

Pantheon Report

Generated at 2018-02-20 06:46:19 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

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

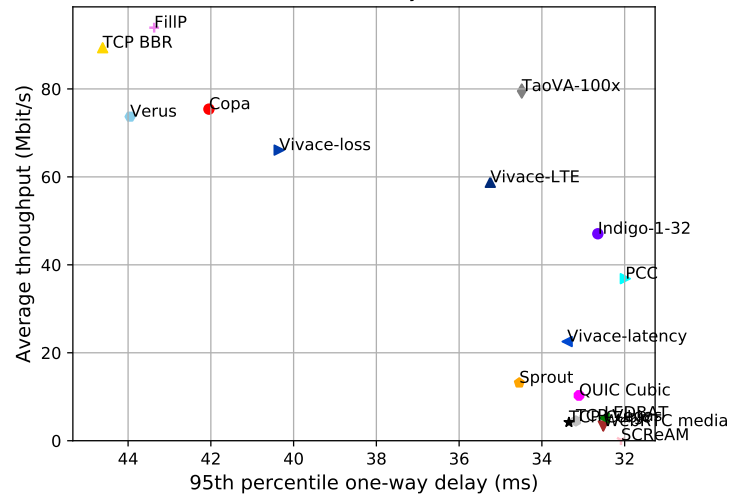
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

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

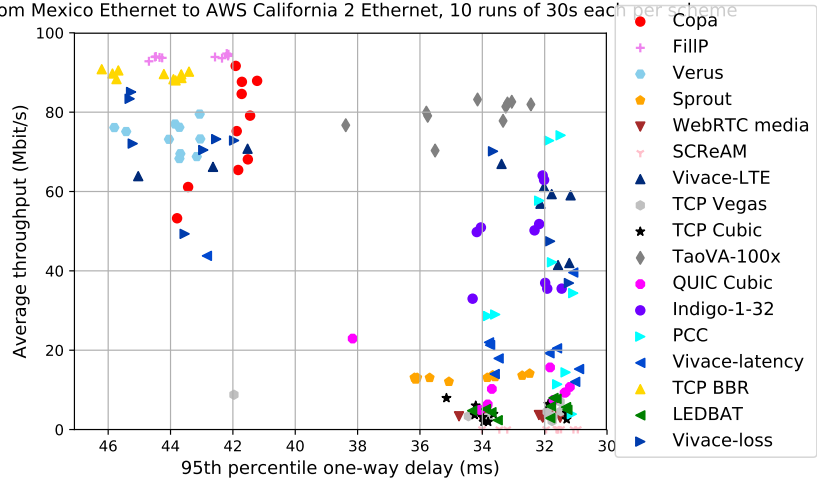
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eae30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  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 @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	89.37	44.61	2.62
TCP Cubic	10	4.18	33.35	1.69
LEDBAT	10	5.17	32.50	1.75
PCC	10	36.85	31.98	1.90
QUIC Cubic	10	10.30	33.10	1.39
SCReAM	10	0.12	32.09	1.70
WebRTC media	10	3.32	32.52	2.15
Sprout	10	13.17	34.55	2.15
TaoVA-100x	10	79.51	34.49	2.46
TCP Vegas	10	4.50	33.18	1.46
Verus	10	73.70	43.95	2.57
Copa	10	75.40	42.05	2.47
FillP	10	93.93	43.37	2.96
Indigo-1-32	10	47.06	32.65	1.82
Vivace-latency	10	22.55	33.39	1.56
Vivace-loss	10	66.09	40.35	2.23
Vivace-LTE	10	58.78	35.25	2.17

Run 1: Statistics of TCP BBR

Start at: 2018-02-19 21:29:09

End at: 2018-02-19 21:29:39

Local clock offset: 0.624 ms

Remote clock offset: -6.885 ms

Below is generated by plot.py at 2018-02-20 06:31:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.75 Mbit/s

95th percentile per-packet one-way delay: 45.862 ms

Loss rate: 2.56%

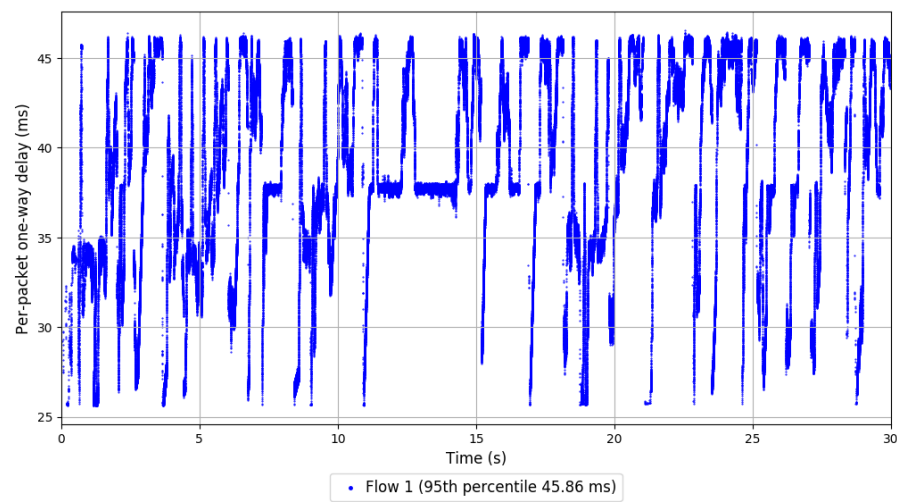
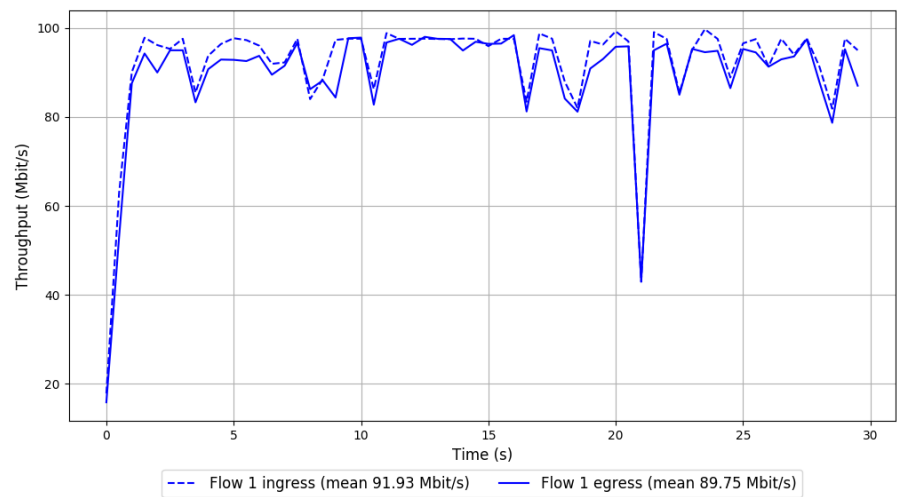
-- Flow 1:

Average throughput: 89.75 Mbit/s

95th percentile per-packet one-way delay: 45.862 ms

Loss rate: 2.56%

Run 1: Report of TCP BBR — Data Link

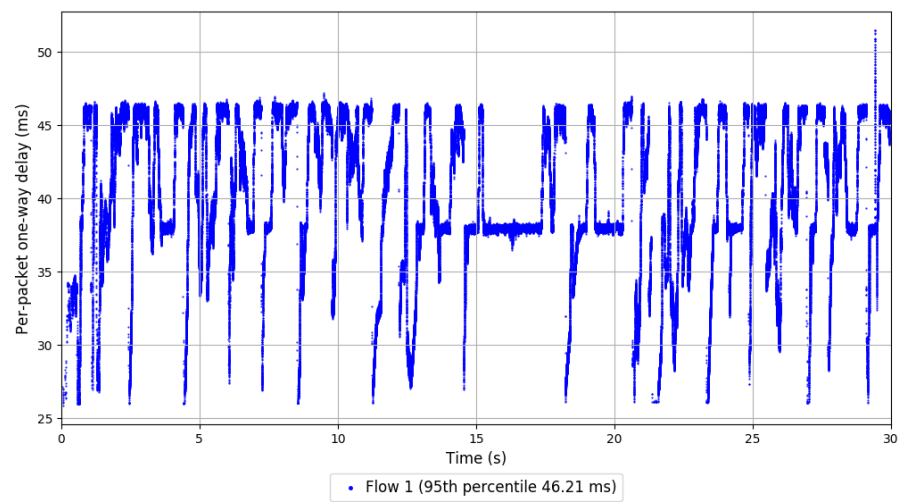
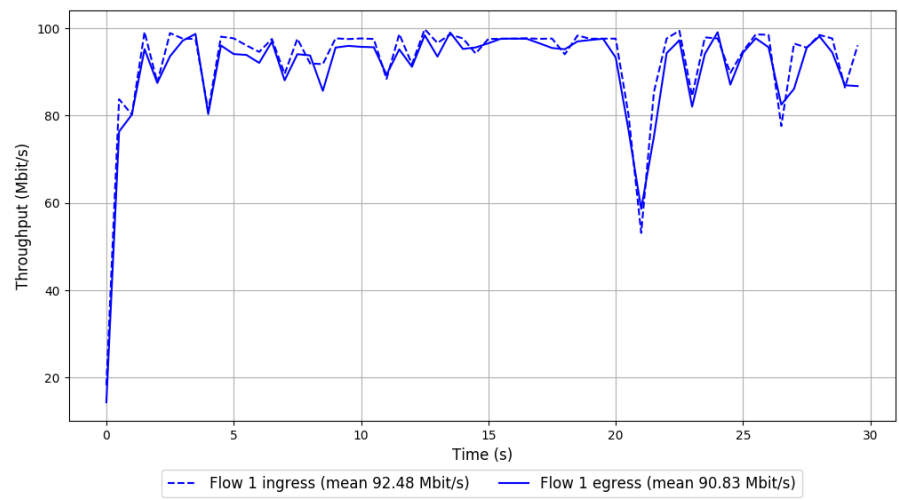


Run 2: Statistics of TCP BBR

Start at: 2018-02-19 21:56:01
End at: 2018-02-19 21:56:31
Local clock offset: -2.032 ms
Remote clock offset: -5.769 ms

Below is generated by plot.py at 2018-02-20 06:31:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.83 Mbit/s
95th percentile per-packet one-way delay: 46.207 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 90.83 Mbit/s
95th percentile per-packet one-way delay: 46.207 ms
Loss rate: 1.96%

Run 2: Report of TCP BBR — Data Link

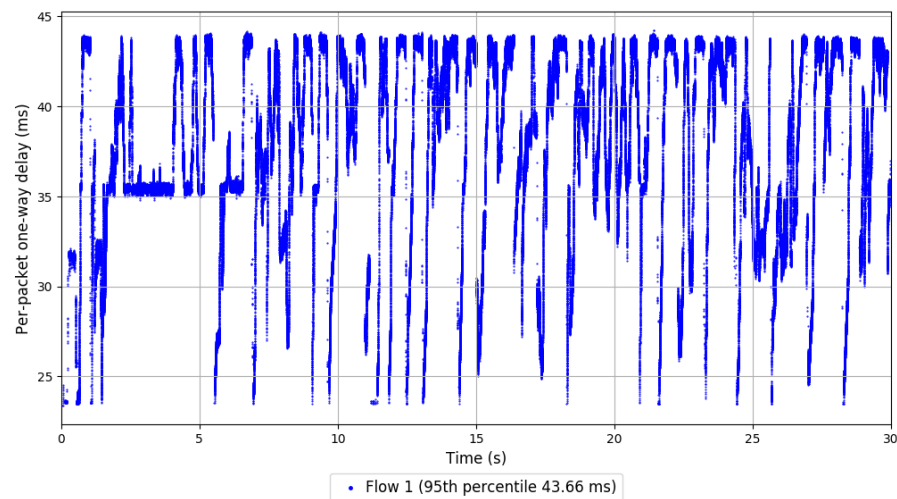
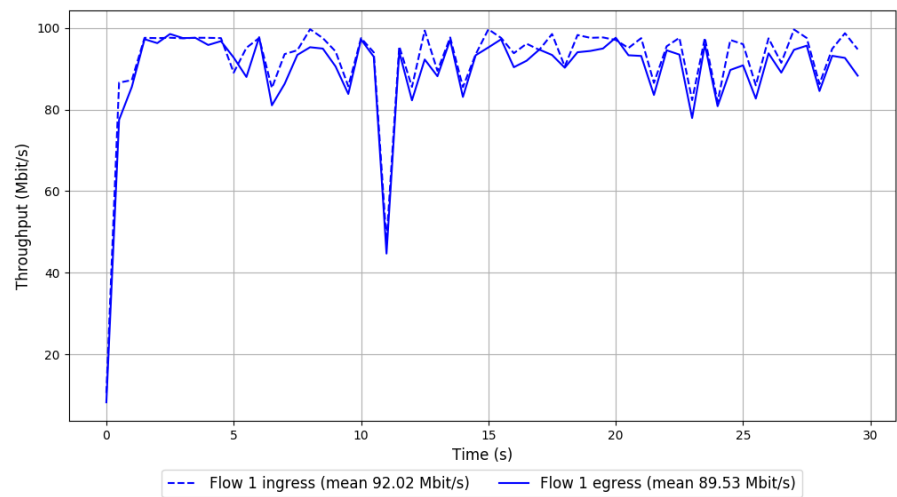


Run 3: Statistics of TCP BBR

Start at: 2018-02-19 22:23:46
End at: 2018-02-19 22:24:16
Local clock offset: -5.274 ms
Remote clock offset: -11.771 ms

Below is generated by plot.py at 2018-02-20 06:31:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 89.53 Mbit/s
95th percentile per-packet one-way delay: 43.655 ms
Loss rate: 2.87%
-- Flow 1:
Average throughput: 89.53 Mbit/s
95th percentile per-packet one-way delay: 43.655 ms
Loss rate: 2.87%

Run 3: Report of TCP BBR — Data Link

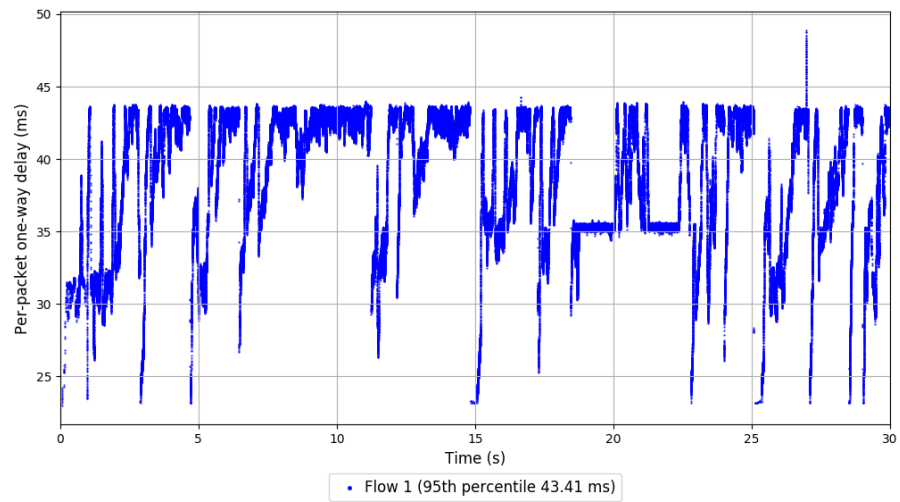
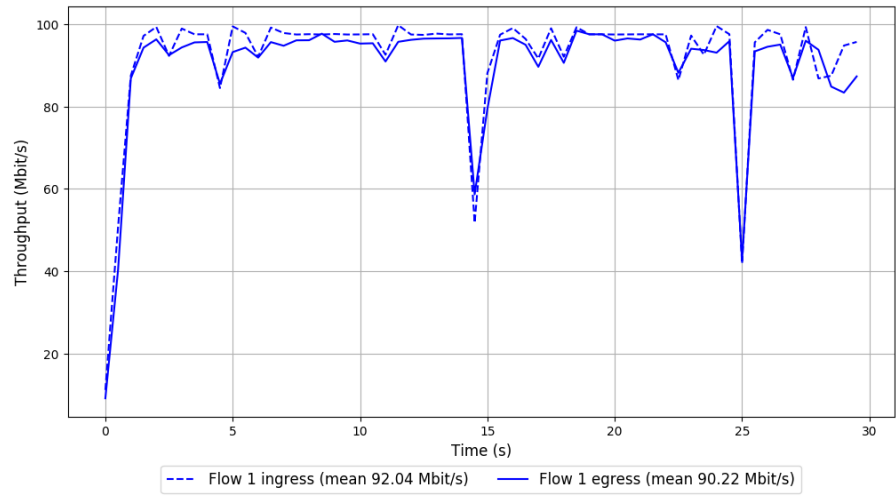


Run 4: Statistics of TCP BBR

Start at: 2018-02-19 22:51:00
End at: 2018-02-19 22:51:30
Local clock offset: -3.785 ms
Remote clock offset: -9.432 ms

Below is generated by plot.py at 2018-02-20 06:31:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.22 Mbit/s
95th percentile per-packet one-way delay: 43.408 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 90.22 Mbit/s
95th percentile per-packet one-way delay: 43.408 ms
Loss rate: 2.15%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-19 23:18:07

End at: 2018-02-19 23:18:37

Local clock offset: 2.907 ms

Remote clock offset: -6.813 ms

Below is generated by plot.py at 2018-02-20 06:31:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.53 Mbit/s

95th percentile per-packet one-way delay: 45.674 ms

Loss rate: 2.55%

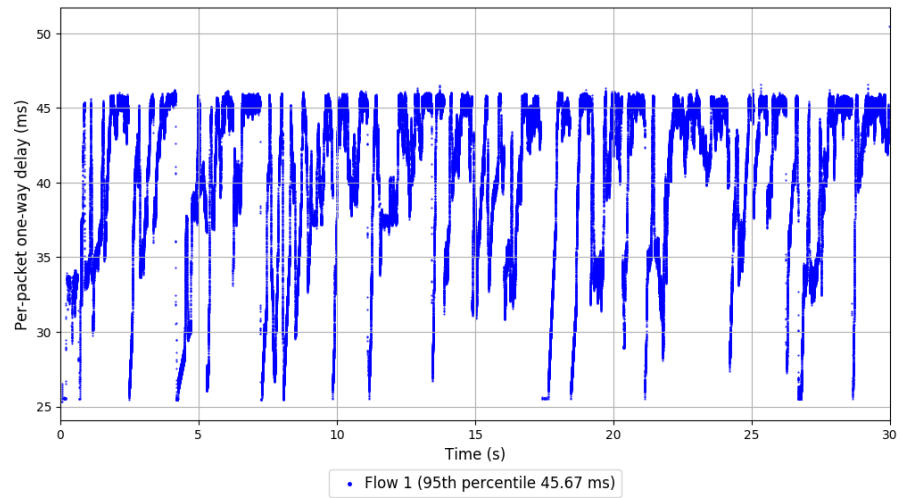
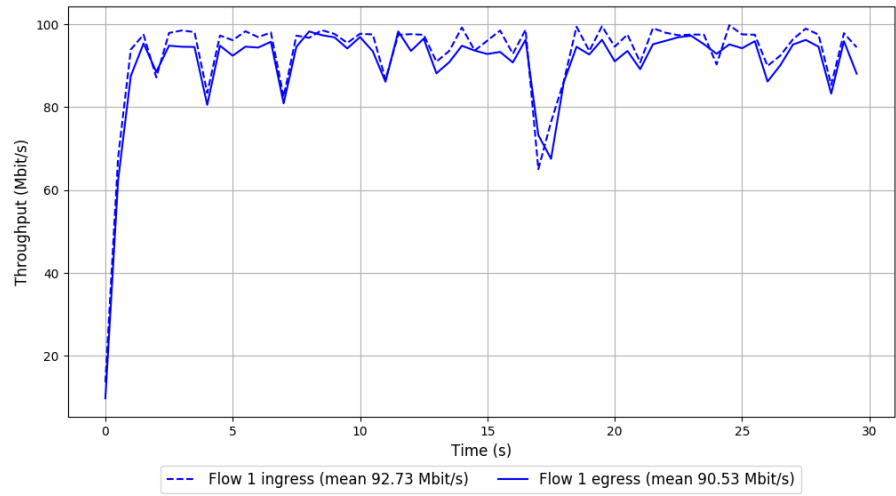
-- Flow 1:

Average throughput: 90.53 Mbit/s

95th percentile per-packet one-way delay: 45.674 ms

Loss rate: 2.55%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-19 23:46:43

End at: 2018-02-19 23:47:13

Local clock offset: 2.311 ms

Remote clock offset: -8.278 ms

Below is generated by plot.py at 2018-02-20 06:31:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.34 Mbit/s

95th percentile per-packet one-way delay: 45.733 ms

Loss rate: 3.06%

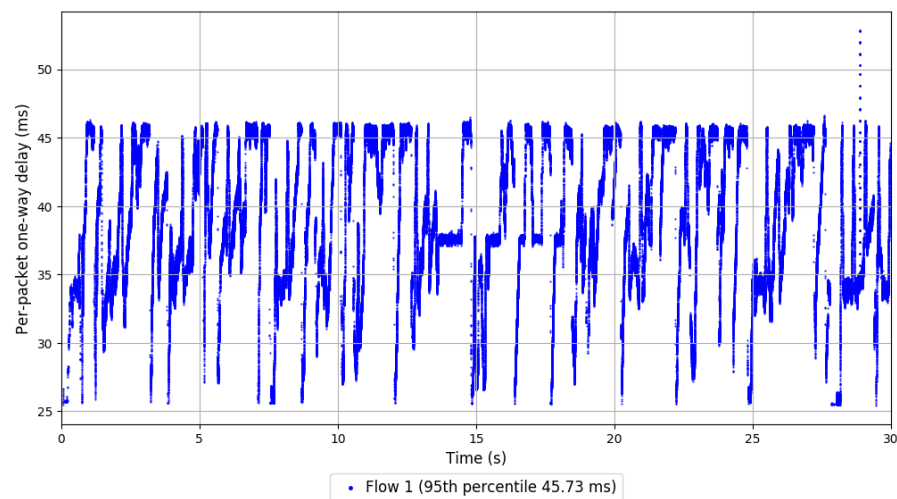
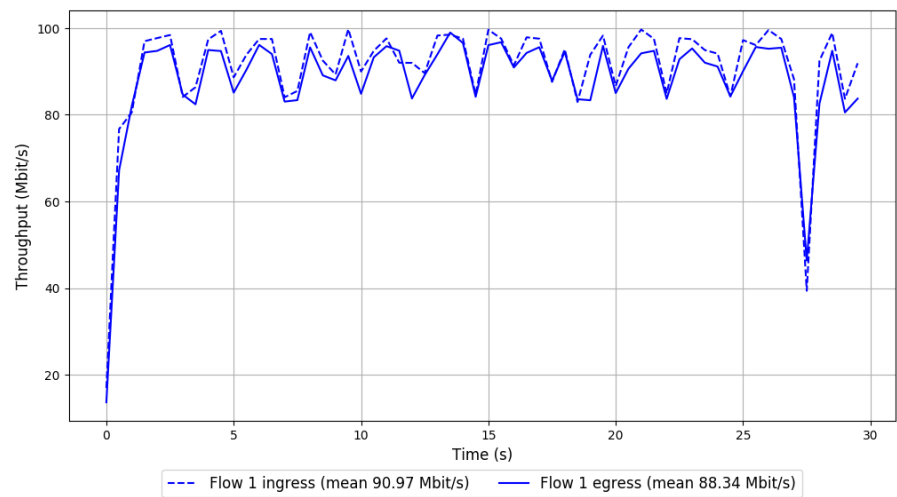
-- Flow 1:

Average throughput: 88.34 Mbit/s

95th percentile per-packet one-way delay: 45.733 ms

Loss rate: 3.06%

Run 6: Report of TCP BBR — Data Link

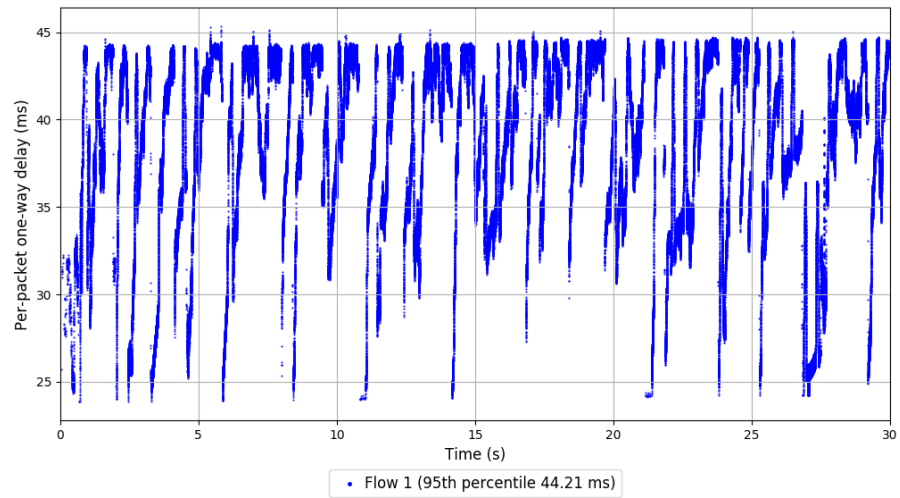
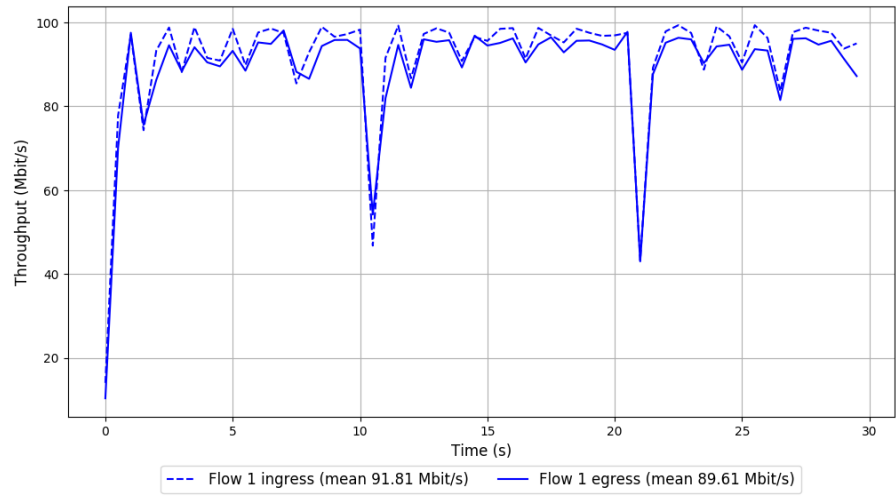


Run 7: Statistics of TCP BBR

Start at: 2018-02-20 00:15:06
End at: 2018-02-20 00:15:36
Local clock offset: -1.545 ms
Remote clock offset: -9.272 ms

Below is generated by plot.py at 2018-02-20 06:31:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 89.61 Mbit/s
95th percentile per-packet one-way delay: 44.213 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 89.61 Mbit/s
95th percentile per-packet one-way delay: 44.213 ms
Loss rate: 2.58%

Run 7: Report of TCP BBR — Data Link

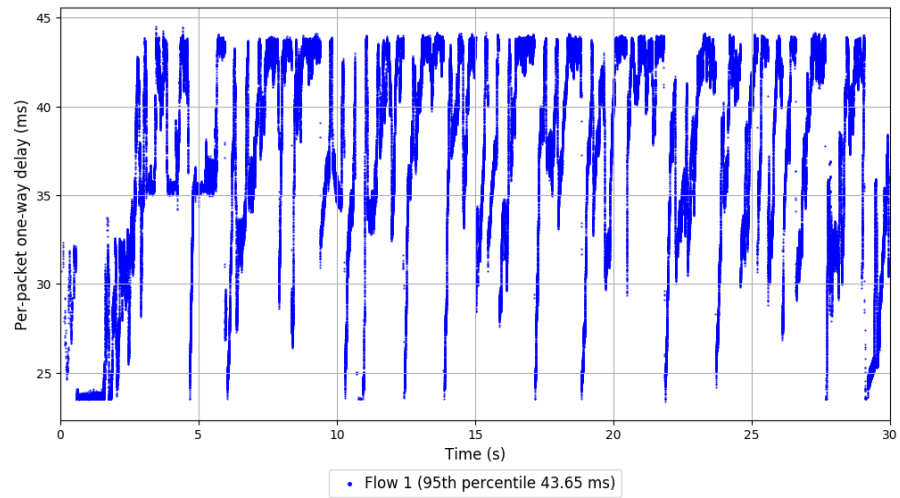
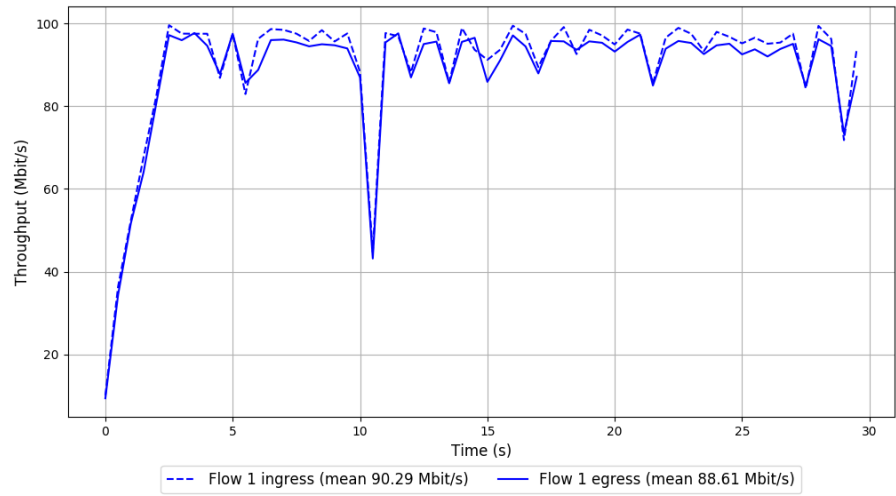


Run 8: Statistics of TCP BBR

Start at: 2018-02-20 00:43:09
End at: 2018-02-20 00:43:39
Local clock offset: -5.207 ms
Remote clock offset: -3.607 ms

Below is generated by plot.py at 2018-02-20 06:31:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 88.61 Mbit/s
95th percentile per-packet one-way delay: 43.651 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 88.61 Mbit/s
95th percentile per-packet one-way delay: 43.651 ms
Loss rate: 2.05%

Run 8: Report of TCP BBR — Data Link

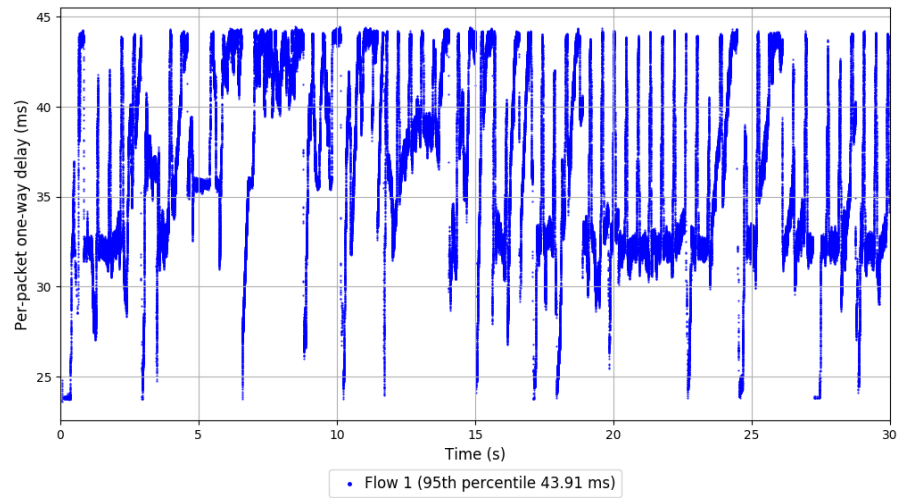
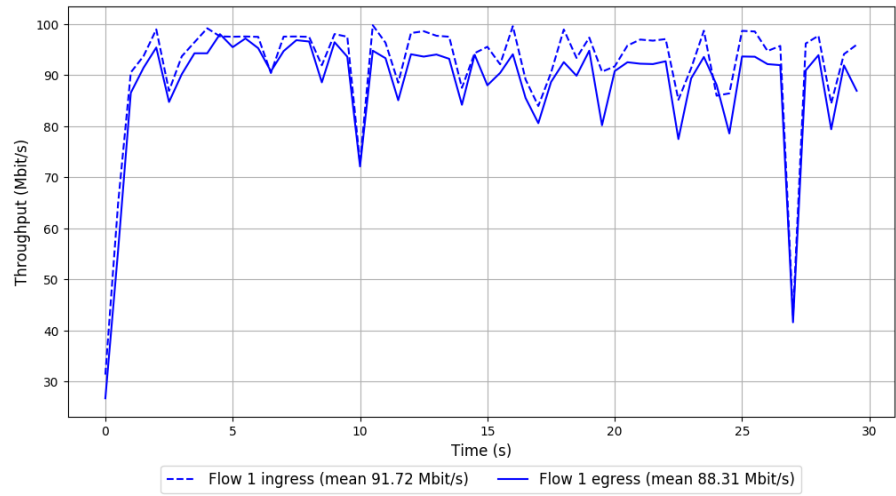


Run 9: Statistics of TCP BBR

Start at: 2018-02-20 01:11:11
End at: 2018-02-20 01:11:41
Local clock offset: -6.444 ms
Remote clock offset: -4.505 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 88.31 Mbit/s
95th percentile per-packet one-way delay: 43.906 ms
Loss rate: 3.89%
-- Flow 1:
Average throughput: 88.31 Mbit/s
95th percentile per-packet one-way delay: 43.906 ms
Loss rate: 3.89%

Run 9: Report of TCP BBR — Data Link

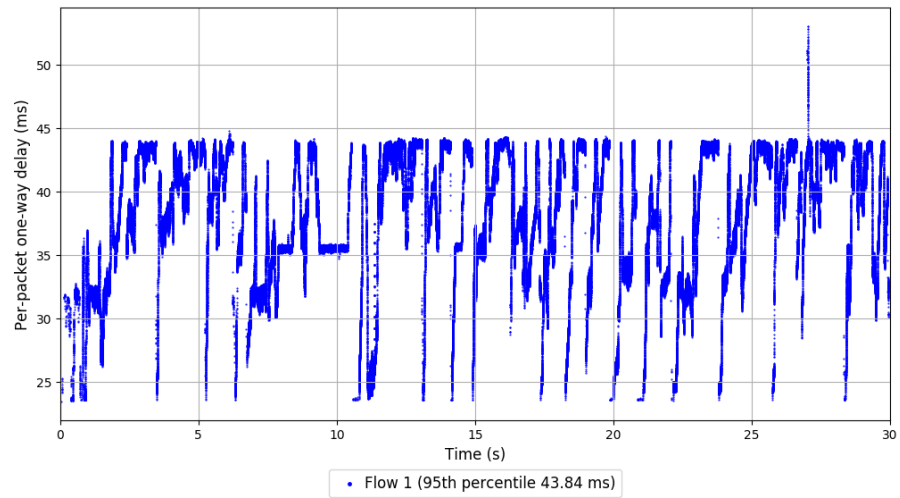
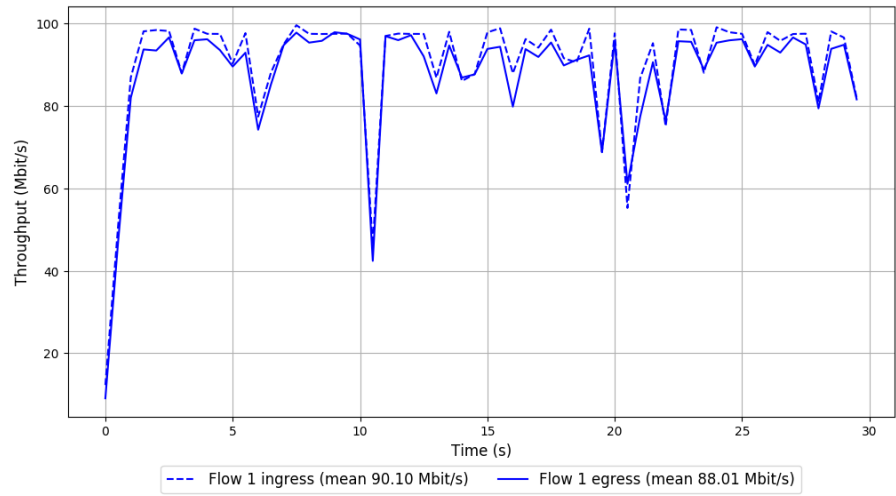


Run 10: Statistics of TCP BBR

Start at: 2018-02-20 01:39:15
End at: 2018-02-20 01:39:45
Local clock offset: -4.247 ms
Remote clock offset: -2.674 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 88.01 Mbit/s
95th percentile per-packet one-way delay: 43.838 ms
Loss rate: 2.49%
-- Flow 1:
Average throughput: 88.01 Mbit/s
95th percentile per-packet one-way delay: 43.838 ms
Loss rate: 2.49%

Run 10: Report of TCP BBR — Data Link

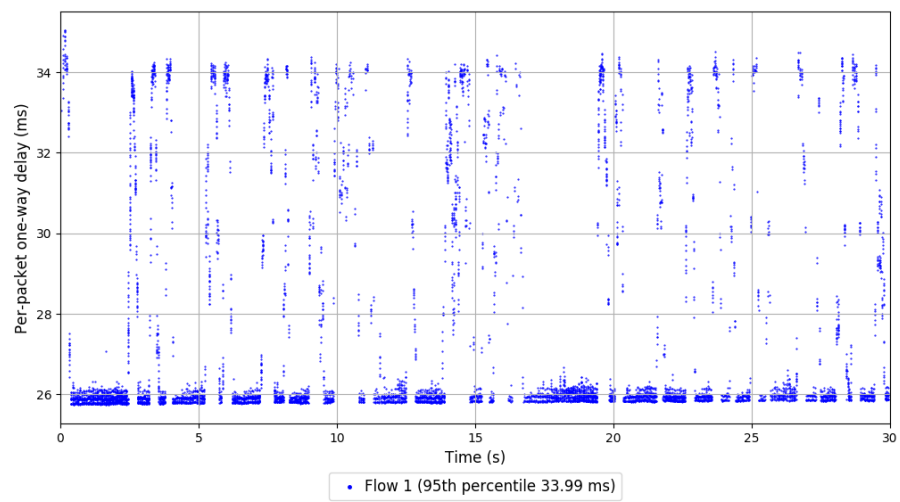
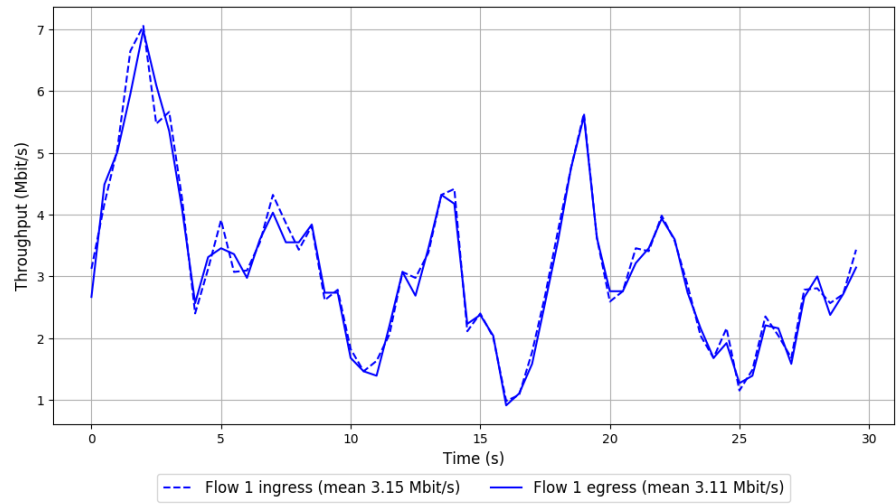


Run 1: Statistics of TCP Cubic

Start at: 2018-02-19 21:30:48
End at: 2018-02-19 21:31:18
Local clock offset: 0.524 ms
Remote clock offset: -6.742 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.11 Mbit/s
95th percentile per-packet one-way delay: 33.987 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 3.11 Mbit/s
95th percentile per-packet one-way delay: 33.987 ms
Loss rate: 1.60%

Run 1: Report of TCP Cubic — Data Link

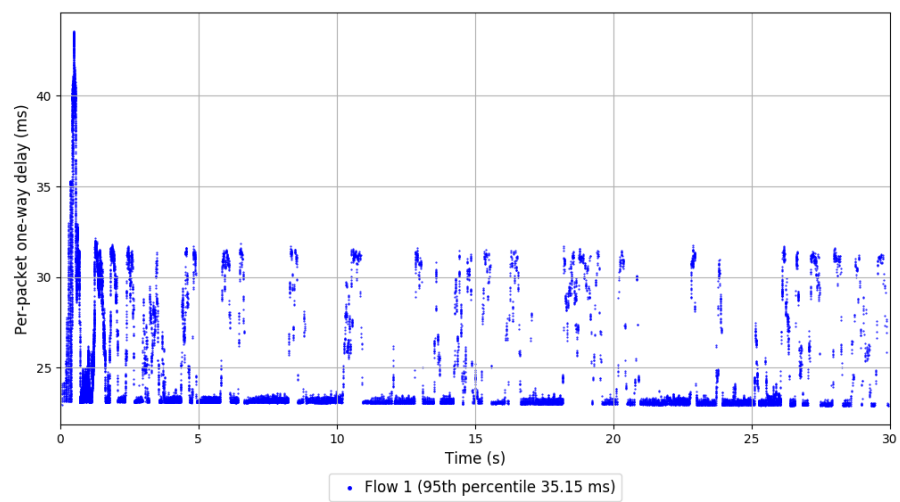
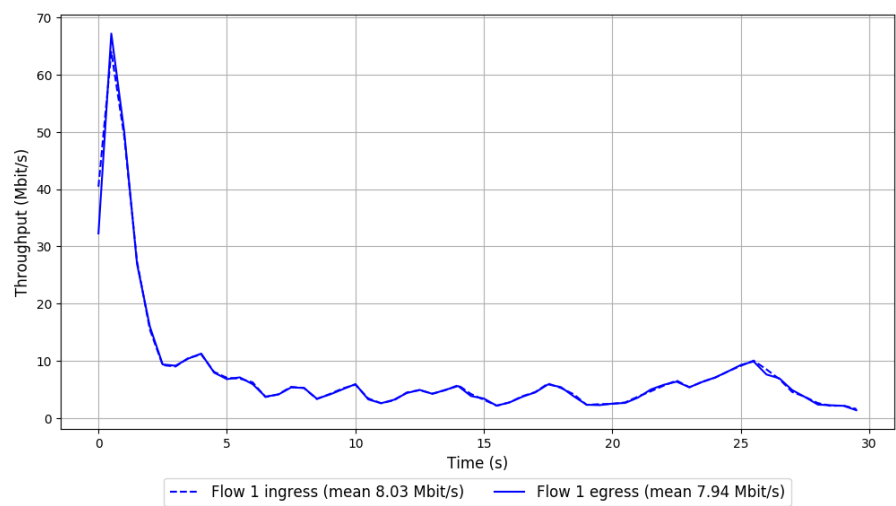


Run 2: Statistics of TCP Cubic

Start at: 2018-02-19 21:57:41
End at: 2018-02-19 21:58:11
Local clock offset: -2.446 ms
Remote clock offset: -3.881 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 7.94 Mbit/s
95th percentile per-packet one-way delay: 35.150 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 7.94 Mbit/s
95th percentile per-packet one-way delay: 35.150 ms
Loss rate: 1.30%

Run 2: Report of TCP Cubic — Data Link

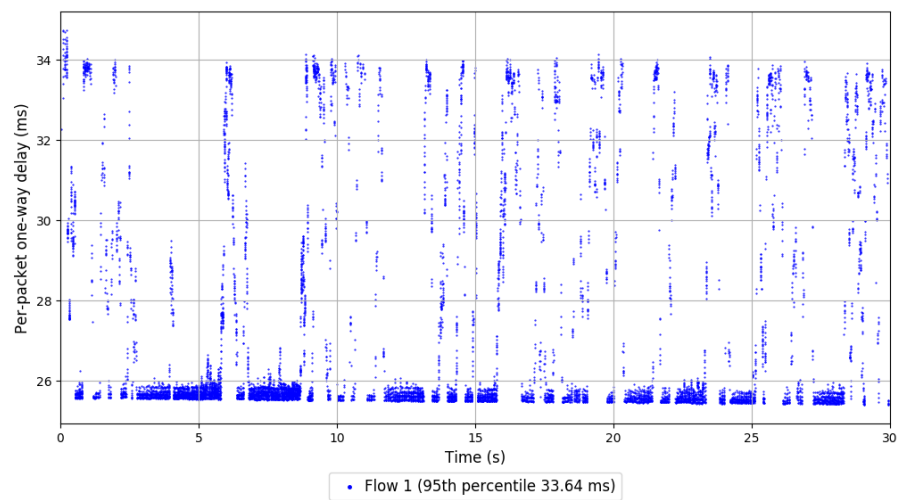
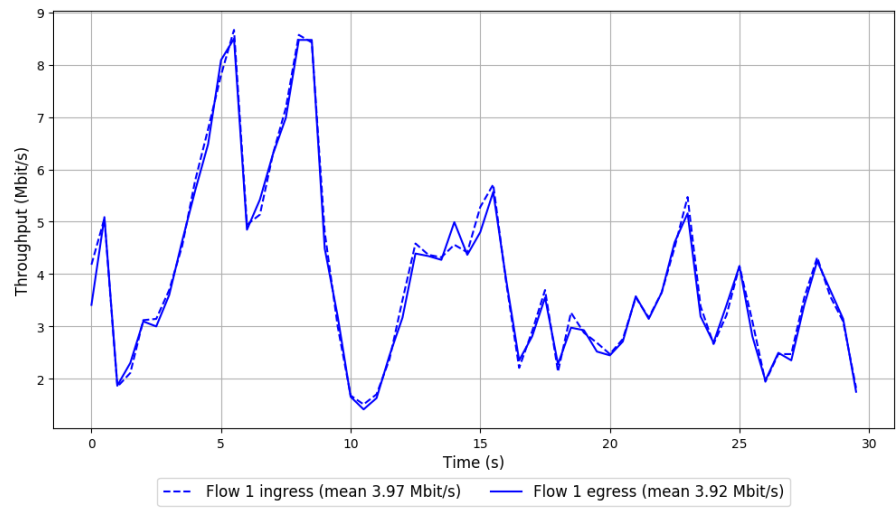


Run 3: Statistics of TCP Cubic

Start at: 2018-02-19 22:25:29
End at: 2018-02-19 22:25:59
Local clock offset: -5.128 ms
Remote clock offset: -14.189 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 33.644 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 33.644 ms
Loss rate: 1.36%

Run 3: Report of TCP Cubic — Data Link

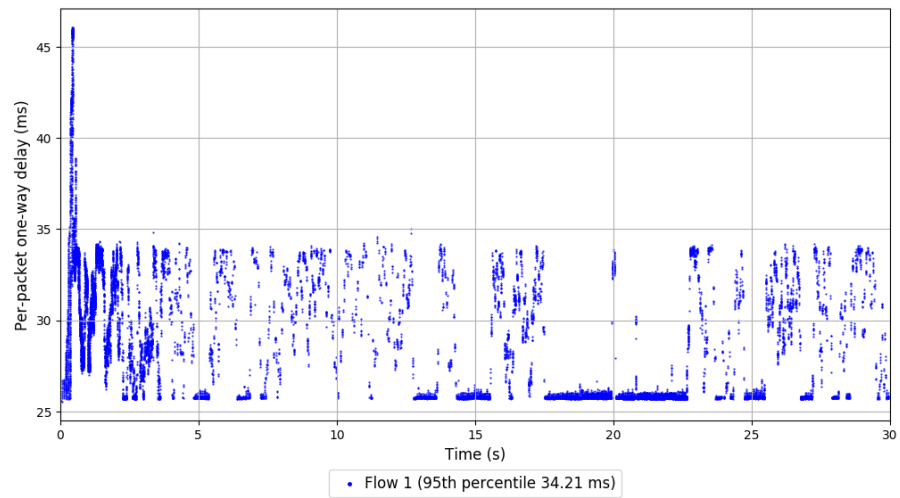
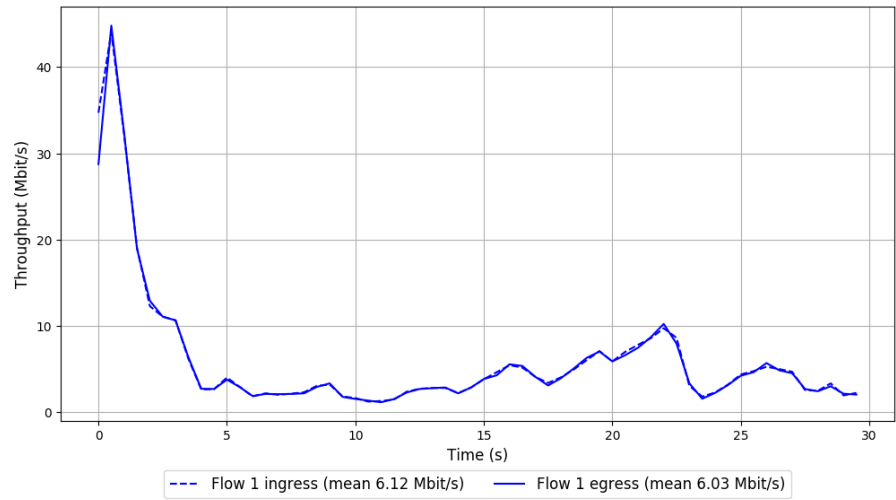


Run 4: Statistics of TCP Cubic

Start at: 2018-02-19 22:52:47
End at: 2018-02-19 22:53:17
Local clock offset: -3.815 ms
Remote clock offset: -11.897 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 6.03 Mbit/s
95th percentile per-packet one-way delay: 34.212 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 6.03 Mbit/s
95th percentile per-packet one-way delay: 34.212 ms
Loss rate: 1.68%

Run 4: Report of TCP Cubic — Data Link

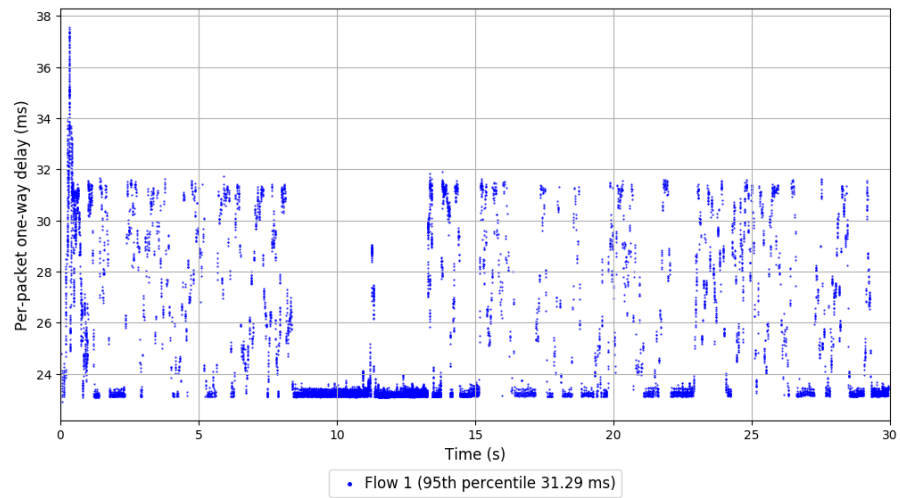
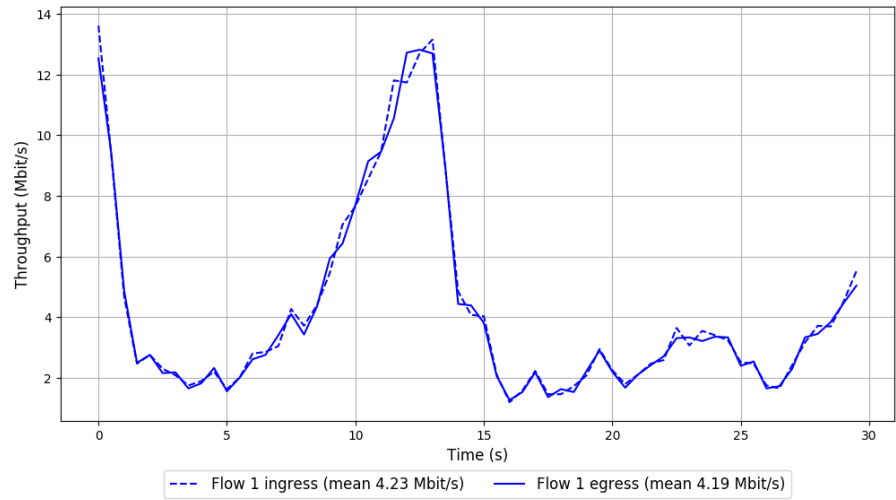


Run 5: Statistics of TCP Cubic

Start at: 2018-02-19 23:19:52
End at: 2018-02-19 23:20:22
Local clock offset: 3.146 ms
Remote clock offset: -4.038 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.19 Mbit/s
95th percentile per-packet one-way delay: 31.286 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 4.19 Mbit/s
95th percentile per-packet one-way delay: 31.286 ms
Loss rate: 1.19%

Run 5: Report of TCP Cubic — Data Link

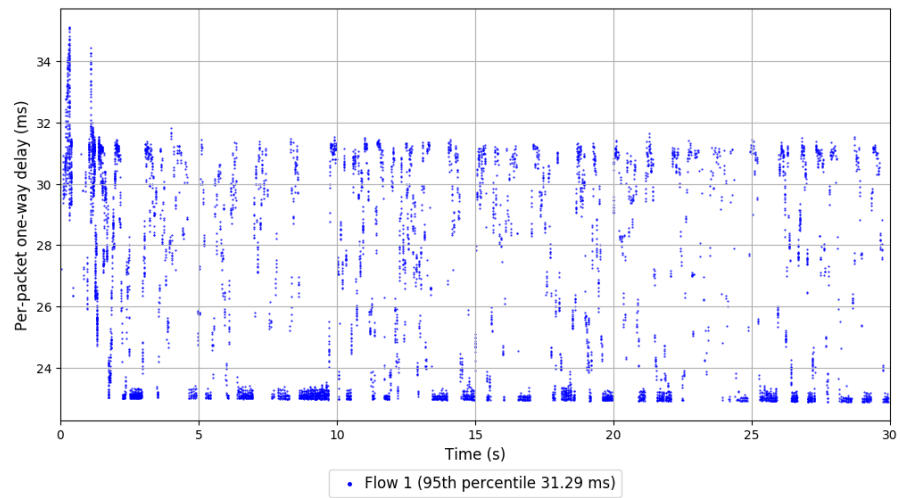
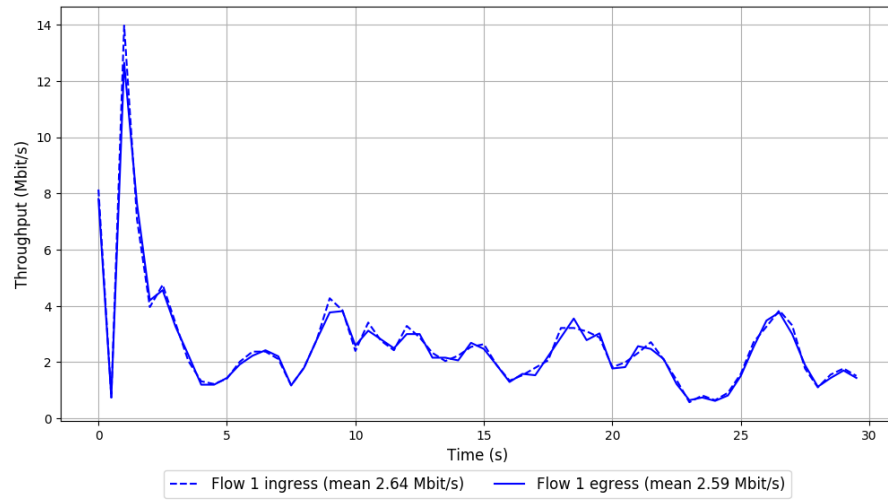


Run 6: Statistics of TCP Cubic

Start at: 2018-02-19 23:48:37
End at: 2018-02-19 23:49:08
Local clock offset: 2.206 ms
Remote clock offset: -6.352 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.59 Mbit/s
95th percentile per-packet one-way delay: 31.294 ms
Loss rate: 2.12%
-- Flow 1:
Average throughput: 2.59 Mbit/s
95th percentile per-packet one-way delay: 31.294 ms
Loss rate: 2.12%

Run 6: Report of TCP Cubic — Data Link

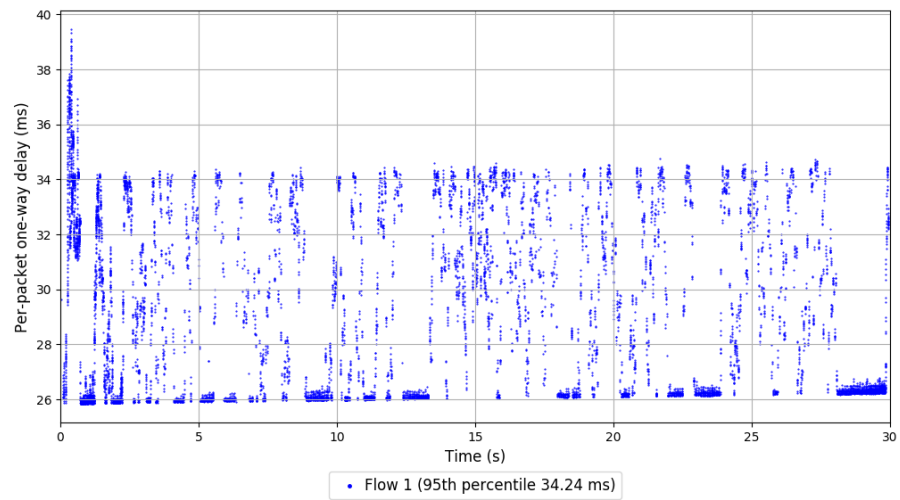
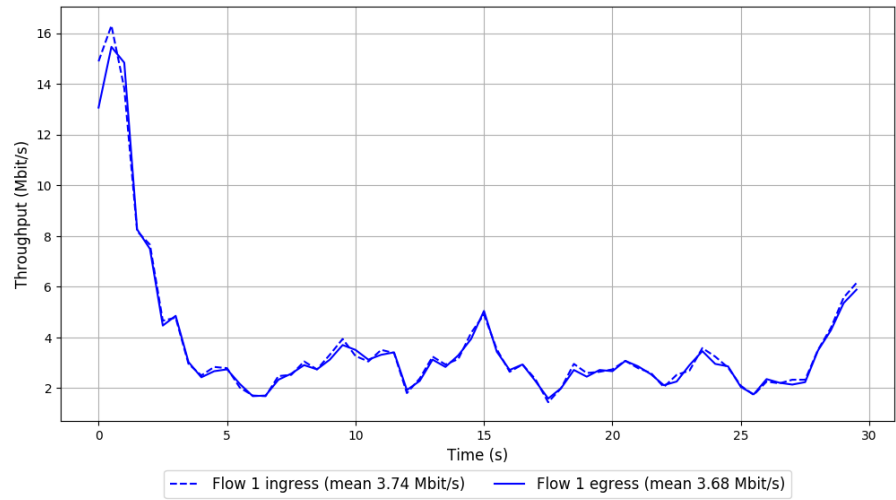


Run 7: Statistics of TCP Cubic

Start at: 2018-02-20 00:16:55
End at: 2018-02-20 00:17:25
Local clock offset: -2.068 ms
Remote clock offset: -10.26 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 34.244 ms
Loss rate: 1.81%
-- Flow 1:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 34.244 ms
Loss rate: 1.81%

Run 7: Report of TCP Cubic — Data Link

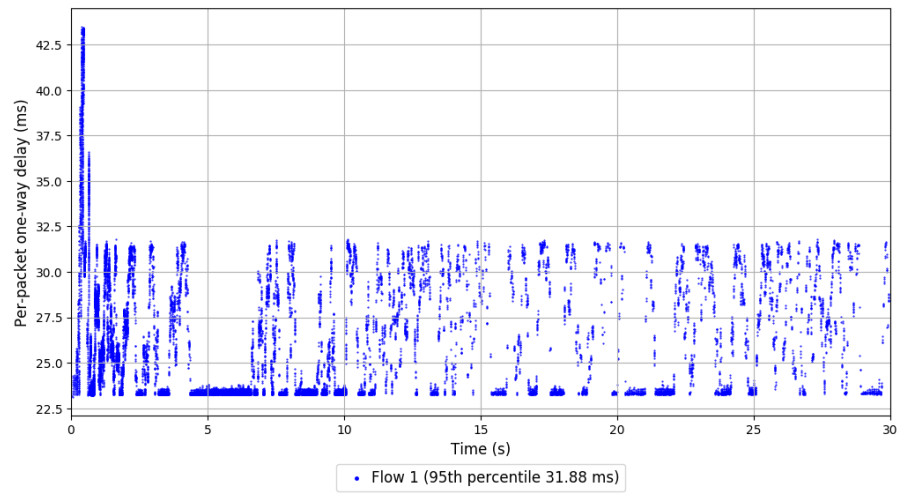
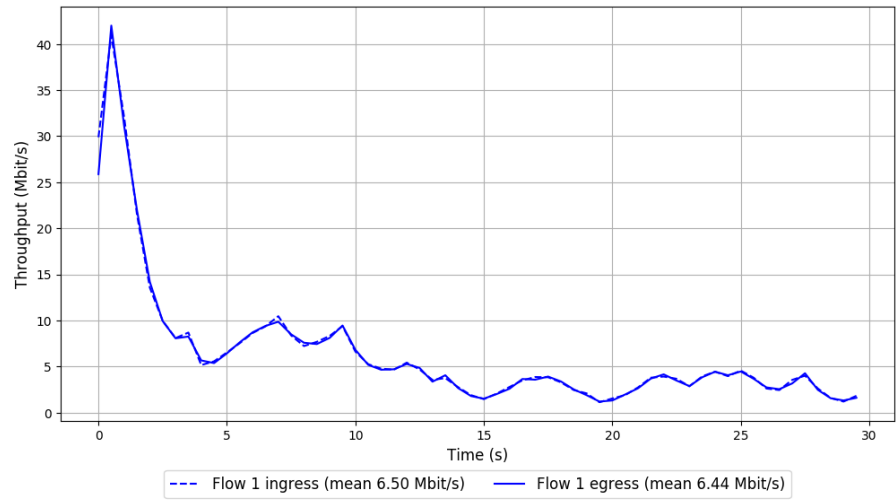


Run 8: Statistics of TCP Cubic

Start at: 2018-02-20 00:44:50
End at: 2018-02-20 00:45:20
Local clock offset: -5.132 ms
Remote clock offset: -3.153 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 31.879 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 31.879 ms
Loss rate: 1.08%

Run 8: Report of TCP Cubic — Data Link

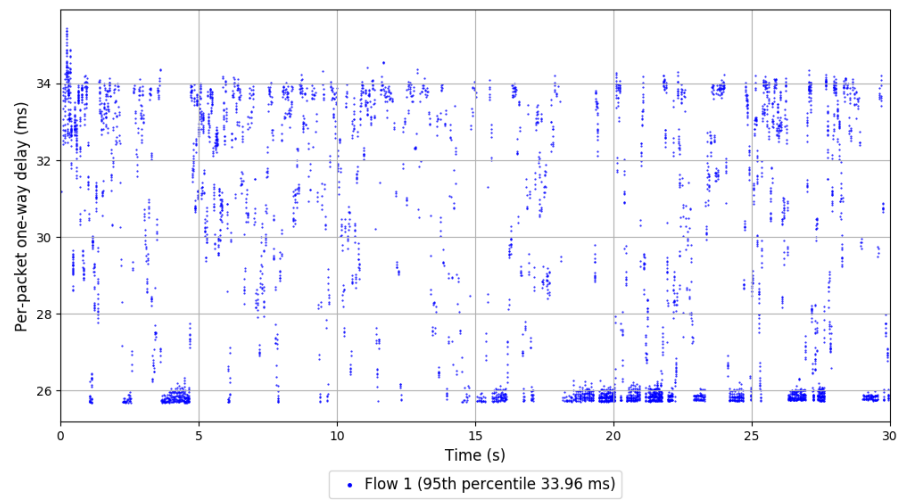
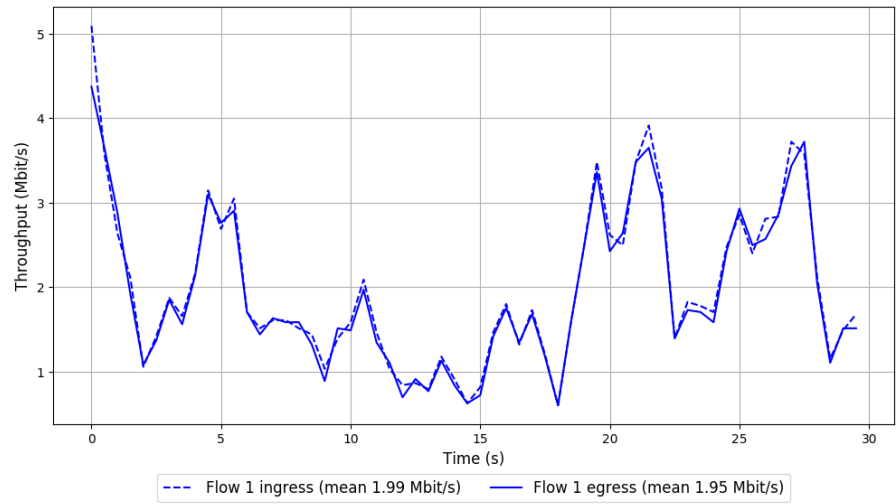


Run 9: Statistics of TCP Cubic

Start at: 2018-02-20 01:13:18
End at: 2018-02-20 01:13:48
Local clock offset: -6.577 ms
Remote clock offset: -6.351 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 33.958 ms
Loss rate: 2.61%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 33.958 ms
Loss rate: 2.61%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-20 01:41:14

End at: 2018-02-20 01:41:44

Local clock offset: -4.264 ms

Remote clock offset: -4.55 ms

Below is generated by plot.py at 2018-02-20 06:33:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 33.813 ms

Loss rate: 2.17%

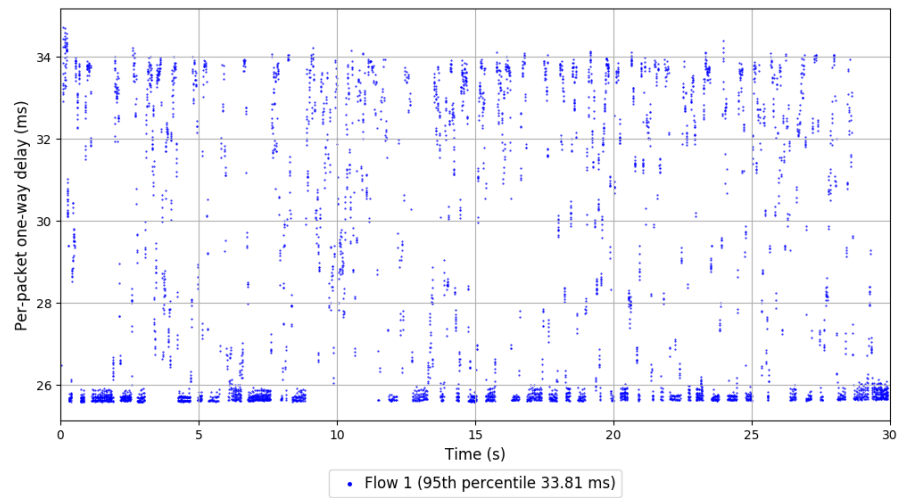
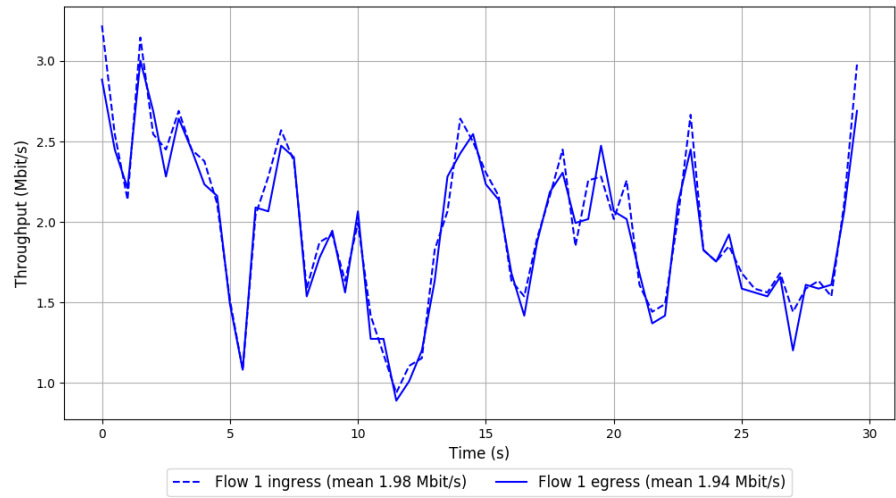
-- Flow 1:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 33.813 ms

Loss rate: 2.17%

Run 10: Report of TCP Cubic — Data Link

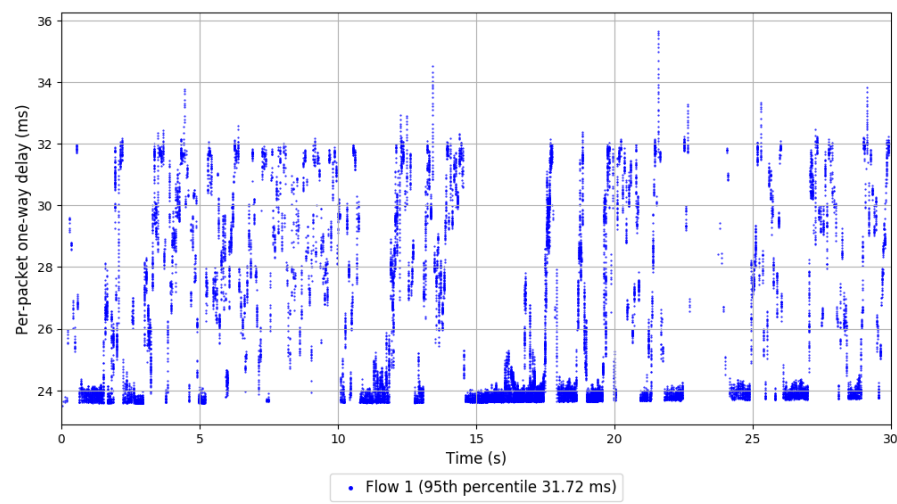
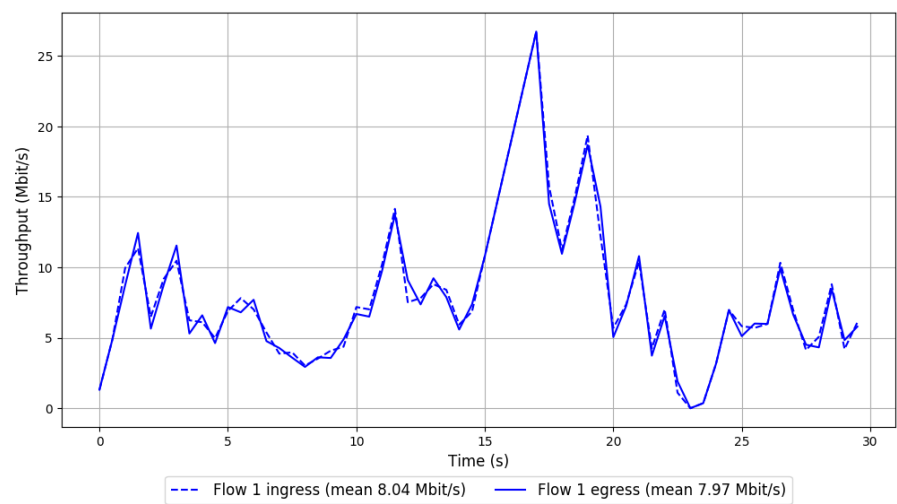


