

Pantheon Report

Generated at 2018-07-03 14:30:38 (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.

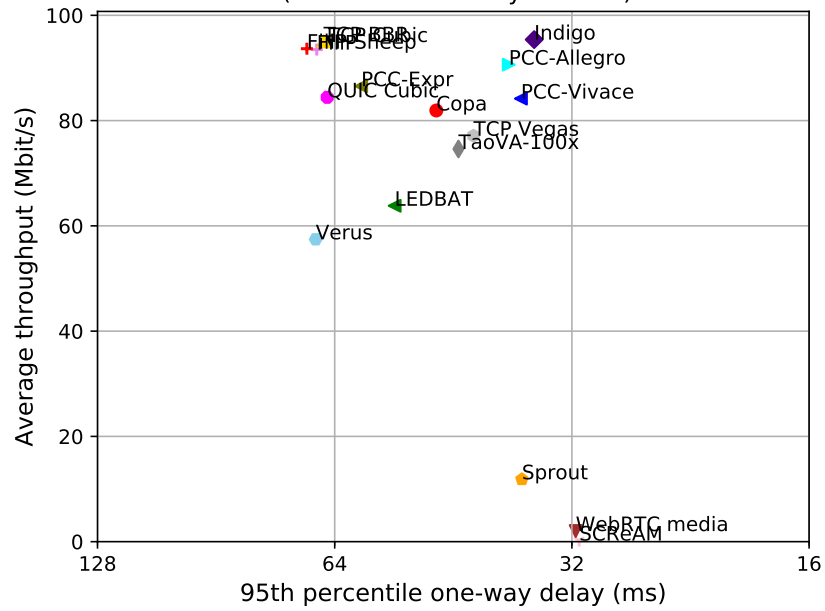
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

