

Pantheon Report

Generated at 2018-11-15 10:06:30 (UTC).

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

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:

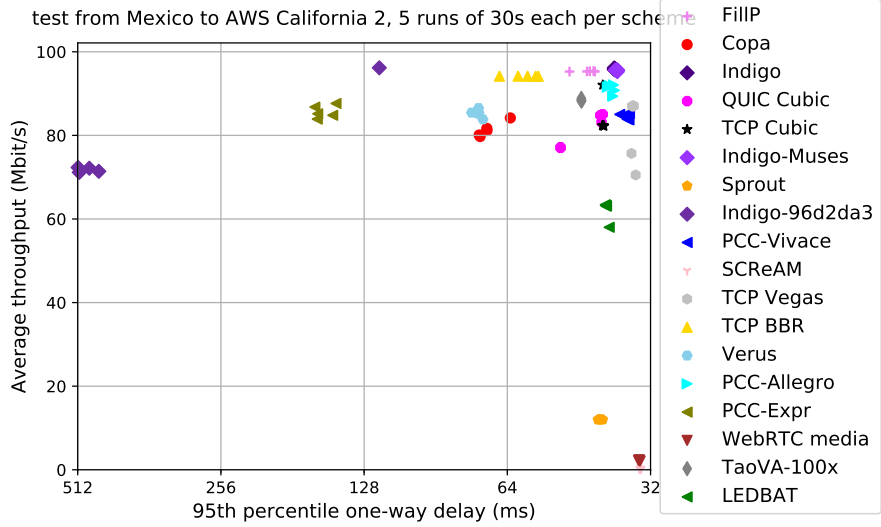
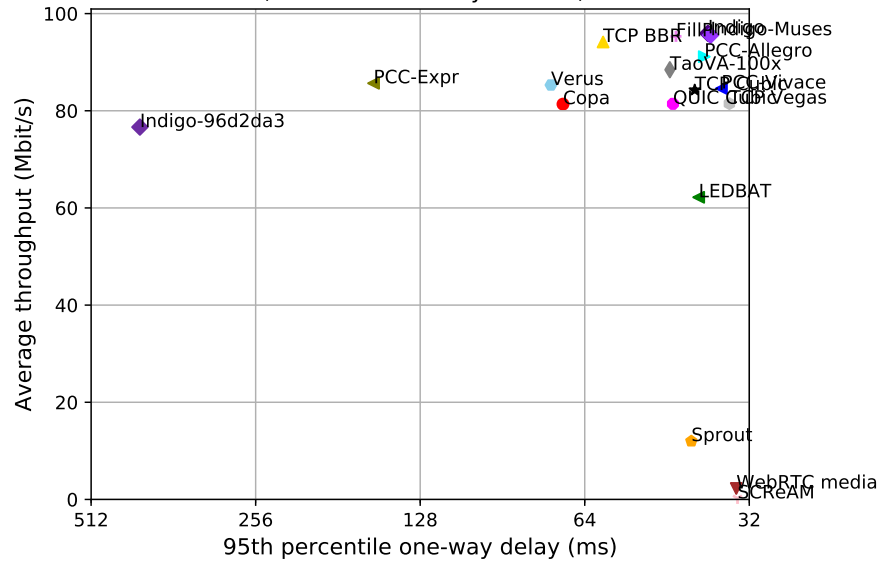
```
Linux 4.15.0-1023-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ 794ca3866981572cb73700a276691acf79c60f2b
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
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 Mexico to AWS California 2, 5 runs of 30s each per scheme
(mean of all runs by scheme)



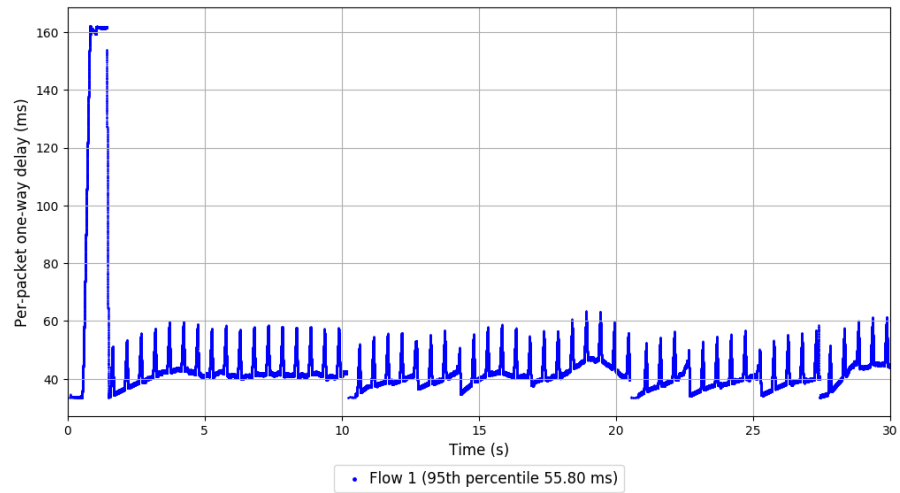
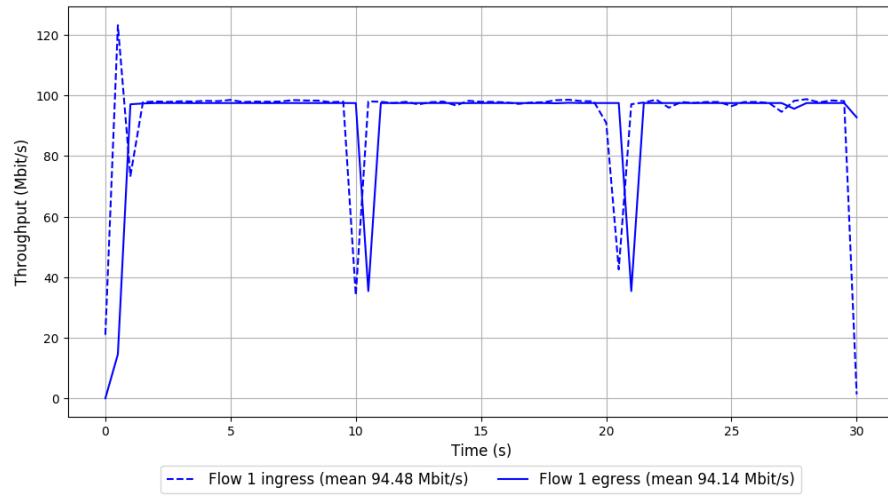
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	94.16	59.24	0.73
Copa	5	81.37	70.14	0.30
TCP Cubic	5	84.26	40.27	0.25
FillP	5	95.32	43.58	0.24
Indigo	5	95.94	38.09	0.23
Indigo-96d2da3	5	76.64	416.90	3.02
LEDBAT	5	62.19	39.61	0.21
Indigo-Muses	5	95.55	37.68	0.23
PCC-Allegro	5	91.14	38.68	0.24
PCC-Expr	5	85.66	155.82	0.36
QUIC Cubic	5	81.43	44.13	0.29
SCReAM	5	0.21	33.63	0.26
Sprout	5	12.00	40.84	0.20
TaoVA-100x	5	88.44	44.72	0.23
TCP Vegas	5	81.47	34.80	0.27
Verus	5	85.30	73.79	0.42
PCC-Vivace	5	84.59	35.99	0.24
WebRTC media	5	2.25	33.80	0.22

Run 1: Statistics of TCP BBR

Start at: 2018-11-15 08:07:21
End at: 2018-11-15 08:07:51
Local clock offset: -0.052 ms
Remote clock offset: -7.071 ms

Below is generated by plot.py at 2018-11-15 09:55:24
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 55.803 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 55.803 ms
Loss rate: 0.57%

Run 1: Report of TCP BBR — Data Link

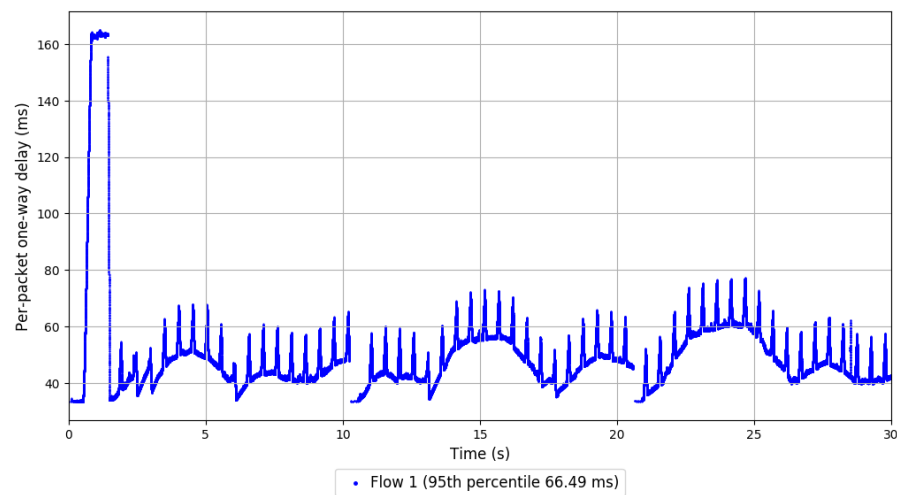
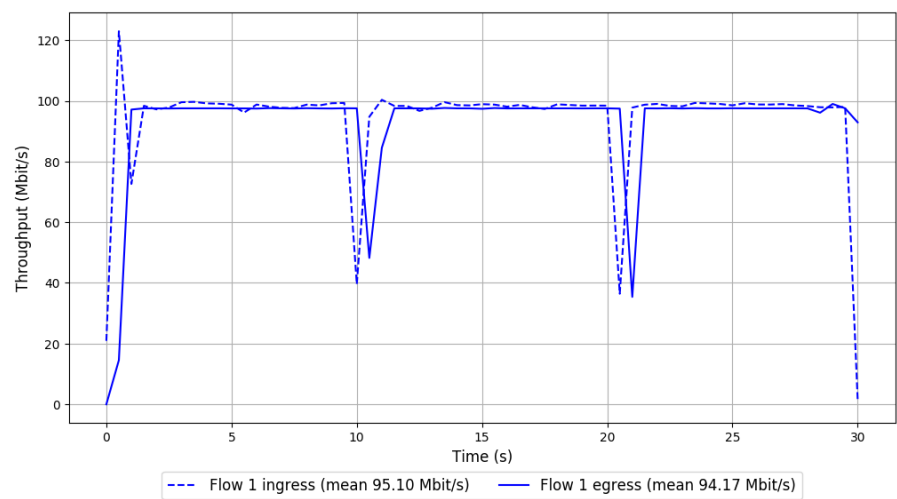


Run 2: Statistics of TCP BBR

Start at: 2018-11-15 08:31:11
End at: 2018-11-15 08:31:41
Local clock offset: -0.121 ms
Remote clock offset: -6.703 ms

Below is generated by plot.py at 2018-11-15 09:55:24
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 66.486 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 66.486 ms
Loss rate: 1.19%

Run 2: Report of TCP BBR — Data Link

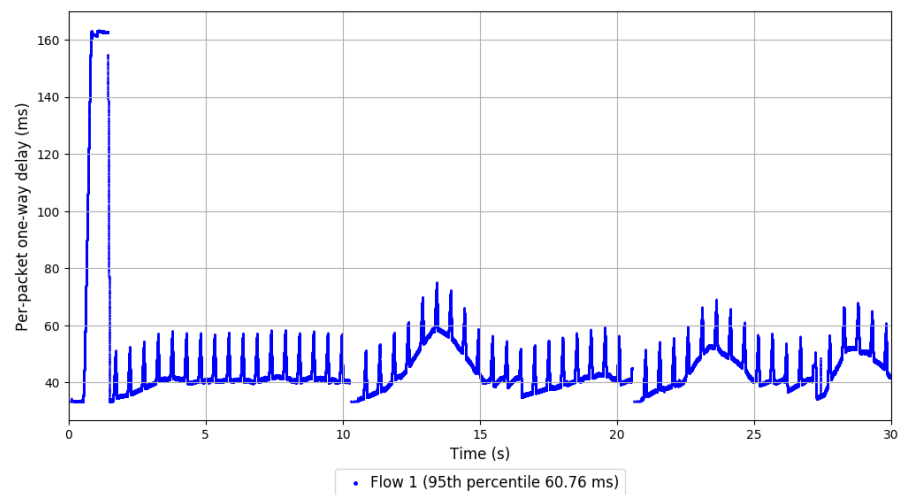
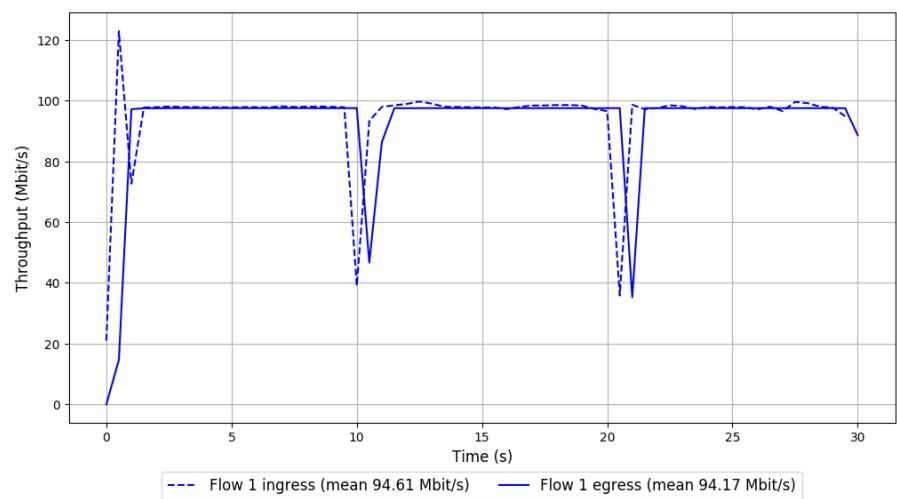


Run 3: Statistics of TCP BBR

Start at: 2018-11-15 08:55:04
End at: 2018-11-15 08:55:34
Local clock offset: -0.167 ms
Remote clock offset: -5.901 ms

Below is generated by plot.py at 2018-11-15 09:55:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 60.757 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 60.757 ms
Loss rate: 0.68%

Run 3: Report of TCP BBR — Data Link

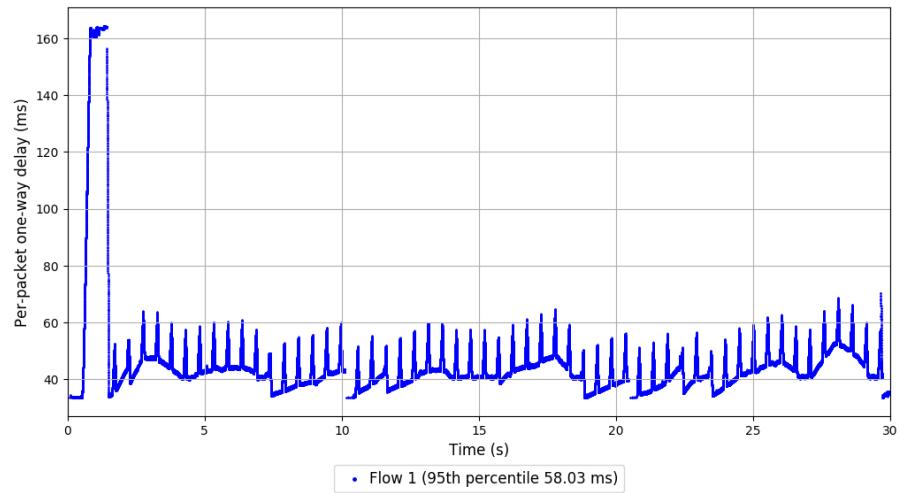
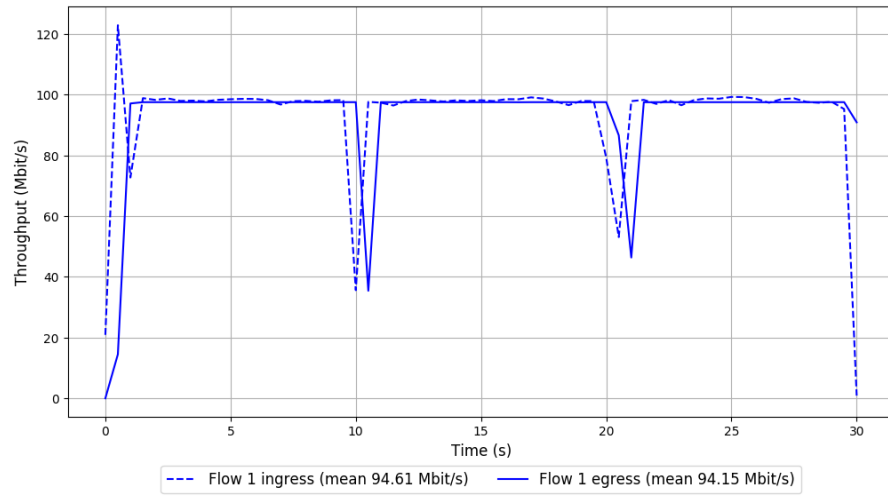


Run 4: Statistics of TCP BBR

Start at: 2018-11-15 09:18:56
End at: 2018-11-15 09:19:26
Local clock offset: -0.034 ms
Remote clock offset: -5.472 ms

Below is generated by plot.py at 2018-11-15 09:55:26
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.15 Mbit/s
95th percentile per-packet one-way delay: 58.032 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 94.15 Mbit/s
95th percentile per-packet one-way delay: 58.032 ms
Loss rate: 0.70%

Run 4: Report of TCP BBR — Data Link

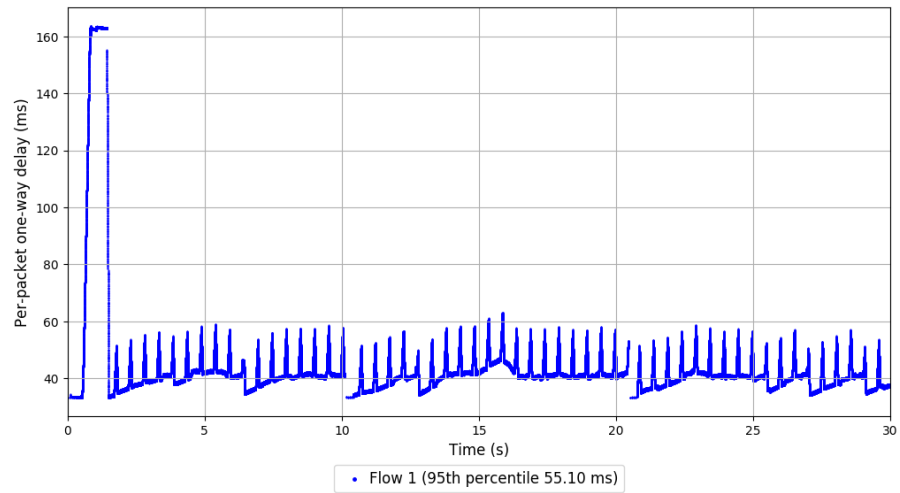
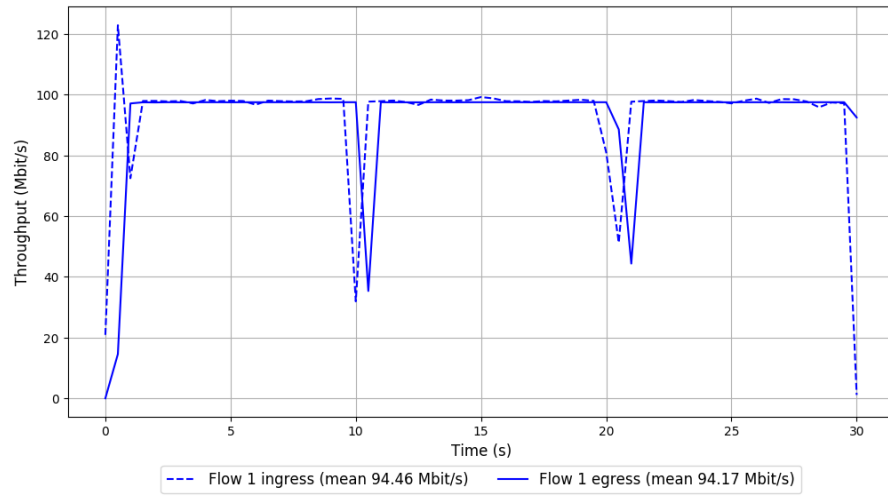


Run 5: Statistics of TCP BBR

Start at: 2018-11-15 09:42:50
End at: 2018-11-15 09:43:20
Local clock offset: -0.057 ms
Remote clock offset: -4.798 ms

Below is generated by plot.py at 2018-11-15 09:55:26
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 55.099 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 55.099 ms
Loss rate: 0.52%

Run 5: Report of TCP BBR — Data Link

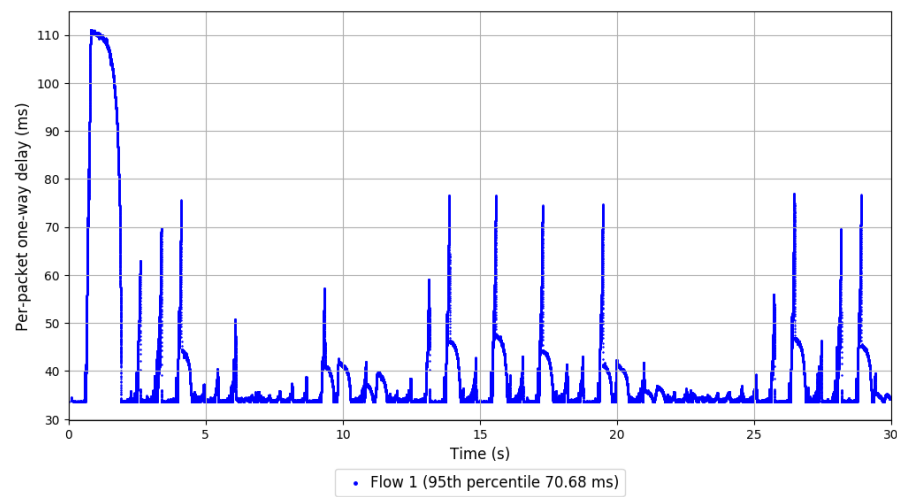
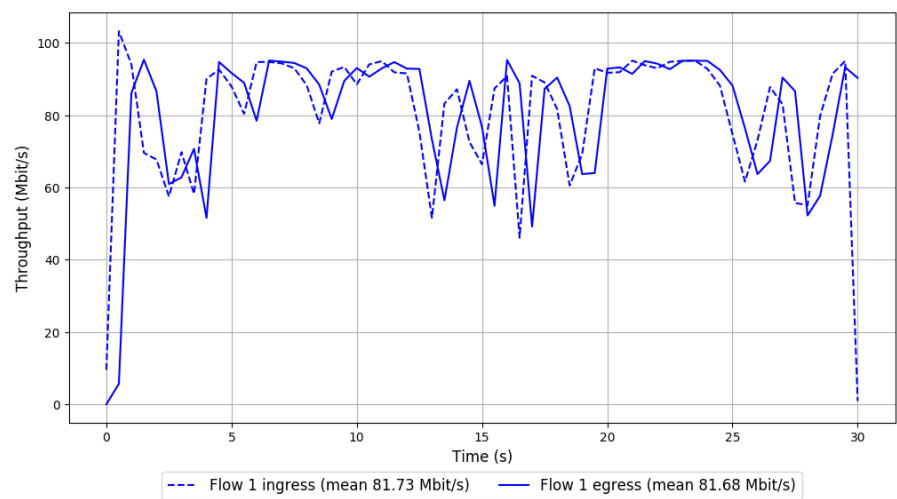


Run 1: Statistics of Copa

Start at: 2018-11-15 07:57:59
End at: 2018-11-15 07:58:29
Local clock offset: 0.236 ms
Remote clock offset: -6.945 ms

Below is generated by plot.py at 2018-11-15 09:56:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 81.68 Mbit/s
95th percentile per-packet one-way delay: 70.681 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 81.68 Mbit/s
95th percentile per-packet one-way delay: 70.681 ms
Loss rate: 0.27%

Run 1: Report of Copa — Data Link

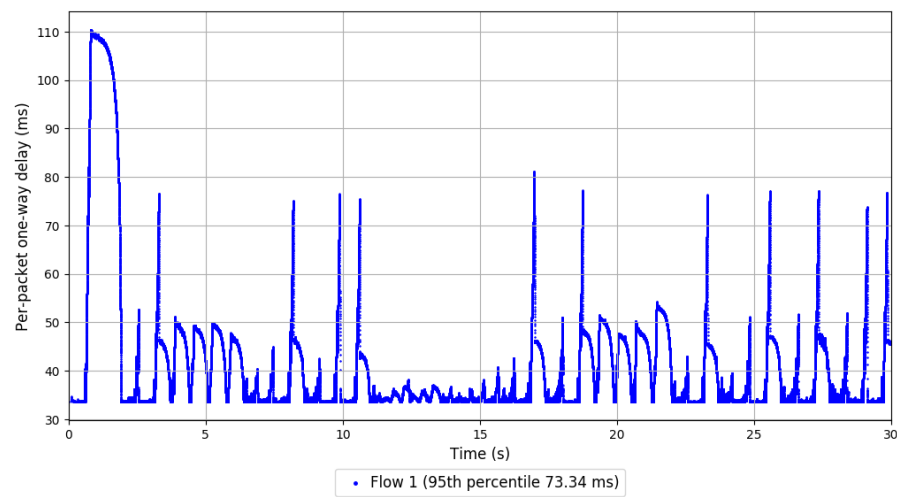
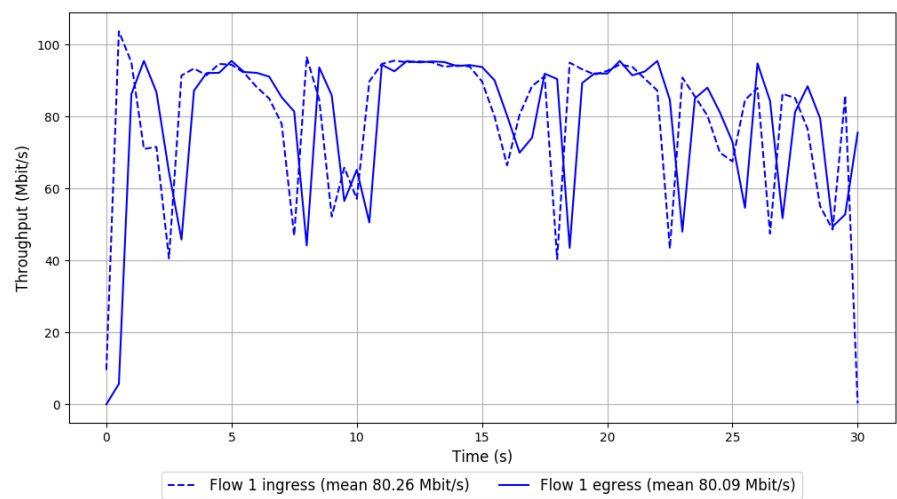


Run 2: Statistics of Copa

Start at: 2018-11-15 08:21:46
End at: 2018-11-15 08:22:16
Local clock offset: -0.061 ms
Remote clock offset: -6.935 ms

Below is generated by plot.py at 2018-11-15 09:56:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 80.09 Mbit/s
95th percentile per-packet one-way delay: 73.342 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 80.09 Mbit/s
95th percentile per-packet one-way delay: 73.342 ms
Loss rate: 0.43%

Run 2: Report of Copa — Data Link

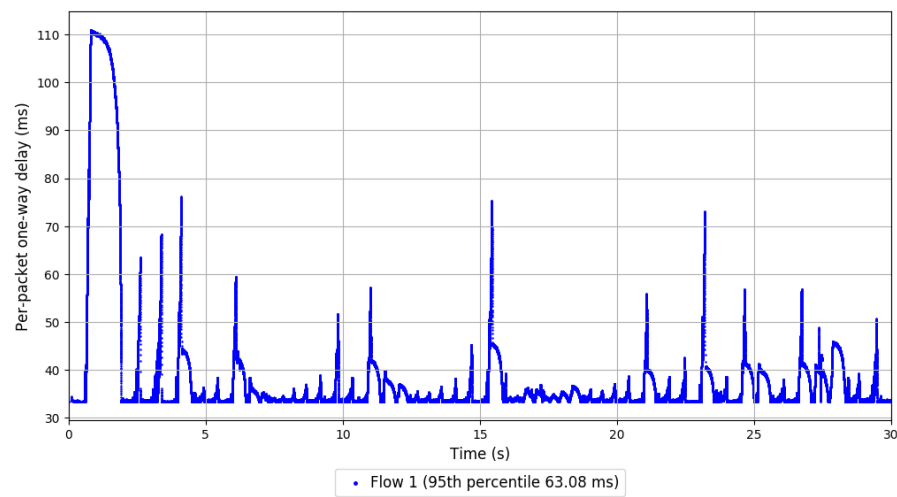
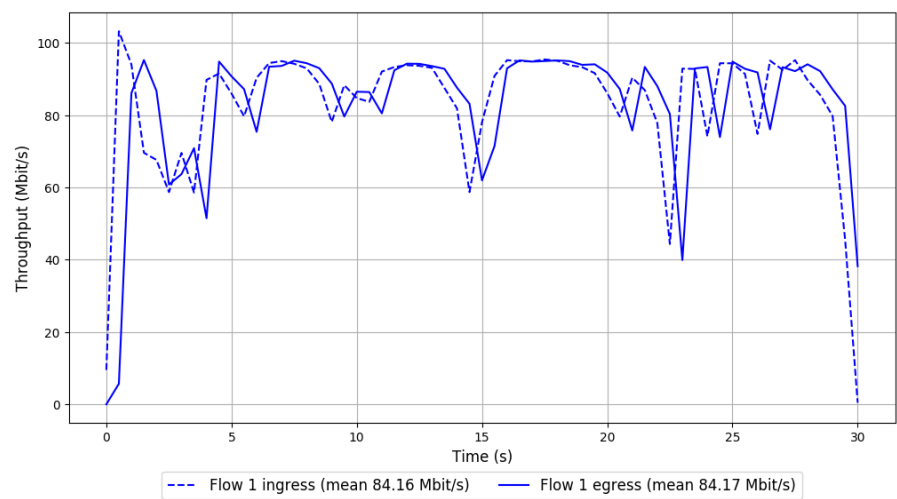


Run 3: Statistics of Copa

Start at: 2018-11-15 08:45:40
End at: 2018-11-15 08:46:10
Local clock offset: -0.189 ms
Remote clock offset: -6.347 ms

Below is generated by plot.py at 2018-11-15 09:56:19
Datalink statistics
-- Total of 1 flow:
Average throughput: 84.17 Mbit/s
95th percentile per-packet one-way delay: 63.079 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 84.17 Mbit/s
95th percentile per-packet one-way delay: 63.079 ms
Loss rate: 0.20%

Run 3: Report of Copa — Data Link

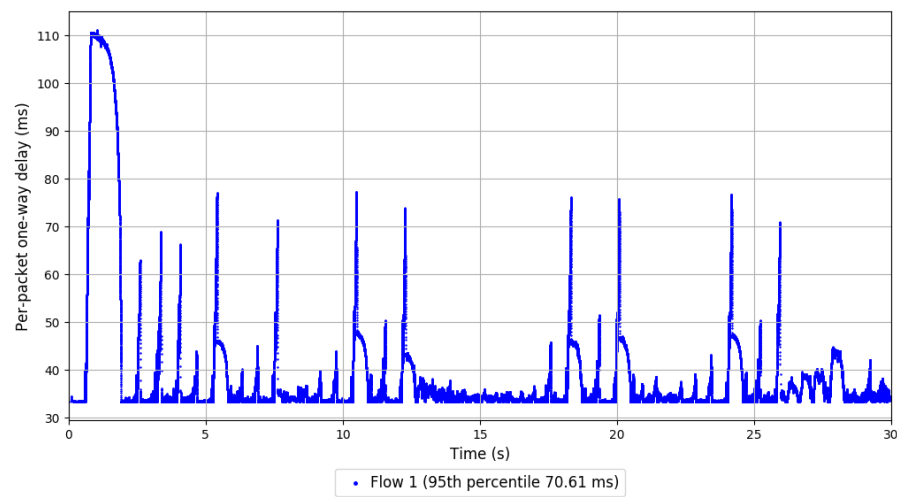
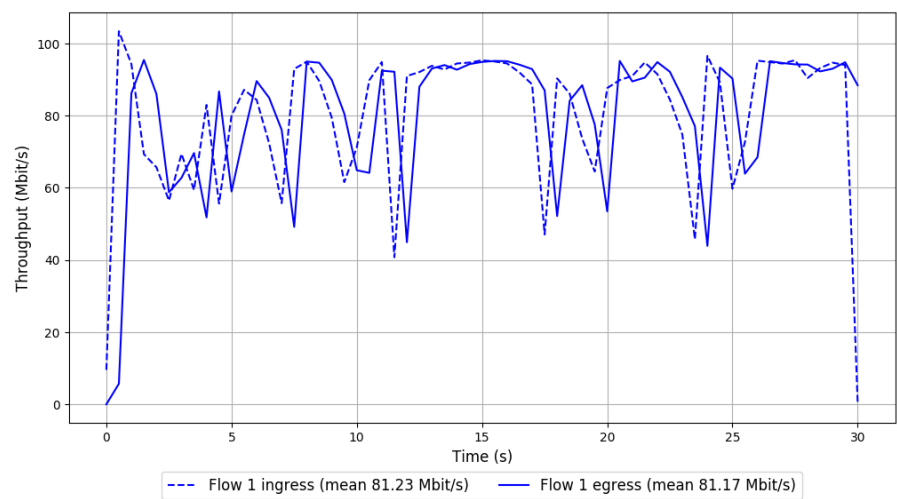


Run 4: Statistics of Copa

Start at: 2018-11-15 09:09:33
End at: 2018-11-15 09:10:03
Local clock offset: -0.092 ms
Remote clock offset: -5.495 ms

Below is generated by plot.py at 2018-11-15 09:57:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 81.17 Mbit/s
95th percentile per-packet one-way delay: 70.611 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 81.17 Mbit/s
95th percentile per-packet one-way delay: 70.611 ms
Loss rate: 0.29%

Run 4: Report of Copa — Data Link

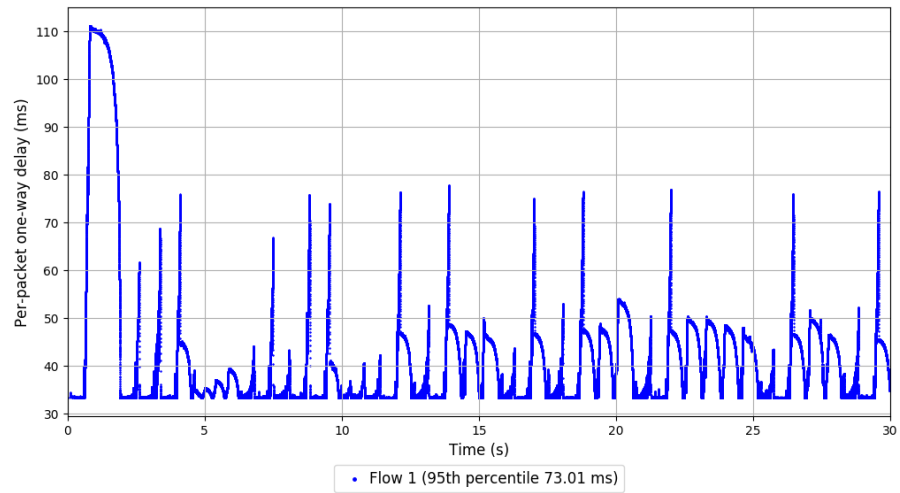
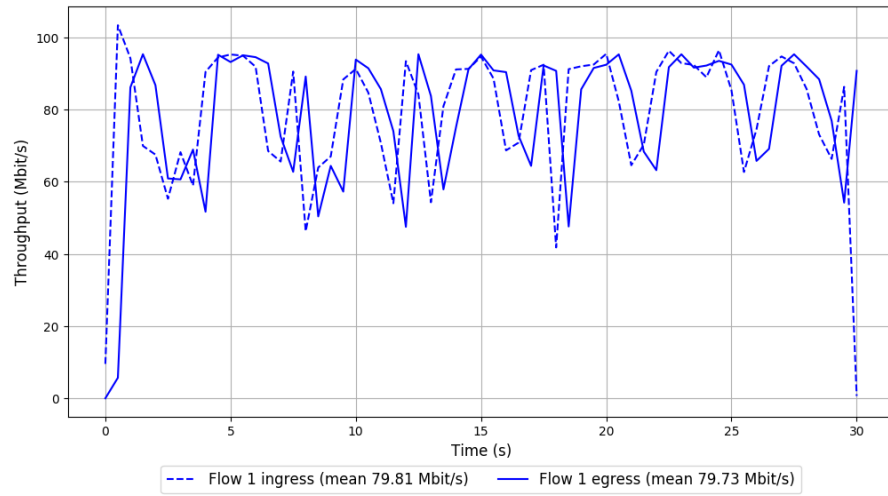


Run 5: Statistics of Copa

Start at: 2018-11-15 09:33:27
End at: 2018-11-15 09:33:57
Local clock offset: -0.049 ms
Remote clock offset: -4.961 ms

Below is generated by plot.py at 2018-11-15 09:57:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 79.73 Mbit/s
95th percentile per-packet one-way delay: 73.009 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 79.73 Mbit/s
