

Pantheon Report

Generated at 2018-11-29 22:07:11 (UTC).

Data path: AWS California 2 on **ens5** (*local*) → Mexico on **em1** (*remote*).

Repeated the test of 18 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

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

System info:

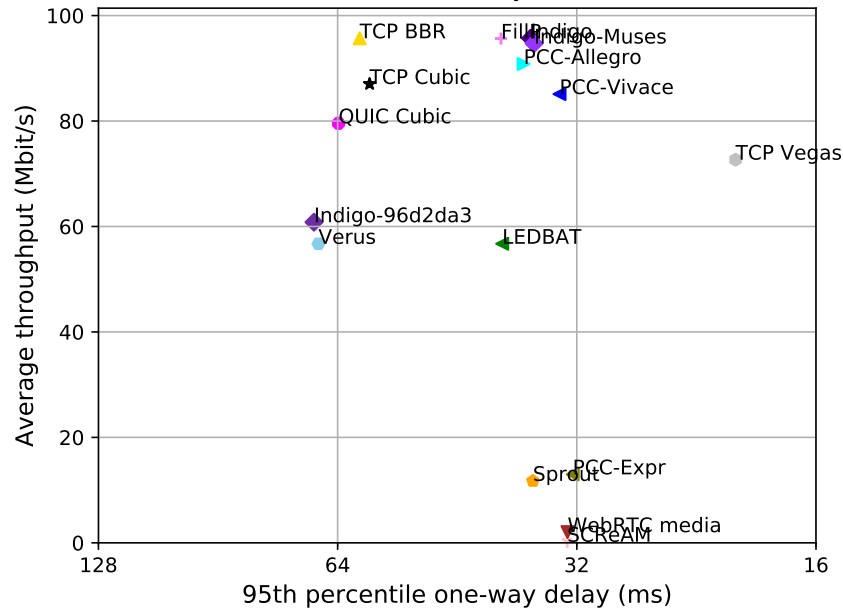
```
Linux 4.15.0-1027-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

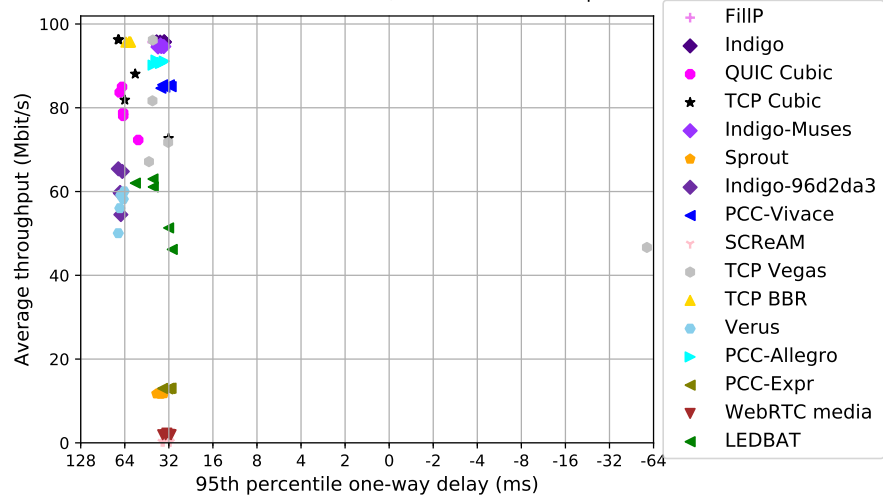
```
branch: muses @ 794ca3866981572cb73700a276691acf79c60f2b
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/indigo-96d2da3 @ 8413272d46f8aa0bcb967ed7048b6a8f994abb95
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
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 AWS California 2 to Mexico, 5 runs of 30s each per scheme
(mean of all runs by scheme)



test from AWS California 2 to Mexico, 5 runs of 30s each per scheme



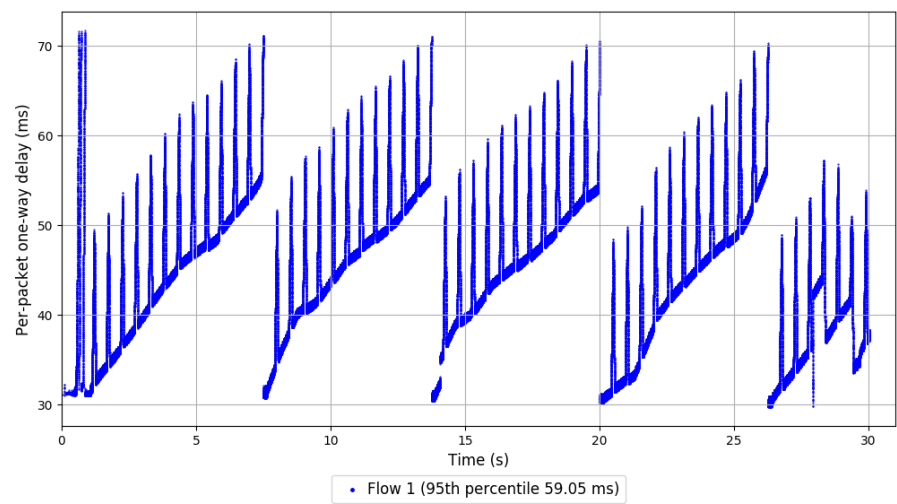
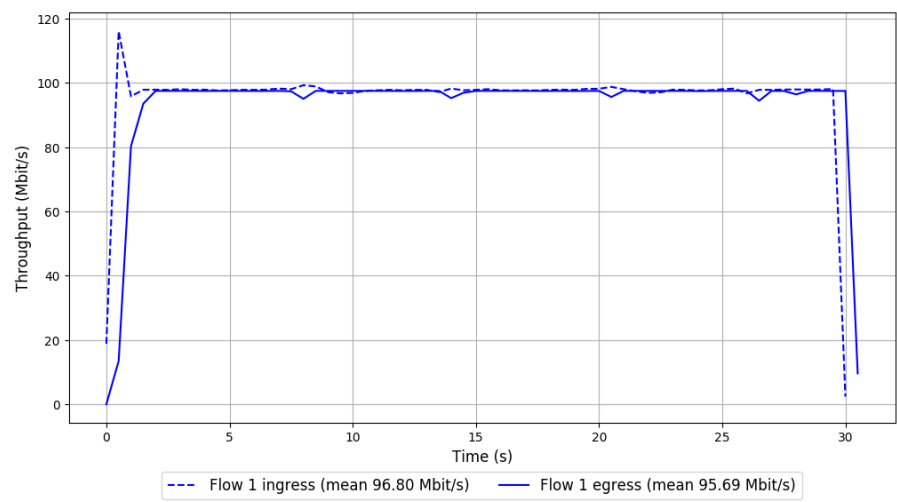
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	95.69	60.04	1.20
Copa	0	N/A	N/A	N/A
TCP Cubic	5	87.03	58.34	0.36
FillP	5	95.64	39.87	0.68
Indigo	5	95.69	36.59	0.02
Indigo-96d2da3	5	60.81	68.54	58.56
LEDBAT	5	56.72	39.73	0.02
Indigo-Muses	5	94.70	36.22	0.13
PCC-Allegro	5	90.82	37.33	0.77
PCC-Expr	5	12.99	32.39	44.50
QUIC Cubic	5	79.57	63.83	1.44
SCReAM	5	0.21	32.91	0.00
Sprout	5	11.75	36.34	0.03
TaoVA-100x	0	N/A	N/A	N/A
TCP Vegas	5	72.67	20.20	0.49
Verus	5	56.71	67.67	33.55
PCC-Vivace	5	85.12	33.65	0.00
WebRTC media	5	2.03	32.88	0.01

Run 1: Statistics of TCP BBR

Start at: 2018-11-29 20:19:21
End at: 2018-11-29 20:19:51
Local clock offset: -9.243 ms
Remote clock offset: -3.271 ms

Below is generated by plot.py at 2018-11-29 21:59:48
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 59.053 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 59.053 ms
Loss rate: 1.12%

Run 1: Report of TCP BBR — Data Link

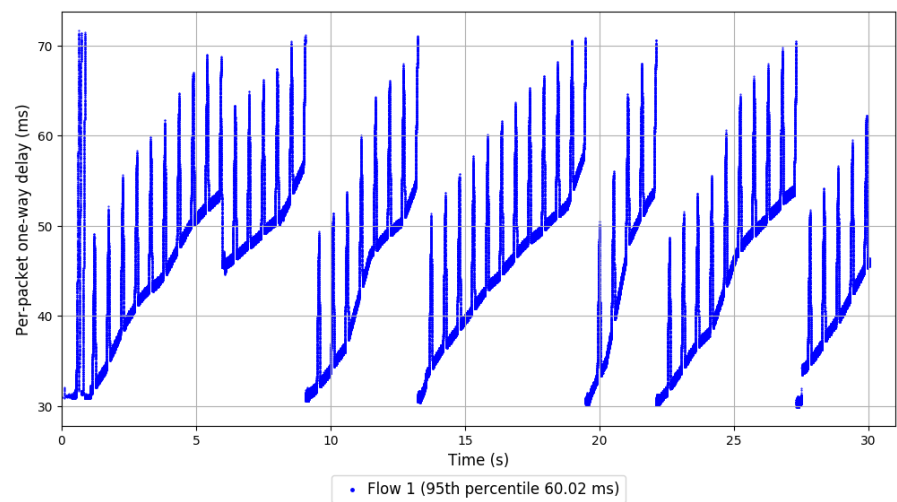
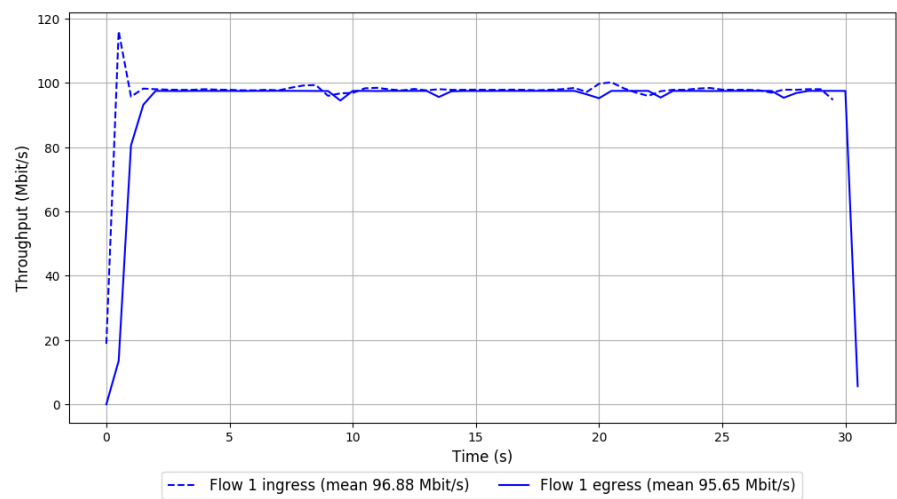


Run 2: Statistics of TCP BBR

Start at: 2018-11-29 20:39:59
End at: 2018-11-29 20:40:29
Local clock offset: -28.792 ms
Remote clock offset: -3.112 ms

Below is generated by plot.py at 2018-11-29 21:59:48
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.65 Mbit/s
95th percentile per-packet one-way delay: 60.024 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 95.65 Mbit/s
95th percentile per-packet one-way delay: 60.024 ms
Loss rate: 1.22%

Run 2: Report of TCP BBR — Data Link

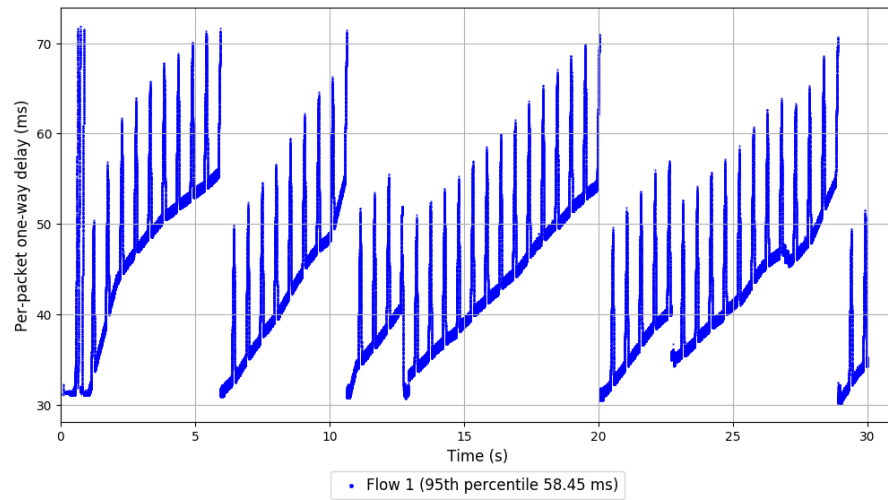
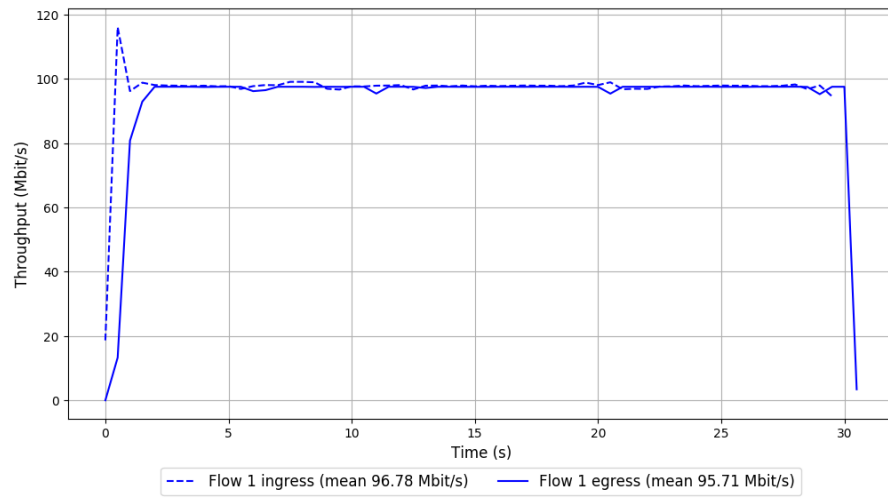


Run 3: Statistics of TCP BBR

Start at: 2018-11-29 21:00:39
End at: 2018-11-29 21:01:09
Local clock offset: -47.107 ms
Remote clock offset: -2.685 ms

Below is generated by plot.py at 2018-11-29 21:59:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 58.449 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 58.449 ms
Loss rate: 1.09%

Run 3: Report of TCP BBR — Data Link

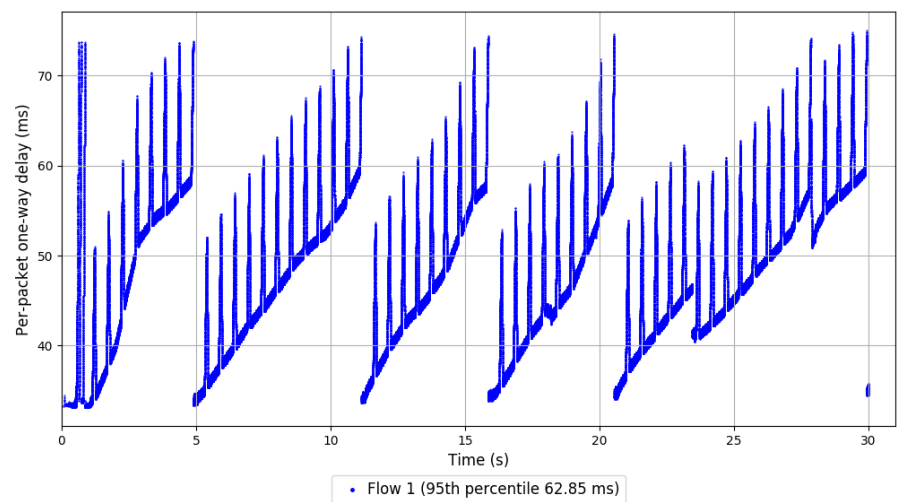
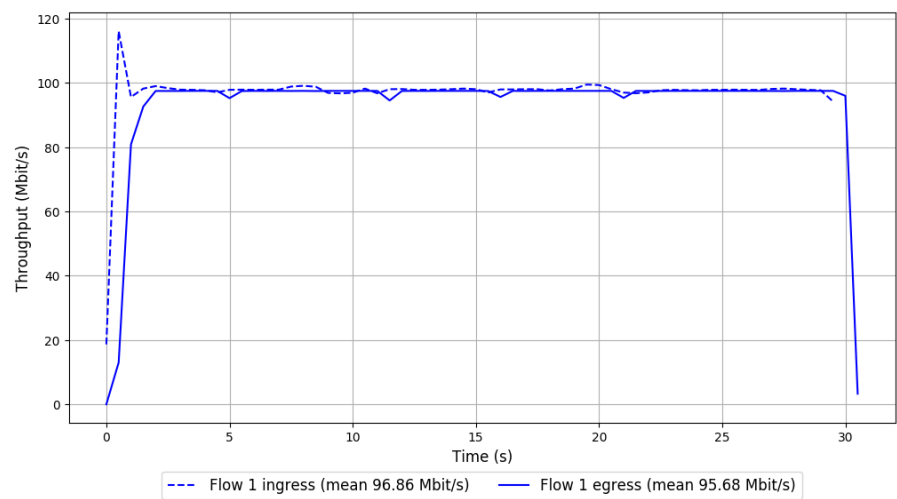


Run 4: Statistics of TCP BBR

Start at: 2018-11-29 21:21:24
End at: 2018-11-29 21:21:54
Local clock offset: -46.334 ms
Remote clock offset: -2.423 ms

Below is generated by plot.py at 2018-11-29 21:59:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.68 Mbit/s
95th percentile per-packet one-way delay: 62.852 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 95.68 Mbit/s
95th percentile per-packet one-way delay: 62.852 ms
Loss rate: 1.21%

Run 4: Report of TCP BBR — Data Link

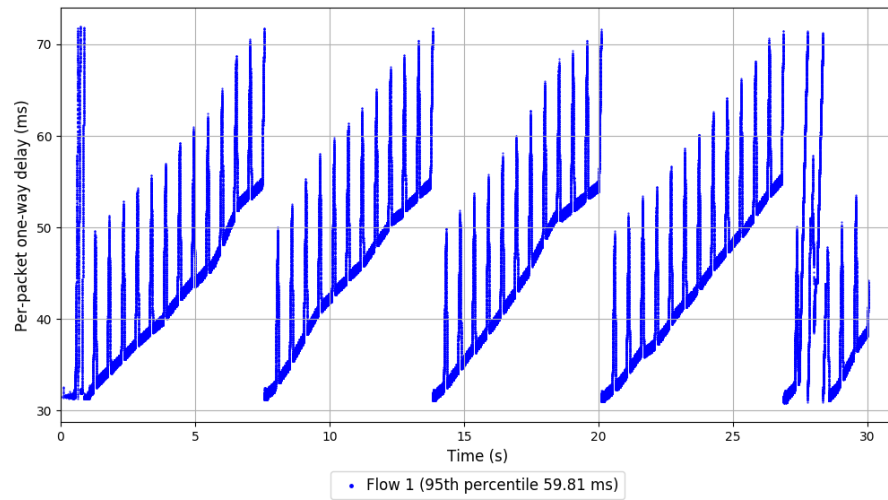
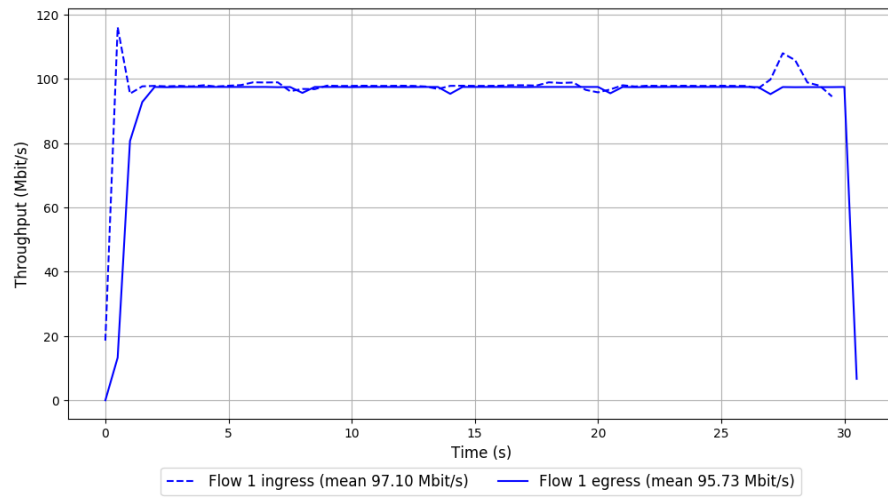


Run 5: Statistics of TCP BBR

Start at: 2018-11-29 21:42:04
End at: 2018-11-29 21:42:34
Local clock offset: -41.697 ms
Remote clock offset: -2.171 ms

Below is generated by plot.py at 2018-11-29 21:59:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.73 Mbit/s
95th percentile per-packet one-way delay: 59.806 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 95.73 Mbit/s
95th percentile per-packet one-way delay: 59.806 ms
Loss rate: 1.37%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

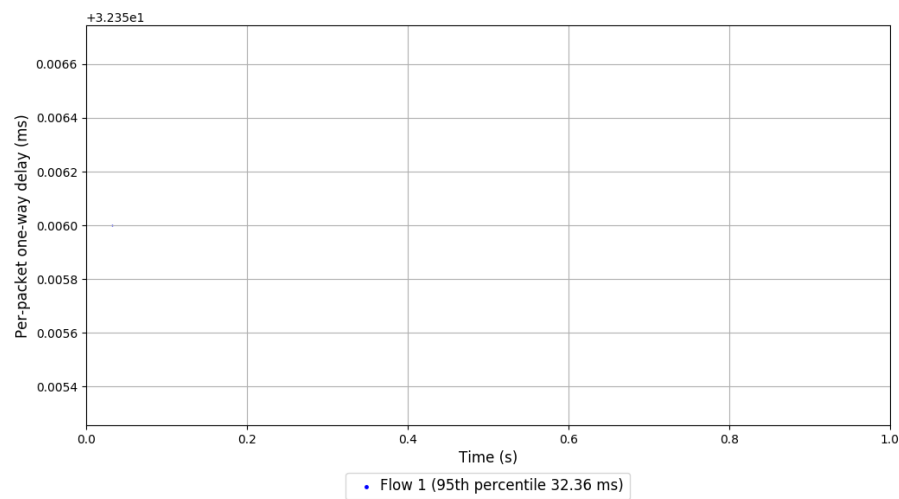
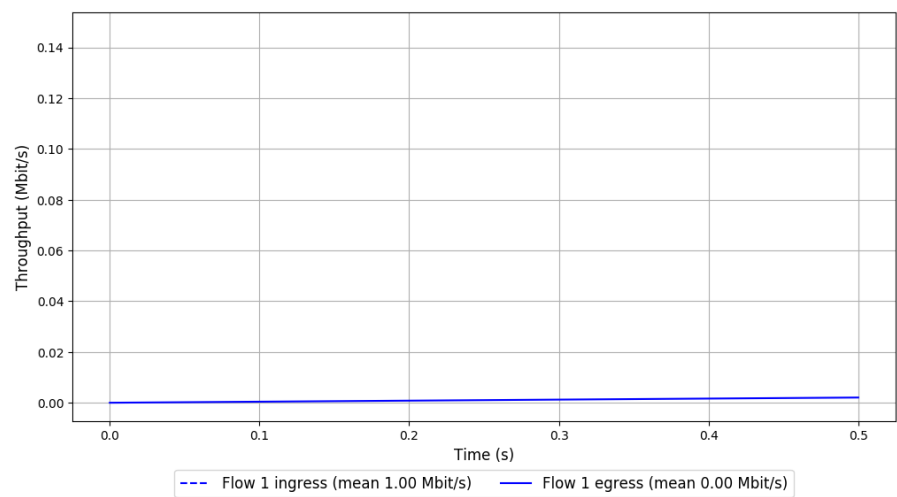
Start at: 2018-11-29 20:34:16

End at: 2018-11-29 20:34:46

Local clock offset: -24.883 ms

Remote clock offset: -3.234 ms

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

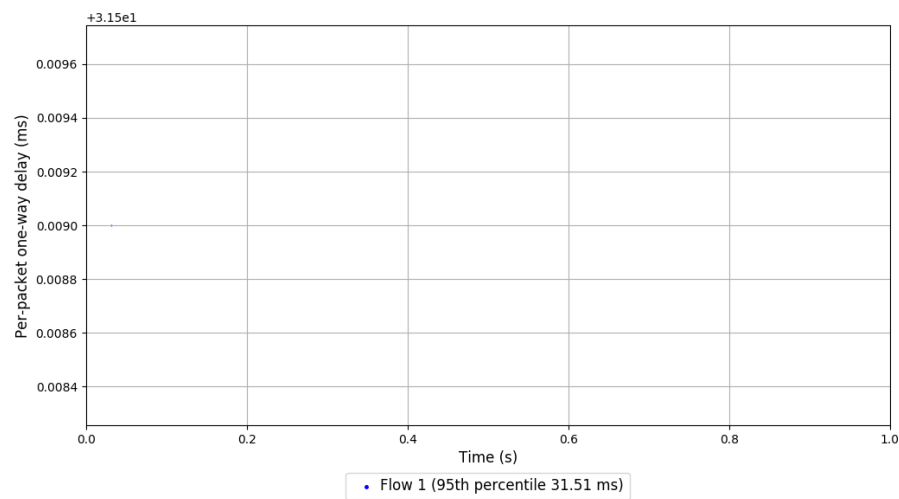
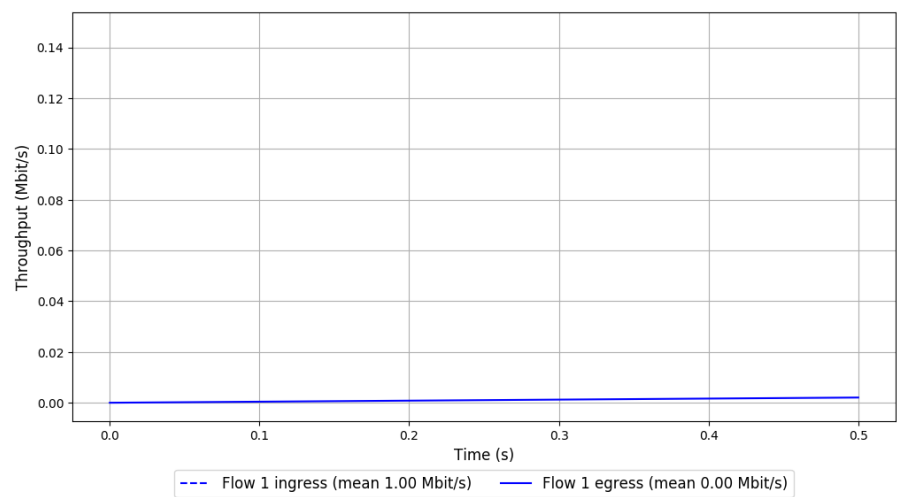
Start at: 2018-11-29 20:54:59

End at: 2018-11-29 20:55:29

Local clock offset: -38.2 ms

Remote clock offset: -2.63 ms

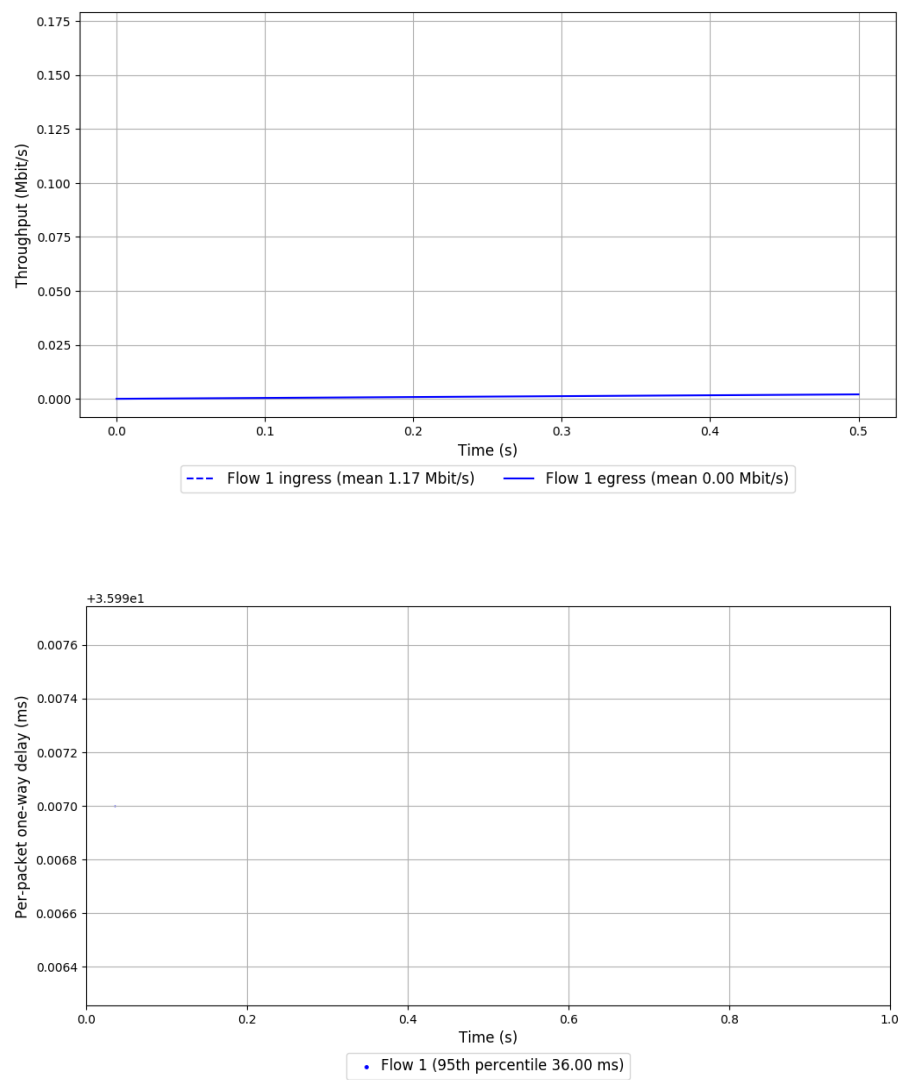
Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-11-29 21:15:41
End at: 2018-11-29 21:16:11
Local clock offset: -75.596 ms
Remote clock offset: -2.374 ms

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

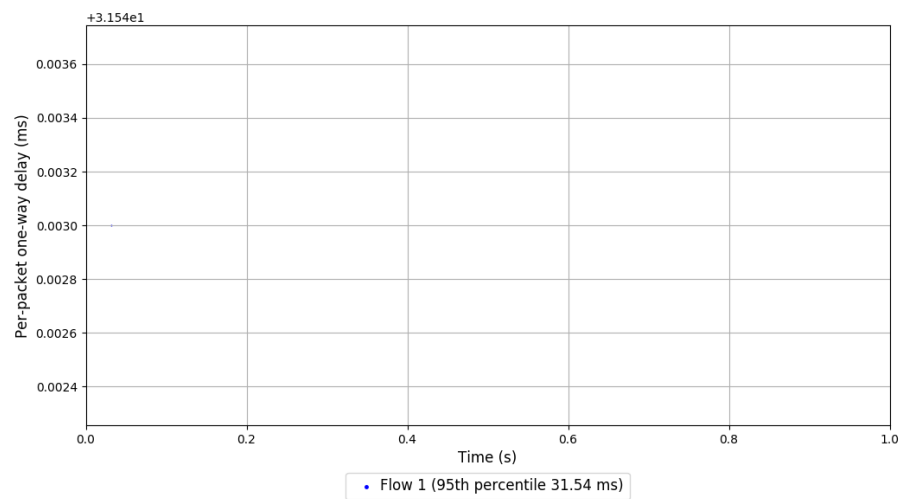
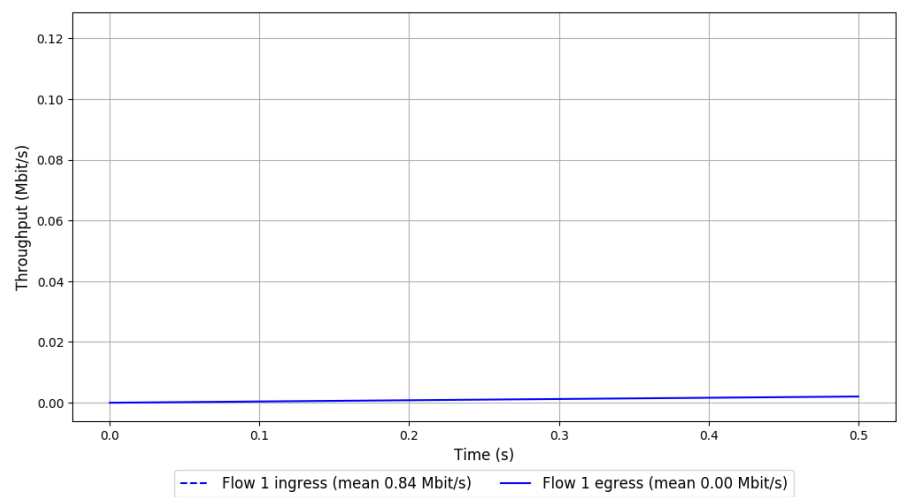
Start at: 2018-11-29 21:36:20

End at: 2018-11-29 21:36:50

Local clock offset: -36.427 ms

Remote clock offset: -2.192 ms

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

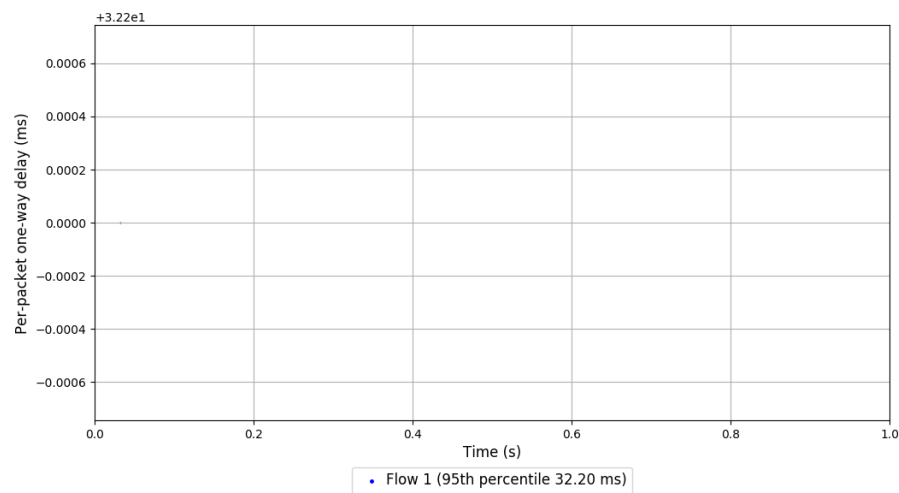
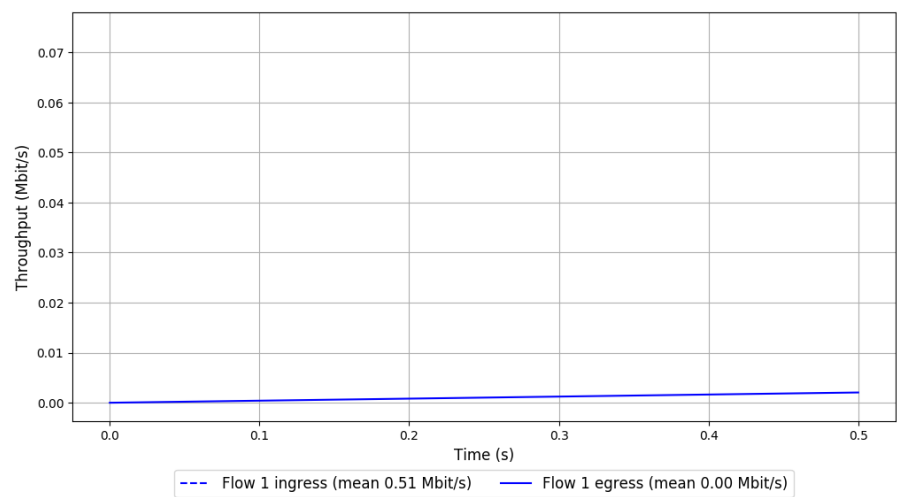
Start at: 2018-11-29 21:56:57