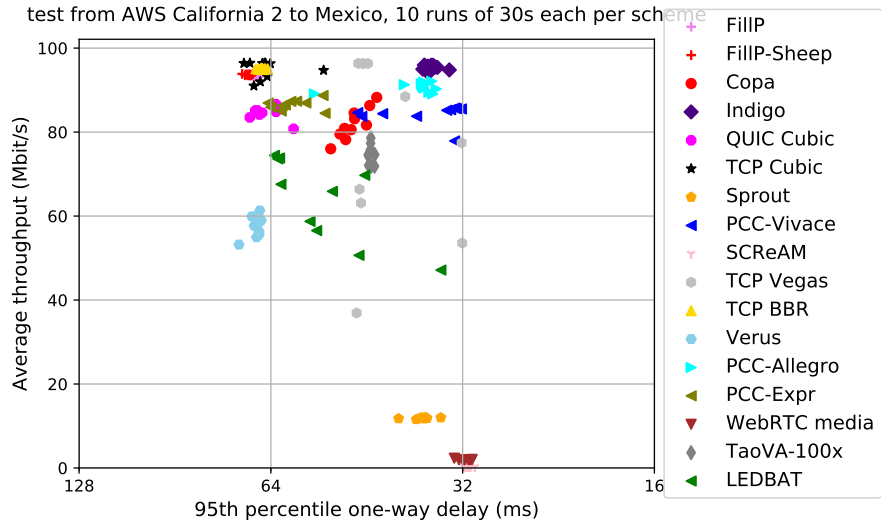
Git summary:

```
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-quirk @ 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)



test from AWS California 2 to Mexico, 10 runs of 30s each per scheme



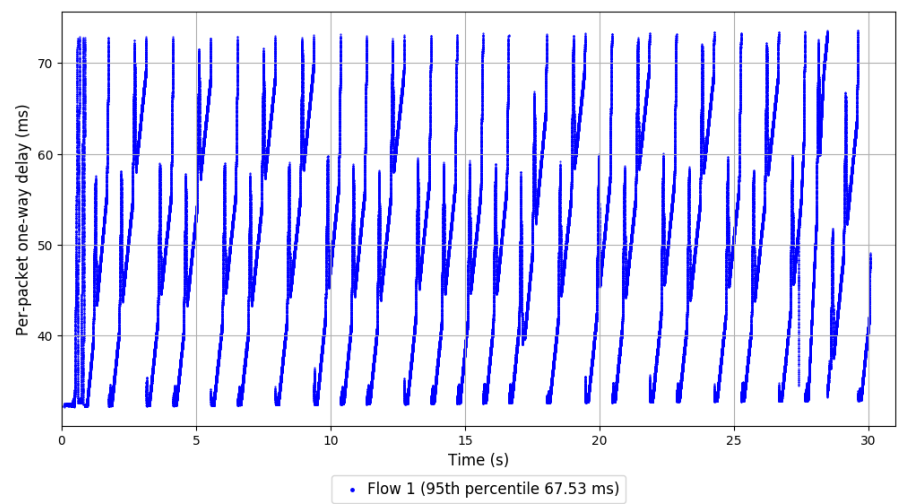
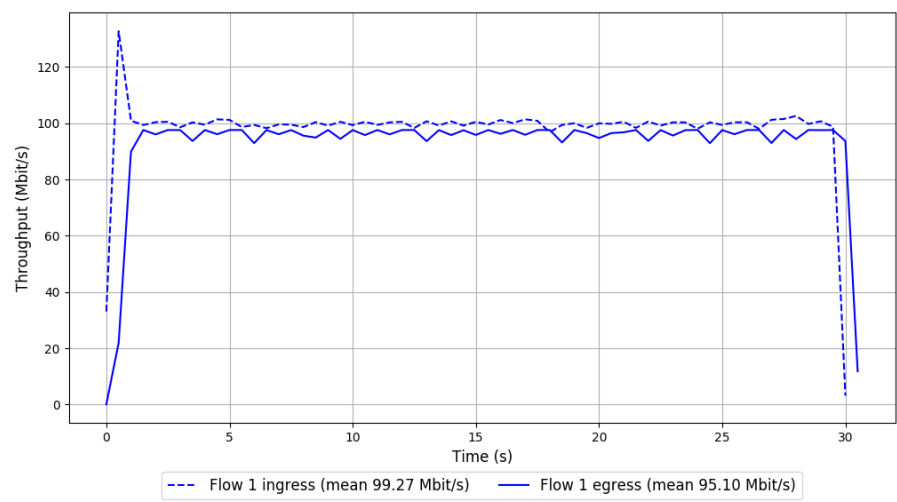
| scheme | # runs | mean avg tput (Mbit/s) flow 1 | mean 95th-%ile delay (ms) flow 1 | mean loss rate (%) flow 1 |
|--------------|--------|----------------------------------|-------------------------------------|------------------------------|
| TCP BBR | 10 | 95.06 | 66.12 | 4.19 |
| Copa | 10 | 81.92 | 47.55 | 0.83 |
| TCP Cubic | 10 | 94.93 | 65.27 | 0.35 |
| FillP | 10 | 93.49 | 67.44 | 8.48 |
| FillP-Sheep | 10 | 93.66 | 69.42 | 4.20 |
| Indigo | 10 | 95.39 | 35.73 | 0.03 |
| LEDBAT | 10 | 63.81 | 53.72 | 0.03 |
| PCC-Allegro | 10 | 90.63 | 38.48 | 0.68 |
| PCC-Expr | 10 | 86.54 | 59.24 | 0.65 |
| QUIC Cubic | 9 | 84.42 | 65.41 | 1.17 |
| SCReAM | 10 | 0.22 | 31.32 | 0.05 |
| Sprout | 10 | 11.86 | 37.03 | 0.03 |
| TaoVA-100x | 10 | 74.60 | 44.58 | 0.01 |
| TCP Vegas | 10 | 77.12 | 42.66 | 0.42 |
| Verus | 10 | 57.44 | 67.66 | 30.62 |
| PCC-Vivace | 10 | 84.18 | 37.14 | 0.01 |
| WebRTC media | 10 | 2.01 | 31.65 | 0.06 |

Run 1: Statistics of TCP BBR

Start at: 2018-07-03 10:41:42
End at: 2018-07-03 10:42:12
Local clock offset: -10.084 ms
Remote clock offset: -1.353 ms

Below is generated by plot.py at 2018-07-03 14:08:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.10 Mbit/s
95th percentile per-packet one-way delay: 67.532 ms
Loss rate: 4.14%
-- Flow 1:
Average throughput: 95.10 Mbit/s
95th percentile per-packet one-way delay: 67.532 ms
Loss rate: 4.14%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-07-03 11:04:04

End at: 2018-07-03 11:04:34

Local clock offset: 4.098 ms

Remote clock offset: -0.678 ms

Below is generated by plot.py at 2018-07-03 14:08:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.19 Mbit/s

95th percentile per-packet one-way delay: 66.115 ms

Loss rate: 4.13%

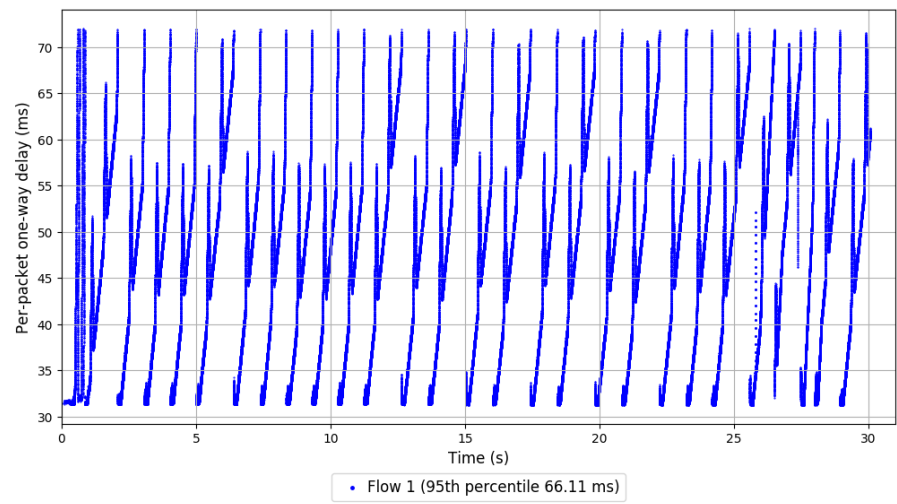
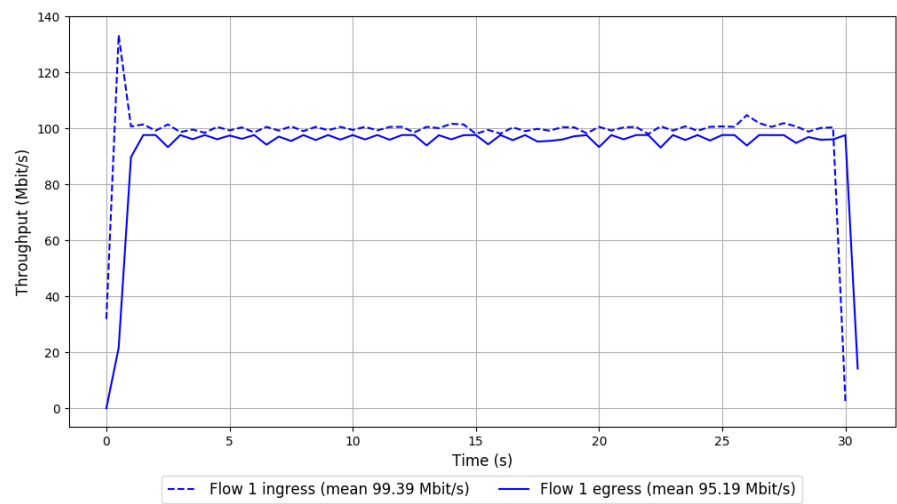
-- Flow 1:

Average throughput: 95.19 Mbit/s

95th percentile per-packet one-way delay: 66.115 ms

Loss rate: 4.13%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-07-03 11:26:17

End at: 2018-07-03 11:26:47

Local clock offset: 2.782 ms

Remote clock offset: -1.755 ms

Below is generated by plot.py at 2018-07-03 14:08:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.18 Mbit/s

95th percentile per-packet one-way delay: 66.245 ms

Loss rate: 4.18%

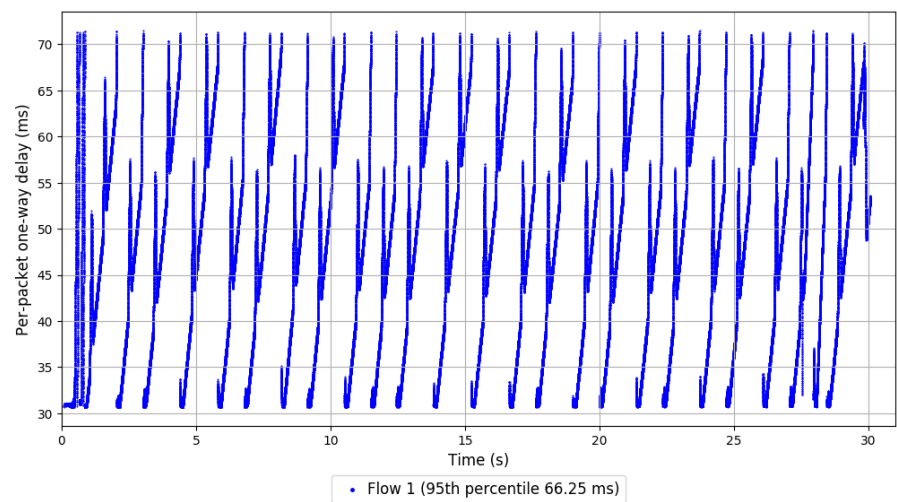
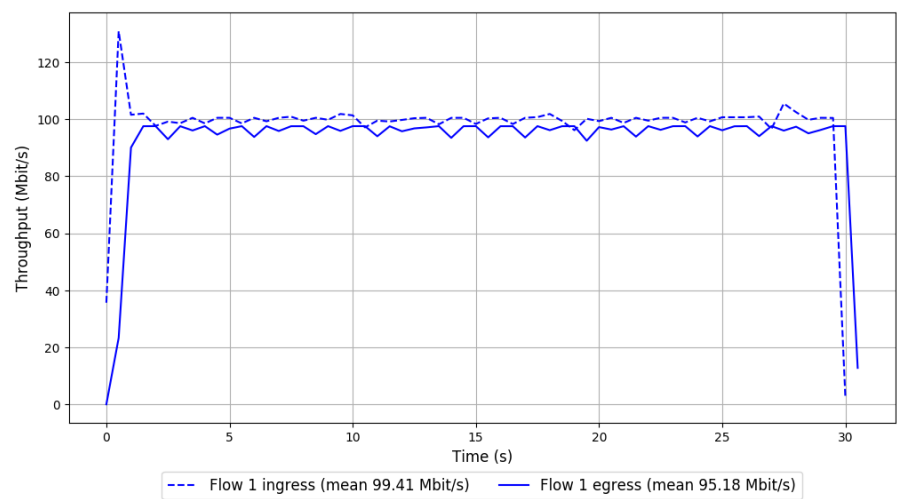
-- Flow 1:

Average throughput: 95.18 Mbit/s

95th percentile per-packet one-way delay: 66.245 ms

Loss rate: 4.18%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-07-03 11:48:33

End at: 2018-07-03 11:49:03

Local clock offset: 1.379 ms

Remote clock offset: -1.707 ms

Below is generated by plot.py at 2018-07-03 14:08:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.10 Mbit/s

95th percentile per-packet one-way delay: 65.384 ms

Loss rate: 4.15%

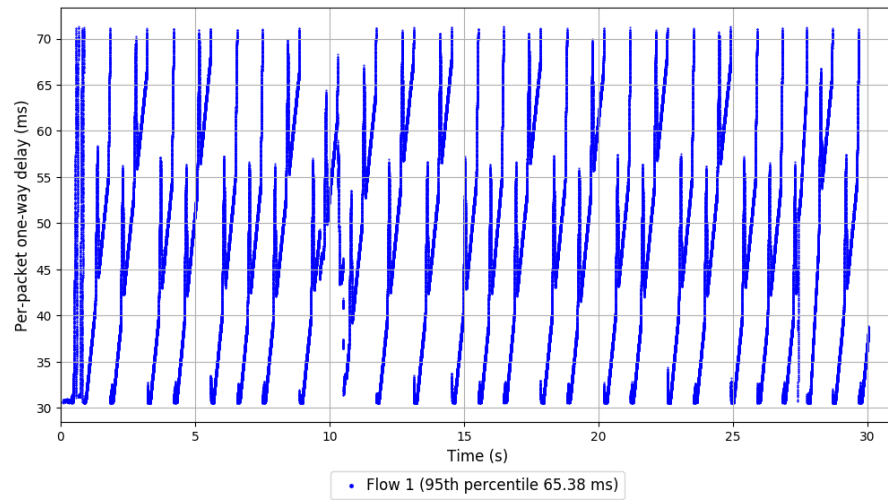
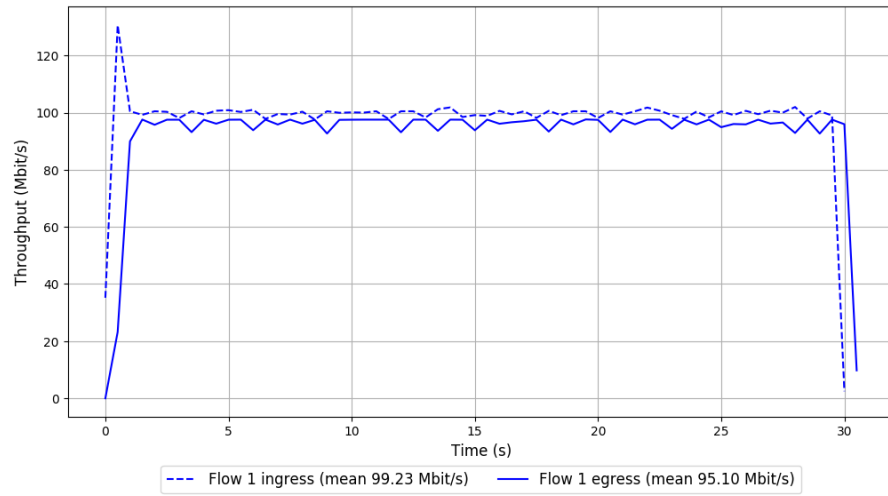
-- Flow 1:

Average throughput: 95.10 Mbit/s

95th percentile per-packet one-way delay: 65.384 ms

Loss rate: 4.15%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-07-03 12:10:46

End at: 2018-07-03 12:11:16

Local clock offset: 1.024 ms

Remote clock offset: -1.514 ms

Below is generated by plot.py at 2018-07-03 14:08:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.91 Mbit/s

95th percentile per-packet one-way delay: 65.743 ms

Loss rate: 4.59%

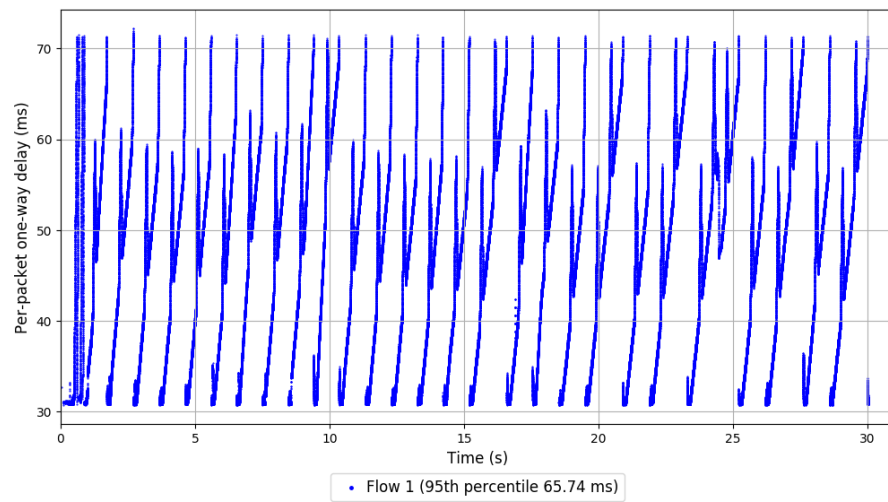
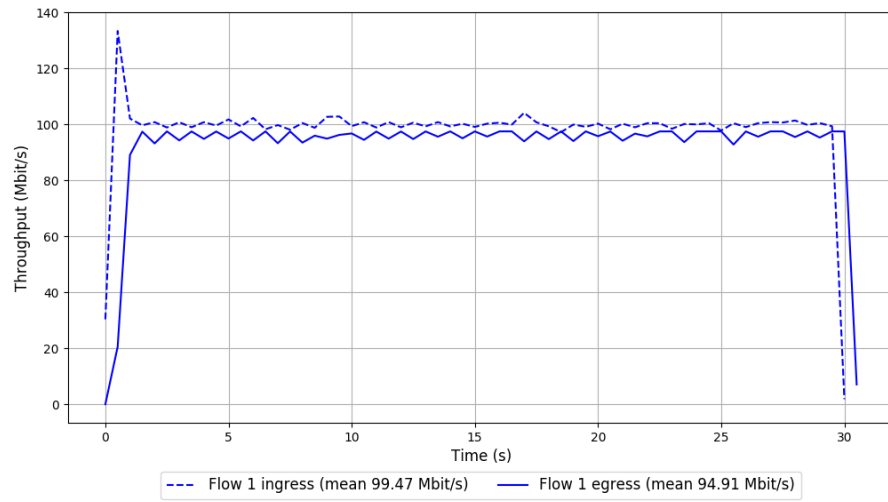
-- Flow 1:

Average throughput: 94.91 Mbit/s

95th percentile per-packet one-way delay: 65.743 ms

Loss rate: 4.59%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-07-03 12:32:57

End at: 2018-07-03 12:33:27

Local clock offset: 1.067 ms

Remote clock offset: -0.229 ms

Below is generated by plot.py at 2018-07-03 14:08:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.93 Mbit/s

95th percentile per-packet one-way delay: 66.812 ms

Loss rate: 4.19%

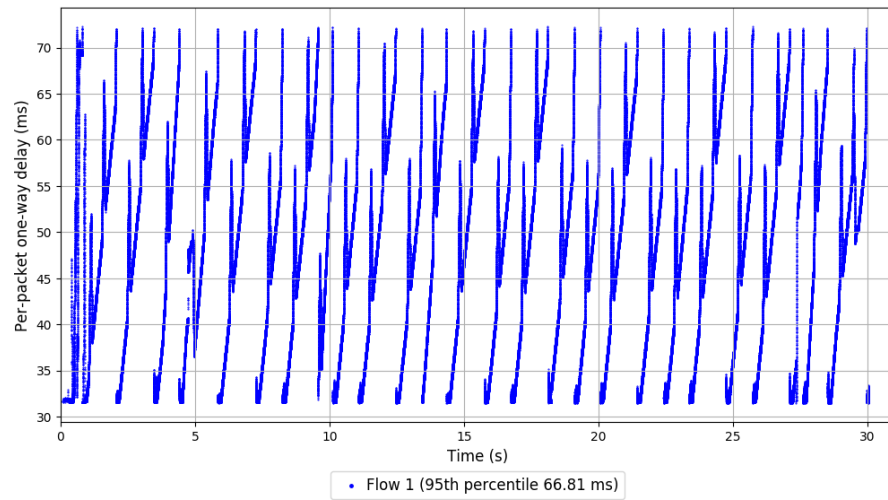
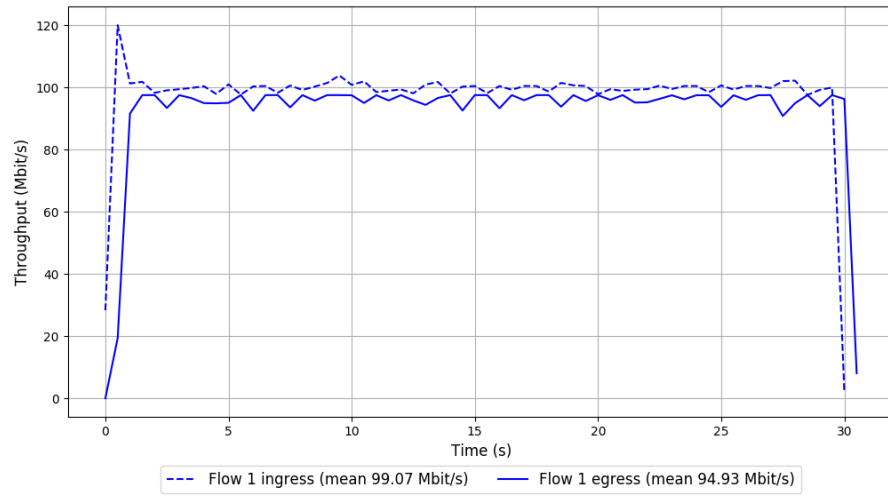
-- Flow 1:

Average throughput: 94.93 Mbit/s

95th percentile per-packet one-way delay: 66.812 ms

Loss rate: 4.19%

Run 6: Report of TCP BBR — Data Link

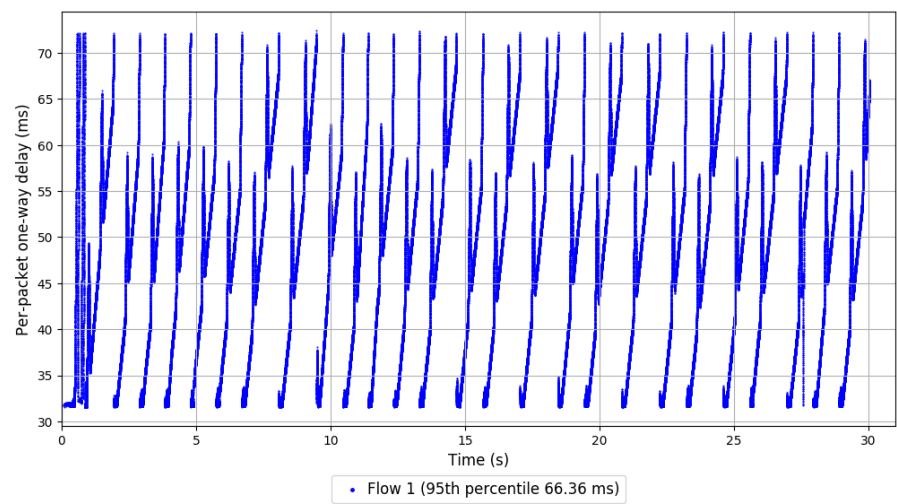
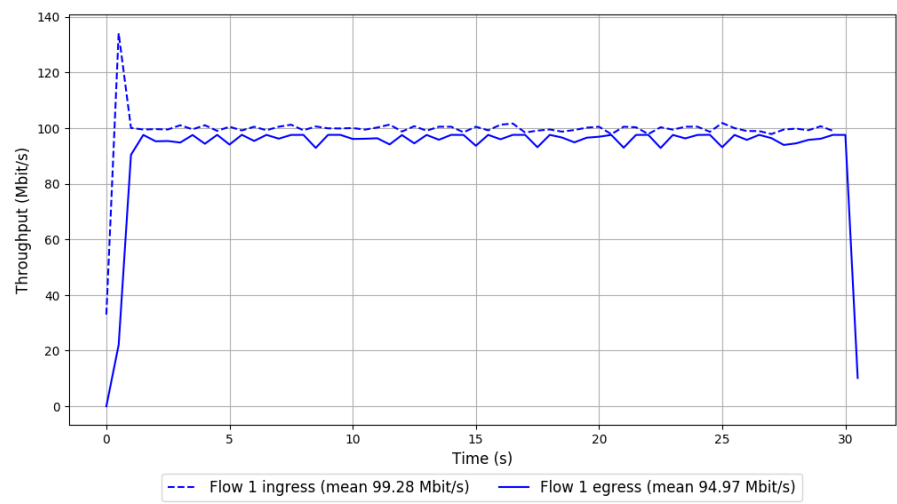


Run 7: Statistics of TCP BBR

Start at: 2018-07-03 12:55:10
End at: 2018-07-03 12:55:40
Local clock offset: 0.622 ms
Remote clock offset: -0.033 ms

Below is generated by plot.py at 2018-07-03 14:08:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.97 Mbit/s
95th percentile per-packet one-way delay: 66.365 ms
Loss rate: 4.24%
-- Flow 1:
Average throughput: 94.97 Mbit/s
95th percentile per-packet one-way delay: 66.365 ms
Loss rate: 4.24%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-07-03 13:17:20

End at: 2018-07-03 13:17:50

Local clock offset: 0.31 ms

Remote clock offset: 1.485 ms

Below is generated by plot.py at 2018-07-03 14:08:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.11 Mbit/s

95th percentile per-packet one-way delay: 66.309 ms

Loss rate: 3.99%

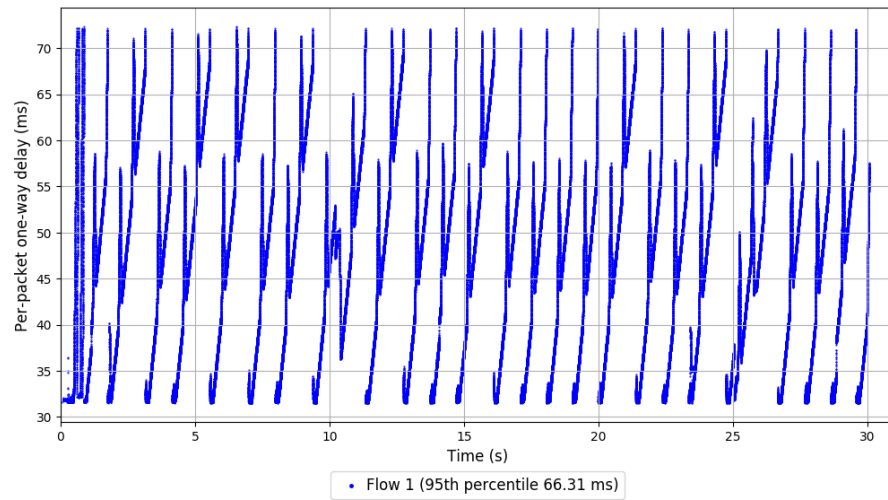
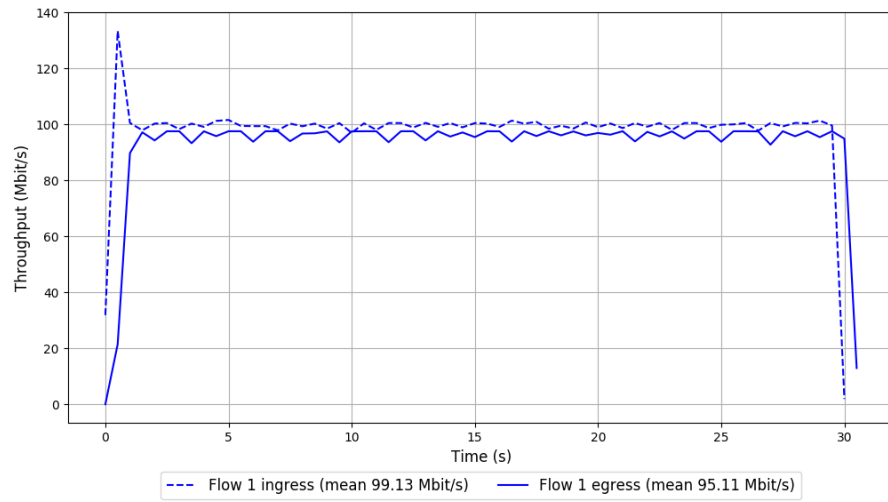
-- Flow 1:

Average throughput: 95.11 Mbit/s

95th percentile per-packet one-way delay: 66.309 ms

Loss rate: 3.99%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-07-03 13:39:36

End at: 2018-07-03 13:40:07

Local clock offset: 0.211 ms

Remote clock offset: 4.423 ms

Below is generated by plot.py at 2018-07-03 14:09:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.04 Mbit/s

95th percentile per-packet one-way delay: 65.908 ms

Loss rate: 4.16%

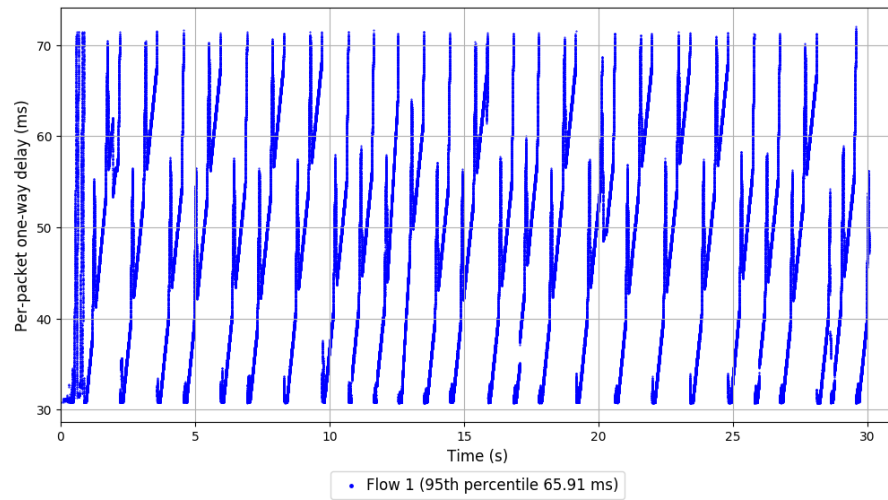
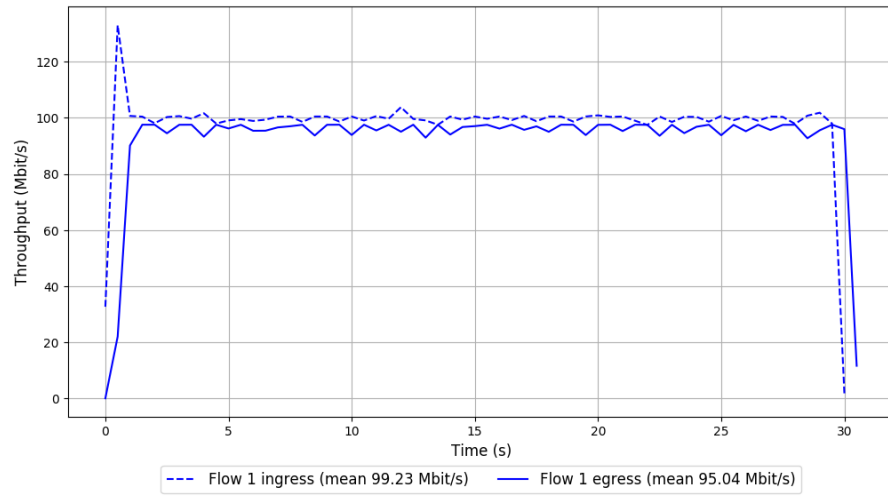
-- Flow 1:

Average throughput: 95.04 Mbit/s

95th percentile per-packet one-way delay: 65.908 ms

Loss rate: 4.16%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-07-03 14:01:57

End at: 2018-07-03 14:02:27

Local clock offset: 0.192 ms

Remote clock offset: 7.476 ms

Below is generated by plot.py at 2018-07-03 14:09:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.06 Mbit/s

95th percentile per-packet one-way delay: 64.766 ms

Loss rate: 4.13%

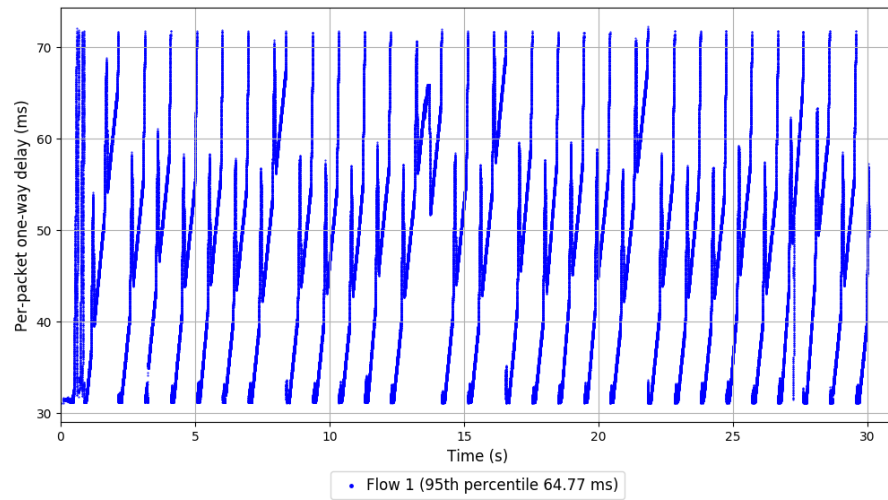
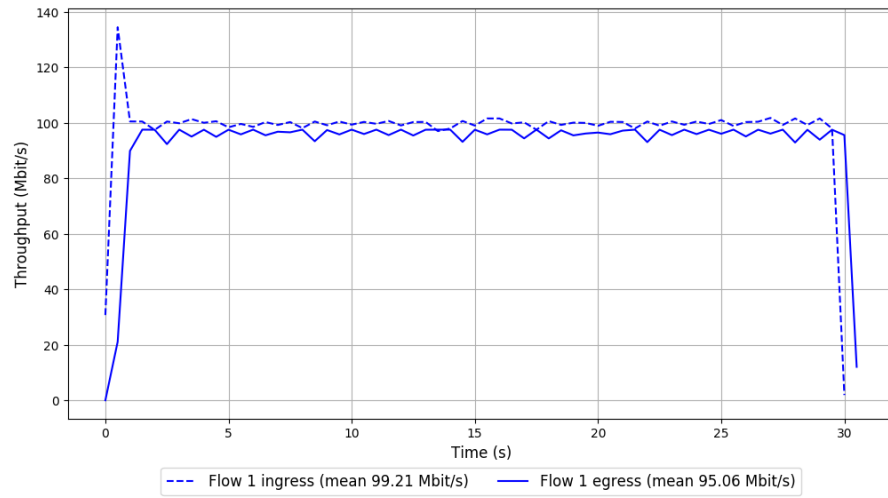
-- Flow 1:

Average throughput: 95.06 Mbit/s

95th percentile per-packet one-way delay: 64.766 ms

Loss rate: 4.13%

Run 10: Report of TCP BBR — Data Link

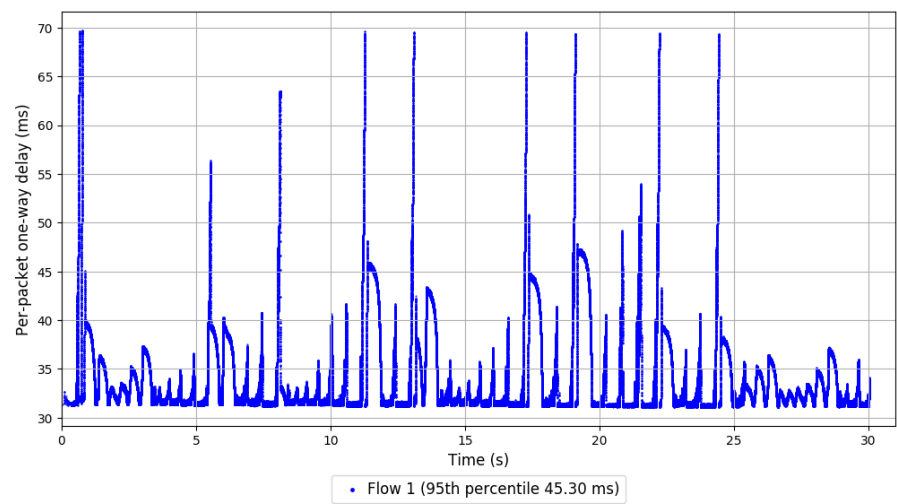
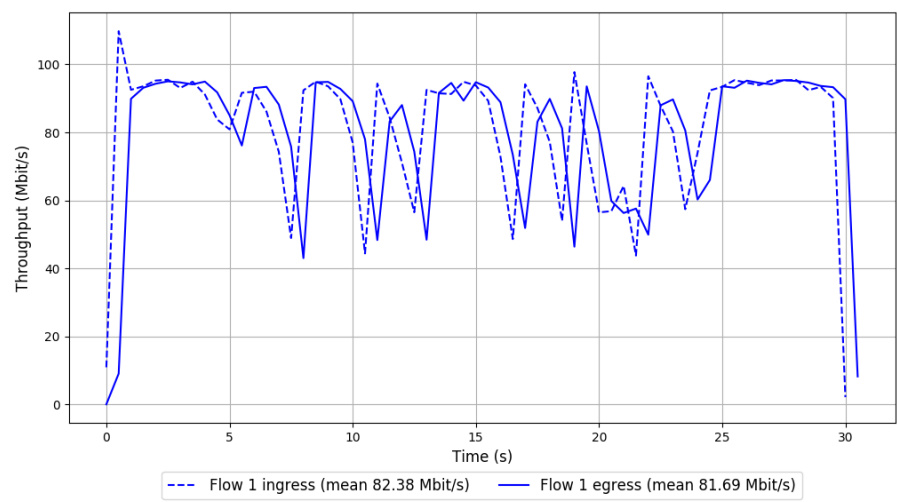


Run 1: Statistics of Copa

Start at: 2018-07-03 10:28:39
End at: 2018-07-03 10:29:09
Local clock offset: -27.95 ms
Remote clock offset: -1.068 ms

Below is generated by plot.py at 2018-07-03 14:10:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 81.69 Mbit/s
95th percentile per-packet one-way delay: 45.304 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 81.69 Mbit/s
95th percentile per-packet one-way delay: 45.304 ms
Loss rate: 0.83%

Run 1: Report of Copa — Data Link

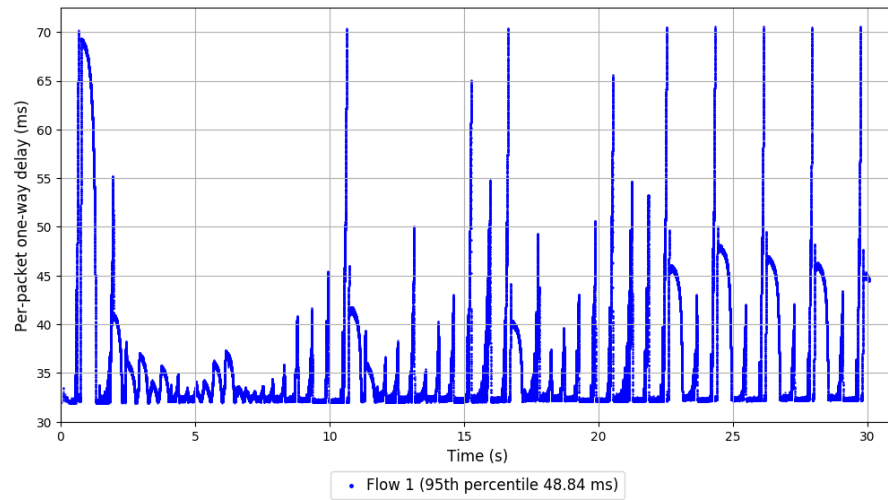
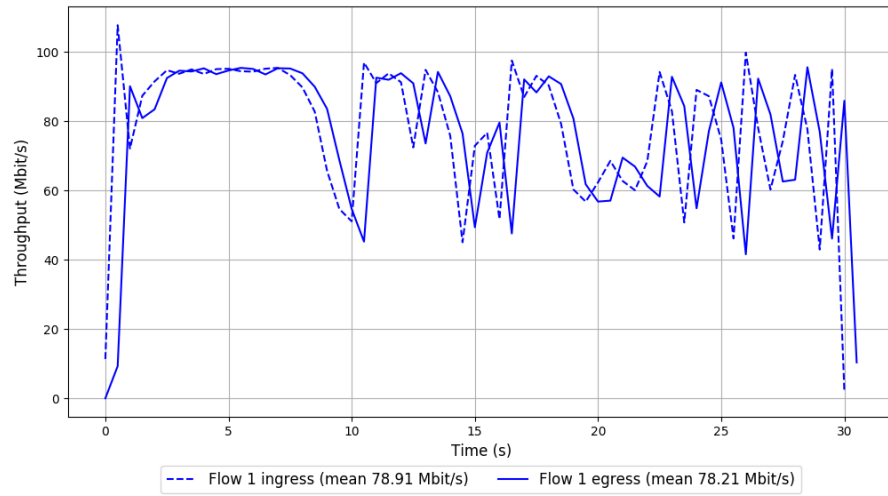


Run 2: Statistics of Copa

Start at: 2018-07-03 10:50:57
End at: 2018-07-03 10:51:27
Local clock offset: -0.854 ms
Remote clock offset: -0.914 ms

Below is generated by plot.py at 2018-07-03 14:10:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 78.21 Mbit/s
95th percentile per-packet one-way delay: 48.837 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 78.21 Mbit/s
95th percentile per-packet one-way delay: 48.837 ms
Loss rate: 0.86%

Run 2: Report of Copa — Data Link

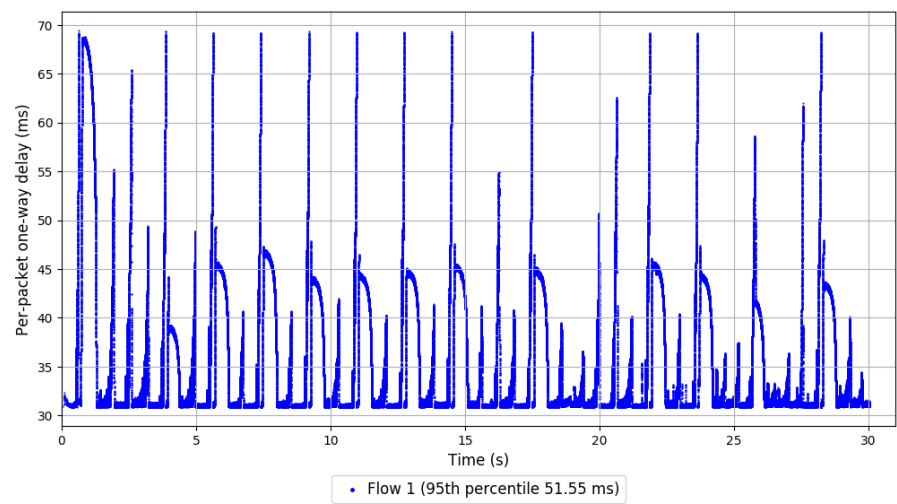
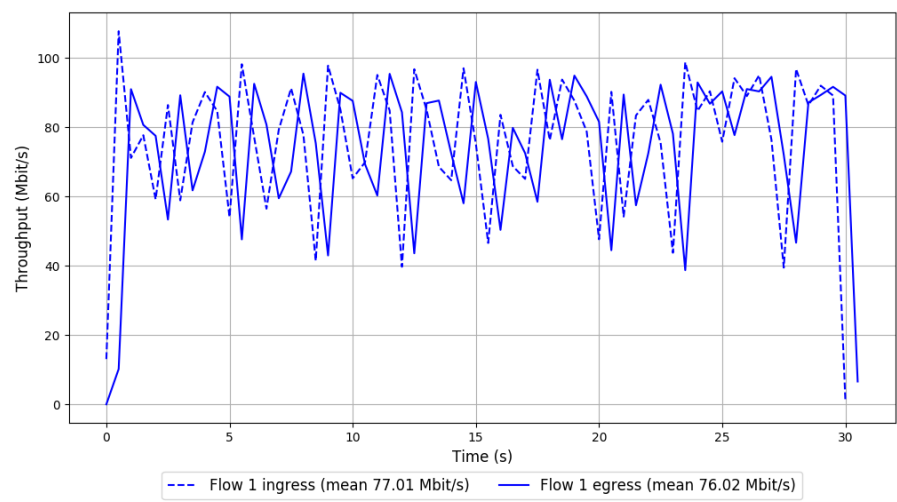


Run 3: Statistics of Copa

Start at: 2018-07-03 11:13:16
End at: 2018-07-03 11:13:46
Local clock offset: 2.377 ms
Remote clock offset: -1.312 ms

Below is generated by plot.py at 2018-07-03 14:10:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 76.02 Mbit/s
95th percentile per-packet one-way delay: 51.552 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 76.02 Mbit/s
95th percentile per-packet one-way delay: 51.552 ms
Loss rate: 1.29%

Run 3: Report of Copa — Data Link

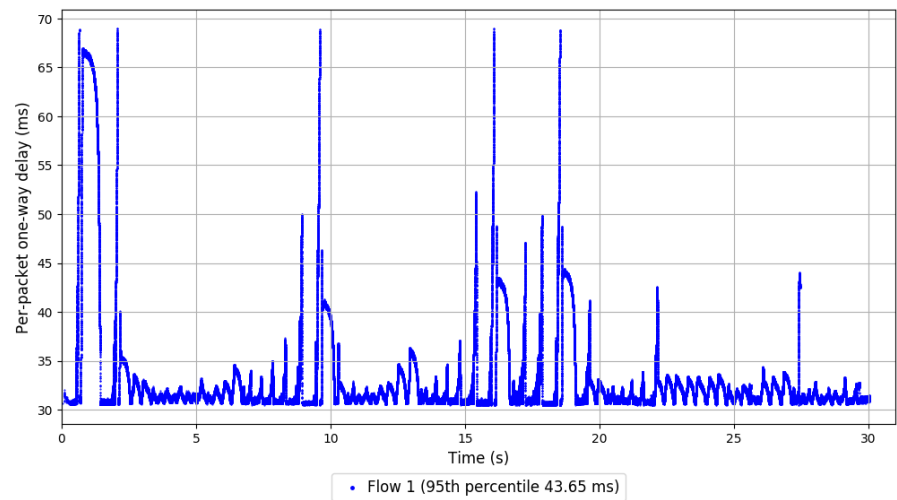
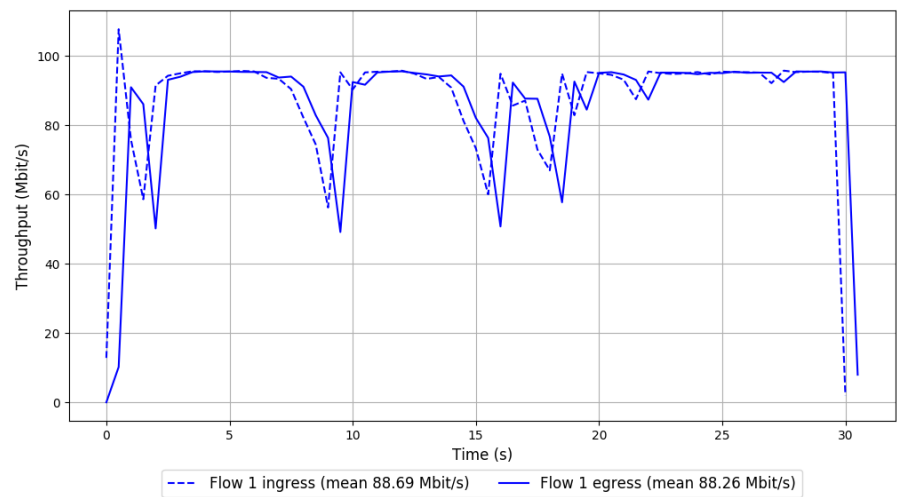


Run 4: Statistics of Copa

Start at: 2018-07-03 11:35:29
End at: 2018-07-03 11:35:59
Local clock offset: 2.73 ms
Remote clock offset: -1.787 ms

Below is generated by plot.py at 2018-07-03 14:10:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 88.26 Mbit/s
95th percentile per-packet one-way delay: 43.653 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 88.26 Mbit/s
95th percentile per-packet one-way delay: 43.653 ms
Loss rate: 0.48%

Run 4: Report of Copa — Data Link

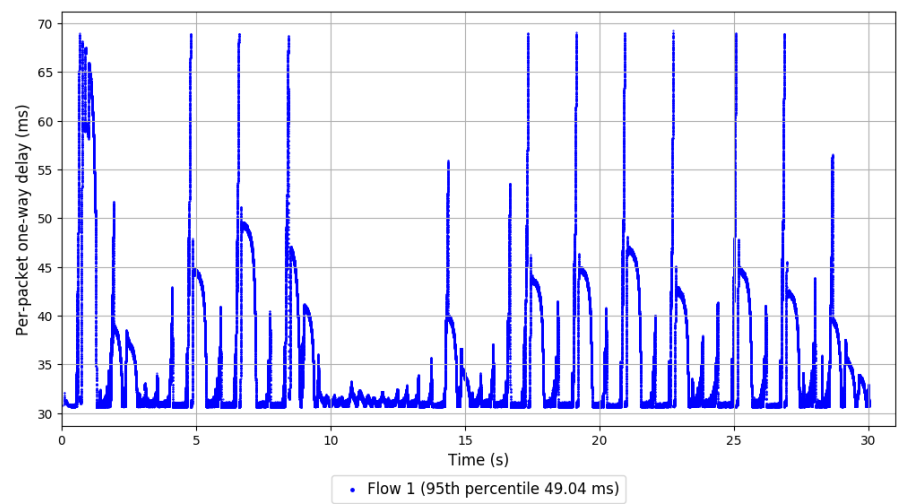
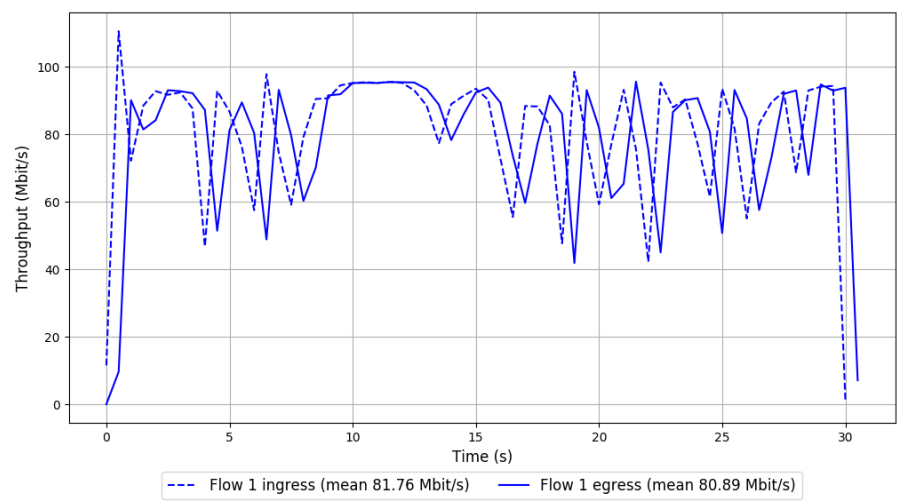


Run 5: Statistics of Copa

Start at: 2018-07-03 11:57:45
End at: 2018-07-03 11:58:15
Local clock offset: 1.527 ms
Remote clock offset: -1.611 ms

Below is generated by plot.py at 2018-07-03 14:10:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 80.89 Mbit/s
95th percentile per-packet one-way delay: 49.040 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 80.89 Mbit/s
95th percentile per-packet one-way delay: 49.040 ms
Loss rate: 1.07%

Run 5: Report of Copa — Data Link

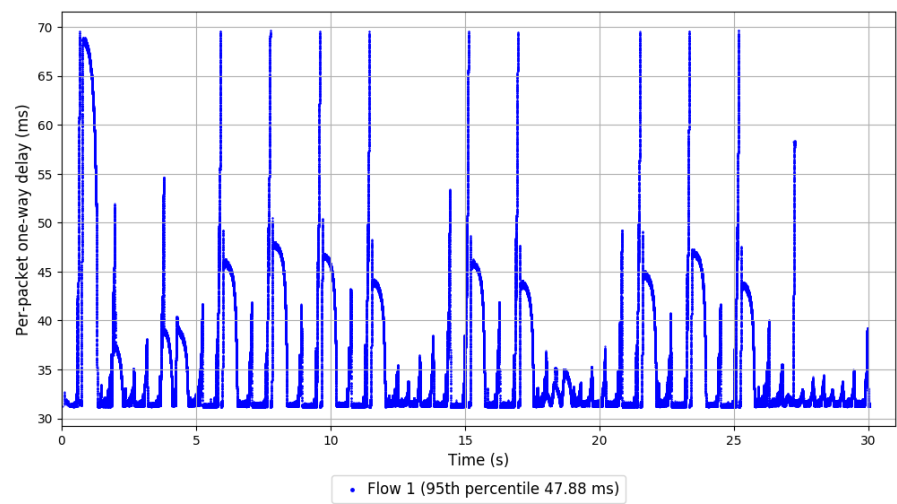
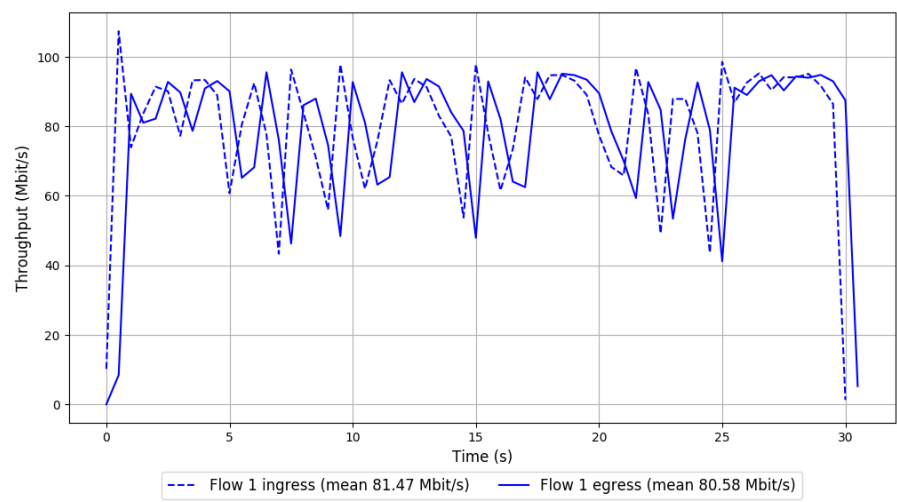


Run 6: Statistics of Copa

Start at: 2018-07-03 12:19:55
End at: 2018-07-03 12:20:25
Local clock offset: 0.842 ms
Remote clock offset: -1.322 ms

Below is generated by plot.py at 2018-07-03 14:10:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 80.58 Mbit/s
95th percentile per-packet one-way delay: 47.880 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 80.58 Mbit/s
95th percentile per-packet one-way delay: 47.880 ms
Loss rate: 1.10%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-07-03 12:42:09

End at: 2018-07-03 12:42:39

Local clock offset: 0.568 ms

Remote clock offset: 0.241 ms

Below is generated by plot.py at 2018-07-03 14:11:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.53 Mbit/s

95th percentile per-packet one-way delay: 49.850 ms

Loss rate: 1.04%

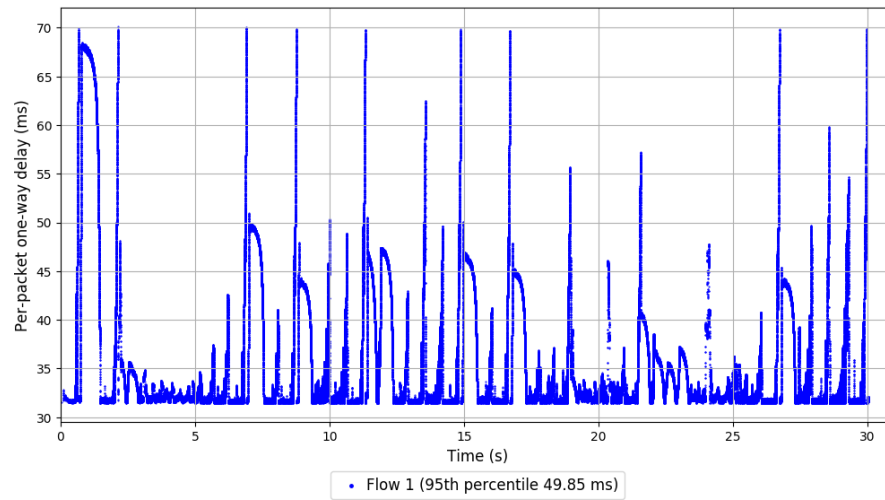
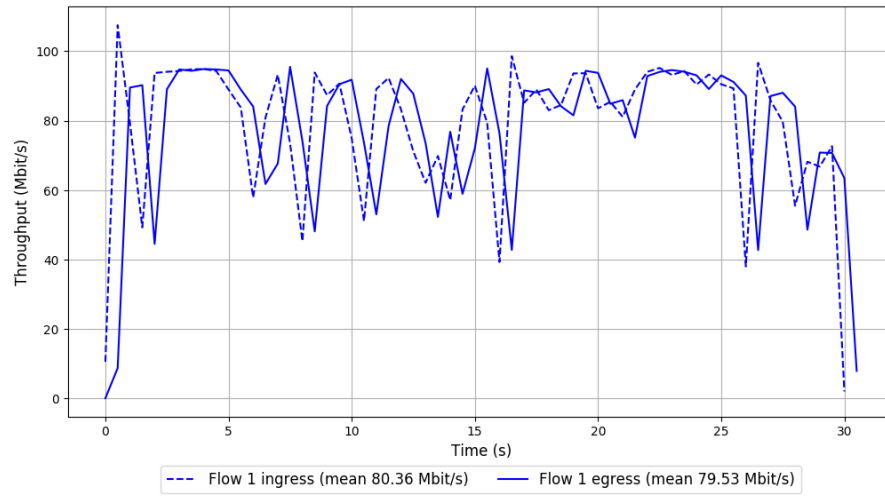
-- Flow 1:

Average throughput: 79.53 Mbit/s

95th percentile per-packet one-way delay: 49.850 ms

Loss rate: 1.04%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-07-03 13:04:20

End at: 2018-07-03 13:04:50

Local clock offset: 0.689 ms

Remote clock offset: 0.197 ms

Below is generated by plot.py at 2018-07-03 14:11:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.33 Mbit/s

95th percentile per-packet one-way delay: 44.771 ms

Loss rate: 0.43%

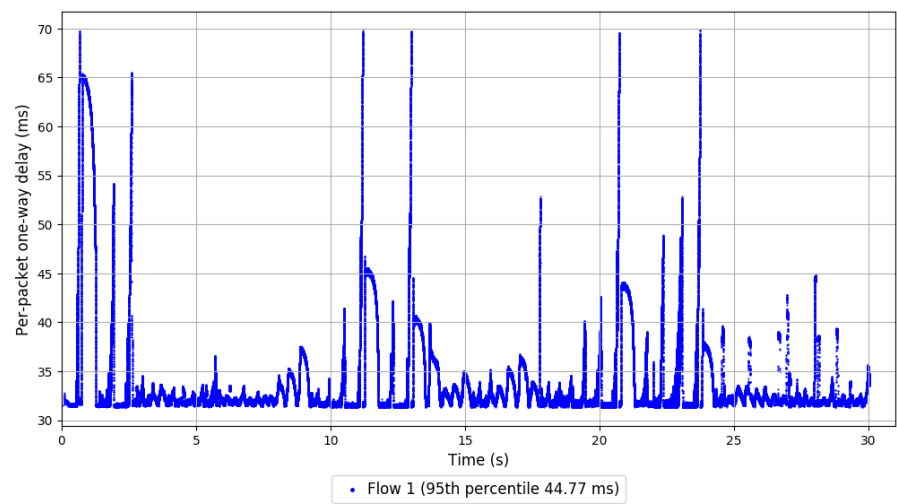
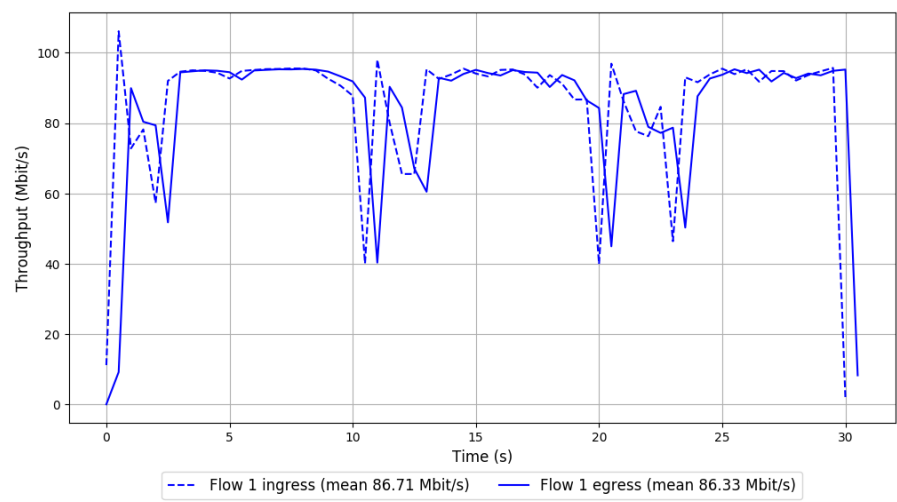
-- Flow 1:

Average throughput: 86.33 Mbit/s

95th percentile per-packet one-way delay: 44.771 ms

Loss rate: 0.43%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-07-03 13:26:32

End at: 2018-07-03 13:27:02

Local clock offset: 0.321 ms

Remote clock offset: 2.422 ms

Below is generated by plot.py at 2018-07-03 14:11:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.54 Mbit/s

95th percentile per-packet one-way delay: 47.370 ms

Loss rate: 0.64%

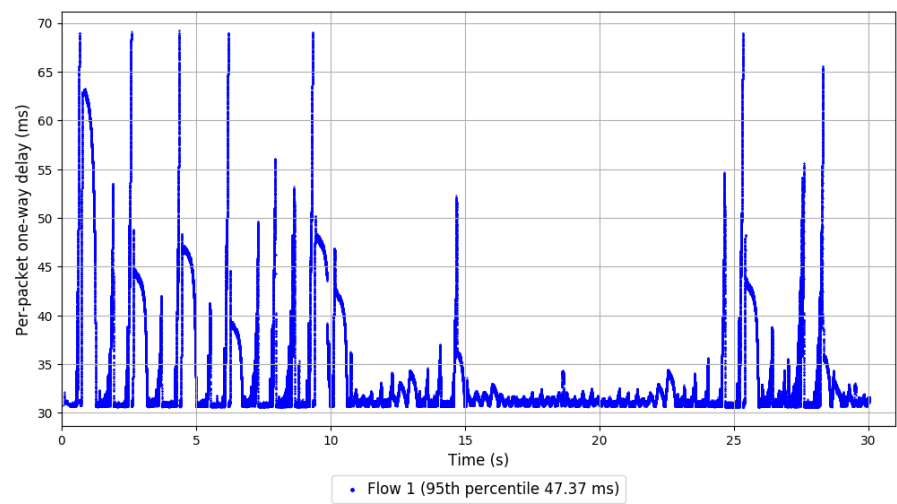
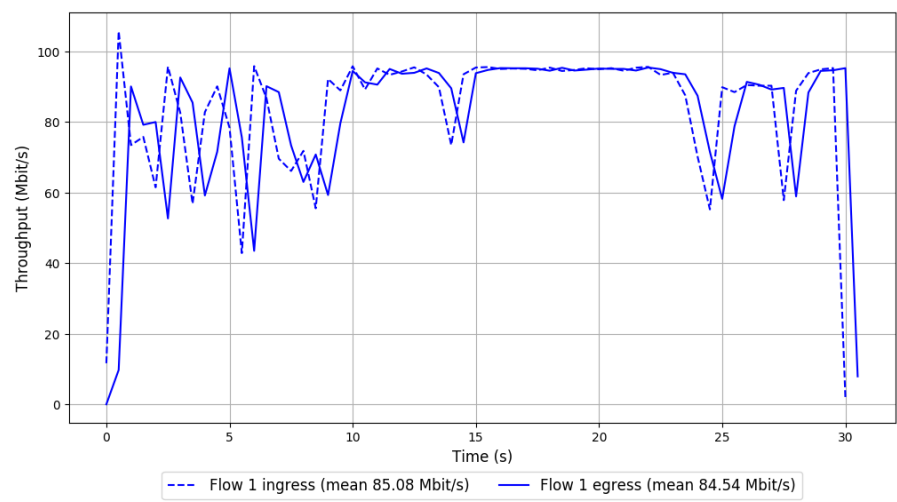
-- Flow 1:

Average throughput: 84.54 Mbit/s

95th percentile per-packet one-way delay: 47.370 ms

Loss rate: 0.64%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-07-03 13:48:53

End at: 2018-07-03 13:49:23

Local clock offset: 0.221 ms

Remote clock offset: 6.063 ms

Below is generated by plot.py at 2018-07-03 14:11:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.18 Mbit/s

95th percentile per-packet one-way delay: 47.292 ms

Loss rate: 0.57%

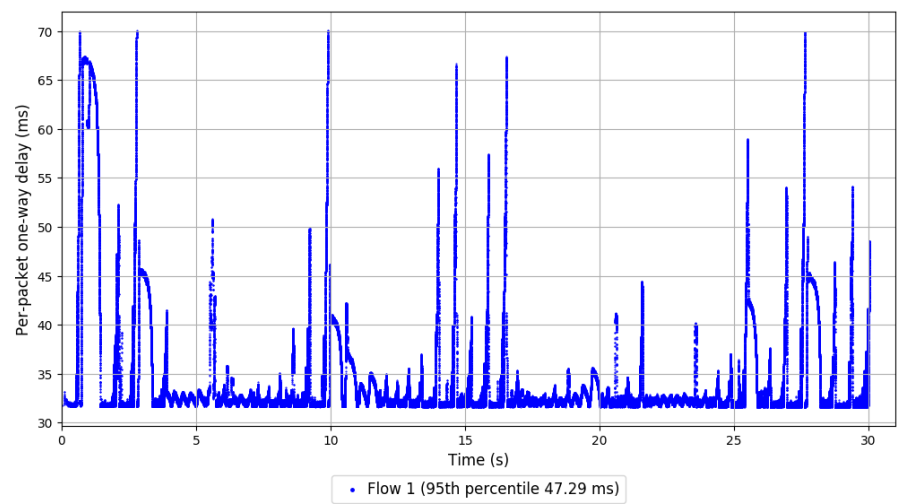
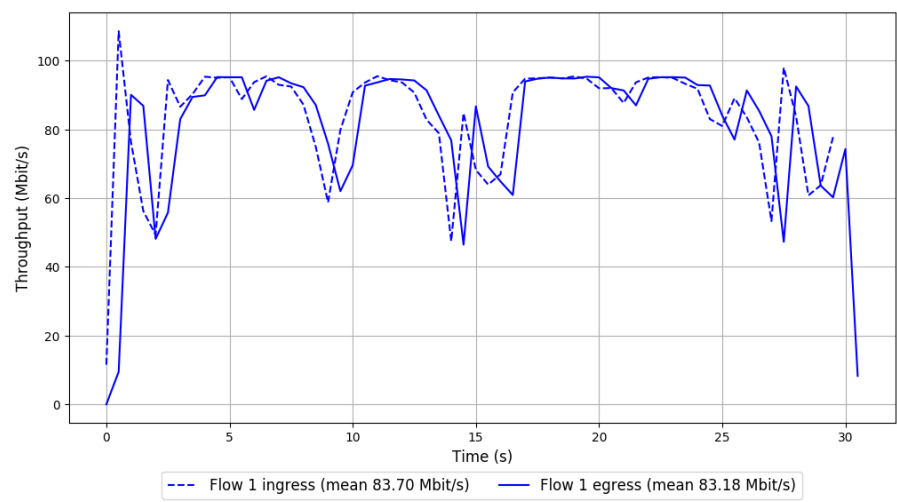
-- Flow 1:

Average throughput: 83.18 Mbit/s

95th percentile per-packet one-way delay: 47.292 ms

Loss rate: 0.57%

Run 10: Report of Copa — Data Link

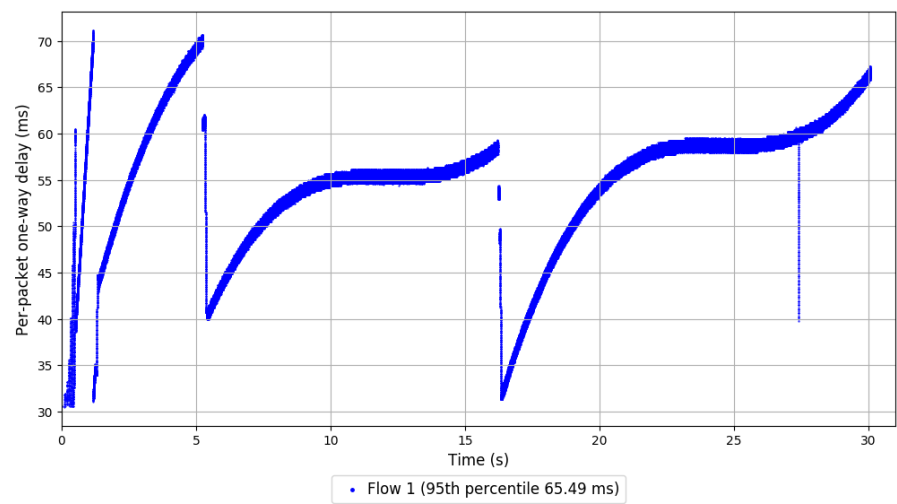
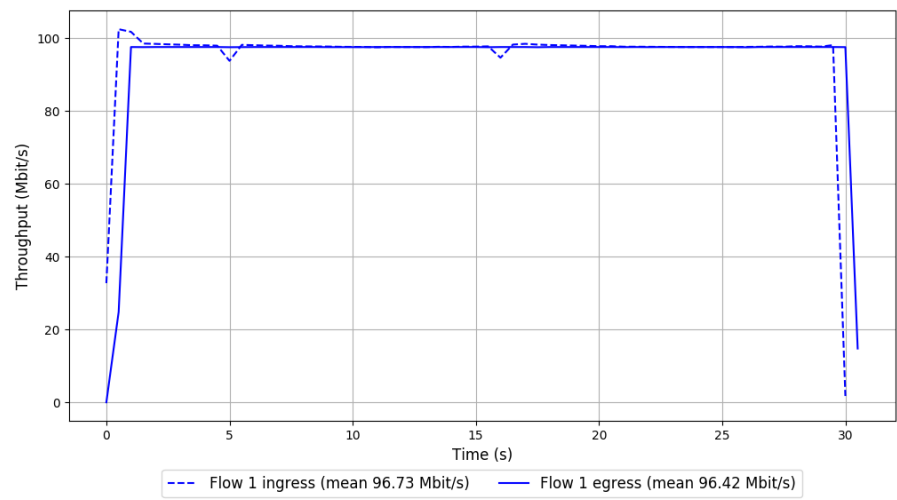


Run 1: Statistics of TCP Cubic

Start at: 2018-07-03 10:24:42
End at: 2018-07-03 10:25:12
Local clock offset: -26.559 ms
Remote clock offset: -1.275 ms

Below is generated by plot.py at 2018-07-03 14:11:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.42 Mbit/s
95th percentile per-packet one-way delay: 65.492 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 96.42 Mbit/s
95th percentile per-packet one-way delay: 65.492 ms
Loss rate: 0.20%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-07-03 10:46:58

End at: 2018-07-03 10:47:28

Local clock offset: -3.866 ms

Remote clock offset: -0.94 ms

Below is generated by plot.py at 2018-07-03 14:11:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.39 Mbit/s

95th percentile per-packet one-way delay: 70.549 ms

Loss rate: 0.44%

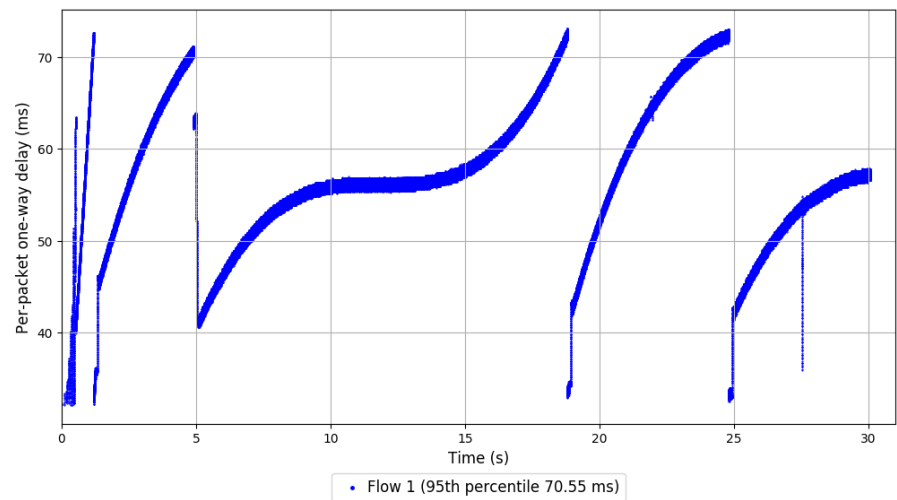
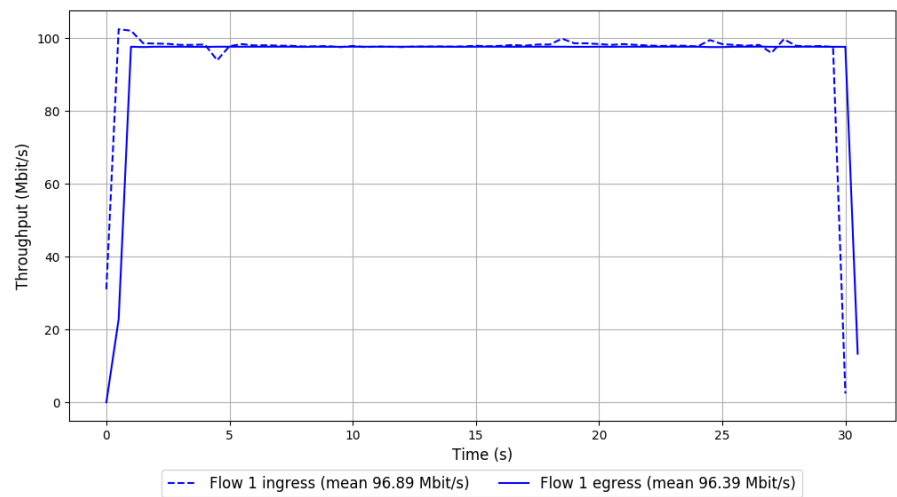
-- Flow 1:

Average throughput: 96.39 Mbit/s

95th percentile per-packet one-way delay: 70.549 ms

Loss rate: 0.44%

Run 2: Report of TCP Cubic — Data Link

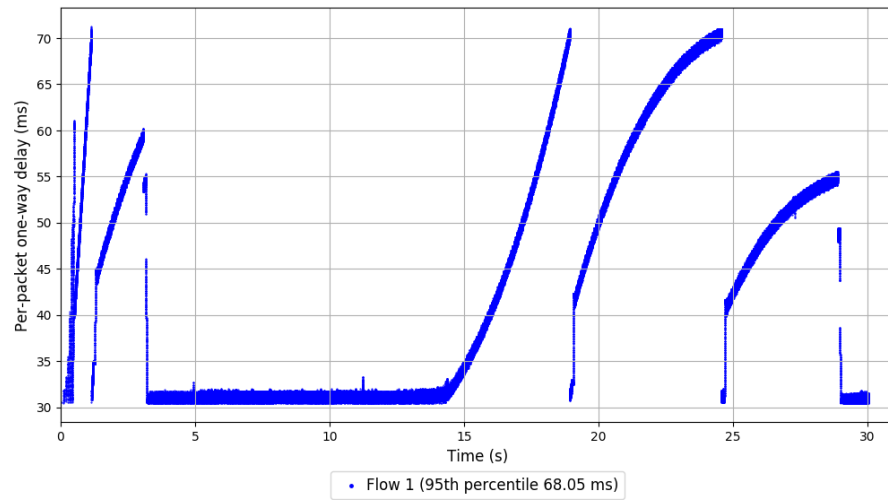
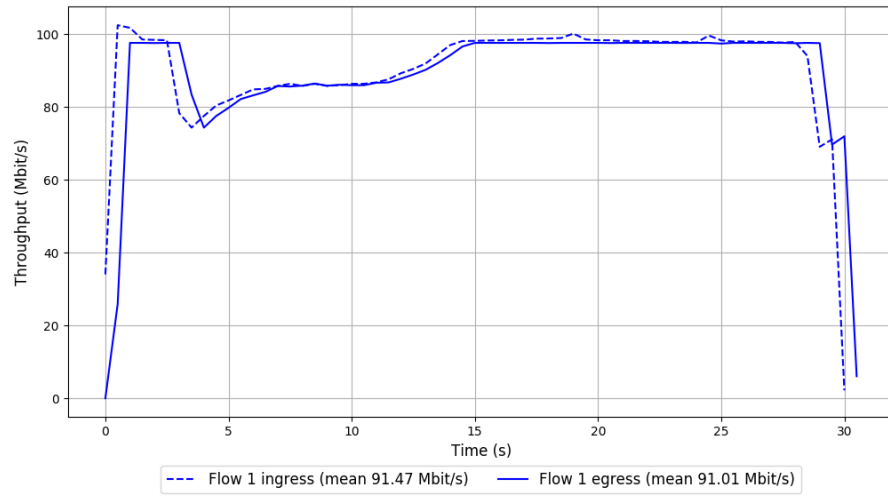


Run 3: Statistics of TCP Cubic

Start at: 2018-07-03 11:09:19
End at: 2018-07-03 11:09:49
Local clock offset: 2.859 ms
Remote clock offset: -1.379 ms

Below is generated by plot.py at 2018-07-03 14:11:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.01 Mbit/s
95th percentile per-packet one-way delay: 68.049 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 91.01 Mbit/s
95th percentile per-packet one-way delay: 68.049 ms
Loss rate: 0.50%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-07-03 11:31:32

End at: 2018-07-03 11:32:02

Local clock offset: 3.202 ms

Remote clock offset: -1.55 ms

Below is generated by plot.py at 2018-07-03 14:11:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.99 Mbit/s

95th percentile per-packet one-way delay: 66.491 ms

Loss rate: 0.34%

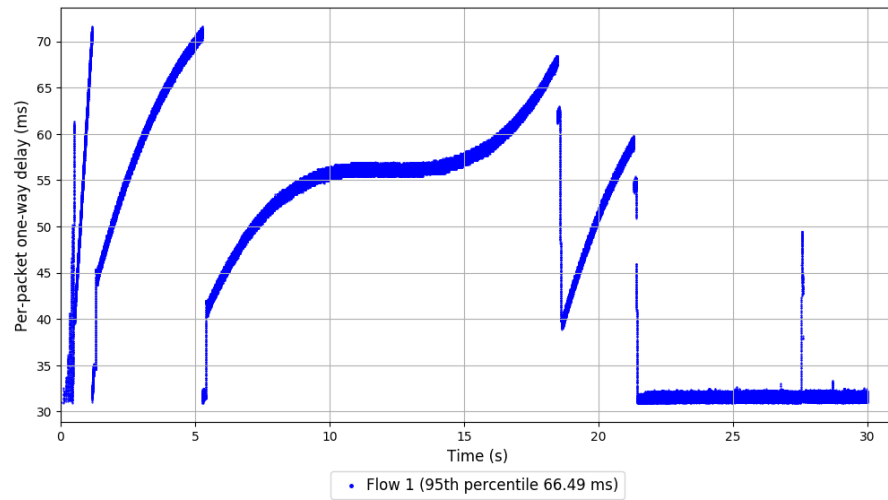
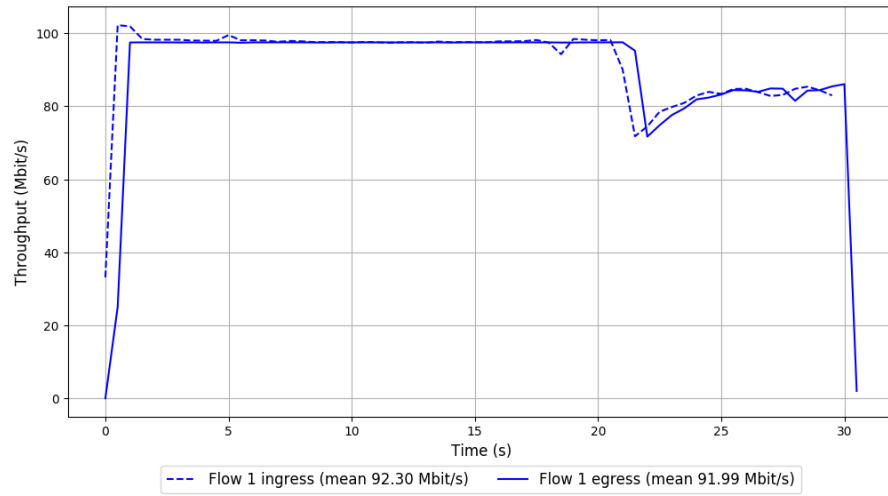
-- Flow 1:

Average throughput: 91.99 Mbit/s

95th percentile per-packet one-way delay: 66.491 ms

Loss rate: 0.34%

Run 4: Report of TCP Cubic — Data Link

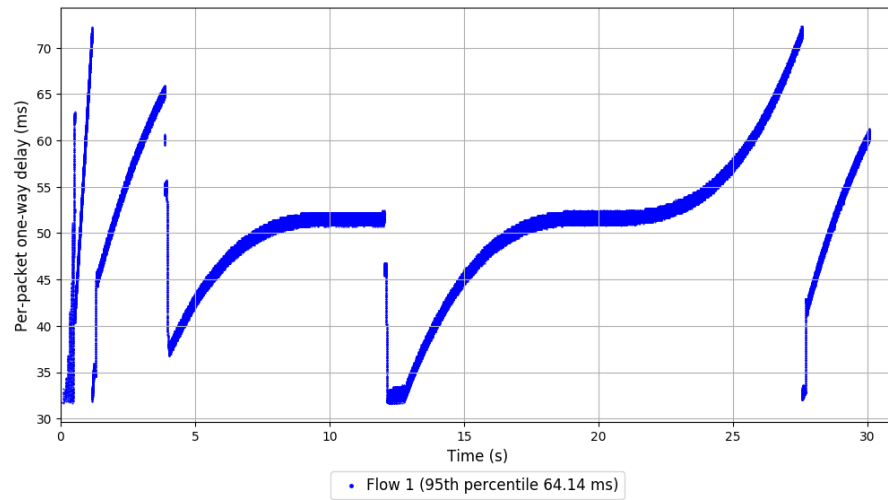
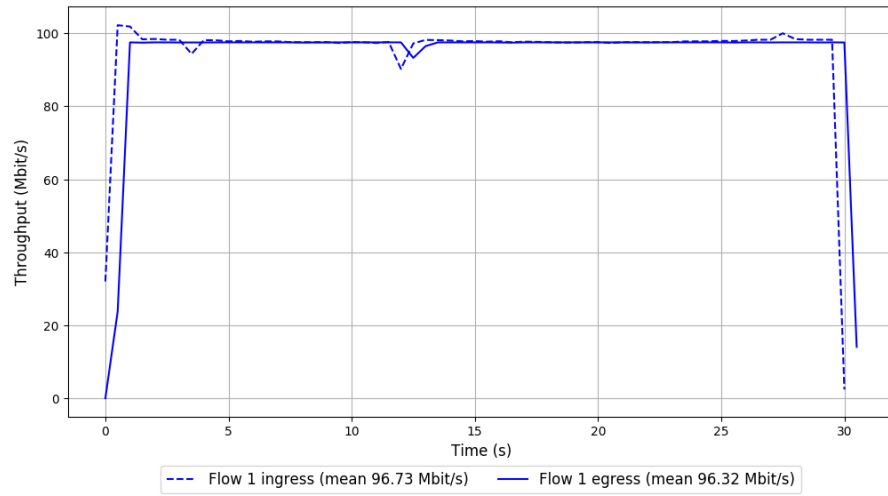


Run 5: Statistics of TCP Cubic

Start at: 2018-07-03 11:53:48
End at: 2018-07-03 11:54:18
Local clock offset: 1.441 ms
Remote clock offset: -1.224 ms

Below is generated by plot.py at 2018-07-03 14:12:24
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.32 Mbit/s
95th percentile per-packet one-way delay: 64.136 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 96.32 Mbit/s
95th percentile per-packet one-way delay: 64.136 ms
Loss rate: 0.33%

Run 5: Report of TCP Cubic — Data Link

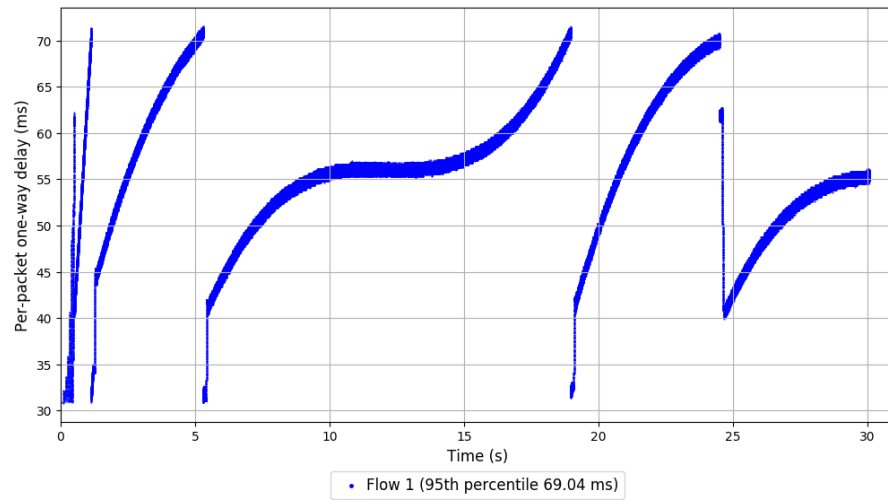
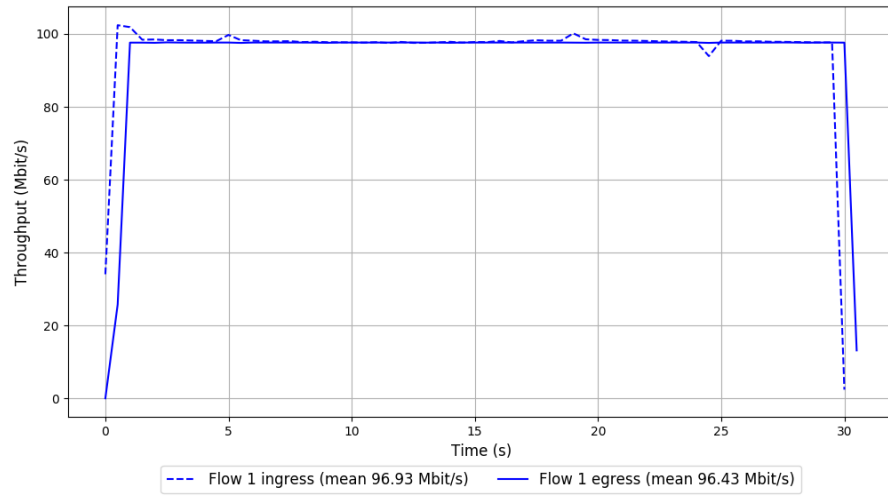


Run 6: Statistics of TCP Cubic

Start at: 2018-07-03 12:15:59
End at: 2018-07-03 12:16:29
Local clock offset: 0.872 ms
Remote clock offset: -1.226 ms

Below is generated by plot.py at 2018-07-03 14:12:27
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.43 Mbit/s
95th percentile per-packet one-way delay: 69.041 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 96.43 Mbit/s
95th percentile per-packet one-way delay: 69.041 ms
Loss rate: 0.43%

Run 6: Report of TCP Cubic — Data Link

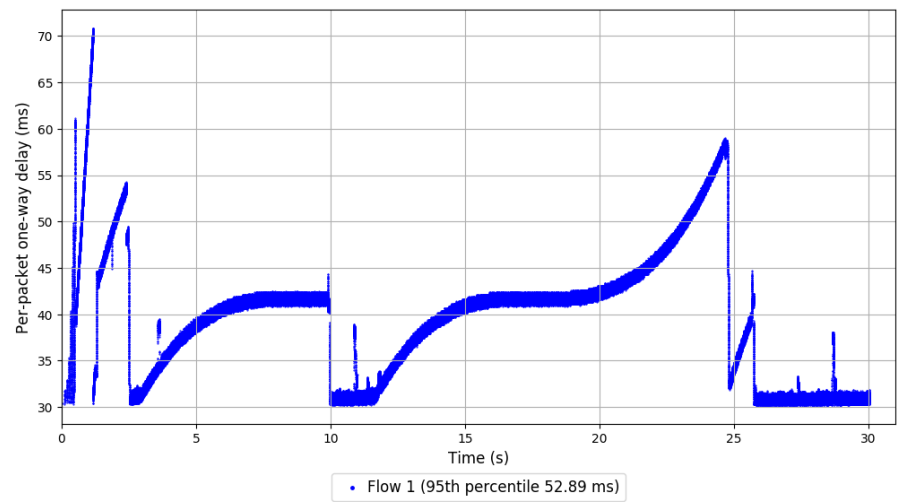
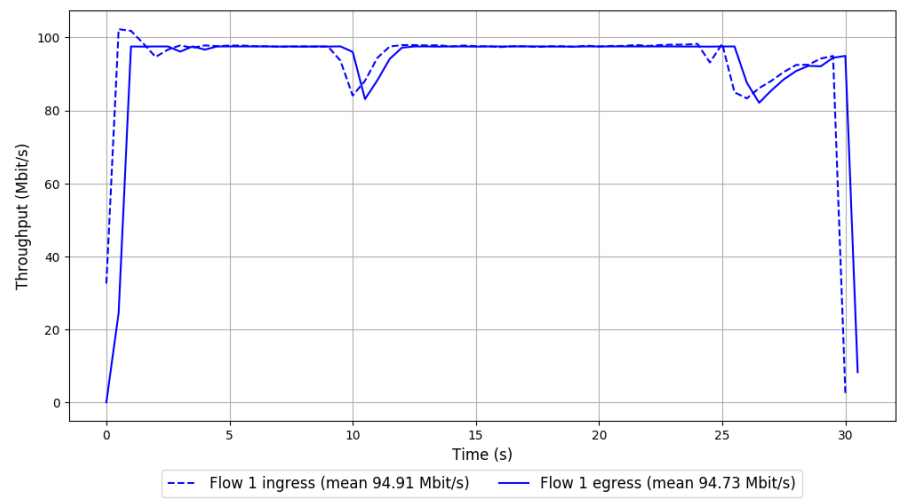


Run 7: Statistics of TCP Cubic

Start at: 2018-07-03 12:38:12
End at: 2018-07-03 12:38:42
Local clock offset: 0.783 ms
Remote clock offset: -0.467 ms

Below is generated by plot.py at 2018-07-03 14:12:27
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.73 Mbit/s
95th percentile per-packet one-way delay: 52.892 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 94.73 Mbit/s
95th percentile per-packet one-way delay: 52.892 ms
Loss rate: 0.19%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-07-03 13:00:23

End at: 2018-07-03 13:00:53

Local clock offset: 0.698 ms

Remote clock offset: 0.258 ms

Below is generated by plot.py at 2018-07-03 14:12:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.36 Mbit/s

95th percentile per-packet one-way delay: 65.982 ms

Loss rate: 0.34%

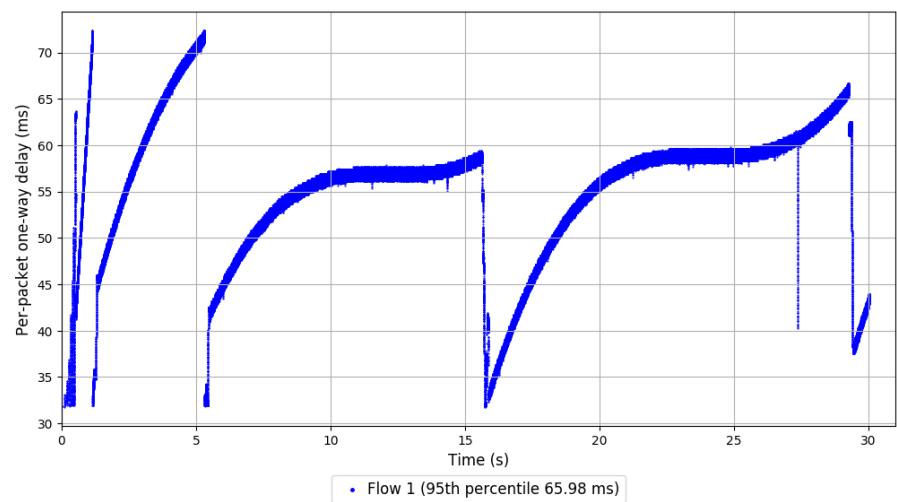
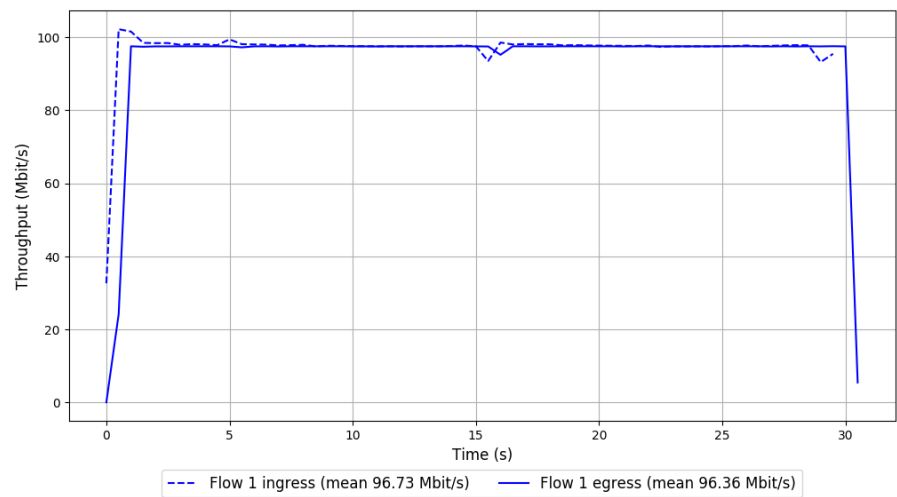
-- Flow 1:

Average throughput: 96.36 Mbit/s

95th percentile per-packet one-way delay: 65.982 ms

Loss rate: 0.34%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-07-03 13:22:34

End at: 2018-07-03 13:23:04

Local clock offset: 0.386 ms

Remote clock offset: 1.843 ms

Below is generated by plot.py at 2018-07-03 14:12:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.40 Mbit/s

95th percentile per-packet one-way delay: 65.246 ms

Loss rate: 0.29%

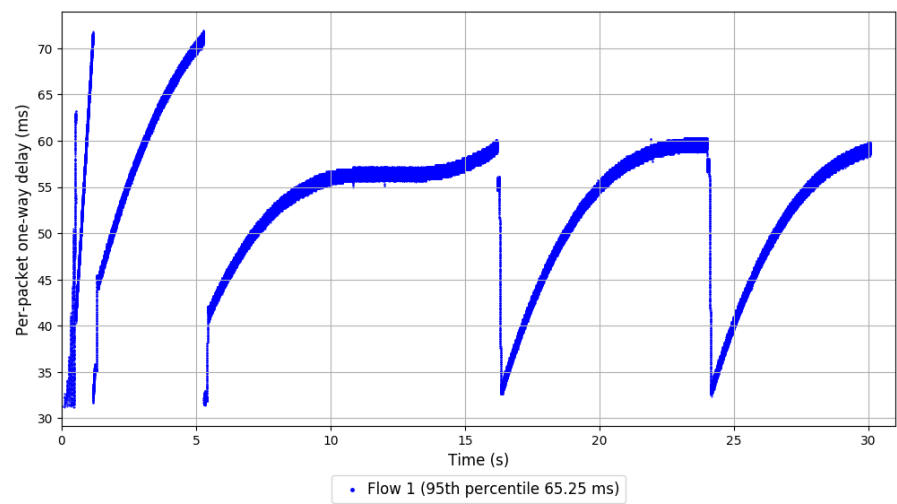
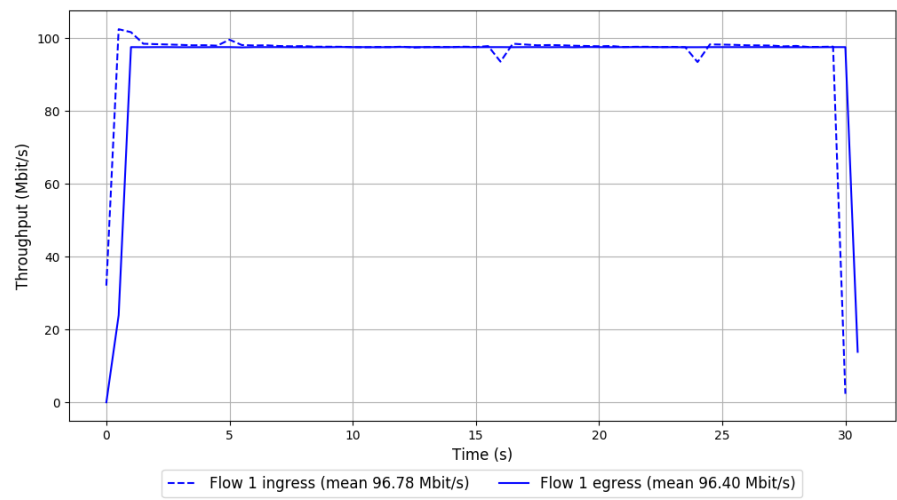
-- Flow 1:

Average throughput: 96.40 Mbit/s

95th percentile per-packet one-way delay: 65.246 ms

Loss rate: 0.29%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-07-03 13:44:53

End at: 2018-07-03 13:45:23

Local clock offset: 0.243 ms

Remote clock offset: 5.094 ms

Below is generated by plot.py at 2018-07-03 14:12:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.24 Mbit/s

95th percentile per-packet one-way delay: 64.842 ms

Loss rate: 0.39%

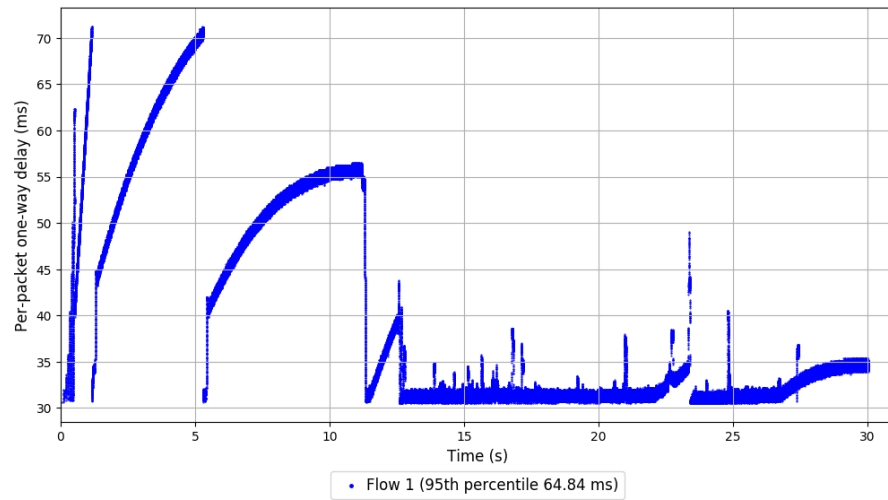
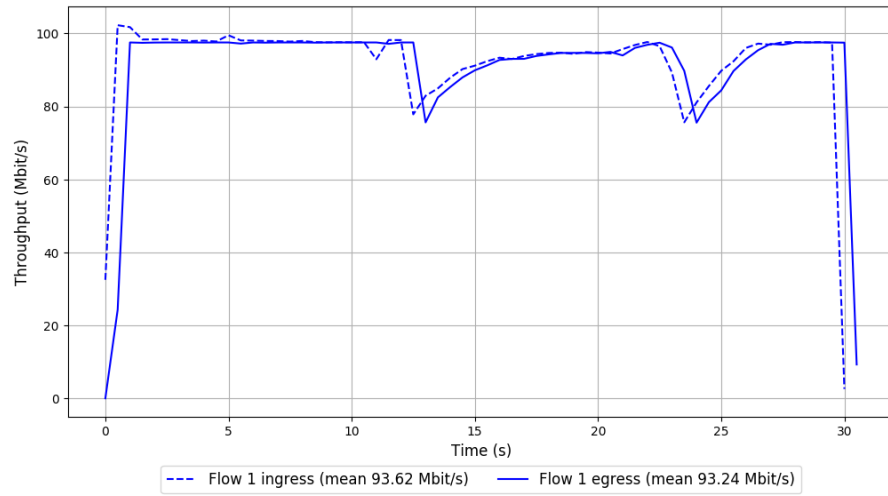
-- Flow 1:

Average throughput: 93.24 Mbit/s

95th percentile per-packet one-way delay: 64.842 ms

Loss rate: 0.39%

Run 10: Report of TCP Cubic — Data Link

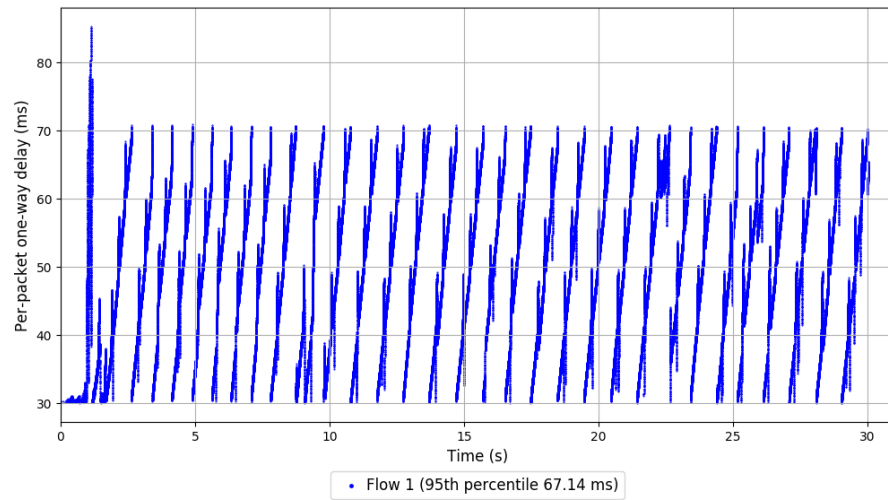
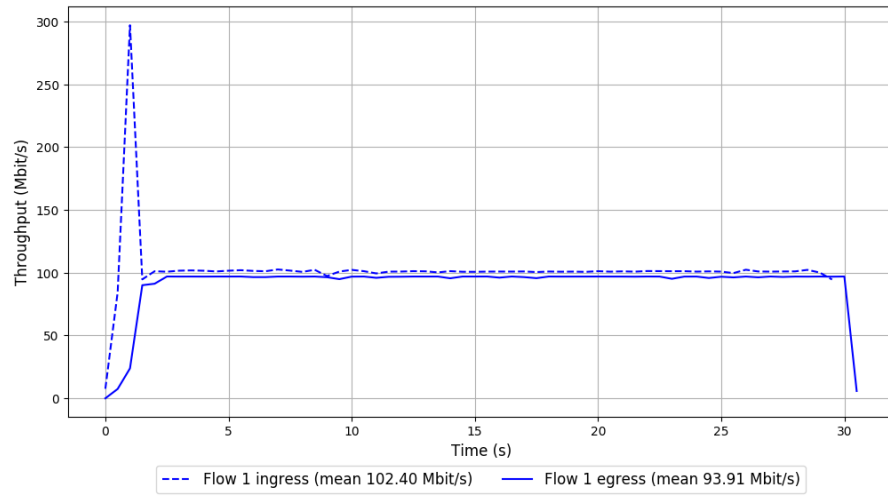


Run 1: Statistics of FillP

Start at: 2018-07-03 10:23:23
End at: 2018-07-03 10:23:53
Local clock offset: -25.959 ms
Remote clock offset: -1.42 ms

Below is generated by plot.py at 2018-07-03 14:13:26
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.91 Mbit/s
95th percentile per-packet one-way delay: 67.143 ms
Loss rate: 8.18%
-- Flow 1:
Average throughput: 93.91 Mbit/s
95th percentile per-packet one-way delay: 67.143 ms
Loss rate: 8.18%

Run 1: Report of FillP — Data Link

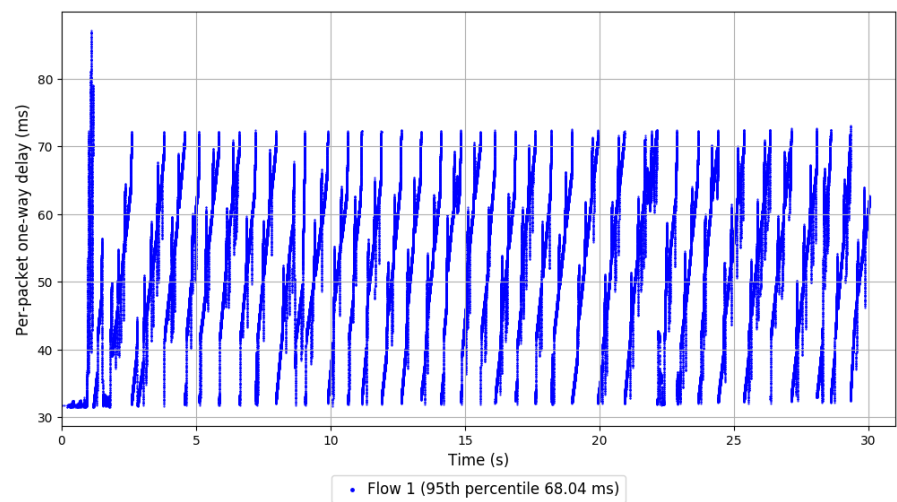
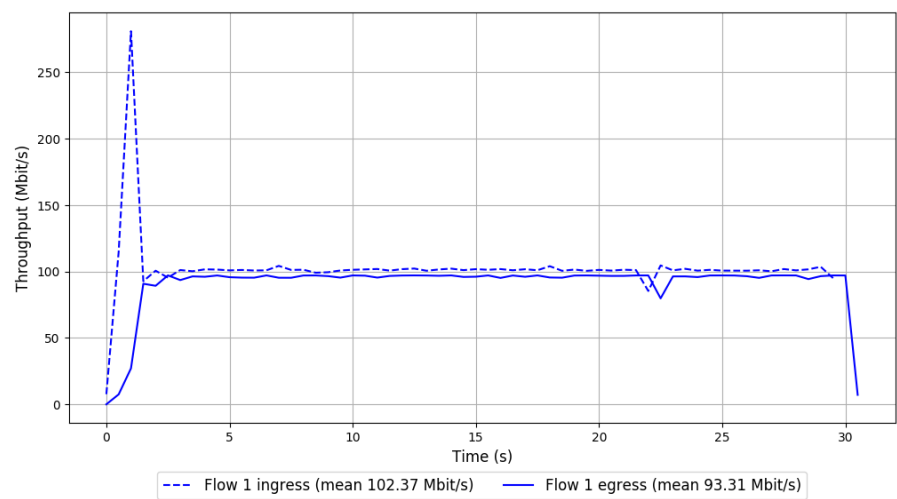


Run 2: Statistics of FillP

Start at: 2018-07-03 10:45:39
End at: 2018-07-03 10:46:09
Local clock offset: -5.213 ms
Remote clock offset: -0.857 ms

Below is generated by plot.py at 2018-07-03 14:13:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.31 Mbit/s
95th percentile per-packet one-way delay: 68.041 ms
Loss rate: 8.76%
-- Flow 1:
Average throughput: 93.31 Mbit/s
95th percentile per-packet one-way delay: 68.041 ms
Loss rate: 8.76%

Run 2: Report of FillP — Data Link

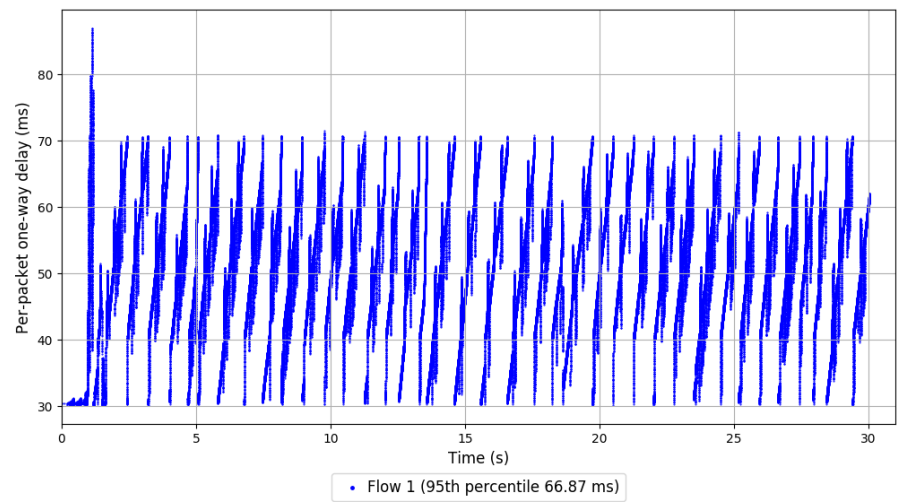
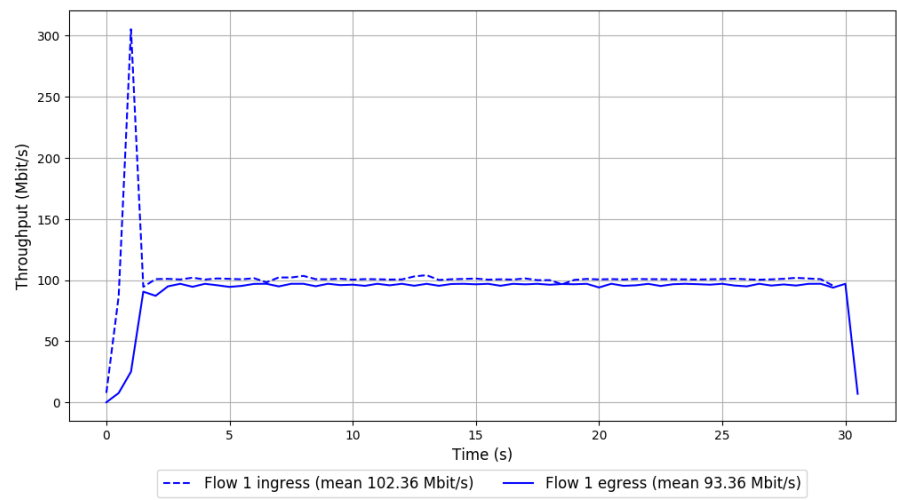


Run 3: Statistics of FillP

Start at: 2018-07-03 11:08:01
End at: 2018-07-03 11:08:31
Local clock offset: 3.09 ms
Remote clock offset: -1.405 ms

Below is generated by plot.py at 2018-07-03 14:13:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.36 Mbit/s
95th percentile per-packet one-way delay: 66.869 ms
Loss rate: 8.69%
-- Flow 1:
Average throughput: 93.36 Mbit/s
95th percentile per-packet one-way delay: 66.869 ms
Loss rate: 8.69%

Run 3: Report of FillP — Data Link

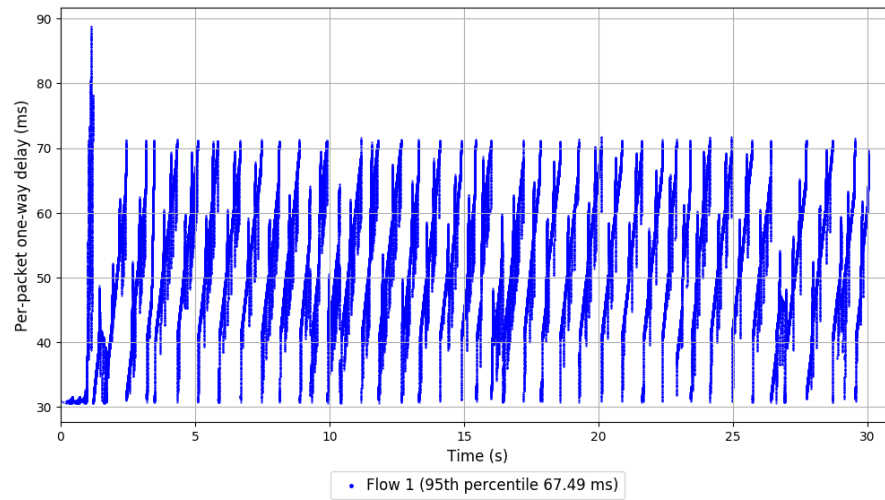
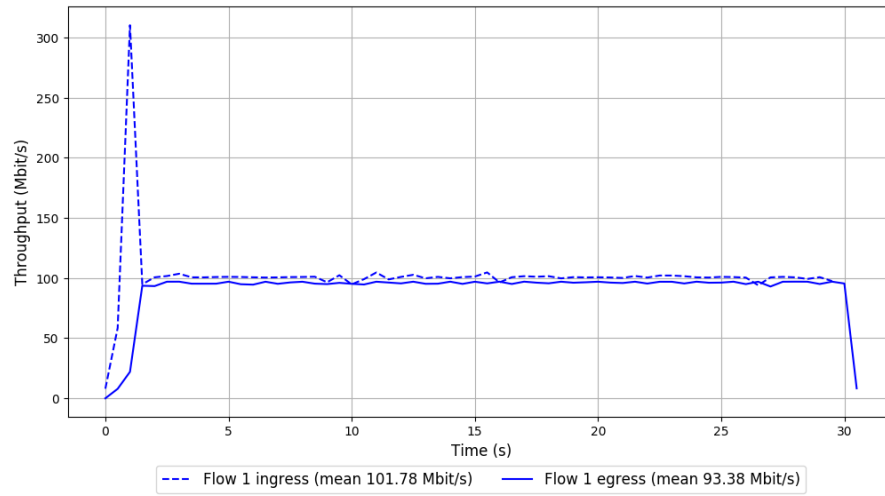


Run 4: Statistics of FillP

Start at: 2018-07-03 11:30:13
End at: 2018-07-03 11:30:43
Local clock offset: 2.984 ms
Remote clock offset: -1.801 ms

Below is generated by plot.py at 2018-07-03 14:13:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.38 Mbit/s
95th percentile per-packet one-way delay: 67.490 ms
Loss rate: 8.14%
-- Flow 1:
Average throughput: 93.38 Mbit/s
95th percentile per-packet one-way delay: 67.490 ms
Loss rate: 8.14%

Run 4: Report of FillP — Data Link

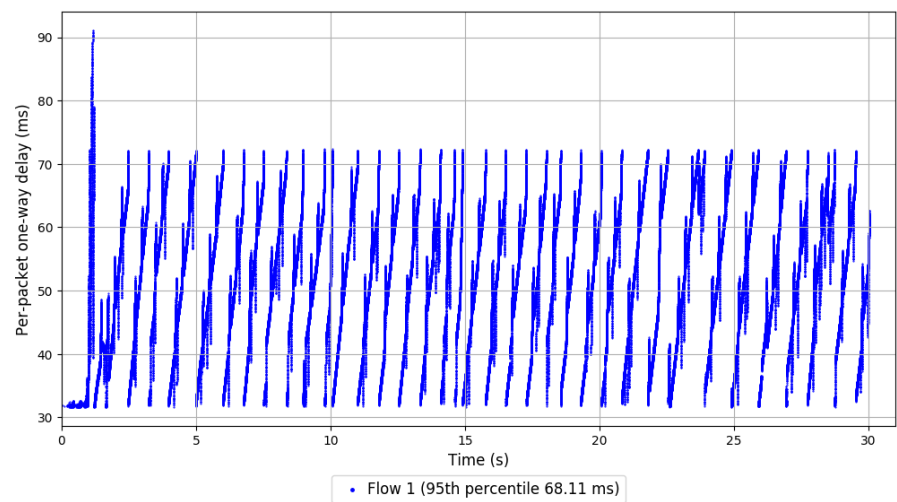
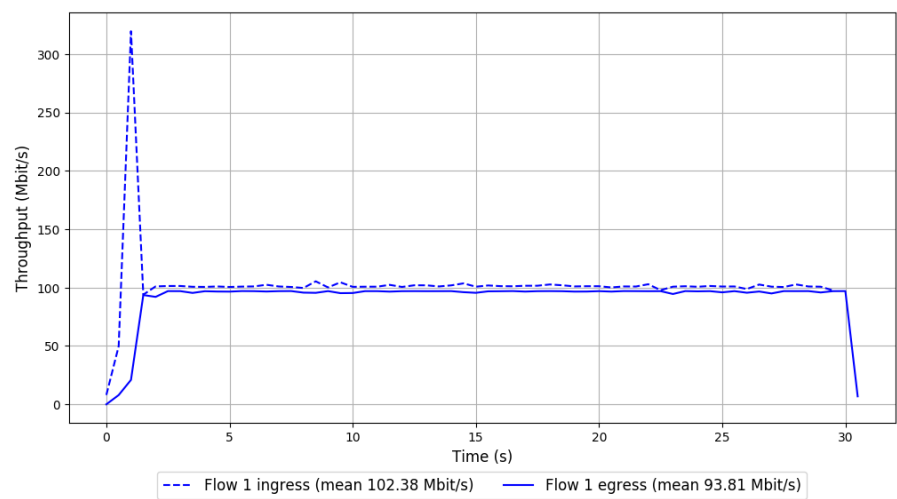


Run 5: Statistics of FillP

Start at: 2018-07-03 11:52:29
End at: 2018-07-03 11:52:59
Local clock offset: 1.312 ms
Remote clock offset: -1.225 ms

Below is generated by plot.py at 2018-07-03 14:13:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.81 Mbit/s
95th percentile per-packet one-way delay: 68.112 ms
Loss rate: 8.28%
-- Flow 1:
Average throughput: 93.81 Mbit/s
95th percentile per-packet one-way delay: 68.112 ms
Loss rate: 8.28%

Run 5: Report of FillP — Data Link

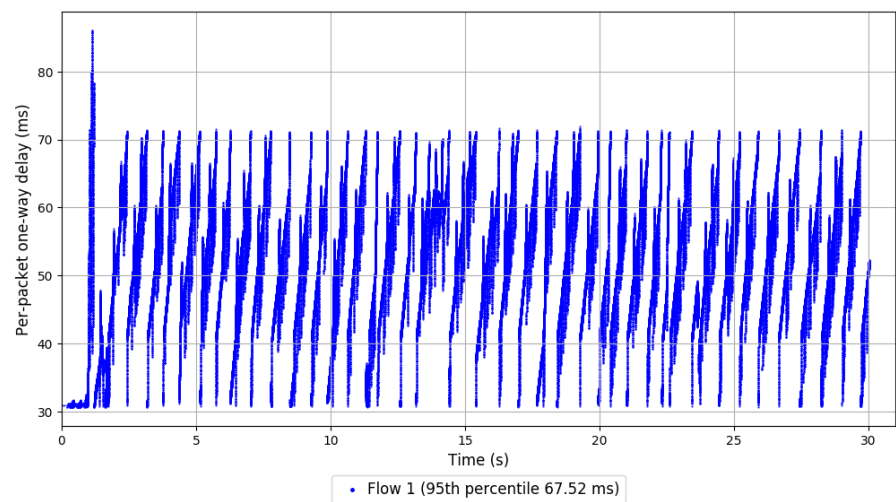
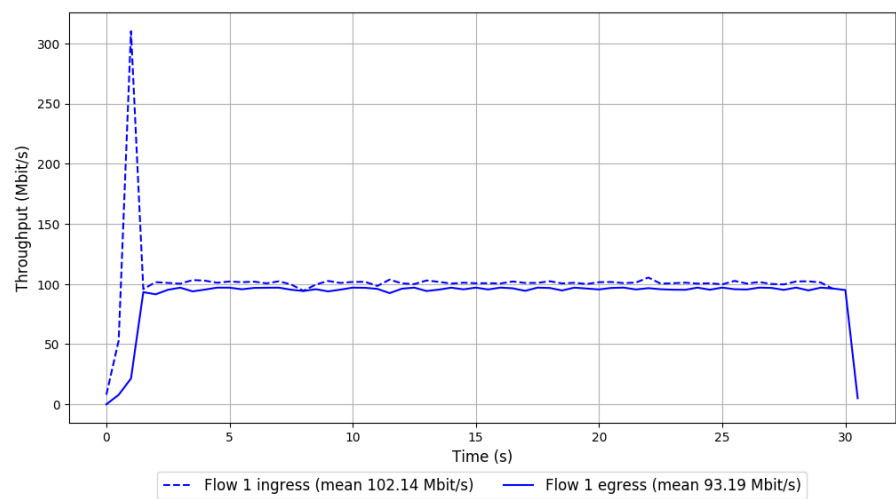


Run 6: Statistics of FillP

Start at: 2018-07-03 12:14:41
End at: 2018-07-03 12:15:11
Local clock offset: 0.888 ms
Remote clock offset: -1.289 ms

Below is generated by plot.py at 2018-07-03 14:13:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.19 Mbit/s
95th percentile per-packet one-way delay: 67.522 ms
Loss rate: 8.70%
-- Flow 1:
Average throughput: 93.19 Mbit/s
95th percentile per-packet one-way delay: 67.522 ms
Loss rate: 8.70%

Run 6: Report of FillP — Data Link

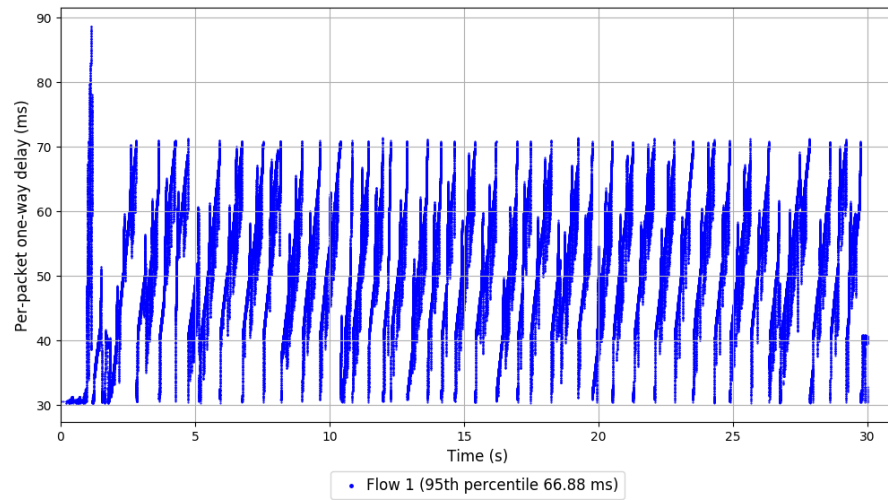
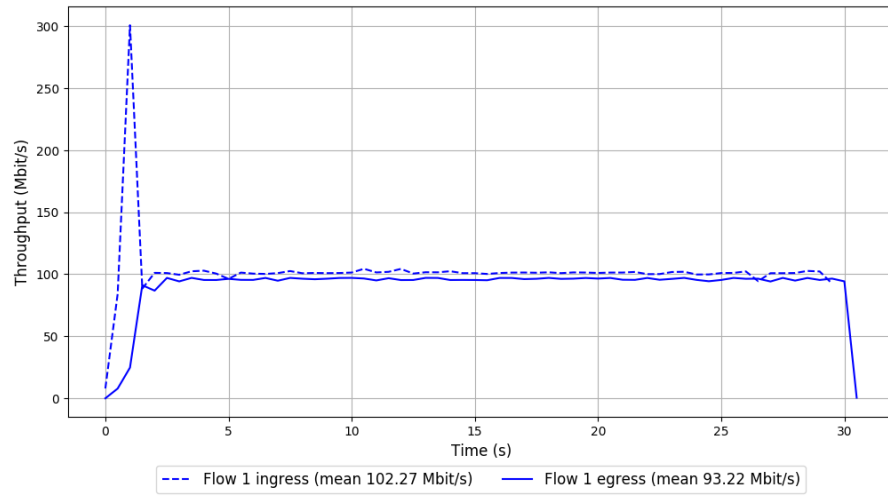


Run 7: Statistics of FillP

Start at: 2018-07-03 12:36:54
End at: 2018-07-03 12:37:24
Local clock offset: 0.854 ms
Remote clock offset: -0.334 ms

Below is generated by plot.py at 2018-07-03 14:14:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.22 Mbit/s
95th percentile per-packet one-way delay: 66.880 ms
Loss rate: 8.85%
-- Flow 1:
Average throughput: 93.22 Mbit/s
95th percentile per-packet one-way delay: 66.880 ms
Loss rate: 8.85%

Run 7: Report of FillP — Data Link

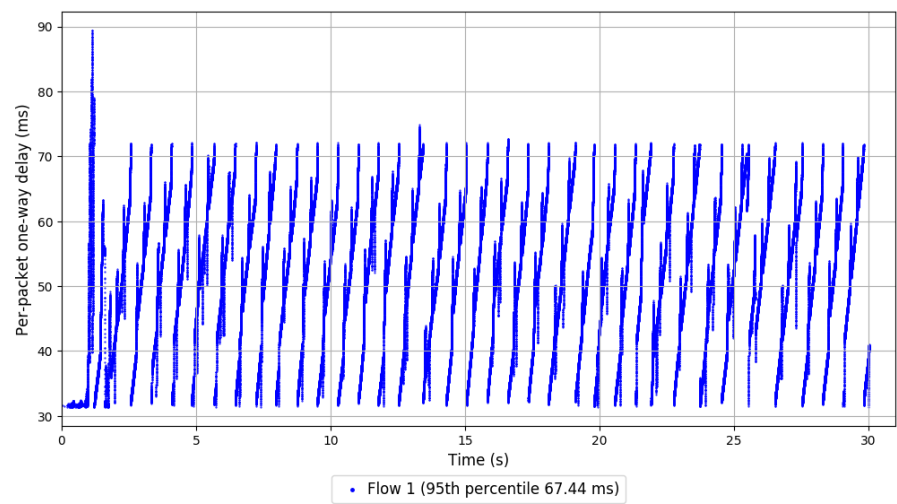
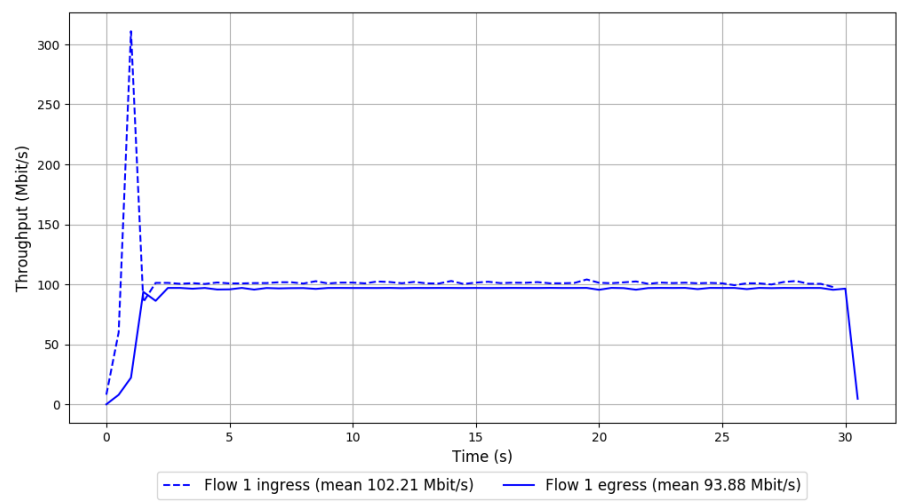


Run 8: Statistics of FillP

Start at: 2018-07-03 12:59:05
End at: 2018-07-03 12:59:35
Local clock offset: 0.584 ms
Remote clock offset: -0.058 ms

Below is generated by plot.py at 2018-07-03 14:14:07
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.88 Mbit/s
95th percentile per-packet one-way delay: 67.441 ms
Loss rate: 8.13%
-- Flow 1:
Average throughput: 93.88 Mbit/s
95th percentile per-packet one-way delay: 67.441 ms
Loss rate: 8.13%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-07-03 13:21:16

End at: 2018-07-03 13:21:46

Local clock offset: 0.391 ms

Remote clock offset: 1.951 ms

Below is generated by plot.py at 2018-07-03 14:15:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.24 Mbit/s

95th percentile per-packet one-way delay: 67.920 ms

Loss rate: 8.61%

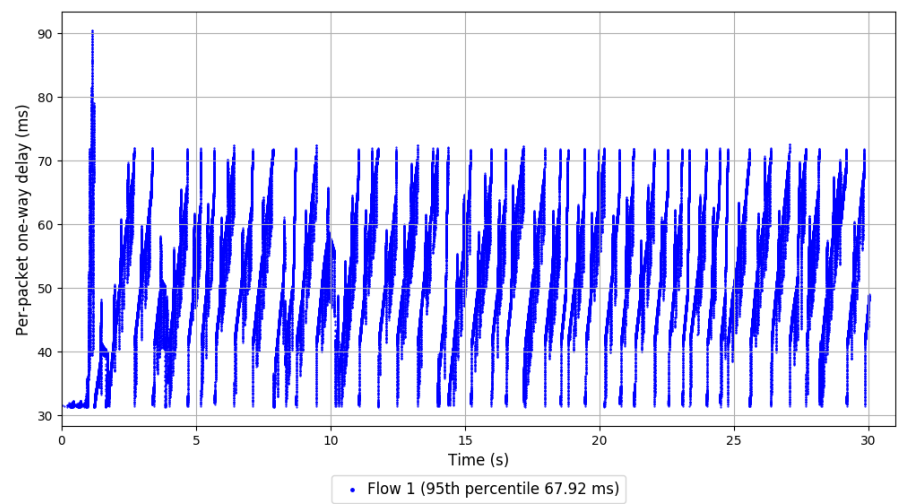
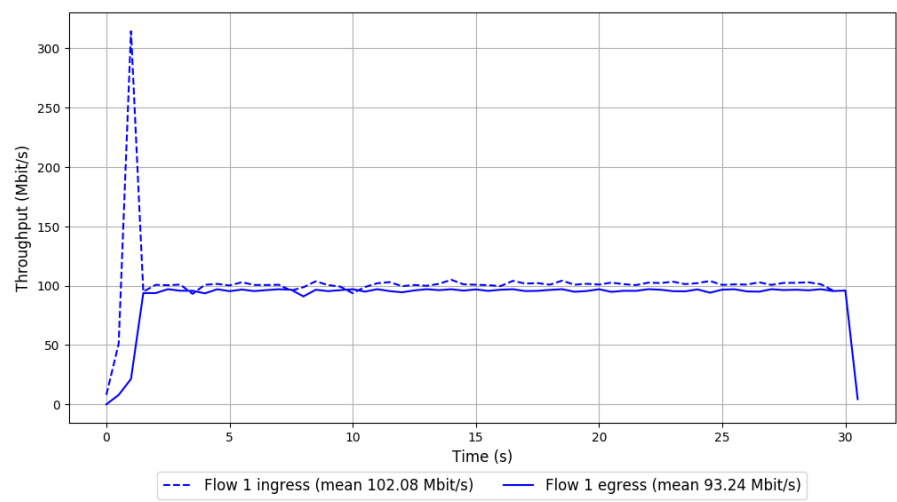
-- Flow 1:

Average throughput: 93.24 Mbit/s

95th percentile per-packet one-way delay: 67.920 ms

Loss rate: 8.61%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-07-03 13:43:34

End at: 2018-07-03 13:44:04

Local clock offset: 0.256 ms

Remote clock offset: 4.93 ms

Below is generated by plot.py at 2018-07-03 14:15:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.59 Mbit/s

95th percentile per-packet one-way delay: 67.020 ms

Loss rate: 8.51%

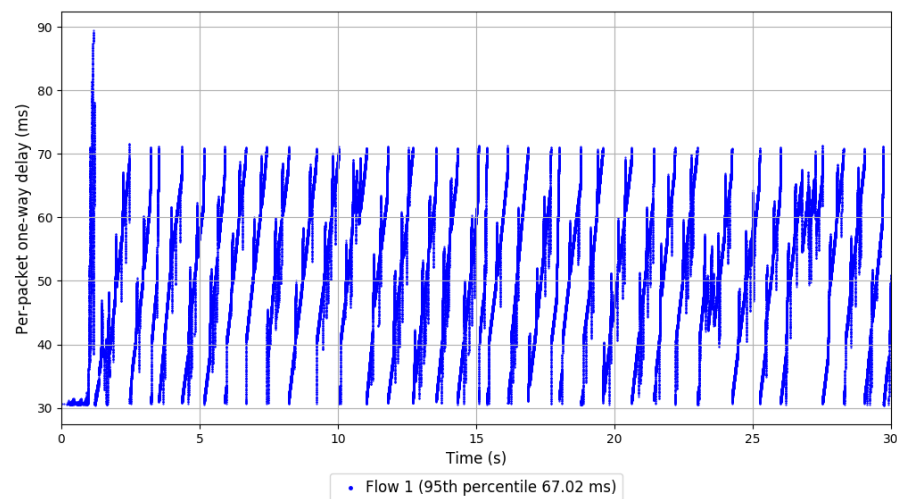
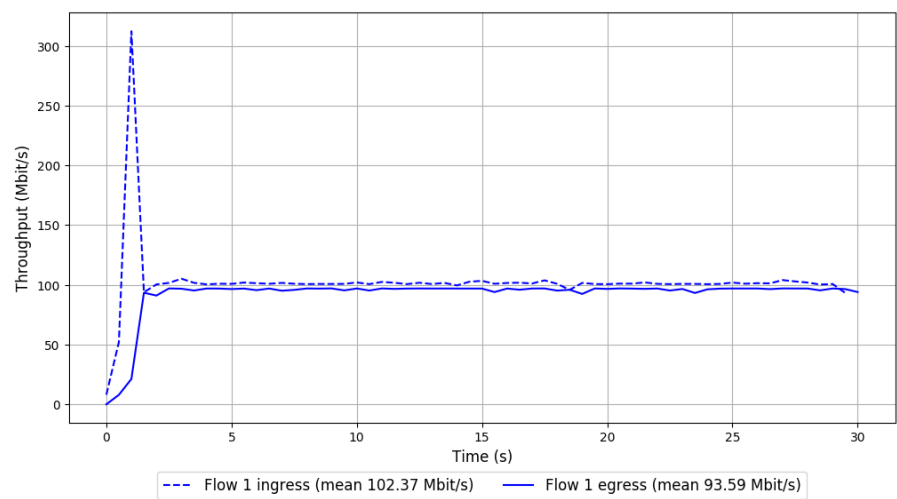
-- Flow 1:

Average throughput: 93.59 Mbit/s

95th percentile per-packet one-way delay: 67.020 ms

Loss rate: 8.51%

Run 10: Report of FillP — Data Link

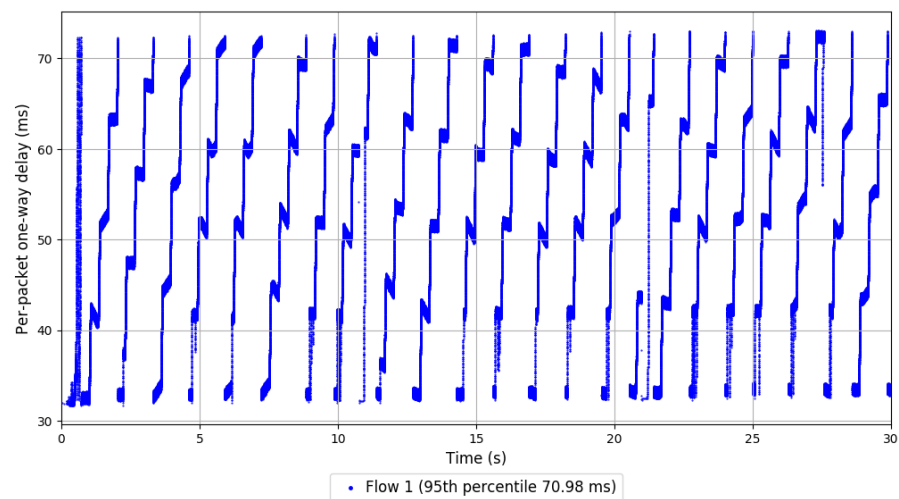
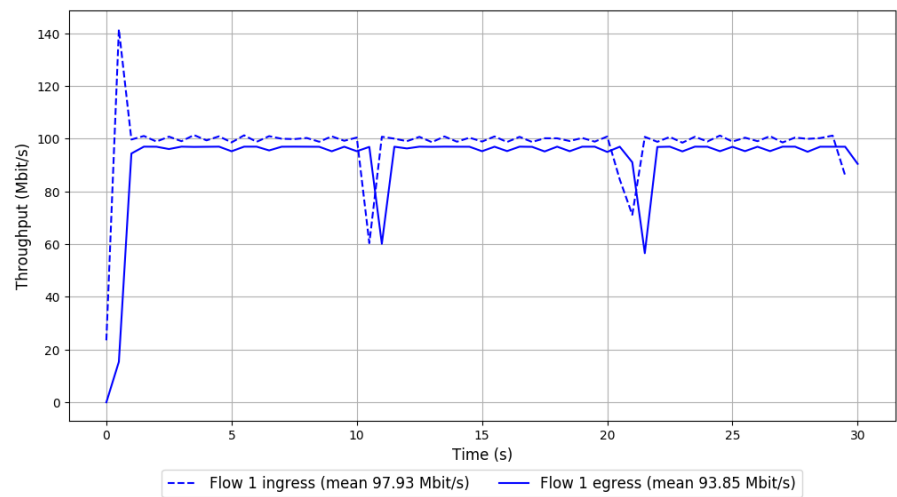


Run 1: Statistics of FillP-Sheep

Start at: 2018-07-03 10:40:24
End at: 2018-07-03 10:40:54
Local clock offset: -12.314 ms
Remote clock offset: -1.258 ms

Below is generated by plot.py at 2018-07-03 14:15:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.85 Mbit/s
95th percentile per-packet one-way delay: 70.981 ms
Loss rate: 4.18%
-- Flow 1:
Average throughput: 93.85 Mbit/s
95th percentile per-packet one-way delay: 70.981 ms
Loss rate: 4.18%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2018-07-03 11:02:46

End at: 2018-07-03 11:03:16

Local clock offset: 4.049 ms

Remote clock offset: -0.995 ms

Below is generated by plot.py at 2018-07-03 14:15:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.66 Mbit/s

95th percentile per-packet one-way delay: 69.275 ms

Loss rate: 3.95%

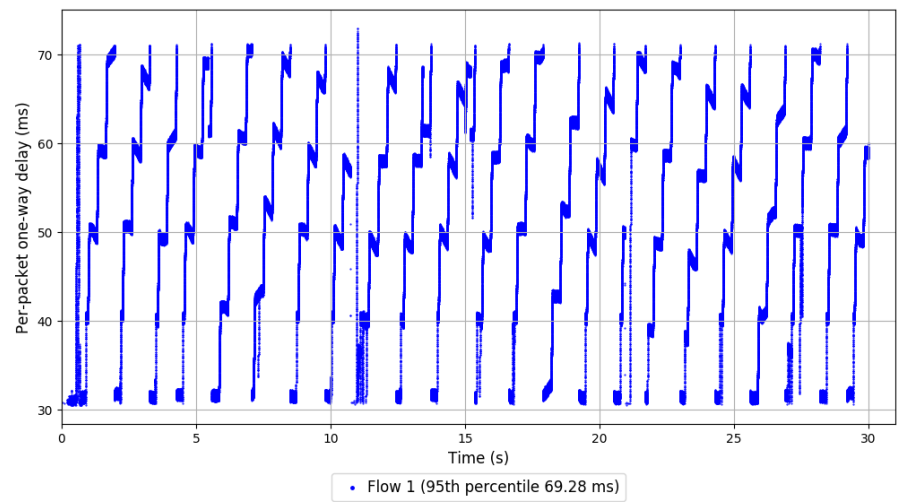
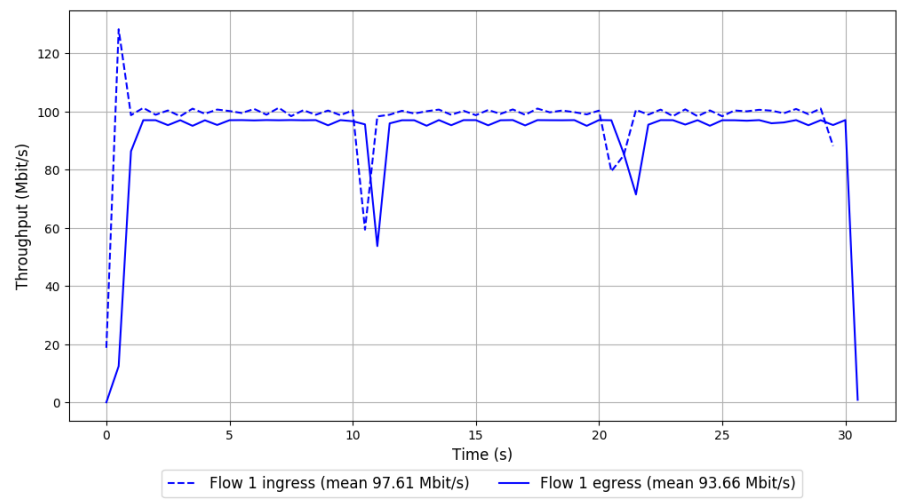
-- Flow 1:

Average throughput: 93.66 Mbit/s

95th percentile per-packet one-way delay: 69.275 ms

Loss rate: 3.95%

Run 2: Report of FillP-Sheep — Data Link

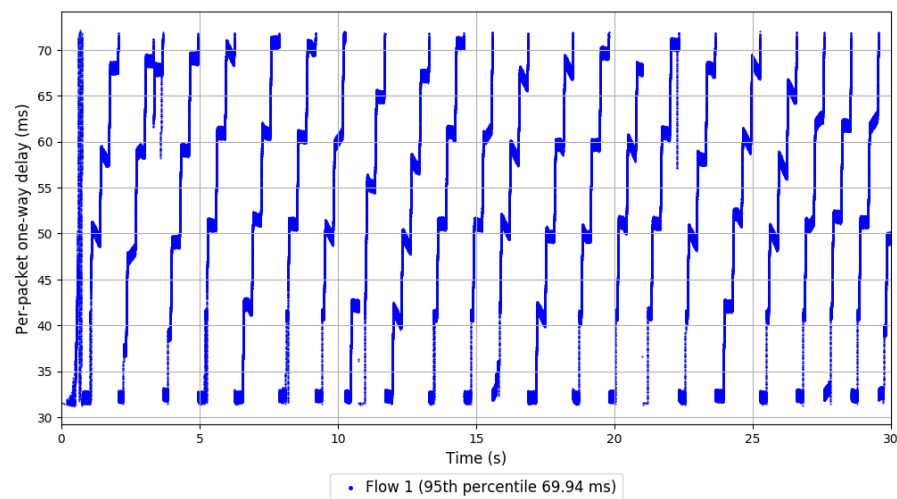
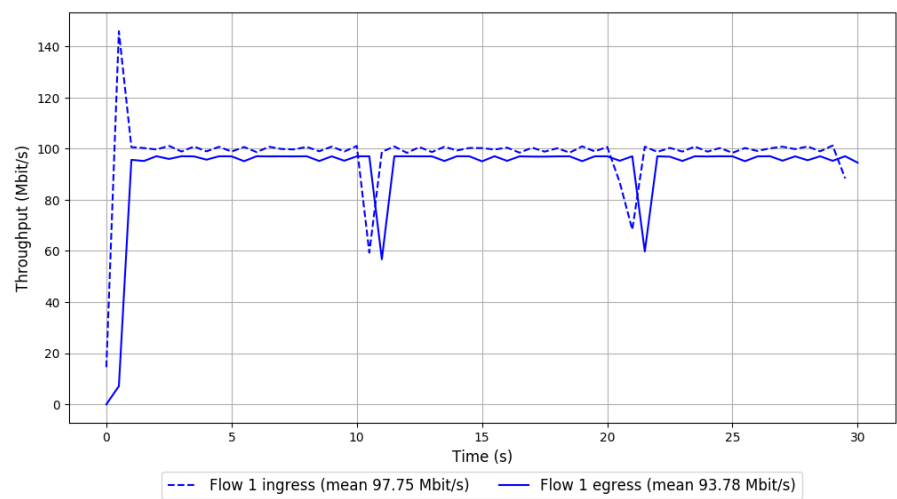


Run 3: Statistics of FillP-Sheep

Start at: 2018-07-03 11:24:59
End at: 2018-07-03 11:25:29
Local clock offset: 2.694 ms
Remote clock offset: -1.629 ms

Below is generated by plot.py at 2018-07-03 14:15:24
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.78 Mbit/s
95th percentile per-packet one-way delay: 69.937 ms
Loss rate: 4.01%
-- Flow 1:
Average throughput: 93.78 Mbit/s
95th percentile per-packet one-way delay: 69.937 ms
Loss rate: 4.01%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2018-07-03 11:47:15

End at: 2018-07-03 11:47:45

Local clock offset: 1.417 ms

Remote clock offset: -1.73 ms

Below is generated by plot.py at 2018-07-03 14:15:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.72 Mbit/s

95th percentile per-packet one-way delay: 69.132 ms

Loss rate: 3.79%

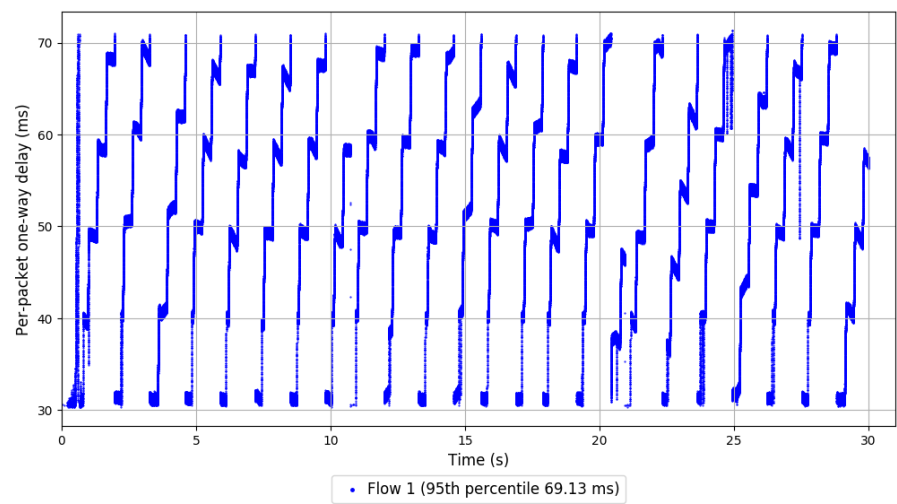
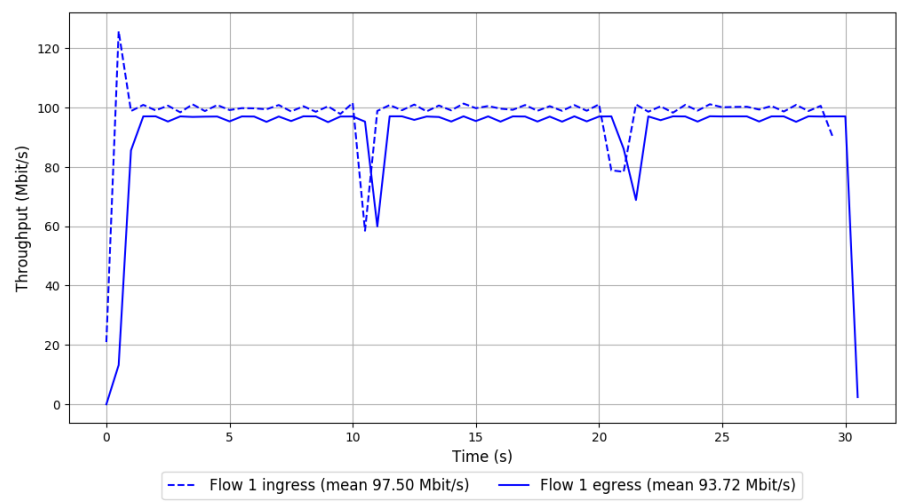
-- Flow 1:

Average throughput: 93.72 Mbit/s

95th percentile per-packet one-way delay: 69.132 ms

Loss rate: 3.79%

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2018-07-03 12:09:28

End at: 2018-07-03 12:09:58

Local clock offset: 1.03 ms

Remote clock offset: -1.248 ms

Below is generated by plot.py at 2018-07-03 14:15:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.53 Mbit/s

95th percentile per-packet one-way delay: 70.217 ms

Loss rate: 4.55%

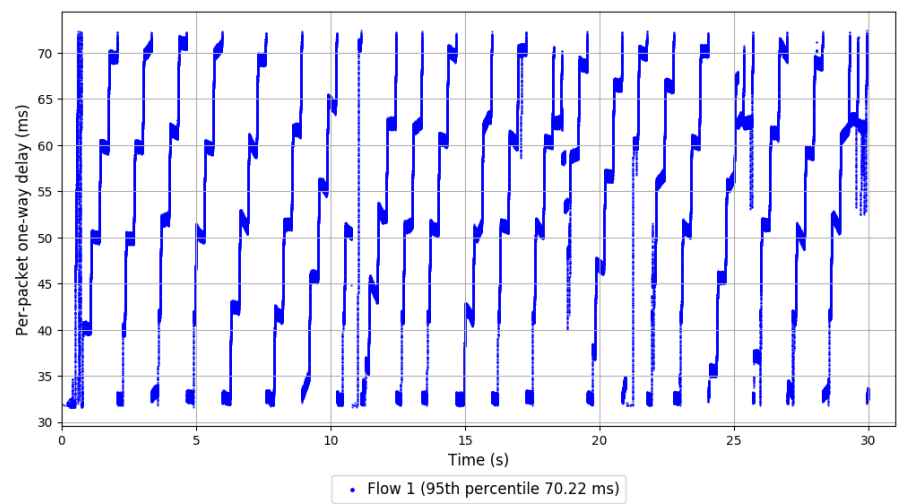
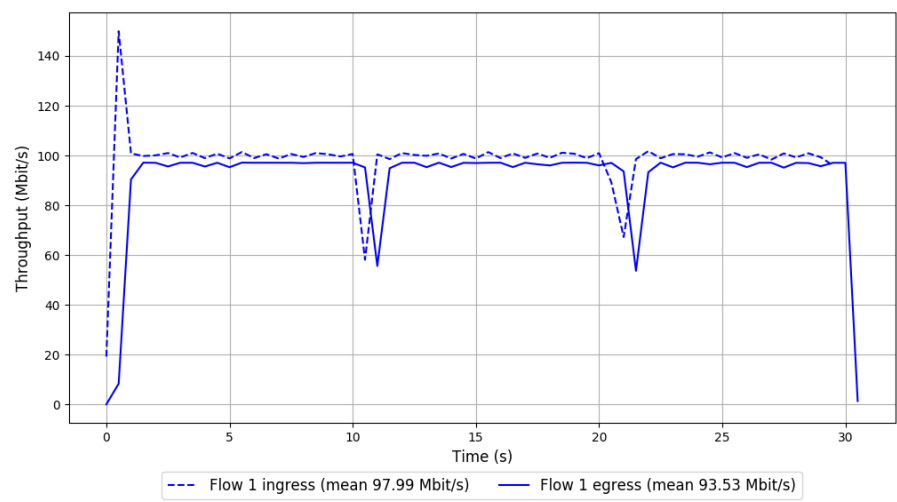
-- Flow 1:

Average throughput: 93.53 Mbit/s

95th percentile per-packet one-way delay: 70.217 ms

Loss rate: 4.55%

Run 5: Report of FillP-Sheep — Data Link

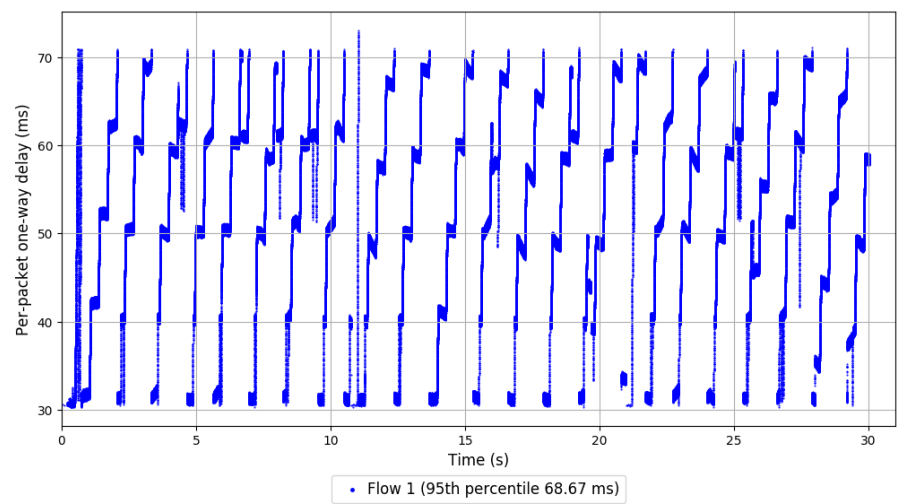
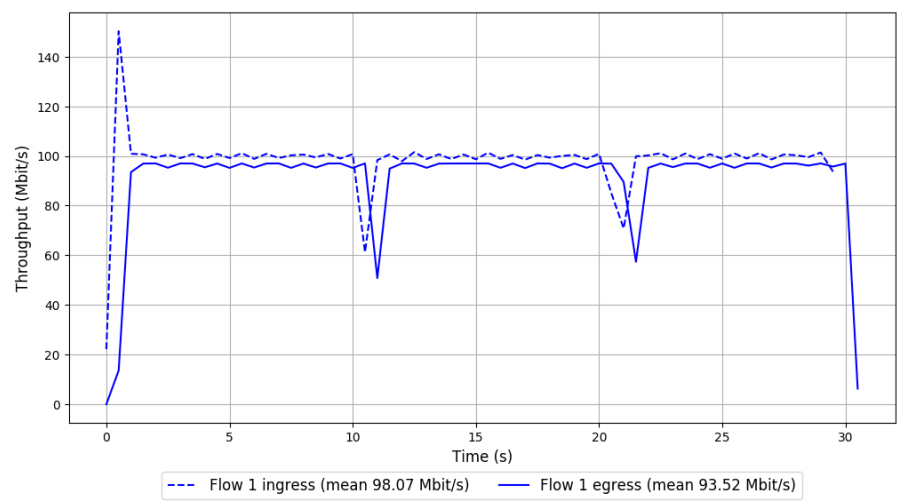


Run 6: Statistics of FillP-Sheep

Start at: 2018-07-03 12:31:39
End at: 2018-07-03 12:32:09
Local clock offset: 1.035 ms
Remote clock offset: -0.648 ms

Below is generated by plot.py at 2018-07-03 14:15:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.52 Mbit/s
95th percentile per-packet one-way delay: 68.675 ms
Loss rate: 4.56%
-- Flow 1:
Average throughput: 93.52 Mbit/s
95th percentile per-packet one-way delay: 68.675 ms
Loss rate: 4.56%

Run 6: Report of FillP-Sheep — Data Link

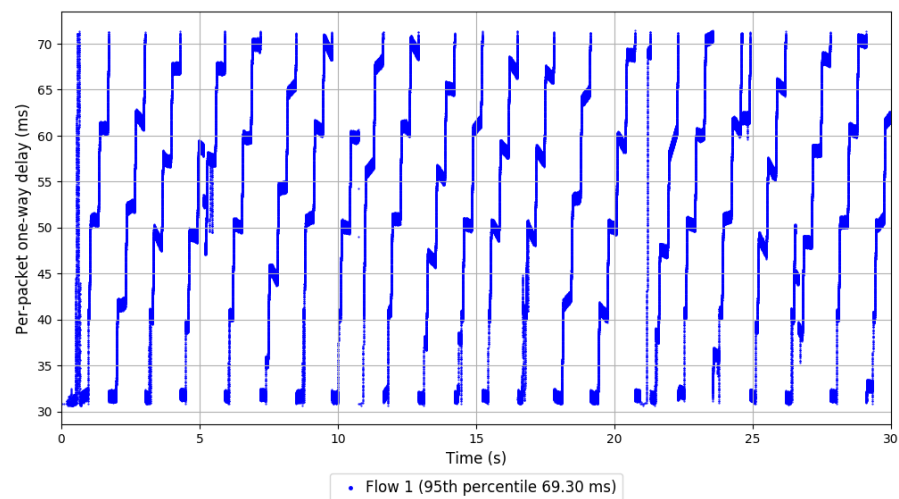
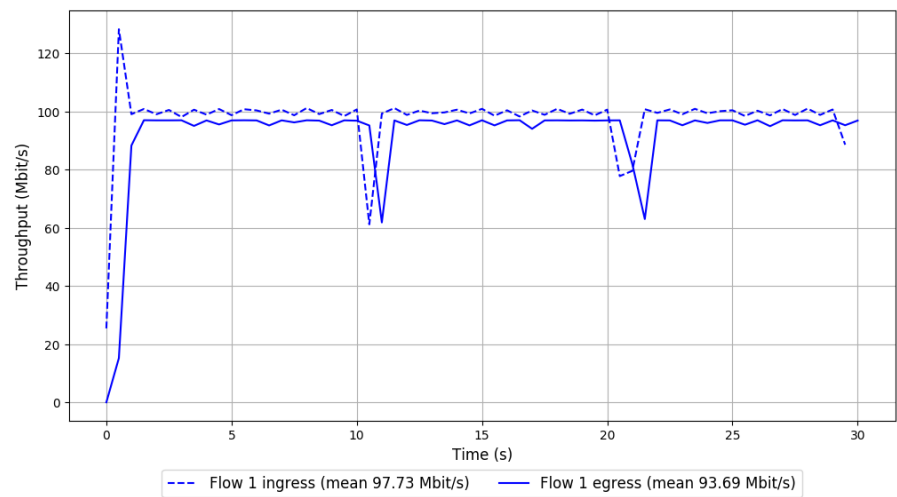


Run 7: Statistics of FillP-Sheep

Start at: 2018-07-03 12:53:52
End at: 2018-07-03 12:54:22
Local clock offset: 0.63 ms
Remote clock offset: -0.084 ms

Below is generated by plot.py at 2018-07-03 14:16:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.69 Mbit/s
95th percentile per-packet one-way delay: 69.297 ms
Loss rate: 4.06%
-- Flow 1:
Average throughput: 93.69 Mbit/s
95th percentile per-packet one-way delay: 69.297 ms
Loss rate: 4.06%

Run 7: Report of FillP-Sheep — Data Link



Run 8: Statistics of FillP-Sheep

Start at: 2018-07-03 13:16:02

End at: 2018-07-03 13:16:32

Local clock offset: 0.316 ms

Remote clock offset: 0.87 ms

Below is generated by plot.py at 2018-07-03 14:16:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.85 Mbit/s

95th percentile per-packet one-way delay: 68.291 ms

Loss rate: 4.01%

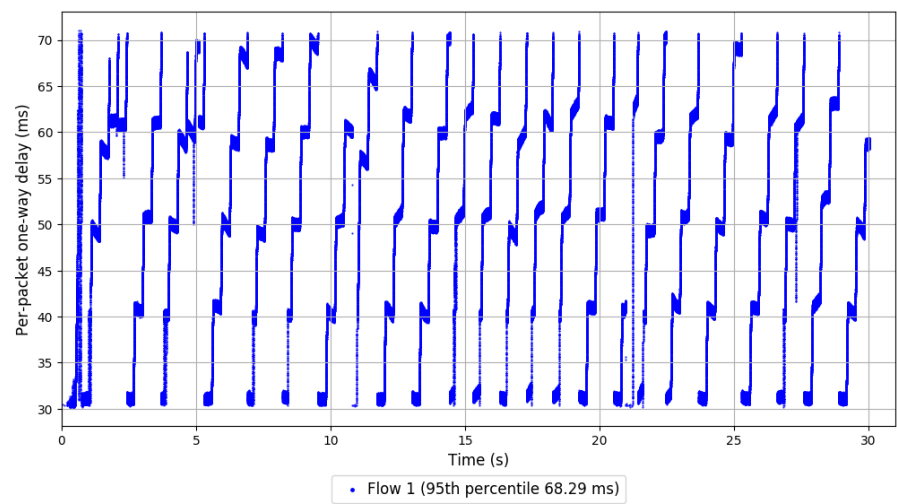
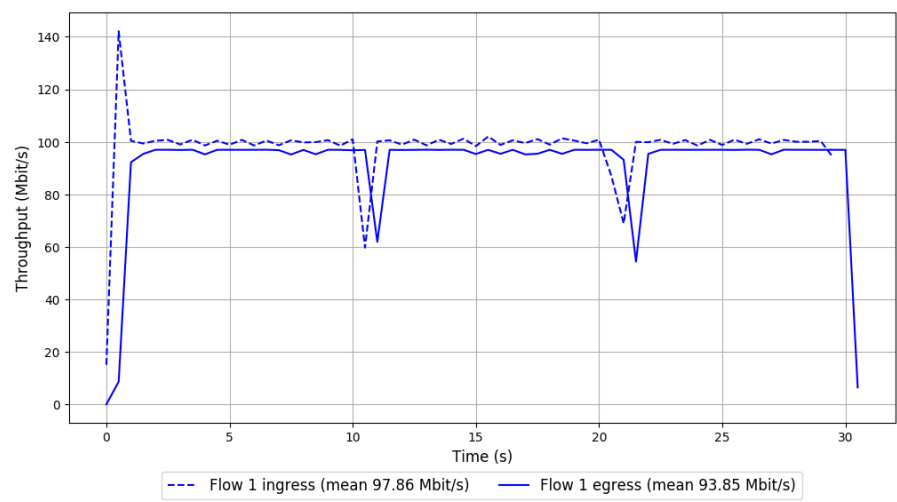
-- Flow 1:

Average throughput: 93.85 Mbit/s

95th percentile per-packet one-way delay: 68.291 ms

Loss rate: 4.01%

Run 8: Report of FillP-Sheep — Data Link



Run 9: Statistics of FillP-Sheep

Start at: 2018-07-03 13:38:18

End at: 2018-07-03 13:38:48

Local clock offset: 0.246 ms

Remote clock offset: 4.287 ms

Below is generated by plot.py at 2018-07-03 14:16:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.50 Mbit/s

95th percentile per-packet one-way delay: 69.479 ms

Loss rate: 4.56%

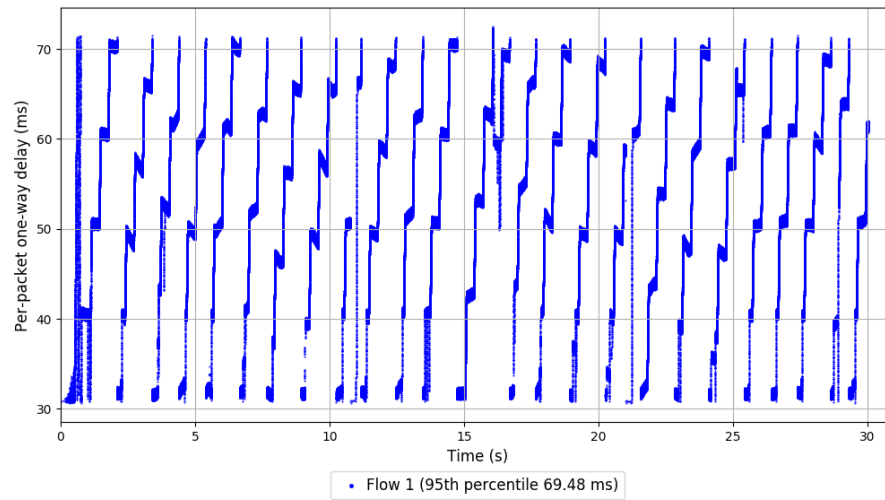
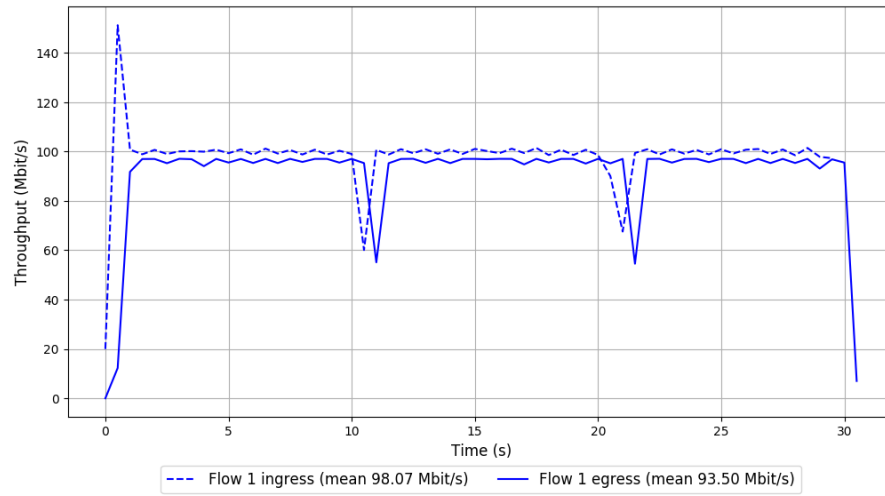
-- Flow 1:

Average throughput: 93.50 Mbit/s

95th percentile per-packet one-way delay: 69.479 ms

Loss rate: 4.56%

Run 9: Report of FillP-Sheep — Data Link



Run 10: Statistics of FillP-Sheep

Start at: 2018-07-03 14:00:38

End at: 2018-07-03 14:01:09

Local clock offset: 0.201 ms

Remote clock offset: 7.366 ms

Below is generated by plot.py at 2018-07-03 14:16:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.49 Mbit/s

95th percentile per-packet one-way delay: 68.917 ms

Loss rate: 4.34%

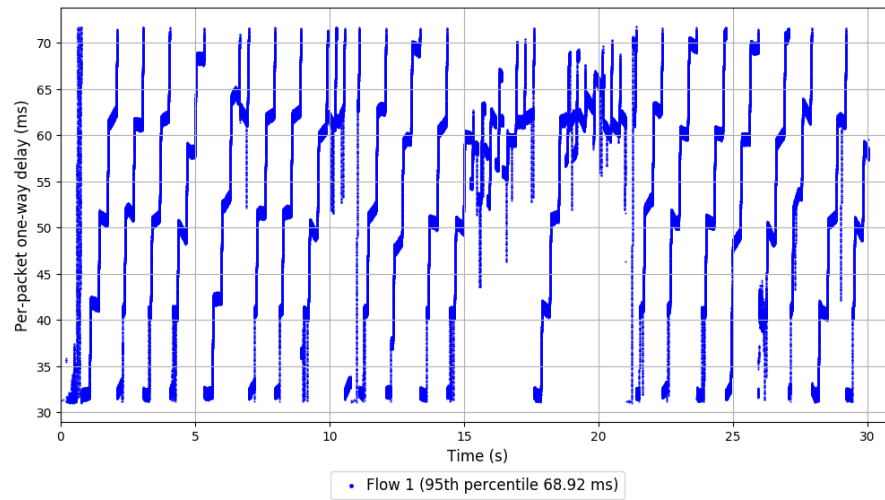
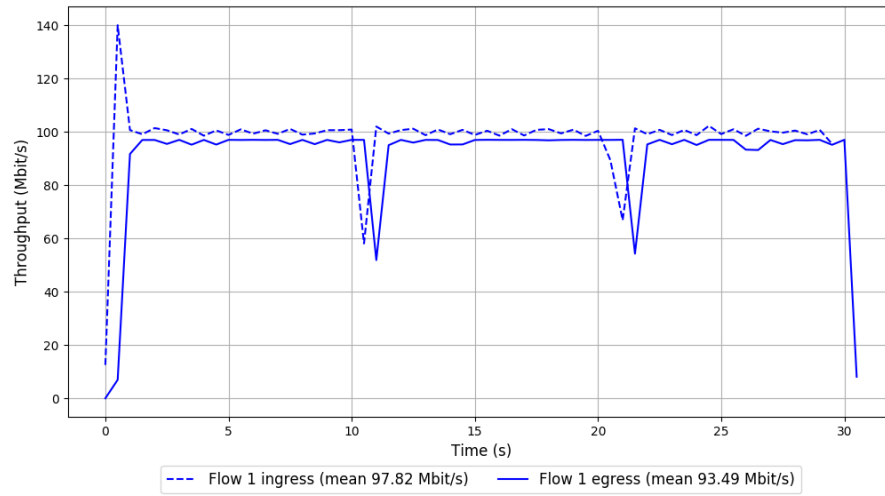
-- Flow 1:

Average throughput: 93.49 Mbit/s

95th percentile per-packet one-way delay: 68.917 ms

Loss rate: 4.34%

Run 10: Report of FillP-Sheep — Data Link

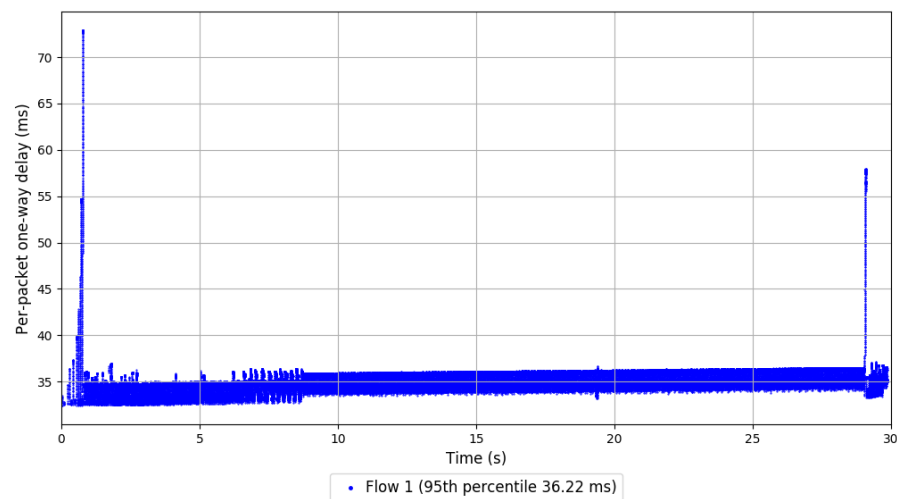
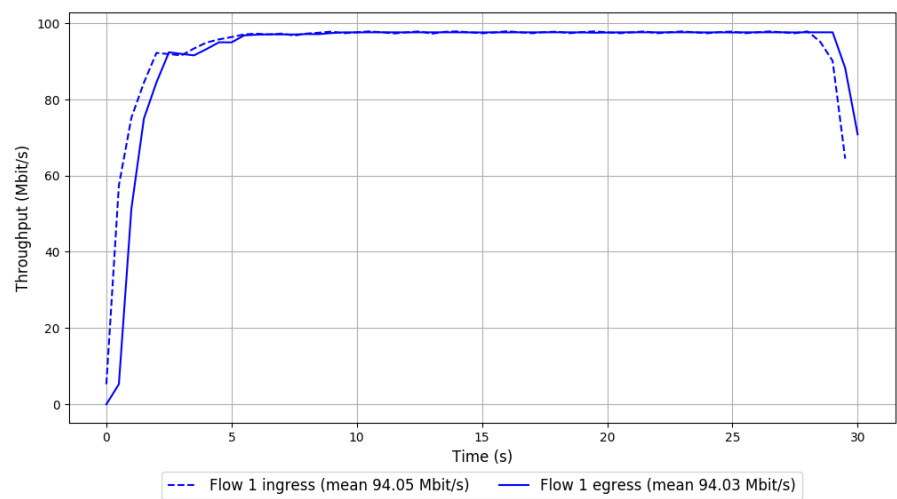