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-19 21:22:04
End at: 2018-02-19 21:22:34
Local clock offset: 1.443 ms
Remote clock offset: -6.19 ms

# Below is generated by plot.py at 2018-02-20 06:33:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.97 Mbit/s
95th percentile per-packet one-way delay: 31.718 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 7.97 Mbit/s
95th percentile per-packet one-way delay: 31.718 ms
Loss rate: 1.04%
```


Run 1: Report of LEDBAT — Data Link

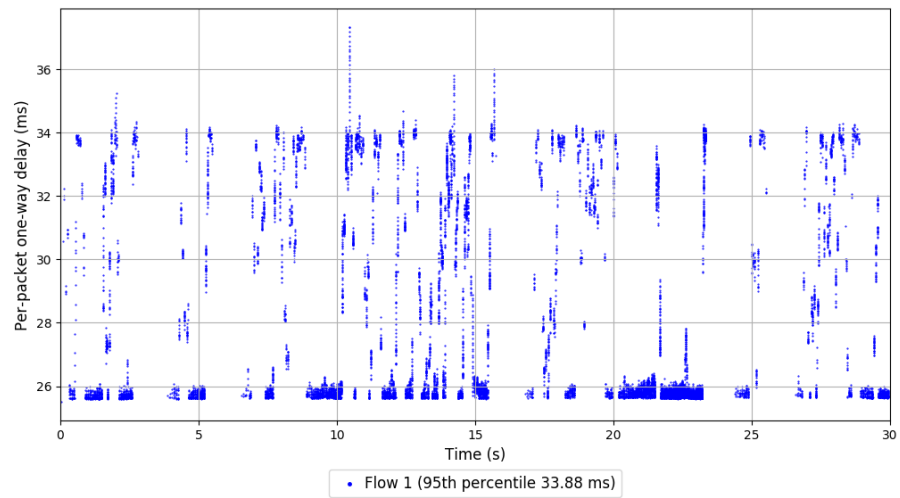
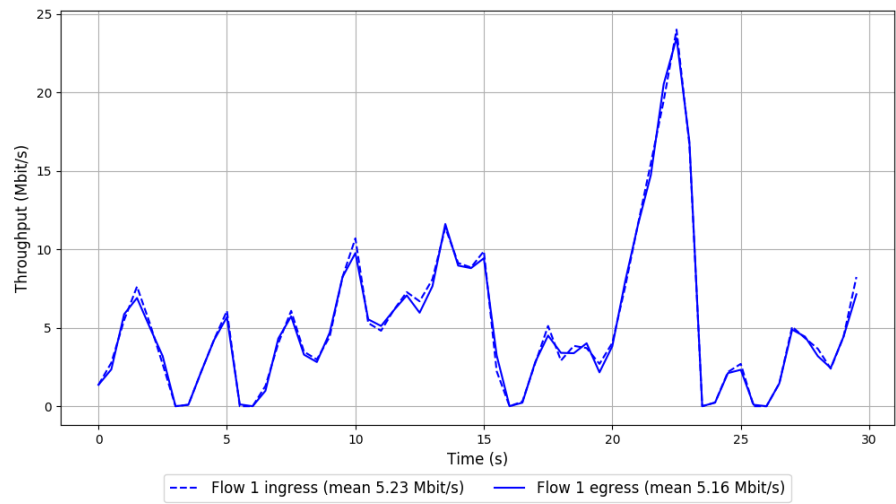


Run 2: Statistics of LEDBAT

Start at: 2018-02-19 21:48:55
End at: 2018-02-19 21:49:25
Local clock offset: -0.476 ms
Remote clock offset: -5.738 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 5.16 Mbit/s
95th percentile per-packet one-way delay: 33.883 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 5.16 Mbit/s
95th percentile per-packet one-way delay: 33.883 ms
Loss rate: 1.67%

Run 2: Report of LEDBAT — Data Link

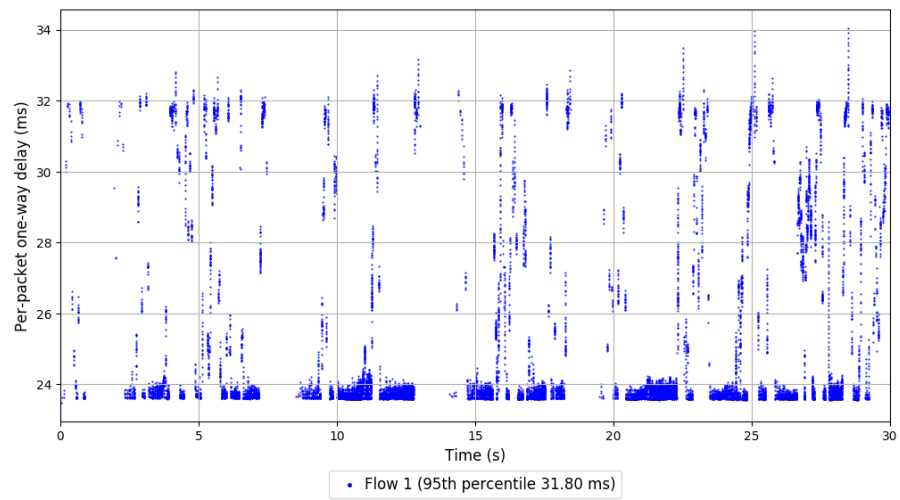
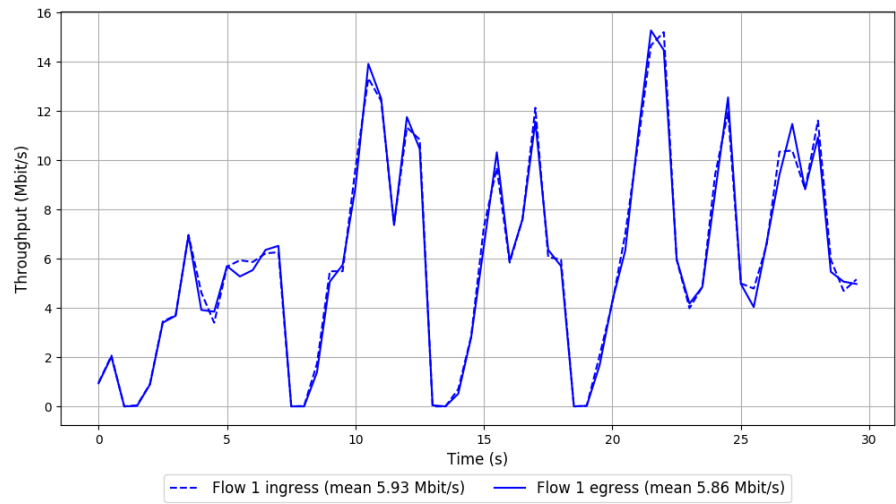


Run 3: Statistics of LEDBAT

Start at: 2018-02-19 22:16:39
End at: 2018-02-19 22:17:09
Local clock offset: -4.704 ms
Remote clock offset: -10.769 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 5.86 Mbit/s
95th percentile per-packet one-way delay: 31.798 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 5.86 Mbit/s
95th percentile per-packet one-way delay: 31.798 ms
Loss rate: 1.31%

Run 3: Report of LEDBAT — Data Link

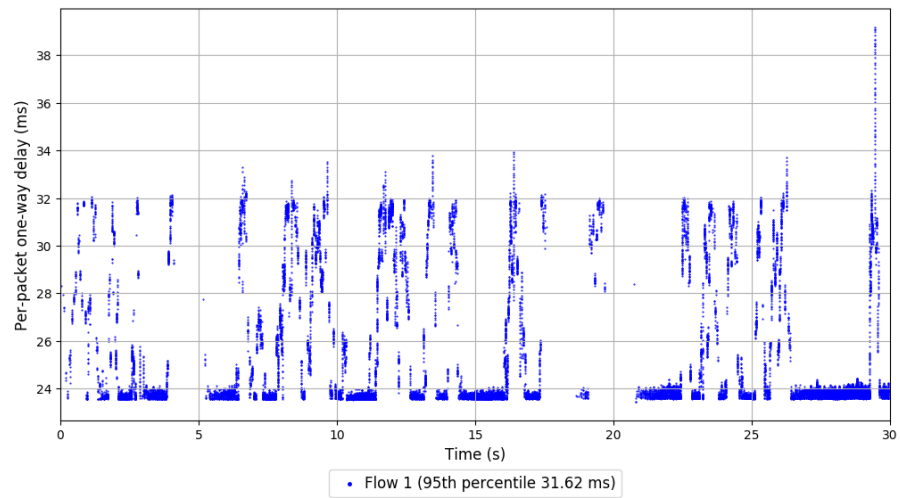
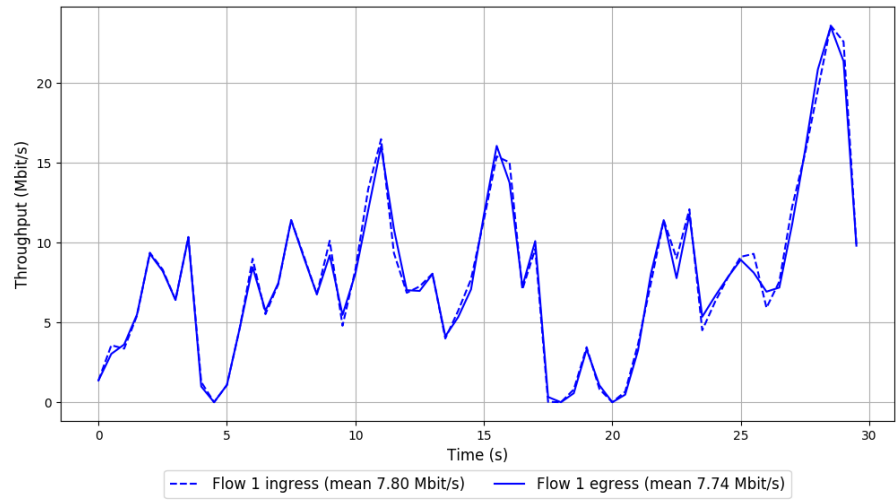


Run 4: Statistics of LEDBAT

Start at: 2018-02-19 22:43:51
End at: 2018-02-19 22:44:21
Local clock offset: -3.685 ms
Remote clock offset: -10.025 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 7.74 Mbit/s
95th percentile per-packet one-way delay: 31.621 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 7.74 Mbit/s
95th percentile per-packet one-way delay: 31.621 ms
Loss rate: 0.93%

Run 4: Report of LEDBAT — Data Link

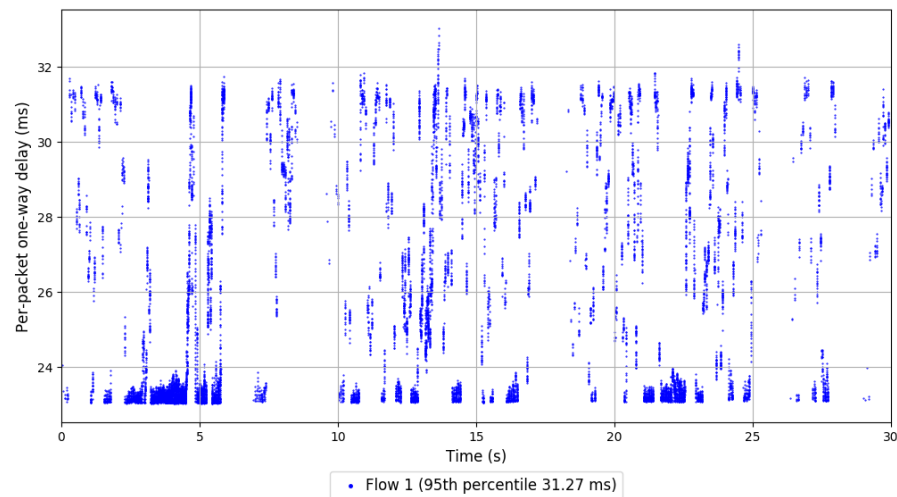
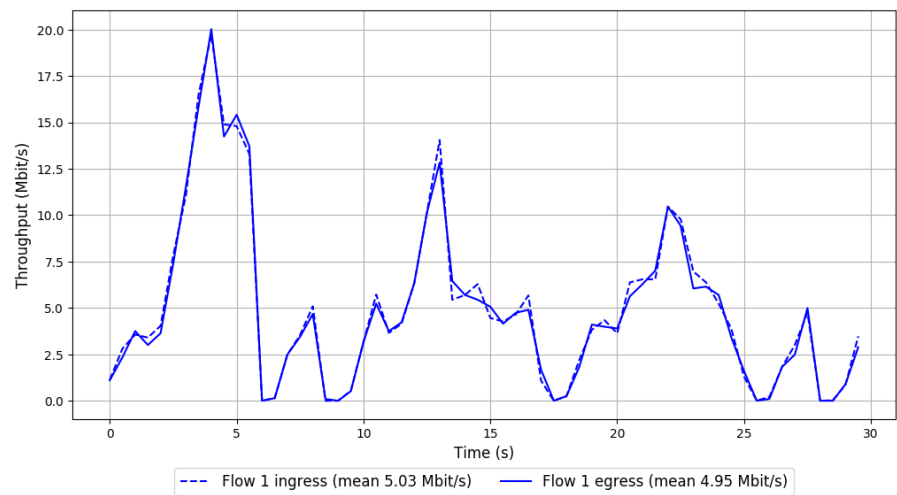


Run 5: Statistics of LEDBAT

Start at: 2018-02-19 23:11:11
End at: 2018-02-19 23:11:41
Local clock offset: 1.749 ms
Remote clock offset: -6.262 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.95 Mbit/s
95th percentile per-packet one-way delay: 31.273 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 4.95 Mbit/s
95th percentile per-packet one-way delay: 31.273 ms
Loss rate: 1.78%

Run 5: Report of LEDBAT — Data Link

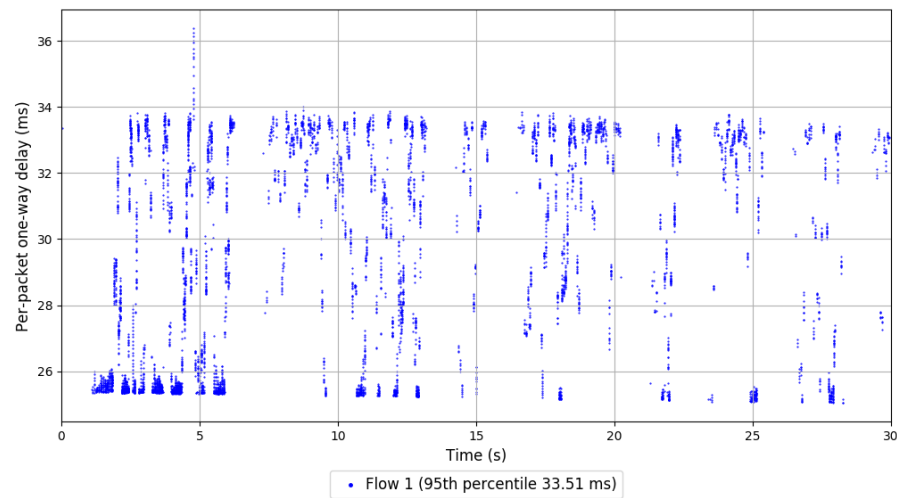
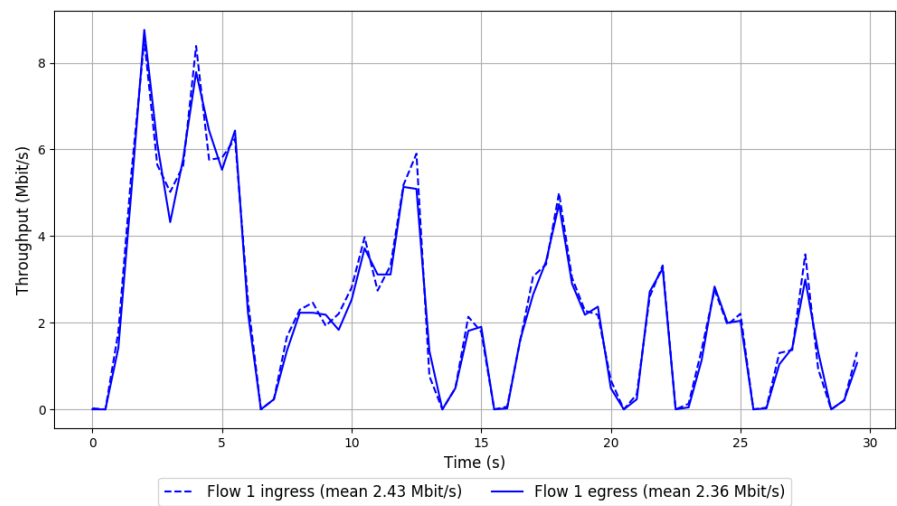


Run 6: Statistics of LEDBAT

Start at: 2018-02-19 23:39:19
End at: 2018-02-19 23:39:49
Local clock offset: 3.0 ms
Remote clock offset: -3.524 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 33.508 ms
Loss rate: 3.10%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 33.508 ms
Loss rate: 3.10%

Run 6: Report of LEDBAT — Data Link

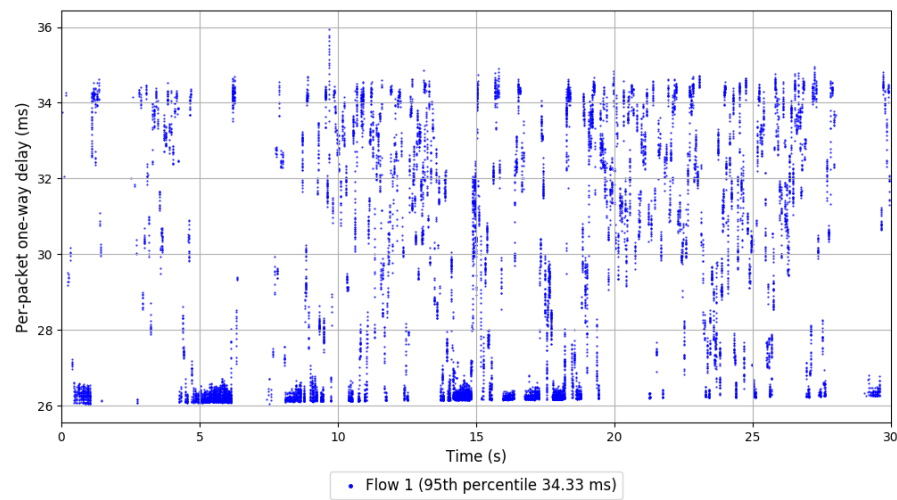
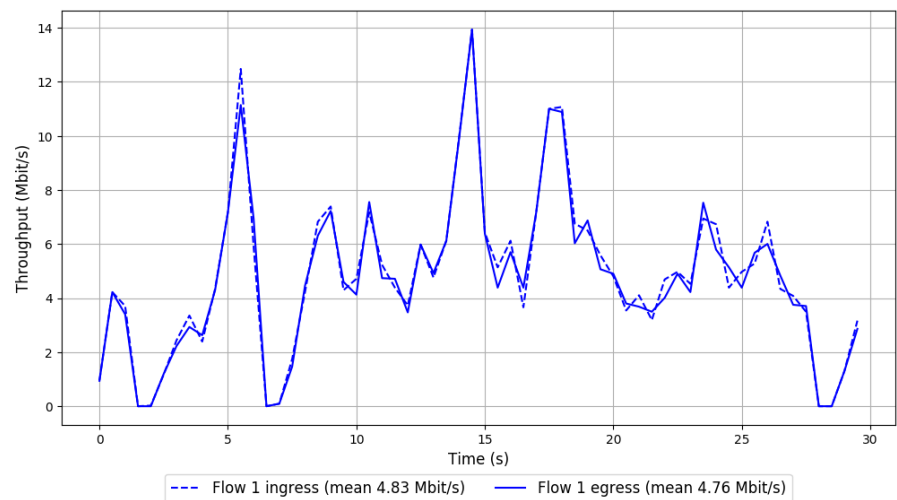


Run 7: Statistics of LEDBAT

Start at: 2018-02-20 00:07:57
End at: 2018-02-20 00:08:27
Local clock offset: 1.352 ms
Remote clock offset: -12.439 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.76 Mbit/s
95th percentile per-packet one-way delay: 34.327 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 4.76 Mbit/s
95th percentile per-packet one-way delay: 34.327 ms
Loss rate: 1.70%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-20 00:36:11

End at: 2018-02-20 00:36:41

Local clock offset: -4.787 ms

Remote clock offset: -5.89 ms

Below is generated by plot.py at 2018-02-20 06:33:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 33.708 ms

Loss rate: 1.63%

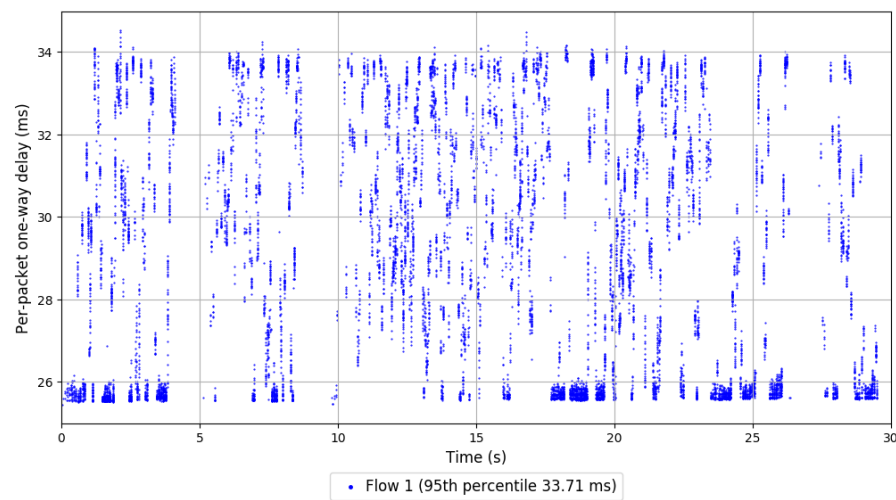
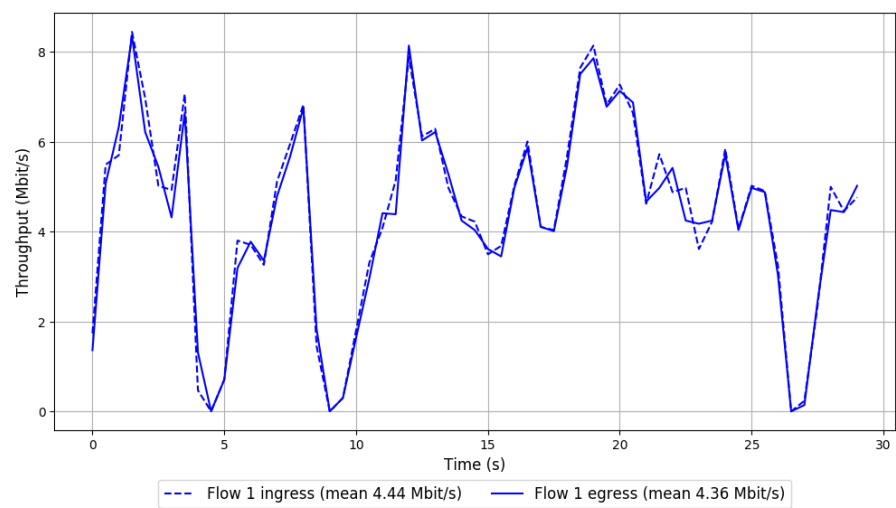
-- Flow 1:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 33.708 ms

Loss rate: 1.63%

Run 8: Report of LEDBAT — Data Link

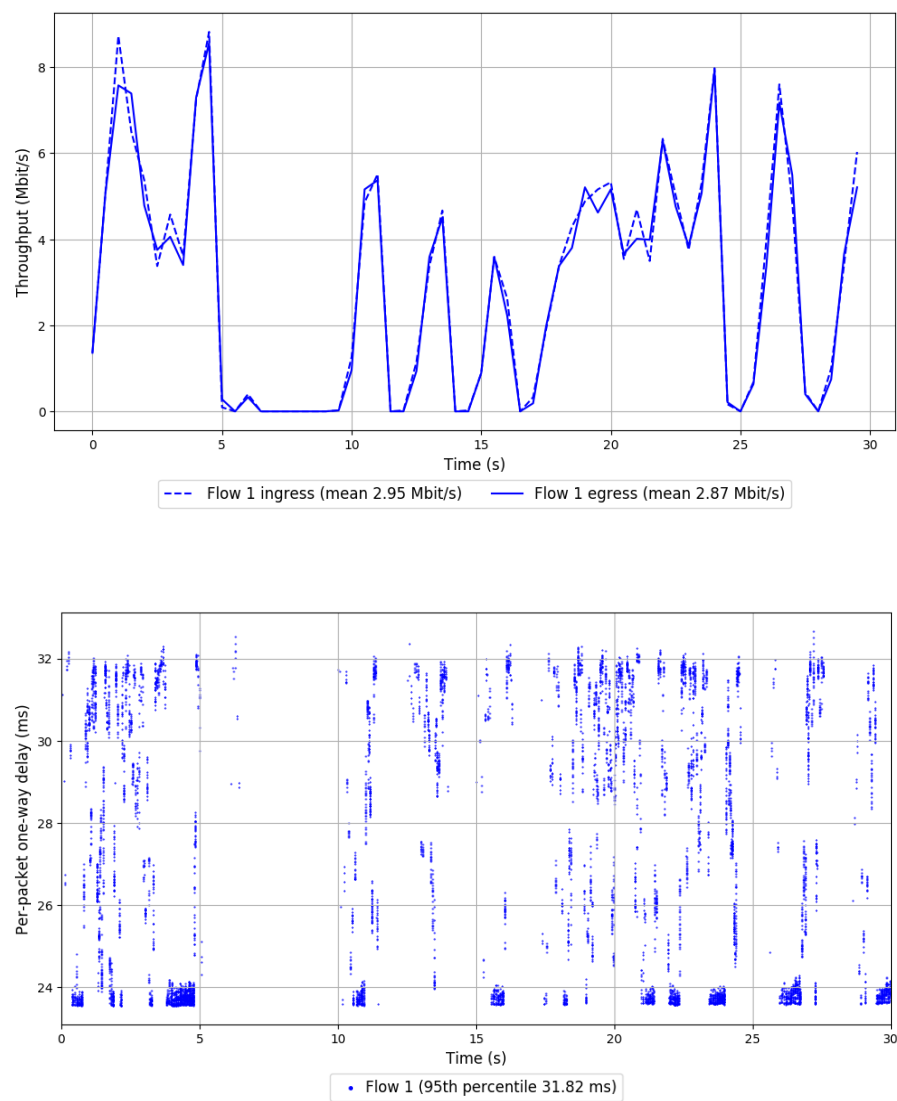


Run 9: Statistics of LEDBAT

Start at: 2018-02-20 01:03:45
End at: 2018-02-20 01:04:15
Local clock offset: -6.018 ms
Remote clock offset: -4.646 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.87 Mbit/s
95th percentile per-packet one-way delay: 31.820 ms
Loss rate: 2.73%
-- Flow 1:
Average throughput: 2.87 Mbit/s
95th percentile per-packet one-way delay: 31.820 ms
Loss rate: 2.73%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-20 01:31:54

End at: 2018-02-20 01:32:24

Local clock offset: -4.502 ms

Remote clock offset: -2.8 ms

Below is generated by plot.py at 2018-02-20 06:33:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.65 Mbit/s

95th percentile per-packet one-way delay: 31.314 ms

Loss rate: 1.57%

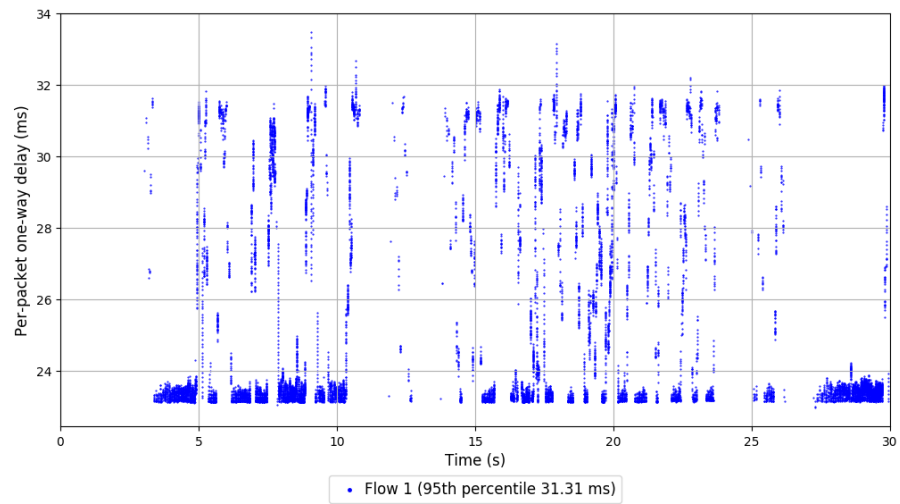
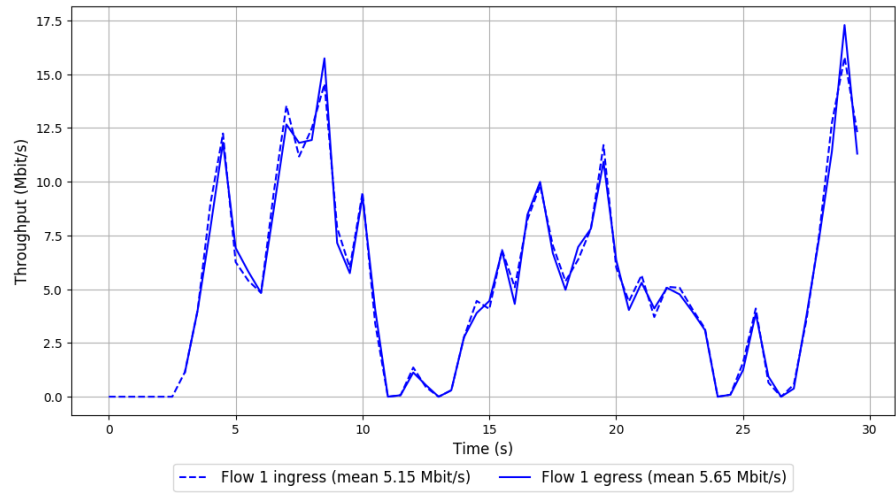
-- Flow 1:

Average throughput: 5.65 Mbit/s

95th percentile per-packet one-way delay: 31.314 ms

Loss rate: 1.57%

Run 10: Report of LEDBAT — Data Link

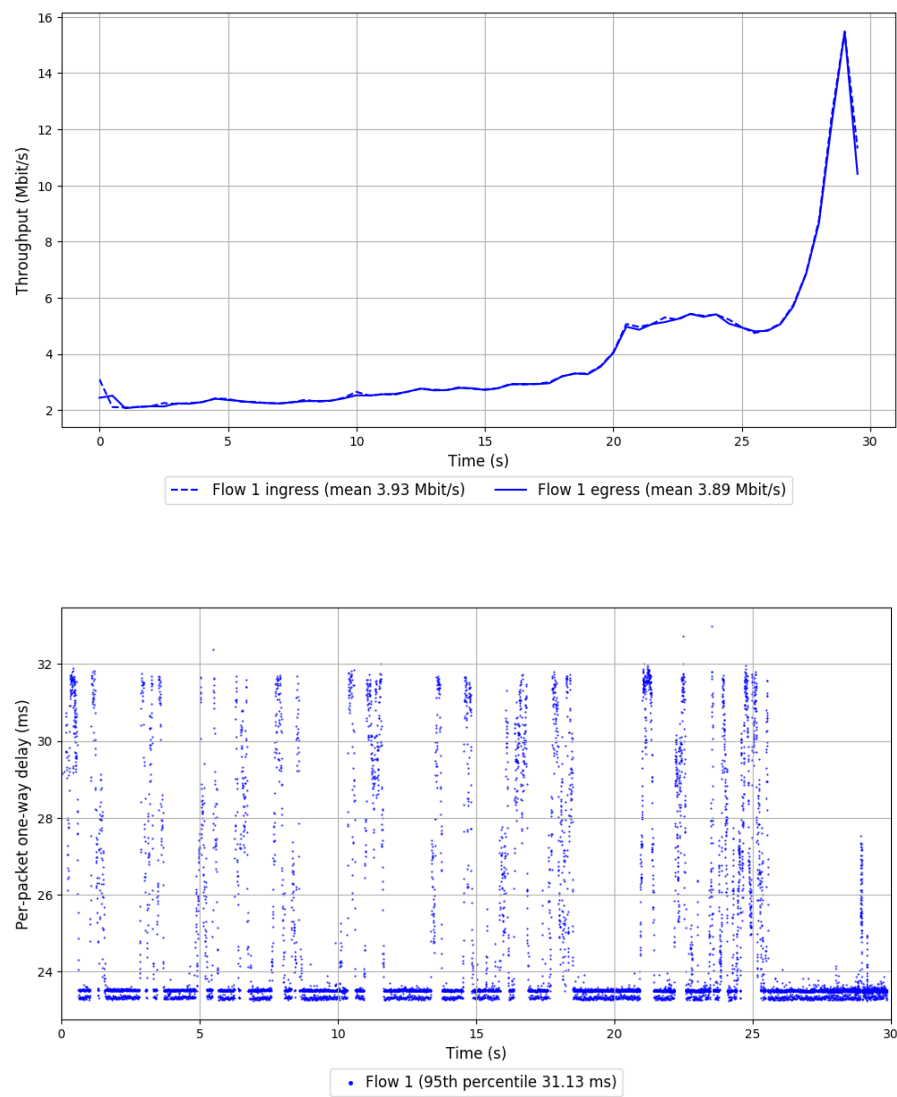


```
Run 1: Statistics of PCC

Start at: 2018-02-19 21:08:25
End at: 2018-02-19 21:08:55
Local clock offset: 2.553 ms
Remote clock offset: -5.854 ms

# Below is generated by plot.py at 2018-02-20 06:33:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.89 Mbit/s
95th percentile per-packet one-way delay: 31.128 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 3.89 Mbit/s
95th percentile per-packet one-way delay: 31.128 ms
Loss rate: 1.11%
```

Run 1: Report of PCC — Data Link

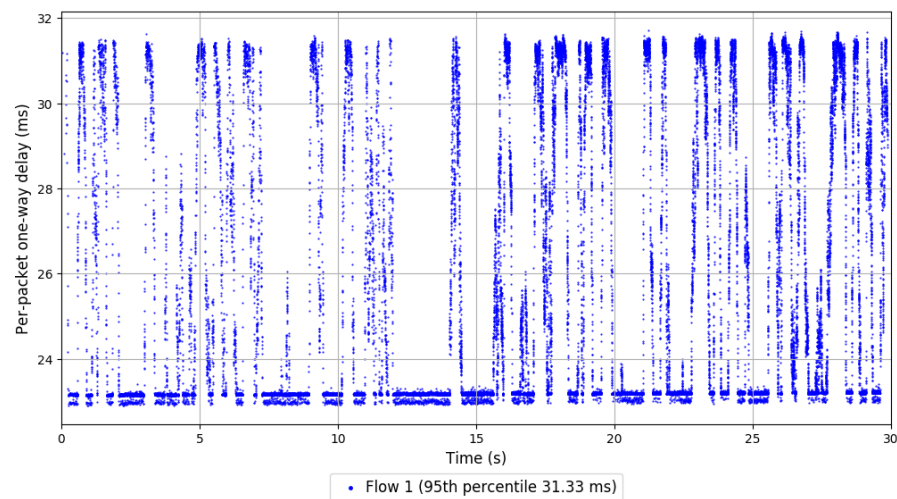
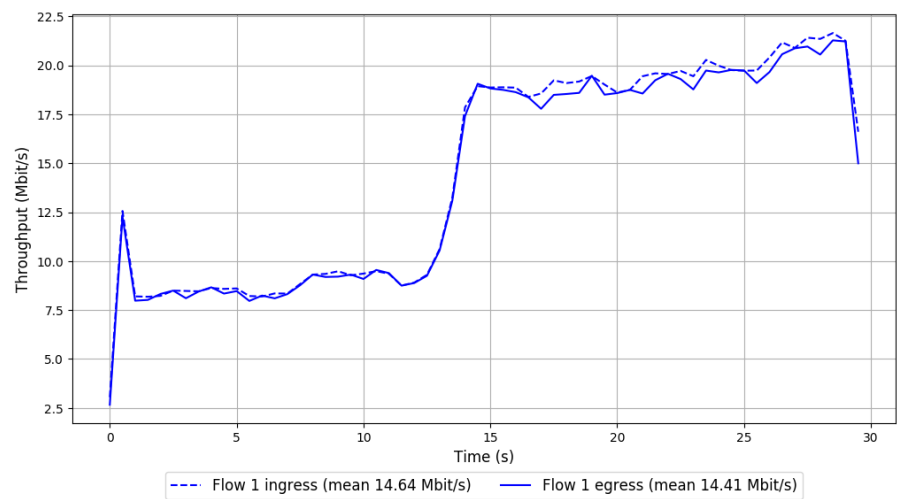


Run 2: Statistics of PCC

Start at: 2018-02-19 21:35:00
End at: 2018-02-19 21:35:30
Local clock offset: 0.256 ms
Remote clock offset: -3.777 ms

Below is generated by plot.py at 2018-02-20 06:33:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 14.41 Mbit/s
95th percentile per-packet one-way delay: 31.329 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 14.41 Mbit/s
95th percentile per-packet one-way delay: 31.329 ms
Loss rate: 1.77%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-19 22:01:59

End at: 2018-02-19 22:02:29

Local clock offset: -3.192 ms

Remote clock offset: -6.78 ms

Below is generated by plot.py at 2018-02-20 06:33:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.41 Mbit/s

95th percentile per-packet one-way delay: 31.598 ms

Loss rate: 2.14%

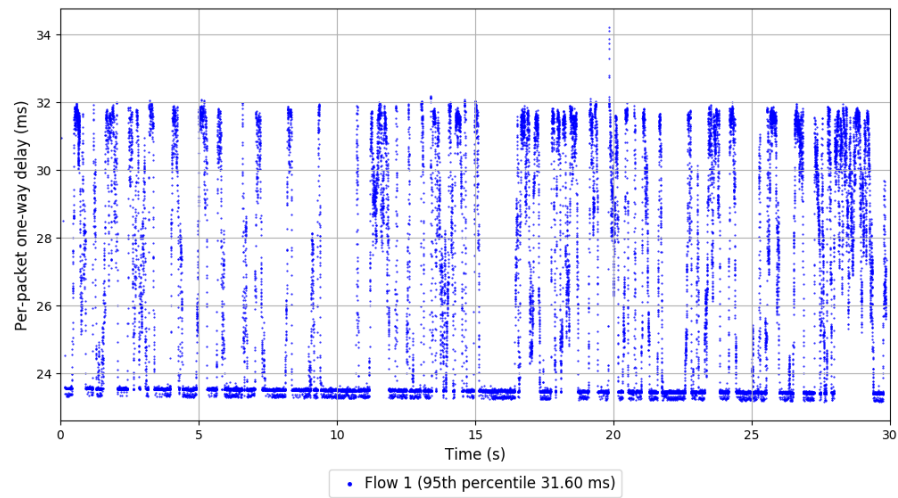
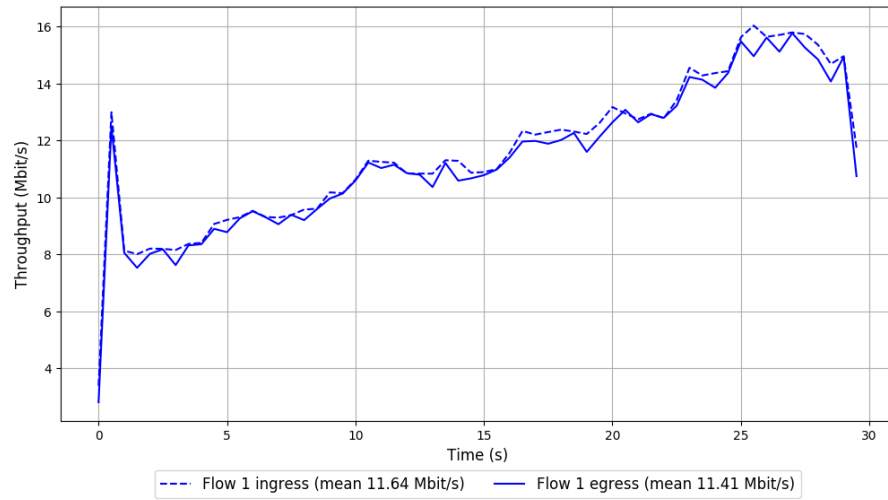
-- Flow 1:

Average throughput: 11.41 Mbit/s

95th percentile per-packet one-way delay: 31.598 ms

Loss rate: 2.14%

Run 3: Report of PCC — Data Link

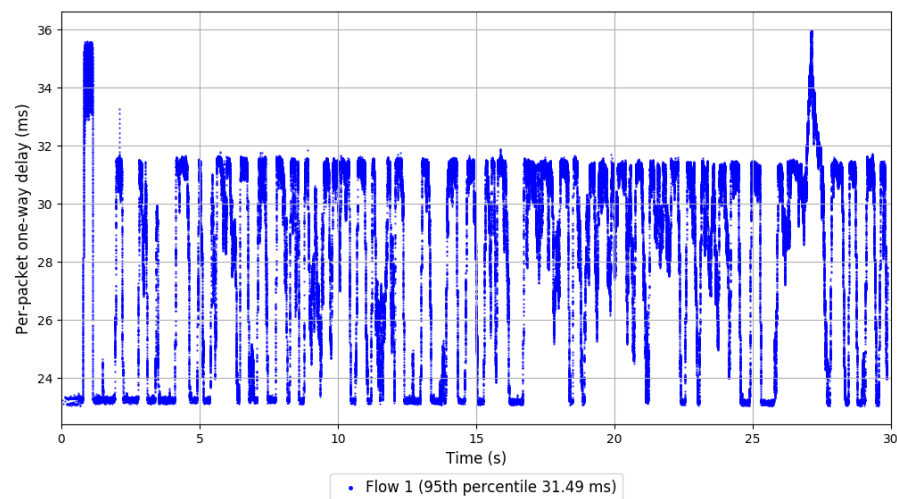
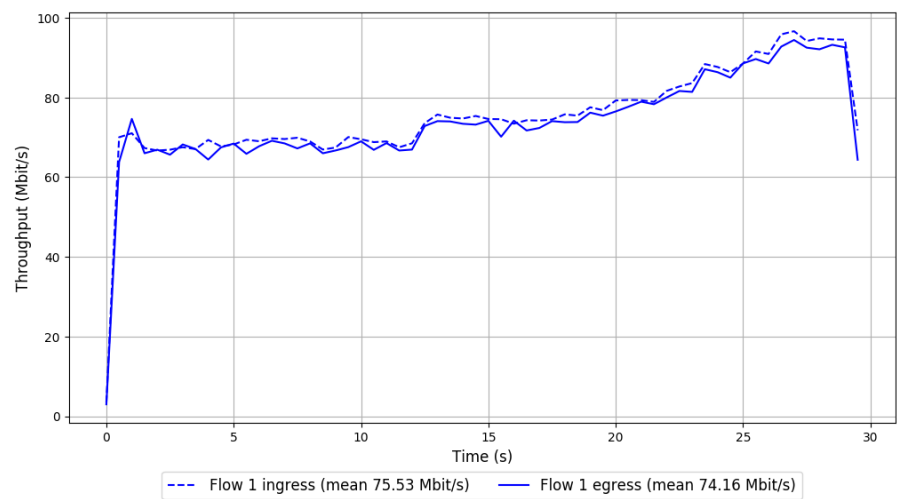


Run 4: Statistics of PCC

Start at: 2018-02-19 22:29:40
End at: 2018-02-19 22:30:10
Local clock offset: -4.487 ms
Remote clock offset: -12.553 ms

Below is generated by plot.py at 2018-02-20 06:33:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 74.16 Mbit/s
95th percentile per-packet one-way delay: 31.488 ms
Loss rate: 1.99%
-- Flow 1:
Average throughput: 74.16 Mbit/s
95th percentile per-packet one-way delay: 31.488 ms
Loss rate: 1.99%

Run 4: Report of PCC — Data Link

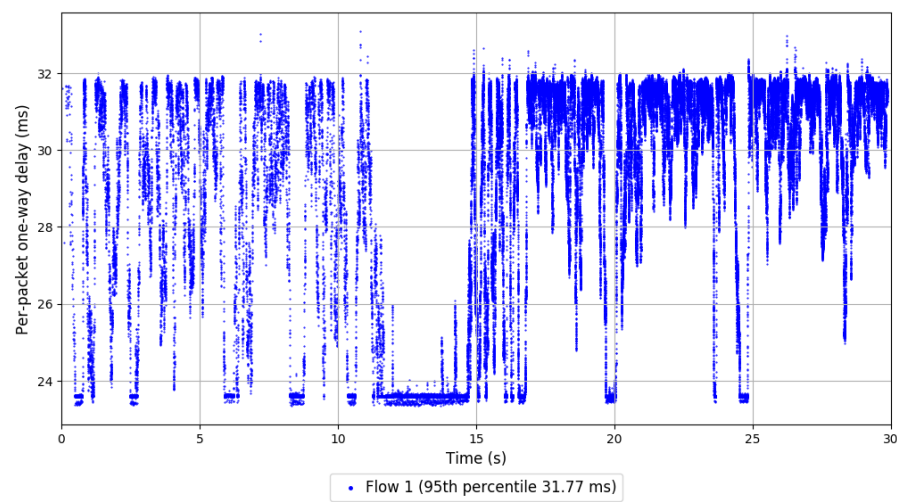
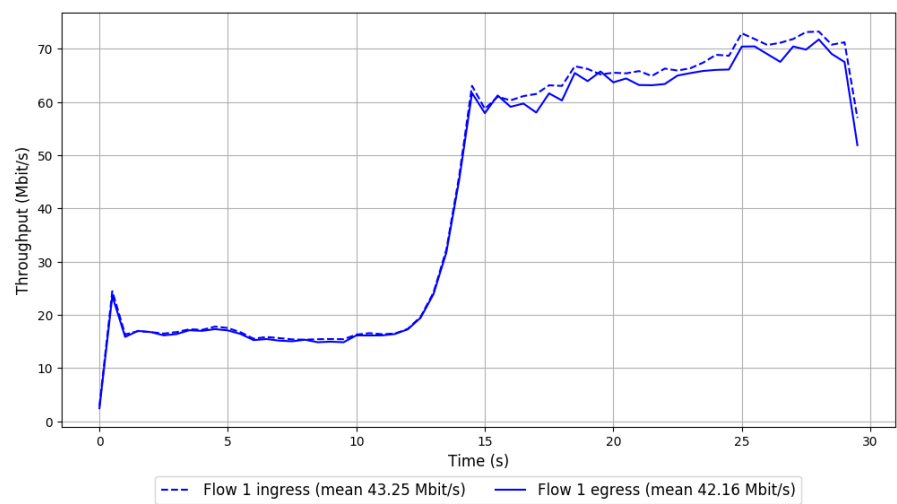


Run 5: Statistics of PCC

Start at: 2018-02-19 22:56:59
End at: 2018-02-19 22:57:29
Local clock offset: -4.003 ms
Remote clock offset: -9.945 ms

Below is generated by plot.py at 2018-02-20 06:33:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 42.16 Mbit/s
95th percentile per-packet one-way delay: 31.765 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 42.16 Mbit/s
95th percentile per-packet one-way delay: 31.765 ms
Loss rate: 2.71%

Run 5: Report of PCC — Data Link

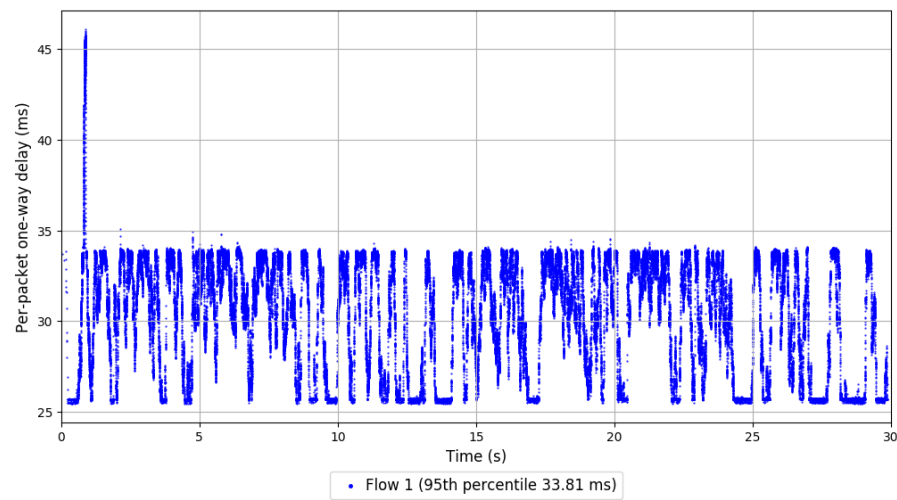
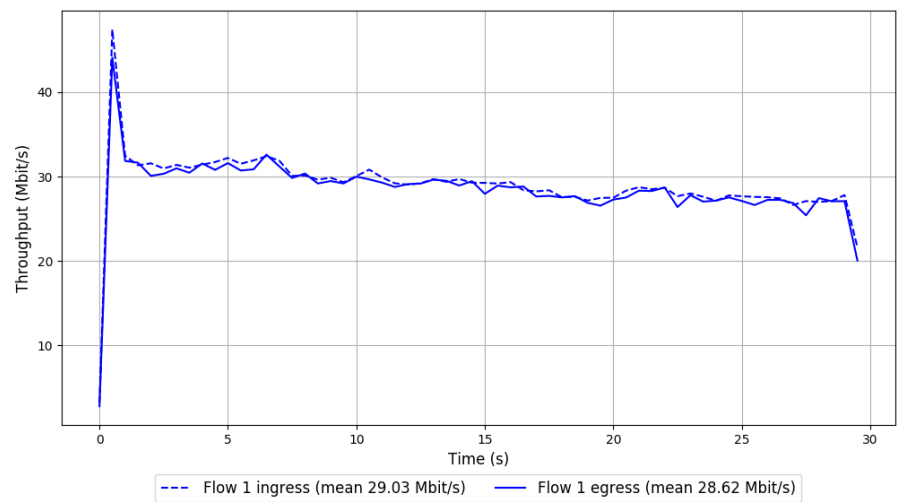


Run 6: Statistics of PCC

Start at: 2018-02-19 23:24:12
End at: 2018-02-19 23:24:42
Local clock offset: 3.768 ms
Remote clock offset: -5.674 ms

Below is generated by plot.py at 2018-02-20 06:33:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 28.62 Mbit/s
95th percentile per-packet one-way delay: 33.815 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 28.62 Mbit/s
95th percentile per-packet one-way delay: 33.815 ms
Loss rate: 1.62%

Run 6: Report of PCC — Data Link

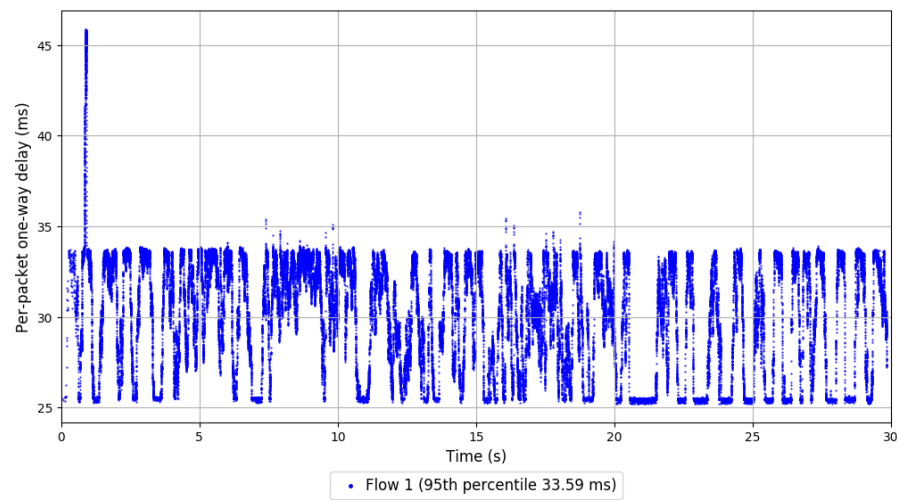
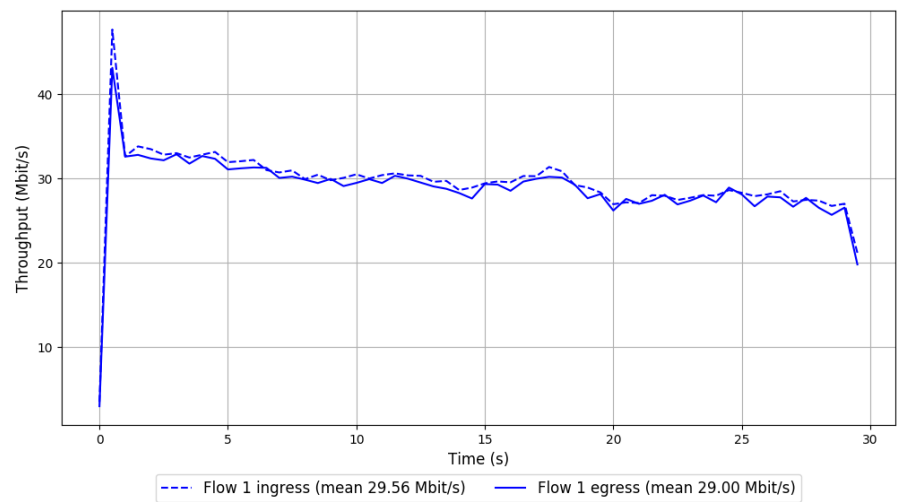


Run 7: Statistics of PCC

Start at: 2018-02-19 23:53:02
End at: 2018-02-19 23:53:32
Local clock offset: 1.923 ms
Remote clock offset: -10.23 ms

Below is generated by plot.py at 2018-02-20 06:33:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 29.00 Mbit/s
95th percentile per-packet one-way delay: 33.586 ms
Loss rate: 2.07%
-- Flow 1:
Average throughput: 29.00 Mbit/s
95th percentile per-packet one-way delay: 33.586 ms
Loss rate: 2.07%

Run 7: Report of PCC — Data Link

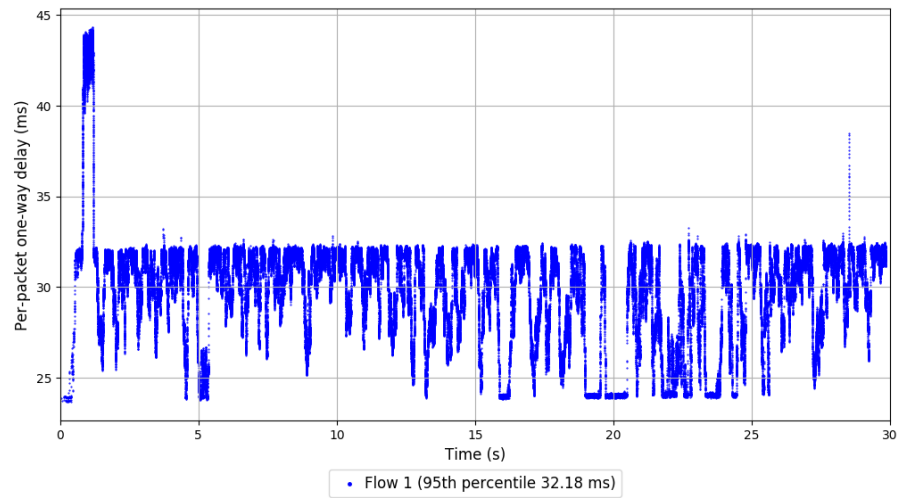
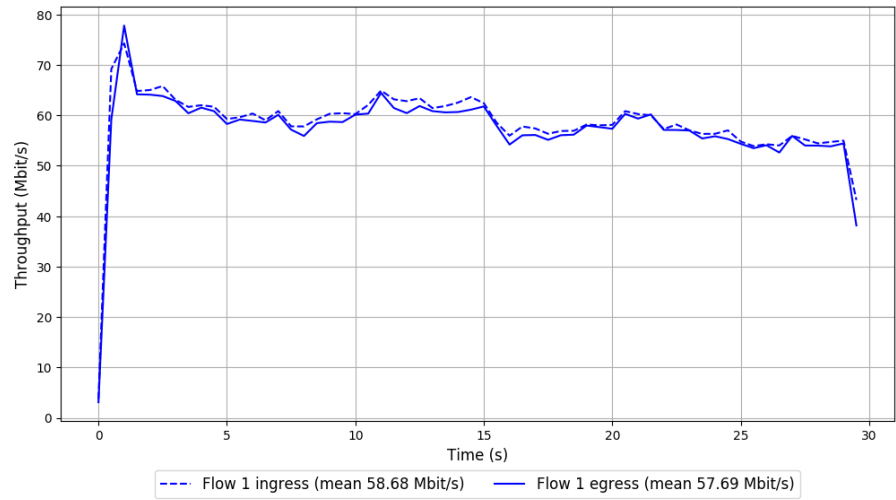


Run 8: Statistics of PCC

Start at: 2018-02-20 00:21:10
End at: 2018-02-20 00:21:40
Local clock offset: -2.935 ms
Remote clock offset: -6.531 ms

Below is generated by plot.py at 2018-02-20 06:33:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 57.69 Mbit/s
95th percentile per-packet one-way delay: 32.176 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 57.69 Mbit/s
95th percentile per-packet one-way delay: 32.176 ms
Loss rate: 1.85%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-20 00:49:03

End at: 2018-02-20 00:49:33

Local clock offset: -5.258 ms

Remote clock offset: -3.92 ms

Below is generated by plot.py at 2018-02-20 06:33:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.83 Mbit/s

95th percentile per-packet one-way delay: 31.858 ms

Loss rate: 2.19%

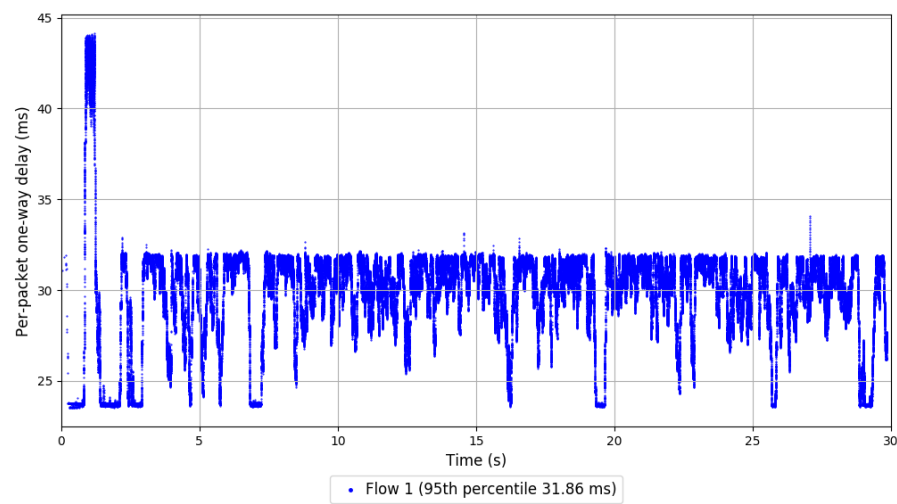
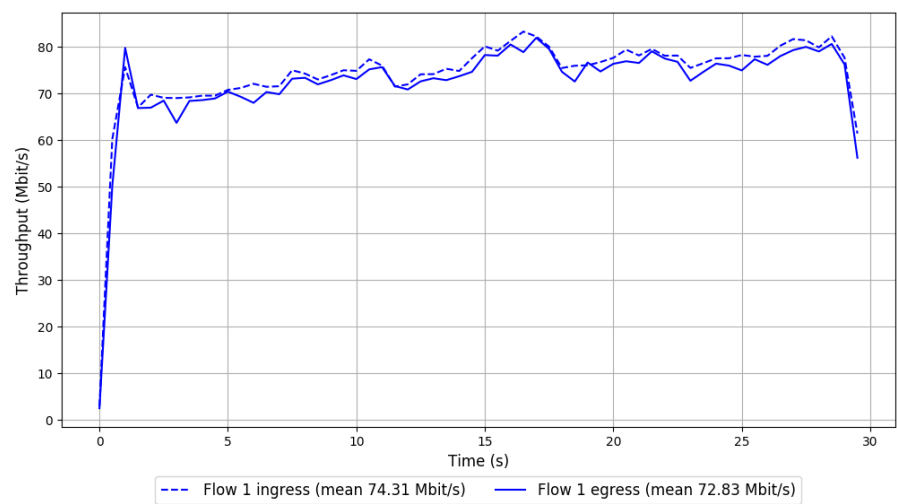
-- Flow 1:

Average throughput: 72.83 Mbit/s

95th percentile per-packet one-way delay: 31.858 ms

Loss rate: 2.19%

Run 9: Report of PCC — Data Link

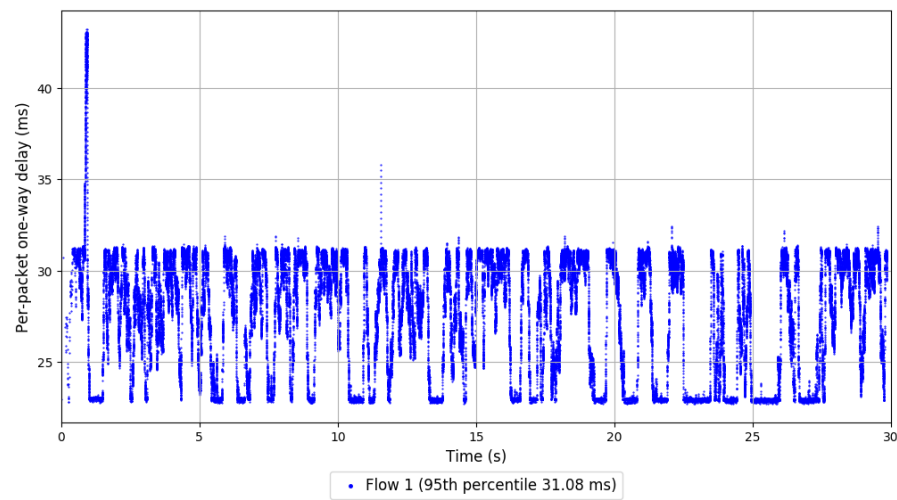
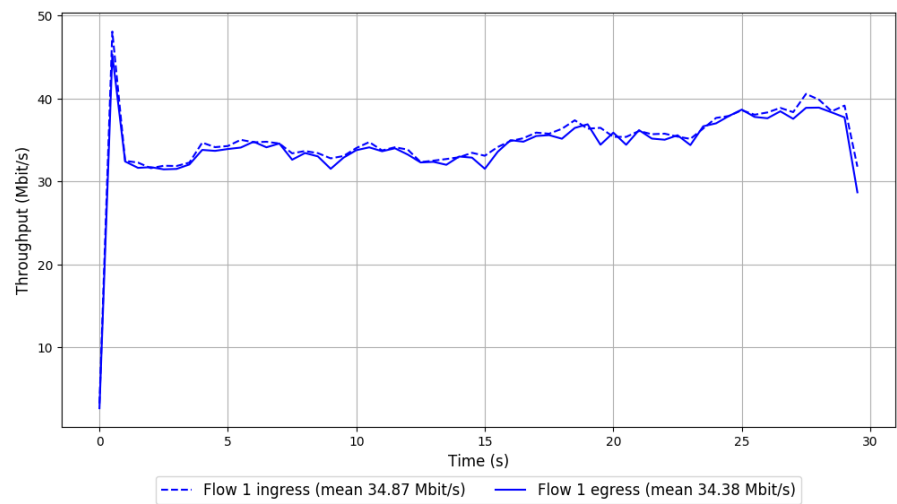


Run 10: Statistics of PCC

Start at: 2018-02-20 01:17:55
End at: 2018-02-20 01:18:25
Local clock offset: -6.006 ms
Remote clock offset: -3.572 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 34.38 Mbit/s
95th percentile per-packet one-way delay: 31.083 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 34.38 Mbit/s
95th percentile per-packet one-way delay: 31.083 ms
Loss rate: 1.57%

Run 10: Report of PCC — Data Link

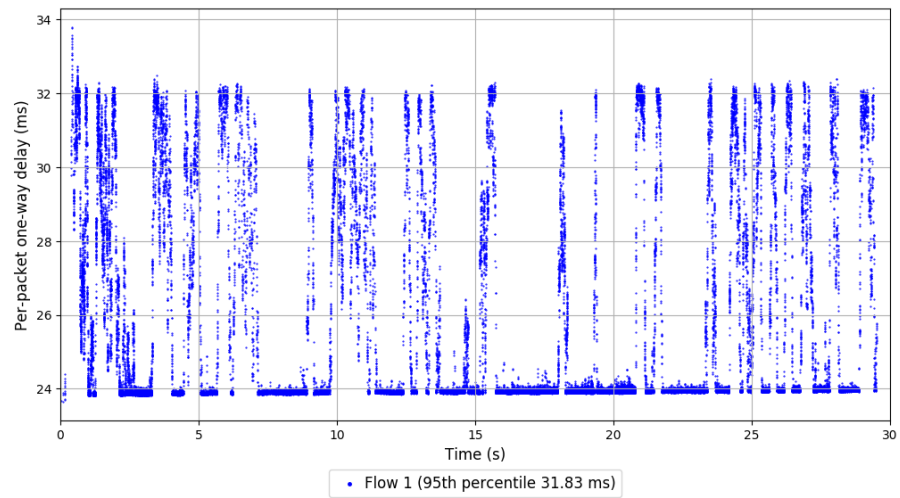
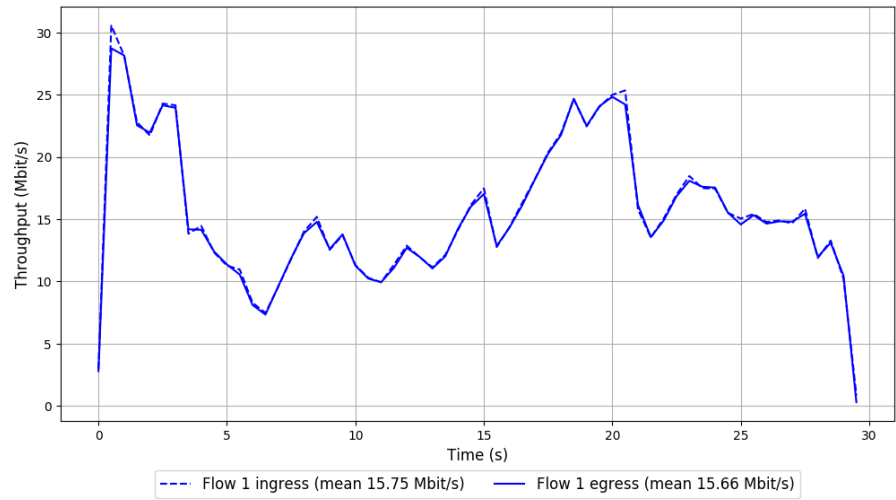


Run 1: Statistics of QUIC Cubic

Start at: 2018-02-19 21:17:21
End at: 2018-02-19 21:17:51
Local clock offset: 2.411 ms
Remote clock offset: -6.242 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 15.66 Mbit/s
95th percentile per-packet one-way delay: 31.827 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 15.66 Mbit/s
95th percentile per-packet one-way delay: 31.827 ms
Loss rate: 0.81%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-19 21:44:13

End at: 2018-02-19 21:44:43

Local clock offset: -0.276 ms

Remote clock offset: -3.381 ms

Below is generated by plot.py at 2018-02-20 06:33:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.26 Mbit/s

95th percentile per-packet one-way delay: 31.362 ms

Loss rate: 1.20%

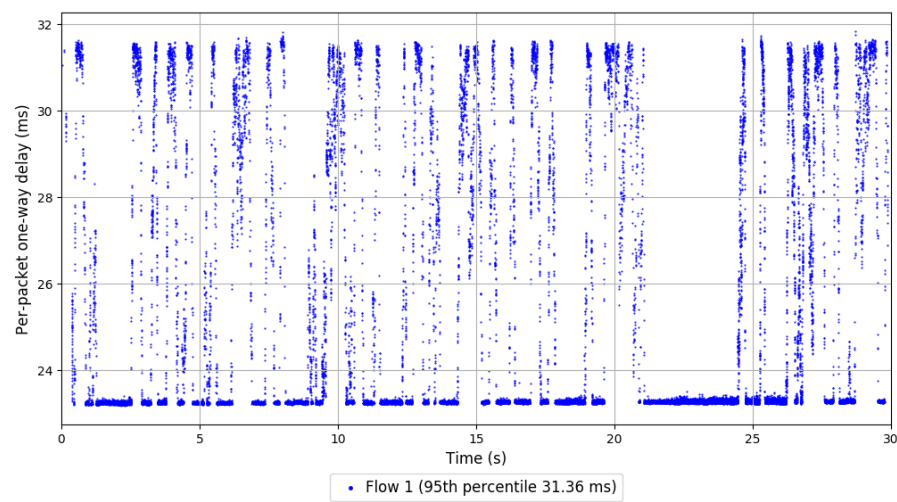
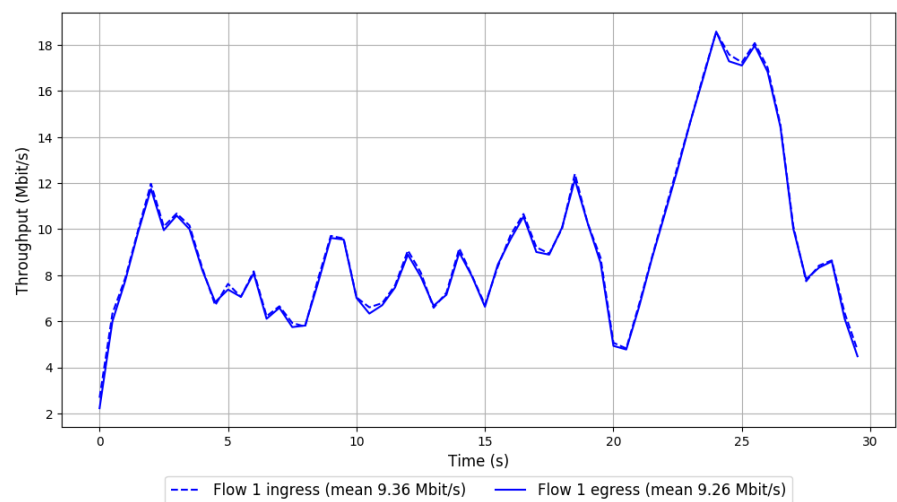
-- Flow 1:

Average throughput: 9.26 Mbit/s

95th percentile per-packet one-way delay: 31.362 ms

Loss rate: 1.20%

Run 2: Report of QUIC Cubic — Data Link

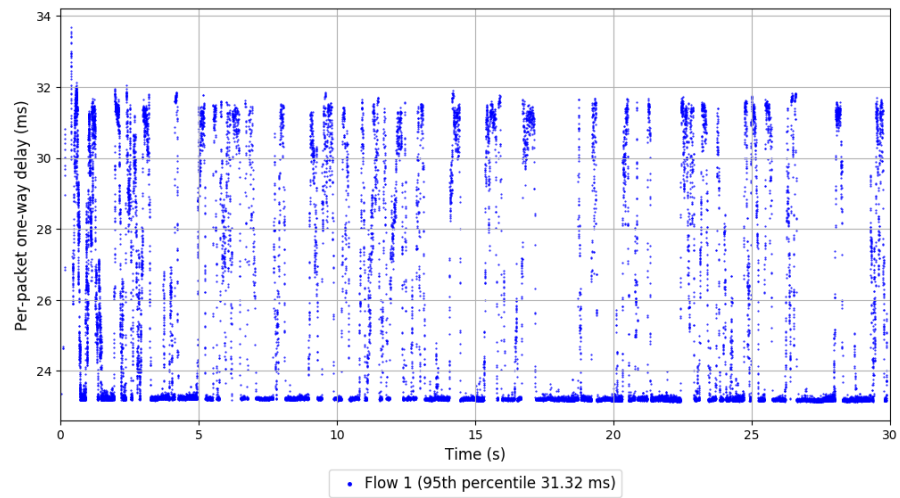
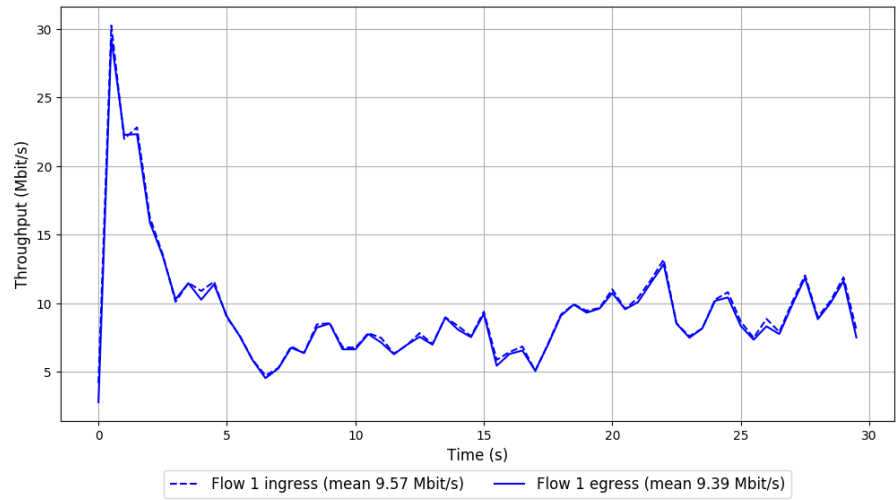


Run 3: Statistics of QUIC Cubic

Start at: 2018-02-19 22:11:48
End at: 2018-02-19 22:12:18
Local clock offset: -4.283 ms
Remote clock offset: -9.485 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 9.39 Mbit/s
95th percentile per-packet one-way delay: 31.325 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 9.39 Mbit/s
95th percentile per-packet one-way delay: 31.325 ms
Loss rate: 2.00%

Run 3: Report of QUIC Cubic — Data Link

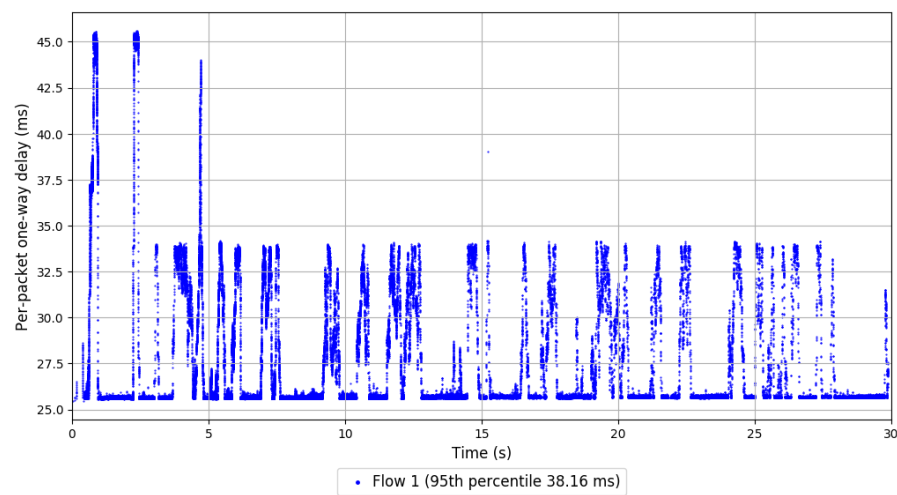
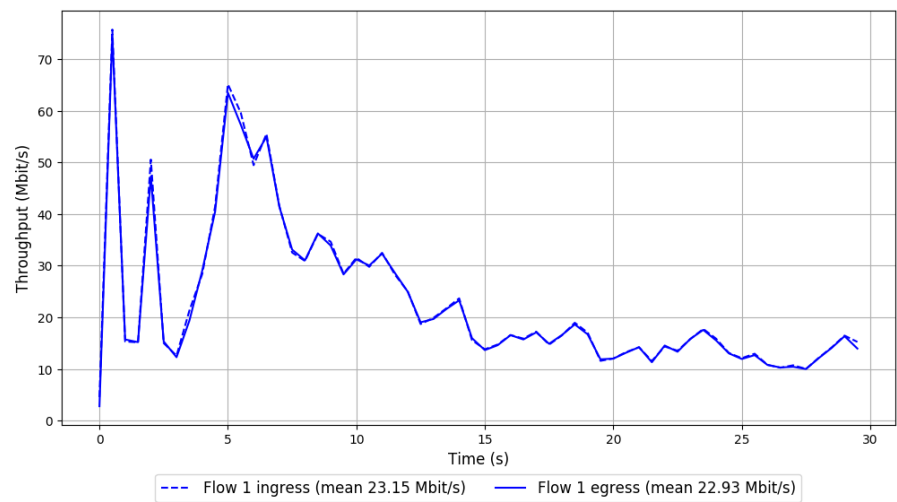


Run 4: Statistics of QUIC Cubic

Start at: 2018-02-19 22:39:04
End at: 2018-02-19 22:39:34
Local clock offset: -3.811 ms
Remote clock offset: -12.675 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 22.93 Mbit/s
95th percentile per-packet one-way delay: 38.159 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 22.93 Mbit/s
95th percentile per-packet one-way delay: 38.159 ms
Loss rate: 1.12%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-19 23:06:23

End at: 2018-02-19 23:06:53

Local clock offset: 0.254 ms

Remote clock offset: -8.678 ms

Below is generated by plot.py at 2018-02-20 06:33:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 10.74 Mbit/s

95th percentile per-packet one-way delay: 31.191 ms

Loss rate: 0.99%

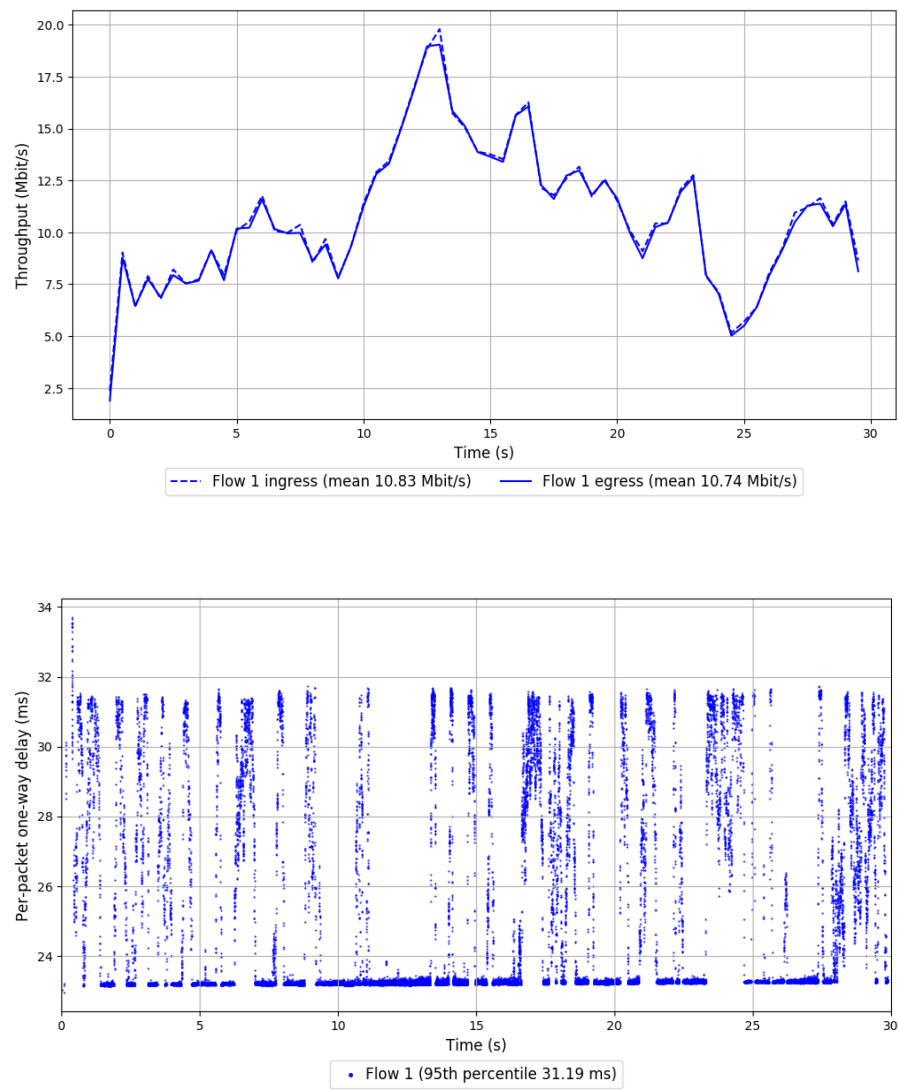
-- Flow 1:

Average throughput: 10.74 Mbit/s

95th percentile per-packet one-way delay: 31.191 ms

Loss rate: 0.99%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-19 23:33:45

End at: 2018-02-19 23:34:15

Local clock offset: 4.249 ms

Remote clock offset: -4.106 ms

Below is generated by plot.py at 2018-02-20 06:33:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.95 Mbit/s

95th percentile per-packet one-way delay: 34.076 ms

Loss rate: 2.27%

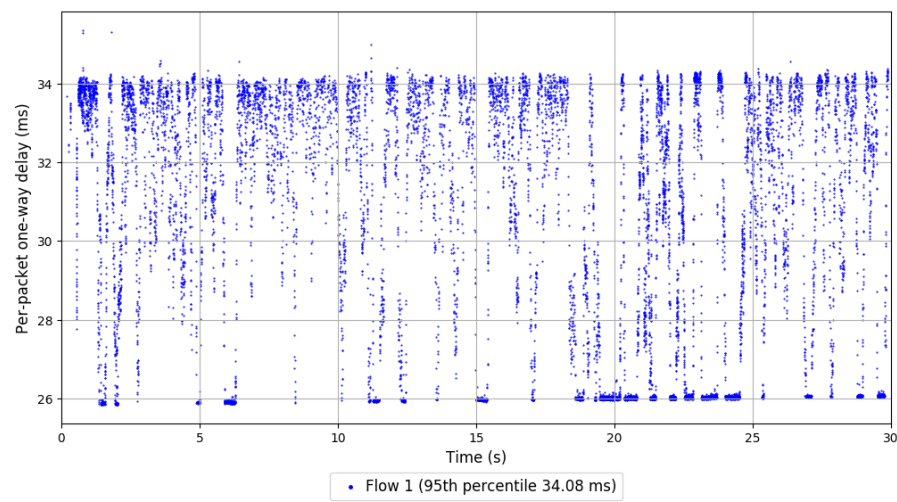
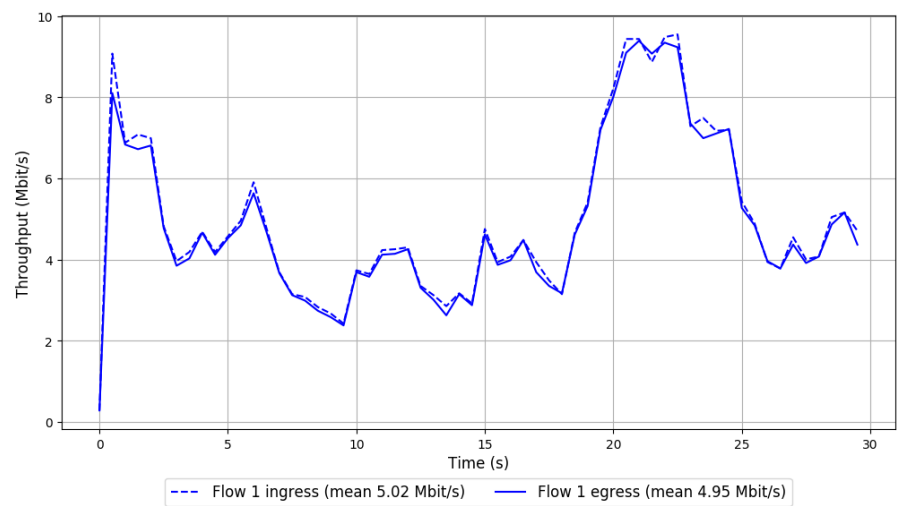
-- Flow 1:

Average throughput: 4.95 Mbit/s

95th percentile per-packet one-way delay: 34.076 ms

Loss rate: 2.27%

Run 6: Report of QUIC Cubic — Data Link

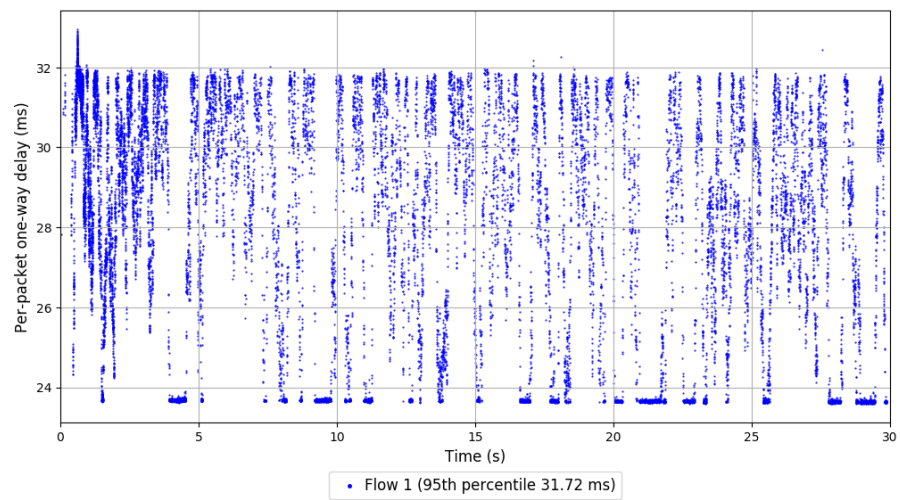
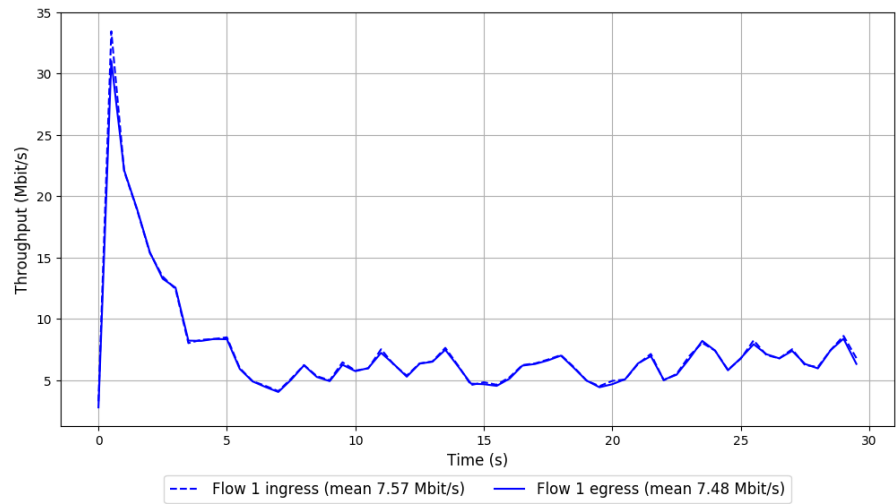


Run 7: Statistics of QUIC Cubic

Start at: 2018-02-20 00:02:50
End at: 2018-02-20 00:03:20
Local clock offset: 1.847 ms
Remote clock offset: -9.813 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 7.48 Mbit/s
95th percentile per-packet one-way delay: 31.716 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 7.48 Mbit/s
95th percentile per-packet one-way delay: 31.716 ms
Loss rate: 1.40%

Run 7: Report of QUIC Cubic — Data Link

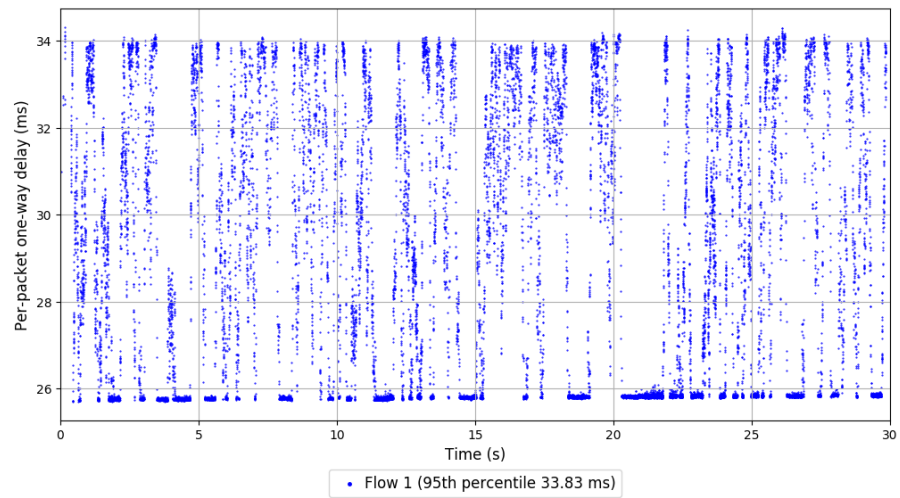
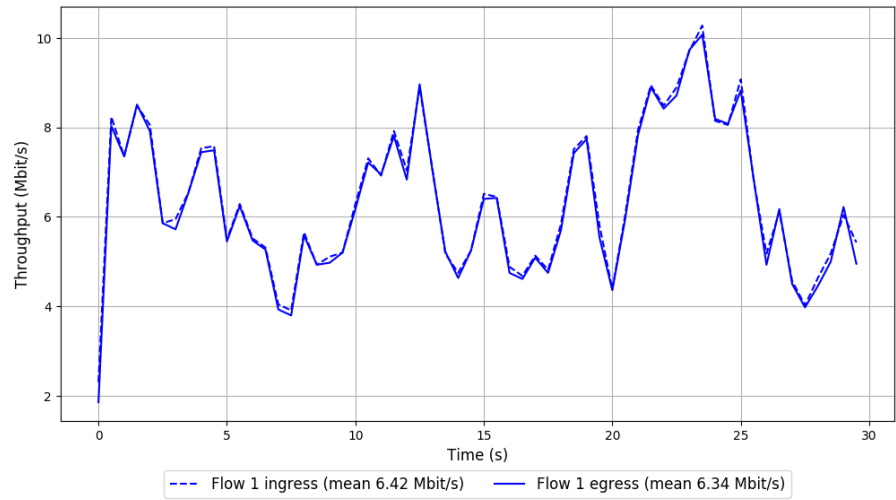


Run 8: Statistics of QUIC Cubic

Start at: 2018-02-20 00:31:06
End at: 2018-02-20 00:31:36
Local clock offset: -4.232 ms
Remote clock offset: -6.428 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 6.34 Mbit/s
95th percentile per-packet one-way delay: 33.827 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 6.34 Mbit/s
95th percentile per-packet one-way delay: 33.827 ms
Loss rate: 1.34%

Run 8: Report of QUIC Cubic — Data Link

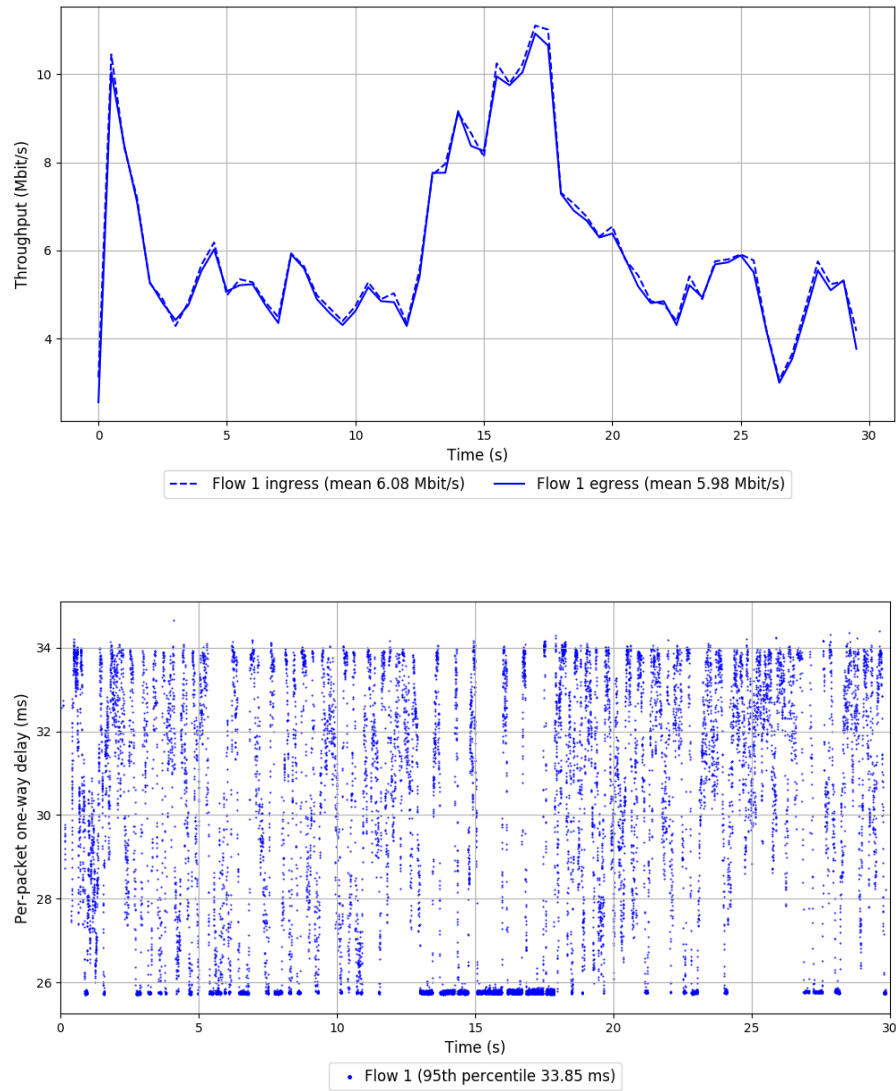


Run 9: Statistics of QUIC Cubic

Start at: 2018-02-20 00:58:45
End at: 2018-02-20 00:59:15
Local clock offset: -5.741 ms
Remote clock offset: -6.845 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 5.98 Mbit/s
95th percentile per-packet one-way delay: 33.852 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 5.98 Mbit/s
95th percentile per-packet one-way delay: 33.852 ms
Loss rate: 1.77%

Run 9: Report of QUIC Cubic — Data Link

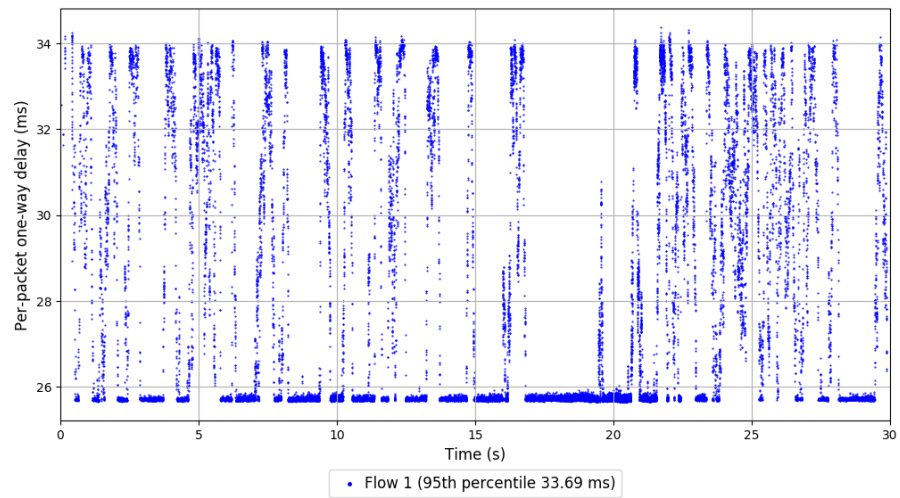
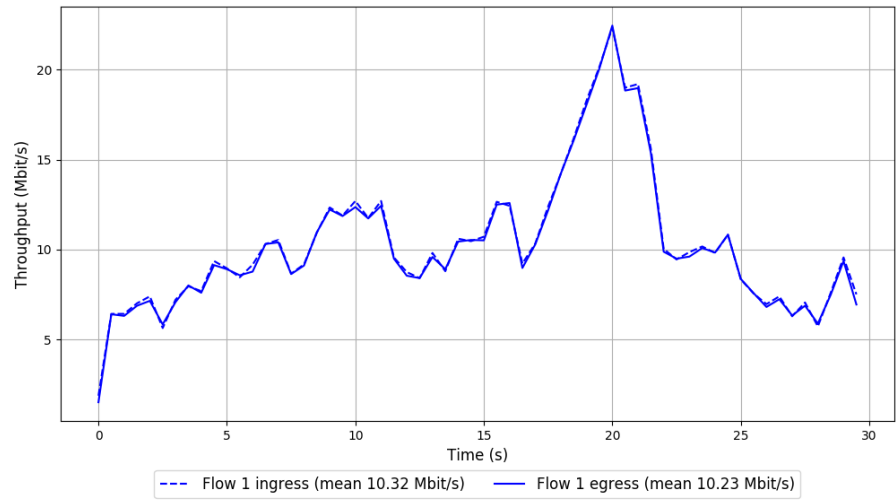


Run 10: Statistics of QUIC Cubic

Start at: 2018-02-20 01:27:23
End at: 2018-02-20 01:27:53
Local clock offset: -4.642 ms
Remote clock offset: -5.565 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 10.23 Mbit/s
95th percentile per-packet one-way delay: 33.694 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 10.23 Mbit/s
95th percentile per-packet one-way delay: 33.694 ms
Loss rate: 0.98%

Run 10: Report of QUIC Cubic — Data Link

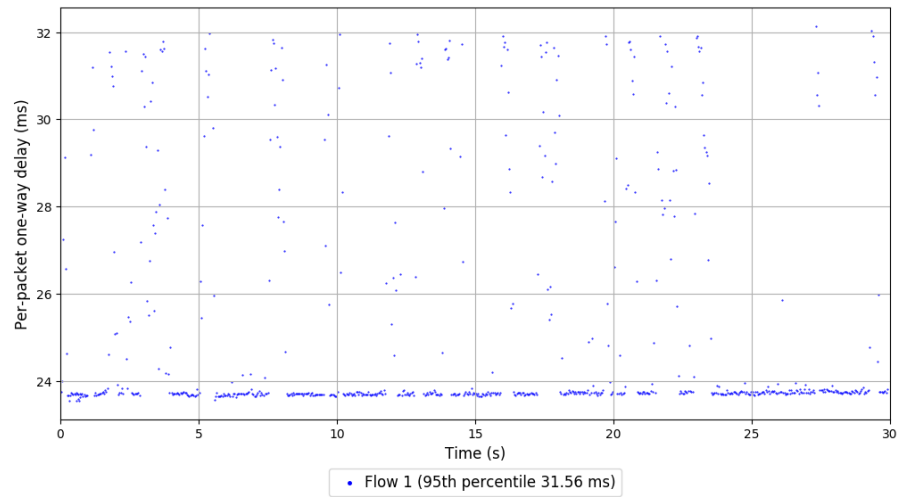
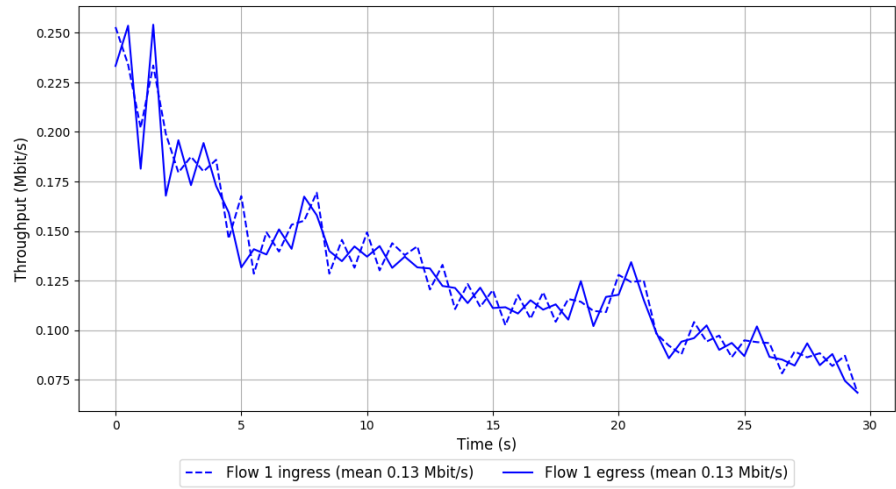