End at: 2018-11-29 21:57:27

Local clock offset: -16.472 ms

Remote clock offset: -2.218 ms

Run 5: Report of Copa — Data Link

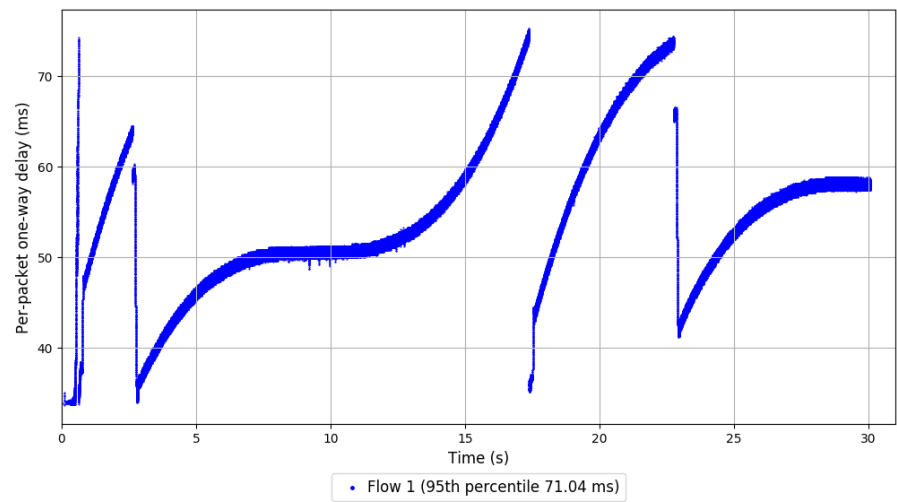
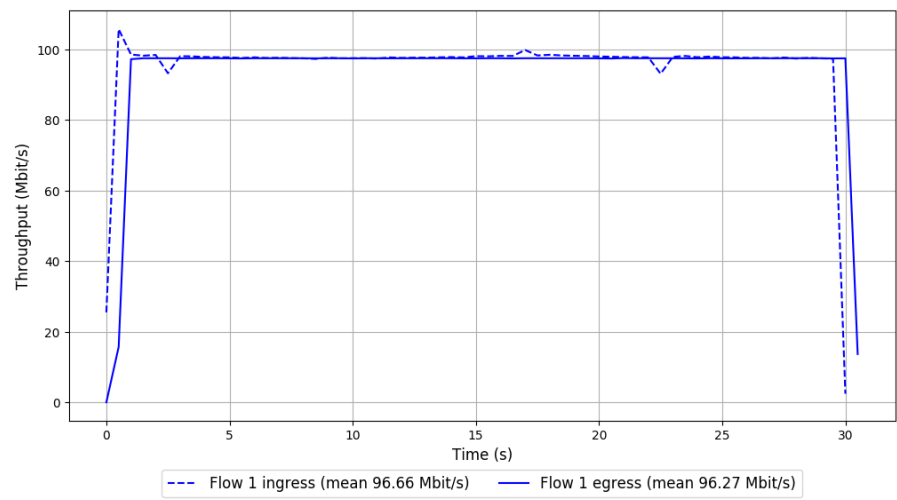


Run 1: Statistics of TCP Cubic

Start at: 2018-11-29 20:18:11
End at: 2018-11-29 20:18:41
Local clock offset: -12.307 ms
Remote clock offset: -3.288 ms

Below is generated by plot.py at 2018-11-29 21:59:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.27 Mbit/s
95th percentile per-packet one-way delay: 71.039 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 96.27 Mbit/s
95th percentile per-packet one-way delay: 71.039 ms
Loss rate: 0.32%

Run 1: Report of TCP Cubic — Data Link

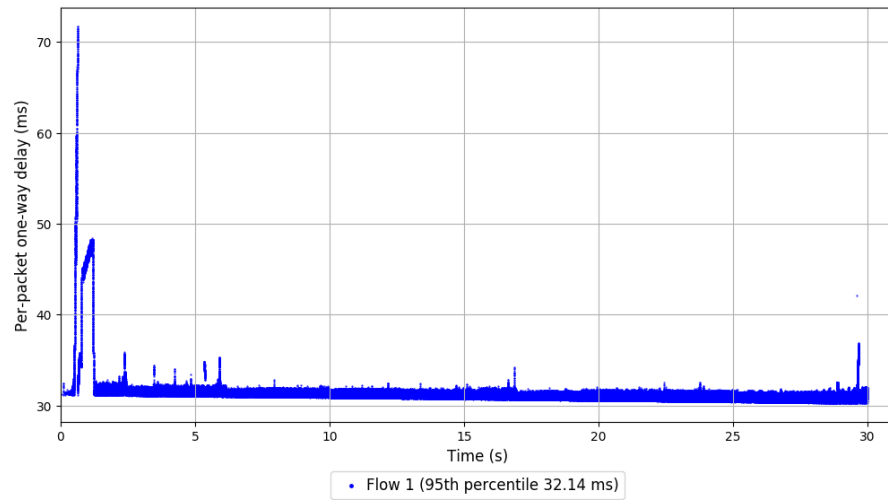
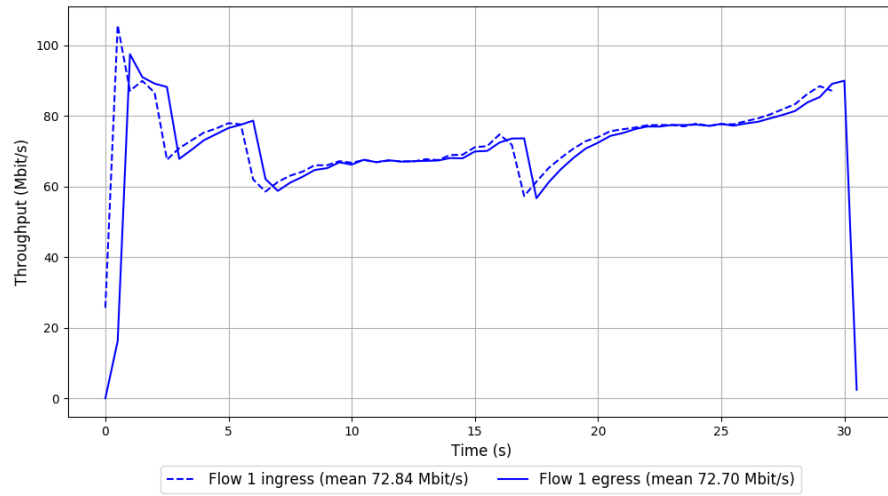


Run 2: Statistics of TCP Cubic

Start at: 2018-11-29 20:38:49
End at: 2018-11-29 20:39:19
Local clock offset: -26.639 ms
Remote clock offset: -2.973 ms

Below is generated by plot.py at 2018-11-29 21:59:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 72.70 Mbit/s
95th percentile per-packet one-way delay: 32.139 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 72.70 Mbit/s
95th percentile per-packet one-way delay: 32.139 ms
Loss rate: 0.20%

Run 2: Report of TCP Cubic — Data Link

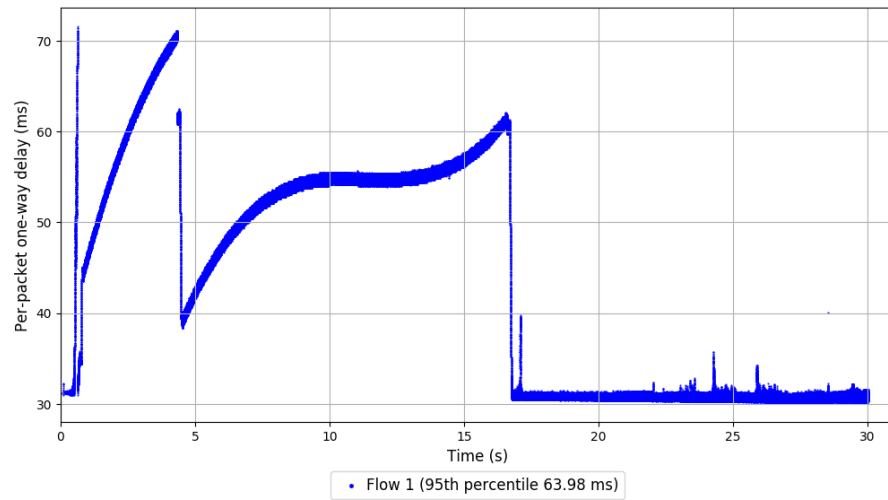
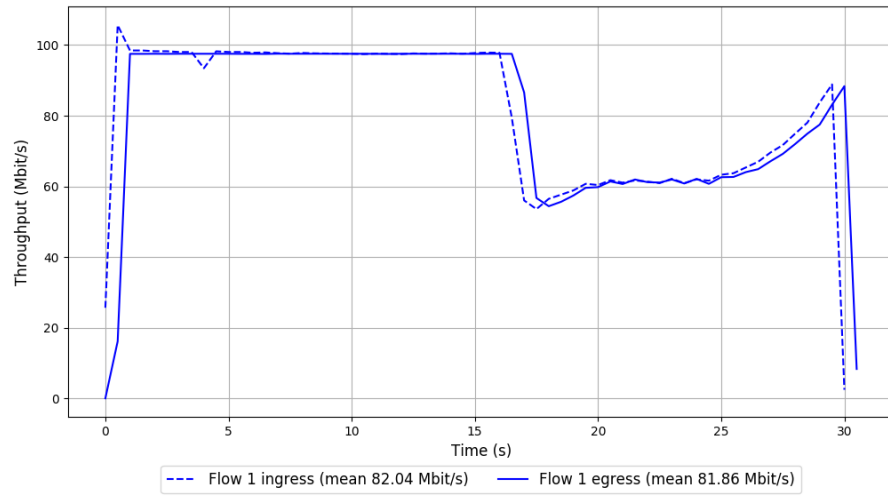


Run 3: Statistics of TCP Cubic

Start at: 2018-11-29 20:59:29
End at: 2018-11-29 20:59:59
Local clock offset: -44.825 ms
Remote clock offset: -2.582 ms

Below is generated by plot.py at 2018-11-29 21:59:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 81.86 Mbit/s
95th percentile per-packet one-way delay: 63.982 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 81.86 Mbit/s
95th percentile per-packet one-way delay: 63.982 ms
Loss rate: 0.22%

Run 3: Report of TCP Cubic — Data Link

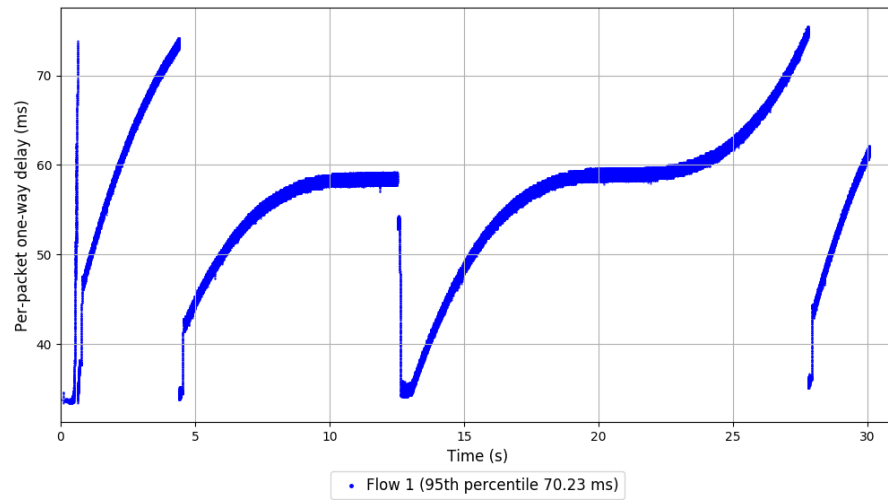
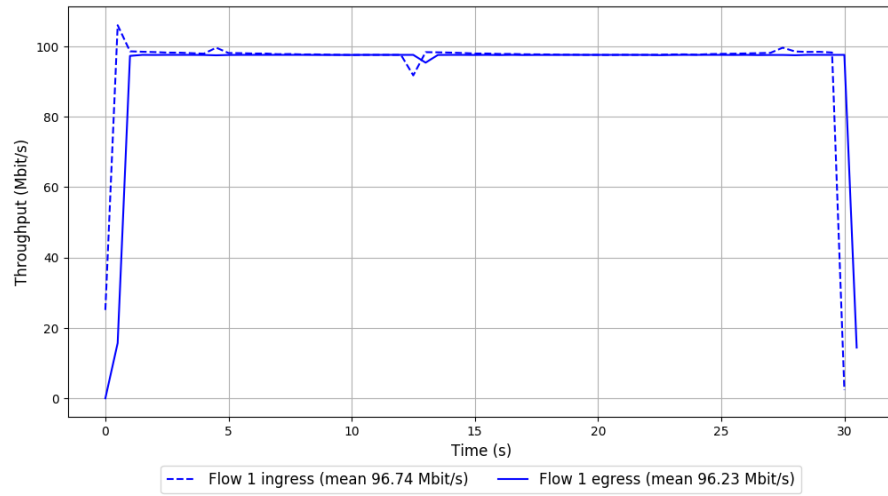


Run 4: Statistics of TCP Cubic

Start at: 2018-11-29 21:20:13
End at: 2018-11-29 21:20:43
Local clock offset: -50.372 ms
Remote clock offset: -2.511 ms

Below is generated by plot.py at 2018-11-29 22:00:36
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.23 Mbit/s
95th percentile per-packet one-way delay: 70.230 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 96.23 Mbit/s
95th percentile per-packet one-way delay: 70.230 ms
Loss rate: 0.43%

Run 4: Report of TCP Cubic — Data Link

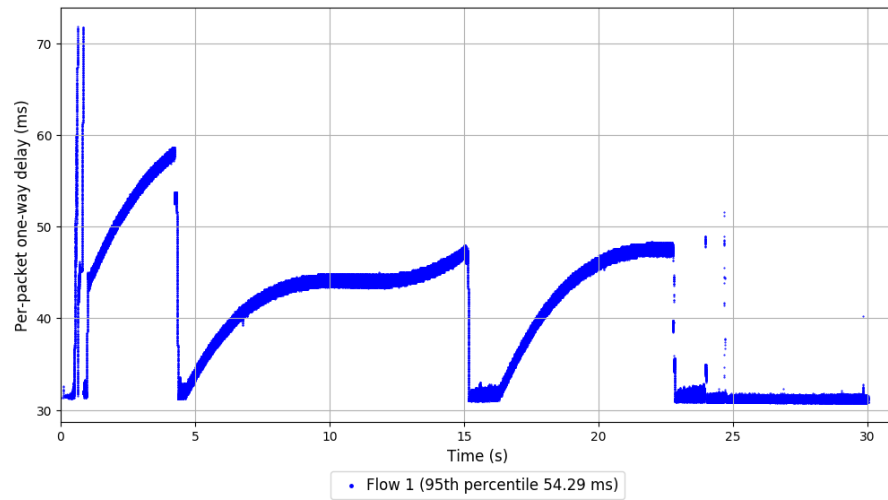
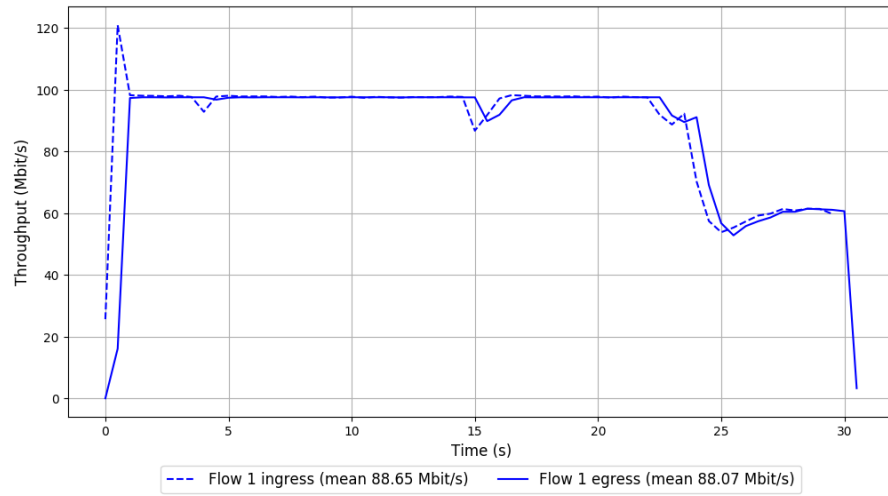


Run 5: Statistics of TCP Cubic

Start at: 2018-11-29 21:40:54
End at: 2018-11-29 21:41:24
Local clock offset: -40.495 ms
Remote clock offset: -2.206 ms

Below is generated by plot.py at 2018-11-29 22:00:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 88.07 Mbit/s
95th percentile per-packet one-way delay: 54.290 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 88.07 Mbit/s
95th percentile per-packet one-way delay: 54.290 ms
Loss rate: 0.65%

Run 5: Report of TCP Cubic — Data Link

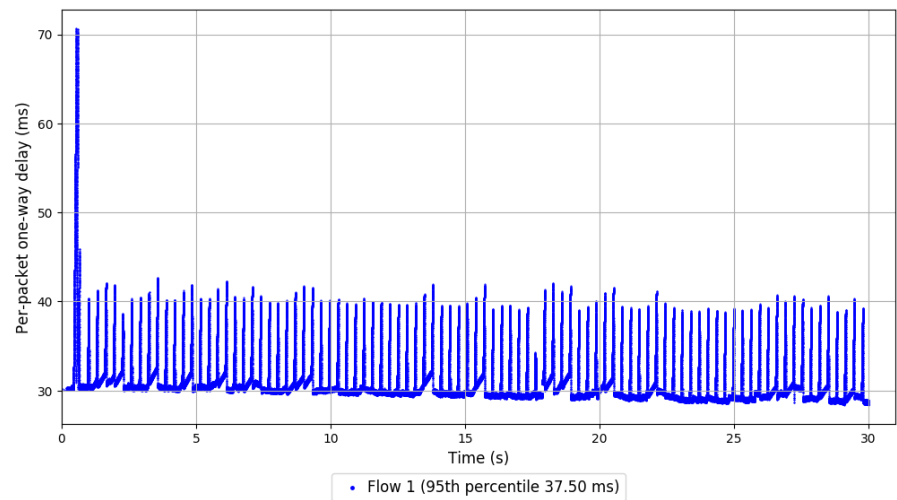
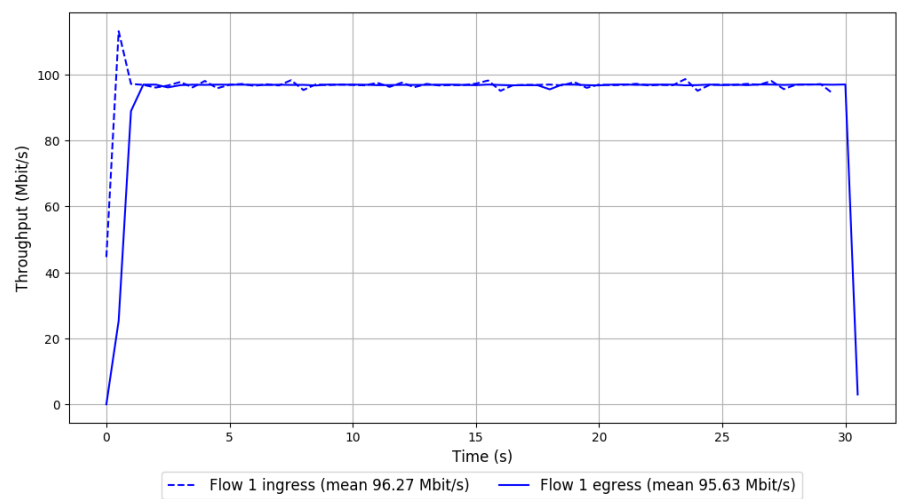


Run 1: Statistics of FillP

Start at: 2018-11-29 20:28:31
End at: 2018-11-29 20:29:01
Local clock offset: -25.638 ms
Remote clock offset: -3.238 ms

Below is generated by plot.py at 2018-11-29 22:01:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.63 Mbit/s
95th percentile per-packet one-way delay: 37.498 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 95.63 Mbit/s
95th percentile per-packet one-way delay: 37.498 ms
Loss rate: 0.67%

Run 1: Report of FillP — Data Link

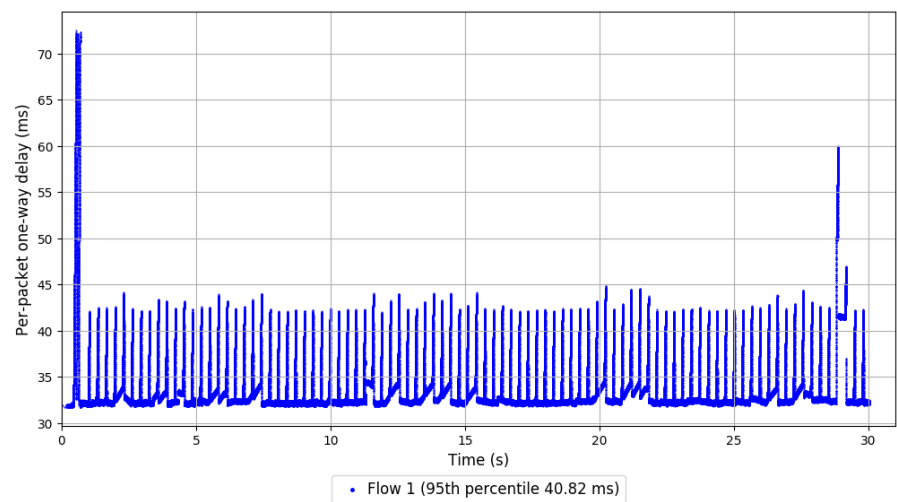
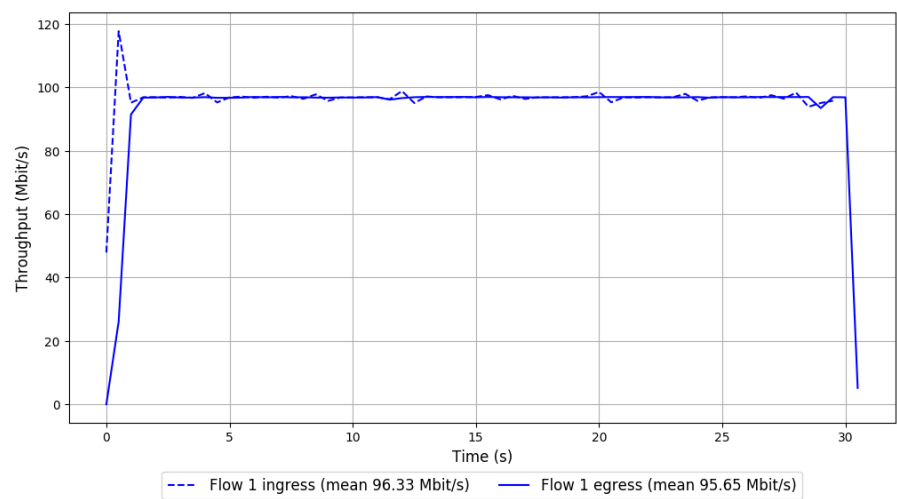


Run 2: Statistics of FillP

Start at: 2018-11-29 20:49:14
End at: 2018-11-29 20:49:44
Local clock offset: -35.615 ms
Remote clock offset: -2.715 ms

Below is generated by plot.py at 2018-11-29 22:01:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.65 Mbit/s
95th percentile per-packet one-way delay: 40.818 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 95.65 Mbit/s
95th percentile per-packet one-way delay: 40.818 ms
Loss rate: 0.71%

Run 2: Report of FillP — Data Link

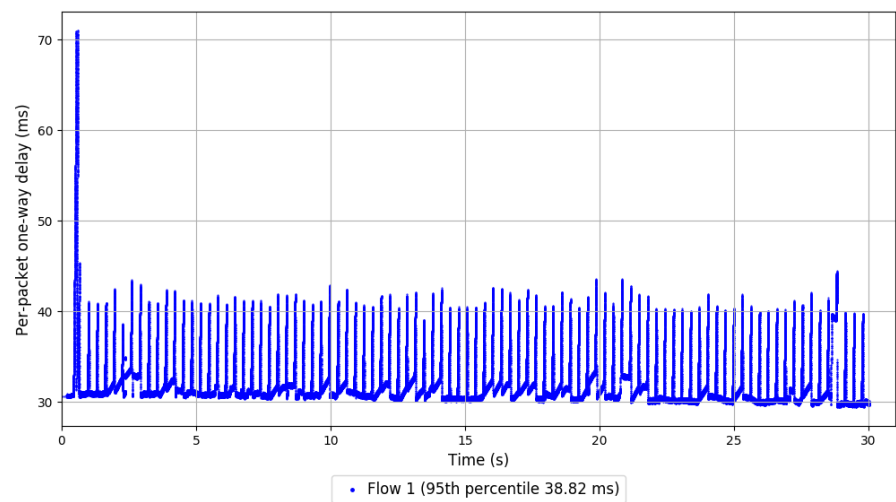
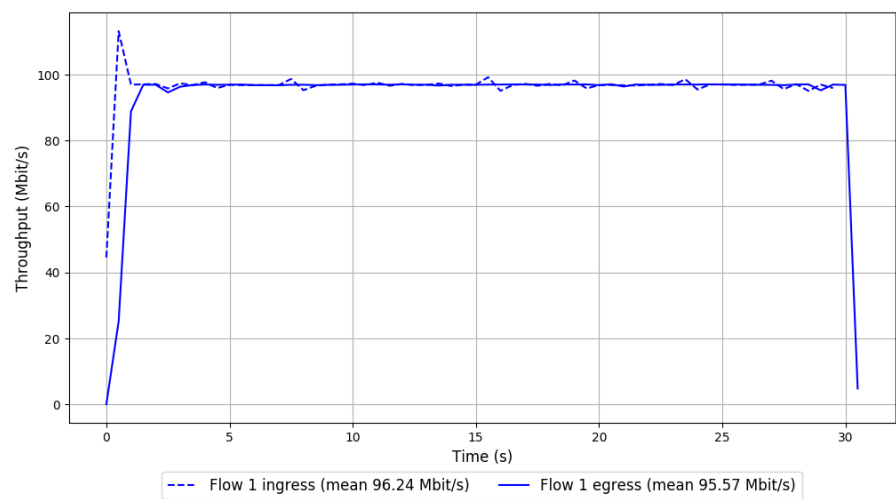


Run 3: Statistics of FillP

Start at: 2018-11-29 21:09:54
End at: 2018-11-29 21:10:24
Local clock offset: -67.038 ms
Remote clock offset: -2.463 ms

Below is generated by plot.py at 2018-11-29 22:01:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.57 Mbit/s
95th percentile per-packet one-way delay: 38.818 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 95.57 Mbit/s
95th percentile per-packet one-way delay: 38.818 ms
Loss rate: 0.70%

Run 3: Report of FillP — Data Link

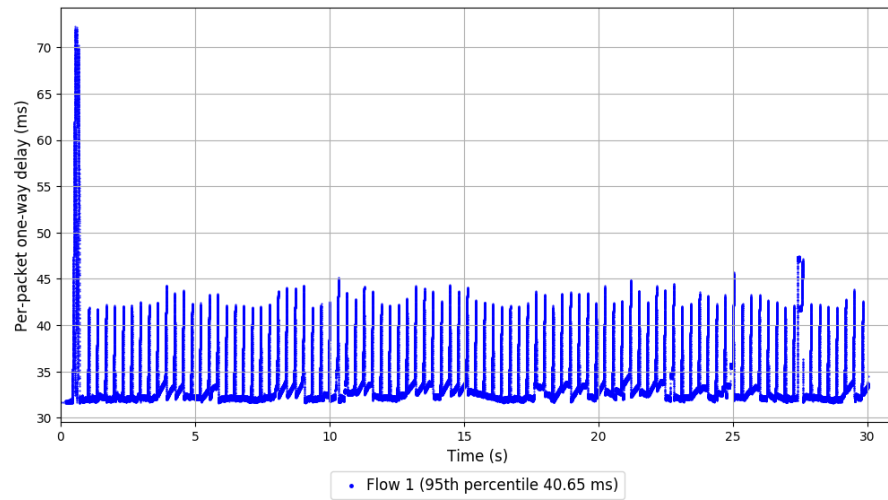
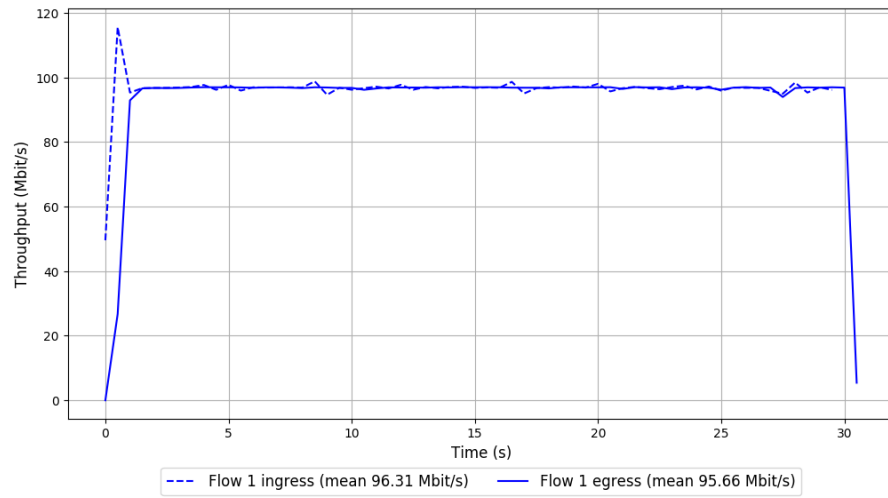


Run 4: Statistics of FillP

Start at: 2018-11-29 21:30:36
End at: 2018-11-29 21:31:06
Local clock offset: -34.357 ms
Remote clock offset: -2.296 ms

Below is generated by plot.py at 2018-11-29 22:01:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.66 Mbit/s
95th percentile per-packet one-way delay: 40.649 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 95.66 Mbit/s
95th percentile per-packet one-way delay: 40.649 ms
Loss rate: 0.66%

Run 4: Report of FillP — Data Link

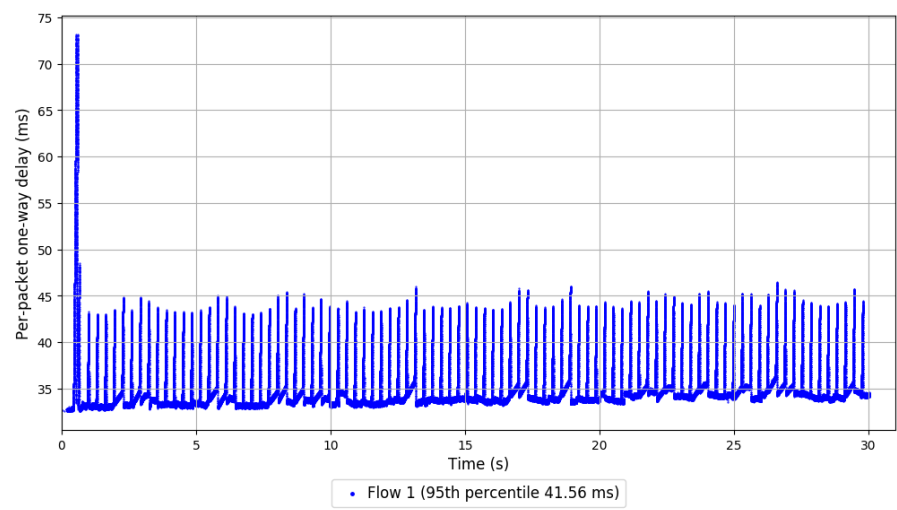
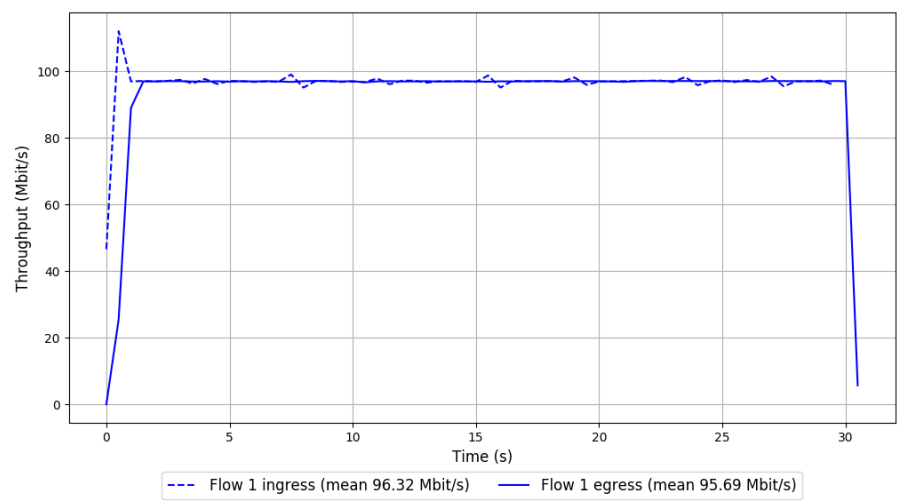


Run 5: Statistics of FillP

Start at: 2018-11-29 21:51:12
End at: 2018-11-29 21:51:42
Local clock offset: -24.043 ms
Remote clock offset: -2.232 ms

Below is generated by plot.py at 2018-11-29 22:01:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 41.559 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 41.559 ms
Loss rate: 0.65%

