

Pantheon Report

Generated at 2018-04-25 00:52:53 (UTC).

Data path: Colombia Ethernet (*remote*) → AWS Brazil 2 Ethernet (*local*).

Repeated the test of 16 congestion control schemes 10 times.

Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

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**).

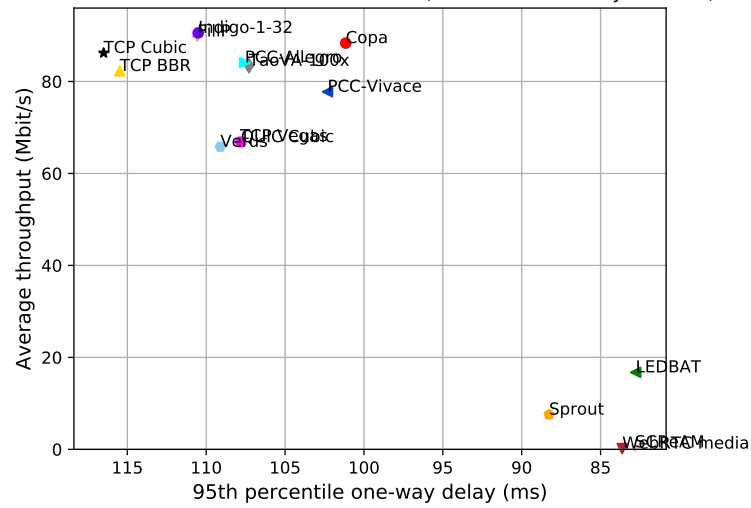
NTP offsets were measured against **gps.ntp.br** and have been applied to correct the timestamps in logs.

Git summary:

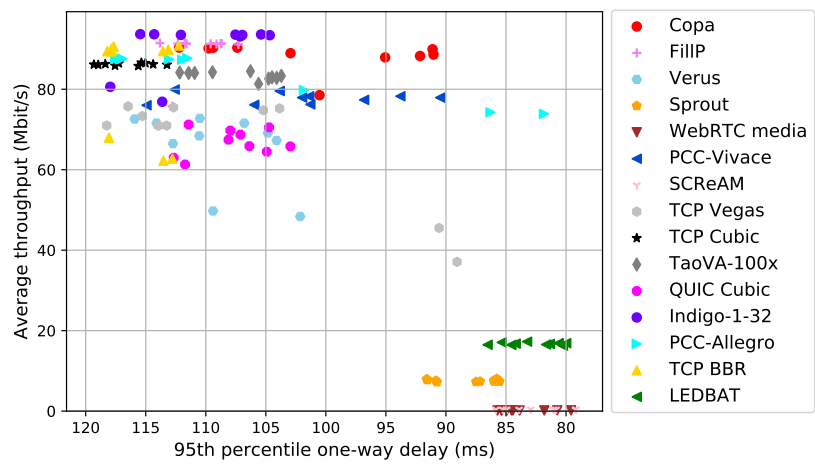
```
branch: master @ 114e807ac1bad7b85168ceb1f8a969063ee6c12c
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
third_party/genericCC @ d223989828276fa83a807da6e0341dc0c7b89aec
third_party/indigo @ 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/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
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 Colombia Ethernet to AWS Brazil 2 Ethernet, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from Colombia Ethernet to AWS Brazil 2 Ethernet, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows



[illegible]

Run 1: Statistics of TCP BBR

Start at: 2018-04-24 17:17:43

End at: 2018-04-24 17:18:13

Local clock offset: -5.124 ms

Remote clock offset: 2.519 ms

Below is generated by plot.py at 2018-04-25 00:32:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.39 Mbit/s

95th percentile per-packet one-way delay: 117.840 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 54.34 Mbit/s

95th percentile per-packet one-way delay: 117.354 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 38.20 Mbit/s

95th percentile per-packet one-way delay: 118.013 ms

Loss rate: 0.00%

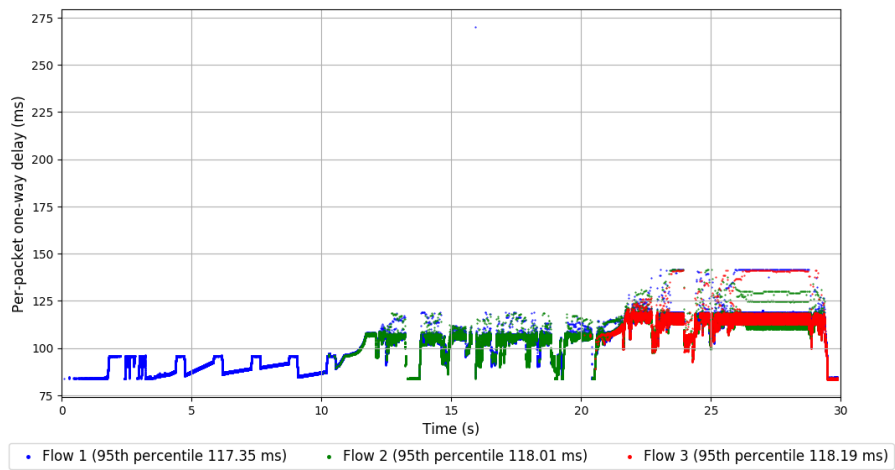
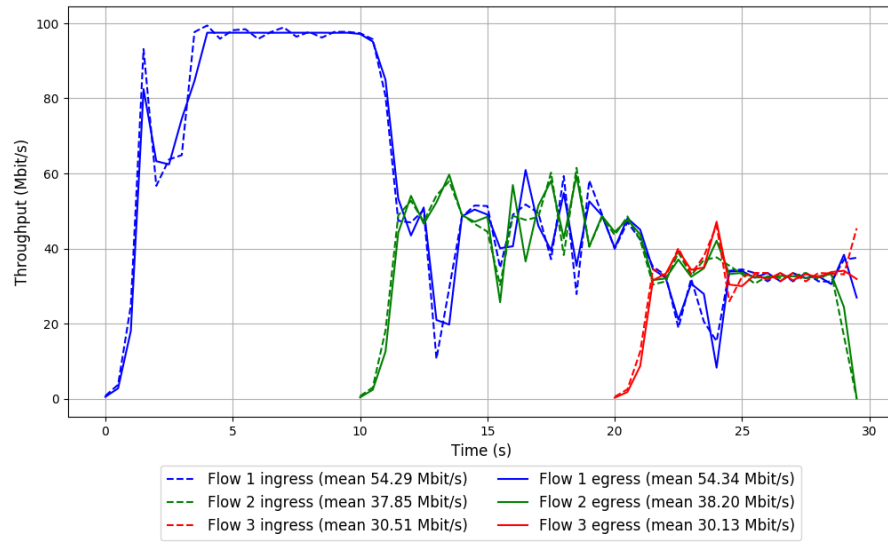
-- Flow 3:

Average throughput: 30.13 Mbit/s

95th percentile per-packet one-way delay: 118.194 ms

Loss rate: 3.30%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-04-24 17:40:16

End at: 2018-04-24 17:40:46

Local clock offset: -4.835 ms

Remote clock offset: 6.894 ms

Below is generated by plot.py at 2018-04-25 00:32:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.46 Mbit/s

95th percentile per-packet one-way delay: 113.561 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 54.53 Mbit/s

95th percentile per-packet one-way delay: 112.539 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 38.34 Mbit/s

95th percentile per-packet one-way delay: 113.502 ms

Loss rate: 0.88%

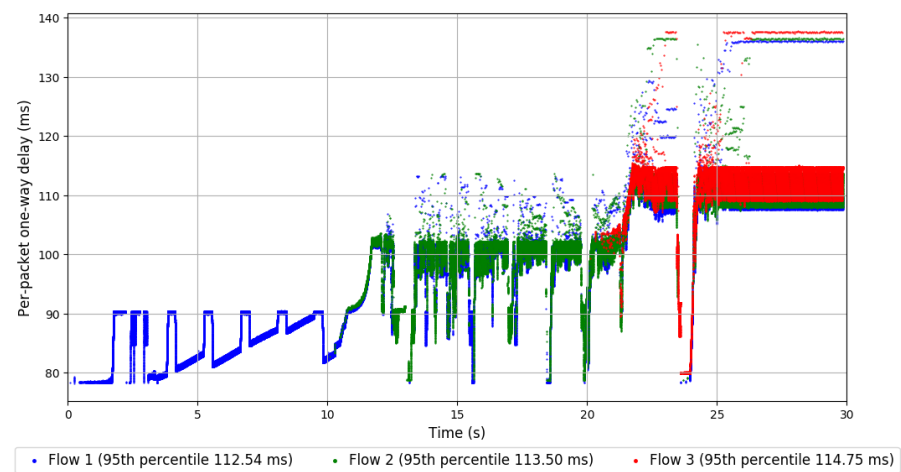
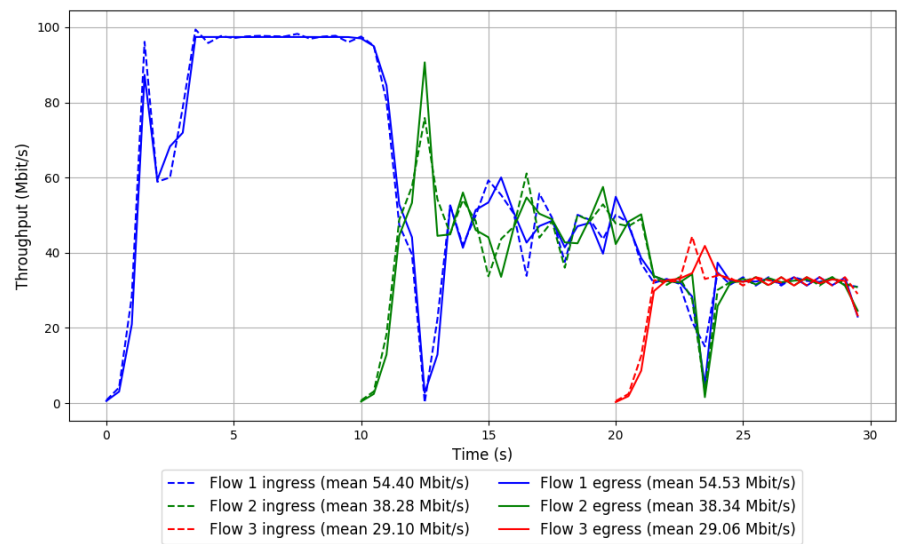
-- Flow 3:

Average throughput: 29.06 Mbit/s

95th percentile per-packet one-way delay: 114.751 ms

Loss rate: 2.32%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-04-24 18:02:41

End at: 2018-04-24 18:03:11

Local clock offset: -3.609 ms

Remote clock offset: 4.475 ms

Below is generated by plot.py at 2018-04-25 00:32:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.46 Mbit/s

95th percentile per-packet one-way delay: 118.201 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 54.80 Mbit/s

95th percentile per-packet one-way delay: 117.636 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 37.30 Mbit/s

95th percentile per-packet one-way delay: 119.427 ms

Loss rate: 0.99%

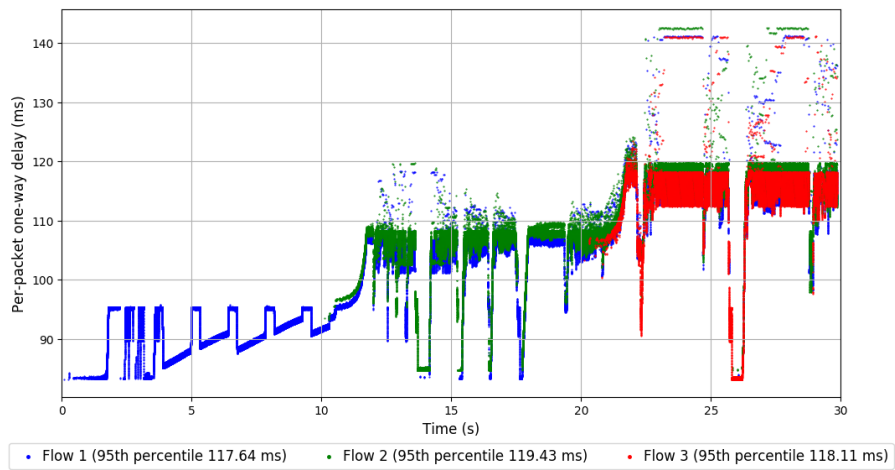
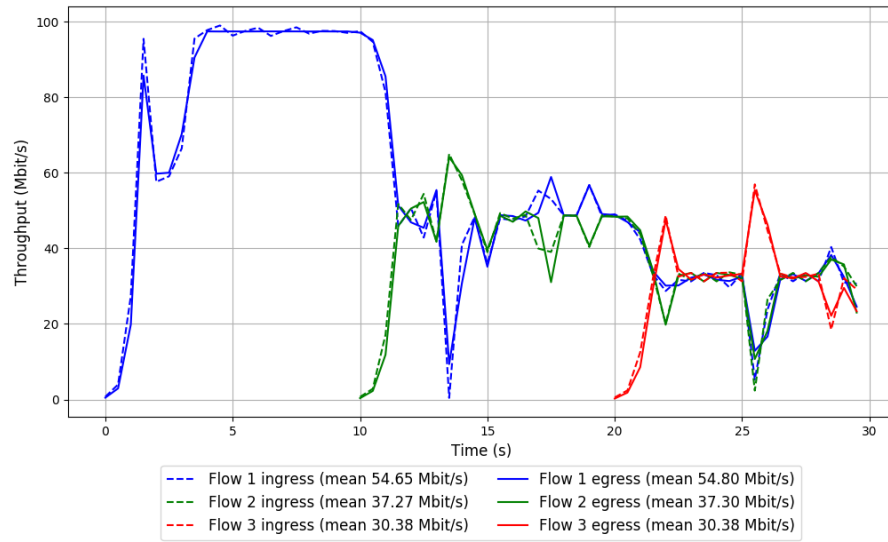
-- Flow 3:

Average throughput: 30.38 Mbit/s

95th percentile per-packet one-way delay: 118.112 ms

Loss rate: 2.22%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-04-24 18:25:03

End at: 2018-04-24 18:25:33

Local clock offset: -3.725 ms

Remote clock offset: 5.635 ms

Below is generated by plot.py at 2018-04-25 00:32:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.13 Mbit/s

95th percentile per-packet one-way delay: 117.836 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 55.05 Mbit/s

95th percentile per-packet one-way delay: 118.086 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 38.60 Mbit/s

95th percentile per-packet one-way delay: 117.805 ms

Loss rate: 0.94%

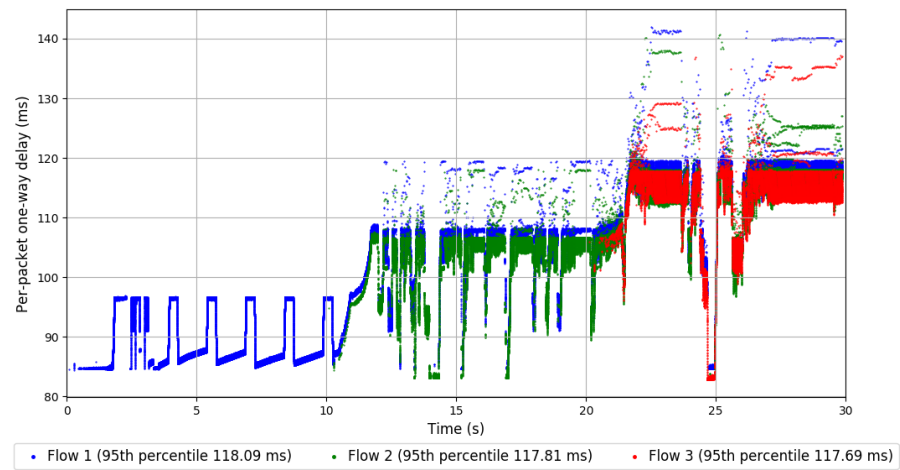
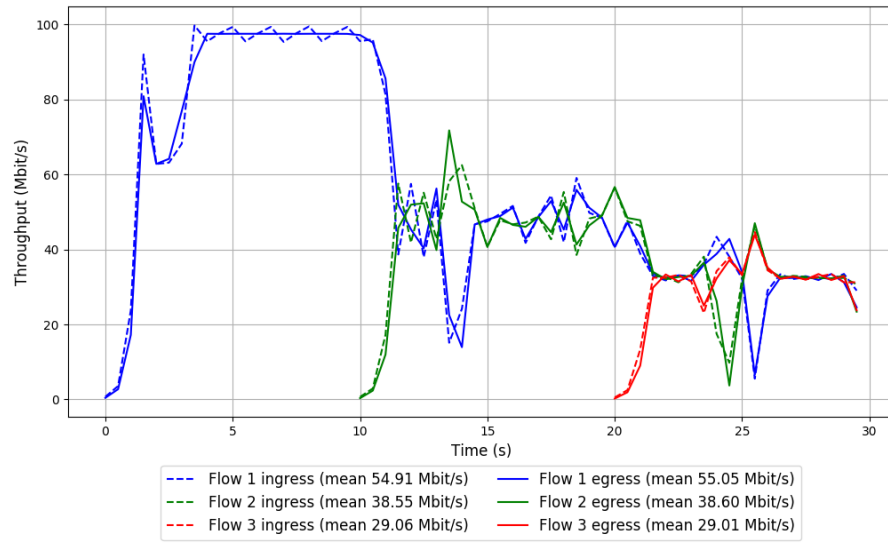
-- Flow 3:

Average throughput: 29.01 Mbit/s

95th percentile per-packet one-way delay: 117.693 ms

Loss rate: 2.45%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-04-24 18:47:41

End at: 2018-04-24 18:48:11

Local clock offset: -4.418 ms

Remote clock offset: 4.142 ms

Below is generated by plot.py at 2018-04-25 00:32:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.97 Mbit/s

95th percentile per-packet one-way delay: 118.061 ms

Loss rate: 5.59%

-- Flow 1:

Average throughput: 40.51 Mbit/s

95th percentile per-packet one-way delay: 117.651 ms

Loss rate: 6.08%

-- Flow 2:

Average throughput: 27.49 Mbit/s

95th percentile per-packet one-way delay: 116.854 ms

Loss rate: 5.62%

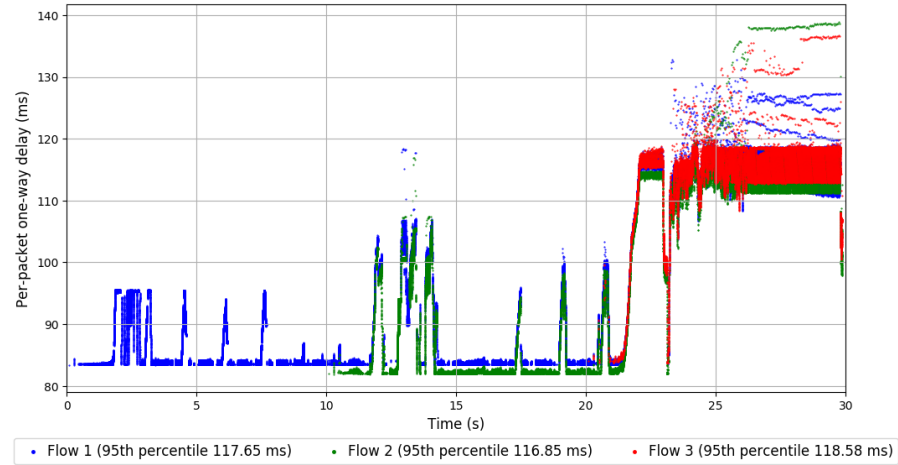
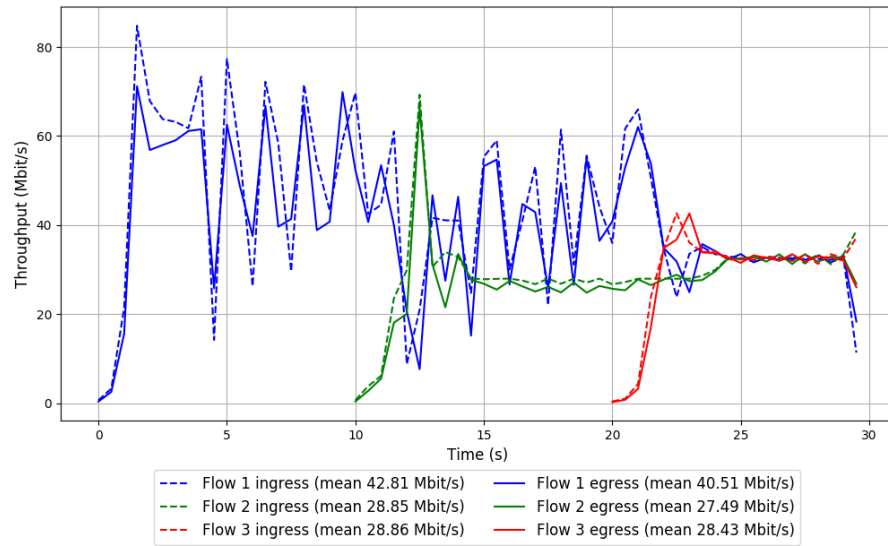
-- Flow 3:

Average throughput: 28.43 Mbit/s

95th percentile per-packet one-way delay: 118.577 ms

Loss rate: 3.37%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

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

End at: 2018-04-24 19:10:34

Local clock offset: -4.308 ms

Remote clock offset: 7.66 ms

Below is generated by plot.py at 2018-04-25 00:32:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.84 Mbit/s

95th percentile per-packet one-way delay: 113.115 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 54.79 Mbit/s

95th percentile per-packet one-way delay: 113.323 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 37.86 Mbit/s

95th percentile per-packet one-way delay: 113.112 ms

Loss rate: 0.91%

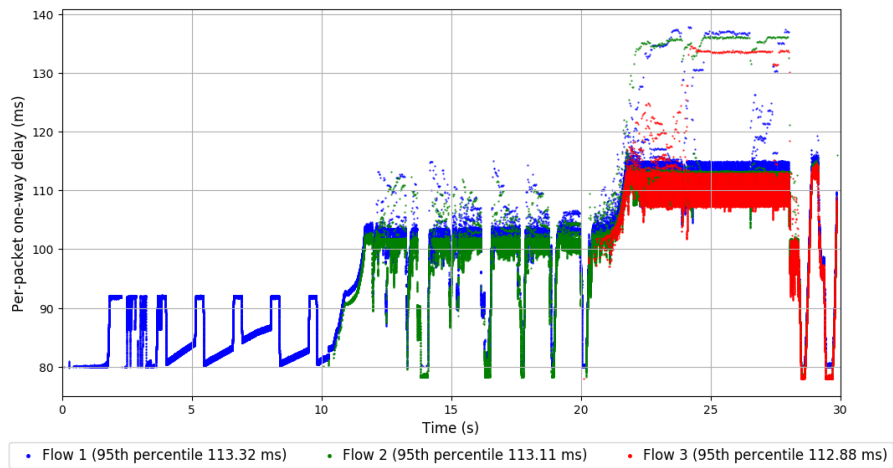
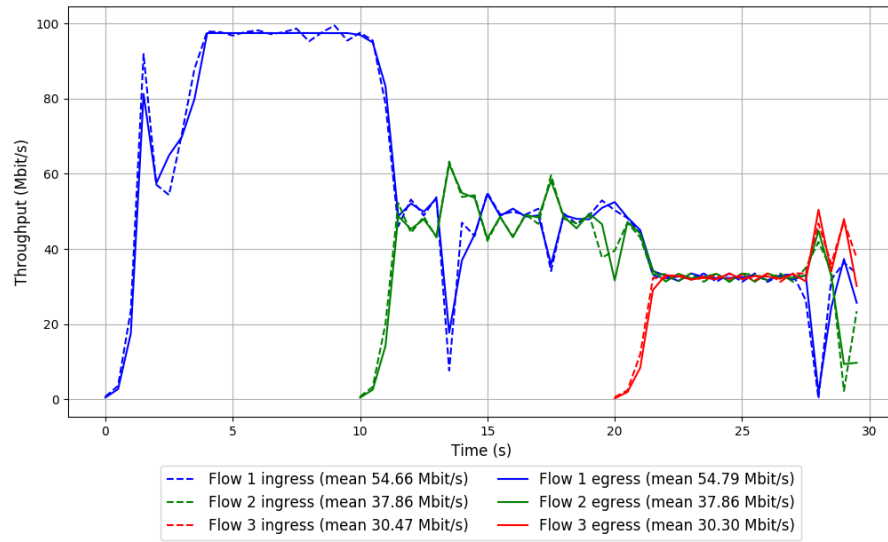
-- Flow 3:

Average throughput: 30.30 Mbit/s

95th percentile per-packet one-way delay: 112.881 ms

Loss rate: 2.34%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-04-24 19:32:24

End at: 2018-04-24 19:32:54

Local clock offset: -3.679 ms

Remote clock offset: 3.759 ms

Below is generated by plot.py at 2018-04-25 00:32:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.25 Mbit/s

95th percentile per-packet one-way delay: 113.523 ms

Loss rate: 12.76%

-- Flow 1:

Average throughput: 38.40 Mbit/s

95th percentile per-packet one-way delay: 110.845 ms

Loss rate: 11.68%

-- Flow 2:

Average throughput: 28.99 Mbit/s

95th percentile per-packet one-way delay: 114.613 ms

Loss rate: 13.47%

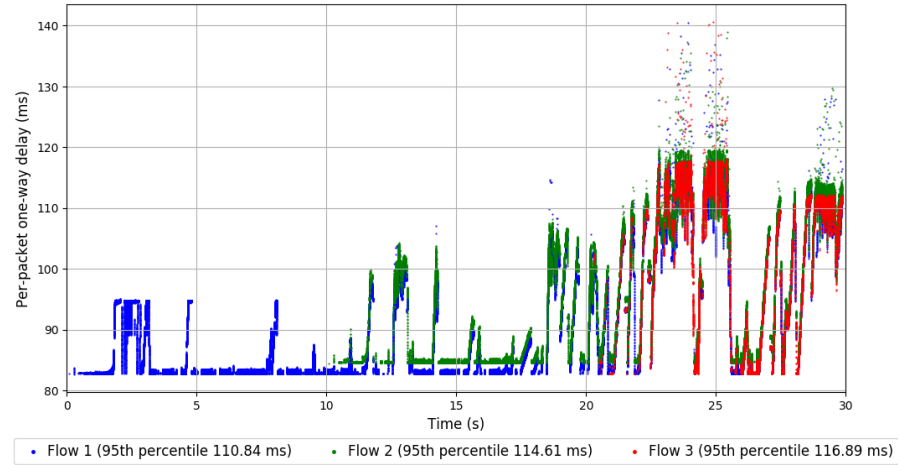
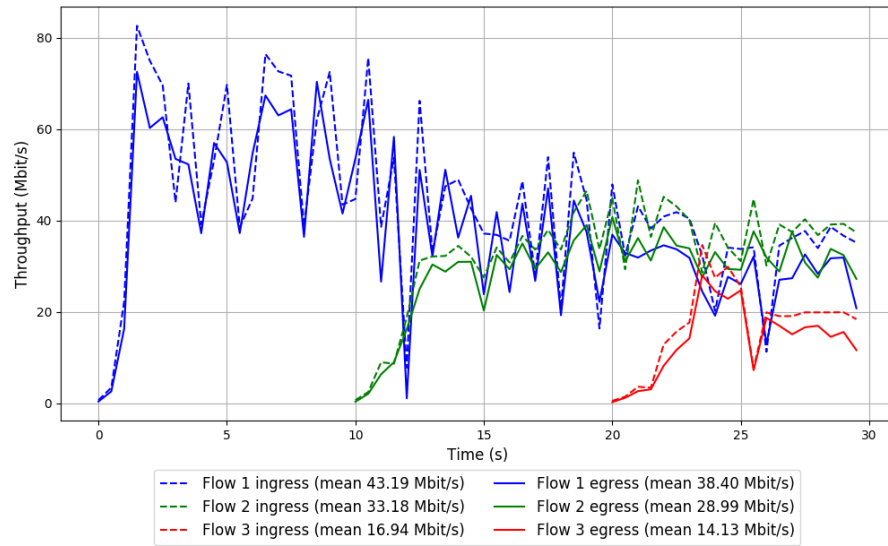
-- Flow 3:

Average throughput: 14.13 Mbit/s

95th percentile per-packet one-way delay: 116.889 ms

Loss rate: 18.27%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-04-24 19:54:56

End at: 2018-04-24 19:55:26

Local clock offset: -4.602 ms

Remote clock offset: 3.798 ms

Below is generated by plot.py at 2018-04-25 00:32:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.62 Mbit/s

95th percentile per-packet one-way delay: 117.675 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 55.64 Mbit/s

95th percentile per-packet one-way delay: 118.254 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 38.35 Mbit/s

95th percentile per-packet one-way delay: 117.276 ms

Loss rate: 0.94%

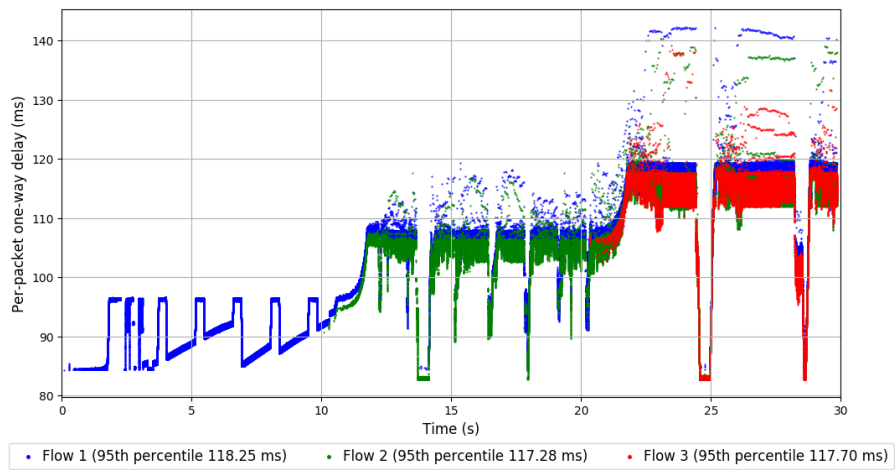
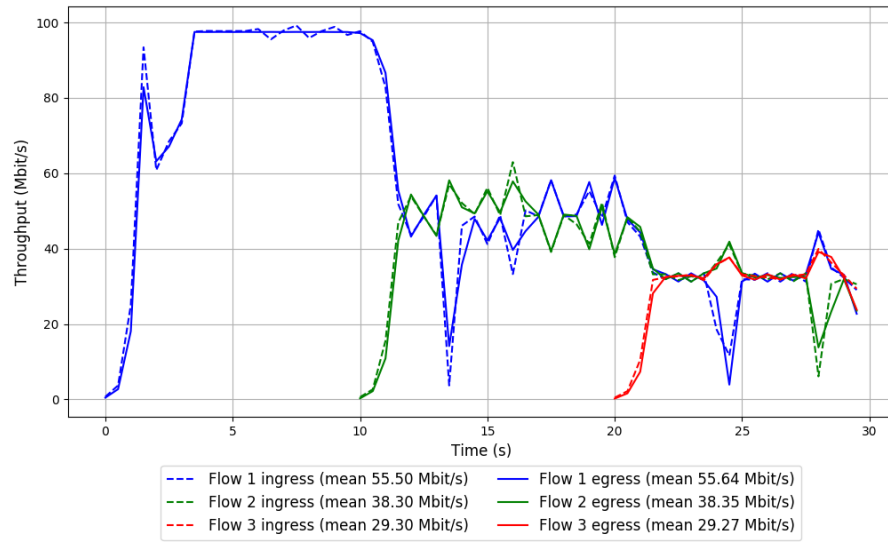
-- Flow 3:

Average throughput: 29.27 Mbit/s

95th percentile per-packet one-way delay: 117.700 ms

Loss rate: 2.36%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-04-24 20:17:16

End at: 2018-04-24 20:17:46

Local clock offset: -4.68 ms

Remote clock offset: 7.414 ms

Below is generated by plot.py at 2018-04-25 00:33:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.75 Mbit/s

95th percentile per-packet one-way delay: 112.775 ms

Loss rate: 12.37%

-- Flow 1:

Average throughput: 39.31 Mbit/s

95th percentile per-packet one-way delay: 110.611 ms

Loss rate: 10.59%

-- Flow 2:

Average throughput: 27.29 Mbit/s

95th percentile per-packet one-way delay: 113.294 ms

Loss rate: 13.55%

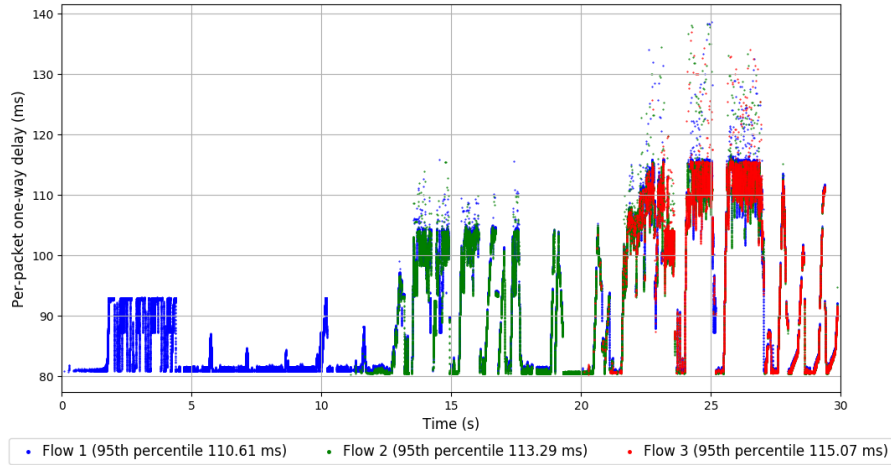
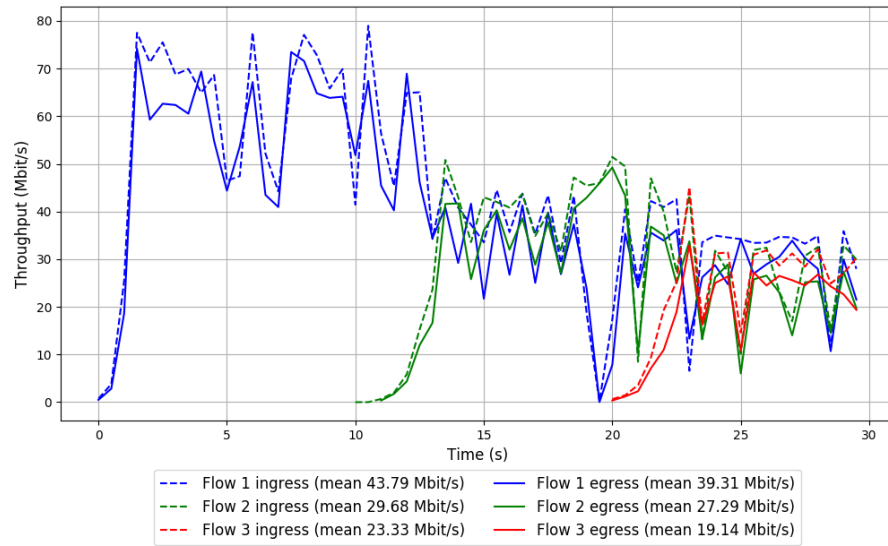
-- Flow 3:

Average throughput: 19.14 Mbit/s

95th percentile per-packet one-way delay: 115.068 ms

Loss rate: 19.46%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-04-24 20:39:59

End at: 2018-04-24 20:40:29

Local clock offset: -5.549 ms

Remote clock offset: 8.022 ms

Below is generated by plot.py at 2018-04-25 00:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.88 Mbit/s

95th percentile per-packet one-way delay: 112.241 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 55.84 Mbit/s

95th percentile per-packet one-way delay: 111.388 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 38.78 Mbit/s

95th percentile per-packet one-way delay: 112.734 ms

Loss rate: 0.95%

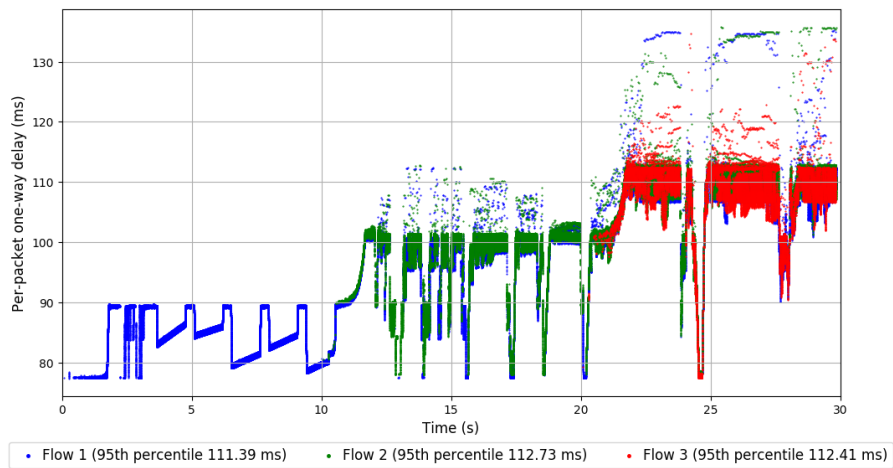
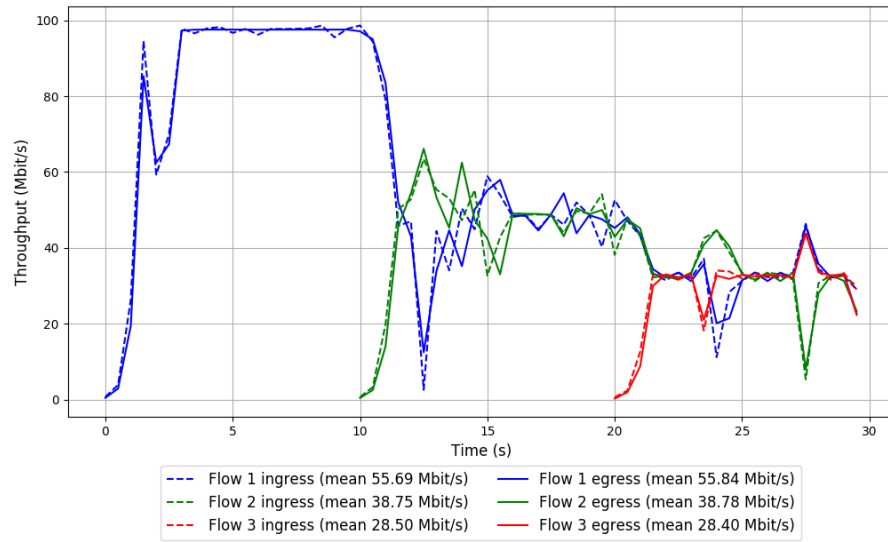
-- Flow 3:

Average throughput: 28.40 Mbit/s

95th percentile per-packet one-way delay: 112.408 ms

Loss rate: 2.37%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-04-24 17:12:03

End at: 2018-04-24 17:12:33

Local clock offset: -5.129 ms

Remote clock offset: 5.379 ms

Below is generated by plot.py at 2018-04-25 00:33:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.63 Mbit/s

95th percentile per-packet one-way delay: 115.361 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 52.43 Mbit/s

95th percentile per-packet one-way delay: 115.775 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 37.55 Mbit/s

95th percentile per-packet one-way delay: 115.148 ms

Loss rate: 1.35%

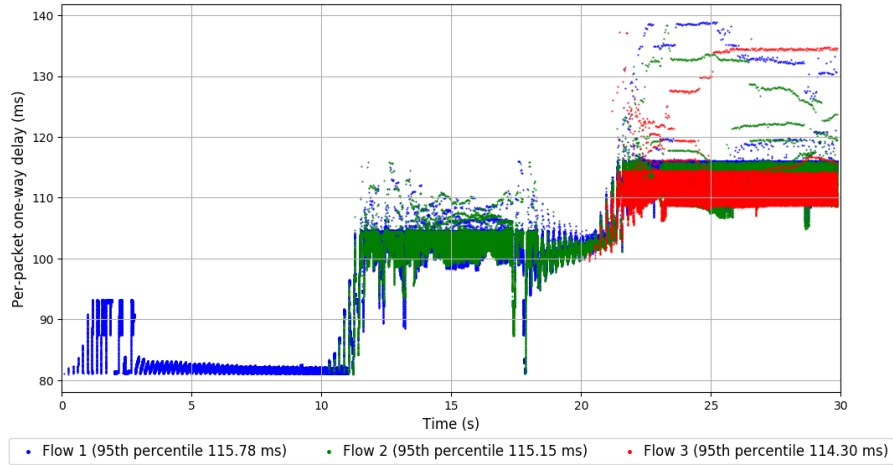
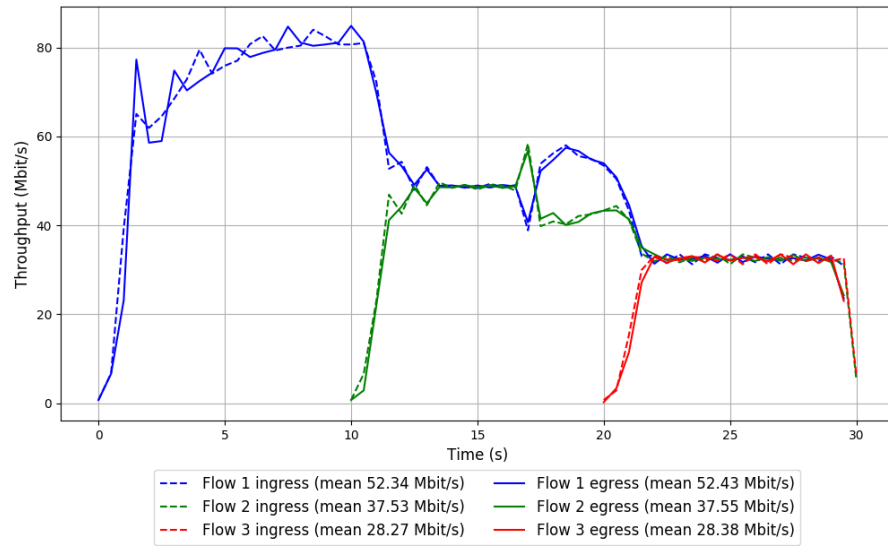
-- Flow 3:

Average throughput: 28.38 Mbit/s

95th percentile per-packet one-way delay: 114.298 ms

Loss rate: 3.90%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-04-24 17:35:08

End at: 2018-04-24 17:35:38

Local clock offset: -4.317 ms

Remote clock offset: 2.21 ms

Below is generated by plot.py at 2018-04-25 00:34:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.13 Mbit/s

95th percentile per-packet one-way delay: 119.318 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 51.25 Mbit/s

95th percentile per-packet one-way delay: 118.272 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 38.56 Mbit/s

95th percentile per-packet one-way delay: 120.318 ms

Loss rate: 1.46%

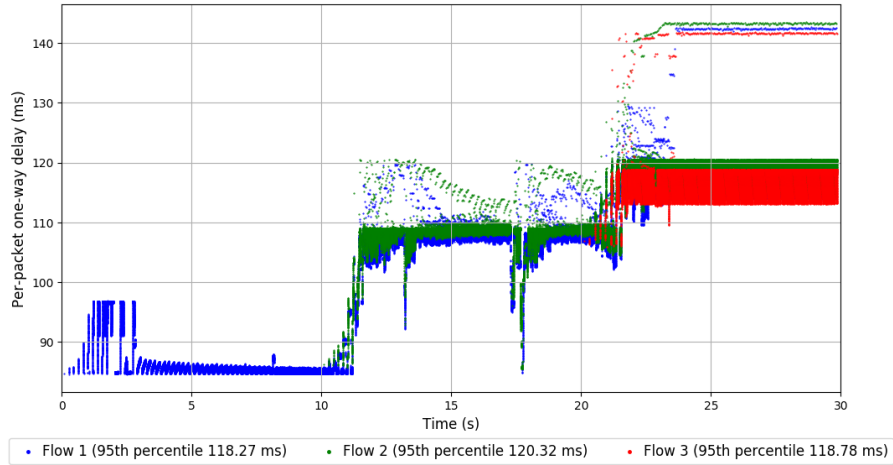
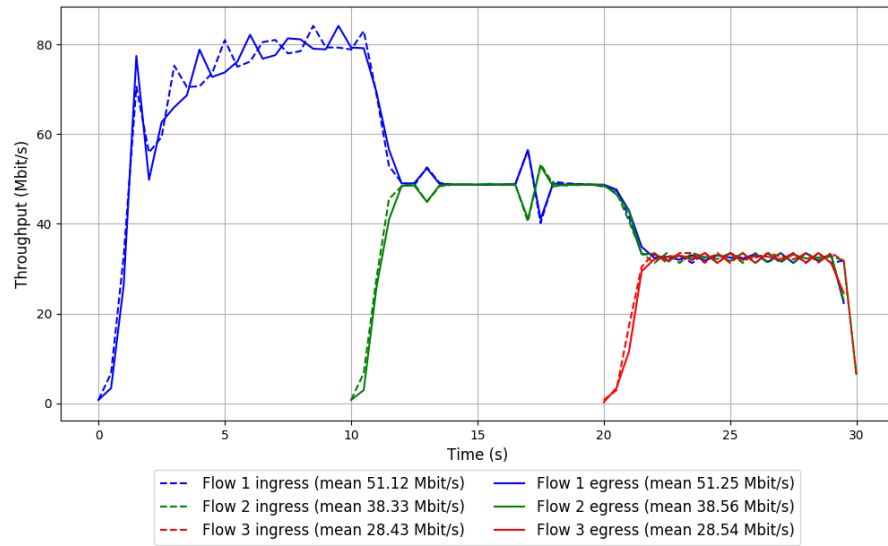
-- Flow 3:

Average throughput: 28.54 Mbit/s

95th percentile per-packet one-way delay: 118.775 ms

Loss rate: 3.88%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-04-24 17:57:33

End at: 2018-04-24 17:58:03

Local clock offset: -5.239 ms

Remote clock offset: 3.196 ms

Below is generated by plot.py at 2018-04-25 00:34:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.44 Mbit/s

95th percentile per-packet one-way delay: 117.238 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 51.53 Mbit/s

95th percentile per-packet one-way delay: 117.100 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 38.53 Mbit/s

95th percentile per-packet one-way delay: 117.778 ms

Loss rate: 1.46%

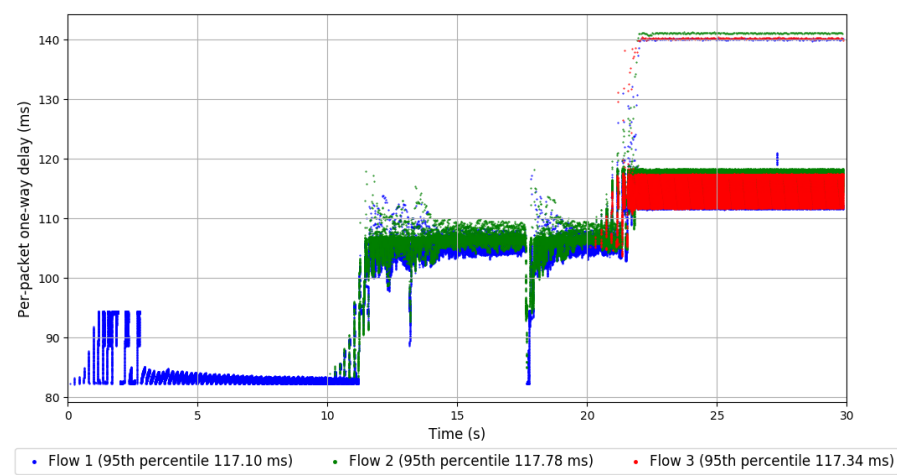
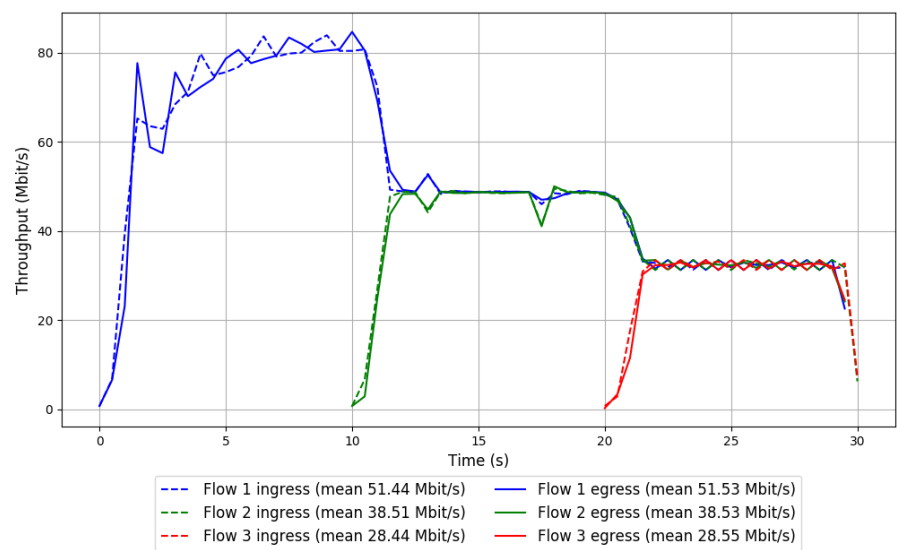
-- Flow 3:

Average throughput: 28.55 Mbit/s

95th percentile per-packet one-way delay: 117.338 ms

Loss rate: 3.86%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-04-24 18:19:55

End at: 2018-04-24 18:20:25

Local clock offset: -3.728 ms

Remote clock offset: 4.643 ms

Below is generated by plot.py at 2018-04-25 00:34:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.07 Mbit/s

95th percentile per-packet one-way delay: 118.955 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 51.03 Mbit/s

95th percentile per-packet one-way delay: 118.843 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 38.79 Mbit/s

95th percentile per-packet one-way delay: 118.400 ms

Loss rate: 1.29%

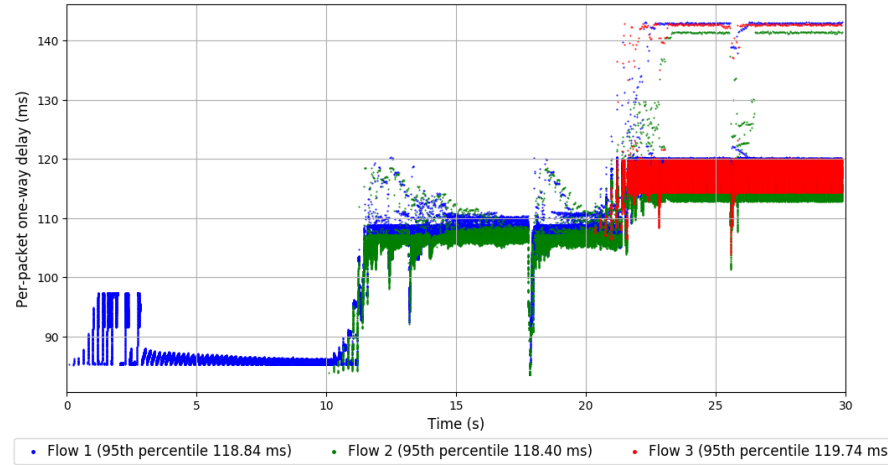
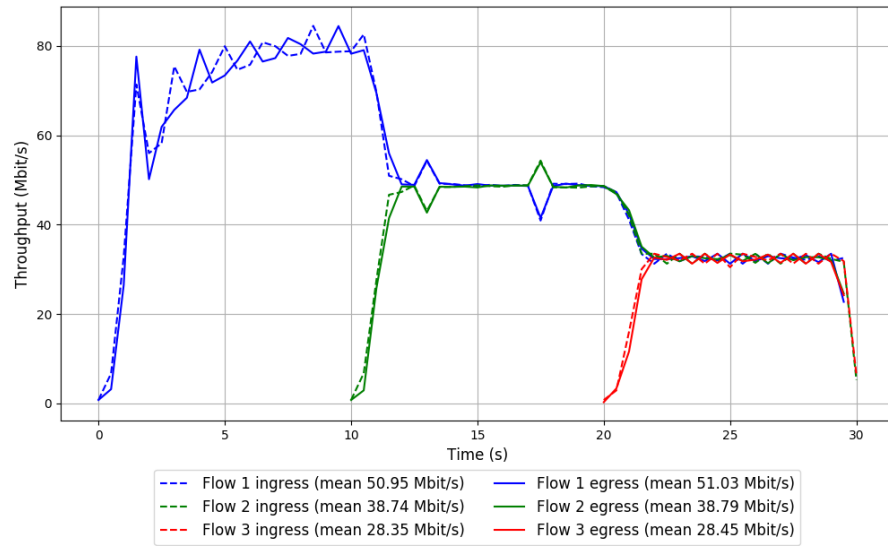
-- Flow 3:

Average throughput: 28.45 Mbit/s

95th percentile per-packet one-way delay: 119.742 ms

Loss rate: 3.92%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-04-24 18:42:33

End at: 2018-04-24 18:43:03

Local clock offset: -4.525 ms

Remote clock offset: 8.132 ms

Below is generated by plot.py at 2018-04-25 00:34:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.21 Mbit/s

95th percentile per-packet one-way delay: 114.383 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 51.82 Mbit/s

95th percentile per-packet one-way delay: 113.687 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 37.83 Mbit/s

95th percentile per-packet one-way delay: 114.080 ms

Loss rate: 0.99%

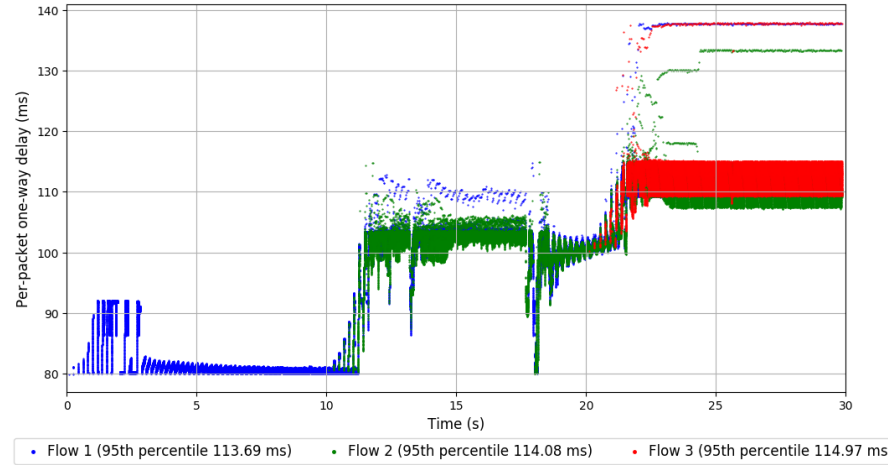
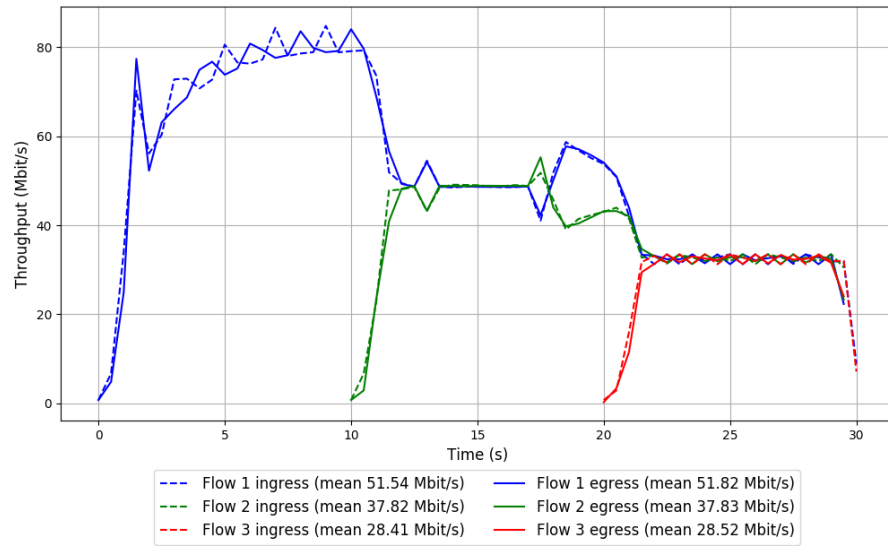
-- Flow 3:

Average throughput: 28.52 Mbit/s

95th percentile per-packet one-way delay: 114.970 ms

Loss rate: 3.90%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-04-24 19:04:56

End at: 2018-04-24 19:05:26

Local clock offset: -5.137 ms

Remote clock offset: 4.058 ms

Below is generated by plot.py at 2018-04-25 00:34:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.78 Mbit/s

95th percentile per-packet one-way delay: 115.618 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 50.84 Mbit/s

95th percentile per-packet one-way delay: 114.399 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 38.75 Mbit/s

95th percentile per-packet one-way delay: 115.797 ms

Loss rate: 1.45%

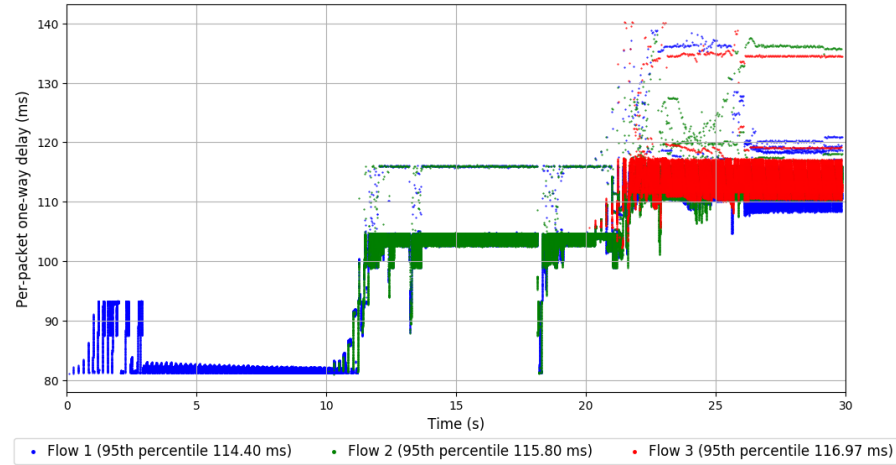
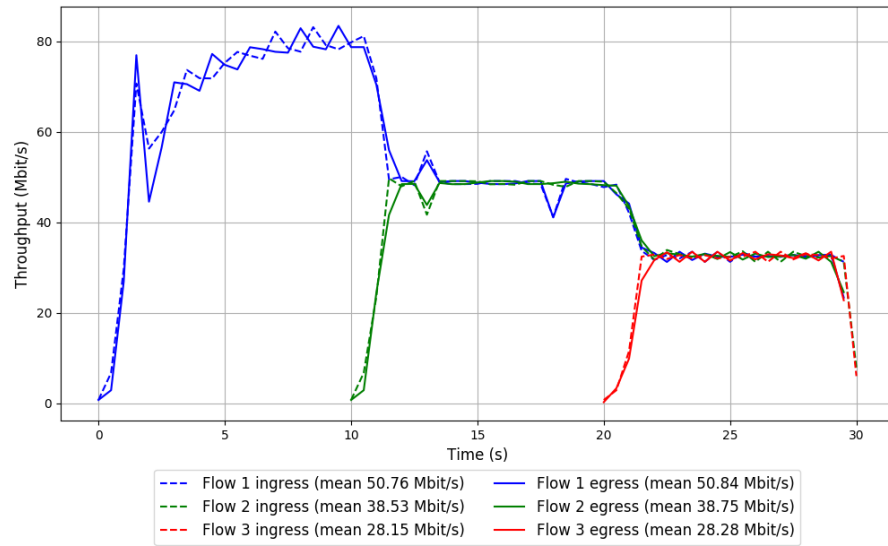
-- Flow 3:

Average throughput: 28.28 Mbit/s

95th percentile per-packet one-way delay: 116.973 ms

Loss rate: 3.93%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-04-24 19:27:18

End at: 2018-04-24 19:27:48

Local clock offset: -4.507 ms

Remote clock offset: 7.588 ms

Below is generated by plot.py at 2018-04-25 00:34:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.10 Mbit/s

95th percentile per-packet one-way delay: 113.230 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 51.36 Mbit/s

95th percentile per-packet one-way delay: 113.058 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 38.26 Mbit/s

95th percentile per-packet one-way delay: 113.517 ms

Loss rate: 1.47%

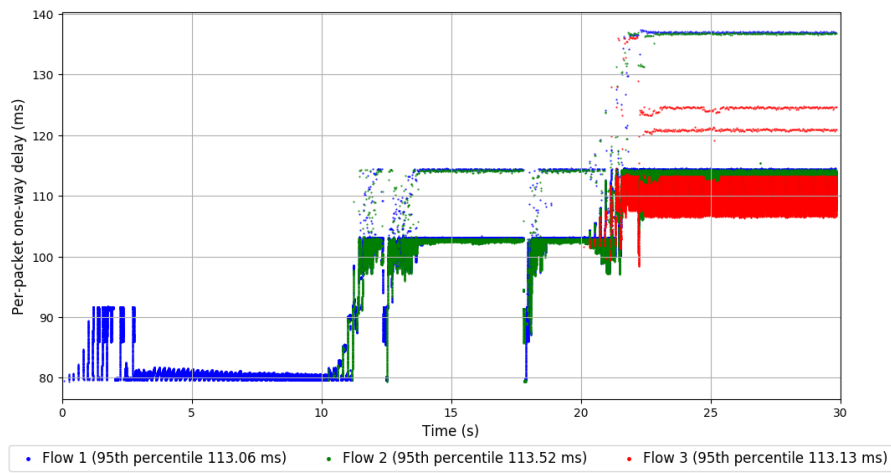
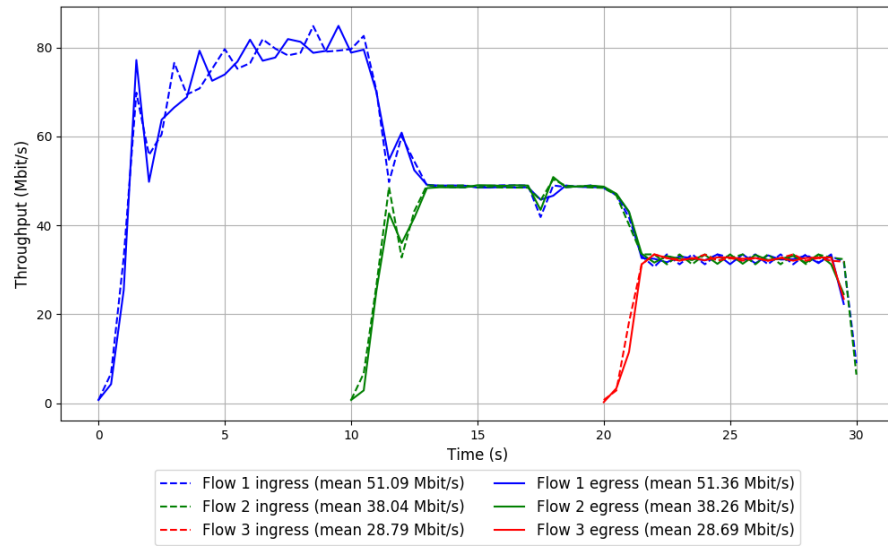
-- Flow 3:

Average throughput: 28.69 Mbit/s

95th percentile per-packet one-way delay: 113.134 ms

Loss rate: 2.63%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-04-24 19:49:48

End at: 2018-04-24 19:50:18

Local clock offset: -3.699 ms

Remote clock offset: 4.548 ms

Below is generated by plot.py at 2018-04-25 00:35:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.87 Mbit/s

95th percentile per-packet one-way delay: 117.556 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 50.74 Mbit/s

95th percentile per-packet one-way delay: 116.919 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 39.11 Mbit/s

95th percentile per-packet one-way delay: 118.047 ms

Loss rate: 1.44%

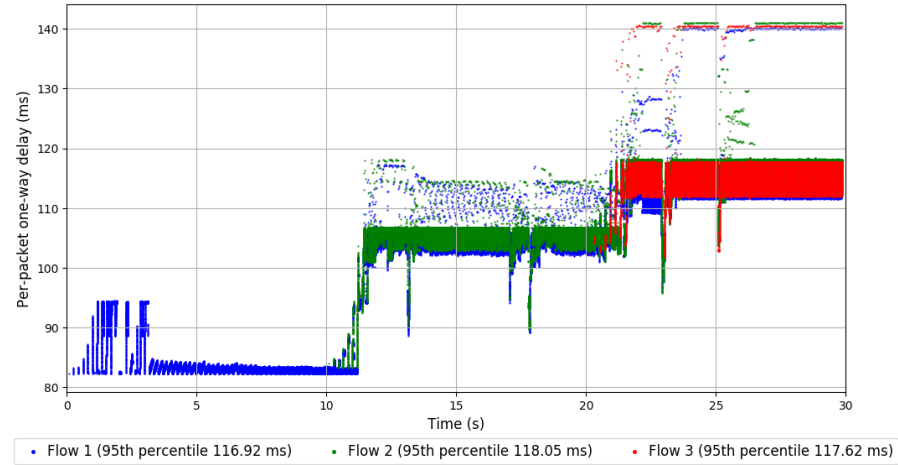
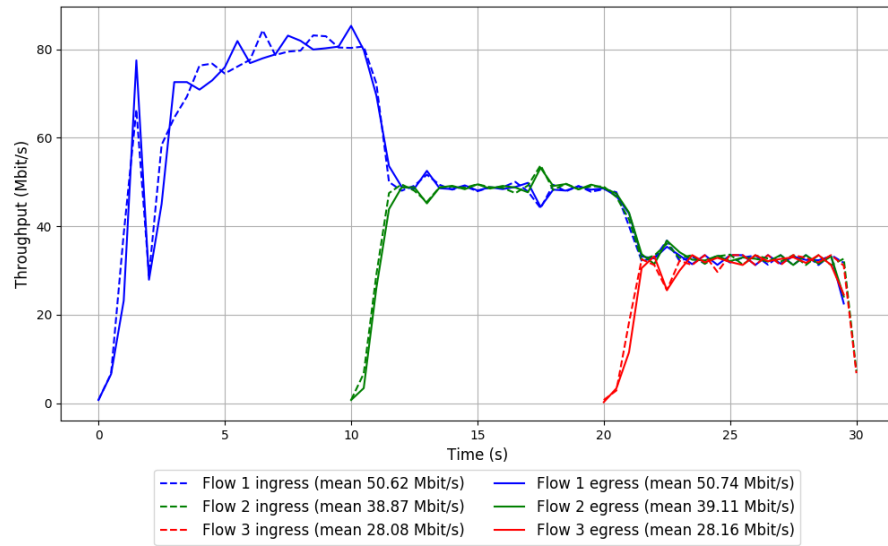
-- Flow 3:

Average throughput: 28.16 Mbit/s

95th percentile per-packet one-way delay: 117.621 ms

Loss rate: 3.91%

Run 8: Report of TCP Cubic — Data Link

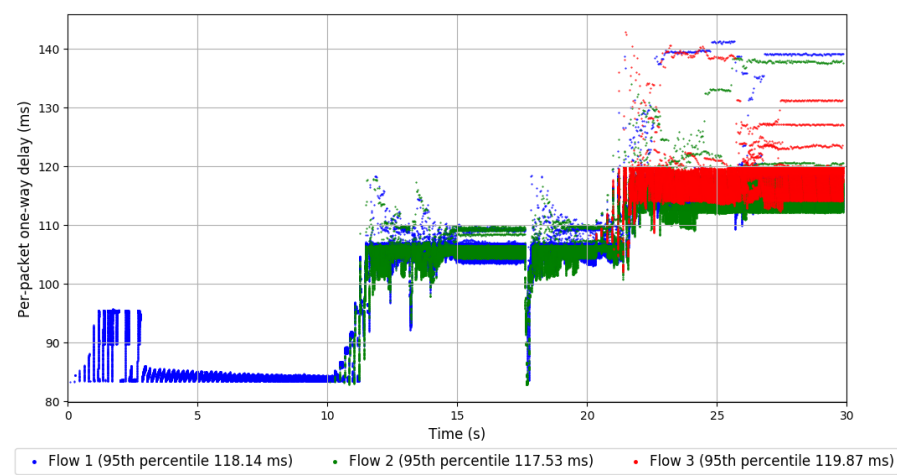
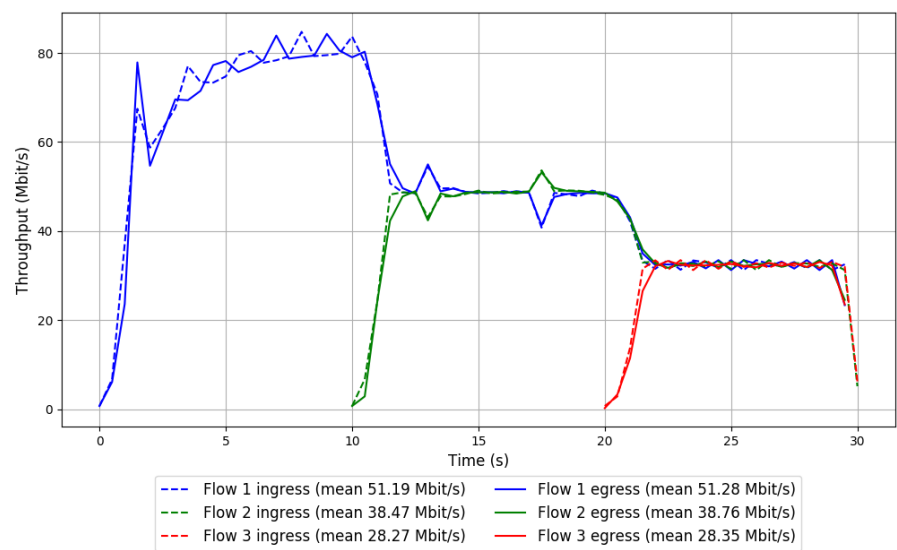


Run 9: Statistics of TCP Cubic

Start at: 2018-04-24 20:12:10
End at: 2018-04-24 20:12:40
Local clock offset: -4.663 ms
Remote clock offset: 3.793 ms

Below is generated by plot.py at 2018-04-25 00:35:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.27 Mbit/s
95th percentile per-packet one-way delay: 118.364 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 51.28 Mbit/s
95th percentile per-packet one-way delay: 118.142 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 38.76 Mbit/s
95th percentile per-packet one-way delay: 117.527 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 28.35 Mbit/s
95th percentile per-packet one-way delay: 119.872 ms
Loss rate: 3.93%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-04-24 20:34:49

End at: 2018-04-24 20:35:19

Local clock offset: -4.741 ms

Remote clock offset: 7.291 ms

Below is generated by plot.py at 2018-04-25 00:35:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.49 Mbit/s

95th percentile per-packet one-way delay: 115.026 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 51.80 Mbit/s

95th percentile per-packet one-way delay: 113.365 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 38.30 Mbit/s

95th percentile per-packet one-way delay: 113.894 ms

Loss rate: 1.46%

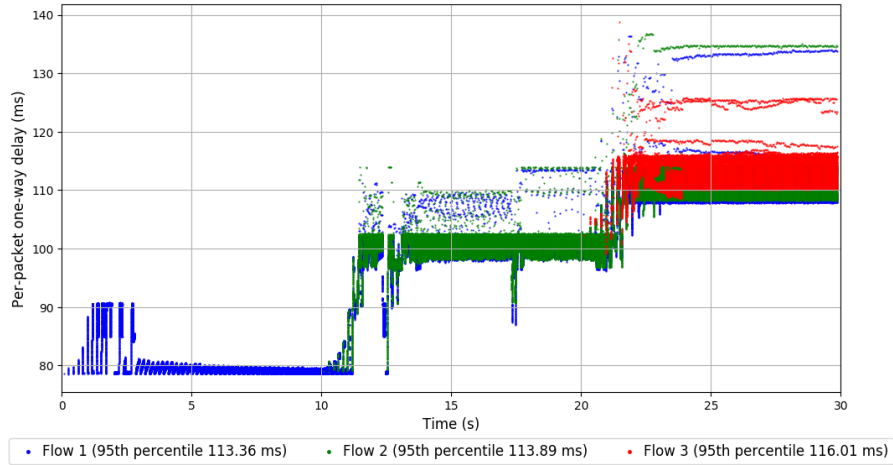
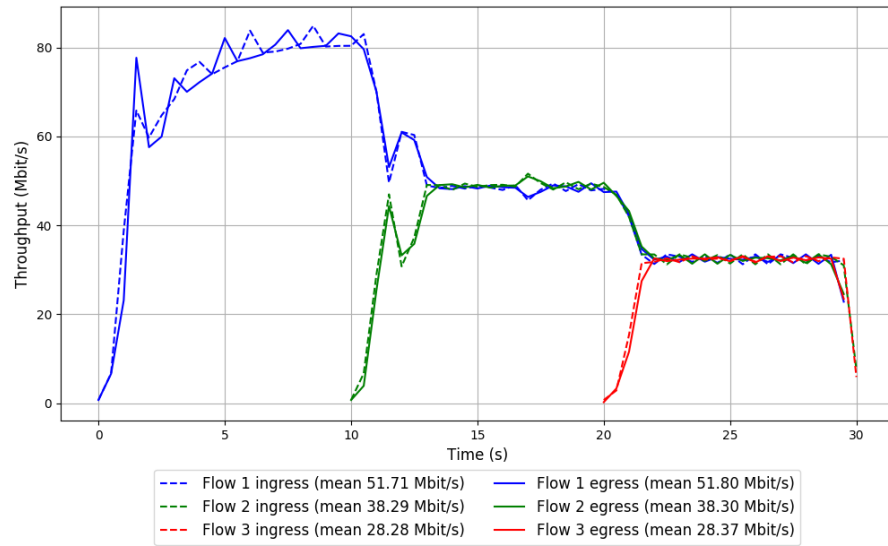
-- Flow 3:

Average throughput: 28.37 Mbit/s

95th percentile per-packet one-way delay: 116.011 ms

Loss rate: 3.89%

Run 10: Report of TCP Cubic — Data Link

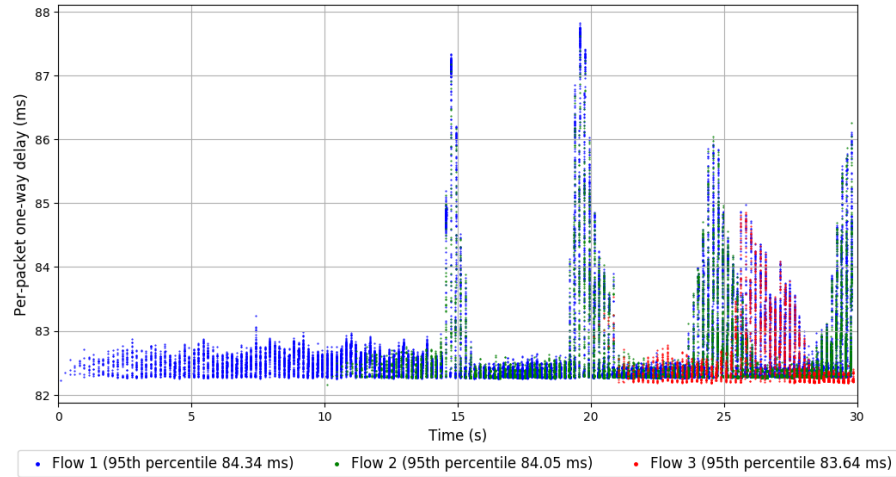
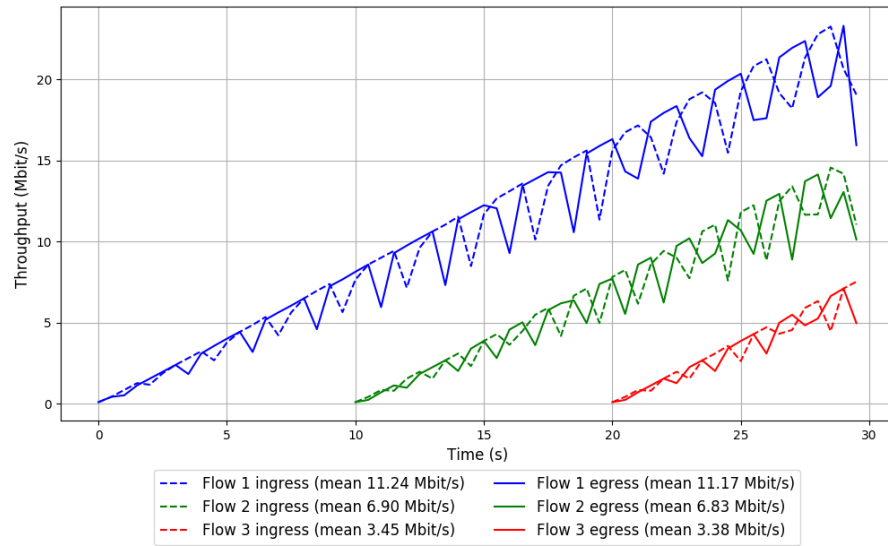