```
Run 1: Statistics of SCReAM

Start at: 2018-02-19 21:26:36
End at: 2018-02-19 21:27:06
Local clock offset: 0.915 ms
Remote clock offset: -5.293 ms

# Below is generated by plot.py at 2018-02-20 06:33:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 31.563 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 31.563 ms
Loss rate: 0.95%
```

Run 1: Report of SReAM — Data Link

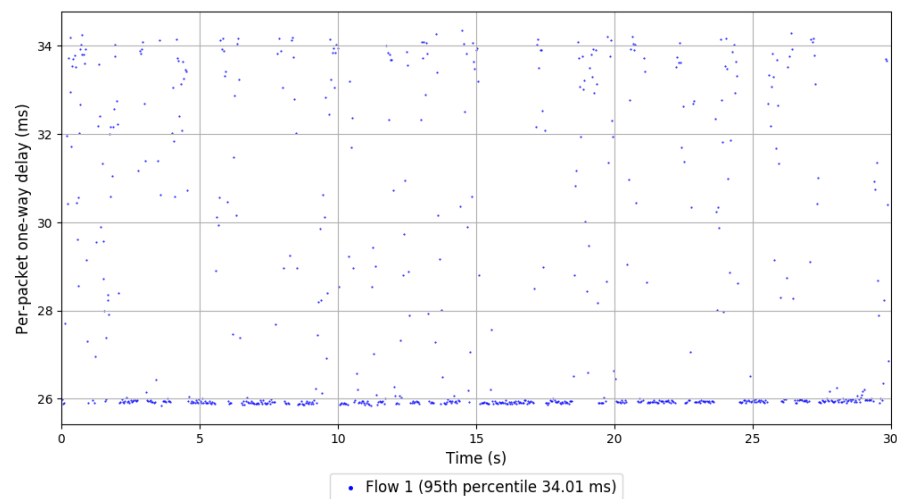
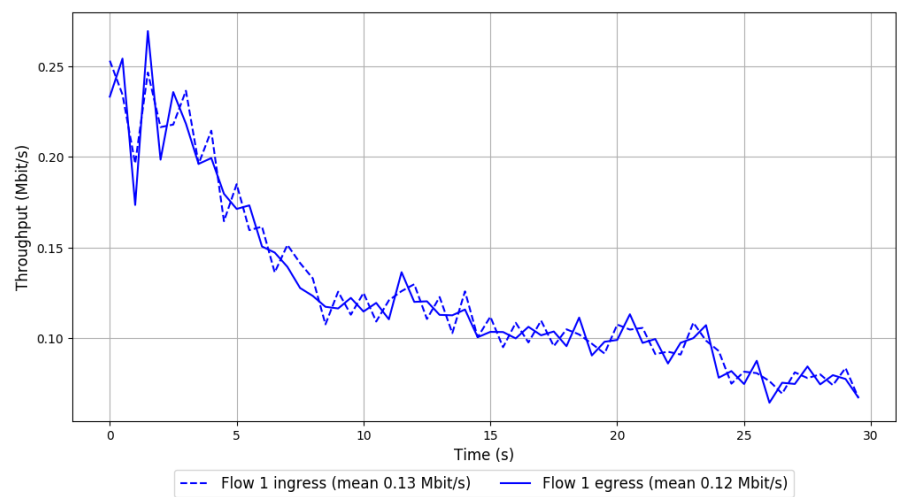


Run 2: Statistics of SCReAM

Start at: 2018-02-19 21:53:29
End at: 2018-02-19 21:53:59
Local clock offset: -1.413 ms
Remote clock offset: -5.771 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 34.010 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 34.010 ms
Loss rate: 0.98%

Run 2: Report of SReAM — Data Link

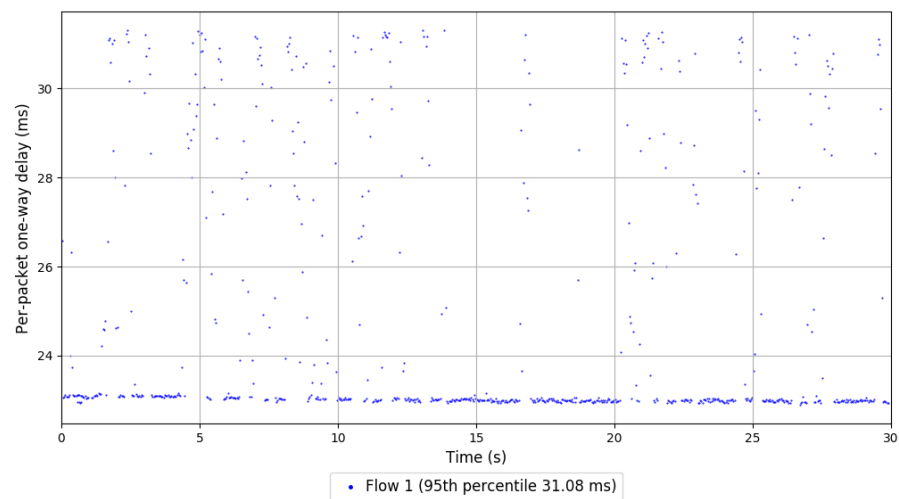
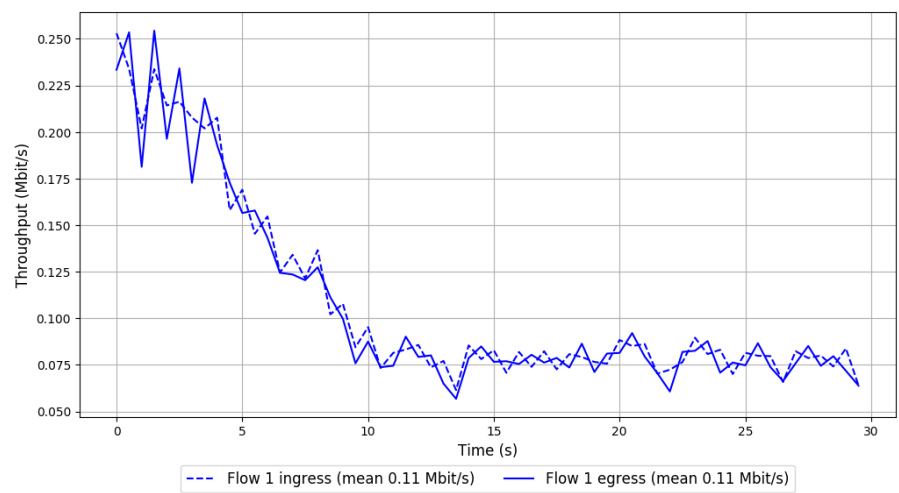


Run 3: Statistics of SCReAM

Start at: 2018-02-19 22:21:12
End at: 2018-02-19 22:21:42
Local clock offset: -5.061 ms
Remote clock offset: -10.995 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 31.077 ms
Loss rate: 1.82%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 31.077 ms
Loss rate: 1.82%

Run 3: Report of SReAM — Data Link

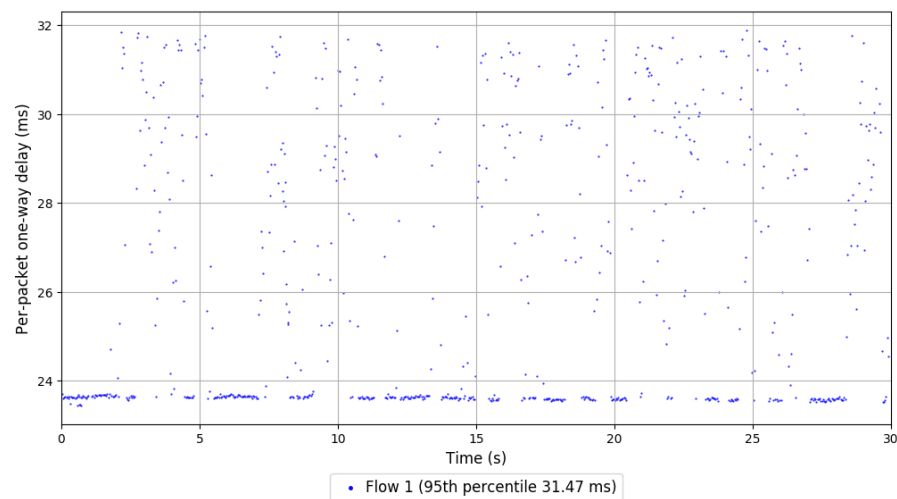
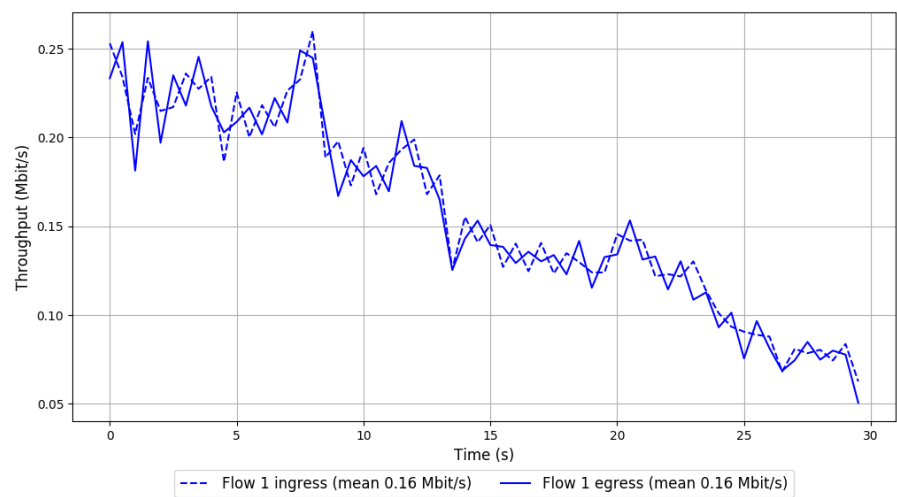


Run 4: Statistics of SCReAM

Start at: 2018-02-19 22:48:26
End at: 2018-02-19 22:48:56
Local clock offset: -3.748 ms
Remote clock offset: -9.935 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 31.474 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 31.474 ms
Loss rate: 0.90%

Run 4: Report of SReAM — Data Link

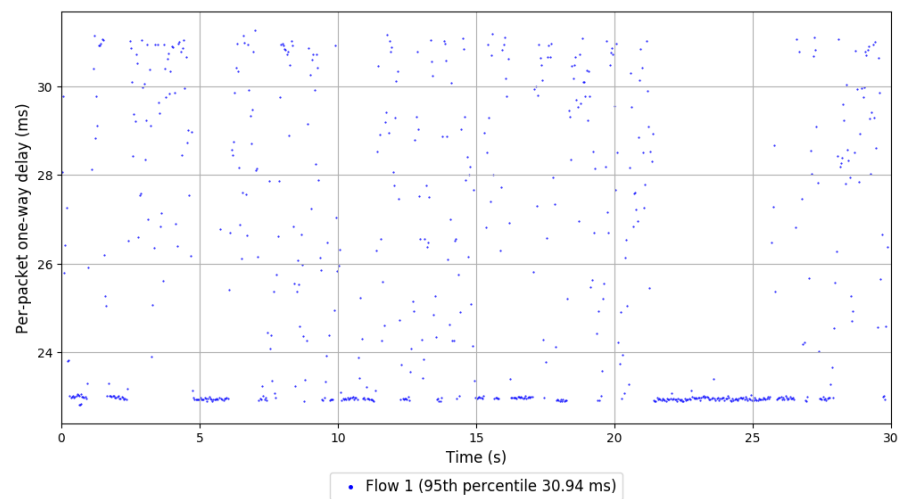
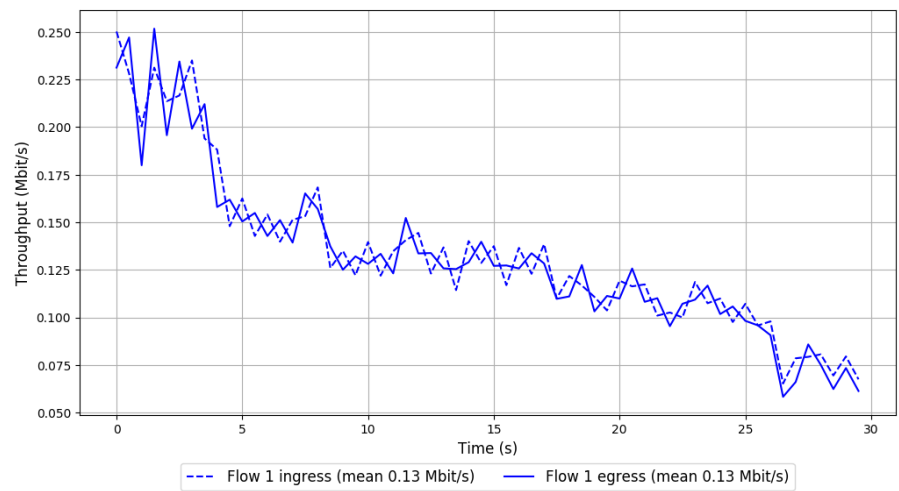


Run 5: Statistics of SCReAM

Start at: 2018-02-19 23:15:33
End at: 2018-02-19 23:16:03
Local clock offset: 2.612 ms
Remote clock offset: -4.896 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 30.937 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 30.937 ms
Loss rate: 1.23%

Run 5: Report of SReAM — Data Link

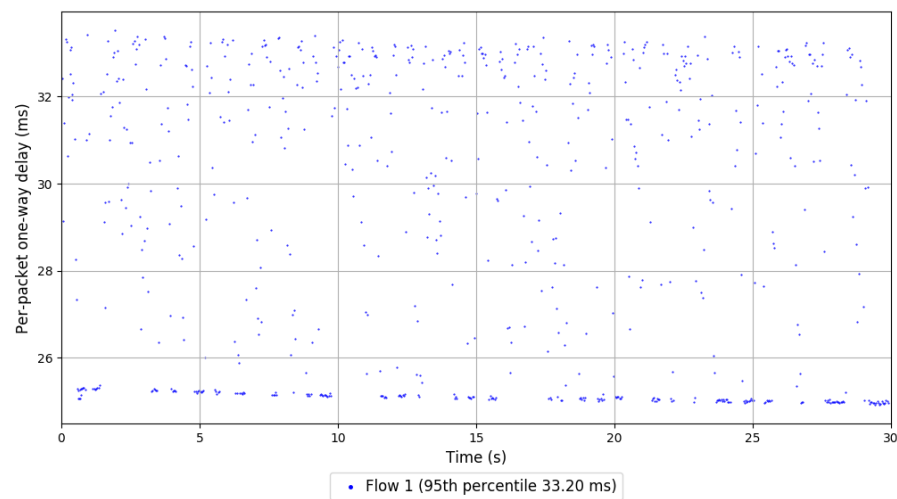
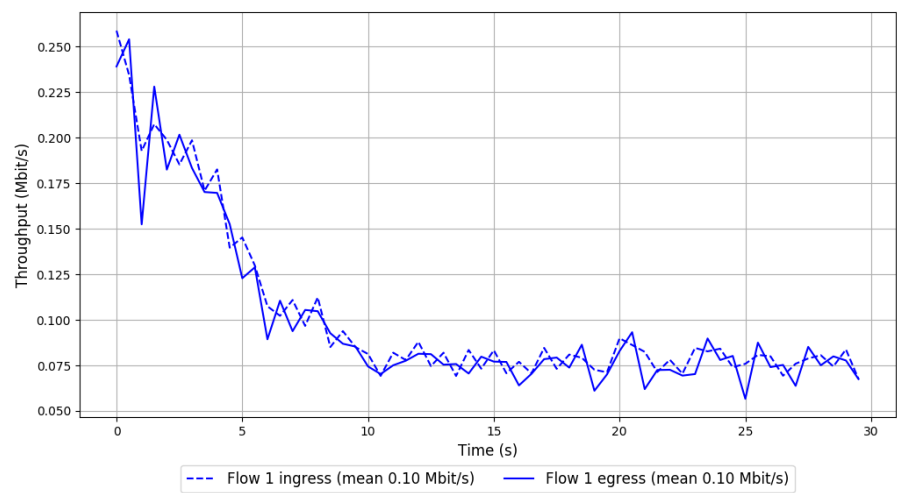


Run 6: Statistics of SCReAM

Start at: 2018-02-19 23:44:07
End at: 2018-02-19 23:44:37
Local clock offset: 2.419 ms
Remote clock offset: -6.807 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 33.200 ms
Loss rate: 3.04%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 33.200 ms
Loss rate: 3.04%

Run 6: Report of SReAM — Data Link

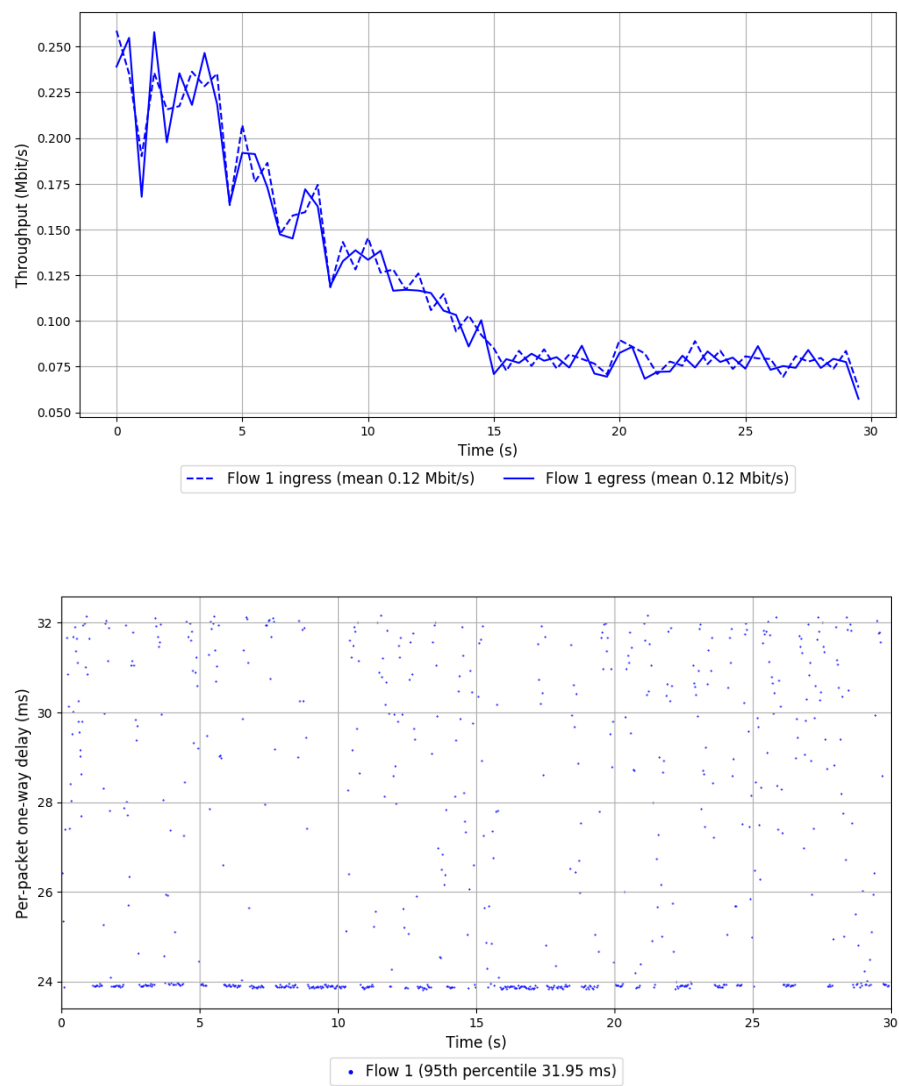


Run 7: Statistics of SCReAM

Start at: 2018-02-20 00:12:27
End at: 2018-02-20 00:12:57
Local clock offset: -0.678 ms
Remote clock offset: -10.823 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 31.953 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 31.953 ms
Loss rate: 1.57%

Run 7: Report of SReAM — Data Link

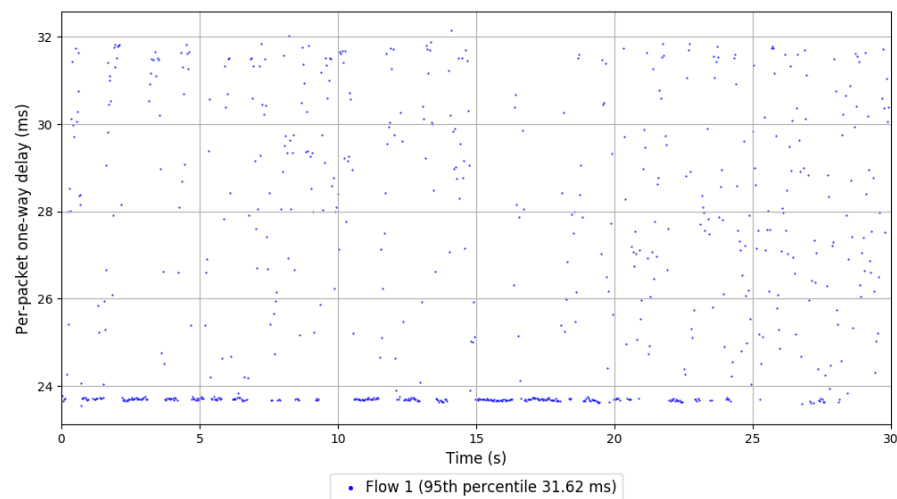
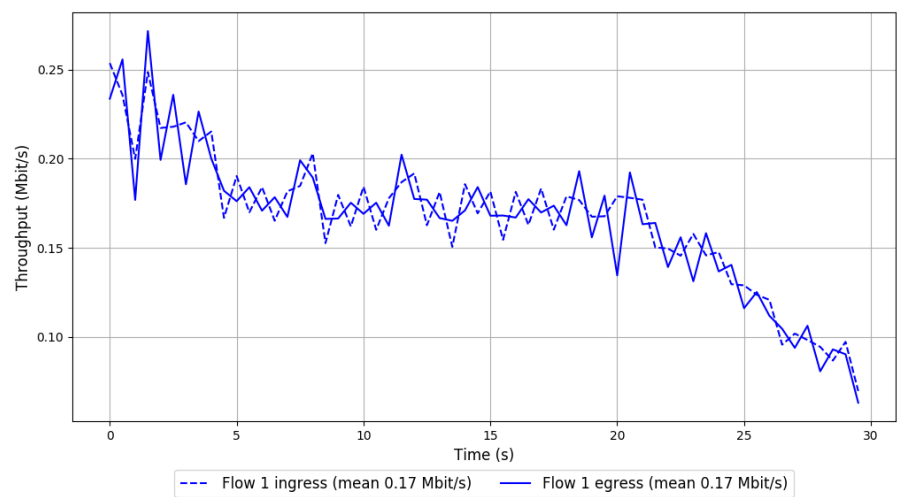


Run 8: Statistics of SCReAM

Start at: 2018-02-20 00:40:34
End at: 2018-02-20 00:41:04
Local clock offset: -5.067 ms
Remote clock offset: -3.759 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 31.622 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 31.622 ms
Loss rate: 0.95%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-02-20 01:08:36

End at: 2018-02-20 01:09:06

Local clock offset: -6.393 ms

Remote clock offset: -6.57 ms

Below is generated by plot.py at 2018-02-20 06:33:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 33.454 ms

Loss rate: 2.81%

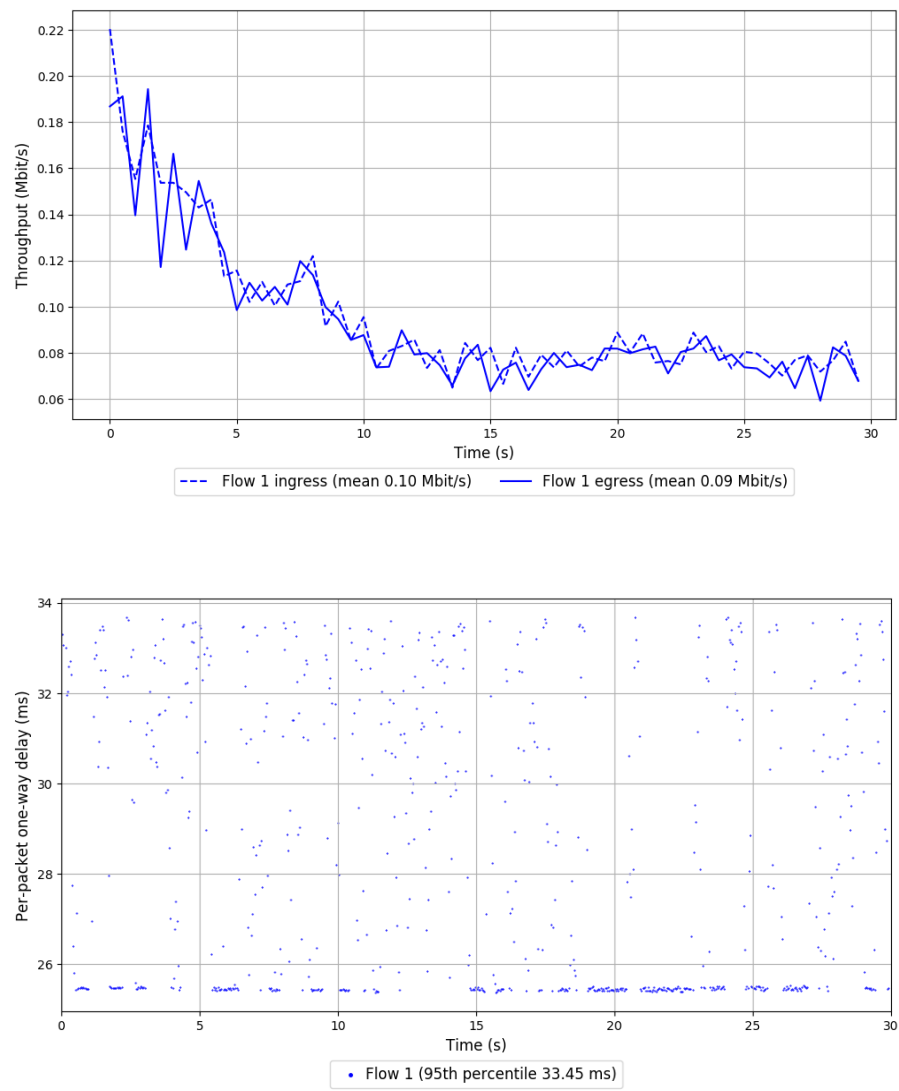
-- Flow 1:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 33.454 ms

Loss rate: 2.81%

Run 9: Report of SReAM — Data Link

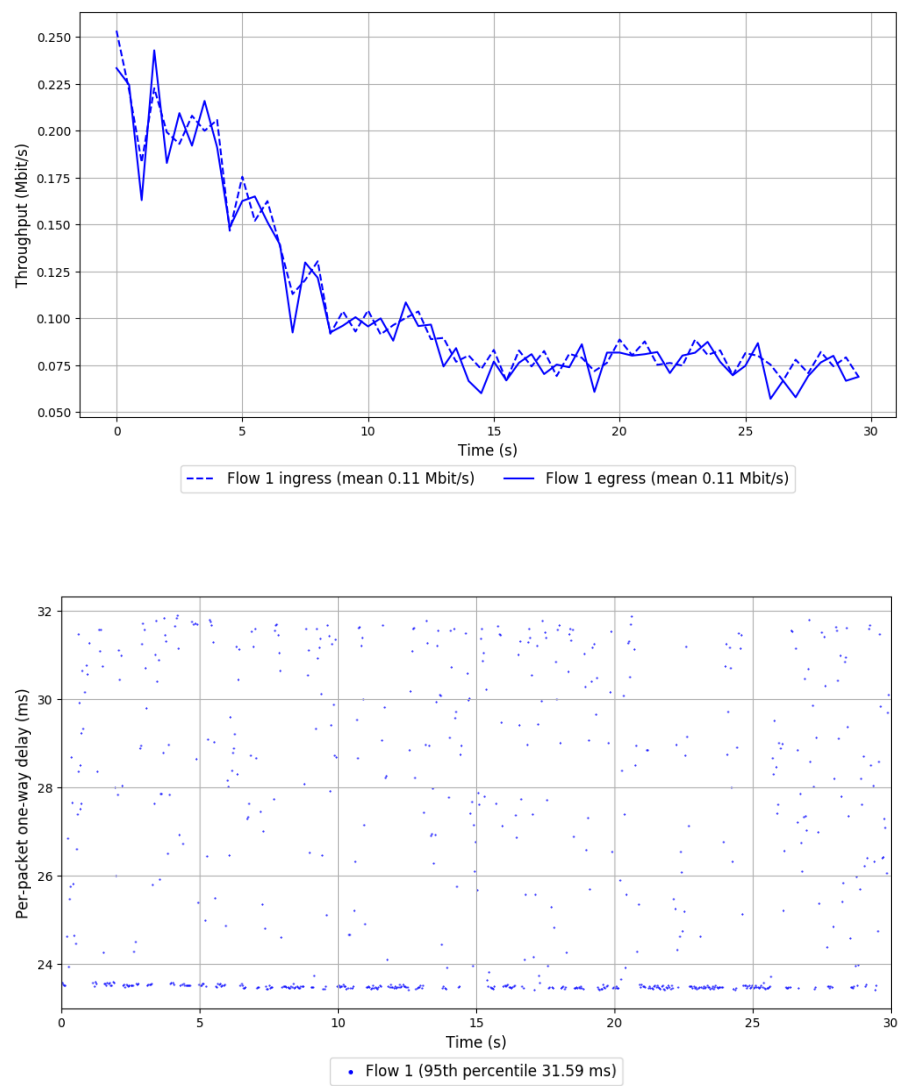


Run 10: Statistics of SCReAM

Start at: 2018-02-20 01:36:41
End at: 2018-02-20 01:37:11
Local clock offset: -4.3 ms
Remote clock offset: -2.813 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 31.594 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 31.594 ms
Loss rate: 2.71%

Run 10: Report of SCRaM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-02-19 21:27:52

End at: 2018-02-19 21:28:22

Local clock offset: 0.681 ms

Remote clock offset: -5.184 ms

Below is generated by plot.py at 2018-02-20 06:33:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 32.063 ms

Loss rate: 1.83%

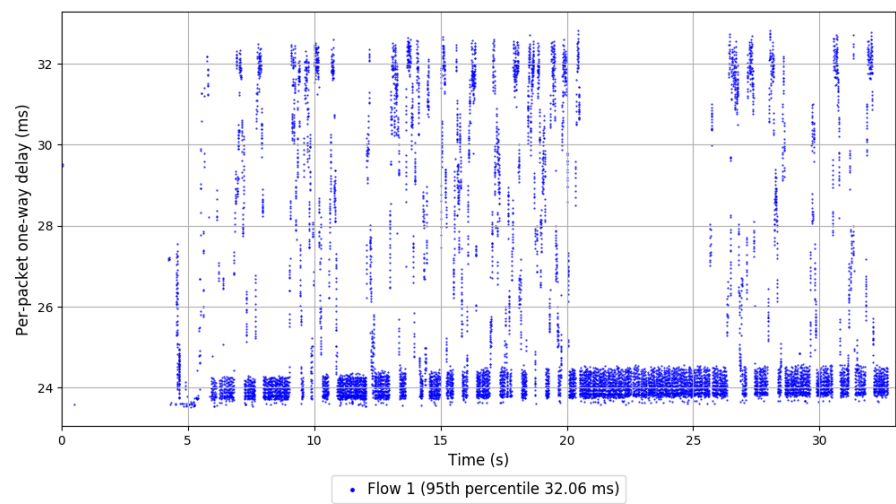
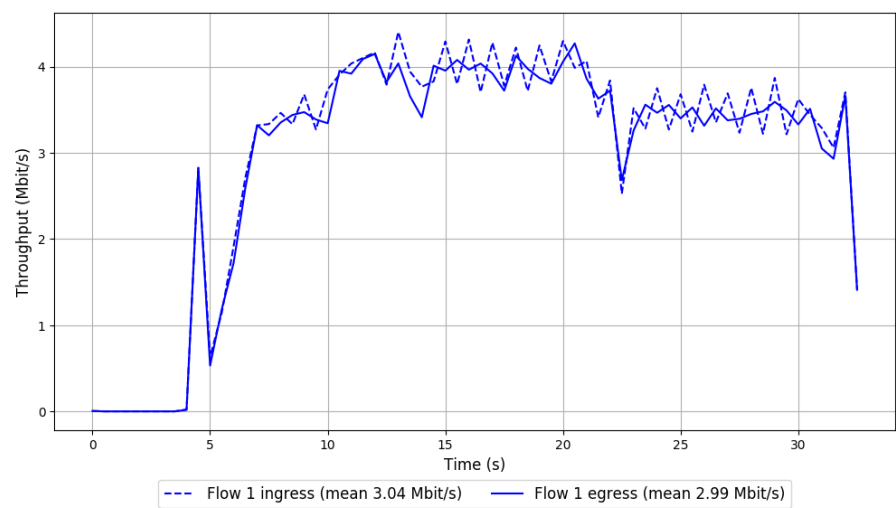
-- Flow 1:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 32.063 ms

Loss rate: 1.83%

Run 1: Report of WebRTC media — Data Link

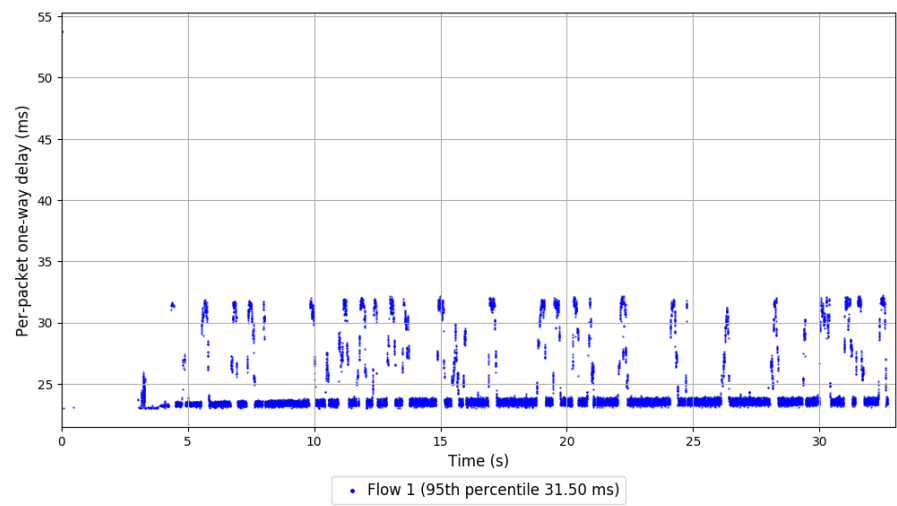
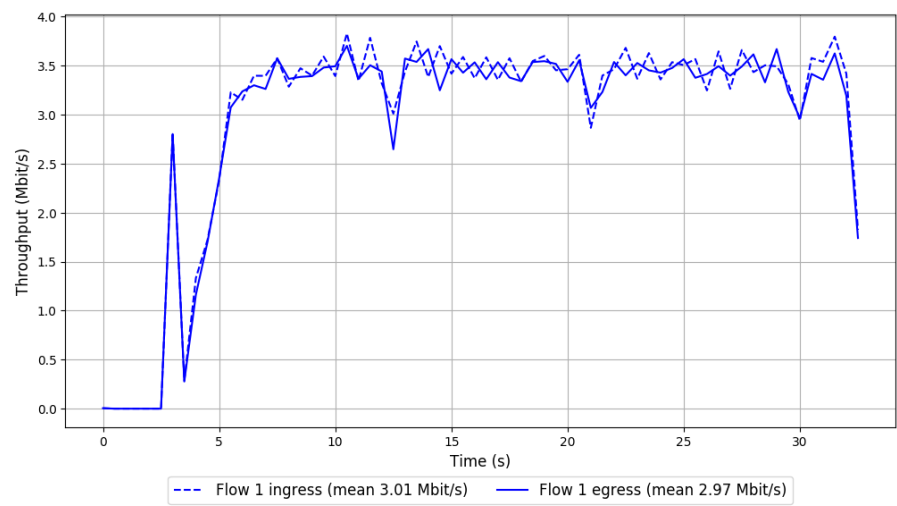


Run 2: Statistics of WebRTC media

Start at: 2018-02-19 21:54:44
End at: 2018-02-19 21:55:14
Local clock offset: -1.756 ms
Remote clock offset: -3.095 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 31.502 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 2.97 Mbit/s
95th percentile per-packet one-way delay: 31.502 ms
Loss rate: 1.35%

Run 2: Report of WebRTC media — Data Link

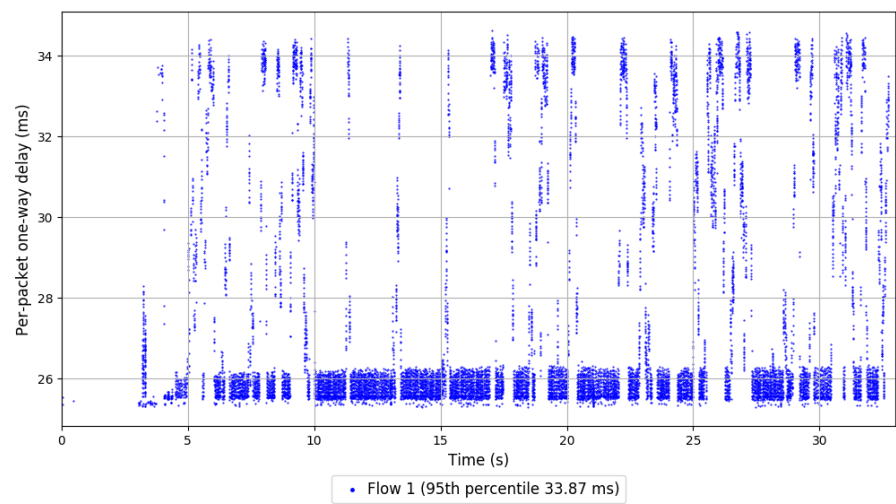
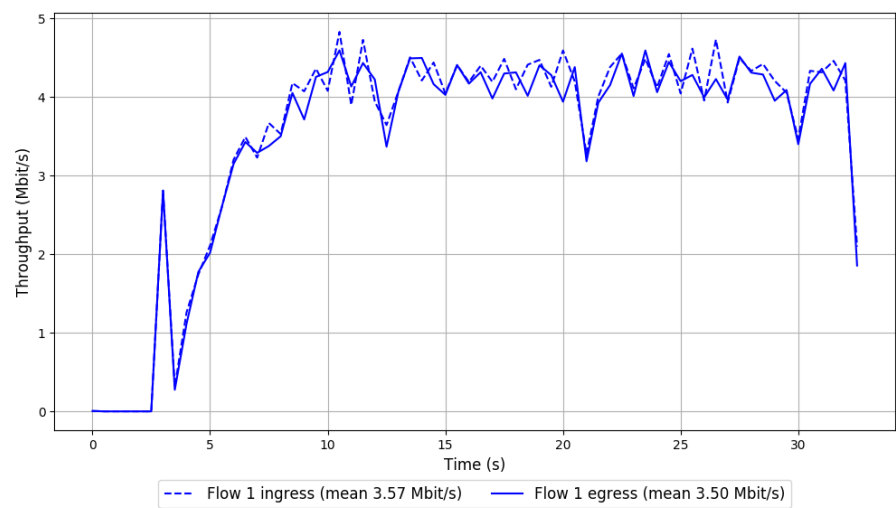


Run 3: Statistics of WebRTC media

Start at: 2018-02-19 22:22:29
End at: 2018-02-19 22:22:59
Local clock offset: -5.237 ms
Remote clock offset: -13.687 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.50 Mbit/s
95th percentile per-packet one-way delay: 33.865 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 3.50 Mbit/s
95th percentile per-packet one-way delay: 33.865 ms
Loss rate: 1.91%

Run 3: Report of WebRTC media — Data Link

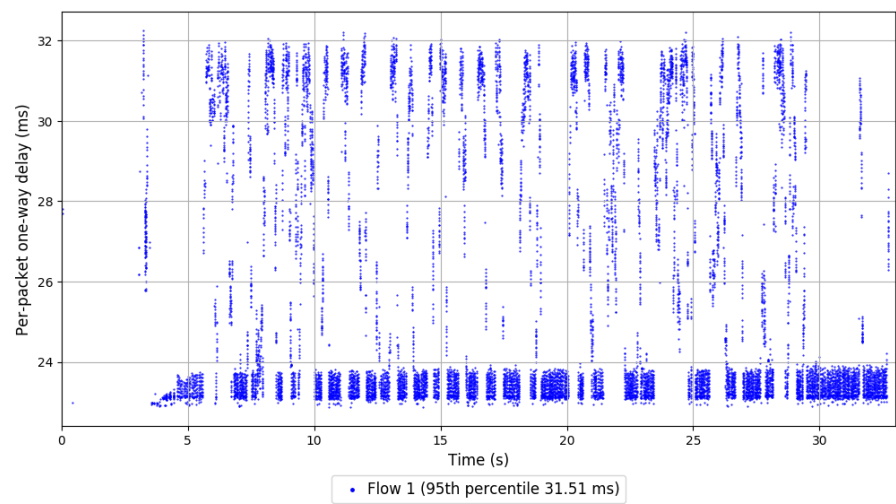
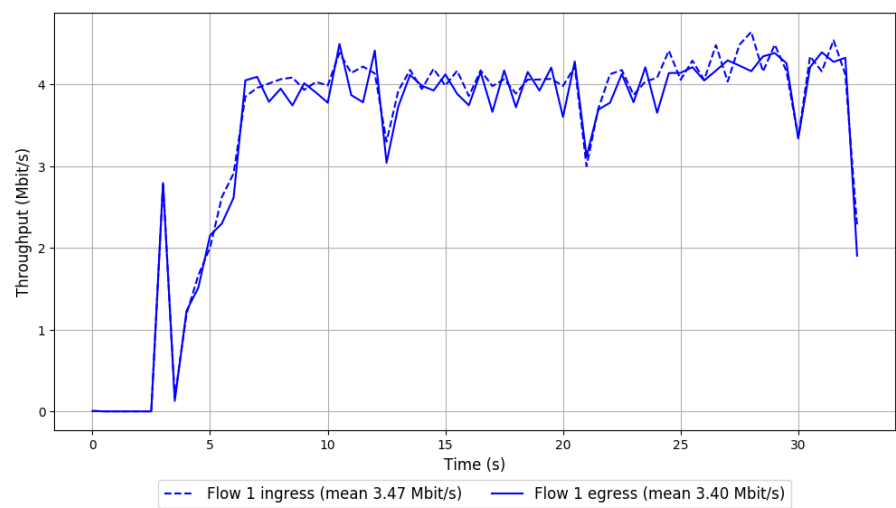


Run 4: Statistics of WebRTC media

Start at: 2018-02-19 22:49:42
End at: 2018-02-19 22:50:12
Local clock offset: -3.848 ms
Remote clock offset: -9.426 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.40 Mbit/s
95th percentile per-packet one-way delay: 31.508 ms
Loss rate: 2.21%
-- Flow 1:
Average throughput: 3.40 Mbit/s
95th percentile per-packet one-way delay: 31.508 ms
Loss rate: 2.21%

Run 4: Report of WebRTC media — Data Link

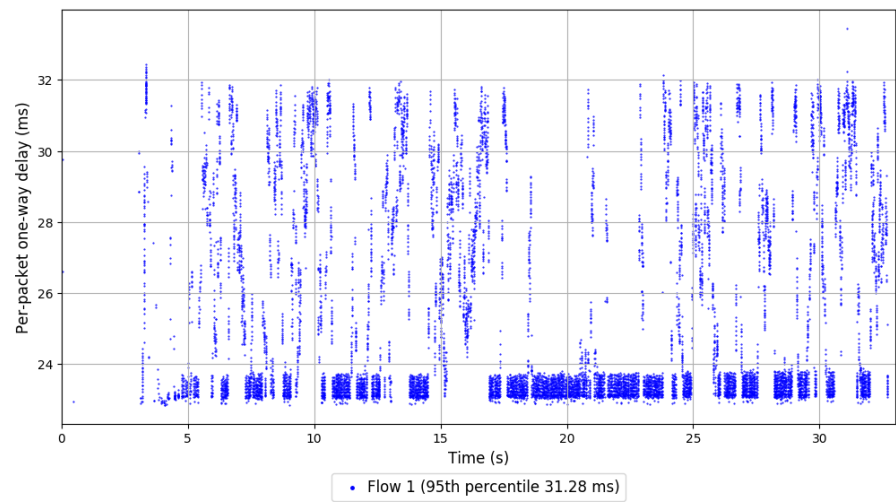
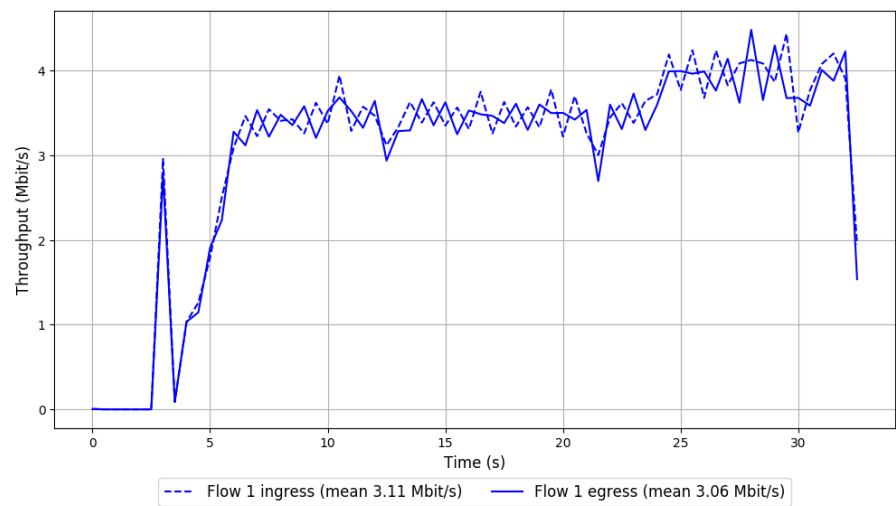


Run 5: Statistics of WebRTC media

Start at: 2018-02-19 23:16:49
End at: 2018-02-19 23:17:19
Local clock offset: 2.755 ms
Remote clock offset: -4.693 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 31.276 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 31.276 ms
Loss rate: 1.43%

Run 5: Report of WebRTC media — Data Link

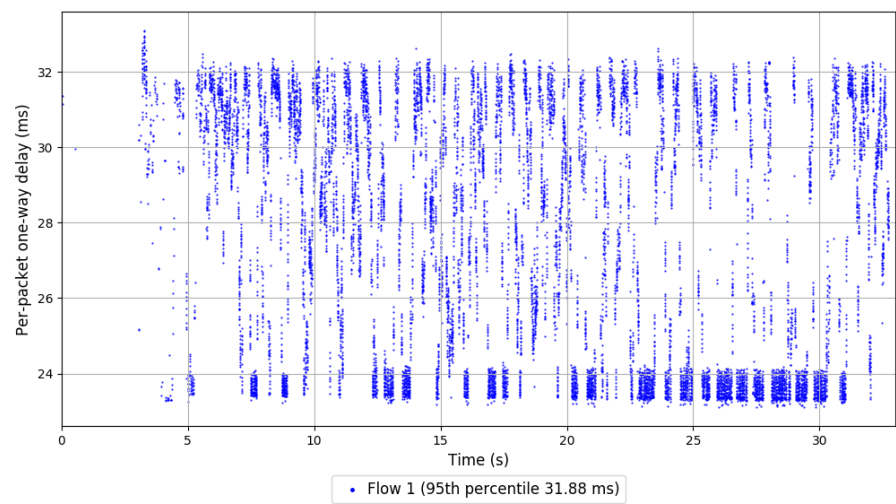
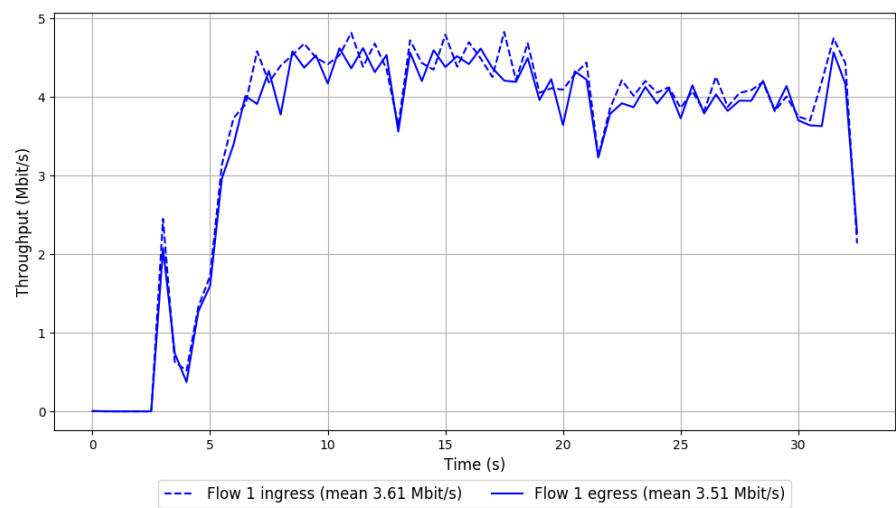


Run 6: Statistics of WebRTC media

Start at: 2018-02-19 23:45:23
End at: 2018-02-19 23:45:53
Local clock offset: 2.398 ms
Remote clock offset: -5.541 ms

Below is generated by plot.py at 2018-02-20 06:33:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 31.880 ms
Loss rate: 2.99%
-- Flow 1:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 31.880 ms
Loss rate: 2.99%

Run 6: Report of WebRTC media — Data Link

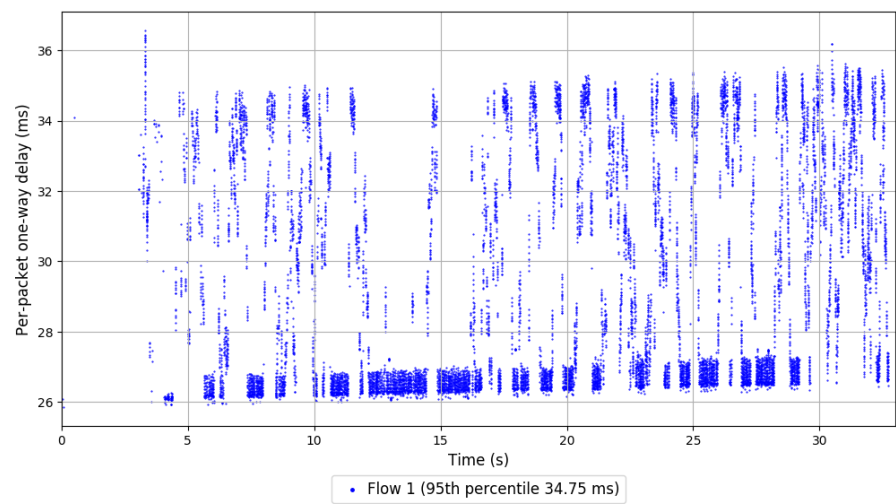
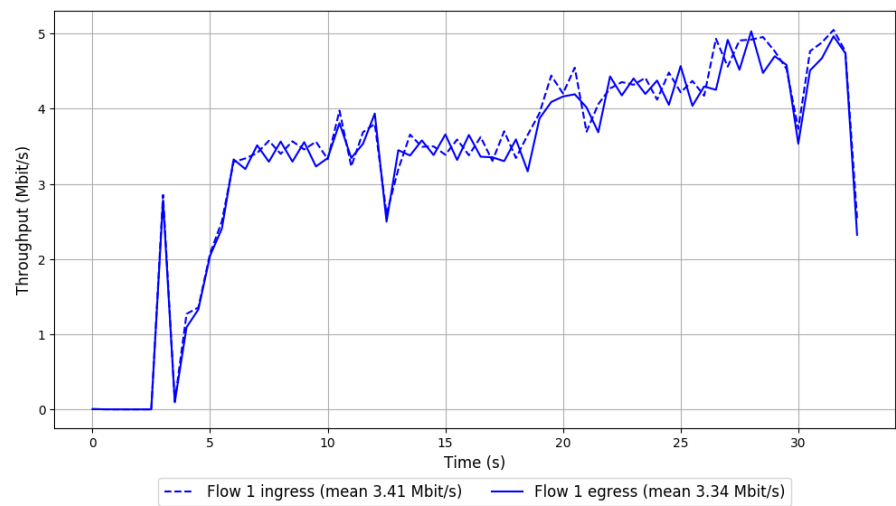


Run 7: Statistics of WebRTC media

Start at: 2018-02-20 00:13:43
End at: 2018-02-20 00:14:13
Local clock offset: -1.221 ms
Remote clock offset: -12.613 ms

Below is generated by plot.py at 2018-02-20 06:33:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 34.747 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 34.747 ms
Loss rate: 2.22%

Run 7: Report of WebRTC media — Data Link

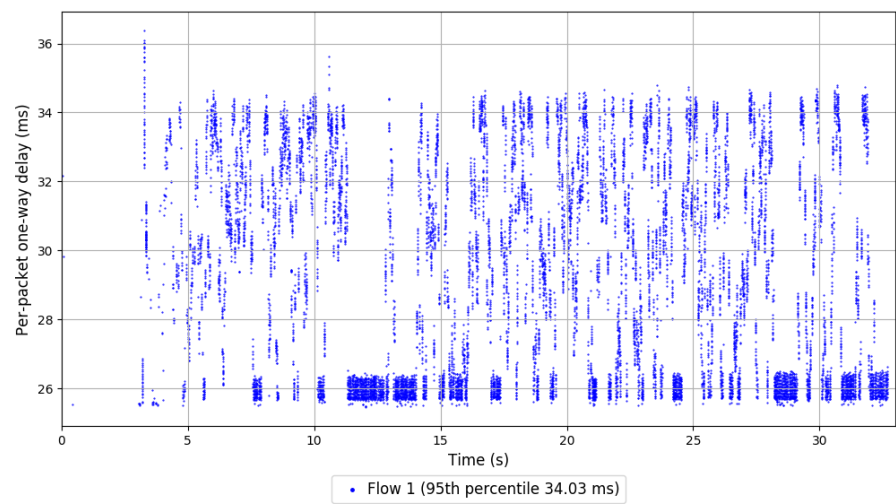
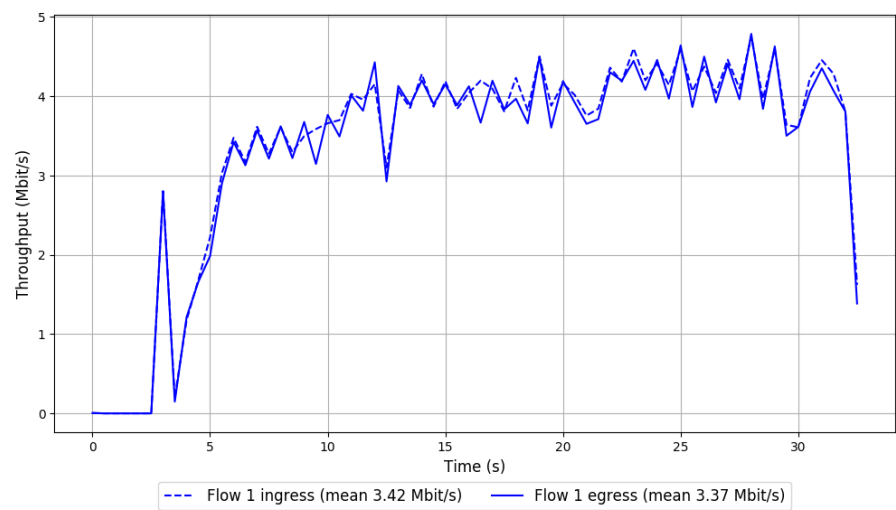


Run 8: Statistics of WebRTC media

Start at: 2018-02-20 00:41:51
End at: 2018-02-20 00:42:21
Local clock offset: -5.122 ms
Remote clock offset: -5.733 ms

Below is generated by plot.py at 2018-02-20 06:33:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.37 Mbit/s
95th percentile per-packet one-way delay: 34.031 ms
Loss rate: 1.82%
-- Flow 1:
Average throughput: 3.37 Mbit/s
95th percentile per-packet one-way delay: 34.031 ms
Loss rate: 1.82%

Run 8: Report of WebRTC media — Data Link

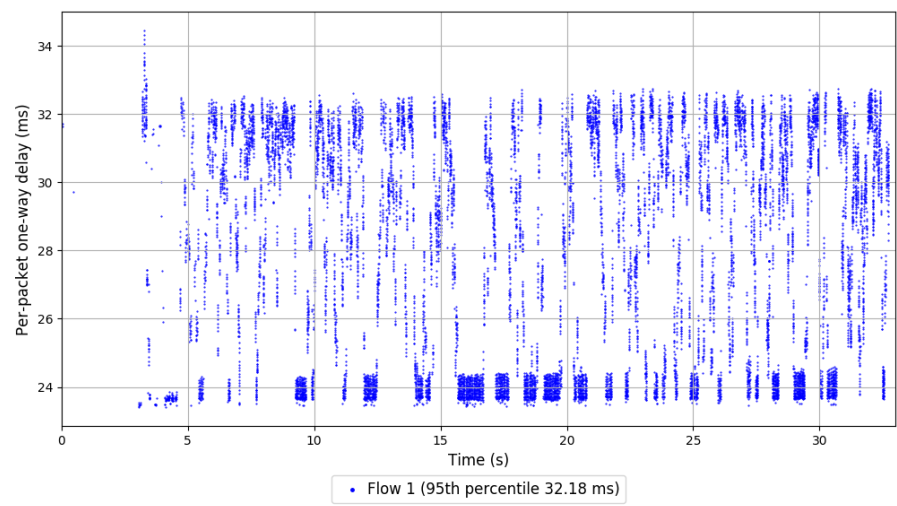
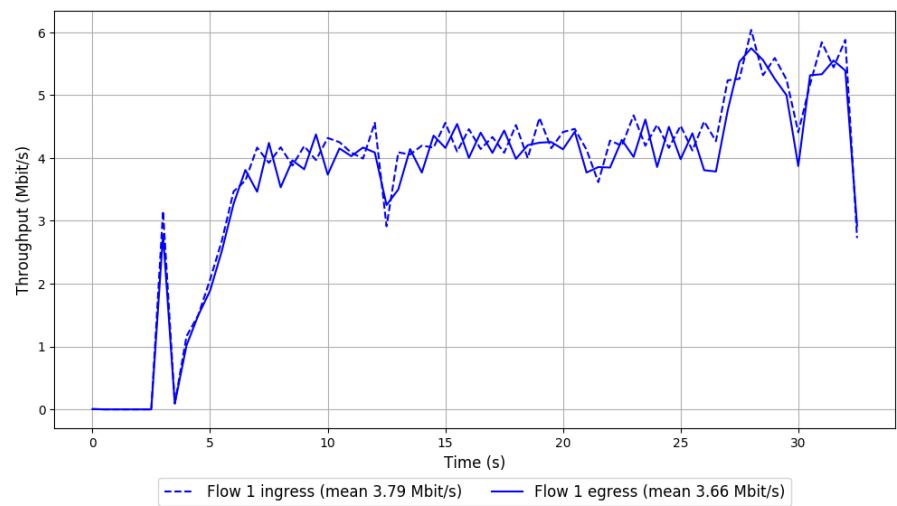


Run 9: Statistics of WebRTC media

Start at: 2018-02-20 01:09:53
End at: 2018-02-20 01:10:23
Local clock offset: -6.386 ms
Remote clock offset: -4.503 ms

Below is generated by plot.py at 2018-02-20 06:33:44
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.66 Mbit/s
95th percentile per-packet one-way delay: 32.184 ms
Loss rate: 3.51%
-- Flow 1:
Average throughput: 3.66 Mbit/s
95th percentile per-packet one-way delay: 32.184 ms
Loss rate: 3.51%

Run 9: Report of WebRTC media — Data Link

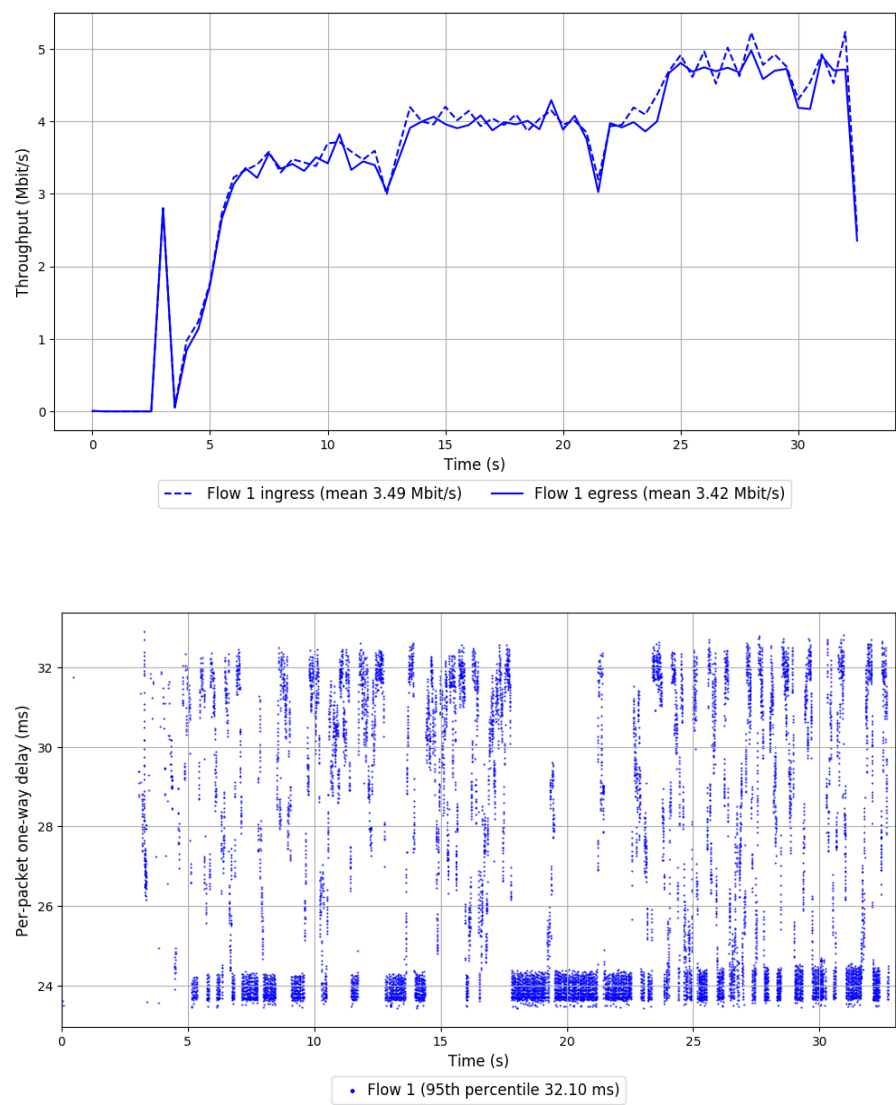


Run 10: Statistics of WebRTC media

Start at: 2018-02-20 01:37:57
End at: 2018-02-20 01:38:27
Local clock offset: -4.273 ms
Remote clock offset: -2.853 ms

Below is generated by plot.py at 2018-02-20 06:33:44
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 32.099 ms
Loss rate: 2.25%
-- Flow 1:
Average throughput: 3.42 Mbit/s
95th percentile per-packet one-way delay: 32.099 ms
Loss rate: 2.25%

Run 10: Report of WebRTC media — Data Link

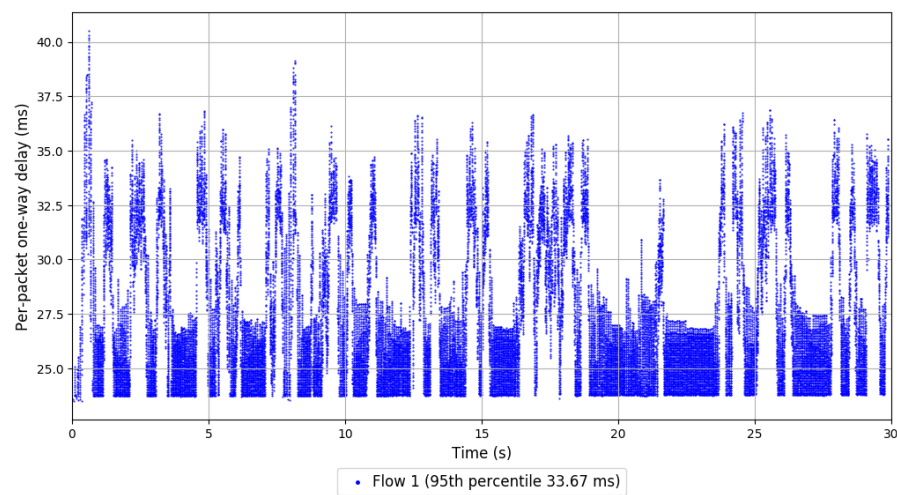
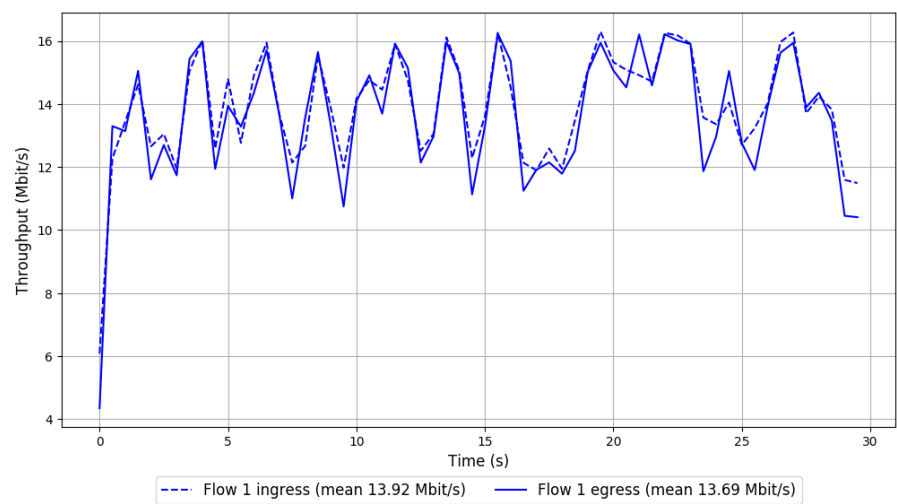


Run 1: Statistics of Sprout

Start at: 2018-02-19 21:33:43
End at: 2018-02-19 21:34:13
Local clock offset: 0.335 ms
Remote clock offset: -4.395 ms

Below is generated by plot.py at 2018-02-20 06:33:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.69 Mbit/s
95th percentile per-packet one-way delay: 33.666 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 13.69 Mbit/s
95th percentile per-packet one-way delay: 33.666 ms
Loss rate: 1.83%

Run 1: Report of Sprout — Data Link

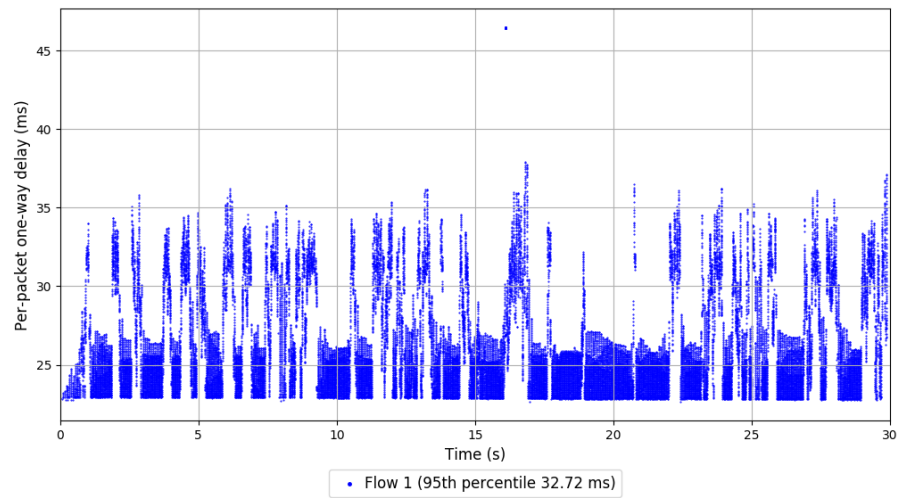
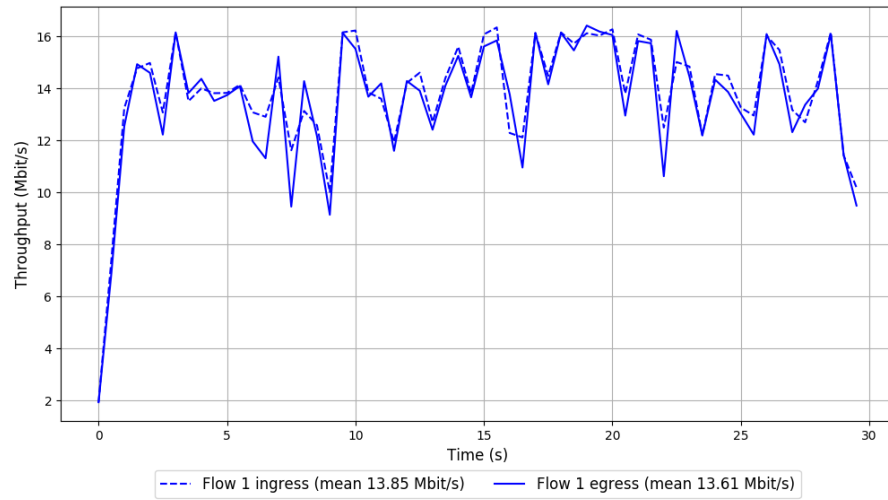


Run 2: Statistics of Sprout

Start at: 2018-02-19 22:00:41
End at: 2018-02-19 22:01:11
Local clock offset: -2.996 ms
Remote clock offset: -5.553 ms

Below is generated by plot.py at 2018-02-20 06:33:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.61 Mbit/s
95th percentile per-packet one-way delay: 32.720 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 13.61 Mbit/s
95th percentile per-packet one-way delay: 32.720 ms
Loss rate: 1.87%

Run 2: Report of Sprout — Data Link

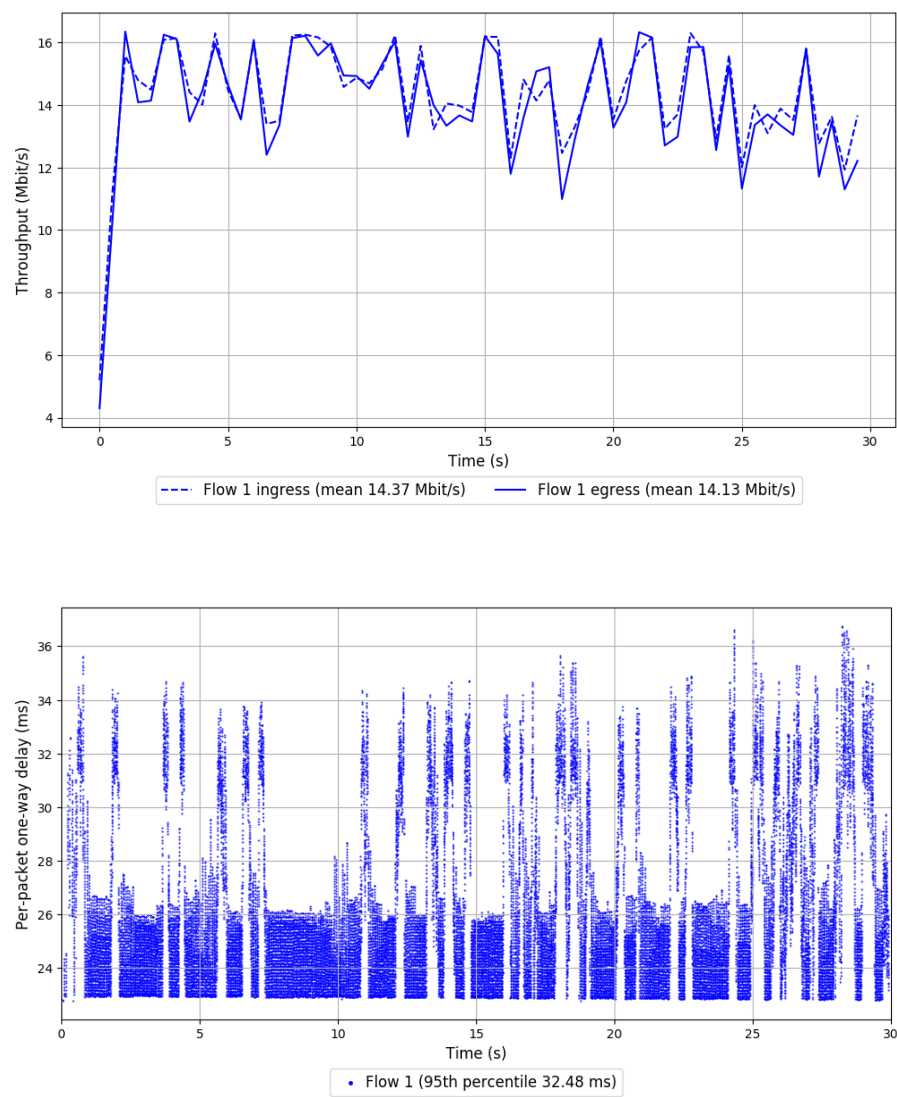


Run 3: Statistics of Sprout

Start at: 2018-02-19 22:28:21
End at: 2018-02-19 22:28:51
Local clock offset: -4.575 ms
Remote clock offset: -11.943 ms

Below is generated by plot.py at 2018-02-20 06:33:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 14.13 Mbit/s
95th percentile per-packet one-way delay: 32.481 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 14.13 Mbit/s
95th percentile per-packet one-way delay: 32.481 ms
Loss rate: 1.84%

Run 3: Report of Sprout — Data Link

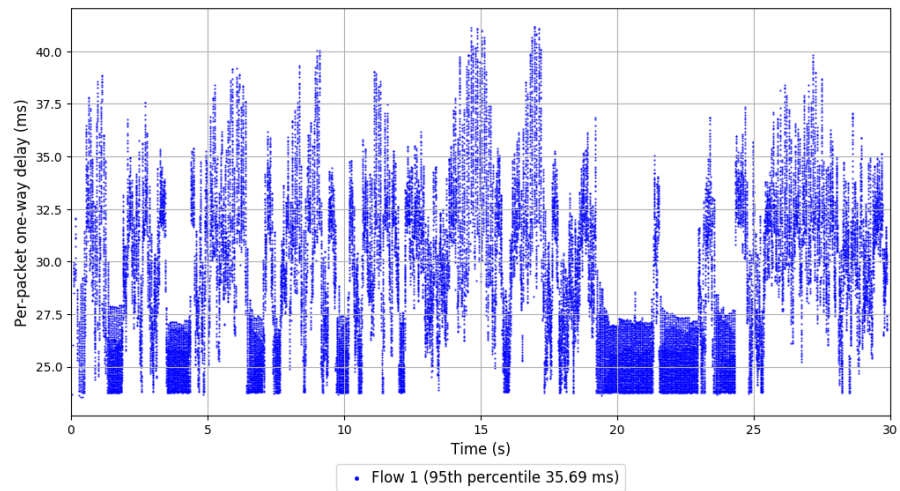
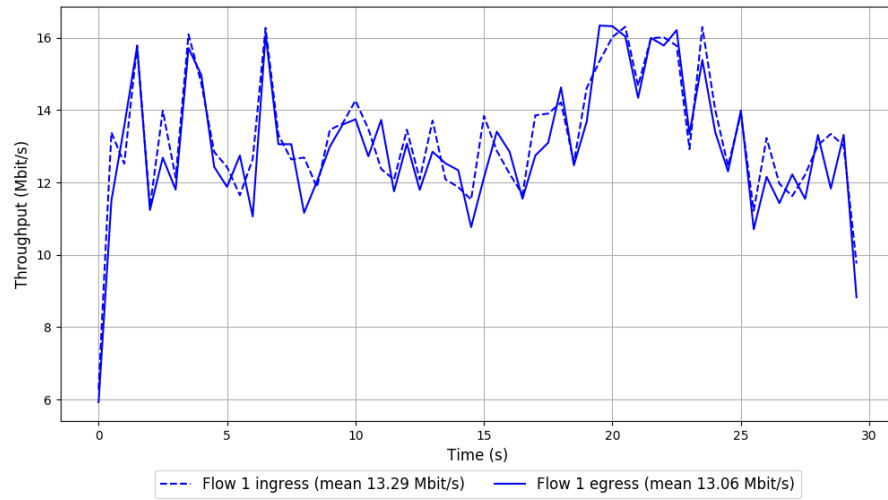