Run 5: Report of FillP — Data Link

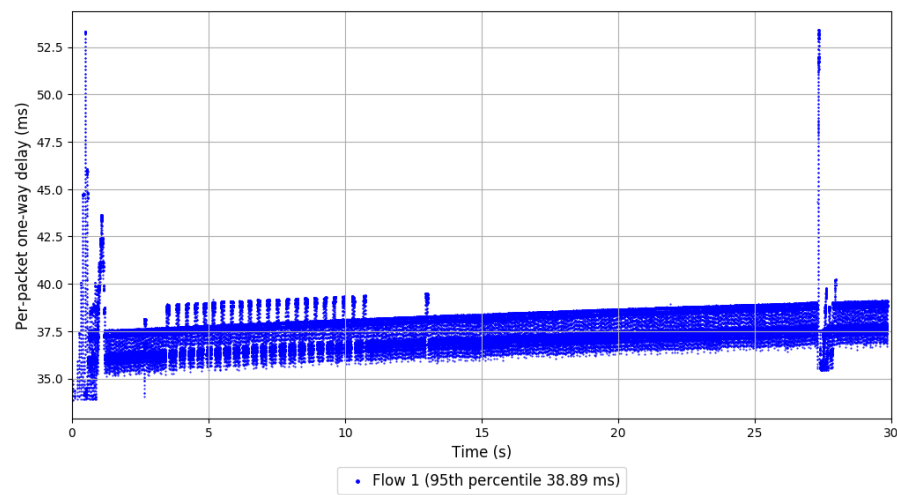
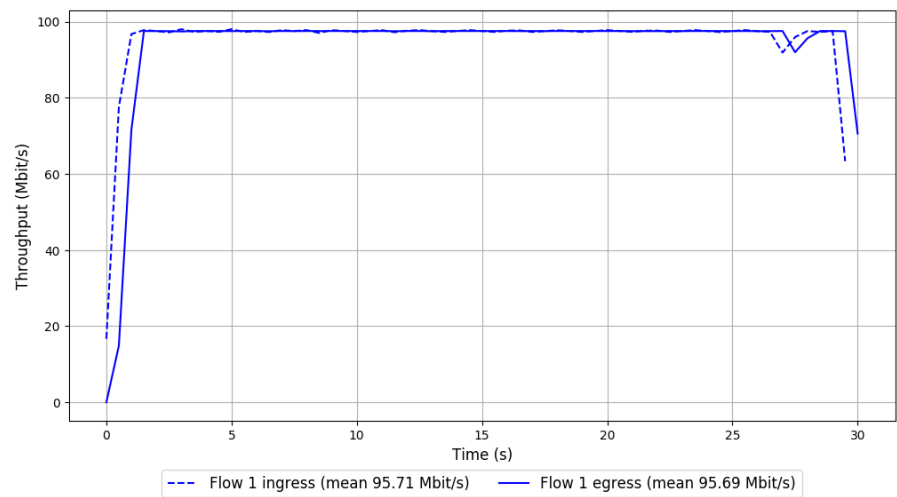


```
Run 1: Statistics of Indigo

Start at: 2018-11-29 20:22:47
End at: 2018-11-29 20:23:17
Local clock offset: -21.295 ms
Remote clock offset: -3.237 ms

# Below is generated by plot.py at 2018-11-29 22:01:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 38.891 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 38.891 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

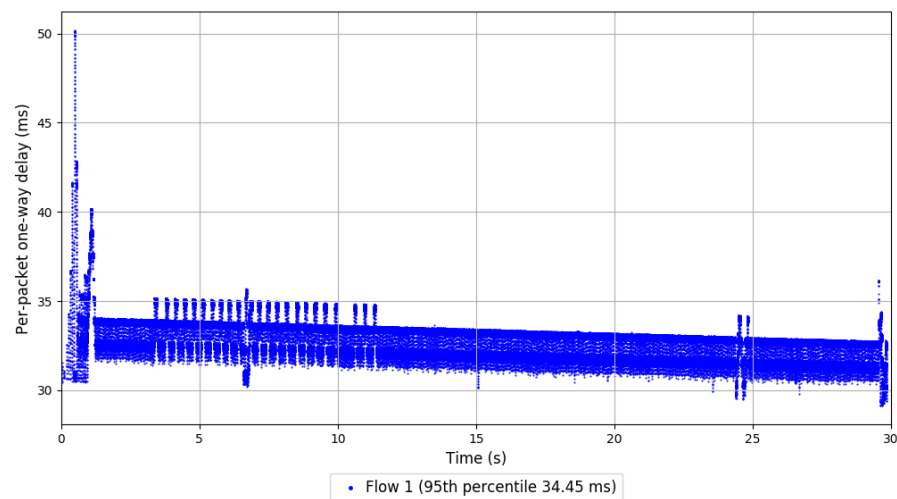
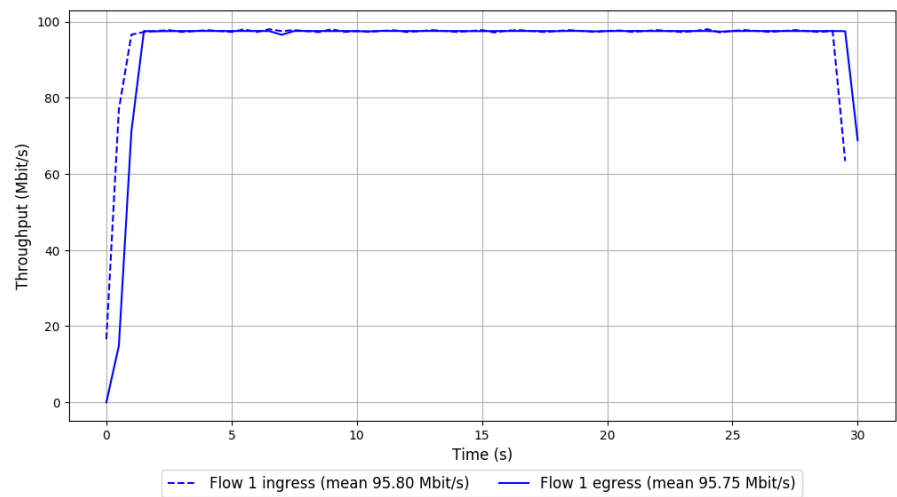


Run 2: Statistics of Indigo

Start at: 2018-11-29 20:43:28
End at: 2018-11-29 20:43:58
Local clock offset: -36.961 ms
Remote clock offset: -3.031 ms

Below is generated by plot.py at 2018-11-29 22:01:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 34.450 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 34.450 ms
Loss rate: 0.05%

Run 2: Report of Indigo — Data Link

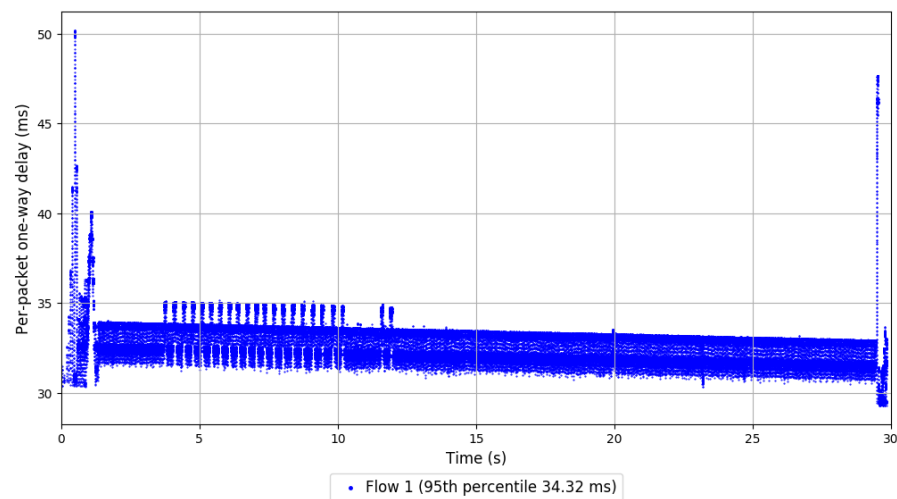
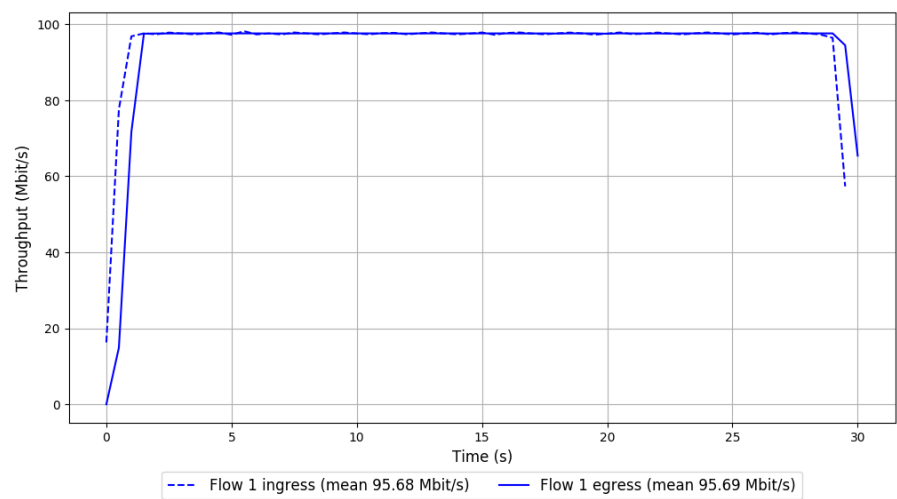


Run 3: Statistics of Indigo

Start at: 2018-11-29 21:04:05
End at: 2018-11-29 21:04:35
Local clock offset: -53.498 ms
Remote clock offset: -2.672 ms

Below is generated by plot.py at 2018-11-29 22:01:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 34.321 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 34.321 ms
Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

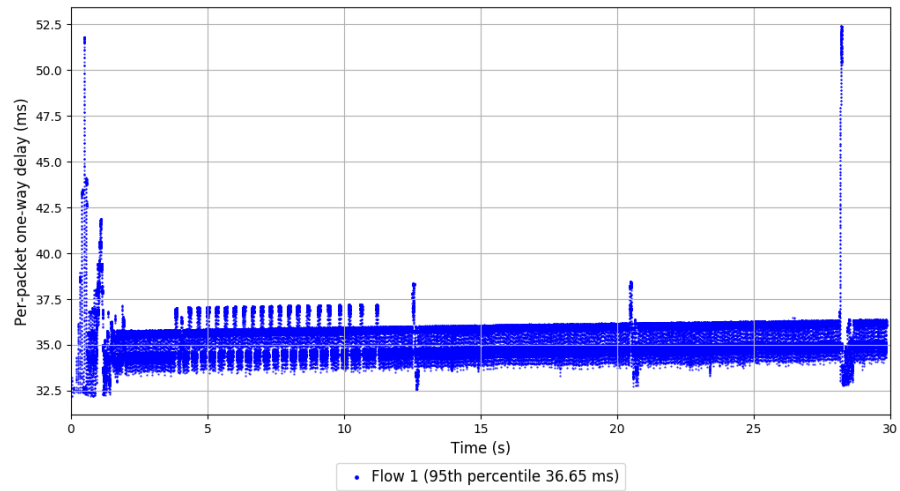
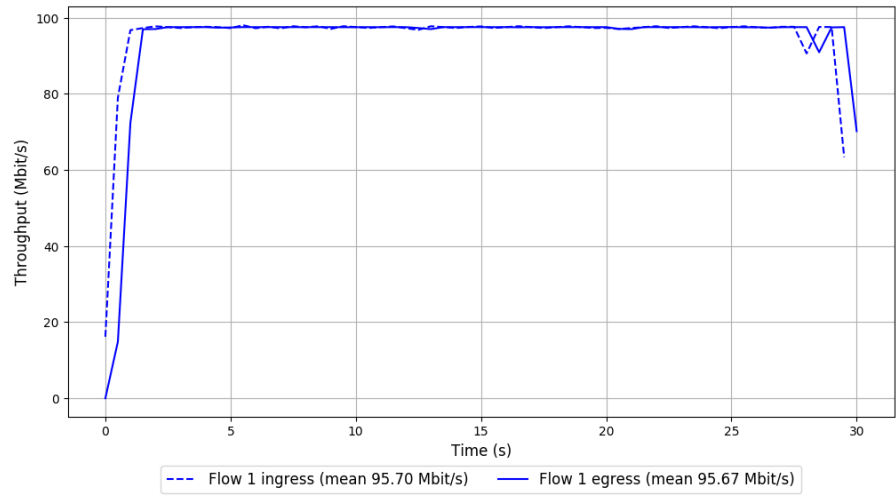


Run 4: Statistics of Indigo

Start at: 2018-11-29 21:24:52
End at: 2018-11-29 21:25:22
Local clock offset: -38.254 ms
Remote clock offset: -2.365 ms

Below is generated by plot.py at 2018-11-29 22:02:06
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.67 Mbit/s
95th percentile per-packet one-way delay: 36.649 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 95.67 Mbit/s
95th percentile per-packet one-way delay: 36.649 ms
Loss rate: 0.02%

Run 4: Report of Indigo — Data Link

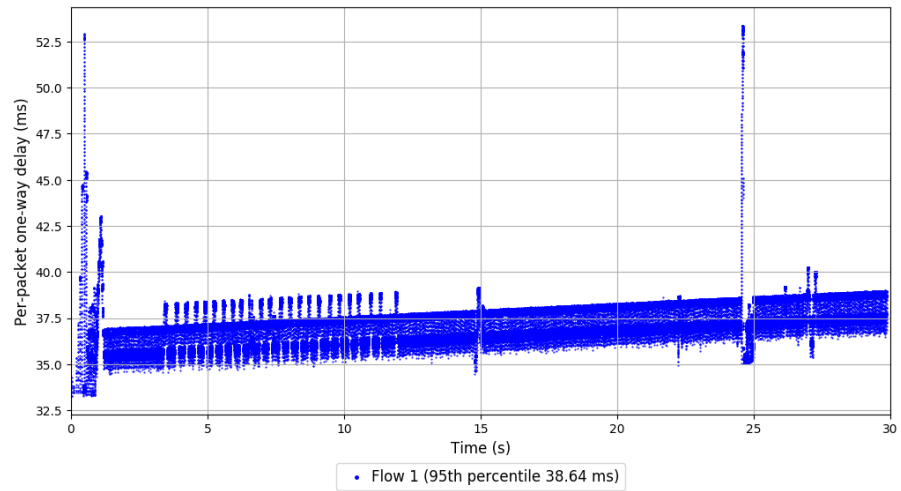
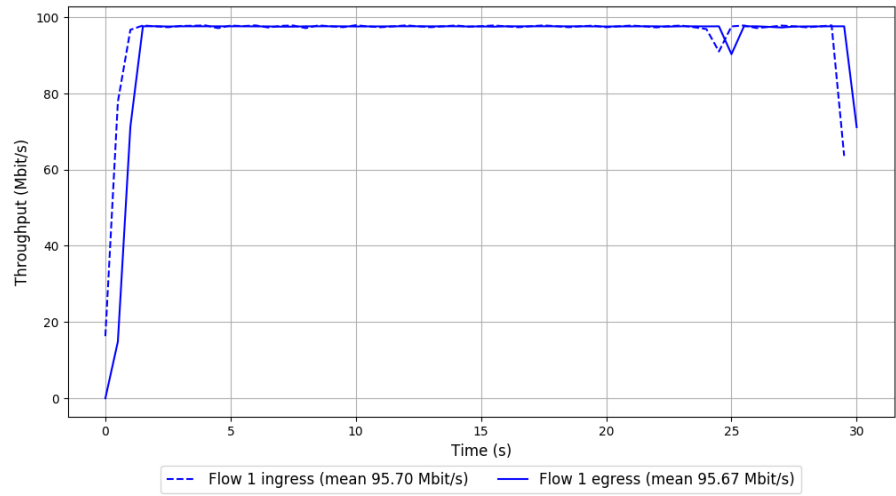


Run 5: Statistics of Indigo

Start at: 2018-11-29 21:45:29
End at: 2018-11-29 21:45:59
Local clock offset: -42.133 ms
Remote clock offset: -2.155 ms

Below is generated by plot.py at 2018-11-29 22:02:21
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.67 Mbit/s
95th percentile per-packet one-way delay: 38.641 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 95.67 Mbit/s
95th percentile per-packet one-way delay: 38.641 ms
Loss rate: 0.01%

Run 5: Report of Indigo — Data Link

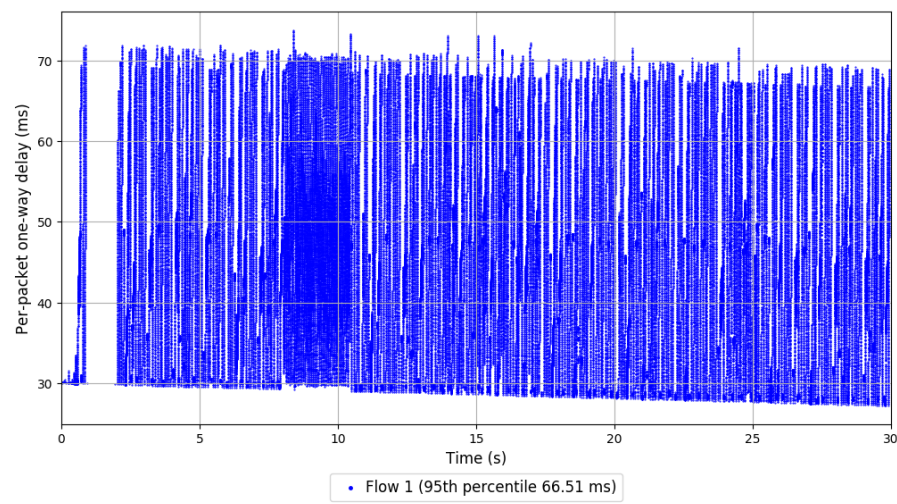
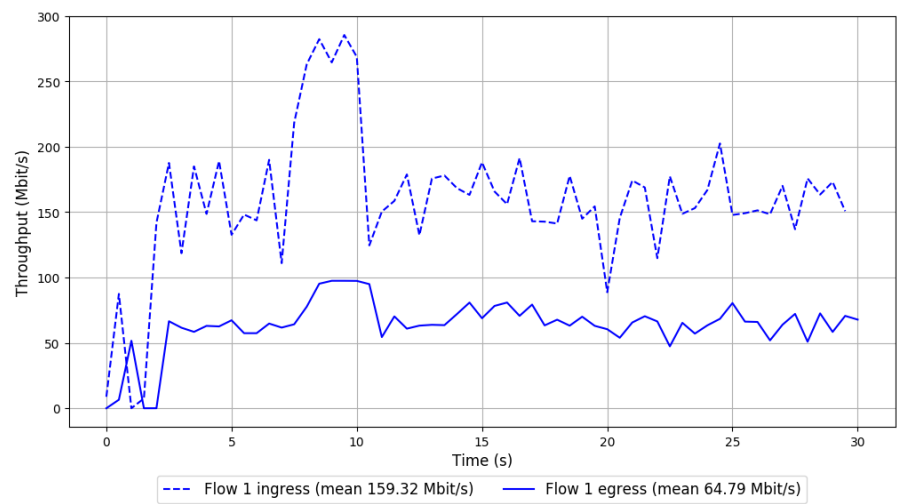


Run 1: Statistics of Indigo-96d2da3

Start at: 2018-11-29 20:21:37
End at: 2018-11-29 20:22:07
Local clock offset: -18.378 ms
Remote clock offset: -3.31 ms

Below is generated by plot.py at 2018-11-29 22:02:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 64.79 Mbit/s
95th percentile per-packet one-way delay: 66.512 ms
Loss rate: 59.30%
-- Flow 1:
Average throughput: 64.79 Mbit/s
95th percentile per-packet one-way delay: 66.512 ms
Loss rate: 59.30%

Run 1: Report of Indigo-96d2da3 — Data Link

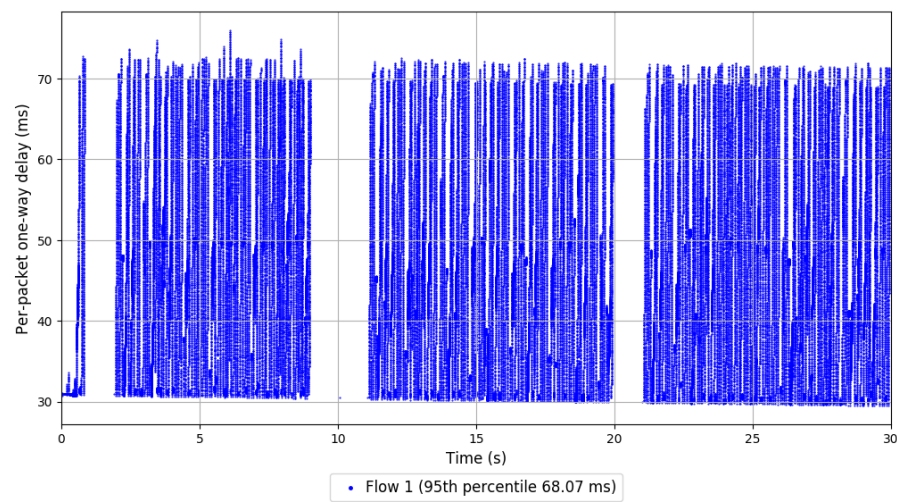
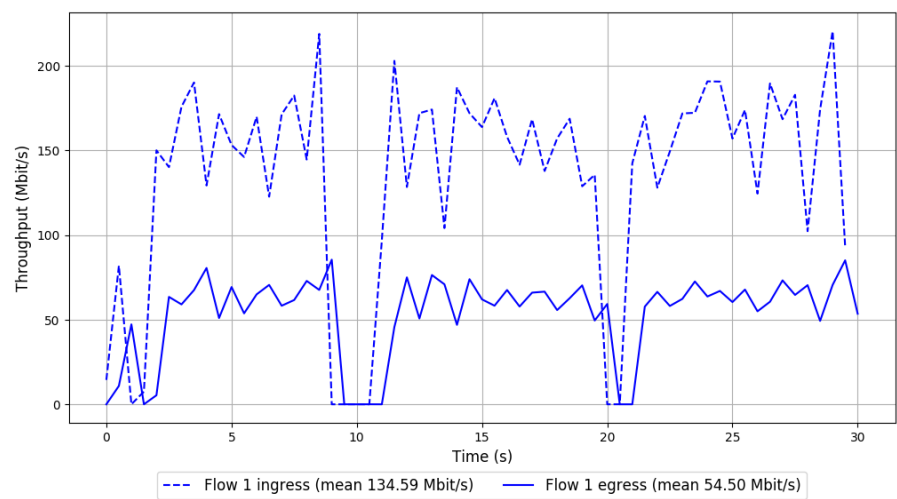


Run 2: Statistics of Indigo-96d2da3

Start at: 2018-11-29 20:42:17
End at: 2018-11-29 20:42:47
Local clock offset: -33.916 ms
Remote clock offset: -2.866 ms

Below is generated by plot.py at 2018-11-29 22:02:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 54.50 Mbit/s
95th percentile per-packet one-way delay: 68.066 ms
Loss rate: 59.47%
-- Flow 1:
Average throughput: 54.50 Mbit/s
95th percentile per-packet one-way delay: 68.066 ms
Loss rate: 59.47%

Run 2: Report of Indigo-96d2da3 — Data Link

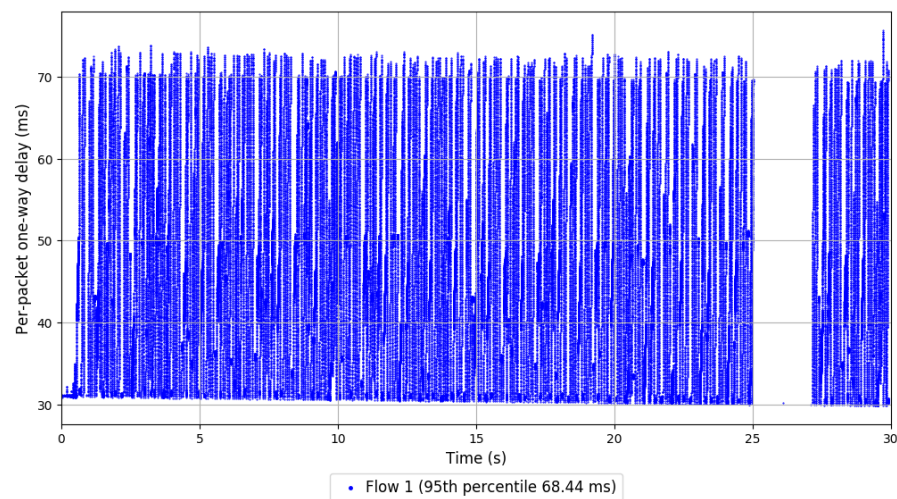
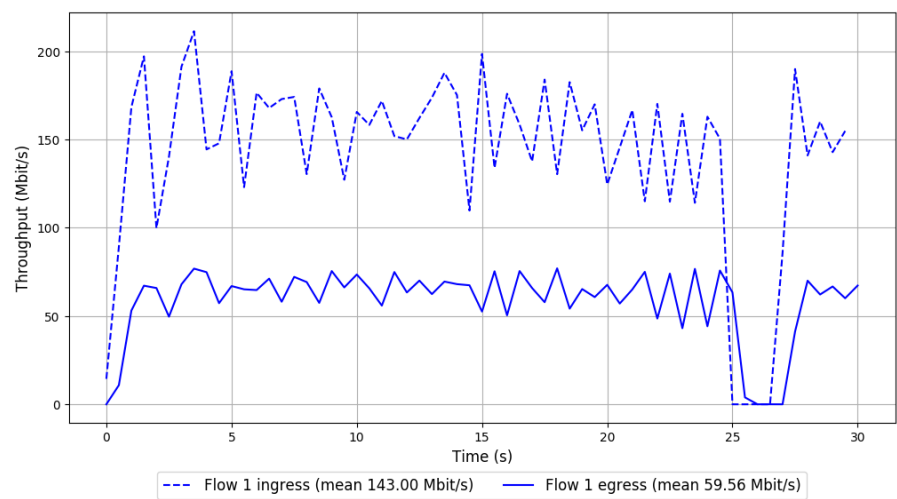


Run 3: Statistics of Indigo-96d2da3

Start at: 2018-11-29 21:02:55
End at: 2018-11-29 21:03:25
Local clock offset: -51.435 ms
Remote clock offset: -2.483 ms

Below is generated by plot.py at 2018-11-29 22:02:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 59.56 Mbit/s
95th percentile per-packet one-way delay: 68.436 ms
Loss rate: 58.35%
-- Flow 1:
Average throughput: 59.56 Mbit/s
95th percentile per-packet one-way delay: 68.436 ms
Loss rate: 58.35%

Run 3: Report of Indigo-96d2da3 — Data Link

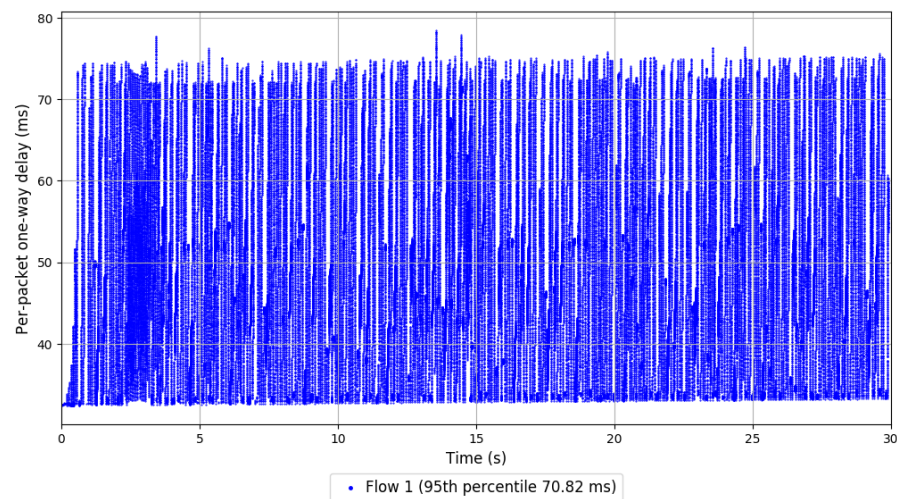
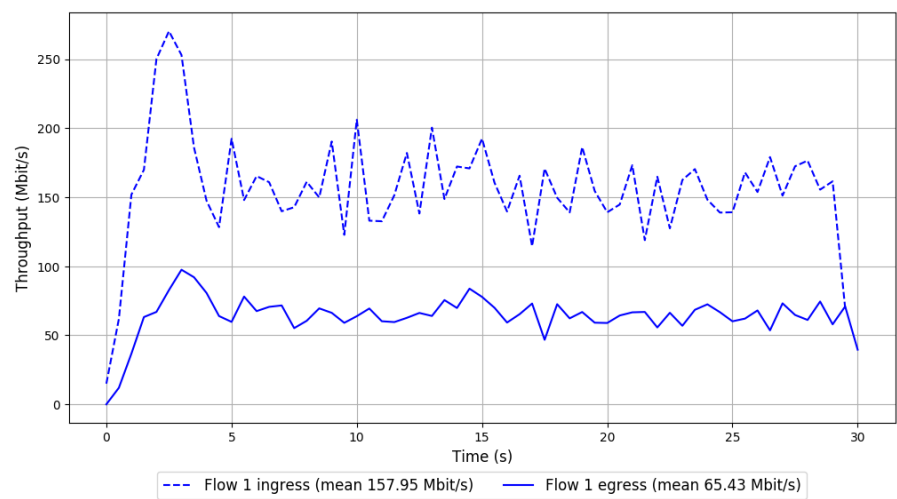


Run 4: Statistics of Indigo-96d2da3

Start at: 2018-11-29 21:23:41
End at: 2018-11-29 21:24:11
Local clock offset: -40.251 ms
Remote clock offset: -2.269 ms

Below is generated by plot.py at 2018-11-29 22:02:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 65.43 Mbit/s
95th percentile per-packet one-way delay: 70.816 ms
Loss rate: 58.54%
-- Flow 1:
Average throughput: 65.43 Mbit/s
95th percentile per-packet one-way delay: 70.816 ms
Loss rate: 58.54%

Run 4: Report of Indigo-96d2da3 — Data Link

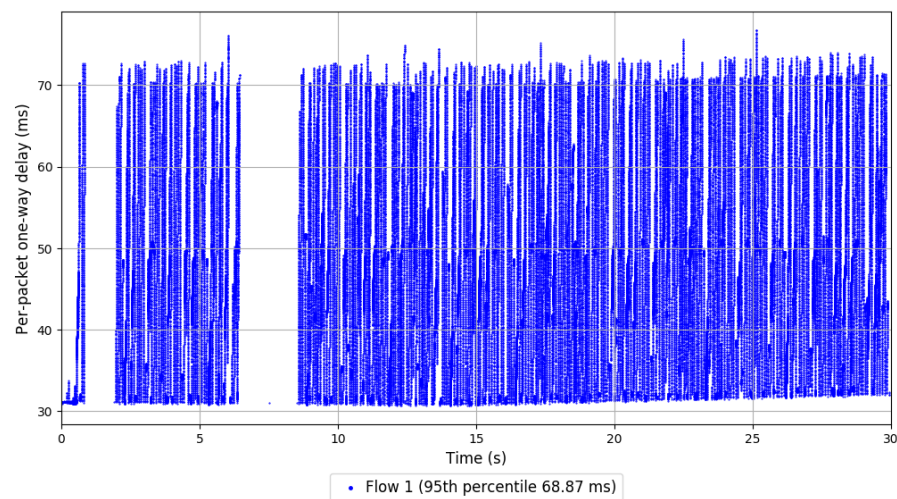
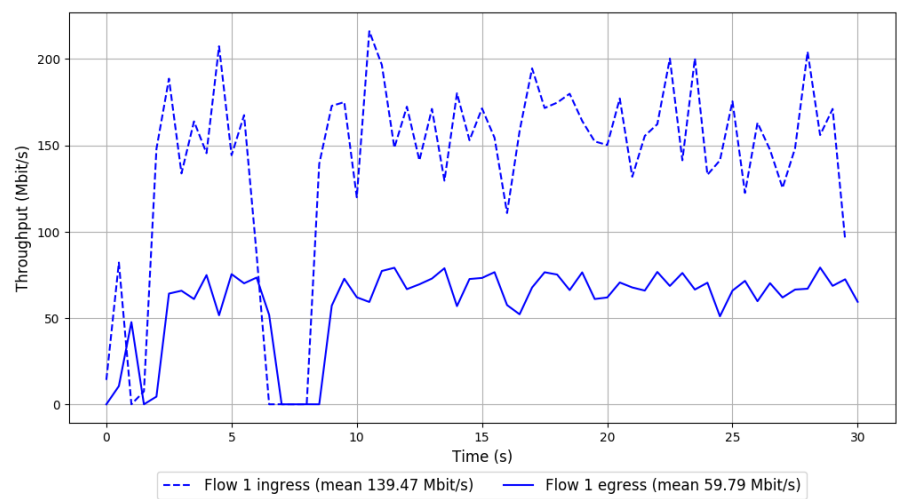


Run 5: Statistics of Indigo-96d2da3

Start at: 2018-11-29 21:44:20
End at: 2018-11-29 21:44:50
Local clock offset: -44.187 ms
Remote clock offset: -2.38 ms

Below is generated by plot.py at 2018-11-29 22:02:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 59.79 Mbit/s
95th percentile per-packet one-way delay: 68.868 ms
Loss rate: 57.13%
-- Flow 1:
Average throughput: 59.79 Mbit/s
95th percentile per-packet one-way delay: 68.868 ms
Loss rate: 57.13%

Run 5: Report of Indigo-96d2da3 — Data Link

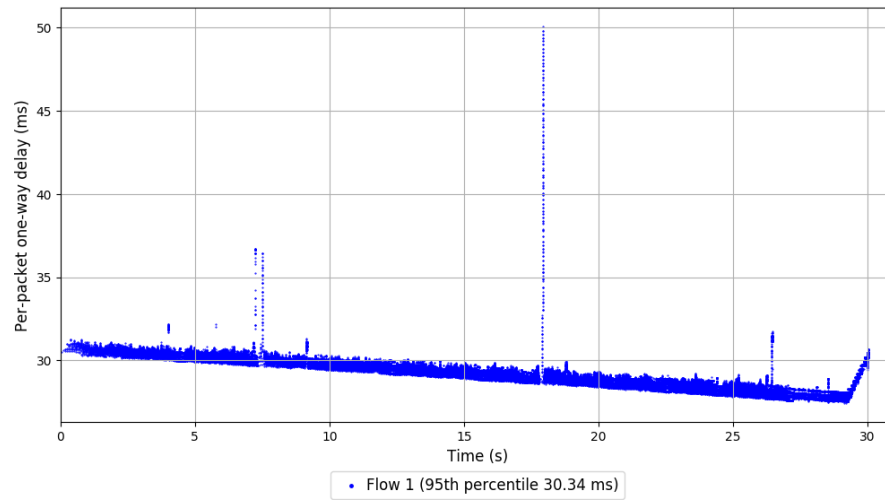
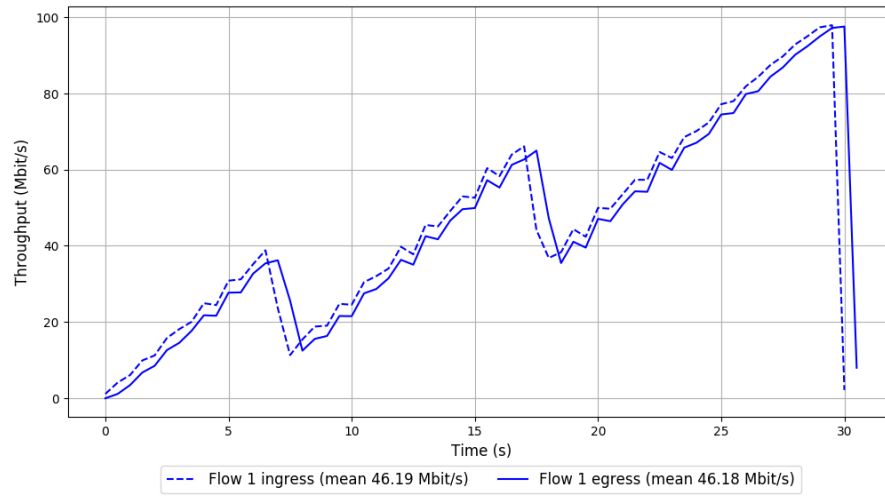


```
Run 1: Statistics of LEDBAT

Start at: 2018-11-29 20:17:03
End at: 2018-11-29 20:17:33
Local clock offset: -5.575 ms
Remote clock offset: -3.288 ms

