

Pantheon Report

Generated at 2019-02-05 15:10:20 (UTC).

Data path: Colombia on **p4p1** (*remote*) → AWS Brazil 2 on **ens5** (*local*).

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against **gps.ntp.br** and have been applied to correct the timestamps in logs.

System info:

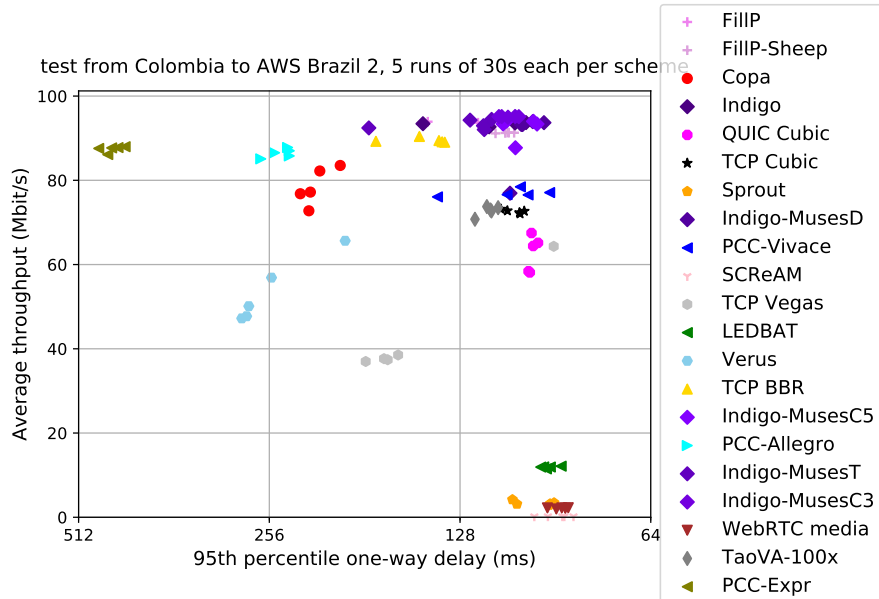
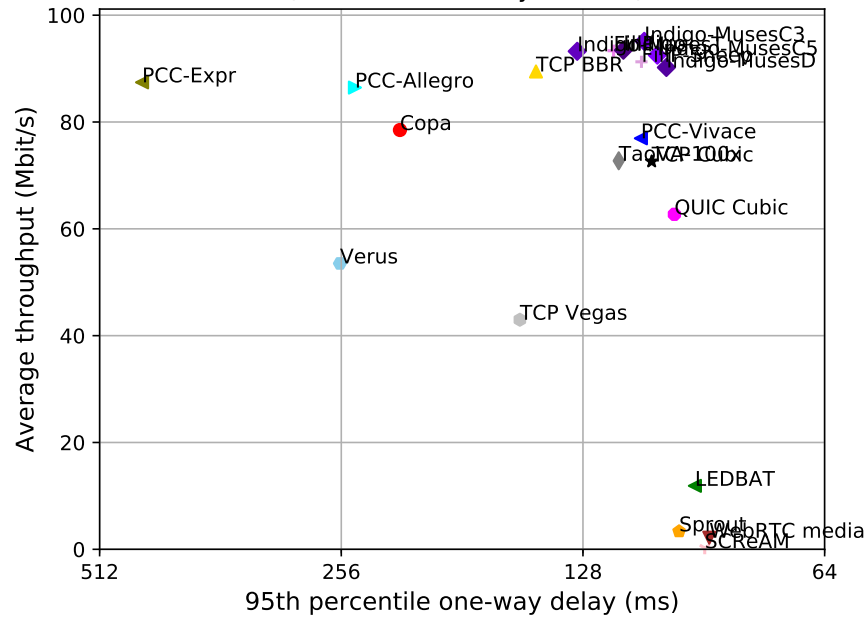
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
```

third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from Colombia to AWS Brazil 2, 5 runs of 30s each per scheme
(mean of all runs by scheme)



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	89.46	146.46	1.30
Copa	5	78.50	216.37	0.88
TCP Cubic	5	72.61	105.10	0.74
FillP	5	93.34	117.23	0.74
FillP-Sheep	5	91.27	108.23	0.67
Indigo	5	93.44	113.99	0.67
Indigo-MusesC3	5	95.10	107.37	5.37
Indigo-MusesC5	5	92.51	103.41	3.10
Indigo-MusesD	5	90.21	100.76	3.49
Indigo-MusesT	5	93.24	130.12	7.89
LEDBAT	5	11.88	92.85	1.15
PCC-Allegro	5	86.44	246.18	0.74
PCC-Expr	5	87.43	453.32	1.41
QUIC Cubic	5	62.72	98.47	0.84
SCReAM	5	0.22	90.27	0.56
Sprout	5	3.37	97.15	0.86
TaoVA-100x	5	72.74	115.52	0.60
TCP Vegas	5	42.98	153.39	0.74
Verus	5	53.52	257.02	0.70
PCC-Vivace	5	76.95	108.41	0.74
WebRTC media	5	2.17	89.09	0.41

Run 1: Statistics of TCP BBR

Start at: 2019-02-05 12:54:46

End at: 2019-02-05 12:55:16

Local clock offset: -6.64 ms

Remote clock offset: 7.459 ms

Below is generated by plot.py at 2019-02-05 14:59:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.05 Mbit/s

95th percentile per-packet one-way delay: 135.324 ms

Loss rate: 1.26%

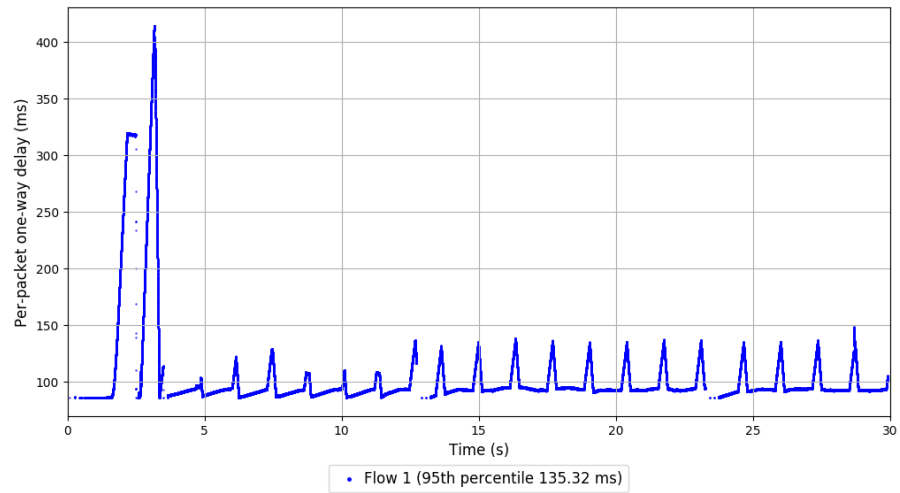
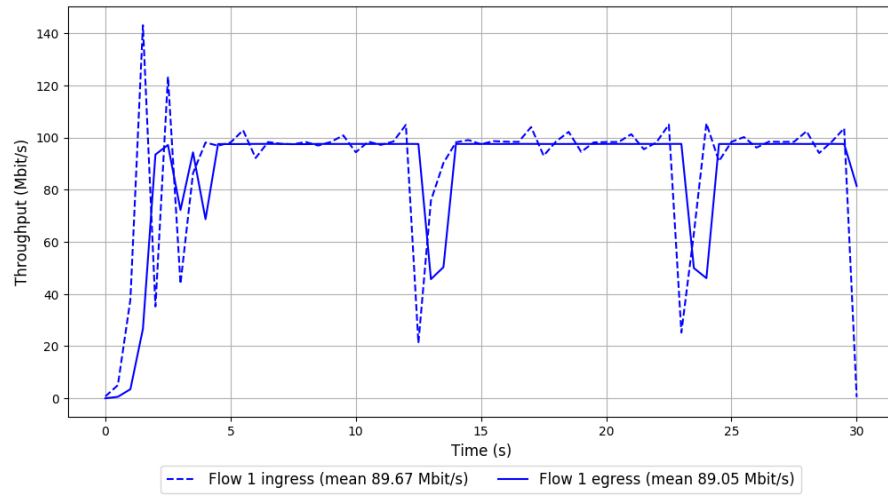
-- Flow 1:

Average throughput: 89.05 Mbit/s

95th percentile per-packet one-way delay: 135.324 ms

Loss rate: 1.26%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-02-05 13:19:44

End at: 2019-02-05 13:20:14

Local clock offset: -6.513 ms

Remote clock offset: 8.383 ms

Below is generated by plot.py at 2019-02-05 14:59:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.45 Mbit/s

95th percentile per-packet one-way delay: 138.195 ms

Loss rate: 1.30%

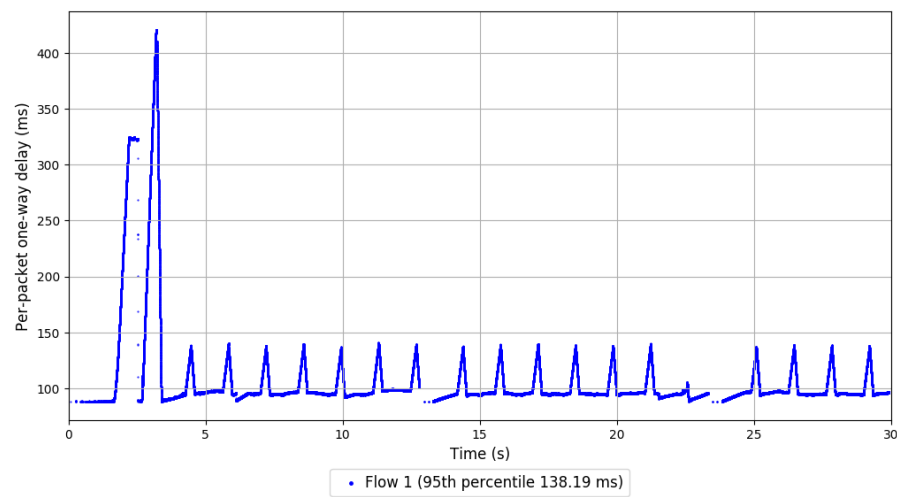
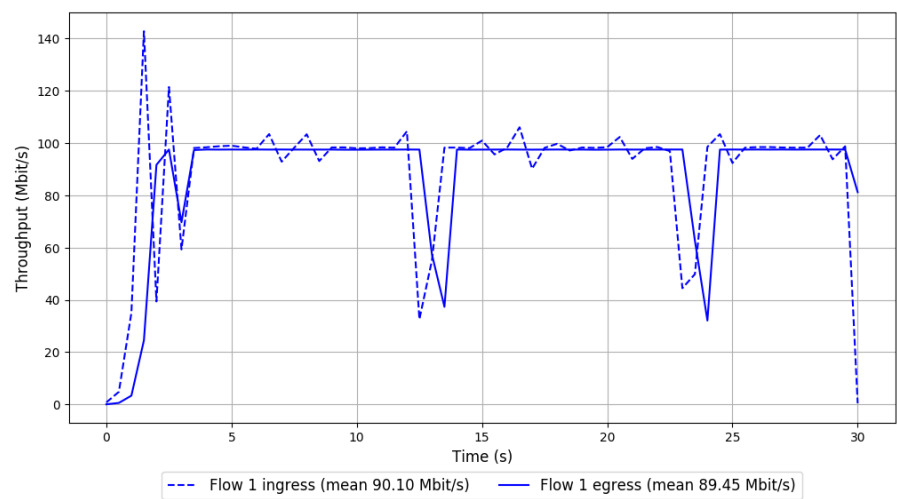
-- Flow 1:

Average throughput: 89.45 Mbit/s

95th percentile per-packet one-way delay: 138.195 ms

Loss rate: 1.30%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-02-05 13:44:40

End at: 2019-02-05 13:45:10

Local clock offset: -6.18 ms

Remote clock offset: 6.272 ms

Below is generated by plot.py at 2019-02-05 14:59:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.41 Mbit/s

95th percentile per-packet one-way delay: 148.364 ms

Loss rate: 1.22%

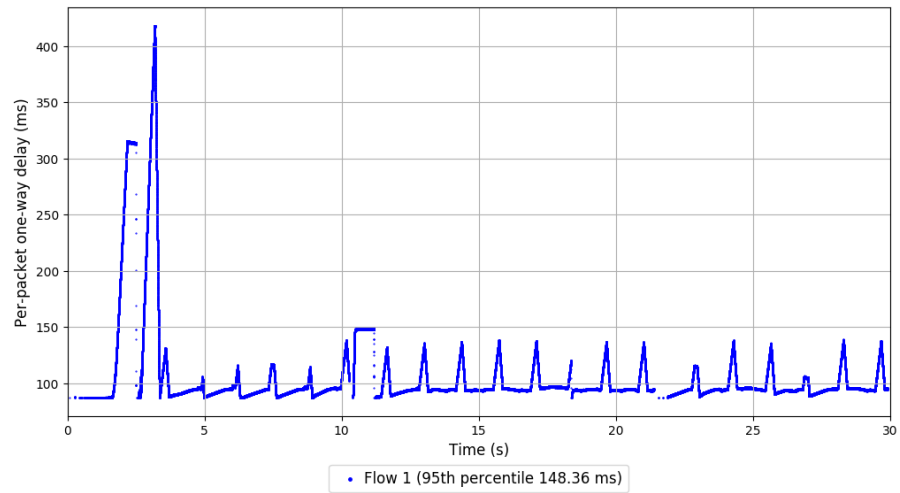
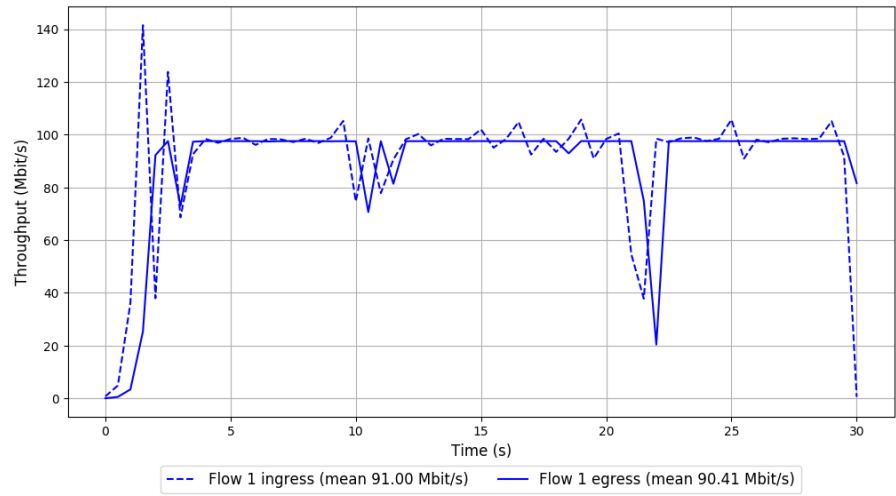
-- Flow 1:

Average throughput: 90.41 Mbit/s

95th percentile per-packet one-way delay: 148.364 ms

Loss rate: 1.22%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2019-02-05 14:09:40

End at: 2019-02-05 14:10:10

Local clock offset: -0.035 ms

Remote clock offset: 0.79 ms

Below is generated by plot.py at 2019-02-05 14:59:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.26 Mbit/s

95th percentile per-packet one-way delay: 173.787 ms

Loss rate: 1.30%

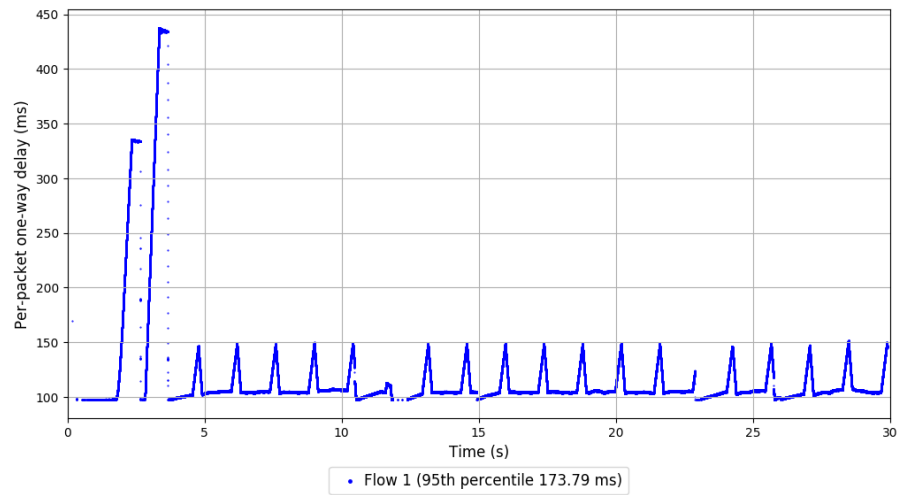
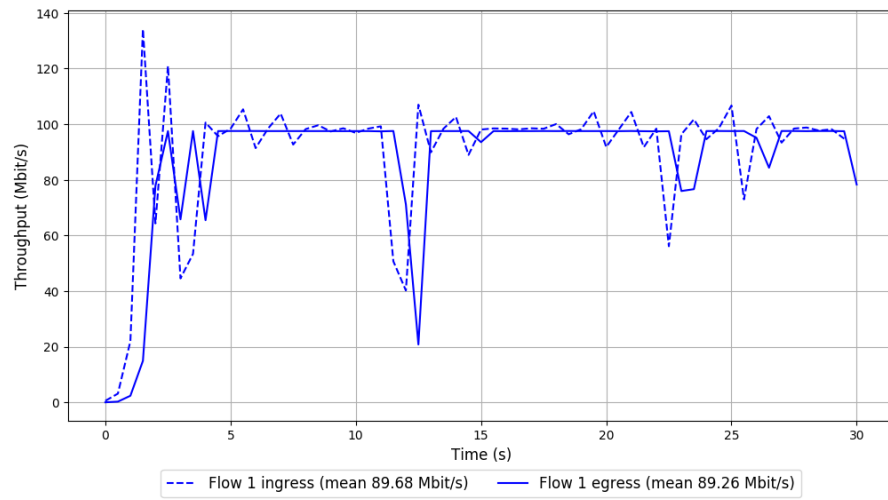
-- Flow 1:

Average throughput: 89.26 Mbit/s

95th percentile per-packet one-way delay: 173.787 ms

Loss rate: 1.30%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2019-02-05 14:34:37

End at: 2019-02-05 14:35:07

Local clock offset: -6.211 ms

Remote clock offset: 7.449 ms

Below is generated by plot.py at 2019-02-05 14:59:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.14 Mbit/s

95th percentile per-packet one-way delay: 136.620 ms

Loss rate: 1.40%

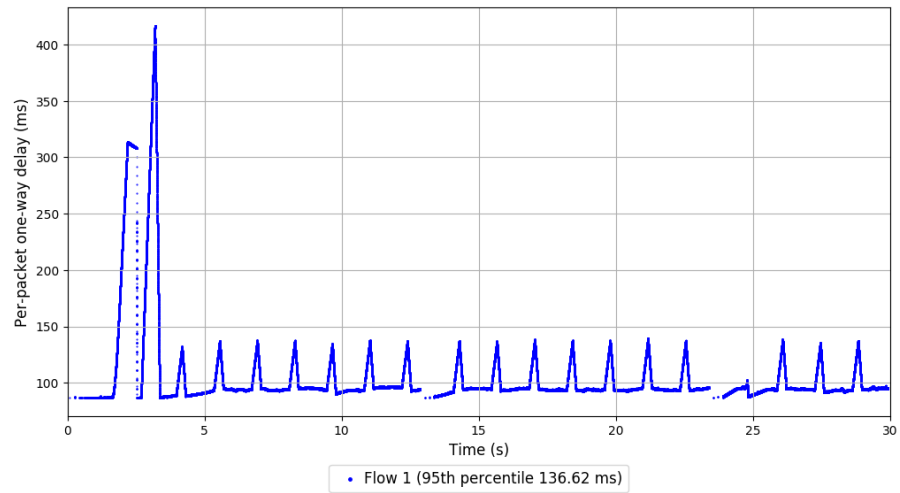
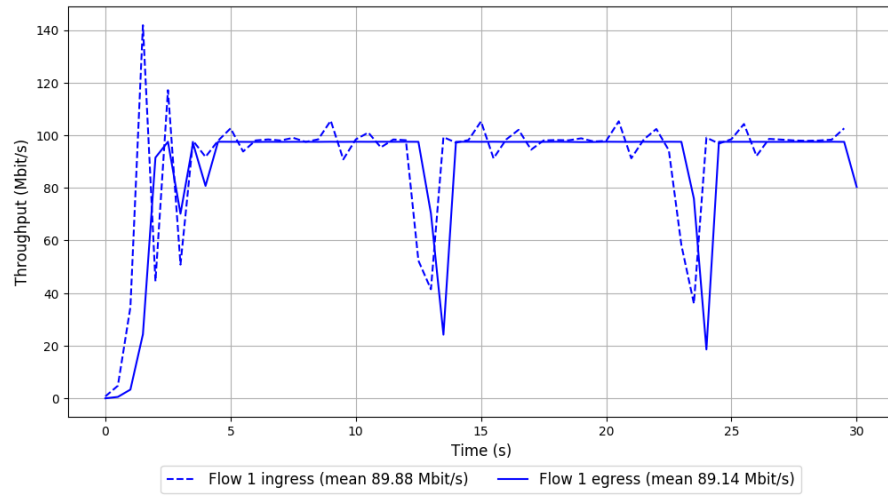
-- Flow 1:

Average throughput: 89.14 Mbit/s

95th percentile per-packet one-way delay: 136.620 ms

Loss rate: 1.40%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-02-05 13:01:55

End at: 2019-02-05 13:02:25

Local clock offset: -6.643 ms

Remote clock offset: 2.619 ms

Below is generated by plot.py at 2019-02-05 15:00:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.76 Mbit/s

95th percentile per-packet one-way delay: 221.728 ms

Loss rate: 0.91%

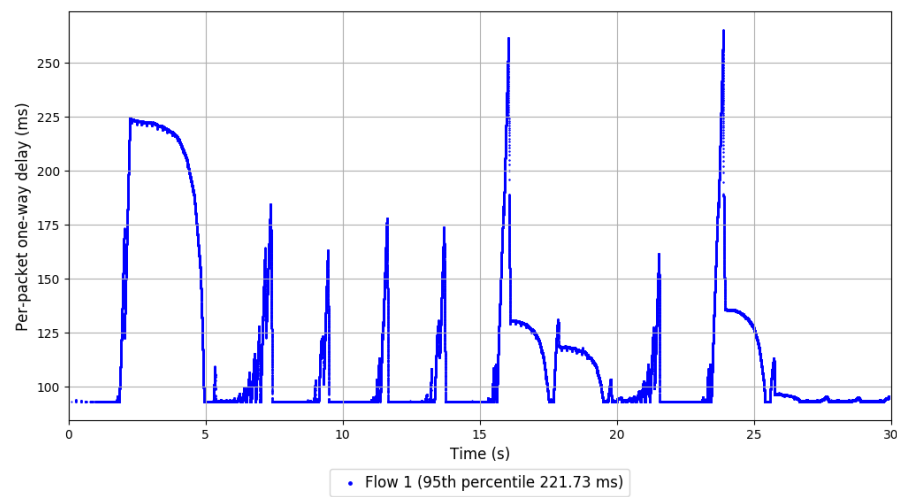
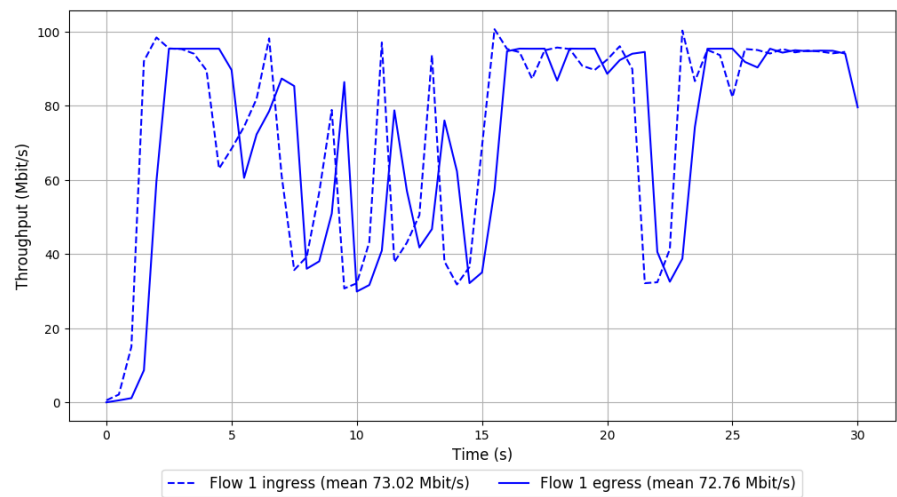
-- Flow 1:

Average throughput: 72.76 Mbit/s

95th percentile per-packet one-way delay: 221.728 ms

Loss rate: 0.91%

Run 1: Report of Copa — Data Link

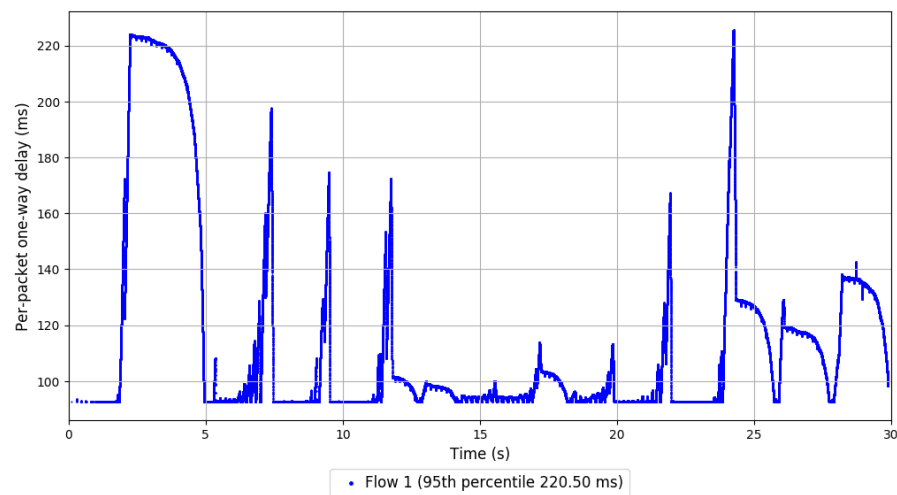
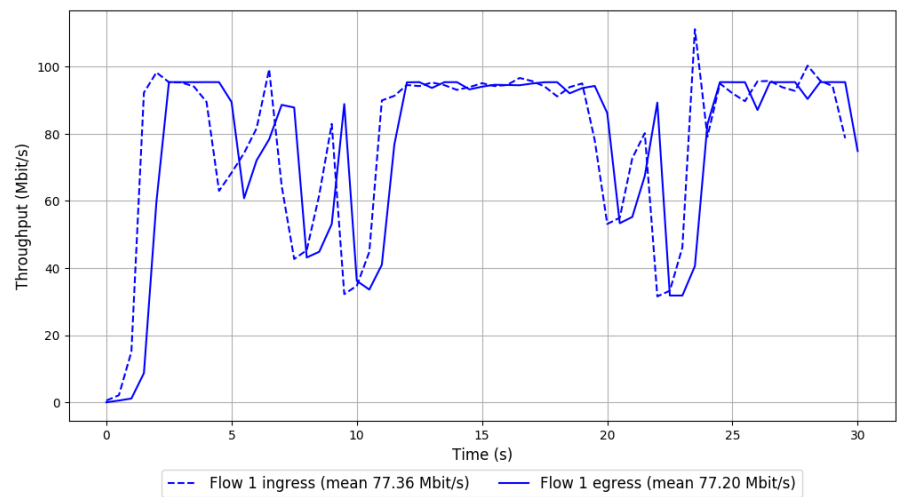


Run 2: Statistics of Copa

Start at: 2019-02-05 13:26:51
End at: 2019-02-05 13:27:21
Local clock offset: -6.262 ms
Remote clock offset: 2.926 ms

Below is generated by plot.py at 2019-02-05 15:00:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 77.20 Mbit/s
95th percentile per-packet one-way delay: 220.498 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 77.20 Mbit/s
95th percentile per-packet one-way delay: 220.498 ms
Loss rate: 0.78%

Run 2: Report of Copa — Data Link

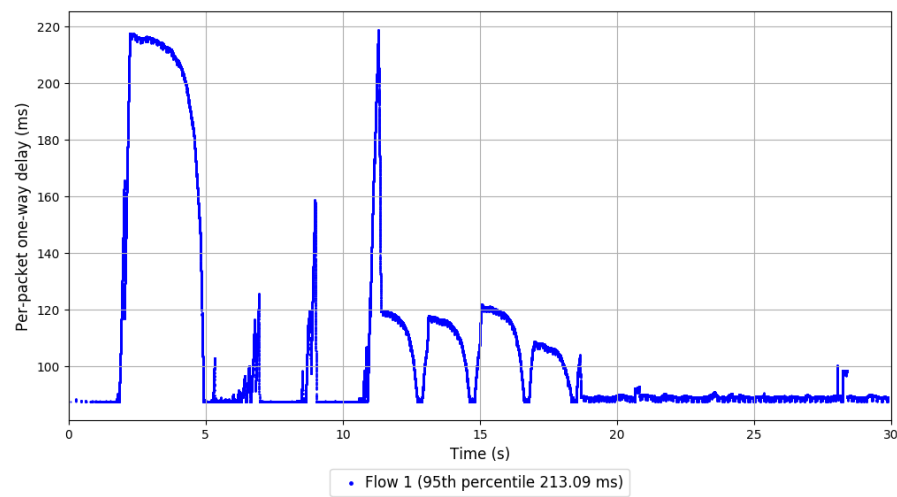
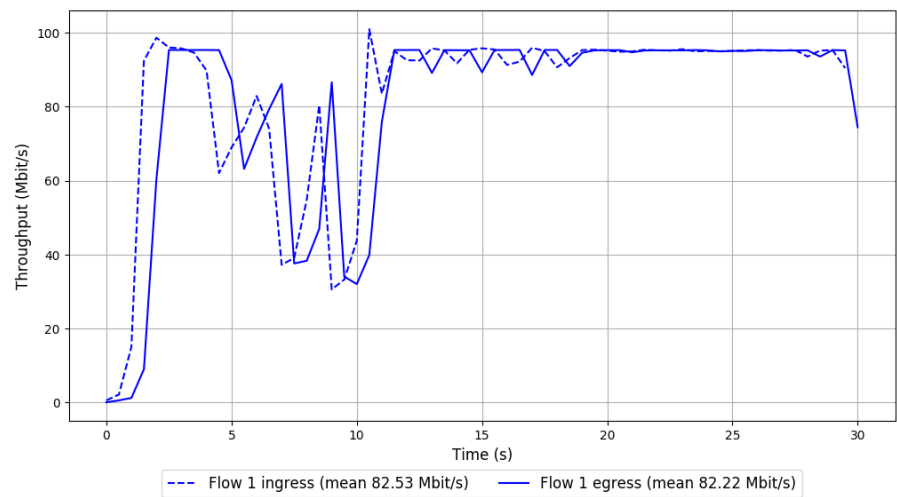


Run 3: Statistics of Copa

Start at: 2019-02-05 13:51:48
End at: 2019-02-05 13:52:18
Local clock offset: -3.361 ms
Remote clock offset: 7.916 ms

Below is generated by plot.py at 2019-02-05 15:00:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 82.22 Mbit/s
95th percentile per-packet one-way delay: 213.090 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 82.22 Mbit/s
95th percentile per-packet one-way delay: 213.090 ms
Loss rate: 0.95%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2019-02-05 14:16:48

End at: 2019-02-05 14:17:18

Local clock offset: 0.095 ms

Remote clock offset: 0.885 ms

Below is generated by plot.py at 2019-02-05 15:00:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.81 Mbit/s

95th percentile per-packet one-way delay: 228.701 ms

Loss rate: 0.85%

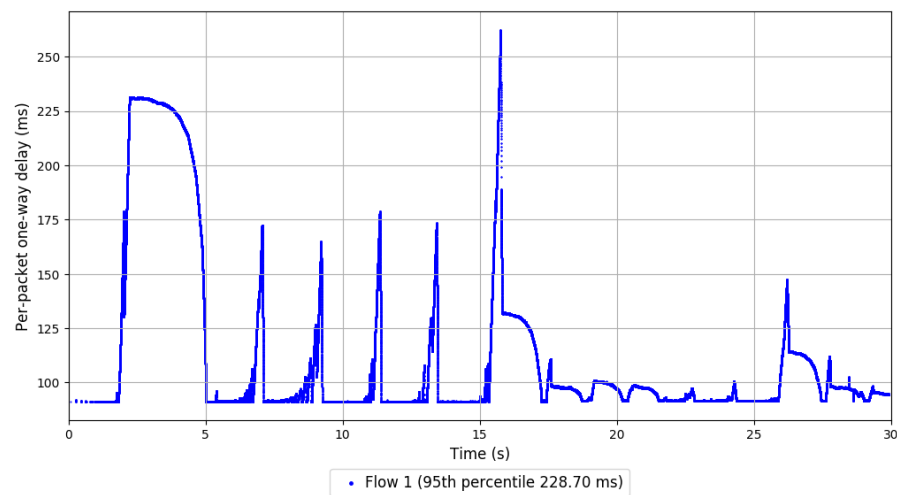
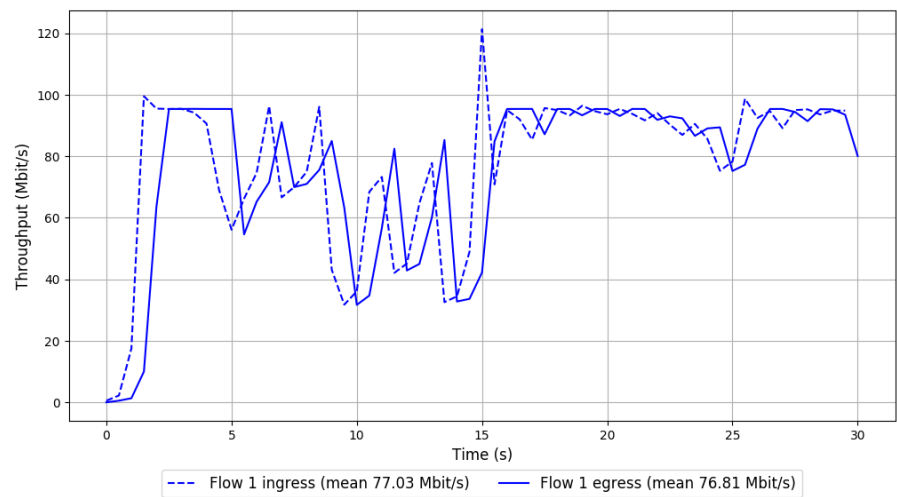
-- Flow 1:

Average throughput: 76.81 Mbit/s

95th percentile per-packet one-way delay: 228.701 ms

Loss rate: 0.85%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-02-05 14:41:44

End at: 2019-02-05 14:42:14

Local clock offset: -6.84 ms

Remote clock offset: 5.572 ms

Below is generated by plot.py at 2019-02-05 15:01:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.52 Mbit/s

95th percentile per-packet one-way delay: 197.838 ms

Loss rate: 0.89%

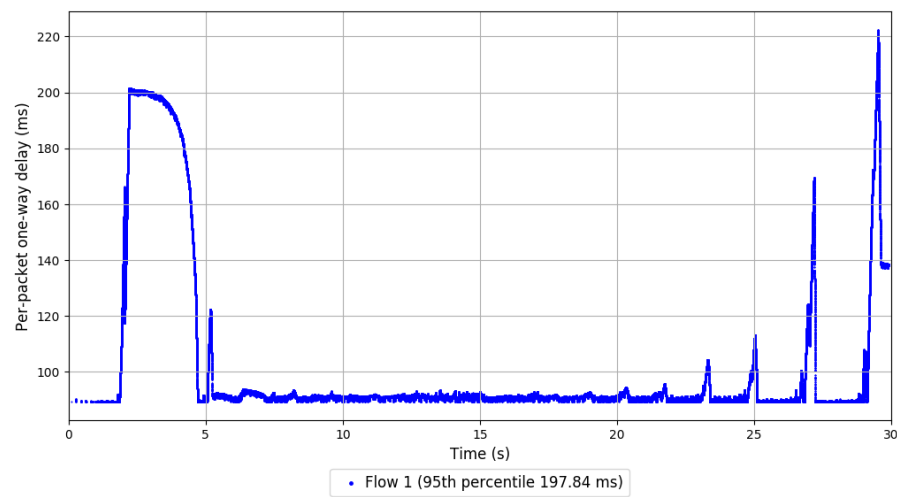
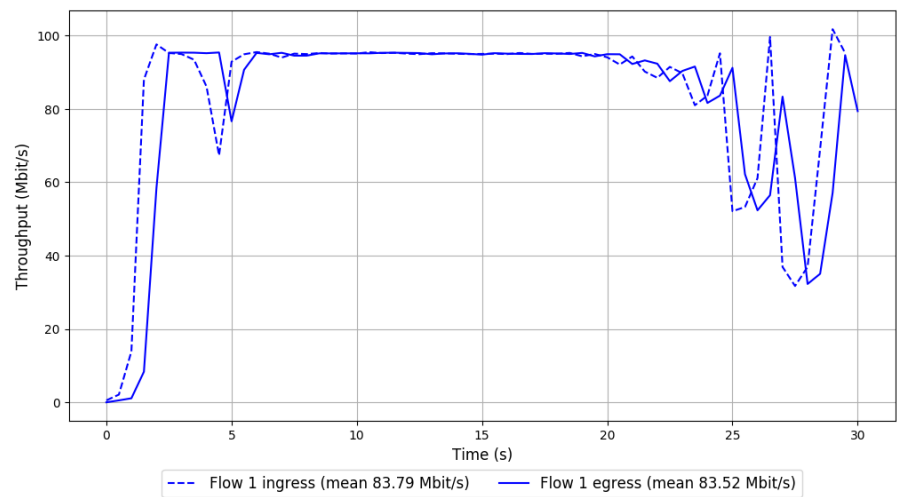
-- Flow 1:

Average throughput: 83.52 Mbit/s

95th percentile per-packet one-way delay: 197.838 ms

Loss rate: 0.89%

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-02-05 13:10:23

End at: 2019-02-05 13:10:53

Local clock offset: -6.738 ms

Remote clock offset: 7.928 ms

Below is generated by plot.py at 2019-02-05 15:01:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.07 Mbit/s

95th percentile per-packet one-way delay: 102.921 ms

Loss rate: 1.04%

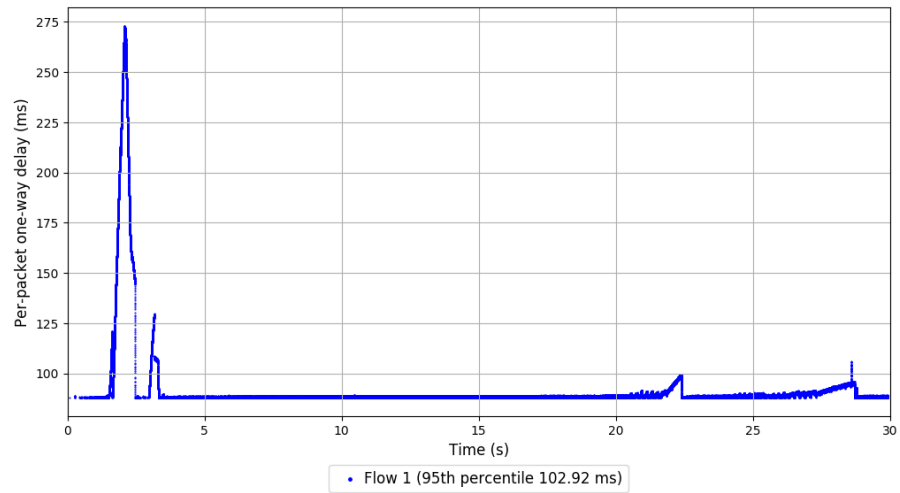
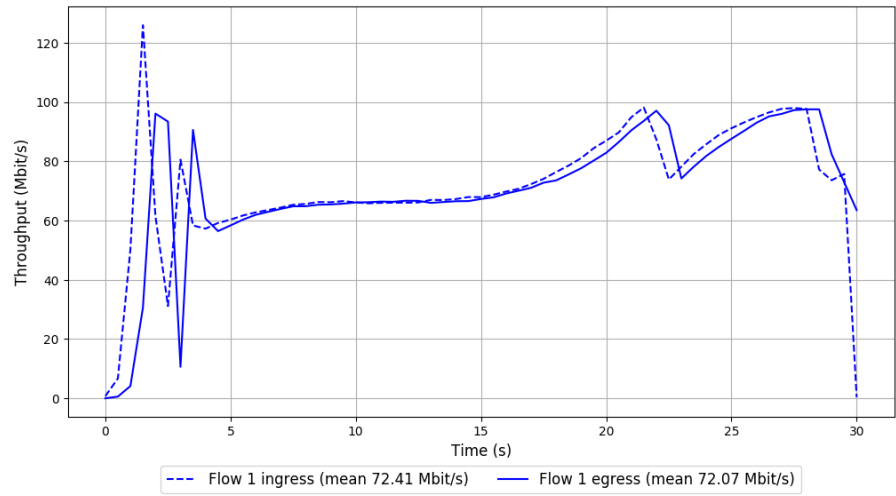
-- Flow 1:

Average throughput: 72.07 Mbit/s

95th percentile per-packet one-way delay: 102.921 ms

