

Pantheon Report

Generated at 2018-04-10 17:52:05 (UTC).

Data path: AWS Korea Ethernet (*local*) → China Ethernet (*remote*).

Repeated the test of 17 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

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

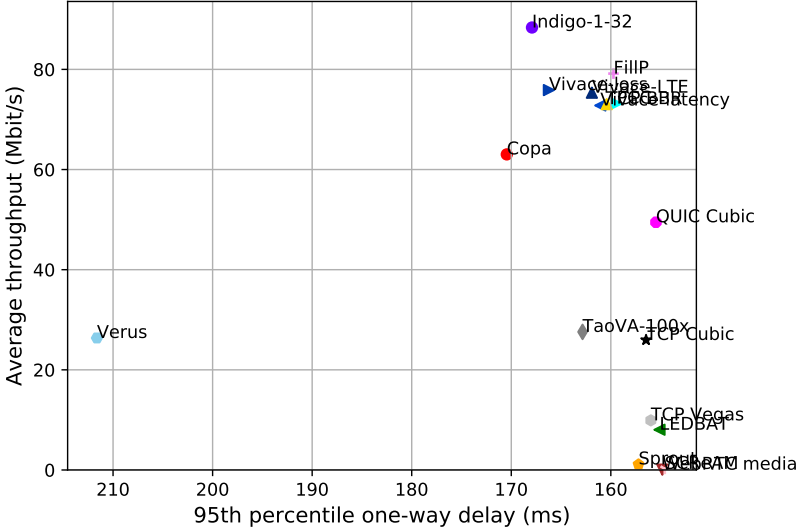
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

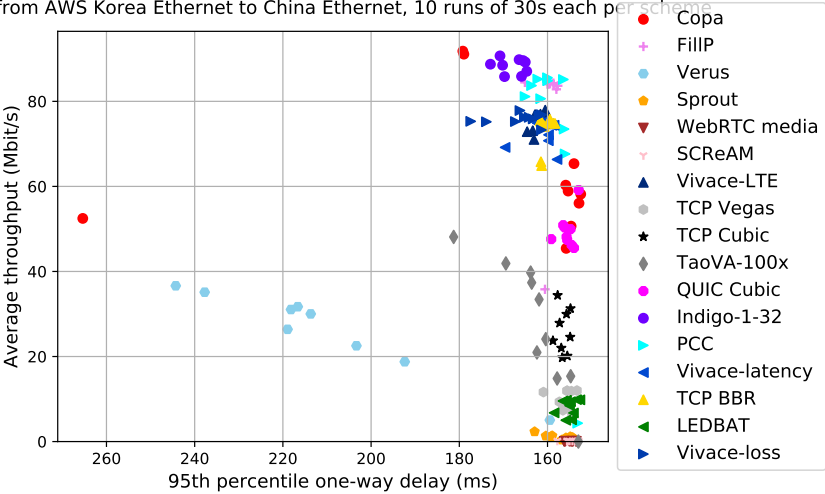
Git summary:

```
branch: master @ eb420b5be9bafccd22cf68b99ff5a2000462fc59
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
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 @ f1a14bffe749737437f61b1eaeab30b267cde681
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 @ f271183af822eee5d0031620f4bebf38aedc5581
```

test from AWS Korea Ethernet to China Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)



test from AWS Korea Ethernet to China 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	73.06	160.41	3.68
TCP Cubic	9	25.97	156.46	0.23
LEDBAT	10	8.04	155.11	0.08
PCC	10	73.17	159.42	1.69
QUIC Cubic	9	49.47	155.47	0.79
SCReAM	9	0.22	154.58	0.00
WebRTC media	10	0.06	154.83	0.00
Sprout	10	1.12	157.22	0.46
TaoVA-100x	10	27.58	162.84	3.11
TCP Vegas	10	9.91	155.98	0.39
Verus	9	26.36	211.62	73.25
Copa	10	63.02	170.45	26.55
FillP	10	79.16	159.73	5.45
Indigo-1-32	9	88.37	167.92	23.57
Vivace-latency	10	72.79	161.06	0.57
Vivace-loss	10	75.87	166.22	0.81
Vivace-LTE	10	75.35	161.90	0.48

Run 1: Statistics of TCP BBR

Start at: 2018-04-10 13:18:25

End at: 2018-04-10 13:18:55

Local clock offset: 18.627 ms

Remote clock offset: 2.176 ms

Below is generated by plot.py at 2018-04-10 17:34:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.89 Mbit/s

95th percentile per-packet one-way delay: 161.332 ms

Loss rate: 2.66%

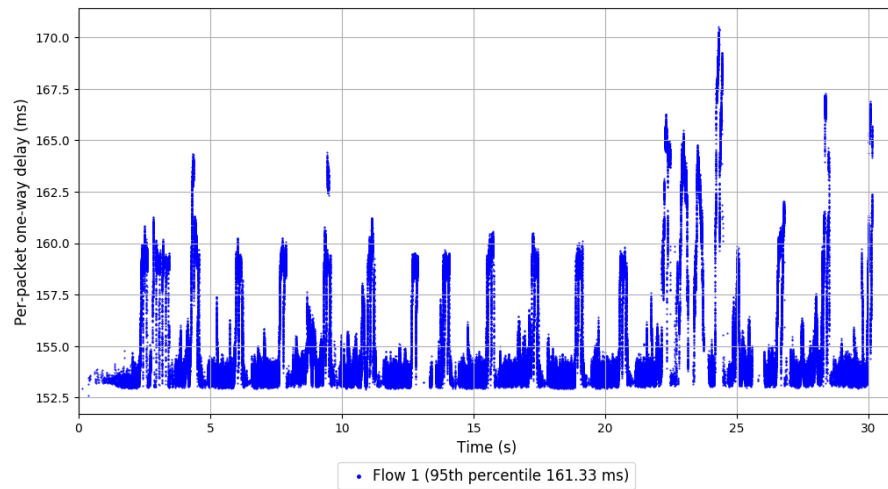
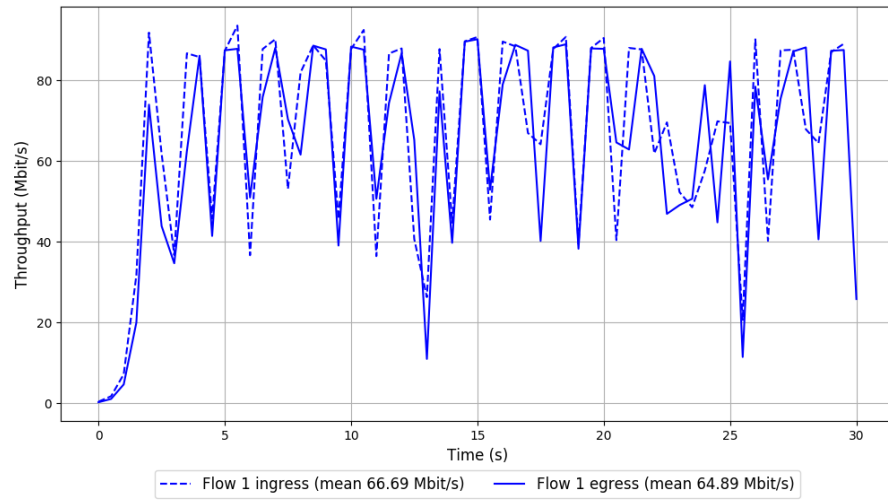
-- Flow 1:

Average throughput: 64.89 Mbit/s

95th percentile per-packet one-way delay: 161.332 ms

Loss rate: 2.66%

Run 1: Report of TCP BBR — Data Link

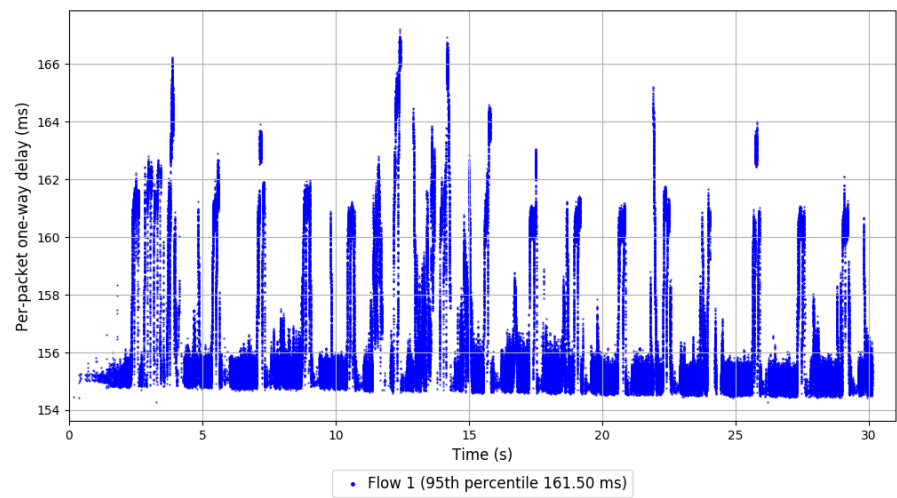
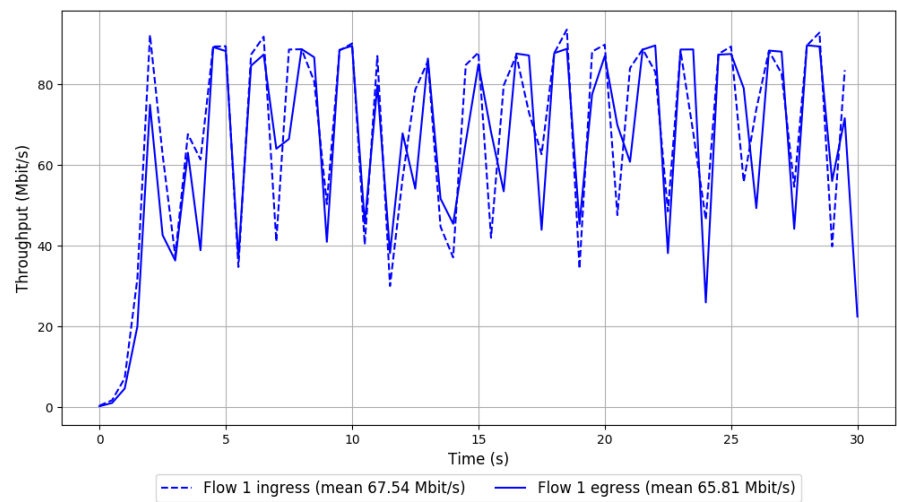


Run 2: Statistics of TCP BBR

Start at: 2018-04-10 13:43:45
End at: 2018-04-10 13:44:15
Local clock offset: 15.694 ms
Remote clock offset: 18.163 ms

Below is generated by plot.py at 2018-04-10 17:34:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 65.81 Mbit/s
95th percentile per-packet one-way delay: 161.495 ms
Loss rate: 2.57%
-- Flow 1:
Average throughput: 65.81 Mbit/s
95th percentile per-packet one-way delay: 161.495 ms
Loss rate: 2.57%

Run 2: Report of TCP BBR — Data Link

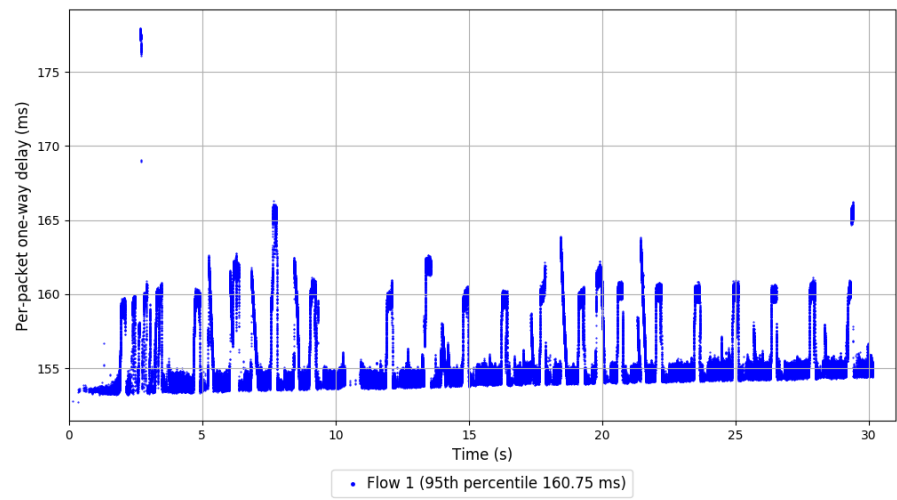
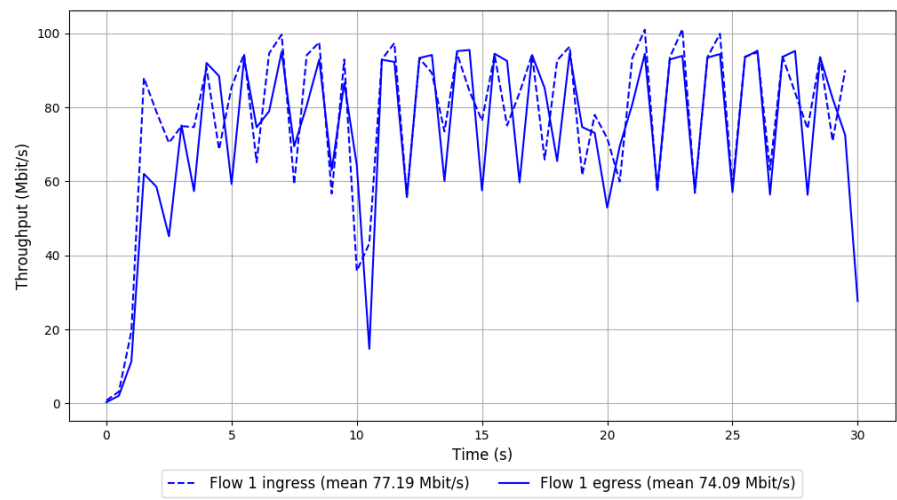


Run 3: Statistics of TCP BBR

Start at: 2018-04-10 14:07:45
End at: 2018-04-10 14:08:15
Local clock offset: 14.885 ms
Remote clock offset: 22.677 ms

Below is generated by plot.py at 2018-04-10 17:34:31
Datalink statistics
-- Total of 1 flow:
Average throughput: 74.09 Mbit/s
95th percentile per-packet one-way delay: 160.755 ms
Loss rate: 4.01%
-- Flow 1:
Average throughput: 74.09 Mbit/s
95th percentile per-packet one-way delay: 160.755 ms
Loss rate: 4.01%

Run 3: Report of TCP BBR — Data Link

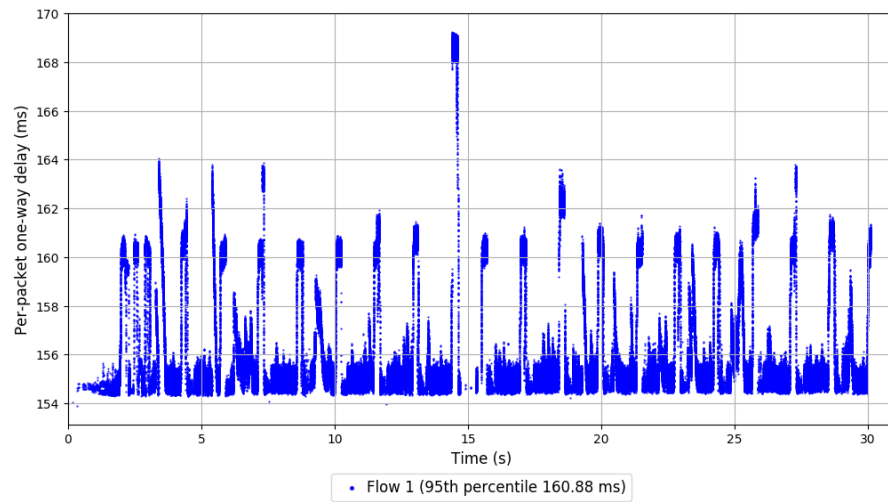
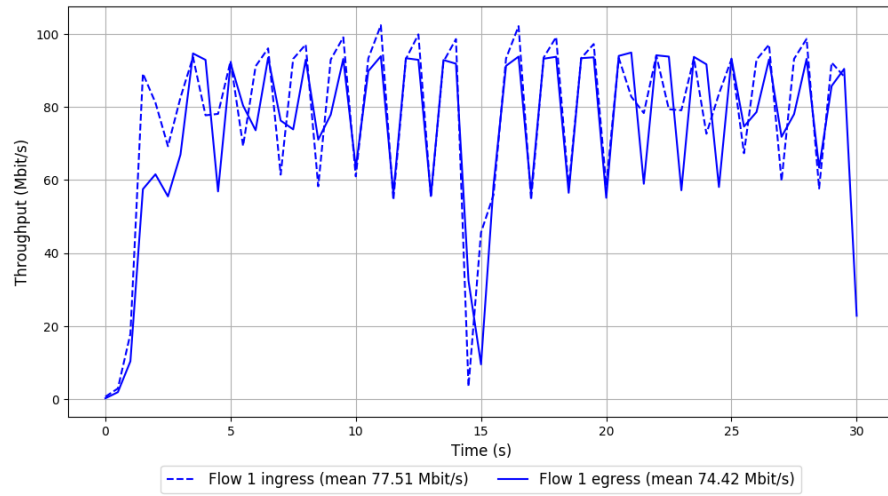


Run 4: Statistics of TCP BBR

Start at: 2018-04-10 14:32:15
End at: 2018-04-10 14:32:45
Local clock offset: 15.986 ms
Remote clock offset: -0.761 ms

Below is generated by plot.py at 2018-04-10 17:34:31
Datalink statistics
-- Total of 1 flow:
Average throughput: 74.42 Mbit/s
95th percentile per-packet one-way delay: 160.882 ms
Loss rate: 3.96%
-- Flow 1:
Average throughput: 74.42 Mbit/s
95th percentile per-packet one-way delay: 160.882 ms
Loss rate: 3.96%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-04-10 14:56:08

End at: 2018-04-10 14:56:38

Local clock offset: 22.82 ms

Remote clock offset: 1.654 ms

Below is generated by plot.py at 2018-04-10 17:34:31

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.84 Mbit/s

95th percentile per-packet one-way delay: 158.706 ms

Loss rate: 3.86%

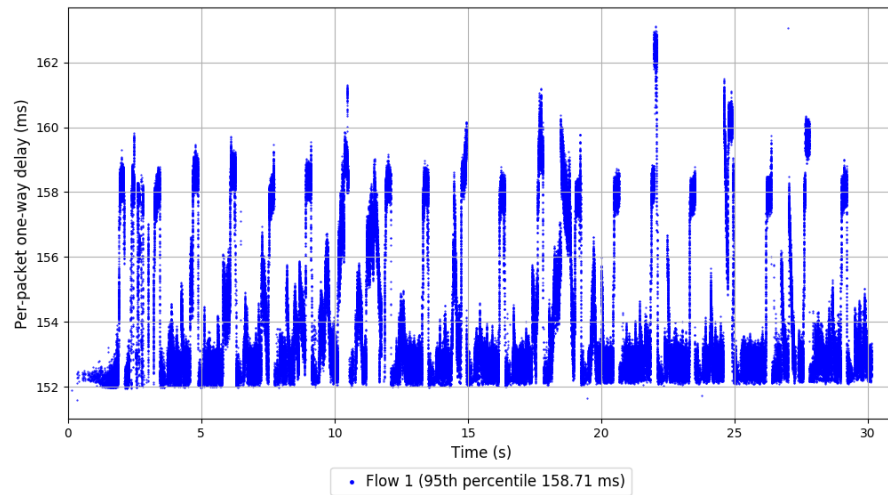
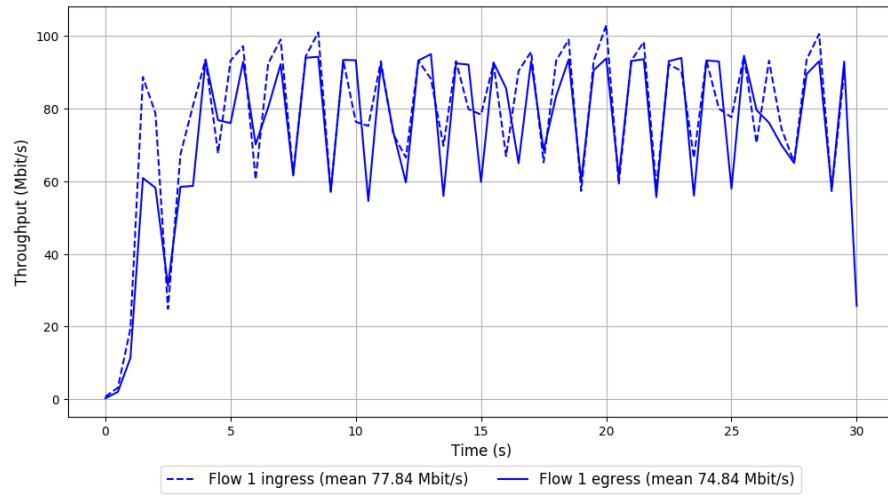
-- Flow 1:

Average throughput: 74.84 Mbit/s

95th percentile per-packet one-way delay: 158.706 ms

Loss rate: 3.86%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-04-10 15:20:39

End at: 2018-04-10 15:21:09

Local clock offset: 27.657 ms

Remote clock offset: 2.185 ms

Below is generated by plot.py at 2018-04-10 17:34:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.80 Mbit/s

95th percentile per-packet one-way delay: 159.470 ms

Loss rate: 4.04%

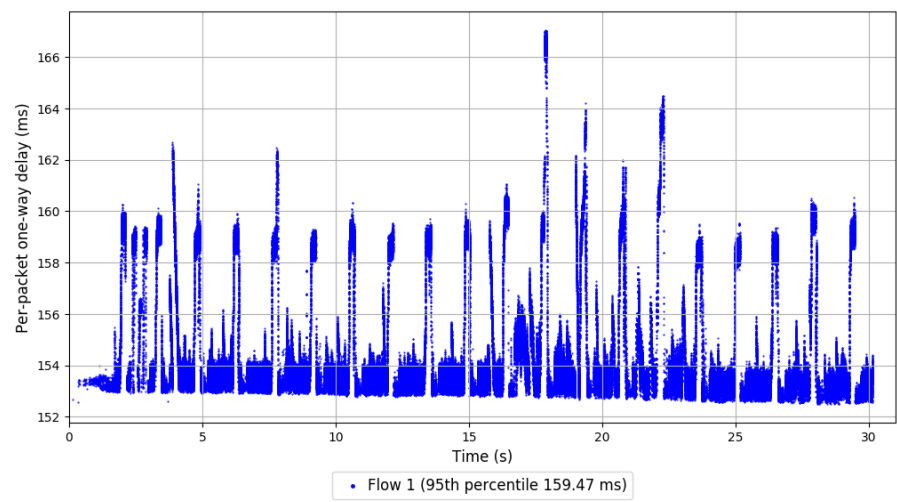
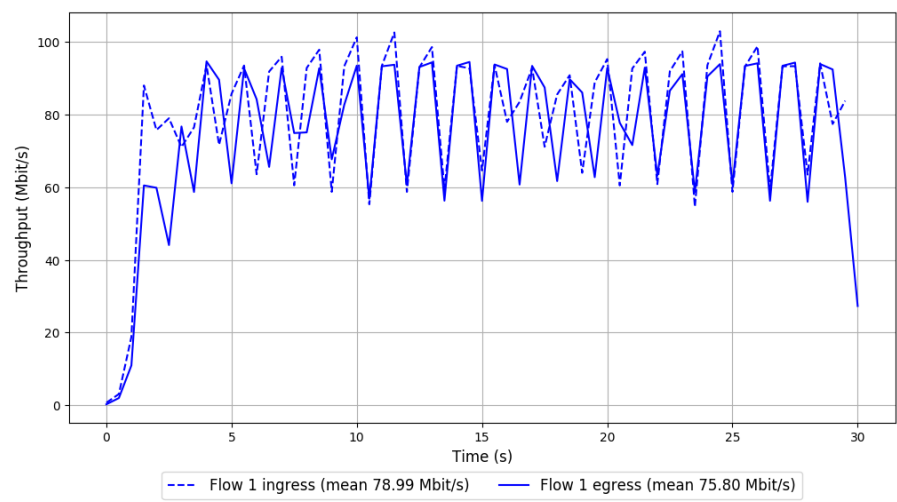
-- Flow 1:

Average throughput: 75.80 Mbit/s

95th percentile per-packet one-way delay: 159.470 ms

Loss rate: 4.04%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-04-10 15:43:54

End at: 2018-04-10 15:44:24

Local clock offset: 16.922 ms

Remote clock offset: 2.003 ms

Below is generated by plot.py at 2018-04-10 17:34:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.62 Mbit/s

95th percentile per-packet one-way delay: 161.541 ms

Loss rate: 3.77%

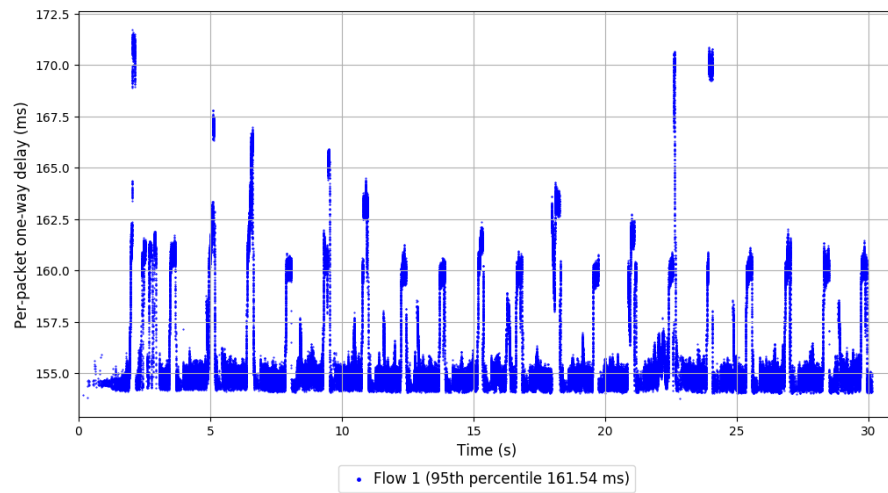
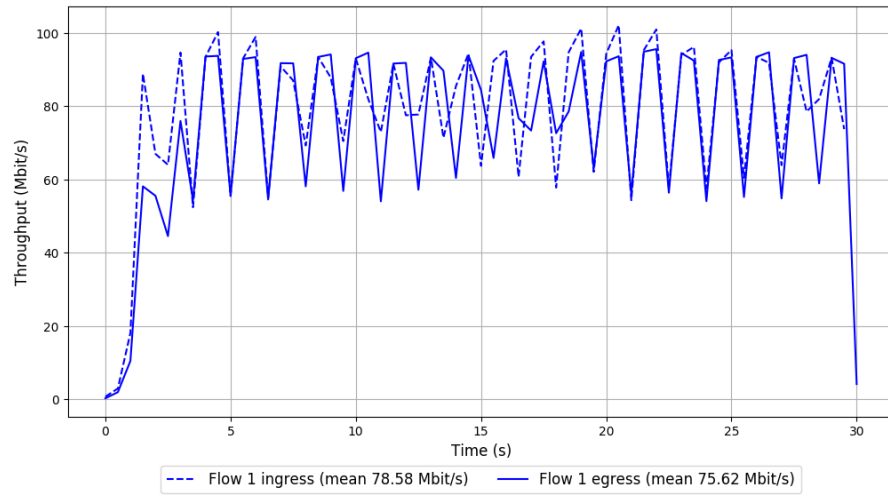
-- Flow 1:

Average throughput: 75.62 Mbit/s

95th percentile per-packet one-way delay: 161.541 ms

Loss rate: 3.77%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-04-10 16:06:28

End at: 2018-04-10 16:06:58

Local clock offset: 17.98 ms

Remote clock offset: 20.309 ms

Below is generated by plot.py at 2018-04-10 17:34:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.39 Mbit/s

95th percentile per-packet one-way delay: 161.682 ms

Loss rate: 3.83%

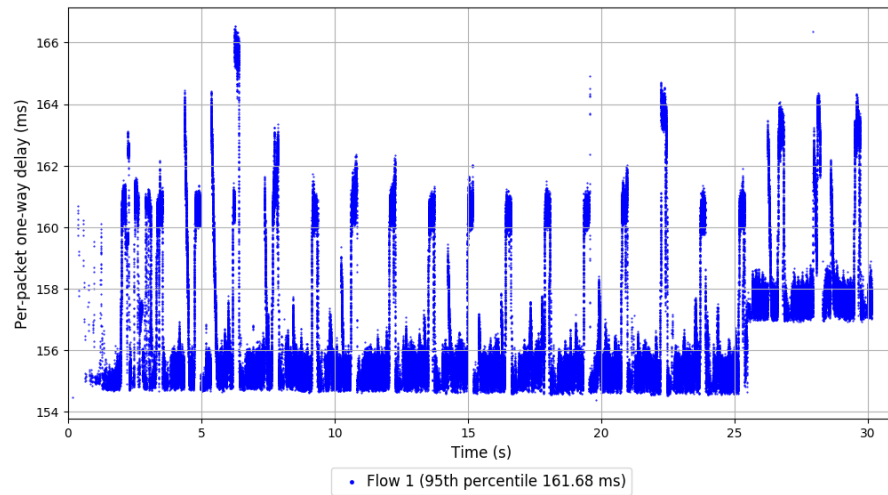
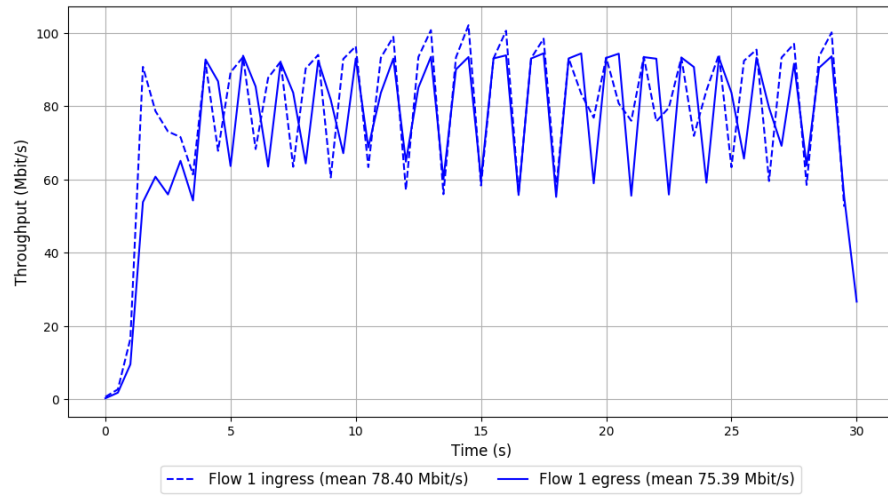
-- Flow 1:

Average throughput: 75.39 Mbit/s

95th percentile per-packet one-way delay: 161.682 ms

Loss rate: 3.83%

Run 8: Report of TCP BBR — Data Link

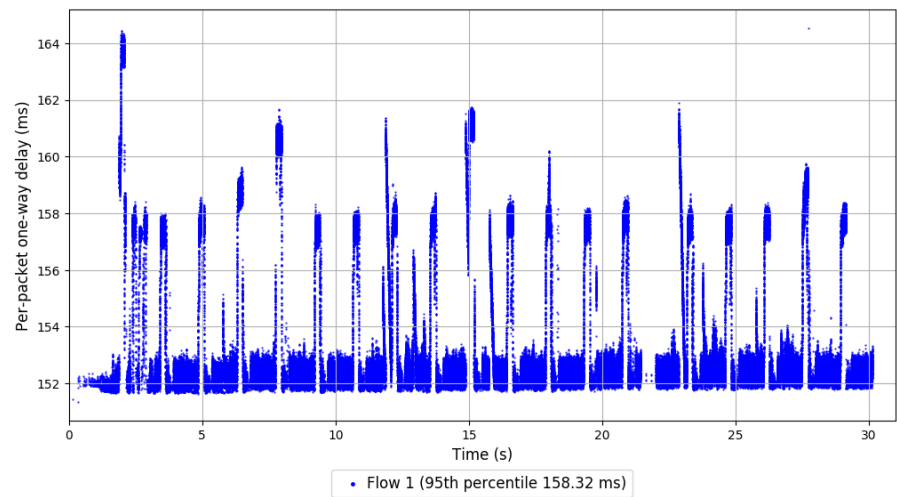
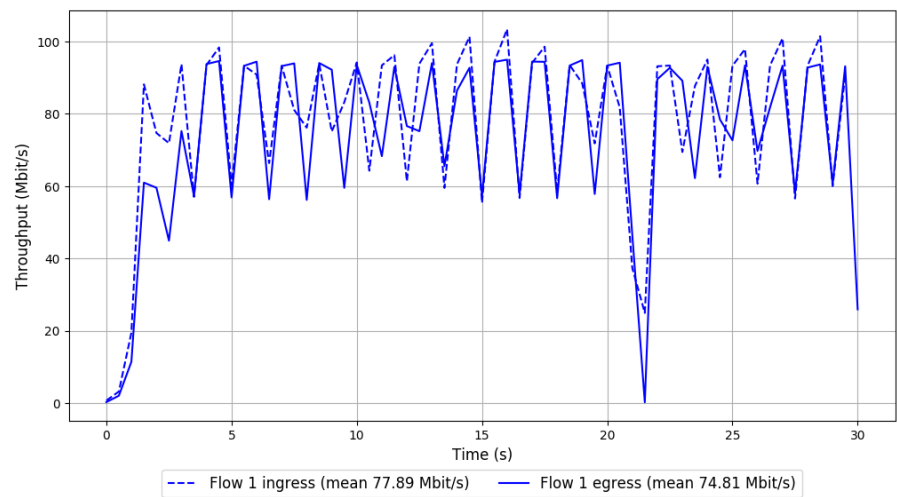


Run 9: Statistics of TCP BBR

Start at: 2018-04-10 16:30:19
End at: 2018-04-10 16:30:49
Local clock offset: 16.608 ms
Remote clock offset: 12.407 ms

Below is generated by plot.py at 2018-04-10 17:35:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 74.81 Mbit/s
95th percentile per-packet one-way delay: 158.320 ms
Loss rate: 3.94%
-- Flow 1:
Average throughput: 74.81 Mbit/s
95th percentile per-packet one-way delay: 158.320 ms
Loss rate: 3.94%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-04-10 16:53:15

End at: 2018-04-10 16:53:45

Local clock offset: 8.252 ms

Remote clock offset: 3.512 ms

Below is generated by plot.py at 2018-04-10 17:35:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.97 Mbit/s

95th percentile per-packet one-way delay: 159.919 ms

Loss rate: 4.15%

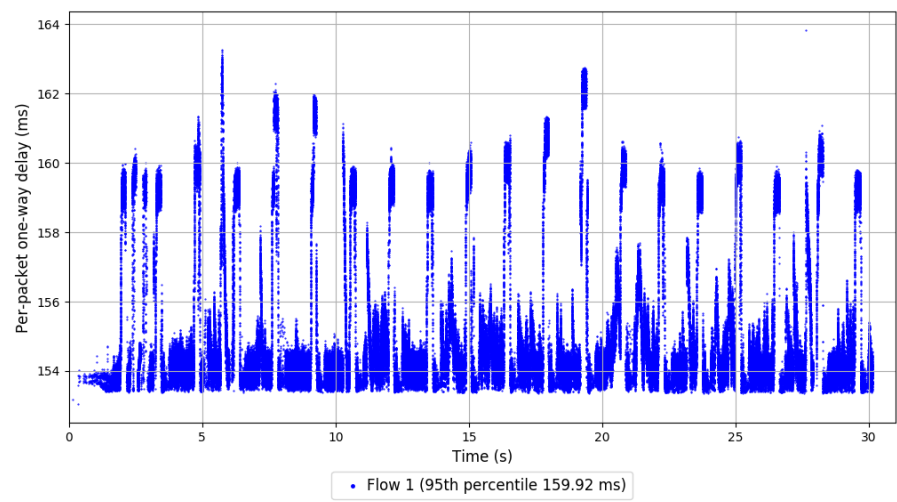
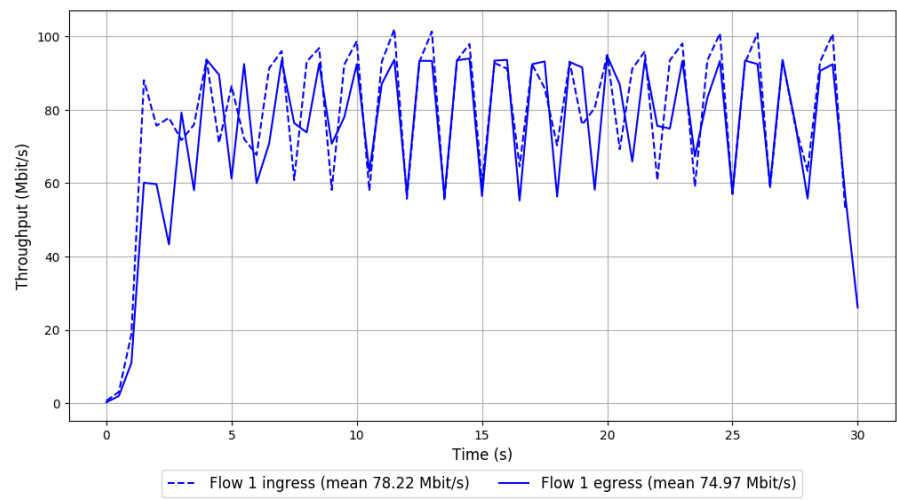
-- Flow 1:

Average throughput: 74.97 Mbit/s

95th percentile per-packet one-way delay: 159.919 ms

Loss rate: 4.15%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

/home/ubuntu/pantheon_data/2018-04-10T13-13-AWS-Korea-to-China-10-runs/default_tcp_stats_run

Run 1: Report of TCP Cubic — Data Link

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Figure is missing

Run 2: Statistics of TCP Cubic

Start at: 2018-04-10 13:45:06

End at: 2018-04-10 13:45:36

Local clock offset: 15.998 ms

Remote clock offset: 19.17 ms

Below is generated by plot.py at 2018-04-10 17:35:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.01 Mbit/s

95th percentile per-packet one-way delay: 156.877 ms

Loss rate: 0.29%

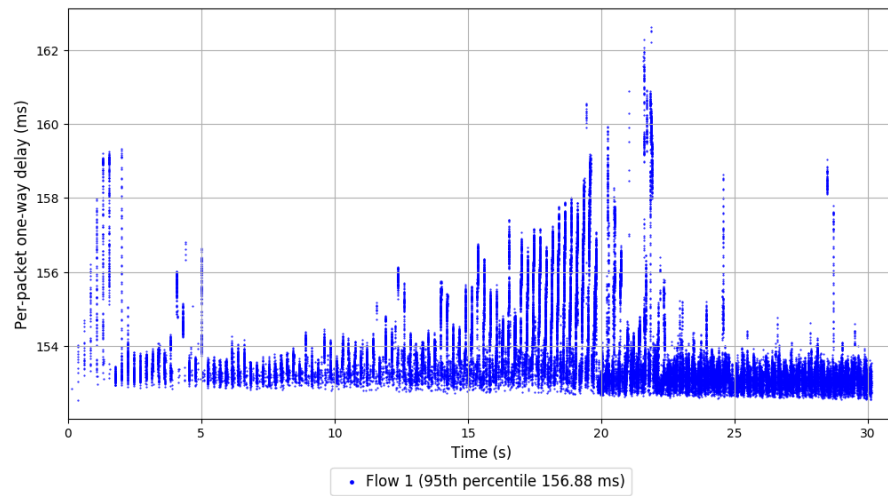
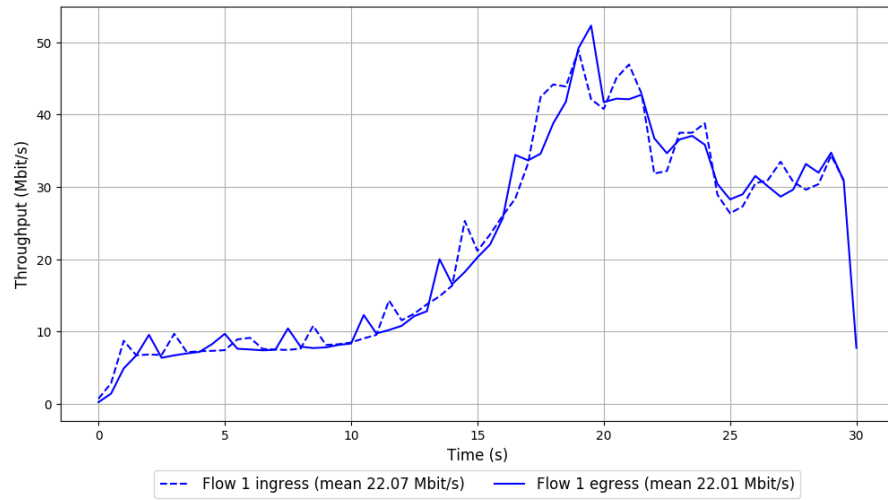
-- Flow 1:

Average throughput: 22.01 Mbit/s

95th percentile per-packet one-way delay: 156.877 ms

Loss rate: 0.29%

Run 2: Report of TCP Cubic — Data Link

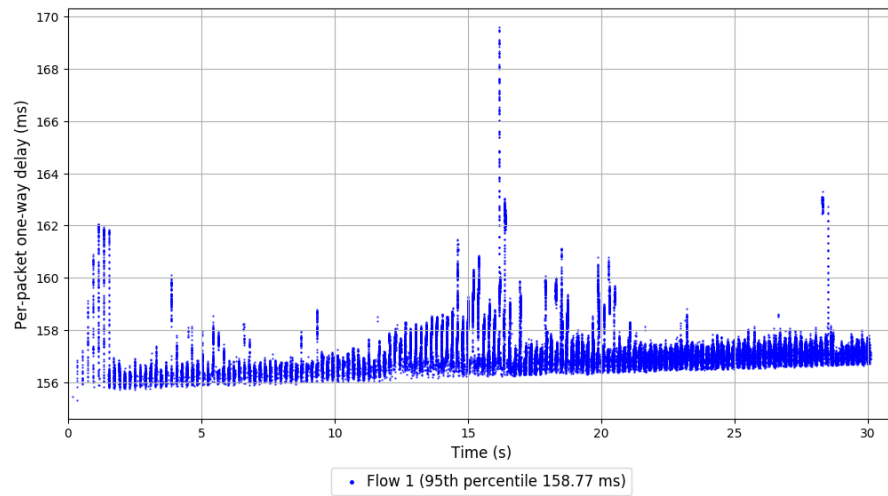
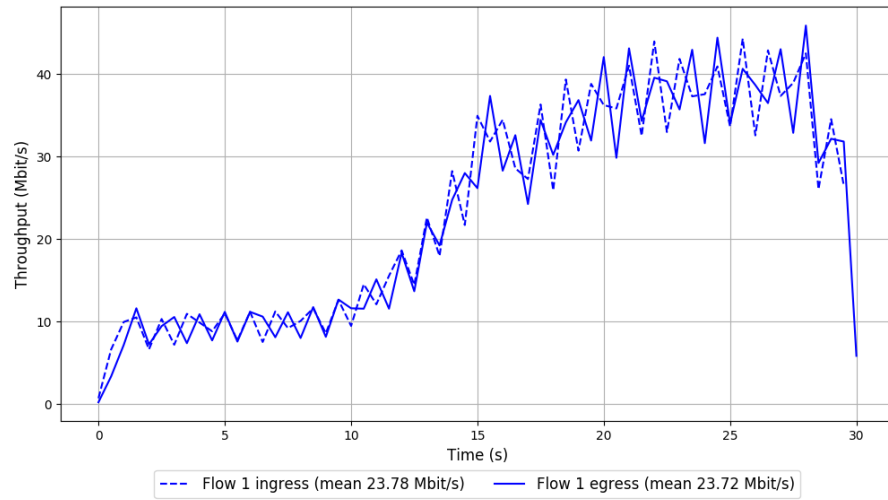


Run 3: Statistics of TCP Cubic

Start at: 2018-04-10 14:09:06
End at: 2018-04-10 14:09:36
Local clock offset: 14.582 ms
Remote clock offset: 18.894 ms

Below is generated by plot.py at 2018-04-10 17:35:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 23.72 Mbit/s
95th percentile per-packet one-way delay: 158.774 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 23.72 Mbit/s
95th percentile per-packet one-way delay: 158.774 ms
Loss rate: 0.27%

Run 3: Report of TCP Cubic — Data Link

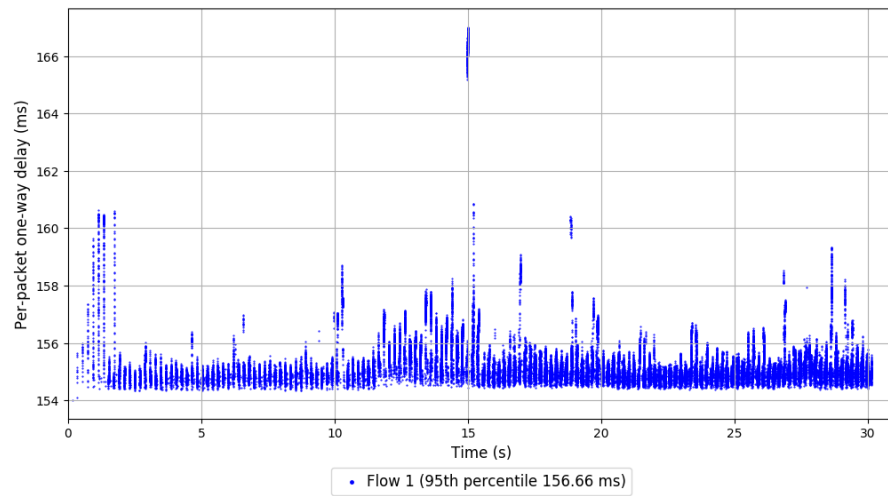
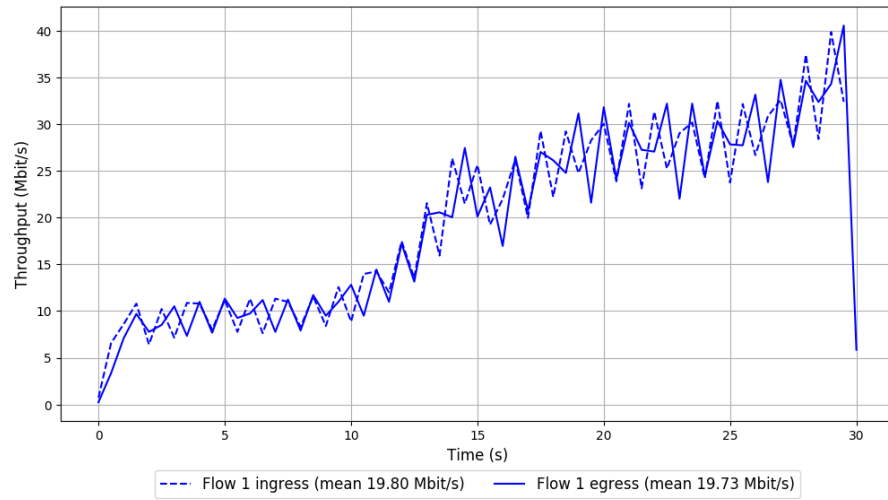


Run 4: Statistics of TCP Cubic

Start at: 2018-04-10 14:33:36
End at: 2018-04-10 14:34:06
Local clock offset: 15.792 ms
Remote clock offset: -1.088 ms

Below is generated by plot.py at 2018-04-10 17:35:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 19.73 Mbit/s
95th percentile per-packet one-way delay: 156.661 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 19.73 Mbit/s
95th percentile per-packet one-way delay: 156.661 ms
Loss rate: 0.36%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-04-10 14:57:29

End at: 2018-04-10 14:57:59

Local clock offset: 23.468 ms

Remote clock offset: 1.63 ms

Below is generated by plot.py at 2018-04-10 17:35:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.98 Mbit/s

95th percentile per-packet one-way delay: 155.699 ms

Loss rate: 0.13%

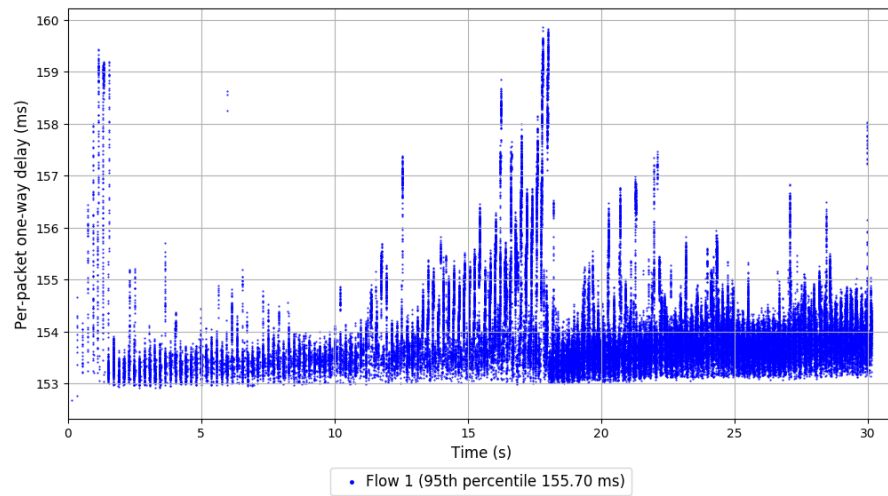
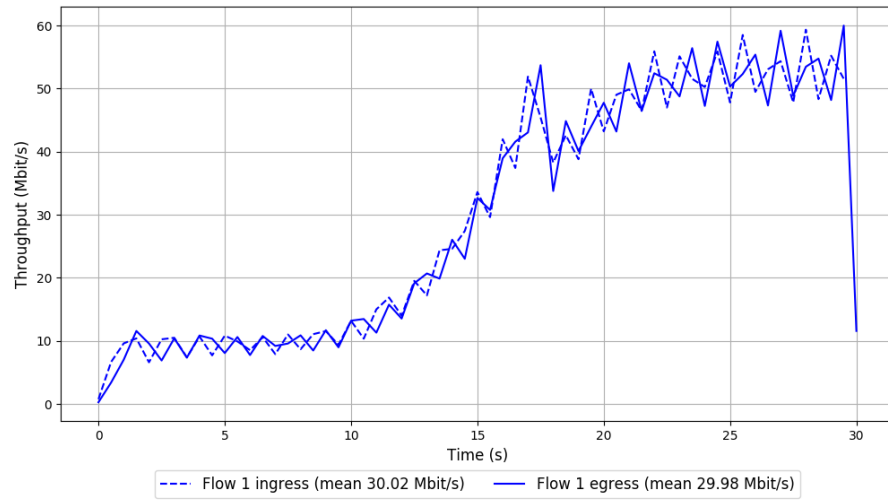
-- Flow 1:

Average throughput: 29.98 Mbit/s

95th percentile per-packet one-way delay: 155.699 ms

Loss rate: 0.13%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-04-10 15:21:55

End at: 2018-04-10 15:22:25

Local clock offset: 26.374 ms

Remote clock offset: 2.089 ms

Below is generated by plot.py at 2018-04-10 17:35:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.14 Mbit/s

95th percentile per-packet one-way delay: 155.508 ms

Loss rate: 0.29%

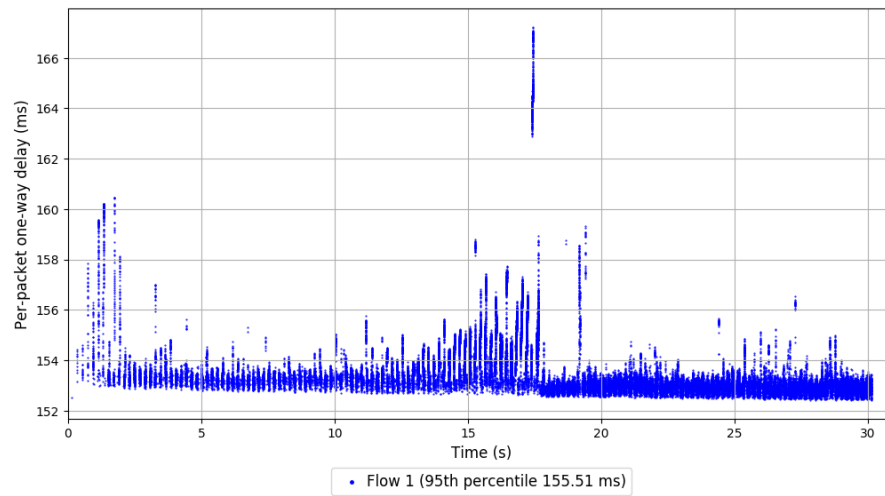
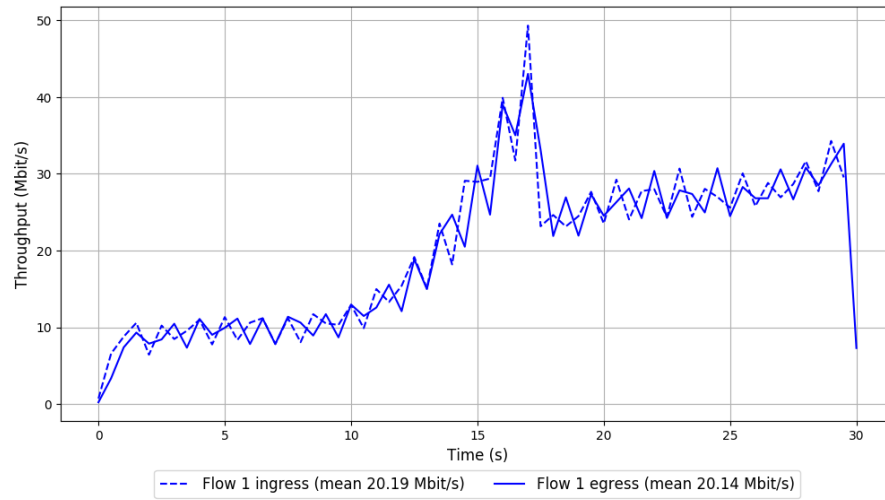
-- Flow 1:

Average throughput: 20.14 Mbit/s

95th percentile per-packet one-way delay: 155.508 ms

Loss rate: 0.29%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-04-10 15:45:10

End at: 2018-04-10 15:45:40

Local clock offset: 16.774 ms

Remote clock offset: 1.956 ms

Below is generated by plot.py at 2018-04-10 17:35:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 24.58 Mbit/s

95th percentile per-packet one-way delay: 154.863 ms

Loss rate: 0.26%

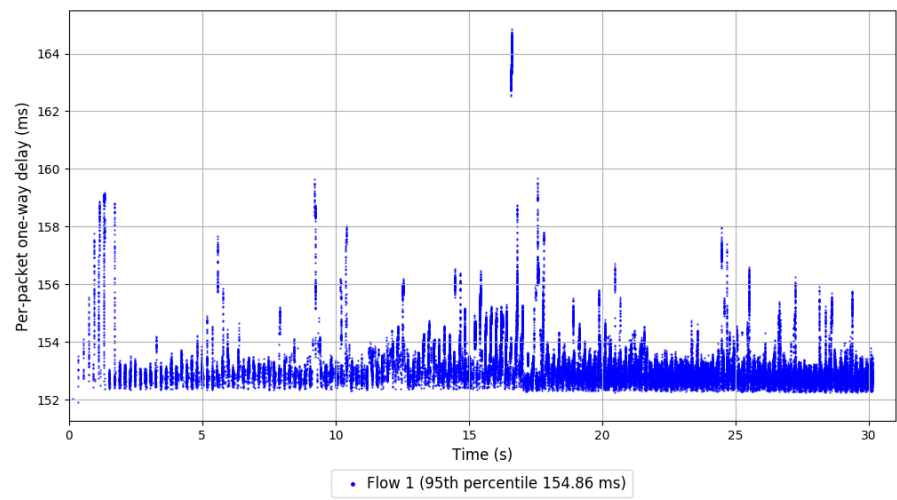
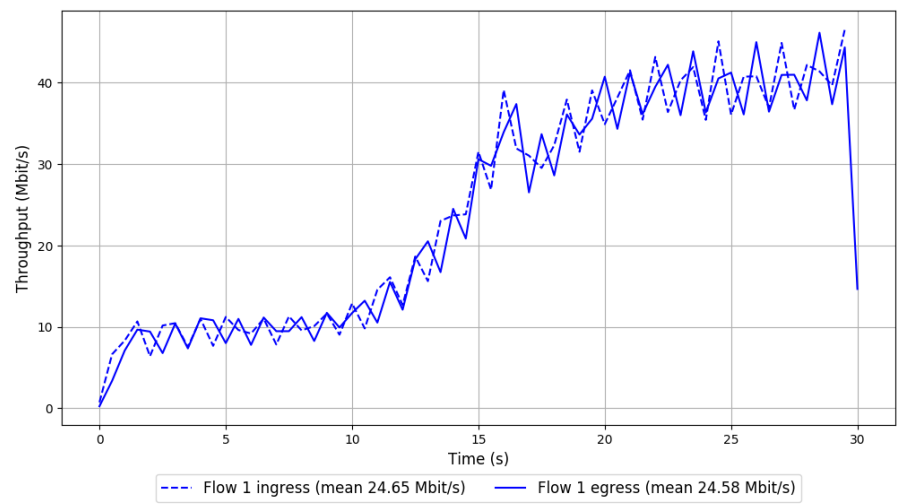
-- Flow 1:

Average throughput: 24.58 Mbit/s

95th percentile per-packet one-way delay: 154.863 ms

Loss rate: 0.26%

Run 7: Report of TCP Cubic — Data Link

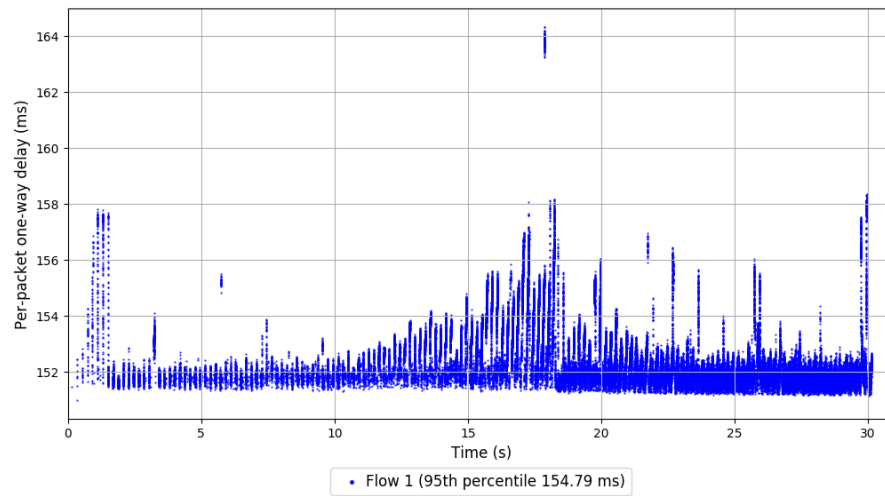
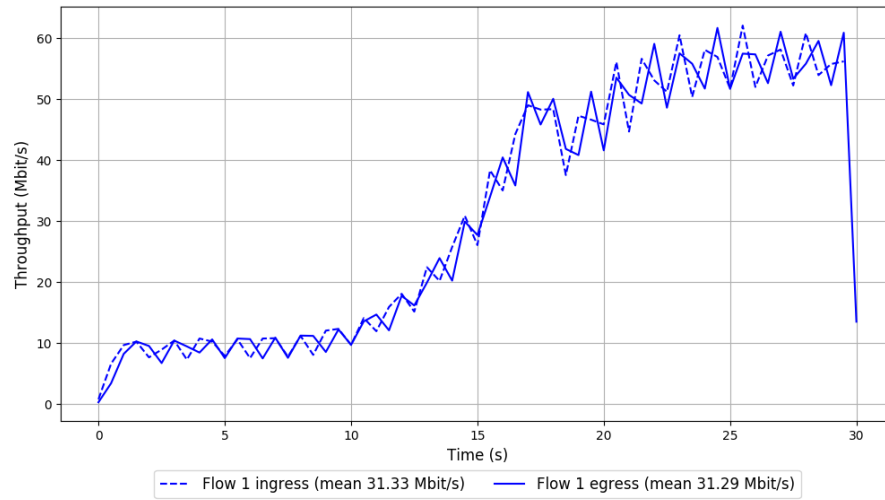


Run 8: Statistics of TCP Cubic

Start at: 2018-04-10 16:07:45
End at: 2018-04-10 16:08:15
Local clock offset: 17.968 ms
Remote clock offset: 20.914 ms

Below is generated by plot.py at 2018-04-10 17:35:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 31.29 Mbit/s
95th percentile per-packet one-way delay: 154.792 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 31.29 Mbit/s
95th percentile per-packet one-way delay: 154.792 ms
Loss rate: 0.14%

Run 8: Report of TCP Cubic — Data Link

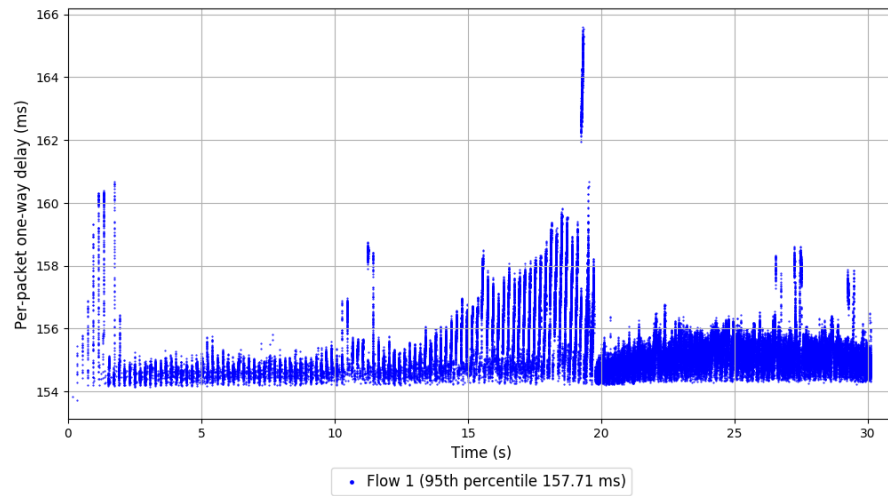
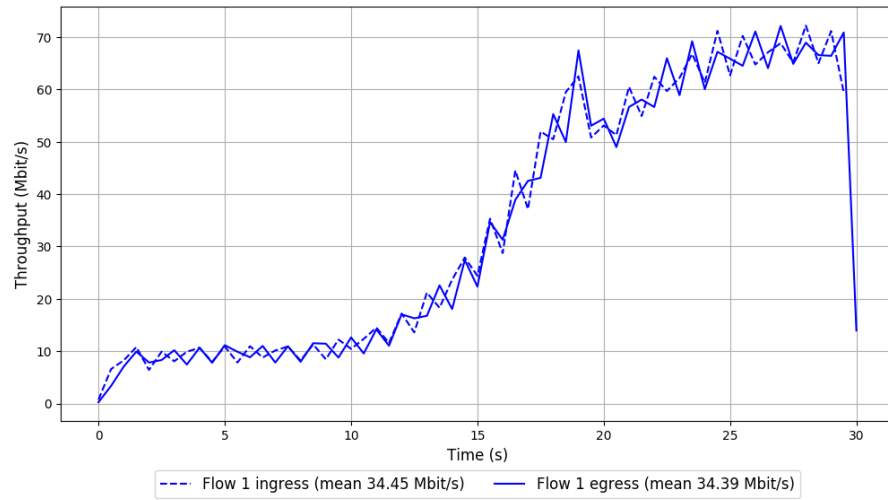


Run 9: Statistics of TCP Cubic

Start at: 2018-04-10 16:31:35
End at: 2018-04-10 16:32:05
Local clock offset: 15.51 ms
Remote clock offset: 10.965 ms

Below is generated by plot.py at 2018-04-10 17:35:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 34.39 Mbit/s
95th percentile per-packet one-way delay: 157.708 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 34.39 Mbit/s
95th percentile per-packet one-way delay: 157.708 ms
Loss rate: 0.16%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-04-10 16:54:32

End at: 2018-04-10 16:55:02

Local clock offset: 8.08 ms

Remote clock offset: 3.411 ms

Below is generated by plot.py at 2018-04-10 17:35:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 27.88 Mbit/s

95th percentile per-packet one-way delay: 157.259 ms

Loss rate: 0.13%

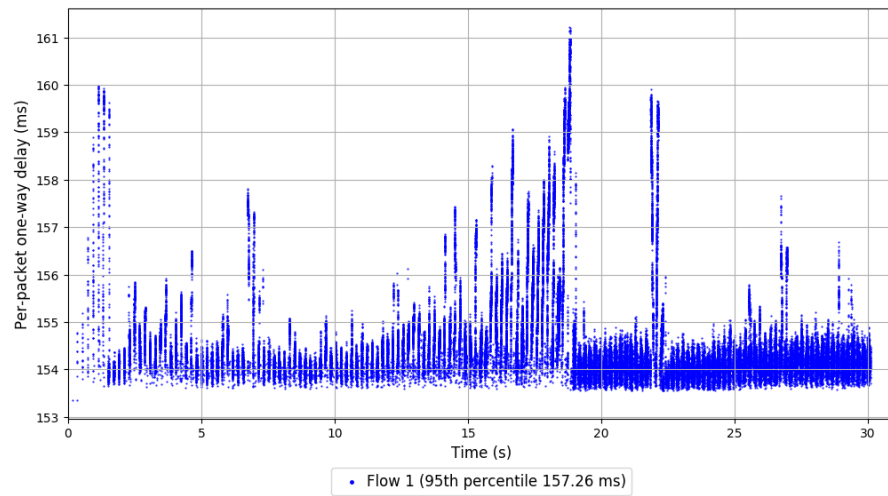
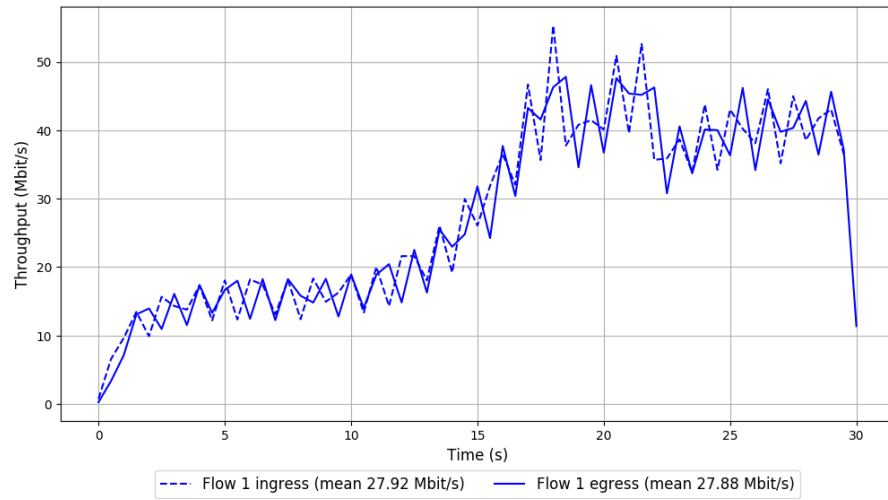
-- Flow 1:

Average throughput: 27.88 Mbit/s

95th percentile per-packet one-way delay: 157.259 ms

Loss rate: 0.13%

Run 10: Report of TCP Cubic — Data Link

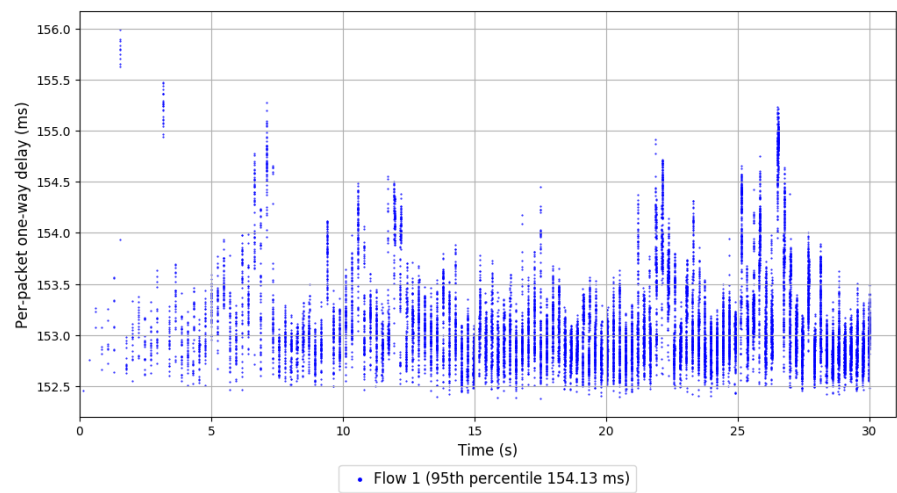
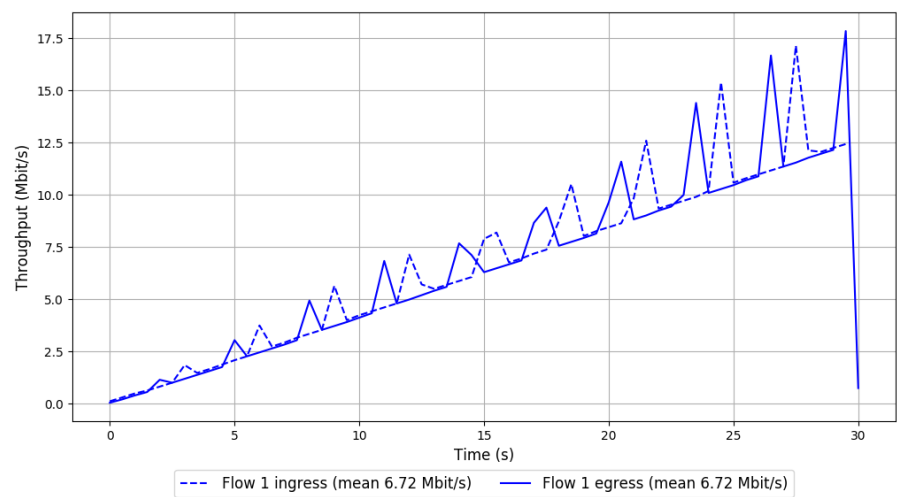


```
Run 1: Statistics of LEDBAT

Start at: 2018-04-10 13:28:56
End at: 2018-04-10 13:29:26
Local clock offset: 16.226 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2018-04-10 17:35:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.72 Mbit/s
95th percentile per-packet one-way delay: 154.130 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.72 Mbit/s
95th percentile per-packet one-way delay: 154.130 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

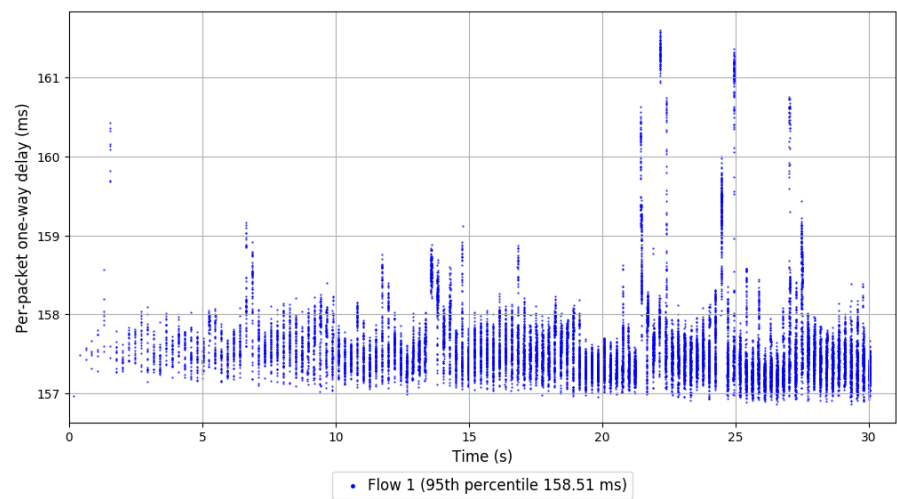
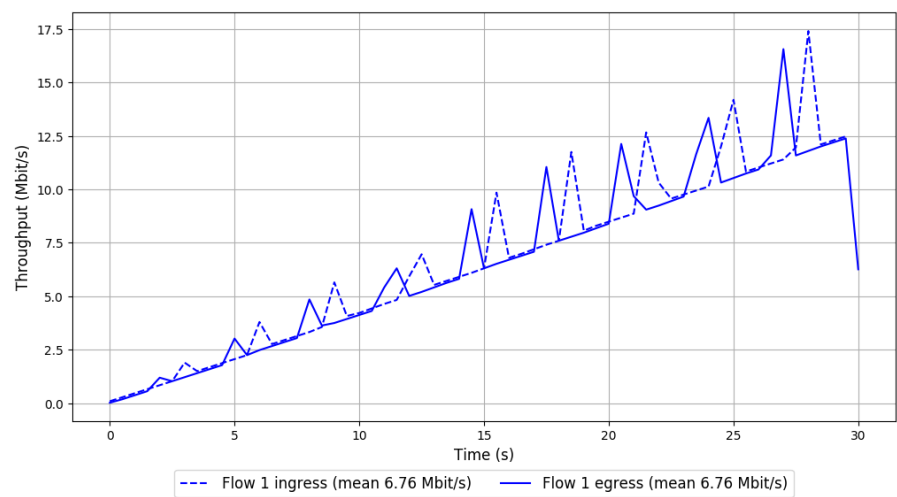


Run 2: Statistics of LEDBAT

Start at: 2018-04-10 13:53:08
End at: 2018-04-10 13:53:38
Local clock offset: 16.276 ms
Remote clock offset: 24.055 ms

Below is generated by plot.py at 2018-04-10 17:35:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 6.76 Mbit/s
95th percentile per-packet one-way delay: 158.511 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.76 Mbit/s
95th percentile per-packet one-way delay: 158.511 ms
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-04-10 14:17:02

End at: 2018-04-10 14:17:32

Local clock offset: 15.462 ms

Remote clock offset: 7.081 ms

Below is generated by plot.py at 2018-04-10 17:35:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.71 Mbit/s

95th percentile per-packet one-way delay: 155.709 ms

Loss rate: 0.00%

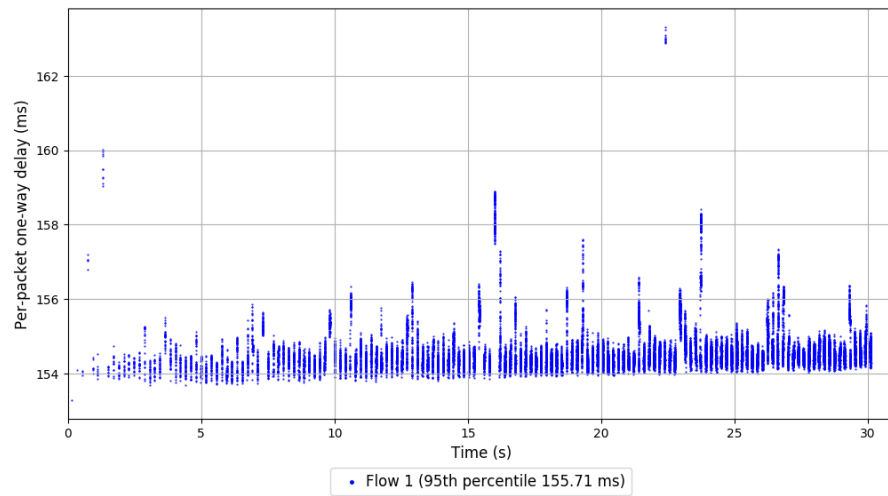
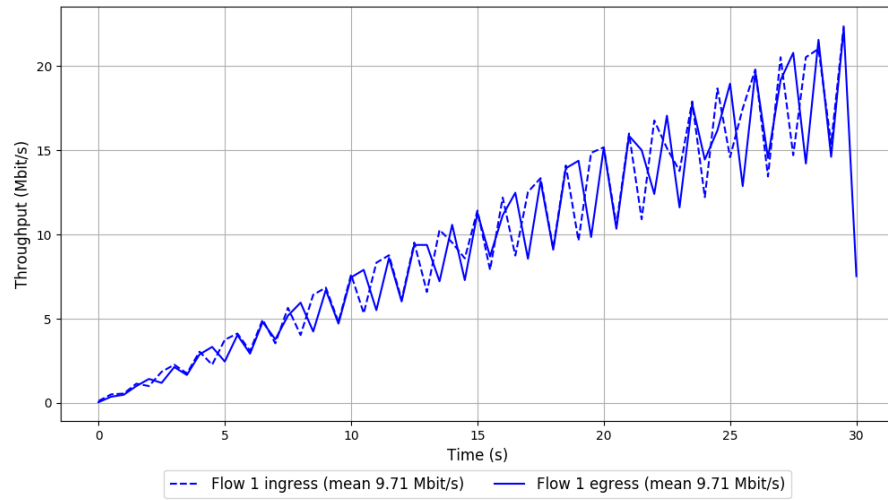
-- Flow 1:

Average throughput: 9.71 Mbit/s

95th percentile per-packet one-way delay: 155.709 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-04-10 14:41:33

End at: 2018-04-10 14:42:03

Local clock offset: 15.584 ms

Remote clock offset: -1.45 ms

Below is generated by plot.py at 2018-04-10 17:35:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.81 Mbit/s

95th percentile per-packet one-way delay: 152.656 ms

Loss rate: 0.00%

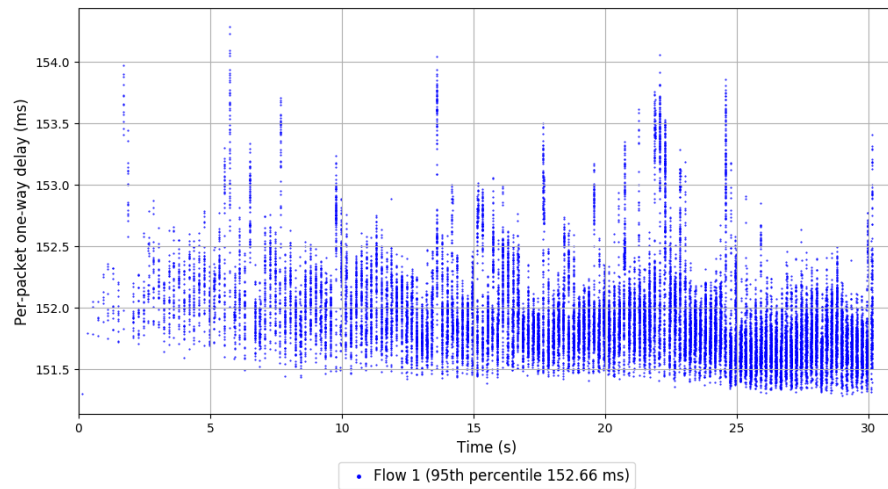
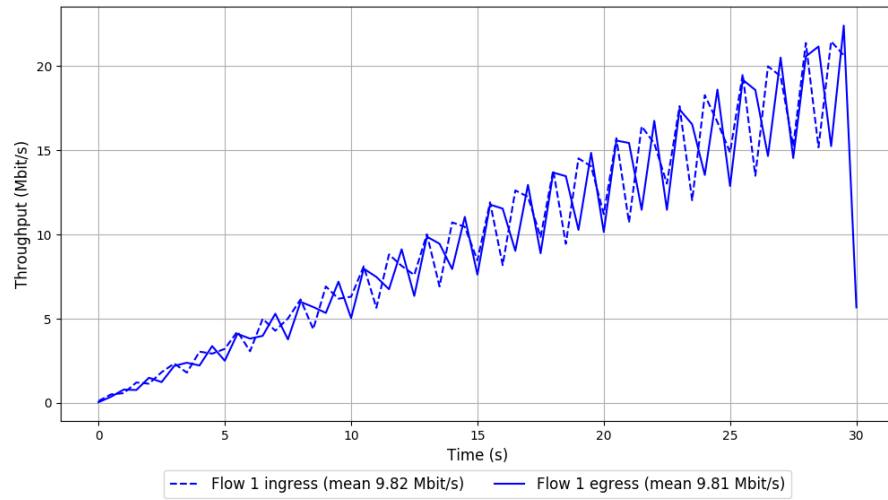
-- Flow 1:

Average throughput: 9.81 Mbit/s

95th percentile per-packet one-way delay: 152.656 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-04-10 15:05:15

End at: 2018-04-10 15:05:45

Local clock offset: 25.957 ms

Remote clock offset: 2.088 ms

Below is generated by plot.py at 2018-04-10 17:35:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.86 Mbit/s

95th percentile per-packet one-way delay: 153.432 ms

Loss rate: 0.00%

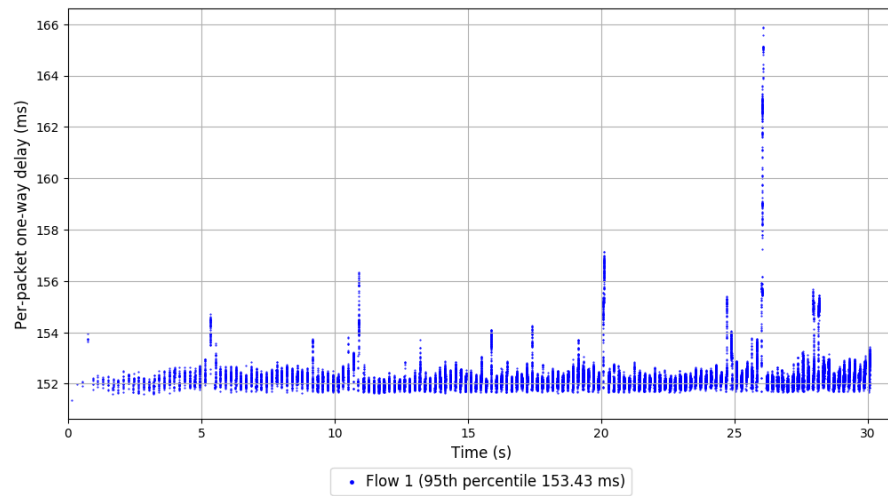
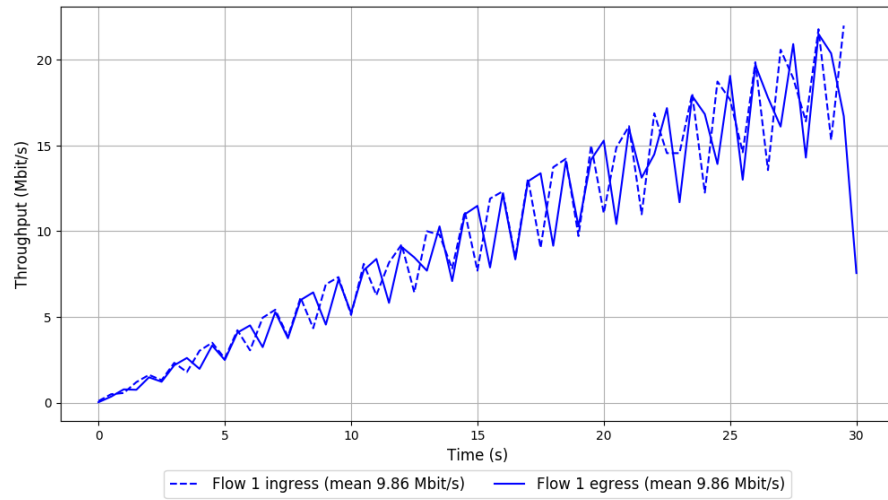
-- Flow 1:

Average throughput: 9.86 Mbit/s

95th percentile per-packet one-way delay: 153.432 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-04-10 15:30:01

End at: 2018-04-10 15:30:31

Local clock offset: 20.88 ms

Remote clock offset: 2.029 ms

Below is generated by plot.py at 2018-04-10 17:35:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.38 Mbit/s

95th percentile per-packet one-way delay: 154.795 ms

Loss rate: 0.15%

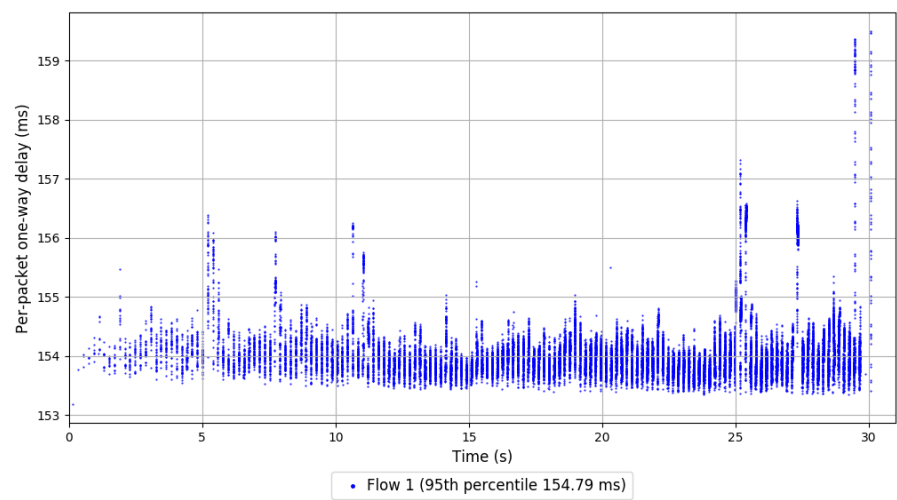
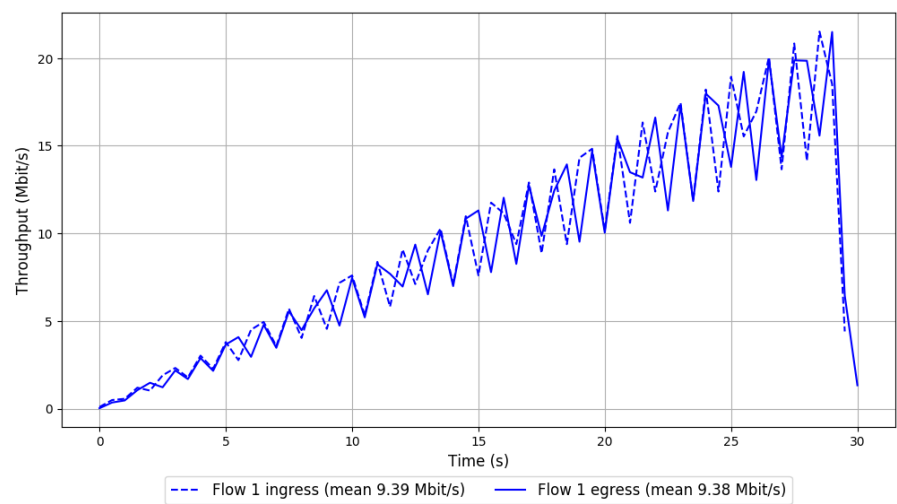
-- Flow 1:

Average throughput: 9.38 Mbit/s

95th percentile per-packet one-way delay: 154.795 ms

Loss rate: 0.15%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-04-10 15:52:42

End at: 2018-04-10 15:53:12

Local clock offset: 15.385 ms

Remote clock offset: 9.601 ms

Below is generated by plot.py at 2018-04-10 17:35:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 155.859 ms

Loss rate: 0.22%

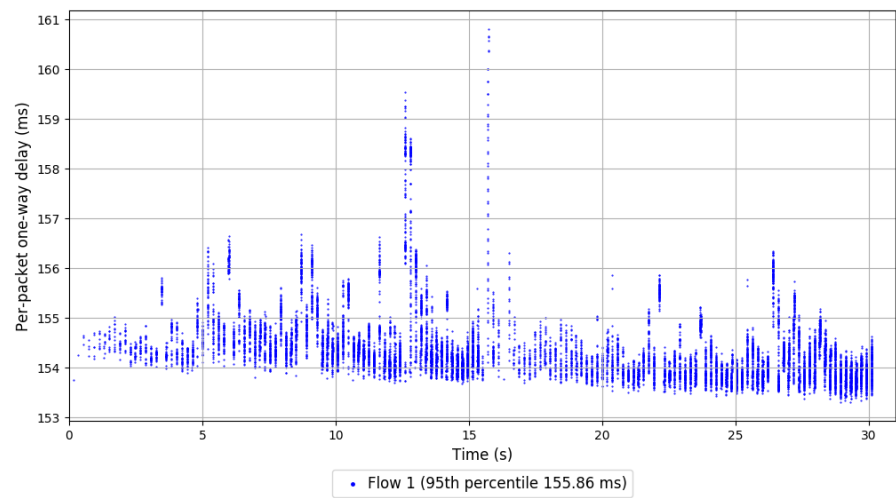
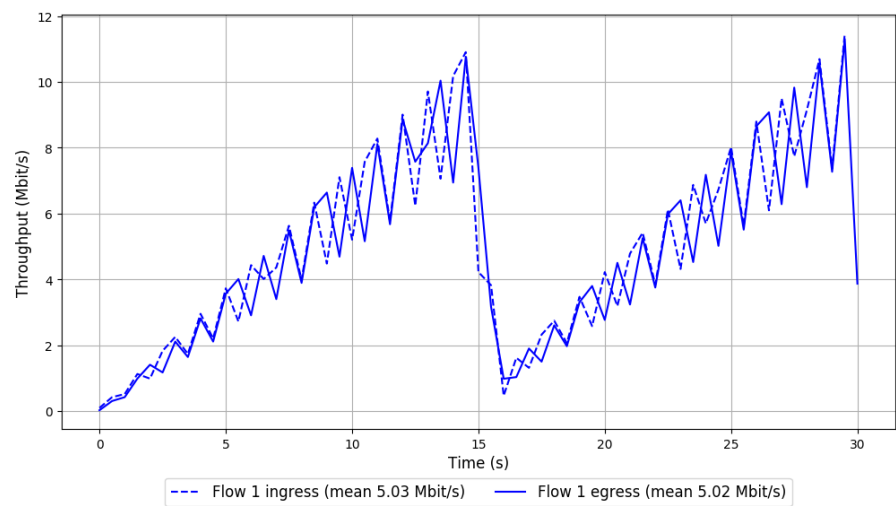
-- Flow 1:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 155.859 ms

Loss rate: 0.22%

Run 7: Report of LEDBAT — Data Link

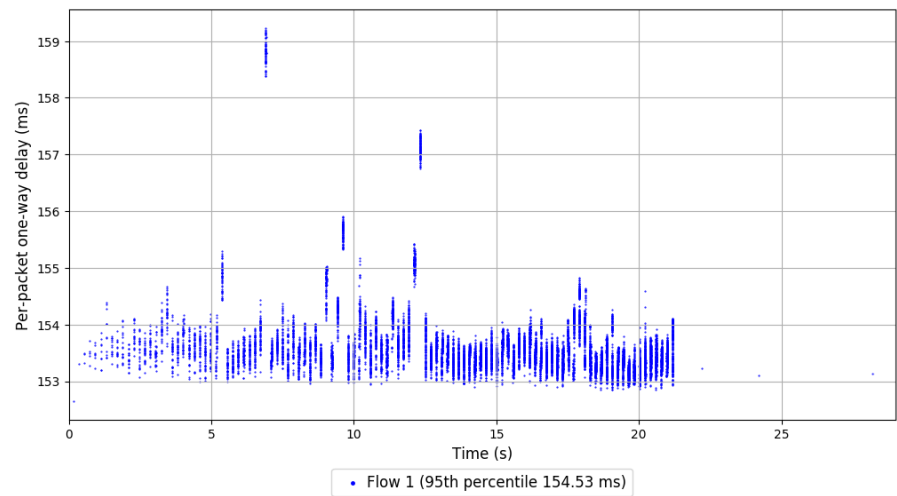
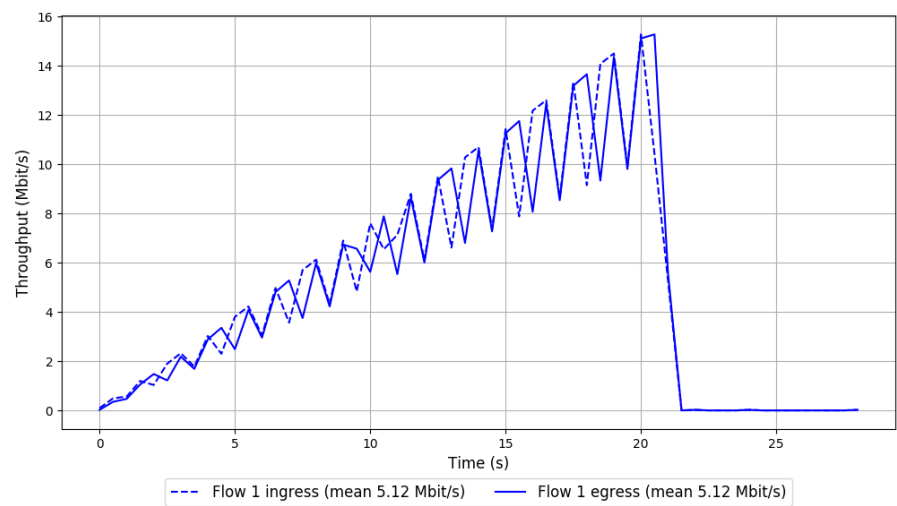


Run 8: Statistics of LEDBAT

Start at: 2018-04-10 16:15:17
End at: 2018-04-10 16:15:47
Local clock offset: 18.069 ms
Remote clock offset: 24.138 ms

Below is generated by plot.py at 2018-04-10 17:35:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 154.533 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 154.533 ms
Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-04-10 16:39:06

End at: 2018-04-10 16:39:36

Local clock offset: 12.018 ms

Remote clock offset: 6.442 ms

Below is generated by plot.py at 2018-04-10 17:35:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.47 Mbit/s

95th percentile per-packet one-way delay: 155.014 ms

Loss rate: 0.42%

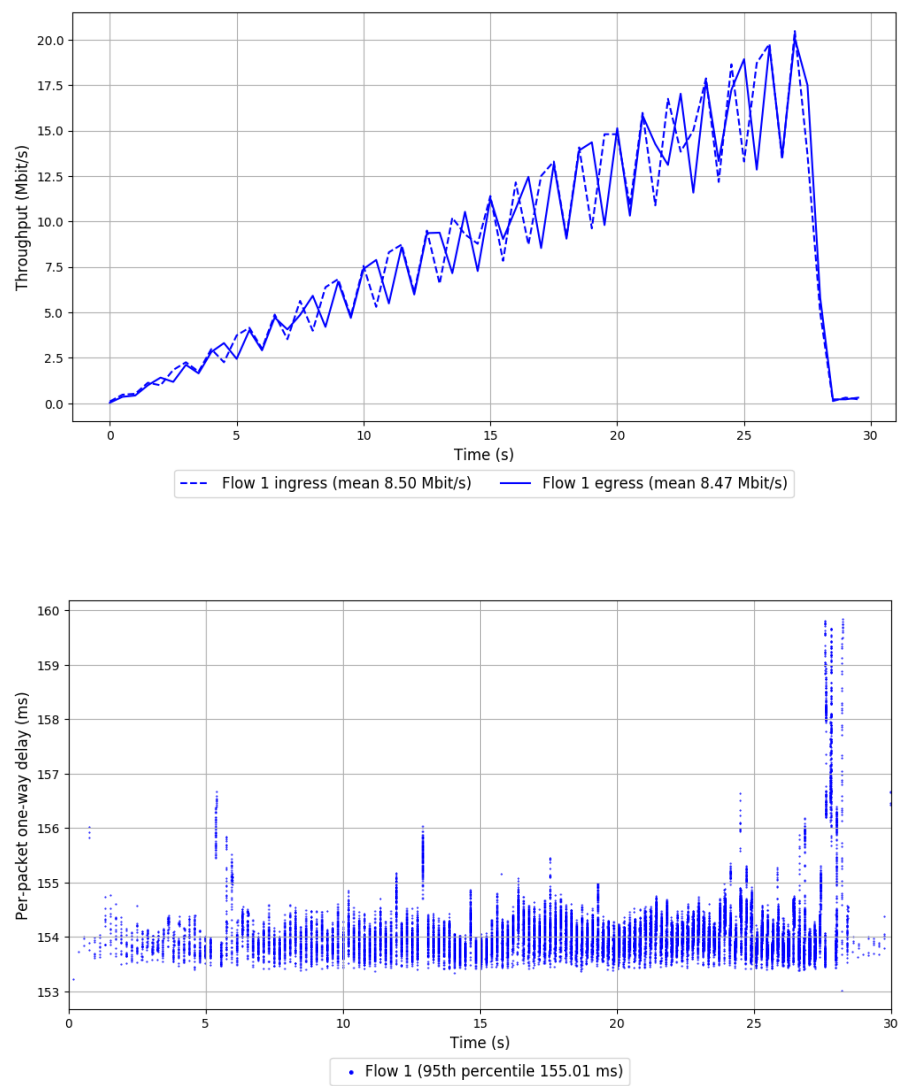
-- Flow 1:

Average throughput: 8.47 Mbit/s

95th percentile per-packet one-way delay: 155.014 ms

Loss rate: 0.42%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-04-10 17:02:02

End at: 2018-04-10 17:02:32

Local clock offset: 6.681 ms

Remote clock offset: 1.597 ms

Below is generated by plot.py at 2018-04-10 17:35:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 9.54 Mbit/s

95th percentile per-packet one-way delay: 156.502 ms

Loss rate: 0.00%

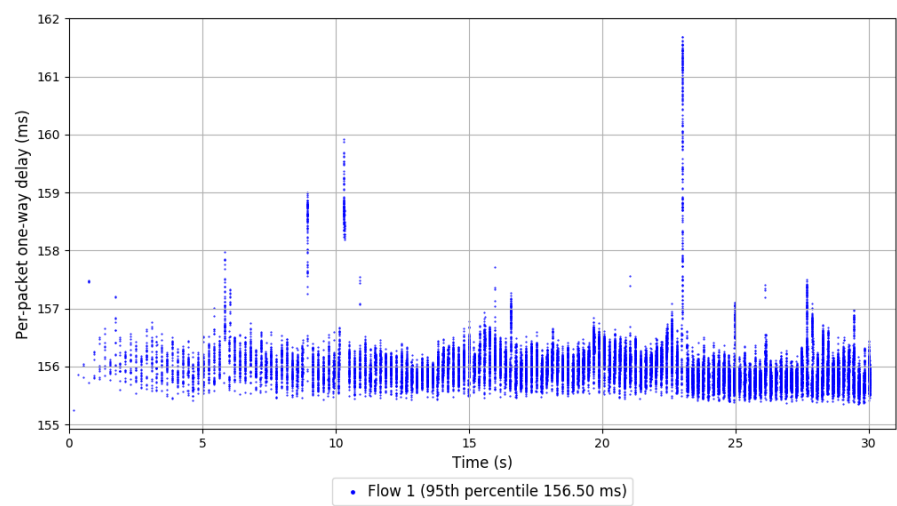
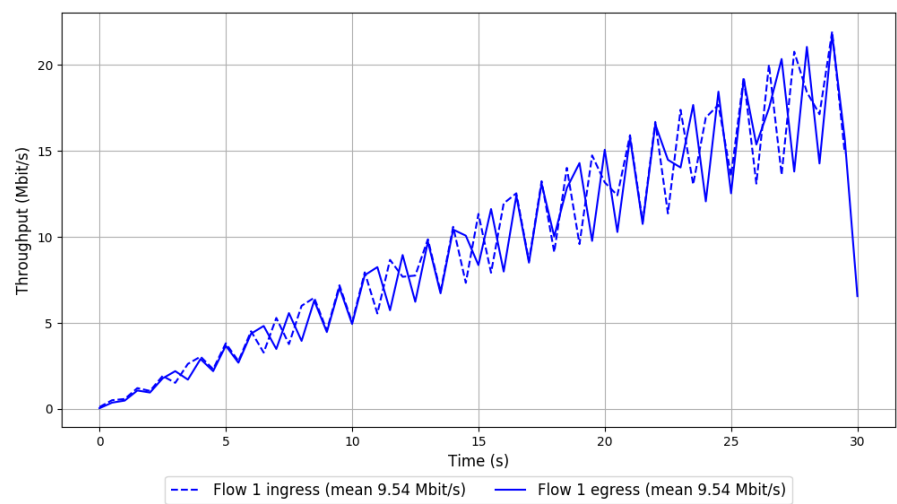
-- Flow 1:

Average throughput: 9.54 Mbit/s

95th percentile per-packet one-way delay: 156.502 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

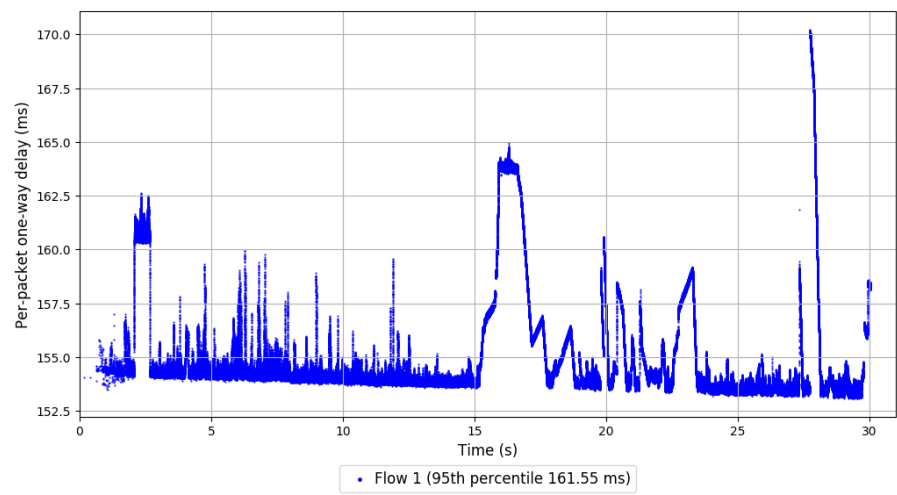
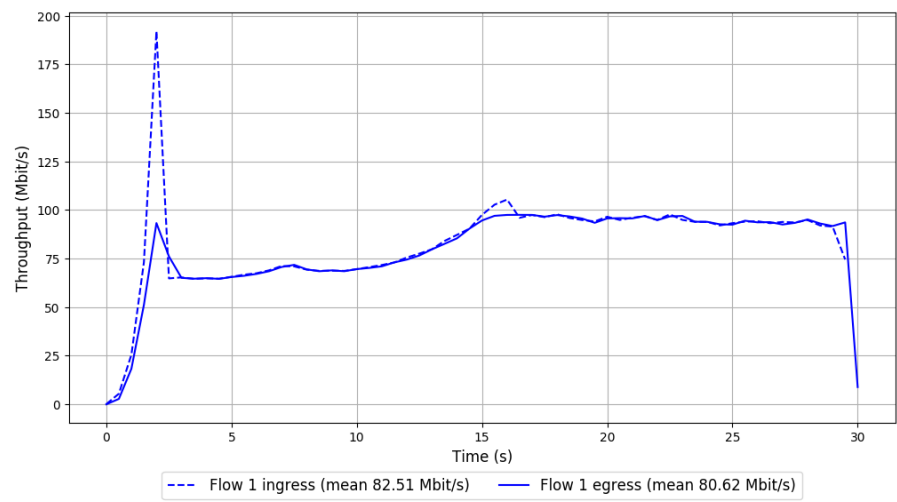


```
Run 1: Statistics of PCC

Start at: 2018-04-10 13:32:55
End at: 2018-04-10 13:33:25
Local clock offset: 15.404 ms
Remote clock offset: 2.983 ms

# Below is generated by plot.py at 2018-04-10 17:36:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.62 Mbit/s
95th percentile per-packet one-way delay: 161.554 ms
Loss rate: 2.28%
-- Flow 1:
Average throughput: 80.62 Mbit/s
95th percentile per-packet one-way delay: 161.554 ms
Loss rate: 2.28%
```

Run 1: Report of PCC — Data Link

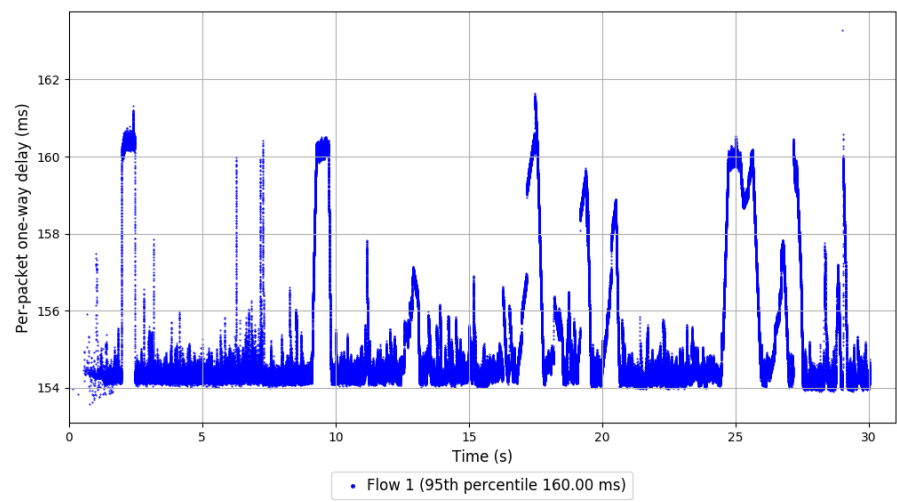
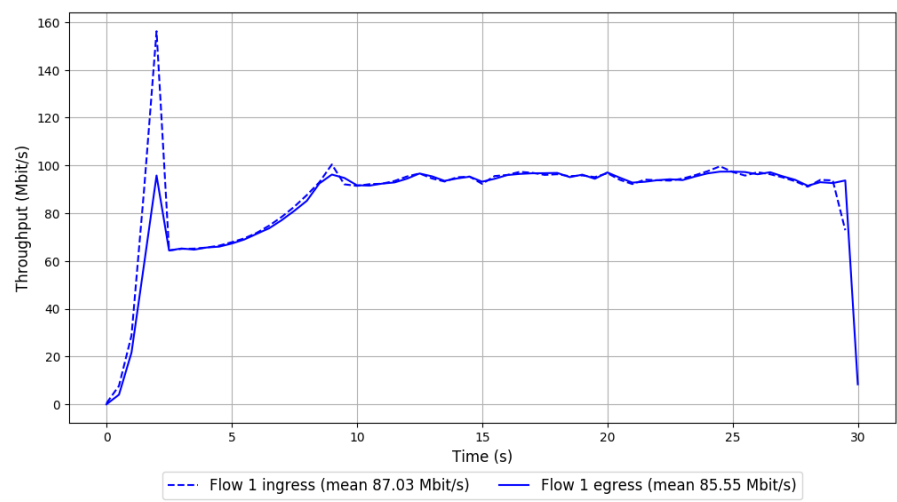


Run 2: Statistics of PCC

Start at: 2018-04-10 13:57:07
End at: 2018-04-10 13:57:37
Local clock offset: 15.995 ms
Remote clock offset: 25.803 ms

Below is generated by plot.py at 2018-04-10 17:36:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.55 Mbit/s
95th percentile per-packet one-way delay: 160.000 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 85.55 Mbit/s
95th percentile per-packet one-way delay: 160.000 ms
Loss rate: 1.70%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-04-10 14:20:58

End at: 2018-04-10 14:21:28

Local clock offset: 15.805 ms

Remote clock offset: 3.681 ms

Below is generated by plot.py at 2018-04-10 17:36:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.64 Mbit/s

95th percentile per-packet one-way delay: 156.011 ms

Loss rate: 2.07%

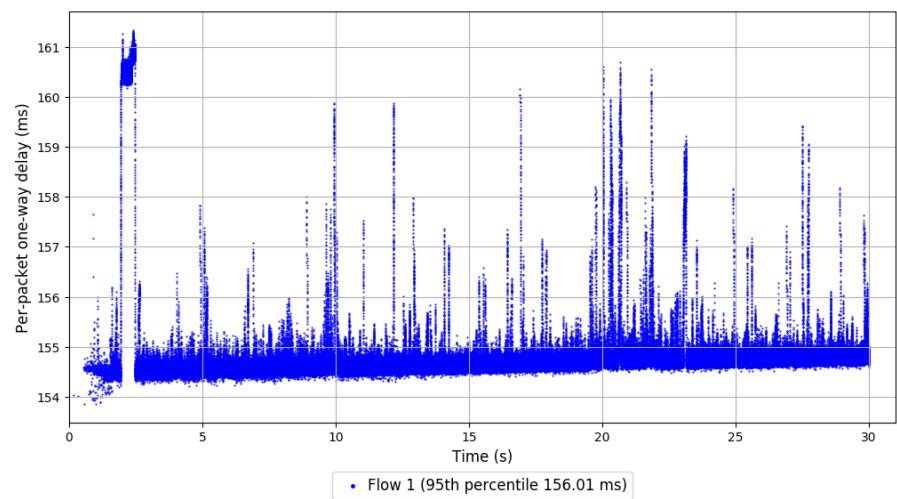
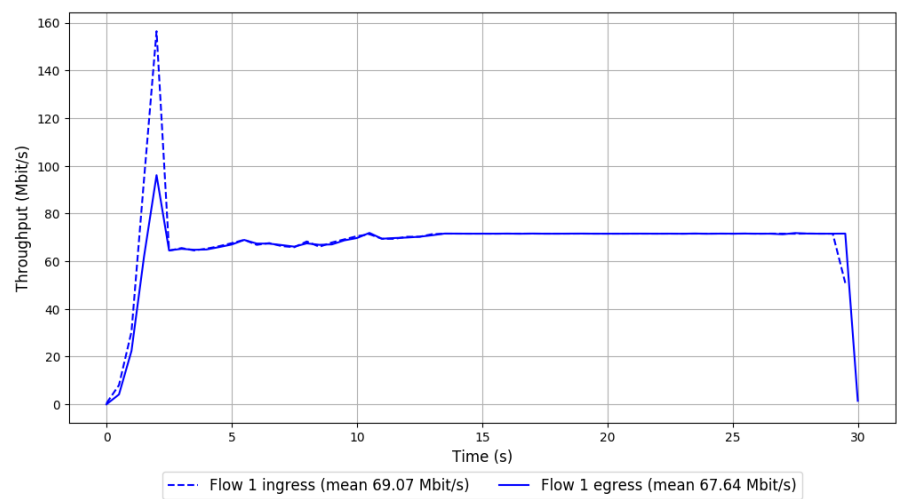
-- Flow 1:

Average throughput: 67.64 Mbit/s

95th percentile per-packet one-way delay: 156.011 ms

Loss rate: 2.07%

Run 3: Report of PCC — Data Link

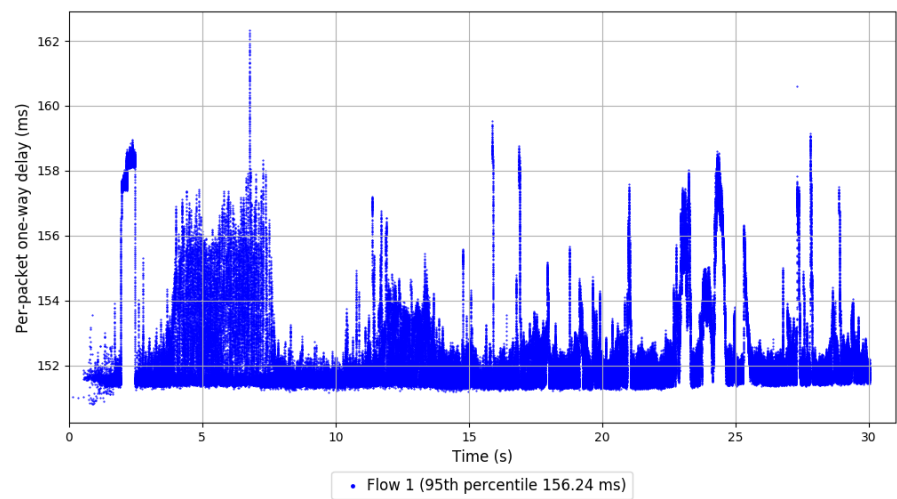
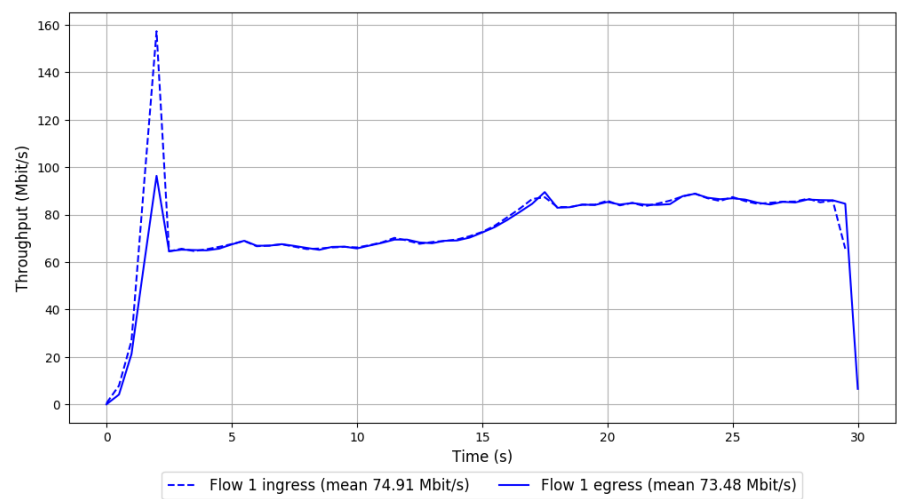


Run 4: Statistics of PCC

Start at: 2018-04-10 14:45:28
End at: 2018-04-10 14:45:58
Local clock offset: 15.282 ms
Remote clock offset: -0.116 ms

Below is generated by plot.py at 2018-04-10 17:36:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 73.48 Mbit/s
95th percentile per-packet one-way delay: 156.239 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 73.48 Mbit/s
95th percentile per-packet one-way delay: 156.239 ms
Loss rate: 1.91%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-04-10 15:08:59

End at: 2018-04-10 15:09:29

Local clock offset: 26.319 ms

Remote clock offset: 2.16 ms

Below is generated by plot.py at 2018-04-10 17:36:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 153.154 ms

Loss rate: 0.00%

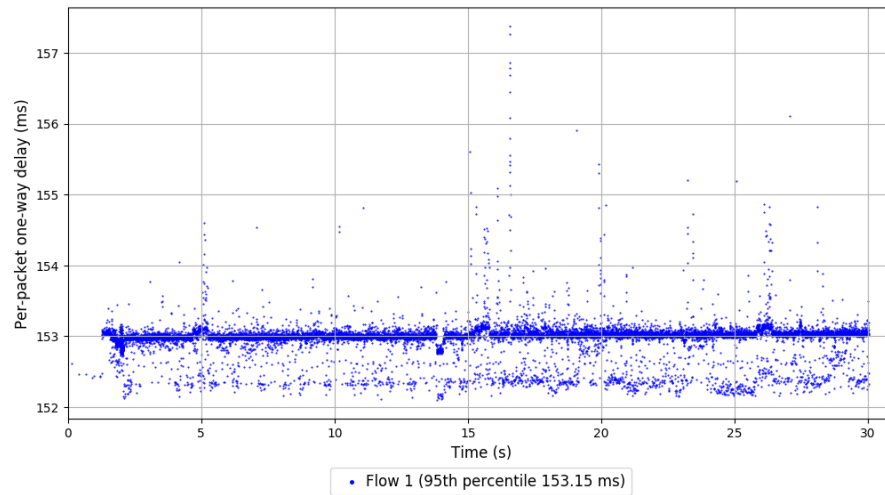
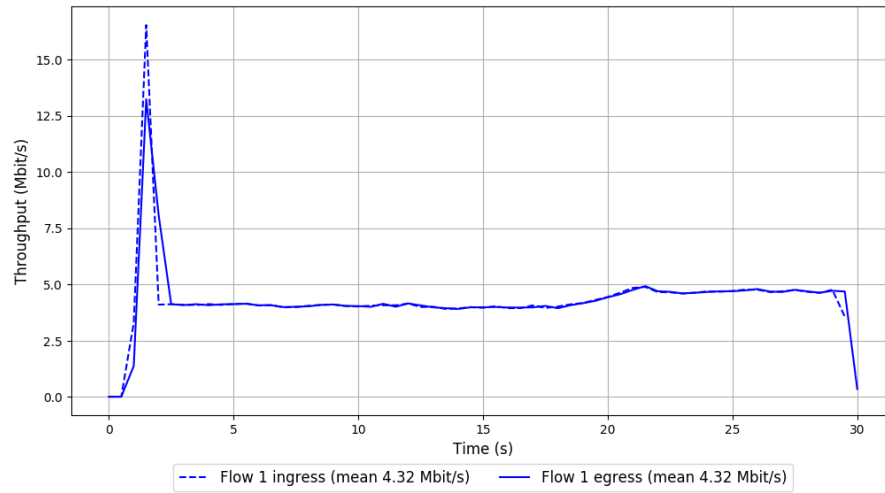
-- Flow 1:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 153.154 ms

Loss rate: 0.00%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-04-10 15:33:44

End at: 2018-04-10 15:34:15

Local clock offset: 19.415 ms

Remote clock offset: 2.016 ms

Below is generated by plot.py at 2018-04-10 17:36:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.22 Mbit/s

95th percentile per-packet one-way delay: 162.205 ms

Loss rate: 1.72%

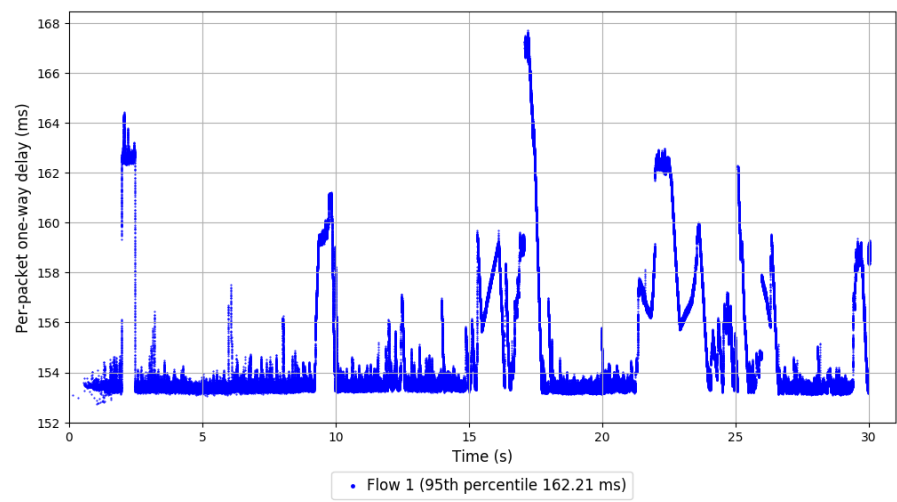
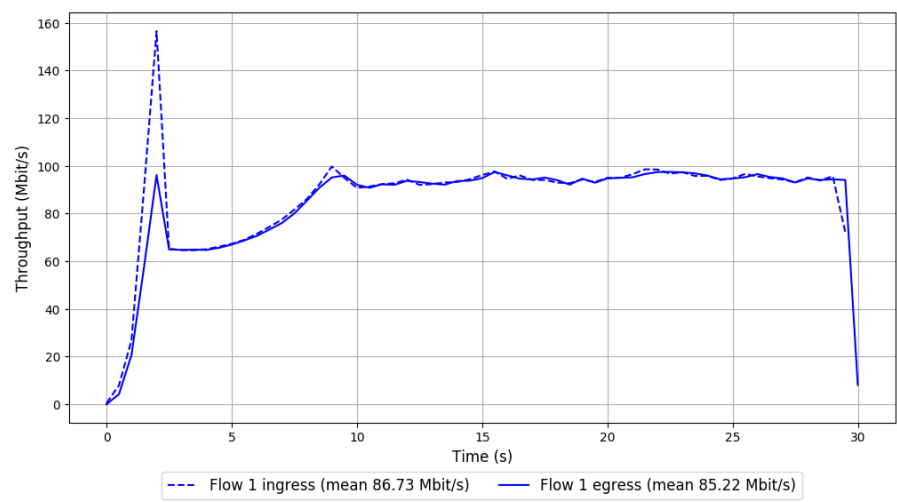
-- Flow 1:

Average throughput: 85.22 Mbit/s

95th percentile per-packet one-way delay: 162.205 ms

Loss rate: 1.72%

Run 6: Report of PCC — Data Link

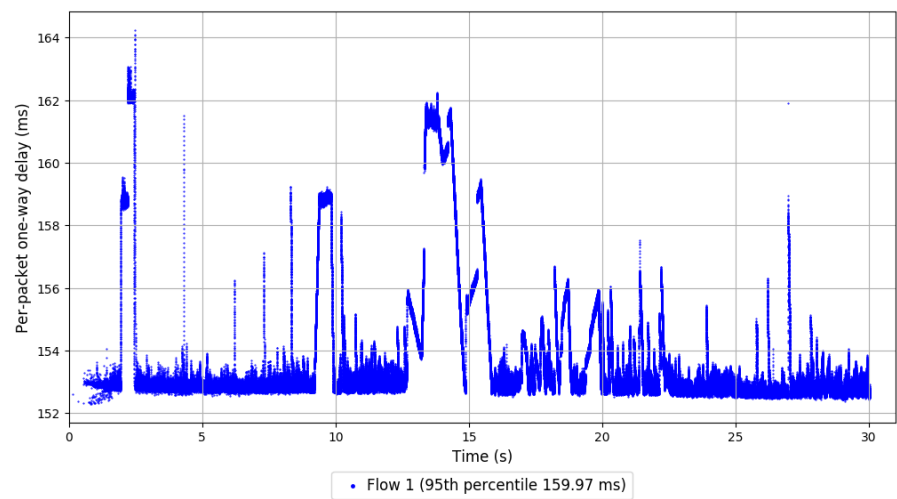
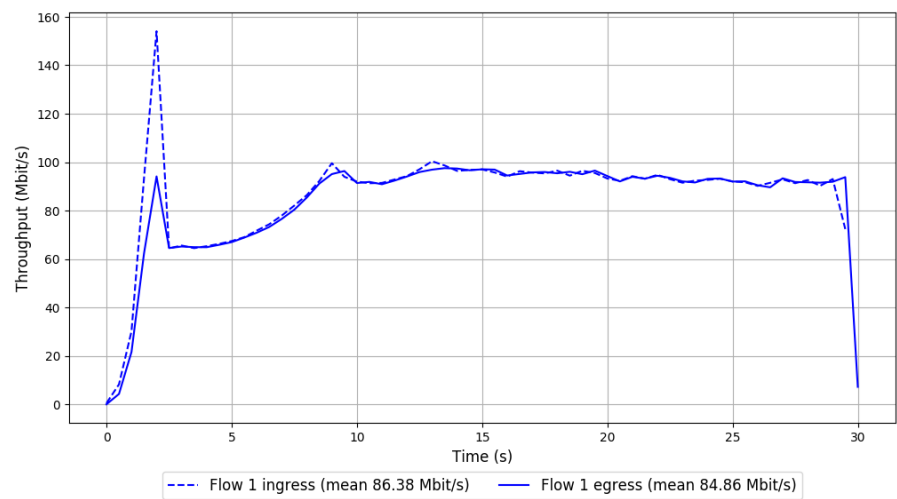


Run 7: Statistics of PCC

Start at: 2018-04-10 15:56:24
End at: 2018-04-10 15:56:54
Local clock offset: 15.911 ms
Remote clock offset: 13.454 ms

Below is generated by plot.py at 2018-04-10 17:36:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 84.86 Mbit/s
95th percentile per-packet one-way delay: 159.970 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 84.86 Mbit/s
95th percentile per-packet one-way delay: 159.970 ms
Loss rate: 1.76%

Run 7: Report of PCC — Data Link

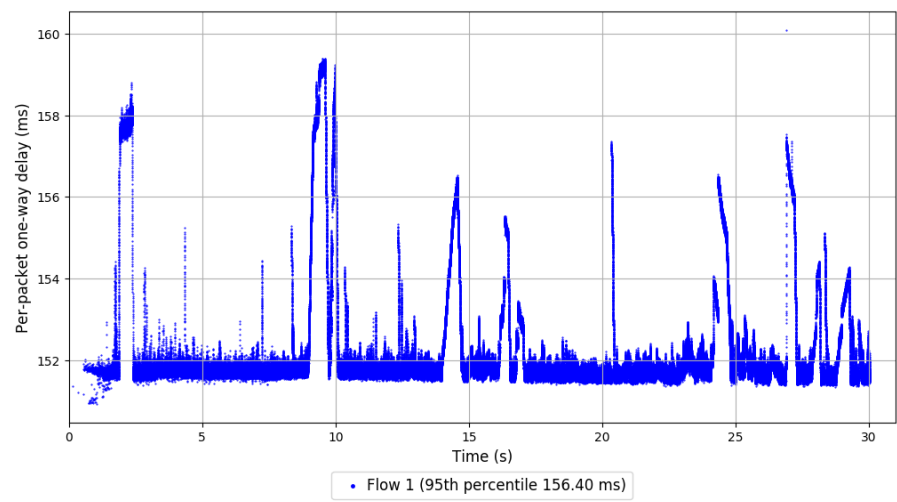
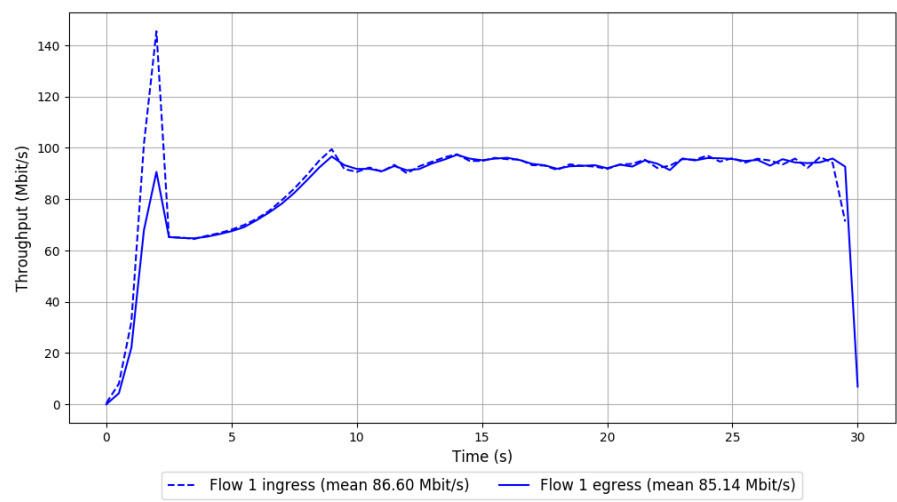


Run 8: Statistics of PCC

Start at: 2018-04-10 16:19:54
End at: 2018-04-10 16:20:24
Local clock offset: 18.005 ms
Remote clock offset: 25.824 ms

Below is generated by plot.py at 2018-04-10 17:37:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.14 Mbit/s
95th percentile per-packet one-way delay: 156.398 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 85.14 Mbit/s
95th percentile per-packet one-way delay: 156.398 ms
Loss rate: 1.68%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-04-10 16:42:49

End at: 2018-04-10 16:43:19

Local clock offset: 10.666 ms

Remote clock offset: 5.181 ms

Below is generated by plot.py at 2018-04-10 17:37:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.71 Mbit/s

95th percentile per-packet one-way delay: 163.618 ms

Loss rate: 1.92%

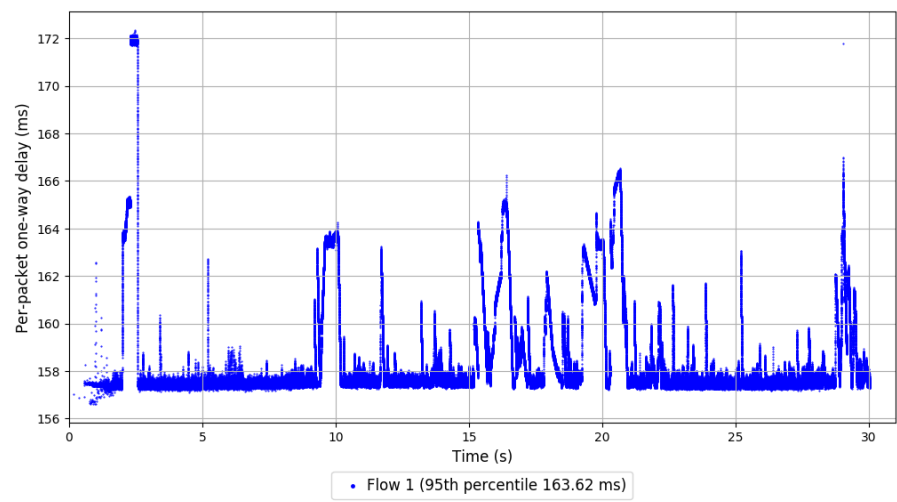
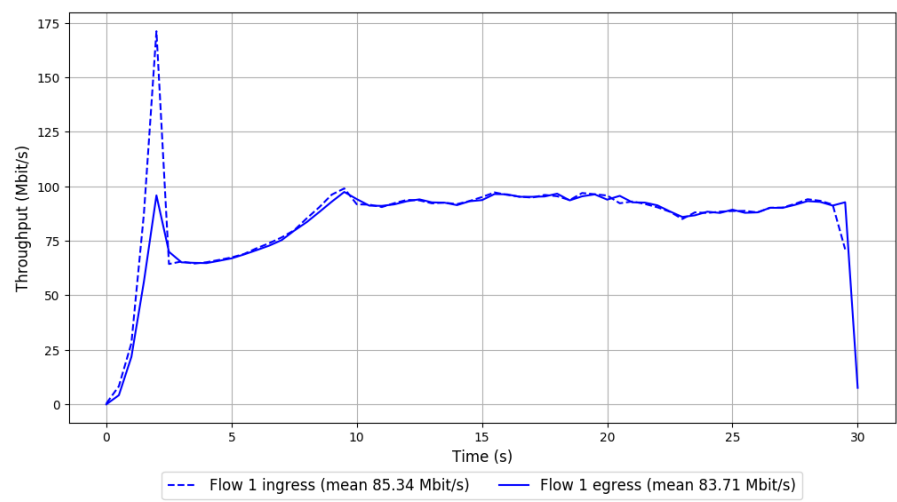
-- Flow 1:

Average throughput: 83.71 Mbit/s

95th percentile per-packet one-way delay: 163.618 ms

Loss rate: 1.92%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-04-10 17:05:45

End at: 2018-04-10 17:06:15

Local clock offset: 4.565 ms

Remote clock offset: 0.824 ms

Below is generated by plot.py at 2018-04-10 17:38:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.12 Mbit/s

95th percentile per-packet one-way delay: 165.092 ms

Loss rate: 1.89%

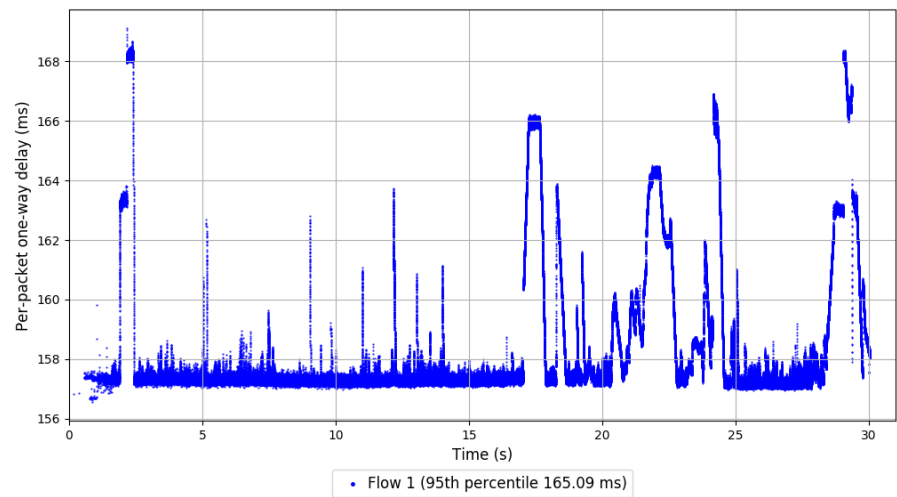
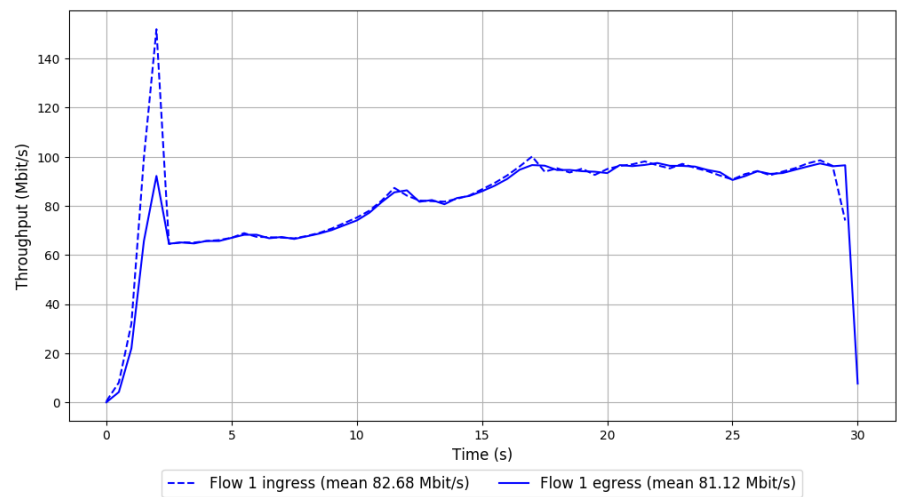
-- Flow 1:

Average throughput: 81.12 Mbit/s

95th percentile per-packet one-way delay: 165.092 ms

Loss rate: 1.89%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

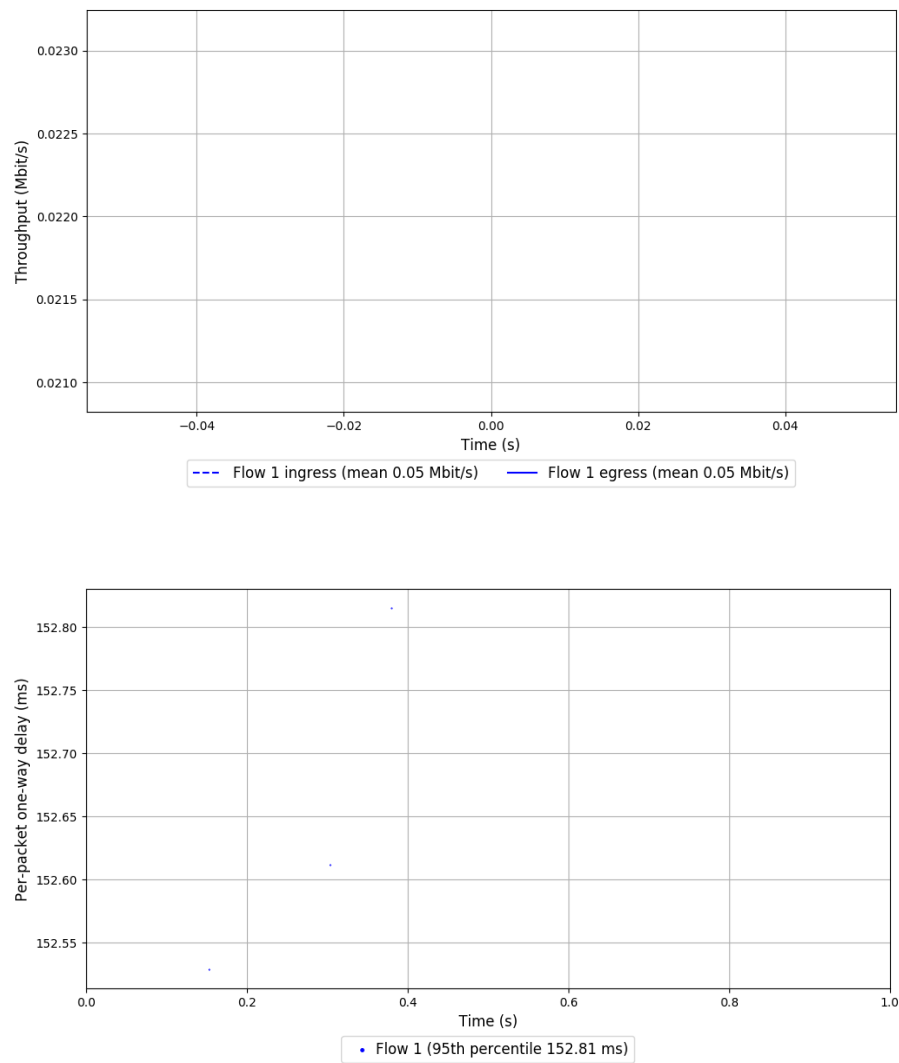
Start at: 2018-04-10 13:26:16

End at: 2018-04-10 13:26:46

Local clock offset: 16.547 ms

Remote clock offset: 0.35 ms

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-04-10 13:50:24

End at: 2018-04-10 13:50:55

Local clock offset: 16.105 ms

Remote clock offset: 22.546 ms

Below is generated by plot.py at 2018-04-10 17:38:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 59.14 Mbit/s

95th percentile per-packet one-way delay: 152.938 ms

Loss rate: 0.34%

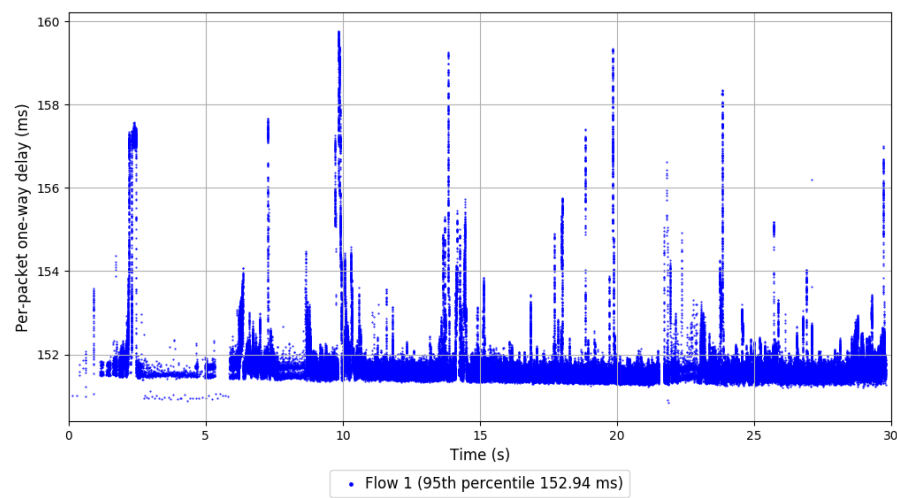
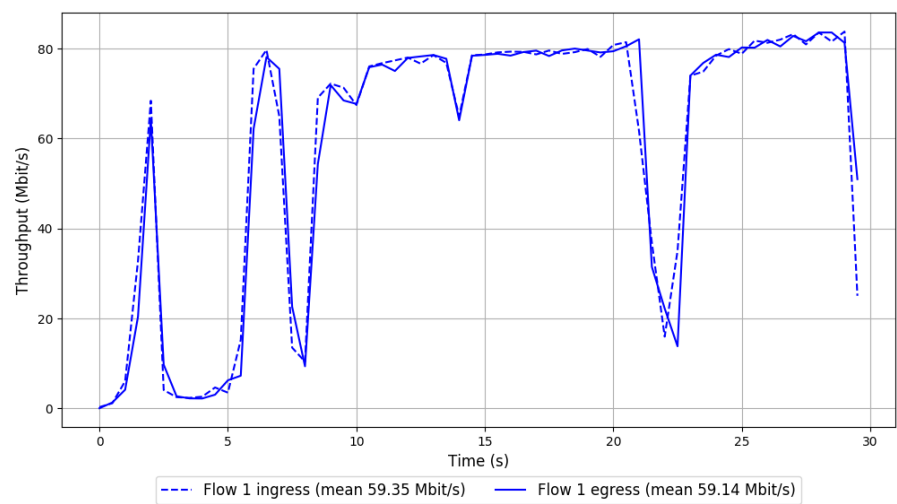
-- Flow 1:

Average throughput: 59.14 Mbit/s

95th percentile per-packet one-way delay: 152.938 ms

Loss rate: 0.34%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-04-10 14:14:21

End at: 2018-04-10 14:14:51

Local clock offset: 15.128 ms

Remote clock offset: 9.909 ms

Below is generated by plot.py at 2018-04-10 17:38:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.89 Mbit/s

95th percentile per-packet one-way delay: 156.439 ms

Loss rate: 0.57%

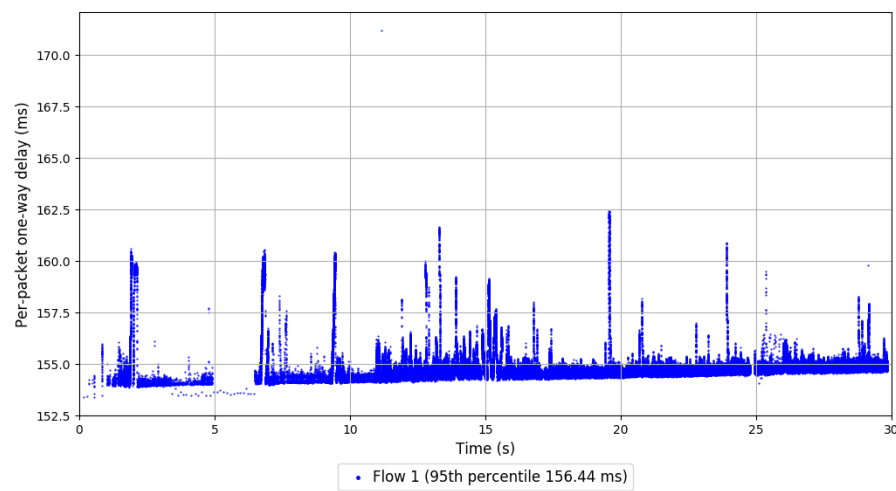
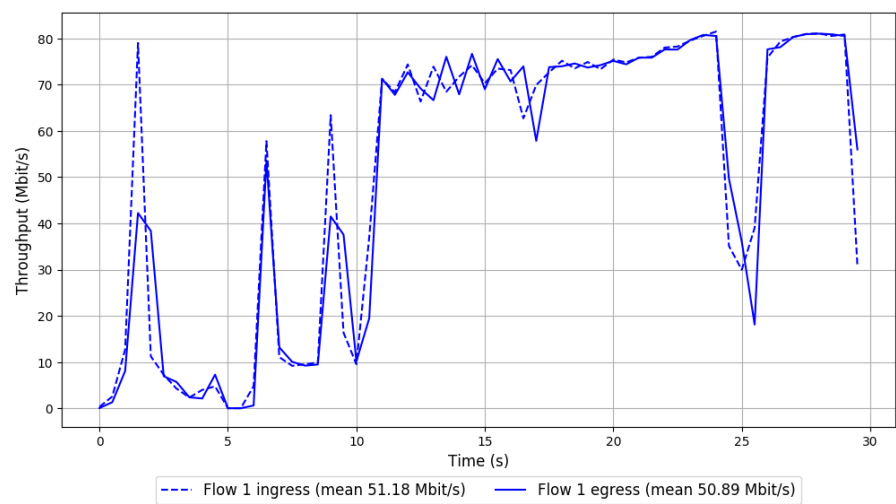
-- Flow 1:

Average throughput: 50.89 Mbit/s

95th percentile per-packet one-way delay: 156.439 ms

Loss rate: 0.57%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-04-10 14:38:52

End at: 2018-04-10 14:39:22

Local clock offset: 15.564 ms

Remote clock offset: -2.128 ms

Below is generated by plot.py at 2018-04-10 17:38:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.53 Mbit/s

95th percentile per-packet one-way delay: 153.998 ms

Loss rate: 1.18%

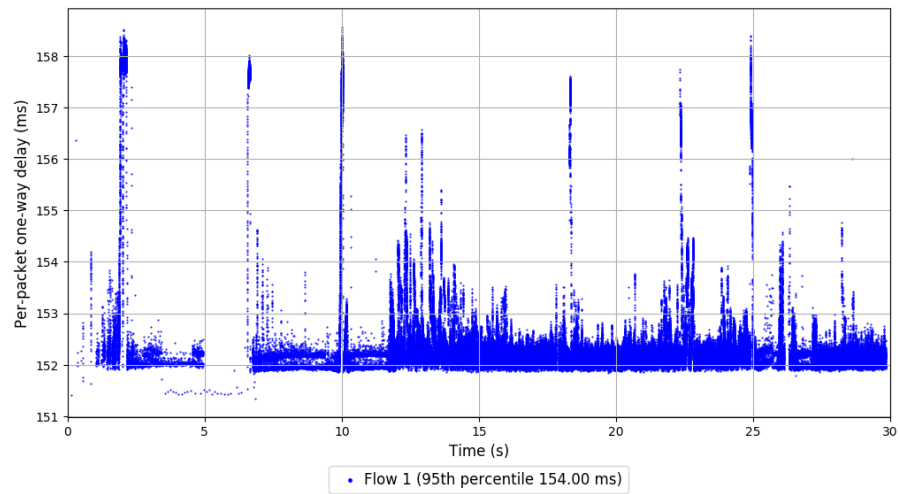
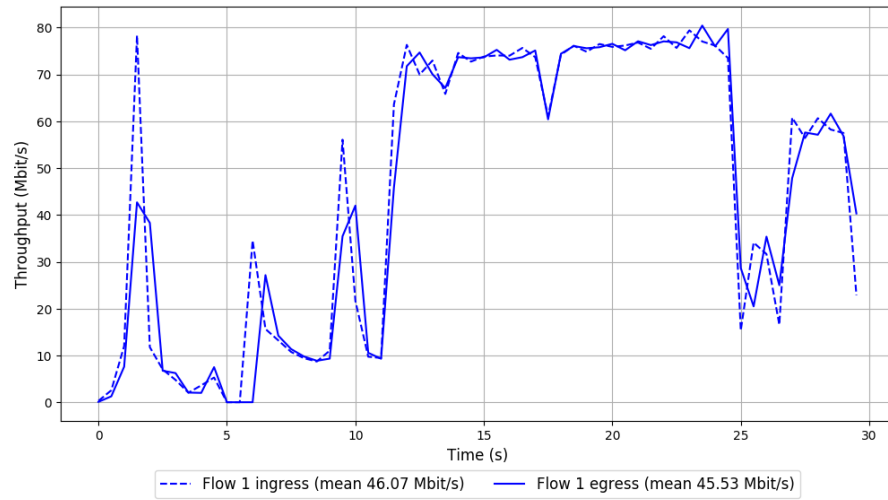
-- Flow 1:

Average throughput: 45.53 Mbit/s

95th percentile per-packet one-way delay: 153.998 ms

Loss rate: 1.18%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-04-10 15:02:42

End at: 2018-04-10 15:03:12

Local clock offset: 25.023 ms

Remote clock offset: 2.007 ms

Below is generated by plot.py at 2018-04-10 17:38:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.15 Mbit/s

95th percentile per-packet one-way delay: 155.679 ms

Loss rate: 0.88%

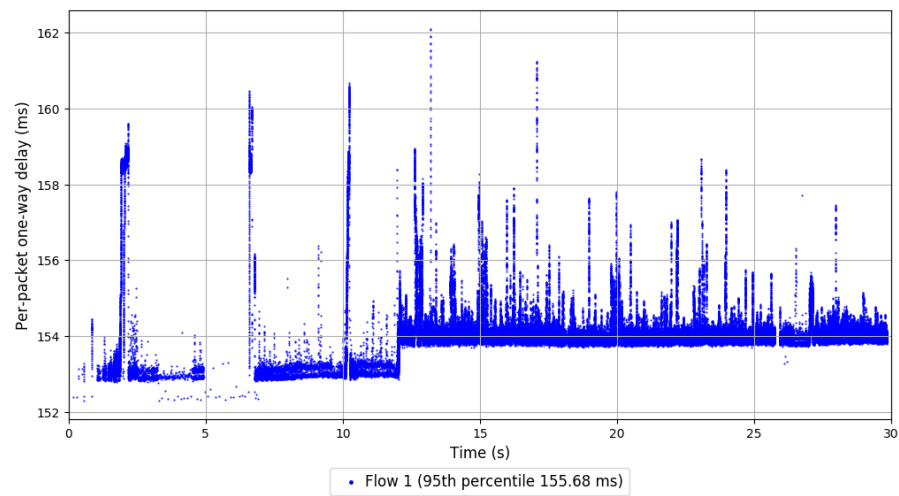
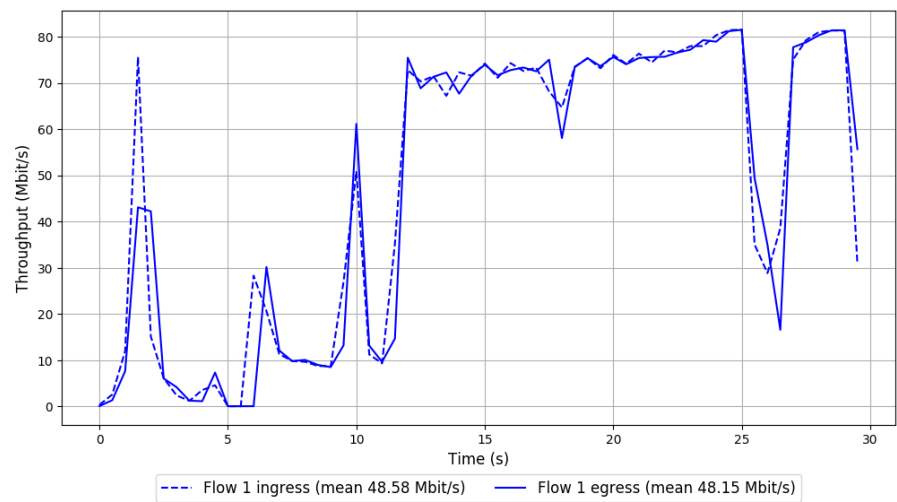
-- Flow 1:

Average throughput: 48.15 Mbit/s

95th percentile per-packet one-way delay: 155.679 ms

Loss rate: 0.88%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-04-10 15:27:29

End at: 2018-04-10 15:27:59

Local clock offset: 22.094 ms

Remote clock offset: 1.987 ms

Below is generated by plot.py at 2018-04-10 17:38:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 46.21 Mbit/s

95th percentile per-packet one-way delay: 154.542 ms

Loss rate: 1.13%

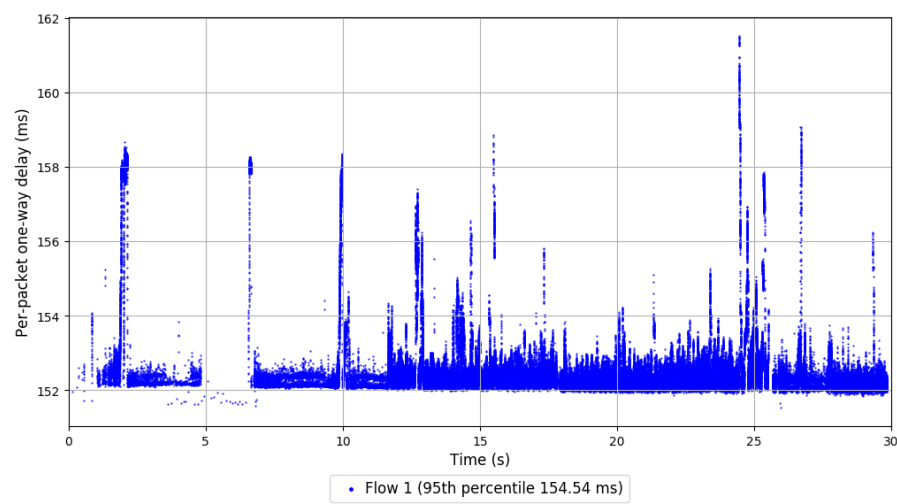
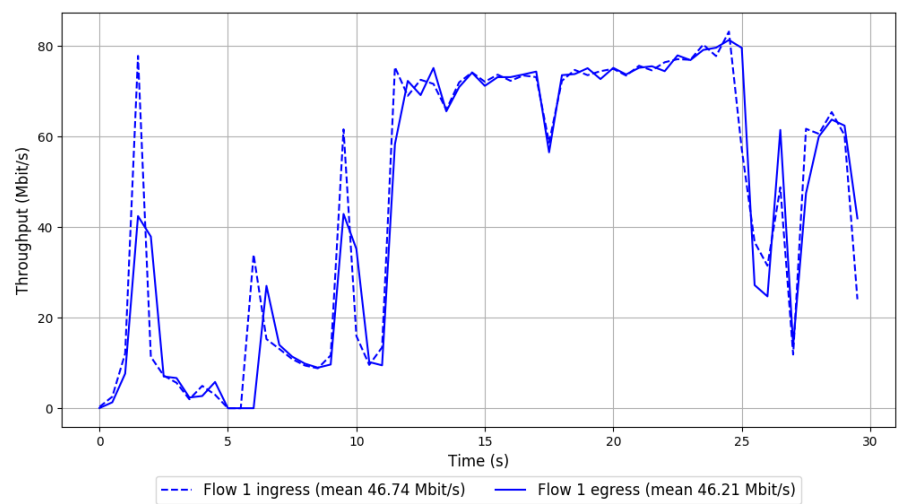
-- Flow 1:

Average throughput: 46.21 Mbit/s

95th percentile per-packet one-way delay: 154.542 ms

Loss rate: 1.13%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-04-10 15:50:09

End at: 2018-04-10 15:50:39

Local clock offset: 16.054 ms

Remote clock offset: 5.675 ms

Below is generated by plot.py at 2018-04-10 17:38:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.36 Mbit/s

95th percentile per-packet one-way delay: 156.135 ms

Loss rate: 0.60%

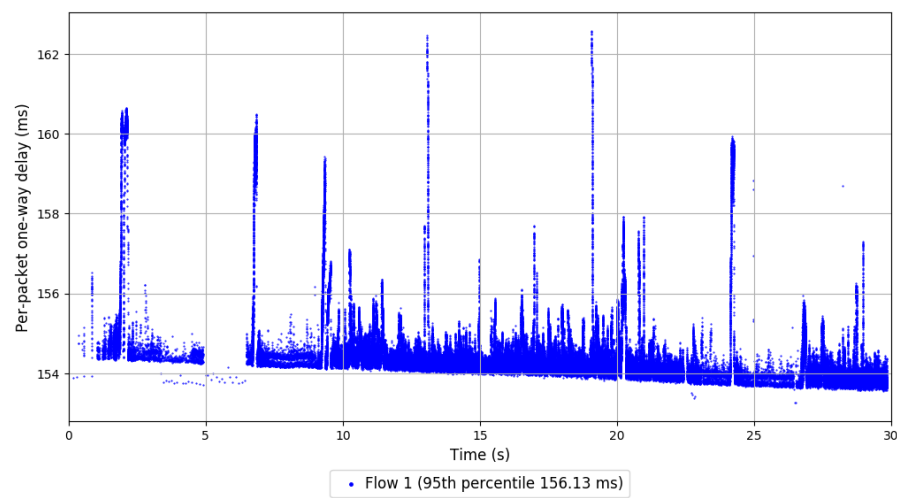
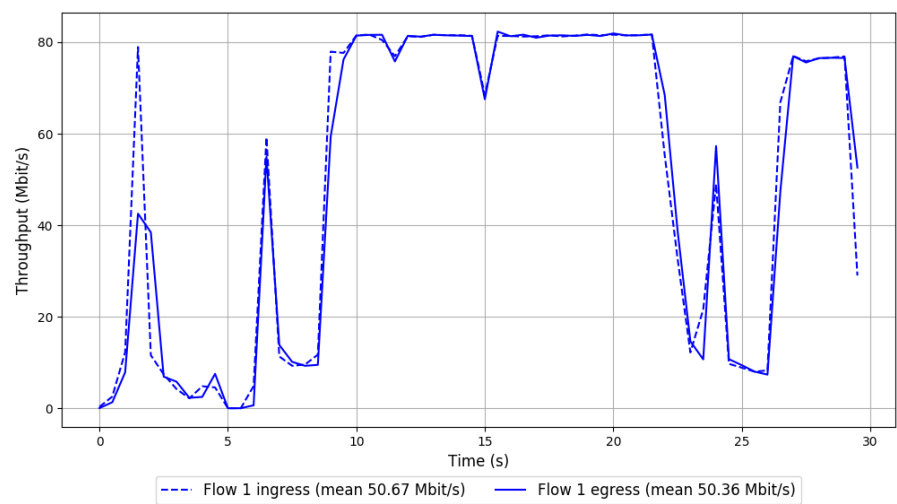
-- Flow 1:

Average throughput: 50.36 Mbit/s

95th percentile per-packet one-way delay: 156.135 ms

Loss rate: 0.60%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-04-10 16:12:44

End at: 2018-04-10 16:13:14

Local clock offset: 18.023 ms

Remote clock offset: 23.107 ms

Below is generated by plot.py at 2018-04-10 17:38:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.60 Mbit/s

95th percentile per-packet one-way delay: 159.158 ms

Loss rate: 0.96%

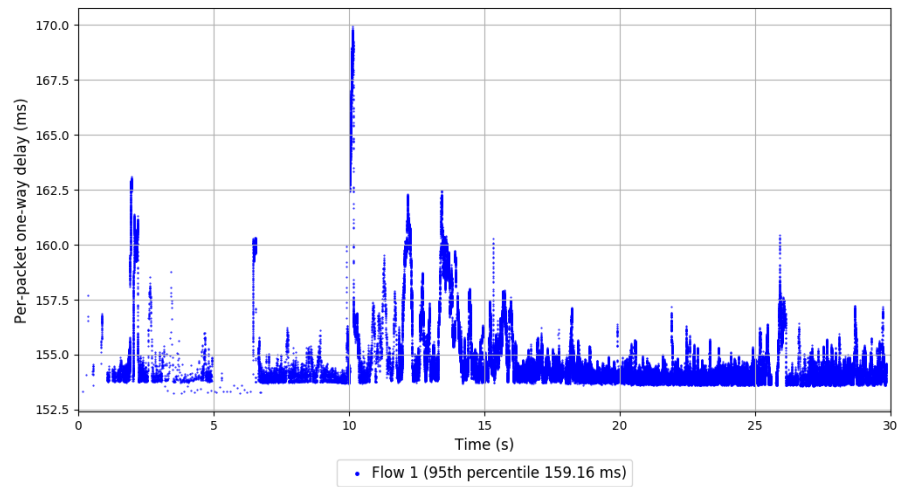
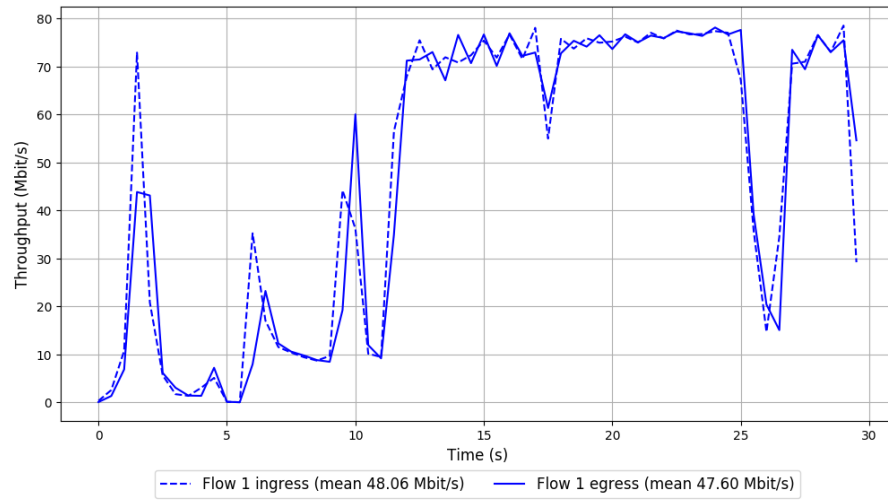
-- Flow 1:

Average throughput: 47.60 Mbit/s

95th percentile per-packet one-way delay: 159.158 ms

Loss rate: 0.96%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-04-10 16:36:33

End at: 2018-04-10 16:37:03

Local clock offset: 12.881 ms

Remote clock offset: 7.492 ms

Below is generated by plot.py at 2018-04-10 17:38:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 47.43 Mbit/s

95th percentile per-packet one-way delay: 155.541 ms

Loss rate: 0.95%

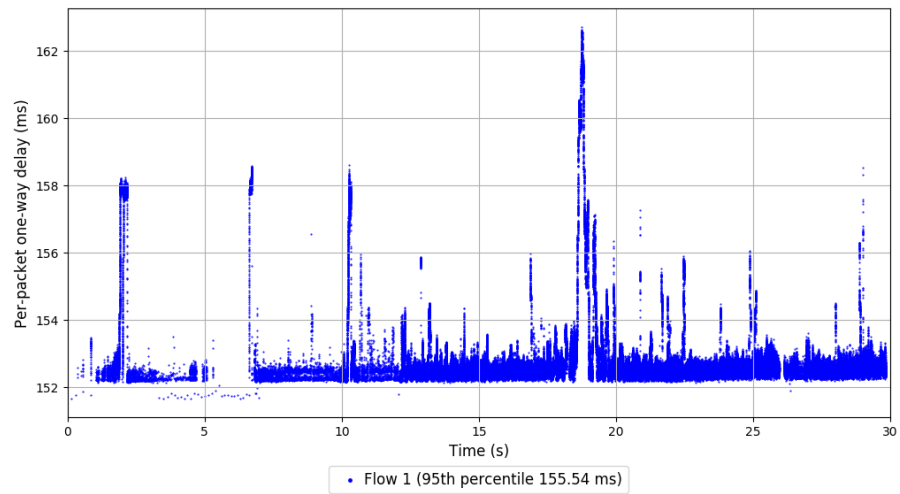
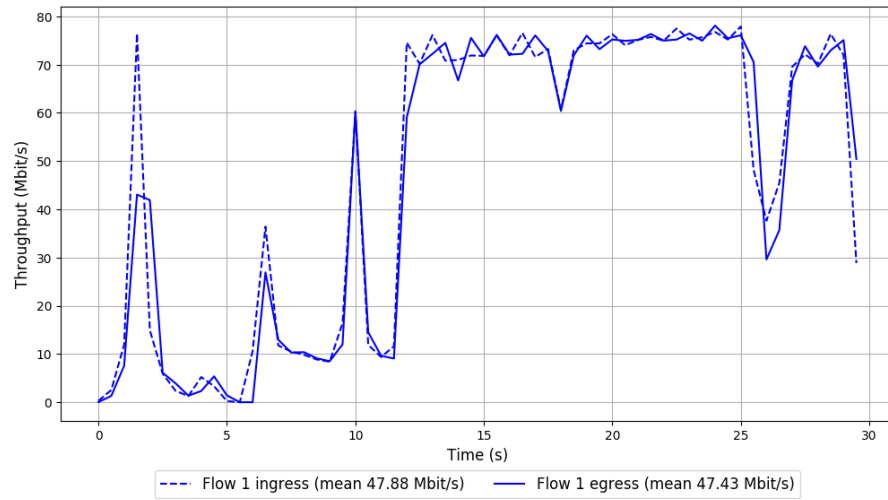
-- Flow 1:

Average throughput: 47.43 Mbit/s

95th percentile per-packet one-way delay: 155.541 ms

Loss rate: 0.95%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-04-10 16:59:30

End at: 2018-04-10 17:00:00

Local clock offset: 7.063 ms

Remote clock offset: 2.13 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 49.96 Mbit/s

95th percentile per-packet one-way delay: 154.785 ms

Loss rate: 0.54%

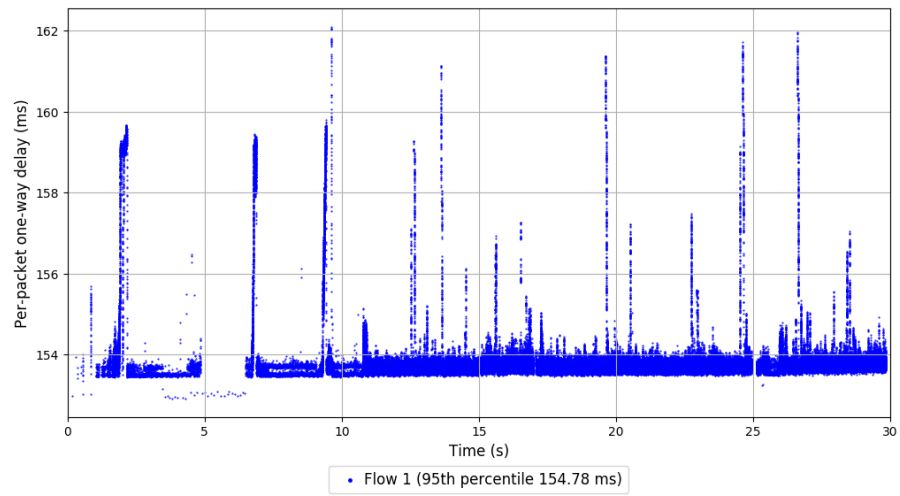
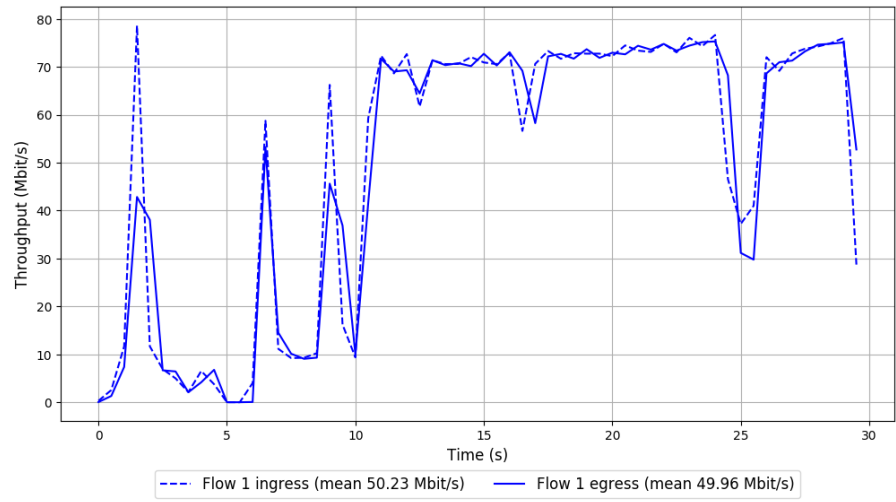
-- Flow 1:

Average throughput: 49.96 Mbit/s

95th percentile per-packet one-way delay: 154.785 ms

Loss rate: 0.54%

Run 10: Report of QUIC Cubic — Data Link

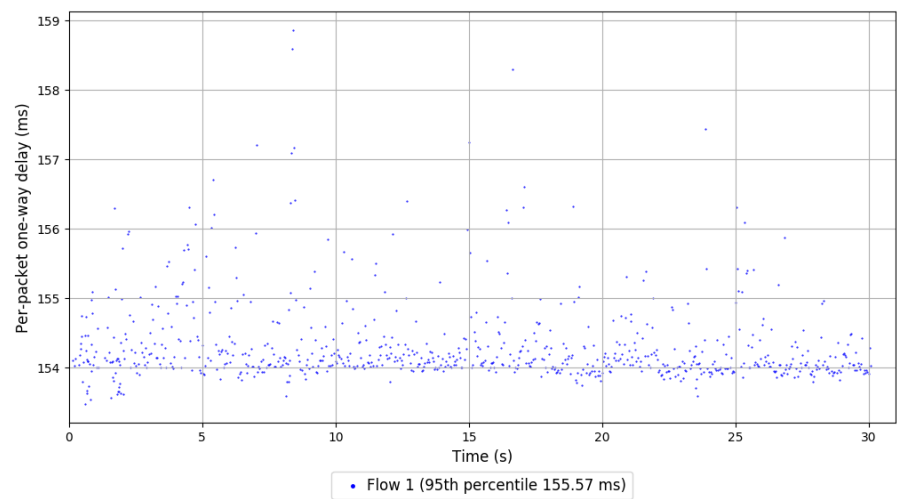
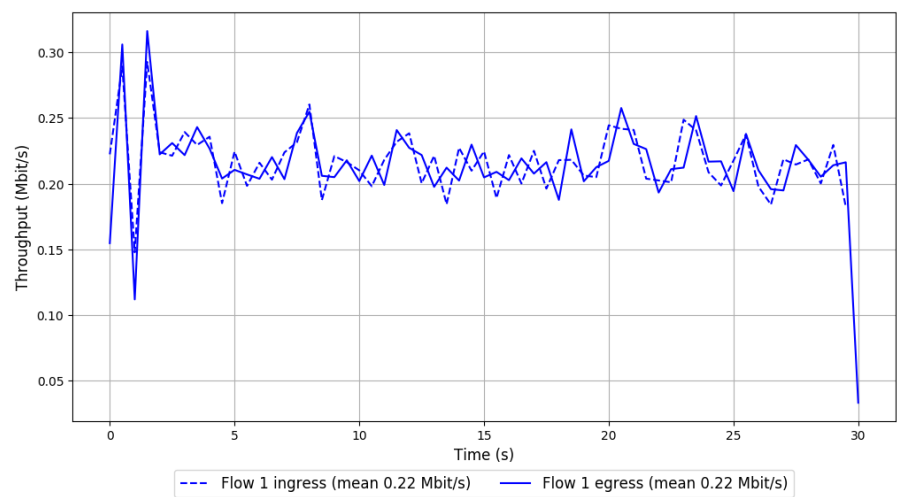