95th percentile per-packet one-way delay: 73.009 ms
Loss rate: 0.31%

Run 5: Report of Copa — Data Link

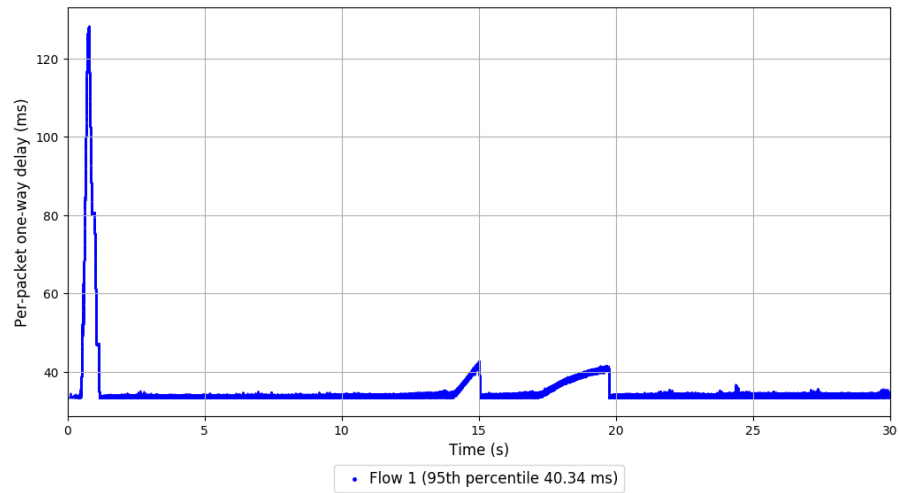
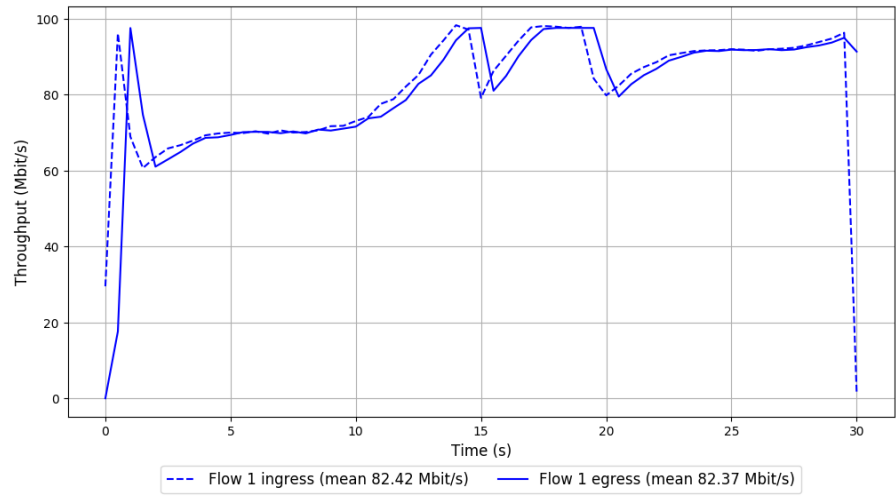


Run 1: Statistics of TCP Cubic

Start at: 2018-11-15 07:54:05
End at: 2018-11-15 07:54:35
Local clock offset: 0.254 ms
Remote clock offset: -6.778 ms

Below is generated by plot.py at 2018-11-15 09:57:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 82.37 Mbit/s
95th percentile per-packet one-way delay: 40.341 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 82.37 Mbit/s
95th percentile per-packet one-way delay: 40.341 ms
Loss rate: 0.27%

Run 1: Report of TCP Cubic — Data Link

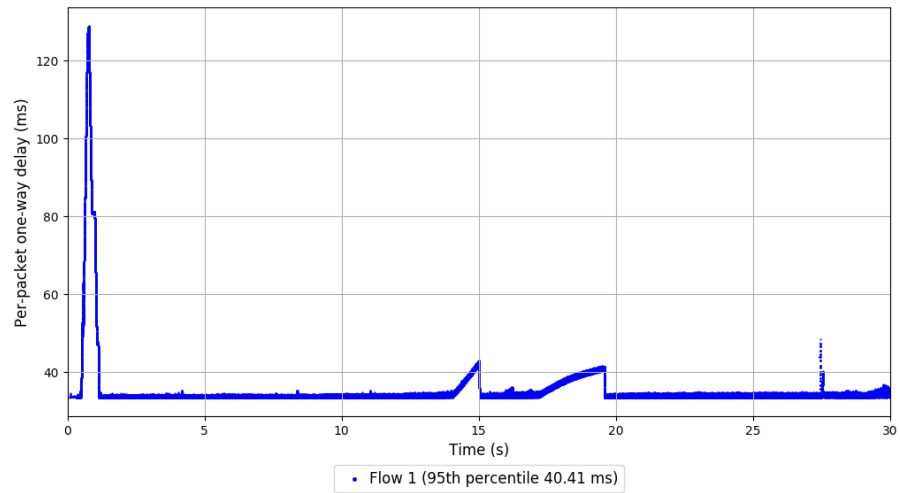
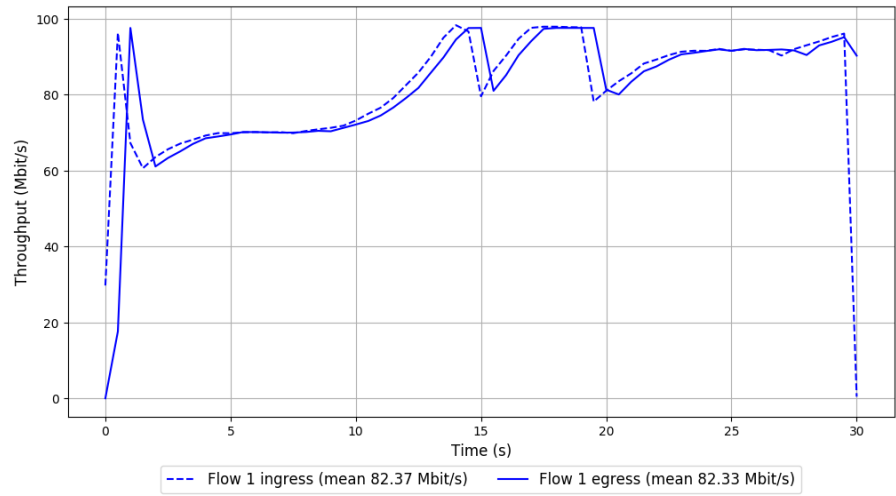


Run 2: Statistics of TCP Cubic

Start at: 2018-11-15 08:17:52
End at: 2018-11-15 08:18:23
Local clock offset: -0.053 ms
Remote clock offset: -6.944 ms

Below is generated by plot.py at 2018-11-15 09:57:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 82.33 Mbit/s
95th percentile per-packet one-way delay: 40.407 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 82.33 Mbit/s
95th percentile per-packet one-way delay: 40.407 ms
Loss rate: 0.26%

Run 2: Report of TCP Cubic — Data Link

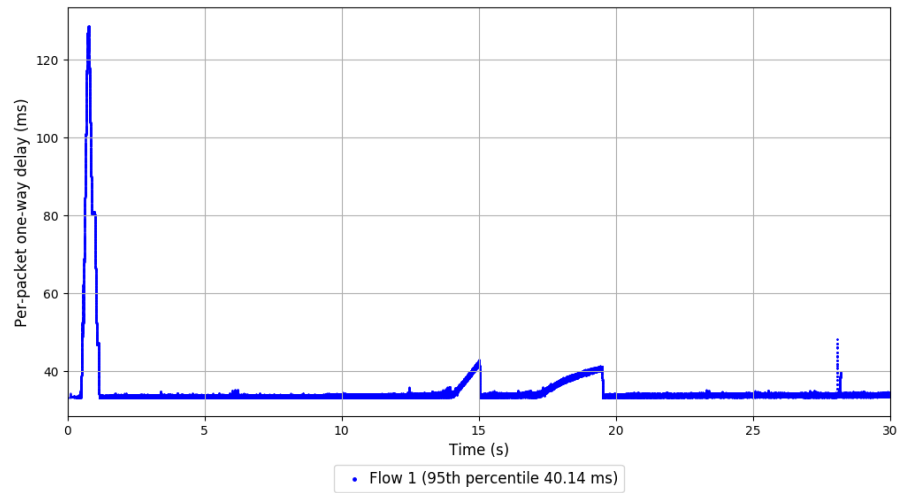
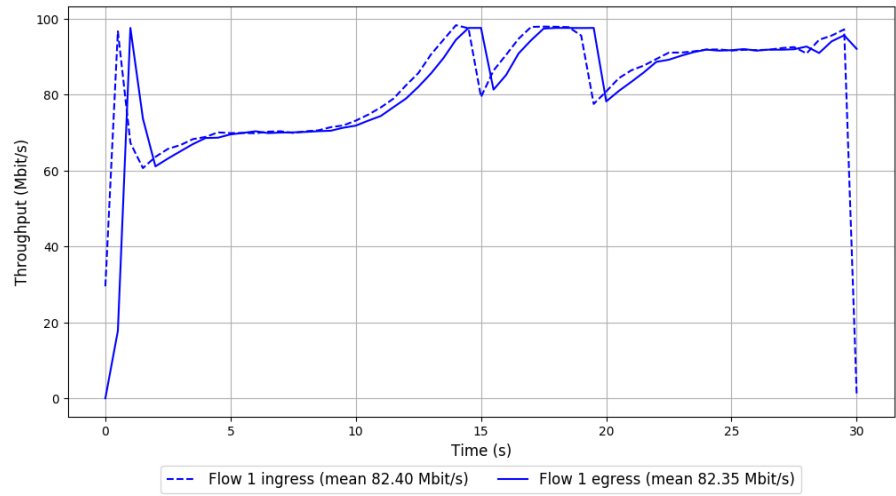


Run 3: Statistics of TCP Cubic

Start at: 2018-11-15 08:41:45
End at: 2018-11-15 08:42:15
Local clock offset: -0.169 ms
Remote clock offset: -6.483 ms

Below is generated by plot.py at 2018-11-15 09:57:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 82.35 Mbit/s
95th percentile per-packet one-way delay: 40.141 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 82.35 Mbit/s
95th percentile per-packet one-way delay: 40.141 ms
Loss rate: 0.26%

Run 3: Report of TCP Cubic — Data Link

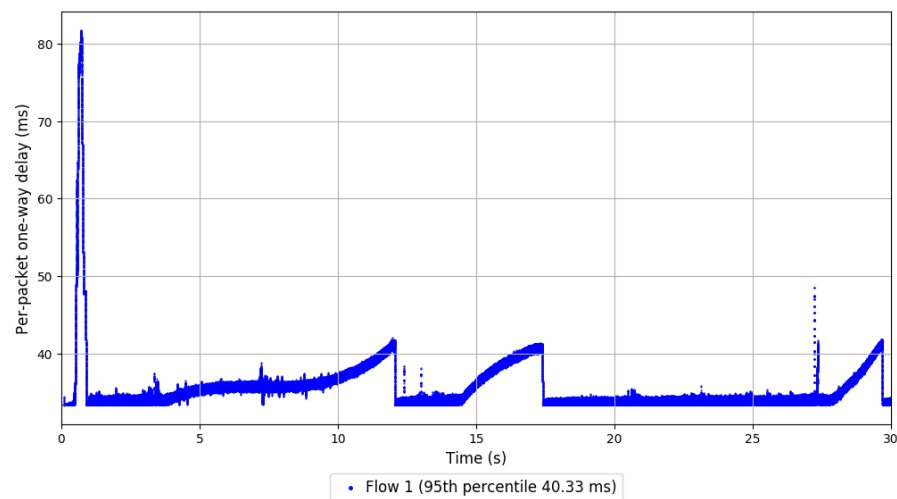
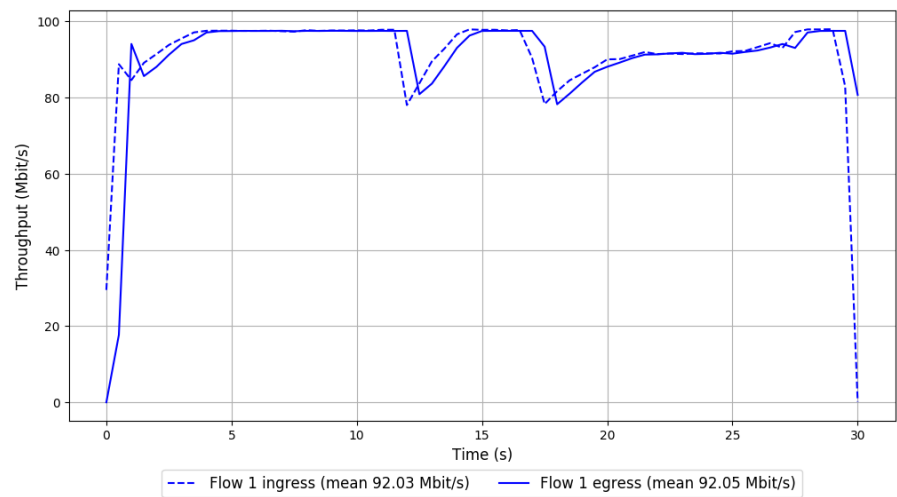


Run 4: Statistics of TCP Cubic

Start at: 2018-11-15 09:05:38
End at: 2018-11-15 09:06:08
Local clock offset: -0.107 ms
Remote clock offset: -5.612 ms

Below is generated by plot.py at 2018-11-15 09:57:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 92.05 Mbit/s
95th percentile per-packet one-way delay: 40.327 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 92.05 Mbit/s
95th percentile per-packet one-way delay: 40.327 ms
Loss rate: 0.19%

Run 4: Report of TCP Cubic — Data Link

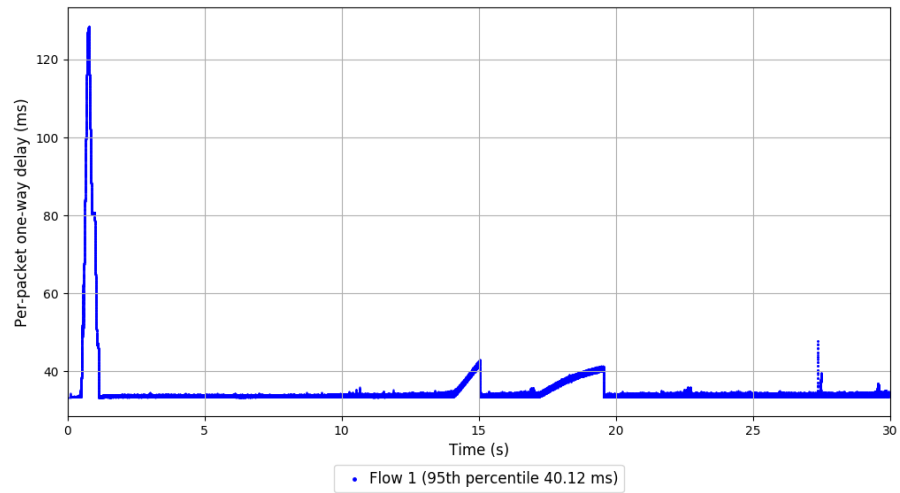
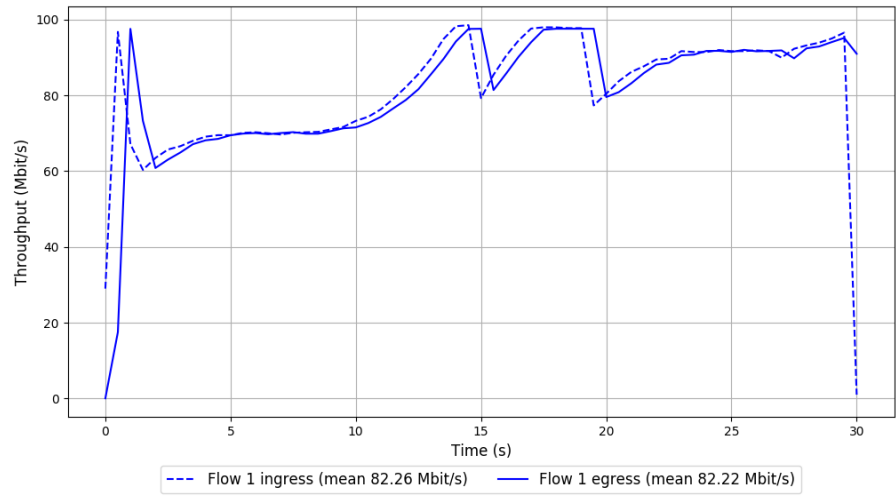


Run 5: Statistics of TCP Cubic

Start at: 2018-11-15 09:29:31
End at: 2018-11-15 09:30:01
Local clock offset: -0.034 ms
Remote clock offset: -5.054 ms

Below is generated by plot.py at 2018-11-15 09:57:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 82.22 Mbit/s
95th percentile per-packet one-way delay: 40.121 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 82.22 Mbit/s
95th percentile per-packet one-way delay: 40.121 ms
Loss rate: 0.26%

Run 5: Report of TCP Cubic — Data Link

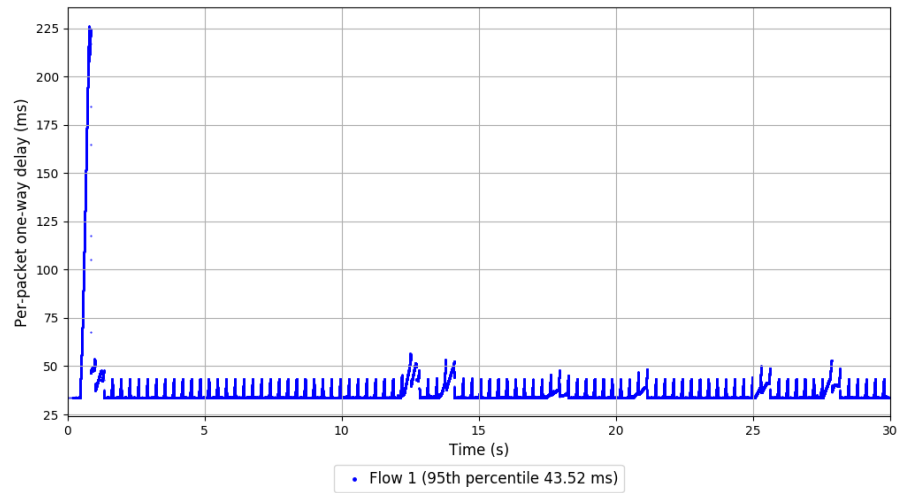
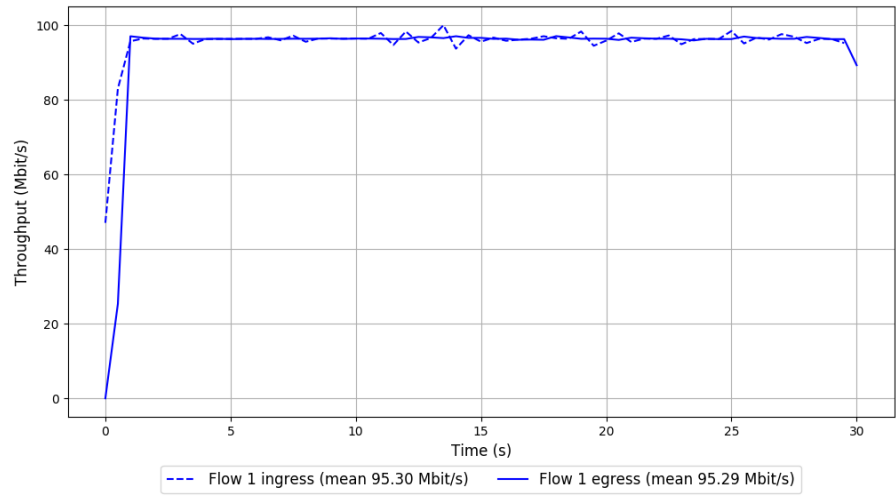


Run 1: Statistics of FillP

Start at: 2018-11-15 08:16:34
End at: 2018-11-15 08:17:04
Local clock offset: -0.071 ms
Remote clock offset: -6.961 ms

Below is generated by plot.py at 2018-11-15 09:57:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.29 Mbit/s
95th percentile per-packet one-way delay: 43.521 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 95.29 Mbit/s
95th percentile per-packet one-way delay: 43.521 ms
Loss rate: 0.22%

Run 1: Report of FillP — Data Link

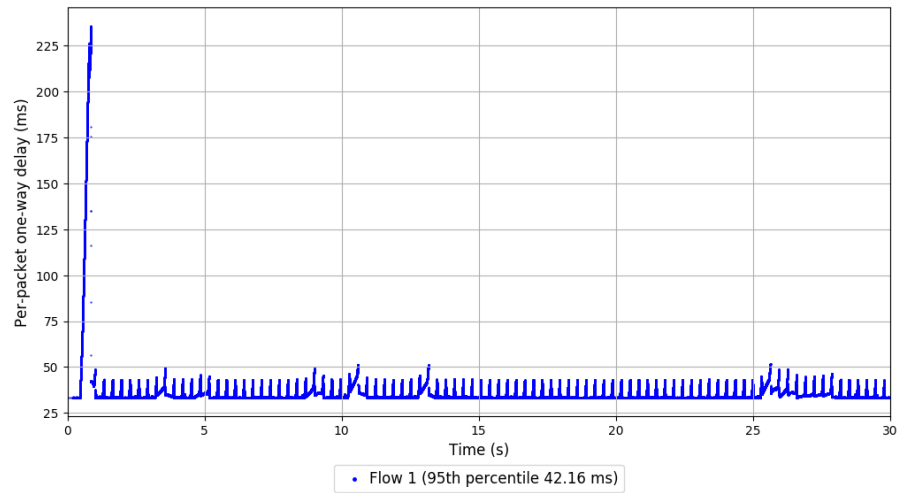
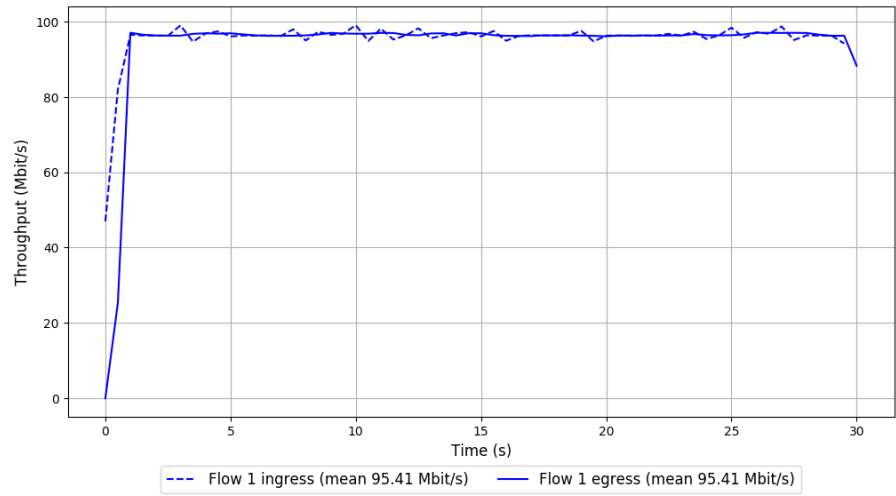


Run 2: Statistics of FillP

Start at: 2018-11-15 08:40:27
End at: 2018-11-15 08:40:57
Local clock offset: -0.172 ms
Remote clock offset: -6.581 ms

Below is generated by plot.py at 2018-11-15 09:57:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.41 Mbit/s
95th percentile per-packet one-way delay: 42.165 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 95.41 Mbit/s
95th percentile per-packet one-way delay: 42.165 ms
Loss rate: 0.22%

Run 2: Report of FillP — Data Link

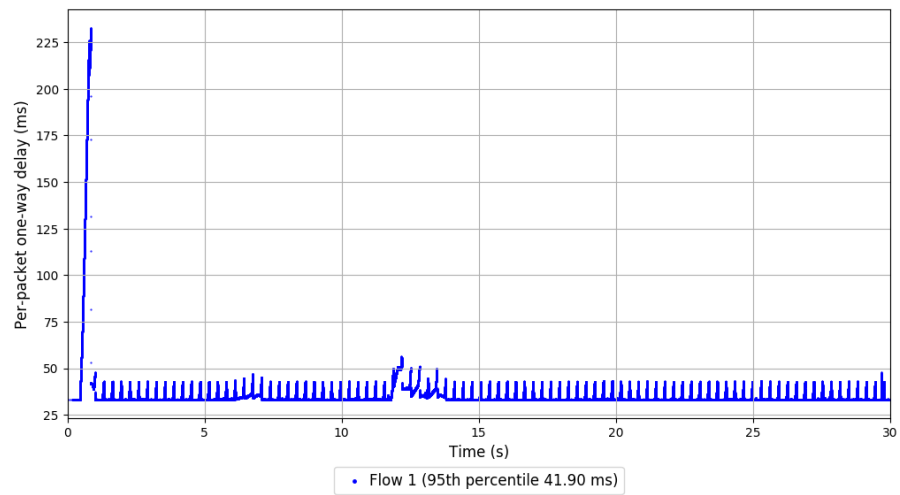
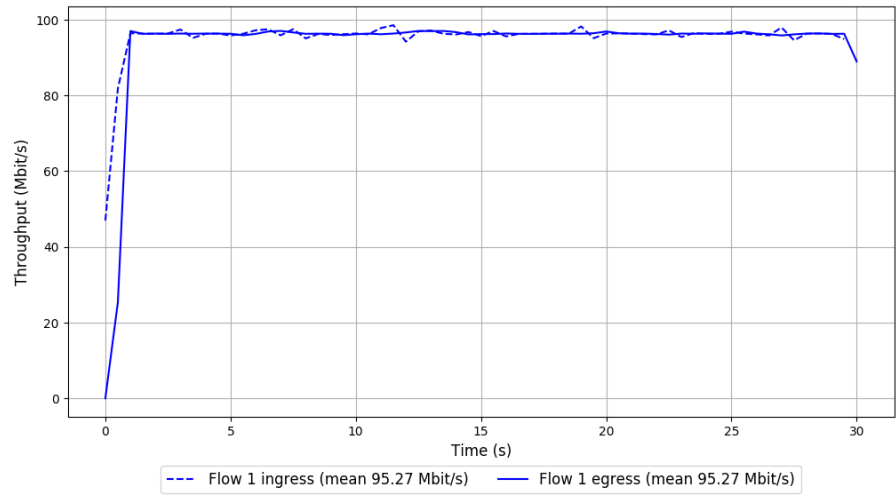


Run 3: Statistics of FillP

Start at: 2018-11-15 09:04:19
End at: 2018-11-15 09:04:49
Local clock offset: -0.135 ms
Remote clock offset: -5.521 ms

Below is generated by plot.py at 2018-11-15 09:57:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 41.899 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 41.899 ms
Loss rate: 0.22%

Run 3: Report of FillP — Data Link

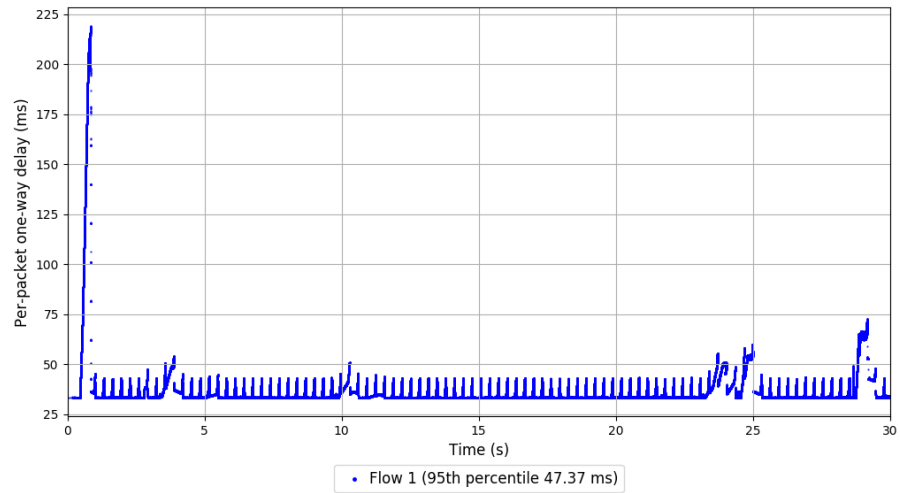
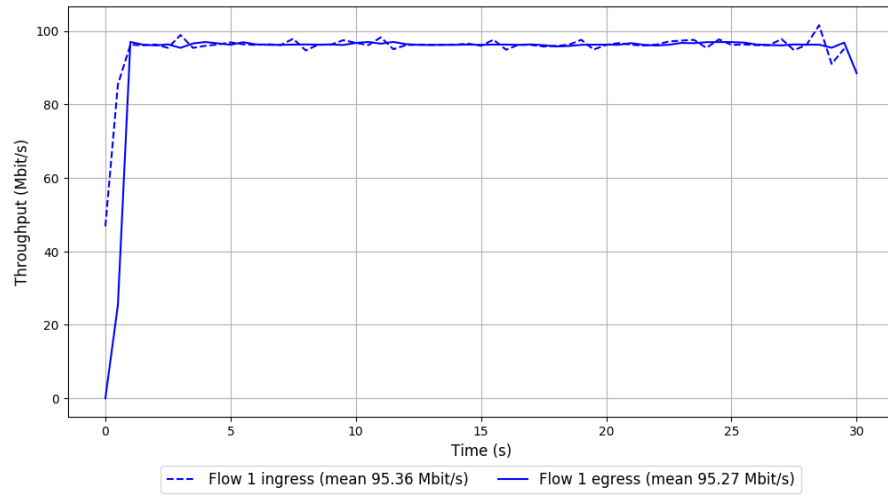


Run 4: Statistics of FillP

Start at: 2018-11-15 09:28:12
End at: 2018-11-15 09:28:42
Local clock offset: -0.025 ms
Remote clock offset: -5.081 ms

Below is generated by plot.py at 2018-11-15 09:57:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 47.366 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 47.366 ms
Loss rate: 0.30%

Run 4: Report of FillP — Data Link

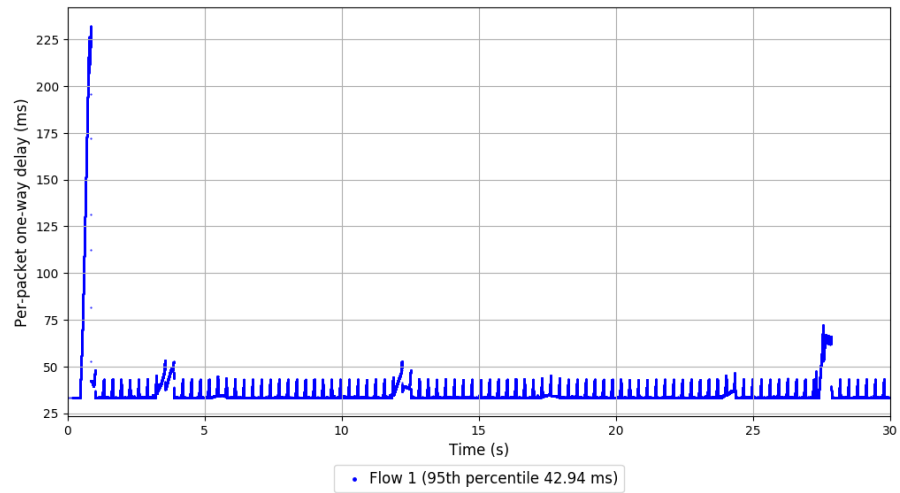
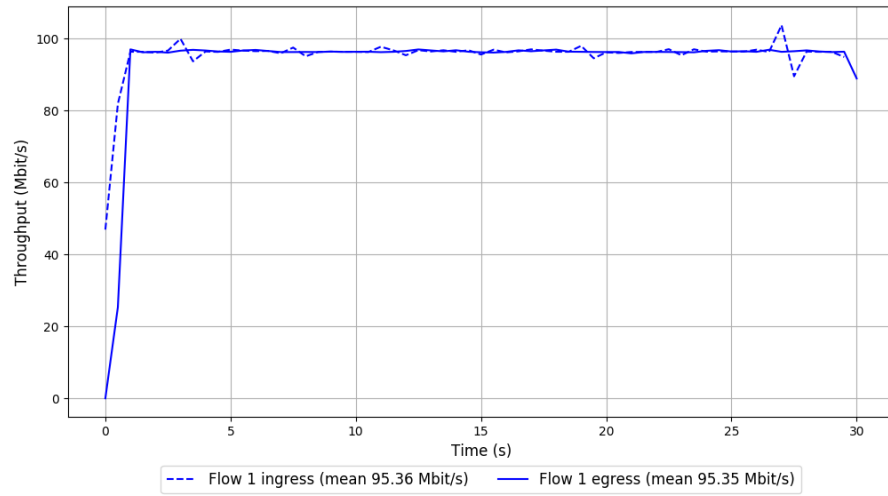


Run 5: Statistics of FillP

Start at: 2018-11-15 09:52:06
End at: 2018-11-15 09:52:36
Local clock offset: -0.077 ms
Remote clock offset: -4.508 ms

Below is generated by plot.py at 2018-11-15 09:58:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.35 Mbit/s
95th percentile per-packet one-way delay: 42.941 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 95.35 Mbit/s
95th percentile per-packet one-way delay: 42.941 ms
Loss rate: 0.22%

Run 5: Report of FillP — Data Link

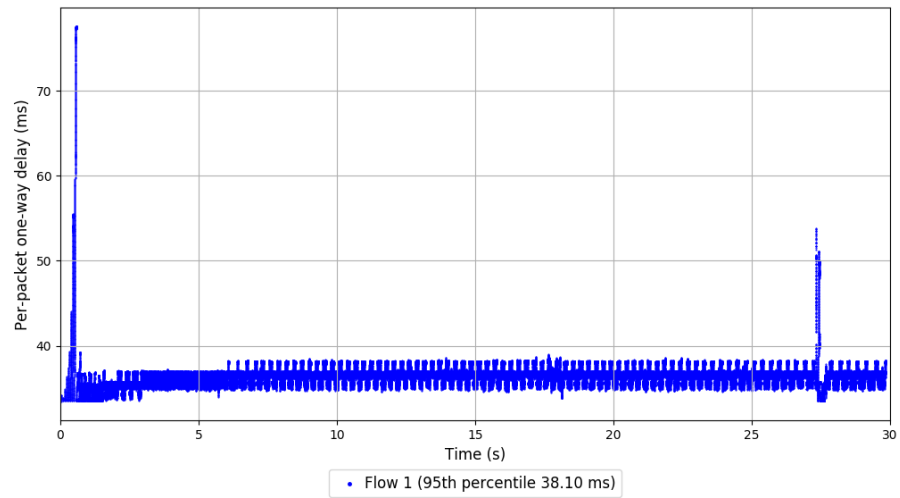
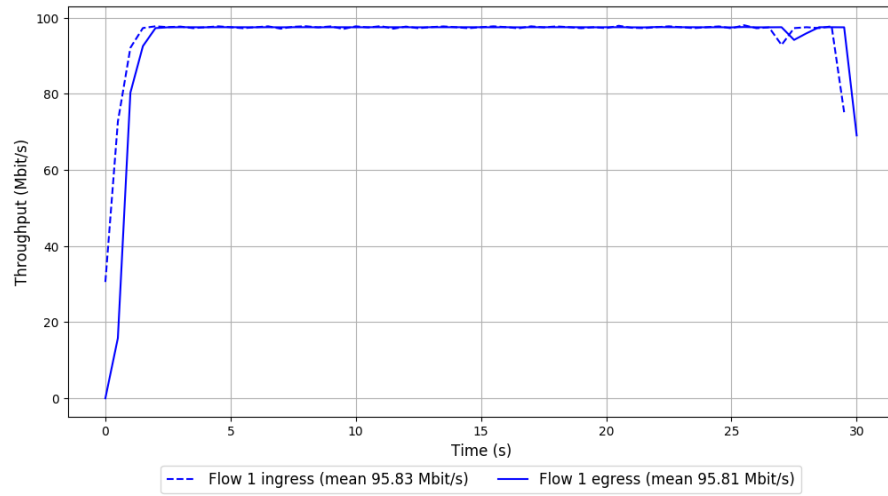


```
Run 1: Statistics of Indigo

Start at: 2018-11-15 08:11:20
End at: 2018-11-15 08:11:50
Local clock offset: -0.065 ms
Remote clock offset: -6.921 ms

# Below is generated by plot.py at 2018-11-15 09:58:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 38.099 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 38.099 ms
Loss rate: 0.23%
```

Run 1: Report of Indigo — Data Link

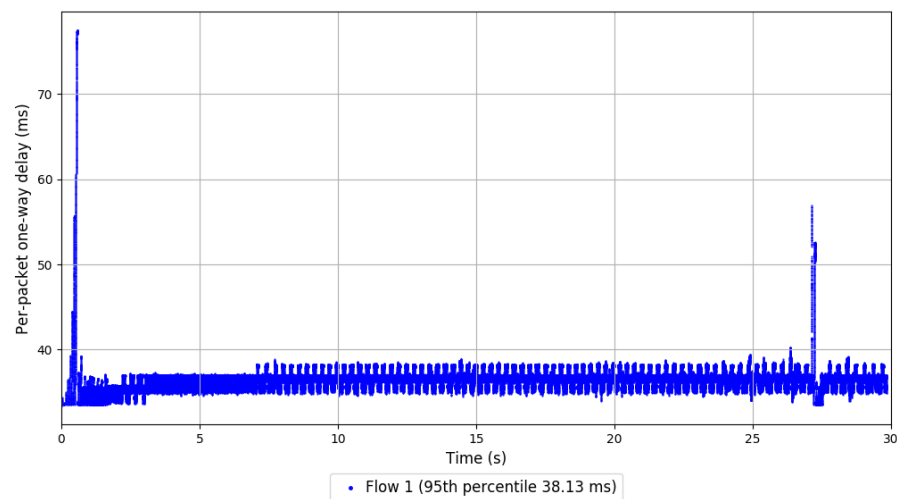
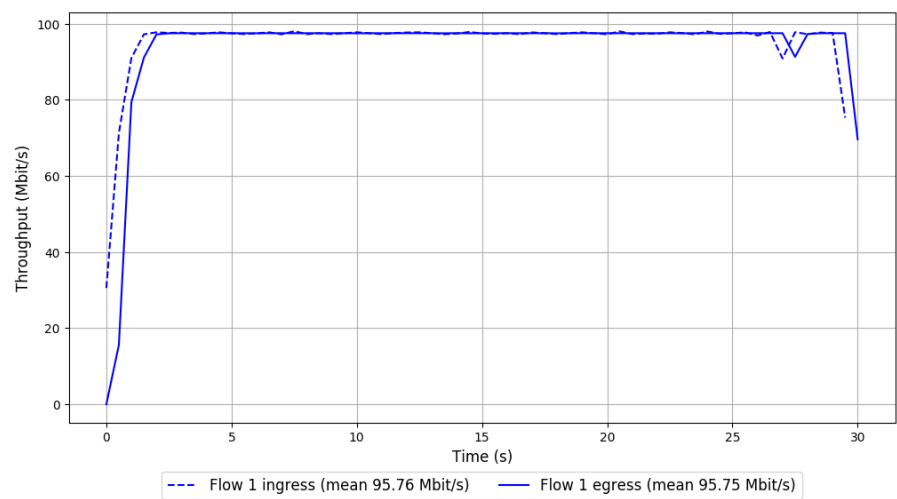


Run 2: Statistics of Indigo

Start at: 2018-11-15 08:35:11