Loss rate: 1.04%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-02-05 13:35:21

End at: 2019-02-05 13:35:51

Local clock offset: -6.151 ms

Remote clock offset: 3.563 ms

Below is generated by plot.py at 2019-02-05 15:01:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.17 Mbit/s

95th percentile per-packet one-way delay: 110.344 ms

Loss rate: 0.64%

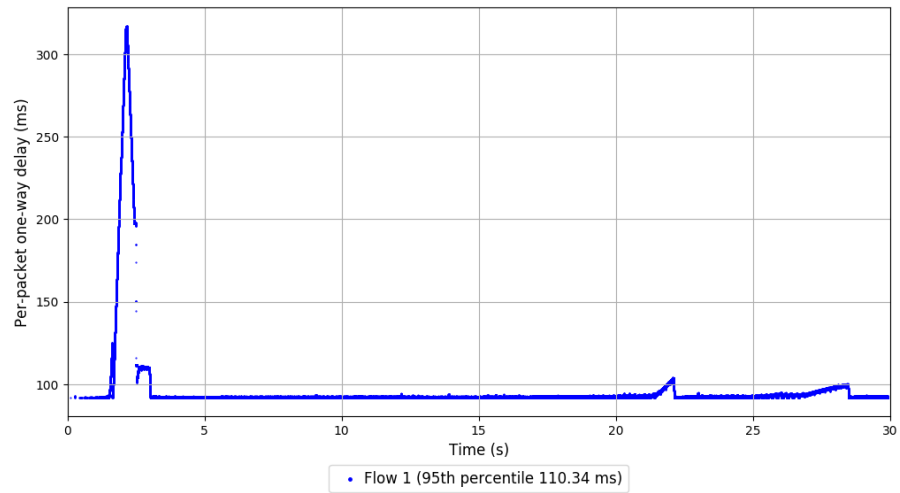
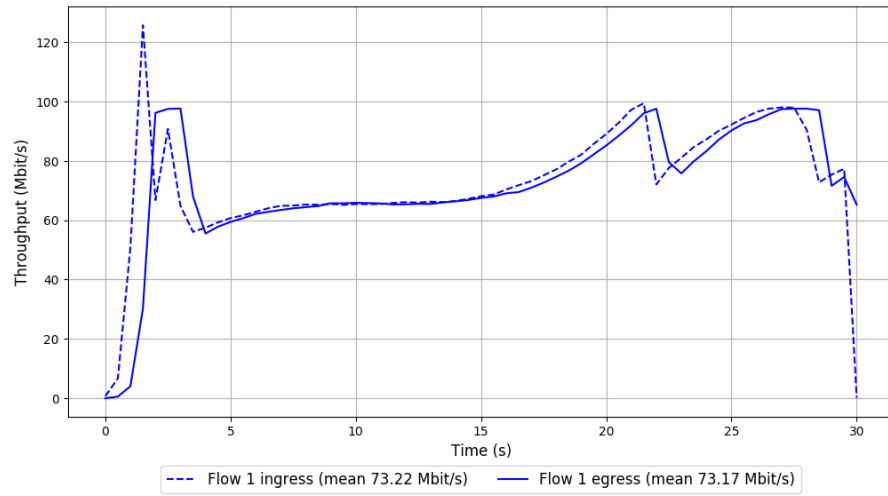
-- Flow 1:

Average throughput: 73.17 Mbit/s

95th percentile per-packet one-way delay: 110.344 ms

Loss rate: 0.64%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2019-02-05 14:00:18

End at: 2019-02-05 14:00:48

Local clock offset: -1.22 ms

Remote clock offset: 7.888 ms

Below is generated by plot.py at 2019-02-05 15:01:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.33 Mbit/s

95th percentile per-packet one-way delay: 103.133 ms

Loss rate: 0.73%

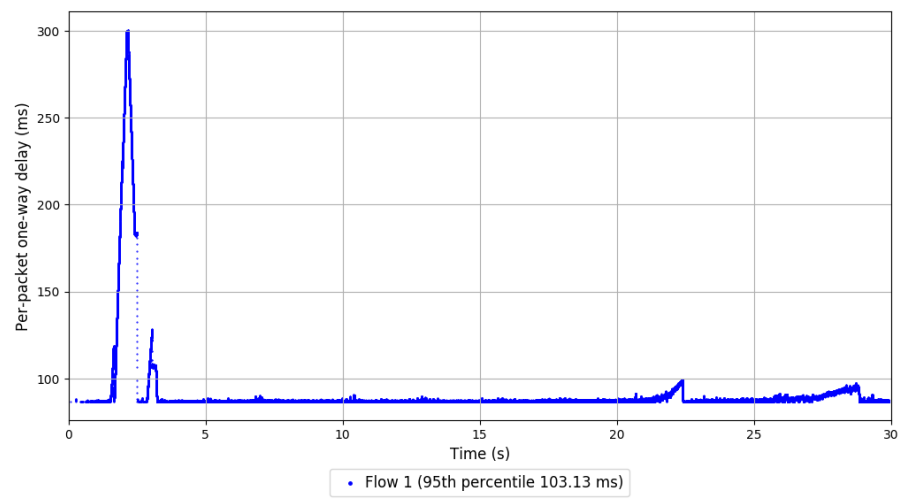
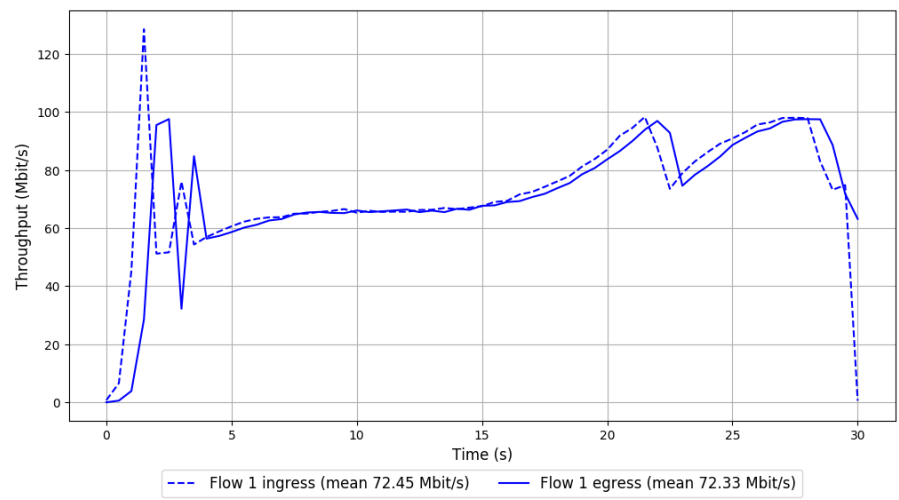
-- Flow 1:

Average throughput: 72.33 Mbit/s

95th percentile per-packet one-way delay: 103.133 ms

Loss rate: 0.73%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2019-02-05 14:25:17

End at: 2019-02-05 14:25:47

Local clock offset: -4.235 ms

Remote clock offset: 0.593 ms

Below is generated by plot.py at 2019-02-05 15:01:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.78 Mbit/s

95th percentile per-packet one-way delay: 107.767 ms

Loss rate: 0.64%

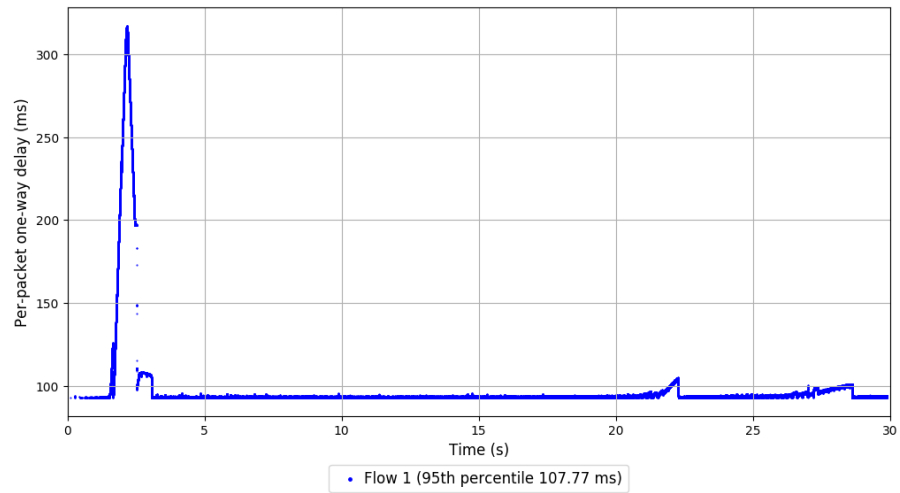
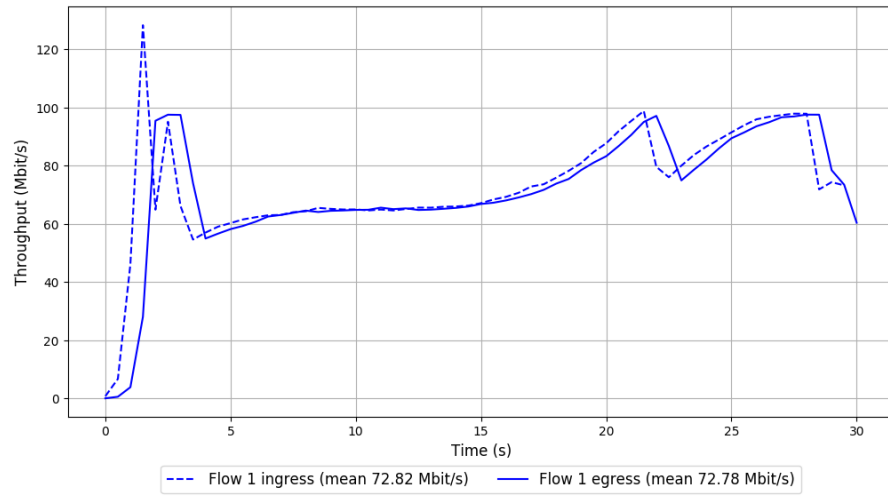
-- Flow 1:

Average throughput: 72.78 Mbit/s

95th percentile per-packet one-way delay: 107.767 ms

Loss rate: 0.64%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2019-02-05 14:50:14

End at: 2019-02-05 14:50:44

Local clock offset: -4.861 ms

Remote clock offset: 7.06 ms

Below is generated by plot.py at 2019-02-05 15:01:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.68 Mbit/s

95th percentile per-packet one-way delay: 101.353 ms

Loss rate: 0.65%

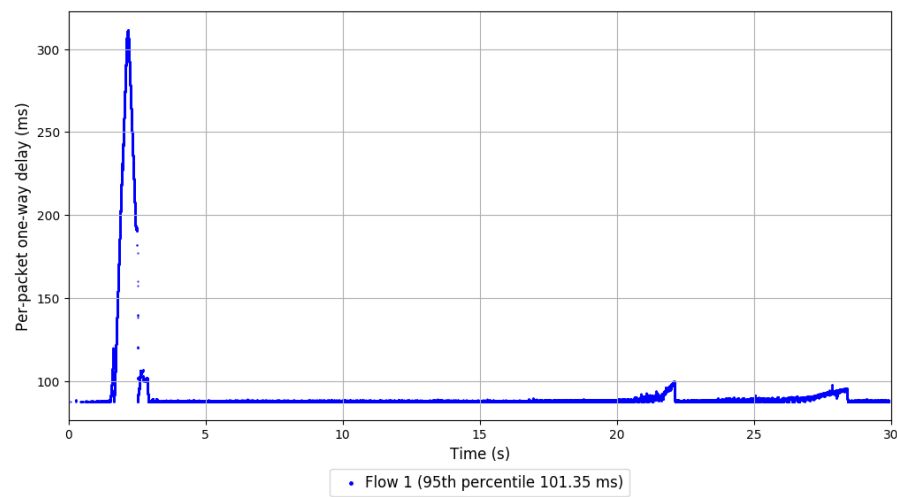
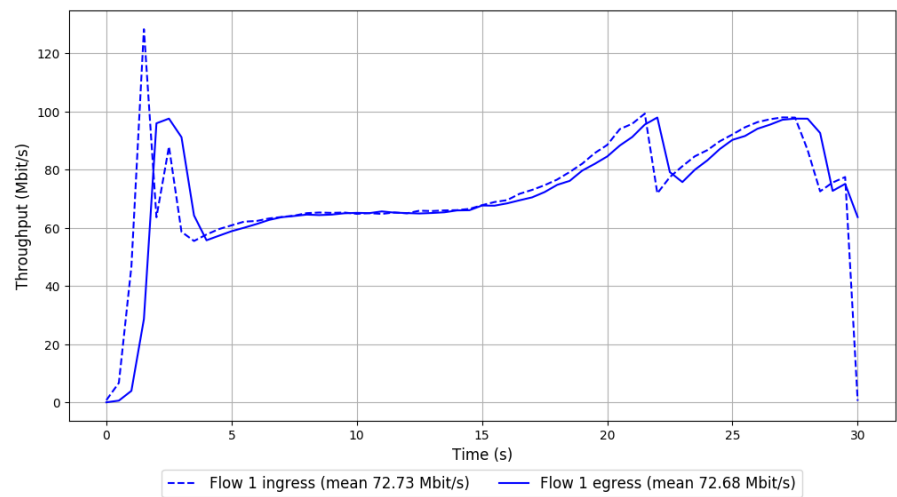
-- Flow 1:

Average throughput: 72.68 Mbit/s

95th percentile per-packet one-way delay: 101.353 ms

Loss rate: 0.65%

Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-02-05 12:55:59

End at: 2019-02-05 12:56:29

Local clock offset: -6.634 ms

Remote clock offset: 2.363 ms

Below is generated by plot.py at 2019-02-05 15:01:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.91 Mbit/s

95th percentile per-packet one-way delay: 143.921 ms

Loss rate: 1.07%

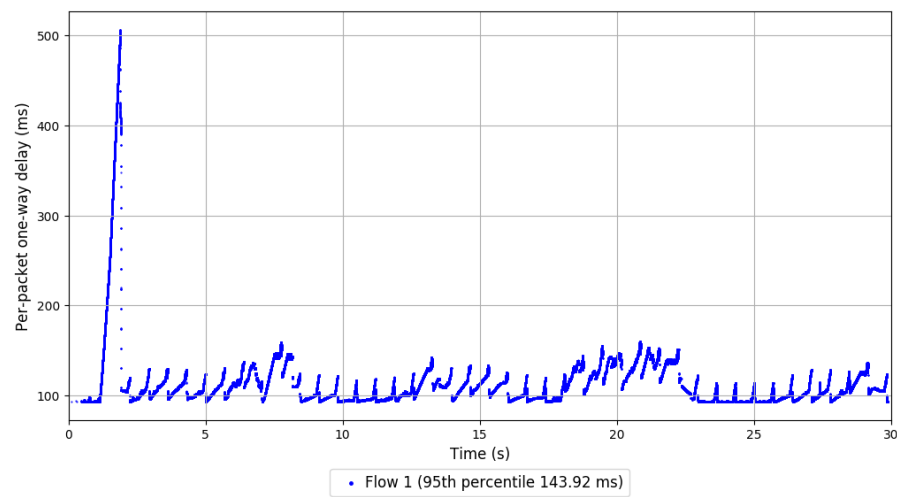
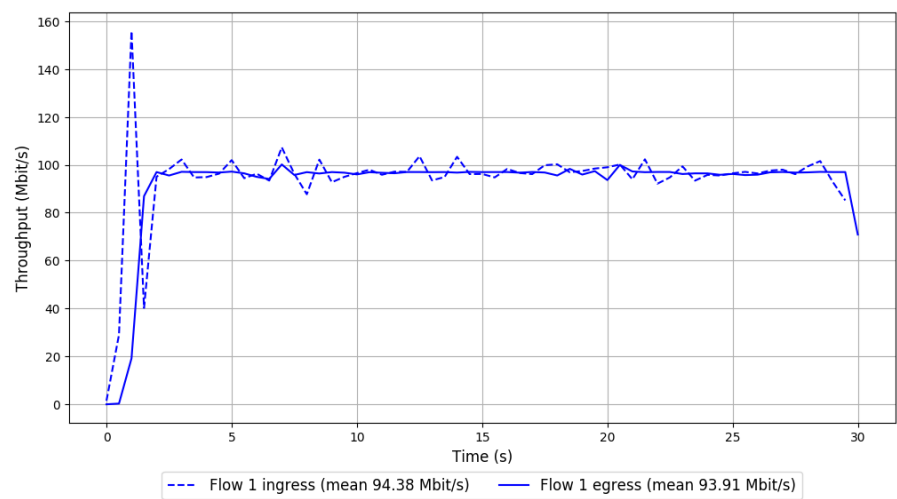
-- Flow 1:

Average throughput: 93.91 Mbit/s

95th percentile per-packet one-way delay: 143.921 ms

Loss rate: 1.07%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2019-02-05 13:20:57

End at: 2019-02-05 13:21:27

Local clock offset: -6.442 ms

Remote clock offset: 8.425 ms

Below is generated by plot.py at 2019-02-05 15:01:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.00 Mbit/s

95th percentile per-packet one-way delay: 103.008 ms

Loss rate: 0.60%

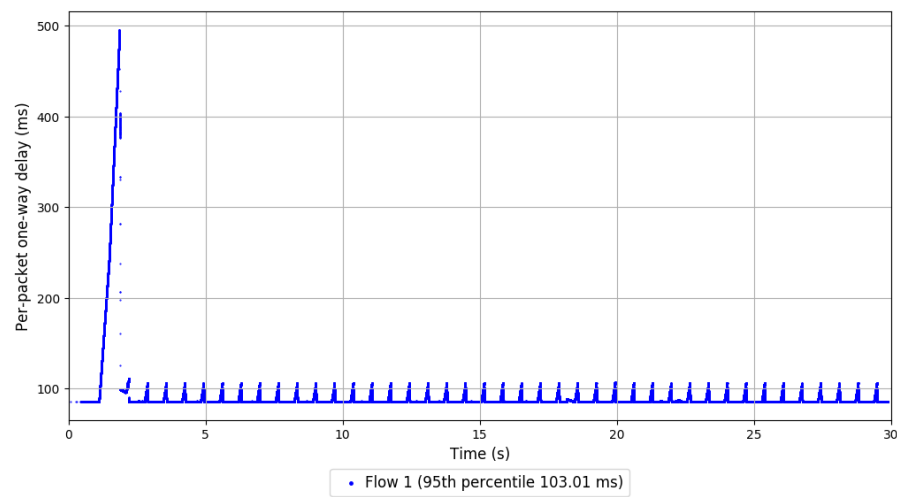
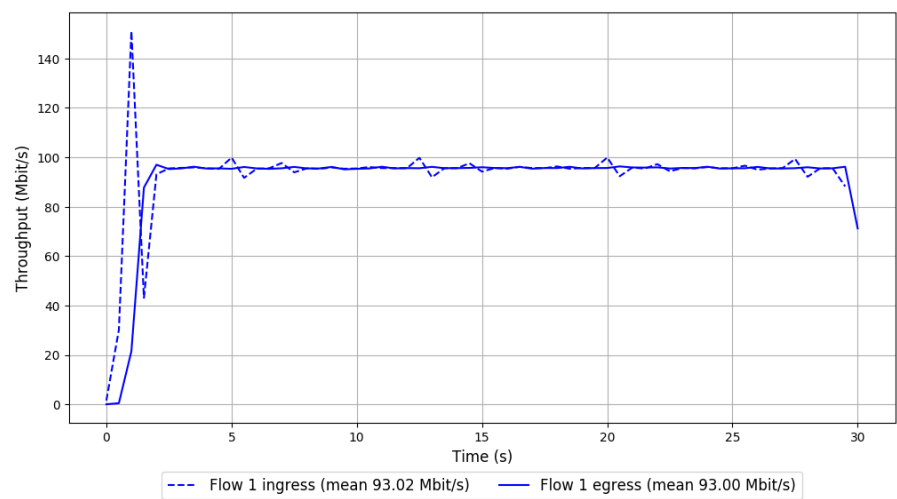
-- Flow 1:

Average throughput: 93.00 Mbit/s

95th percentile per-packet one-way delay: 103.008 ms

Loss rate: 0.60%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2019-02-05 13:45:53

End at: 2019-02-05 13:46:23

Local clock offset: -6.101 ms

Remote clock offset: 3.862 ms

Below is generated by plot.py at 2019-02-05 15:01:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.07 Mbit/s

95th percentile per-packet one-way delay: 109.563 ms

Loss rate: 0.74%

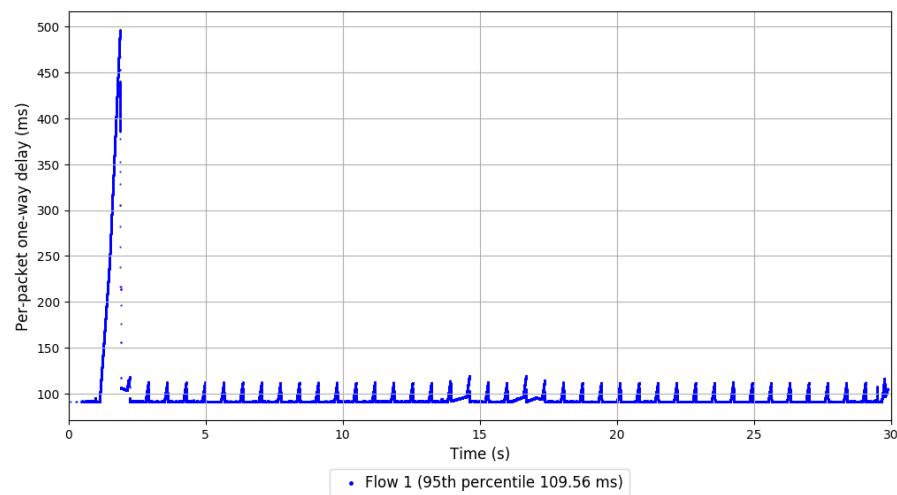
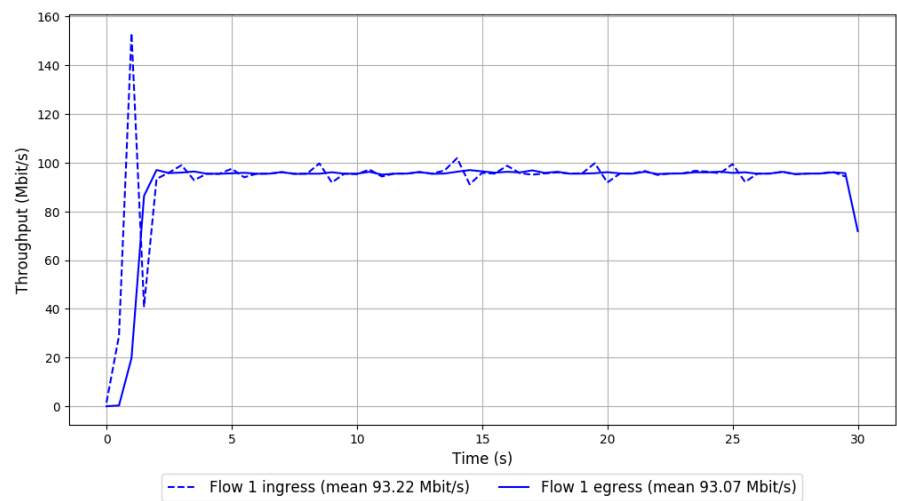
-- Flow 1:

Average throughput: 93.07 Mbit/s

95th percentile per-packet one-way delay: 109.563 ms

Loss rate: 0.74%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2019-02-05 14:10:53

End at: 2019-02-05 14:11:23

Local clock offset: 0.078 ms

Remote clock offset: 5.979 ms

Below is generated by plot.py at 2019-02-05 15:01:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.68 Mbit/s

95th percentile per-packet one-way delay: 119.911 ms

Loss rate: 0.68%

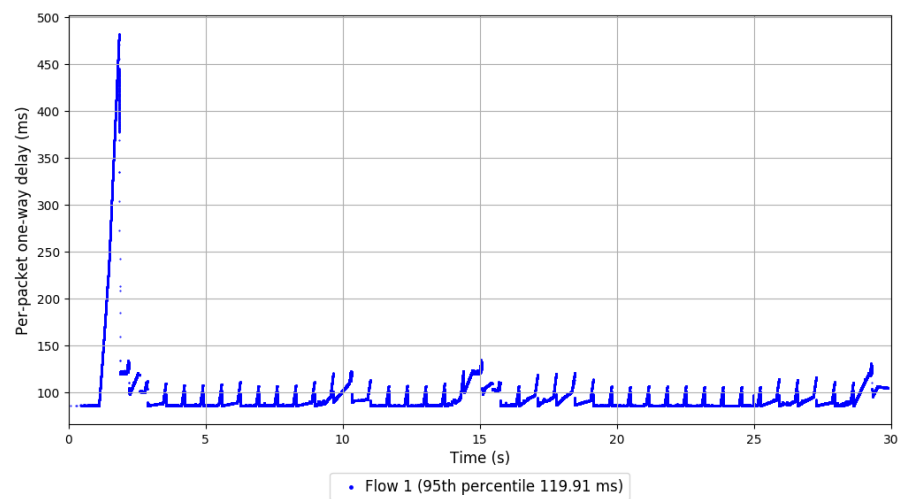
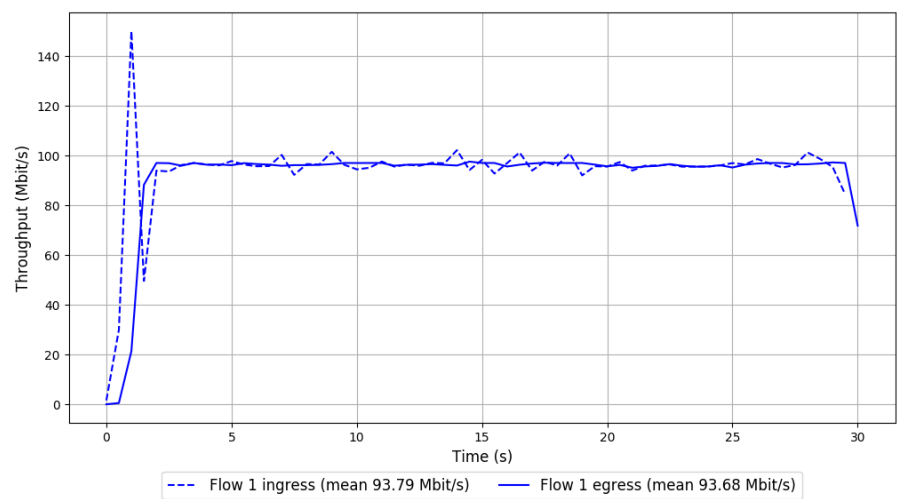
-- Flow 1:

Average throughput: 93.68 Mbit/s

95th percentile per-packet one-way delay: 119.911 ms

Loss rate: 0.68%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2019-02-05 14:35:49

End at: 2019-02-05 14:36:19

Local clock offset: -6.284 ms

Remote clock offset: 2.553 ms

Below is generated by plot.py at 2019-02-05 15:02:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.03 Mbit/s

95th percentile per-packet one-way delay: 109.757 ms

Loss rate: 0.61%

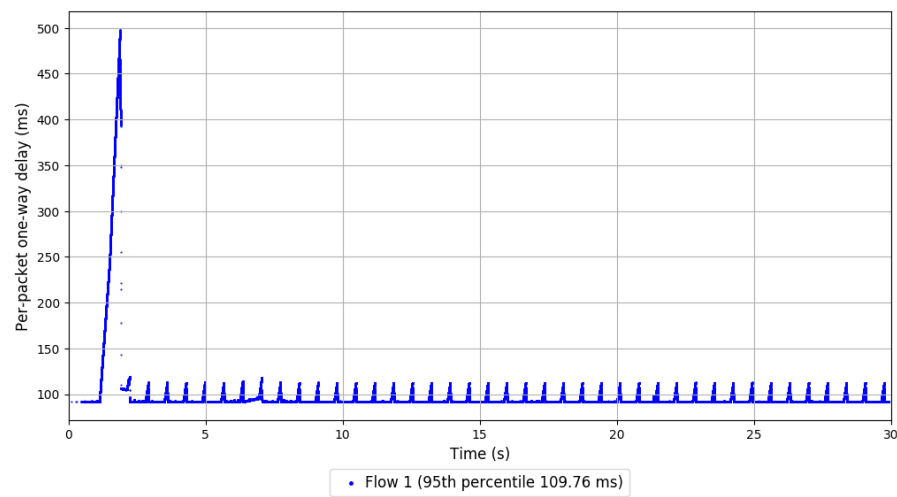
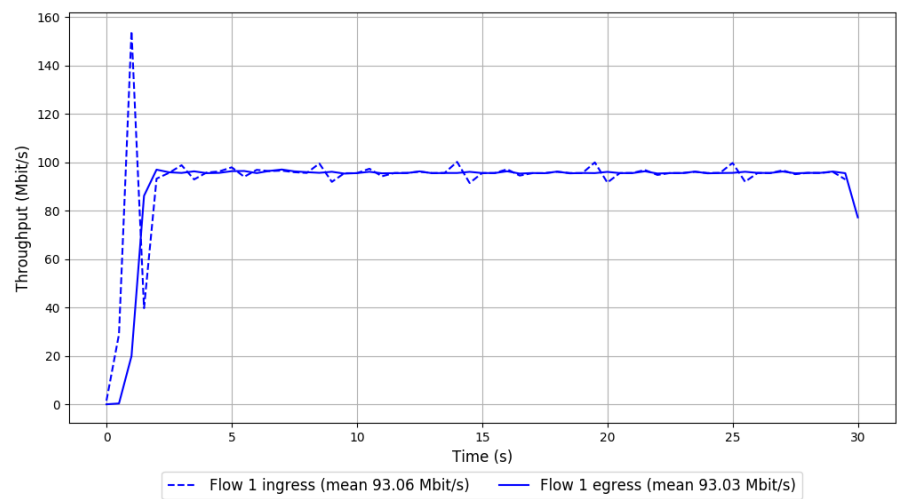
-- Flow 1:

Average throughput: 93.03 Mbit/s

95th percentile per-packet one-way delay: 109.757 ms

Loss rate: 0.61%

Run 5: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2019-02-05 13:06:47

End at: 2019-02-05 13:07:17

Local clock offset: -6.66 ms

Remote clock offset: 8.015 ms

Below is generated by plot.py at 2019-02-05 15:02:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.29 Mbit/s

95th percentile per-packet one-way delay: 105.152 ms

Loss rate: 0.64%

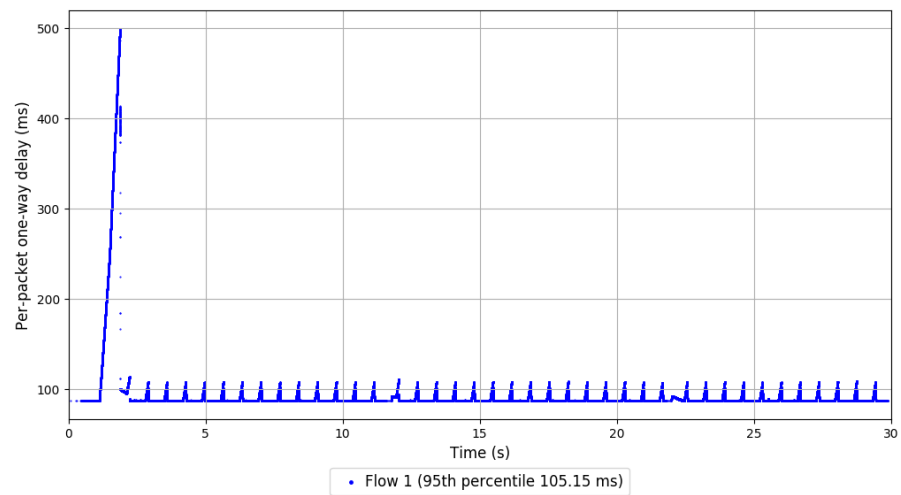
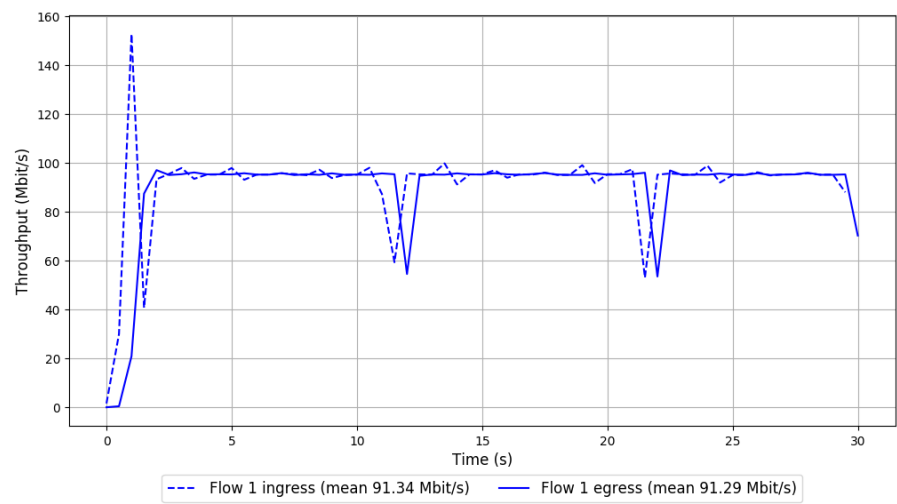
-- Flow 1:

Average throughput: 91.29 Mbit/s

95th percentile per-packet one-way delay: 105.152 ms

Loss rate: 0.64%

Run 1: Report of FillP-Sheep — Data Link

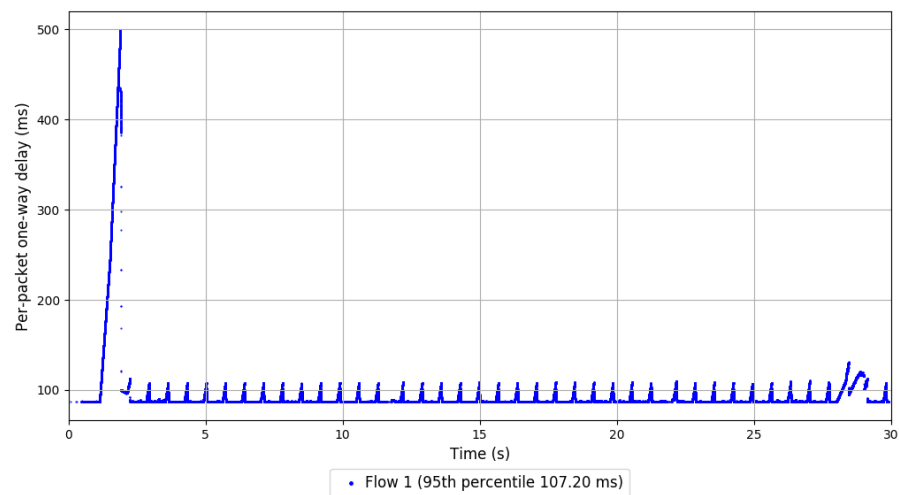
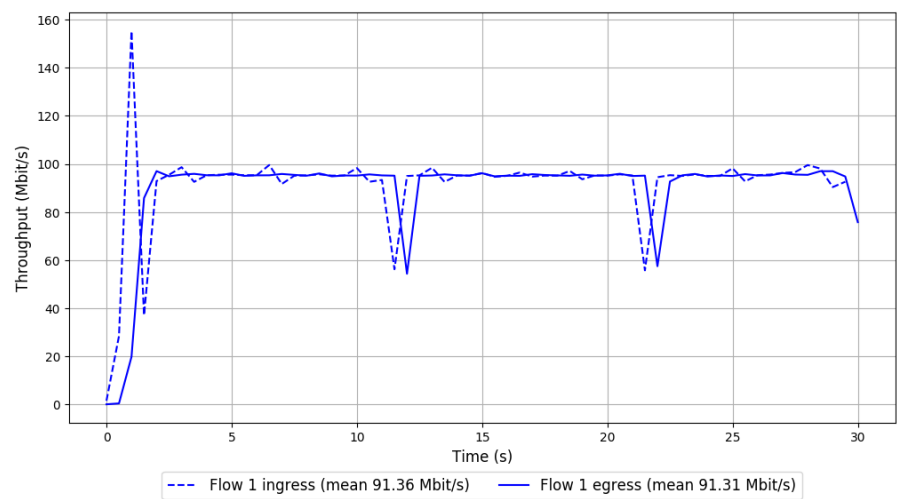


Run 2: Statistics of FillP-Sheep

Start at: 2019-02-05 13:31:44
End at: 2019-02-05 13:32:14
Local clock offset: -6.174 ms
Remote clock offset: 8.683 ms

Below is generated by plot.py at 2019-02-05 15:02:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.31 Mbit/s
95th percentile per-packet one-way delay: 107.205 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 91.31 Mbit/s
95th percentile per-packet one-way delay: 107.205 ms
Loss rate: 0.63%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-02-05 13:56:41

End at: 2019-02-05 13:57:11

Local clock offset: -1.97 ms

Remote clock offset: 7.211 ms

Below is generated by plot.py at 2019-02-05 15:02:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.14 Mbit/s

95th percentile per-packet one-way delay: 112.517 ms

Loss rate: 0.64%

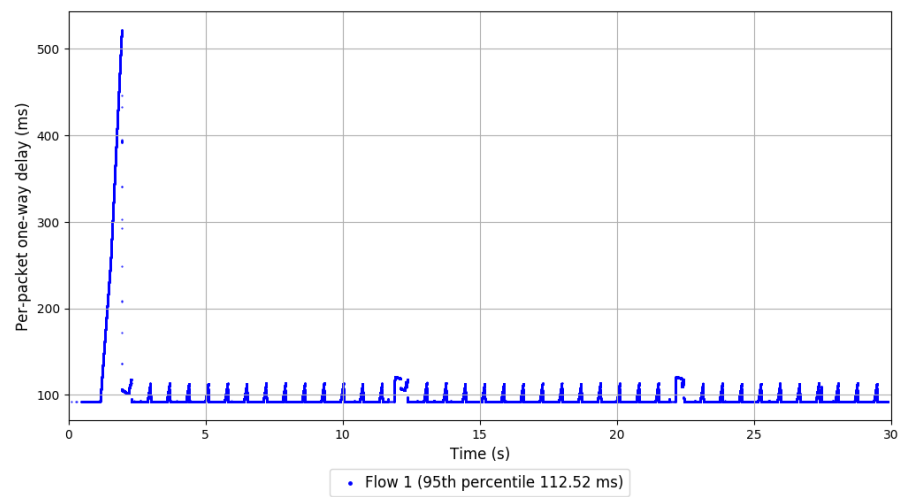
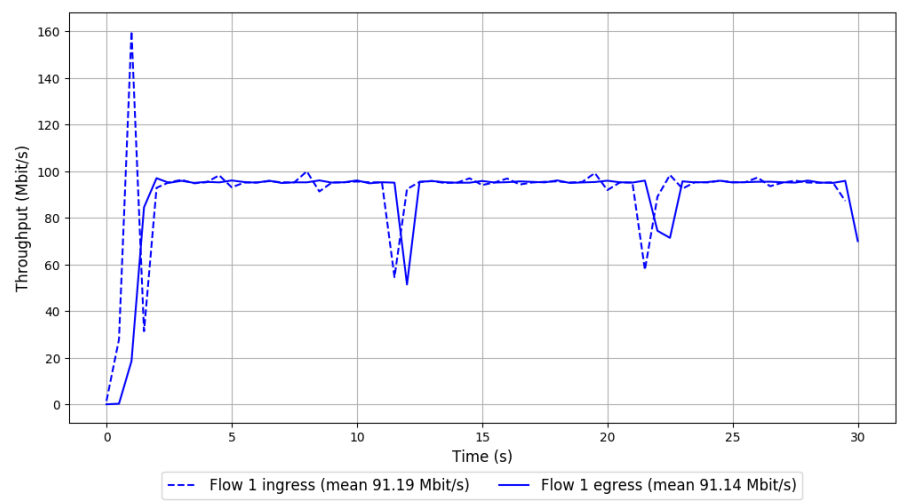
-- Flow 1:

Average throughput: 91.14 Mbit/s

95th percentile per-packet one-way delay: 112.517 ms

Loss rate: 0.64%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-02-05 14:21:40

End at: 2019-02-05 14:22:10

Local clock offset: -2.879 ms

Remote clock offset: 0.605 ms

Below is generated by plot.py at 2019-02-05 15:02:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.24 Mbit/s

95th percentile per-packet one-way delay: 108.597 ms

Loss rate: 0.68%

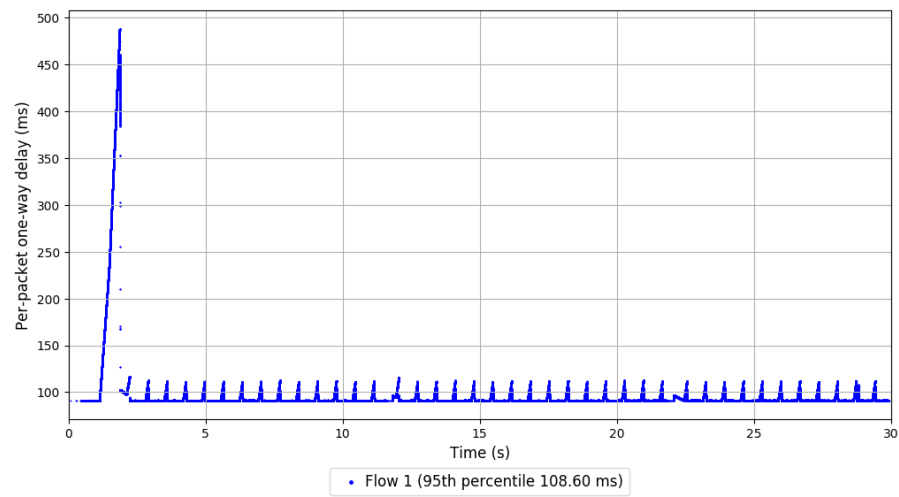
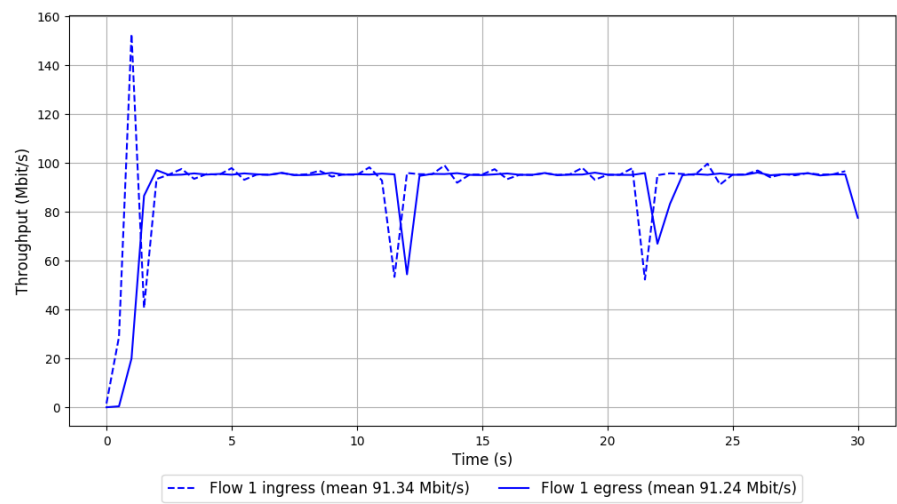
-- Flow 1:

Average throughput: 91.24 Mbit/s

95th percentile per-packet one-way delay: 108.597 ms

Loss rate: 0.68%

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2019-02-05 14:46:37

End at: 2019-02-05 14:47:07

Local clock offset: -6.784 ms

Remote clock offset: 1.882 ms

