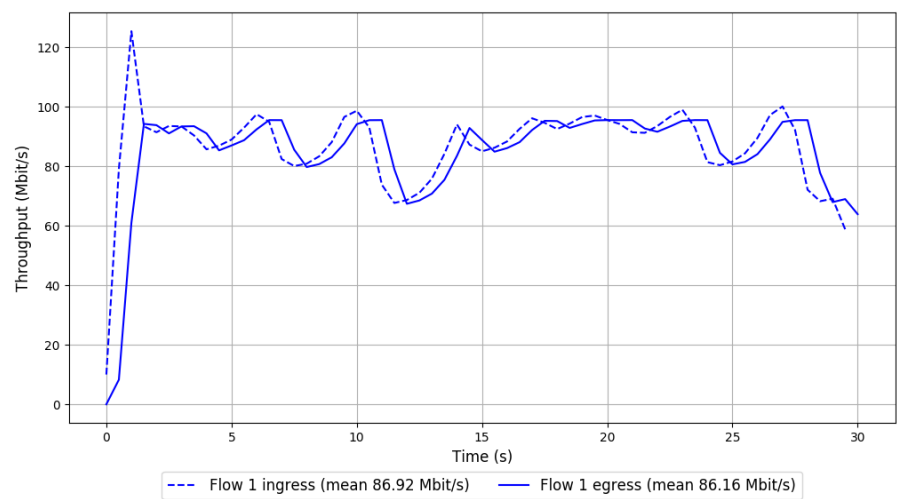
-- Flow 1:

Average throughput: 86.16 Mbit/s

95th percentile per-packet one-way delay: 60.286 ms

Loss rate: 0.85%

Run 6: Report of PCC-Expr — Data Link



Run 7: Statistics of PCC-Expr

Start at: 2018-07-09 22:25:14

End at: 2018-07-09 22:25:44

Local clock offset: -1.202 ms

Remote clock offset: 4.067 ms

Below is generated by plot.py at 2018-07-10 00:12:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.46 Mbit/s

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

Loss rate: 2.04%

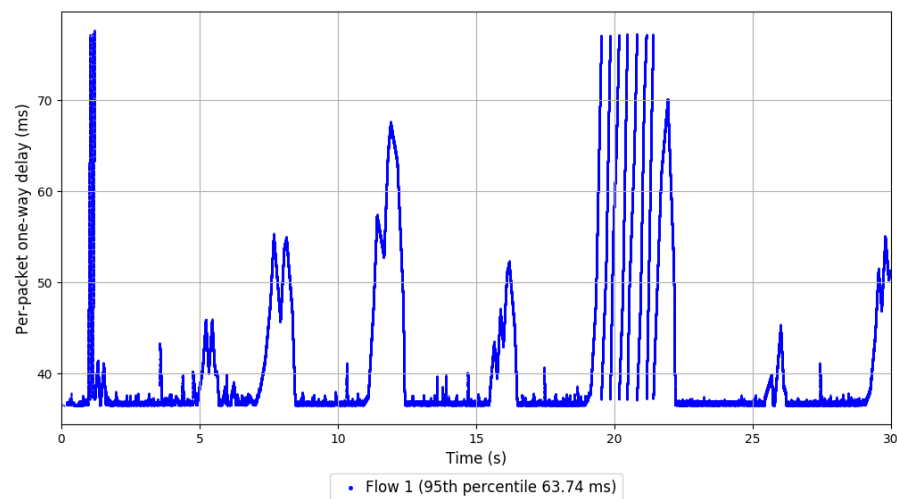
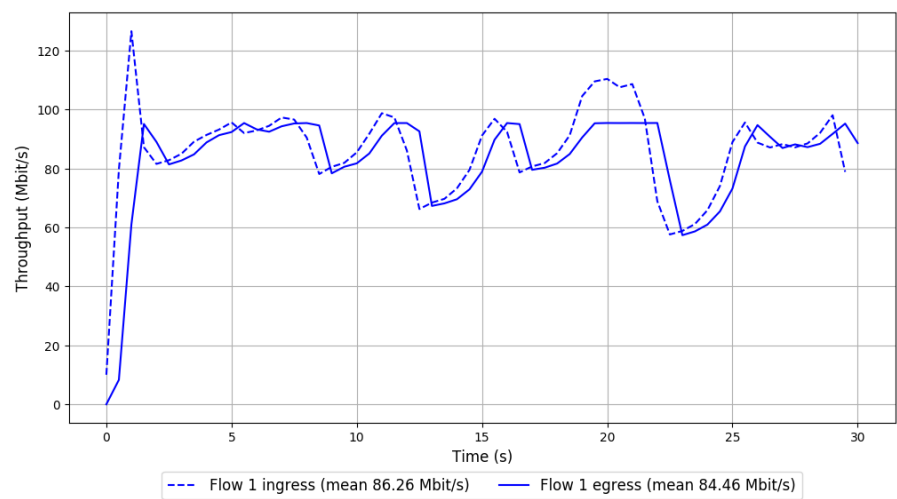
-- Flow 1:

Average throughput: 84.46 Mbit/s

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

Loss rate: 2.04%

Run 7: Report of PCC-Expr — Data Link



Run 8: Statistics of PCC-Expr

Start at: 2018-07-09 22:49:11

End at: 2018-07-09 22:49:41

Local clock offset: -1.477 ms

Remote clock offset: 3.759 ms

Below is generated by plot.py at 2018-07-10 00:12:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.87 Mbit/s

95th percentile per-packet one-way delay: 63.915 ms

Loss rate: 1.01%

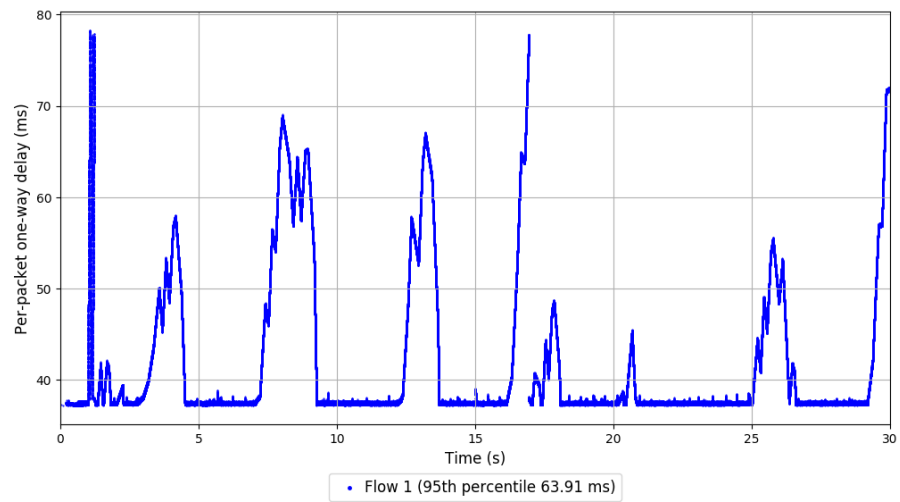
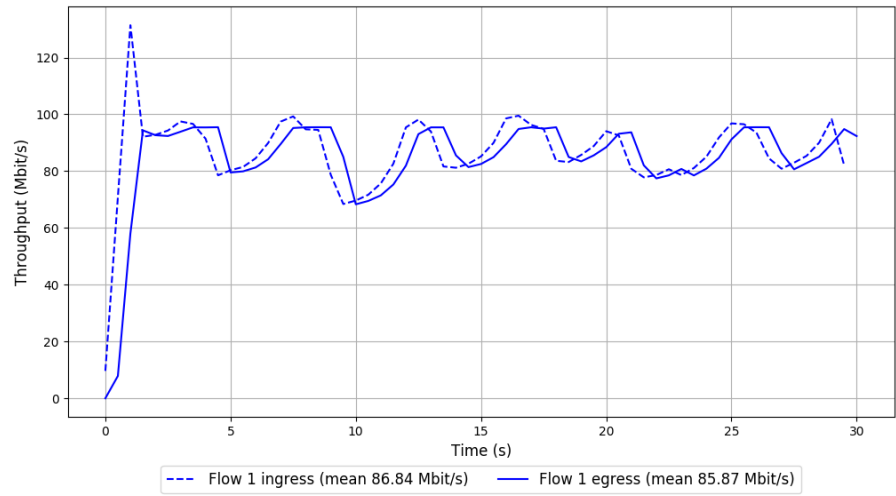
-- Flow 1:

Average throughput: 85.87 Mbit/s

95th percentile per-packet one-way delay: 63.915 ms

Loss rate: 1.01%

Run 8: Report of PCC-Expr — Data Link



Run 9: Statistics of PCC-Expr

Start at: 2018-07-09 23:13:31

End at: 2018-07-09 23:14:01

Local clock offset: -1.677 ms

Remote clock offset: 3.206 ms

Below is generated by plot.py at 2018-07-10 00:13:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.26 Mbit/s

95th percentile per-packet one-way delay: 61.588 ms

Loss rate: 1.12%

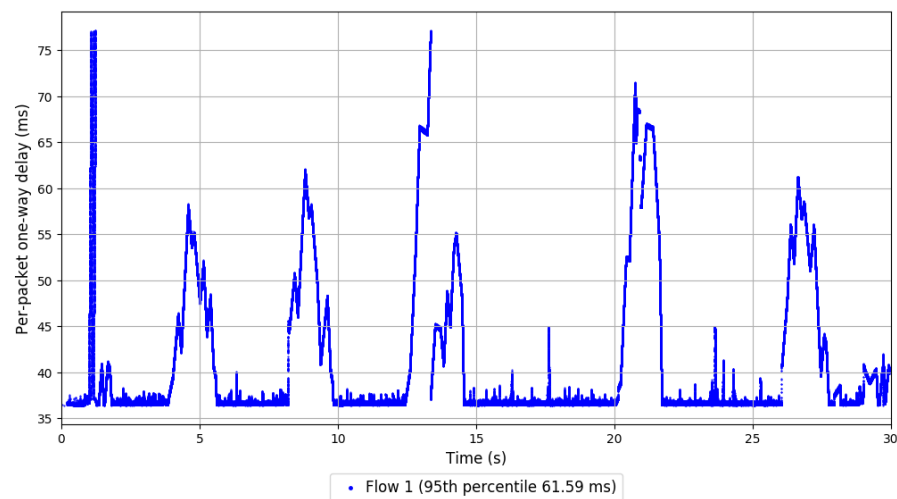
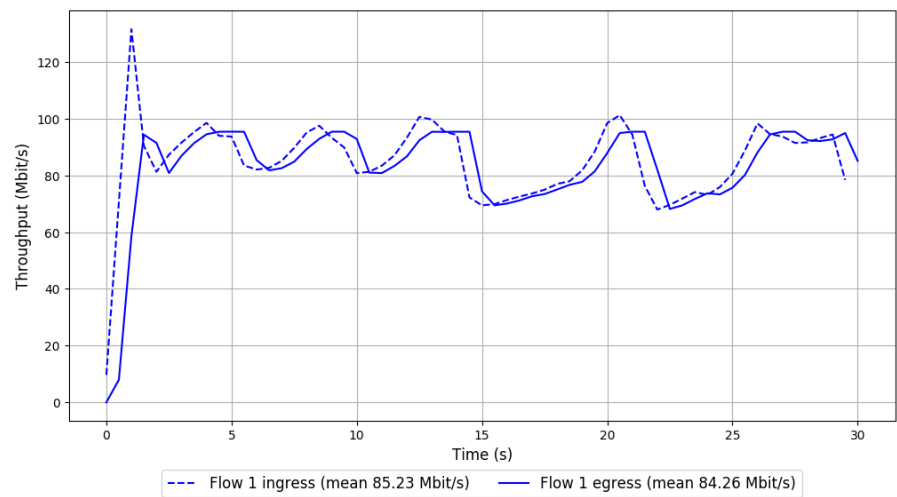
-- Flow 1:

Average throughput: 84.26 Mbit/s

95th percentile per-packet one-way delay: 61.588 ms

Loss rate: 1.12%

Run 9: Report of PCC-Expr — Data Link



Run 10: Statistics of PCC-Expr

Start at: 2018-07-09 23:38:07

End at: 2018-07-09 23:38:37

Local clock offset: -1.644 ms

Remote clock offset: 3.642 ms

Below is generated by plot.py at 2018-07-10 00:13:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.66 Mbit/s

95th percentile per-packet one-way delay: 63.429 ms

Loss rate: 1.29%

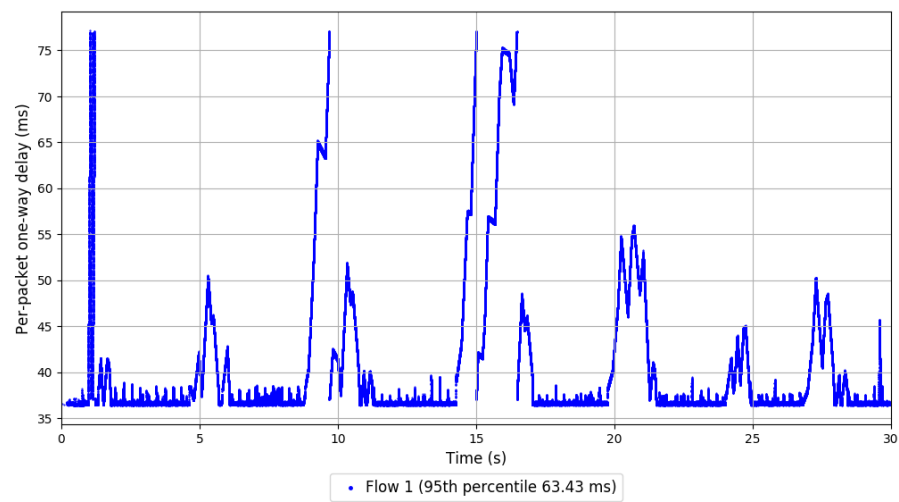
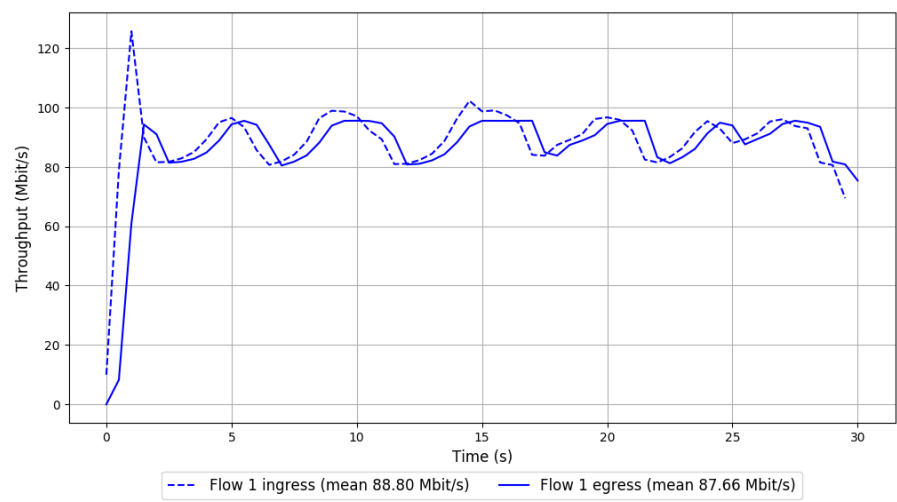
-- Flow 1:

Average throughput: 87.66 Mbit/s

95th percentile per-packet one-way delay: 63.429 ms

Loss rate: 1.29%

Run 10: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

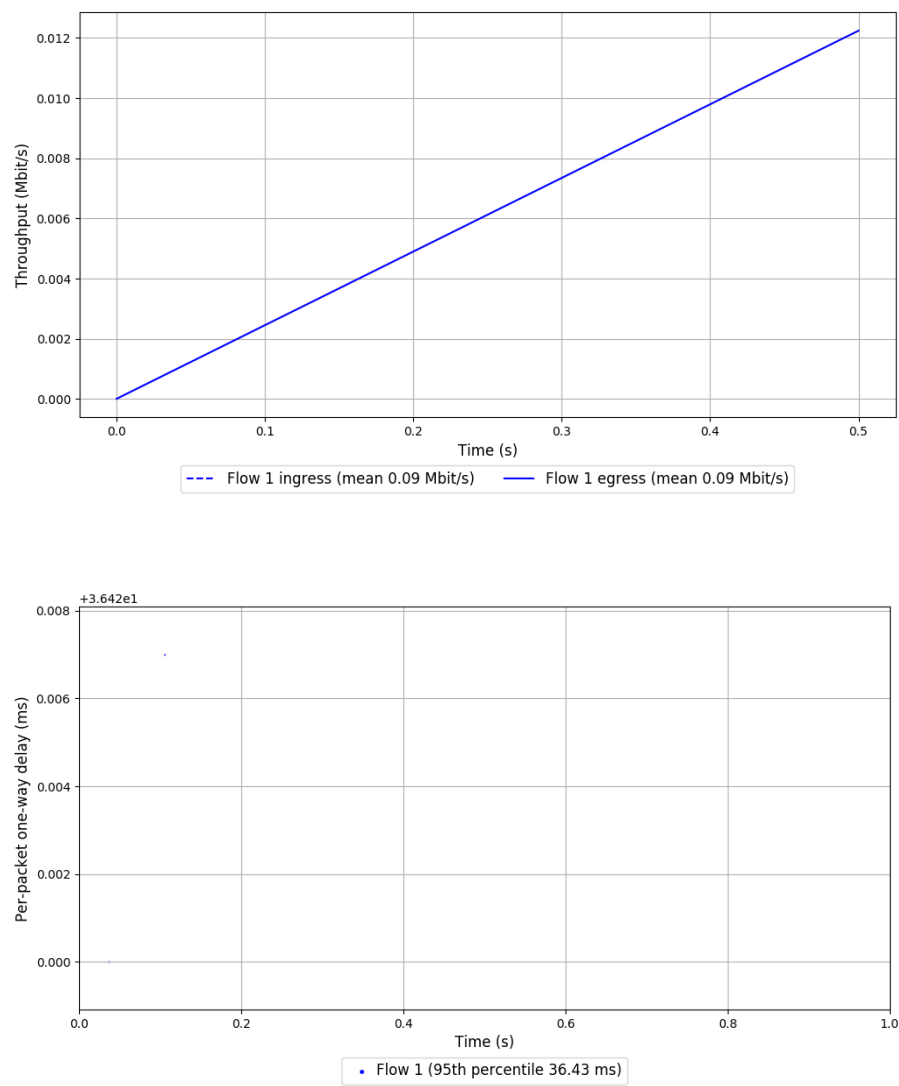
Start at: 2018-07-09 20:12:11

End at: 2018-07-09 20:12:41

Local clock offset: -2.183 ms

Remote clock offset: 5.38 ms

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-07-09 20:36:11

End at: 2018-07-09 20:36:41

Local clock offset: -2.685 ms

Remote clock offset: 4.83 ms

Below is generated by plot.py at 2018-07-10 00:13:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.75 Mbit/s

95th percentile per-packet one-way delay: 72.159 ms

Loss rate: 2.61%

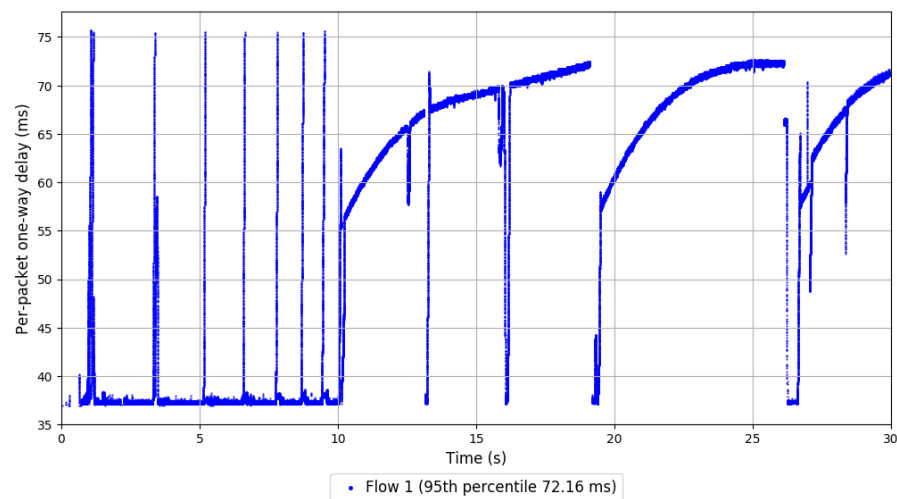
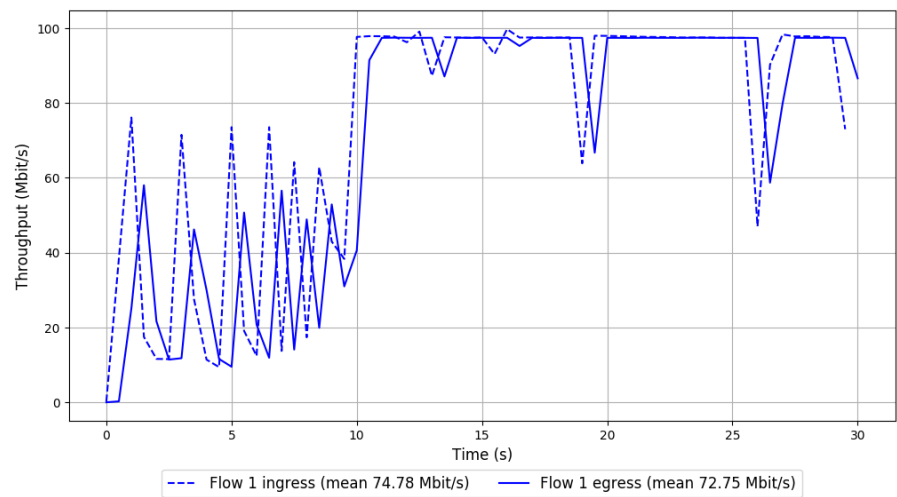
-- Flow 1:

Average throughput: 72.75 Mbit/s

95th percentile per-packet one-way delay: 72.159 ms

Loss rate: 2.61%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-07-09 20:59:19

End at: 2018-07-09 20:59:49

Local clock offset: -2.467 ms

Remote clock offset: 3.281 ms

Below is generated by plot.py at 2018-07-10 00:13:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 68.89 Mbit/s

95th percentile per-packet one-way delay: 74.378 ms

Loss rate: 2.87%

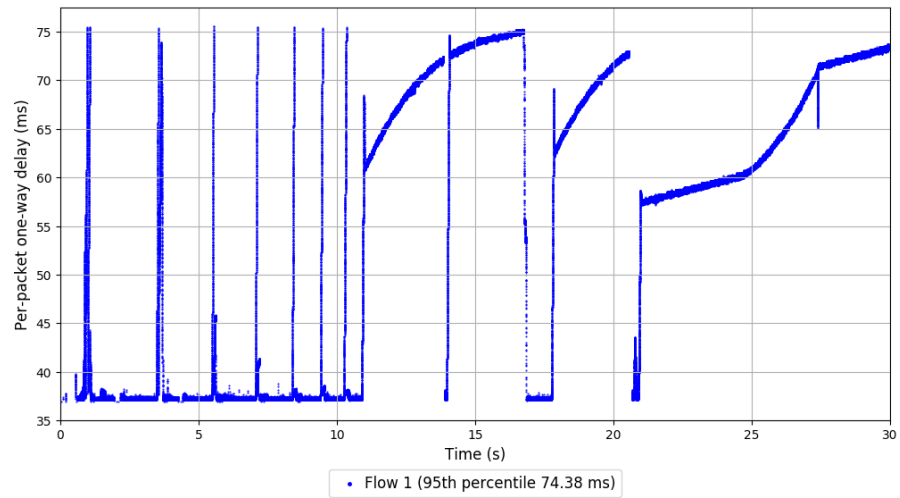
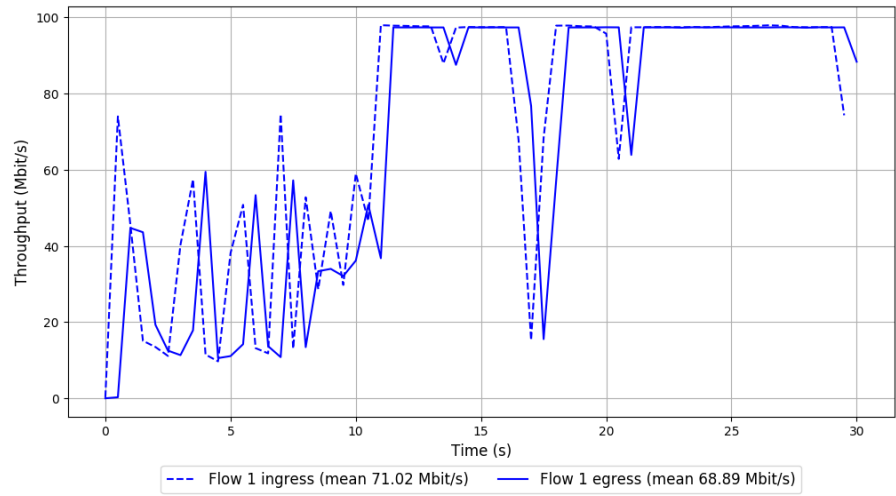
-- Flow 1:

Average throughput: 68.89 Mbit/s

95th percentile per-packet one-way delay: 74.378 ms

Loss rate: 2.87%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-07-09 21:22:06

End at: 2018-07-09 21:22:36

Local clock offset: -1.339 ms

Remote clock offset: 3.555 ms

Below is generated by plot.py at 2018-07-10 00:13:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.74 Mbit/s

95th percentile per-packet one-way delay: 44.250 ms

Loss rate: 3.23%

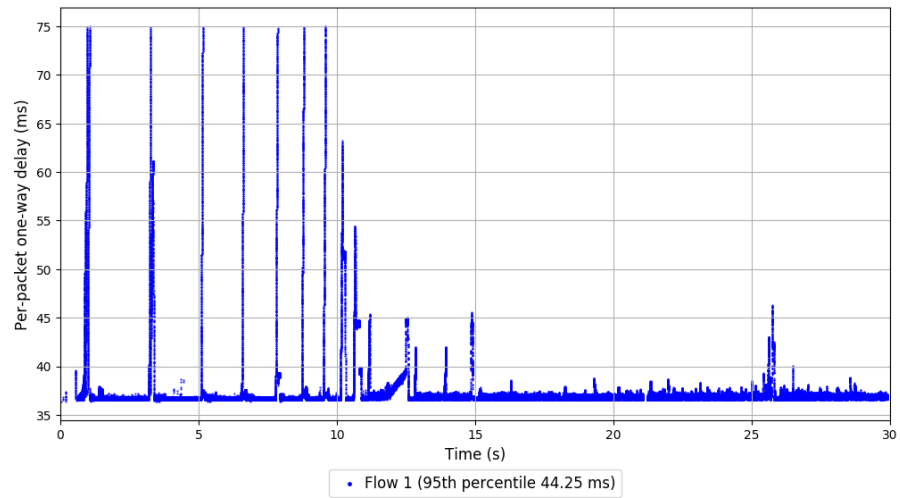
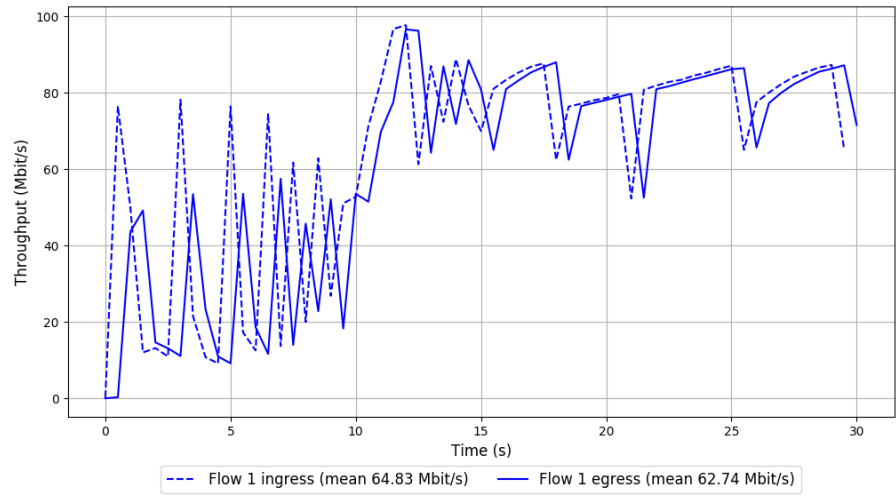
-- Flow 1:

Average throughput: 62.74 Mbit/s

95th percentile per-packet one-way delay: 44.250 ms

Loss rate: 3.23%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-07-09 21:45:30

End at: 2018-07-09 21:46:00

Local clock offset: -0.661 ms

Remote clock offset: 3.705 ms

Below is generated by plot.py at 2018-07-10 00:13:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.67 Mbit/s

95th percentile per-packet one-way delay: 70.691 ms

Loss rate: 0.63%

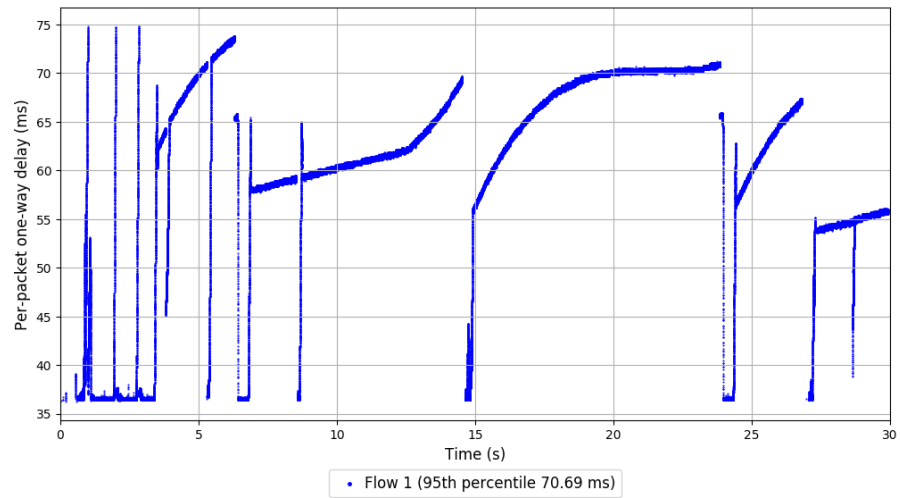
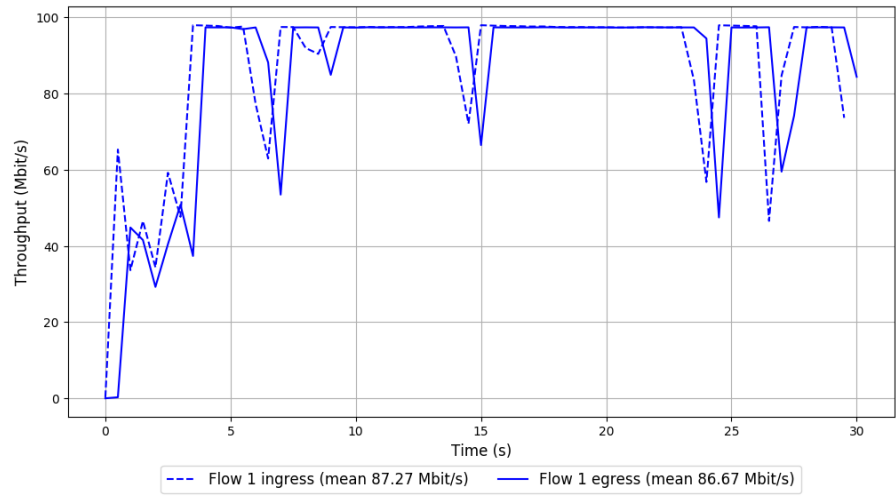
-- Flow 1:

Average throughput: 86.67 Mbit/s

95th percentile per-packet one-way delay: 70.691 ms

Loss rate: 0.63%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-07-09 22:09:08

End at: 2018-07-09 22:09:38

Local clock offset: -0.851 ms

Remote clock offset: 3.776 ms

Below is generated by plot.py at 2018-07-10 00:13:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.60 Mbit/s

95th percentile per-packet one-way delay: 73.721 ms

Loss rate: 2.80%

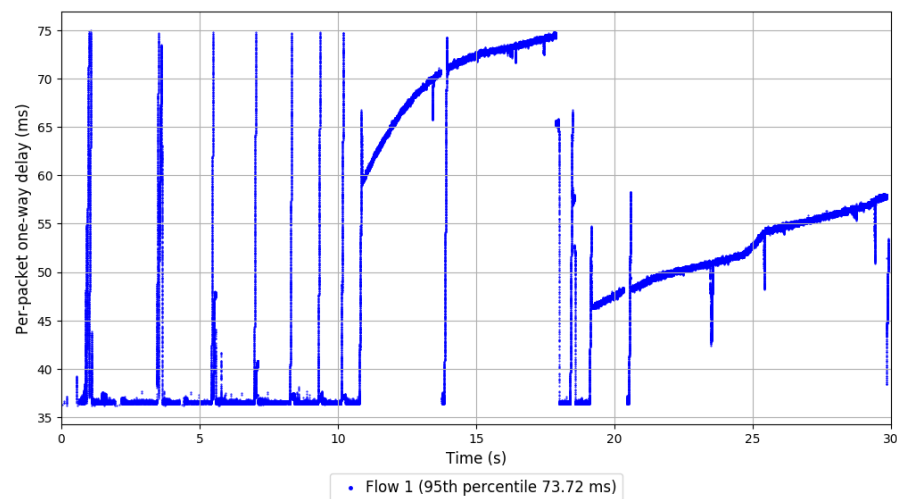
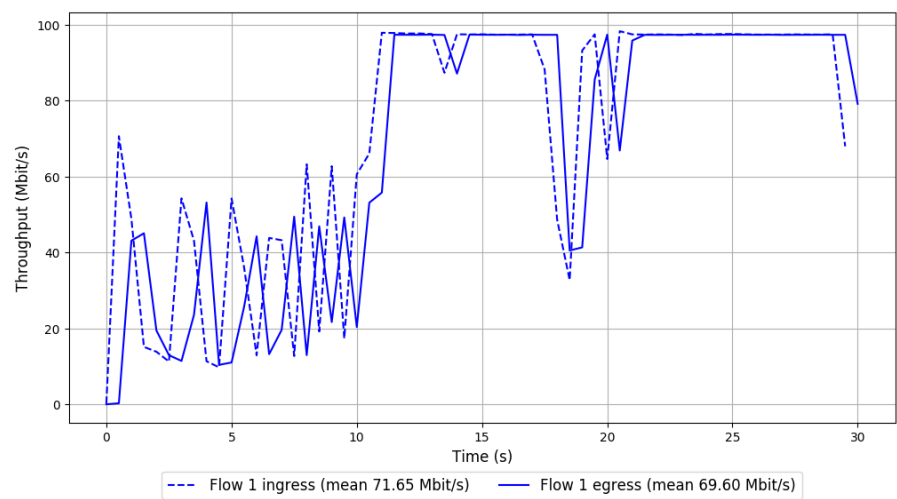
-- Flow 1:

Average throughput: 69.60 Mbit/s

95th percentile per-packet one-way delay: 73.721 ms

Loss rate: 2.80%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-07-09 22:32:11

End at: 2018-07-09 22:32:41

Local clock offset: -1.396 ms

Remote clock offset: 3.917 ms

Below is generated by plot.py at 2018-07-10 00:13:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.11 Mbit/s

95th percentile per-packet one-way delay: 72.686 ms

Loss rate: 2.66%

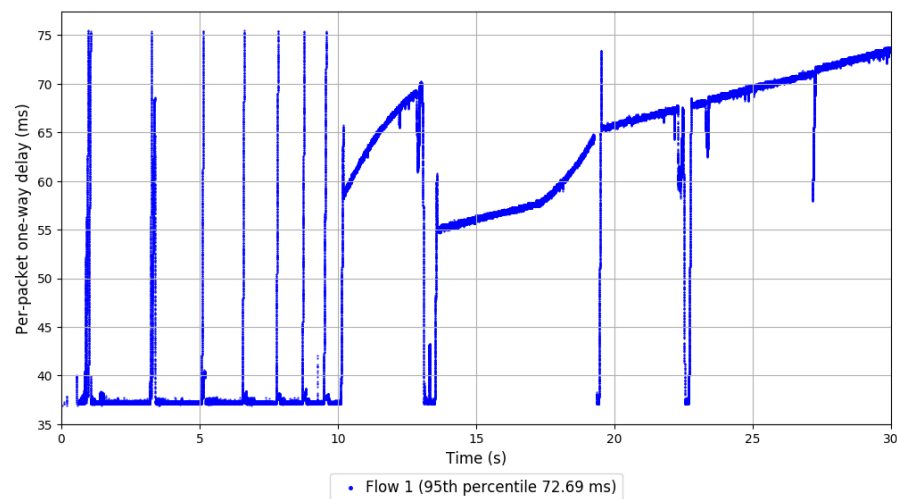
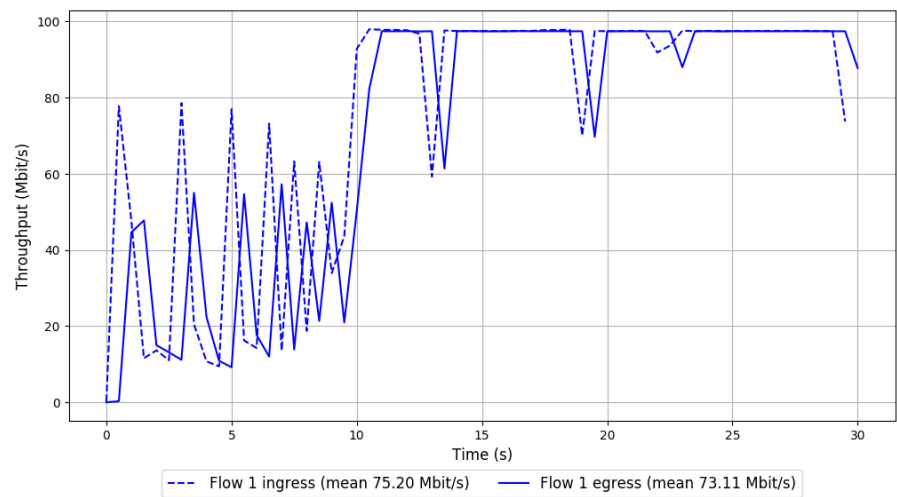
-- Flow 1:

Average throughput: 73.11 Mbit/s

95th percentile per-packet one-way delay: 72.686 ms

Loss rate: 2.66%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-07-09 22:56:35

End at: 2018-07-09 22:57:05

Local clock offset: -1.556 ms

Remote clock offset: 3.482 ms

Below is generated by plot.py at 2018-07-10 00:13:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.86 Mbit/s

95th percentile per-packet one-way delay: 70.893 ms

Loss rate: 2.80%

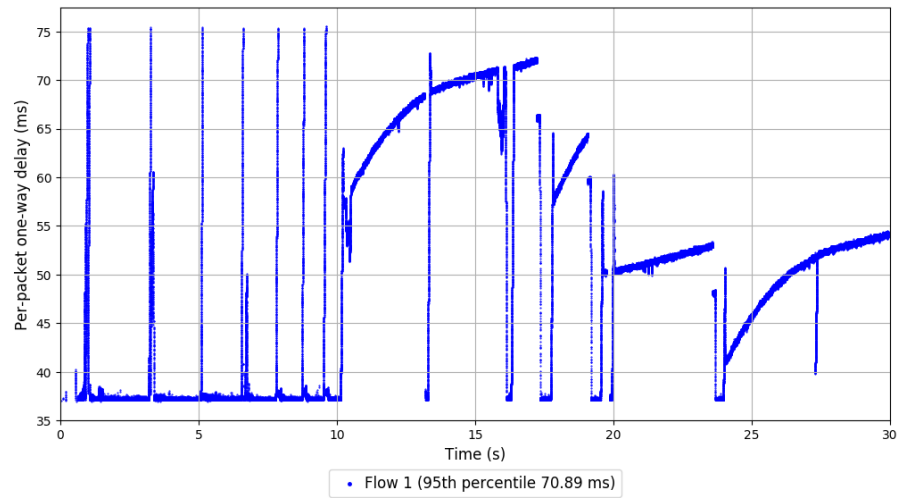
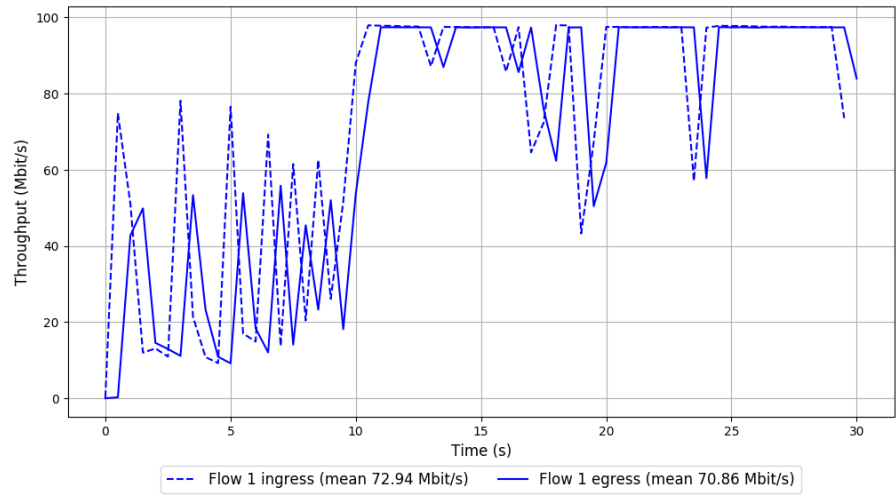
-- Flow 1:

Average throughput: 70.86 Mbit/s

95th percentile per-packet one-way delay: 70.893 ms

Loss rate: 2.80%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-07-09 23:20:48

End at: 2018-07-09 23:21:18

Local clock offset: -1.701 ms

Remote clock offset: 3.144 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.15 Mbit/s

95th percentile per-packet one-way delay: 72.520 ms

Loss rate: 0.79%

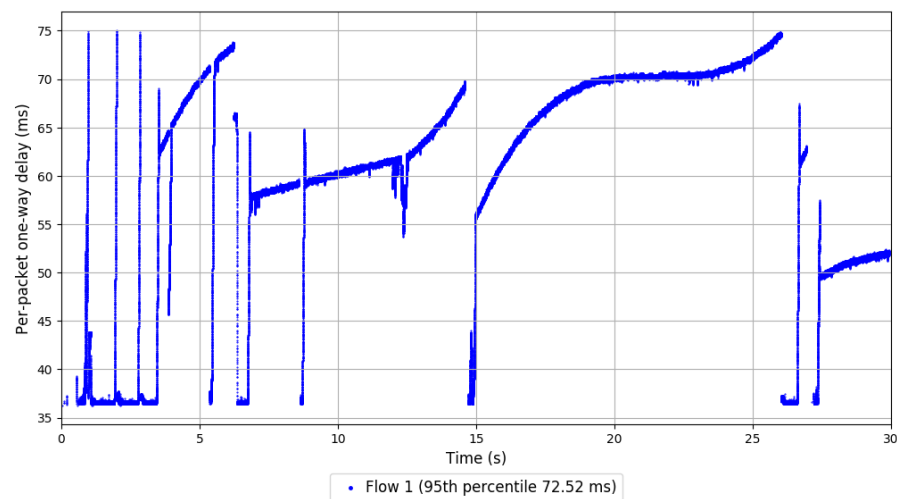
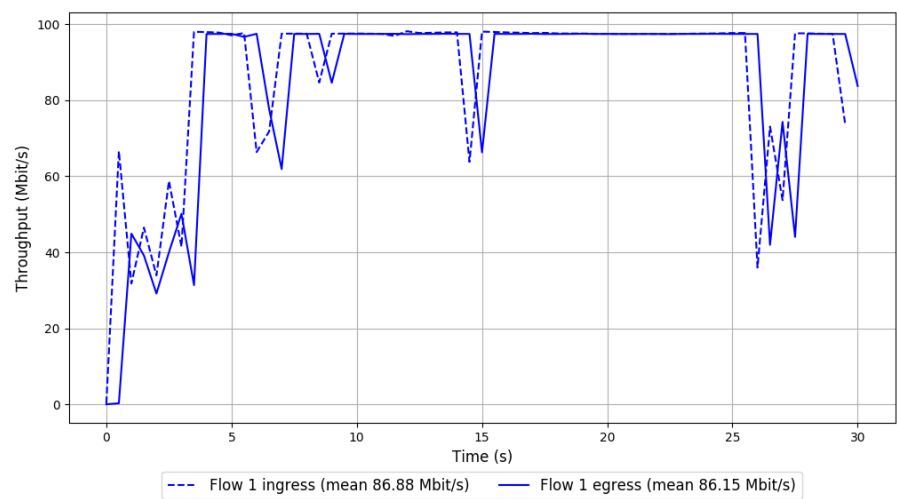
-- Flow 1:

Average throughput: 86.15 Mbit/s

95th percentile per-packet one-way delay: 72.520 ms

Loss rate: 0.79%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-07-09 23:45:22

End at: 2018-07-09 23:45:52

Local clock offset: -1.671 ms

Remote clock offset: 3.766 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.51 Mbit/s

95th percentile per-packet one-way delay: 72.150 ms

Loss rate: 2.67%

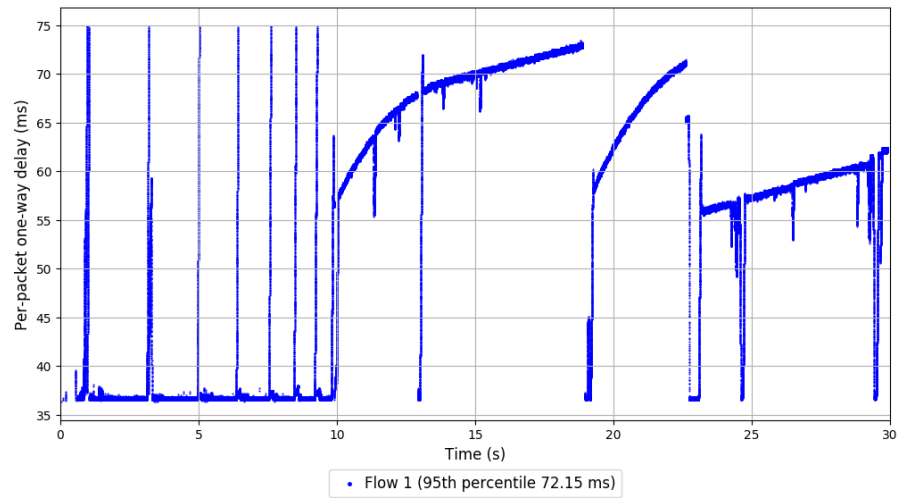
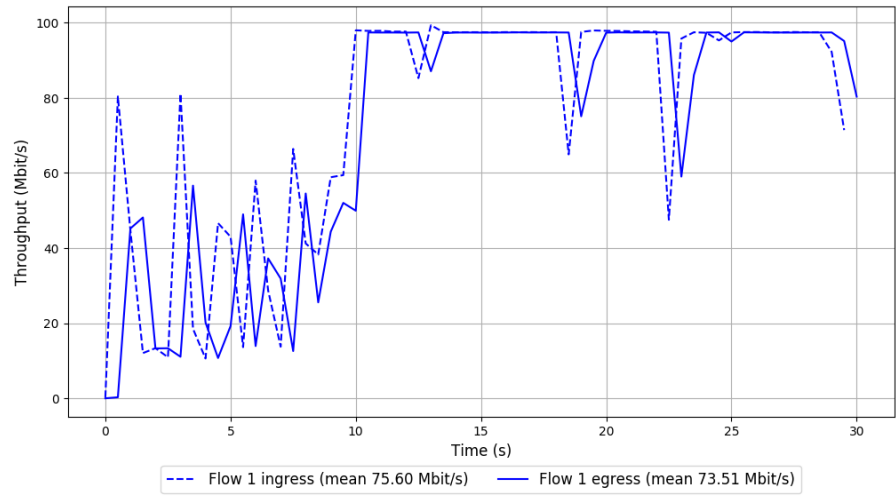
-- Flow 1:

Average throughput: 73.51 Mbit/s

95th percentile per-packet one-way delay: 72.150 ms

Loss rate: 2.67%

Run 10: Report of QUIC Cubic — Data Link

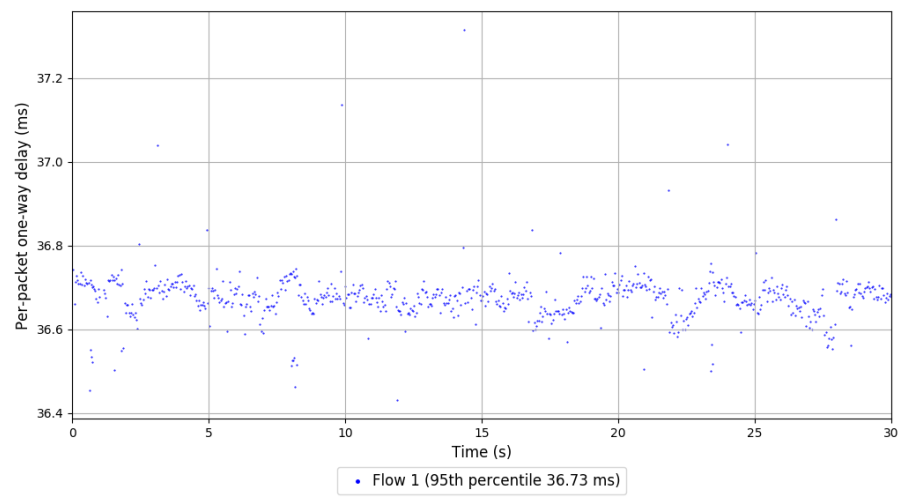
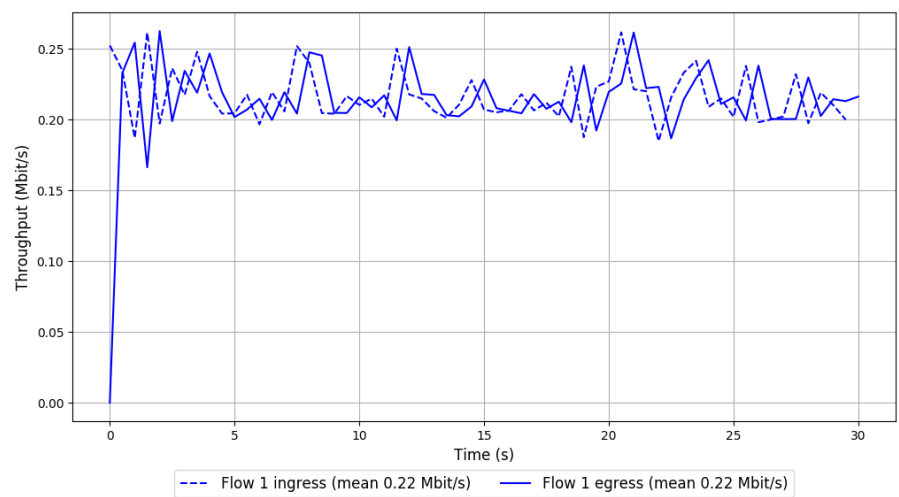


```
Run 1: Statistics of SCReAM

Start at: 2018-07-09 20:13:26
End at: 2018-07-09 20:13:56
Local clock offset: -2.169 ms
Remote clock offset: 5.409 ms

# Below is generated by plot.py at 2018-07-10 00:13:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 36.728 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 36.728 ms
Loss rate: 0.00%
```


Run 1: Report of SReAM — Data Link

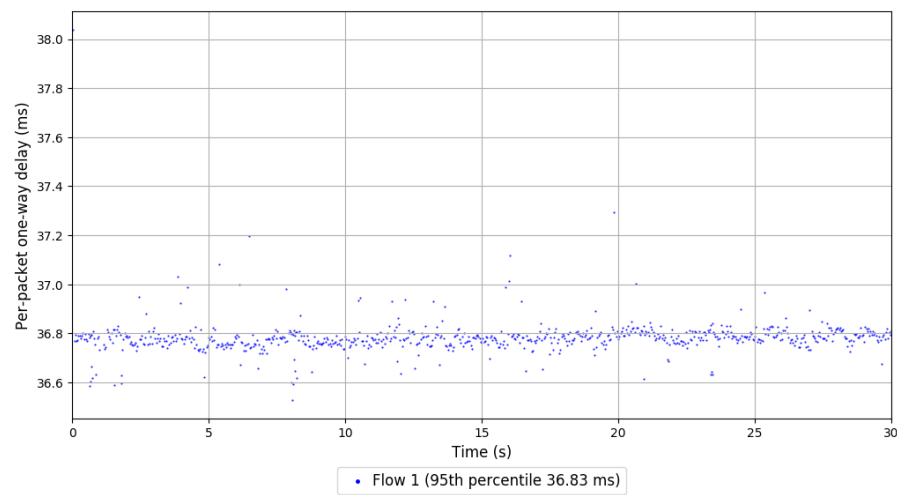
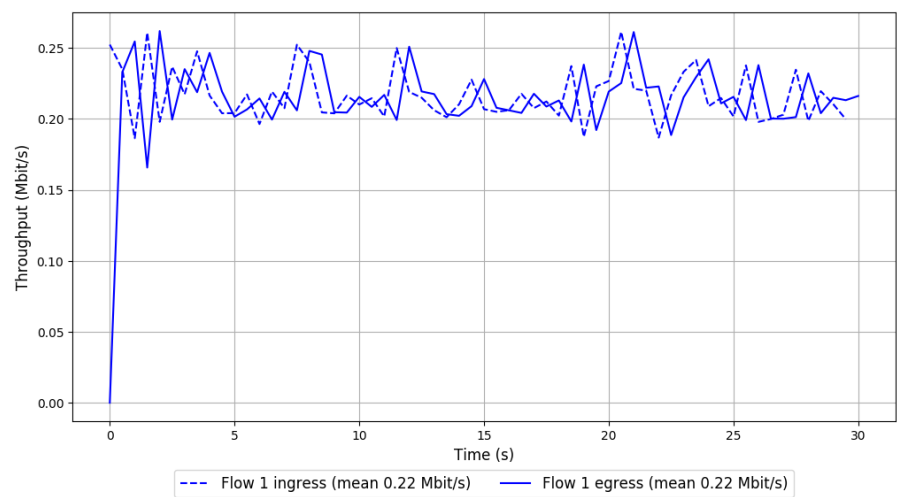


```
Run 2: Statistics of SCReAM

Start at: 2018-07-09 20:37:32
End at: 2018-07-09 20:38:02
Local clock offset: -2.76 ms
Remote clock offset: 4.768 ms

# Below is generated by plot.py at 2018-07-10 00:13:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 36.833 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 36.833 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-07-09 21:00:41

End at: 2018-07-09 21:01:11

Local clock offset: -2.407 ms

Remote clock offset: 3.248 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 36.679 ms

Loss rate: 0.00%

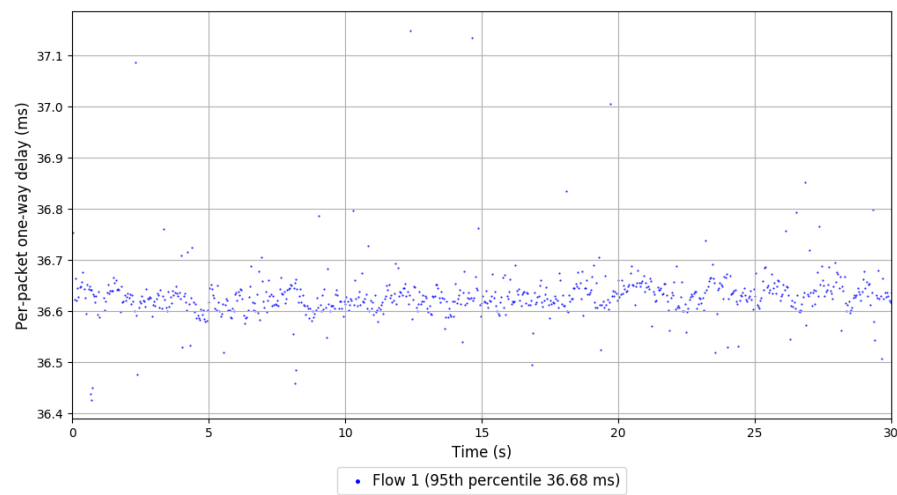
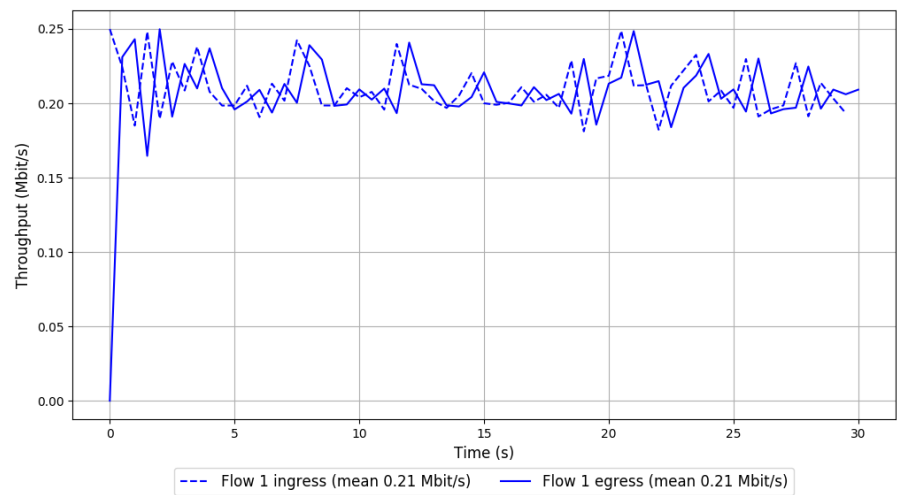
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 36.679 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-07-09 21:23:25

End at: 2018-07-09 21:23:56

Local clock offset: -1.29 ms

Remote clock offset: 3.576 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.505 ms

Loss rate: 0.00%

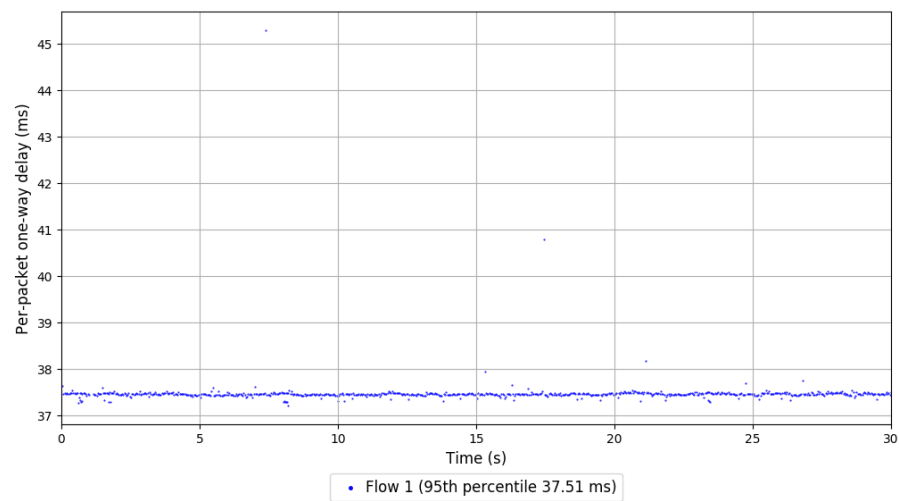
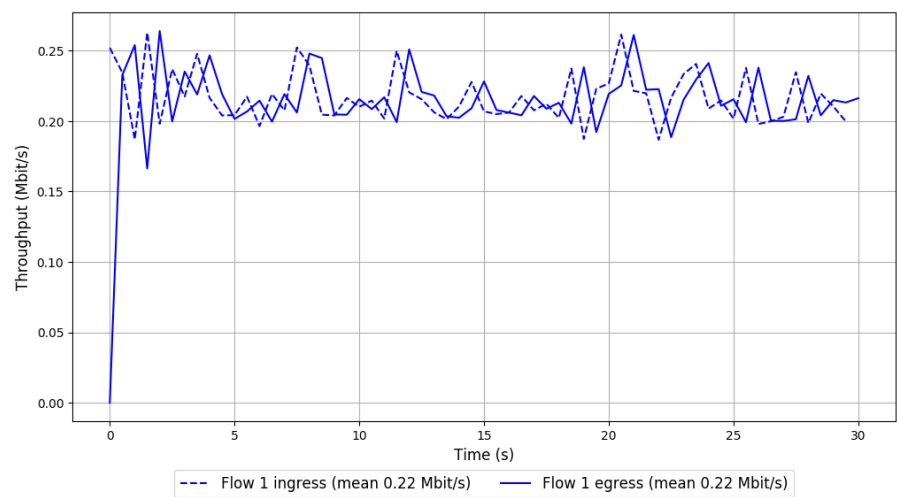
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.505 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-07-09 21:46:49

End at: 2018-07-09 21:47:19

Local clock offset: -0.63 ms

Remote clock offset: 3.757 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.309 ms

Loss rate: 0.00%

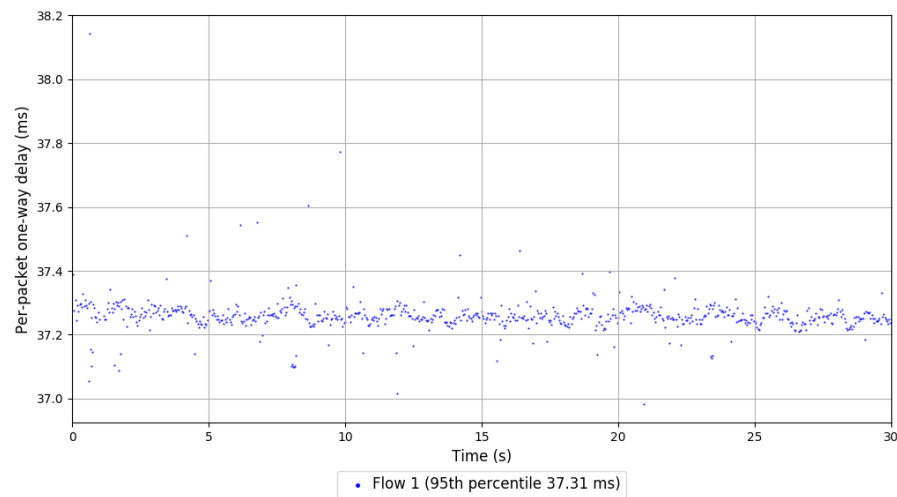
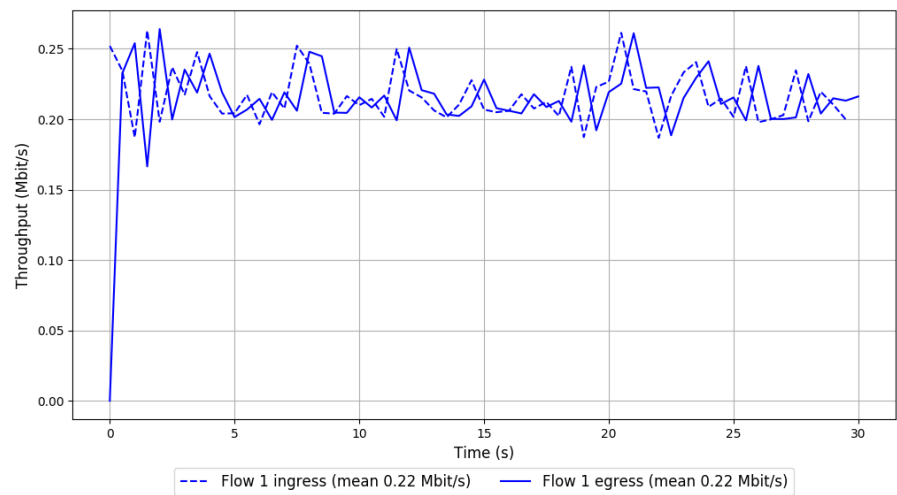
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.309 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-07-09 22:10:28

End at: 2018-07-09 22:10:58

Local clock offset: -0.945 ms

Remote clock offset: 3.88 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.485 ms

Loss rate: 0.00%

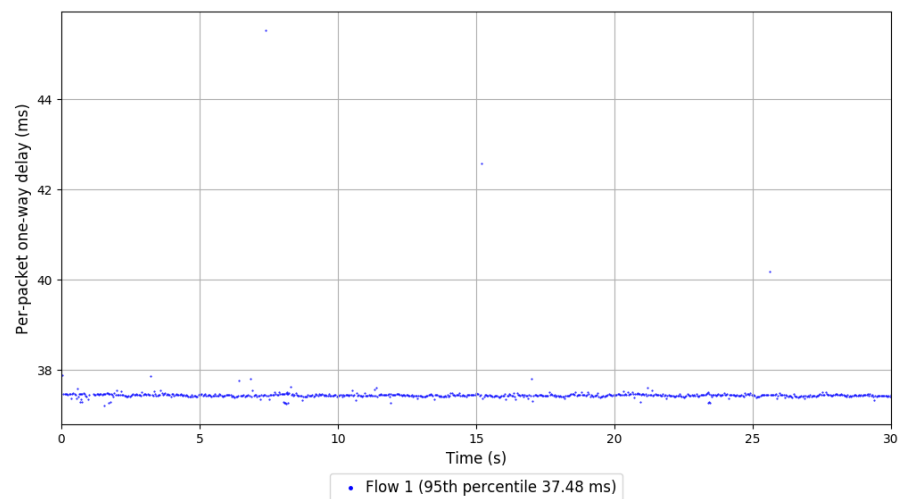
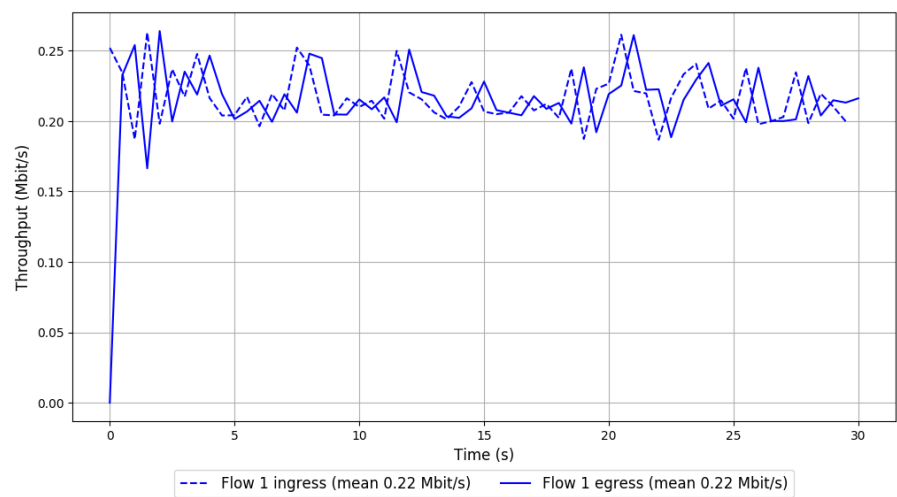
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.485 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

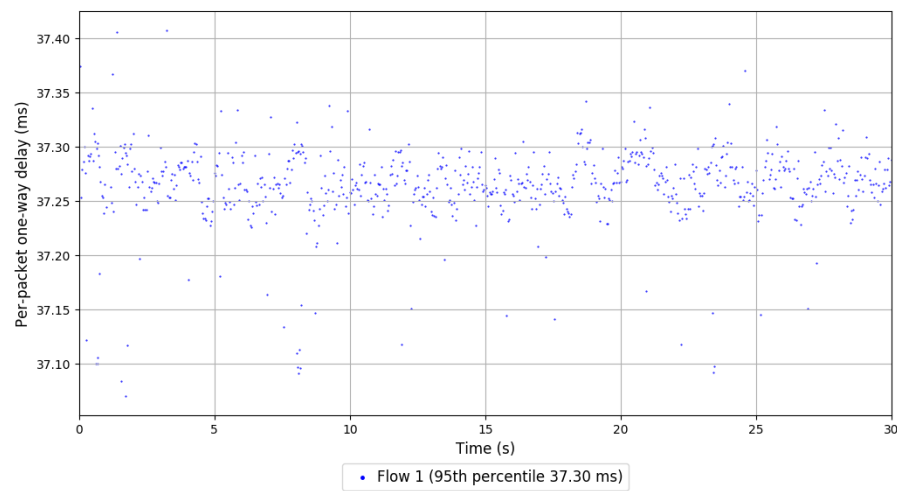
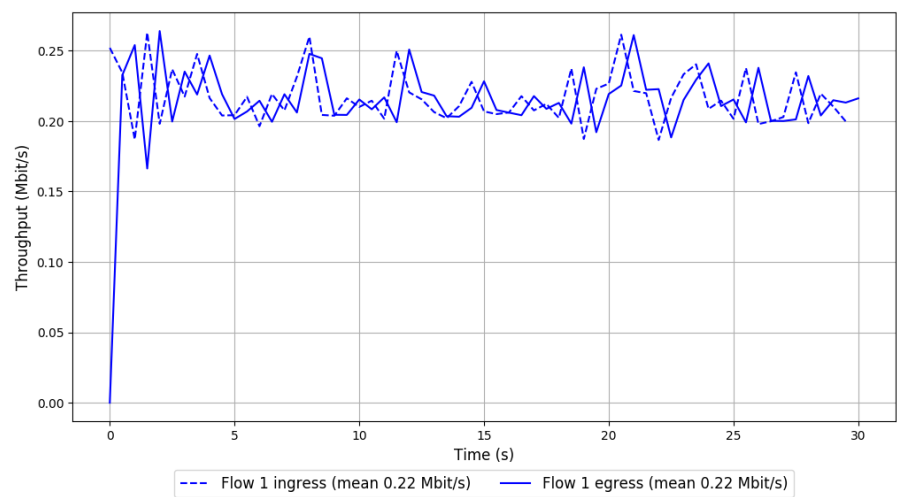