# Below is generated by plot.py at 2018-11-29 22:02:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.18 Mbit/s
95th percentile per-packet one-way delay: 30.341 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 46.18 Mbit/s
95th percentile per-packet one-way delay: 30.341 ms
Loss rate: 0.03%
```

Run 1: Report of LEDBAT — Data Link

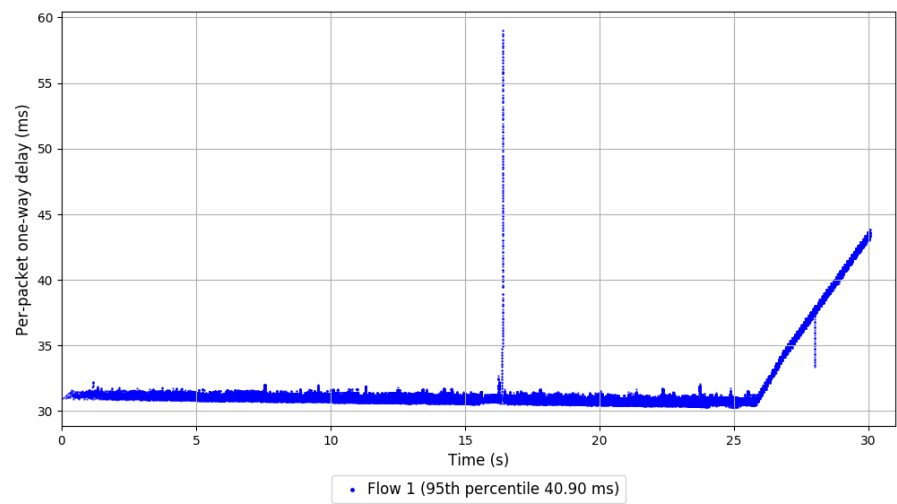
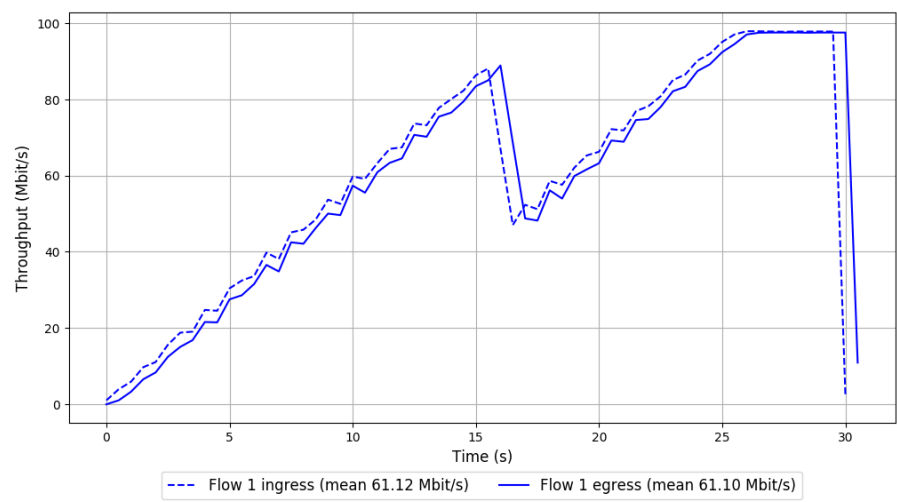


Run 2: Statistics of LEDBAT

Start at: 2018-11-29 20:37:39
End at: 2018-11-29 20:38:09
Local clock offset: -24.671 ms
Remote clock offset: -3.199 ms

Below is generated by plot.py at 2018-11-29 22:02:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 61.10 Mbit/s
95th percentile per-packet one-way delay: 40.902 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.10 Mbit/s
95th percentile per-packet one-way delay: 40.902 ms
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link

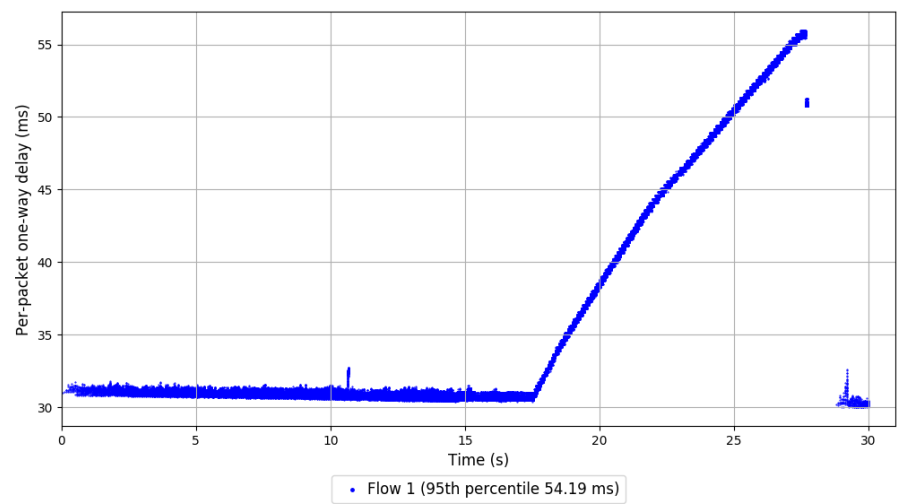
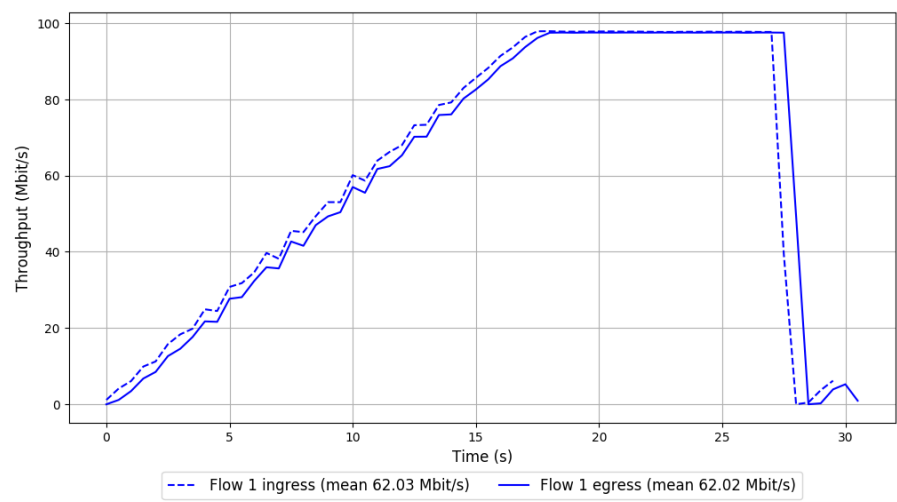


Run 3: Statistics of LEDBAT

Start at: 2018-11-29 20:58:20
End at: 2018-11-29 20:58:50
Local clock offset: -42.73 ms
Remote clock offset: -2.703 ms

Below is generated by plot.py at 2018-11-29 22:02:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 62.02 Mbit/s
95th percentile per-packet one-way delay: 54.192 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 62.02 Mbit/s
95th percentile per-packet one-way delay: 54.192 ms
Loss rate: 0.03%

Run 3: Report of LEDBAT — Data Link

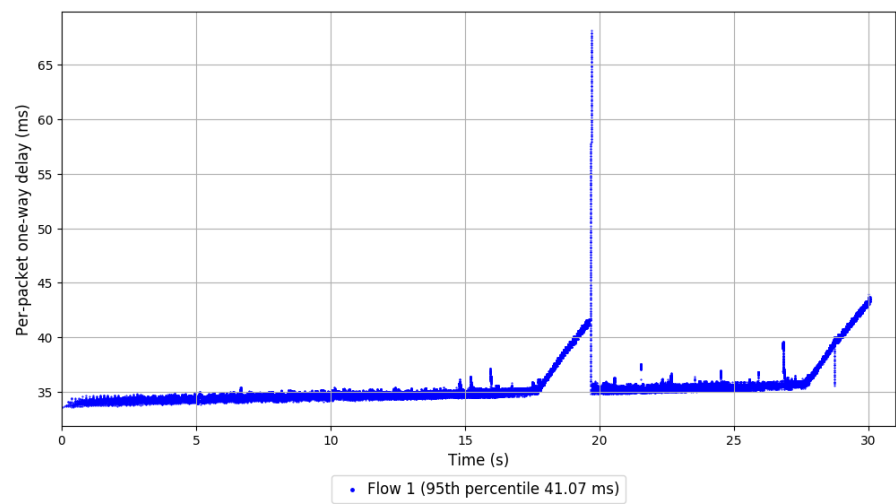
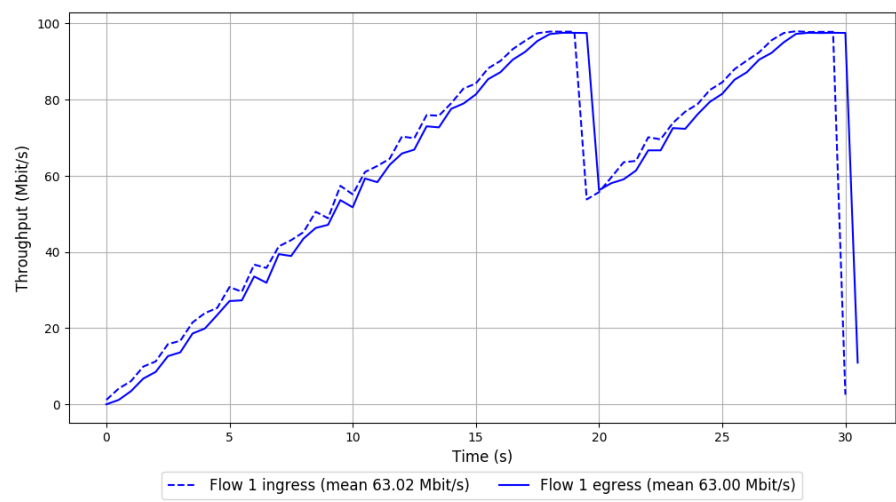


Run 4: Statistics of LEDBAT

Start at: 2018-11-29 21:19:02
End at: 2018-11-29 21:19:32
Local clock offset: -54.846 ms
Remote clock offset: -2.4 ms

Below is generated by plot.py at 2018-11-29 22:03:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 63.00 Mbit/s
95th percentile per-packet one-way delay: 41.073 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.00 Mbit/s
95th percentile per-packet one-way delay: 41.073 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

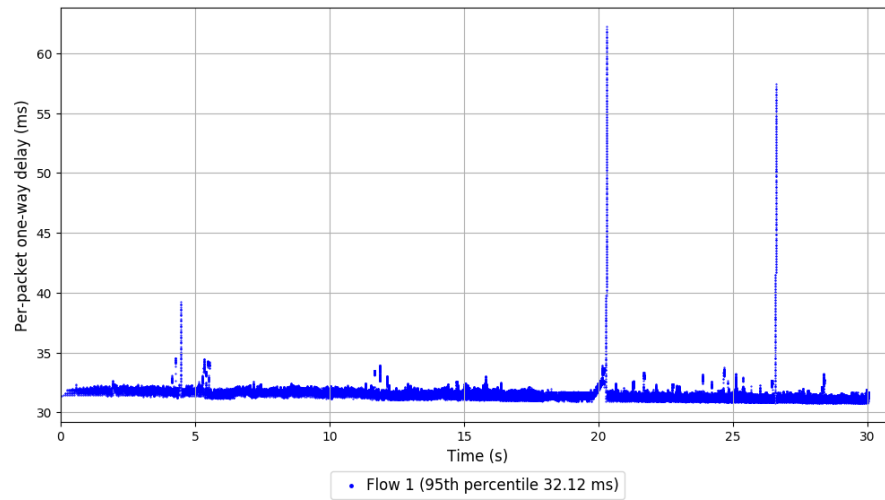
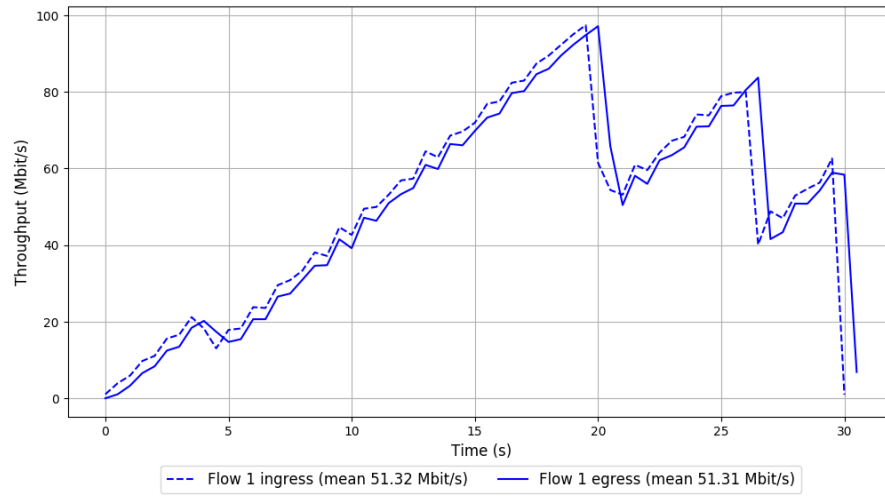


Run 5: Statistics of LEDBAT

Start at: 2018-11-29 21:39:46
End at: 2018-11-29 21:40:16
Local clock offset: -39.299 ms
Remote clock offset: -2.17 ms

Below is generated by plot.py at 2018-11-29 22:03:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 51.31 Mbit/s
95th percentile per-packet one-way delay: 32.120 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 51.31 Mbit/s
95th percentile per-packet one-way delay: 32.120 ms
Loss rate: 0.02%

Run 5: Report of LEDBAT — Data Link

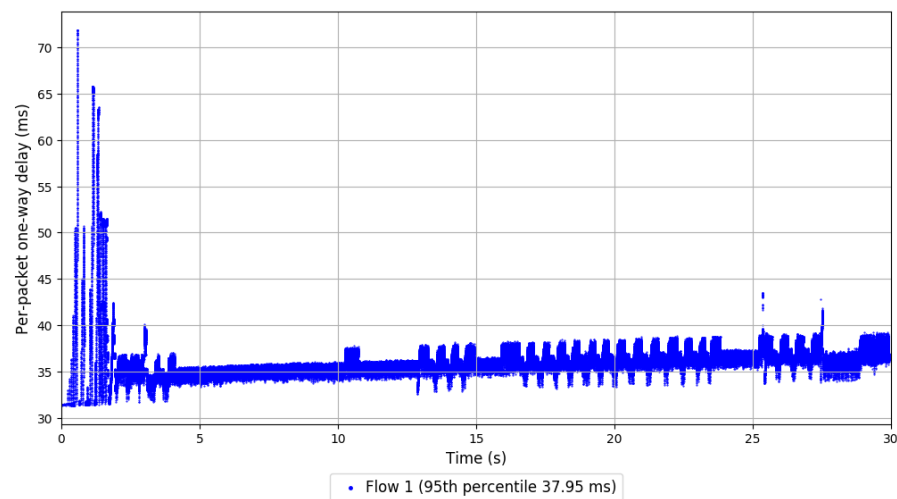
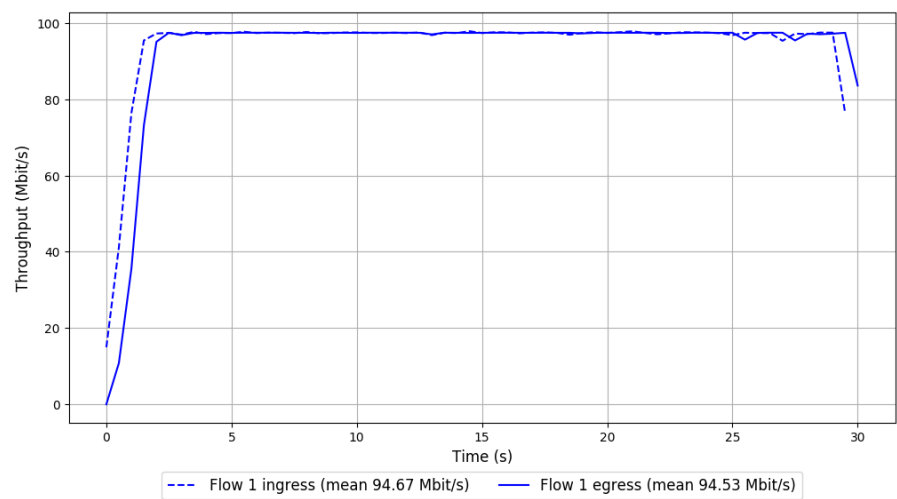


Run 1: Statistics of Indigo-Muses

Start at: 2018-11-29 20:30:49
End at: 2018-11-29 20:31:19
Local clock offset: -34.784 ms
Remote clock offset: -3.3 ms

Below is generated by plot.py at 2018-11-29 22:03:31
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.53 Mbit/s
95th percentile per-packet one-way delay: 37.945 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 94.53 Mbit/s
95th percentile per-packet one-way delay: 37.945 ms
Loss rate: 0.13%

Run 1: Report of Indigo-Muses — Data Link

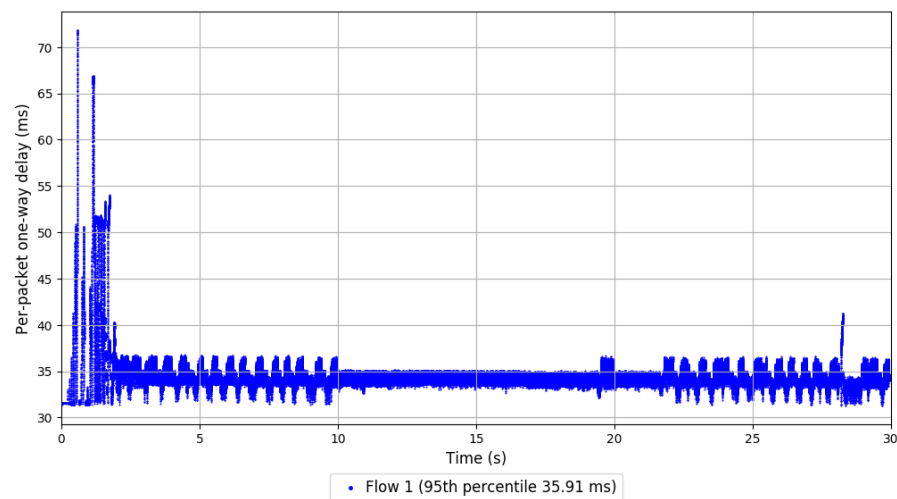
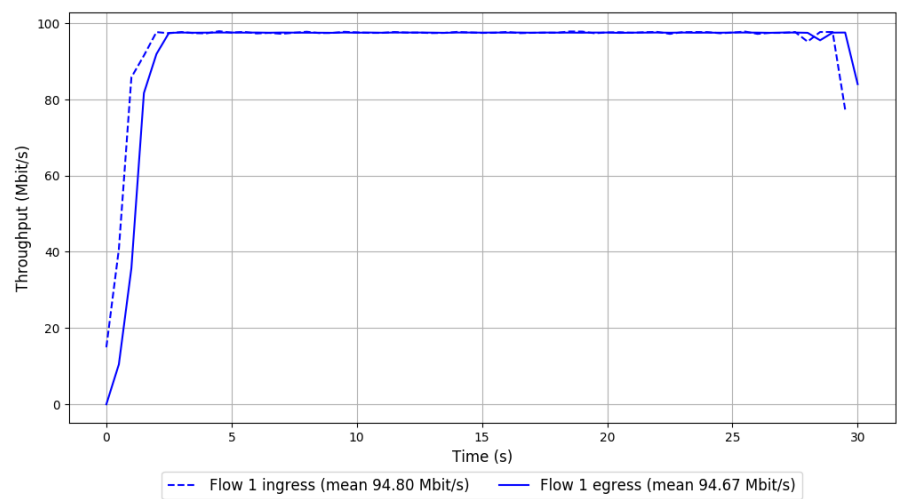


Run 2: Statistics of Indigo-Muses

Start at: 2018-11-29 20:51:33
End at: 2018-11-29 20:52:03
Local clock offset: -35.611 ms
Remote clock offset: -2.937 ms

Below is generated by plot.py at 2018-11-29 22:03:31
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.67 Mbit/s
95th percentile per-packet one-way delay: 35.914 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 94.67 Mbit/s
95th percentile per-packet one-way delay: 35.914 ms
Loss rate: 0.13%

Run 2: Report of Indigo-Muses — Data Link

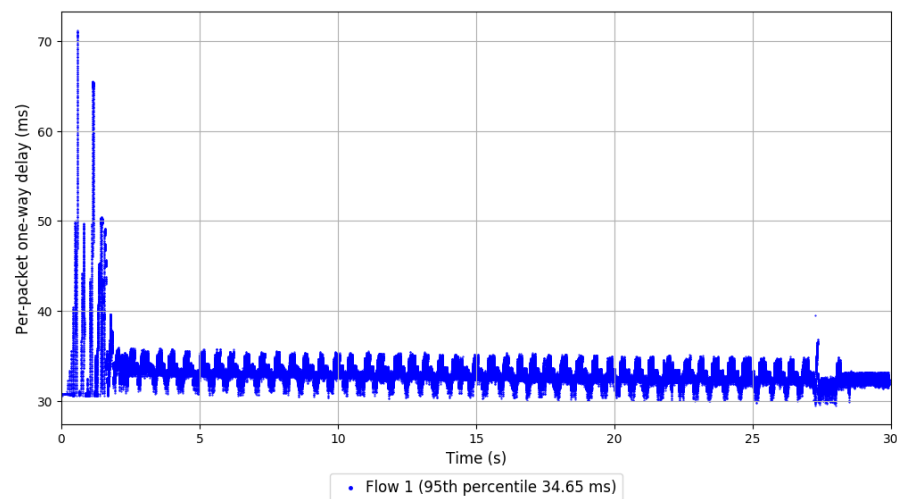
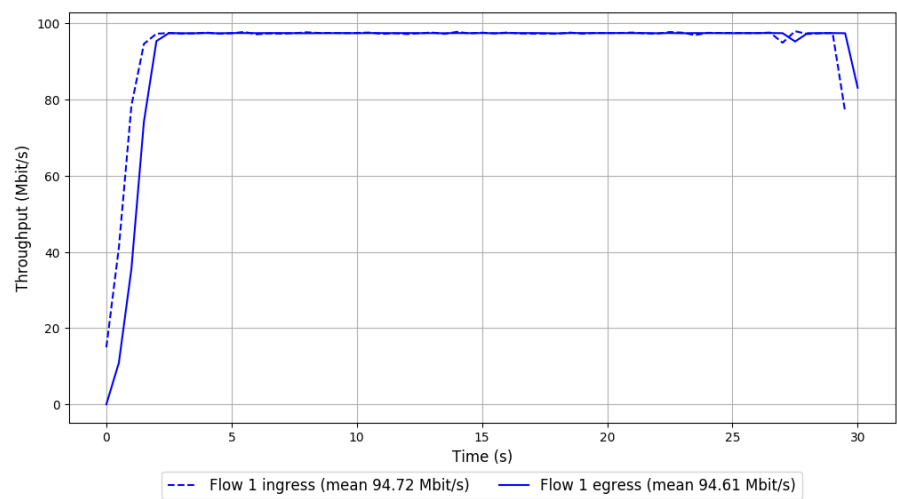


Run 3: Statistics of Indigo-Muses

Start at: 2018-11-29 21:12:14
End at: 2018-11-29 21:12:44
Local clock offset: -72.927 ms
Remote clock offset: -2.572 ms

Below is generated by plot.py at 2018-11-29 22:03:35
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.61 Mbit/s
95th percentile per-packet one-way delay: 34.653 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 94.61 Mbit/s
95th percentile per-packet one-way delay: 34.653 ms
Loss rate: 0.11%

Run 3: Report of Indigo-Muses — Data Link

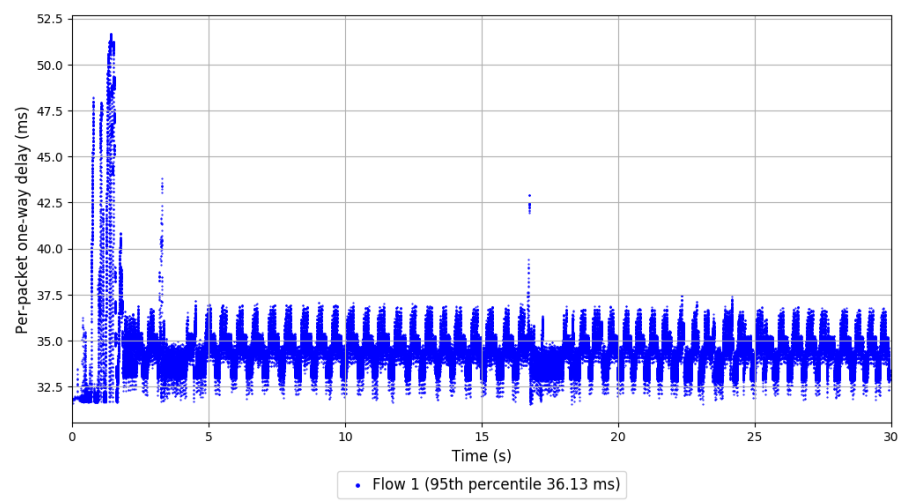
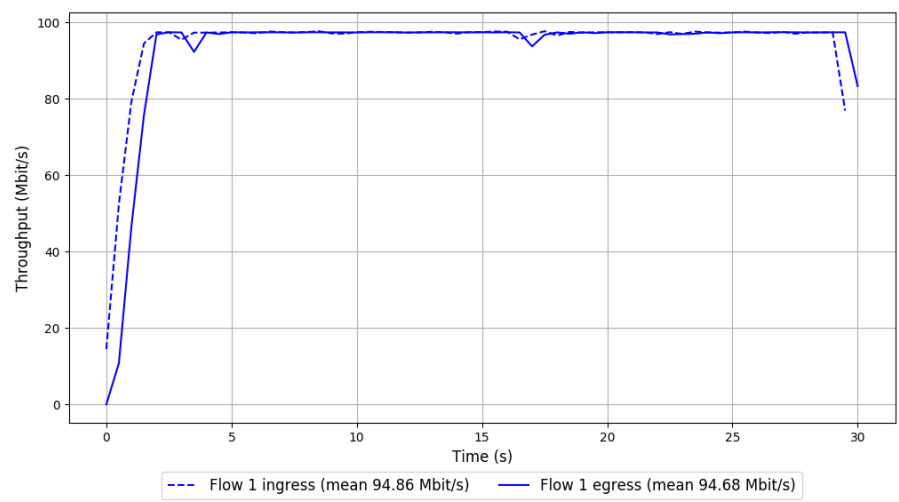


Run 4: Statistics of Indigo-Muses

Start at: 2018-11-29 21:32:54
End at: 2018-11-29 21:33:25
Local clock offset: -34.672 ms
Remote clock offset: -2.164 ms

Below is generated by plot.py at 2018-11-29 22:04:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.68 Mbit/s
95th percentile per-packet one-way delay: 36.128 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 94.68 Mbit/s
95th percentile per-packet one-way delay: 36.128 ms
Loss rate: 0.19%

Run 4: Report of Indigo-Muses — Data Link

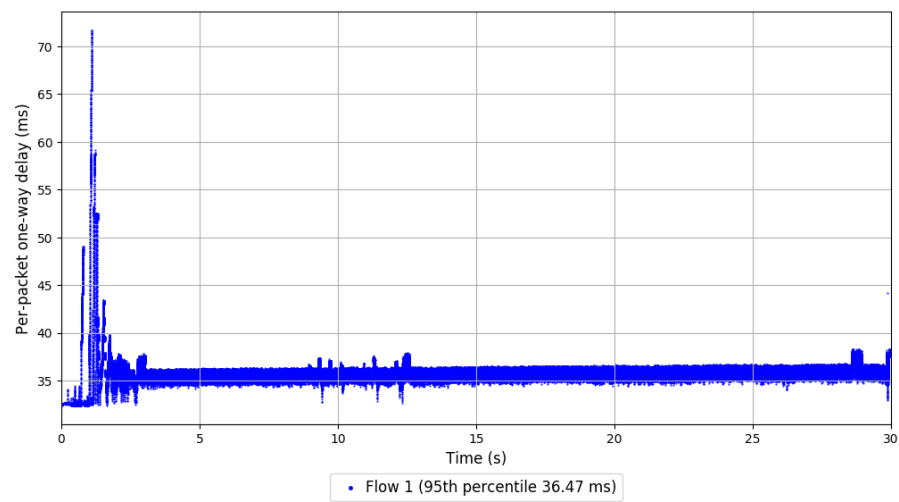
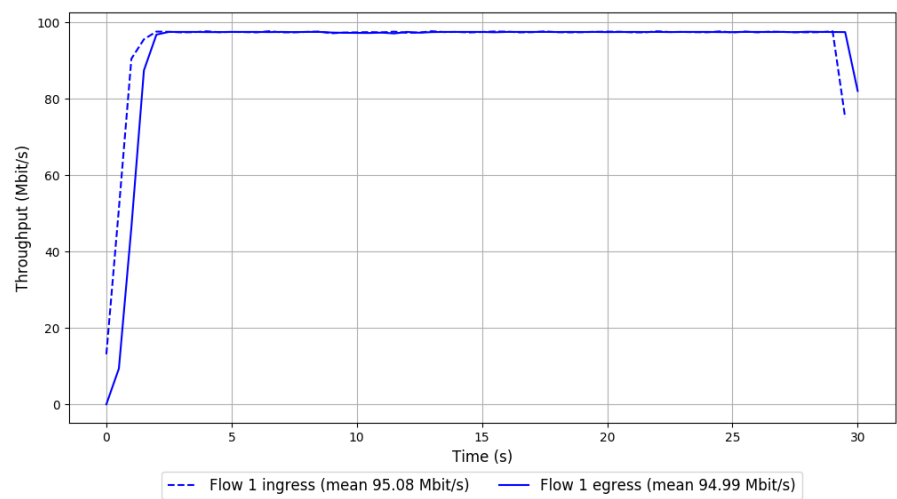


Run 5: Statistics of Indigo-Muses

Start at: 2018-11-29 21:53:31
End at: 2018-11-29 21:54:01
Local clock offset: -20.015 ms
Remote clock offset: -2.183 ms

Below is generated by plot.py at 2018-11-29 22:04:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.99 Mbit/s
95th percentile per-packet one-way delay: 36.467 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 94.99 Mbit/s
95th percentile per-packet one-way delay: 36.467 ms
Loss rate: 0.08%

Run 5: Report of Indigo-Muses — Data Link

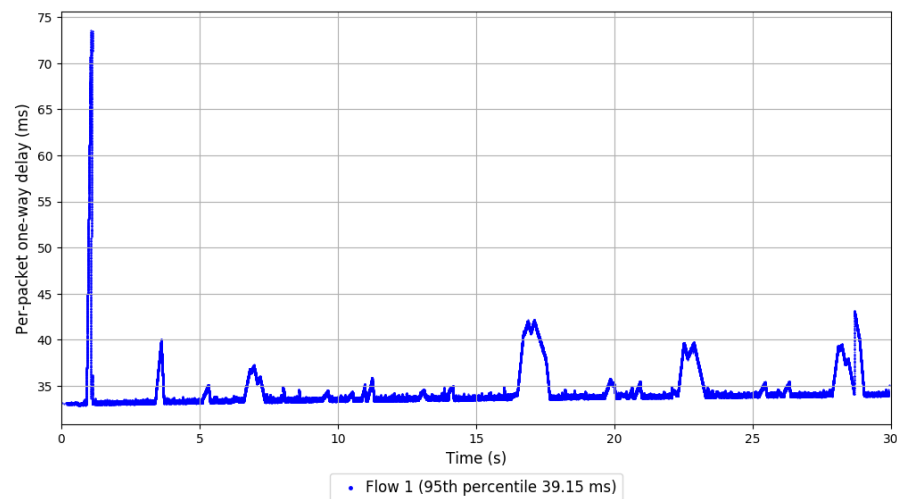
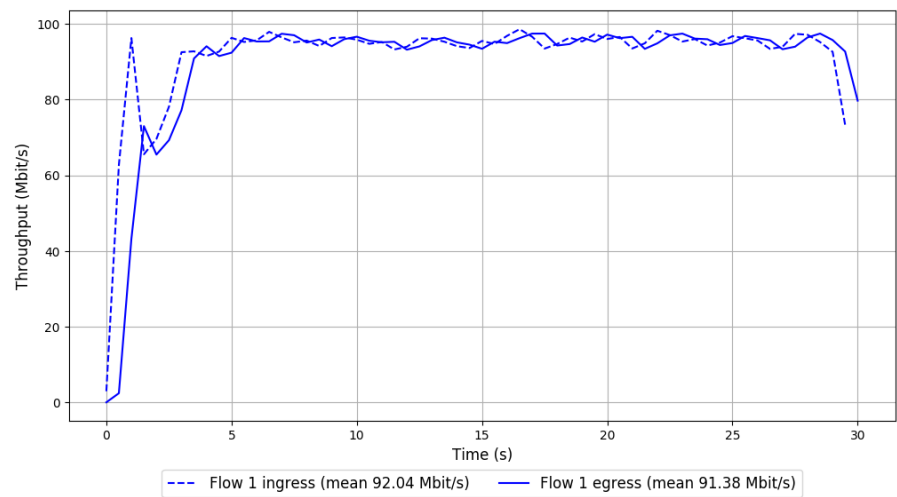


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-11-29 20:33:06
End at: 2018-11-29 20:33:36
Local clock offset: -27.242 ms
Remote clock offset: -3.132 ms

# Below is generated by plot.py at 2018-11-29 22:04:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.38 Mbit/s
95th percentile per-packet one-way delay: 39.152 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 91.38 Mbit/s
95th percentile per-packet one-way delay: 39.152 ms
Loss rate: 0.71%
```

Run 1: Report of PCC-Allegro — Data Link

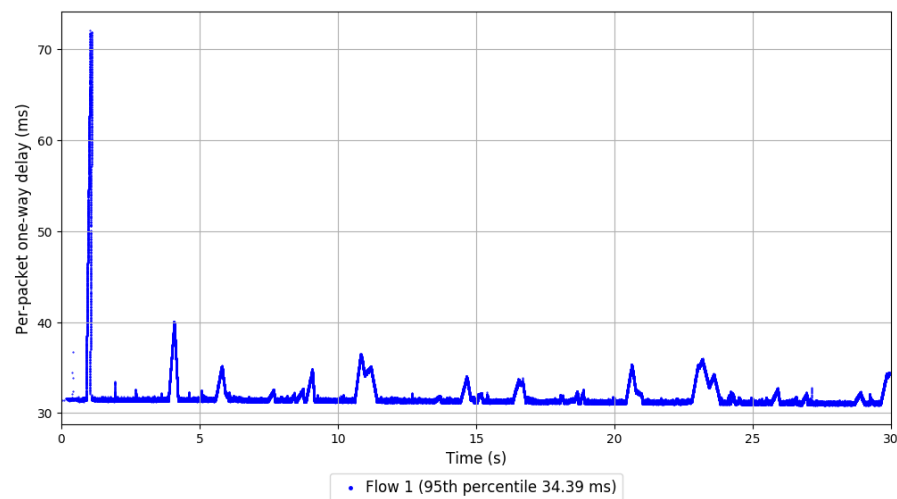
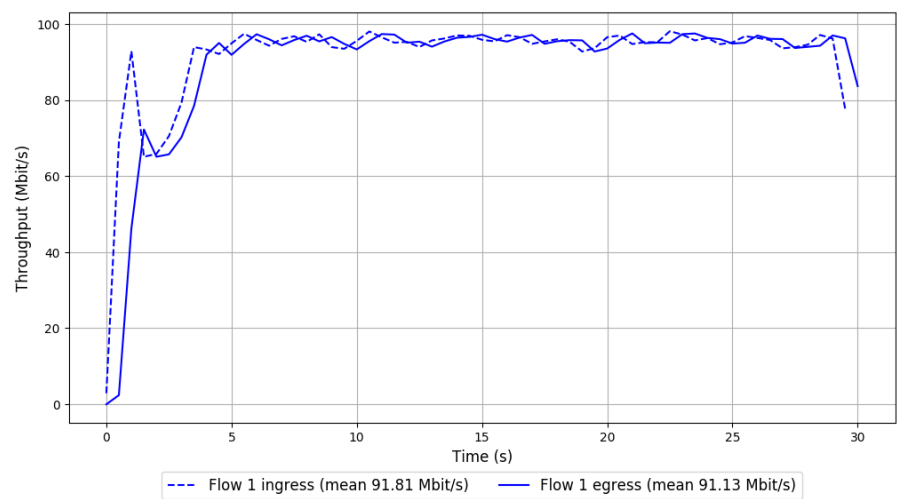


Run 2: Statistics of PCC-Allegro

Start at: 2018-11-29 20:53:50
End at: 2018-11-29 20:54:20
Local clock offset: -37.053 ms
Remote clock offset: -2.704 ms

Below is generated by plot.py at 2018-11-29 22:04:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.13 Mbit/s
95th percentile per-packet one-way delay: 34.391 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 91.13 Mbit/s
95th percentile per-packet one-way delay: 34.391 ms
Loss rate: 0.72%

Run 2: Report of PCC-Allegro — Data Link

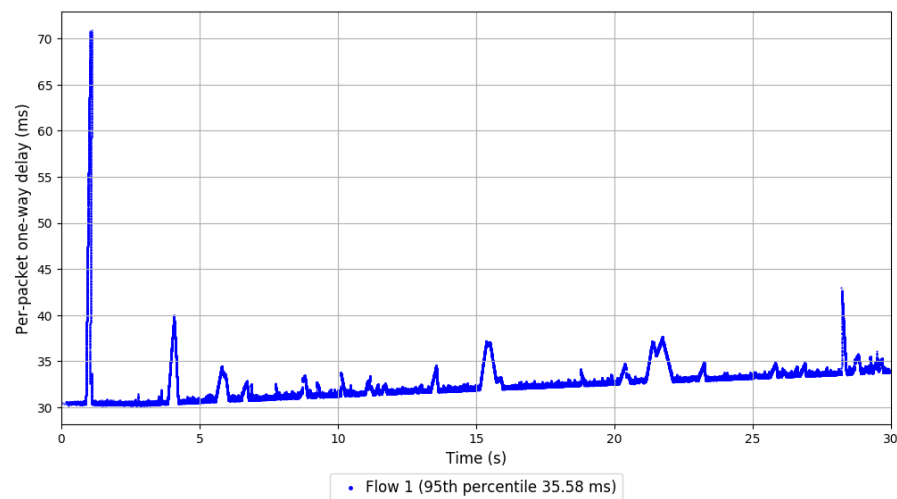
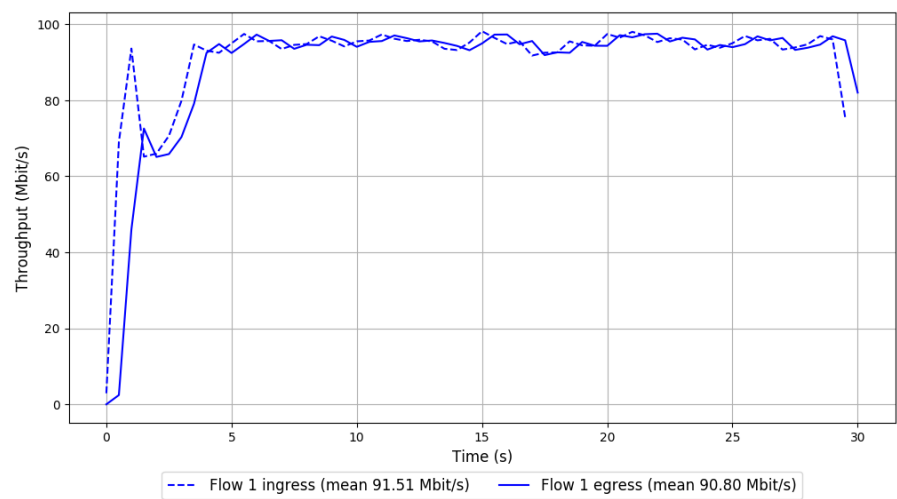


Run 3: Statistics of PCC-Allegro

Start at: 2018-11-29 21:14:31
End at: 2018-11-29 21:15:01
Local clock offset: -78.447 ms
Remote clock offset: -2.533 ms

Below is generated by plot.py at 2018-11-29 22:04:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.80 Mbit/s
95th percentile per-packet one-way delay: 35.580 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 90.80 Mbit/s
95th percentile per-packet one-way delay: 35.580 ms
Loss rate: 0.76%

Run 3: Report of PCC-Allegro — Data Link

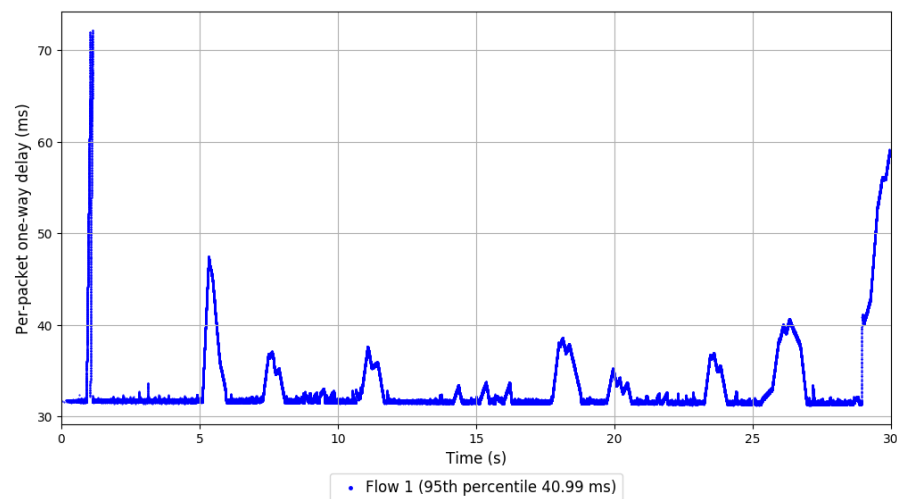
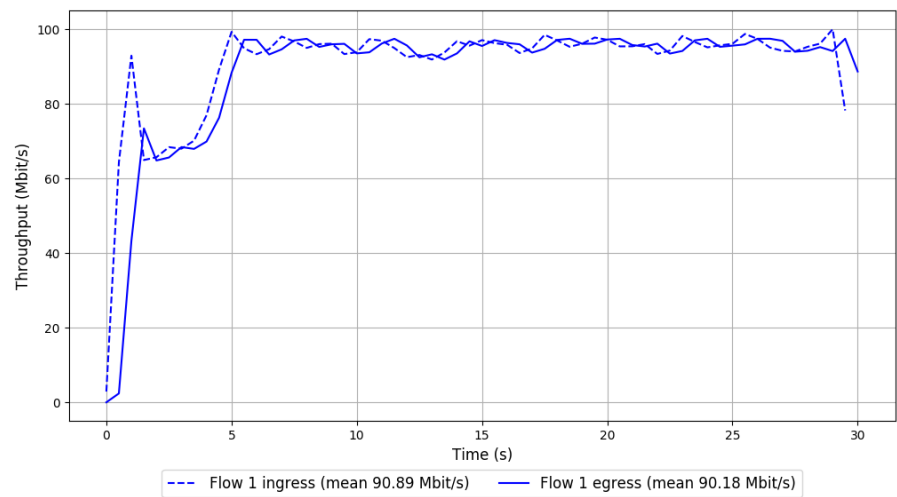