Below is generated by plot.py at 2019-02-05 15:02:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.36 Mbit/s

95th percentile per-packet one-way delay: 107.661 ms

Loss rate: 0.75%

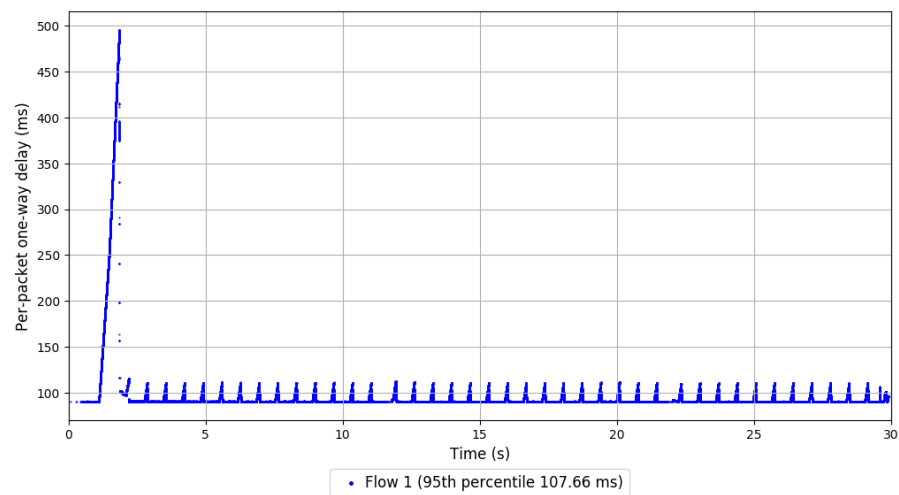
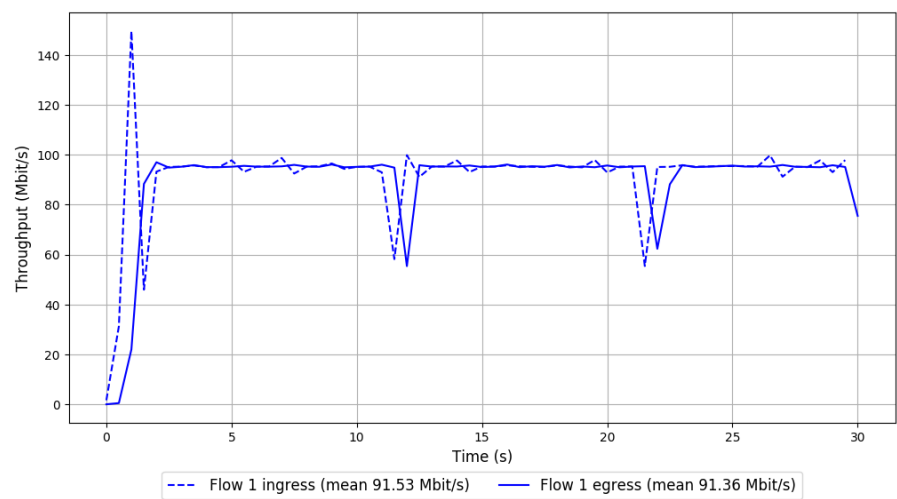
-- Flow 1:

Average throughput: 91.36 Mbit/s

95th percentile per-packet one-way delay: 107.661 ms

Loss rate: 0.75%

Run 5: Report of FillP-Sheep — Data Link



Run 1: Statistics of Indigo

Start at: 2019-02-05 13:03:08

End at: 2019-02-05 13:03:38

Local clock offset: -6.627 ms

Remote clock offset: 7.47 ms

Below is generated by plot.py at 2019-02-05 15:02:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.75 Mbit/s

95th percentile per-packet one-way delay: 102.819 ms

Loss rate: 0.63%

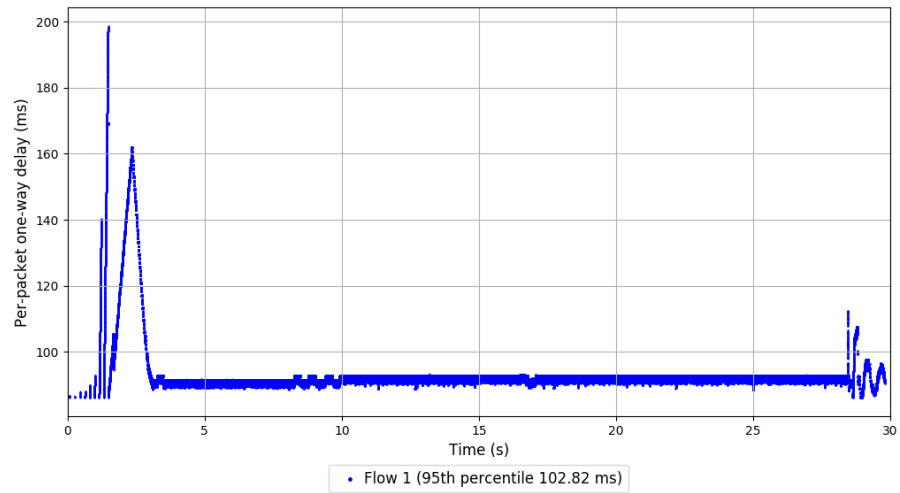
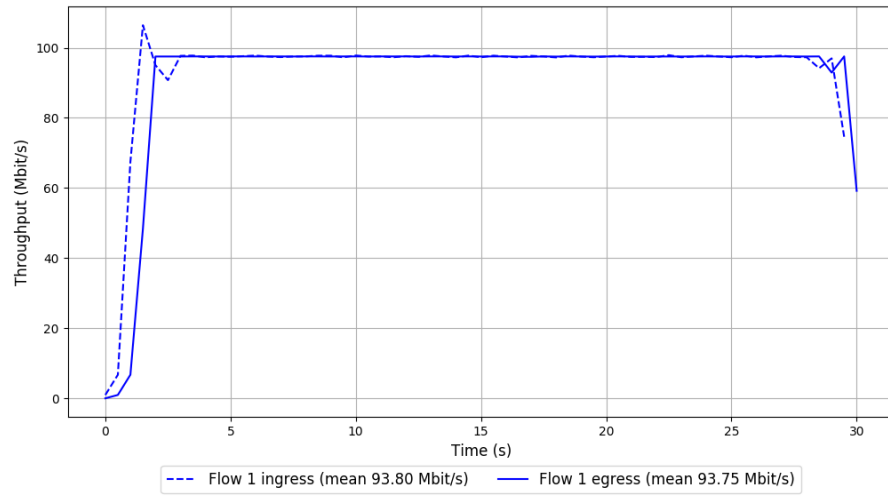
-- Flow 1:

Average throughput: 93.75 Mbit/s

95th percentile per-packet one-way delay: 102.819 ms

Loss rate: 0.63%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-02-05 13:28:05

End at: 2019-02-05 13:28:35

Local clock offset: -6.233 ms

Remote clock offset: 2.781 ms

Below is generated by plot.py at 2019-02-05 15:02:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.69 Mbit/s

95th percentile per-packet one-way delay: 115.150 ms

Loss rate: 0.70%

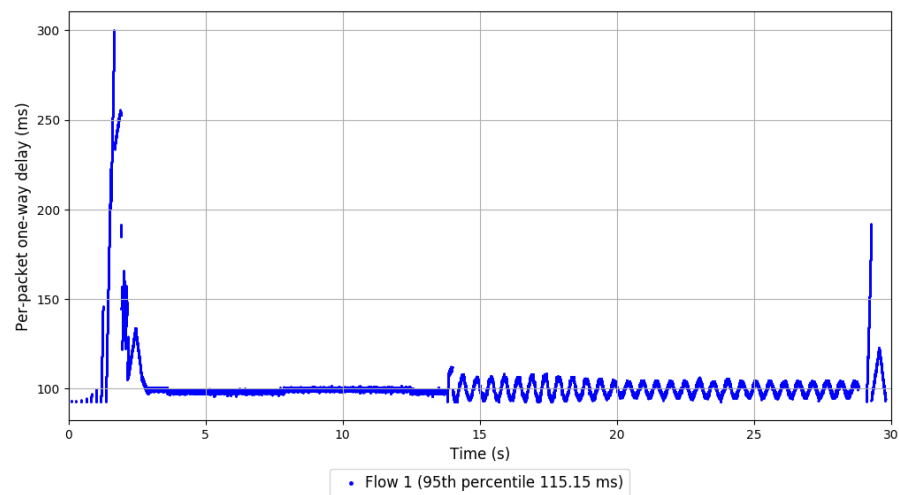
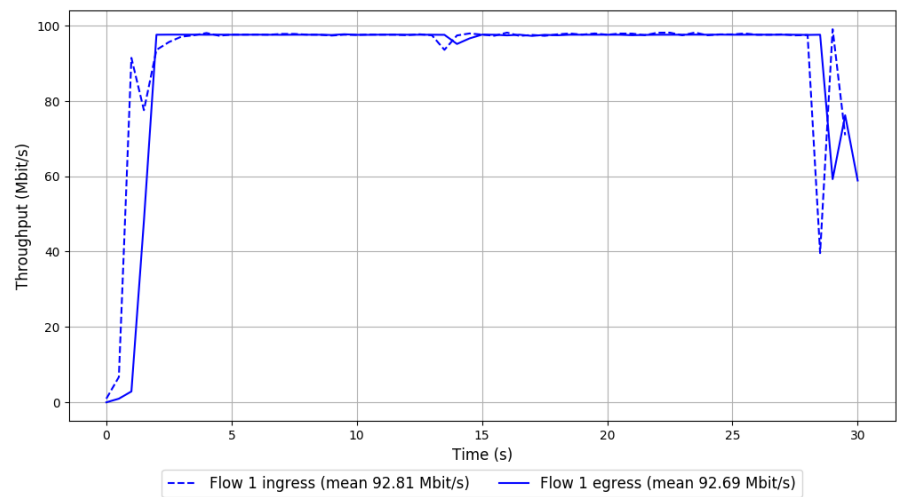
-- Flow 1:

Average throughput: 92.69 Mbit/s

95th percentile per-packet one-way delay: 115.150 ms

Loss rate: 0.70%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-02-05 13:53:02

End at: 2019-02-05 13:53:32

Local clock offset: -3.004 ms

Remote clock offset: 7.904 ms

Below is generated by plot.py at 2019-02-05 15:03:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.44 Mbit/s

95th percentile per-packet one-way delay: 146.473 ms

Loss rate: 0.73%

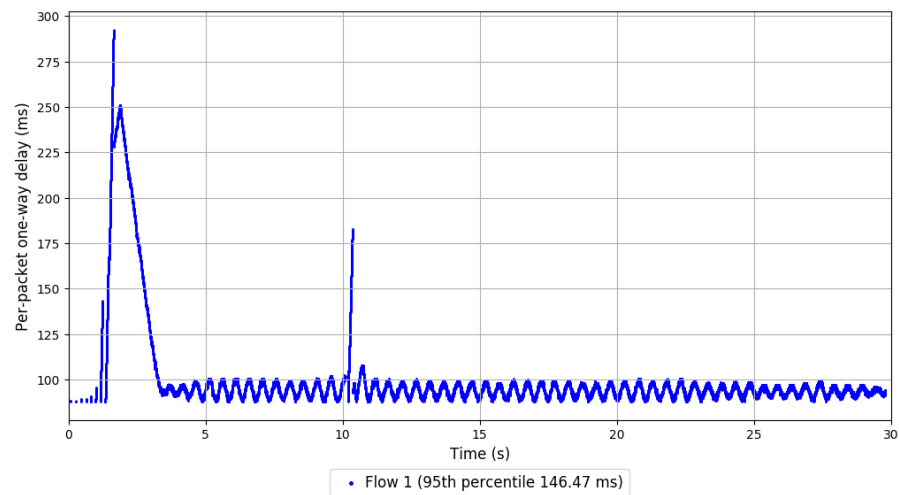
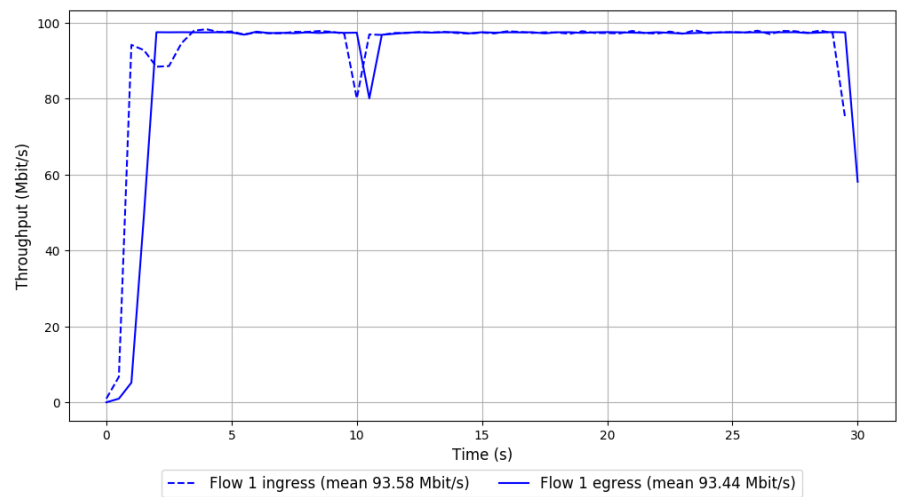
-- Flow 1:

Average throughput: 93.44 Mbit/s

95th percentile per-packet one-way delay: 146.473 ms

Loss rate: 0.73%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2019-02-05 14:18:02

End at: 2019-02-05 14:18:32

Local clock offset: -0.943 ms

Remote clock offset: 4.864 ms

Below is generated by plot.py at 2019-02-05 15:03:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.61 Mbit/s

95th percentile per-packet one-way delay: 104.816 ms

Loss rate: 0.67%

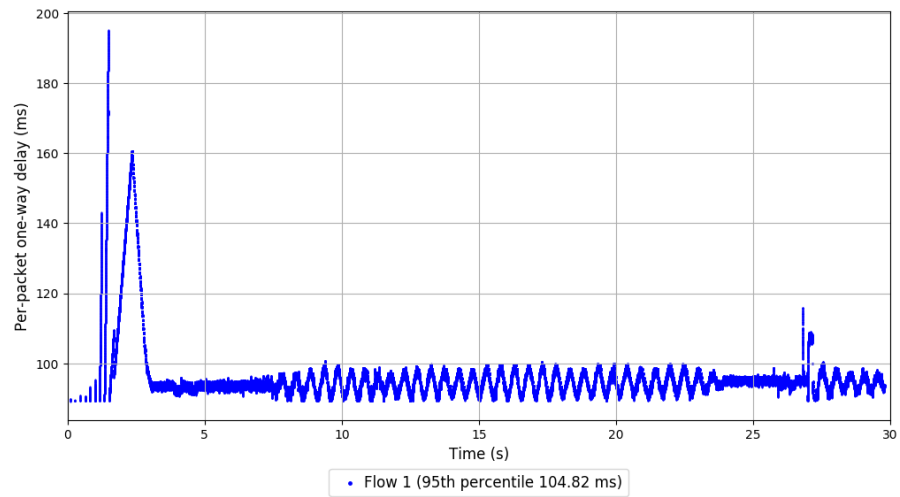
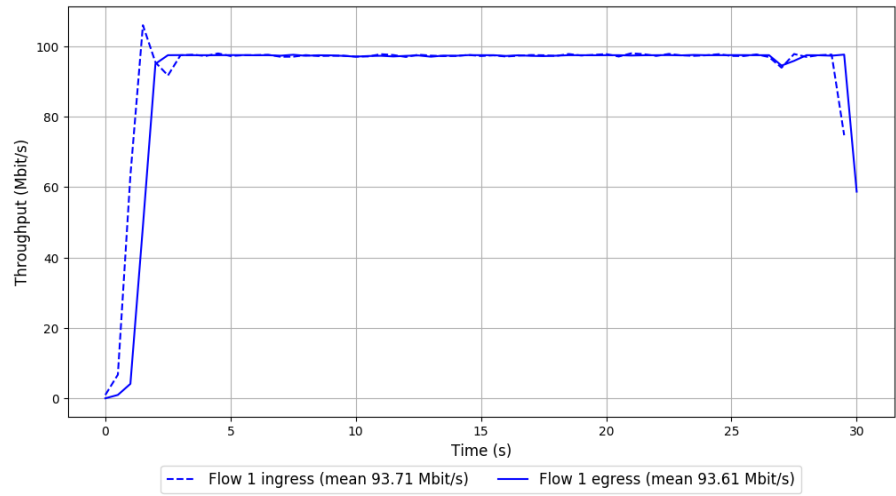
-- Flow 1:

Average throughput: 93.61 Mbit/s

95th percentile per-packet one-way delay: 104.816 ms

Loss rate: 0.67%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2019-02-05 14:42:58

End at: 2019-02-05 14:43:28

Local clock offset: -6.927 ms

Remote clock offset: 3.002 ms

Below is generated by plot.py at 2019-02-05 15:03:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.71 Mbit/s

95th percentile per-packet one-way delay: 100.711 ms

Loss rate: 0.63%

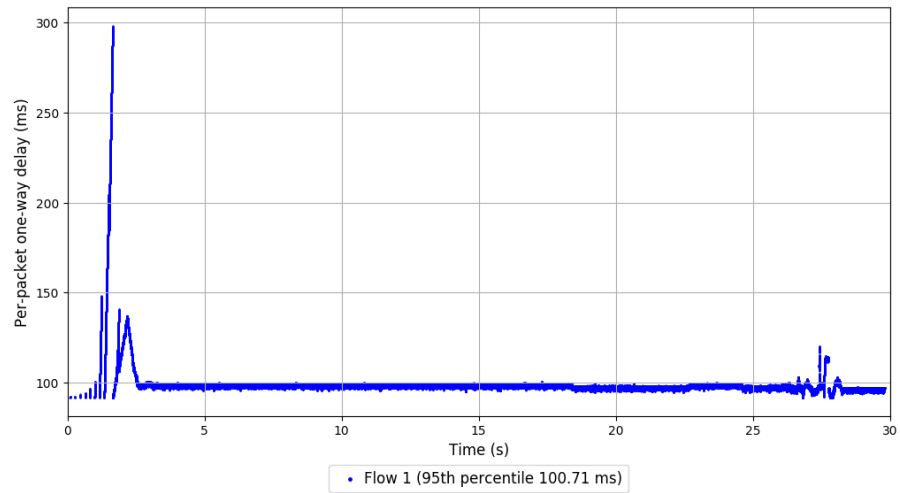
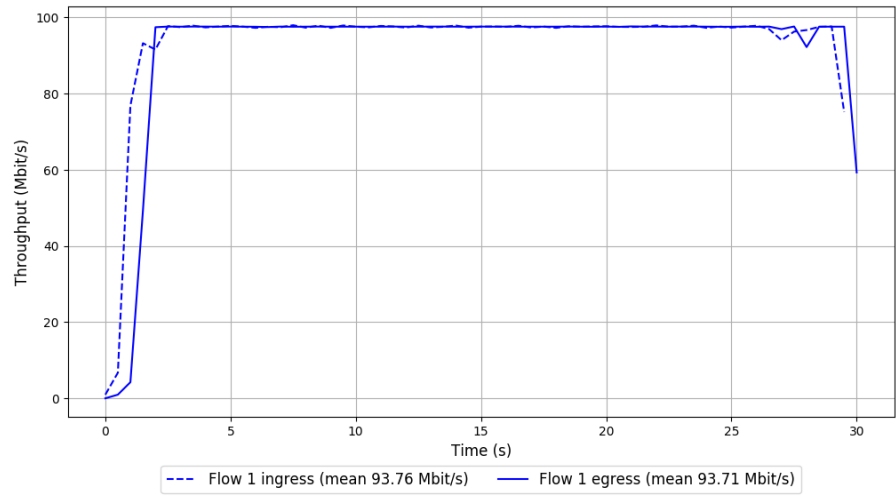
-- Flow 1:

Average throughput: 93.71 Mbit/s

95th percentile per-packet one-way delay: 100.711 ms

Loss rate: 0.63%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-02-05 12:53:34

End at: 2019-02-05 12:54:04

Local clock offset: -6.656 ms

Remote clock offset: 7.662 ms

Below is generated by plot.py at 2019-02-05 15:03:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.11 Mbit/s

95th percentile per-packet one-way delay: 103.373 ms

Loss rate: 7.54%

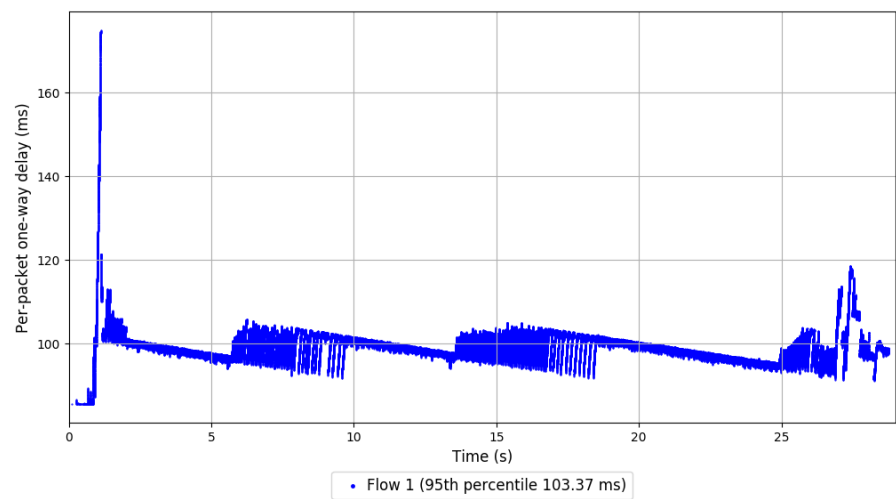
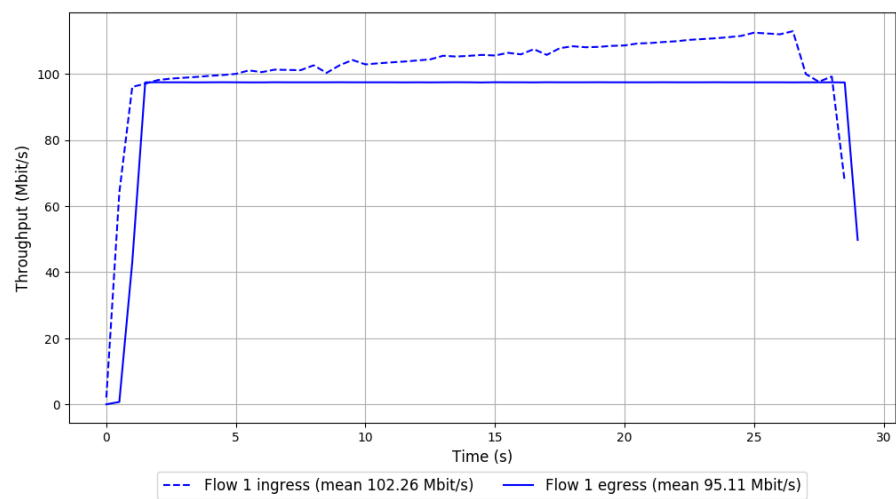
-- Flow 1:

Average throughput: 95.11 Mbit/s

95th percentile per-packet one-way delay: 103.373 ms

Loss rate: 7.54%

Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

Start at: 2019-02-05 13:18:32

End at: 2019-02-05 13:19:02

Local clock offset: -6.575 ms

Remote clock offset: 4.664 ms

Below is generated by plot.py at 2019-02-05 15:03:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.13 Mbit/s

95th percentile per-packet one-way delay: 111.130 ms

Loss rate: 6.62%

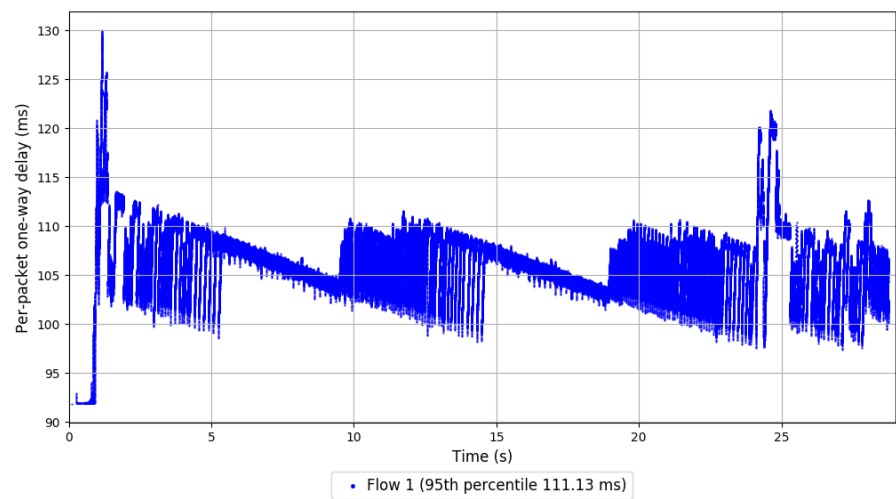
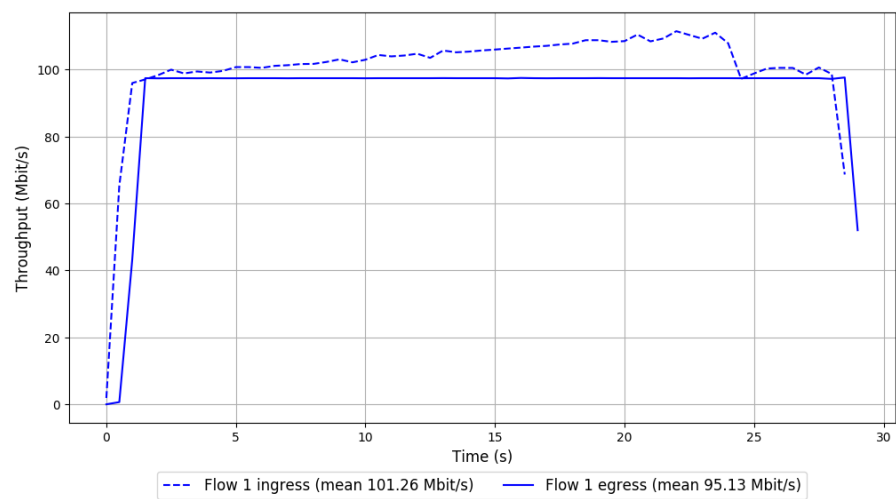
-- Flow 1:

Average throughput: 95.13 Mbit/s

95th percentile per-packet one-way delay: 111.130 ms

Loss rate: 6.62%

Run 2: Report of Indigo-MusesC3 — Data Link

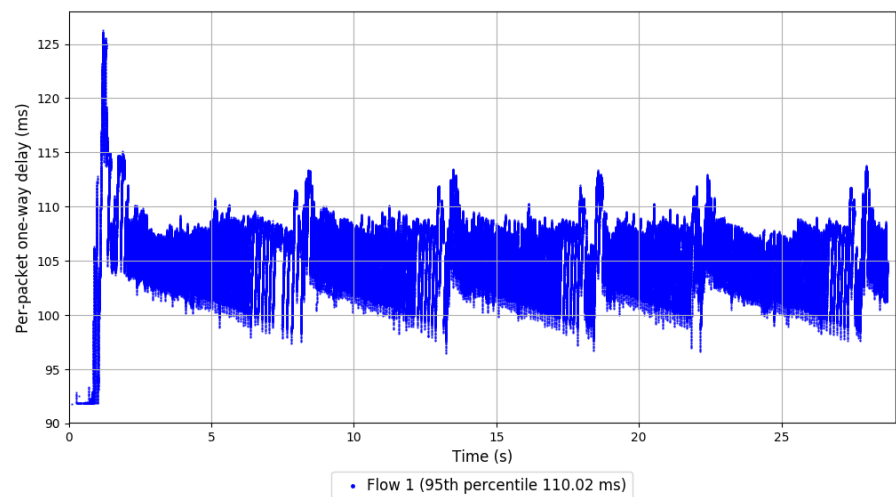
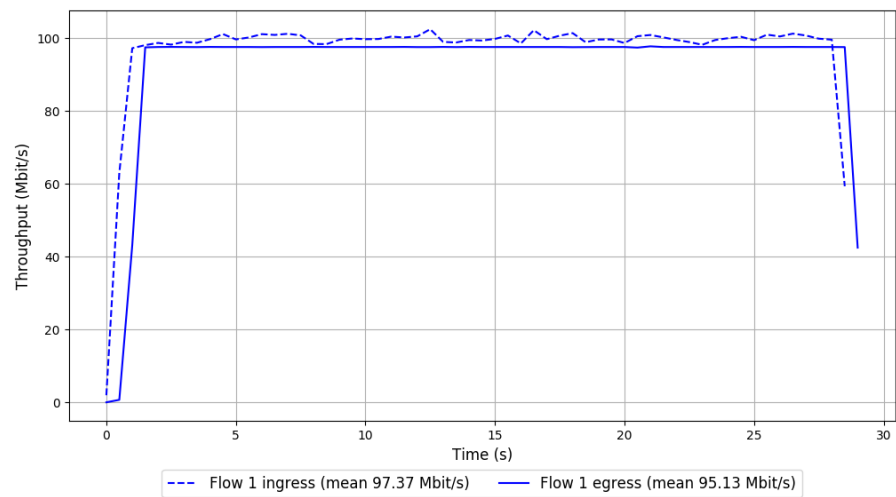


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-02-05 13:43:28
End at: 2019-02-05 13:43:58
Local clock offset: -6.103 ms
Remote clock offset: 3.716 ms

Below is generated by plot.py at 2019-02-05 15:03:36
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.13 Mbit/s
95th percentile per-packet one-way delay: 110.017 ms
Loss rate: 2.89%
-- Flow 1:
Average throughput: 95.13 Mbit/s
95th percentile per-packet one-way delay: 110.017 ms
Loss rate: 2.89%

Run 3: Report of Indigo-MusesC3 — Data Link



Run 4: Statistics of Indigo-MusesC3

Start at: 2019-02-05 14:08:28

End at: 2019-02-05 14:08:58

Local clock offset: -0.16 ms

Remote clock offset: 4.996 ms

Below is generated by plot.py at 2019-02-05 15:03:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.98 Mbit/s

95th percentile per-packet one-way delay: 107.529 ms

Loss rate: 4.45%

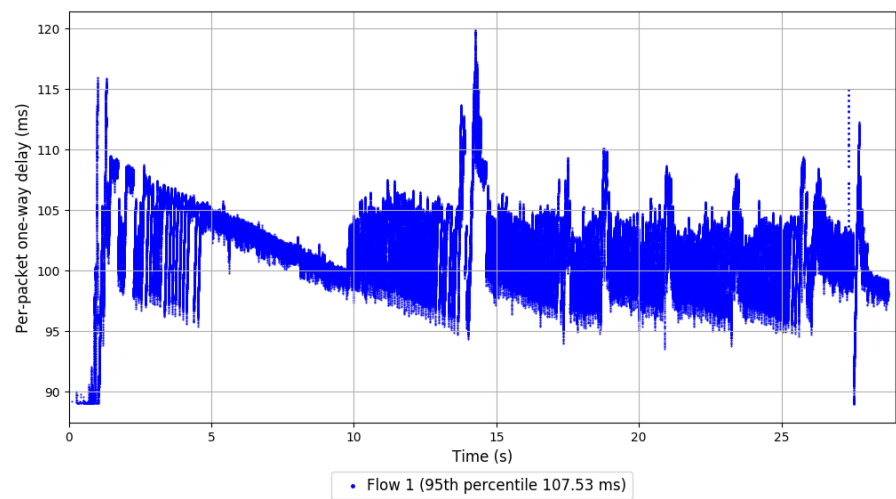
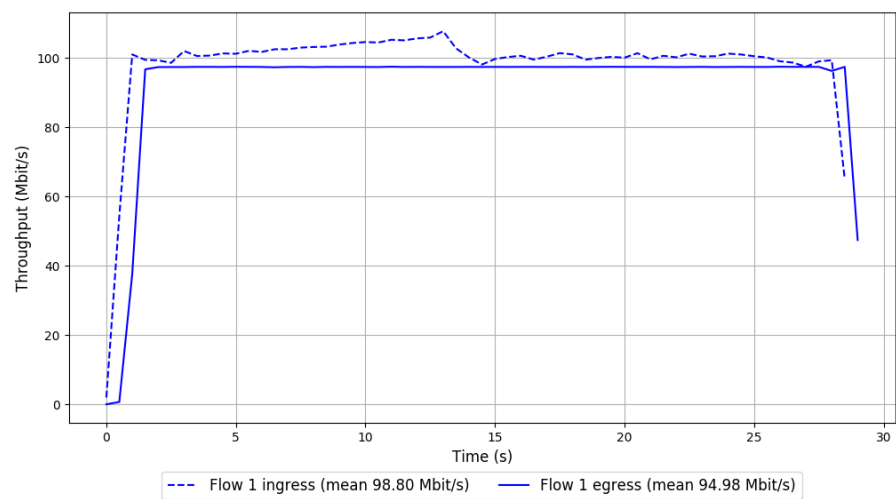
-- Flow 1:

Average throughput: 94.98 Mbit/s

95th percentile per-packet one-way delay: 107.529 ms

Loss rate: 4.45%

Run 4: Report of Indigo-MusesC3 — Data Link



Run 5: Statistics of Indigo-MusesC3

Start at: 2019-02-05 14:33:25

End at: 2019-02-05 14:33:55

Local clock offset: -5.982 ms

Remote clock offset: 5.027 ms

Below is generated by plot.py at 2019-02-05 15:03:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.16 Mbit/s

95th percentile per-packet one-way delay: 104.781 ms

Loss rate: 5.36%

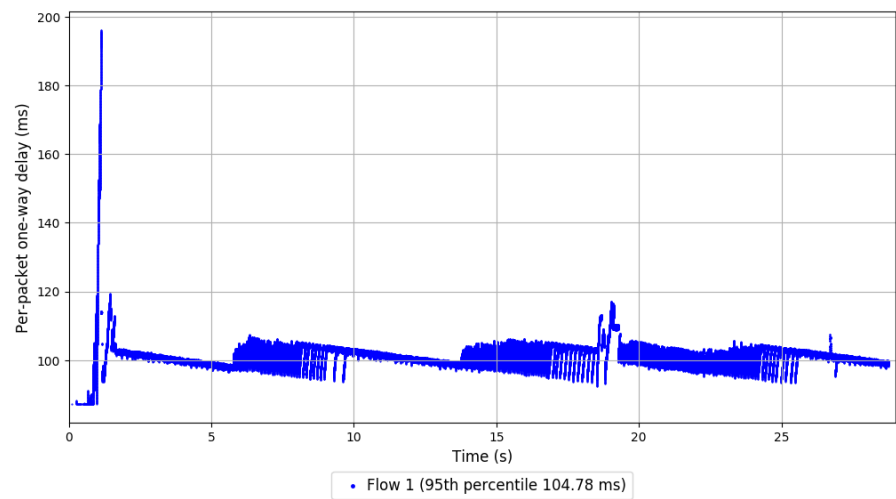
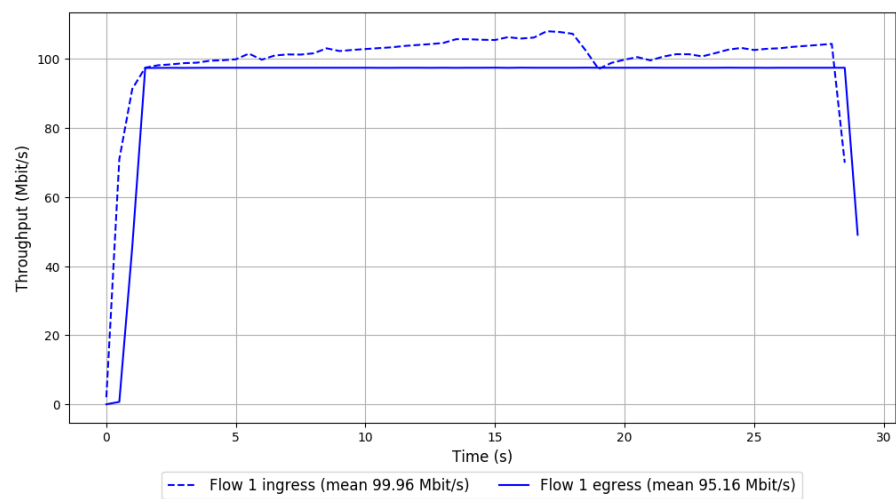
-- Flow 1:

Average throughput: 95.16 Mbit/s

95th percentile per-packet one-way delay: 104.781 ms

Loss rate: 5.36%

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-02-05 12:58:23

End at: 2019-02-05 12:58:53

Local clock offset: -6.69 ms

Remote clock offset: 8.283 ms

Below is generated by plot.py at 2019-02-05 15:04:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.35 Mbit/s

95th percentile per-packet one-way delay: 96.758 ms

Loss rate: 1.07%

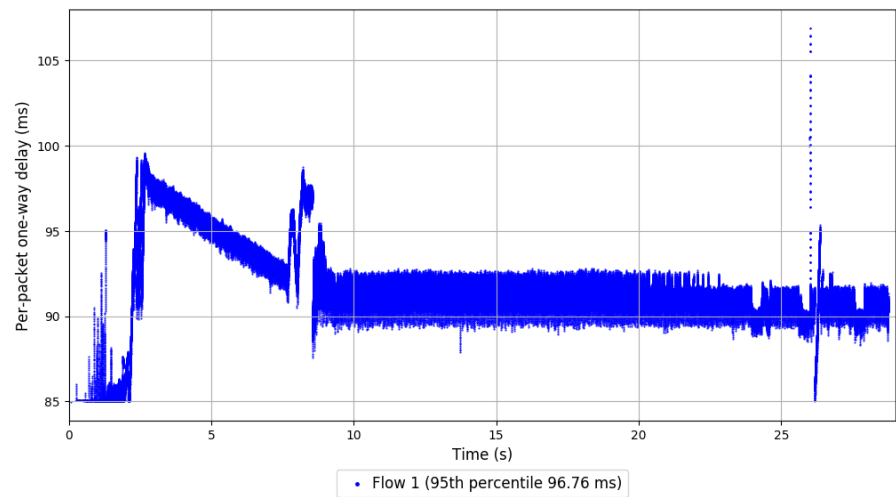
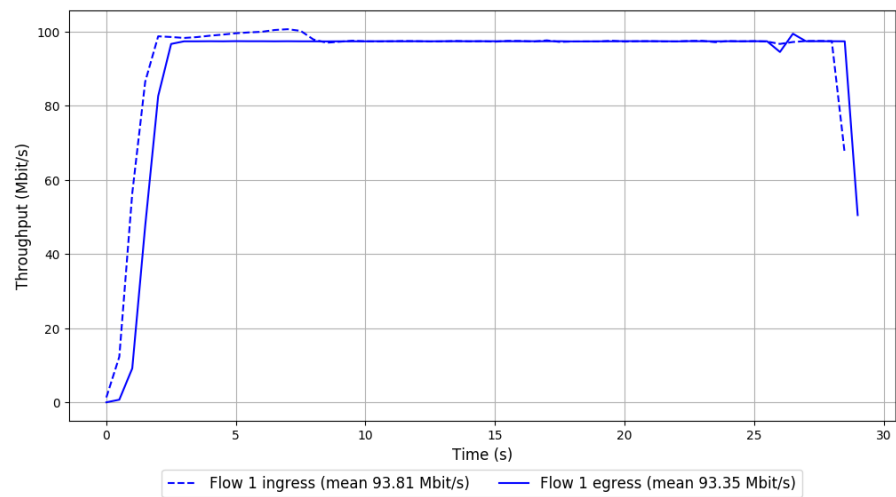
-- Flow 1:

Average throughput: 93.35 Mbit/s

95th percentile per-packet one-way delay: 96.758 ms

Loss rate: 1.07%

Run 1: Report of Indigo-MusesC5 — Data Link



Run 2: Statistics of Indigo-MusesC5

Start at: 2019-02-05 13:23:20

End at: 2019-02-05 13:23:50

Local clock offset: -6.424 ms

Remote clock offset: 4.247 ms

Below is generated by plot.py at 2019-02-05 15:04:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.40 Mbit/s

95th percentile per-packet one-way delay: 109.454 ms

Loss rate: 6.35%

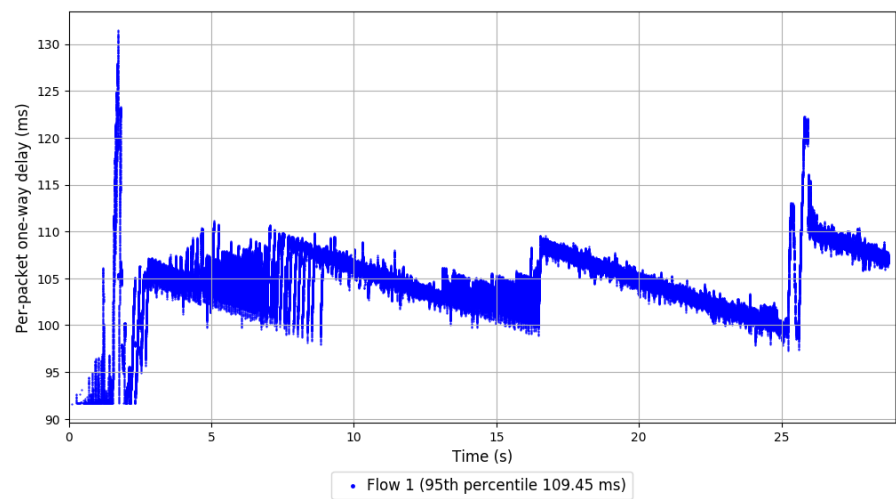
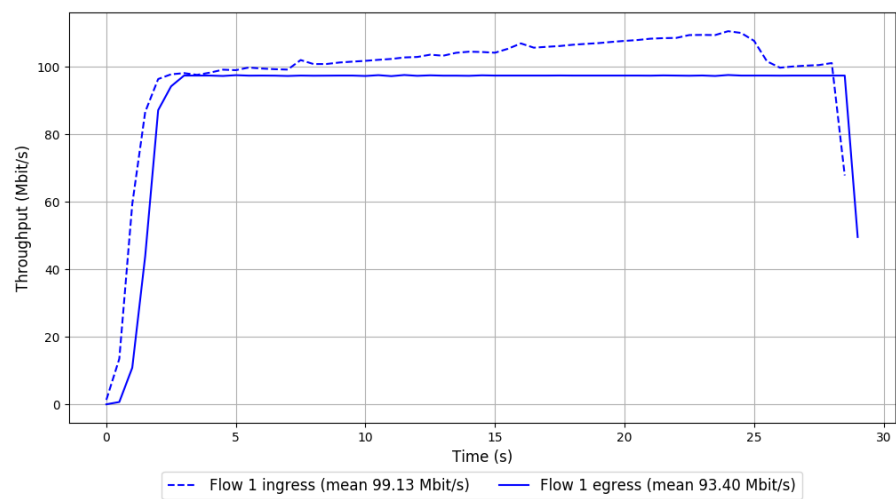
-- Flow 1:

Average throughput: 93.40 Mbit/s

95th percentile per-packet one-way delay: 109.454 ms

Loss rate: 6.35%

Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

Start at: 2019-02-05 13:48:16

End at: 2019-02-05 13:48:46

Local clock offset: -4.865 ms