```
Run 1: Statistics of Indigo

Start at: 2018-07-03 10:39:03
End at: 2018-07-03 10:39:33
Local clock offset: -14.738 ms
Remote clock offset: -1.43 ms

# Below is generated by plot.py at 2018-07-03 14:16:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 36.221 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 36.221 ms
Loss rate: 0.01%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-07-03 11:01:27

End at: 2018-07-03 11:01:57

Local clock offset: 3.719 ms

Remote clock offset: -0.75 ms

Below is generated by plot.py at 2018-07-03 14:16:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.92 Mbit/s

95th percentile per-packet one-way delay: 35.609 ms

Loss rate: 0.01%

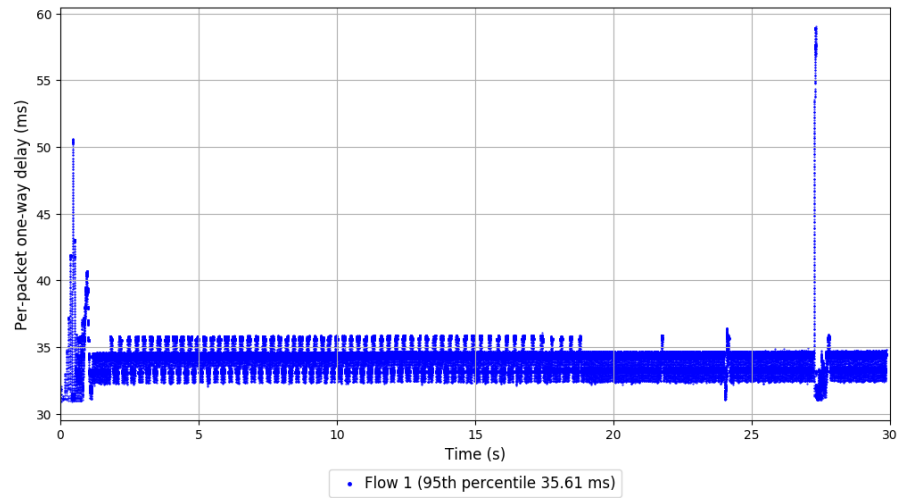
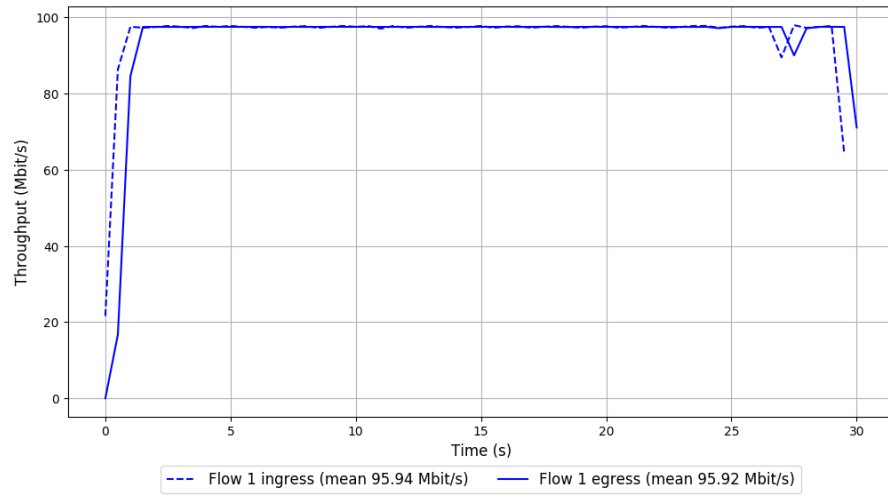
-- Flow 1:

Average throughput: 95.92 Mbit/s

95th percentile per-packet one-way delay: 35.609 ms

Loss rate: 0.01%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-07-03 11:23:39

End at: 2018-07-03 11:24:09

Local clock offset: 2.603 ms

Remote clock offset: -1.35 ms

Below is generated by plot.py at 2018-07-03 14:16:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.50 Mbit/s

95th percentile per-packet one-way delay: 35.332 ms

Loss rate: 0.00%

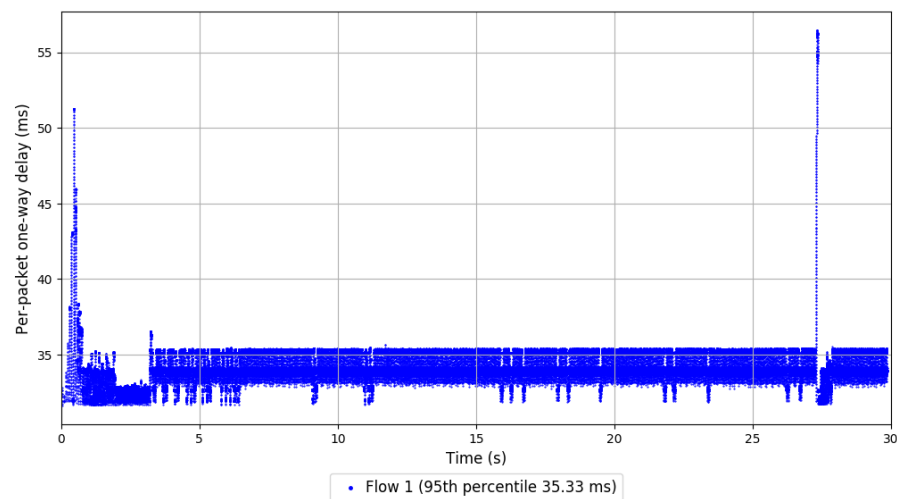
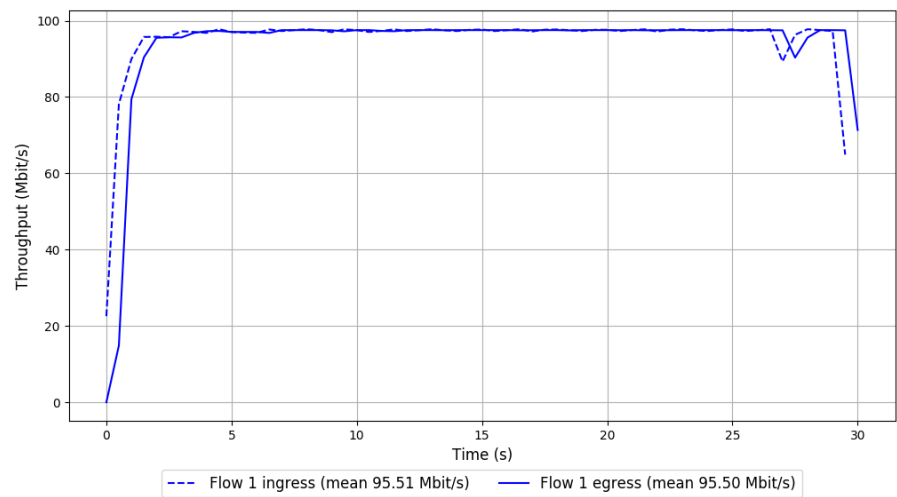
-- Flow 1:

Average throughput: 95.50 Mbit/s

95th percentile per-packet one-way delay: 35.332 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

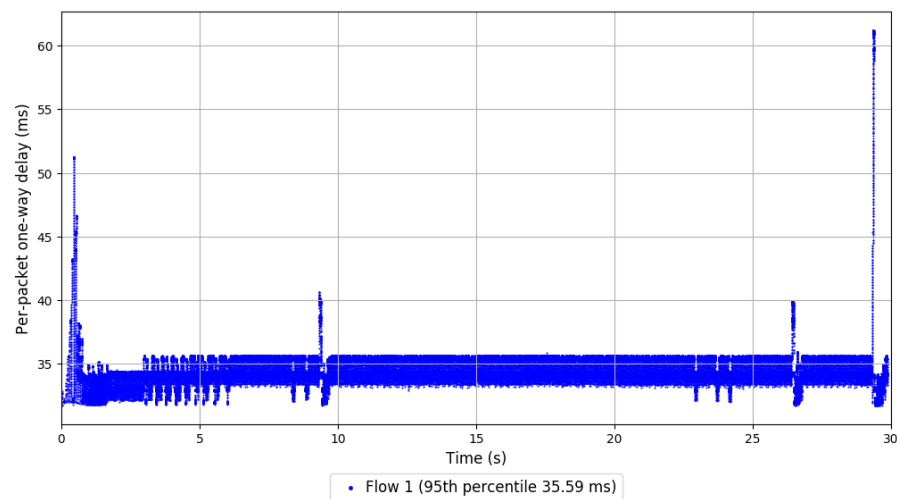
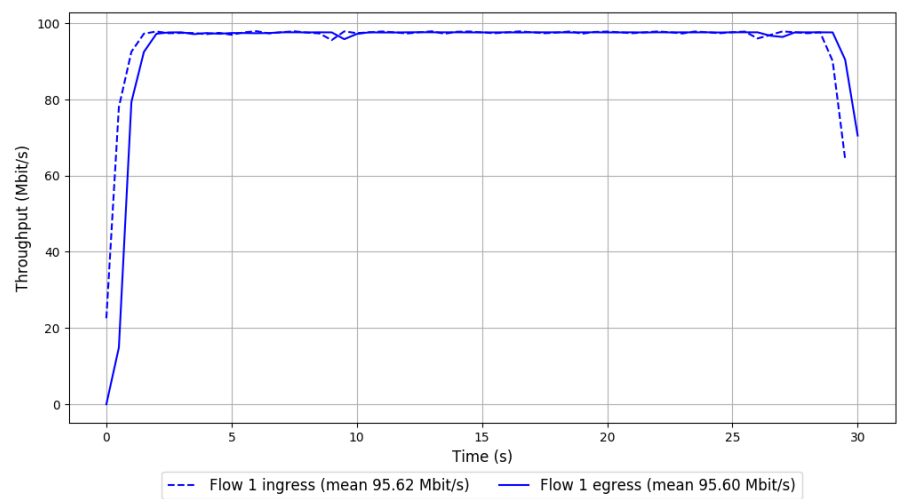


Run 4: Statistics of Indigo

Start at: 2018-07-03 11:45:55
End at: 2018-07-03 11:46:25
Local clock offset: 1.432 ms
Remote clock offset: -1.177 ms

Below is generated by plot.py at 2018-07-03 14:16:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 35.589 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 35.589 ms
Loss rate: 0.01%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-07-03 12:08:08

End at: 2018-07-03 12:08:38

Local clock offset: 1.226 ms

Remote clock offset: -1.287 ms

Below is generated by plot.py at 2018-07-03 14:17:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.97 Mbit/s

95th percentile per-packet one-way delay: 36.753 ms

Loss rate: 0.01%

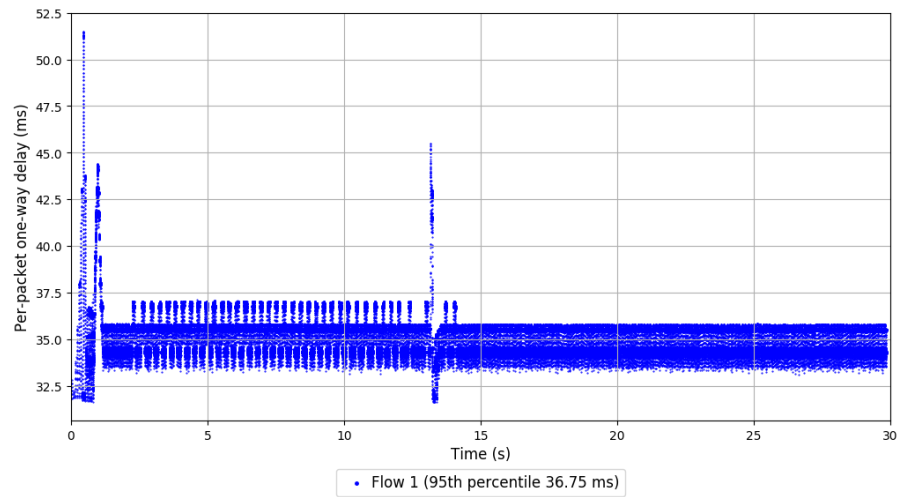
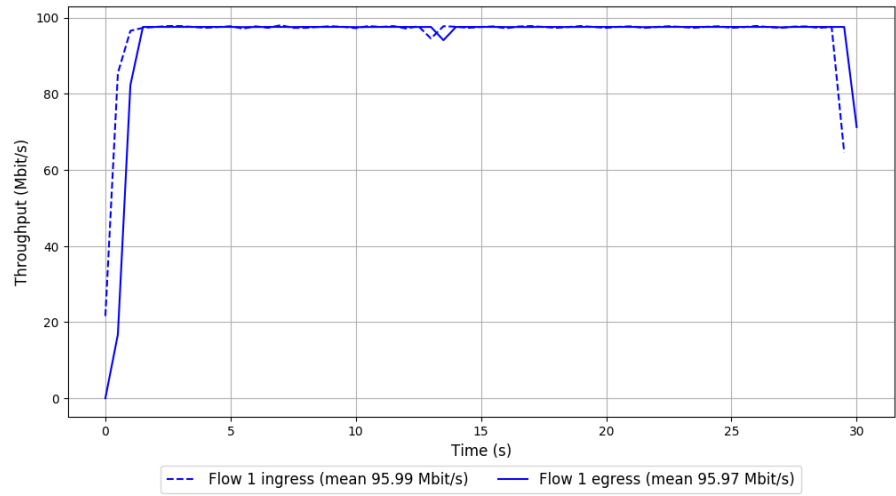
-- Flow 1:

Average throughput: 95.97 Mbit/s

95th percentile per-packet one-way delay: 36.753 ms

Loss rate: 0.01%

Run 5: Report of Indigo — Data Link

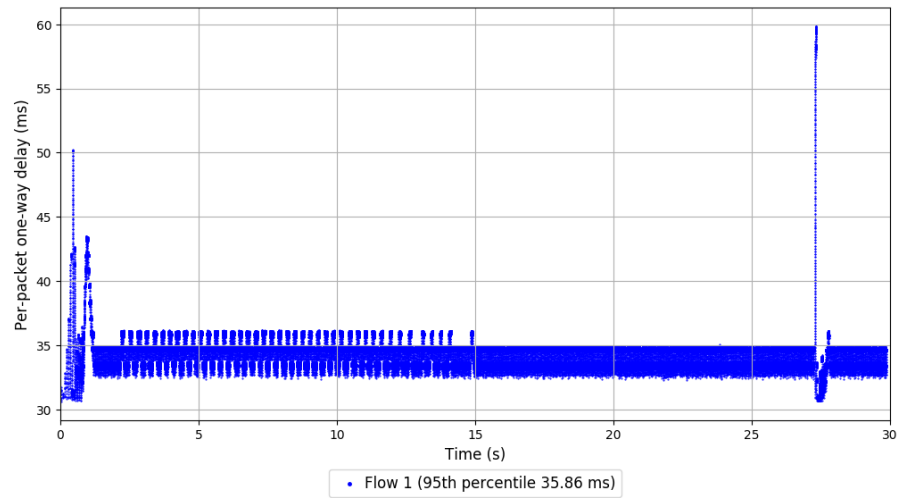
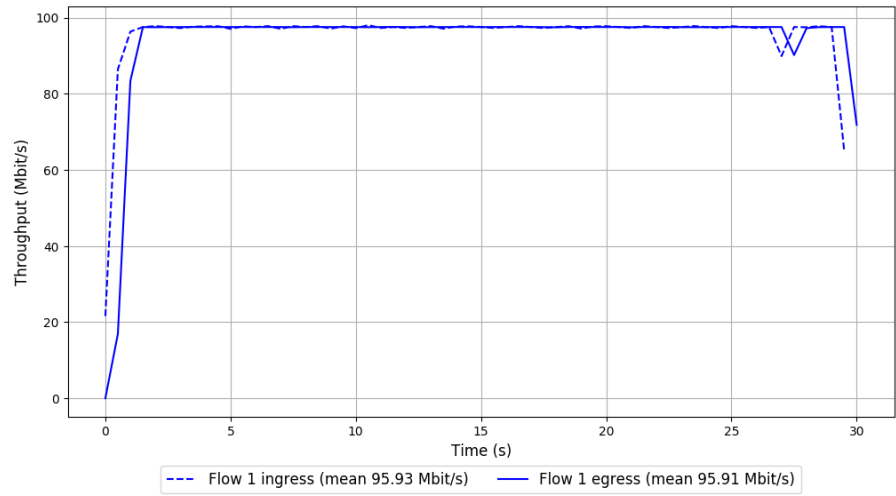


Run 6: Statistics of Indigo

Start at: 2018-07-03 12:30:19
End at: 2018-07-03 12:30:49
Local clock offset: 0.914 ms
Remote clock offset: -0.634 ms

Below is generated by plot.py at 2018-07-03 14:17:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.91 Mbit/s
95th percentile per-packet one-way delay: 35.864 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.91 Mbit/s
95th percentile per-packet one-way delay: 35.864 ms
Loss rate: 0.00%

Run 6: Report of Indigo — Data Link

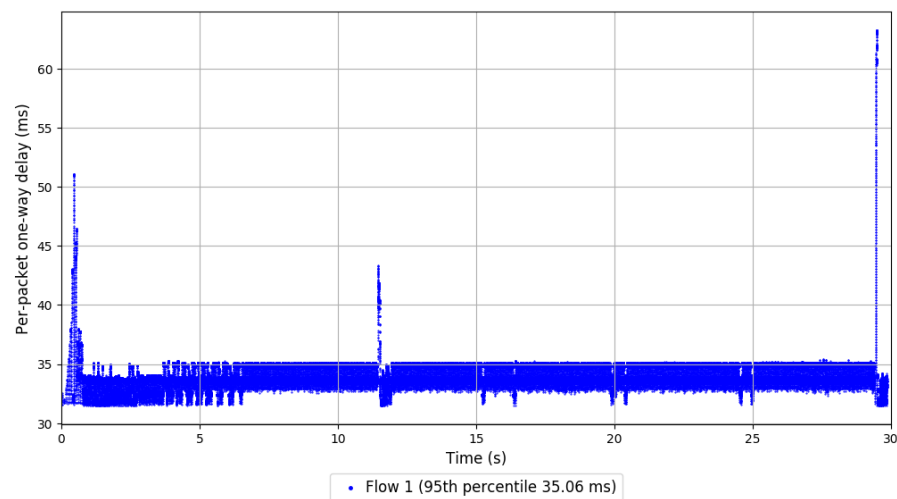
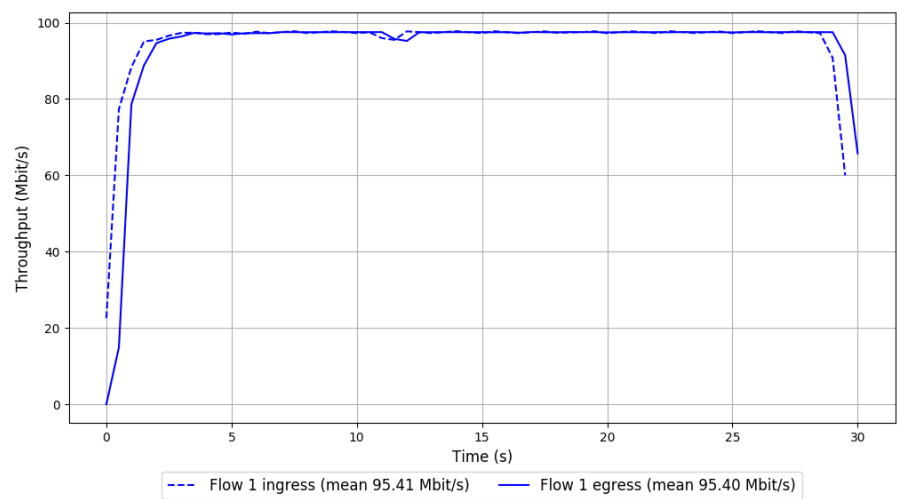


Run 7: Statistics of Indigo

Start at: 2018-07-03 12:52:32
End at: 2018-07-03 12:53:02
Local clock offset: 0.631 ms
Remote clock offset: -0.043 ms

Below is generated by plot.py at 2018-07-03 14:17:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.40 Mbit/s
95th percentile per-packet one-way delay: 35.060 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 95.40 Mbit/s
95th percentile per-packet one-way delay: 35.060 ms
Loss rate: 0.01%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-07-03 13:14:42

End at: 2018-07-03 13:15:12

Local clock offset: 0.407 ms

Remote clock offset: 0.692 ms

Below is generated by plot.py at 2018-07-03 14:17:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.81 Mbit/s

95th percentile per-packet one-way delay: 33.578 ms

Loss rate: 0.07%

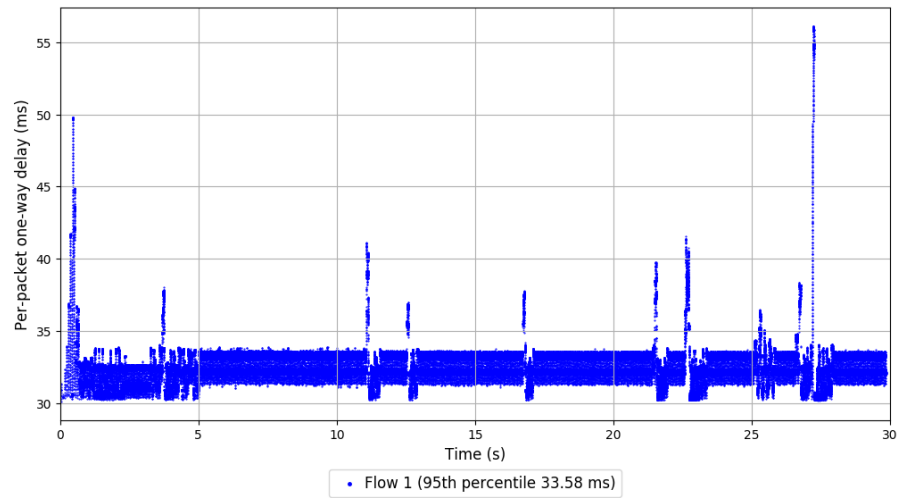
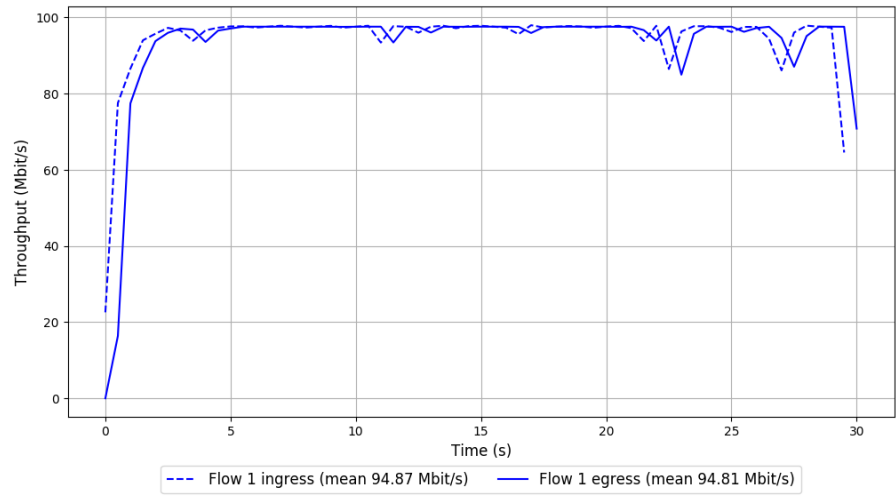
-- Flow 1:

Average throughput: 94.81 Mbit/s

95th percentile per-packet one-way delay: 33.578 ms

Loss rate: 0.07%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-07-03 13:36:58

End at: 2018-07-03 13:37:28

Local clock offset: 0.364 ms

Remote clock offset: 4.036 ms

Below is generated by plot.py at 2018-07-03 14:18:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.98 Mbit/s

95th percentile per-packet one-way delay: 36.955 ms

Loss rate: 0.17%

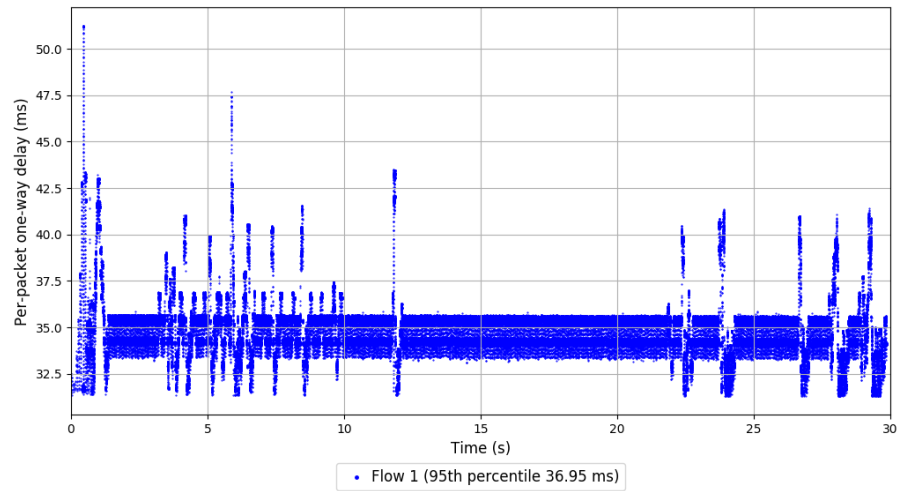
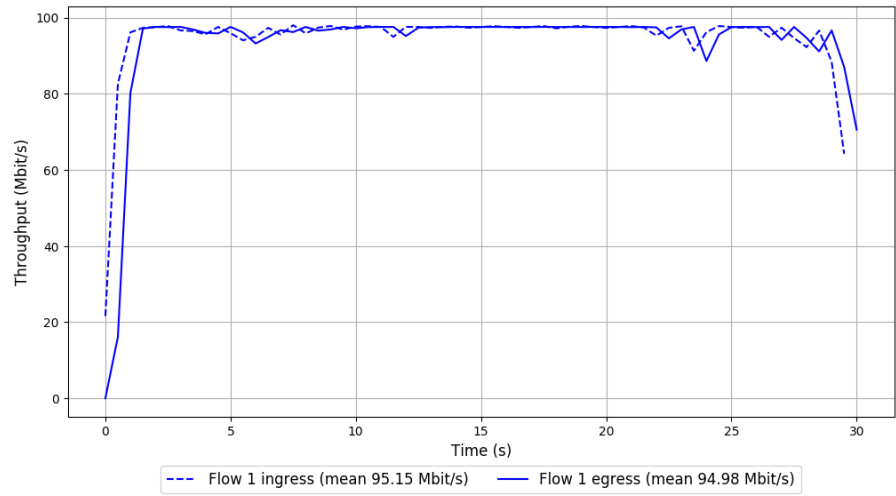
-- Flow 1:

Average throughput: 94.98 Mbit/s

95th percentile per-packet one-way delay: 36.955 ms

Loss rate: 0.17%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-07-03 13:59:18

End at: 2018-07-03 13:59:48

Local clock offset: 0.11 ms

Remote clock offset: 7.136 ms

Below is generated by plot.py at 2018-07-03 14:18:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.73 Mbit/s

95th percentile per-packet one-way delay: 36.320 ms

Loss rate: 0.01%

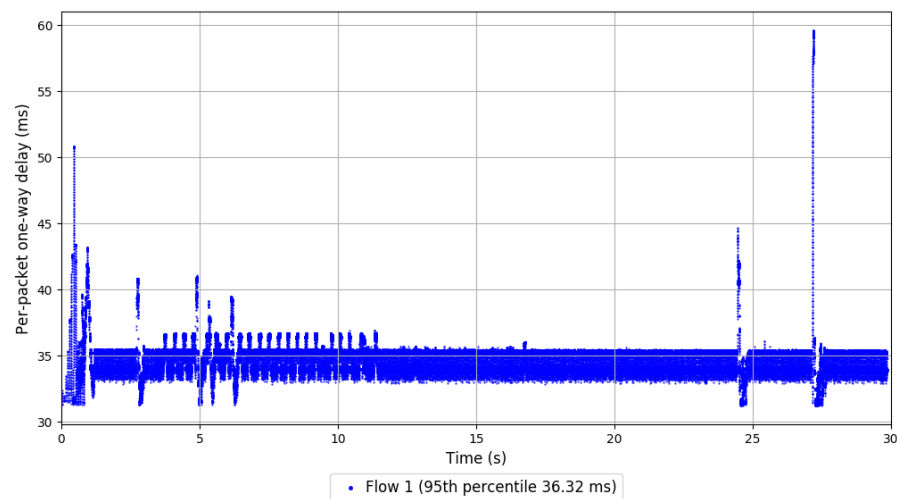
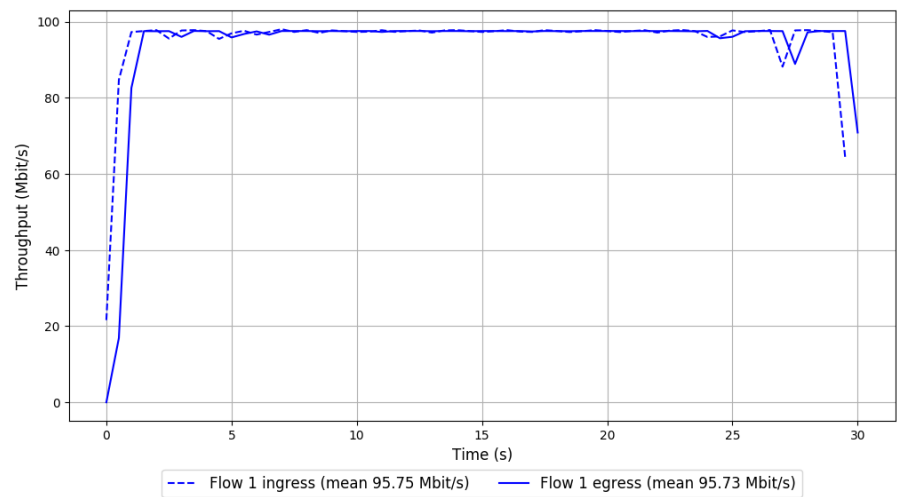
-- Flow 1:

Average throughput: 95.73 Mbit/s

95th percentile per-packet one-way delay: 36.320 ms

Loss rate: 0.01%

Run 10: Report of Indigo — Data Link

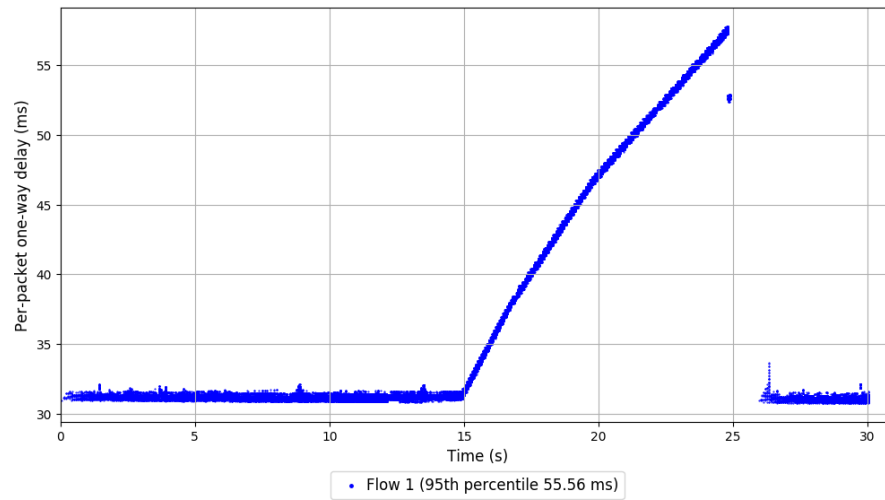
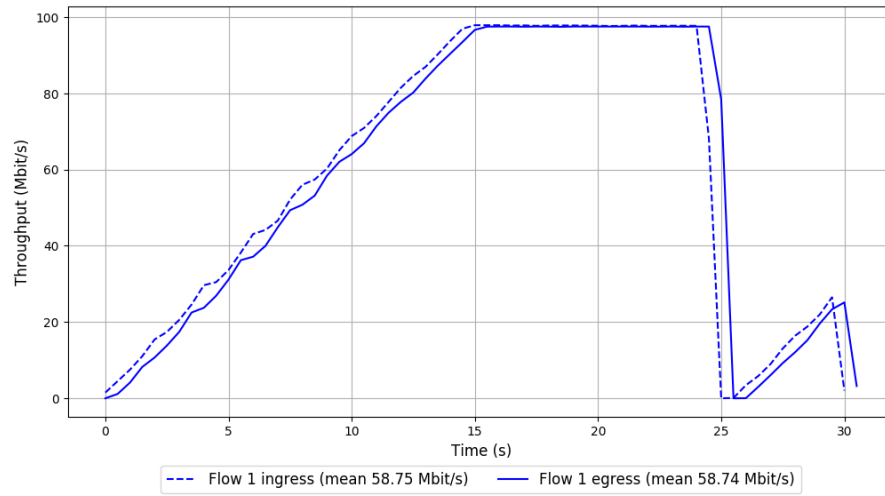


Run 1: Statistics of LEDBAT

Start at: 2018-07-03 10:27:21
End at: 2018-07-03 10:27:51
Local clock offset: -27.405 ms
Remote clock offset: -1.346 ms

Below is generated by plot.py at 2018-07-03 14:18:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 58.74 Mbit/s
95th percentile per-packet one-way delay: 55.565 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 58.74 Mbit/s
95th percentile per-packet one-way delay: 55.565 ms
Loss rate: 0.03%

Run 1: Report of LEDBAT — Data Link

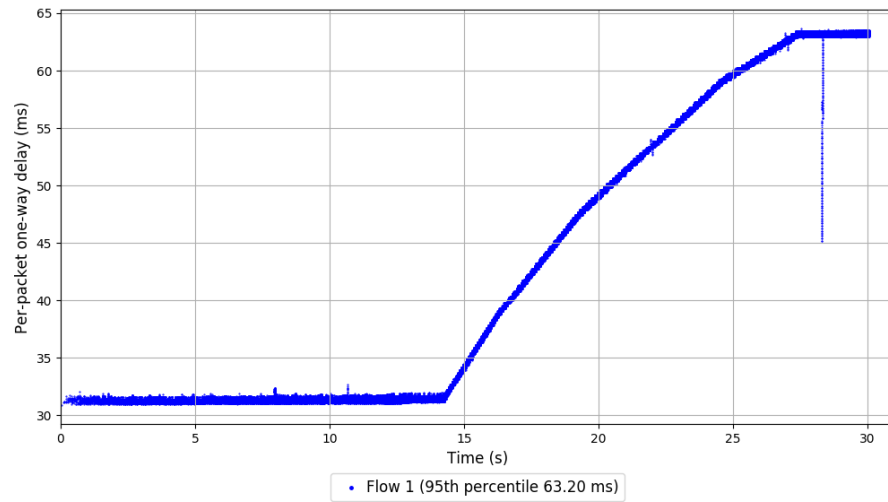
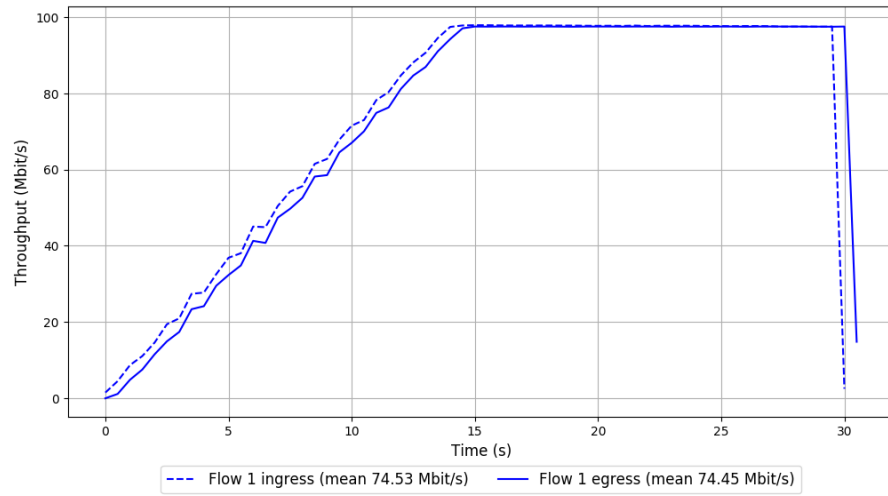


Run 2: Statistics of LEDBAT

Start at: 2018-07-03 10:49:38
End at: 2018-07-03 10:50:08
Local clock offset: -1.611 ms
Remote clock offset: -1.166 ms

Below is generated by plot.py at 2018-07-03 14:18:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 74.45 Mbit/s
95th percentile per-packet one-way delay: 63.202 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 74.45 Mbit/s
95th percentile per-packet one-way delay: 63.202 ms
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link