```
Run 1: Statistics of LEDBAT

Start at: 2018-04-24 17:08:06
End at: 2018-04-24 17:08:36
Local clock offset: -5.094 ms
Remote clock offset: 2.439 ms

# Below is generated by plot.py at 2018-04-25 00:35:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.78 Mbit/s
95th percentile per-packet one-way delay: 84.195 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 11.17 Mbit/s
95th percentile per-packet one-way delay: 84.336 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 6.83 Mbit/s
95th percentile per-packet one-way delay: 84.047 ms
Loss rate: 1.88%
-- Flow 3:
Average throughput: 3.38 Mbit/s
95th percentile per-packet one-way delay: 83.641 ms
Loss rate: 3.74%
```

Run 1: Report of LEDBAT — Data Link

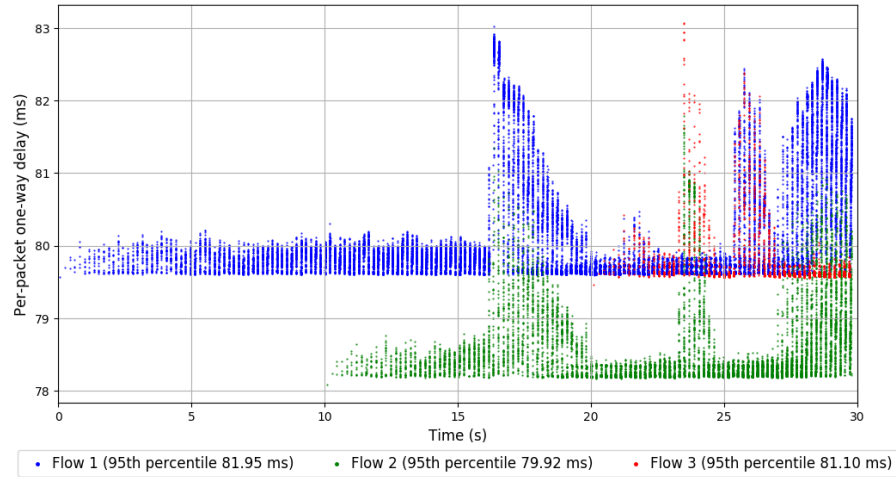
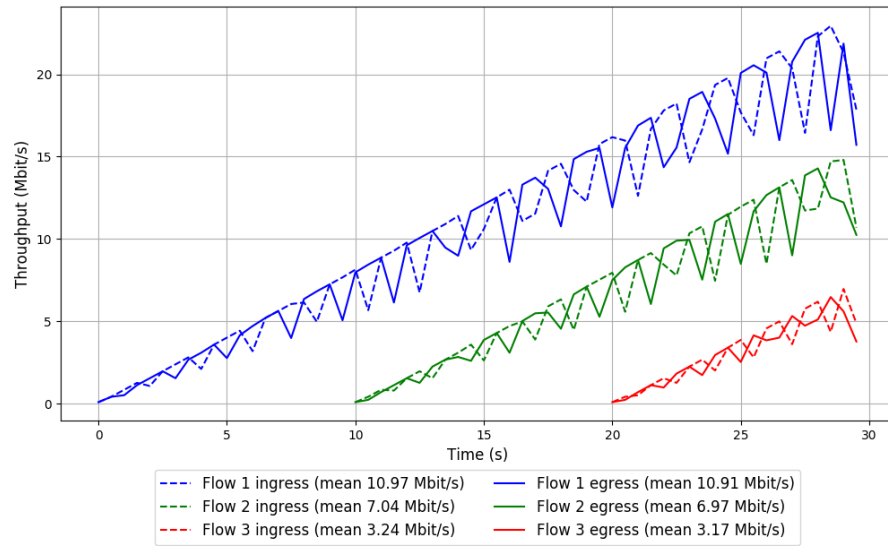


```
Run 2: Statistics of LEDBAT

Start at: 2018-04-24 17:31:10
End at: 2018-04-24 17:31:40
Local clock offset: -5.101 ms
Remote clock offset: 6.75 ms

# Below is generated by plot.py at 2018-04-25 00:35:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.55 Mbit/s
95th percentile per-packet one-way delay: 81.663 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 10.91 Mbit/s
95th percentile per-packet one-way delay: 81.948 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 79.915 ms
Loss rate: 1.86%
-- Flow 3:
Average throughput: 3.17 Mbit/s
95th percentile per-packet one-way delay: 81.098 ms
Loss rate: 3.89%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-04-24 17:53:37

End at: 2018-04-24 17:54:07

Local clock offset: -4.497 ms

Remote clock offset: 8.05 ms

Below is generated by plot.py at 2018-04-25 00:35:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.89 Mbit/s

95th percentile per-packet one-way delay: 79.986 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 10.88 Mbit/s

95th percentile per-packet one-way delay: 78.531 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 7.33 Mbit/s

95th percentile per-packet one-way delay: 79.758 ms

Loss rate: 1.81%

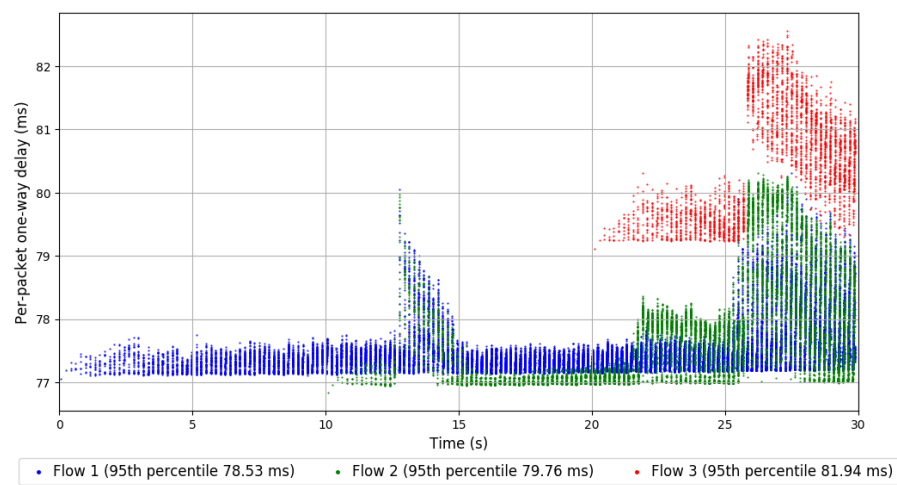
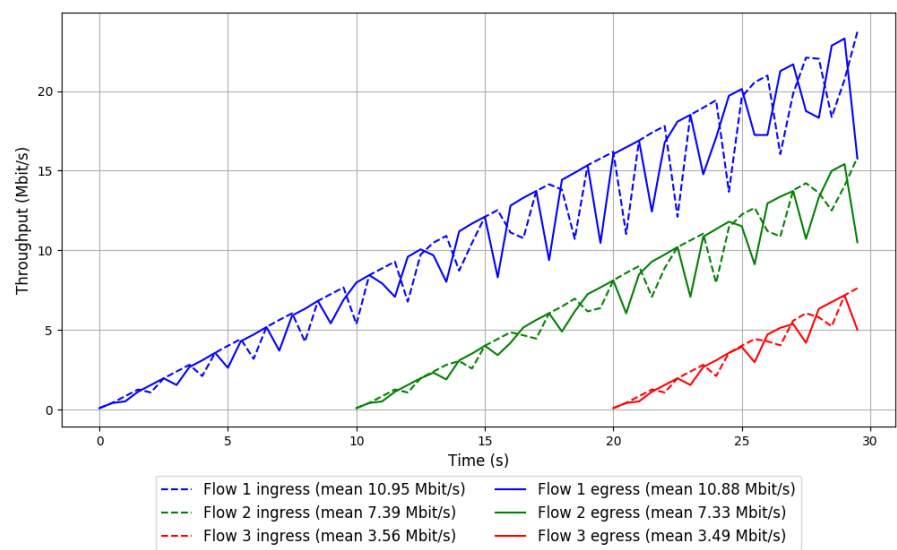
-- Flow 3:

Average throughput: 3.49 Mbit/s

95th percentile per-packet one-way delay: 81.940 ms

Loss rate: 3.68%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-04-24 18:15:58

End at: 2018-04-24 18:16:28

Local clock offset: -3.655 ms

Remote clock offset: 9.93 ms

Below is generated by plot.py at 2018-04-25 00:35:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.89 Mbit/s

95th percentile per-packet one-way delay: 80.618 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 11.05 Mbit/s

95th percentile per-packet one-way delay: 80.151 ms

Loss rate: 1.20%

-- Flow 2:

Average throughput: 7.07 Mbit/s

95th percentile per-packet one-way delay: 80.869 ms

Loss rate: 1.84%

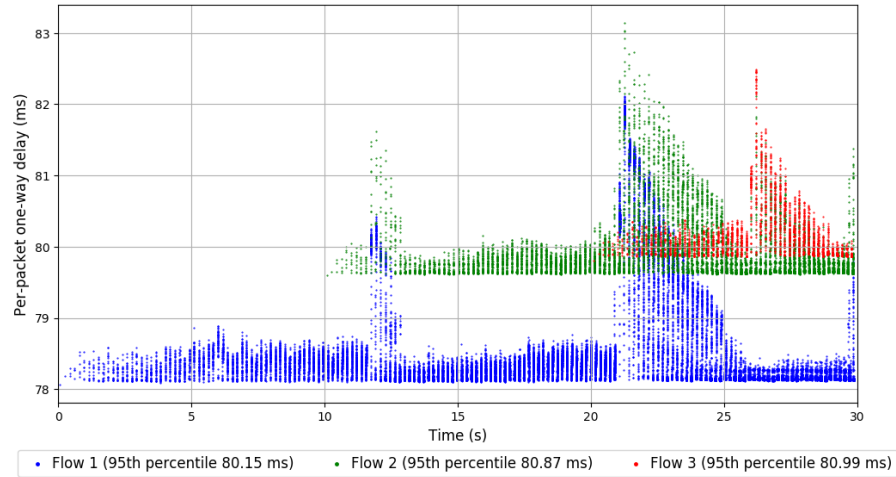
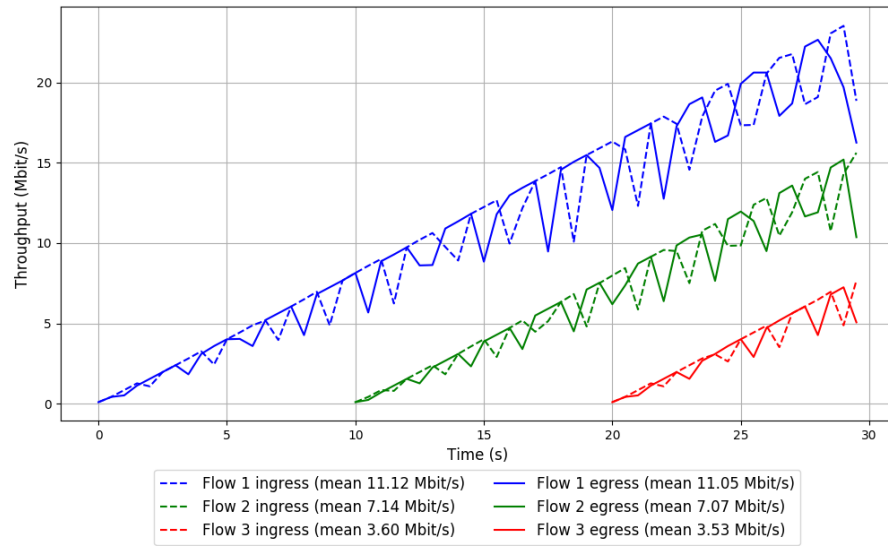
-- Flow 3:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 80.989 ms

Loss rate: 3.66%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-04-24 18:38:36

End at: 2018-04-24 18:39:06

Local clock offset: -4.483 ms

Remote clock offset: 4.409 ms

Below is generated by plot.py at 2018-04-25 00:35:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.47 Mbit/s

95th percentile per-packet one-way delay: 84.555 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 10.88 Mbit/s

95th percentile per-packet one-way delay: 84.552 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 6.85 Mbit/s

95th percentile per-packet one-way delay: 83.835 ms

Loss rate: 1.88%

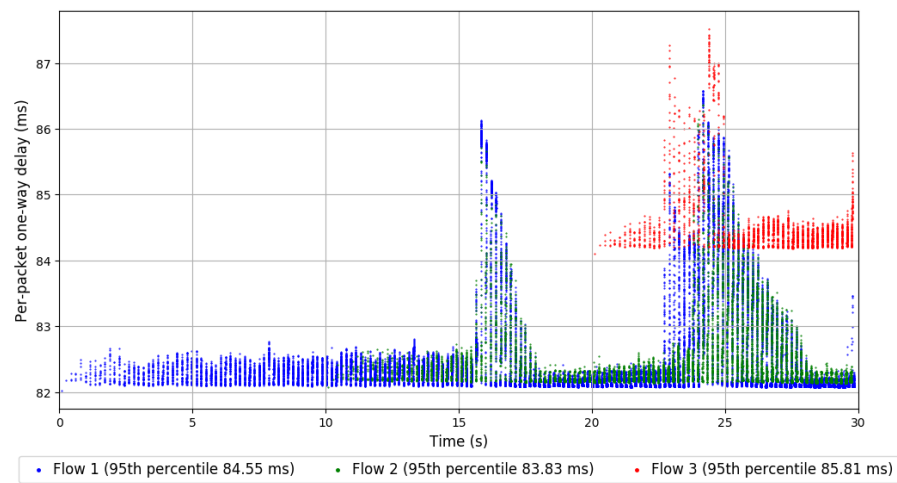
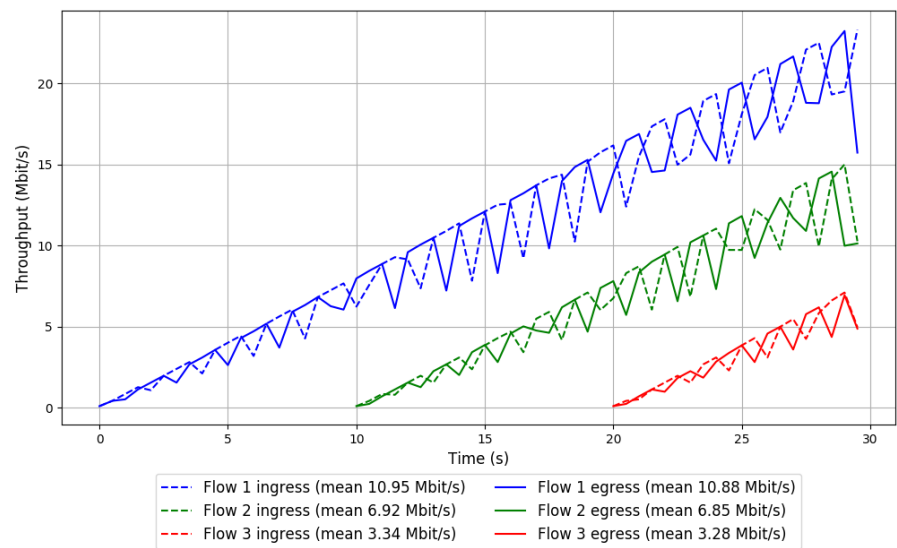
-- Flow 3:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 85.807 ms

Loss rate: 3.82%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-04-24 19:01:00

End at: 2018-04-24 19:01:30

Local clock offset: -4.358 ms

Remote clock offset: 7.94 ms

Below is generated by plot.py at 2018-04-25 00:35:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.71 Mbit/s

95th percentile per-packet one-way delay: 81.350 ms

Loss rate: 1.56%

-- Flow 1:

Average throughput: 10.70 Mbit/s

95th percentile per-packet one-way delay: 81.398 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 7.35 Mbit/s

95th percentile per-packet one-way delay: 81.258 ms

Loss rate: 1.81%

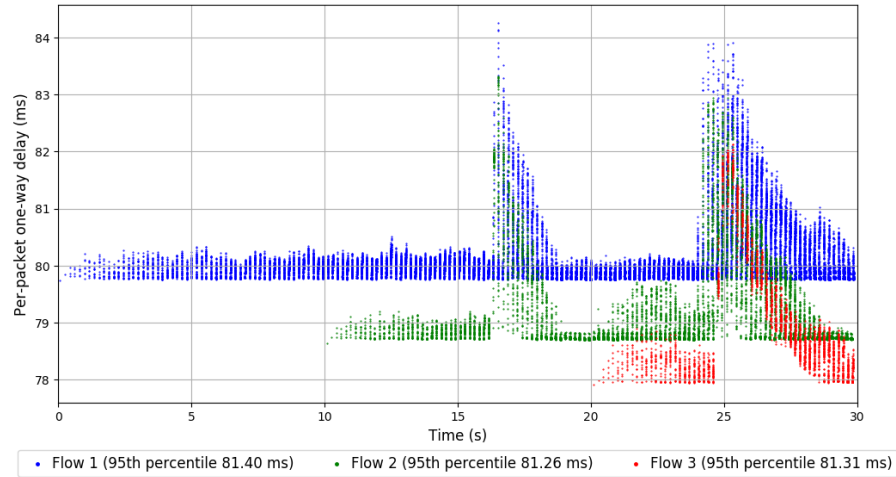
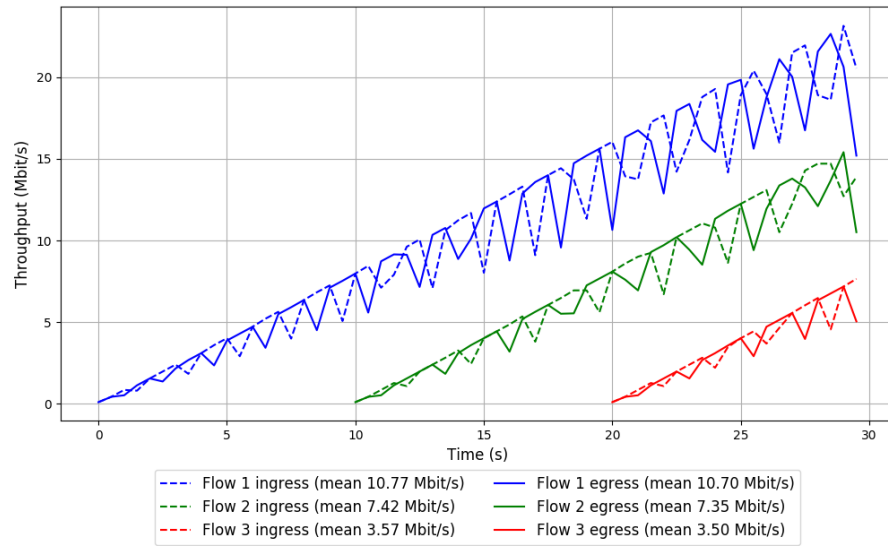
-- Flow 3:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 81.313 ms

Loss rate: 3.68%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-04-24 19:23:22

End at: 2018-04-24 19:23:52

Local clock offset: -4.482 ms

Remote clock offset: 3.006 ms

Below is generated by plot.py at 2018-04-25 00:35:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.49 Mbit/s

95th percentile per-packet one-way delay: 86.530 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 10.89 Mbit/s

95th percentile per-packet one-way delay: 86.370 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 6.72 Mbit/s

95th percentile per-packet one-way delay: 86.672 ms

Loss rate: 1.76%

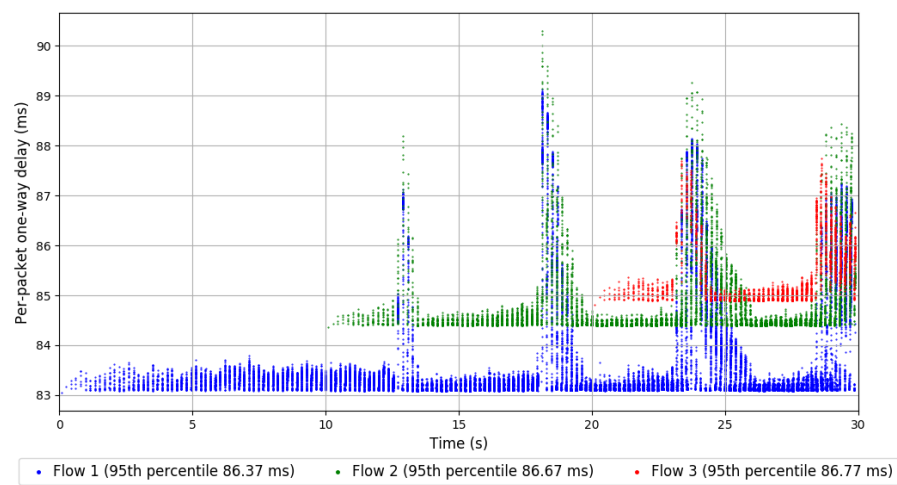
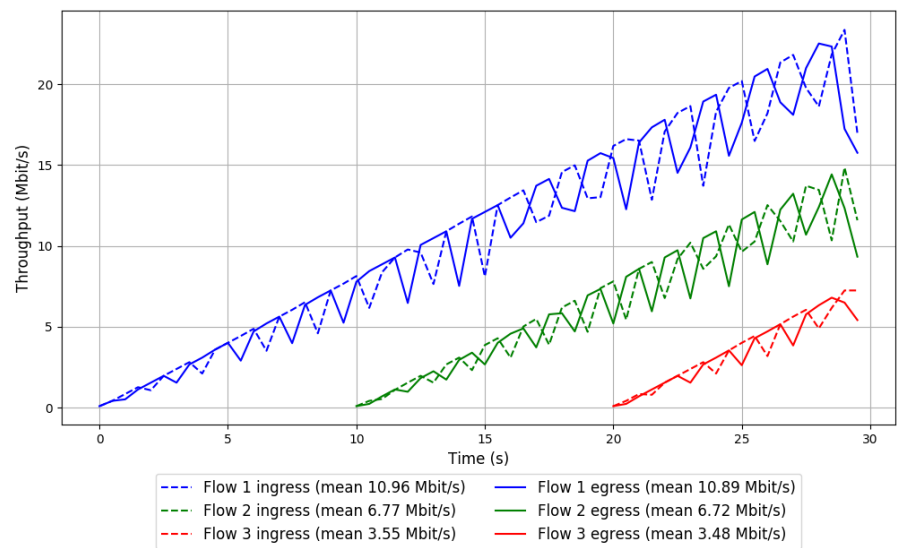
-- Flow 3:

Average throughput: 3.48 Mbit/s

95th percentile per-packet one-way delay: 86.773 ms

Loss rate: 3.66%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-04-24 19:45:52

End at: 2018-04-24 19:46:22

Local clock offset: -5.297 ms

Remote clock offset: 4.411 ms

Below is generated by plot.py at 2018-04-25 00:35:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.27 Mbit/s

95th percentile per-packet one-way delay: 83.247 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 11.44 Mbit/s

95th percentile per-packet one-way delay: 83.289 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 7.20 Mbit/s

95th percentile per-packet one-way delay: 83.175 ms

Loss rate: 1.82%

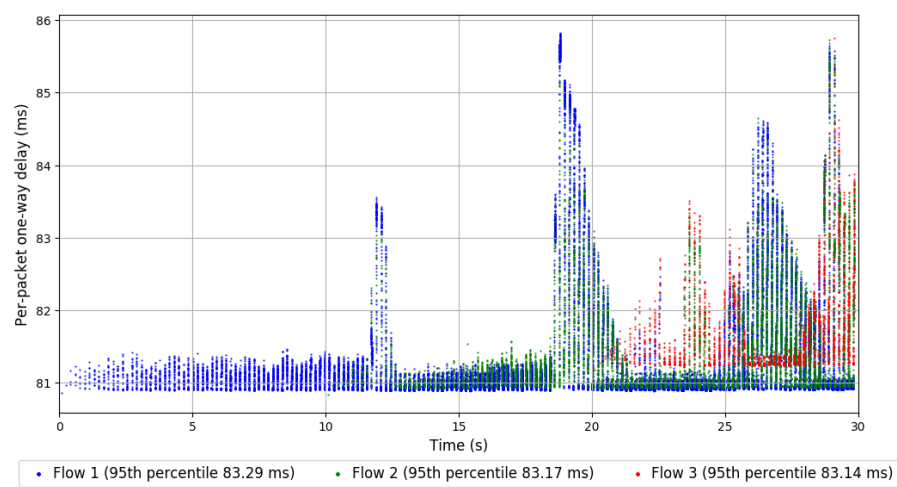
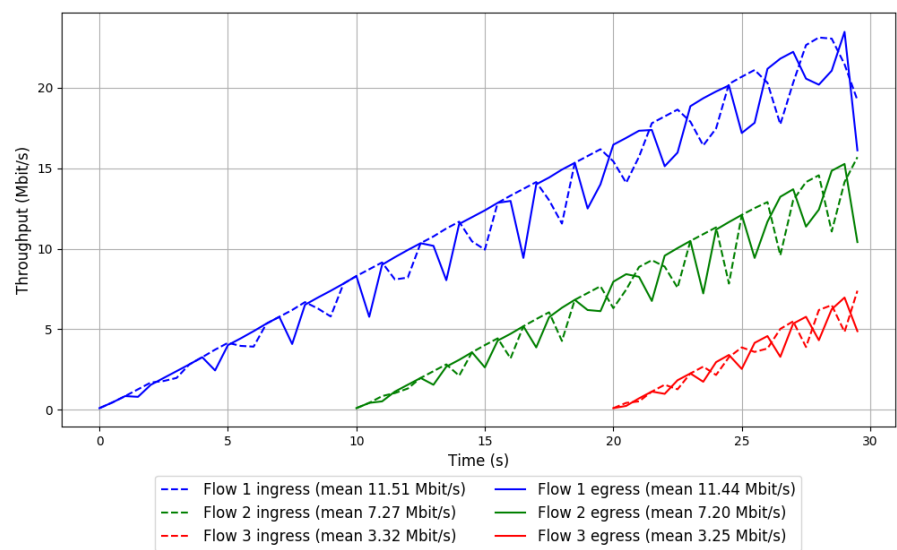
-- Flow 3:

Average throughput: 3.25 Mbit/s

95th percentile per-packet one-way delay: 83.145 ms

Loss rate: 3.81%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-04-24 20:08:13

End at: 2018-04-24 20:08:43

Local clock offset: -5.507 ms

Remote clock offset: 8.567 ms

Below is generated by plot.py at 2018-04-25 00:35:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.27 Mbit/s

95th percentile per-packet one-way delay: 80.267 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 10.36 Mbit/s

95th percentile per-packet one-way delay: 79.721 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 7.19 Mbit/s

95th percentile per-packet one-way delay: 79.808 ms

Loss rate: 1.82%

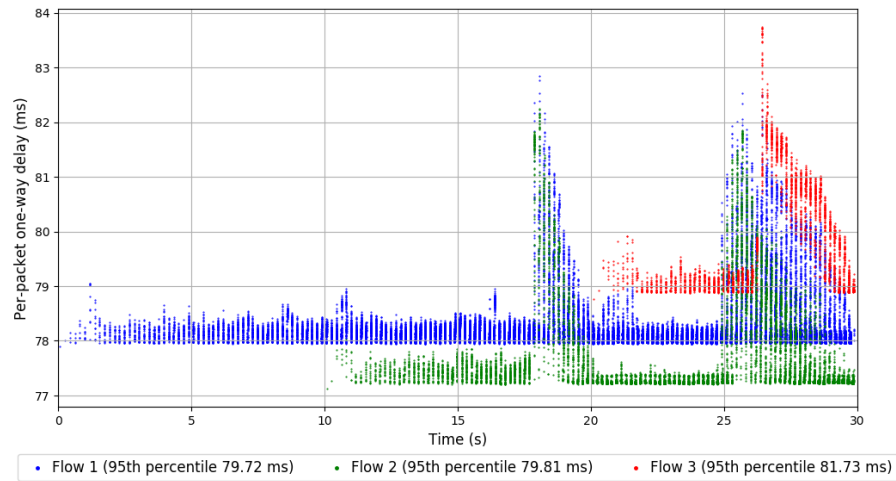
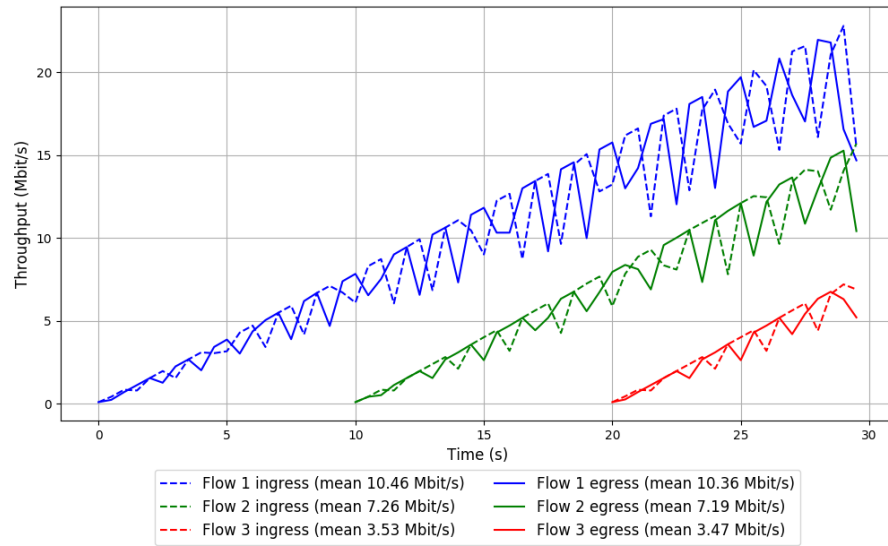
-- Flow 3:

Average throughput: 3.47 Mbit/s

95th percentile per-packet one-way delay: 81.734 ms

Loss rate: 3.67%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-04-24 20:30:45

End at: 2018-04-24 20:31:15

Local clock offset: -4.731 ms

Remote clock offset: 4.31 ms

Below is generated by plot.py at 2018-04-25 00:35:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.08 Mbit/s

95th percentile per-packet one-way delay: 85.360 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 11.19 Mbit/s

95th percentile per-packet one-way delay: 84.330 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 7.20 Mbit/s

95th percentile per-packet one-way delay: 86.008 ms

Loss rate: 1.82%

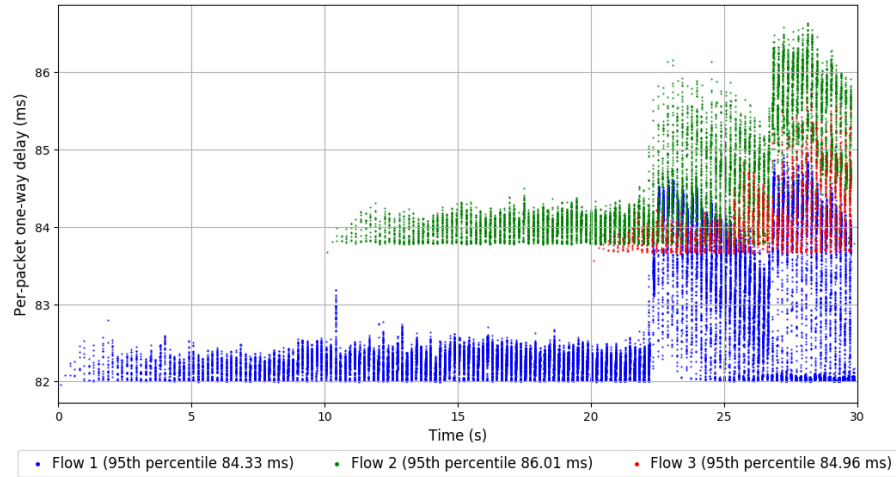
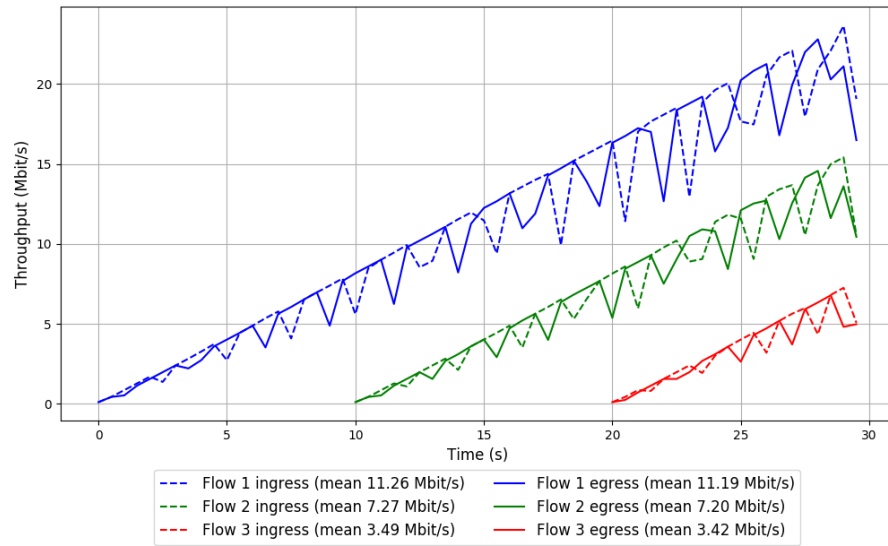
-- Flow 3:

Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 84.961 ms

Loss rate: 3.74%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2018-04-24 17:16:16

End at: 2018-04-24 17:16:46

Local clock offset: -5.096 ms

Remote clock offset: 1.689 ms

Below is generated by plot.py at 2018-04-25 00:36:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.72 Mbit/s

95th percentile per-packet one-way delay: 117.362 ms

Loss rate: 3.34%

-- Flow 1:

Average throughput: 55.18 Mbit/s

95th percentile per-packet one-way delay: 116.260 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 34.84 Mbit/s

95th percentile per-packet one-way delay: 116.396 ms

Loss rate: 6.16%

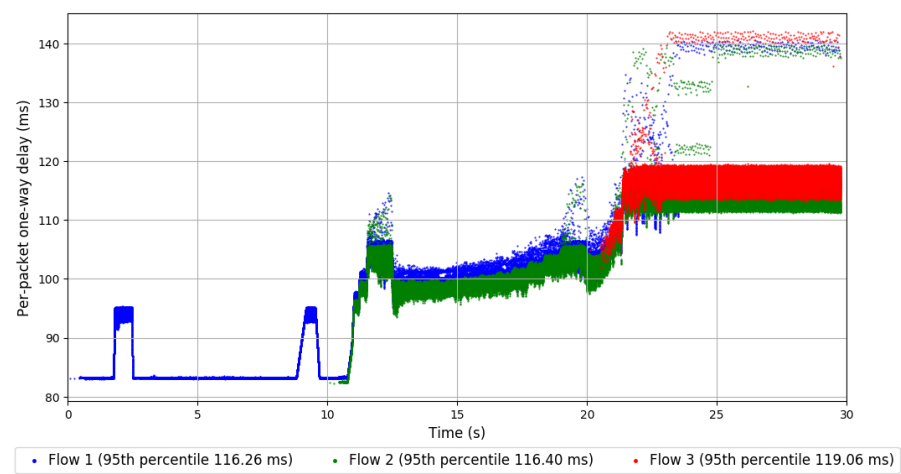
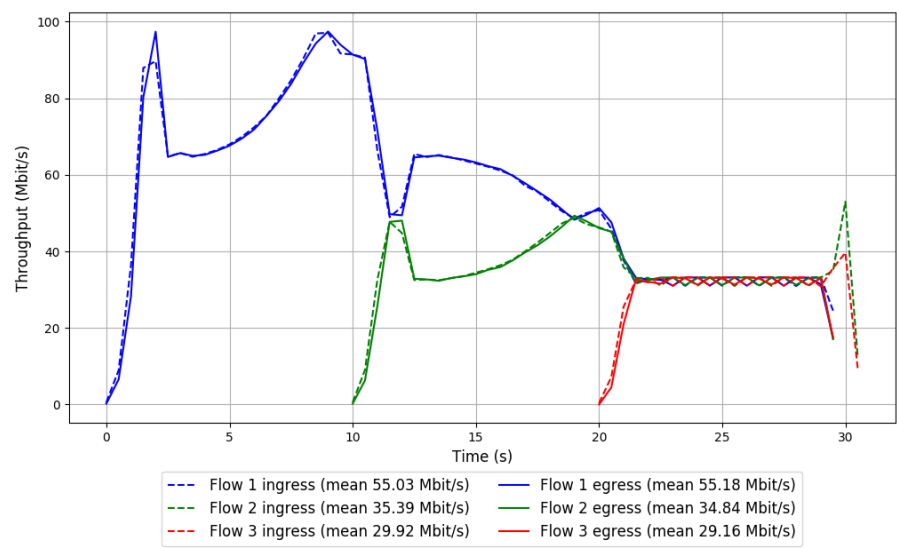
-- Flow 3:

Average throughput: 29.16 Mbit/s

95th percentile per-packet one-way delay: 119.058 ms

Loss rate: 11.63%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-04-24 17:38:56

End at: 2018-04-24 17:39:26

Local clock offset: -5.623 ms

Remote clock offset: 2.268 ms

Below is generated by plot.py at 2018-04-25 00:36:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.60 Mbit/s

95th percentile per-packet one-way delay: 116.956 ms

Loss rate: 4.70%

-- Flow 1:

Average throughput: 56.54 Mbit/s

95th percentile per-packet one-way delay: 116.718 ms

Loss rate: 3.46%

-- Flow 2:

Average throughput: 32.47 Mbit/s

95th percentile per-packet one-way delay: 117.434 ms

Loss rate: 8.64%

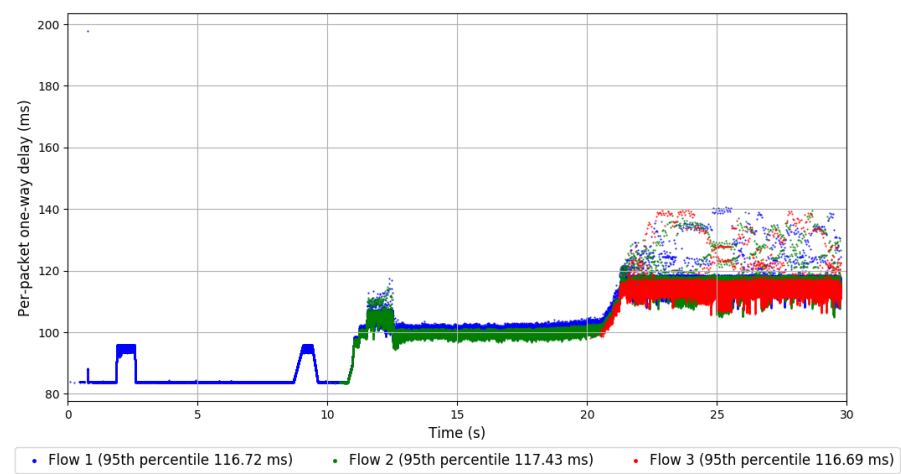
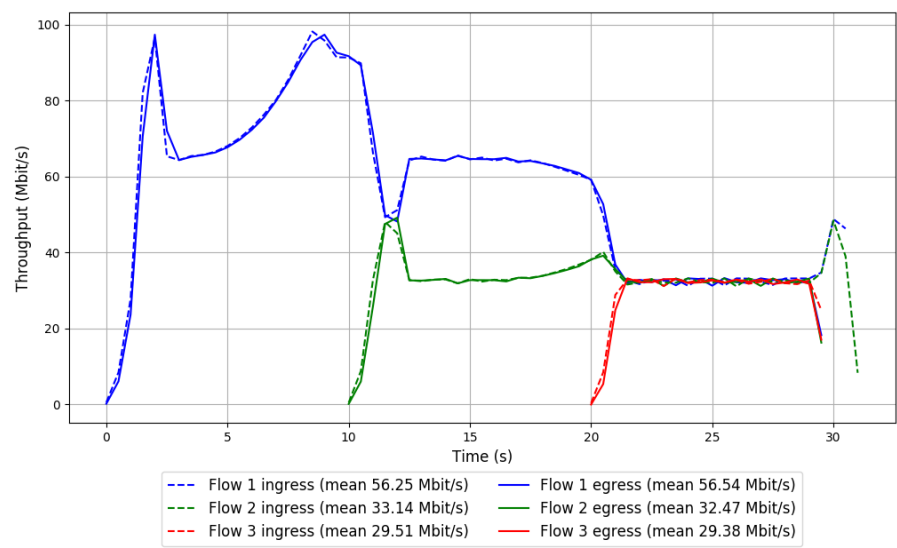
-- Flow 3:

Average throughput: 29.38 Mbit/s

95th percentile per-packet one-way delay: 116.691 ms

Loss rate: 2.61%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-04-24 18:01:22

End at: 2018-04-24 18:01:52

Local clock offset: -4.342 ms

Remote clock offset: 3.641 ms

Below is generated by plot.py at 2018-04-25 00:36:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.44 Mbit/s

95th percentile per-packet one-way delay: 117.141 ms

Loss rate: 1.78%

-- Flow 1:

Average throughput: 56.41 Mbit/s

95th percentile per-packet one-way delay: 115.302 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 32.31 Mbit/s

95th percentile per-packet one-way delay: 118.424 ms

Loss rate: 2.59%

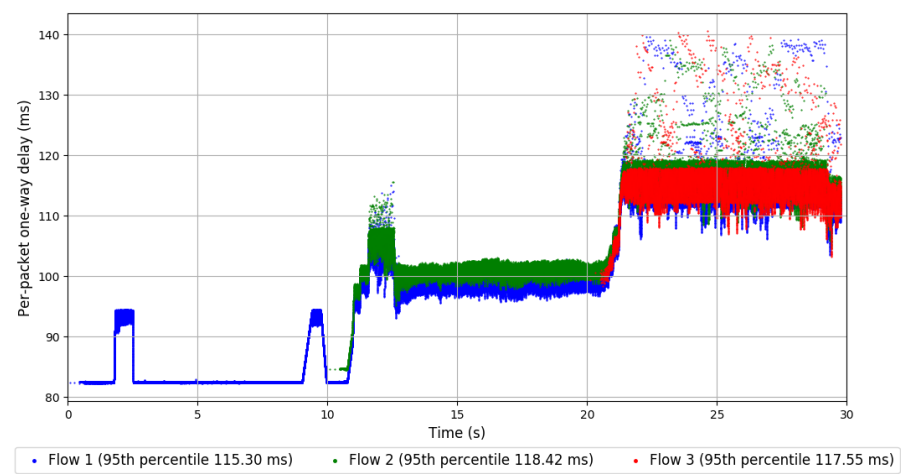
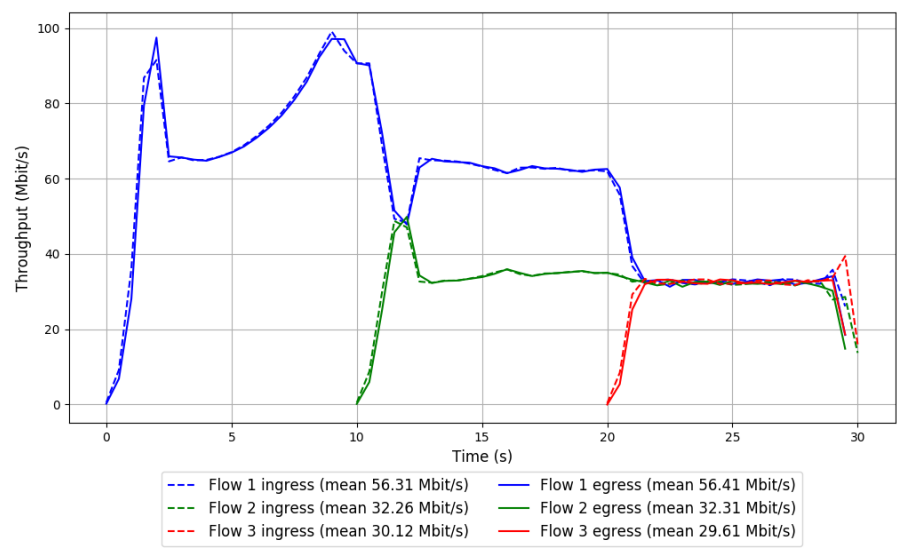
-- Flow 3:

Average throughput: 29.61 Mbit/s

95th percentile per-packet one-way delay: 117.550 ms

Loss rate: 7.23%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-04-24 18:23:43

End at: 2018-04-24 18:24:13

Local clock offset: -4.455 ms

Remote clock offset: 9.451 ms

Below is generated by plot.py at 2018-04-25 00:36:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.35 Mbit/s

95th percentile per-packet one-way delay: 111.966 ms

Loss rate: 4.64%

-- Flow 1:

Average throughput: 57.00 Mbit/s

95th percentile per-packet one-way delay: 110.715 ms

Loss rate: 3.79%

-- Flow 2:

Average throughput: 31.44 Mbit/s

95th percentile per-packet one-way delay: 112.608 ms

Loss rate: 7.83%

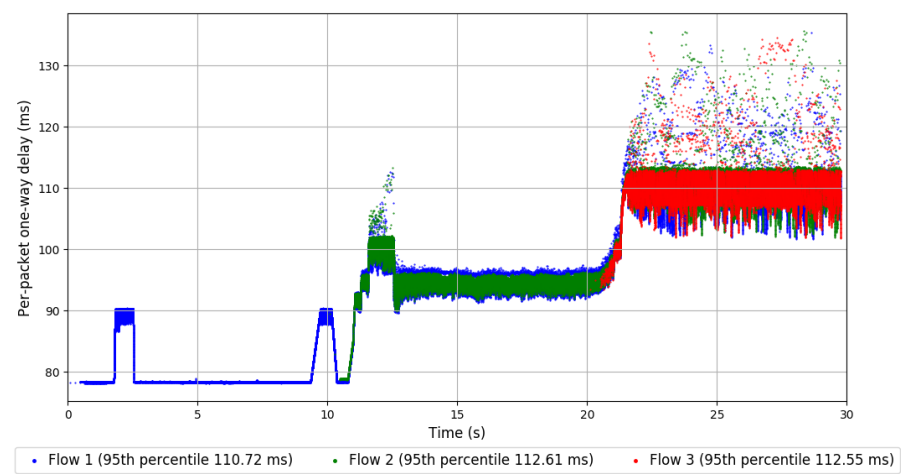
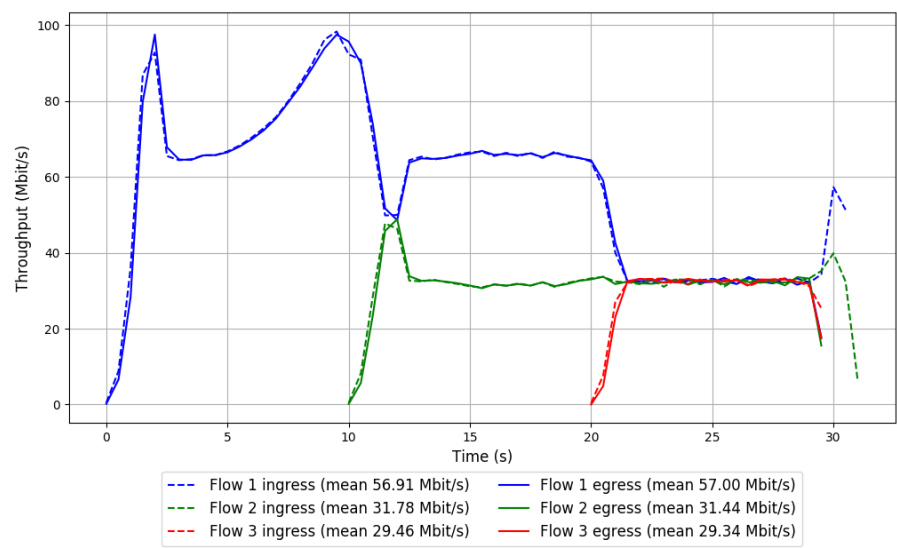
-- Flow 3:

Average throughput: 29.34 Mbit/s

95th percentile per-packet one-way delay: 112.549 ms

Loss rate: 2.48%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-04-24 18:46:22

End at: 2018-04-24 18:46:52

Local clock offset: -4.442 ms

Remote clock offset: 4.184 ms

Below is generated by plot.py at 2018-04-25 00:36:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.81 Mbit/s

95th percentile per-packet one-way delay: 101.824 ms

Loss rate: 9.55%

-- Flow 1:

Average throughput: 59.89 Mbit/s

95th percentile per-packet one-way delay: 101.493 ms

Loss rate: 8.16%

-- Flow 2:

Average throughput: 29.23 Mbit/s

95th percentile per-packet one-way delay: 103.449 ms

Loss rate: 13.26%

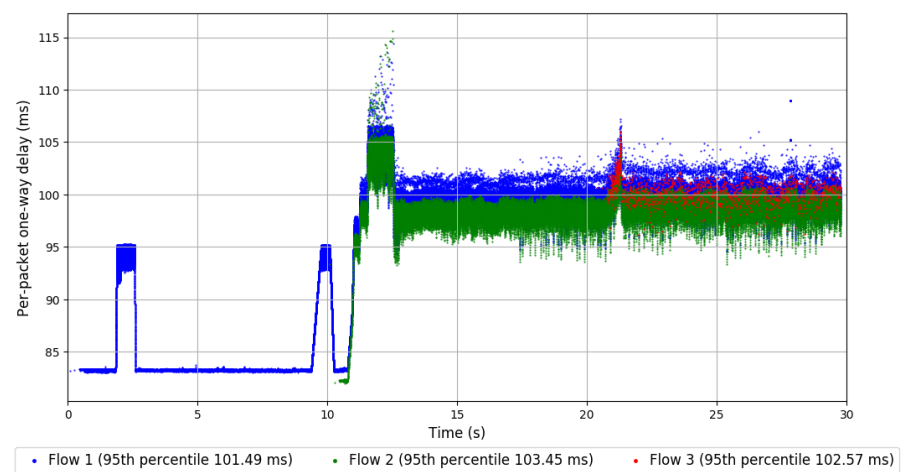
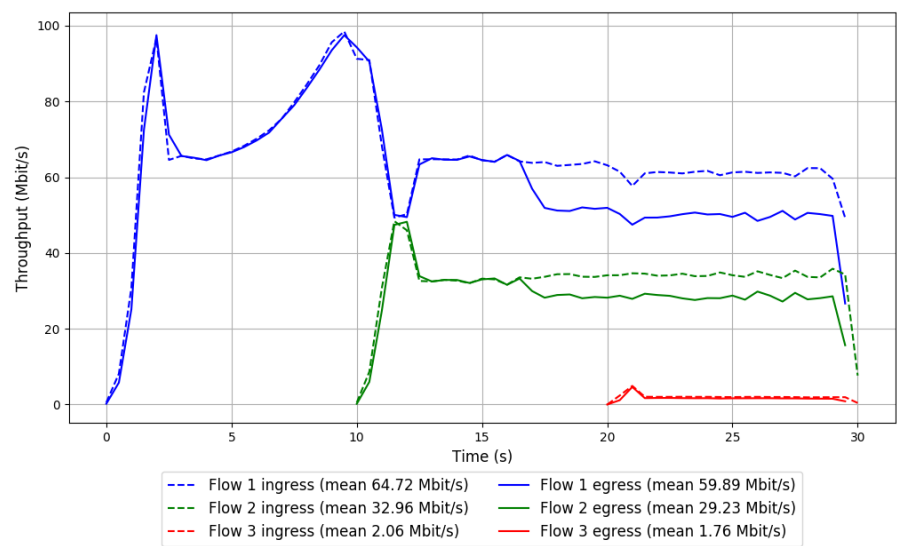
-- Flow 3:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 102.572 ms

Loss rate: 20.70%

Run 5: Report of PCC-Allegro — Data Link



Run 6: Statistics of PCC-Allegro

Start at: 2018-04-24 19:08:44

End at: 2018-04-24 19:09:14

Local clock offset: -4.42 ms

Remote clock offset: 3.112 ms

Below is generated by plot.py at 2018-04-25 00:36:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.56 Mbit/s

95th percentile per-packet one-way delay: 117.541 ms

Loss rate: 4.66%

-- Flow 1:

Average throughput: 56.96 Mbit/s

95th percentile per-packet one-way delay: 115.640 ms

Loss rate: 4.01%

-- Flow 2:

Average throughput: 31.70 Mbit/s

95th percentile per-packet one-way delay: 118.021 ms

Loss rate: 1.30%

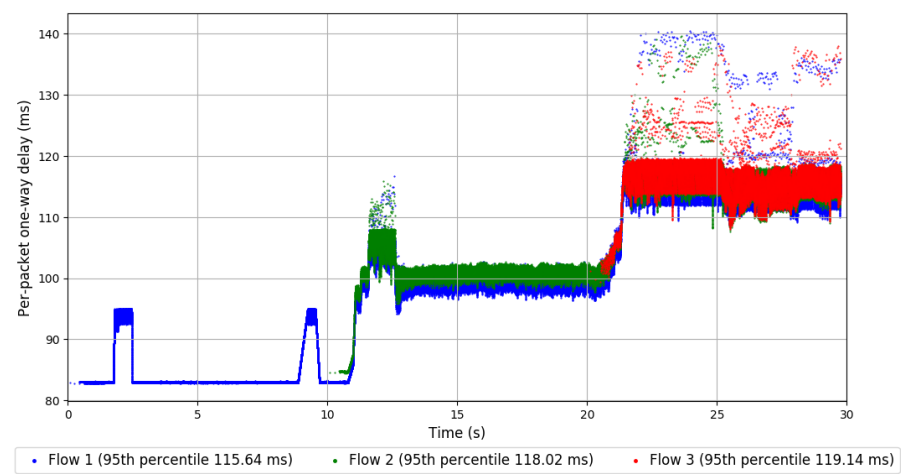
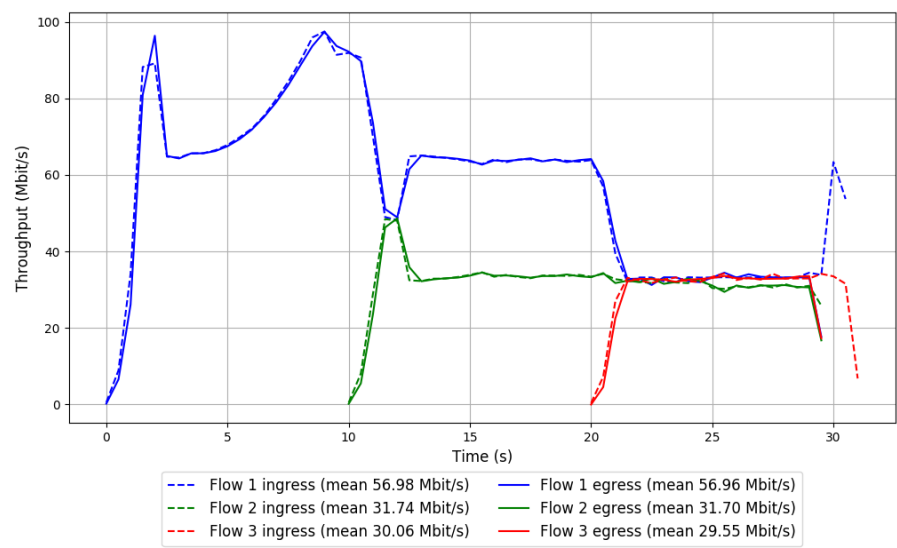
-- Flow 3:

Average throughput: 29.55 Mbit/s

95th percentile per-packet one-way delay: 119.139 ms

Loss rate: 14.45%

Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

Start at: 2018-04-24 19:31:06

End at: 2018-04-24 19:31:36

Local clock offset: -4.391 ms

Remote clock offset: 3.804 ms

Below is generated by plot.py at 2018-04-25 00:36:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.88 Mbit/s

95th percentile per-packet one-way delay: 81.837 ms

Loss rate: 2.43%

-- Flow 1:

Average throughput: 69.37 Mbit/s

95th percentile per-packet one-way delay: 81.709 ms

Loss rate: 2.37%

-- Flow 2:

Average throughput: 4.73 Mbit/s

95th percentile per-packet one-way delay: 81.732 ms

Loss rate: 2.94%

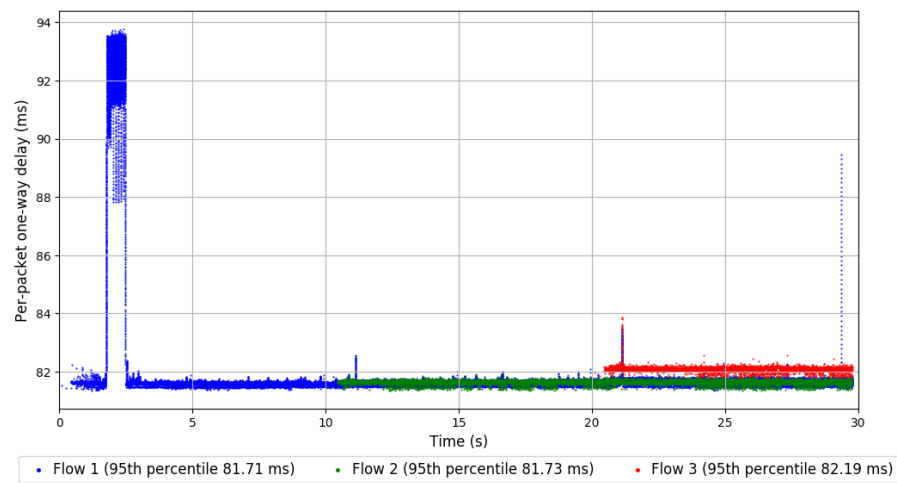
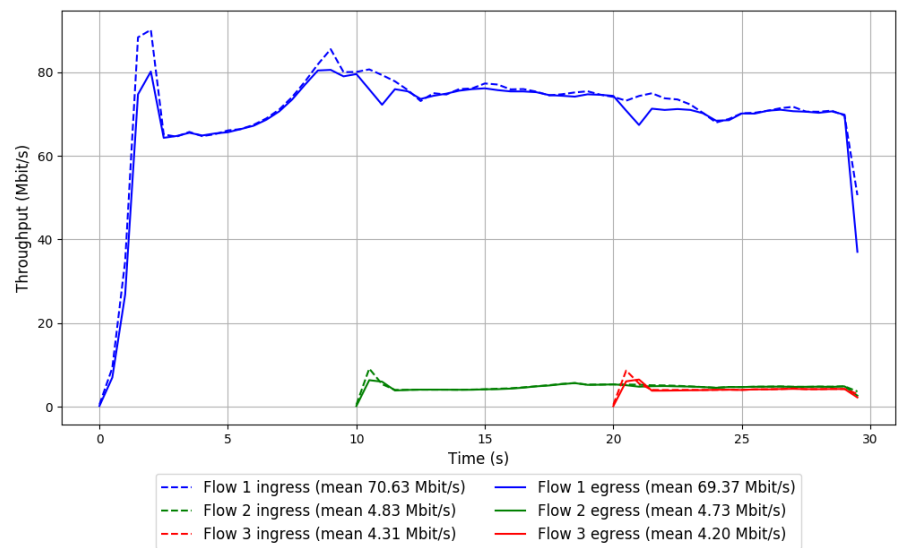
-- Flow 3:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 82.195 ms