Remote clock offset: 4.023 ms

Below is generated by plot.py at 2019-02-05 15:04:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.07 Mbit/s

95th percentile per-packet one-way delay: 108.124 ms

Loss rate: 6.70%

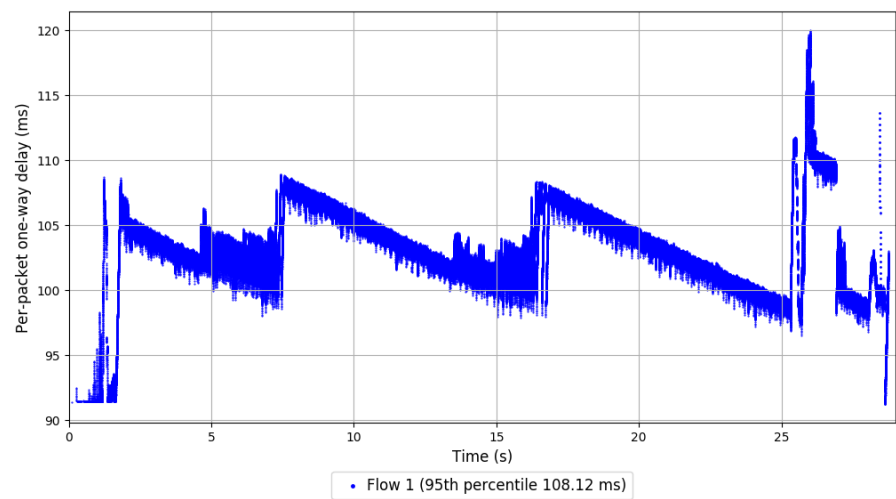
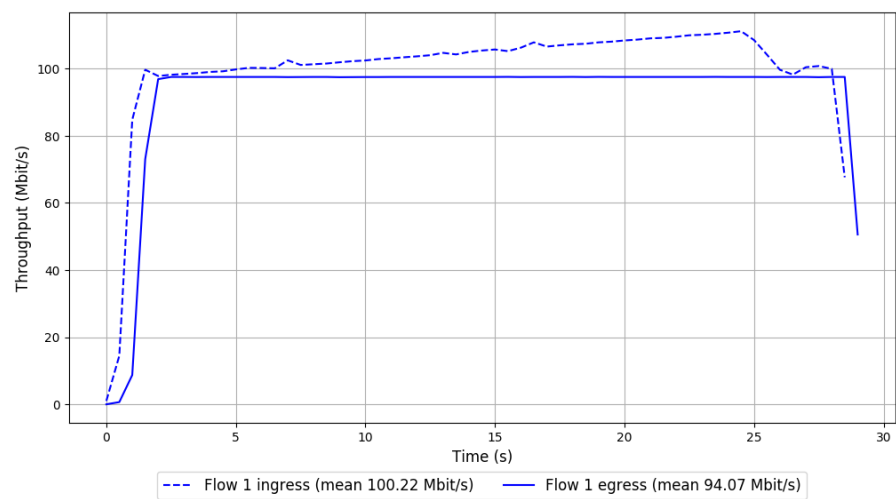
-- Flow 1:

Average throughput: 94.07 Mbit/s

95th percentile per-packet one-way delay: 108.124 ms

Loss rate: 6.70%

Run 3: Report of Indigo-MusesC5 — Data Link



Run 4: Statistics of Indigo-MusesC5

Start at: 2019-02-05 14:13:16

End at: 2019-02-05 14:13:46

Local clock offset: 0.37 ms

Remote clock offset: 2.117 ms

Below is generated by plot.py at 2019-02-05 15:04:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.01 Mbit/s

95th percentile per-packet one-way delay: 98.025 ms

Loss rate: 0.70%

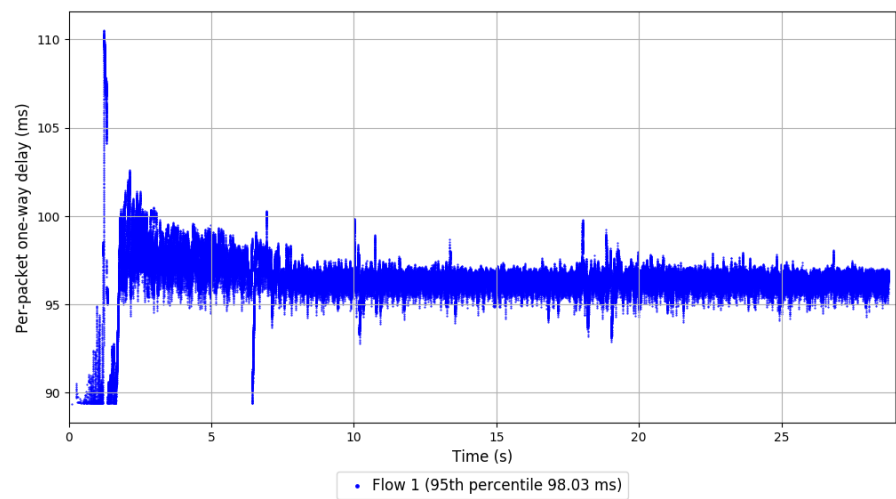
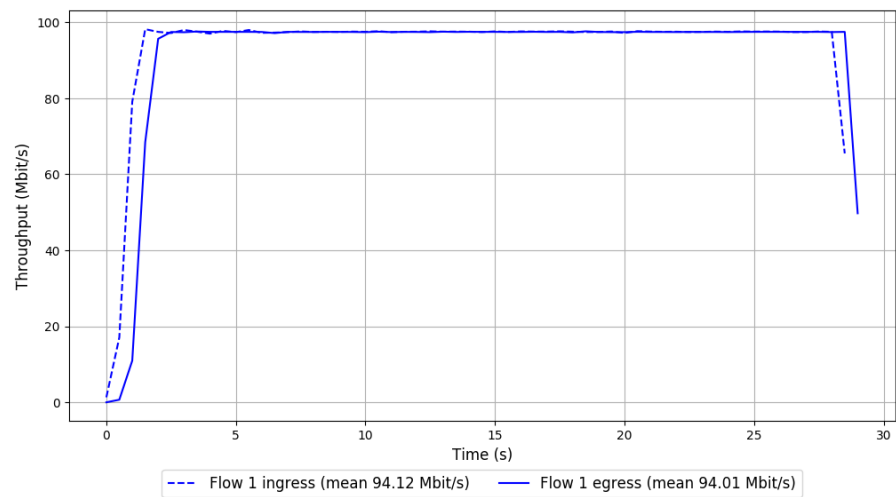
-- Flow 1:

Average throughput: 94.01 Mbit/s

95th percentile per-packet one-way delay: 98.025 ms

Loss rate: 0.70%

Run 4: Report of Indigo-MusesC5 — Data Link



Run 5: Statistics of Indigo-MusesC5

Start at: 2019-02-05 14:38:13

End at: 2019-02-05 14:38:43

Local clock offset: -6.539 ms

Remote clock offset: 5.27 ms

Below is generated by plot.py at 2019-02-05 15:04:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.73 Mbit/s

95th percentile per-packet one-way delay: 104.666 ms

Loss rate: 0.68%

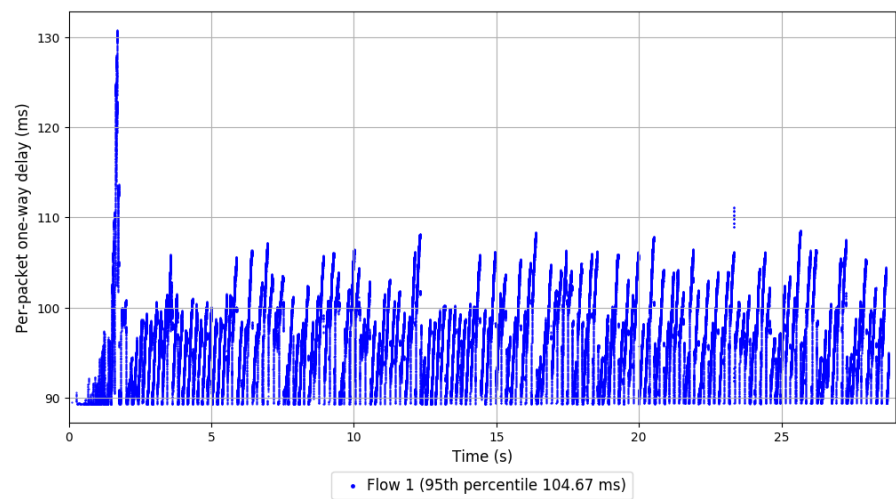
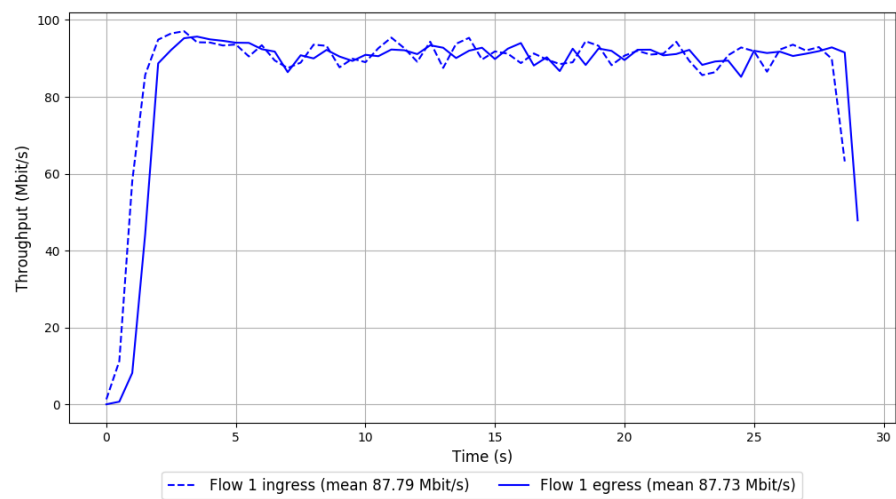
-- Flow 1:

Average throughput: 87.73 Mbit/s

95th percentile per-packet one-way delay: 104.666 ms

Loss rate: 0.68%

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

Start at: 2019-02-05 13:07:58

End at: 2019-02-05 13:08:28

Local clock offset: -6.678 ms

Remote clock offset: 4.101 ms

Below is generated by plot.py at 2019-02-05 15:04:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.26 Mbit/s

95th percentile per-packet one-way delay: 102.448 ms

Loss rate: 1.75%

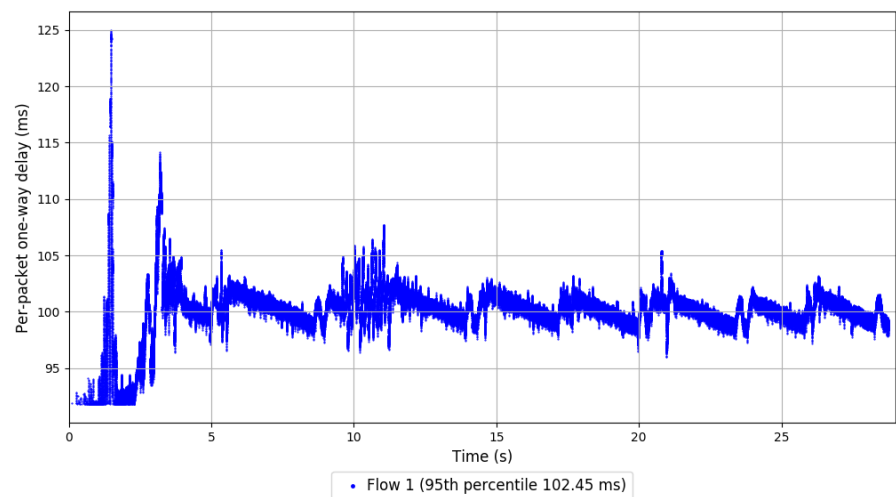
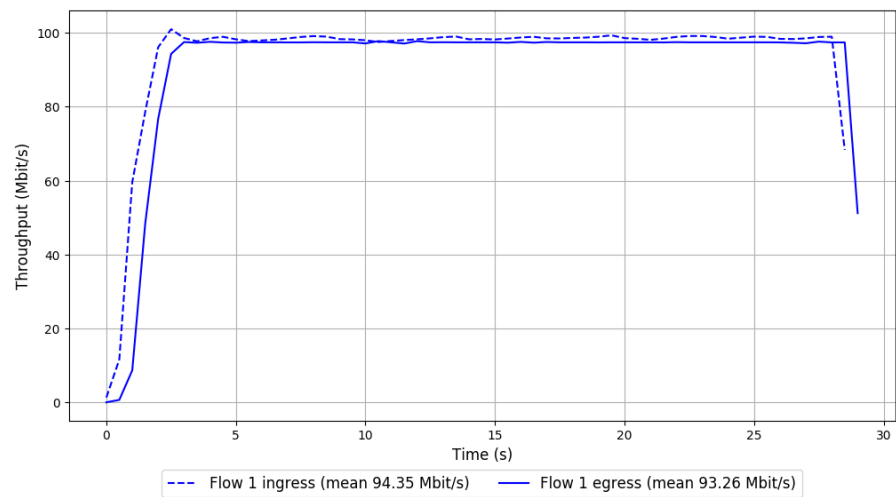
-- Flow 1:

Average throughput: 93.26 Mbit/s

95th percentile per-packet one-way delay: 102.448 ms

Loss rate: 1.75%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-02-05 13:32:55

End at: 2019-02-05 13:33:25

Local clock offset: -6.166 ms

Remote clock offset: 3.723 ms

Below is generated by plot.py at 2019-02-05 15:04:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.69 Mbit/s

95th percentile per-packet one-way delay: 94.353 ms

Loss rate: 0.63%

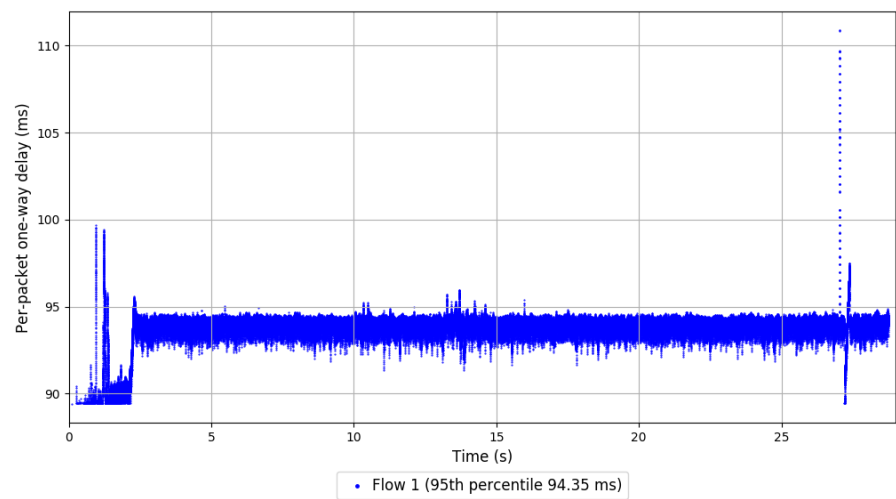
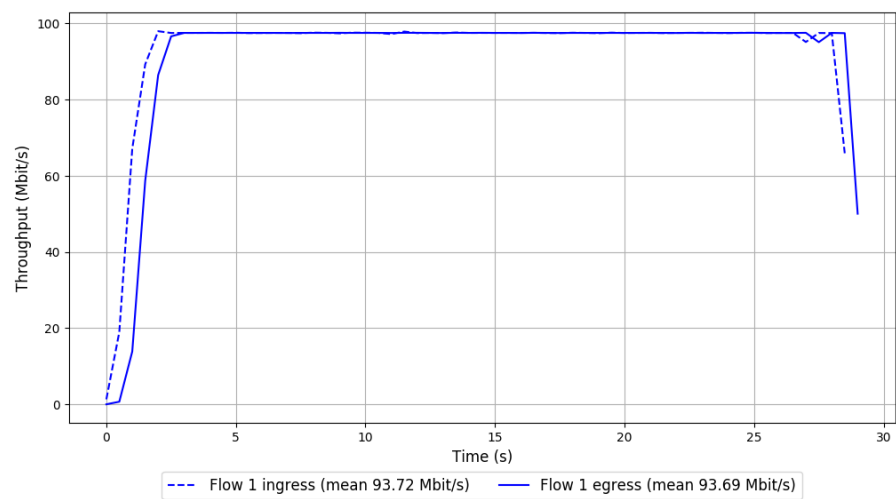
-- Flow 1:

Average throughput: 93.69 Mbit/s

95th percentile per-packet one-way delay: 94.353 ms

Loss rate: 0.63%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-02-05 13:57:52

End at: 2019-02-05 13:58:23

Local clock offset: -1.688 ms

Remote clock offset: 5.929 ms

Below is generated by plot.py at 2019-02-05 15:04:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.94 Mbit/s

95th percentile per-packet one-way delay: 106.745 ms

Loss rate: 12.87%

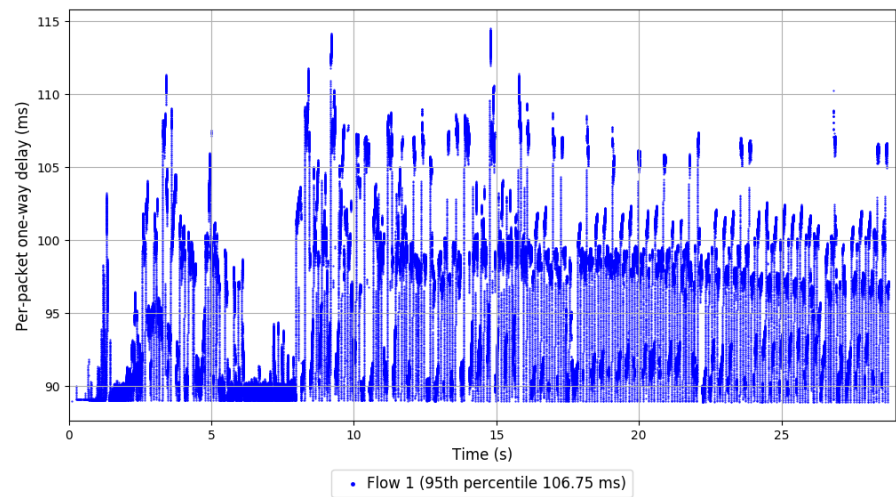
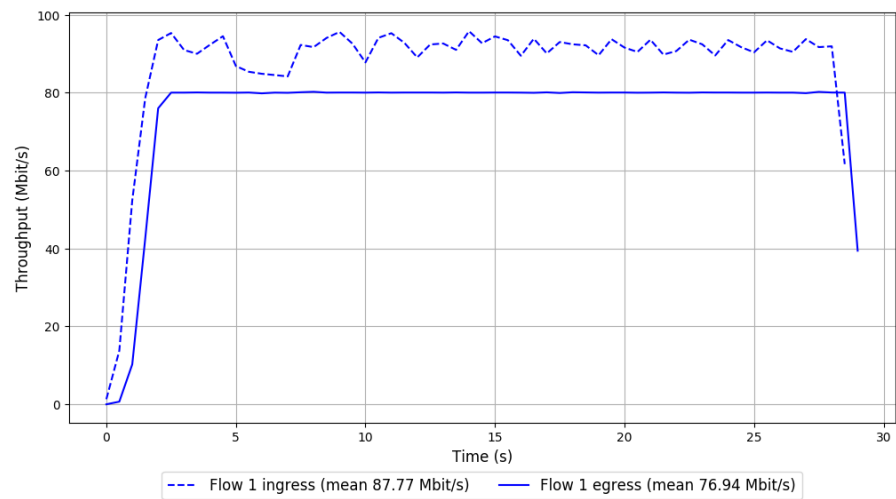
-- Flow 1:

Average throughput: 76.94 Mbit/s

95th percentile per-packet one-way delay: 106.745 ms

Loss rate: 12.87%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-02-05 14:22:51

End at: 2019-02-05 14:23:21

Local clock offset: -3.455 ms

Remote clock offset: 5.619 ms

Below is generated by plot.py at 2019-02-05 15:05:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.93 Mbit/s

95th percentile per-packet one-way delay: 98.285 ms

Loss rate: 0.66%

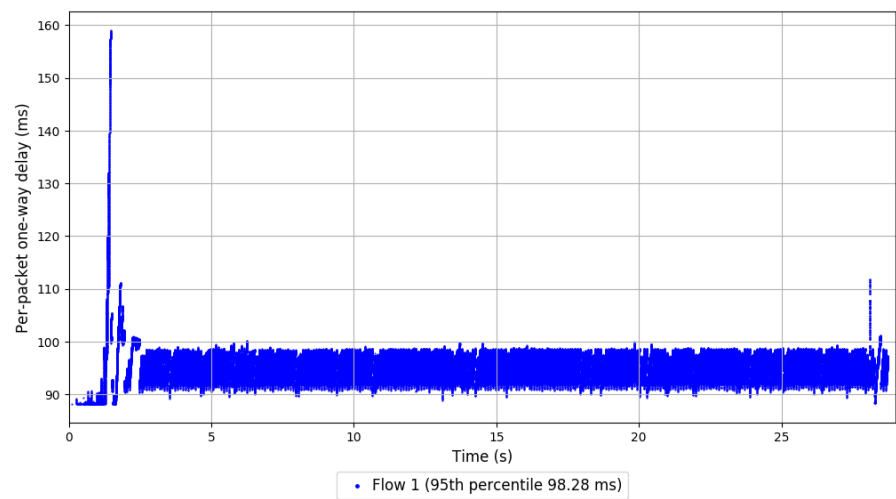
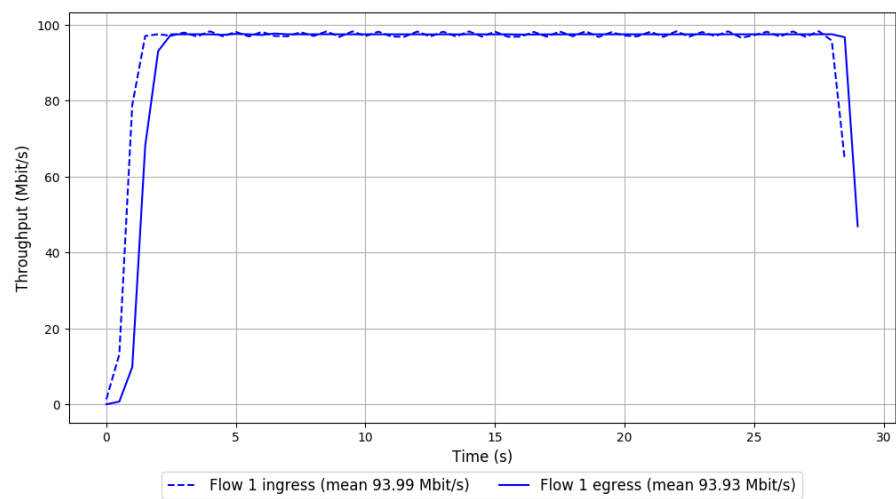
-- Flow 1:

Average throughput: 93.93 Mbit/s

95th percentile per-packet one-way delay: 98.285 ms

Loss rate: 0.66%

Run 4: Report of Indigo-MusesD — Data Link



Run 5: Statistics of Indigo-MusesD

Start at: 2019-02-05 14:47:48

End at: 2019-02-05 14:48:18

Local clock offset: -6.044 ms

Remote clock offset: 1.84 ms

Below is generated by plot.py at 2019-02-05 15:05:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.24 Mbit/s

95th percentile per-packet one-way delay: 101.985 ms

Loss rate: 1.55%

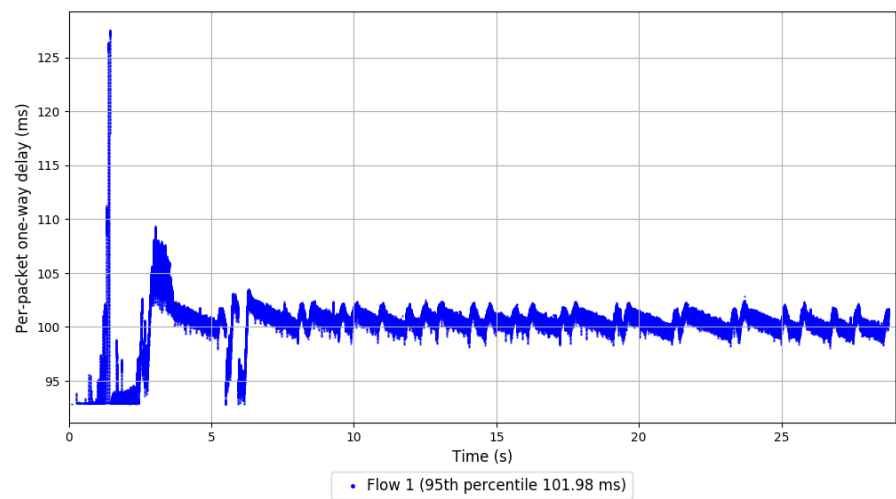
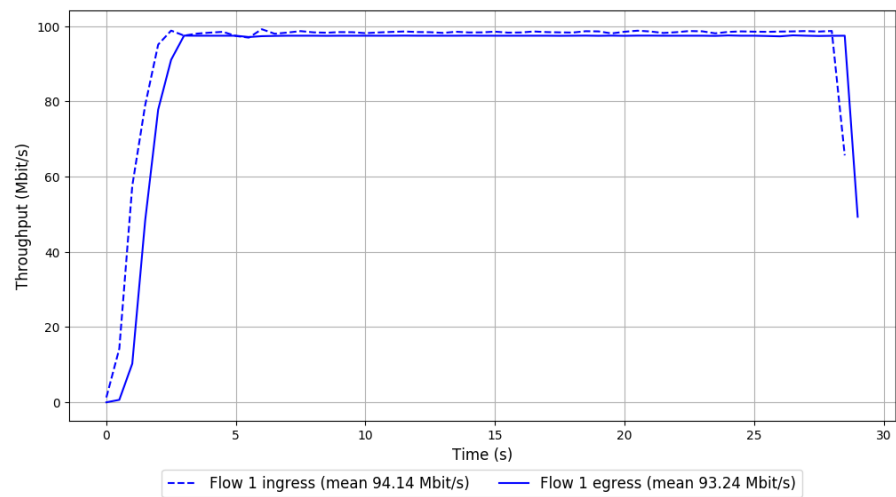
-- Flow 1:

Average throughput: 93.24 Mbit/s

95th percentile per-packet one-way delay: 101.985 ms

Loss rate: 1.55%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

Start at: 2019-02-05 12:57:11

End at: 2019-02-05 12:57:41

Local clock offset: -6.636 ms

Remote clock offset: 3.704 ms

Below is generated by plot.py at 2019-02-05 15:05:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.44 Mbit/s

95th percentile per-packet one-way delay: 178.309 ms

Loss rate: 7.32%

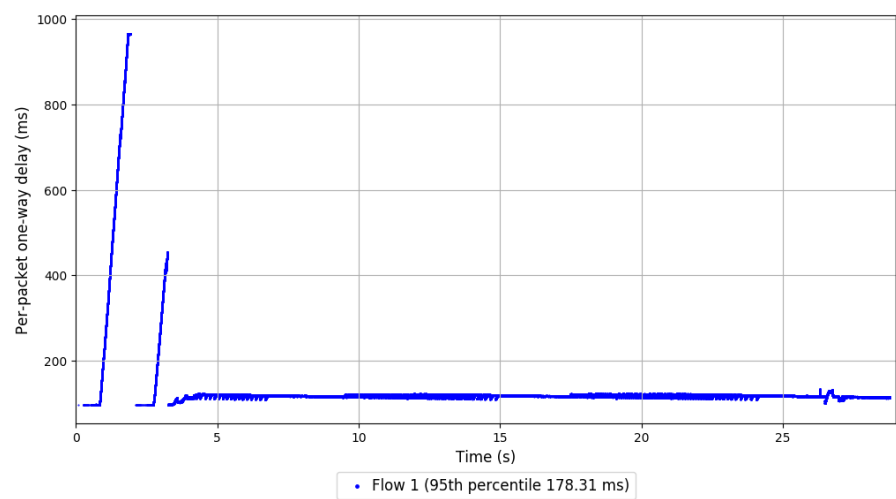
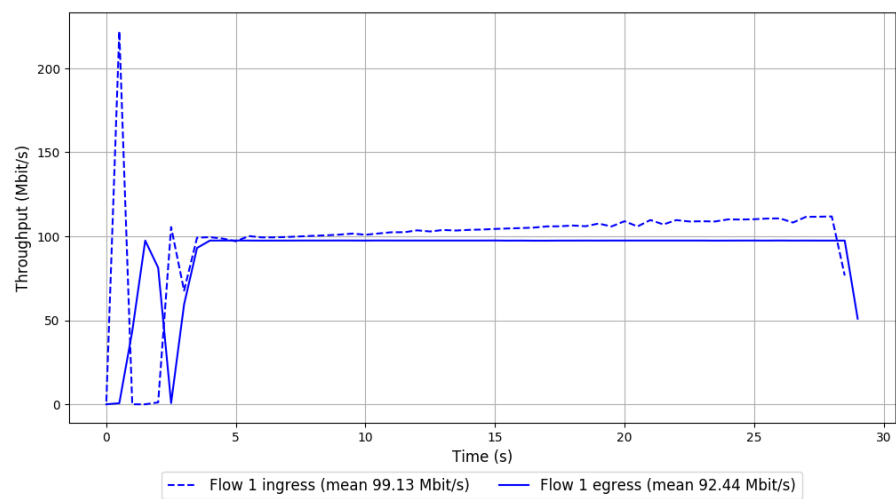
-- Flow 1:

Average throughput: 92.44 Mbit/s

95th percentile per-packet one-way delay: 178.309 ms

Loss rate: 7.32%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-02-05 13:22:08

End at: 2019-02-05 13:22:38

Local clock offset: -6.399 ms

Remote clock offset: 4.39 ms

Below is generated by plot.py at 2019-02-05 15:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.28 Mbit/s

95th percentile per-packet one-way delay: 123.405 ms

Loss rate: 7.70%

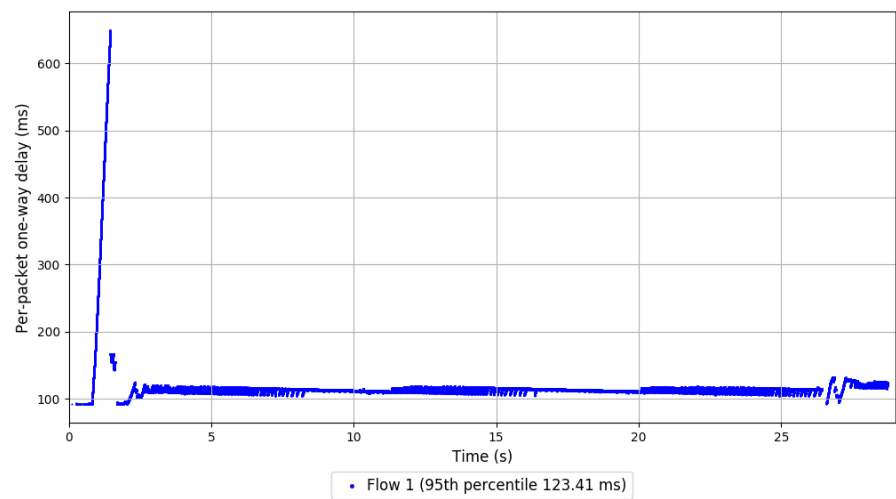
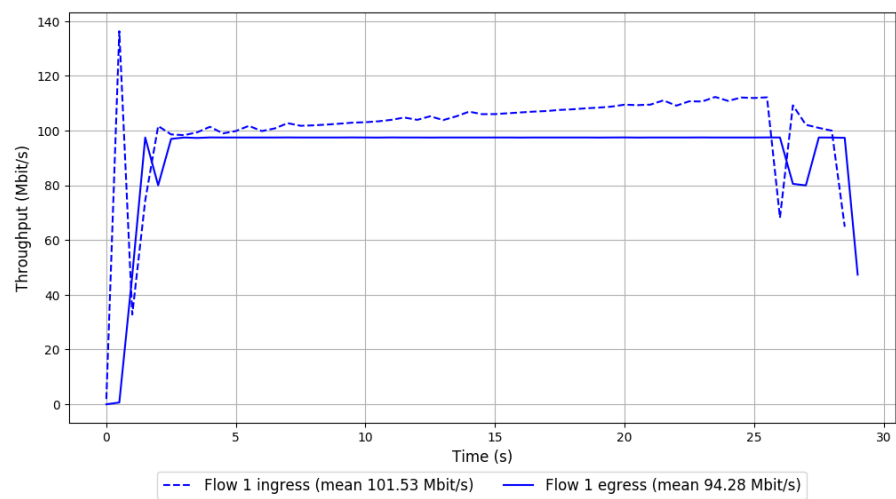
-- Flow 1:

Average throughput: 94.28 Mbit/s

95th percentile per-packet one-way delay: 123.405 ms

Loss rate: 7.70%

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

Start at: 2019-02-05 13:47:04

End at: 2019-02-05 13:47:34

Local clock offset: -5.61 ms

Remote clock offset: 3.934 ms

Below is generated by plot.py at 2019-02-05 15:05:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.96 Mbit/s

95th percentile per-packet one-way delay: 117.567 ms

Loss rate: 7.91%

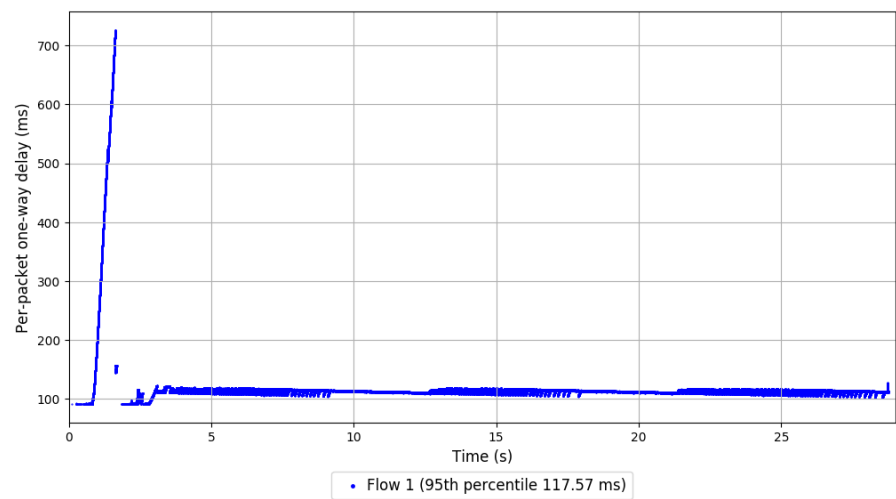
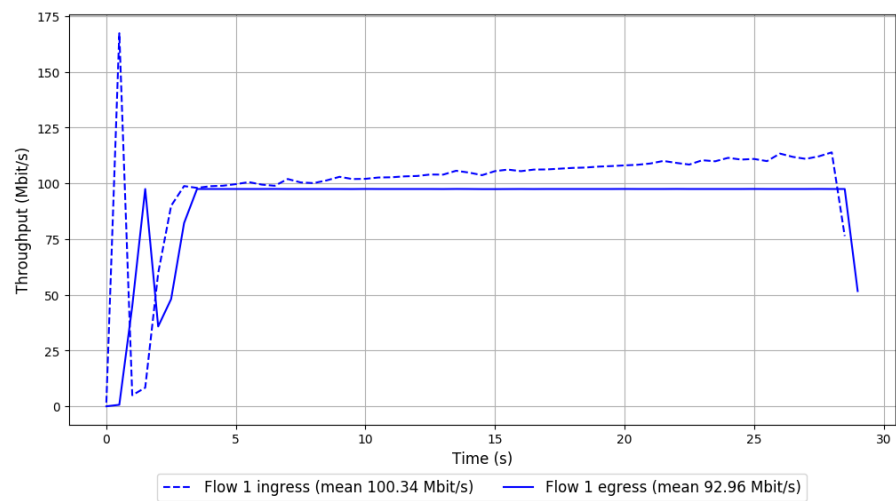
-- Flow 1:

Average throughput: 92.96 Mbit/s

95th percentile per-packet one-way delay: 117.567 ms

Loss rate: 7.91%

Run 3: Report of Indigo-MusesT — Data Link



Run 4: Statistics of Indigo-MusesT

Start at: 2019-02-05 14:12:04

End at: 2019-02-05 14:12:34

Local clock offset: 0.196 ms

Remote clock offset: 5.92 ms

Below is generated by plot.py at 2019-02-05 15:05:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.46 Mbit/s

95th percentile per-packet one-way delay: 114.116 ms

Loss rate: 9.04%

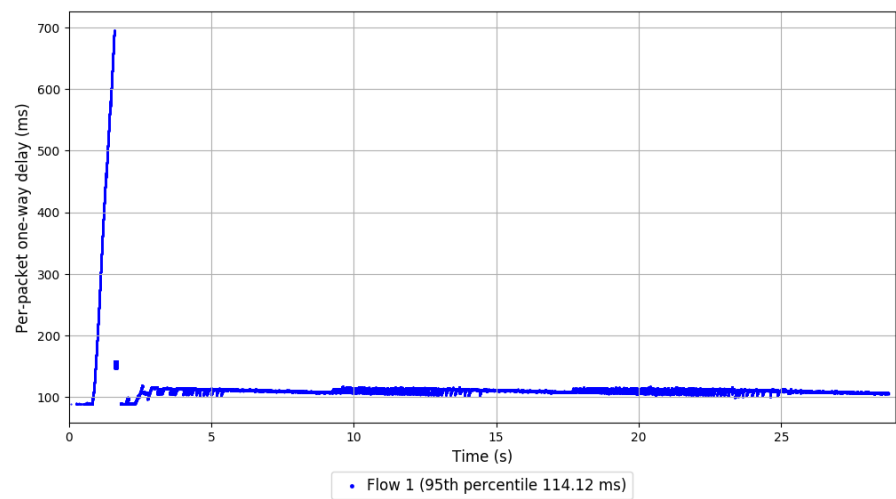
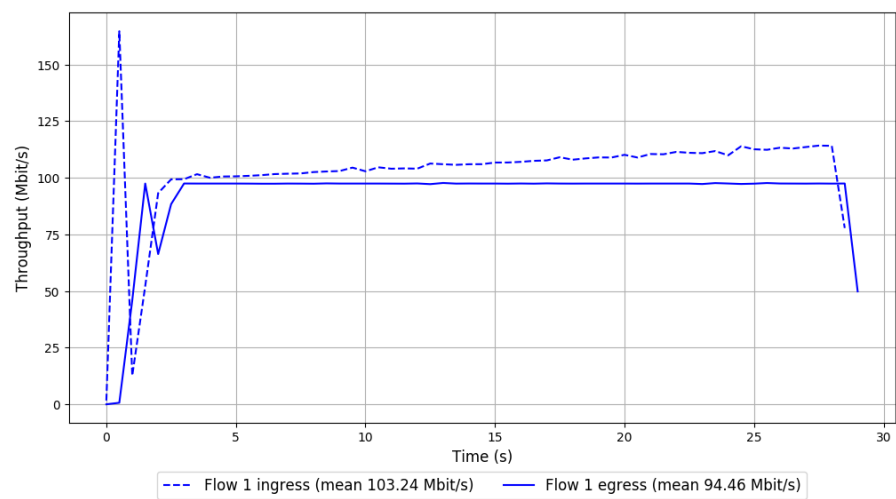
-- Flow 1:

Average throughput: 94.46 Mbit/s

95th percentile per-packet one-way delay: 114.116 ms

Loss rate: 9.04%

Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MusesT

Start at: 2019-02-05 14:37:01

End at: 2019-02-05 14:37:31

Local clock offset: -6.396 ms

Remote clock offset: 6.734 ms

Below is generated by plot.py at 2019-02-05 15:05:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.04 Mbit/s

95th percentile per-packet one-way delay: 117.225 ms

Loss rate: 7.48%

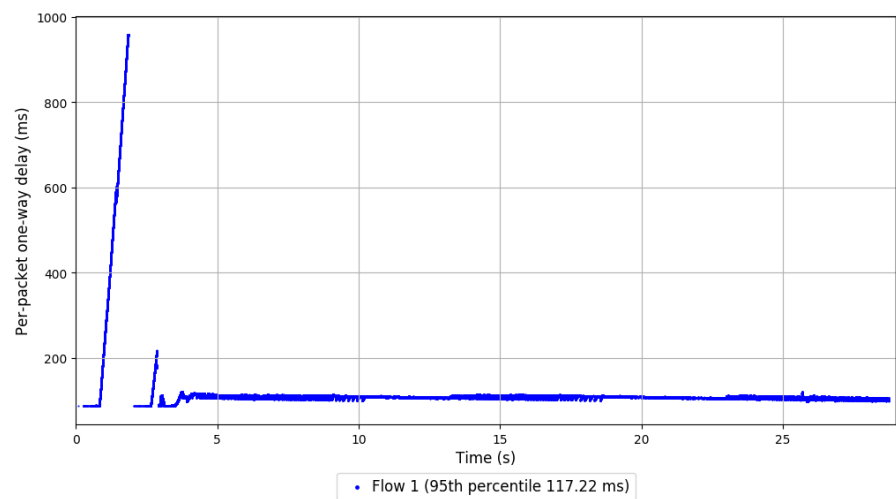
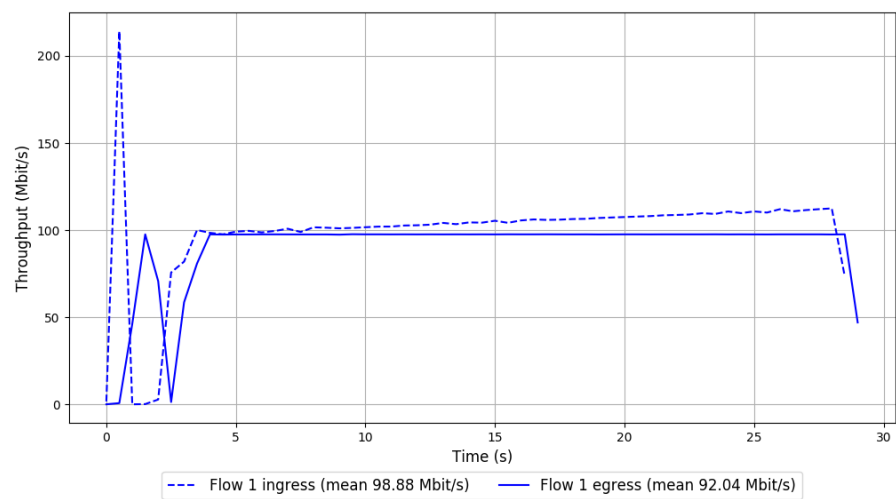
-- Flow 1:

Average throughput: 92.04 Mbit/s

95th percentile per-packet one-way delay: 117.225 ms

Loss rate: 7.48%

Run 5: Report of Indigo-MusesT — Data Link

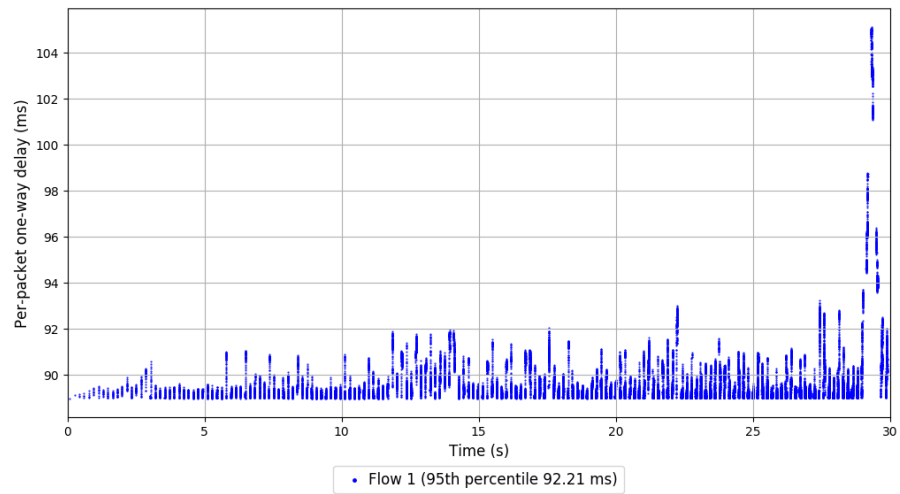
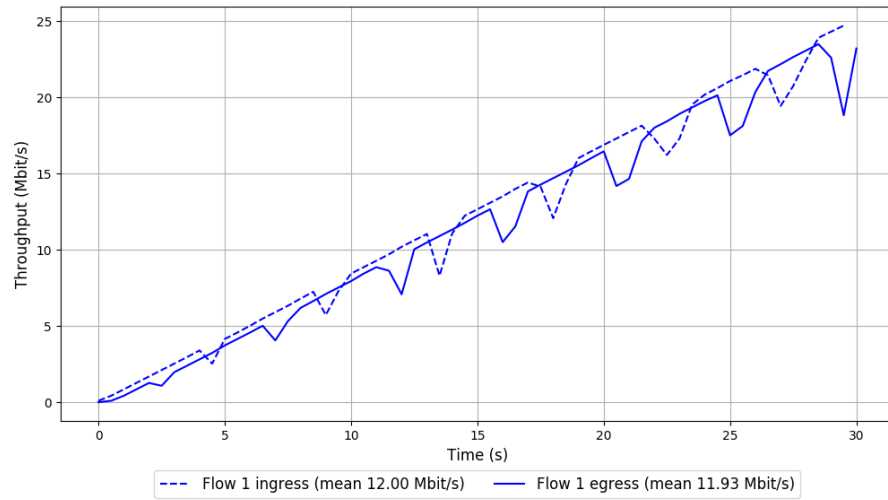