```
Run 7: Statistics of SCReAM

Start at: 2018-07-09 22:33:36
End at: 2018-07-09 22:34:06
Local clock offset: -1.428 ms
Remote clock offset: 3.9 ms

# Below is generated by plot.py at 2018-07-10 00:13:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 37.305 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 37.305 ms
Loss rate: 0.00%
```

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-07-09 22:57:58

End at: 2018-07-09 22:58:28

Local clock offset: -1.571 ms

Remote clock offset: 3.449 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 36.628 ms

Loss rate: 0.00%

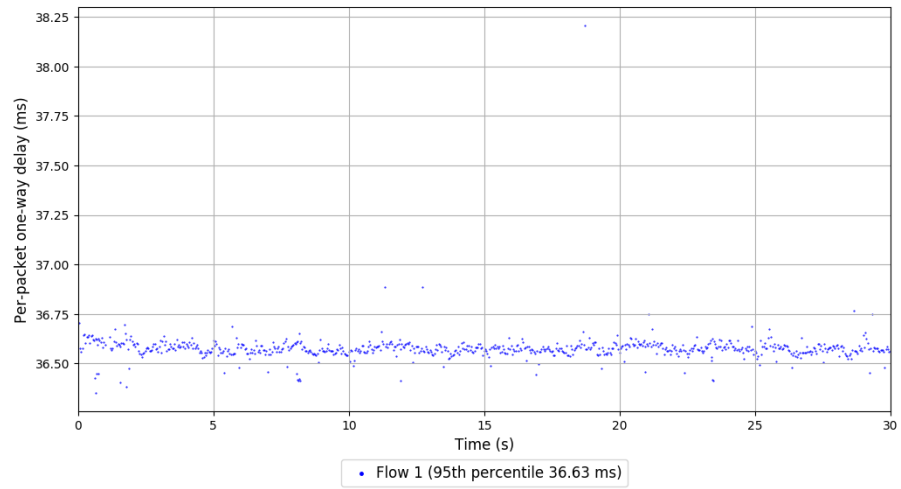
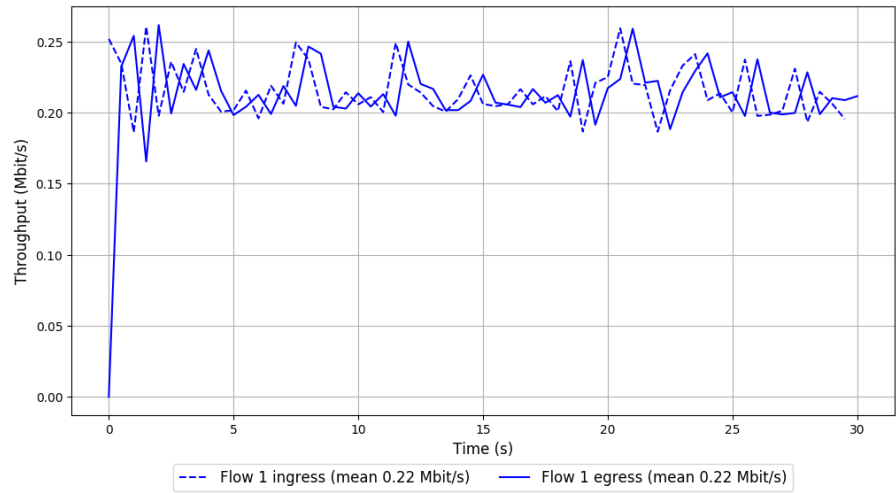
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 36.628 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-07-09 23:22:13

End at: 2018-07-09 23:22:43

Local clock offset: -1.807 ms

Remote clock offset: 3.146 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.451 ms

Loss rate: 0.00%

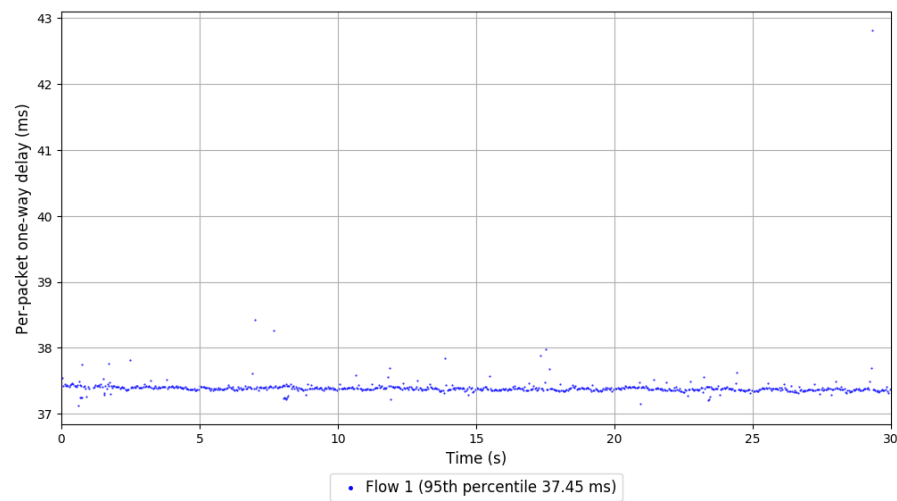
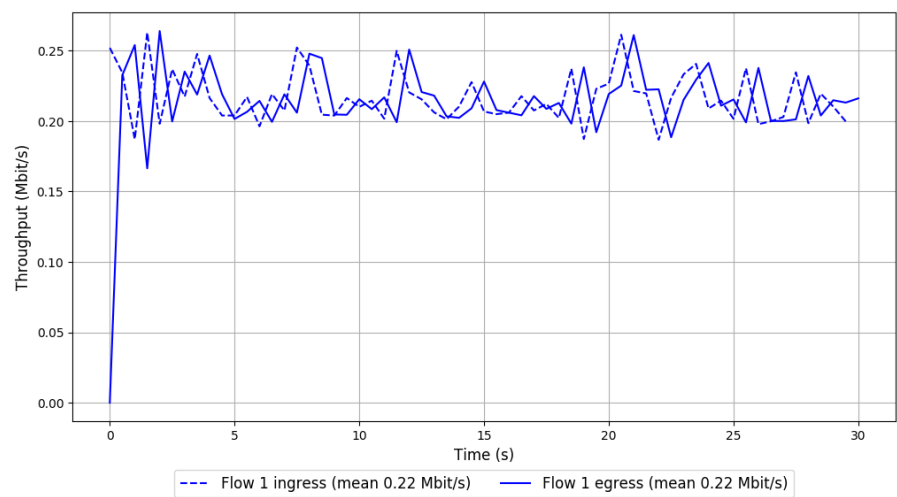
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 37.451 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-07-09 23:46:48

End at: 2018-07-09 23:47:18

Local clock offset: -1.575 ms

Remote clock offset: 3.701 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 36.655 ms

Loss rate: 0.00%

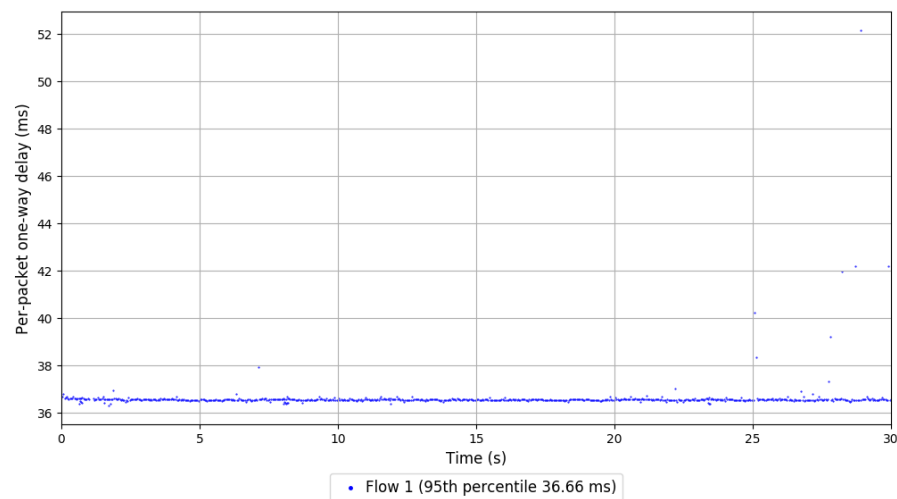
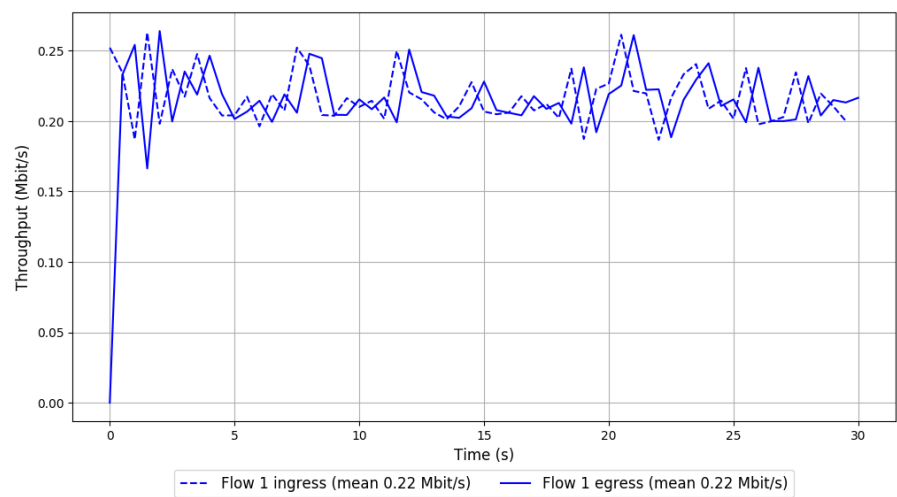
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 36.655 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2018-07-09 20:09:29

End at: 2018-07-09 20:09:59

Local clock offset: -2.048 ms

Remote clock offset: 5.361 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.53 Mbit/s

95th percentile per-packet one-way delay: 42.779 ms

Loss rate: 0.00%

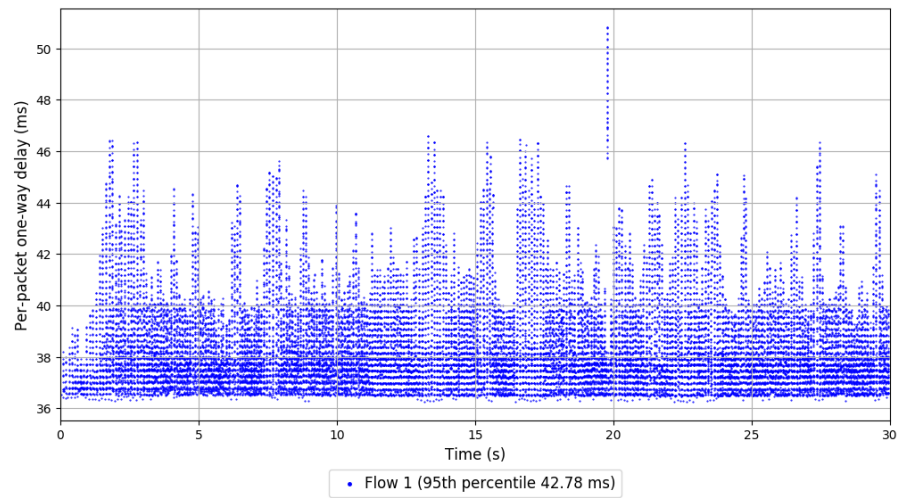
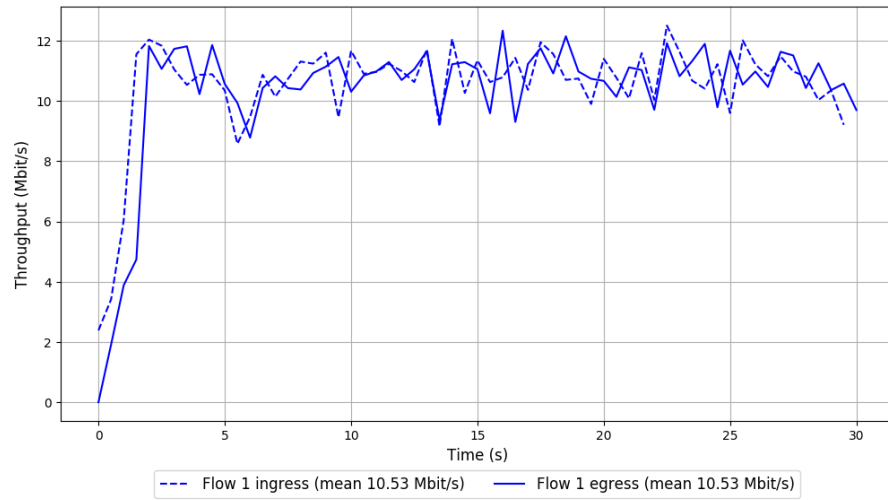
-- Flow 1:

Average throughput: 10.53 Mbit/s

95th percentile per-packet one-way delay: 42.779 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-07-09 20:33:33

End at: 2018-07-09 20:34:03

Local clock offset: -2.618 ms

Remote clock offset: 5.293 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.43 Mbit/s

95th percentile per-packet one-way delay: 43.401 ms

Loss rate: 0.00%

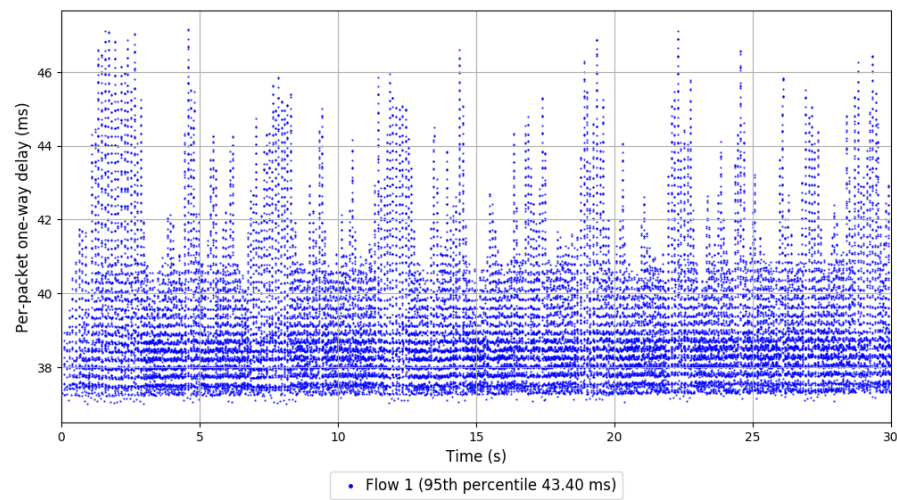
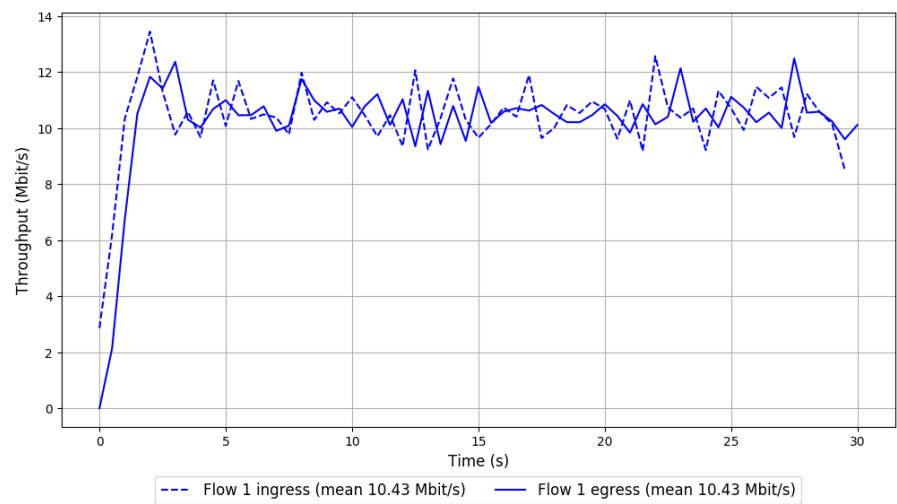
-- Flow 1:

Average throughput: 10.43 Mbit/s

95th percentile per-packet one-way delay: 43.401 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-07-09 20:56:39

End at: 2018-07-09 20:57:09

Local clock offset: -2.634 ms

Remote clock offset: 3.348 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.61 Mbit/s

95th percentile per-packet one-way delay: 43.828 ms

Loss rate: 0.00%

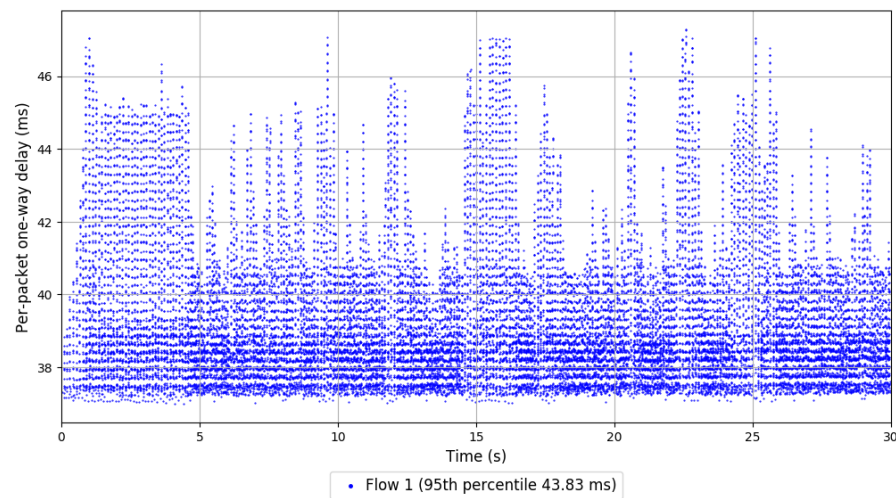
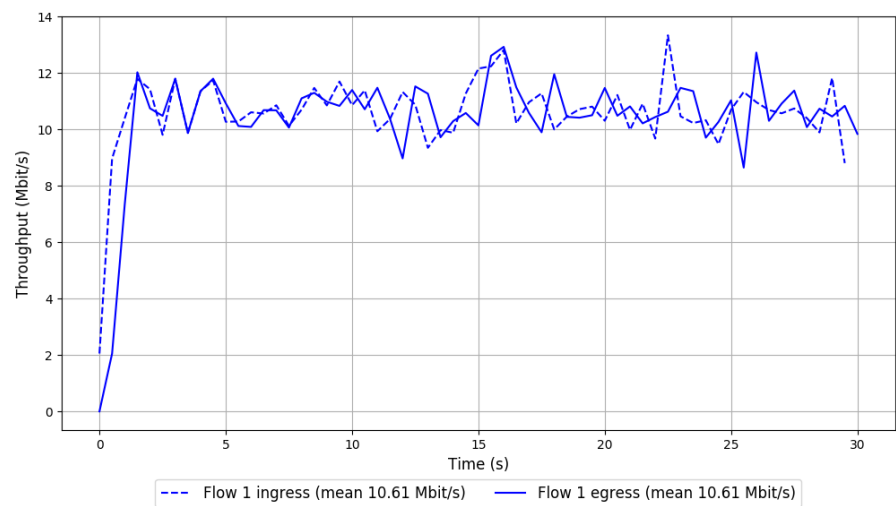
-- Flow 1:

Average throughput: 10.61 Mbit/s

95th percentile per-packet one-way delay: 43.828 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

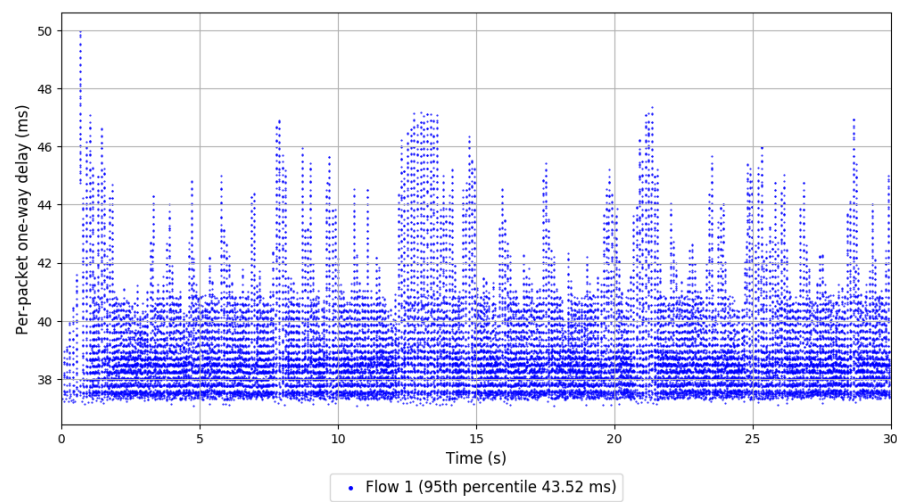
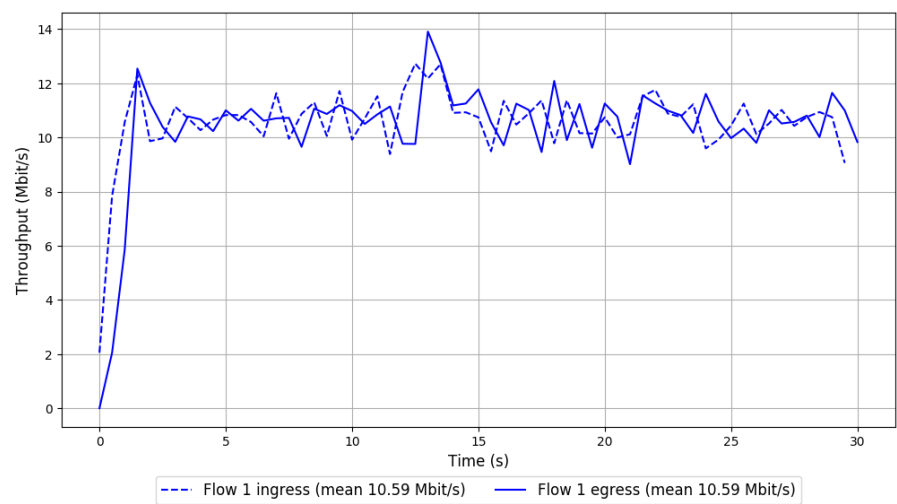


Run 4: Statistics of Sprout

Start at: 2018-07-09 21:19:31
End at: 2018-07-09 21:20:01
Local clock offset: -1.483 ms
Remote clock offset: 3.517 ms

Below is generated by plot.py at 2018-07-10 00:13:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 10.59 Mbit/s
95th percentile per-packet one-way delay: 43.519 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.59 Mbit/s
95th percentile per-packet one-way delay: 43.519 ms
Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-07-09 21:42:53

End at: 2018-07-09 21:43:23

Local clock offset: -0.767 ms

Remote clock offset: 3.633 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.49 Mbit/s

95th percentile per-packet one-way delay: 44.494 ms

Loss rate: 0.15%

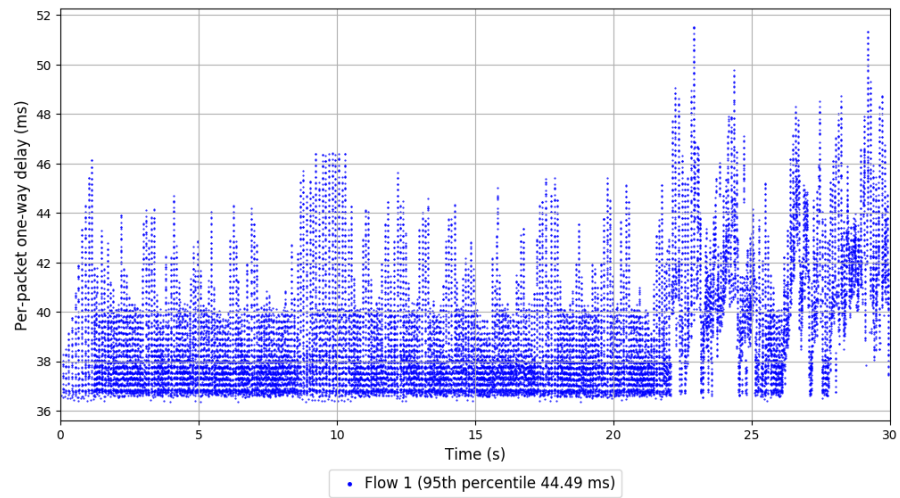
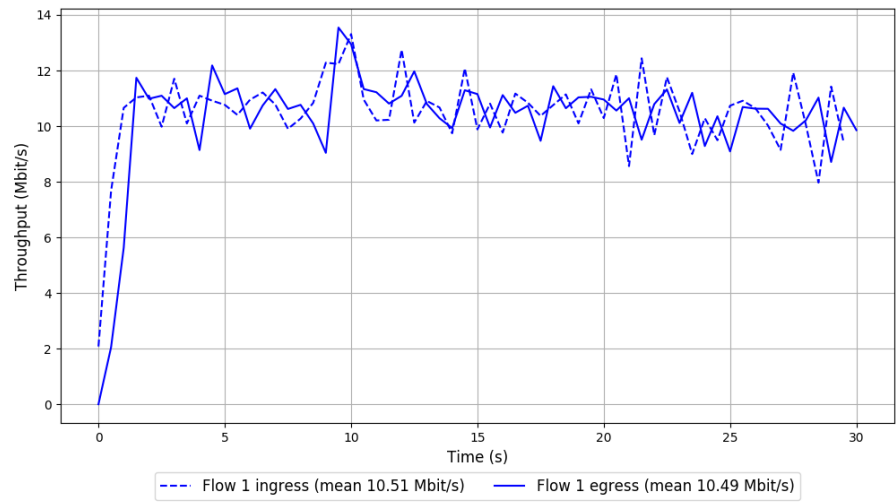
-- Flow 1:

Average throughput: 10.49 Mbit/s

95th percentile per-packet one-way delay: 44.494 ms

Loss rate: 0.15%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-07-09 22:06:26

End at: 2018-07-09 22:06:56

Local clock offset: -0.801 ms

Remote clock offset: 3.9 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.50 Mbit/s

95th percentile per-packet one-way delay: 42.123 ms

Loss rate: 0.00%

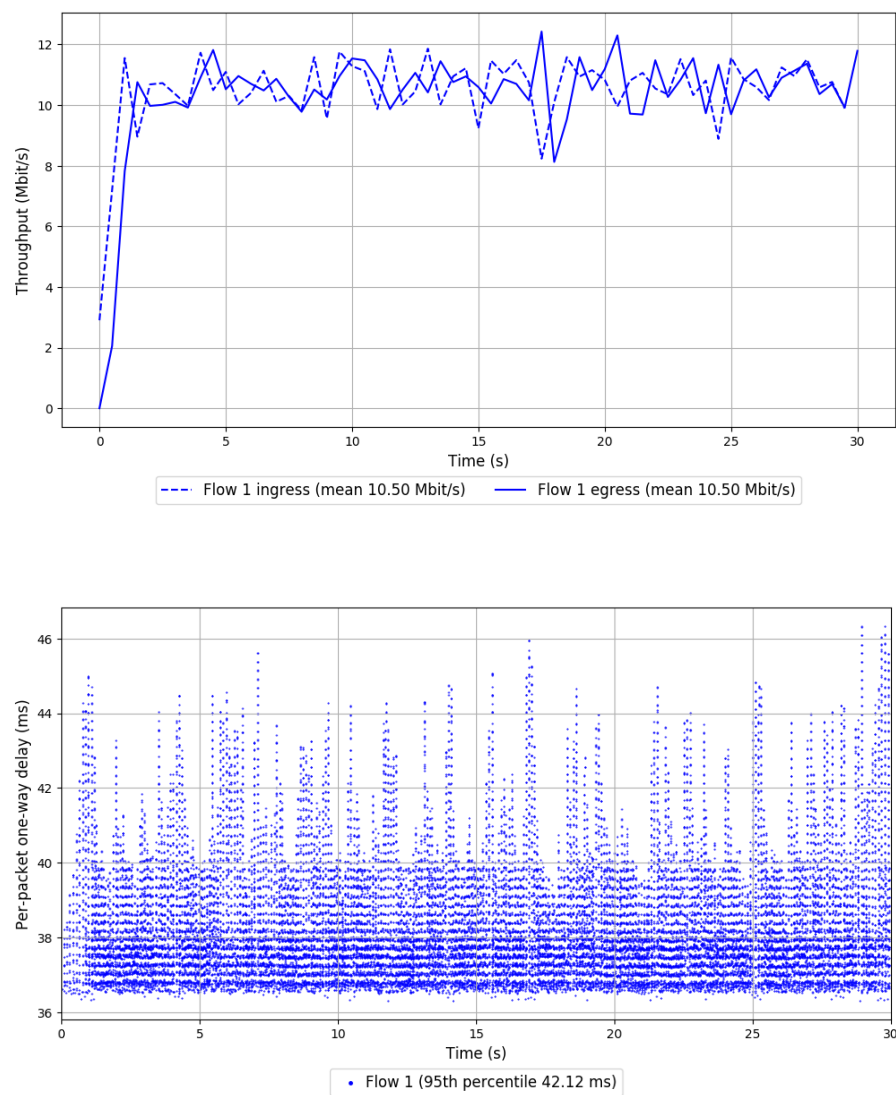
-- Flow 1:

Average throughput: 10.50 Mbit/s

95th percentile per-packet one-way delay: 42.123 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link

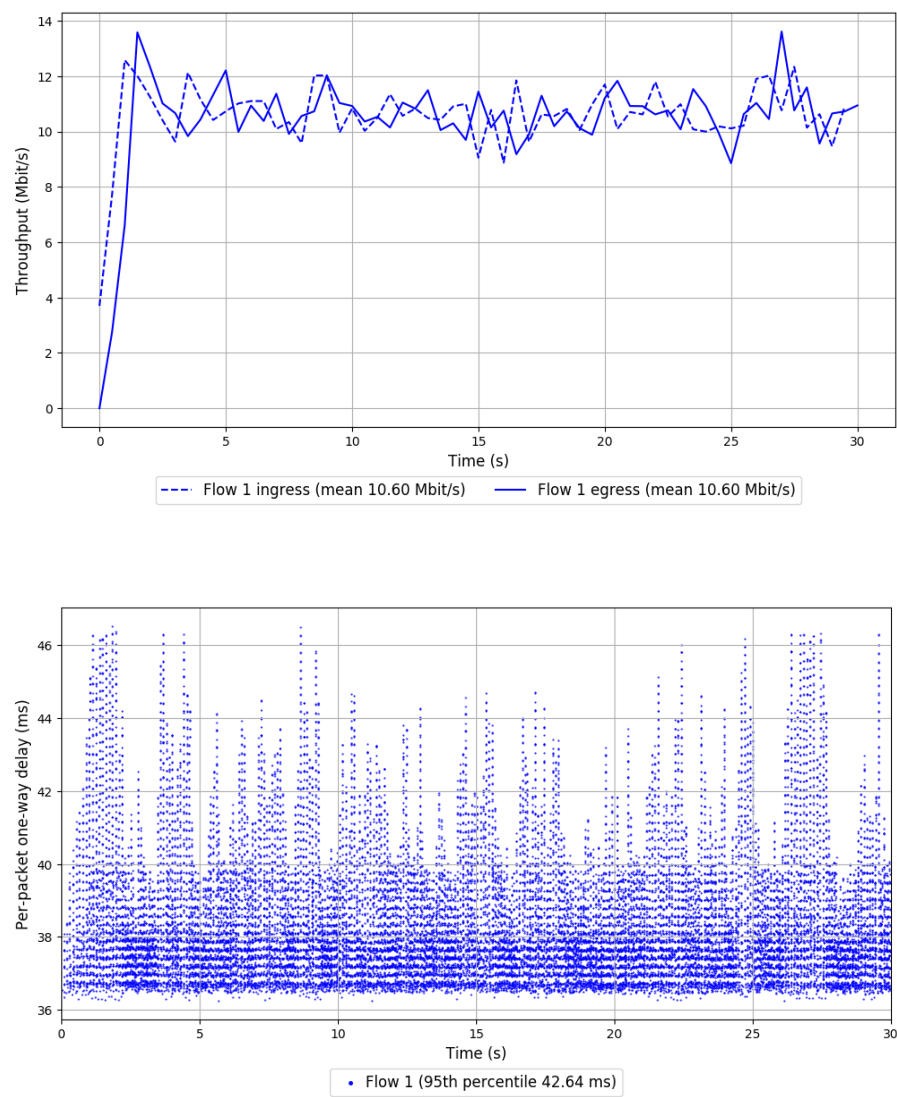


Run 7: Statistics of Sprout

Start at: 2018-07-09 22:29:36
End at: 2018-07-09 22:30:06
Local clock offset: -1.313 ms
Remote clock offset: 3.955 ms

Below is generated by plot.py at 2018-07-10 00:13:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 10.60 Mbit/s
95th percentile per-packet one-way delay: 42.638 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.60 Mbit/s
95th percentile per-packet one-way delay: 42.638 ms
Loss rate: 0.00%

Run 7: Report of Sprout — Data Link

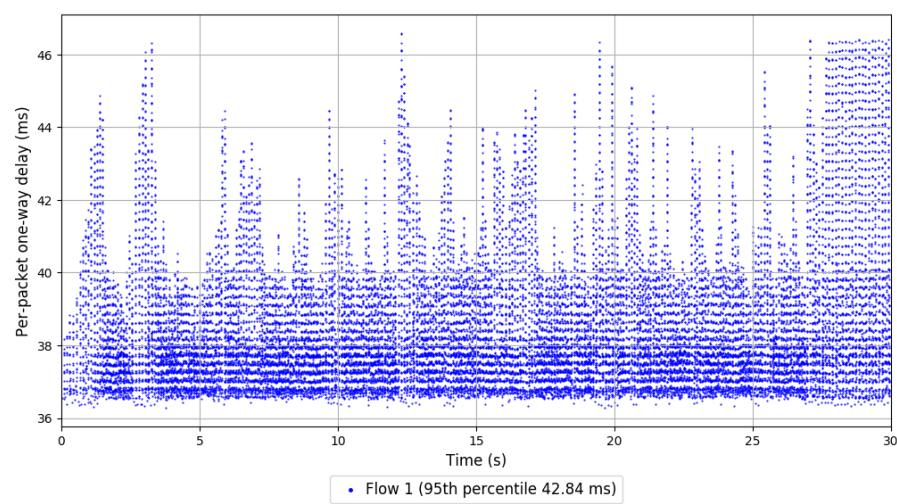
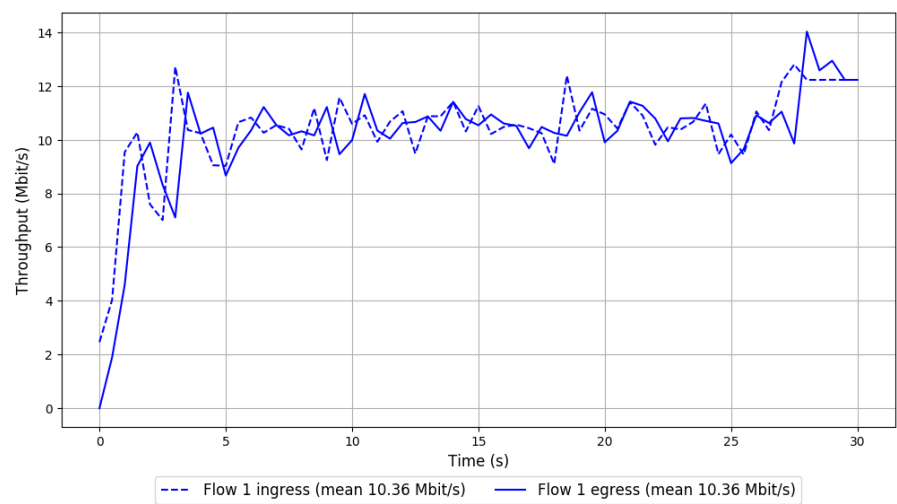


Run 8: Statistics of Sprout

Start at: 2018-07-09 22:53:54
End at: 2018-07-09 22:54:24
Local clock offset: -1.546 ms
Remote clock offset: 3.59 ms

Below is generated by plot.py at 2018-07-10 00:13:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 10.36 Mbit/s
95th percentile per-packet one-way delay: 42.835 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 10.36 Mbit/s
95th percentile per-packet one-way delay: 42.835 ms
Loss rate: 0.02%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-07-09 23:18:05

End at: 2018-07-09 23:18:35

Local clock offset: -1.706 ms

Remote clock offset: 3.14 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.44 Mbit/s

95th percentile per-packet one-way delay: 43.064 ms

Loss rate: 0.05%

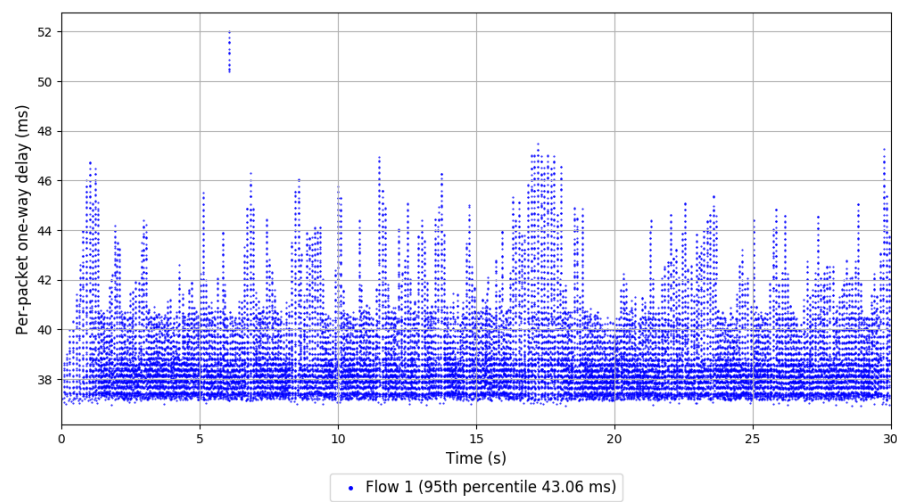
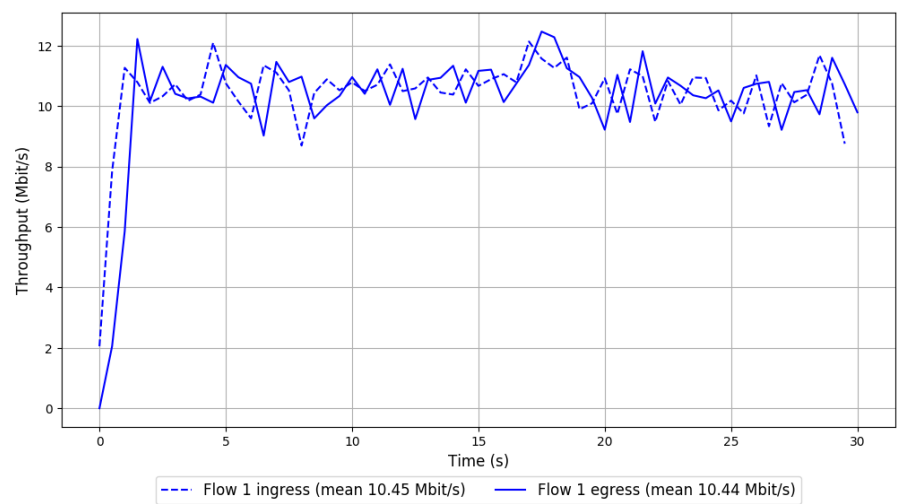
-- Flow 1:

Average throughput: 10.44 Mbit/s

95th percentile per-packet one-way delay: 43.064 ms

Loss rate: 0.05%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-07-09 23:42:34

End at: 2018-07-09 23:43:05

Local clock offset: -1.625 ms

Remote clock offset: 3.828 ms

Below is generated by plot.py at 2018-07-10 00:13:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.52 Mbit/s

95th percentile per-packet one-way delay: 42.916 ms

Loss rate: 0.00%

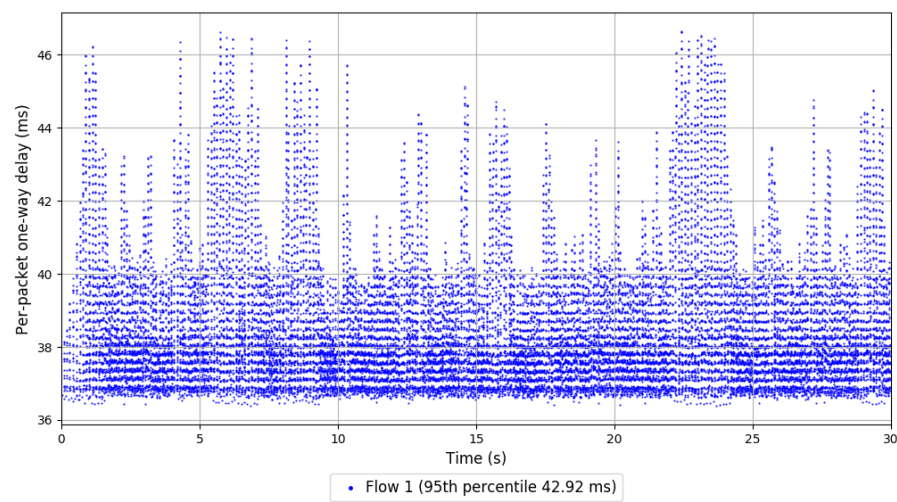
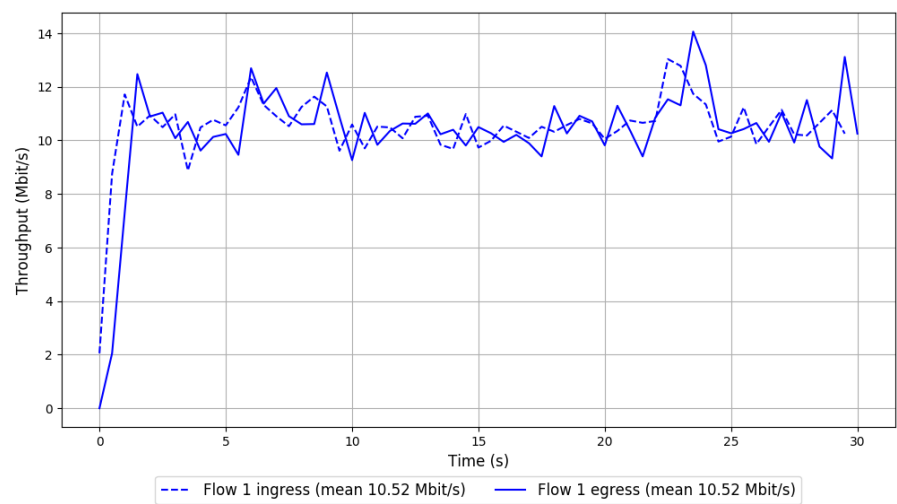
-- Flow 1:

Average throughput: 10.52 Mbit/s

95th percentile per-packet one-way delay: 42.916 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

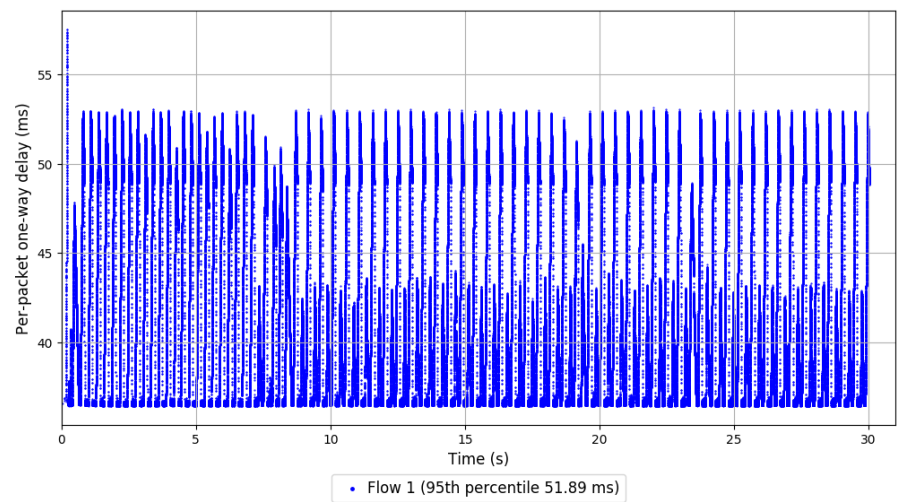
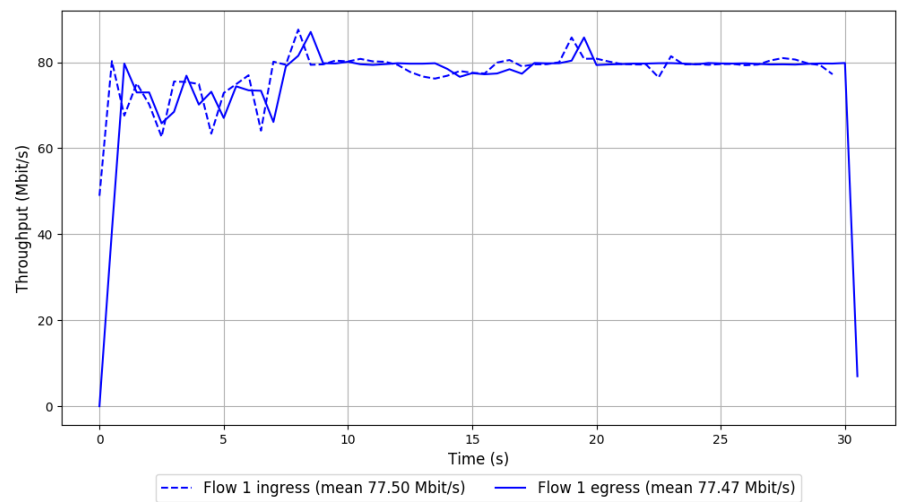


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-07-09 20:06:46
End at: 2018-07-09 20:07:16
Local clock offset: -2.036 ms
Remote clock offset: 5.253 ms

# Below is generated by plot.py at 2018-07-10 00:15:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.47 Mbit/s
95th percentile per-packet one-way delay: 51.890 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 77.47 Mbit/s
95th percentile per-packet one-way delay: 51.890 ms
Loss rate: 0.00%
```