End at: 2018-11-15 08:35:41
Local clock offset: -0.15 ms
Remote clock offset: -6.738 ms

Below is generated by plot.py at 2018-11-15 09:58:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 38.132 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 38.132 ms
Loss rate: 0.23%

Run 2: Report of Indigo — Data Link

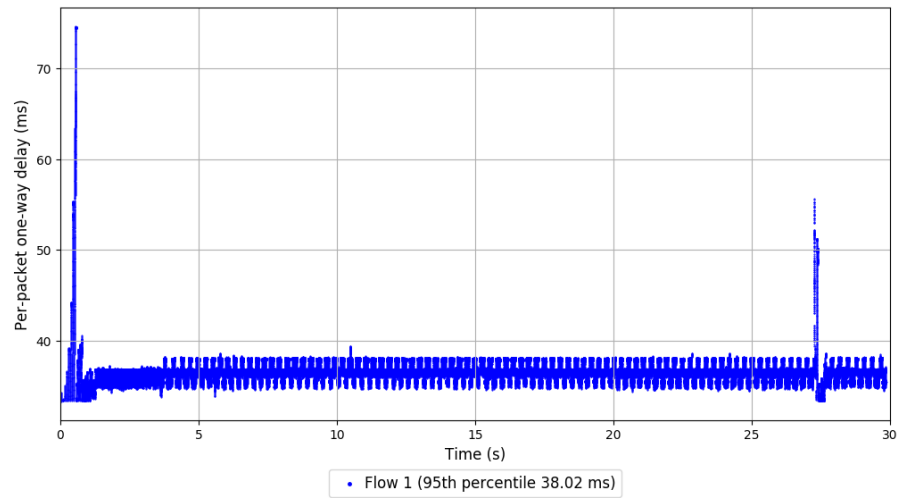
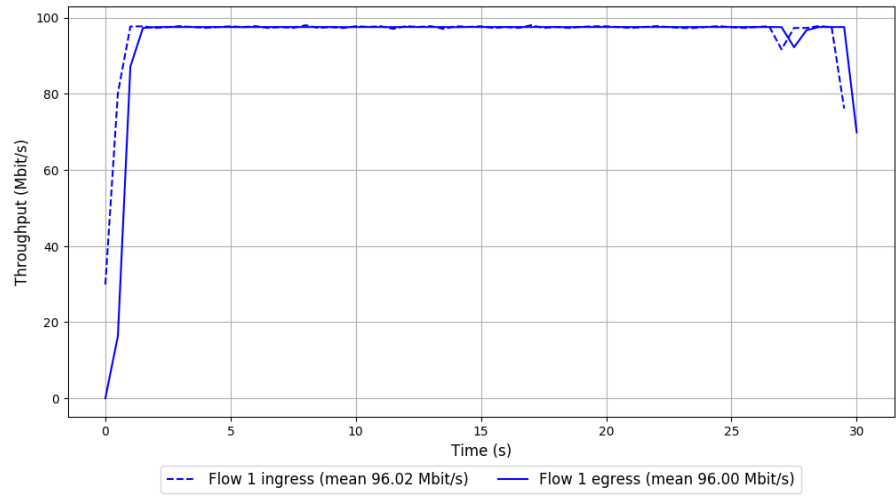


Run 3: Statistics of Indigo

Start at: 2018-11-15 08:59:04
End at: 2018-11-15 08:59:34
Local clock offset: -0.159 ms
Remote clock offset: -5.803 ms

Below is generated by plot.py at 2018-11-15 09:58:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.00 Mbit/s
95th percentile per-packet one-way delay: 38.023 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 96.00 Mbit/s
95th percentile per-packet one-way delay: 38.023 ms
Loss rate: 0.23%

Run 3: Report of Indigo — Data Link

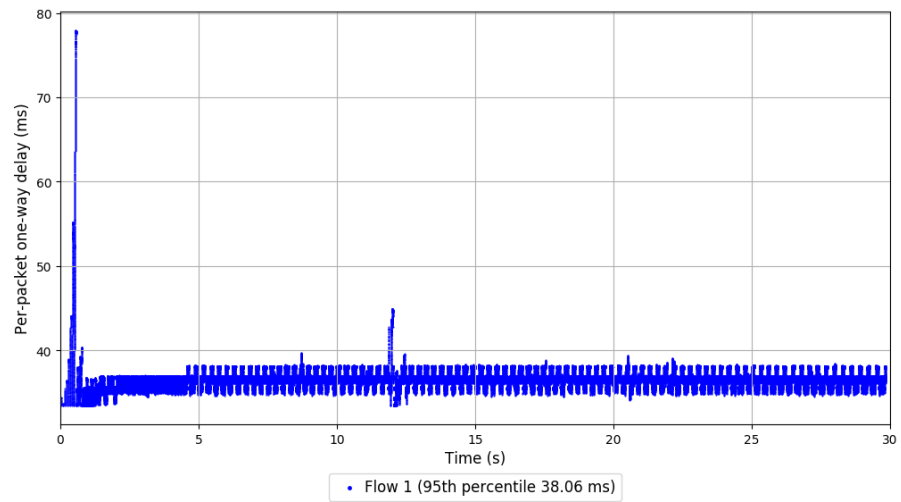
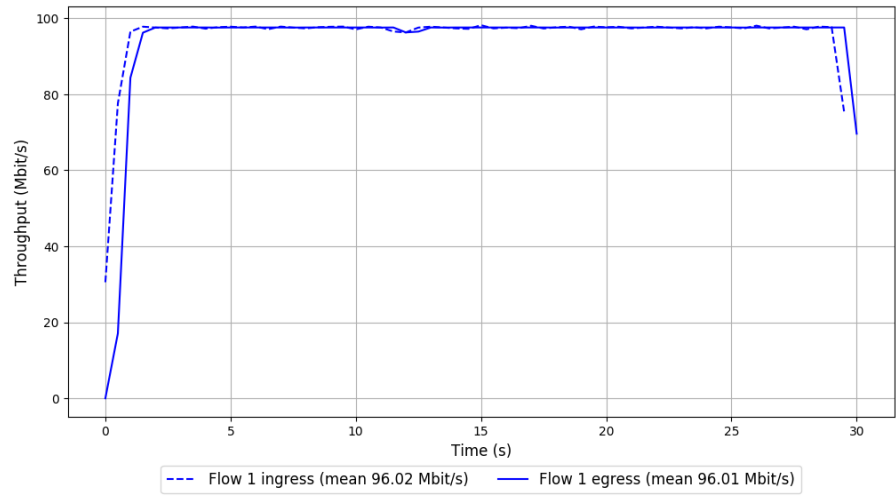


Run 4: Statistics of Indigo

Start at: 2018-11-15 09:22:56
End at: 2018-11-15 09:23:26
Local clock offset: -0.01 ms
Remote clock offset: -5.213 ms

Below is generated by plot.py at 2018-11-15 09:58:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 38.060 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 38.060 ms
Loss rate: 0.22%

Run 4: Report of Indigo — Data Link

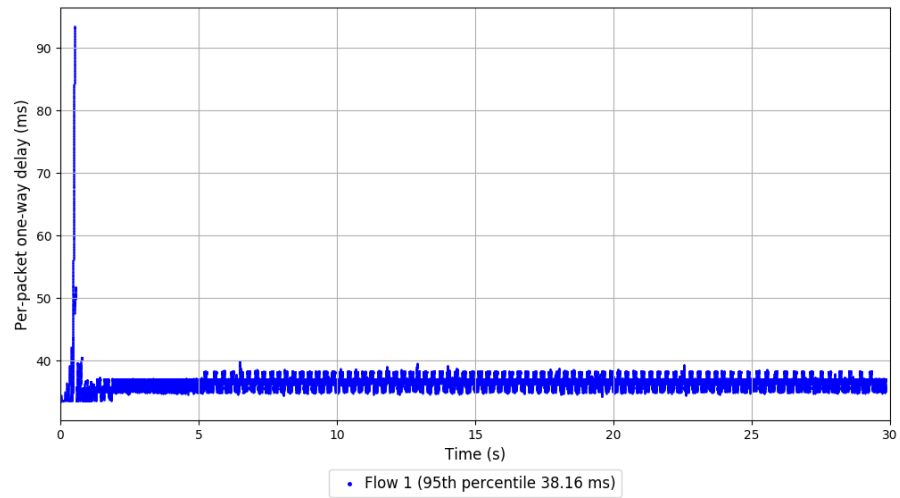
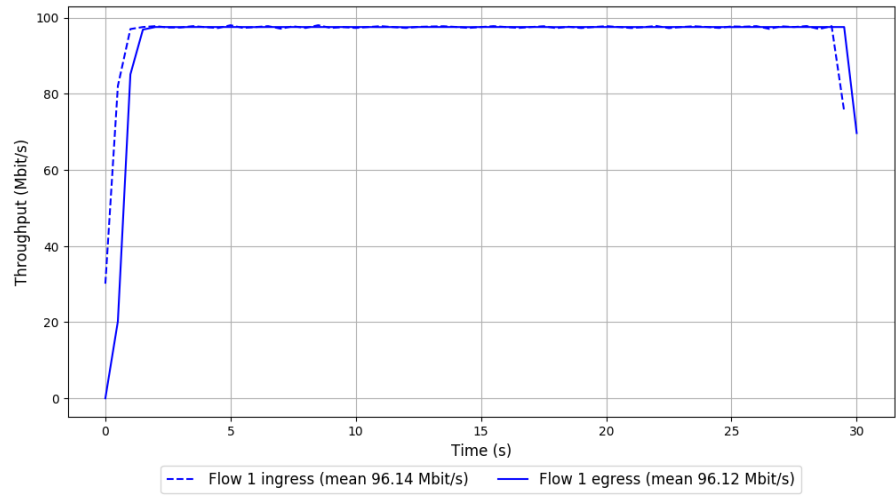


Run 5: Statistics of Indigo

Start at: 2018-11-15 09:46:50
End at: 2018-11-15 09:47:20
Local clock offset: -0.068 ms
Remote clock offset: -4.754 ms

Below is generated by plot.py at 2018-11-15 09:59:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.12 Mbit/s
95th percentile per-packet one-way delay: 38.156 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 96.12 Mbit/s
95th percentile per-packet one-way delay: 38.156 ms
Loss rate: 0.22%

Run 5: Report of Indigo — Data Link

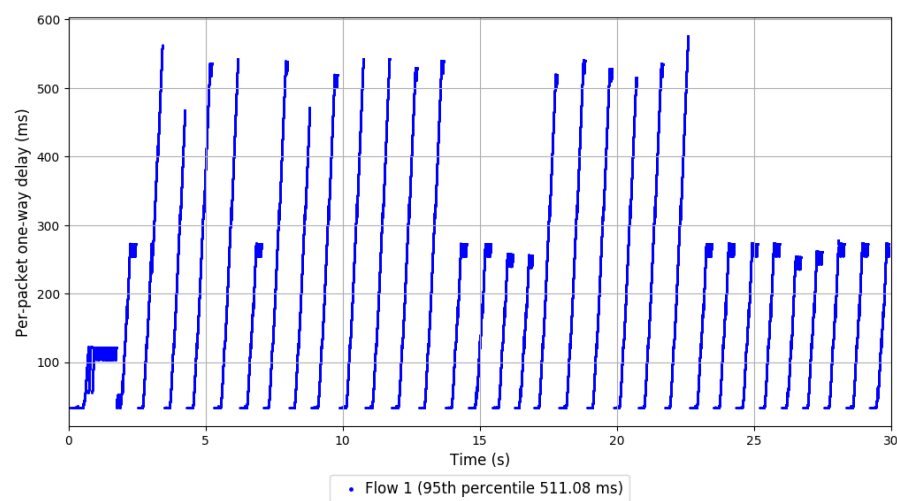
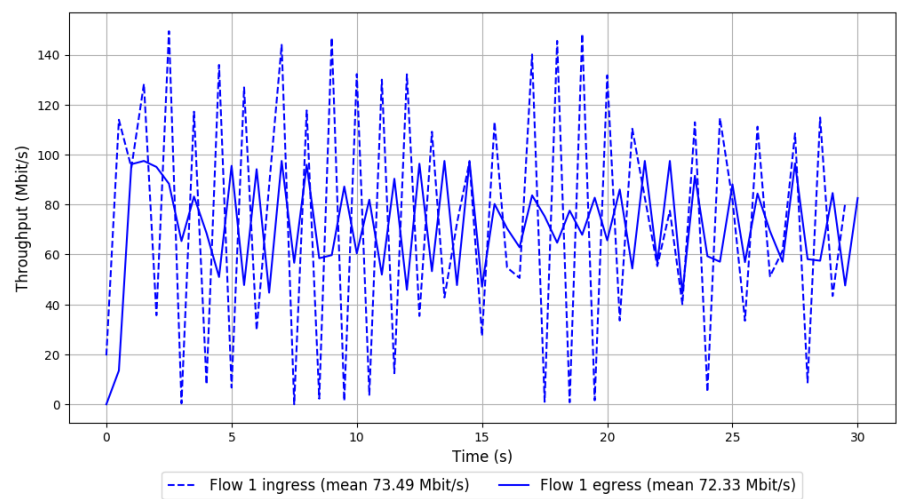


Run 1: Statistics of Indigo-96d2da3

Start at: 2018-11-15 07:56:41
End at: 2018-11-15 07:57:11
Local clock offset: 0.312 ms
Remote clock offset: -6.758 ms

Below is generated by plot.py at 2018-11-15 09:59:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 72.33 Mbit/s
95th percentile per-packet one-way delay: 511.078 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 72.33 Mbit/s
95th percentile per-packet one-way delay: 511.078 ms
Loss rate: 1.18%

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

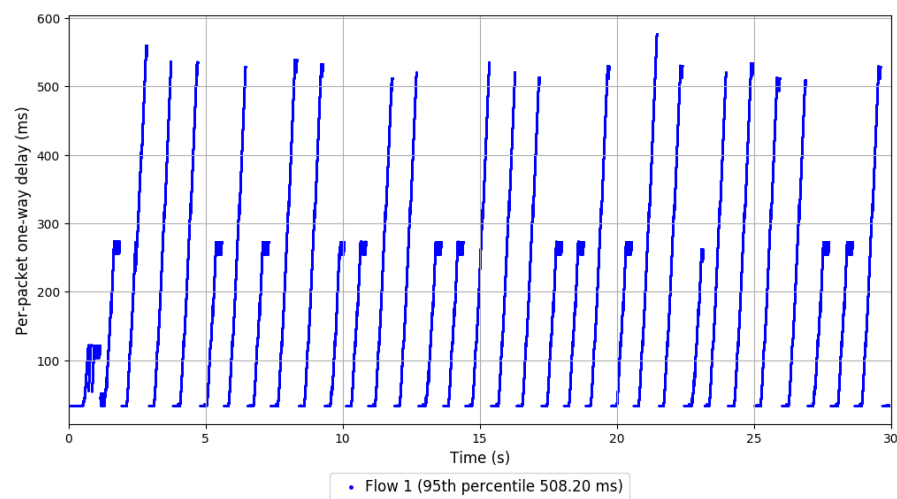
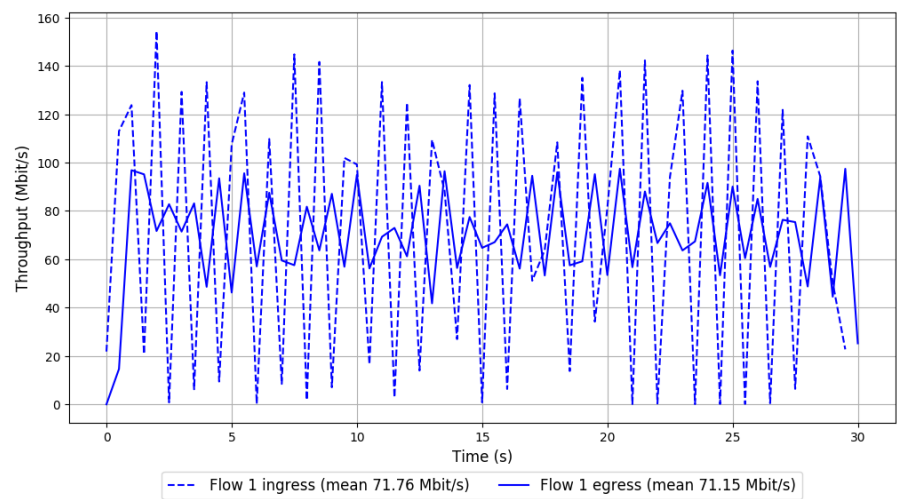


Run 2: Statistics of Indigo-96d2da3

Start at: 2018-11-15 08:20:28
End at: 2018-11-15 08:20:58
Local clock offset: -0.055 ms
Remote clock offset: -6.964 ms

Below is generated by plot.py at 2018-11-15 09:59:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 71.15 Mbit/s
95th percentile per-packet one-way delay: 508.202 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 71.15 Mbit/s
95th percentile per-packet one-way delay: 508.202 ms
Loss rate: 1.06%

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

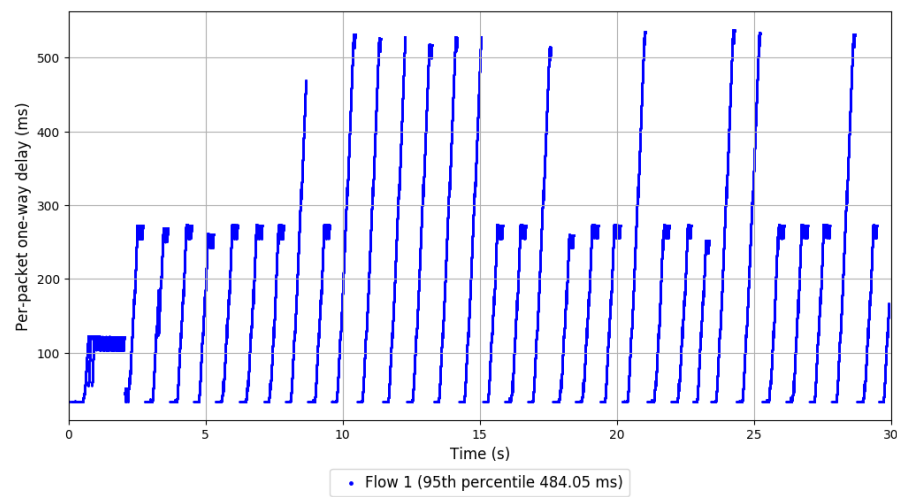
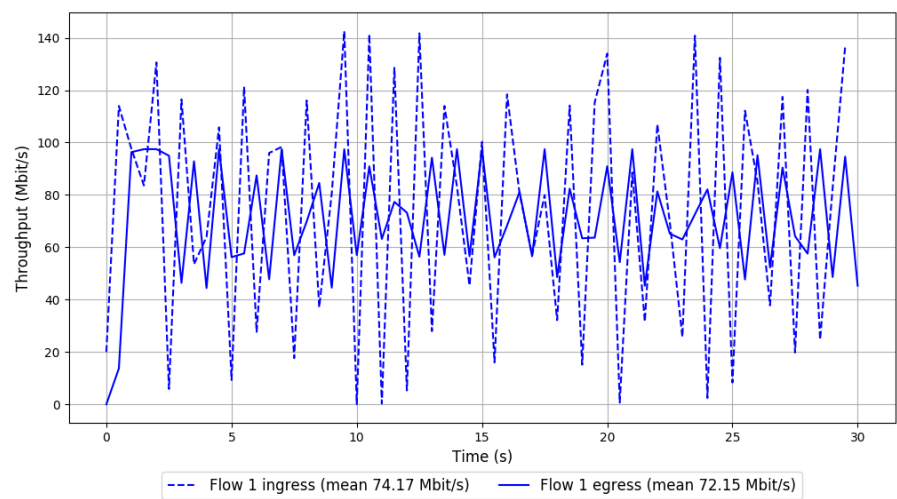


Run 3: Statistics of Indigo-96d2da3

Start at: 2018-11-15 08:44:21
End at: 2018-11-15 08:44:51
Local clock offset: -0.166 ms
Remote clock offset: -6.574 ms

Below is generated by plot.py at 2018-11-15 09:59:24
Datalink statistics
-- Total of 1 flow:
Average throughput: 72.15 Mbit/s
95th percentile per-packet one-way delay: 484.048 ms
Loss rate: 2.67%
-- Flow 1:
Average throughput: 72.15 Mbit/s
95th percentile per-packet one-way delay: 484.048 ms
Loss rate: 2.67%

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

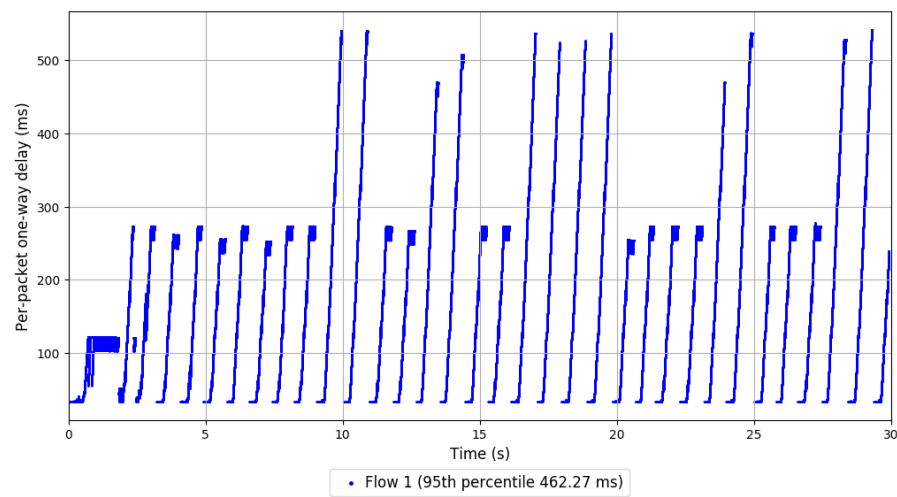
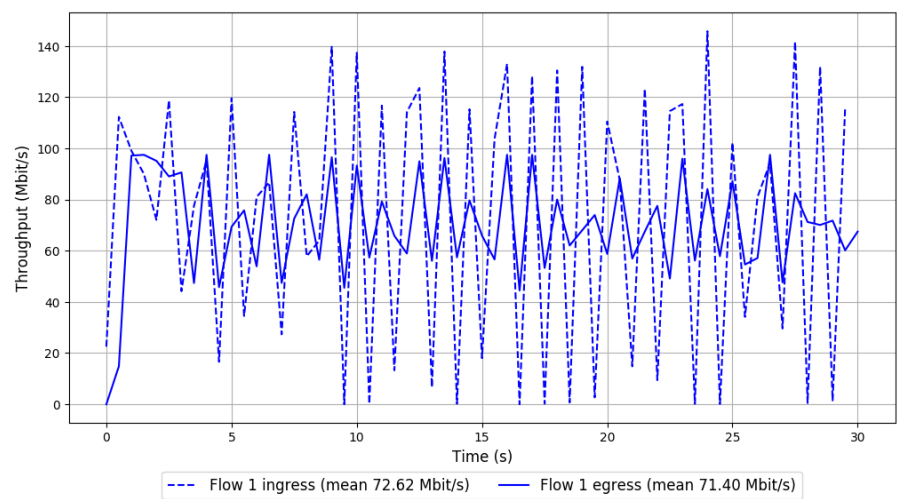


Run 4: Statistics of Indigo-96d2da3

Start at: 2018-11-15 09:08:14
End at: 2018-11-15 09:08:44
Local clock offset: -0.099 ms
Remote clock offset: -5.681 ms

Below is generated by plot.py at 2018-11-15 09:59:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 71.40 Mbit/s
95th percentile per-packet one-way delay: 462.269 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 71.40 Mbit/s
95th percentile per-packet one-way delay: 462.269 ms
Loss rate: 1.71%

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

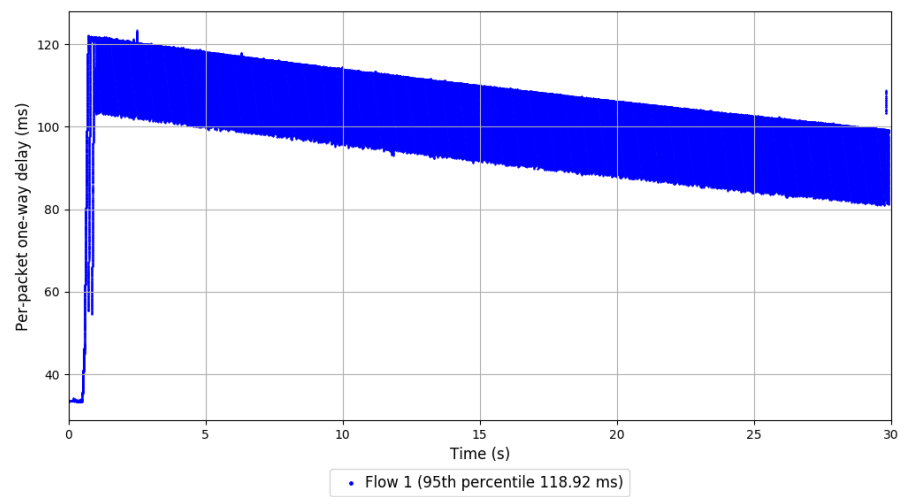
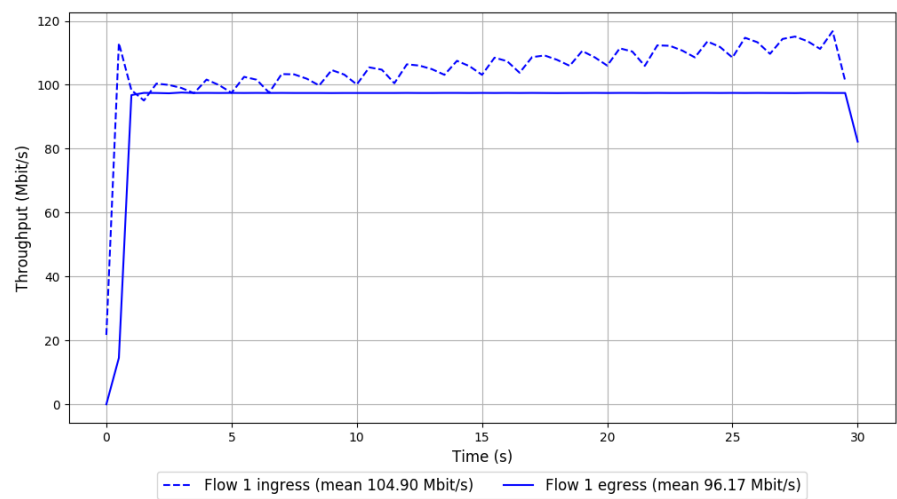


Run 5: Statistics of Indigo-96d2da3

Start at: 2018-11-15 09:32:07
End at: 2018-11-15 09:32:37
Local clock offset: -0.042 ms
Remote clock offset: -5.005 ms

Below is generated by plot.py at 2018-11-15 09:59:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.17 Mbit/s
95th percentile per-packet one-way delay: 118.918 ms
Loss rate: 8.49%
-- Flow 1:
Average throughput: 96.17 Mbit/s
95th percentile per-packet one-way delay: 118.918 ms
Loss rate: 8.49%

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

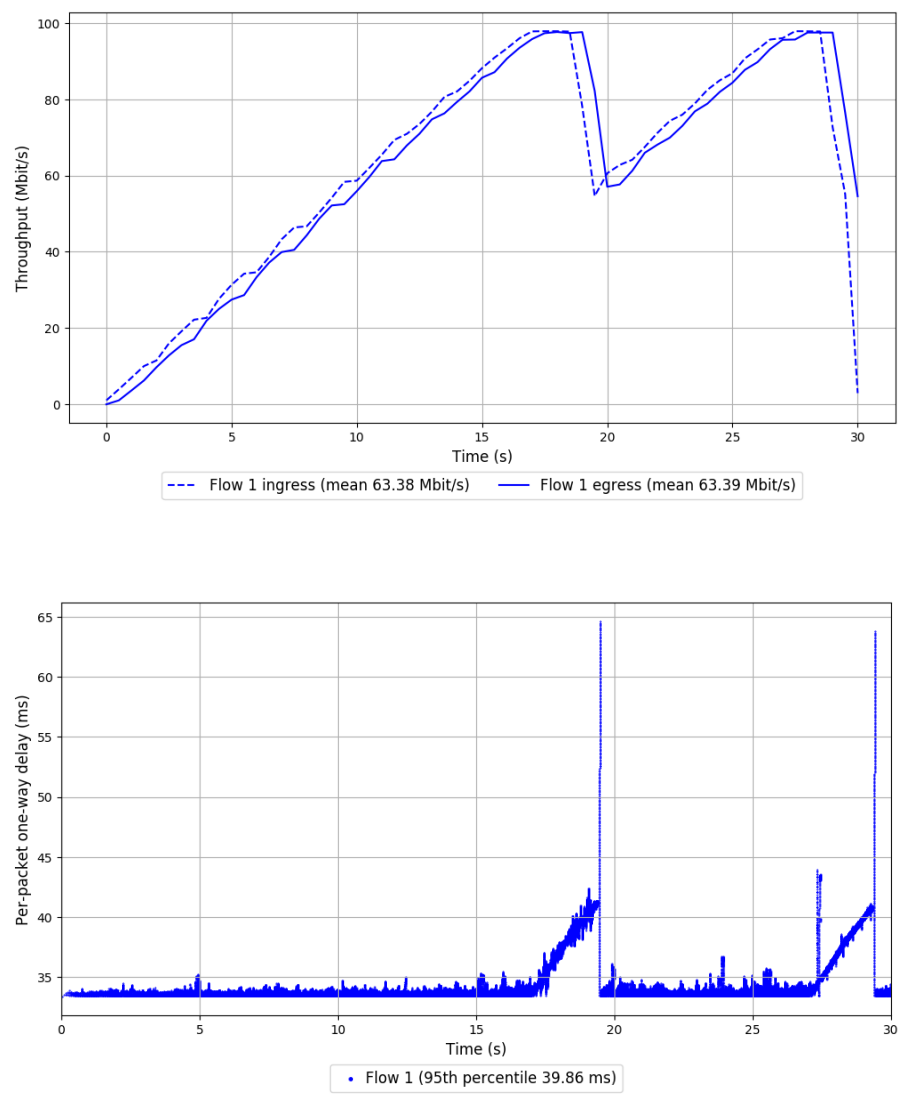


Run 1: Statistics of LEDBAT

Start at: 2018-11-15 08:06:01
End at: 2018-11-15 08:06:31
Local clock offset: -0.028 ms
Remote clock offset: -6.907 ms

Below is generated by plot.py at 2018-11-15 09:59:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 63.39 Mbit/s
95th percentile per-packet one-way delay: 39.861 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.39 Mbit/s
95th percentile per-packet one-way delay: 39.861 ms
Loss rate: 0.20%

Run 1: Report of LEDBAT — Data Link

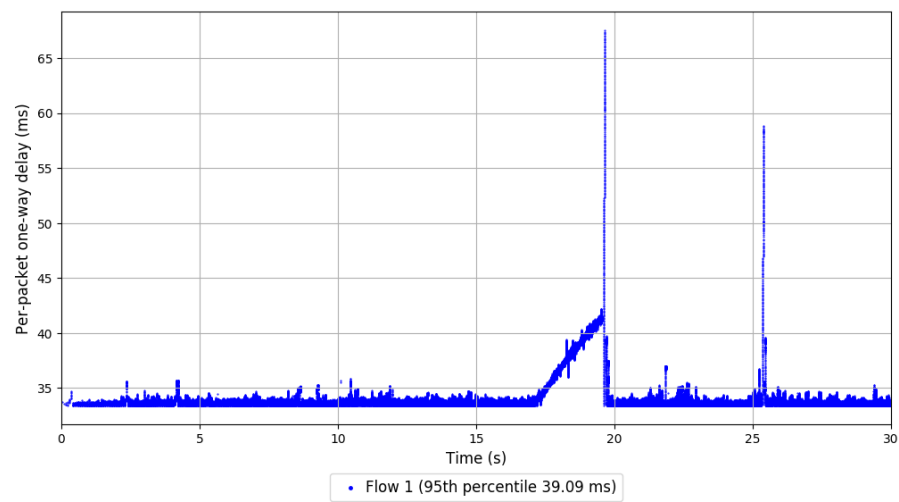
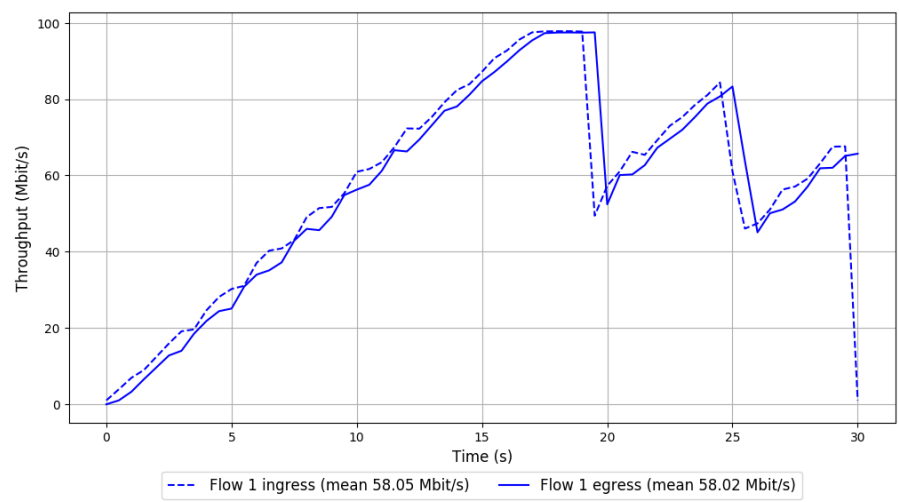


Run 2: Statistics of LEDBAT

Start at: 2018-11-15 08:29:51
End at: 2018-11-15 08:30:21
Local clock offset: -0.092 ms
Remote clock offset: -6.598 ms

Below is generated by plot.py at 2018-11-15 09:59:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 58.02 Mbit/s
95th percentile per-packet one-way delay: 39.094 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 58.02 Mbit/s
95th percentile per-packet one-way delay: 39.094 ms
Loss rate: 0.26%

Run 2: Report of LEDBAT — Data Link

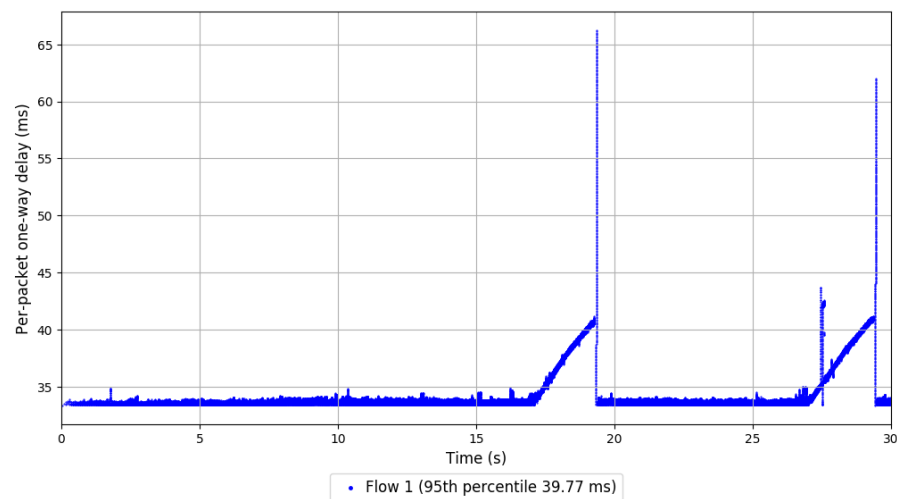
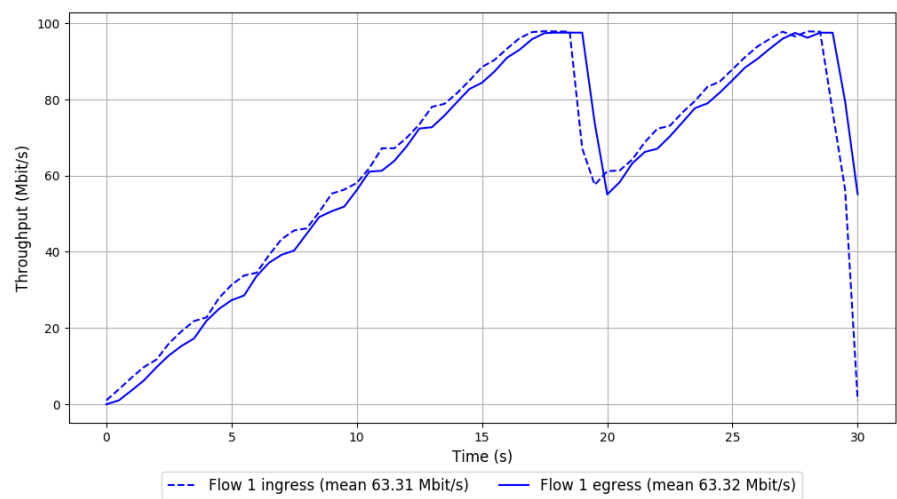


Run 3: Statistics of LEDBAT

Start at: 2018-11-15 08:53:44
End at: 2018-11-15 08:54:14
Local clock offset: -0.168 ms
Remote clock offset: -5.994 ms