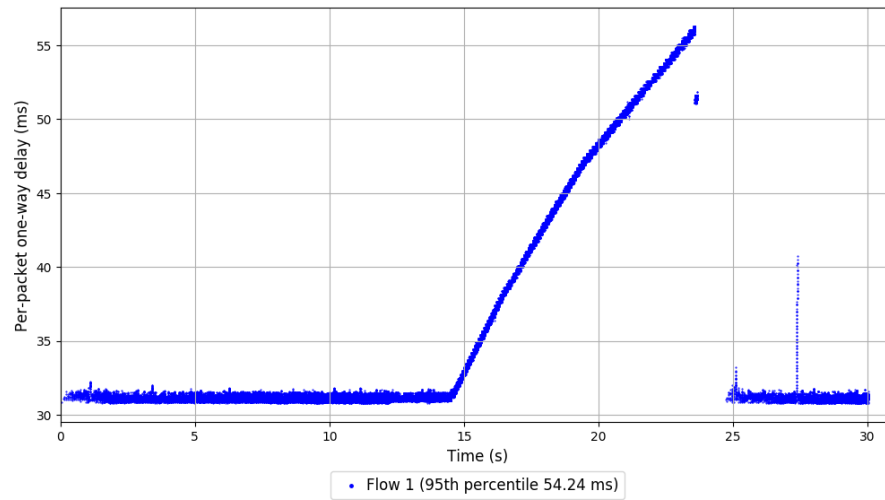
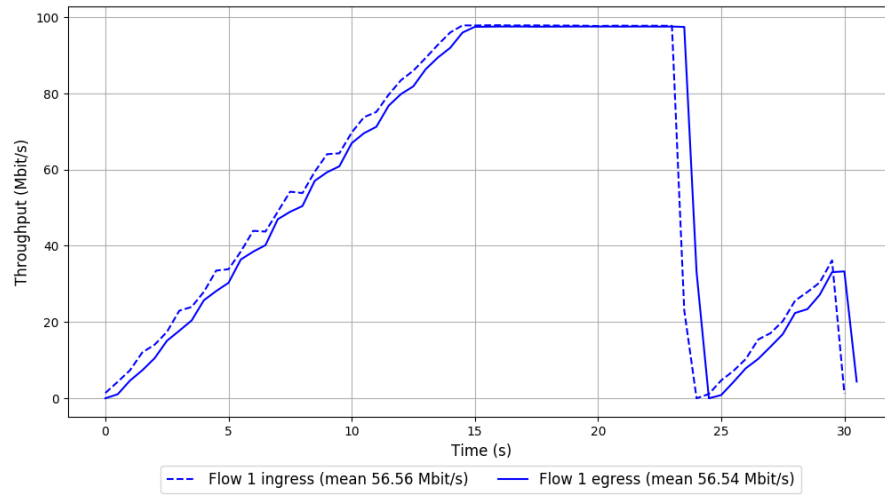


Run 3: Statistics of LEDBAT

Start at: 2018-07-03 11:11:58
End at: 2018-07-03 11:12:28
Local clock offset: 2.47 ms
Remote clock offset: -1.282 ms

Below is generated by plot.py at 2018-07-03 14:18:20
Datalink statistics
-- Total of 1 flow:
Average throughput: 56.54 Mbit/s
95th percentile per-packet one-way delay: 54.244 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 56.54 Mbit/s
95th percentile per-packet one-way delay: 54.244 ms
Loss rate: 0.03%

Run 3: Report of LEDBAT — Data Link

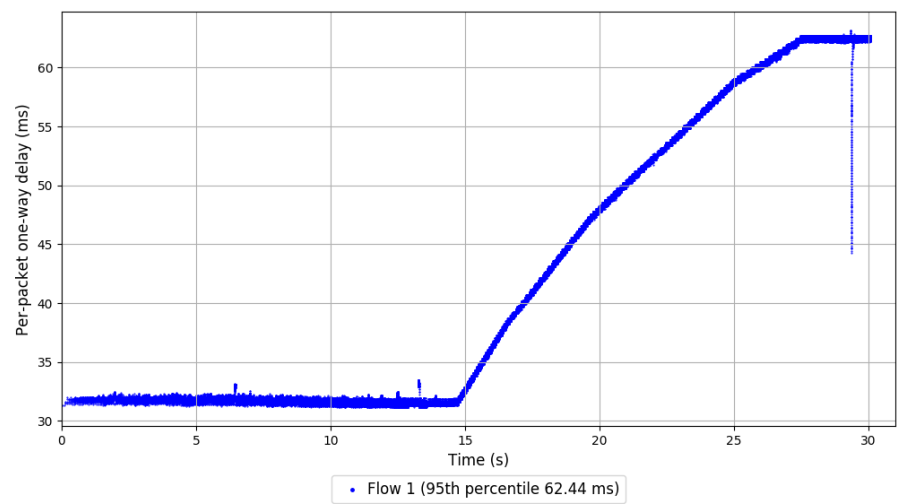
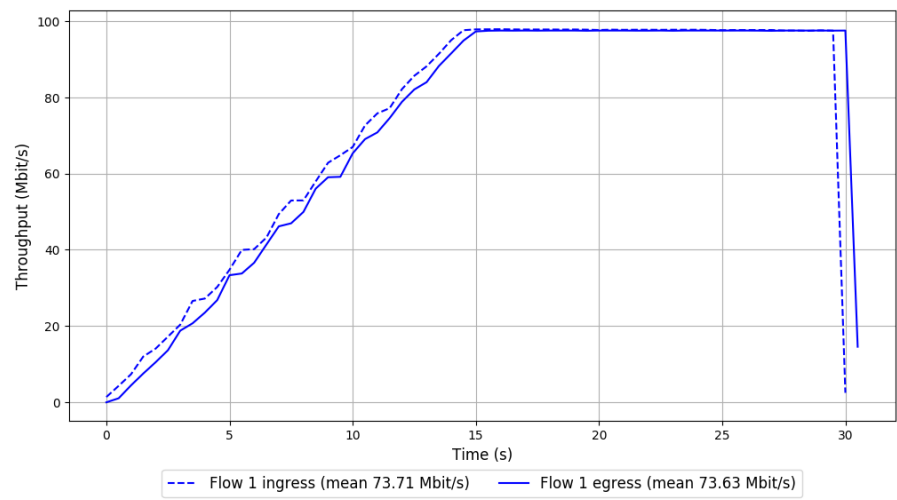


Run 4: Statistics of LEDBAT

Start at: 2018-07-03 11:34:10
End at: 2018-07-03 11:34:40
Local clock offset: 3.188 ms
Remote clock offset: -1.695 ms

Below is generated by plot.py at 2018-07-03 14:18:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 73.63 Mbit/s
95th percentile per-packet one-way delay: 62.438 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.63 Mbit/s
95th percentile per-packet one-way delay: 62.438 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

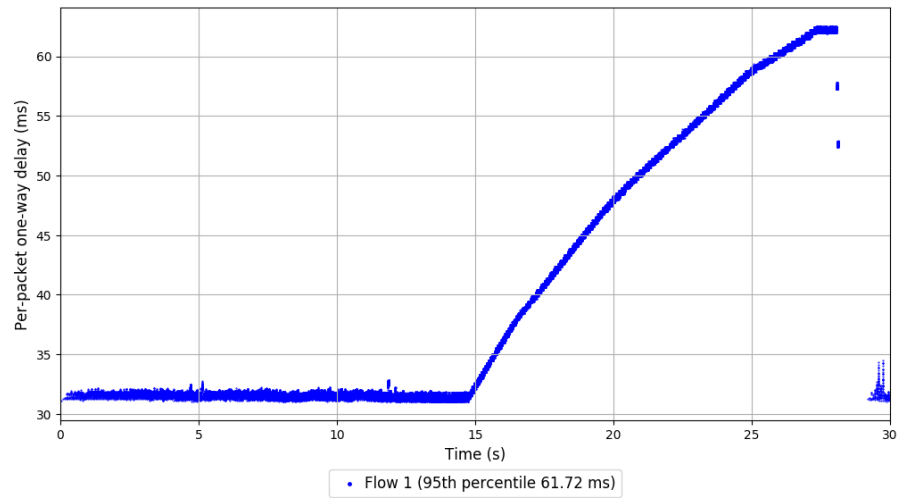
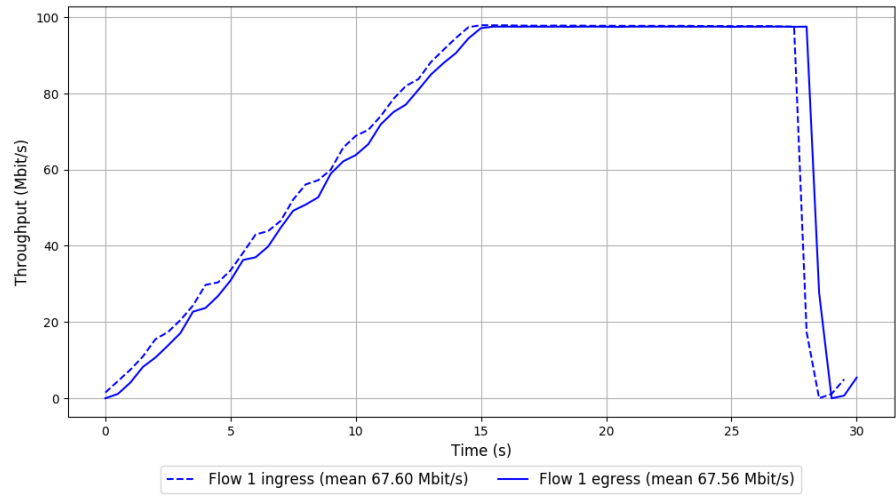


Run 5: Statistics of LEDBAT

Start at: 2018-07-03 11:56:26
End at: 2018-07-03 11:56:56
Local clock offset: 1.496 ms
Remote clock offset: -1.874 ms

Below is generated by plot.py at 2018-07-03 14:18:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 67.56 Mbit/s
95th percentile per-packet one-way delay: 61.718 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 67.56 Mbit/s
95th percentile per-packet one-way delay: 61.718 ms
Loss rate: 0.05%

Run 5: Report of LEDBAT — Data Link

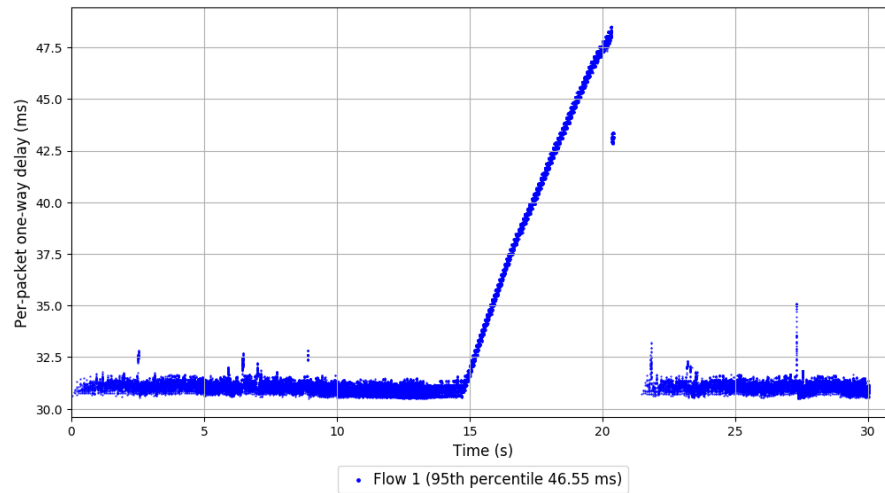
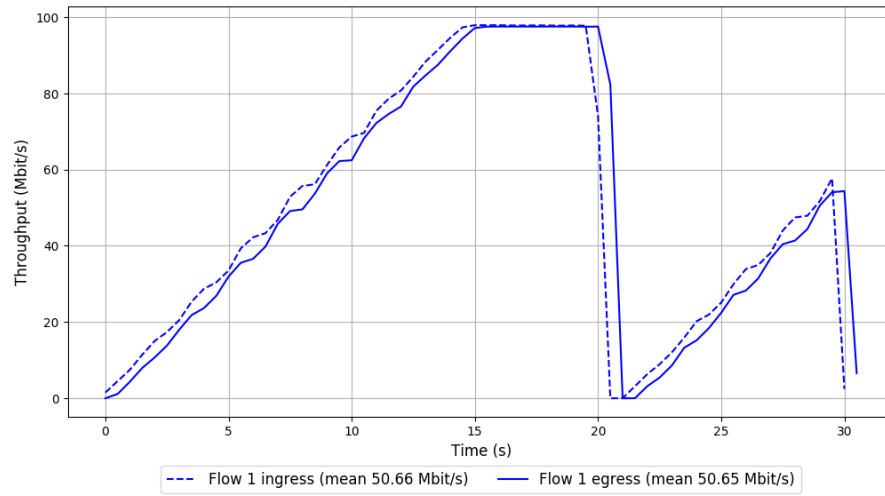


Run 6: Statistics of LEDBAT

Start at: 2018-07-03 12:18:37
End at: 2018-07-03 12:19:07
Local clock offset: 0.775 ms
Remote clock offset: -1.422 ms

Below is generated by plot.py at 2018-07-03 14:18:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 50.65 Mbit/s
95th percentile per-packet one-way delay: 46.546 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 50.65 Mbit/s
95th percentile per-packet one-way delay: 46.546 ms
Loss rate: 0.03%

Run 6: Report of LEDBAT — Data Link

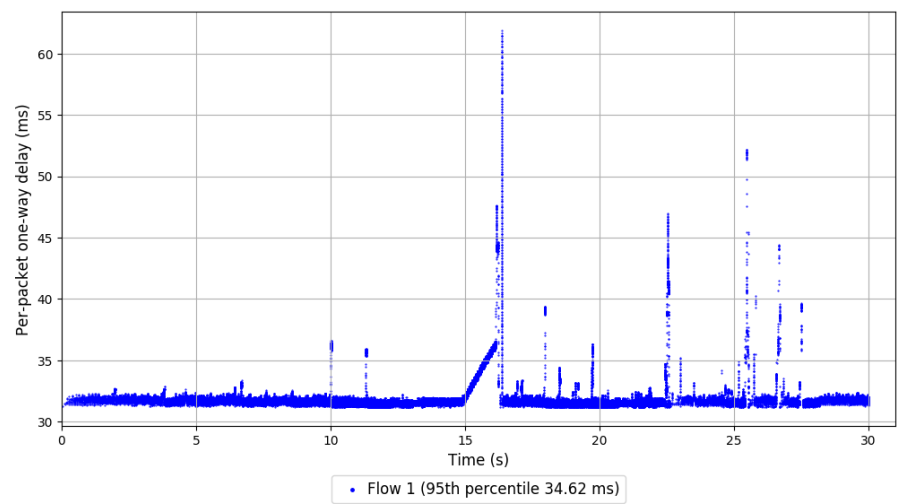
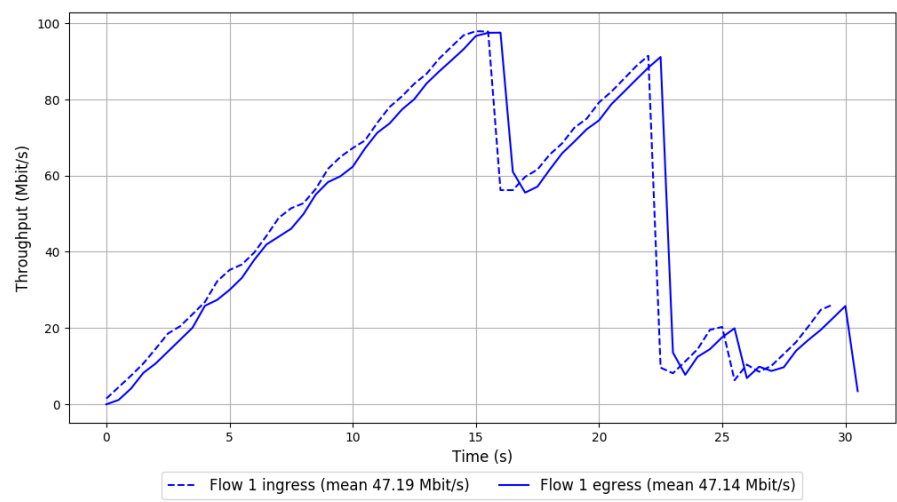


Run 7: Statistics of LEDBAT

Start at: 2018-07-03 12:40:51
End at: 2018-07-03 12:41:21
Local clock offset: 0.674 ms
Remote clock offset: -0.045 ms

Below is generated by plot.py at 2018-07-03 14:18:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 47.14 Mbit/s
95th percentile per-packet one-way delay: 34.625 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 47.14 Mbit/s
95th percentile per-packet one-way delay: 34.625 ms
Loss rate: 0.11%

Run 7: Report of LEDBAT — Data Link

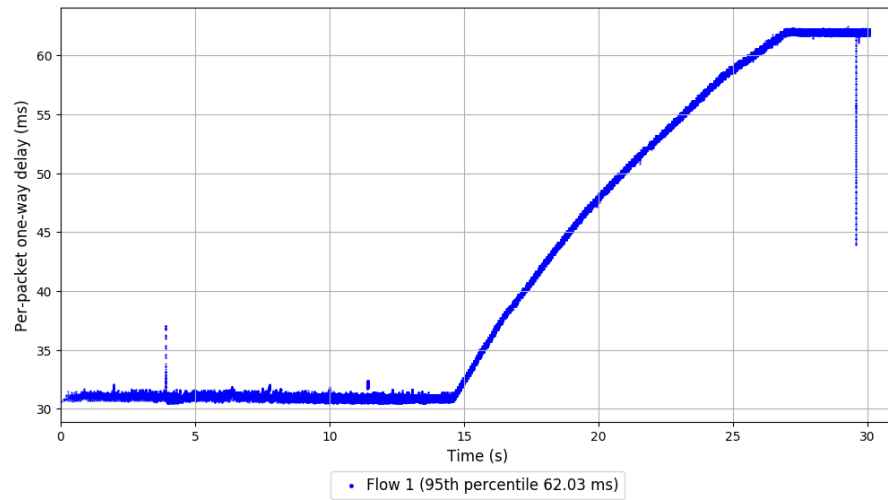
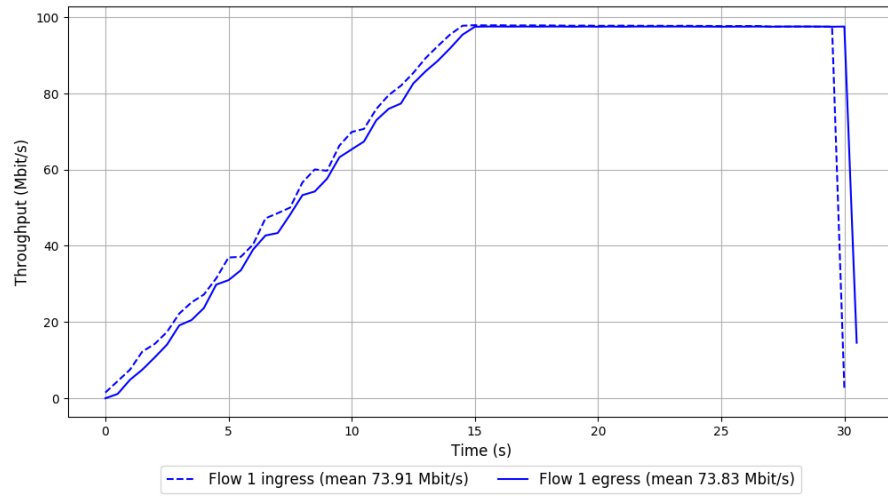


Run 8: Statistics of LEDBAT

Start at: 2018-07-03 13:03:01
End at: 2018-07-03 13:03:31
Local clock offset: 0.737 ms
Remote clock offset: -0.104 ms

Below is generated by plot.py at 2018-07-03 14:18:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 73.83 Mbit/s
95th percentile per-packet one-way delay: 62.026 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.83 Mbit/s
95th percentile per-packet one-way delay: 62.026 ms
Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-07-03 13:25:14

End at: 2018-07-03 13:25:44

Local clock offset: 0.316 ms

Remote clock offset: 2.303 ms

Below is generated by plot.py at 2018-07-03 14:18:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 69.72 Mbit/s

95th percentile per-packet one-way delay: 45.586 ms

Loss rate: 0.02%

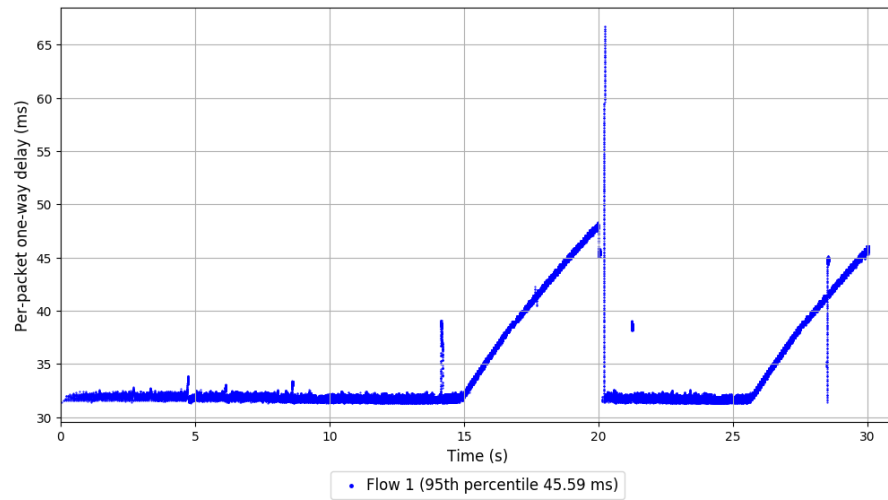
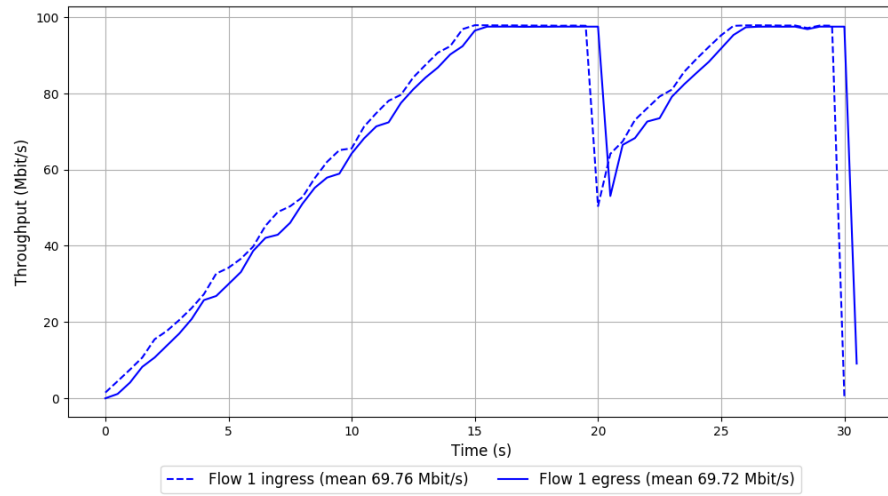
-- Flow 1:

Average throughput: 69.72 Mbit/s

95th percentile per-packet one-way delay: 45.586 ms

Loss rate: 0.02%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-07-03 13:47:34

End at: 2018-07-03 13:48:04

Local clock offset: 0.235 ms

Remote clock offset: 5.424 ms

Below is generated by plot.py at 2018-07-03 14:18:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.89 Mbit/s

95th percentile per-packet one-way delay: 51.254 ms

Loss rate: 0.01%

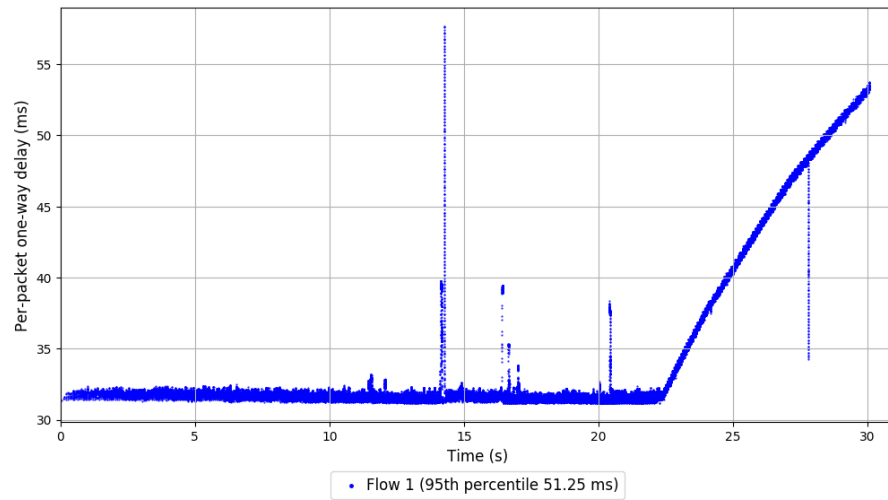
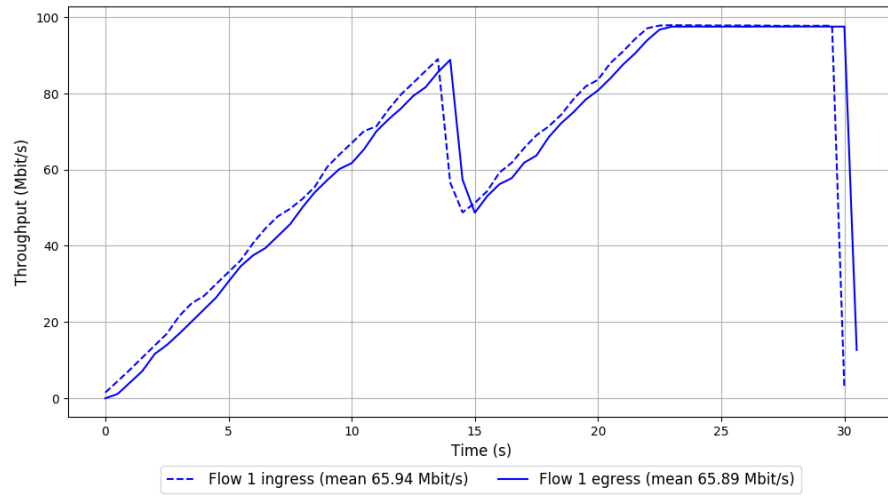
-- Flow 1:

Average throughput: 65.89 Mbit/s

95th percentile per-packet one-way delay: 51.254 ms

Loss rate: 0.01%

Run 10: Report of LEDBAT — Data Link

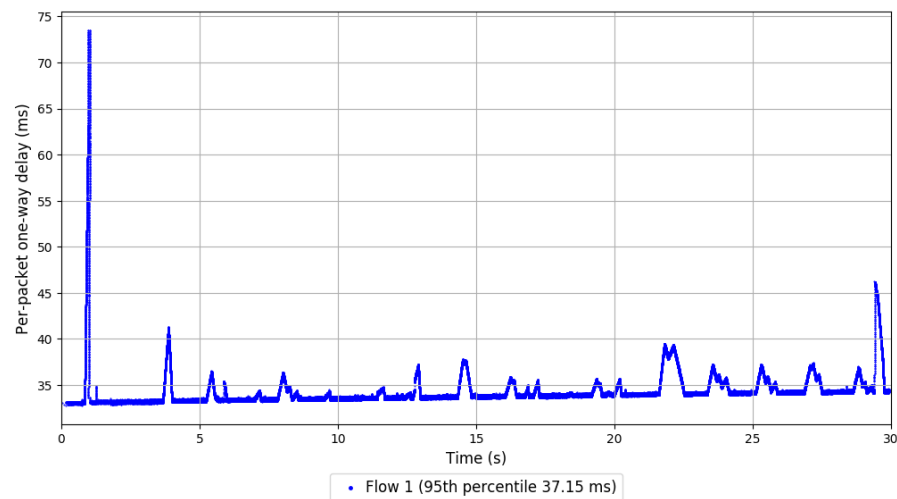
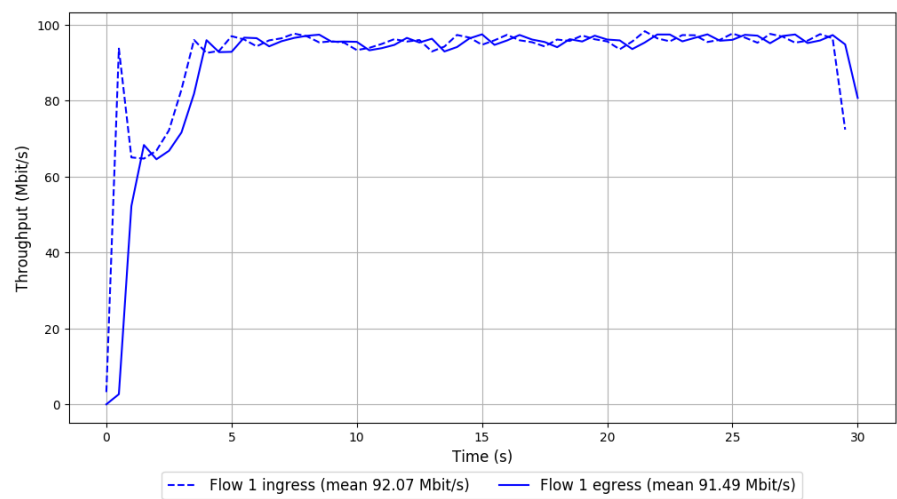


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-07-03 10:36:26
End at: 2018-07-03 10:36:56
Local clock offset: -20.876 ms
Remote clock offset: -1.379 ms

# Below is generated by plot.py at 2018-07-03 14:19:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.49 Mbit/s
95th percentile per-packet one-way delay: 37.154 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 91.49 Mbit/s
95th percentile per-packet one-way delay: 37.154 ms
Loss rate: 0.63%
```

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-07-03 10:58:49

End at: 2018-07-03 10:59:19

Local clock offset: 2.874 ms

Remote clock offset: -1.173 ms

Below is generated by plot.py at 2018-07-03 14:19:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.28 Mbit/s

95th percentile per-packet one-way delay: 35.195 ms

Loss rate: 0.91%

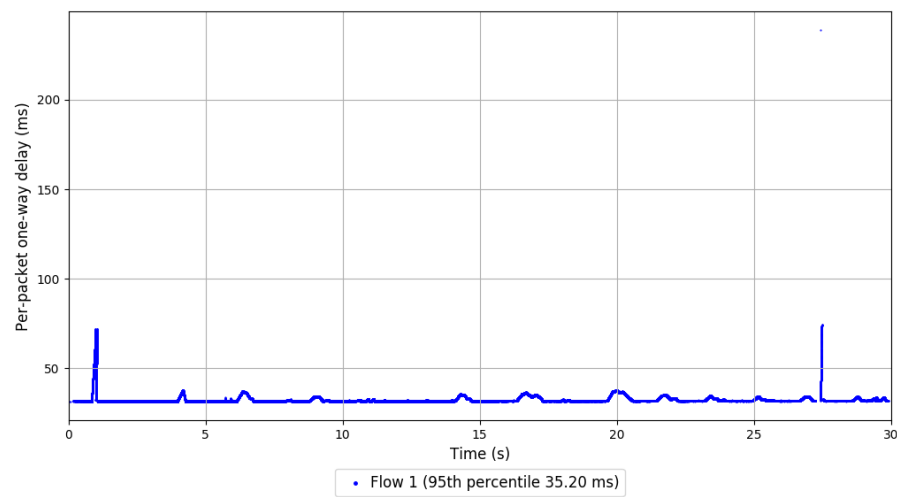
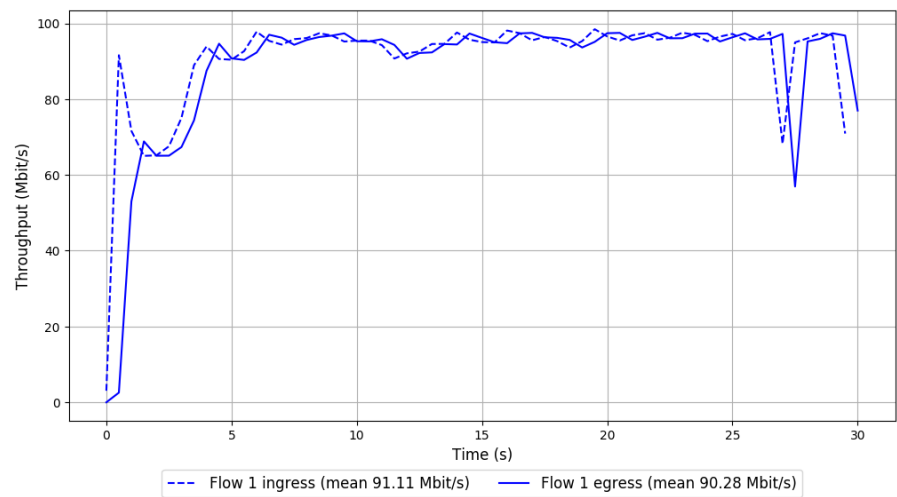
-- Flow 1:

Average throughput: 90.28 Mbit/s

95th percentile per-packet one-way delay: 35.195 ms

Loss rate: 0.91%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-07-03 11:21:02

End at: 2018-07-03 11:21:32

Local clock offset: 2.38 ms

Remote clock offset: -1.793 ms

Below is generated by plot.py at 2018-07-03 14:19:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.92 Mbit/s

95th percentile per-packet one-way delay: 36.847 ms

Loss rate: 0.65%

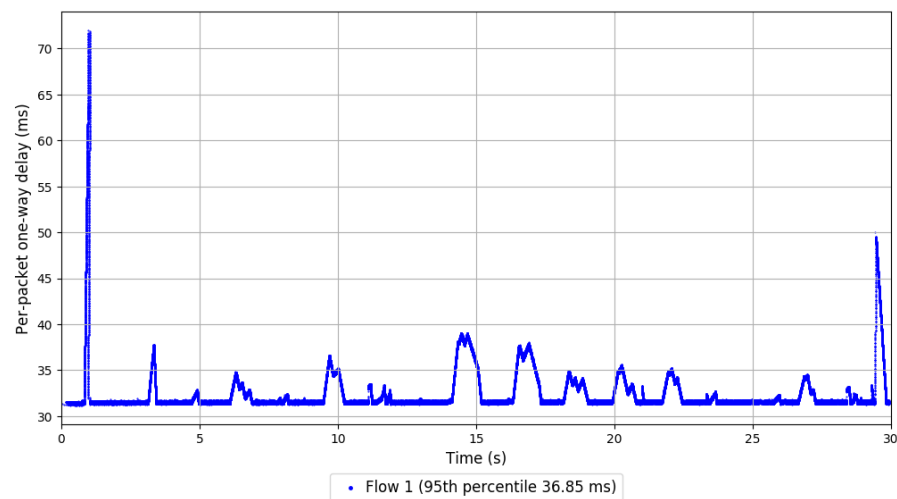
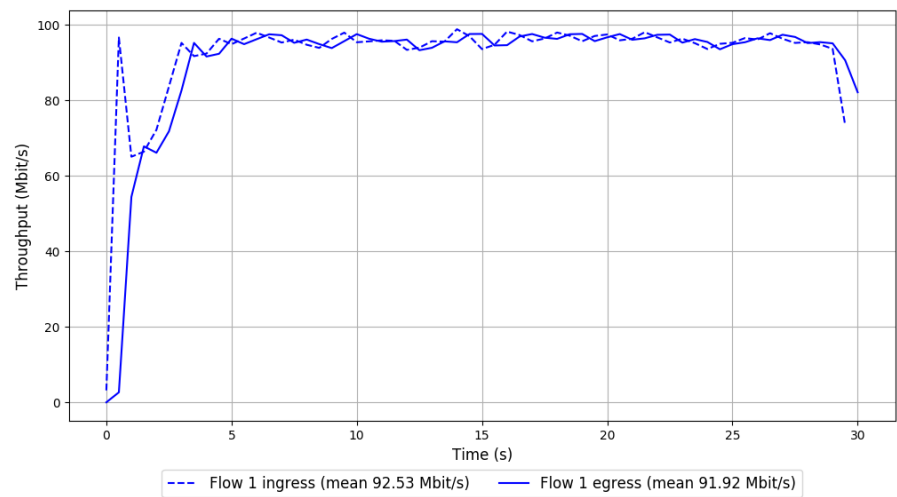
-- Flow 1:

Average throughput: 91.92 Mbit/s

95th percentile per-packet one-way delay: 36.847 ms

Loss rate: 0.65%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-07-03 11:43:17

End at: 2018-07-03 11:43:47

Local clock offset: 1.512 ms

Remote clock offset: -1.455 ms

Below is generated by plot.py at 2018-07-03 14:19:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.10 Mbit/s

95th percentile per-packet one-way delay: 35.783 ms

Loss rate: 0.61%

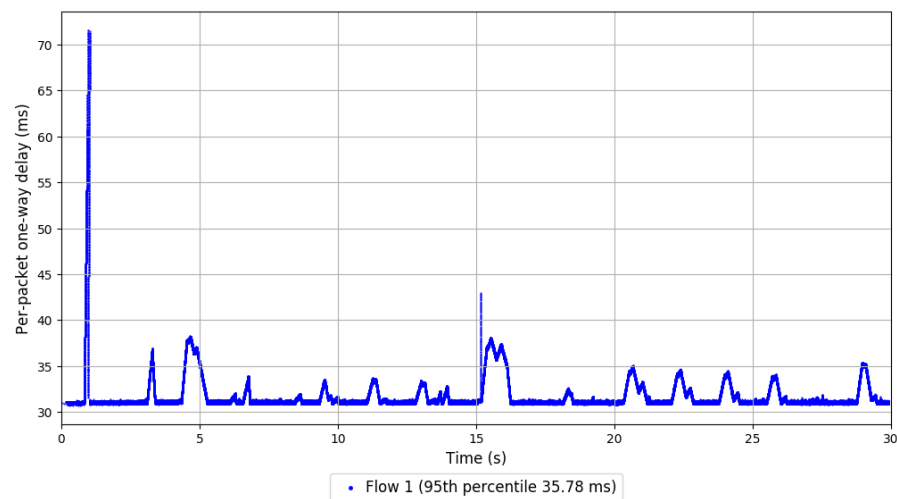
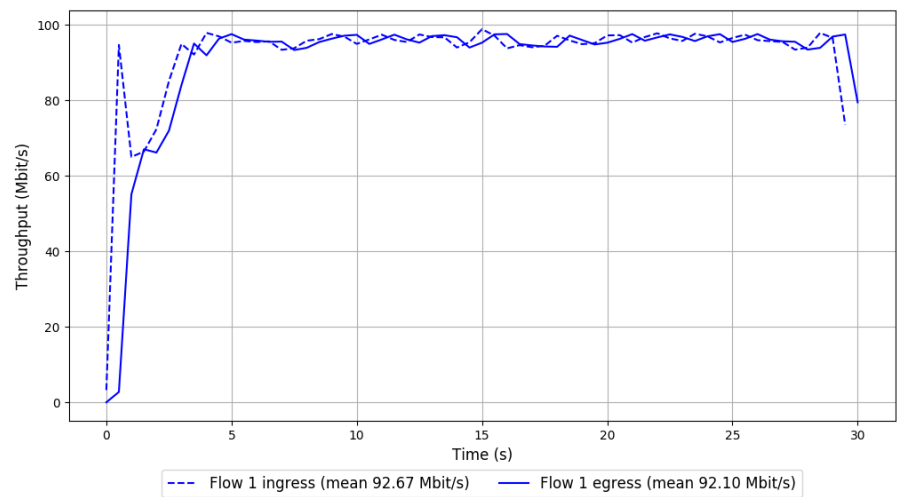
-- Flow 1:

Average throughput: 92.10 Mbit/s

95th percentile per-packet one-way delay: 35.783 ms

Loss rate: 0.61%

Run 4: Report of PCC-Allegro — Data Link

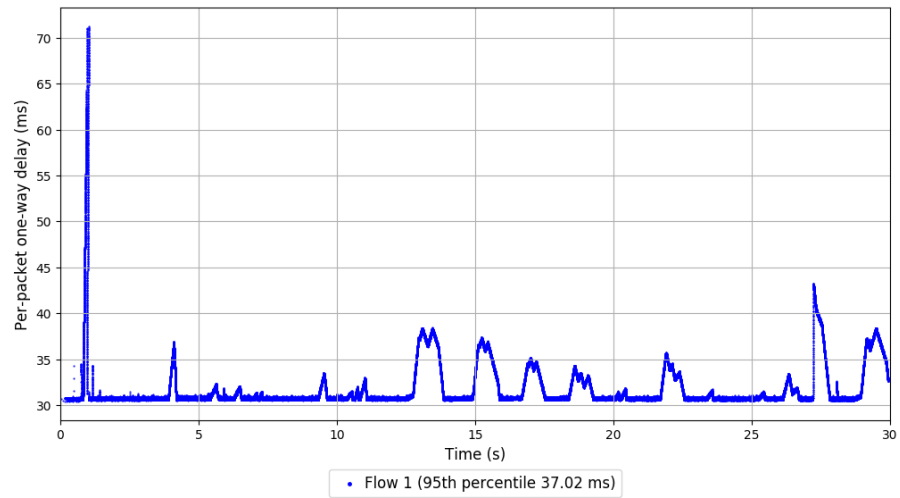
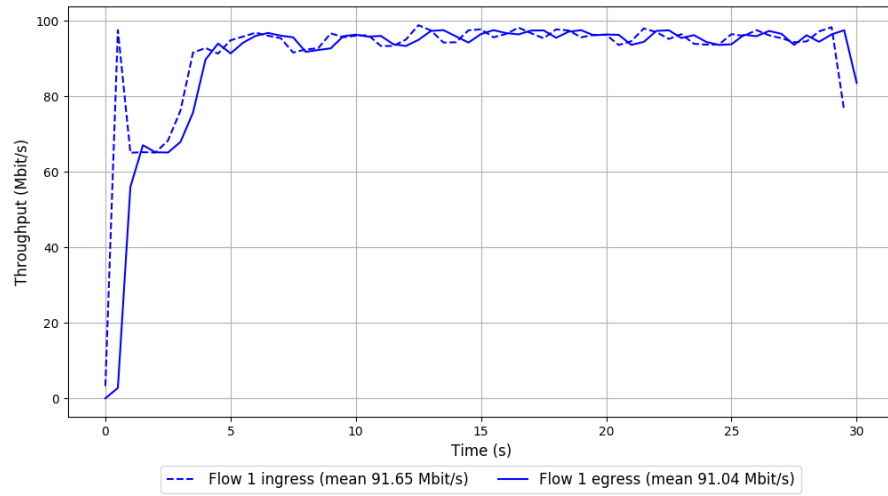


Run 5: Statistics of PCC-Allegro

Start at: 2018-07-03 12:05:31
End at: 2018-07-03 12:06:01
Local clock offset: 1.476 ms
Remote clock offset: -1.651 ms

Below is generated by plot.py at 2018-07-03 14:19:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.04 Mbit/s
95th percentile per-packet one-way delay: 37.019 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 91.04 Mbit/s
95th percentile per-packet one-way delay: 37.019 ms
Loss rate: 0.66%

Run 5: Report of PCC-Allegro — Data Link

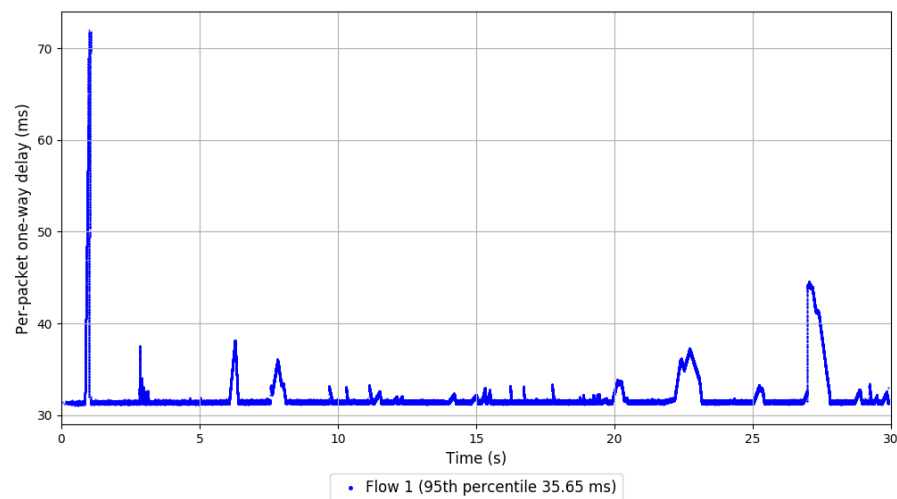
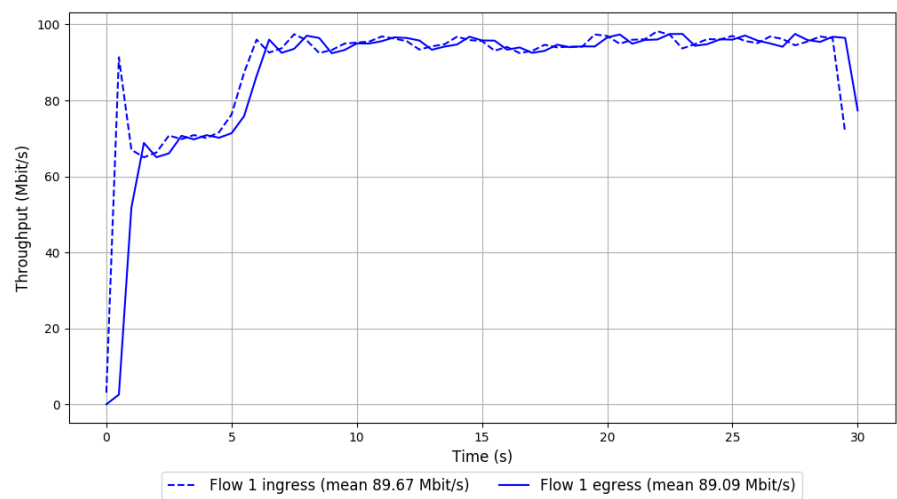


Run 6: Statistics of PCC-Allegro

Start at: 2018-07-03 12:27:41
End at: 2018-07-03 12:28:11
Local clock offset: 0.949 ms
Remote clock offset: -0.807 ms

Below is generated by plot.py at 2018-07-03 14:20:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 89.09 Mbit/s
95th percentile per-packet one-way delay: 35.645 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 89.09 Mbit/s
95th percentile per-packet one-way delay: 35.645 ms
Loss rate: 0.64%

Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

Start at: 2018-07-03 12:49:55

End at: 2018-07-03 12:50:25

Local clock offset: 0.593 ms

Remote clock offset: 0.329 ms

Below is generated by plot.py at 2018-07-03 14:20:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.11 Mbit/s

95th percentile per-packet one-way delay: 54.682 ms

Loss rate: 0.70%

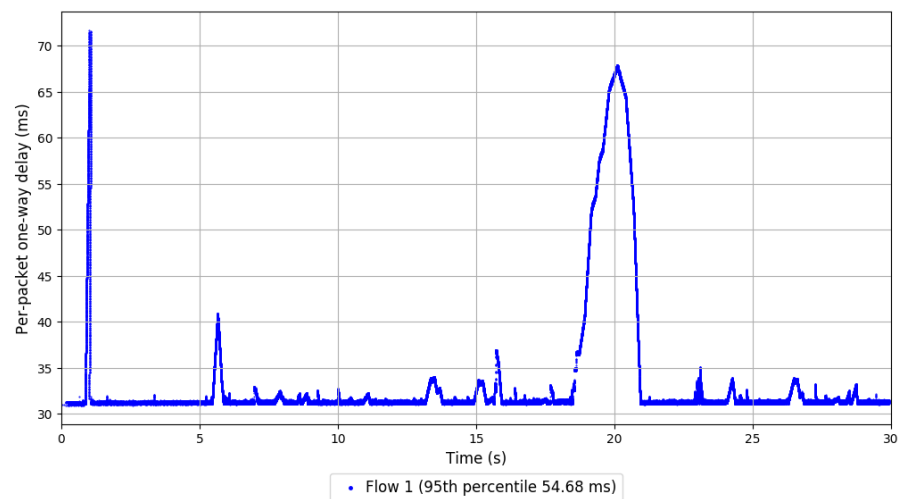
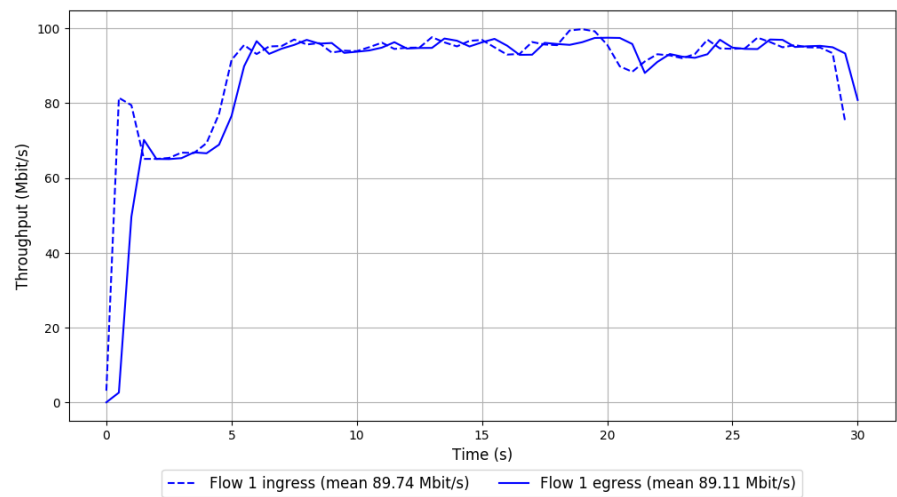
-- Flow 1:

Average throughput: 89.11 Mbit/s

95th percentile per-packet one-way delay: 54.682 ms

Loss rate: 0.70%

Run 7: Report of PCC-Allegro — Data Link



Run 8: Statistics of PCC-Allegro

Start at: 2018-07-03 13:12:05

End at: 2018-07-03 13:12:35

Local clock offset: 0.346 ms

Remote clock offset: 0.62 ms

Below is generated by plot.py at 2018-07-03 14:20:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.48 Mbit/s

95th percentile per-packet one-way delay: 36.833 ms

Loss rate: 0.66%

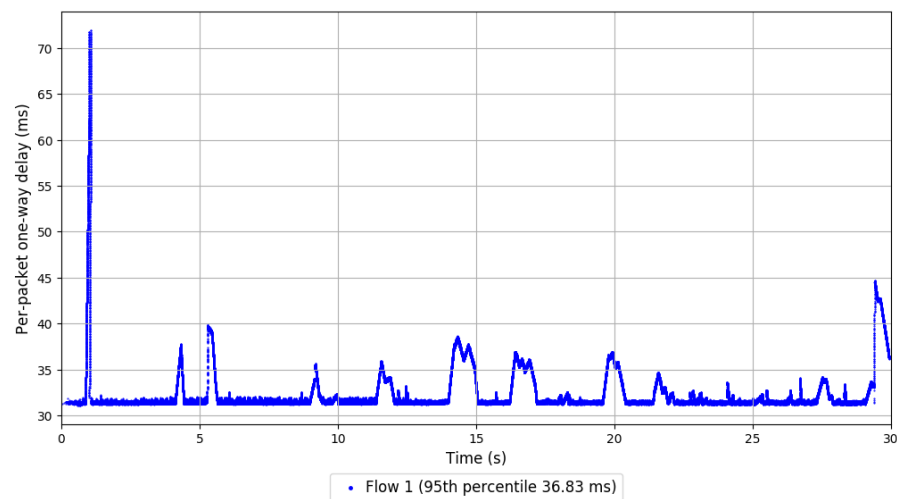
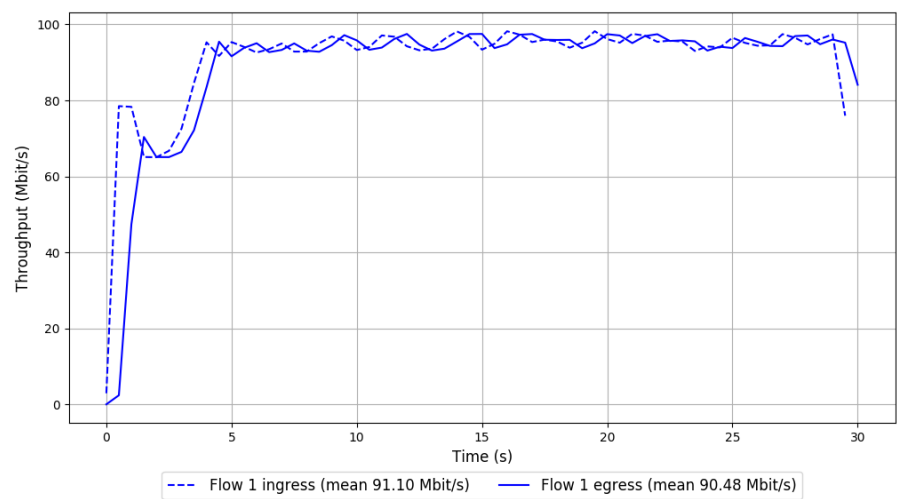
-- Flow 1:

Average throughput: 90.48 Mbit/s

95th percentile per-packet one-way delay: 36.833 ms

Loss rate: 0.66%

Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-07-03 13:34:20

End at: 2018-07-03 13:34:50

Local clock offset: 0.324 ms

Remote clock offset: 3.79 ms

Below is generated by plot.py at 2018-07-03 14:20:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.30 Mbit/s

95th percentile per-packet one-way delay: 39.503 ms

Loss rate: 0.71%

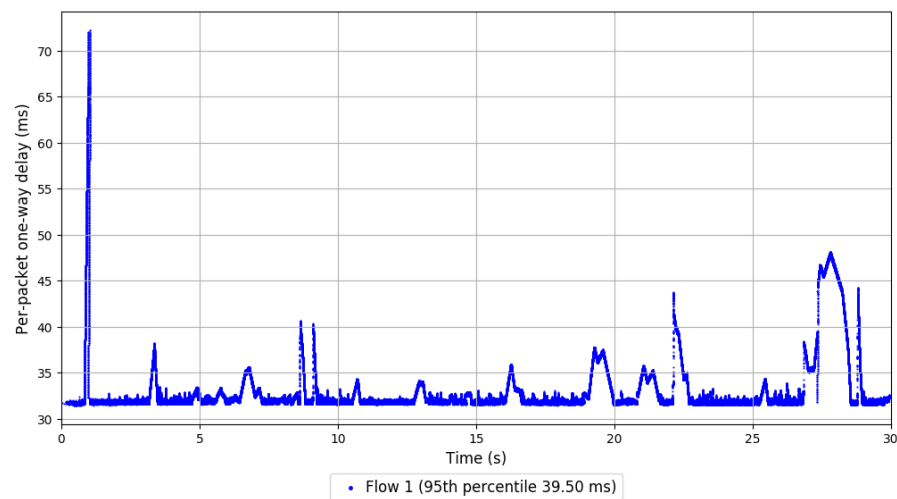
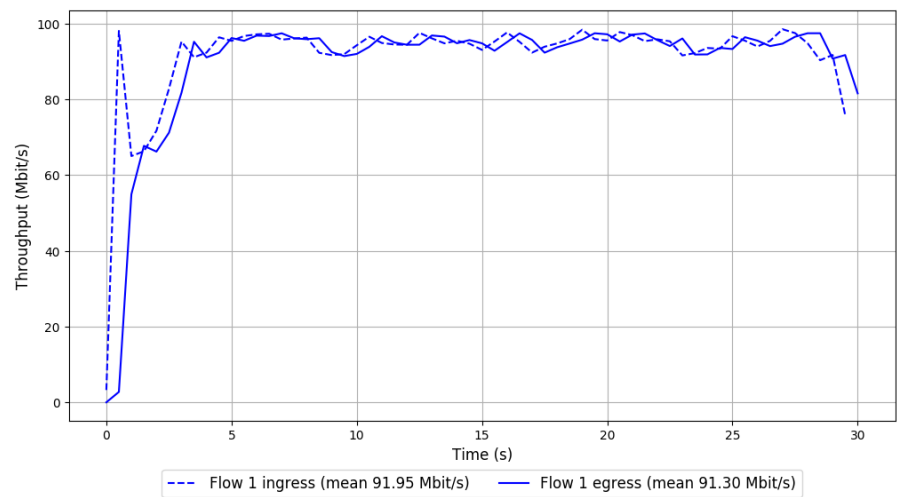
-- Flow 1:

Average throughput: 91.30 Mbit/s

95th percentile per-packet one-way delay: 39.503 ms

Loss rate: 0.71%

Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-07-03 13:56:40

End at: 2018-07-03 13:57:10

Local clock offset: 0.105 ms

Remote clock offset: 7.072 ms

Below is generated by plot.py at 2018-07-03 14:20:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.47 Mbit/s

95th percentile per-packet one-way delay: 36.149 ms

Loss rate: 0.68%

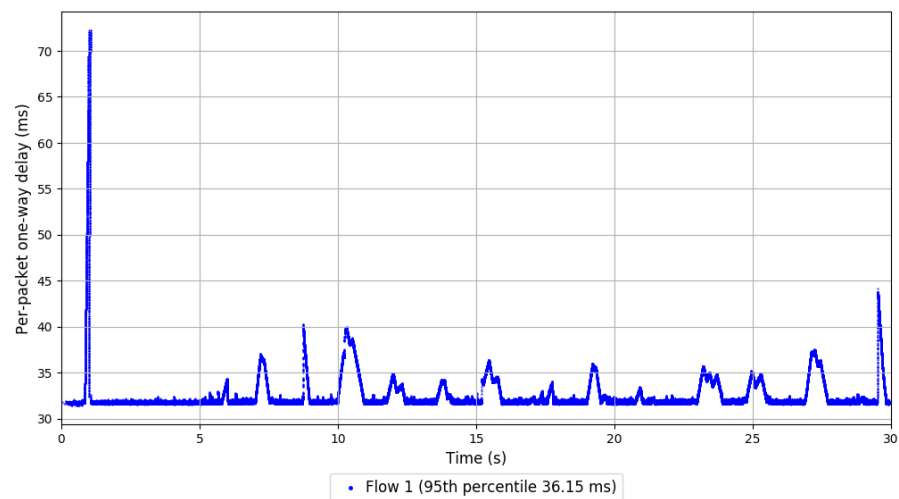
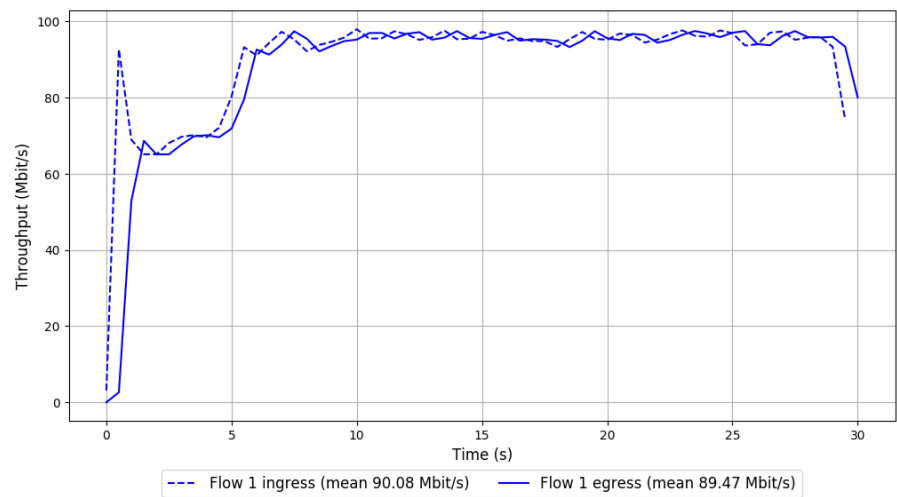
-- Flow 1:

Average throughput: 89.47 Mbit/s

95th percentile per-packet one-way delay: 36.149 ms

Loss rate: 0.68%

Run 10: Report of PCC-Allegro — Data Link

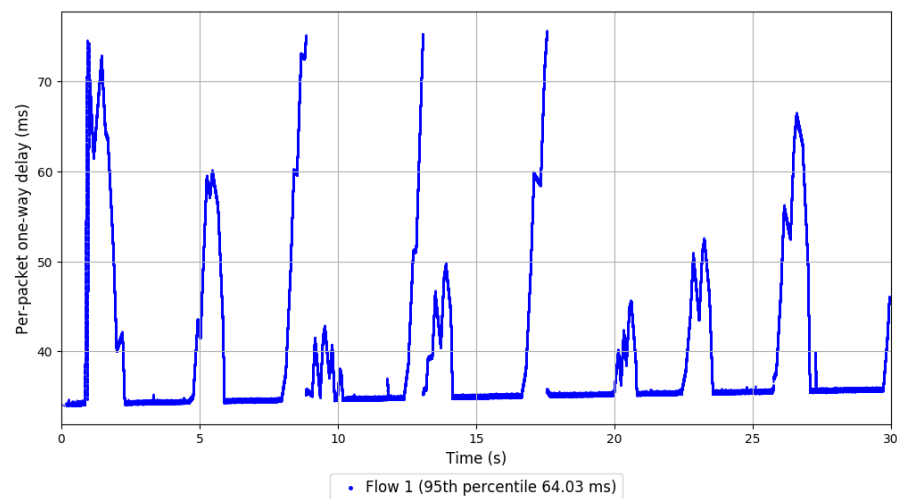
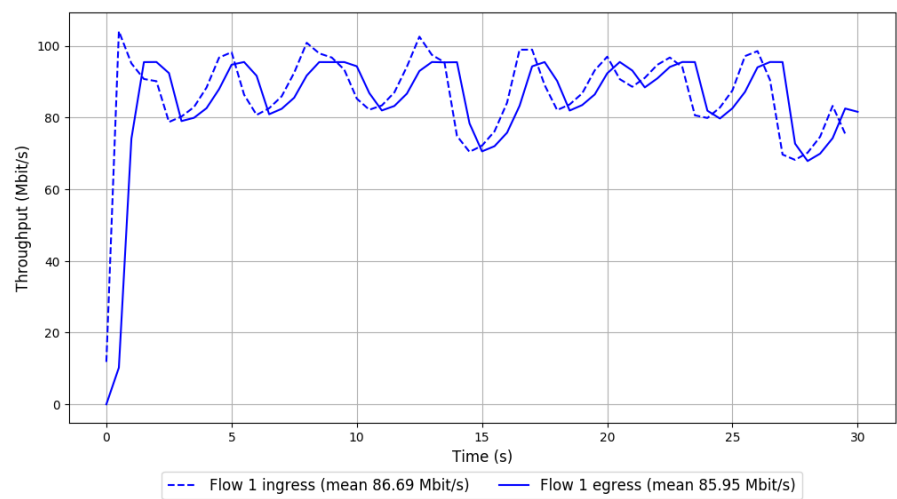


```
Run 1: Statistics of PCC-Expr

Start at: 2018-07-03 10:33:48
End at: 2018-07-03 10:34:18
Local clock offset: -29.156 ms
Remote clock offset: -0.975 ms