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



Run 2: Statistics of TaoVA-100x

Start at: 2018-07-09 20:30:32

End at: 2018-07-09 20:31:02

Local clock offset: -2.382 ms

Remote clock offset: 5.814 ms

Below is generated by plot.py at 2018-07-10 00:15:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.41 Mbit/s

95th percentile per-packet one-way delay: 51.355 ms

Loss rate: 0.00%

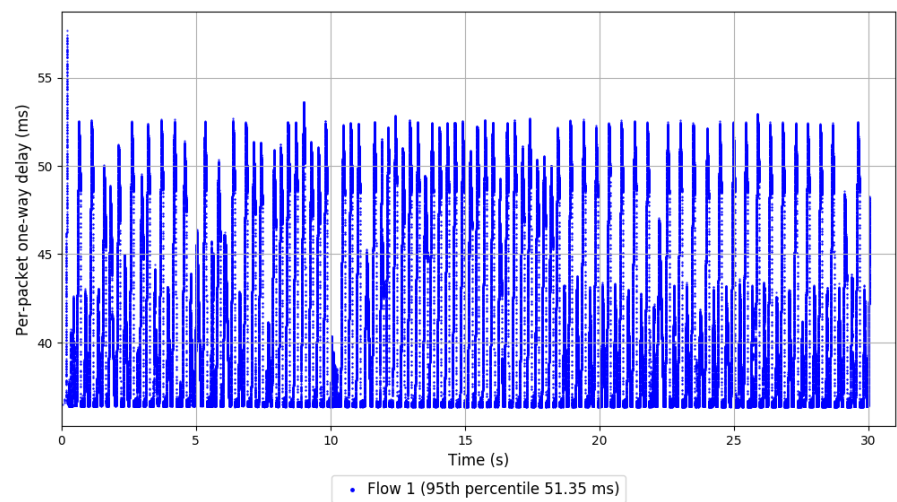
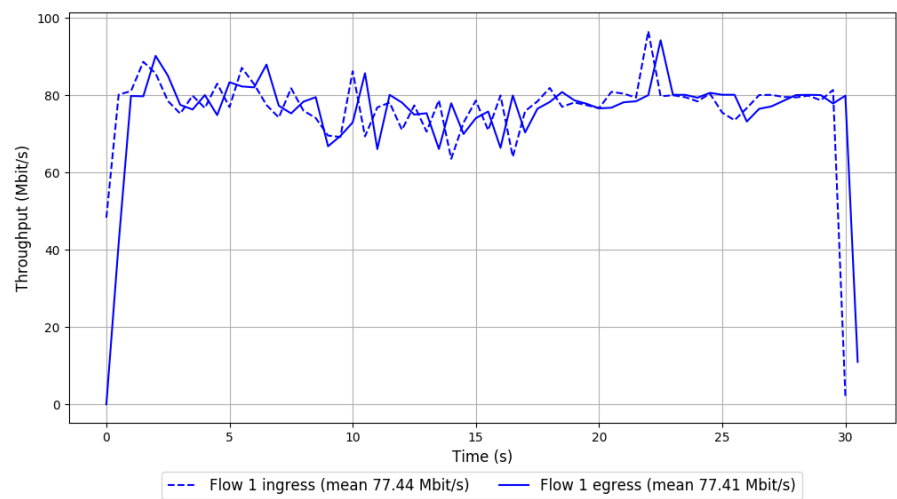
-- Flow 1:

Average throughput: 77.41 Mbit/s

95th percentile per-packet one-way delay: 51.355 ms

Loss rate: 0.00%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-07-09 20:53:47

End at: 2018-07-09 20:54:17

Local clock offset: -2.827 ms

Remote clock offset: 3.469 ms

Below is generated by plot.py at 2018-07-10 00:15:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.46 Mbit/s

95th percentile per-packet one-way delay: 52.465 ms

Loss rate: 0.07%

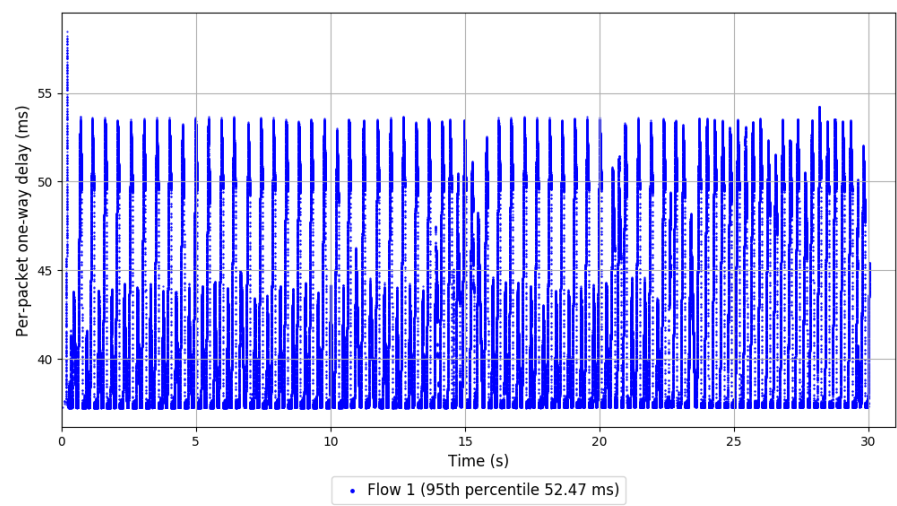
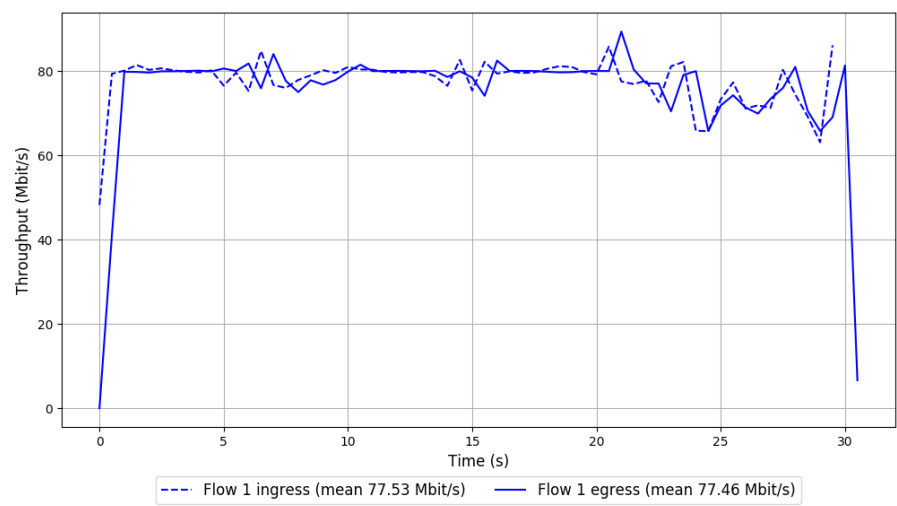
-- Flow 1:

Average throughput: 77.46 Mbit/s

95th percentile per-packet one-way delay: 52.465 ms

Loss rate: 0.07%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-07-09 21:16:50

End at: 2018-07-09 21:17:20

Local clock offset: -1.655 ms

Remote clock offset: 3.452 ms

Below is generated by plot.py at 2018-07-10 00:15:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.27 Mbit/s

95th percentile per-packet one-way delay: 51.862 ms

Loss rate: 0.01%

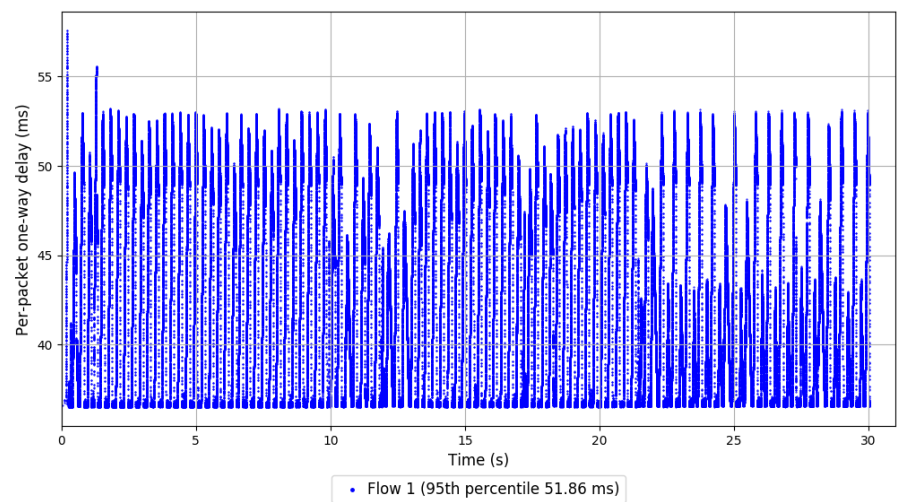
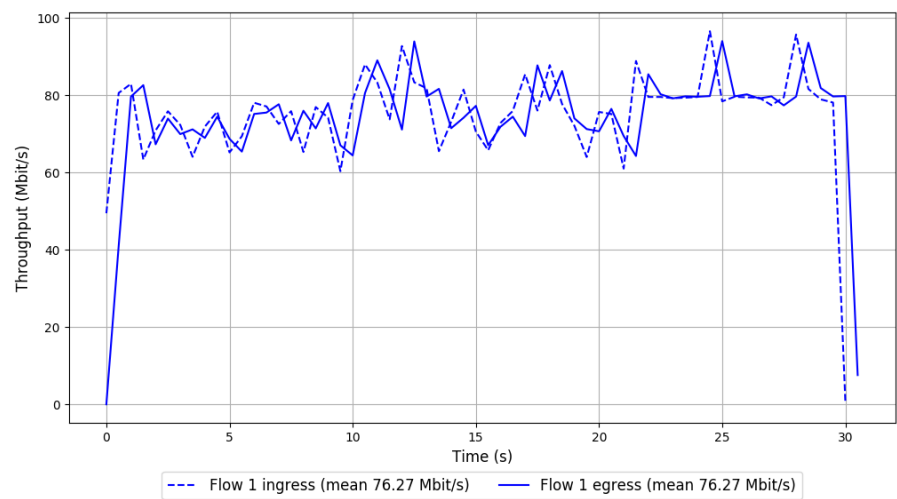
-- Flow 1:

Average throughput: 76.27 Mbit/s

95th percentile per-packet one-way delay: 51.862 ms

Loss rate: 0.01%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-07-09 21:40:01

End at: 2018-07-09 21:40:31

Local clock offset: -0.707 ms

Remote clock offset: 3.56 ms

Below is generated by plot.py at 2018-07-10 00:15:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.04 Mbit/s

95th percentile per-packet one-way delay: 52.473 ms

Loss rate: 0.00%

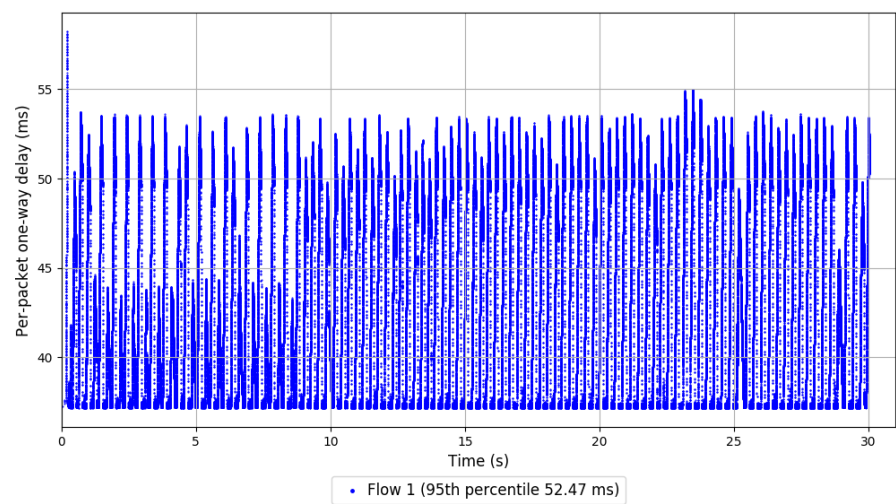
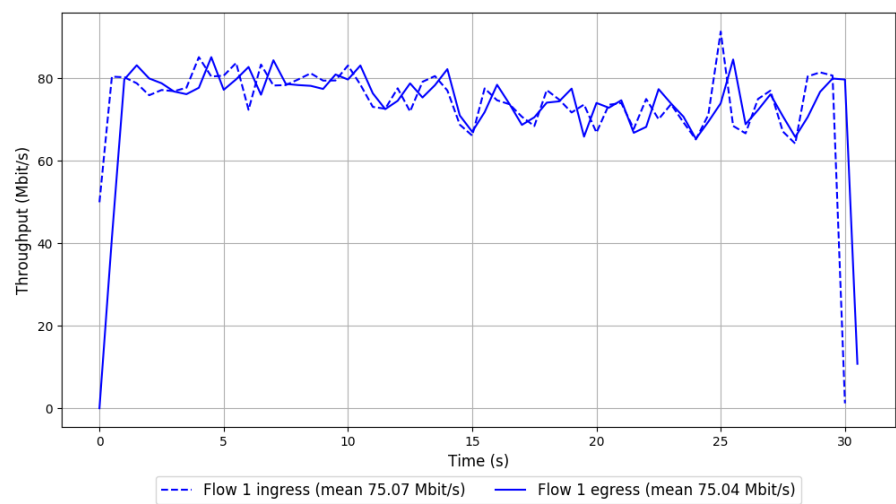
-- Flow 1:

Average throughput: 75.04 Mbit/s

95th percentile per-packet one-way delay: 52.473 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-07-09 22:03:35

End at: 2018-07-09 22:04:05

Local clock offset: -0.768 ms

Remote clock offset: 3.928 ms

Below is generated by plot.py at 2018-07-10 00:15:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.74 Mbit/s

95th percentile per-packet one-way delay: 51.630 ms

Loss rate: 0.01%

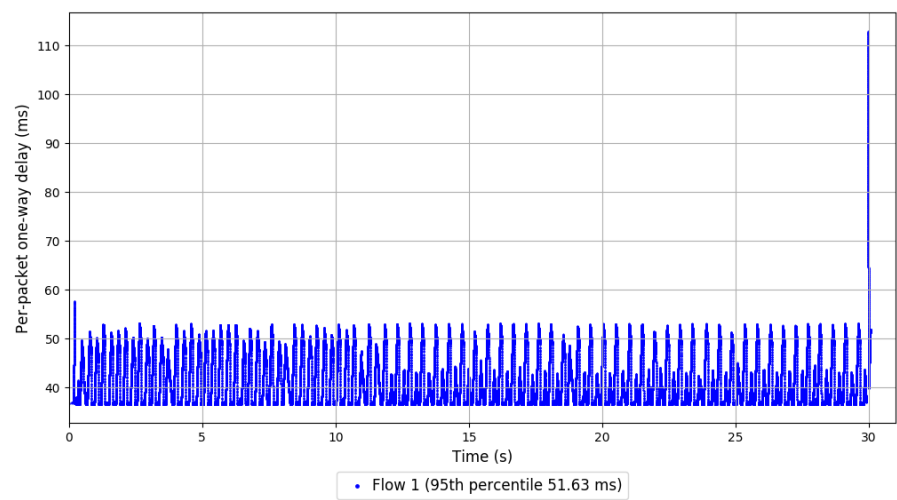
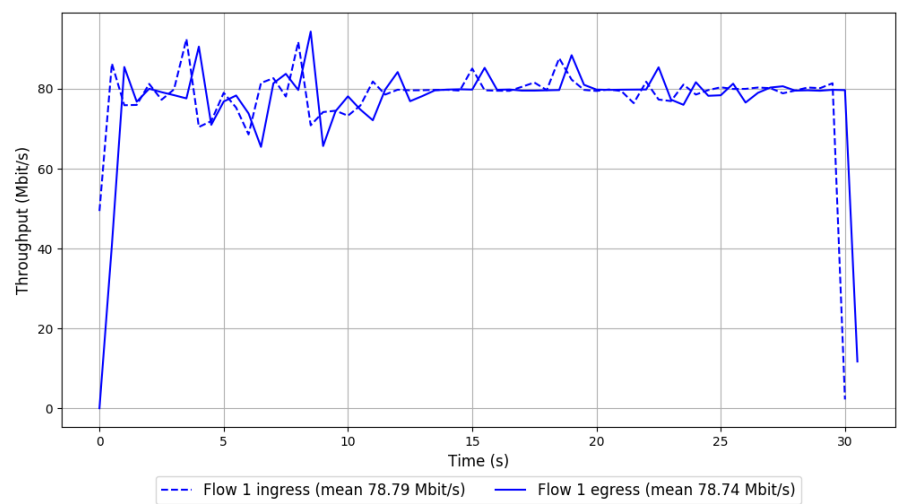
-- Flow 1:

Average throughput: 78.74 Mbit/s

95th percentile per-packet one-way delay: 51.630 ms

Loss rate: 0.01%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-07-09 22:26:48

End at: 2018-07-09 22:27:18

Local clock offset: -1.24 ms

Remote clock offset: 3.977 ms

Below is generated by plot.py at 2018-07-10 00:15:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.61 Mbit/s

95th percentile per-packet one-way delay: 51.845 ms

Loss rate: 0.07%

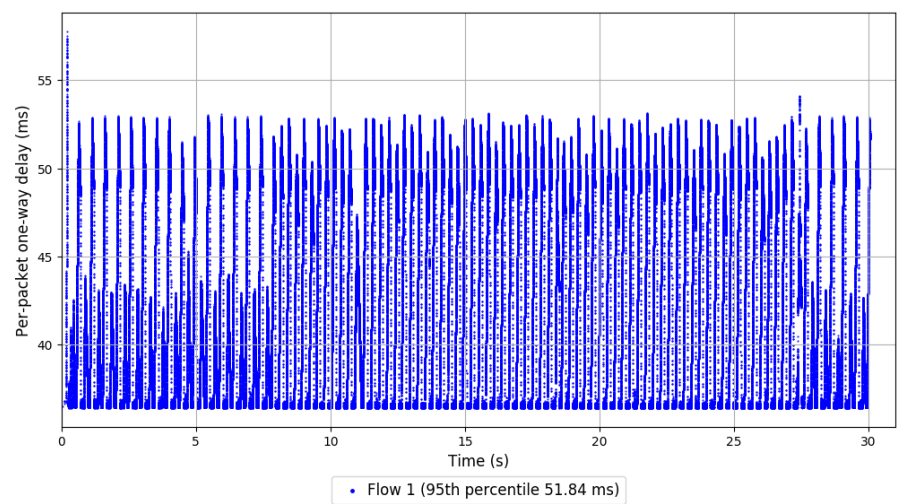
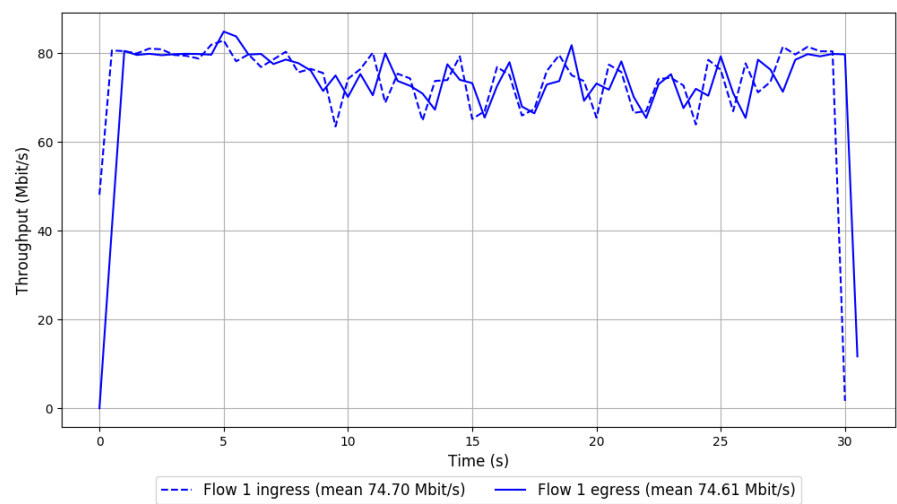
-- Flow 1:

Average throughput: 74.61 Mbit/s

95th percentile per-packet one-way delay: 51.845 ms

Loss rate: 0.07%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-07-09 22:50:51

End at: 2018-07-09 22:51:21

Local clock offset: -1.522 ms

Remote clock offset: 3.747 ms

Below is generated by plot.py at 2018-07-10 00:15:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.68 Mbit/s