Below is generated by plot.py at 2018-11-15 09:59:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 63.32 Mbit/s
95th percentile per-packet one-way delay: 39.772 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.32 Mbit/s
95th percentile per-packet one-way delay: 39.772 ms
Loss rate: 0.20%

Run 3: Report of LEDBAT — Data Link

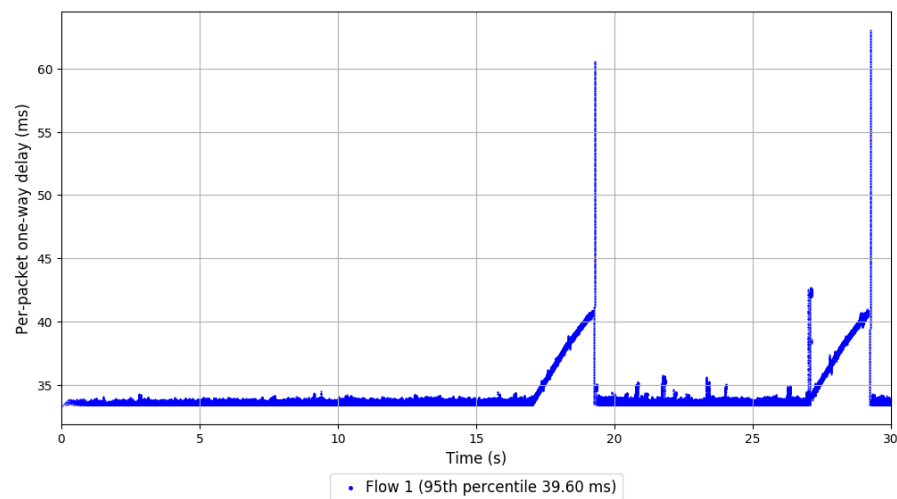
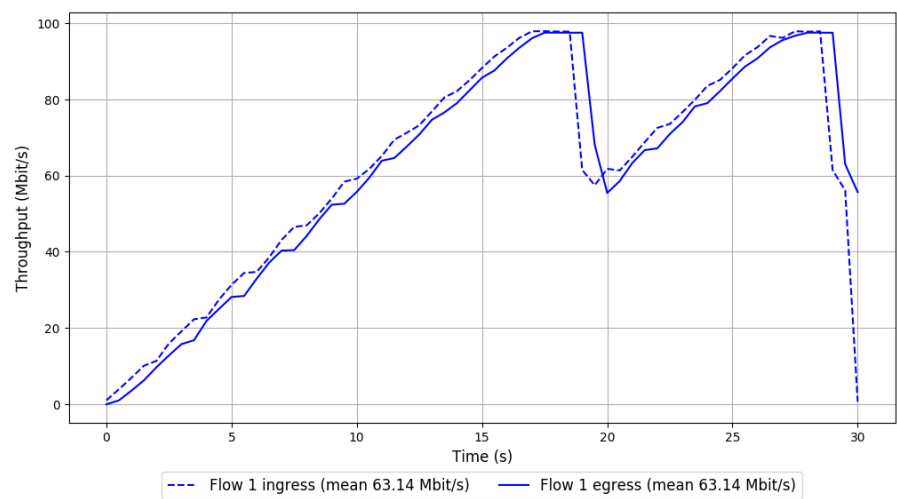


Run 4: Statistics of LEDBAT

Start at: 2018-11-15 09:17:37
End at: 2018-11-15 09:18:07
Local clock offset: -0.052 ms
Remote clock offset: -5.406 ms

Below is generated by plot.py at 2018-11-15 09:59:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 63.14 Mbit/s
95th percentile per-packet one-way delay: 39.603 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.14 Mbit/s
95th percentile per-packet one-way delay: 39.603 ms
Loss rate: 0.20%

Run 4: Report of LEDBAT — Data Link

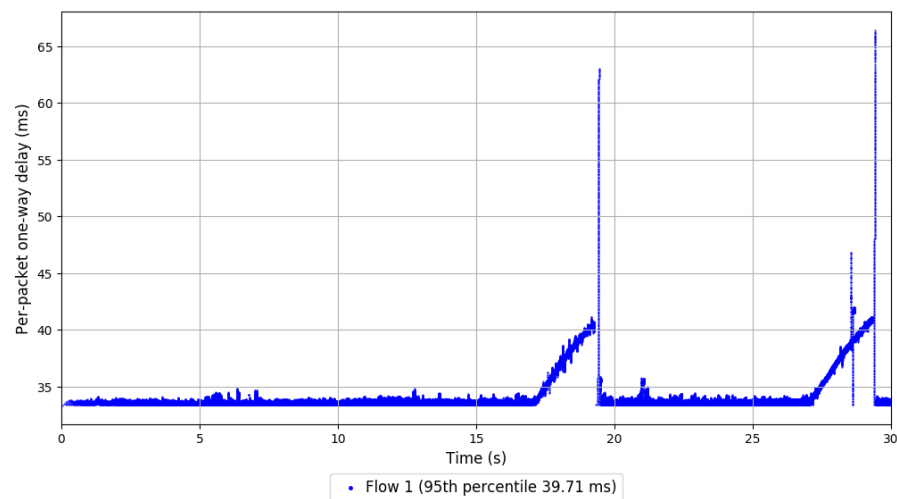
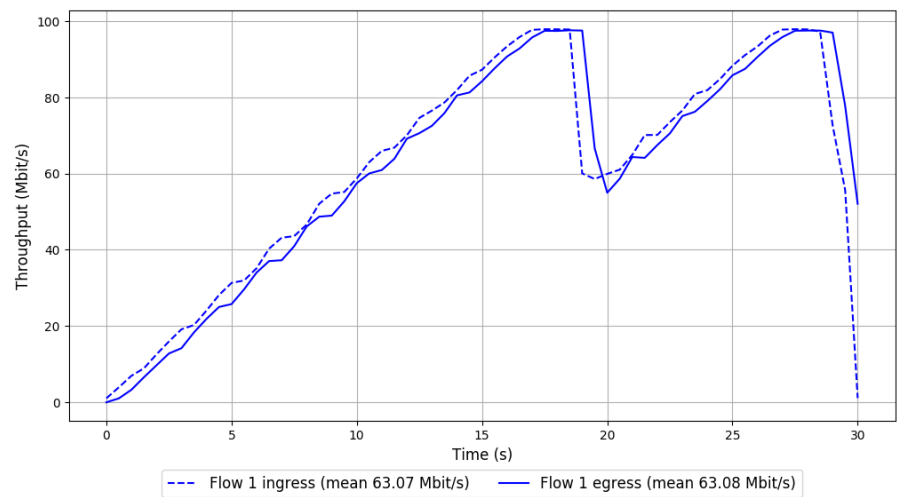


Run 5: Statistics of LEDBAT

Start at: 2018-11-15 09:41:31
End at: 2018-11-15 09:42:01
Local clock offset: -0.055 ms
Remote clock offset: -4.841 ms

Below is generated by plot.py at 2018-11-15 09:59:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 63.08 Mbit/s
95th percentile per-packet one-way delay: 39.708 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.08 Mbit/s
95th percentile per-packet one-way delay: 39.708 ms
Loss rate: 0.20%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of Indigo-Muses

Start at: 2018-11-15 08:15:14

End at: 2018-11-15 08:15:44

Local clock offset: -0.06 ms

Remote clock offset: -6.999 ms

Below is generated by plot.py at 2018-11-15 10:00:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.64 Mbit/s

95th percentile per-packet one-way delay: 37.764 ms

Loss rate: 0.23%

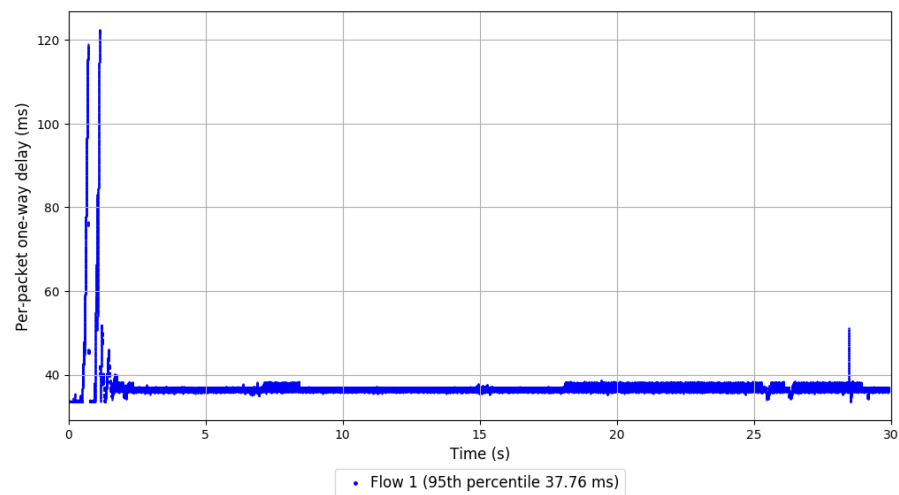
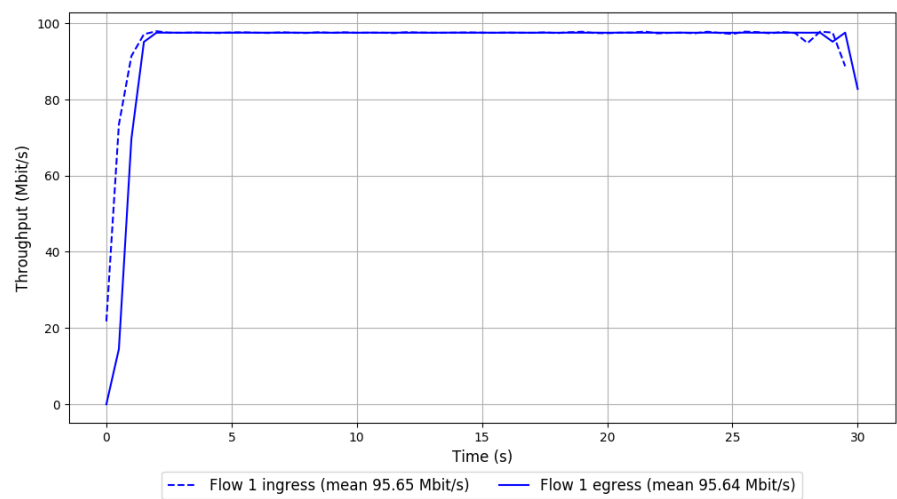
-- Flow 1:

Average throughput: 95.64 Mbit/s

95th percentile per-packet one-way delay: 37.764 ms

Loss rate: 0.23%

Run 1: Report of Indigo-Muses — Data Link

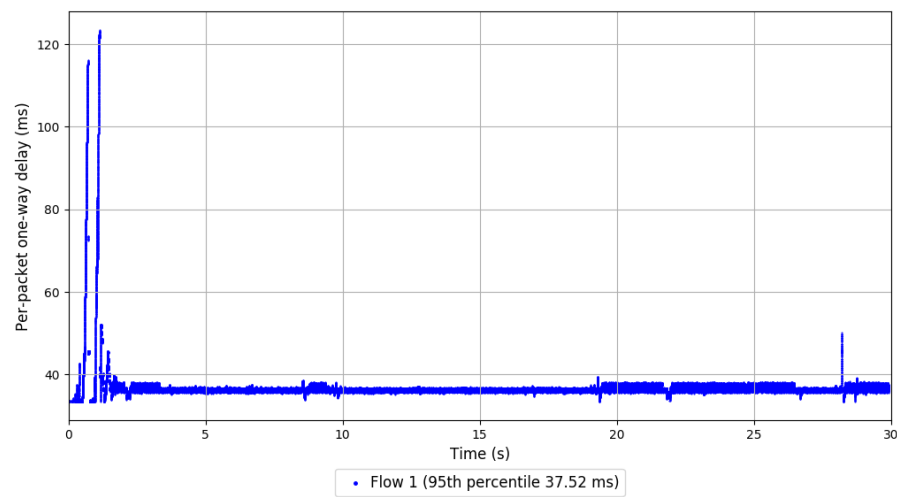
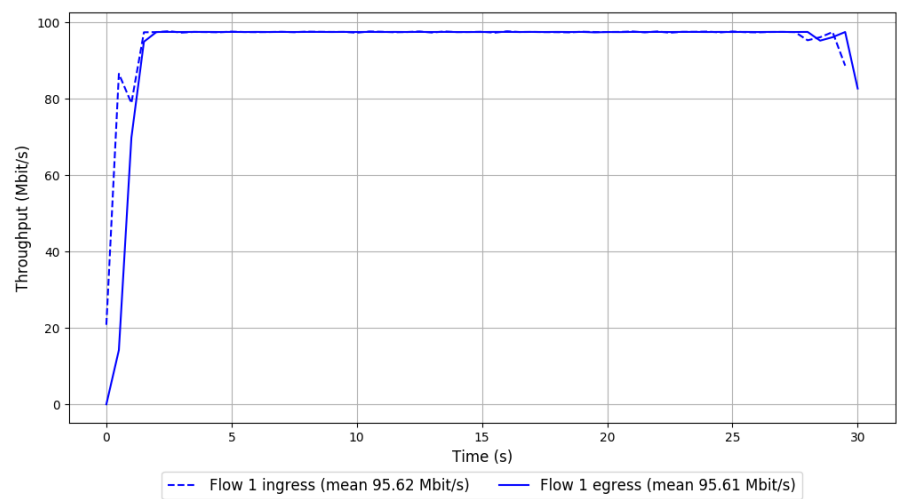


Run 2: Statistics of Indigo-Muses

Start at: 2018-11-15 08:39:07
End at: 2018-11-15 08:39:37
Local clock offset: -0.168 ms
Remote clock offset: -6.687 ms

Below is generated by plot.py at 2018-11-15 10:00:35
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.61 Mbit/s
95th percentile per-packet one-way delay: 37.520 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.61 Mbit/s
95th percentile per-packet one-way delay: 37.520 ms
Loss rate: 0.23%

Run 2: Report of Indigo-Muses — Data Link

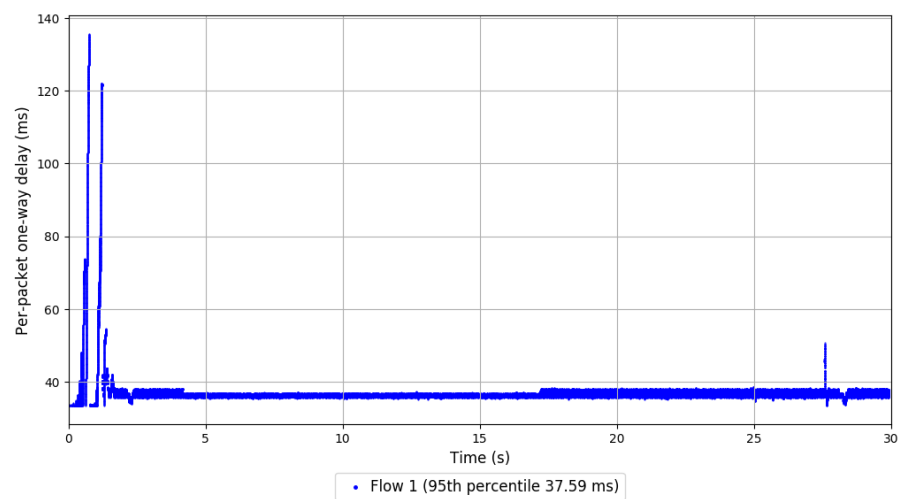
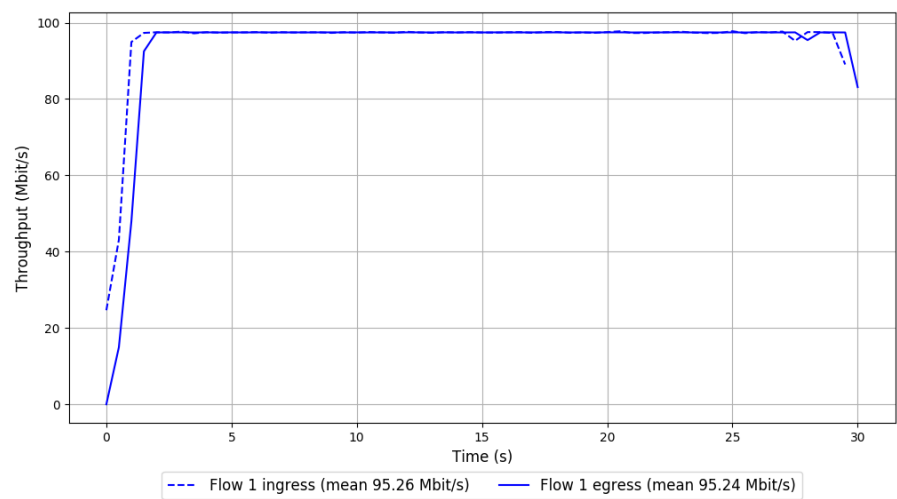


Run 3: Statistics of Indigo-Muses

Start at: 2018-11-15 09:02:59
End at: 2018-11-15 09:03:29
Local clock offset: -0.136 ms
Remote clock offset: -5.726 ms

Below is generated by plot.py at 2018-11-15 10:00:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.24 Mbit/s
95th percentile per-packet one-way delay: 37.586 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.24 Mbit/s
95th percentile per-packet one-way delay: 37.586 ms
Loss rate: 0.23%

Run 3: Report of Indigo-Muses — Data Link



Run 4: Statistics of Indigo-Muses

Start at: 2018-11-15 09:26:52

End at: 2018-11-15 09:27:22

Local clock offset: 0.006 ms

Remote clock offset: -5.1 ms

Below is generated by plot.py at 2018-11-15 10:00:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.64 Mbit/s

95th percentile per-packet one-way delay: 37.591 ms

Loss rate: 0.23%

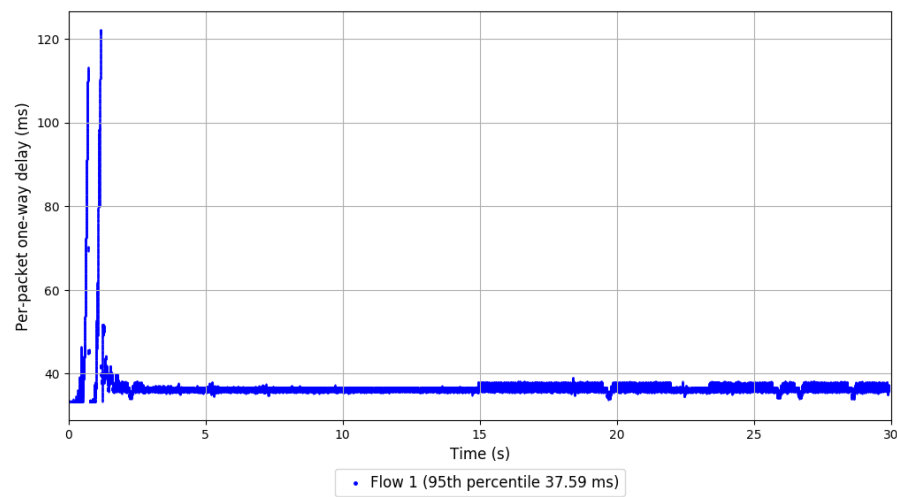
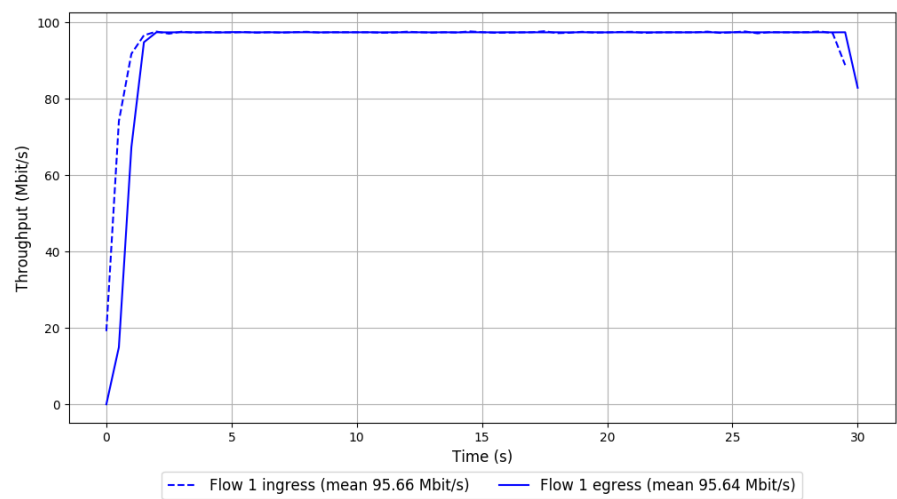
-- Flow 1:

Average throughput: 95.64 Mbit/s

95th percentile per-packet one-way delay: 37.591 ms

Loss rate: 0.23%

Run 4: Report of Indigo-Muses — Data Link

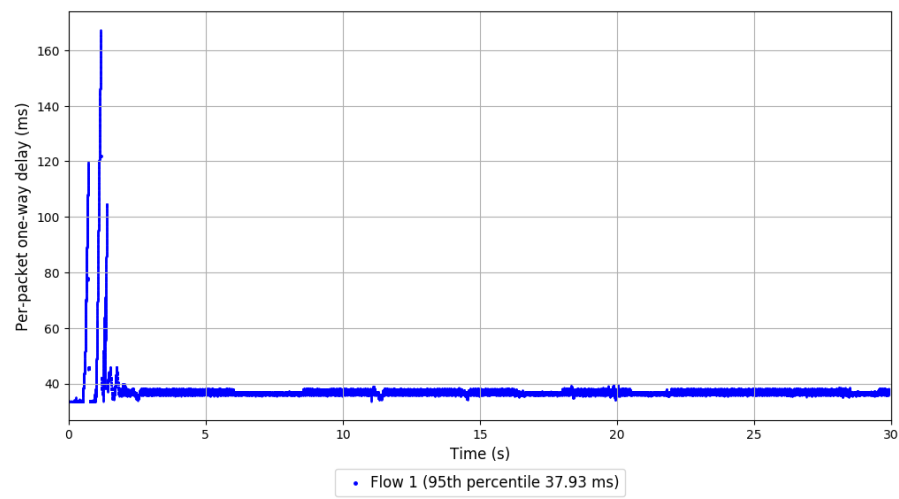
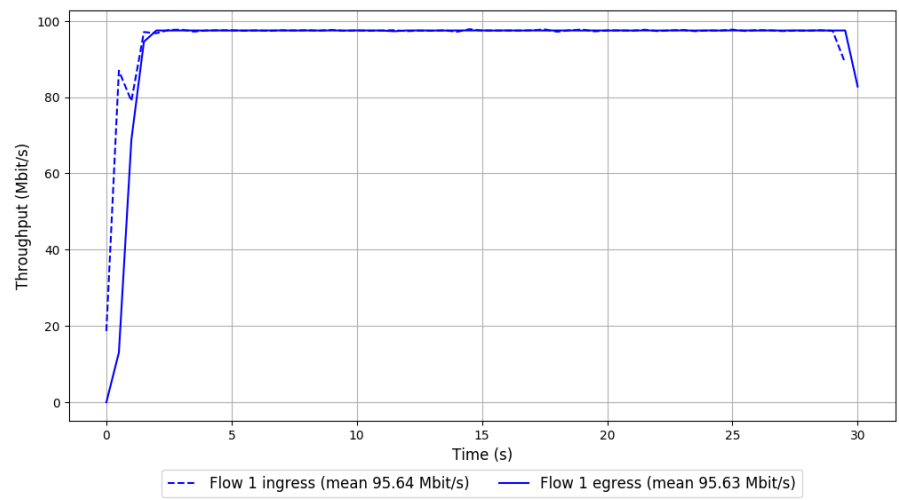


Run 5: Statistics of Indigo-Muses

Start at: 2018-11-15 09:50:46
End at: 2018-11-15 09:51:16
Local clock offset: -0.068 ms
Remote clock offset: -4.689 ms

Below is generated by plot.py at 2018-11-15 10:00:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.63 Mbit/s
95th percentile per-packet one-way delay: 37.933 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.63 Mbit/s
95th percentile per-packet one-way delay: 37.933 ms
Loss rate: 0.23%

Run 5: Report of Indigo-Muses — Data Link

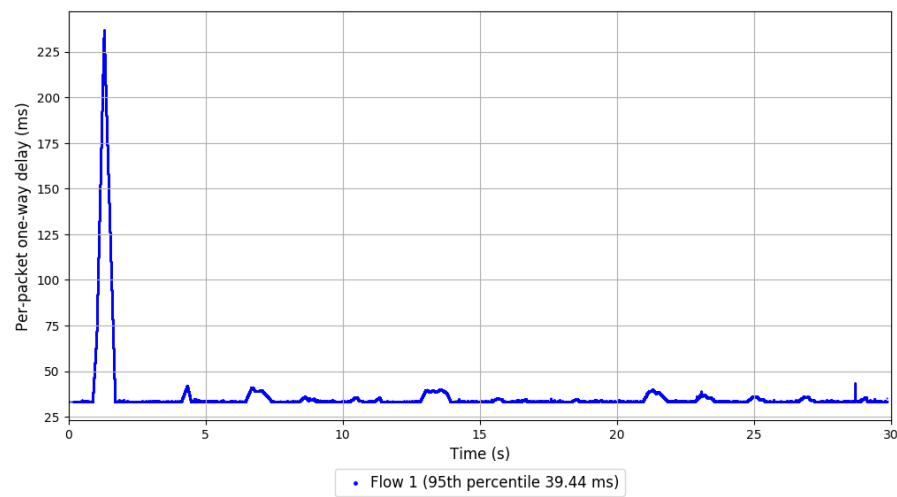
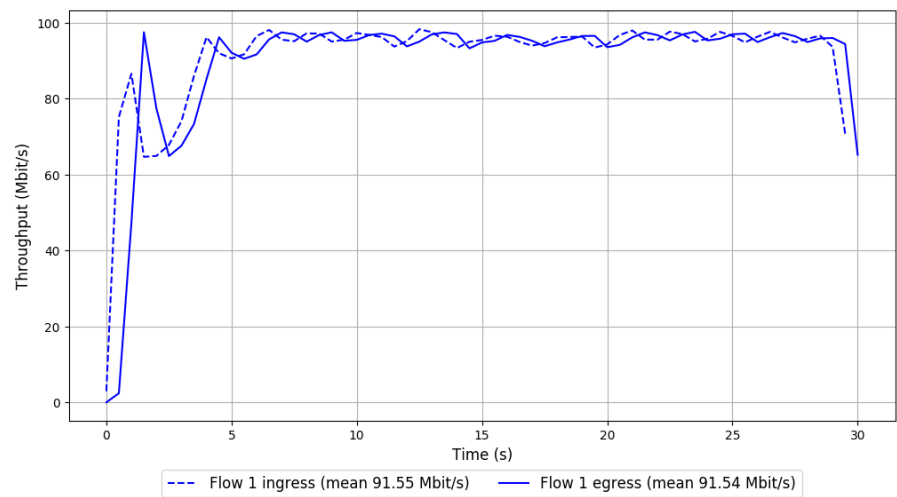


Run 1: Statistics of PCC-Allegro

Start at: 2018-11-15 08:12:40
End at: 2018-11-15 08:13:10
Local clock offset: -0.071 ms
Remote clock offset: -6.876 ms

Below is generated by plot.py at 2018-11-15 10:00:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.54 Mbit/s
95th percentile per-packet one-way delay: 39.440 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 91.54 Mbit/s
95th percentile per-packet one-way delay: 39.440 ms
Loss rate: 0.22%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-11-15 08:36:32

End at: 2018-11-15 08:37:02

Local clock offset: -0.159 ms

Remote clock offset: -6.848 ms

Below is generated by plot.py at 2018-11-15 10:00:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.77 Mbit/s

95th percentile per-packet one-way delay: 38.133 ms

Loss rate: 0.23%

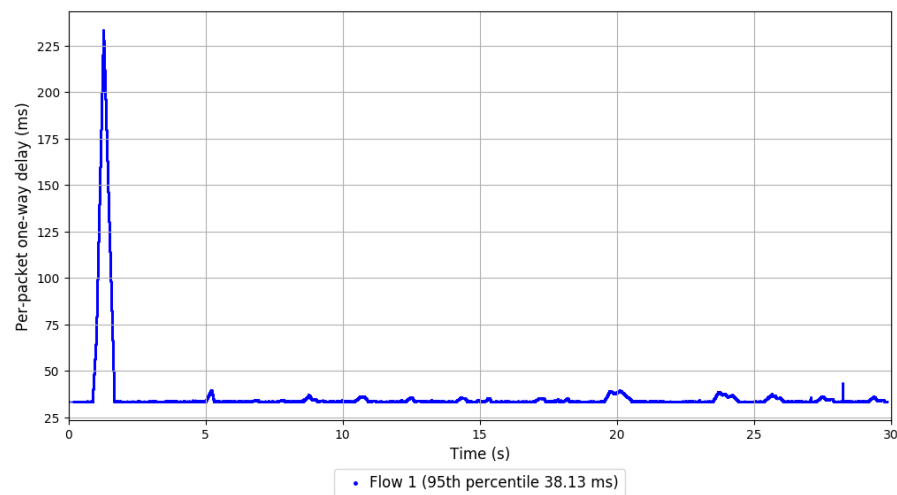
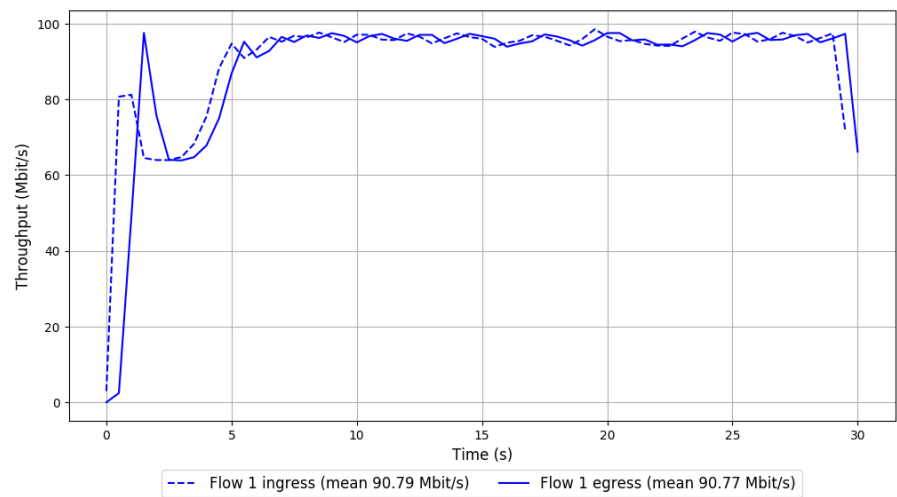
-- Flow 1:

Average throughput: 90.77 Mbit/s

95th percentile per-packet one-way delay: 38.133 ms

Loss rate: 0.23%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-11-15 09:00:25

End at: 2018-11-15 09:00:55

Local clock offset: -0.14 ms

Remote clock offset: -5.705 ms

Below is generated by plot.py at 2018-11-15 10:01:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.07 Mbit/s

95th percentile per-packet one-way delay: 38.284 ms

Loss rate: 0.24%

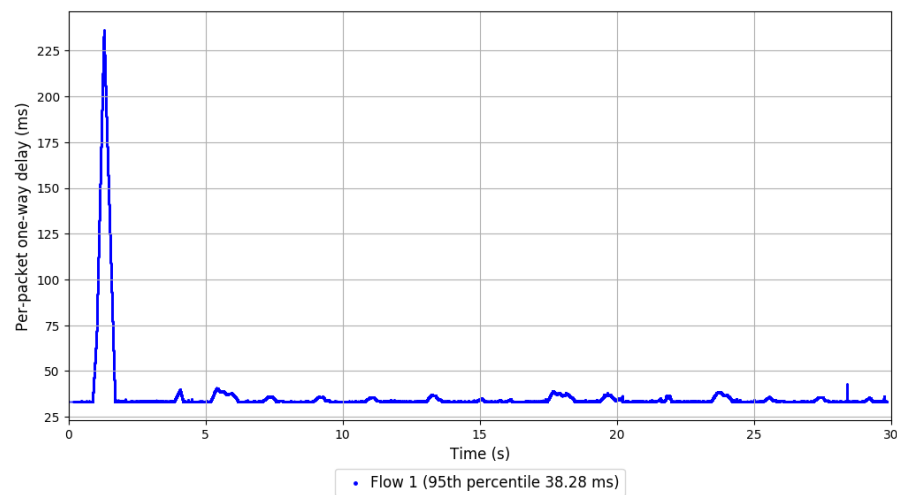
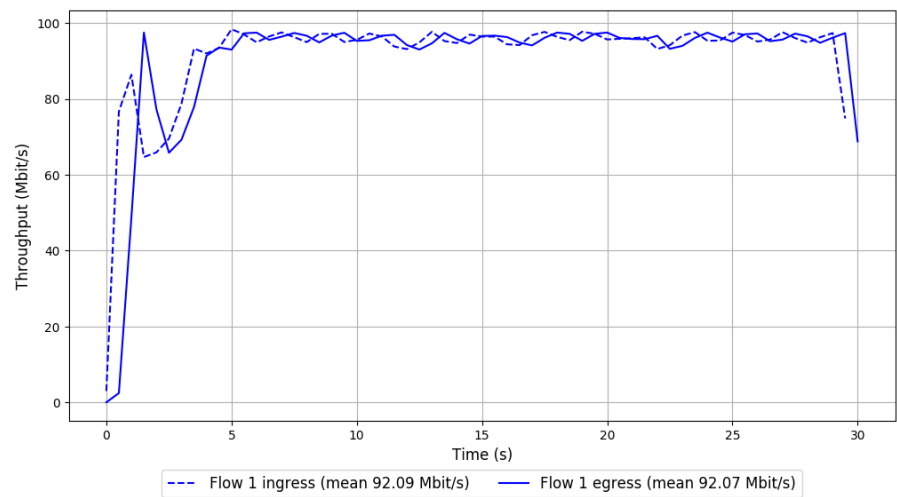
-- Flow 1:

Average throughput: 92.07 Mbit/s

95th percentile per-packet one-way delay: 38.284 ms

Loss rate: 0.24%

Run 3: Report of PCC-Allegro — Data Link

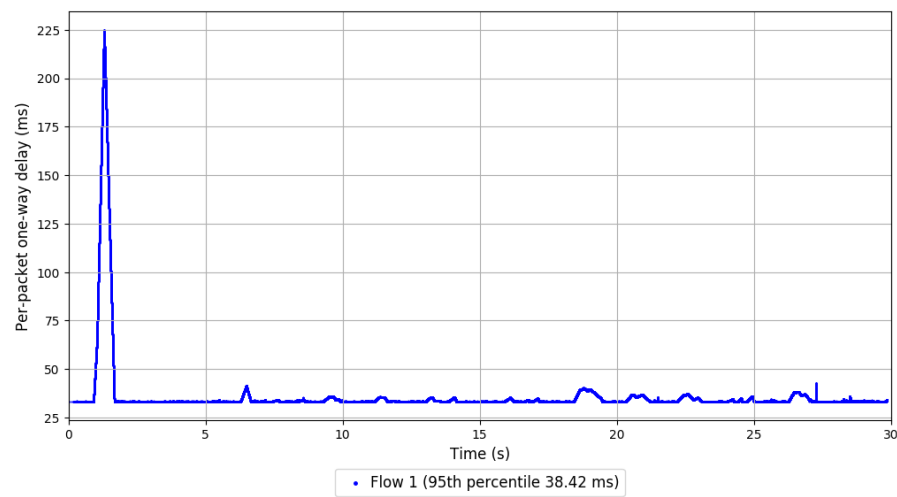
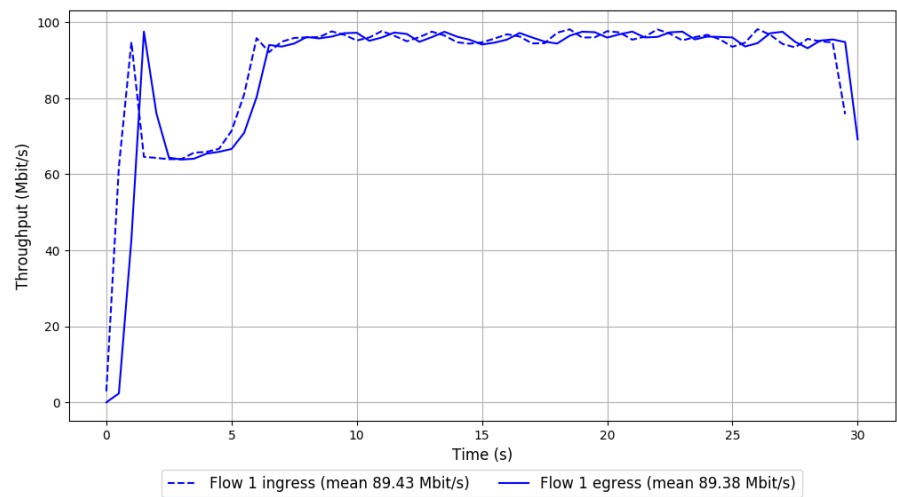


Run 4: Statistics of PCC-Allegro

Start at: 2018-11-15 09:24:17
End at: 2018-11-15 09:24:47
Local clock offset: -0.011 ms