# Below is generated by plot.py at 2018-07-03 14:21:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.95 Mbit/s
95th percentile per-packet one-way delay: 64.027 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 85.95 Mbit/s
95th percentile per-packet one-way delay: 64.027 ms
Loss rate: 0.82%
```


Run 1: Report of PCC-Expr — Data Link

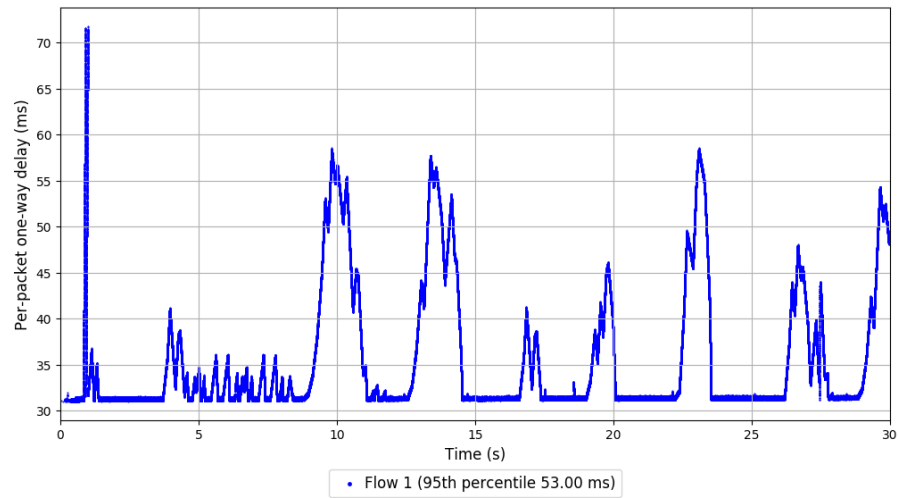
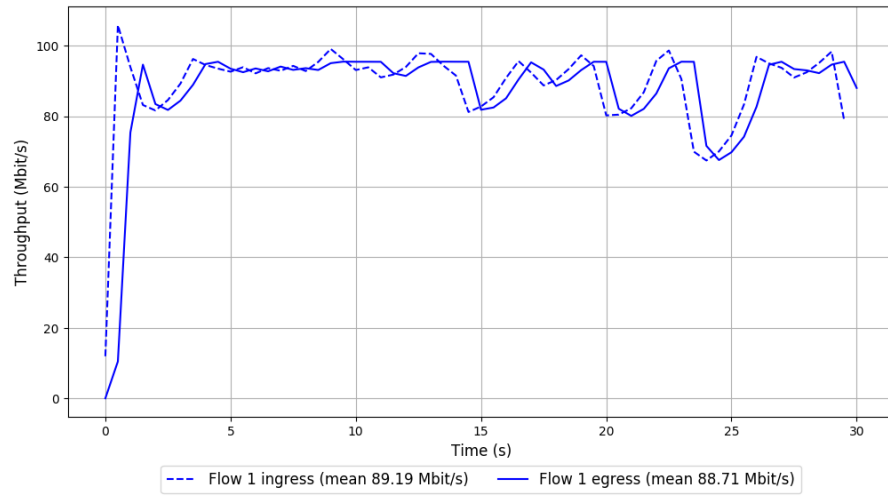


Run 2: Statistics of PCC-Expr

Start at: 2018-07-03 10:56:12
End at: 2018-07-03 10:56:42
Local clock offset: 1.869 ms
Remote clock offset: -0.825 ms

Below is generated by plot.py at 2018-07-03 14:21:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 88.71 Mbit/s
95th percentile per-packet one-way delay: 53.004 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 88.71 Mbit/s
95th percentile per-packet one-way delay: 53.004 ms
Loss rate: 0.48%

Run 2: Report of PCC-Expr — Data Link

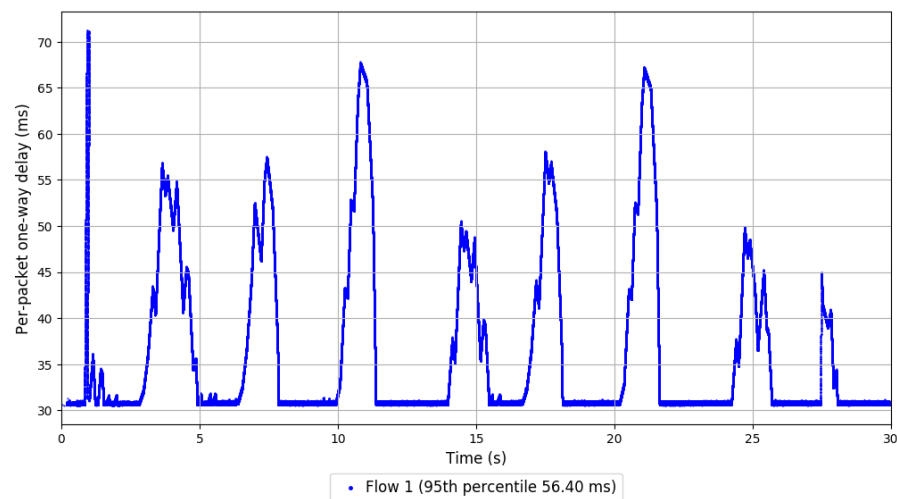
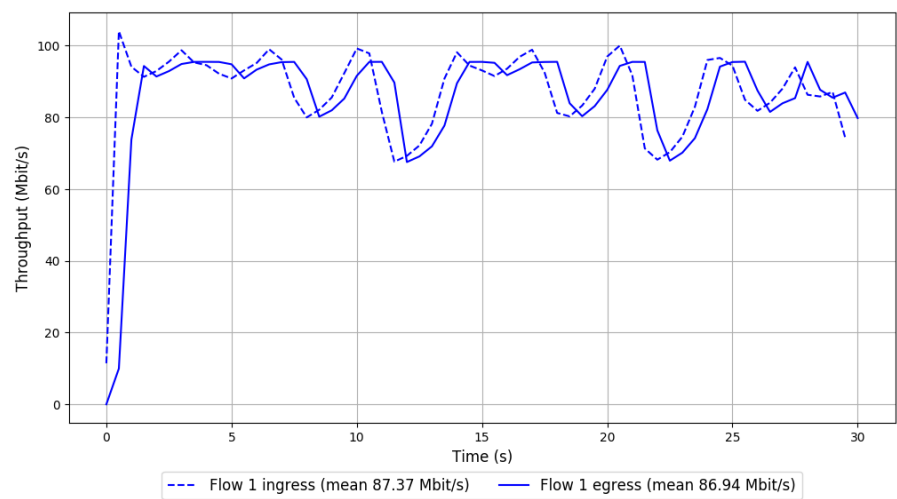


Run 3: Statistics of PCC-Expr

Start at: 2018-07-03 11:18:25
End at: 2018-07-03 11:18:55
Local clock offset: 2.398 ms
Remote clock offset: -1.696 ms

Below is generated by plot.py at 2018-07-03 14:21:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 86.94 Mbit/s
95th percentile per-packet one-way delay: 56.398 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 86.94 Mbit/s
95th percentile per-packet one-way delay: 56.398 ms
Loss rate: 0.49%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-07-03 11:40:39

End at: 2018-07-03 11:41:09

Local clock offset: 1.825 ms

Remote clock offset: -1.977 ms

Below is generated by plot.py at 2018-07-03 14:22:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.34 Mbit/s

95th percentile per-packet one-way delay: 58.309 ms

Loss rate: 0.52%

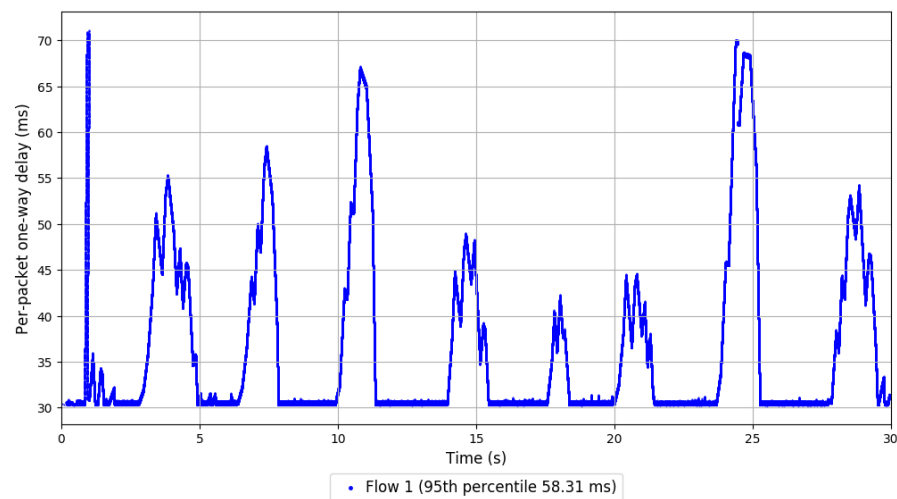
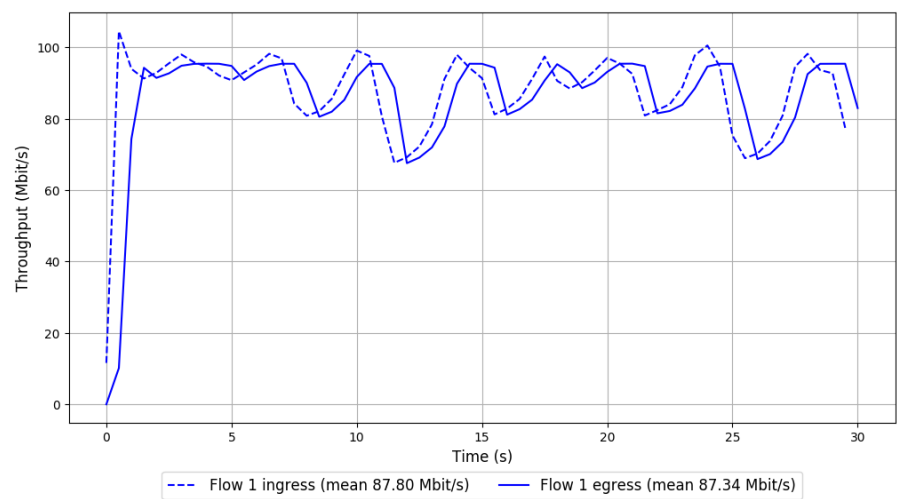
-- Flow 1:

Average throughput: 87.34 Mbit/s

95th percentile per-packet one-way delay: 58.309 ms

Loss rate: 0.52%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-07-03 12:02:54

End at: 2018-07-03 12:03:24

Local clock offset: 1.732 ms

Remote clock offset: -1.701 ms

Below is generated by plot.py at 2018-07-03 14:22:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.93 Mbit/s

95th percentile per-packet one-way delay: 64.653 ms

Loss rate: 0.63%

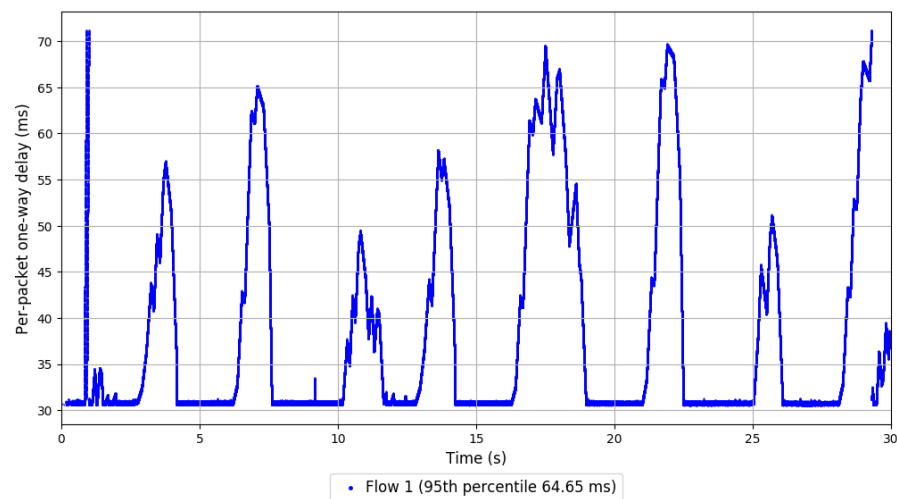
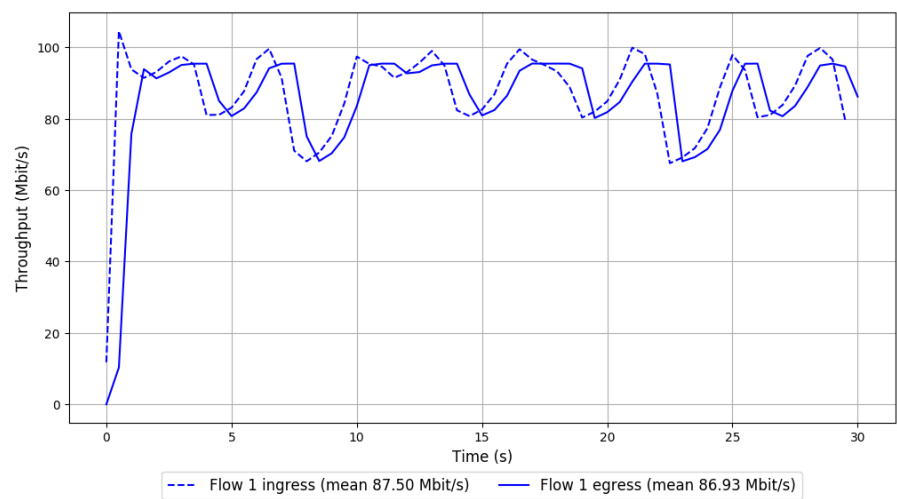
-- Flow 1:

Average throughput: 86.93 Mbit/s

95th percentile per-packet one-way delay: 64.653 ms

Loss rate: 0.63%

Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

Start at: 2018-07-03 12:25:04

End at: 2018-07-03 12:25:34

Local clock offset: 0.883 ms

Remote clock offset: -0.683 ms

Below is generated by plot.py at 2018-07-03 14:22:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.46 Mbit/s

95th percentile per-packet one-way delay: 60.746 ms

Loss rate: 0.64%

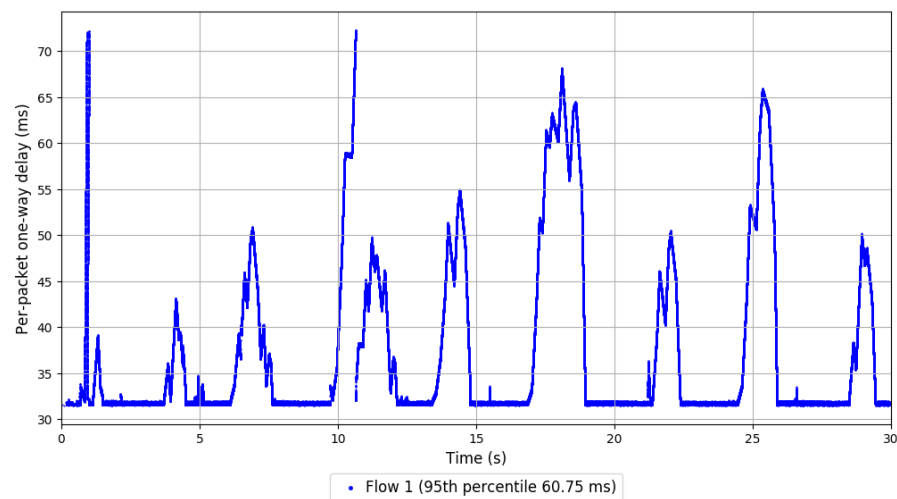
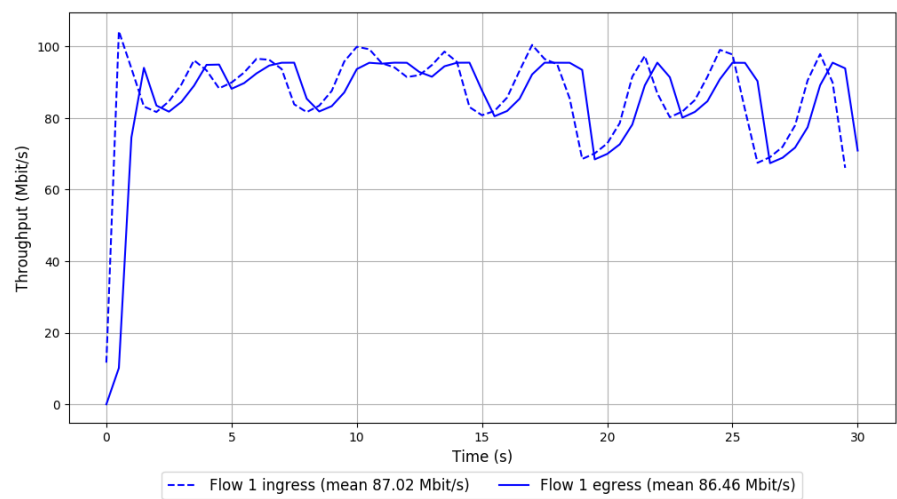
-- Flow 1:

Average throughput: 86.46 Mbit/s

95th percentile per-packet one-way delay: 60.746 ms

Loss rate: 0.64%

Run 6: Report of PCC-Expr — Data Link



Run 7: Statistics of PCC-Expr

Start at: 2018-07-03 12:47:17

End at: 2018-07-03 12:47:47

Local clock offset: 0.6 ms

Remote clock offset: 0.181 ms

Below is generated by plot.py at 2018-07-03 14:22:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.48 Mbit/s

95th percentile per-packet one-way delay: 52.622 ms

Loss rate: 0.59%

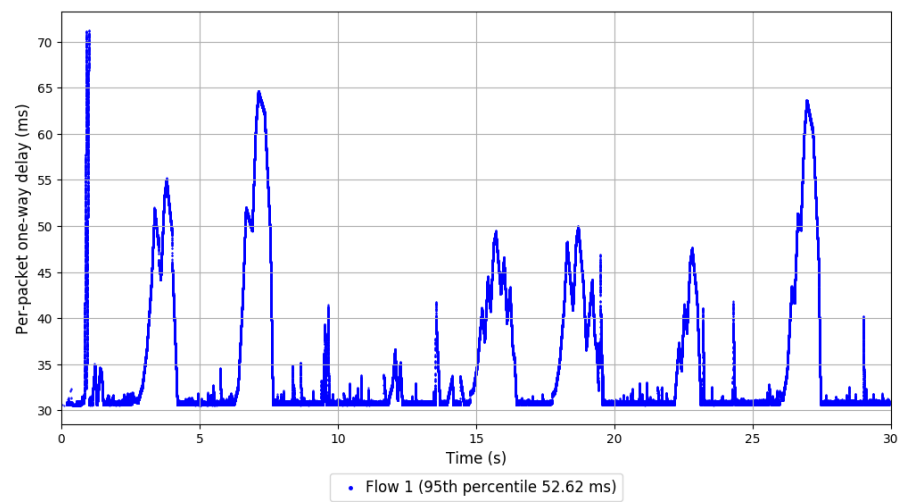
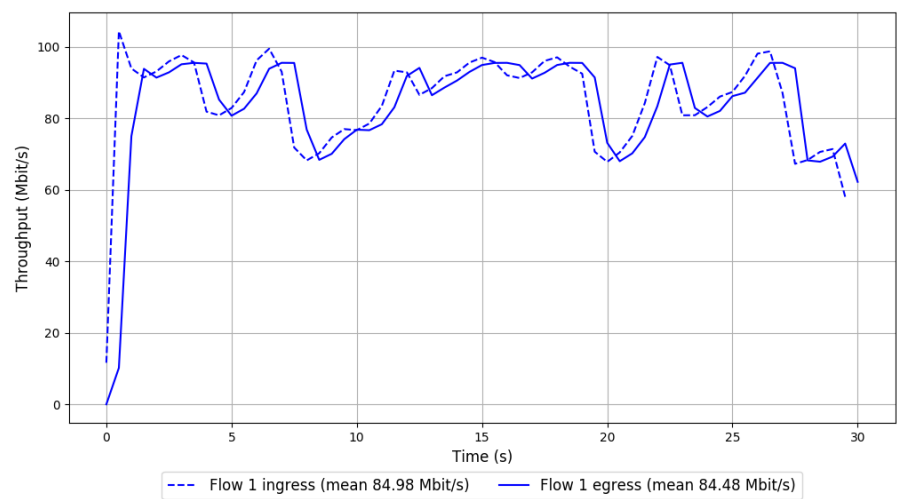
-- Flow 1:

Average throughput: 84.48 Mbit/s

95th percentile per-packet one-way delay: 52.622 ms

Loss rate: 0.59%

Run 7: Report of PCC-Expr — Data Link



Run 8: Statistics of PCC-Expr

Start at: 2018-07-03 13:09:28

End at: 2018-07-03 13:09:58

Local clock offset: 0.511 ms

Remote clock offset: 0.418 ms

Below is generated by plot.py at 2018-07-03 14:22:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.26 Mbit/s

95th percentile per-packet one-way delay: 61.447 ms

Loss rate: 0.79%

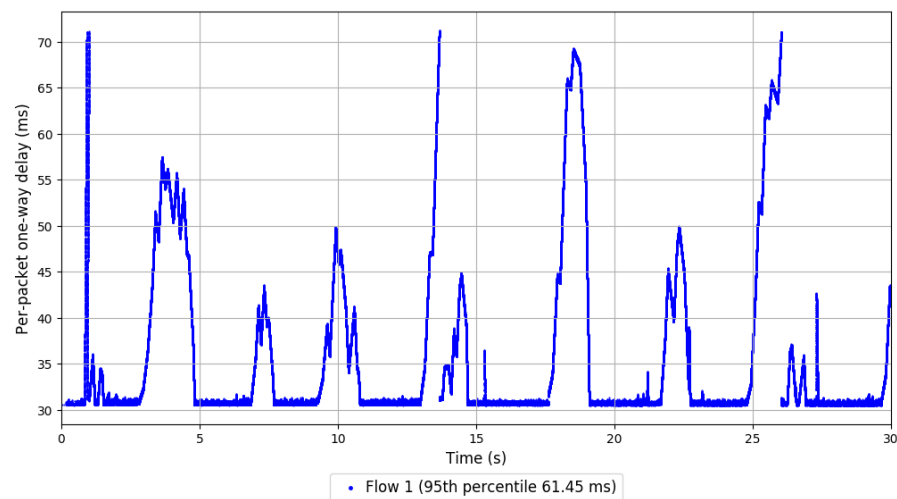
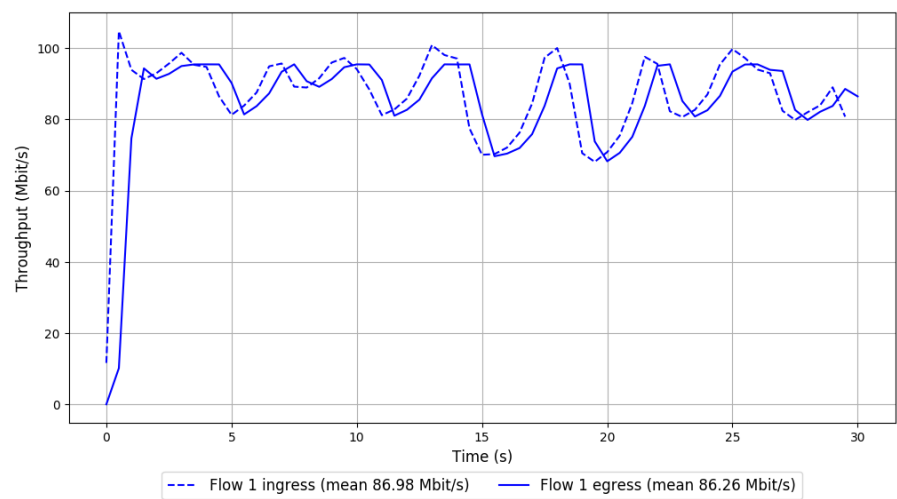
-- Flow 1:

Average throughput: 86.26 Mbit/s

95th percentile per-packet one-way delay: 61.447 ms

Loss rate: 0.79%

Run 8: Report of PCC-Expr — Data Link



Run 9: Statistics of PCC-Expr

Start at: 2018-07-03 13:31:42

End at: 2018-07-03 13:32:12

Local clock offset: 0.343 ms

Remote clock offset: 3.575 ms

Below is generated by plot.py at 2018-07-03 14:23:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.02 Mbit/s

95th percentile per-packet one-way delay: 61.656 ms

Loss rate: 0.51%

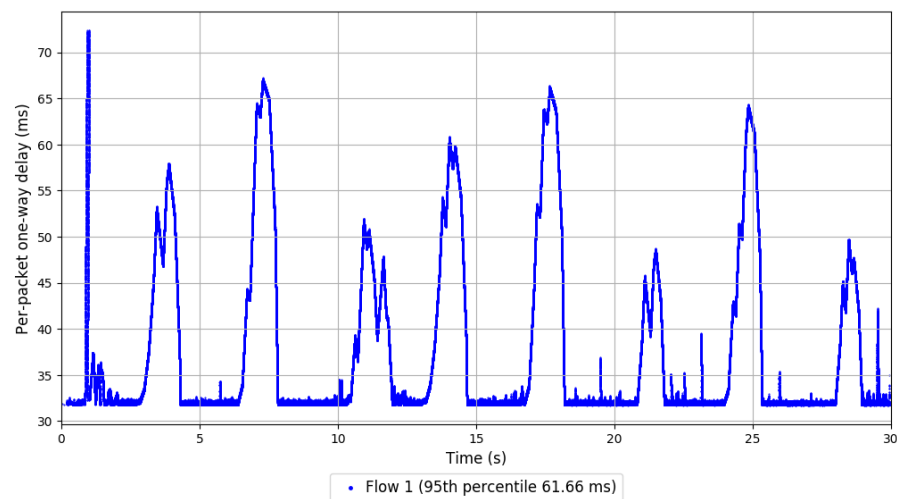
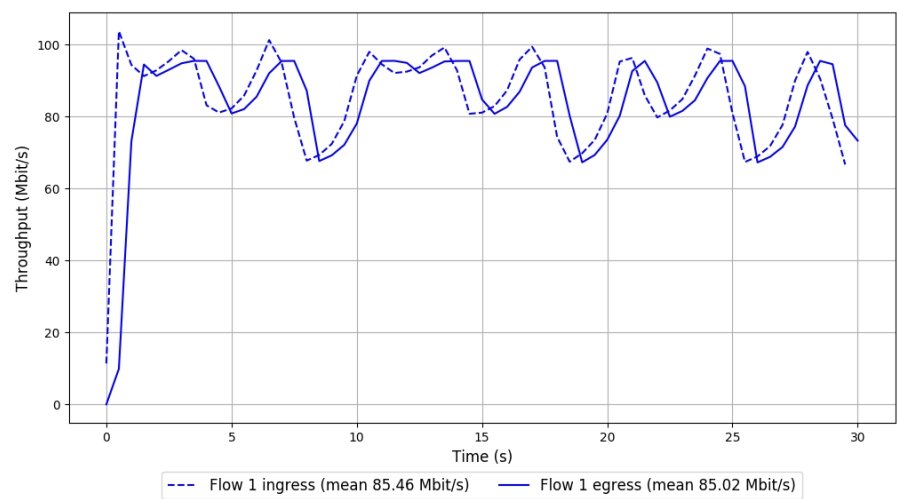
-- Flow 1:

Average throughput: 85.02 Mbit/s

95th percentile per-packet one-way delay: 61.656 ms

Loss rate: 0.51%

Run 9: Report of PCC-Expr — Data Link



Run 10: Statistics of PCC-Expr

Start at: 2018-07-03 13:54:03

End at: 2018-07-03 13:54:33

Local clock offset: 0.124 ms

Remote clock offset: 6.321 ms

Below is generated by plot.py at 2018-07-03 14:24:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.31 Mbit/s

95th percentile per-packet one-way delay: 59.545 ms

Loss rate: 1.03%

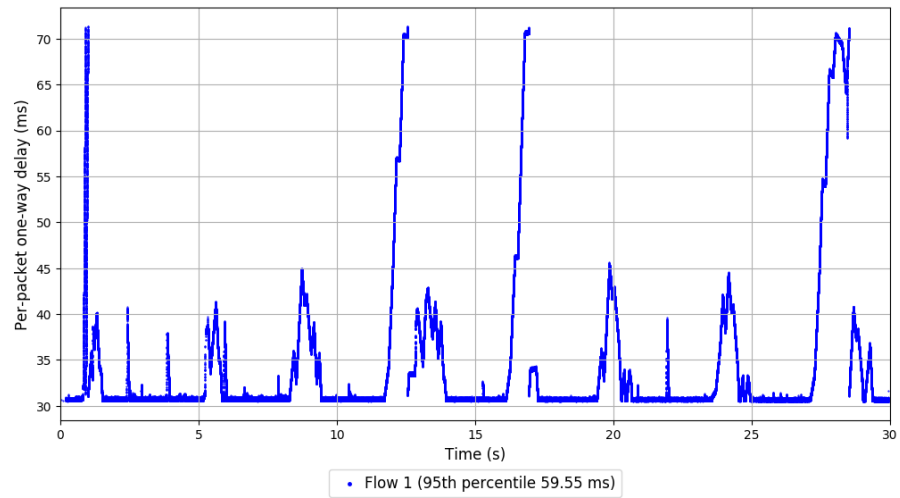
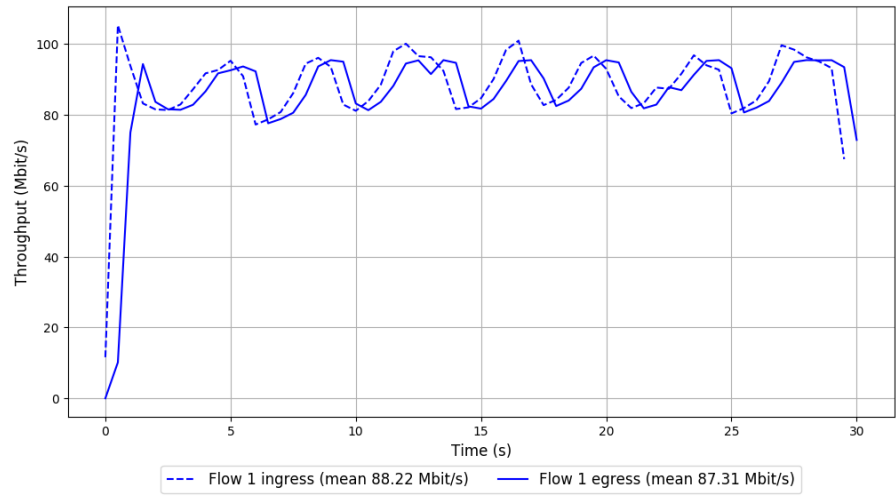
-- Flow 1:

Average throughput: 87.31 Mbit/s

95th percentile per-packet one-way delay: 59.545 ms

Loss rate: 1.03%

Run 10: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

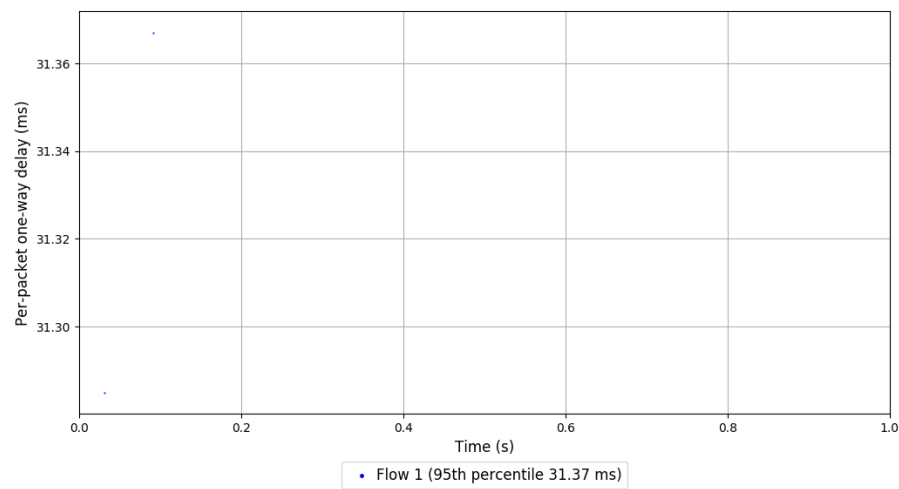
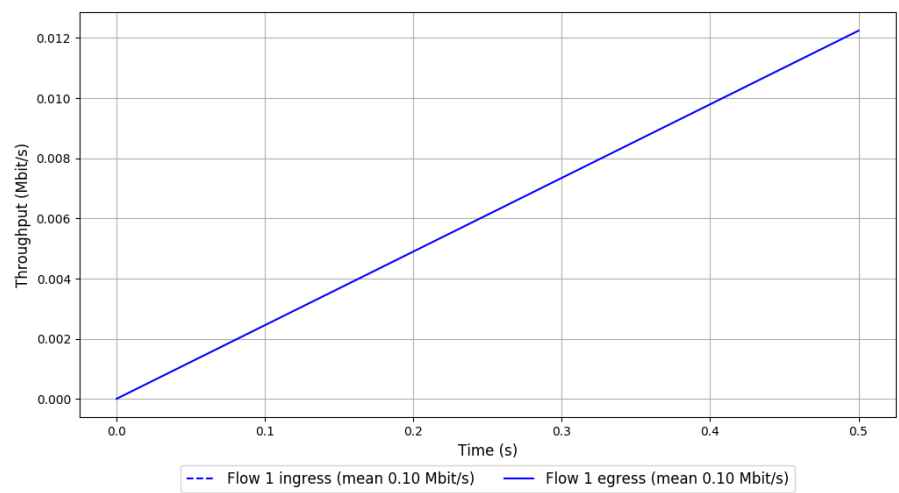
Start at: 2018-07-03 10:22:08

End at: 2018-07-03 10:22:38

Local clock offset: -25.594 ms

Remote clock offset: -1.104 ms

Run 1: Report of QUIC Cubic — Data Link

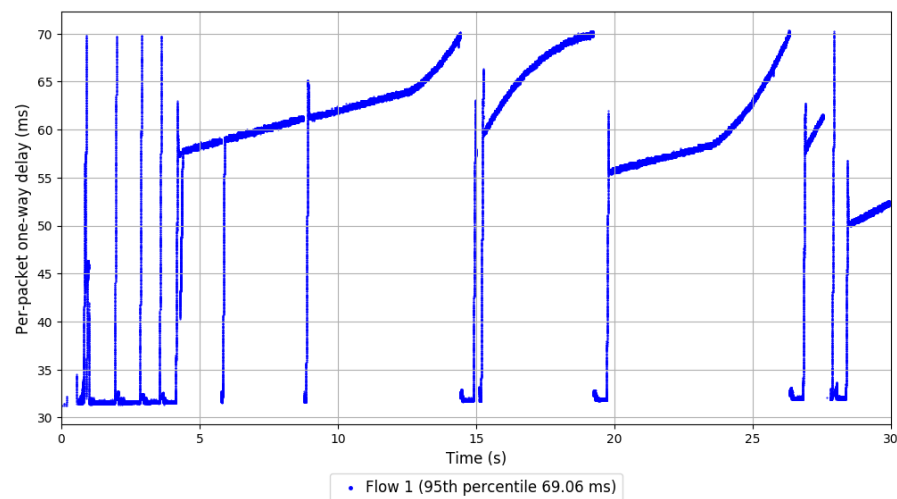
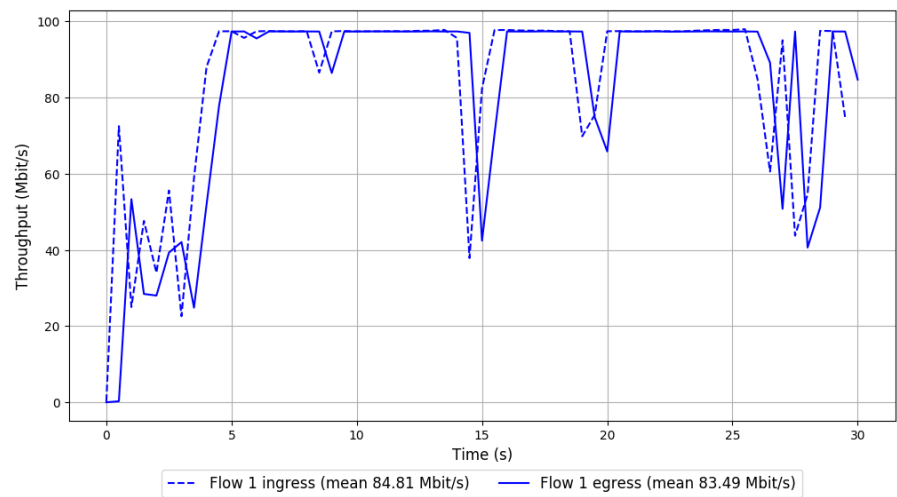


Run 2: Statistics of QUIC Cubic

Start at: 2018-07-03 10:44:20
End at: 2018-07-03 10:44:50
Local clock offset: -6.446 ms
Remote clock offset: -1.044 ms

Below is generated by plot.py at 2018-07-03 14:24:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 83.49 Mbit/s
95th percentile per-packet one-way delay: 69.061 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 83.49 Mbit/s
95th percentile per-packet one-way delay: 69.061 ms
Loss rate: 1.49%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-07-03 11:06:42

End at: 2018-07-03 11:07:12

Local clock offset: 3.338 ms

Remote clock offset: -1.008 ms

Below is generated by plot.py at 2018-07-03 14:24:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.99 Mbit/s

95th percentile per-packet one-way delay: 67.352 ms

Loss rate: 1.16%

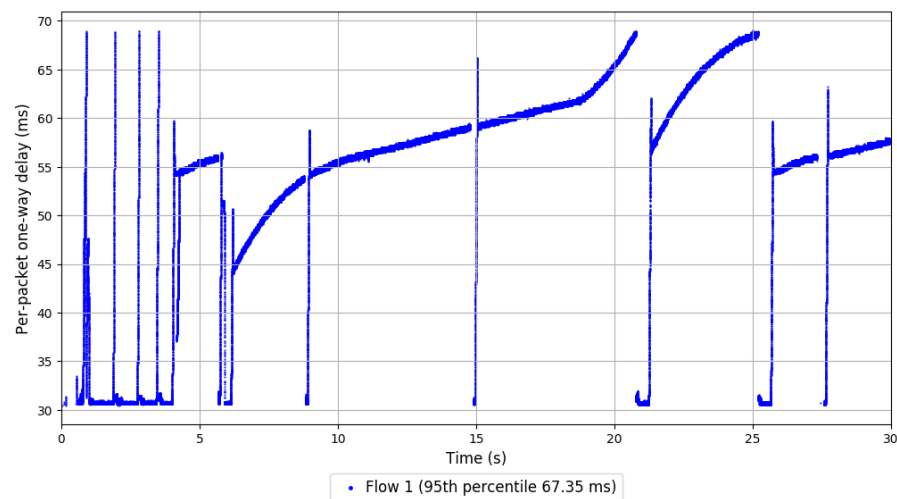
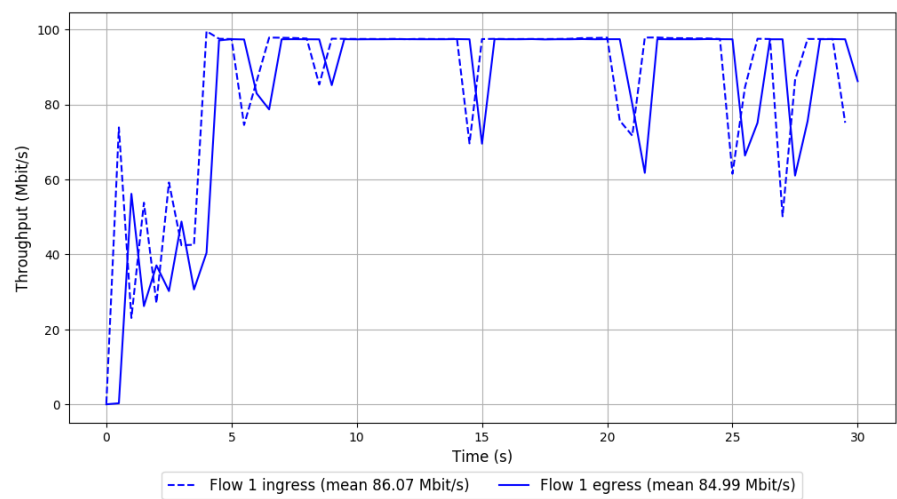
-- Flow 1:

Average throughput: 84.99 Mbit/s

95th percentile per-packet one-way delay: 67.352 ms

Loss rate: 1.16%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-07-03 11:28:54

End at: 2018-07-03 11:29:25

Local clock offset: 2.982 ms

Remote clock offset: -2.013 ms

Below is generated by plot.py at 2018-07-03 14:24:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.60 Mbit/s

95th percentile per-packet one-way delay: 66.034 ms

Loss rate: 1.30%

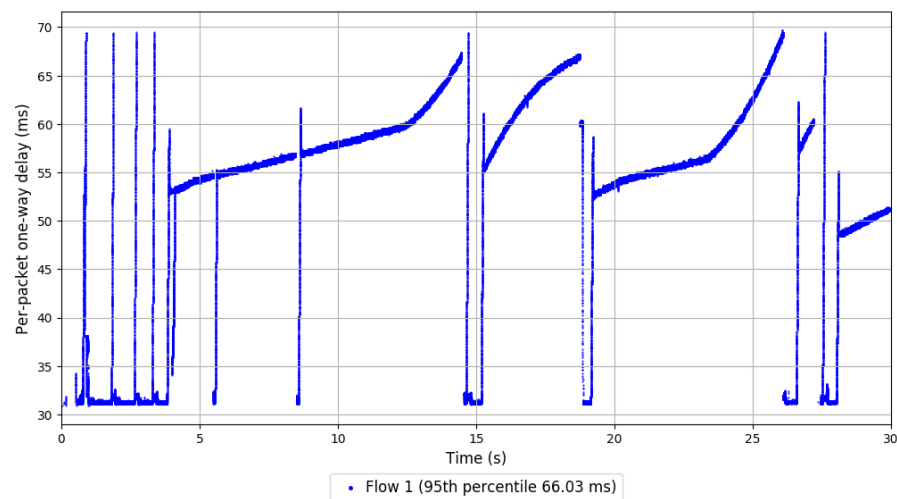
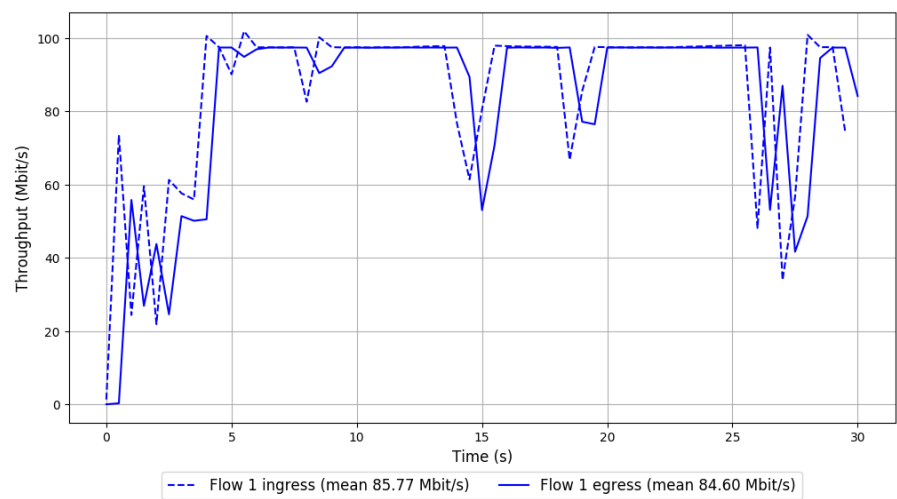
-- Flow 1:

Average throughput: 84.60 Mbit/s

95th percentile per-packet one-way delay: 66.034 ms

Loss rate: 1.30%

Run 4: Report of QUIC Cubic — Data Link

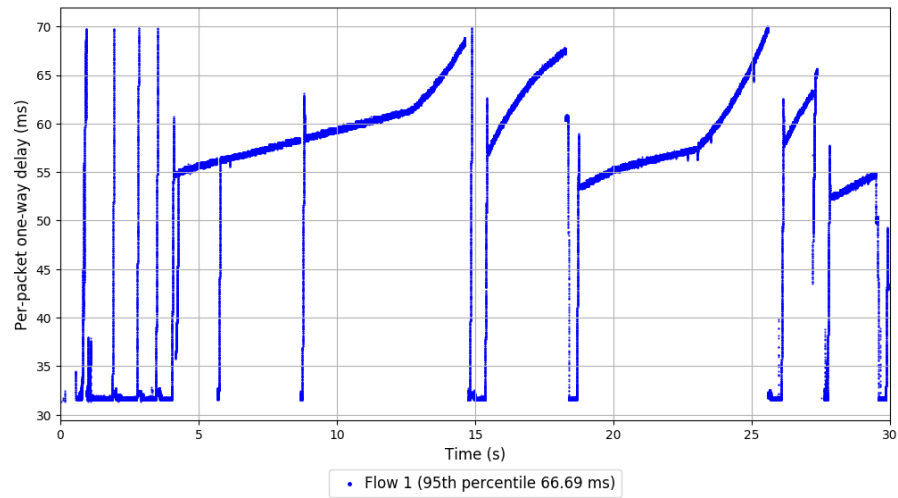
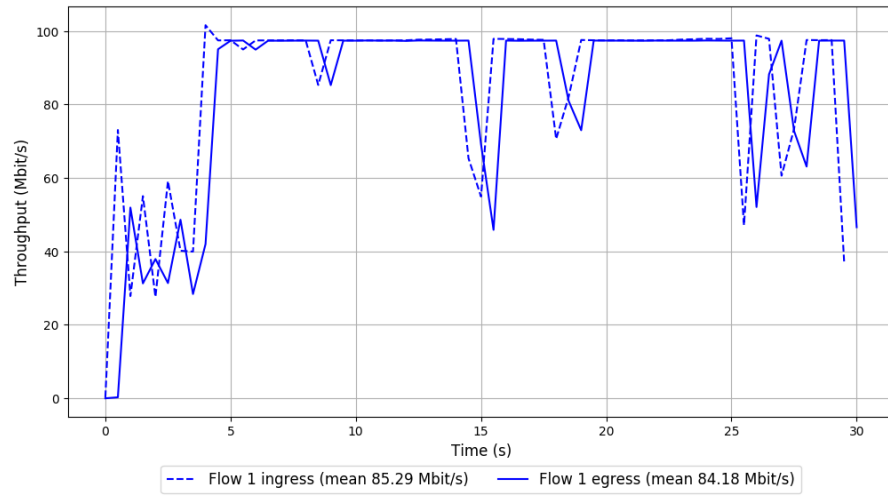


Run 5: Statistics of QUIC Cubic

Start at: 2018-07-03 11:51:10
End at: 2018-07-03 11:51:40
Local clock offset: 1.372 ms
Remote clock offset: -1.359 ms

Below is generated by plot.py at 2018-07-03 14:24:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 84.18 Mbit/s
95th percentile per-packet one-way delay: 66.693 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 84.18 Mbit/s
95th percentile per-packet one-way delay: 66.693 ms
Loss rate: 1.26%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-07-03 12:13:22

End at: 2018-07-03 12:13:52

Local clock offset: 0.83 ms

Remote clock offset: -1.607 ms

Below is generated by plot.py at 2018-07-03 14:24:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.12 Mbit/s

95th percentile per-packet one-way delay: 67.727 ms

Loss rate: 1.06%

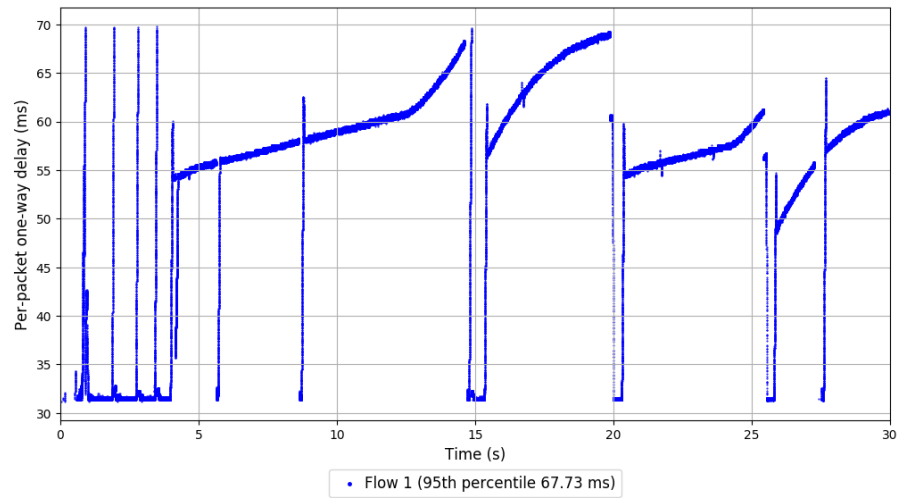
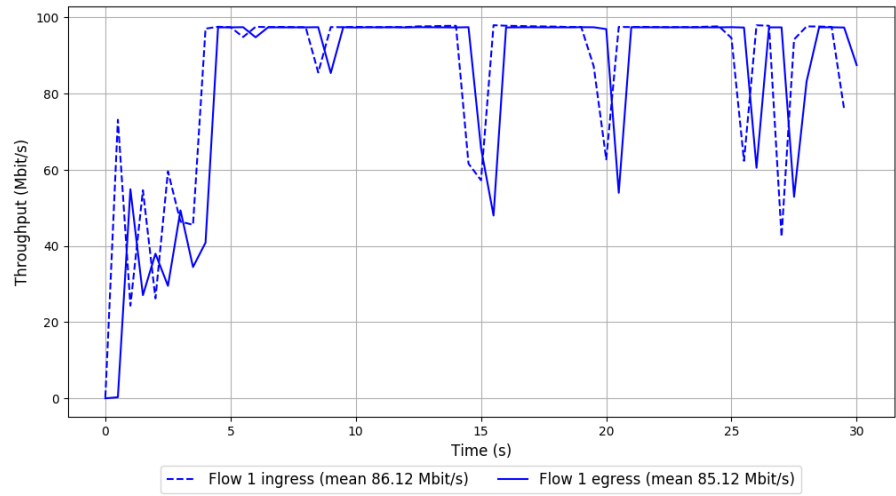
-- Flow 1:

Average throughput: 85.12 Mbit/s

95th percentile per-packet one-way delay: 67.727 ms

Loss rate: 1.06%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-07-03 12:35:35

End at: 2018-07-03 12:36:05

Local clock offset: 0.845 ms

Remote clock offset: 0.098 ms

Below is generated by plot.py at 2018-07-03 14:24:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.62 Mbit/s

95th percentile per-packet one-way delay: 62.827 ms

Loss rate: 0.95%

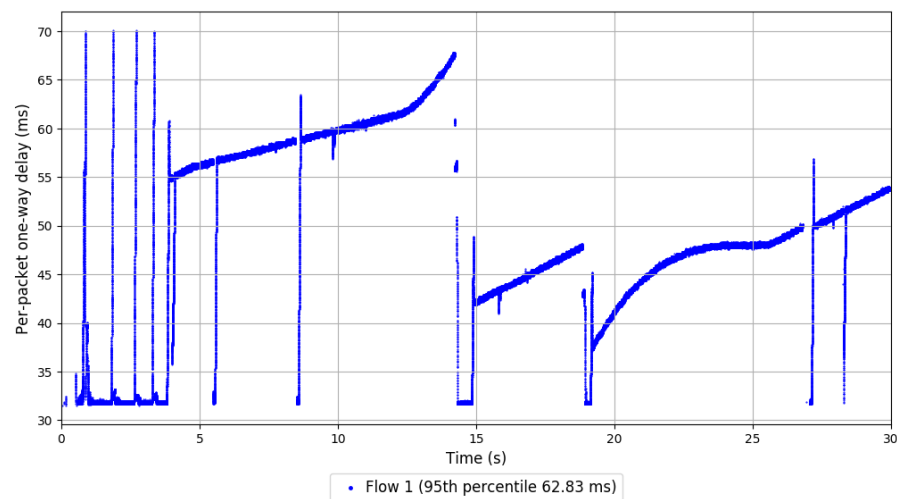
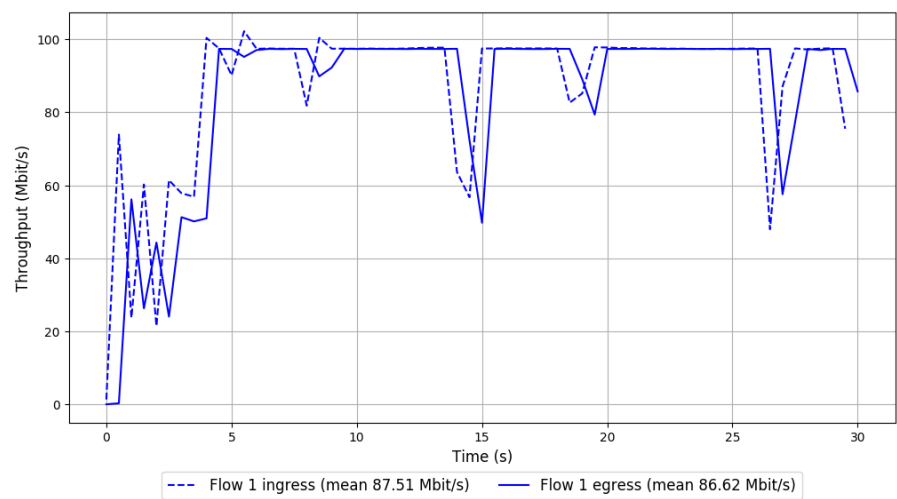
-- Flow 1:

Average throughput: 86.62 Mbit/s

95th percentile per-packet one-way delay: 62.827 ms

Loss rate: 0.95%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-07-03 12:57:47

End at: 2018-07-03 12:58:17

Local clock offset: 0.668 ms

Remote clock offset: -0.082 ms

Below is generated by plot.py at 2018-07-03 14:24:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.78 Mbit/s

95th percentile per-packet one-way delay: 58.957 ms

Loss rate: 1.07%

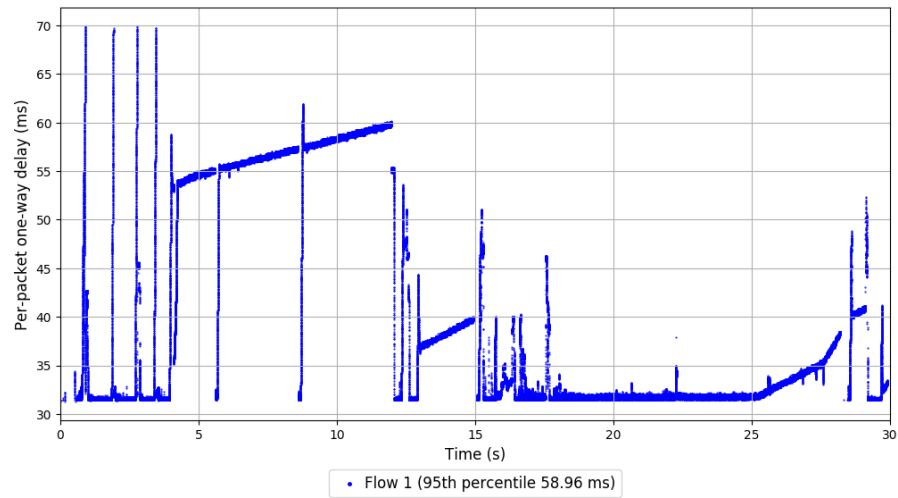
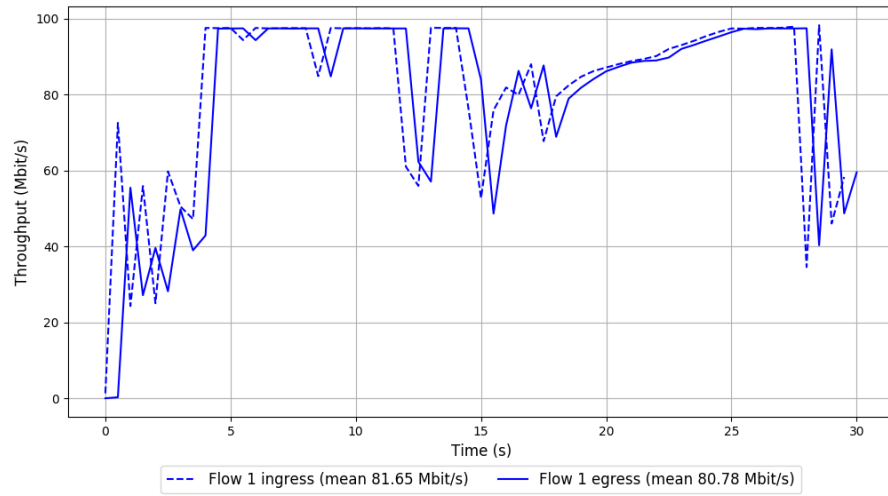
-- Flow 1:

Average throughput: 80.78 Mbit/s

95th percentile per-packet one-way delay: 58.957 ms

Loss rate: 1.07%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-07-03 13:19:57

End at: 2018-07-03 13:20:27

Local clock offset: 0.382 ms

Remote clock offset: 1.538 ms

Below is generated by plot.py at 2018-07-03 14:24:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.19 Mbit/s

95th percentile per-packet one-way delay: 67.219 ms

Loss rate: 1.19%

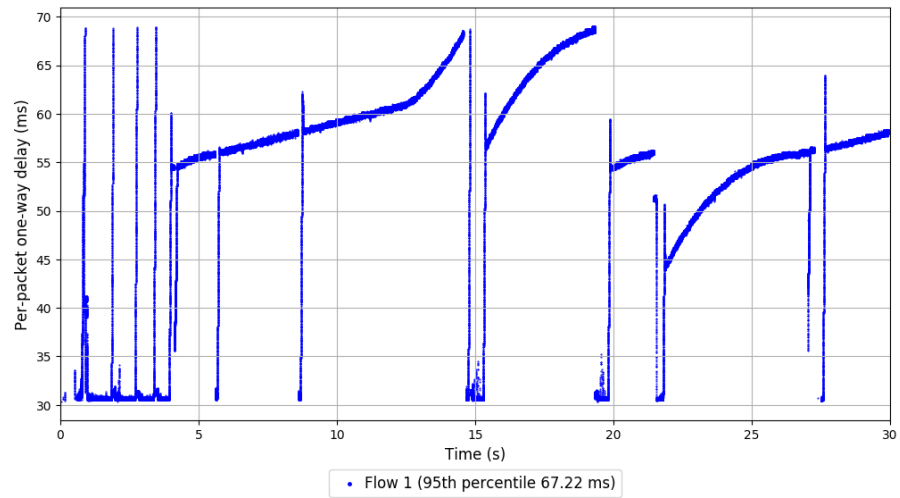
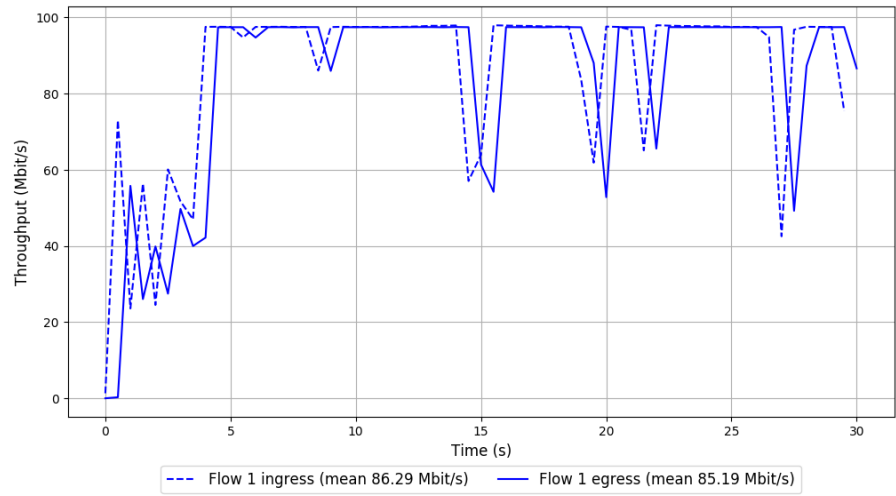
-- Flow 1:

Average throughput: 85.19 Mbit/s

95th percentile per-packet one-way delay: 67.219 ms

Loss rate: 1.19%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-07-03 13:42:15

End at: 2018-07-03 13:42:45

Local clock offset: 0.268 ms

Remote clock offset: 4.582 ms

Below is generated by plot.py at 2018-07-03 14:24:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.82 Mbit/s

95th percentile per-packet one-way delay: 62.822 ms

Loss rate: 1.04%

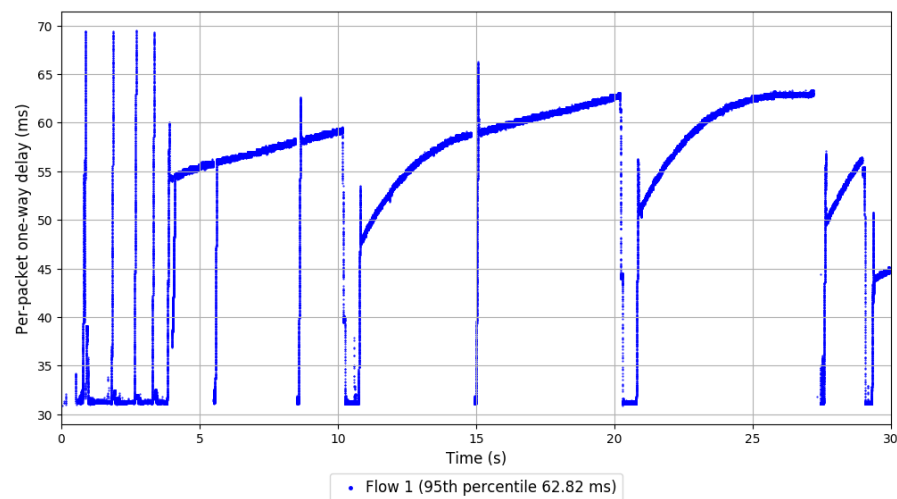
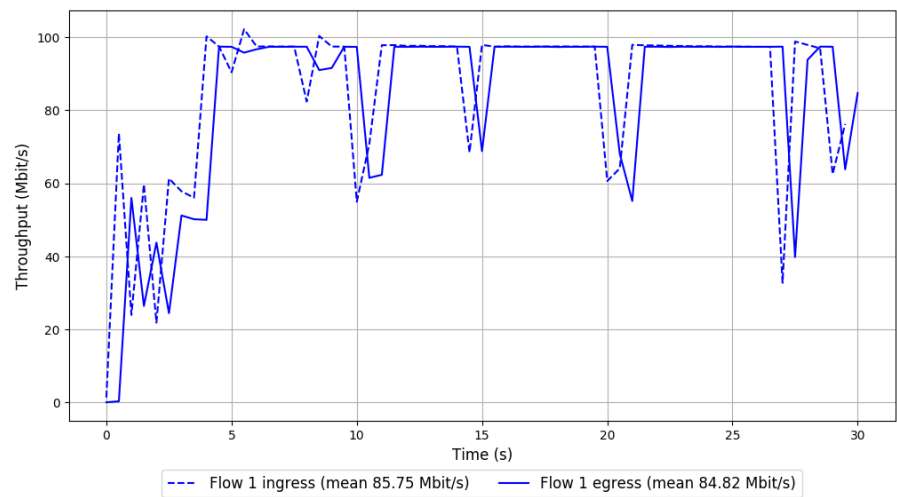
-- Flow 1:

Average throughput: 84.82 Mbit/s

95th percentile per-packet one-way delay: 62.822 ms

Loss rate: 1.04%

Run 10: Report of QUIC Cubic — Data Link

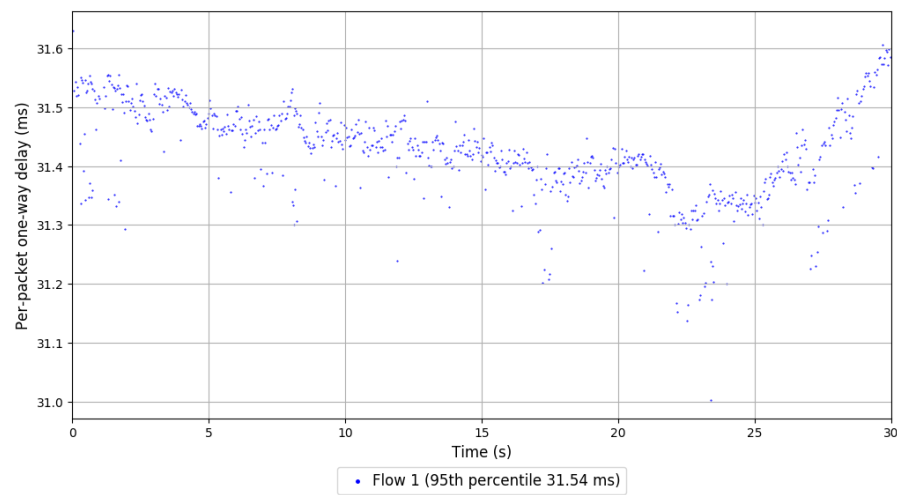
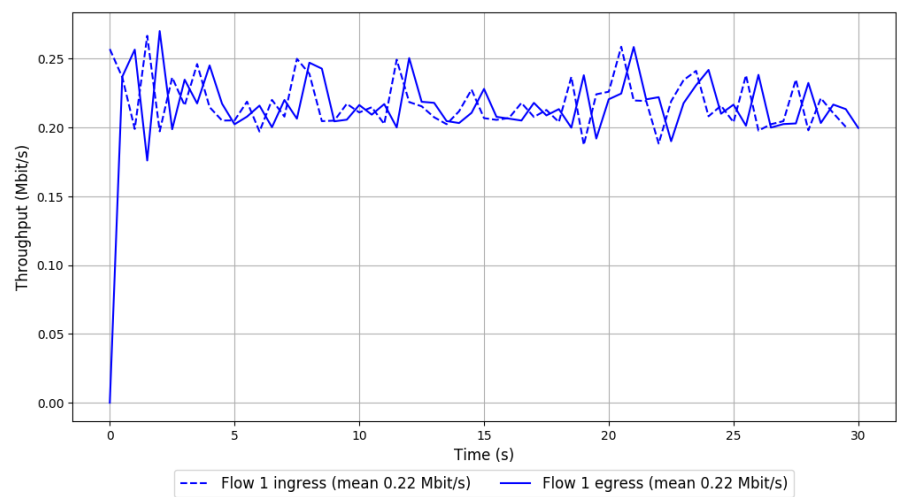


```
Run 1: Statistics of SCReAM

Start at: 2018-07-03 10:32:33
End at: 2018-07-03 10:33:03
Local clock offset: -29.354 ms
Remote clock offset: -1.014 ms