Loss rate: 4.21%

Run 7: Report of PCC-Allegro — Data Link



Run 8: Statistics of PCC-Allegro

Start at: 2018-04-24 19:53:36

End at: 2018-04-24 19:54:06

Local clock offset: -5.229 ms

Remote clock offset: 8.408 ms

Below is generated by plot.py at 2018-04-25 00:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.44 Mbit/s

95th percentile per-packet one-way delay: 113.065 ms

Loss rate: 3.25%

-- Flow 1:

Average throughput: 56.48 Mbit/s

95th percentile per-packet one-way delay: 112.486 ms

Loss rate: 2.50%

-- Flow 2:

Average throughput: 32.39 Mbit/s

95th percentile per-packet one-way delay: 113.140 ms

Loss rate: 5.38%

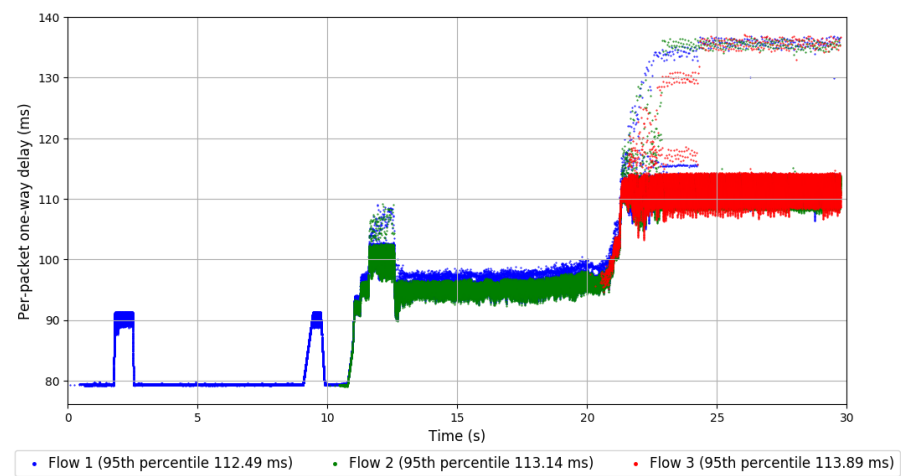
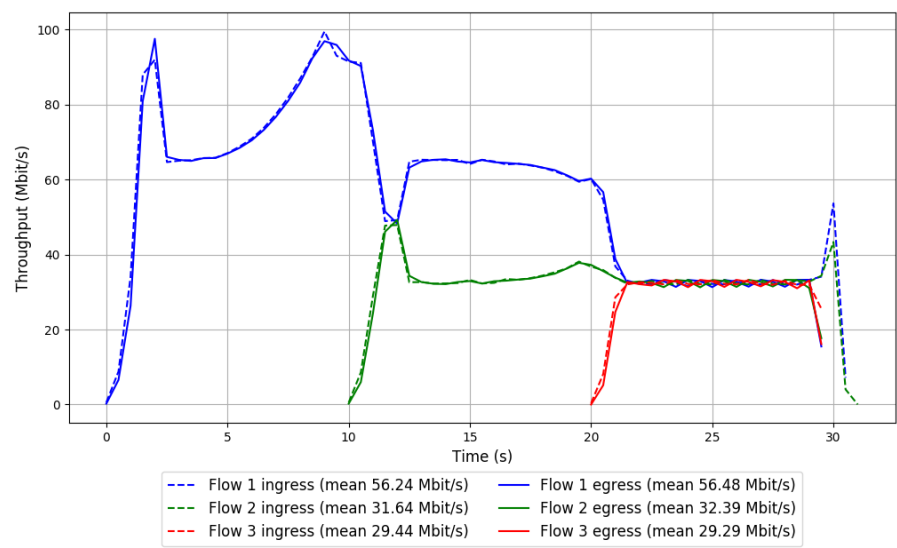
-- Flow 3:

Average throughput: 29.29 Mbit/s

95th percentile per-packet one-way delay: 113.887 ms

Loss rate: 2.77%

Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-04-24 20:15:58

End at: 2018-04-24 20:16:28

Local clock offset: -3.97 ms

Remote clock offset: 9.109 ms

Below is generated by plot.py at 2018-04-25 00:37:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.26 Mbit/s

95th percentile per-packet one-way delay: 86.288 ms

Loss rate: 2.77%

-- Flow 1:

Average throughput: 70.93 Mbit/s

95th percentile per-packet one-way delay: 86.114 ms

Loss rate: 2.69%

-- Flow 2:

Average throughput: 2.49 Mbit/s

95th percentile per-packet one-way delay: 78.648 ms

Loss rate: 3.25%

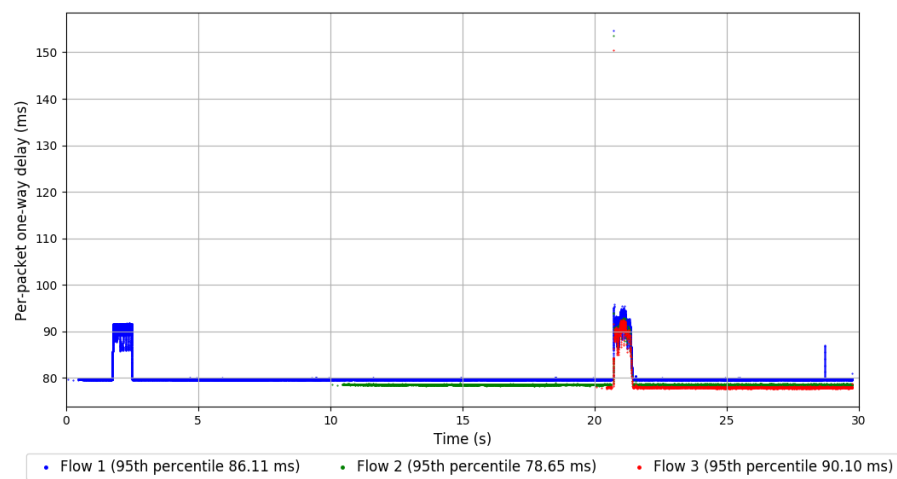
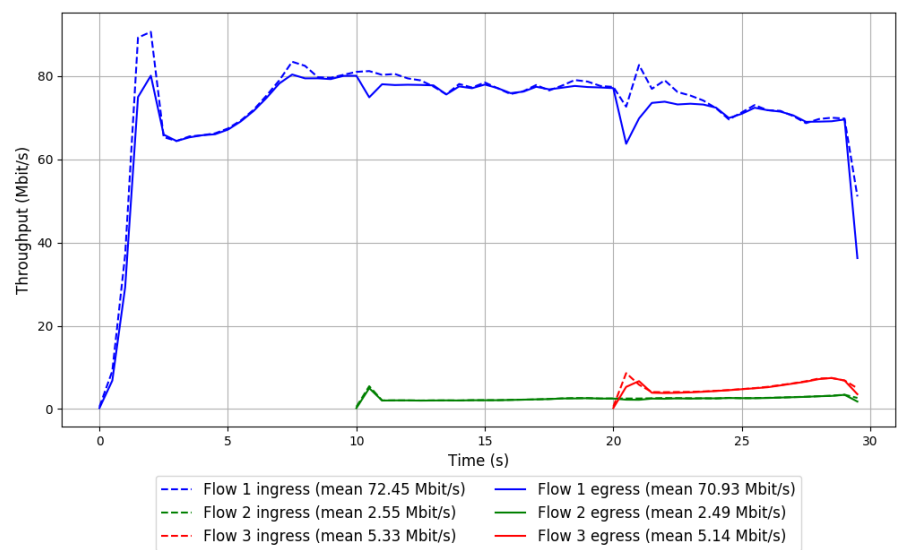
-- Flow 3:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 90.097 ms

Loss rate: 5.37%

Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-04-24 20:38:38

End at: 2018-04-24 20:39:08

Local clock offset: -5.651 ms

Remote clock offset: 8.049 ms

Below is generated by plot.py at 2018-04-25 00:37:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.71 Mbit/s

95th percentile per-packet one-way delay: 111.537 ms

Loss rate: 5.55%

-- Flow 1:

Average throughput: 56.38 Mbit/s

95th percentile per-packet one-way delay: 109.905 ms

Loss rate: 5.38%

-- Flow 2:

Average throughput: 33.01 Mbit/s

95th percentile per-packet one-way delay: 112.706 ms

Loss rate: 7.13%

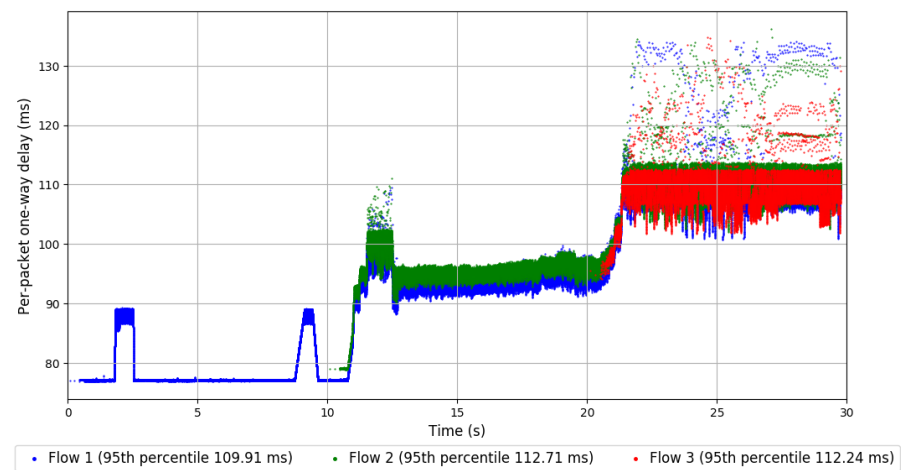
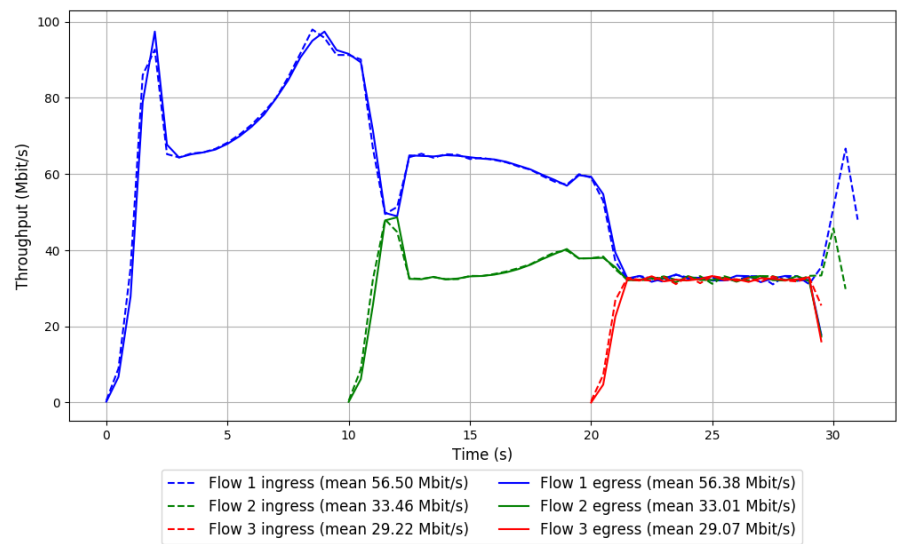
-- Flow 3:

Average throughput: 29.07 Mbit/s

95th percentile per-packet one-way delay: 112.239 ms

Loss rate: 2.78%

Run 10: Report of PCC-Allegro — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-04-24 17:03:53

End at: 2018-04-24 17:04:23

Local clock offset: -5.807 ms

Remote clock offset: 6.185 ms

Below is generated by plot.py at 2018-04-25 00:37:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.86 Mbit/s

95th percentile per-packet one-way delay: 106.368 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 40.12 Mbit/s

95th percentile per-packet one-way delay: 106.075 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 30.41 Mbit/s

95th percentile per-packet one-way delay: 106.491 ms

Loss rate: 1.74%

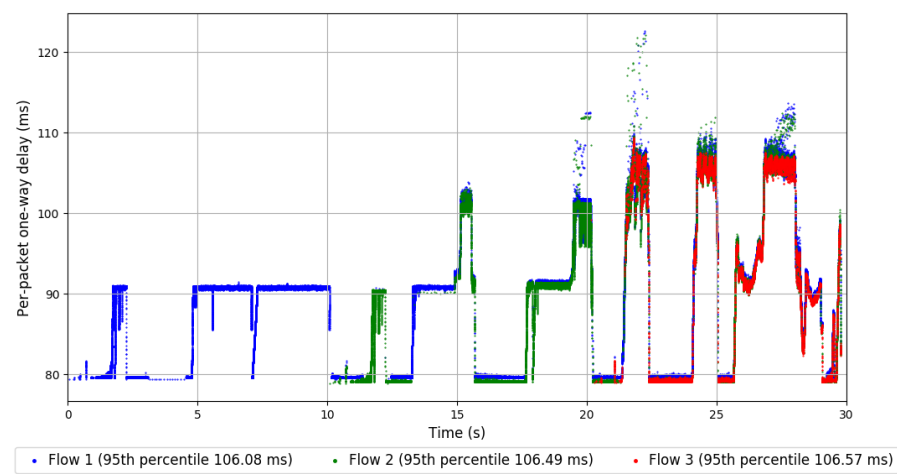
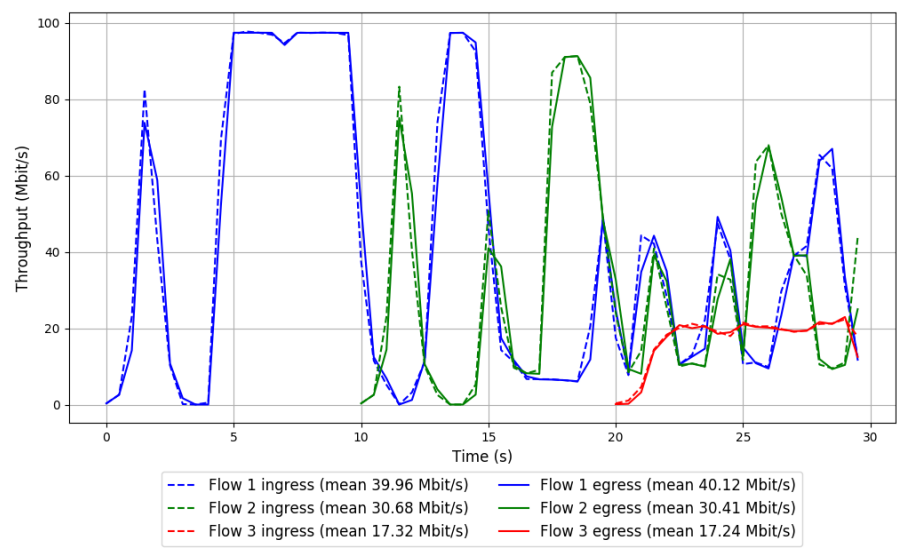
-- Flow 3:

Average throughput: 17.24 Mbit/s

95th percentile per-packet one-way delay: 106.567 ms

Loss rate: 2.48%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-04-24 17:27:05

End at: 2018-04-24 17:27:35

Local clock offset: -5.915 ms

Remote clock offset: 2.792 ms

Below is generated by plot.py at 2018-04-25 00:37:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.47 Mbit/s

95th percentile per-packet one-way delay: 104.922 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 43.24 Mbit/s

95th percentile per-packet one-way delay: 104.435 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 29.31 Mbit/s

95th percentile per-packet one-way delay: 105.092 ms

Loss rate: 1.47%

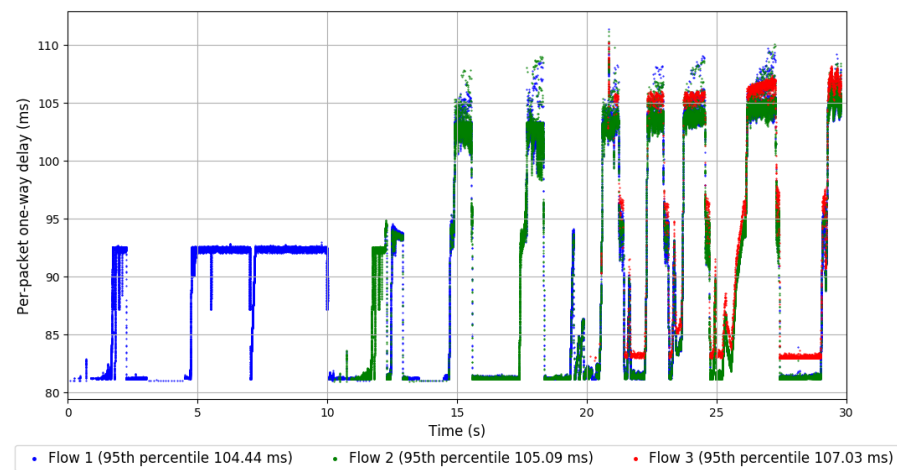
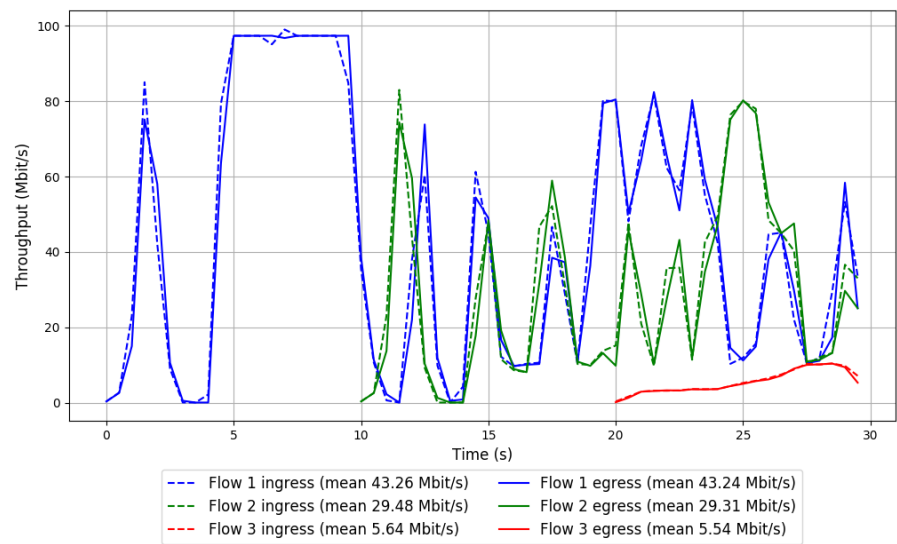
-- Flow 3:

Average throughput: 5.54 Mbit/s

95th percentile per-packet one-way delay: 107.026 ms

Loss rate: 3.53%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-04-24 17:49:33

End at: 2018-04-24 17:50:03

Local clock offset: -5.398 ms

Remote clock offset: 7.09 ms

Below is generated by plot.py at 2018-04-25 00:37:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.23 Mbit/s

95th percentile per-packet one-way delay: 111.427 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 38.50 Mbit/s

95th percentile per-packet one-way delay: 111.809 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 37.02 Mbit/s

95th percentile per-packet one-way delay: 111.237 ms

Loss rate: 0.95%

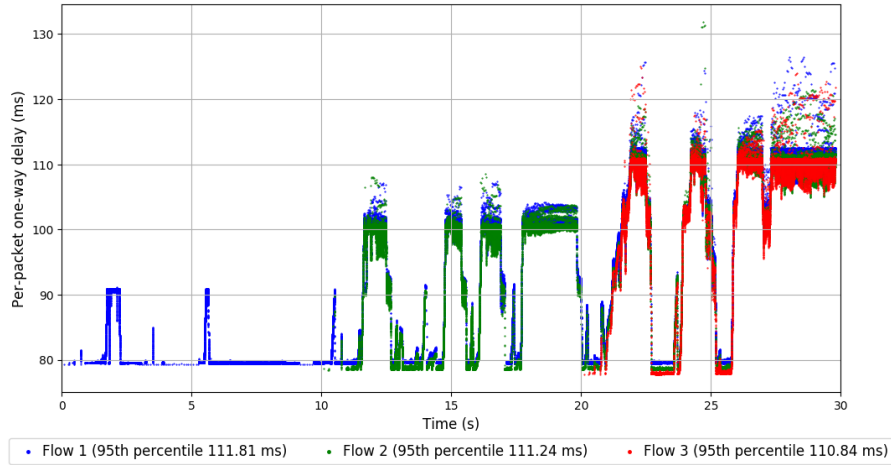
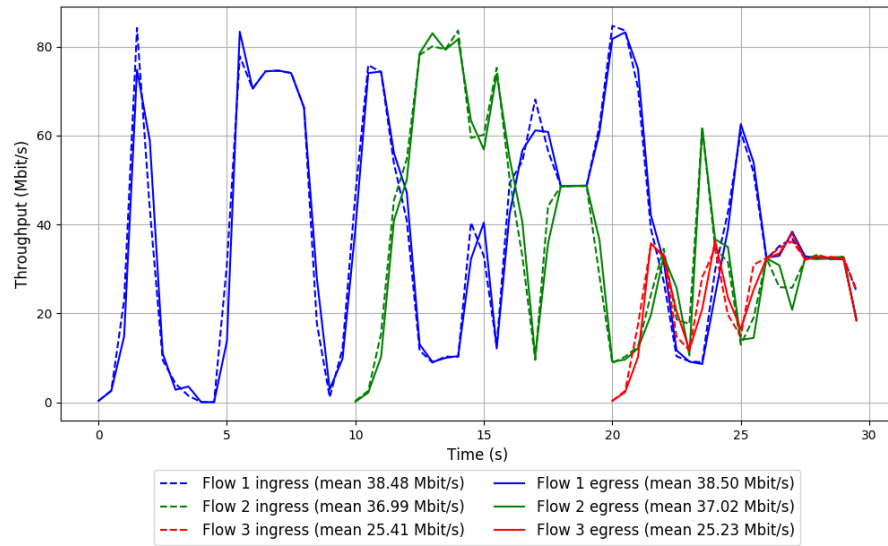
-- Flow 3:

Average throughput: 25.23 Mbit/s

95th percentile per-packet one-way delay: 110.838 ms

Loss rate: 2.80%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-04-24 18:11:56

End at: 2018-04-24 18:12:26

Local clock offset: -4.35 ms

Remote clock offset: 4.314 ms

Below is generated by plot.py at 2018-04-25 00:37:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.47 Mbit/s

95th percentile per-packet one-way delay: 108.108 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 44.19 Mbit/s

95th percentile per-packet one-way delay: 108.326 ms

Loss rate: 0.95%

-- Flow 2:

Average throughput: 32.55 Mbit/s

95th percentile per-packet one-way delay: 106.555 ms

Loss rate: 0.47%

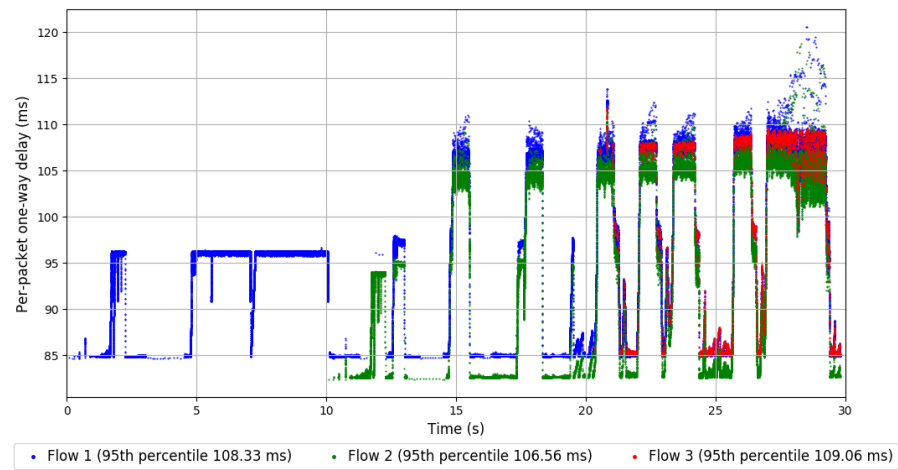
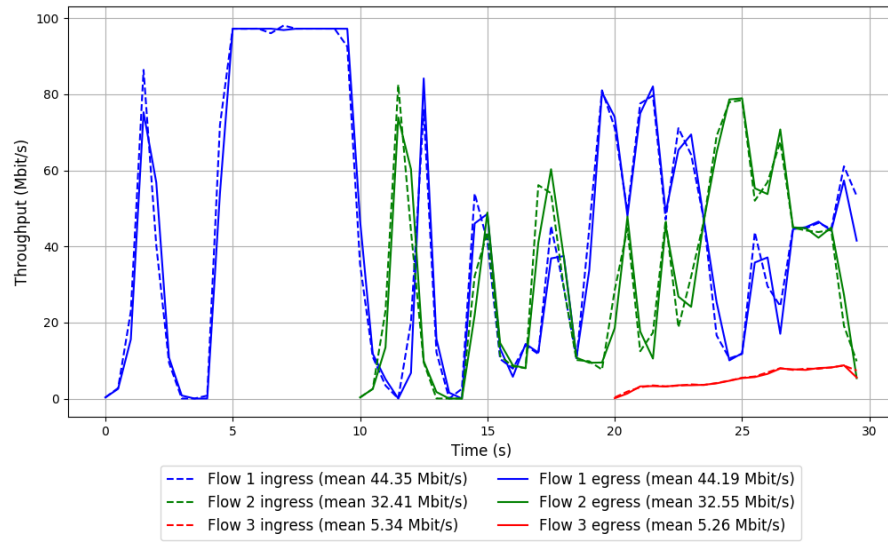
-- Flow 3:

Average throughput: 5.26 Mbit/s

95th percentile per-packet one-way delay: 109.063 ms

Loss rate: 3.30%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-04-24 18:34:30

End at: 2018-04-24 18:35:00

Local clock offset: -4.547 ms

Remote clock offset: 8.523 ms

Below is generated by plot.py at 2018-04-25 00:37:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.73 Mbit/s

95th percentile per-packet one-way delay: 107.958 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 38.37 Mbit/s

95th percentile per-packet one-way delay: 104.647 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 40.01 Mbit/s

95th percentile per-packet one-way delay: 107.674 ms

Loss rate: 0.88%

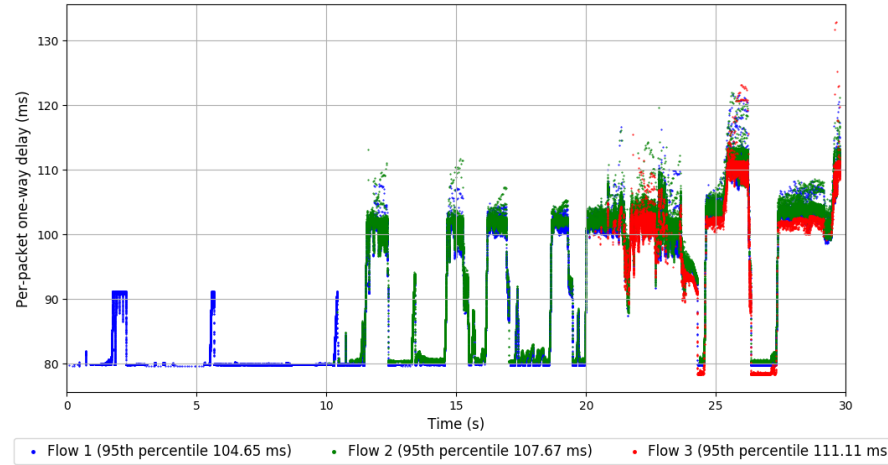
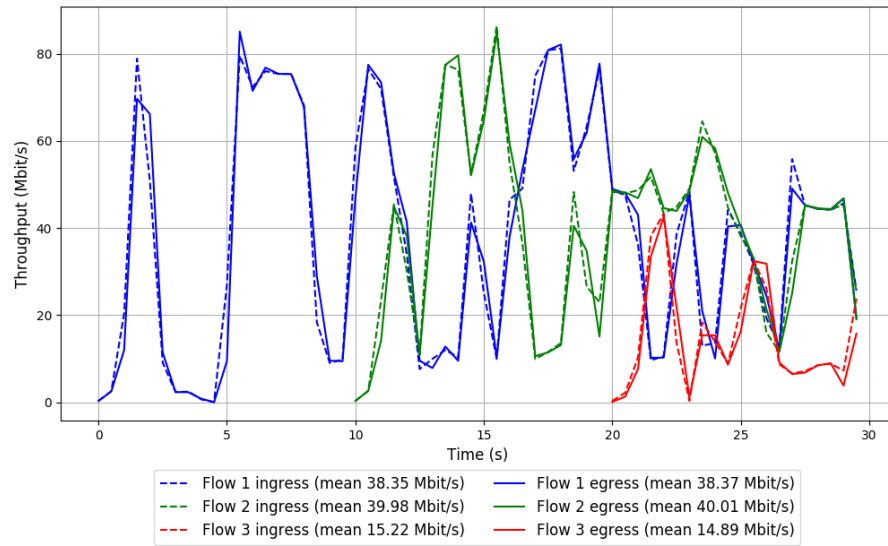
-- Flow 3:

Average throughput: 14.89 Mbit/s

95th percentile per-packet one-way delay: 111.105 ms

Loss rate: 4.38%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-04-24 18:56:55

End at: 2018-04-24 18:57:25

Local clock offset: -5.137 ms

Remote clock offset: 3.3 ms

Below is generated by plot.py at 2018-04-25 00:38:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.73 Mbit/s

95th percentile per-packet one-way delay: 107.114 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 38.42 Mbit/s

95th percentile per-packet one-way delay: 107.243 ms

Loss rate: 1.23%

-- Flow 2:

Average throughput: 43.61 Mbit/s

95th percentile per-packet one-way delay: 105.161 ms

Loss rate: 0.34%

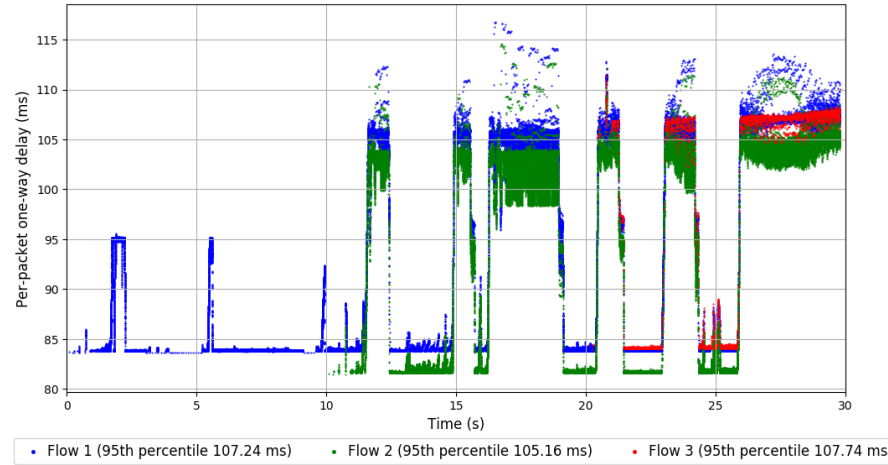
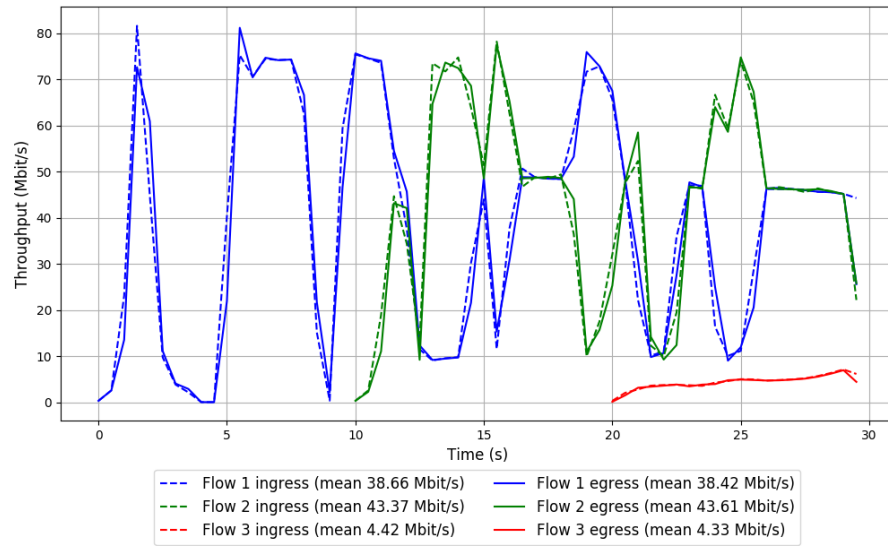
-- Flow 3:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 107.742 ms

Loss rate: 3.82%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

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

End at: 2018-04-24 19:19:49

Local clock offset: -3.585 ms

Remote clock offset: 2.923 ms

Below is generated by plot.py at 2018-04-25 00:38:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.98 Mbit/s

95th percentile per-packet one-way delay: 112.669 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 33.49 Mbit/s

95th percentile per-packet one-way delay: 110.160 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 37.64 Mbit/s

95th percentile per-packet one-way delay: 110.702 ms

Loss rate: 1.33%

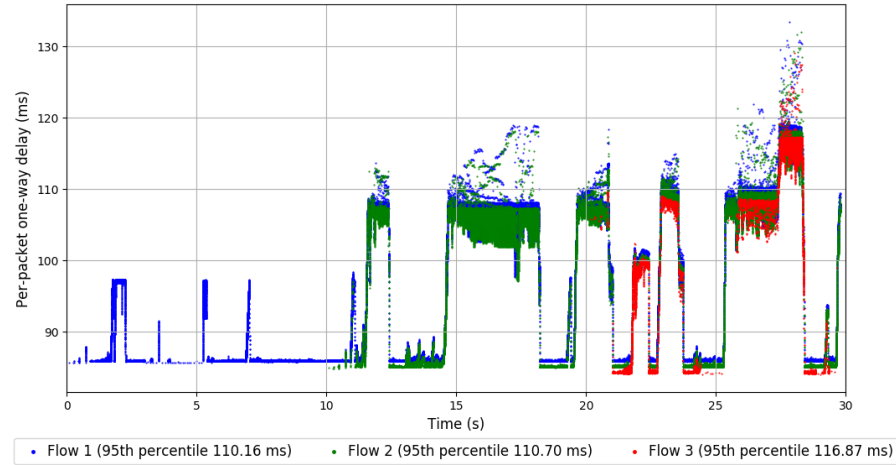
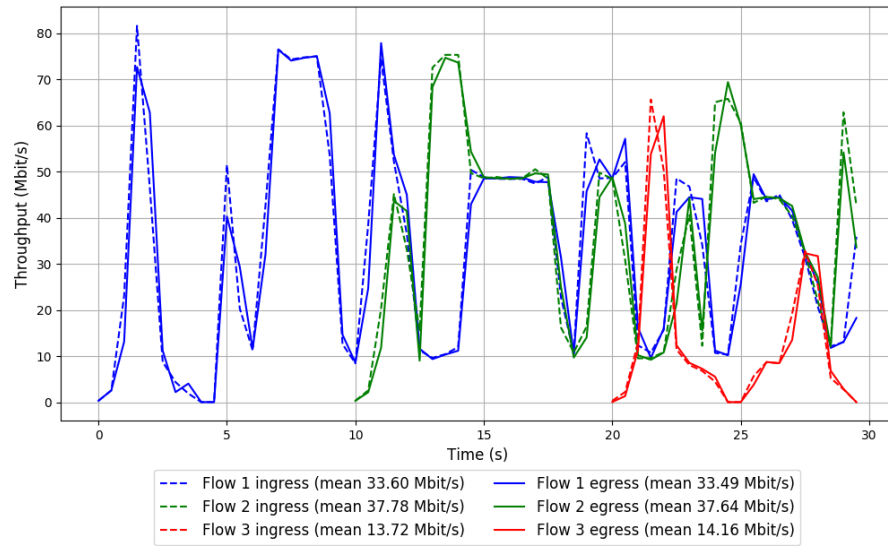
-- Flow 3:

Average throughput: 14.16 Mbit/s

95th percentile per-packet one-way delay: 116.873 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-04-24 19:41:48

End at: 2018-04-24 19:42:18

Local clock offset: -4.454 ms

Remote clock offset: 7.999 ms

Below is generated by plot.py at 2018-04-25 00:38:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.81 Mbit/s

95th percentile per-packet one-way delay: 102.957 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 44.26 Mbit/s

95th percentile per-packet one-way delay: 102.999 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 29.45 Mbit/s

95th percentile per-packet one-way delay: 102.452 ms

Loss rate: 0.33%

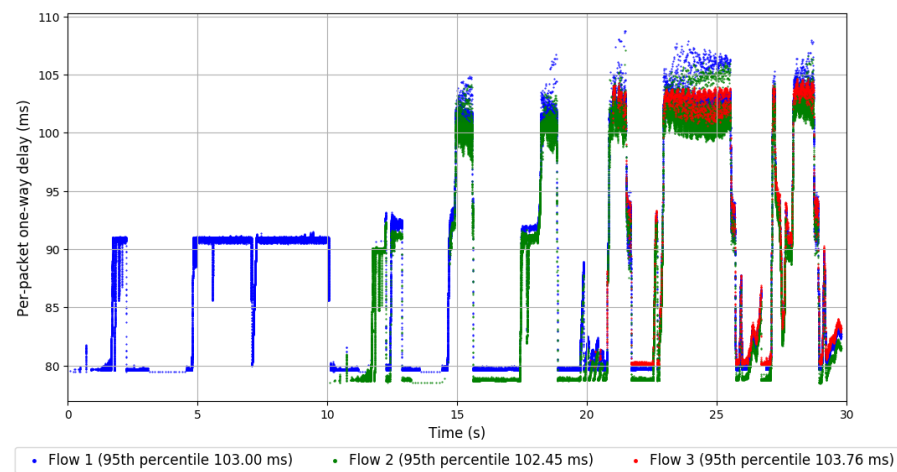
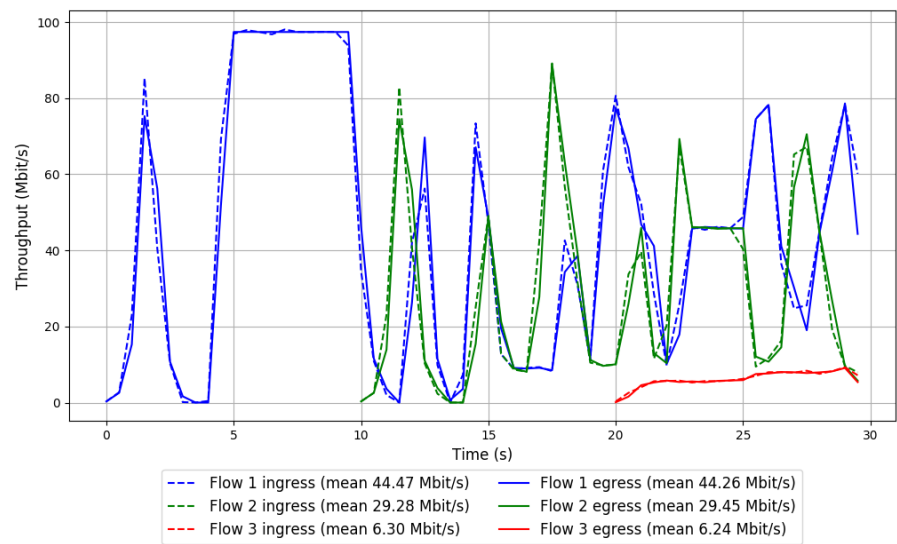
-- Flow 3:

Average throughput: 6.24 Mbit/s

95th percentile per-packet one-way delay: 103.763 ms

Loss rate: 2.77%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-04-24 20:04:09

End at: 2018-04-24 20:04:39

Local clock offset: -3.89 ms

Remote clock offset: 8.606 ms

Below is generated by plot.py at 2018-04-25 00:38:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.53 Mbit/s

95th percentile per-packet one-way delay: 104.732 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 41.47 Mbit/s

95th percentile per-packet one-way delay: 102.910 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 36.97 Mbit/s

95th percentile per-packet one-way delay: 103.895 ms

Loss rate: 1.35%

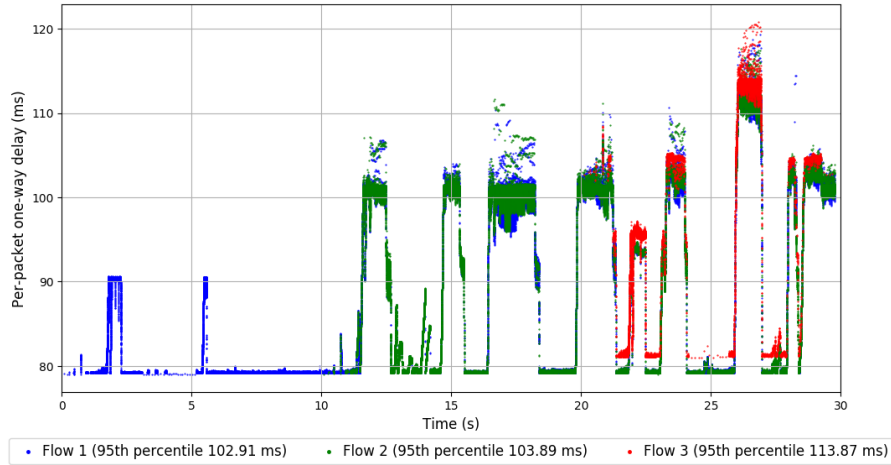
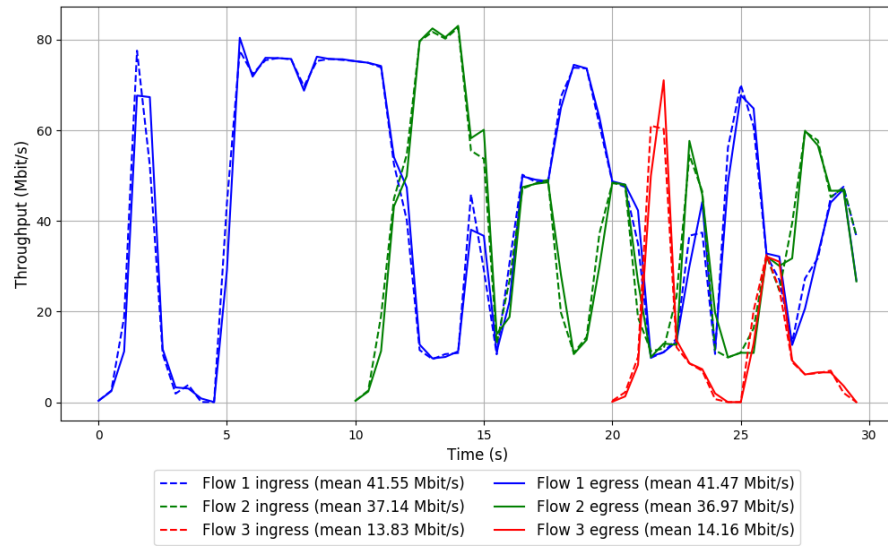
-- Flow 3:

Average throughput: 14.16 Mbit/s

95th percentile per-packet one-way delay: 113.871 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-04-24 20:26:40

End at: 2018-04-24 20:27:10

Local clock offset: -3.965 ms

Remote clock offset: 8.055 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.31 Mbit/s

95th percentile per-packet one-way delay: 111.723 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 36.24 Mbit/s

95th percentile per-packet one-way delay: 109.926 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 23.11 Mbit/s

95th percentile per-packet one-way delay: 111.995 ms

Loss rate: 1.49%

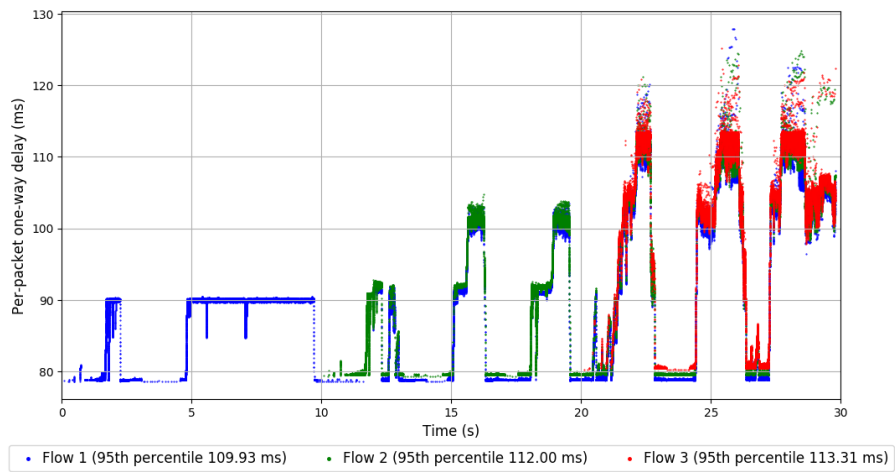
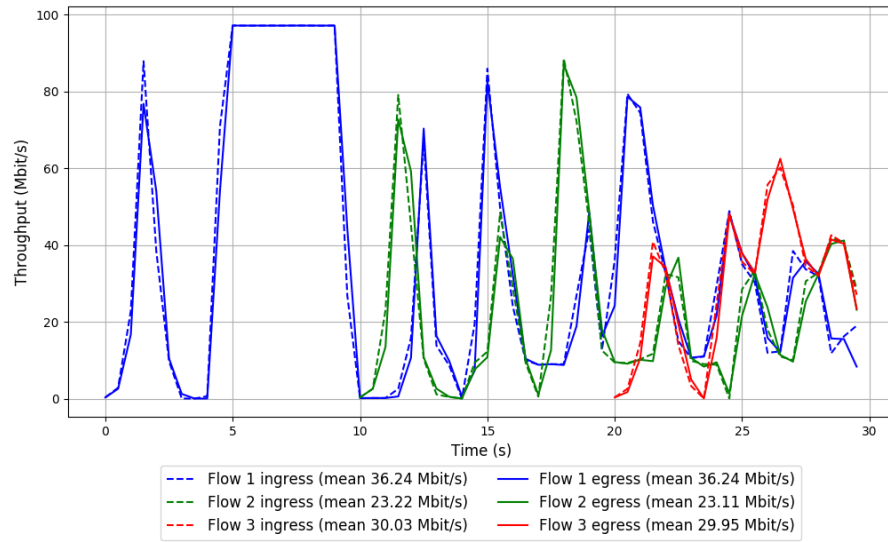
-- Flow 3:

Average throughput: 29.95 Mbit/s

95th percentile per-packet one-way delay: 113.309 ms

Loss rate: 2.13%

Run 10: Report of QUIC Cubic — Data Link

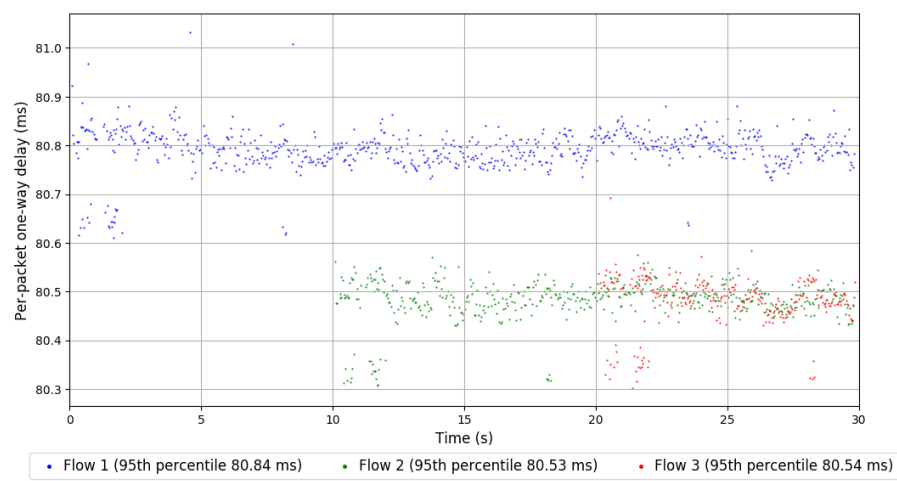
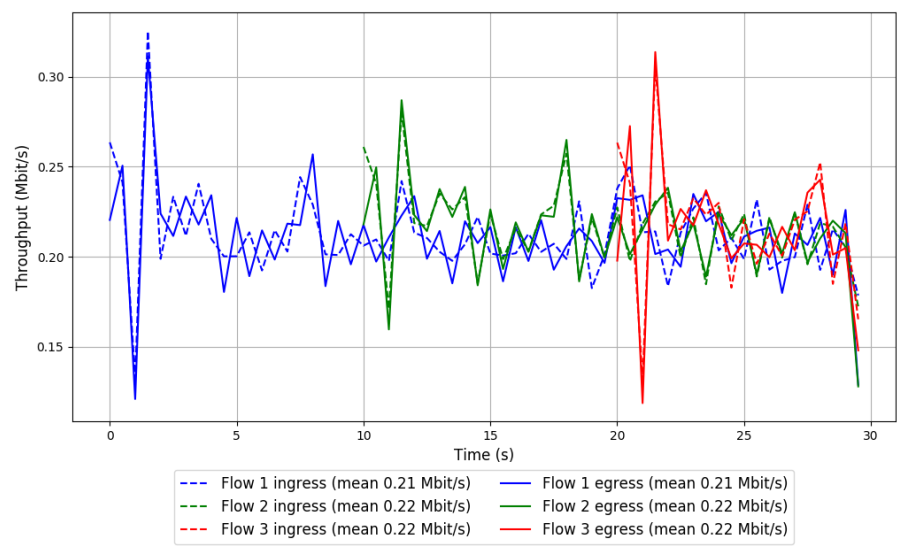


```
Run 1: Statistics of SReAM

Start at: 2018-04-24 16:59:59
End at: 2018-04-24 17:00:29
Local clock offset: -4.833 ms
Remote clock offset: 5.381 ms

# Below is generated by plot.py at 2018-04-25 00:38:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 80.832 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 80.843 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.534 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.537 ms
Loss rate: 1.49%
```

Run 1: Report of SReAM — Data Link

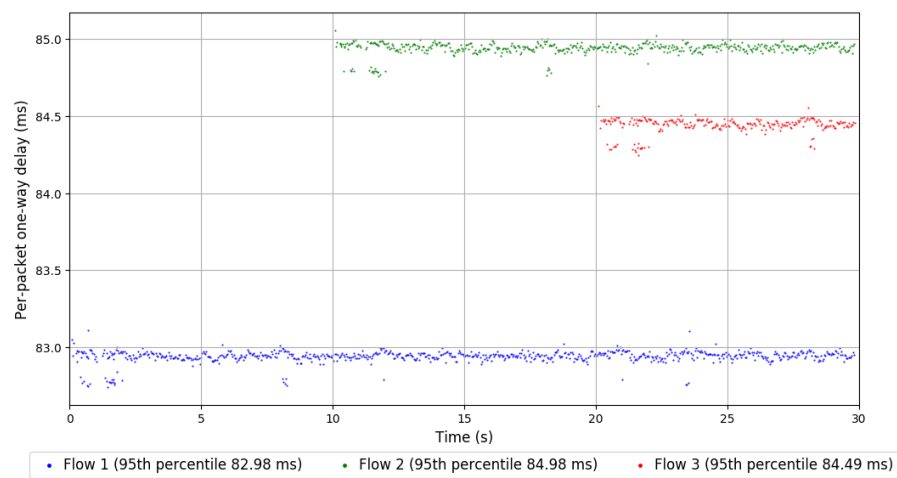
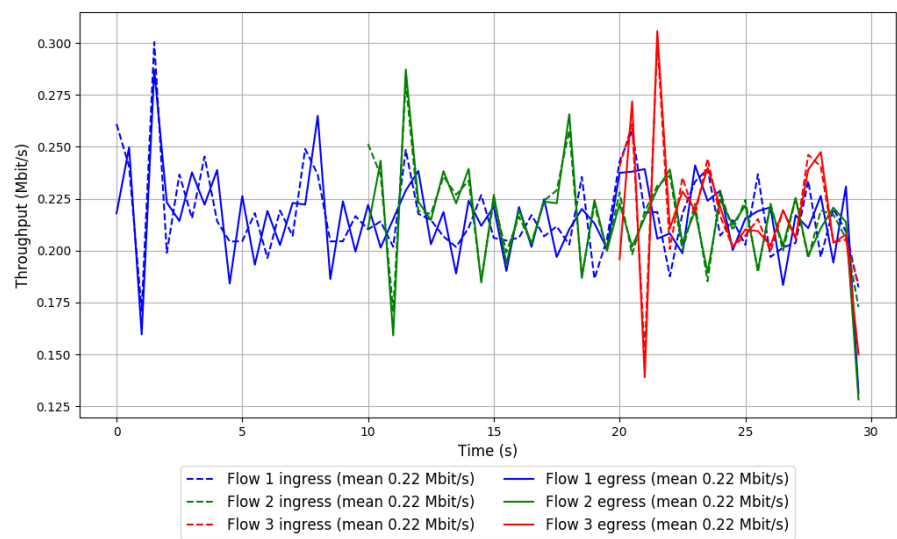


Run 2: Statistics of SReAM

Start at: 2018-04-24 17:23:10
End at: 2018-04-24 17:23:40
Local clock offset: -4.362 ms
Remote clock offset: 2.693 ms

Below is generated by plot.py at 2018-04-25 00:38:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 84.971 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.981 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.983 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.489 ms
Loss rate: 1.49%

Run 2: Report of SReAM — Data Link

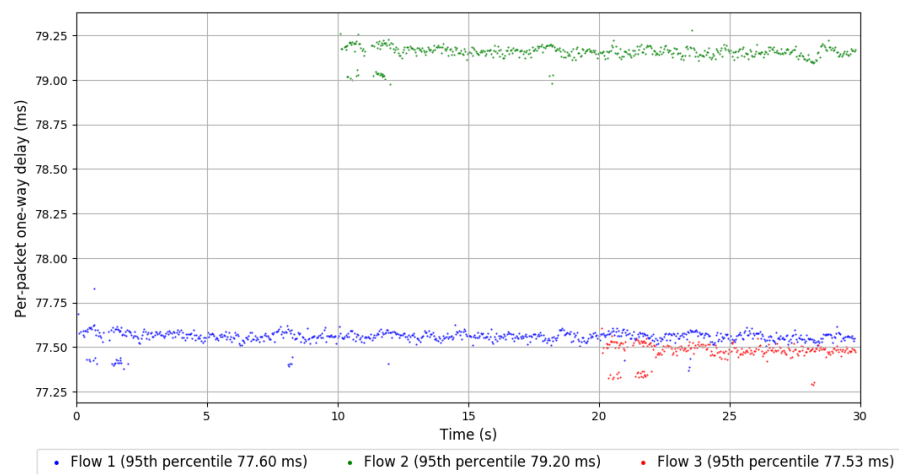
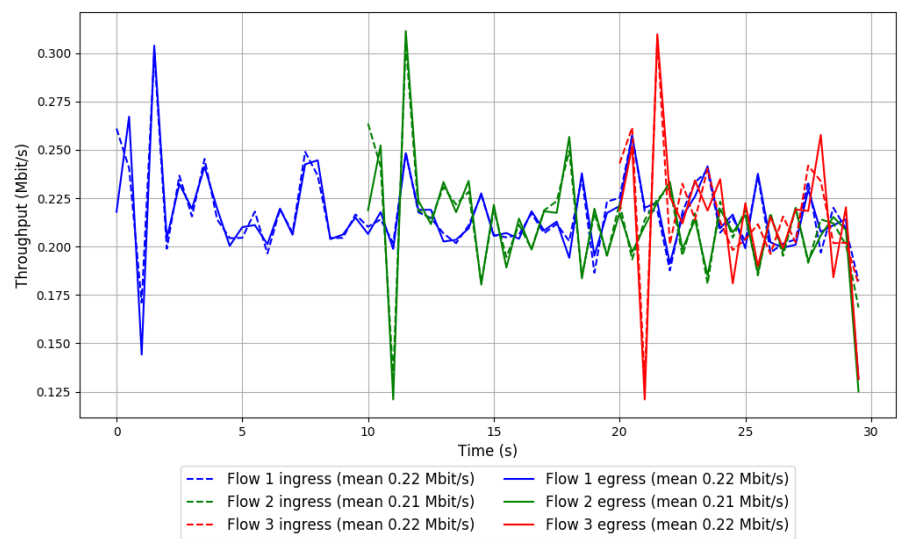


Run 3: Statistics of SReAM

Start at: 2018-04-24 17:45:39
End at: 2018-04-24 17:46:09
Local clock offset: -5.395 ms
Remote clock offset: 6.989 ms

Below is generated by plot.py at 2018-04-25 00:38:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 79.185 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.597 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 79.203 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.531 ms
Loss rate: 1.49%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2018-04-24 18:08:02

End at: 2018-04-24 18:08:32

Local clock offset: -3.483 ms

Remote clock offset: 4.196 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 85.256 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.015 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.271 ms

Loss rate: 0.84%

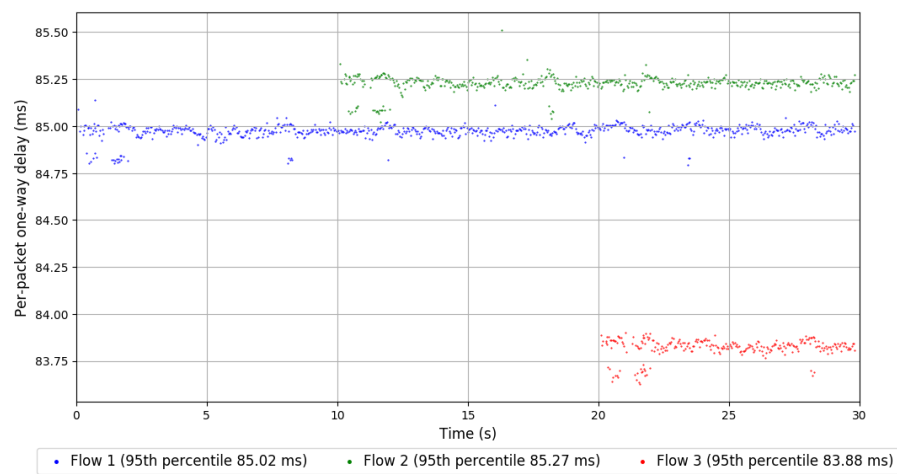
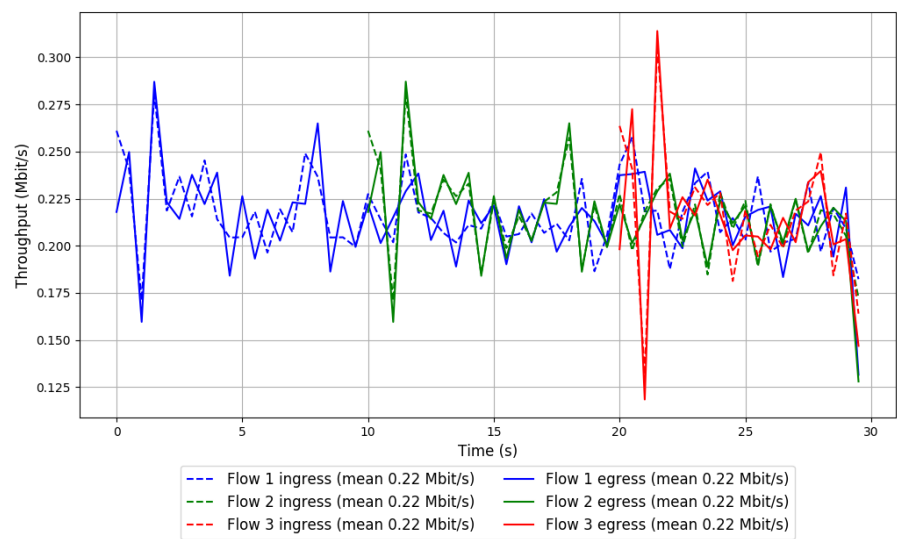
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.876 ms

Loss rate: 1.49%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-04-24 18:30:35

End at: 2018-04-24 18:31:05

Local clock offset: -4.489 ms

Remote clock offset: 5.257 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 83.906 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.914 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 82.469 ms

Loss rate: 0.84%

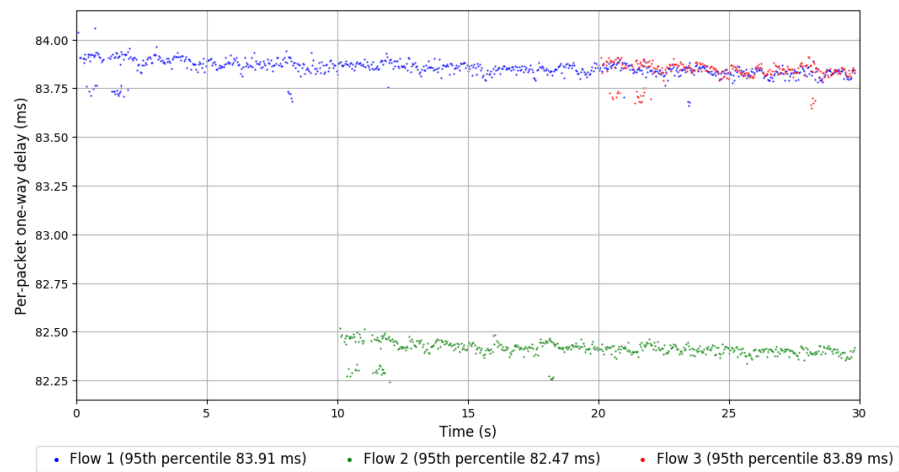
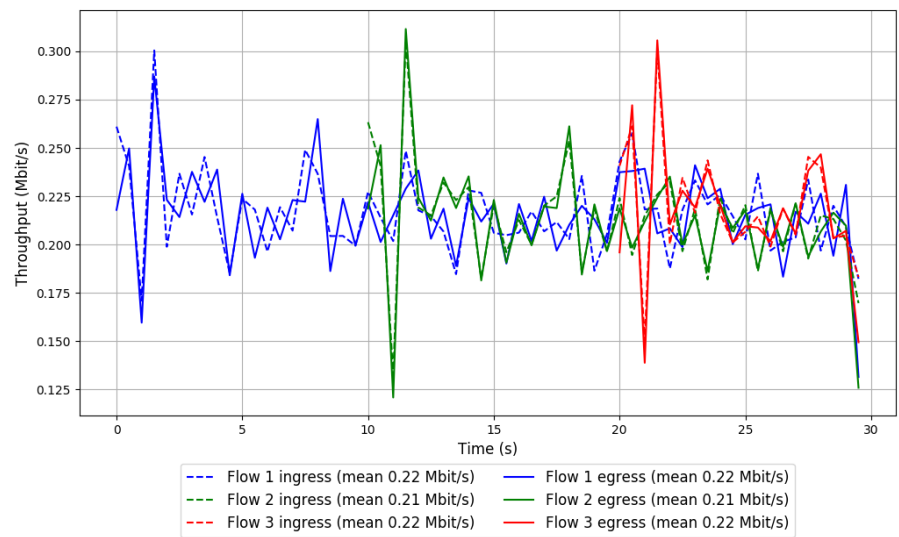
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.894 ms

Loss rate: 1.49%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-04-24 18:53:02

End at: 2018-04-24 18:53:32

Local clock offset: -5.142 ms

Remote clock offset: 4.174 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 82.929 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 81.533 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 82.940 ms

Loss rate: 0.85%

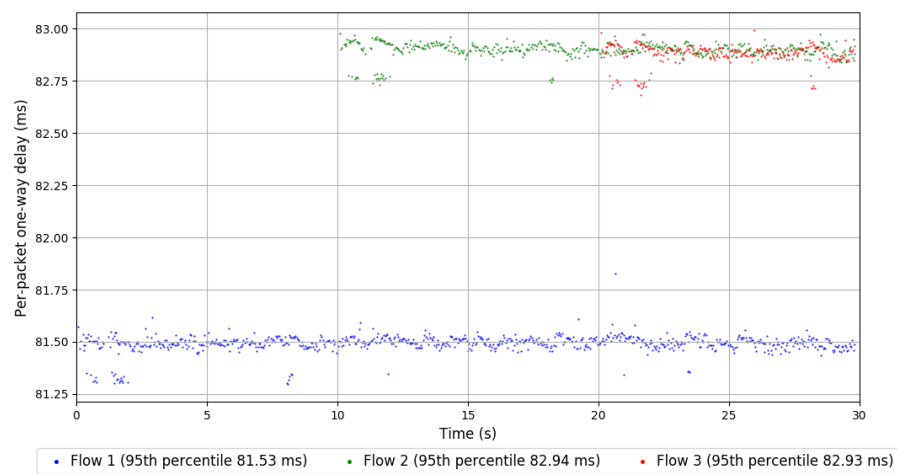
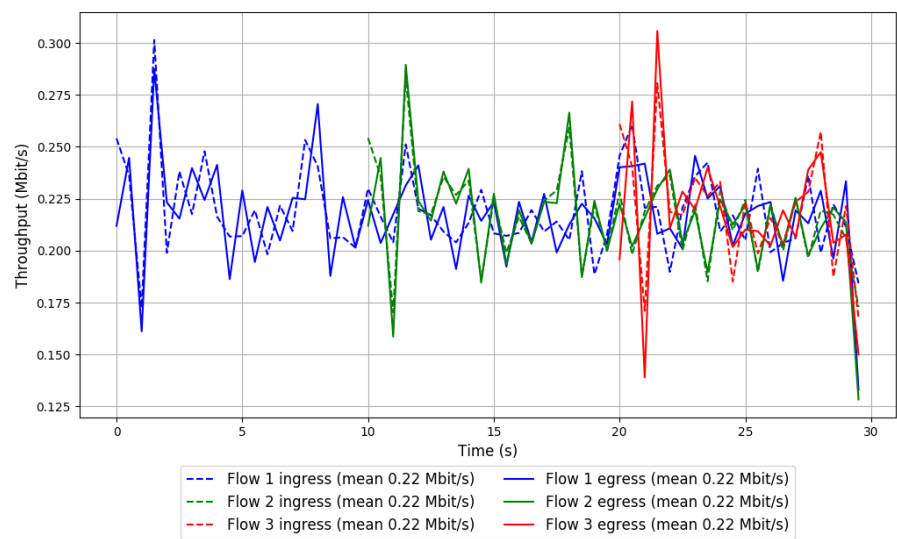
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 82.929 ms