Run 4: Statistics of PCC-Allegro

Start at: 2018-11-29 21:35:11
End at: 2018-11-29 21:35:41
Local clock offset: -35.784 ms
Remote clock offset: -2.197 ms

Below is generated by plot.py at 2018-11-29 22:04:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.18 Mbit/s
95th percentile per-packet one-way delay: 40.993 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 90.18 Mbit/s
95th percentile per-packet one-way delay: 40.993 ms
Loss rate: 0.68%

Run 4: Report of PCC-Allegro — Data Link

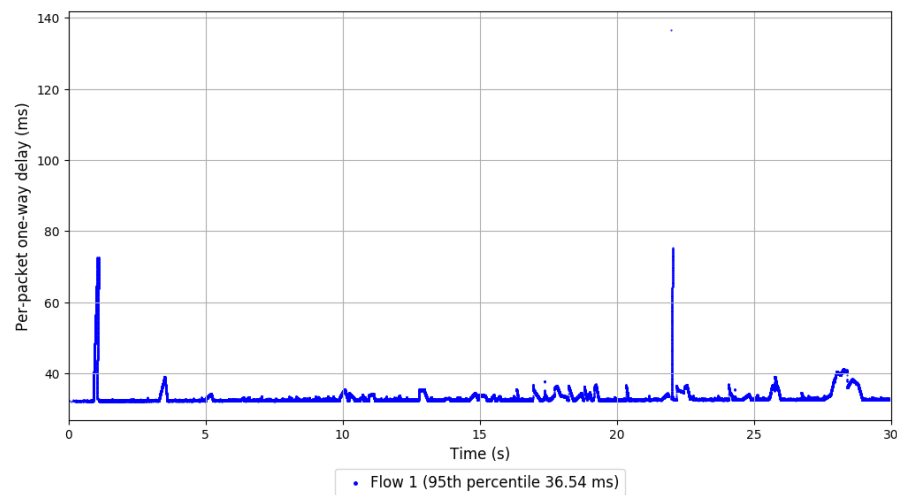
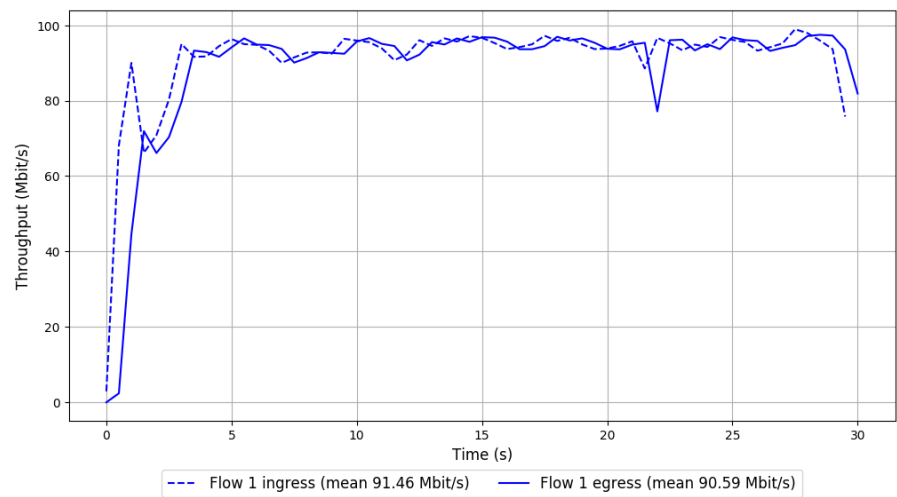


Run 5: Statistics of PCC-Allegro

Start at: 2018-11-29 21:55:48
End at: 2018-11-29 21:56:18
Local clock offset: -17.322 ms
Remote clock offset: -2.173 ms

Below is generated by plot.py at 2018-11-29 22:04:46
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.59 Mbit/s
95th percentile per-packet one-way delay: 36.540 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 90.59 Mbit/s
95th percentile per-packet one-way delay: 36.540 ms
Loss rate: 0.96%

Run 5: Report of PCC-Allegro — Data Link

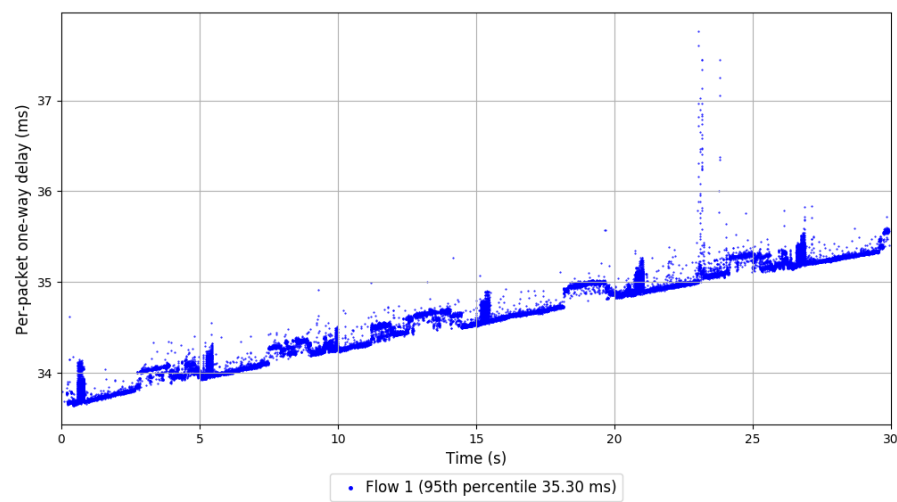
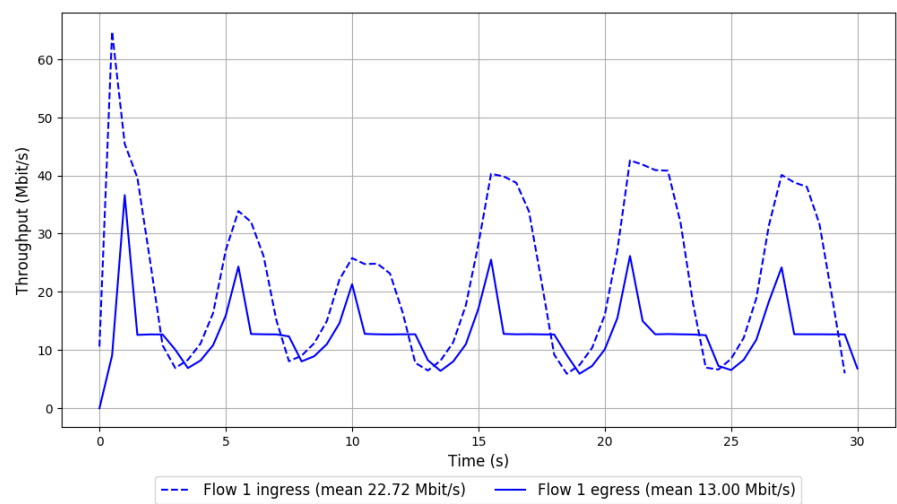


```
Run 1: Statistics of PCC-Expr

Start at: 2018-11-29 20:31:59
End at: 2018-11-29 20:32:29
Local clock offset: -31.446 ms
Remote clock offset: -3.266 ms

# Below is generated by plot.py at 2018-11-29 22:04:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 13.00 Mbit/s
95th percentile per-packet one-way delay: 35.304 ms
Loss rate: 42.79%
-- Flow 1:
Average throughput: 13.00 Mbit/s
95th percentile per-packet one-way delay: 35.304 ms
Loss rate: 42.79%
```

Run 1: Report of PCC-Expr — Data Link

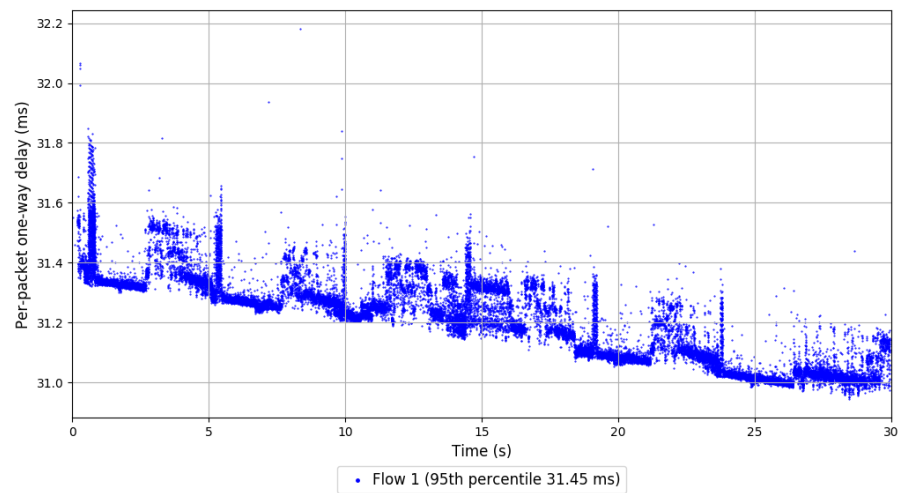
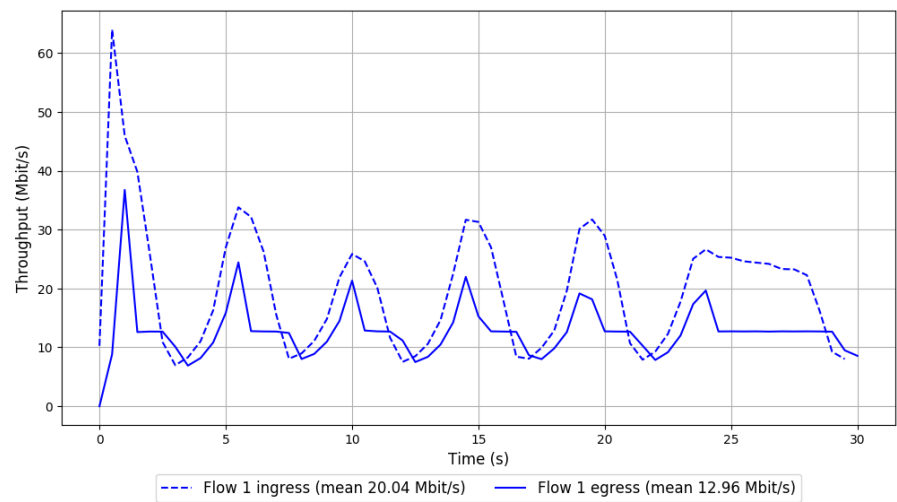


Run 2: Statistics of PCC-Expr

Start at: 2018-11-29 20:52:43
End at: 2018-11-29 20:53:13
Local clock offset: -36.252 ms
Remote clock offset: -2.867 ms

Below is generated by plot.py at 2018-11-29 22:04:46
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.96 Mbit/s
95th percentile per-packet one-way delay: 31.451 ms
Loss rate: 35.35%
-- Flow 1:
Average throughput: 12.96 Mbit/s
95th percentile per-packet one-way delay: 31.451 ms
Loss rate: 35.35%

Run 2: Report of PCC-Expr — Data Link

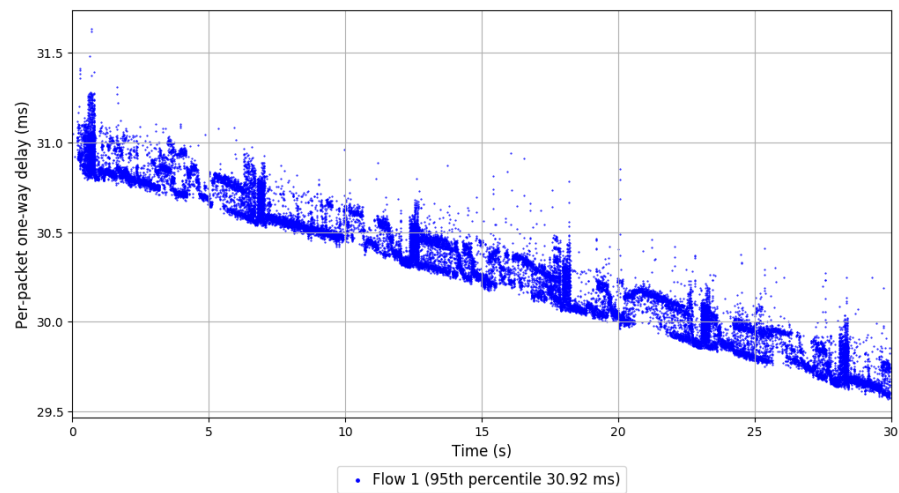
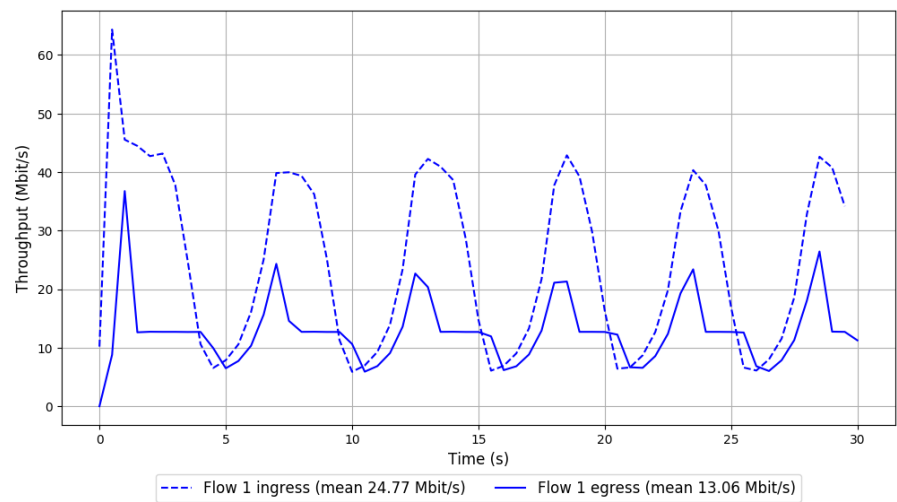


Run 3: Statistics of PCC-Expr

Start at: 2018-11-29 21:13:24
End at: 2018-11-29 21:13:54
Local clock offset: -75.844 ms
Remote clock offset: -2.311 ms

Below is generated by plot.py at 2018-11-29 22:04:46
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.06 Mbit/s
95th percentile per-packet one-way delay: 30.922 ms
Loss rate: 47.28%
-- Flow 1:
Average throughput: 13.06 Mbit/s
95th percentile per-packet one-way delay: 30.922 ms
Loss rate: 47.28%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-11-29 21:34:04

End at: 2018-11-29 21:34:34

Local clock offset: -35.2 ms

Remote clock offset: -2.172 ms

Below is generated by plot.py at 2018-11-29 22:04:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.06 Mbit/s

95th percentile per-packet one-way delay: 31.774 ms

Loss rate: 46.33%

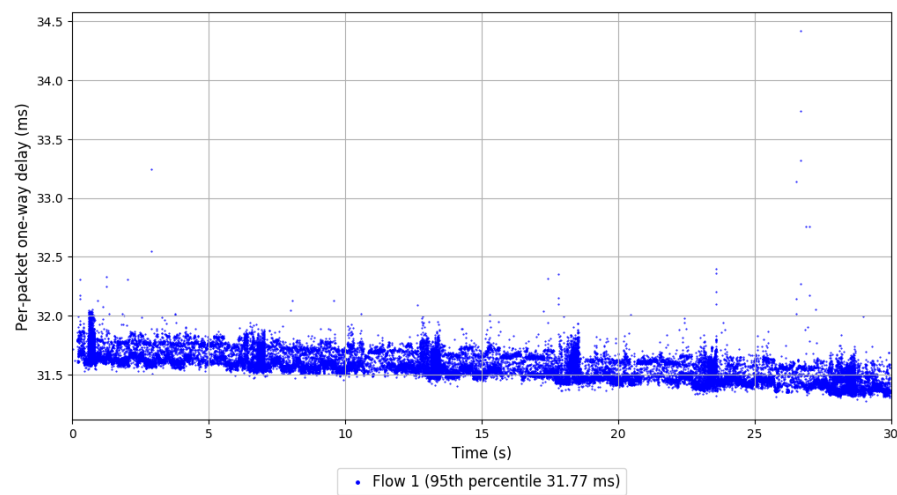
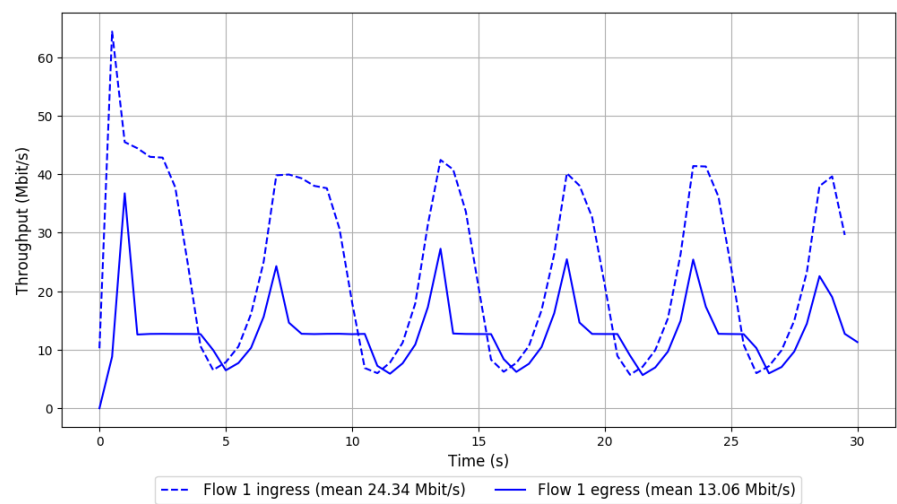
-- Flow 1:

Average throughput: 13.06 Mbit/s

95th percentile per-packet one-way delay: 31.774 ms

Loss rate: 46.33%

Run 4: Report of PCC-Expr — Data Link

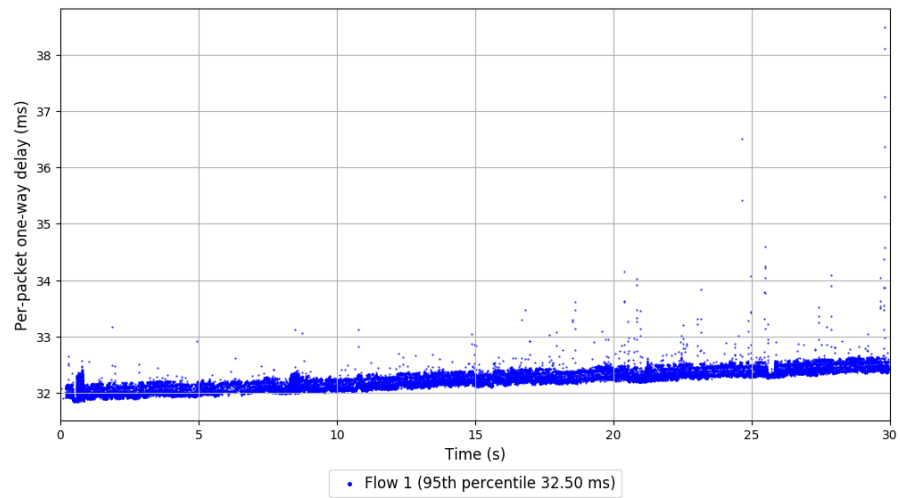
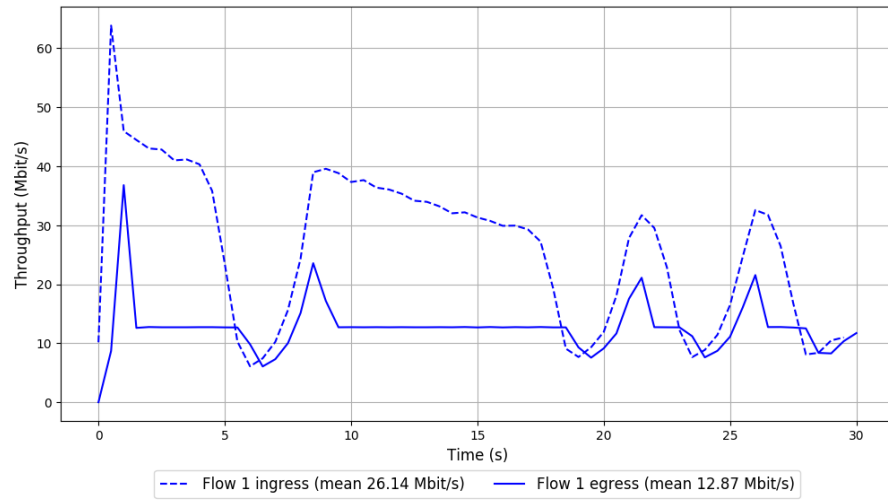


Run 5: Statistics of PCC-Expr

Start at: 2018-11-29 21:54:41
End at: 2018-11-29 21:55:11
Local clock offset: -18.344 ms
Remote clock offset: -2.398 ms

Below is generated by plot.py at 2018-11-29 22:04:46
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.87 Mbit/s
95th percentile per-packet one-way delay: 32.499 ms
Loss rate: 50.75%
-- Flow 1:
Average throughput: 12.87 Mbit/s
95th percentile per-packet one-way delay: 32.499 ms
Loss rate: 50.75%

Run 5: Report of PCC-Expr — Data Link

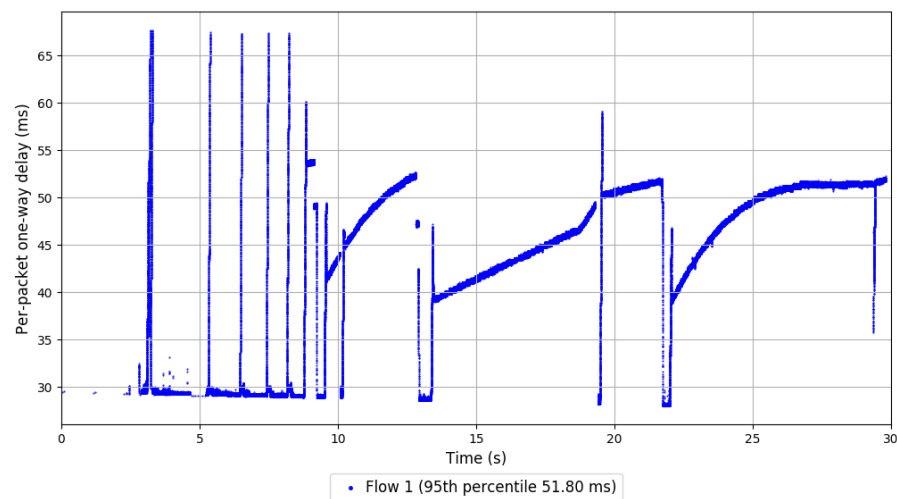
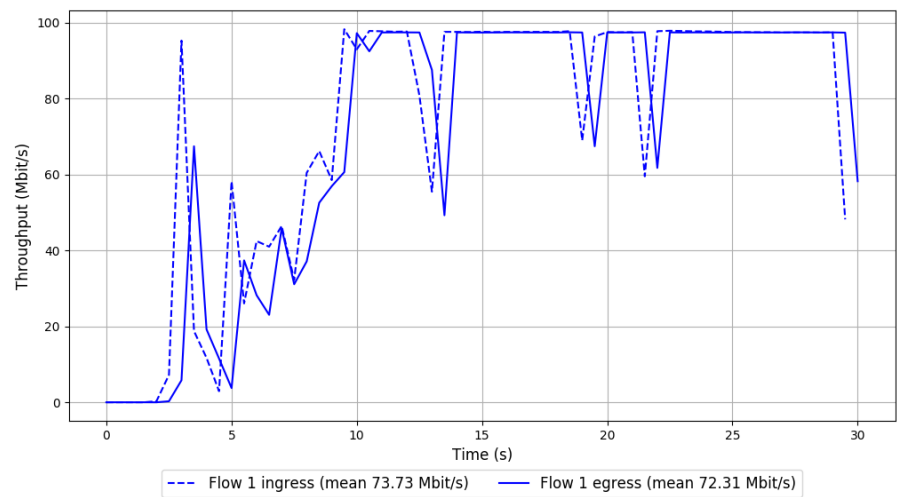


Run 1: Statistics of QUIC Cubic

Start at: 2018-11-29 20:29:40
End at: 2018-11-29 20:30:10
Local clock offset: -29.762 ms
Remote clock offset: -3.367 ms

Below is generated by plot.py at 2018-11-29 22:05:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 72.31 Mbit/s
95th percentile per-packet one-way delay: 51.803 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 72.31 Mbit/s
95th percentile per-packet one-way delay: 51.803 ms
Loss rate: 1.86%

Run 1: Report of QUIC Cubic — Data Link

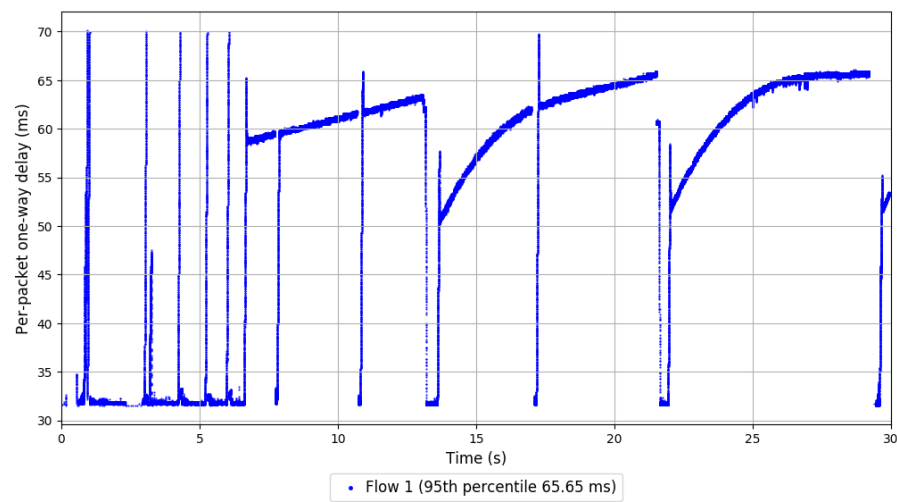
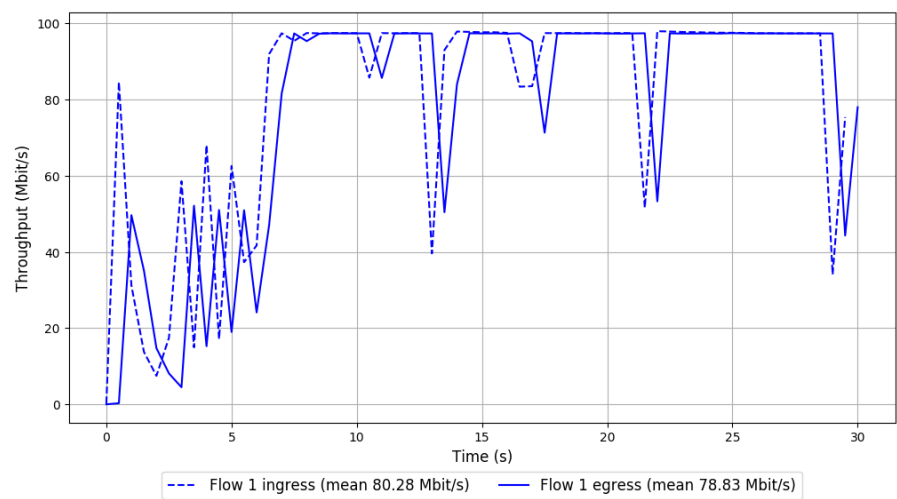


Run 2: Statistics of QUIC Cubic

Start at: 2018-11-29 20:50:24
End at: 2018-11-29 20:50:54
Local clock offset: -35.427 ms
Remote clock offset: -2.785 ms

Below is generated by plot.py at 2018-11-29 22:05:21
Datalink statistics
-- Total of 1 flow:
Average throughput: 78.83 Mbit/s
95th percentile per-packet one-way delay: 65.646 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 78.83 Mbit/s
95th percentile per-packet one-way delay: 65.646 ms
Loss rate: 1.74%

Run 2: Report of QUIC Cubic — Data Link

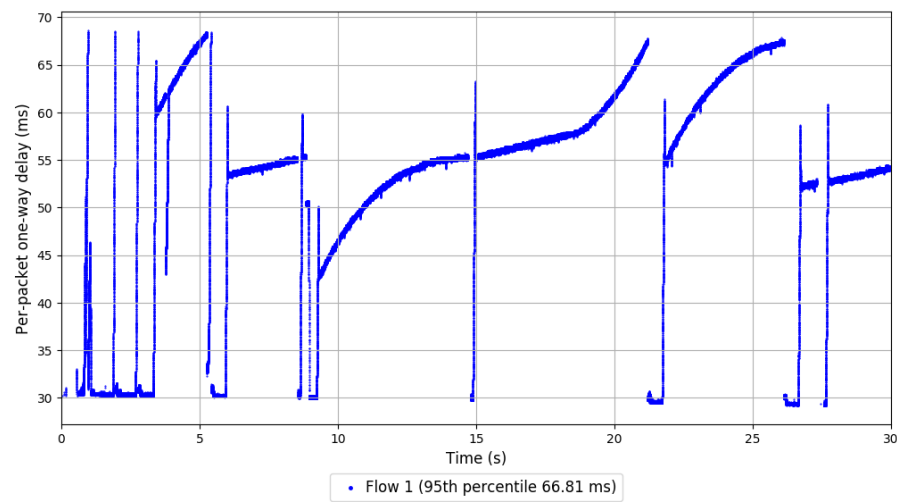
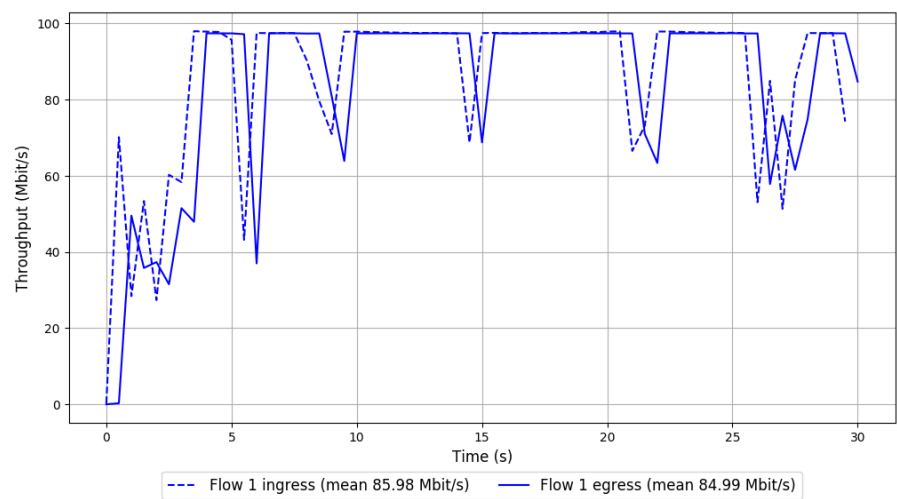


Run 3: Statistics of QUIC Cubic

Start at: 2018-11-29 21:11:04
End at: 2018-11-29 21:11:34
Local clock offset: -69.821 ms
Remote clock offset: -2.69 ms

Below is generated by plot.py at 2018-11-29 22:05:29
Datalink statistics
-- Total of 1 flow:
Average throughput: 84.99 Mbit/s
95th percentile per-packet one-way delay: 66.807 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 84.99 Mbit/s
95th percentile per-packet one-way delay: 66.807 ms
Loss rate: 1.08%

Run 3: Report of QUIC Cubic — Data Link

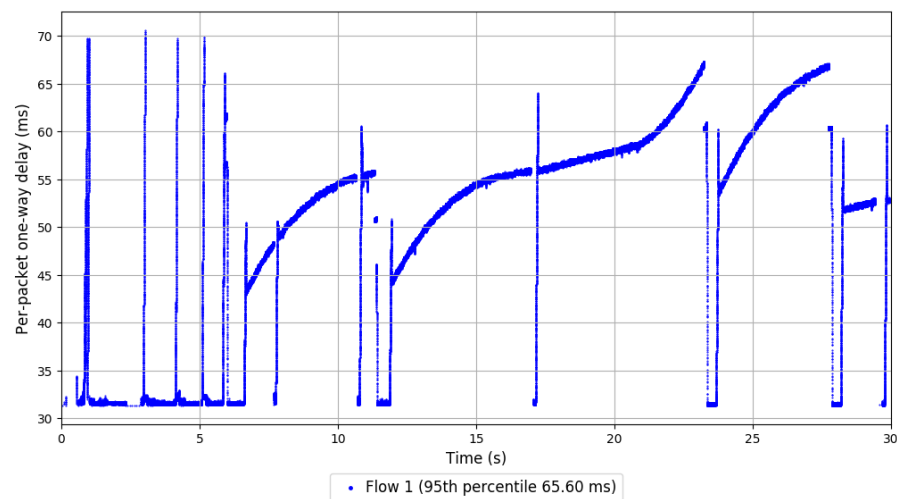
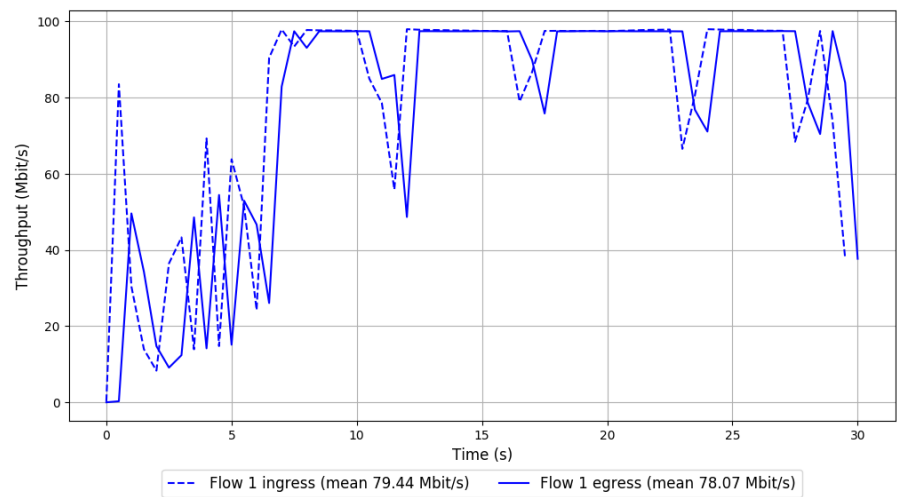


Run 4: Statistics of QUIC Cubic

Start at: 2018-11-29 21:31:45
End at: 2018-11-29 21:32:15
Local clock offset: -34.41 ms
Remote clock offset: -2.412 ms

Below is generated by plot.py at 2018-11-29 22:05:29
Datalink statistics
-- Total of 1 flow:
Average throughput: 78.07 Mbit/s
95th percentile per-packet one-way delay: 65.598 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 78.07 Mbit/s
95th percentile per-packet one-way delay: 65.598 ms
Loss rate: 1.65%

Run 4: Report of QUIC Cubic — Data Link

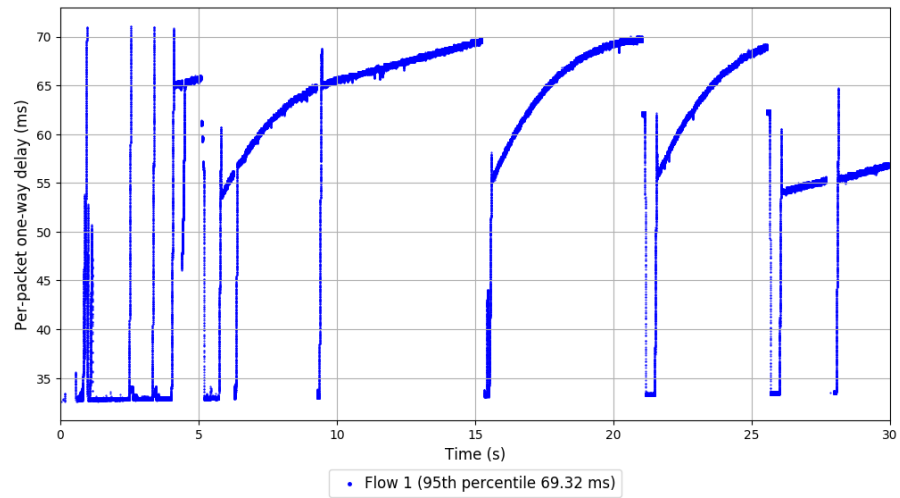
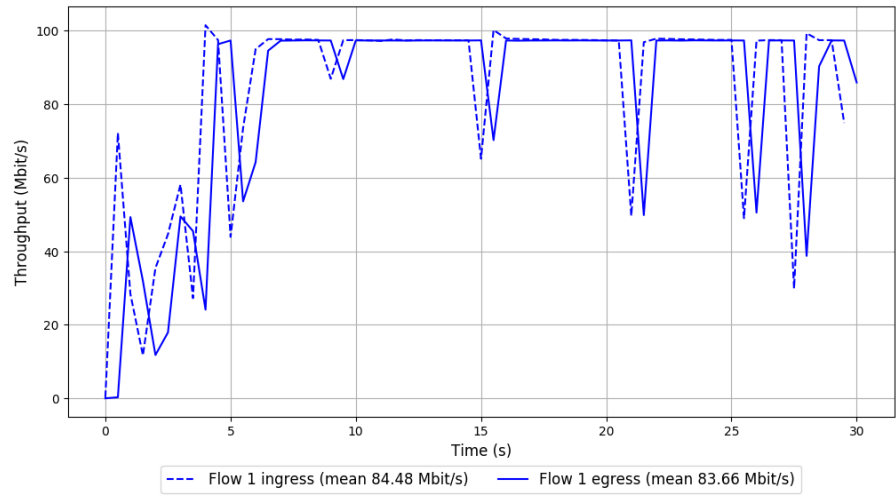