Remote clock offset: -5.155 ms

Below is generated by plot.py at 2018-11-15 10:01:36
Datalink statistics
-- Total of 1 flow:
Average throughput: 89.38 Mbit/s
95th percentile per-packet one-way delay: 38.425 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 89.38 Mbit/s
95th percentile per-packet one-way delay: 38.425 ms
Loss rate: 0.26%

Run 4: Report of PCC-Allegro — Data Link

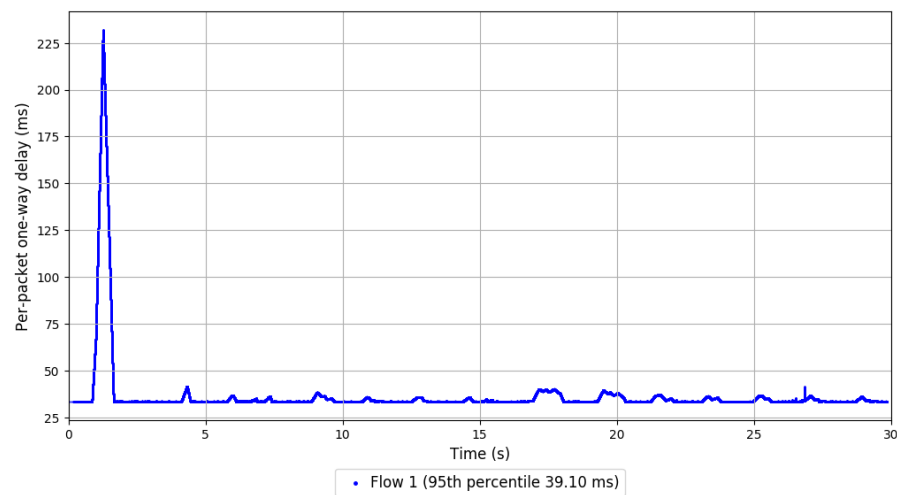
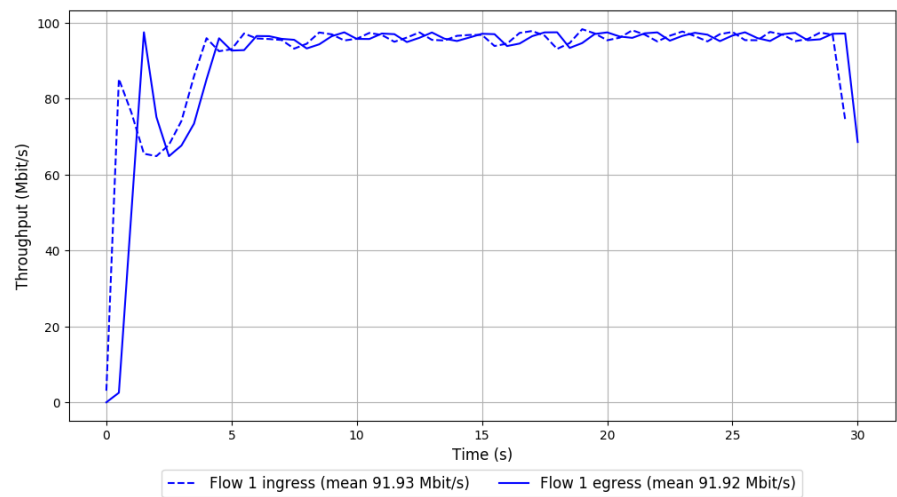


Run 5: Statistics of PCC-Allegro

Start at: 2018-11-15 09:48:11
End at: 2018-11-15 09:48:41
Local clock offset: -0.056 ms
Remote clock offset: -4.679 ms

Below is generated by plot.py at 2018-11-15 10:01:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.92 Mbit/s
95th percentile per-packet one-way delay: 39.099 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 91.92 Mbit/s
95th percentile per-packet one-way delay: 39.099 ms
Loss rate: 0.23%

Run 5: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2018-11-15 08:04:39

End at: 2018-11-15 08:05:09

Local clock offset: 0.017 ms

Remote clock offset: -7.048 ms

Below is generated by plot.py at 2018-11-15 10:02:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 86.78 Mbit/s

95th percentile per-packet one-way delay: 162.492 ms

Loss rate: 0.42%

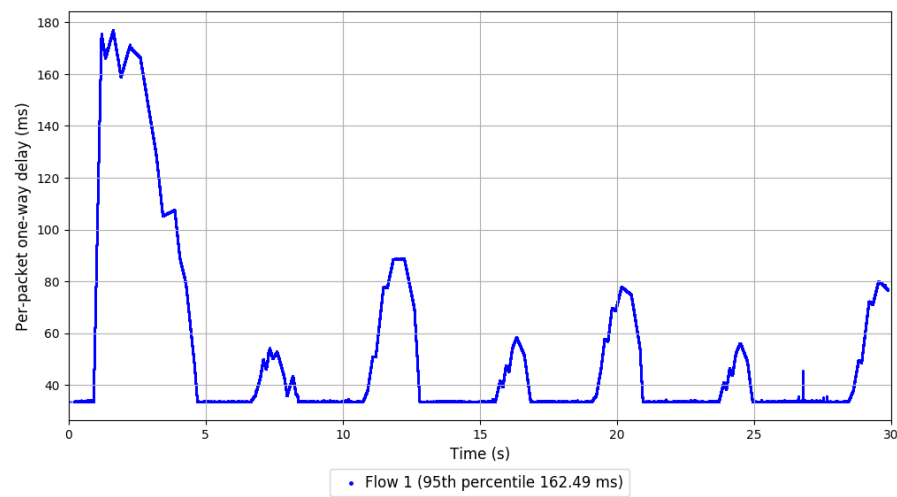
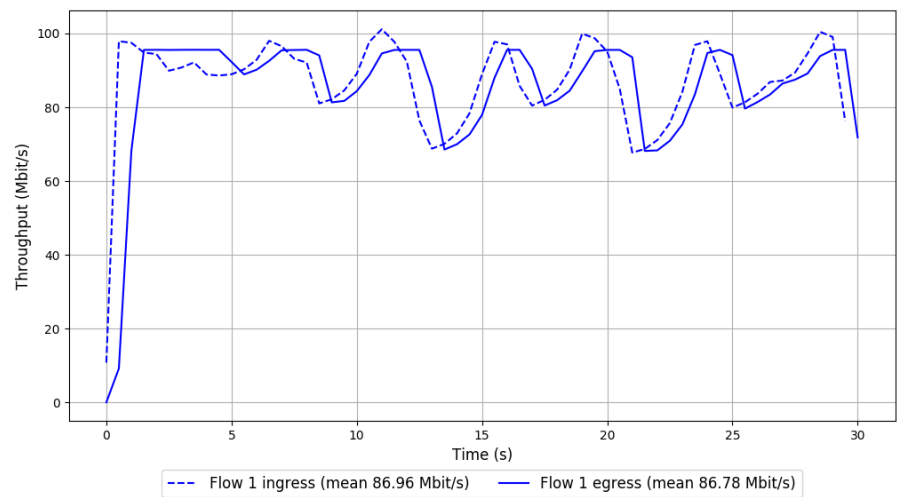
-- Flow 1:

Average throughput: 86.78 Mbit/s

95th percentile per-packet one-way delay: 162.492 ms

Loss rate: 0.42%

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2018-11-15 08:28:28

End at: 2018-11-15 08:28:59

Local clock offset: -0.088 ms

Remote clock offset: -6.9 ms

Below is generated by plot.py at 2018-11-15 10:02:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.81 Mbit/s

95th percentile per-packet one-way delay: 149.038 ms

Loss rate: 0.28%

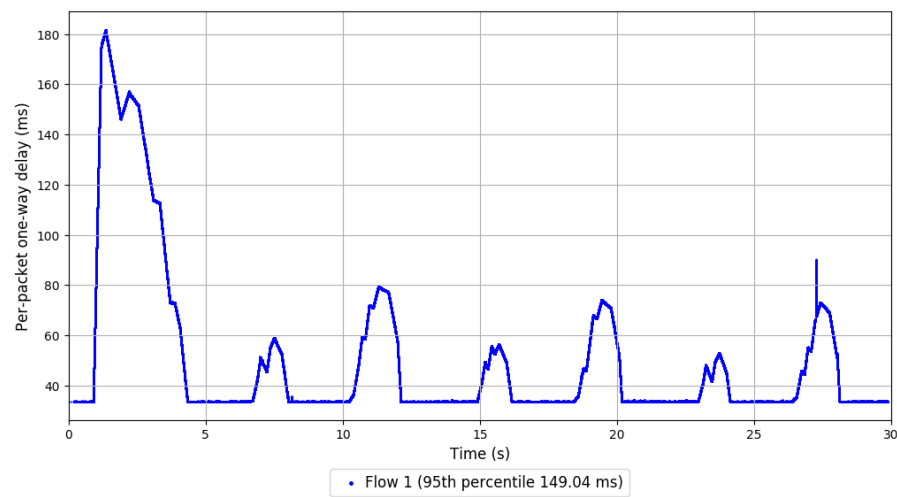
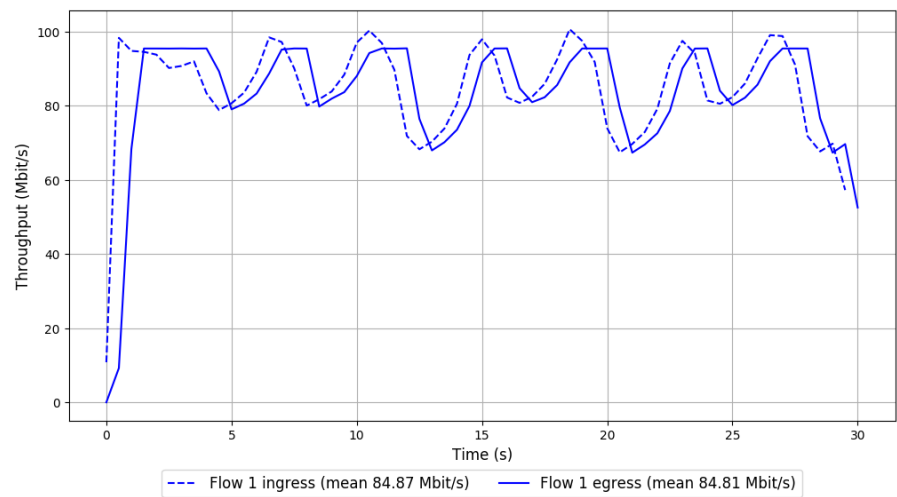
-- Flow 1:

Average throughput: 84.81 Mbit/s

95th percentile per-packet one-way delay: 149.038 ms

Loss rate: 0.28%

Run 2: Report of PCC-Expr — Data Link

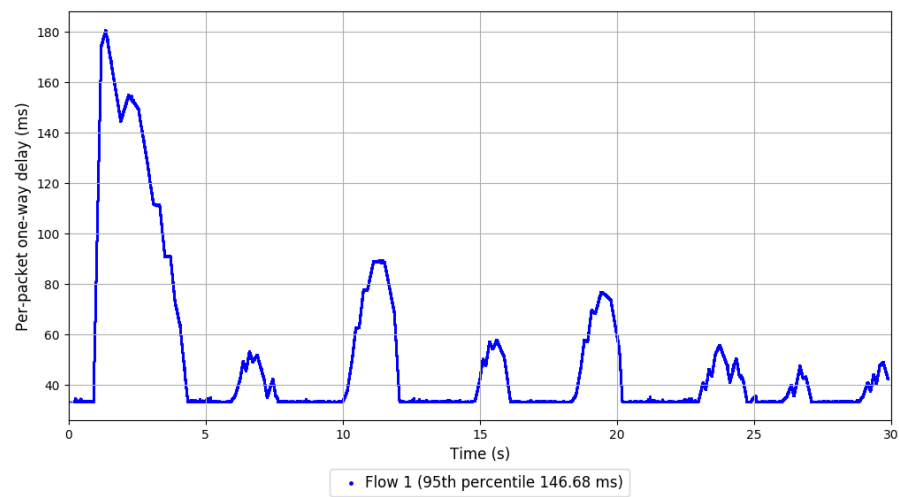
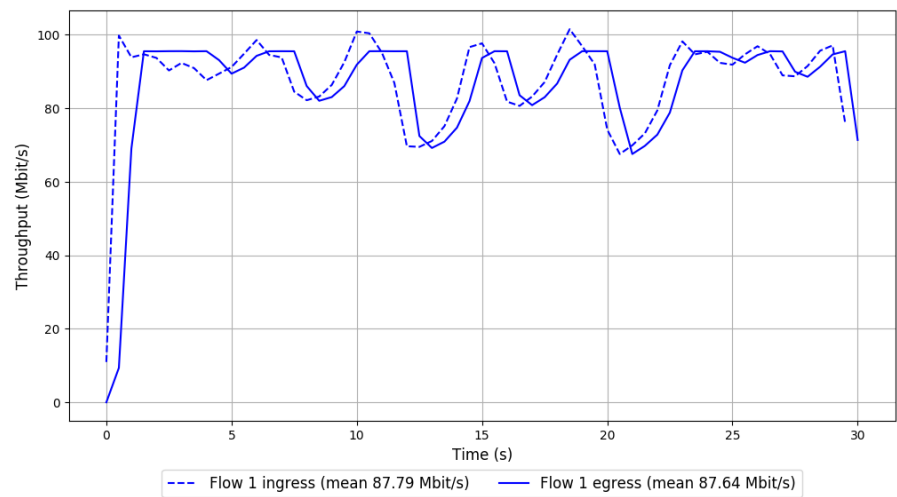


Run 3: Statistics of PCC-Expr

Start at: 2018-11-15 08:52:22
End at: 2018-11-15 08:52:52
Local clock offset: -0.168 ms
Remote clock offset: -6.053 ms

Below is generated by plot.py at 2018-11-15 10:02:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 87.64 Mbit/s
95th percentile per-packet one-way delay: 146.676 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 87.64 Mbit/s
95th percentile per-packet one-way delay: 146.676 ms
Loss rate: 0.38%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2018-11-15 09:16:14

End at: 2018-11-15 09:16:44

Local clock offset: -0.052 ms

Remote clock offset: -5.18 ms

Below is generated by plot.py at 2018-11-15 10:02:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.89 Mbit/s

95th percentile per-packet one-way delay: 160.613 ms

Loss rate: 0.27%

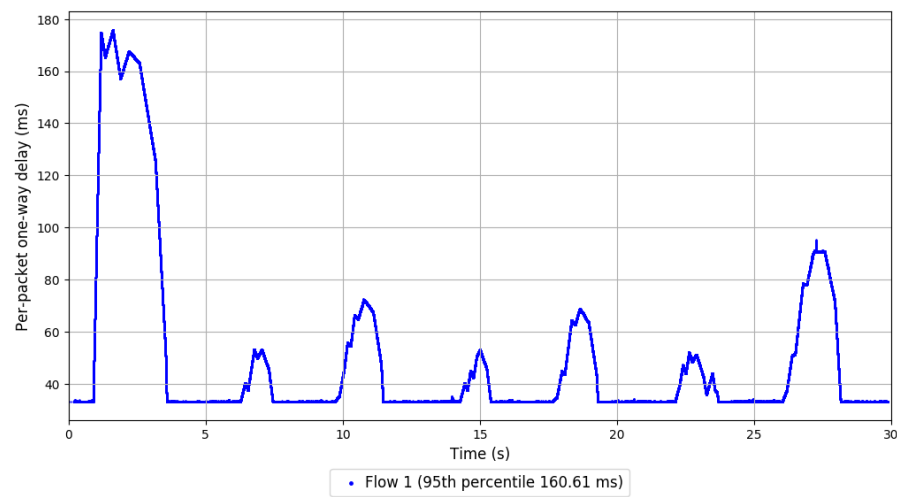
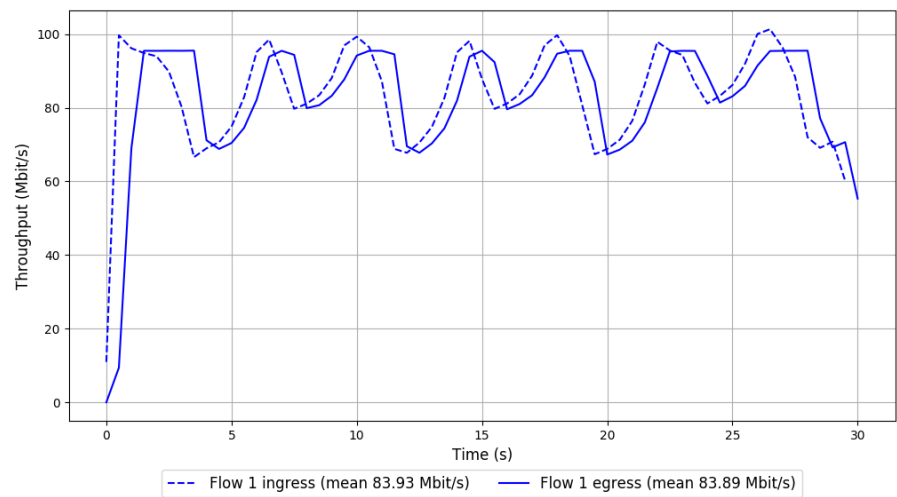
-- Flow 1:

Average throughput: 83.89 Mbit/s

95th percentile per-packet one-way delay: 160.613 ms

Loss rate: 0.27%

Run 4: Report of PCC-Expr — Data Link

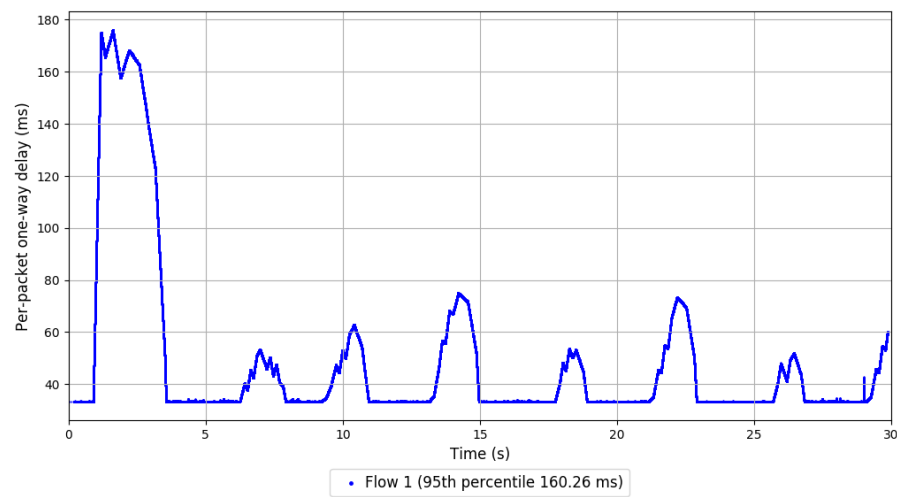
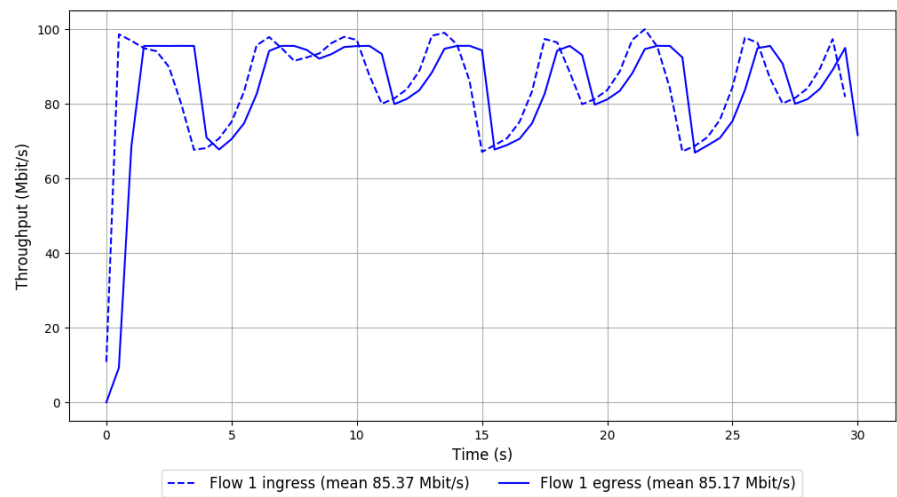


Run 5: Statistics of PCC-Expr

Start at: 2018-11-15 09:40:08
End at: 2018-11-15 09:40:38
Local clock offset: -0.063 ms
Remote clock offset: -4.921 ms

Below is generated by plot.py at 2018-11-15 10:02:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.17 Mbit/s
95th percentile per-packet one-way delay: 160.265 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 85.17 Mbit/s
95th percentile per-packet one-way delay: 160.265 ms
Loss rate: 0.44%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-11-15 08:01:57

End at: 2018-11-15 08:02:27

Local clock offset: 0.078 ms

Remote clock offset: -6.908 ms

Below is generated by plot.py at 2018-11-15 10:02:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.80 Mbit/s

95th percentile per-packet one-way delay: 40.821 ms

Loss rate: 0.28%

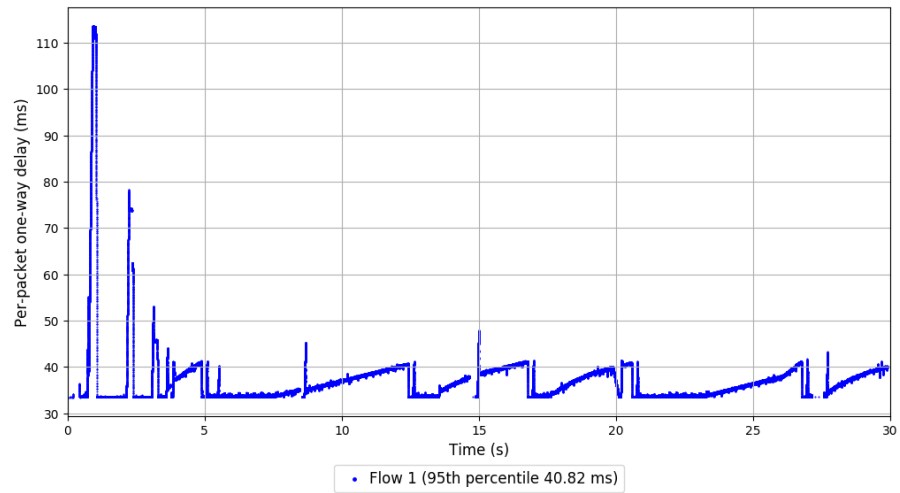
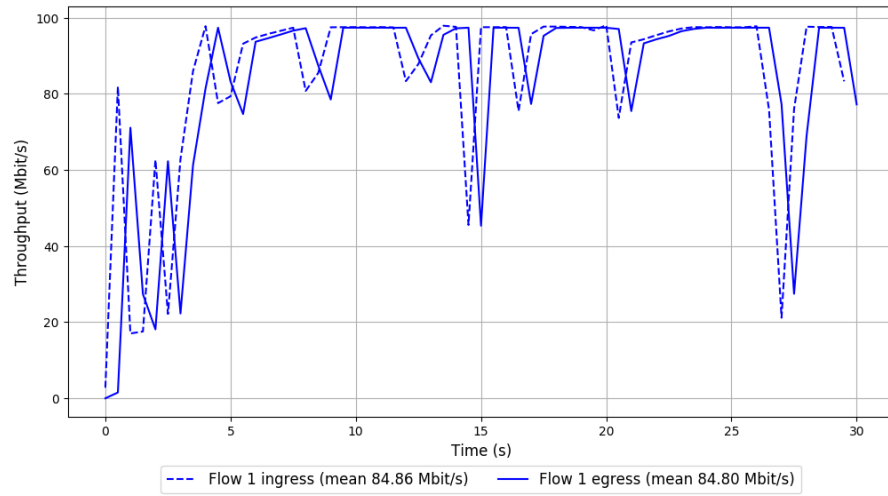
-- Flow 1:

Average throughput: 84.80 Mbit/s

95th percentile per-packet one-way delay: 40.821 ms

Loss rate: 0.28%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-11-15 08:25:46

End at: 2018-11-15 08:26:16

Local clock offset: -0.061 ms

Remote clock offset: -6.545 ms

Below is generated by plot.py at 2018-11-15 10:02:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.04 Mbit/s

95th percentile per-packet one-way delay: 40.330 ms

Loss rate: 0.26%

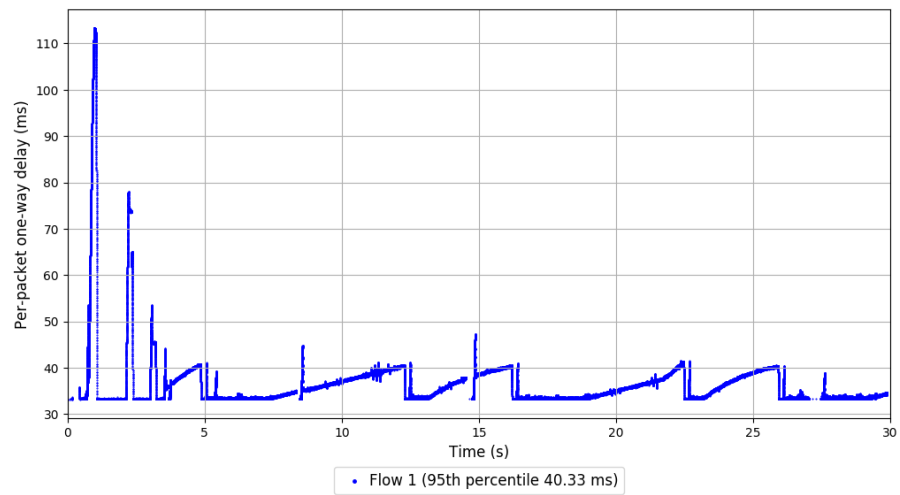
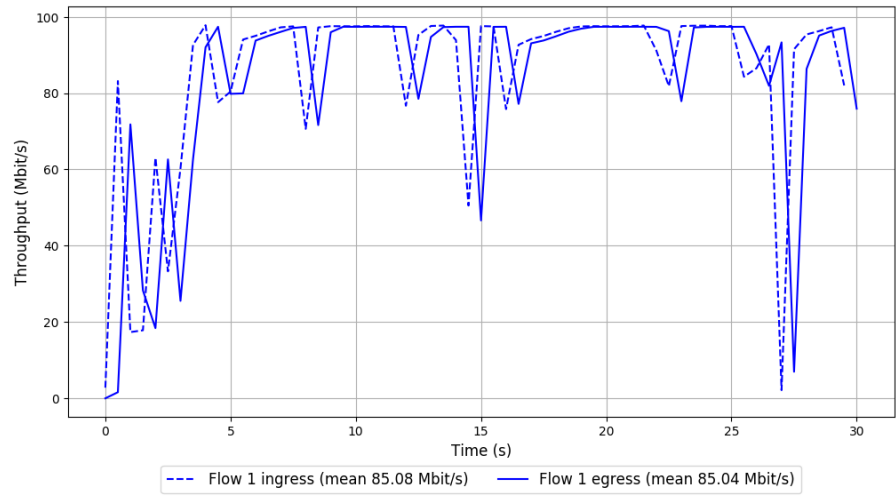
-- Flow 1:

Average throughput: 85.04 Mbit/s

95th percentile per-packet one-way delay: 40.330 ms

Loss rate: 0.26%

Run 2: Report of QUIC Cubic — Data Link

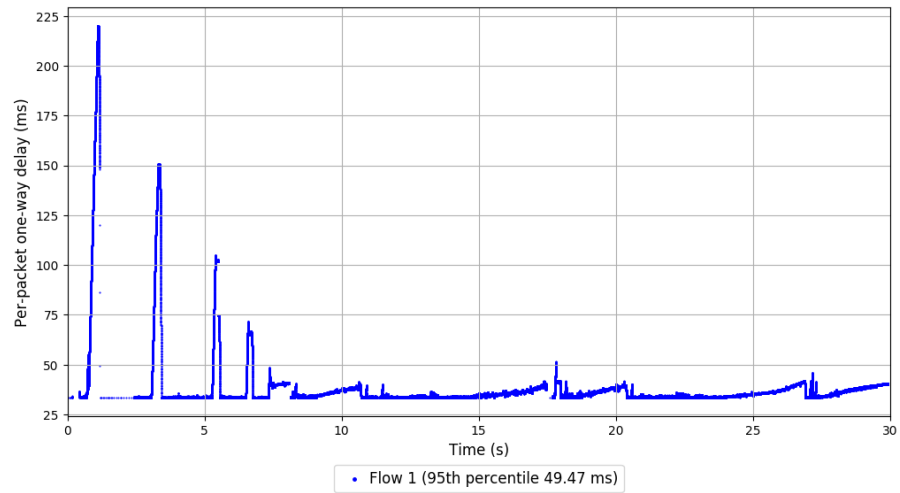
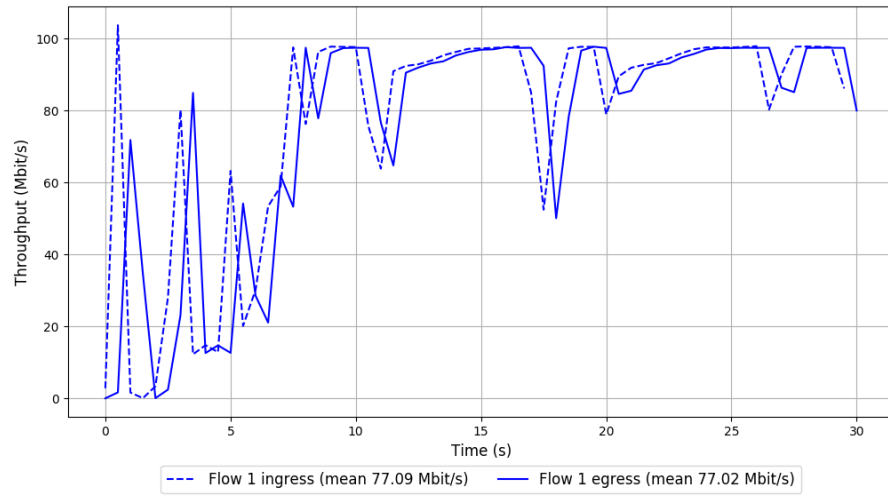


Run 3: Statistics of QUIC Cubic

Start at: 2018-11-15 08:49:39
End at: 2018-11-15 08:50:09
Local clock offset: -0.165 ms
Remote clock offset: -6.274 ms

Below is generated by plot.py at 2018-11-15 10:02:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 77.02 Mbit/s
95th percentile per-packet one-way delay: 49.467 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 77.02 Mbit/s
95th percentile per-packet one-way delay: 49.467 ms
Loss rate: 0.31%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-11-15 09:13:32

End at: 2018-11-15 09:14:02

Local clock offset: -0.066 ms

Remote clock offset: -5.417 ms

Below is generated by plot.py at 2018-11-15 10:03:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.11 Mbit/s

95th percentile per-packet one-way delay: 40.571 ms

Loss rate: 0.32%

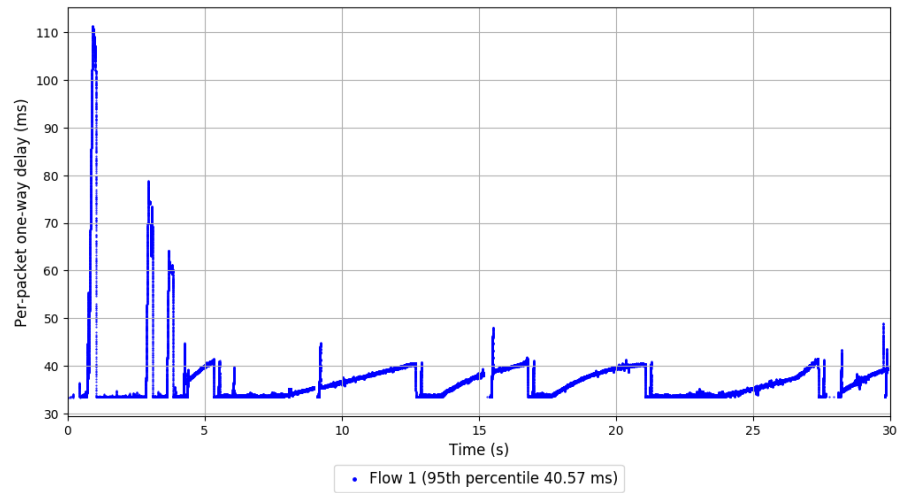
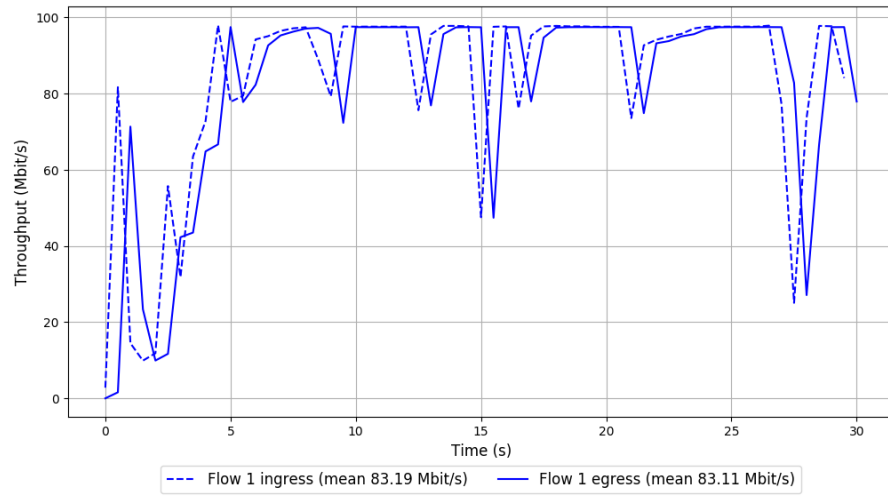
-- Flow 1:

Average throughput: 83.11 Mbit/s

95th percentile per-packet one-way delay: 40.571 ms

Loss rate: 0.32%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-11-15 09:37:26

End at: 2018-11-15 09:37:56

Local clock offset: -0.074 ms

Remote clock offset: -4.984 ms

Below is generated by plot.py at 2018-11-15 10:03:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.17 Mbit/s

95th percentile per-packet one-way delay: 49.466 ms