Loss rate: 1.49%

Run 6: Report of SReAM — Data Link

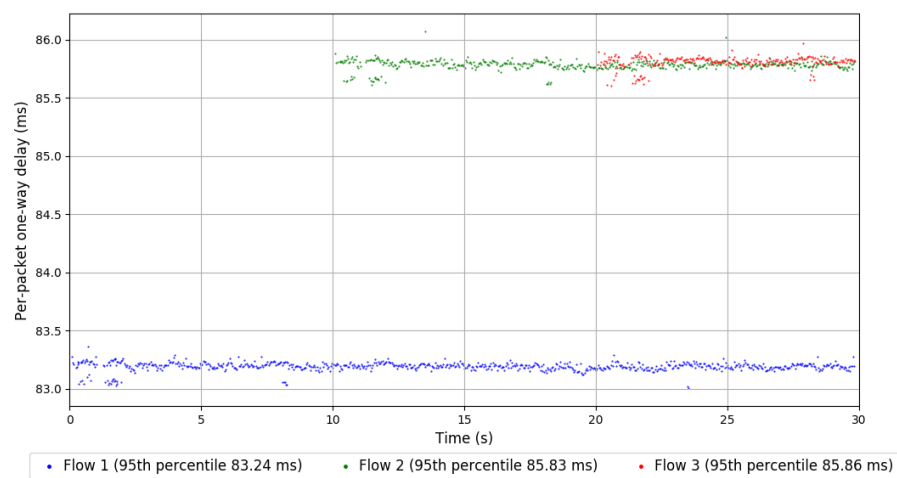
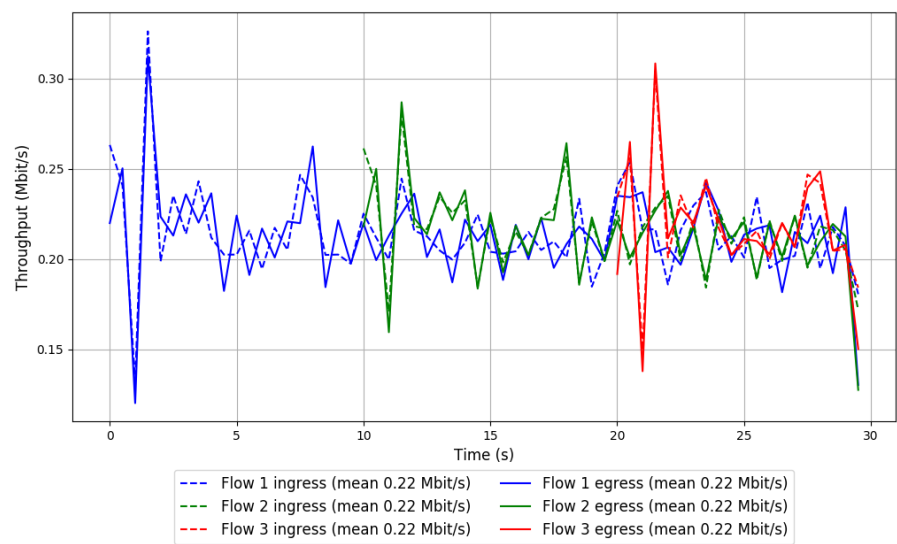


Run 7: Statistics of SReAM

Start at: 2018-04-24 19:15:25
End at: 2018-04-24 19:15:55
Local clock offset: -3.559 ms
Remote clock offset: 2.985 ms

Below is generated by plot.py at 2018-04-25 00:38:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 85.838 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.237 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.832 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.865 ms
Loss rate: 1.50%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-04-24 19:37:54

End at: 2018-04-24 19:38:24

Local clock offset: -5.221 ms

Remote clock offset: 7.797 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 79.203 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 79.123 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 79.219 ms

Loss rate: 0.85%

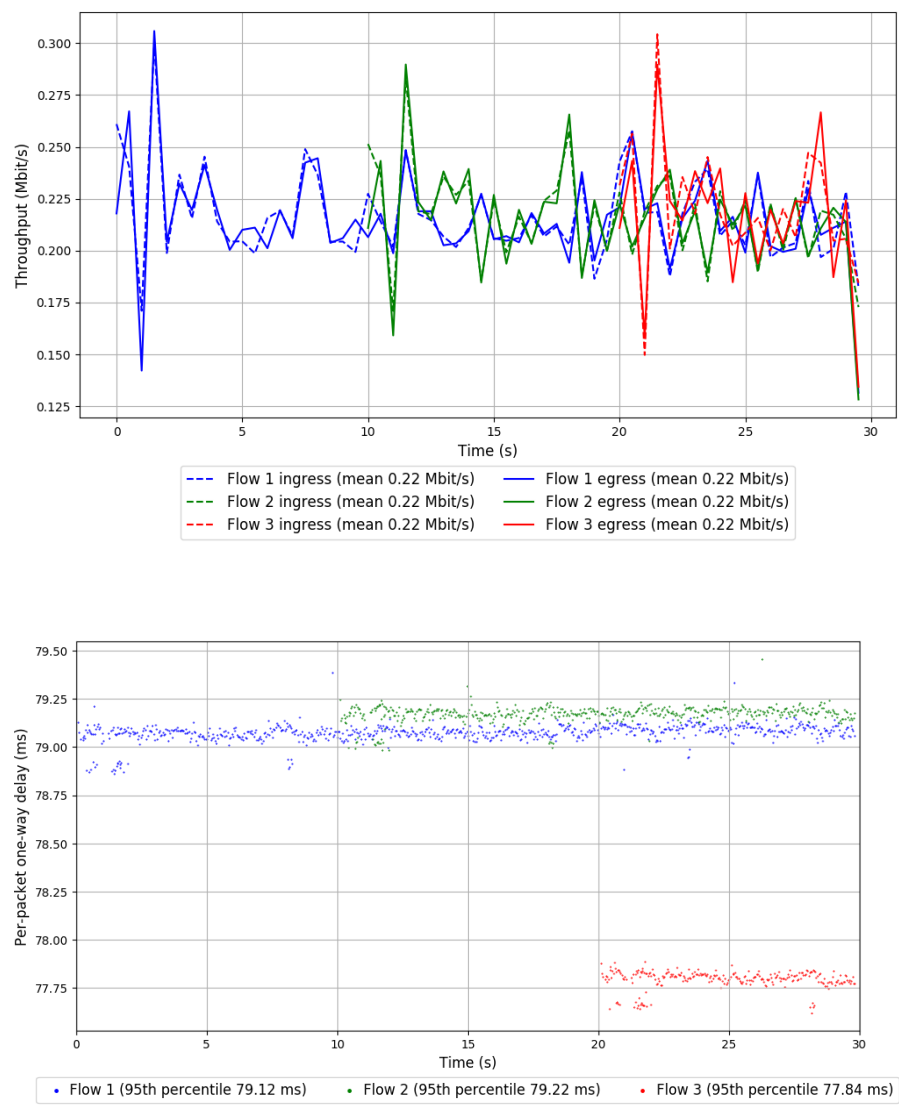
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 77.842 ms

Loss rate: 1.50%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-04-24 20:00:16

End at: 2018-04-24 20:00:46

Local clock offset: -4.632 ms

Remote clock offset: 7.642 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 81.045 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 79.318 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 81.064 ms

Loss rate: 0.84%

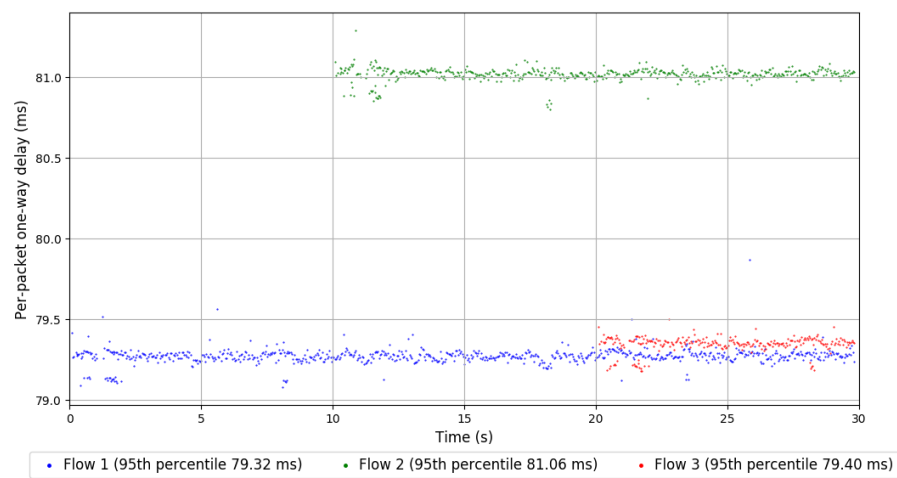
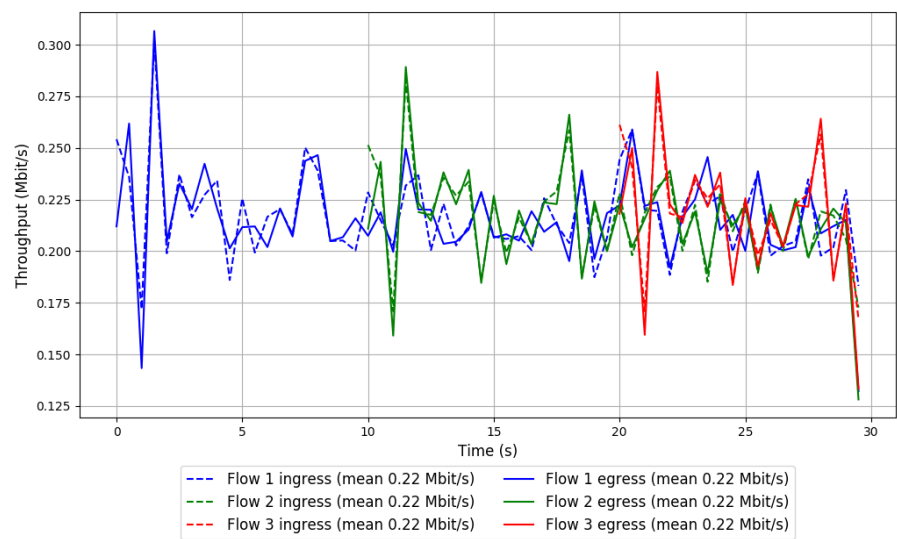
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 79.398 ms

Loss rate: 1.49%

Run 9: Report of SCRaM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-04-24 20:22:47

End at: 2018-04-24 20:23:17

Local clock offset: -4.738 ms

Remote clock offset: 3.57 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 84.948 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.631 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.968 ms

Loss rate: 0.84%

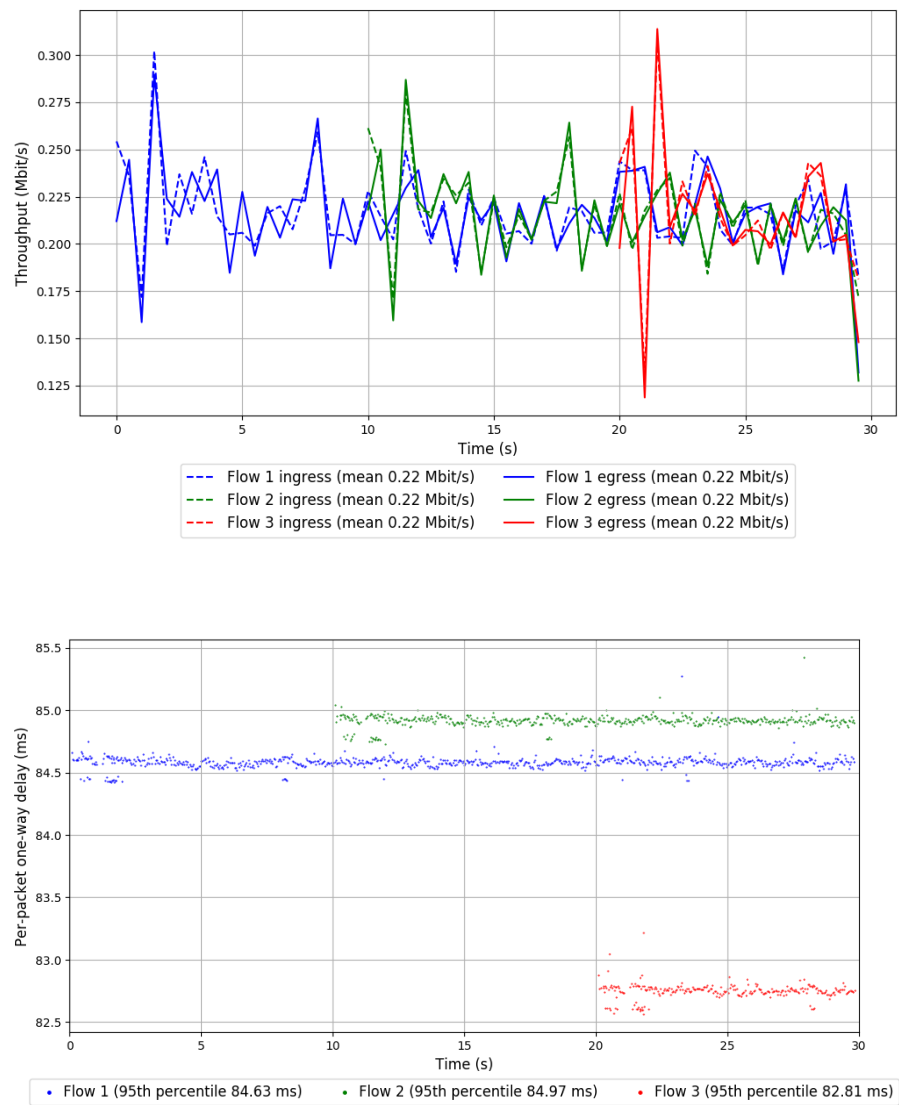
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 82.809 ms

Loss rate: 1.49%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-04-24 17:13:22

End at: 2018-04-24 17:13:52

Local clock offset: -5.156 ms

Remote clock offset: 2.503 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 84.541 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 85.372 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 82.981 ms

Loss rate: 0.00%

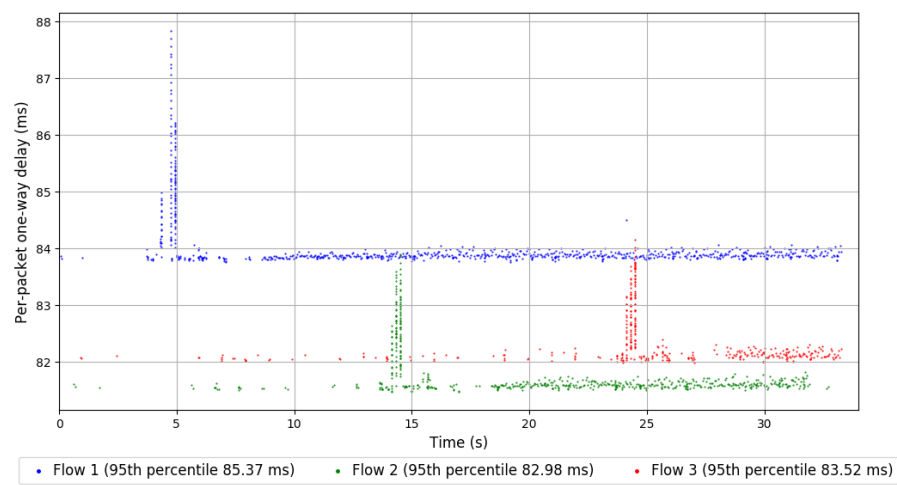
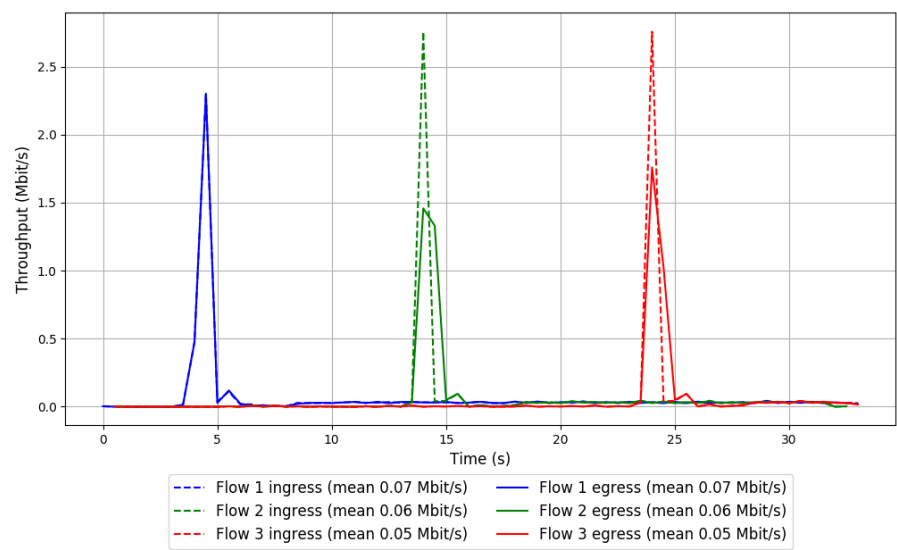
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 83.524 ms

Loss rate: 0.31%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-04-24 17:36:28

End at: 2018-04-24 17:36:58

Local clock offset: -5.722 ms

Remote clock offset: 2.989 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 83.864 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 83.683 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 82.513 ms

Loss rate: 0.00%

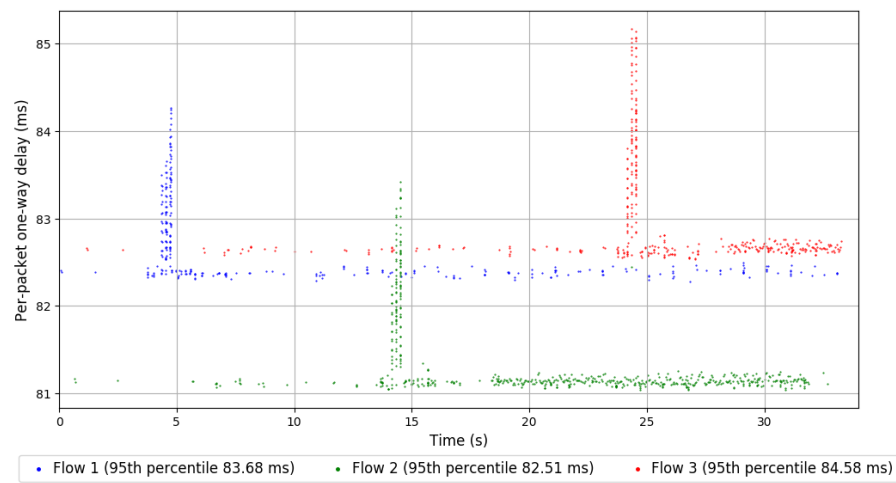
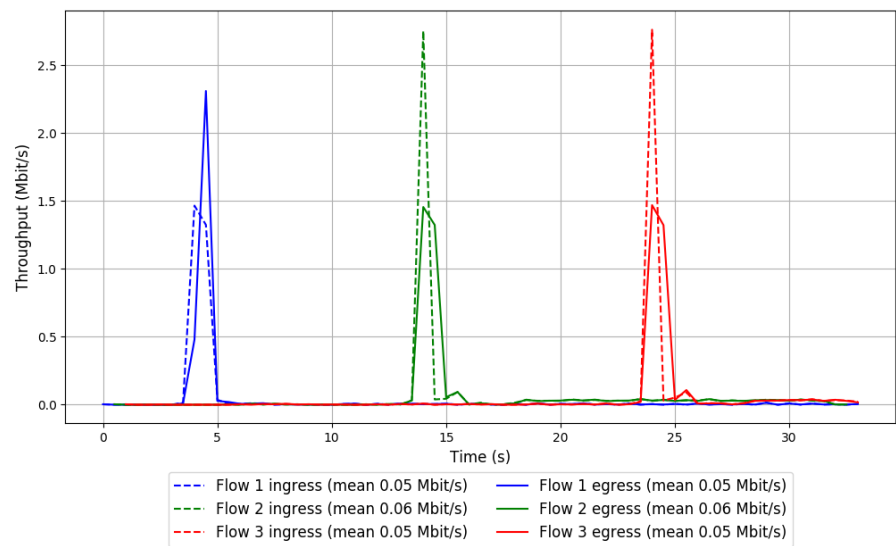
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 84.584 ms

Loss rate: 0.31%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-04-24 17:58:53

End at: 2018-04-24 17:59:23

Local clock offset: -3.653 ms

Remote clock offset: 4.114 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 85.373 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 85.469 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 85.537 ms

Loss rate: 0.00%

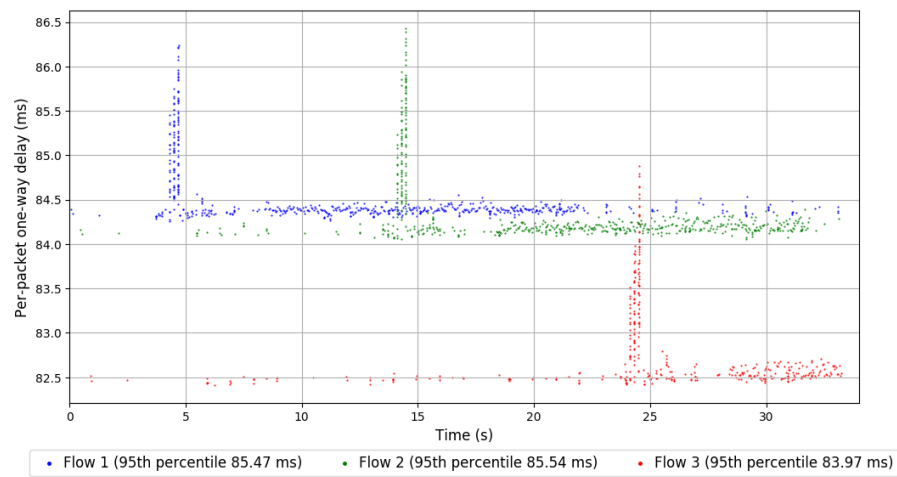
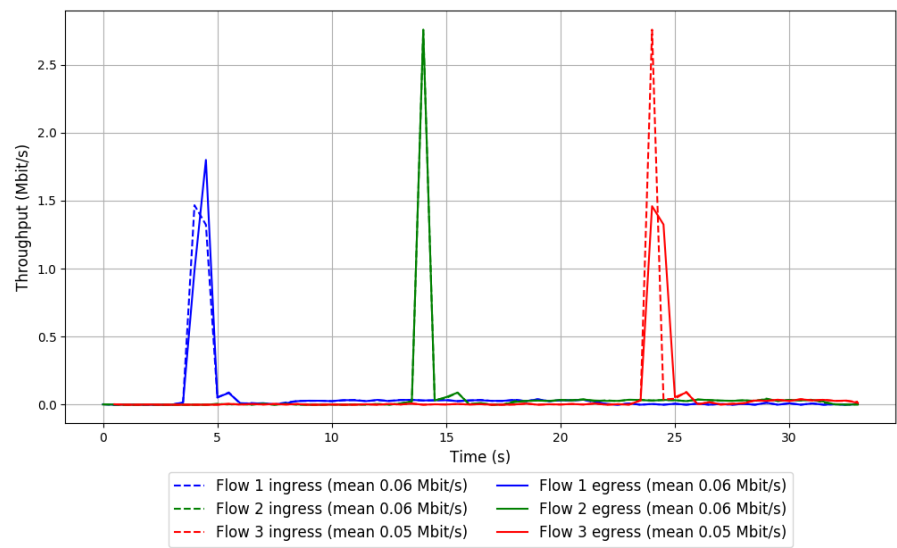
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 83.971 ms

Loss rate: 0.31%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-04-24 18:21:14

End at: 2018-04-24 18:21:44

Local clock offset: -3.706 ms

Remote clock offset: 10.19 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 79.582 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 79.516 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 79.395 ms

Loss rate: 0.00%

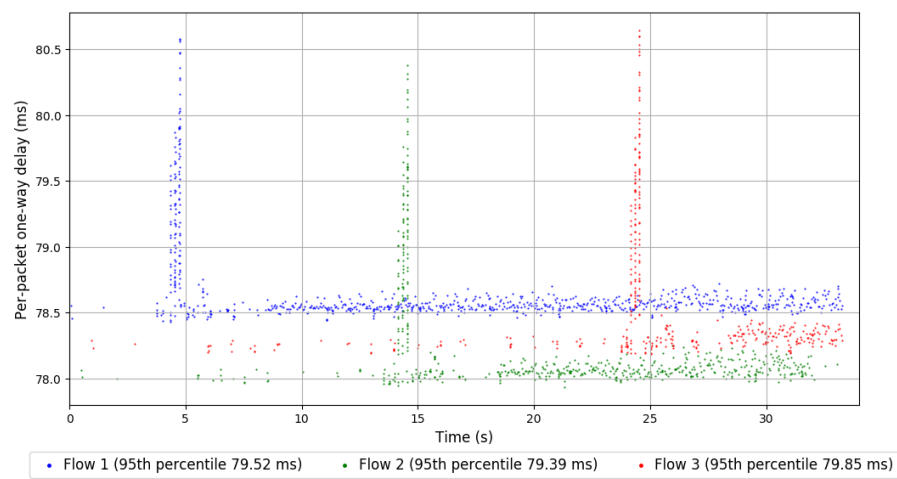
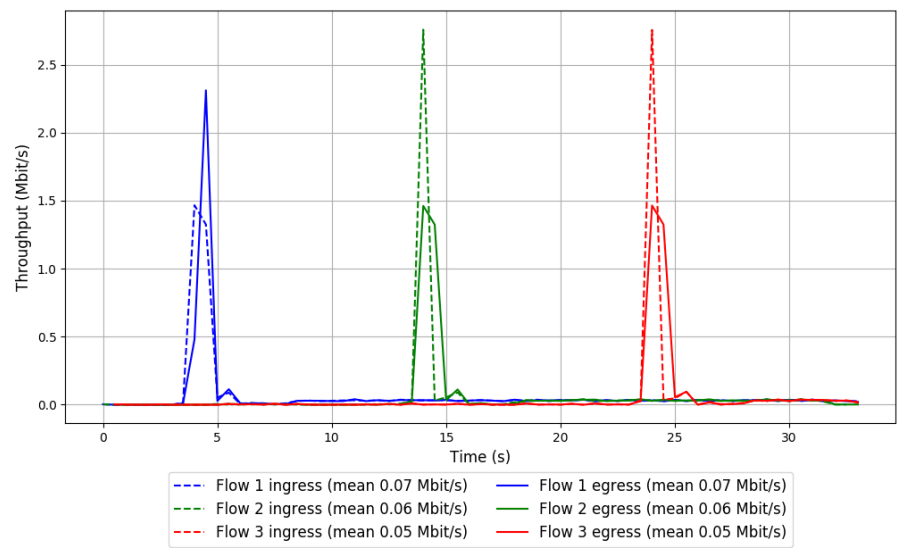
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 79.850 ms

Loss rate: 0.31%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-04-24 18:43:53

End at: 2018-04-24 18:44:23

Local clock offset: -5.186 ms

Remote clock offset: 8.086 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 80.731 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 80.999 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 80.836 ms

Loss rate: 0.00%

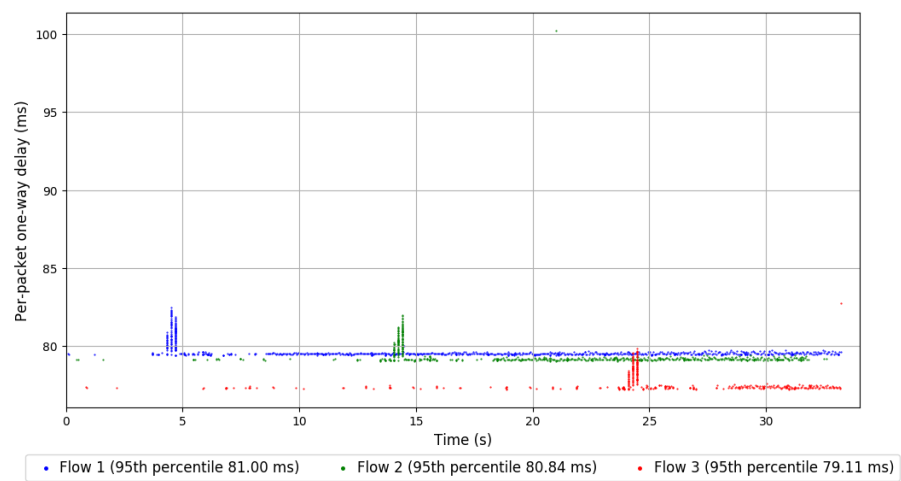
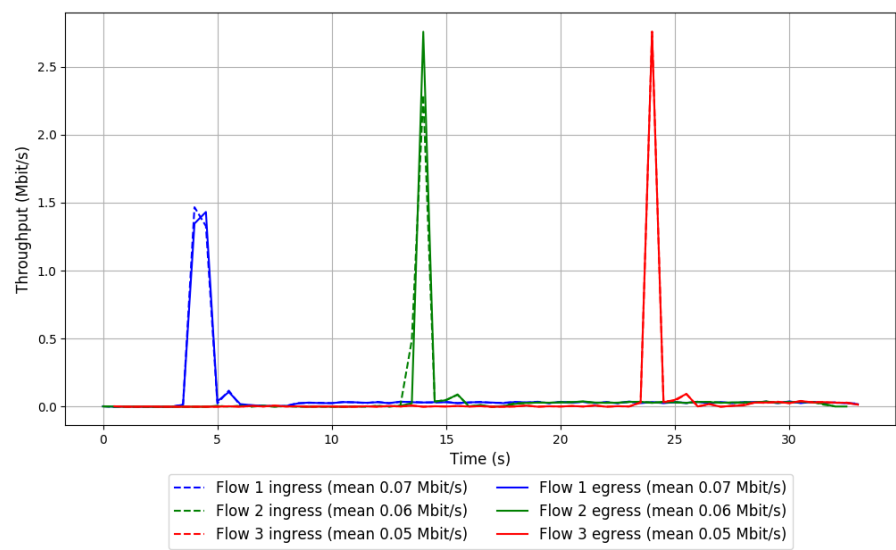
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 79.112 ms

Loss rate: 0.23%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-04-24 19:06:16

End at: 2018-04-24 19:06:46

Local clock offset: -3.578 ms

Remote clock offset: 7.76 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 81.811 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 79.463 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 81.767 ms

Loss rate: 0.00%

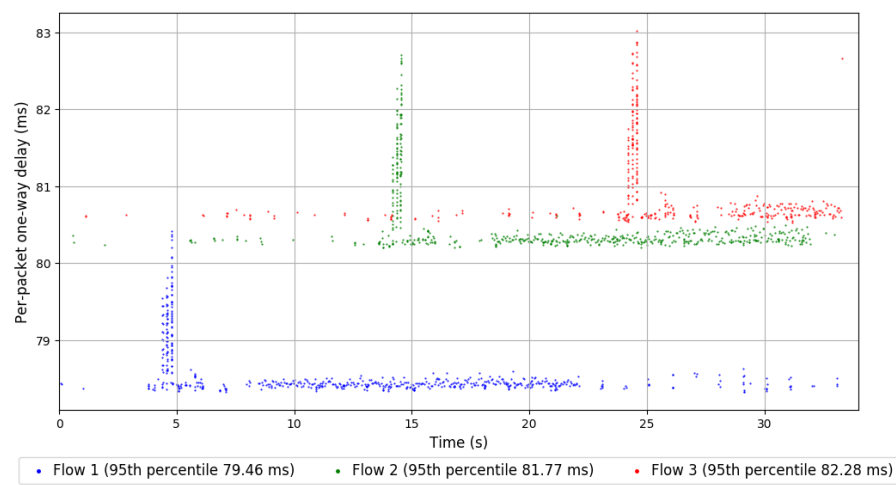
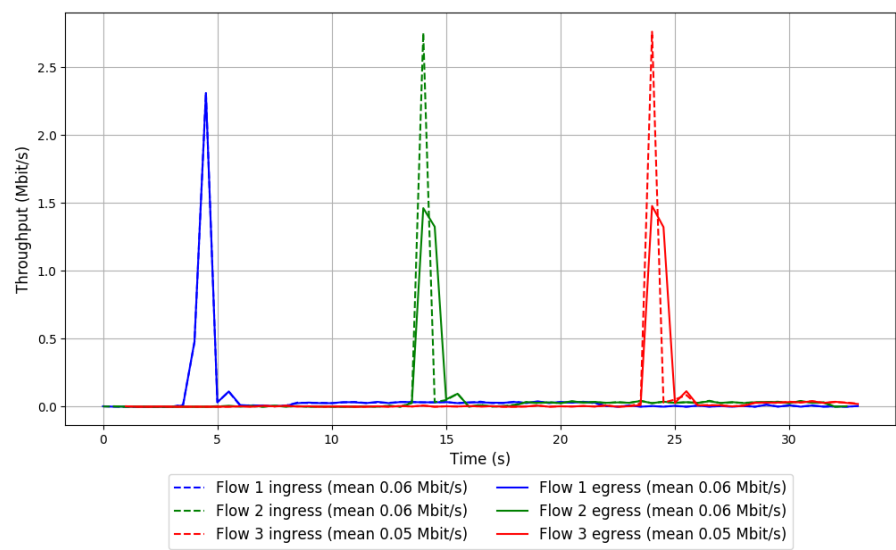
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 82.285 ms

Loss rate: 0.23%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-04-24 19:28:38

End at: 2018-04-24 19:29:08

Local clock offset: -5.188 ms

Remote clock offset: 3.77 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 84.422 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 83.750 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 85.114 ms

Loss rate: 0.00%

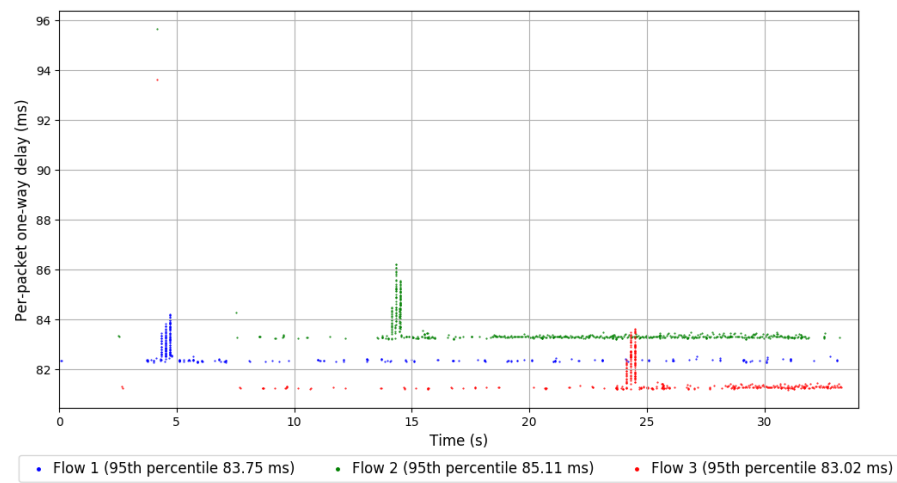
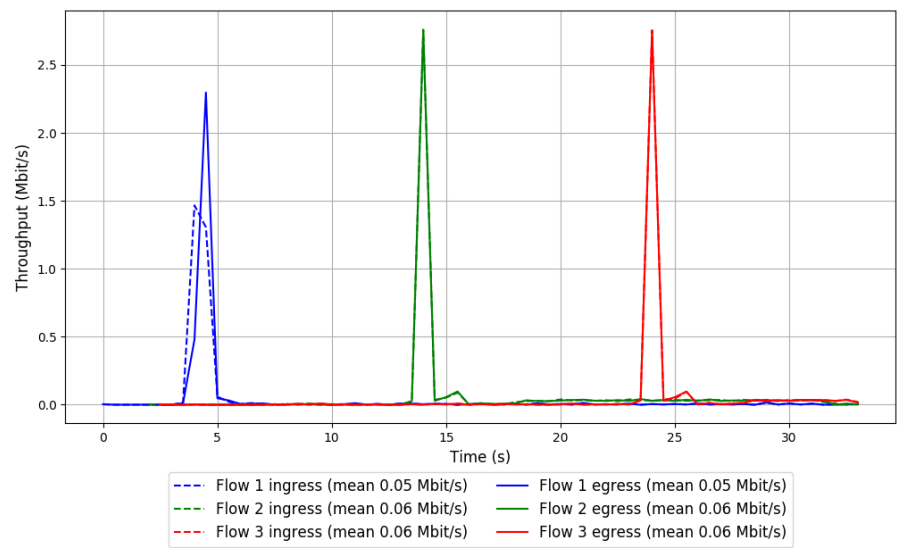
-- Flow 3:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 83.019 ms

Loss rate: 0.23%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-04-24 19:51:08

End at: 2018-04-24 19:51:38

Local clock offset: -4.52 ms

Remote clock offset: 3.663 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 85.709 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.799 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 85.950 ms

Loss rate: 0.00%

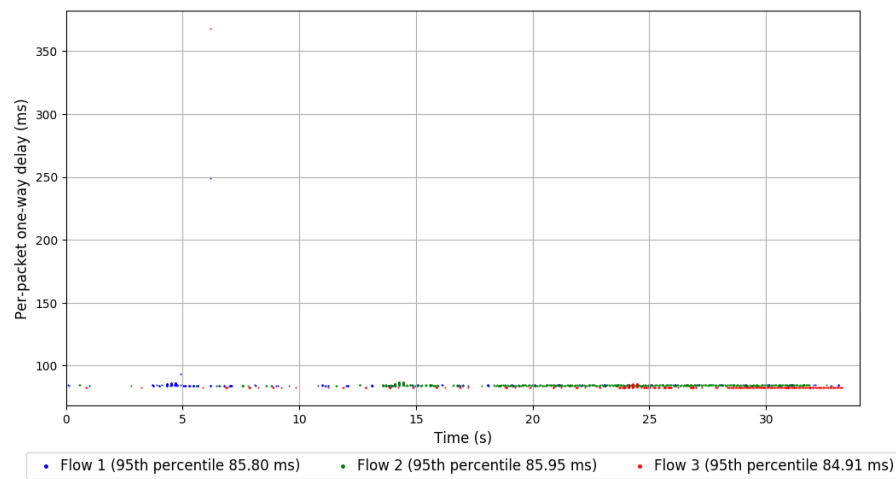
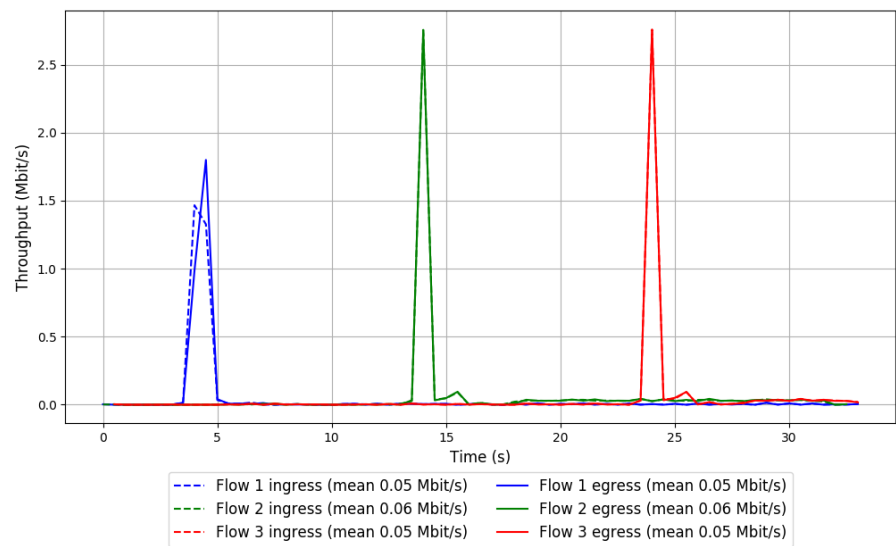
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 84.906 ms

Loss rate: 0.23%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-04-24 20:13:29

End at: 2018-04-24 20:13:59

Local clock offset: -4.712 ms

Remote clock offset: 4.667 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 84.934 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.230 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 83.750 ms

Loss rate: 0.00%

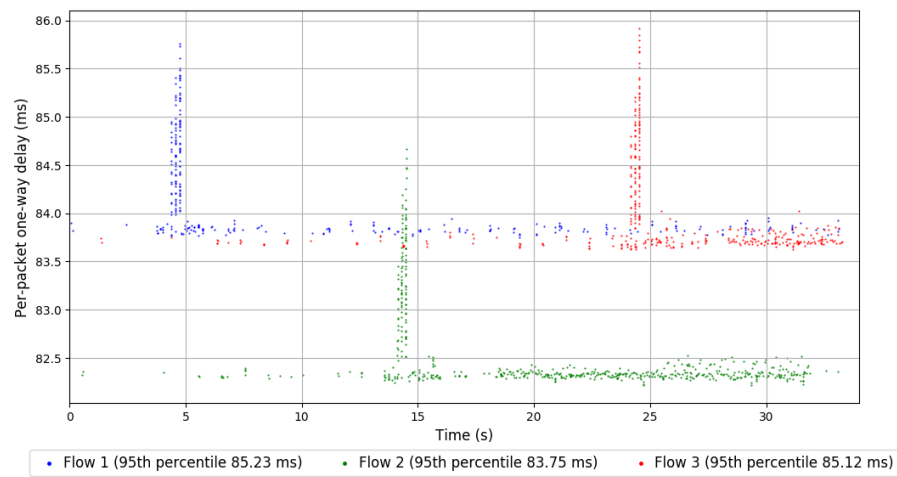
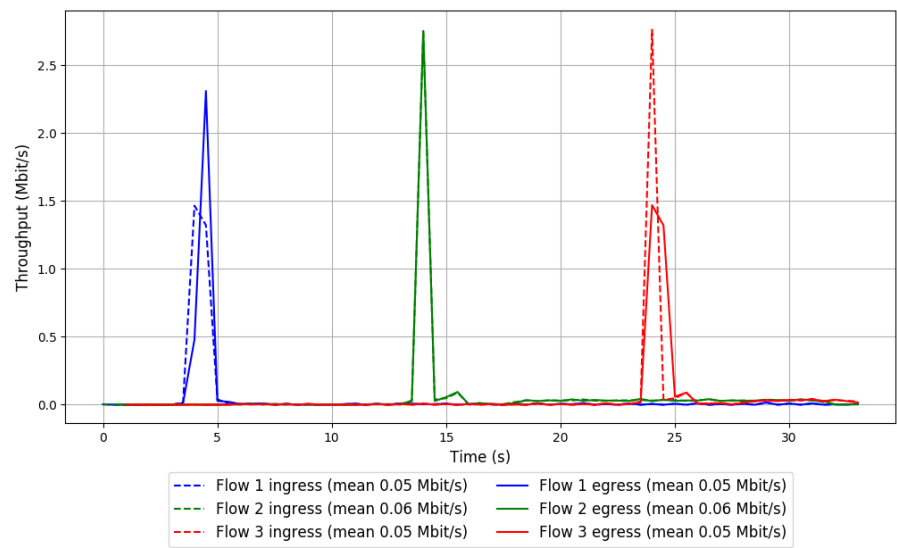
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.120 ms

Loss rate: 0.40%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-04-24 20:36:10

End at: 2018-04-24 20:36:40

Local clock offset: -4.789 ms

Remote clock offset: 4.265 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 85.351 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 87.326 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 83.458 ms

Loss rate: 0.00%

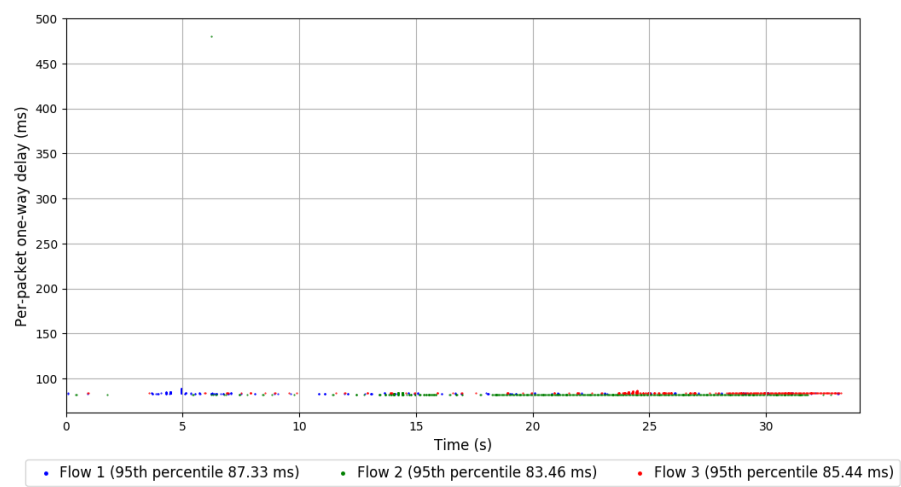
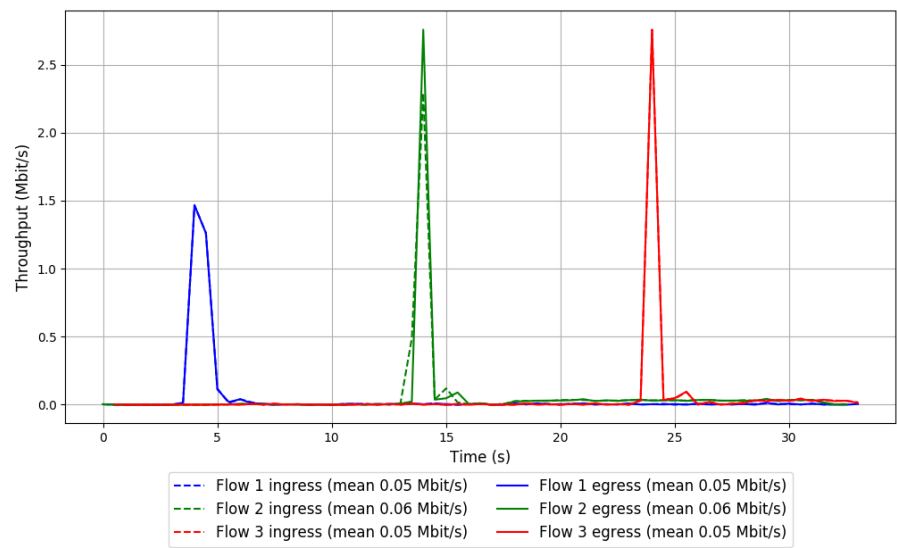
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.442 ms

Loss rate: 0.31%

Run 10: Report of WebRTC media — Data Link

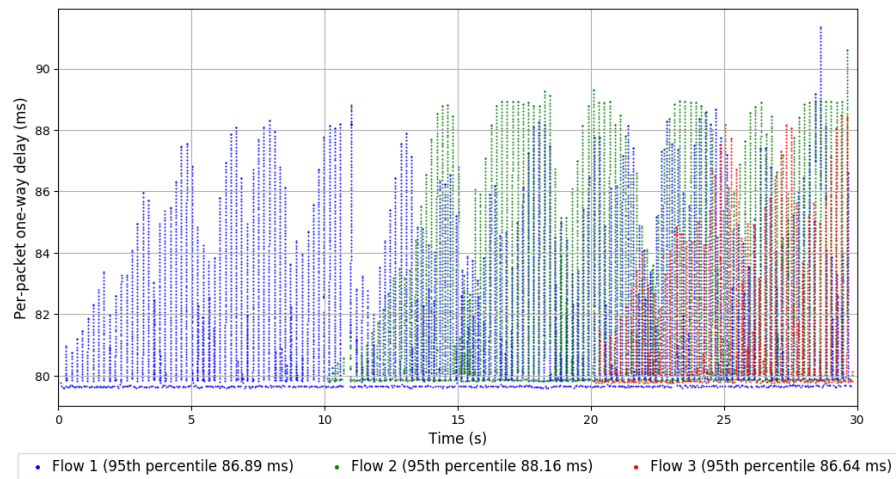
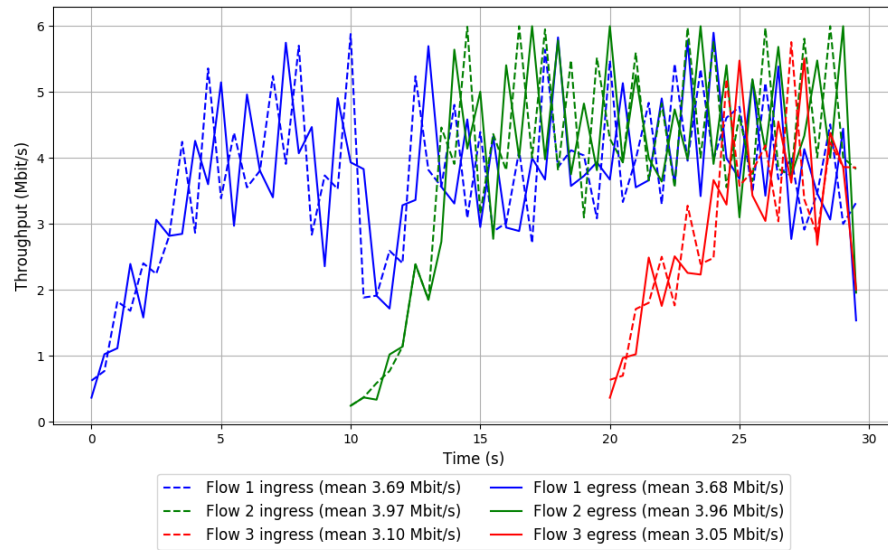


Run 1: Statistics of Sprout

Start at: 2018-04-24 17:01:14
End at: 2018-04-24 17:01:44
Local clock offset: -4.091 ms
Remote clock offset: 5.39 ms

Below is generated by plot.py at 2018-04-25 00:38:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.29 Mbit/s
95th percentile per-packet one-way delay: 87.494 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 86.892 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 3.96 Mbit/s
95th percentile per-packet one-way delay: 88.155 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 3.05 Mbit/s
95th percentile per-packet one-way delay: 86.640 ms
Loss rate: 3.04%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-04-24 17:24:25

End at: 2018-04-24 17:24:55

Local clock offset: -5.082 ms

Remote clock offset: 1.856 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 91.539 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 4.08 Mbit/s

95th percentile per-packet one-way delay: 90.990 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 3.68 Mbit/s

95th percentile per-packet one-way delay: 92.068 ms

Loss rate: 1.56%

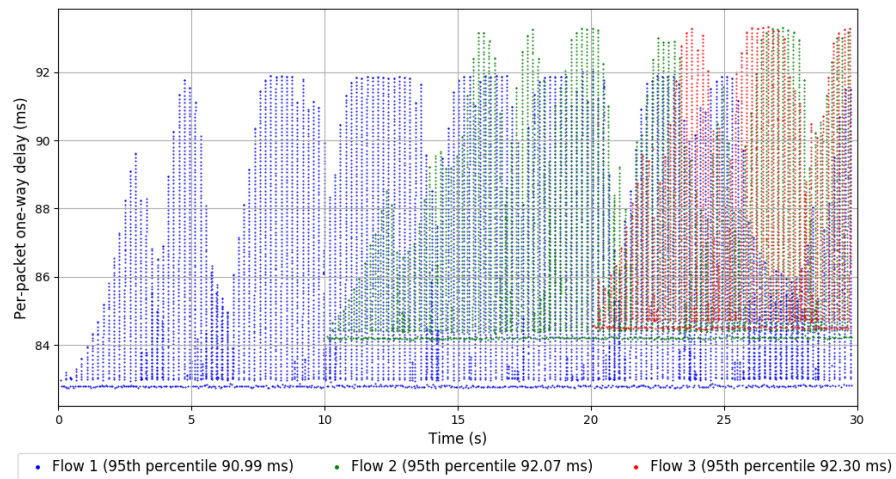
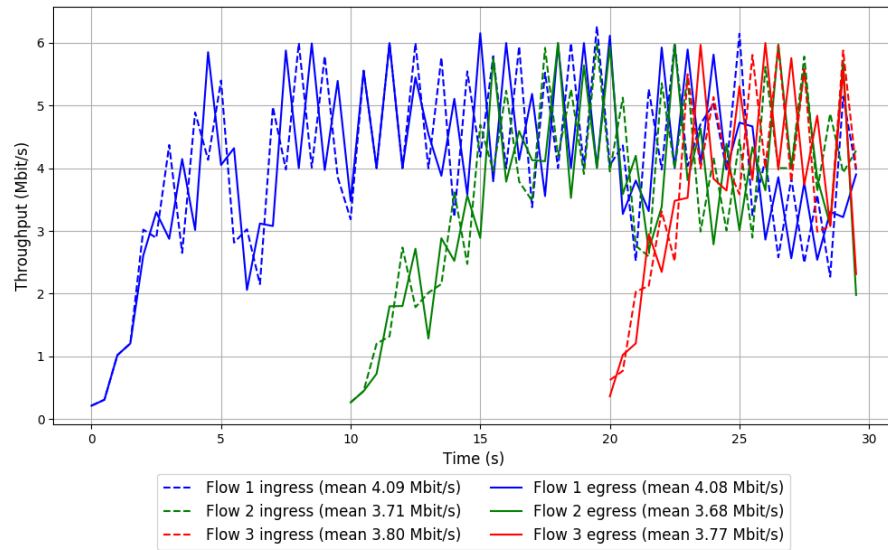
-- Flow 3:

Average throughput: 3.77 Mbit/s

95th percentile per-packet one-way delay: 92.299 ms

Loss rate: 2.68%

Run 2: Report of Sprout — Data Link

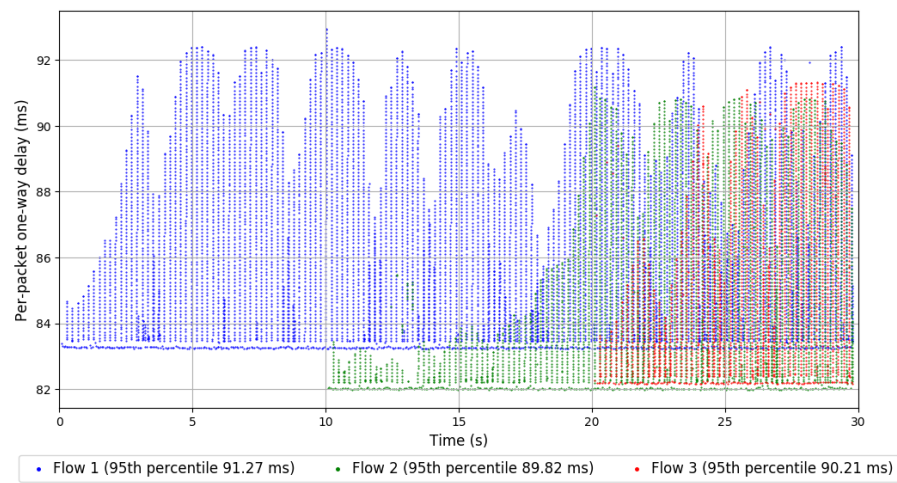
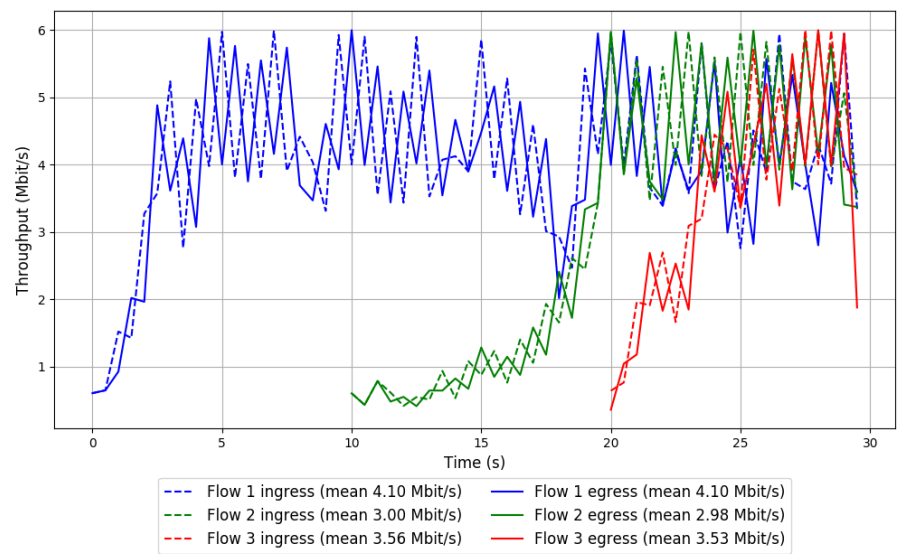


Run 3: Statistics of Sprout

Start at: 2018-04-24 17:46:53
End at: 2018-04-24 17:47:23
Local clock offset: -4.618 ms
Remote clock offset: 3.235 ms

```
# Below is generated by plot.py at 2018-04-25 00:38:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.22 Mbit/s
95th percentile per-packet one-way delay: 90.745 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 91.265 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 89.816 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 90.214 ms
Loss rate: 2.81%
```

Run 3: Report of Sprout — Data Link

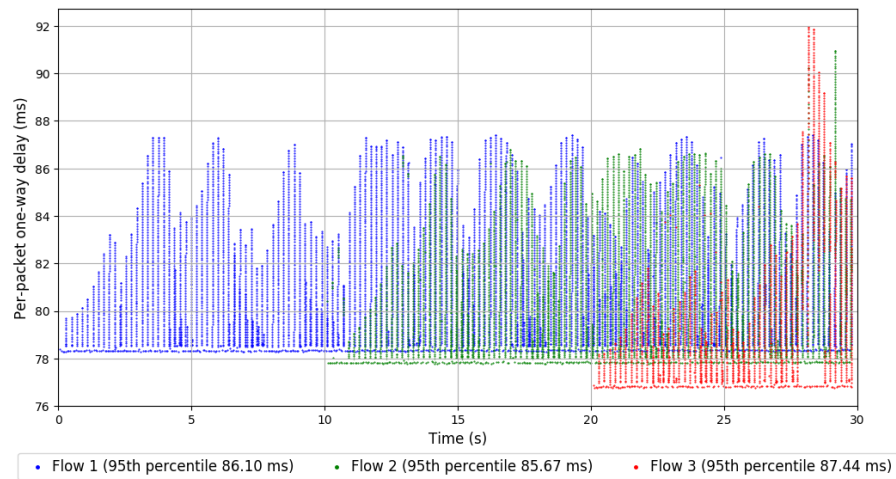
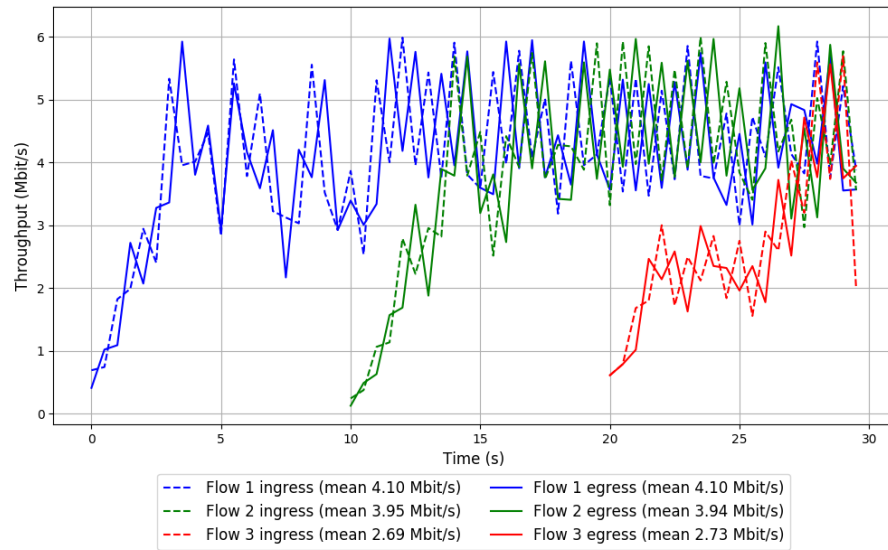


Run 4: Statistics of Sprout

Start at: 2018-04-24 18:09:16
End at: 2018-04-24 18:09:46
Local clock offset: -5.077 ms
Remote clock offset: 9.657 ms

```
# Below is generated by plot.py at 2018-04-25 00:38:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.60 Mbit/s
95th percentile per-packet one-way delay: 86.022 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 86.096 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 85.670 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 87.437 ms
Loss rate: 0.01%
```

Run 4: Report of Sprout — Data Link

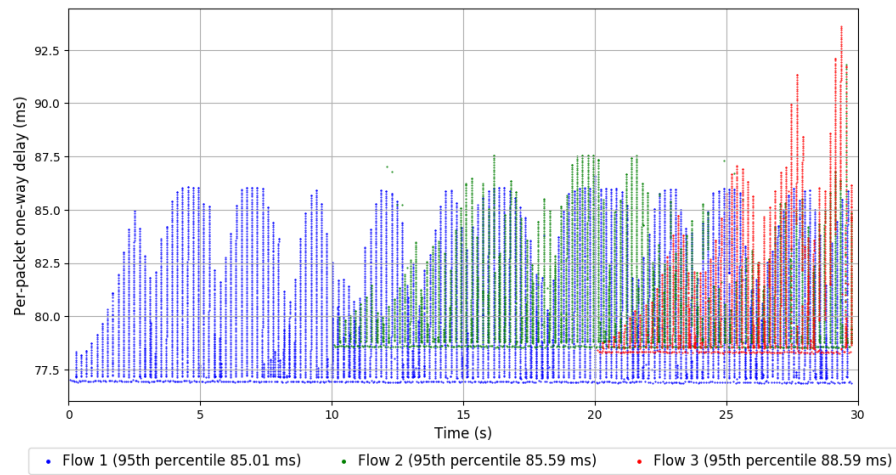
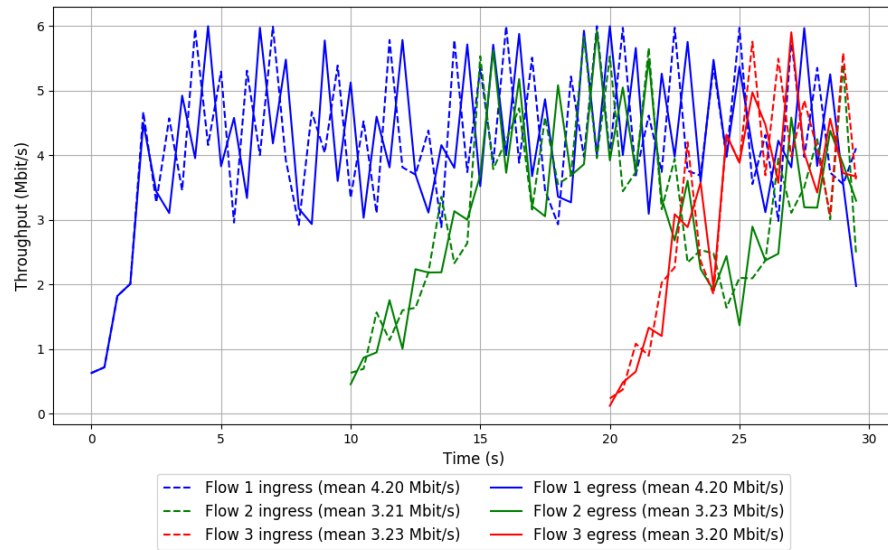


Run 5: Statistics of Sprout

Start at: 2018-04-24 18:31:49
End at: 2018-04-24 18:32:19
Local clock offset: -5.254 ms
Remote clock offset: 9.686 ms

```
# Below is generated by plot.py at 2018-04-25 00:38:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 85.528 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 85.008 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 85.589 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 3.20 Mbit/s
95th percentile per-packet one-way delay: 88.587 ms
Loss rate: 2.81%
```

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-04-24 18:54:17

End at: 2018-04-24 18:54:47

Local clock offset: -4.41 ms

Remote clock offset: 4.109 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 90.834 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 89.070 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 91.874 ms

Loss rate: 1.20%

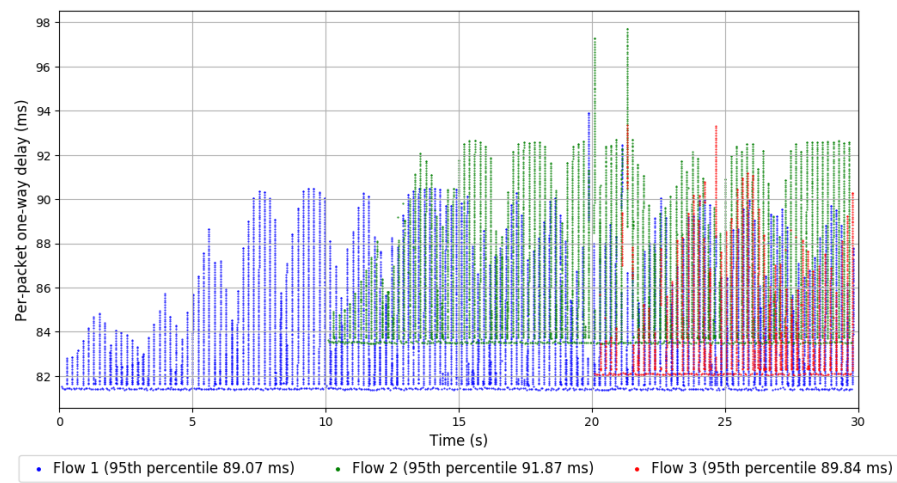
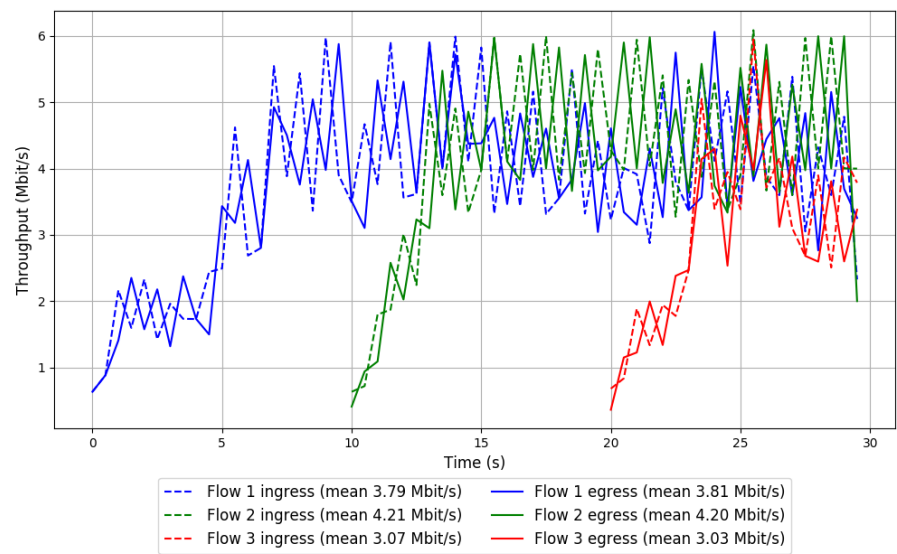
-- Flow 3:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 89.836 ms

Loss rate: 3.26%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-04-24 19:16:39

End at: 2018-04-24 19:17:09

Local clock offset: -5.1 ms

Remote clock offset: 6.815 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.37 Mbit/s