Run 4: Statistics of Sprout

Start at: 2018-02-19 22:55:41
End at: 2018-02-19 22:56:11
Local clock offset: -3.877 ms
Remote clock offset: -9.928 ms

Below is generated by plot.py at 2018-02-20 06:33:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.06 Mbit/s
95th percentile per-packet one-way delay: 35.689 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 13.06 Mbit/s
95th percentile per-packet one-way delay: 35.689 ms
Loss rate: 1.96%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-19 23:22:53

End at: 2018-02-19 23:23:23

Local clock offset: 3.507 ms

Remote clock offset: -3.35 ms

Below is generated by plot.py at 2018-02-20 06:33:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 13.08 Mbit/s

95th percentile per-packet one-way delay: 33.841 ms

Loss rate: 1.81%

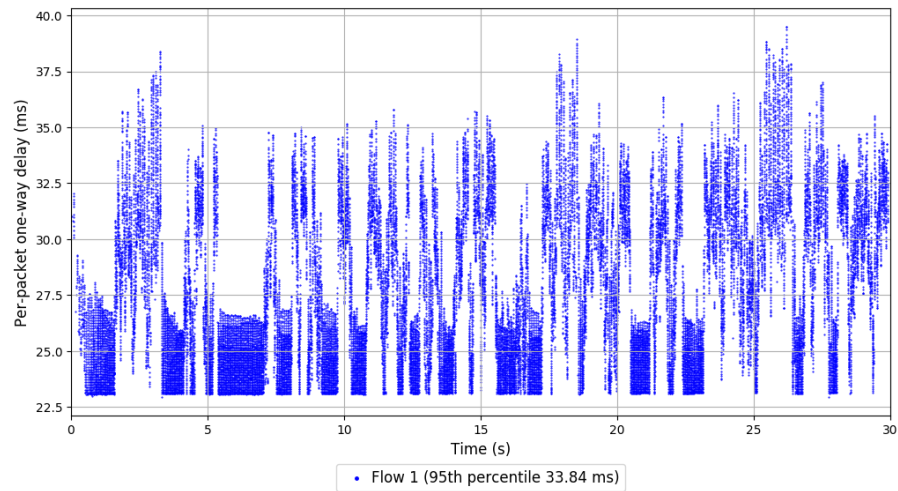
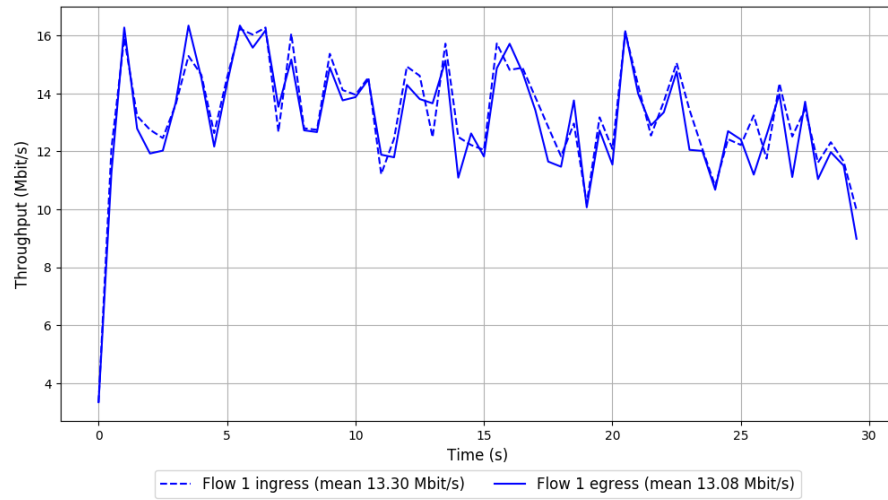
-- Flow 1:

Average throughput: 13.08 Mbit/s

95th percentile per-packet one-way delay: 33.841 ms

Loss rate: 1.81%

Run 5: Report of Sprout — Data Link

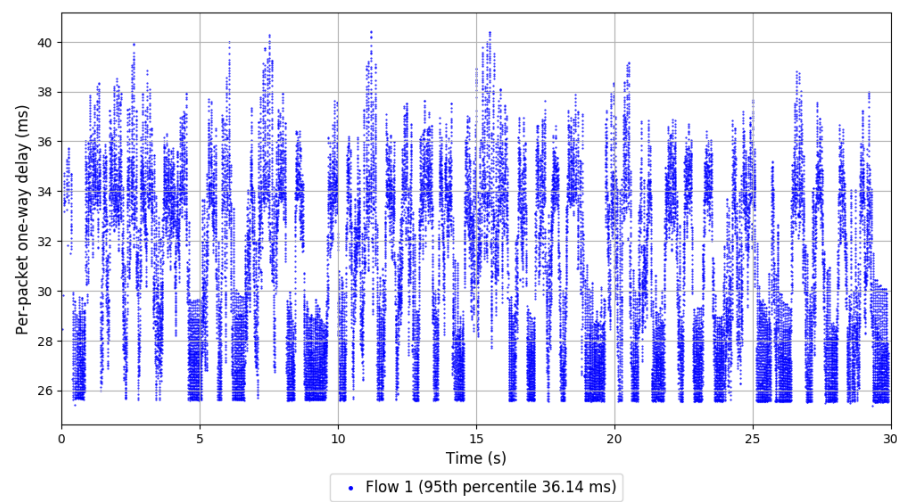
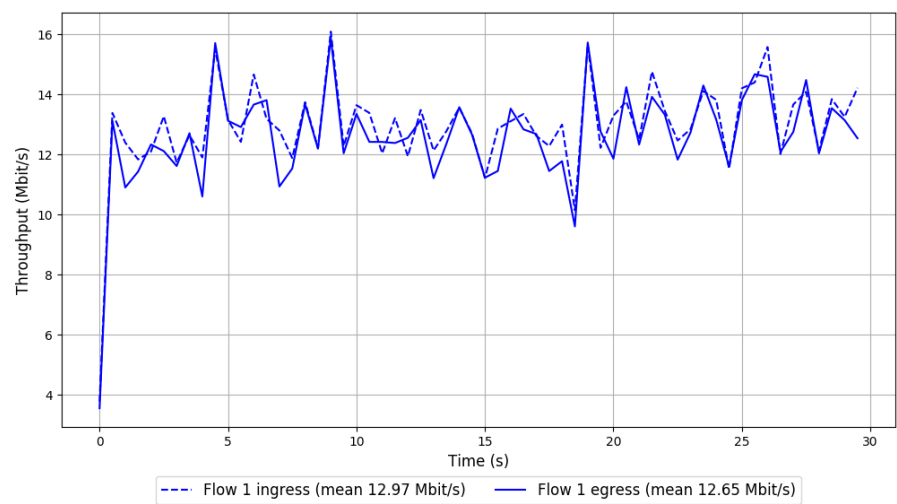


Run 6: Statistics of Sprout

Start at: 2018-02-19 23:51:43
End at: 2018-02-19 23:52:13
Local clock offset: 1.968 ms
Remote clock offset: -9.983 ms

Below is generated by plot.py at 2018-02-20 06:33:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.65 Mbit/s
95th percentile per-packet one-way delay: 36.137 ms
Loss rate: 2.62%
-- Flow 1:
Average throughput: 12.65 Mbit/s
95th percentile per-packet one-way delay: 36.137 ms
Loss rate: 2.62%

Run 6: Report of Sprout — Data Link

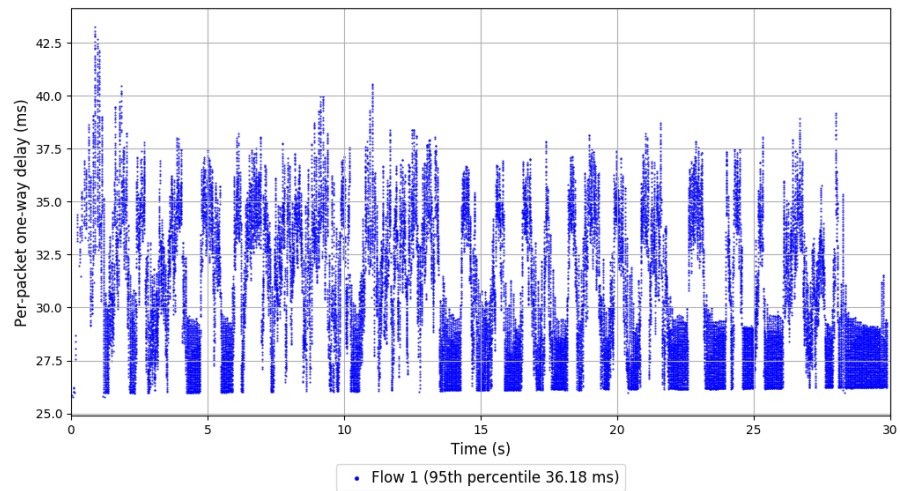
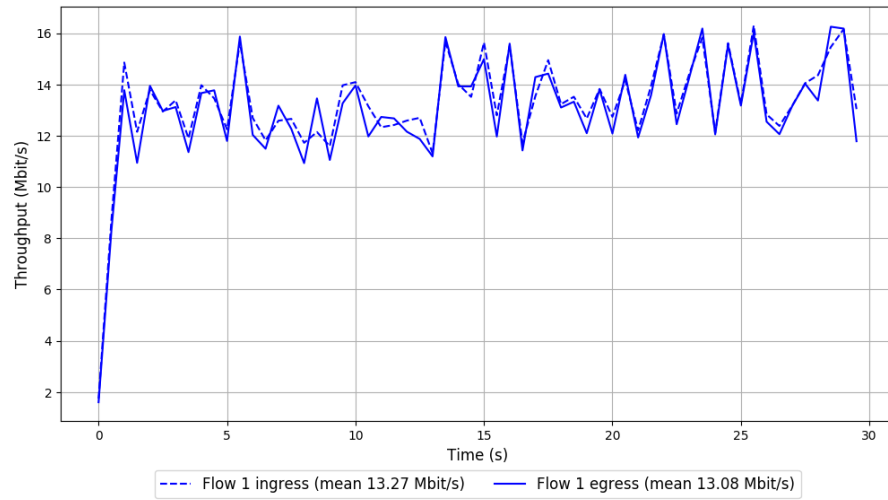


Run 7: Statistics of Sprout

Start at: 2018-02-20 00:19:51
End at: 2018-02-20 00:20:21
Local clock offset: -2.679 ms
Remote clock offset: -8.97 ms

Below is generated by plot.py at 2018-02-20 06:34:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.08 Mbit/s
95th percentile per-packet one-way delay: 36.176 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 13.08 Mbit/s
95th percentile per-packet one-way delay: 36.176 ms
Loss rate: 1.62%

Run 7: Report of Sprout — Data Link

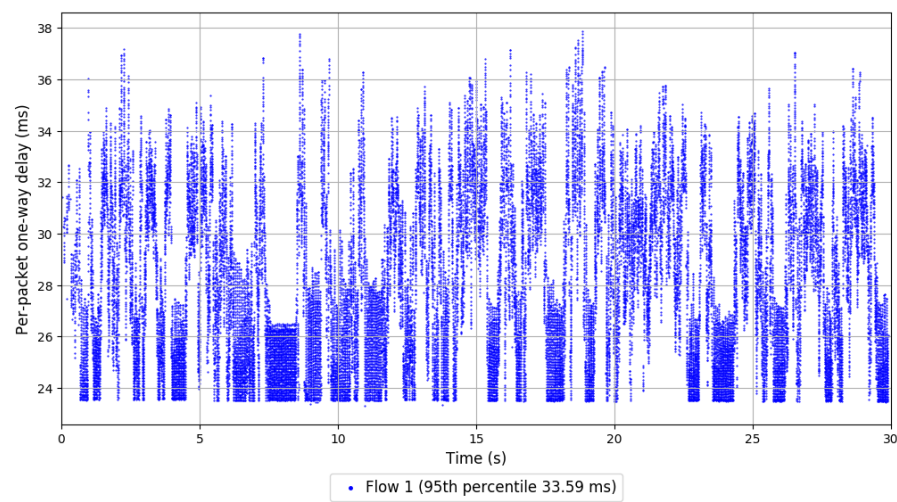
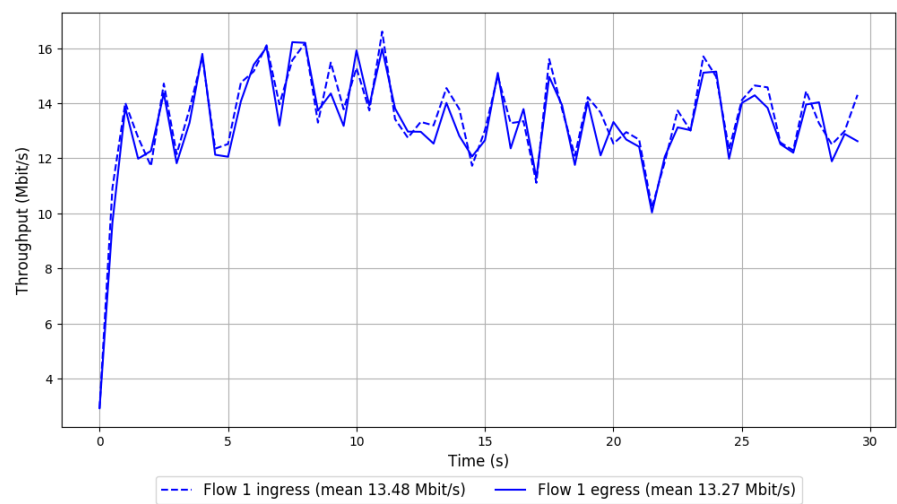


Run 8: Statistics of Sprout

Start at: 2018-02-20 00:47:43
End at: 2018-02-20 00:48:13
Local clock offset: -5.315 ms
Remote clock offset: -3.647 ms

Below is generated by plot.py at 2018-02-20 06:34:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.27 Mbit/s
95th percentile per-packet one-way delay: 33.592 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 13.27 Mbit/s
95th percentile per-packet one-way delay: 33.592 ms
Loss rate: 1.78%

Run 8: Report of Sprout — Data Link

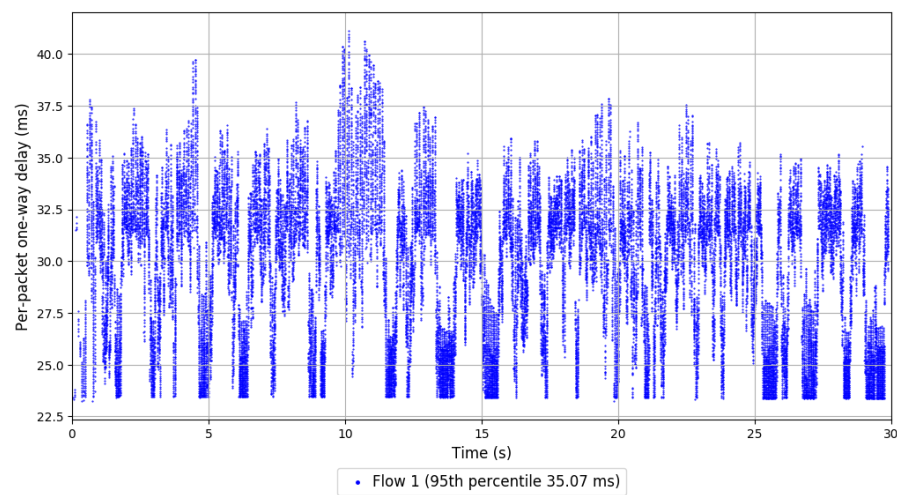
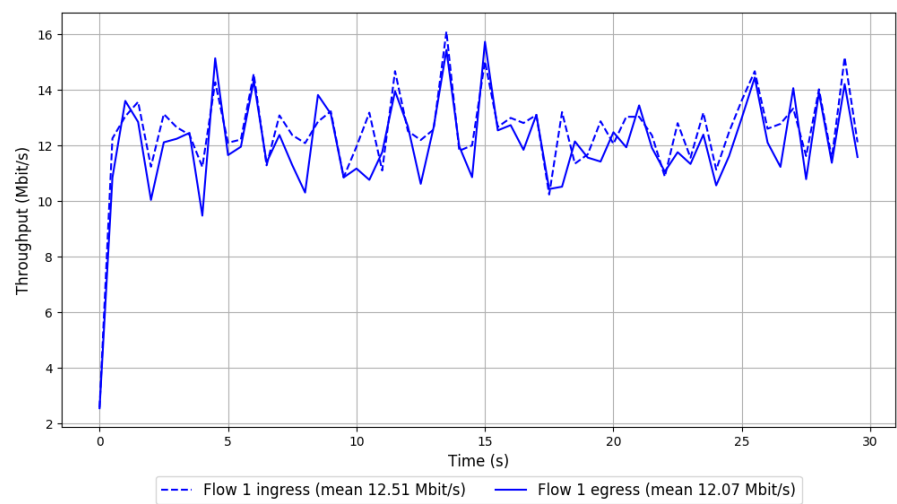


Run 9: Statistics of Sprout

Start at: 2018-02-20 01:16:35
End at: 2018-02-20 01:17:05
Local clock offset: -6.338 ms
Remote clock offset: -4.033 ms

Below is generated by plot.py at 2018-02-20 06:34:07
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.07 Mbit/s
95th percentile per-packet one-way delay: 35.071 ms
Loss rate: 3.67%
-- Flow 1:
Average throughput: 12.07 Mbit/s
95th percentile per-packet one-way delay: 35.071 ms
Loss rate: 3.67%

Run 9: Report of Sprout — Data Link

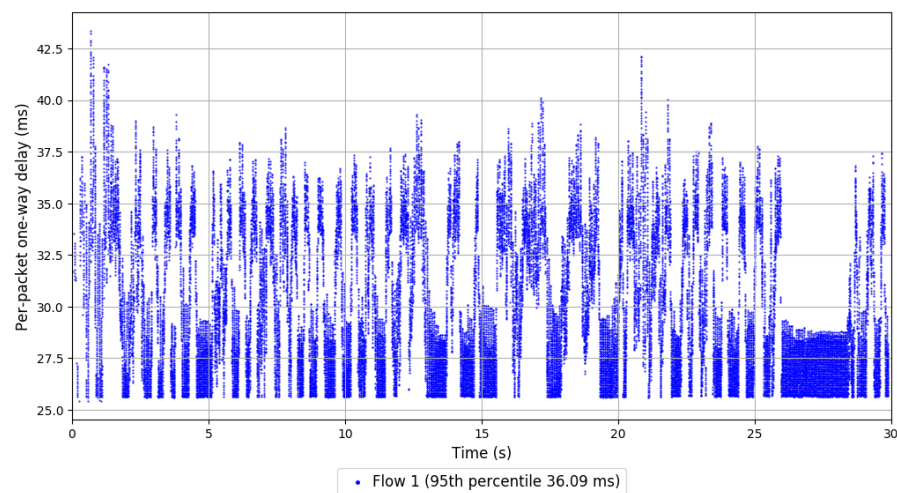
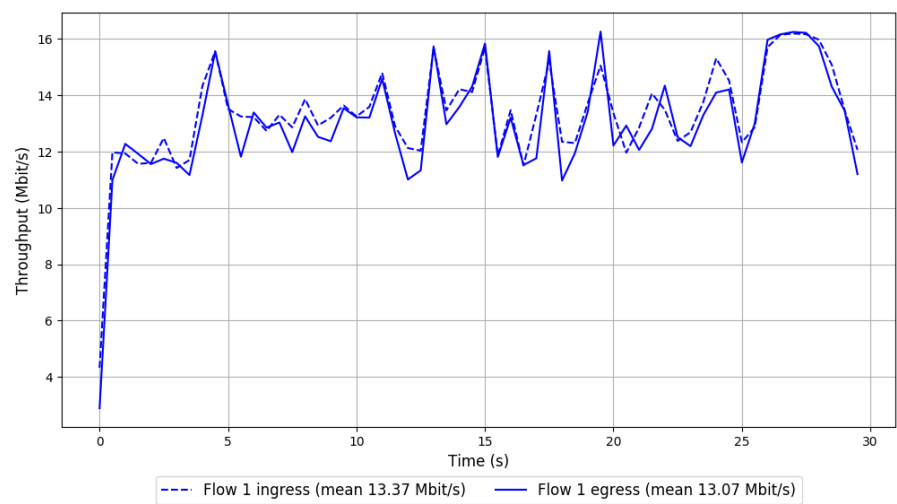


Run 10: Statistics of Sprout

Start at: 2018-02-20 01:44:12
End at: 2018-02-20 01:44:42
Local clock offset: -4.329 ms
Remote clock offset: -4.354 ms

Below is generated by plot.py at 2018-02-20 06:34:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.07 Mbit/s
95th percentile per-packet one-way delay: 36.089 ms
Loss rate: 2.45%
-- Flow 1:
Average throughput: 13.07 Mbit/s
95th percentile per-packet one-way delay: 36.089 ms
Loss rate: 2.45%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-02-19 21:20:12

End at: 2018-02-19 21:20:42

Local clock offset: 1.777 ms

Remote clock offset: -5.745 ms

Below is generated by plot.py at 2018-02-20 06:36:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.40 Mbit/s

95th percentile per-packet one-way delay: 33.247 ms

Loss rate: 1.92%

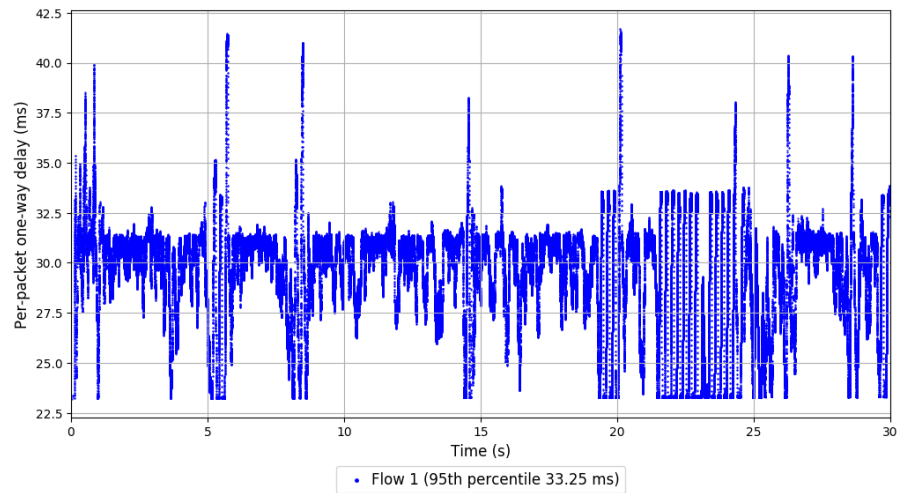
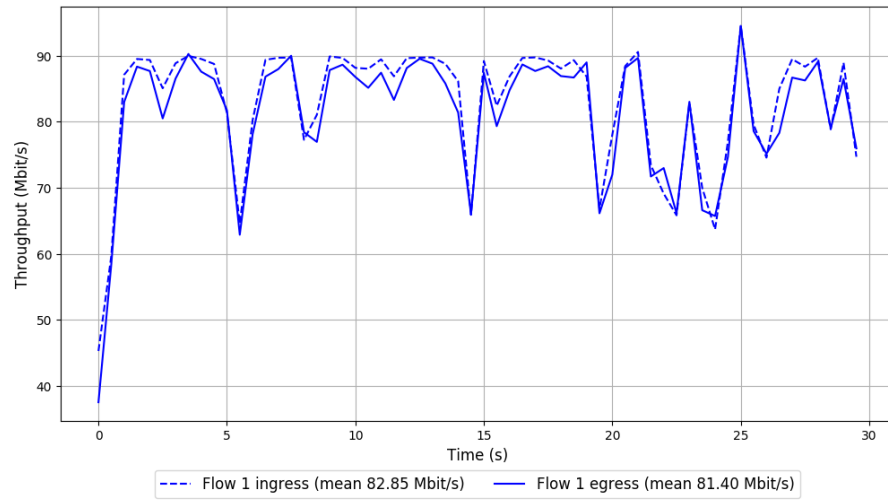
-- Flow 1:

Average throughput: 81.40 Mbit/s

95th percentile per-packet one-way delay: 33.247 ms

Loss rate: 1.92%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-02-19 21:47:05

End at: 2018-02-19 21:47:35

Local clock offset: -0.33 ms

Remote clock offset: -3.604 ms

Below is generated by plot.py at 2018-02-20 06:36:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.32 Mbit/s

95th percentile per-packet one-way delay: 35.514 ms

Loss rate: 1.96%

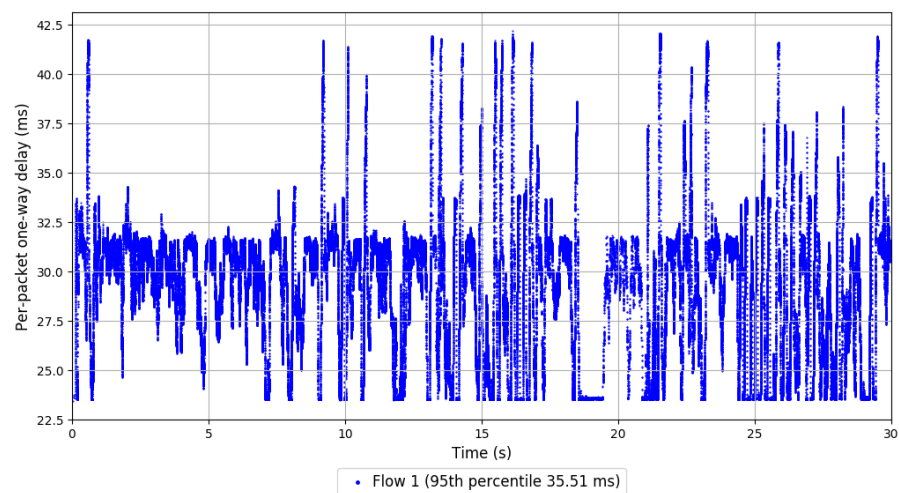
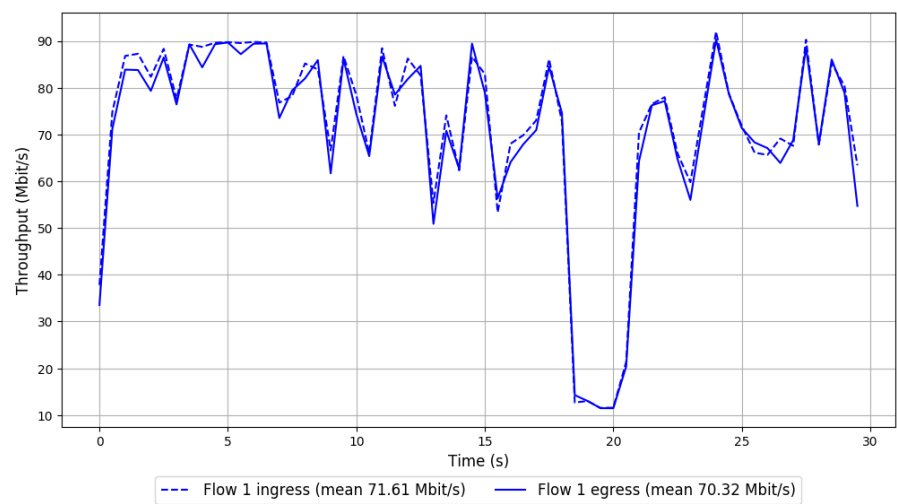
-- Flow 1:

Average throughput: 70.32 Mbit/s

95th percentile per-packet one-way delay: 35.514 ms

Loss rate: 1.96%

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

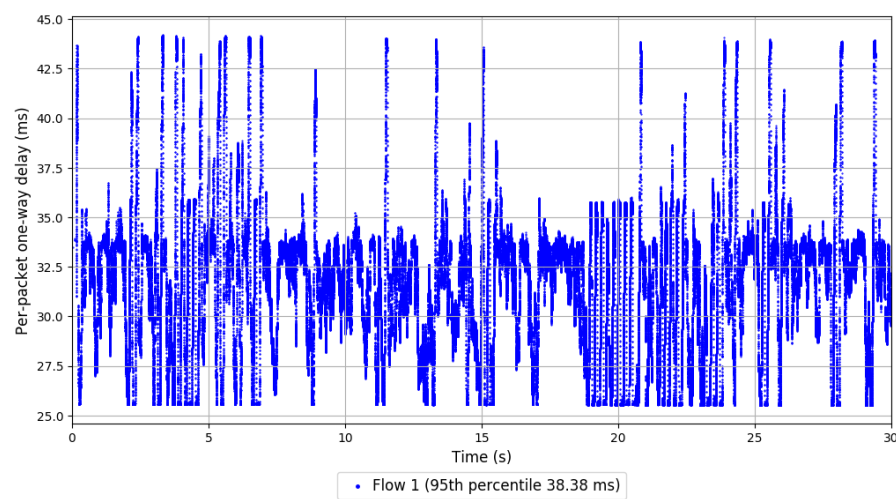
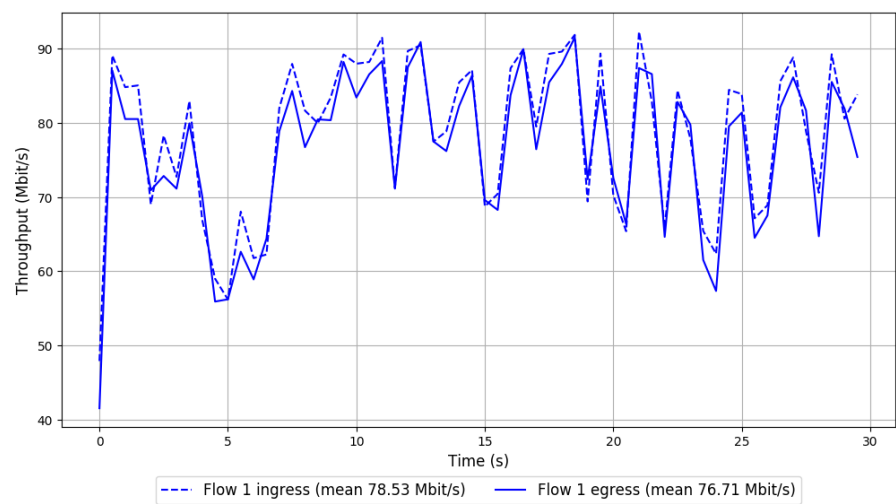


Run 3: Statistics of TaoVA-100x

Start at: 2018-02-19 22:14:42
End at: 2018-02-19 22:15:12
Local clock offset: -4.655 ms
Remote clock offset: -12.55 ms

Below is generated by plot.py at 2018-02-20 06:36:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 76.71 Mbit/s
95th percentile per-packet one-way delay: 38.380 ms
Loss rate: 2.52%
-- Flow 1:
Average throughput: 76.71 Mbit/s
95th percentile per-packet one-way delay: 38.380 ms
Loss rate: 2.52%

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

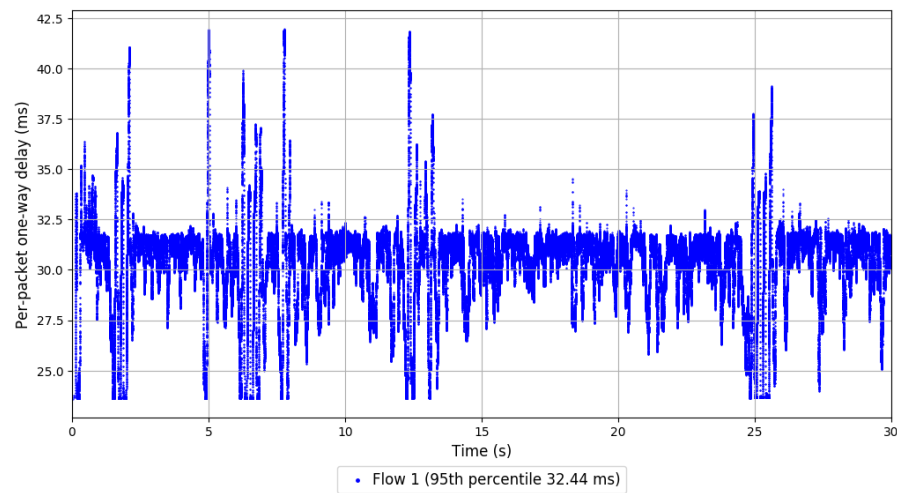
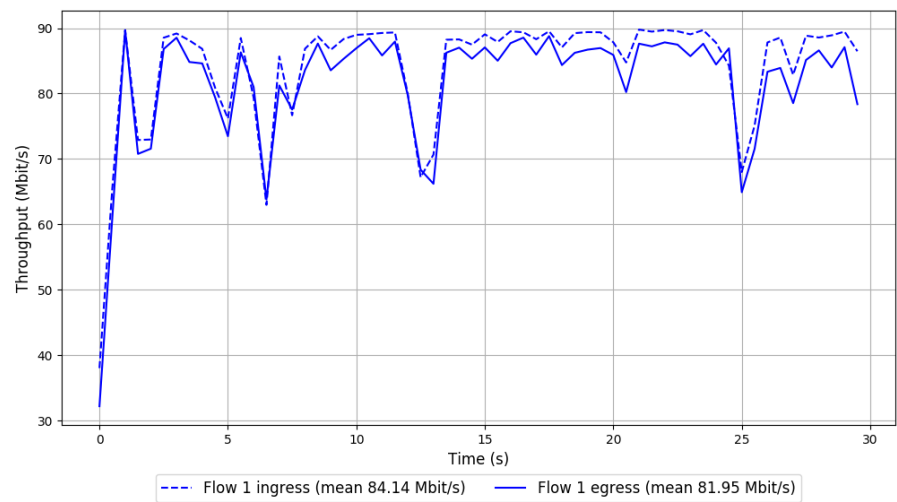


Run 4: Statistics of TaoVA-100x

Start at: 2018-02-19 22:42:02
End at: 2018-02-19 22:42:32
Local clock offset: -3.692 ms
Remote clock offset: -10.23 ms

Below is generated by plot.py at 2018-02-20 06:36:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 81.95 Mbit/s
95th percentile per-packet one-way delay: 32.442 ms
Loss rate: 2.77%
-- Flow 1:
Average throughput: 81.95 Mbit/s
95th percentile per-packet one-way delay: 32.442 ms
Loss rate: 2.77%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-19 23:09:13

End at: 2018-02-19 23:09:43

Local clock offset: 1.236 ms

Remote clock offset: -7.148 ms

Below is generated by plot.py at 2018-02-20 06:36:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.81 Mbit/s

95th percentile per-packet one-way delay: 33.334 ms

Loss rate: 2.80%

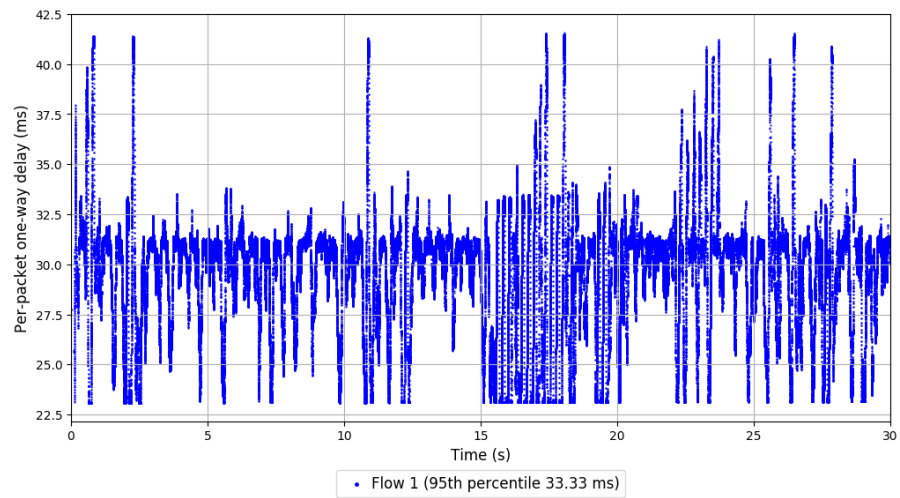
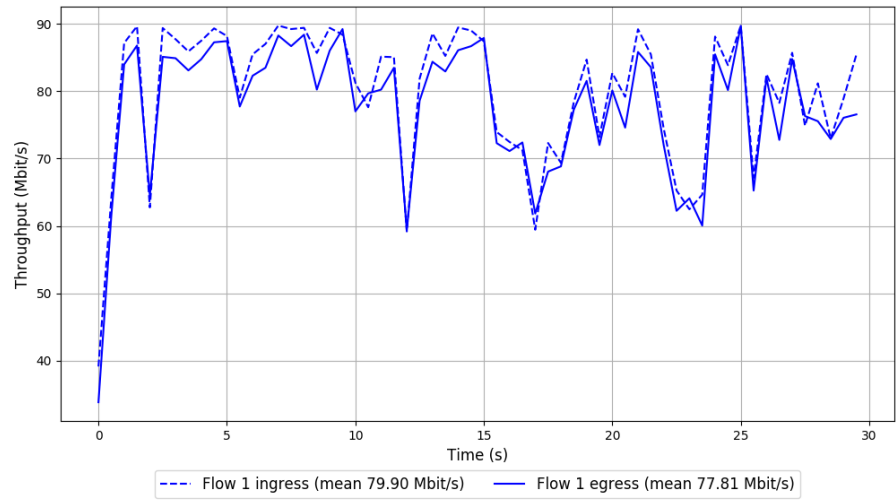
-- Flow 1:

Average throughput: 77.81 Mbit/s

95th percentile per-packet one-way delay: 33.334 ms

Loss rate: 2.80%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-19 23:37:00

End at: 2018-02-19 23:37:30

Local clock offset: 3.499 ms

Remote clock offset: -3.651 ms

Below is generated by plot.py at 2018-02-20 06:36:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.19 Mbit/s

95th percentile per-packet one-way delay: 34.153 ms

Loss rate: 3.61%

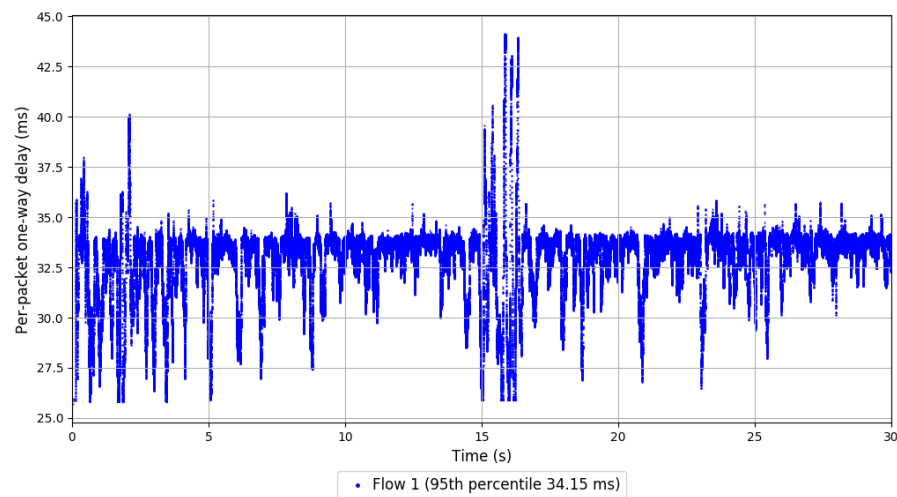
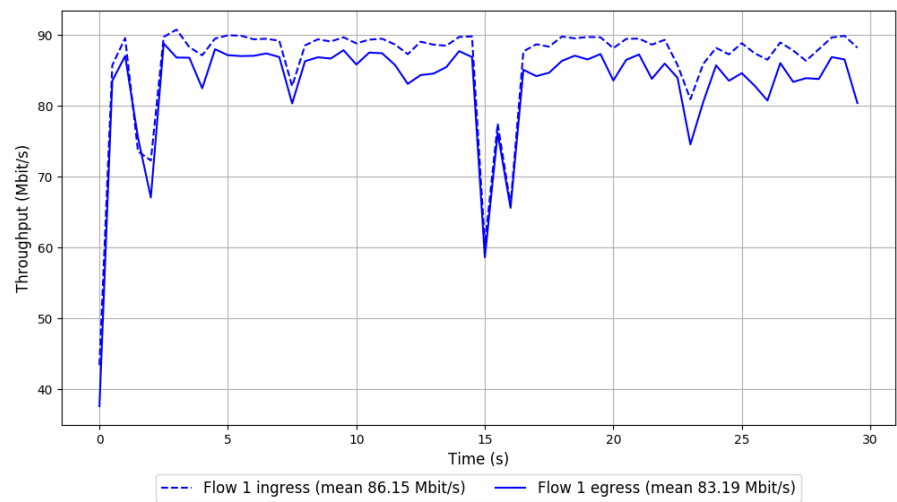
-- Flow 1:

Average throughput: 83.19 Mbit/s

95th percentile per-packet one-way delay: 34.153 ms

Loss rate: 3.61%

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

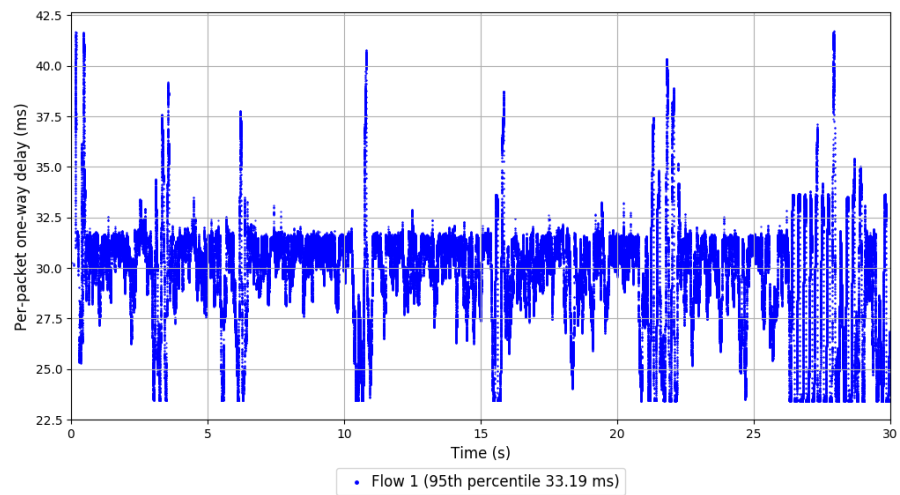
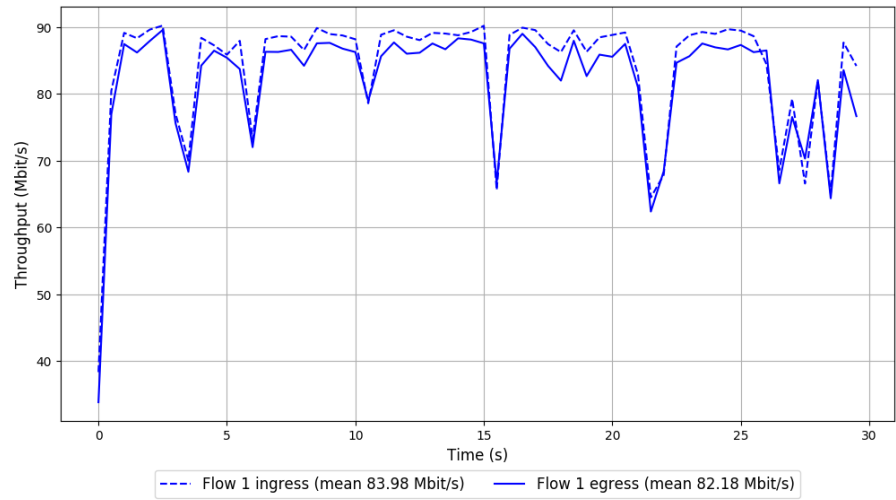


Run 7: Statistics of TaoVA-100x

Start at: 2018-02-20 00:05:50
End at: 2018-02-20 00:06:20
Local clock offset: 1.713 ms
Remote clock offset: -10.179 ms

Below is generated by plot.py at 2018-02-20 06:36:19
Datalink statistics
-- Total of 1 flow:
Average throughput: 82.18 Mbit/s
95th percentile per-packet one-way delay: 33.193 ms
Loss rate: 2.34%
-- Flow 1:
Average throughput: 82.18 Mbit/s
95th percentile per-packet one-way delay: 33.193 ms
Loss rate: 2.34%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-20 00:34:04

End at: 2018-02-20 00:34:34

Local clock offset: -4.524 ms

Remote clock offset: -4.017 ms

Below is generated by plot.py at 2018-02-20 06:36:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.62 Mbit/s

95th percentile per-packet one-way delay: 33.055 ms

Loss rate: 2.31%

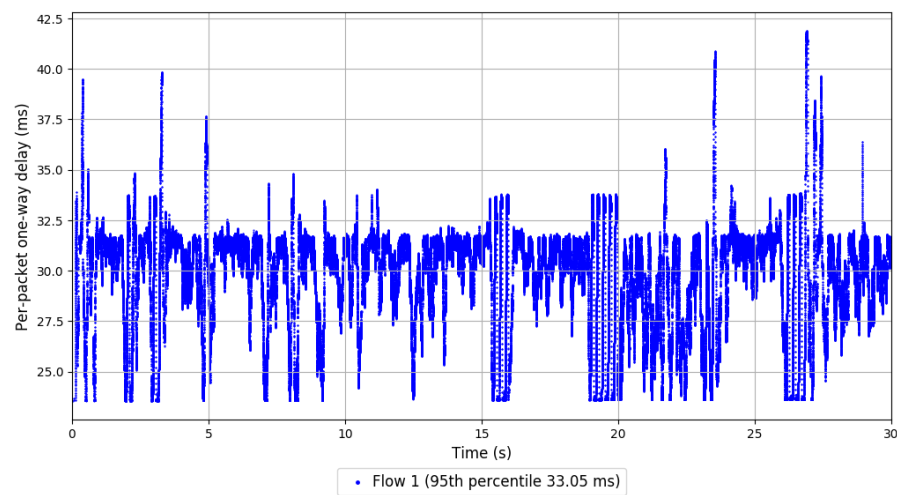
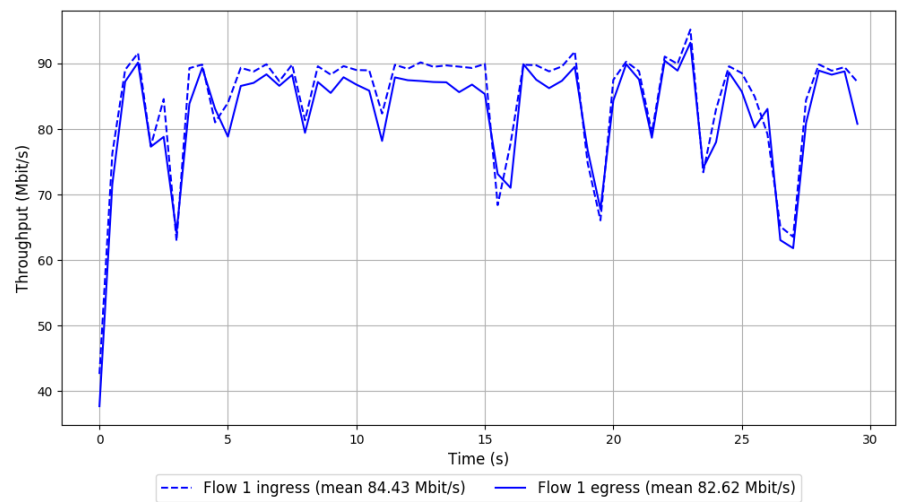
-- Flow 1:

Average throughput: 82.62 Mbit/s

95th percentile per-packet one-way delay: 33.055 ms

Loss rate: 2.31%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-20 01:01:47

End at: 2018-02-20 01:02:17

Local clock offset: -5.887 ms

Remote clock offset: -6.86 ms

Below is generated by plot.py at 2018-02-20 06:37:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.88 Mbit/s

95th percentile per-packet one-way delay: 35.794 ms

Loss rate: 2.61%

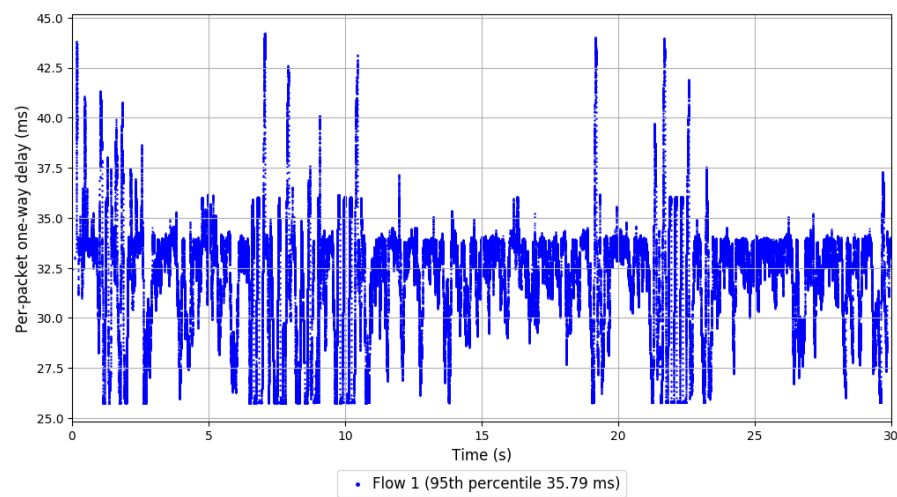
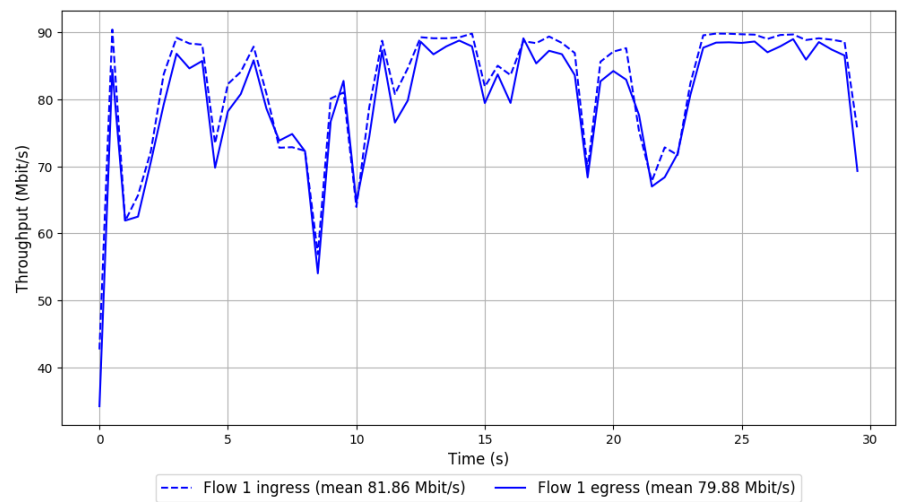
-- Flow 1:

Average throughput: 79.88 Mbit/s

95th percentile per-packet one-way delay: 35.794 ms

Loss rate: 2.61%

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

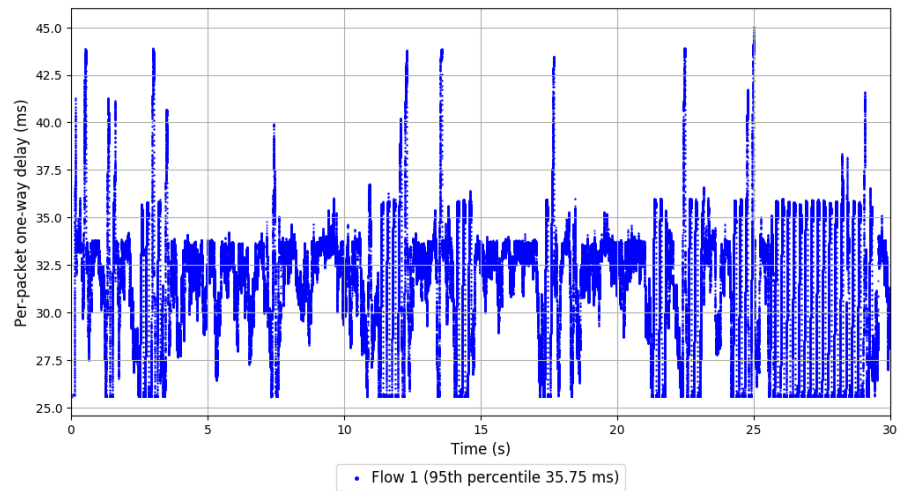
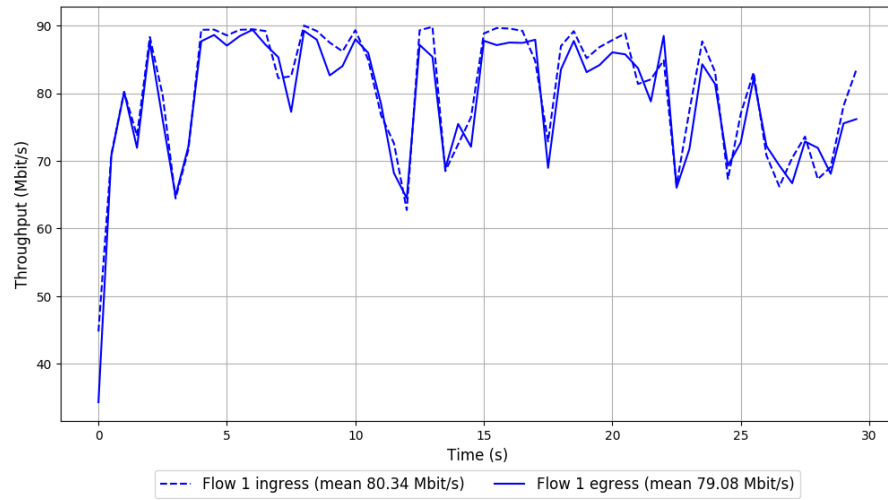


Run 10: Statistics of TaoVA-100x

Start at: 2018-02-20 01:30:10
End at: 2018-02-20 01:30:40
Local clock offset: -4.552 ms
Remote clock offset: -5.432 ms

Below is generated by plot.py at 2018-02-20 06:38:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 79.08 Mbit/s
95th percentile per-packet one-way delay: 35.752 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 79.08 Mbit/s
95th percentile per-packet one-way delay: 35.752 ms
Loss rate: 1.74%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-19 21:23:28

End at: 2018-02-19 21:23:58

Local clock offset: 1.276 ms

Remote clock offset: -5.962 ms

Below is generated by plot.py at 2018-02-20 06:38:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 31.921 ms

Loss rate: 1.24%

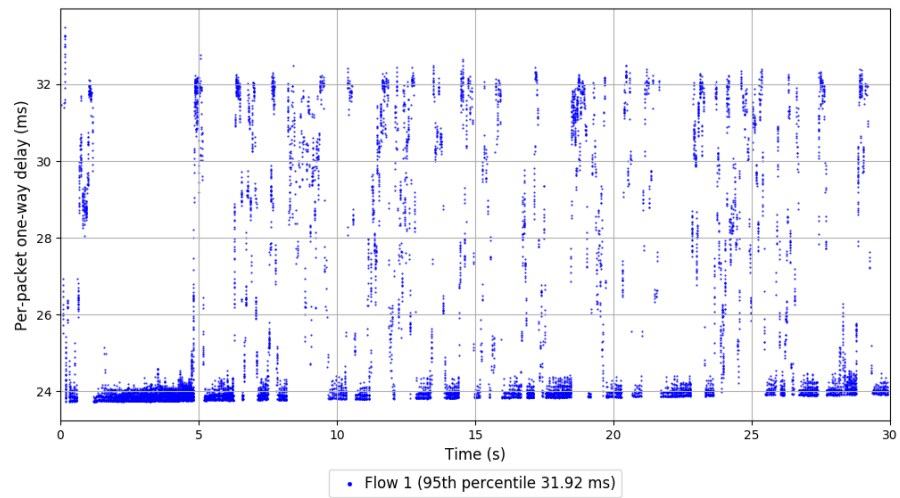
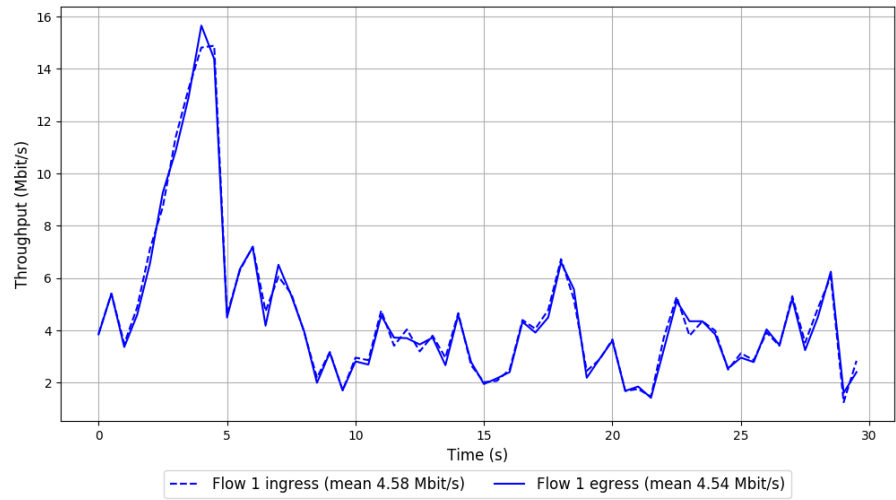
-- Flow 1:

Average throughput: 4.54 Mbit/s

95th percentile per-packet one-way delay: 31.921 ms

Loss rate: 1.24%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-19 21:50:12

End at: 2018-02-19 21:50:42

Local clock offset: -0.416 ms

Remote clock offset: -3.1 ms

Below is generated by plot.py at 2018-02-20 06:38:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.59 Mbit/s

95th percentile per-packet one-way delay: 31.481 ms

Loss rate: 1.48%

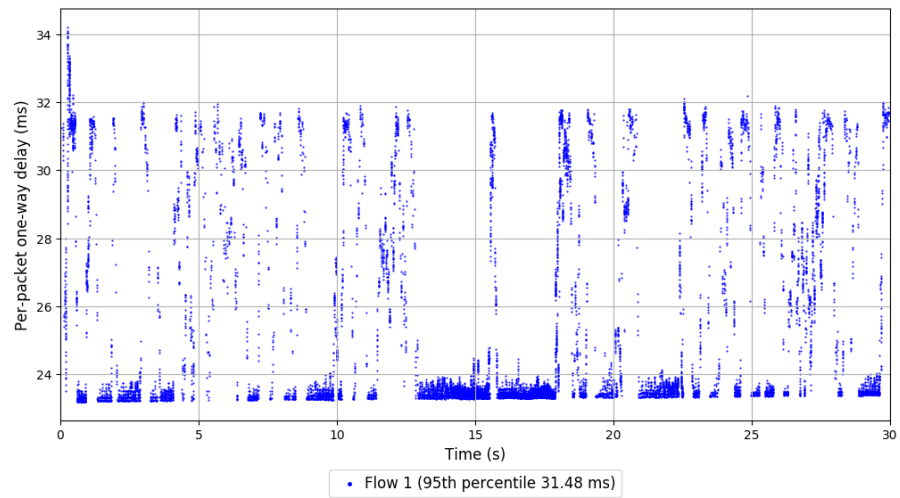
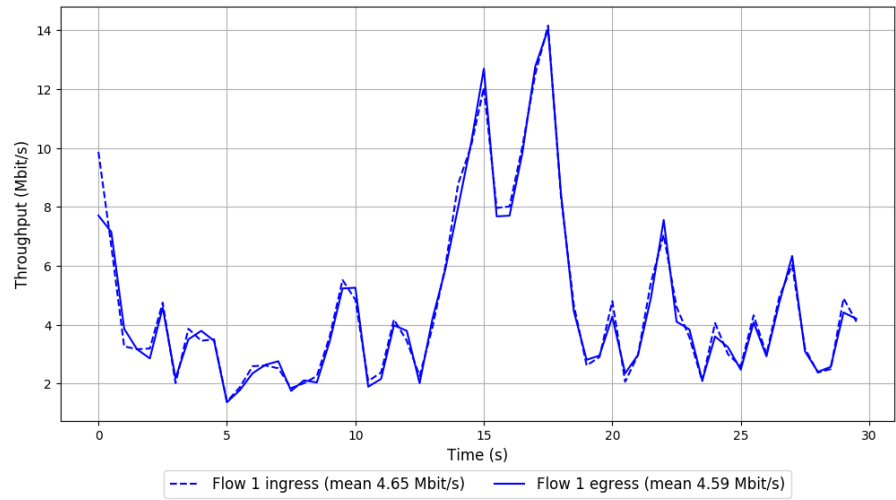
-- Flow 1:

Average throughput: 4.59 Mbit/s

95th percentile per-packet one-way delay: 31.481 ms

Loss rate: 1.48%

Run 2: Report of TCP Vegas — Data Link

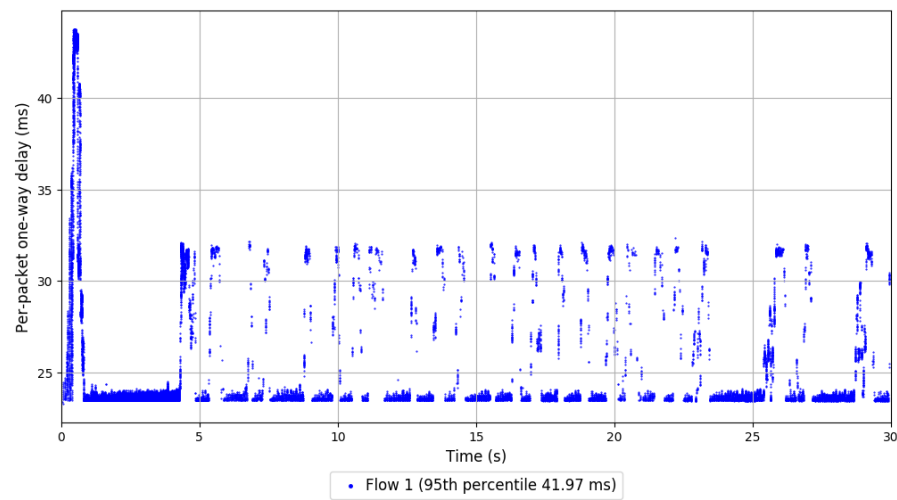
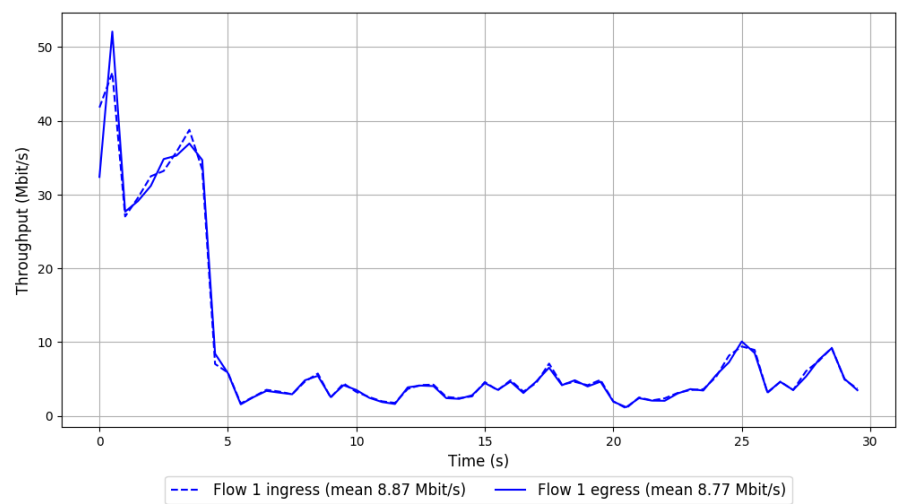


Run 3: Statistics of TCP Vegas

Start at: 2018-02-19 22:17:57
End at: 2018-02-19 22:18:27
Local clock offset: -4.891 ms
Remote clock offset: -10.949 ms

Below is generated by plot.py at 2018-02-20 06:38:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 8.77 Mbit/s
95th percentile per-packet one-way delay: 41.966 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 8.77 Mbit/s
95th percentile per-packet one-way delay: 41.966 ms
Loss rate: 1.26%

Run 3: Report of TCP Vegas — Data Link

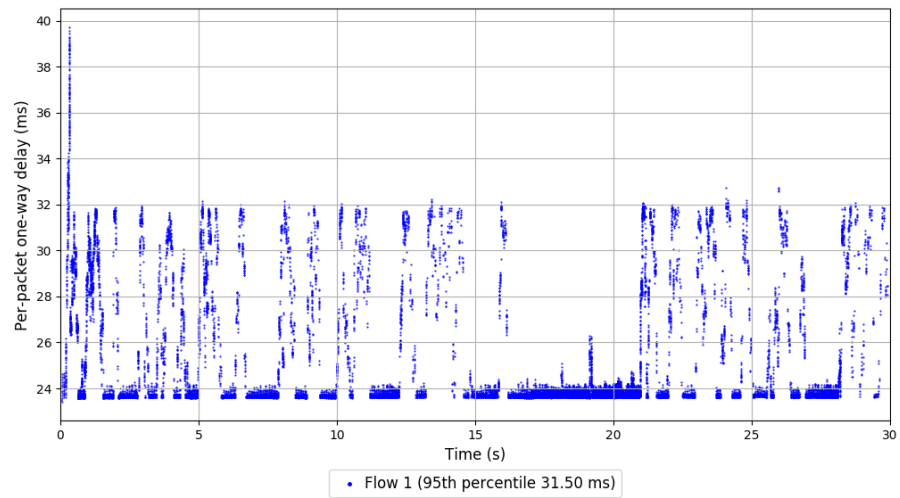
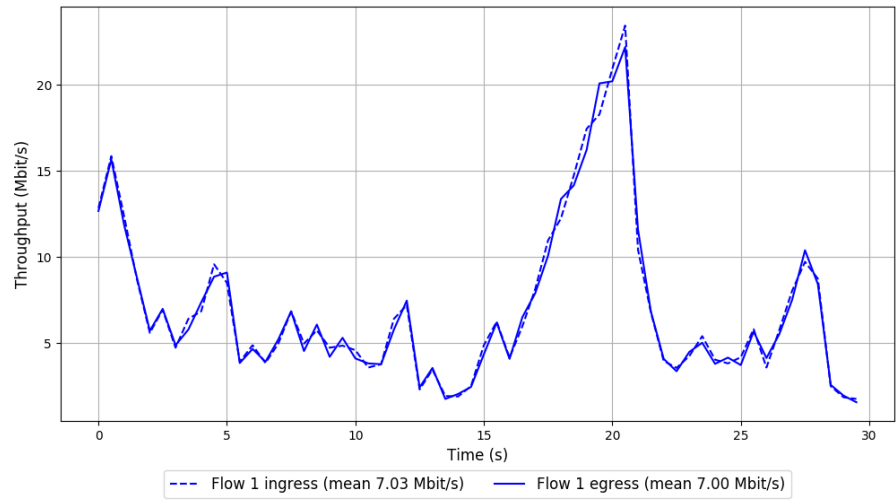


Run 4: Statistics of TCP Vegas

Start at: 2018-02-19 22:45:11
End at: 2018-02-19 22:45:41
Local clock offset: -3.775 ms
Remote clock offset: -10.057 ms

Below is generated by plot.py at 2018-02-20 06:38:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 31.505 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 31.505 ms
Loss rate: 0.65%

Run 4: Report of TCP Vegas — Data Link

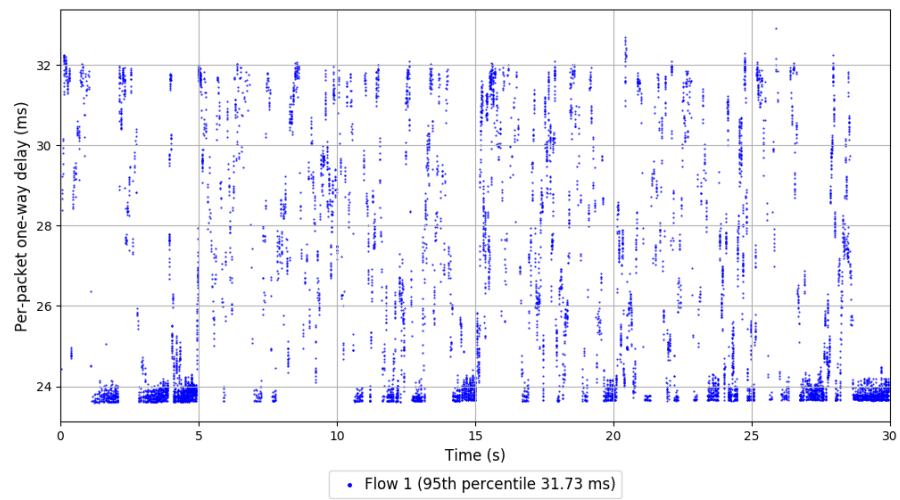
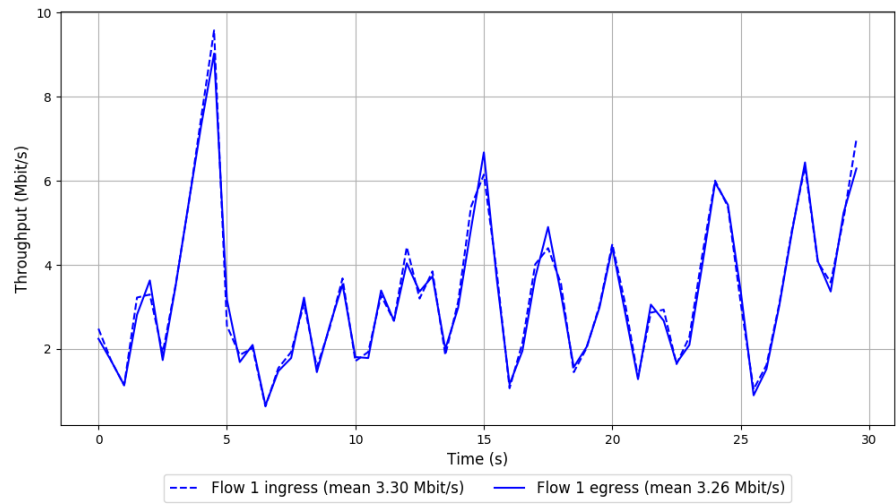


Run 5: Statistics of TCP Vegas

Start at: 2018-02-19 23:12:30
End at: 2018-02-19 23:13:00
Local clock offset: 2.062 ms
Remote clock offset: -6.372 ms

Below is generated by plot.py at 2018-02-20 06:38:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.26 Mbit/s
95th percentile per-packet one-way delay: 31.734 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 3.26 Mbit/s
95th percentile per-packet one-way delay: 31.734 ms
Loss rate: 1.49%

Run 5: Report of TCP Vegas — Data Link

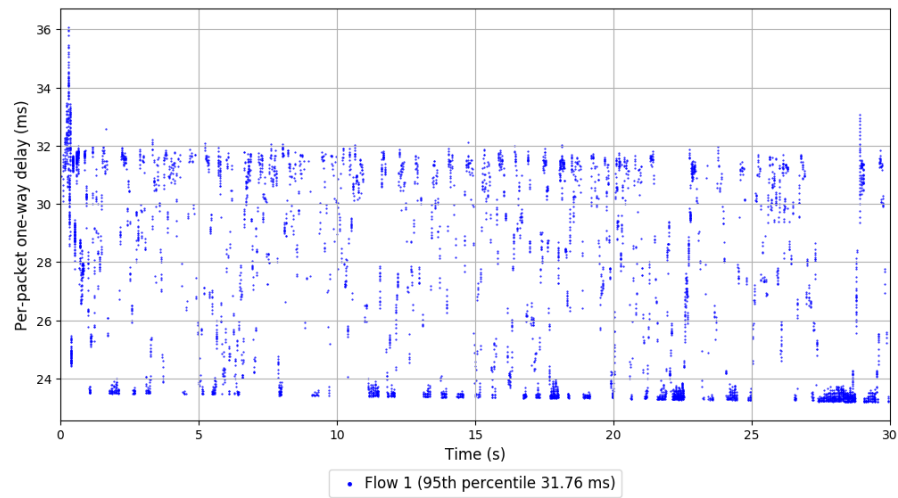
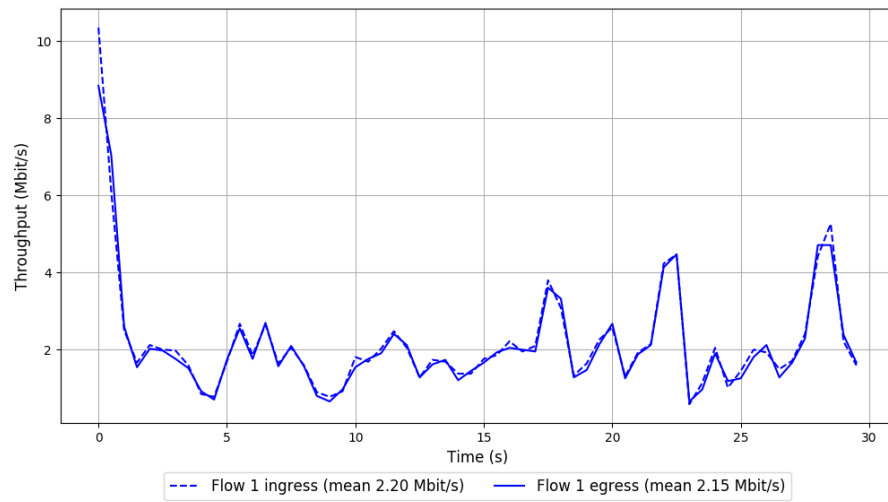


Run 6: Statistics of TCP Vegas

Start at: 2018-02-19 23:40:38
End at: 2018-02-19 23:41:08
Local clock offset: 2.897 ms
Remote clock offset: -2.649 ms

Below is generated by plot.py at 2018-02-20 06:38:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 31.760 ms
Loss rate: 2.41%
-- Flow 1:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 31.760 ms
Loss rate: 2.41%

Run 6: Report of TCP Vegas — Data Link

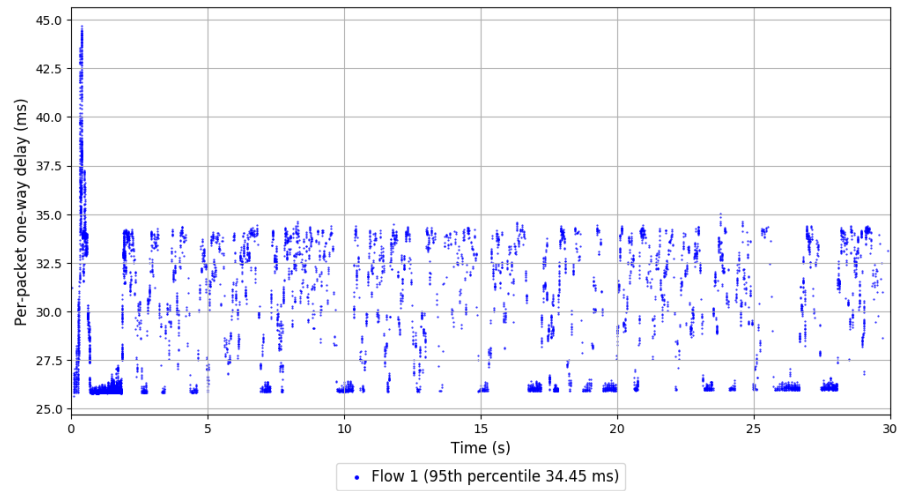
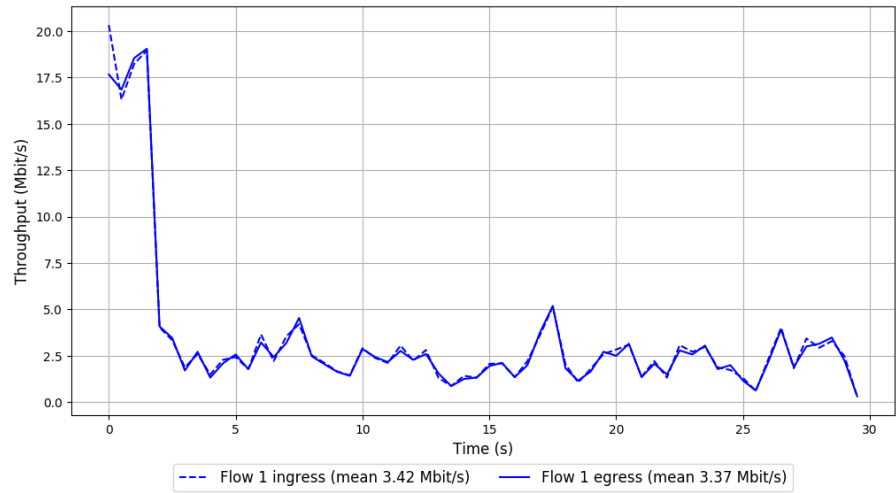


Run 7: Statistics of TCP Vegas

Start at: 2018-02-20 00:09:15
End at: 2018-02-20 00:09:45
Local clock offset: 0.614 ms
Remote clock offset: -12.453 ms

Below is generated by plot.py at 2018-02-20 06:38:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.37 Mbit/s
95th percentile per-packet one-way delay: 34.446 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 3.37 Mbit/s
95th percentile per-packet one-way delay: 34.446 ms
Loss rate: 1.87%

Run 7: Report of TCP Vegas — Data Link

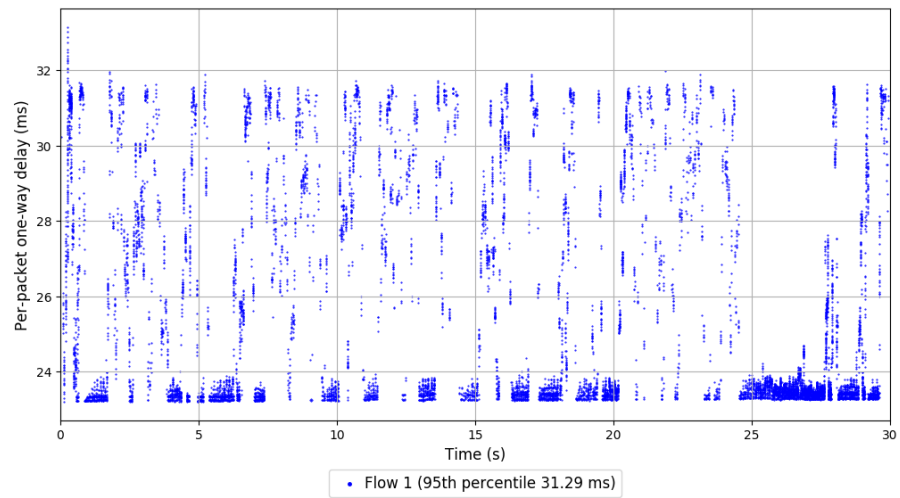
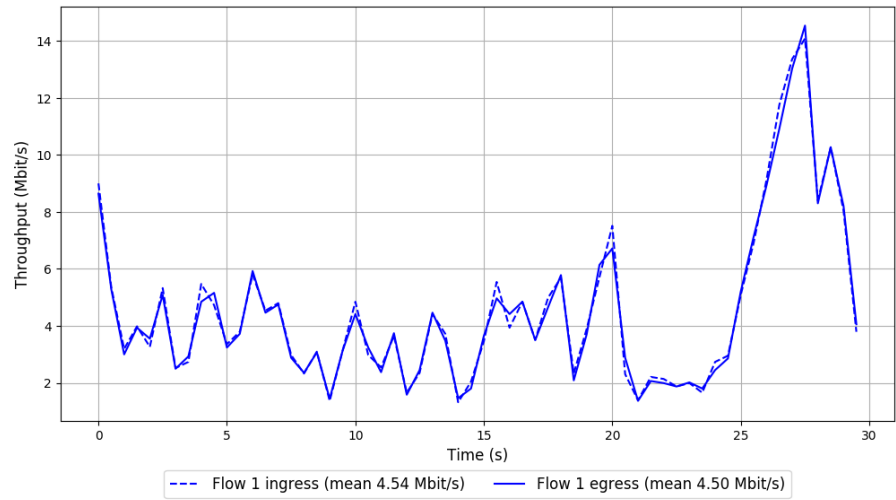


Run 8: Statistics of TCP Vegas

Start at: 2018-02-20 00:37:29
End at: 2018-02-20 00:37:59
Local clock offset: -4.833 ms
Remote clock offset: -3.391 ms

Below is generated by plot.py at 2018-02-20 06:38:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.50 Mbit/s
95th percentile per-packet one-way delay: 31.292 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 4.50 Mbit/s
95th percentile per-packet one-way delay: 31.292 ms
Loss rate: 0.92%

Run 8: Report of TCP Vegas — Data Link

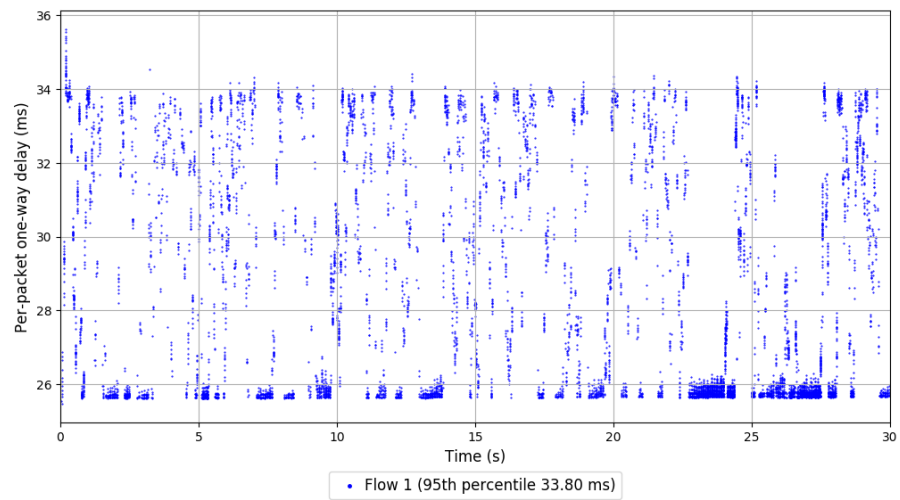
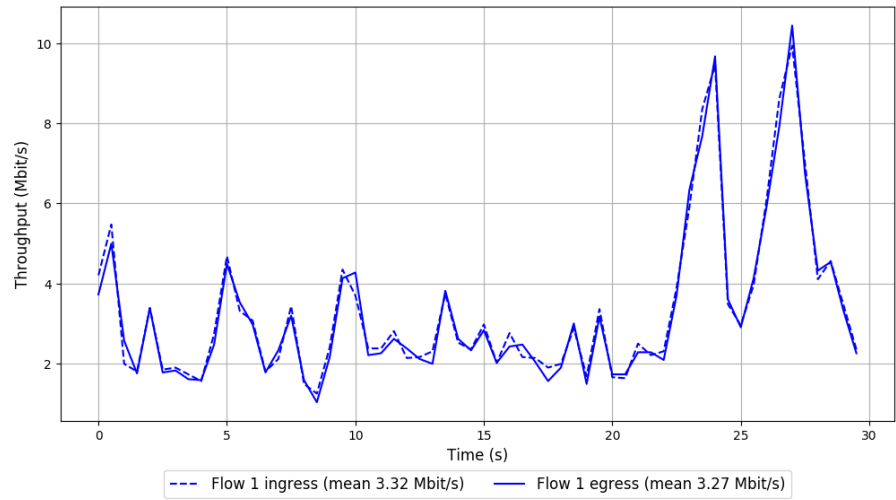


Run 9: Statistics of TCP Vegas

Start at: 2018-02-20 01:05:02
End at: 2018-02-20 01:05:32
Local clock offset: -6.111 ms
Remote clock offset: -6.698 ms

Below is generated by plot.py at 2018-02-20 06:38:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.27 Mbit/s
95th percentile per-packet one-way delay: 33.802 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 3.27 Mbit/s
95th percentile per-packet one-way delay: 33.802 ms
Loss rate: 1.66%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-20 01:33:14

End at: 2018-02-20 01:33:44

Local clock offset: -4.354 ms

Remote clock offset: -3.175 ms

Below is generated by plot.py at 2018-02-20 06:38:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 31.878 ms

Loss rate: 1.61%

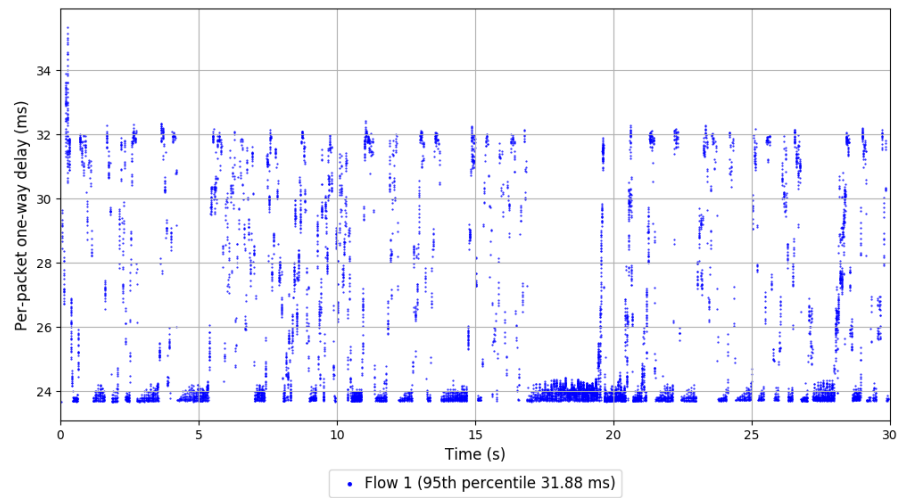
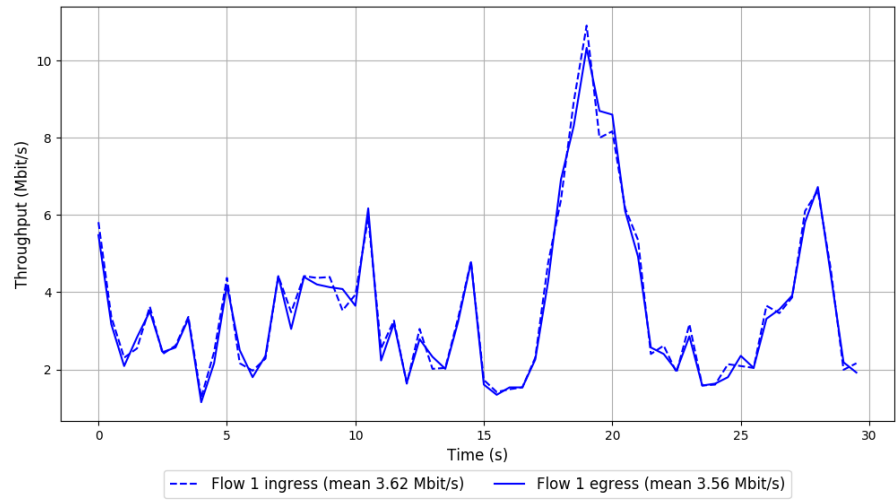
-- Flow 1:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 31.878 ms

Loss rate: 1.61%

Run 10: Report of TCP Vegas — Data Link

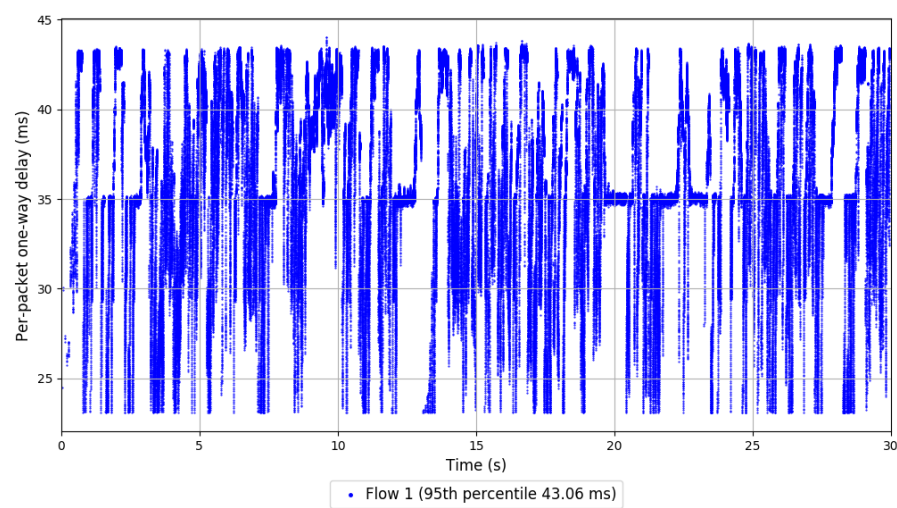
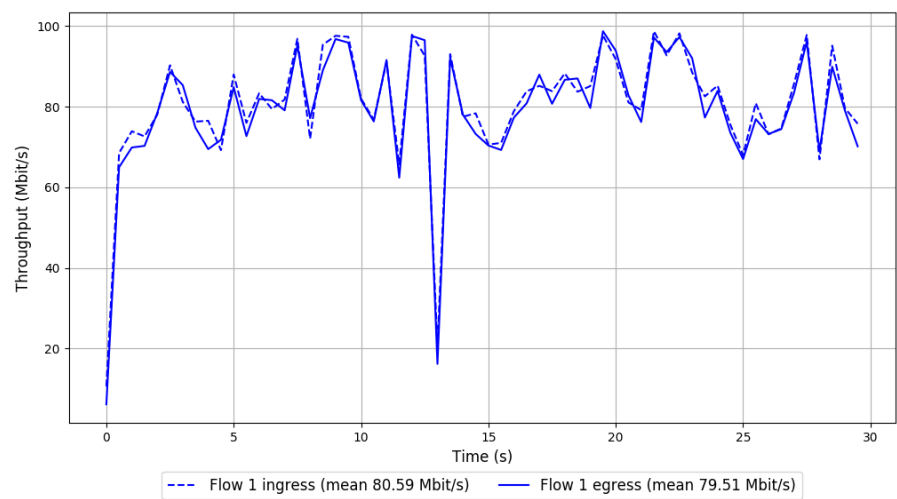


Run 1: Statistics of Verus

Start at: 2018-02-19 21:12:37
End at: 2018-02-19 21:13:07
Local clock offset: 2.595 ms
Remote clock offset: -5.549 ms

Below is generated by plot.py at 2018-02-20 06:38:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 79.51 Mbit/s
95th percentile per-packet one-way delay: 43.065 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 79.51 Mbit/s
95th percentile per-packet one-way delay: 43.065 ms
Loss rate: 1.54%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-19 21:39:07

End at: 2018-02-19 21:39:37

Local clock offset: 0.02 ms

Remote clock offset: -4.08 ms

Below is generated by plot.py at 2018-02-20 06:38:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.01 Mbit/s

95th percentile per-packet one-way delay: 43.854 ms

Loss rate: 2.47%

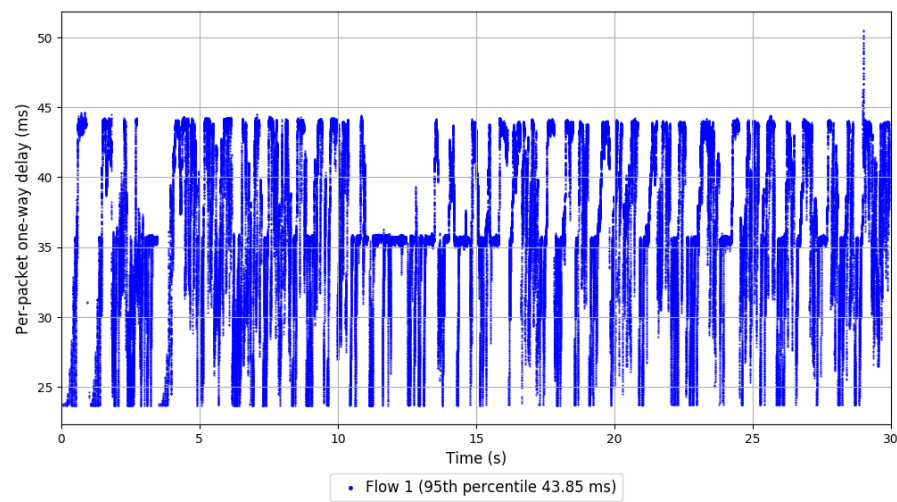
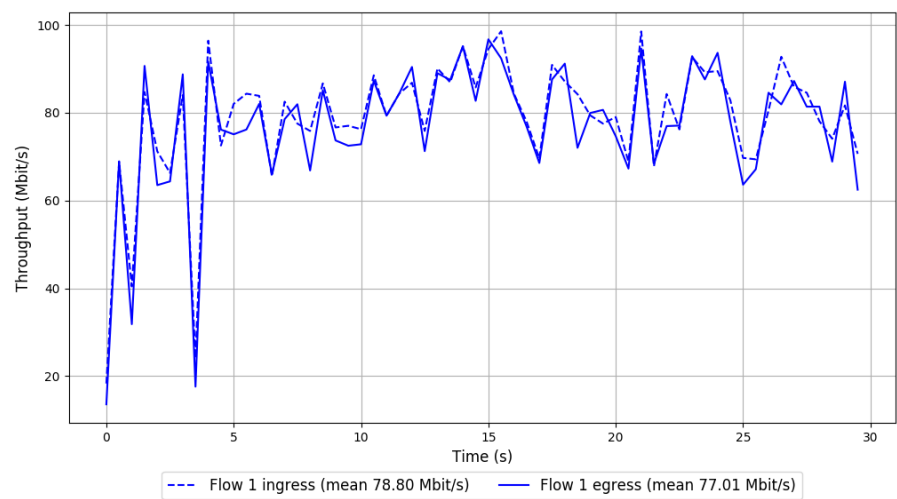
-- Flow 1:

Average throughput: 77.01 Mbit/s

95th percentile per-packet one-way delay: 43.854 ms

Loss rate: 2.47%

Run 2: Report of Verus — Data Link

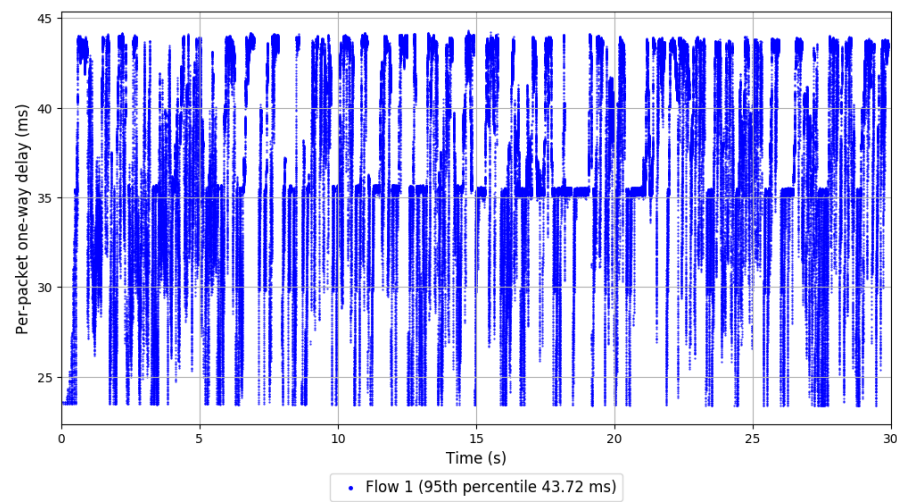
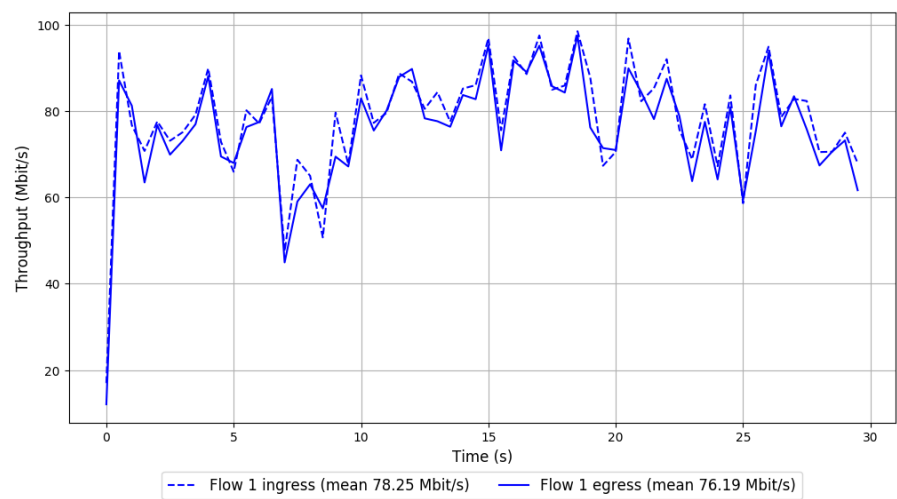


Run 3: Statistics of Verus

Start at: 2018-02-19 22:06:35
End at: 2018-02-19 22:07:05
Local clock offset: -3.767 ms
Remote clock offset: -8.403 ms

Below is generated by plot.py at 2018-02-20 06:38:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 76.19 Mbit/s
95th percentile per-packet one-way delay: 43.716 ms
Loss rate: 3.03%
-- Flow 1:
Average throughput: 76.19 Mbit/s
95th percentile per-packet one-way delay: 43.716 ms
Loss rate: 3.03%

Run 3: Report of Verus — Data Link

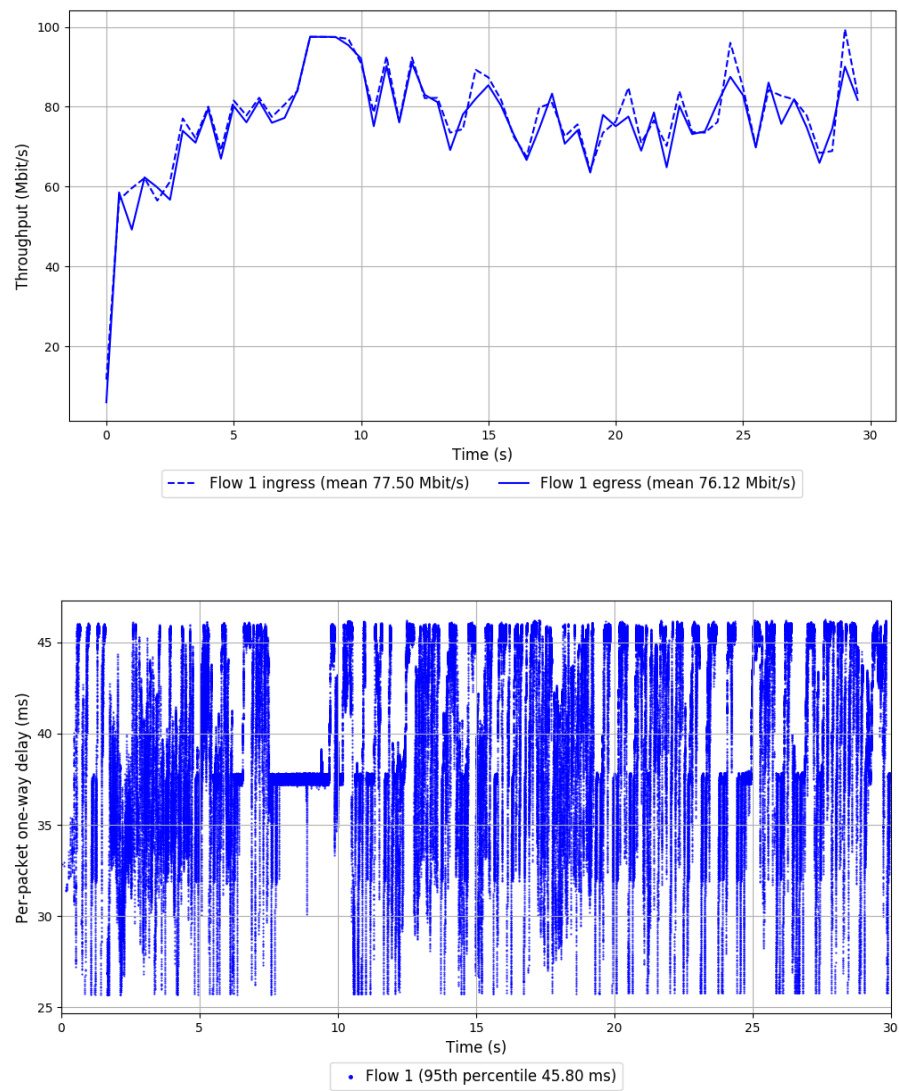


Run 4: Statistics of Verus

Start at: 2018-02-19 22:34:13
End at: 2018-02-19 22:34:43
Local clock offset: -4.025 ms
Remote clock offset: -13.72 ms

Below is generated by plot.py at 2018-02-20 06:38:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 76.12 Mbit/s
95th percentile per-packet one-way delay: 45.803 ms
Loss rate: 1.98%
-- Flow 1:
Average throughput: 76.12 Mbit/s
95th percentile per-packet one-way delay: 45.803 ms
Loss rate: 1.98%

Run 4: Report of Verus — Data Link

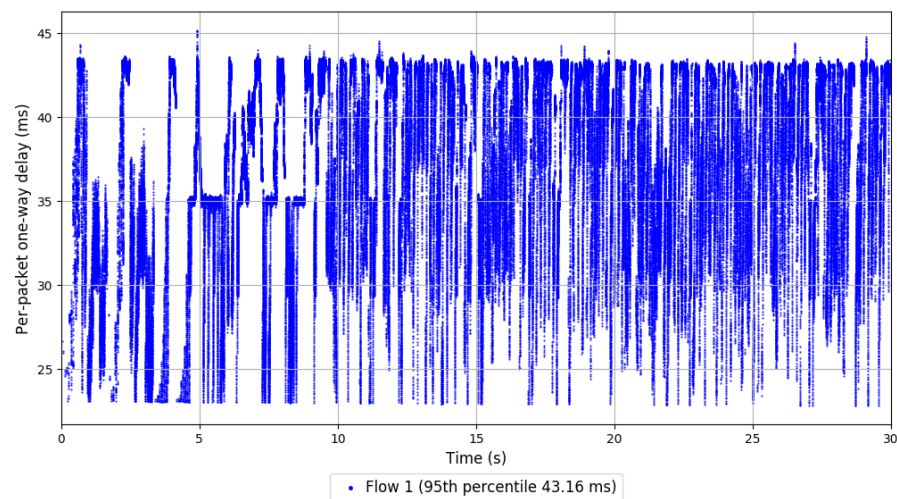
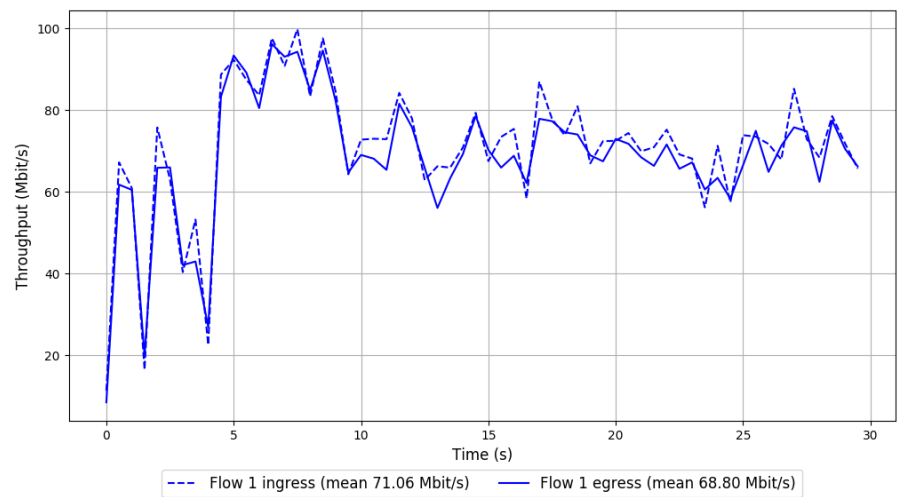


Run 5: Statistics of Verus

Start at: 2018-02-19 23:01:12
End at: 2018-02-19 23:01:42
Local clock offset: -2.341 ms
Remote clock offset: -9.882 ms

Below is generated by plot.py at 2018-02-20 06:38:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 68.80 Mbit/s
95th percentile per-packet one-way delay: 43.158 ms
Loss rate: 3.13%
-- Flow 1:
Average throughput: 68.80 Mbit/s
95th percentile per-packet one-way delay: 43.158 ms
Loss rate: 3.13%

Run 5: Report of Verus — Data Link

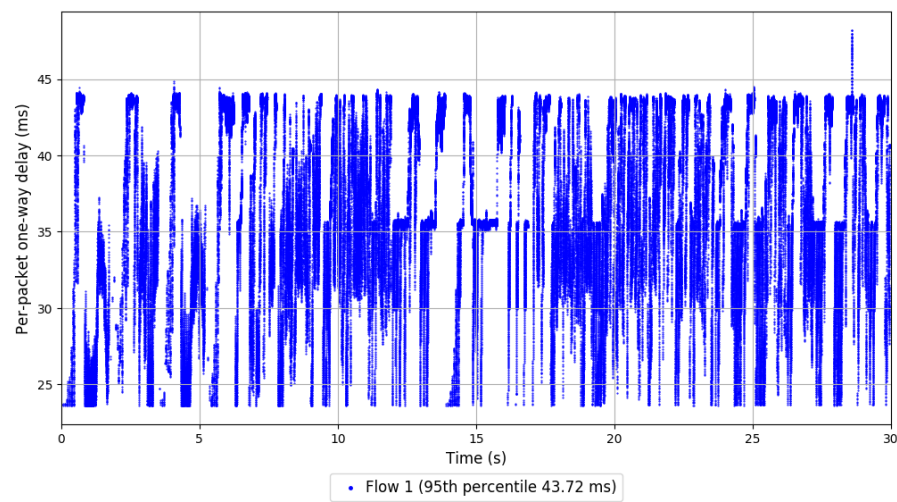
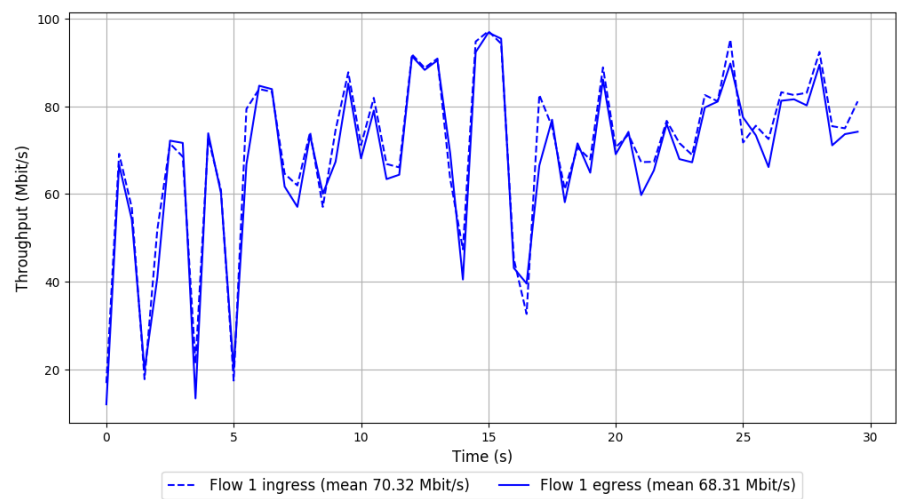


Run 6: Statistics of Verus

Start at: 2018-02-19 23:28:36
End at: 2018-02-19 23:29:06
Local clock offset: 4.062 ms
Remote clock offset: -2.958 ms

Below is generated by plot.py at 2018-02-20 06:38:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 68.31 Mbit/s
95th percentile per-packet one-way delay: 43.715 ms
Loss rate: 3.04%
-- Flow 1:
Average throughput: 68.31 Mbit/s
95th percentile per-packet one-way delay: 43.715 ms
Loss rate: 3.04%

Run 6: Report of Verus — Data Link

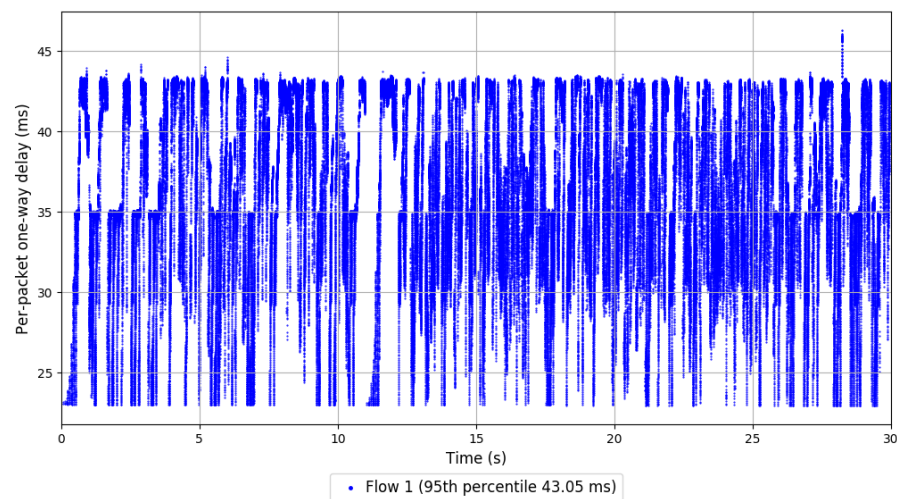
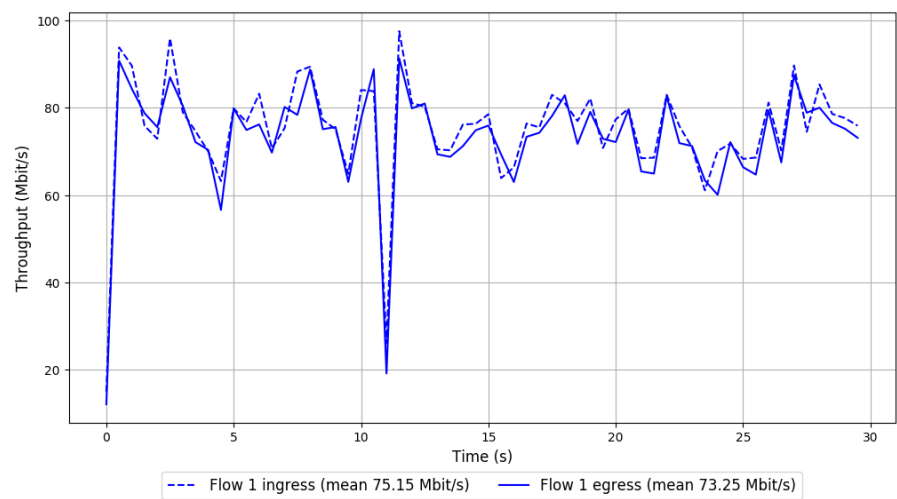


Run 7: Statistics of Verus

Start at: 2018-02-19 23:57:30
End at: 2018-02-19 23:58:00
Local clock offset: 1.894 ms
Remote clock offset: -8.564 ms

Below is generated by plot.py at 2018-02-20 06:38:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 73.25 Mbit/s
95th percentile per-packet one-way delay: 43.046 ms
Loss rate: 2.73%
-- Flow 1:
Average throughput: 73.25 Mbit/s
95th percentile per-packet one-way delay: 43.046 ms
Loss rate: 2.73%

Run 7: Report of Verus — Data Link

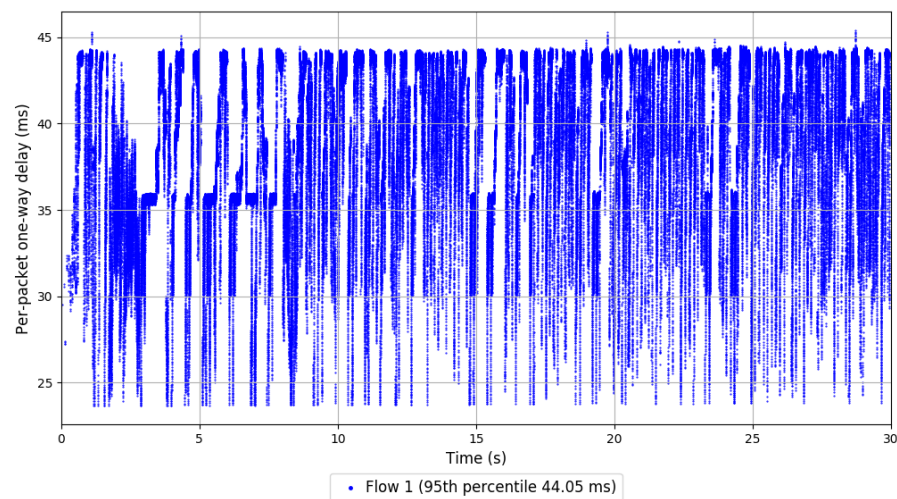
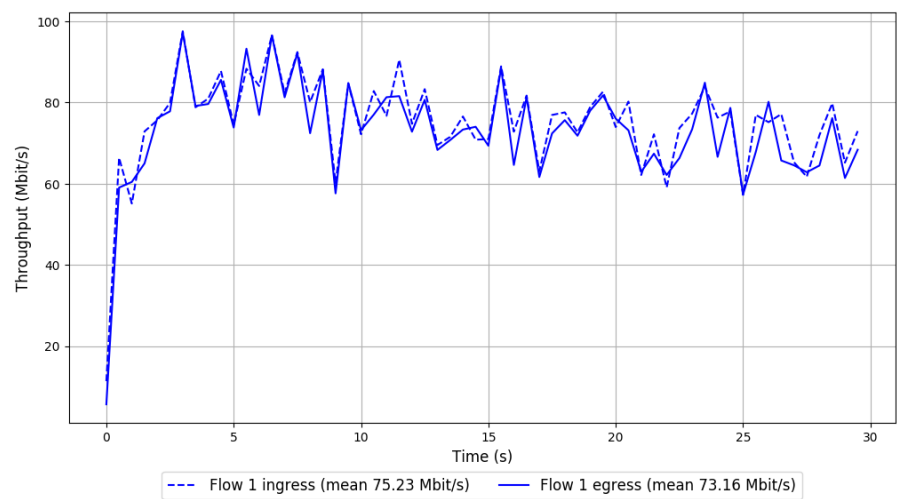


Run 8: Statistics of Verus

Start at: 2018-02-20 00:25:33
End at: 2018-02-20 00:26:03
Local clock offset: -3.626 ms
Remote clock offset: -5.235 ms

Below is generated by plot.py at 2018-02-20 06:38:24
Datalink statistics
-- Total of 1 flow:
Average throughput: 73.16 Mbit/s
95th percentile per-packet one-way delay: 44.050 ms
Loss rate: 2.92%
-- Flow 1:
Average throughput: 73.16 Mbit/s
95th percentile per-packet one-way delay: 44.050 ms
Loss rate: 2.92%

Run 8: Report of Verus — Data Link

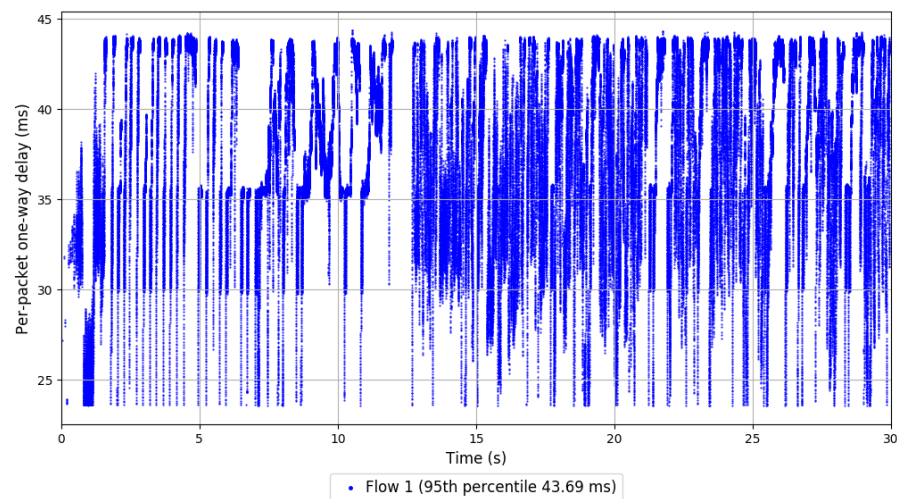
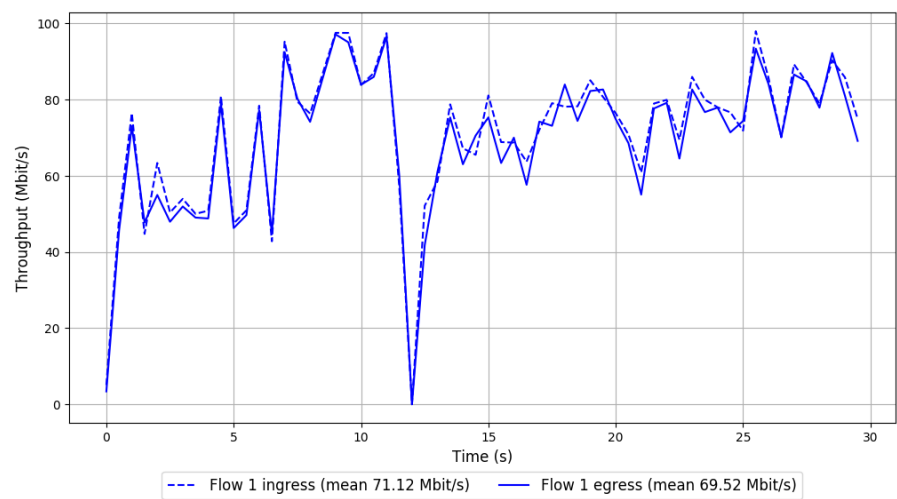


Run 9: Statistics of Verus

Start at: 2018-02-20 00:53:35
End at: 2018-02-20 00:54:05
Local clock offset: -5.543 ms
Remote clock offset: -4.483 ms

Below is generated by plot.py at 2018-02-20 06:38:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 69.52 Mbit/s
95th percentile per-packet one-way delay: 43.685 ms
Loss rate: 2.47%
-- Flow 1:
Average throughput: 69.52 Mbit/s
95th percentile per-packet one-way delay: 43.685 ms
Loss rate: 2.47%

Run 9: Report of Verus — Data Link

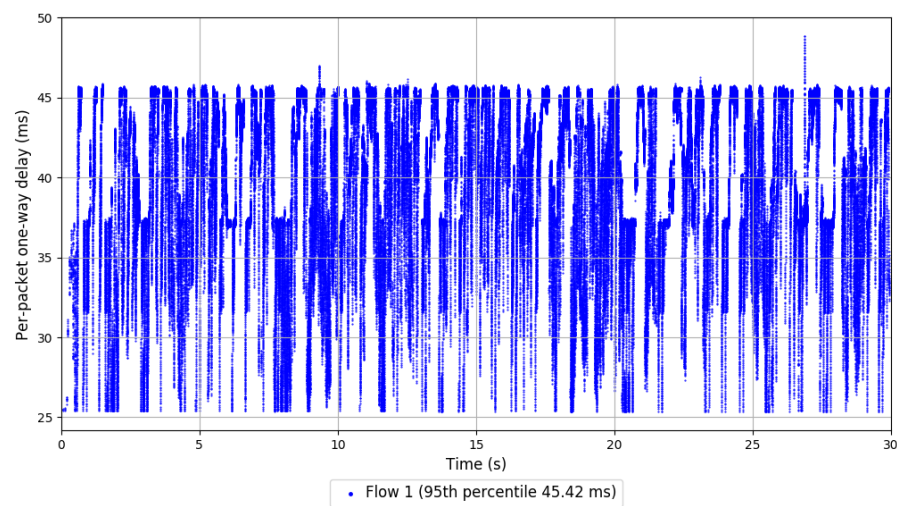
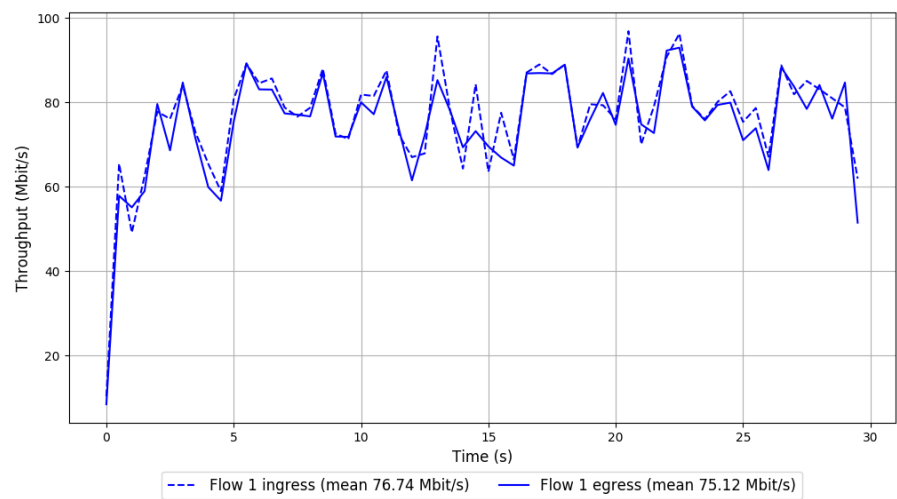


Run 10: Statistics of Verus

Start at: 2018-02-20 01:22:25
End at: 2018-02-20 01:22:55
Local clock offset: -5.225 ms
Remote clock offset: -5.754 ms

Below is generated by plot.py at 2018-02-20 06:38:29
Datalink statistics
-- Total of 1 flow:
Average throughput: 75.12 Mbit/s
95th percentile per-packet one-way delay: 45.422 ms
Loss rate: 2.37%
-- Flow 1:
Average throughput: 75.12 Mbit/s
95th percentile per-packet one-way delay: 45.422 ms
Loss rate: 2.37%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-19 21:24:46

End at: 2018-02-19 21:25:16

Local clock offset: 1.084 ms

Remote clock offset: -5.655 ms

Below is generated by plot.py at 2018-02-20 06:39:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.22 Mbit/s

95th percentile per-packet one-way delay: 41.877 ms

Loss rate: 2.21%

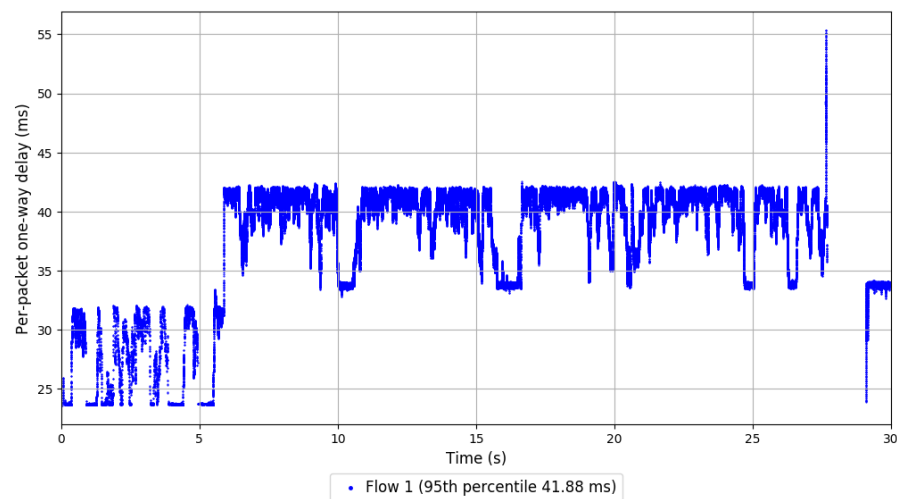
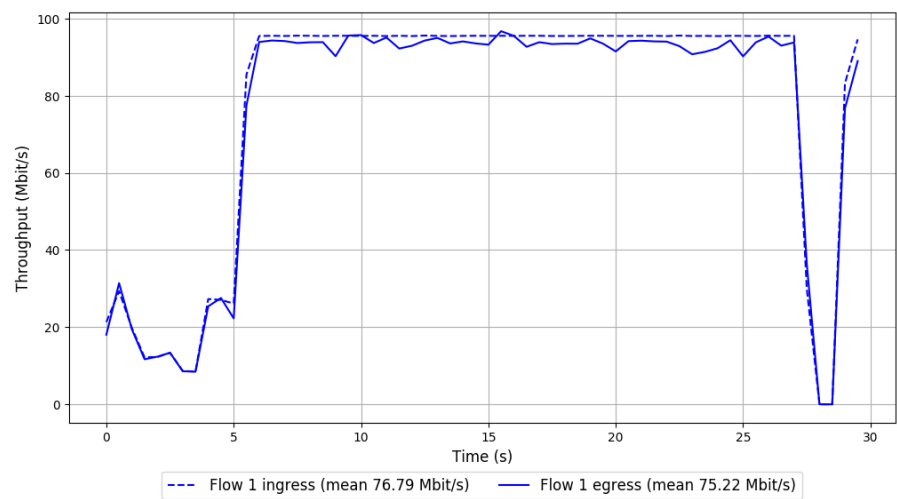
-- Flow 1:

Average throughput: 75.22 Mbit/s

95th percentile per-packet one-way delay: 41.877 ms

Loss rate: 2.21%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-19 21:51:31

End at: 2018-02-19 21:52:01

Local clock offset: -0.79 ms

Remote clock offset: -3.04 ms

Below is generated by plot.py at 2018-02-20 06:39:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.12 Mbit/s

95th percentile per-packet one-way delay: 41.448 ms

Loss rate: 2.41%

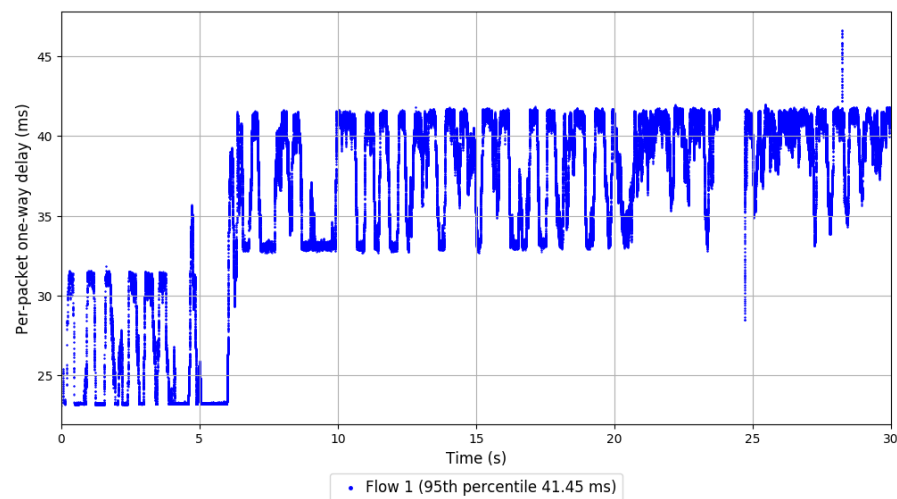
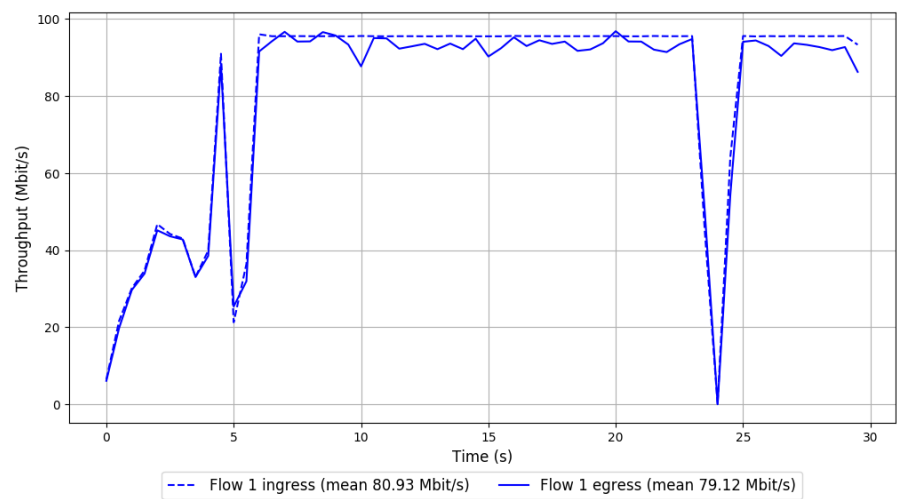
-- Flow 1:

Average throughput: 79.12 Mbit/s

95th percentile per-packet one-way delay: 41.448 ms

Loss rate: 2.41%

Run 2: Report of Copa — Data Link

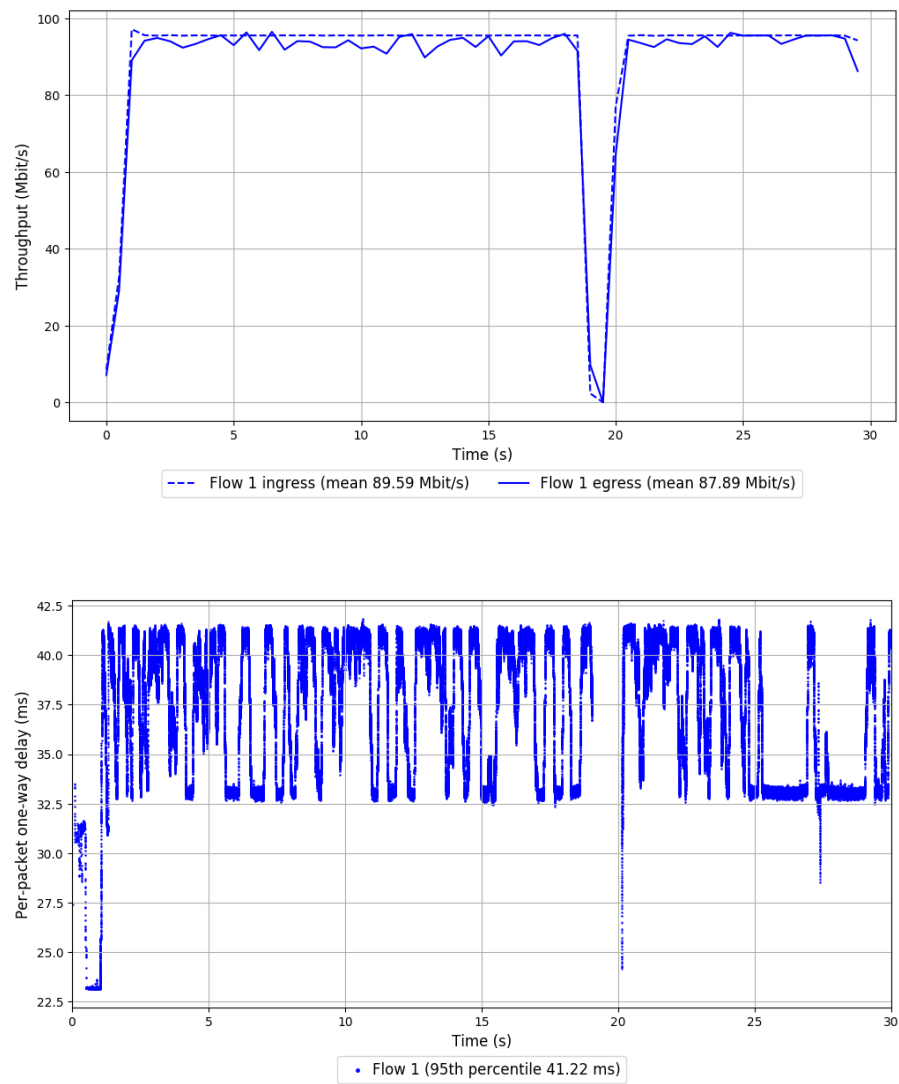


Run 3: Statistics of Copa

Start at: 2018-02-19 22:19:17
End at: 2018-02-19 22:19:47
Local clock offset: -4.93 ms
Remote clock offset: -10.784 ms

Below is generated by plot.py at 2018-02-20 06:40:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 87.89 Mbit/s
95th percentile per-packet one-way delay: 41.223 ms
Loss rate: 2.09%
-- Flow 1:
Average throughput: 87.89 Mbit/s
95th percentile per-packet one-way delay: 41.223 ms
Loss rate: 2.09%

Run 3: Report of Copa — Data Link

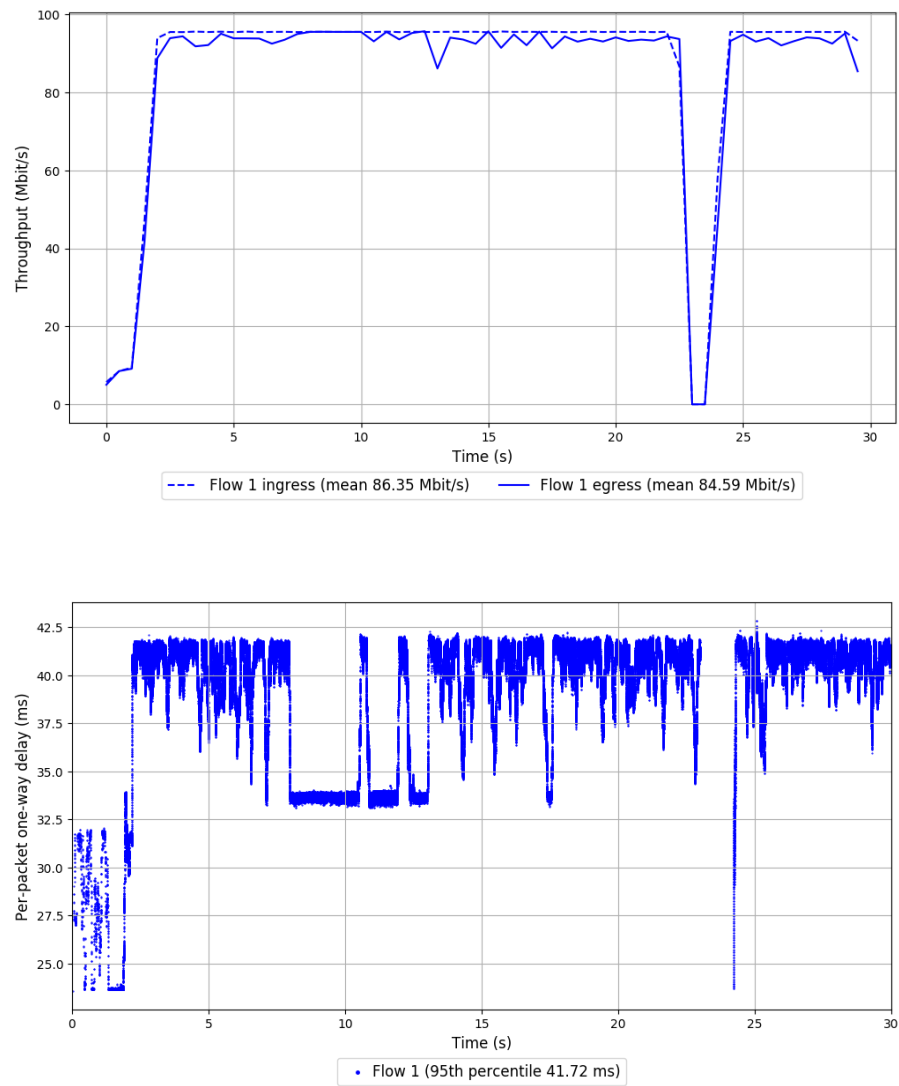


Run 4: Statistics of Copa

Start at: 2018-02-19 22:46:30
End at: 2018-02-19 22:47:00
Local clock offset: -3.702 ms
Remote clock offset: -9.974 ms

Below is generated by plot.py at 2018-02-20 06:40:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 84.59 Mbit/s
95th percentile per-packet one-way delay: 41.718 ms
Loss rate: 2.21%
-- Flow 1:
Average throughput: 84.59 Mbit/s
95th percentile per-packet one-way delay: 41.718 ms
Loss rate: 2.21%

Run 4: Report of Copa — Data Link

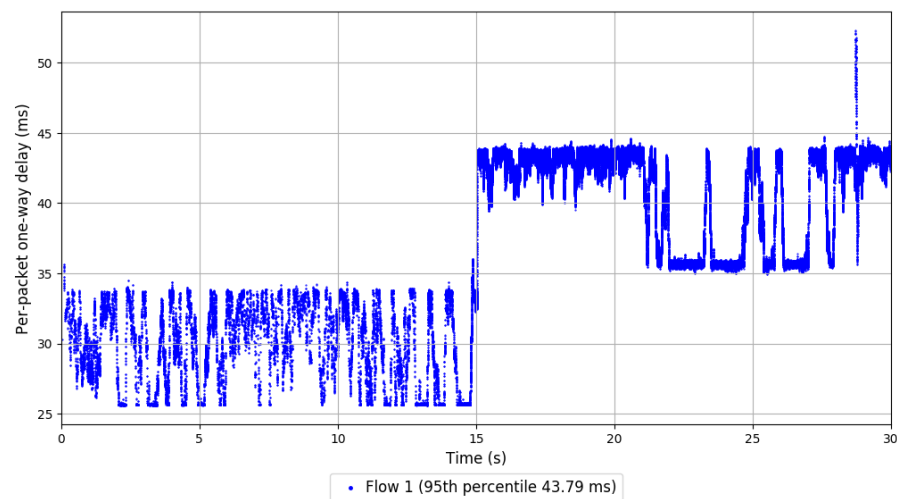
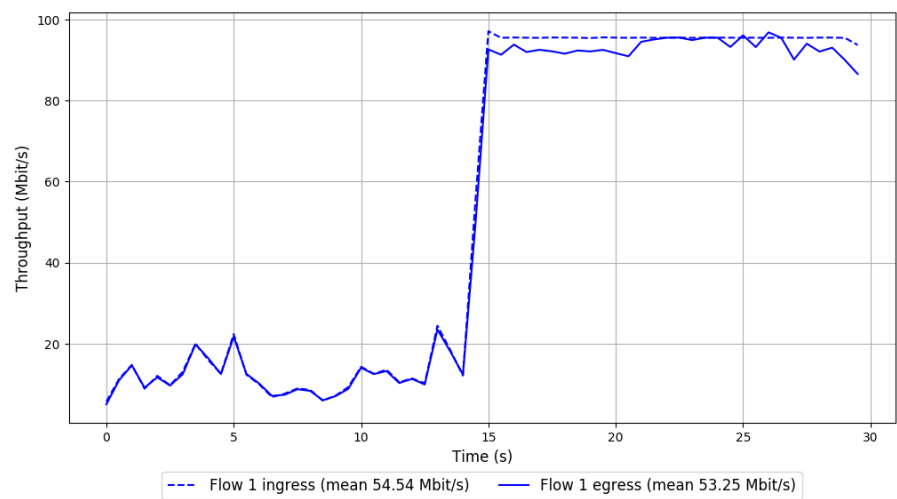


Run 5: Statistics of Copa

Start at: 2018-02-19 23:13:47
End at: 2018-02-19 23:14:17
Local clock offset: 2.283 ms
Remote clock offset: -7.986 ms

Below is generated by plot.py at 2018-02-20 06:40:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 53.25 Mbit/s
95th percentile per-packet one-way delay: 43.790 ms
Loss rate: 2.55%
-- Flow 1:
Average throughput: 53.25 Mbit/s
95th percentile per-packet one-way delay: 43.790 ms
Loss rate: 2.55%

Run 5: Report of Copa — Data Link

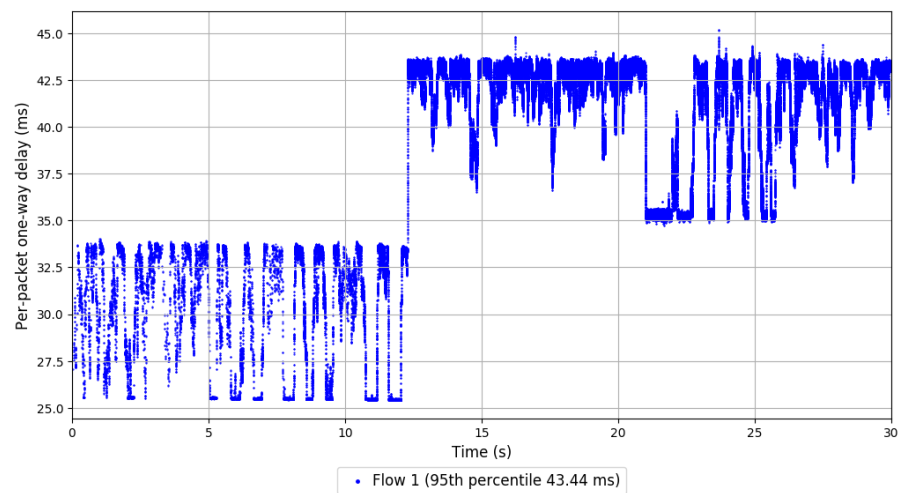
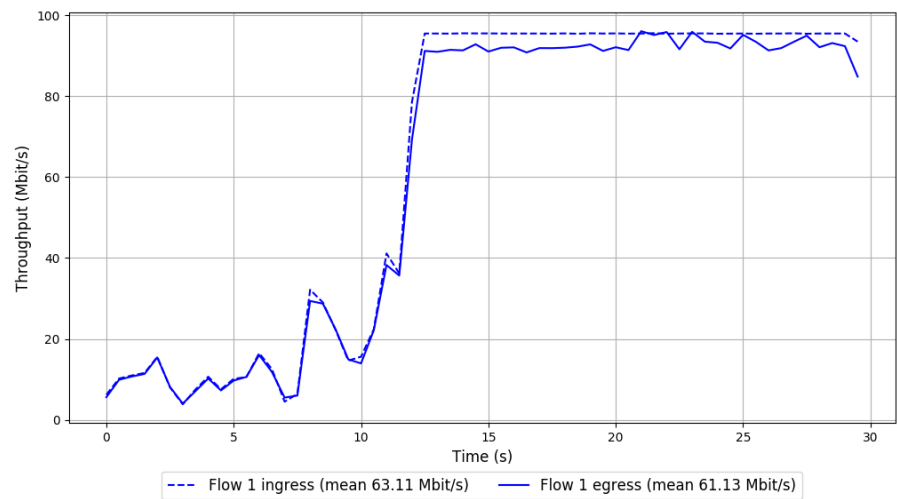


Run 6: Statistics of Copa

Start at: 2018-02-19 23:41:55
End at: 2018-02-19 23:42:25
Local clock offset: 2.756 ms
Remote clock offset: -5.633 ms

Below is generated by plot.py at 2018-02-20 06:40:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 61.13 Mbit/s
95th percentile per-packet one-way delay: 43.436 ms
Loss rate: 3.33%
-- Flow 1:
Average throughput: 61.13 Mbit/s
95th percentile per-packet one-way delay: 43.436 ms
Loss rate: 3.33%

Run 6: Report of Copa — Data Link

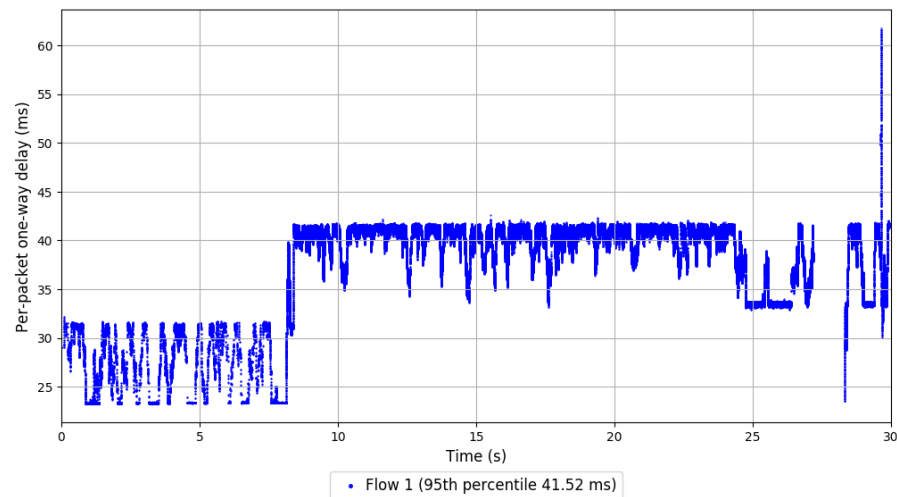
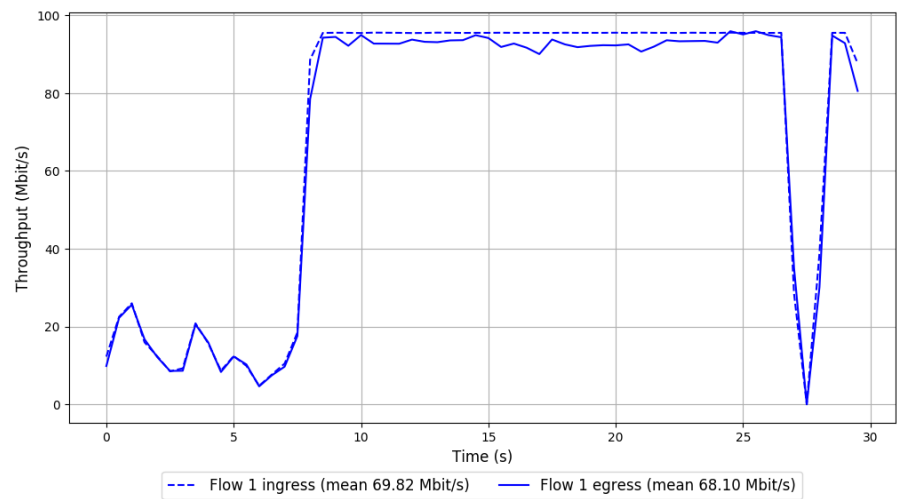


Run 7: Statistics of Copa

Start at: 2018-02-20 00:10:32
End at: 2018-02-20 00:11:02
Local clock offset: 0.086 ms
Remote clock offset: -10.054 ms

Below is generated by plot.py at 2018-02-20 06:40:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 68.10 Mbit/s
95th percentile per-packet one-way delay: 41.520 ms
Loss rate: 2.68%
-- Flow 1:
Average throughput: 68.10 Mbit/s
95th percentile per-packet one-way delay: 41.520 ms
Loss rate: 2.68%

Run 7: Report of Copa — Data Link

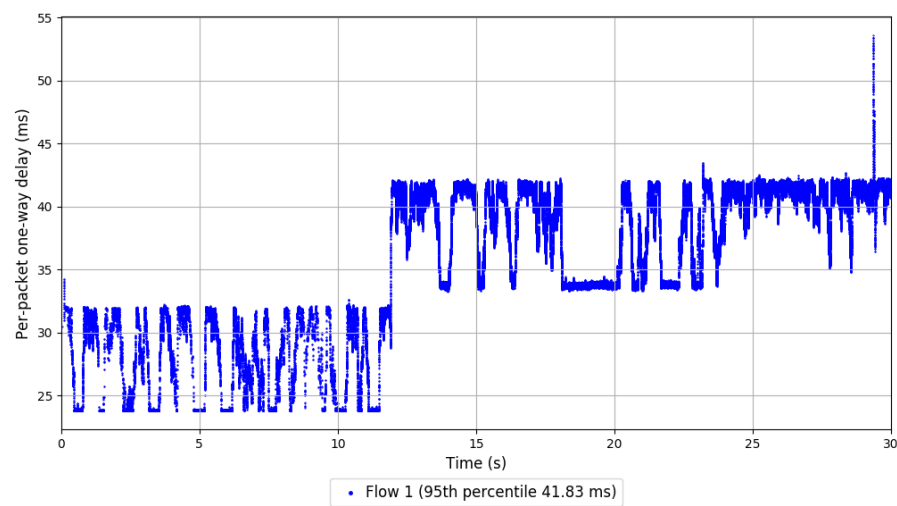
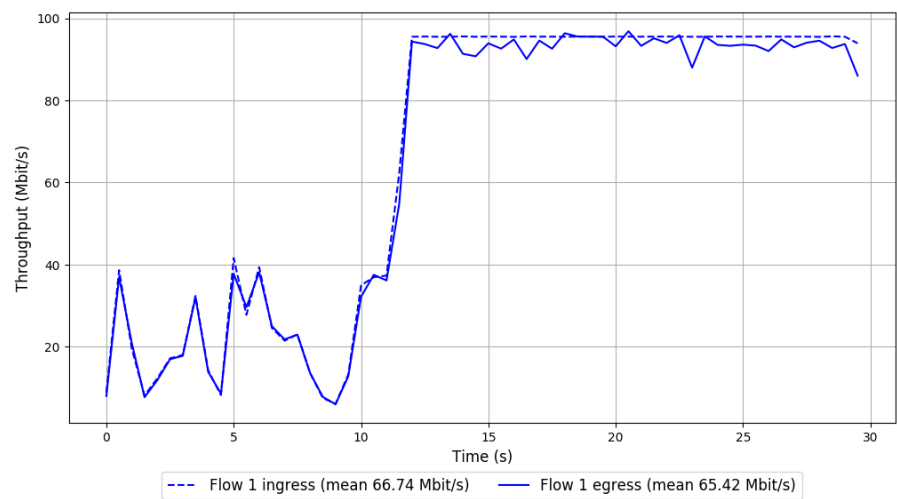


Run 8: Statistics of Copa

Start at: 2018-02-20 00:38:46
End at: 2018-02-20 00:39:16
Local clock offset: -4.905 ms
Remote clock offset: -3.855 ms

Below is generated by plot.py at 2018-02-20 06:40:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 65.42 Mbit/s
95th percentile per-packet one-way delay: 41.830 ms
Loss rate: 2.17%
-- Flow 1:
Average throughput: 65.42 Mbit/s
95th percentile per-packet one-way delay: 41.830 ms
Loss rate: 2.17%

Run 8: Report of Copa — Data Link

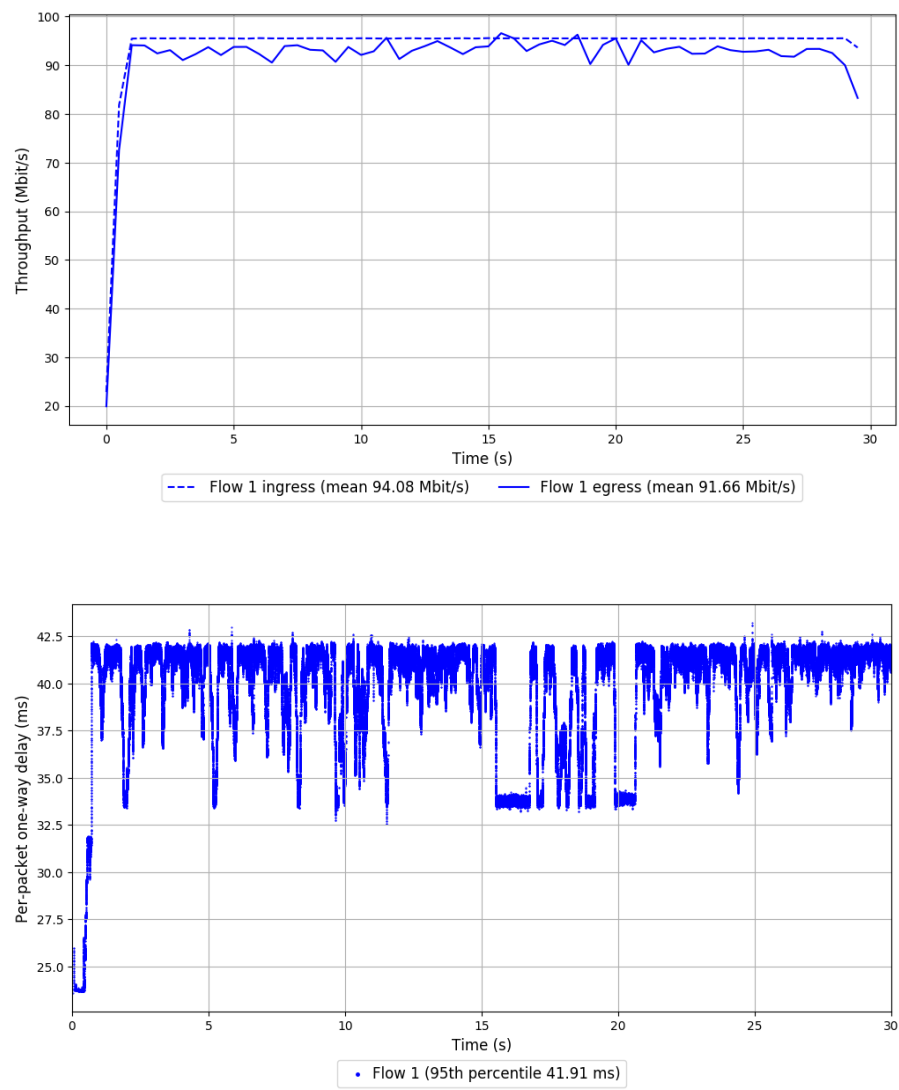


Run 9: Statistics of Copa

Start at: 2018-02-20 01:06:19
End at: 2018-02-20 01:06:49
Local clock offset: -6.178 ms
Remote clock offset: -4.714 ms

Below is generated by plot.py at 2018-02-20 06:41:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.66 Mbit/s
95th percentile per-packet one-way delay: 41.910 ms
Loss rate: 2.74%
-- Flow 1:
Average throughput: 91.66 Mbit/s
95th percentile per-packet one-way delay: 41.910 ms
Loss rate: 2.74%

Run 9: Report of Copa — Data Link

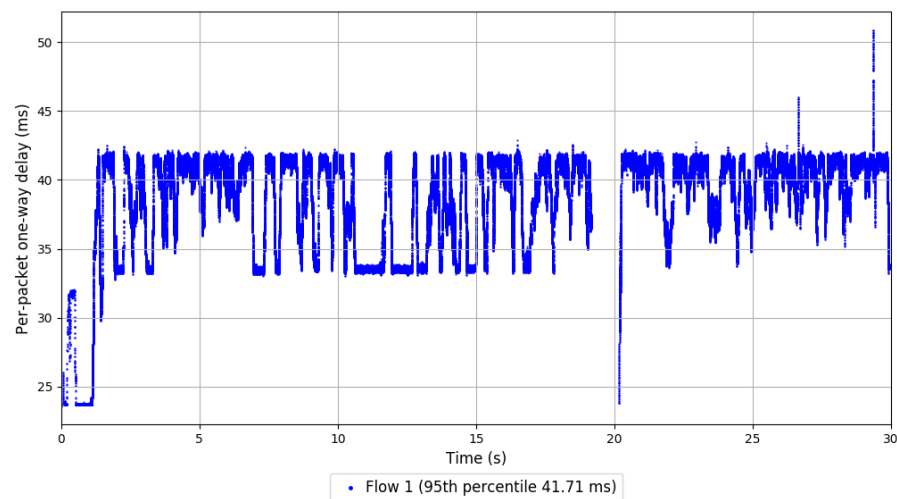
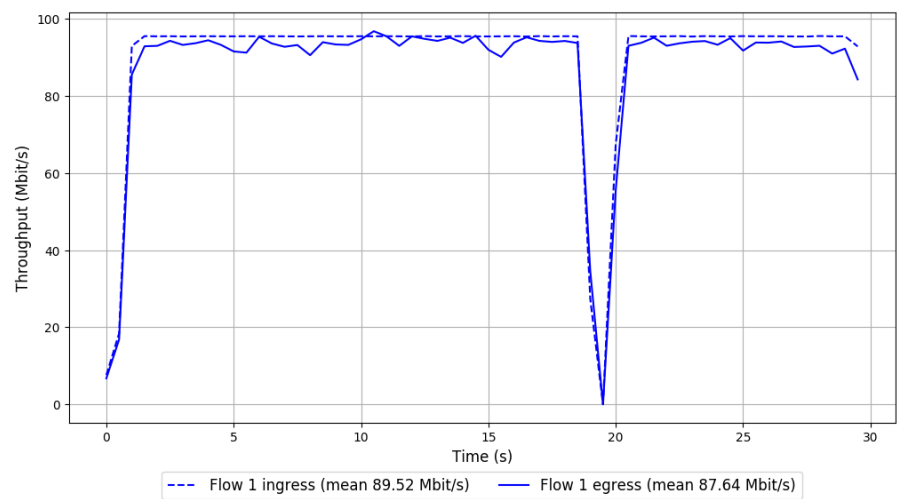


Run 10: Statistics of Copa

Start at: 2018-02-20 01:34:31
End at: 2018-02-20 01:35:01
Local clock offset: -4.32 ms
Remote clock offset: -3.084 ms

Below is generated by plot.py at 2018-02-20 06:41:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 87.64 Mbit/s
95th percentile per-packet one-way delay: 41.711 ms
Loss rate: 2.29%
-- Flow 1:
Average throughput: 87.64 Mbit/s
95th percentile per-packet one-way delay: 41.711 ms
Loss rate: 2.29%

Run 10: Report of Copa — Data Link

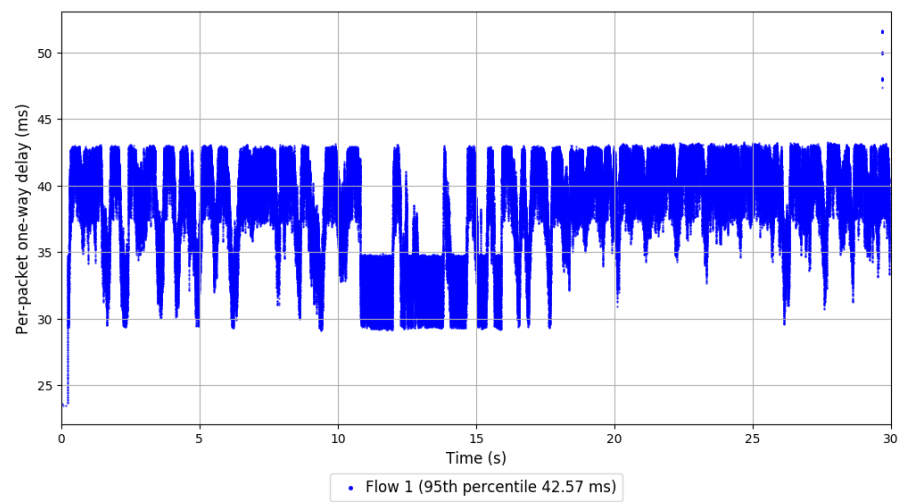
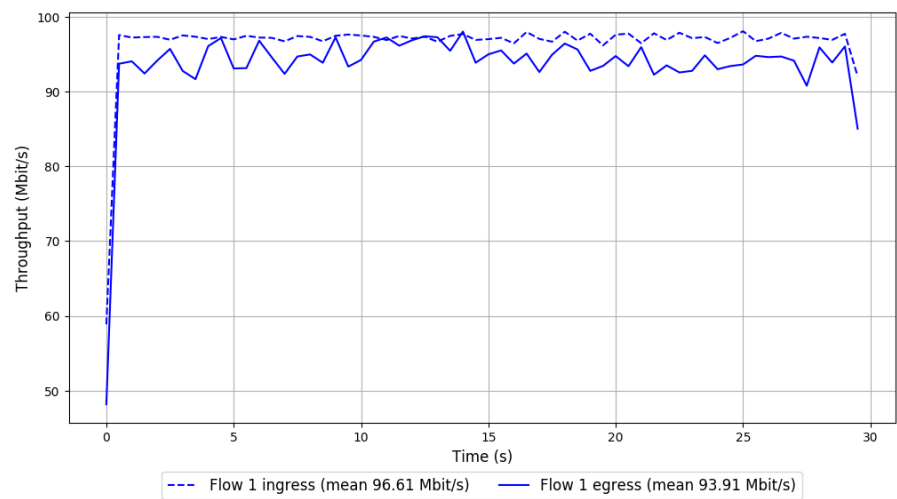


Run 1: Statistics of FillP

Start at: 2018-02-19 21:32:05
End at: 2018-02-19 21:32:35
Local clock offset: 0.437 ms
Remote clock offset: -4.538 ms

Below is generated by plot.py at 2018-02-20 06:41:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.91 Mbit/s
95th percentile per-packet one-way delay: 42.573 ms
Loss rate: 2.98%
-- Flow 1:
Average throughput: 93.91 Mbit/s
95th percentile per-packet one-way delay: 42.573 ms
Loss rate: 2.98%

Run 1: Report of FillP — Data Link

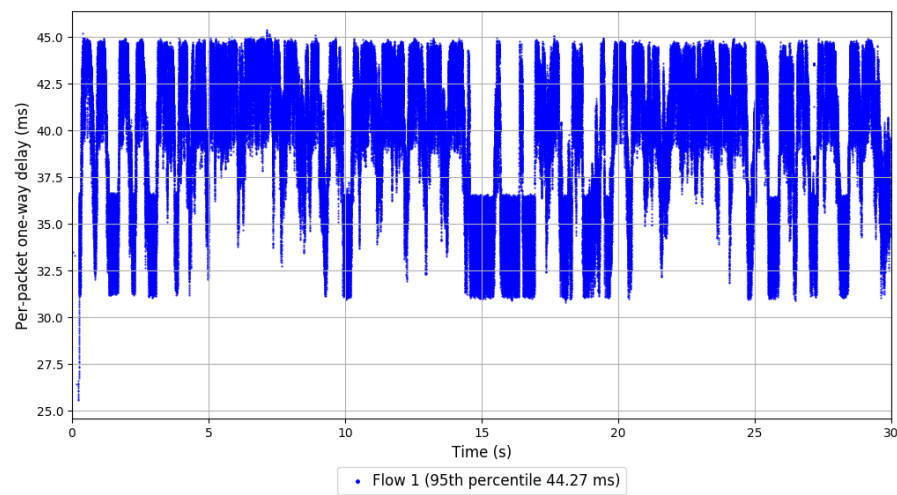
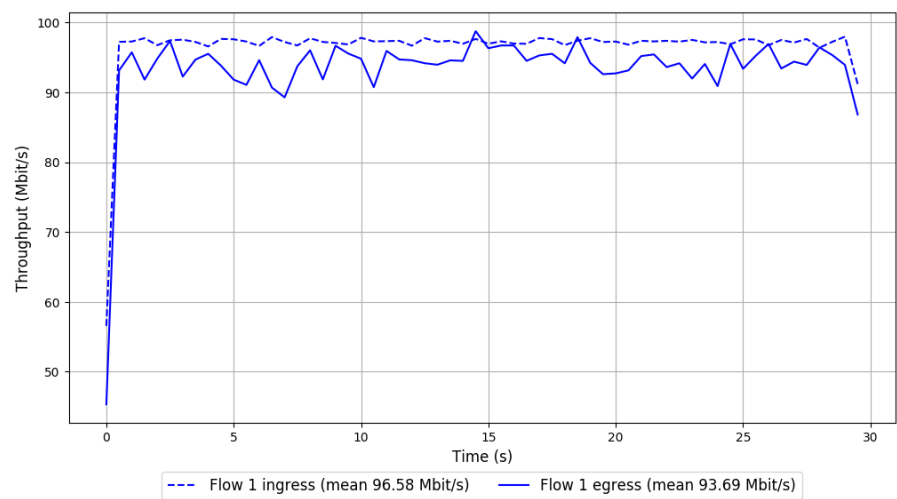


Run 2: Statistics of FillP

Start at: 2018-02-19 21:58:58
End at: 2018-02-19 21:59:28
Local clock offset: -2.695 ms
Remote clock offset: -7.197 ms

Below is generated by plot.py at 2018-02-20 06:41:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.69 Mbit/s
95th percentile per-packet one-way delay: 44.268 ms
Loss rate: 3.20%
-- Flow 1:
Average throughput: 93.69 Mbit/s
95th percentile per-packet one-way delay: 44.268 ms
Loss rate: 3.20%

Run 2: Report of FillP — Data Link

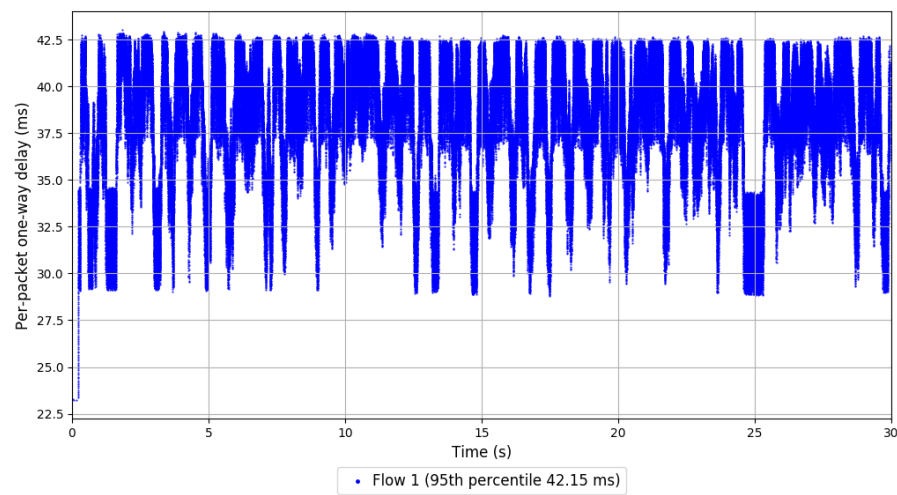
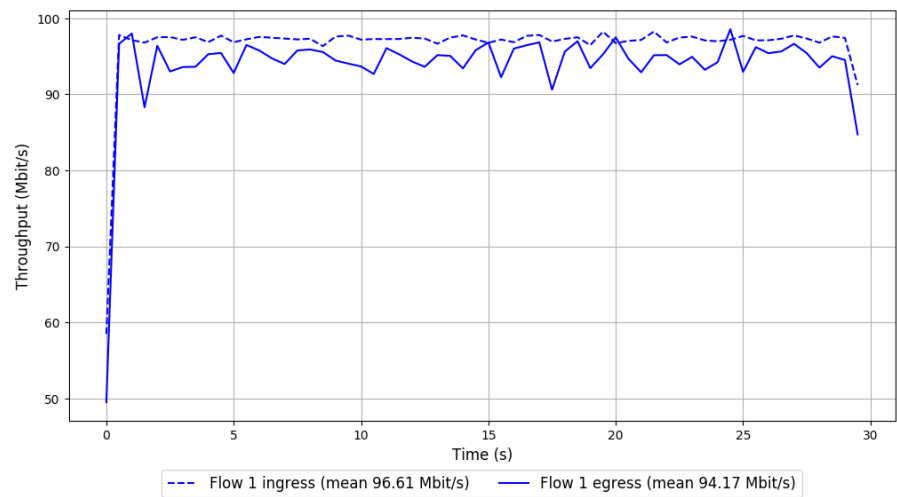


Run 3: Statistics of FillP

Start at: 2018-02-19 22:26:47
End at: 2018-02-19 22:27:17
Local clock offset: -4.878 ms
Remote clock offset: -12.204 ms

Below is generated by plot.py at 2018-02-20 06:41:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 42.153 ms
Loss rate: 2.72%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 42.153 ms
Loss rate: 2.72%

Run 3: Report of FillP — Data Link

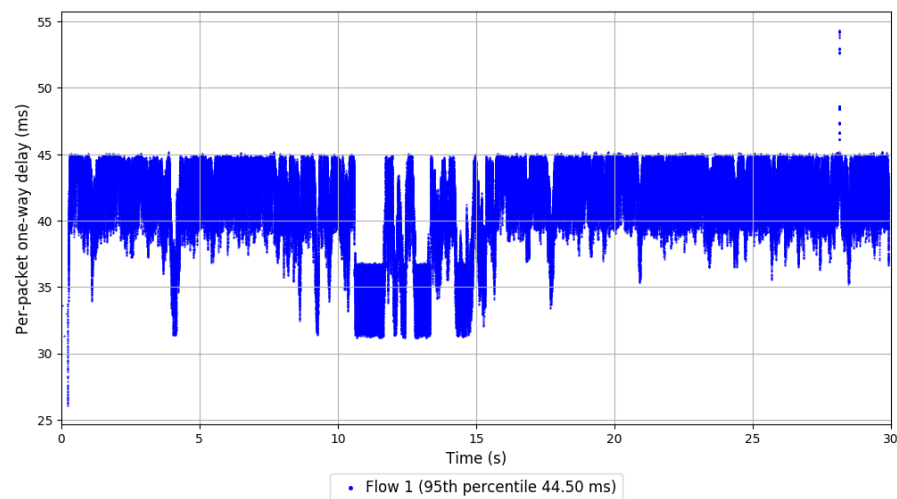
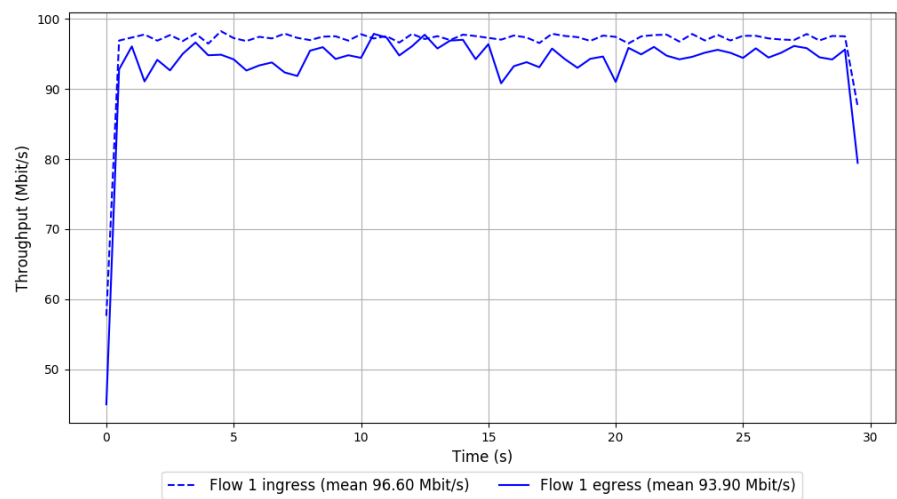


Run 4: Statistics of FillP

Start at: 2018-02-19 22:54:04
End at: 2018-02-19 22:54:34
Local clock offset: -3.955 ms
Remote clock offset: -11.994 ms

Below is generated by plot.py at 2018-02-20 06:41:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.90 Mbit/s
95th percentile per-packet one-way delay: 44.500 ms
Loss rate: 3.00%
-- Flow 1:
Average throughput: 93.90 Mbit/s
95th percentile per-packet one-way delay: 44.500 ms
Loss rate: 3.00%

Run 4: Report of FillP — Data Link

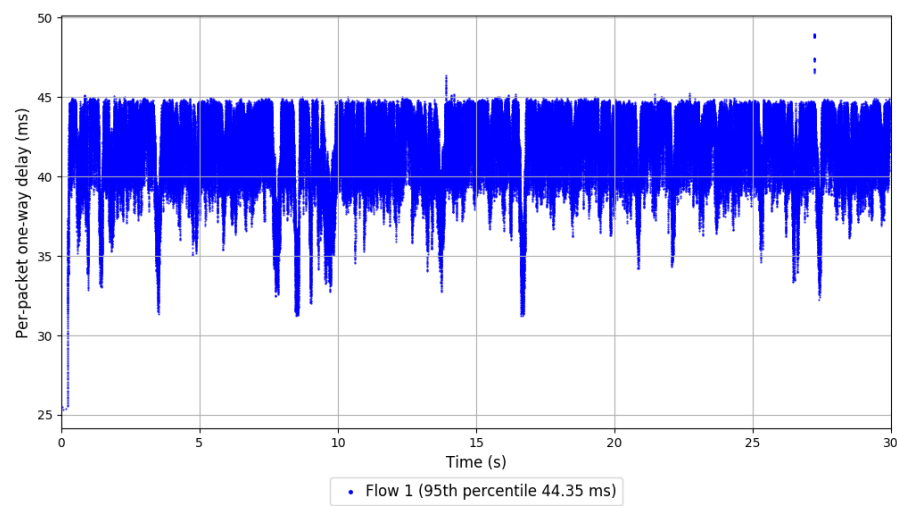
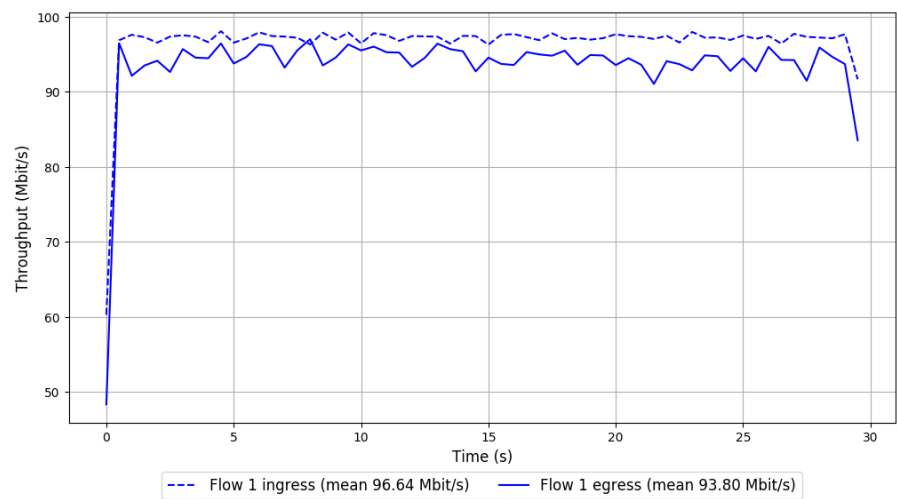


Run 5: Statistics of FillP

Start at: 2018-02-19 23:21:15
End at: 2018-02-19 23:21:45
Local clock offset: 3.328 ms
Remote clock offset: -6.179 ms

Below is generated by plot.py at 2018-02-20 06:41:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 44.351 ms
Loss rate: 3.11%
-- Flow 1:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 44.351 ms
Loss rate: 3.11%

Run 5: Report of FillP — Data Link

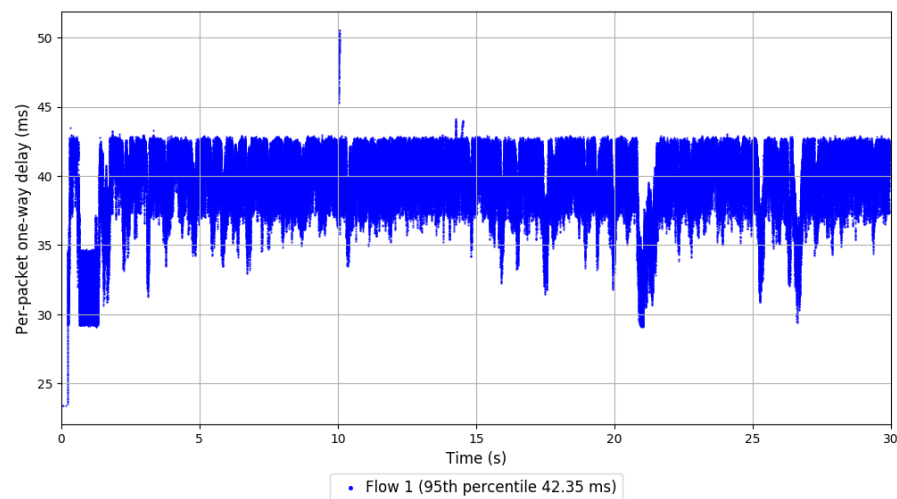
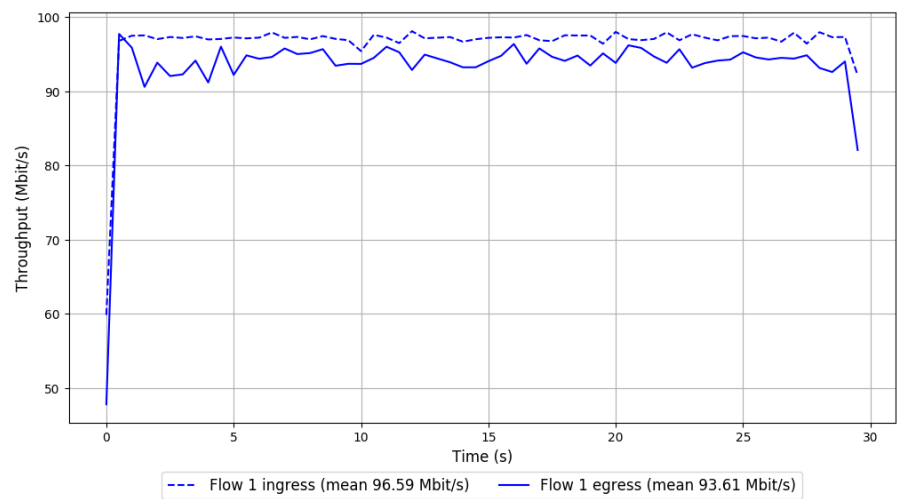


Run 6: Statistics of FillP

Start at: 2018-02-19 23:49:56
End at: 2018-02-19 23:50:26
Local clock offset: 2.141 ms
Remote clock offset: -7.254 ms

Below is generated by plot.py at 2018-02-20 06:41:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 93.61 Mbit/s
95th percentile per-packet one-way delay: 42.349 ms
Loss rate: 3.27%
-- Flow 1:
Average throughput: 93.61 Mbit/s
95th percentile per-packet one-way delay: 42.349 ms
Loss rate: 3.27%

Run 6: Report of FillP — Data Link

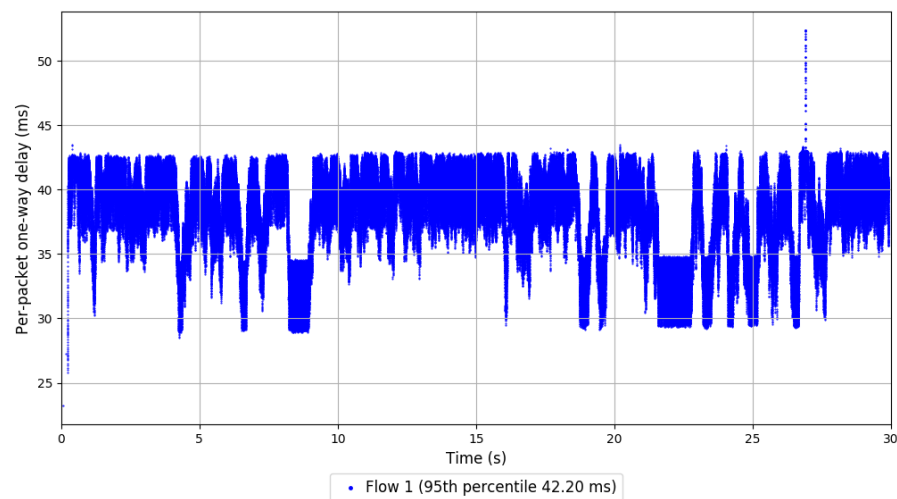
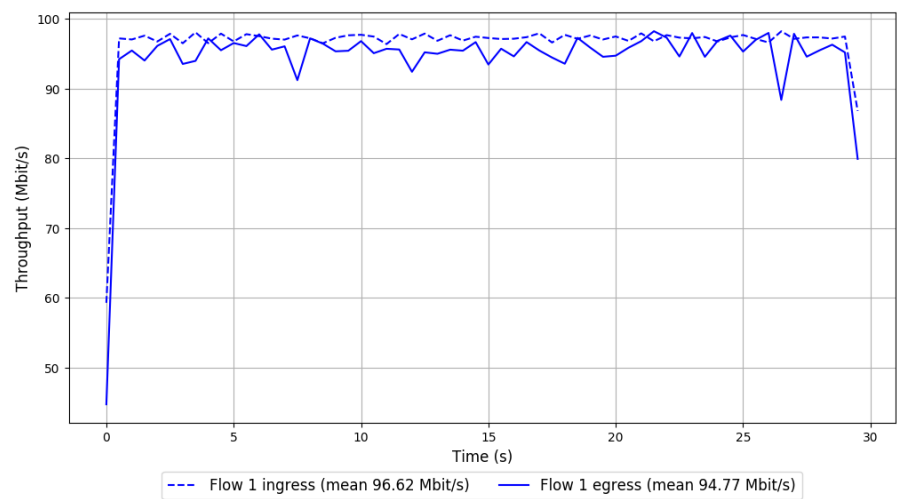


Run 7: Statistics of FillP

Start at: 2018-02-20 00:18:12
End at: 2018-02-20 00:18:42
Local clock offset: -2.345 ms
Remote clock offset: -7.151 ms

Below is generated by plot.py at 2018-02-20 06:42:46
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.77 Mbit/s
95th percentile per-packet one-way delay: 42.197 ms
Loss rate: 2.10%
-- Flow 1:
Average throughput: 94.77 Mbit/s
95th percentile per-packet one-way delay: 42.197 ms
Loss rate: 2.10%

Run 7: Report of FillP — Data Link

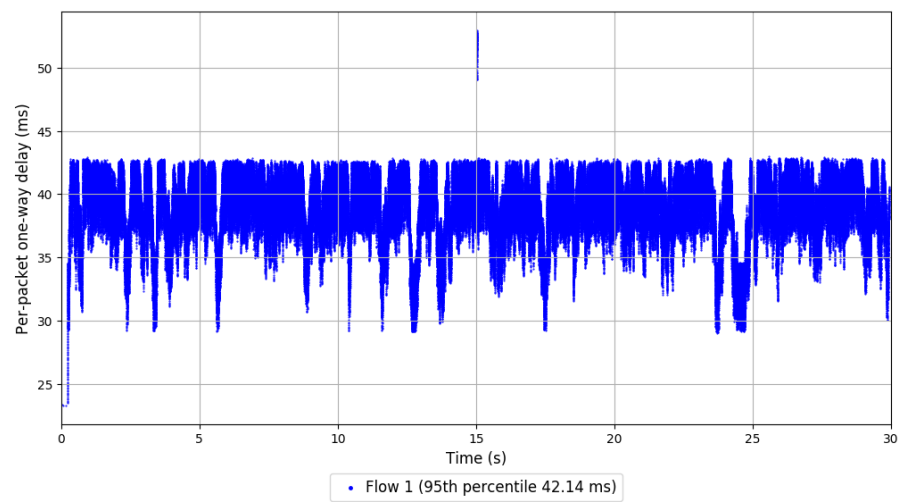
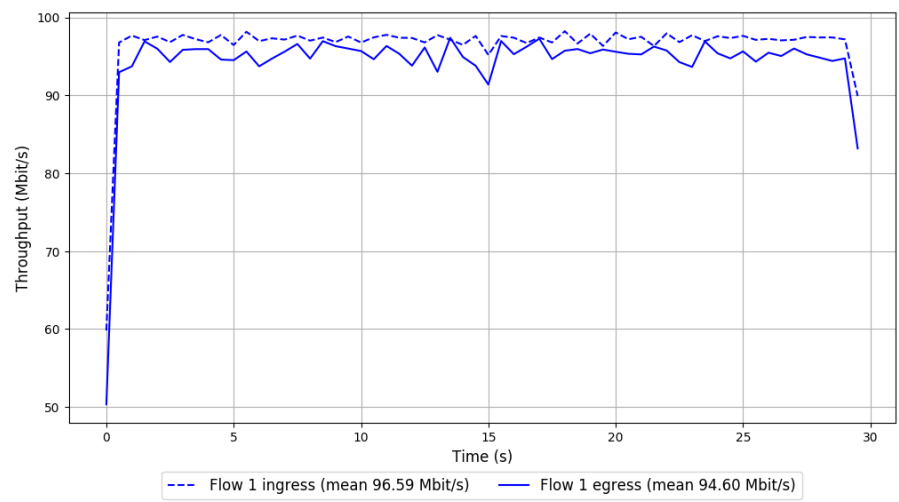


Run 8: Statistics of FillP

Start at: 2018-02-20 00:46:09
End at: 2018-02-20 00:46:39
Local clock offset: -5.264 ms
Remote clock offset: -3.486 ms

Below is generated by plot.py at 2018-02-20 06:43:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.60 Mbit/s
95th percentile per-packet one-way delay: 42.143 ms
Loss rate: 2.25%
-- Flow 1:
Average throughput: 94.60 Mbit/s
95th percentile per-packet one-way delay: 42.143 ms
Loss rate: 2.25%

Run 8: Report of FillP — Data Link

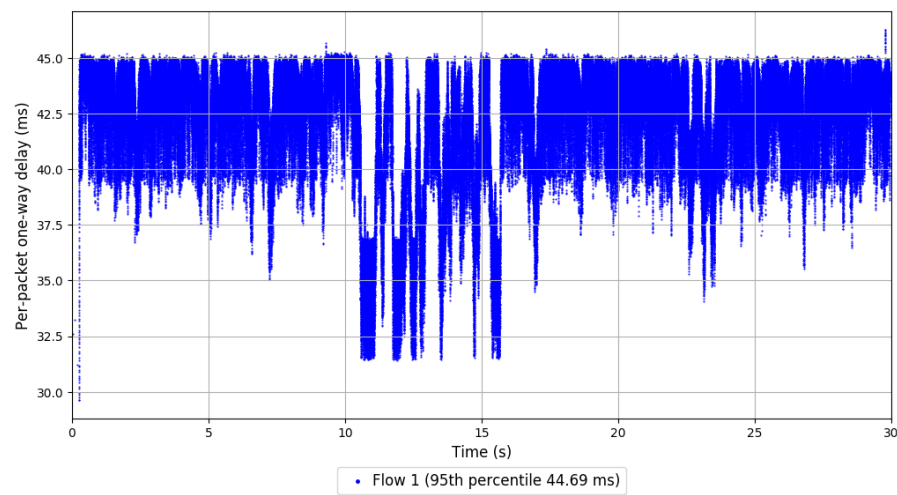
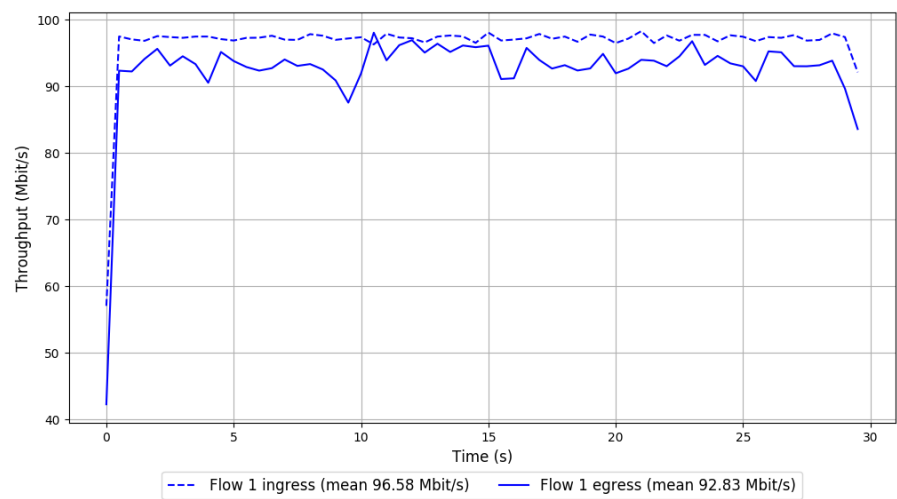


Run 9: Statistics of FillP

Start at: 2018-02-20 01:14:36
End at: 2018-02-20 01:15:06
Local clock offset: -6.643 ms
Remote clock offset: -6.373 ms

Below is generated by plot.py at 2018-02-20 06:43:18
Datalink statistics
-- Total of 1 flow:
Average throughput: 92.83 Mbit/s
95th percentile per-packet one-way delay: 44.693 ms
Loss rate: 4.09%
-- Flow 1:
Average throughput: 92.83 Mbit/s
95th percentile per-packet one-way delay: 44.693 ms
Loss rate: 4.09%

Run 9: Report of FillP — Data Link

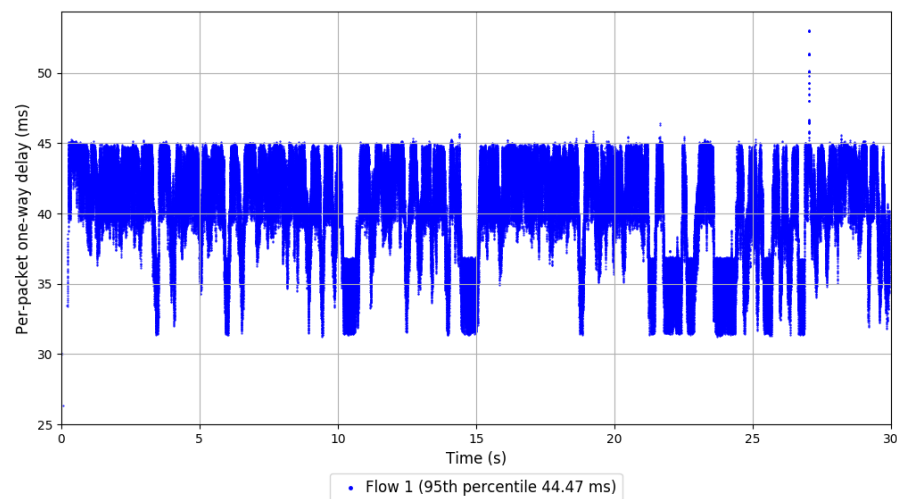
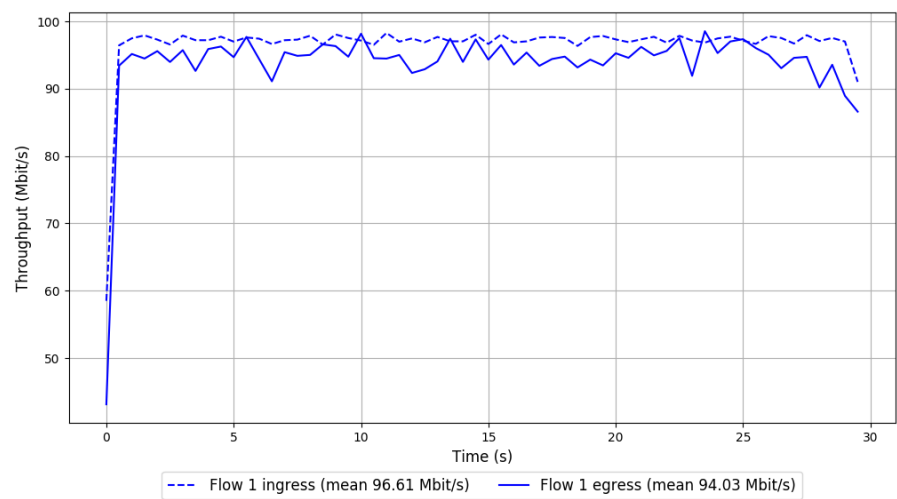


Run 10: Statistics of FillP

Start at: 2018-02-20 01:42:31
End at: 2018-02-20 01:43:01
Local clock offset: -4.238 ms
Remote clock offset: -4.507 ms

Below is generated by plot.py at 2018-02-20 06:43:20
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 44.472 ms
Loss rate: 2.86%
-- Flow 1:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 44.472 ms
Loss rate: 2.86%

Run 10: Report of FillP — Data Link



Run 1: Statistics of Indigo-1-32

Start at: 2018-02-19 21:09:42

End at: 2018-02-19 21:10:12

Local clock offset: 2.564 ms

Remote clock offset: -5.939 ms

Below is generated by plot.py at 2018-02-20 06:43:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 62.91 Mbit/s

95th percentile per-packet one-way delay: 32.019 ms

Loss rate: 1.07%

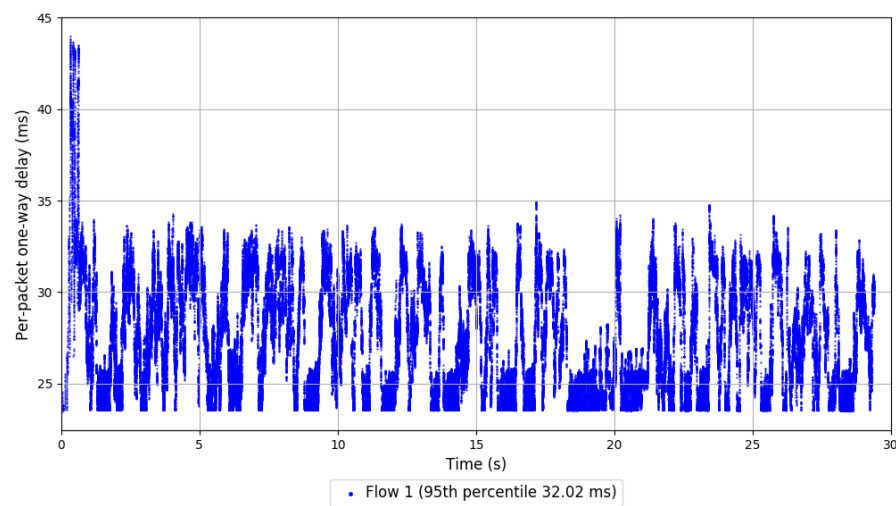
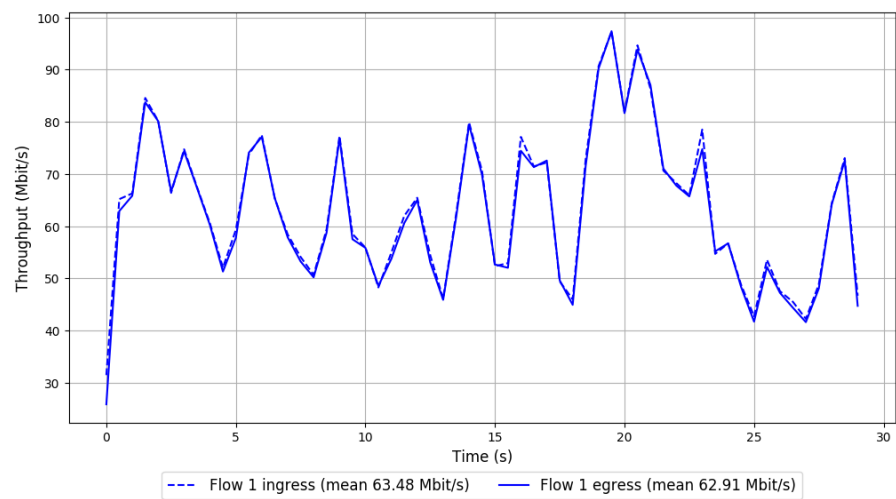
-- Flow 1:

Average throughput: 62.91 Mbit/s

95th percentile per-packet one-way delay: 32.019 ms

Loss rate: 1.07%

Run 1: Report of Indigo-1-32 — Data Link



Run 2: Statistics of Indigo-1-32

Start at: 2018-02-19 21:36:18

End at: 2018-02-19 21:36:48

Local clock offset: 0.178 ms

Remote clock offset: -6.269 ms

Below is generated by plot.py at 2018-02-20 06:43:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.94 Mbit/s

95th percentile per-packet one-way delay: 34.045 ms

Loss rate: 1.22%

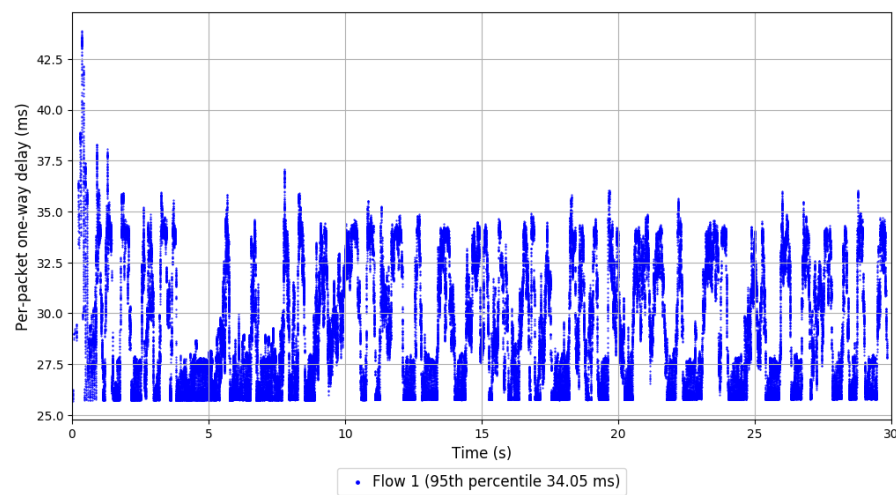
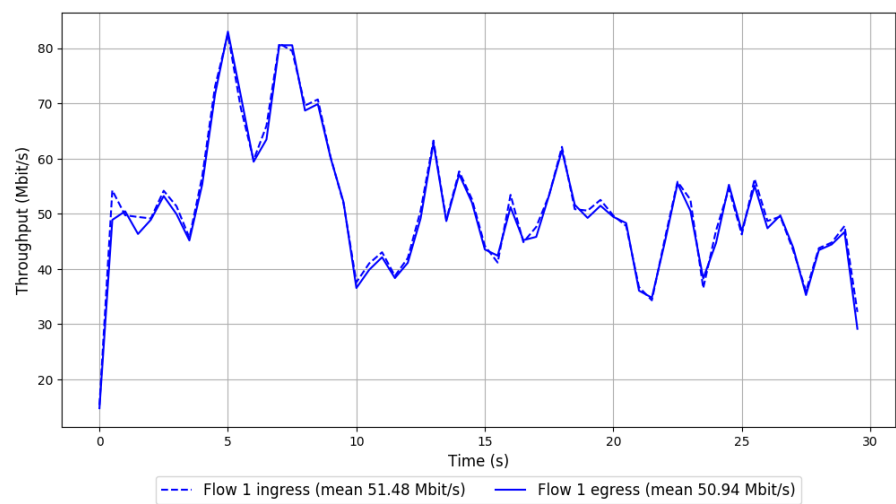
-- Flow 1:

Average throughput: 50.94 Mbit/s

95th percentile per-packet one-way delay: 34.045 ms

Loss rate: 1.22%