```
Run 1: Statistics of LEDBAT

Start at: 2019-02-05 13:00:46
End at: 2019-02-05 13:01:16
Local clock offset: -6.623 ms
Remote clock offset: 6.617 ms

# Below is generated by plot.py at 2019-02-05 15:05:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.93 Mbit/s
95th percentile per-packet one-way delay: 92.207 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 11.93 Mbit/s
95th percentile per-packet one-way delay: 92.207 ms
Loss rate: 1.15%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-02-05 13:25:43

End at: 2019-02-05 13:26:13

Local clock offset: -6.292 ms

Remote clock offset: 7.73 ms

Below is generated by plot.py at 2019-02-05 15:05:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.49 Mbit/s

95th percentile per-packet one-way delay: 93.520 ms

Loss rate: 1.18%

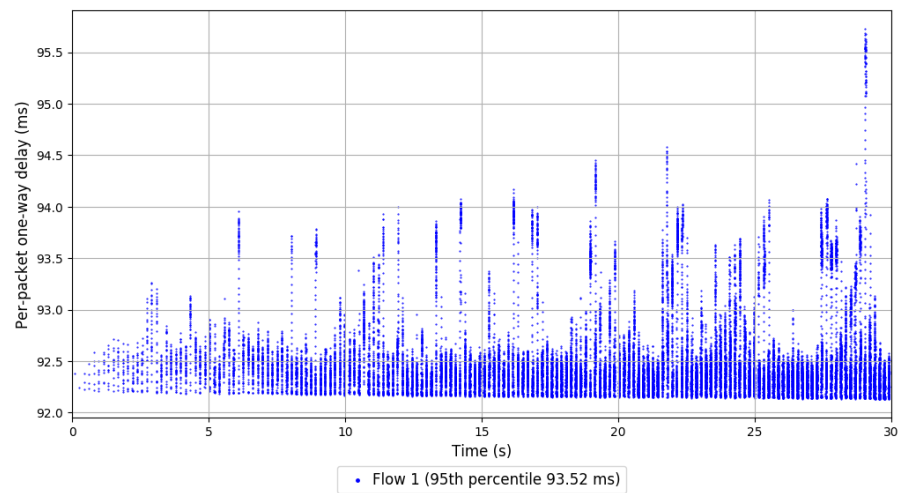
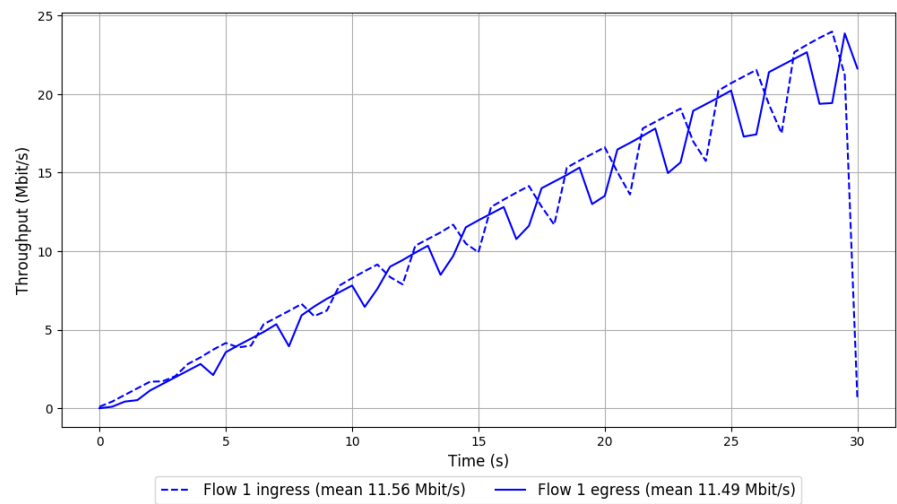
-- Flow 1:

Average throughput: 11.49 Mbit/s

95th percentile per-packet one-way delay: 93.520 ms

Loss rate: 1.18%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2019-02-05 13:50:39

End at: 2019-02-05 13:51:09

Local clock offset: -3.821 ms

Remote clock offset: 2.948 ms

Below is generated by plot.py at 2019-02-05 15:05:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.95 Mbit/s

95th percentile per-packet one-way delay: 94.430 ms

Loss rate: 1.15%

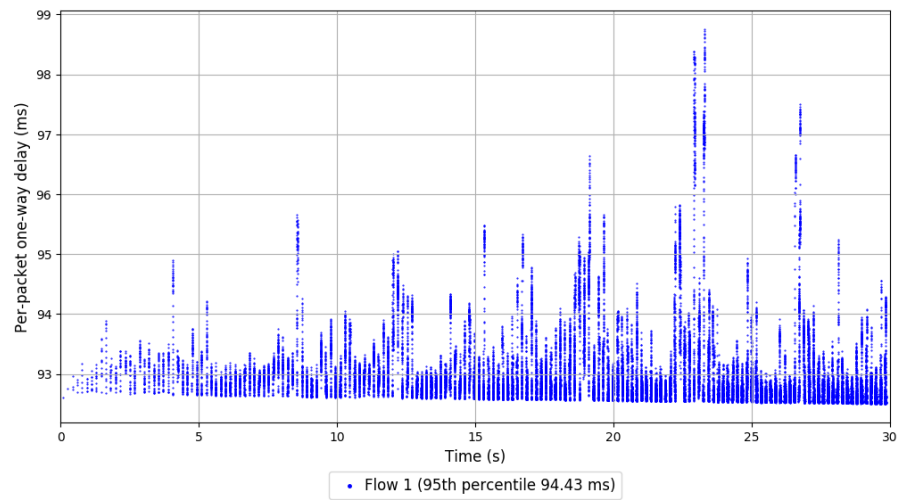
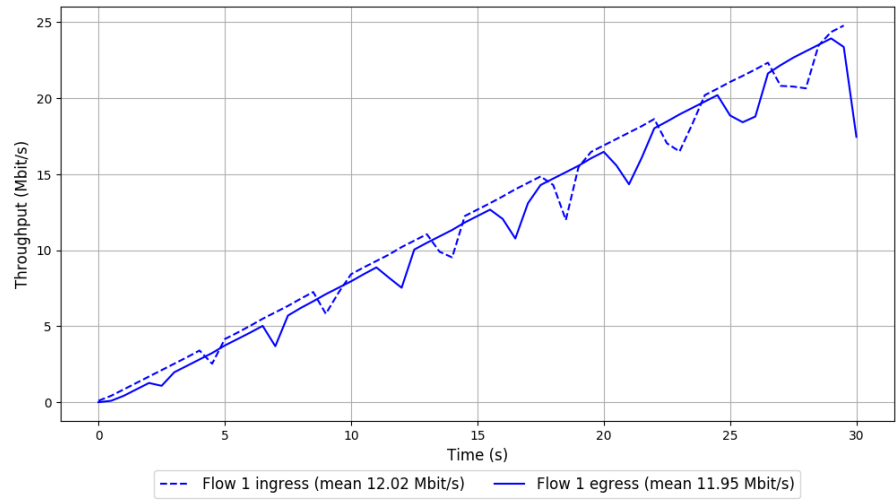
-- Flow 1:

Average throughput: 11.95 Mbit/s

95th percentile per-packet one-way delay: 94.430 ms

Loss rate: 1.15%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2019-02-05 14:15:39

End at: 2019-02-05 14:16:09

Local clock offset: 0.599 ms

Remote clock offset: 0.876 ms

Below is generated by plot.py at 2019-02-05 15:05:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 95.476 ms

Loss rate: 1.15%

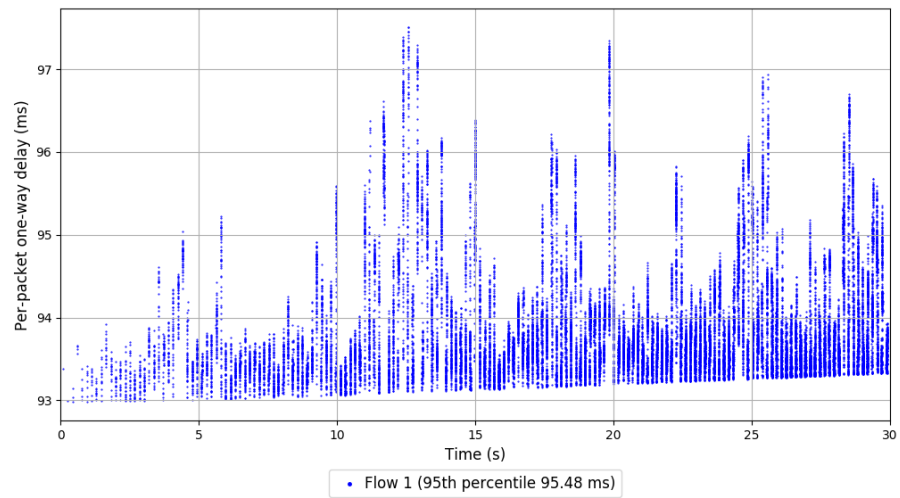
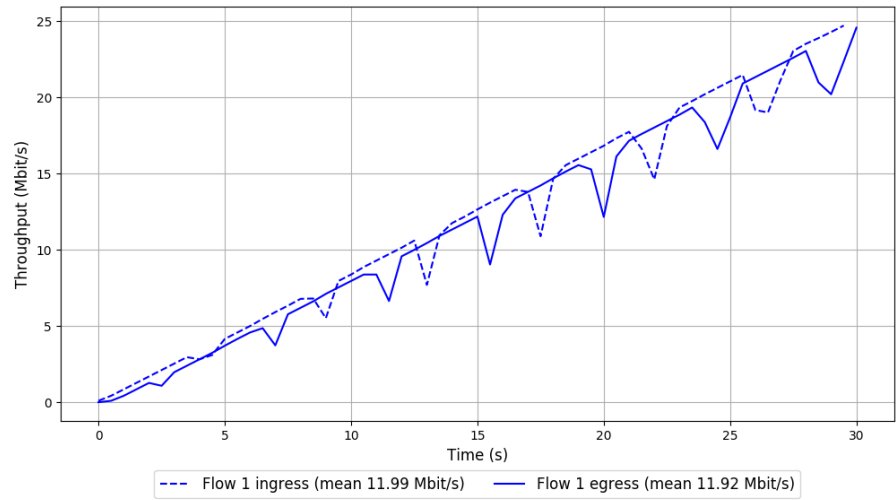
-- Flow 1:

Average throughput: 11.92 Mbit/s

95th percentile per-packet one-way delay: 95.476 ms

Loss rate: 1.15%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2019-02-05 14:40:35

End at: 2019-02-05 14:41:05

Local clock offset: -6.796 ms

Remote clock offset: 5.462 ms

Below is generated by plot.py at 2019-02-05 15:05:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.13 Mbit/s

95th percentile per-packet one-way delay: 88.640 ms

Loss rate: 1.14%

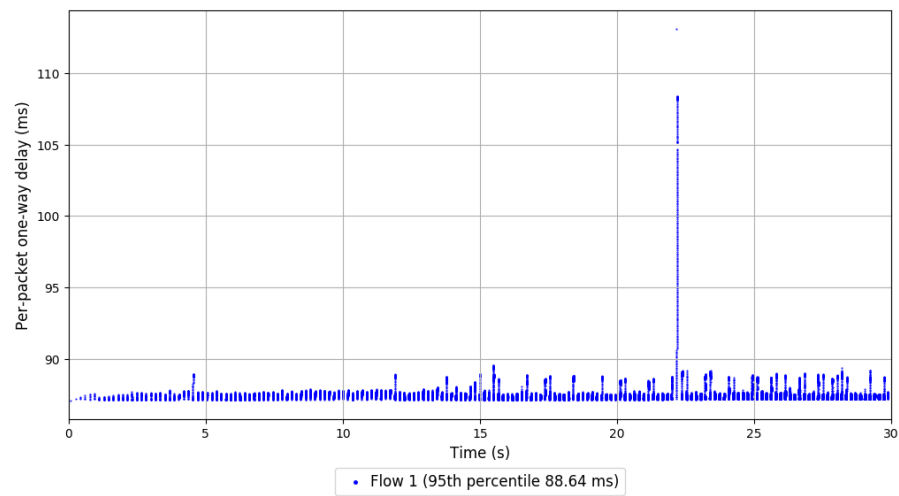
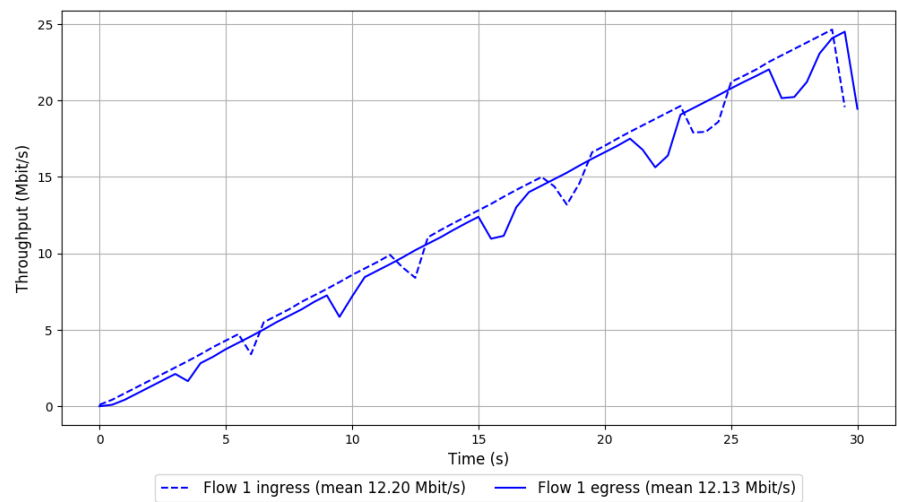
-- Flow 1:

Average throughput: 12.13 Mbit/s

95th percentile per-packet one-way delay: 88.640 ms

Loss rate: 1.14%

Run 5: Report of LEDBAT — Data Link

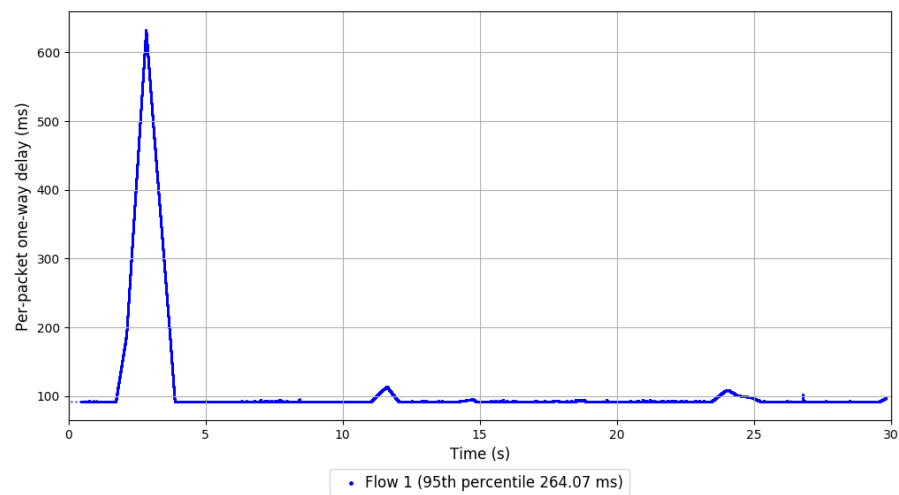
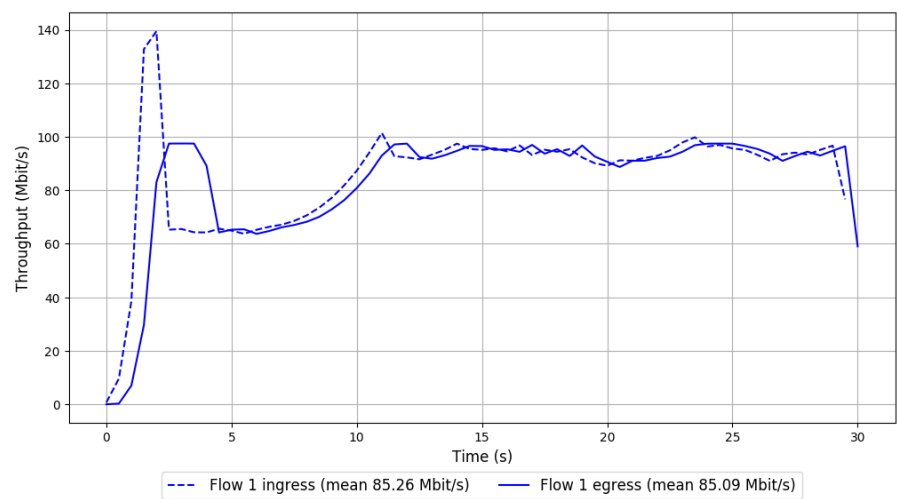


```
Run 1: Statistics of PCC-Allegro

Start at: 2019-02-05 12:59:35
End at: 2019-02-05 13:00:05
Local clock offset: -6.625 ms
Remote clock offset: 3.677 ms

# Below is generated by plot.py at 2019-02-05 15:06:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.09 Mbit/s
95th percentile per-packet one-way delay: 264.075 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 85.09 Mbit/s
95th percentile per-packet one-way delay: 264.075 ms
Loss rate: 0.78%
```

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-02-05 13:24:32

End at: 2019-02-05 13:25:02

Local clock offset: -6.405 ms

Remote clock offset: 3.114 ms

Below is generated by plot.py at 2019-02-05 15:06:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.79 Mbit/s

95th percentile per-packet one-way delay: 239.552 ms

Loss rate: 0.71%

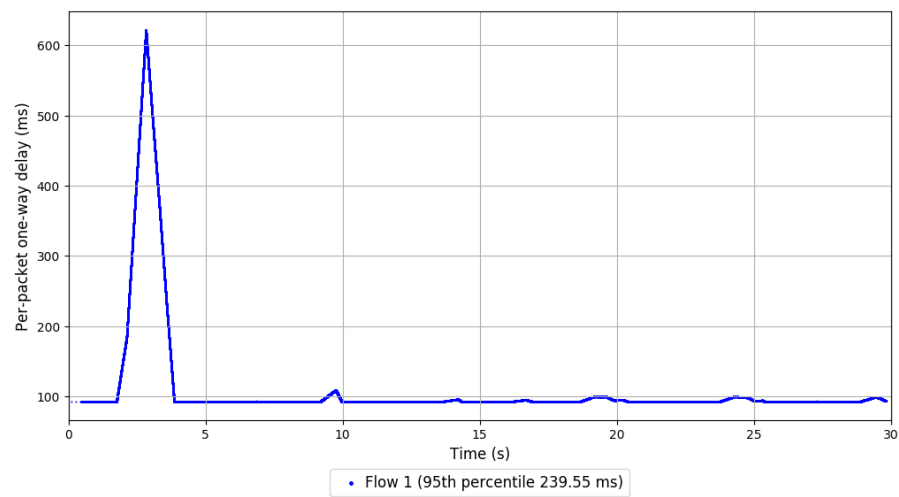
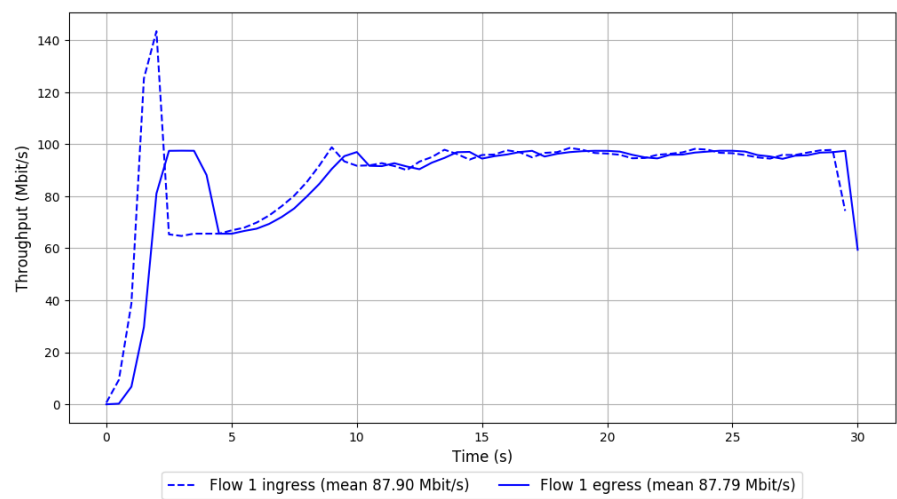
-- Flow 1:

Average throughput: 87.79 Mbit/s

95th percentile per-packet one-way delay: 239.552 ms

Loss rate: 0.71%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-02-05 13:49:28

End at: 2019-02-05 13:49:58

Local clock offset: -4.314 ms

Remote clock offset: 2.847 ms

Below is generated by plot.py at 2019-02-05 15:06:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.79 Mbit/s

95th percentile per-packet one-way delay: 238.081 ms

Loss rate: 0.75%

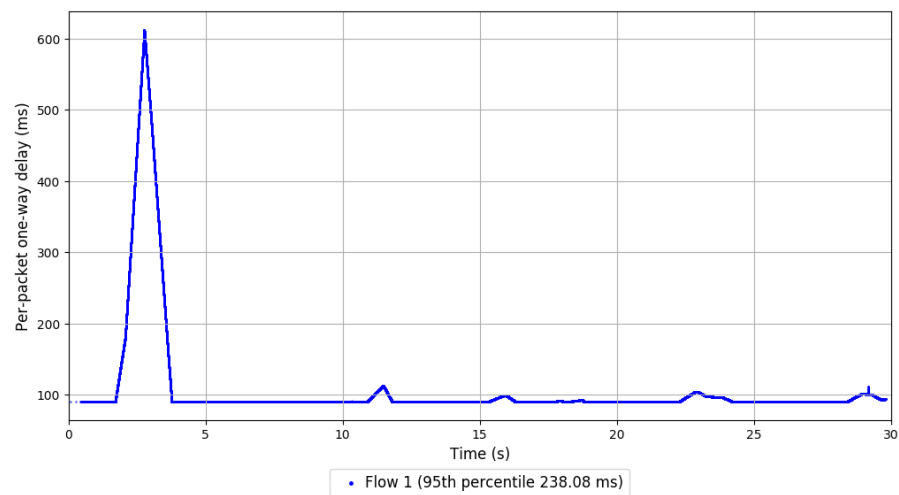
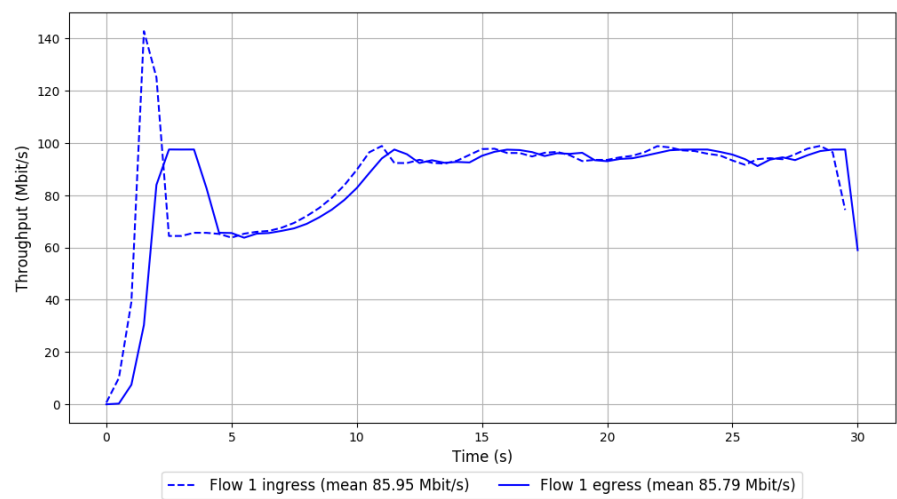
-- Flow 1:

Average throughput: 85.79 Mbit/s

95th percentile per-packet one-way delay: 238.081 ms

Loss rate: 0.75%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-02-05 14:14:28

End at: 2019-02-05 14:14:58

Local clock offset: 0.489 ms

Remote clock offset: 1.881 ms

Below is generated by plot.py at 2019-02-05 15:06:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.54 Mbit/s

95th percentile per-packet one-way delay: 251.162 ms

Loss rate: 0.76%

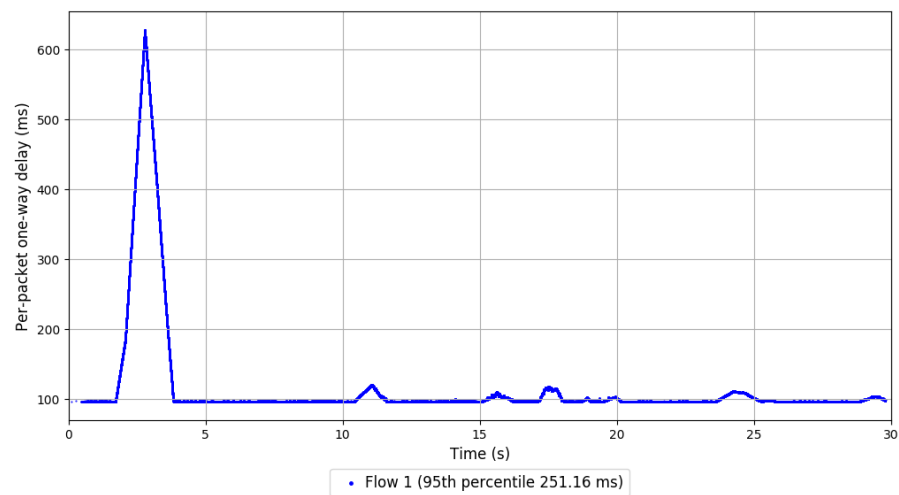
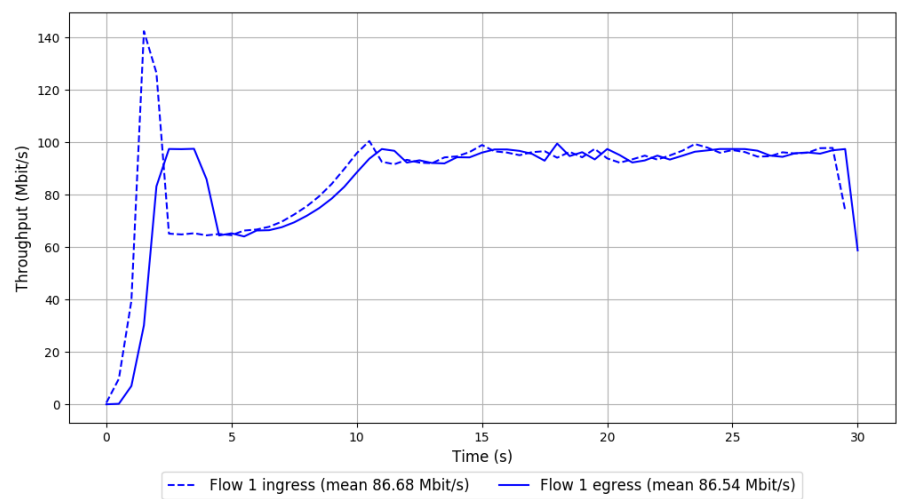
-- Flow 1:

Average throughput: 86.54 Mbit/s

95th percentile per-packet one-way delay: 251.162 ms

Loss rate: 0.76%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-02-05 14:39:24

End at: 2019-02-05 14:39:54

Local clock offset: -6.656 ms

Remote clock offset: 5.556 ms

Below is generated by plot.py at 2019-02-05 15:06:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.01 Mbit/s

95th percentile per-packet one-way delay: 238.049 ms

Loss rate: 0.69%

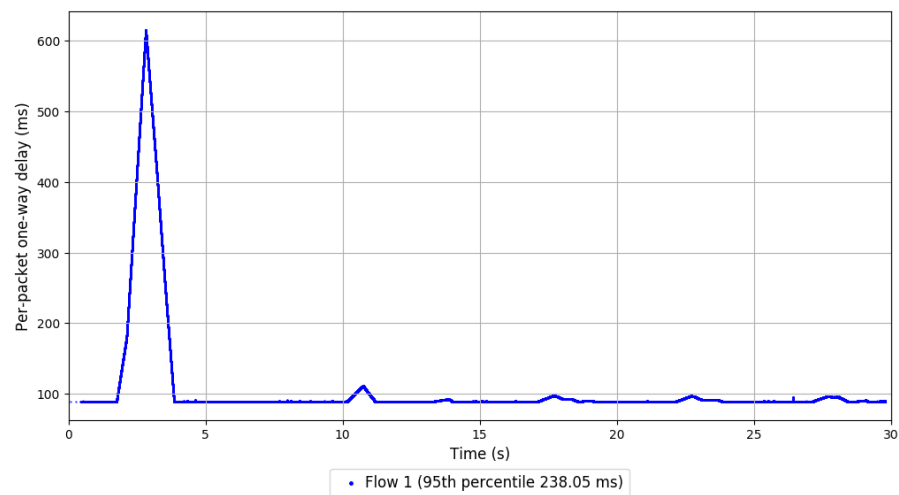
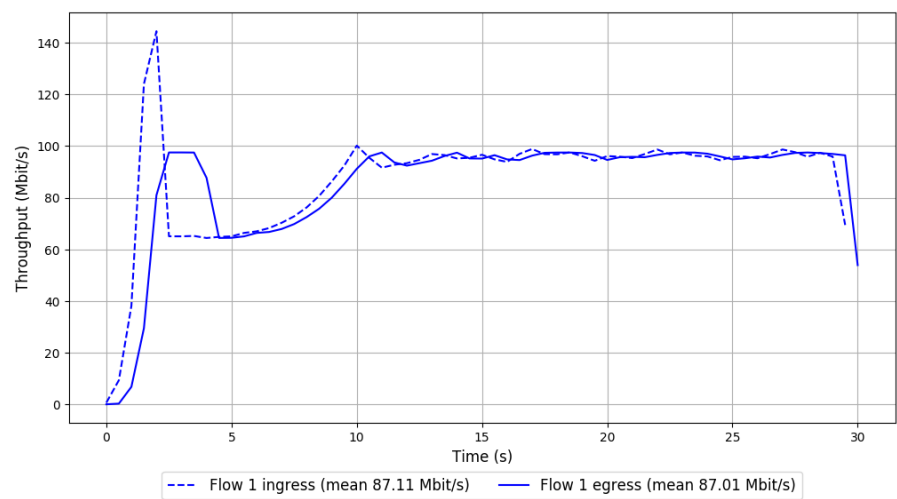
-- Flow 1:

Average throughput: 87.01 Mbit/s

95th percentile per-packet one-way delay: 238.049 ms

Loss rate: 0.69%

Run 5: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2019-02-05 13:04:21

End at: 2019-02-05 13:04:51

Local clock offset: -6.638 ms

Remote clock offset: 7.681 ms

Below is generated by plot.py at 2019-02-05 15:07:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.57 Mbit/s

95th percentile per-packet one-way delay: 475.936 ms

Loss rate: 1.74%

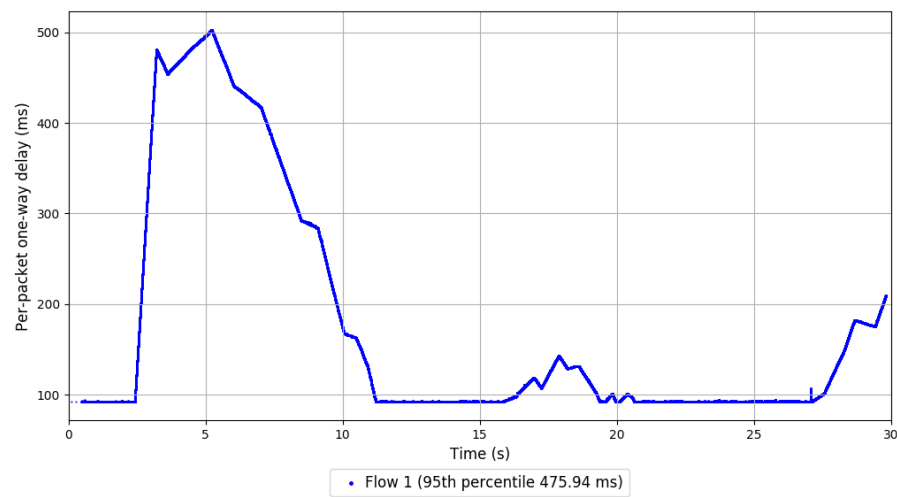
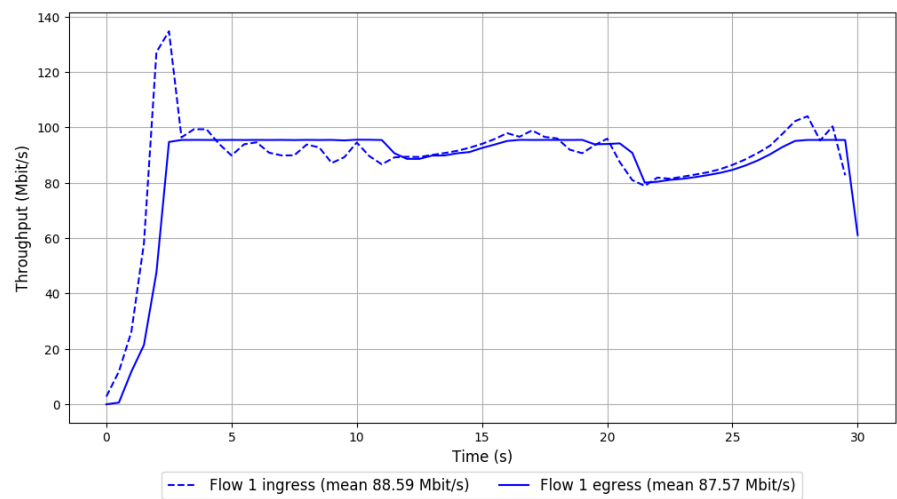
-- Flow 1:

Average throughput: 87.57 Mbit/s

95th percentile per-packet one-way delay: 475.936 ms

Loss rate: 1.74%

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2019-02-05 13:29:19

End at: 2019-02-05 13:29:49

Local clock offset: -6.219 ms

Remote clock offset: 3.731 ms

Below is generated by plot.py at 2019-02-05 15:07:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.12 Mbit/s

95th percentile per-packet one-way delay: 460.522 ms

Loss rate: 1.29%

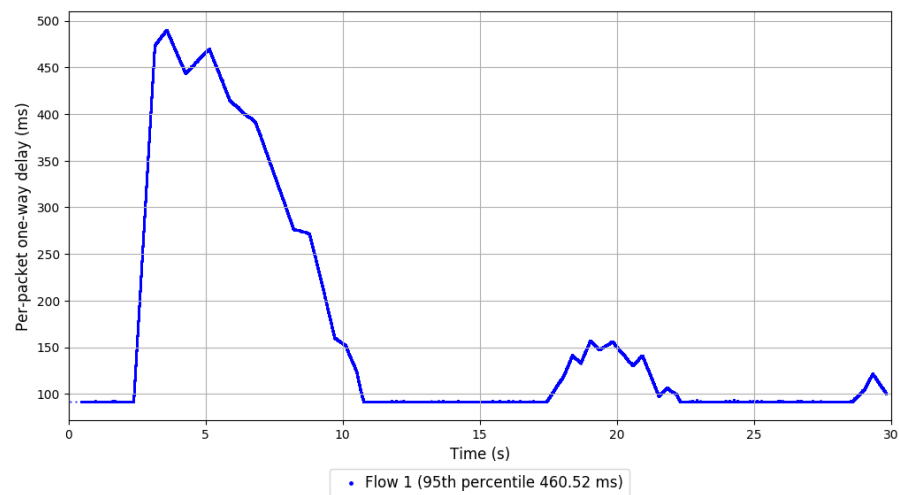
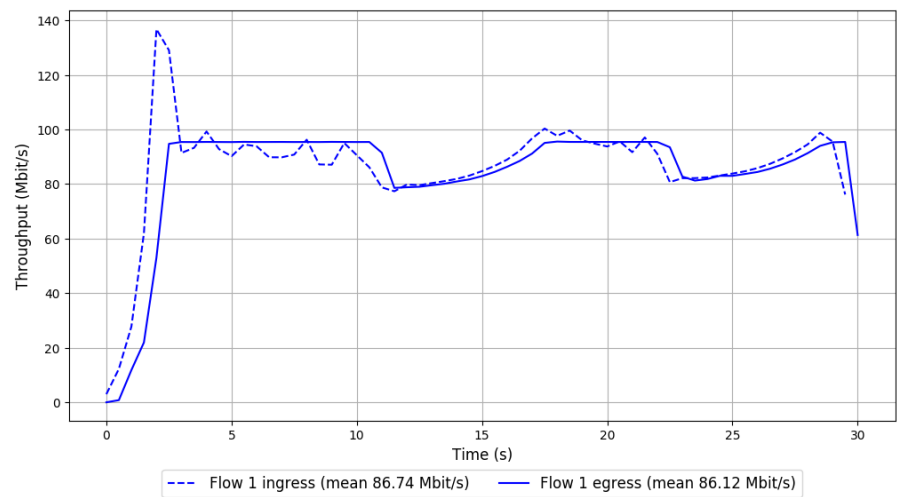
-- Flow 1:

Average throughput: 86.12 Mbit/s

95th percentile per-packet one-way delay: 460.522 ms

Loss rate: 1.29%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2019-02-05 13:54:15

End at: 2019-02-05 13:54:45

Local clock offset: -2.612 ms

Remote clock offset: 2.781 ms

Below is generated by plot.py at 2019-02-05 15:07:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.98 Mbit/s

95th percentile per-packet one-way delay: 432.388 ms

Loss rate: 1.11%

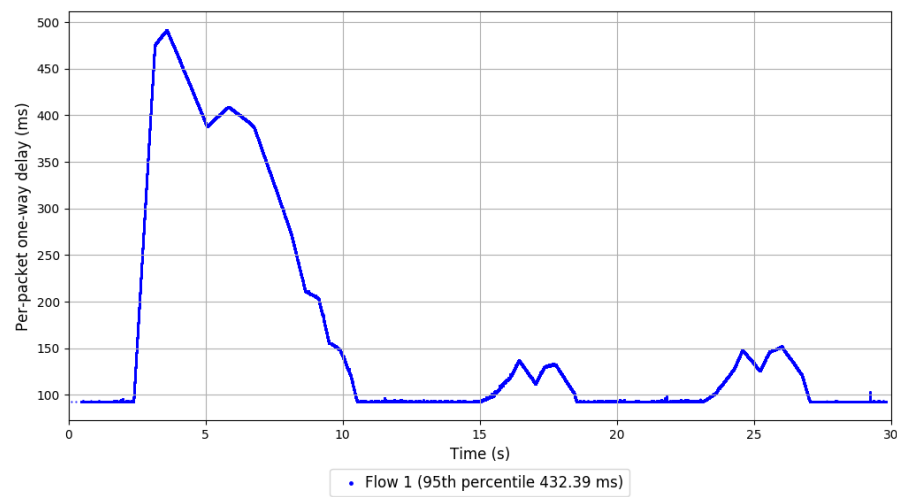
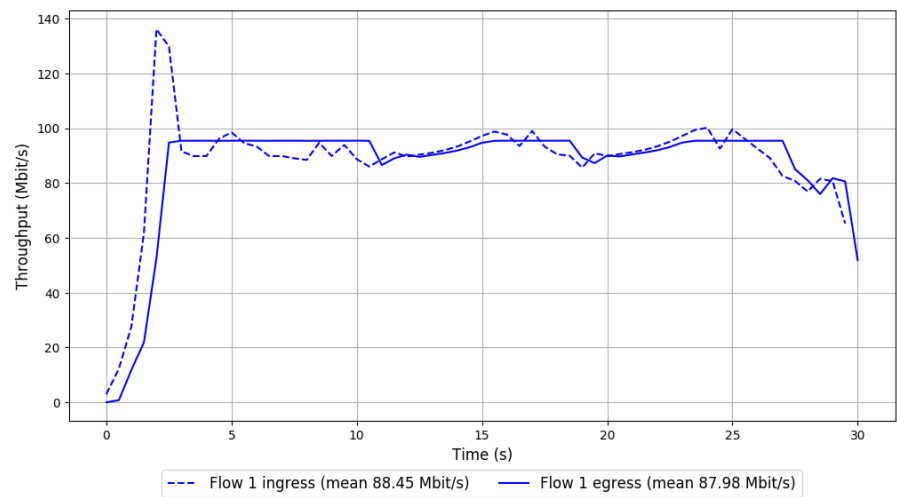
-- Flow 1:

Average throughput: 87.98 Mbit/s

95th percentile per-packet one-way delay: 432.388 ms

Loss rate: 1.11%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2019-02-05 14:19:15

End at: 2019-02-05 14:19:45

Local clock offset: -1.597 ms

Remote clock offset: 0.866 ms

Below is generated by plot.py at 2019-02-05 15:08:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.69 Mbit/s

95th percentile per-packet one-way delay: 454.086 ms

Loss rate: 1.16%

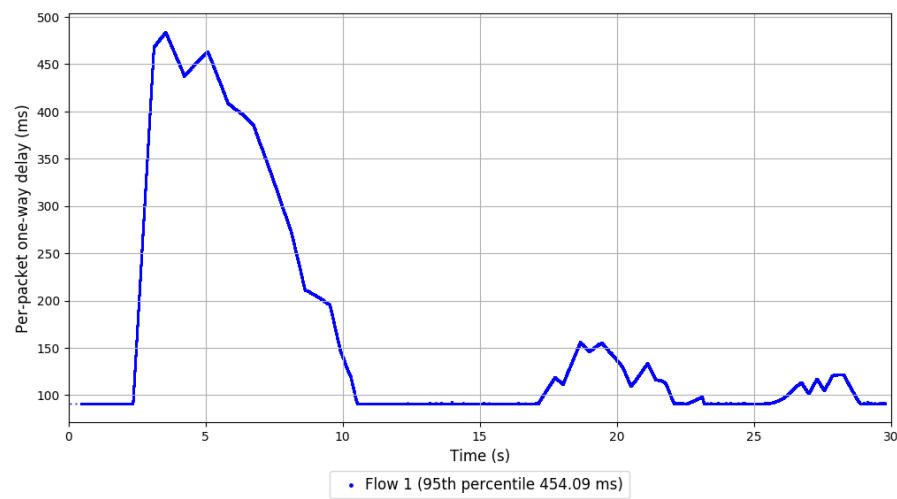
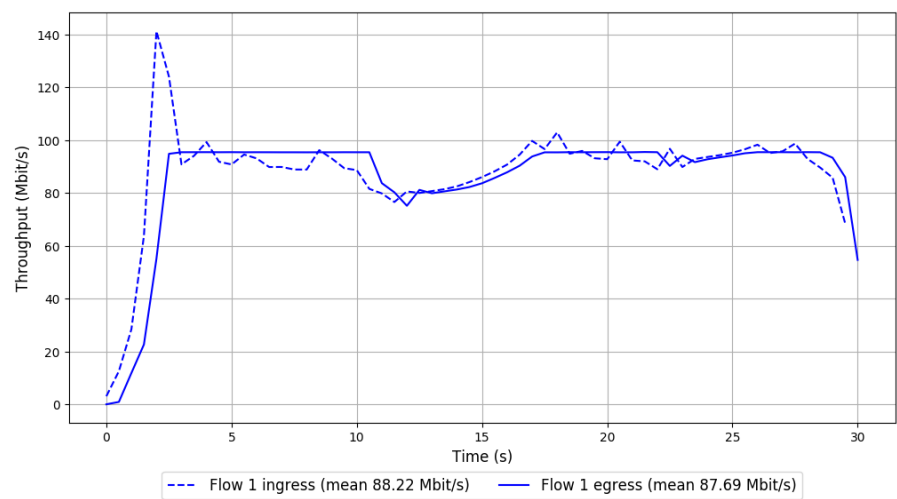
-- Flow 1:

Average throughput: 87.69 Mbit/s

95th percentile per-packet one-way delay: 454.086 ms

Loss rate: 1.16%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2019-02-05 14:44:11

End at: 2019-02-05 14:44:42

Local clock offset: -6.995 ms

Remote clock offset: 6.836 ms

Below is generated by plot.py at 2019-02-05 15:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.77 Mbit/s

95th percentile per-packet one-way delay: 443.680 ms

Loss rate: 1.77%

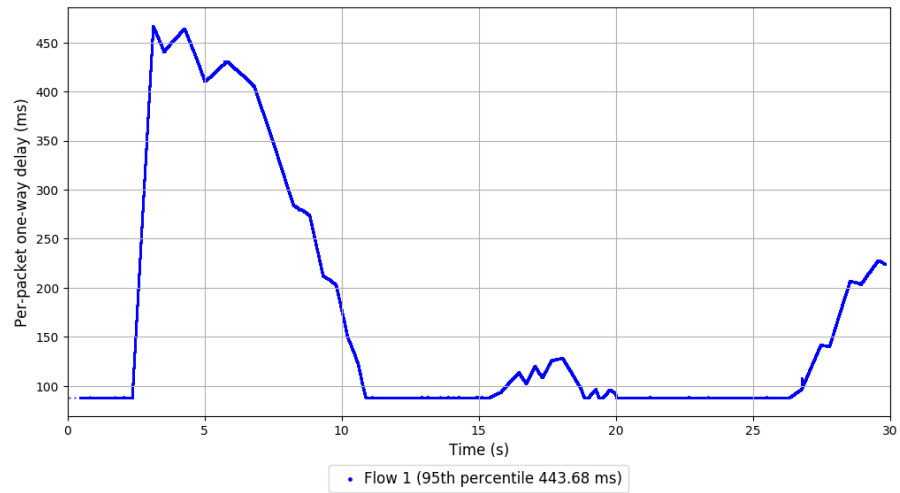
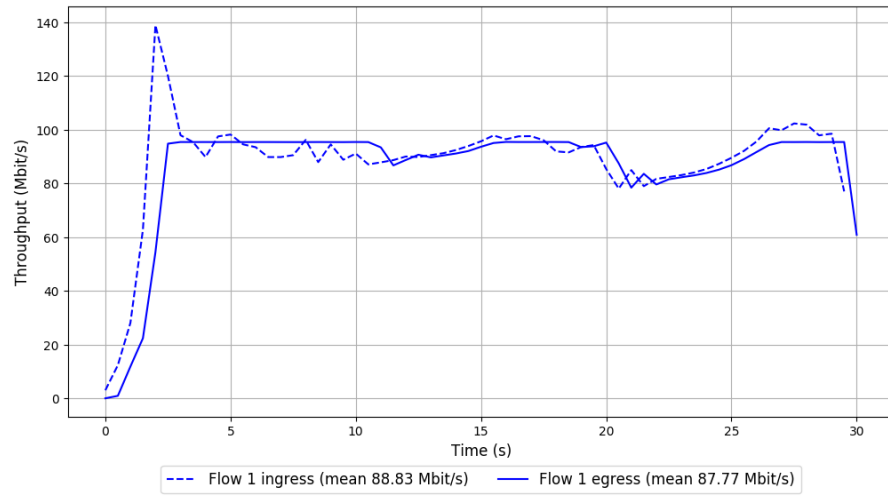
-- Flow 1:

Average throughput: 87.77 Mbit/s

95th percentile per-packet one-way delay: 443.680 ms

Loss rate: 1.77%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-02-05 13:05:36

End at: 2019-02-05 13:06:06

Local clock offset: -6.658 ms

Remote clock offset: 3.96 ms

Below is generated by plot.py at 2019-02-05 15:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.12 Mbit/s

95th percentile per-packet one-way delay: 99.331 ms

Loss rate: 0.85%

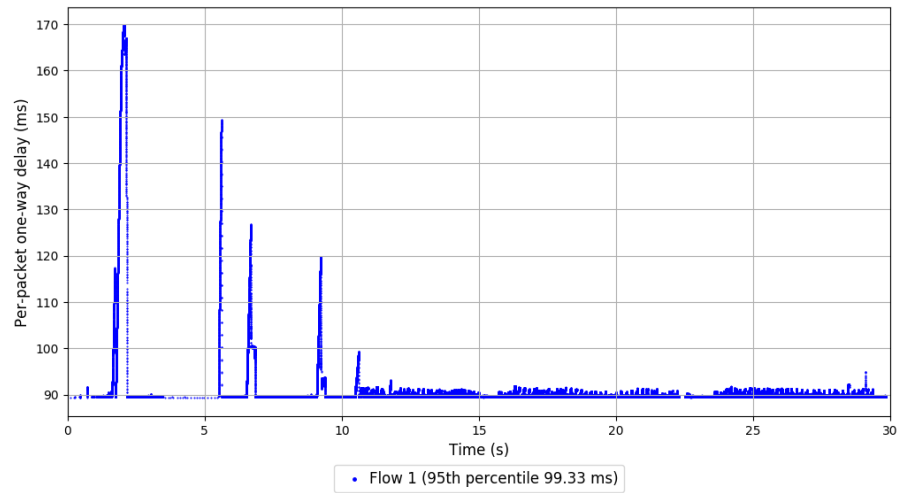
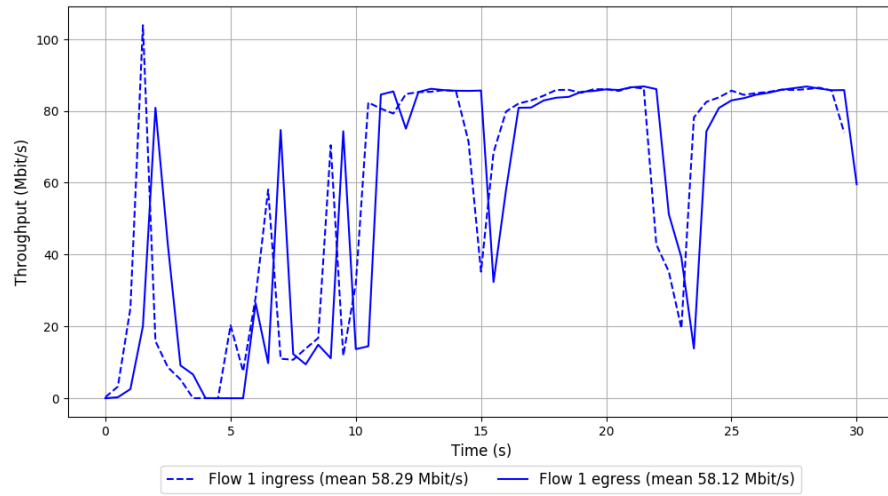
-- Flow 1:

Average throughput: 58.12 Mbit/s

95th percentile per-packet one-way delay: 99.331 ms

Loss rate: 0.85%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-02-05 13:30:33

End at: 2019-02-05 13:31:03

Local clock offset: -6.208 ms

Remote clock offset: 3.721 ms

Below is generated by plot.py at 2019-02-05 15:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.49 Mbit/s

95th percentile per-packet one-way delay: 98.716 ms

Loss rate: 0.81%

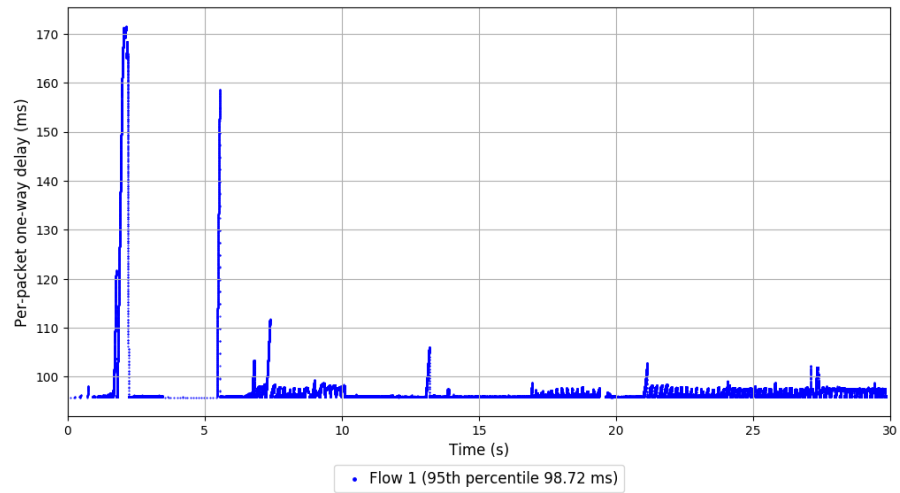
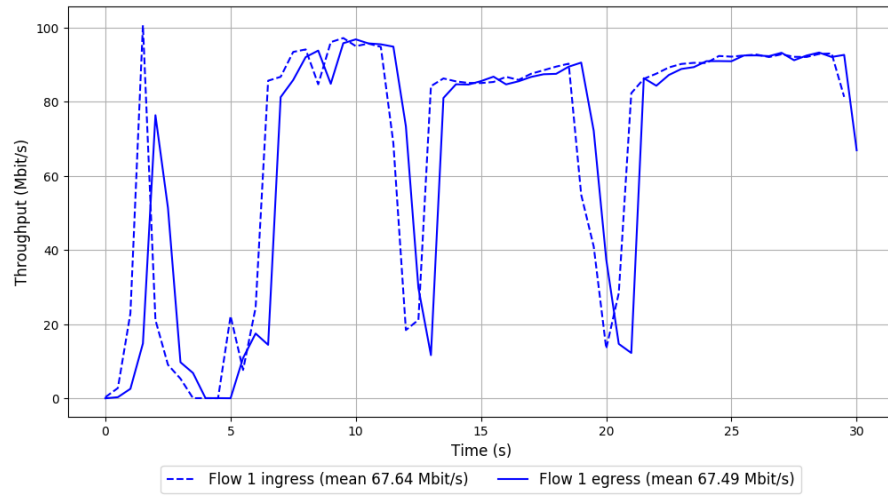
-- Flow 1:

Average throughput: 67.49 Mbit/s

95th percentile per-packet one-way delay: 98.716 ms

Loss rate: 0.81%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-02-05 13:55:30

End at: 2019-02-05 13:56:00

Local clock offset: -2.283 ms

Remote clock offset: 7.544 ms

Below is generated by plot.py at 2019-02-05 15:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.16 Mbit/s

95th percentile per-packet one-way delay: 96.414 ms

Loss rate: 0.84%

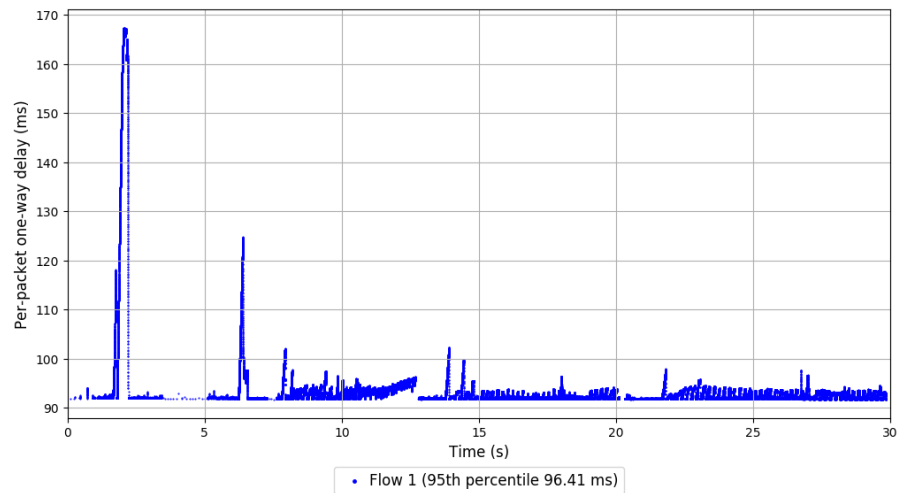
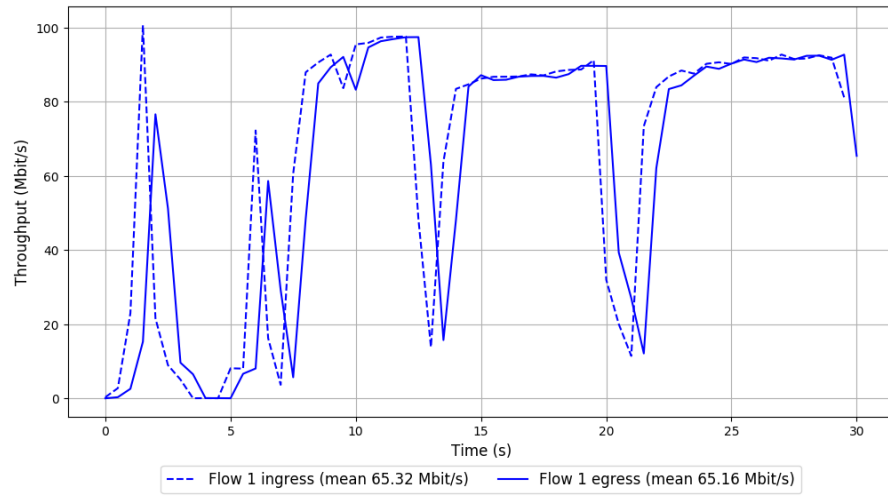
-- Flow 1:

Average throughput: 65.16 Mbit/s

95th percentile per-packet one-way delay: 96.414 ms

Loss rate: 0.84%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2019-02-05 14:20:29

End at: 2019-02-05 14:20:59

Local clock offset: -2.287 ms

Remote clock offset: 0.735 ms

Below is generated by plot.py at 2019-02-05 15:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.41 Mbit/s

95th percentile per-packet one-way delay: 99.791 ms

Loss rate: 0.85%

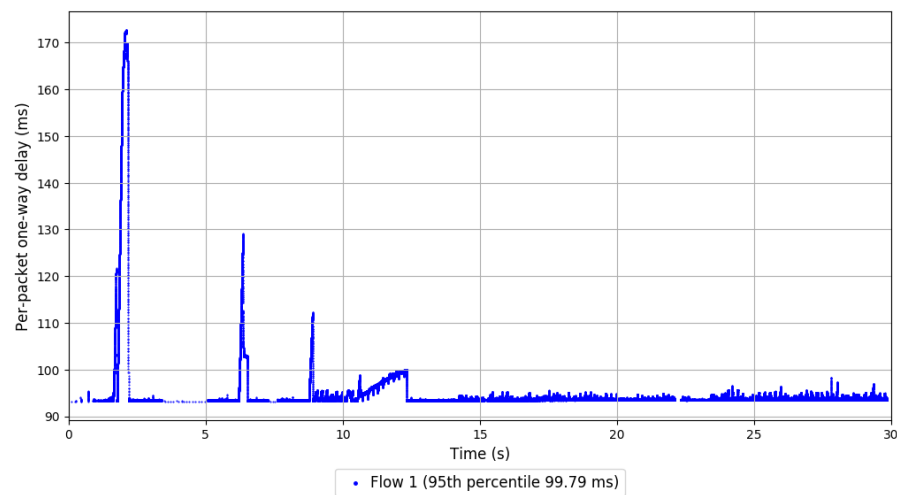
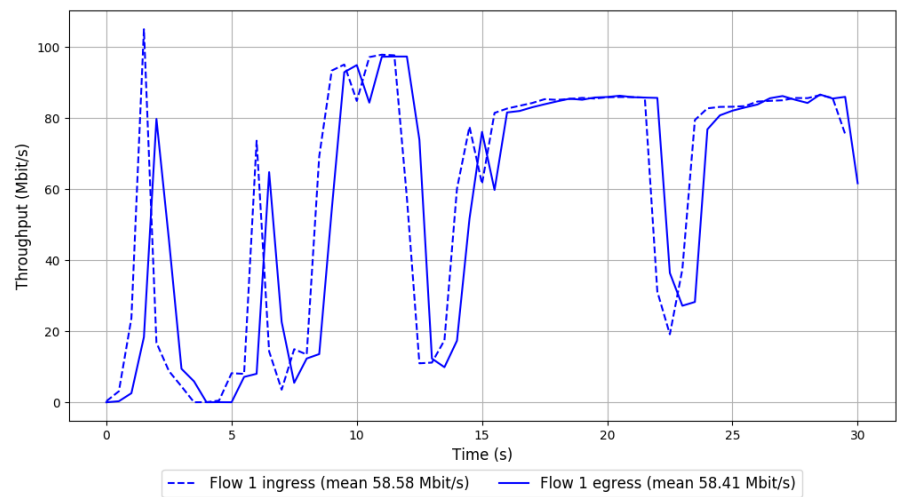
-- Flow 1:

Average throughput: 58.41 Mbit/s

95th percentile per-packet one-way delay: 99.791 ms

Loss rate: 0.85%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2019-02-05 14:45:26

End at: 2019-02-05 14:45:56

Local clock offset: -7.071 ms

Remote clock offset: 5.814 ms

Below is generated by plot.py at 2019-02-05 15:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.40 Mbit/s

95th percentile per-packet one-way delay: 98.121 ms

Loss rate: 0.83%

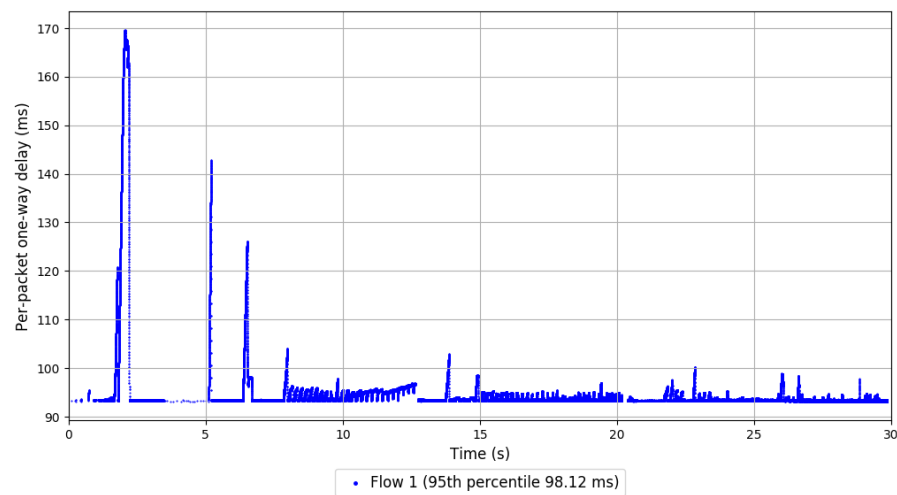
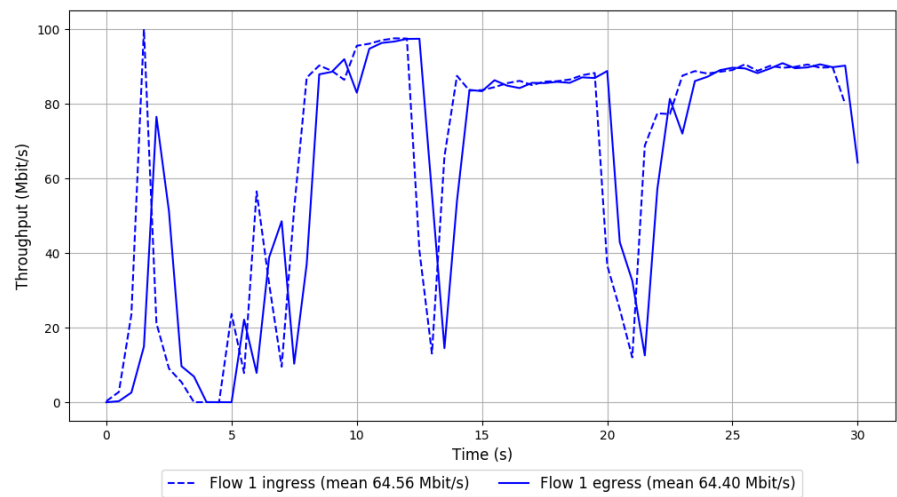
-- Flow 1:

Average throughput: 64.40 Mbit/s

95th percentile per-packet one-way delay: 98.121 ms

Loss rate: 0.83%

Run 5: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2019-02-05 13:15:04

End at: 2019-02-05 13:15:34

Local clock offset: -6.732 ms

Remote clock offset: 3.324 ms

Below is generated by plot.py at 2019-02-05 15:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 93.006 ms

Loss rate: 0.64%

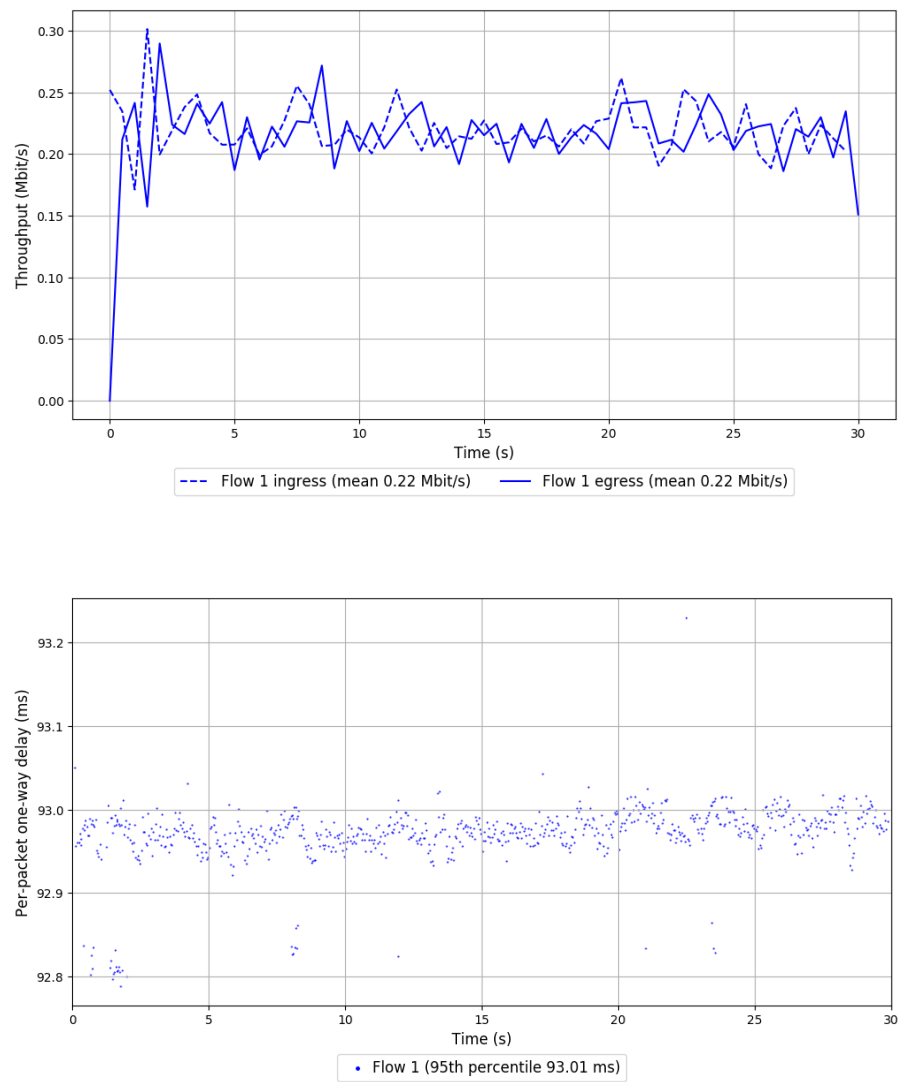
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 93.006 ms

Loss rate: 0.64%

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2019-02-05 13:40:01

End at: 2019-02-05 13:40:31

Local clock offset: -6.136 ms

Remote clock offset: 8.669 ms

Below is generated by plot.py at 2019-02-05 15:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.751 ms

Loss rate: 0.51%

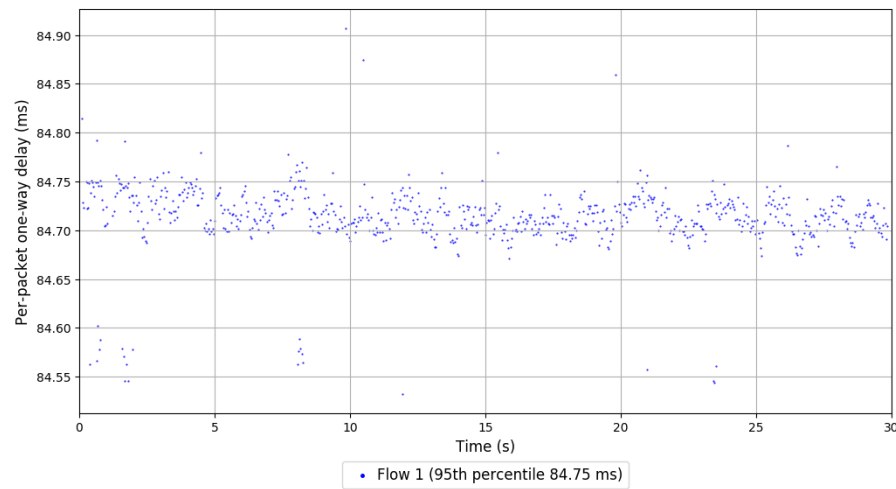
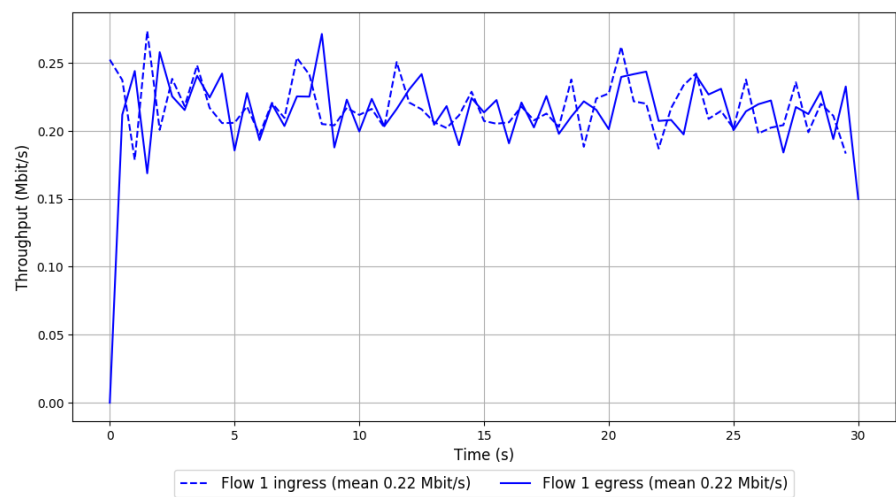
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.751 ms

Loss rate: 0.51%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2019-02-05 14:04:59

End at: 2019-02-05 14:05:29

Local clock offset: -0.603 ms

Remote clock offset: 2.591 ms

Below is generated by plot.py at 2019-02-05 15:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 97.718 ms

Loss rate: 0.50%

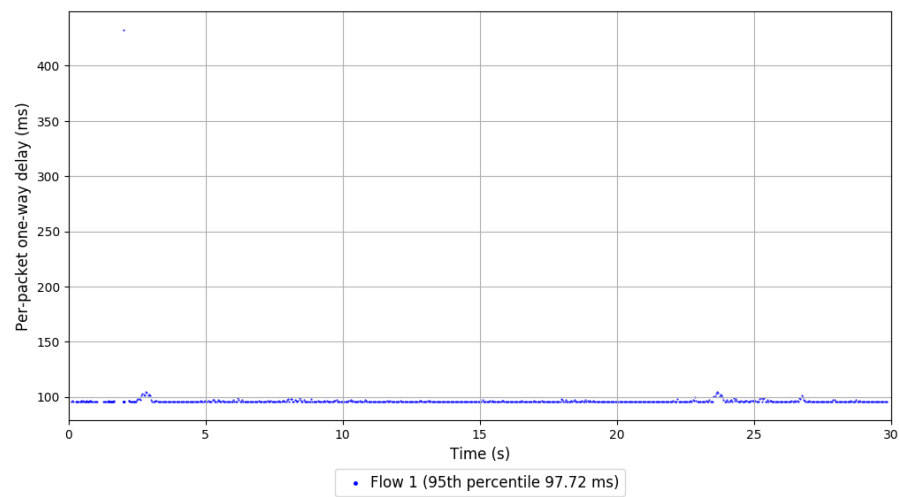
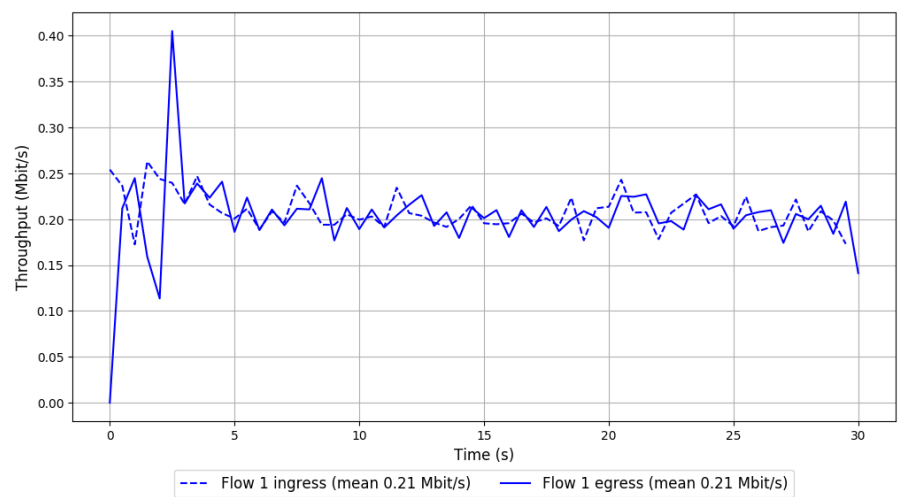
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 97.718 ms

Loss rate: 0.50%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2019-02-05 14:29:57

End at: 2019-02-05 14:30:27

Local clock offset: -5.403 ms

Remote clock offset: 5.988 ms

Below is generated by plot.py at 2019-02-05 15:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.248 ms

Loss rate: 0.51%

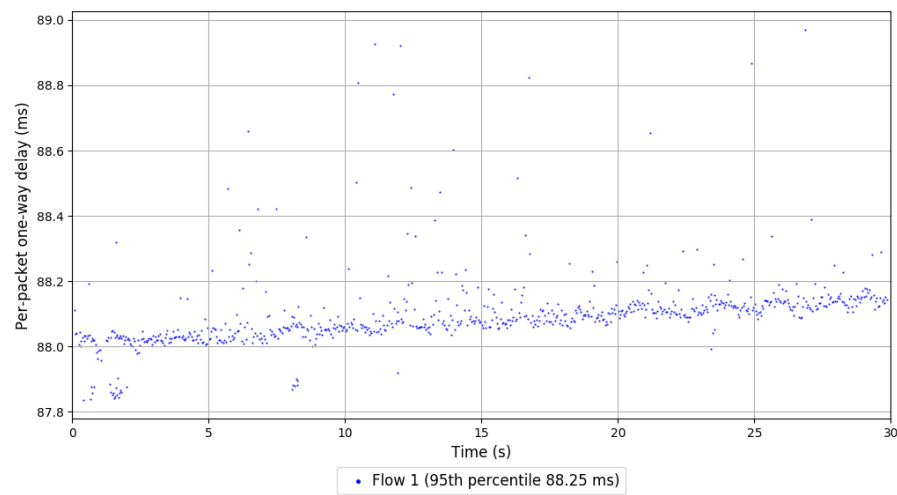
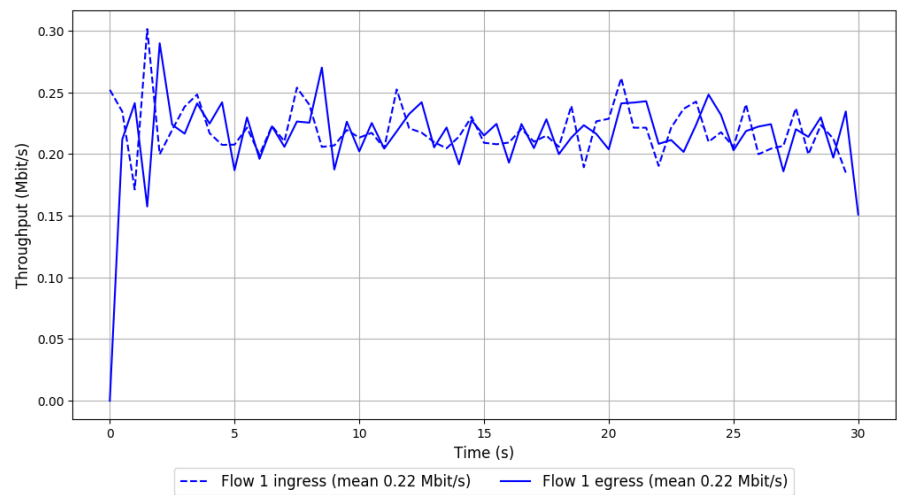
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.248 ms

Loss rate: 0.51%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2019-02-05 14:54:54

End at: 2019-02-05 14:55:24

Local clock offset: -3.267 ms

Remote clock offset: 7.338 ms

Below is generated by plot.py at 2019-02-05 15:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.618 ms

Loss rate: 0.64%

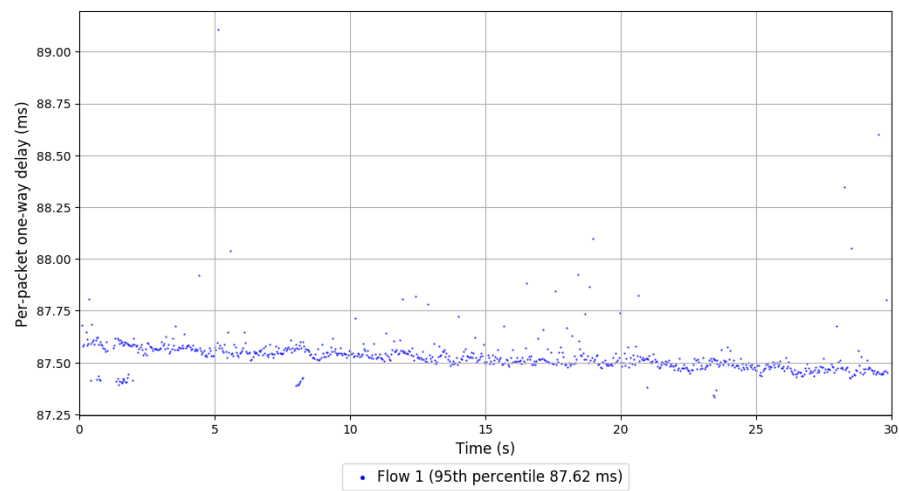
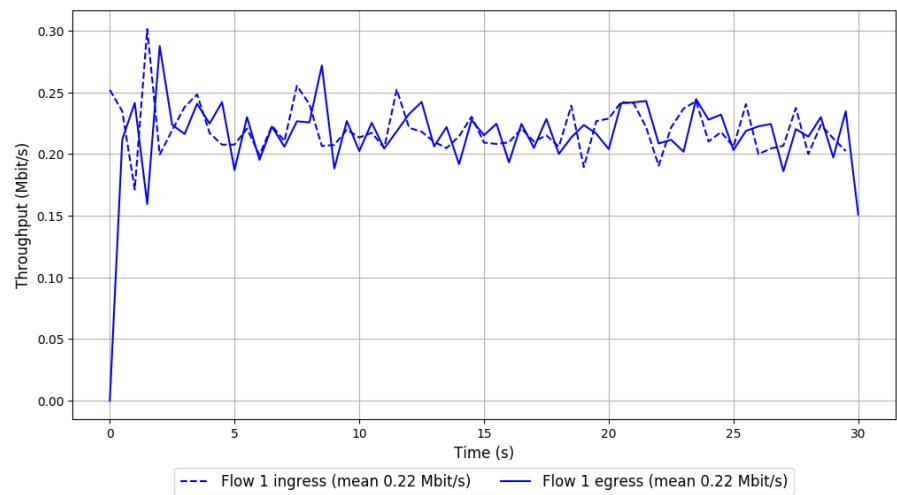
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.618 ms

Loss rate: 0.64%

Run 5: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-02-05 13:13:56

End at: 2019-02-05 13:14:26

Local clock offset: -6.722 ms

Remote clock offset: 4.364 ms

Below is generated by plot.py at 2019-02-05 15:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 104.089 ms

Loss rate: 1.05%

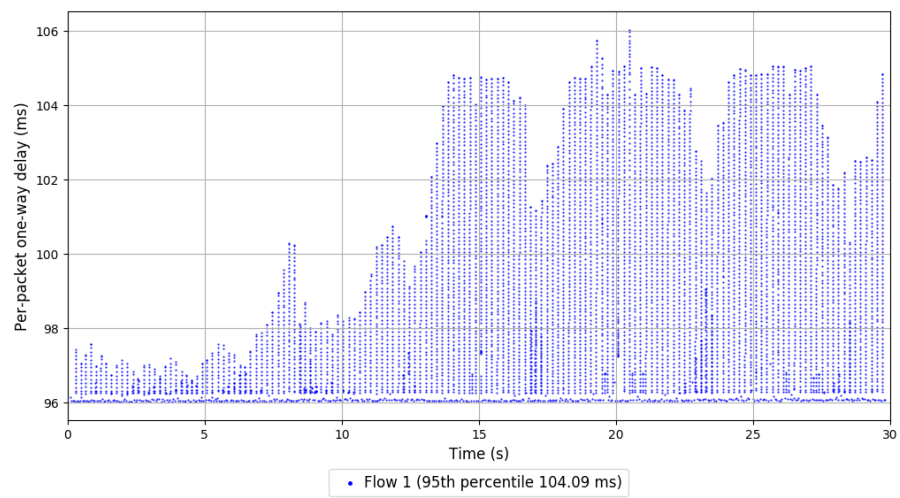
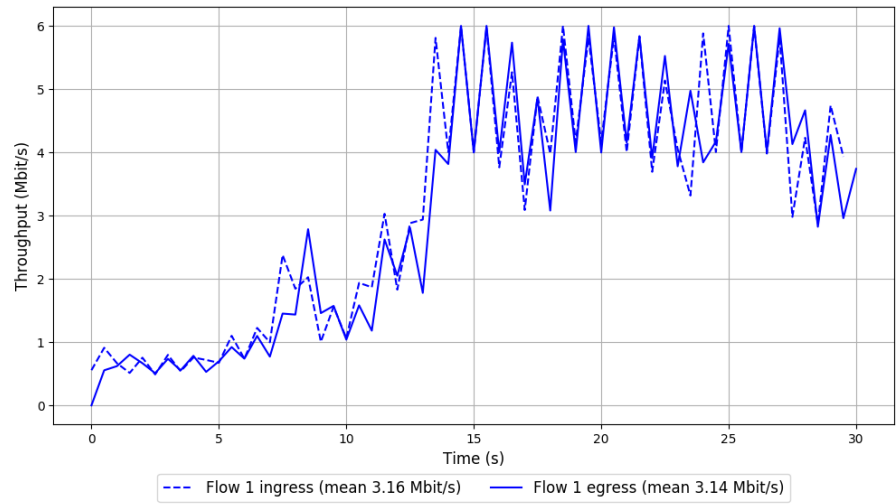
-- Flow 1:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 104.089 ms

Loss rate: 1.05%

Run 1: Report of Sprout — Data Link

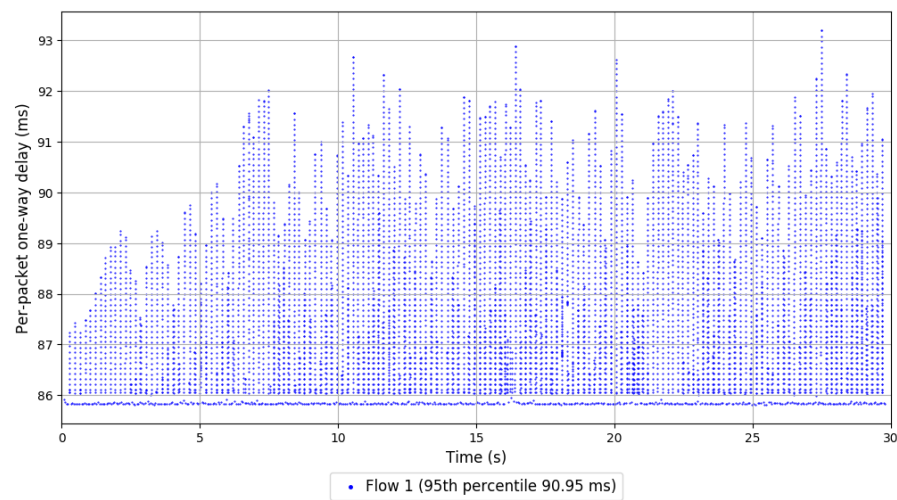
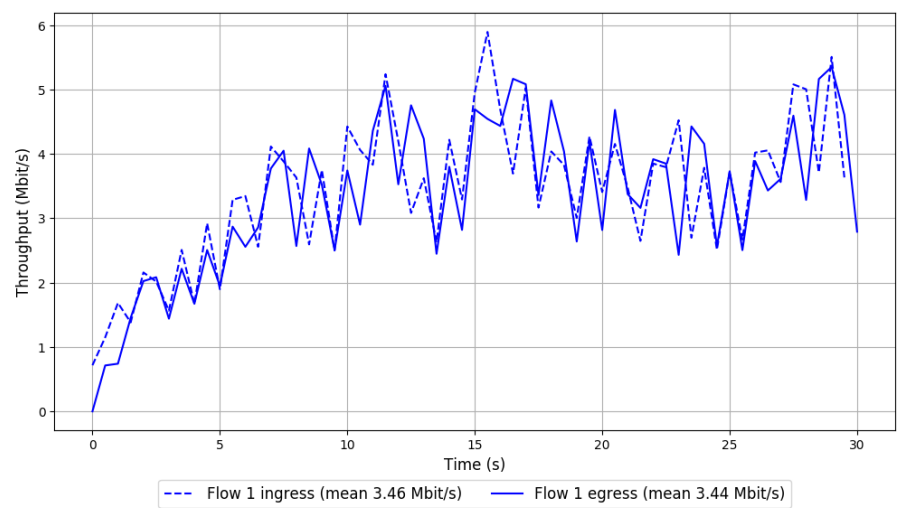


Run 2: Statistics of Sprout

Start at: 2019-02-05 13:38:53
End at: 2019-02-05 13:39:23
Local clock offset: -6.129 ms
Remote clock offset: 7.4 ms

Below is generated by plot.py at 2019-02-05 15:08:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.44 Mbit/s
95th percentile per-packet one-way delay: 90.948 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 3.44 Mbit/s
95th percentile per-packet one-way delay: 90.948 ms
Loss rate: 0.85%

Run 2: Report of Sprout — Data Link

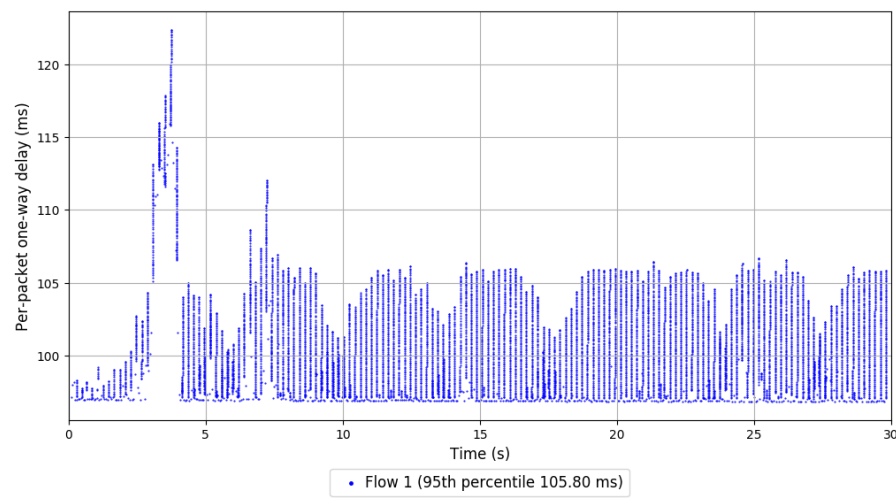
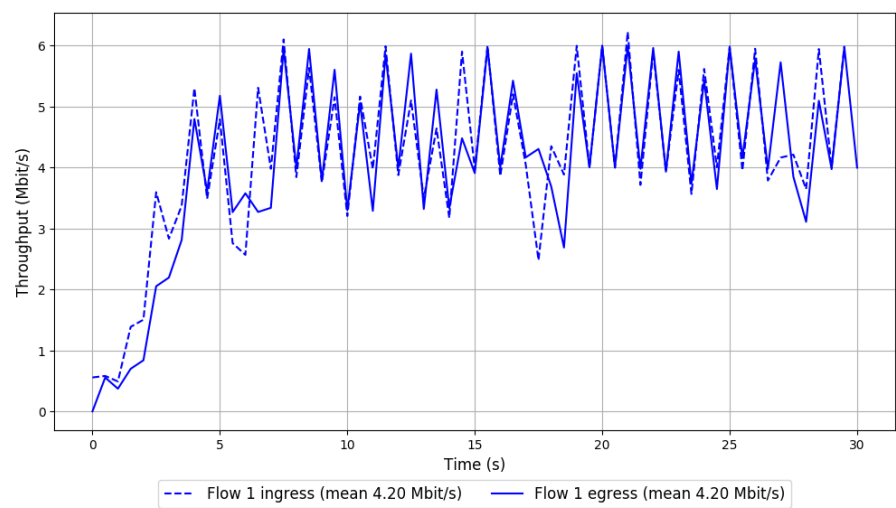


Run 3: Statistics of Sprout

Start at: 2019-02-05 14:03:51
End at: 2019-02-05 14:04:21
Local clock offset: -0.708 ms
Remote clock offset: 1.342 ms

Below is generated by plot.py at 2019-02-05 15:08:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 105.801 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 105.801 ms
Loss rate: 0.80%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2019-02-05 14:28:49

End at: 2019-02-05 14:29:19

Local clock offset: -5.239 ms

Remote clock offset: 5.888 ms

Below is generated by plot.py at 2019-02-05 15:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 92.655 ms

Loss rate: 0.86%

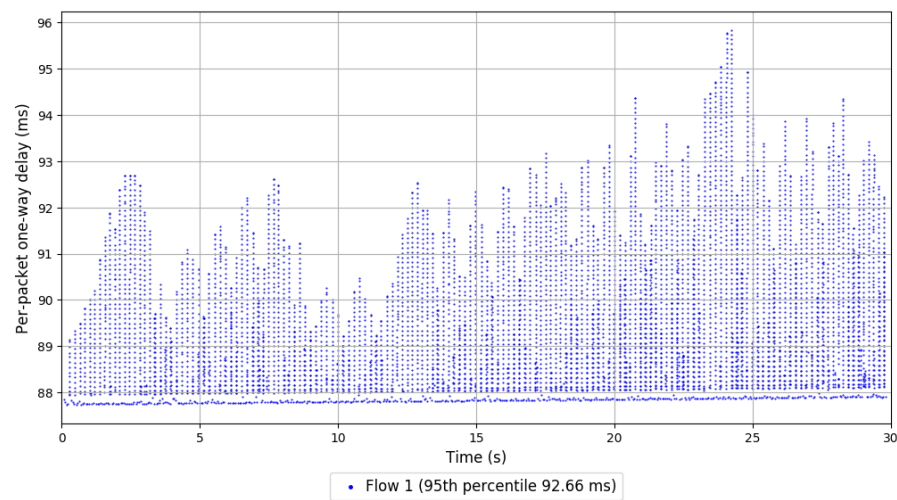
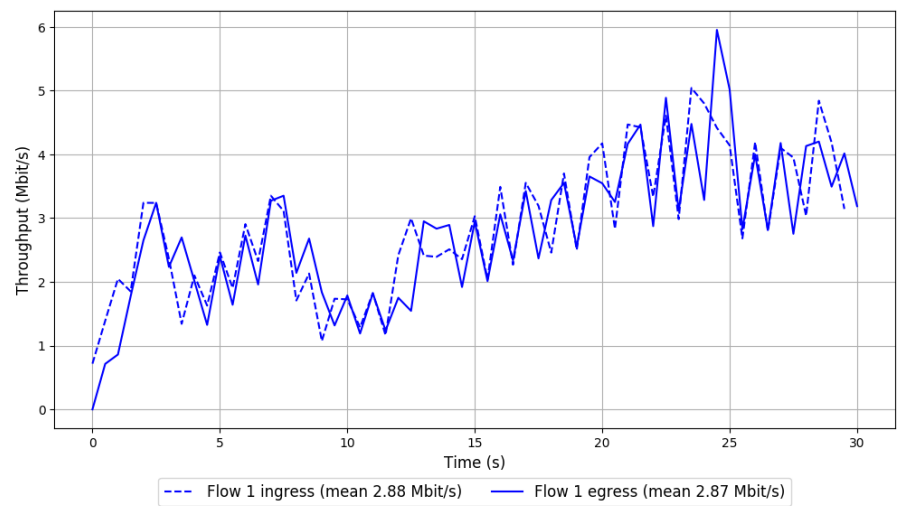
-- Flow 1:

Average throughput: 2.87 Mbit/s

95th percentile per-packet one-way delay: 92.655 ms

Loss rate: 0.86%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2019-02-05 14:53:46

End at: 2019-02-05 14:54:16

Local clock offset: -3.561 ms

Remote clock offset: 7.139 ms

Below is generated by plot.py at 2019-02-05 15:08:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 92.276 ms

Loss rate: 0.72%

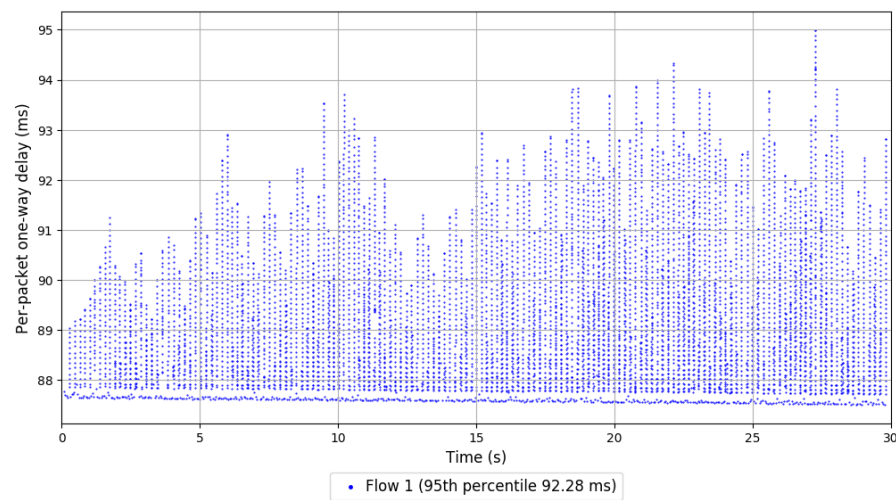
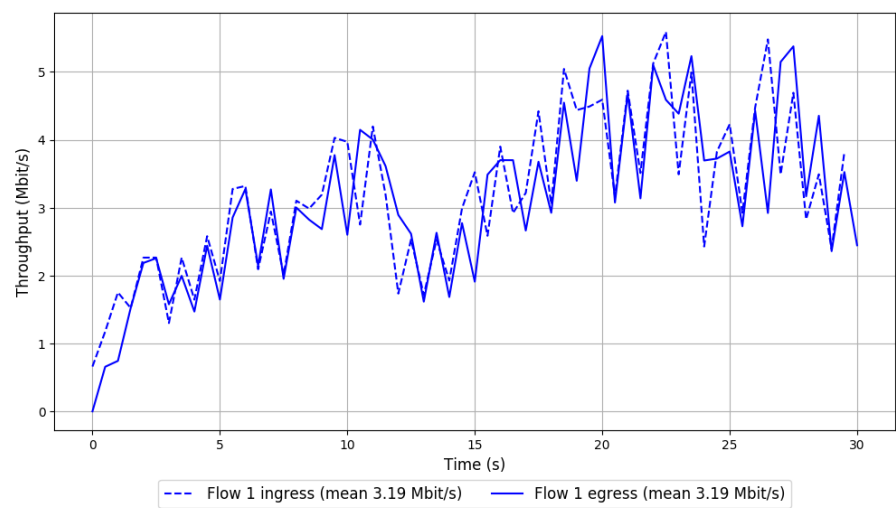
-- Flow 1:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 92.276 ms