Loss rate: 0.30%

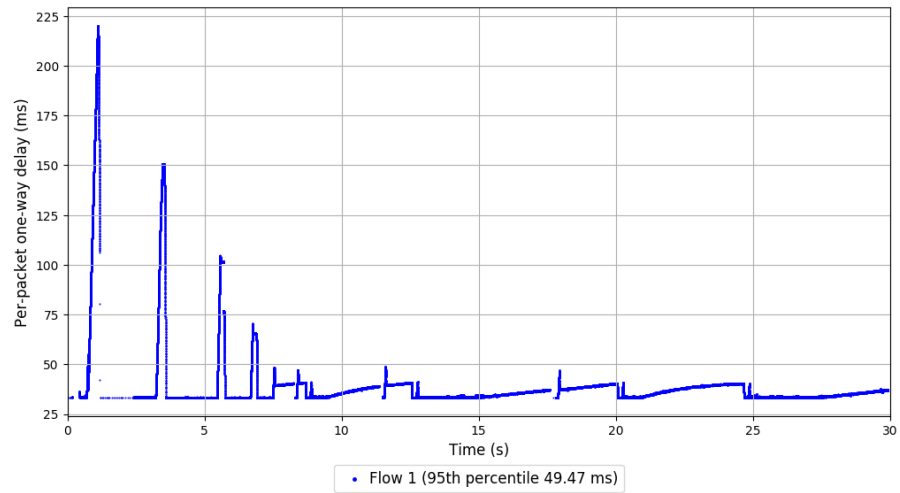
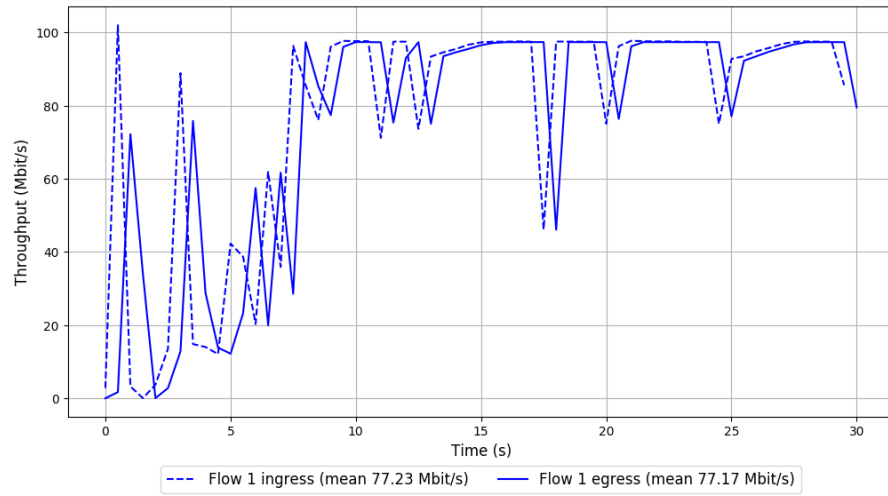
-- Flow 1:

Average throughput: 77.17 Mbit/s

95th percentile per-packet one-way delay: 49.466 ms

Loss rate: 0.30%

Run 5: Report of QUIC Cubic — Data Link

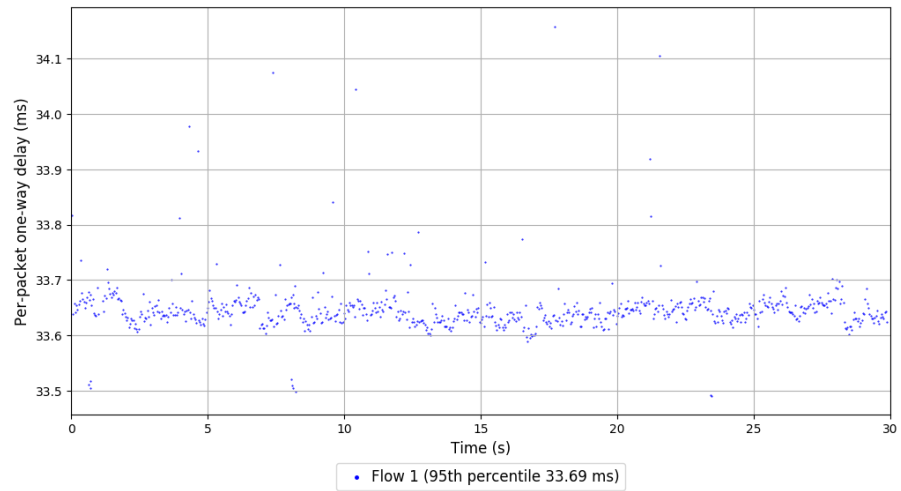
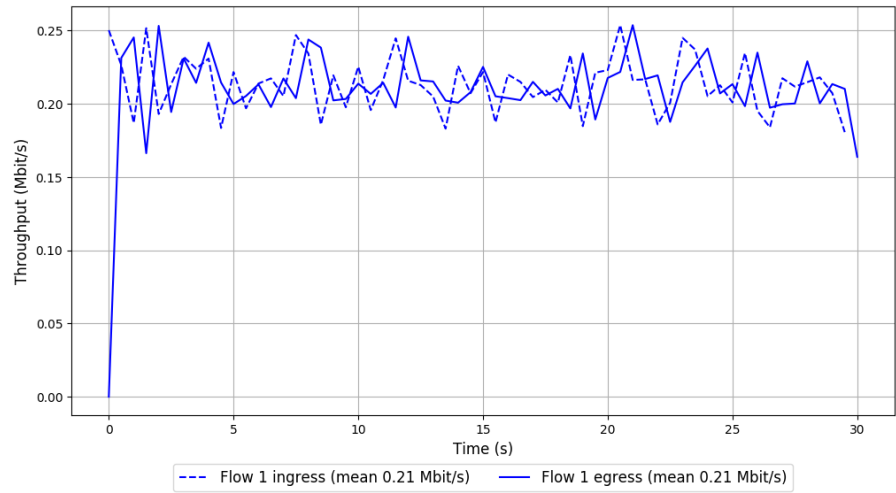


```
Run 1: Statistics of SCReAM

Start at: 2018-11-15 08:00:41
End at: 2018-11-15 08:01:11
Local clock offset: 0.137 ms
Remote clock offset: -7.007 ms

# Below is generated by plot.py at 2018-11-15 10:03:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.687 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.687 ms
Loss rate: 0.26%
```

Run 1: Report of SReAM — Data Link

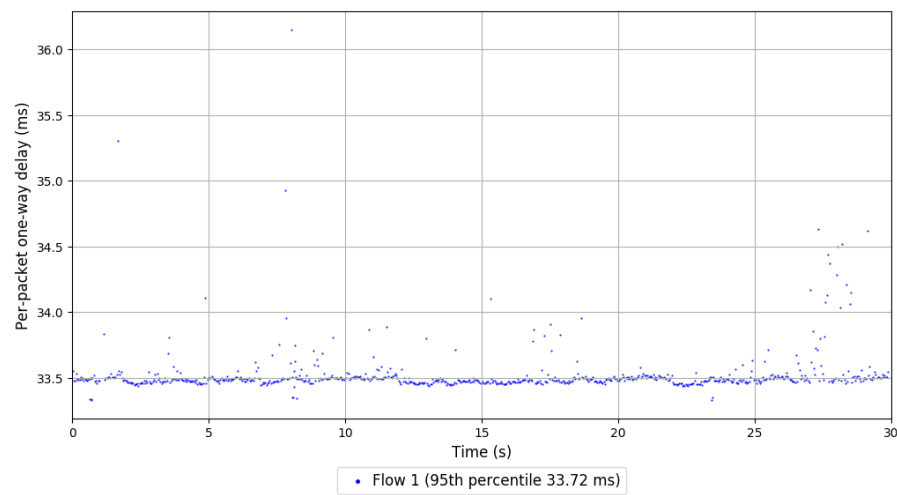
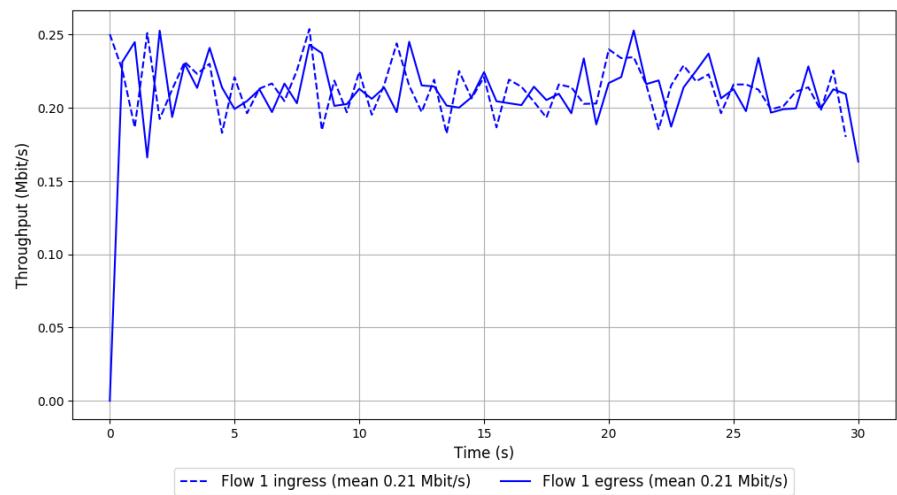


Run 2: Statistics of SCReAM

Start at: 2018-11-15 08:24:30
End at: 2018-11-15 08:25:00
Local clock offset: -0.063 ms
Remote clock offset: -6.734 ms

Below is generated by plot.py at 2018-11-15 10:03:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.716 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.716 ms
Loss rate: 0.26%

Run 2: Report of SReAM — Data Link

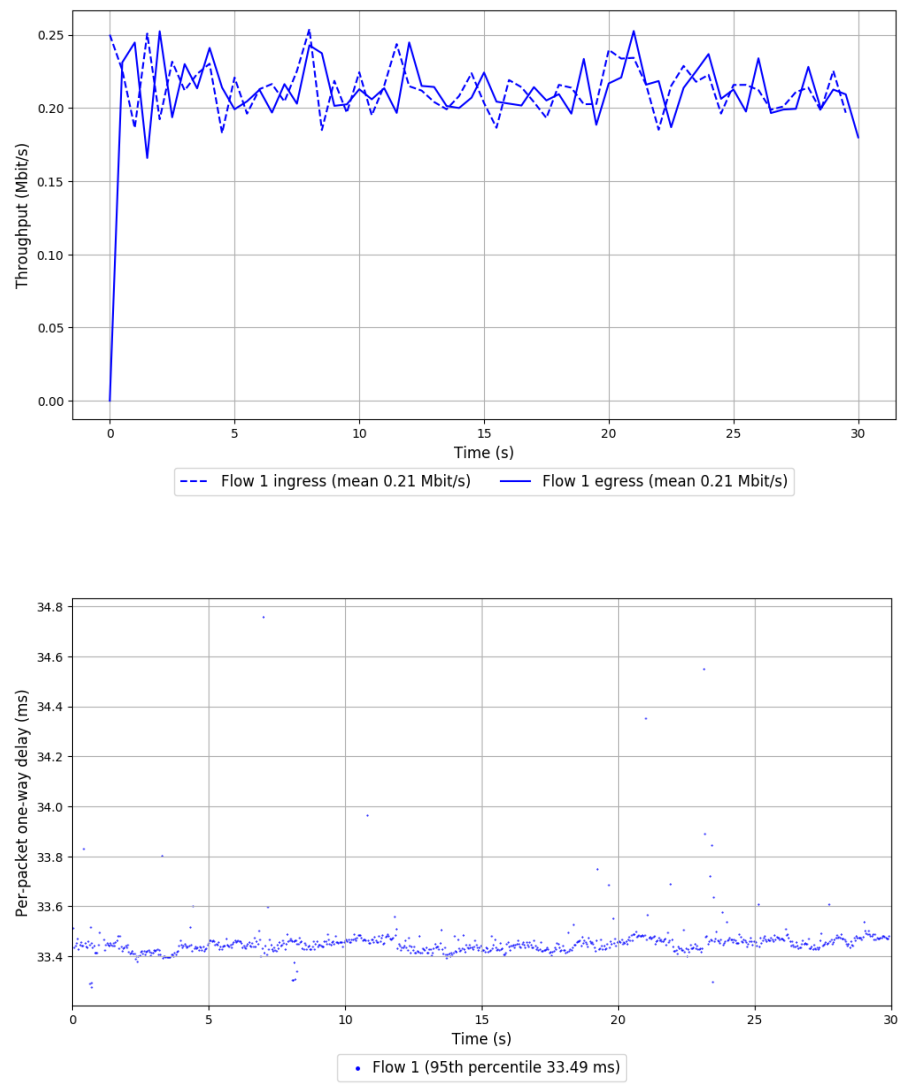


Run 3: Statistics of SReAM

Start at: 2018-11-15 08:48:24
End at: 2018-11-15 08:48:54
Local clock offset: -0.172 ms
Remote clock offset: -6.192 ms

Below is generated by plot.py at 2018-11-15 10:03:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.494 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.494 ms
Loss rate: 0.26%

Run 3: Report of SReAM — Data Link

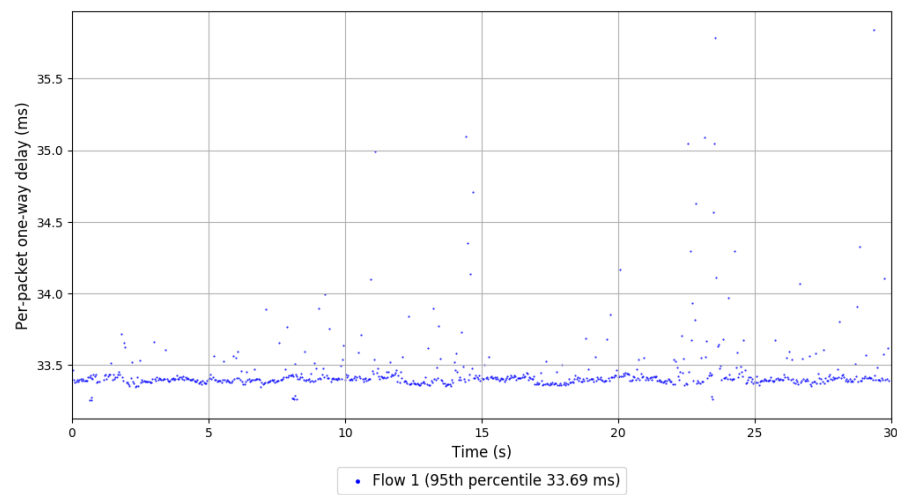
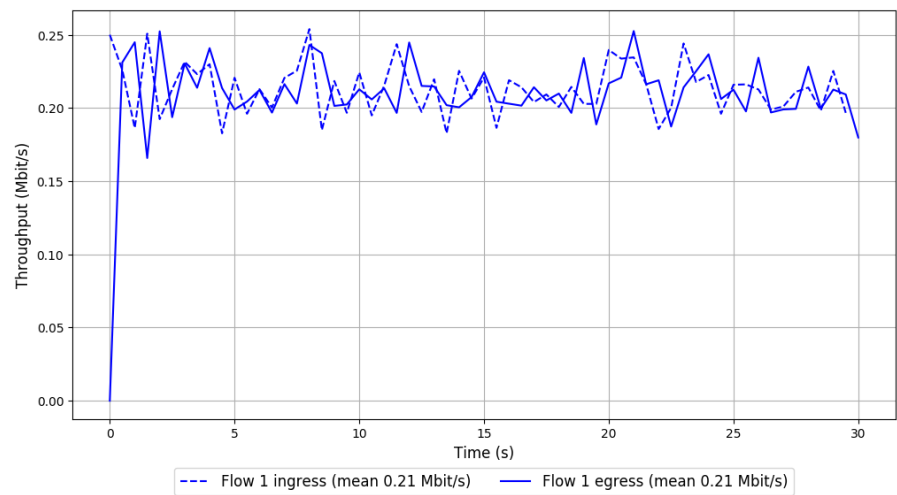


Run 4: Statistics of SCReAM

Start at: 2018-11-15 09:12:16
End at: 2018-11-15 09:12:46
Local clock offset: -0.074 ms
Remote clock offset: -5.451 ms

Below is generated by plot.py at 2018-11-15 10:03:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.687 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.687 ms
Loss rate: 0.26%

Run 4: Report of SReAM — Data Link

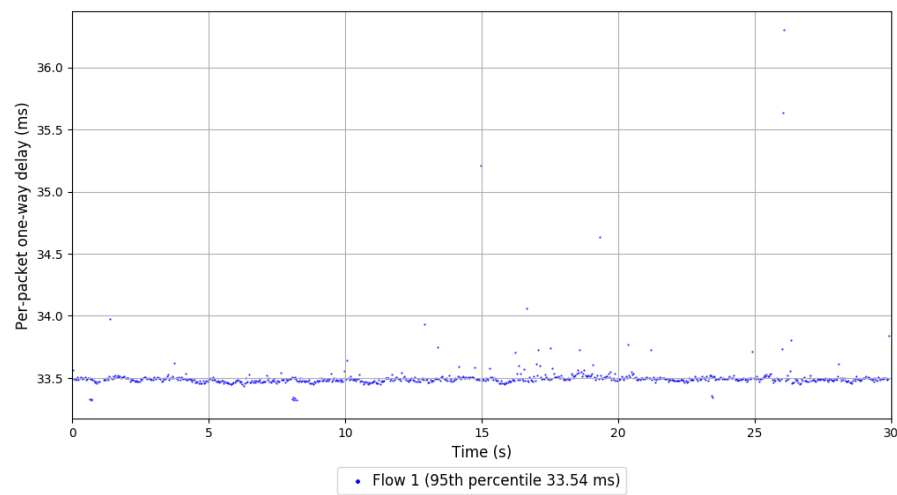
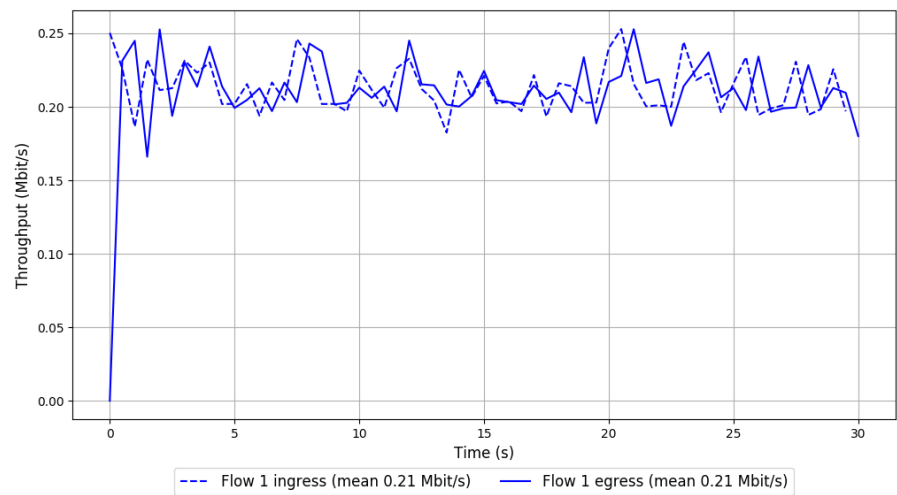


Run 5: Statistics of SCReAM

Start at: 2018-11-15 09:36:10
End at: 2018-11-15 09:36:40
Local clock offset: -0.059 ms
Remote clock offset: -5.098 ms

Below is generated by plot.py at 2018-11-15 10:03:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.544 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.544 ms
Loss rate: 0.26%

Run 5: Report of SReAM — Data Link

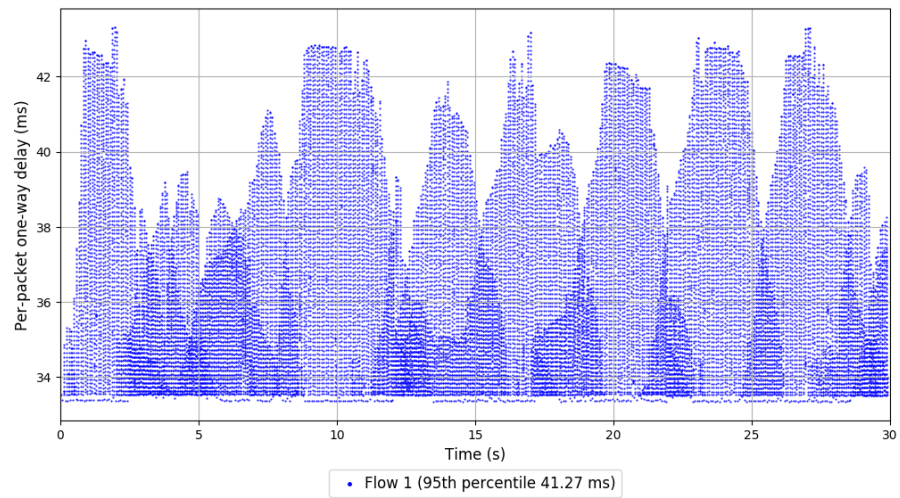
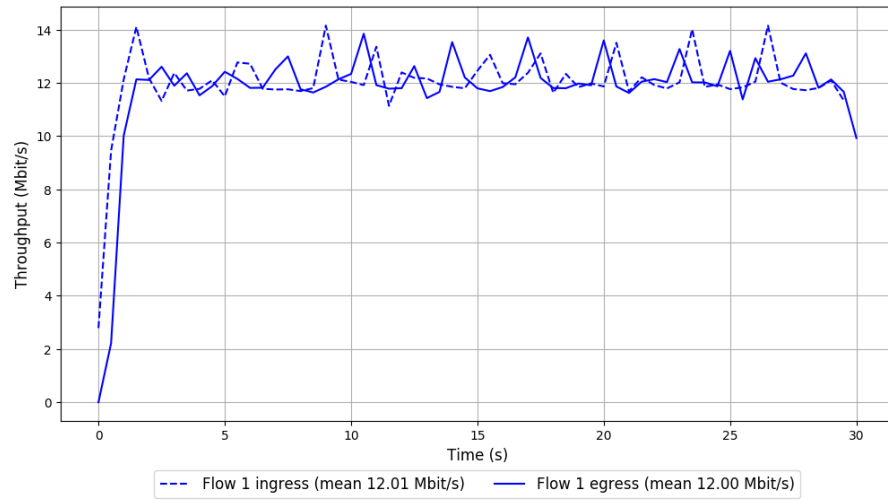


Run 1: Statistics of Sprout

Start at: 2018-11-15 07:55:24
End at: 2018-11-15 07:55:54
Local clock offset: 0.271 ms
Remote clock offset: -6.773 ms

Below is generated by plot.py at 2018-11-15 10:03:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 41.268 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 41.268 ms
Loss rate: 0.26%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-11-15 08:19:12

End at: 2018-11-15 08:19:42

Local clock offset: -0.07 ms

Remote clock offset: -6.77 ms

Below is generated by plot.py at 2018-11-15 10:03:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.96 Mbit/s

95th percentile per-packet one-way delay: 40.808 ms

Loss rate: 0.17%

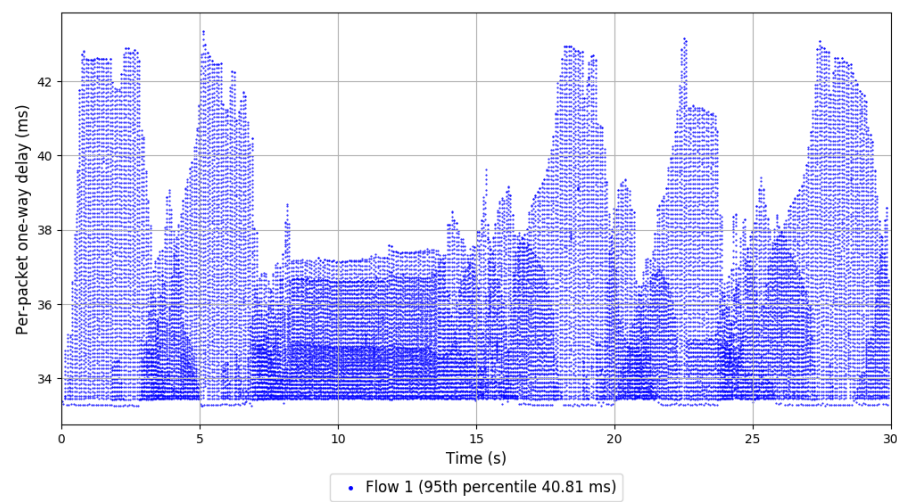
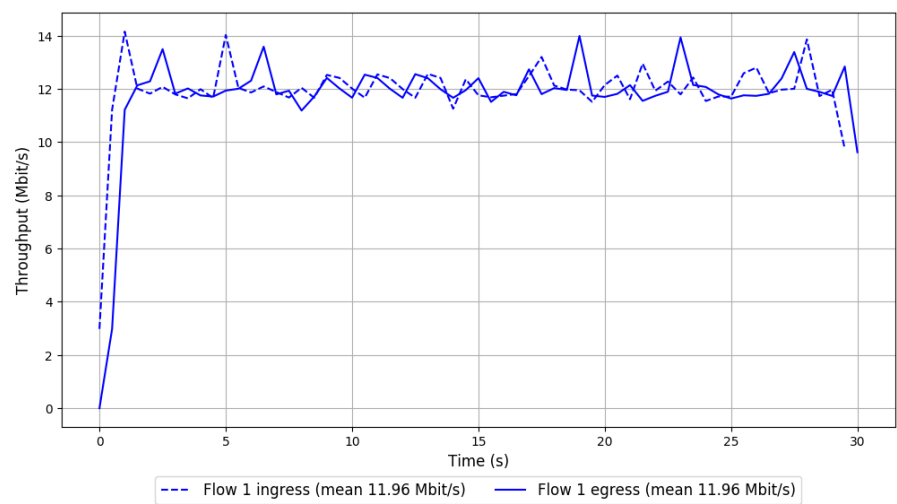
-- Flow 1:

Average throughput: 11.96 Mbit/s

95th percentile per-packet one-way delay: 40.808 ms

Loss rate: 0.17%

Run 2: Report of Sprout — Data Link

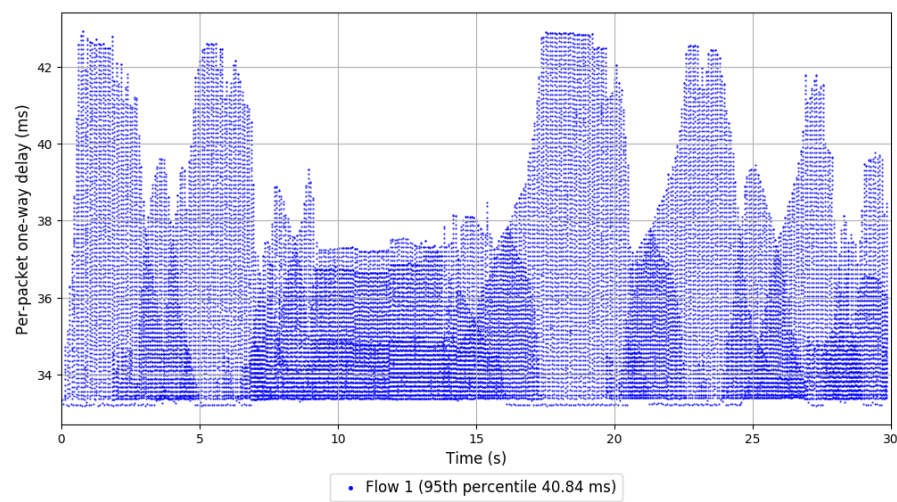
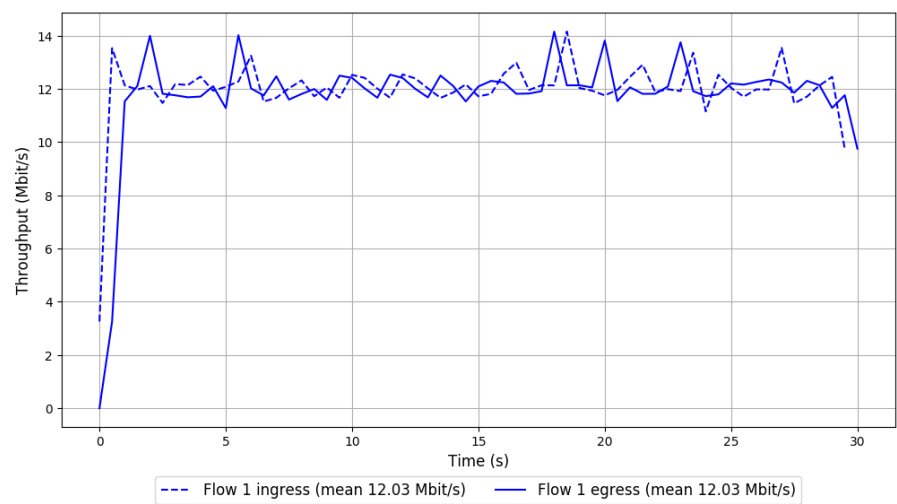


Run 3: Statistics of Sprout

Start at: 2018-11-15 08:43:05
End at: 2018-11-15 08:43:35
Local clock offset: -0.168 ms
Remote clock offset: -6.456 ms

Below is generated by plot.py at 2018-11-15 10:03:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 40.845 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 40.845 ms
Loss rate: 0.27%

Run 3: Report of Sprout — Data Link

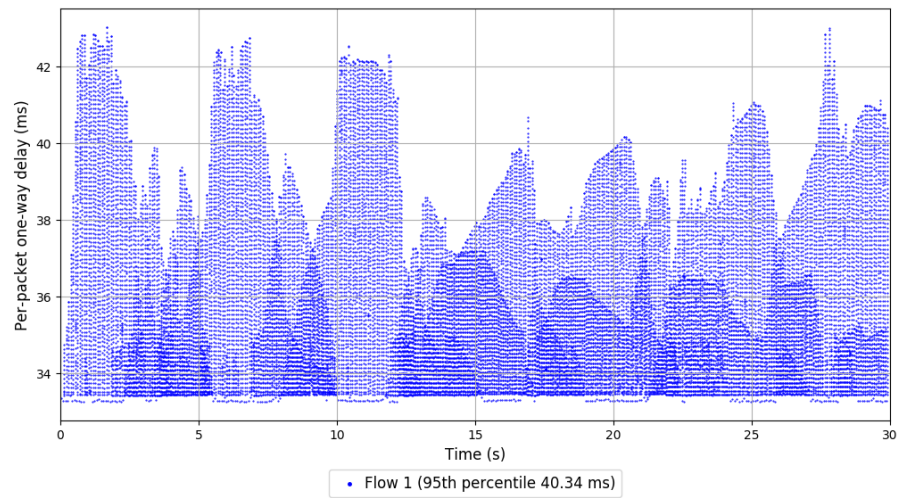
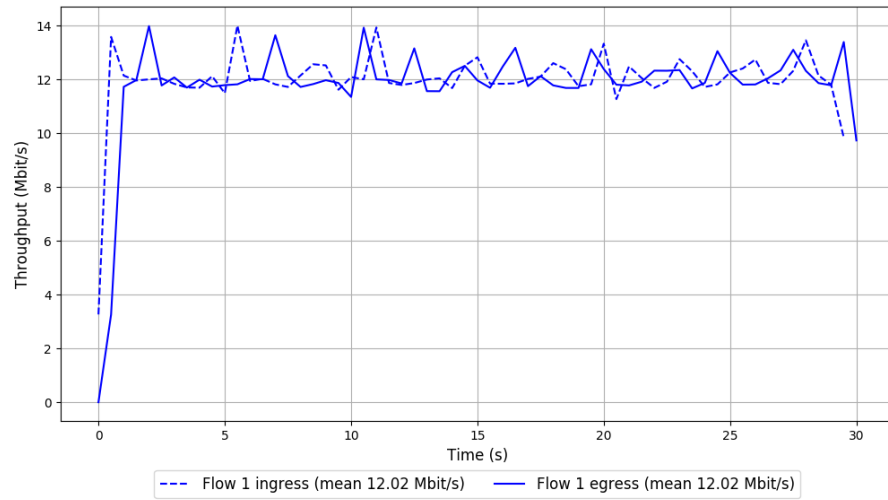


Run 4: Statistics of Sprout

Start at: 2018-11-15 09:06:58
End at: 2018-11-15 09:07:28
Local clock offset: -0.109 ms
Remote clock offset: -5.568 ms

Below is generated by plot.py at 2018-11-15 10:03:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.02 Mbit/s
95th percentile per-packet one-way delay: 40.337 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 12.02 Mbit/s
95th percentile per-packet one-way delay: 40.337 ms
Loss rate: 0.07%

Run 4: Report of Sprout — Data Link

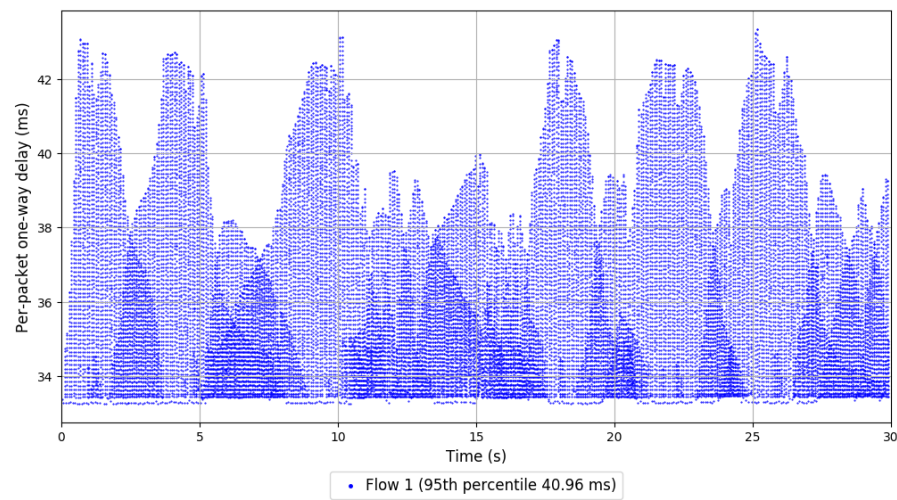
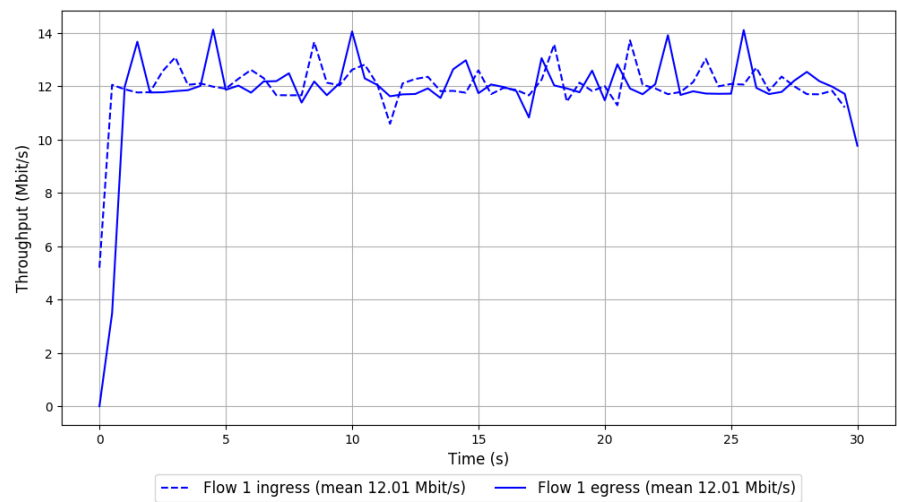


Run 5: Statistics of Sprout

Start at: 2018-11-15 09:30:50
End at: 2018-11-15 09:31:20
Local clock offset: -0.048 ms
Remote clock offset: -5.053 ms

Below is generated by plot.py at 2018-11-15 10:03:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.01 Mbit/s
95th percentile per-packet one-way delay: 40.964 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 12.01 Mbit/s
95th percentile per-packet one-way delay: 40.964 ms
Loss rate: 0.22%

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-11-15 08:03:17

End at: 2018-11-15 08:03:47

Local clock offset: 0.03 ms

Remote clock offset: -6.948 ms

Below is generated by plot.py at 2018-11-15 10:04:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.86 Mbit/s

95th percentile per-packet one-way delay: 44.736 ms

Loss rate: 0.22%

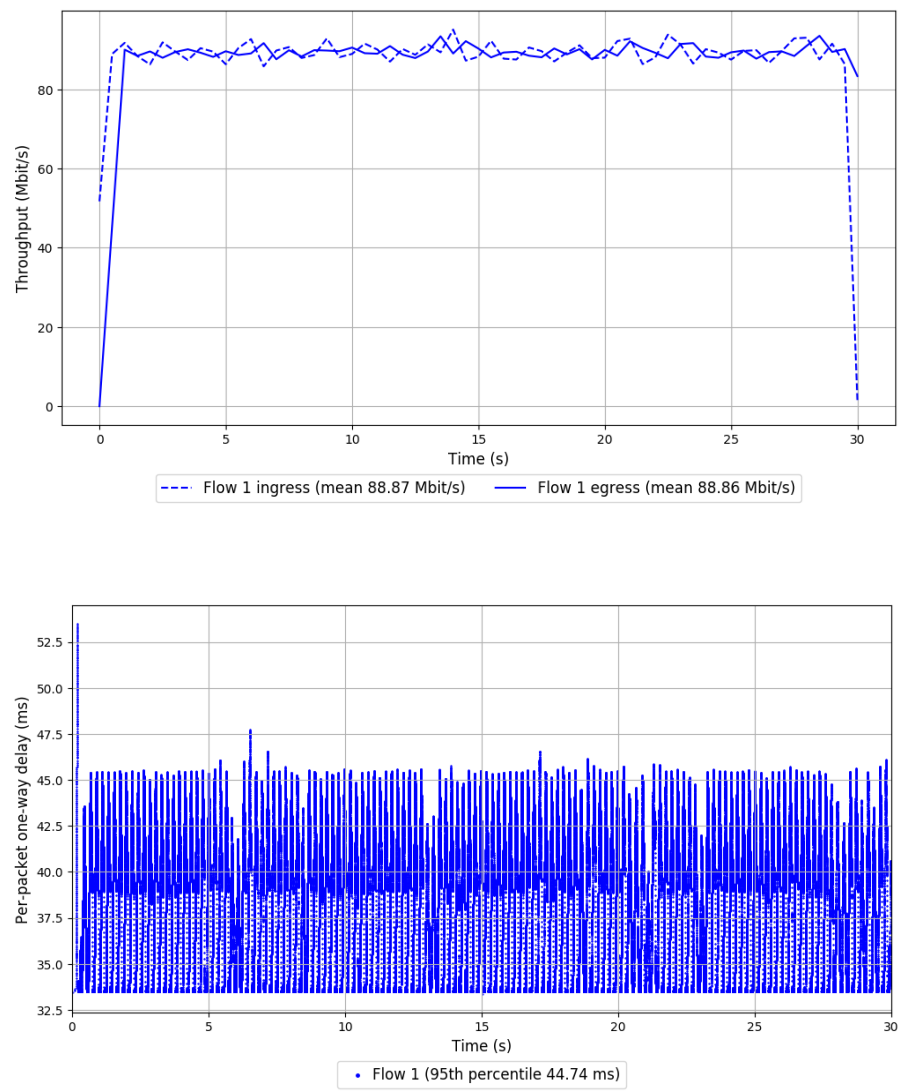
-- Flow 1:

Average throughput: 88.86 Mbit/s

95th percentile per-packet one-way delay: 44.736 ms

Loss rate: 0.22%

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

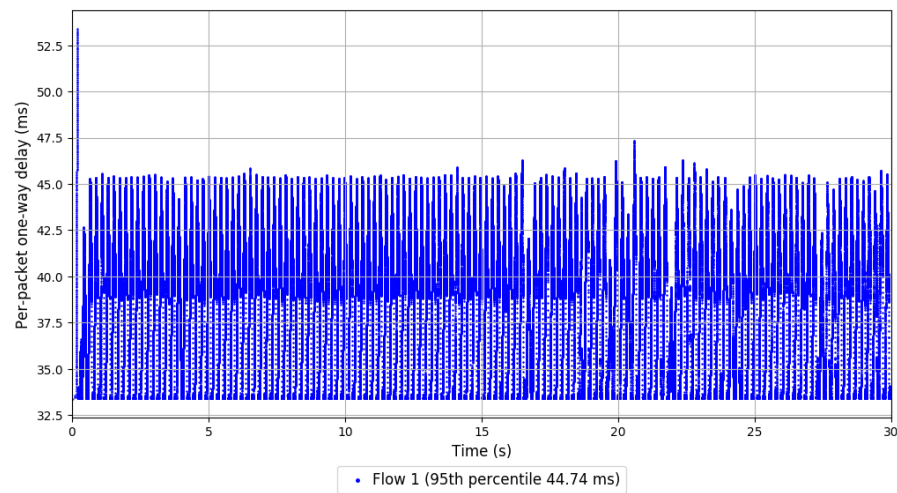
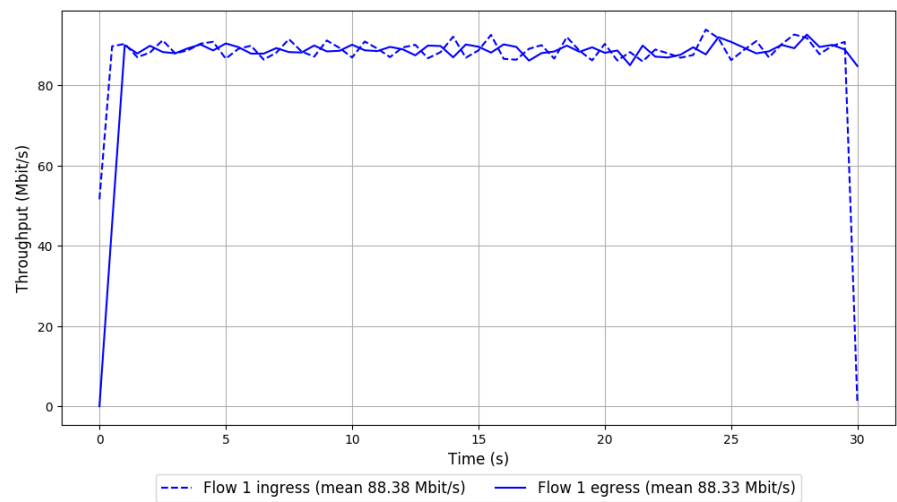


Run 2: Statistics of TaoVA-100x

Start at: 2018-11-15 08:27:05
End at: 2018-11-15 08:27:35
Local clock offset: -0.043 ms
Remote clock offset: -6.715 ms

Below is generated by plot.py at 2018-11-15 10:04:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 88.33 Mbit/s
95th percentile per-packet one-way delay: 44.742 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 88.33 Mbit/s
95th percentile per-packet one-way delay: 44.742 ms
Loss rate: 0.26%

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

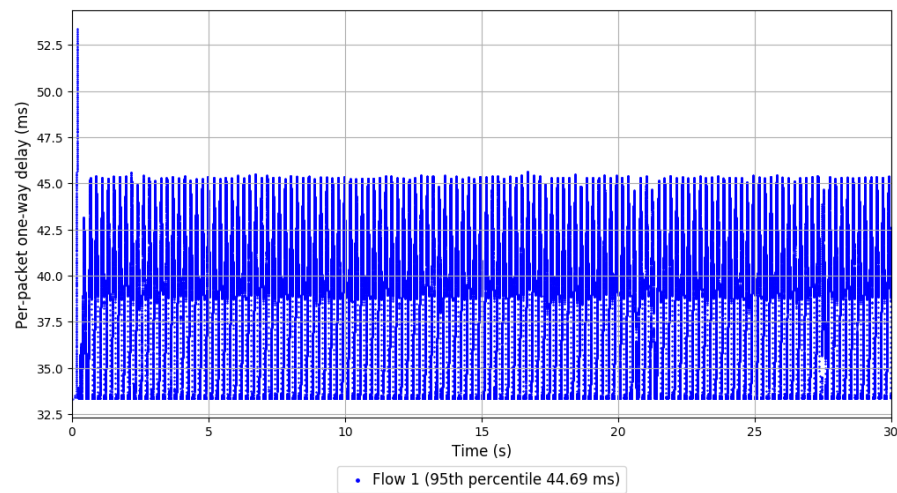