95th percentile per-packet one-way delay: 87.160 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 3.35 Mbit/s

95th percentile per-packet one-way delay: 86.729 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 87.752 ms

Loss rate: 1.19%

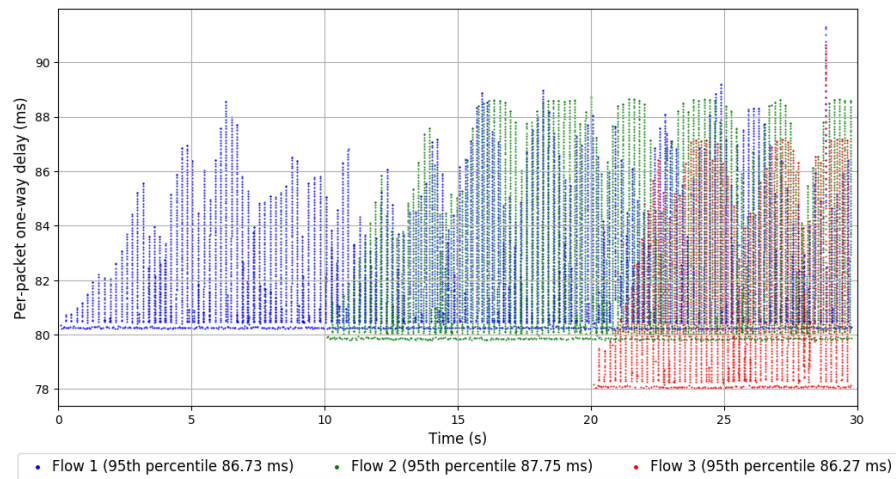
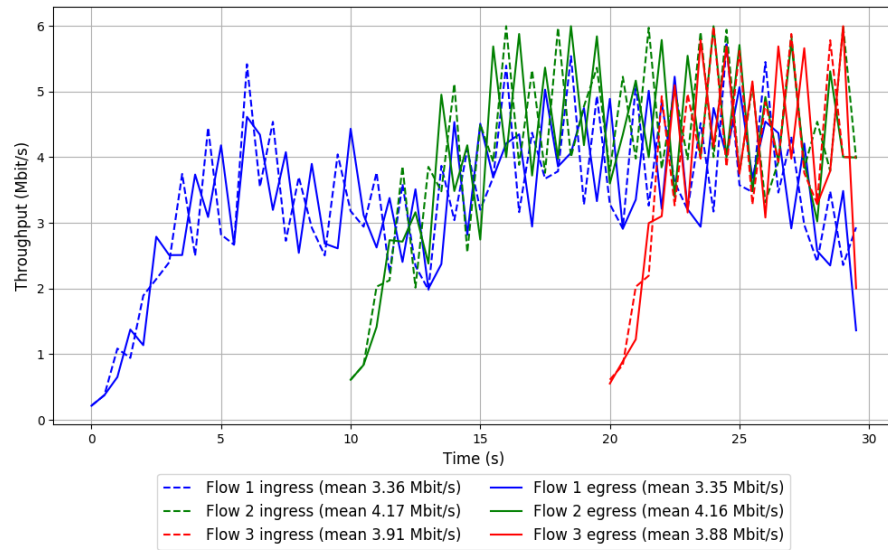
-- Flow 3:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 86.270 ms

Loss rate: 2.60%

Run 7: Report of Sprout — Data Link

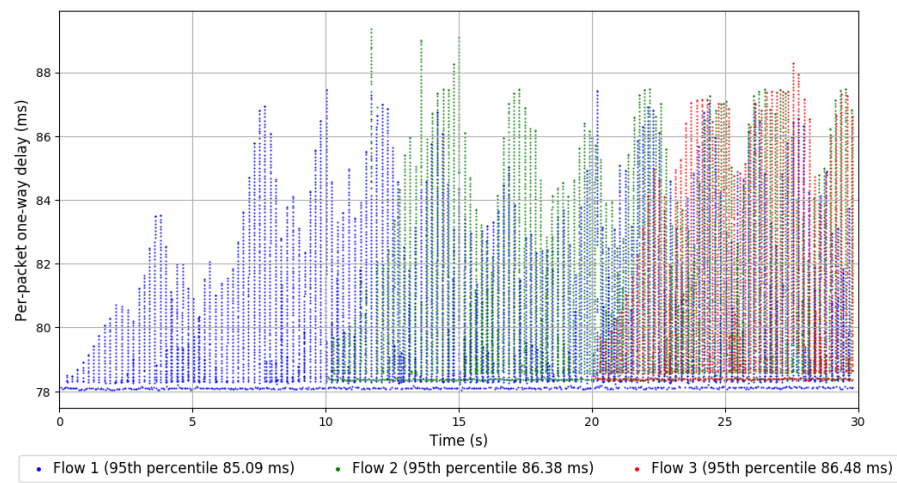
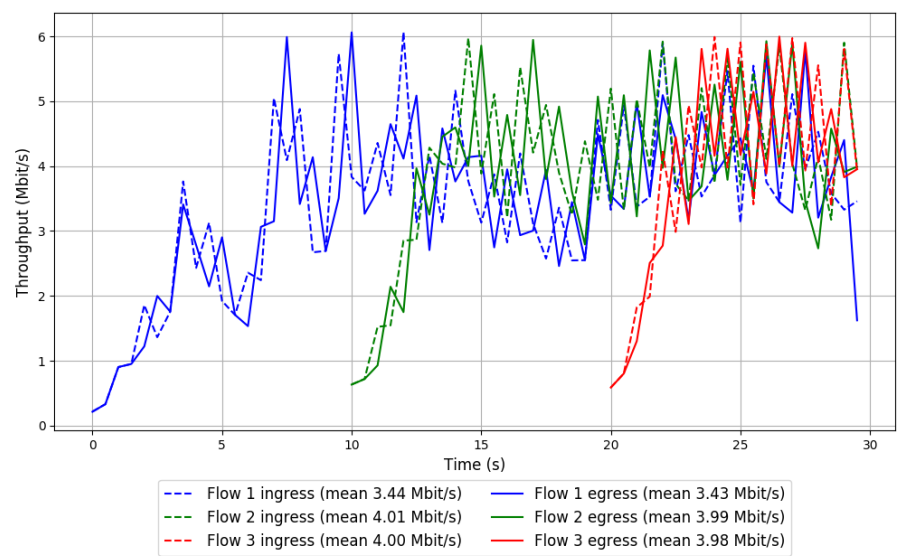


Run 8: Statistics of Sprout

Start at: 2018-04-24 19:39:09
End at: 2018-04-24 19:39:39
Local clock offset: -4.424 ms
Remote clock offset: 7.816 ms

```
# Below is generated by plot.py at 2018-04-25 00:38:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 85.968 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 3.43 Mbit/s
95th percentile per-packet one-way delay: 85.086 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 3.99 Mbit/s
95th percentile per-packet one-way delay: 86.380 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 3.98 Mbit/s
95th percentile per-packet one-way delay: 86.483 ms
Loss rate: 2.46%
```

Run 8: Report of Sprout — Data Link

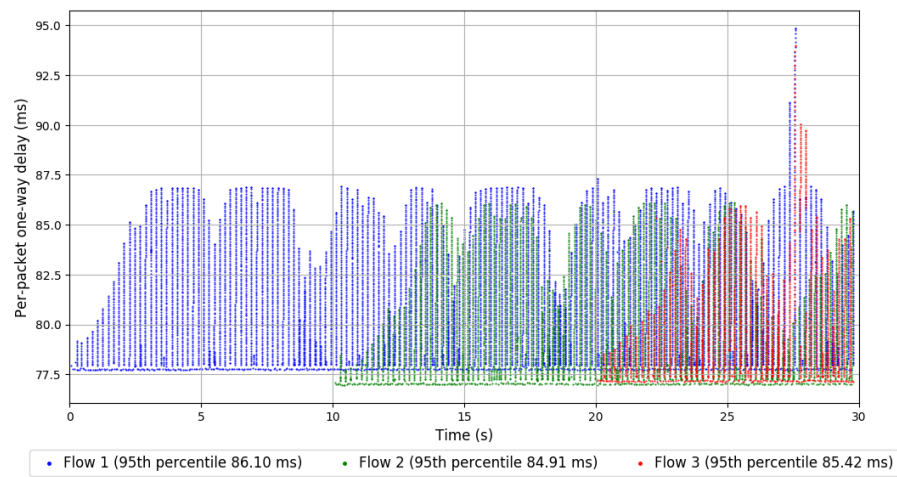
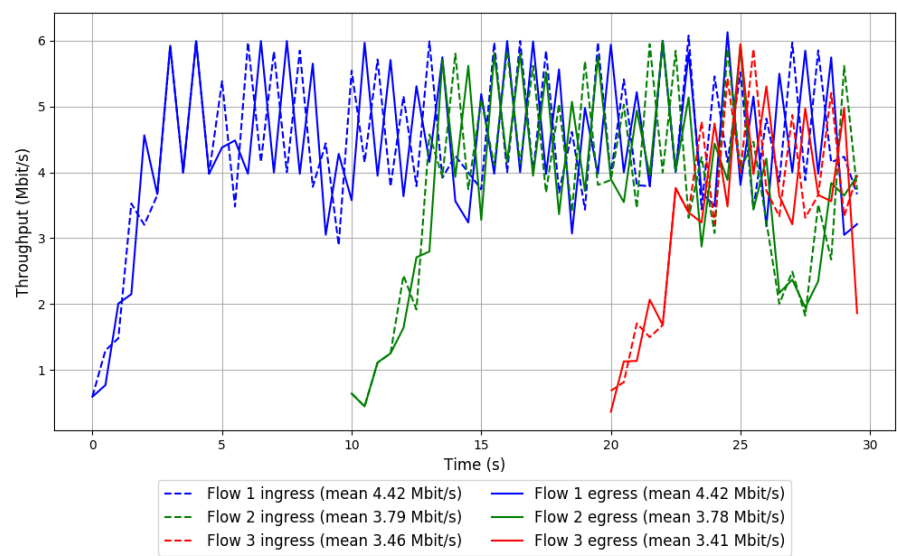


Run 9: Statistics of Sprout

Start at: 2018-04-24 20:01:30
End at: 2018-04-24 20:02:00
Local clock offset: -5.407 ms
Remote clock offset: 8.56 ms

```
# Below is generated by plot.py at 2018-04-25 00:38:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.04 Mbit/s
95th percentile per-packet one-way delay: 85.758 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 4.42 Mbit/s
95th percentile per-packet one-way delay: 86.097 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: 84.908 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 3.41 Mbit/s
95th percentile per-packet one-way delay: 85.418 ms
Loss rate: 3.07%
```

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-04-24 20:24:01

End at: 2018-04-24 20:24:31

Local clock offset: -4.728 ms

Remote clock offset: 4.346 ms

Below is generated by plot.py at 2018-04-25 00:38:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 91.603 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 92.148 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 3.71 Mbit/s

95th percentile per-packet one-way delay: 89.523 ms

Loss rate: 1.27%

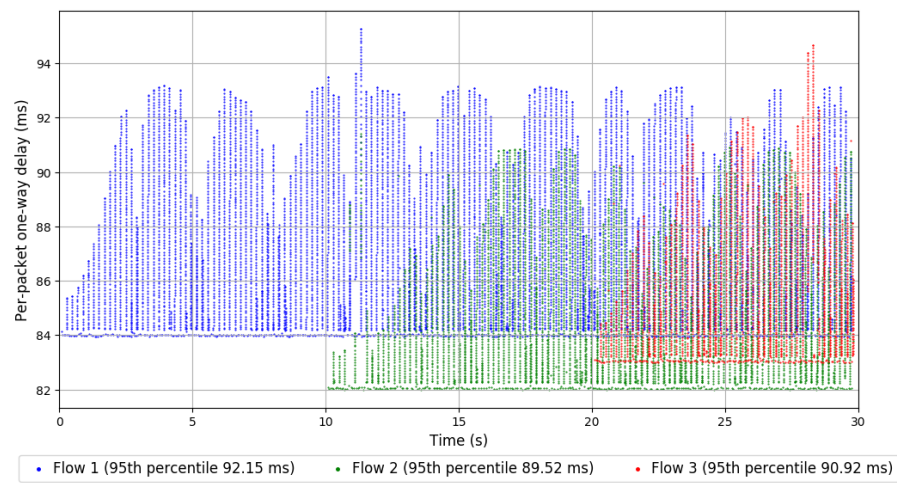
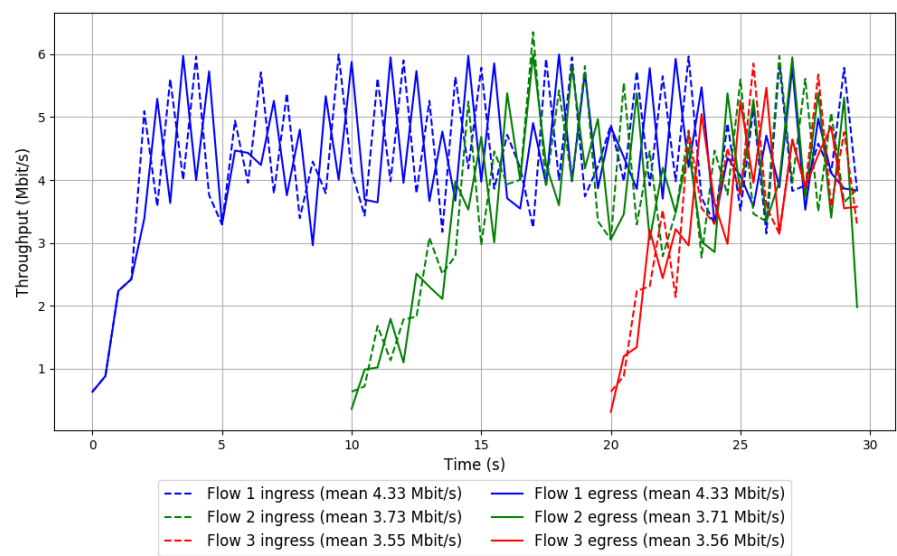
-- Flow 3:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 90.922 ms