95th percentile per-packet one-way delay: 51.882 ms

Loss rate: 0.00%

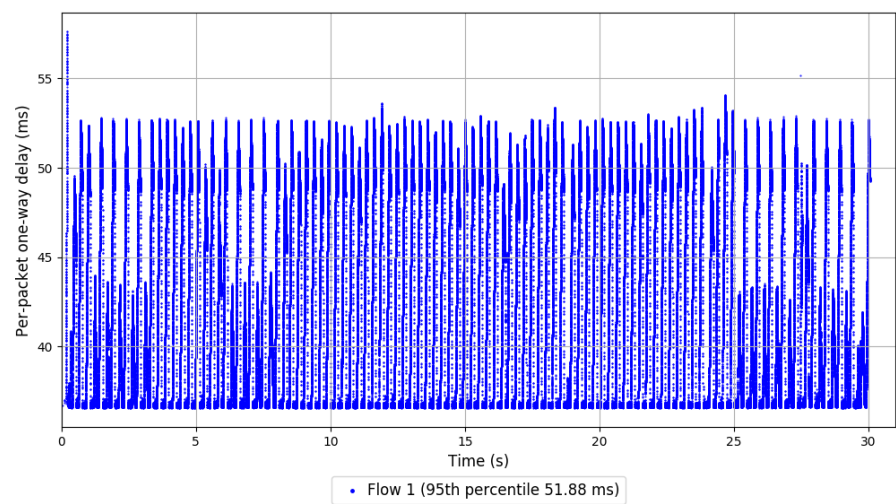
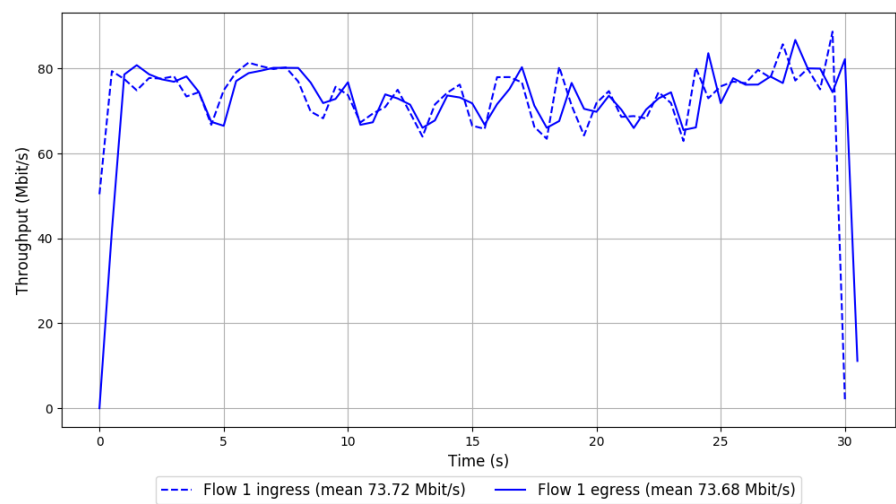
-- Flow 1:

Average throughput: 73.68 Mbit/s

95th percentile per-packet one-way delay: 51.882 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-07-09 23:15:00

End at: 2018-07-09 23:15:30

Local clock offset: -1.686 ms

Remote clock offset: 3.198 ms

Below is generated by plot.py at 2018-07-10 00:17:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.05 Mbit/s

95th percentile per-packet one-way delay: 51.686 ms

Loss rate: 0.09%

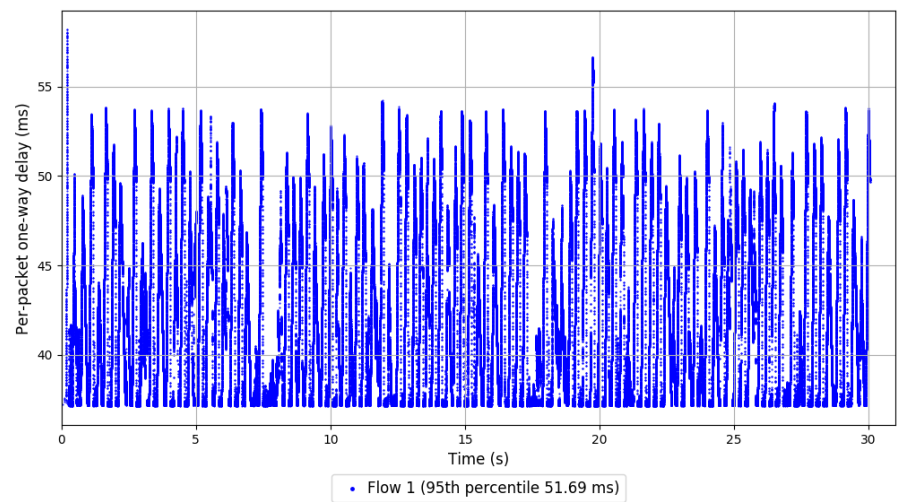
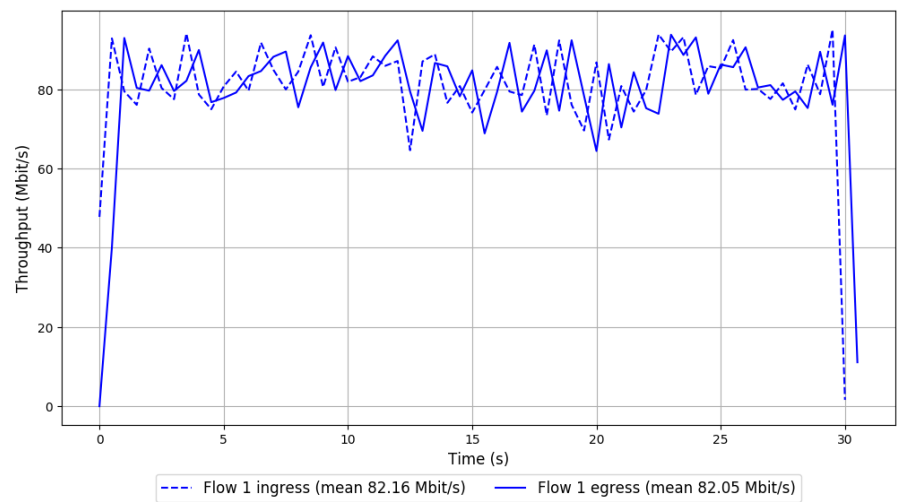
-- Flow 1:

Average throughput: 82.05 Mbit/s

95th percentile per-packet one-way delay: 51.686 ms

Loss rate: 0.09%

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

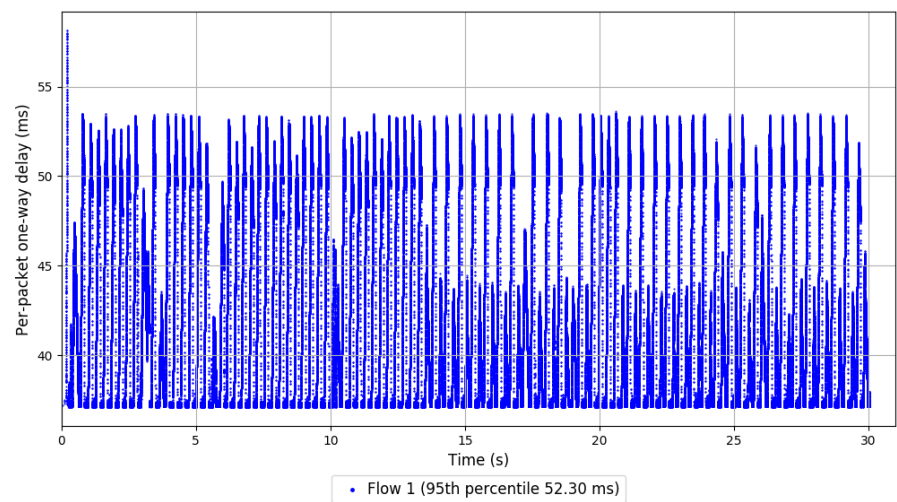
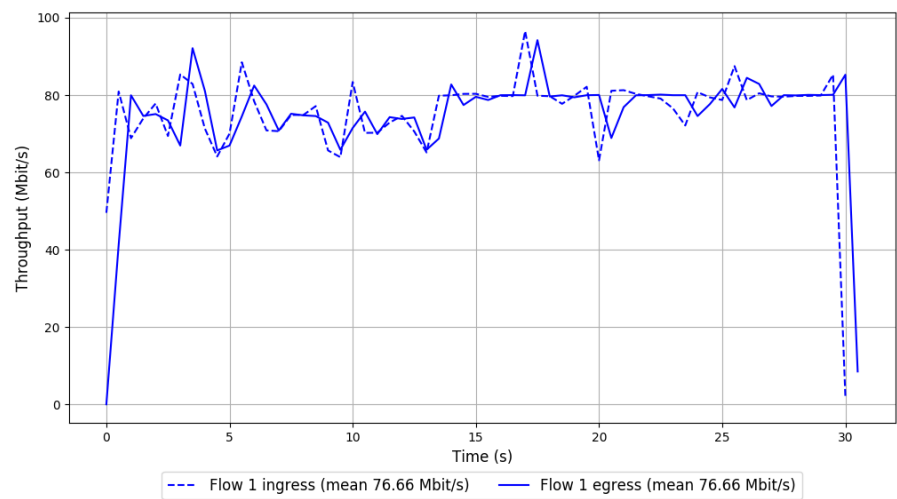


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-07-09 23:39:35
End at: 2018-07-09 23:40:05
Local clock offset: -1.617 ms
Remote clock offset: 3.694 ms

# Below is generated by plot.py at 2018-07-10 00:17:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.66 Mbit/s
95th percentile per-packet one-way delay: 52.304 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.66 Mbit/s
95th percentile per-packet one-way delay: 52.304 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-07-09 20:10:49

End at: 2018-07-09 20:11:19

Local clock offset: -2.073 ms

Remote clock offset: 5.348 ms

Below is generated by plot.py at 2018-07-10 00:17:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.44 Mbit/s

95th percentile per-packet one-way delay: 43.912 ms

Loss rate: 0.01%

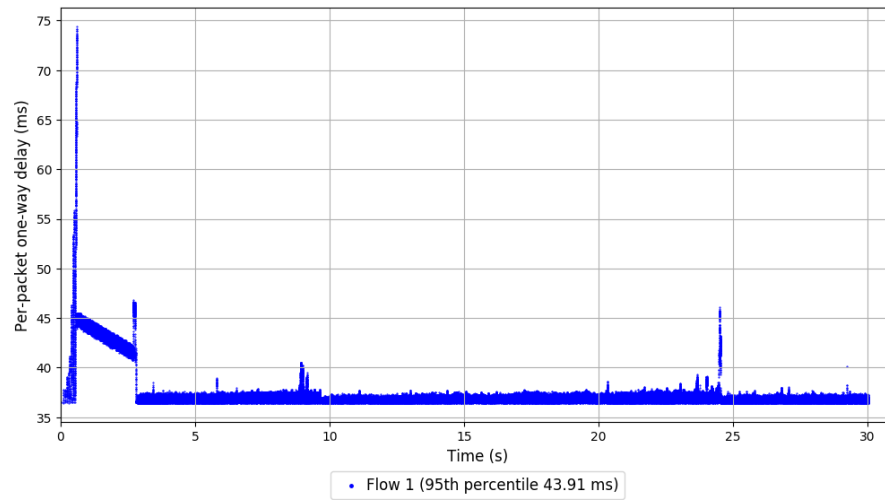
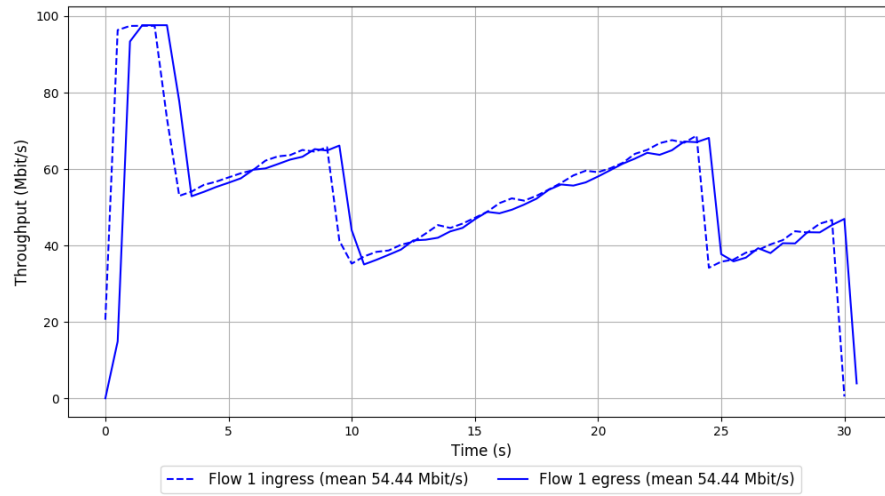
-- Flow 1:

Average throughput: 54.44 Mbit/s

95th percentile per-packet one-way delay: 43.912 ms

Loss rate: 0.01%

Run 1: Report of TCP Vegas — Data Link

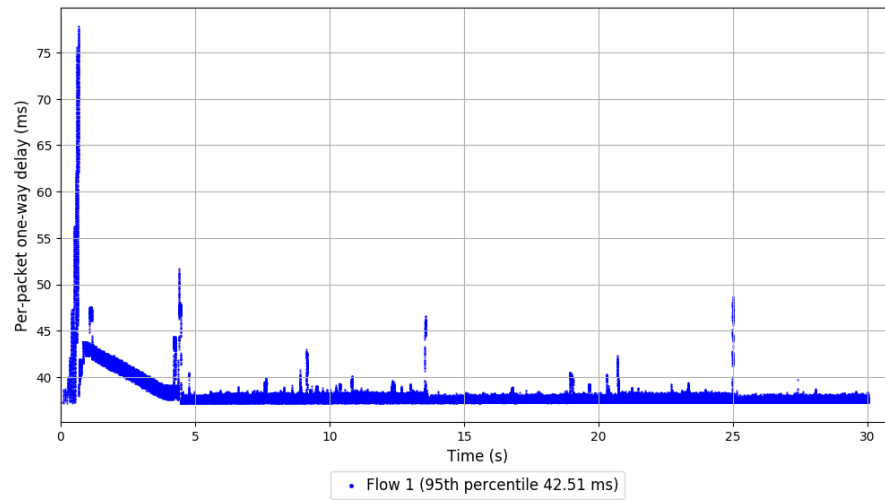
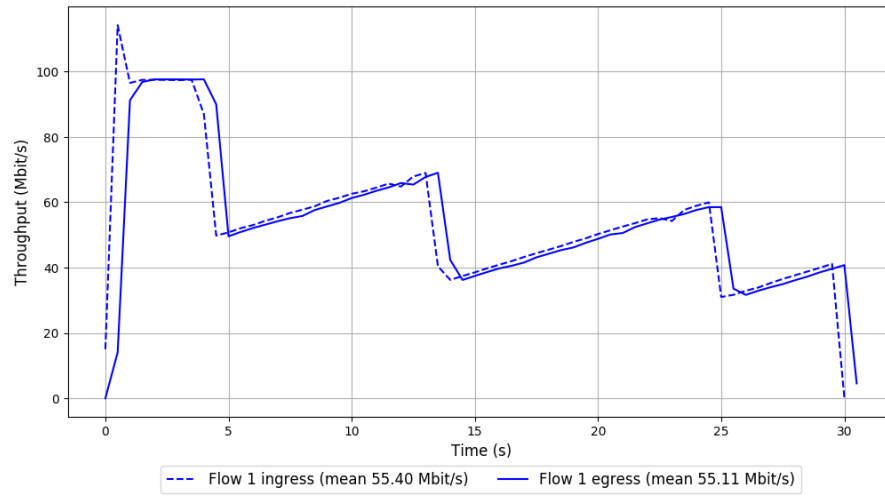


Run 2: Statistics of TCP Vegas

Start at: 2018-07-09 20:34:50
End at: 2018-07-09 20:35:20
Local clock offset: -2.605 ms
Remote clock offset: 5.111 ms

Below is generated by plot.py at 2018-07-10 00:17:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 55.11 Mbit/s
95th percentile per-packet one-way delay: 42.510 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 55.11 Mbit/s
95th percentile per-packet one-way delay: 42.510 ms
Loss rate: 0.51%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-07-09 20:58:00

End at: 2018-07-09 20:58:30

Local clock offset: -2.562 ms

Remote clock offset: 3.342 ms

Below is generated by plot.py at 2018-07-10 00:17:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.57 Mbit/s

95th percentile per-packet one-way delay: 42.690 ms

Loss rate: 0.44%

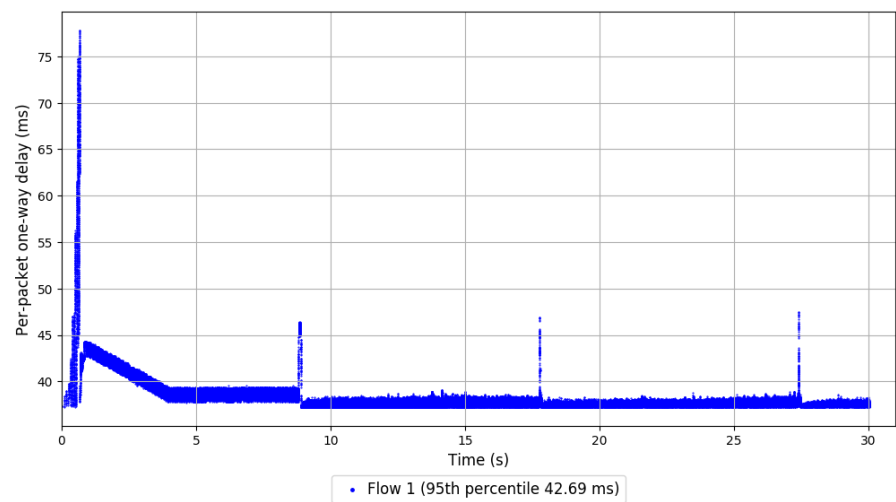
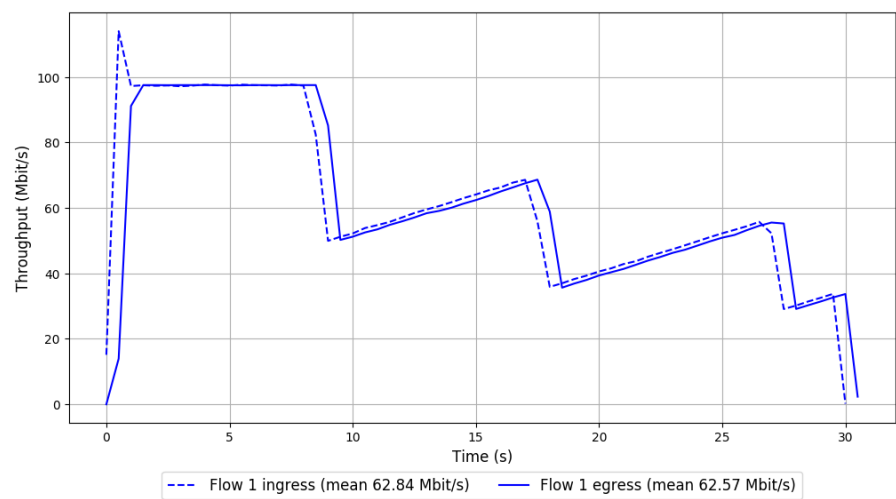
-- Flow 1:

Average throughput: 62.57 Mbit/s

95th percentile per-packet one-way delay: 42.690 ms

Loss rate: 0.44%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-07-09 21:20:47

End at: 2018-07-09 21:21:17

Local clock offset: -1.325 ms

Remote clock offset: 3.568 ms

Below is generated by plot.py at 2018-07-10 00:17:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.07 Mbit/s

95th percentile per-packet one-way delay: 41.153 ms

Loss rate: 0.27%

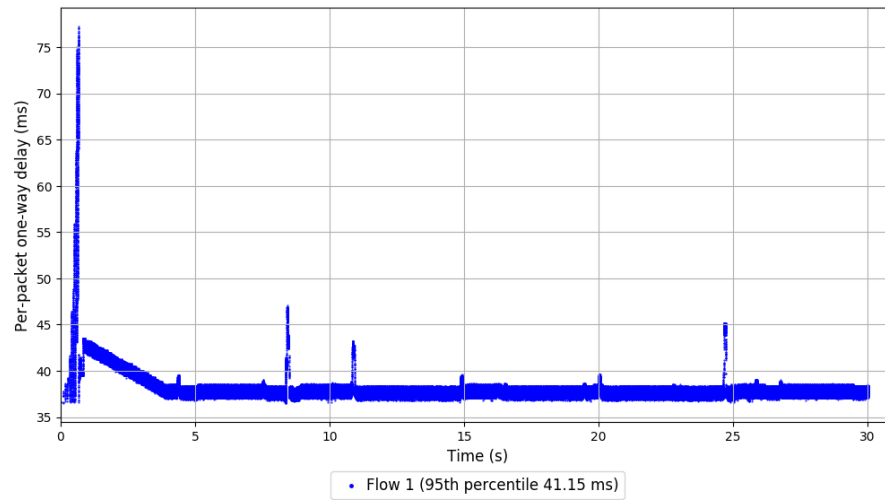
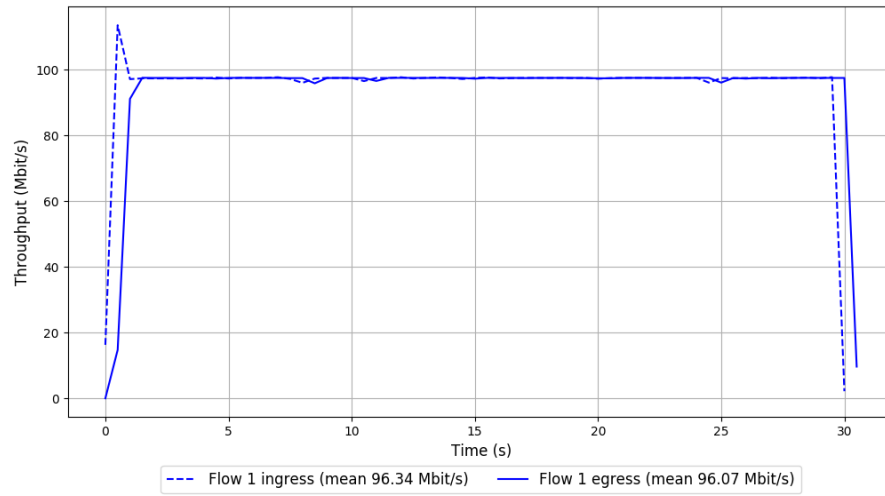
-- Flow 1:

Average throughput: 96.07 Mbit/s

95th percentile per-packet one-way delay: 41.153 ms

Loss rate: 0.27%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-07-09 21:44:10

End at: 2018-07-09 21:44:40

Local clock offset: -0.688 ms

Remote clock offset: 3.675 ms

Below is generated by plot.py at 2018-07-10 00:17:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.98 Mbit/s

95th percentile per-packet one-way delay: 42.474 ms

Loss rate: 0.27%

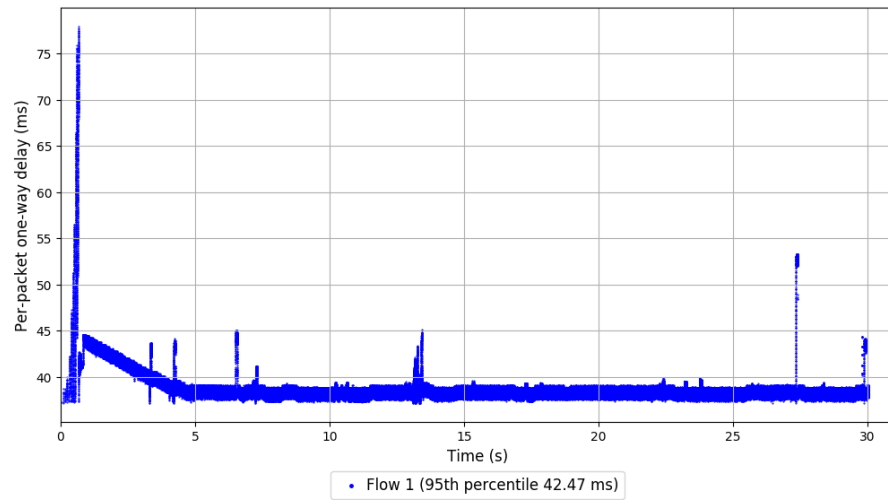
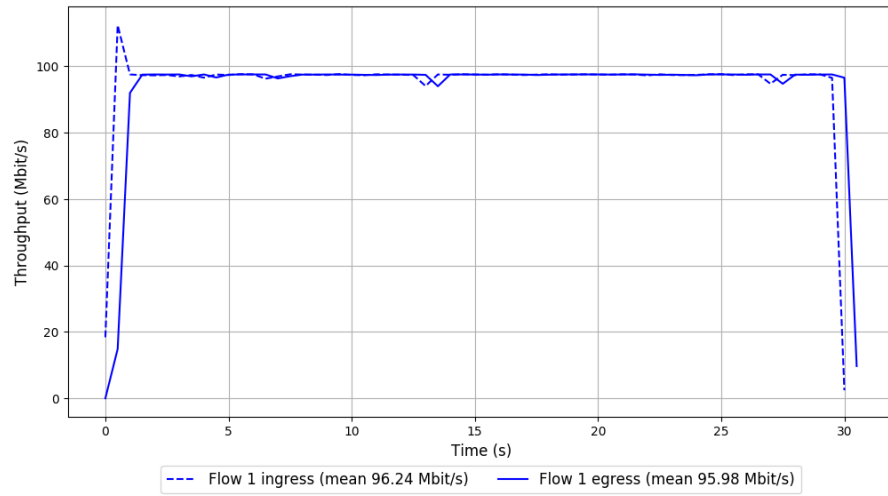
-- Flow 1:

Average throughput: 95.98 Mbit/s

95th percentile per-packet one-way delay: 42.474 ms

Loss rate: 0.27%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-07-09 22:07:43

End at: 2018-07-09 22:08:13

Local clock offset: -0.83 ms

Remote clock offset: 3.827 ms

Below is generated by plot.py at 2018-07-10 00:17:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.03 Mbit/s

95th percentile per-packet one-way delay: 41.649 ms

Loss rate: 0.27%

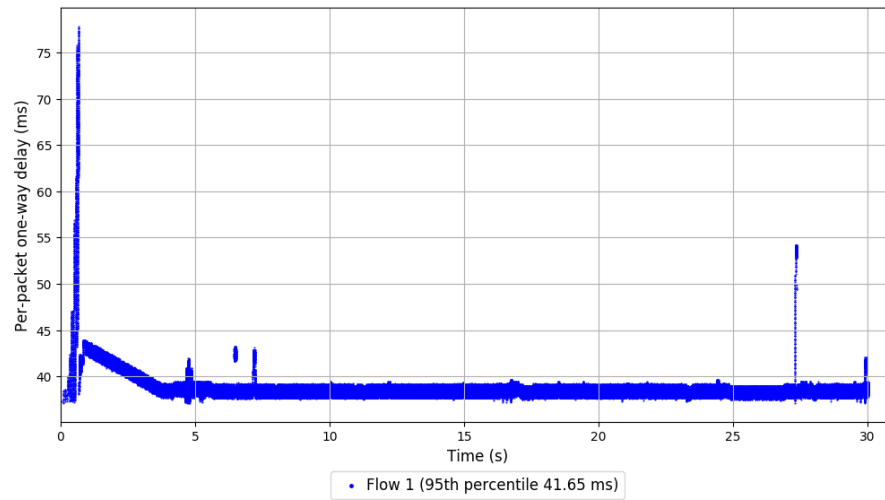
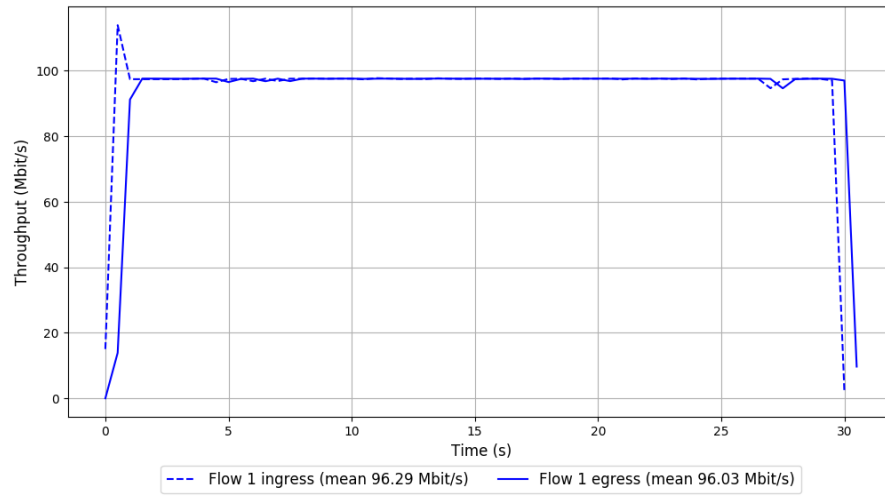
-- Flow 1:

Average throughput: 96.03 Mbit/s

95th percentile per-packet one-way delay: 41.649 ms

Loss rate: 0.27%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-07-09 22:30:52

End at: 2018-07-09 22:31:22

Local clock offset: -1.462 ms

Remote clock offset: 3.978 ms

Below is generated by plot.py at 2018-07-10 00:17:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.89 Mbit/s

95th percentile per-packet one-way delay: 41.514 ms

Loss rate: 0.31%

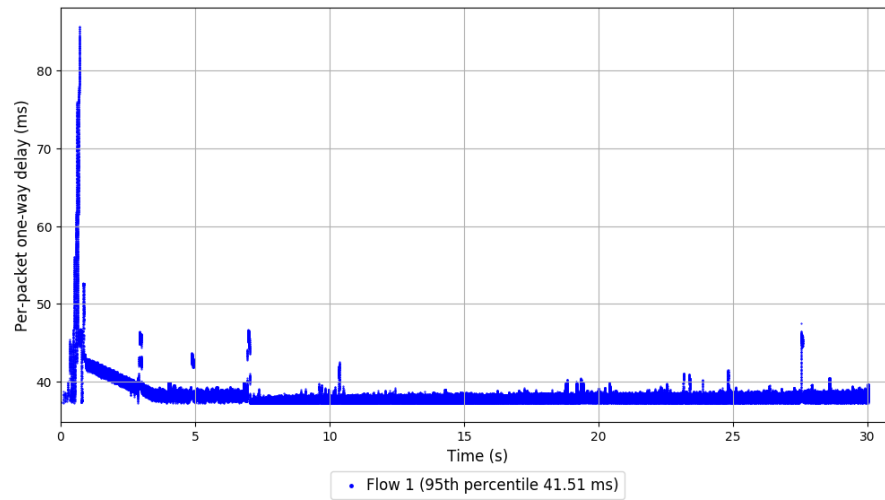
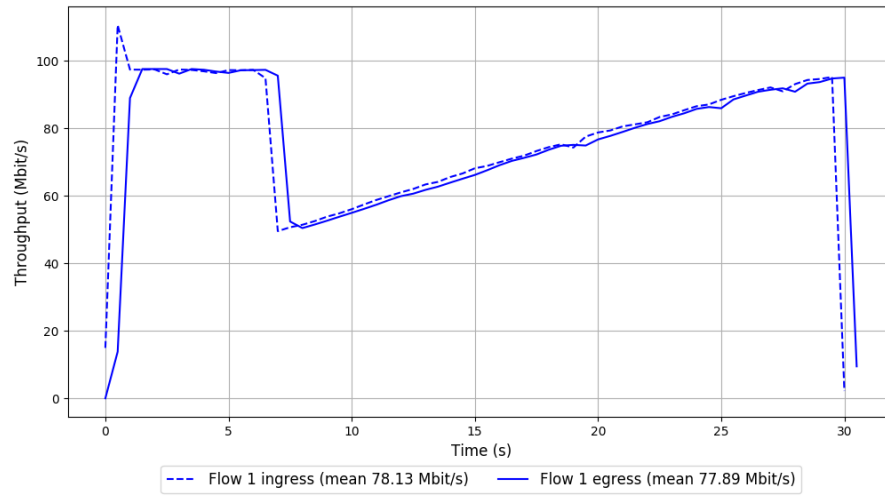
-- Flow 1:

Average throughput: 77.89 Mbit/s

95th percentile per-packet one-way delay: 41.514 ms

Loss rate: 0.31%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-07-09 22:55:11

End at: 2018-07-09 22:55:41

Local clock offset: -1.547 ms

Remote clock offset: 3.534 ms

Below is generated by plot.py at 2018-07-10 00:17:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.09 Mbit/s

95th percentile per-packet one-way delay: 43.301 ms

Loss rate: 0.43%

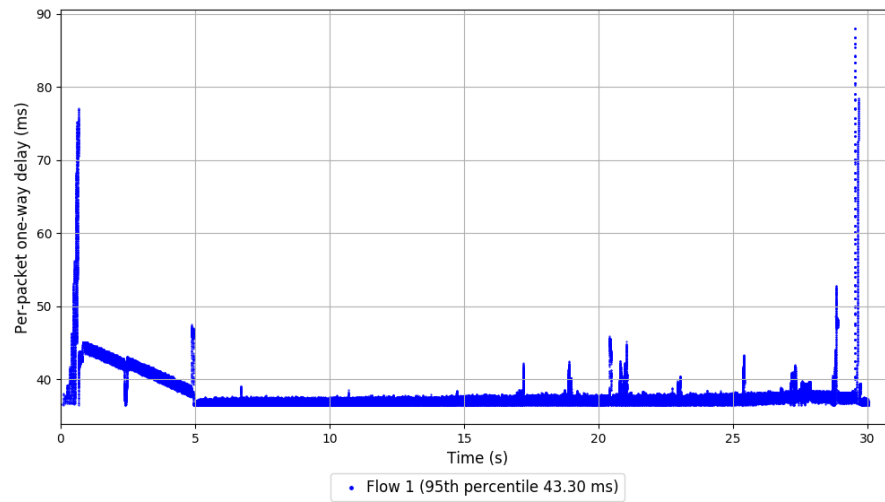
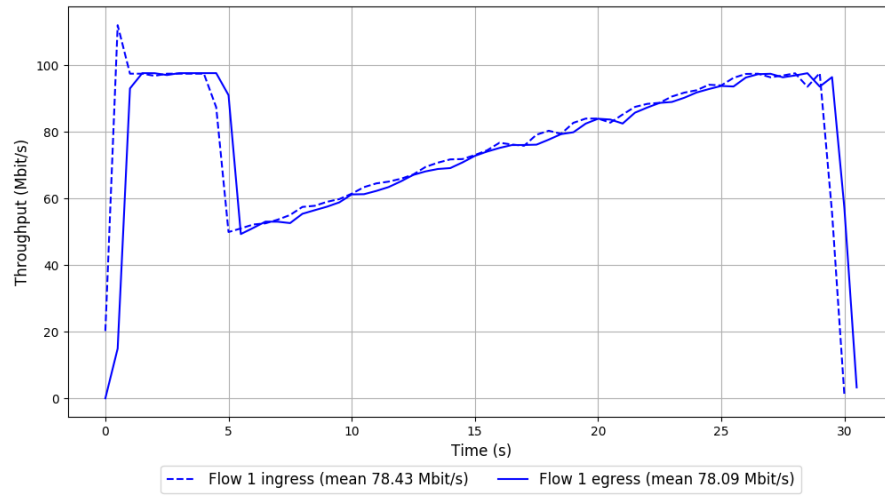
-- Flow 1:

Average throughput: 78.09 Mbit/s

95th percentile per-packet one-way delay: 43.301 ms

Loss rate: 0.43%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-07-09 23:19:22

End at: 2018-07-09 23:19:52

Local clock offset: -1.712 ms

Remote clock offset: 3.159 ms

Below is generated by plot.py at 2018-07-10 00:17:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.21 Mbit/s

95th percentile per-packet one-way delay: 38.280 ms

Loss rate: 0.84%

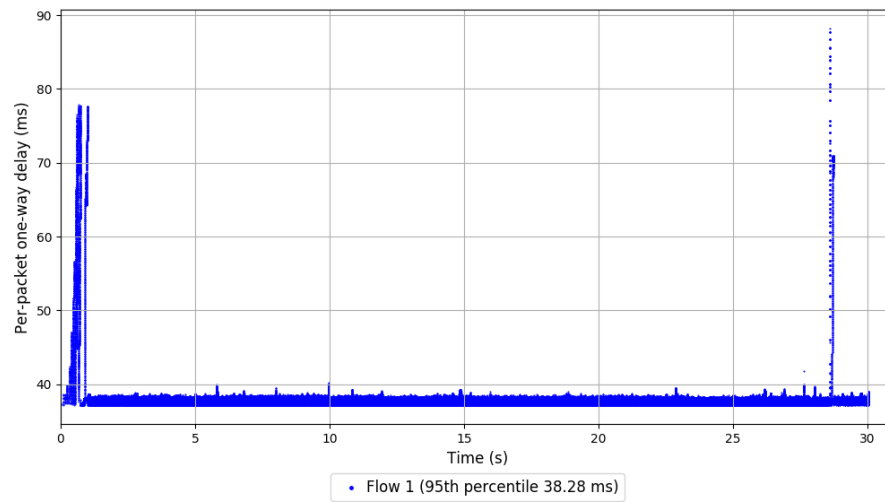
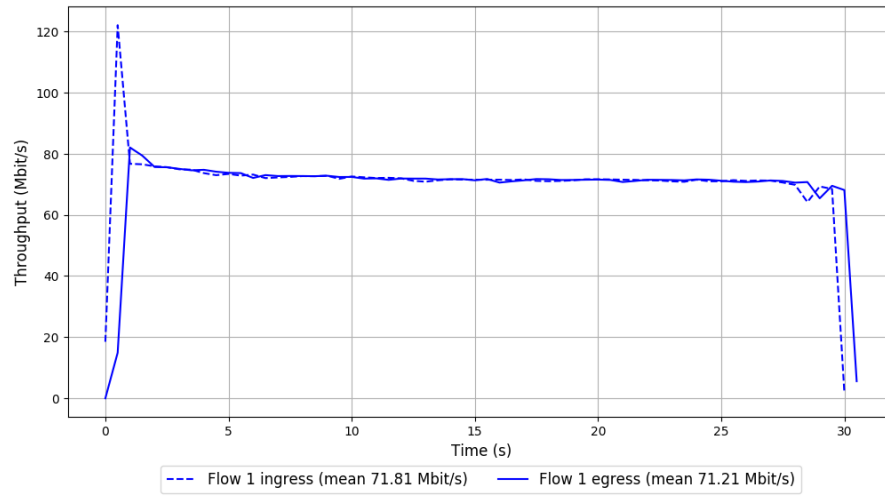
-- Flow 1:

Average throughput: 71.21 Mbit/s

95th percentile per-packet one-way delay: 38.280 ms

Loss rate: 0.84%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-07-09 23:43:52

End at: 2018-07-09 23:44:22

Local clock offset: -1.605 ms

Remote clock offset: 3.739 ms

Below is generated by plot.py at 2018-07-10 00:17:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.71 Mbit/s

95th percentile per-packet one-way delay: 43.020 ms

Loss rate: 0.27%

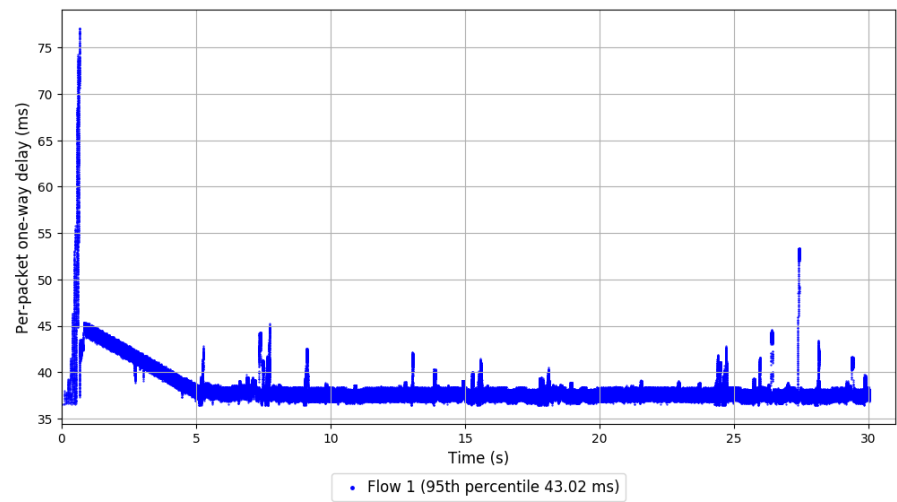
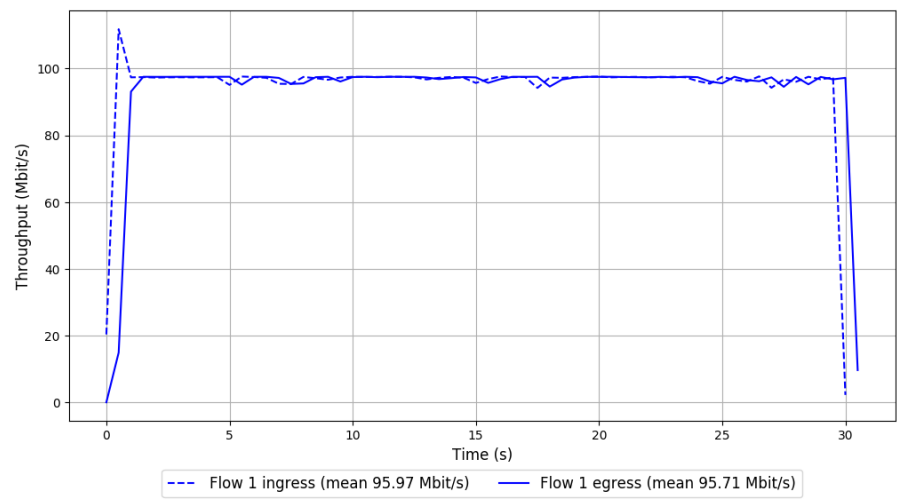
-- Flow 1:

Average throughput: 95.71 Mbit/s

95th percentile per-packet one-way delay: 43.020 ms

Loss rate: 0.27%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-07-09 20:18:54

End at: 2018-07-09 20:19:24

Local clock offset: -2.039 ms

Remote clock offset: 5.536 ms

Below is generated by plot.py at 2018-07-10 00:17:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.12 Mbit/s

95th percentile per-packet one-way delay: 71.900 ms

Loss rate: 23.10%

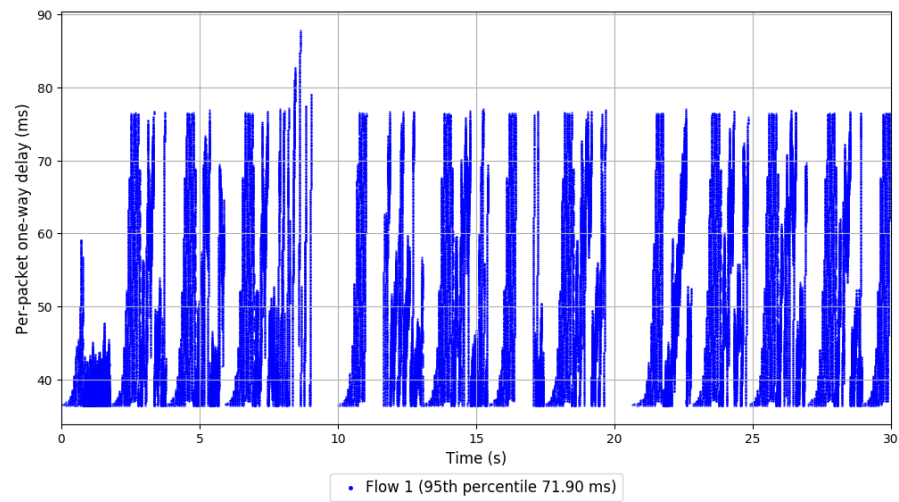
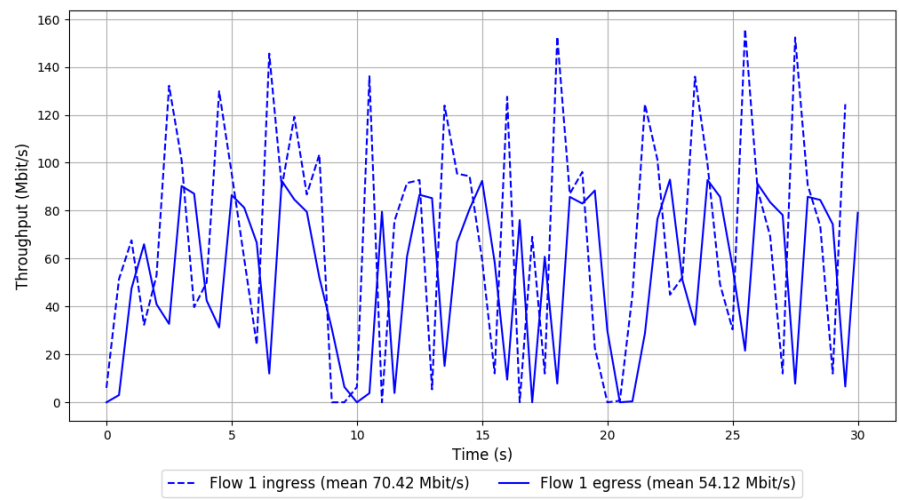
-- Flow 1:

Average throughput: 54.12 Mbit/s

95th percentile per-packet one-way delay: 71.900 ms

Loss rate: 23.10%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-07-09 20:42:57

End at: 2018-07-09 20:43:27

Local clock offset: -3.099 ms

Remote clock offset: 4.105 ms

Below is generated by plot.py at 2018-07-10 00:17:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.40 Mbit/s

95th percentile per-packet one-way delay: 72.611 ms

Loss rate: 21.70%

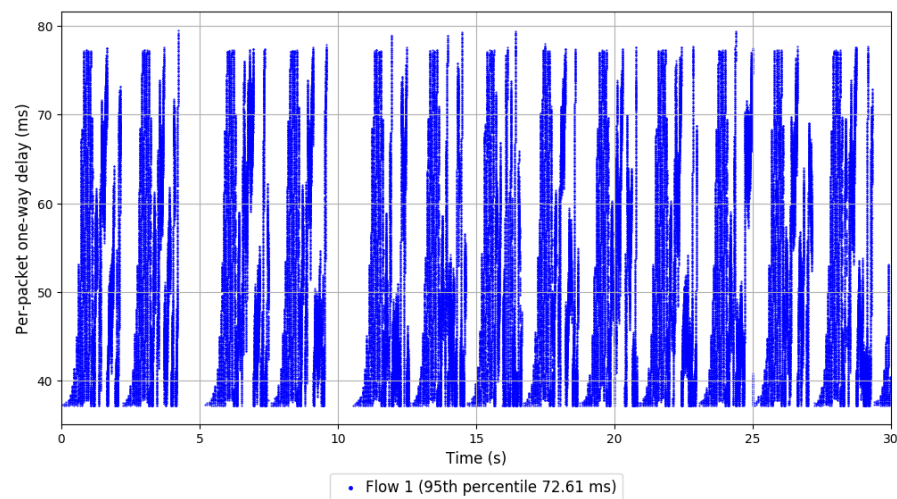
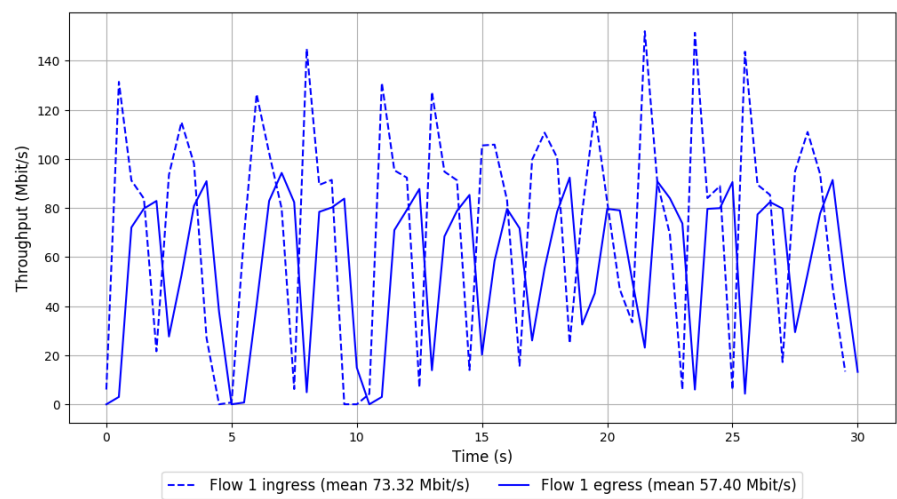
-- Flow 1:

Average throughput: 57.40 Mbit/s

95th percentile per-packet one-way delay: 72.611 ms

Loss rate: 21.70%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-07-09 21:05:55

End at: 2018-07-09 21:06:25

Local clock offset: -2.316 ms

Remote clock offset: 3.215 ms

Below is generated by plot.py at 2018-07-10 00:17:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.28 Mbit/s

95th percentile per-packet one-way delay: 72.851 ms

Loss rate: 22.17%

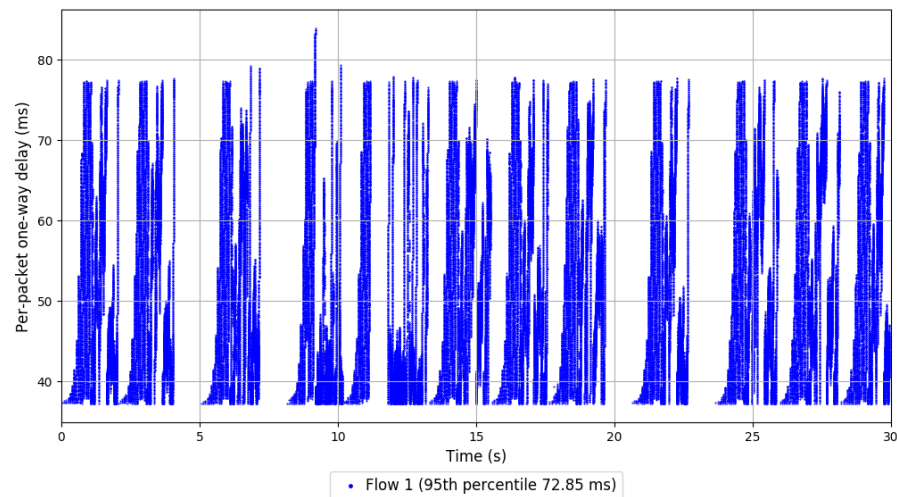
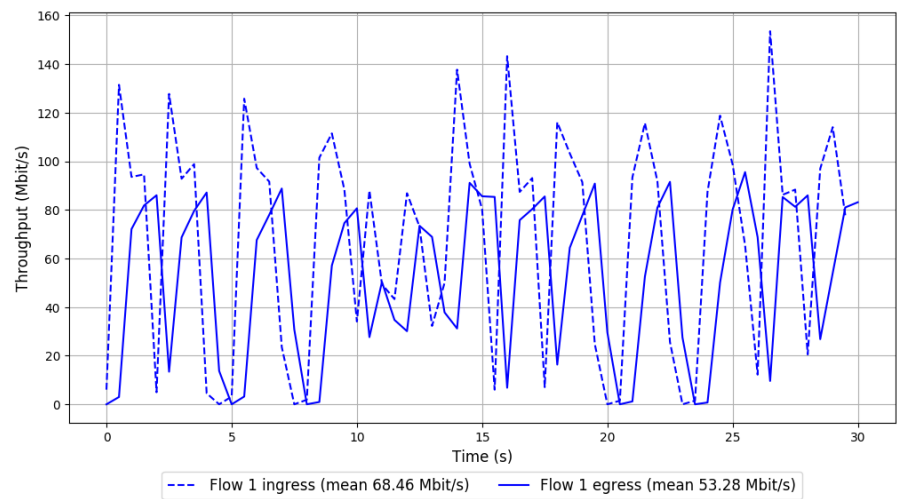
-- Flow 1:

Average throughput: 53.28 Mbit/s

95th percentile per-packet one-way delay: 72.851 ms

Loss rate: 22.17%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-07-09 21:28:53

End at: 2018-07-09 21:29:23

Local clock offset: -0.948 ms

Remote clock offset: 3.526 ms

Below is generated by plot.py at 2018-07-10 00:17:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.05 Mbit/s

95th percentile per-packet one-way delay: 72.696 ms

Loss rate: 22.44%

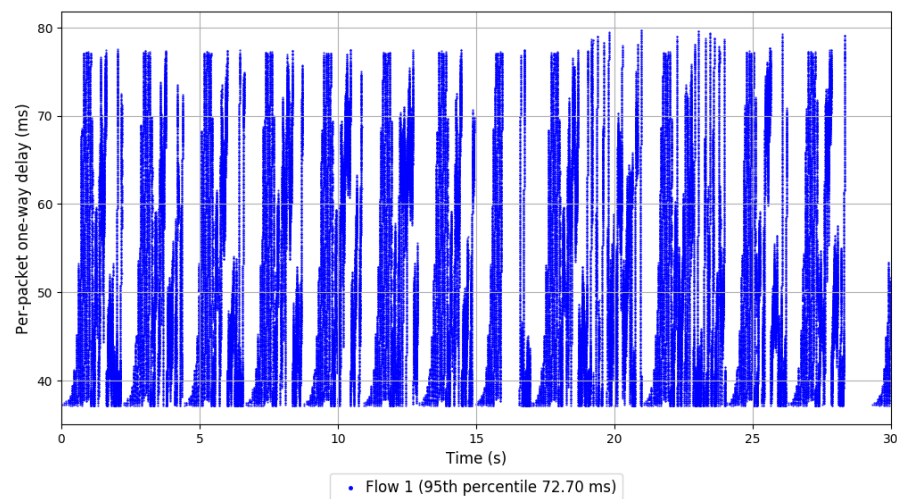
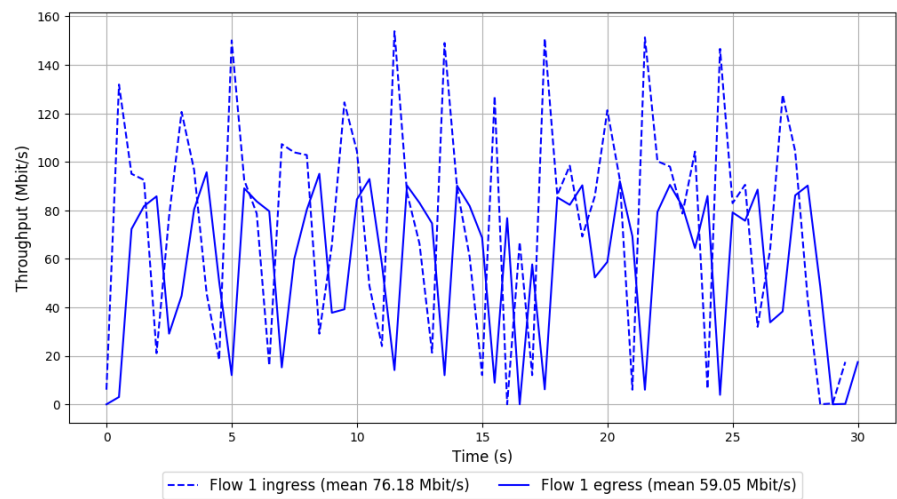
-- Flow 1:

Average throughput: 59.05 Mbit/s

95th percentile per-packet one-way delay: 72.696 ms

Loss rate: 22.44%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-07-09 21:52:12

End at: 2018-07-09 21:52:42

Local clock offset: -0.641 ms

Remote clock offset: 3.849 ms

Below is generated by plot.py at 2018-07-10 00:17:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.65 Mbit/s

95th percentile per-packet one-way delay: 72.411 ms

Loss rate: 22.48%

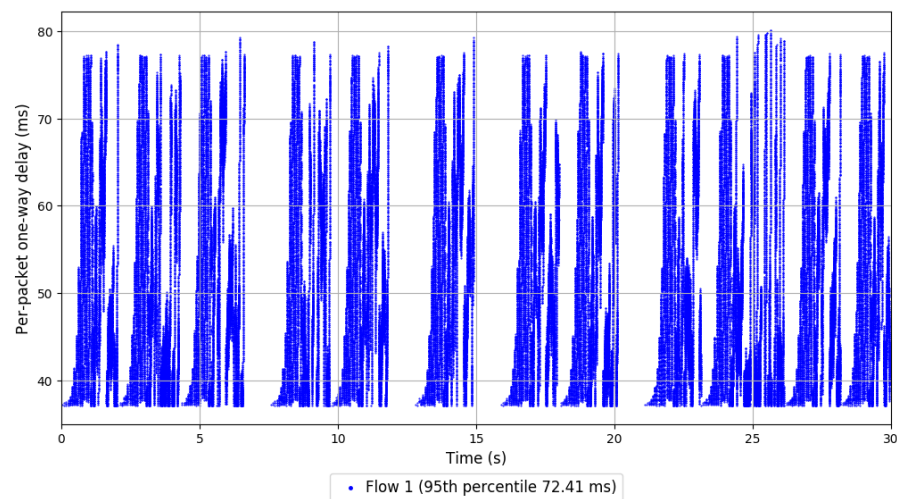
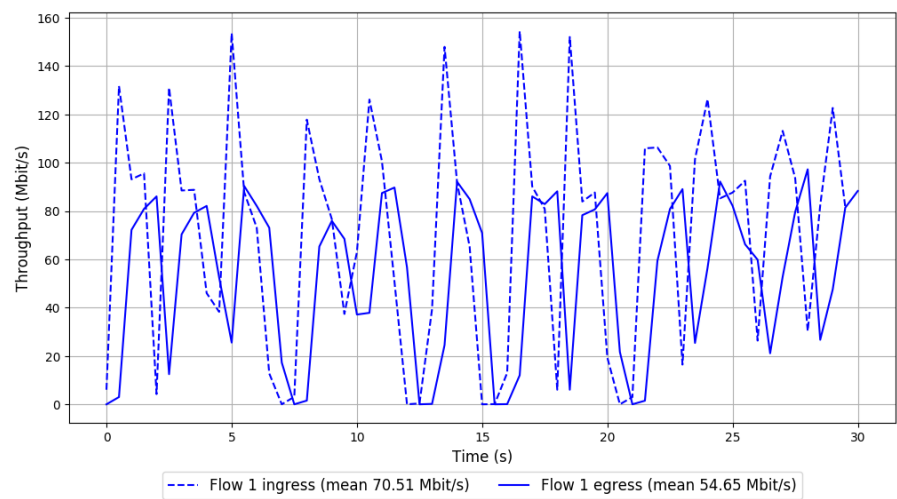
-- Flow 1:

Average throughput: 54.65 Mbit/s

95th percentile per-packet one-way delay: 72.411 ms

Loss rate: 22.48%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-07-09 22:15:41

End at: 2018-07-09 22:16:11

Local clock offset: -0.959 ms

Remote clock offset: 3.87 ms

Below is generated by plot.py at 2018-07-10 00:18:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.24 Mbit/s

95th percentile per-packet one-way delay: 71.759 ms

Loss rate: 22.95%

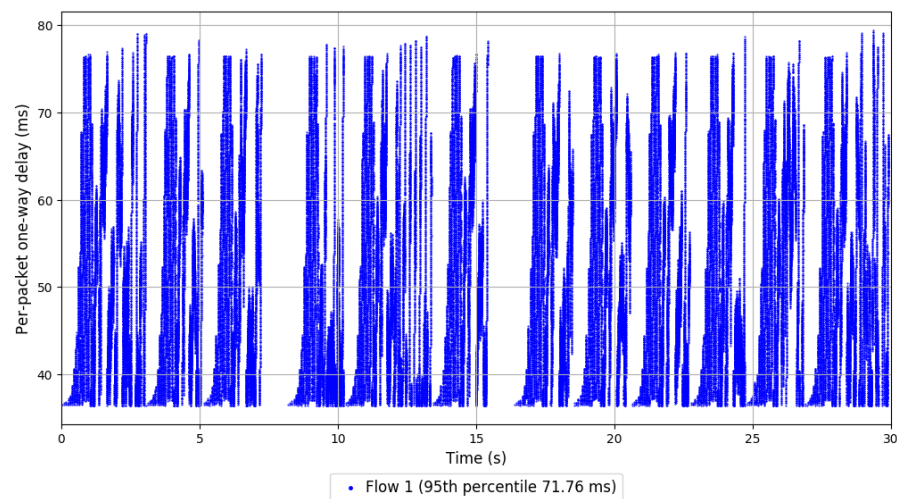
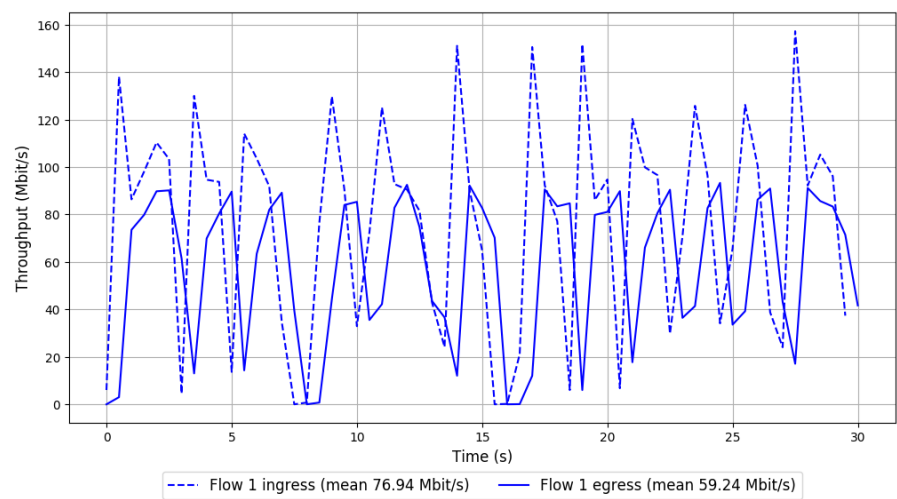
-- Flow 1:

Average throughput: 59.24 Mbit/s

95th percentile per-packet one-way delay: 71.759 ms

Loss rate: 22.95%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-07-09 22:38:57

End at: 2018-07-09 22:39:27

Local clock offset: -1.533 ms

Remote clock offset: 3.824 ms

Below is generated by plot.py at 2018-07-10 00:18:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.86 Mbit/s

95th percentile per-packet one-way delay: 72.157 ms

Loss rate: 29.03%

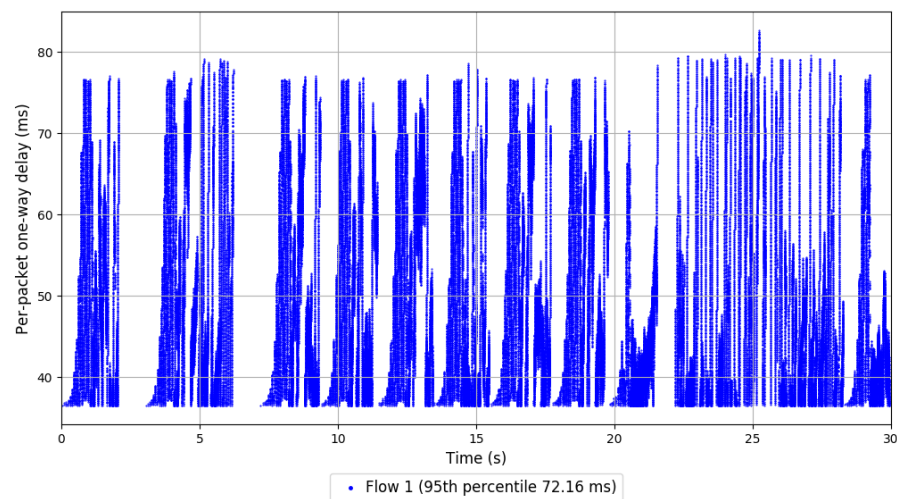
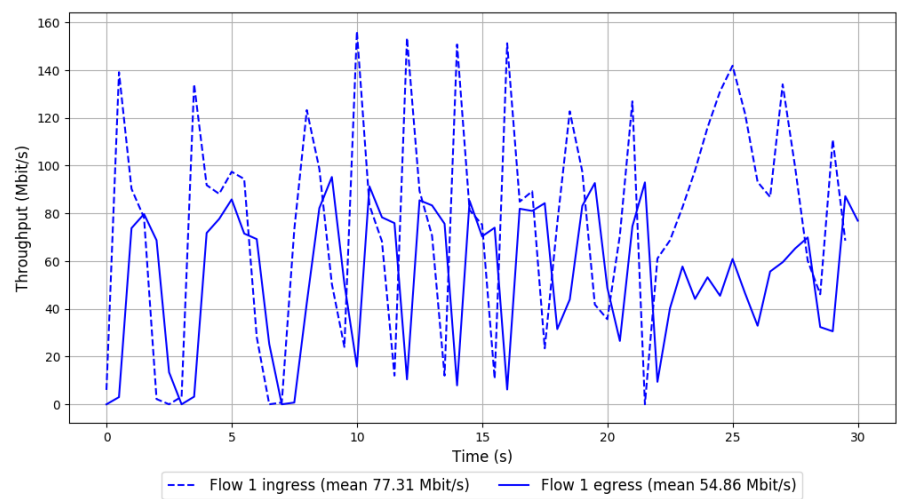
-- Flow 1:

Average throughput: 54.86 Mbit/s

95th percentile per-packet one-way delay: 72.157 ms

Loss rate: 29.03%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-07-09 23:03:28

End at: 2018-07-09 23:03:58

Local clock offset: -1.691 ms

Remote clock offset: 3.403 ms

Below is generated by plot.py at 2018-07-10 00:18:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 54.50 Mbit/s

95th percentile per-packet one-way delay: 73.207 ms

Loss rate: 30.75%

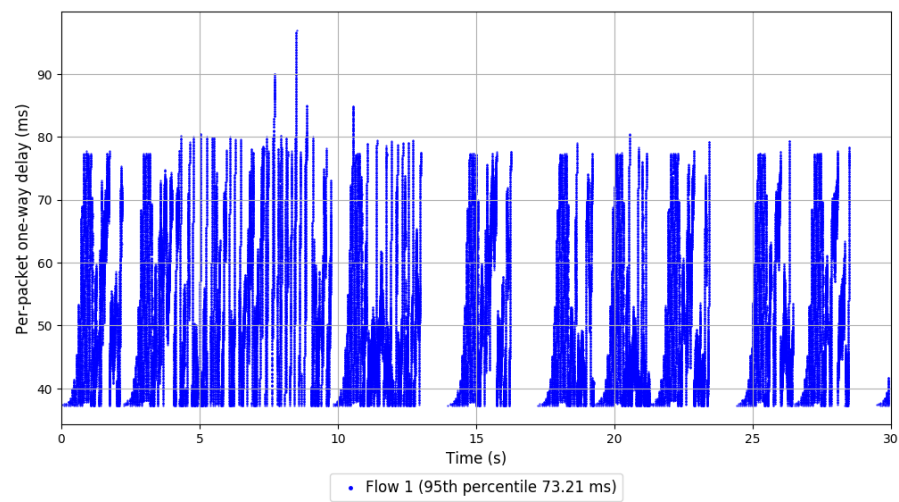
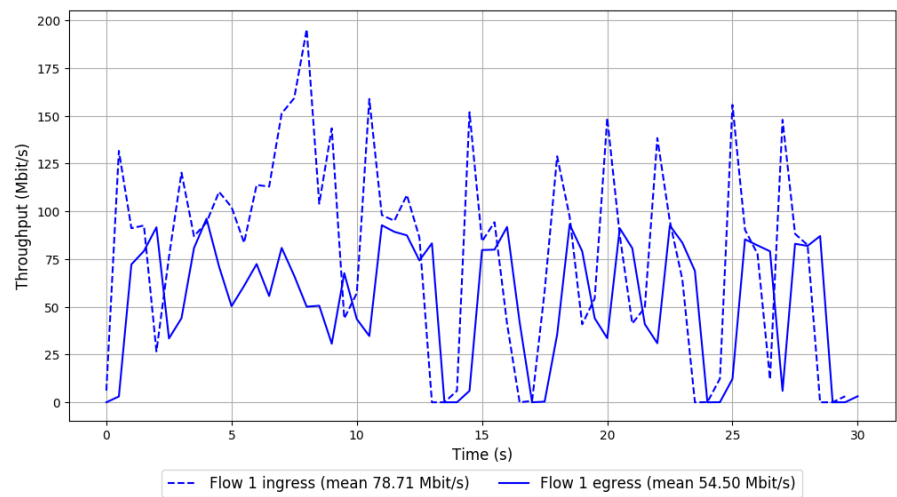
-- Flow 1:

Average throughput: 54.50 Mbit/s

95th percentile per-packet one-way delay: 73.207 ms

Loss rate: 30.75%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-07-09 23:27:38

End at: 2018-07-09 23:28:08

Local clock offset: -1.773 ms

Remote clock offset: 3.42 ms

Below is generated by plot.py at 2018-07-10 00:18:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.31 Mbit/s