Run 2: Report of Indigo-1-32 — Data Link

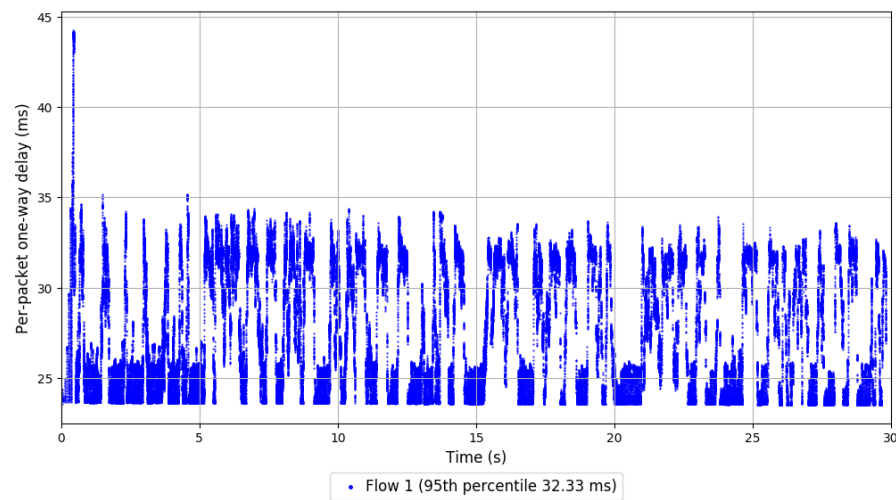
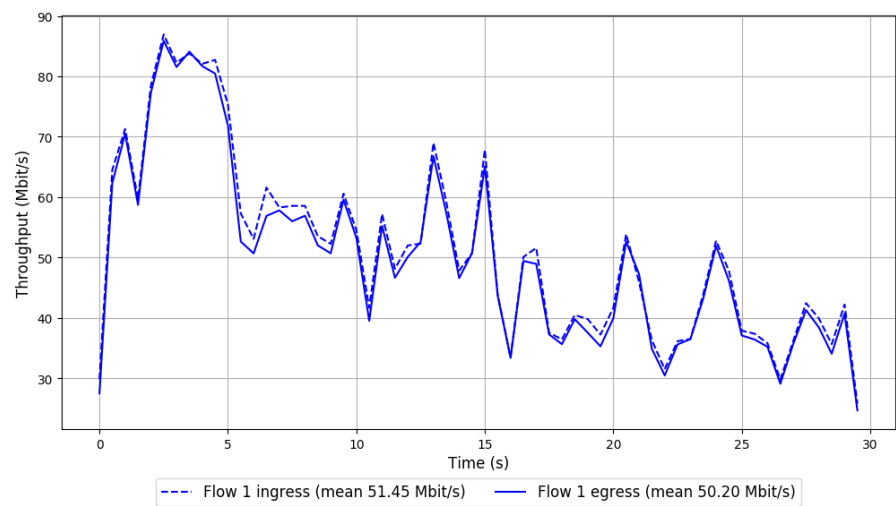


Run 3: Statistics of Indigo-1-32

Start at: 2018-02-19 22:03:18
End at: 2018-02-19 22:03:48
Local clock offset: -3.367 ms
Remote clock offset: -7.445 ms

Below is generated by plot.py at 2018-02-20 06:43:20
Datalink statistics
-- Total of 1 flow:
Average throughput: 50.20 Mbit/s
95th percentile per-packet one-way delay: 32.325 ms
Loss rate: 2.61%
-- Flow 1:
Average throughput: 50.20 Mbit/s
95th percentile per-packet one-way delay: 32.325 ms
Loss rate: 2.61%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-19 22:31:11

End at: 2018-02-19 22:31:41

Local clock offset: -4.214 ms

Remote clock offset: -12.1 ms

Below is generated by plot.py at 2018-02-20 06:43:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.03 Mbit/s

95th percentile per-packet one-way delay: 32.065 ms

Loss rate: 1.75%

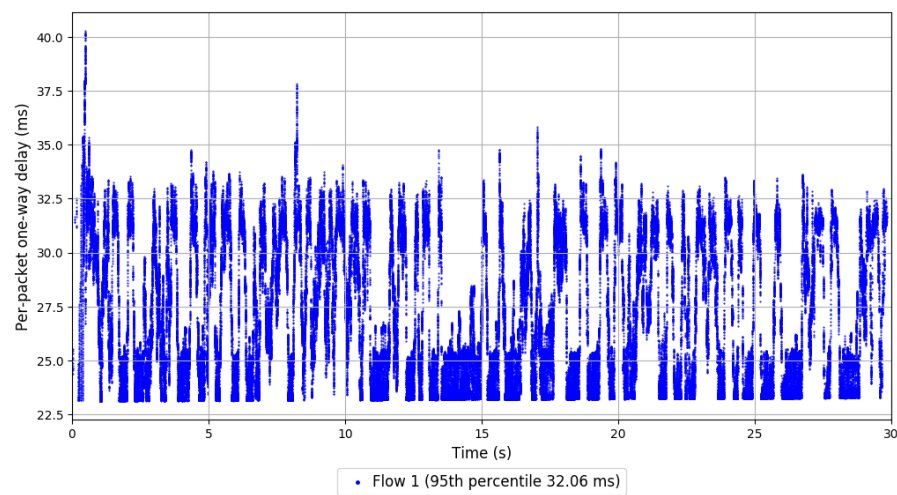
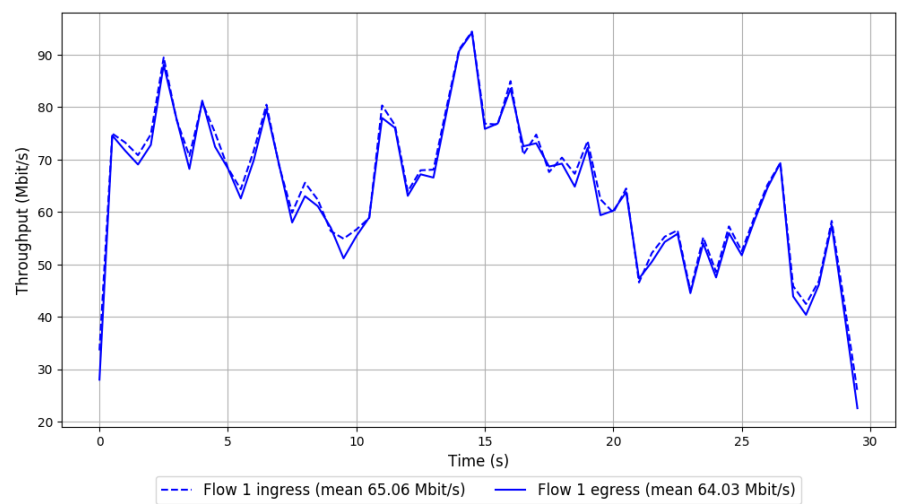
-- Flow 1:

Average throughput: 64.03 Mbit/s

95th percentile per-packet one-way delay: 32.065 ms

Loss rate: 1.75%

Run 4: Report of Indigo-1-32 — Data Link

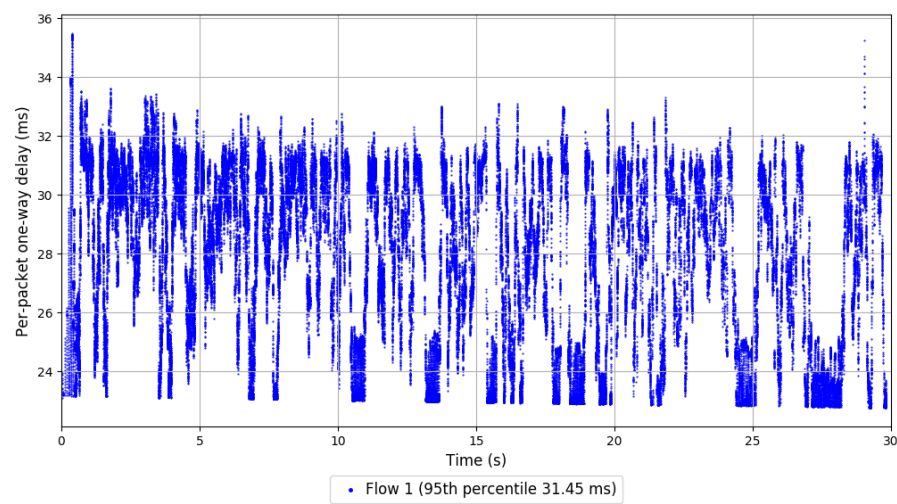
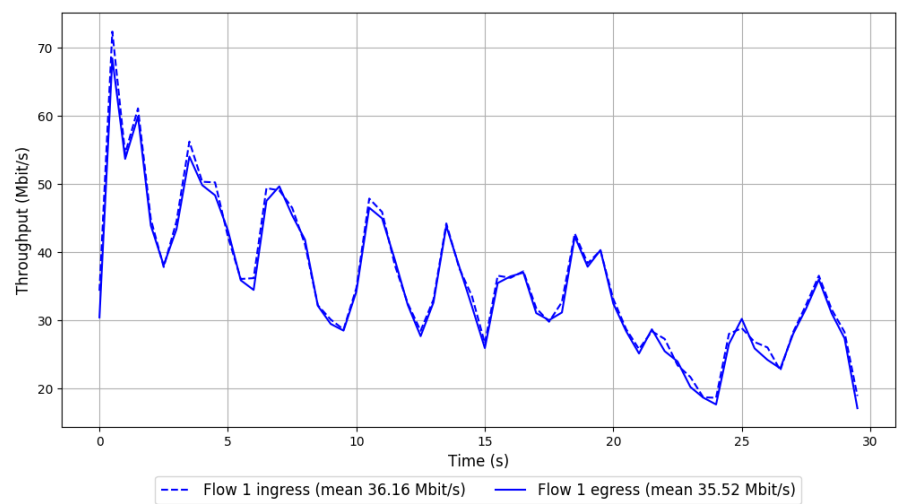


Run 5: Statistics of Indigo-1-32

Start at: 2018-02-19 22:58:25
End at: 2018-02-19 22:58:55
Local clock offset: -3.949 ms
Remote clock offset: -9.523 ms

Below is generated by plot.py at 2018-02-20 06:43:20
Datalink statistics
-- Total of 1 flow:
Average throughput: 35.52 Mbit/s
95th percentile per-packet one-way delay: 31.455 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 35.52 Mbit/s
95th percentile per-packet one-way delay: 31.455 ms
Loss rate: 1.94%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-19 23:25:32

End at: 2018-02-19 23:26:02

Local clock offset: 3.888 ms

Remote clock offset: -2.966 ms

Below is generated by plot.py at 2018-02-20 06:43:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 51.80 Mbit/s

95th percentile per-packet one-way delay: 32.177 ms

Loss rate: 1.80%

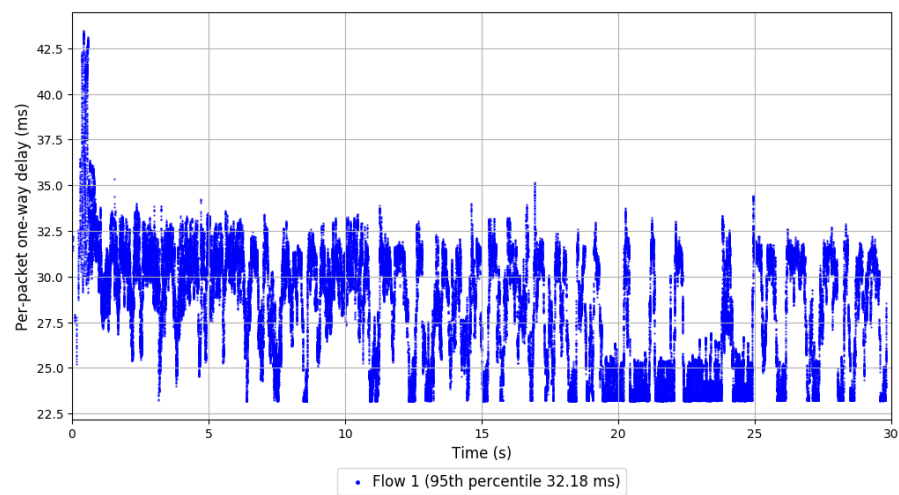
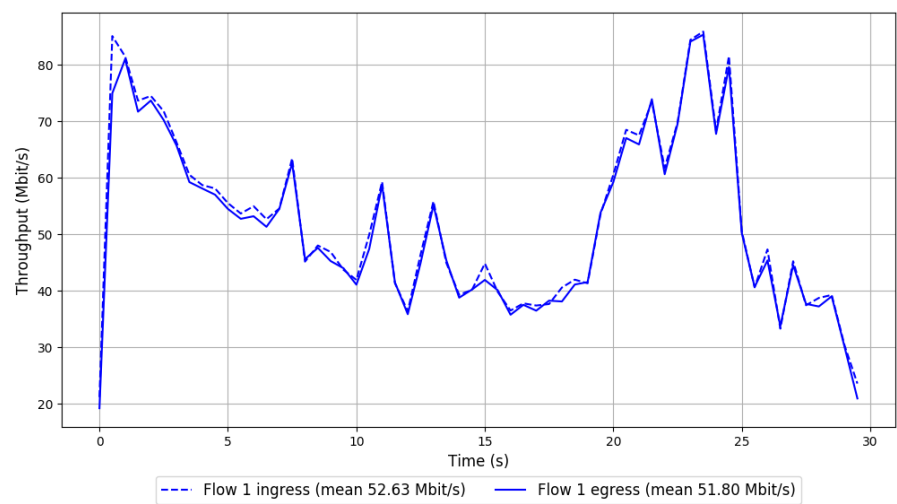
-- Flow 1:

Average throughput: 51.80 Mbit/s

95th percentile per-packet one-way delay: 32.177 ms

Loss rate: 1.80%

Run 6: Report of Indigo-1-32 — Data Link

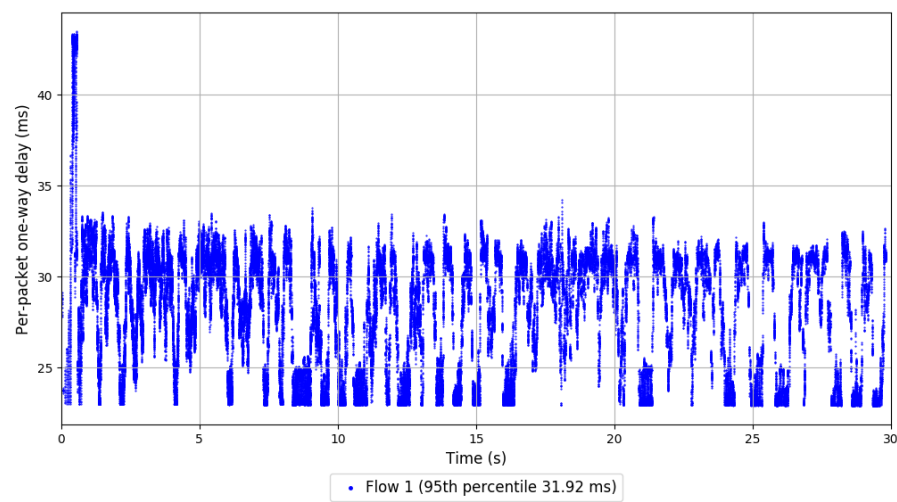
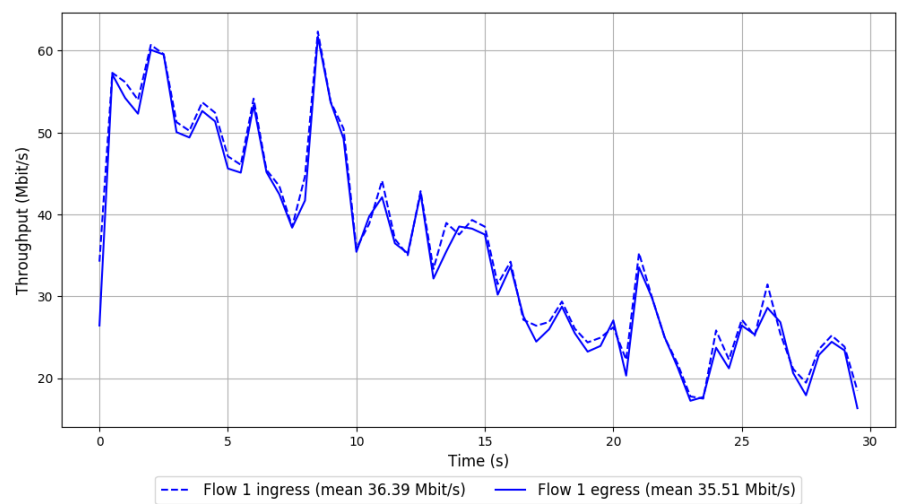


Run 7: Statistics of Indigo-1-32

Start at: 2018-02-19 23:54:25
End at: 2018-02-19 23:54:55
Local clock offset: 1.894 ms
Remote clock offset: -7.964 ms

Below is generated by plot.py at 2018-02-20 06:43:24
Datalink statistics
-- Total of 1 flow:
Average throughput: 35.51 Mbit/s
95th percentile per-packet one-way delay: 31.917 ms
Loss rate: 2.59%
-- Flow 1:
Average throughput: 35.51 Mbit/s
95th percentile per-packet one-way delay: 31.917 ms
Loss rate: 2.59%

Run 7: Report of Indigo-1-32 — Data Link

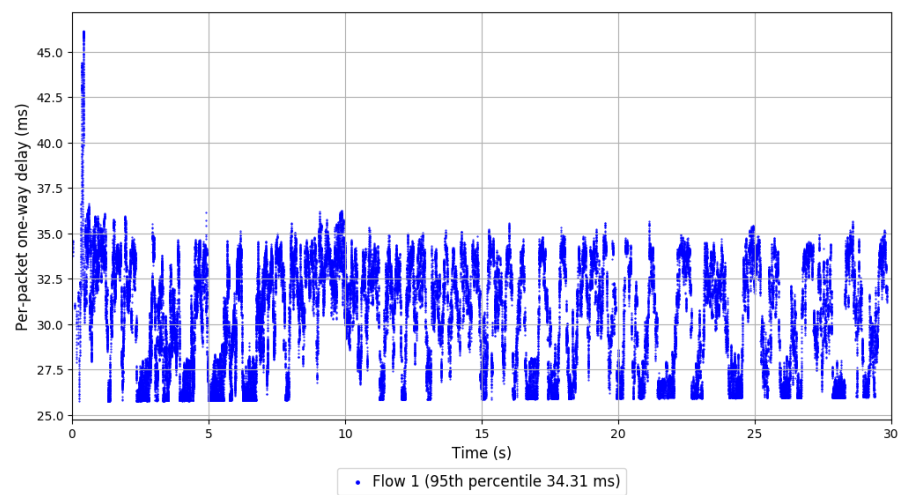
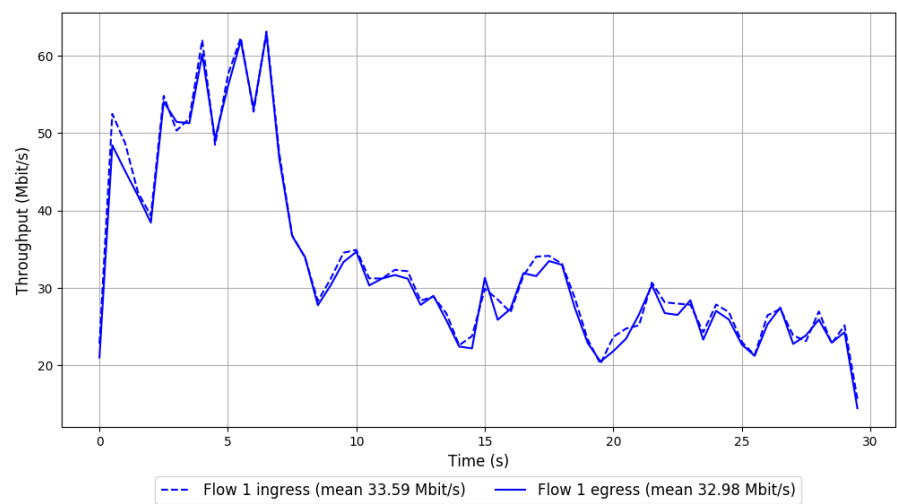


Run 8: Statistics of Indigo-1-32

Start at: 2018-02-20 00:22:37
End at: 2018-02-20 00:23:07
Local clock offset: -3.265 ms
Remote clock offset: -8.081 ms

Below is generated by plot.py at 2018-02-20 06:43:24
Datalink statistics
-- Total of 1 flow:
Average throughput: 32.98 Mbit/s
95th percentile per-packet one-way delay: 34.311 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 32.98 Mbit/s
95th percentile per-packet one-way delay: 34.311 ms
Loss rate: 2.00%

Run 8: Report of Indigo-1-32 — Data Link

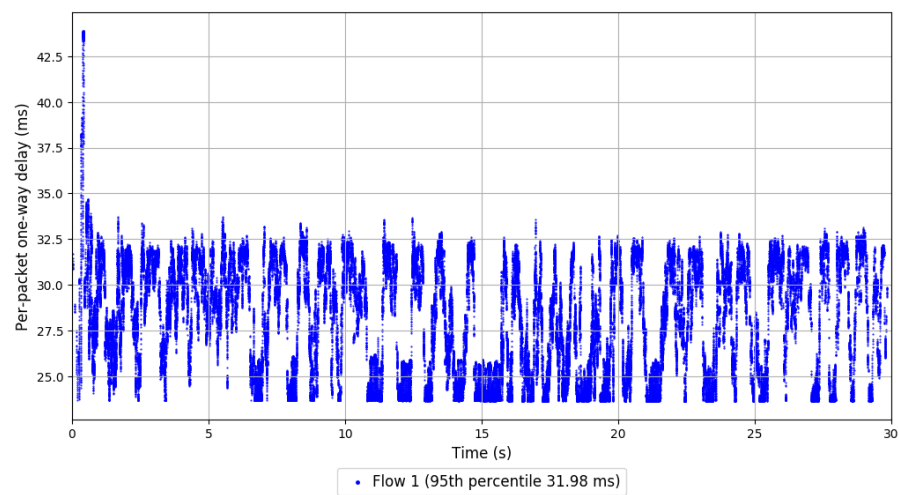
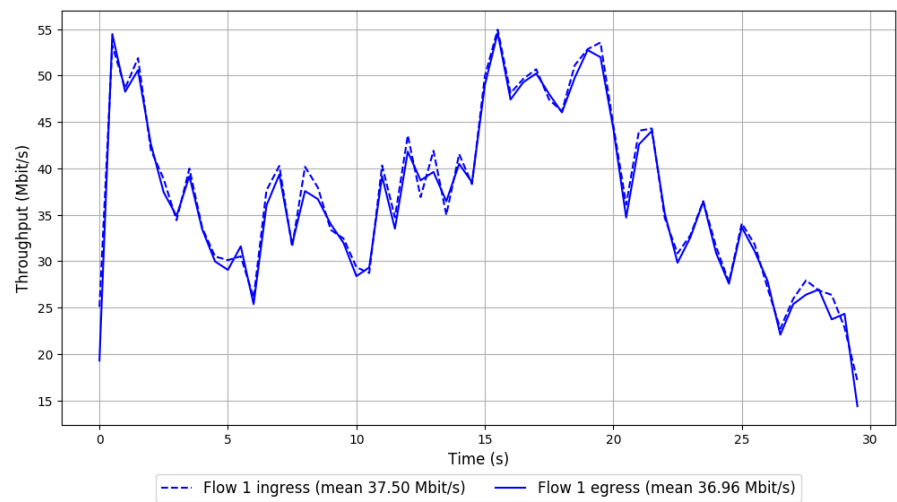


Run 9: Statistics of Indigo-1-32

Start at: 2018-02-20 00:50:31
End at: 2018-02-20 00:51:01
Local clock offset: -5.316 ms
Remote clock offset: -4.178 ms

Below is generated by plot.py at 2018-02-20 06:43:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 36.96 Mbit/s
95th percentile per-packet one-way delay: 31.984 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 36.96 Mbit/s
95th percentile per-packet one-way delay: 31.984 ms
Loss rate: 1.63%

Run 9: Report of Indigo-1-32 — Data Link

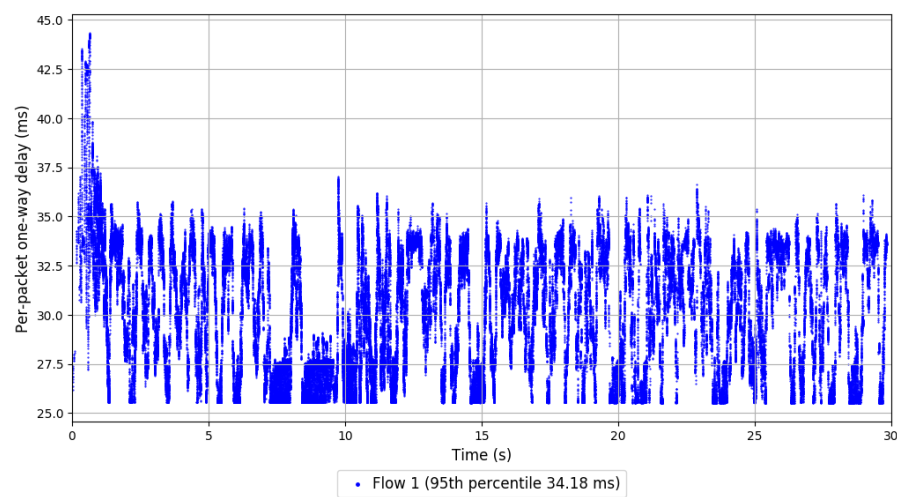
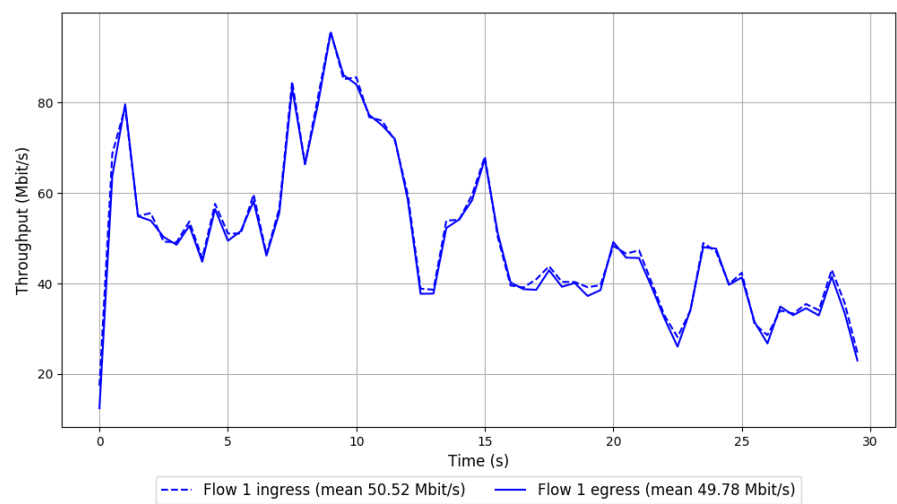


Run 10: Statistics of Indigo-1-32

Start at: 2018-02-20 01:19:20
End at: 2018-02-20 01:19:50
Local clock offset: -5.683 ms
Remote clock offset: -6.039 ms

Below is generated by plot.py at 2018-02-20 06:43:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 49.78 Mbit/s
95th percentile per-packet one-way delay: 34.178 ms
Loss rate: 1.64%
-- Flow 1:
Average throughput: 49.78 Mbit/s
95th percentile per-packet one-way delay: 34.178 ms
Loss rate: 1.64%

Run 10: Report of Indigo-1-32 — Data Link

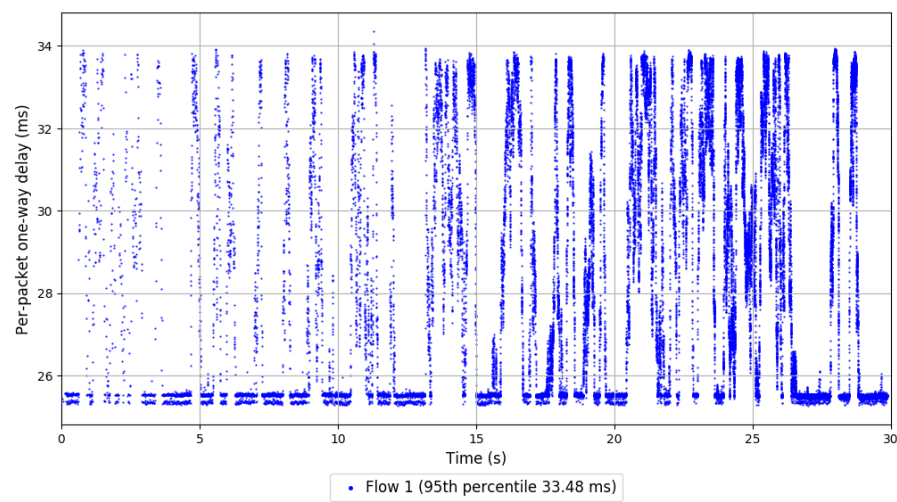
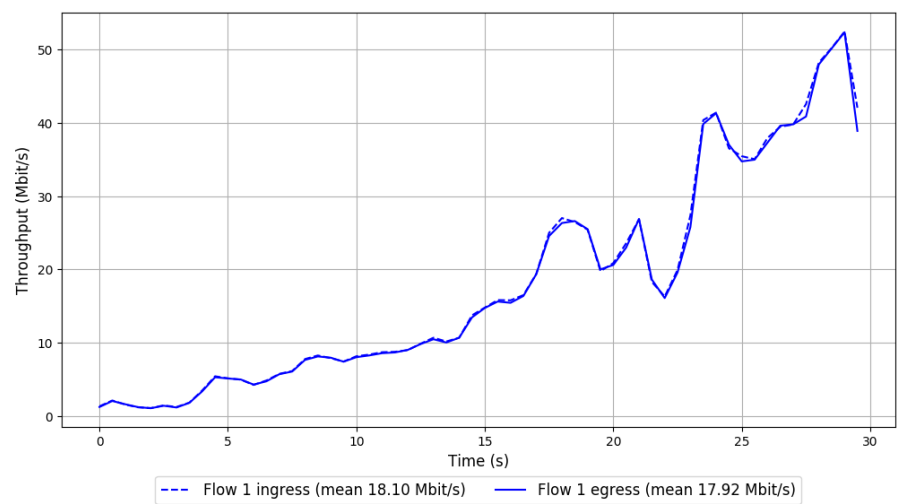


Run 1: Statistics of Vivace-latency

Start at: 2018-02-19 21:11:17
End at: 2018-02-19 21:11:47
Local clock offset: 2.483 ms
Remote clock offset: -8.036 ms

Below is generated by plot.py at 2018-02-20 06:43:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 17.92 Mbit/s
95th percentile per-packet one-way delay: 33.478 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 17.92 Mbit/s
95th percentile per-packet one-way delay: 33.478 ms
Loss rate: 1.17%

Run 1: Report of Vivace-latency — Data Link

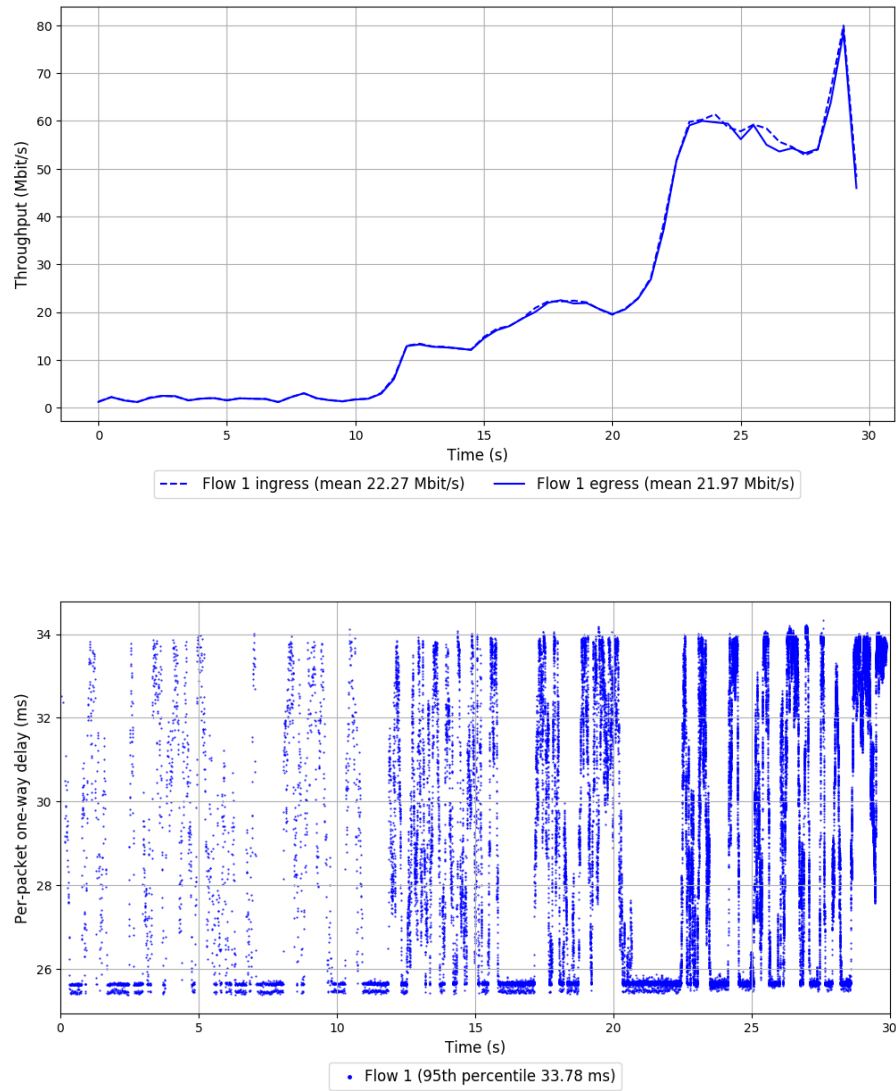


Run 2: Statistics of Vivace-latency

Start at: 2018-02-19 21:37:46
End at: 2018-02-19 21:38:16
Local clock offset: 0.09 ms
Remote clock offset: -6.082 ms

Below is generated by plot.py at 2018-02-20 06:43:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 21.97 Mbit/s
95th percentile per-packet one-way delay: 33.785 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 21.97 Mbit/s
95th percentile per-packet one-way delay: 33.785 ms
Loss rate: 1.54%

Run 2: Report of Vivace-latency — Data Link

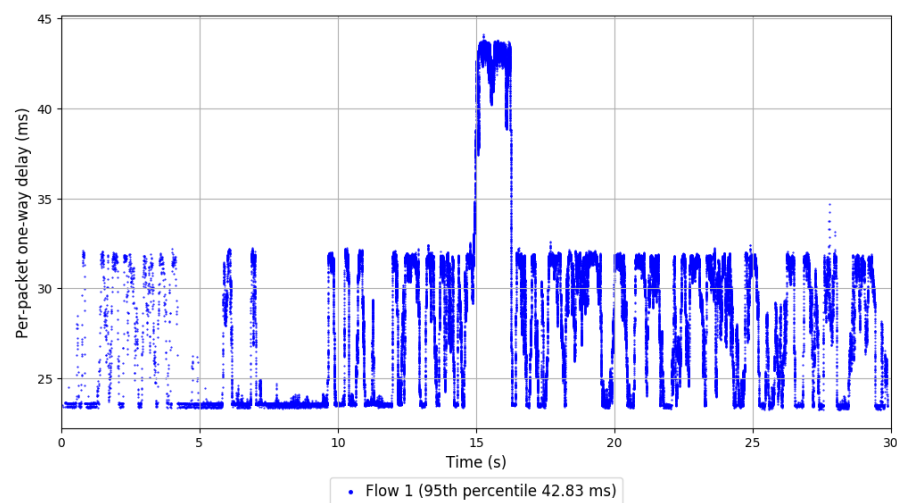
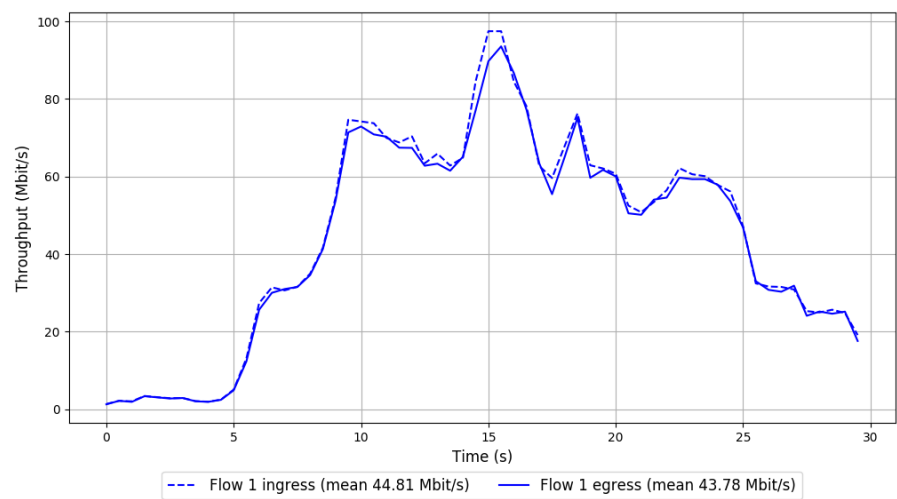


Run 3: Statistics of Vivace-latency

Start at: 2018-02-19 22:04:56
End at: 2018-02-19 22:05:26
Local clock offset: -3.553 ms
Remote clock offset: -7.998 ms

Below is generated by plot.py at 2018-02-20 06:44:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 43.78 Mbit/s
95th percentile per-packet one-way delay: 42.833 ms
Loss rate: 2.46%
-- Flow 1:
Average throughput: 43.78 Mbit/s
95th percentile per-packet one-way delay: 42.833 ms
Loss rate: 2.46%

Run 3: Report of Vivace-latency — Data Link

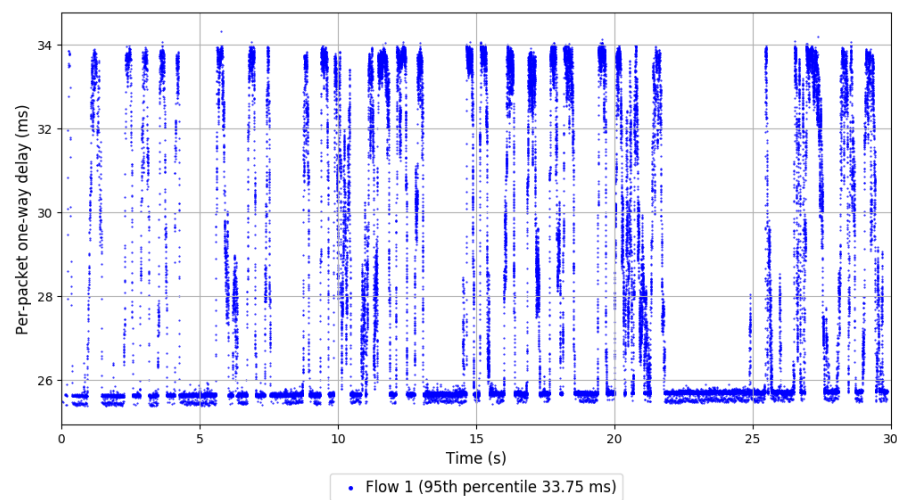
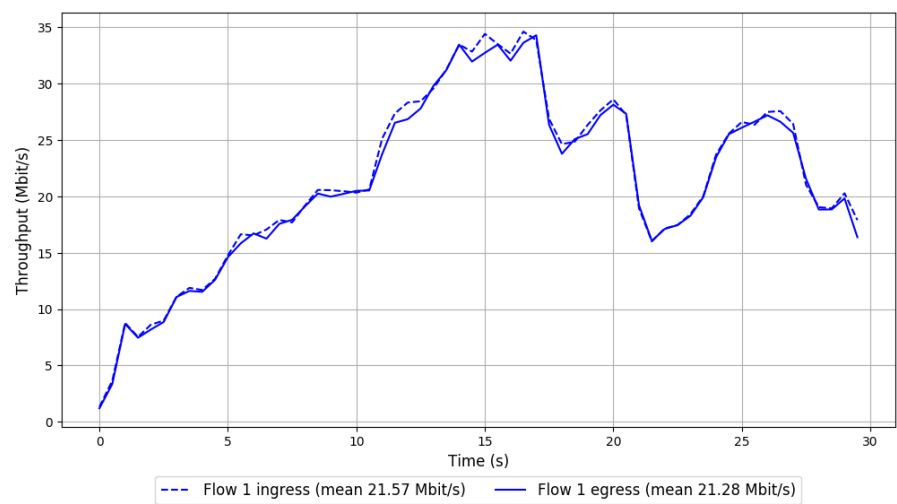


Run 4: Statistics of Vivace-latency

Start at: 2018-02-19 22:32:48
End at: 2018-02-19 22:33:18
Local clock offset: -4.052 ms
Remote clock offset: -13.975 ms

Below is generated by plot.py at 2018-02-20 06:44:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 21.28 Mbit/s
95th percentile per-packet one-way delay: 33.751 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 21.28 Mbit/s
95th percentile per-packet one-way delay: 33.751 ms
Loss rate: 1.51%

Run 4: Report of Vivace-latency — Data Link

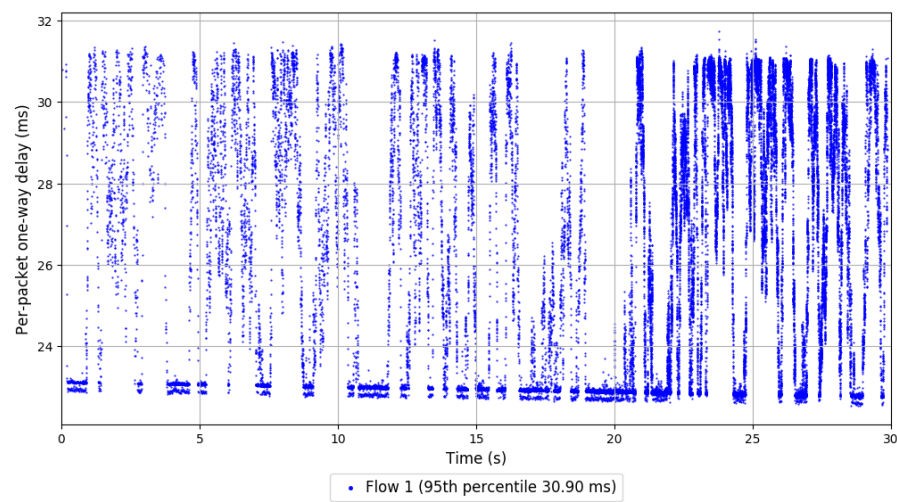
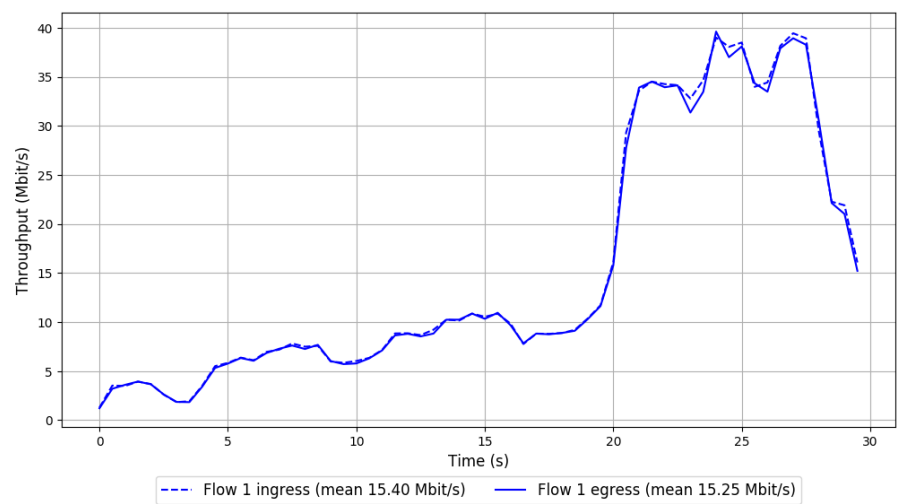


Run 5: Statistics of Vivace-latency

Start at: 2018-02-19 22:59:48
End at: 2018-02-19 23:00:18
Local clock offset: -3.316 ms
Remote clock offset: -9.942 ms

Below is generated by plot.py at 2018-02-20 06:44:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 15.25 Mbit/s
95th percentile per-packet one-way delay: 30.897 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 15.25 Mbit/s
95th percentile per-packet one-way delay: 30.897 ms
Loss rate: 1.19%

Run 5: Report of Vivace-latency — Data Link

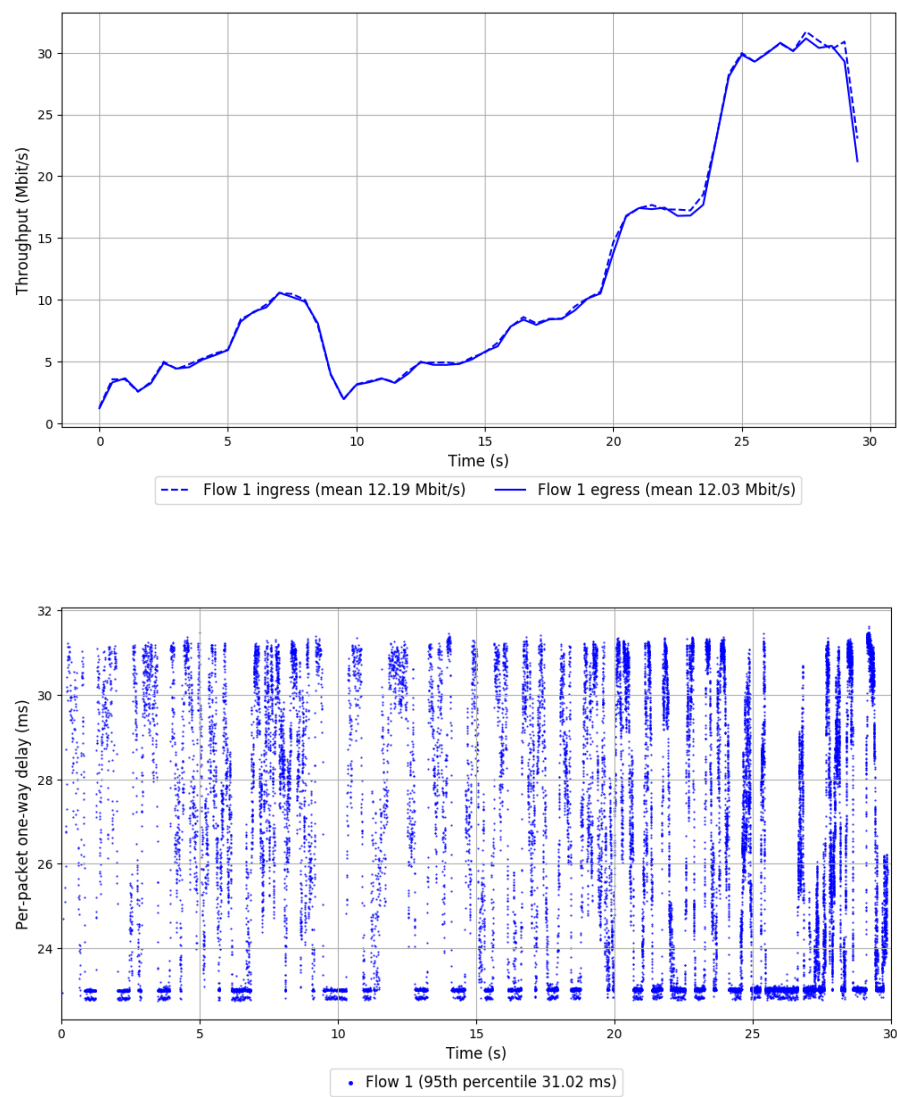


Run 6: Statistics of Vivace-latency

Start at: 2018-02-19 23:27:13
End at: 2018-02-19 23:27:43
Local clock offset: 3.954 ms
Remote clock offset: -2.598 ms

Below is generated by plot.py at 2018-02-20 06:44:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 31.021 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 31.021 ms
Loss rate: 1.47%

Run 6: Report of Vivace-latency — Data Link

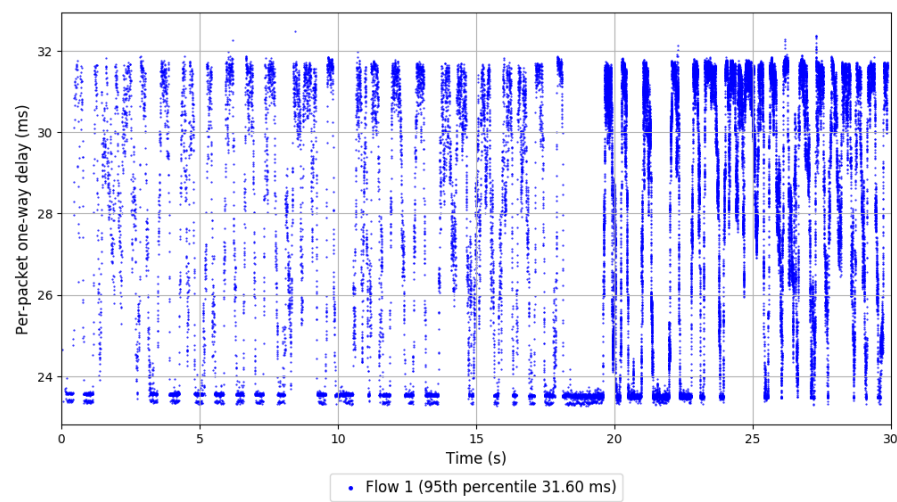
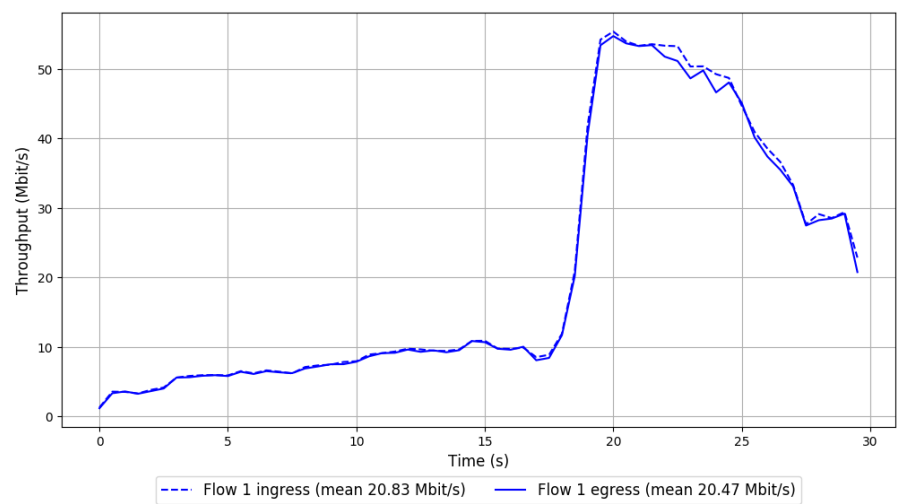


Run 7: Statistics of Vivace-latency

Start at: 2018-02-19 23:56:00
End at: 2018-02-19 23:56:31
Local clock offset: 1.925 ms
Remote clock offset: -8.735 ms

Below is generated by plot.py at 2018-02-20 06:44:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 20.47 Mbit/s
95th percentile per-packet one-way delay: 31.604 ms
Loss rate: 1.93%
-- Flow 1:
Average throughput: 20.47 Mbit/s
95th percentile per-packet one-way delay: 31.604 ms
Loss rate: 1.93%

Run 7: Report of Vivace-latency — Data Link

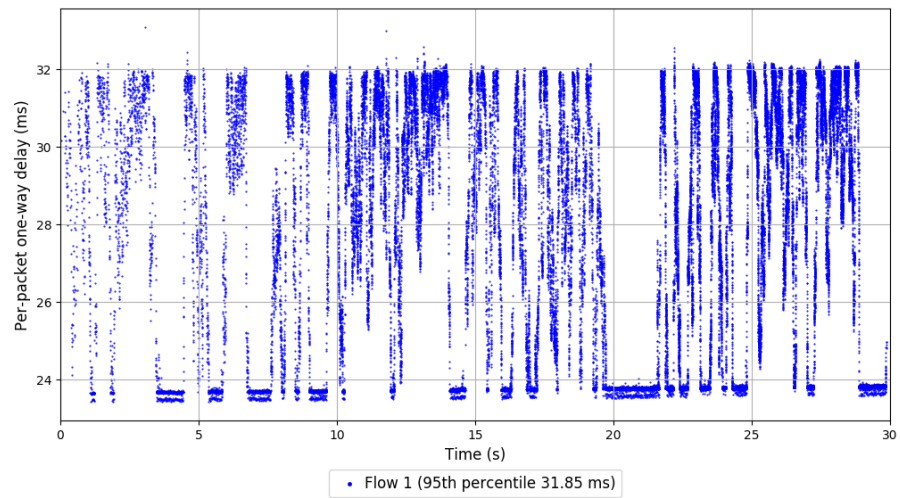
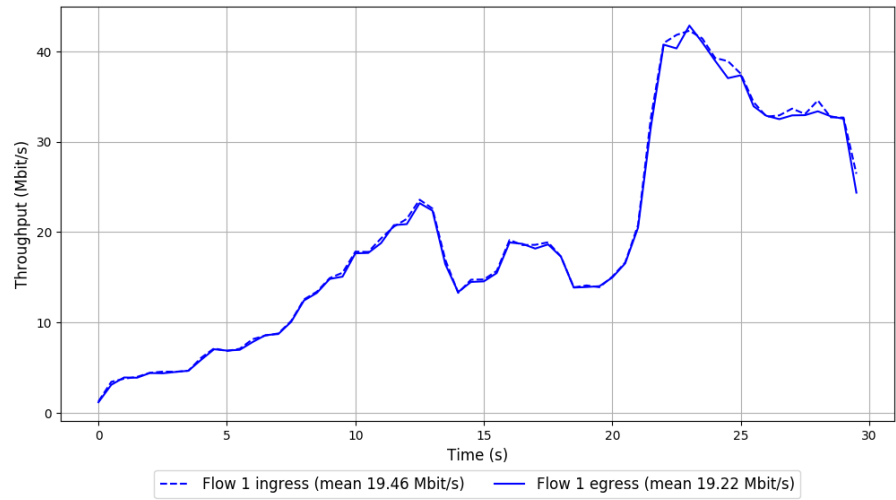


Run 8: Statistics of Vivace-latency

Start at: 2018-02-20 00:24:05
End at: 2018-02-20 00:24:35
Local clock offset: -3.402 ms
Remote clock offset: -5.507 ms

Below is generated by plot.py at 2018-02-20 06:44:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 19.22 Mbit/s
95th percentile per-packet one-way delay: 31.846 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 19.22 Mbit/s
95th percentile per-packet one-way delay: 31.846 ms
Loss rate: 1.41%

Run 8: Report of Vivace-latency — Data Link

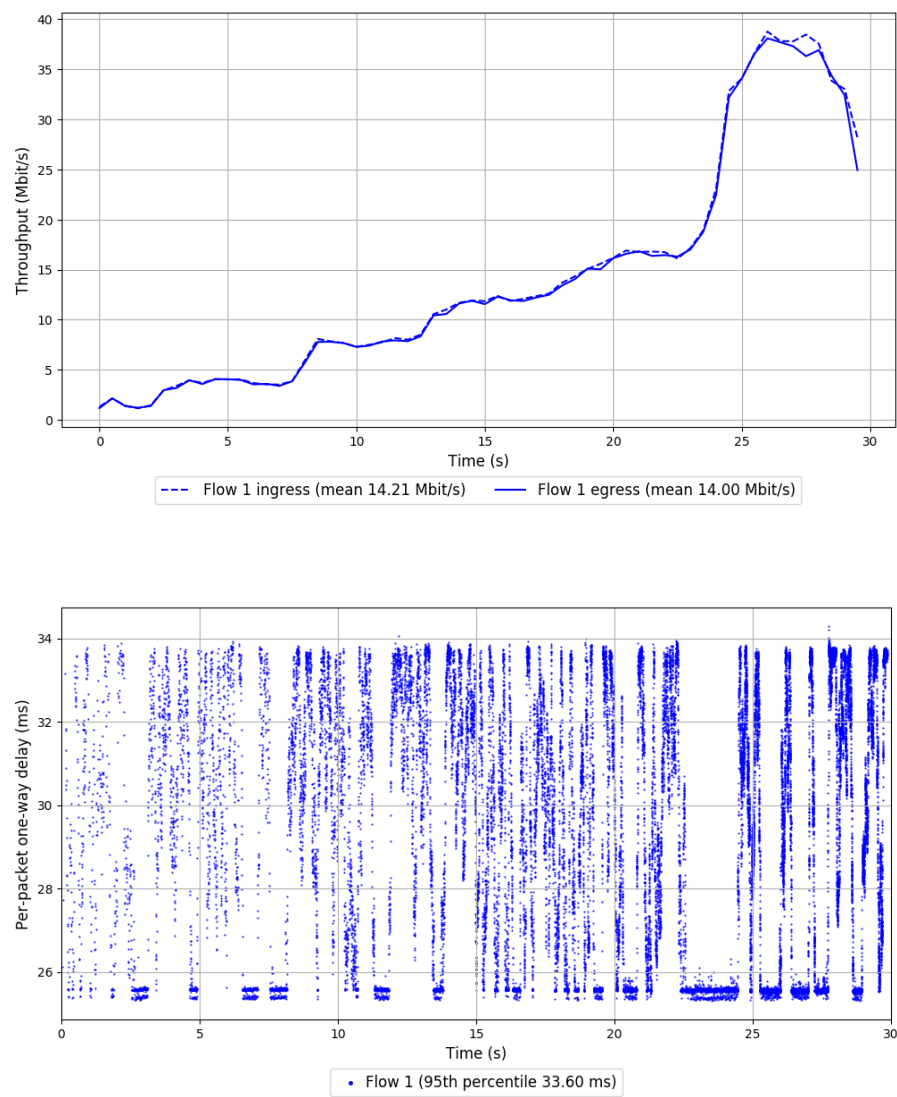


Run 9: Statistics of Vivace-latency

Start at: 2018-02-20 00:52:09
End at: 2018-02-20 00:52:39
Local clock offset: -5.407 ms
Remote clock offset: -6.269 ms

Below is generated by plot.py at 2018-02-20 06:44:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 14.00 Mbit/s
95th percentile per-packet one-way delay: 33.603 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 14.00 Mbit/s
95th percentile per-packet one-way delay: 33.603 ms
Loss rate: 1.68%

Run 9: Report of Vivace-latency — Data Link

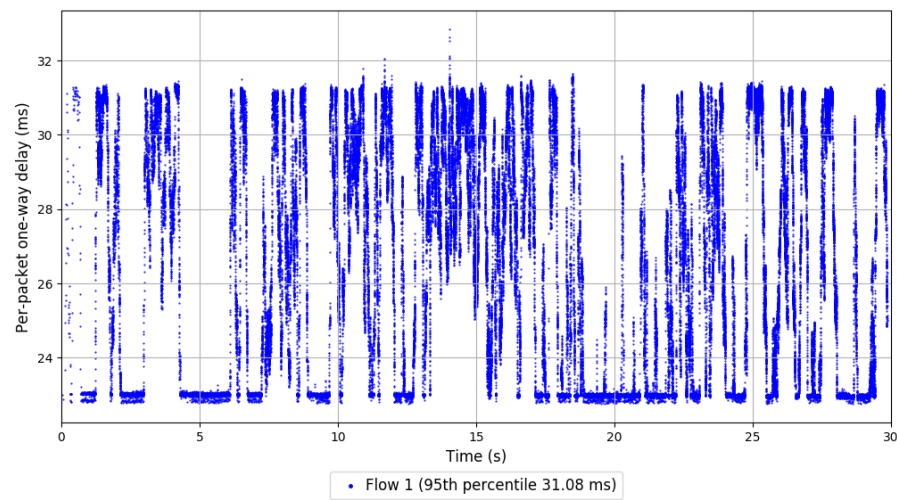
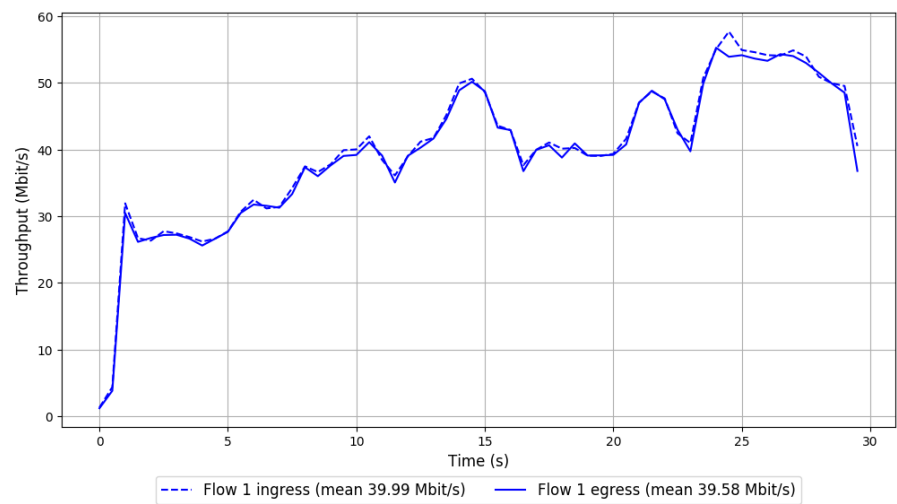


Run 10: Statistics of Vivace-latency

Start at: 2018-02-20 01:20:53
End at: 2018-02-20 01:21:23
Local clock offset: -5.358 ms
Remote clock offset: -3.289 ms

Below is generated by plot.py at 2018-02-20 06:44:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.58 Mbit/s
95th percentile per-packet one-way delay: 31.084 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 39.58 Mbit/s
95th percentile per-packet one-way delay: 31.084 ms
Loss rate: 1.21%

Run 10: Report of Vivace-latency — Data Link

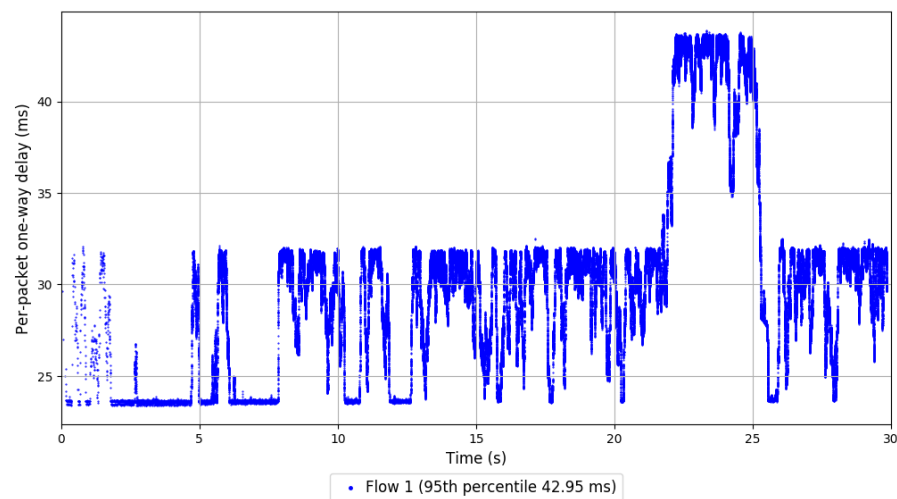
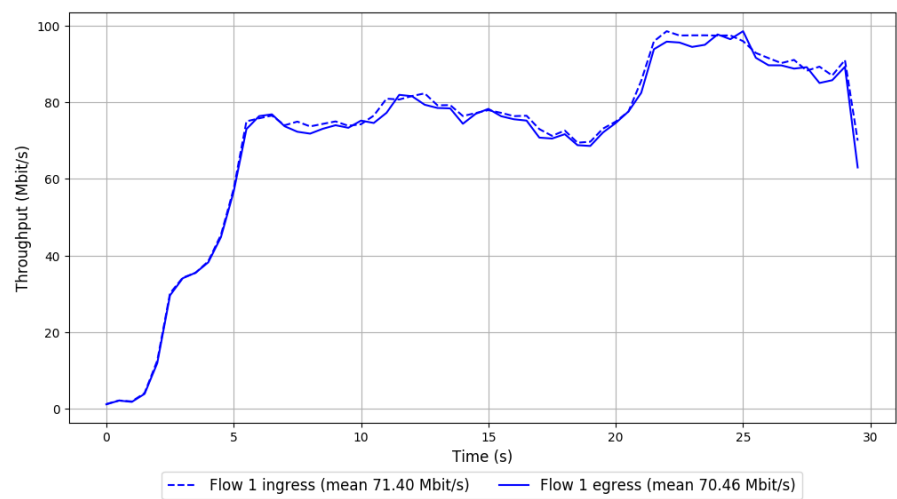


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-19 21:15:49
End at: 2018-02-19 21:16:19
Local clock offset: 2.59 ms
Remote clock offset: -6.185 ms

# Below is generated by plot.py at 2018-02-20 06:44:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.46 Mbit/s
95th percentile per-packet one-way delay: 42.949 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 70.46 Mbit/s
95th percentile per-packet one-way delay: 42.949 ms
Loss rate: 1.51%
```