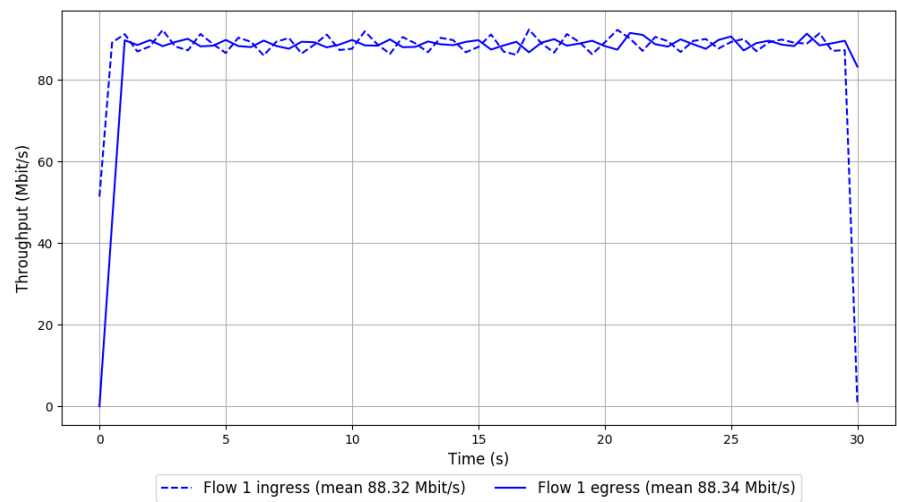


Run 3: Statistics of TaoVA-100x

Start at: 2018-11-15 08:50:59
End at: 2018-11-15 08:51:29
Local clock offset: -0.175 ms
Remote clock offset: -6.109 ms

Below is generated by plot.py at 2018-11-15 10:05:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 88.34 Mbit/s
95th percentile per-packet one-way delay: 44.691 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 88.34 Mbit/s
95th percentile per-packet one-way delay: 44.691 ms
Loss rate: 0.19%

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

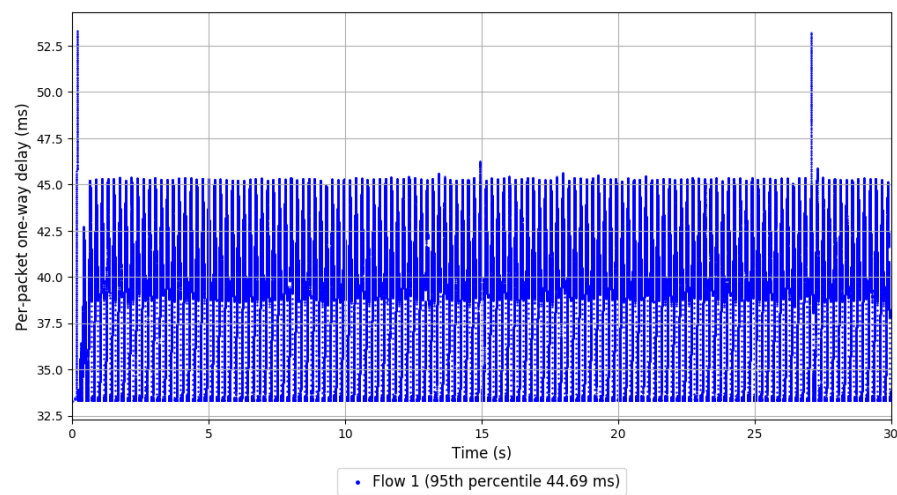
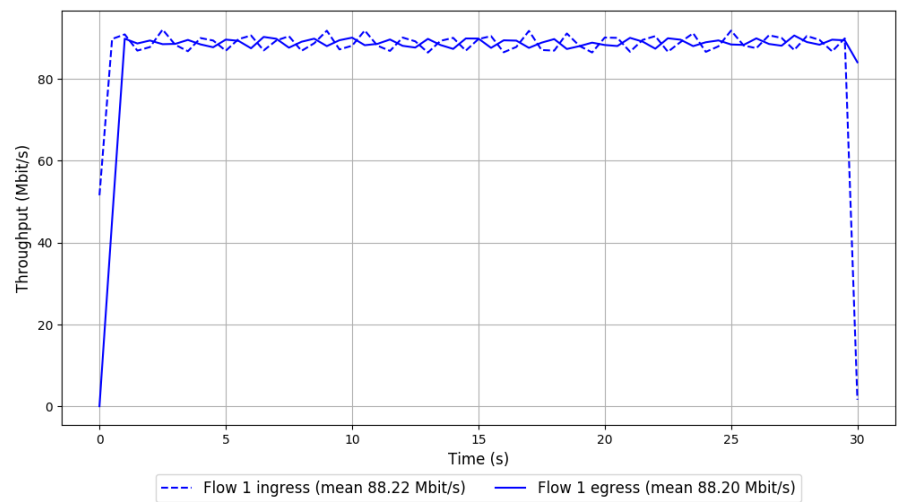


Run 4: Statistics of TaoVA-100x

Start at: 2018-11-15 09:14:52
End at: 2018-11-15 09:15:22
Local clock offset: -0.053 ms
Remote clock offset: -5.326 ms

Below is generated by plot.py at 2018-11-15 10:05:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 88.20 Mbit/s
95th percentile per-packet one-way delay: 44.691 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 88.20 Mbit/s
95th percentile per-packet one-way delay: 44.691 ms
Loss rate: 0.24%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-11-15 09:38:45

End at: 2018-11-15 09:39:15

Local clock offset: -0.049 ms

Remote clock offset: -4.96 ms

Below is generated by plot.py at 2018-11-15 10:05:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.47 Mbit/s

95th percentile per-packet one-way delay: 44.730 ms

Loss rate: 0.26%

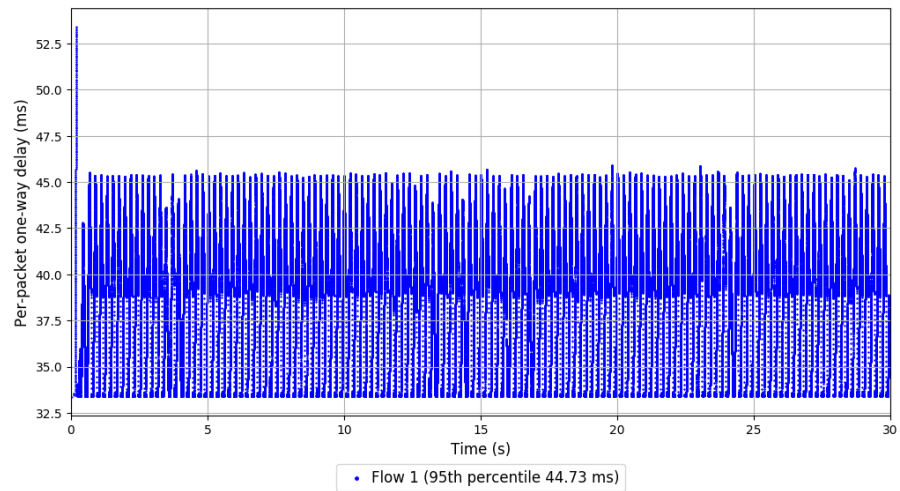
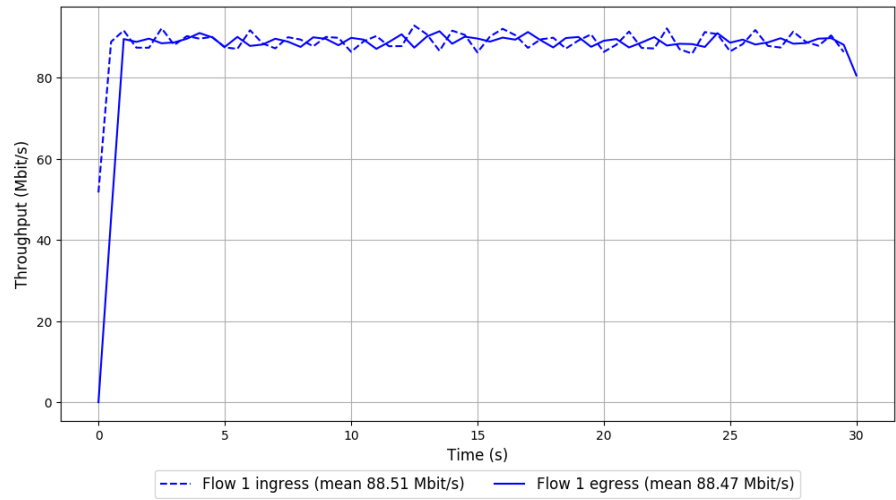
-- Flow 1:

Average throughput: 88.47 Mbit/s

95th percentile per-packet one-way delay: 44.730 ms

Loss rate: 0.26%

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

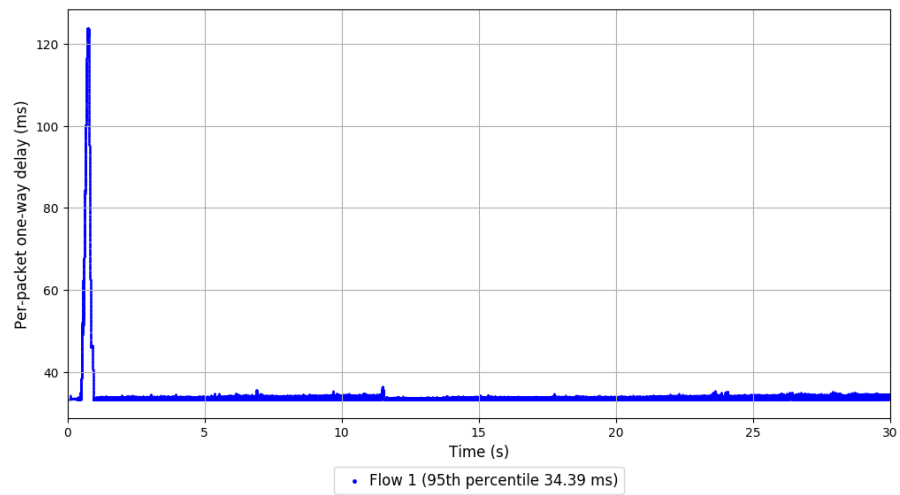
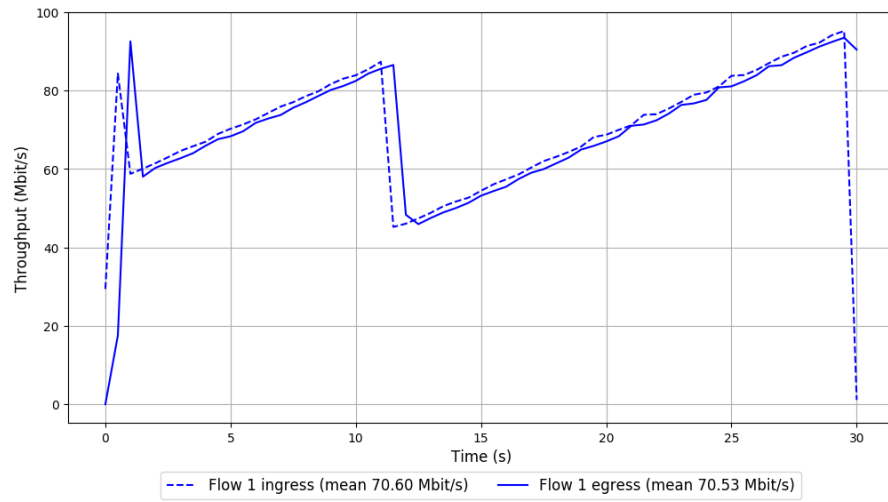


Run 1: Statistics of TCP Vegas

Start at: 2018-11-15 08:10:01
End at: 2018-11-15 08:10:31
Local clock offset: -0.066 ms
Remote clock offset: -6.847 ms

Below is generated by plot.py at 2018-11-15 10:05:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 70.53 Mbit/s
95th percentile per-packet one-way delay: 34.391 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 70.53 Mbit/s
95th percentile per-packet one-way delay: 34.391 ms
Loss rate: 0.30%

Run 1: Report of TCP Vegas — Data Link

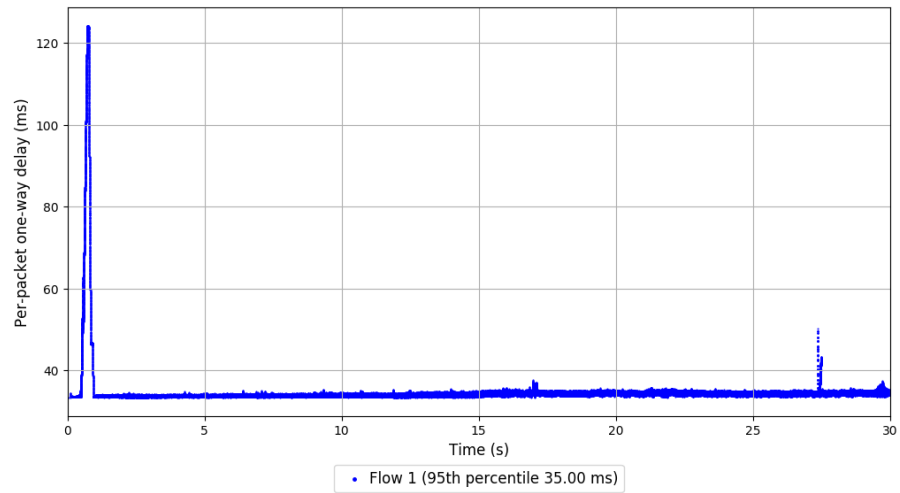
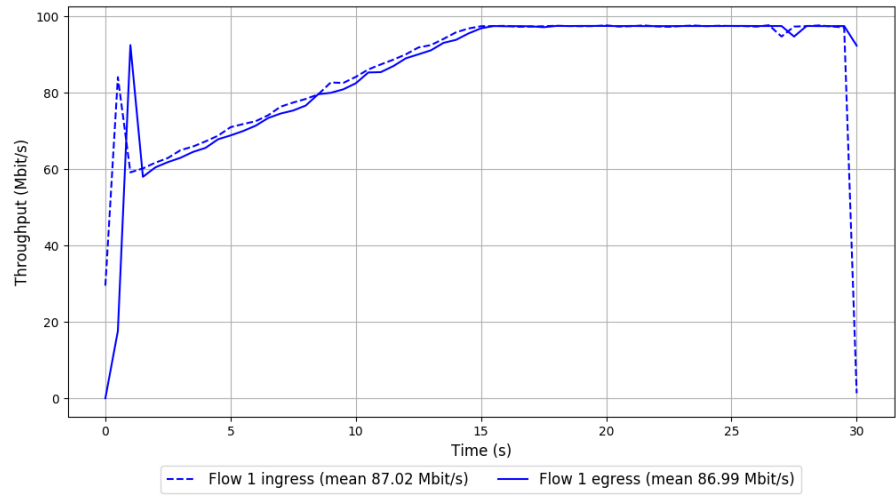


Run 2: Statistics of TCP Vegas

Start at: 2018-11-15 08:33:52
End at: 2018-11-15 08:34:22
Local clock offset: -0.148 ms
Remote clock offset: -6.718 ms

Below is generated by plot.py at 2018-11-15 10:05:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 86.99 Mbit/s
95th percentile per-packet one-way delay: 35.004 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 86.99 Mbit/s
95th percentile per-packet one-way delay: 35.004 ms
Loss rate: 0.25%

Run 2: Report of TCP Vegas — Data Link

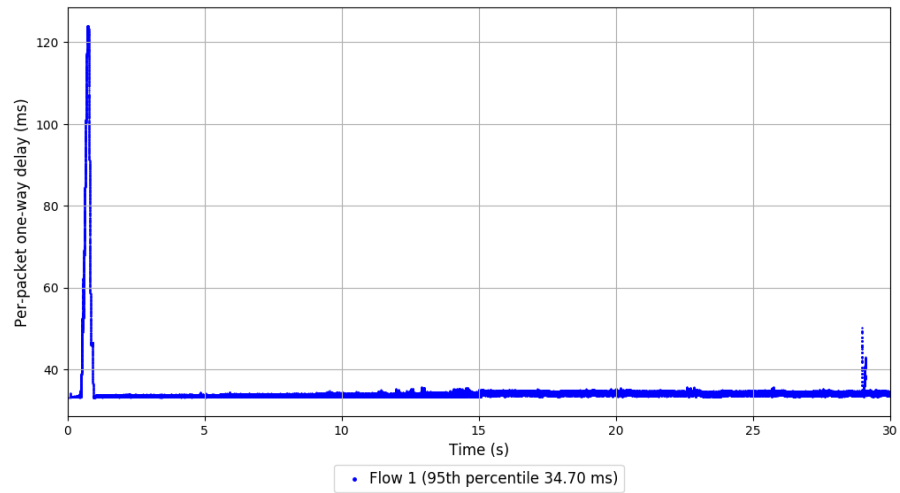
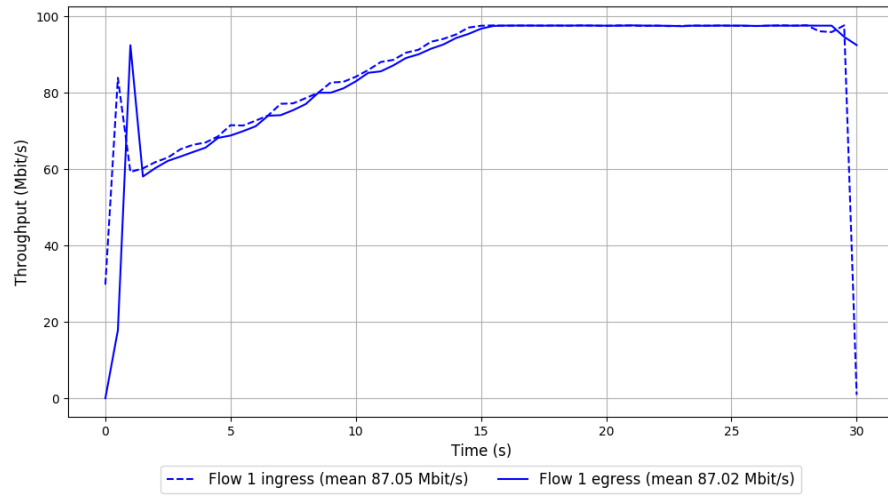


Run 3: Statistics of TCP Vegas

Start at: 2018-11-15 08:57:45
End at: 2018-11-15 08:58:15
Local clock offset: -0.166 ms
Remote clock offset: -5.686 ms

Below is generated by plot.py at 2018-11-15 10:05:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 87.02 Mbit/s
95th percentile per-packet one-way delay: 34.702 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 87.02 Mbit/s
95th percentile per-packet one-way delay: 34.702 ms
Loss rate: 0.24%

Run 3: Report of TCP Vegas — Data Link

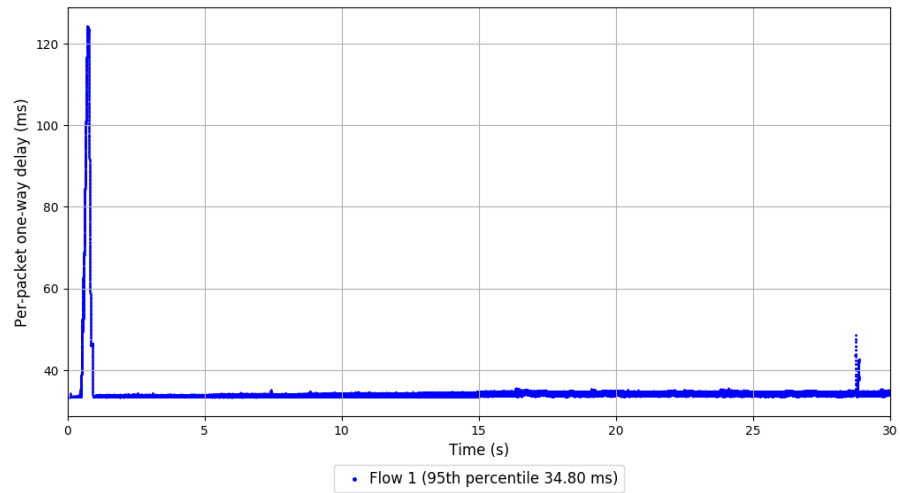
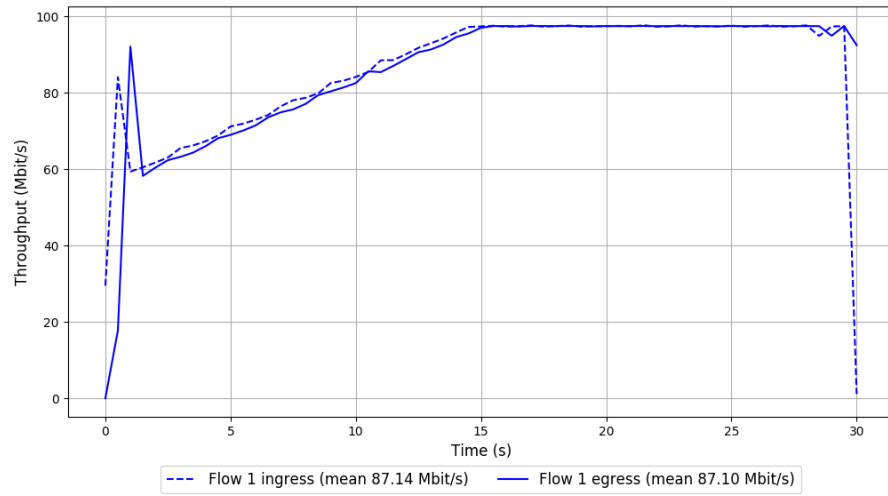


Run 4: Statistics of TCP Vegas

Start at: 2018-11-15 09:21:37
End at: 2018-11-15 09:22:07
Local clock offset: -0.021 ms
Remote clock offset: -5.248 ms

Below is generated by plot.py at 2018-11-15 10:05:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 87.10 Mbit/s
95th percentile per-packet one-way delay: 34.801 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 87.10 Mbit/s
95th percentile per-packet one-way delay: 34.801 ms
Loss rate: 0.25%

Run 4: Report of TCP Vegas — Data Link

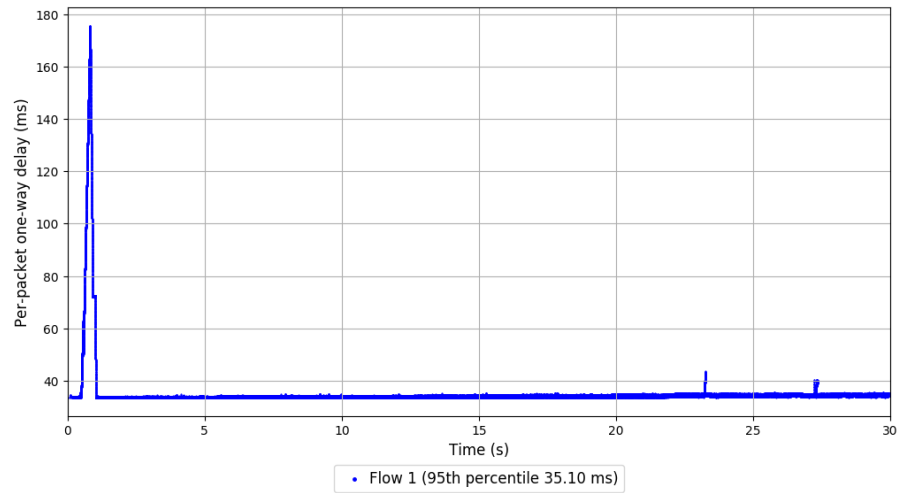
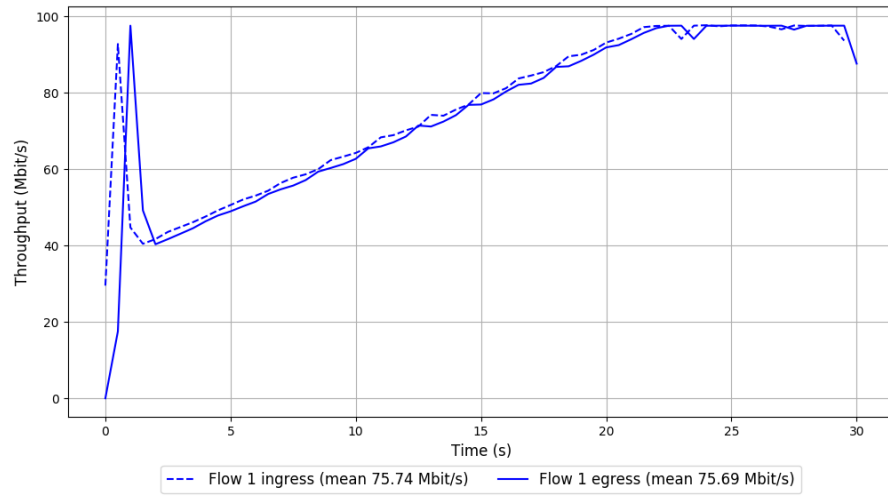


Run 5: Statistics of TCP Vegas

Start at: 2018-11-15 09:45:31
End at: 2018-11-15 09:46:01
Local clock offset: -0.063 ms
Remote clock offset: -4.981 ms

Below is generated by plot.py at 2018-11-15 10:05:29
Datalink statistics
-- Total of 1 flow:
Average throughput: 75.69 Mbit/s
95th percentile per-packet one-way delay: 35.098 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 75.69 Mbit/s
95th percentile per-packet one-way delay: 35.098 ms
Loss rate: 0.29%

Run 5: Report of TCP Vegas — Data Link

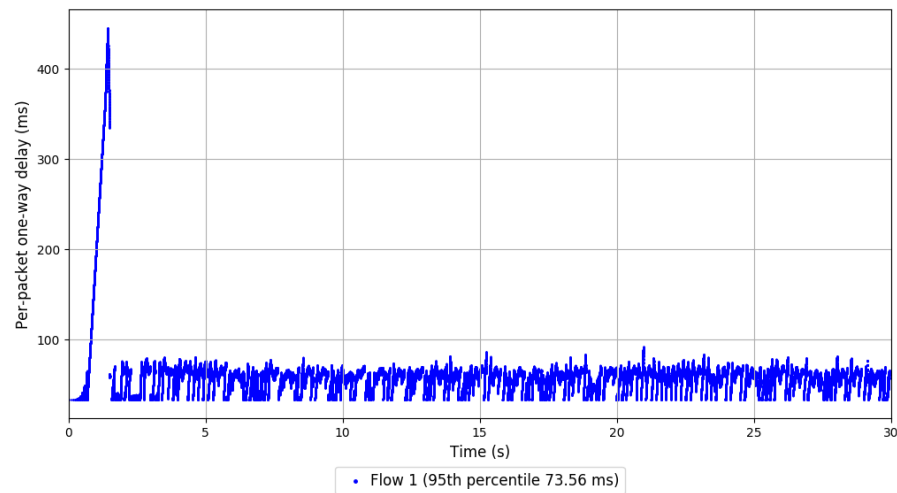
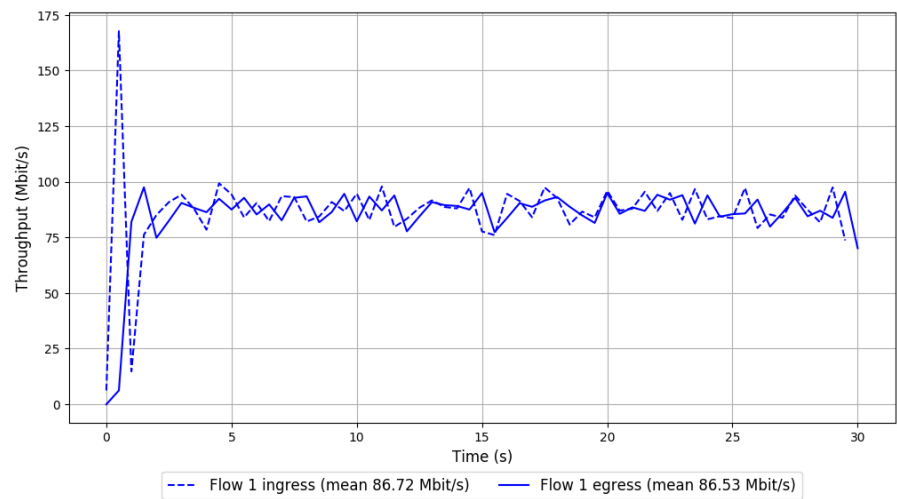


Run 1: Statistics of Verus

Start at: 2018-11-15 08:08:41
End at: 2018-11-15 08:09:11
Local clock offset: -0.058 ms
Remote clock offset: -6.888 ms

Below is generated by plot.py at 2018-11-15 10:05:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 86.53 Mbit/s
95th percentile per-packet one-way delay: 73.557 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 86.53 Mbit/s
95th percentile per-packet one-way delay: 73.557 ms
Loss rate: 0.43%

Run 1: Report of Verus — Data Link

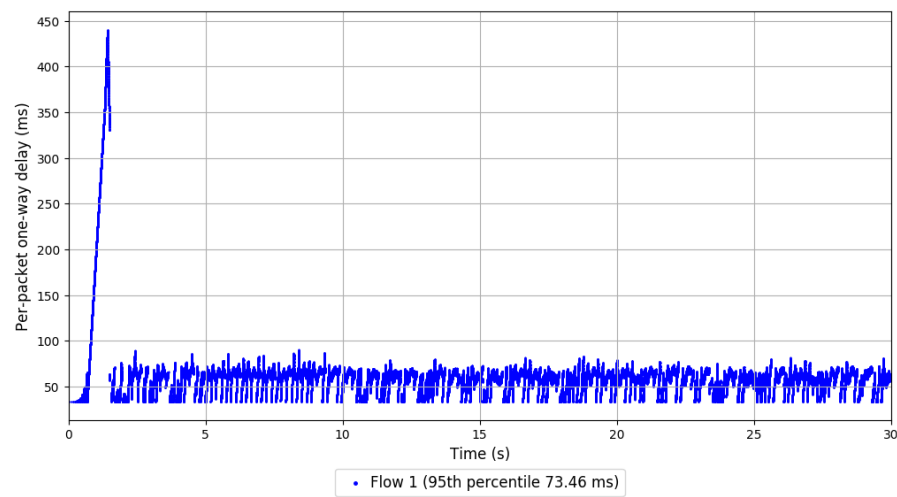
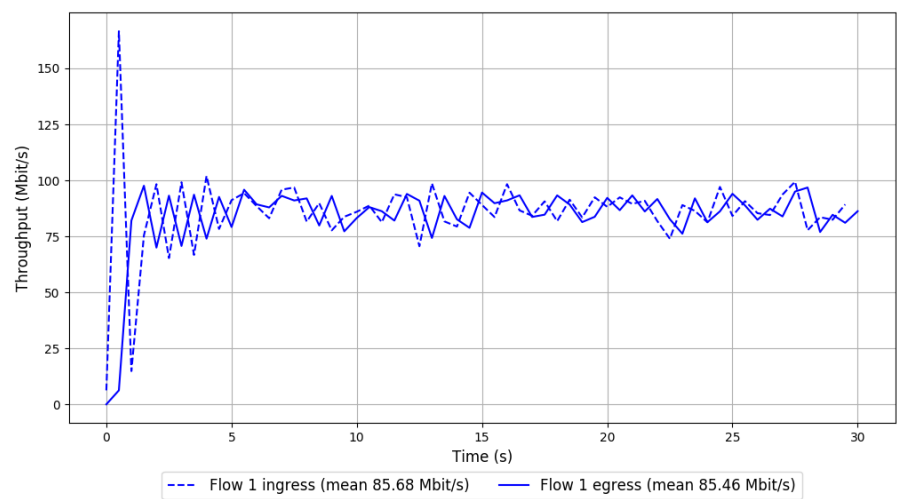


Run 2: Statistics of Verus

Start at: 2018-11-15 08:32:31
End at: 2018-11-15 08:33:01
Local clock offset: -0.133 ms
Remote clock offset: -6.572 ms

Below is generated by plot.py at 2018-11-15 10:06:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.46 Mbit/s
95th percentile per-packet one-way delay: 73.456 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 85.46 Mbit/s
95th percentile per-packet one-way delay: 73.456 ms
Loss rate: 0.45%

Run 2: Report of Verus — Data Link

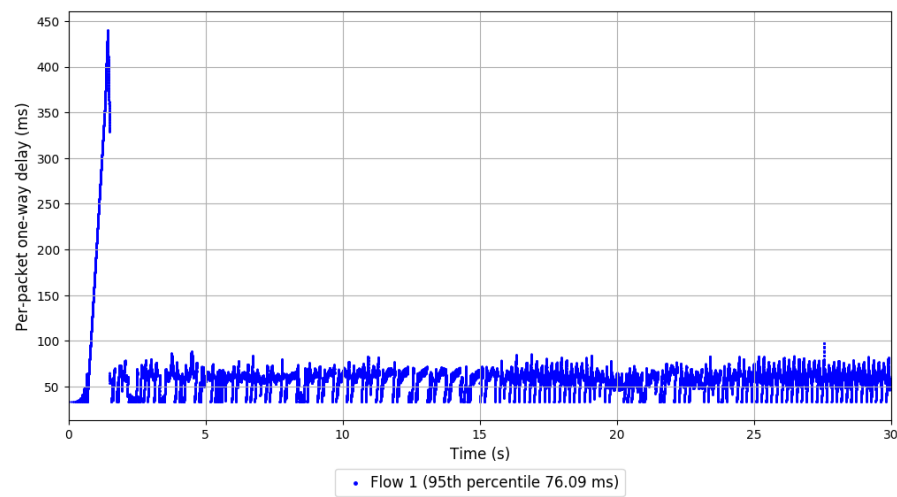
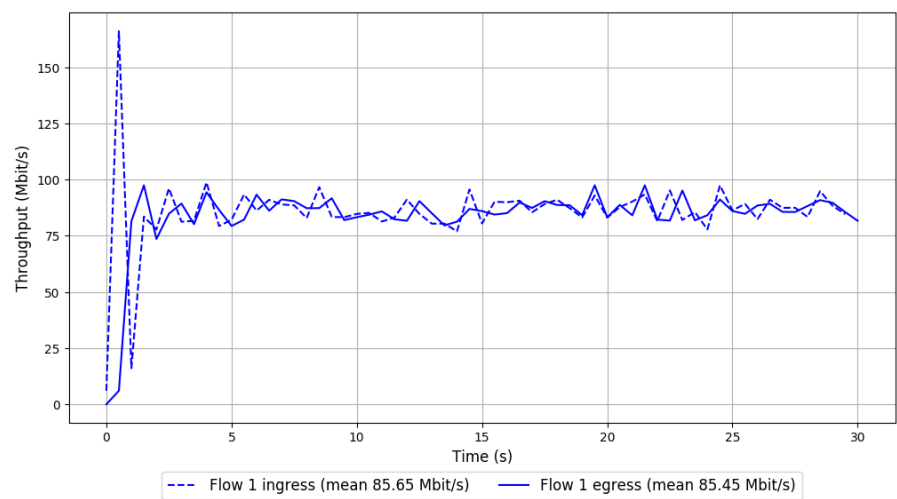


Run 3: Statistics of Verus

Start at: 2018-11-15 08:56:24
End at: 2018-11-15 08:56:54
Local clock offset: -0.176 ms
Remote clock offset: -5.862 ms

Below is generated by plot.py at 2018-11-15 10:06:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.45 Mbit/s
95th percentile per-packet one-way delay: 76.095 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 85.45 Mbit/s
95th percentile per-packet one-way delay: 76.095 ms
Loss rate: 0.44%