```
Run 1: Statistics of SCReAM

Start at: 2018-04-10 13:23:36
End at: 2018-04-10 13:24:06
Local clock offset: 17.361 ms
Remote clock offset: 0.896 ms

# Below is generated by plot.py at 2018-04-10 17:38:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 155.572 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 155.572 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

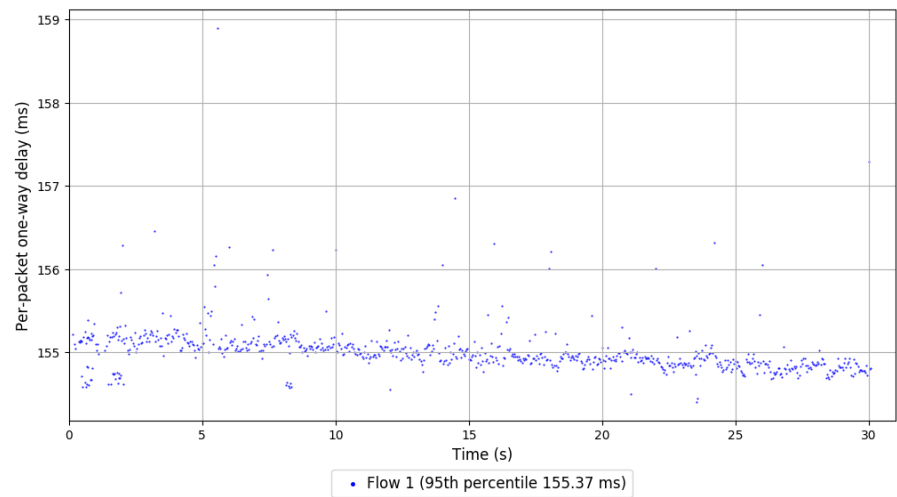
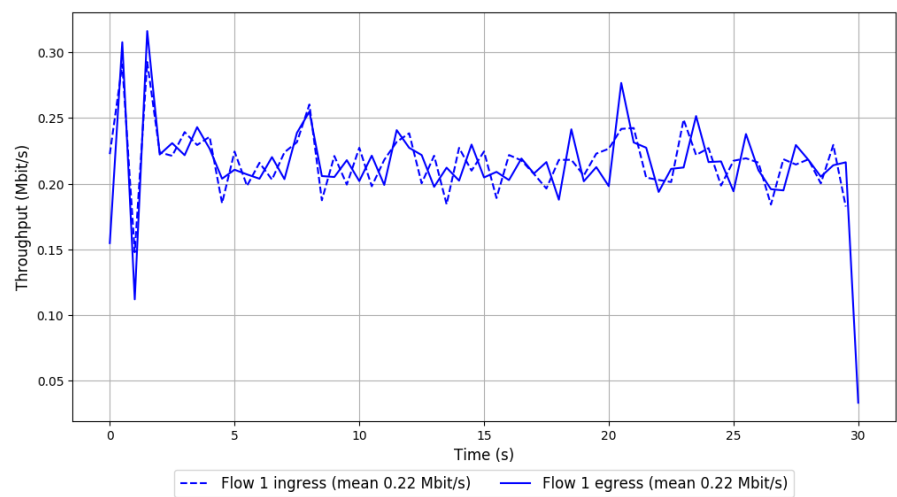


Run 2: Statistics of SCReAM

Start at: 2018-04-10 13:47:44
End at: 2018-04-10 13:48:15
Local clock offset: 15.909 ms
Remote clock offset: 20.985 ms

Below is generated by plot.py at 2018-04-10 17:38:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 155.365 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 155.365 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

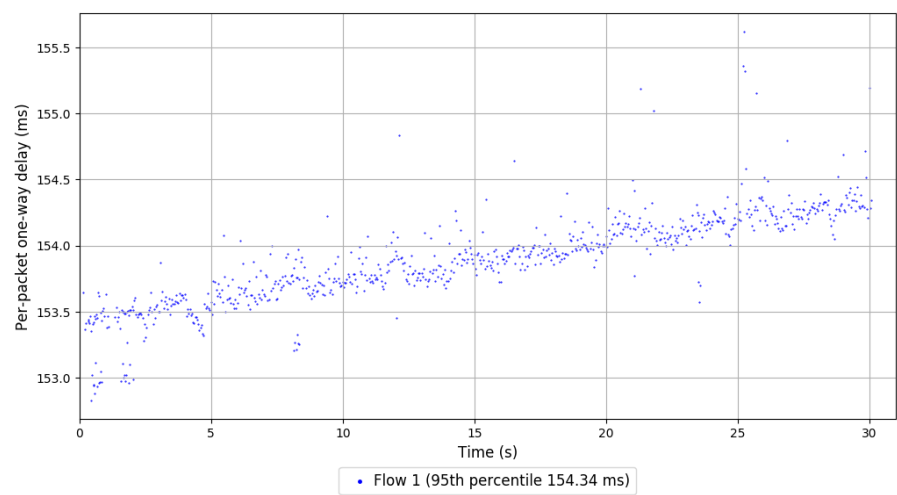
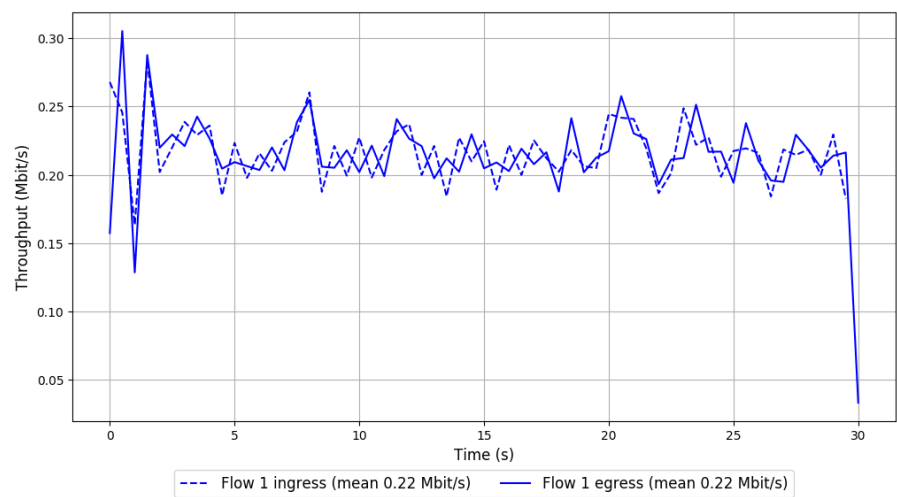


Run 3: Statistics of SCReAM

Start at: 2018-04-10 14:11:44
End at: 2018-04-10 14:12:14
Local clock offset: 14.515 ms
Remote clock offset: 13.982 ms

Below is generated by plot.py at 2018-04-10 17:38:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 154.341 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 154.341 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

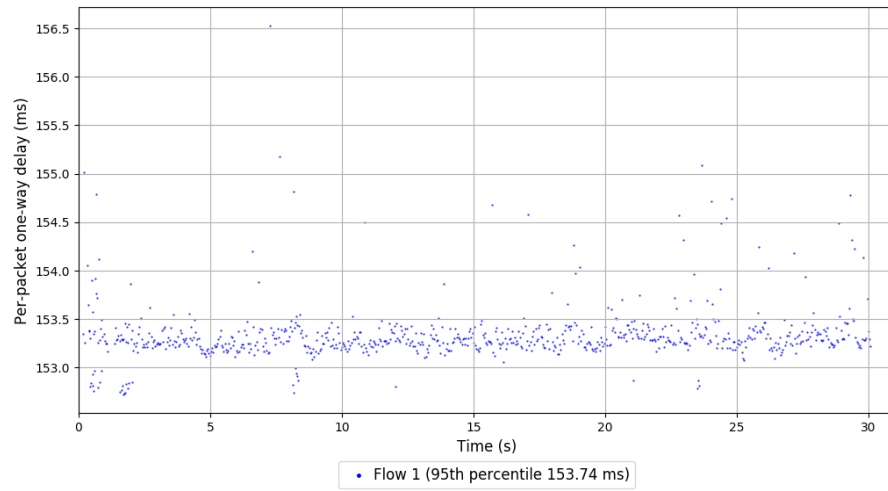
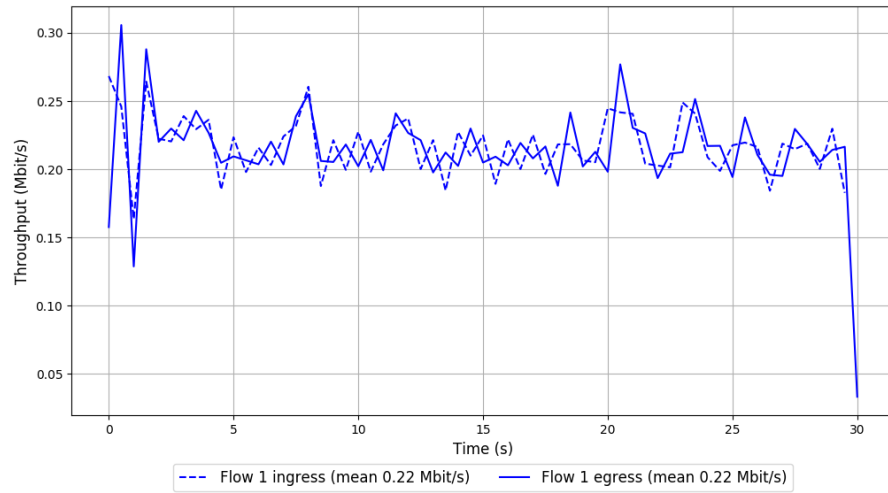


Run 4: Statistics of SCReAM

Start at: 2018-04-10 14:36:14
End at: 2018-04-10 14:36:44
Local clock offset: 15.623 ms
Remote clock offset: -1.724 ms

Below is generated by plot.py at 2018-04-10 17:38:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 153.740 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 153.740 ms
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-04-10 15:00:05

End at: 2018-04-10 15:00:35

Local clock offset: 24.603 ms

Remote clock offset: 1.859 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 153.180 ms

Loss rate: 0.00%

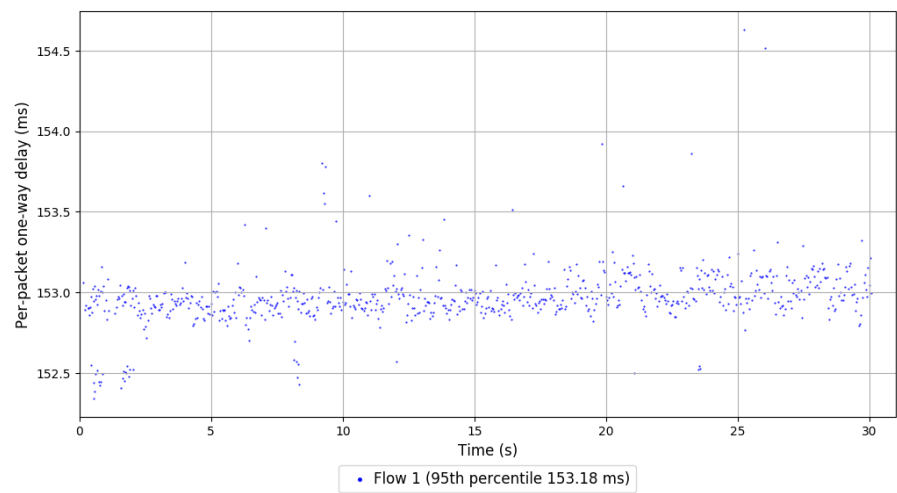
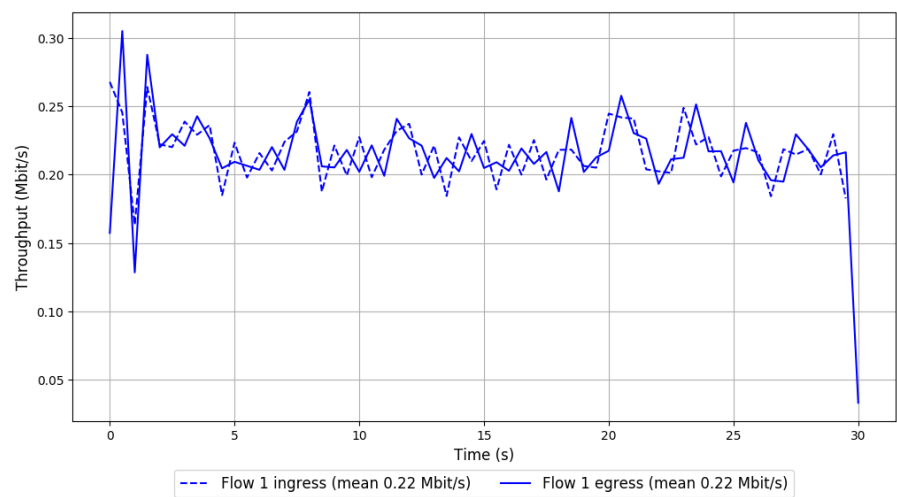
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 153.180 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

/home/ubuntu/pantheon_data/2018-04-10T13-13-AWS-Korea-to-China-10-runs/scream_stats_run6.log

Run 6: Report of SReAM — Data Link

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Run 7: Statistics of SCReAM

Start at: 2018-04-10 15:47:40

End at: 2018-04-10 15:48:10

Local clock offset: 16.083 ms

Remote clock offset: 1.954 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 153.352 ms

Loss rate: 0.00%

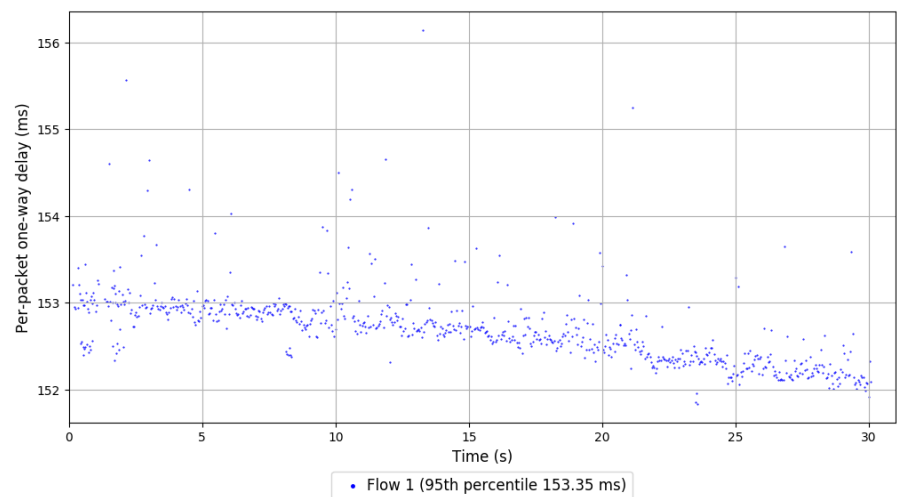
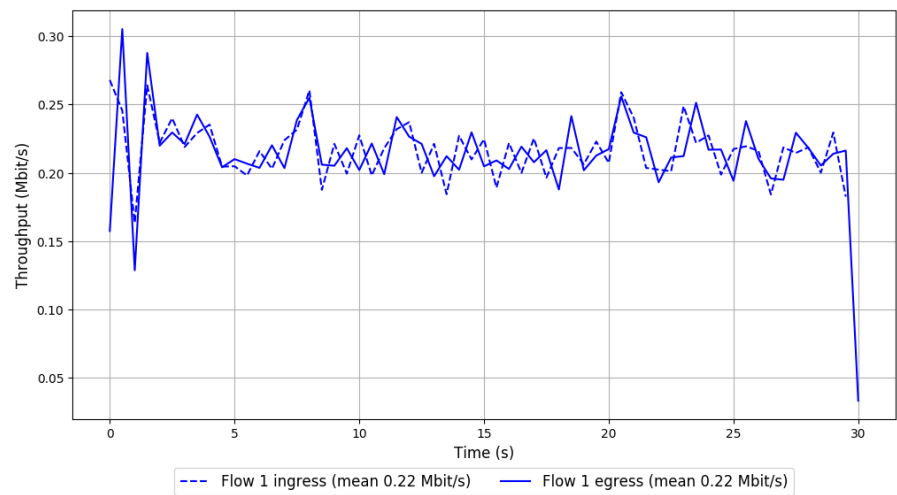
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 153.352 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link

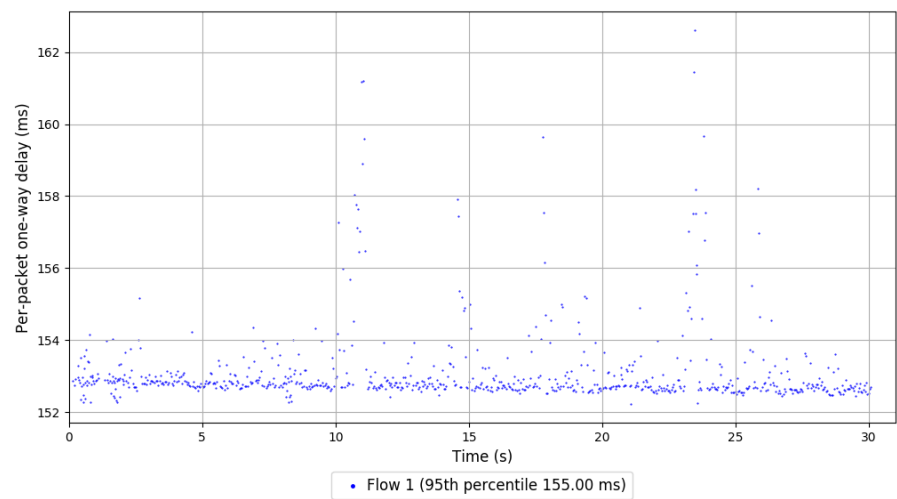
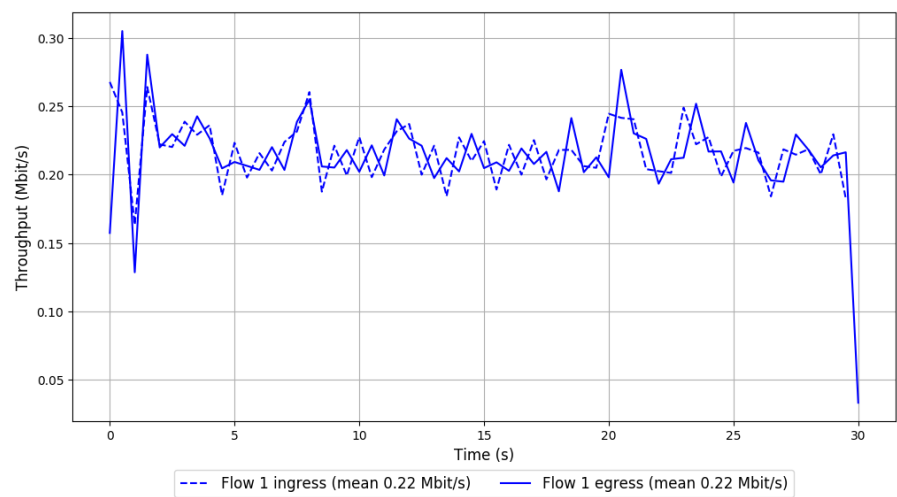


Run 8: Statistics of SCReAM

Start at: 2018-04-10 16:10:15
End at: 2018-04-10 16:10:45
Local clock offset: 17.871 ms
Remote clock offset: 22.112 ms

Below is generated by plot.py at 2018-04-10 17:38:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 155.004 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 155.004 ms
Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-04-10 16:34:04

End at: 2018-04-10 16:34:34

Local clock offset: 14.11 ms

Remote clock offset: 9.128 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 152.921 ms

Loss rate: 0.00%

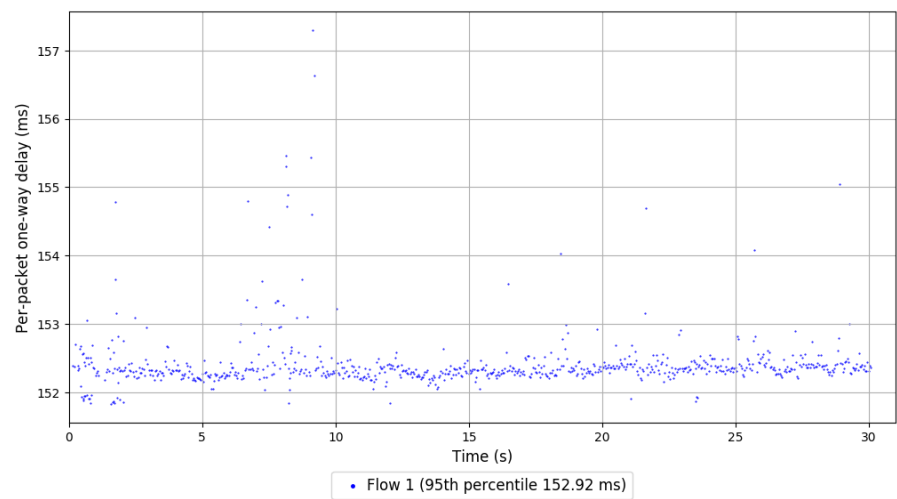
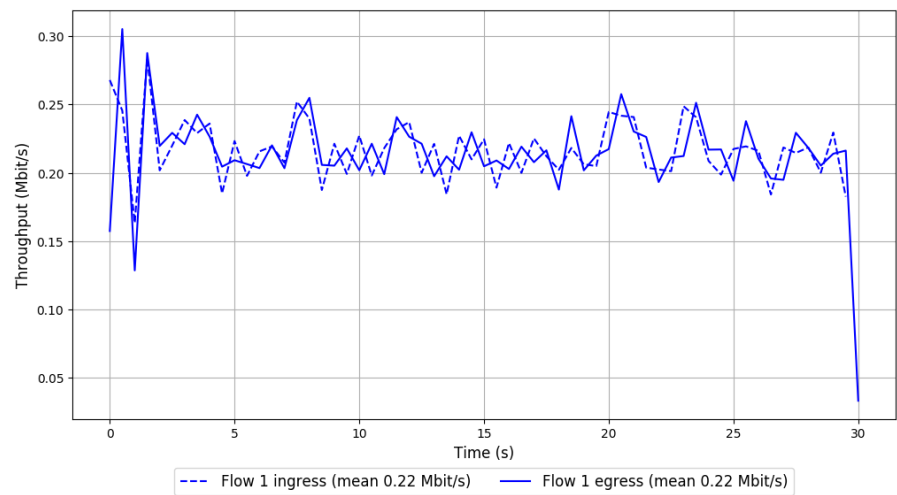
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 152.921 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SCReAM

Start at: 2018-04-10 16:57:00

End at: 2018-04-10 16:57:30

Local clock offset: 7.524 ms

Remote clock offset: 2.958 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 157.766 ms

Loss rate: 0.00%

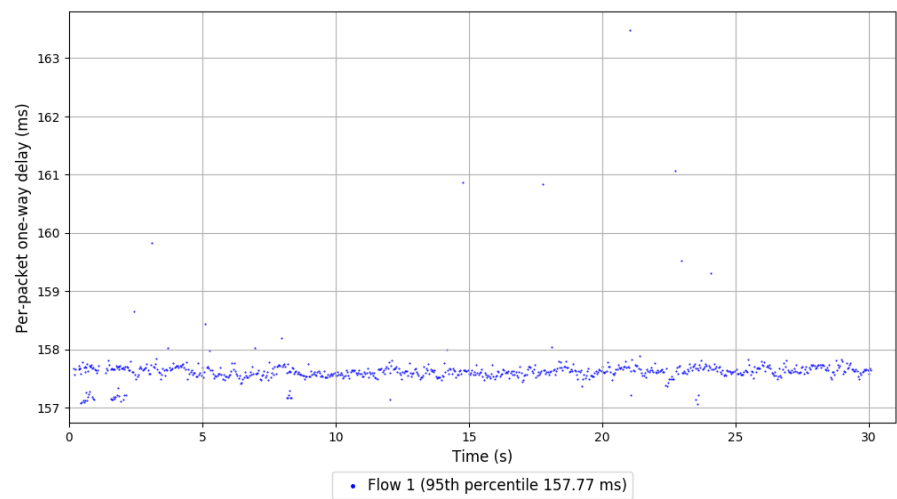
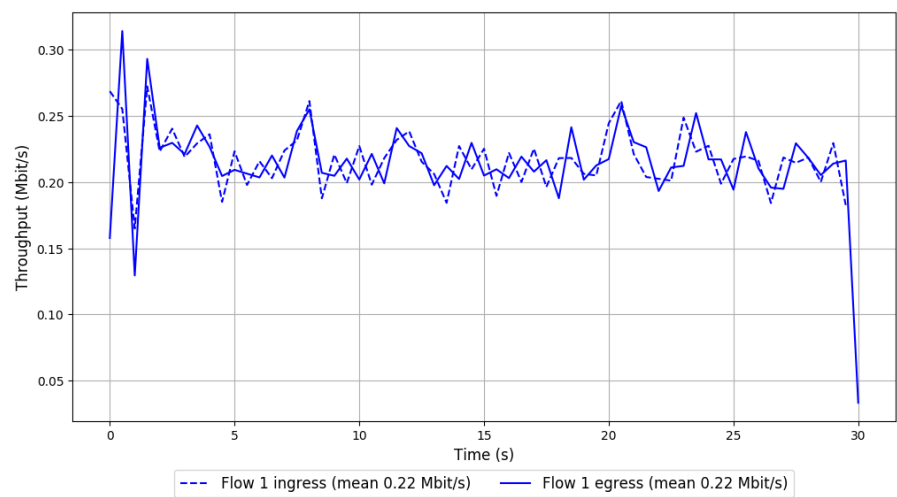
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 157.766 ms

Loss rate: 0.00%

Run 10: Report of SReAM — Data Link

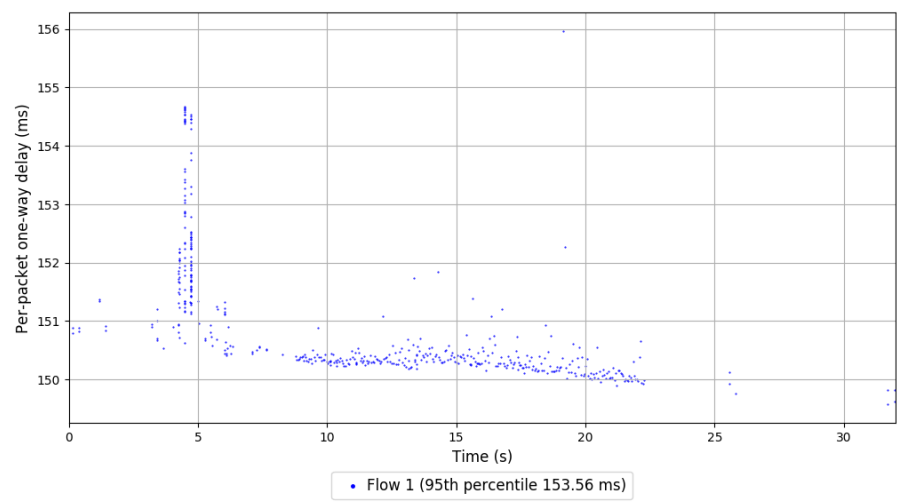
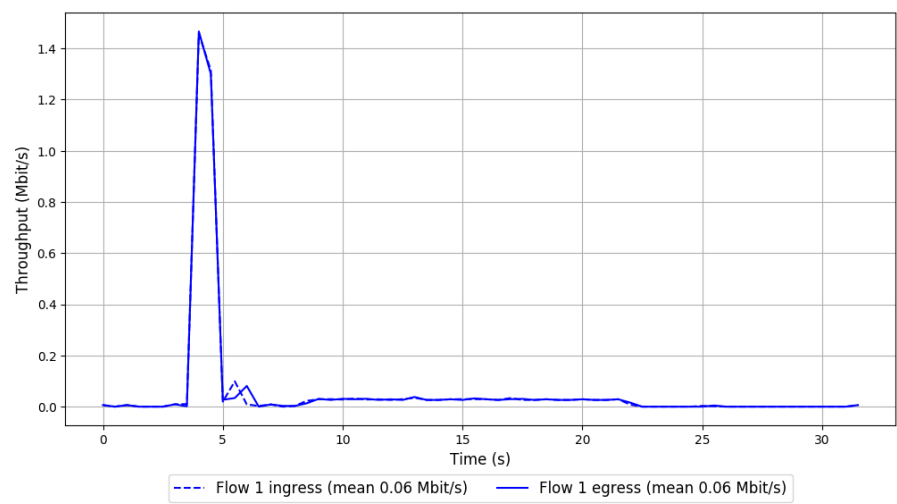


```
Run 1: Statistics of WebRTC media

Start at: 2018-04-10 13:31:38
End at: 2018-04-10 13:32:08
Local clock offset: 15.426 ms
Remote clock offset: 0.092 ms

# Below is generated by plot.py at 2018-04-10 17:38:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 153.564 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 153.564 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

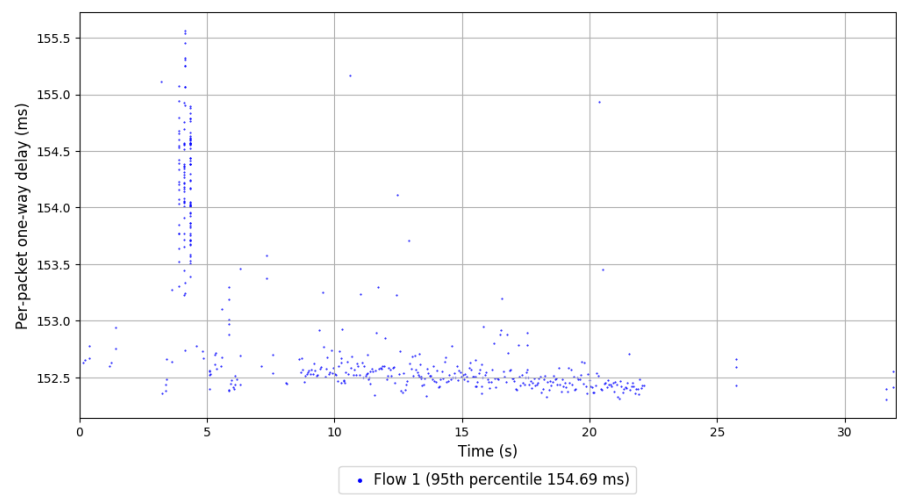
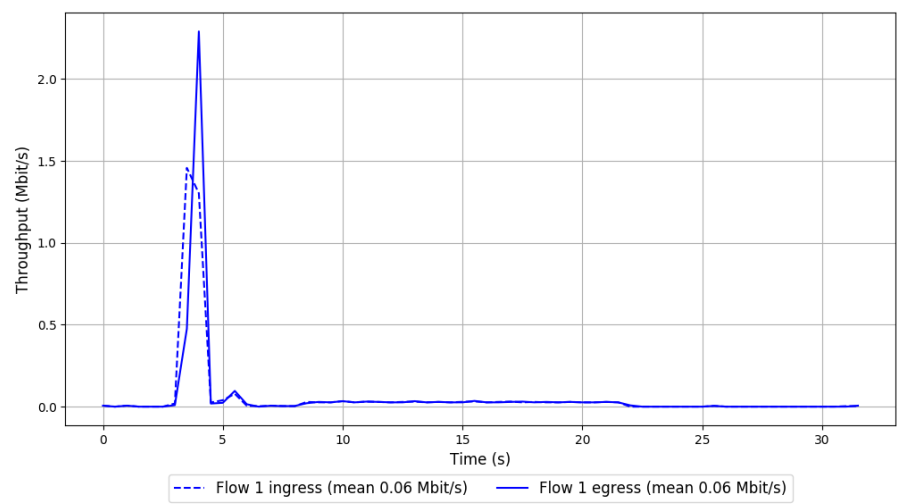


Run 2: Statistics of WebRTC media

Start at: 2018-04-10 13:55:51
End at: 2018-04-10 13:56:21
Local clock offset: 15.878 ms
Remote clock offset: 25.318 ms

Below is generated by plot.py at 2018-04-10 17:38:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 154.692 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 154.692 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-04-10 14:19:42

End at: 2018-04-10 14:20:12

Local clock offset: 15.827 ms

Remote clock offset: 4.618 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 155.051 ms

Loss rate: 0.00%

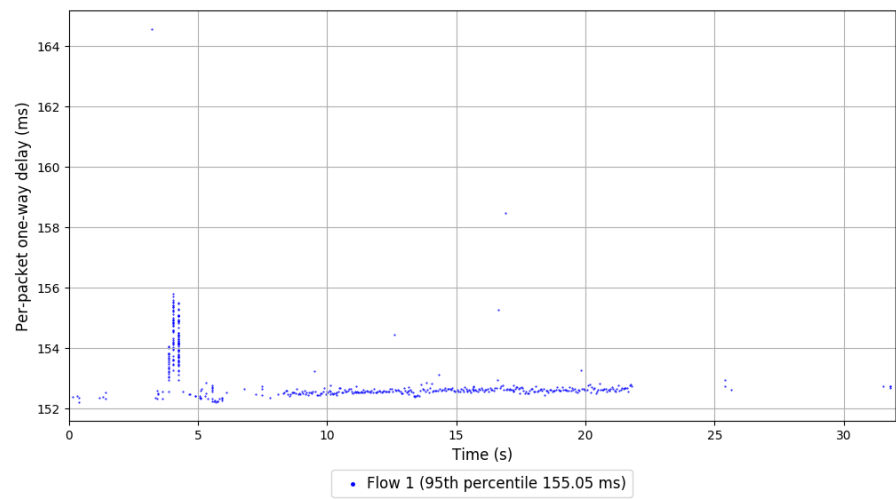
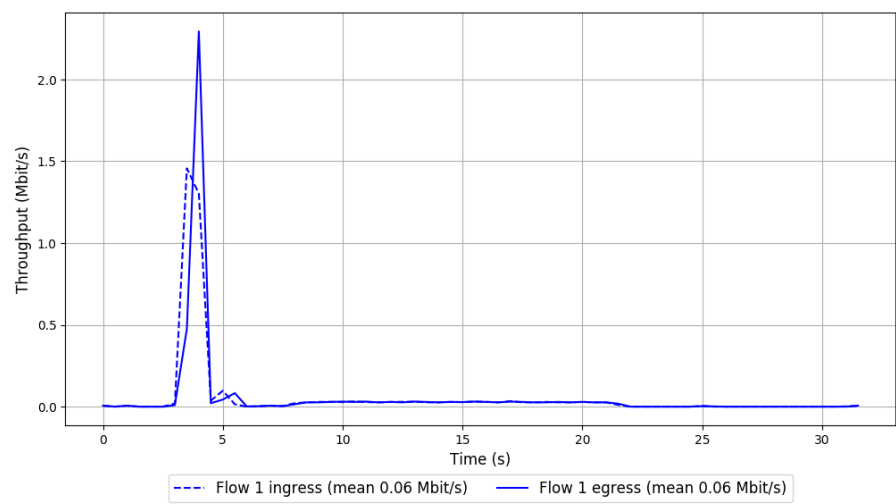
-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 155.051 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

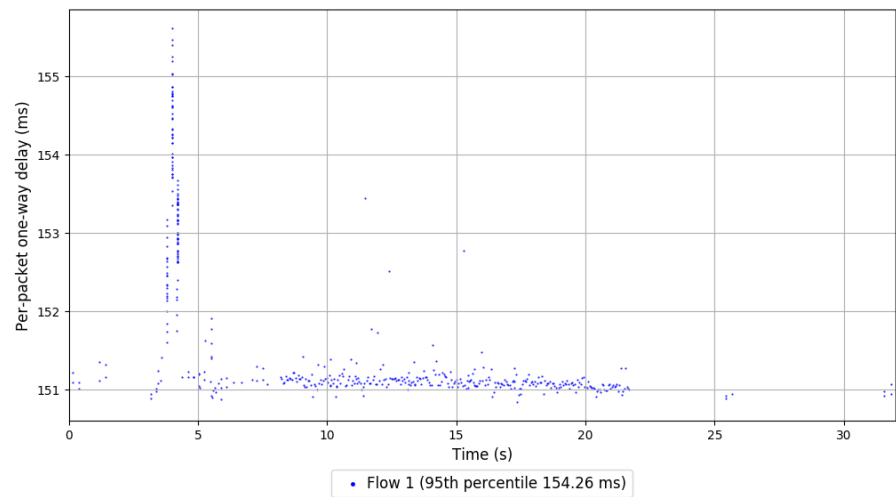
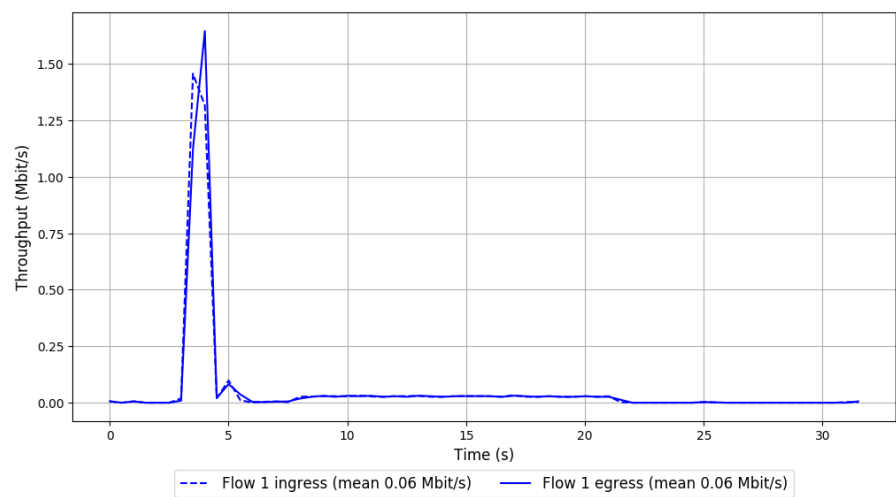


Run 4: Statistics of WebRTC media

Start at: 2018-04-10 14:44:12
End at: 2018-04-10 14:44:42
Local clock offset: 15.331 ms
Remote clock offset: -0.406 ms

Below is generated by plot.py at 2018-04-10 17:38:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 154.265 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 154.265 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-04-10 15:07:46

End at: 2018-04-10 15:08:16

Local clock offset: 26.211 ms

Remote clock offset: 2.133 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 156.198 ms

Loss rate: 0.00%

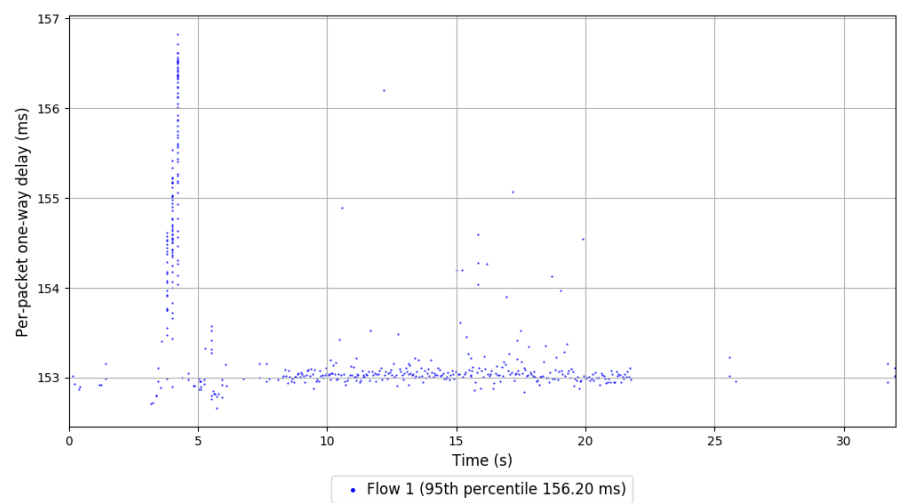
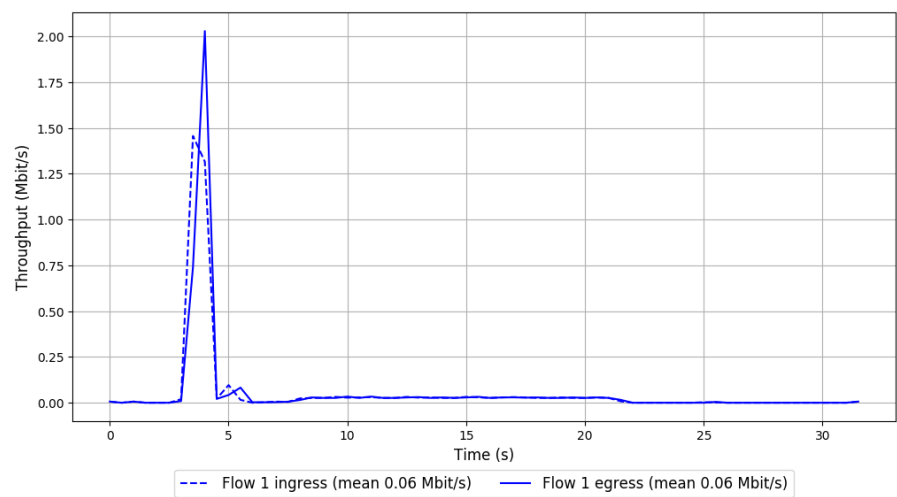
-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 156.198 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-04-10 15:32:33

End at: 2018-04-10 15:33:03

Local clock offset: 19.882 ms

Remote clock offset: 2.042 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 153.459 ms

Loss rate: 0.00%

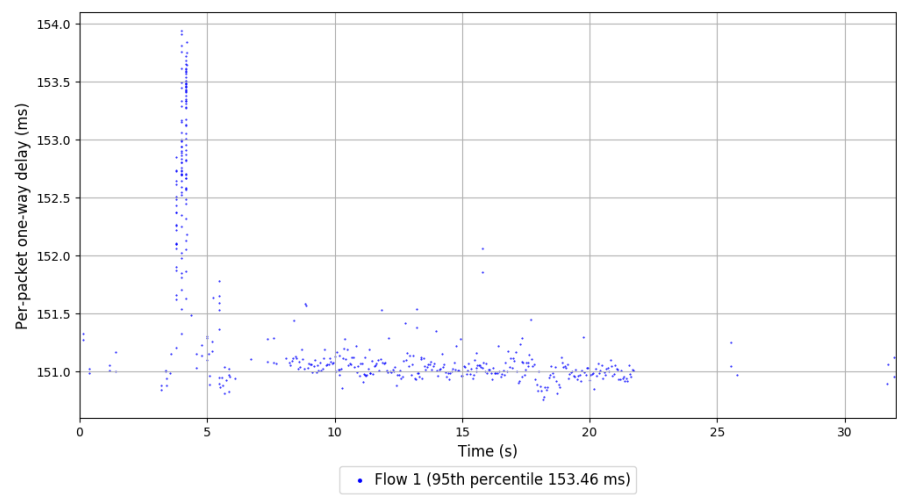
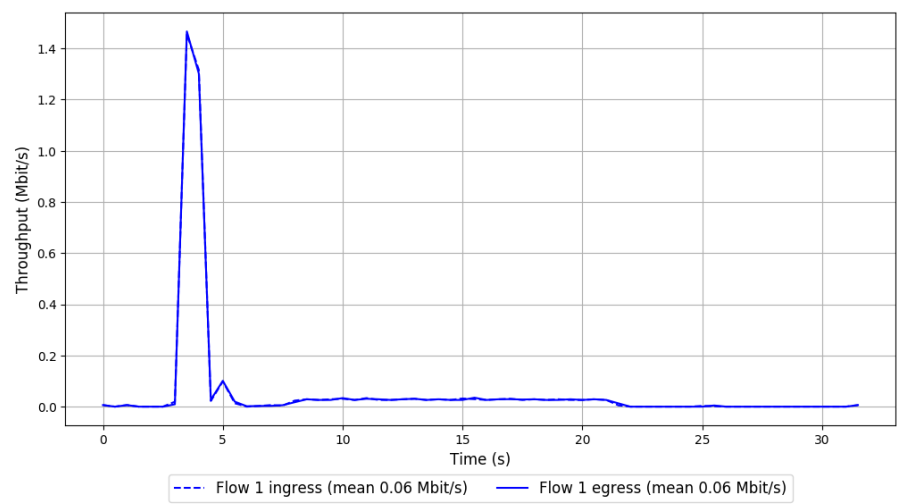
-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 153.459 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link

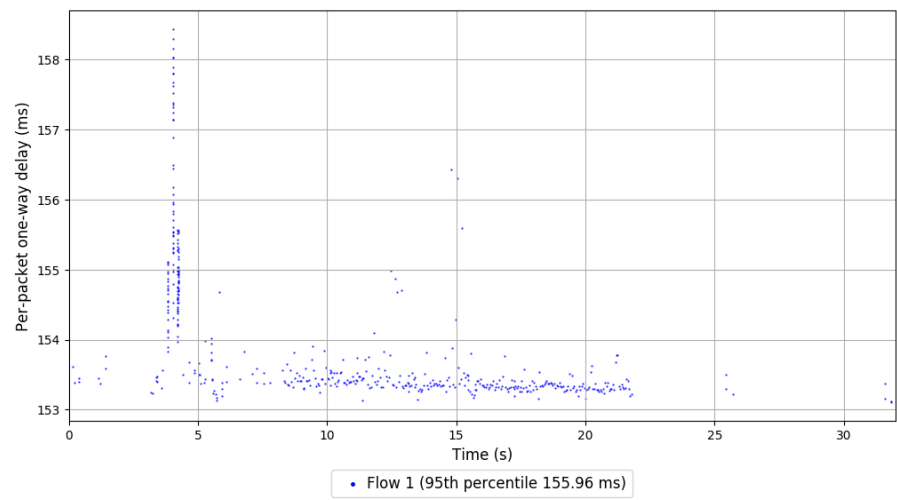
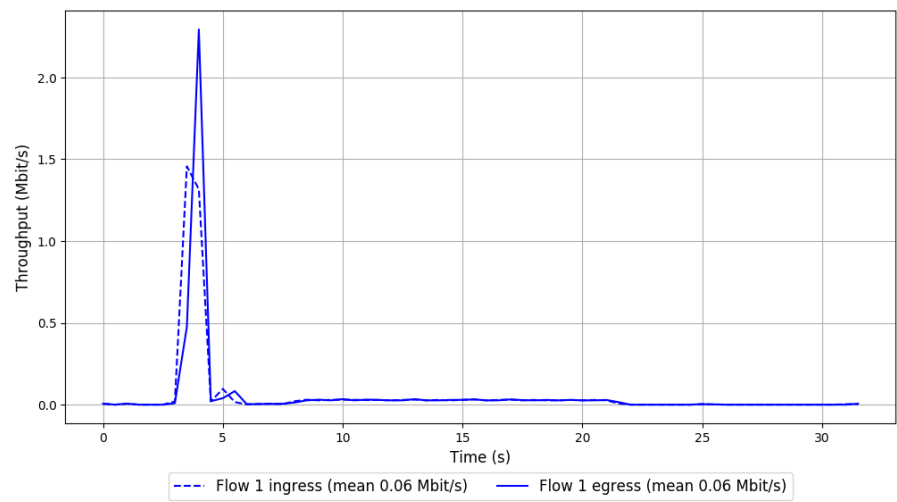


Run 7: Statistics of WebRTC media

Start at: 2018-04-10 15:55:13
End at: 2018-04-10 15:55:43
Local clock offset: 15.508 ms
Remote clock offset: 12.408 ms

Below is generated by plot.py at 2018-04-10 17:38:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 155.964 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 155.964 ms
Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link

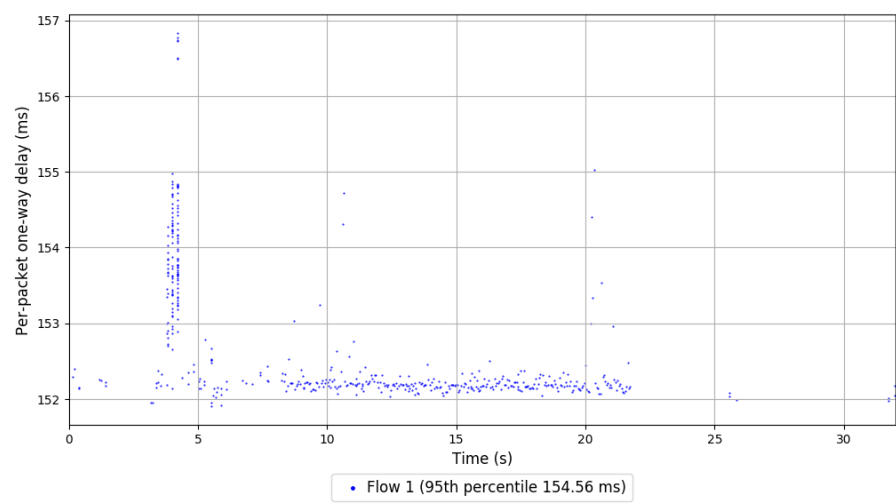
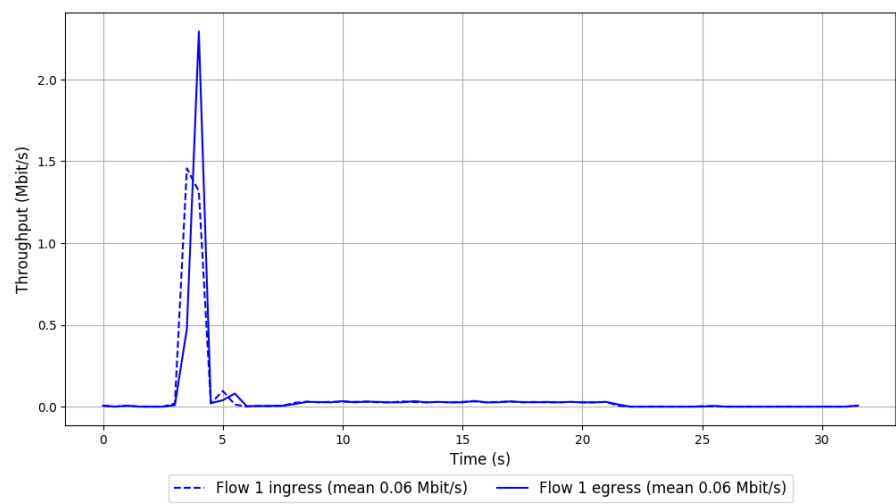


Run 8: Statistics of WebRTC media

Start at: 2018-04-10 16:18:42
End at: 2018-04-10 16:19:12
Local clock offset: 18.177 ms
Remote clock offset: 25.266 ms

Below is generated by plot.py at 2018-04-10 17:38:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 154.555 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 154.555 ms
Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-04-10 16:41:38

End at: 2018-04-10 16:42:08

Local clock offset: 10.947 ms

Remote clock offset: 5.474 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 154.301 ms

Loss rate: 0.00%

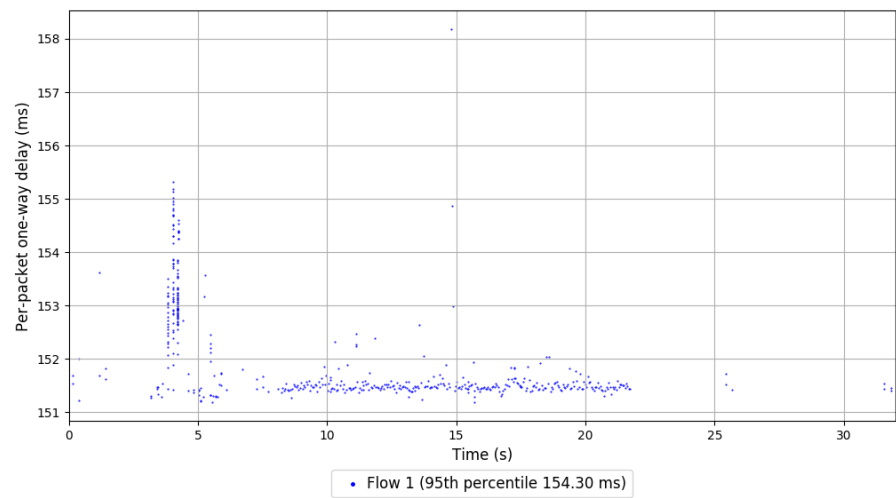
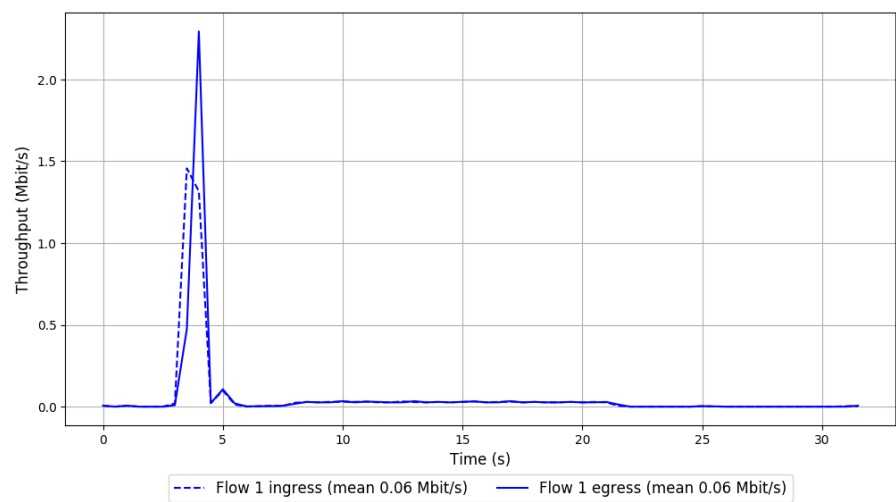
-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 154.301 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-04-10 17:04:34

End at: 2018-04-10 17:05:04

Local clock offset: 5.481 ms

Remote clock offset: 0.994 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 156.203 ms

Loss rate: 0.00%

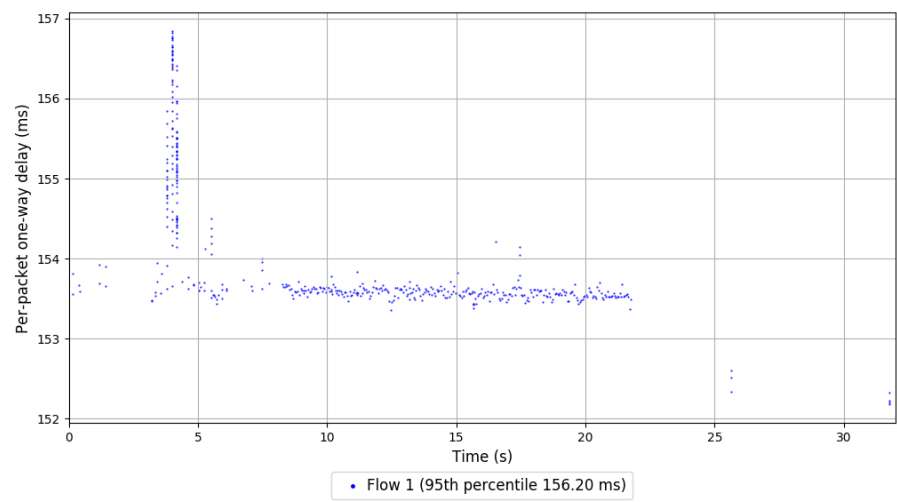
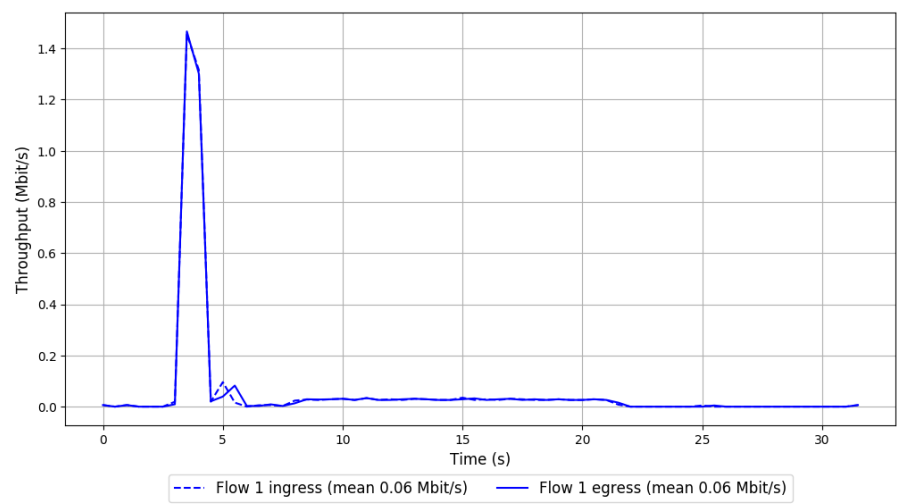
-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 156.203 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-04-10 13:35:37

End at: 2018-04-10 13:36:07

Local clock offset: 14.666 ms

Remote clock offset: 8.286 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 154.079 ms

Loss rate: 0.00%

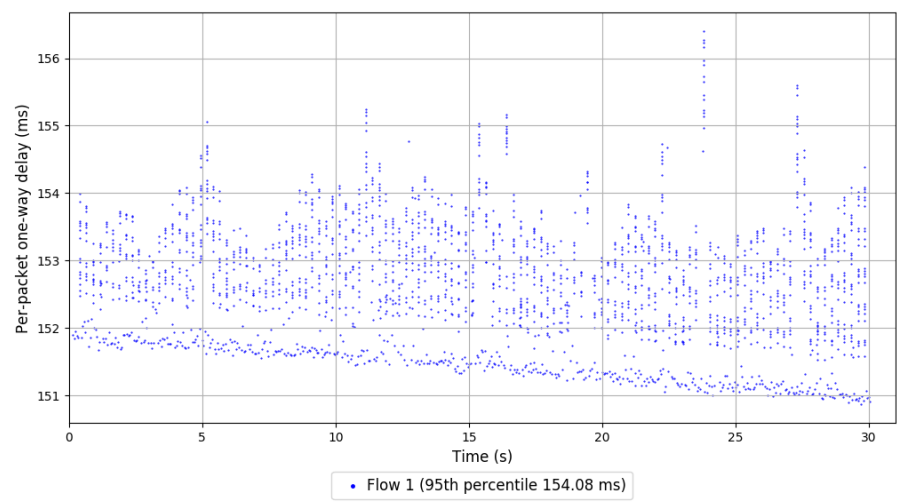
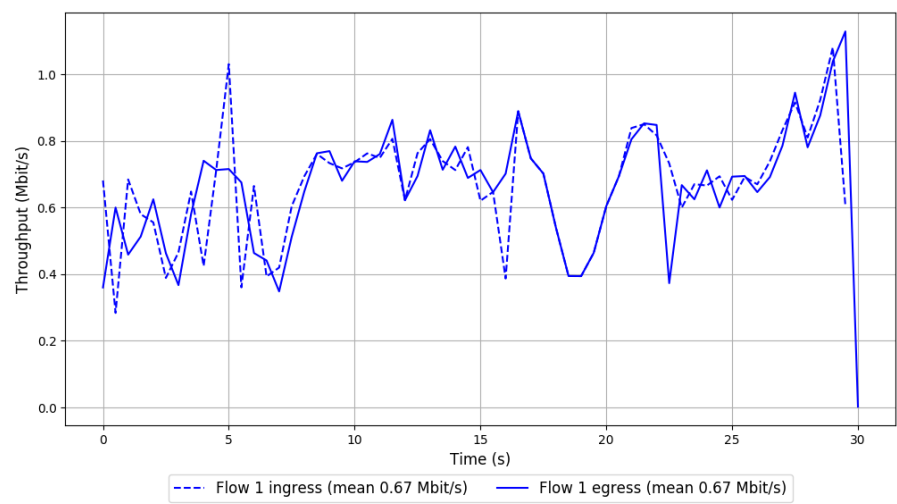
-- Flow 1:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 154.079 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

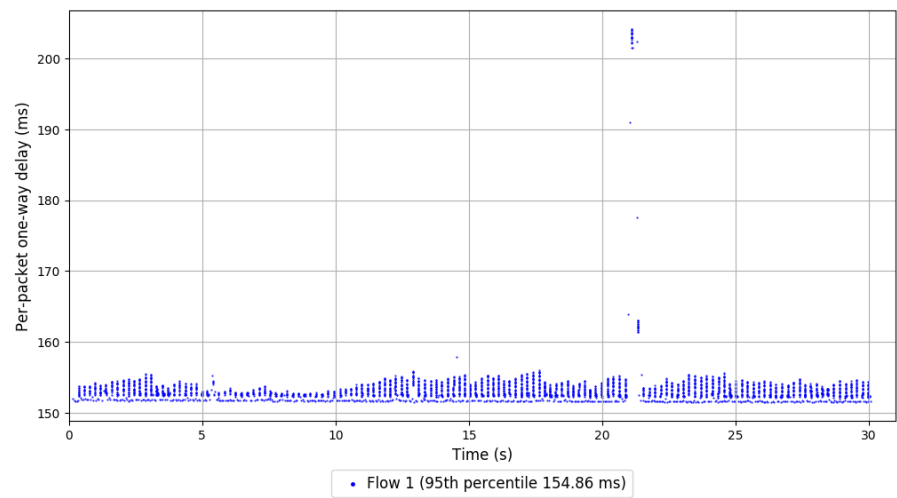
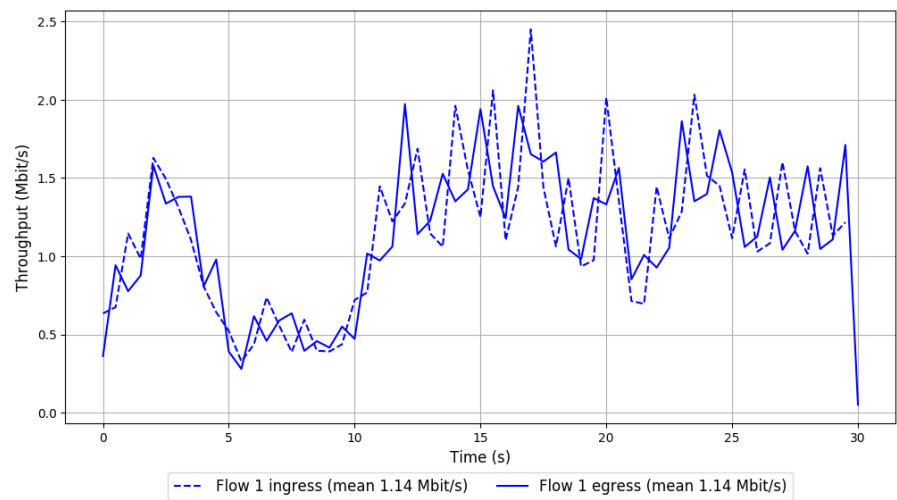


Run 2: Statistics of Sprout

Start at: 2018-04-10 13:59:48
End at: 2018-04-10 14:00:18
Local clock offset: 15.62 ms
Remote clock offset: 26.864 ms

Below is generated by plot.py at 2018-04-10 17:38:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 154.860 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 154.860 ms
Loss rate: 0.10%

Run 2: Report of Sprout — Data Link

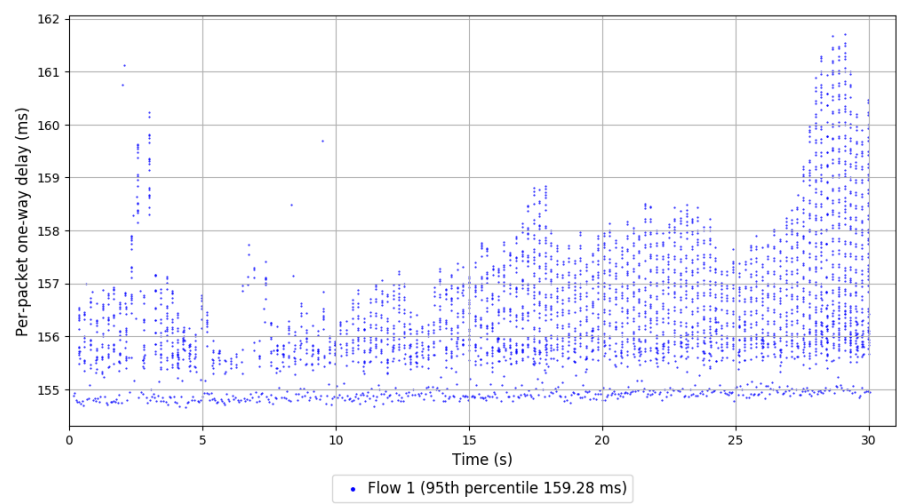
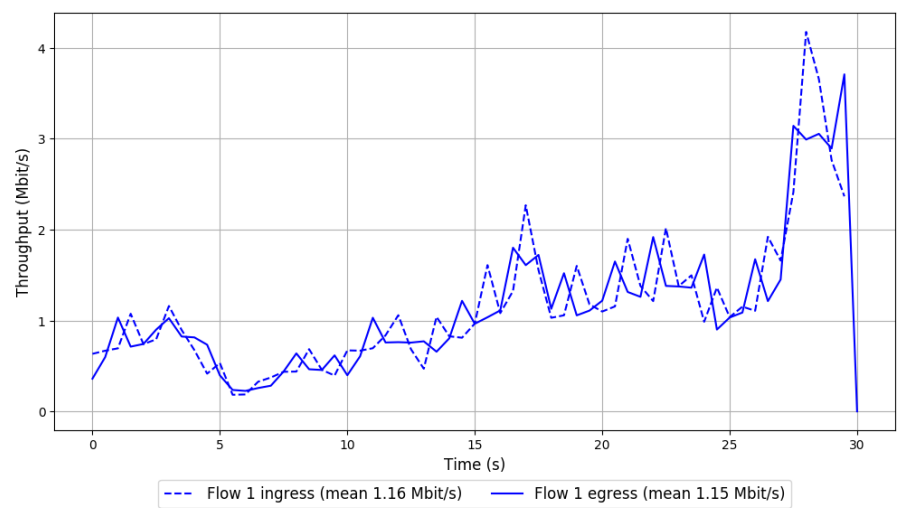


Run 3: Statistics of Sprout

Start at: 2018-04-10 14:24:15
End at: 2018-04-10 14:24:45
Local clock offset: 15.882 ms
Remote clock offset: 2.225 ms

Below is generated by plot.py at 2018-04-10 17:38:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 159.279 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 159.279 ms
Loss rate: 0.73%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-04-10 14:48:08

End at: 2018-04-10 14:48:38

Local clock offset: 17.137 ms

Remote clock offset: 0.613 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.88 Mbit/s

95th percentile per-packet one-way delay: 155.832 ms

Loss rate: 0.14%

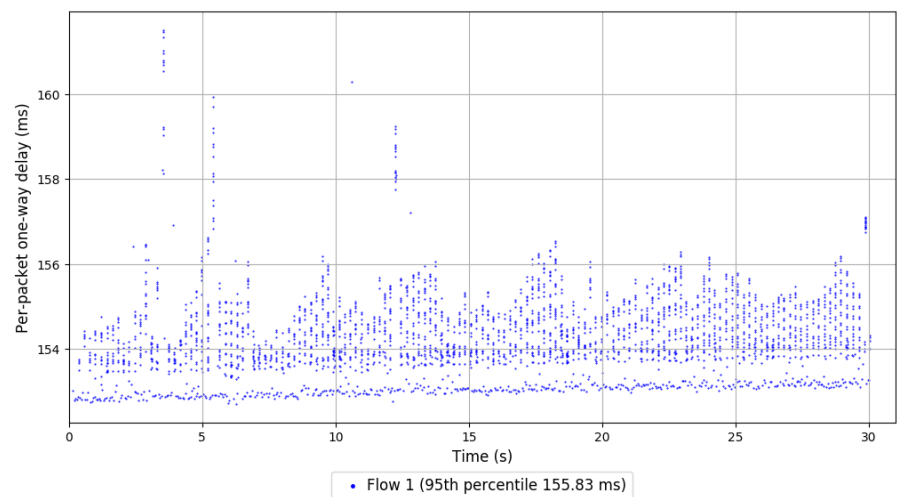
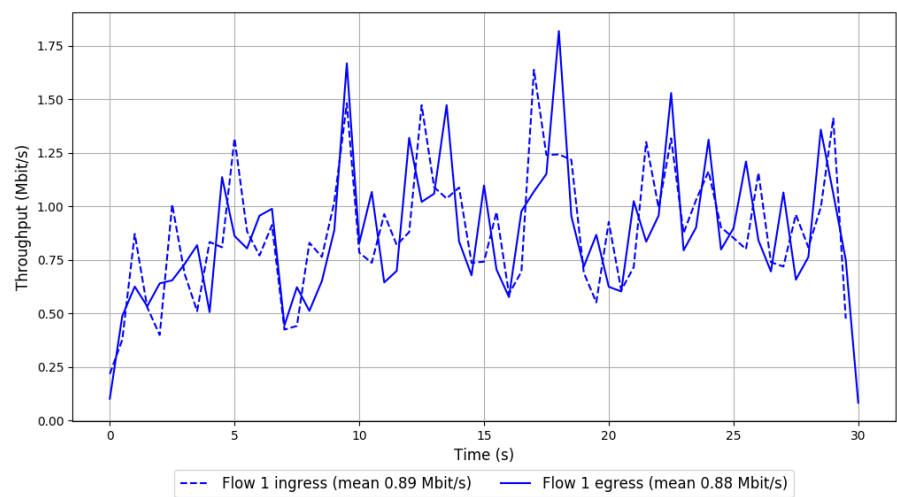
-- Flow 1:

Average throughput: 0.88 Mbit/s

95th percentile per-packet one-way delay: 155.832 ms

Loss rate: 0.14%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-04-10 15:12:44

End at: 2018-04-10 15:13:14

Local clock offset: 27.032 ms

Remote clock offset: 2.227 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 156.718 ms

Loss rate: 0.00%

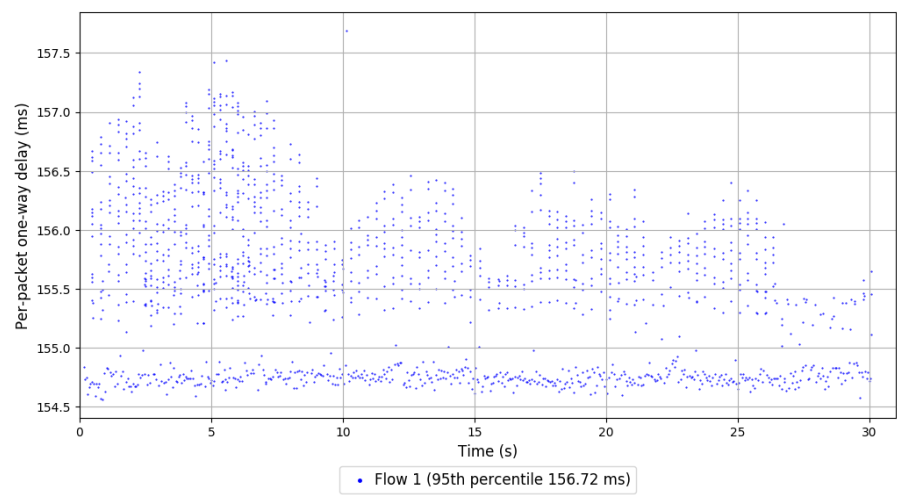
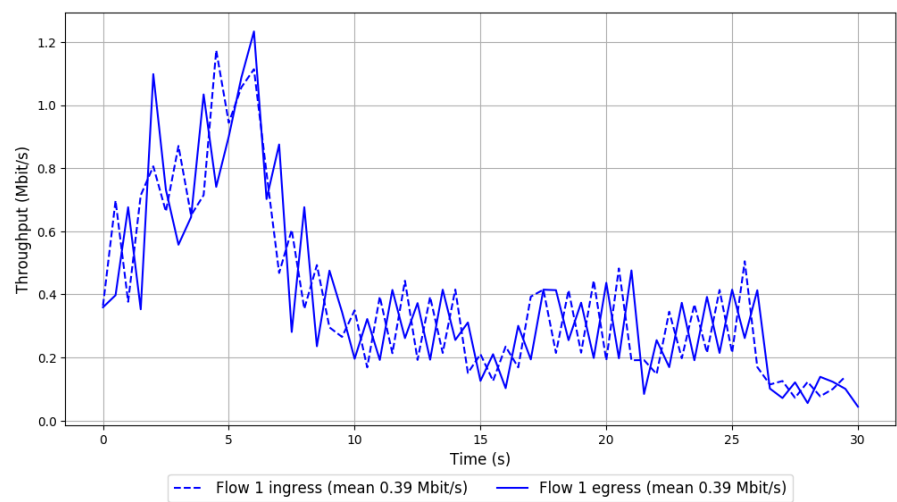
-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 156.718 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-04-10 15:36:17

End at: 2018-04-10 15:36:47

Local clock offset: 18.488 ms

Remote clock offset: 2.02 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 162.930 ms

Loss rate: 2.27%

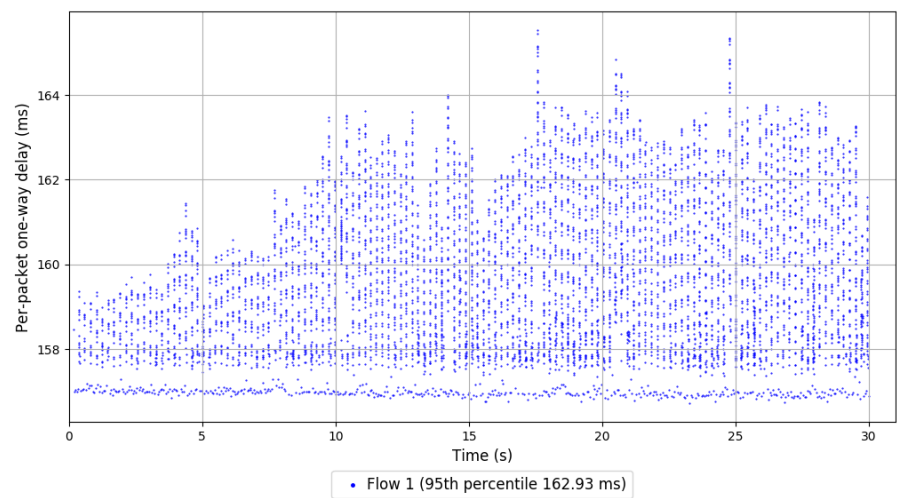
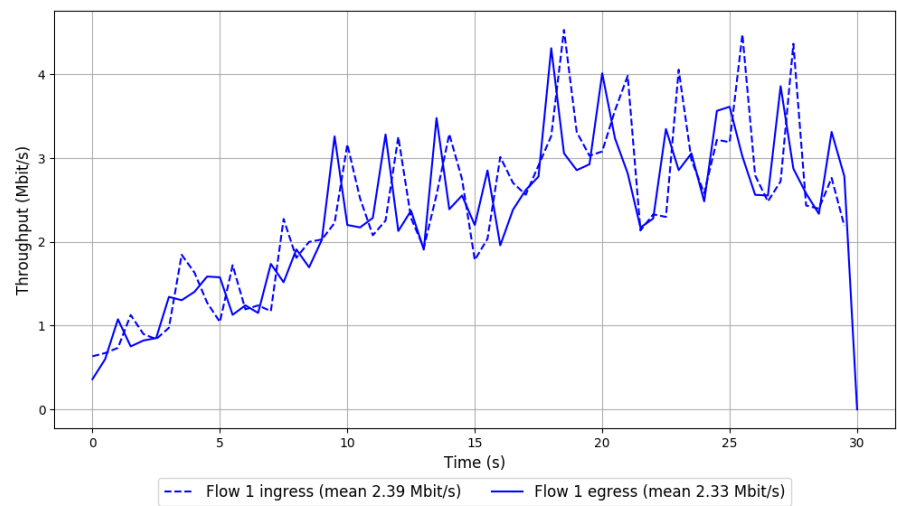
-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 162.930 ms

Loss rate: 2.27%

Run 6: Report of Sprout — Data Link

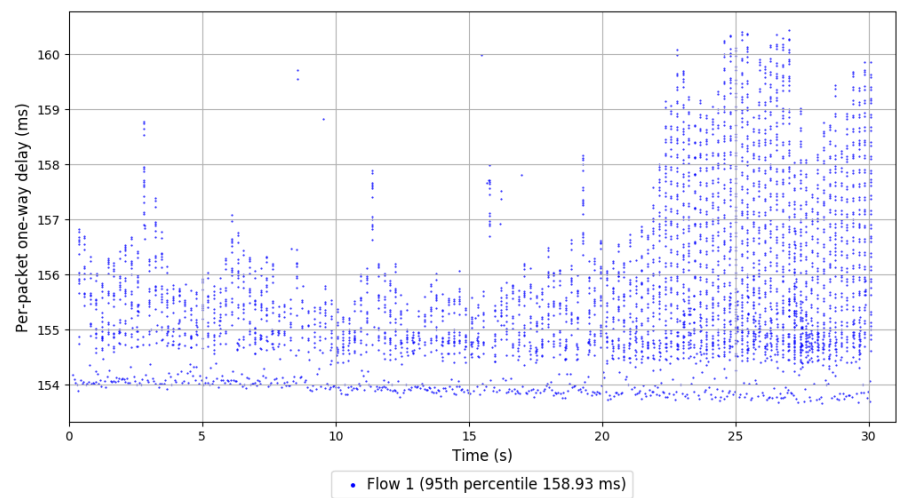
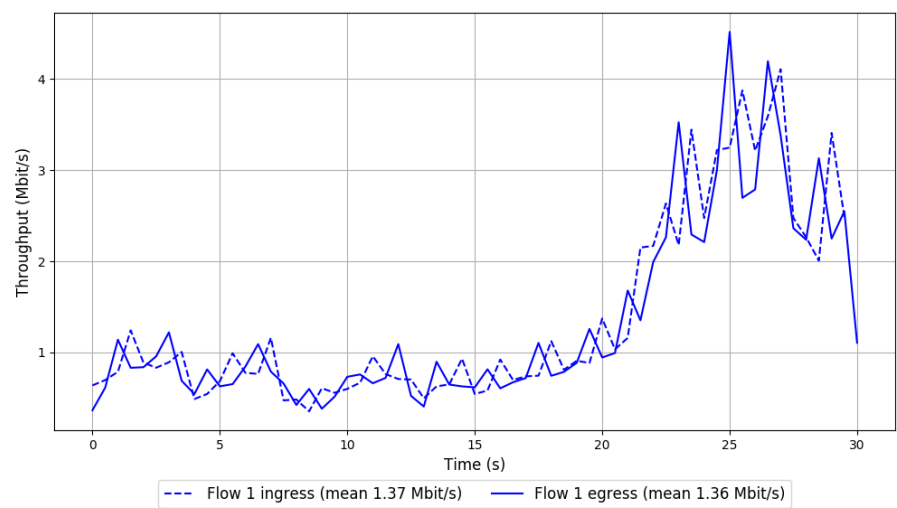


Run 7: Statistics of Sprout

Start at: 2018-04-10 15:58:54
End at: 2018-04-10 15:59:24
Local clock offset: 16.716 ms
Remote clock offset: 15.732 ms

Below is generated by plot.py at 2018-04-10 17:38:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 158.934 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 158.934 ms
Loss rate: 1.35%

Run 7: Report of Sprout — Data Link

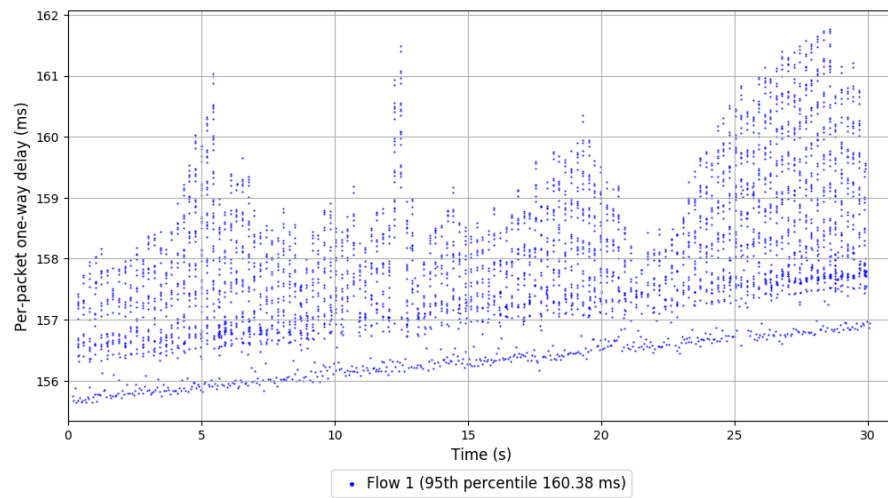
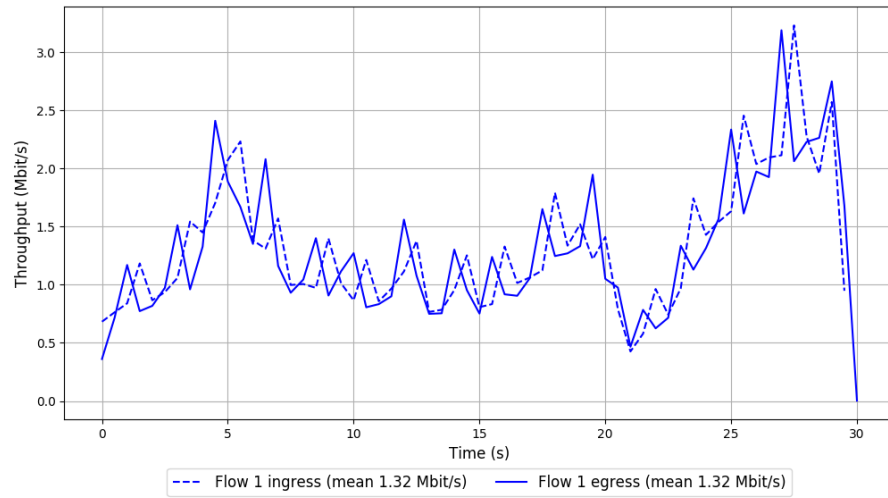


Run 8: Statistics of Sprout

Start at: 2018-04-10 16:22:26
End at: 2018-04-10 16:22:56
Local clock offset: 17.699 ms
Remote clock offset: 25.887 ms

Below is generated by plot.py at 2018-04-10 17:38:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 160.383 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 160.383 ms
Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-04-10 16:45:23

End at: 2018-04-10 16:45:53

Local clock offset: 10.109 ms

Remote clock offset: 4.625 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.96 Mbit/s

95th percentile per-packet one-way delay: 154.841 ms

Loss rate: 0.00%

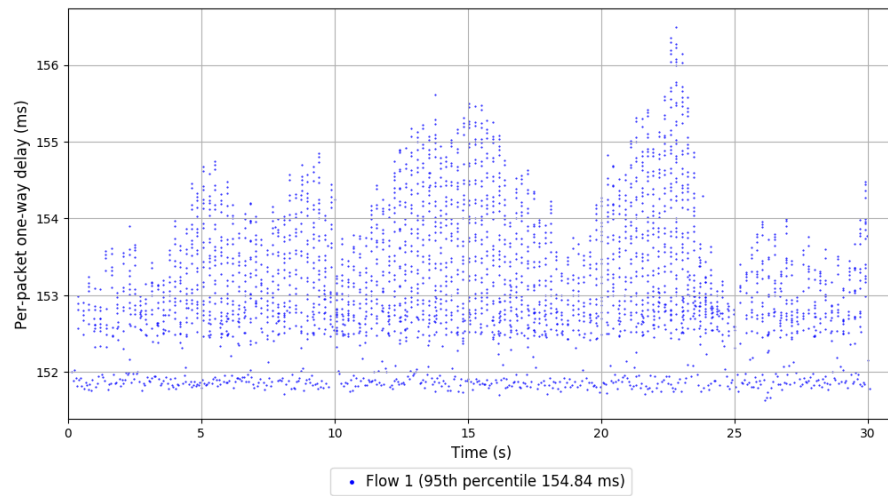
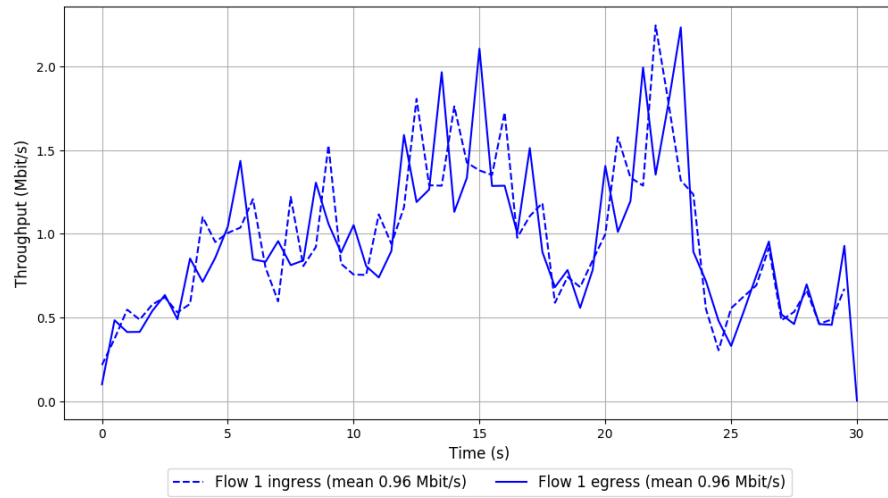
-- Flow 1:

Average throughput: 0.96 Mbit/s

95th percentile per-packet one-way delay: 154.841 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-04-10 17:08:16

End at: 2018-04-10 17:08:46

Local clock offset: 3.223 ms

Remote clock offset: 0.441 ms

Below is generated by plot.py at 2018-04-10 17:38:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.97 Mbit/s

95th percentile per-packet one-way delay: 154.339 ms

Loss rate: 0.00%

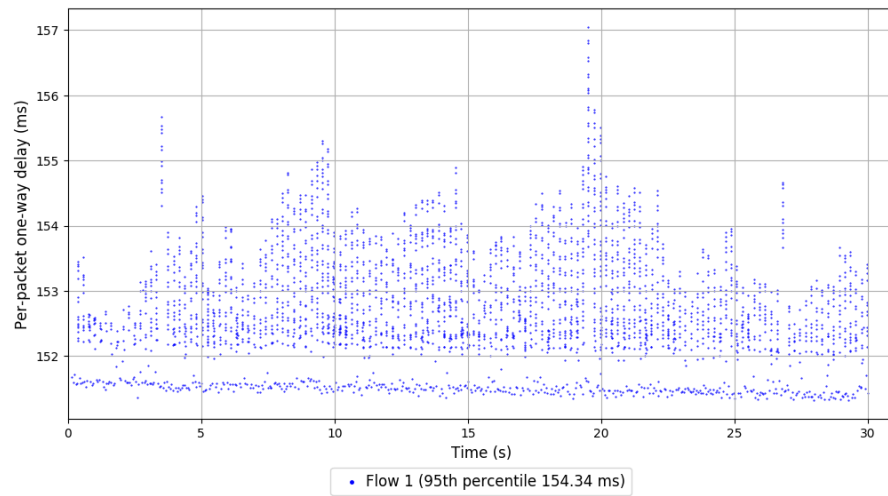
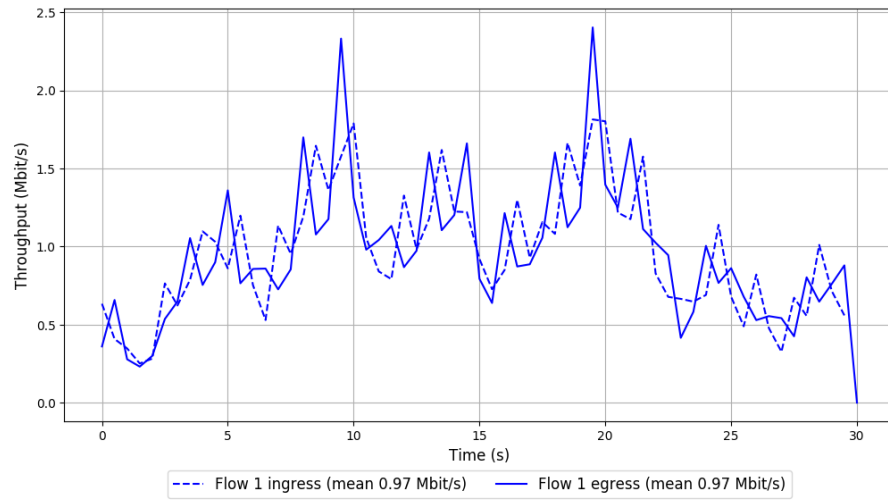
-- Flow 1:

Average throughput: 0.97 Mbit/s

95th percentile per-packet one-way delay: 154.339 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

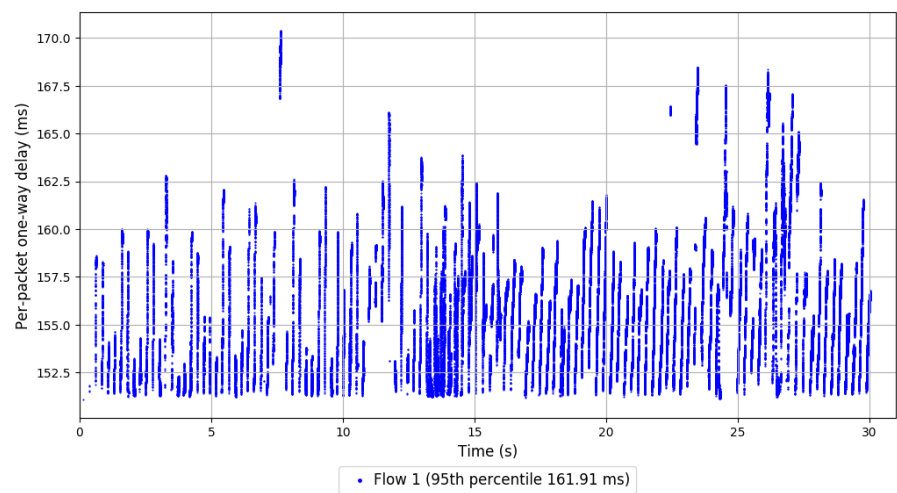
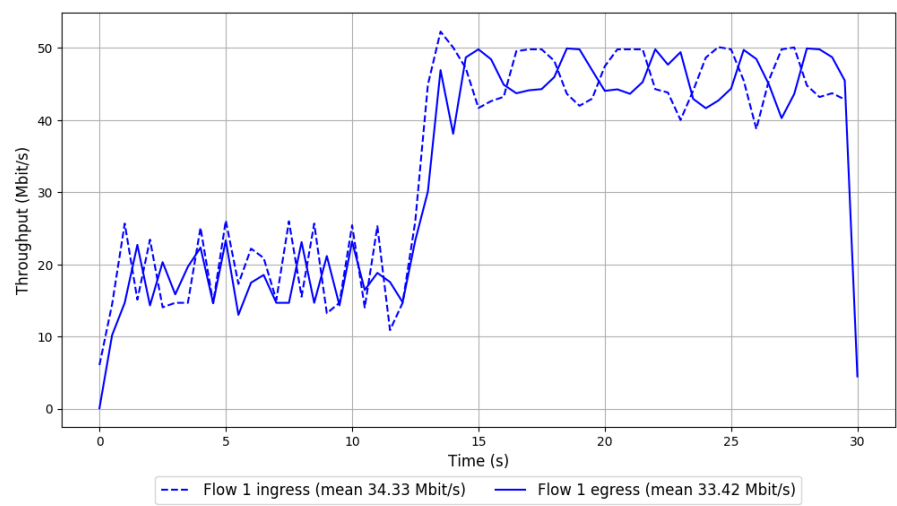


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-04-10 13:22:15
End at: 2018-04-10 13:22:45
Local clock offset: 17.631 ms
Remote clock offset: 1.305 ms

# Below is generated by plot.py at 2018-04-10 17:39:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.42 Mbit/s
95th percentile per-packet one-way delay: 161.913 ms
Loss rate: 2.63%
-- Flow 1:
Average throughput: 33.42 Mbit/s
95th percentile per-packet one-way delay: 161.913 ms
Loss rate: 2.63%
```


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

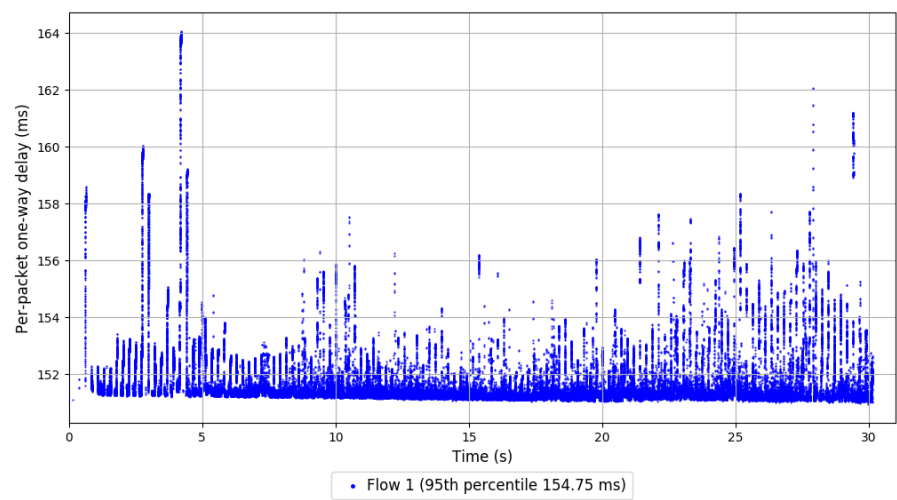
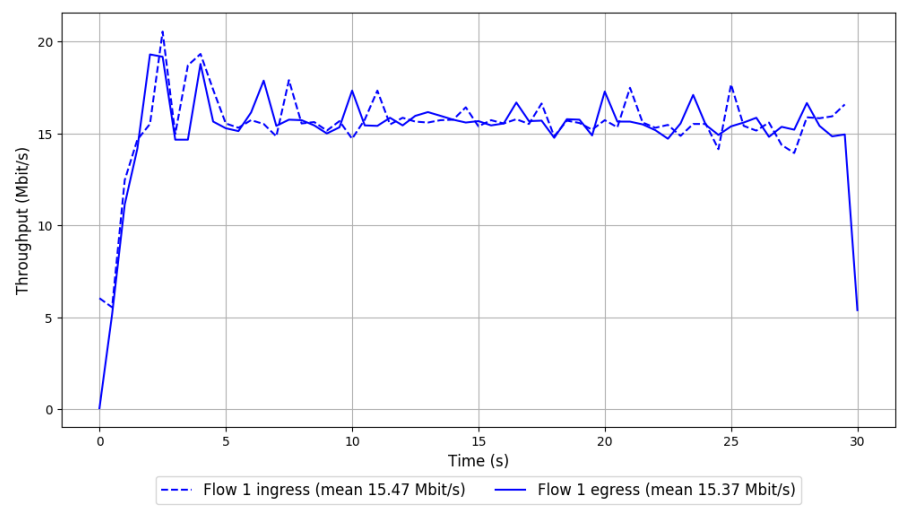


Run 2: Statistics of TaoVA-100x

Start at: 2018-04-10 13:46:25
End at: 2018-04-10 13:46:55
Local clock offset: 16.074 ms
Remote clock offset: 19.988 ms

Below is generated by plot.py at 2018-04-10 17:39:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 15.37 Mbit/s
95th percentile per-packet one-way delay: 154.745 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 15.37 Mbit/s
95th percentile per-packet one-way delay: 154.745 ms
Loss rate: 0.69%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-04-10 14:10:24

End at: 2018-04-10 14:10:54

Local clock offset: 14.648 ms

Remote clock offset: 16.101 ms

Below is generated by plot.py at 2018-04-10 17:39:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 41.88 Mbit/s

95th percentile per-packet one-way delay: 169.443 ms

Loss rate: 3.08%

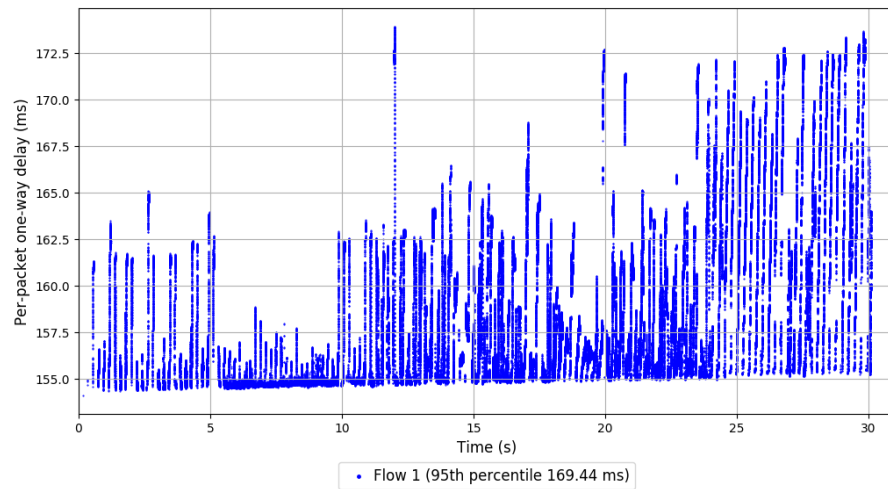
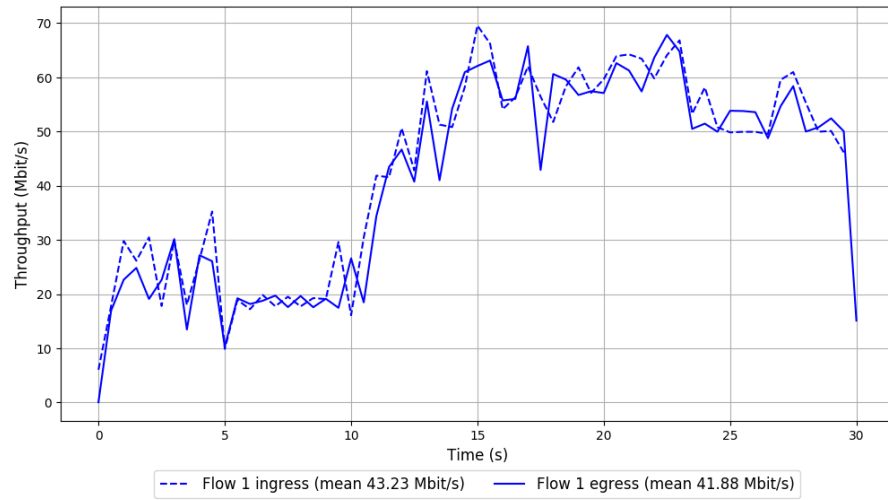
-- Flow 1:

Average throughput: 41.88 Mbit/s

95th percentile per-packet one-way delay: 169.443 ms

Loss rate: 3.08%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-04-10 14:34:53

End at: 2018-04-10 14:35:23

Local clock offset: 15.77 ms

Remote clock offset: -1.421 ms

Below is generated by plot.py at 2018-04-10 17:39:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 48.12 Mbit/s

95th percentile per-packet one-way delay: 181.281 ms

Loss rate: 1.35%

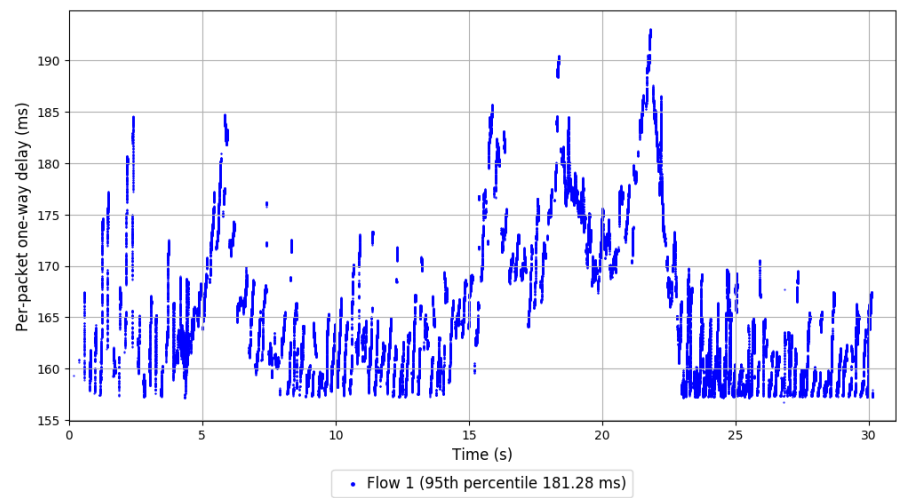
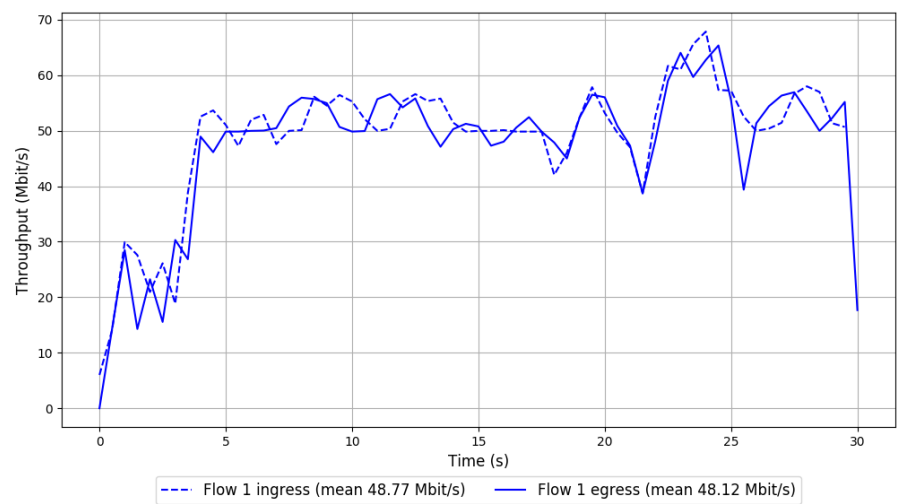
-- Flow 1:

Average throughput: 48.12 Mbit/s

95th percentile per-packet one-way delay: 181.281 ms

Loss rate: 1.35%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-04-10 14:58:47

End at: 2018-04-10 14:59:17

Local clock offset: 24.181 ms

Remote clock offset: 1.812 ms

Below is generated by plot.py at 2018-04-10 17:39:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.84 Mbit/s

95th percentile per-packet one-way delay: 157.813 ms

Loss rate: 1.87%

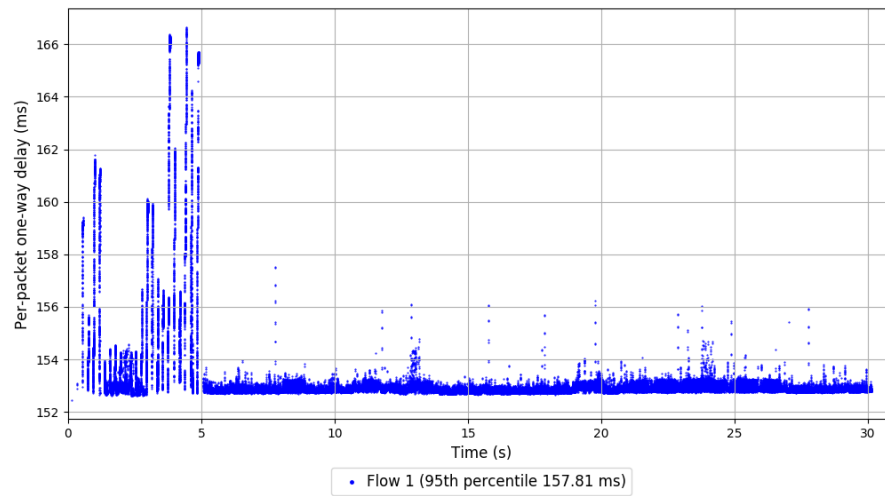
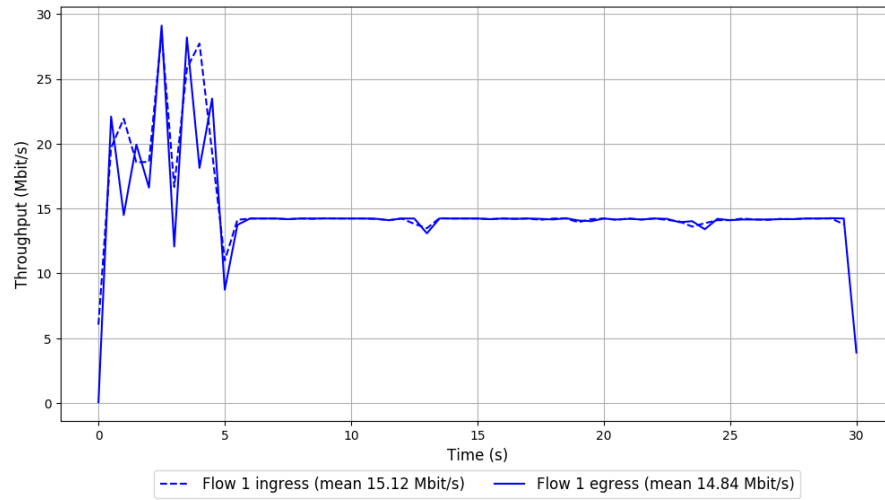
-- Flow 1:

Average throughput: 14.84 Mbit/s

95th percentile per-packet one-way delay: 157.813 ms

Loss rate: 1.87%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-04-10 15:23:09

End at: 2018-04-10 15:23:39

Local clock offset: 25.389 ms

Remote clock offset: 2.162 ms

Below is generated by plot.py at 2018-04-10 17:39:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 153.001 ms

Loss rate: 0.00%

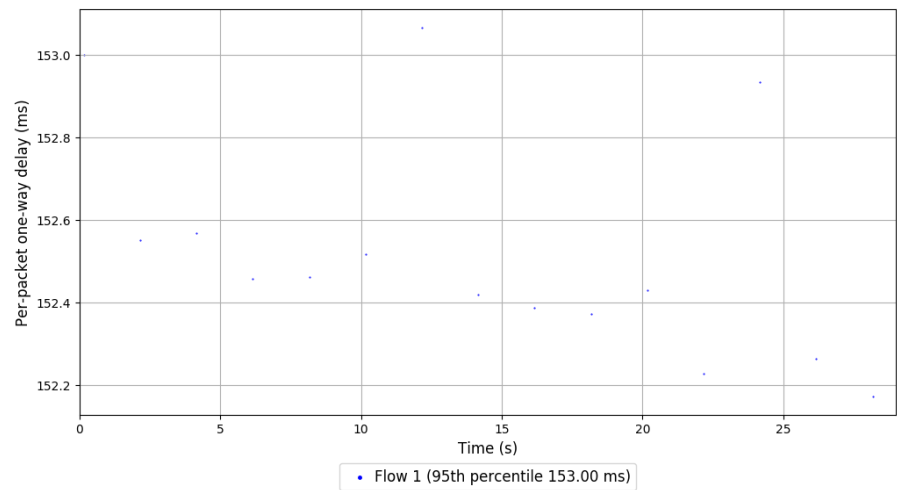
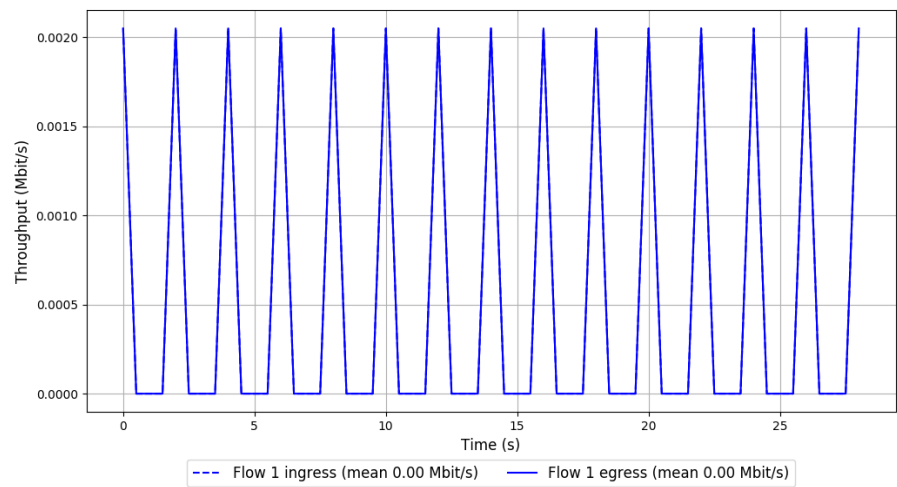
-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 153.001 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-04-10 15:46:24

End at: 2018-04-10 15:46:54

Local clock offset: 16.488 ms

Remote clock offset: 1.977 ms

Below is generated by plot.py at 2018-04-10 17:39:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.37 Mbit/s

95th percentile per-packet one-way delay: 163.589 ms

Loss rate: 3.38%

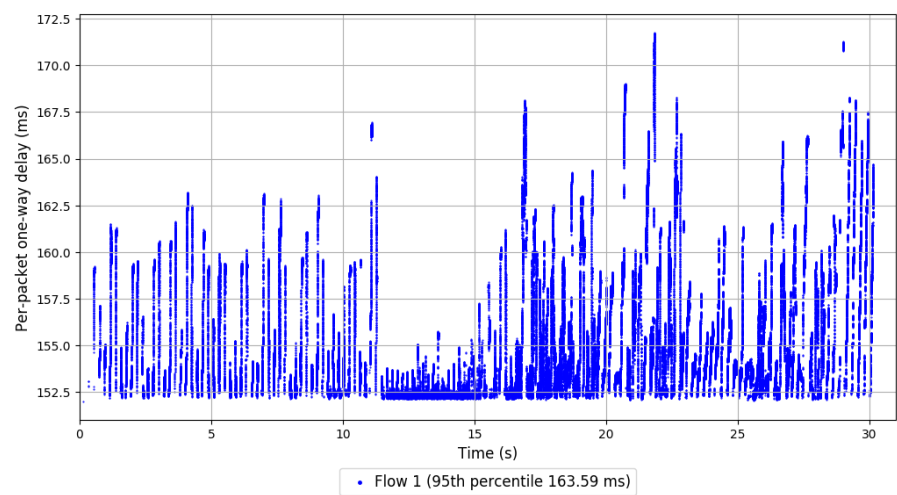
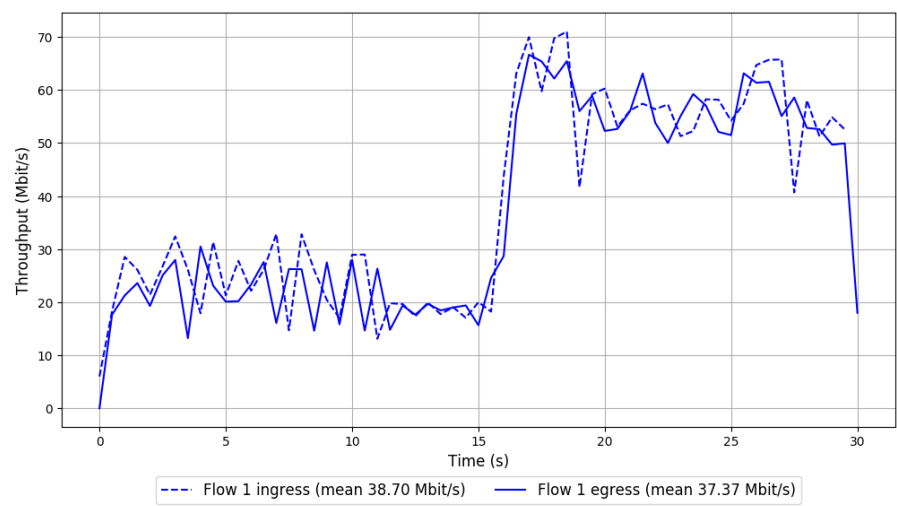
-- Flow 1:

Average throughput: 37.37 Mbit/s

95th percentile per-packet one-way delay: 163.589 ms

Loss rate: 3.38%

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

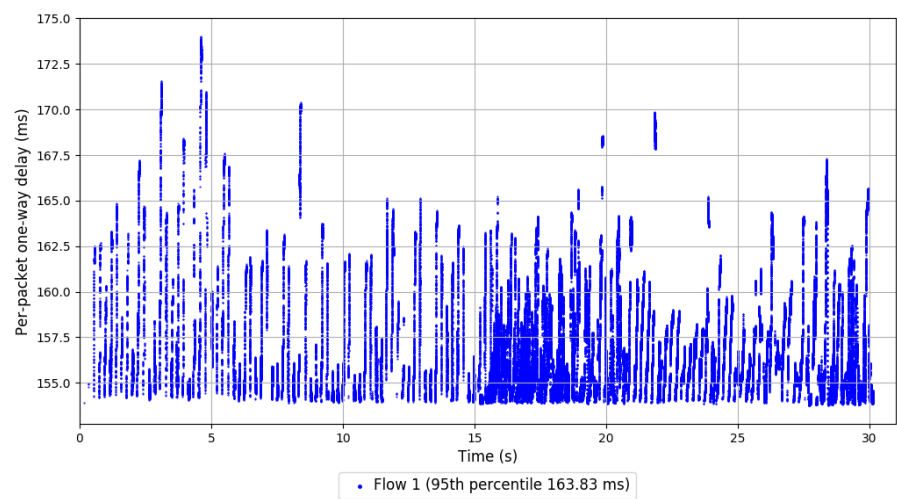
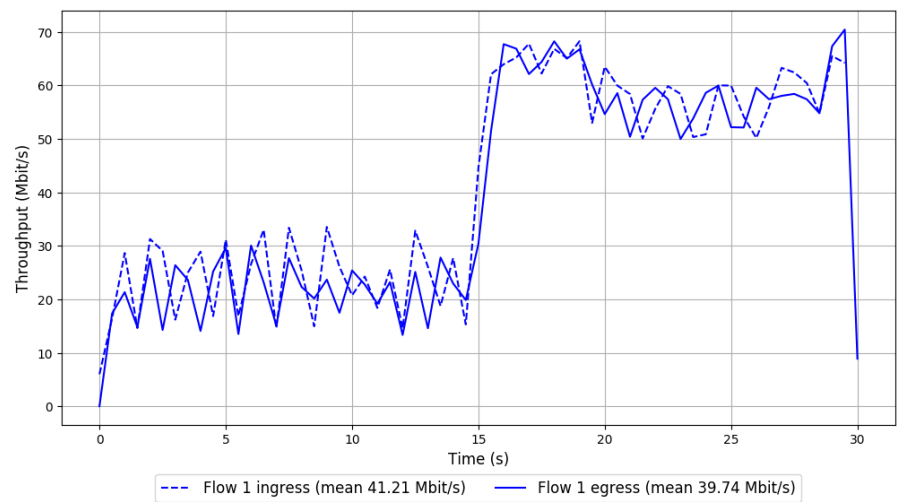


Run 8: Statistics of TaoVA-100x

Start at: 2018-04-10 16:08:59
End at: 2018-04-10 16:09:29
Local clock offset: 18.038 ms
Remote clock offset: 21.593 ms

Below is generated by plot.py at 2018-04-10 17:39:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.74 Mbit/s
95th percentile per-packet one-way delay: 163.827 ms
Loss rate: 3.56%
-- Flow 1:
Average throughput: 39.74 Mbit/s
95th percentile per-packet one-way delay: 163.827 ms
Loss rate: 3.56%

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

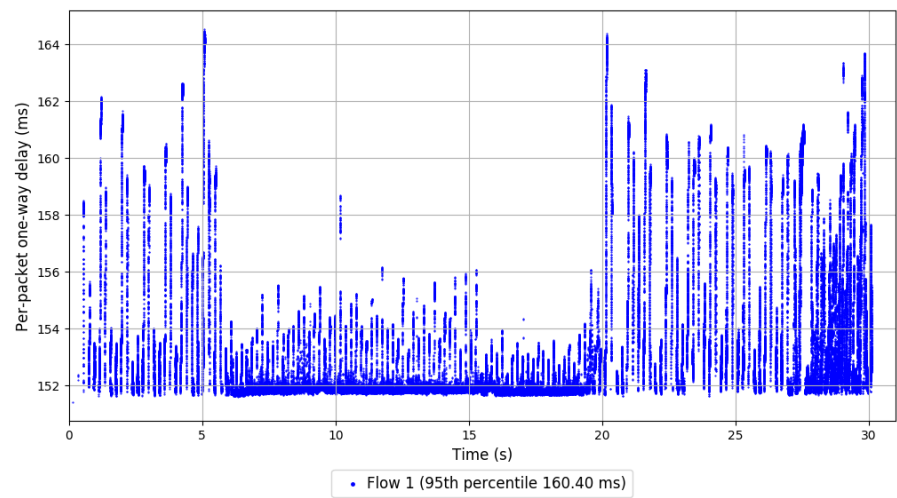
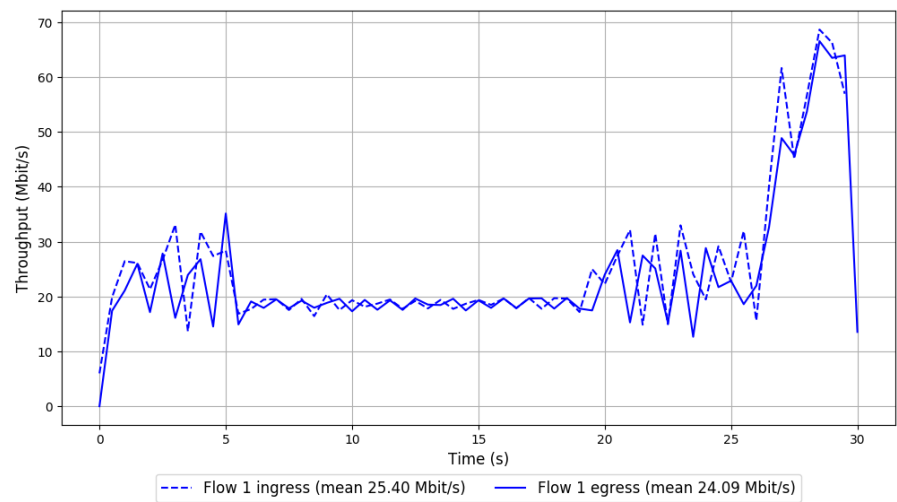


Run 9: Statistics of TaoVA-100x

Start at: 2018-04-10 16:32:50
End at: 2018-04-10 16:33:20
Local clock offset: 14.719 ms
Remote clock offset: 10.081 ms

Below is generated by plot.py at 2018-04-10 17:39:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 24.09 Mbit/s
95th percentile per-packet one-way delay: 160.395 ms
Loss rate: 5.18%
-- Flow 1:
Average throughput: 24.09 Mbit/s
95th percentile per-packet one-way delay: 160.395 ms
Loss rate: 5.18%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-04-10 16:55:46

End at: 2018-04-10 16:56:16

Local clock offset: 7.877 ms

Remote clock offset: 3.32 ms

Below is generated by plot.py at 2018-04-10 17:39:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 20.96 Mbit/s

95th percentile per-packet one-way delay: 162.398 ms

Loss rate: 9.33%

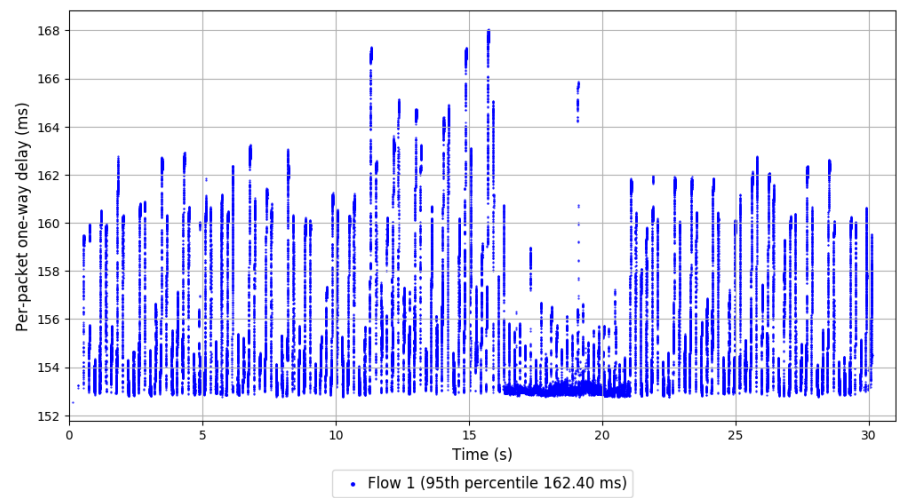
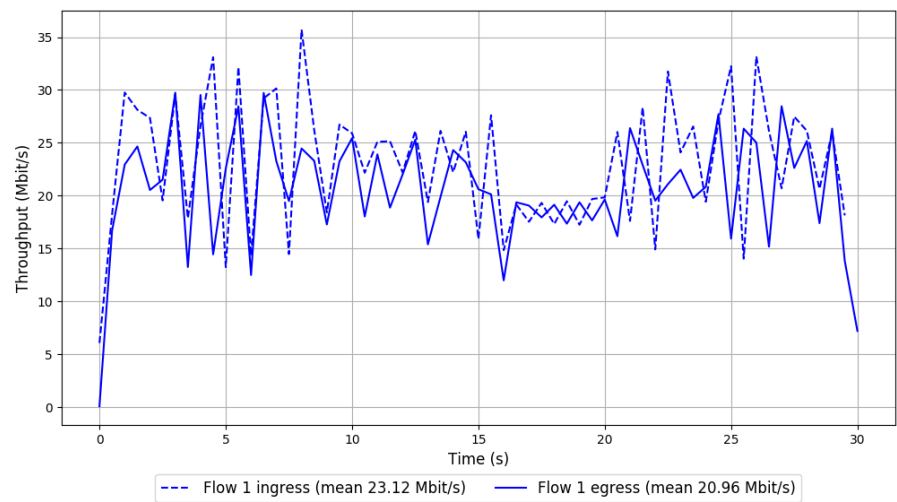
-- Flow 1:

Average throughput: 20.96 Mbit/s

95th percentile per-packet one-way delay: 162.398 ms

Loss rate: 9.33%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-04-10 13:14:21

End at: 2018-04-10 13:14:52

Local clock offset: 19.553 ms

Remote clock offset: 3.427 ms

Below is generated by plot.py at 2018-04-10 17:39:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.16 Mbit/s

95th percentile per-packet one-way delay: 155.138 ms

Loss rate: 0.28%

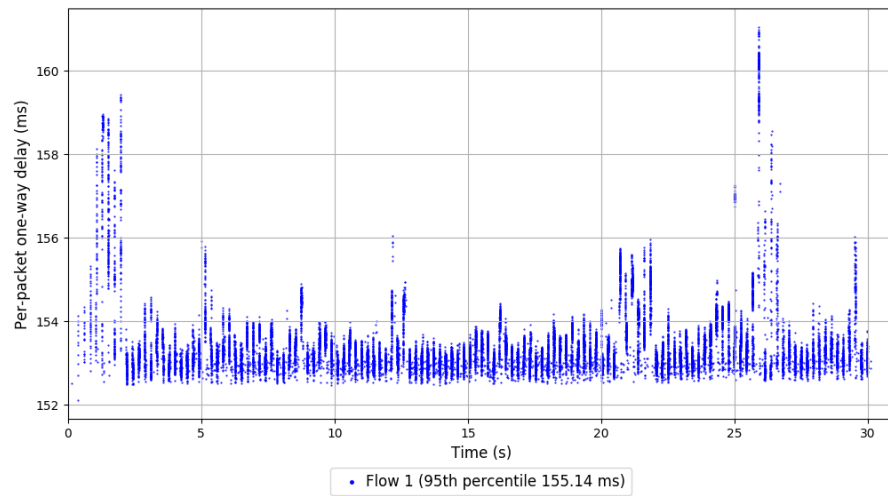
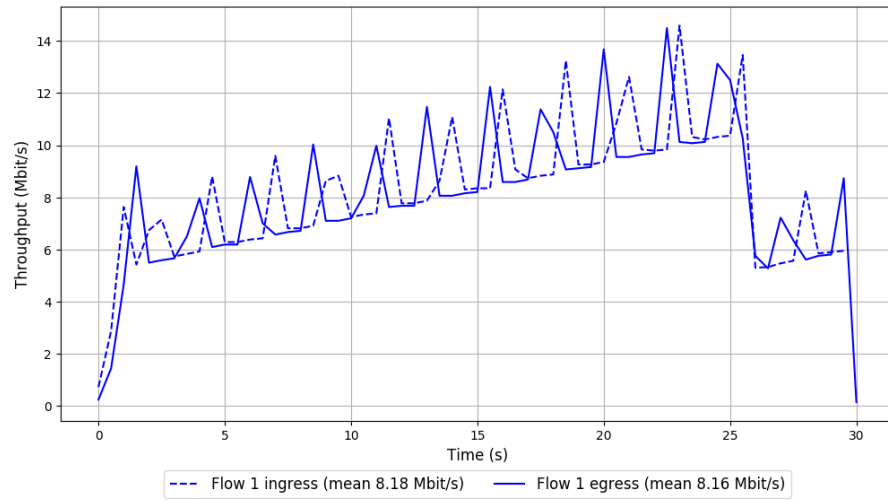
-- Flow 1:

Average throughput: 8.16 Mbit/s

95th percentile per-packet one-way delay: 155.138 ms

Loss rate: 0.28%

Run 1: Report of TCP Vegas — Data Link

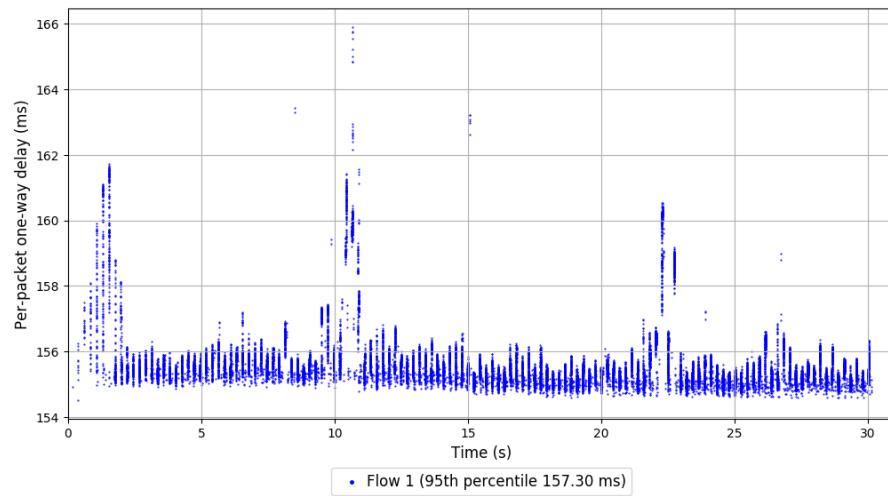
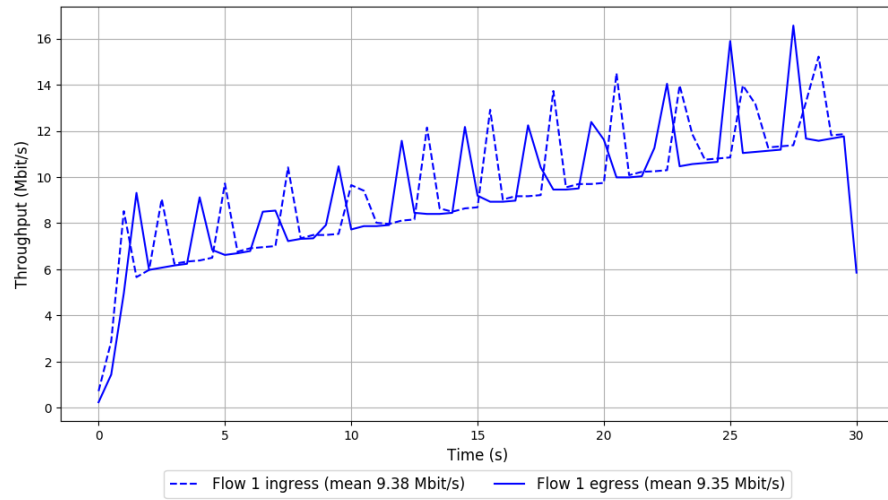


Run 2: Statistics of TCP Vegas

Start at: 2018-04-10 13:39:41
End at: 2018-04-10 13:40:11
Local clock offset: 14.699 ms
Remote clock offset: 13.968 ms

Below is generated by plot.py at 2018-04-10 17:39:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 9.35 Mbit/s
95th percentile per-packet one-way delay: 157.298 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 9.35 Mbit/s
95th percentile per-packet one-way delay: 157.298 ms
Loss rate: 0.32%

Run 2: Report of TCP Vegas — Data Link

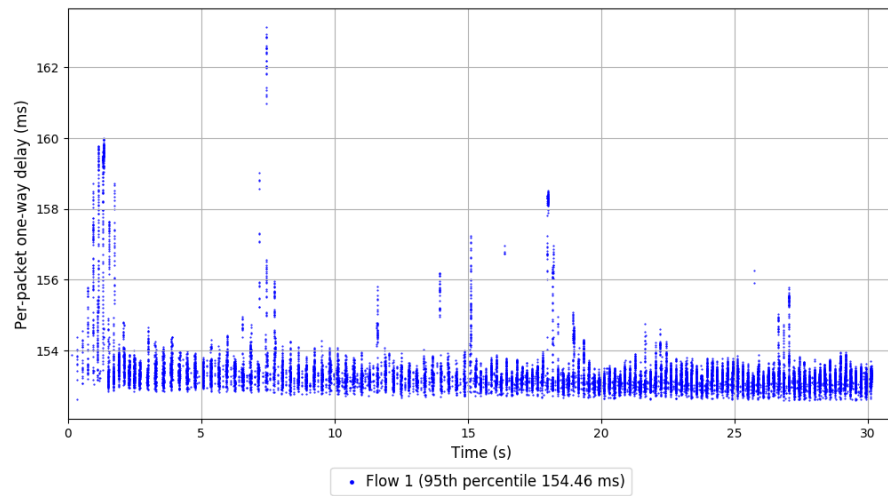
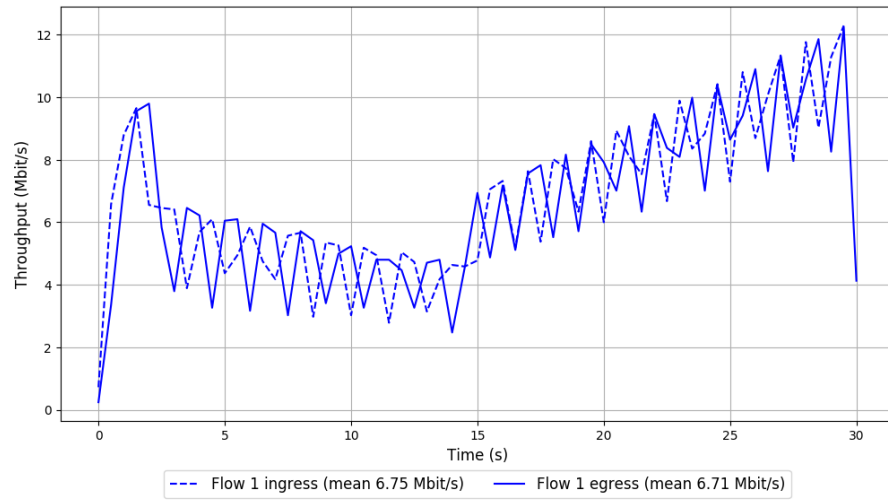


Run 3: Statistics of TCP Vegas

Start at: 2018-04-10 14:03:47
End at: 2018-04-10 14:04:17
Local clock offset: 15.347 ms
Remote clock offset: 28.447 ms

Below is generated by plot.py at 2018-04-10 17:39:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 6.71 Mbit/s
95th percentile per-packet one-way delay: 154.459 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 6.71 Mbit/s
95th percentile per-packet one-way delay: 154.459 ms
Loss rate: 0.55%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-04-10 14:28:15

End at: 2018-04-10 14:28:45

Local clock offset: 15.932 ms

Remote clock offset: 0.361 ms

Below is generated by plot.py at 2018-04-10 17:39:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.35 Mbit/s

95th percentile per-packet one-way delay: 156.512 ms

Loss rate: 0.56%

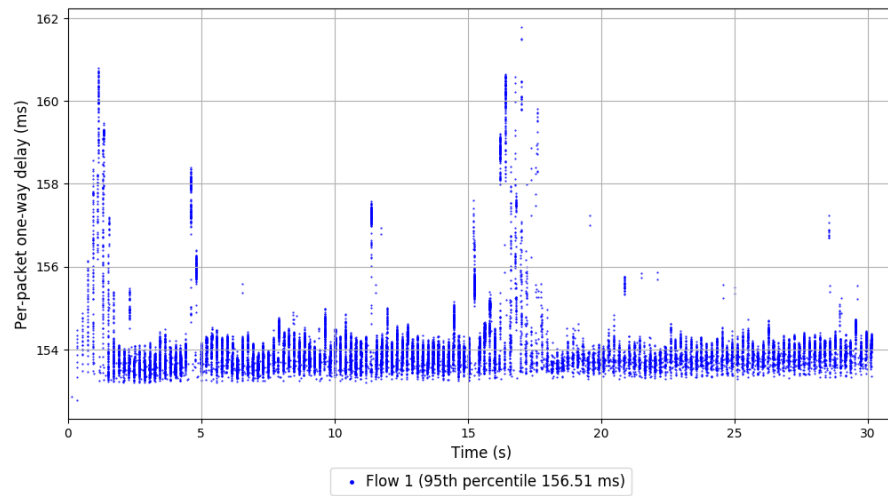
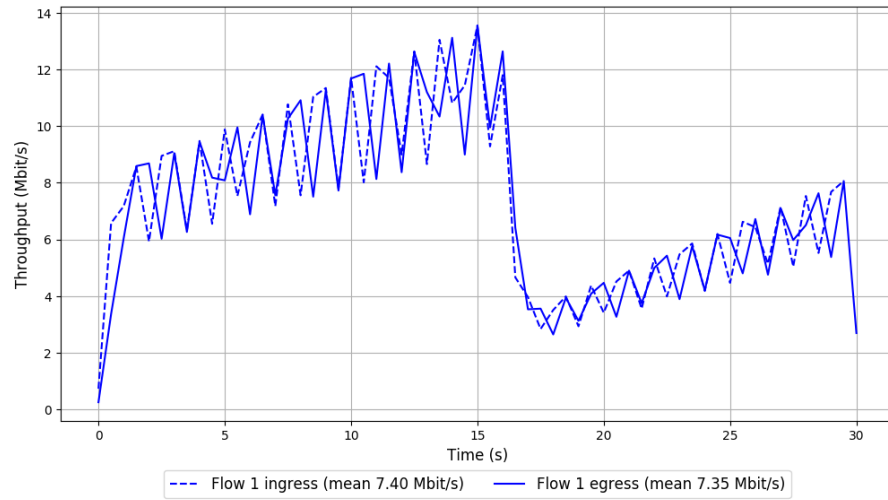
-- Flow 1:

Average throughput: 7.35 Mbit/s

95th percentile per-packet one-way delay: 156.512 ms

Loss rate: 0.56%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-04-10 14:52:07

End at: 2018-04-10 14:52:37

Local clock offset: 20.484 ms

Remote clock offset: 1.263 ms

Below is generated by plot.py at 2018-04-10 17:39:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.96 Mbit/s

95th percentile per-packet one-way delay: 155.547 ms

Loss rate: 0.28%

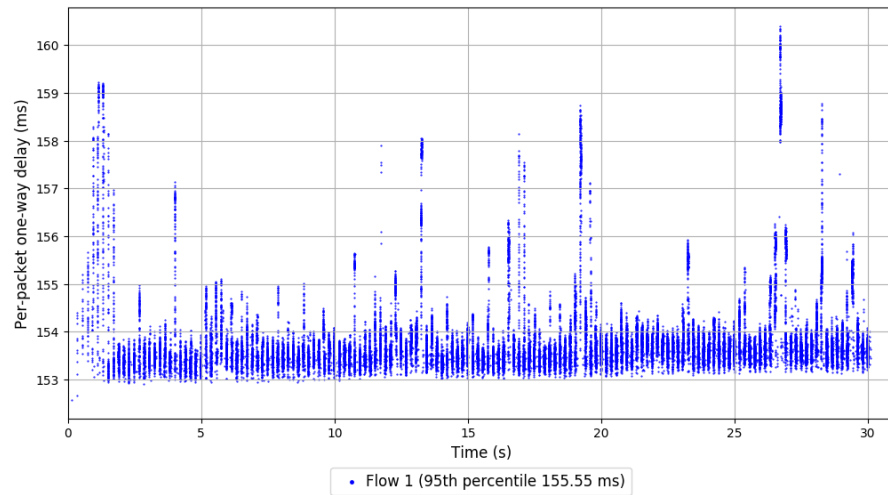
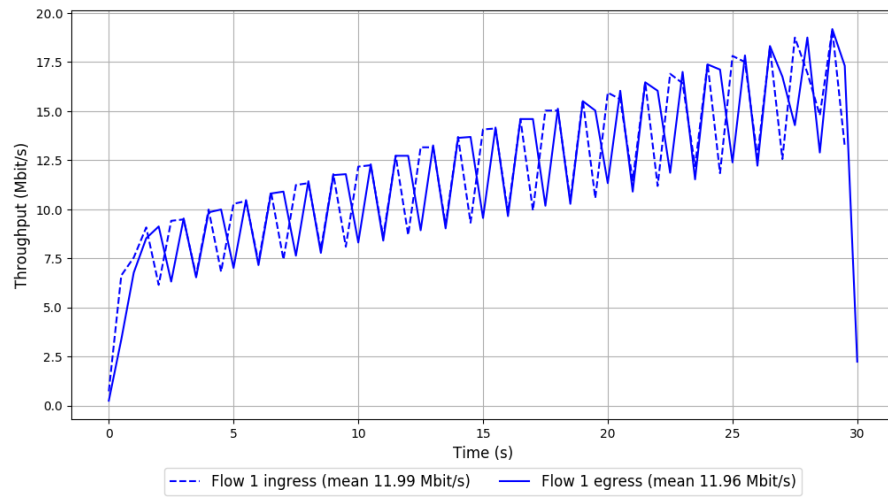
-- Flow 1:

Average throughput: 11.96 Mbit/s

95th percentile per-packet one-way delay: 155.547 ms

Loss rate: 0.28%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-04-10 15:16:52

End at: 2018-04-10 15:17:22

Local clock offset: 27.455 ms

Remote clock offset: 2.188 ms

Below is generated by plot.py at 2018-04-10 17:39:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.14 Mbit/s

95th percentile per-packet one-way delay: 156.456 ms

Loss rate: 0.75%

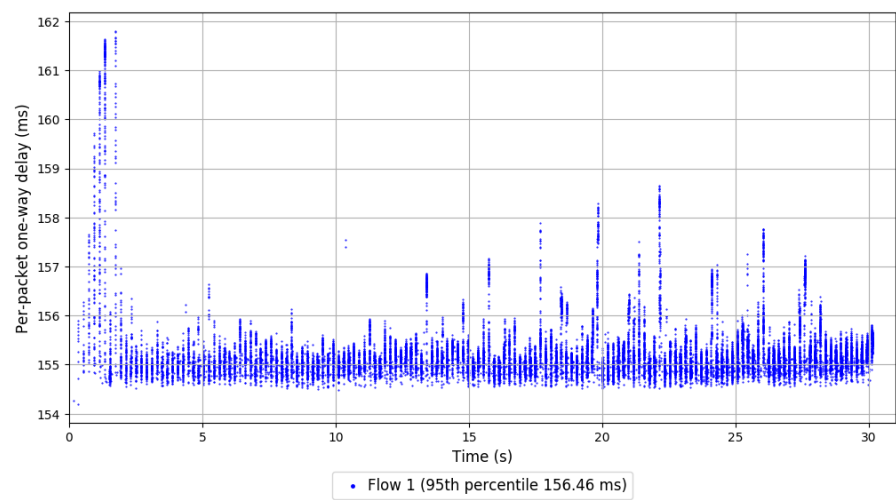
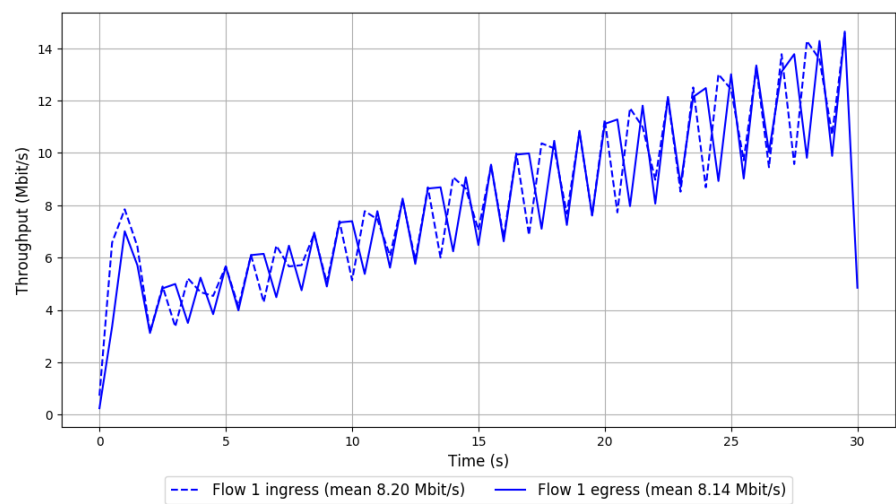
-- Flow 1:

Average throughput: 8.14 Mbit/s

95th percentile per-packet one-way delay: 156.456 ms

Loss rate: 0.75%

Run 6: Report of TCP Vegas — Data Link

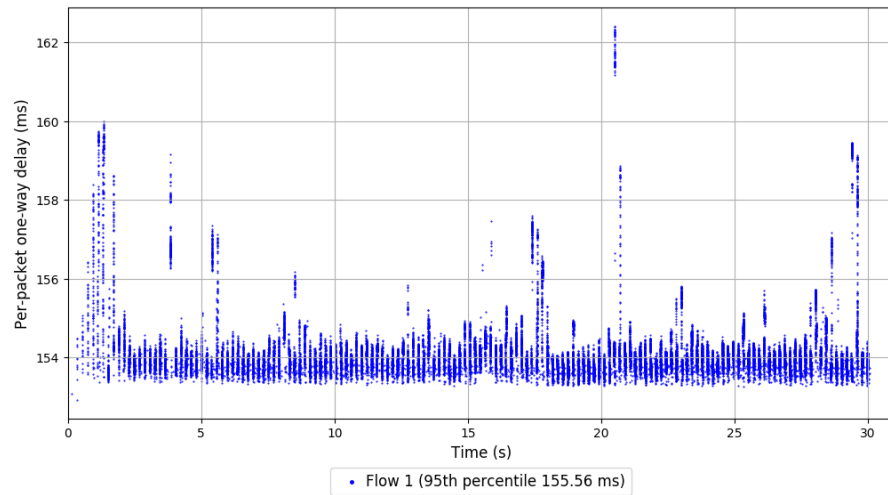
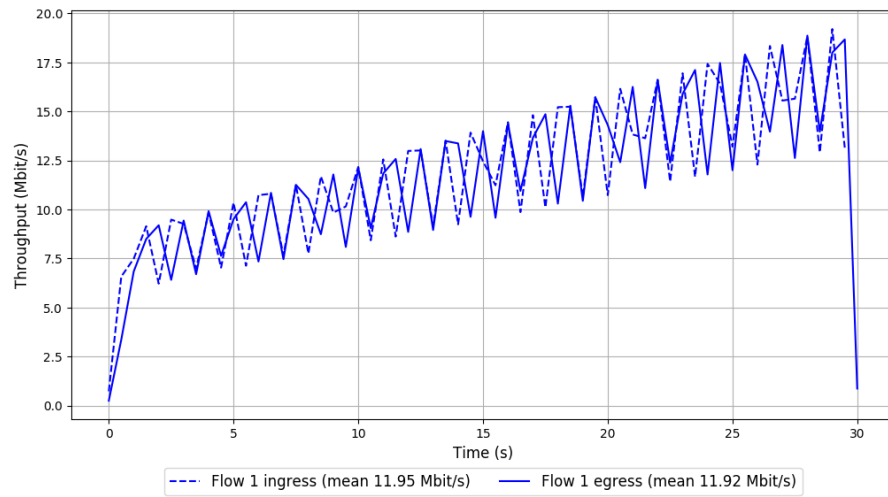


Run 7: Statistics of TCP Vegas

Start at: 2018-04-10 15:40:05
End at: 2018-04-10 15:40:35
Local clock offset: 17.642 ms
Remote clock offset: 1.97 ms

Below is generated by plot.py at 2018-04-10 17:39:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.92 Mbit/s
95th percentile per-packet one-way delay: 155.557 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 11.92 Mbit/s
95th percentile per-packet one-way delay: 155.557 ms
Loss rate: 0.27%

Run 7: Report of TCP Vegas — Data Link

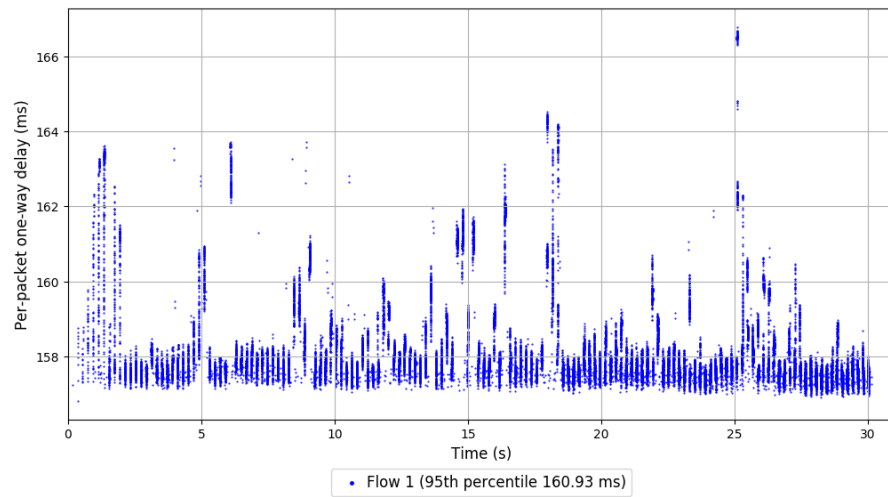
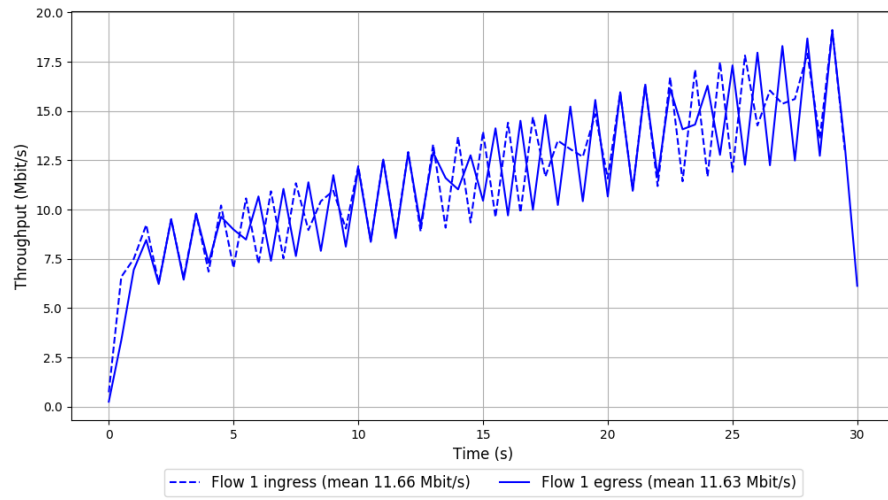


Run 8: Statistics of TCP Vegas

Start at: 2018-04-10 16:02:41
End at: 2018-04-10 16:03:11
Local clock offset: 17.395 ms
Remote clock offset: 18.255 ms

Below is generated by plot.py at 2018-04-10 17:39:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.63 Mbit/s
95th percentile per-packet one-way delay: 160.926 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 11.63 Mbit/s
95th percentile per-packet one-way delay: 160.926 ms
Loss rate: 0.27%

Run 8: Report of TCP Vegas — Data Link

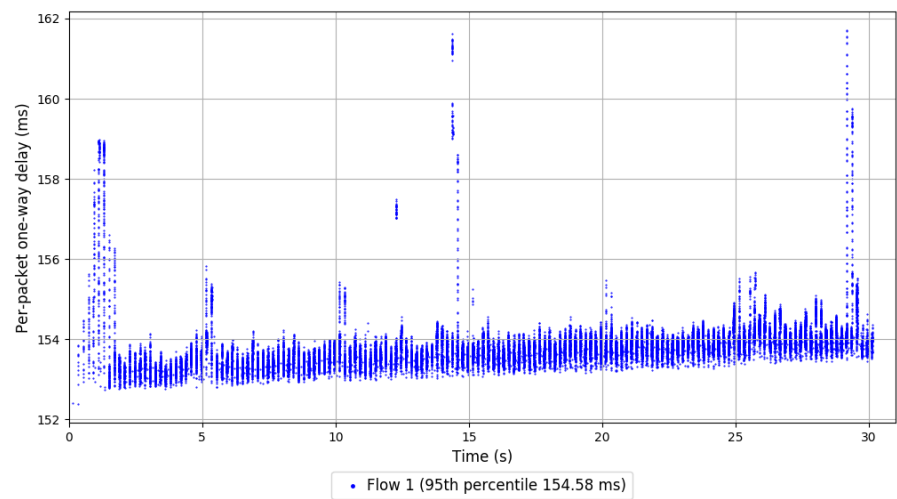
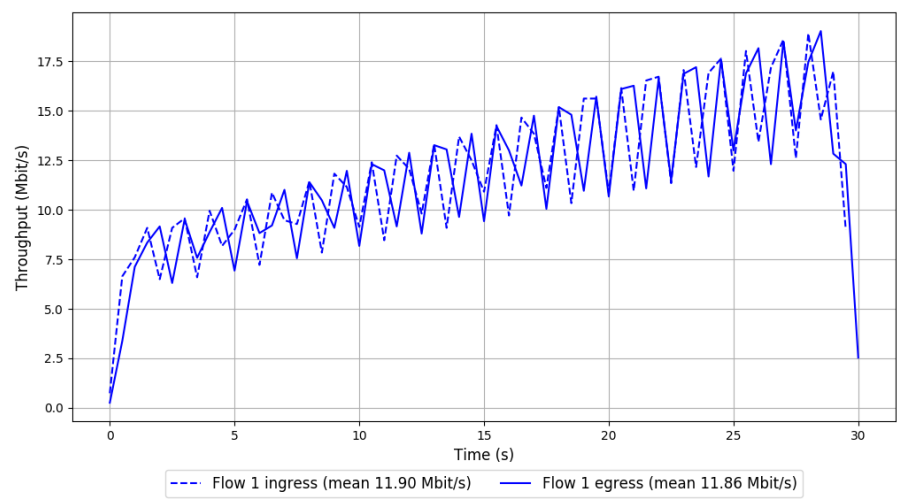


Run 9: Statistics of TCP Vegas

Start at: 2018-04-10 16:26:30
End at: 2018-04-10 16:27:00
Local clock offset: 17.848 ms
Remote clock offset: 17.347 ms

Below is generated by plot.py at 2018-04-10 17:39:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 154.581 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 154.581 ms
Loss rate: 0.29%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-04-10 16:49:27

End at: 2018-04-10 16:49:57

Local clock offset: 8.967 ms

Remote clock offset: 4.068 ms

Below is generated by plot.py at 2018-04-10 17:39:51

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.01 Mbit/s

95th percentile per-packet one-way delay: 153.330 ms

Loss rate: 0.28%

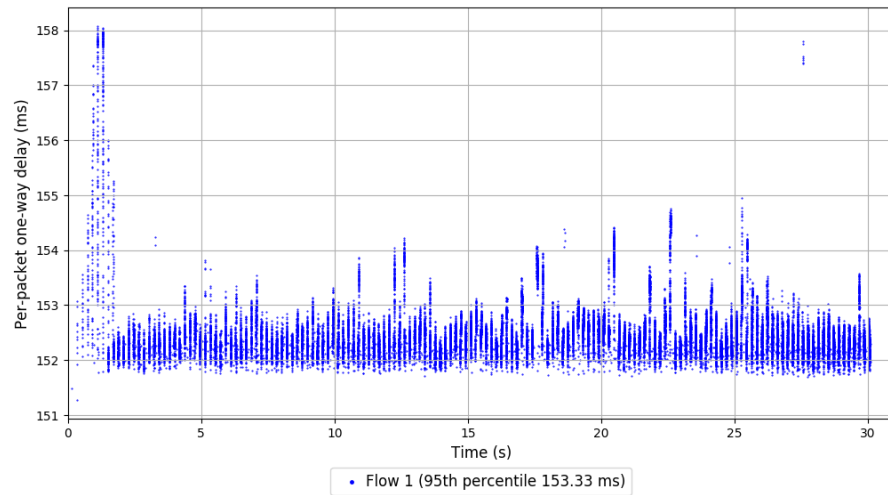
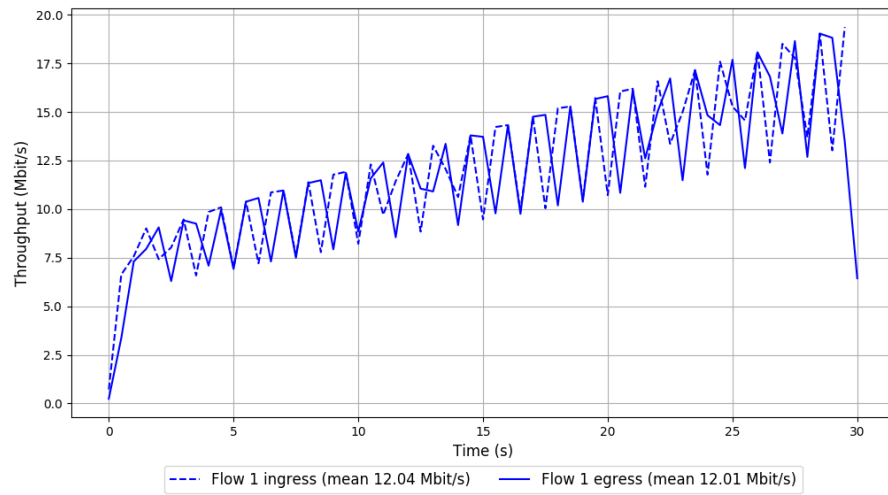
-- Flow 1:

Average throughput: 12.01 Mbit/s

95th percentile per-packet one-way delay: 153.330 ms

Loss rate: 0.28%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-04-10 13:34:16

End at: 2018-04-10 13:34:46

Local clock offset: 15.126 ms

Remote clock offset: 5.824 ms

Below is generated by plot.py at 2018-04-10 17:40:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 26.39 Mbit/s

95th percentile per-packet one-way delay: 218.936 ms

Loss rate: 84.85%

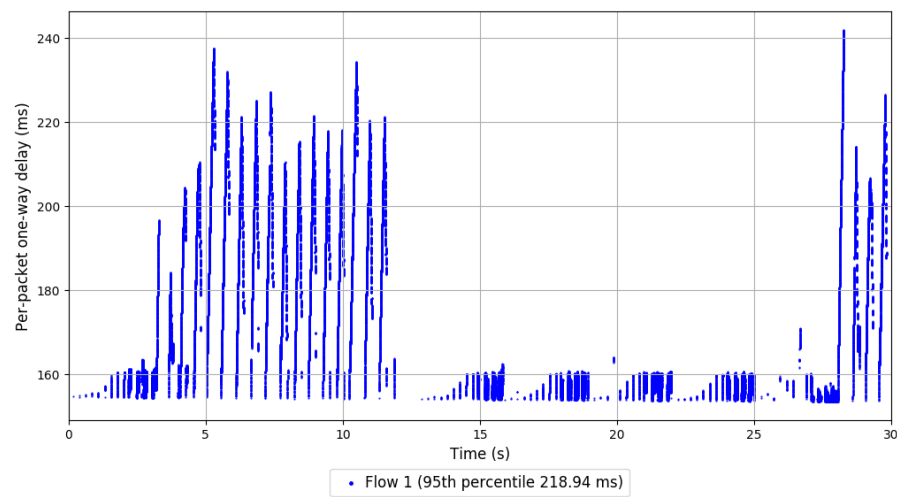
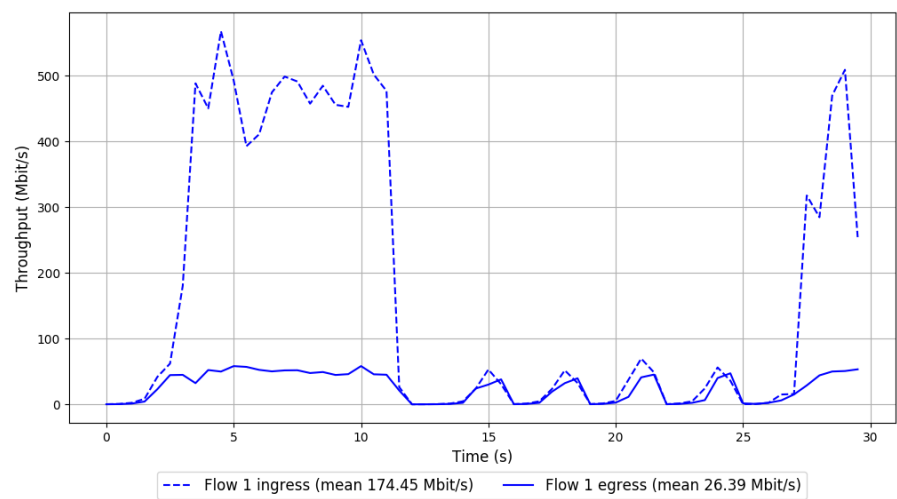
-- Flow 1:

Average throughput: 26.39 Mbit/s

95th percentile per-packet one-way delay: 218.936 ms

Loss rate: 84.85%

Run 1: Report of Verus — Data Link

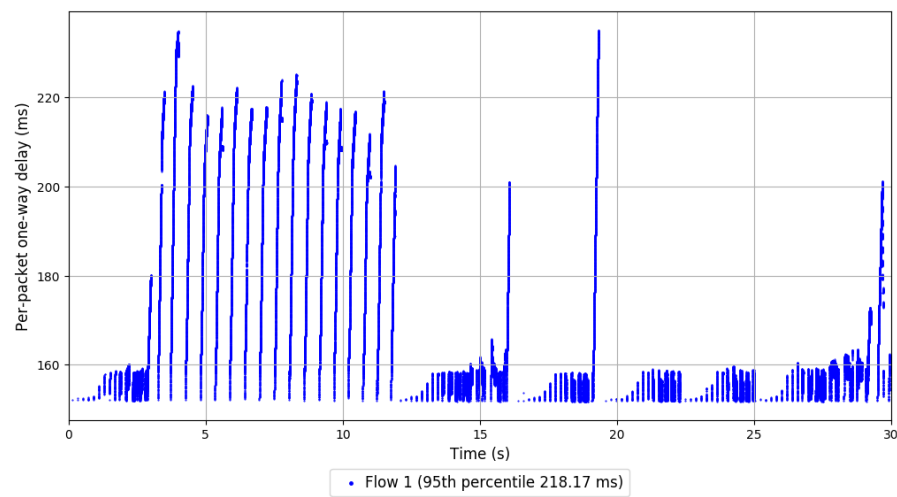
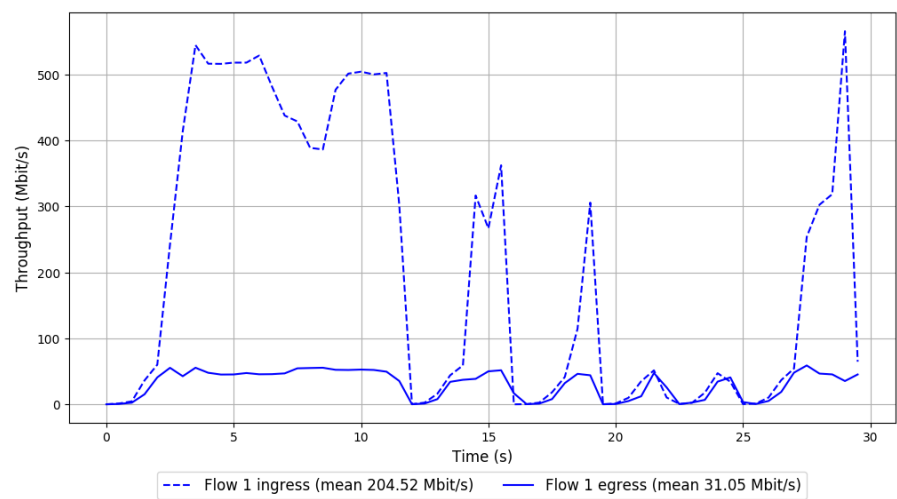


Run 2: Statistics of Verus

Start at: 2018-04-10 13:58:27
End at: 2018-04-10 13:58:57
Local clock offset: 15.856 ms
Remote clock offset: 26.397 ms

Below is generated by plot.py at 2018-04-10 17:40:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 31.05 Mbit/s
95th percentile per-packet one-way delay: 218.166 ms
Loss rate: 84.81%
-- Flow 1:
Average throughput: 31.05 Mbit/s
95th percentile per-packet one-way delay: 218.166 ms
Loss rate: 84.81%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

/home/ubuntu/pantheon_data/2018-04-10T13-13-AWS-Korea-to-China-10-runs/verus_stats_run3.log

Run 3: Report of Verus — Data Link

Figure is missing

Figure is missing

Run 4: Statistics of Verus

Start at: 2018-04-10 14:46:47

End at: 2018-04-10 14:47:17

Local clock offset: 15.878 ms

Remote clock offset: 0.35 ms

Below is generated by plot.py at 2018-04-10 17:40:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.12 Mbit/s

95th percentile per-packet one-way delay: 237.732 ms

Loss rate: 79.35%

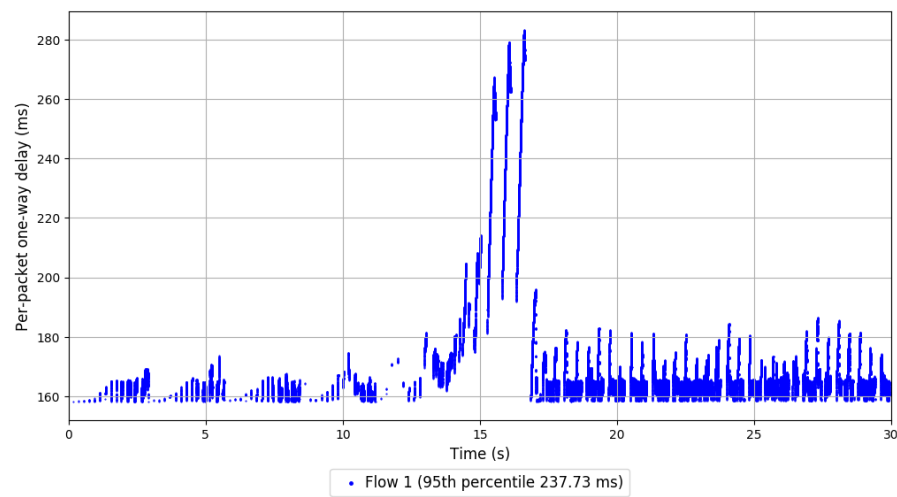
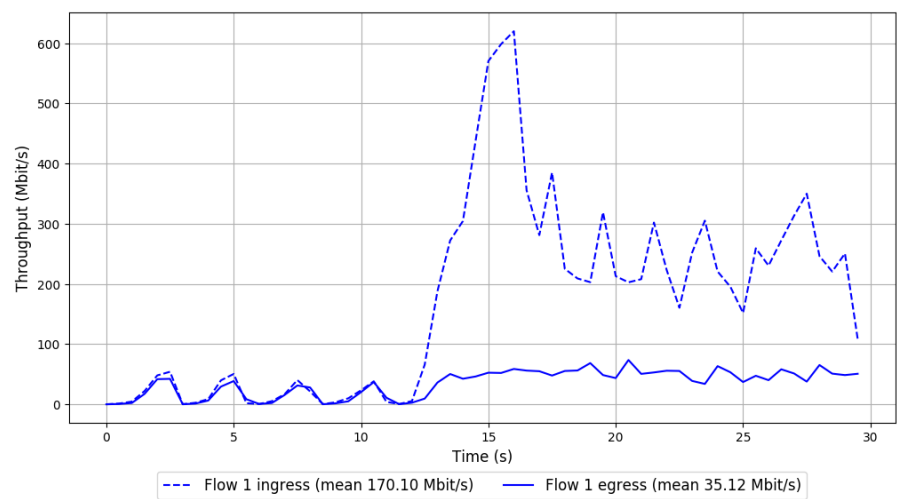
-- Flow 1:

Average throughput: 35.12 Mbit/s

95th percentile per-packet one-way delay: 237.732 ms

Loss rate: 79.35%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-04-10 15:10:40

End at: 2018-04-10 15:11:10

Local clock offset: 26.702 ms

Remote clock offset: 2.186 ms

Below is generated by plot.py at 2018-04-10 17:40:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 5.05 Mbit/s

95th percentile per-packet one-way delay: 159.477 ms

Loss rate: 22.85%

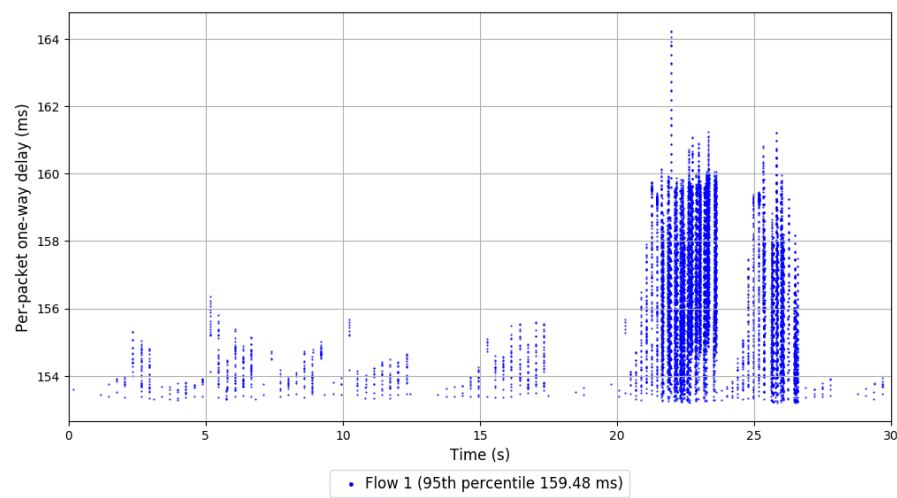
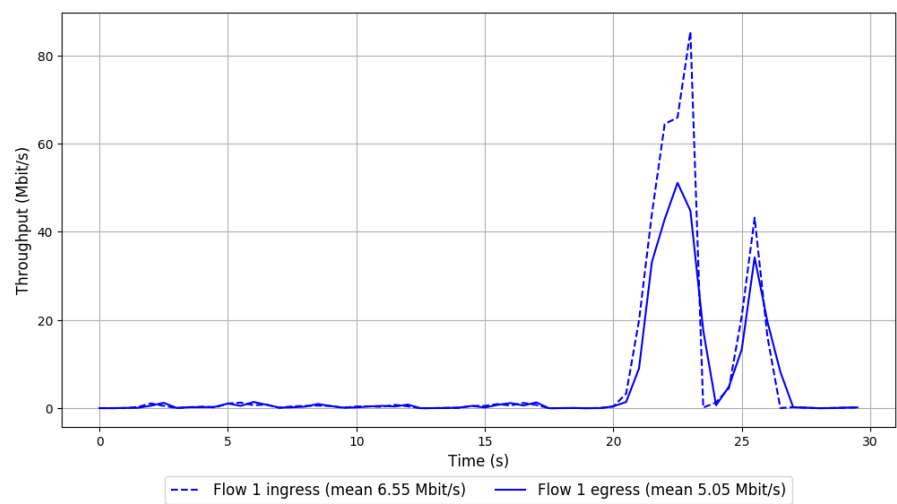
-- Flow 1:

Average throughput: 5.05 Mbit/s

95th percentile per-packet one-way delay: 159.477 ms

Loss rate: 22.85%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-04-10 15:35:00

End at: 2018-04-10 15:35:30

Local clock offset: 18.961 ms

Remote clock offset: 2.051 ms

Below is generated by plot.py at 2018-04-10 17:40:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.71 Mbit/s

95th percentile per-packet one-way delay: 216.618 ms

Loss rate: 85.26%

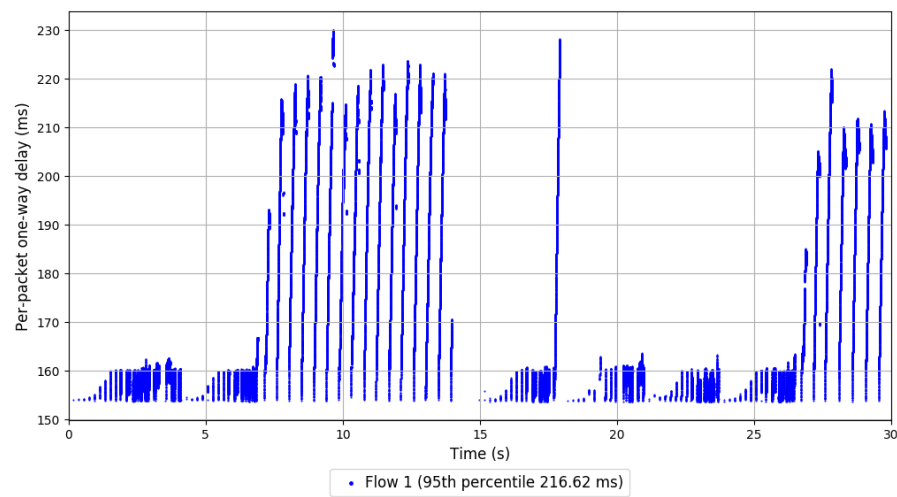
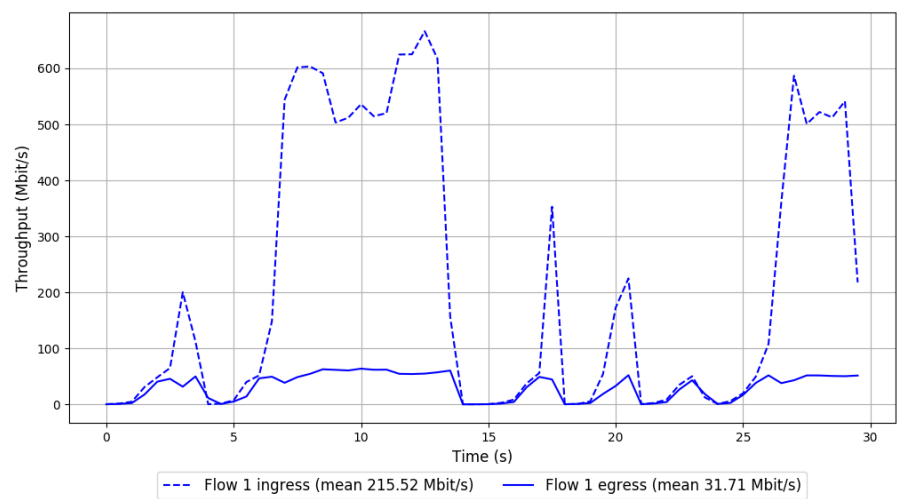
-- Flow 1:

Average throughput: 31.71 Mbit/s

95th percentile per-packet one-way delay: 216.618 ms

Loss rate: 85.26%

Run 6: Report of Verus — Data Link

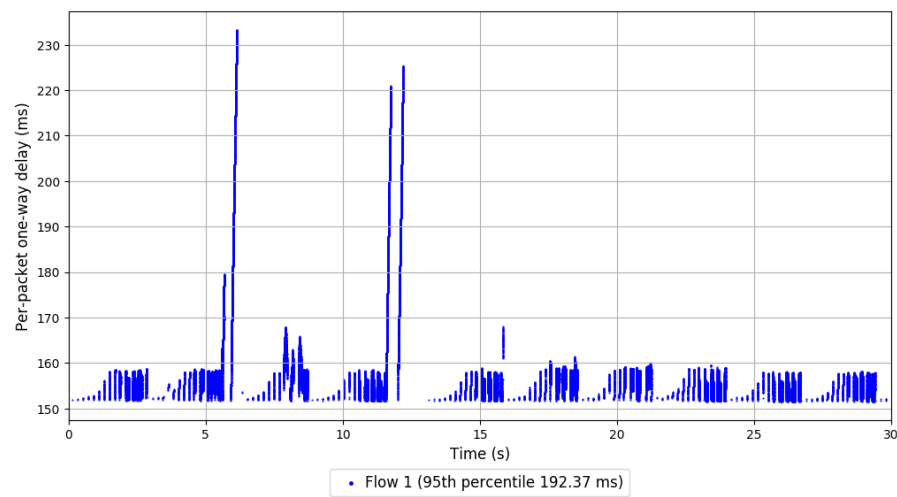
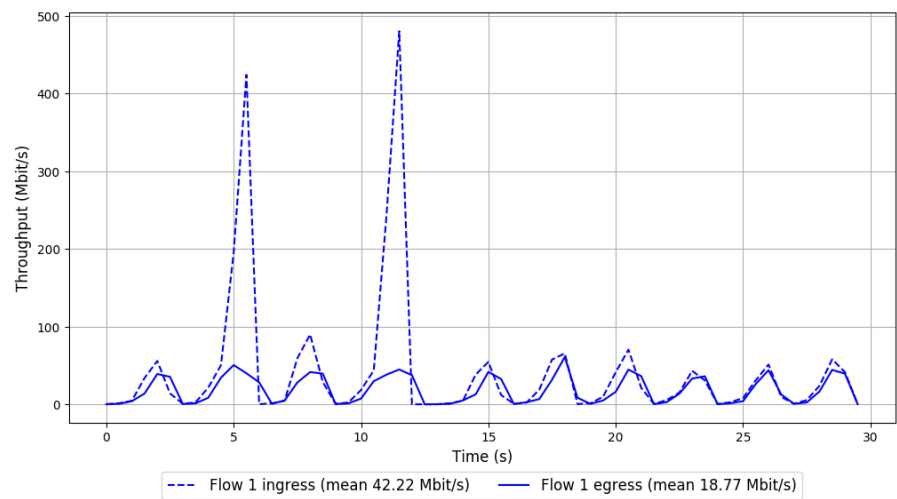


Run 7: Statistics of Verus

Start at: 2018-04-10 15:57:40
End at: 2018-04-10 15:58:10
Local clock offset: 16.19 ms
Remote clock offset: 14.675 ms

Below is generated by plot.py at 2018-04-10 17:40:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 18.77 Mbit/s
95th percentile per-packet one-way delay: 192.371 ms
Loss rate: 55.55%
-- Flow 1:
Average throughput: 18.77 Mbit/s
95th percentile per-packet one-way delay: 192.371 ms
Loss rate: 55.55%

Run 7: Report of Verus — Data Link

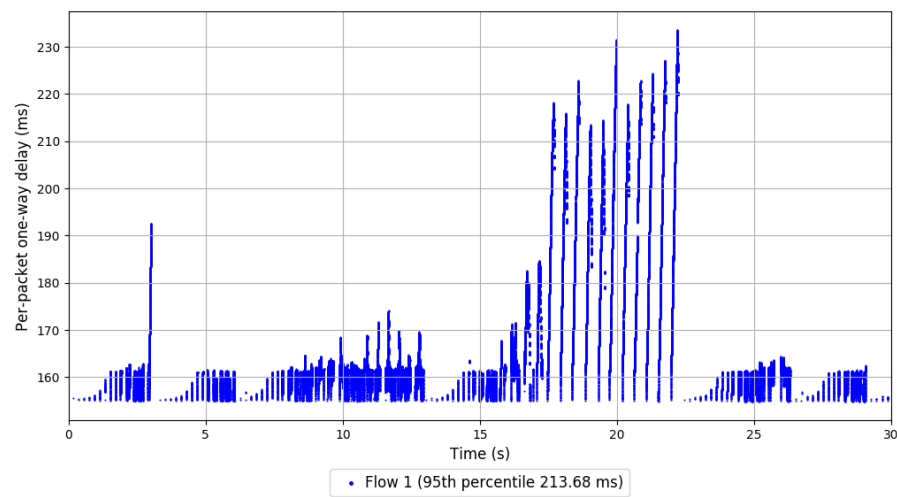
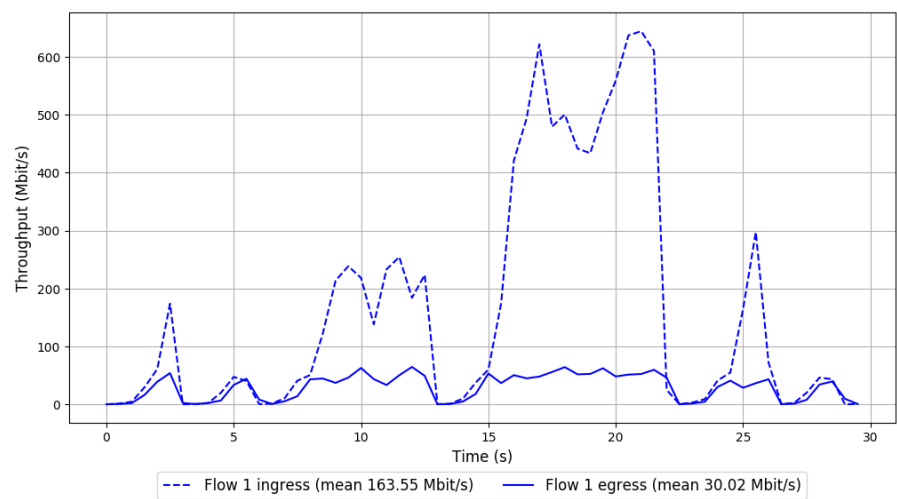


Run 8: Statistics of Verus

Start at: 2018-04-10 16:21:10
End at: 2018-04-10 16:21:40
Local clock offset: 17.935 ms
Remote clock offset: 26.372 ms

Below is generated by plot.py at 2018-04-10 17:40:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 30.02 Mbit/s
95th percentile per-packet one-way delay: 213.682 ms
Loss rate: 81.64%
-- Flow 1:
Average throughput: 30.02 Mbit/s
95th percentile per-packet one-way delay: 213.682 ms
Loss rate: 81.64%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-04-10 16:44:05

End at: 2018-04-10 16:44:35

Local clock offset: 10.289 ms

Remote clock offset: 4.956 ms

Below is generated by plot.py at 2018-04-10 17:41:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.63 Mbit/s

95th percentile per-packet one-way delay: 244.288 ms

Loss rate: 87.16%

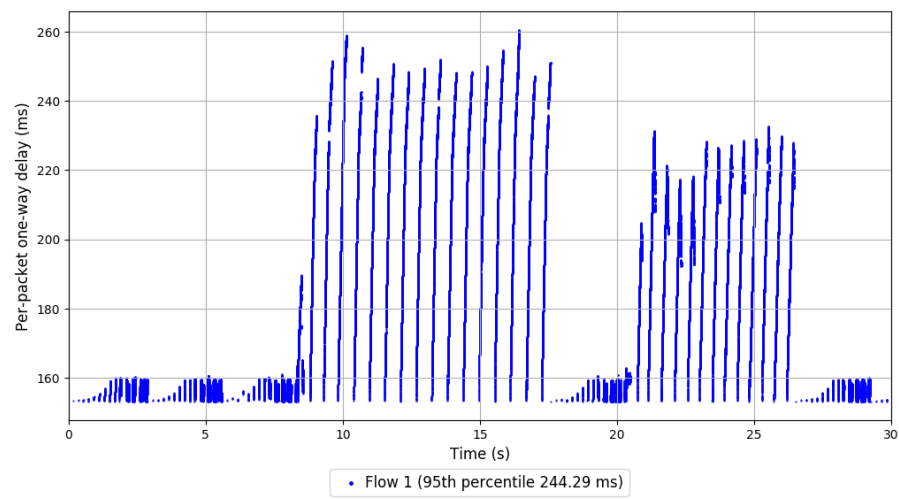
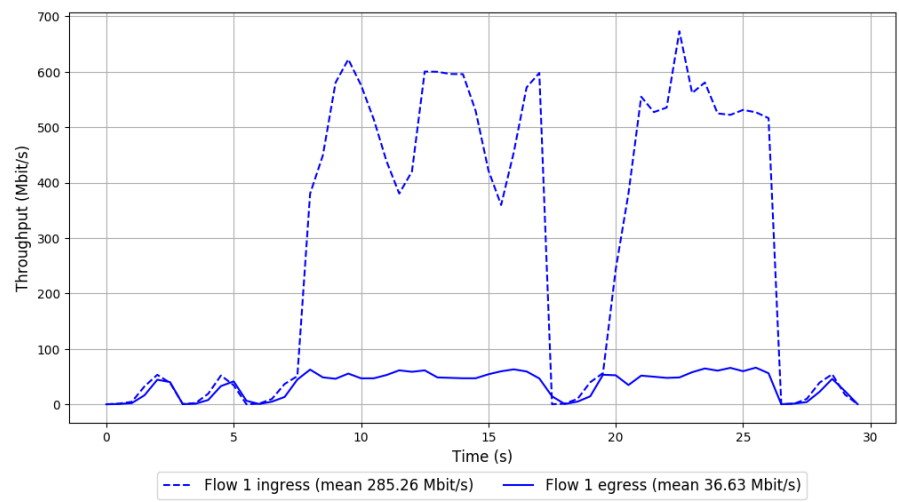
-- Flow 1:

Average throughput: 36.63 Mbit/s

95th percentile per-packet one-way delay: 244.288 ms

Loss rate: 87.16%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-04-10 17:07:01

End at: 2018-04-10 17:07:31

Local clock offset: 3.933 ms

Remote clock offset: 0.62 ms

Below is generated by plot.py at 2018-04-10 17:41:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.53 Mbit/s

95th percentile per-packet one-way delay: 203.322 ms

Loss rate: 77.82%

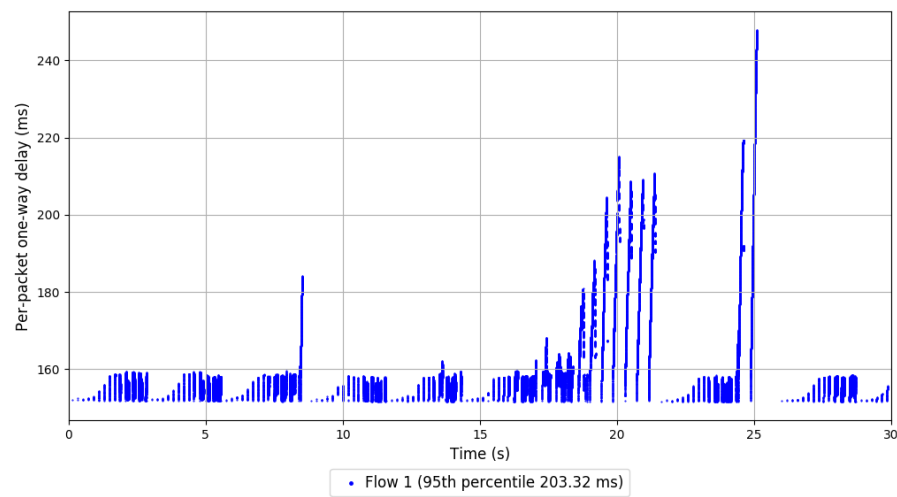
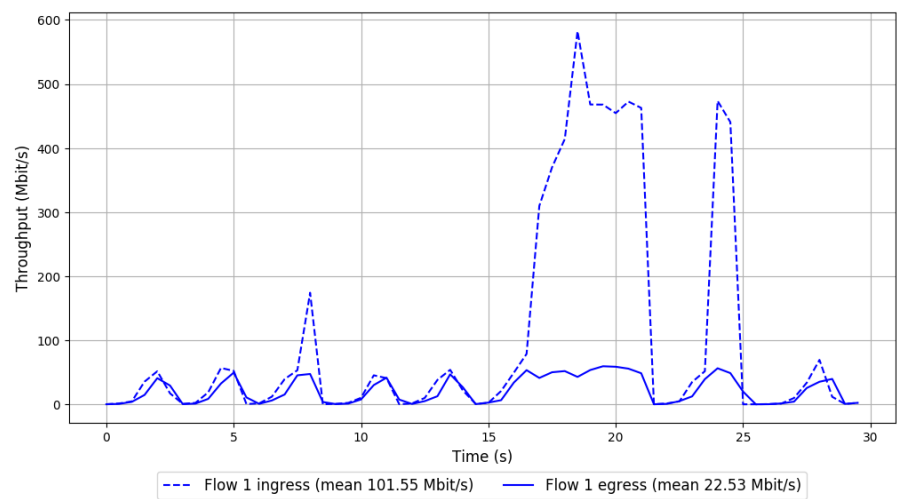
-- Flow 1:

Average throughput: 22.53 Mbit/s

95th percentile per-packet one-way delay: 203.322 ms

Loss rate: 77.82%

Run 10: Report of Verus — Data Link

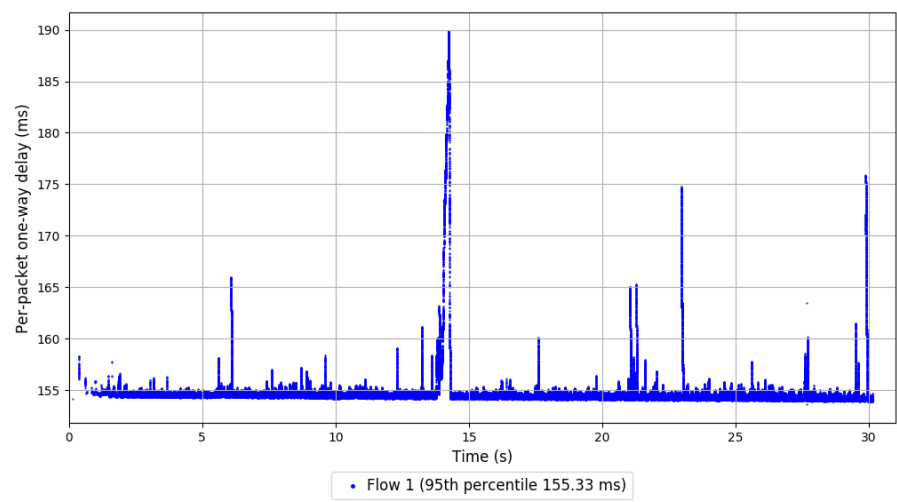
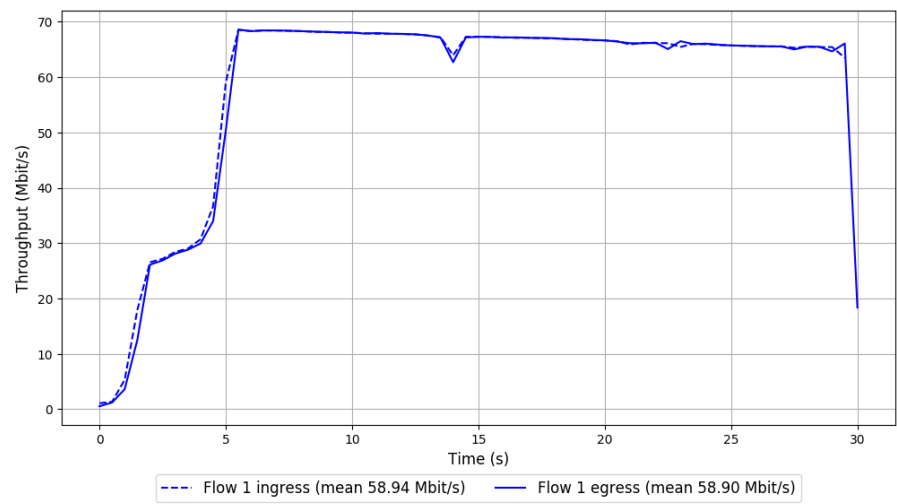


Run 1: Statistics of Copa

Start at: 2018-04-10 13:38:17
End at: 2018-04-10 13:38:47
Local clock offset: 14.194 ms
Remote clock offset: 12.285 ms

Below is generated by plot.py at 2018-04-10 17:41:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 58.90 Mbit/s
95th percentile per-packet one-way delay: 155.330 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 58.90 Mbit/s
95th percentile per-packet one-way delay: 155.330 ms
Loss rate: 0.05%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-04-10 14:02:26

End at: 2018-04-10 14:02:56

Local clock offset: 15.327 ms

Remote clock offset: 27.73 ms

Below is generated by plot.py at 2018-04-10 17:42:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.18 Mbit/s

95th percentile per-packet one-way delay: 152.469 ms

Loss rate: 0.01%

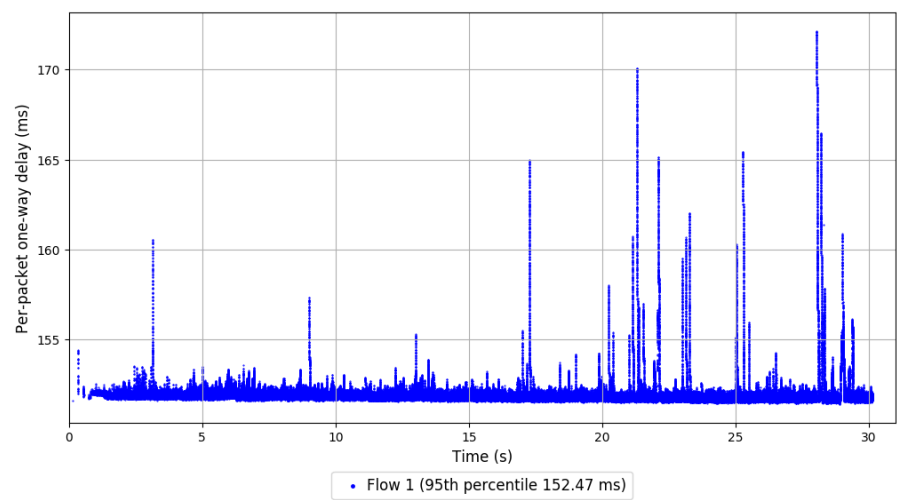
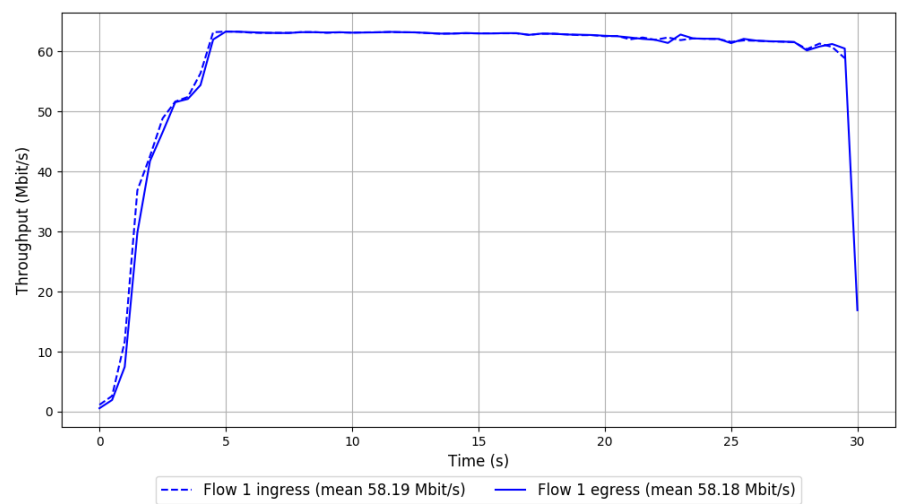
-- Flow 1:

Average throughput: 58.18 Mbit/s

95th percentile per-packet one-way delay: 152.469 ms

Loss rate: 0.01%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-04-10 14:26:53

End at: 2018-04-10 14:27:23

Local clock offset: 15.938 ms

Remote clock offset: 0.884 ms

Below is generated by plot.py at 2018-04-10 17:42:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 56.05 Mbit/s

95th percentile per-packet one-way delay: 152.860 ms

Loss rate: 0.00%

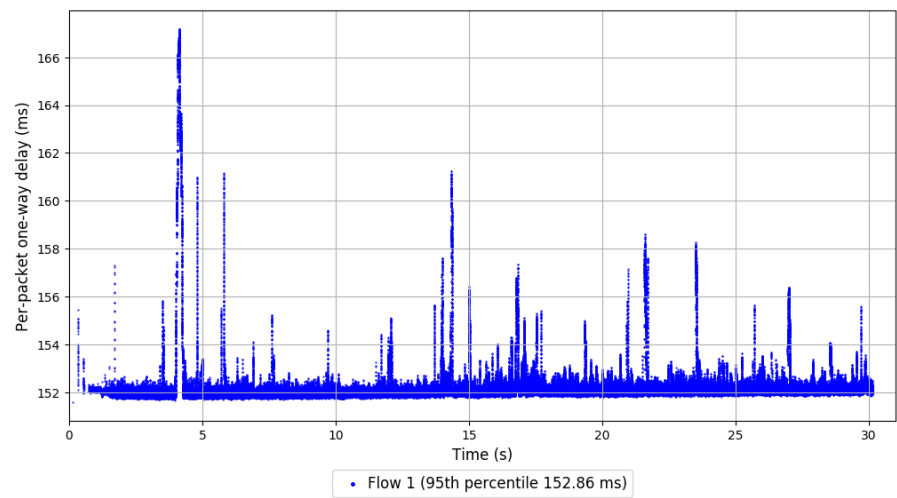
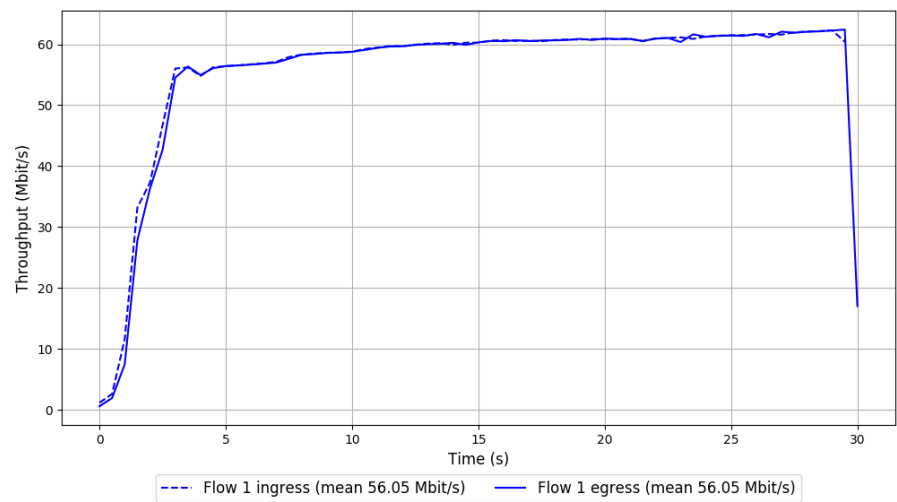
-- Flow 1:

Average throughput: 56.05 Mbit/s

95th percentile per-packet one-way delay: 152.860 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-04-10 14:50:45

End at: 2018-04-10 14:51:16

Local clock offset: 19.708 ms

Remote clock offset: 1.069 ms

Below is generated by plot.py at 2018-04-10 17:42:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.65 Mbit/s

95th percentile per-packet one-way delay: 154.654 ms

Loss rate: 0.00%

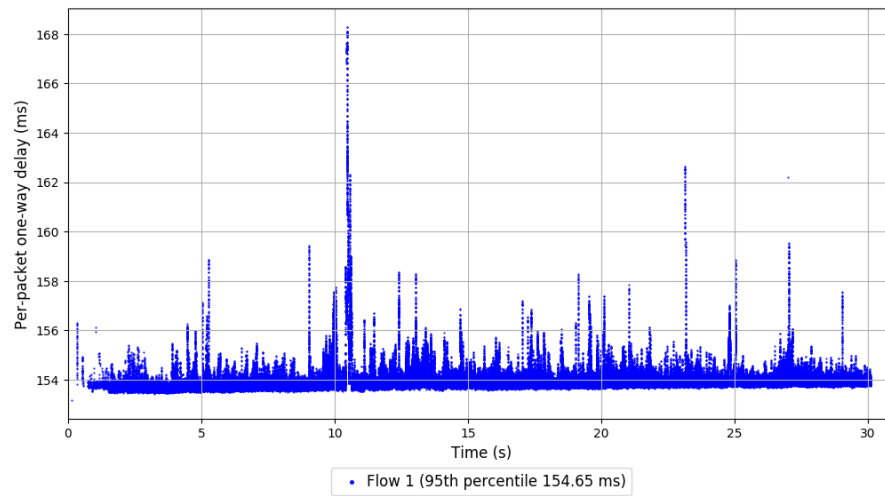
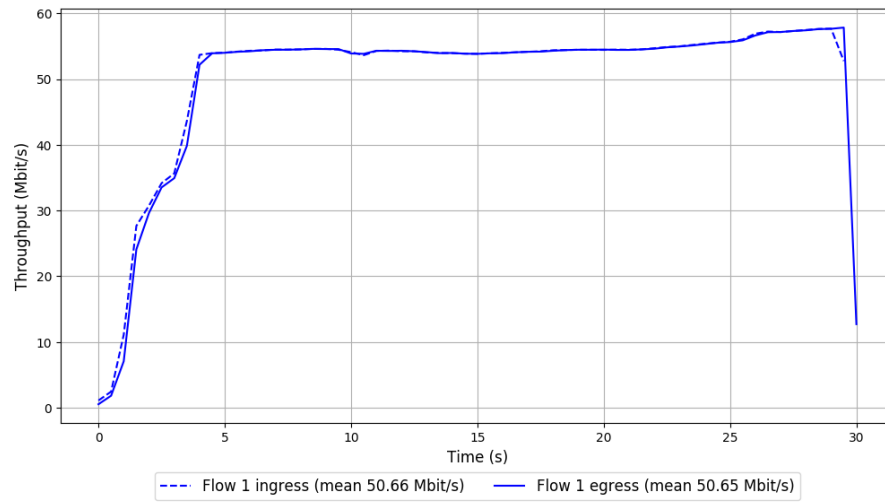
-- Flow 1:

Average throughput: 50.65 Mbit/s

95th percentile per-packet one-way delay: 154.654 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-04-10 15:15:33

End at: 2018-04-10 15:16:03

Local clock offset: 27.147 ms

Remote clock offset: 2.21 ms

Below is generated by plot.py at 2018-04-10 17:42:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.35 Mbit/s

95th percentile per-packet one-way delay: 153.998 ms

Loss rate: 0.02%

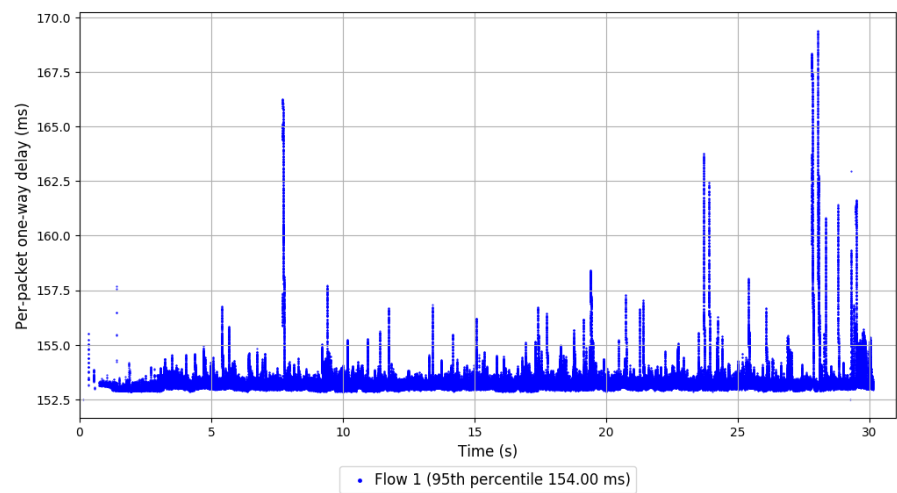
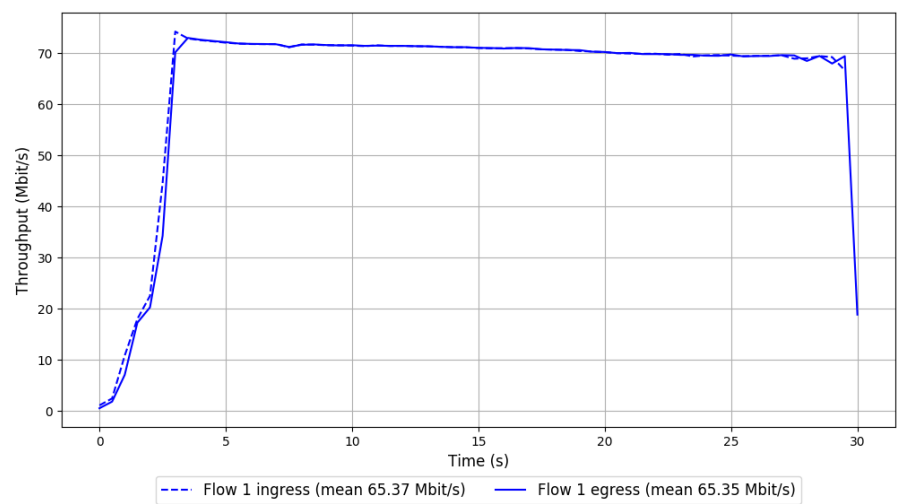
-- Flow 1:

Average throughput: 65.35 Mbit/s

95th percentile per-packet one-way delay: 153.998 ms

Loss rate: 0.02%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-04-10 15:38:47

End at: 2018-04-10 15:39:17

Local clock offset: 18.006 ms

Remote clock offset: 1.992 ms

Below is generated by plot.py at 2018-04-10 17:42:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 60.29 Mbit/s

95th percentile per-packet one-way delay: 155.868 ms

Loss rate: 0.00%

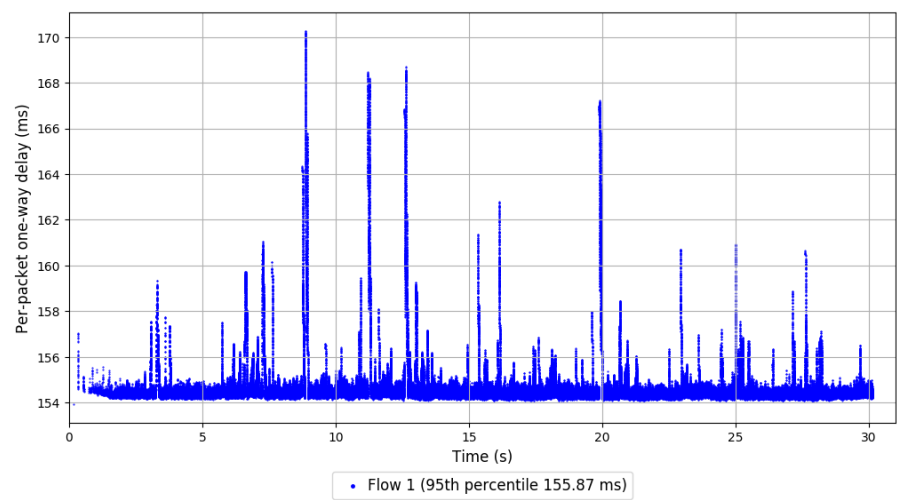
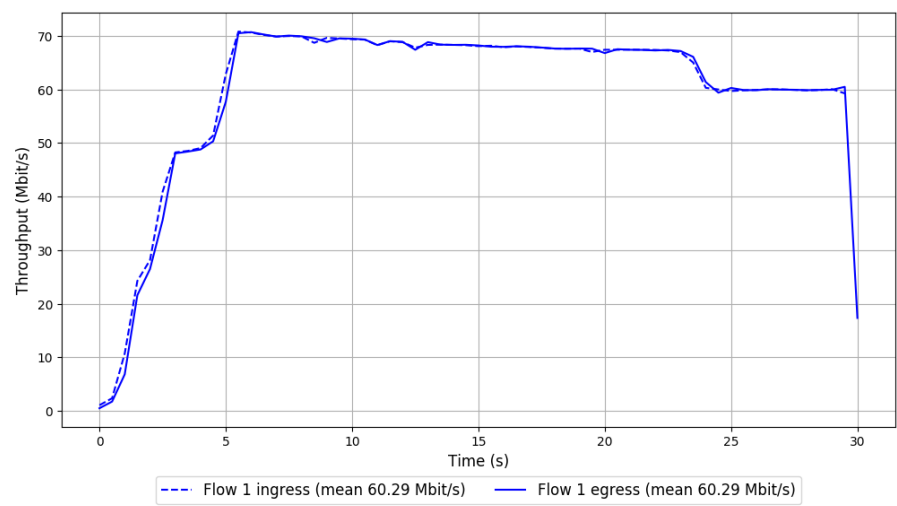
-- Flow 1:

Average throughput: 60.29 Mbit/s

95th percentile per-packet one-way delay: 155.868 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link

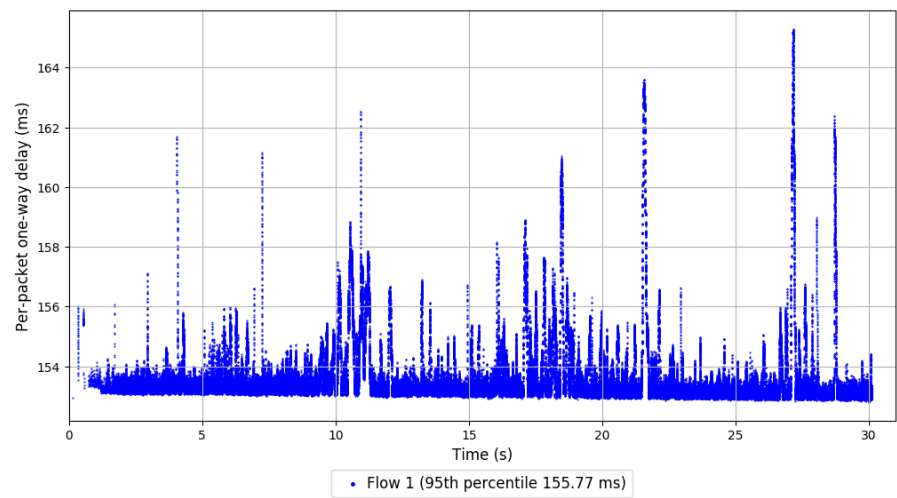
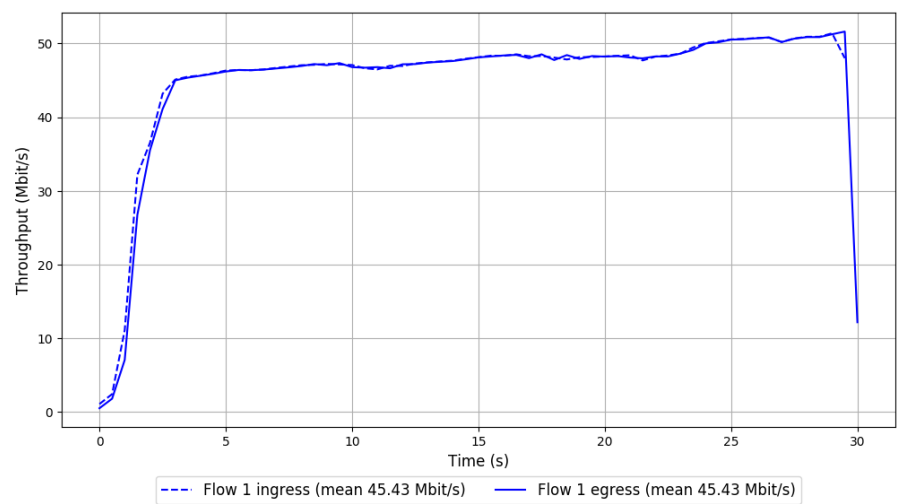


Run 7: Statistics of Copa

Start at: 2018-04-10 16:01:24
End at: 2018-04-10 16:01:54
Local clock offset: 17.262 ms
Remote clock offset: 17.492 ms

Below is generated by plot.py at 2018-04-10 17:42:26
Datalink statistics
-- Total of 1 flow:
Average throughput: 45.43 Mbit/s
95th percentile per-packet one-way delay: 155.770 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.43 Mbit/s
95th percentile per-packet one-way delay: 155.770 ms
Loss rate: 0.00%

Run 7: Report of Copa — Data Link

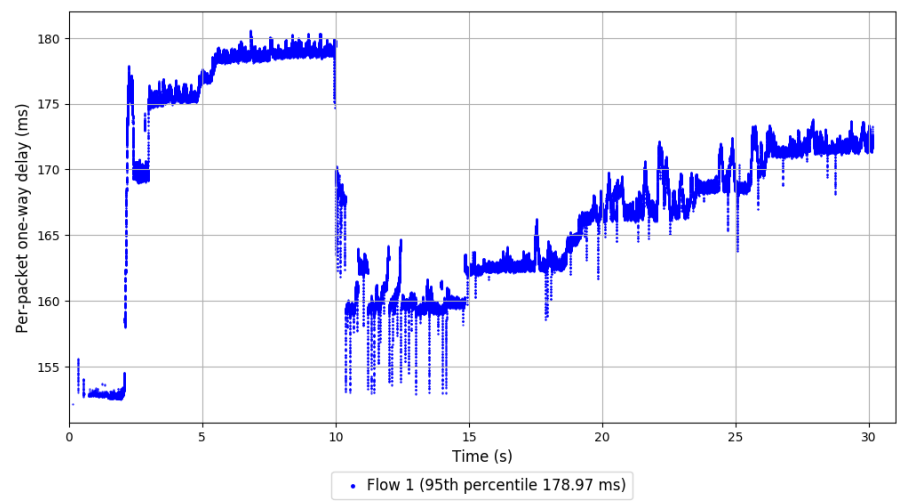
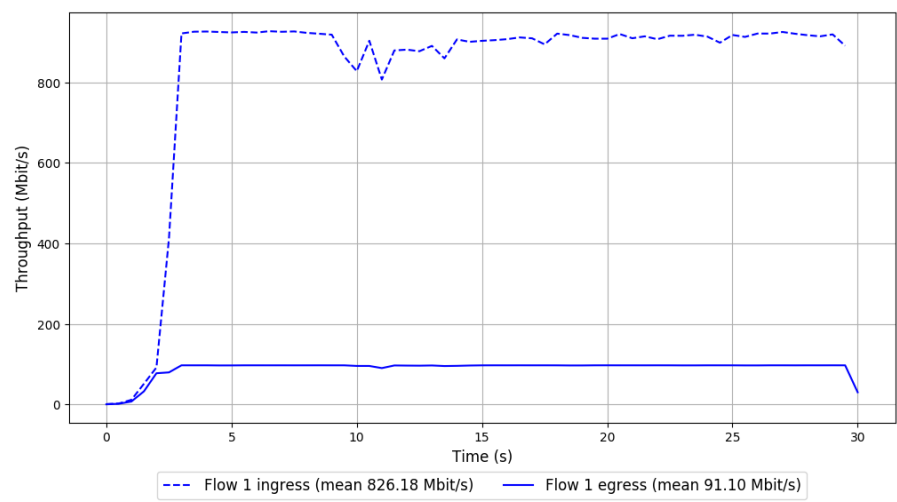


Run 8: Statistics of Copa

Start at: 2018-04-10 16:24:56
End at: 2018-04-10 16:25:26
Local clock offset: 17.835 ms
Remote clock offset: 20.363 ms

Below is generated by plot.py at 2018-04-10 17:49:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.10 Mbit/s
95th percentile per-packet one-way delay: 178.968 ms
Loss rate: 88.97%
-- Flow 1:
Average throughput: 91.10 Mbit/s
95th percentile per-packet one-way delay: 178.968 ms
Loss rate: 88.97%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-04-10 16:47:53

End at: 2018-04-10 16:48:23

Local clock offset: 9.328 ms

Remote clock offset: 4.082 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.81 Mbit/s

95th percentile per-packet one-way delay: 179.201 ms

Loss rate: 88.44%

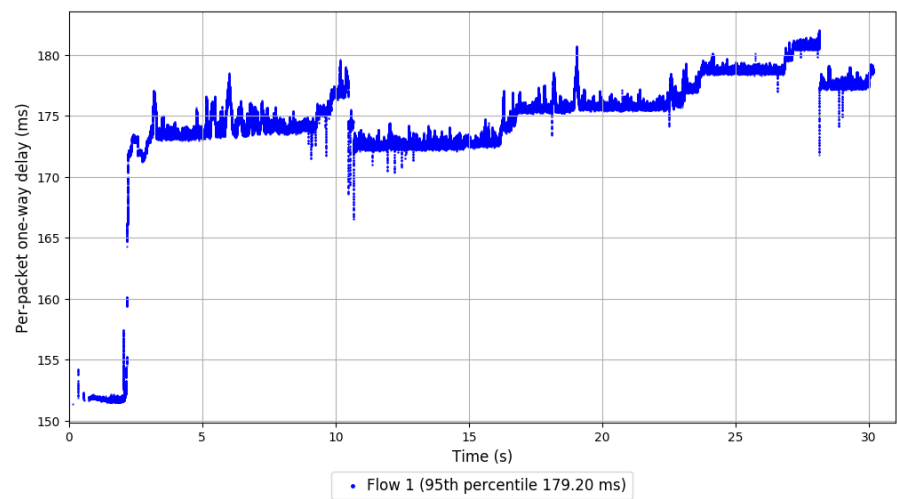
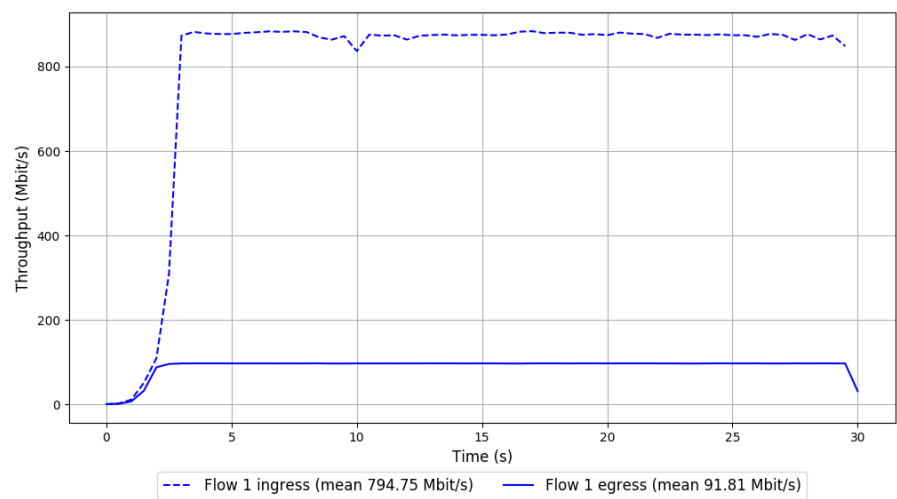
-- Flow 1:

Average throughput: 91.81 Mbit/s

95th percentile per-packet one-way delay: 179.201 ms

Loss rate: 88.44%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-04-10 17:10:47

End at: 2018-04-10 17:11:17

Local clock offset: 1.855 ms

Remote clock offset: 0.093 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 52.47 Mbit/s

95th percentile per-packet one-way delay: 265.372 ms

Loss rate: 88.03%

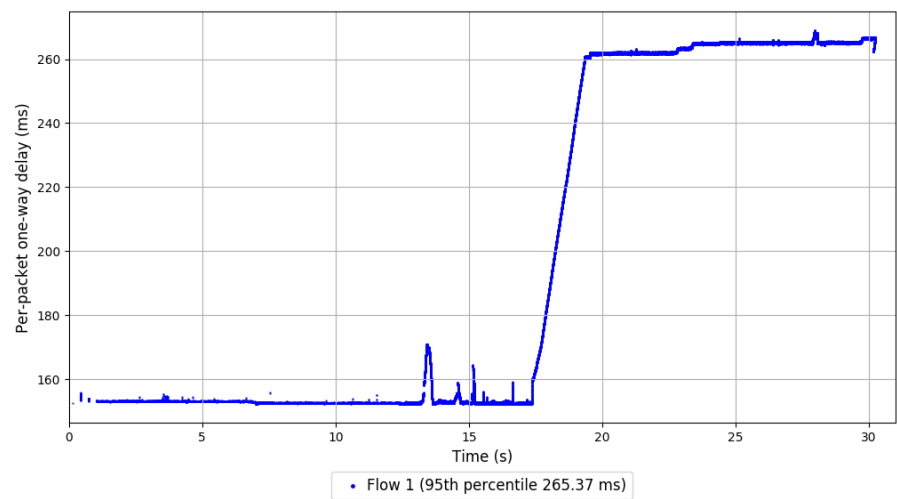
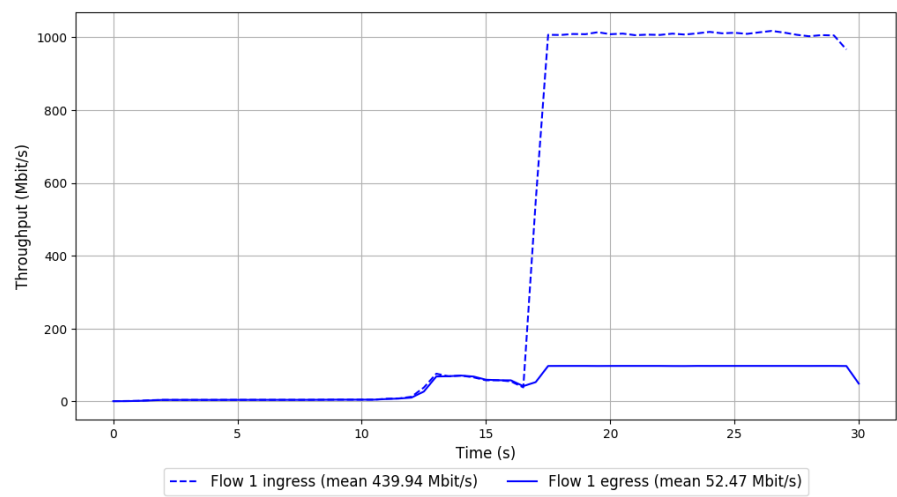
-- Flow 1:

Average throughput: 52.47 Mbit/s

95th percentile per-packet one-way delay: 265.372 ms

Loss rate: 88.03%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-04-10 13:17:03

End at: 2018-04-10 13:17:33

Local clock offset: 18.888 ms

Remote clock offset: 2.534 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 82.84 Mbit/s

95th percentile per-packet one-way delay: 157.991 ms

Loss rate: 5.12%

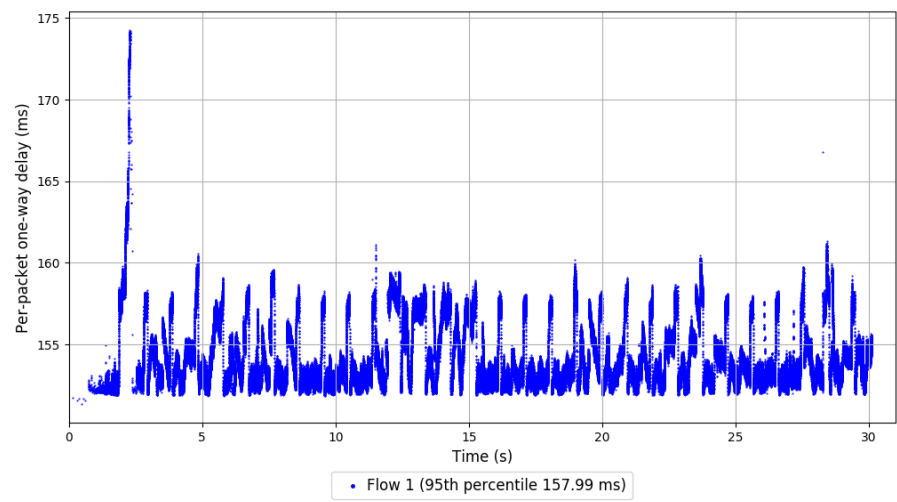
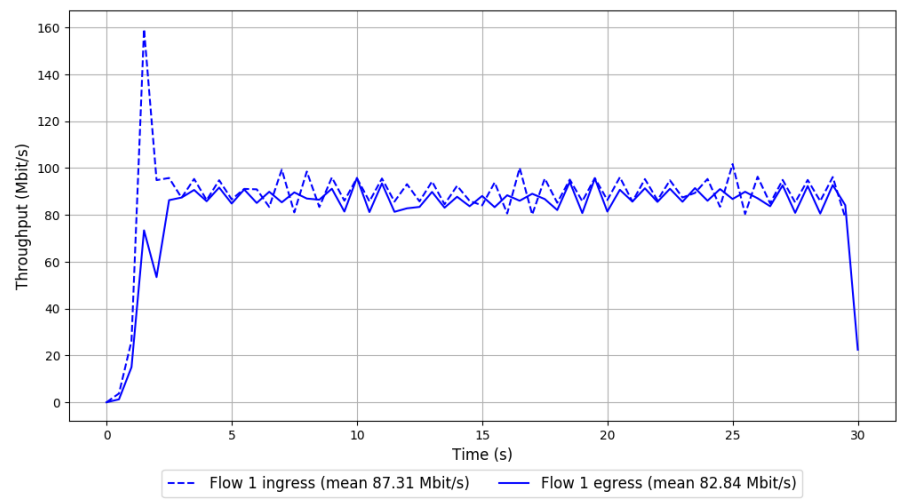
-- Flow 1:

Average throughput: 82.84 Mbit/s

95th percentile per-packet one-way delay: 157.991 ms

Loss rate: 5.12%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-04-10 13:42:23

End at: 2018-04-10 13:42:53

Local clock offset: 15.571 ms

Remote clock offset: 16.86 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.65 Mbit/s

95th percentile per-packet one-way delay: 157.665 ms

Loss rate: 4.64%

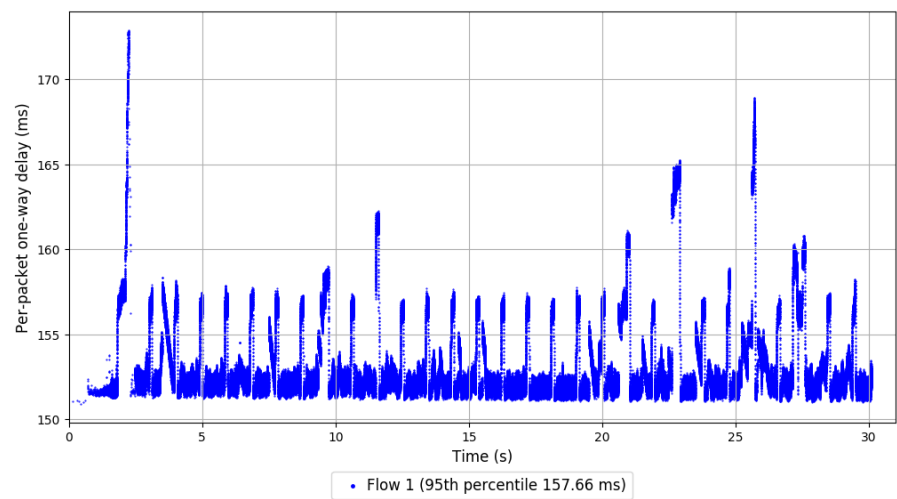
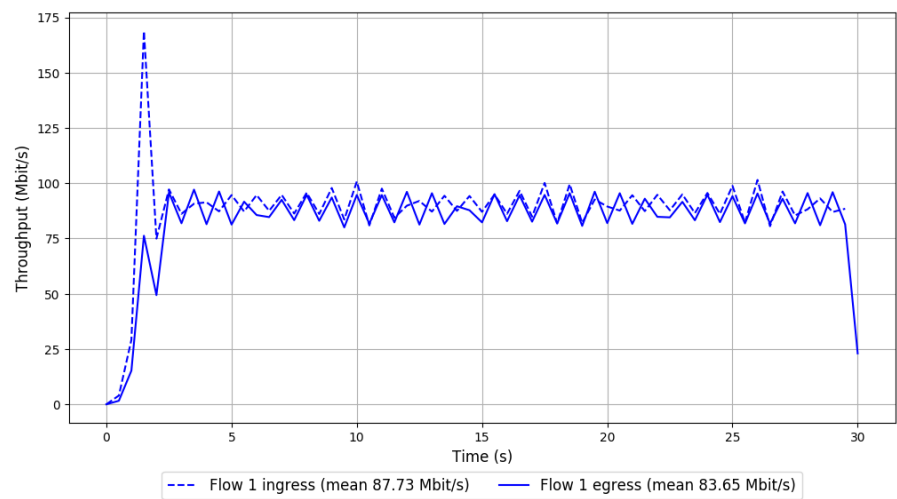
-- Flow 1:

Average throughput: 83.65 Mbit/s

95th percentile per-packet one-way delay: 157.665 ms

Loss rate: 4.64%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-04-10 14:06:24

End at: 2018-04-10 14:06:54

Local clock offset: 15.093 ms

Remote clock offset: 26.14 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.46 Mbit/s

95th percentile per-packet one-way delay: 165.134 ms

Loss rate: 4.57%

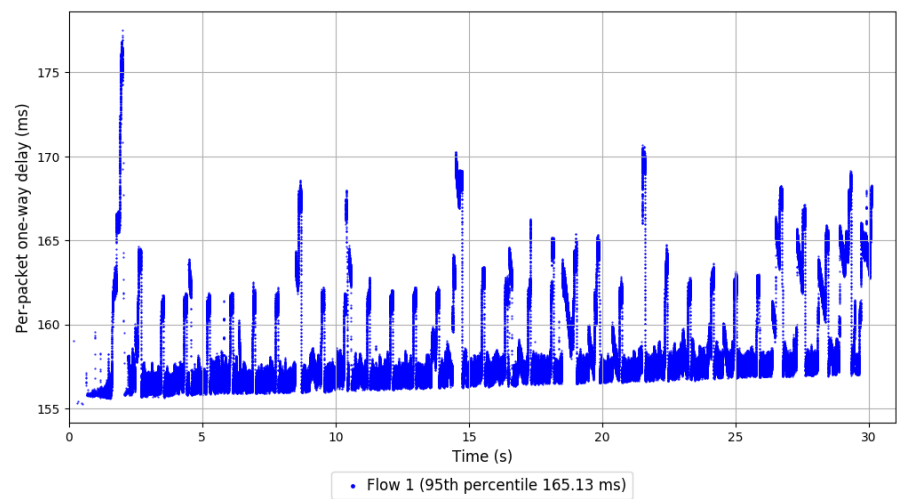
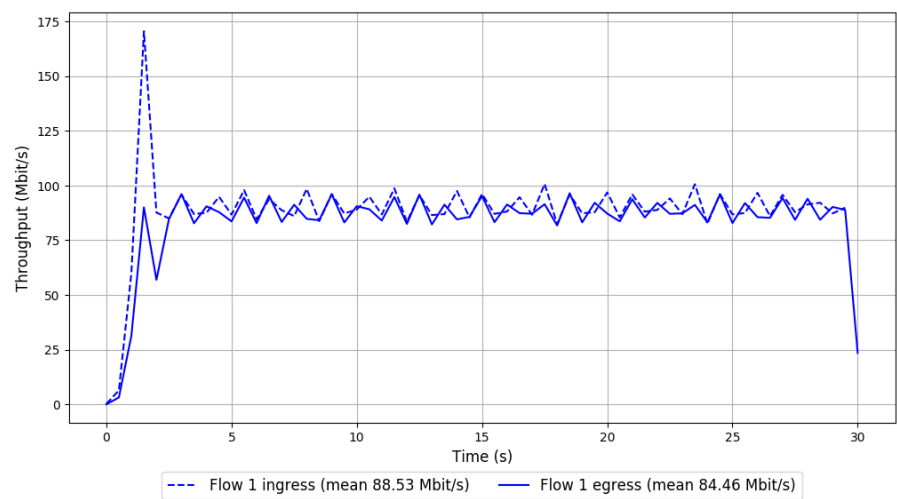
-- Flow 1:

Average throughput: 84.46 Mbit/s

95th percentile per-packet one-way delay: 165.134 ms

Loss rate: 4.57%

Run 3: Report of FillP — Data Link

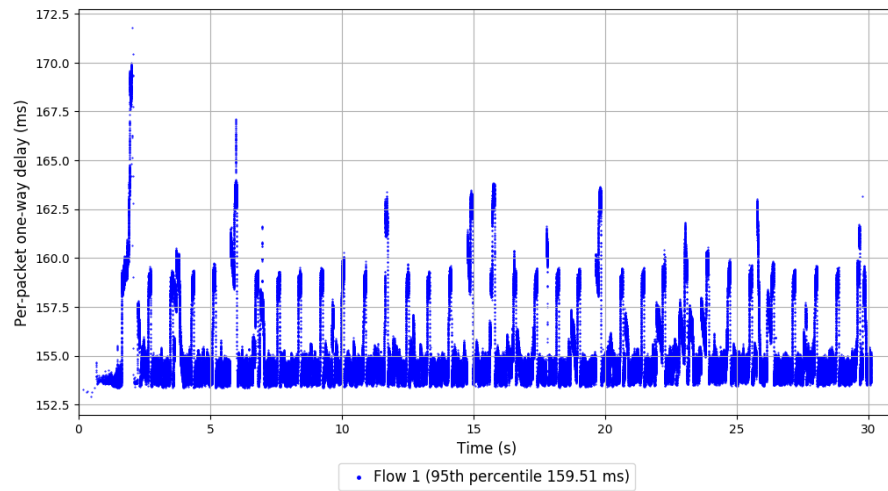
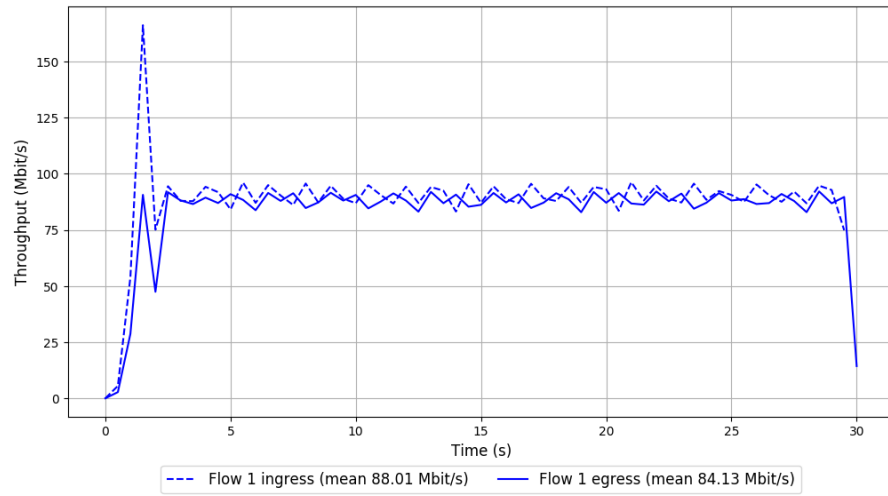


Run 4: Statistics of FillP

Start at: 2018-04-10 14:30:55
End at: 2018-04-10 14:31:25
Local clock offset: 15.705 ms
Remote clock offset: -0.449 ms

Below is generated by plot.py at 2018-04-10 17:49:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 84.13 Mbit/s
95th percentile per-packet one-way delay: 159.511 ms
Loss rate: 4.41%
-- Flow 1:
Average throughput: 84.13 Mbit/s
95th percentile per-packet one-way delay: 159.511 ms
Loss rate: 4.41%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-04-10 14:54:48

End at: 2018-04-10 14:55:18

Local clock offset: 22.316 ms

Remote clock offset: 1.512 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.05 Mbit/s

95th percentile per-packet one-way delay: 160.008 ms

Loss rate: 4.61%

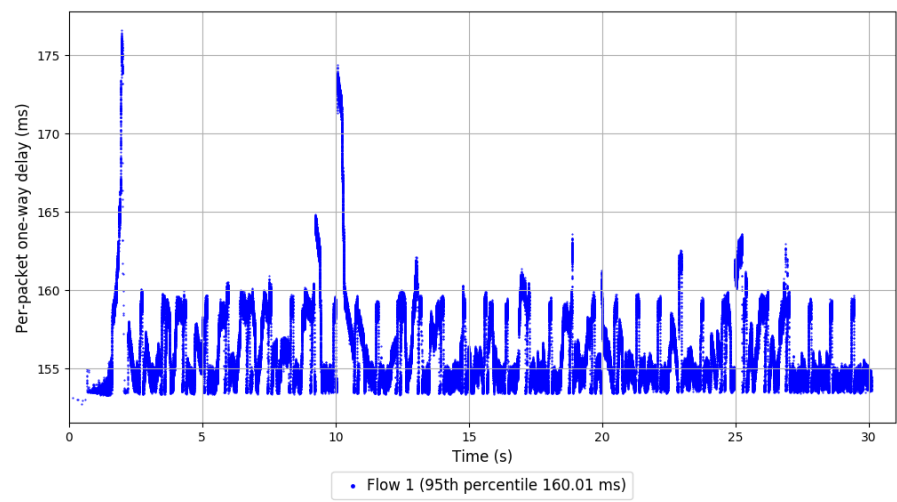
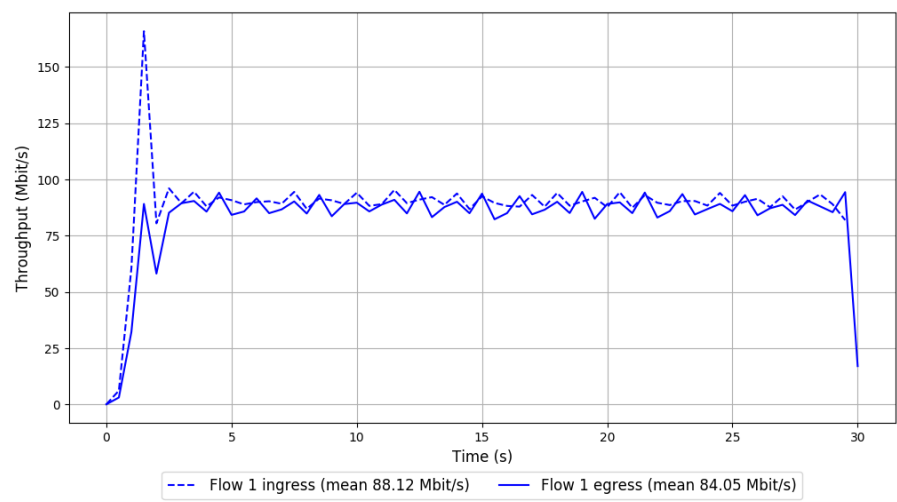
-- Flow 1:

Average throughput: 84.05 Mbit/s

95th percentile per-packet one-way delay: 160.008 ms

Loss rate: 4.61%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-04-10 15:19:24

End at: 2018-04-10 15:19:54

Local clock offset: 27.726 ms

Remote clock offset: 2.169 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.80 Mbit/s

95th percentile per-packet one-way delay: 160.578 ms

Loss rate: 13.51%

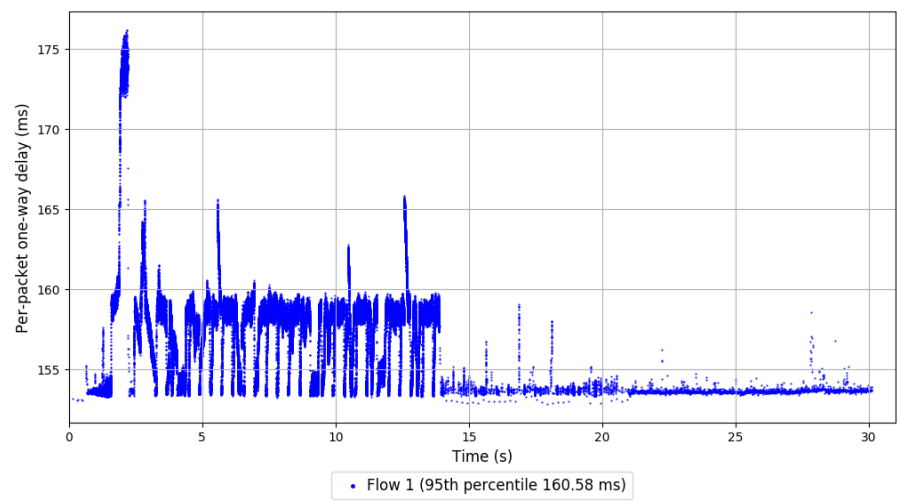
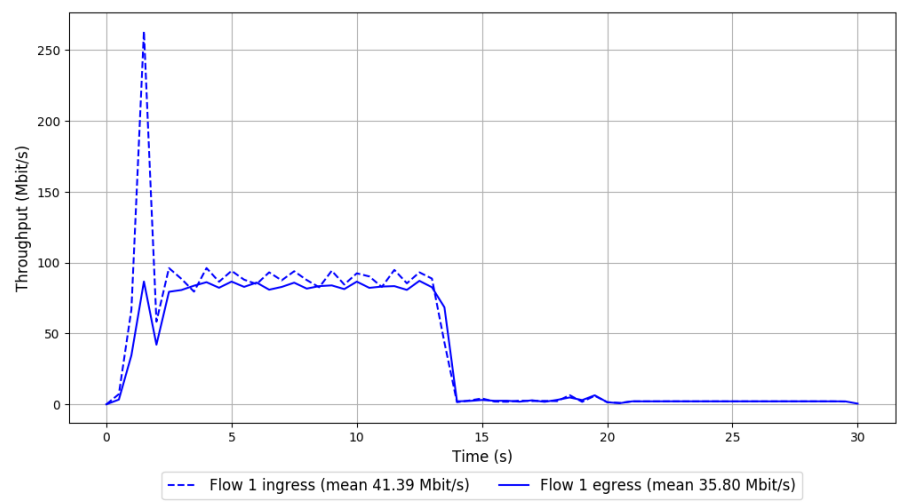
-- Flow 1:

Average throughput: 35.80 Mbit/s

95th percentile per-packet one-way delay: 160.578 ms

Loss rate: 13.51%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-04-10 15:42:38

End at: 2018-04-10 15:43:08

Local clock offset: 17.029 ms

Remote clock offset: 2.074 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.99 Mbit/s

95th percentile per-packet one-way delay: 158.579 ms

Loss rate: 4.14%

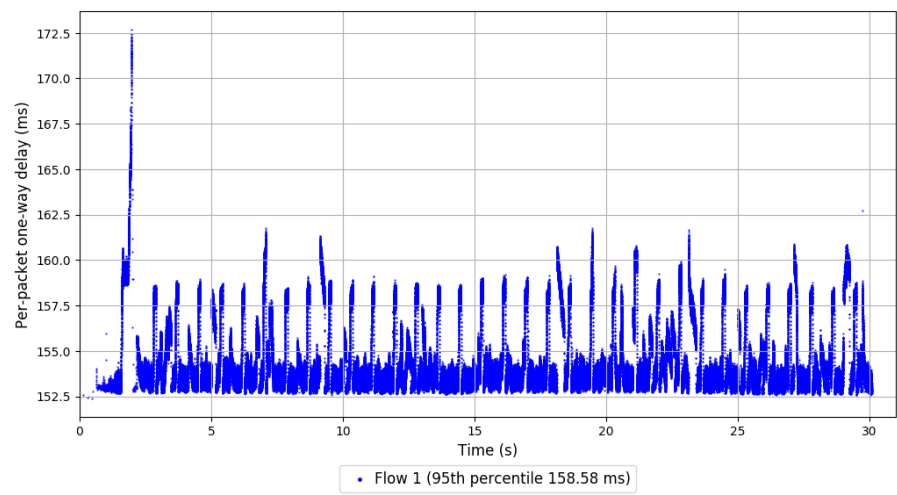
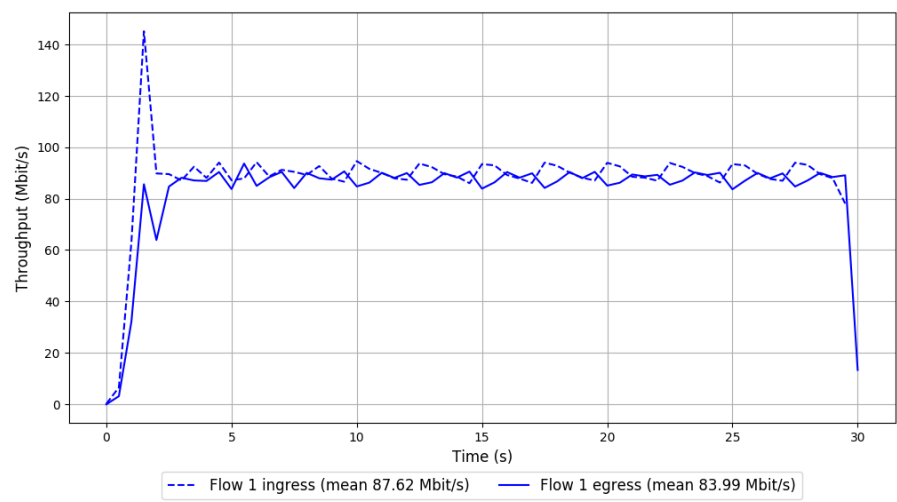
-- Flow 1:

Average throughput: 83.99 Mbit/s

95th percentile per-packet one-way delay: 158.579 ms

Loss rate: 4.14%

Run 7: Report of FillP — Data Link

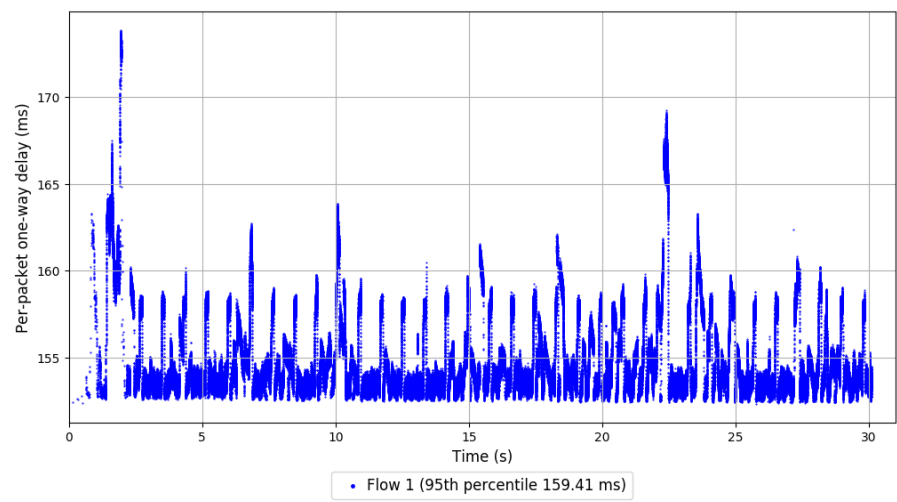
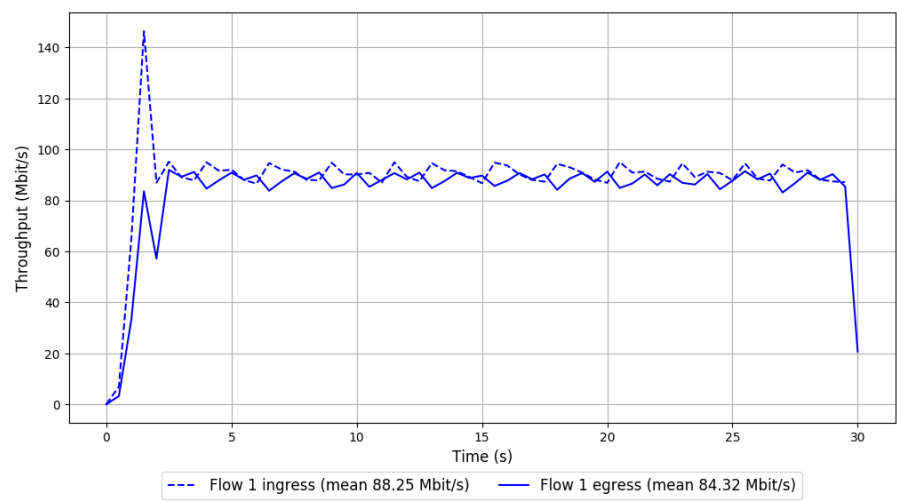


Run 8: Statistics of FillP

Start at: 2018-04-10 16:05:12
End at: 2018-04-10 16:05:42
Local clock offset: 17.727 ms
Remote clock offset: 19.632 ms

Below is generated by plot.py at 2018-04-10 17:49:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 84.32 Mbit/s
95th percentile per-packet one-way delay: 159.407 ms
Loss rate: 4.45%
-- Flow 1:
Average throughput: 84.32 Mbit/s
95th percentile per-packet one-way delay: 159.407 ms
Loss rate: 4.45%

Run 8: Report of FillP — Data Link

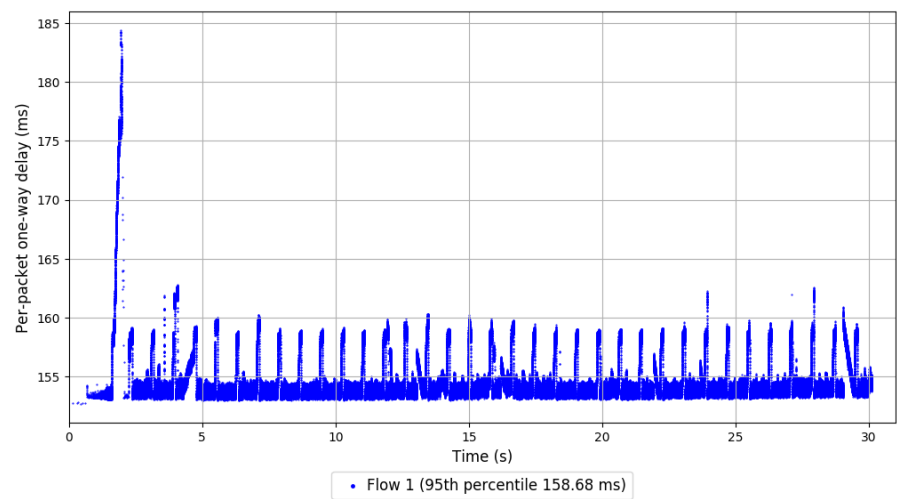
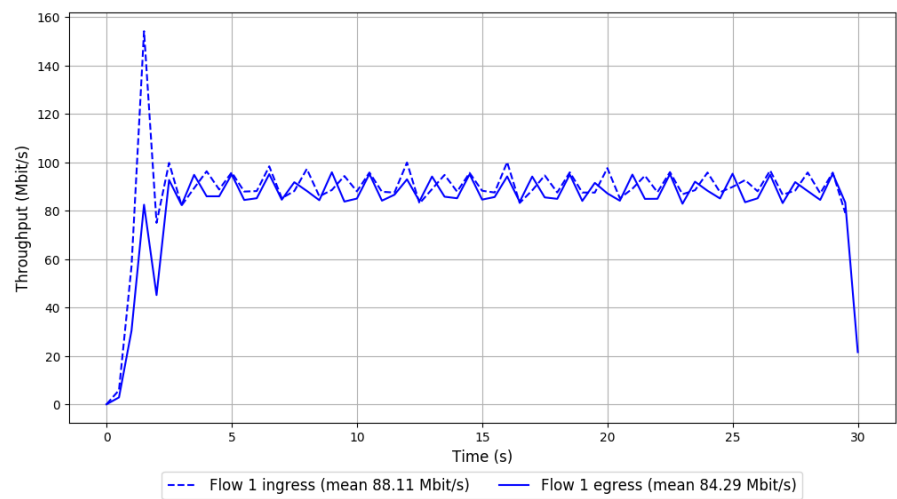


Run 9: Statistics of FillP

Start at: 2018-04-10 16:29:03
End at: 2018-04-10 16:29:33
Local clock offset: 17.591 ms
Remote clock offset: 13.703 ms

Below is generated by plot.py at 2018-04-10 17:49:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 84.29 Mbit/s
95th percentile per-packet one-way delay: 158.683 ms
Loss rate: 4.33%
-- Flow 1:
Average throughput: 84.29 Mbit/s
95th percentile per-packet one-way delay: 158.683 ms
Loss rate: 4.33%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-04-10 16:51:59

End at: 2018-04-10 16:52:29

Local clock offset: 8.689 ms

Remote clock offset: 3.653 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.08 Mbit/s

95th percentile per-packet one-way delay: 159.777 ms

Loss rate: 4.68%

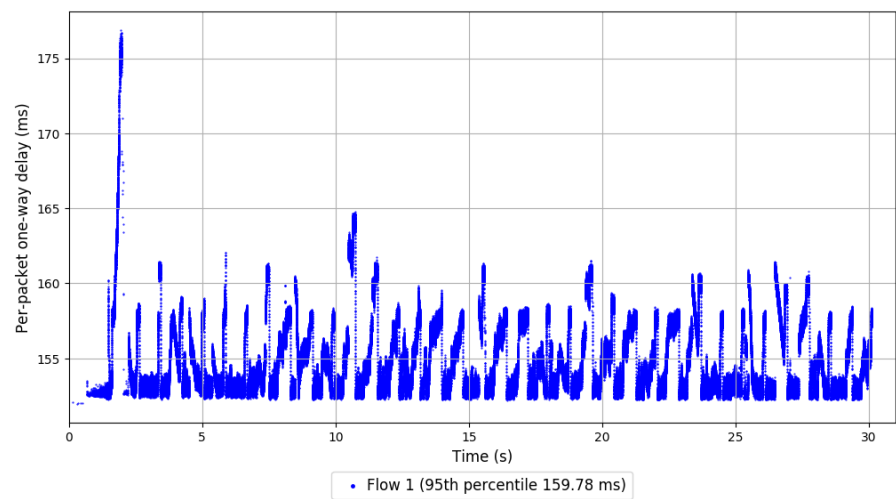
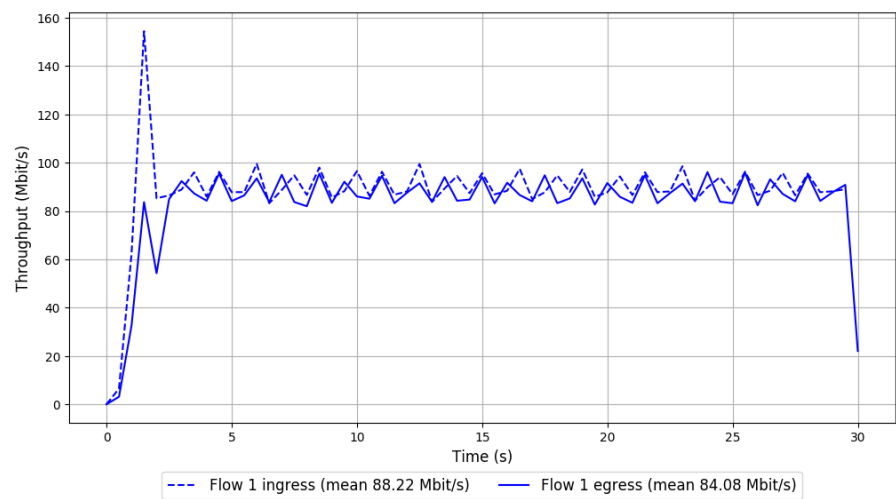
-- Flow 1:

Average throughput: 84.08 Mbit/s

95th percentile per-packet one-way delay: 159.777 ms

Loss rate: 4.68%

Run 10: Report of FillP — Data Link

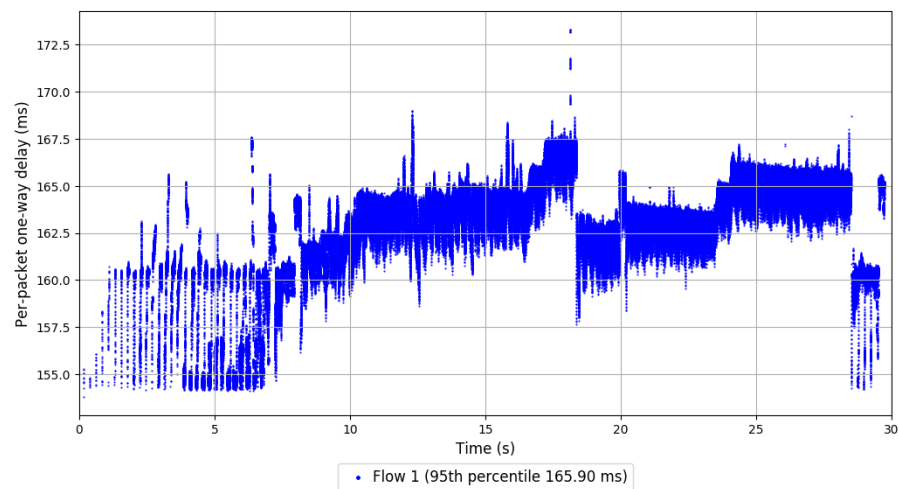
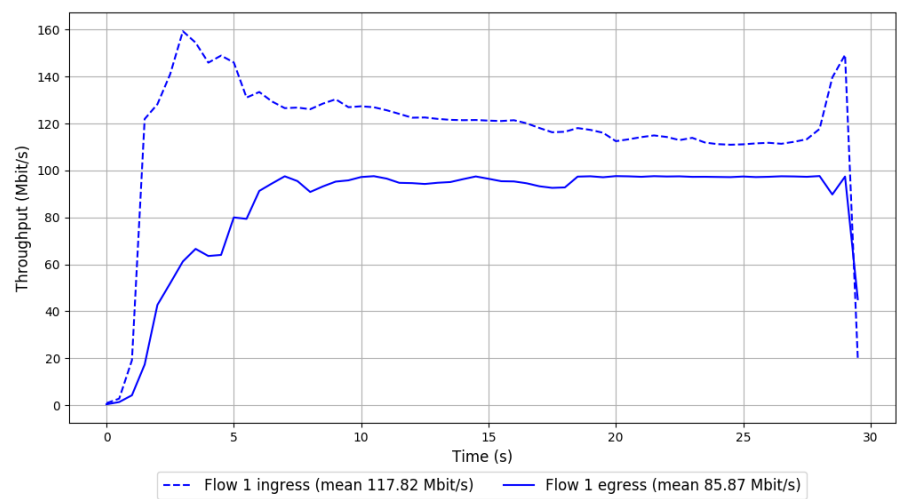


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-04-10 13:30:14
End at: 2018-04-10 13:30:44
Local clock offset: 15.695 ms
Remote clock offset: -0.225 ms

# Below is generated by plot.py at 2018-04-10 17:49:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.87 Mbit/s
95th percentile per-packet one-way delay: 165.898 ms
Loss rate: 27.09%
-- Flow 1:
Average throughput: 85.87 Mbit/s
95th percentile per-packet one-way delay: 165.898 ms
Loss rate: 27.09%
```

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



Run 2: Statistics of Indigo-1-32

Start at: 2018-04-10 13:54:26

End at: 2018-04-10 13:54:56

Local clock offset: 16.026 ms

Remote clock offset: 24.617 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 85.82 Mbit/s

95th percentile per-packet one-way delay: 169.748 ms

Loss rate: 30.47%

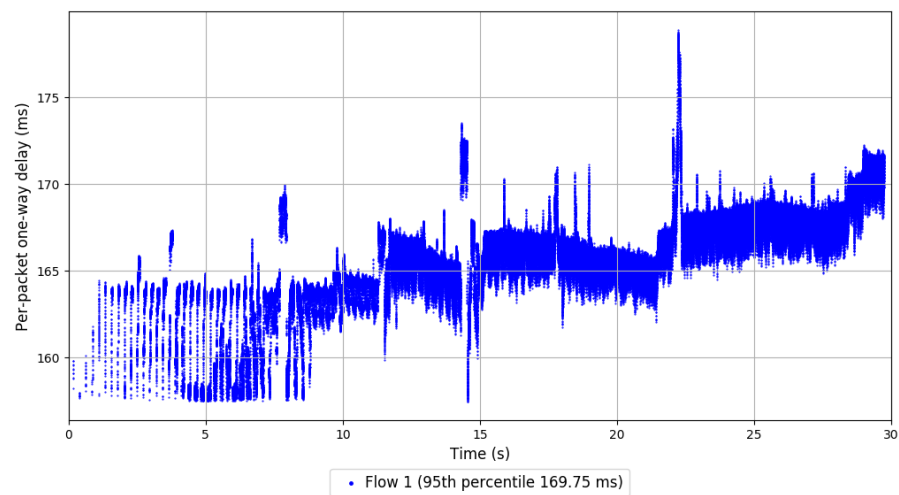
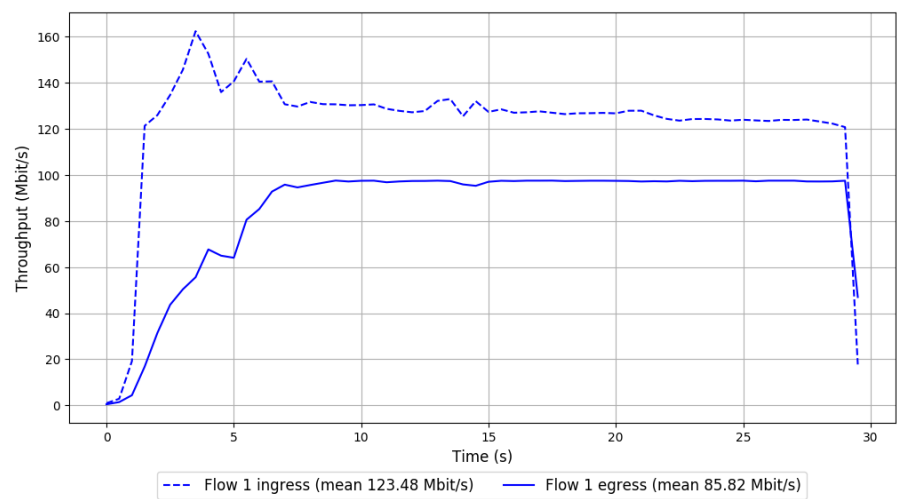
-- Flow 1:

Average throughput: 85.82 Mbit/s

95th percentile per-packet one-way delay: 169.748 ms

Loss rate: 30.47%

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-04-10 14:18:19

End at: 2018-04-10 14:18:49

Local clock offset: 15.596 ms

Remote clock offset: 5.819 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.23 Mbit/s

95th percentile per-packet one-way delay: 165.042 ms

Loss rate: 30.56%

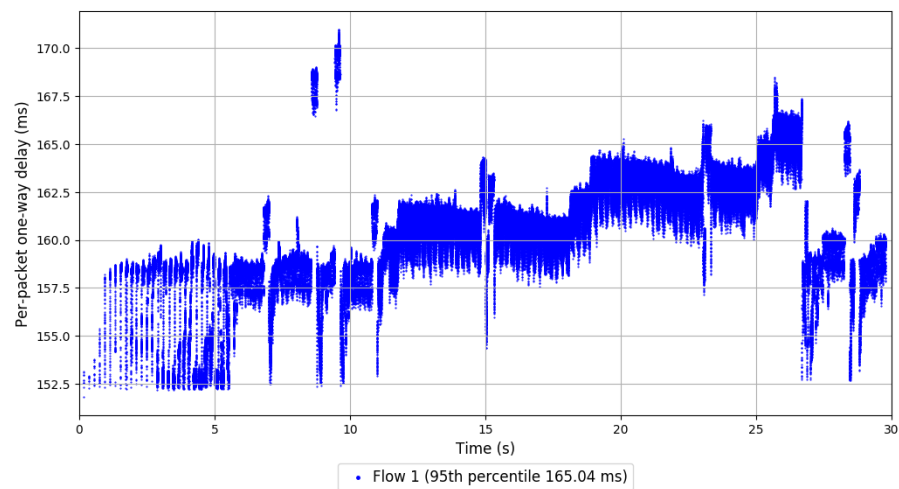
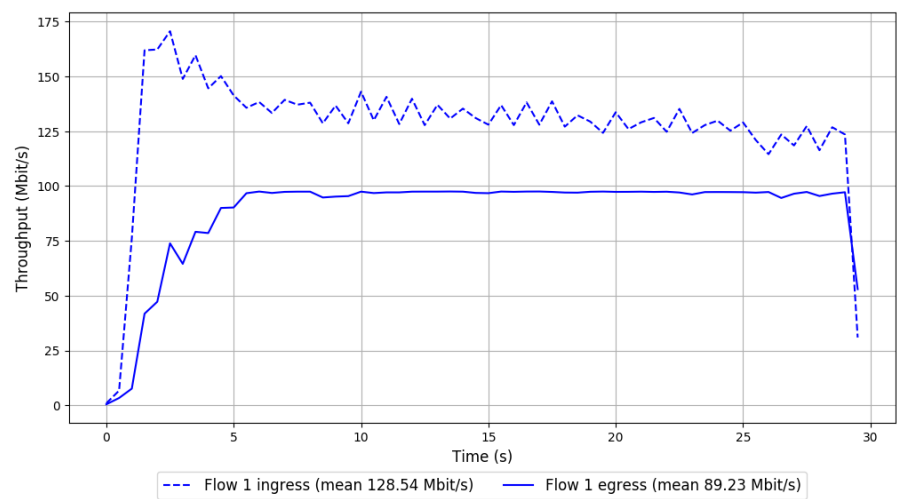
-- Flow 1:

Average throughput: 89.23 Mbit/s

95th percentile per-packet one-way delay: 165.042 ms

Loss rate: 30.56%

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

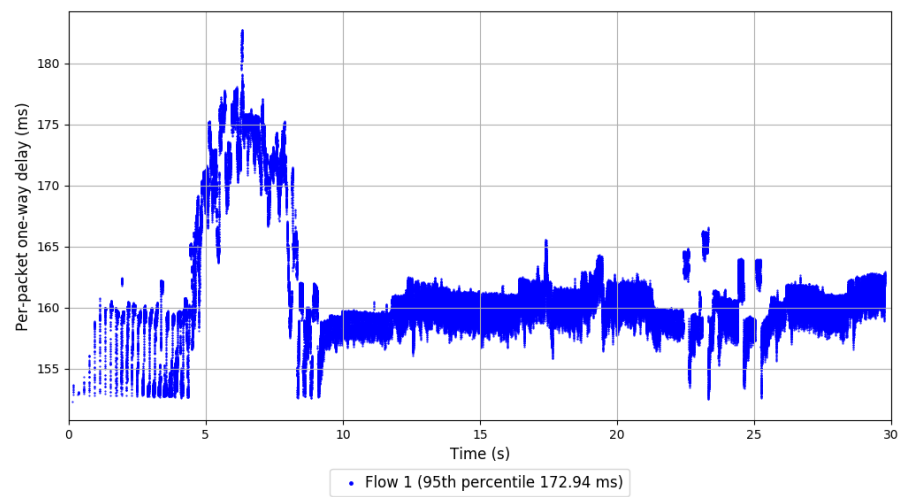
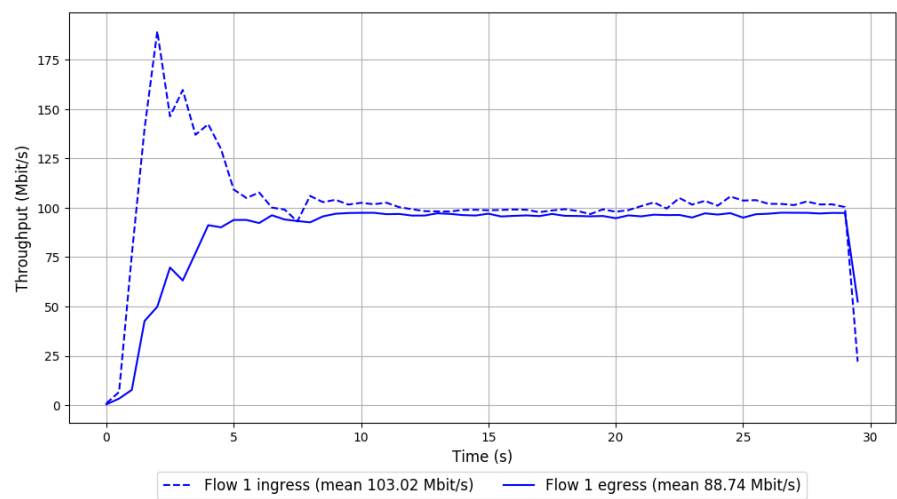


Run 4: Statistics of Indigo-1-32

Start at: 2018-04-10 14:42:50
End at: 2018-04-10 14:43:20
Local clock offset: 15.441 ms
Remote clock offset: -0.952 ms

Below is generated by plot.py at 2018-04-10 17:49:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 88.74 Mbit/s
95th percentile per-packet one-way delay: 172.942 ms
Loss rate: 13.84%
-- Flow 1:
Average throughput: 88.74 Mbit/s
95th percentile per-packet one-way delay: 172.942 ms
Loss rate: 13.84%

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



Run 5: Statistics of Indigo-1-32

Start at: 2018-04-10 15:06:28

End at: 2018-04-10 15:06:58

Local clock offset: 25.996 ms

Remote clock offset: 2.099 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.49 Mbit/s

95th percentile per-packet one-way delay: 170.183 ms

Loss rate: 28.07%

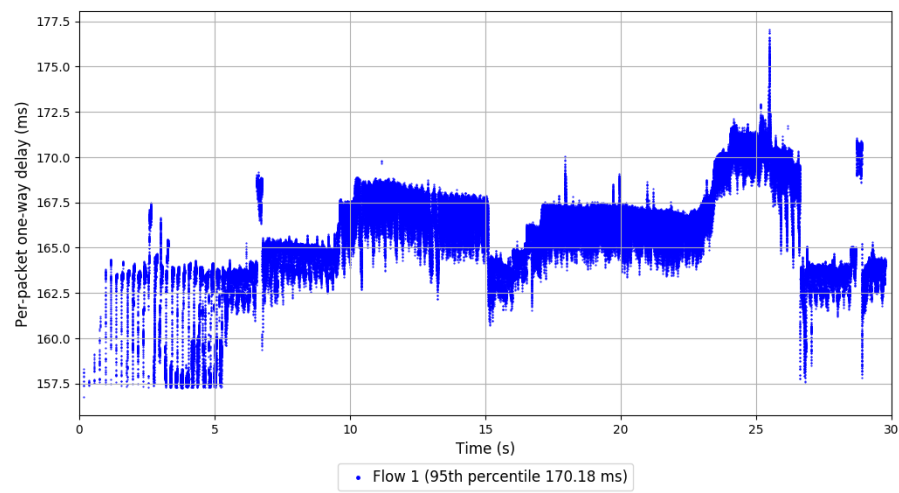
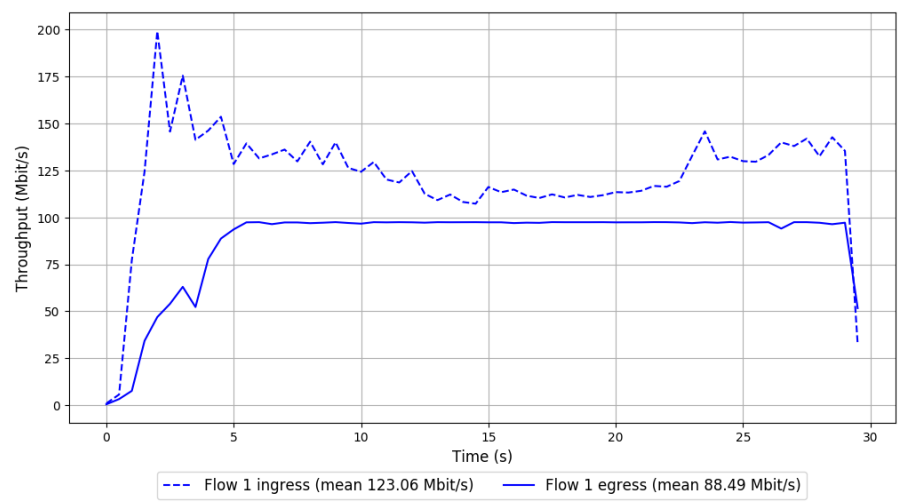
-- Flow 1:

Average throughput: 88.49 Mbit/s

95th percentile per-packet one-way delay: 170.183 ms

Loss rate: 28.07%

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



Run 6: Statistics of Indigo-1-32

Start at: 2018-04-10 15:31:14

End at: 2018-04-10 15:31:44

Local clock offset: 20.233 ms

Remote clock offset: 1.963 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.81 Mbit/s

95th percentile per-packet one-way delay: 166.439 ms

Loss rate: 28.07%

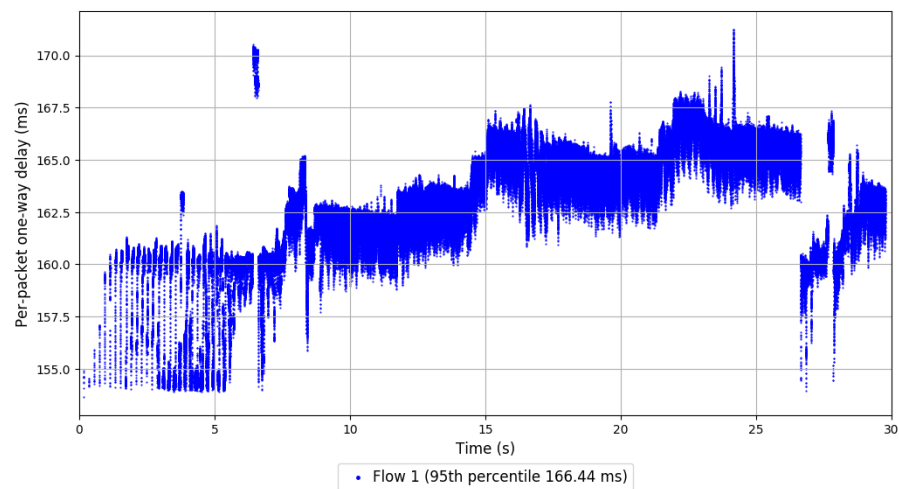
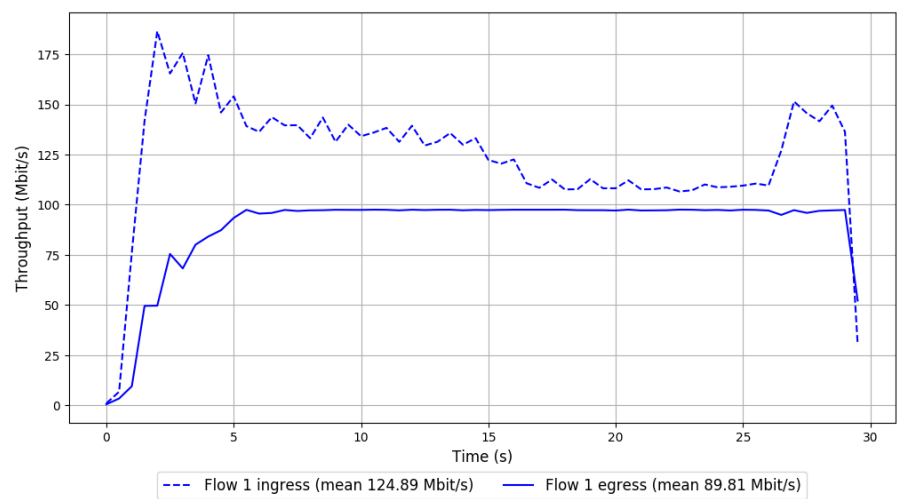
-- Flow 1:

Average throughput: 89.81 Mbit/s

95th percentile per-packet one-way delay: 166.439 ms

Loss rate: 28.07%

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

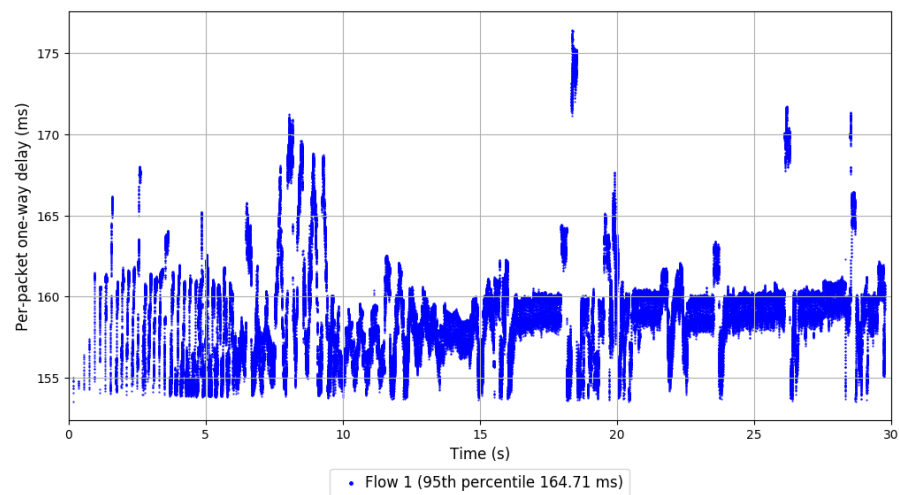
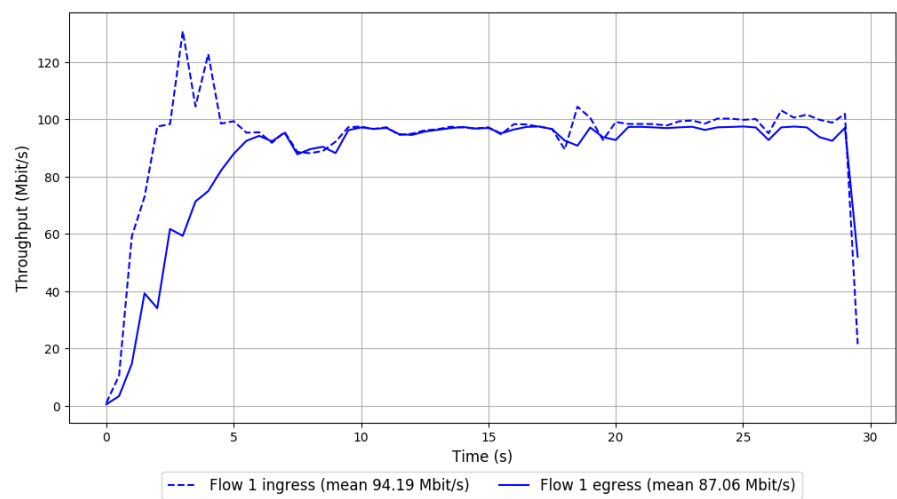


Run 7: Statistics of Indigo-1-32

Start at: 2018-04-10 15:53:55
End at: 2018-04-10 15:54:25
Local clock offset: 15.374 ms
Remote clock offset: 11.016 ms

Below is generated by plot.py at 2018-04-10 17:49:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 87.06 Mbit/s
95th percentile per-packet one-way delay: 164.708 ms
Loss rate: 7.55%
-- Flow 1:
Average throughput: 87.06 Mbit/s
95th percentile per-packet one-way delay: 164.708 ms
Loss rate: 7.55%

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



Run 8: Statistics of Indigo-1-32

/home/ubuntu/pantheon_data/2018-04-10T13-13-AWS-Korea-to-China-10-runs/indigo_1_32_stats_run

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

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Run 9: Statistics of Indigo-1-32

Start at: 2018-04-10 16:40:19

End at: 2018-04-10 16:40:49

Local clock offset: 11.223 ms

Remote clock offset: 6.048 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.69 Mbit/s

95th percentile per-packet one-way delay: 170.772 ms

Loss rate: 21.41%

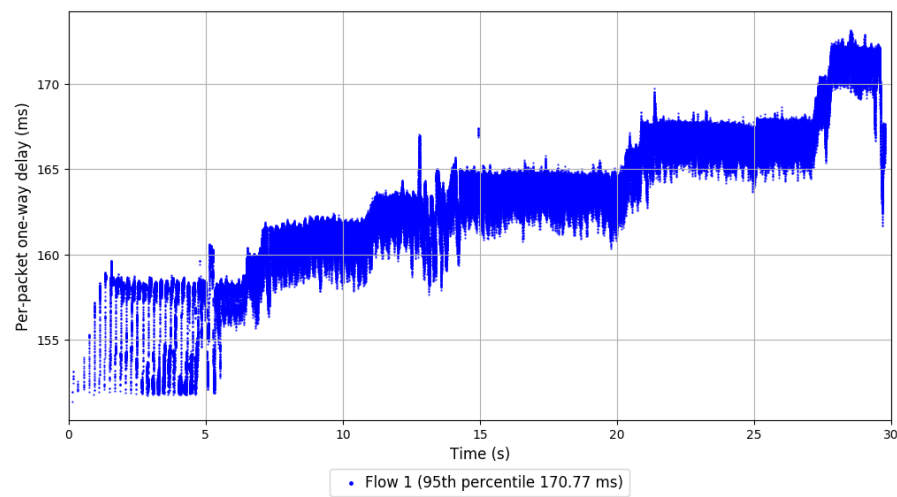
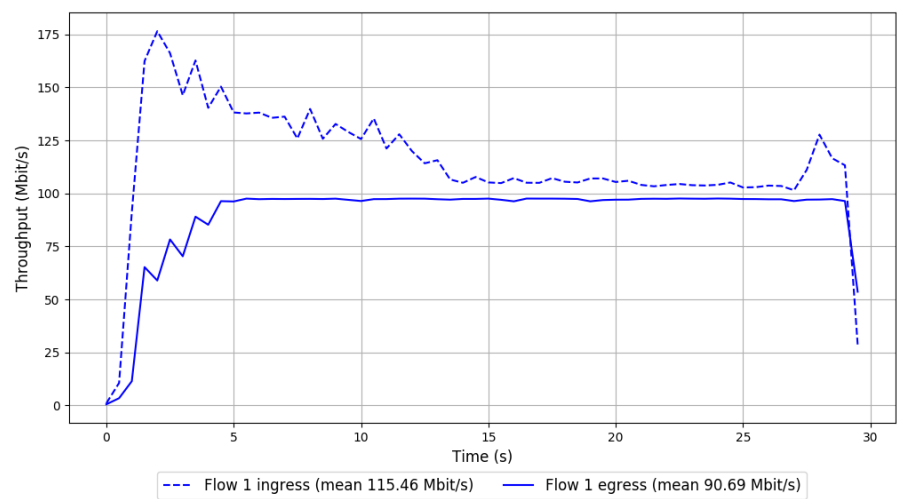
-- Flow 1:

Average throughput: 90.69 Mbit/s

95th percentile per-packet one-way delay: 170.772 ms

Loss rate: 21.41%

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



Run 10: Statistics of Indigo-1-32

Start at: 2018-04-10 17:03:15

End at: 2018-04-10 17:03:46

Local clock offset: 6.539 ms

Remote clock offset: 1.267 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.58 Mbit/s

95th percentile per-packet one-way delay: 165.537 ms

Loss rate: 25.11%

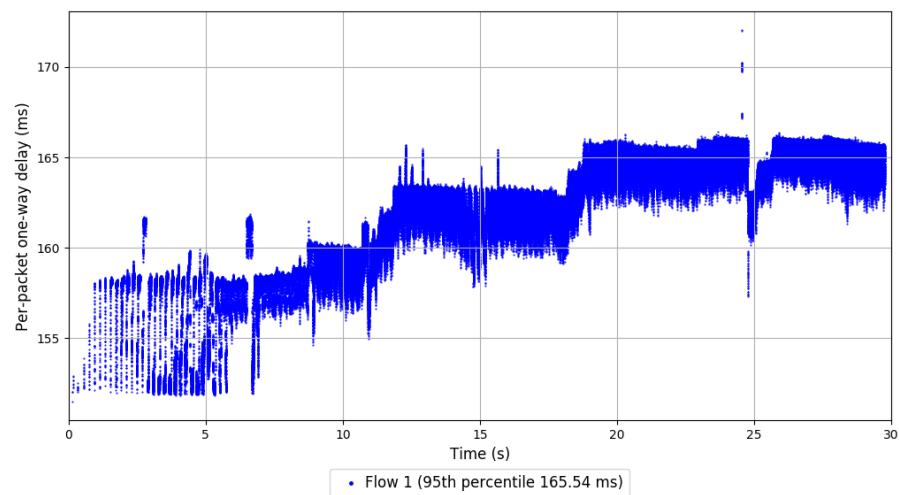
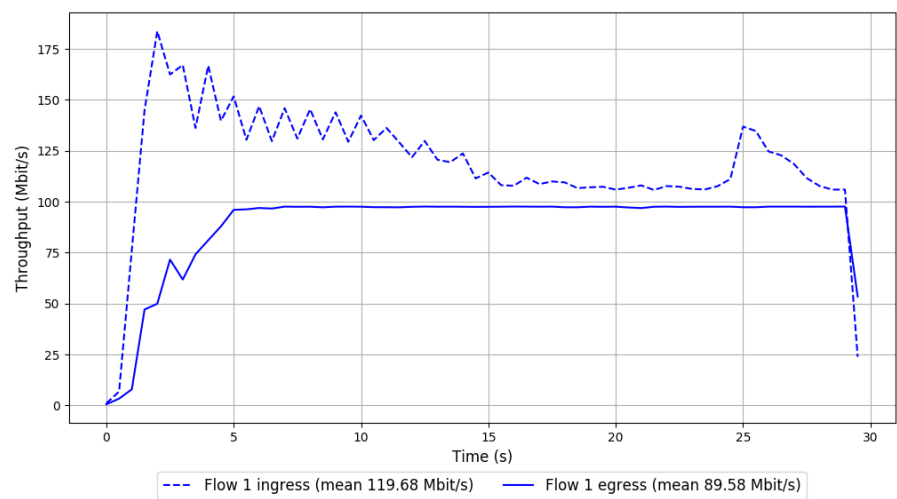
-- Flow 1:

Average throughput: 89.58 Mbit/s

95th percentile per-packet one-way delay: 165.537 ms

Loss rate: 25.11%

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

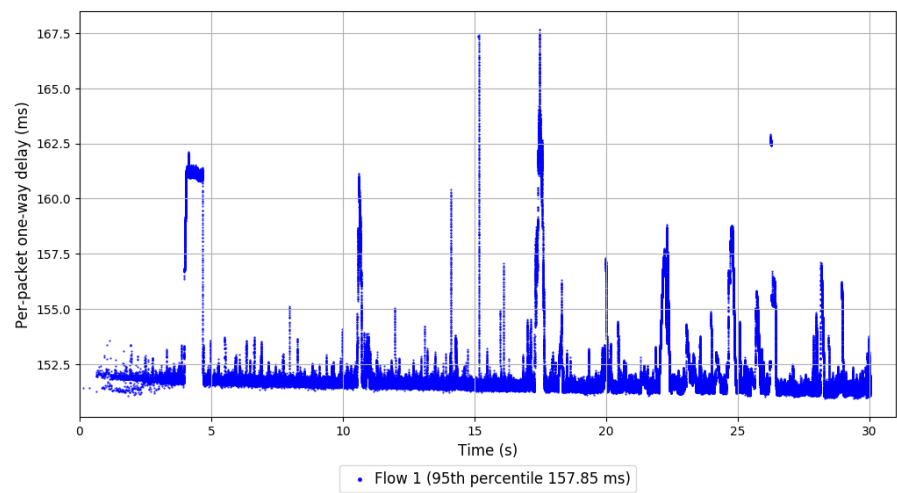
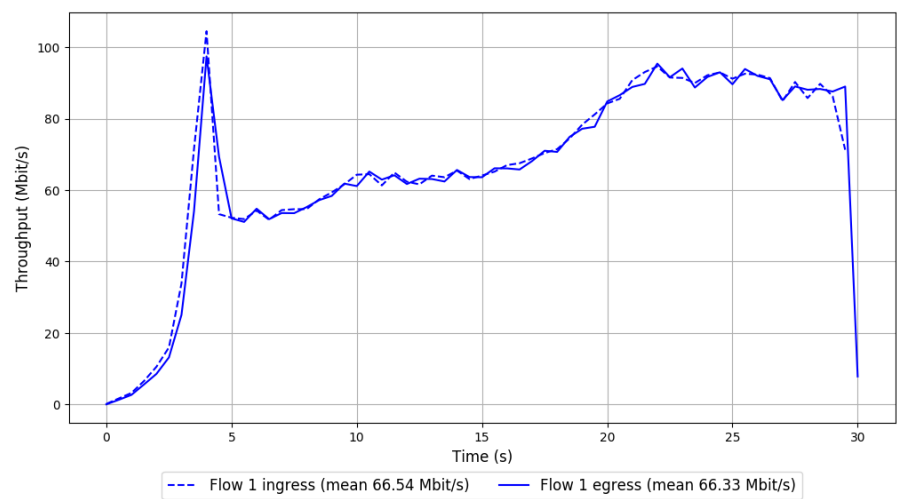


Run 1: Statistics of Vivace-latency

Start at: 2018-04-10 13:36:54
End at: 2018-04-10 13:37:24
Local clock offset: 14.549 ms
Remote clock offset: 10.171 ms

Below is generated by plot.py at 2018-04-10 17:49:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 66.33 Mbit/s
95th percentile per-packet one-way delay: 157.852 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 66.33 Mbit/s
95th percentile per-packet one-way delay: 157.852 ms
Loss rate: 0.30%

Run 1: Report of Vivace-latency — Data Link

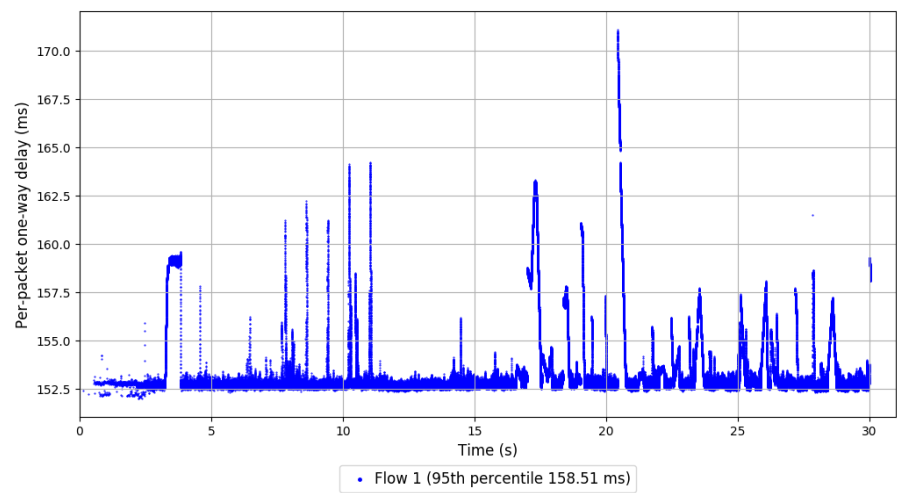
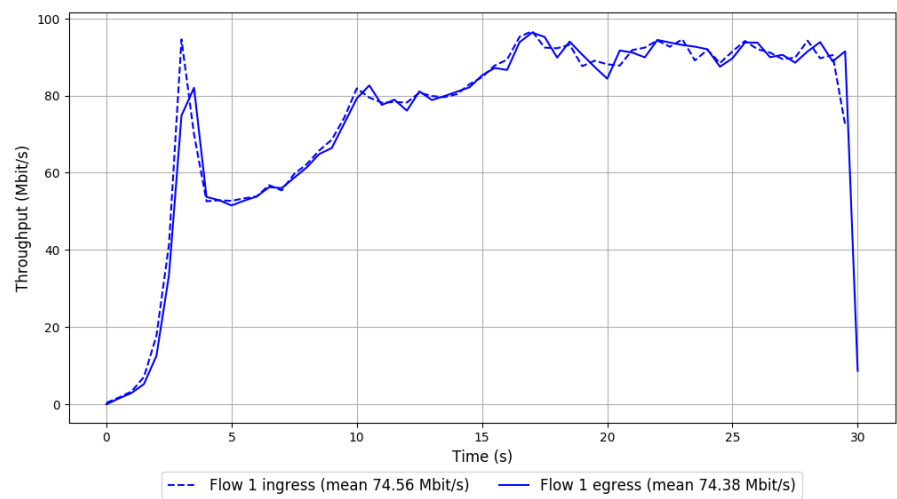


Run 2: Statistics of Vivace-latency

Start at: 2018-04-10 14:01:04
End at: 2018-04-10 14:01:34
Local clock offset: 15.55 ms
Remote clock offset: 27.419 ms

Below is generated by plot.py at 2018-04-10 17:49:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 74.38 Mbit/s
95th percentile per-packet one-way delay: 158.510 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 74.38 Mbit/s
95th percentile per-packet one-way delay: 158.510 ms
Loss rate: 0.22%

Run 2: Report of Vivace-latency — Data Link

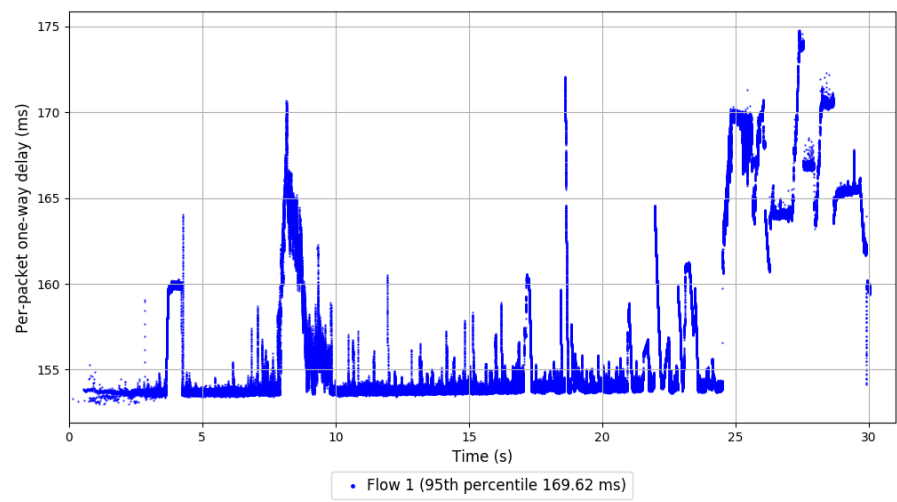
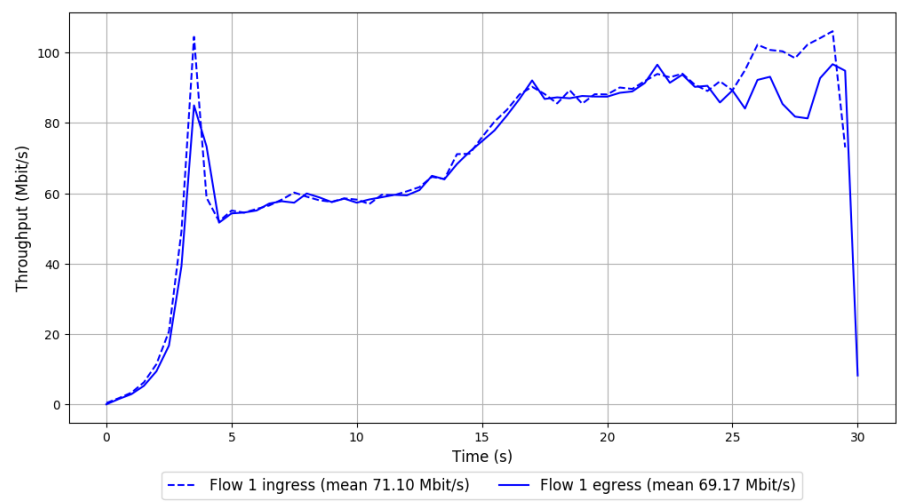


Run 3: Statistics of Vivace-latency

Start at: 2018-04-10 14:25:32
End at: 2018-04-10 14:26:02
Local clock offset: 15.838 ms
Remote clock offset: 1.332 ms

Below is generated by plot.py at 2018-04-10 17:49:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 69.17 Mbit/s
95th percentile per-packet one-way delay: 169.622 ms
Loss rate: 2.70%
-- Flow 1:
Average throughput: 69.17 Mbit/s
95th percentile per-packet one-way delay: 169.622 ms
Loss rate: 2.70%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-04-10 14:49:24

End at: 2018-04-10 14:49:54

Local clock offset: 18.724 ms

Remote clock offset: 0.841 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.23 Mbit/s

95th percentile per-packet one-way delay: 160.834 ms

Loss rate: 0.19%

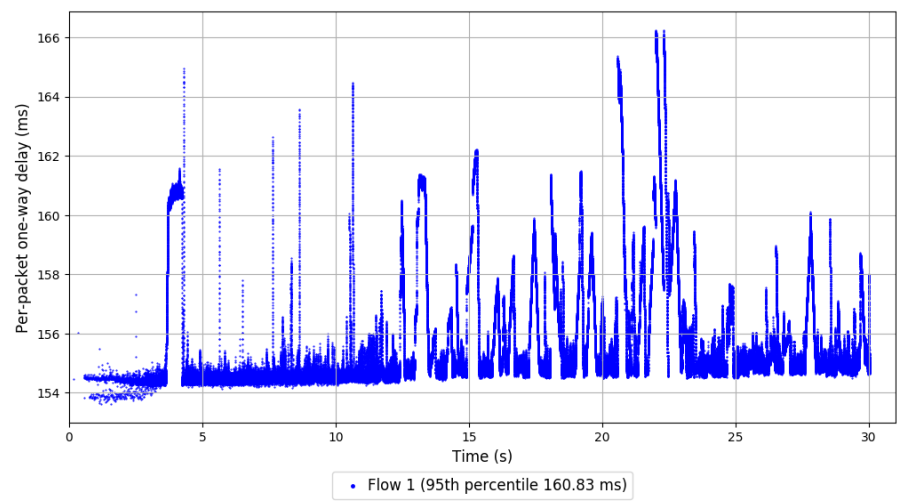
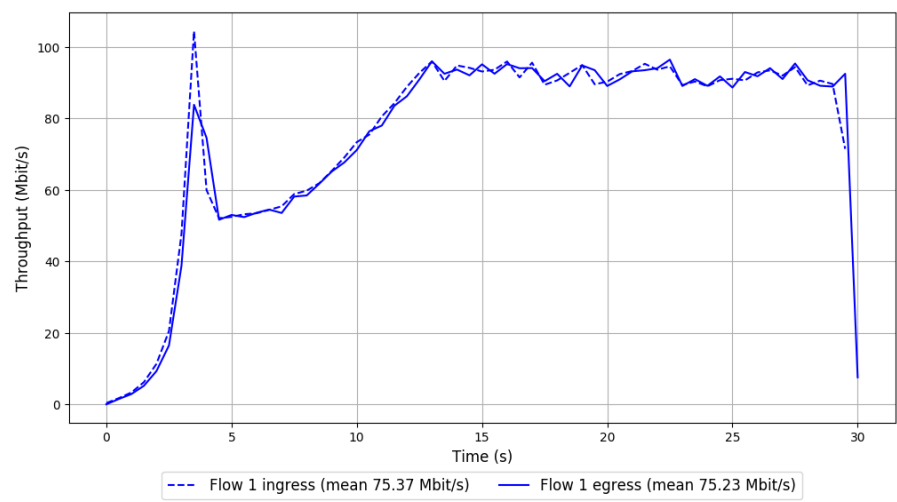
-- Flow 1:

Average throughput: 75.23 Mbit/s

95th percentile per-packet one-way delay: 160.834 ms

Loss rate: 0.19%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-04-10 15:14:08

End at: 2018-04-10 15:14:38

Local clock offset: 26.981 ms

Remote clock offset: 2.204 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.89 Mbit/s

95th percentile per-packet one-way delay: 162.349 ms

Loss rate: 0.45%

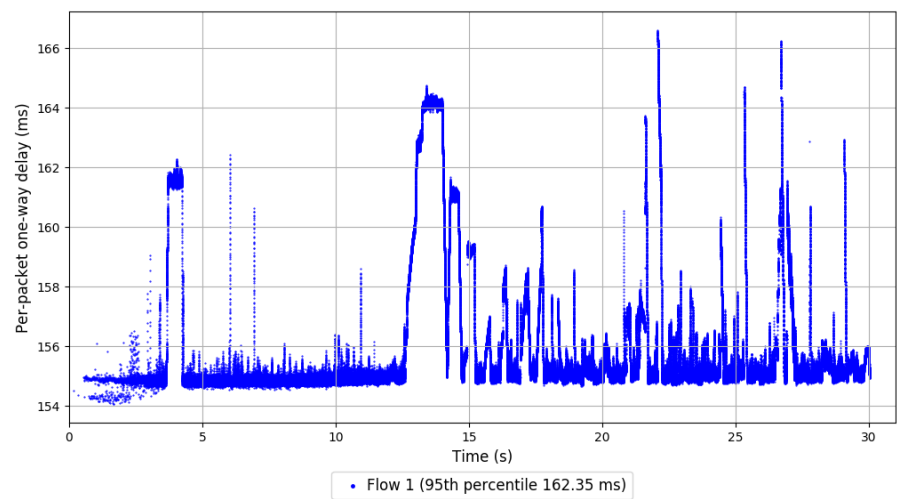
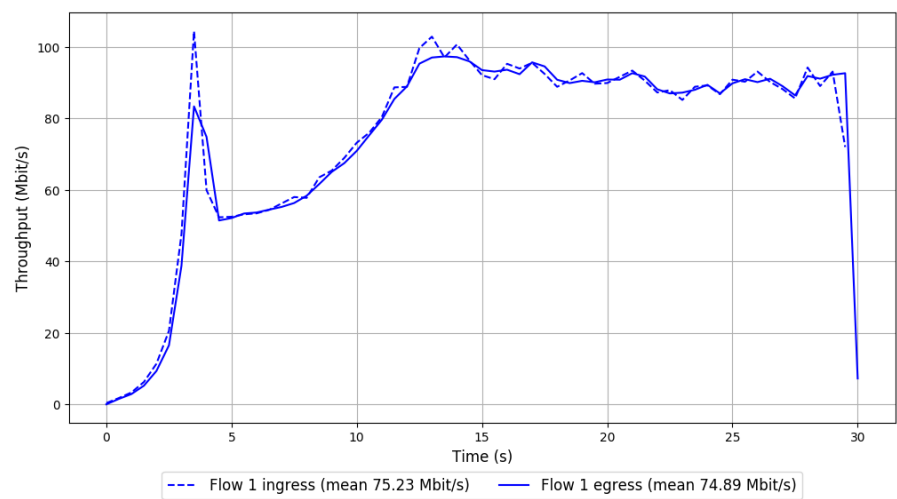
-- Flow 1:

Average throughput: 74.89 Mbit/s

95th percentile per-packet one-way delay: 162.349 ms

Loss rate: 0.45%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-04-10 15:37:29

End at: 2018-04-10 15:37:59

Local clock offset: 18.293 ms

Remote clock offset: 2.053 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.20 Mbit/s

95th percentile per-packet one-way delay: 160.888 ms

Loss rate: 0.41%

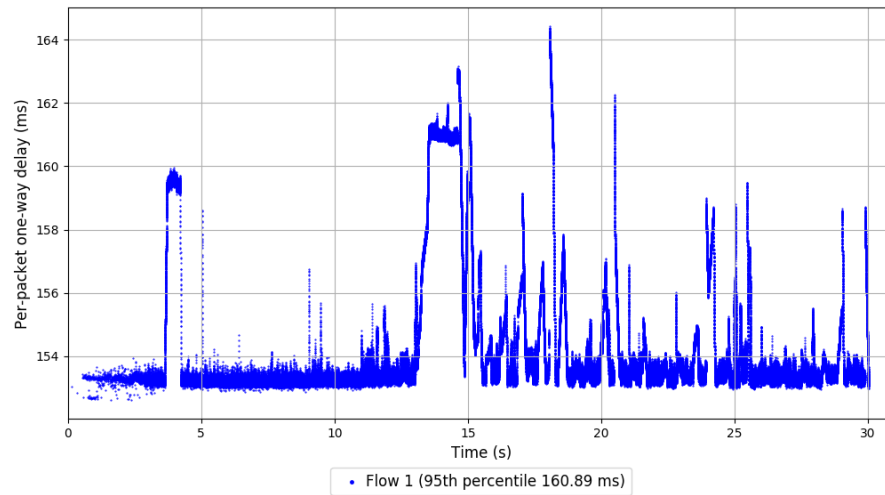
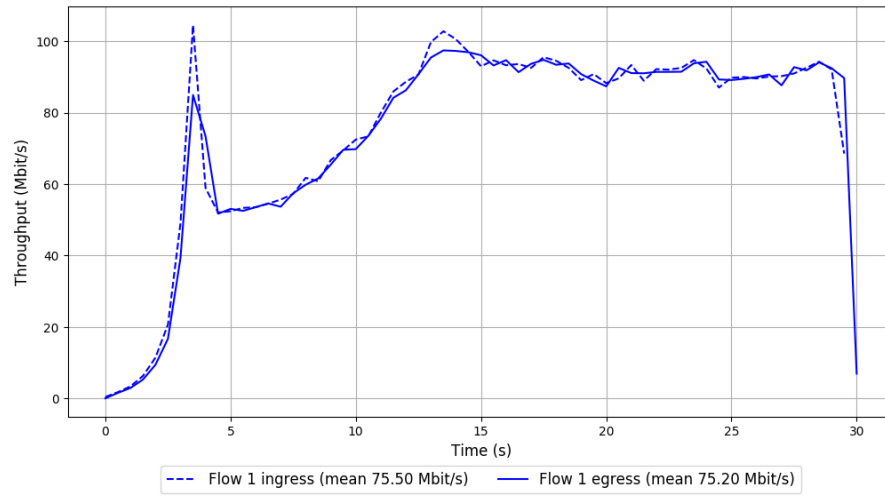
-- Flow 1:

Average throughput: 75.20 Mbit/s

95th percentile per-packet one-way delay: 160.888 ms

Loss rate: 0.41%

Run 6: Report of Vivace-latency — Data Link

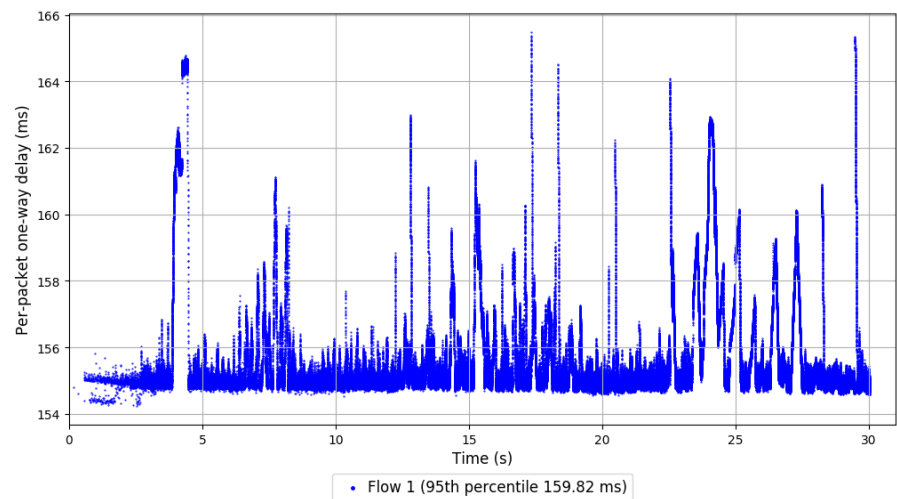
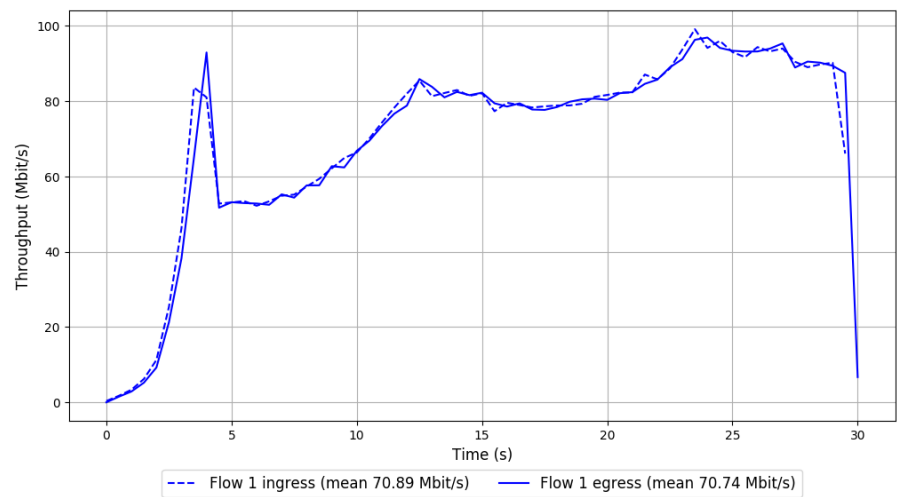


Run 7: Statistics of Vivace-latency

Start at: 2018-04-10 16:00:06
End at: 2018-04-10 16:00:36
Local clock offset: 17.068 ms
Remote clock offset: 16.533 ms

Below is generated by plot.py at 2018-04-10 17:49:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 70.74 Mbit/s
95th percentile per-packet one-way delay: 159.816 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 70.74 Mbit/s
95th percentile per-packet one-way delay: 159.816 ms
Loss rate: 0.21%

Run 7: Report of Vivace-latency — Data Link

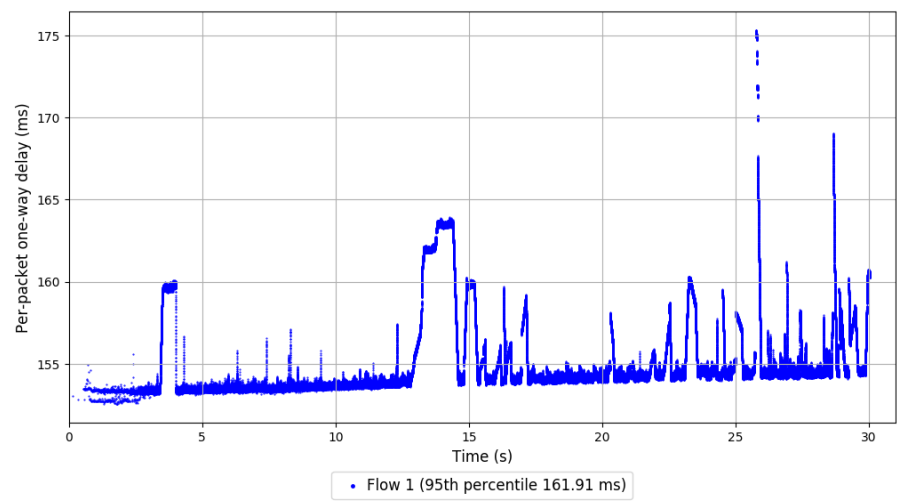
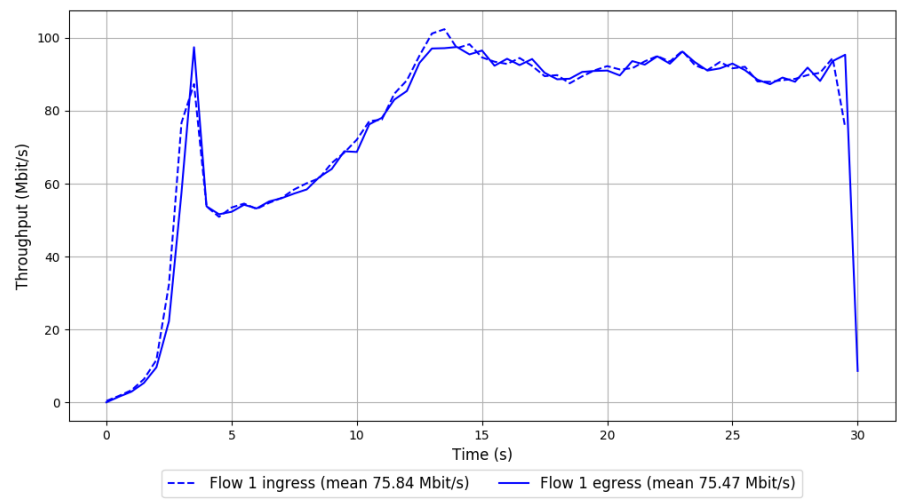


Run 8: Statistics of Vivace-latency

Start at: 2018-04-10 16:23:38
End at: 2018-04-10 16:24:08
Local clock offset: 17.886 ms
Remote clock offset: 22.879 ms

Below is generated by plot.py at 2018-04-10 17:49:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 75.47 Mbit/s
95th percentile per-packet one-way delay: 161.906 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 75.47 Mbit/s
95th percentile per-packet one-way delay: 161.906 ms
Loss rate: 0.47%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-04-10 16:46:35

End at: 2018-04-10 16:47:05

Local clock offset: 9.681 ms

Remote clock offset: 4.47 ms

Below is generated by plot.py at 2018-04-10 17:49:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.13 Mbit/s

95th percentile per-packet one-way delay: 159.783 ms

Loss rate: 0.49%

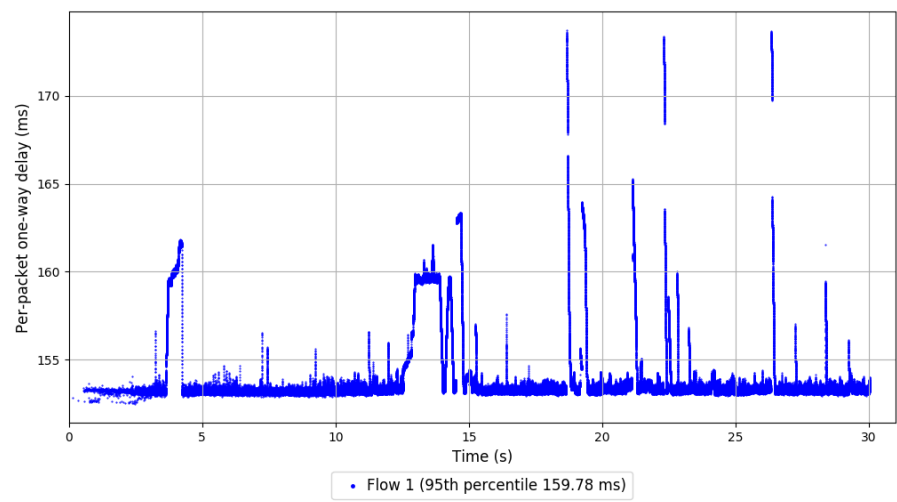
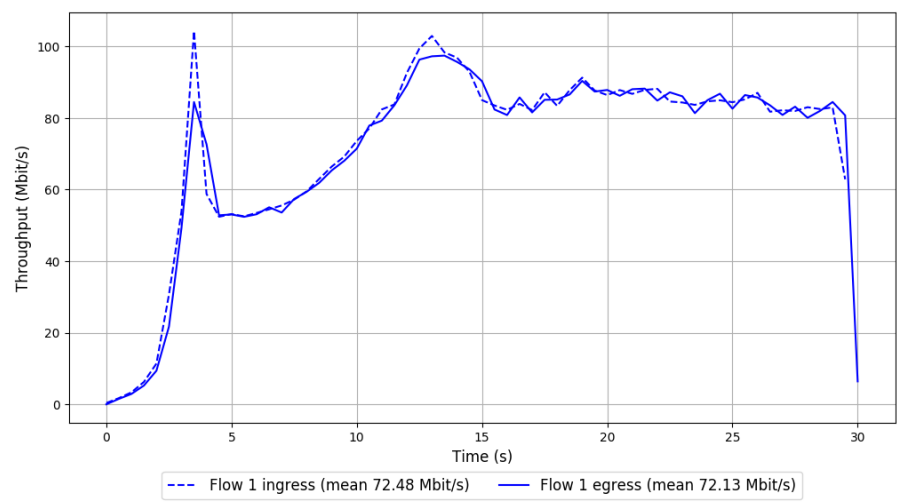
-- Flow 1:

Average throughput: 72.13 Mbit/s

95th percentile per-packet one-way delay: 159.783 ms

Loss rate: 0.49%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-04-10 17:09:28

End at: 2018-04-10 17:09:58

Local clock offset: 2.399 ms

Remote clock offset: 0.226 ms

Below is generated by plot.py at 2018-04-10 17:49:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.36 Mbit/s

95th percentile per-packet one-way delay: 159.034 ms

Loss rate: 0.24%

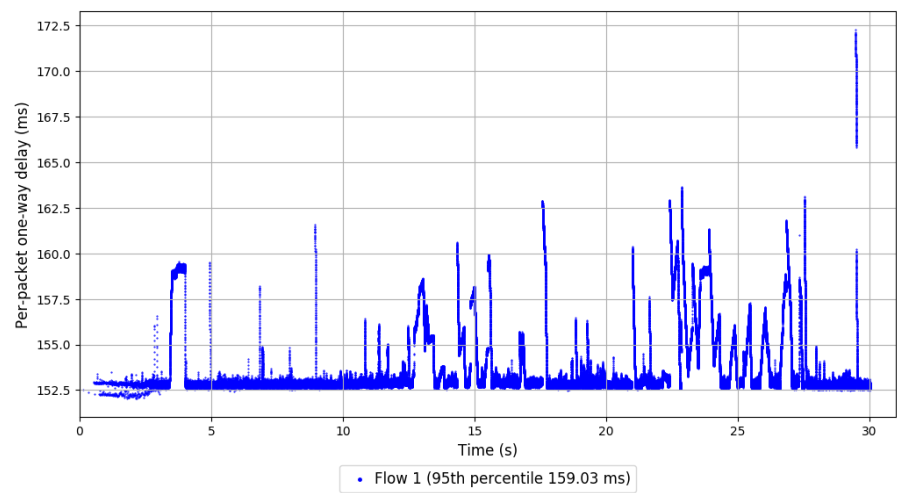
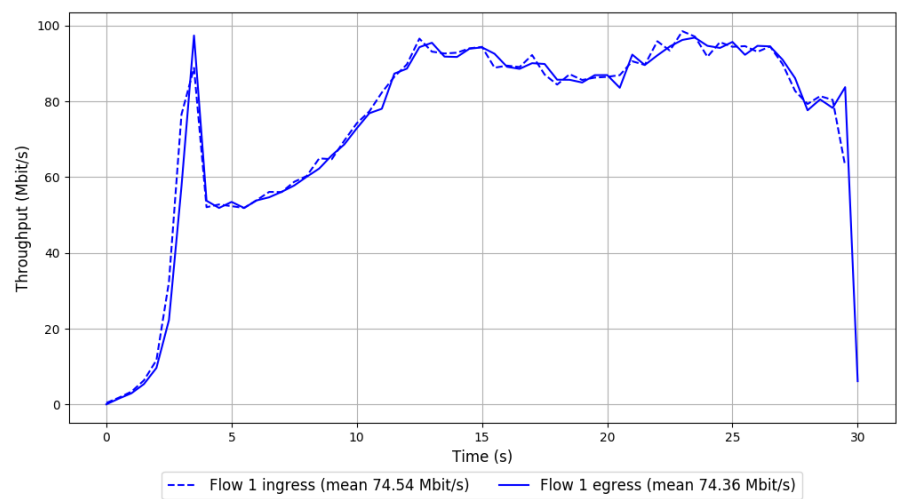
-- Flow 1:

Average throughput: 74.36 Mbit/s

95th percentile per-packet one-way delay: 159.034 ms

Loss rate: 0.24%

Run 10: Report of Vivace-latency — Data Link



Run 1: Statistics of Vivace-loss

Start at: 2018-04-10 13:27:33

End at: 2018-04-10 13:28:03

Local clock offset: 16.348 ms

Remote clock offset: 0.222 ms

Below is generated by plot.py at 2018-04-10 17:49:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.25 Mbit/s

95th percentile per-packet one-way delay: 167.291 ms

Loss rate: 0.84%

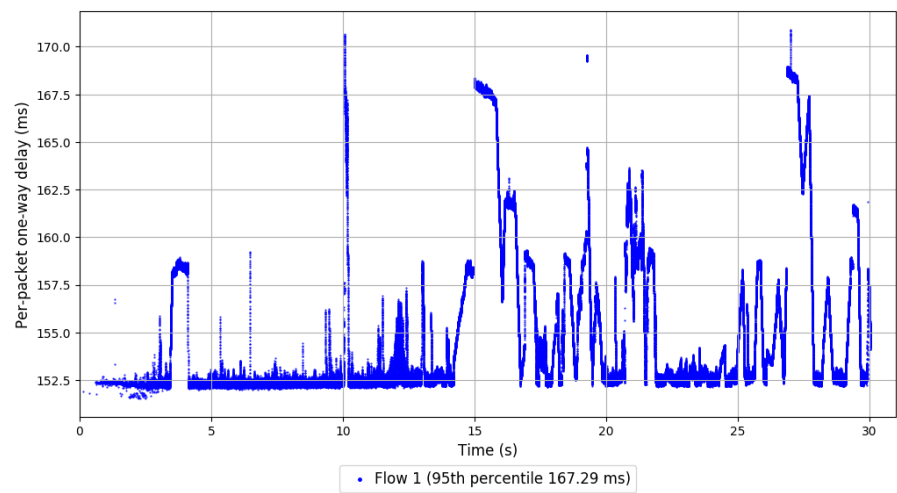
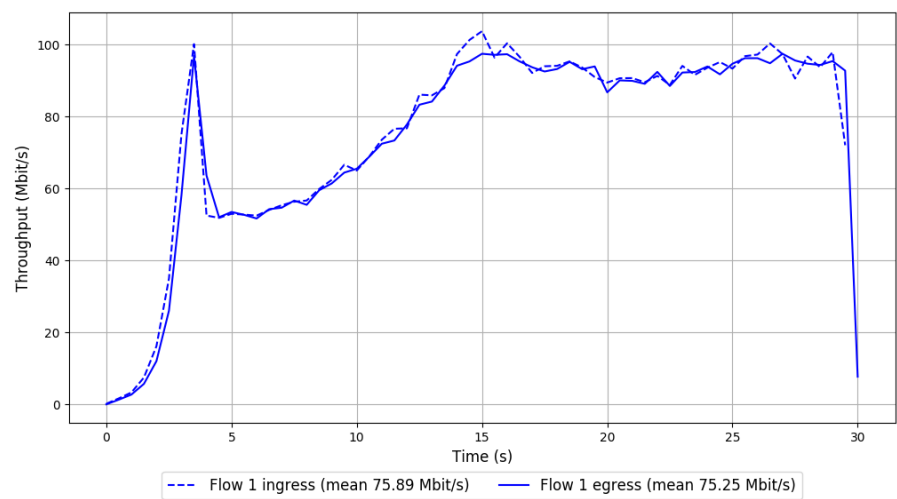
-- Flow 1:

Average throughput: 75.25 Mbit/s

95th percentile per-packet one-way delay: 167.291 ms

Loss rate: 0.84%

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-04-10 13:51:45

End at: 2018-04-10 13:52:16

Local clock offset: 16.16 ms

Remote clock offset: 23.204 ms

Below is generated by plot.py at 2018-04-10 17:49:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.27 Mbit/s

95th percentile per-packet one-way delay: 161.370 ms

Loss rate: 0.79%

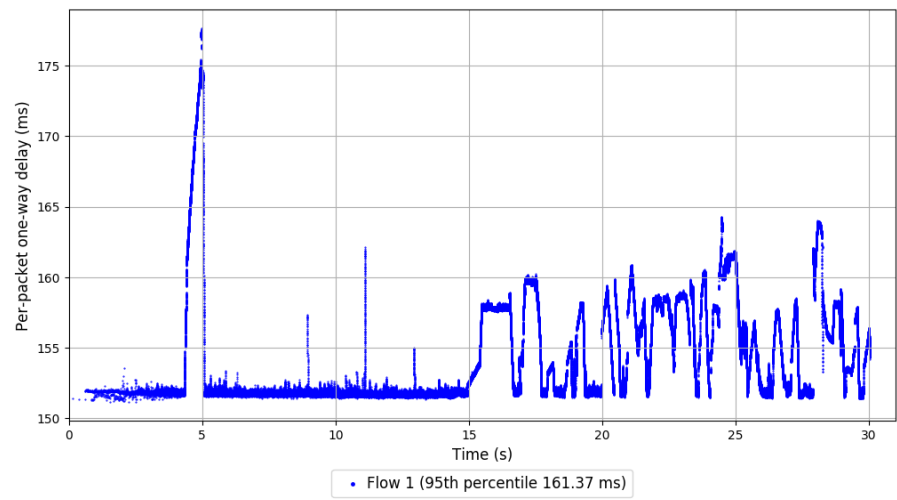
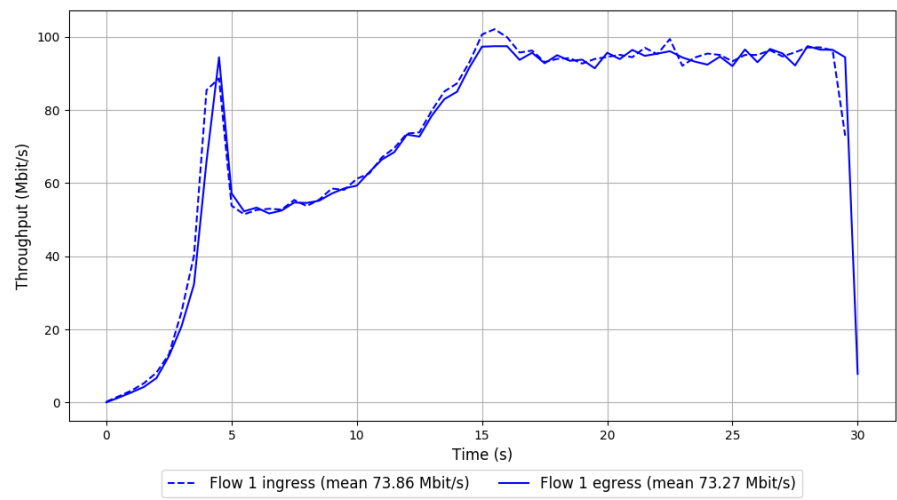
-- Flow 1:

Average throughput: 73.27 Mbit/s

95th percentile per-packet one-way delay: 161.370 ms

Loss rate: 0.79%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-04-10 14:15:41

End at: 2018-04-10 14:16:11

Local clock offset: 15.245 ms

Remote clock offset: 8.468 ms

Below is generated by plot.py at 2018-04-10 17:49:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.30 Mbit/s

95th percentile per-packet one-way delay: 177.410 ms

Loss rate: 1.58%

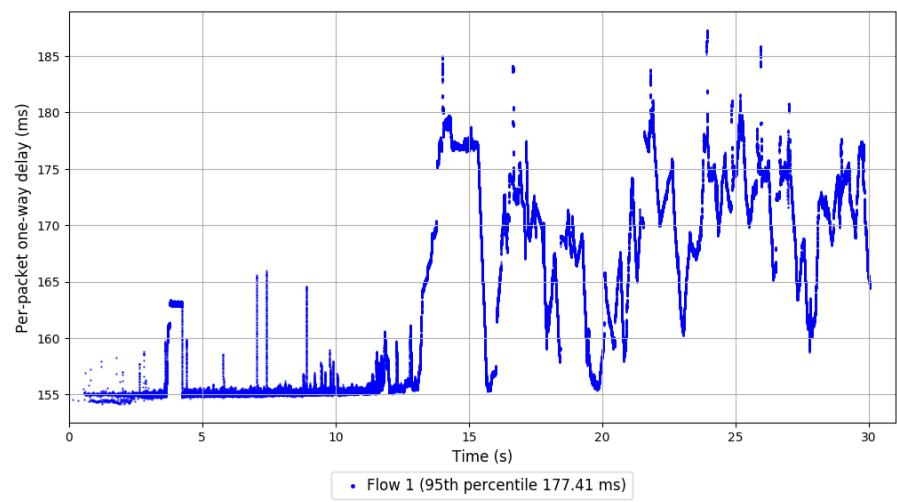
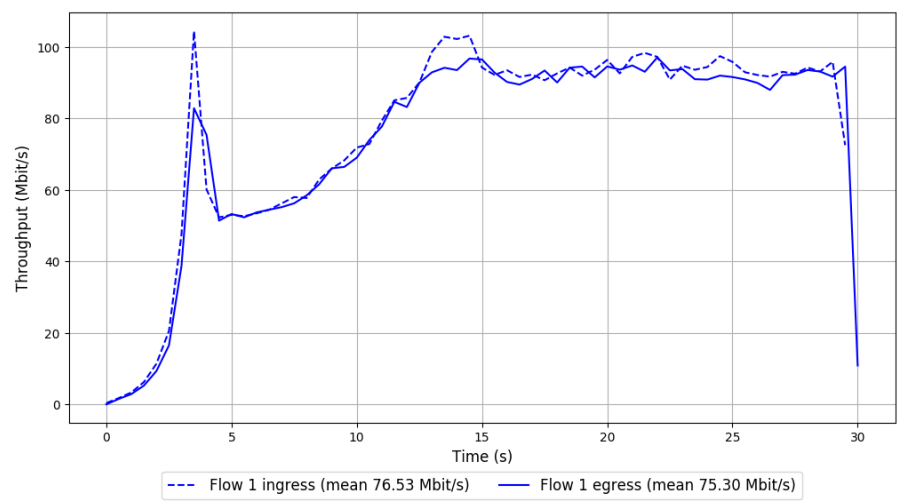
-- Flow 1:

Average throughput: 75.30 Mbit/s

95th percentile per-packet one-way delay: 177.410 ms

Loss rate: 1.58%

Run 3: Report of Vivace-loss — Data Link

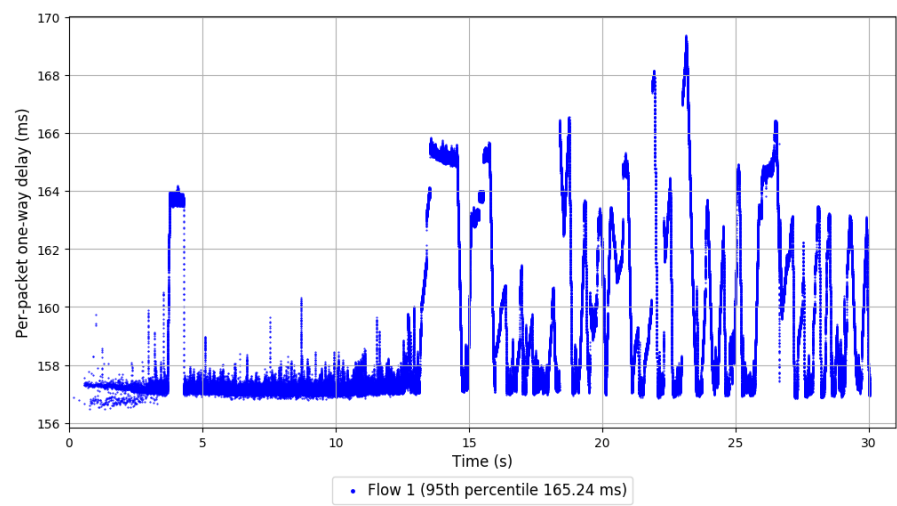
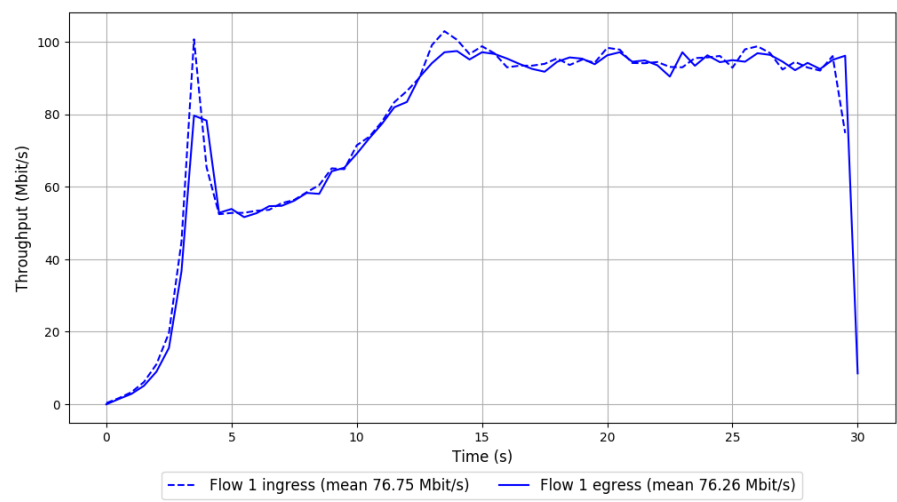


Run 4: Statistics of Vivace-loss

Start at: 2018-04-10 14:40:11
End at: 2018-04-10 14:40:41
Local clock offset: 15.514 ms
Remote clock offset: -1.965 ms

Below is generated by plot.py at 2018-04-10 17:50:01
Datalink statistics
-- Total of 1 flow:
Average throughput: 76.26 Mbit/s
95th percentile per-packet one-way delay: 165.239 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 76.26 Mbit/s
95th percentile per-packet one-way delay: 165.239 ms
Loss rate: 0.65%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-04-10 15:03:57

End at: 2018-04-10 15:04:27

Local clock offset: 25.557 ms

Remote clock offset: 2.04 ms

Below is generated by plot.py at 2018-04-10 17:50:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.59 Mbit/s

95th percentile per-packet one-way delay: 161.933 ms

Loss rate: 0.59%

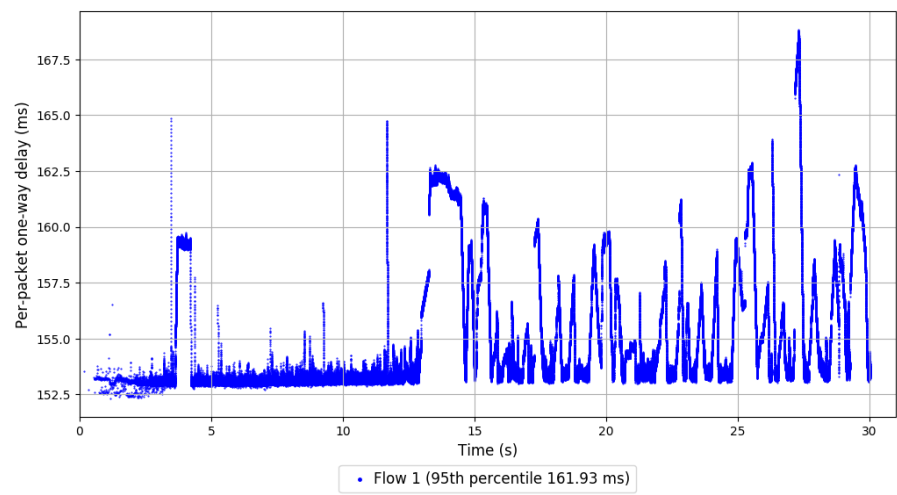
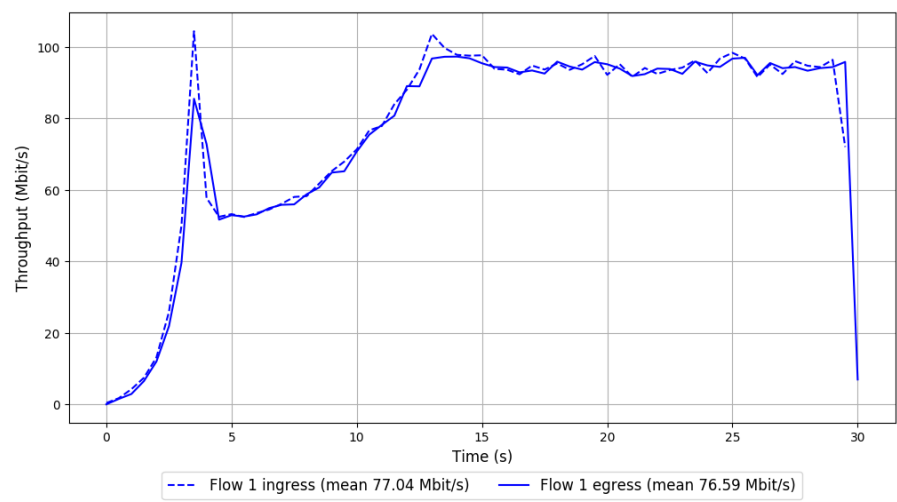
-- Flow 1:

Average throughput: 76.59 Mbit/s

95th percentile per-packet one-way delay: 161.933 ms

Loss rate: 0.59%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-04-10 15:28:44

End at: 2018-04-10 15:29:14

Local clock offset: 21.443 ms

Remote clock offset: 1.993 ms

Below is generated by plot.py at 2018-04-10 17:50:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.20 Mbit/s

95th percentile per-packet one-way delay: 173.863 ms

Loss rate: 0.98%

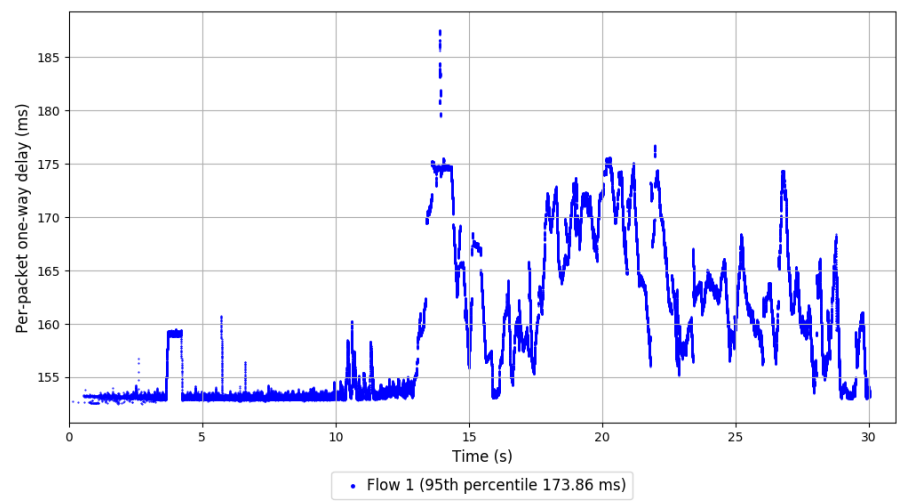
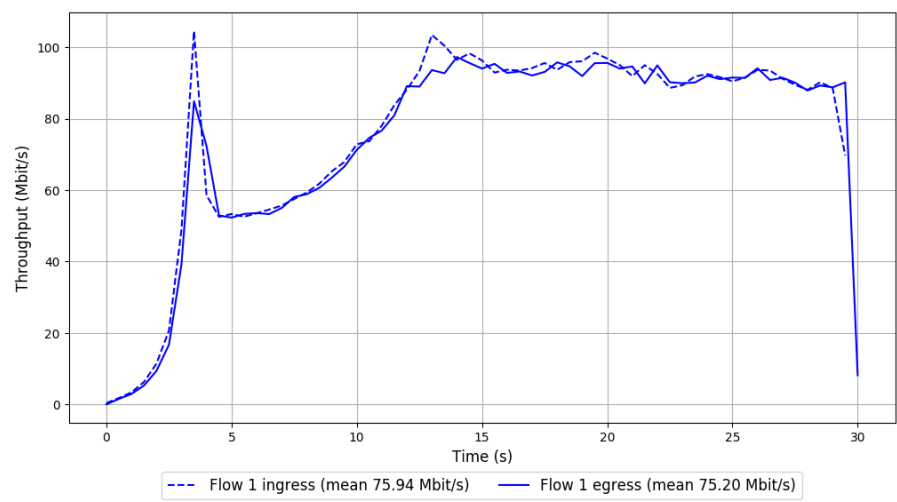
-- Flow 1:

Average throughput: 75.20 Mbit/s

95th percentile per-packet one-way delay: 173.863 ms

Loss rate: 0.98%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-04-10 15:51:24

End at: 2018-04-10 15:51:54

Local clock offset: 15.728 ms

Remote clock offset: 7.521 ms

Below is generated by plot.py at 2018-04-10 17:50:27

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.87 Mbit/s

95th percentile per-packet one-way delay: 163.257 ms

Loss rate: 0.79%

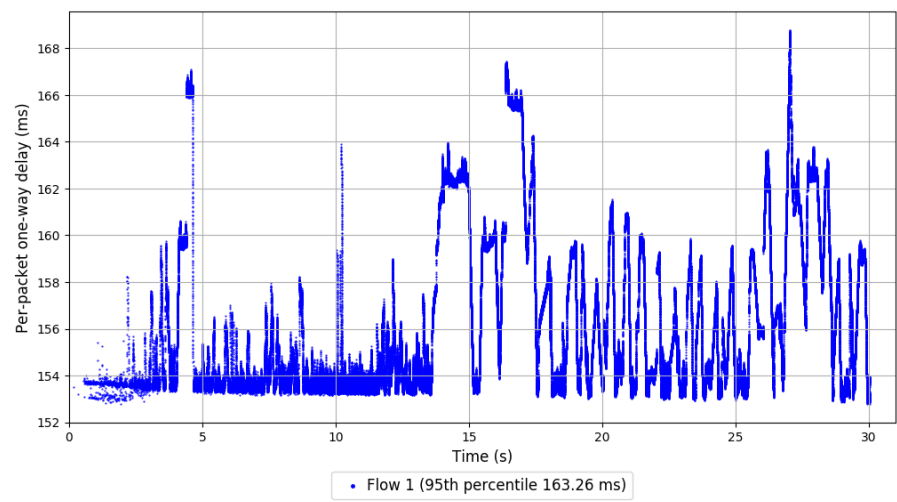
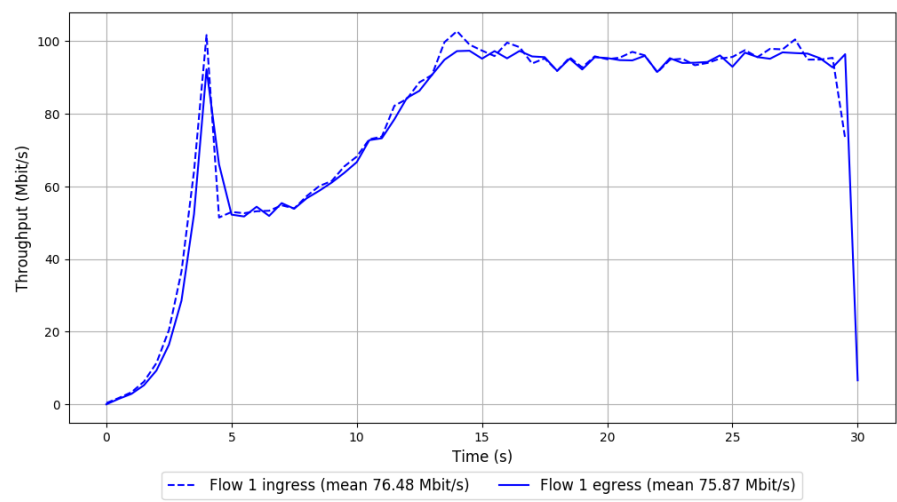
-- Flow 1:

Average throughput: 75.87 Mbit/s

95th percentile per-packet one-way delay: 163.257 ms

Loss rate: 0.79%

Run 7: Report of Vivace-loss — Data Link

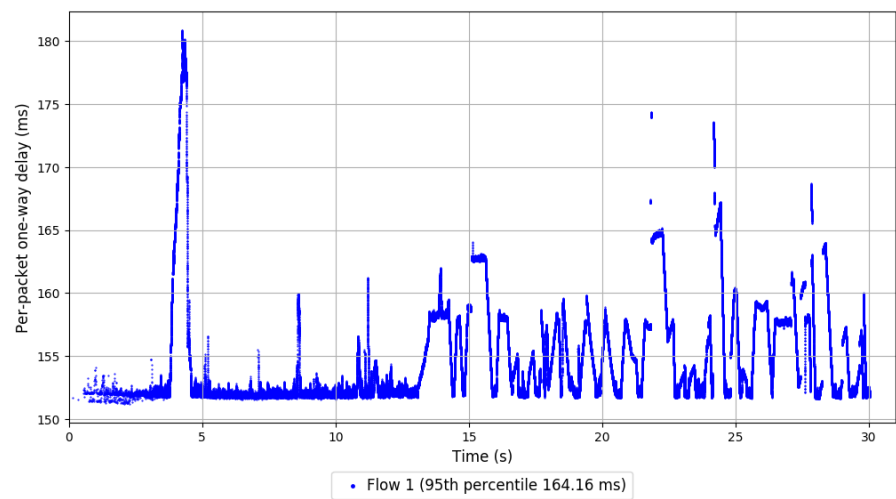
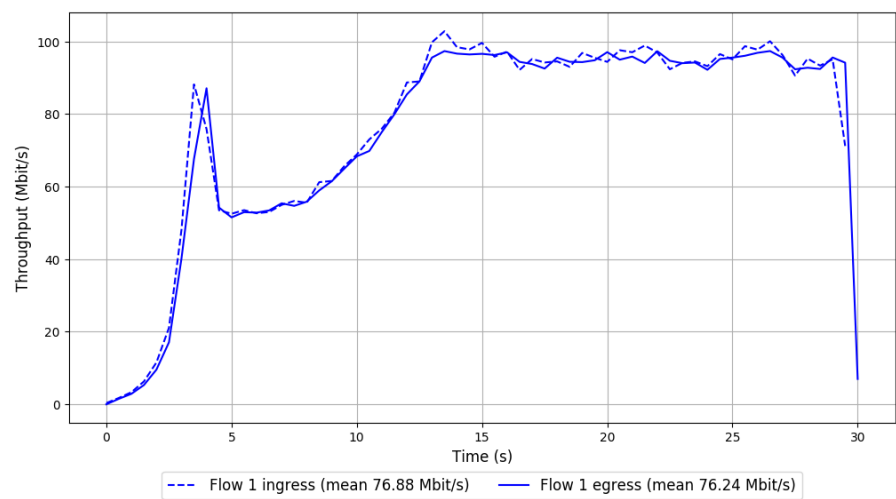


Run 8: Statistics of Vivace-loss

Start at: 2018-04-10 16:13:59
End at: 2018-04-10 16:14:29
Local clock offset: 18.105 ms
Remote clock offset: 23.639 ms

Below is generated by plot.py at 2018-04-10 17:50:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 76.24 Mbit/s
95th percentile per-packet one-way delay: 164.163 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 76.24 Mbit/s
95th percentile per-packet one-way delay: 164.163 ms
Loss rate: 0.83%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-04-10 16:37:48

End at: 2018-04-10 16:38:18

Local clock offset: 12.373 ms

Remote clock offset: 6.999 ms

Below is generated by plot.py at 2018-04-10 17:51:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.84 Mbit/s

95th percentile per-packet one-way delay: 166.251 ms

Loss rate: 0.65%

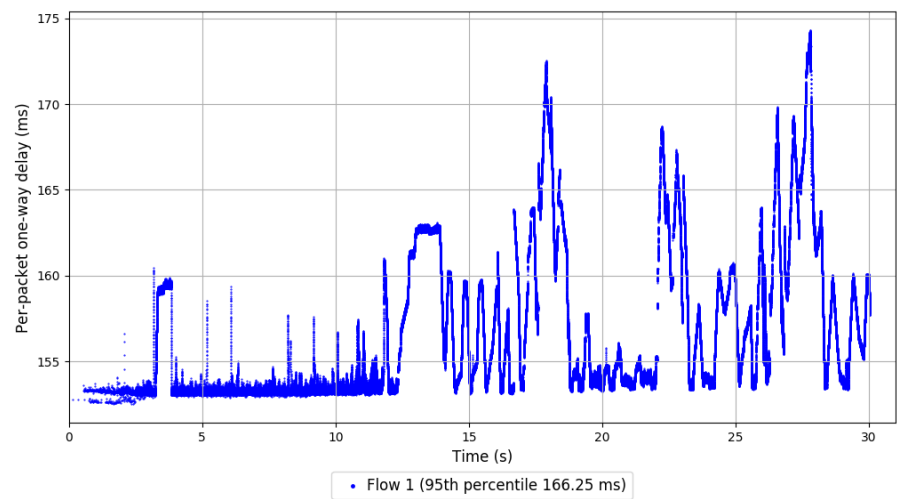
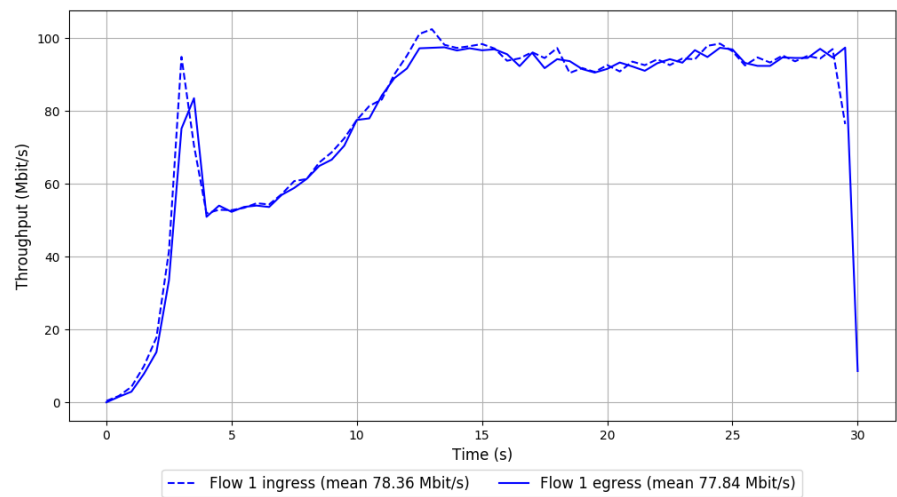
-- Flow 1:

Average throughput: 77.84 Mbit/s

95th percentile per-packet one-way delay: 166.251 ms

Loss rate: 0.65%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-04-10 17:00:45

End at: 2018-04-10 17:01:15

Local clock offset: 7.042 ms

Remote clock offset: 1.934 ms

Below is generated by plot.py at 2018-04-10 17:51:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.88 Mbit/s

95th percentile per-packet one-way delay: 161.408 ms

Loss rate: 0.39%

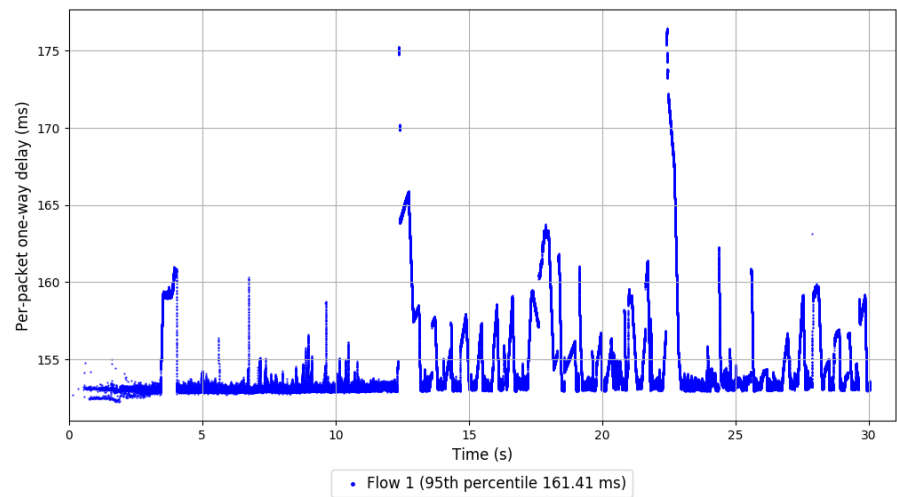
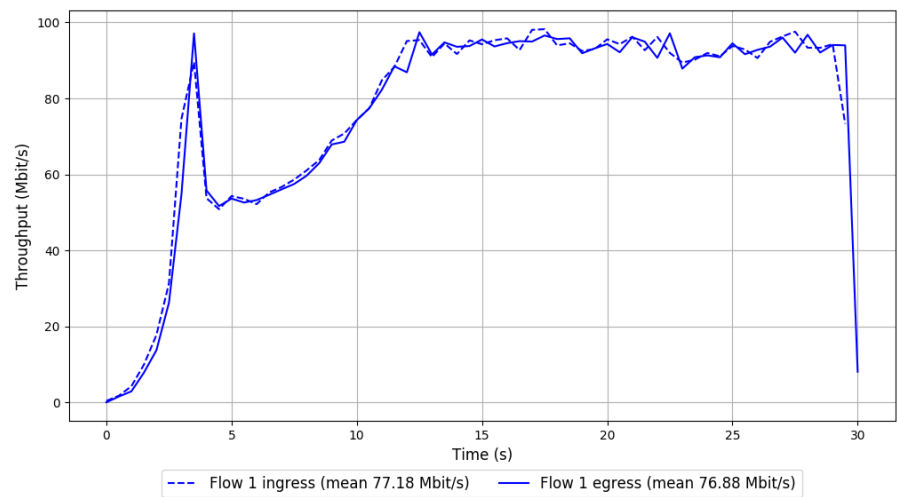
-- Flow 1:

Average throughput: 76.88 Mbit/s

95th percentile per-packet one-way delay: 161.408 ms

Loss rate: 0.39%

Run 10: Report of Vivace-loss — Data Link



Run 1: Statistics of Vivace-LTE

Start at: 2018-04-10 13:24:53

End at: 2018-04-10 13:25:23

Local clock offset: 16.834 ms

Remote clock offset: 0.548 ms

Below is generated by plot.py at 2018-04-10 17:51:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.88 Mbit/s

95th percentile per-packet one-way delay: 164.610 ms

Loss rate: 0.67%

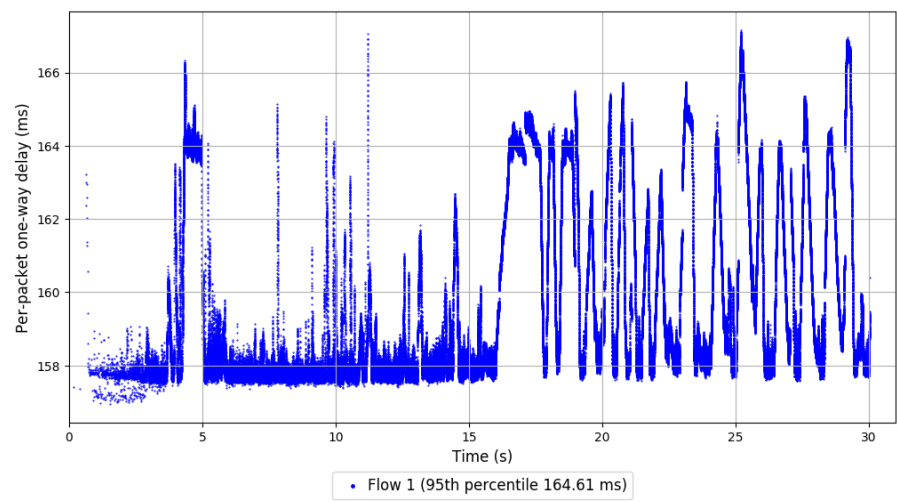
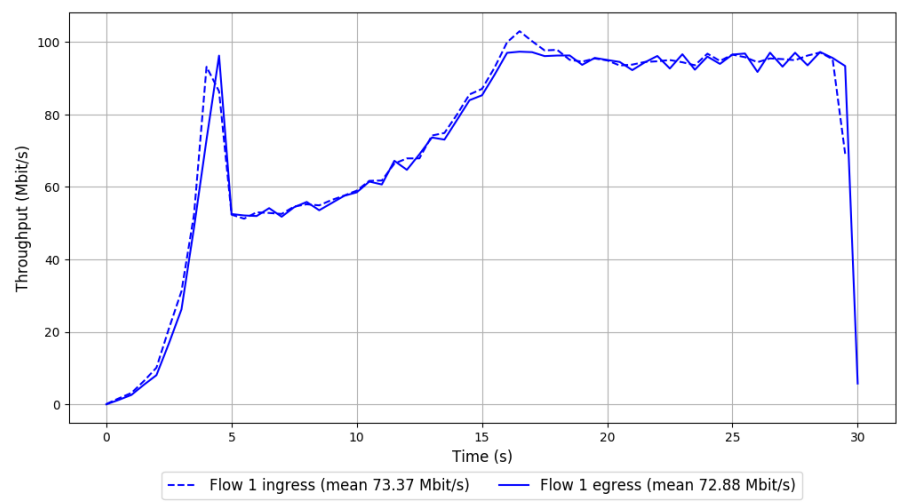
-- Flow 1:

Average throughput: 72.88 Mbit/s

95th percentile per-packet one-way delay: 164.610 ms

Loss rate: 0.67%

Run 1: Report of Vivace-LTE — Data Link

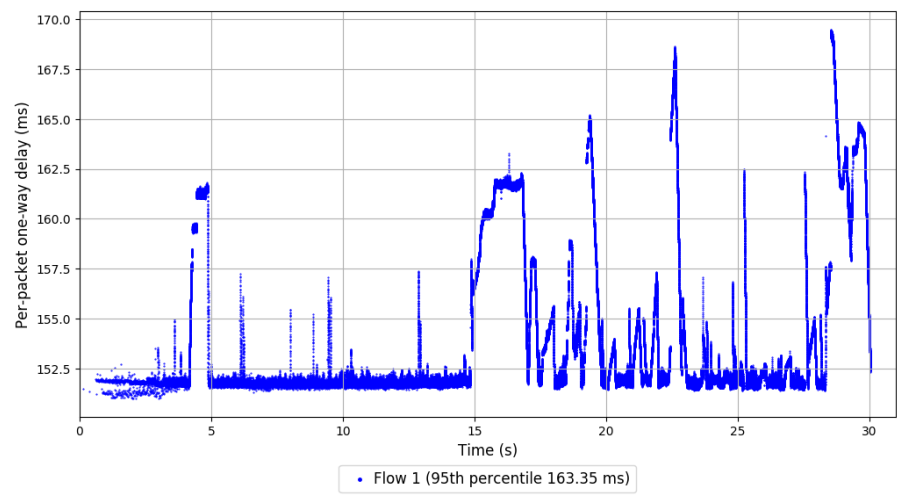
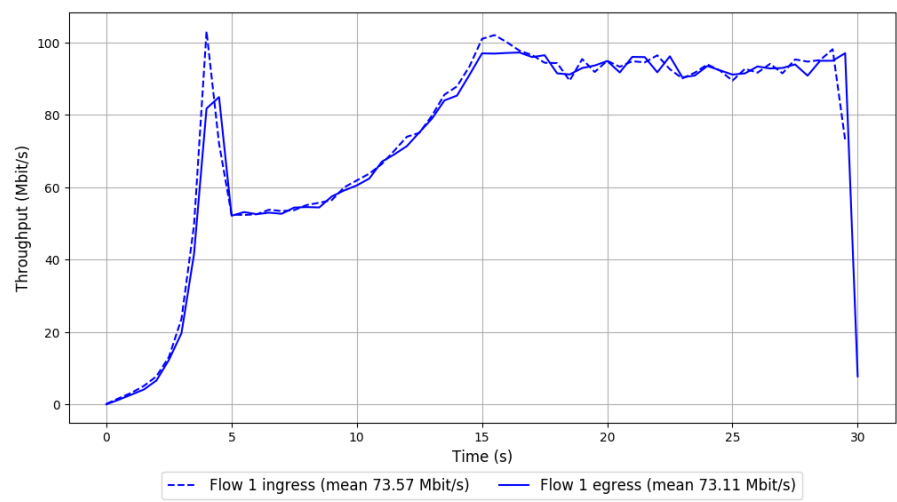


Run 2: Statistics of Vivace-LTE

Start at: 2018-04-10 13:49:02
End at: 2018-04-10 13:49:32
Local clock offset: 16.222 ms
Remote clock offset: 21.627 ms

Below is generated by plot.py at 2018-04-10 17:51:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 73.11 Mbit/s
95th percentile per-packet one-way delay: 163.355 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 73.11 Mbit/s
95th percentile per-packet one-way delay: 163.355 ms
Loss rate: 0.63%

Run 2: Report of Vivace-LTE — Data Link

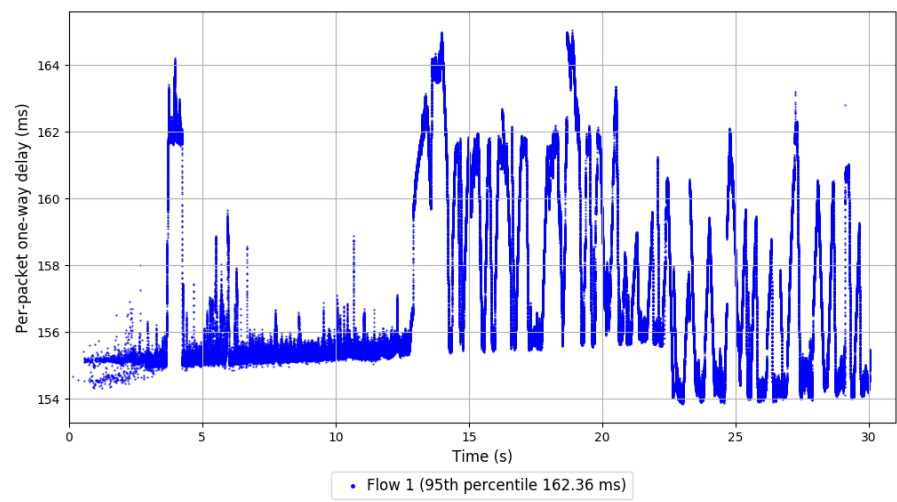
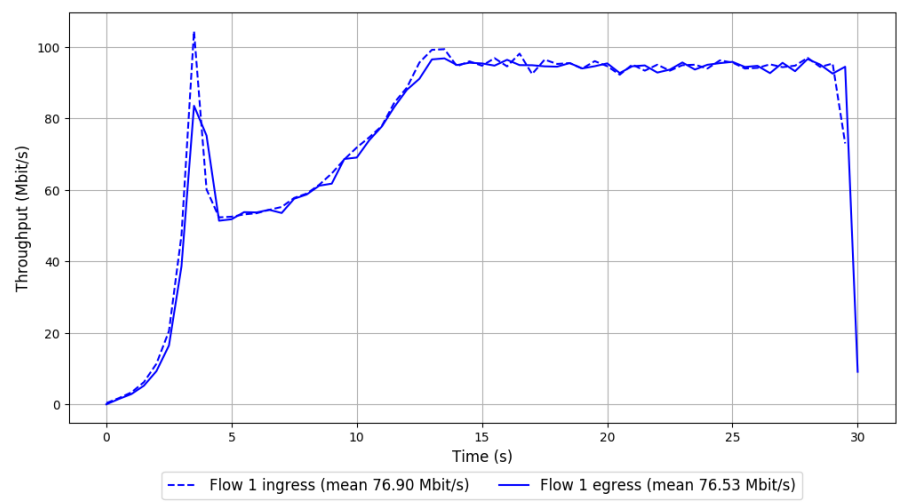


Run 3: Statistics of Vivace-LTE

Start at: 2018-04-10 14:13:00
End at: 2018-04-10 14:13:30
Local clock offset: 14.551 ms
Remote clock offset: 11.788 ms

Below is generated by plot.py at 2018-04-10 17:51:17
Datalink statistics
-- Total of 1 flow:
Average throughput: 76.53 Mbit/s
95th percentile per-packet one-way delay: 162.362 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 76.53 Mbit/s
95th percentile per-packet one-way delay: 162.362 ms
Loss rate: 0.47%

Run 3: Report of Vivace-LTE — Data Link

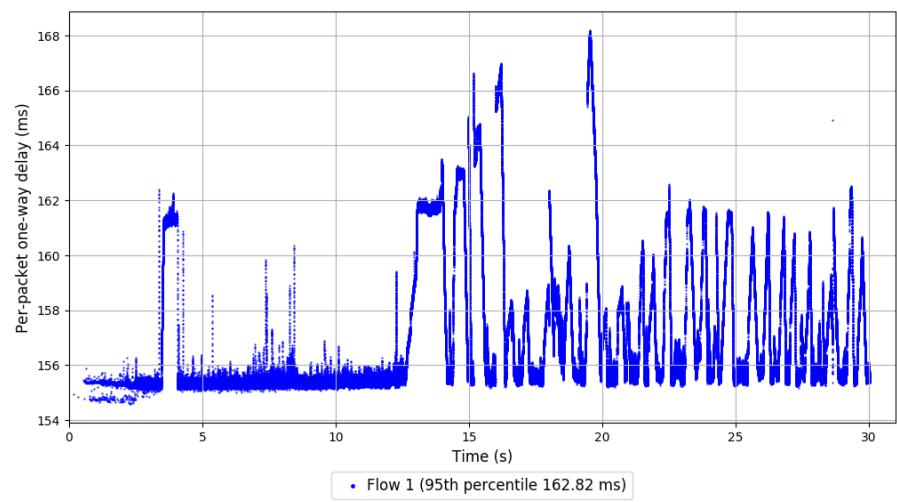
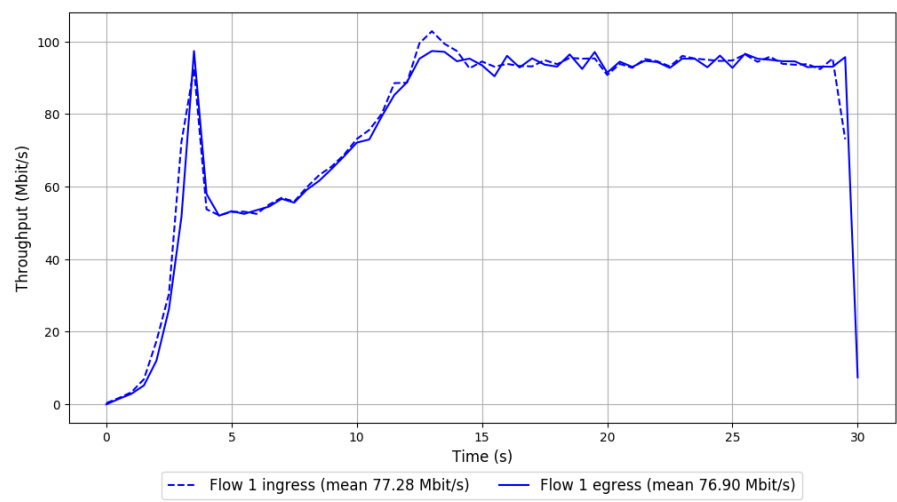


Run 4: Statistics of Vivace-LTE

Start at: 2018-04-10 14:37:30
End at: 2018-04-10 14:38:00
Local clock offset: 15.652 ms
Remote clock offset: -1.899 ms

Below is generated by plot.py at 2018-04-10 17:51:36
Datalink statistics
-- Total of 1 flow:
Average throughput: 76.90 Mbit/s
95th percentile per-packet one-way delay: 162.819 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 76.90 Mbit/s
95th percentile per-packet one-way delay: 162.819 ms
Loss rate: 0.50%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-04-10 15:01:21

End at: 2018-04-10 15:01:51

Local clock offset: 24.768 ms

Remote clock offset: 1.931 ms

Below is generated by plot.py at 2018-04-10 17:51:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.40 Mbit/s

95th percentile per-packet one-way delay: 161.455 ms

Loss rate: 0.60%

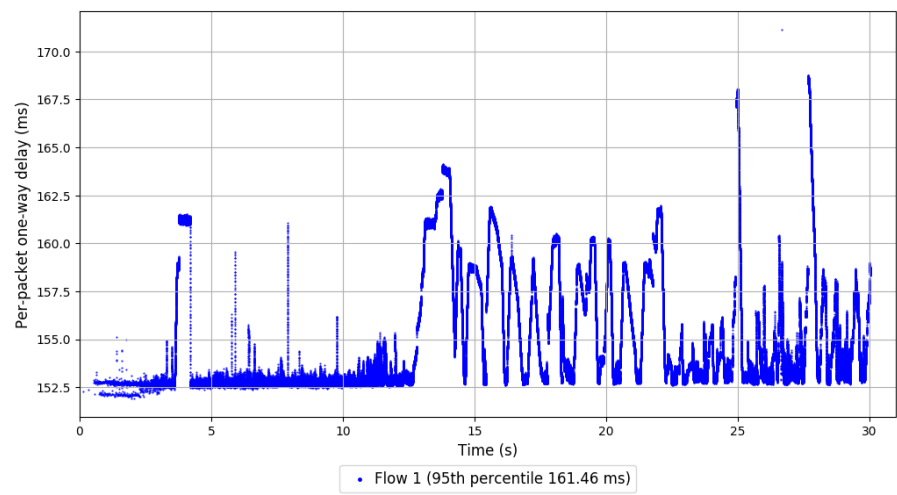
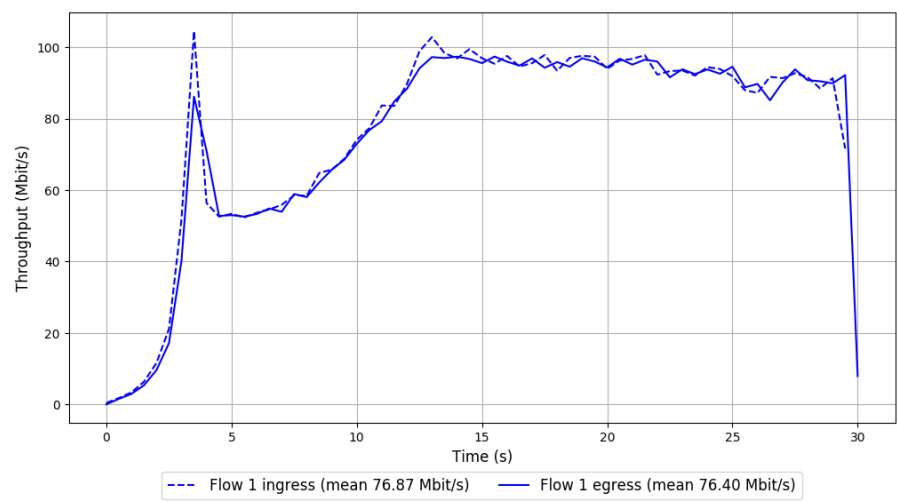
-- Flow 1:

Average throughput: 76.40 Mbit/s

95th percentile per-packet one-way delay: 161.455 ms

Loss rate: 0.60%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-04-10 15:26:11

End at: 2018-04-10 15:26:41

Local clock offset: 23.016 ms

Remote clock offset: 2.072 ms

Below is generated by plot.py at 2018-04-10 17:52:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.71 Mbit/s

95th percentile per-packet one-way delay: 158.721 ms

Loss rate: 0.75%

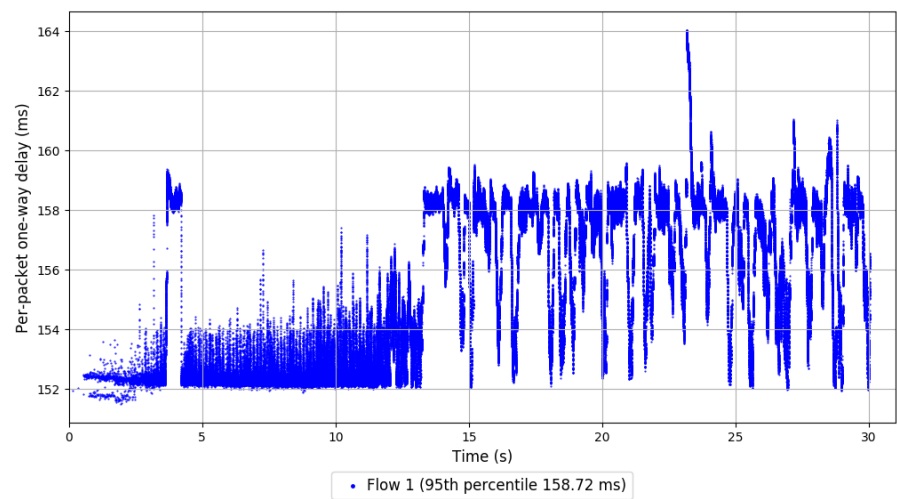
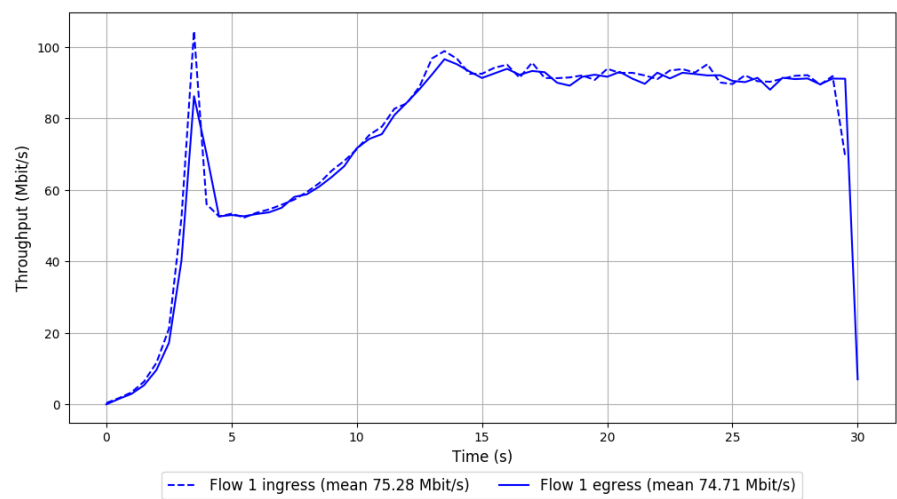
-- Flow 1:

Average throughput: 74.71 Mbit/s

95th percentile per-packet one-way delay: 158.721 ms

Loss rate: 0.75%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-04-10 15:48:52

End at: 2018-04-10 15:49:22

Local clock offset: 16.116 ms

Remote clock offset: 3.536 ms

Below is generated by plot.py at 2018-04-10 17:52:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.93 Mbit/s

95th percentile per-packet one-way delay: 160.521 ms

Loss rate: 0.44%

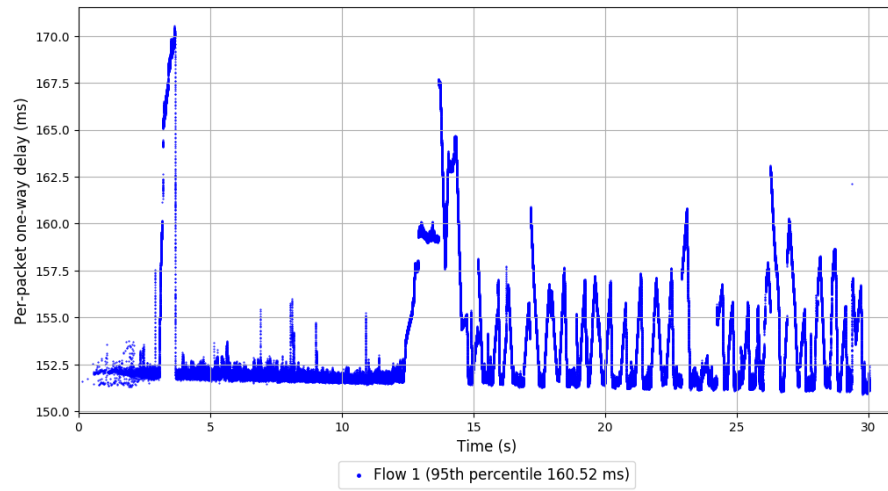
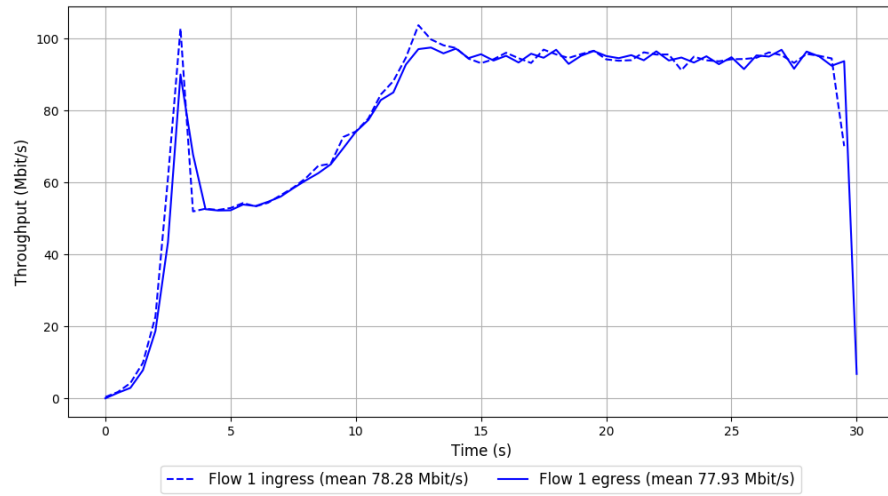
-- Flow 1:

Average throughput: 77.93 Mbit/s

95th percentile per-packet one-way delay: 160.521 ms

Loss rate: 0.44%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-04-10 16:11:27

End at: 2018-04-10 16:11:57

Local clock offset: 18.022 ms

Remote clock offset: 22.61 ms

Below is generated by plot.py at 2018-04-10 17:52:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.04 Mbit/s

95th percentile per-packet one-way delay: 160.519 ms

Loss rate: 0.25%

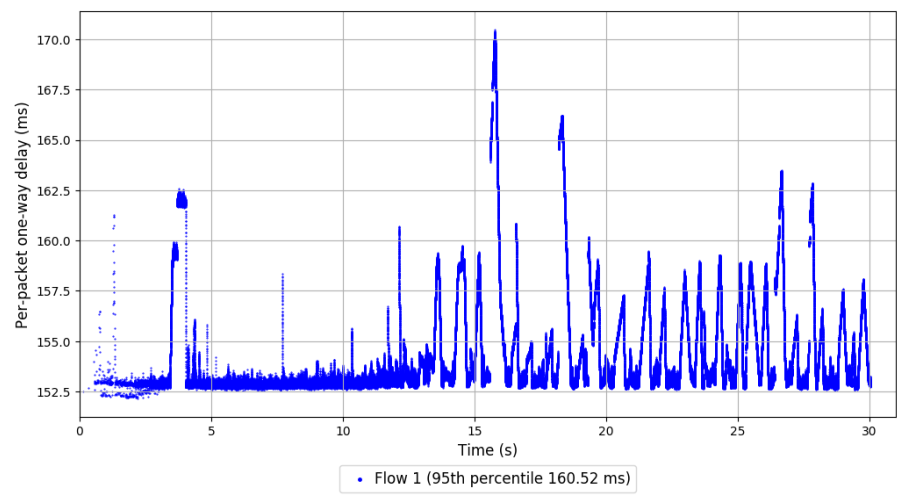
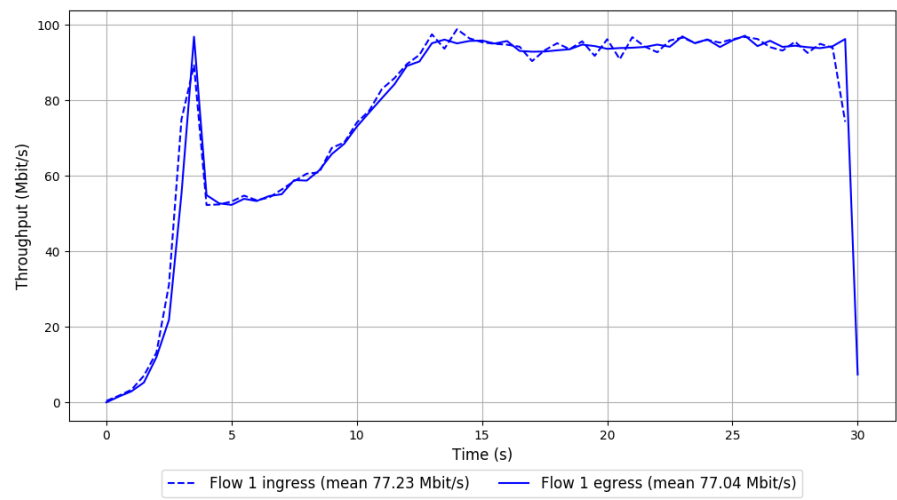
-- Flow 1:

Average throughput: 77.04 Mbit/s

95th percentile per-packet one-way delay: 160.519 ms

Loss rate: 0.25%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-04-10 16:35:16

End at: 2018-04-10 16:35:46

Local clock offset: 13.234 ms

Remote clock offset: 8.223 ms

Below is generated by plot.py at 2018-04-10 17:52:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 71.04 Mbit/s

95th percentile per-packet one-way delay: 163.067 ms

Loss rate: 0.17%

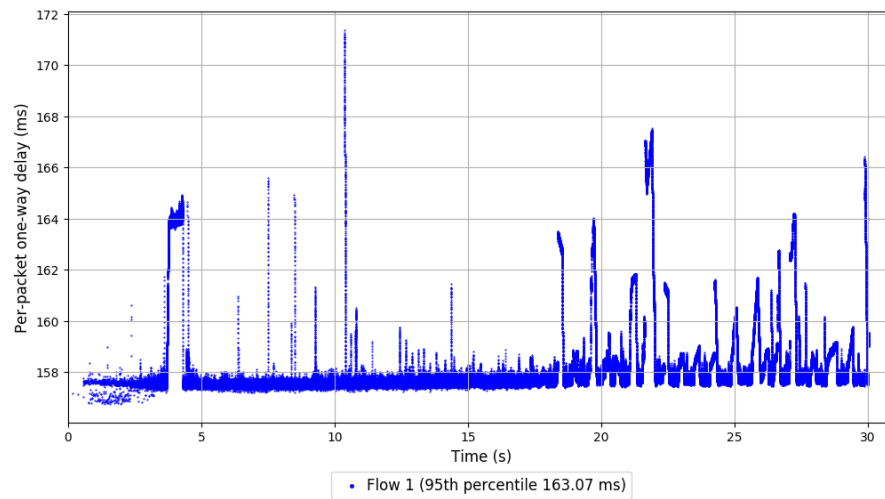
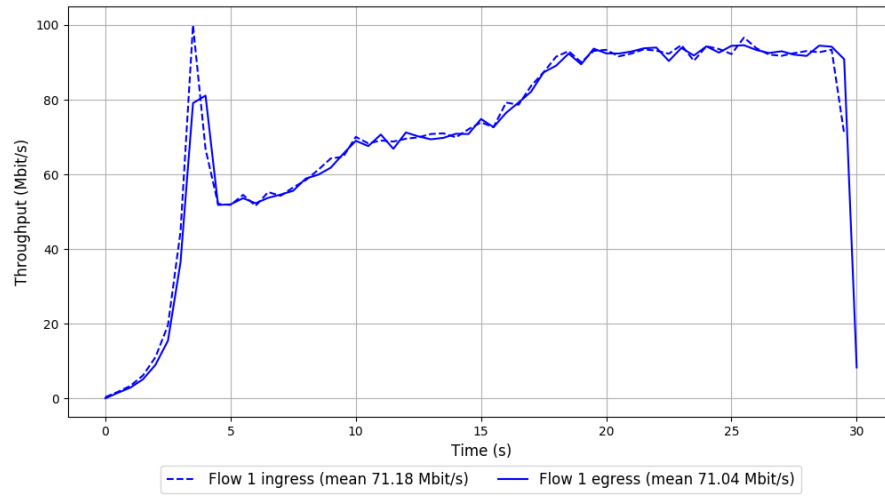
-- Flow 1:

Average throughput: 71.04 Mbit/s

95th percentile per-packet one-way delay: 163.067 ms

Loss rate: 0.17%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-04-10 16:58:12

End at: 2018-04-10 16:58:42

Local clock offset: 7.408 ms

Remote clock offset: 2.659 ms

Below is generated by plot.py at 2018-04-10 17:52:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 76.99 Mbit/s

95th percentile per-packet one-way delay: 161.606 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 76.99 Mbit/s

95th percentile per-packet one-way delay: 161.606 ms

Loss rate: 0.34%

Run 10: Report of Vivace-LTE — Data Link