Loss rate: 0.72%

Run 5: Report of Sprout — Data Link

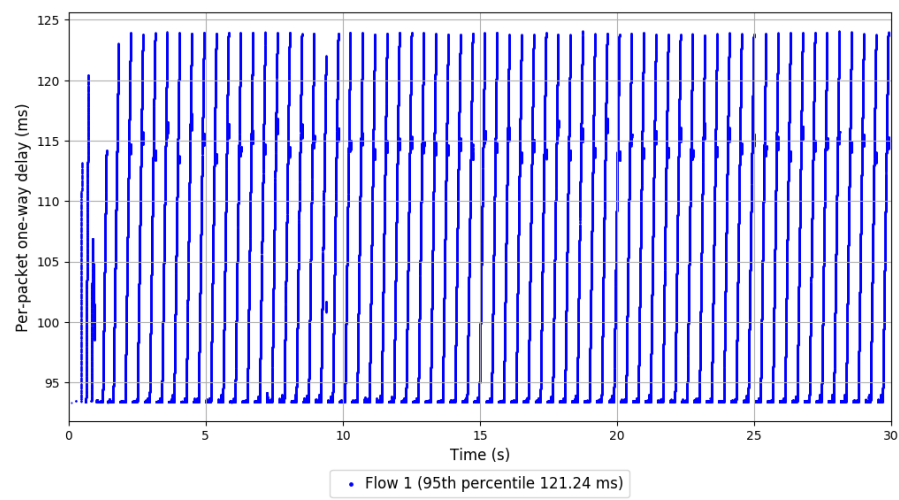
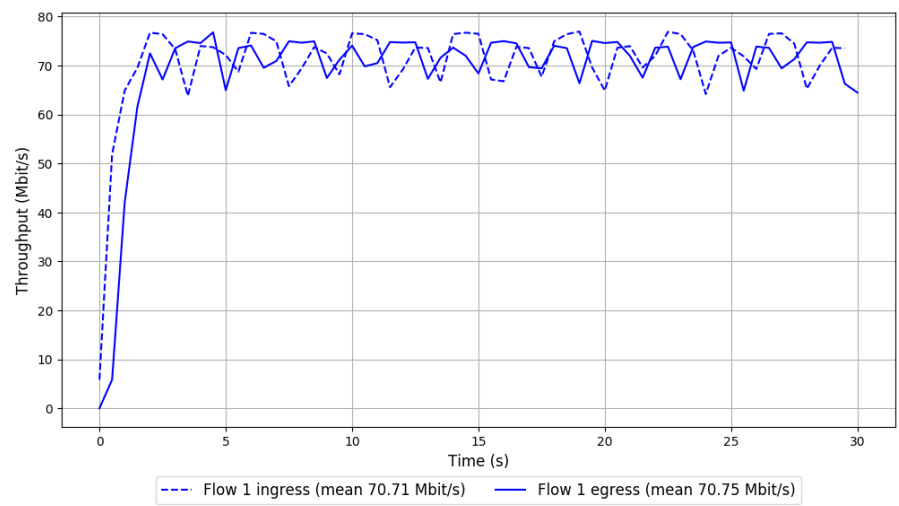



```
Run 1: Statistics of TaoVA-100x

Start at: 2019-02-05 13:09:10
End at: 2019-02-05 13:09:40
Local clock offset: -6.732 ms
Remote clock offset: 6.823 ms

# Below is generated by plot.py at 2019-02-05 15:09:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.75 Mbit/s
95th percentile per-packet one-way delay: 121.243 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 70.75 Mbit/s
95th percentile per-packet one-way delay: 121.243 ms
Loss rate: 0.58%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-02-05 13:34:07

End at: 2019-02-05 13:34:37

Local clock offset: -6.236 ms

Remote clock offset: 3.502 ms

Below is generated by plot.py at 2019-02-05 15:09:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.76 Mbit/s

95th percentile per-packet one-way delay: 116.103 ms

Loss rate: 0.53%

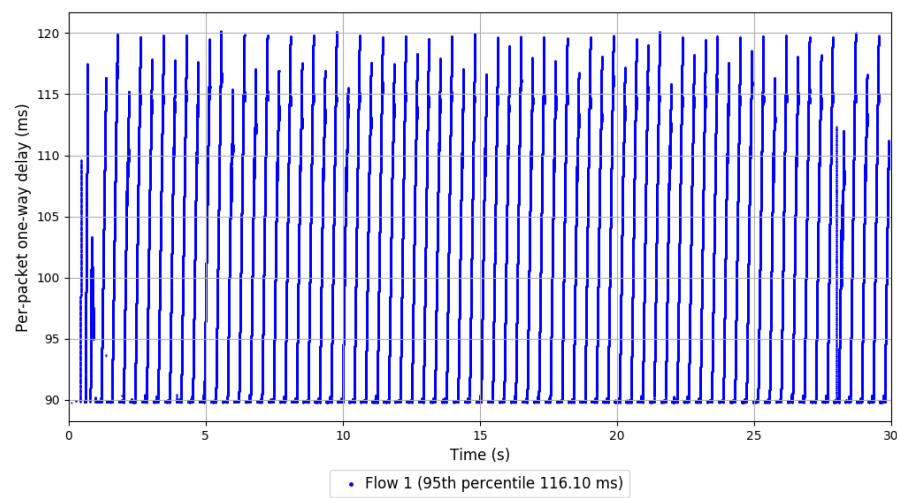
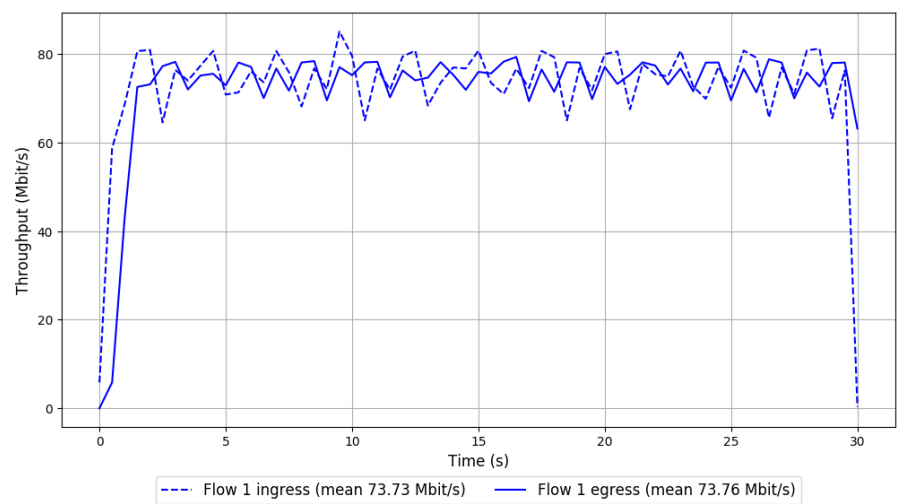
-- Flow 1:

Average throughput: 73.76 Mbit/s

95th percentile per-packet one-way delay: 116.103 ms

Loss rate: 0.53%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-02-05 13:59:04

End at: 2019-02-05 13:59:34

Local clock offset: -1.515 ms

Remote clock offset: 6.967 ms

Below is generated by plot.py at 2019-02-05 15:09:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.71 Mbit/s

95th percentile per-packet one-way delay: 114.187 ms

Loss rate: 0.64%

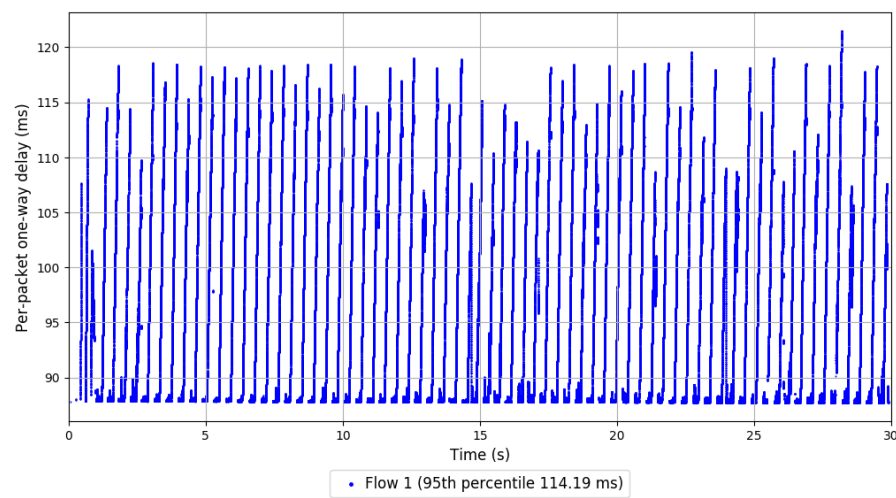
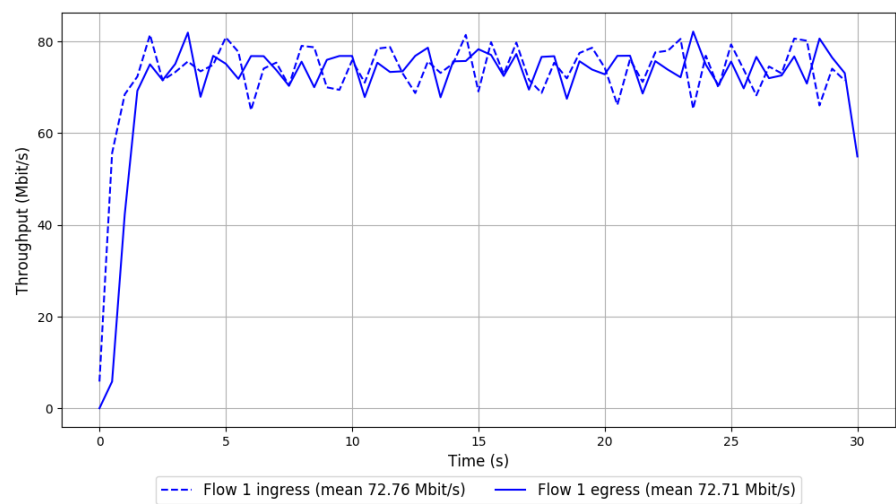
-- Flow 1:

Average throughput: 72.71 Mbit/s

95th percentile per-packet one-way delay: 114.187 ms

Loss rate: 0.64%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-02-05 14:24:03

End at: 2019-02-05 14:24:33

Local clock offset: -3.903 ms

Remote clock offset: 6.924 ms

Below is generated by plot.py at 2019-02-05 15:09:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.51 Mbit/s

95th percentile per-packet one-way delay: 111.457 ms

Loss rate: 0.66%

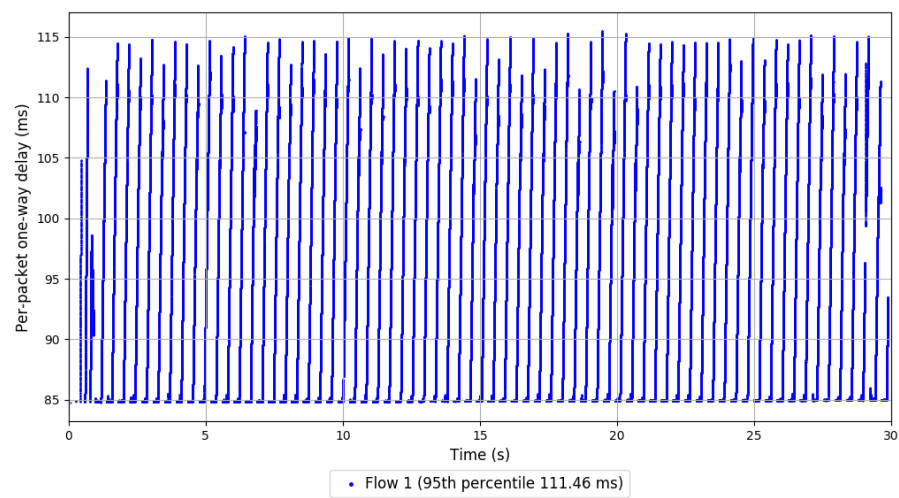
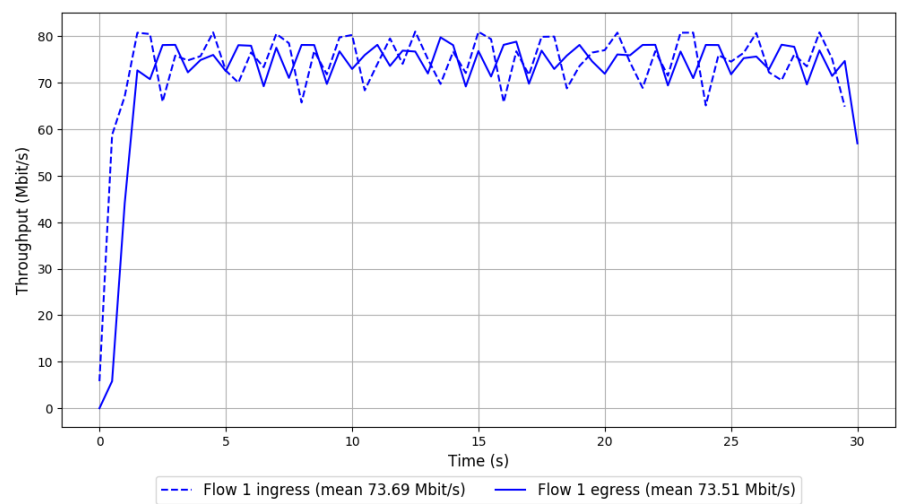
-- Flow 1:

Average throughput: 73.51 Mbit/s

95th percentile per-packet one-way delay: 111.457 ms

Loss rate: 0.66%

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



Run 5: Statistics of TaoVA-100x

Start at: 2019-02-05 14:49:00

End at: 2019-02-05 14:49:30

Local clock offset: -5.411 ms

Remote clock offset: 6.957 ms

Below is generated by plot.py at 2019-02-05 15:09:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.96 Mbit/s

95th percentile per-packet one-way delay: 114.586 ms

Loss rate: 0.57%

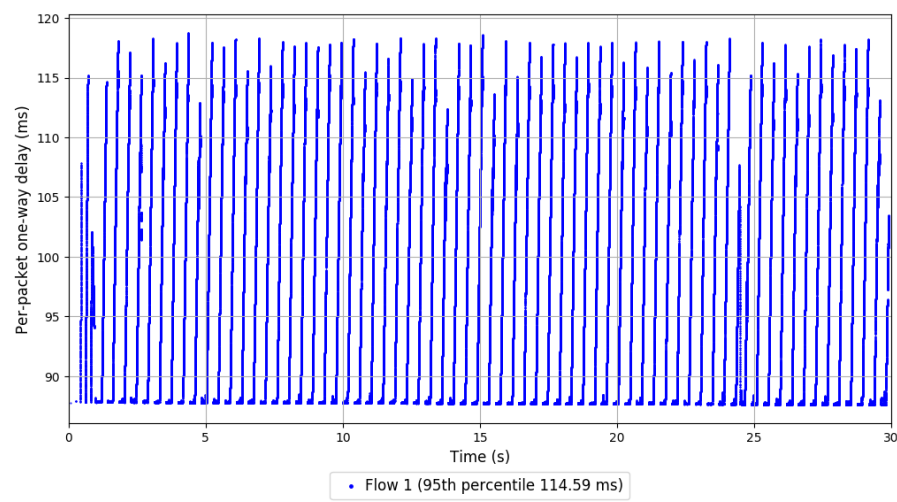
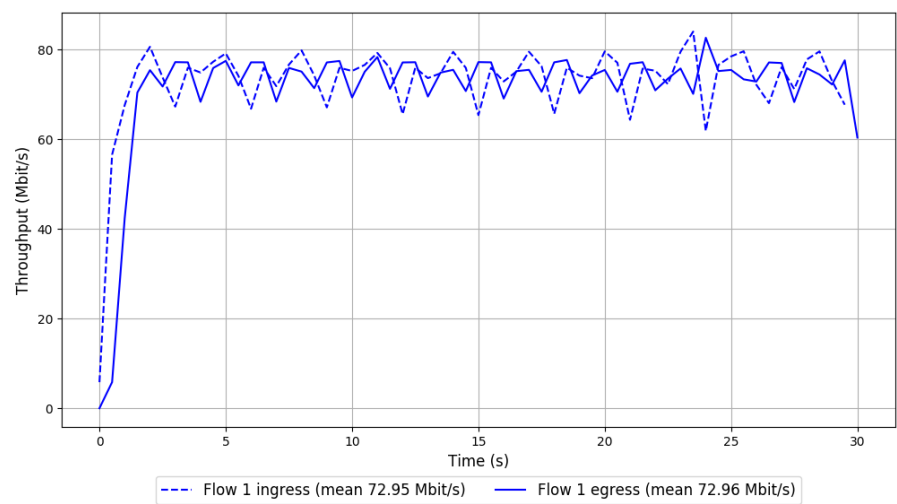
-- Flow 1:

Average throughput: 72.96 Mbit/s

95th percentile per-packet one-way delay: 114.586 ms

Loss rate: 0.57%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-02-05 13:11:35

End at: 2019-02-05 13:12:05

Local clock offset: -6.736 ms

Remote clock offset: 9.075 ms

Below is generated by plot.py at 2019-02-05 15:09:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 38.53 Mbit/s

95th percentile per-packet one-way delay: 160.302 ms

Loss rate: 0.69%

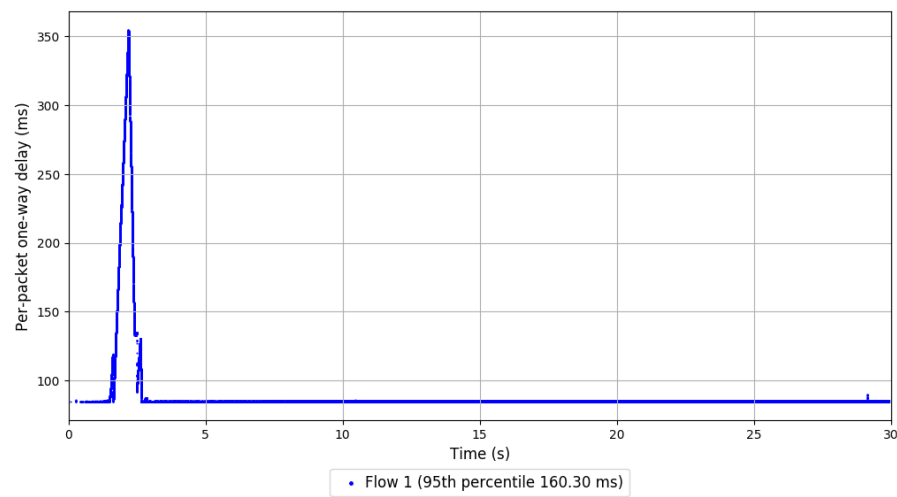
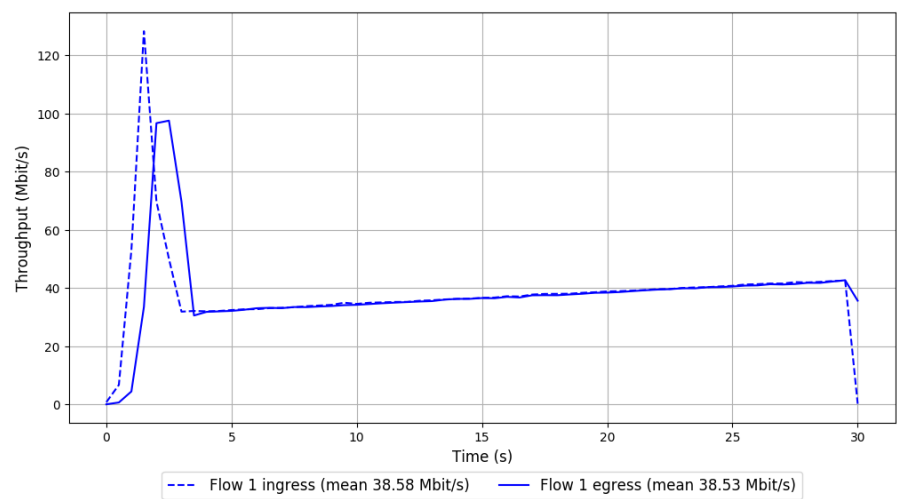
-- Flow 1:

Average throughput: 38.53 Mbit/s

95th percentile per-packet one-way delay: 160.302 ms

Loss rate: 0.69%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-02-05 13:36:32

End at: 2019-02-05 13:37:02

Local clock offset: -6.198 ms

Remote clock offset: 2.513 ms

Below is generated by plot.py at 2019-02-05 15:09:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.99 Mbit/s

95th percentile per-packet one-way delay: 180.344 ms

Loss rate: 0.68%

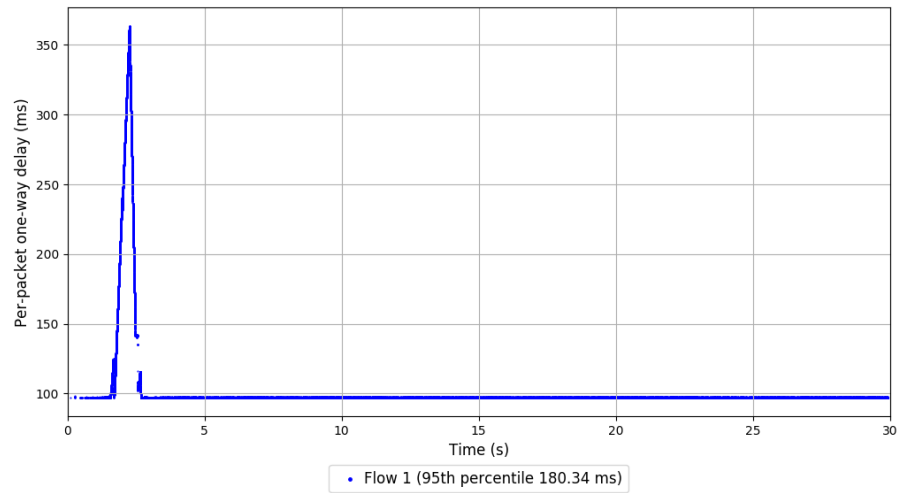
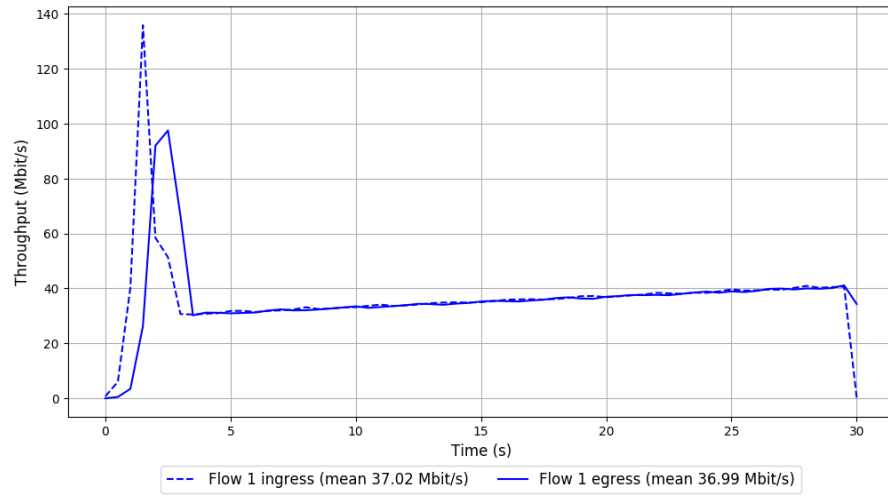
-- Flow 1:

Average throughput: 36.99 Mbit/s

95th percentile per-packet one-way delay: 180.344 ms

Loss rate: 0.68%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-02-05 14:01:29

End at: 2019-02-05 14:01:59

Local clock offset: -1.034 ms

Remote clock offset: 5.473 ms

Below is generated by plot.py at 2019-02-05 15:09:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.32 Mbit/s

95th percentile per-packet one-way delay: 91.063 ms

Loss rate: 1.06%

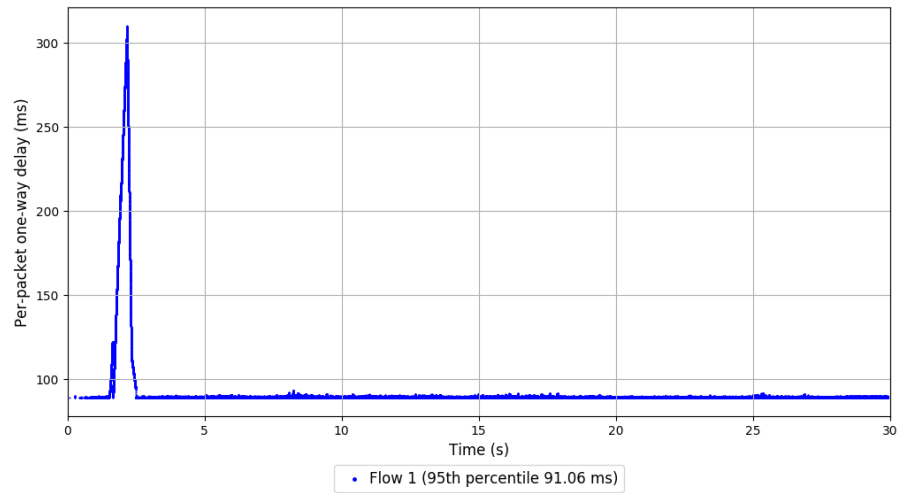
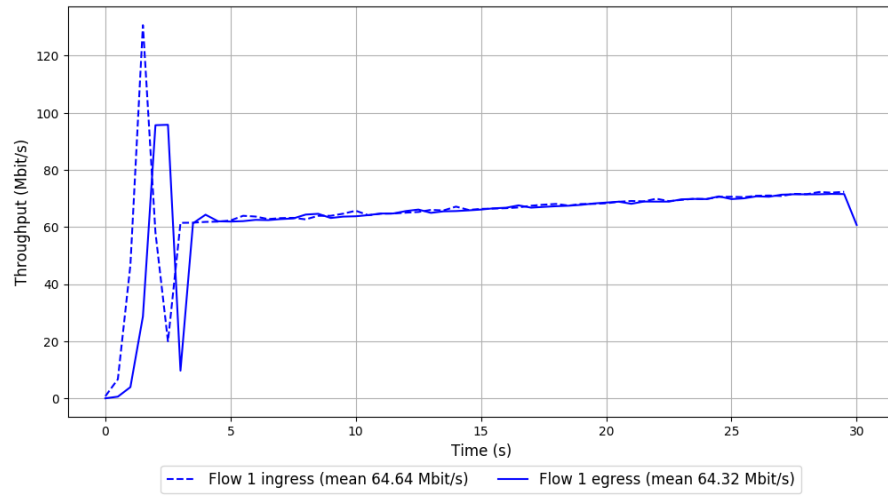
-- Flow 1:

Average throughput: 64.32 Mbit/s

95th percentile per-packet one-way delay: 91.063 ms

Loss rate: 1.06%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2019-02-05 14:26:28

End at: 2019-02-05 14:26:58

Local clock offset: -4.69 ms

Remote clock offset: 5.606 ms

Below is generated by plot.py at 2019-02-05 15:09:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.40 Mbit/s

95th percentile per-packet one-way delay: 166.505 ms

Loss rate: 0.62%

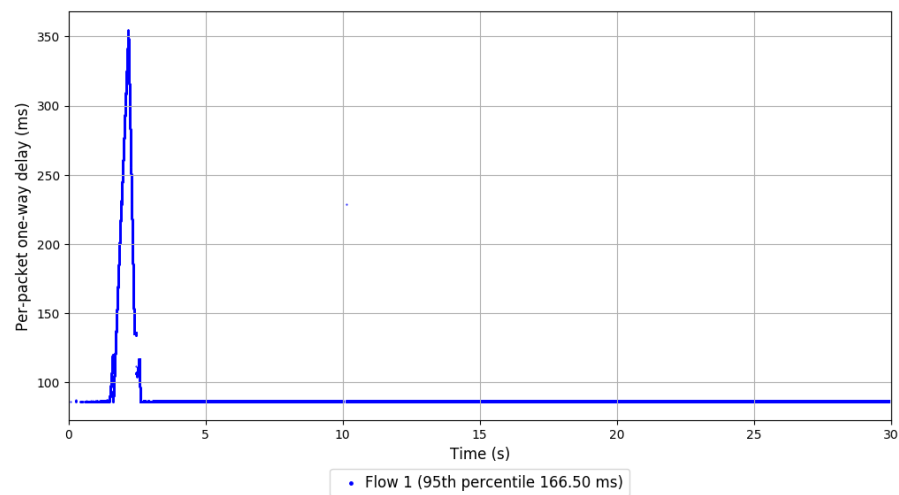
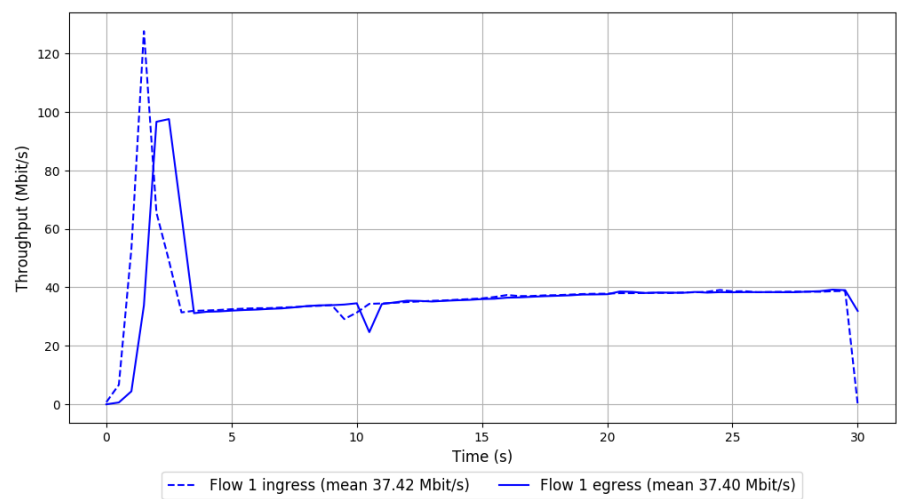
-- Flow 1:

Average throughput: 37.40 Mbit/s

95th percentile per-packet one-way delay: 166.505 ms

Loss rate: 0.62%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2019-02-05 14:51:25

End at: 2019-02-05 14:51:55

Local clock offset: -4.363 ms

Remote clock offset: 3.223 ms

Below is generated by plot.py at 2019-02-05 15:09:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.66 Mbit/s

95th percentile per-packet one-way delay: 168.745 ms

Loss rate: 0.67%

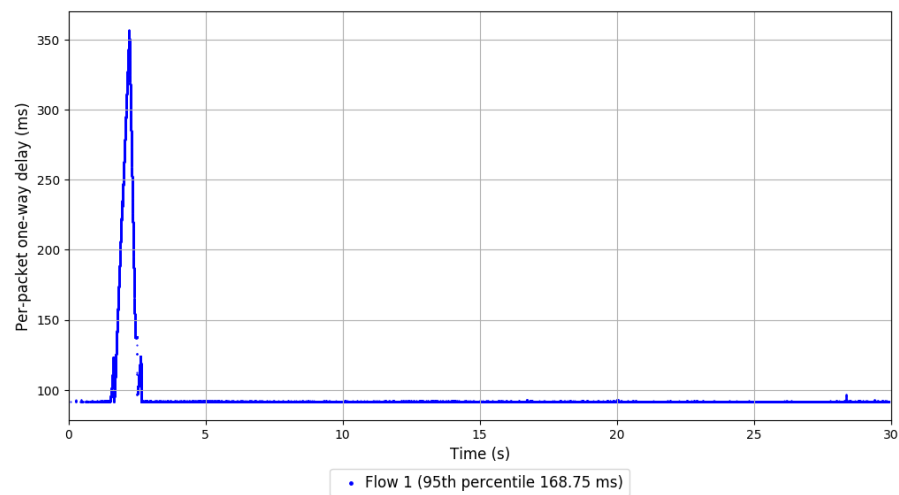
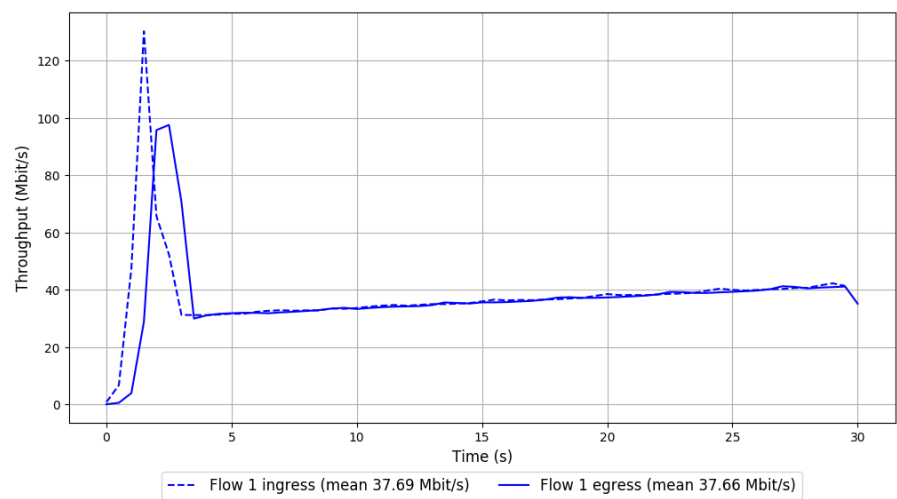
-- Flow 1:

Average throughput: 37.66 Mbit/s

95th percentile per-packet one-way delay: 168.745 ms

Loss rate: 0.67%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-02-05 13:12:44

End at: 2019-02-05 13:13:14

Local clock offset: -6.695 ms

Remote clock offset: 8.221 ms

Below is generated by plot.py at 2019-02-05 15:09:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.64 Mbit/s

95th percentile per-packet one-way delay: 194.324 ms

Loss rate: 0.97%

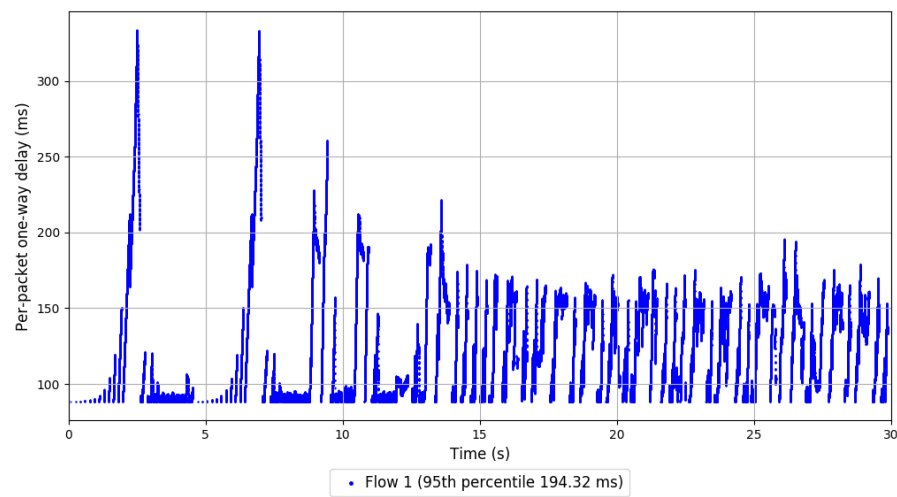
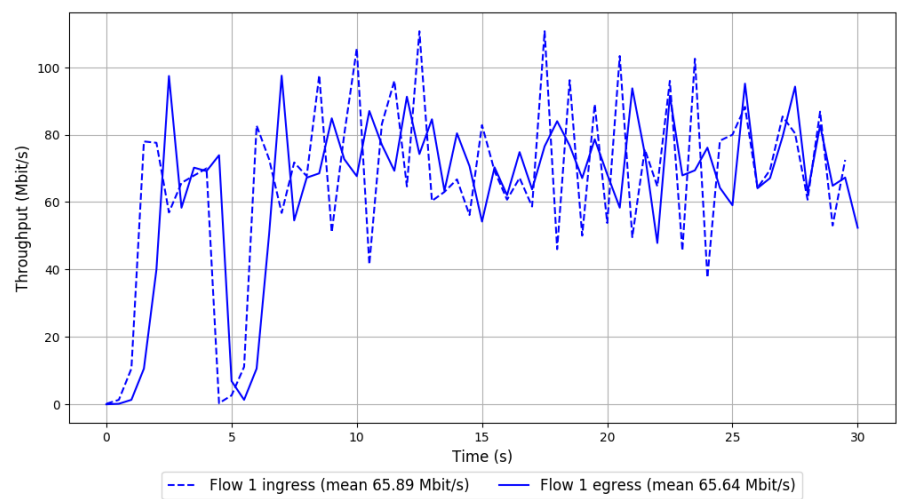
-- Flow 1:

Average throughput: 65.64 Mbit/s

95th percentile per-packet one-way delay: 194.324 ms

Loss rate: 0.97%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-02-05 13:37:42

End at: 2019-02-05 13:38:12

Local clock offset: -6.134 ms

Remote clock offset: 7.762 ms

Below is generated by plot.py at 2019-02-05 15:09:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.23 Mbit/s

95th percentile per-packet one-way delay: 282.974 ms

Loss rate: 1.43%

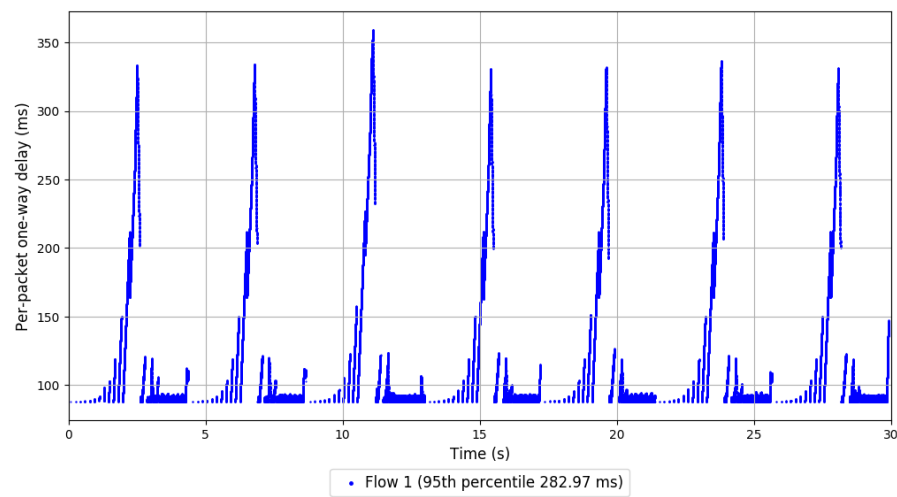
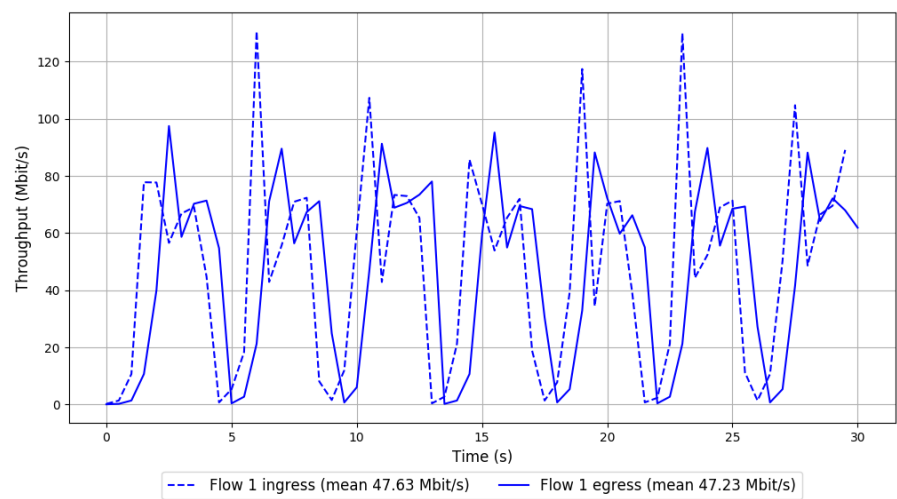
-- Flow 1:

Average throughput: 47.23 Mbit/s

95th percentile per-packet one-way delay: 282.974 ms

Loss rate: 1.43%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2019-02-05 14:02:40

End at: 2019-02-05 14:03:10

Local clock offset: -0.868 ms

Remote clock offset: 5.479 ms

Below is generated by plot.py at 2019-02-05 15:09:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.73 Mbit/s

95th percentile per-packet one-way delay: 277.989 ms

Loss rate: 0.91%

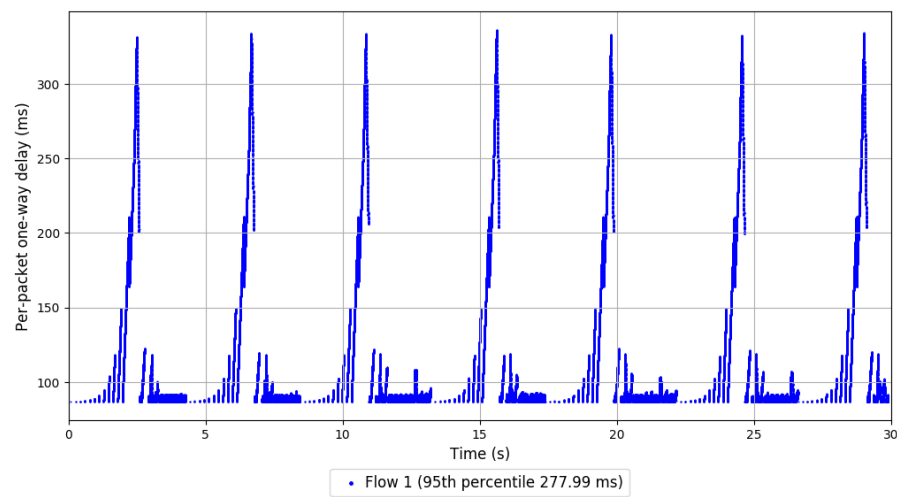
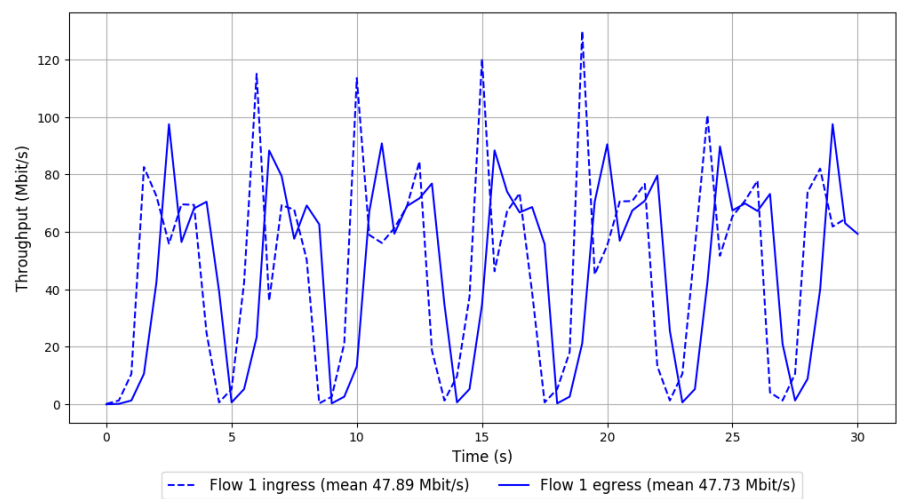
-- Flow 1:

Average throughput: 47.73 Mbit/s

95th percentile per-packet one-way delay: 277.989 ms

Loss rate: 0.91%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2019-02-05 14:27:38

End at: 2019-02-05 14:28:08

Local clock offset: -4.972 ms

Remote clock offset: 0.46 ms

Below is generated by plot.py at 2019-02-05 15:09:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.89 Mbit/s

95th percentile per-packet one-way delay: 253.980 ms

Loss rate: 0.07%

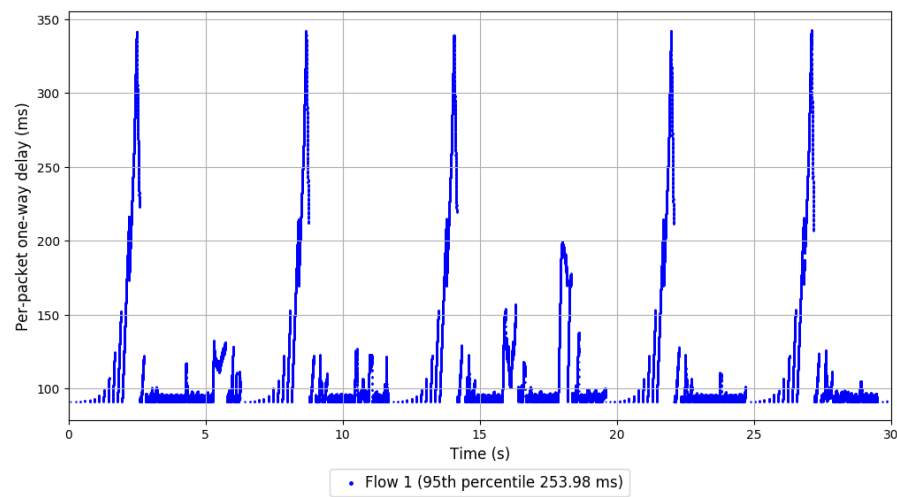
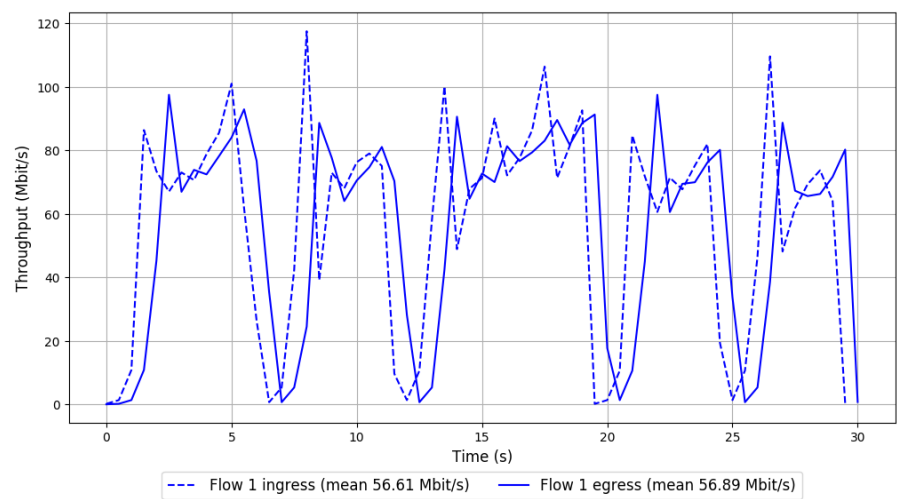
-- Flow 1:

Average throughput: 56.89 Mbit/s

95th percentile per-packet one-way delay: 253.980 ms

Loss rate: 0.07%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2019-02-05 14:52:35

End at: 2019-02-05 14:53:05

Local clock offset: -3.991 ms

Remote clock offset: 7.088 ms

Below is generated by plot.py at 2019-02-05 15:09:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.12 Mbit/s

95th percentile per-packet one-way delay: 275.810 ms

Loss rate: 0.12%

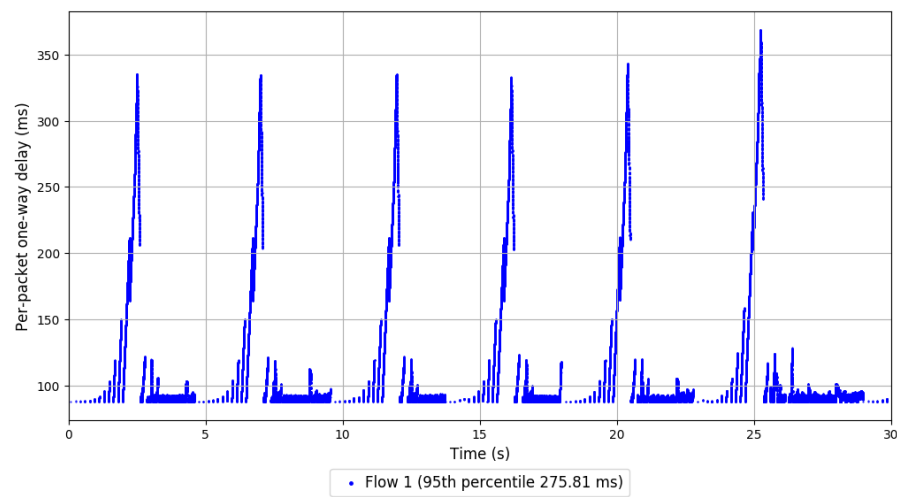
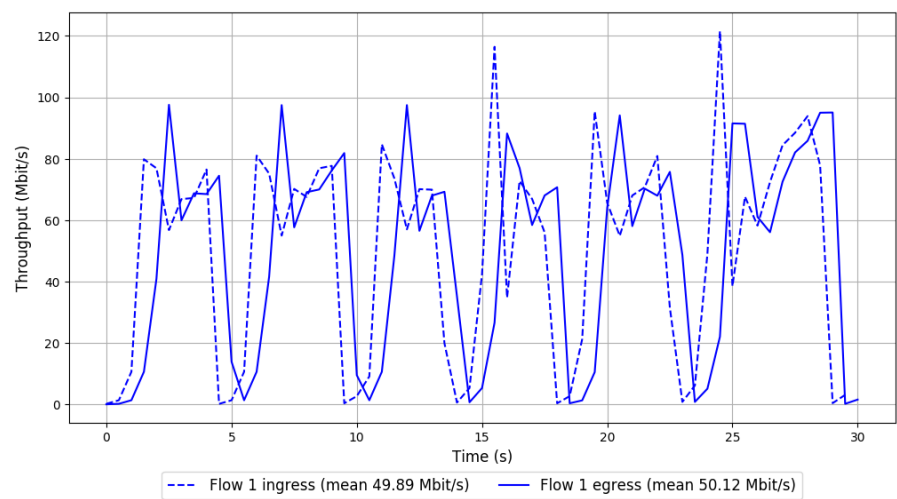
-- Flow 1:

Average throughput: 50.12 Mbit/s

95th percentile per-packet one-way delay: 275.810 ms

Loss rate: 0.12%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-02-05 13:16:11

End at: 2019-02-05 13:16:41

Local clock offset: -6.786 ms

Remote clock offset: 3.41 ms

Below is generated by plot.py at 2019-02-05 15:10:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.60 Mbit/s

95th percentile per-packet one-way delay: 107.898 ms

Loss rate: 0.76%

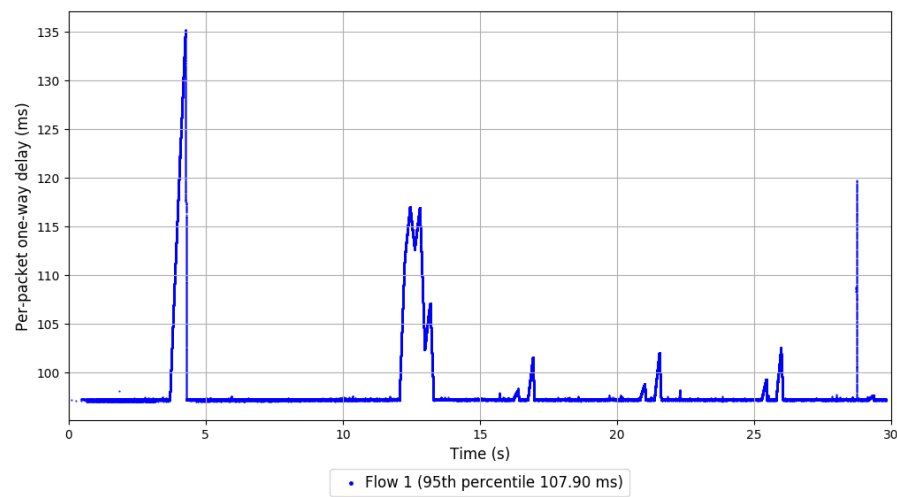
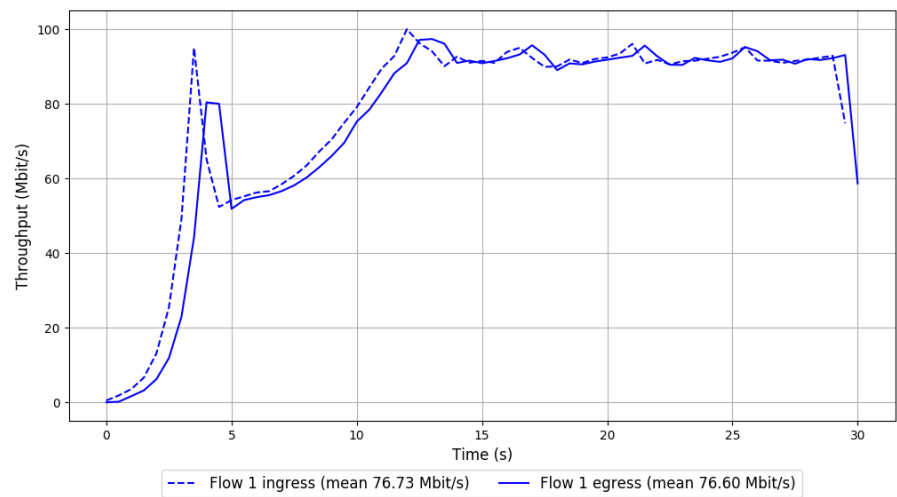
-- Flow 1:

Average throughput: 76.60 Mbit/s

95th percentile per-packet one-way delay: 107.898 ms

Loss rate: 0.76%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2019-02-05 13:41:08

End at: 2019-02-05 13:41:38

Local clock offset: -6.122 ms

Remote clock offset: 7.504 ms

Below is generated by plot.py at 2019-02-05 15:10:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.06 Mbit/s

95th percentile per-packet one-way delay: 138.963 ms

Loss rate: 0.78%

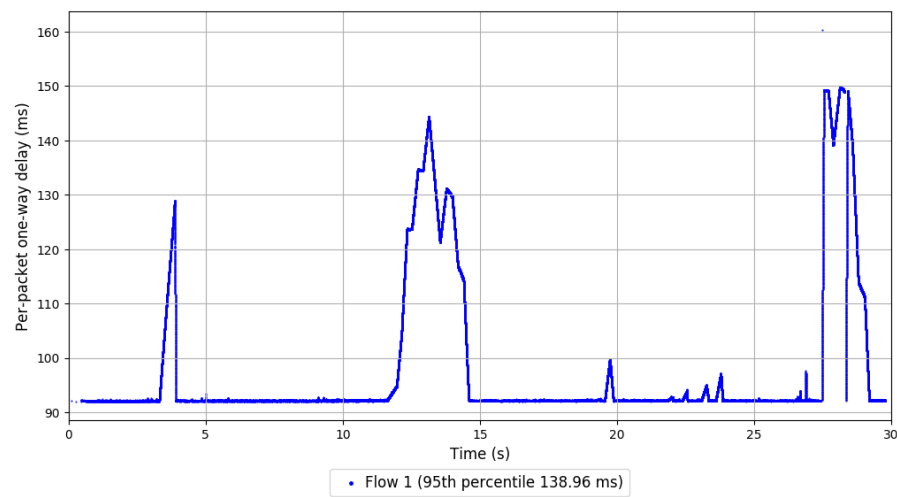
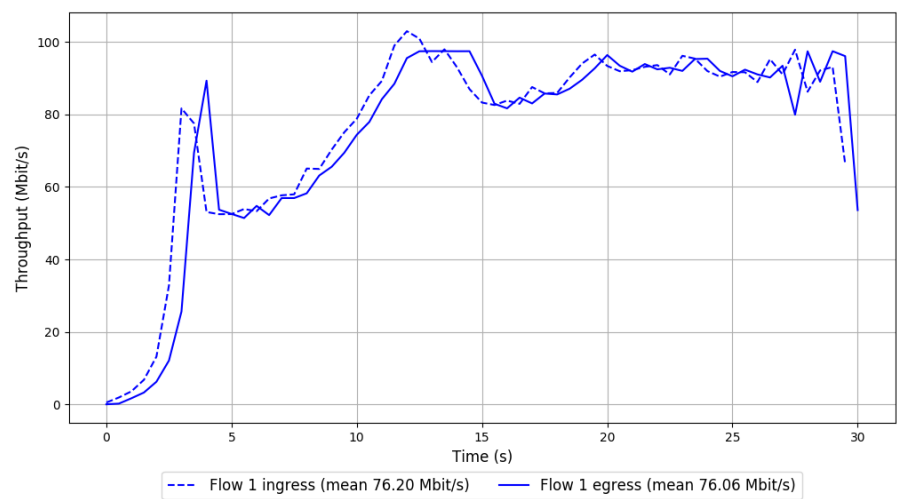
-- Flow 1:

Average throughput: 76.06 Mbit/s

95th percentile per-packet one-way delay: 138.963 ms

Loss rate: 0.78%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-02-05 14:06:07

End at: 2019-02-05 14:06:37

Local clock offset: -0.37 ms

Remote clock offset: 5.022 ms

Below is generated by plot.py at 2019-02-05 15:10:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.09 Mbit/s

95th percentile per-packet one-way delay: 92.429 ms

Loss rate: 0.72%

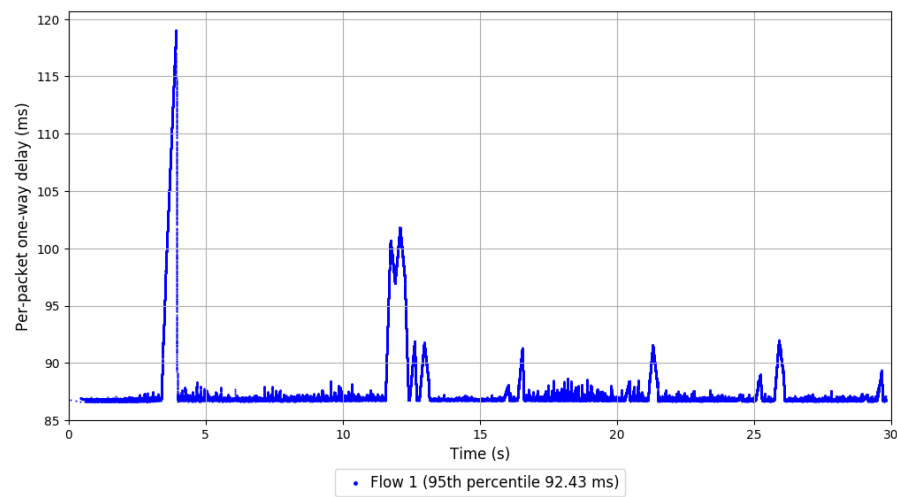
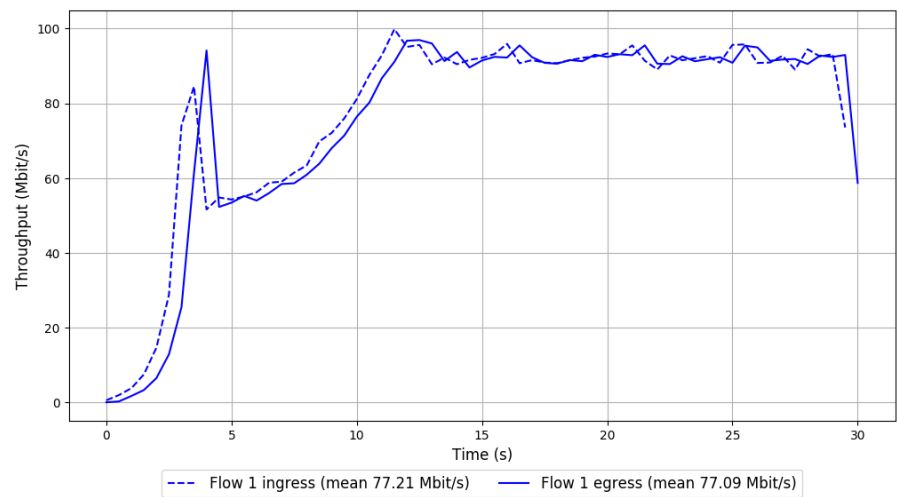
-- Flow 1:

Average throughput: 77.09 Mbit/s

95th percentile per-packet one-way delay: 92.429 ms

Loss rate: 0.72%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-02-05 14:31:04

End at: 2019-02-05 14:31:34

Local clock offset: -5.607 ms

Remote clock offset: 4.822 ms

Below is generated by plot.py at 2019-02-05 15:10:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.53 Mbit/s

95th percentile per-packet one-way delay: 99.970 ms

Loss rate: 0.74%

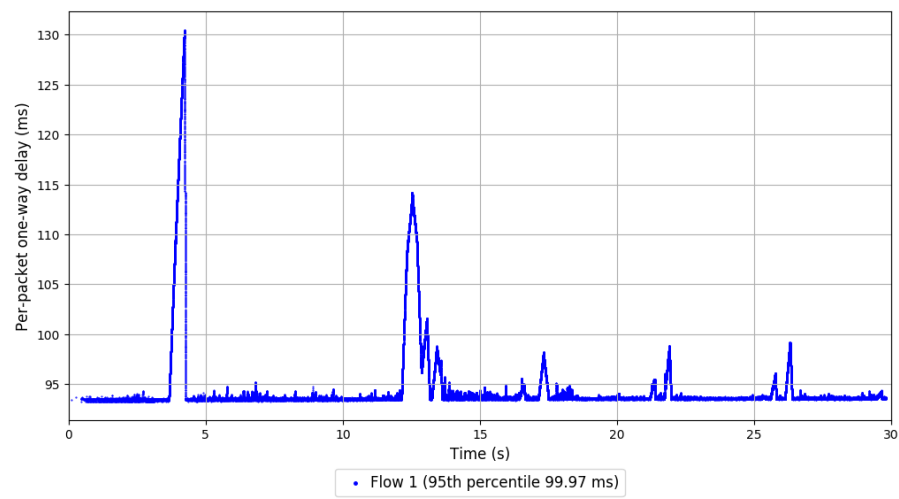
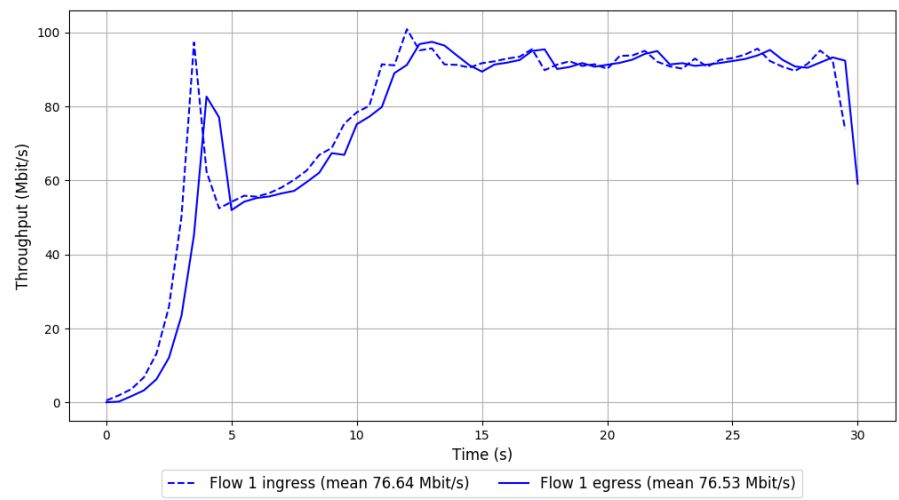
-- Flow 1:

Average throughput: 76.53 Mbit/s

95th percentile per-packet one-way delay: 99.970 ms

Loss rate: 0.74%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-02-05 14:56:01

End at: 2019-02-05 14:56:31

Local clock offset: -2.978 ms

Remote clock offset: 2.177 ms

Below is generated by plot.py at 2019-02-05 15:10:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.45 Mbit/s

95th percentile per-packet one-way delay: 102.804 ms

Loss rate: 0.69%

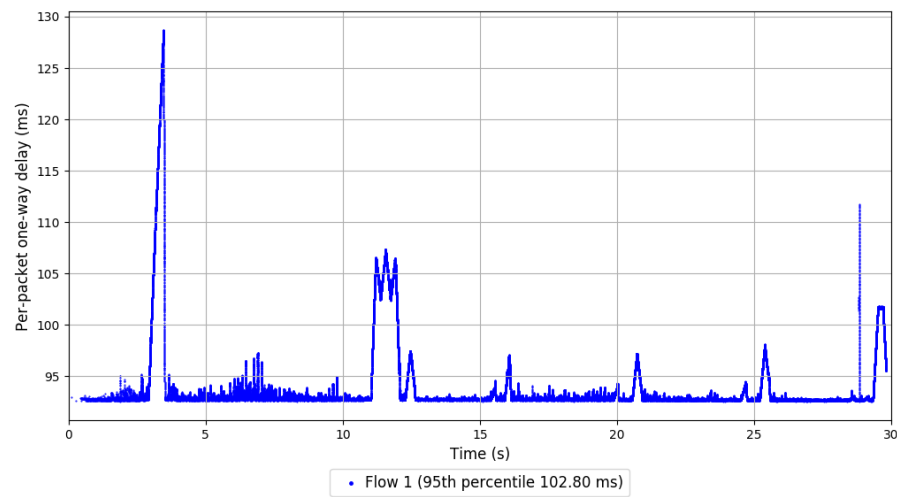
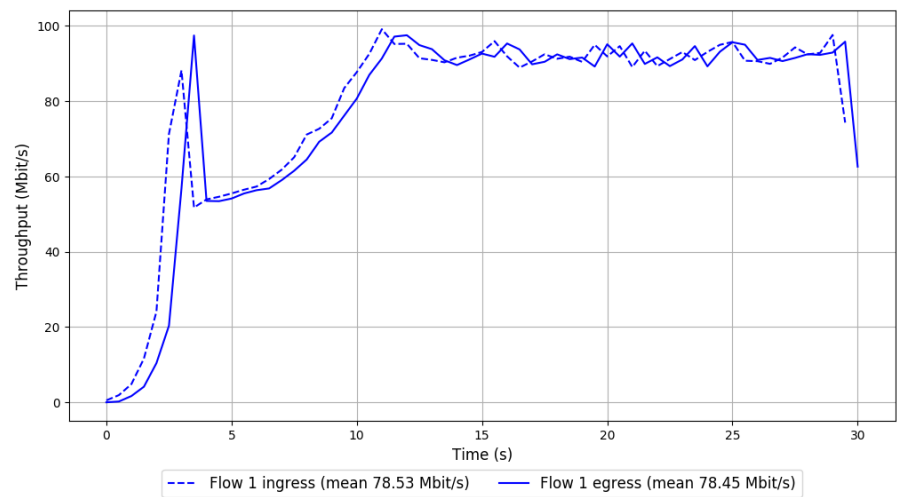
-- Flow 1:

Average throughput: 78.45 Mbit/s

95th percentile per-packet one-way delay: 102.804 ms

Loss rate: 0.69%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-02-05 12:52:26

End at: 2019-02-05 12:52:56

Local clock offset: -6.656 ms

Remote clock offset: 3.532 ms

Below is generated by plot.py at 2019-02-05 15:10:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 90.199 ms

Loss rate: 0.51%

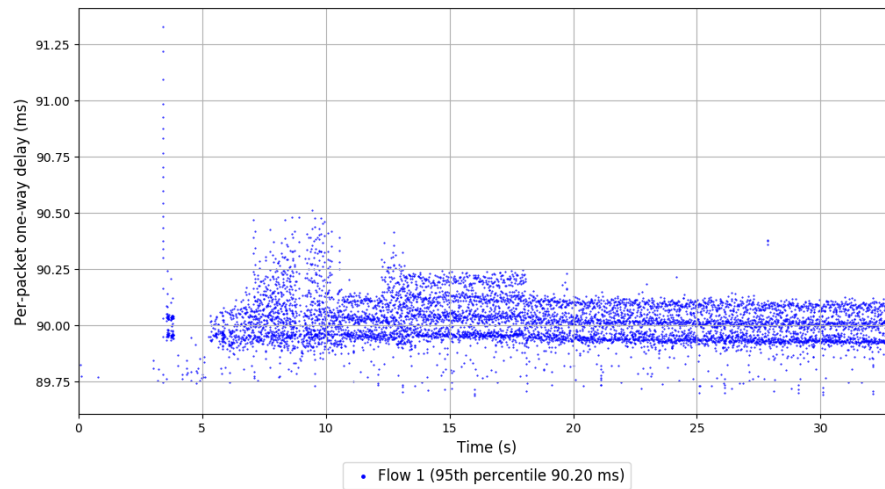
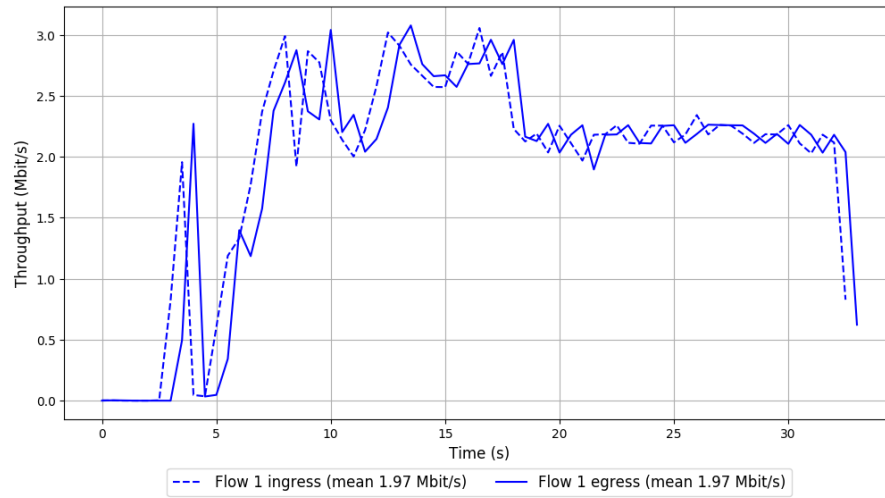
-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 90.199 ms

Loss rate: 0.51%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-02-05 13:17:24

End at: 2019-02-05 13:17:54

Local clock offset: -6.642 ms

Remote clock offset: 8.413 ms

Below is generated by plot.py at 2019-02-05 15:10:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 88.443 ms

Loss rate: 0.41%

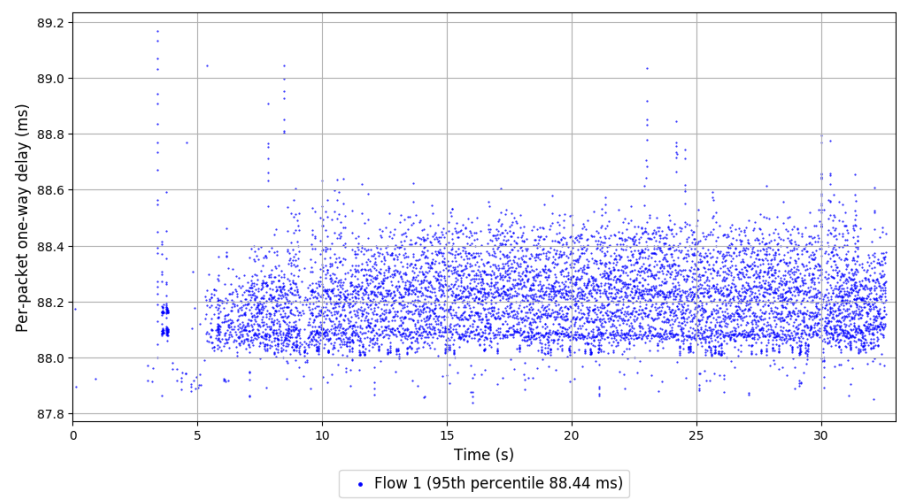
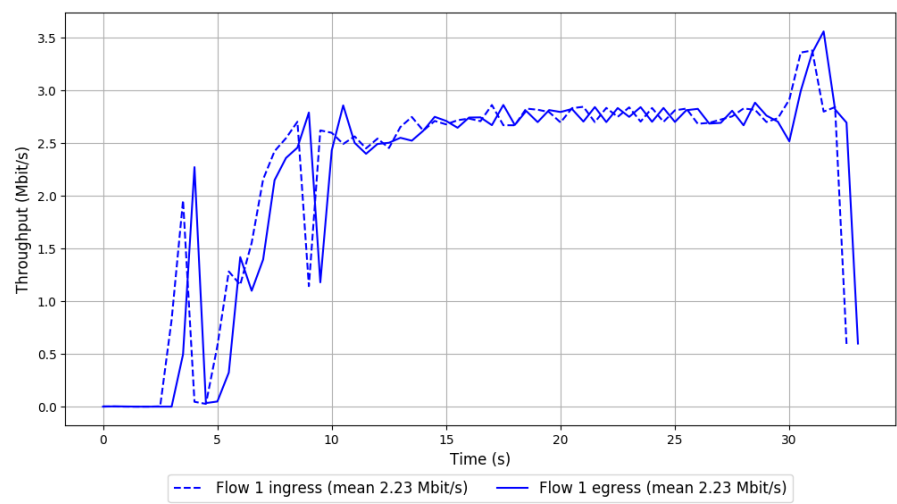
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 88.443 ms

Loss rate: 0.41%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-02-05 13:42:21

End at: 2019-02-05 13:42:51

Local clock offset: -6.115 ms

Remote clock offset: 7.522 ms

Below is generated by plot.py at 2019-02-05 15:10:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 86.368 ms

Loss rate: 0.25%

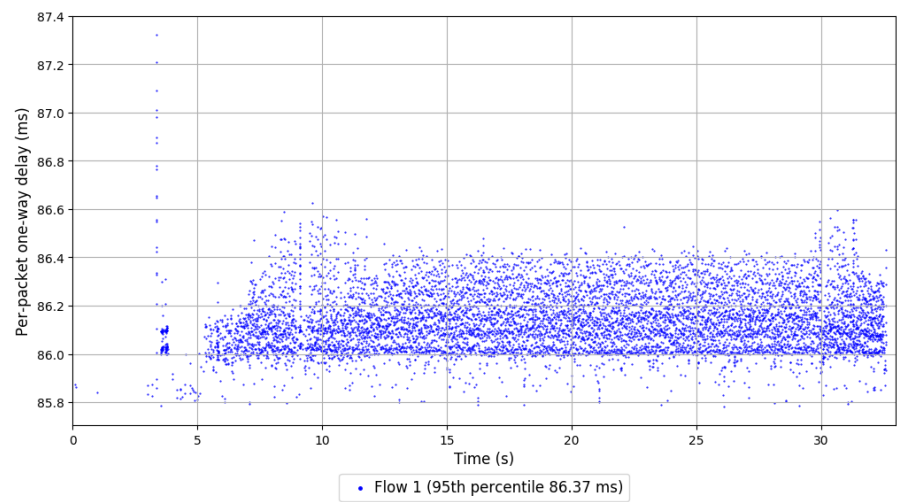
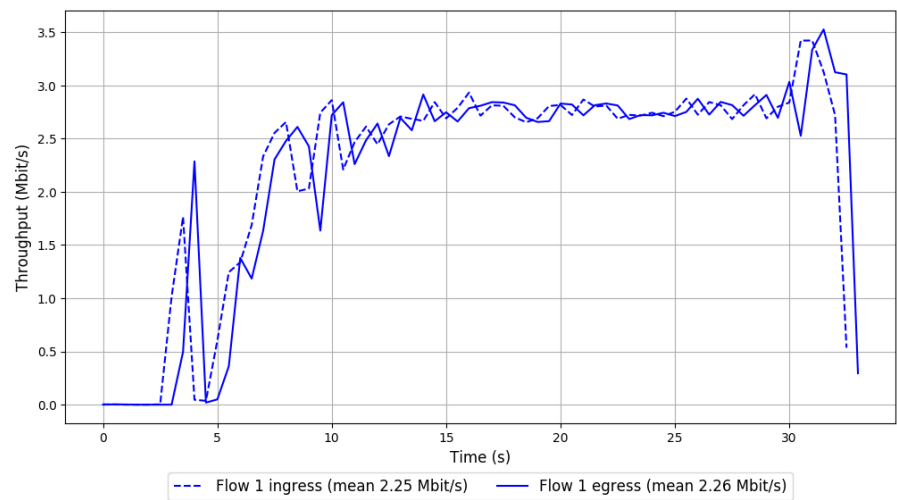
-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 86.368 ms

Loss rate: 0.25%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2019-02-05 14:07:20

End at: 2019-02-05 14:07:50

Local clock offset: -0.243 ms

Remote clock offset: 1.236 ms

Below is generated by plot.py at 2019-02-05 15:10:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 93.167 ms

Loss rate: 0.39%

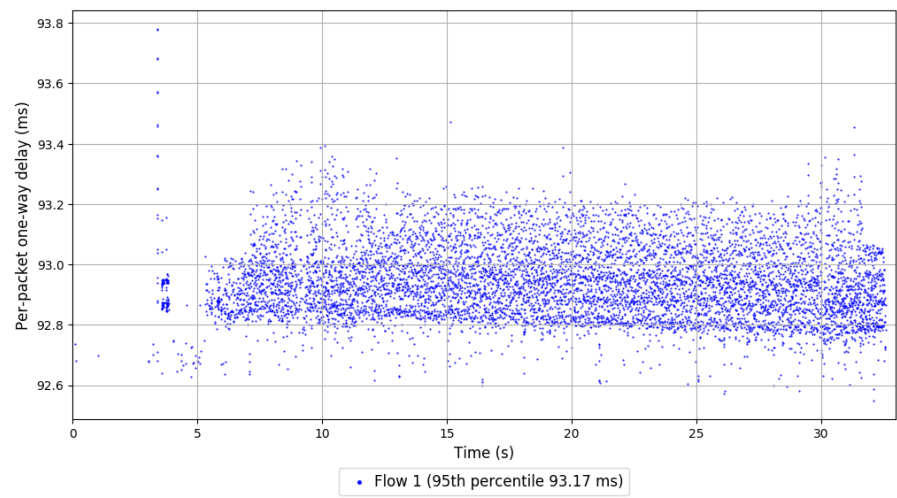
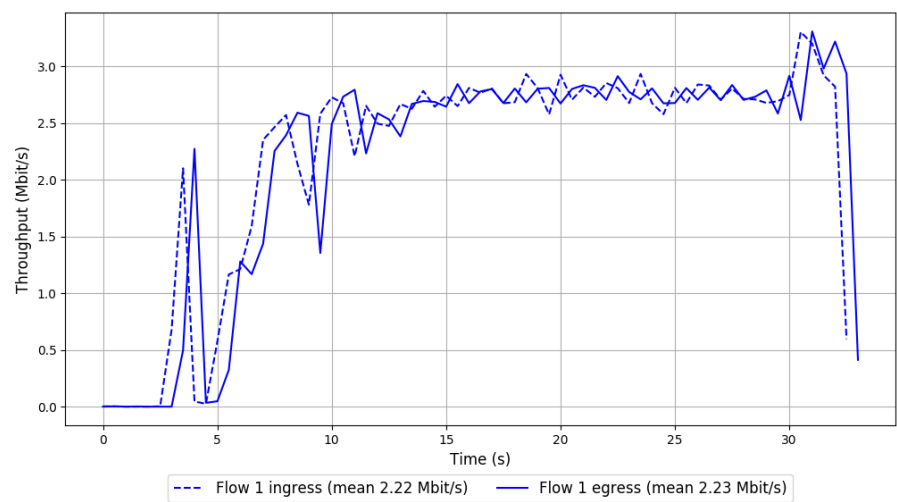
-- Flow 1:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 93.167 ms

Loss rate: 0.39%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-02-05 14:32:17

End at: 2019-02-05 14:32:47

Local clock offset: -5.804 ms

Remote clock offset: 7.381 ms

Below is generated by plot.py at 2019-02-05 15:10:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 87.298 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 87.298 ms

Loss rate: 0.48%

Run 5: Report of WebRTC media — Data Link