Run 3: Report of Verus — Data Link

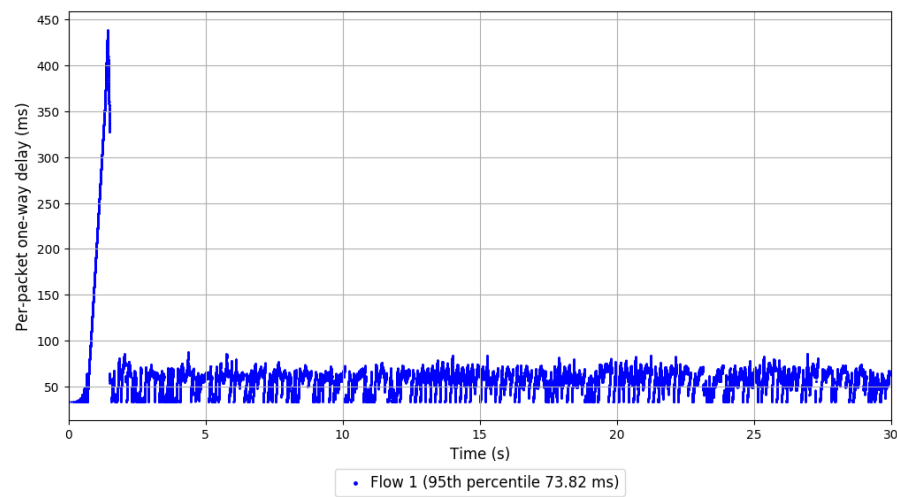
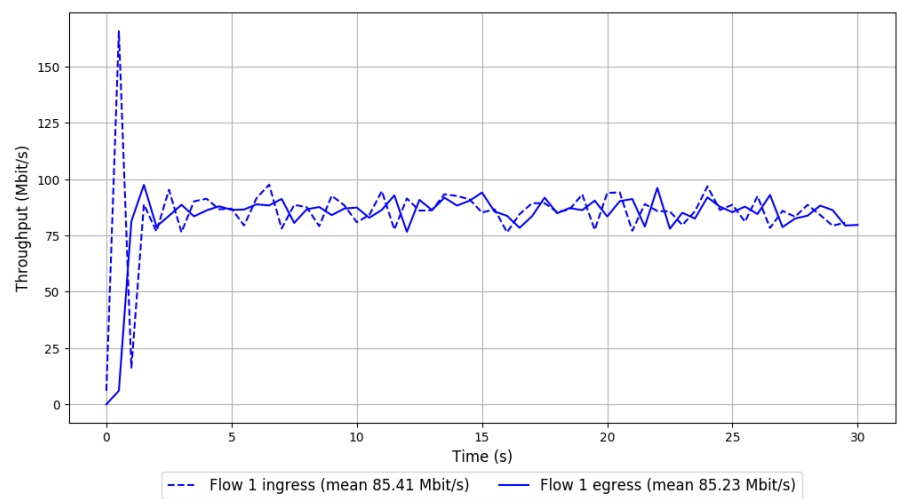


Run 4: Statistics of Verus

Start at: 2018-11-15 09:20:16
End at: 2018-11-15 09:20:46
Local clock offset: -0.023 ms
Remote clock offset: -5.233 ms

Below is generated by plot.py at 2018-11-15 10:06:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.23 Mbit/s
95th percentile per-packet one-way delay: 73.818 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 85.23 Mbit/s
95th percentile per-packet one-way delay: 73.818 ms
Loss rate: 0.33%

Run 4: Report of Verus — Data Link

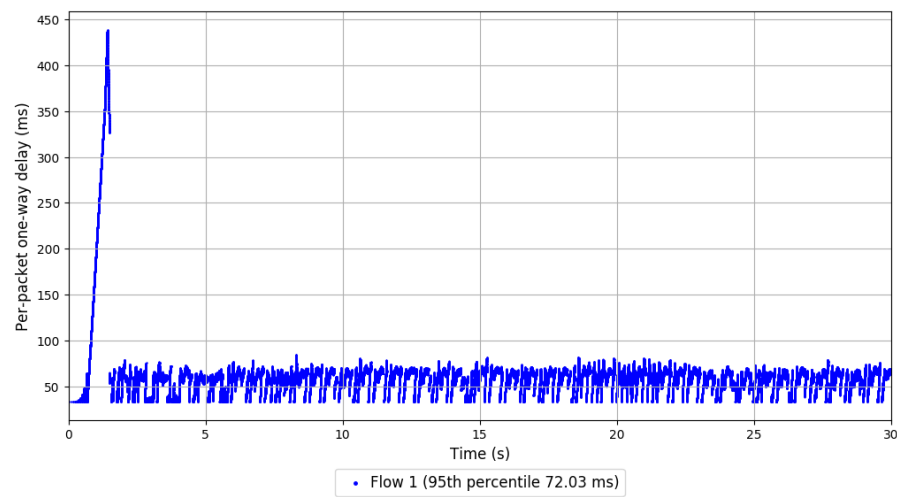
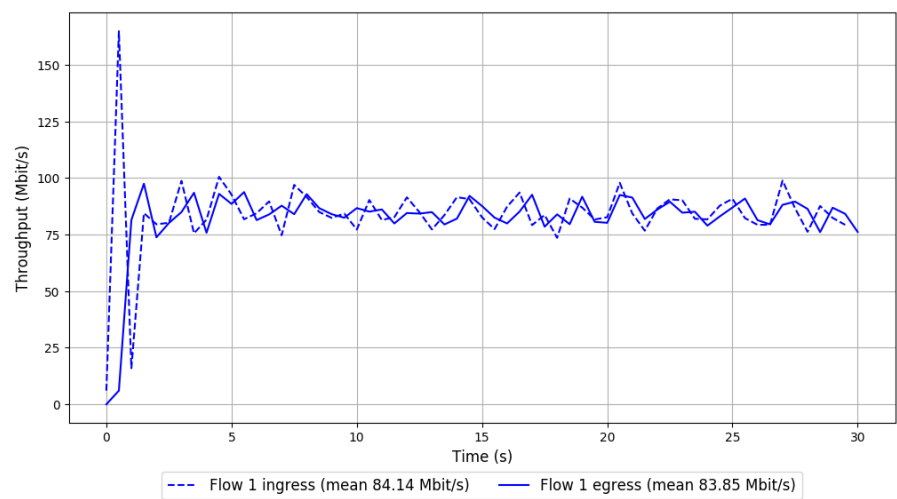


Run 5: Statistics of Verus

Start at: 2018-11-15 09:44:11
End at: 2018-11-15 09:44:41
Local clock offset: -0.062 ms
Remote clock offset: -4.697 ms

Below is generated by plot.py at 2018-11-15 10:06:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 83.85 Mbit/s
95th percentile per-packet one-way delay: 72.034 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 83.85 Mbit/s
95th percentile per-packet one-way delay: 72.034 ms
Loss rate: 0.47%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-11-15 07:59:21

End at: 2018-11-15 07:59:51

Local clock offset: 0.169 ms

Remote clock offset: -7.036 ms

Below is generated by plot.py at 2018-11-15 10:06:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.06 Mbit/s

95th percentile per-packet one-way delay: 35.969 ms

Loss rate: 0.21%

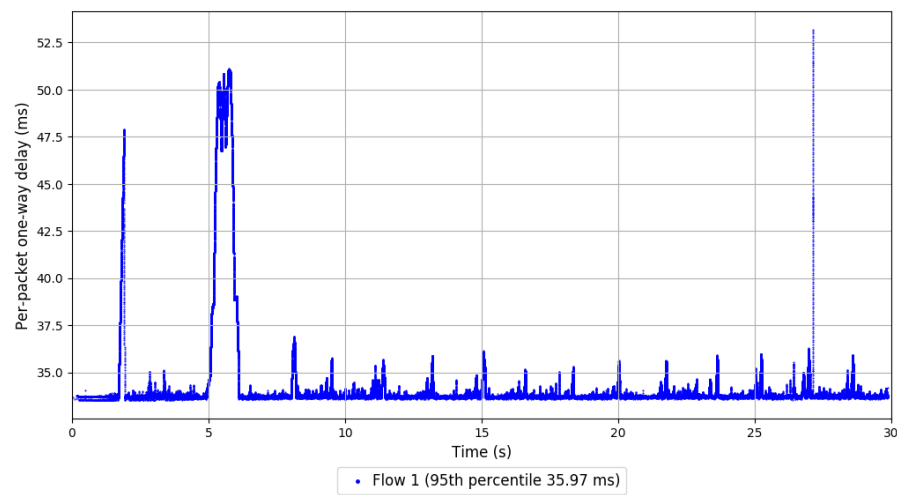
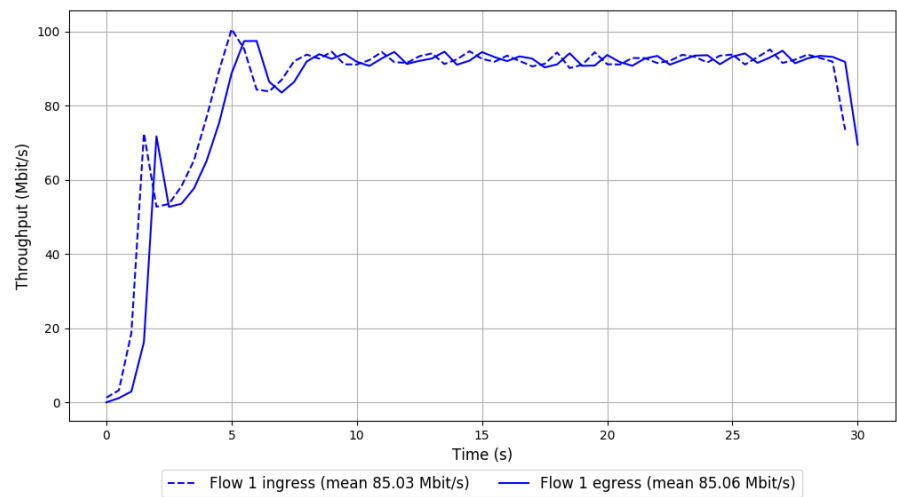
-- Flow 1:

Average throughput: 85.06 Mbit/s

95th percentile per-packet one-way delay: 35.969 ms

Loss rate: 0.21%

Run 1: Report of PCC-Vivace — Data Link

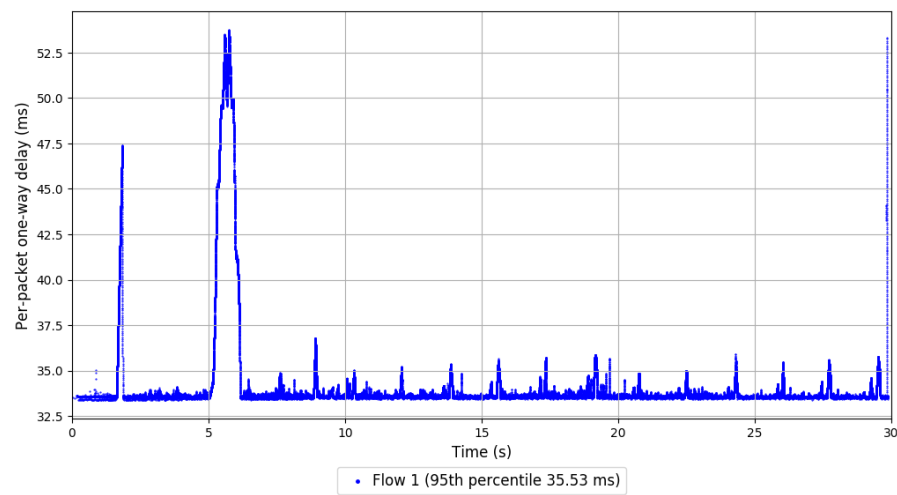
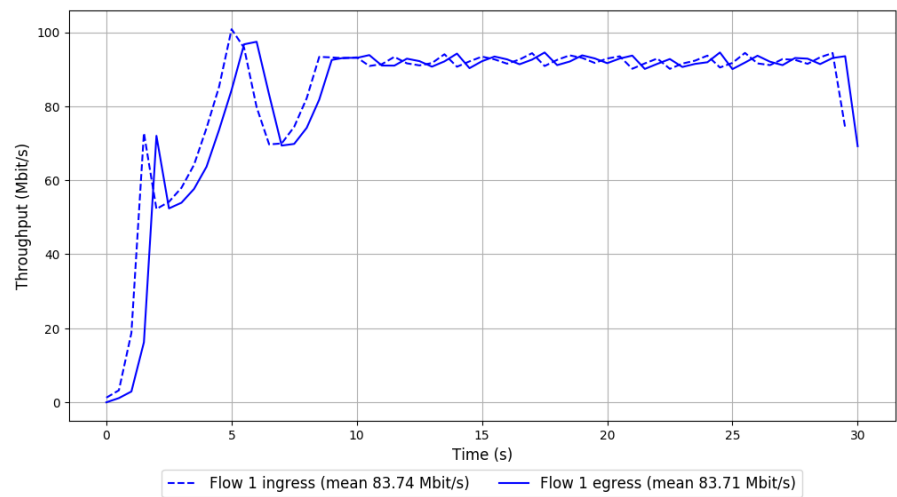


Run 2: Statistics of PCC-Vivace

Start at: 2018-11-15 08:23:09
End at: 2018-11-15 08:23:39
Local clock offset: -0.064 ms
Remote clock offset: -6.886 ms

Below is generated by plot.py at 2018-11-15 10:06:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 83.71 Mbit/s
95th percentile per-packet one-way delay: 35.527 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 83.71 Mbit/s
95th percentile per-packet one-way delay: 35.527 ms
Loss rate: 0.25%

Run 2: Report of PCC-Vivace — Data Link

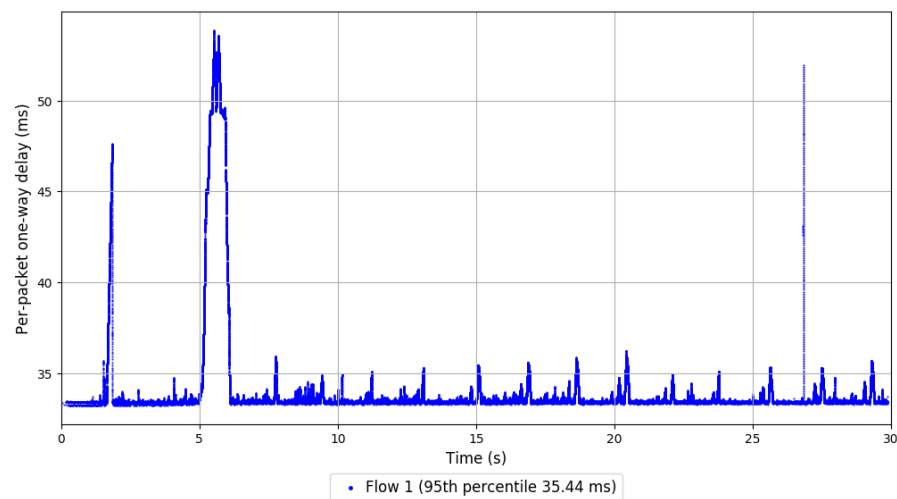
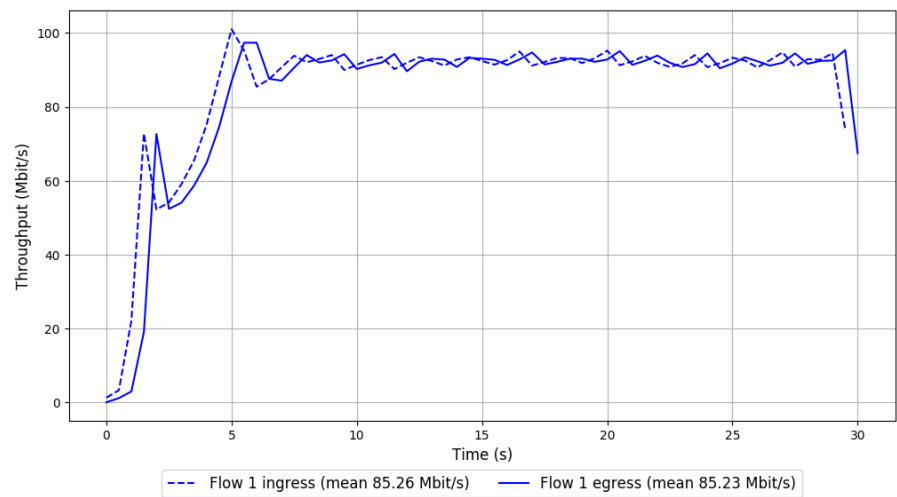


Run 3: Statistics of PCC-Vivace

Start at: 2018-11-15 08:47:03
End at: 2018-11-15 08:47:33
Local clock offset: -0.167 ms
Remote clock offset: -6.303 ms

Below is generated by plot.py at 2018-11-15 10:06:21
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.23 Mbit/s
95th percentile per-packet one-way delay: 35.441 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 85.23 Mbit/s
95th percentile per-packet one-way delay: 35.441 ms
Loss rate: 0.25%

Run 3: Report of PCC-Vivace — Data Link

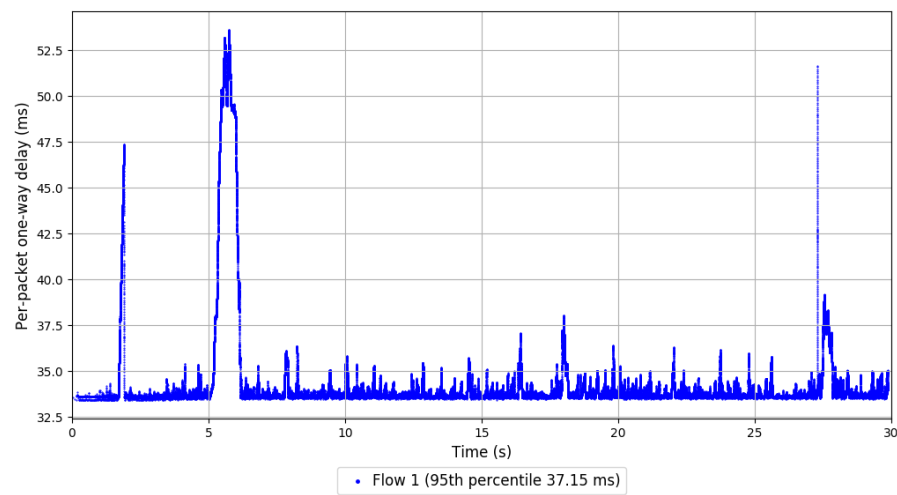
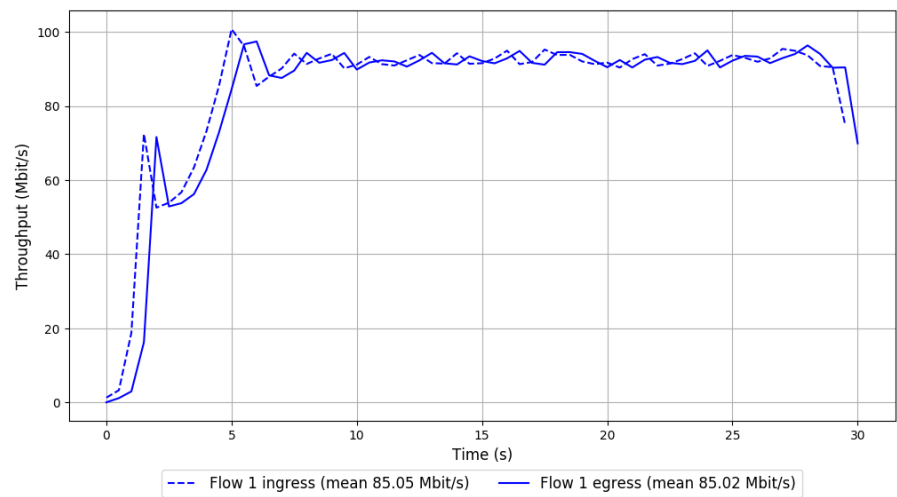


Run 4: Statistics of PCC-Vivace

Start at: 2018-11-15 09:10:56
End at: 2018-11-15 09:11:26
Local clock offset: -0.086 ms
Remote clock offset: -5.653 ms

Below is generated by plot.py at 2018-11-15 10:06:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.02 Mbit/s
95th percentile per-packet one-way delay: 37.145 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 85.02 Mbit/s
95th percentile per-packet one-way delay: 37.145 ms
Loss rate: 0.24%

Run 4: Report of PCC-Vivace — Data Link

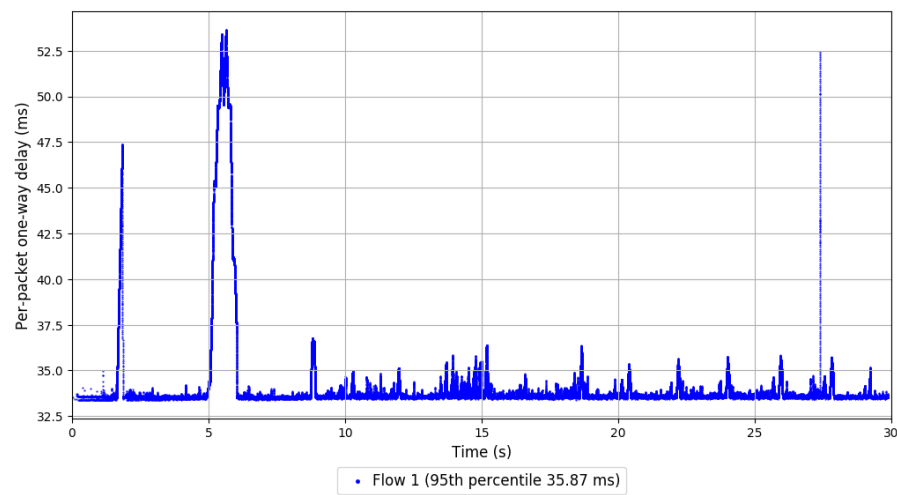
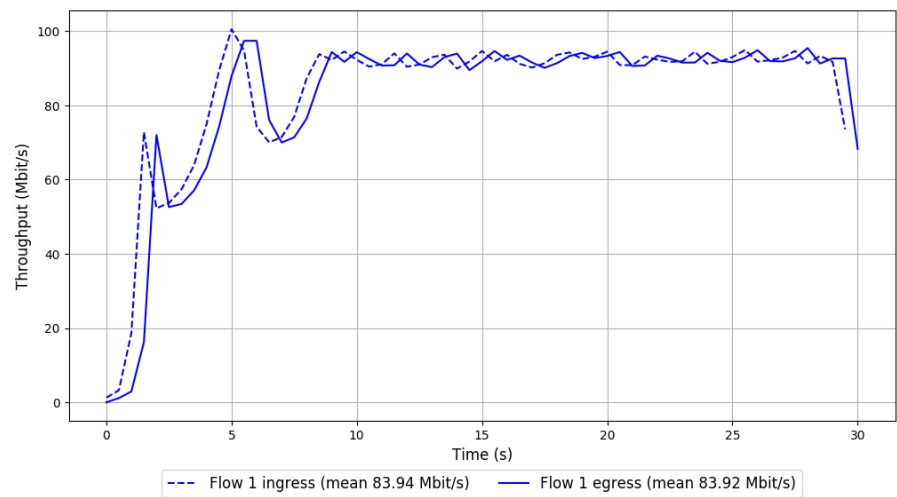


Run 5: Statistics of PCC-Vivace

Start at: 2018-11-15 09:34:49
End at: 2018-11-15 09:35:19
Local clock offset: -0.052 ms
Remote clock offset: -5.181 ms

Below is generated by plot.py at 2018-11-15 10:06:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 83.92 Mbit/s
95th percentile per-packet one-way delay: 35.869 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 83.92 Mbit/s
95th percentile per-packet one-way delay: 35.869 ms
Loss rate: 0.23%

Run 5: Report of PCC-Vivace — Data Link

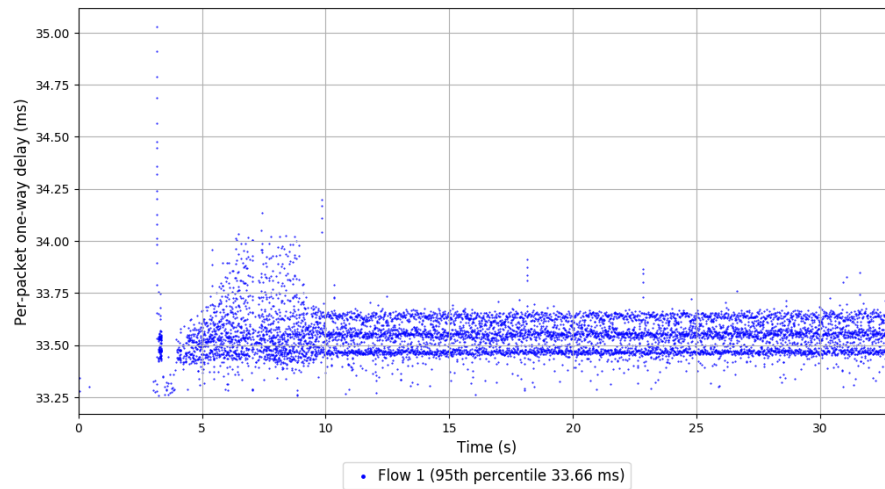
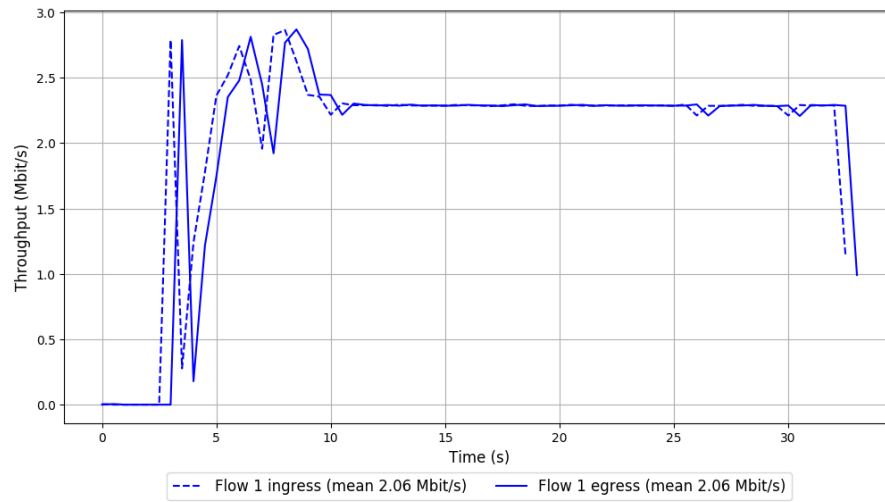


Run 1: Statistics of WebRTC media

Start at: 2018-11-15 08:13:59
End at: 2018-11-15 08:14:29
Local clock offset: -0.078 ms
Remote clock offset: -6.849 ms

Below is generated by plot.py at 2018-11-15 10:06:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 33.665 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 33.665 ms
Loss rate: 0.22%

Run 1: Report of WebRTC media — Data Link

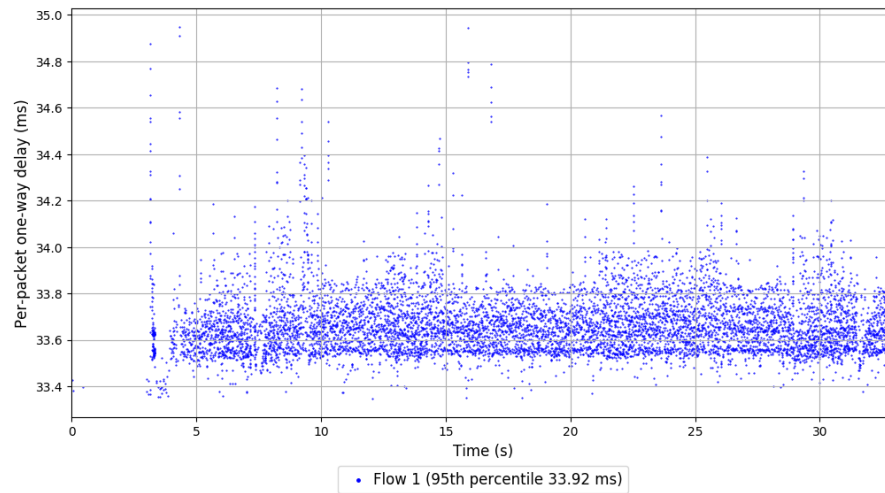
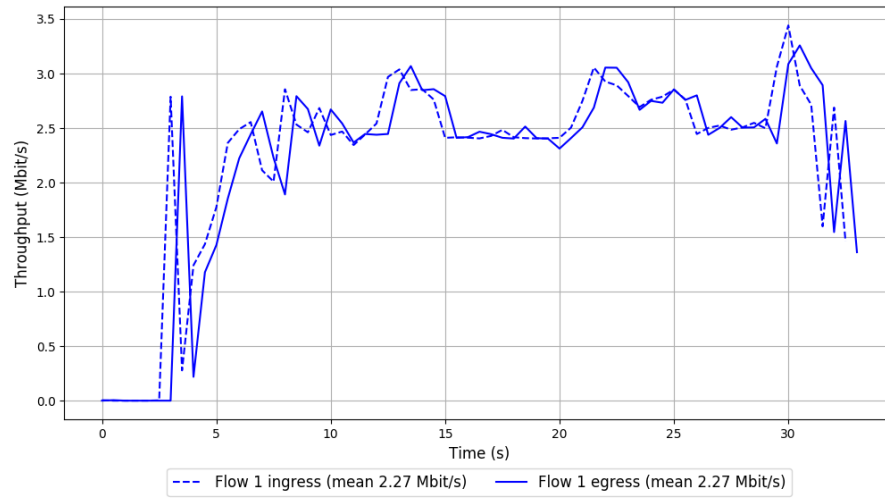


Run 2: Statistics of WebRTC media

Start at: 2018-11-15 08:37:50
End at: 2018-11-15 08:38:20
Local clock offset: -0.17 ms
Remote clock offset: -6.737 ms

Below is generated by plot.py at 2018-11-15 10:06:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 33.919 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 33.919 ms
Loss rate: 0.20%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-11-15 09:01:43

End at: 2018-11-15 09:02:13

Local clock offset: -0.133 ms

Remote clock offset: -5.68 ms

Below is generated by plot.py at 2018-11-15 10:06:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 33.747 ms

Loss rate: 0.18%

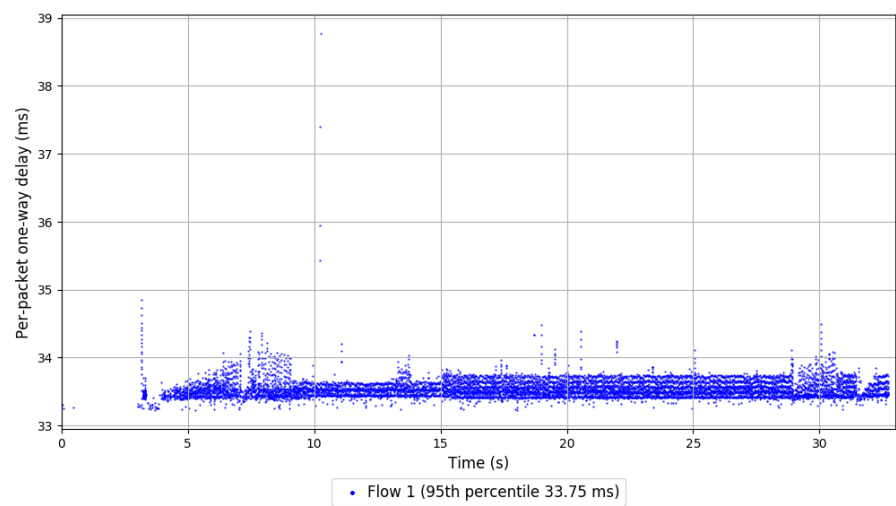
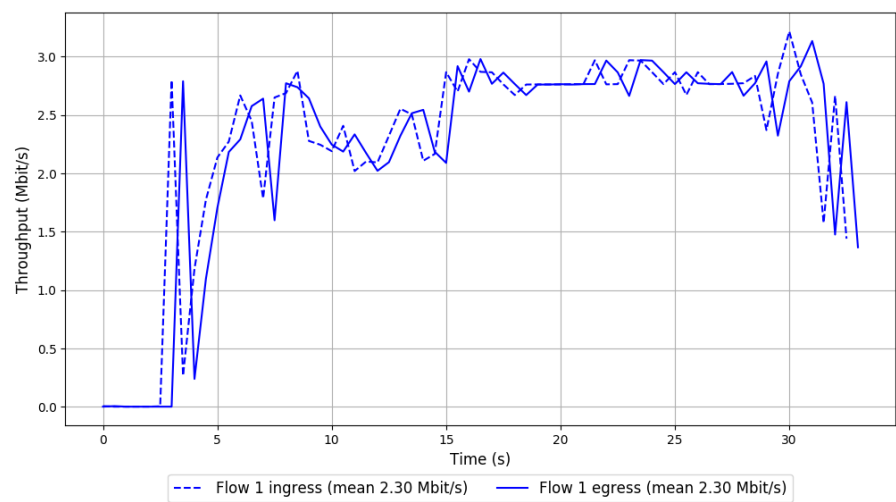
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 33.747 ms

Loss rate: 0.18%

Run 3: Report of WebRTC media — Data Link

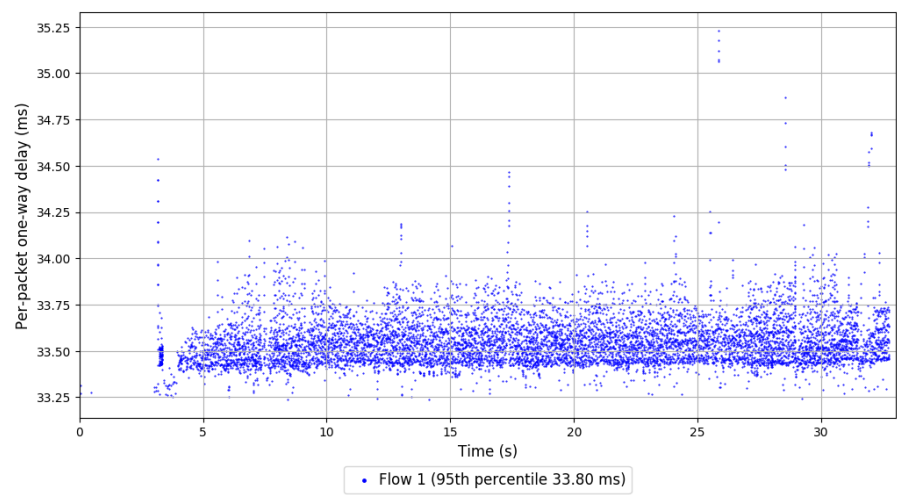
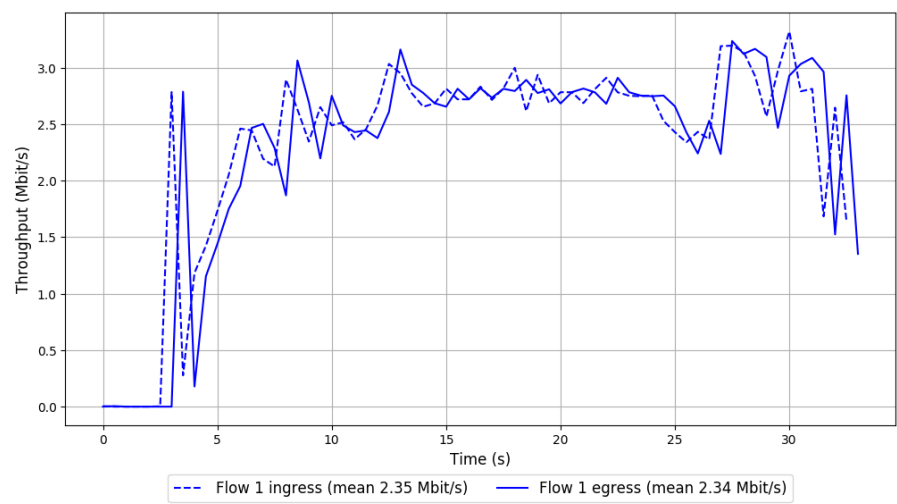


Run 4: Statistics of WebRTC media

Start at: 2018-11-15 09:25:36
End at: 2018-11-15 09:26:06
Local clock offset: -0.009 ms
Remote clock offset: -5.163 ms

Below is generated by plot.py at 2018-11-15 10:06:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 33.797 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 33.797 ms
Loss rate: 0.25%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-11-15 09:49:30
End at: 2018-11-15 09:50:00
Local clock offset: -0.068 ms
Remote clock offset: -4.633 ms

Below is generated by plot.py at 2018-11-15 10:06:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 33.874 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 33.874 ms
Loss rate: 0.26%

Run 5: Report of WebRTC media — Data Link