# Below is generated by plot.py at 2018-07-03 14:24:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 31.537 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 31.537 ms
Loss rate: 0.13%
```


Run 1: Report of SReAM — Data Link

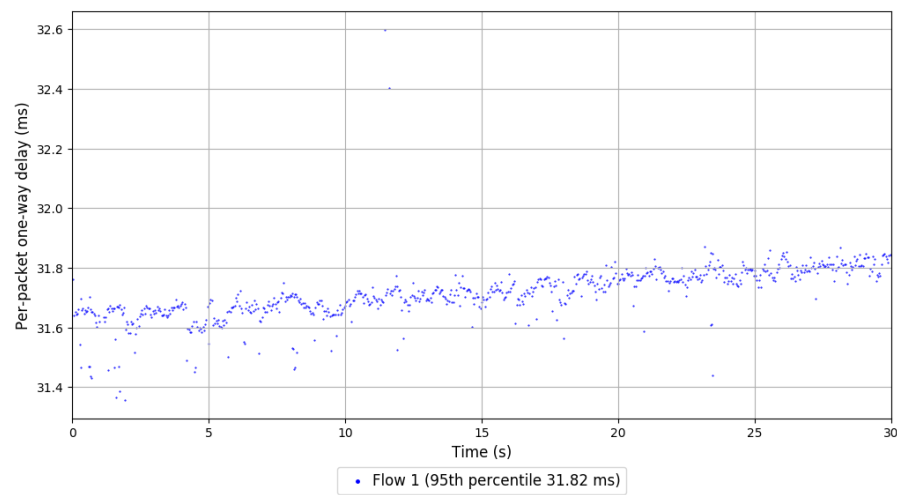
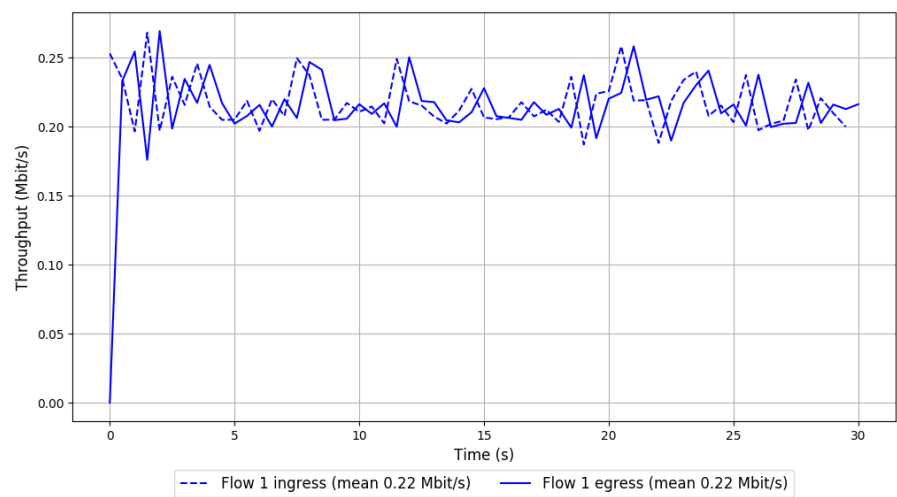


Run 2: Statistics of SCReAM

Start at: 2018-07-03 10:54:57
End at: 2018-07-03 10:55:27
Local clock offset: 1.37 ms
Remote clock offset: -1.065 ms

Below is generated by plot.py at 2018-07-03 14:24:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 31.824 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 31.824 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

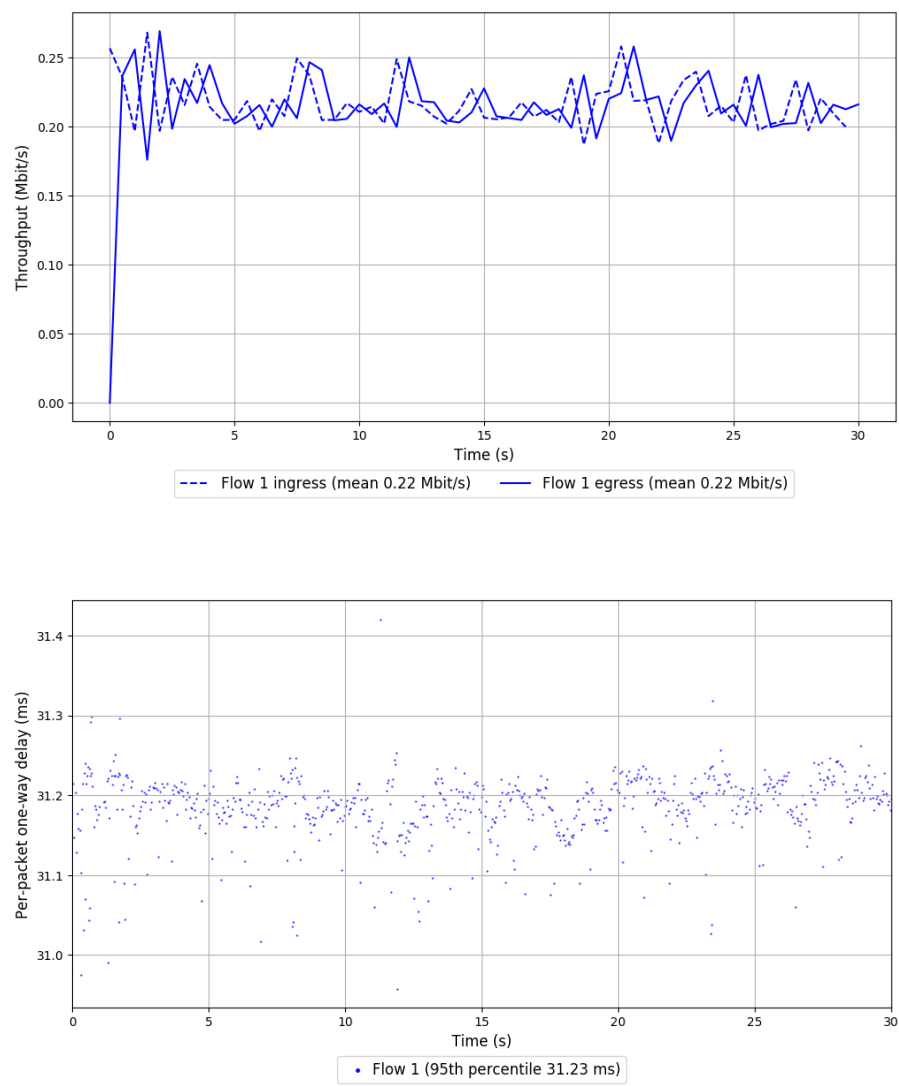


Run 3: Statistics of SCReAM

Start at: 2018-07-03 11:17:10
End at: 2018-07-03 11:17:40
Local clock offset: 2.378 ms
Remote clock offset: -1.869 ms

Below is generated by plot.py at 2018-07-03 14:24:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 31.232 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 31.232 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

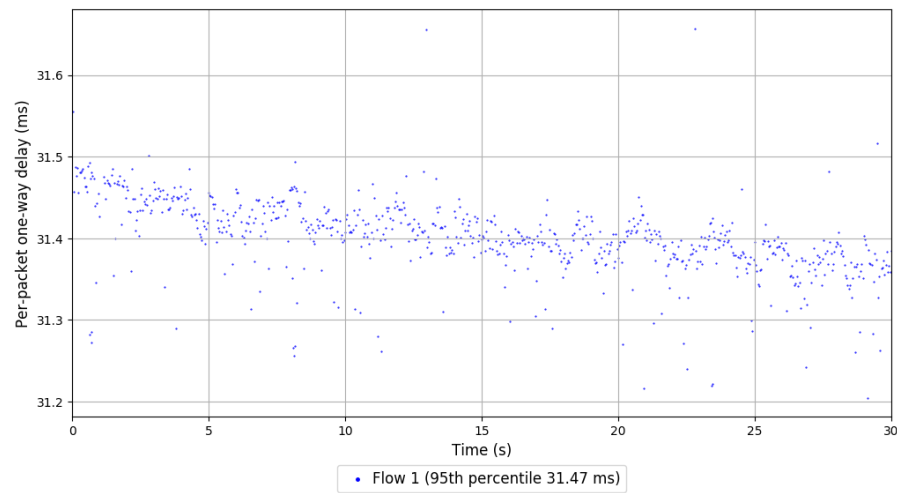
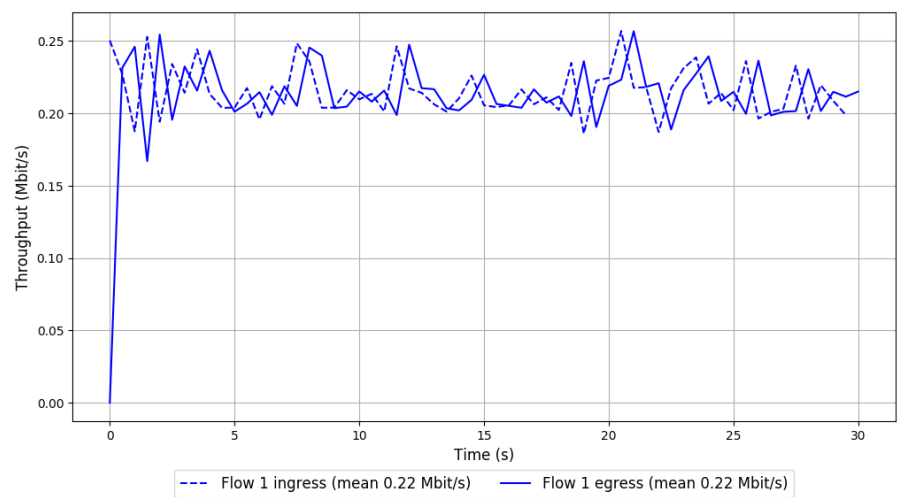


Run 4: Statistics of SReAM

Start at: 2018-07-03 11:39:24
End at: 2018-07-03 11:39:55
Local clock offset: 1.909 ms
Remote clock offset: -1.787 ms

Below is generated by plot.py at 2018-07-03 14:24:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 31.467 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 31.467 ms
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

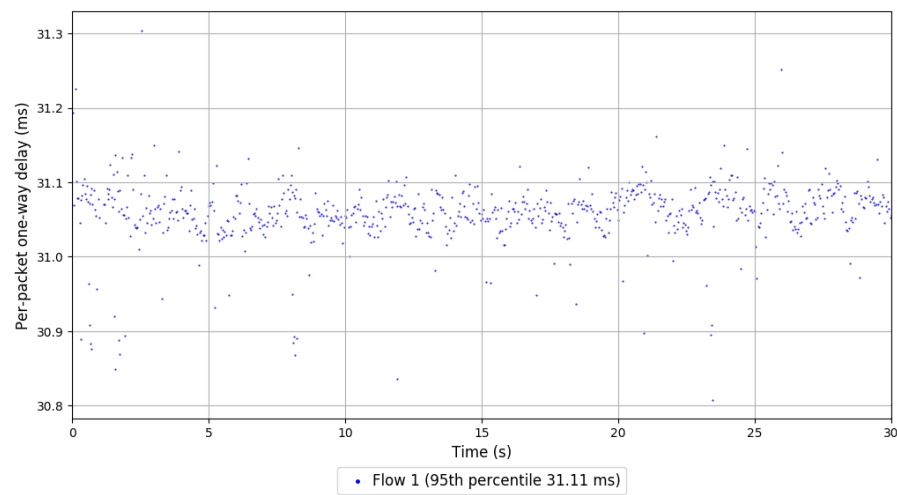
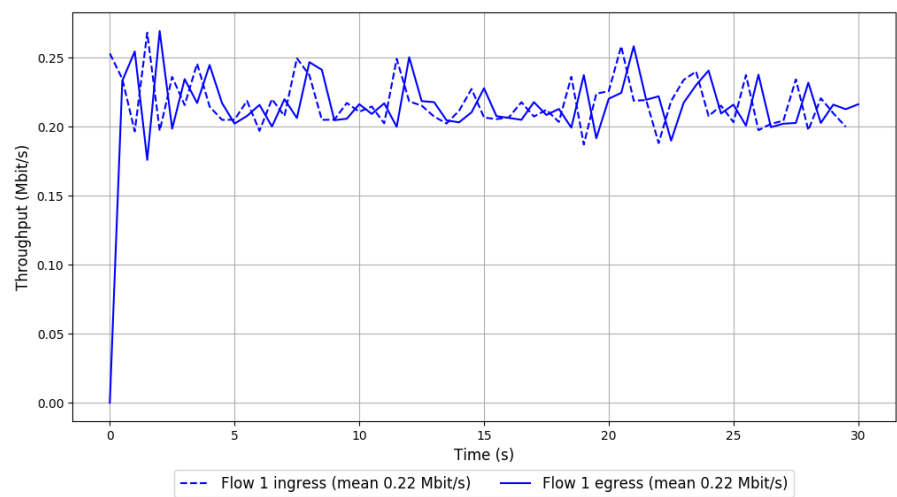


Run 5: Statistics of SCReAM

Start at: 2018-07-03 12:01:39
End at: 2018-07-03 12:02:09
Local clock offset: 1.59 ms
Remote clock offset: -1.464 ms

Below is generated by plot.py at 2018-07-03 14:24:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 31.107 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 31.107 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

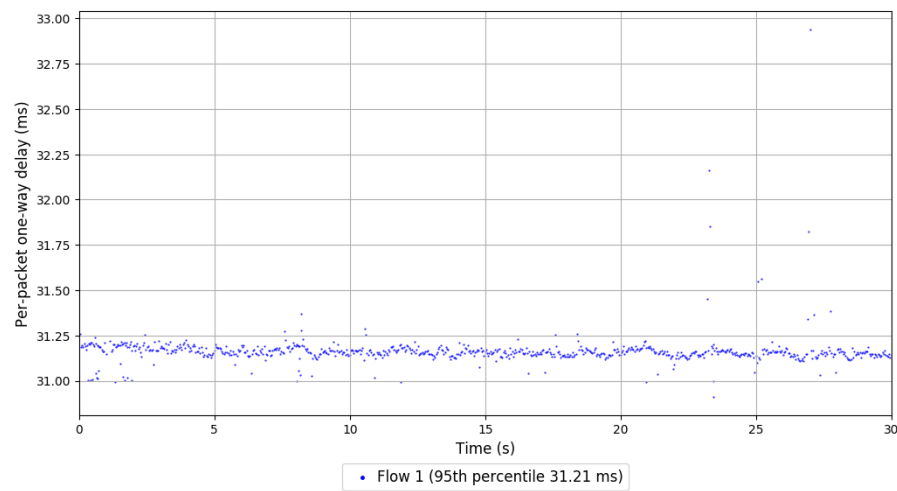
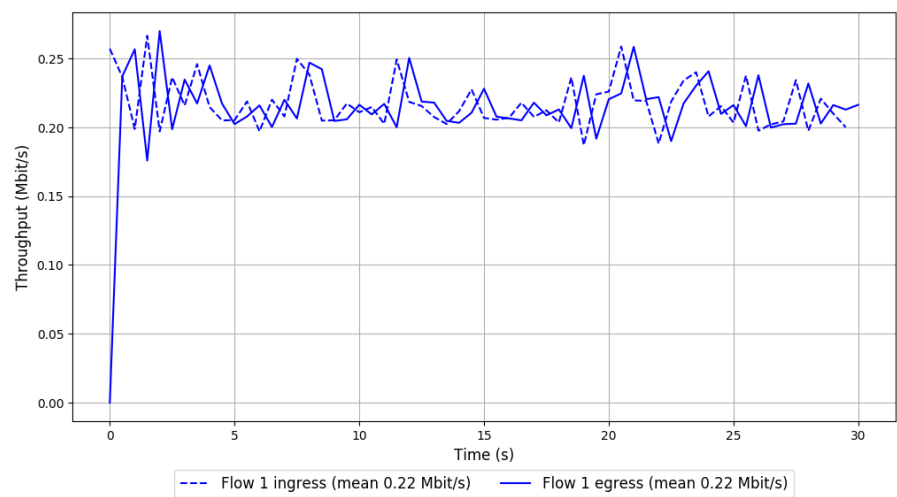


Run 6: Statistics of SCReAM

Start at: 2018-07-03 12:23:49
End at: 2018-07-03 12:24:19
Local clock offset: 0.859 ms
Remote clock offset: -1.261 ms

Below is generated by plot.py at 2018-07-03 14:24:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 31.210 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 31.210 ms
Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-07-03 12:46:02

End at: 2018-07-03 12:46:32

Local clock offset: 0.595 ms

Remote clock offset: 0.353 ms

Below is generated by plot.py at 2018-07-03 14:24:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 31.492 ms

Loss rate: 0.16%

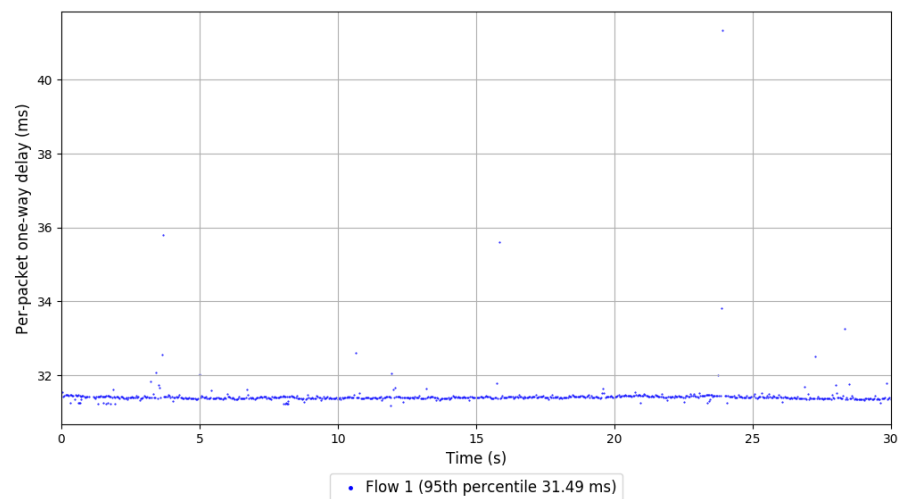
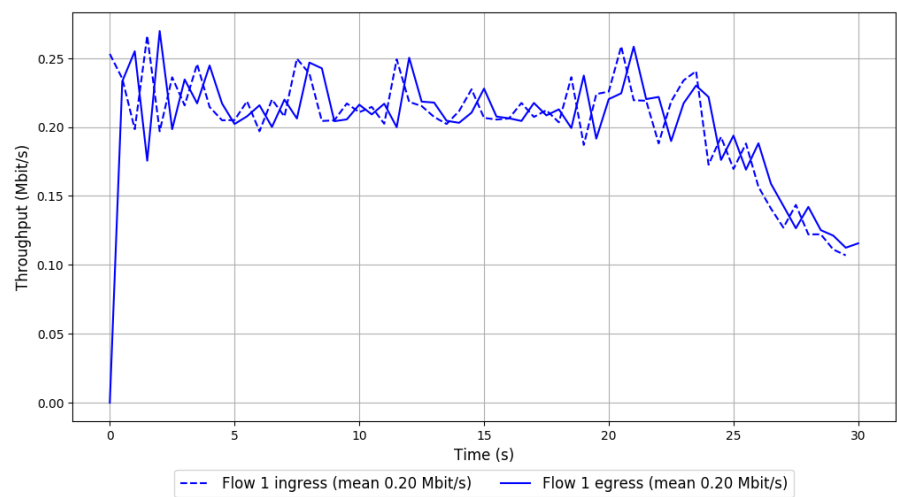
-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 31.492 ms

Loss rate: 0.16%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-07-03 13:08:14

End at: 2018-07-03 13:08:44

Local clock offset: 0.522 ms

Remote clock offset: 0.716 ms

Below is generated by plot.py at 2018-07-03 14:24:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 31.176 ms

Loss rate: 0.00%

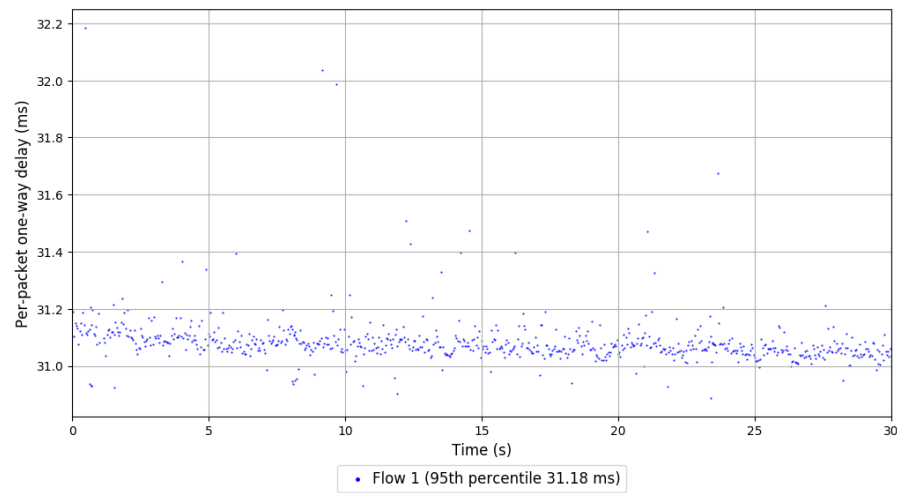
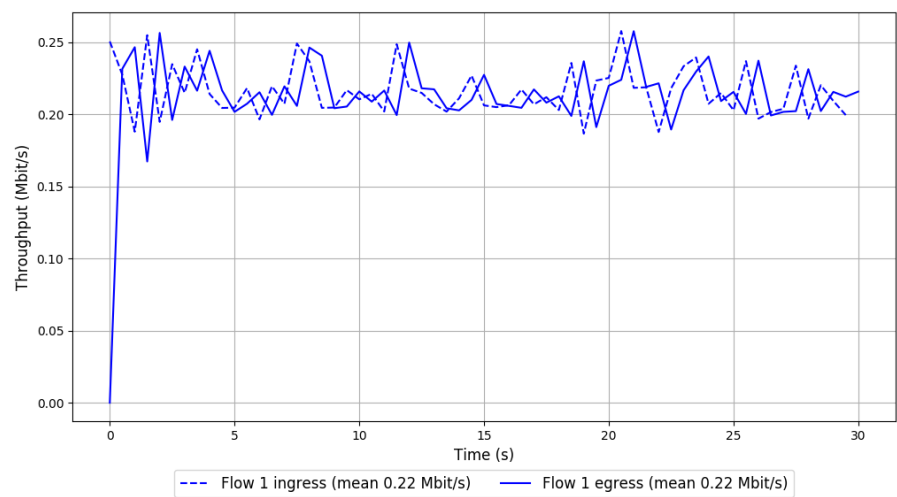
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 31.176 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-07-03 13:30:27

End at: 2018-07-03 13:30:57

Local clock offset: 0.347 ms

Remote clock offset: 2.979 ms

Below is generated by plot.py at 2018-07-03 14:24:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.543 ms

Loss rate: 0.16%

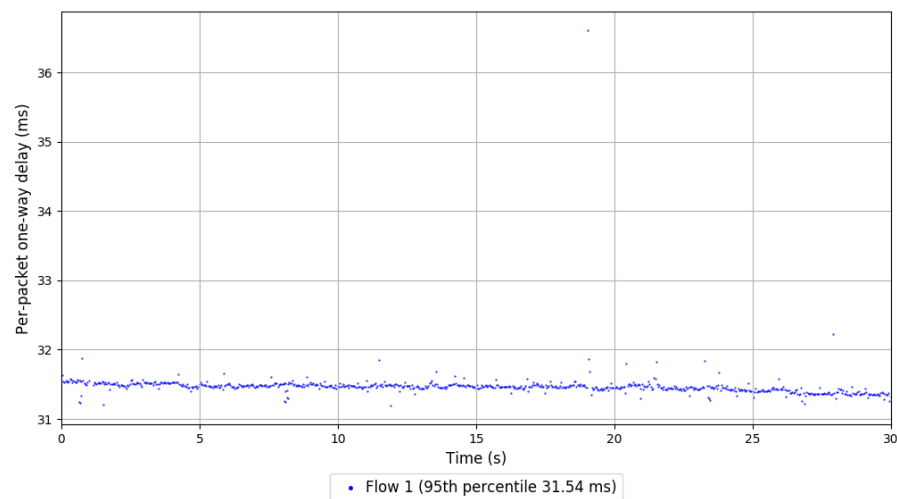
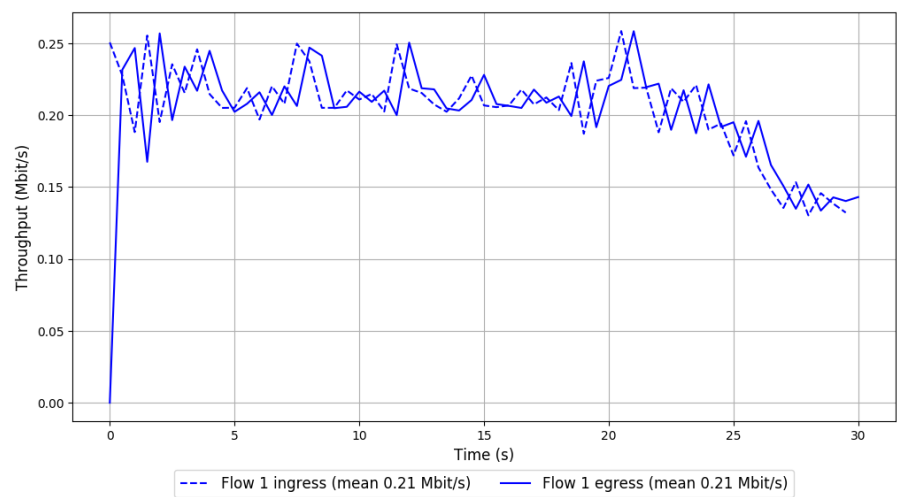
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 31.543 ms

Loss rate: 0.16%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SCReAM

Start at: 2018-07-03 13:52:48

End at: 2018-07-03 13:53:18

Local clock offset: 0.186 ms

Remote clock offset: 6.069 ms

Below is generated by plot.py at 2018-07-03 14:24:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 30.623 ms

Loss rate: 0.00%

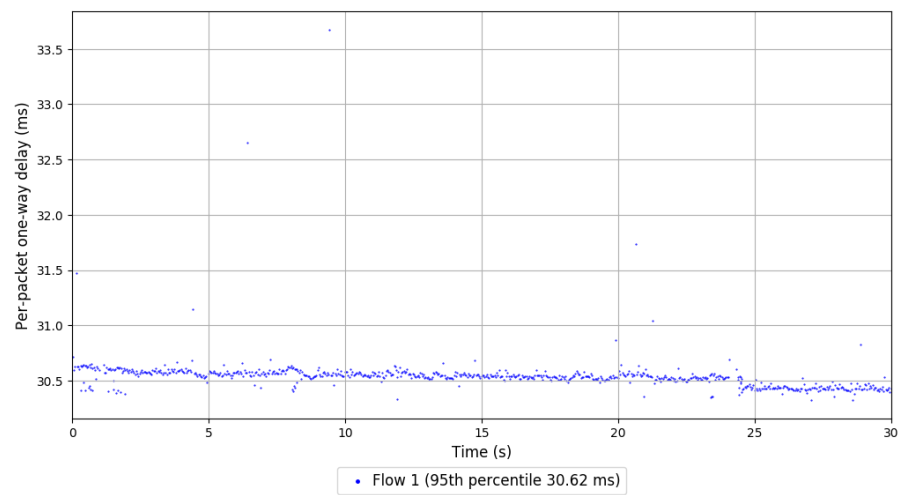
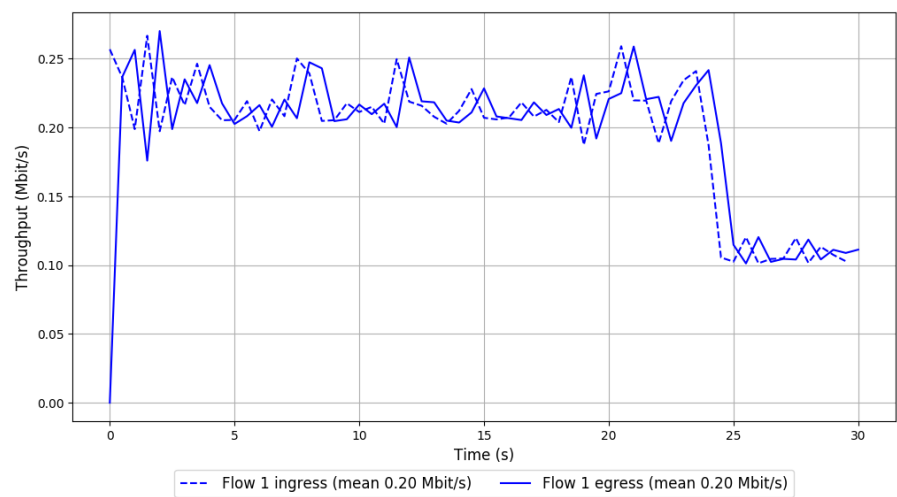
-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 30.623 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

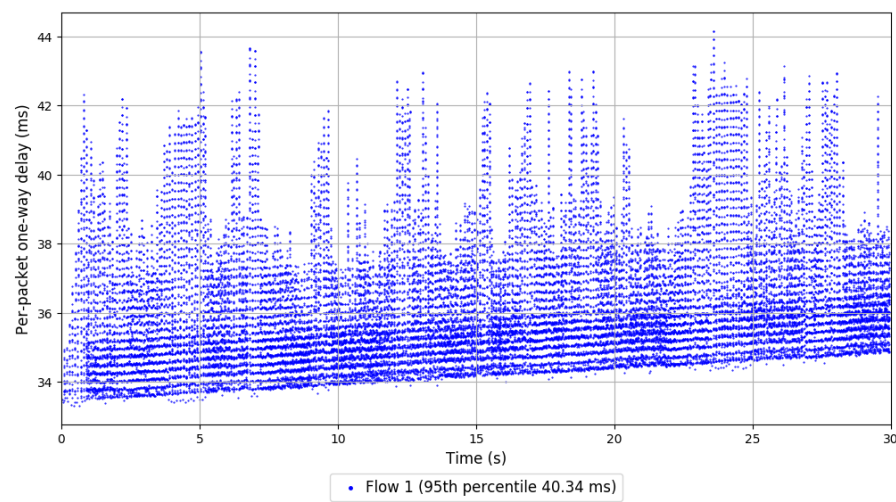
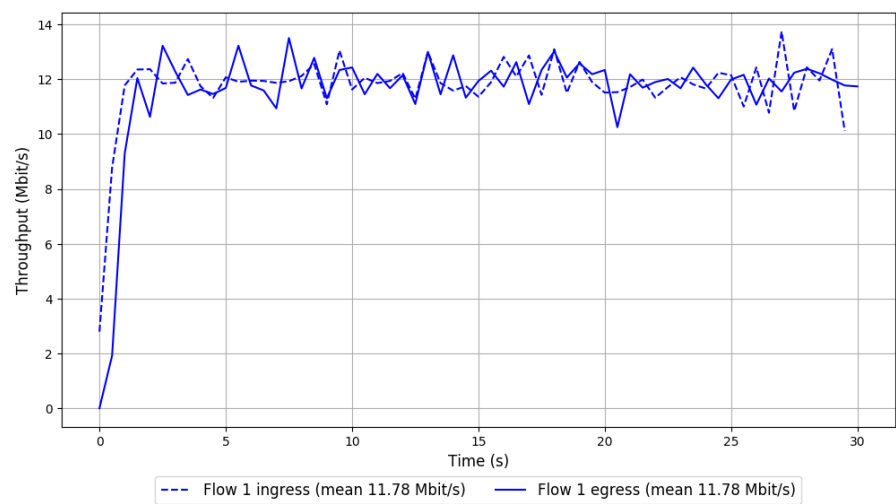


Run 1: Statistics of Sprout

Start at: 2018-07-03 10:35:09
End at: 2018-07-03 10:35:39
Local clock offset: -24.544 ms
Remote clock offset: -1.127 ms

Below is generated by plot.py at 2018-07-03 14:24:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.78 Mbit/s
95th percentile per-packet one-way delay: 40.336 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.78 Mbit/s
95th percentile per-packet one-way delay: 40.336 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

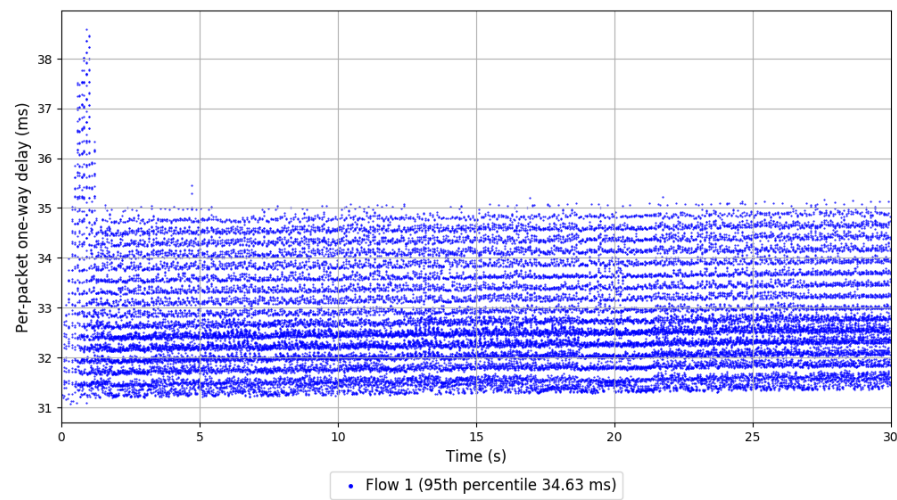
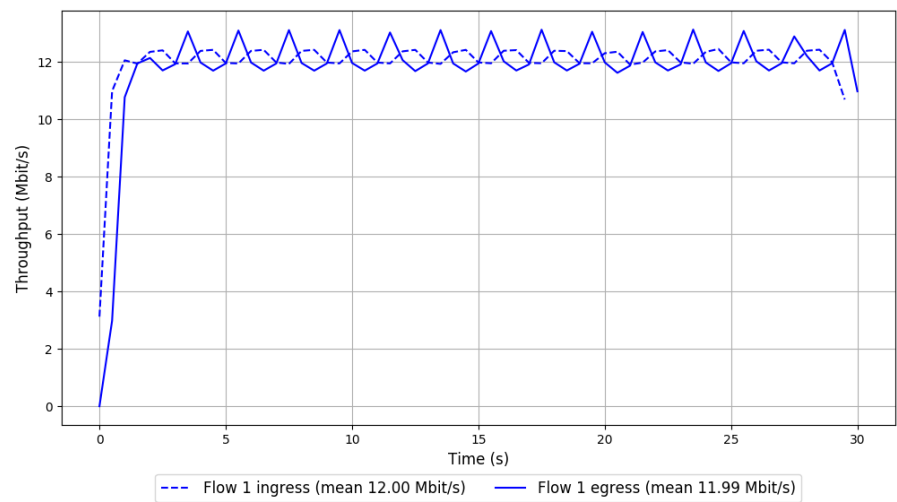


Run 2: Statistics of Sprout

Start at: 2018-07-03 10:57:33
End at: 2018-07-03 10:58:03
Local clock offset: 2.442 ms
Remote clock offset: -0.604 ms

Below is generated by plot.py at 2018-07-03 14:24:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 34.627 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 34.627 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

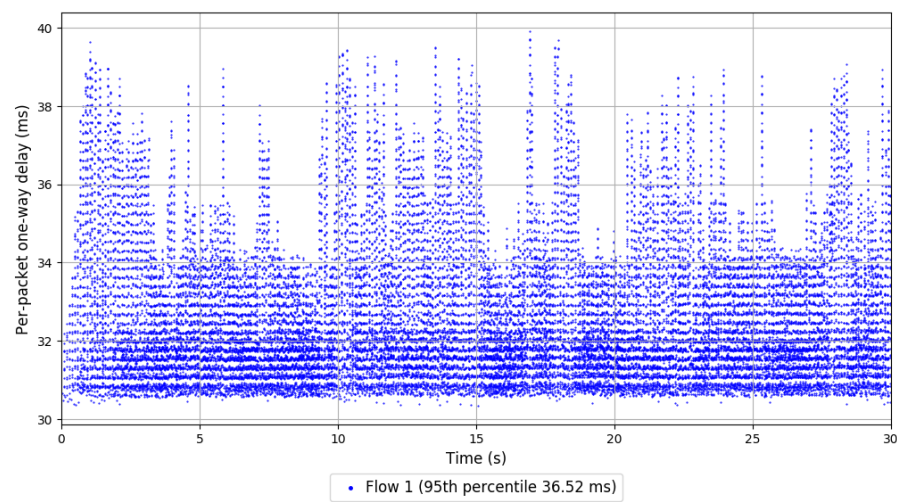
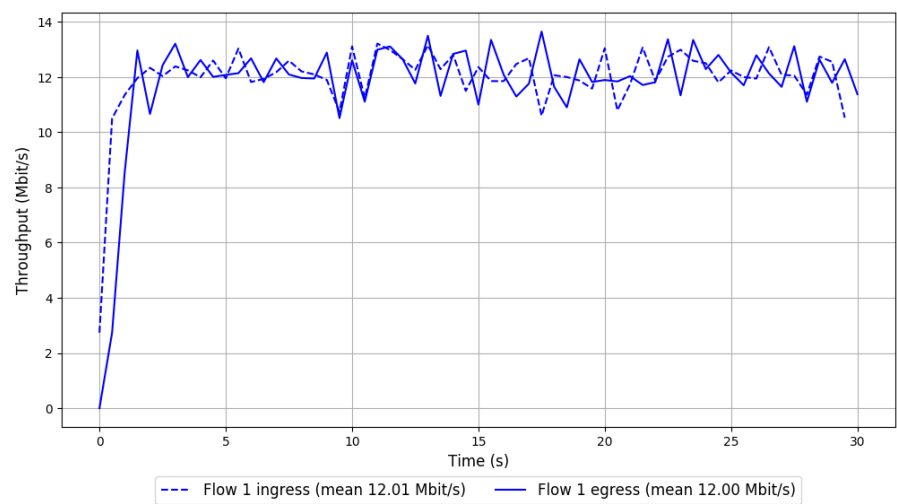


Run 3: Statistics of Sprout

Start at: 2018-07-03 11:19:46
End at: 2018-07-03 11:20:16
Local clock offset: 2.432 ms
Remote clock offset: -1.753 ms

Below is generated by plot.py at 2018-07-03 14:24:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 36.520 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 36.520 ms
Loss rate: 0.05%

Run 3: Report of Sprout — Data Link

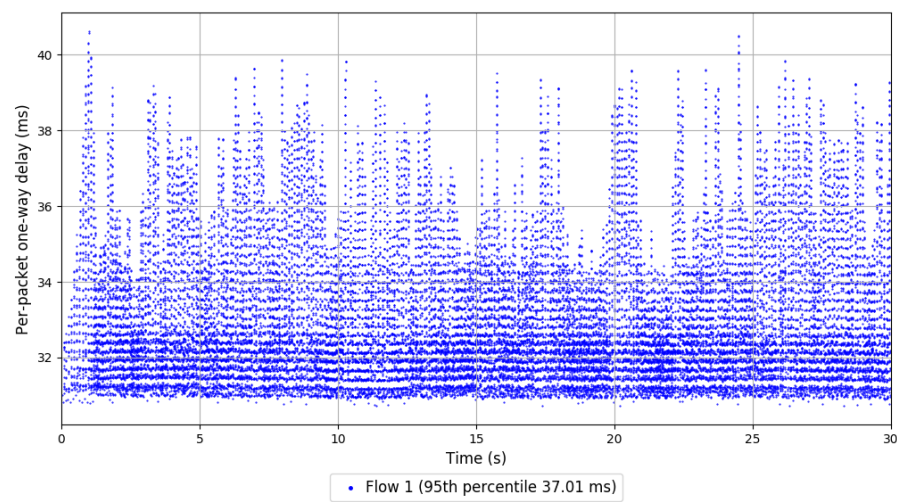
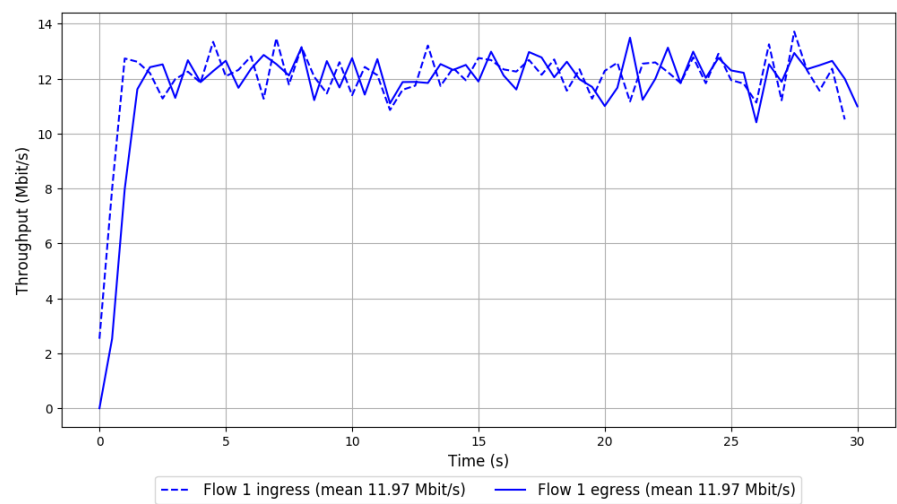


Run 4: Statistics of Sprout

Start at: 2018-07-03 11:42:01
End at: 2018-07-03 11:42:31
Local clock offset: 1.692 ms
Remote clock offset: -1.354 ms

Below is generated by plot.py at 2018-07-03 14:24:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.97 Mbit/s
95th percentile per-packet one-way delay: 37.008 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.97 Mbit/s
95th percentile per-packet one-way delay: 37.008 ms
Loss rate: 0.00%

Run 4: Report of Sprout — Data Link

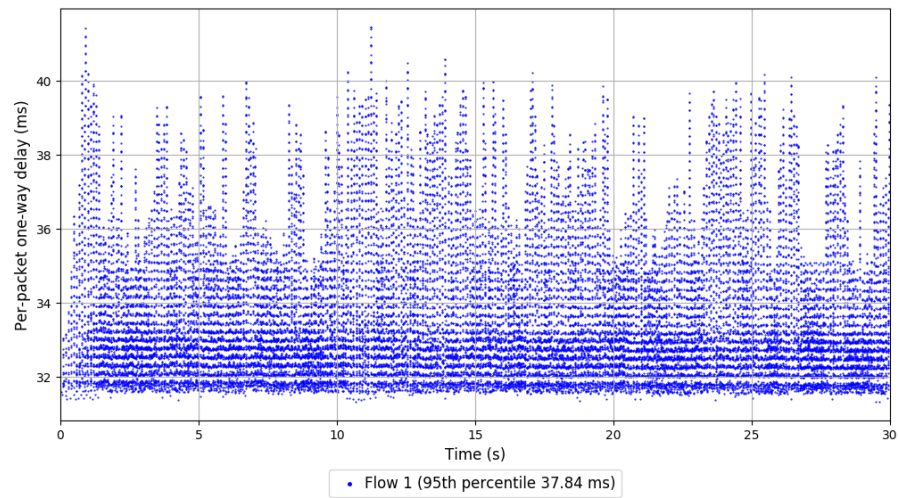
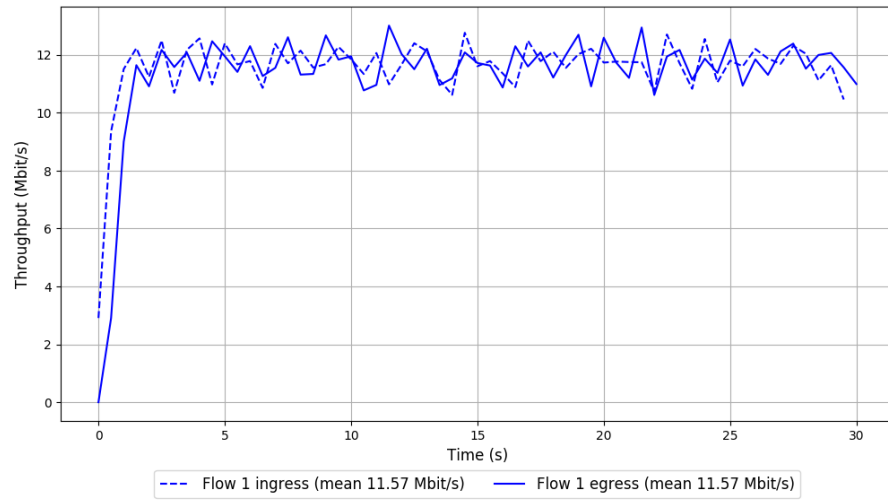


Run 5: Statistics of Sprout

Start at: 2018-07-03 12:04:15
End at: 2018-07-03 12:04:45
Local clock offset: 1.567 ms
Remote clock offset: -1.408 ms

Below is generated by plot.py at 2018-07-03 14:24:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.57 Mbit/s
95th percentile per-packet one-way delay: 37.841 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.57 Mbit/s
95th percentile per-packet one-way delay: 37.841 ms
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link

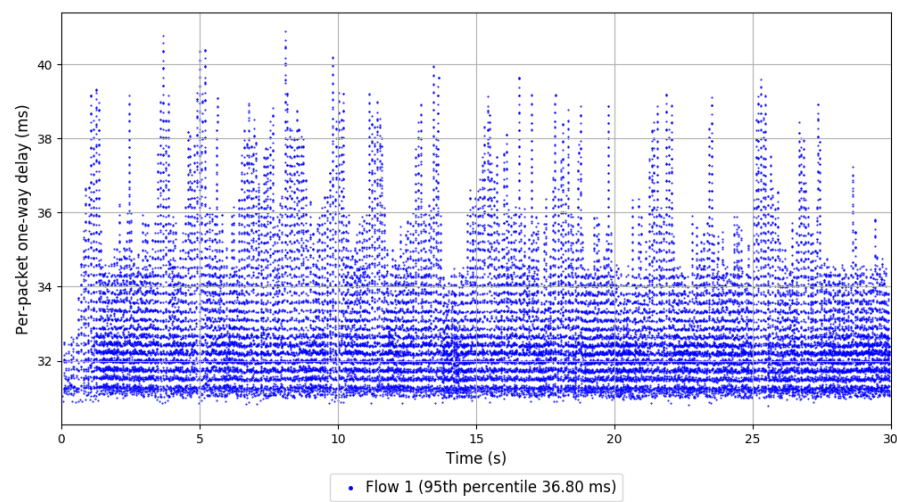
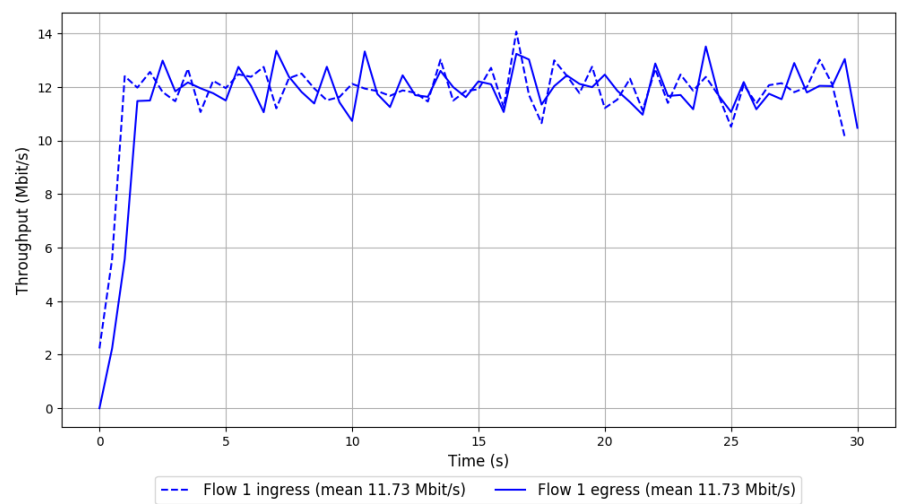


Run 6: Statistics of Sprout

Start at: 2018-07-03 12:26:25
End at: 2018-07-03 12:26:55
Local clock offset: 0.913 ms
Remote clock offset: -0.452 ms

Below is generated by plot.py at 2018-07-03 14:24:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.73 Mbit/s
95th percentile per-packet one-way delay: 36.805 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.73 Mbit/s
95th percentile per-packet one-way delay: 36.805 ms
Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-07-03 12:48:39

End at: 2018-07-03 12:49:09

Local clock offset: 0.59 ms

Remote clock offset: 0.254 ms

Below is generated by plot.py at 2018-07-03 14:24:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.89 Mbit/s

95th percentile per-packet one-way delay: 36.772 ms

Loss rate: 0.20%

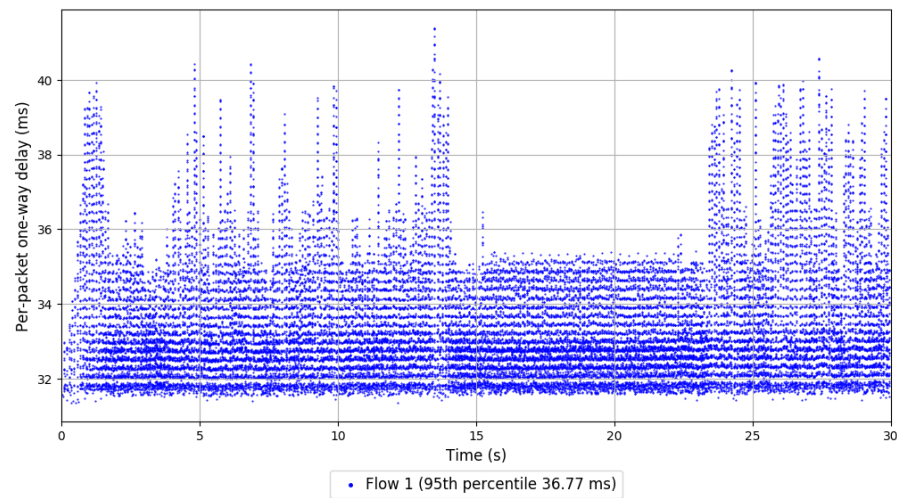
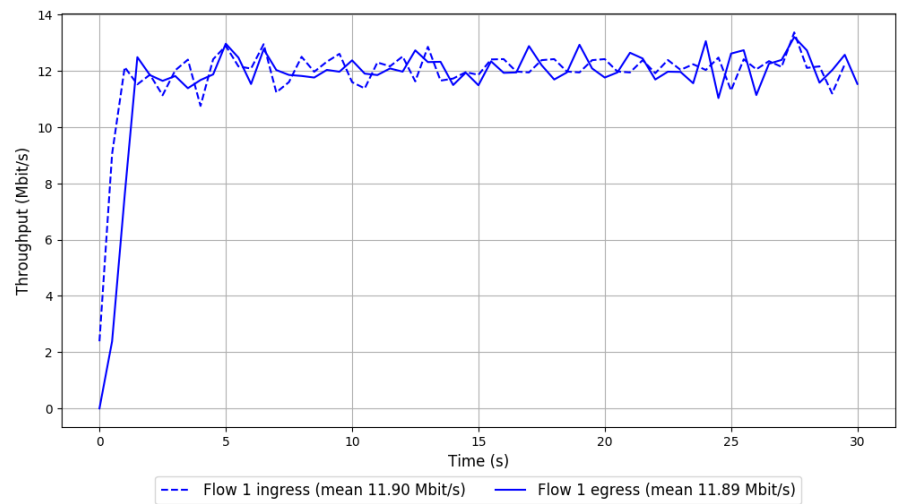
-- Flow 1:

Average throughput: 11.89 Mbit/s

95th percentile per-packet one-way delay: 36.772 ms

Loss rate: 0.20%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-07-03 13:10:49

End at: 2018-07-03 13:11:19

Local clock offset: 0.379 ms

Remote clock offset: 0.315 ms

Below is generated by plot.py at 2018-07-03 14:24:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.90 Mbit/s

95th percentile per-packet one-way delay: 36.696 ms

Loss rate: 0.00%

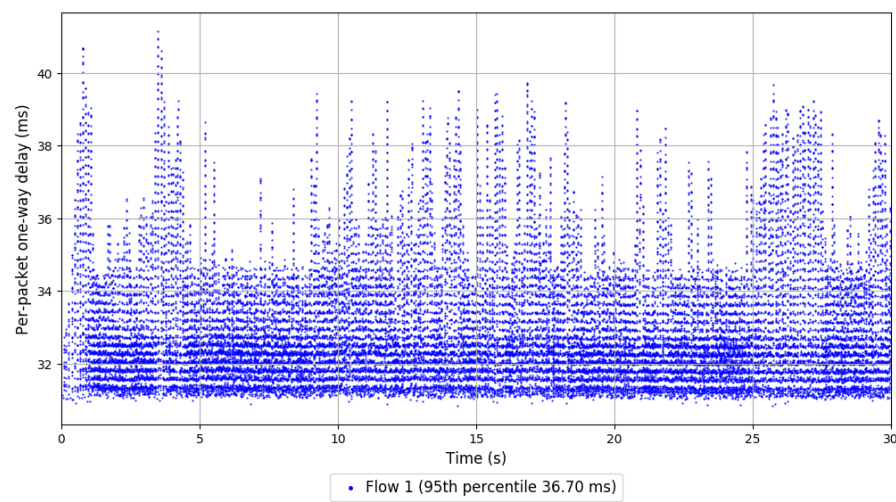
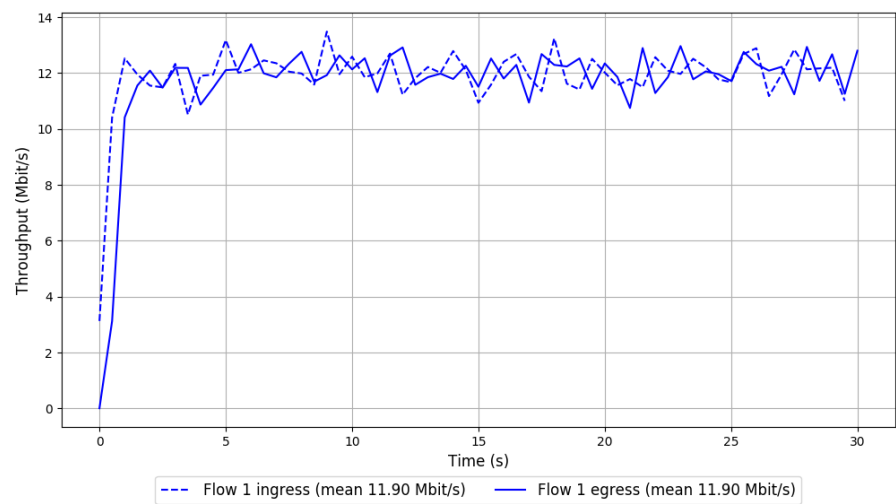
-- Flow 1:

Average throughput: 11.90 Mbit/s

95th percentile per-packet one-way delay: 36.696 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-07-03 13:33:04

End at: 2018-07-03 13:33:34

Local clock offset: 0.436 ms

Remote clock offset: 3.525 ms

Below is generated by plot.py at 2018-07-03 14:24:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.91 Mbit/s

95th percentile per-packet one-way delay: 37.342 ms

Loss rate: 0.00%

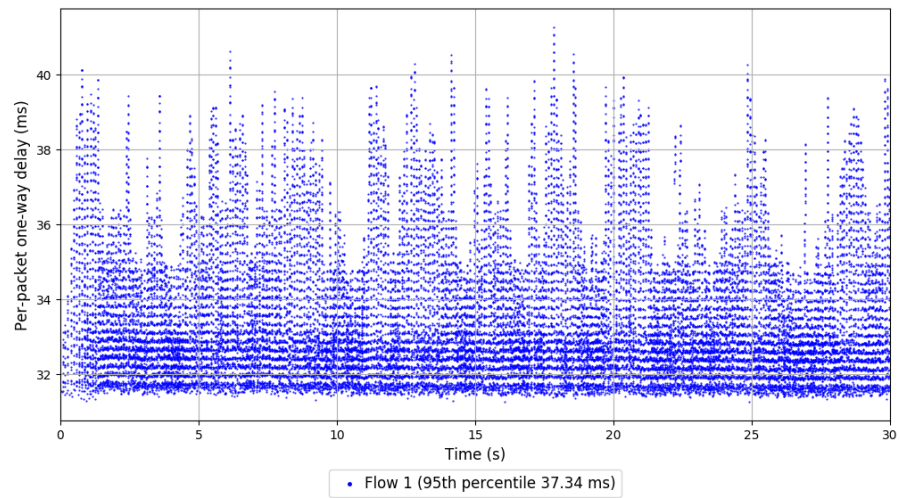
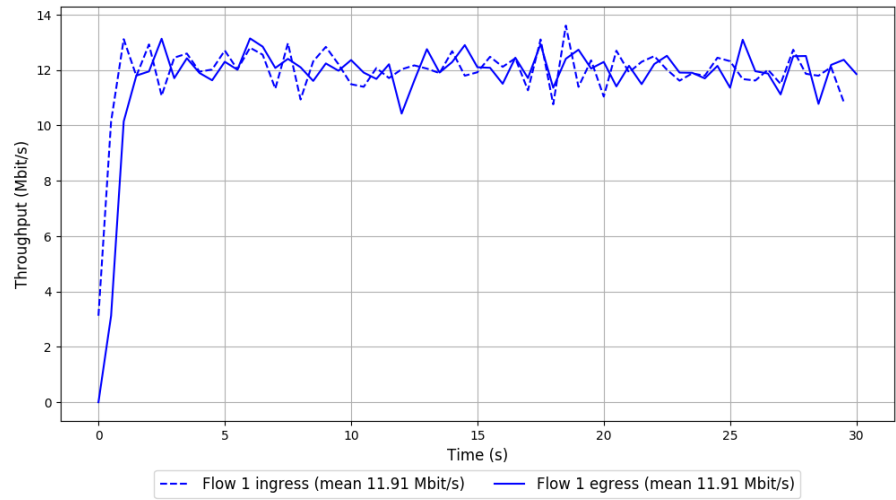
-- Flow 1:

Average throughput: 11.91 Mbit/s

95th percentile per-packet one-way delay: 37.342 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-07-03 13:55:25

End at: 2018-07-03 13:55:55

Local clock offset: 0.207 ms

Remote clock offset: 6.763 ms

Below is generated by plot.py at 2018-07-03 14:24:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.83 Mbit/s

95th percentile per-packet one-way delay: 36.395 ms

Loss rate: 0.05%

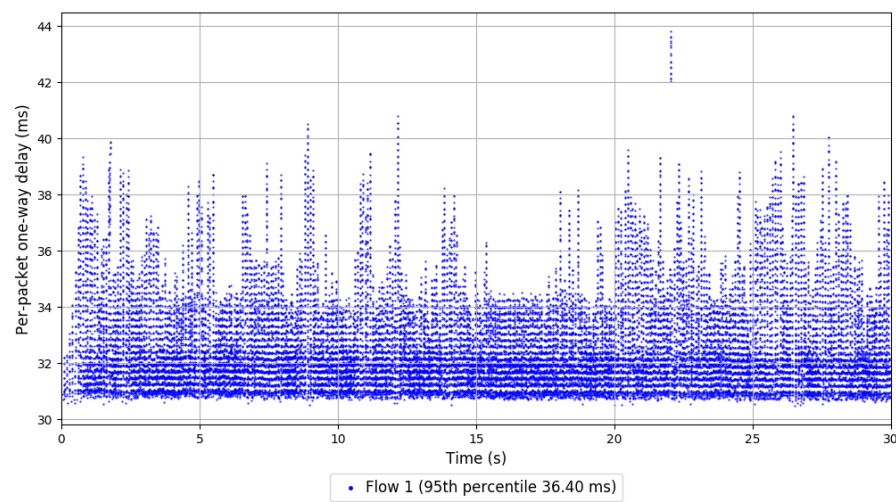
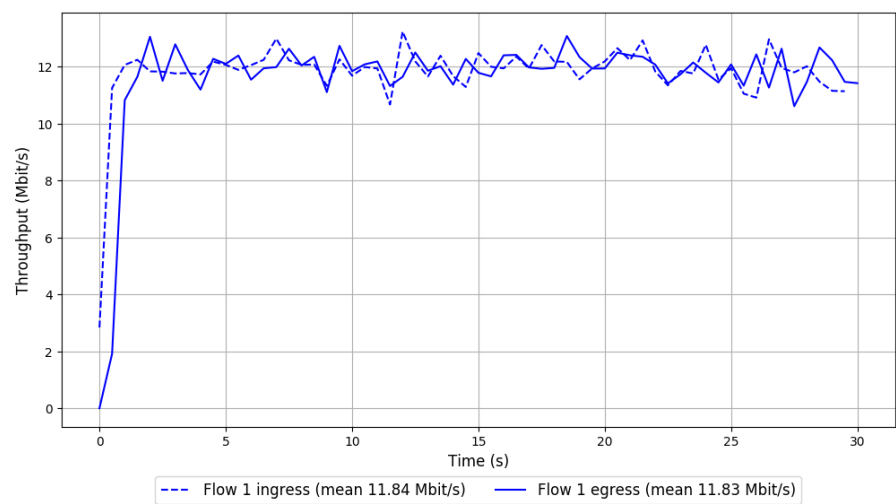
-- Flow 1:

Average throughput: 11.83 Mbit/s

95th percentile per-packet one-way delay: 36.395 ms

Loss rate: 0.05%

Run 10: Report of Sprout — Data Link

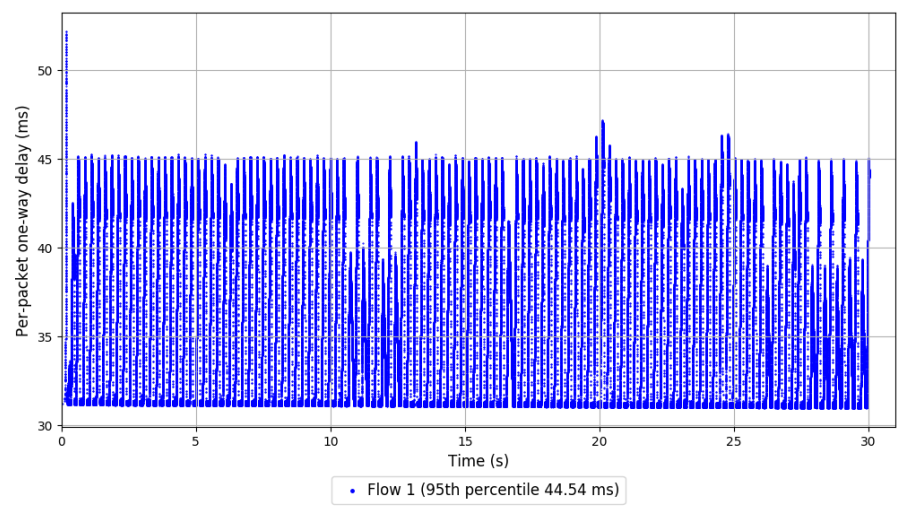
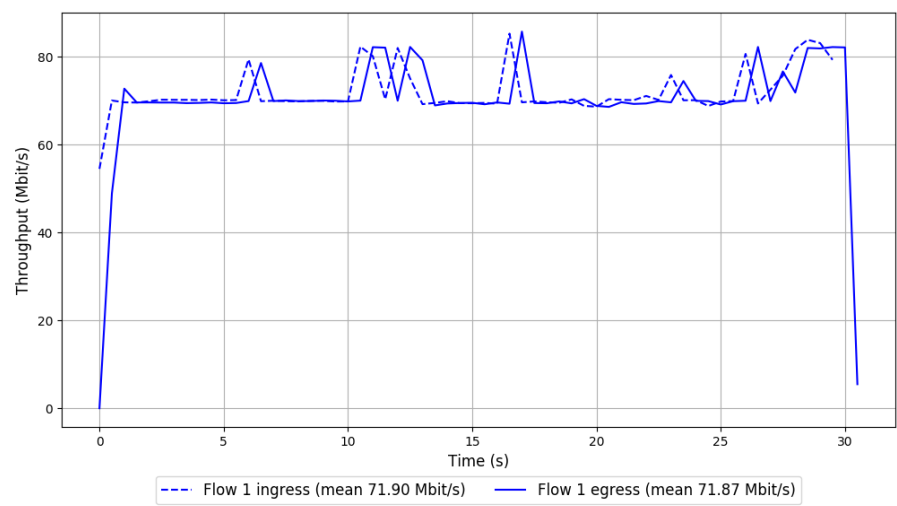


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-07-03 10:26:01
End at: 2018-07-03 10:26:31
Local clock offset: -26.981 ms
Remote clock offset: -1.26 ms

# Below is generated by plot.py at 2018-07-03 14:26:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.87 Mbit/s
95th percentile per-packet one-way delay: 44.539 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 71.87 Mbit/s
95th percentile per-packet one-way delay: 44.539 ms
Loss rate: 0.00%
```


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

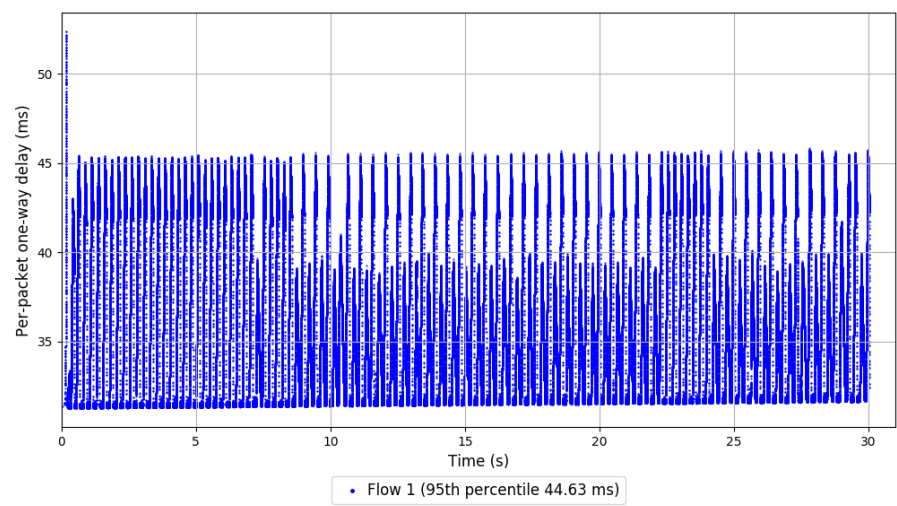
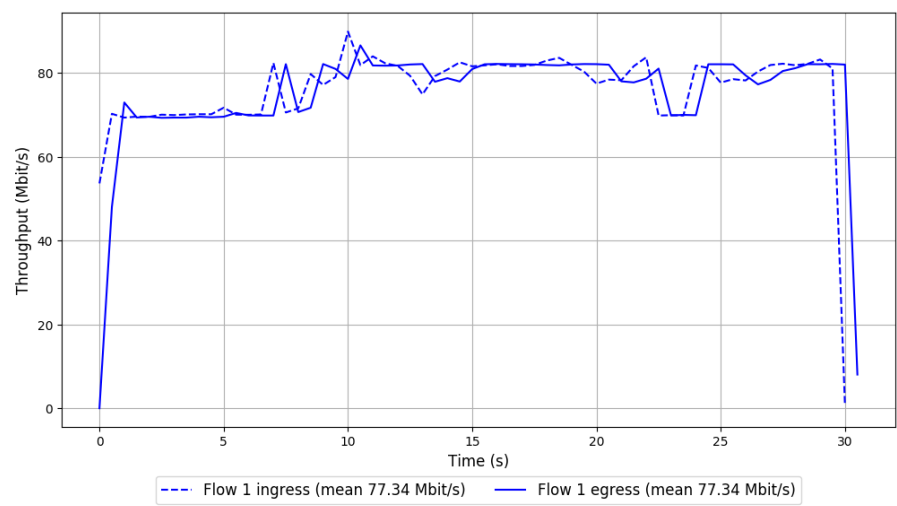


Run 2: Statistics of TaoVA-100x

Start at: 2018-07-03 10:48:17
End at: 2018-07-03 10:48:47
Local clock offset: -2.695 ms
Remote clock offset: -0.976 ms

Below is generated by plot.py at 2018-07-03 14:26:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 77.34 Mbit/s
95th percentile per-packet one-way delay: 44.632 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 77.34 Mbit/s
95th percentile per-packet one-way delay: 44.632 ms
Loss rate: 0.00%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-07-03 11:10:37

End at: 2018-07-03 11:11:07

Local clock offset: 2.607 ms

Remote clock offset: -1.423 ms

Below is generated by plot.py at 2018-07-03 14:26:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.65 Mbit/s

95th percentile per-packet one-way delay: 43.964 ms

Loss rate: 0.00%

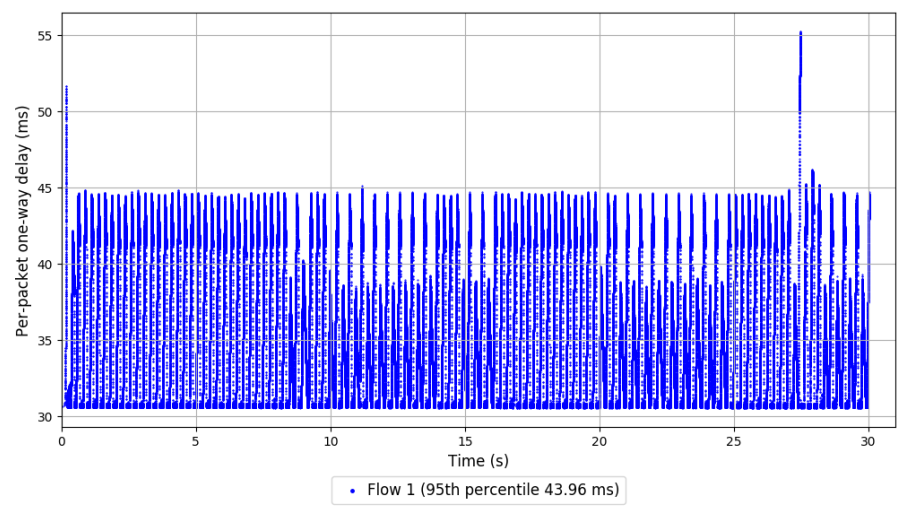
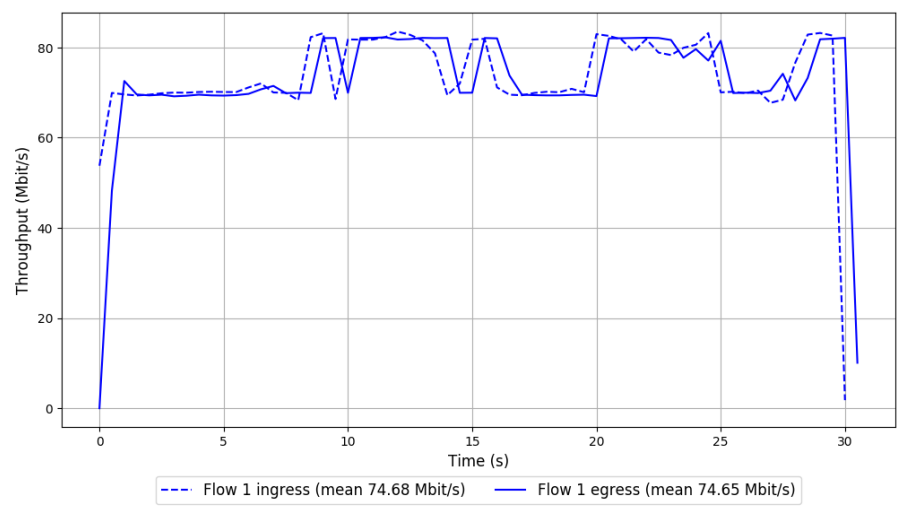
-- Flow 1:

Average throughput: 74.65 Mbit/s

95th percentile per-packet one-way delay: 43.964 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-07-03 11:32:50

End at: 2018-07-03 11:33:20

Local clock offset: 3.231 ms

Remote clock offset: -1.571 ms

Below is generated by plot.py at 2018-07-03 14:26:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.05 Mbit/s

95th percentile per-packet one-way delay: 44.954 ms

Loss rate: 0.03%

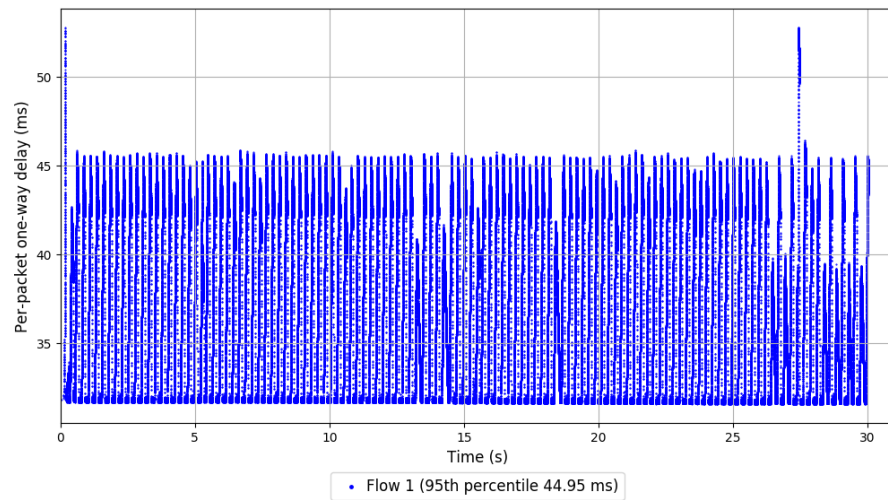
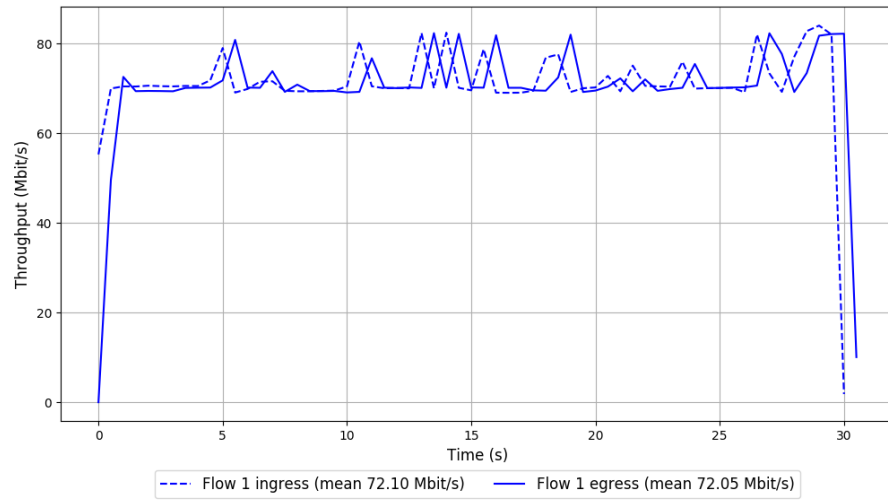
-- Flow 1:

Average throughput: 72.05 Mbit/s

95th percentile per-packet one-way delay: 44.954 ms

Loss rate: 0.03%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-07-03 11:55:06

End at: 2018-07-03 11:55:36

Local clock offset: 1.371 ms

Remote clock offset: -1.589 ms

Below is generated by plot.py at 2018-07-03 14:26:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.12 Mbit/s

95th percentile per-packet one-way delay: 44.881 ms

Loss rate: 0.00%

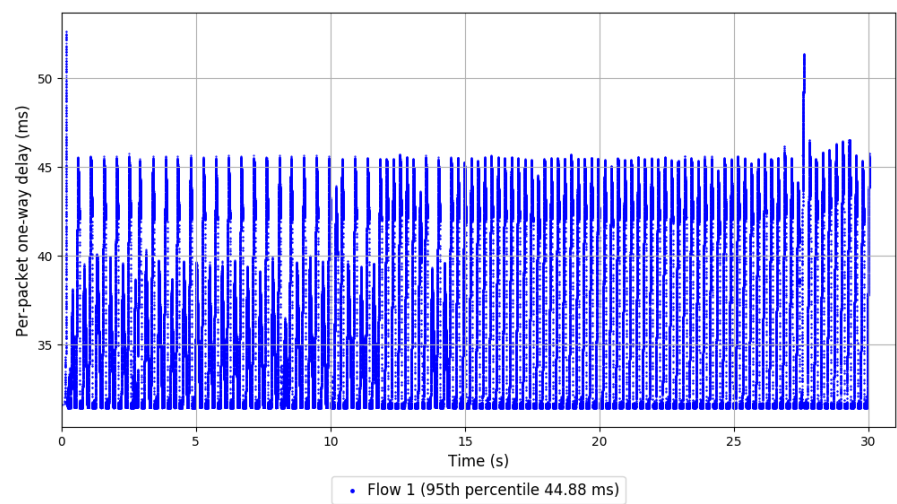
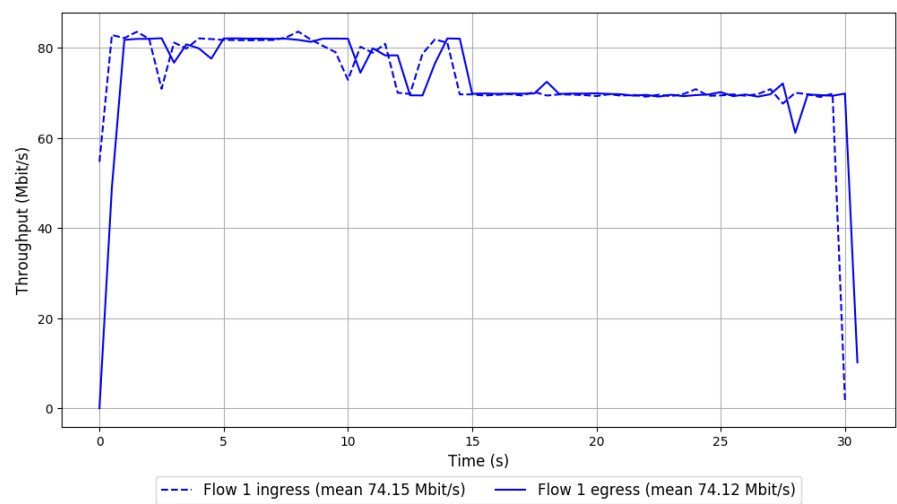
-- Flow 1:

Average throughput: 74.12 Mbit/s

95th percentile per-packet one-way delay: 44.881 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-07-03 12:17:17

End at: 2018-07-03 12:17:47

Local clock offset: 0.863 ms

Remote clock offset: -1.208 ms

Below is generated by plot.py at 2018-07-03 14:26:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.87 Mbit/s

95th percentile per-packet one-way delay: 44.004 ms

Loss rate: 0.00%

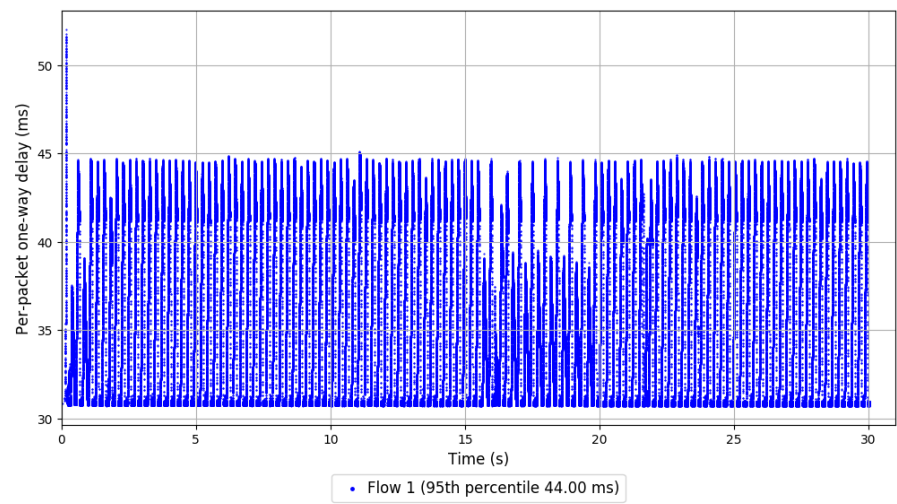
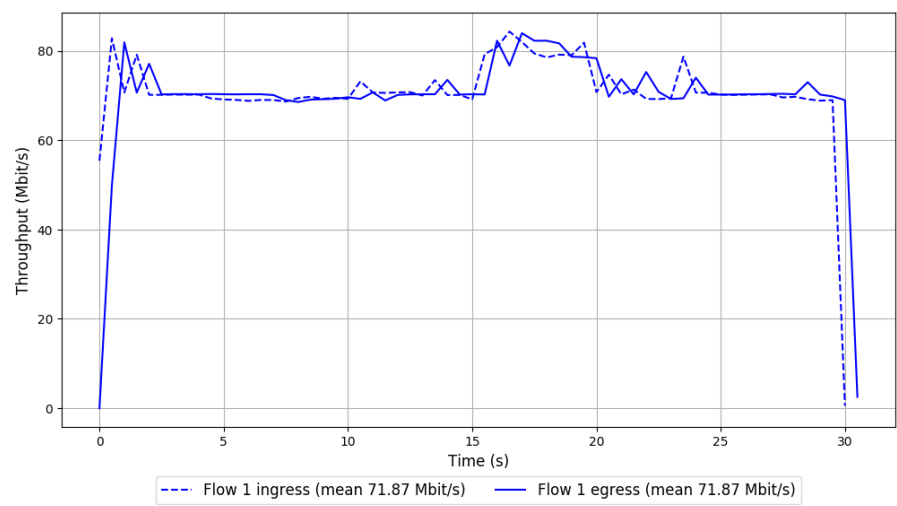
-- Flow 1:

Average throughput: 71.87 Mbit/s

95th percentile per-packet one-way delay: 44.004 ms

Loss rate: 0.00%

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

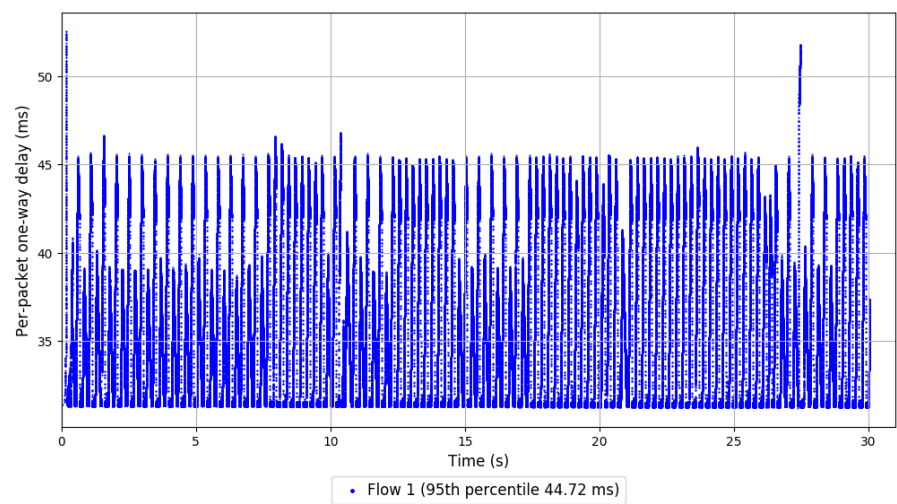
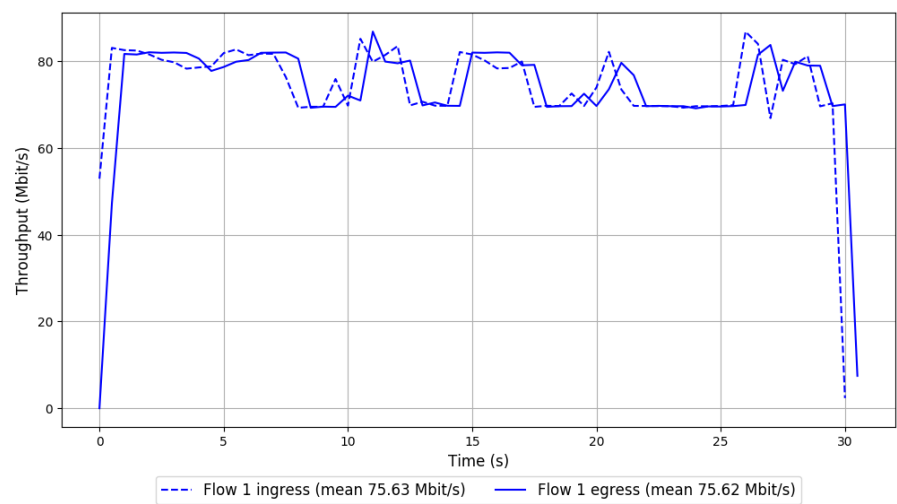


Run 7: Statistics of TaoVA-100x

Start at: 2018-07-03 12:39:31
End at: 2018-07-03 12:40:01
Local clock offset: 0.637 ms
Remote clock offset: -0.085 ms

Below is generated by plot.py at 2018-07-03 14:26:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 75.62 Mbit/s
95th percentile per-packet one-way delay: 44.715 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 75.62 Mbit/s
95th percentile per-packet one-way delay: 44.715 ms
Loss rate: 0.01%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-07-03 13:01:41

End at: 2018-07-03 13:02:11

Local clock offset: 0.612 ms

Remote clock offset: 0.135 ms

Below is generated by plot.py at 2018-07-03 14:26:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.57 Mbit/s

95th percentile per-packet one-way delay: 45.032 ms

Loss rate: 0.05%

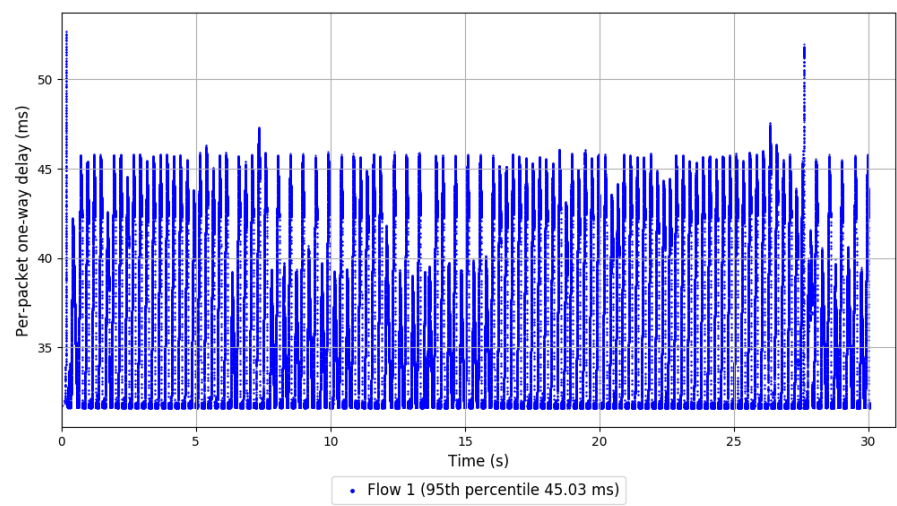
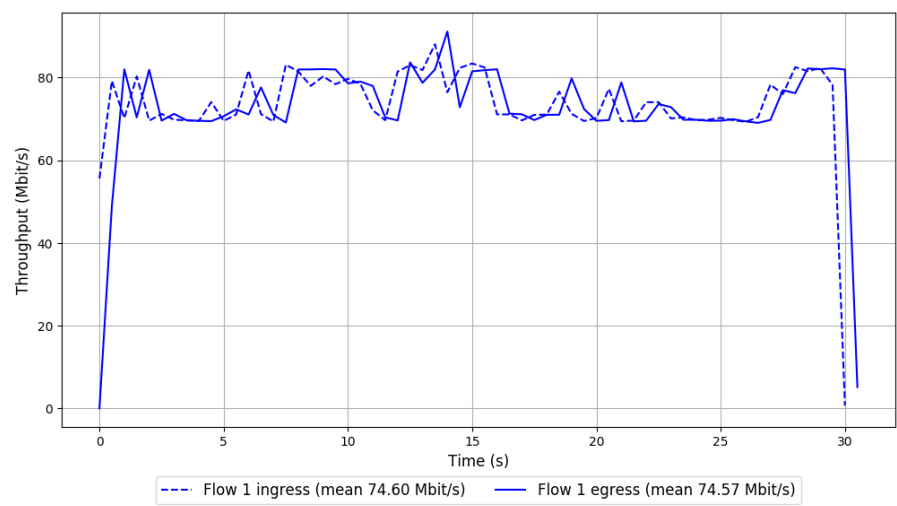
-- Flow 1:

Average throughput: 74.57 Mbit/s

95th percentile per-packet one-way delay: 45.032 ms

Loss rate: 0.05%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-07-03 13:23:53

End at: 2018-07-03 13:24:23

Local clock offset: 0.397 ms

Remote clock offset: 2.086 ms

Below is generated by plot.py at 2018-07-03 14:27:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.36 Mbit/s

95th percentile per-packet one-way delay: 44.476 ms

Loss rate: 0.03%

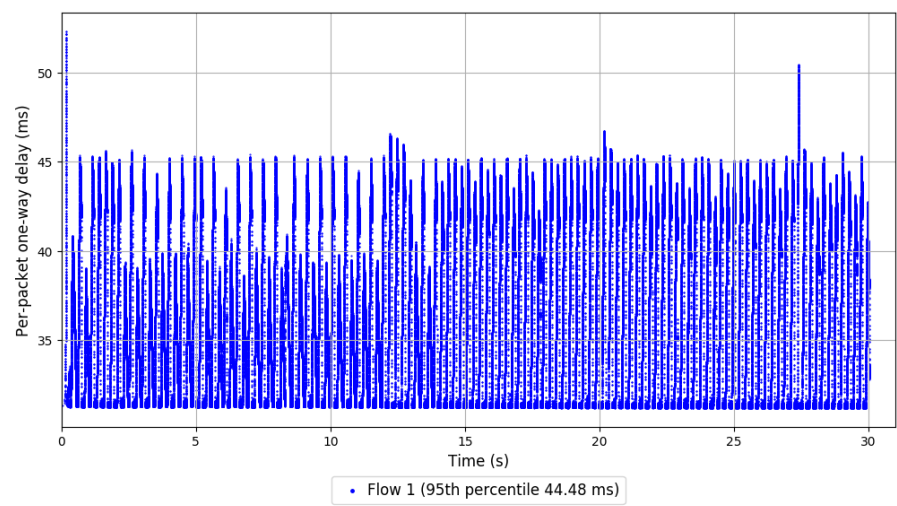
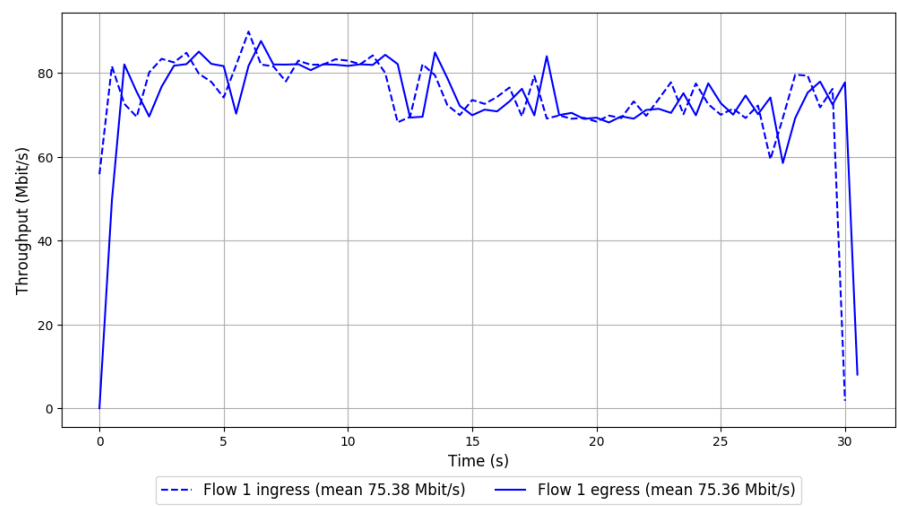
-- Flow 1:

Average throughput: 75.36 Mbit/s

95th percentile per-packet one-way delay: 44.476 ms

Loss rate: 0.03%

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

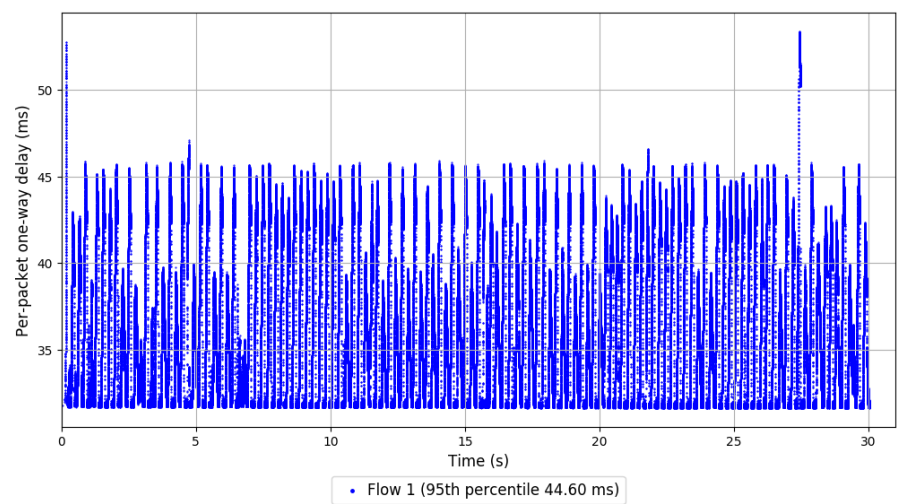
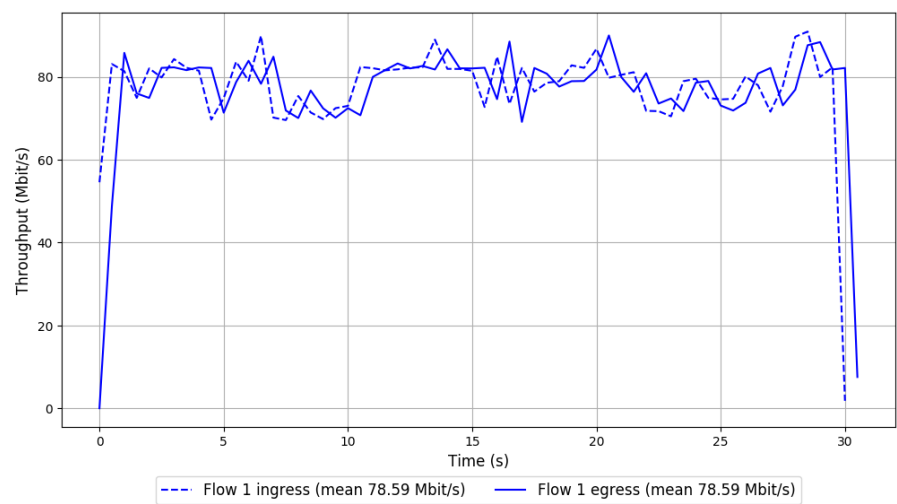


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-07-03 13:46:13
End at: 2018-07-03 13:46:43
Local clock offset: 0.224 ms
Remote clock offset: 5.696 ms

# Below is generated by plot.py at 2018-07-03 14:28:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.59 Mbit/s
95th percentile per-packet one-way delay: 44.600 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 78.59 Mbit/s
95th percentile per-packet one-way delay: 44.600 ms
Loss rate: 0.00%
```

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

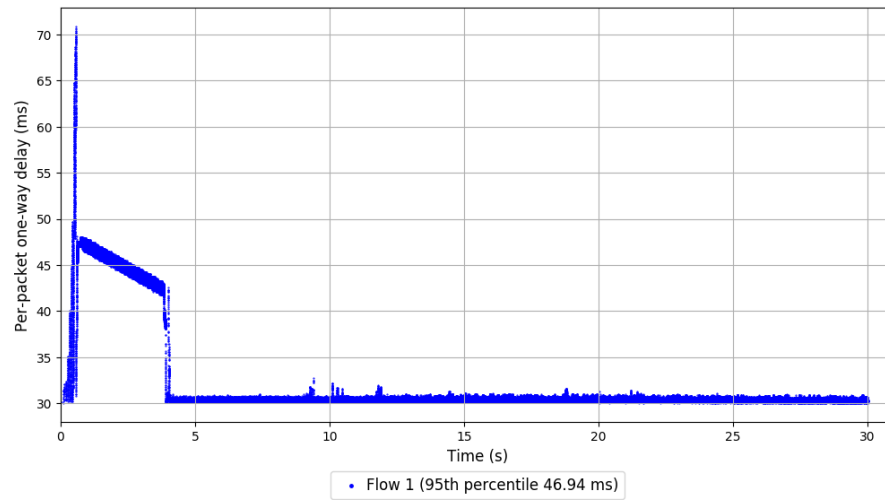
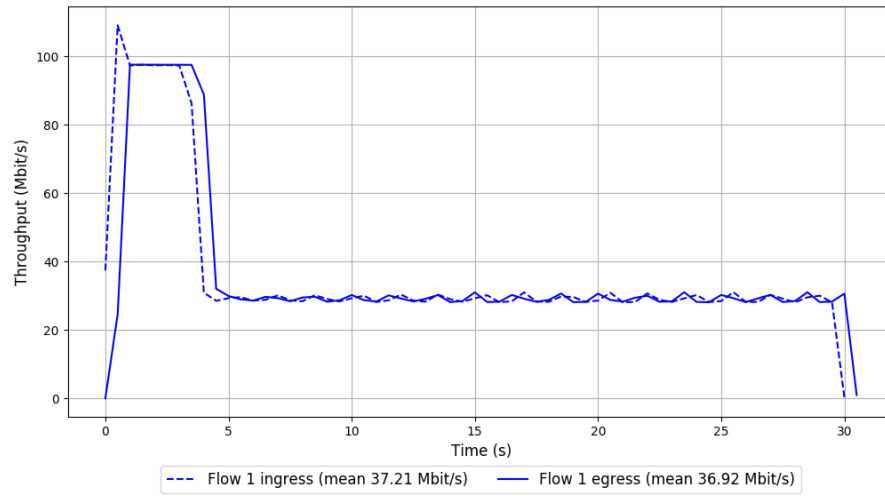


Run 1: Statistics of TCP Vegas

Start at: 2018-07-03 10:30:01
End at: 2018-07-03 10:30:31
Local clock offset: -28.437 ms
Remote clock offset: -1.453 ms

Below is generated by plot.py at 2018-07-03 14:28:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 36.92 Mbit/s
95th percentile per-packet one-way delay: 46.942 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 36.92 Mbit/s
95th percentile per-packet one-way delay: 46.942 ms
Loss rate: 0.78%

Run 1: Report of TCP Vegas — Data Link

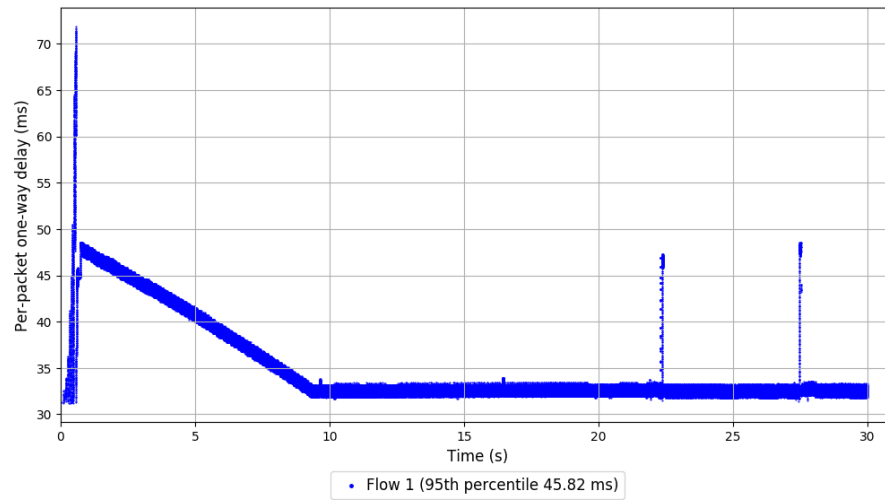
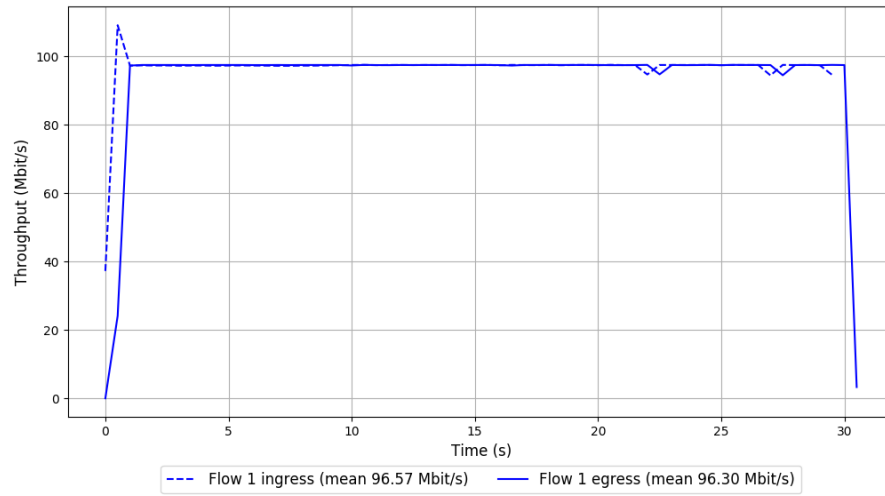


Run 2: Statistics of TCP Vegas

Start at: 2018-07-03 10:52:23
End at: 2018-07-03 10:52:53
Local clock offset: -0.012 ms
Remote clock offset: -0.861 ms

Below is generated by plot.py at 2018-07-03 14:28:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 45.818 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 45.818 ms
Loss rate: 0.27%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-07-03 11:14:37

End at: 2018-07-03 11:15:07

Local clock offset: 2.412 ms

Remote clock offset: -1.62 ms

Below is generated by plot.py at 2018-07-03 14:28:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.44 Mbit/s

95th percentile per-packet one-way delay: 32.117 ms

Loss rate: 0.72%

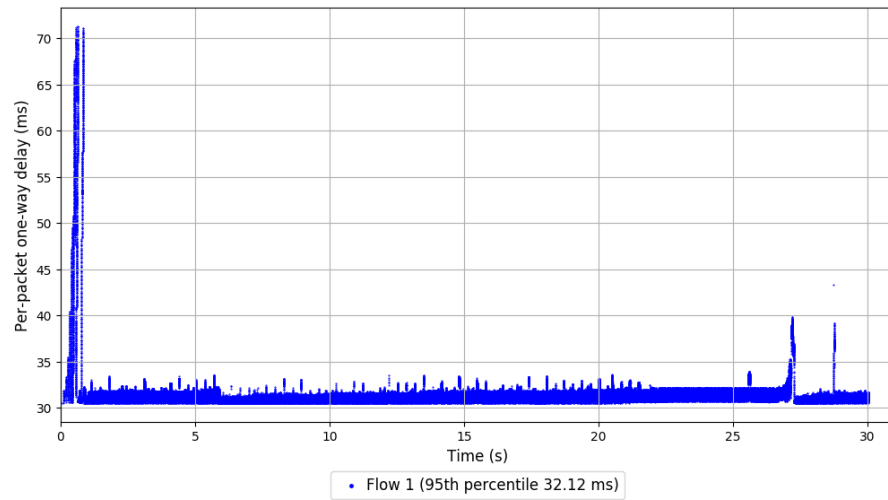
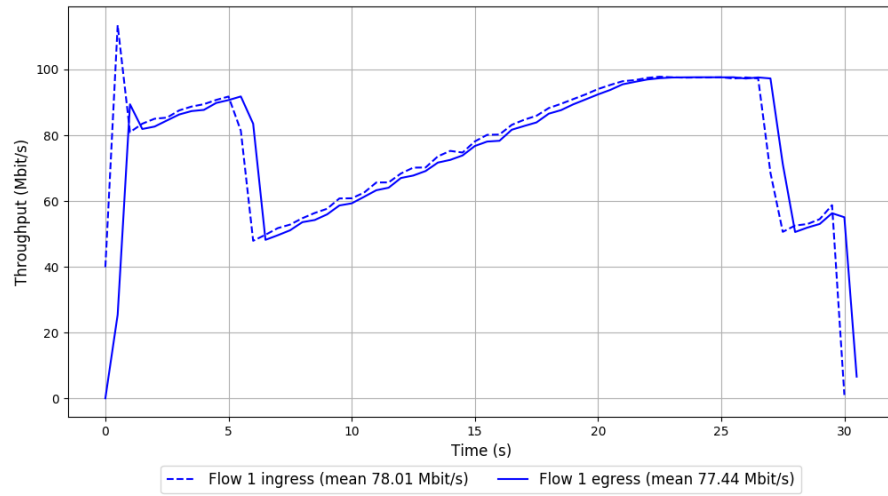
-- Flow 1:

Average throughput: 77.44 Mbit/s

95th percentile per-packet one-way delay: 32.117 ms

Loss rate: 0.72%

Run 3: Report of TCP Vegas — Data Link

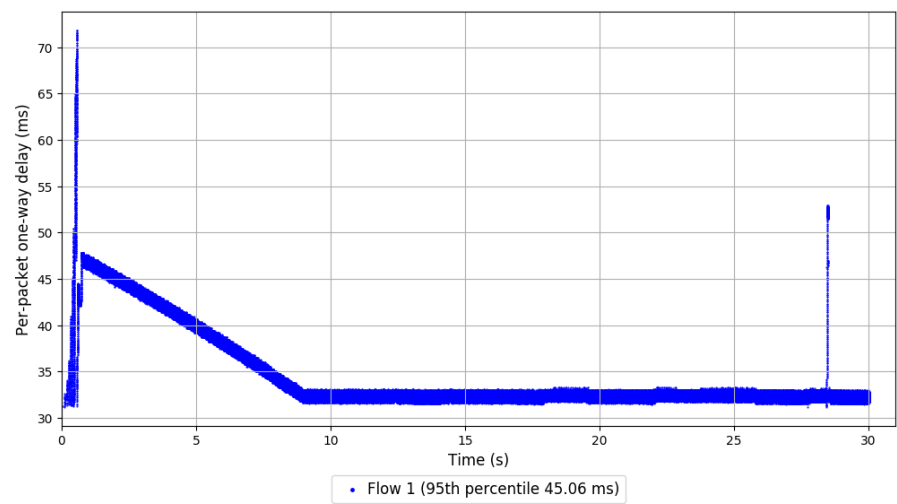
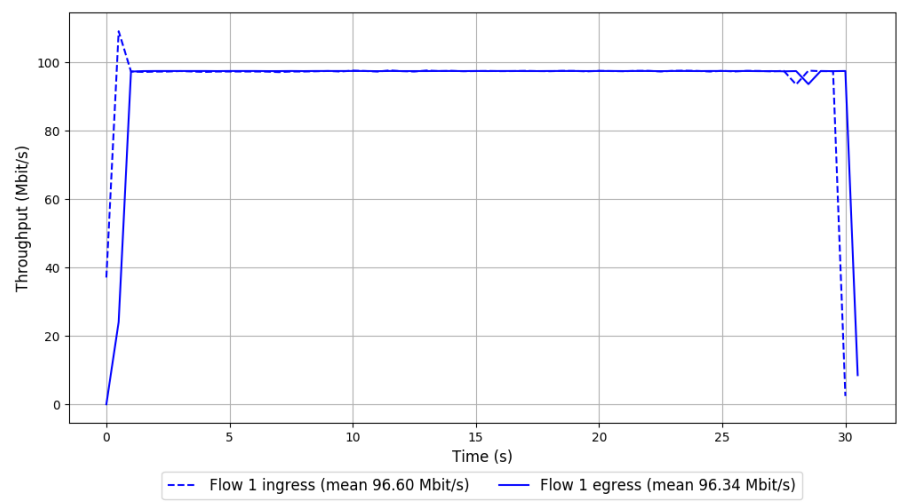


Run 4: Statistics of TCP Vegas

Start at: 2018-07-03 11:36:51
End at: 2018-07-03 11:37:21
Local clock offset: 2.348 ms
Remote clock offset: -1.927 ms

Below is generated by plot.py at 2018-07-03 14:28:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.34 Mbit/s
95th percentile per-packet one-way delay: 45.065 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.34 Mbit/s
95th percentile per-packet one-way delay: 45.065 ms
Loss rate: 0.27%

Run 4: Report of TCP Vegas — Data Link

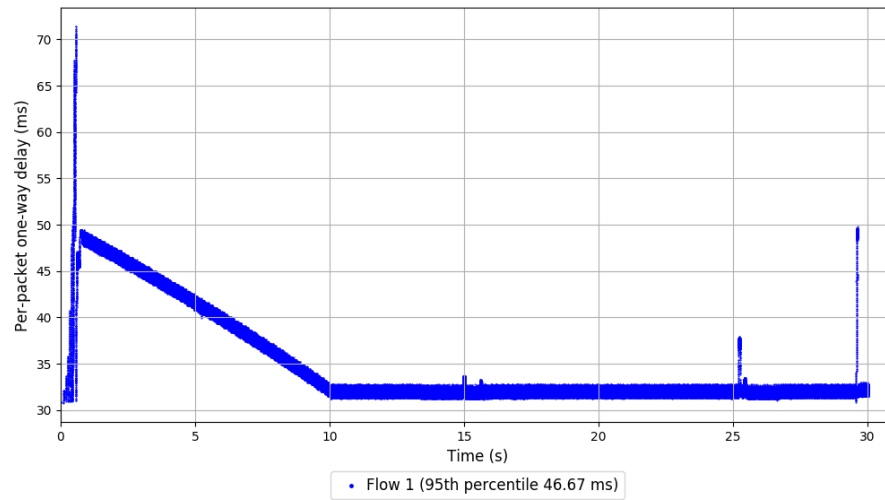
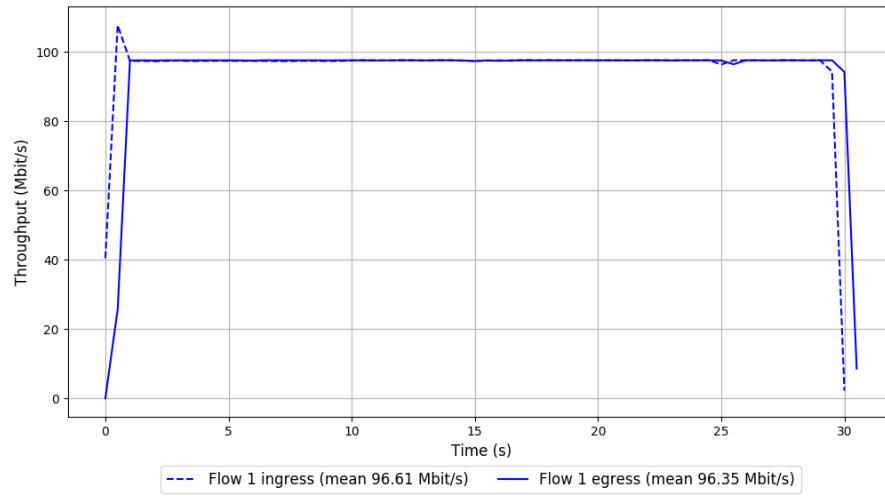


Run 5: Statistics of TCP Vegas

Start at: 2018-07-03 11:59:05
End at: 2018-07-03 11:59:35
Local clock offset: 1.577 ms
Remote clock offset: -1.474 ms

Below is generated by plot.py at 2018-07-03 14:28:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.35 Mbit/s
95th percentile per-packet one-way delay: 46.667 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.35 Mbit/s
95th percentile per-packet one-way delay: 46.667 ms
Loss rate: 0.27%

Run 5: Report of TCP Vegas — Data Link

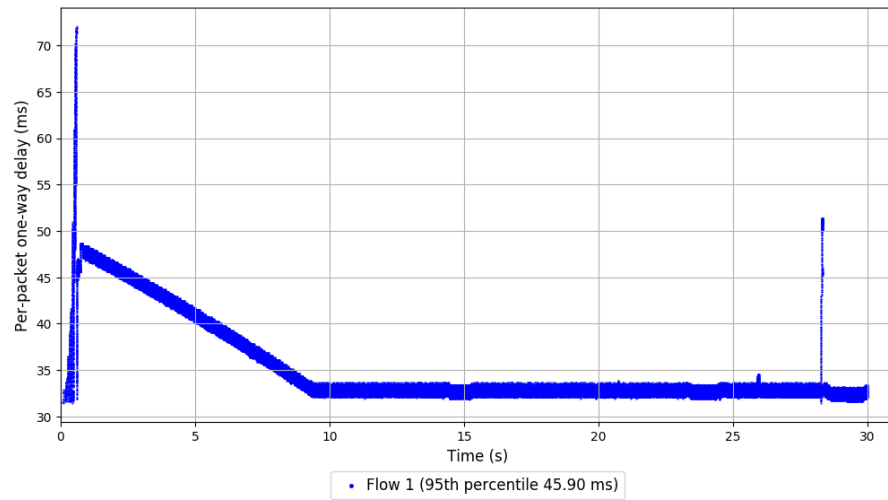
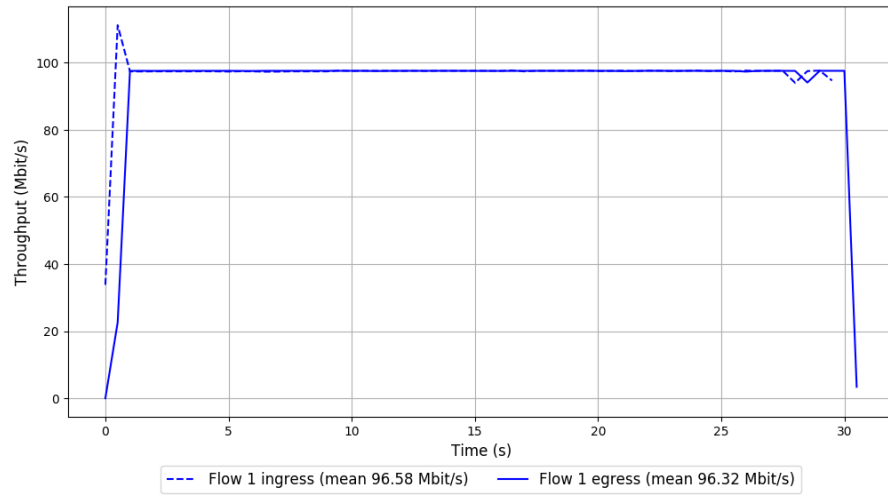


Run 6: Statistics of TCP Vegas

Start at: 2018-07-03 12:21:15
End at: 2018-07-03 12:21:45
Local clock offset: 0.748 ms
Remote clock offset: -1.102 ms

Below is generated by plot.py at 2018-07-03 14:28:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.32 Mbit/s
95th percentile per-packet one-way delay: 45.903 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.32 Mbit/s
95th percentile per-packet one-way delay: 45.903 ms
Loss rate: 0.27%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-07-03 12:43:29

End at: 2018-07-03 12:43:59

Local clock offset: 0.606 ms

Remote clock offset: 0.562 ms

Below is generated by plot.py at 2018-07-03 14:28:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.39 Mbit/s

95th percentile per-packet one-way delay: 46.453 ms

Loss rate: 0.37%

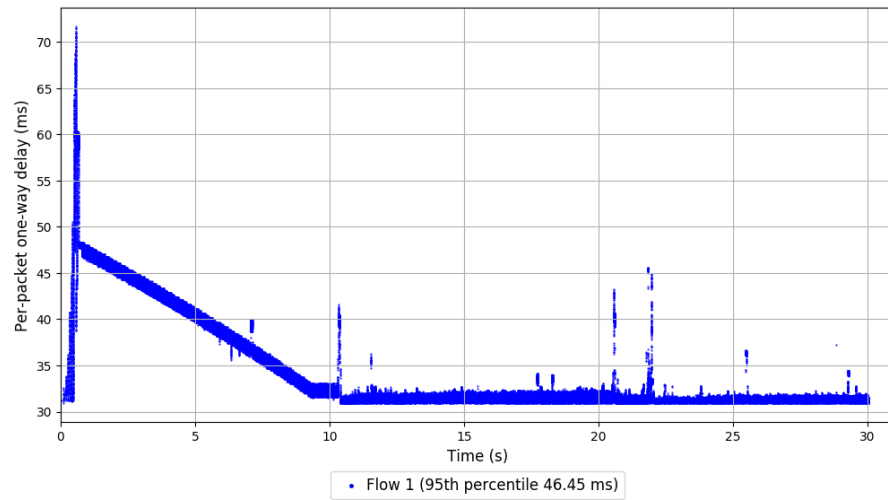
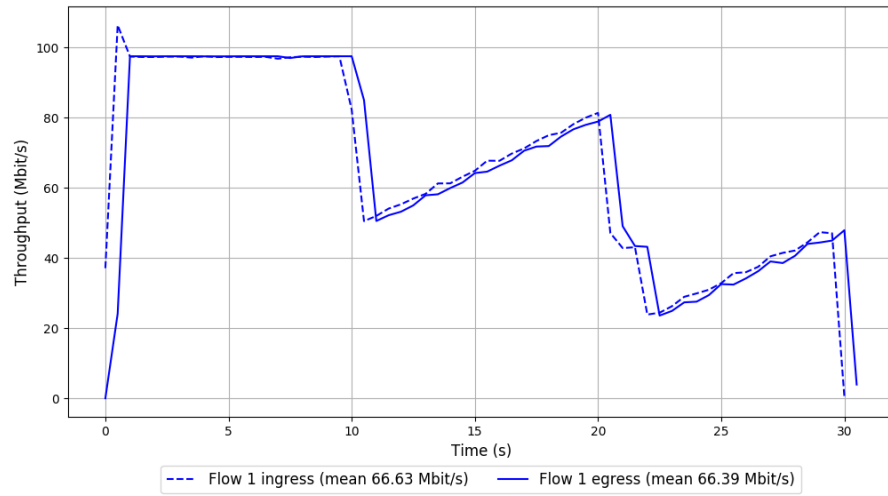
-- Flow 1:

Average throughput: 66.39 Mbit/s

95th percentile per-packet one-way delay: 46.453 ms

Loss rate: 0.37%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-07-03 13:05:41

End at: 2018-07-03 13:06:11

Local clock offset: 0.609 ms

Remote clock offset: 0.545 ms

Below is generated by plot.py at 2018-07-03 14:28:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.46 Mbit/s

95th percentile per-packet one-way delay: 39.381 ms

Loss rate: 0.29%

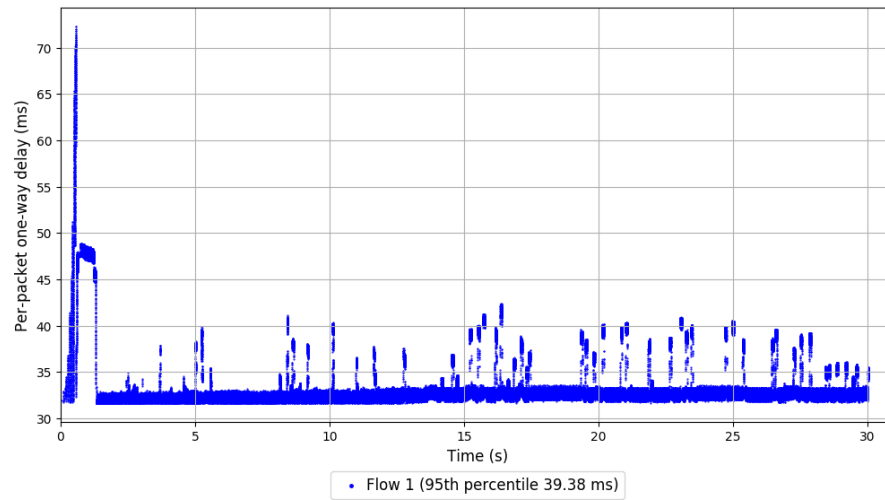
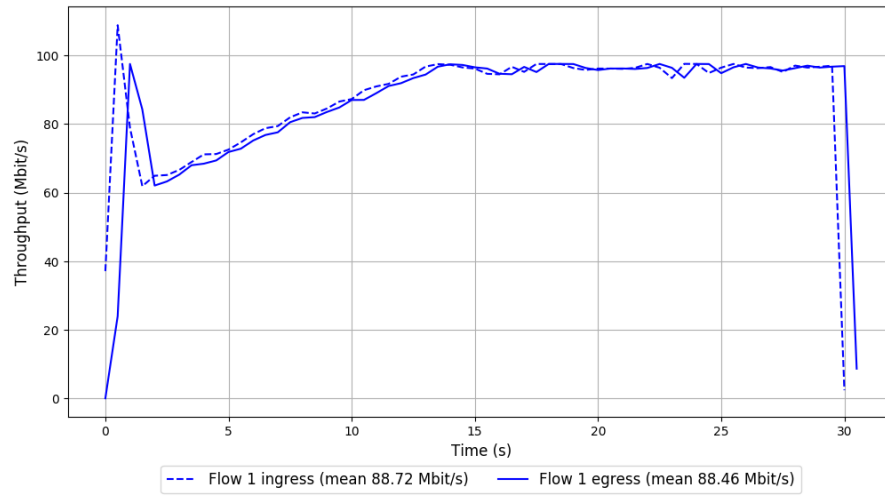
-- Flow 1:

Average throughput: 88.46 Mbit/s

95th percentile per-packet one-way delay: 39.381 ms

Loss rate: 0.29%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-07-03 13:27:54

End at: 2018-07-03 13:28:24

Local clock offset: 0.409 ms

Remote clock offset: 2.75 ms

Below is generated by plot.py at 2018-07-03 14:28:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.56 Mbit/s

95th percentile per-packet one-way delay: 32.053 ms

Loss rate: 0.50%

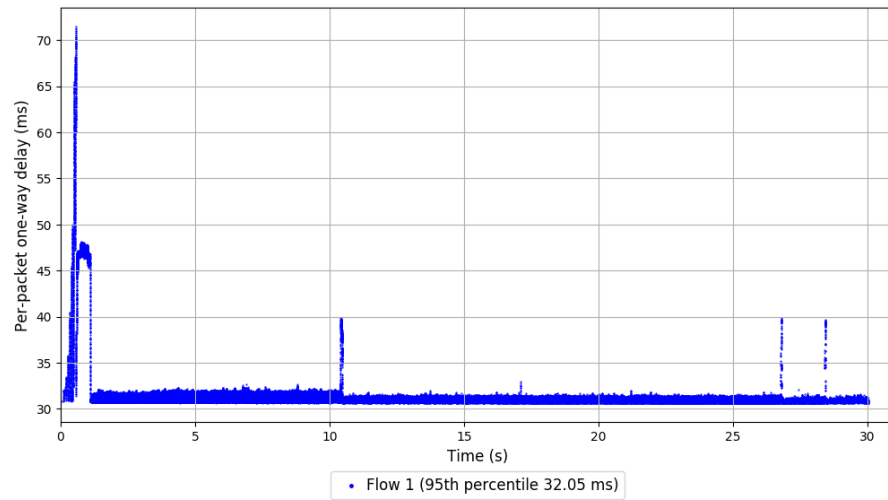
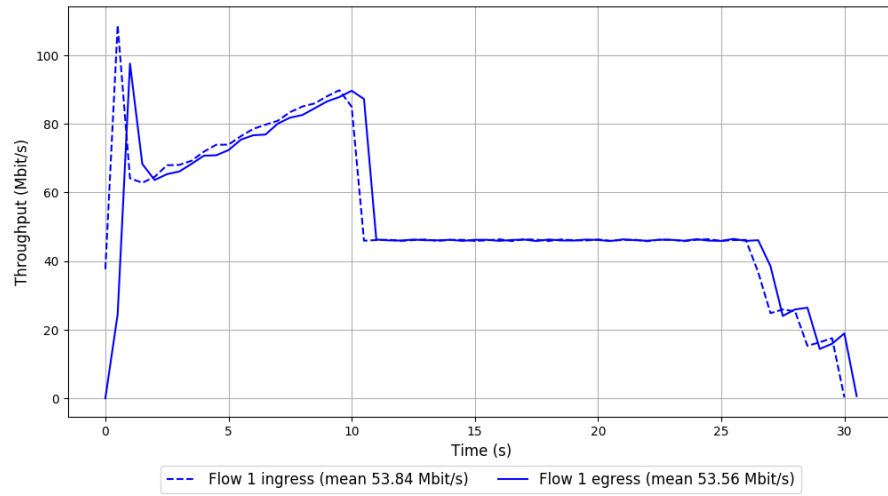
-- Flow 1:

Average throughput: 53.56 Mbit/s

95th percentile per-packet one-way delay: 32.053 ms

Loss rate: 0.50%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-07-03 13:50:15

End at: 2018-07-03 13:50:45

Local clock offset: 0.215 ms

Remote clock offset: 5.564 ms

Below is generated by plot.py at 2018-07-03 14:28:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.11 Mbit/s

95th percentile per-packet one-way delay: 46.201 ms

Loss rate: 0.42%

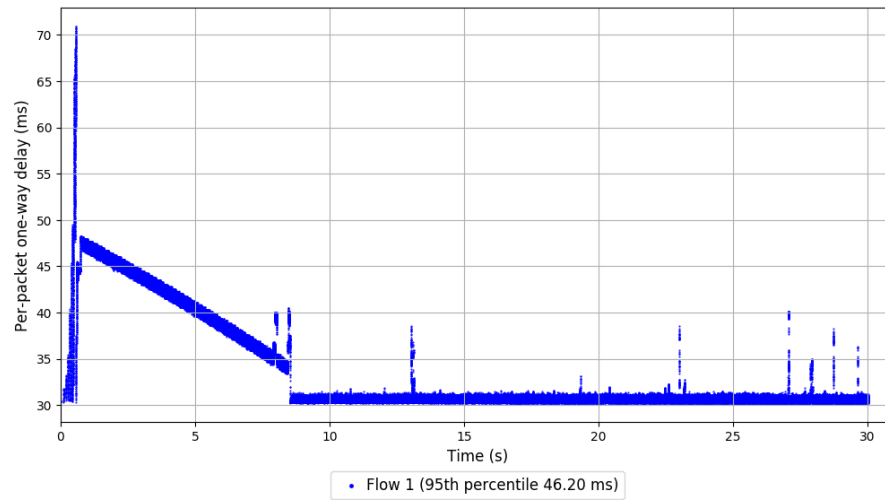
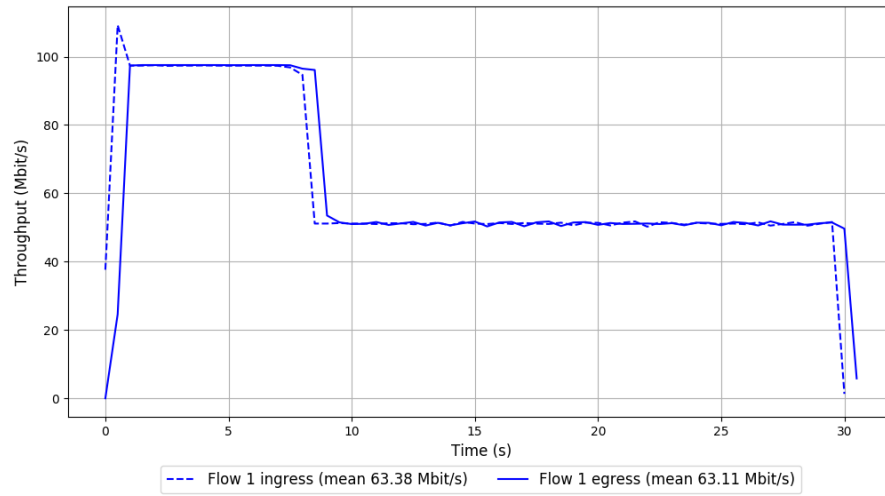
-- Flow 1:

Average throughput: 63.11 Mbit/s

95th percentile per-packet one-way delay: 46.201 ms

Loss rate: 0.42%

Run 10: Report of TCP Vegas — Data Link

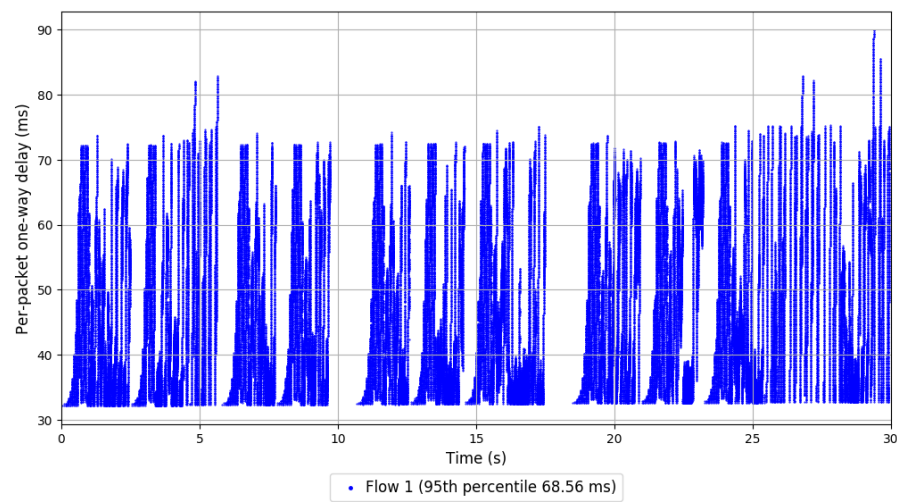
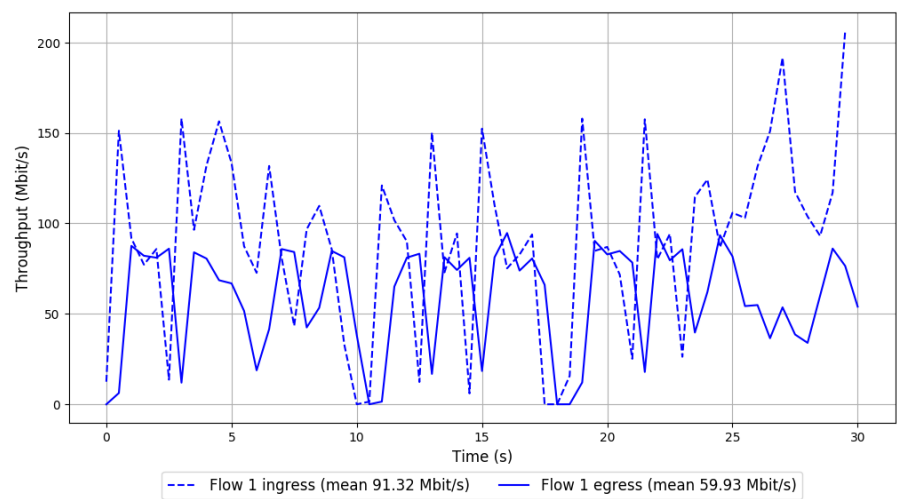


Run 1: Statistics of Verus

Start at: 2018-07-03 10:43:01
End at: 2018-07-03 10:43:31
Local clock offset: -7.979 ms
Remote clock offset: -1.041 ms

Below is generated by plot.py at 2018-07-03 14:28:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 59.93 Mbit/s
95th percentile per-packet one-way delay: 68.561 ms
Loss rate: 34.31%
-- Flow 1:
Average throughput: 59.93 Mbit/s
95th percentile per-packet one-way delay: 68.561 ms
Loss rate: 34.31%

Run 1: Report of Verus — Data Link

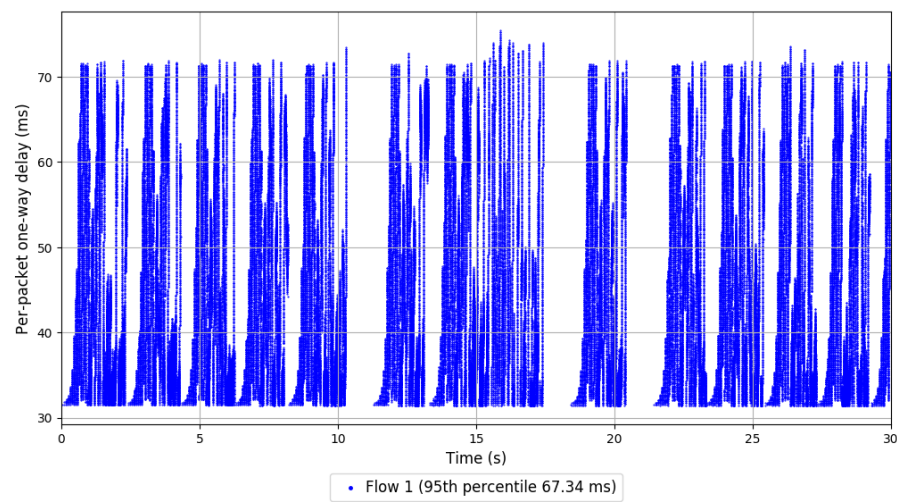
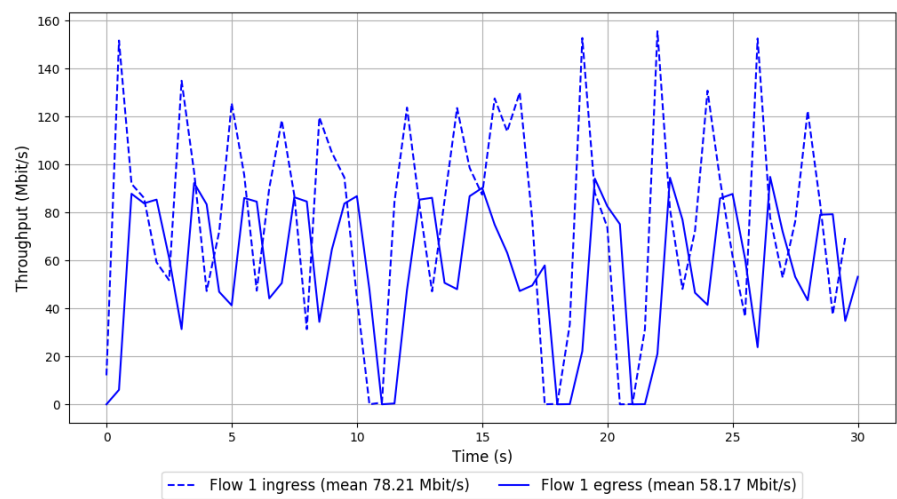


Run 2: Statistics of Verus

Start at: 2018-07-03 11:05:24
End at: 2018-07-03 11:05:54
Local clock offset: 3.615 ms
Remote clock offset: -0.757 ms

Below is generated by plot.py at 2018-07-03 14:28:27
Datalink statistics
-- Total of 1 flow:
Average throughput: 58.17 Mbit/s
95th percentile per-packet one-way delay: 67.339 ms
Loss rate: 25.53%
-- Flow 1:
Average throughput: 58.17 Mbit/s
95th percentile per-packet one-way delay: 67.339 ms
Loss rate: 25.53%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-07-03 11:27:36

End at: 2018-07-03 11:28:06

Local clock offset: 2.8 ms

Remote clock offset: -1.599 ms

Below is generated by plot.py at 2018-07-03 14:28:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.70 Mbit/s

95th percentile per-packet one-way delay: 67.967 ms

Loss rate: 30.69%

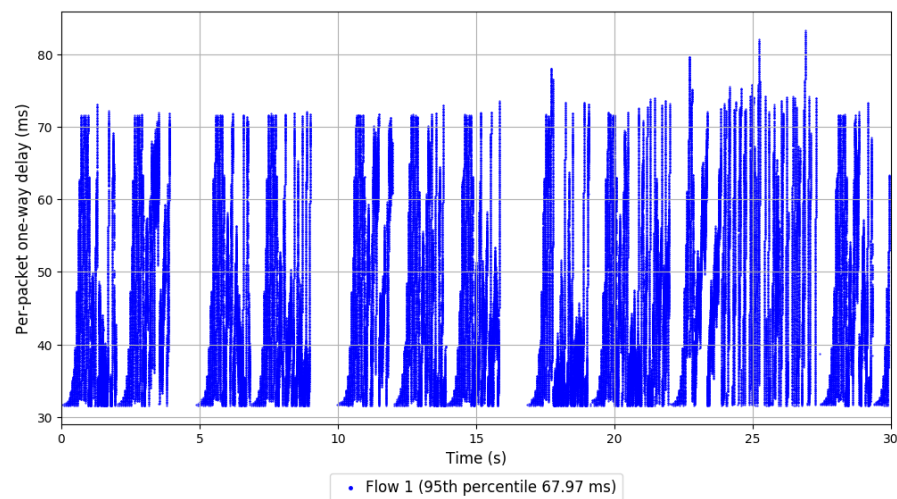
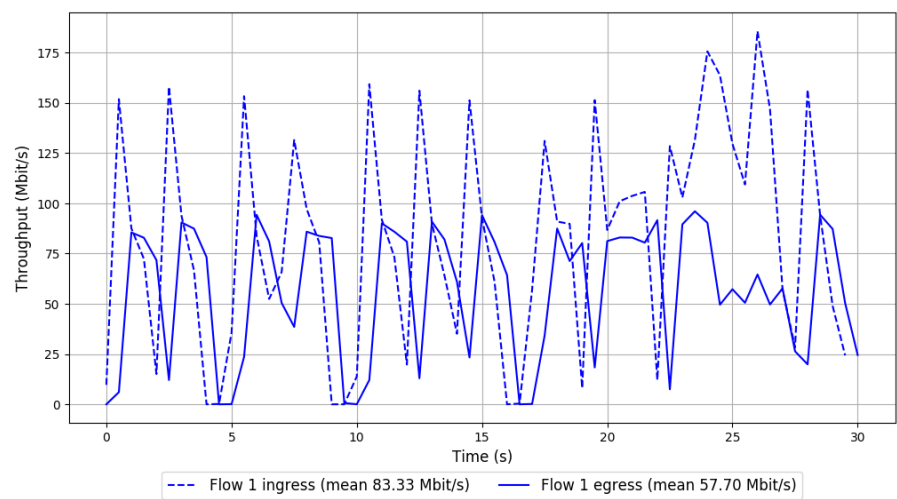
-- Flow 1:

Average throughput: 57.70 Mbit/s

95th percentile per-packet one-way delay: 67.967 ms

Loss rate: 30.69%

Run 3: Report of Verus — Data Link

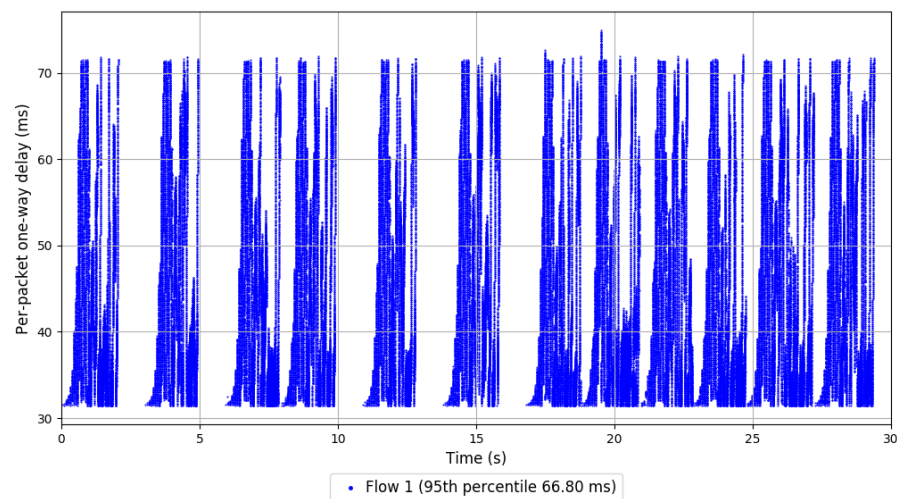
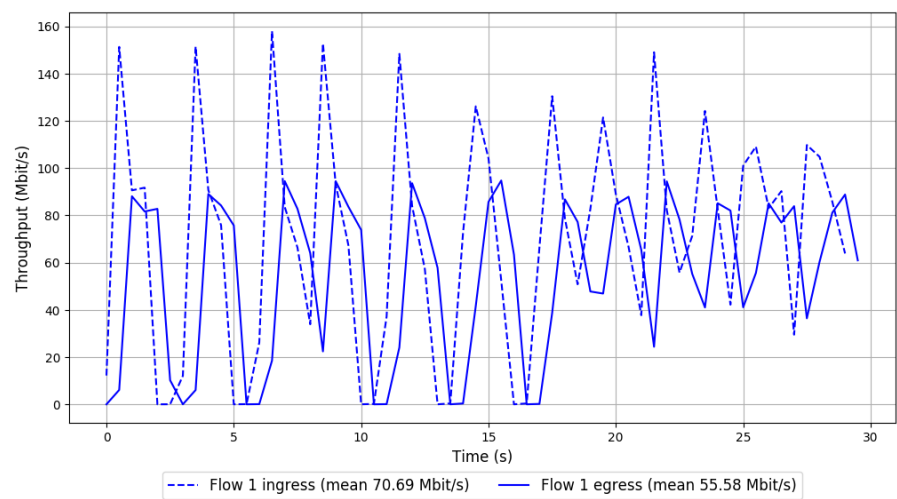


Run 4: Statistics of Verus

Start at: 2018-07-03 11:49:52
End at: 2018-07-03 11:50:22
Local clock offset: 1.315 ms
Remote clock offset: -1.545 ms

Below is generated by plot.py at 2018-07-03 14:28:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 55.58 Mbit/s
95th percentile per-packet one-way delay: 66.797 ms
Loss rate: 21.32%
-- Flow 1:
Average throughput: 55.58 Mbit/s
95th percentile per-packet one-way delay: 66.797 ms
Loss rate: 21.32%

Run 4: Report of Verus — Data Link

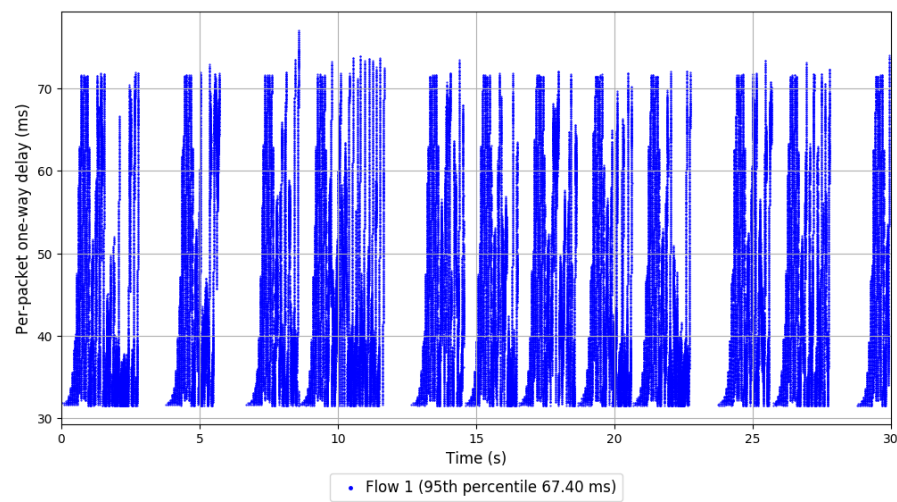
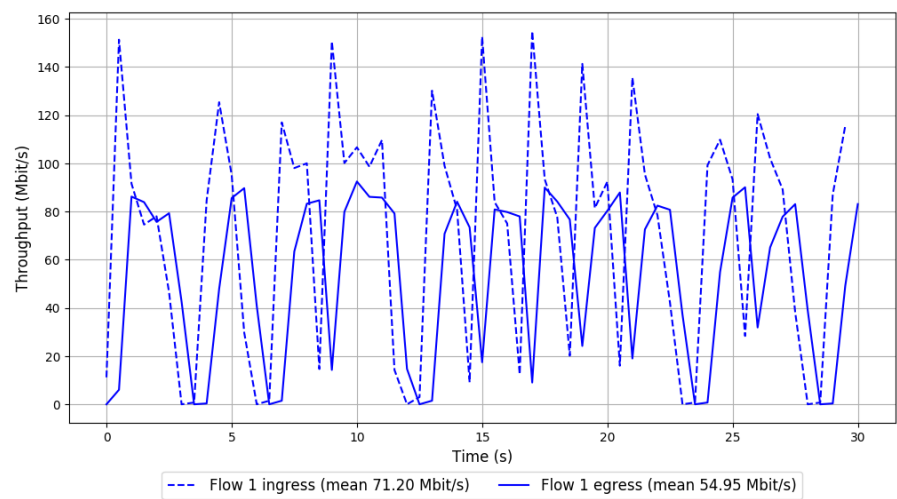


Run 5: Statistics of Verus

Start at: 2018-07-03 12:12:04
End at: 2018-07-03 12:12:34
Local clock offset: 0.892 ms
Remote clock offset: -1.452 ms

Below is generated by plot.py at 2018-07-03 14:28:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 54.95 Mbit/s
95th percentile per-packet one-way delay: 67.397 ms
Loss rate: 22.81%
-- Flow 1:
Average throughput: 54.95 Mbit/s
95th percentile per-packet one-way delay: 67.397 ms
Loss rate: 22.81%

Run 5: Report of Verus — Data Link

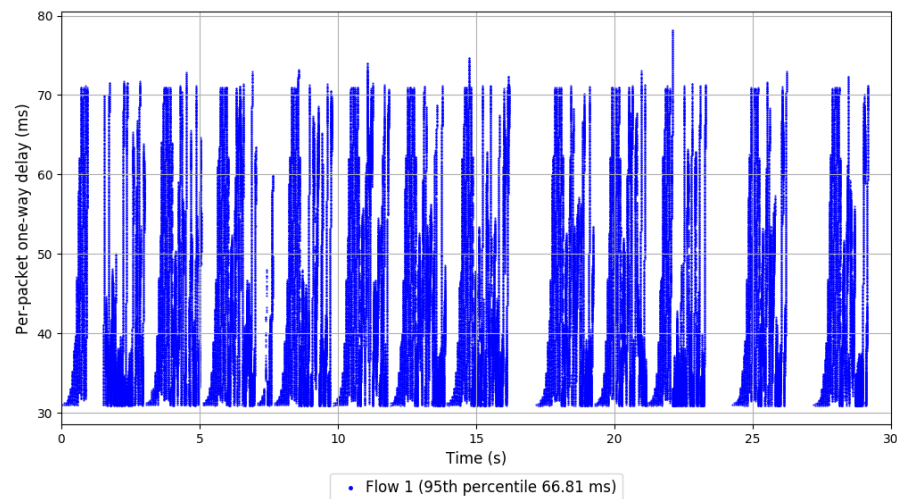
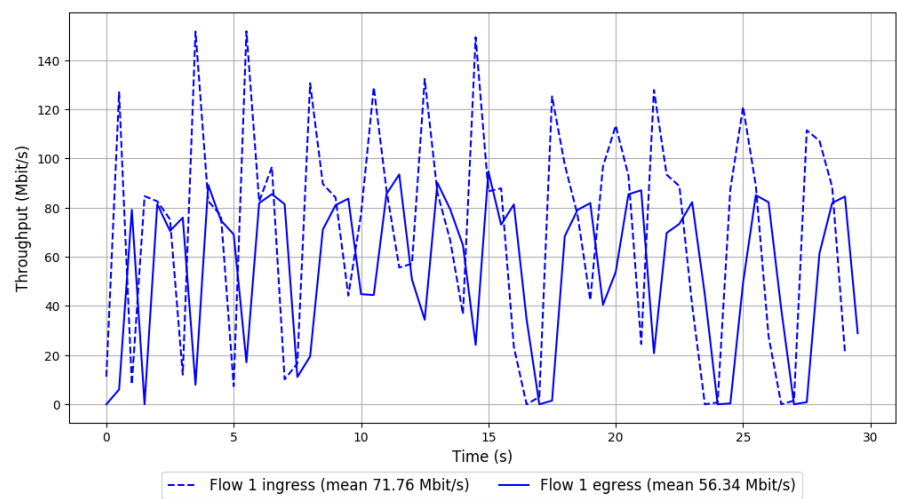


Run 6: Statistics of Verus

Start at: 2018-07-03 12:34:17
End at: 2018-07-03 12:34:47
Local clock offset: 1.019 ms
Remote clock offset: -0.657 ms

Below is generated by plot.py at 2018-07-03 14:28:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 56.34 Mbit/s
95th percentile per-packet one-way delay: 66.808 ms
Loss rate: 21.44%
-- Flow 1:
Average throughput: 56.34 Mbit/s
95th percentile per-packet one-way delay: 66.808 ms
Loss rate: 21.44%

Run 6: Report of Verus — Data Link

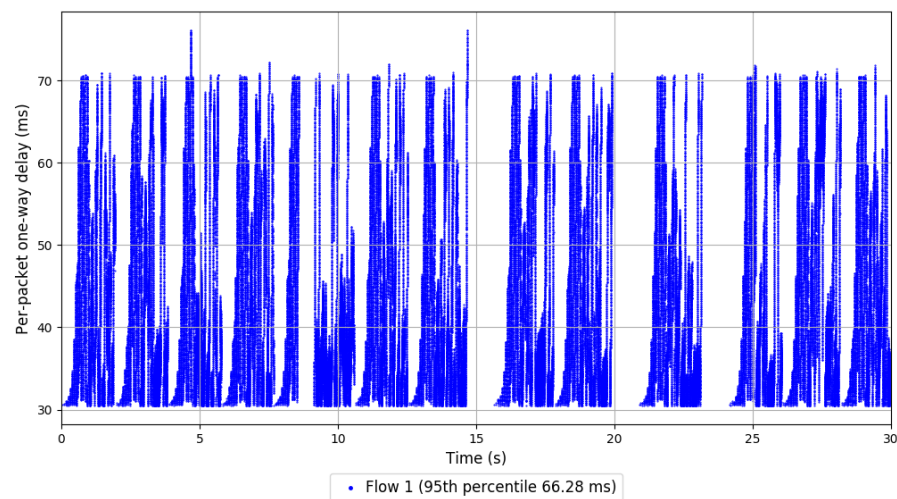
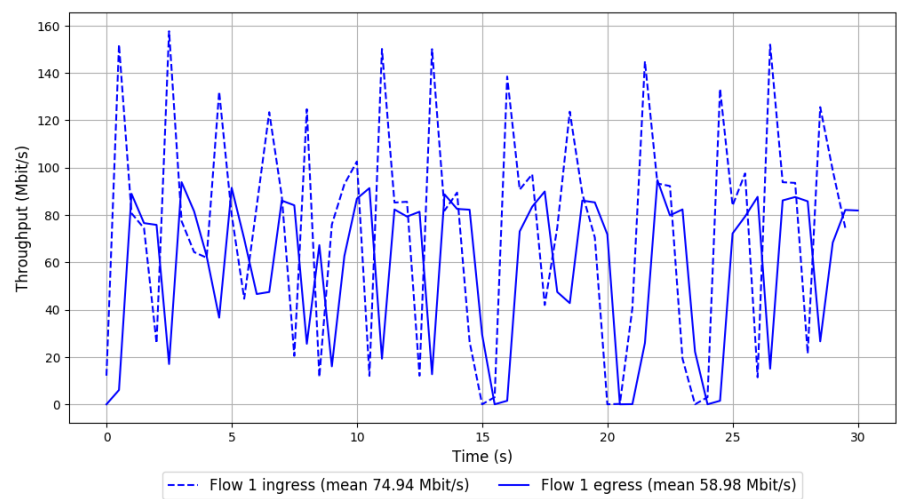


Run 7: Statistics of Verus

Start at: 2018-07-03 12:56:29
End at: 2018-07-03 12:56:59
Local clock offset: 0.655 ms
Remote clock offset: -0.393 ms

Below is generated by plot.py at 2018-07-03 14:29:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 58.98 Mbit/s
95th percentile per-packet one-way delay: 66.277 ms
Loss rate: 21.28%
-- Flow 1:
Average throughput: 58.98 Mbit/s
95th percentile per-packet one-way delay: 66.277 ms
Loss rate: 21.28%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-07-03 13:18:39

End at: 2018-07-03 13:19:09

Local clock offset: 0.297 ms

Remote clock offset: 1.32 ms

Below is generated by plot.py at 2018-07-03 14:29:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 61.31 Mbit/s

95th percentile per-packet one-way delay: 66.614 ms

Loss rate: 22.18%

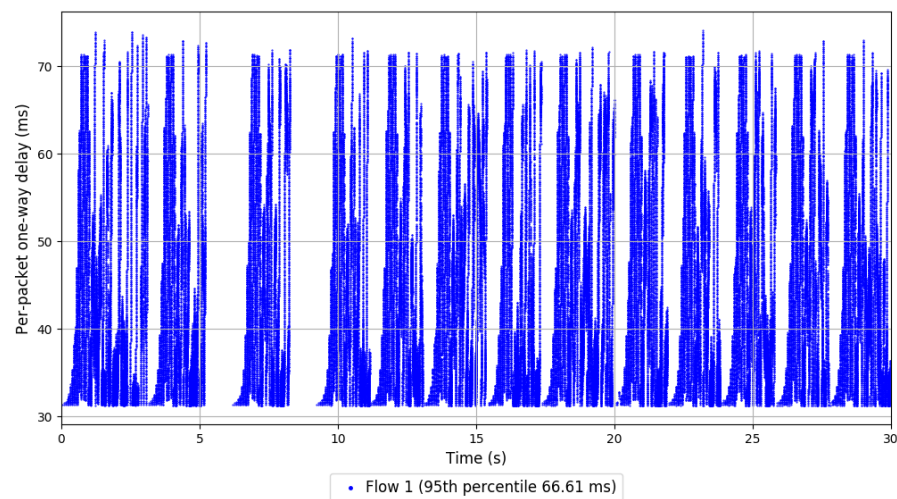
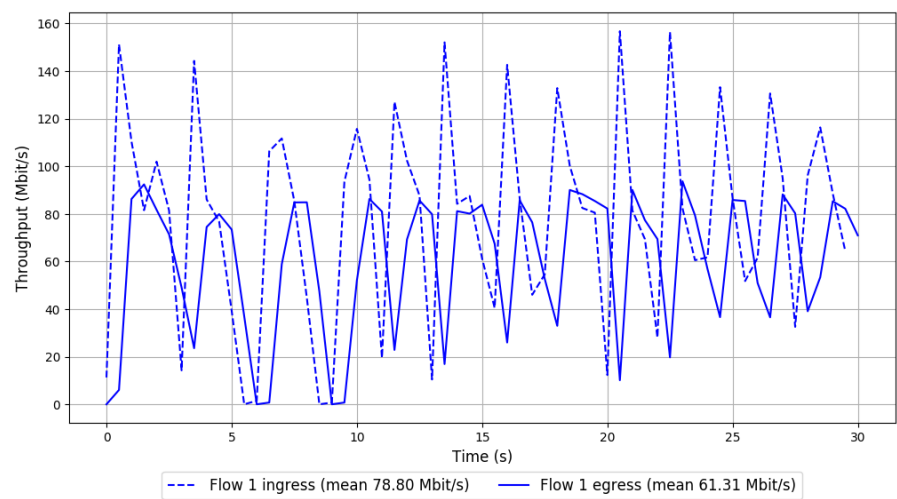
-- Flow 1:

Average throughput: 61.31 Mbit/s

95th percentile per-packet one-way delay: 66.614 ms

Loss rate: 22.18%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-07-03 13:40:56

End at: 2018-07-03 13:41:26

Local clock offset: 0.295 ms

Remote clock offset: 4.195 ms

Below is generated by plot.py at 2018-07-03 14:29:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.24 Mbit/s

95th percentile per-packet one-way delay: 66.975 ms

Loss rate: 41.78%

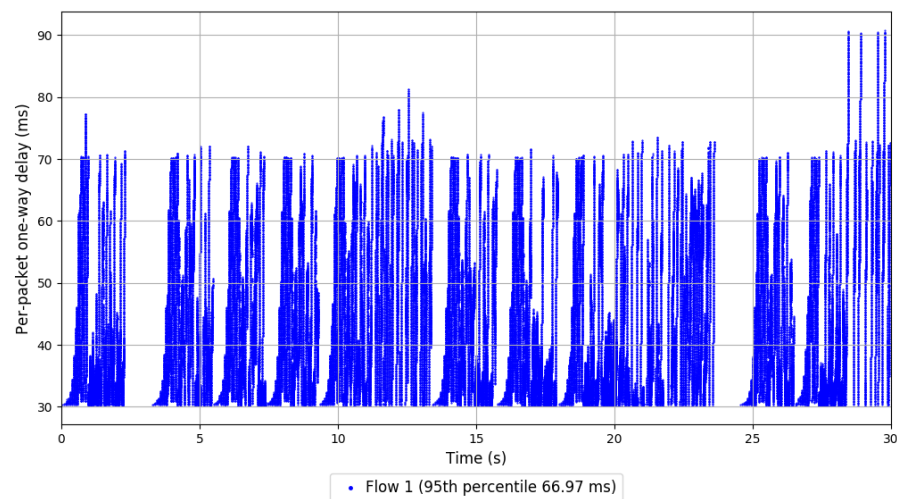
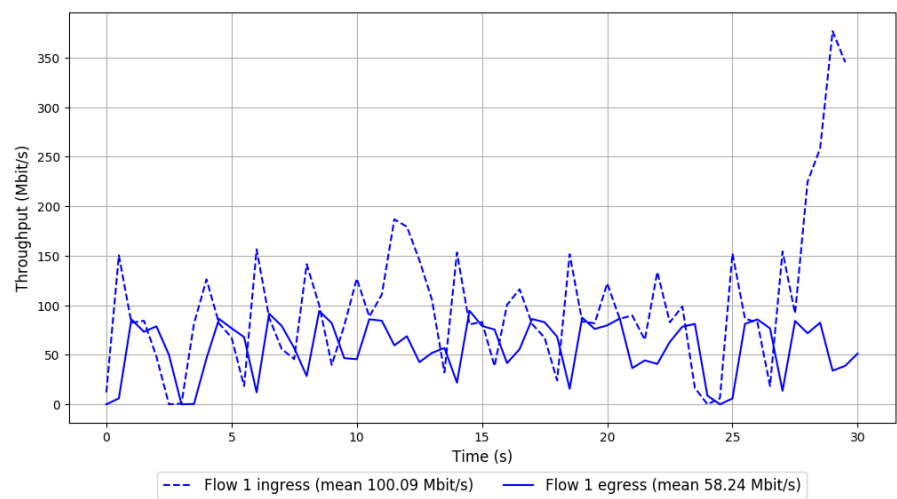
-- Flow 1:

Average throughput: 58.24 Mbit/s

95th percentile per-packet one-way delay: 66.975 ms

Loss rate: 41.78%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-07-03 14:03:16

End at: 2018-07-03 14:03:46

Local clock offset: 0.191 ms

Remote clock offset: 7.506 ms

Below is generated by plot.py at 2018-07-03 14:29:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 53.21 Mbit/s

95th percentile per-packet one-way delay: 71.816 ms

Loss rate: 64.85%

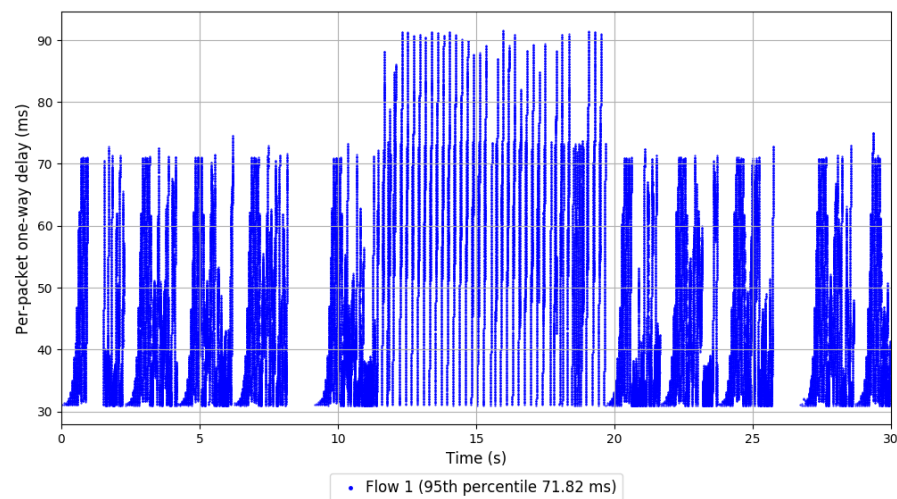
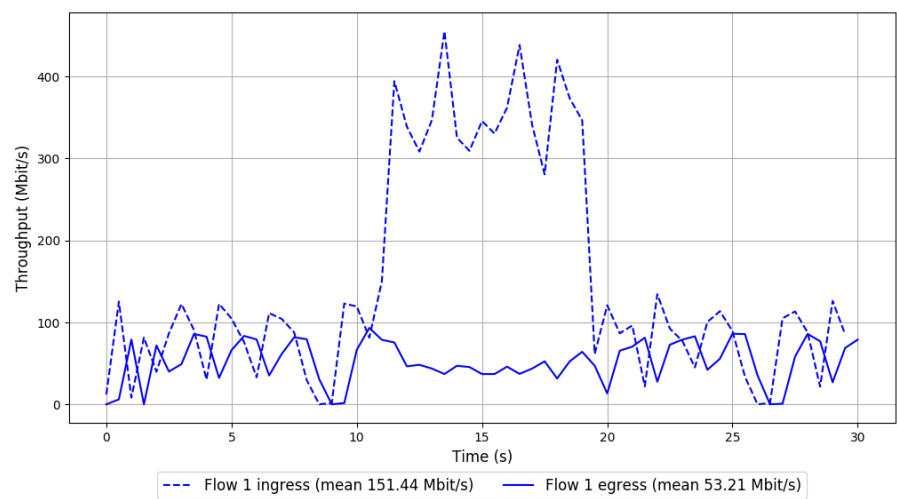
-- Flow 1:

Average throughput: 53.21 Mbit/s

95th percentile per-packet one-way delay: 71.816 ms

Loss rate: 64.85%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-07-03 10:37:43

End at: 2018-07-03 10:38:13

Local clock offset: -17.44 ms

Remote clock offset: -1.16 ms

Below is generated by plot.py at 2018-07-03 14:29:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.72 Mbit/s

95th percentile per-packet one-way delay: 46.074 ms

Loss rate: 0.00%

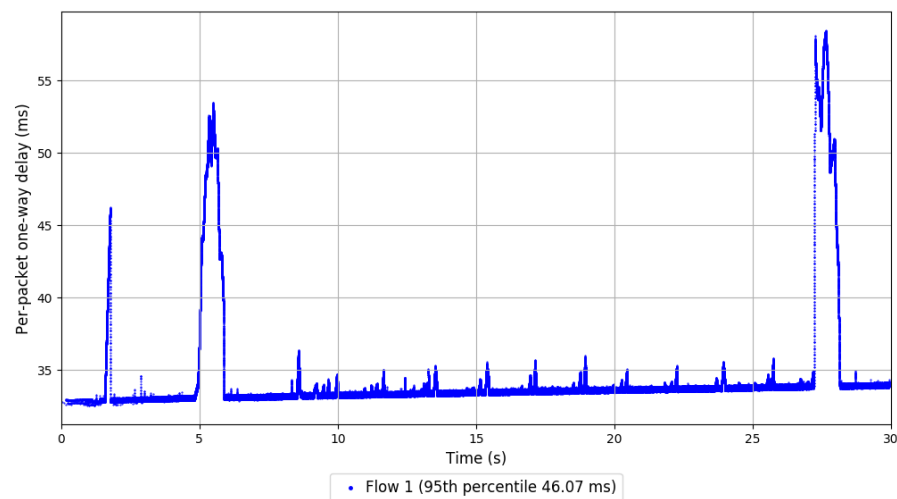
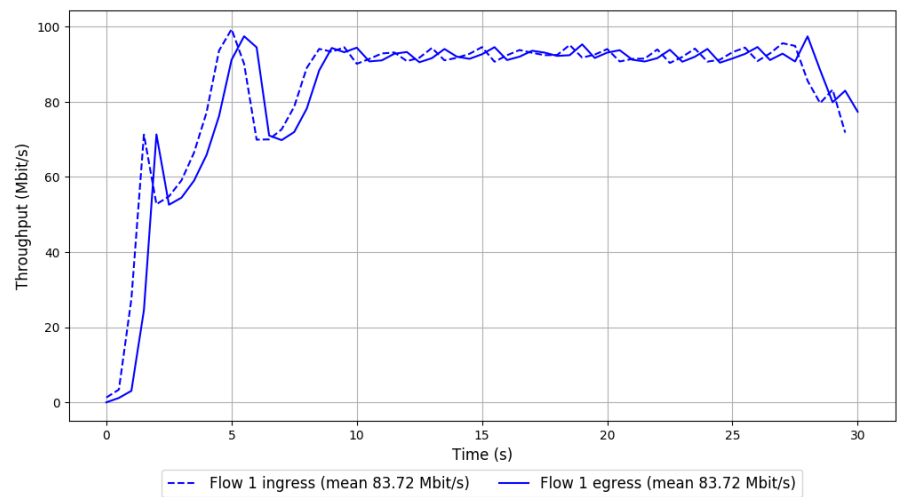
-- Flow 1:

Average throughput: 83.72 Mbit/s

95th percentile per-packet one-way delay: 46.074 ms

Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link

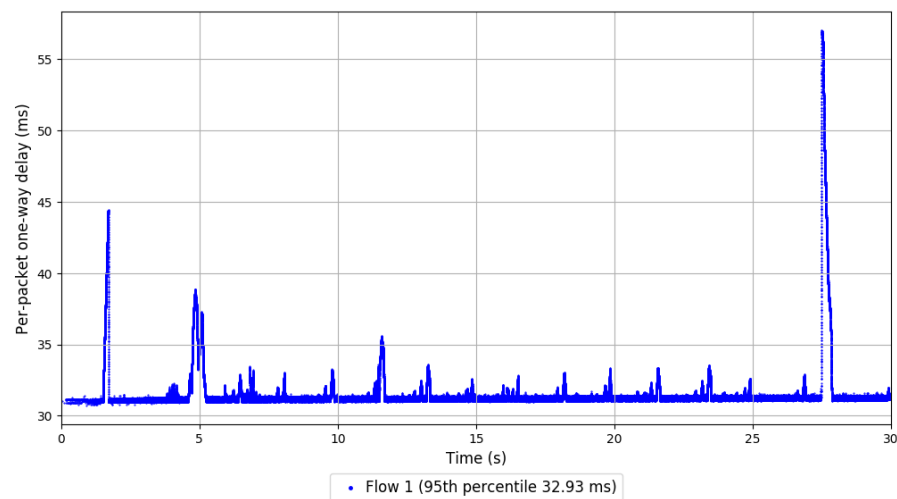
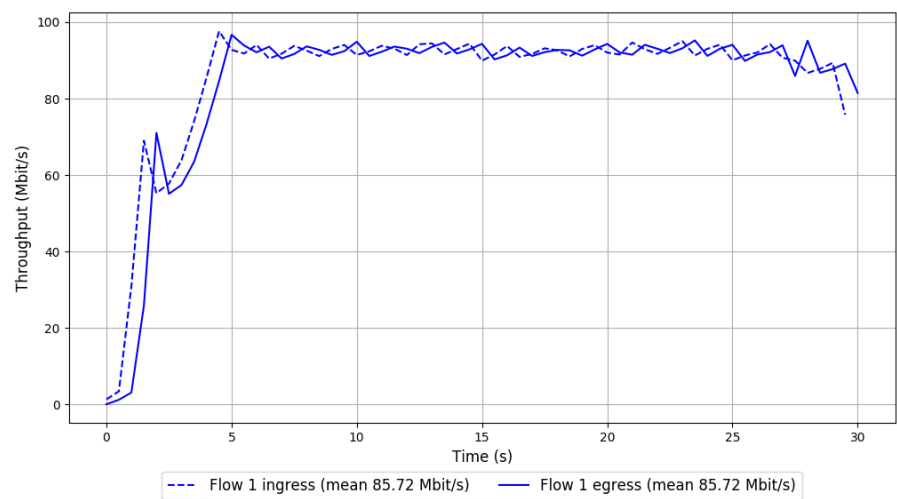


Run 2: Statistics of PCC-Vivace

Start at: 2018-07-03 11:00:07
End at: 2018-07-03 11:00:37
Local clock offset: 3.343 ms
Remote clock offset: -0.771 ms

Below is generated by plot.py at 2018-07-03 14:29:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.72 Mbit/s
95th percentile per-packet one-way delay: 32.926 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.72 Mbit/s
95th percentile per-packet one-way delay: 32.926 ms
Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-07-03 11:22:20

End at: 2018-07-03 11:22:50

Local clock offset: 2.525 ms

Remote clock offset: -1.626 ms

Below is generated by plot.py at 2018-07-03 14:29:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.51 Mbit/s

95th percentile per-packet one-way delay: 32.143 ms

Loss rate: 0.00%

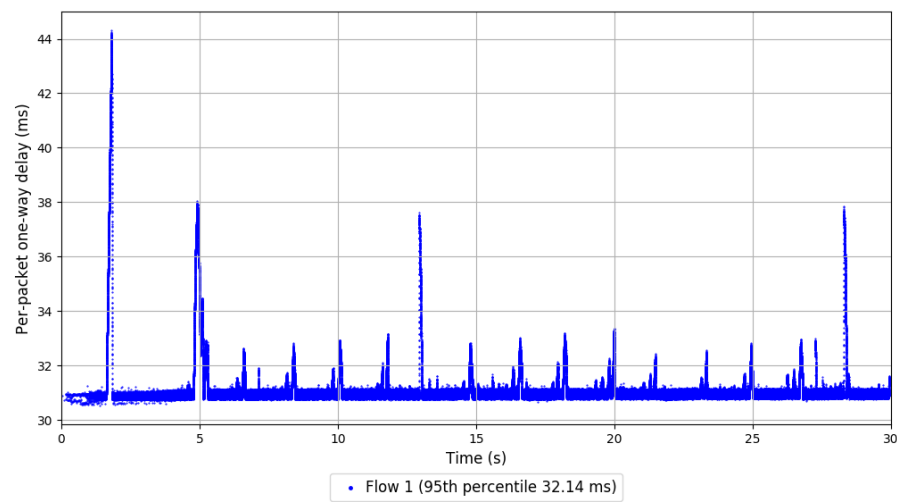
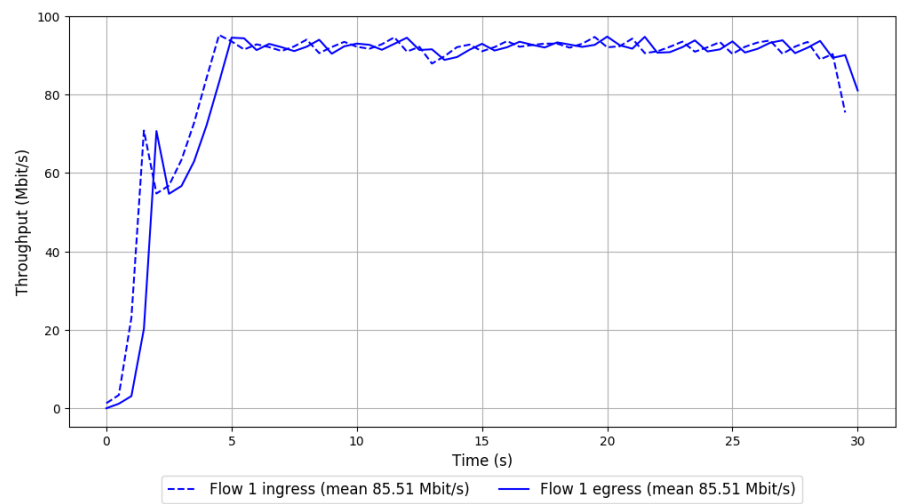
-- Flow 1:

Average throughput: 85.51 Mbit/s

95th percentile per-packet one-way delay: 32.143 ms

Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-07-03 11:44:35

End at: 2018-07-03 11:45:05

Local clock offset: 1.418 ms

Remote clock offset: -1.957 ms

Below is generated by plot.py at 2018-07-03 14:30:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.19 Mbit/s

95th percentile per-packet one-way delay: 33.899 ms

Loss rate: 0.05%

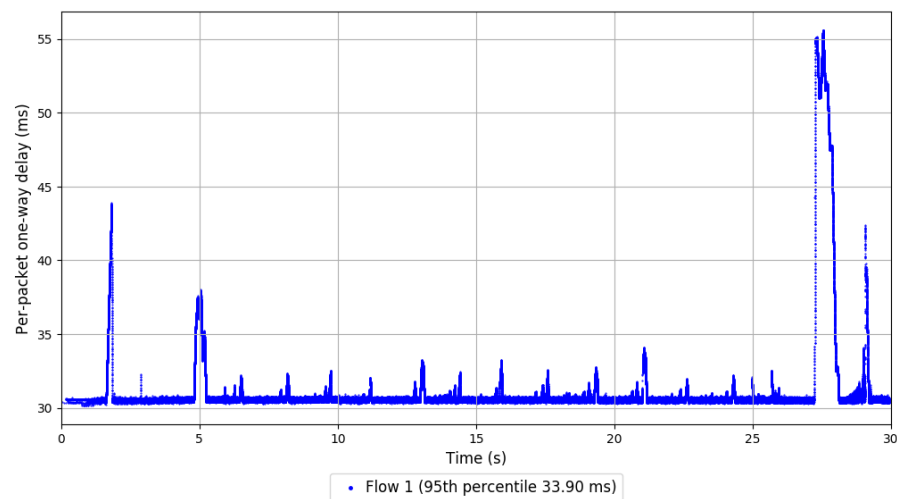
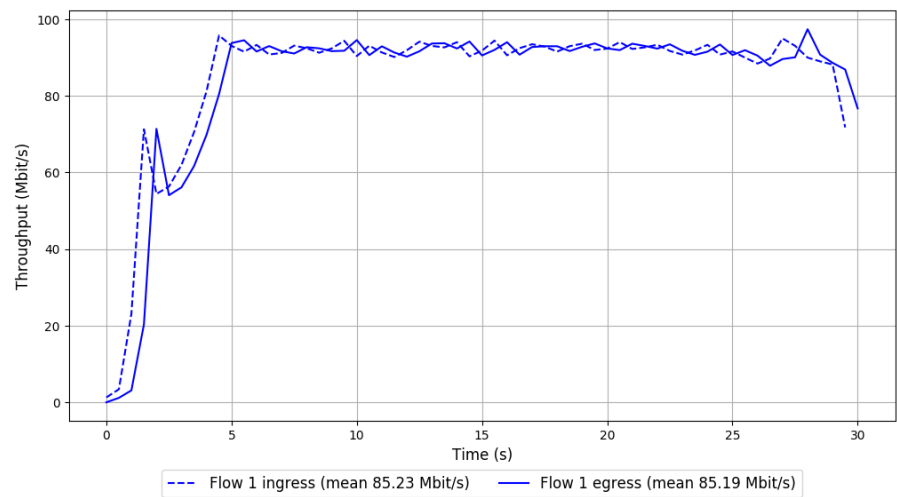
-- Flow 1:

Average throughput: 85.19 Mbit/s

95th percentile per-packet one-way delay: 33.899 ms

Loss rate: 0.05%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-07-03 12:06:48

End at: 2018-07-03 12:07:18

Local clock offset: 1.339 ms

Remote clock offset: -1.958 ms

Below is generated by plot.py at 2018-07-03 14:30:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.38 Mbit/s

95th percentile per-packet one-way delay: 42.727 ms

Loss rate: 0.02%

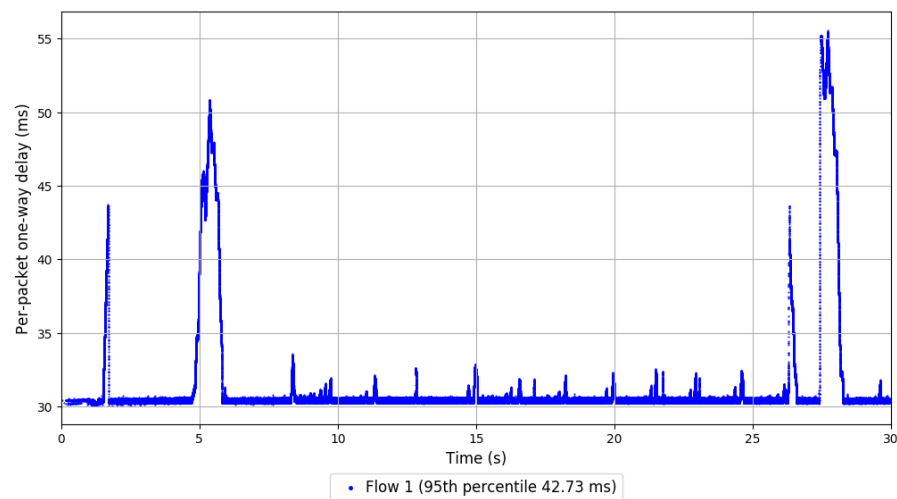
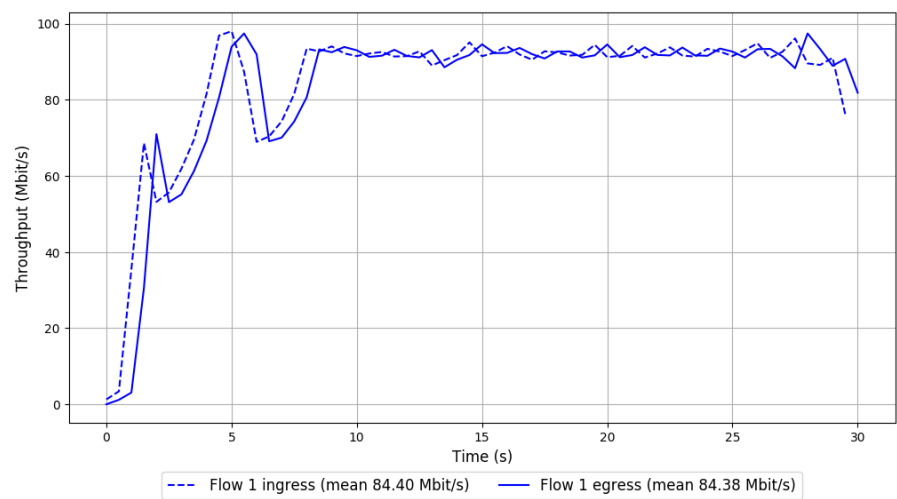
-- Flow 1:

Average throughput: 84.38 Mbit/s

95th percentile per-packet one-way delay: 42.727 ms

Loss rate: 0.02%

Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-07-03 12:28:59

End at: 2018-07-03 12:29:29

Local clock offset: 0.974 ms

Remote clock offset: -0.942 ms

Below is generated by plot.py at 2018-07-03 14:30:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.77 Mbit/s

95th percentile per-packet one-way delay: 37.799 ms

Loss rate: 0.00%

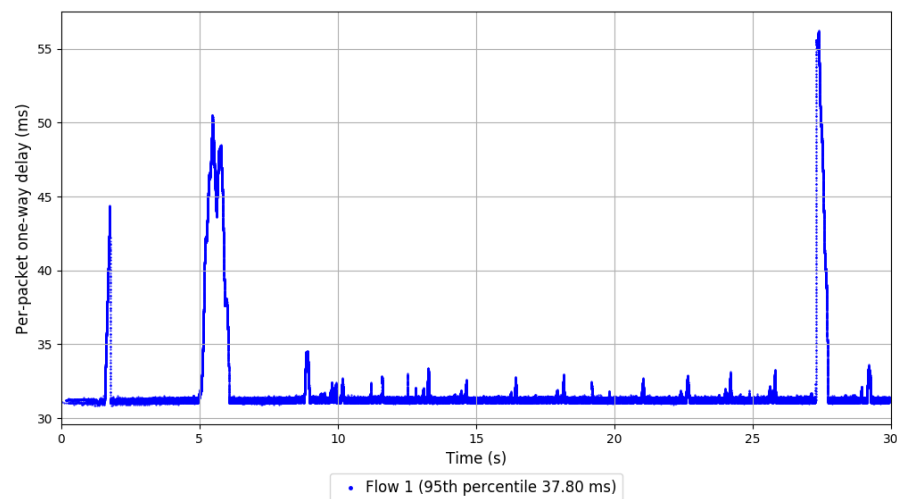
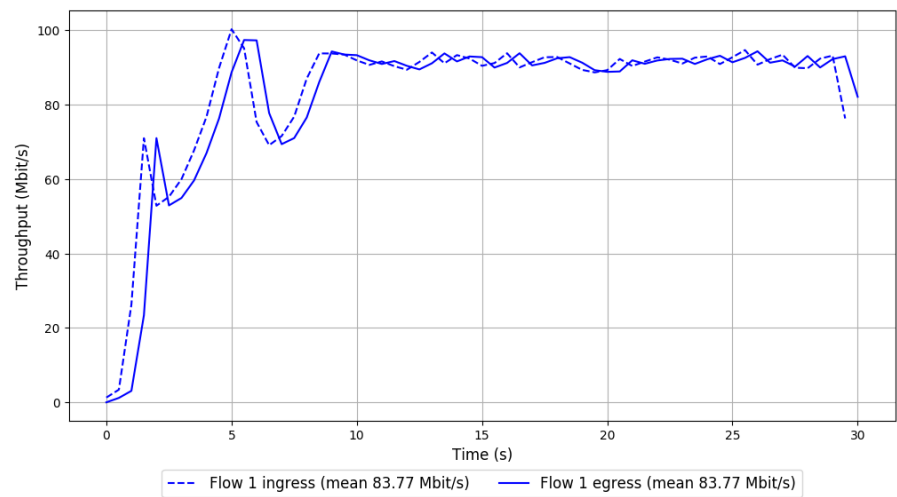
-- Flow 1:

Average throughput: 83.77 Mbit/s

95th percentile per-packet one-way delay: 37.799 ms

Loss rate: 0.00%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-07-03 12:51:12

End at: 2018-07-03 12:51:42

Local clock offset: 0.613 ms

Remote clock offset: 0.007 ms

Below is generated by plot.py at 2018-07-03 14:30:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.34 Mbit/s

95th percentile per-packet one-way delay: 33.418 ms

Loss rate: 0.00%

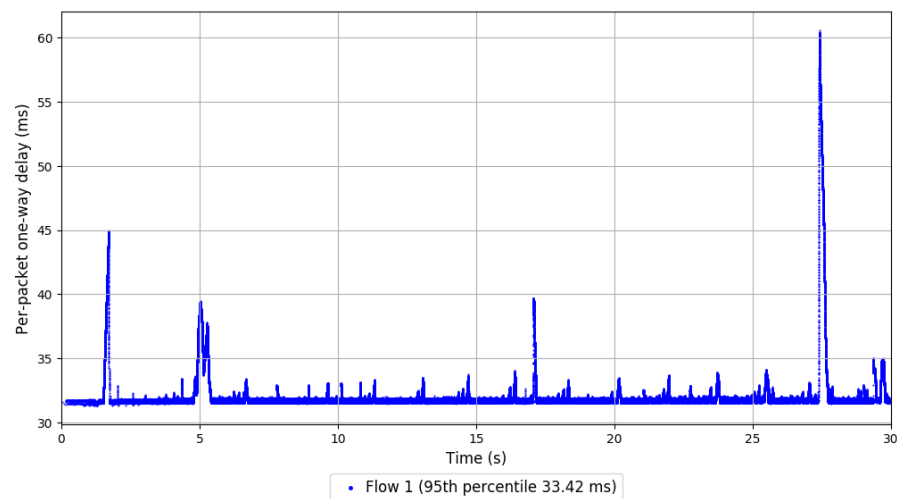
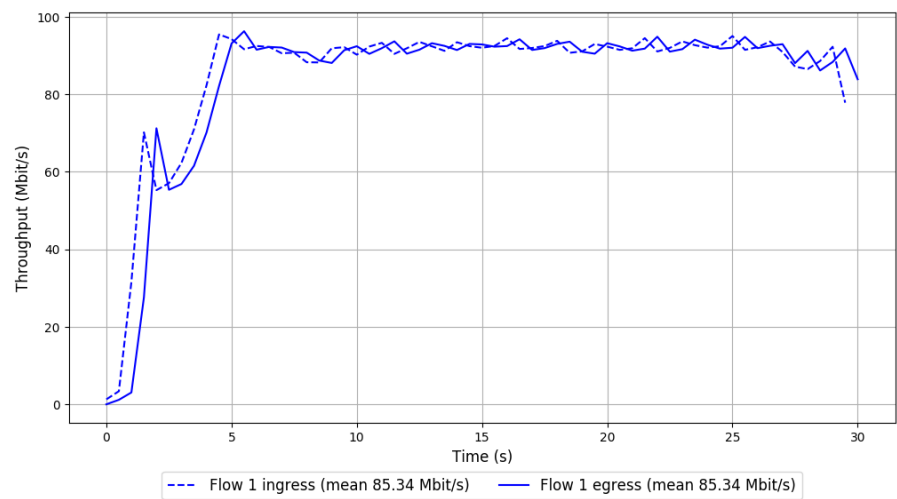
-- Flow 1:

Average throughput: 85.34 Mbit/s

95th percentile per-packet one-way delay: 33.418 ms

Loss rate: 0.00%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-07-03 13:13:22

End at: 2018-07-03 13:13:52

Local clock offset: 0.418 ms

Remote clock offset: 0.805 ms

Below is generated by plot.py at 2018-07-03 14:30:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.59 Mbit/s

95th percentile per-packet one-way delay: 32.738 ms

Loss rate: 0.00%

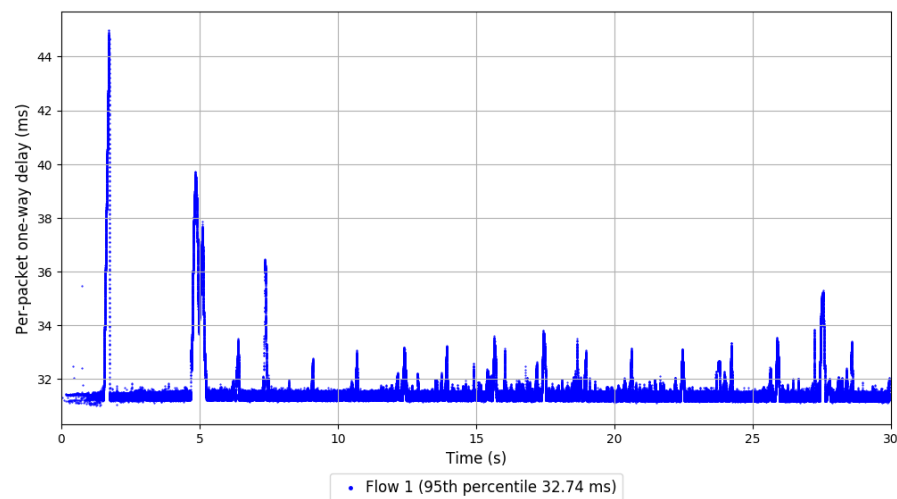
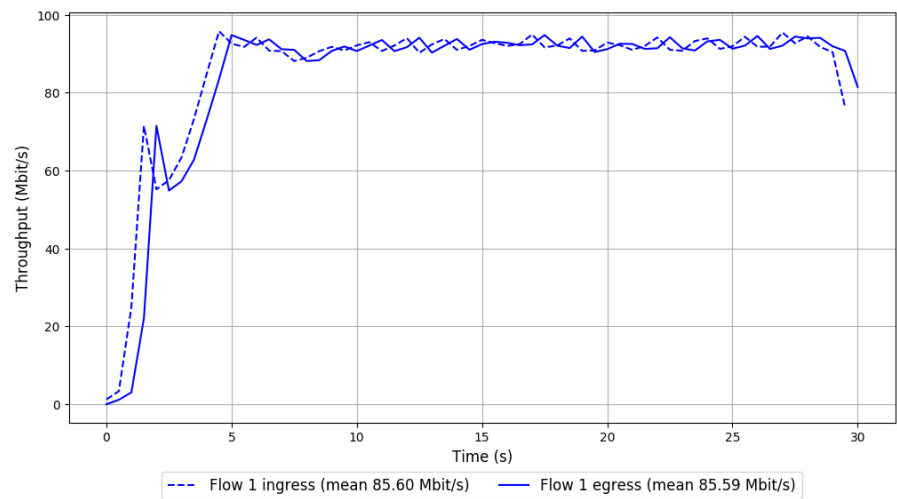
-- Flow 1:

Average throughput: 85.59 Mbit/s

95th percentile per-packet one-way delay: 32.738 ms

Loss rate: 0.00%

Run 8: Report of PCC-Vivace — Data Link



Run 9: Statistics of PCC-Vivace

Start at: 2018-07-03 13:35:38

End at: 2018-07-03 13:36:08

Local clock offset: 0.293 ms

Remote clock offset: 3.695 ms

Below is generated by plot.py at 2018-07-03 14:30:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.89 Mbit/s

95th percentile per-packet one-way delay: 32.948 ms

Loss rate: 0.04%

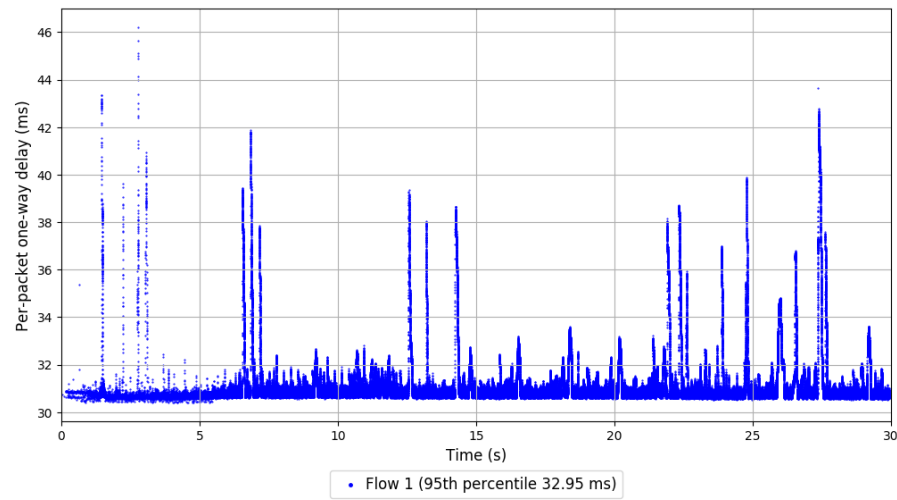
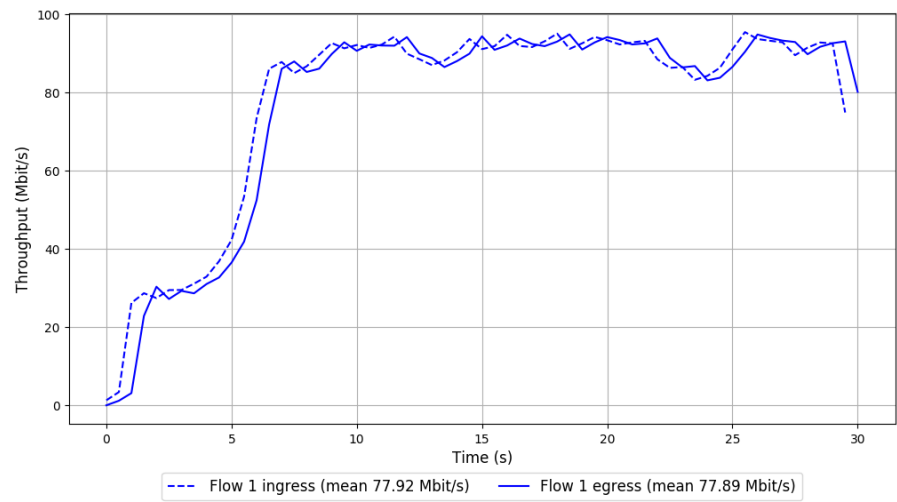
-- Flow 1:

Average throughput: 77.89 Mbit/s

95th percentile per-packet one-way delay: 32.948 ms

Loss rate: 0.04%

Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-07-03 13:57:58

End at: 2018-07-03 13:58:28

Local clock offset: 0.203 ms

Remote clock offset: 7.251 ms

Below is generated by plot.py at 2018-07-03 14:30:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.65 Mbit/s

95th percentile per-packet one-way delay: 46.756 ms

Loss rate: 0.01%

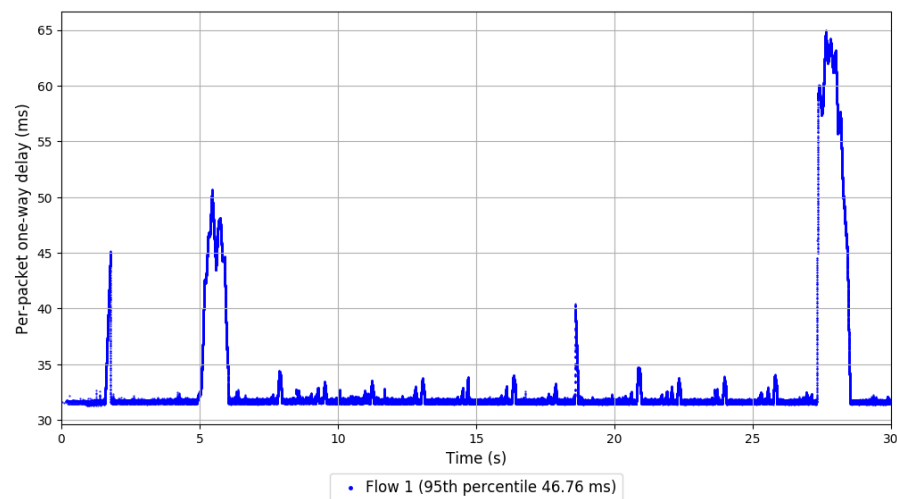
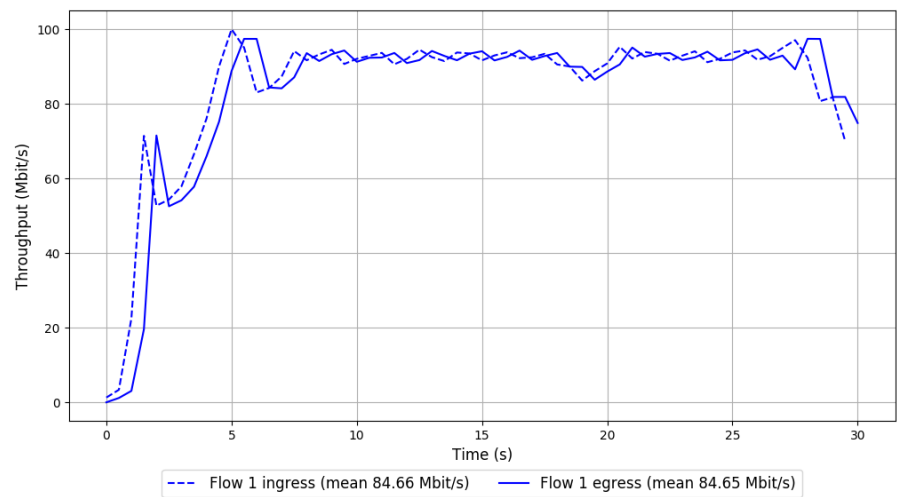
-- Flow 1:

Average throughput: 84.65 Mbit/s

95th percentile per-packet one-way delay: 46.756 ms

Loss rate: 0.01%

Run 10: Report of PCC-Vivace — Data Link

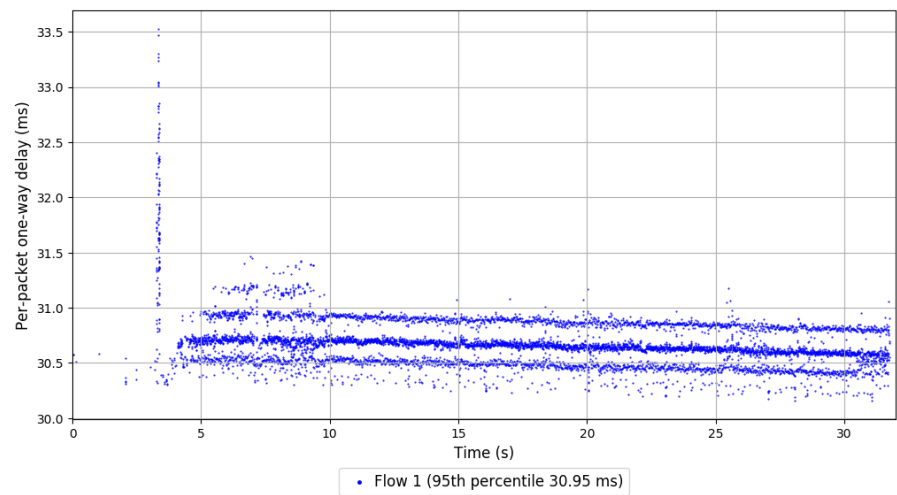
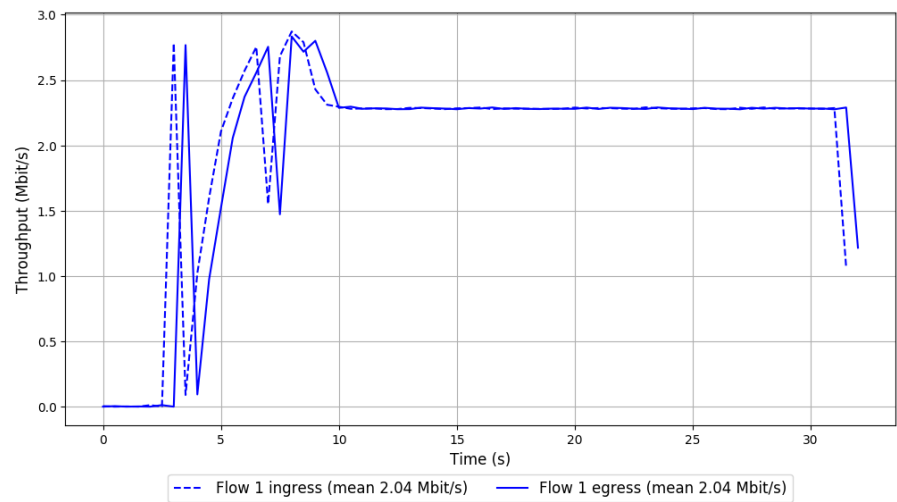


Run 1: Statistics of WebRTC media

Start at: 2018-07-03 10:31:18
End at: 2018-07-03 10:31:48
Local clock offset: -28.87 ms
Remote clock offset: -1.093 ms

Below is generated by plot.py at 2018-07-03 14:30:36
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 30.948 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 30.948 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

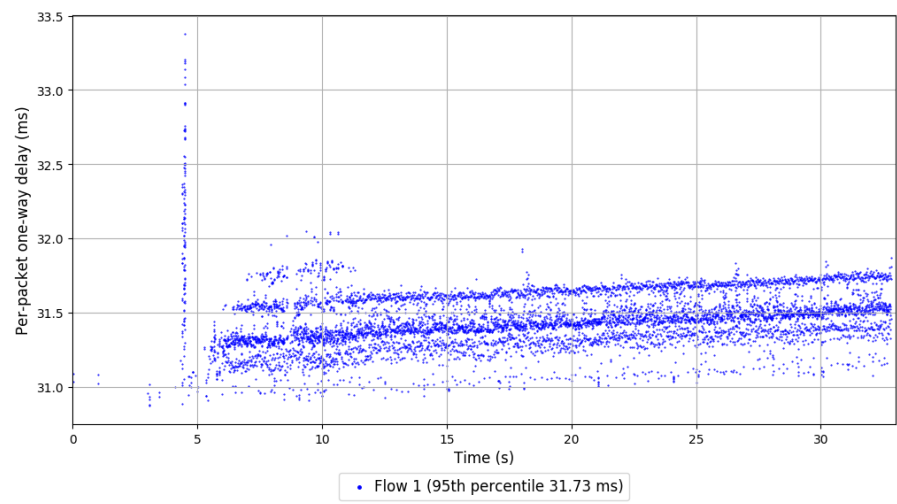
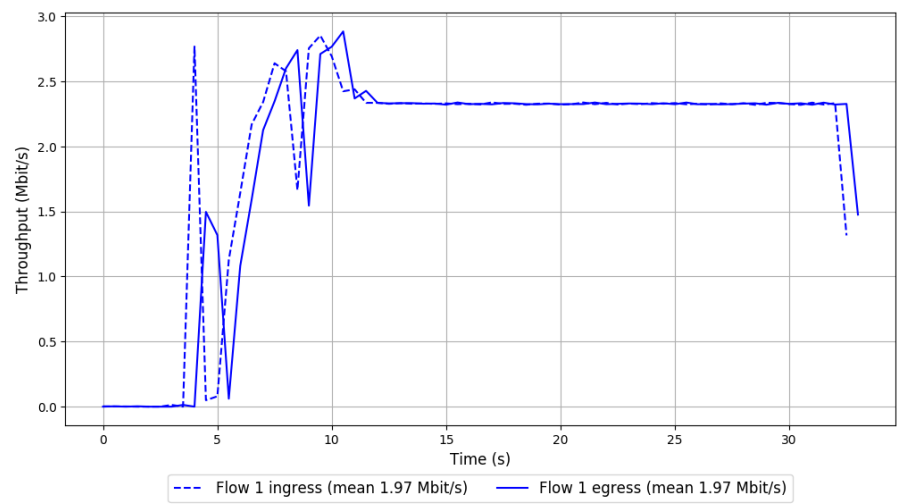


Run 2: Statistics of WebRTC media

Start at: 2018-07-03 10:53:42
End at: 2018-07-03 10:54:12
Local clock offset: 0.697 ms
Remote clock offset: -0.893 ms

Below is generated by plot.py at 2018-07-03 14:30:36
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 31.730 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 31.730 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

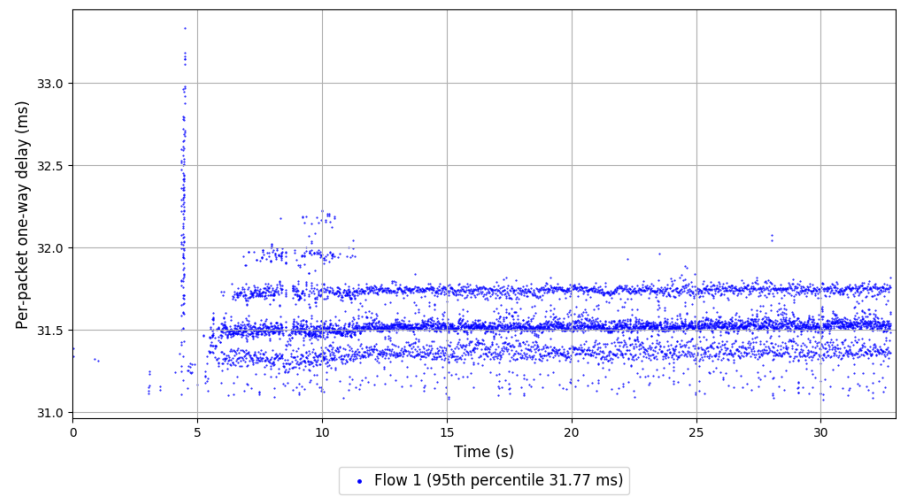
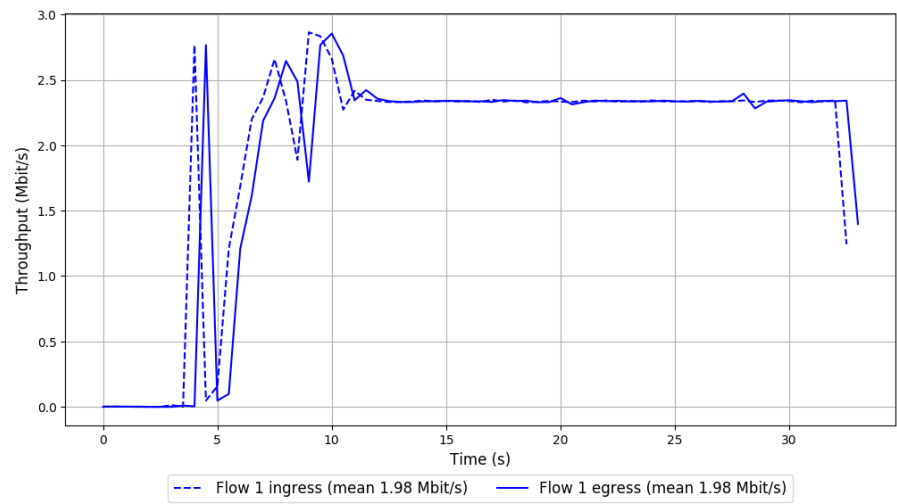


Run 3: Statistics of WebRTC media

Start at: 2018-07-03 11:15:55
End at: 2018-07-03 11:16:25
Local clock offset: 2.375 ms
Remote clock offset: -1.575 ms

Below is generated by plot.py at 2018-07-03 14:30:36
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 31.773 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 31.773 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

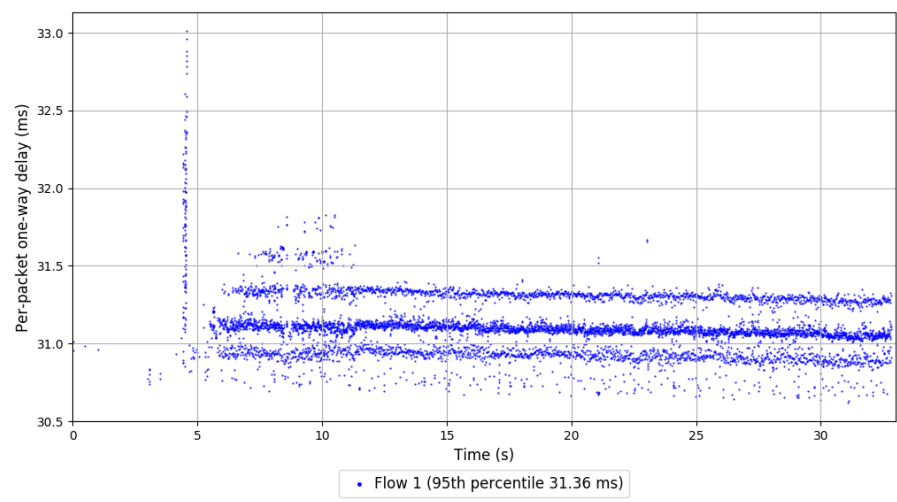
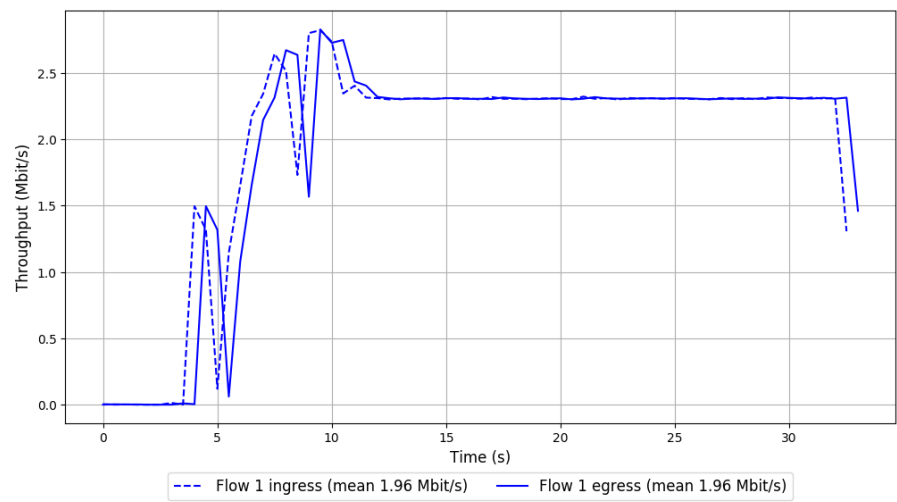


Run 4: Statistics of WebRTC media

Start at: 2018-07-03 11:38:09
End at: 2018-07-03 11:38:39
Local clock offset: 2.184 ms
Remote clock offset: -2.117 ms

Below is generated by plot.py at 2018-07-03 14:30:36
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 31.357 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 31.357 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-07-03 12:00:24

End at: 2018-07-03 12:00:54

Local clock offset: 1.619 ms

Remote clock offset: -1.82 ms

Below is generated by plot.py at 2018-07-03 14:30:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 30.934 ms

Loss rate: 0.00%

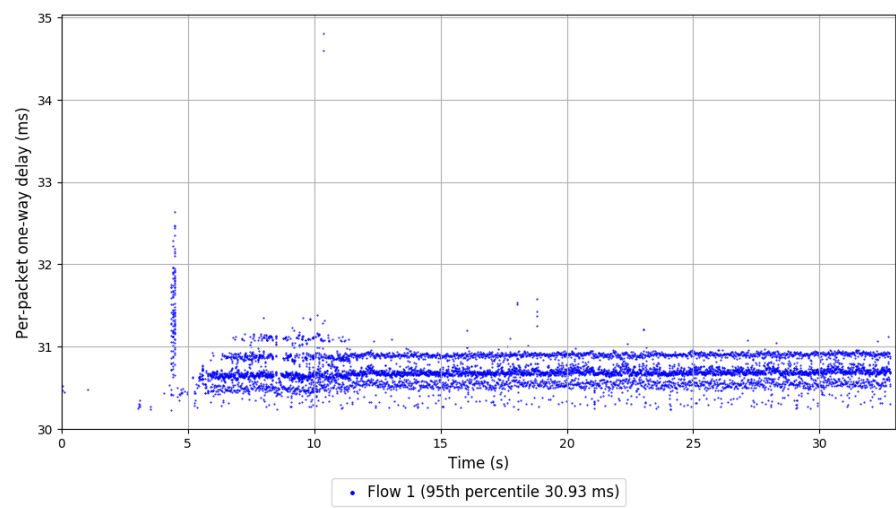
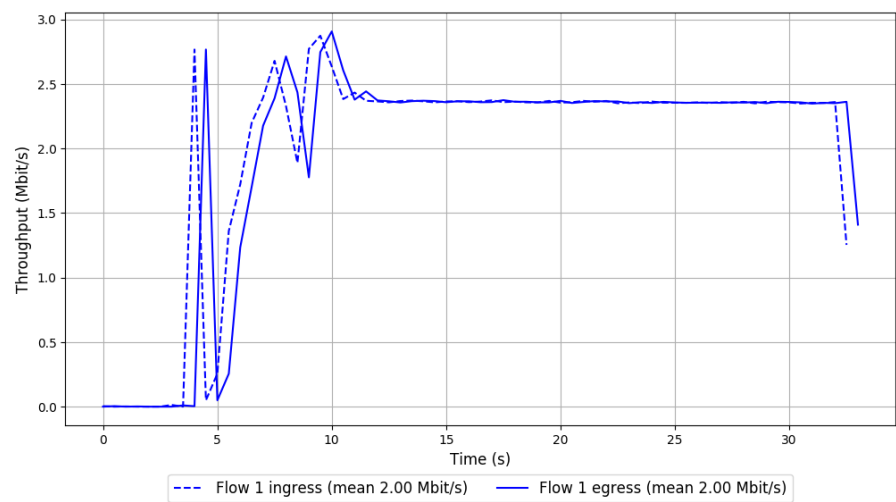
-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 30.934 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-07-03 12:22:34

End at: 2018-07-03 12:23:04

Local clock offset: 0.846 ms

Remote clock offset: -0.858 ms

Below is generated by plot.py at 2018-07-03 14:30:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 31.258 ms

Loss rate: 0.00%

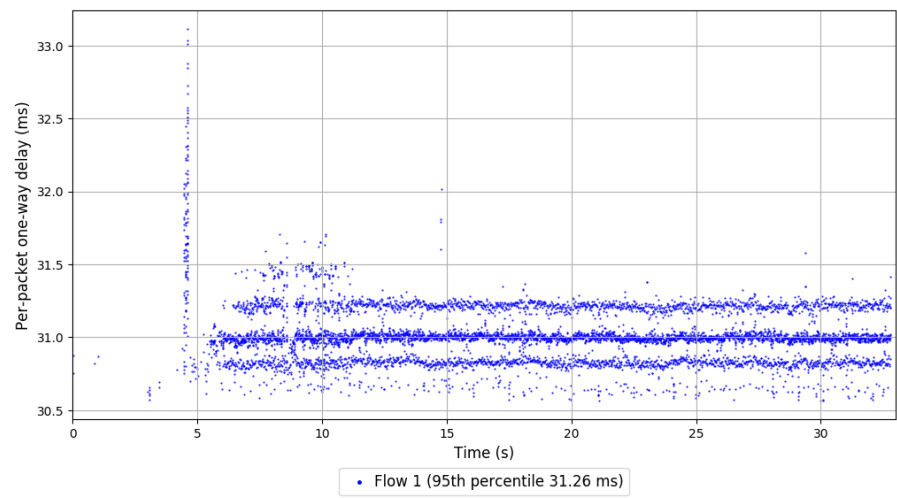
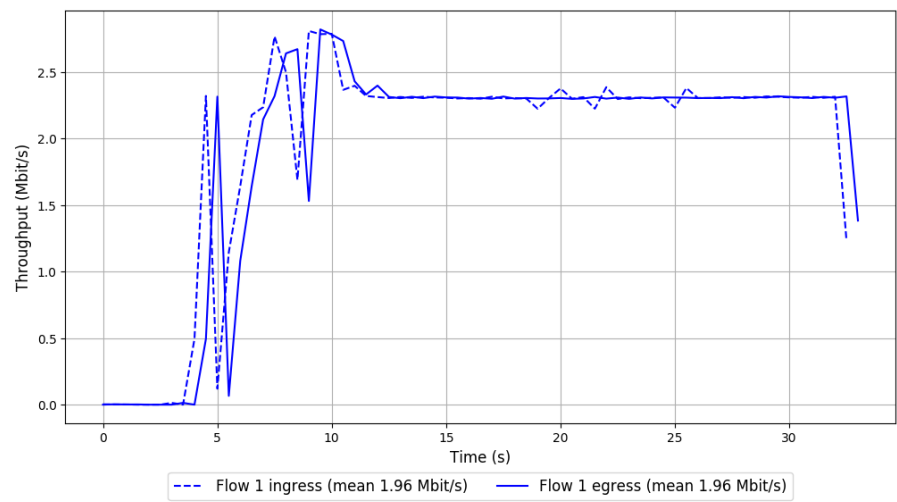
-- Flow 1:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 31.258 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-07-03 12:44:47

End at: 2018-07-03 12:45:17

Local clock offset: 0.514 ms

Remote clock offset: 0.473 ms

Below is generated by plot.py at 2018-07-03 14:30:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 32.978 ms

Loss rate: 0.61%

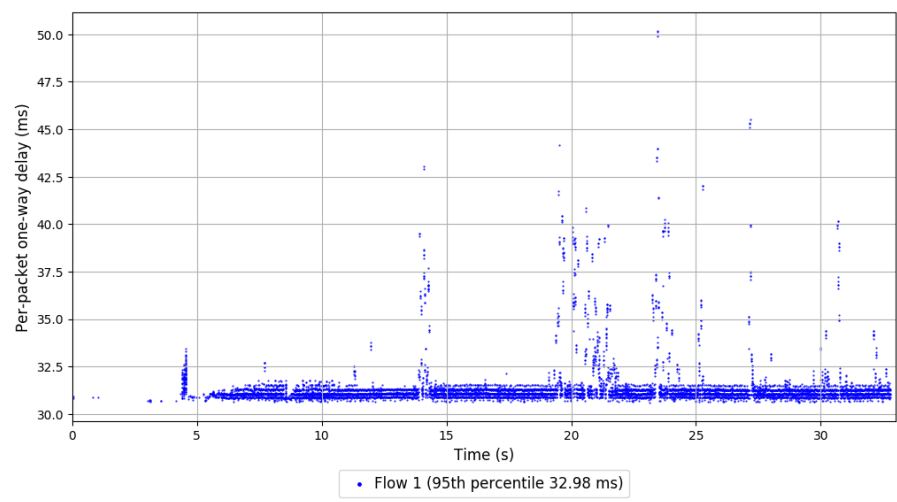
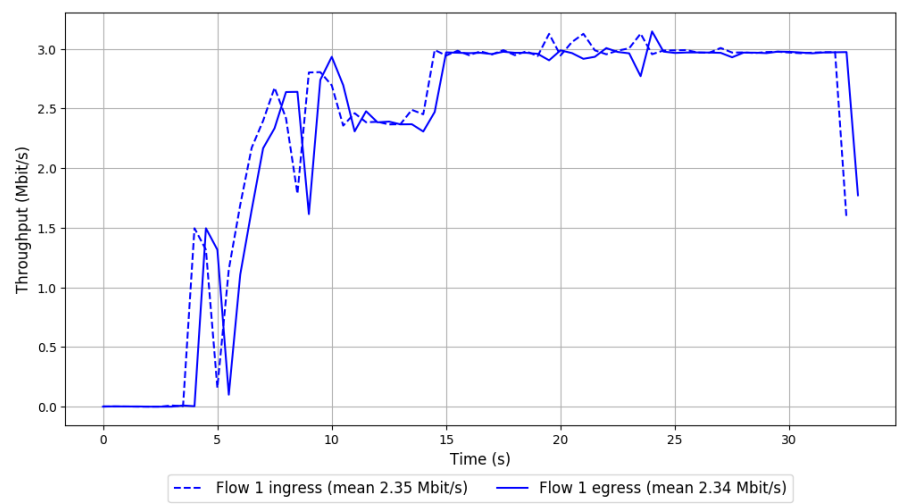
-- Flow 1:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 32.978 ms

Loss rate: 0.61%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-07-03 13:06:59

End at: 2018-07-03 13:07:29

Local clock offset: 0.571 ms

Remote clock offset: 0.298 ms

Below is generated by plot.py at 2018-07-03 14:30:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 31.085 ms

Loss rate: 0.00%

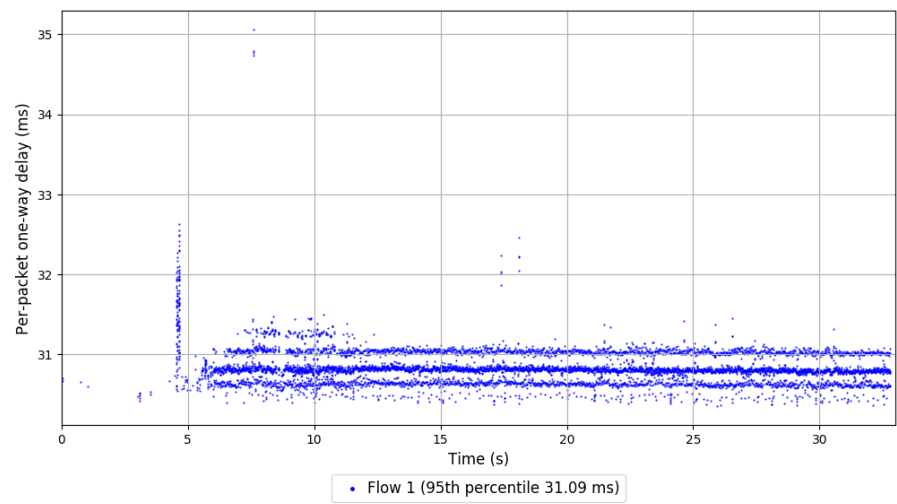
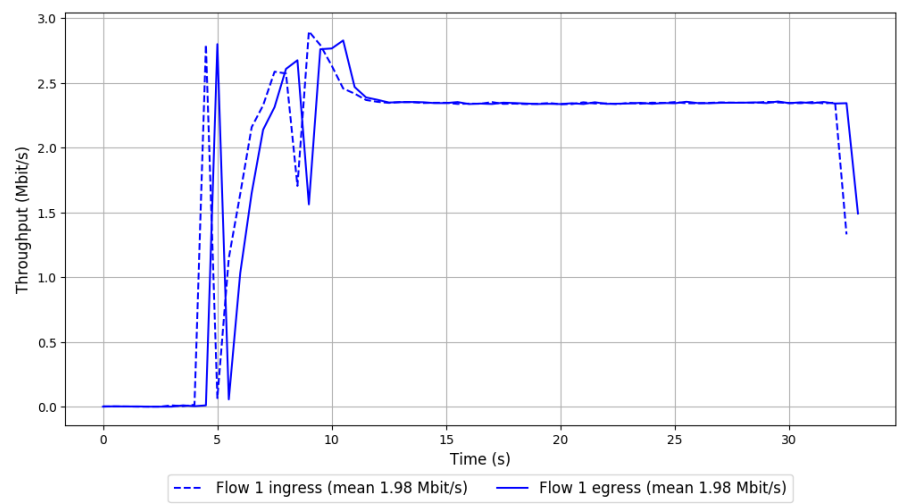
-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 31.085 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-07-03 13:29:11

End at: 2018-07-03 13:29:41

Local clock offset: 0.339 ms

Remote clock offset: 2.99 ms

Below is generated by plot.py at 2018-07-03 14:30:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 31.995 ms

Loss rate: 0.03%

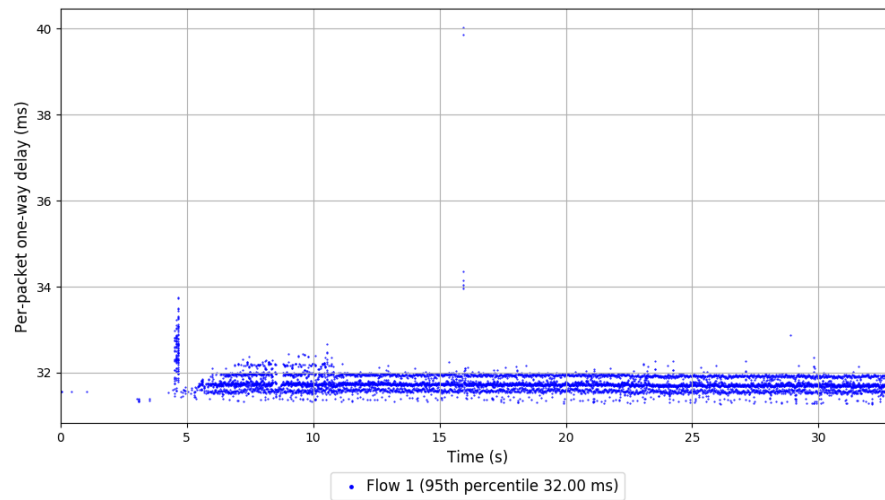
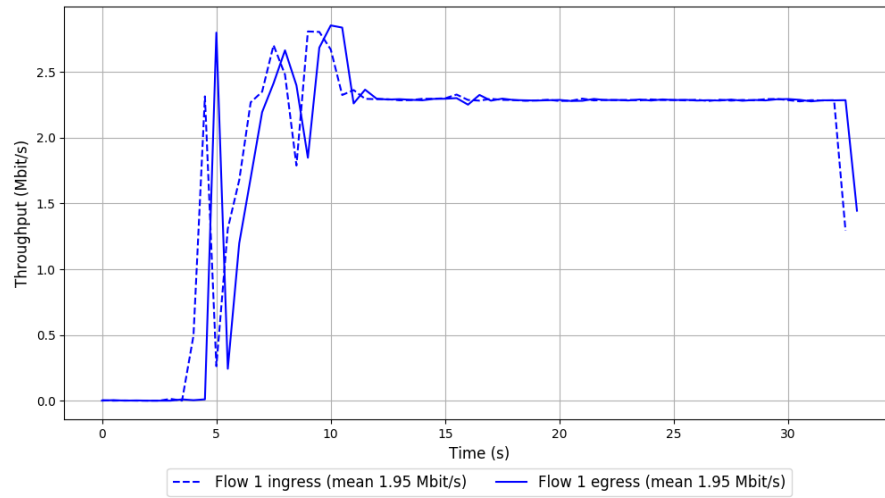
-- Flow 1:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 31.995 ms

Loss rate: 0.03%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-07-03 13:51:33

End at: 2018-07-03 13:52:03

Local clock offset: 0.118 ms

Remote clock offset: 6.54 ms

Below is generated by plot.py at 2018-07-03 14:30:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 32.426 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 32.426 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