Run 1: Report of Vivace-loss — Data Link

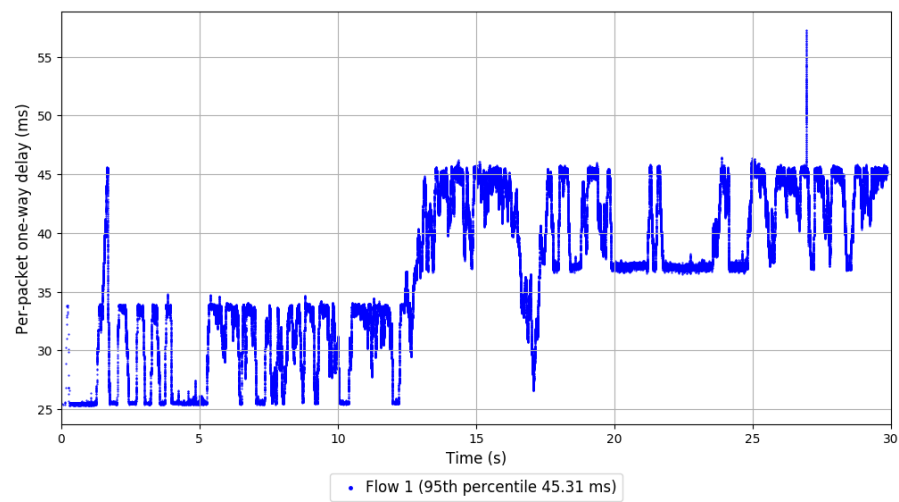
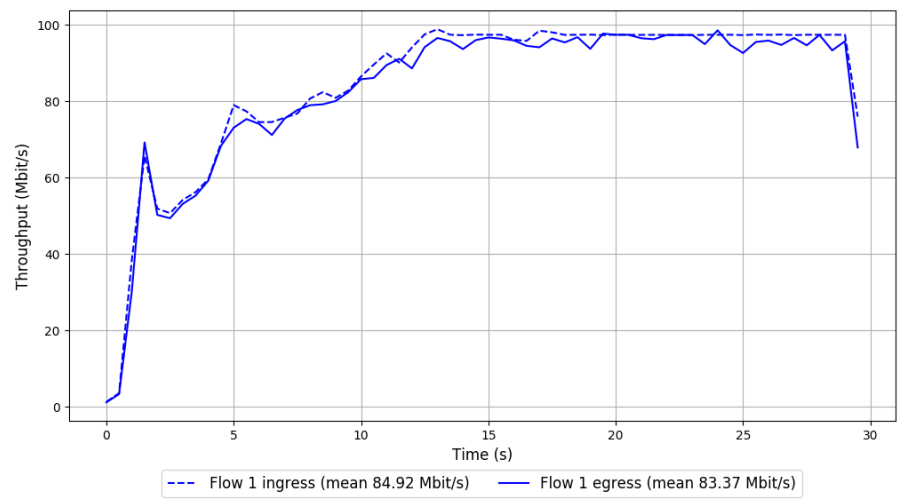


Run 2: Statistics of Vivace-loss

Start at: 2018-02-19 21:42:29
End at: 2018-02-19 21:42:59
Local clock offset: -0.208 ms
Remote clock offset: -5.863 ms

Below is generated by plot.py at 2018-02-20 06:45:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 83.37 Mbit/s
95th percentile per-packet one-way delay: 45.311 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 83.37 Mbit/s
95th percentile per-packet one-way delay: 45.311 ms
Loss rate: 2.00%

Run 2: Report of Vivace-loss — Data Link

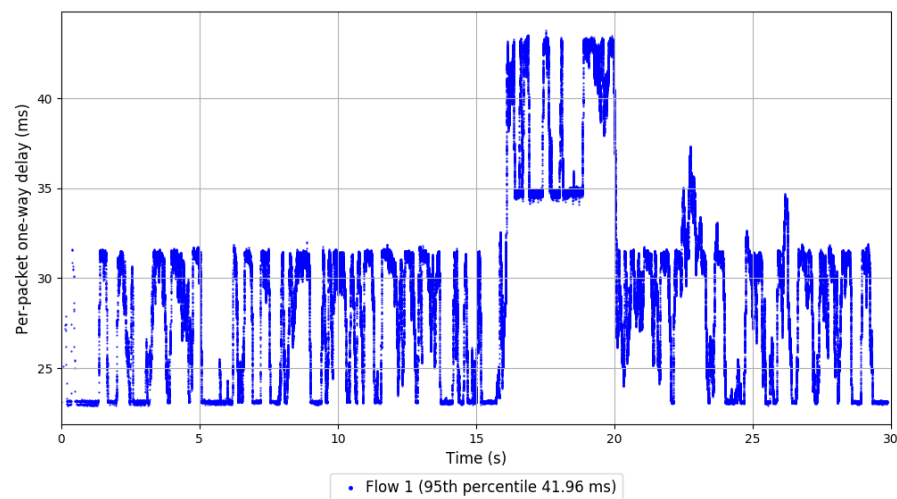
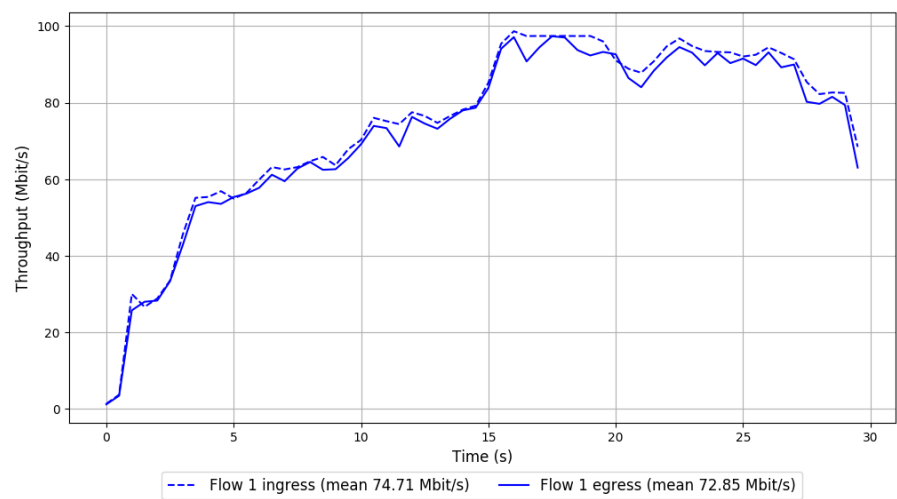


Run 3: Statistics of Vivace-loss

Start at: 2018-02-19 22:10:06
End at: 2018-02-19 22:10:36
Local clock offset: -4.111 ms
Remote clock offset: -9.078 ms

Below is generated by plot.py at 2018-02-20 06:45:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 72.85 Mbit/s
95th percentile per-packet one-way delay: 41.961 ms
Loss rate: 2.66%
-- Flow 1:
Average throughput: 72.85 Mbit/s
95th percentile per-packet one-way delay: 41.961 ms
Loss rate: 2.66%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-19 22:37:24

End at: 2018-02-19 22:37:54

Local clock offset: -3.883 ms

Remote clock offset: -12.994 ms

Below is generated by plot.py at 2018-02-20 06:45:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.08 Mbit/s

95th percentile per-packet one-way delay: 45.212 ms

Loss rate: 1.56%

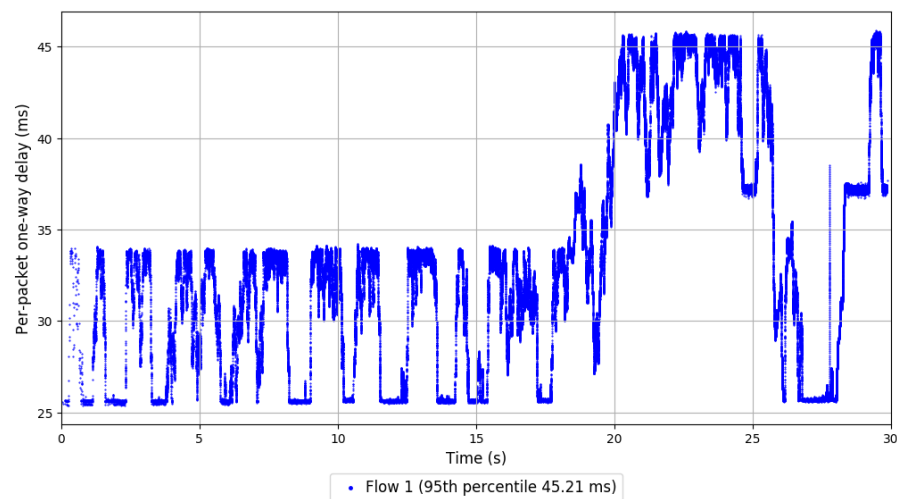
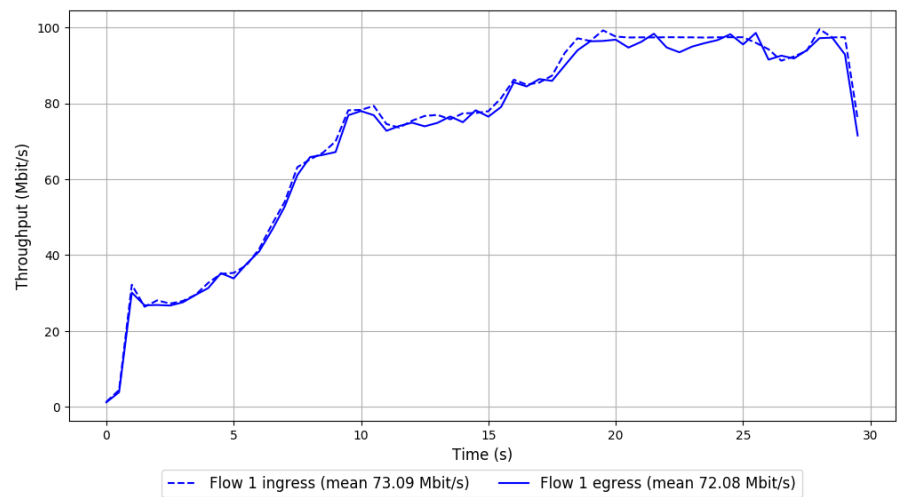
-- Flow 1:

Average throughput: 72.08 Mbit/s

95th percentile per-packet one-way delay: 45.212 ms

Loss rate: 1.56%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-19 23:04:40

End at: 2018-02-19 23:05:10

Local clock offset: -0.45 ms

Remote clock offset: -12.077 ms

Below is generated by plot.py at 2018-02-20 06:45:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.09 Mbit/s

95th percentile per-packet one-way delay: 45.265 ms

Loss rate: 2.25%

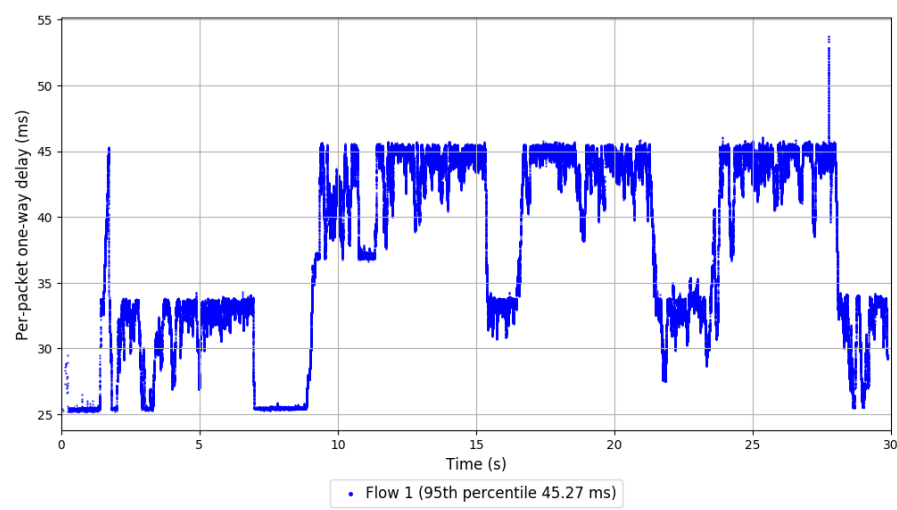
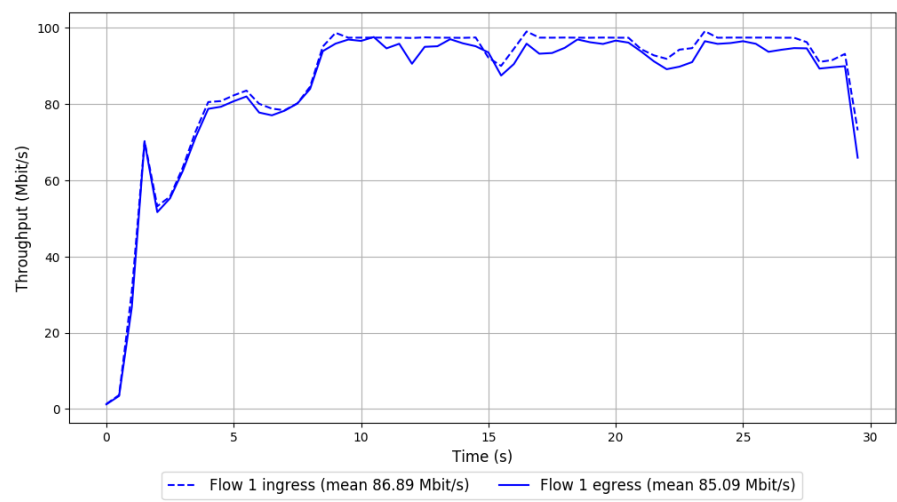
-- Flow 1:

Average throughput: 85.09 Mbit/s

95th percentile per-packet one-way delay: 45.265 ms

Loss rate: 2.25%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-19 23:31:59

End at: 2018-02-19 23:32:29

Local clock offset: 4.426 ms

Remote clock offset: -2.396 ms

Below is generated by plot.py at 2018-02-20 06:45:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.45 Mbit/s

95th percentile per-packet one-way delay: 31.826 ms

Loss rate: 2.42%

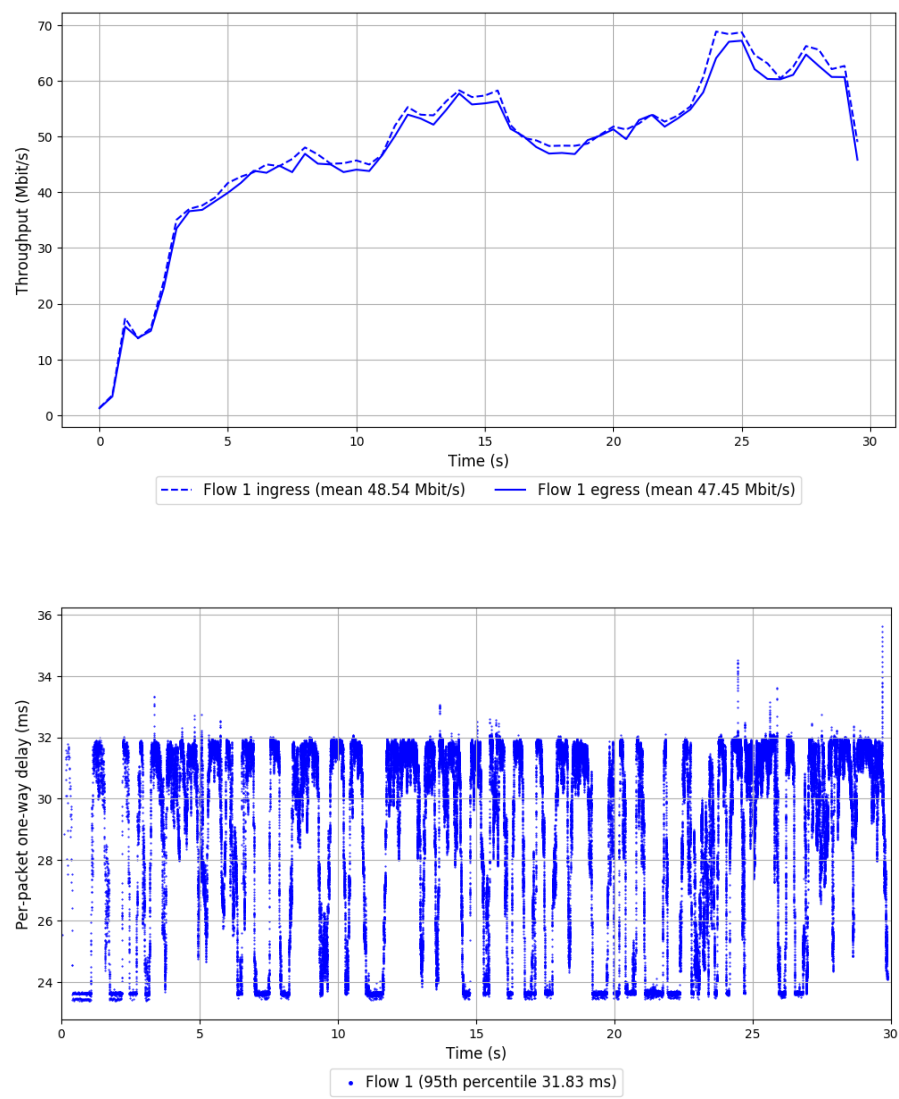
-- Flow 1:

Average throughput: 47.45 Mbit/s

95th percentile per-packet one-way delay: 31.826 ms

Loss rate: 2.42%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-20 00:00:57

End at: 2018-02-20 00:01:27

Local clock offset: 1.837 ms

Remote clock offset: -11.522 ms

Below is generated by plot.py at 2018-02-20 06:45:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 70.14 Mbit/s

95th percentile per-packet one-way delay: 33.656 ms

Loss rate: 2.60%

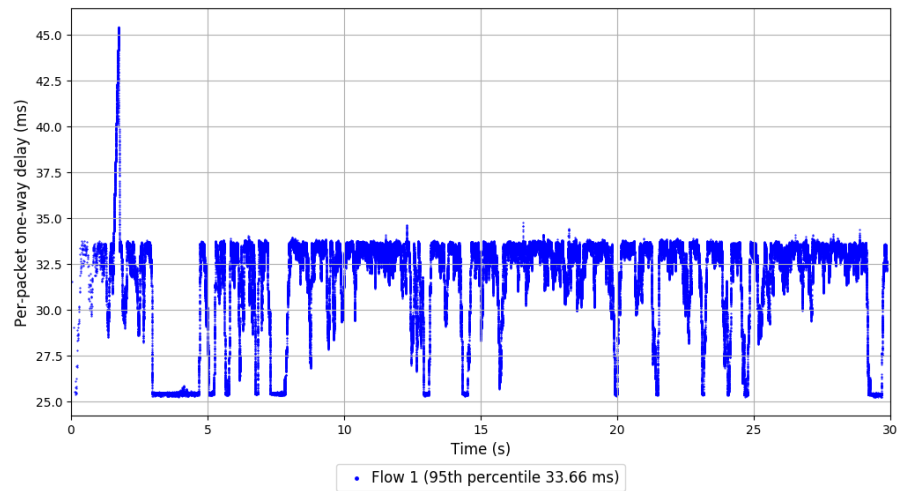
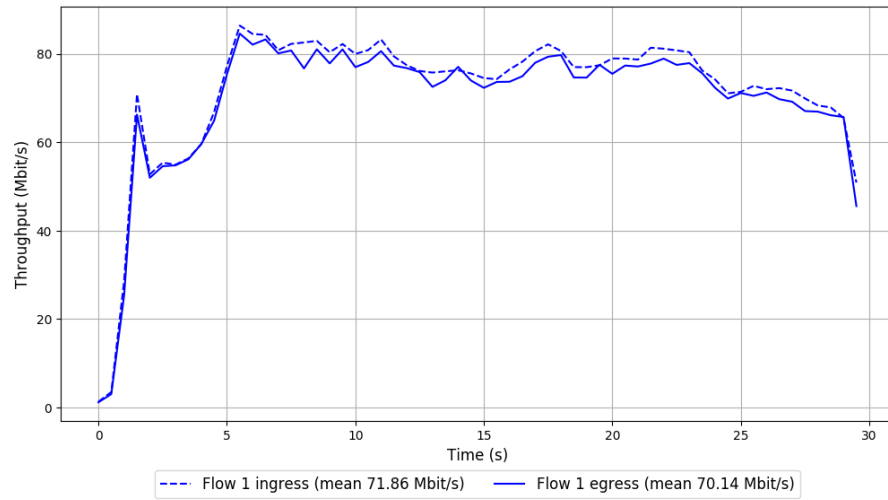
-- Flow 1:

Average throughput: 70.14 Mbit/s

95th percentile per-packet one-way delay: 33.656 ms

Loss rate: 2.60%

Run 7: Report of Vivace-loss — Data Link

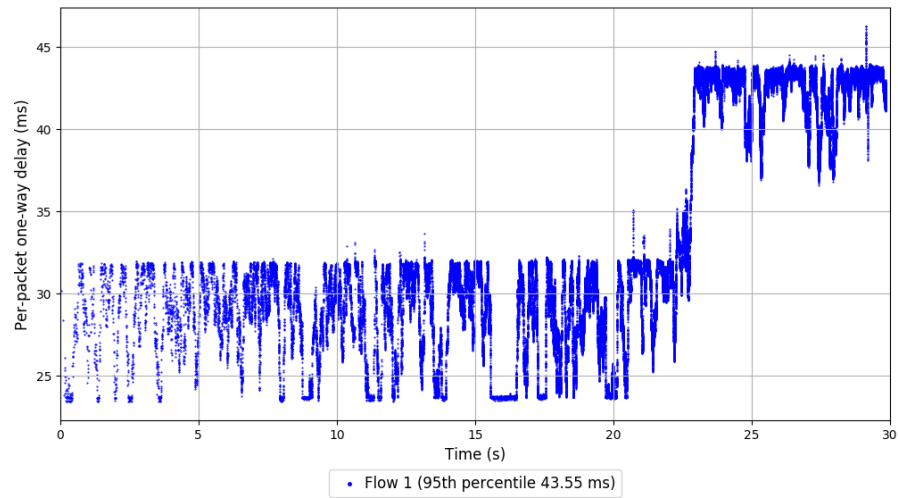
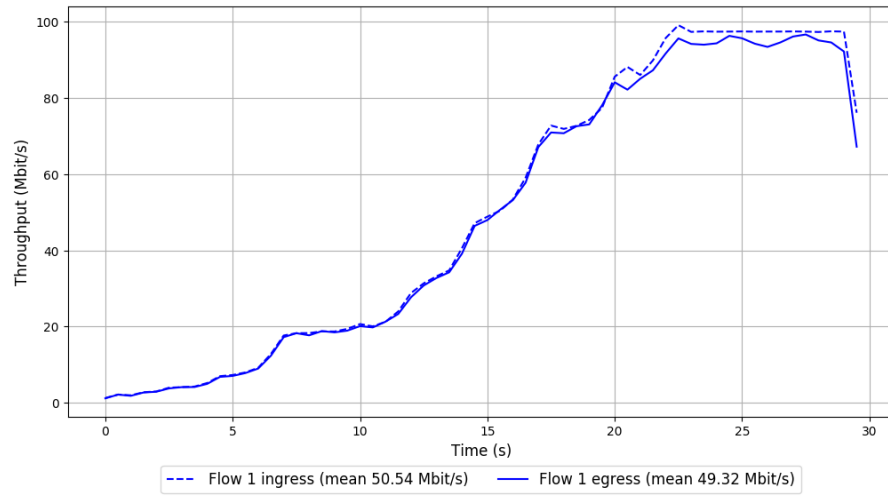


Run 8: Statistics of Vivace-loss

Start at: 2018-02-20 00:29:26
End at: 2018-02-20 00:29:56
Local clock offset: -4.137 ms
Remote clock offset: -4.642 ms

Below is generated by plot.py at 2018-02-20 06:45:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 49.32 Mbit/s
95th percentile per-packet one-way delay: 43.547 ms
Loss rate: 2.61%
-- Flow 1:
Average throughput: 49.32 Mbit/s
95th percentile per-packet one-way delay: 43.547 ms
Loss rate: 2.61%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-20 00:57:04

End at: 2018-02-20 00:57:34

Local clock offset: -5.634 ms

Remote clock offset: -4.083 ms

Below is generated by plot.py at 2018-02-20 06:45:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.92 Mbit/s

95th percentile per-packet one-way delay: 31.222 ms

Loss rate: 2.58%

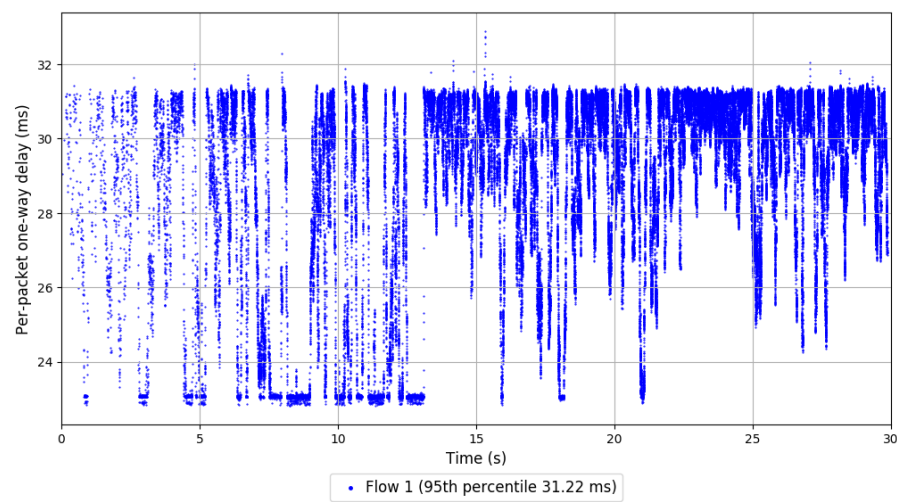
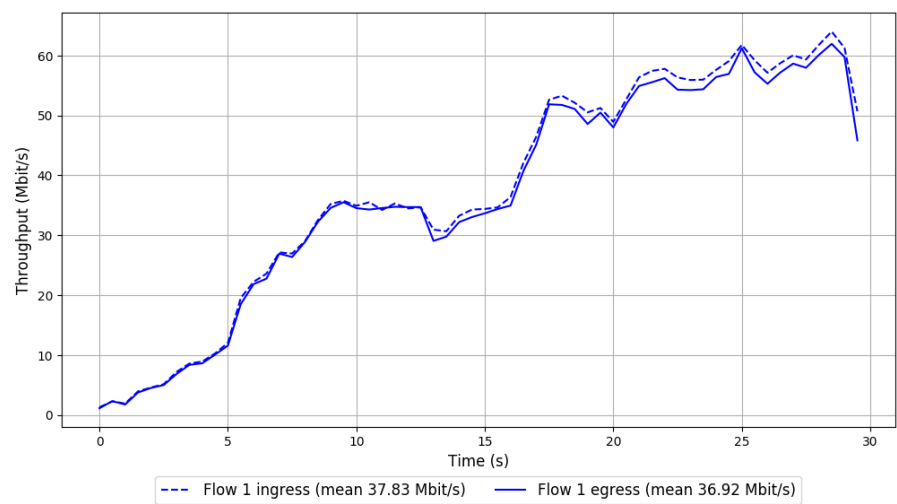
-- Flow 1:

Average throughput: 36.92 Mbit/s

95th percentile per-packet one-way delay: 31.222 ms

Loss rate: 2.58%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-20 01:25:43

End at: 2018-02-20 01:26:13

Local clock offset: -4.836 ms

Remote clock offset: -3.12 ms

Below is generated by plot.py at 2018-02-20 06:45:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.20 Mbit/s

95th percentile per-packet one-way delay: 42.535 ms

Loss rate: 2.12%

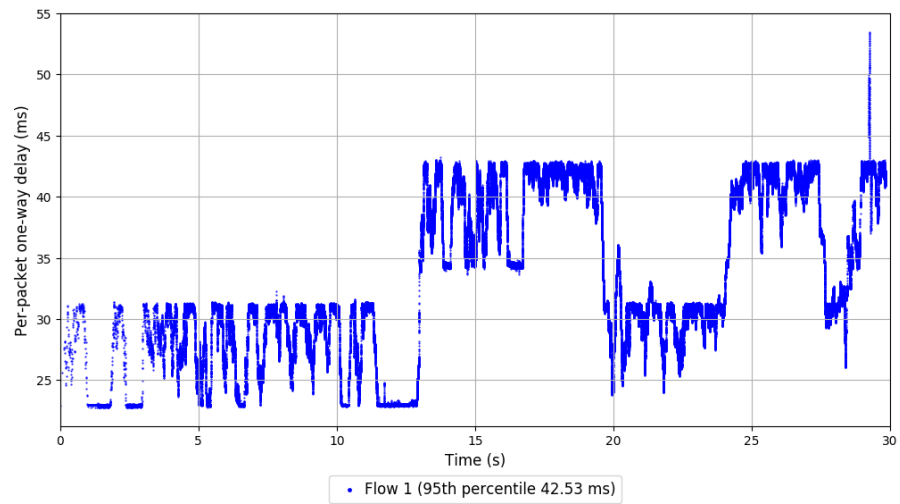
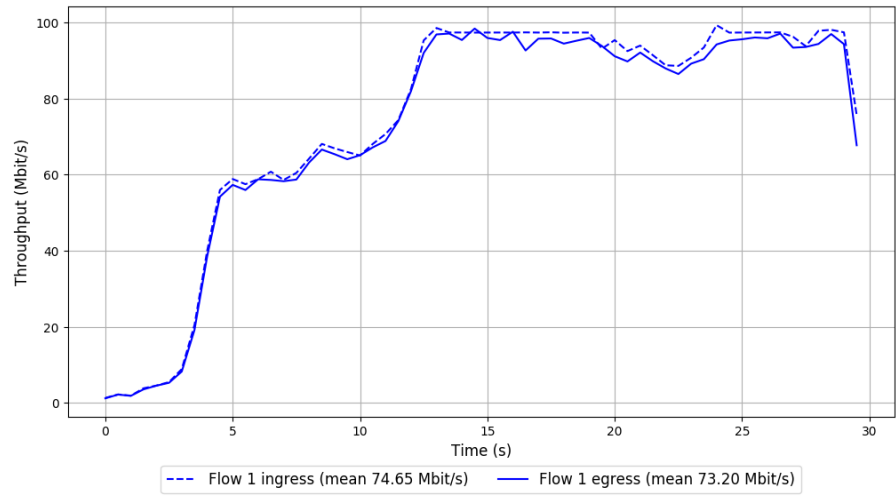
-- Flow 1:

Average throughput: 73.20 Mbit/s

95th percentile per-packet one-way delay: 42.535 ms

Loss rate: 2.12%

Run 10: Report of Vivace-loss — Data Link

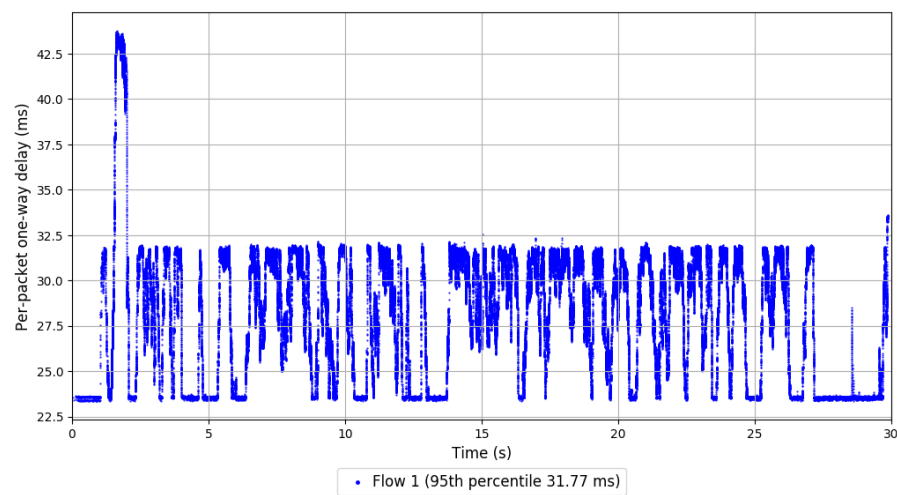
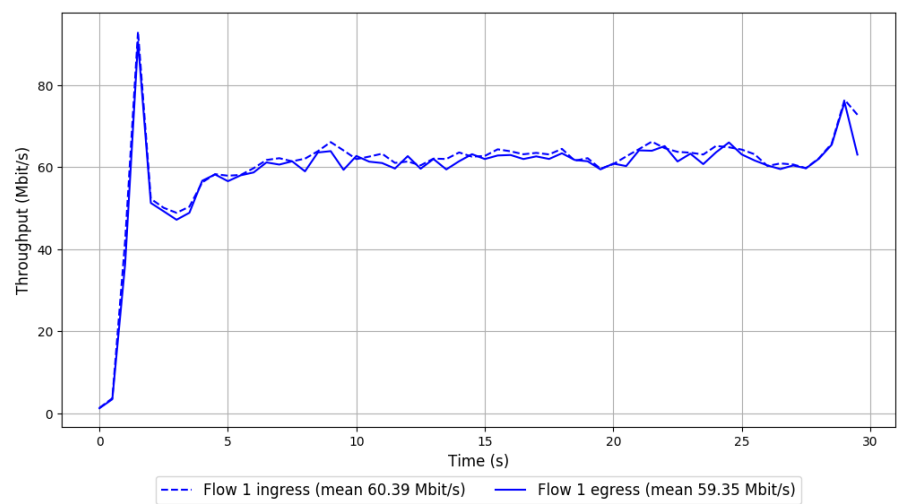


Run 1: Statistics of Vivace-LTE

Start at: 2018-02-19 21:14:15
End at: 2018-02-19 21:14:45
Local clock offset: 2.57 ms
Remote clock offset: -6.104 ms

Below is generated by plot.py at 2018-02-20 06:45:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 59.35 Mbit/s
95th percentile per-packet one-way delay: 31.775 ms
Loss rate: 1.90%
-- Flow 1:
Average throughput: 59.35 Mbit/s
95th percentile per-packet one-way delay: 31.775 ms
Loss rate: 1.90%

Run 1: Report of Vivace-LTE — Data Link

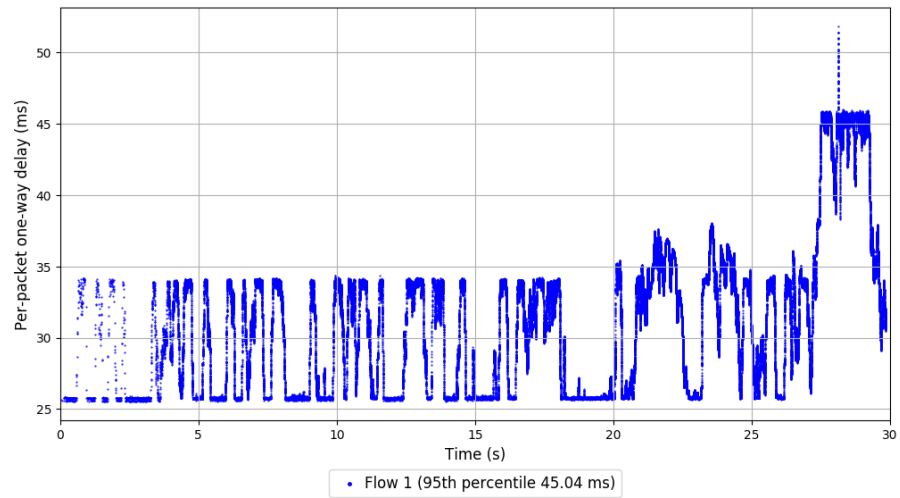
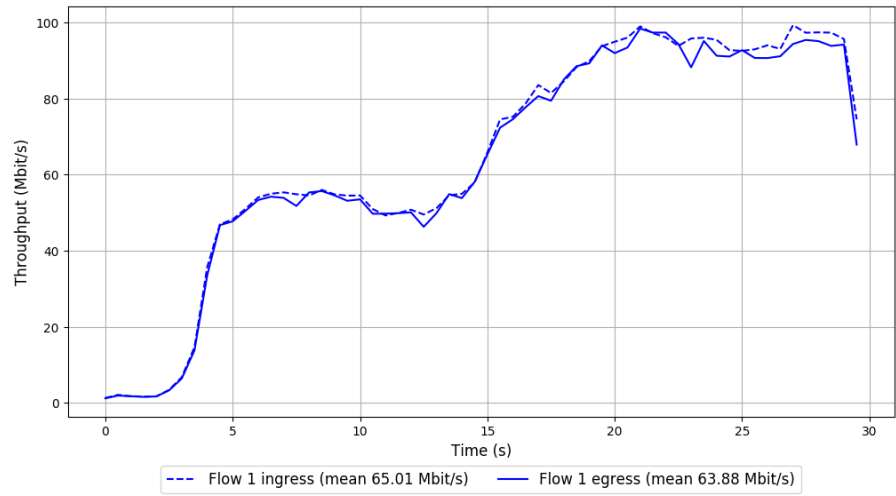


Run 2: Statistics of Vivace-LTE

Start at: 2018-02-19 21:40:45
End at: 2018-02-19 21:41:15
Local clock offset: -0.053 ms
Remote clock offset: -6.034 ms

Below is generated by plot.py at 2018-02-20 06:45:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 63.88 Mbit/s
95th percentile per-packet one-way delay: 45.036 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 63.88 Mbit/s
95th percentile per-packet one-way delay: 45.036 ms
Loss rate: 1.94%

Run 2: Report of Vivace-LTE — Data Link

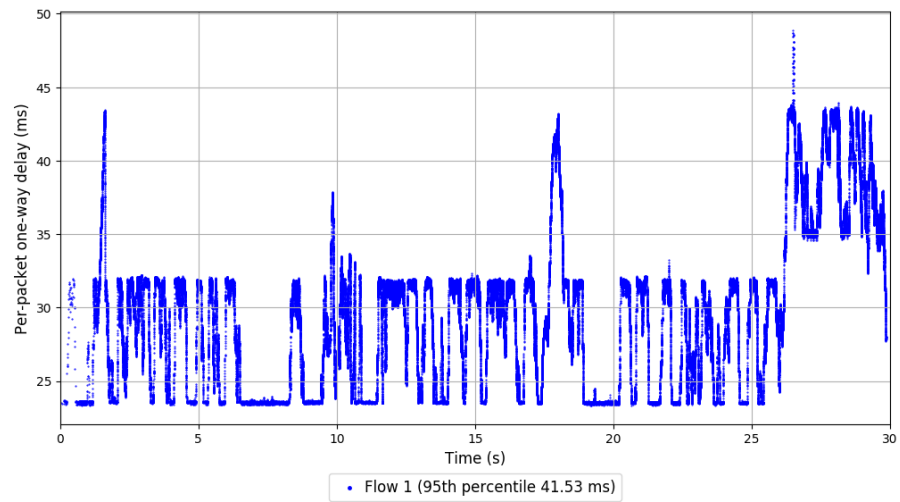
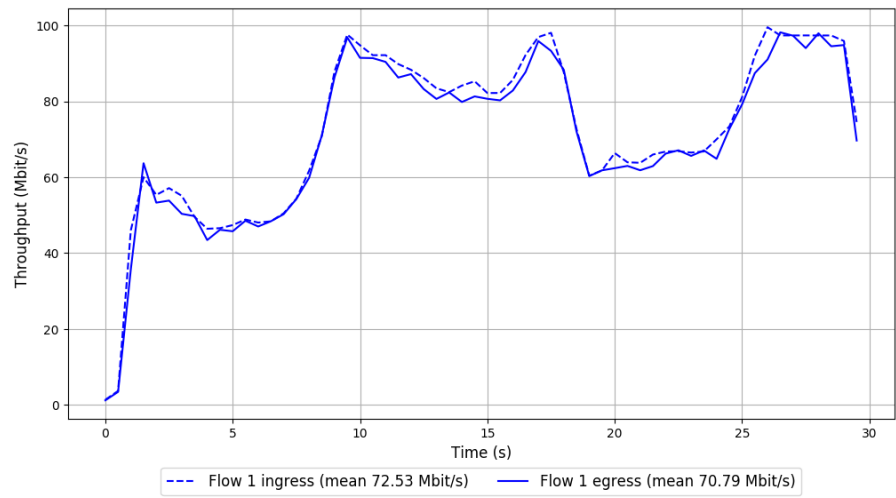


Run 3: Statistics of Vivace-LTE

Start at: 2018-02-19 22:08:28
End at: 2018-02-19 22:08:58
Local clock offset: -3.932 ms
Remote clock offset: -9.057 ms

Below is generated by plot.py at 2018-02-20 06:46:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 70.79 Mbit/s
95th percentile per-packet one-way delay: 41.529 ms
Loss rate: 2.57%
-- Flow 1:
Average throughput: 70.79 Mbit/s
95th percentile per-packet one-way delay: 41.529 ms
Loss rate: 2.57%

Run 3: Report of Vivace-LTE — Data Link

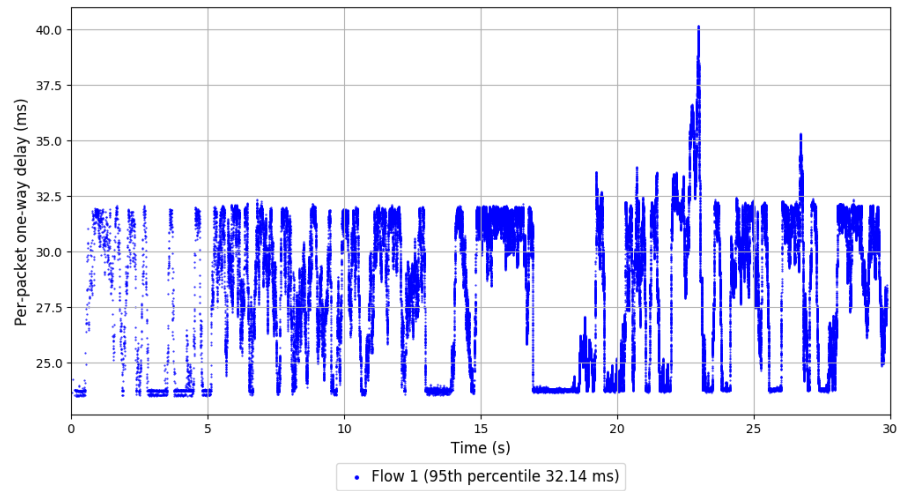
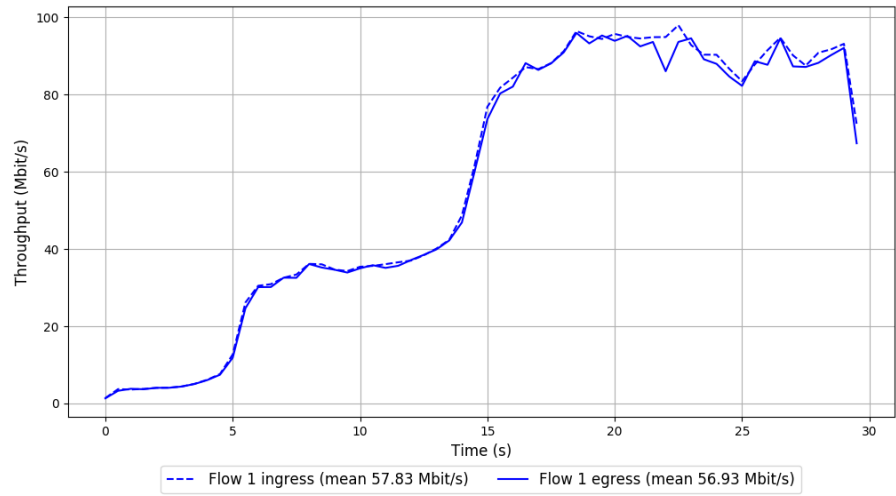


Run 4: Statistics of Vivace-LTE

Start at: 2018-02-19 22:35:49
End at: 2018-02-19 22:36:19
Local clock offset: -3.855 ms
Remote clock offset: -11.293 ms

Below is generated by plot.py at 2018-02-20 06:46:04
Datalink statistics
-- Total of 1 flow:
Average throughput: 56.93 Mbit/s
95th percentile per-packet one-way delay: 32.136 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 56.93 Mbit/s
95th percentile per-packet one-way delay: 32.136 ms
Loss rate: 1.72%

Run 4: Report of Vivace-LTE — Data Link

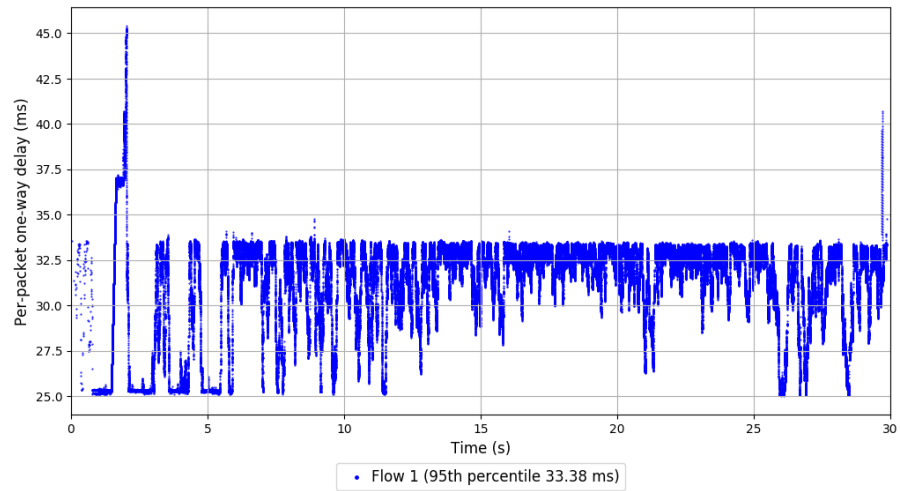
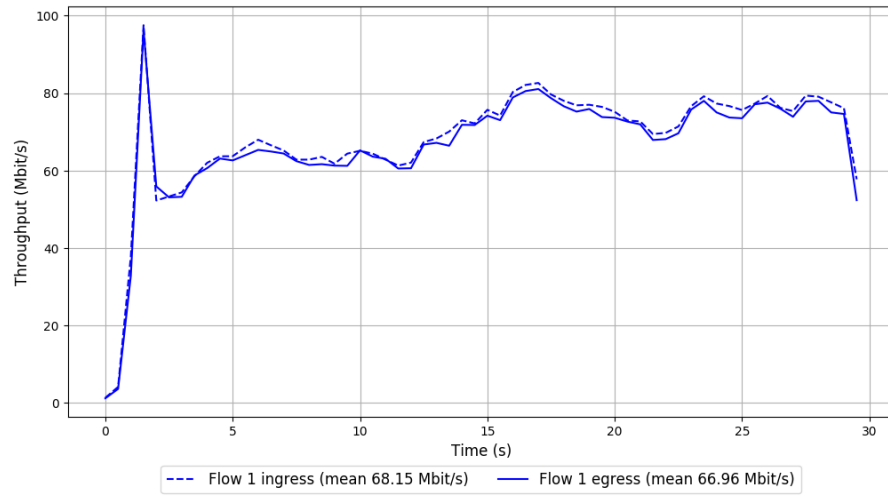


Run 5: Statistics of Vivace-LTE

Start at: 2018-02-19 23:03:01
End at: 2018-02-19 23:03:31
Local clock offset: -1.153 ms
Remote clock offset: -11.929 ms

Below is generated by plot.py at 2018-02-20 06:46:06
Datalink statistics
-- Total of 1 flow:
Average throughput: 66.96 Mbit/s
95th percentile per-packet one-way delay: 33.383 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 66.96 Mbit/s
95th percentile per-packet one-way delay: 33.383 ms
Loss rate: 1.94%

Run 5: Report of Vivace-LTE — Data Link

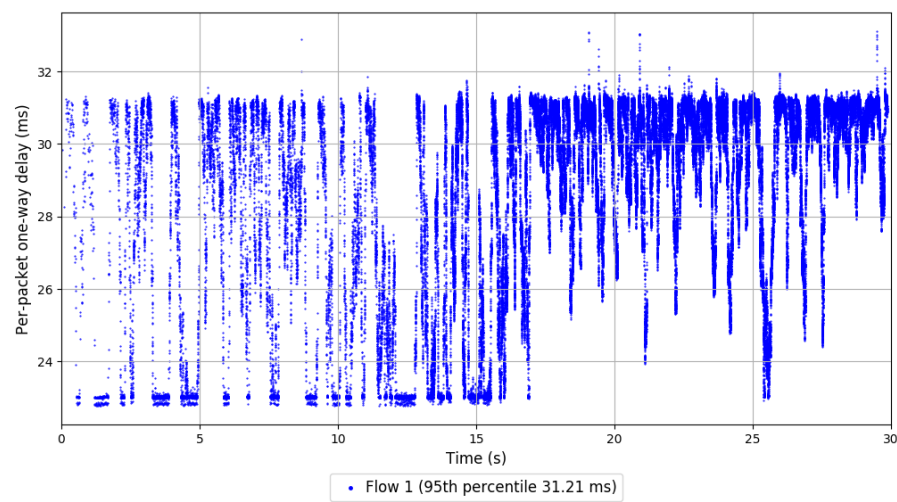
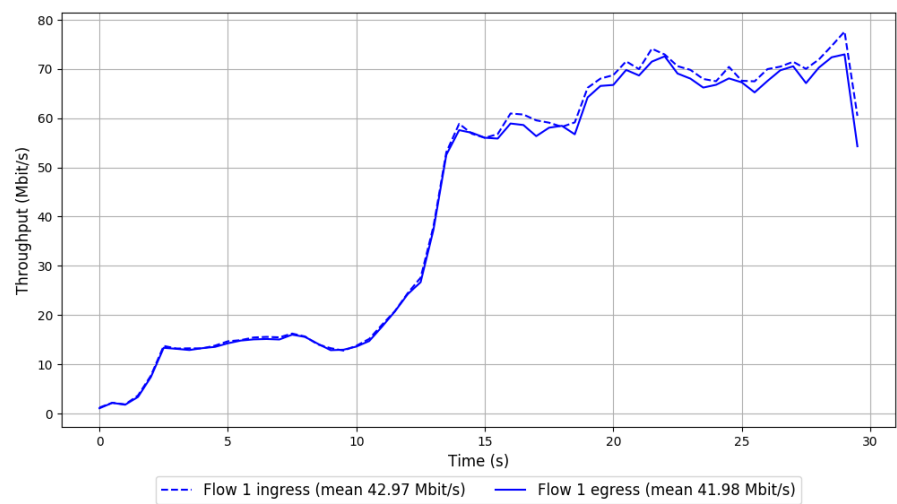


Run 6: Statistics of Vivace-LTE

Start at: 2018-02-19 23:30:21
End at: 2018-02-19 23:30:51
Local clock offset: 4.186 ms
Remote clock offset: -2.148 ms

Below is generated by plot.py at 2018-02-20 06:46:06
Datalink statistics
-- Total of 1 flow:
Average throughput: 41.98 Mbit/s
95th percentile per-packet one-way delay: 31.209 ms
Loss rate: 2.48%
-- Flow 1:
Average throughput: 41.98 Mbit/s
95th percentile per-packet one-way delay: 31.209 ms
Loss rate: 2.48%

Run 6: Report of Vivace-LTE — Data Link

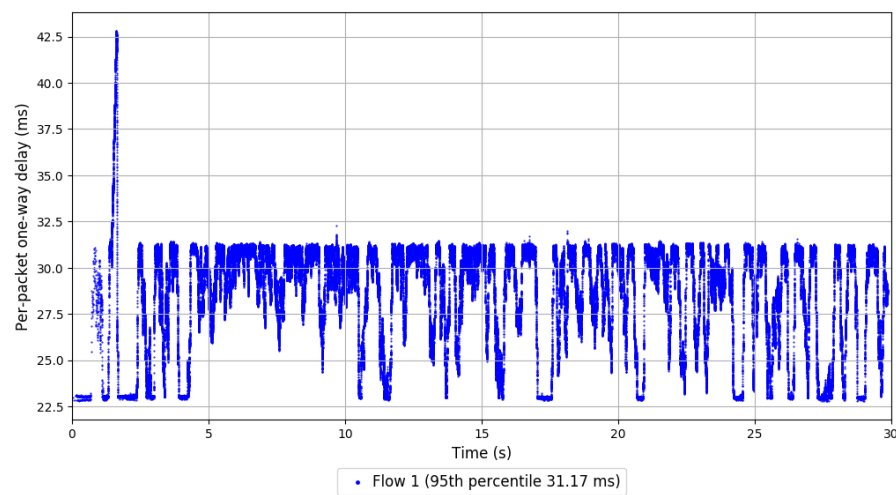
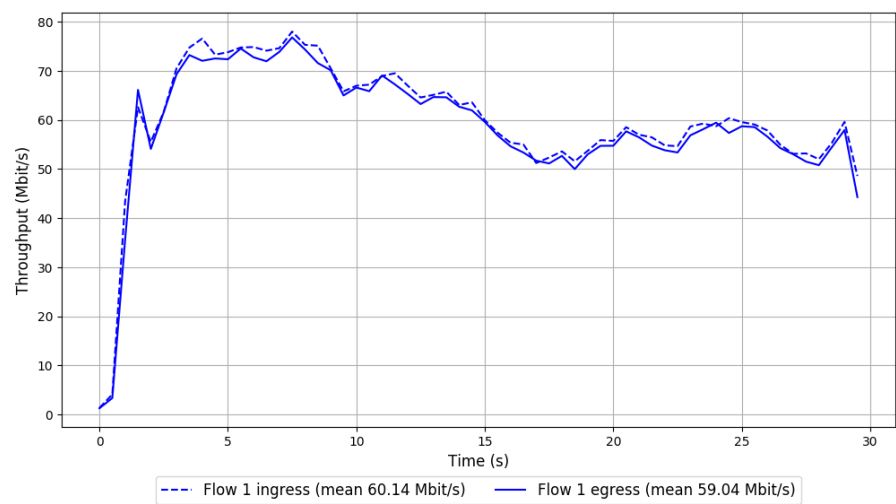


Run 7: Statistics of Vivace-LTE

Start at: 2018-02-19 23:59:15
End at: 2018-02-19 23:59:45
Local clock offset: 1.854 ms
Remote clock offset: -8.793 ms

Below is generated by plot.py at 2018-02-20 06:46:06
Datalink statistics
-- Total of 1 flow:
Average throughput: 59.04 Mbit/s
95th percentile per-packet one-way delay: 31.168 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 59.04 Mbit/s
95th percentile per-packet one-way delay: 31.168 ms
Loss rate: 2.00%

Run 7: Report of Vivace-LTE — Data Link

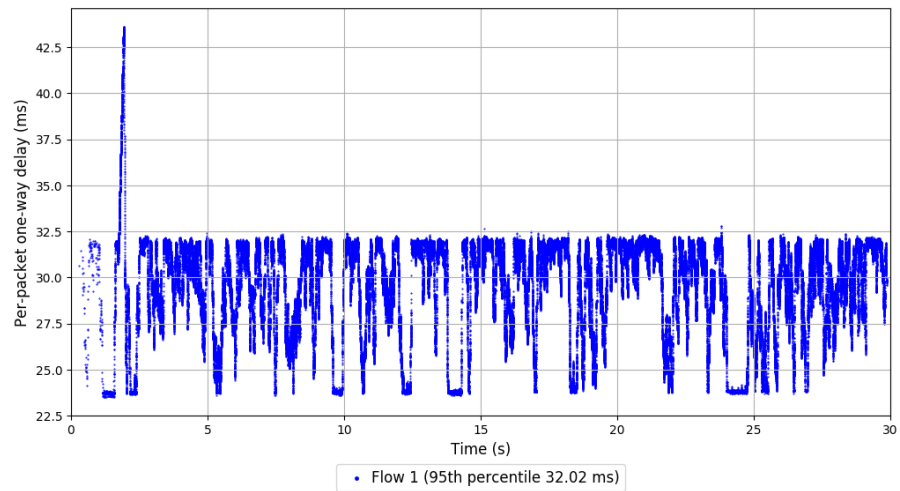
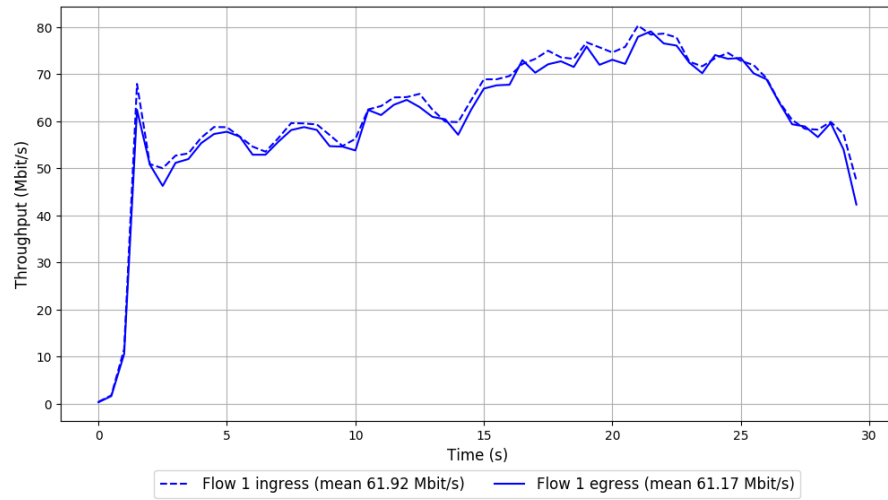


Run 8: Statistics of Vivace-LTE

Start at: 2018-02-20 00:27:32
End at: 2018-02-20 00:28:02
Local clock offset: -3.952 ms
Remote clock offset: -4.988 ms

Below is generated by plot.py at 2018-02-20 06:46:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 61.17 Mbit/s
95th percentile per-packet one-way delay: 32.021 ms
Loss rate: 2.25%
-- Flow 1:
Average throughput: 61.17 Mbit/s
95th percentile per-packet one-way delay: 32.021 ms
Loss rate: 2.25%

Run 8: Report of Vivace-LTE — Data Link

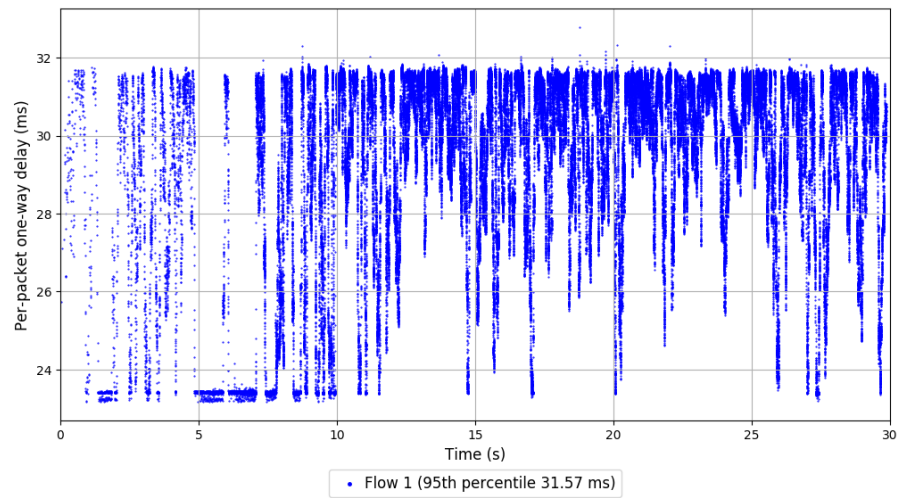
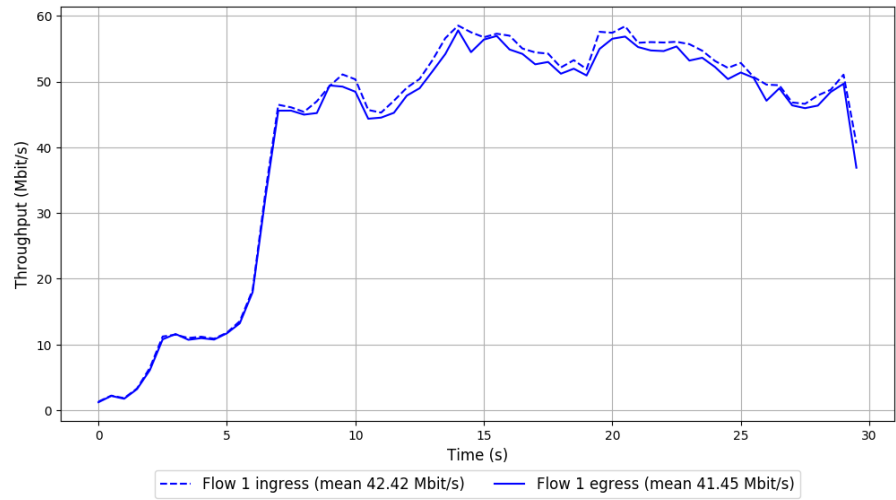


Run 9: Statistics of Vivace-LTE

Start at: 2018-02-20 00:55:22
End at: 2018-02-20 00:55:52
Local clock offset: -5.648 ms
Remote clock offset: -4.461 ms

Below is generated by plot.py at 2018-02-20 06:46:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 41.45 Mbit/s
95th percentile per-packet one-way delay: 31.571 ms
Loss rate: 2.46%
-- Flow 1:
Average throughput: 41.45 Mbit/s
95th percentile per-packet one-way delay: 31.571 ms
Loss rate: 2.46%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-20 01:23:59
End at: 2018-02-20 01:24:29
Local clock offset: -4.923 ms
Remote clock offset: -3.741 ms

Below is generated by plot.py at 2018-02-20 06:46:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 66.22 Mbit/s
95th percentile per-packet one-way delay: 42.638 ms
Loss rate: 2.45%
-- Flow 1:
Average throughput: 66.22 Mbit/s
95th percentile per-packet one-way delay: 42.638 ms
Loss rate: 2.45%

Run 10: Report of Vivace-LTE — Data Link