Loss rate: 1.32%

Run 10: Report of Sprout — Data Link

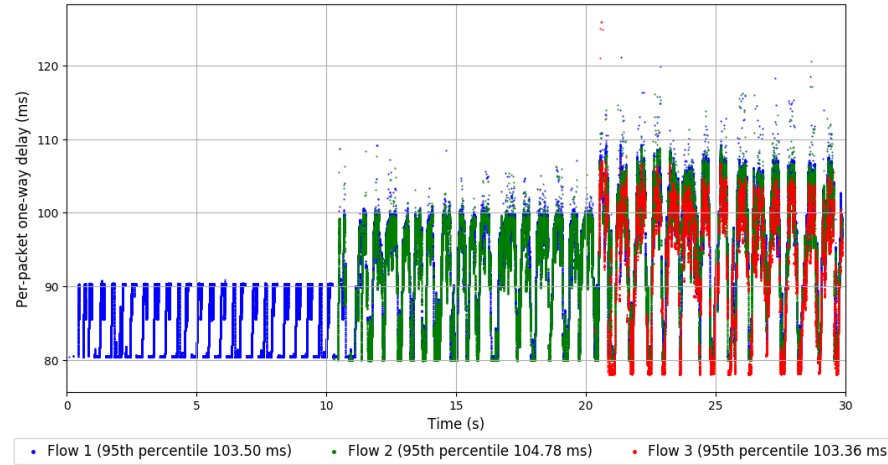
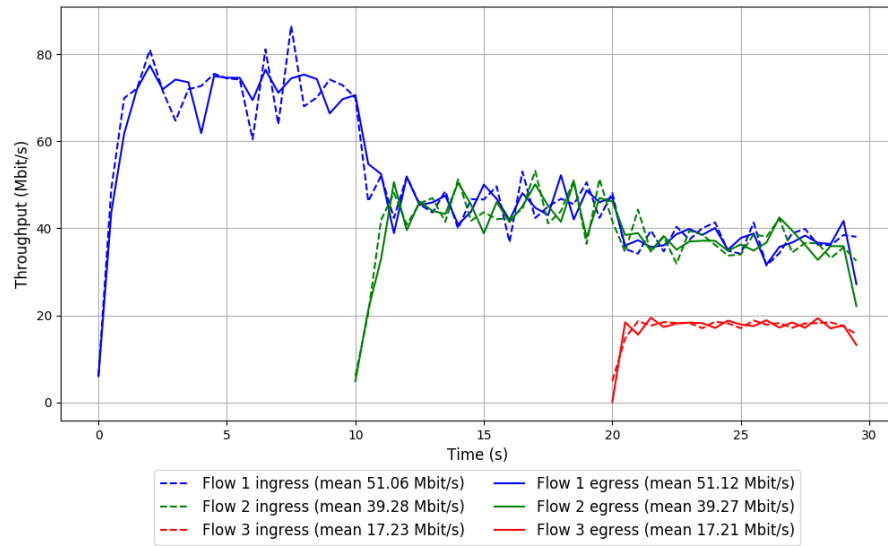



```
Run 1: Statistics of TaoVA-100x

Start at: 2018-04-24 17:06:42
End at: 2018-04-24 17:07:12
Local clock offset: -5.818 ms
Remote clock offset: 5.396 ms

# Below is generated by plot.py at 2018-04-25 00:40:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.82 Mbit/s
95th percentile per-packet one-way delay: 104.091 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 51.12 Mbit/s
95th percentile per-packet one-way delay: 103.503 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 39.27 Mbit/s
95th percentile per-packet one-way delay: 104.783 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 17.21 Mbit/s
95th percentile per-packet one-way delay: 103.357 ms
Loss rate: 1.75%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-04-24 17:29:46

End at: 2018-04-24 17:30:16

Local clock offset: -5.081 ms

Remote clock offset: 6.63 ms

Below is generated by plot.py at 2018-04-25 00:40:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.63 Mbit/s

95th percentile per-packet one-way delay: 104.771 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 50.31 Mbit/s

95th percentile per-packet one-way delay: 103.292 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 40.05 Mbit/s

95th percentile per-packet one-way delay: 105.247 ms

Loss rate: 0.89%

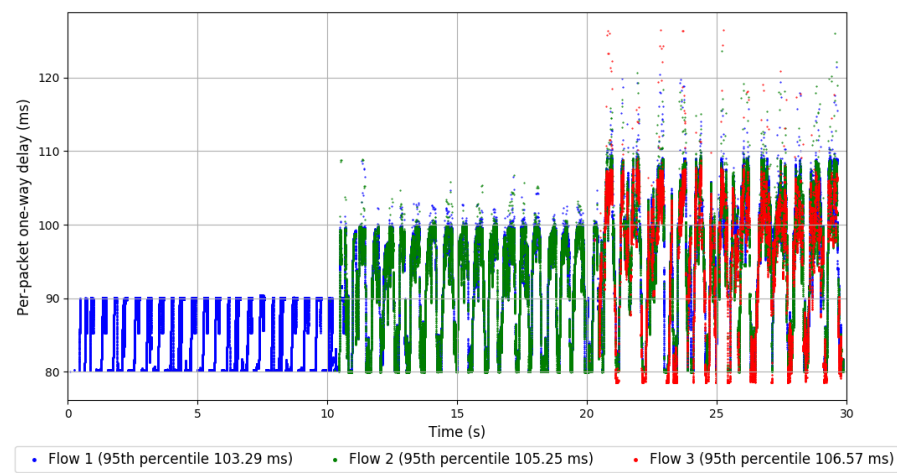
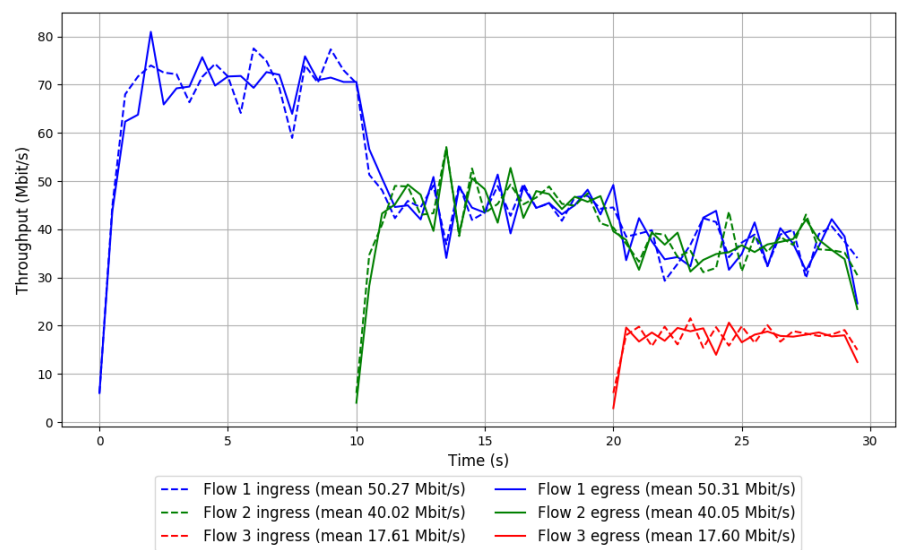
-- Flow 3:

Average throughput: 17.60 Mbit/s

95th percentile per-packet one-way delay: 106.566 ms

Loss rate: 2.10%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-04-24 17:52:13

End at: 2018-04-24 17:52:43

Local clock offset: -4.518 ms

Remote clock offset: 7.109 ms

Below is generated by plot.py at 2018-04-25 00:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.33 Mbit/s

95th percentile per-packet one-way delay: 103.703 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 50.99 Mbit/s

95th percentile per-packet one-way delay: 102.075 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 40.12 Mbit/s

95th percentile per-packet one-way delay: 103.767 ms

Loss rate: 0.99%

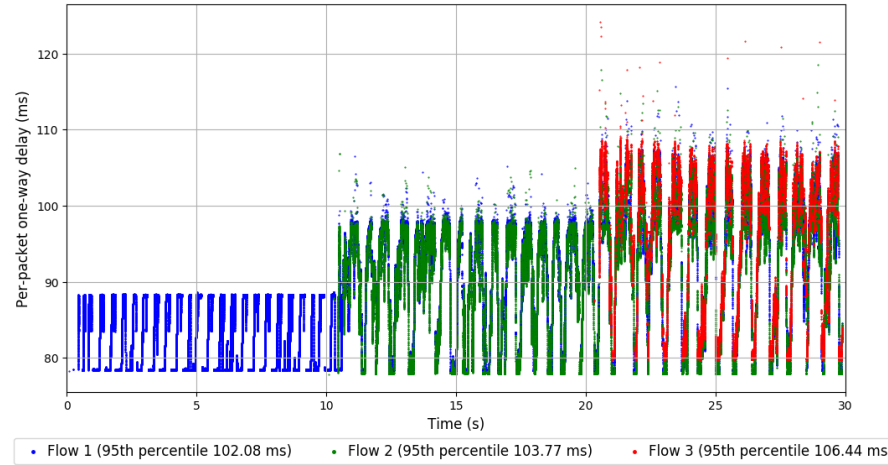
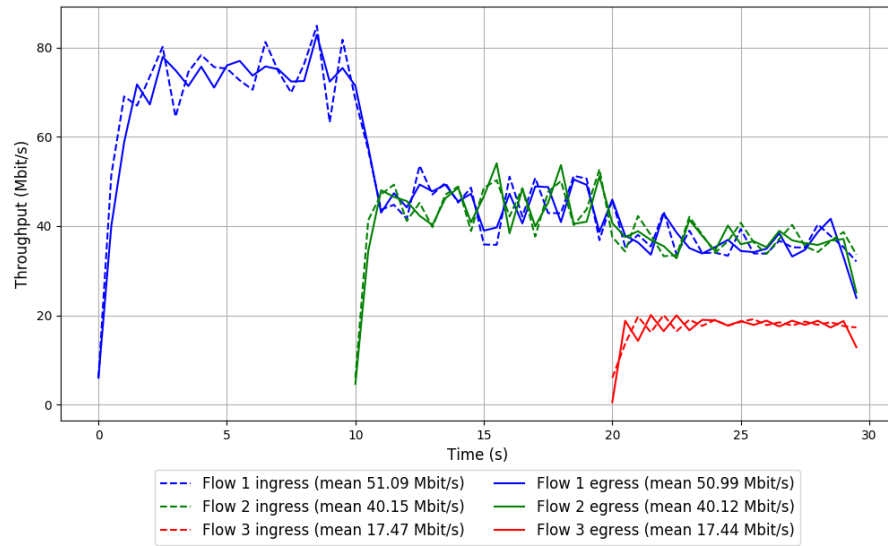
-- Flow 3:

Average throughput: 17.44 Mbit/s

95th percentile per-packet one-way delay: 106.436 ms

Loss rate: 2.11%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-04-24 18:14:35

End at: 2018-04-24 18:15:05

Local clock offset: -4.369 ms

Remote clock offset: 9.075 ms

Below is generated by plot.py at 2018-04-25 00:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.98 Mbit/s

95th percentile per-packet one-way delay: 104.483 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 50.83 Mbit/s

95th percentile per-packet one-way delay: 101.349 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 39.94 Mbit/s

95th percentile per-packet one-way delay: 105.265 ms

Loss rate: 0.83%

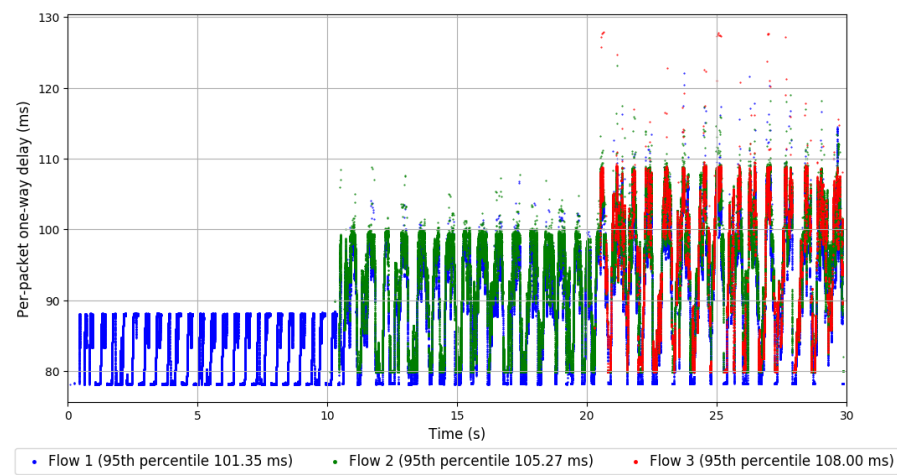
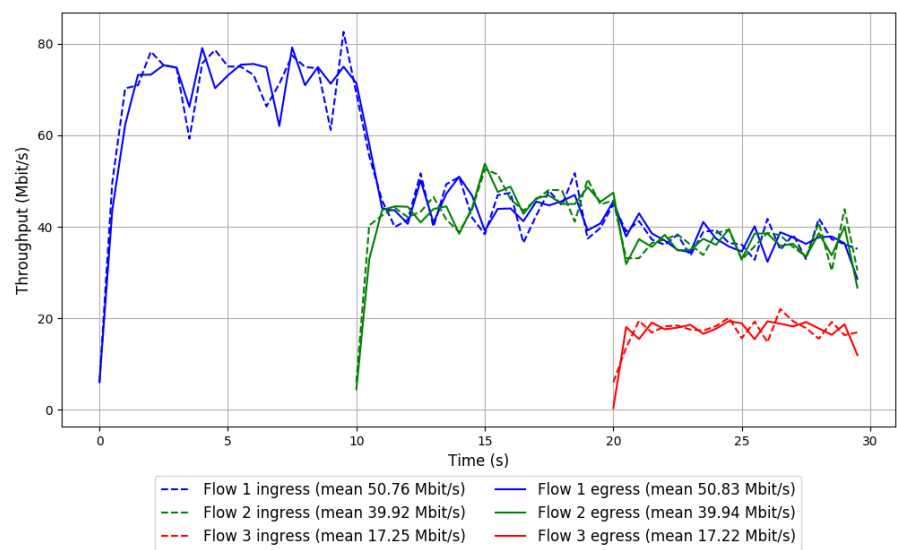
-- Flow 3:

Average throughput: 17.22 Mbit/s

95th percentile per-packet one-way delay: 108.000 ms

Loss rate: 2.10%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-04-24 18:37:12

End at: 2018-04-24 18:37:42

Local clock offset: -3.71 ms

Remote clock offset: 3.663 ms

Below is generated by plot.py at 2018-04-25 00:41:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.23 Mbit/s

95th percentile per-packet one-way delay: 109.442 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 52.24 Mbit/s

95th percentile per-packet one-way delay: 108.714 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 39.70 Mbit/s

95th percentile per-packet one-way delay: 109.338 ms

Loss rate: 0.75%

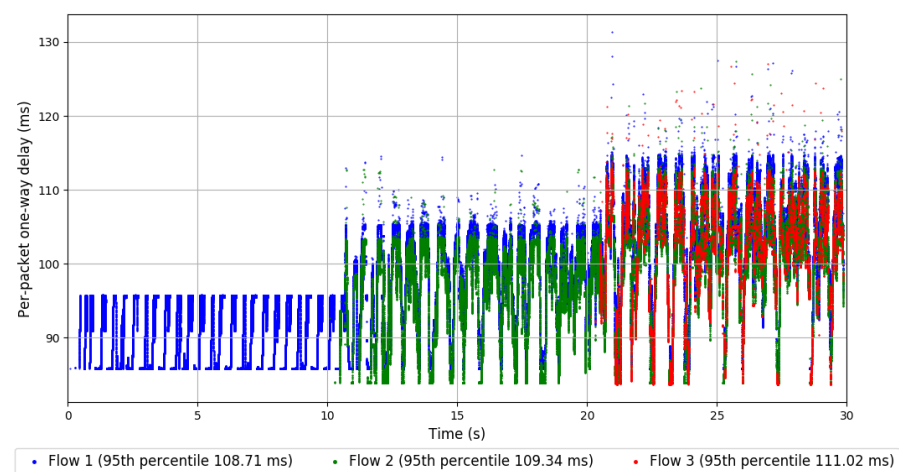
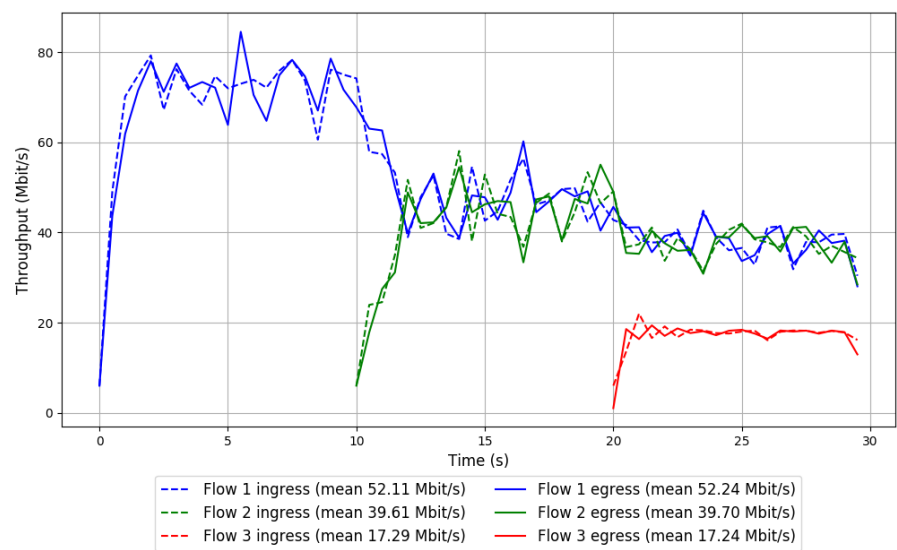
-- Flow 3:

Average throughput: 17.24 Mbit/s

95th percentile per-packet one-way delay: 111.018 ms

Loss rate: 1.99%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-04-24 18:59:36

End at: 2018-04-24 19:00:06

Local clock offset: -5.099 ms

Remote clock offset: 7.923 ms

Below is generated by plot.py at 2018-04-25 00:41:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.48 Mbit/s

95th percentile per-packet one-way delay: 106.279 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 50.63 Mbit/s

95th percentile per-packet one-way delay: 104.799 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 38.81 Mbit/s

95th percentile per-packet one-way delay: 106.511 ms

Loss rate: 0.64%

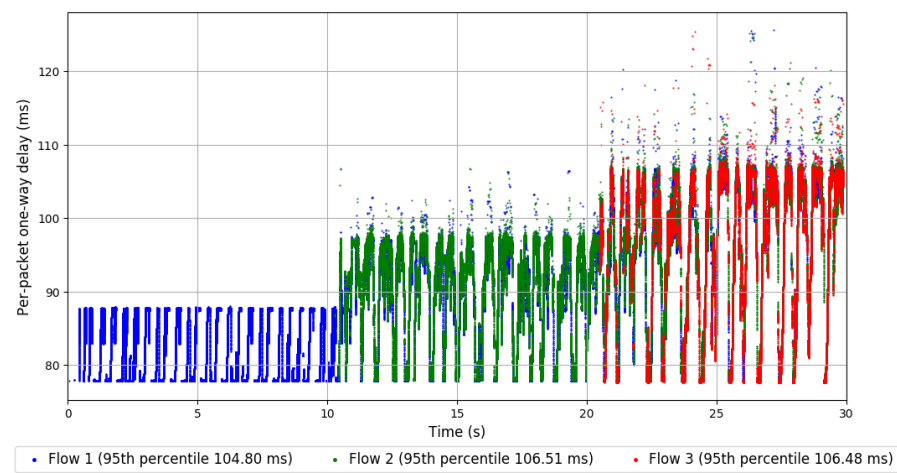
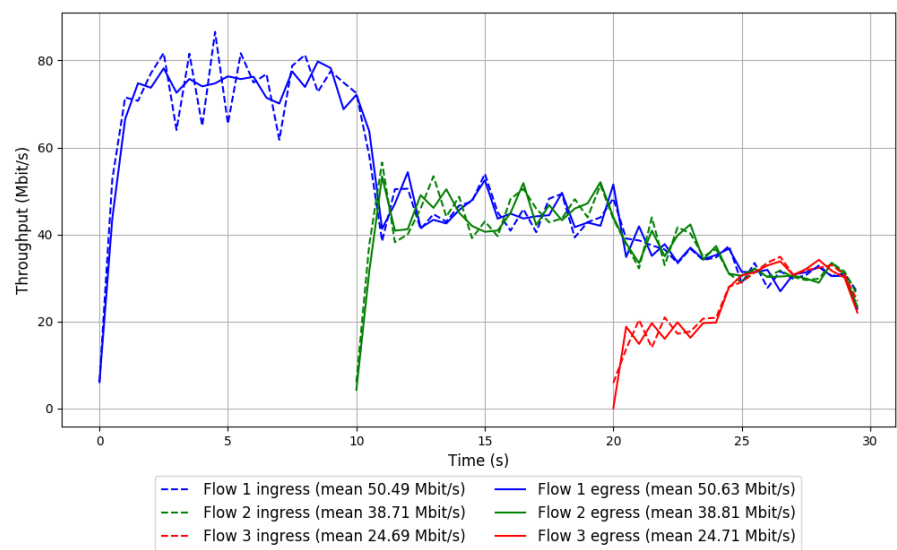
-- Flow 3:

Average throughput: 24.71 Mbit/s

95th percentile per-packet one-way delay: 106.480 ms

Loss rate: 1.88%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-04-24 19:21:59

End at: 2018-04-24 19:22:29

Local clock offset: -5.143 ms

Remote clock offset: 2.99 ms

Below is generated by plot.py at 2018-04-25 00:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.16 Mbit/s

95th percentile per-packet one-way delay: 112.172 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 49.42 Mbit/s

95th percentile per-packet one-way delay: 110.816 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 37.91 Mbit/s

95th percentile per-packet one-way delay: 112.274 ms

Loss rate: 0.86%

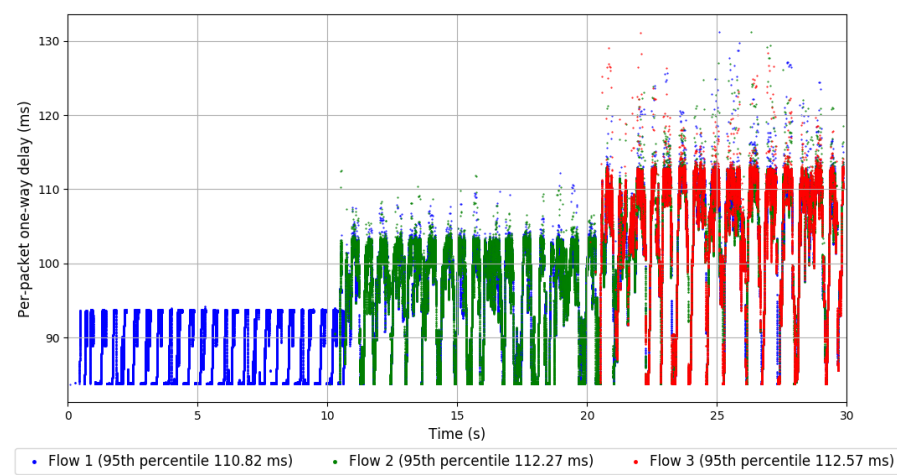
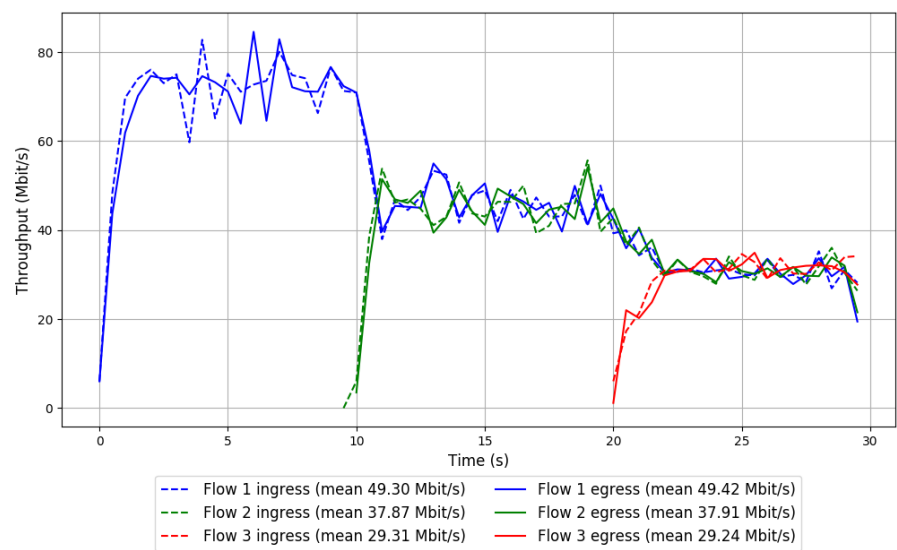
-- Flow 3:

Average throughput: 29.24 Mbit/s

95th percentile per-packet one-way delay: 112.572 ms

Loss rate: 2.39%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-04-24 19:44:29

End at: 2018-04-24 19:44:59

Local clock offset: -4.423 ms

Remote clock offset: 4.357 ms

Below is generated by plot.py at 2018-04-25 00:41:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.05 Mbit/s

95th percentile per-packet one-way delay: 110.926 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 50.26 Mbit/s

95th percentile per-packet one-way delay: 110.361 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 38.73 Mbit/s

95th percentile per-packet one-way delay: 110.353 ms

Loss rate: 0.72%

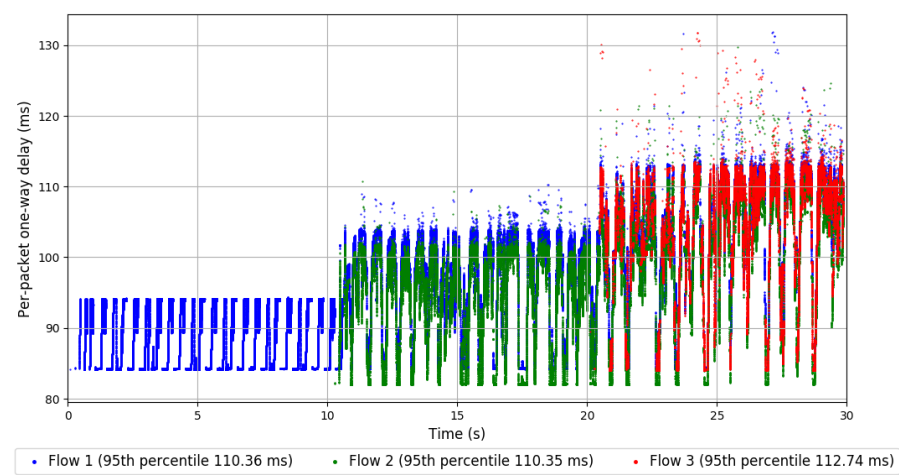
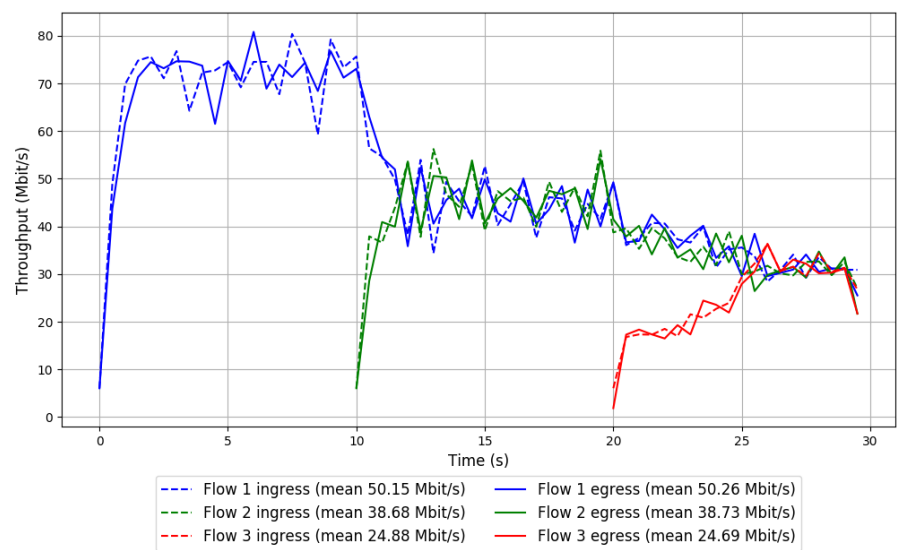
-- Flow 3:

Average throughput: 24.69 Mbit/s

95th percentile per-packet one-way delay: 112.743 ms

Loss rate: 2.59%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-04-24 20:06:49

End at: 2018-04-24 20:07:19

Local clock offset: -4.648 ms

Remote clock offset: 4.088 ms

Below is generated by plot.py at 2018-04-25 00:43:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.05 Mbit/s

95th percentile per-packet one-way delay: 111.427 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 50.11 Mbit/s

95th percentile per-packet one-way delay: 109.579 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 37.99 Mbit/s

95th percentile per-packet one-way delay: 112.972 ms

Loss rate: 0.76%

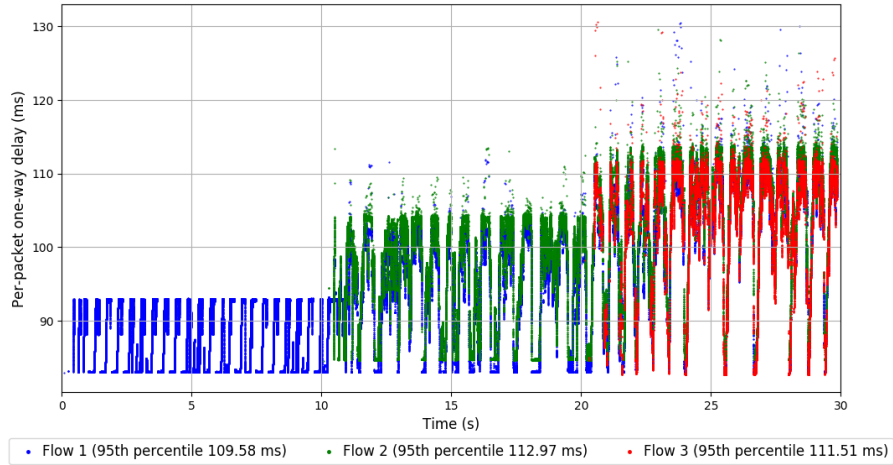
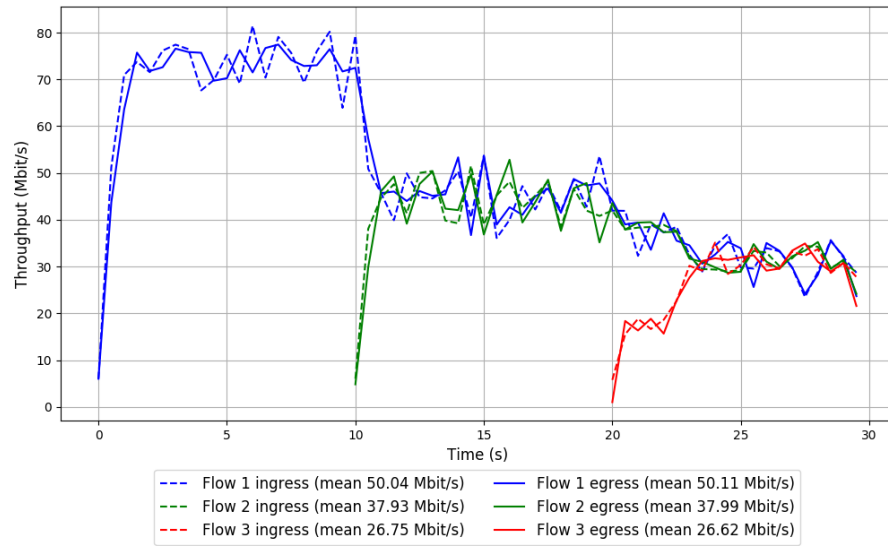
-- Flow 3:

Average throughput: 26.62 Mbit/s

95th percentile per-packet one-way delay: 111.507 ms

Loss rate: 2.46%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-04-24 20:29:21

End at: 2018-04-24 20:29:51

Local clock offset: -4.001 ms

Remote clock offset: 7.187 ms

Below is generated by plot.py at 2018-04-25 00:43:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.34 Mbit/s

95th percentile per-packet one-way delay: 105.603 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 49.11 Mbit/s

95th percentile per-packet one-way delay: 103.054 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 40.19 Mbit/s

95th percentile per-packet one-way delay: 106.672 ms

Loss rate: 0.71%

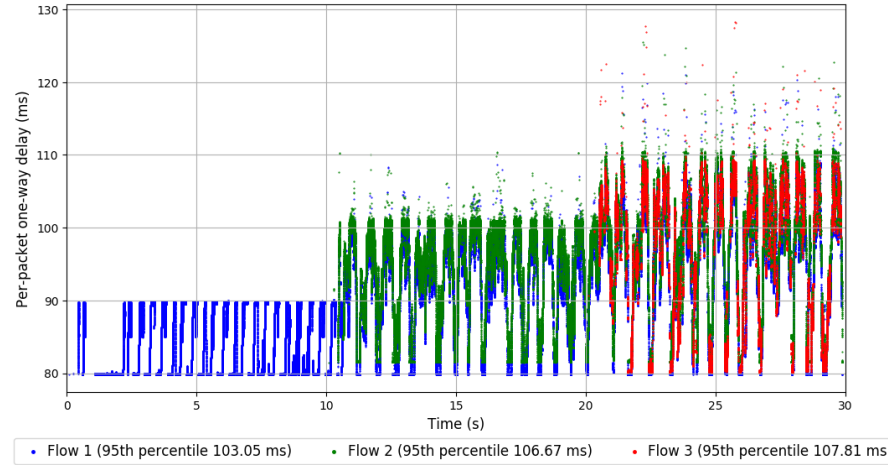
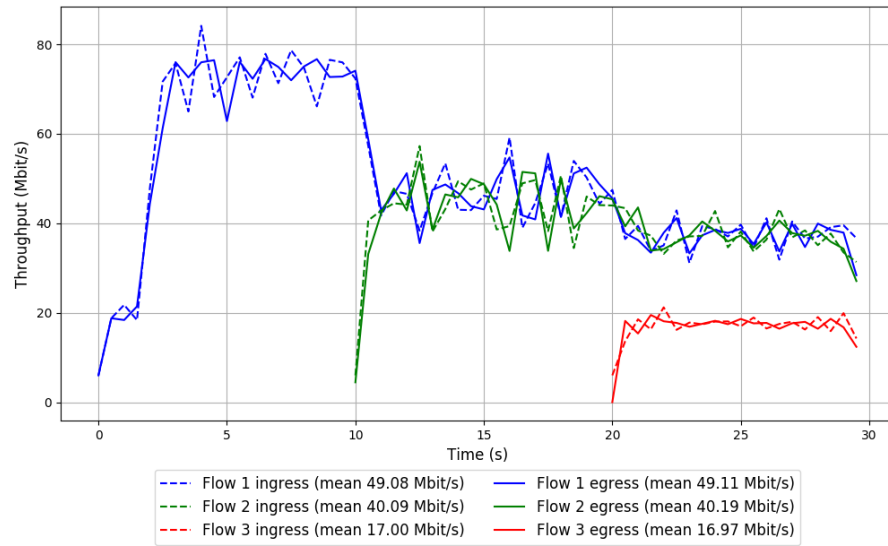
-- Flow 3:

Average throughput: 16.97 Mbit/s

95th percentile per-packet one-way delay: 107.815 ms

Loss rate: 2.15%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-04-24 17:09:22

End at: 2018-04-24 17:09:52

Local clock offset: -5.056 ms

Remote clock offset: 1.686 ms

Below is generated by plot.py at 2018-04-25 00:43:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.98 Mbit/s

95th percentile per-packet one-way delay: 118.249 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 37.27 Mbit/s

95th percentile per-packet one-way delay: 116.797 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 36.55 Mbit/s

95th percentile per-packet one-way delay: 118.937 ms

Loss rate: 0.97%

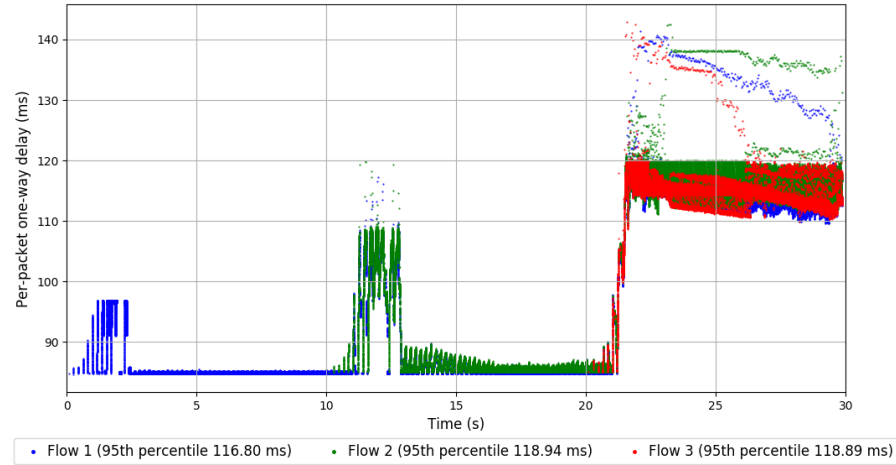
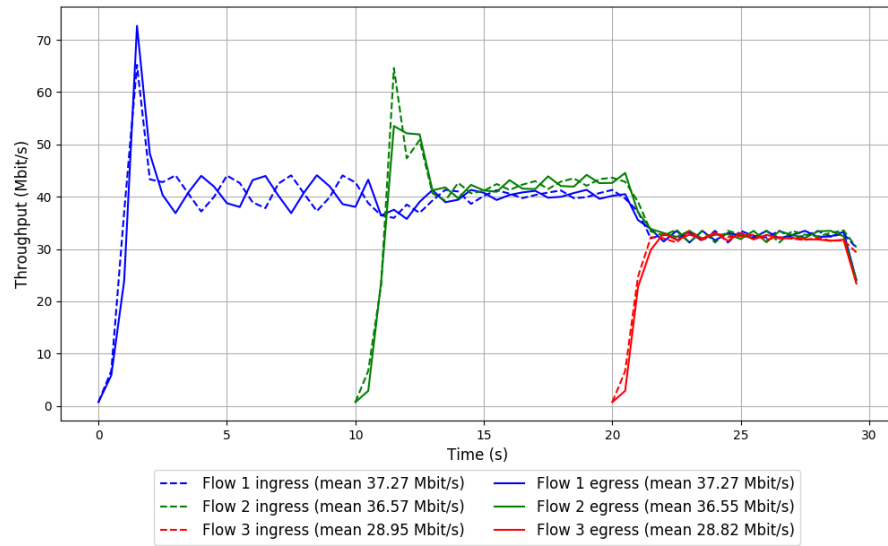
-- Flow 3:

Average throughput: 28.82 Mbit/s

95th percentile per-packet one-way delay: 118.893 ms

Loss rate: 2.30%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-04-24 17:32:26

End at: 2018-04-24 17:32:56

Local clock offset: -5.873 ms

Remote clock offset: 2.09 ms

Below is generated by plot.py at 2018-04-25 00:43:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.74 Mbit/s

95th percentile per-packet one-way delay: 116.472 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 37.21 Mbit/s

95th percentile per-packet one-way delay: 114.142 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 43.96 Mbit/s

95th percentile per-packet one-way delay: 115.236 ms

Loss rate: 0.79%

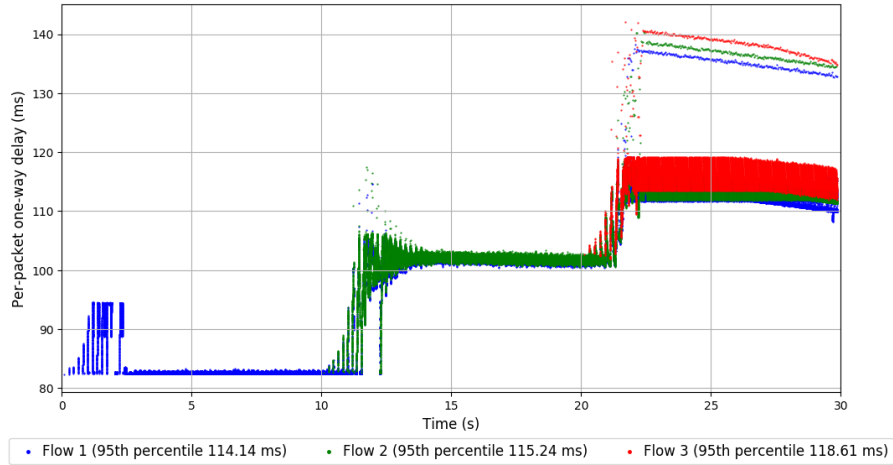
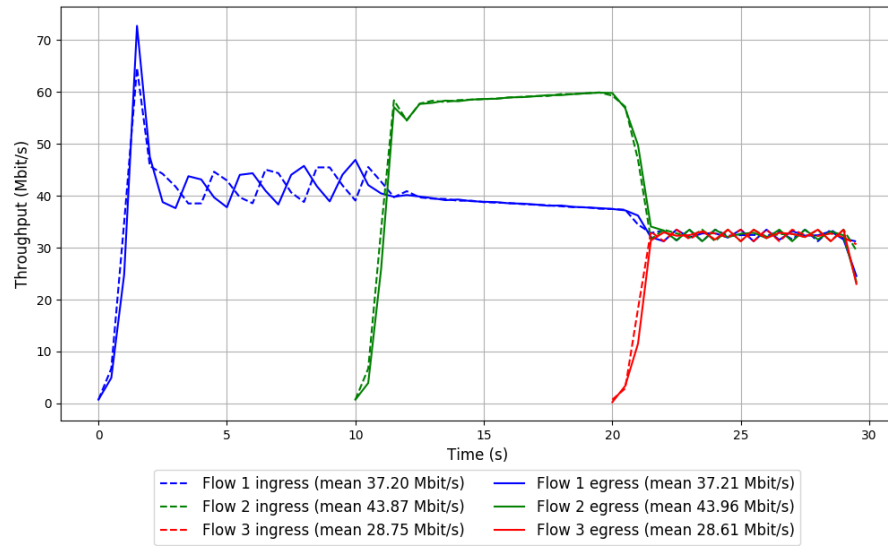
-- Flow 3:

Average throughput: 28.61 Mbit/s

95th percentile per-packet one-way delay: 118.612 ms

Loss rate: 2.51%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-04-24 17:54:53

End at: 2018-04-24 17:55:23

Local clock offset: -3.717 ms

Remote clock offset: 6.629 ms

Below is generated by plot.py at 2018-04-25 00:43:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.33 Mbit/s

95th percentile per-packet one-way delay: 115.287 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 39.17 Mbit/s

95th percentile per-packet one-way delay: 115.123 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 37.15 Mbit/s

95th percentile per-packet one-way delay: 116.028 ms

Loss rate: 0.91%

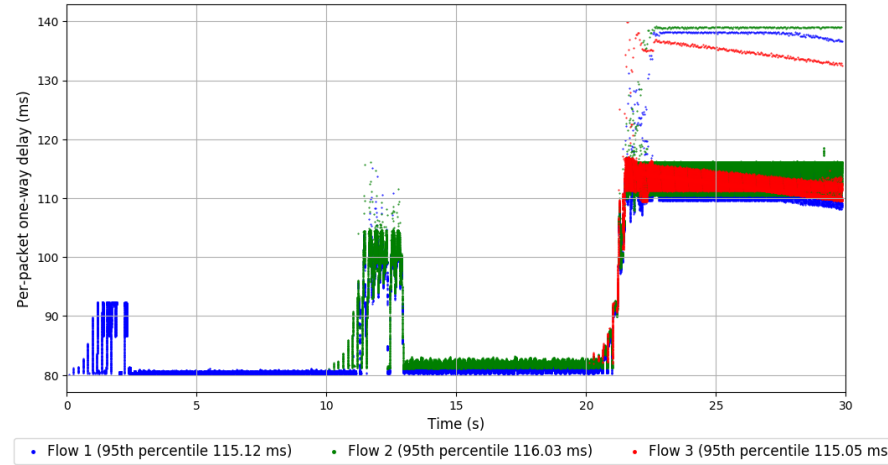
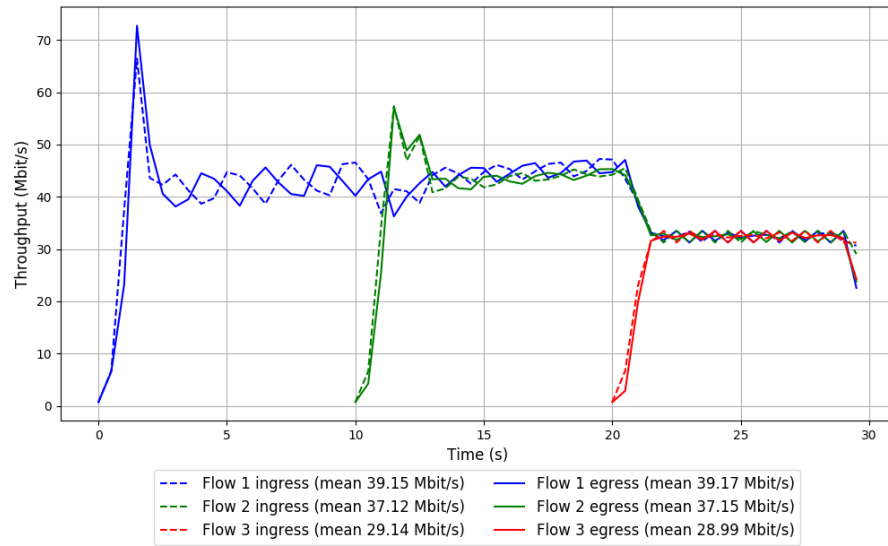
-- Flow 3:

Average throughput: 28.99 Mbit/s

95th percentile per-packet one-way delay: 115.049 ms

Loss rate: 2.36%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-04-24 18:17:15

End at: 2018-04-24 18:17:45

Local clock offset: -4.505 ms

Remote clock offset: 5.367 ms

Below is generated by plot.py at 2018-04-25 00:43:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.24 Mbit/s

95th percentile per-packet one-way delay: 103.855 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 35.98 Mbit/s

95th percentile per-packet one-way delay: 103.338 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 54.75 Mbit/s

95th percentile per-packet one-way delay: 103.826 ms

Loss rate: 1.27%

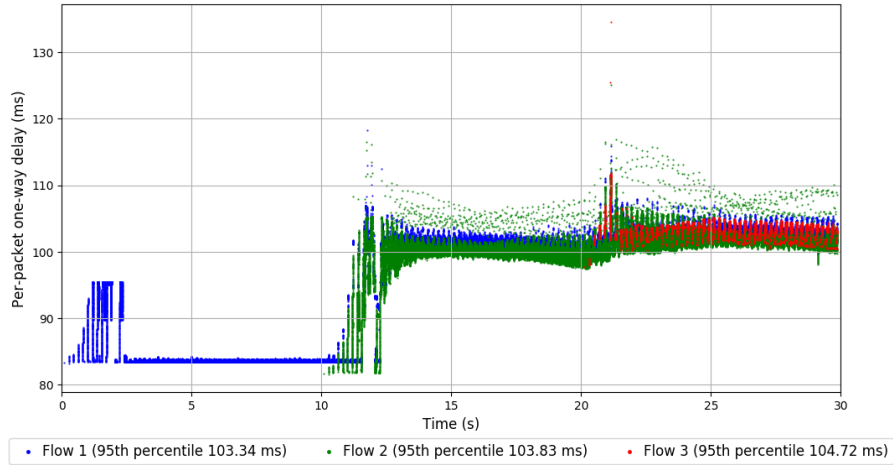
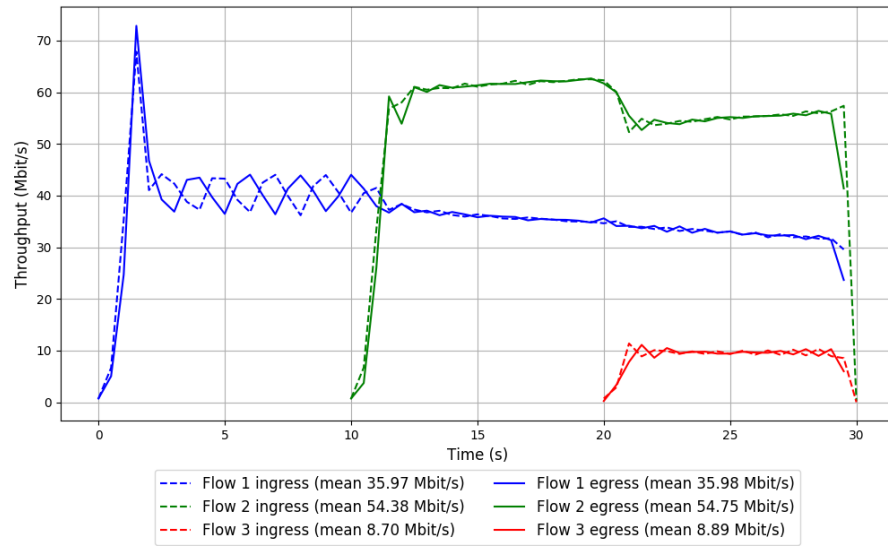
-- Flow 3:

Average throughput: 8.89 Mbit/s

95th percentile per-packet one-way delay: 104.721 ms

Loss rate: 2.18%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-04-24 18:39:52

End at: 2018-04-24 18:40:22

Local clock offset: -5.296 ms

Remote clock offset: 9.061 ms

Below is generated by plot.py at 2018-04-25 00:43:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.77 Mbit/s

95th percentile per-packet one-way delay: 105.212 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 40.80 Mbit/s

95th percentile per-packet one-way delay: 103.462 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 43.72 Mbit/s

95th percentile per-packet one-way delay: 104.830 ms

Loss rate: 1.00%

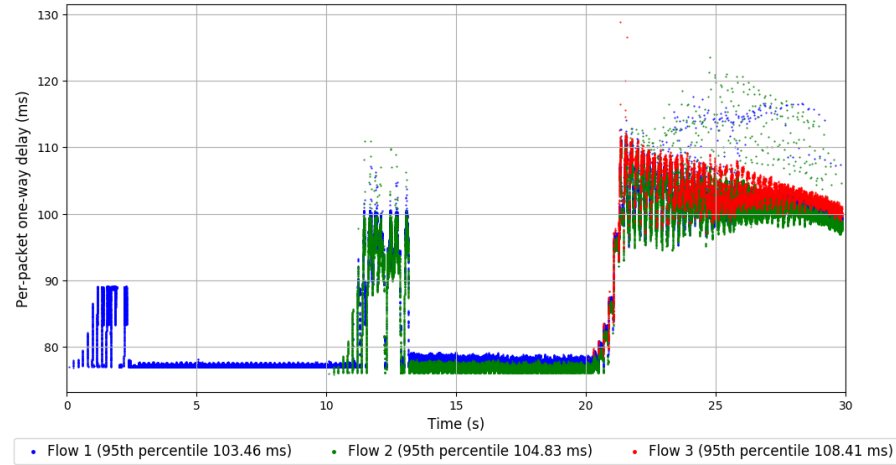
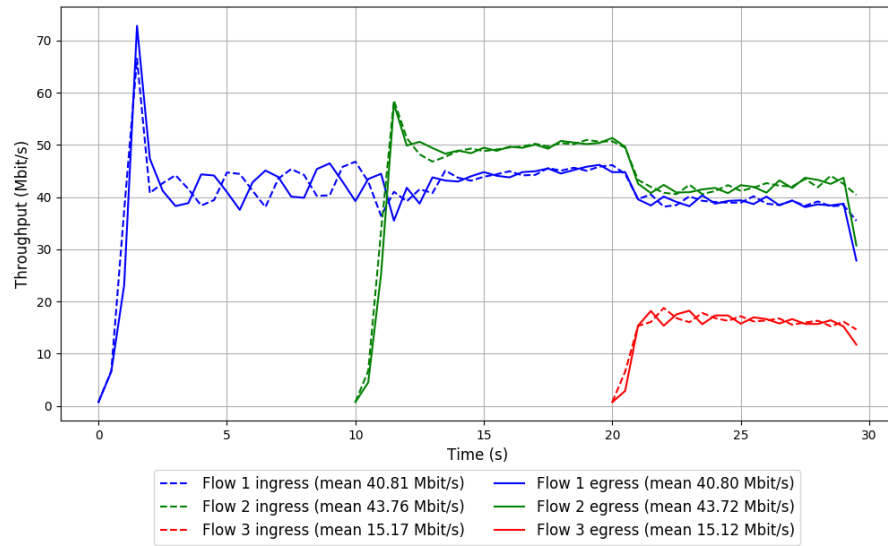
-- Flow 3:

Average throughput: 15.12 Mbit/s

95th percentile per-packet one-way delay: 108.408 ms

Loss rate: 2.14%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-04-24 19:02:16

End at: 2018-04-24 19:02:46

Local clock offset: -3.593 ms

Remote clock offset: 7.859 ms

Below is generated by plot.py at 2018-04-25 00:43:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.92 Mbit/s

95th percentile per-packet one-way delay: 113.948 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 36.46 Mbit/s

95th percentile per-packet one-way delay: 112.055 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 37.69 Mbit/s

95th percentile per-packet one-way delay: 114.234 ms

Loss rate: 0.96%

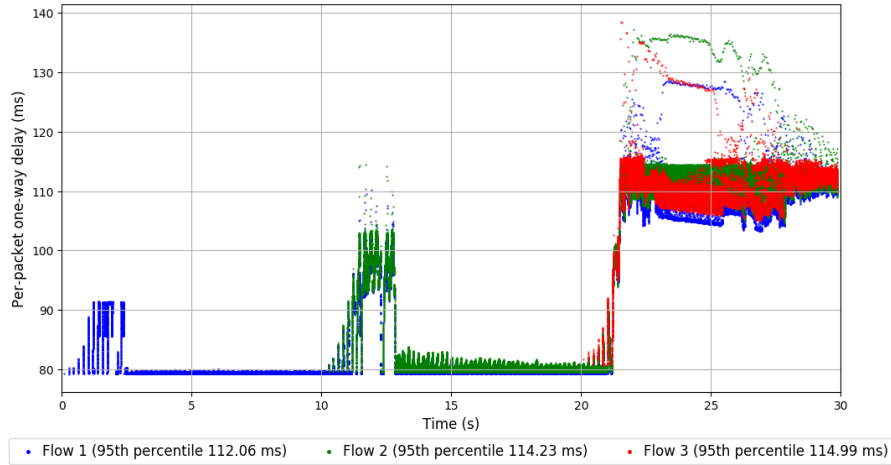
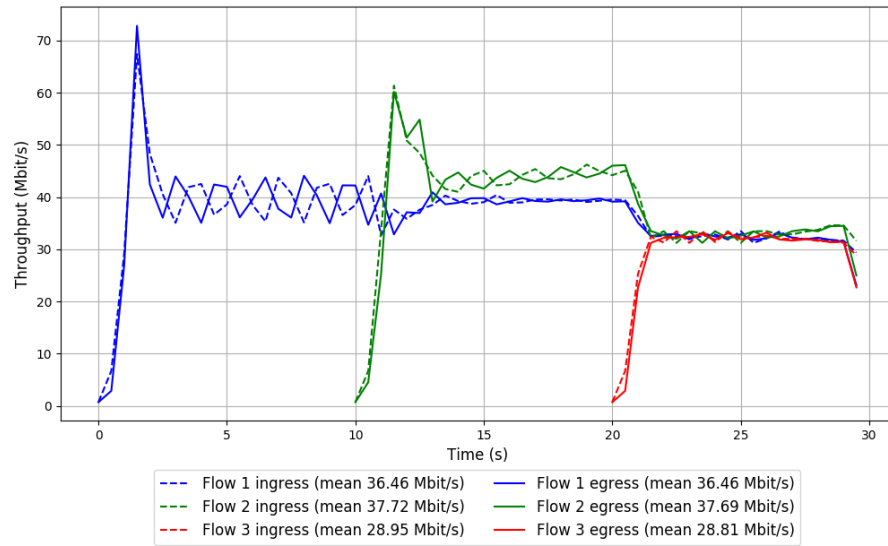
-- Flow 3:

Average throughput: 28.81 Mbit/s

95th percentile per-packet one-way delay: 114.988 ms

Loss rate: 2.30%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-04-24 19:24:38

End at: 2018-04-24 19:25:08

Local clock offset: -4.387 ms

Remote clock offset: 7.611 ms

Below is generated by plot.py at 2018-04-25 00:43:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.49 Mbit/s

95th percentile per-packet one-way delay: 112.687 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 35.97 Mbit/s

95th percentile per-packet one-way delay: 108.641 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 45.09 Mbit/s

95th percentile per-packet one-way delay: 109.311 ms

Loss rate: 0.75%

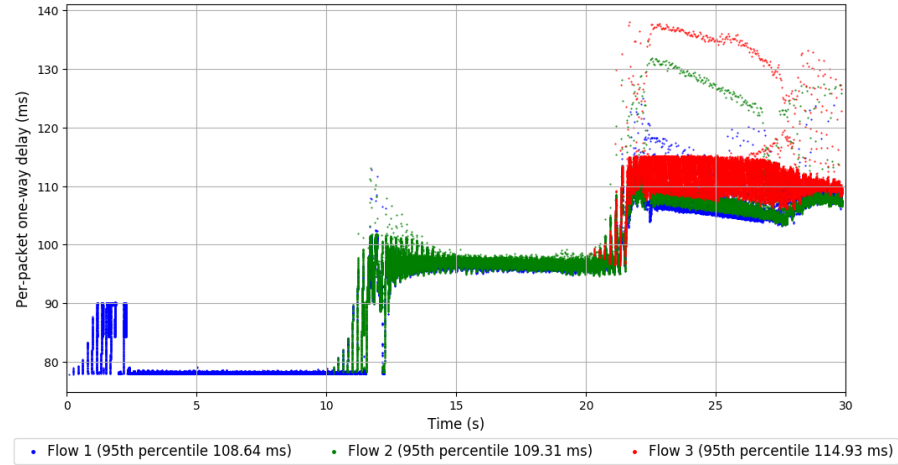
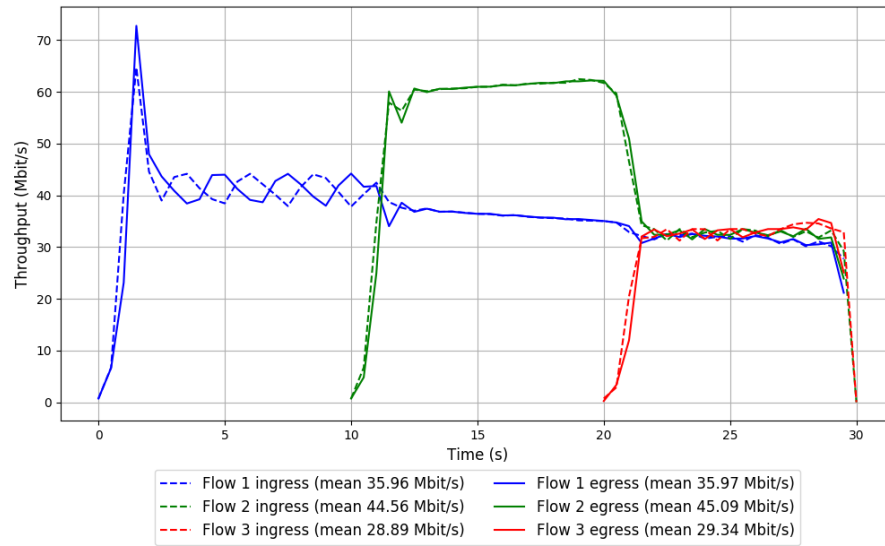
-- Flow 3:

Average throughput: 29.34 Mbit/s

95th percentile per-packet one-way delay: 114.926 ms

Loss rate: 2.48%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-04-24 19:47:09

End at: 2018-04-24 19:47:39

Local clock offset: -4.514 ms

Remote clock offset: 9.084 ms

Below is generated by plot.py at 2018-04-25 00:43:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 45.53 Mbit/s

95th percentile per-packet one-way delay: 90.568 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 25.39 Mbit/s

95th percentile per-packet one-way delay: 90.938 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 25.02 Mbit/s

95th percentile per-packet one-way delay: 89.675 ms

Loss rate: 1.64%

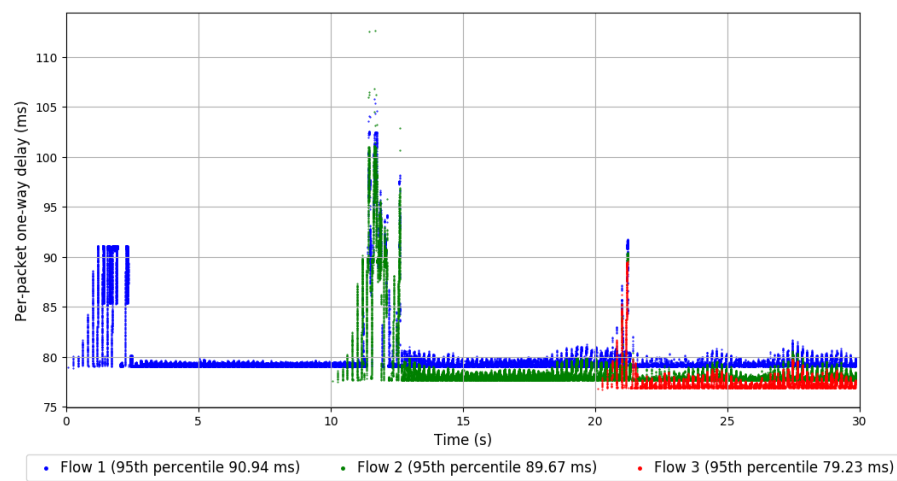
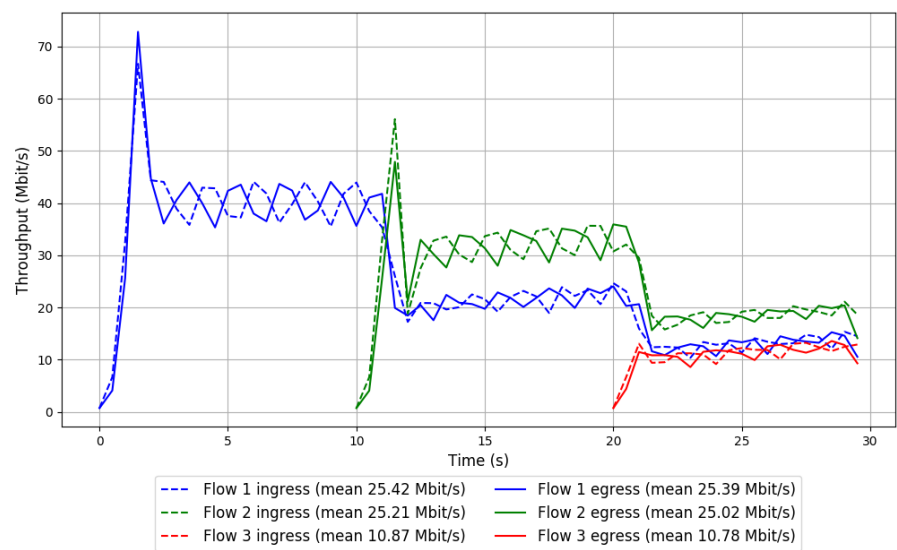
-- Flow 3:

Average throughput: 10.78 Mbit/s

95th percentile per-packet one-way delay: 79.233 ms

Loss rate: 2.62%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-04-24 20:09:29

End at: 2018-04-24 20:09:59

Local clock offset: -3.914 ms

Remote clock offset: 9.439 ms

Below is generated by plot.py at 2018-04-25 00:43:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.96 Mbit/s

95th percentile per-packet one-way delay: 113.256 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 37.45 Mbit/s

95th percentile per-packet one-way delay: 110.801 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 36.35 Mbit/s

95th percentile per-packet one-way delay: 113.227 ms

Loss rate: 0.94%

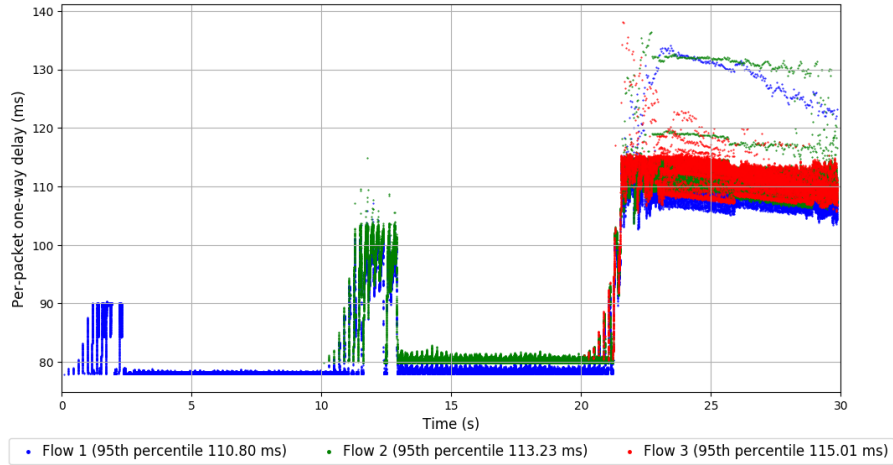
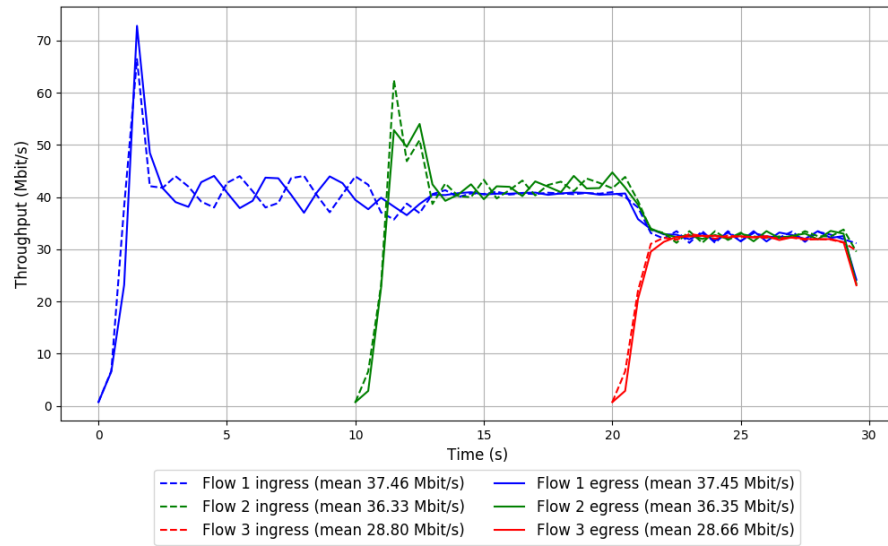
-- Flow 3:

Average throughput: 28.66 Mbit/s

95th percentile per-packet one-way delay: 115.010 ms

Loss rate: 2.35%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-04-24 20:32:01

End at: 2018-04-24 20:32:31

Local clock offset: -5.542 ms

Remote clock offset: 8.079 ms

Below is generated by plot.py at 2018-04-25 00:43:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.09 Mbit/s

95th percentile per-packet one-way delay: 89.076 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 26.61 Mbit/s

95th percentile per-packet one-way delay: 88.873 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 5.16 Mbit/s

95th percentile per-packet one-way delay: 85.549 ms

Loss rate: 1.43%

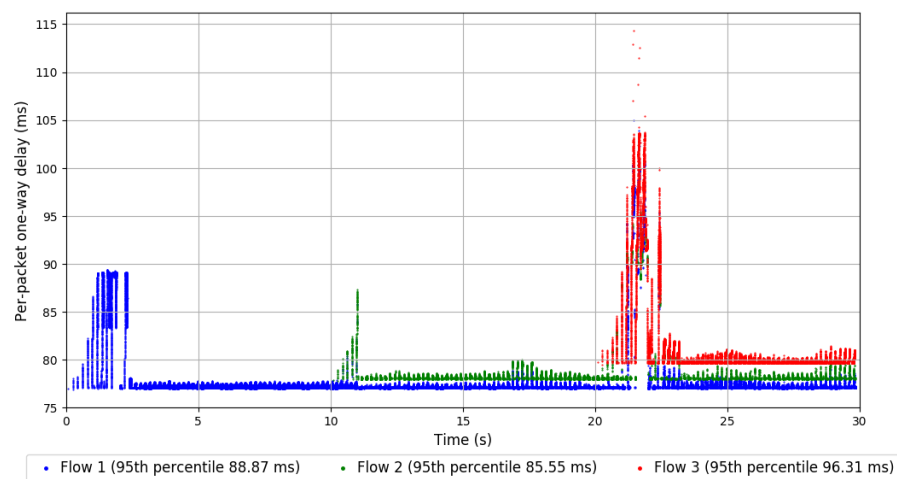
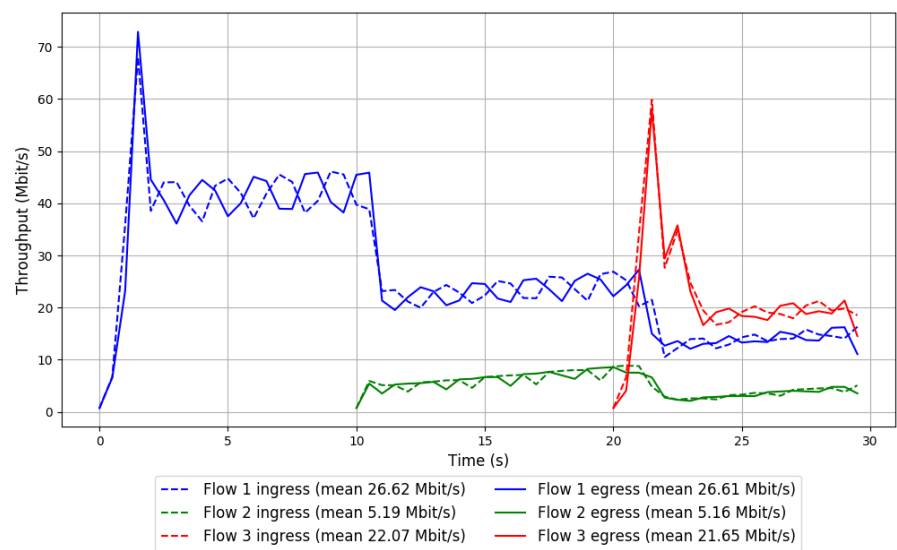
-- Flow 3:

Average throughput: 21.65 Mbit/s

95th percentile per-packet one-way delay: 96.308 ms

Loss rate: 3.66%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-04-24 17:19:05

End at: 2018-04-24 17:19:35

Local clock offset: -4.346 ms

Remote clock offset: 6.268 ms

Below is generated by plot.py at 2018-04-25 00:43:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.41 Mbit/s

95th percentile per-packet one-way delay: 110.544 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 30.79 Mbit/s

95th percentile per-packet one-way delay: 109.188 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 46.78 Mbit/s

95th percentile per-packet one-way delay: 109.013 ms

Loss rate: 0.30%

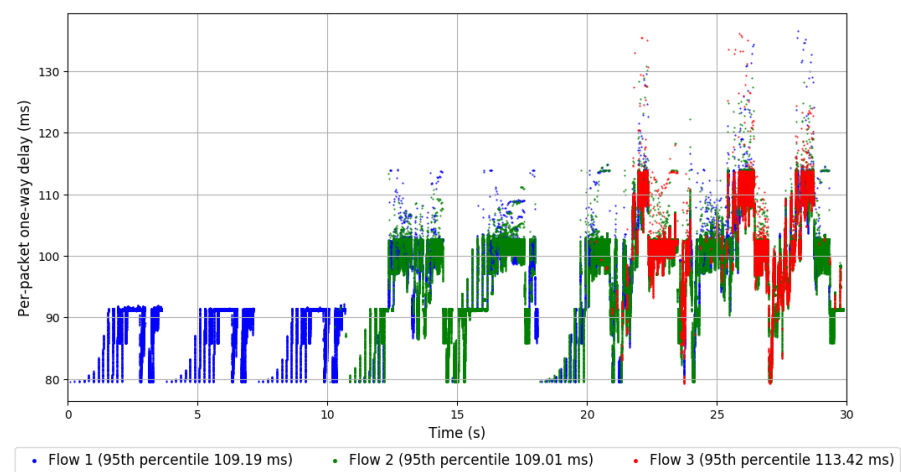
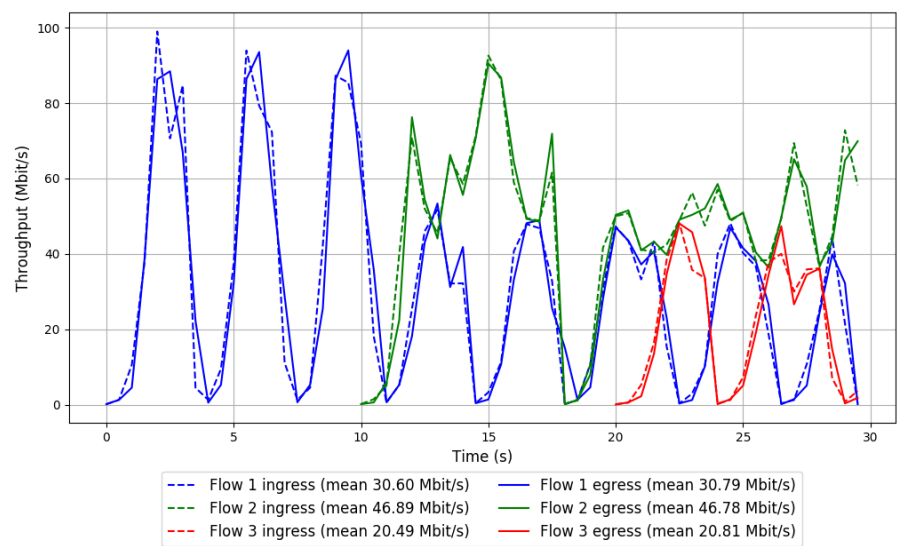
-- Flow 3:

Average throughput: 20.81 Mbit/s

95th percentile per-packet one-way delay: 113.417 ms

Loss rate: 0.58%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-04-24 17:41:37

End at: 2018-04-24 17:42:07

Local clock offset: -4.748 ms

Remote clock offset: 6.897 ms

Below is generated by plot.py at 2018-04-25 00:43:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.59 Mbit/s

95th percentile per-packet one-way delay: 114.100 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 38.63 Mbit/s

95th percentile per-packet one-way delay: 113.021 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 40.53 Mbit/s

95th percentile per-packet one-way delay: 114.083 ms

Loss rate: 1.18%

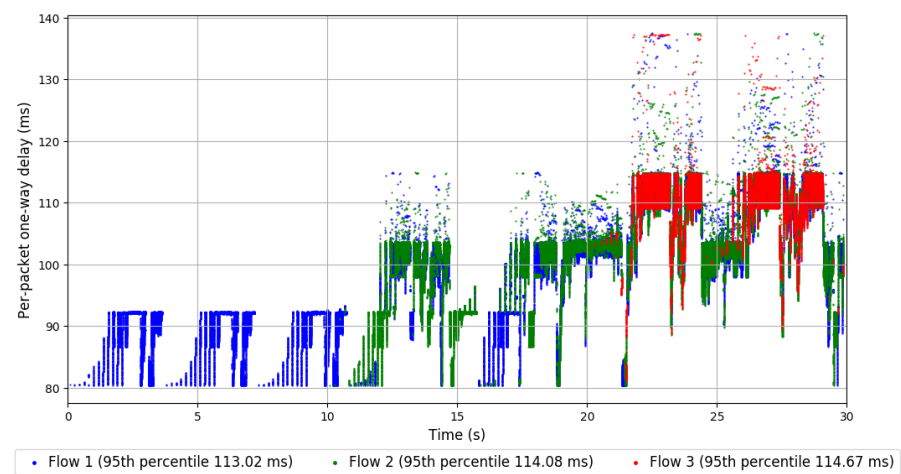
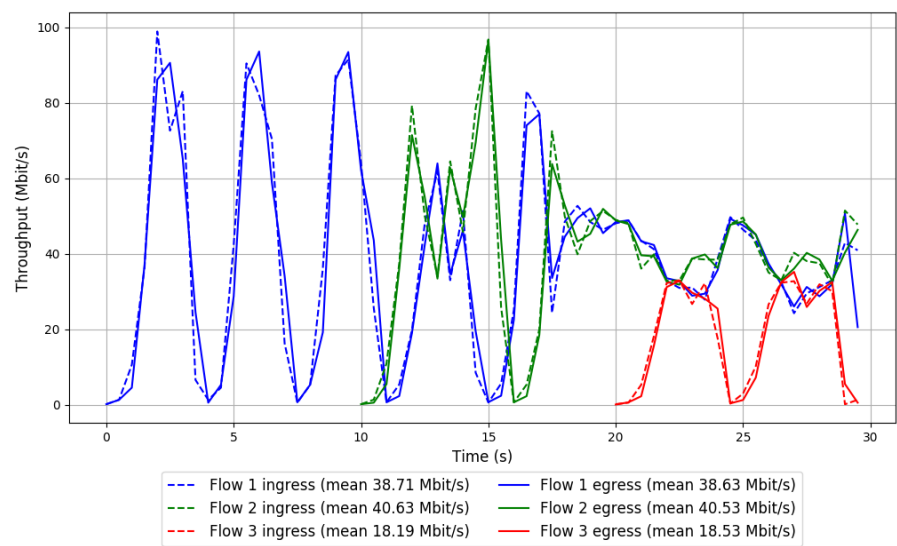
-- Flow 3:

Average throughput: 18.53 Mbit/s

95th percentile per-packet one-way delay: 114.670 ms

Loss rate: 0.21%

Run 2: Report of Verus — Data Link

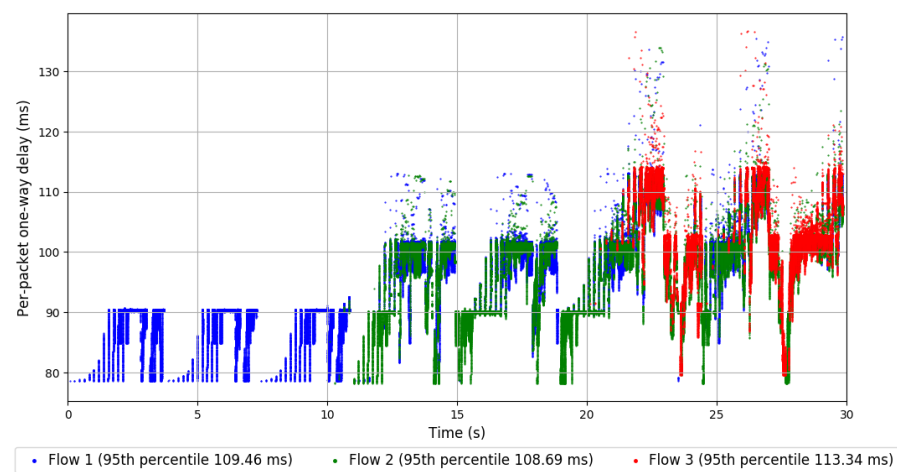
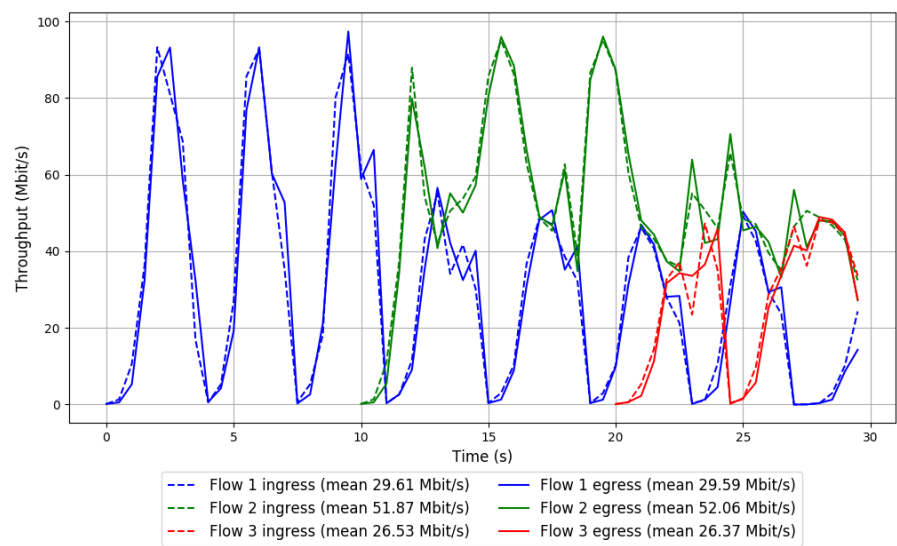


Run 3: Statistics of Verus

Start at: 2018-04-24 18:04:01
End at: 2018-04-24 18:04:31
Local clock offset: -4.406 ms
Remote clock offset: 8.403 ms

Below is generated by plot.py at 2018-04-25 00:44:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 72.75 Mbit/s
95th percentile per-packet one-way delay: 110.493 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 29.59 Mbit/s
95th percentile per-packet one-way delay: 109.456 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 52.06 Mbit/s
95th percentile per-packet one-way delay: 108.691 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 26.37 Mbit/s
95th percentile per-packet one-way delay: 113.345 ms
Loss rate: 2.77%

Run 3: Report of Verus — Data Link

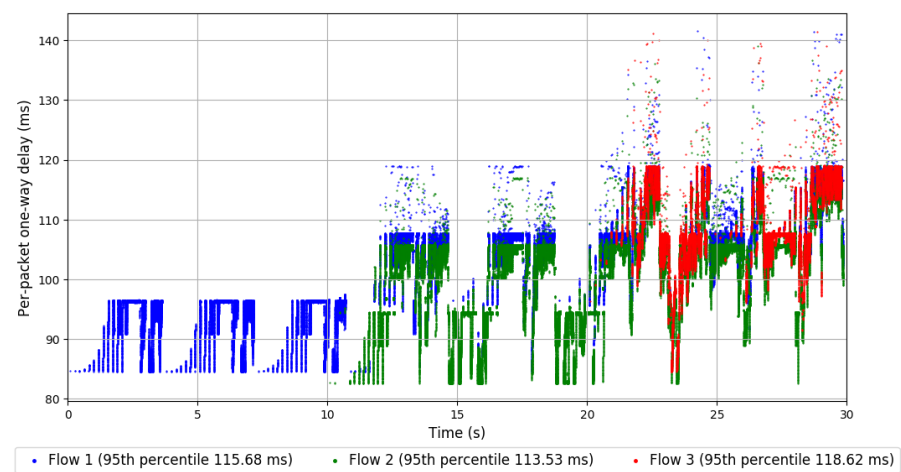
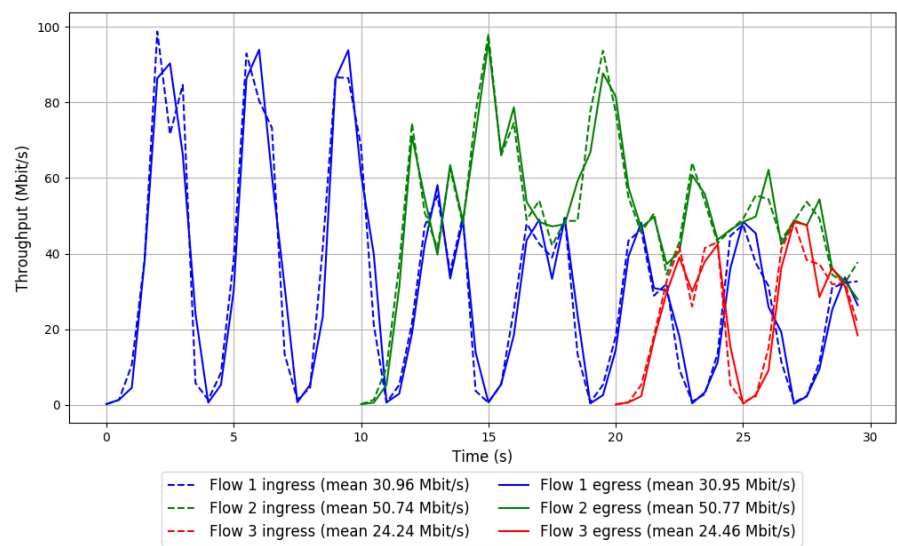


Run 4: Statistics of Verus

Start at: 2018-04-24 18:26:23
End at: 2018-04-24 18:26:53
Local clock offset: -4.513 ms
Remote clock offset: 4.88 ms

Below is generated by plot.py at 2018-04-25 00:44:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 72.59 Mbit/s
95th percentile per-packet one-way delay: 115.926 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 30.95 Mbit/s
95th percentile per-packet one-way delay: 115.677 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 50.77 Mbit/s
95th percentile per-packet one-way delay: 113.531 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 24.46 Mbit/s
95th percentile per-packet one-way delay: 118.619 ms
Loss rate: 2.07%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-04-24 18:49:00

End at: 2018-04-24 18:49:30

Local clock offset: -5.167 ms

Remote clock offset: 8.851 ms

Below is generated by plot.py at 2018-04-25 00:44:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.12 Mbit/s

95th percentile per-packet one-way delay: 104.833 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 34.75 Mbit/s