Run 5: Statistics of QUIC Cubic

Start at: 2018-11-29 21:52:21
End at: 2018-11-29 21:52:51
Local clock offset: -21.978 ms
Remote clock offset: -2.179 ms

Below is generated by plot.py at 2018-11-29 22:05:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 83.66 Mbit/s
95th percentile per-packet one-way delay: 69.317 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 83.66 Mbit/s
95th percentile per-packet one-way delay: 69.317 ms
Loss rate: 0.89%

Run 5: Report of QUIC Cubic — Data Link

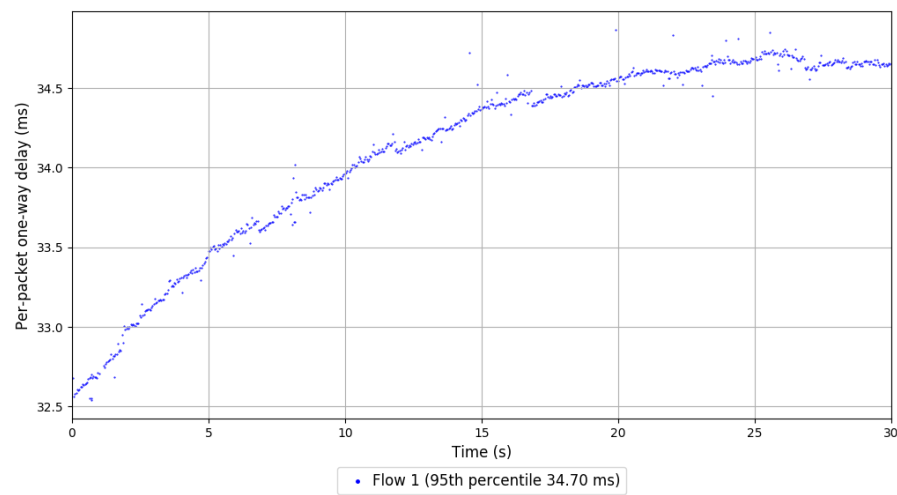
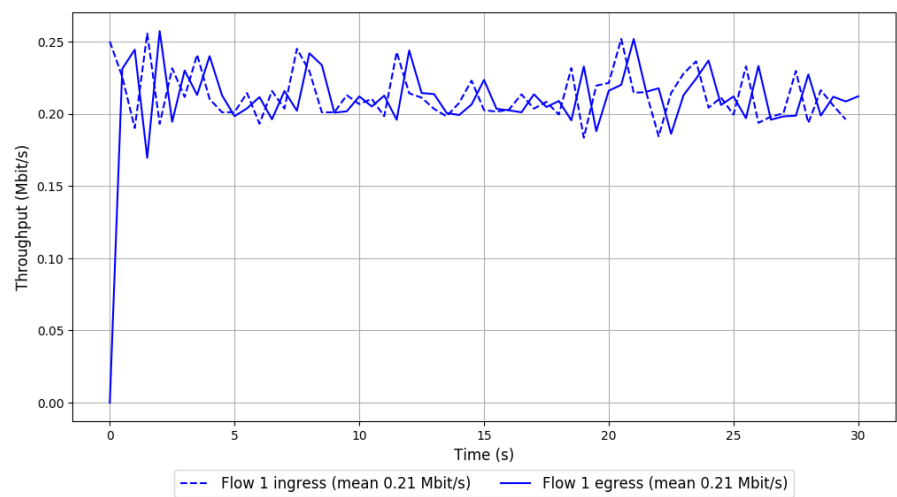


```
Run 1: Statistics of SCReAM

Start at: 2018-11-29 20:15:57
End at: 2018-11-29 20:16:27
Local clock offset: -7.704 ms
Remote clock offset: -3.317 ms

# Below is generated by plot.py at 2018-11-29 22:05:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 34.695 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 34.695 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

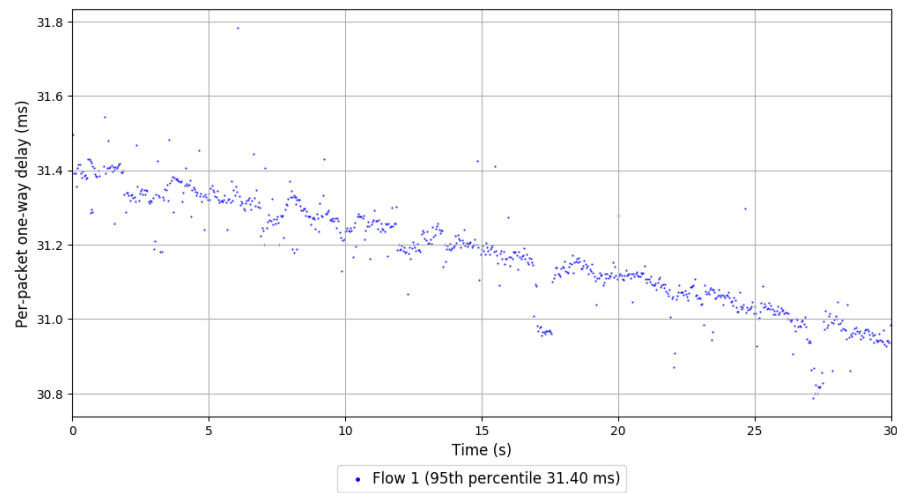
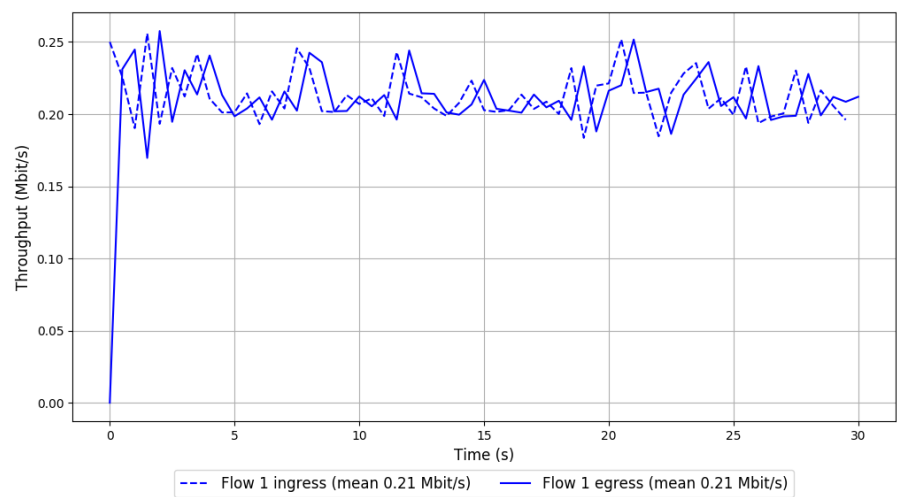


Run 2: Statistics of SCReAM

Start at: 2018-11-29 20:36:33
End at: 2018-11-29 20:37:03
Local clock offset: -23.892 ms
Remote clock offset: -3.215 ms

Below is generated by plot.py at 2018-11-29 22:05:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 31.396 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 31.396 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

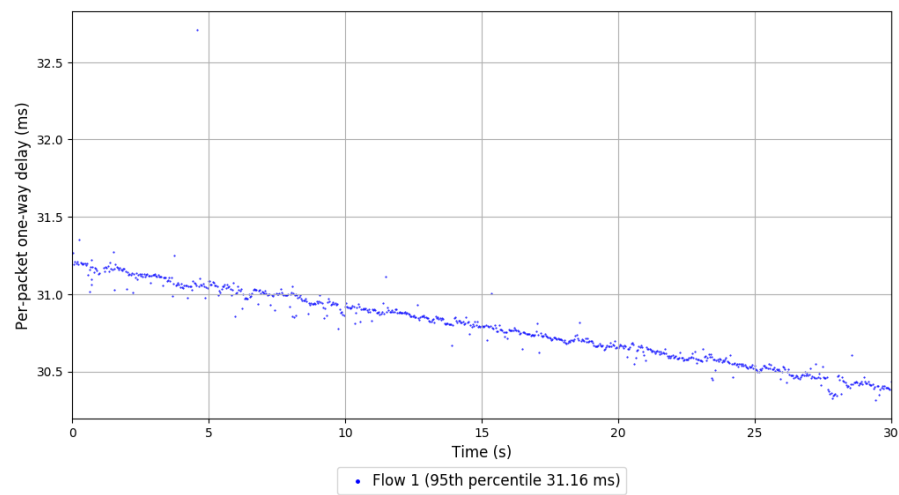
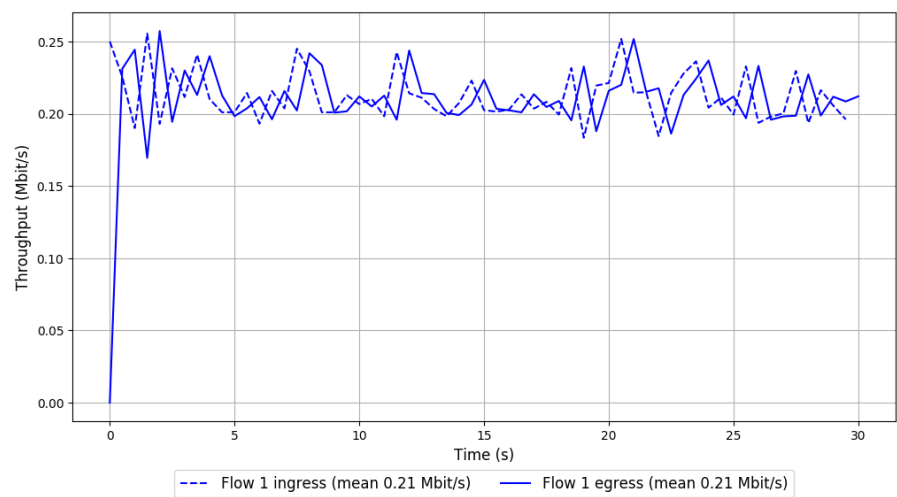


Run 3: Statistics of SCReAM

Start at: 2018-11-29 20:57:14
End at: 2018-11-29 20:57:44
Local clock offset: -41.035 ms
Remote clock offset: -2.611 ms

Below is generated by plot.py at 2018-11-29 22:05:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 31.156 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 31.156 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

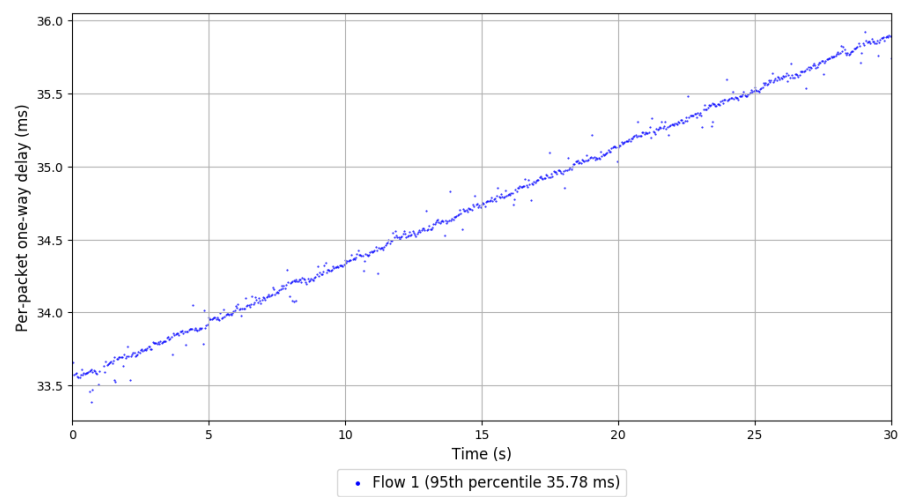
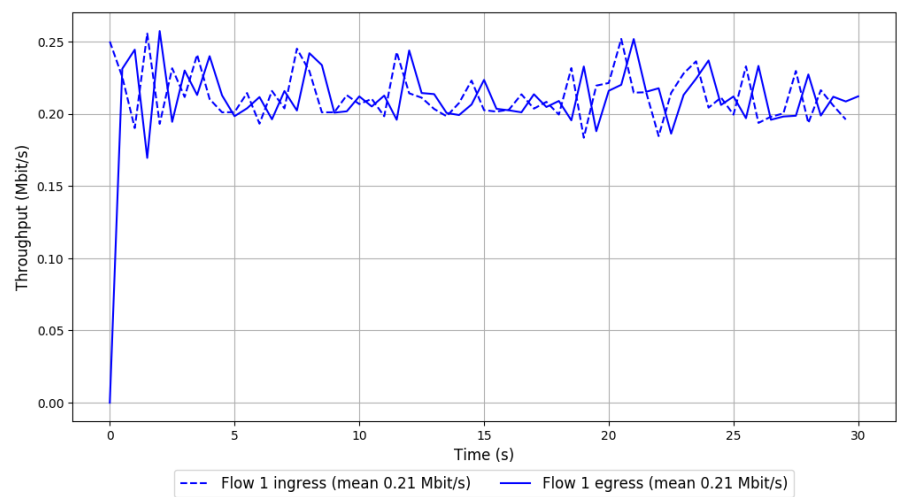


Run 4: Statistics of SCReAM

Start at: 2018-11-29 21:17:56
End at: 2018-11-29 21:18:26
Local clock offset: -59.748 ms
Remote clock offset: -2.346 ms

Below is generated by plot.py at 2018-11-29 22:05:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 35.781 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 35.781 ms
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

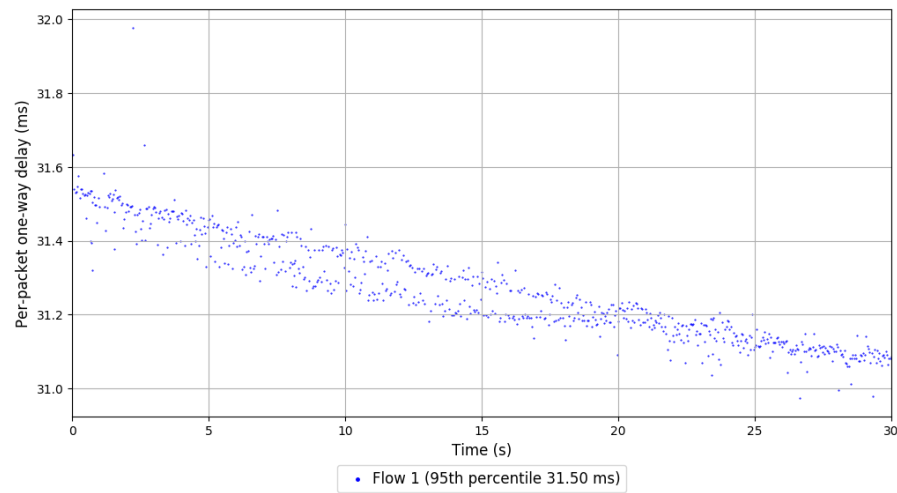
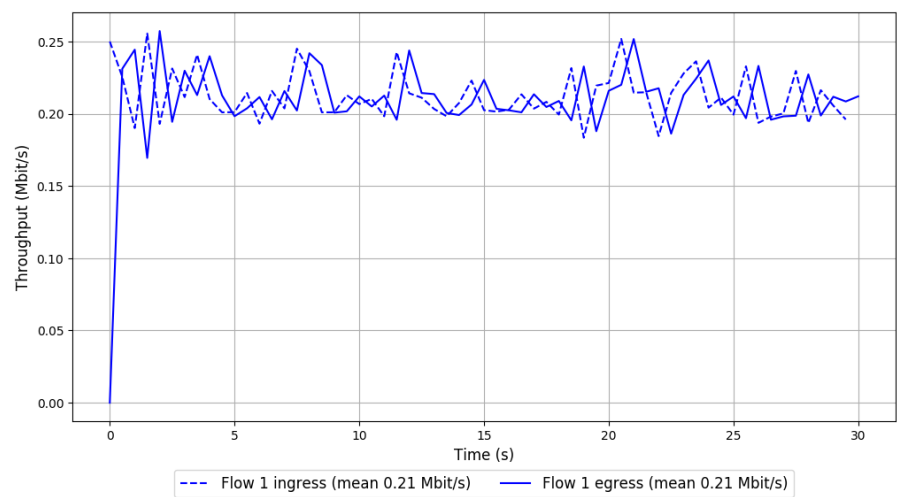


Run 5: Statistics of SCReAM

Start at: 2018-11-29 21:38:35
End at: 2018-11-29 21:39:05
Local clock offset: -38.125 ms
Remote clock offset: -2.072 ms

Below is generated by plot.py at 2018-11-29 22:05:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 31.498 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 31.498 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

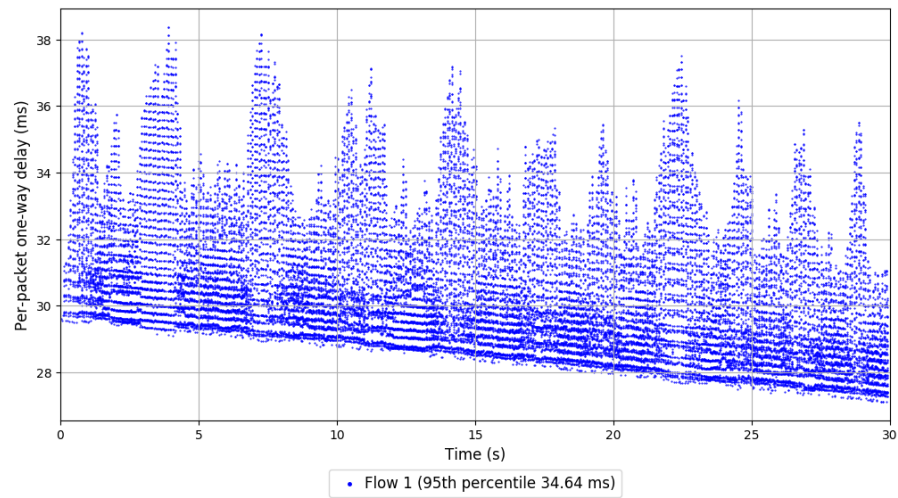
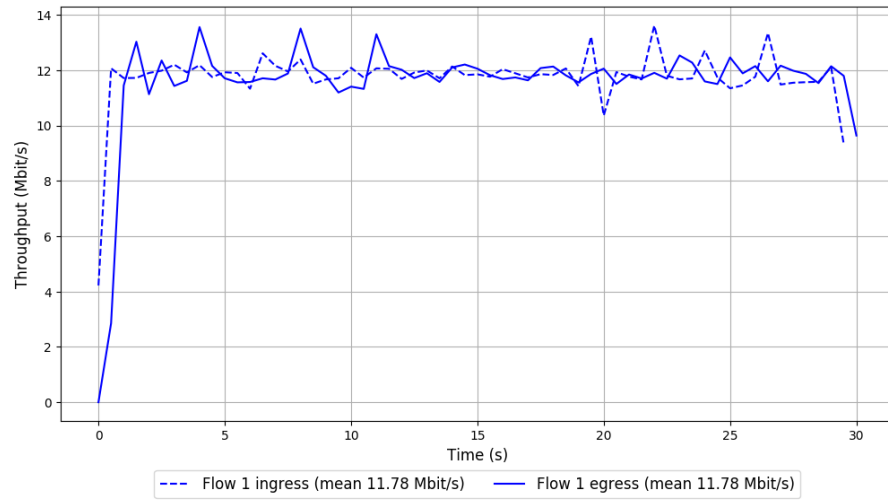


Run 1: Statistics of Sprout

Start at: 2018-11-29 20:20:31
End at: 2018-11-29 20:21:01
Local clock offset: -12.254 ms
Remote clock offset: -3.333 ms

Below is generated by plot.py at 2018-11-29 22:05:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.78 Mbit/s
95th percentile per-packet one-way delay: 34.638 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.78 Mbit/s
95th percentile per-packet one-way delay: 34.638 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

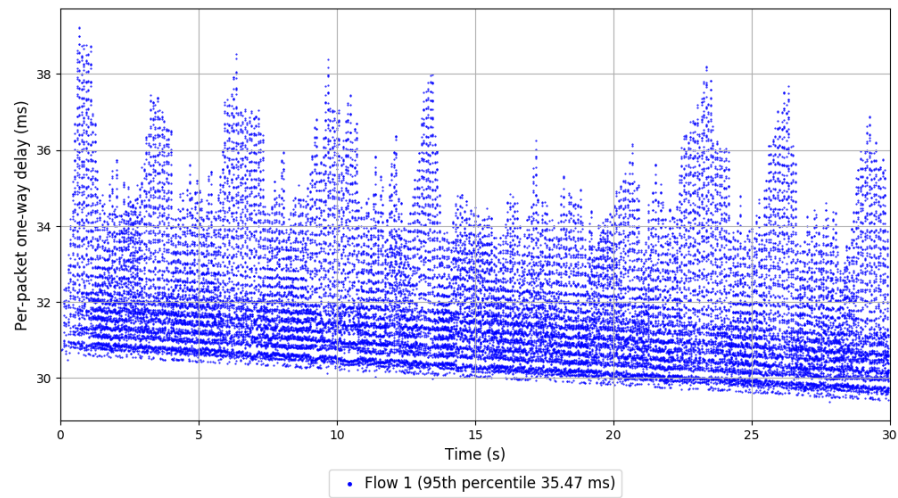
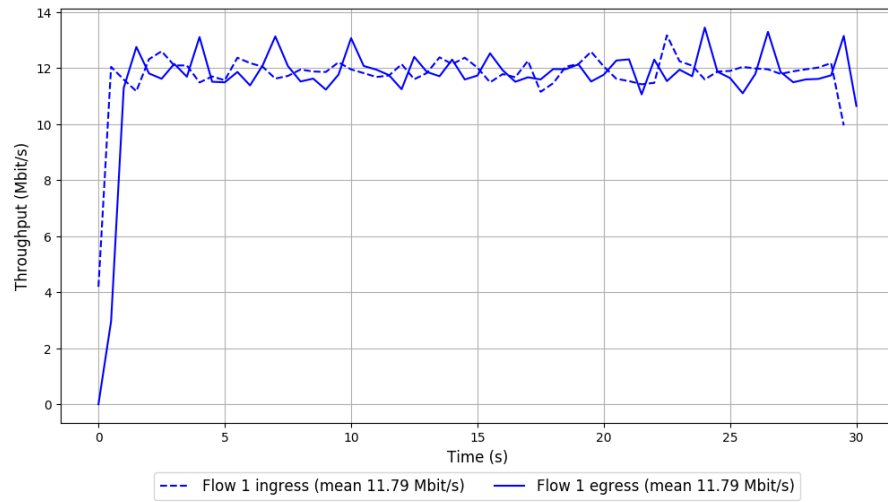


Run 2: Statistics of Sprout

Start at: 2018-11-29 20:41:11
End at: 2018-11-29 20:41:41
Local clock offset: -31.049 ms
Remote clock offset: -2.889 ms

Below is generated by plot.py at 2018-11-29 22:05:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.79 Mbit/s
95th percentile per-packet one-way delay: 35.474 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.79 Mbit/s
95th percentile per-packet one-way delay: 35.474 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

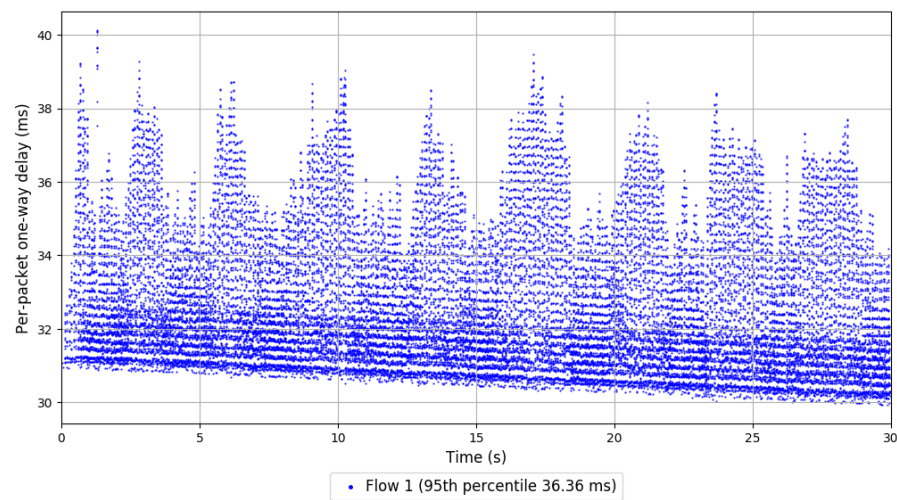
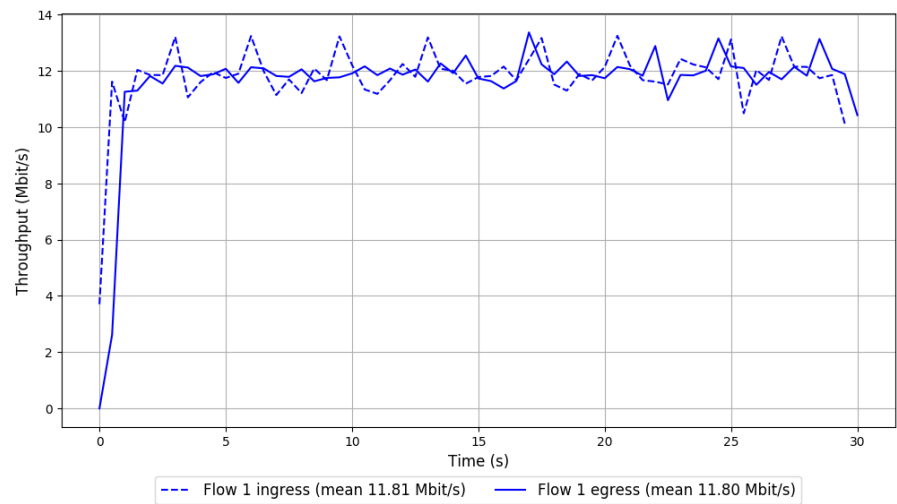


Run 3: Statistics of Sprout

Start at: 2018-11-29 21:01:49
End at: 2018-11-29 21:02:19
Local clock offset: -49.204 ms
Remote clock offset: -2.572 ms

Below is generated by plot.py at 2018-11-29 22:05:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 36.359 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 36.359 ms
Loss rate: 0.04%

Run 3: Report of Sprout — Data Link

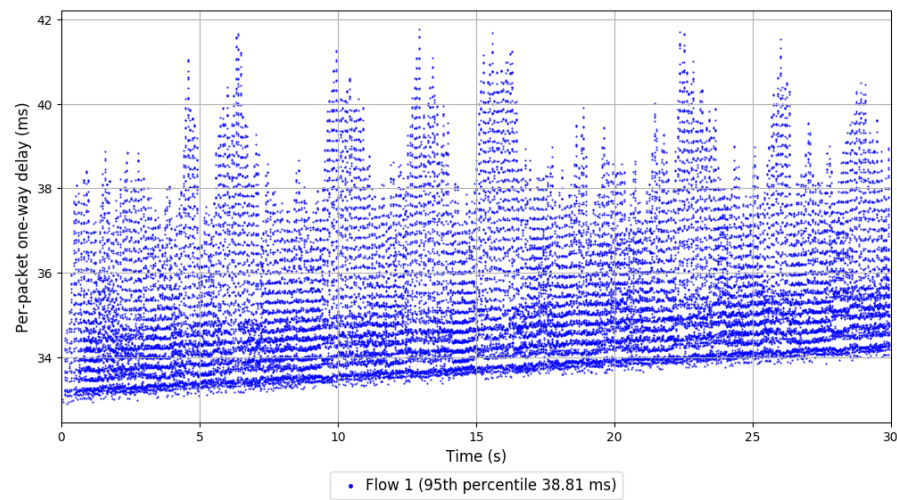
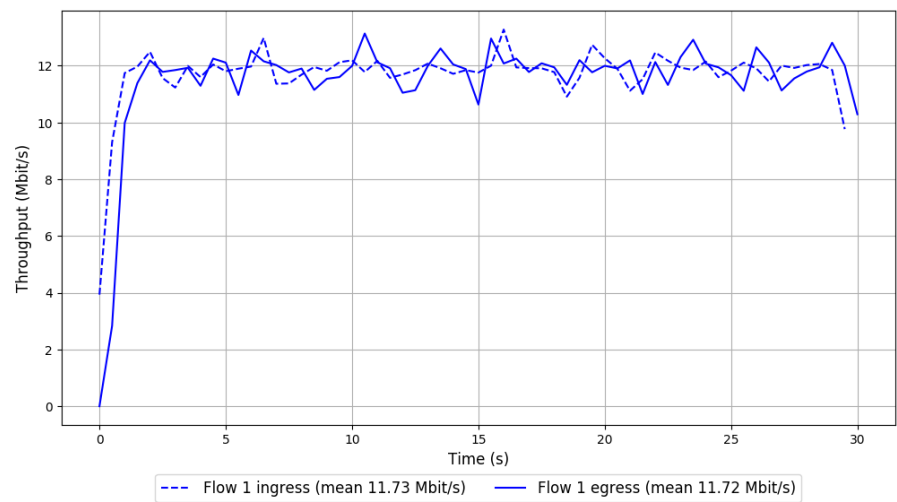


Run 4: Statistics of Sprout

Start at: 2018-11-29 21:22:35
End at: 2018-11-29 21:23:05
Local clock offset: -43.049 ms
Remote clock offset: -2.346 ms

Below is generated by plot.py at 2018-11-29 22:05:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.72 Mbit/s
95th percentile per-packet one-way delay: 38.812 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 11.72 Mbit/s
95th percentile per-packet one-way delay: 38.812 ms
Loss rate: 0.05%

Run 4: Report of Sprout — Data Link

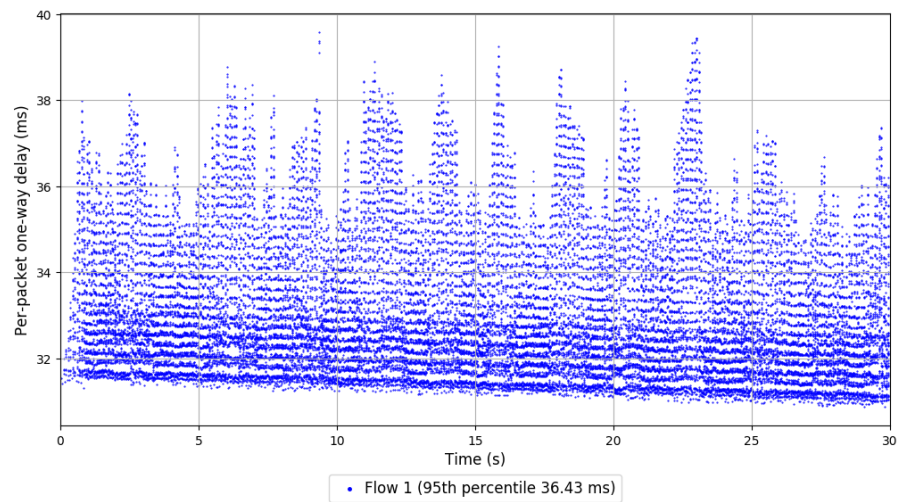
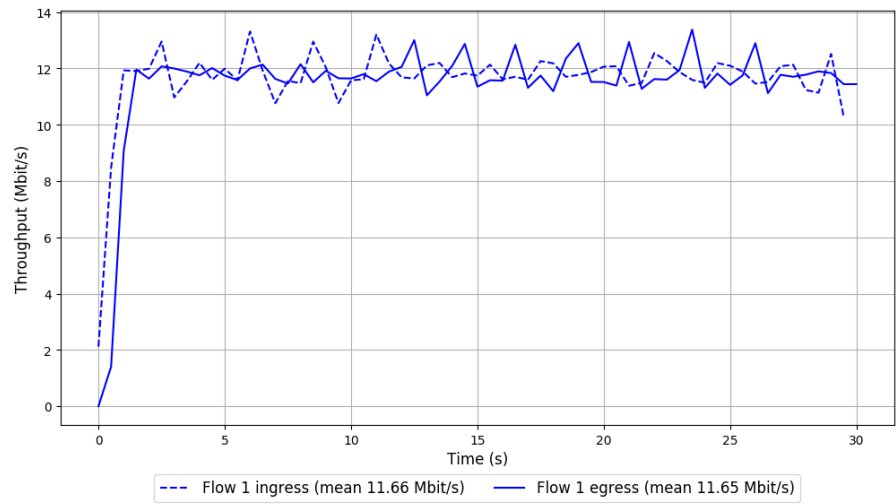


Run 5: Statistics of Sprout

Start at: 2018-11-29 21:43:13
End at: 2018-11-29 21:43:43
Local clock offset: -43.091 ms
Remote clock offset: -2.176 ms

Below is generated by plot.py at 2018-11-29 22:05:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.65 Mbit/s
95th percentile per-packet one-way delay: 36.432 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 11.65 Mbit/s
95th percentile per-packet one-way delay: 36.432 ms
Loss rate: 0.05%

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

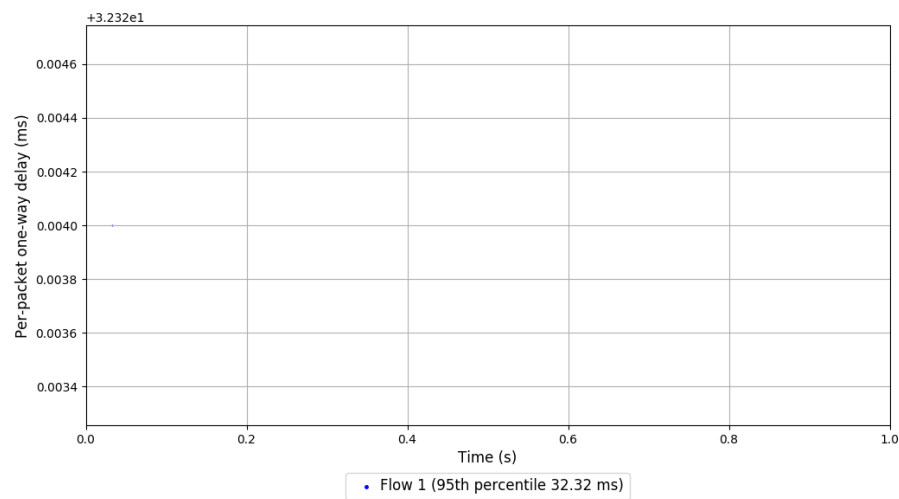
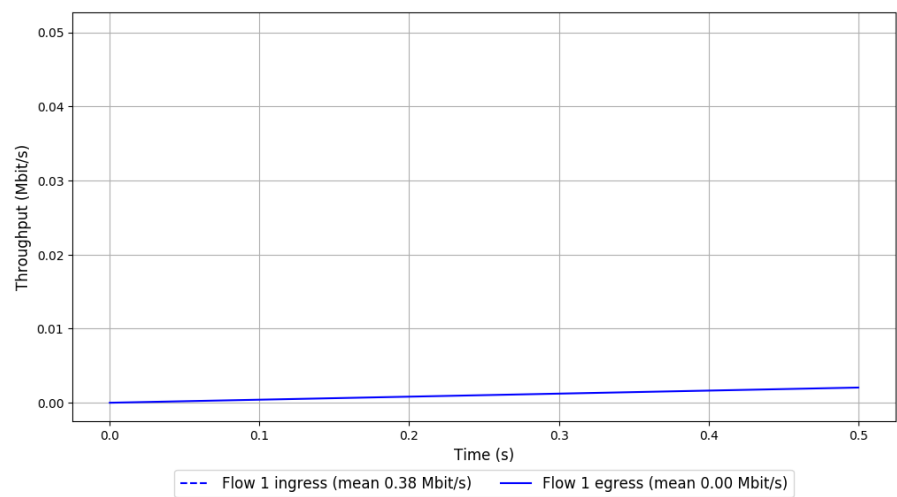
Start at: 2018-11-29 20:23:58

End at: 2018-11-29 20:24:28

Local clock offset: -17.114 ms

Remote clock offset: -3.296 ms

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



Run 2: Statistics of TaoVA-100x

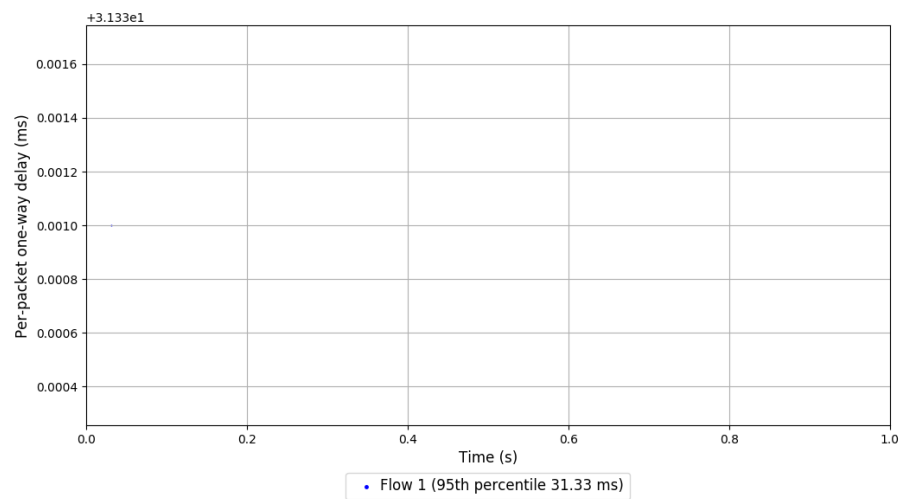
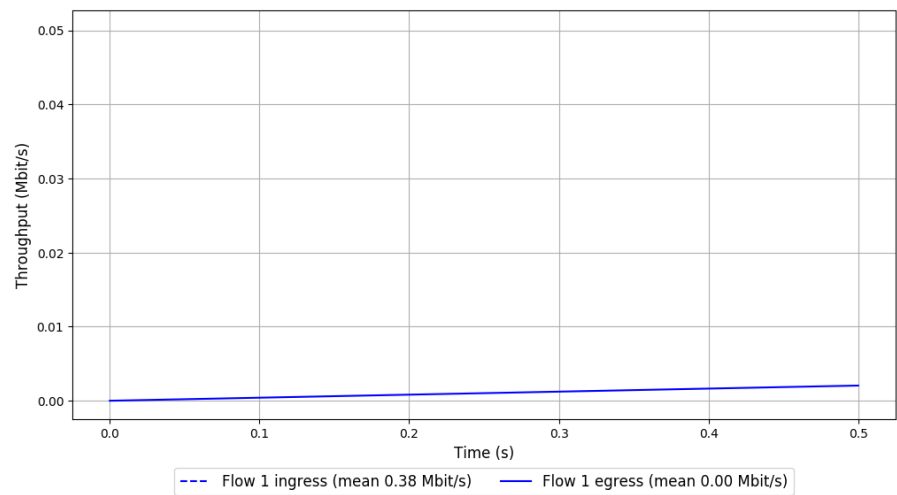
Start at: 2018-11-29 20:44:41

End at: 2018-11-29 20:45:11

Local clock offset: -40.305 ms

Remote clock offset: -2.707 ms

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



Run 3: Statistics of TaoVA-100x

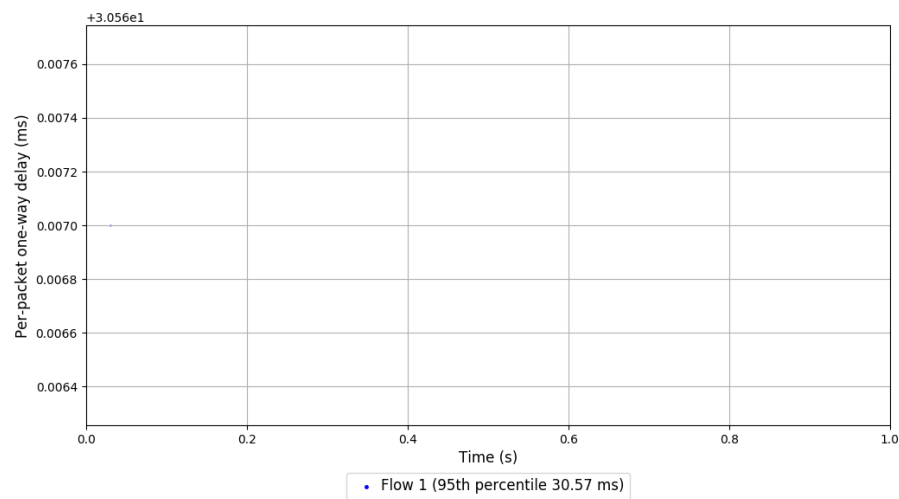
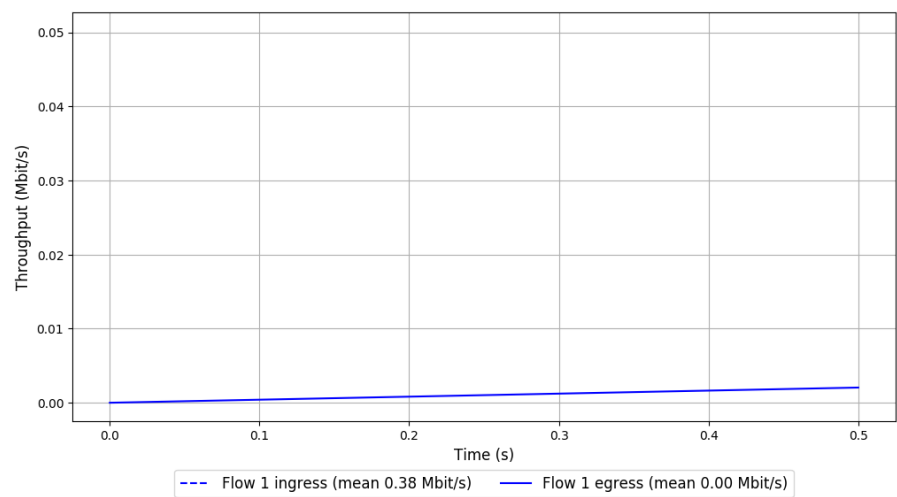
Start at: 2018-11-29 21:05:16

End at: 2018-11-29 21:05:46

Local clock offset: -56.108 ms

Remote clock offset: -2.487 ms

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



Run 4: Statistics of TaoVA-100x

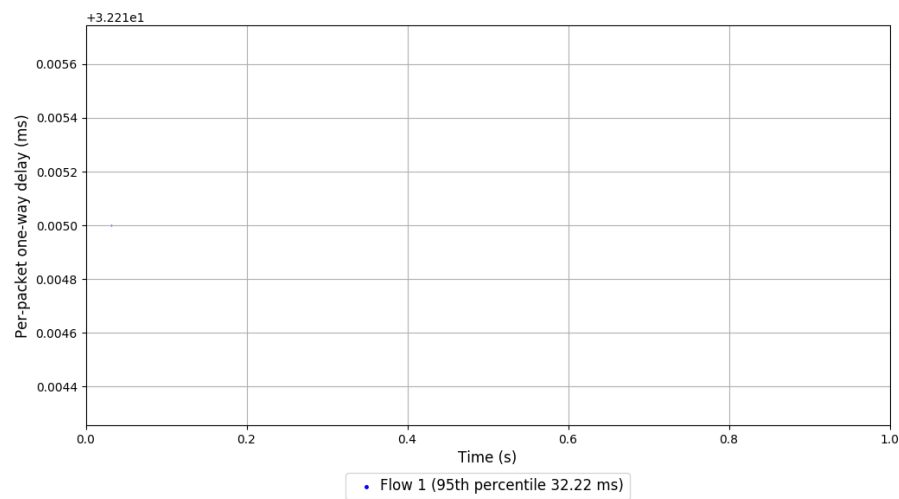
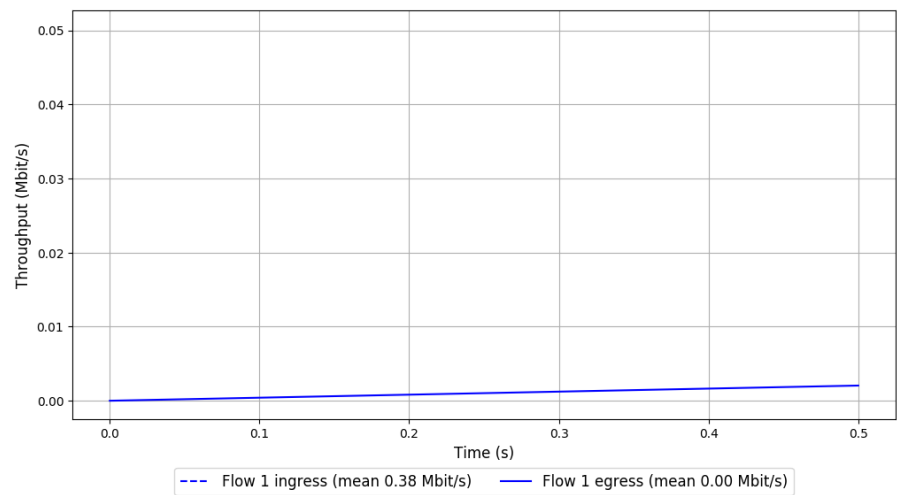
Start at: 2018-11-29 21:26:03

End at: 2018-11-29 21:26:33

Local clock offset: -36.707 ms

Remote clock offset: -2.321 ms

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



Run 5: Statistics of TaoVA-100x

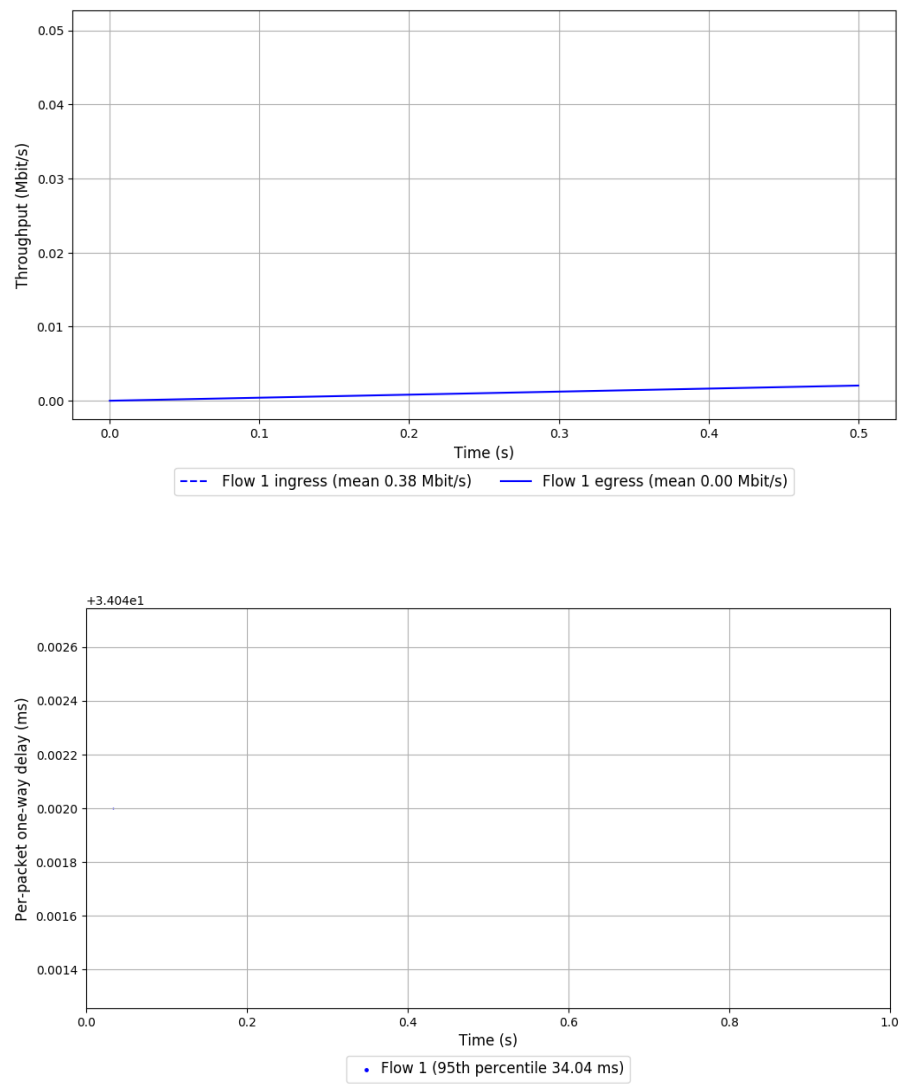
Start at: 2018-11-29 21:46:40

End at: 2018-11-29 21:47:10

Local clock offset: -37.991 ms

Remote clock offset: -2.338 ms

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

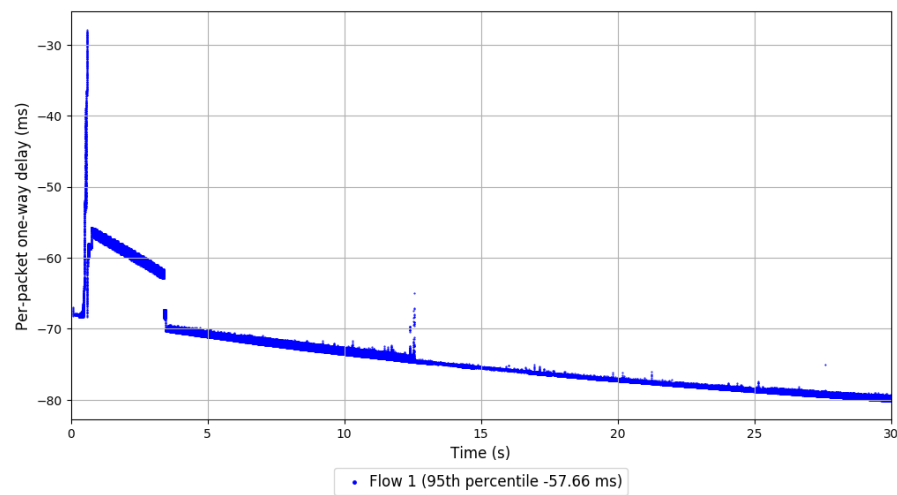
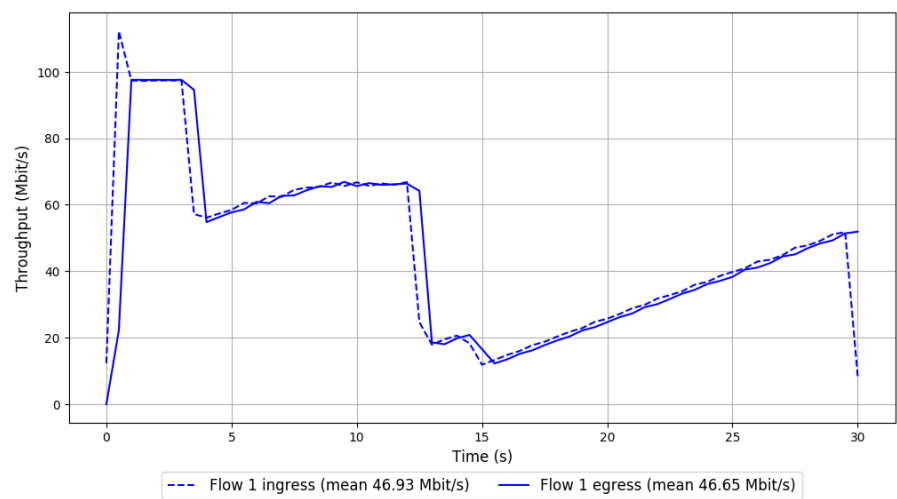


Run 1: Statistics of TCP Vegas

Start at: 2018-11-29 20:14:49
End at: 2018-11-29 20:15:19
Local clock offset: 107.47 ms
Remote clock offset: -3.339 ms

Below is generated by plot.py at 2018-11-29 22:05:35
Datalink statistics
-- Total of 1 flow:
Average throughput: 46.65 Mbit/s
95th percentile per-packet one-way delay: -57.656 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 46.65 Mbit/s
95th percentile per-packet one-way delay: -57.656 ms
Loss rate: 0.65%

Run 1: Report of TCP Vegas — Data Link

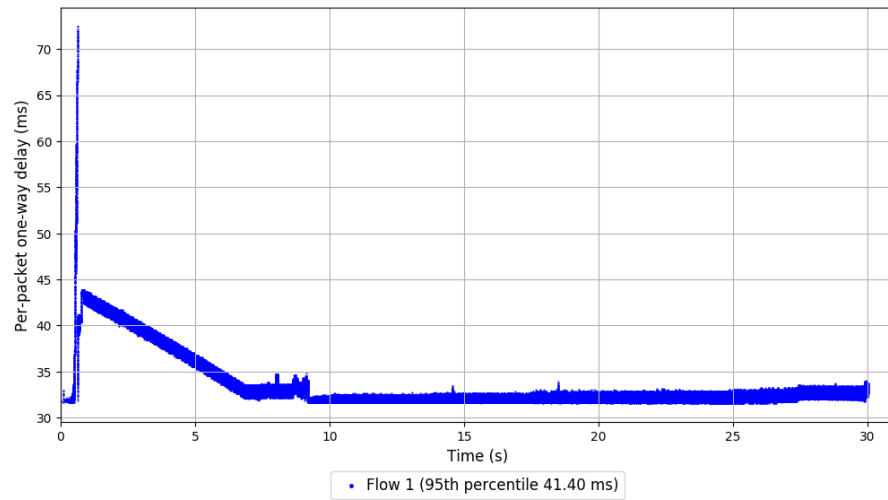
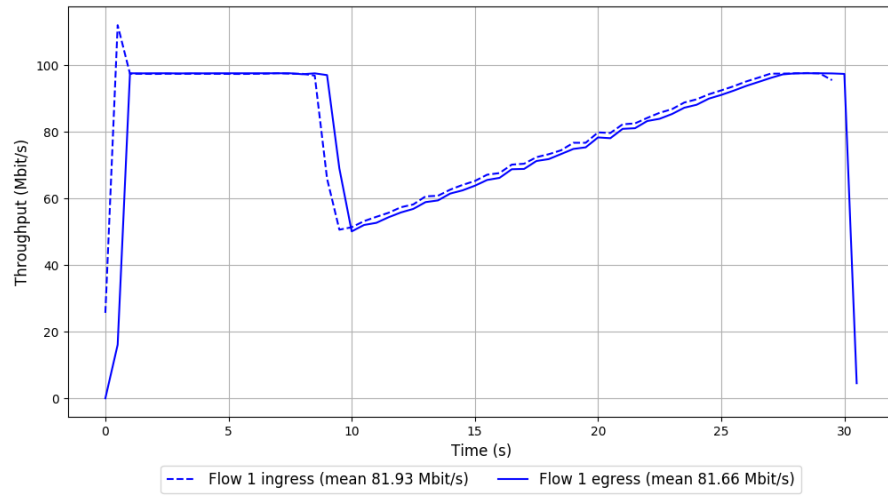


Run 2: Statistics of TCP Vegas

Start at: 2018-11-29 20:35:22
End at: 2018-11-29 20:35:52
Local clock offset: -23.762 ms
Remote clock offset: -3.192 ms

Below is generated by plot.py at 2018-11-29 22:06:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 81.66 Mbit/s
95th percentile per-packet one-way delay: 41.402 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 81.66 Mbit/s
95th percentile per-packet one-way delay: 41.402 ms
Loss rate: 0.32%

Run 2: Report of TCP Vegas — Data Link

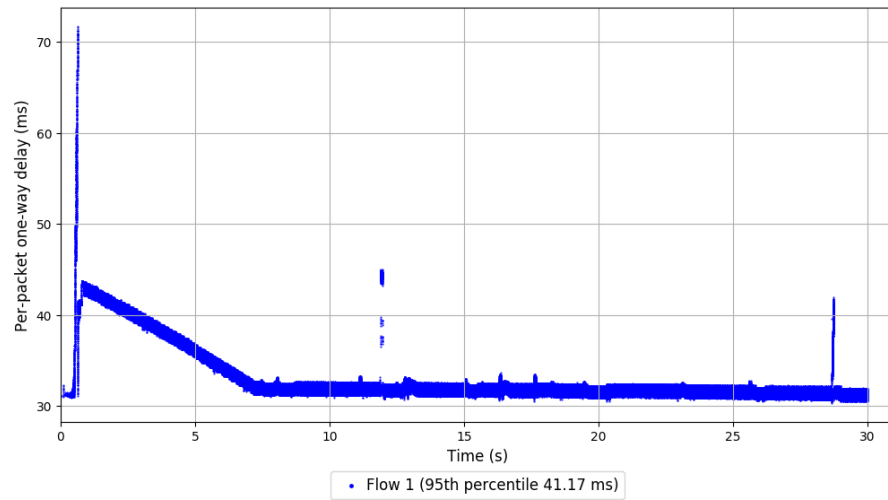
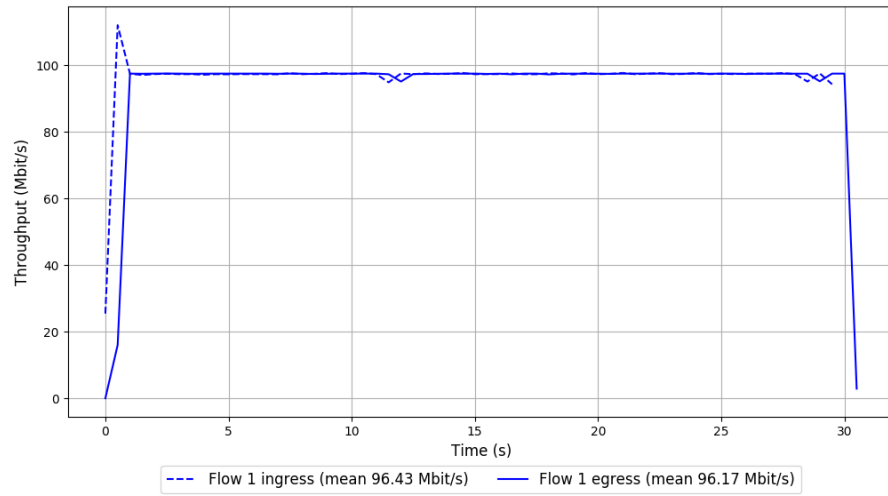


Run 3: Statistics of TCP Vegas

Start at: 2018-11-29 20:56:04
End at: 2018-11-29 20:56:34
Local clock offset: -39.428 ms
Remote clock offset: -2.768 ms

Below is generated by plot.py at 2018-11-29 22:06:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.17 Mbit/s
95th percentile per-packet one-way delay: 41.174 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.17 Mbit/s
95th percentile per-packet one-way delay: 41.174 ms
Loss rate: 0.27%

Run 3: Report of TCP Vegas — Data Link

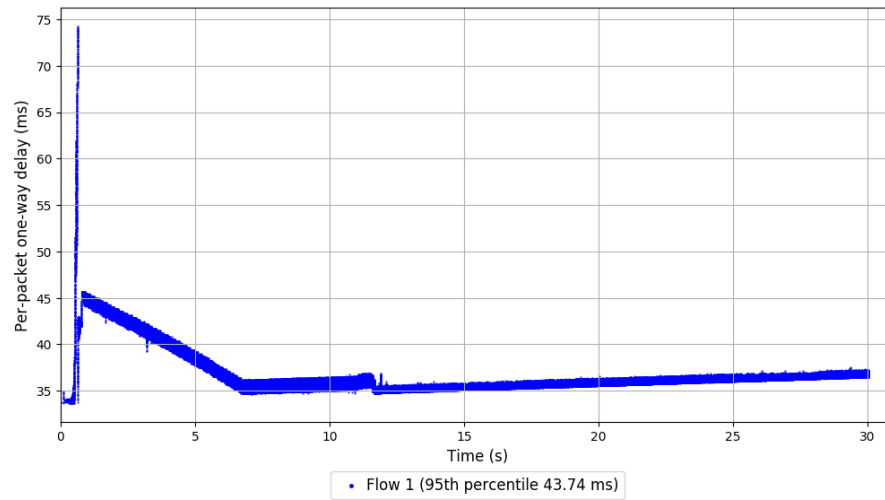
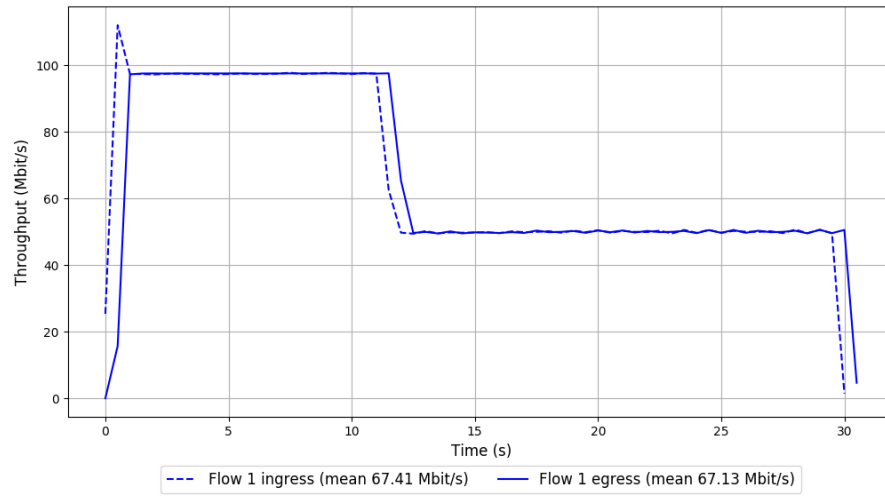


Run 4: Statistics of TCP Vegas

Start at: 2018-11-29 21:16:47
End at: 2018-11-29 21:17:17
Local clock offset: -66.333 ms
Remote clock offset: -2.405 ms

Below is generated by plot.py at 2018-11-29 22:06:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 67.13 Mbit/s
95th percentile per-packet one-way delay: 43.737 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 67.13 Mbit/s
95th percentile per-packet one-way delay: 43.737 ms
Loss rate: 0.40%

Run 4: Report of TCP Vegas — Data Link

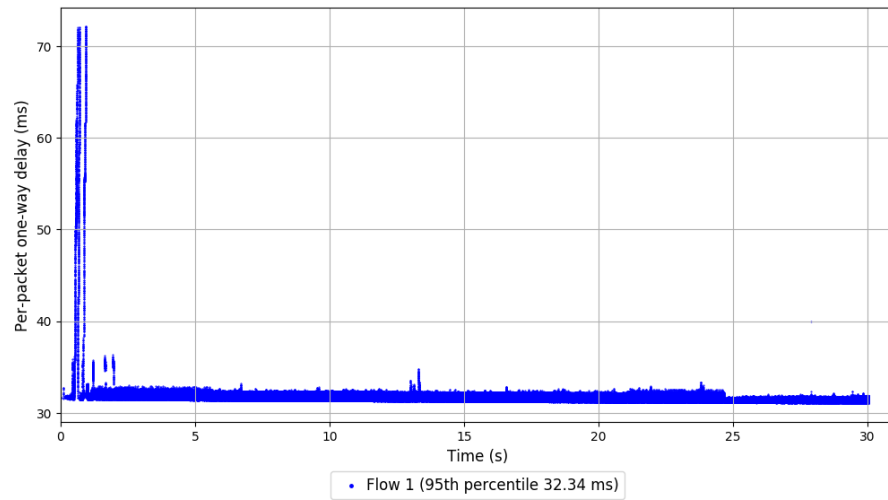
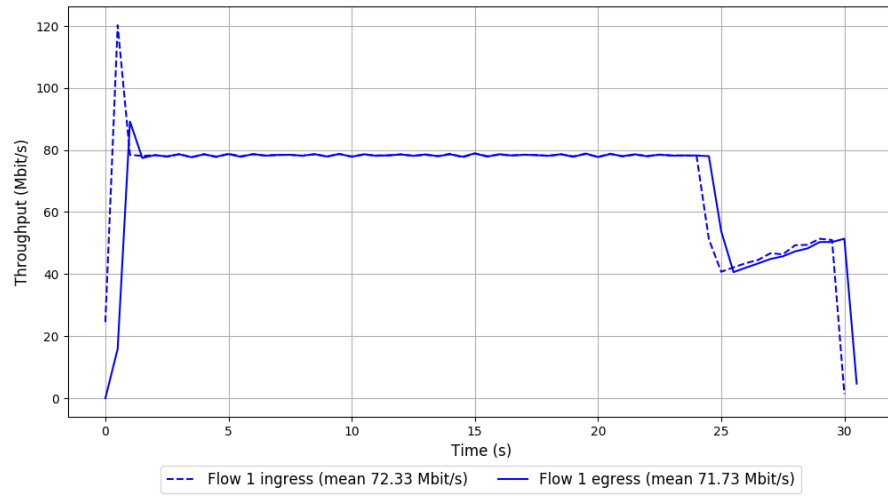


Run 5: Statistics of TCP Vegas

Start at: 2018-11-29 21:37:26
End at: 2018-11-29 21:37:56
Local clock offset: -37.247 ms
Remote clock offset: -2.082 ms

Below is generated by plot.py at 2018-11-29 22:06:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 71.73 Mbit/s
95th percentile per-packet one-way delay: 32.345 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 71.73 Mbit/s
95th percentile per-packet one-way delay: 32.345 ms
Loss rate: 0.82%

Run 5: Report of TCP Vegas — Data Link

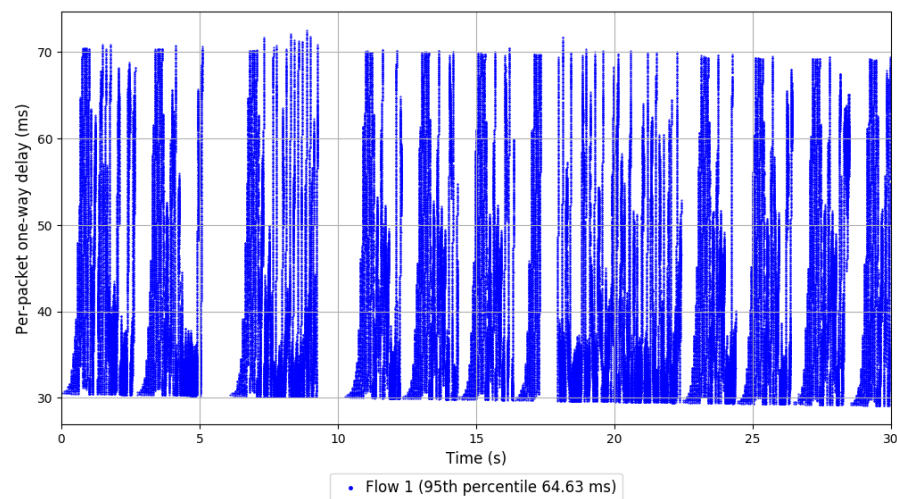
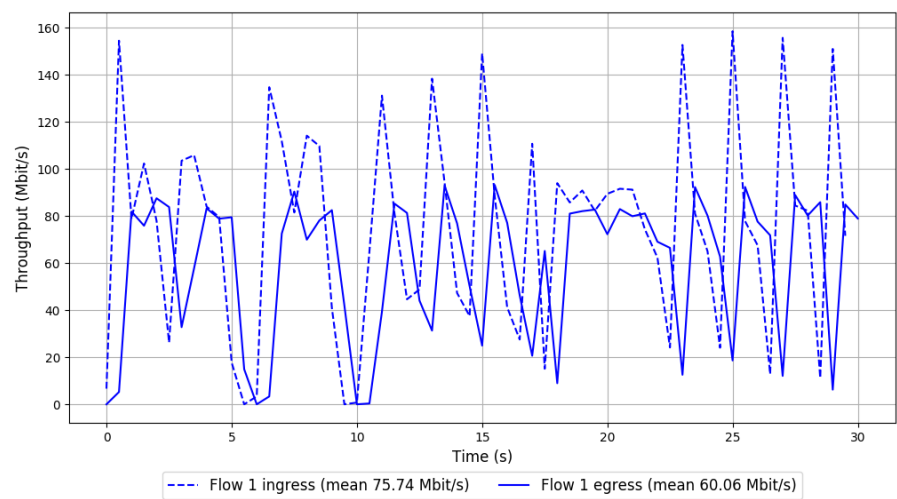


Run 1: Statistics of Verus

Start at: 2018-11-29 20:26:10
End at: 2018-11-29 20:26:40
Local clock offset: -18.012 ms
Remote clock offset: -3.083 ms

Below is generated by plot.py at 2018-11-29 22:06:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 60.06 Mbit/s
95th percentile per-packet one-way delay: 64.627 ms
Loss rate: 20.61%
-- Flow 1:
Average throughput: 60.06 Mbit/s
95th percentile per-packet one-way delay: 64.627 ms
Loss rate: 20.61%

Run 1: Report of Verus — Data Link

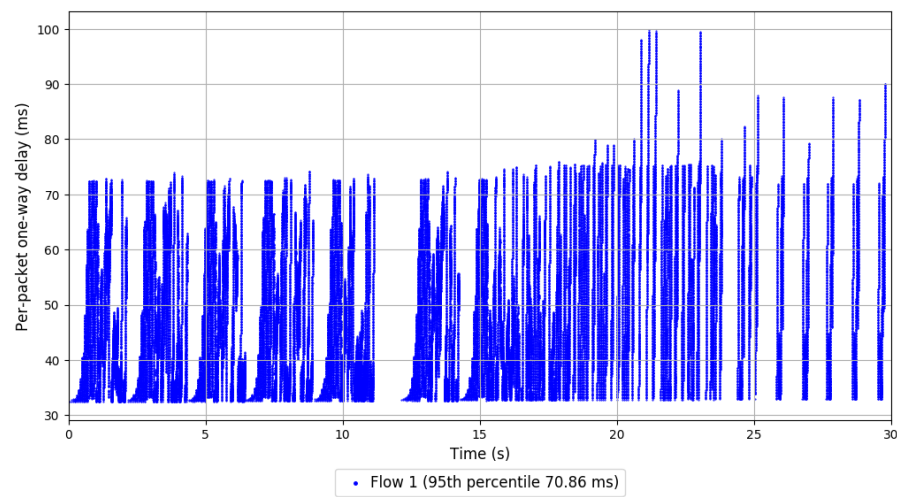
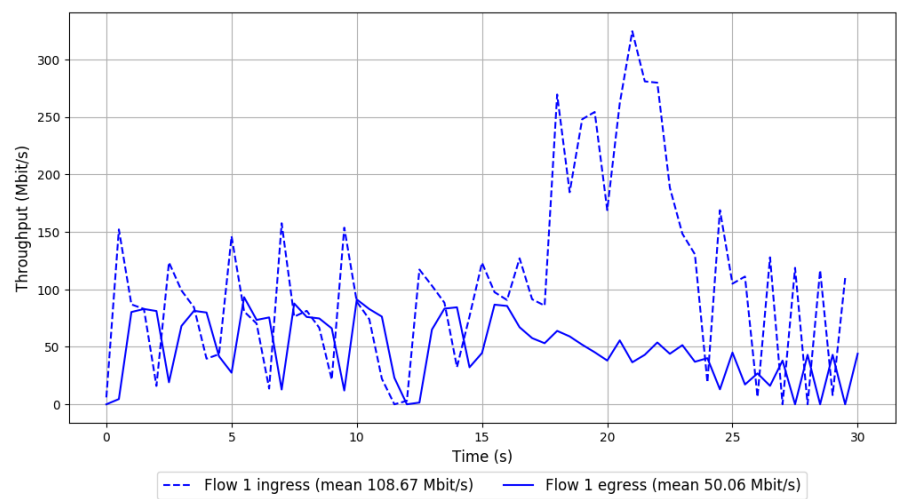


Run 2: Statistics of Verus

Start at: 2018-11-29 20:46:53
End at: 2018-11-29 20:47:23
Local clock offset: -37.779 ms
Remote clock offset: -2.764 ms

Below is generated by plot.py at 2018-11-29 22:06:21
Datalink statistics
-- Total of 1 flow:
Average throughput: 50.06 Mbit/s
95th percentile per-packet one-way delay: 70.862 ms
Loss rate: 53.85%
-- Flow 1:
Average throughput: 50.06 Mbit/s
95th percentile per-packet one-way delay: 70.862 ms
Loss rate: 53.85%

Run 2: Report of Verus — Data Link

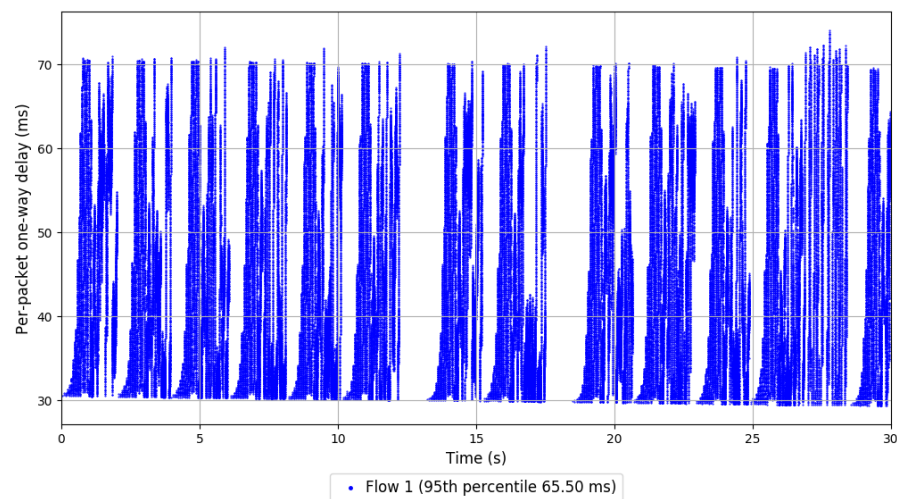
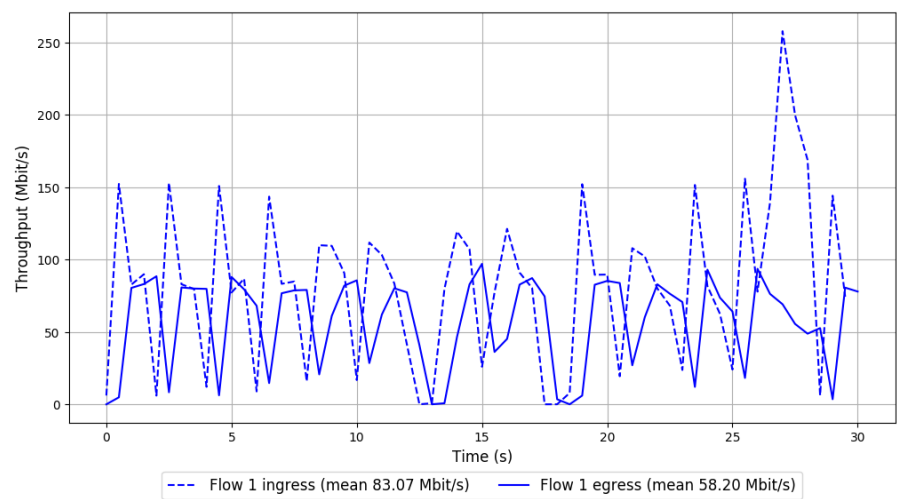


Run 3: Statistics of Verus

Start at: 2018-11-29 21:07:28
End at: 2018-11-29 21:07:58
Local clock offset: -61.255 ms
Remote clock offset: -2.538 ms

Below is generated by plot.py at 2018-11-29 22:06:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 58.20 Mbit/s
95th percentile per-packet one-way delay: 65.496 ms
Loss rate: 29.87%
-- Flow 1:
Average throughput: 58.20 Mbit/s
95th percentile per-packet one-way delay: 65.496 ms
Loss rate: 29.87%

Run 3: Report of Verus — Data Link

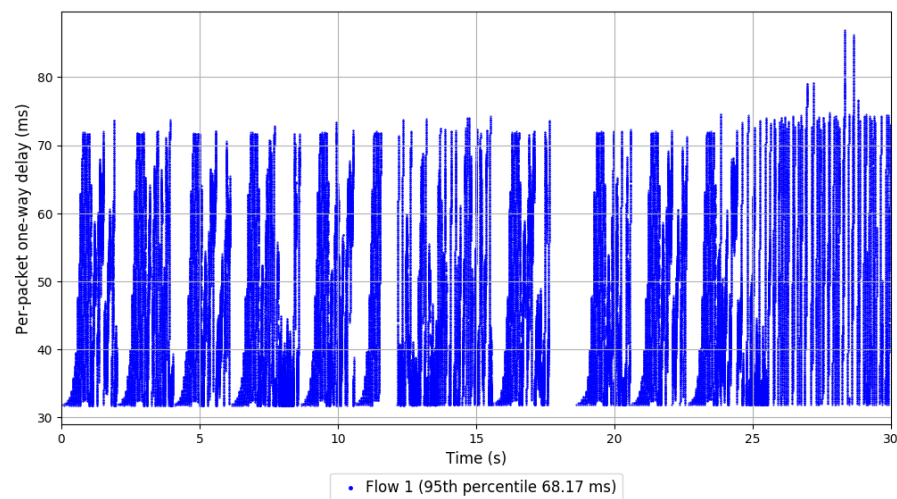
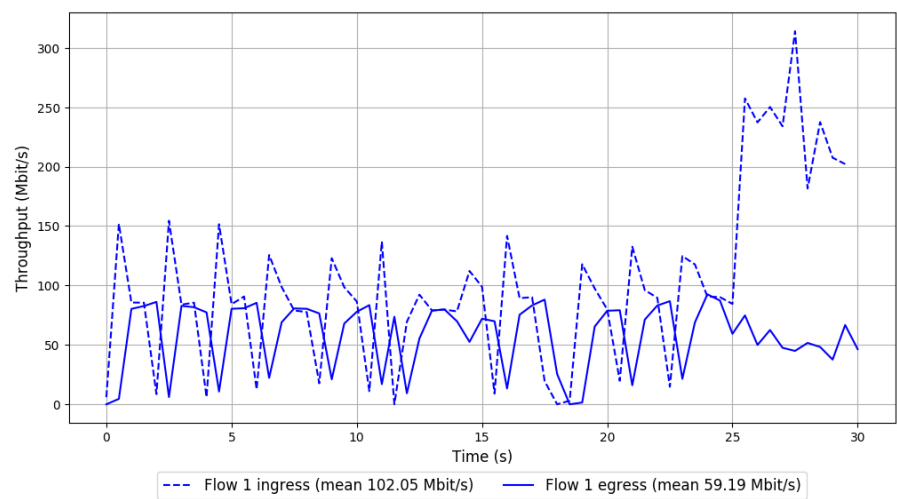


Run 4: Statistics of Verus

Start at: 2018-11-29 21:28:15
End at: 2018-11-29 21:28:45
Local clock offset: -35.046 ms
Remote clock offset: -2.489 ms

Below is generated by plot.py at 2018-11-29 22:06:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 59.19 Mbit/s