95th percentile per-packet one-way delay: 72.374 ms

Loss rate: 22.42%

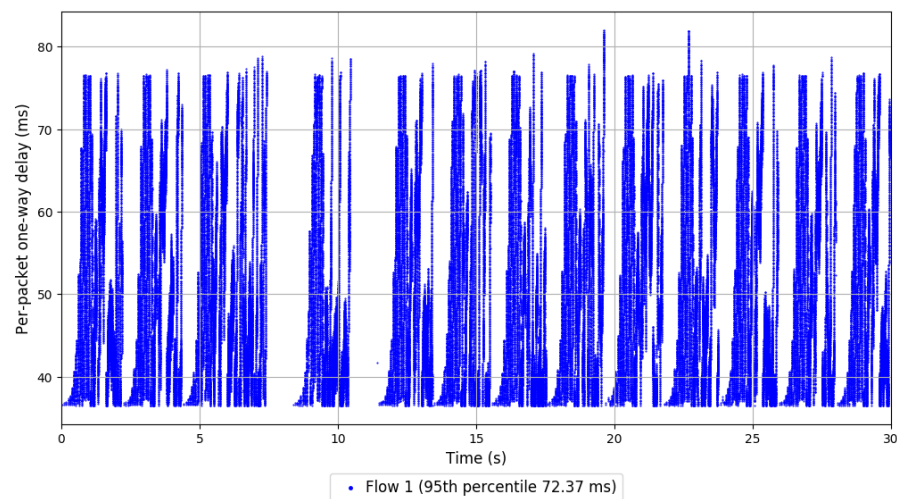
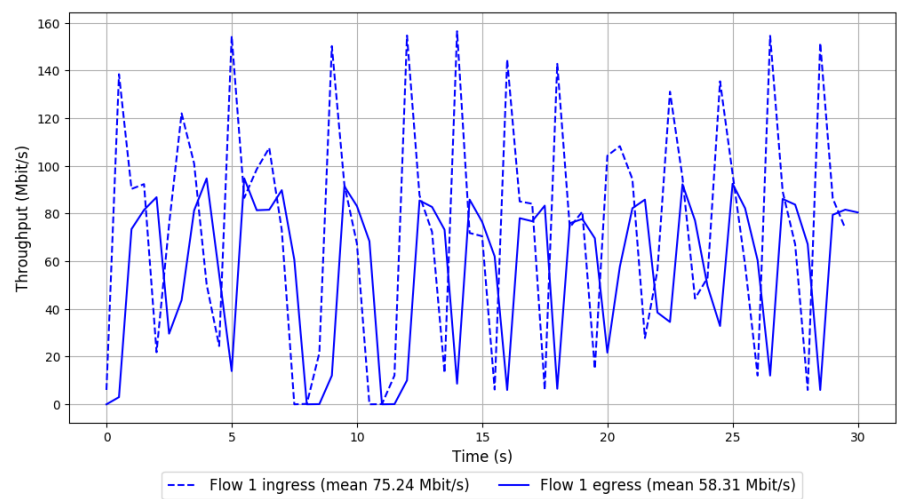
-- Flow 1:

Average throughput: 58.31 Mbit/s

95th percentile per-packet one-way delay: 72.374 ms

Loss rate: 22.42%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-07-09 23:52:13

End at: 2018-07-09 23:52:43

Local clock offset: -1.541 ms

Remote clock offset: 3.81 ms

Below is generated by plot.py at 2018-07-10 00:18:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.32 Mbit/s

95th percentile per-packet one-way delay: 72.506 ms

Loss rate: 33.25%

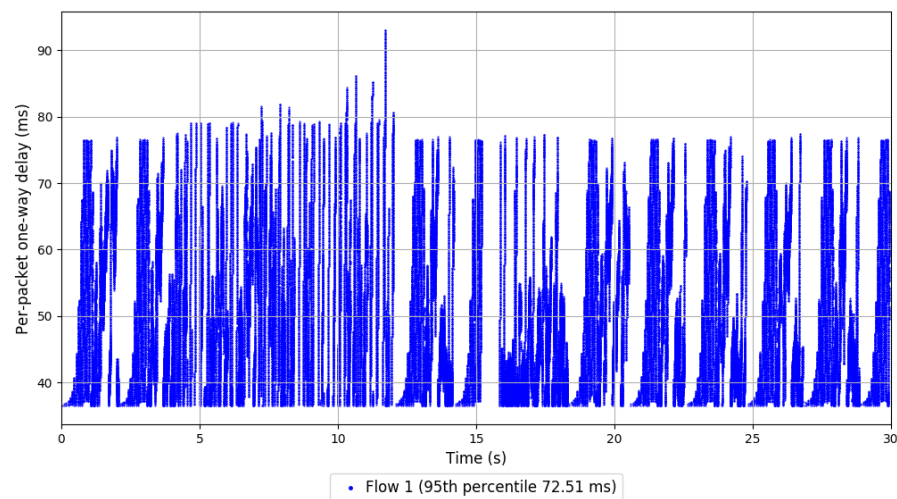
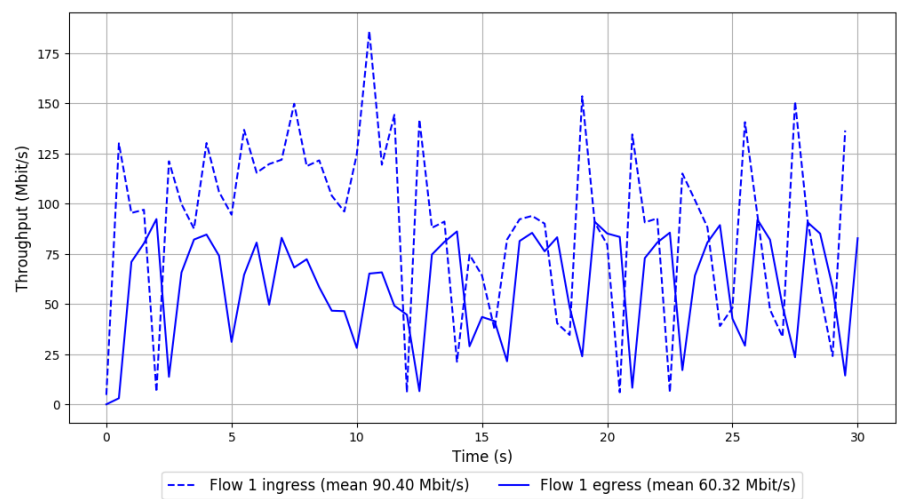
-- Flow 1:

Average throughput: 60.32 Mbit/s

95th percentile per-packet one-way delay: 72.506 ms

Loss rate: 33.25%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-07-09 19:58:44

End at: 2018-07-09 19:59:14

Local clock offset: -2.005 ms

Remote clock offset: 5.047 ms

Below is generated by plot.py at 2018-07-10 00:19:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.44 Mbit/s

95th percentile per-packet one-way delay: 39.246 ms

Loss rate: 0.02%

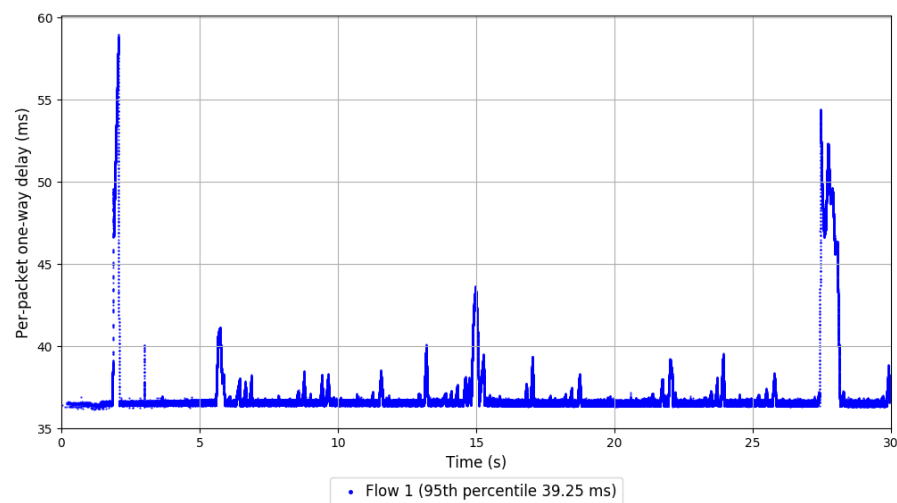
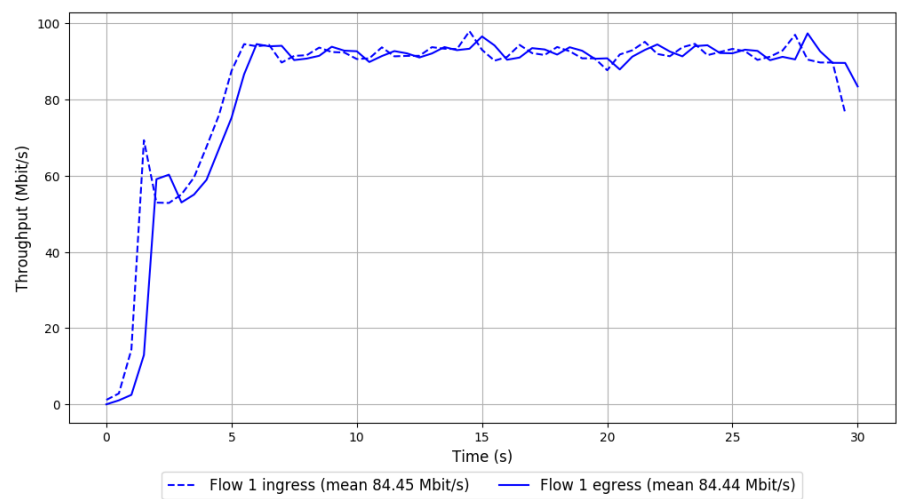
-- Flow 1:

Average throughput: 84.44 Mbit/s

95th percentile per-packet one-way delay: 39.246 ms

Loss rate: 0.02%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-07-09 20:21:46

End at: 2018-07-09 20:22:16

Local clock offset: -2.191 ms

Remote clock offset: 5.589 ms

Below is generated by plot.py at 2018-07-10 00:19:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.55 Mbit/s

95th percentile per-packet one-way delay: 38.571 ms

Loss rate: 0.00%

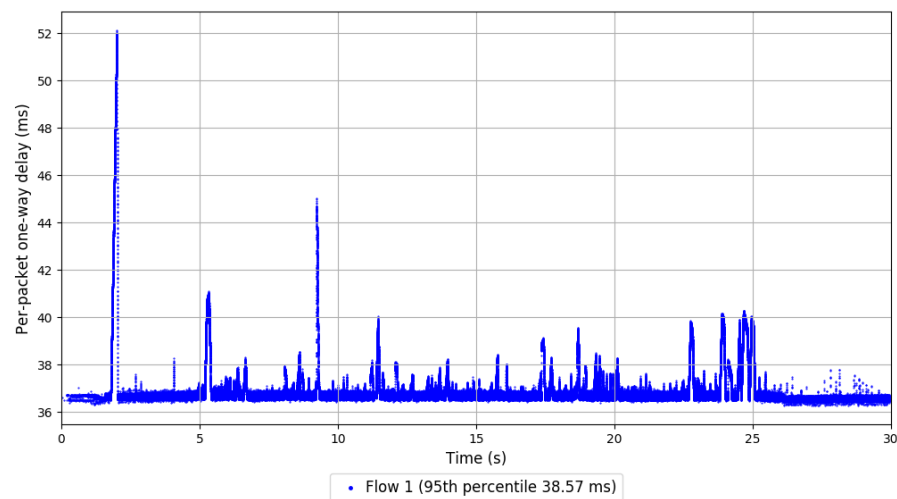
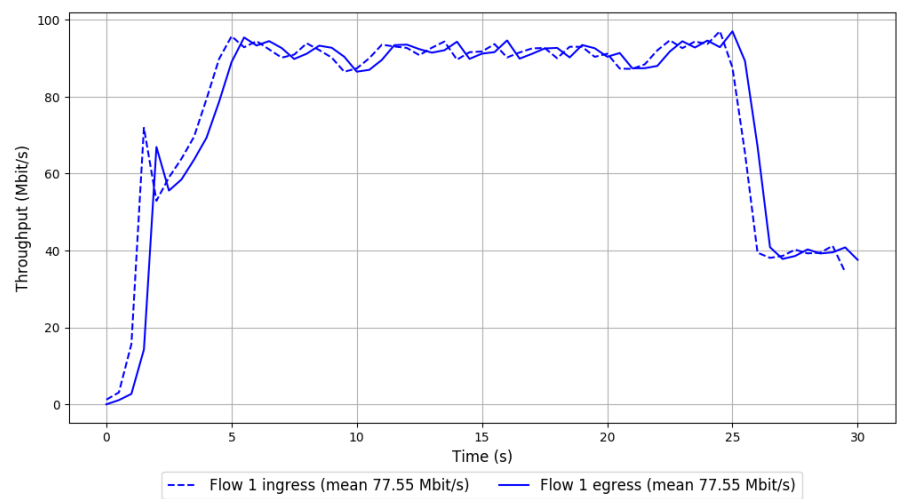
-- Flow 1:

Average throughput: 77.55 Mbit/s

95th percentile per-packet one-way delay: 38.571 ms

Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-07-09 20:45:46

End at: 2018-07-09 20:46:16

Local clock offset: -3.283 ms

Remote clock offset: 3.878 ms

Below is generated by plot.py at 2018-07-10 00:19:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.31 Mbit/s

95th percentile per-packet one-way delay: 49.536 ms

Loss rate: 0.02%

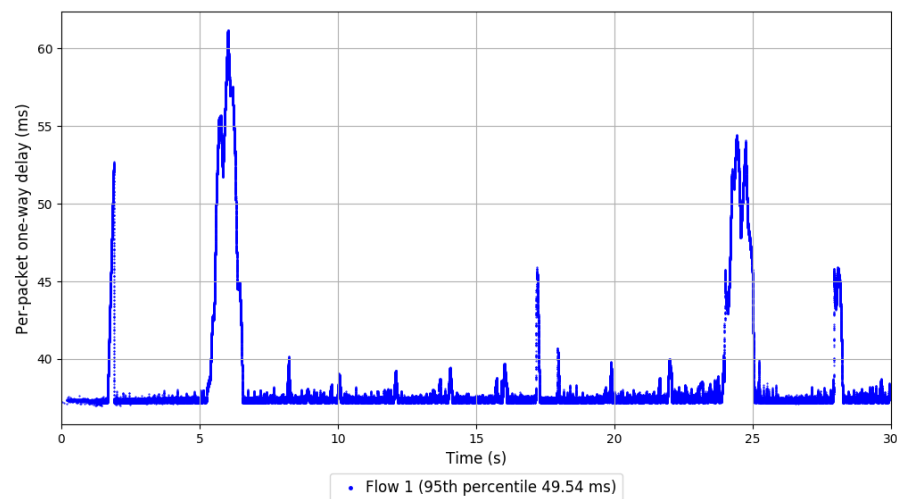
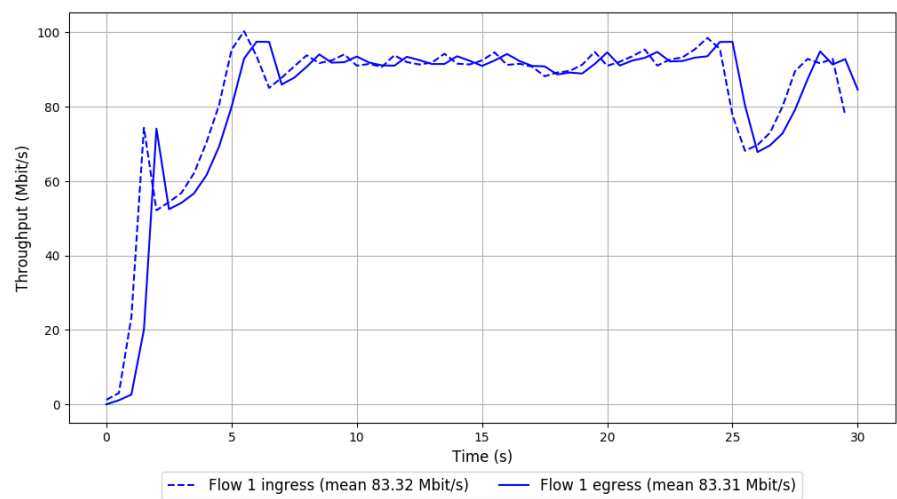
-- Flow 1:

Average throughput: 83.31 Mbit/s

95th percentile per-packet one-way delay: 49.536 ms

Loss rate: 0.02%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-07-09 21:08:35

End at: 2018-07-09 21:09:05

Local clock offset: -2.181 ms

Remote clock offset: 3.288 ms

Below is generated by plot.py at 2018-07-10 00:19:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.79 Mbit/s

95th percentile per-packet one-way delay: 38.467 ms

Loss rate: 0.03%

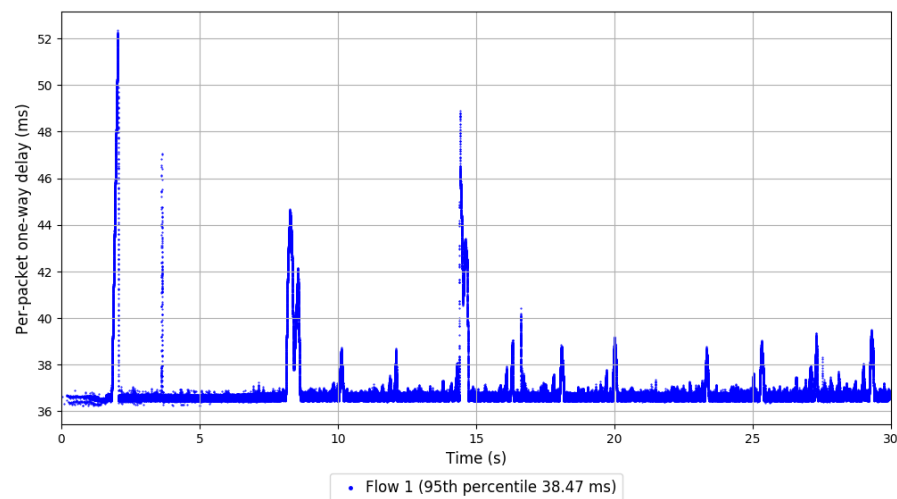
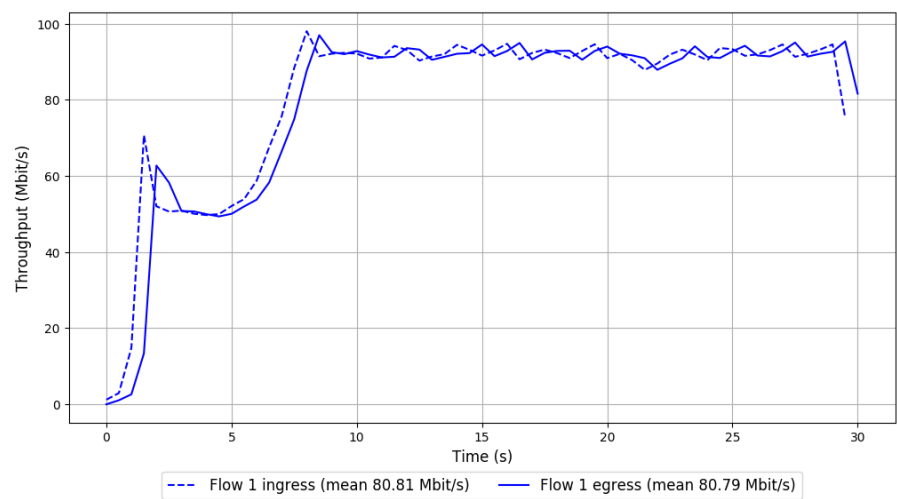
-- Flow 1:

Average throughput: 80.79 Mbit/s

95th percentile per-packet one-way delay: 38.467 ms

Loss rate: 0.03%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-07-09 21:31:40

End at: 2018-07-09 21:32:10

Local clock offset: -0.866 ms

Remote clock offset: 3.529 ms

Below is generated by plot.py at 2018-07-10 00:19:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.08 Mbit/s

95th percentile per-packet one-way delay: 44.483 ms

Loss rate: 0.04%

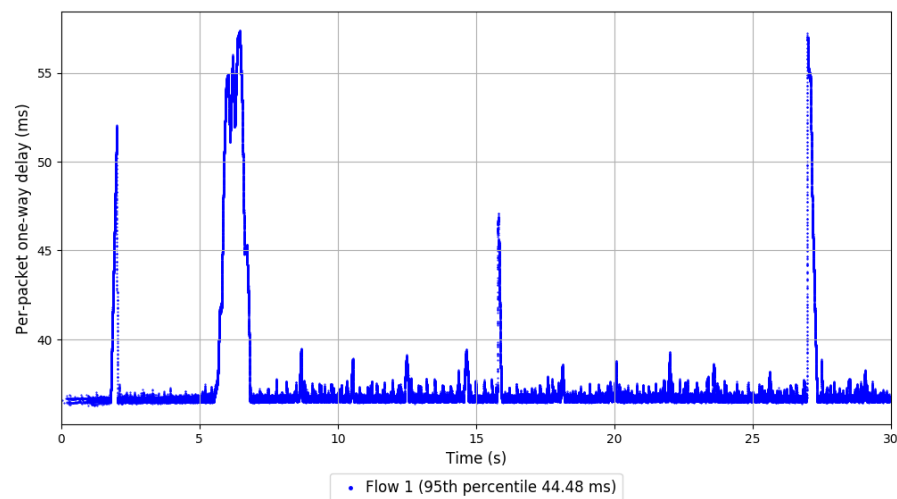
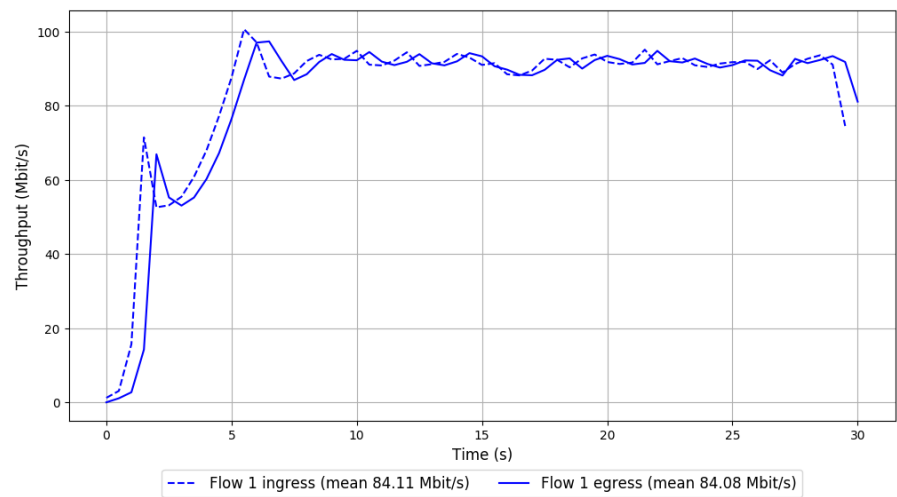
-- Flow 1:

Average throughput: 84.08 Mbit/s

95th percentile per-packet one-way delay: 44.483 ms

Loss rate: 0.04%

Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-07-09 21:55:02

End at: 2018-07-09 21:55:32

Local clock offset: -0.645 ms

Remote clock offset: 3.889 ms

Below is generated by plot.py at 2018-07-10 00:19:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.48 Mbit/s

95th percentile per-packet one-way delay: 43.062 ms

Loss rate: 0.03%

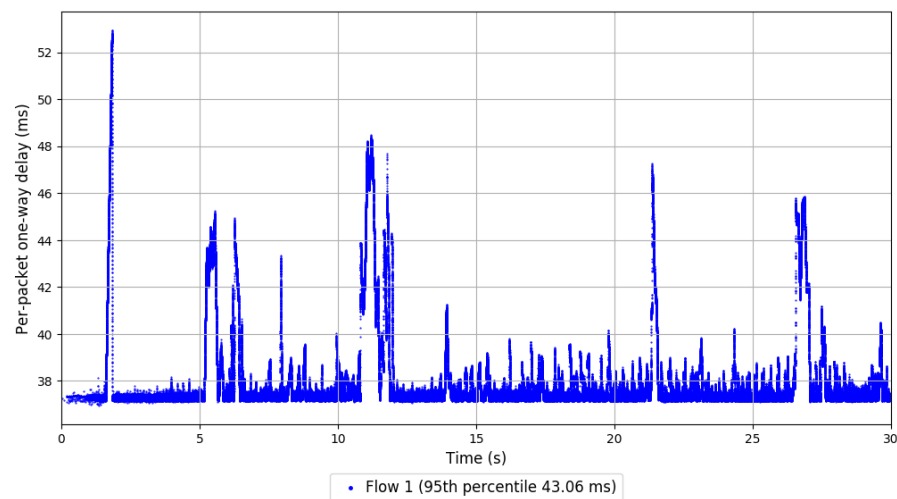
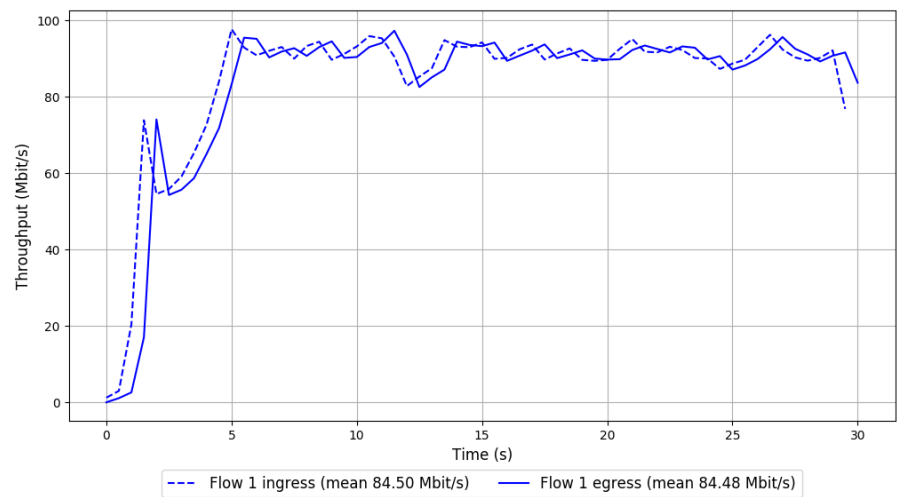
-- Flow 1:

Average throughput: 84.48 Mbit/s

95th percentile per-packet one-way delay: 43.062 ms

Loss rate: 0.03%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-07-09 22:18:21

End at: 2018-07-09 22:18:52

Local clock offset: -1.038 ms

Remote clock offset: 3.355 ms

Below is generated by plot.py at 2018-07-10 00:19:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.33 Mbit/s

95th percentile per-packet one-way delay: 37.648 ms

Loss rate: 0.02%

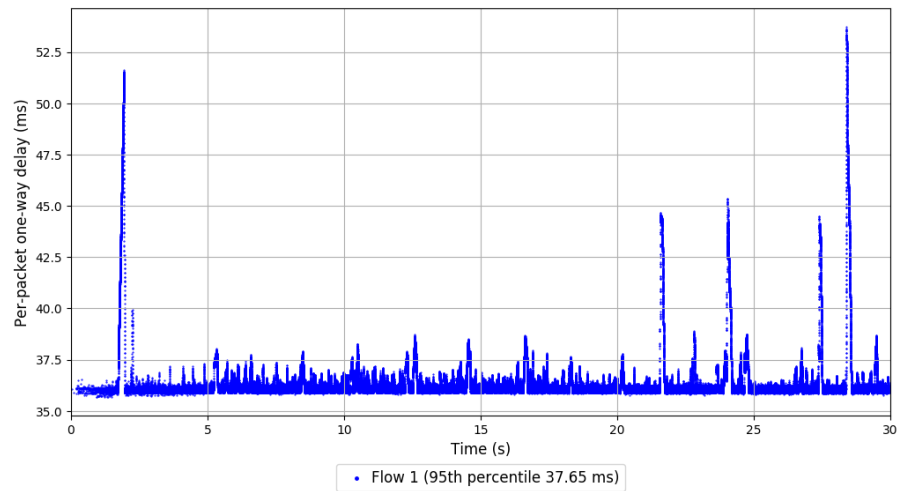
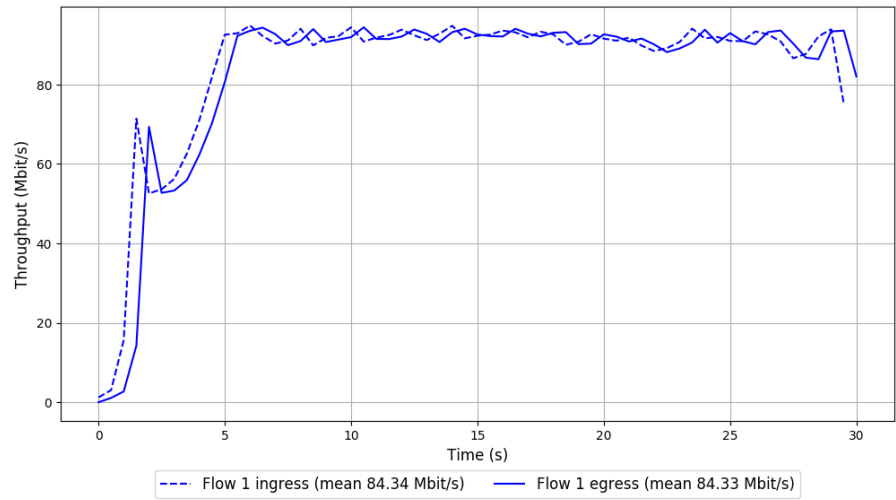
-- Flow 1:

Average throughput: 84.33 Mbit/s

95th percentile per-packet one-way delay: 37.648 ms

Loss rate: 0.02%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-07-09 22:41:48

End at: 2018-07-09 22:42:18

Local clock offset: -1.538 ms

Remote clock offset: 3.858 ms

Below is generated by plot.py at 2018-07-10 00:19:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.44 Mbit/s

95th percentile per-packet one-way delay: 38.479 ms

Loss rate: 0.00%

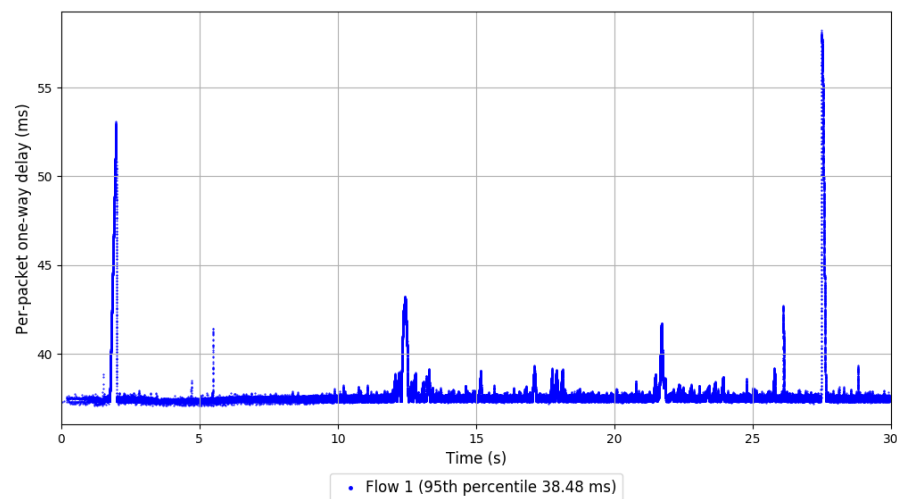
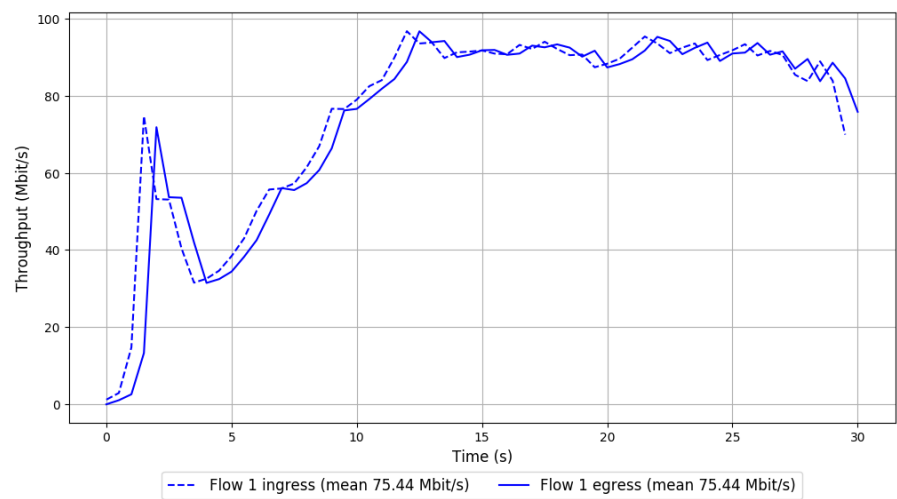
-- Flow 1:

Average throughput: 75.44 Mbit/s

95th percentile per-packet one-way delay: 38.479 ms

Loss rate: 0.00%

Run 8: Report of PCC-Vivace — Data Link



Run 9: Statistics of PCC-Vivace

Start at: 2018-07-09 23:06:22

End at: 2018-07-09 23:06:52

Local clock offset: -1.634 ms

Remote clock offset: 3.406 ms

Below is generated by plot.py at 2018-07-10 00:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.68 Mbit/s