95th percentile per-packet one-way delay: 100.404 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.08 Mbit/s

95th percentile per-packet one-way delay: 104.305 ms

Loss rate: 1.21%

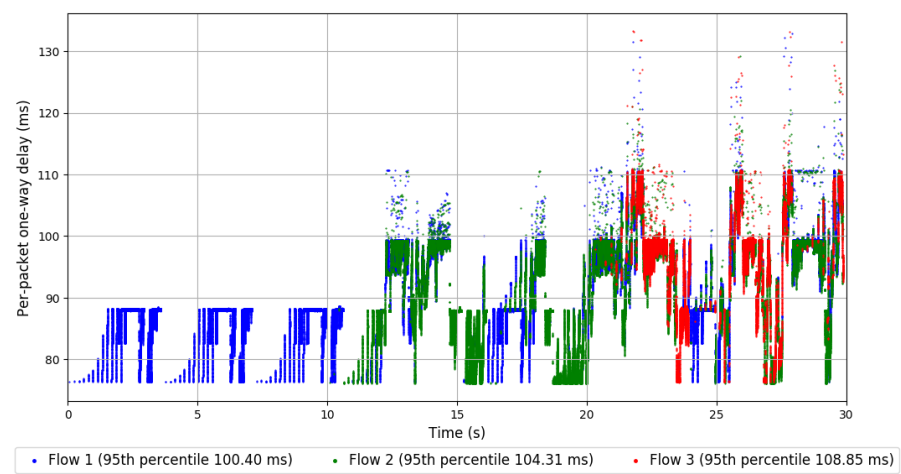
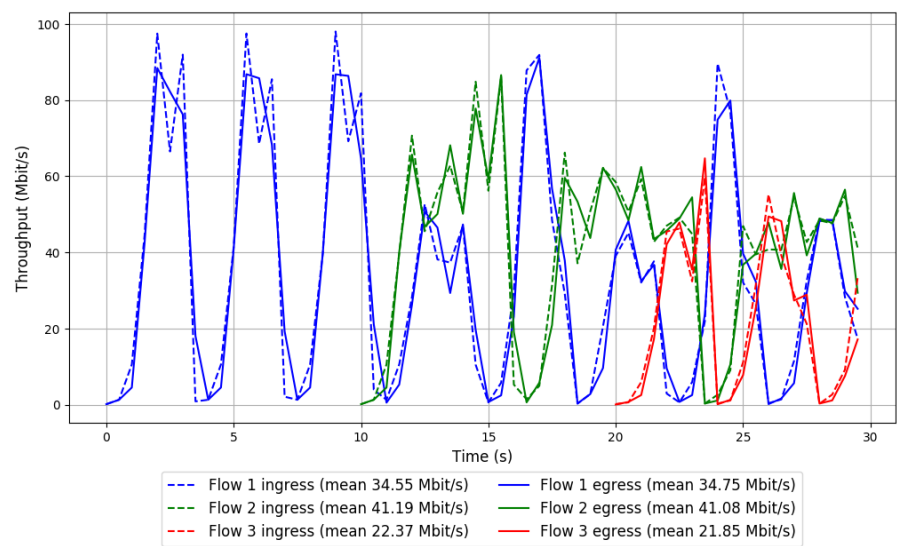
-- Flow 3:

Average throughput: 21.85 Mbit/s

95th percentile per-packet one-way delay: 108.849 ms

Loss rate: 4.37%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-04-24 19:11:25

End at: 2018-04-24 19:11:55

Local clock offset: -4.332 ms

Remote clock offset: 7.699 ms

Below is generated by plot.py at 2018-04-25 00:44:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.27 Mbit/s

95th percentile per-packet one-way delay: 104.104 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 38.67 Mbit/s

95th percentile per-packet one-way delay: 101.505 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 28.93 Mbit/s

95th percentile per-packet one-way delay: 107.246 ms

Loss rate: 1.68%

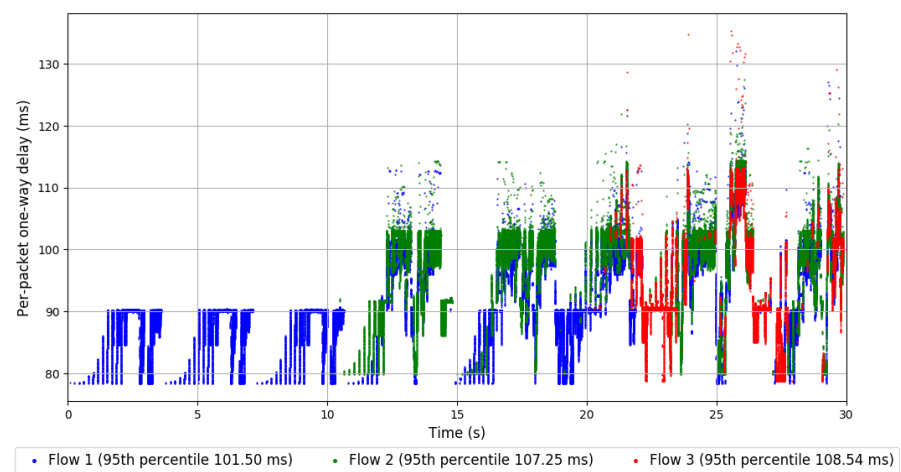
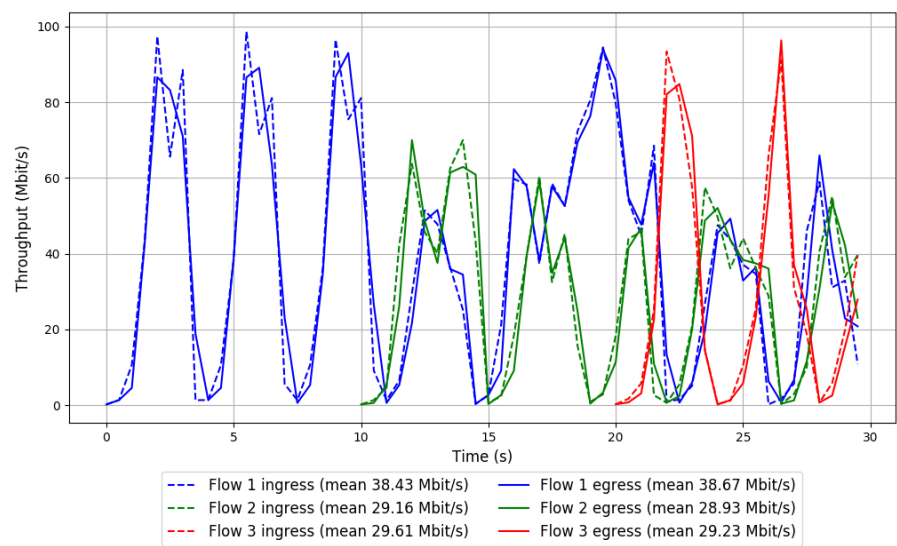
-- Flow 3:

Average throughput: 29.23 Mbit/s

95th percentile per-packet one-way delay: 108.536 ms

Loss rate: 3.29%

Run 6: Report of Verus — Data Link

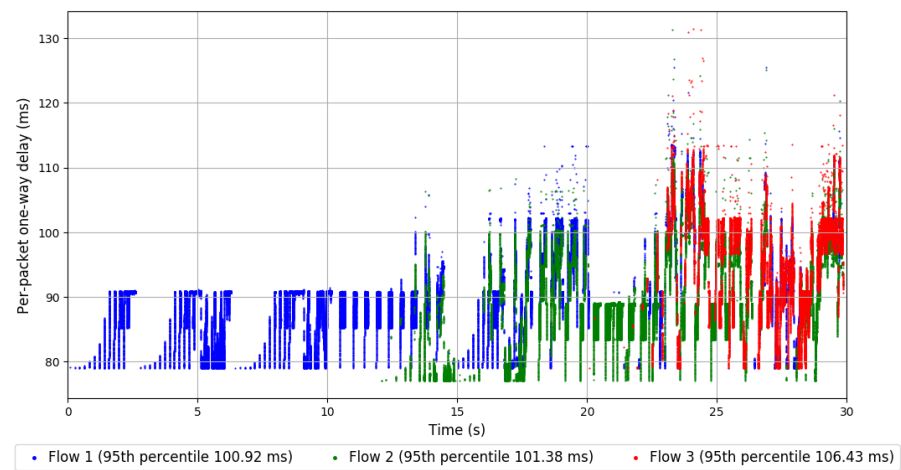
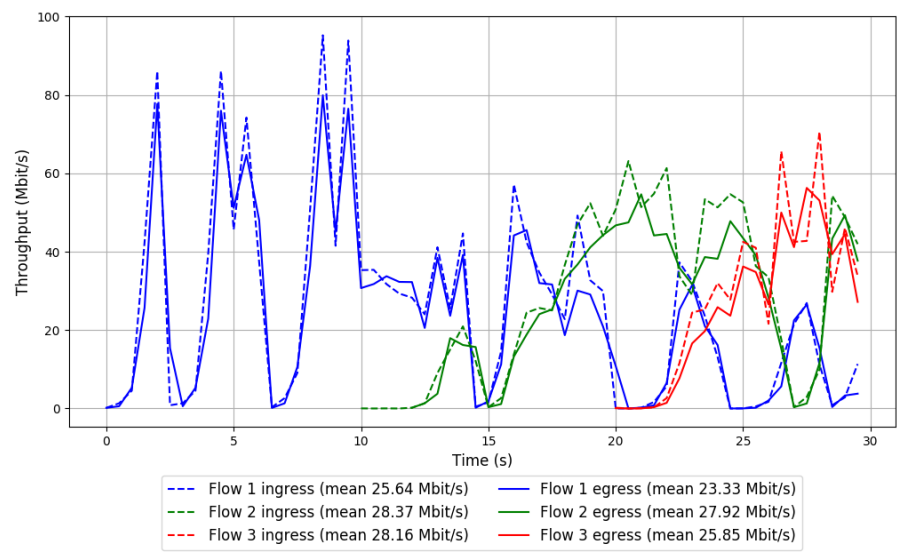


Run 7: Statistics of Verus

Start at: 2018-04-24 19:33:54
End at: 2018-04-24 19:34:24
Local clock offset: -4.398 ms
Remote clock offset: 8.457 ms

Below is generated by plot.py at 2018-04-25 00:44:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 48.37 Mbit/s
95th percentile per-packet one-way delay: 102.139 ms
Loss rate: 10.62%
-- Flow 1:
Average throughput: 23.33 Mbit/s
95th percentile per-packet one-way delay: 100.925 ms
Loss rate: 9.58%
-- Flow 2:
Average throughput: 27.92 Mbit/s
95th percentile per-packet one-way delay: 101.383 ms
Loss rate: 12.35%
-- Flow 3:
Average throughput: 25.85 Mbit/s
95th percentile per-packet one-way delay: 106.433 ms
Loss rate: 9.98%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-04-24 19:56:16

End at: 2018-04-24 19:56:46

Local clock offset: -4.56 ms

Remote clock offset: 4.676 ms

Below is generated by plot.py at 2018-04-25 00:44:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 49.75 Mbit/s

95th percentile per-packet one-way delay: 109.396 ms

Loss rate: 6.73%

-- Flow 1:

Average throughput: 31.14 Mbit/s

95th percentile per-packet one-way delay: 104.681 ms

Loss rate: 6.86%

-- Flow 2:

Average throughput: 20.83 Mbit/s

95th percentile per-packet one-way delay: 113.084 ms

Loss rate: 8.36%

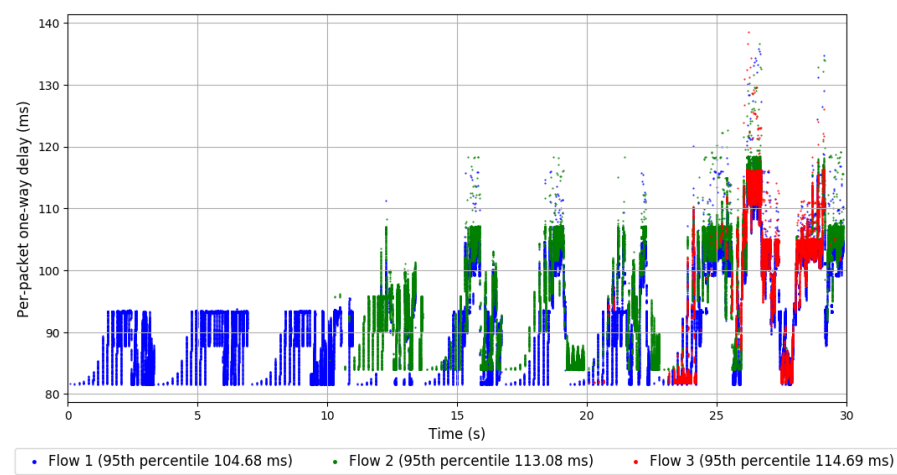
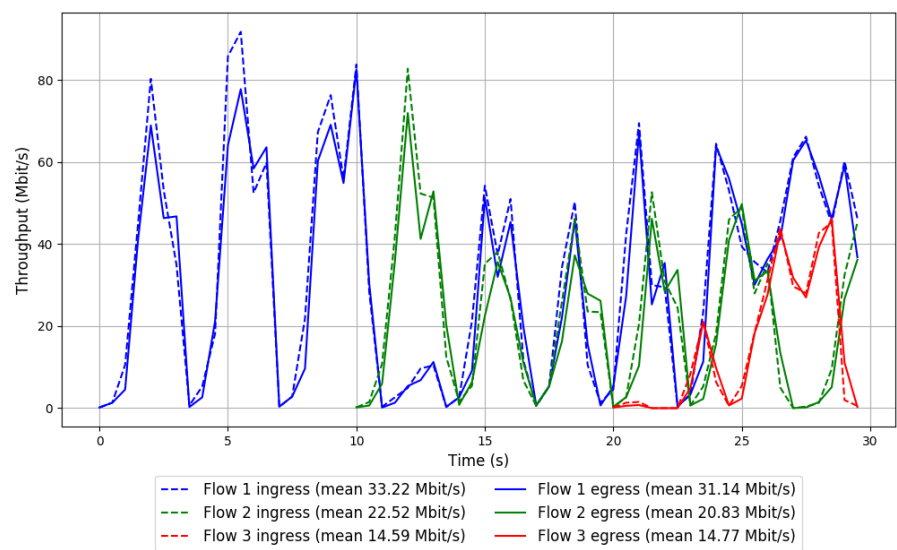
-- Flow 3:

Average throughput: 14.77 Mbit/s

95th percentile per-packet one-way delay: 114.694 ms

Loss rate: 0.66%

Run 8: Report of Verus — Data Link

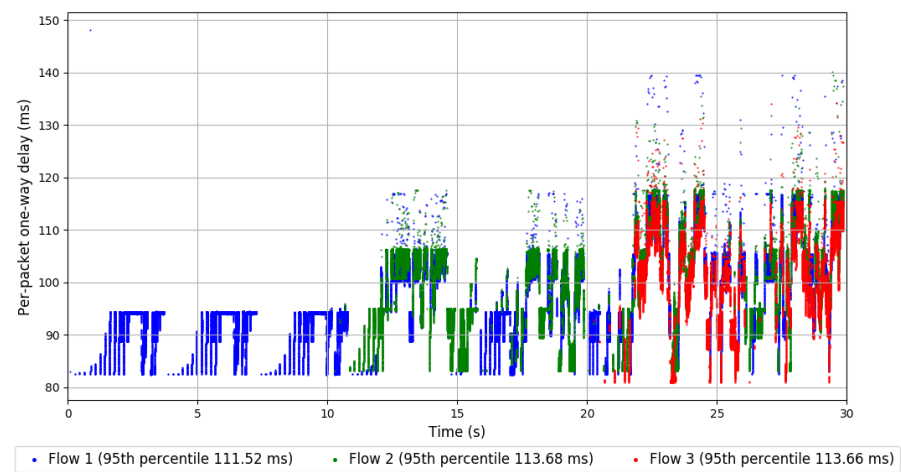
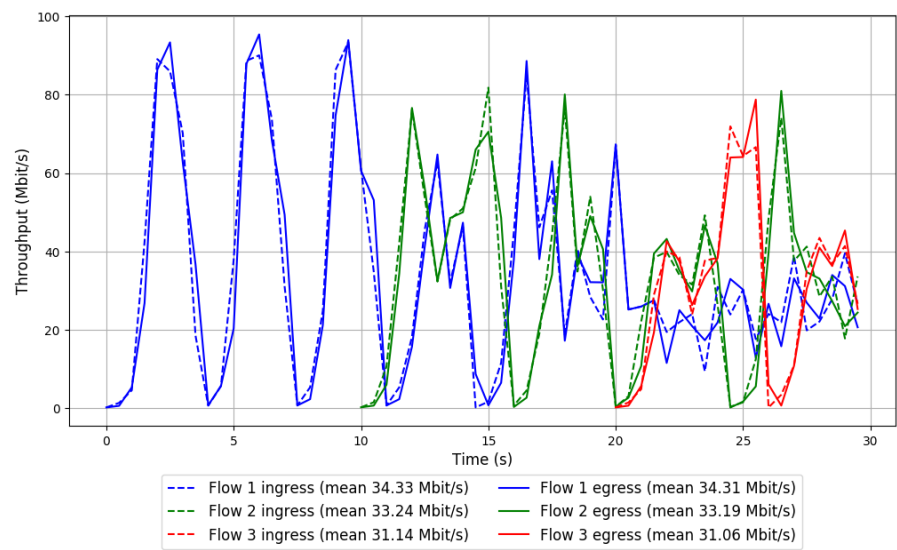


Run 9: Statistics of Verus

Start at: 2018-04-24 20:18:45
End at: 2018-04-24 20:19:15
Local clock offset: -5.473 ms
Remote clock offset: 4.465 ms

Below is generated by plot.py at 2018-04-25 00:44:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 66.49 Mbit/s
95th percentile per-packet one-way delay: 112.737 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 34.31 Mbit/s
95th percentile per-packet one-way delay: 111.515 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 33.19 Mbit/s
95th percentile per-packet one-way delay: 113.677 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 31.06 Mbit/s
95th percentile per-packet one-way delay: 113.662 ms
Loss rate: 1.27%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-04-24 20:41:21

End at: 2018-04-24 20:41:51

Local clock offset: -5.659 ms

Remote clock offset: 3.313 ms

Below is generated by plot.py at 2018-04-25 00:44:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.58 Mbit/s

95th percentile per-packet one-way delay: 106.794 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 33.36 Mbit/s

95th percentile per-packet one-way delay: 105.465 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 43.25 Mbit/s

95th percentile per-packet one-way delay: 105.703 ms

Loss rate: 1.09%

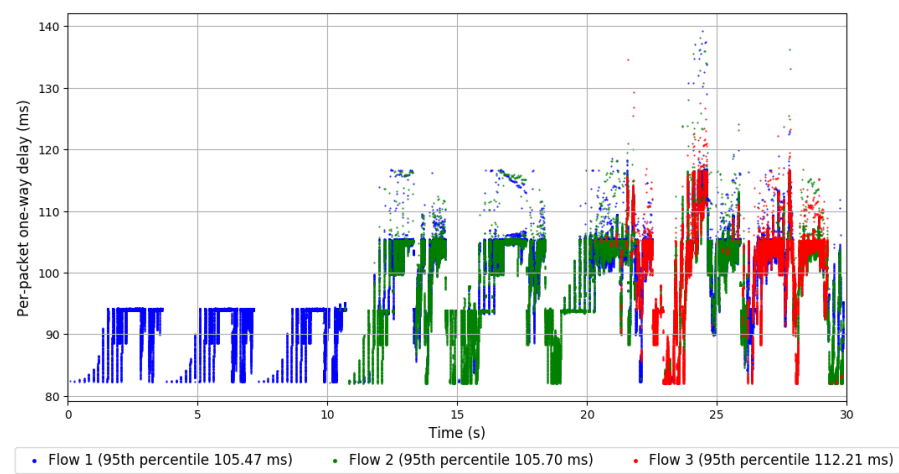
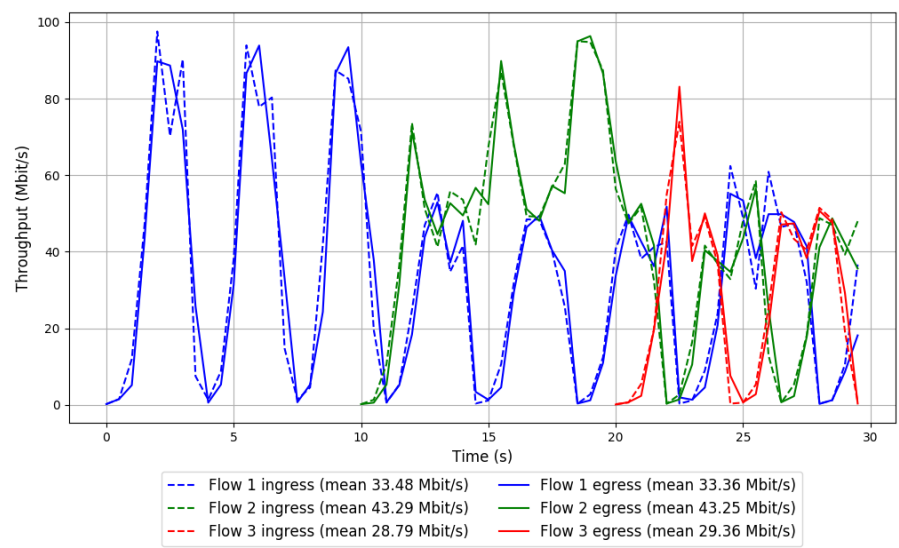
-- Flow 3:

Average throughput: 29.36 Mbit/s

95th percentile per-packet one-way delay: 112.214 ms

Loss rate: 0.08%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-04-24 17:02:29

End at: 2018-04-24 17:02:59

Local clock offset: -4.896 ms

Remote clock offset: 1.599 ms

Below is generated by plot.py at 2018-04-25 00:46:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.35 Mbit/s

95th percentile per-packet one-way delay: 112.213 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 65.93 Mbit/s

95th percentile per-packet one-way delay: 110.584 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 25.58 Mbit/s

95th percentile per-packet one-way delay: 113.587 ms

Loss rate: 2.90%

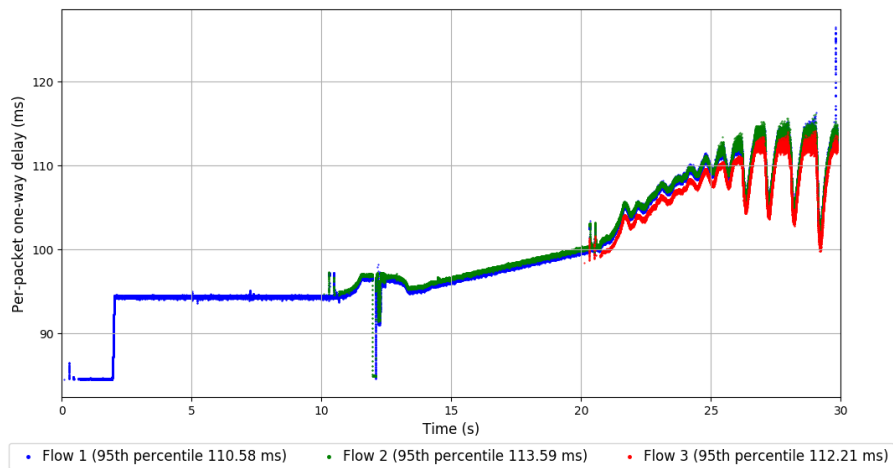
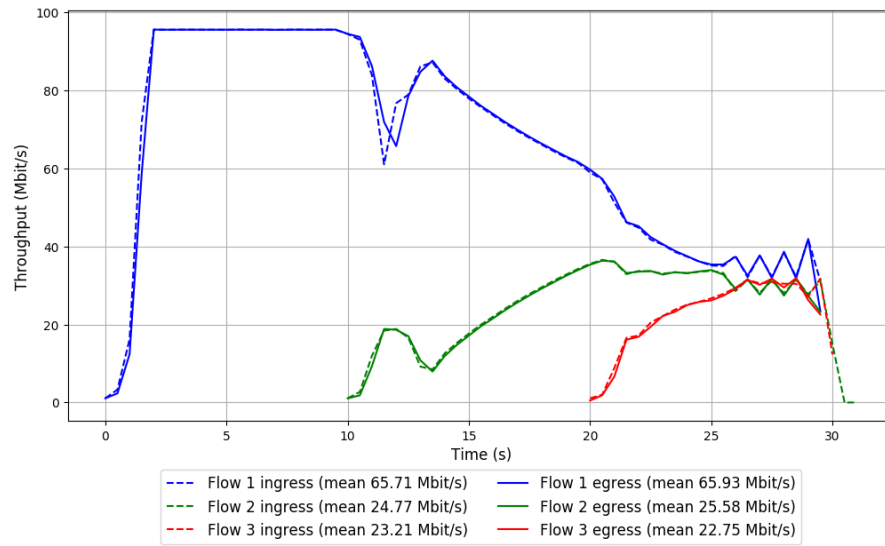
-- Flow 3:

Average throughput: 22.75 Mbit/s

95th percentile per-packet one-way delay: 112.207 ms

Loss rate: 5.97%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-04-24 17:25:40

End at: 2018-04-24 17:26:10

Local clock offset: -5.12 ms

Remote clock offset: 6.501 ms

Below is generated by plot.py at 2018-04-25 00:46:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.63 Mbit/s

95th percentile per-packet one-way delay: 91.034 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 72.87 Mbit/s

95th percentile per-packet one-way delay: 89.677 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 18.55 Mbit/s

95th percentile per-packet one-way delay: 93.982 ms

Loss rate: 0.99%

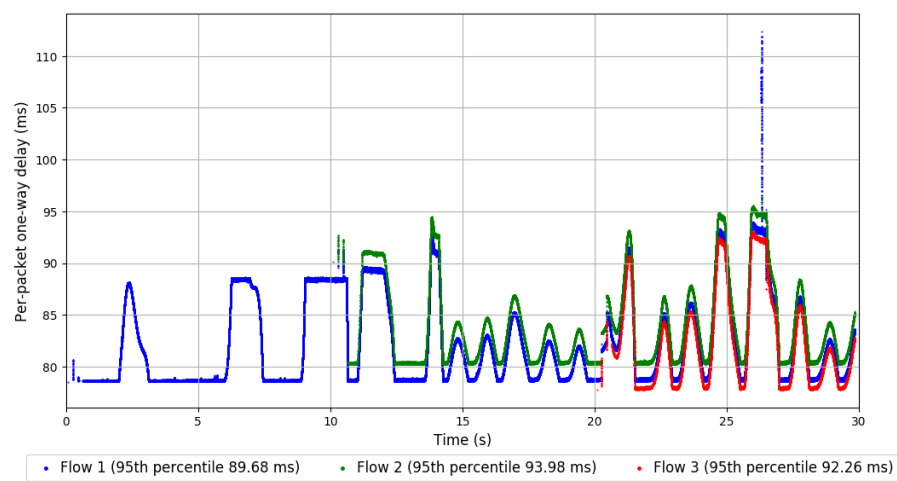
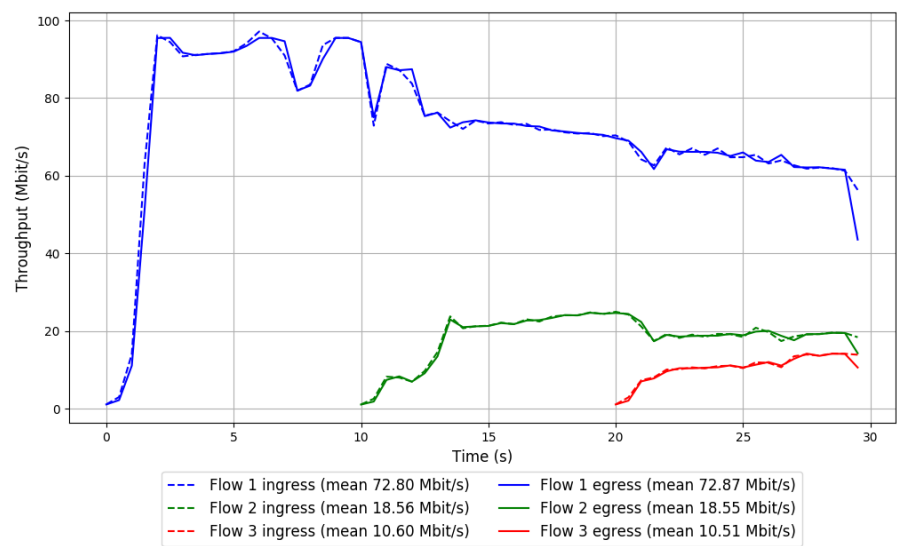
-- Flow 3:

Average throughput: 10.51 Mbit/s

95th percentile per-packet one-way delay: 92.262 ms

Loss rate: 2.64%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-04-24 17:48:08

End at: 2018-04-24 17:48:38

Local clock offset: -5.392 ms

Remote clock offset: 3.182 ms

Below is generated by plot.py at 2018-04-25 00:46:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.32 Mbit/s

95th percentile per-packet one-way delay: 109.386 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 66.09 Mbit/s

95th percentile per-packet one-way delay: 106.360 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 25.12 Mbit/s

95th percentile per-packet one-way delay: 109.848 ms

Loss rate: 2.82%

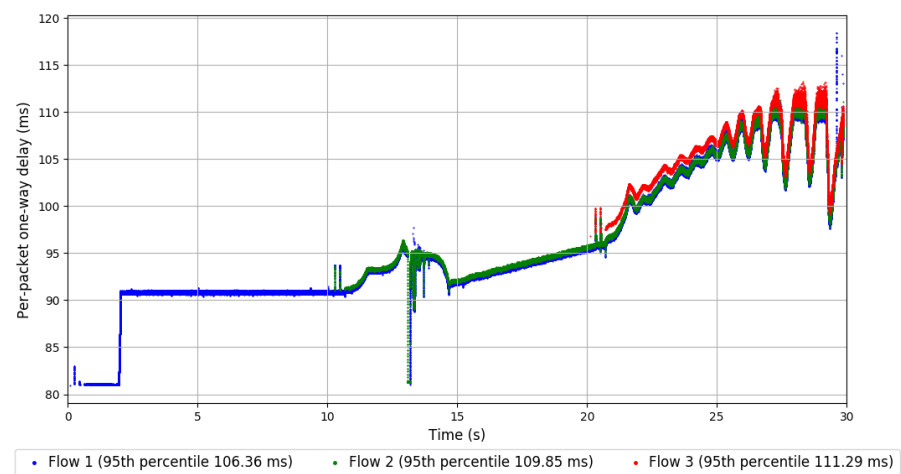
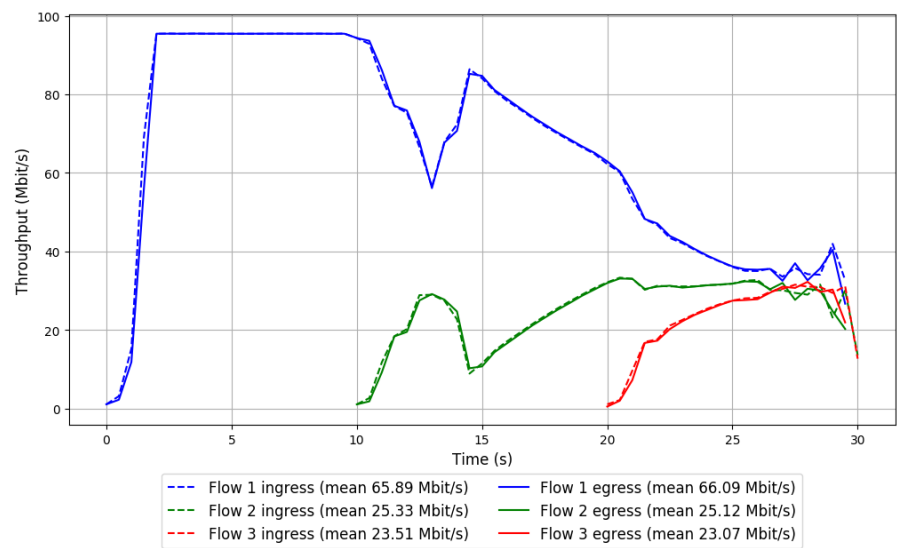
-- Flow 3:

Average throughput: 23.07 Mbit/s

95th percentile per-packet one-way delay: 111.287 ms

Loss rate: 5.89%

Run 3: Report of Copa — Data Link

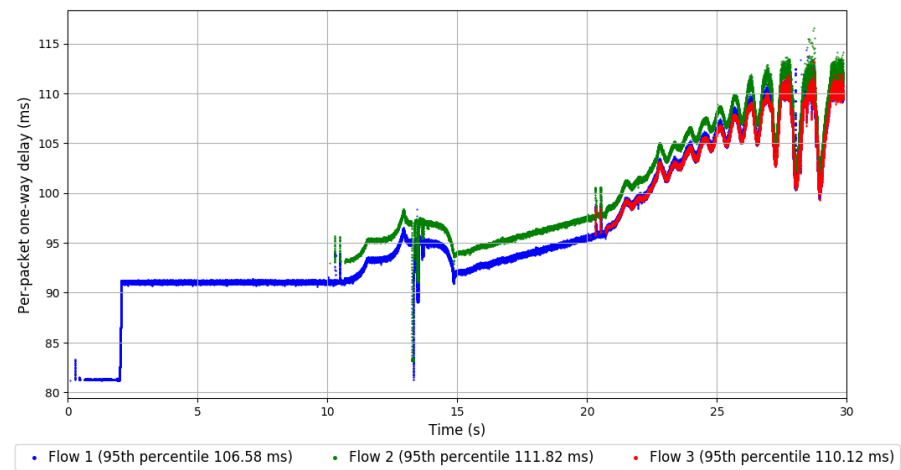
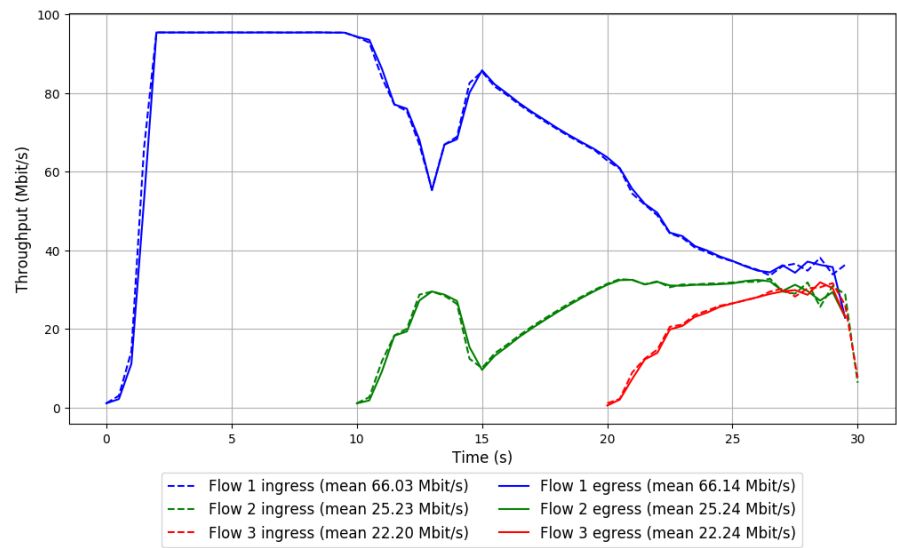


Run 4: Statistics of Copa

Start at: 2018-04-24 18:10:31
End at: 2018-04-24 18:11:01
Local clock offset: -5.059 ms
Remote clock offset: 5.082 ms

Below is generated by plot.py at 2018-04-25 00:46:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.18 Mbit/s
95th percentile per-packet one-way delay: 109.763 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 66.14 Mbit/s
95th percentile per-packet one-way delay: 106.580 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 25.24 Mbit/s
95th percentile per-packet one-way delay: 111.821 ms
Loss rate: 1.88%
-- Flow 3:
Average throughput: 22.24 Mbit/s
95th percentile per-packet one-way delay: 110.120 ms
Loss rate: 3.92%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-04-24 18:33:04

End at: 2018-04-24 18:33:34

Local clock offset: -4.554 ms

Remote clock offset: 7.875 ms

Below is generated by plot.py at 2018-04-25 00:46:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.53 Mbit/s

95th percentile per-packet one-way delay: 100.529 ms

Loss rate: 13.67%

-- Flow 1:

Average throughput: 69.17 Mbit/s

95th percentile per-packet one-way delay: 99.583 ms

Loss rate: 14.69%

-- Flow 2:

Average throughput: 5.38 Mbit/s

95th percentile per-packet one-way delay: 102.605 ms

Loss rate: 6.81%

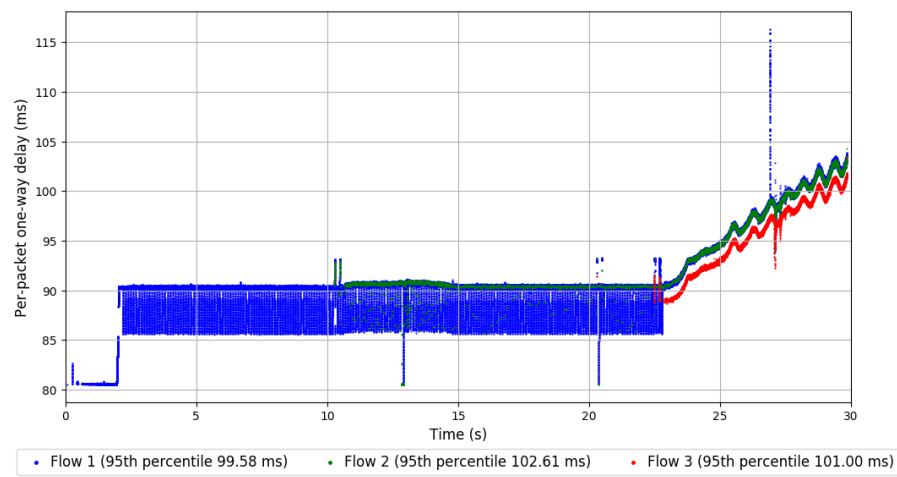
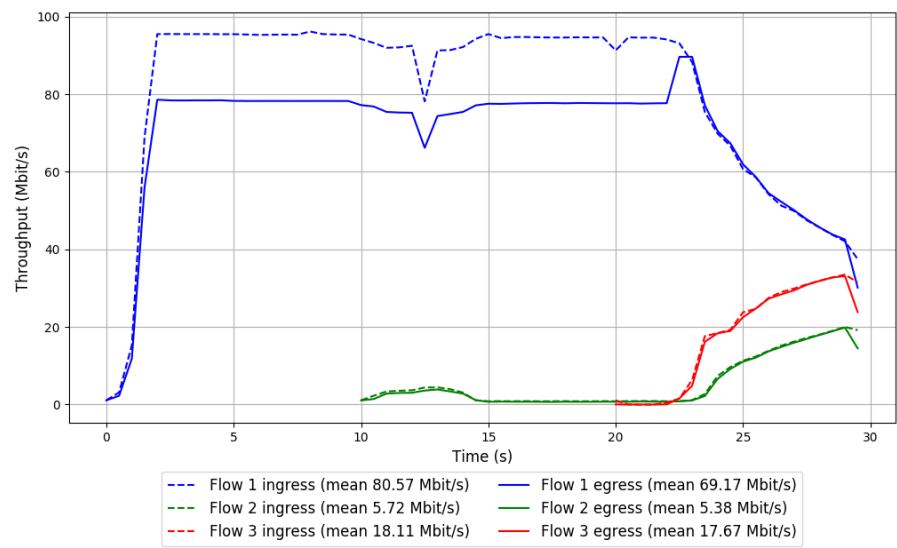
-- Flow 3:

Average throughput: 17.67 Mbit/s

95th percentile per-packet one-way delay: 100.998 ms

Loss rate: 4.27%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-04-24 18:55:32

End at: 2018-04-24 18:56:02

Local clock offset: -3.618 ms

Remote clock offset: 8.71 ms

Below is generated by plot.py at 2018-04-25 00:46:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.91 Mbit/s

95th percentile per-packet one-way delay: 95.061 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 70.21 Mbit/s

95th percentile per-packet one-way delay: 94.535 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 21.51 Mbit/s

95th percentile per-packet one-way delay: 95.825 ms

Loss rate: 1.10%

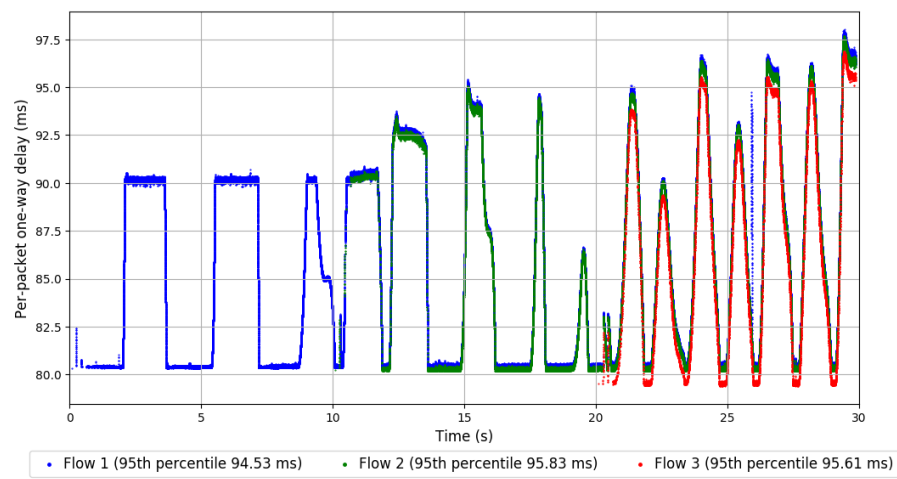
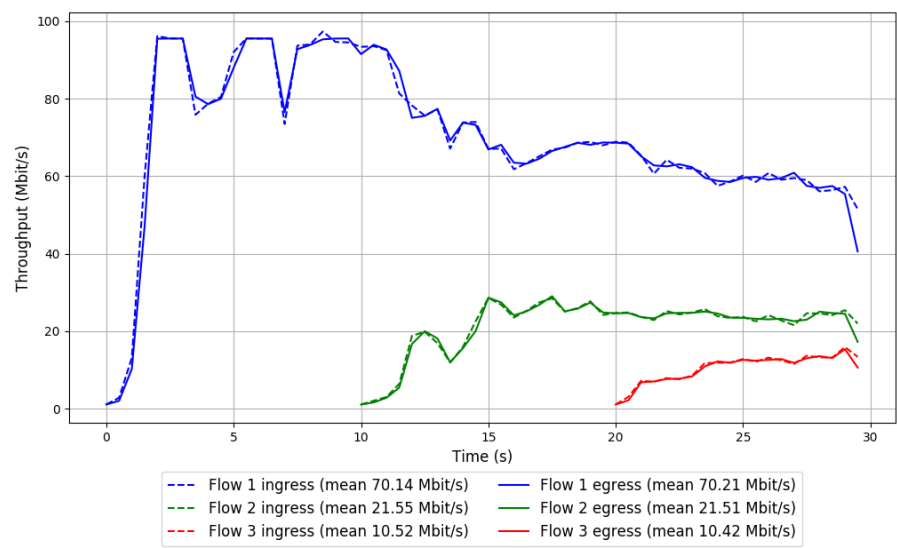
-- Flow 3:

Average throughput: 10.42 Mbit/s

95th percentile per-packet one-way delay: 95.613 ms

Loss rate: 2.73%

Run 6: Report of Copa — Data Link

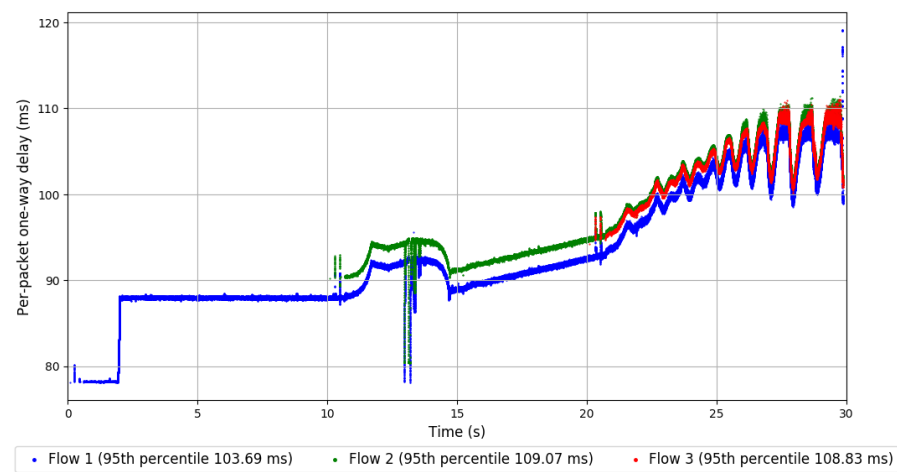
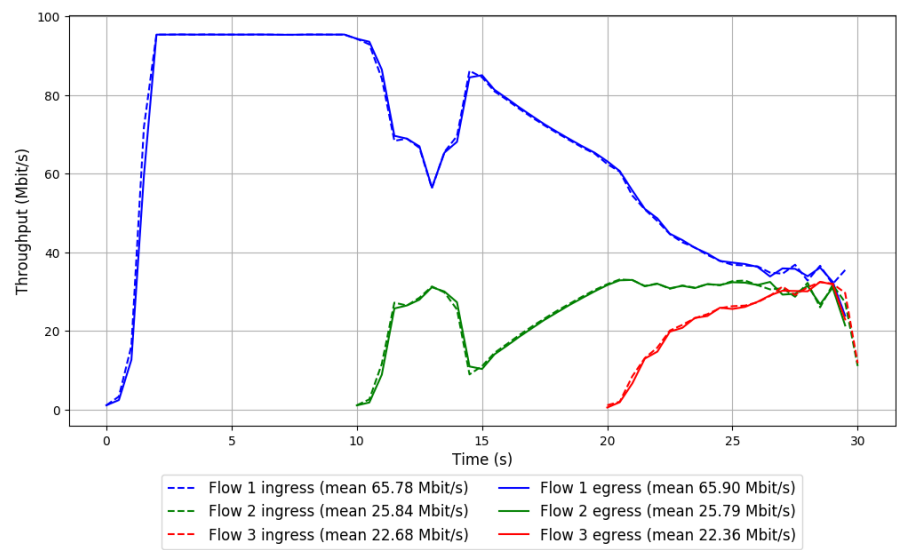


Run 7: Statistics of Copa

Start at: 2018-04-24 19:17:54
End at: 2018-04-24 19:18:24
Local clock offset: -4.301 ms
Remote clock offset: 7.623 ms

Below is generated by plot.py at 2018-04-25 00:47:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.33 Mbit/s
95th percentile per-packet one-way delay: 107.371 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 65.90 Mbit/s
95th percentile per-packet one-way delay: 103.685 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 25.79 Mbit/s
95th percentile per-packet one-way delay: 109.074 ms
Loss rate: 2.29%
-- Flow 3:
Average throughput: 22.36 Mbit/s
95th percentile per-packet one-way delay: 108.832 ms
Loss rate: 5.53%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-04-24 19:40:24

End at: 2018-04-24 19:40:54

Local clock offset: -4.464 ms

Remote clock offset: 8.706 ms

Below is generated by plot.py at 2018-04-25 00:47:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.27 Mbit/s

95th percentile per-packet one-way delay: 92.156 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 75.05 Mbit/s

95th percentile per-packet one-way delay: 92.075 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 15.69 Mbit/s

95th percentile per-packet one-way delay: 92.533 ms

Loss rate: 0.79%

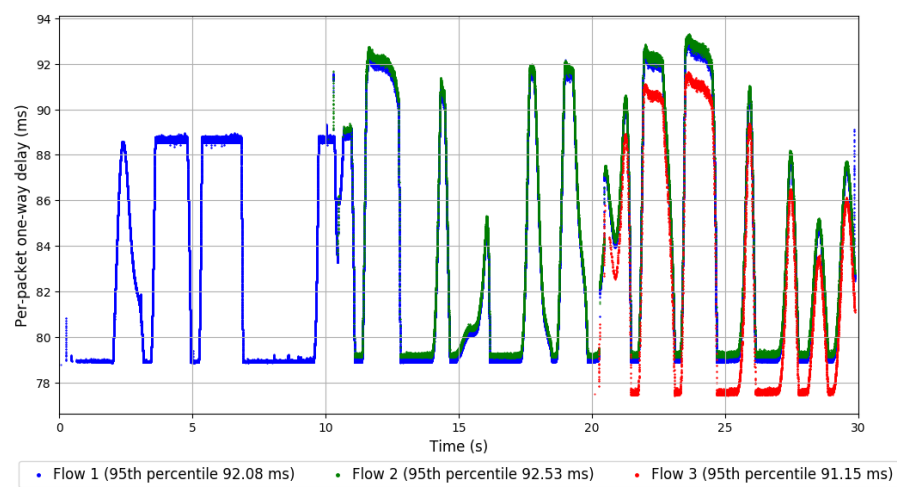
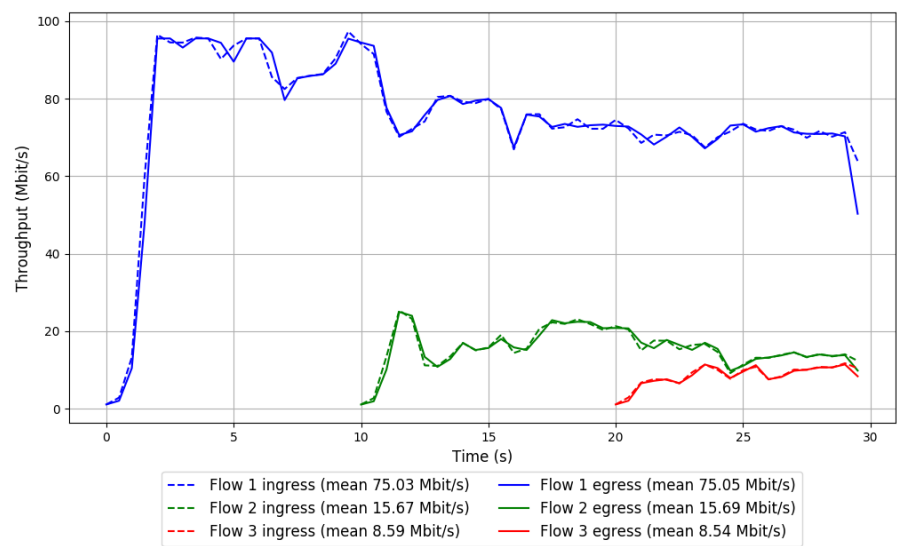
-- Flow 3:

Average throughput: 8.54 Mbit/s

95th percentile per-packet one-way delay: 91.147 ms

Loss rate: 2.40%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-04-24 20:02:45

End at: 2018-04-24 20:03:15

Local clock offset: -5.368 ms

Remote clock offset: 7.662 ms

Below is generated by plot.py at 2018-04-25 00:49:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.96 Mbit/s

95th percentile per-packet one-way delay: 102.944 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 68.07 Mbit/s

95th percentile per-packet one-way delay: 100.756 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 24.19 Mbit/s

95th percentile per-packet one-way delay: 103.824 ms

Loss rate: 0.92%

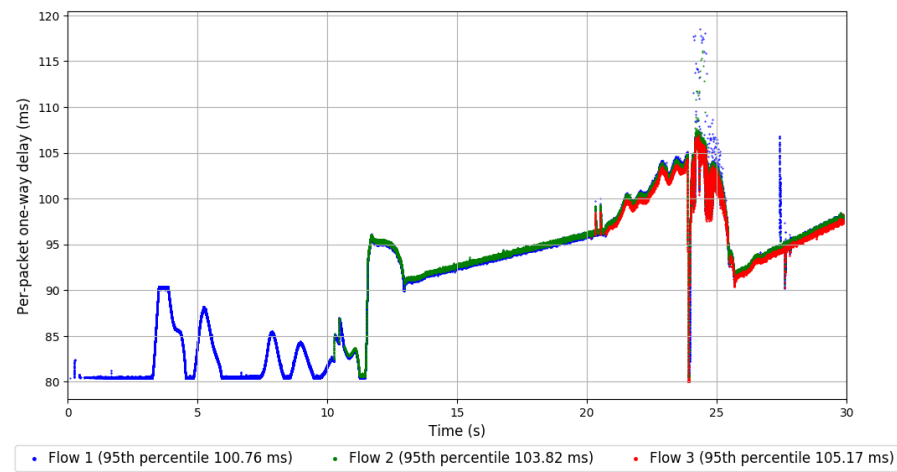
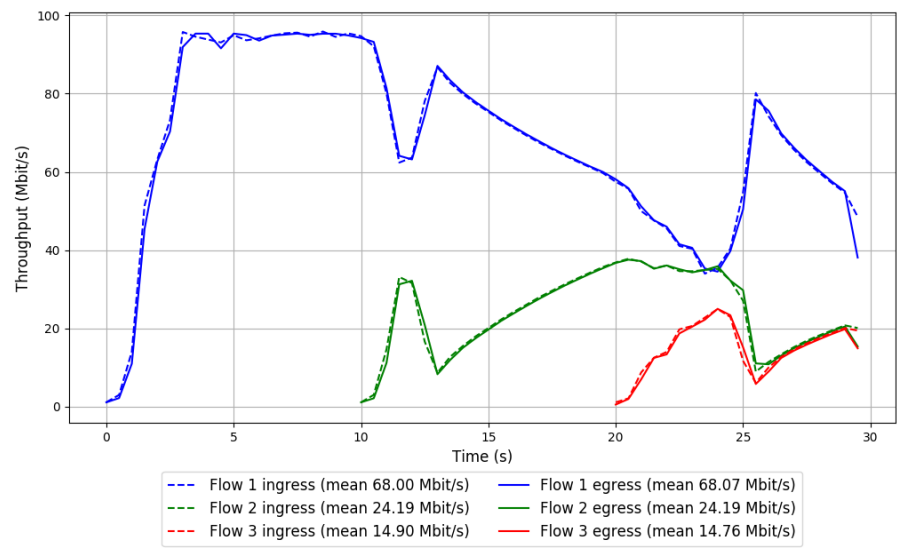
-- Flow 3:

Average throughput: 14.76 Mbit/s

95th percentile per-packet one-way delay: 105.173 ms

Loss rate: 2.88%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-04-24 20:25:16

End at: 2018-04-24 20:25:46

Local clock offset: -3.967 ms

Remote clock offset: 7.268 ms

Below is generated by plot.py at 2018-04-25 00:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.93 Mbit/s

95th percentile per-packet one-way delay: 91.112 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 71.63 Mbit/s

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

Loss rate: 0.46%

-- Flow 2:

Average throughput: 21.49 Mbit/s

95th percentile per-packet one-way delay: 91.433 ms

Loss rate: 1.00%

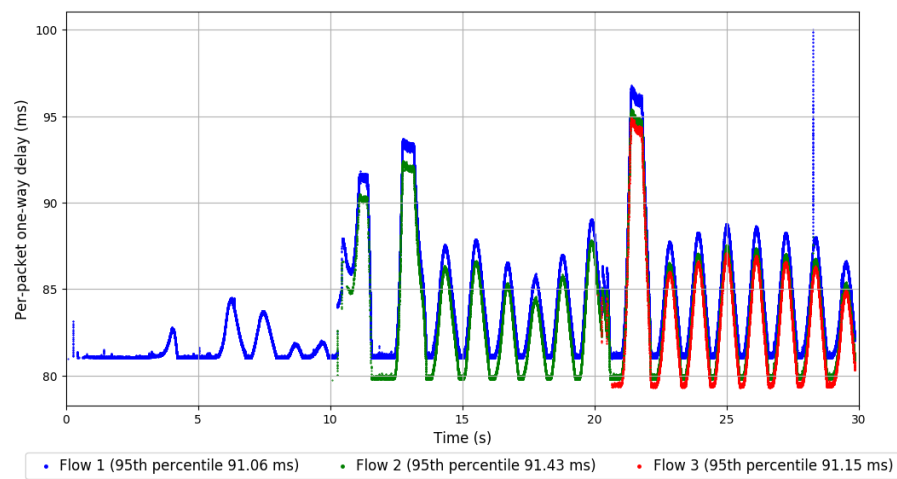
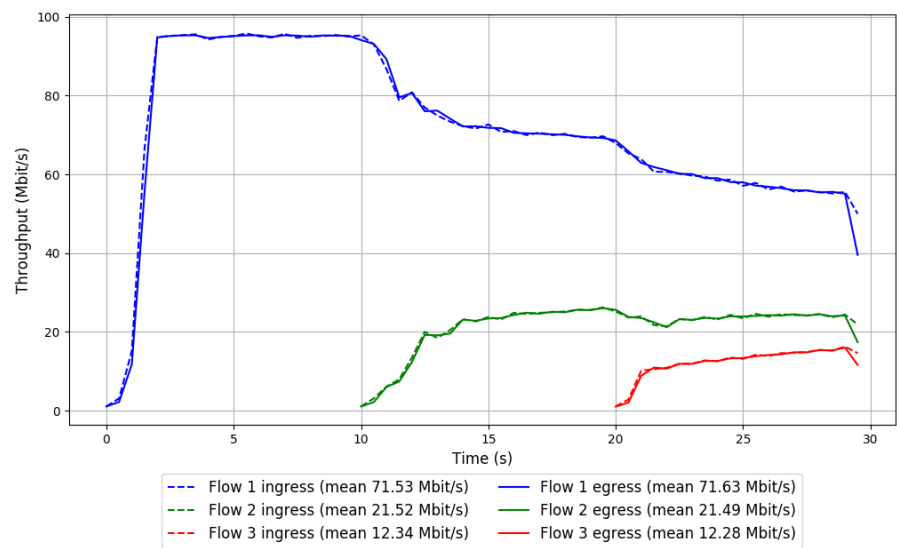
-- Flow 3:

Average throughput: 12.28 Mbit/s

95th percentile per-packet one-way delay: 91.148 ms

Loss rate: 2.34%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-04-24 16:58:40

End at: 2018-04-24 16:59:11

Local clock offset: -4.114 ms

Remote clock offset: 6.268 ms

Below is generated by plot.py at 2018-04-25 00:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.37 Mbit/s

95th percentile per-packet one-way delay: 108.684 ms

Loss rate: 1.72%

-- Flow 1:

Average throughput: 56.18 Mbit/s

95th percentile per-packet one-way delay: 106.362 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 38.83 Mbit/s

95th percentile per-packet one-way delay: 110.296 ms

Loss rate: 1.96%

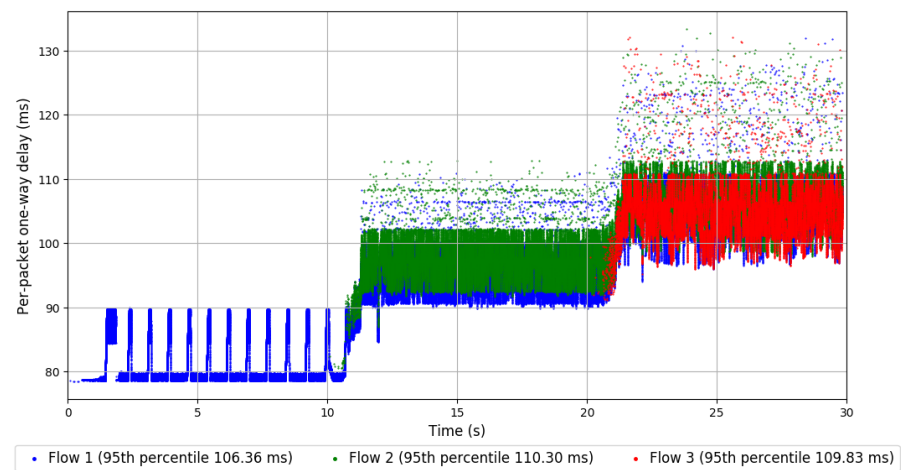
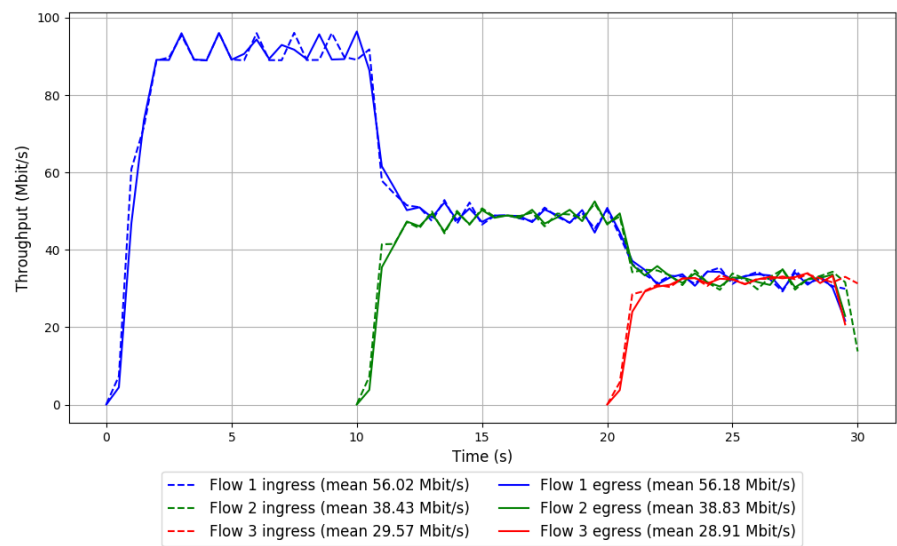
-- Flow 3:

Average throughput: 28.91 Mbit/s

95th percentile per-packet one-way delay: 109.835 ms

Loss rate: 8.07%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-04-24 17:21:51

End at: 2018-04-24 17:22:21

Local clock offset: -4.38 ms

Remote clock offset: 1.806 ms

Below is generated by plot.py at 2018-04-25 00:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.49 Mbit/s

95th percentile per-packet one-way delay: 113.814 ms

Loss rate: 1.94%

-- Flow 1:

Average throughput: 56.47 Mbit/s

95th percentile per-packet one-way delay: 113.292 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 38.50 Mbit/s

95th percentile per-packet one-way delay: 113.681 ms

Loss rate: 2.16%

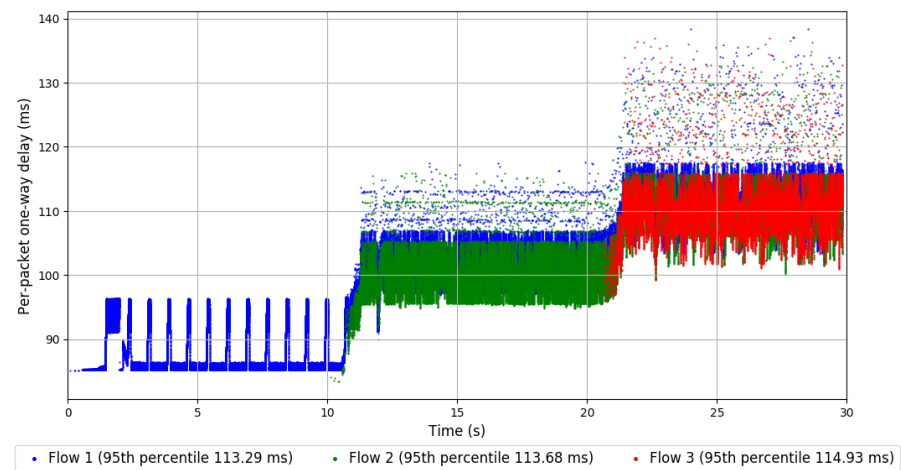
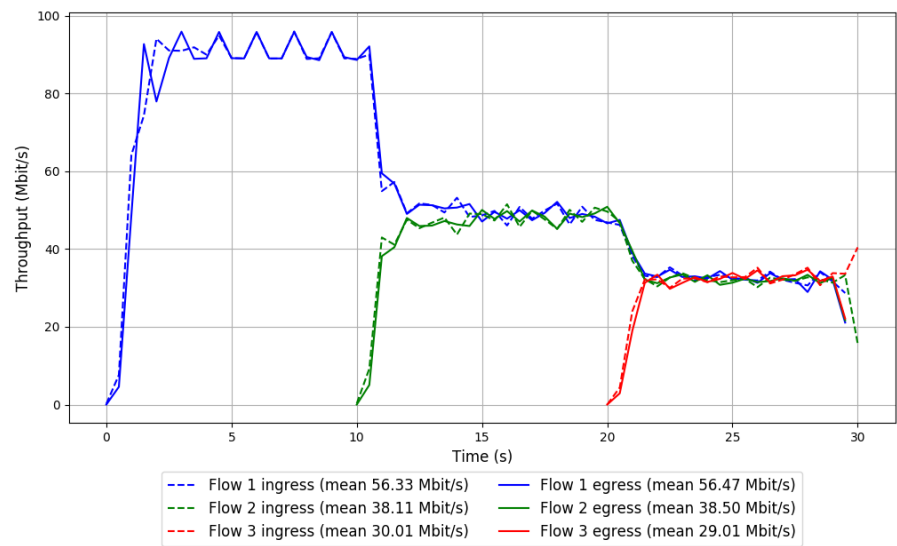
-- Flow 3:

Average throughput: 29.01 Mbit/s

95th percentile per-packet one-way delay: 114.931 ms

Loss rate: 9.49%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-04-24 17:44:19

End at: 2018-04-24 17:44:49

Local clock offset: -5.426 ms

Remote clock offset: 6.162 ms

Below is generated by plot.py at 2018-04-25 00:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.34 Mbit/s

95th percentile per-packet one-way delay: 108.761 ms

Loss rate: 3.59%

-- Flow 1:

Average throughput: 56.58 Mbit/s

95th percentile per-packet one-way delay: 105.941 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 38.36 Mbit/s

95th percentile per-packet one-way delay: 109.972 ms

Loss rate: 5.57%

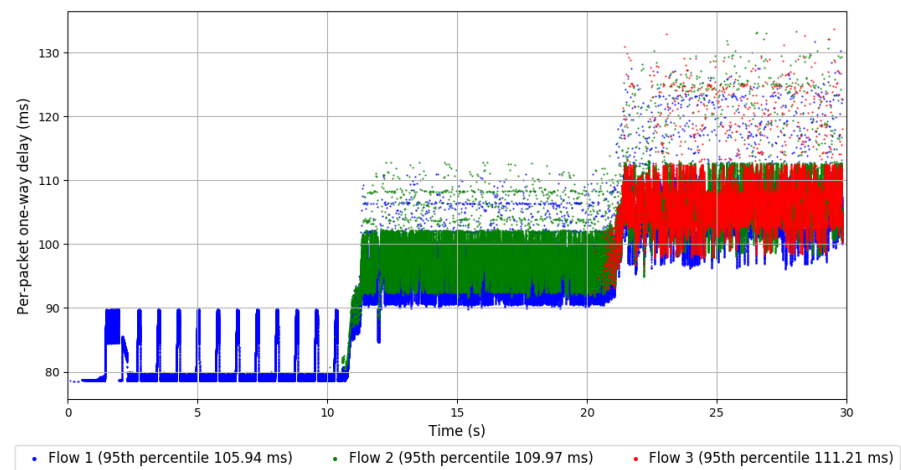
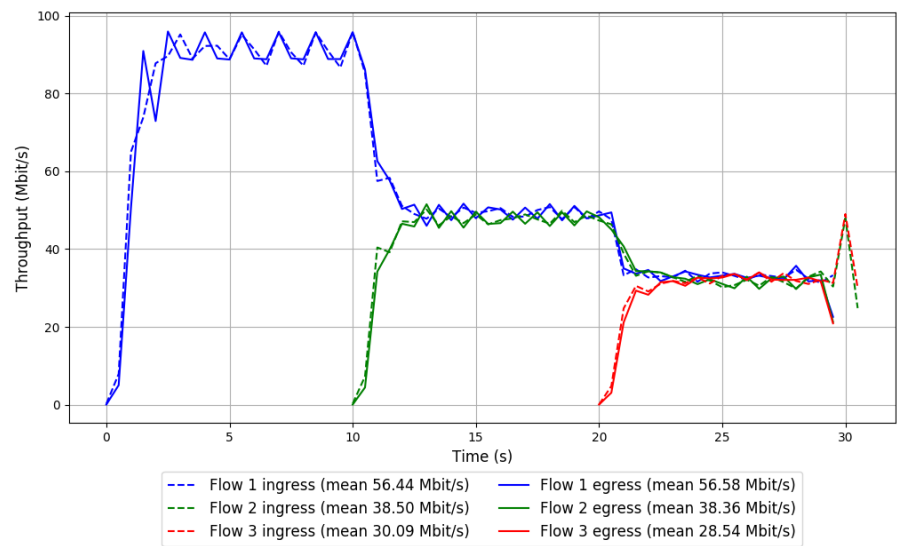
-- Flow 3:

Average throughput: 28.54 Mbit/s

95th percentile per-packet one-way delay: 111.214 ms

Loss rate: 14.76%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-04-24 18:06:42

End at: 2018-04-24 18:07:12

Local clock offset: -4.243 ms

Remote clock offset: 7.791 ms

Below is generated by plot.py at 2018-04-25 00:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.30 Mbit/s

95th percentile per-packet one-way delay: 109.595 ms

Loss rate: 2.88%

-- Flow 1:

Average throughput: 56.31 Mbit/s

95th percentile per-packet one-way delay: 107.339 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 38.43 Mbit/s

95th percentile per-packet one-way delay: 110.131 ms

Loss rate: 4.32%

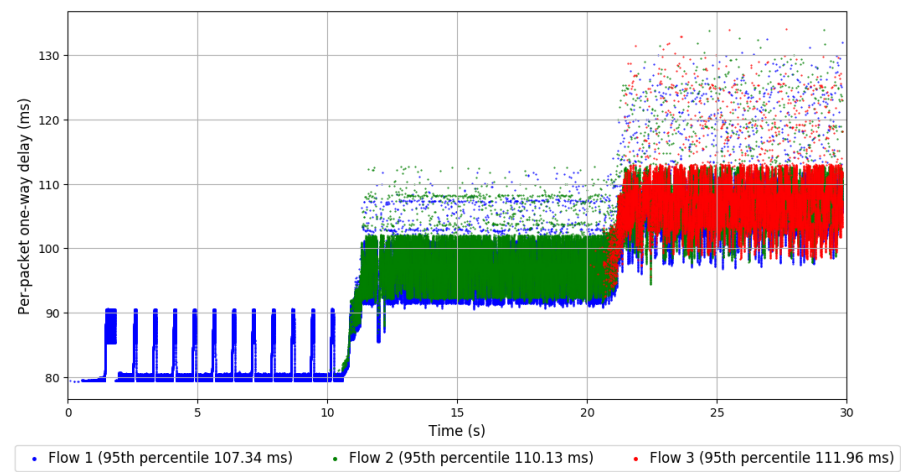
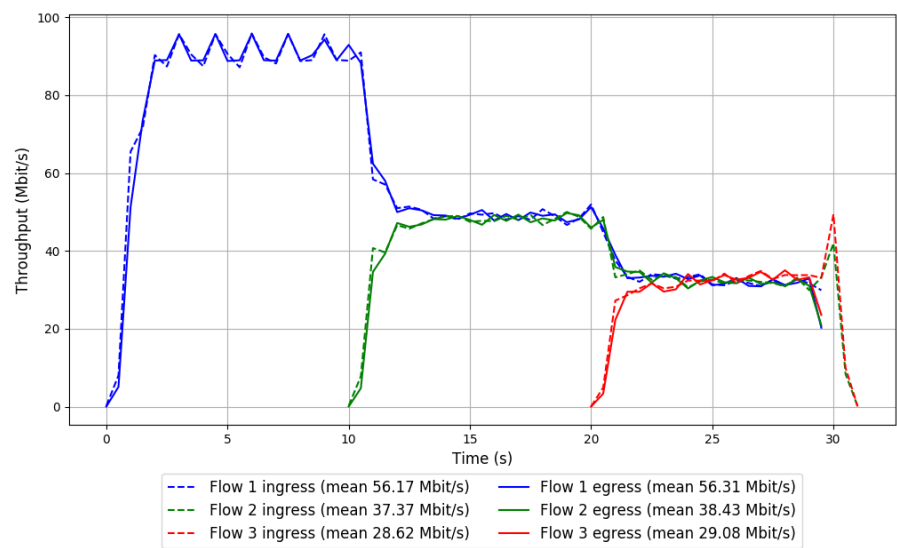
-- Flow 3:

Average throughput: 29.08 Mbit/s

95th percentile per-packet one-way delay: 111.961 ms

Loss rate: 11.98%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-04-24 18:29:04

End at: 2018-04-24 18:29:34

Local clock offset: -3.722 ms

Remote clock offset: 5.503 ms

Below is generated by plot.py at 2018-04-25 00:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.77 Mbit/s

95th percentile per-packet one-way delay: 112.784 ms

Loss rate: 19.69%

-- Flow 1:

Average throughput: 46.31 Mbit/s

95th percentile per-packet one-way delay: 111.649 ms

Loss rate: 13.99%

-- Flow 2:

Average throughput: 32.17 Mbit/s

95th percentile per-packet one-way delay: 113.772 ms

Loss rate: 23.03%

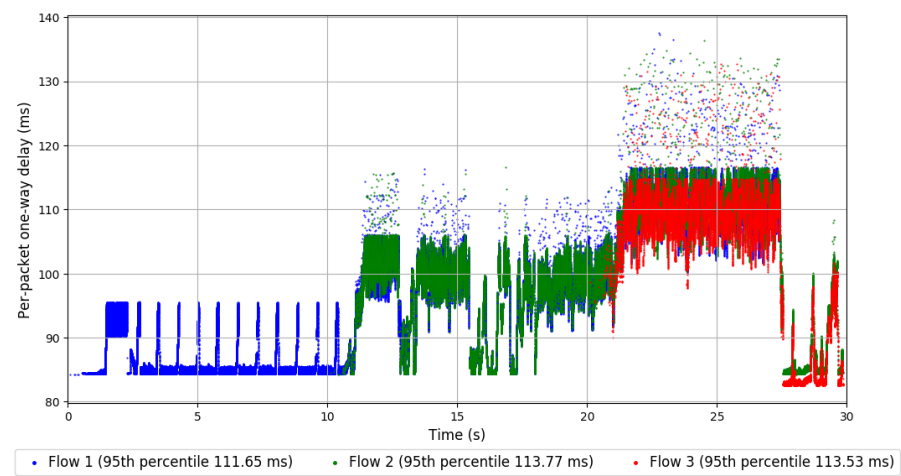
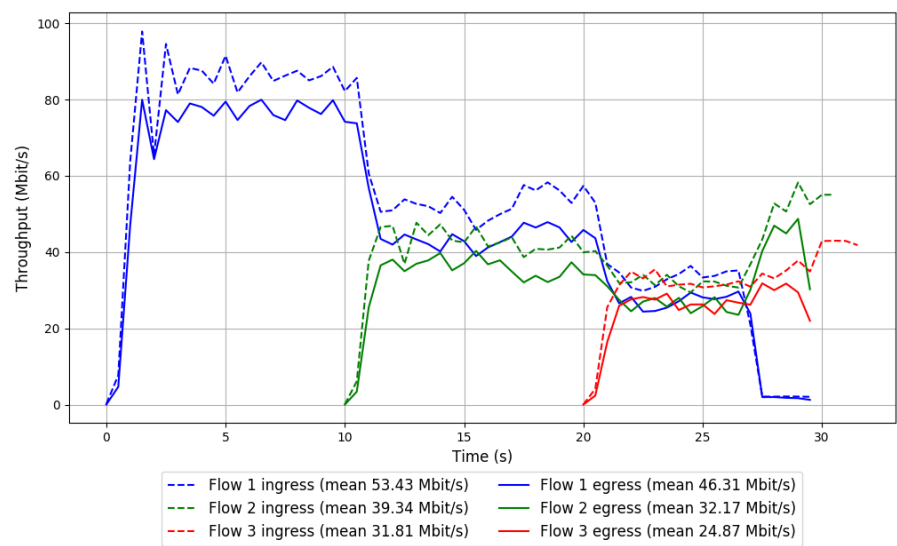
-- Flow 3:

Average throughput: 24.87 Mbit/s

95th percentile per-packet one-way delay: 113.525 ms

Loss rate: 36.46%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-04-24 18:51:43

End at: 2018-04-24 18:52:13

Local clock offset: -4.407 ms

Remote clock offset: 4.183 ms

Below is generated by plot.py at 2018-04-25 00:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.49 Mbit/s

95th percentile per-packet one-way delay: 111.741 ms

Loss rate: 3.47%

-- Flow 1:

Average throughput: 56.22 Mbit/s

95th percentile per-packet one-way delay: 109.727 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 39.26 Mbit/s

95th percentile per-packet one-way delay: 111.593 ms

Loss rate: 5.55%

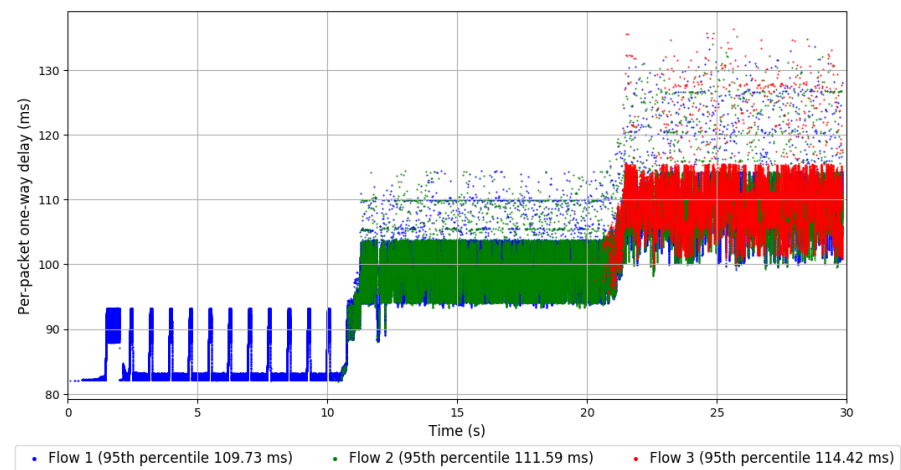
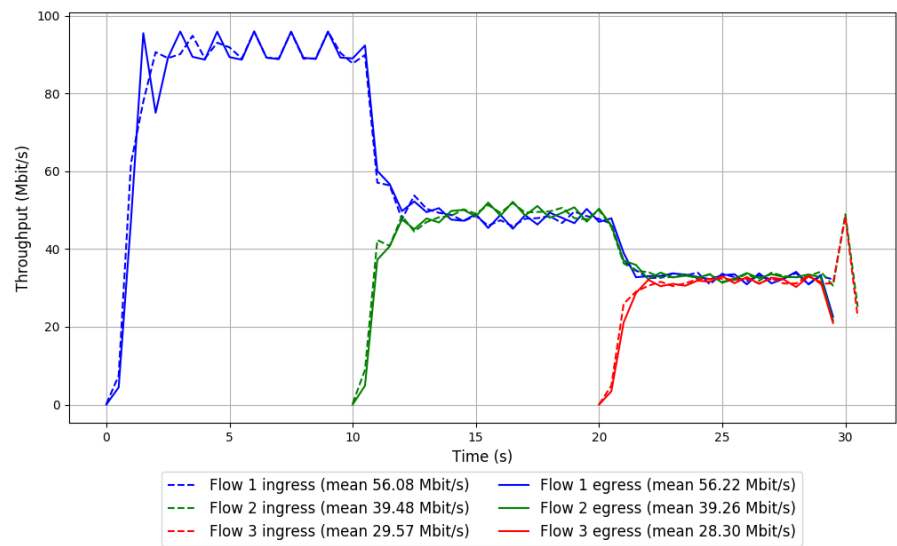
-- Flow 3:

Average throughput: 28.30 Mbit/s

95th percentile per-packet one-way delay: 114.416 ms

Loss rate: 13.79%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-04-24 19:14:06

End at: 2018-04-24 19:14:36

Local clock offset: -4.405 ms

Remote clock offset: 7.672 ms

Below is generated by plot.py at 2018-04-25 00:49:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.23 Mbit/s

95th percentile per-packet one-way delay: 109.105 ms

Loss rate: 2.64%

-- Flow 1:

Average throughput: 56.17 Mbit/s

95th percentile per-packet one-way delay: 108.039 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 38.62 Mbit/s

95th percentile per-packet one-way delay: 108.996 ms

Loss rate: 4.19%

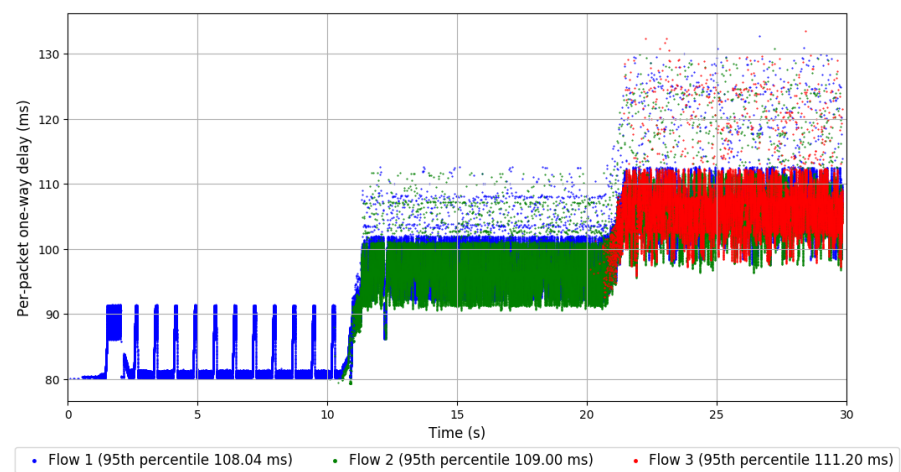
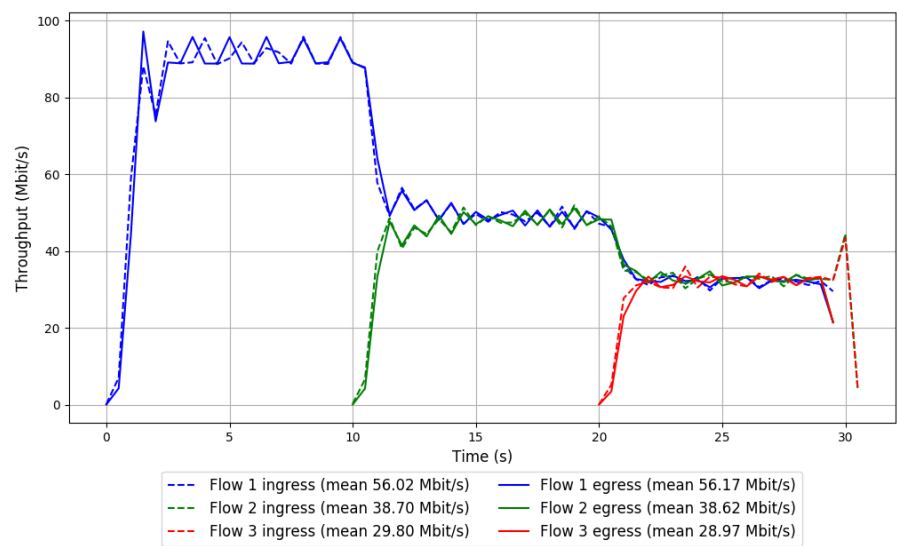
-- Flow 3:

Average throughput: 28.97 Mbit/s

95th percentile per-packet one-way delay: 111.197 ms

Loss rate: 10.41%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-04-24 19:36:35

End at: 2018-04-24 19:37:05

Local clock offset: -4.409 ms

Remote clock offset: 3.936 ms

Below is generated by plot.py at 2018-04-25 00:49:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.30 Mbit/s

95th percentile per-packet one-way delay: 111.606 ms

Loss rate: 2.18%

-- Flow 1:

Average throughput: 56.11 Mbit/s

95th percentile per-packet one-way delay: 111.021 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 38.81 Mbit/s

95th percentile per-packet one-way delay: 111.160 ms

Loss rate: 2.59%

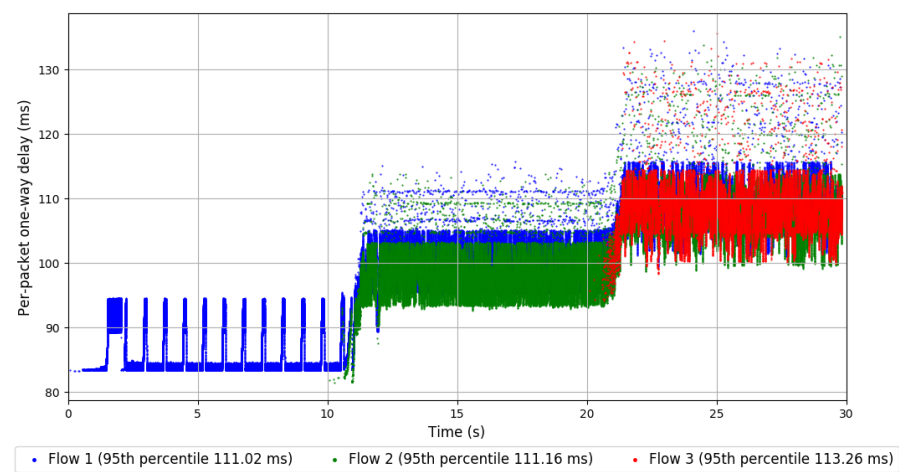
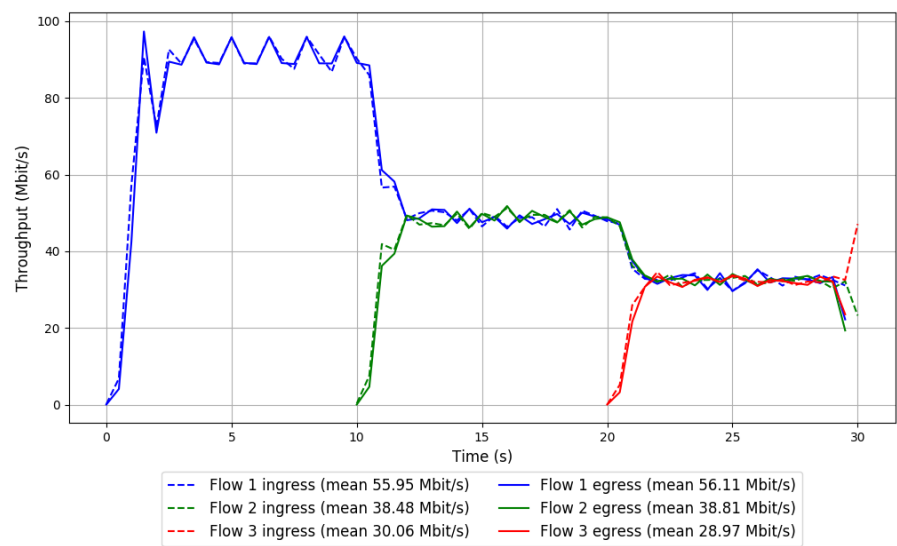
-- Flow 3:

Average throughput: 28.97 Mbit/s

95th percentile per-packet one-way delay: 113.262 ms

Loss rate: 10.17%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-04-24 19:58:56

End at: 2018-04-24 19:59:26

Local clock offset: -5.318 ms

Remote clock offset: 3.851 ms

Below is generated by plot.py at 2018-04-25 00:49:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.35 Mbit/s

95th percentile per-packet one-way delay: 112.325 ms

Loss rate: 2.89%

-- Flow 1:

Average throughput: 56.14 Mbit/s

95th percentile per-packet one-way delay: 110.546 ms

Loss rate: 2.31%

-- Flow 2:

Average throughput: 38.90 Mbit/s

95th percentile per-packet one-way delay: 113.481 ms

Loss rate: 1.03%

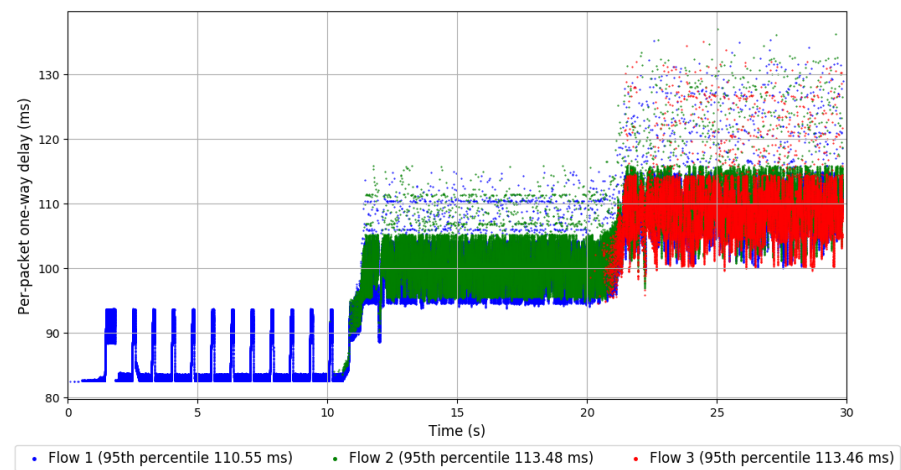
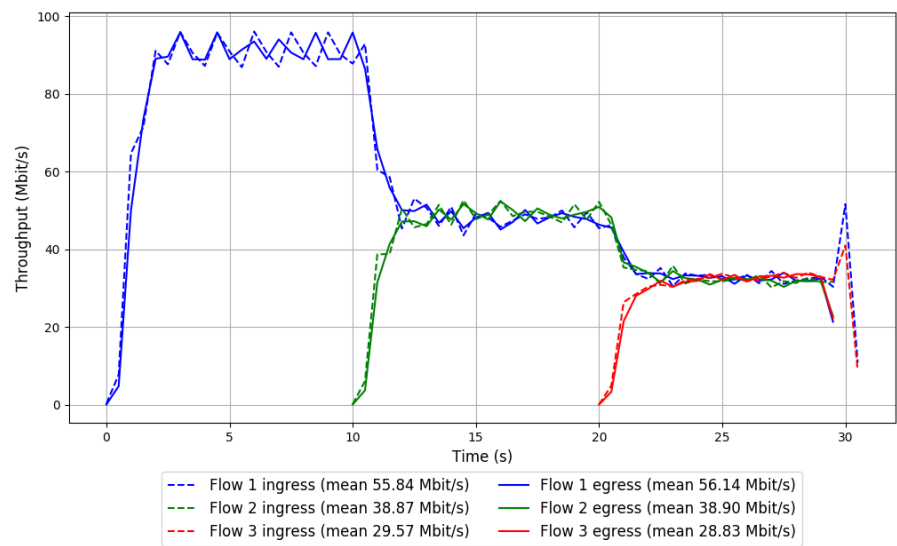
-- Flow 3:

Average throughput: 28.83 Mbit/s

95th percentile per-packet one-way delay: 113.456 ms

Loss rate: 10.69%

Run 9: Report of FillP — Data Link

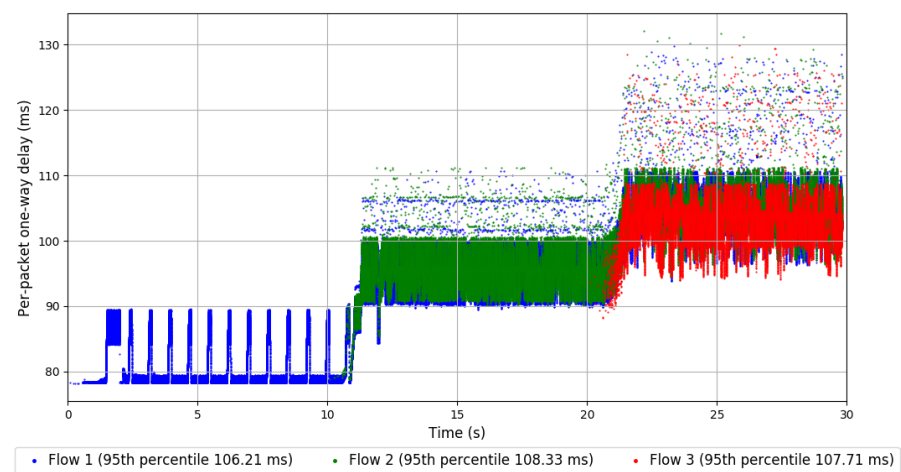
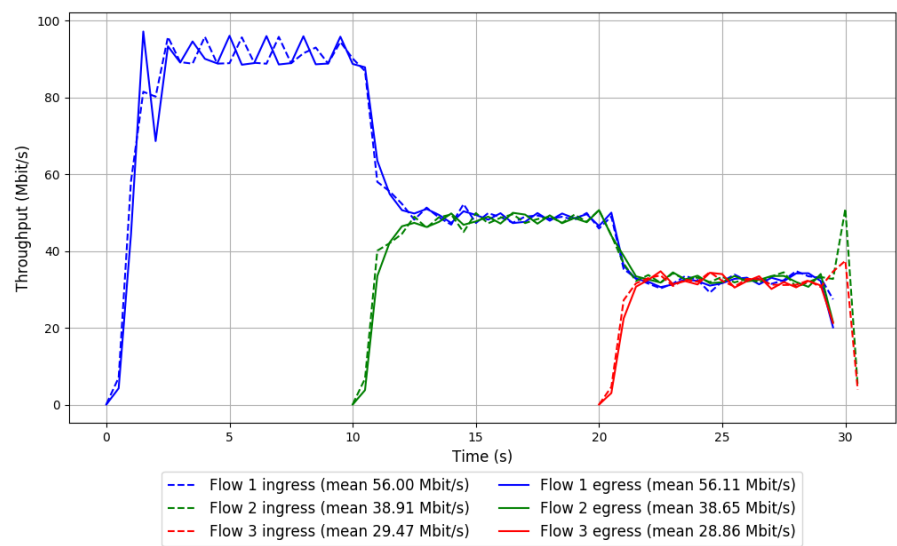