95th percentile per-packet one-way delay: 68.167 ms
Loss rate: 41.91%
-- Flow 1:
Average throughput: 59.19 Mbit/s
95th percentile per-packet one-way delay: 68.167 ms
Loss rate: 41.91%

Run 4: Report of Verus — Data Link

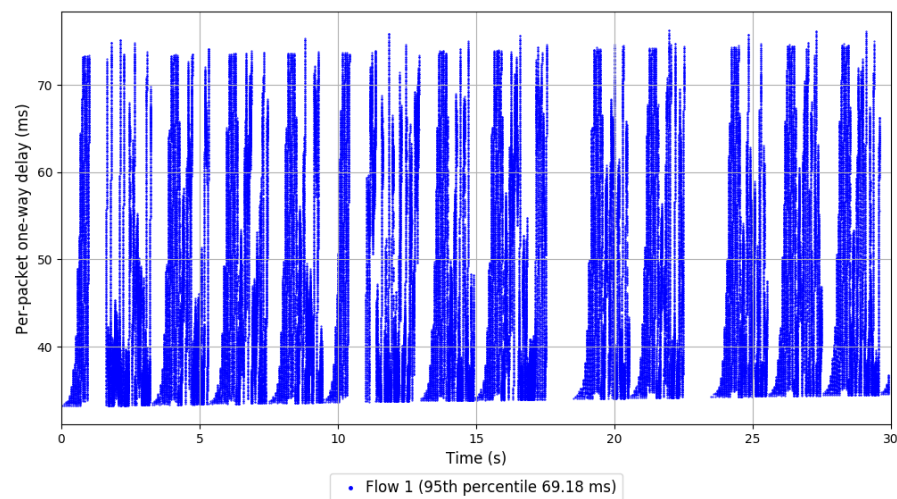
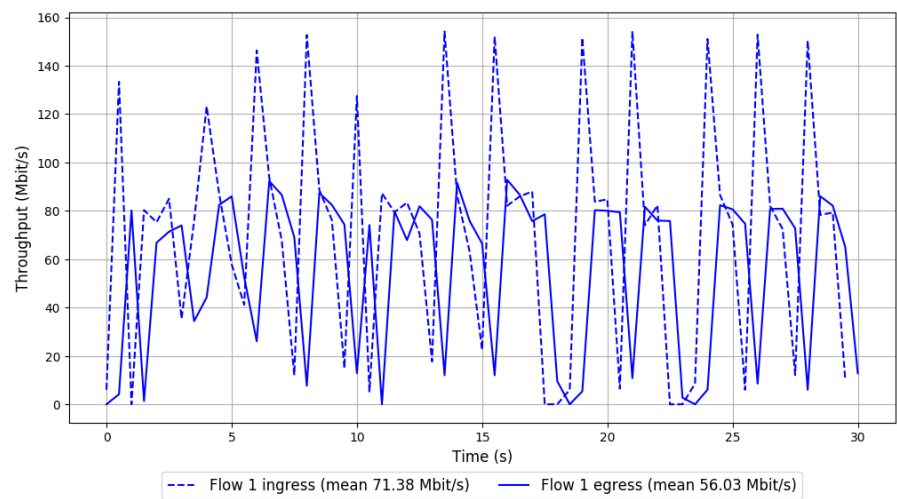


Run 5: Statistics of Verus

Start at: 2018-11-29 21:48:52
End at: 2018-11-29 21:49:22
Local clock offset: -29.921 ms
Remote clock offset: -2.168 ms

Below is generated by plot.py at 2018-11-29 22:06:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 56.03 Mbit/s
95th percentile per-packet one-way delay: 69.179 ms
Loss rate: 21.50%
-- Flow 1:
Average throughput: 56.03 Mbit/s
95th percentile per-packet one-way delay: 69.179 ms
Loss rate: 21.50%

Run 5: Report of Verus — Data Link

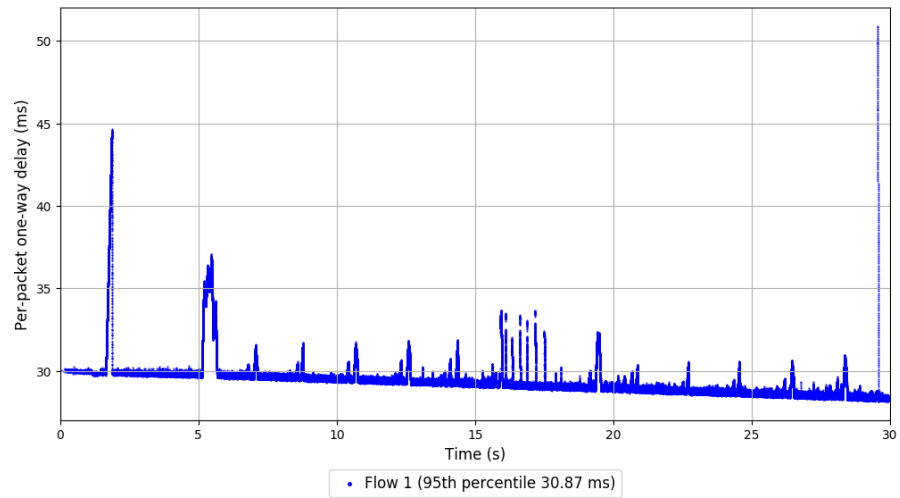
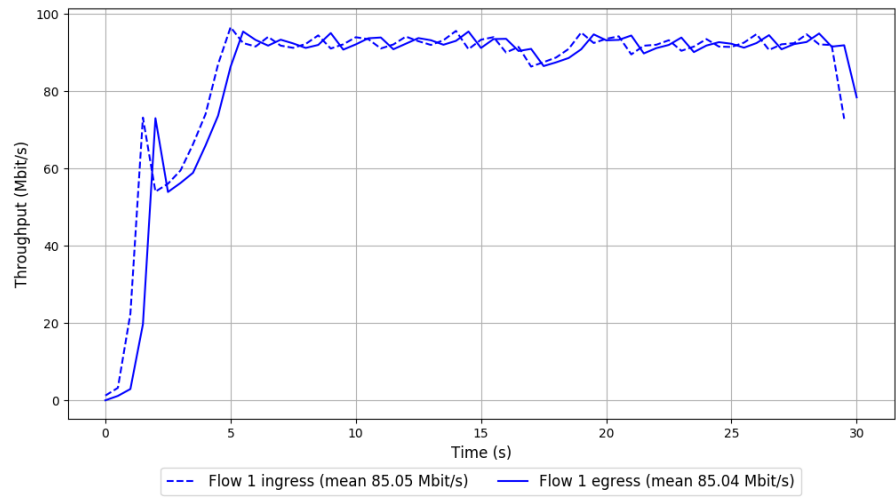


Run 1: Statistics of PCC-Vivace

Start at: 2018-11-29 20:27:20
End at: 2018-11-29 20:27:50
Local clock offset: -21.023 ms
Remote clock offset: -3.167 ms

Below is generated by plot.py at 2018-11-29 22:07:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.04 Mbit/s
95th percentile per-packet one-way delay: 30.873 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 85.04 Mbit/s
95th percentile per-packet one-way delay: 30.873 ms
Loss rate: 0.01%

Run 1: Report of PCC-Vivace — Data Link

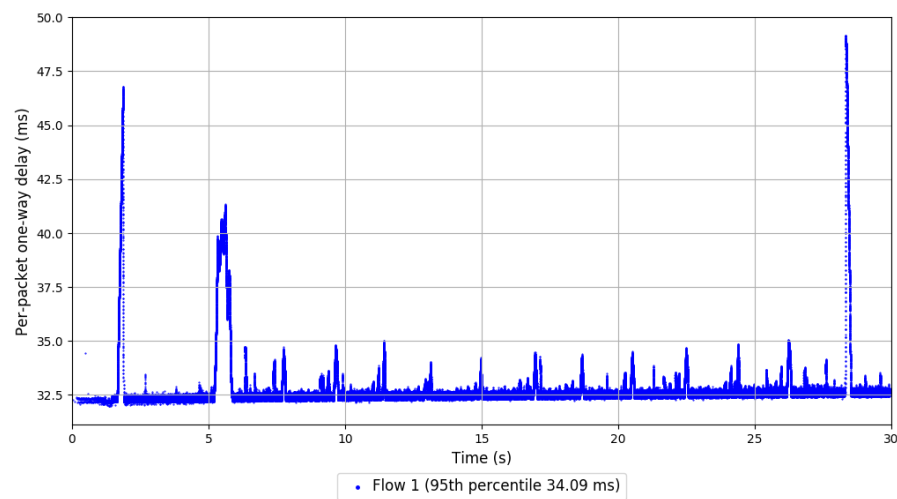
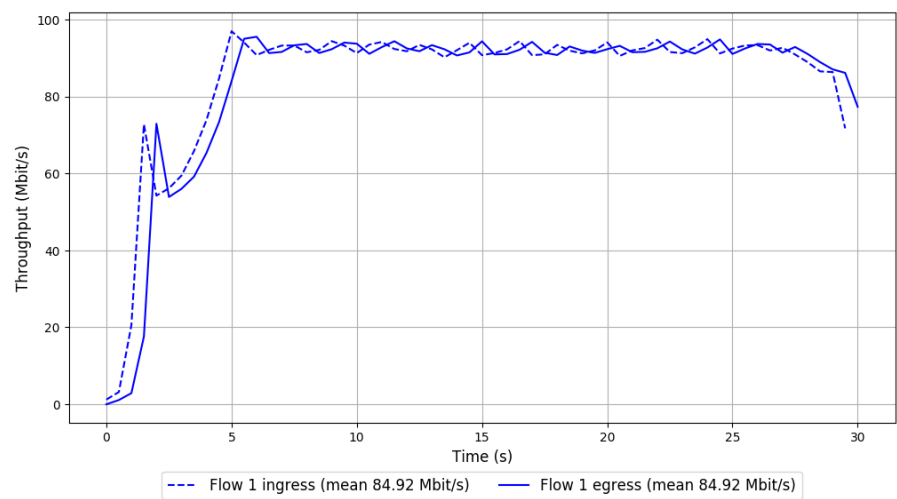


Run 2: Statistics of PCC-Vivace

Start at: 2018-11-29 20:48:03
End at: 2018-11-29 20:48:33
Local clock offset: -36.431 ms
Remote clock offset: -2.813 ms

Below is generated by plot.py at 2018-11-29 22:07:06
Datalink statistics
-- Total of 1 flow:
Average throughput: 84.92 Mbit/s
95th percentile per-packet one-way delay: 34.089 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.92 Mbit/s
95th percentile per-packet one-way delay: 34.089 ms
Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link

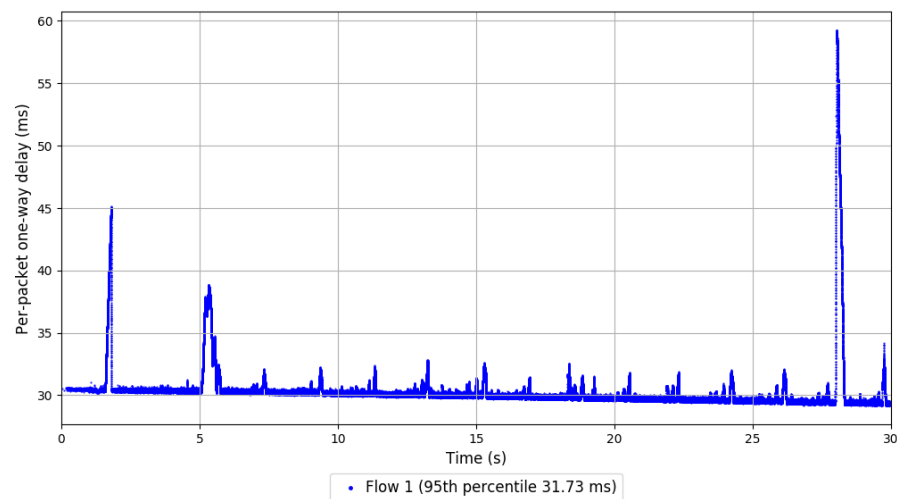
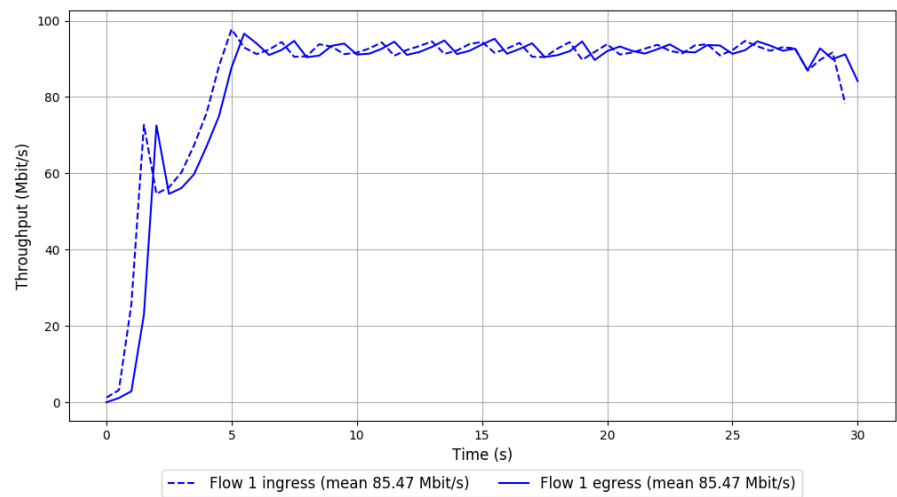


Run 3: Statistics of PCC-Vivace

Start at: 2018-11-29 21:08:38
End at: 2018-11-29 21:09:08
Local clock offset: -63.791 ms
Remote clock offset: -2.533 ms

Below is generated by plot.py at 2018-11-29 22:07:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.47 Mbit/s
95th percentile per-packet one-way delay: 31.725 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.47 Mbit/s
95th percentile per-packet one-way delay: 31.725 ms
Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link

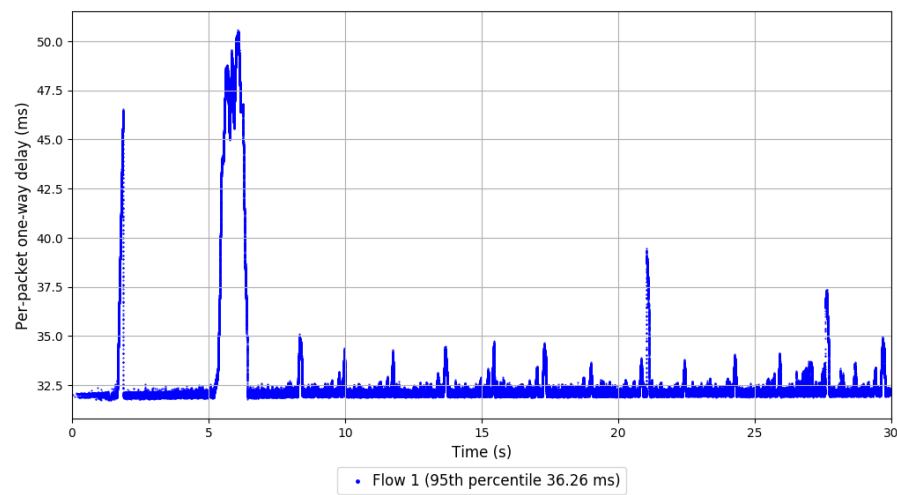
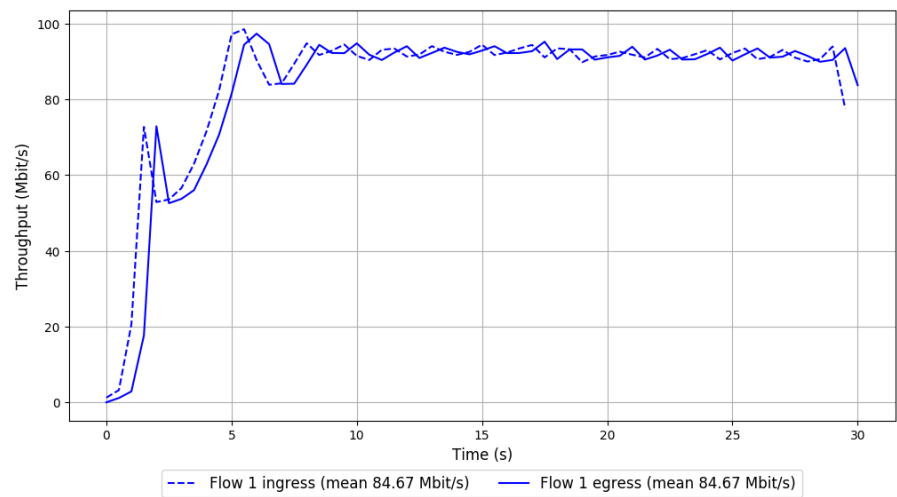


Run 4: Statistics of PCC-Vivace

Start at: 2018-11-29 21:29:25
End at: 2018-11-29 21:29:55
Local clock offset: -34.534 ms
Remote clock offset: -2.272 ms

Below is generated by plot.py at 2018-11-29 22:07:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 84.67 Mbit/s
95th percentile per-packet one-way delay: 36.261 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.67 Mbit/s
95th percentile per-packet one-way delay: 36.261 ms
Loss rate: 0.00%

Run 4: Report of PCC-Vivace — Data Link

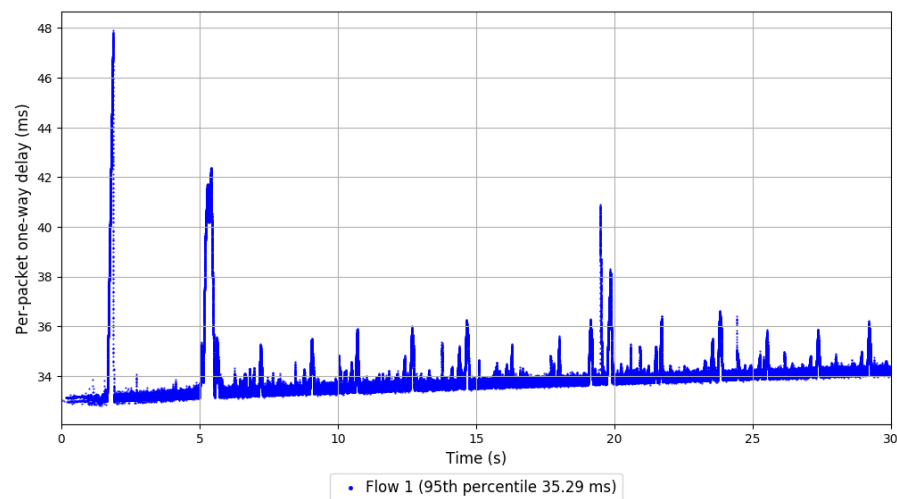
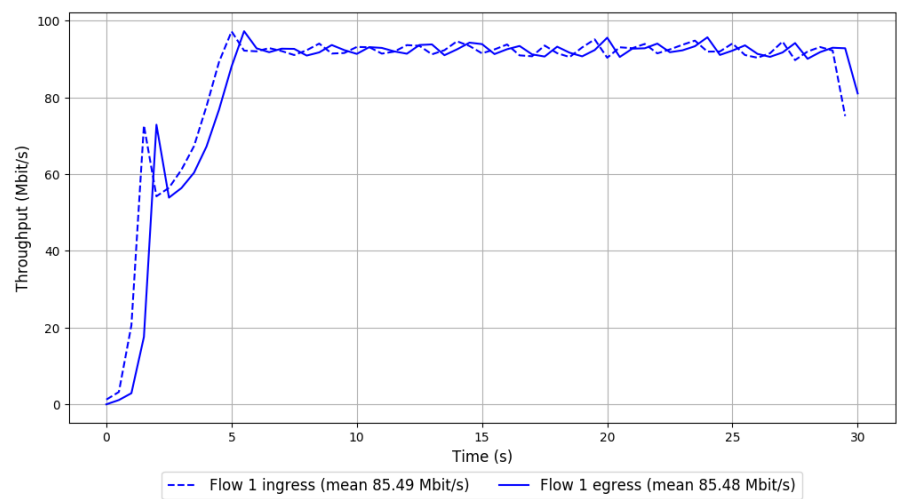


Run 5: Statistics of PCC-Vivace

Start at: 2018-11-29 21:50:01
End at: 2018-11-29 21:50:31
Local clock offset: -26.548 ms
Remote clock offset: -2.067 ms

Below is generated by plot.py at 2018-11-29 22:07:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.48 Mbit/s
95th percentile per-packet one-way delay: 35.290 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 85.48 Mbit/s
95th percentile per-packet one-way delay: 35.290 ms
Loss rate: 0.01%

Run 5: Report of PCC-Vivace — Data Link

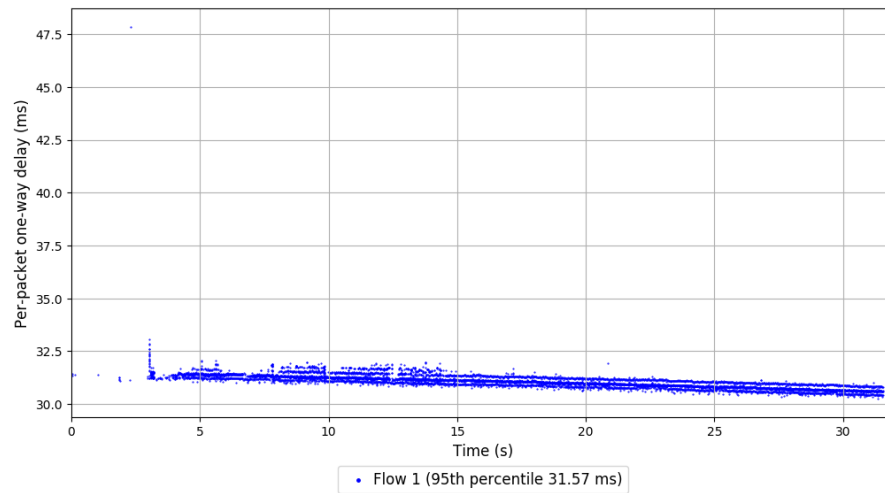
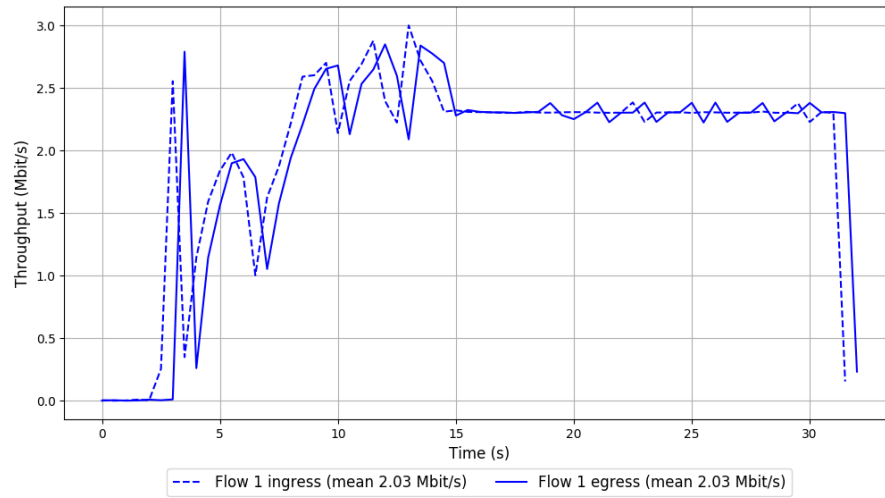


Run 1: Statistics of WebRTC media

Start at: 2018-11-29 20:25:04
End at: 2018-11-29 20:25:34
Local clock offset: -16.569 ms
Remote clock offset: -3.275 ms

Below is generated by plot.py at 2018-11-29 22:07:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 31.568 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 31.568 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

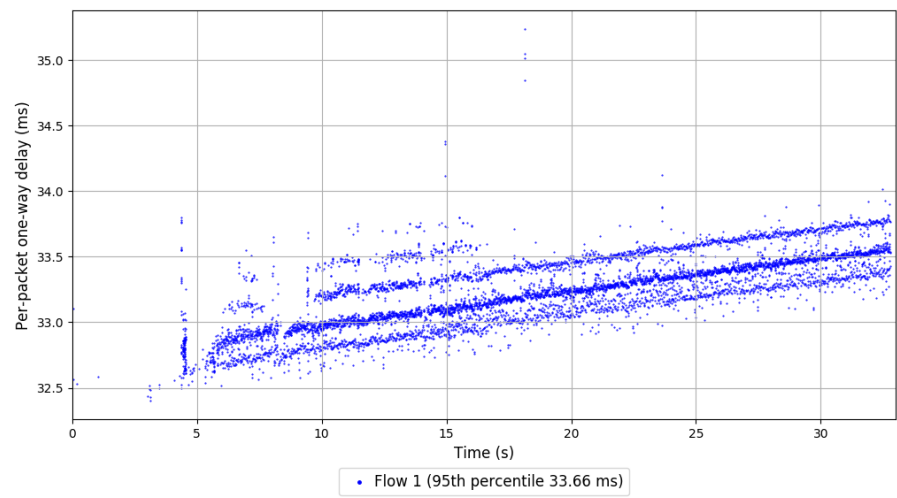
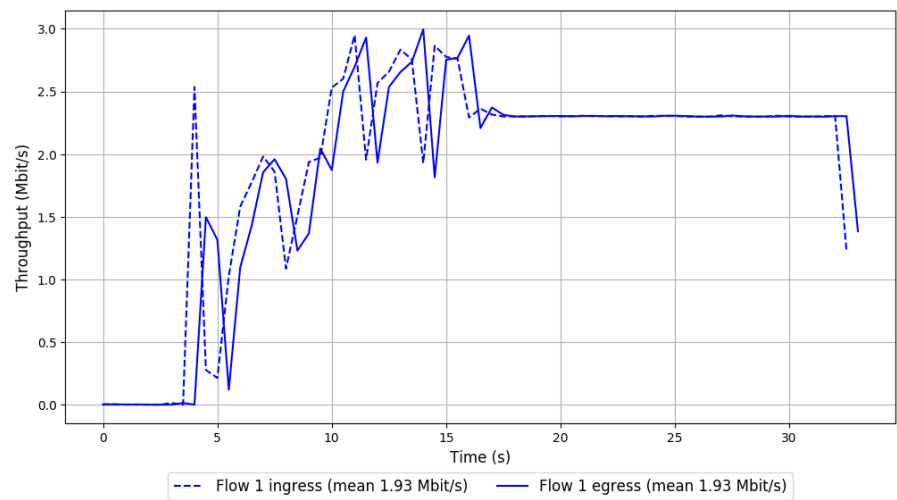


Run 2: Statistics of WebRTC media

Start at: 2018-11-29 20:45:47
End at: 2018-11-29 20:46:17
Local clock offset: -39.471 ms
Remote clock offset: -2.809 ms

Below is generated by plot.py at 2018-11-29 22:07:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 33.662 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 33.662 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

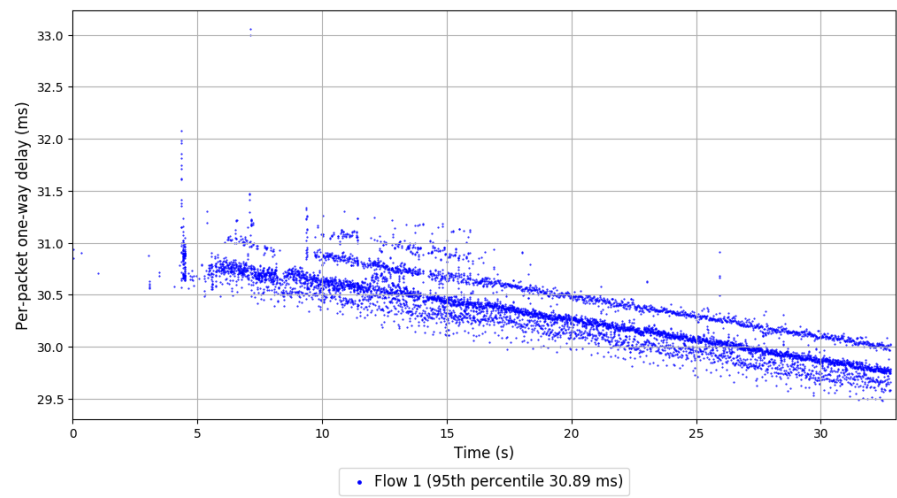
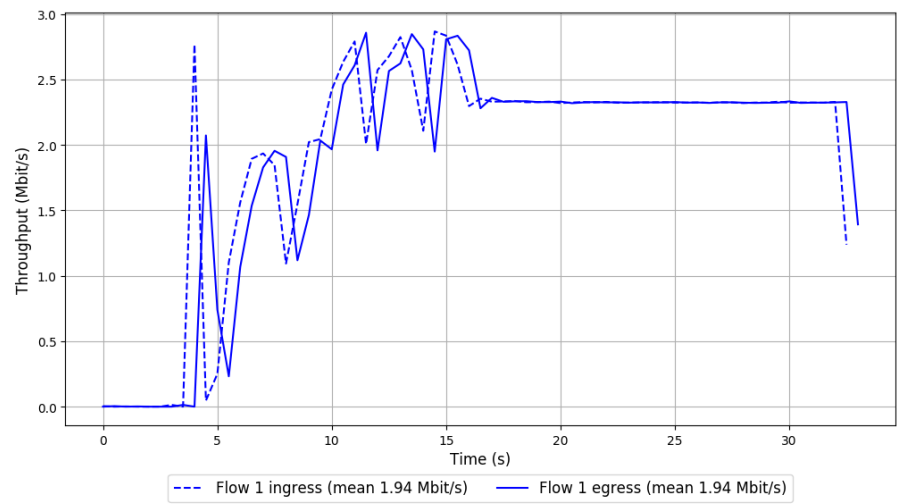


Run 3: Statistics of WebRTC media

Start at: 2018-11-29 21:06:22
End at: 2018-11-29 21:06:52
Local clock offset: -58.739 ms
Remote clock offset: -2.472 ms

Below is generated by plot.py at 2018-11-29 22:07:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 30.891 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 30.891 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

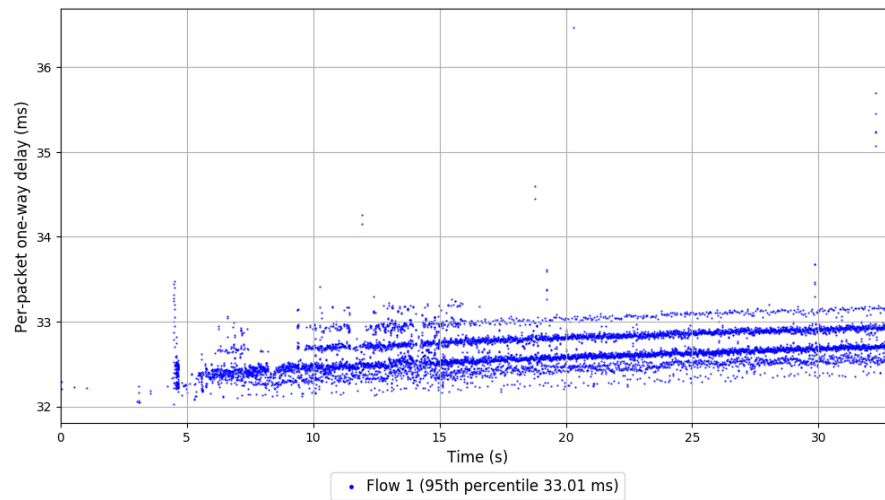
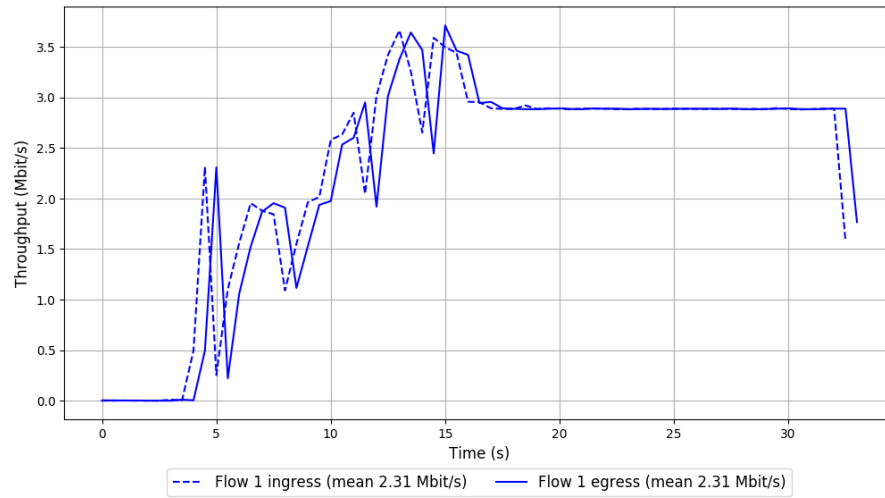


Run 4: Statistics of WebRTC media

Start at: 2018-11-29 21:27:09
End at: 2018-11-29 21:27:39
Local clock offset: -35.74 ms
Remote clock offset: -2.197 ms

Below is generated by plot.py at 2018-11-29 22:07:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 33.008 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 33.008 ms
Loss rate: 0.05%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-11-29 21:47:46

End at: 2018-11-29 21:48:16

Local clock offset: -33.5 ms

Remote clock offset: -2.19 ms

Below is generated by plot.py at 2018-11-29 22:07:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 35.251 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 35.251 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