95th percentile per-packet one-way delay: 38.072 ms

Loss rate: 0.00%

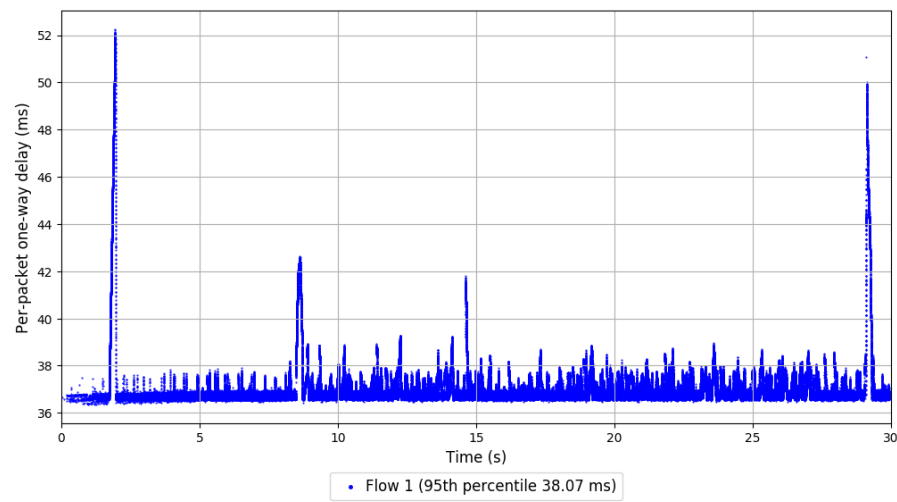
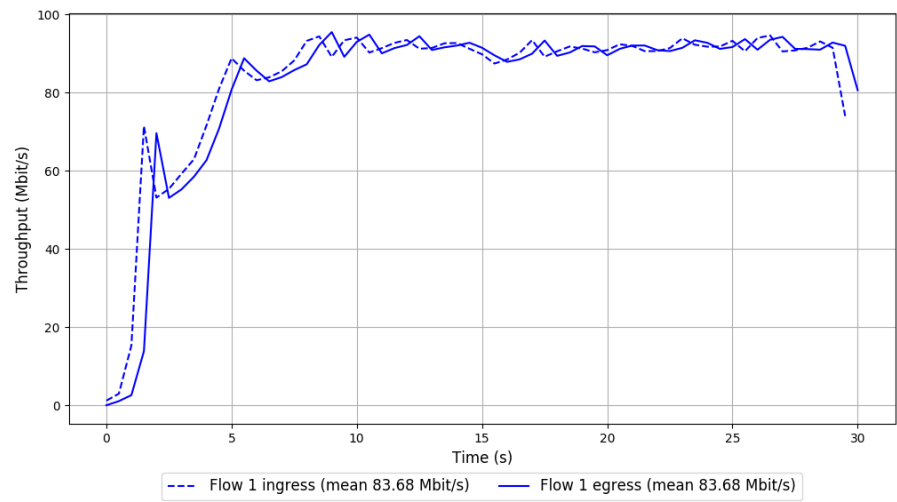
-- Flow 1:

Average throughput: 83.68 Mbit/s

95th percentile per-packet one-way delay: 38.072 ms

Loss rate: 0.00%

Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-07-09 23:30:50

End at: 2018-07-09 23:31:20

Local clock offset: -1.749 ms

Remote clock offset: 3.519 ms

Below is generated by plot.py at 2018-07-10 00:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.16 Mbit/s

95th percentile per-packet one-way delay: 37.816 ms

Loss rate: 0.00%

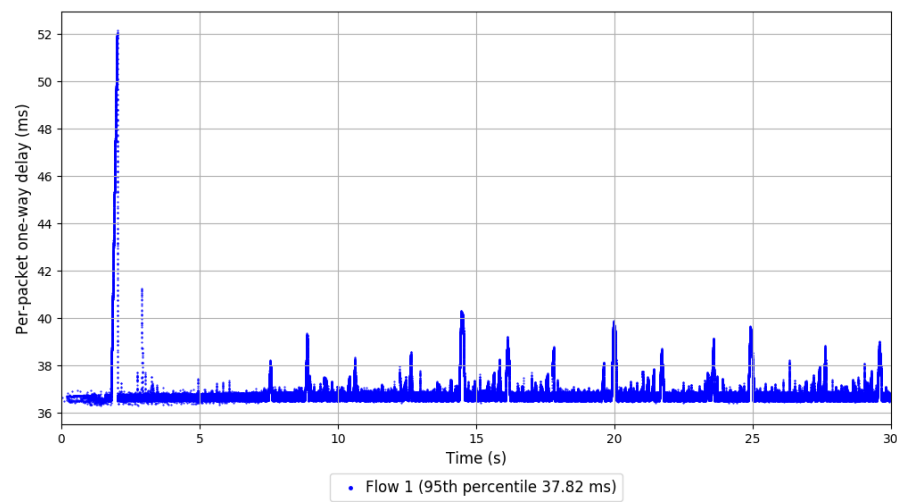
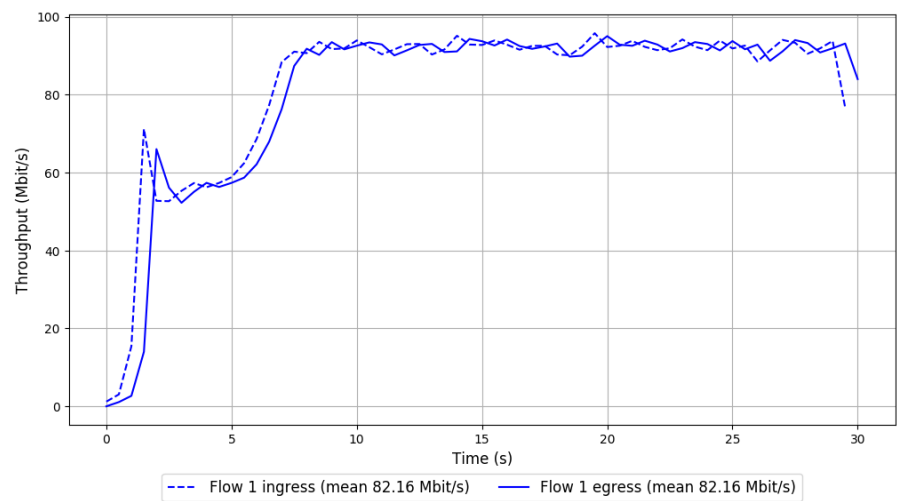
-- Flow 1:

Average throughput: 82.16 Mbit/s

95th percentile per-packet one-way delay: 37.816 ms

Loss rate: 0.00%

Run 10: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-07-09 20:17:39

End at: 2018-07-09 20:18:09

Local clock offset: -2.132 ms

Remote clock offset: 5.503 ms

Below is generated by plot.py at 2018-07-10 00:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 37.159 ms

Loss rate: 0.00%

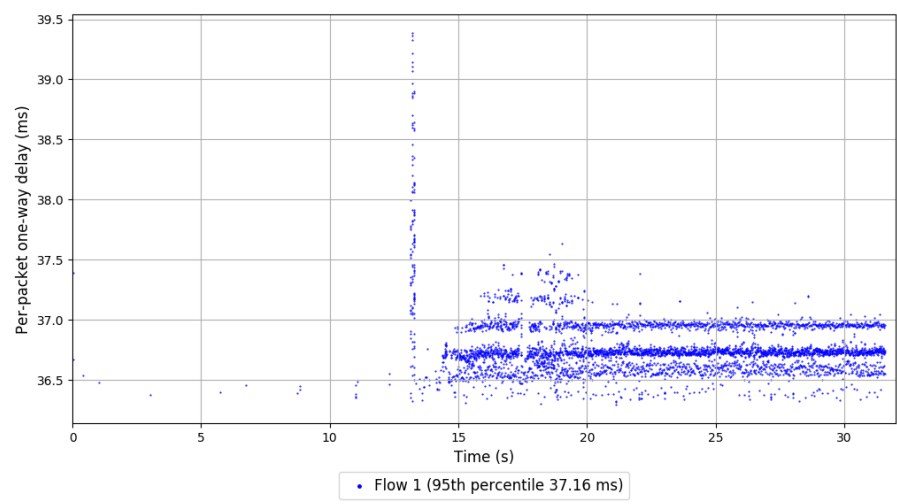
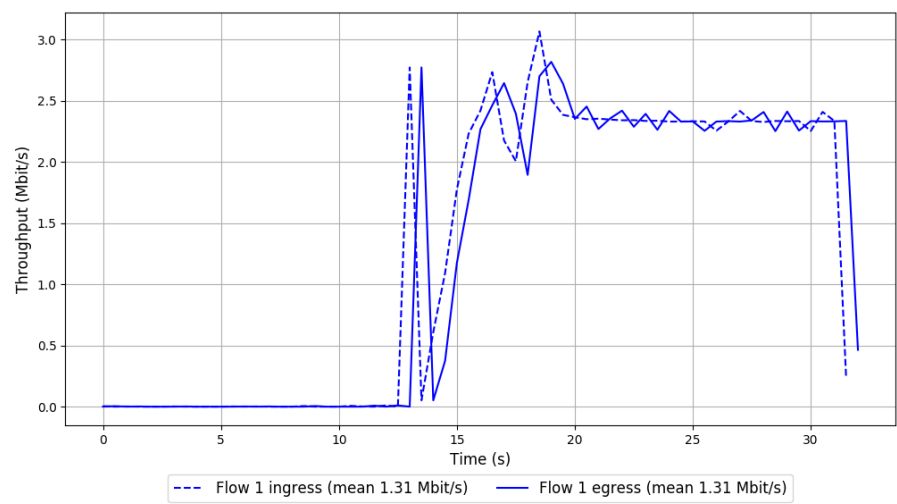
-- Flow 1:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 37.159 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-07-09 20:41:41

End at: 2018-07-09 20:42:11

Local clock offset: -2.995 ms

Remote clock offset: 4.052 ms

Below is generated by plot.py at 2018-07-10 00:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 36.811 ms

Loss rate: 0.00%

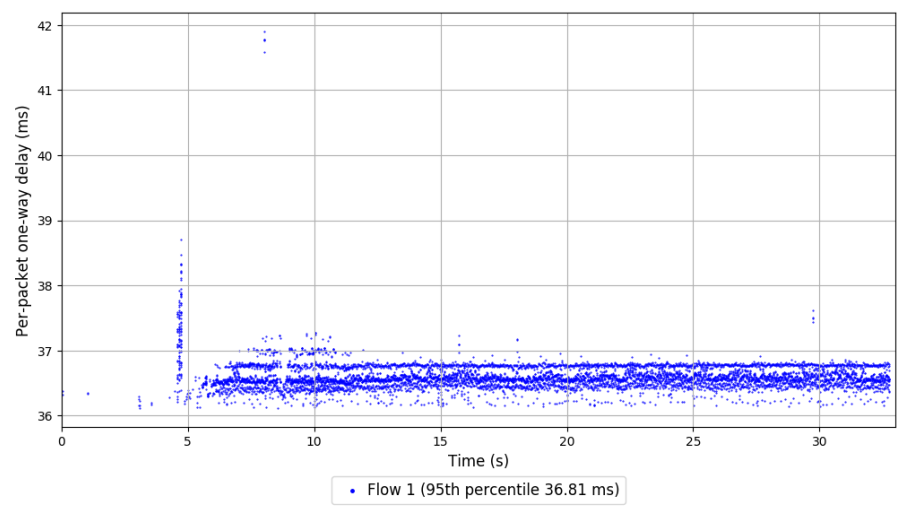
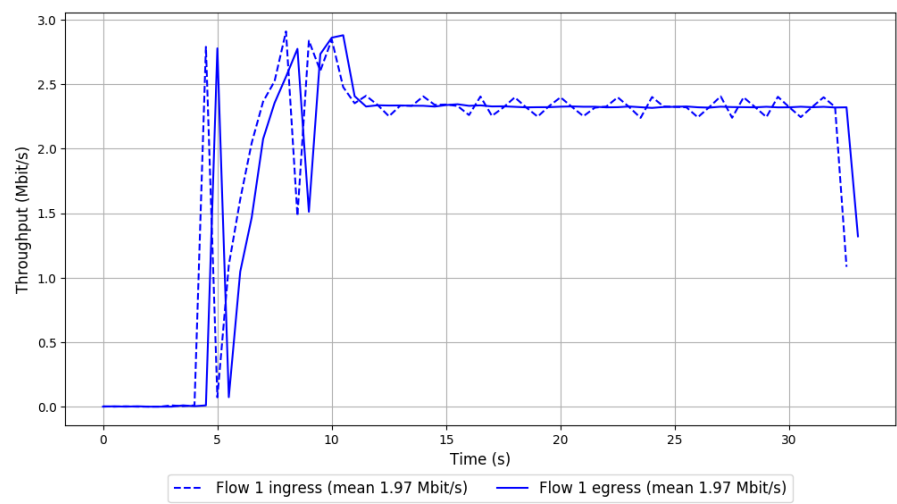
-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 36.811 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-07-09 21:04:40

End at: 2018-07-09 21:05:10

Local clock offset: -2.241 ms

Remote clock offset: 3.108 ms

Below is generated by plot.py at 2018-07-10 00:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 36.893 ms

Loss rate: 0.00%

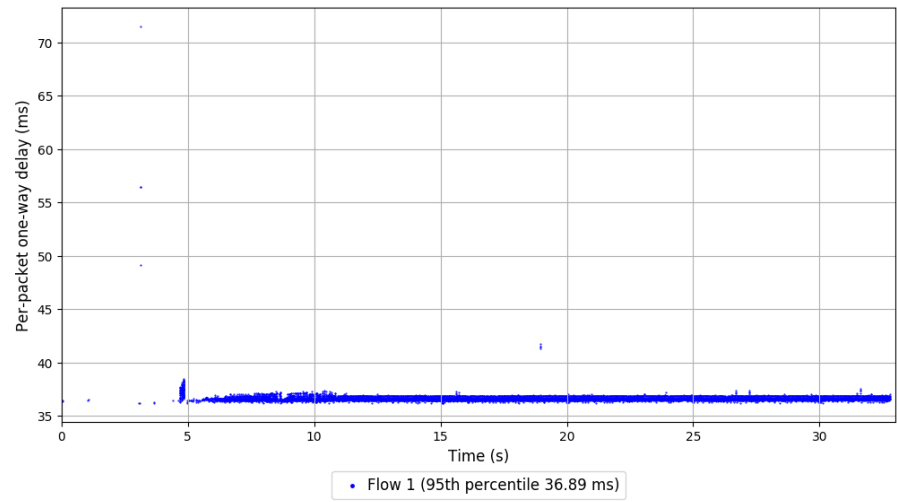
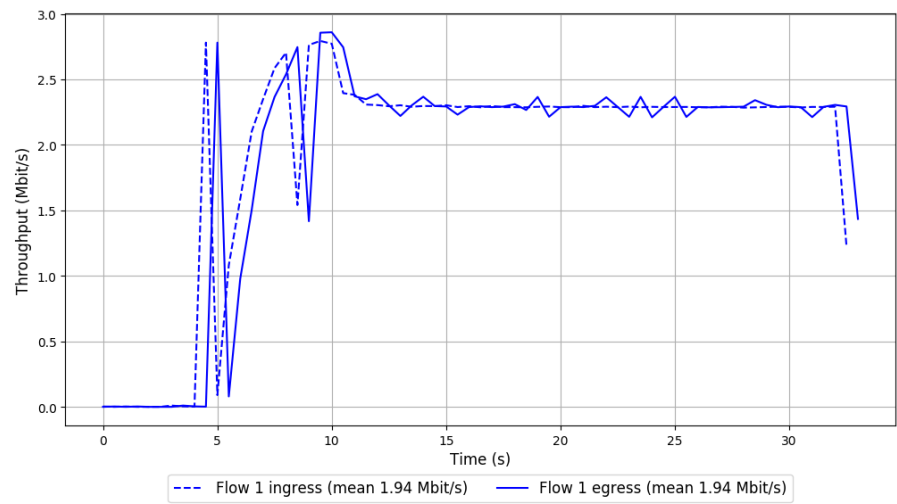
-- Flow 1:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 36.893 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-07-09 21:27:38

End at: 2018-07-09 21:28:08

Local clock offset: -1.031 ms

Remote clock offset: 3.561 ms

Below is generated by plot.py at 2018-07-10 00:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 37.004 ms

Loss rate: 0.00%

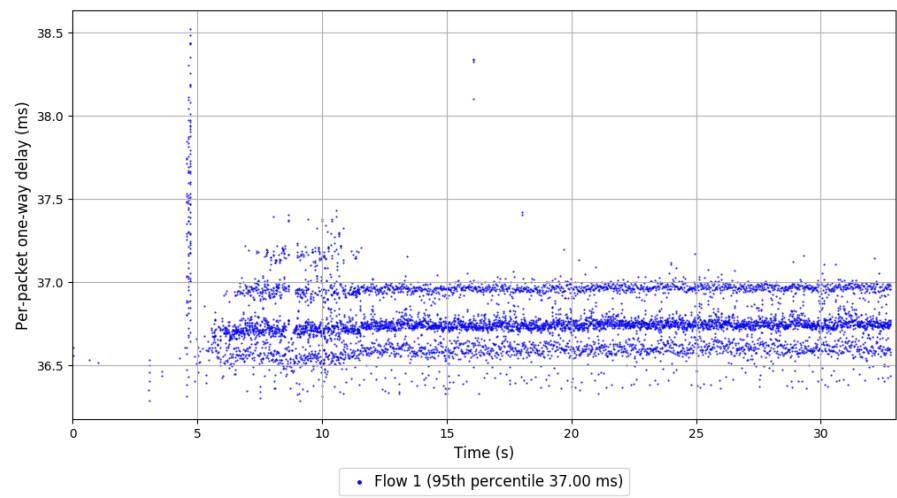
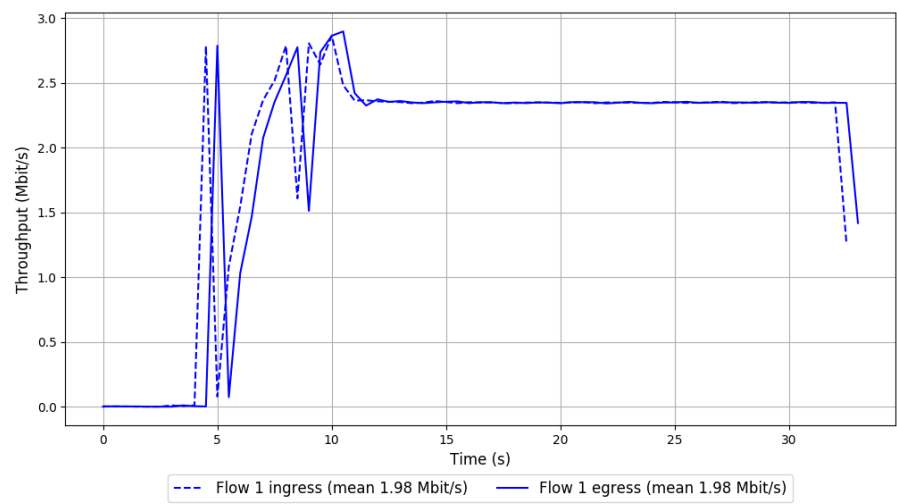
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 37.004 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-07-09 21:50:56

End at: 2018-07-09 21:51:27

Local clock offset: -0.737 ms

Remote clock offset: 3.894 ms

Below is generated by plot.py at 2018-07-10 00:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 37.772 ms

Loss rate: 0.00%

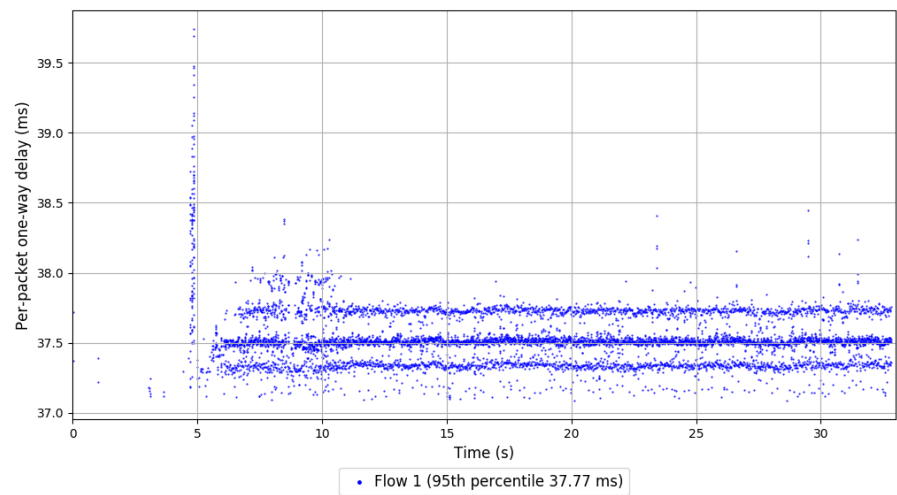
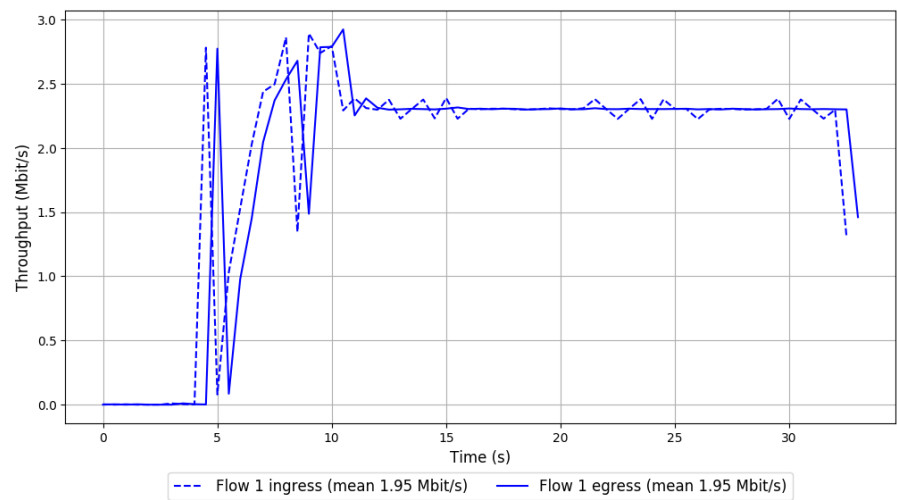
-- Flow 1:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 37.772 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-07-09 22:14:26

End at: 2018-07-09 22:14:56

Local clock offset: -0.91 ms

Remote clock offset: 3.804 ms

Below is generated by plot.py at 2018-07-10 00:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 36.899 ms

Loss rate: 0.00%

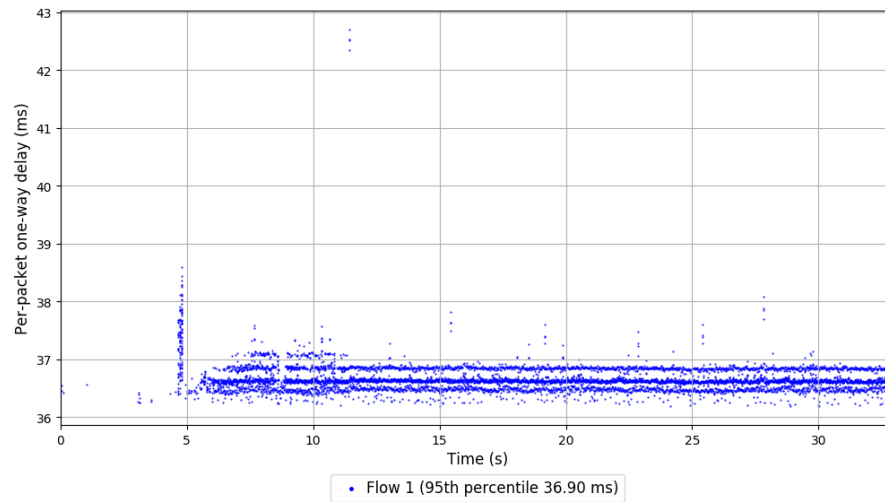
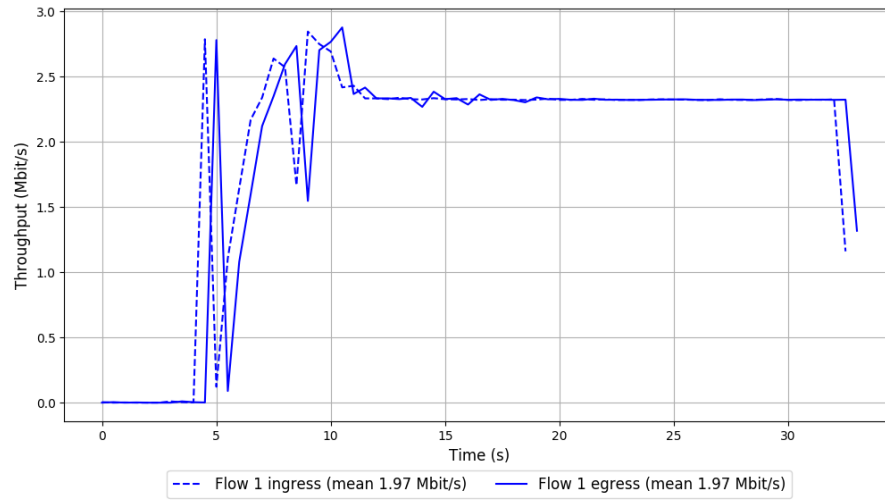
-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 36.899 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-07-09 22:37:42

End at: 2018-07-09 22:38:12

Local clock offset: -1.54 ms

Remote clock offset: 3.864 ms

Below is generated by plot.py at 2018-07-10 00:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 37.727 ms

Loss rate: 0.00%

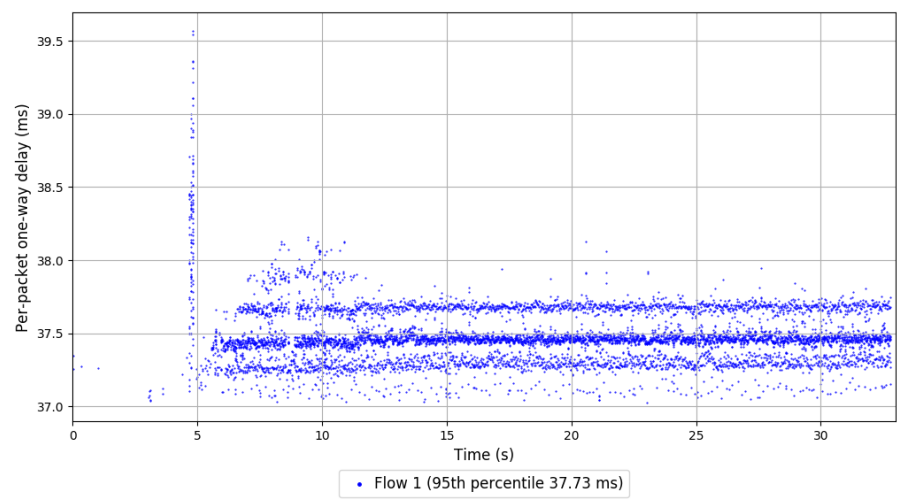
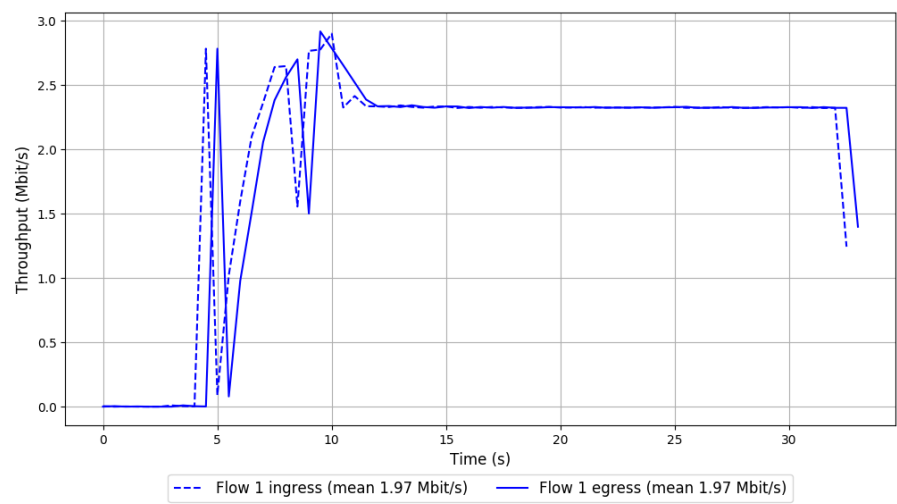
-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 37.727 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-07-09 23:02:12

End at: 2018-07-09 23:02:42

Local clock offset: -1.586 ms

Remote clock offset: 3.347 ms

Below is generated by plot.py at 2018-07-10 00:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 37.579 ms

Loss rate: 0.00%

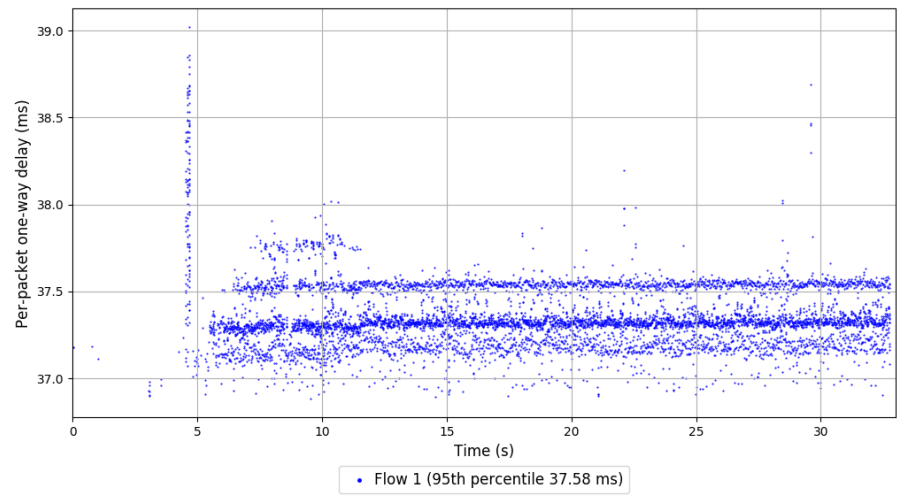
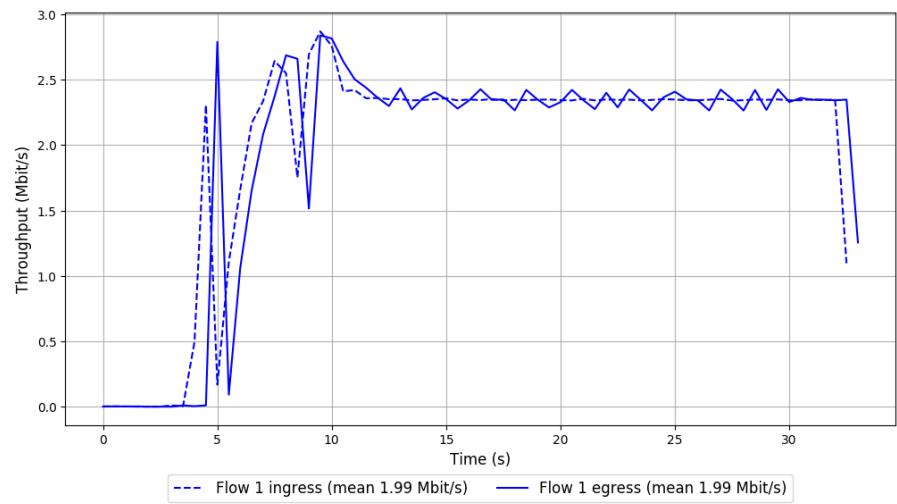
-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 37.579 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-07-09 23:26:23

End at: 2018-07-09 23:26:53

Local clock offset: -1.77 ms

Remote clock offset: 3.402 ms

Below is generated by plot.py at 2018-07-10 00:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 37.041 ms

Loss rate: 0.00%

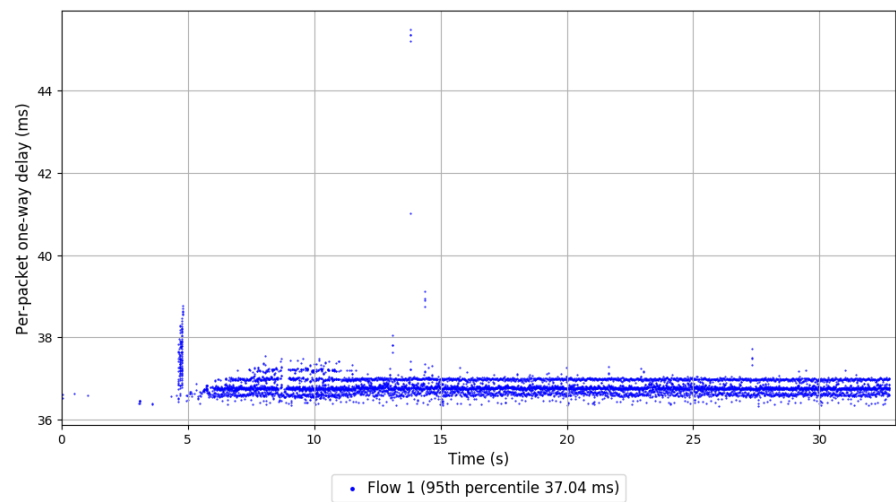
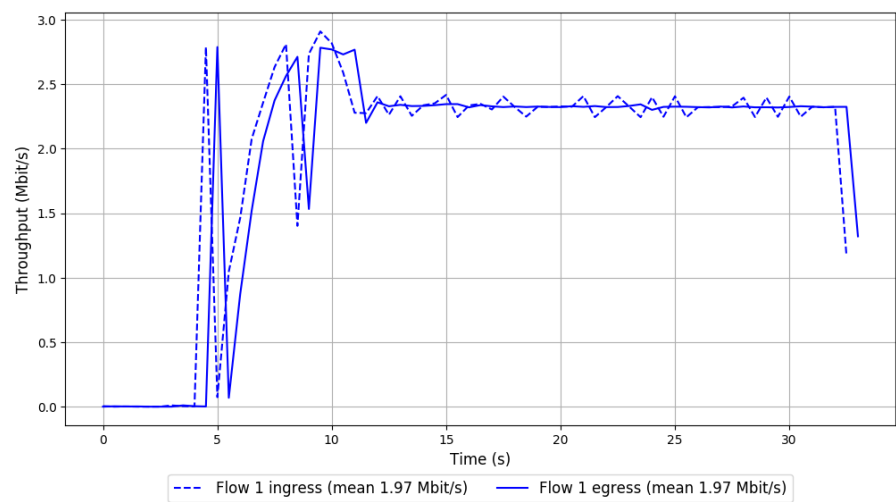
-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 37.041 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-07-09 23:50:58

End at: 2018-07-09 23:51:28

Local clock offset: -1.645 ms

Remote clock offset: 3.699 ms

Below is generated by plot.py at 2018-07-10 00:19:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 36.978 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 36.978 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