```
Run 10: Statistics of FillP

Start at: 2018-04-24 20:21:28
End at: 2018-04-24 20:21:58
Local clock offset: -5.538 ms
Remote clock offset: 8.907 ms

# Below is generated by plot.py at 2018-04-25 00:49:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.16 Mbit/s
95th percentile per-packet one-way delay: 107.280 ms
Loss rate: 2.69%
-- Flow 1:
Average throughput: 56.11 Mbit/s
95th percentile per-packet one-way delay: 106.209 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 38.65 Mbit/s
95th percentile per-packet one-way delay: 108.334 ms
Loss rate: 4.61%
-- Flow 3:
Average throughput: 28.86 Mbit/s
95th percentile per-packet one-way delay: 107.711 ms
Loss rate: 9.87%
```

Run 10: Report of FillP — Data Link



Run 1: Statistics of Indigo-1-32

Start at: 2018-04-24 17:05:15

End at: 2018-04-24 17:05:45

Local clock offset: -4.997 ms

Remote clock offset: 6.224 ms

Below is generated by plot.py at 2018-04-25 00:49:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.62 Mbit/s

95th percentile per-packet one-way delay: 105.396 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 67.80 Mbit/s

95th percentile per-packet one-way delay: 104.110 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 26.58 Mbit/s

95th percentile per-packet one-way delay: 105.856 ms

Loss rate: 0.67%

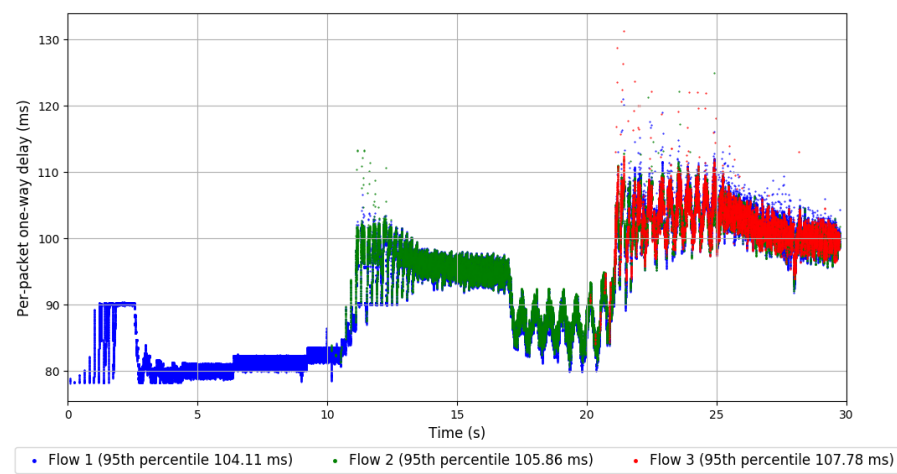
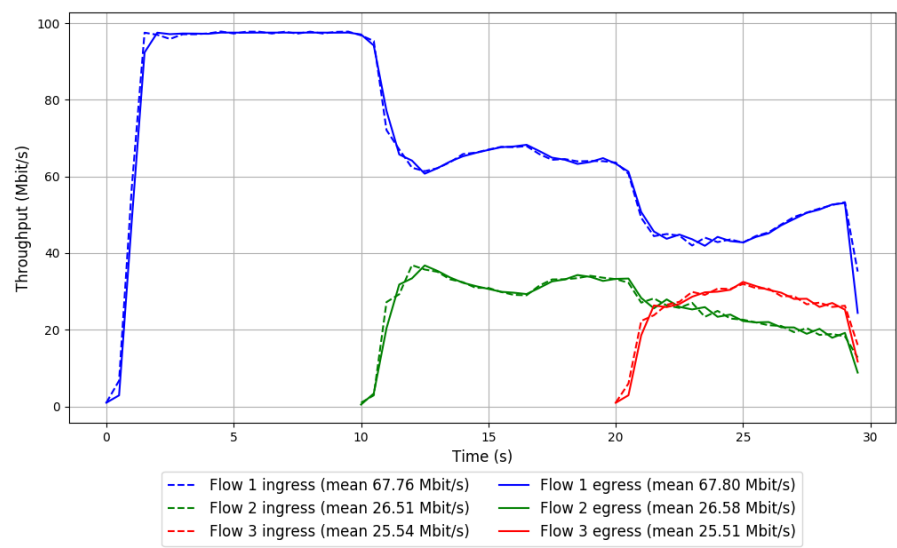
-- Flow 3:

Average throughput: 25.51 Mbit/s

95th percentile per-packet one-way delay: 107.783 ms

Loss rate: 2.04%

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



Run 2: Statistics of Indigo-1-32

Start at: 2018-04-24 17:28:24

End at: 2018-04-24 17:28:54

Local clock offset: -4.356 ms

Remote clock offset: 6.713 ms

Below is generated by plot.py at 2018-04-25 00:50:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.51 Mbit/s

95th percentile per-packet one-way delay: 112.071 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 63.07 Mbit/s

95th percentile per-packet one-way delay: 111.099 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 33.24 Mbit/s

95th percentile per-packet one-way delay: 112.557 ms

Loss rate: 1.08%

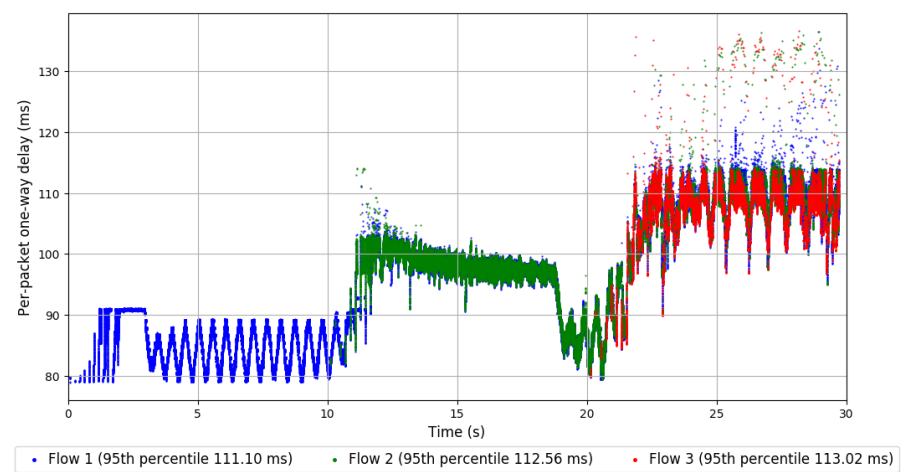
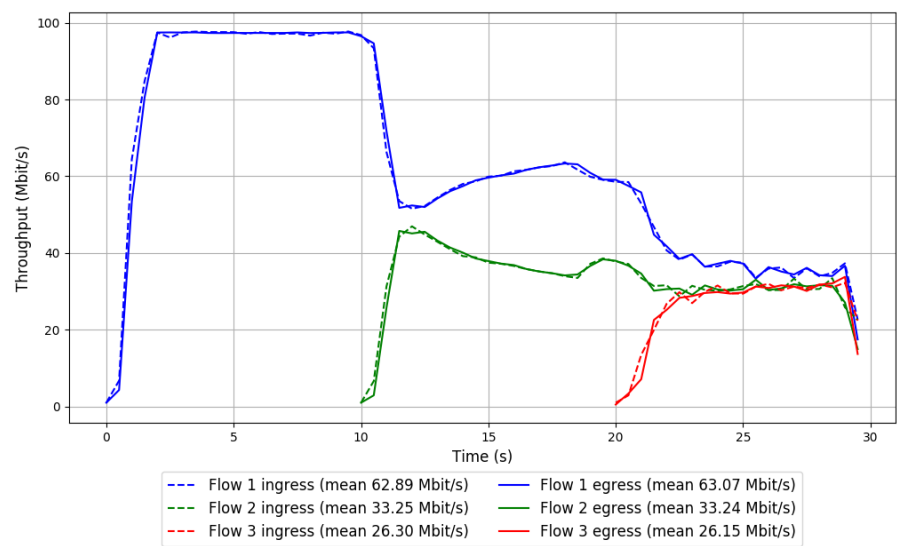
-- Flow 3:

Average throughput: 26.15 Mbit/s

95th percentile per-packet one-way delay: 113.023 ms

Loss rate: 2.62%

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-04-24 17:50:52

End at: 2018-04-24 17:51:22

Local clock offset: -3.797 ms

Remote clock offset: 7.081 ms

Below is generated by plot.py at 2018-04-25 00:50:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.90 Mbit/s

95th percentile per-packet one-way delay: 113.627 ms

Loss rate: 17.31%

-- Flow 1:

Average throughput: 52.82 Mbit/s

95th percentile per-packet one-way delay: 111.919 ms

Loss rate: 16.68%

-- Flow 2:

Average throughput: 25.30 Mbit/s

95th percentile per-packet one-way delay: 113.899 ms

Loss rate: 16.96%

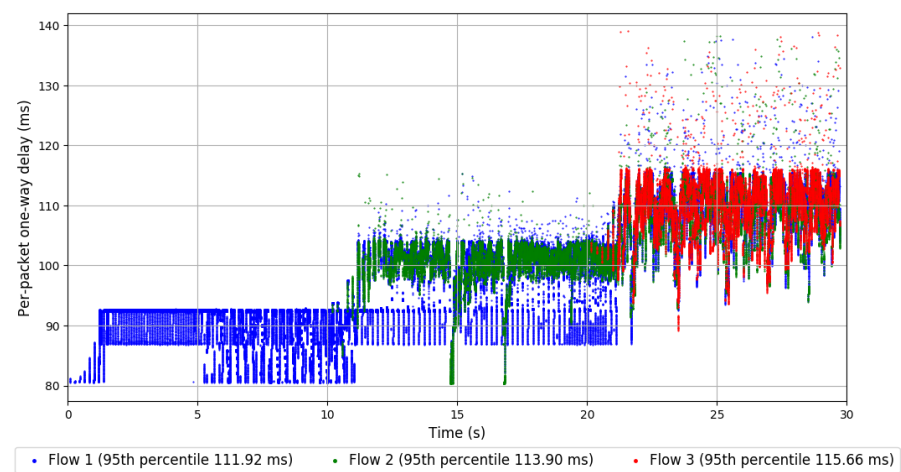
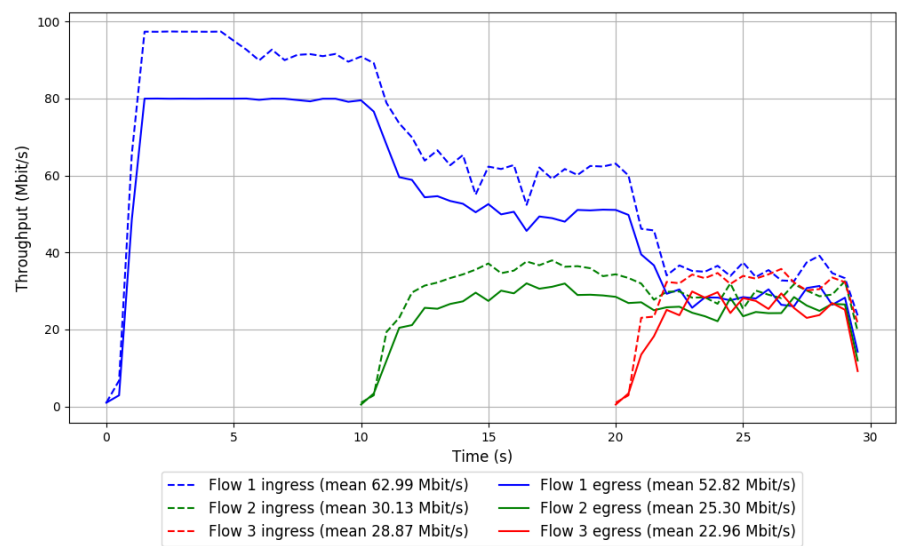
-- Flow 3:

Average throughput: 22.96 Mbit/s

95th percentile per-packet one-way delay: 115.655 ms

Loss rate: 22.26%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-04-24 18:13:14

End at: 2018-04-24 18:13:44

Local clock offset: -3.617 ms

Remote clock offset: 5.267 ms

Below is generated by plot.py at 2018-04-25 00:50:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.61 Mbit/s

95th percentile per-packet one-way delay: 117.952 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 43.60 Mbit/s

95th percentile per-packet one-way delay: 116.179 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 41.82 Mbit/s

95th percentile per-packet one-way delay: 119.135 ms

Loss rate: 0.82%

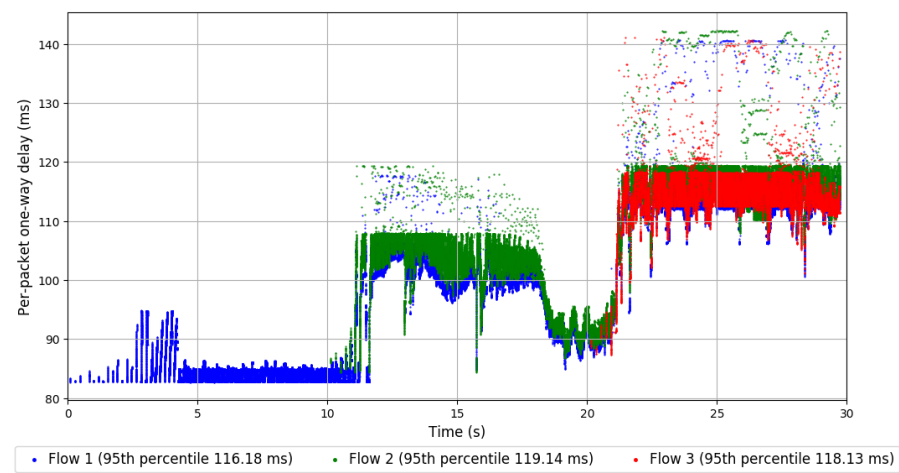
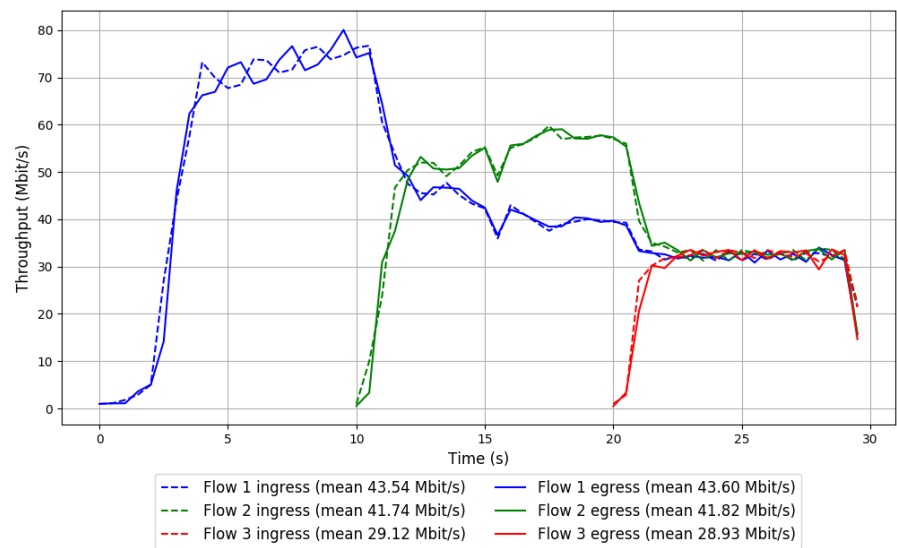
-- Flow 3:

Average throughput: 28.93 Mbit/s

95th percentile per-packet one-way delay: 118.127 ms

Loss rate: 2.55%

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



Run 5: Statistics of Indigo-1-32

Start at: 2018-04-24 18:35:49

End at: 2018-04-24 18:36:19

Local clock offset: -4.558 ms

Remote clock offset: 8.438 ms

Below is generated by plot.py at 2018-04-25 00:51:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.66 Mbit/s

95th percentile per-packet one-way delay: 114.296 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 62.24 Mbit/s

95th percentile per-packet one-way delay: 113.769 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 33.46 Mbit/s

95th percentile per-packet one-way delay: 114.177 ms

Loss rate: 1.07%

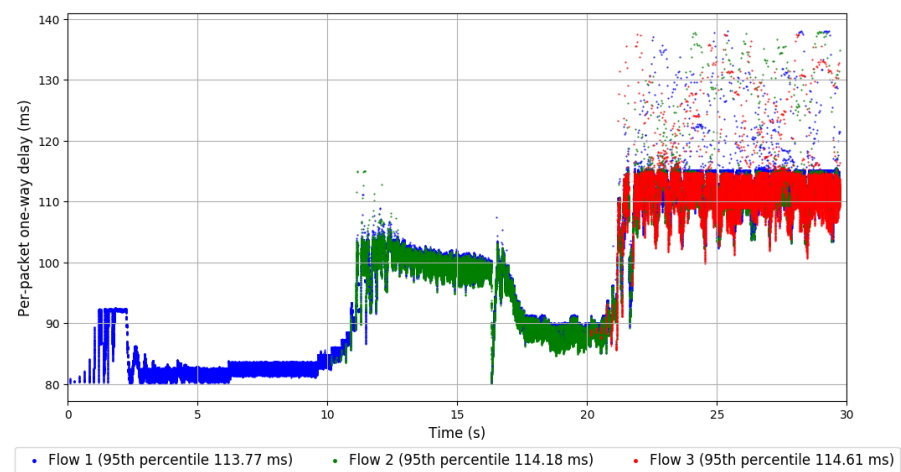
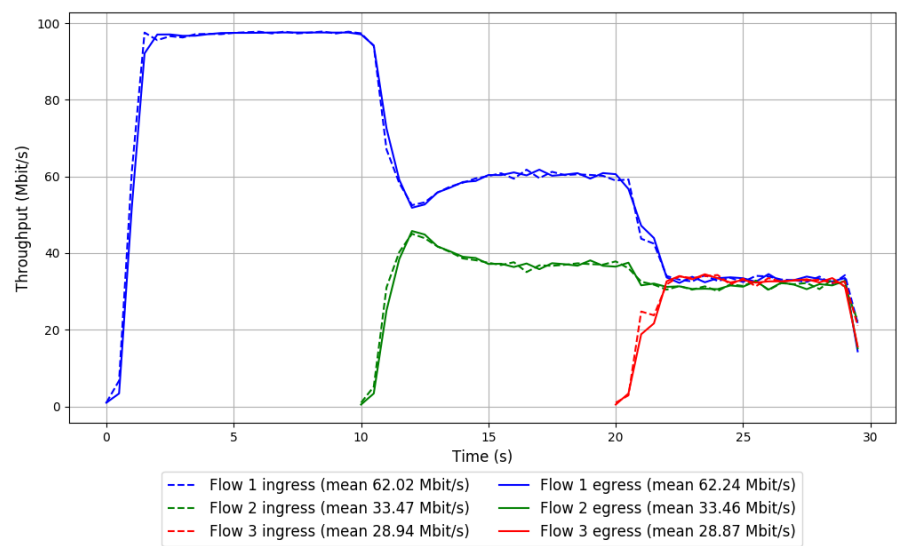
-- Flow 3:

Average throughput: 28.87 Mbit/s

95th percentile per-packet one-way delay: 114.615 ms

Loss rate: 2.37%

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



Run 6: Statistics of Indigo-1-32

Start at: 2018-04-24 18:58:14

End at: 2018-04-24 18:58:44

Local clock offset: -4.398 ms

Remote clock offset: 4.073 ms

Below is generated by plot.py at 2018-04-25 00:51:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.70 Mbit/s

95th percentile per-packet one-way delay: 115.457 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 63.08 Mbit/s

95th percentile per-packet one-way delay: 114.859 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 32.22 Mbit/s

95th percentile per-packet one-way delay: 114.314 ms

Loss rate: 0.74%

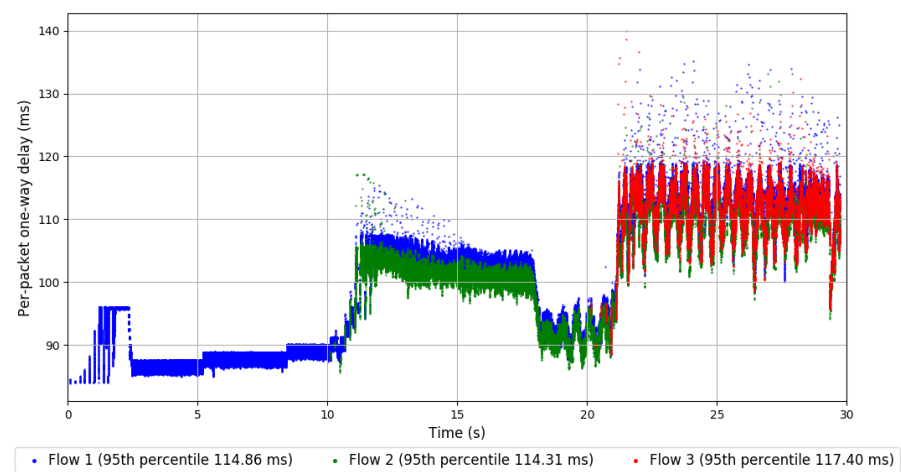
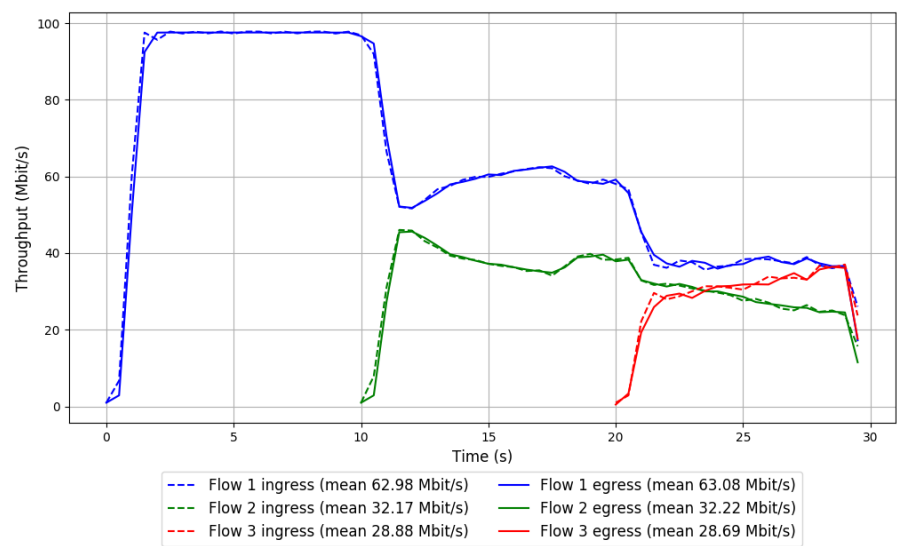
-- Flow 3:

Average throughput: 28.69 Mbit/s

95th percentile per-packet one-way delay: 117.398 ms

Loss rate: 2.61%

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



Run 7: Statistics of Indigo-1-32

Start at: 2018-04-24 19:20:37

End at: 2018-04-24 19:21:07

Local clock offset: -5.169 ms

Remote clock offset: 2.888 ms

Below is generated by plot.py at 2018-04-25 00:51:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.57 Mbit/s

95th percentile per-packet one-way delay: 107.530 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 69.13 Mbit/s

95th percentile per-packet one-way delay: 106.362 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 24.97 Mbit/s

95th percentile per-packet one-way delay: 107.125 ms

Loss rate: 0.69%

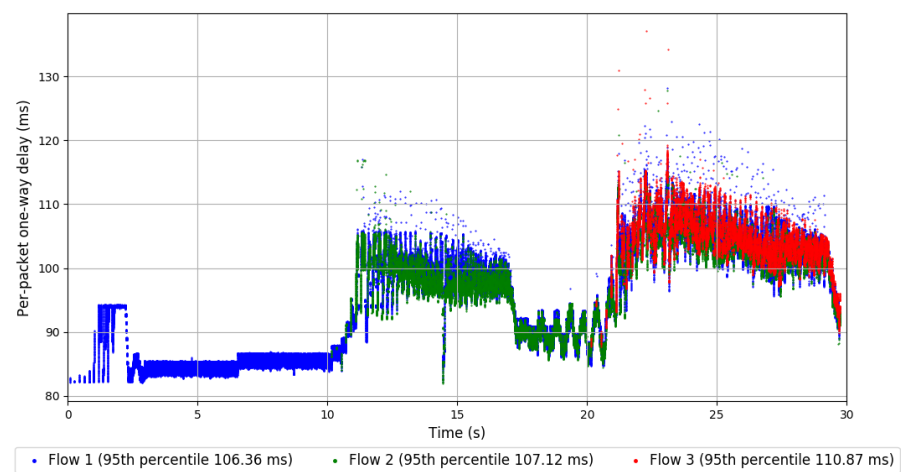
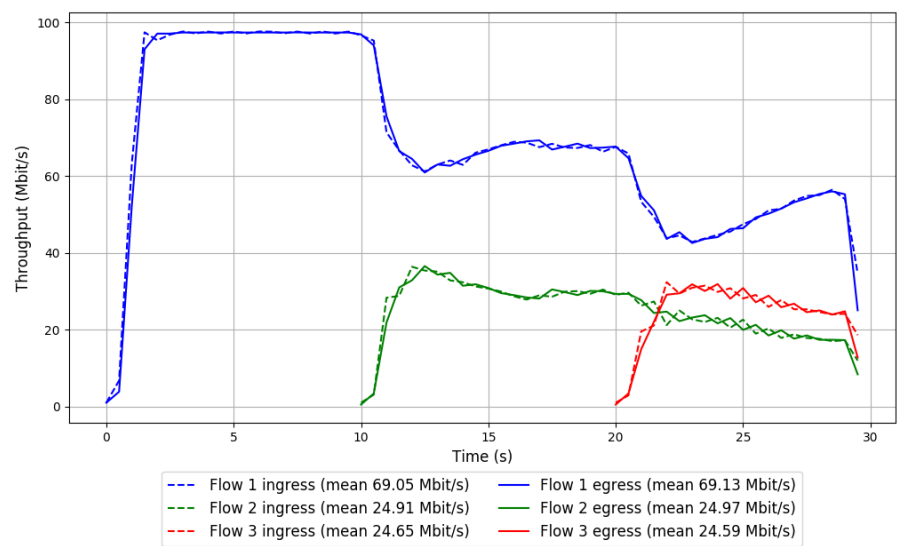
-- Flow 3:

Average throughput: 24.59 Mbit/s

95th percentile per-packet one-way delay: 110.870 ms

Loss rate: 2.14%

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



Run 8: Statistics of Indigo-1-32

Start at: 2018-04-24 19:43:07

End at: 2018-04-24 19:43:37

Local clock offset: -4.457 ms

Remote clock offset: 8.075 ms

Below is generated by plot.py at 2018-04-25 00:51:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.43 Mbit/s

95th percentile per-packet one-way delay: 104.671 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 70.24 Mbit/s

95th percentile per-packet one-way delay: 104.048 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 22.00 Mbit/s

95th percentile per-packet one-way delay: 103.915 ms

Loss rate: 0.71%

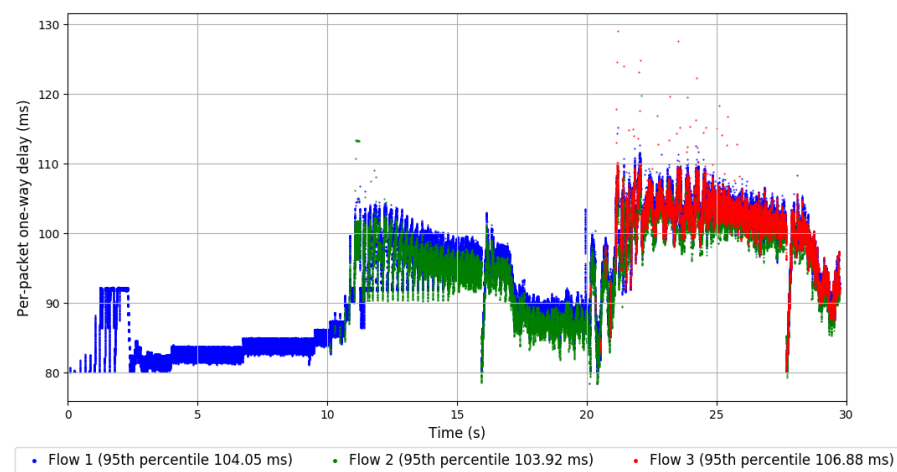
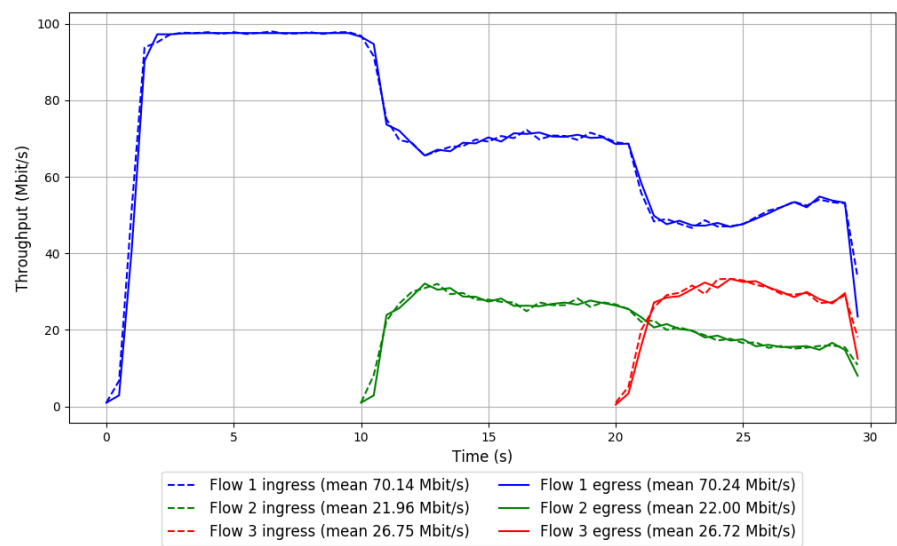
-- Flow 3:

Average throughput: 26.72 Mbit/s

95th percentile per-packet one-way delay: 106.878 ms

Loss rate: 2.01%

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



Run 9: Statistics of Indigo-1-32

Start at: 2018-04-24 20:05:28

End at: 2018-04-24 20:05:58

Local clock offset: -4.678 ms

Remote clock offset: 8.571 ms

Below is generated by plot.py at 2018-04-25 00:51:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.49 Mbit/s

95th percentile per-packet one-way delay: 106.956 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 63.73 Mbit/s

95th percentile per-packet one-way delay: 107.036 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 34.88 Mbit/s

95th percentile per-packet one-way delay: 105.288 ms

Loss rate: 0.73%

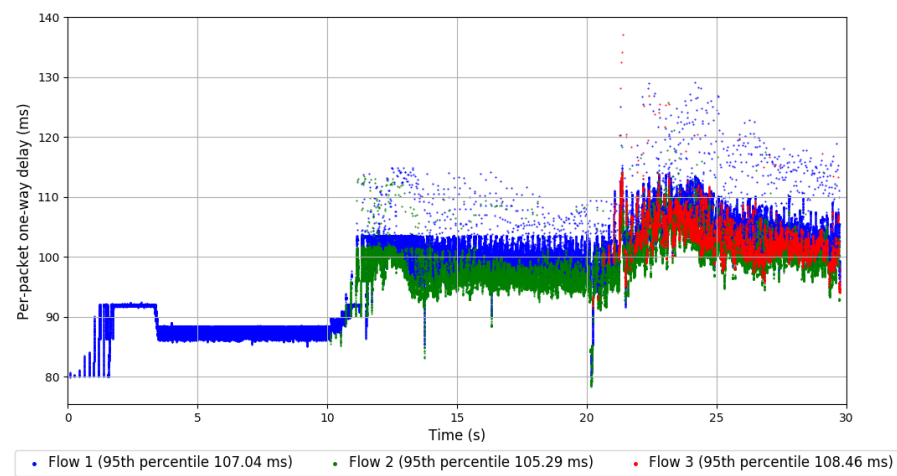
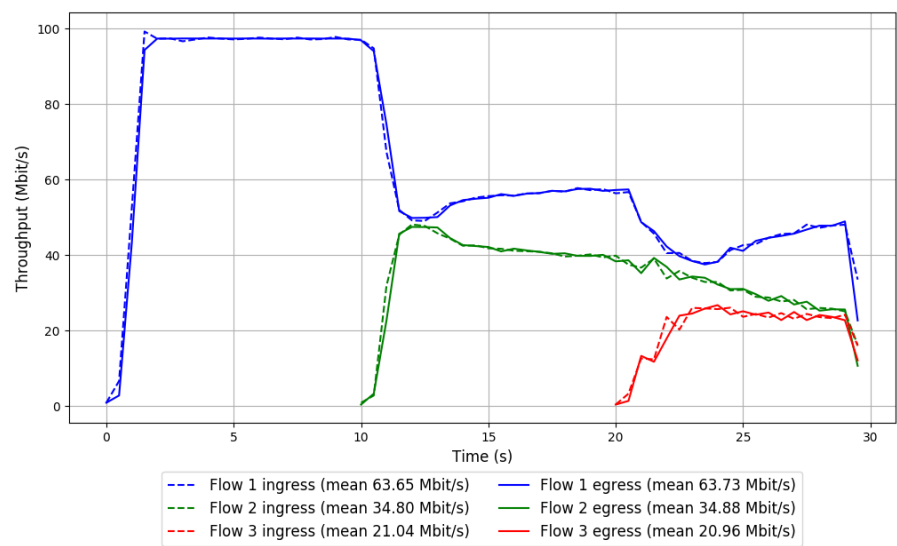
-- Flow 3:

Average throughput: 20.96 Mbit/s

95th percentile per-packet one-way delay: 108.456 ms

Loss rate: 2.38%

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



Run 10: Statistics of Indigo-1-32

Start at: 2018-04-24 20:27:59

End at: 2018-04-24 20:28:29

Local clock offset: -5.566 ms

Remote clock offset: 8.926 ms

Below is generated by plot.py at 2018-04-25 00:51:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.13 Mbit/s

95th percentile per-packet one-way delay: 107.136 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 62.39 Mbit/s

95th percentile per-packet one-way delay: 105.676 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 35.15 Mbit/s

95th percentile per-packet one-way delay: 108.436 ms

Loss rate: 0.75%

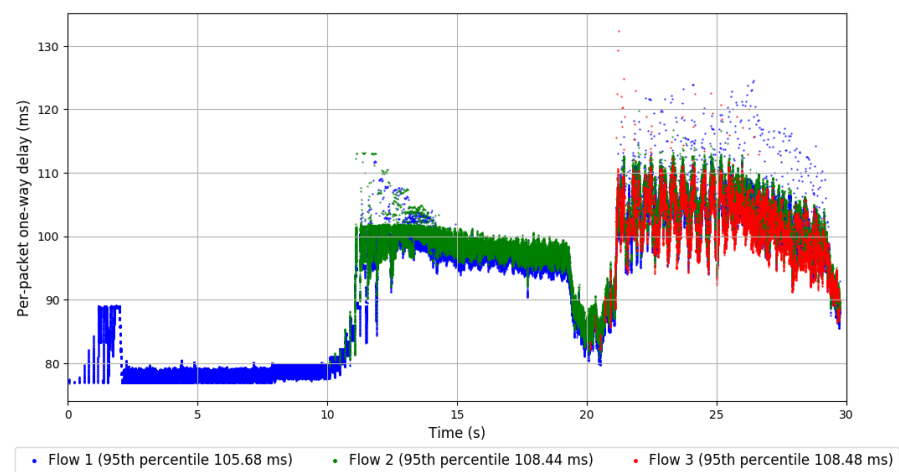
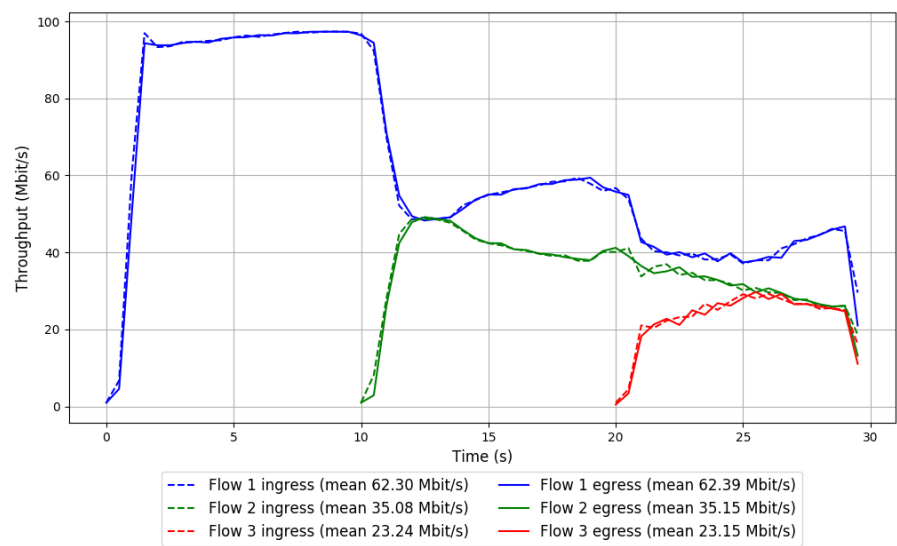
-- Flow 3:

Average throughput: 23.15 Mbit/s

95th percentile per-packet one-way delay: 108.481 ms

Loss rate: 2.25%

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



Run 1: Statistics of PCC-Vivace

Start at: 2018-04-24 17:20:27

End at: 2018-04-24 17:20:57

Local clock offset: -5.887 ms

Remote clock offset: 5.439 ms

Below is generated by plot.py at 2018-04-25 00:51:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.93 Mbit/s

95th percentile per-packet one-way delay: 112.594 ms

Loss rate: 2.42%

-- Flow 1:

Average throughput: 52.33 Mbit/s

95th percentile per-packet one-way delay: 111.872 ms

Loss rate: 1.80%

-- Flow 2:

Average throughput: 30.87 Mbit/s

95th percentile per-packet one-way delay: 112.691 ms

Loss rate: 1.24%

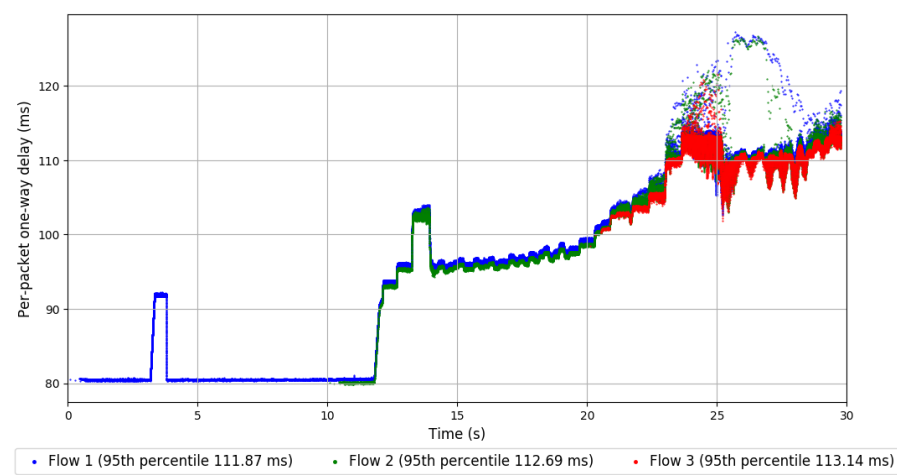
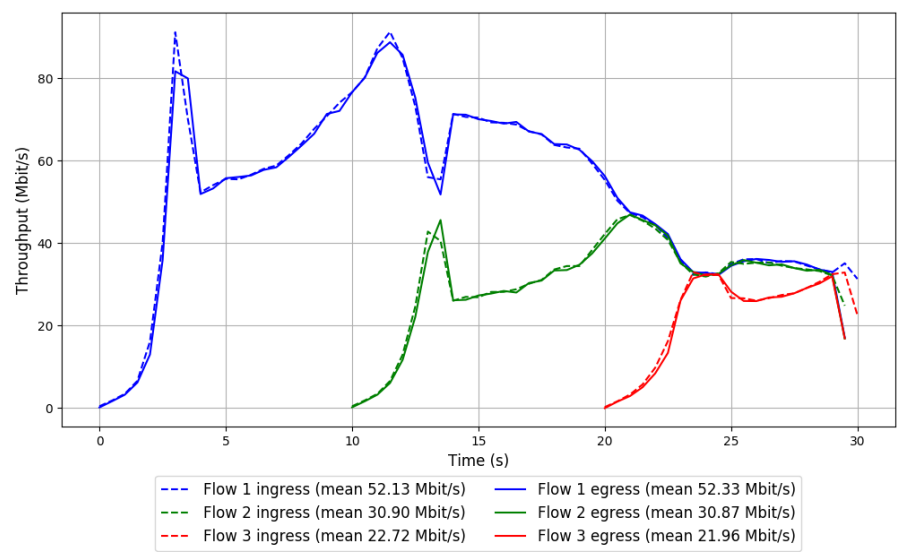
-- Flow 3:

Average throughput: 21.96 Mbit/s

95th percentile per-packet one-way delay: 113.140 ms

Loss rate: 9.74%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-04-24 17:42:57

End at: 2018-04-24 17:43:27

Local clock offset: -5.55 ms

Remote clock offset: 2.332 ms

Below is generated by plot.py at 2018-04-25 00:51:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.02 Mbit/s

95th percentile per-packet one-way delay: 114.936 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 48.54 Mbit/s

95th percentile per-packet one-way delay: 113.017 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 31.26 Mbit/s

95th percentile per-packet one-way delay: 114.696 ms

Loss rate: 1.20%

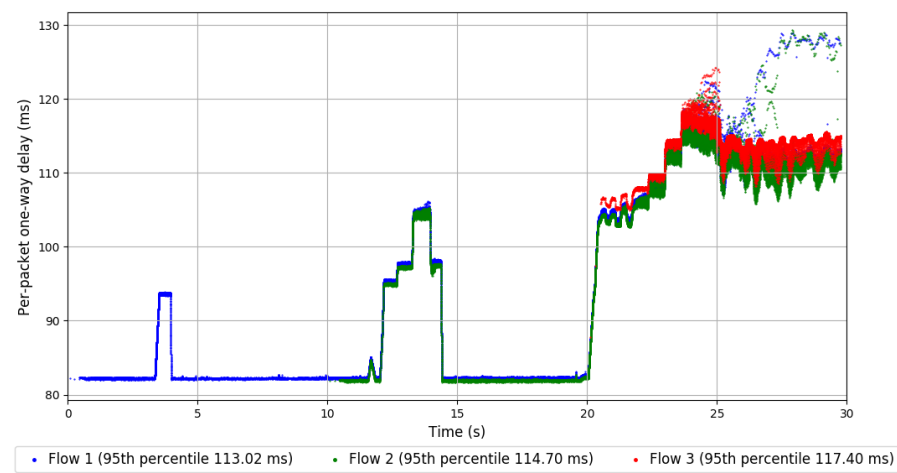
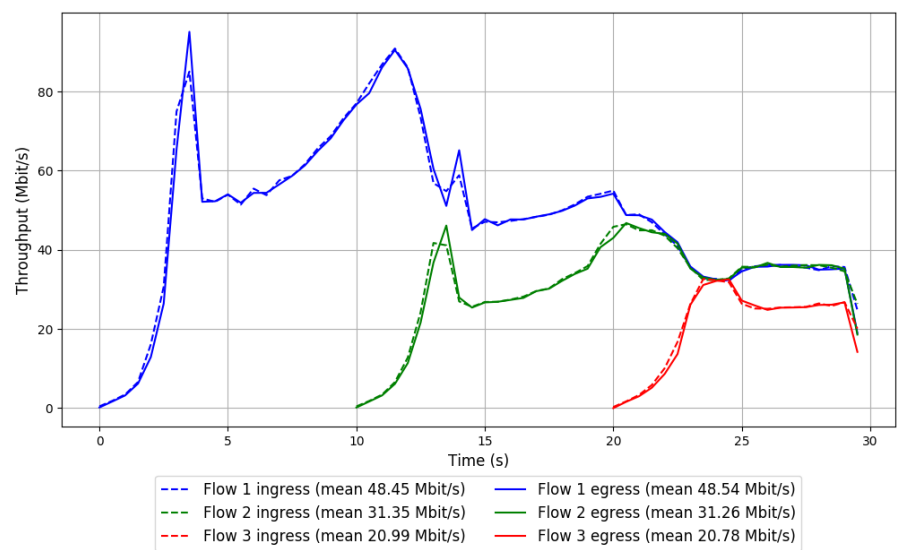
-- Flow 3:

Average throughput: 20.78 Mbit/s

95th percentile per-packet one-way delay: 117.400 ms

Loss rate: 2.89%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-04-24 18:05:21

End at: 2018-04-24 18:05:51

Local clock offset: -3.552 ms

Remote clock offset: 3.973 ms

Below is generated by plot.py at 2018-04-25 00:52:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.13 Mbit/s

95th percentile per-packet one-way delay: 105.962 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 60.22 Mbit/s

95th percentile per-packet one-way delay: 103.552 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 12.51 Mbit/s

95th percentile per-packet one-way delay: 110.497 ms

Loss rate: 1.65%

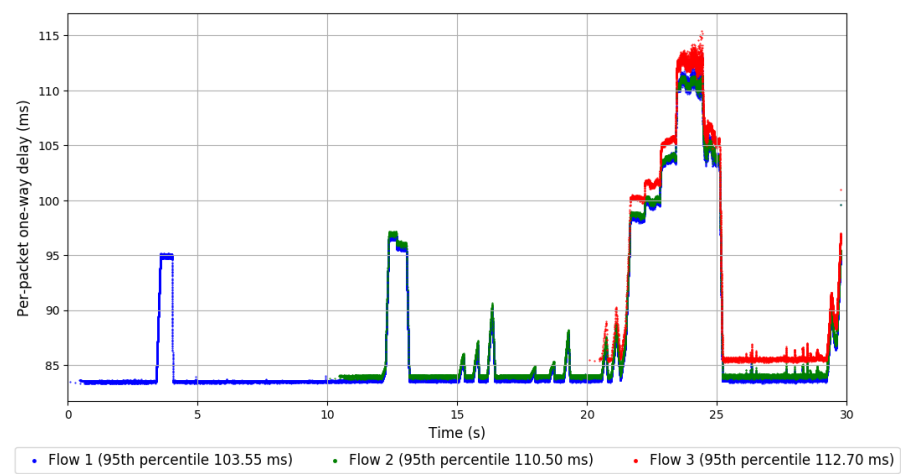
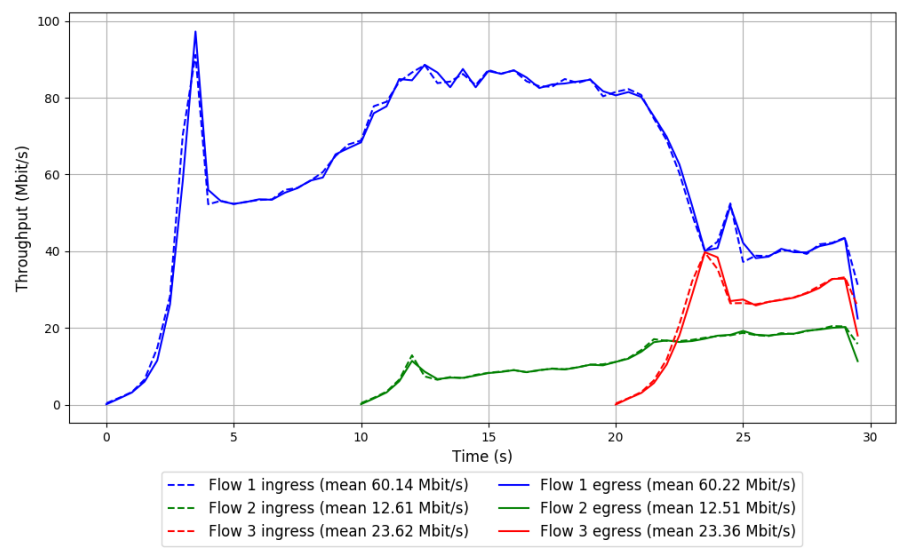
-- Flow 3:

Average throughput: 23.36 Mbit/s

95th percentile per-packet one-way delay: 112.704 ms

Loss rate: 2.88%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-04-24 18:27:43

End at: 2018-04-24 18:28:13

Local clock offset: -4.5 ms

Remote clock offset: 8.674 ms

Below is generated by plot.py at 2018-04-25 00:52:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.26 Mbit/s

95th percentile per-packet one-way delay: 93.797 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 67.94 Mbit/s

95th percentile per-packet one-way delay: 93.838 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 13.49 Mbit/s

95th percentile per-packet one-way delay: 92.171 ms

Loss rate: 1.34%

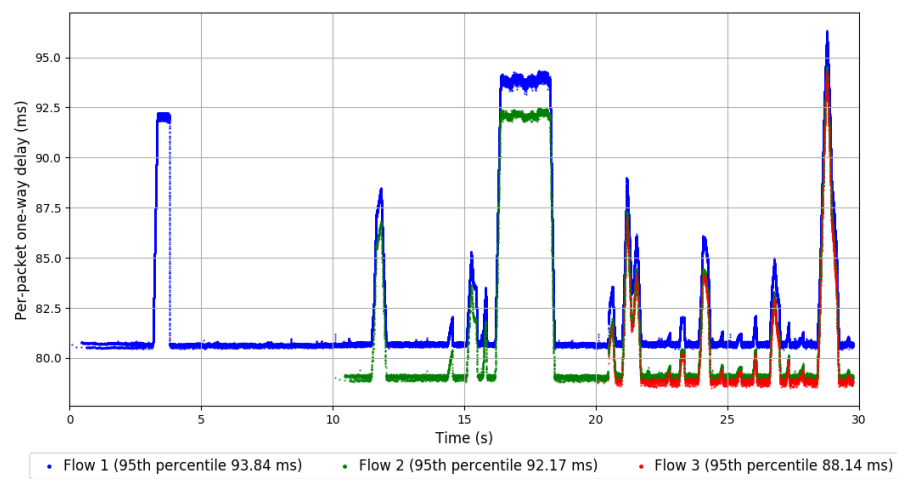
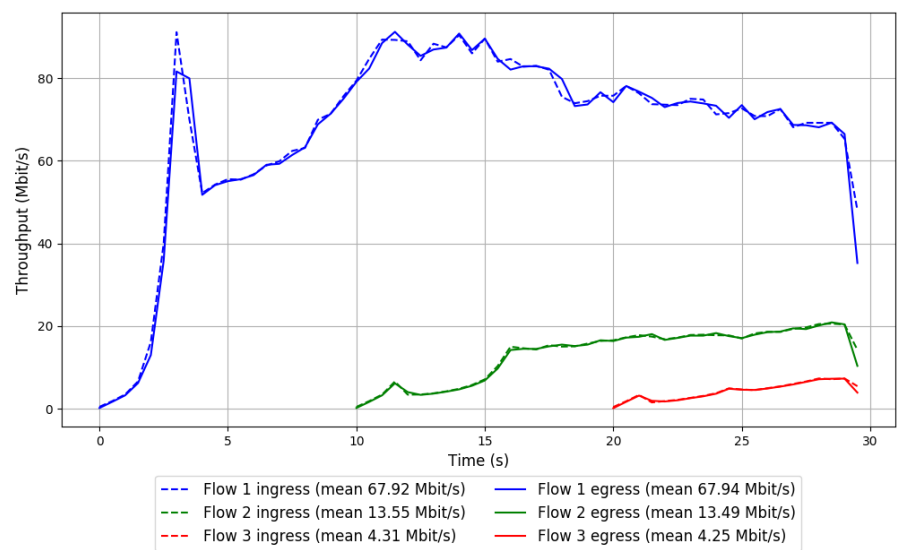
-- Flow 3:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 88.135 ms

Loss rate: 3.23%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-04-24 18:50:21

End at: 2018-04-24 18:50:51

Local clock offset: -4.412 ms

Remote clock offset: 4.086 ms

Below is generated by plot.py at 2018-04-25 00:52:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.93 Mbit/s

95th percentile per-packet one-way delay: 101.982 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 63.83 Mbit/s

95th percentile per-packet one-way delay: 102.137 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 19.25 Mbit/s

95th percentile per-packet one-way delay: 101.033 ms

Loss rate: 1.72%

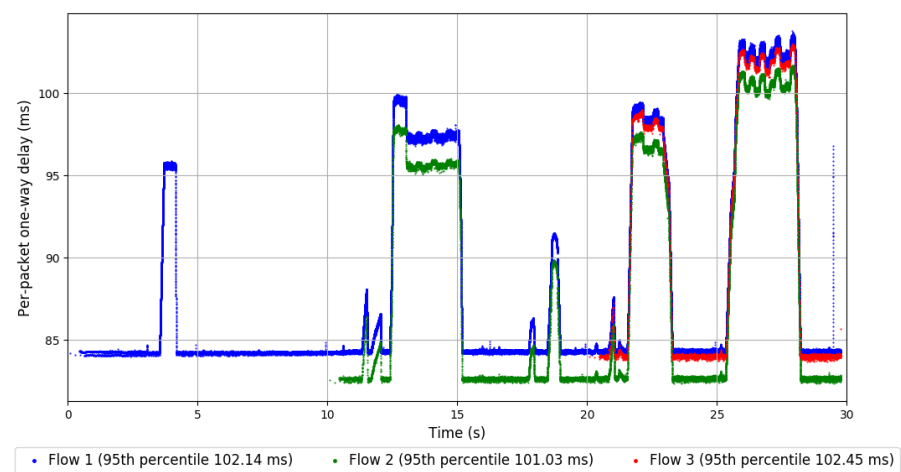
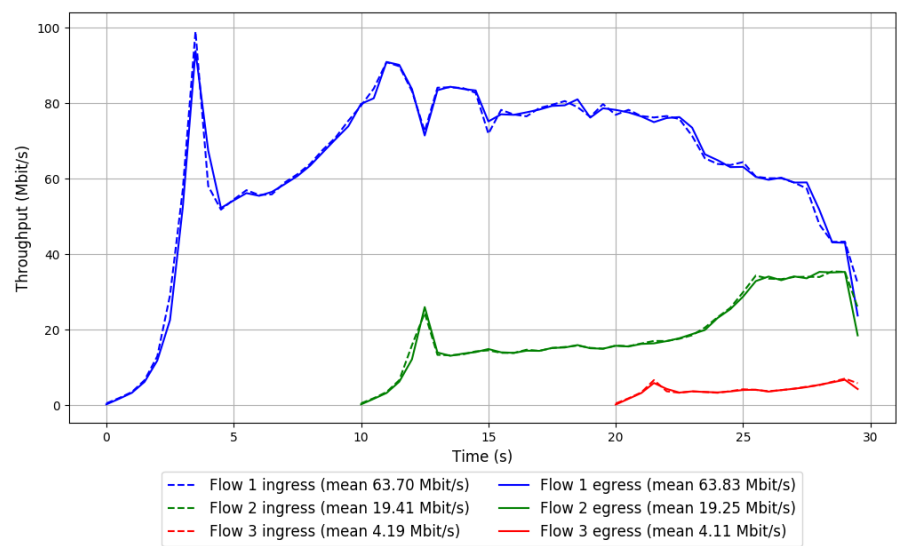
-- Flow 3:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 102.446 ms

Loss rate: 3.51%

Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-04-24 19:12:44

End at: 2018-04-24 19:13:14

Local clock offset: -5.181 ms

Remote clock offset: 7.667 ms

Below is generated by plot.py at 2018-04-25 00:52:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.92 Mbit/s

95th percentile per-packet one-way delay: 90.482 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 68.93 Mbit/s

95th percentile per-packet one-way delay: 90.527 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 11.72 Mbit/s

95th percentile per-packet one-way delay: 88.857 ms

Loss rate: 1.50%

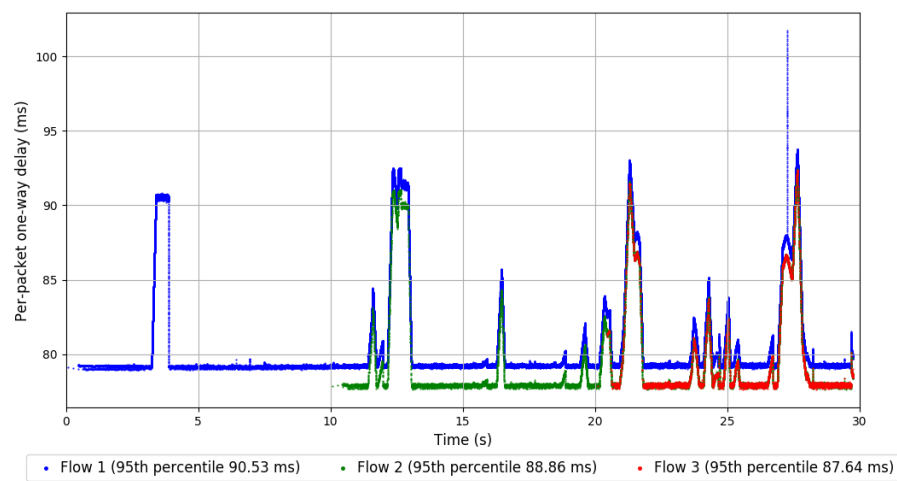
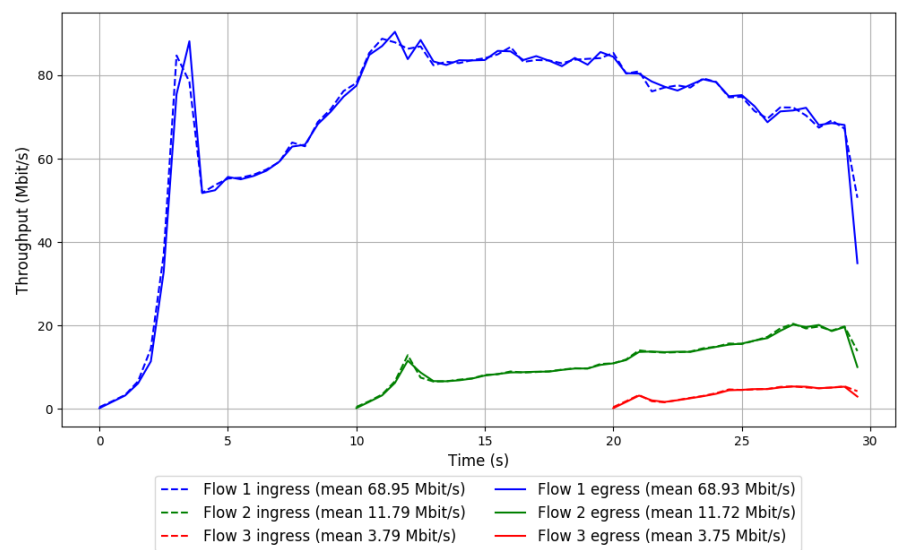
-- Flow 3:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 87.642 ms

Loss rate: 2.92%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-04-24 19:35:13

End at: 2018-04-24 19:35:43

Local clock offset: -4.424 ms

Remote clock offset: 6.683 ms

Below is generated by plot.py at 2018-04-25 00:52:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.36 Mbit/s

95th percentile per-packet one-way delay: 96.816 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 68.02 Mbit/s

95th percentile per-packet one-way delay: 96.473 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 11.44 Mbit/s

95th percentile per-packet one-way delay: 97.612 ms

Loss rate: 1.90%

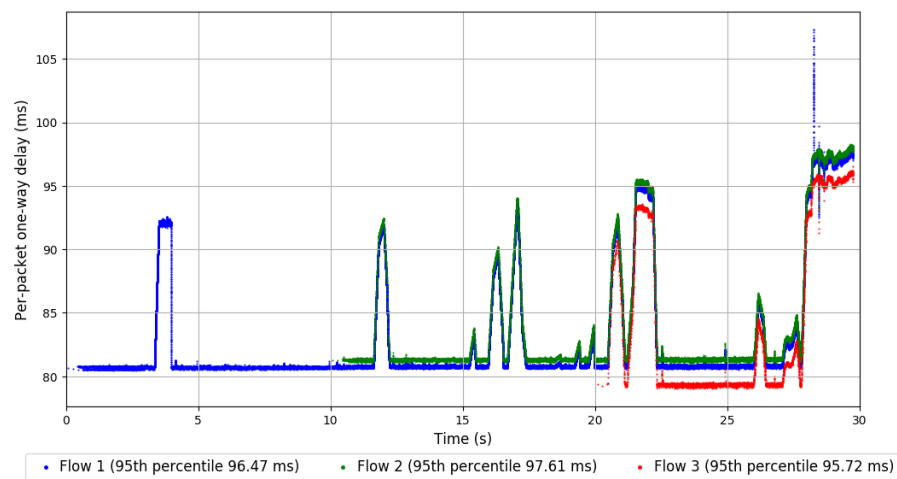
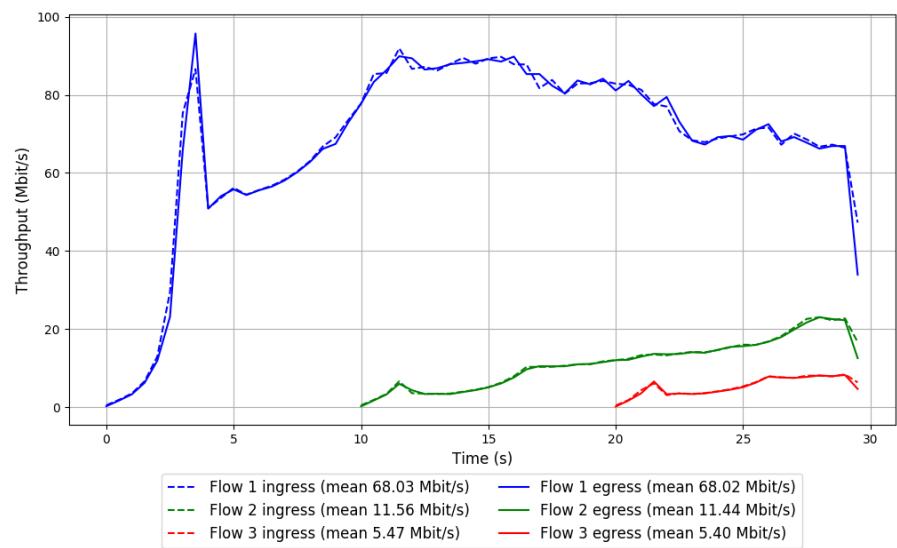
-- Flow 3:

Average throughput: 5.40 Mbit/s

95th percentile per-packet one-way delay: 95.721 ms

Loss rate: 3.08%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-04-24 19:57:35

End at: 2018-04-24 19:58:05

Local clock offset: -4.56 ms

Remote clock offset: 4.68 ms

Below is generated by plot.py at 2018-04-25 00:52:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.56 Mbit/s

95th percentile per-packet one-way delay: 103.848 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 57.25 Mbit/s

95th percentile per-packet one-way delay: 103.658 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 27.41 Mbit/s

95th percentile per-packet one-way delay: 103.995 ms

Loss rate: 1.05%

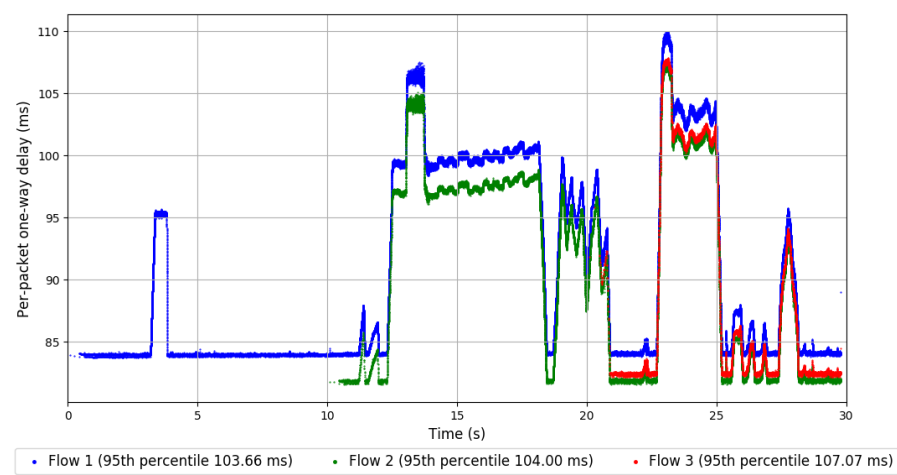
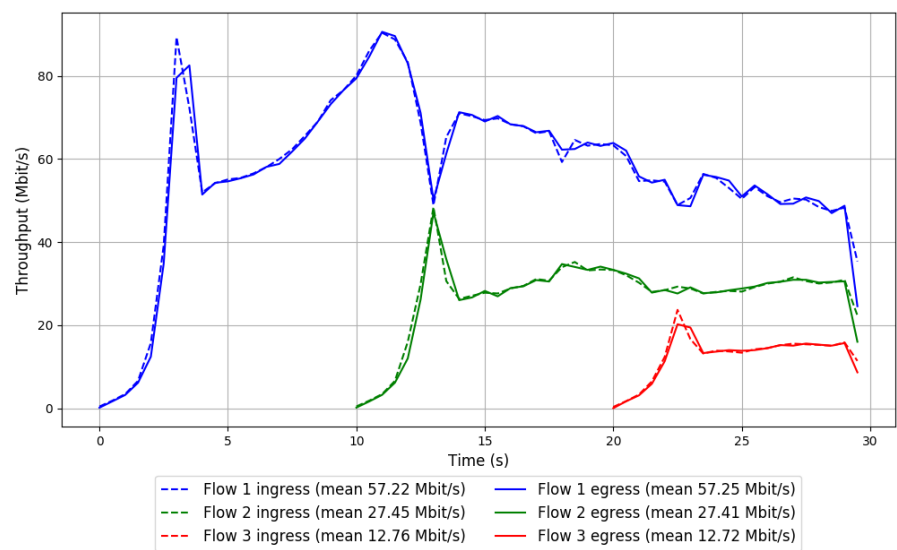
-- Flow 3:

Average throughput: 12.72 Mbit/s

95th percentile per-packet one-way delay: 107.072 ms

Loss rate: 2.19%

Run 8: Report of PCC-Vivace — Data Link



Run 9: Statistics of PCC-Vivace

Start at: 2018-04-24 20:20:06

End at: 2018-04-24 20:20:36

Local clock offset: -4.72 ms

Remote clock offset: 9.024 ms

Below is generated by plot.py at 2018-04-25 00:52:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.23 Mbit/s

95th percentile per-packet one-way delay: 101.293 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 52.80 Mbit/s

95th percentile per-packet one-way delay: 99.655 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 29.25 Mbit/s

95th percentile per-packet one-way delay: 101.877 ms

Loss rate: 1.19%

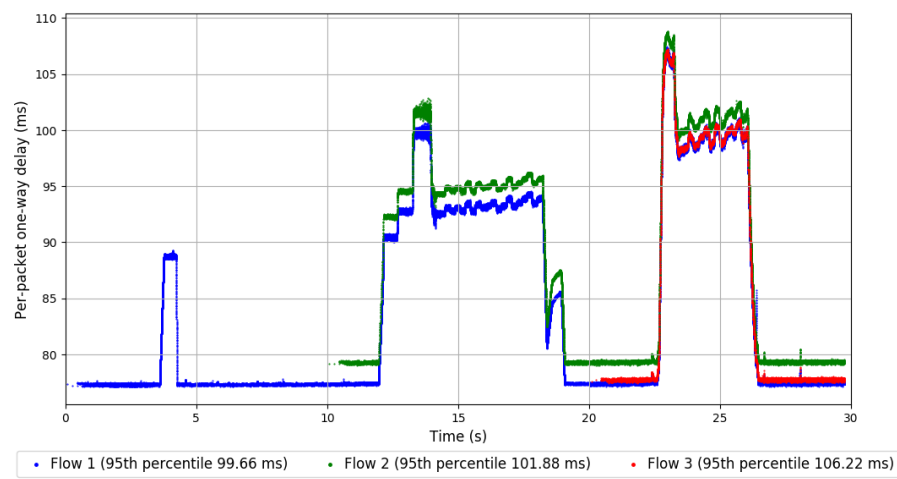
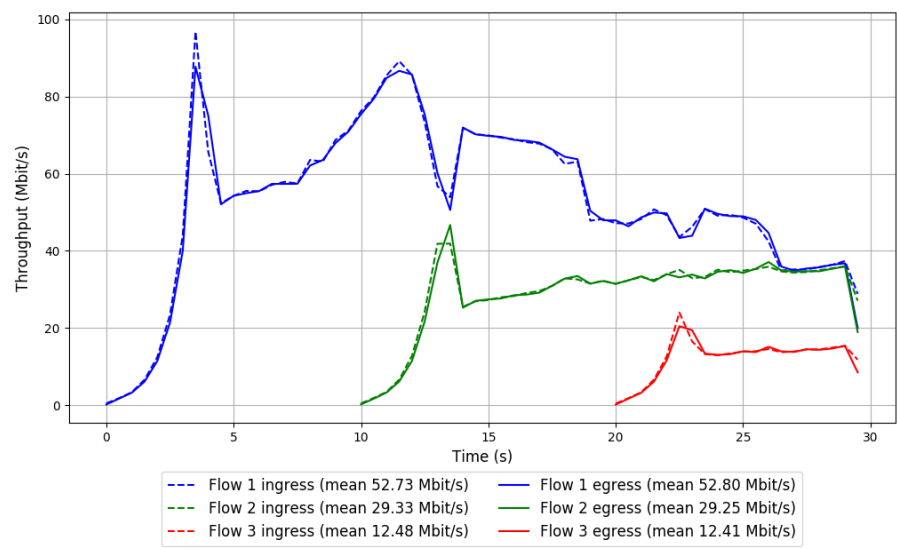
-- Flow 3:

Average throughput: 12.41 Mbit/s

95th percentile per-packet one-way delay: 106.220 ms

Loss rate: 2.35%

Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-04-24 20:42:42

End at: 2018-04-24 20:43:12

Local clock offset: -4.804 ms

Remote clock offset: 8.904 ms

Below is generated by plot.py at 2018-04-25 00:52:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.24 Mbit/s

95th percentile per-packet one-way delay: 101.393 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 64.60 Mbit/s

95th percentile per-packet one-way delay: 99.346 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 8.46 Mbit/s

95th percentile per-packet one-way delay: 105.098 ms

Loss rate: 3.00%

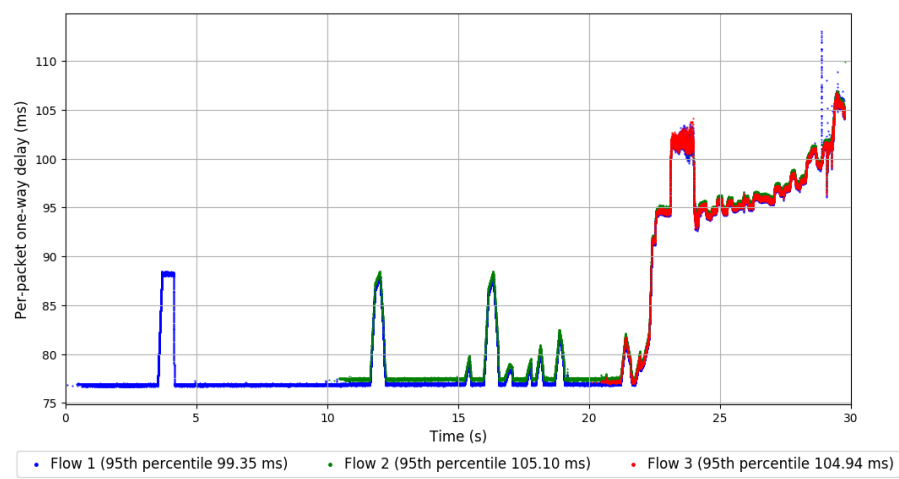
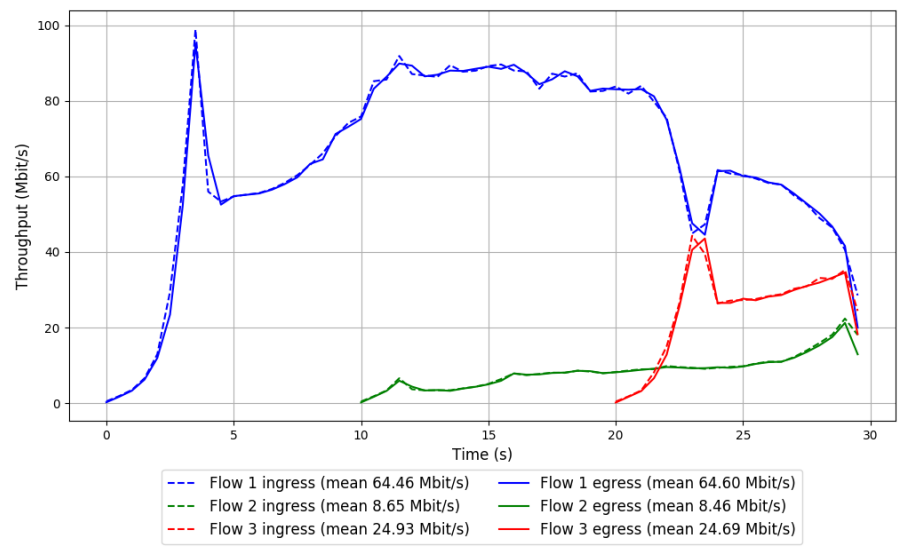
-- Flow 3:

Average throughput: 24.69 Mbit/s

95th percentile per-packet one-way delay: 104.941 ms

Loss rate: 2.77%

Run 10: Report of PCC-Vivace — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2018-04-24 17:14:36

End at: 2018-04-24 17:15:06

Local clock offset: -5.103 ms

Remote clock offset: 6.301 ms

Run 1: Report of PCC-Expr — Data Link

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Run 2: Statistics of PCC-Expr

Start at: 2018-04-24 17:37:42

End at: 2018-04-24 17:38:12

Local clock offset: -4.958 ms

Remote clock offset: 3.122 ms

Run 2: Report of PCC-Expr — Data Link

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Figure is missing

Run 3: Statistics of PCC-Expr

Start at: 2018-04-24 18:00:07

End at: 2018-04-24 18:00:37

Local clock offset: -3.618 ms

Remote clock offset: 8.922 ms

Run 3: Report of PCC-Expr — Data Link

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Figure is missing

Run 4: Statistics of PCC-Expr

Start at: 2018-04-24 18:22:29

End at: 2018-04-24 18:22:59

Local clock offset: -4.554 ms

Remote clock offset: 8.527 ms

Run 4: Report of PCC-Expr — Data Link

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Figure is missing

Run 5: Statistics of PCC-Expr

Start at: 2018-04-24 18:45:08

End at: 2018-04-24 18:45:38

Local clock offset: -4.4 ms

Remote clock offset: 3.4 ms

Run 5: Report of PCC-Expr — Data Link

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Figure is missing

Run 6: Statistics of PCC-Expr

Start at: 2018-04-24 19:07:30

End at: 2018-04-24 19:08:00

Local clock offset: -3.599 ms

Remote clock offset: 3.091 ms

Run 6: Report of PCC-Expr — Data Link

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Figure is missing

Run 7: Statistics of PCC-Expr

Start at: 2018-04-24 19:29:52

End at: 2018-04-24 19:30:22

Local clock offset: -3.671 ms

Remote clock offset: 7.512 ms

Run 7: Report of PCC-Expr — Data Link

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Figure is missing

Run 8: Statistics of PCC-Expr

Start at: 2018-04-24 19:52:22

End at: 2018-04-24 19:52:52

Local clock offset: -3.715 ms

Remote clock offset: 4.497 ms

Run 8: Report of PCC-Expr — Data Link

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Figure is missing

Run 9: Statistics of PCC-Expr

Start at: 2018-04-24 20:14:44

End at: 2018-04-24 20:15:14

Local clock offset: -4.677 ms

Remote clock offset: 3.724 ms

Run 9: Report of PCC-Expr — Data Link

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Figure is missing

Run 10: Statistics of PCC-Expr

Start at: 2018-04-24 20:37:24

End at: 2018-04-24 20:37:54

Local clock offset: -4.856 ms

Remote clock offset: 8.893 ms

Run 10: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing