

Pantheon Report

Generated at 2018-04-17 20:54:33 (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**).

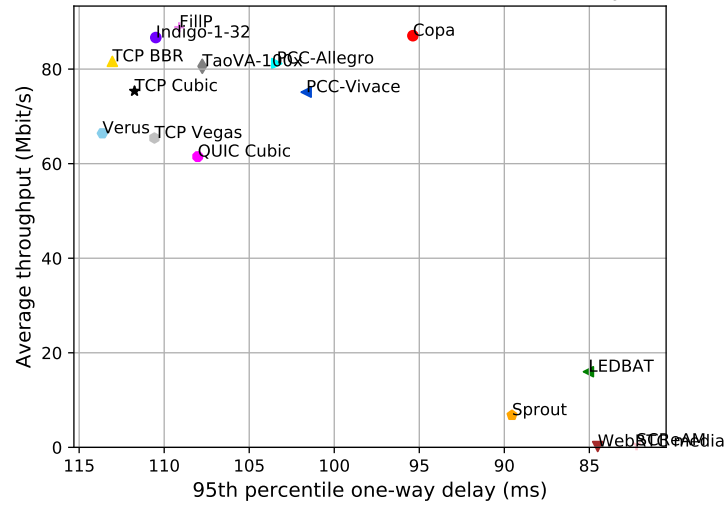
NTP offsets were measured against **gps.ntp.br** and have been applied to correct the timestamps in logs.

Git summary:

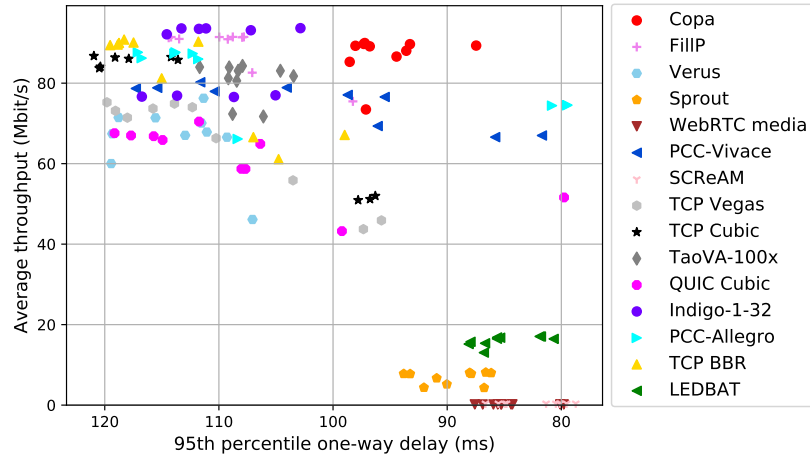
```
branch: master @ b3d6e7098641364fd3a292656a51aa81e316d0b4
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
third_party/genericCC @ d223989828276fa83a807da6e0341dc0c7b89aec
third_party/indigo @ 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

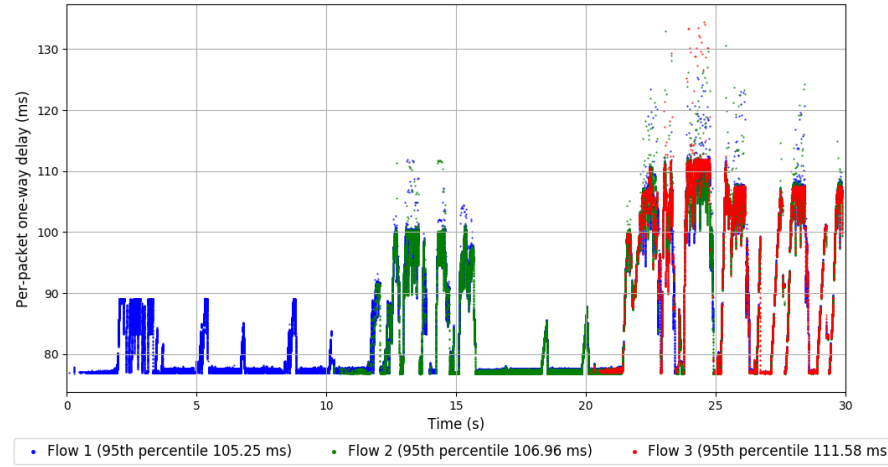
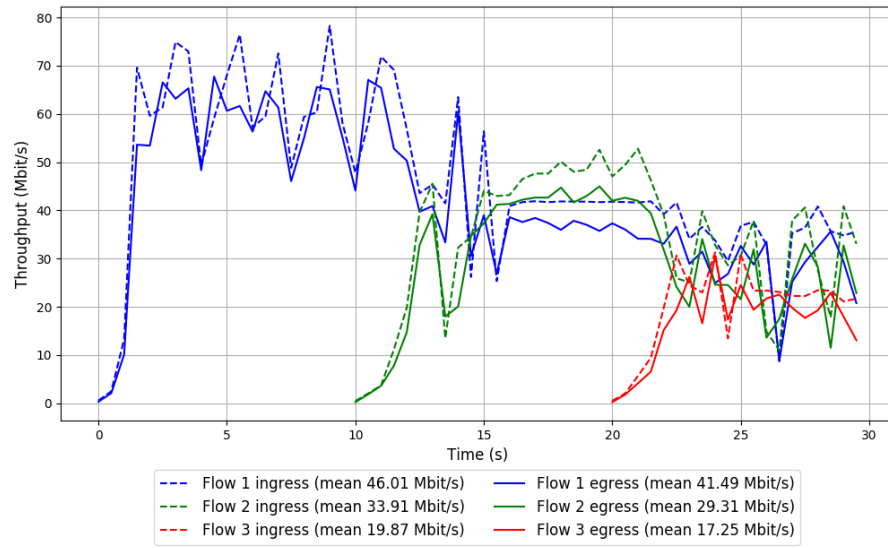


Run 1: Statistics of TCP BBR

Start at: 2018-04-17 13:04:01
End at: 2018-04-17 13:04:31
Local clock offset: -6.496 ms
Remote clock offset: 11.664 ms

Below is generated by plot.py at 2018-04-17 20:35:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 66.59 Mbit/s
95th percentile per-packet one-way delay: 106.978 ms
Loss rate: 11.95%
-- Flow 1:
Average throughput: 41.49 Mbit/s
95th percentile per-packet one-way delay: 105.253 ms
Loss rate: 10.38%
-- Flow 2:
Average throughput: 29.31 Mbit/s
95th percentile per-packet one-way delay: 106.964 ms
Loss rate: 14.34%
-- Flow 3:
Average throughput: 17.25 Mbit/s
95th percentile per-packet one-way delay: 111.579 ms
Loss rate: 14.72%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-04-17 13:26:45

End at: 2018-04-17 13:27:15

Local clock offset: -4.348 ms

Remote clock offset: 6.402 ms

Below is generated by plot.py at 2018-04-17 20:35:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.10 Mbit/s

95th percentile per-packet one-way delay: 117.480 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 55.01 Mbit/s

95th percentile per-packet one-way delay: 116.965 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 38.09 Mbit/s

95th percentile per-packet one-way delay: 117.510 ms

Loss rate: 0.89%

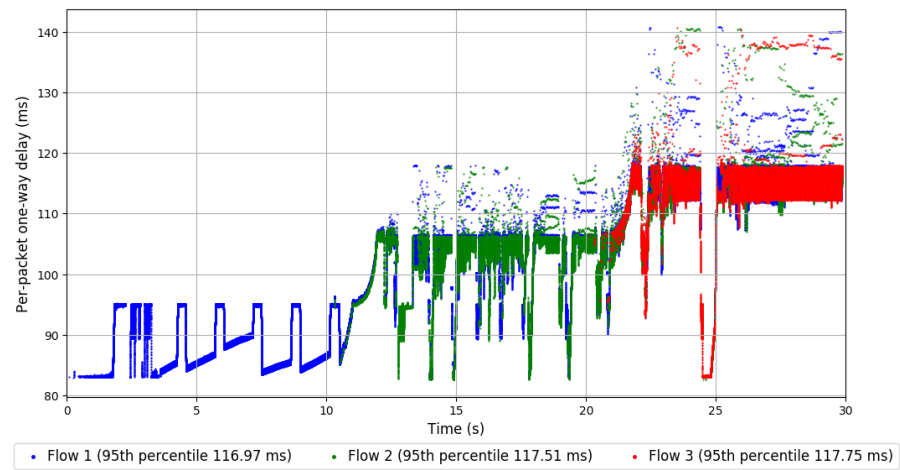
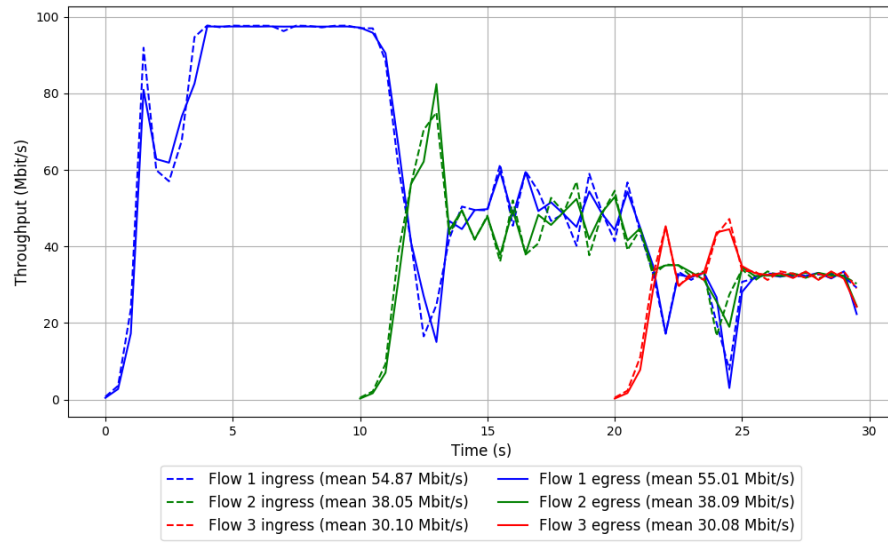
-- Flow 3:

Average throughput: 30.08 Mbit/s

95th percentile per-packet one-way delay: 117.754 ms

Loss rate: 2.24%

Run 2: Report of TCP BBR — Data Link

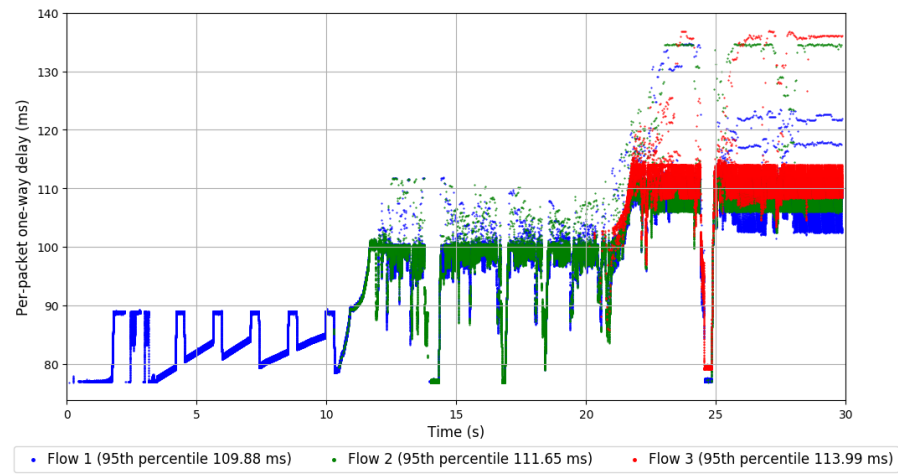
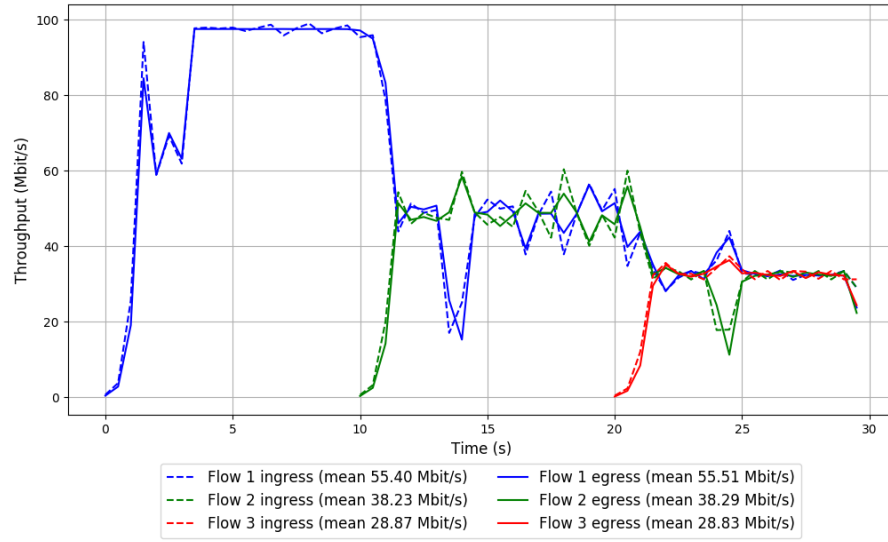


Run 3: Statistics of TCP BBR

Start at: 2018-04-17 13:49:04
End at: 2018-04-17 13:49:34
Local clock offset: -2.467 ms
Remote clock offset: 11.958 ms

Below is generated by plot.py at 2018-04-17 20:35:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.32 Mbit/s
95th percentile per-packet one-way delay: 111.798 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 55.51 Mbit/s
95th percentile per-packet one-way delay: 109.879 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 38.29 Mbit/s
95th percentile per-packet one-way delay: 111.646 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 28.83 Mbit/s
95th percentile per-packet one-way delay: 113.994 ms
Loss rate: 2.36%

Run 3: Report of TCP BBR — Data Link

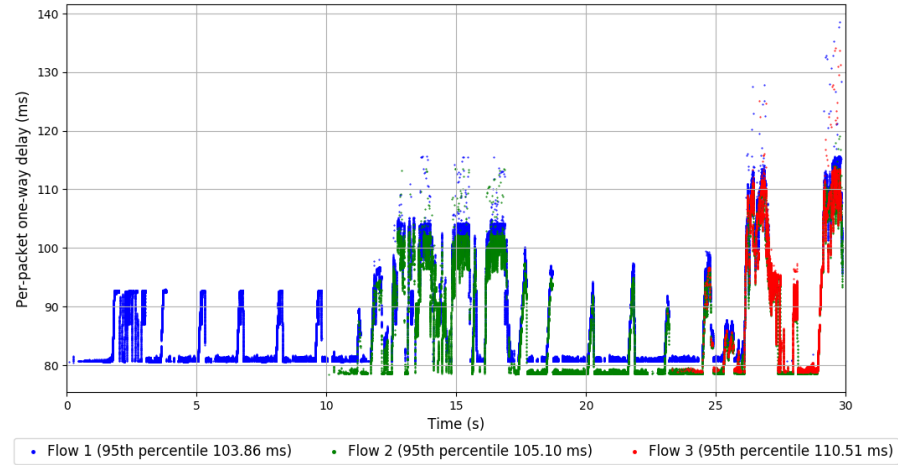
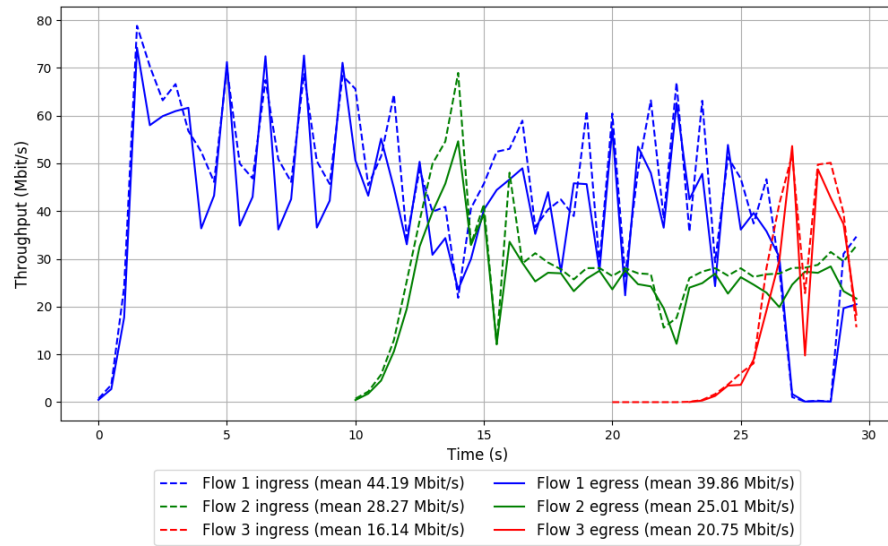


Run 4: Statistics of TCP BBR

Start at: 2018-04-17 14:11:20
End at: 2018-04-17 14:11:50
Local clock offset: -5.098 ms
Remote clock offset: 10.247 ms

Below is generated by plot.py at 2018-04-17 20:35:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 61.12 Mbit/s
95th percentile per-packet one-way delay: 104.772 ms
Loss rate: 11.10%
-- Flow 1:
Average throughput: 39.86 Mbit/s
95th percentile per-packet one-way delay: 103.861 ms
Loss rate: 10.33%
-- Flow 2:
Average throughput: 25.01 Mbit/s
95th percentile per-packet one-way delay: 105.101 ms
Loss rate: 12.31%
-- Flow 3:
Average throughput: 20.75 Mbit/s
95th percentile per-packet one-way delay: 110.513 ms
Loss rate: 13.31%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-04-17 14:33:31

End at: 2018-04-17 14:34:01

Local clock offset: -5.735 ms

Remote clock offset: 5.019 ms

Below is generated by plot.py at 2018-04-17 20:35:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.45 Mbit/s

95th percentile per-packet one-way delay: 119.529 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 54.90 Mbit/s

95th percentile per-packet one-way delay: 120.198 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 38.06 Mbit/s

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

Loss rate: 0.90%

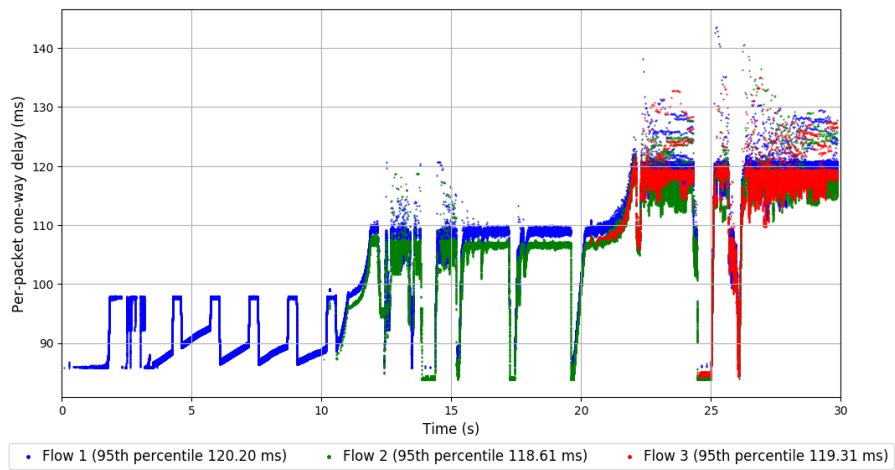
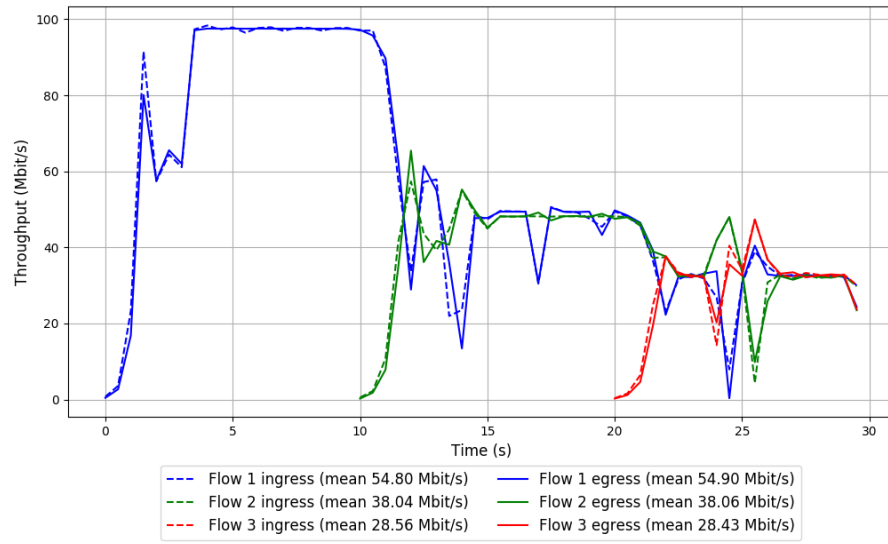
-- Flow 3:

Average throughput: 28.43 Mbit/s

95th percentile per-packet one-way delay: 119.311 ms

Loss rate: 2.51%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-04-17 14:55:57

End at: 2018-04-17 14:56:27

Local clock offset: -4.653 ms

Remote clock offset: 4.633 ms

Below is generated by plot.py at 2018-04-17 20:35:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.14 Mbit/s

95th percentile per-packet one-way delay: 98.982 ms

Loss rate: 10.25%

-- Flow 1:

Average throughput: 52.22 Mbit/s

95th percentile per-packet one-way delay: 97.677 ms

Loss rate: 9.75%

-- Flow 2:

Average throughput: 20.82 Mbit/s

95th percentile per-packet one-way delay: 102.905 ms

Loss rate: 11.68%

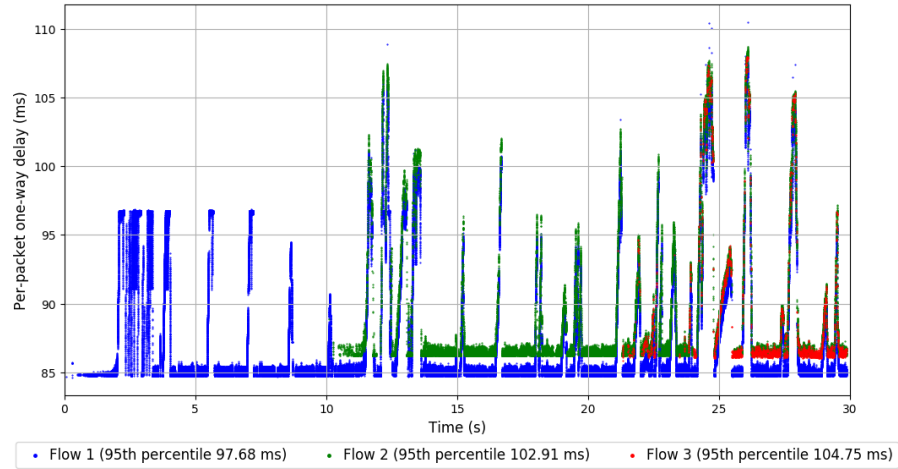
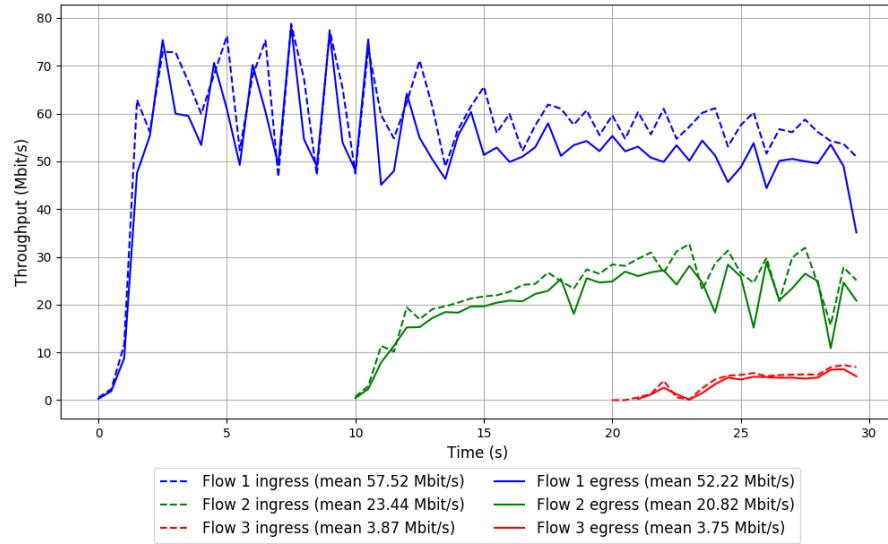
-- Flow 3:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 104.747 ms

Loss rate: 15.03%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-04-17 15:18:13

End at: 2018-04-17 15:18:43

Local clock offset: -6.253 ms

Remote clock offset: 6.64 ms

Below is generated by plot.py at 2018-04-17 20:35:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.59 Mbit/s

95th percentile per-packet one-way delay: 118.868 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 56.00 Mbit/s

95th percentile per-packet one-way delay: 117.968 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 36.70 Mbit/s

95th percentile per-packet one-way delay: 118.973 ms

Loss rate: 0.92%

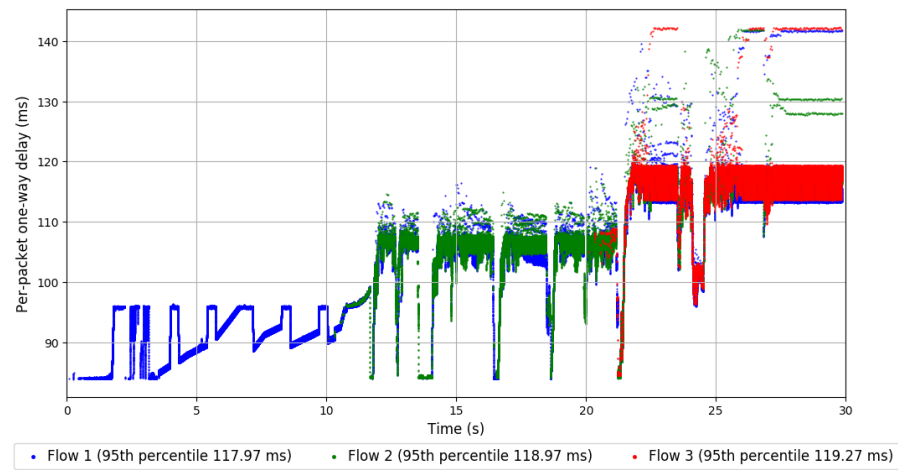
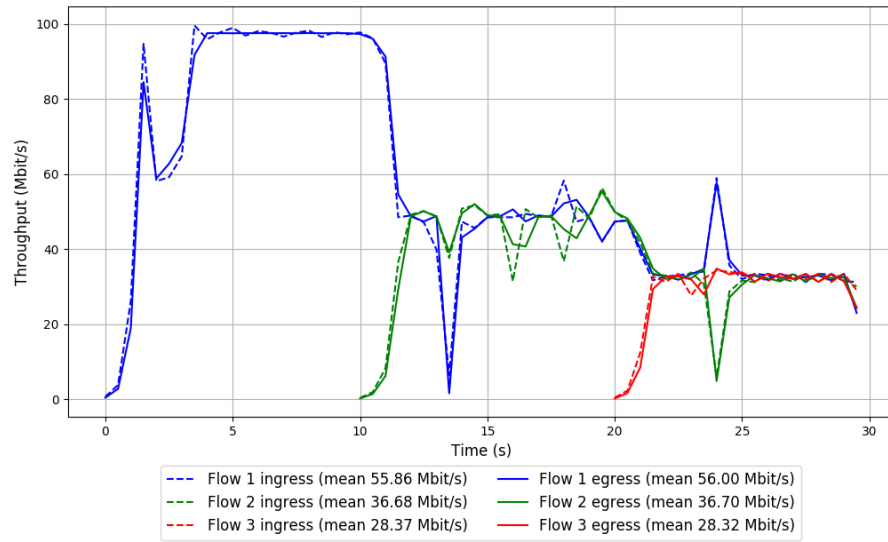
-- Flow 3:

Average throughput: 28.32 Mbit/s

95th percentile per-packet one-way delay: 119.266 ms

Loss rate: 2.38%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-04-17 15:40:33

End at: 2018-04-17 15:41:03

Local clock offset: -5.636 ms

Remote clock offset: 6.42 ms

Below is generated by plot.py at 2018-04-17 20:35:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.00 Mbit/s

95th percentile per-packet one-way delay: 118.755 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 55.46 Mbit/s

95th percentile per-packet one-way delay: 118.217 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 38.11 Mbit/s

95th percentile per-packet one-way delay: 119.207 ms

Loss rate: 0.90%

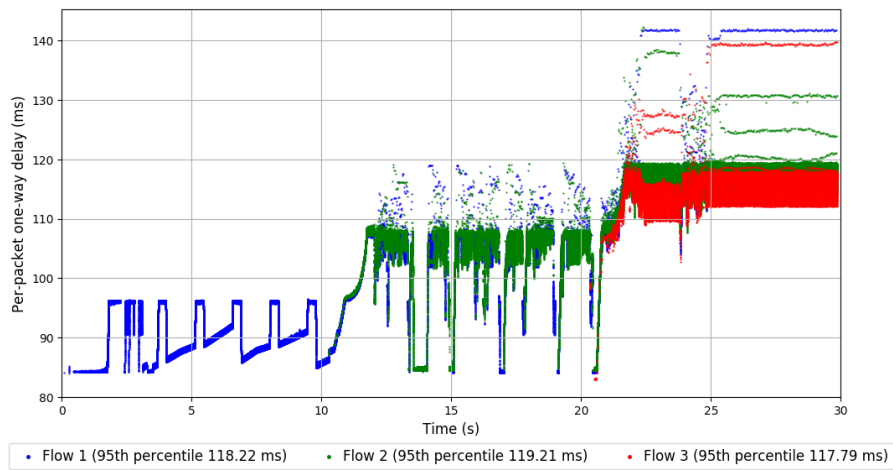
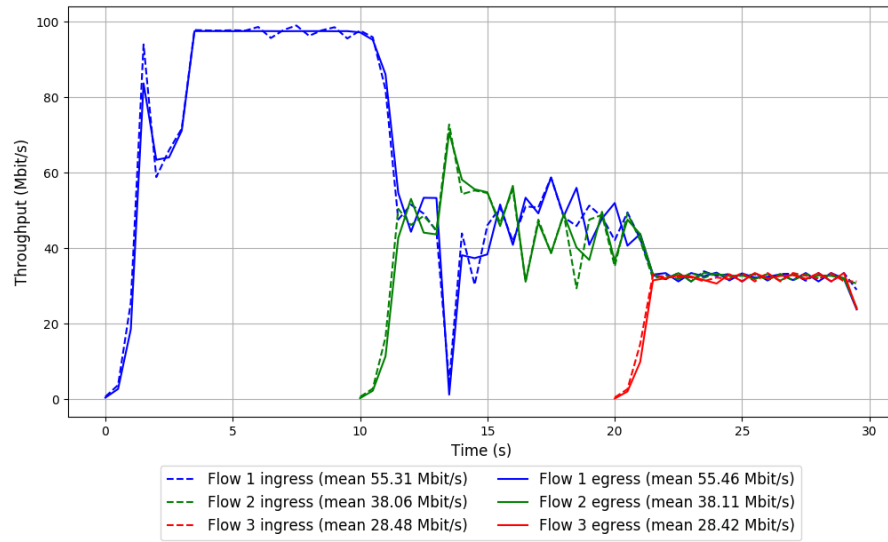
-- Flow 3:

Average throughput: 28.42 Mbit/s

95th percentile per-packet one-way delay: 117.787 ms

Loss rate: 2.48%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-04-17 16:02:52

End at: 2018-04-17 16:03:22

Local clock offset: -6.356 ms

Remote clock offset: 8.663 ms

Below is generated by plot.py at 2018-04-17 20:36:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.21 Mbit/s

95th percentile per-packet one-way delay: 115.015 ms

Loss rate: 2.17%

-- Flow 1:

Average throughput: 47.17 Mbit/s

95th percentile per-packet one-way delay: 113.984 ms

Loss rate: 2.75%

-- Flow 2:

Average throughput: 37.05 Mbit/s

95th percentile per-packet one-way delay: 115.180 ms

Loss rate: 0.95%

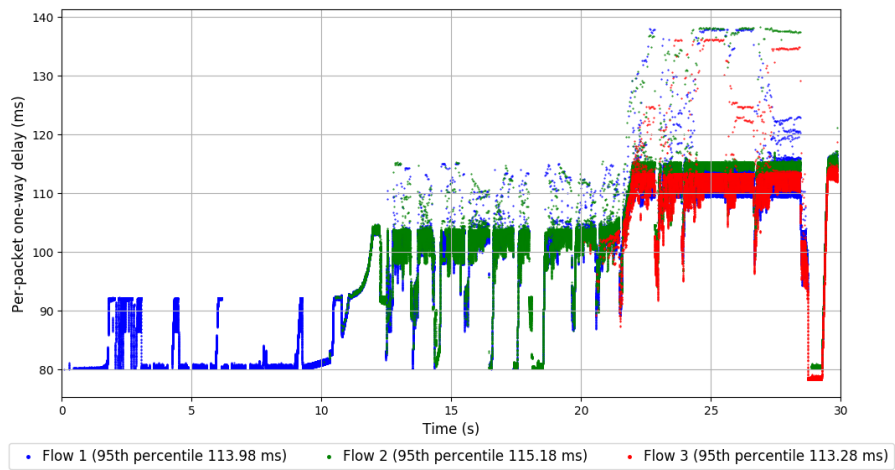
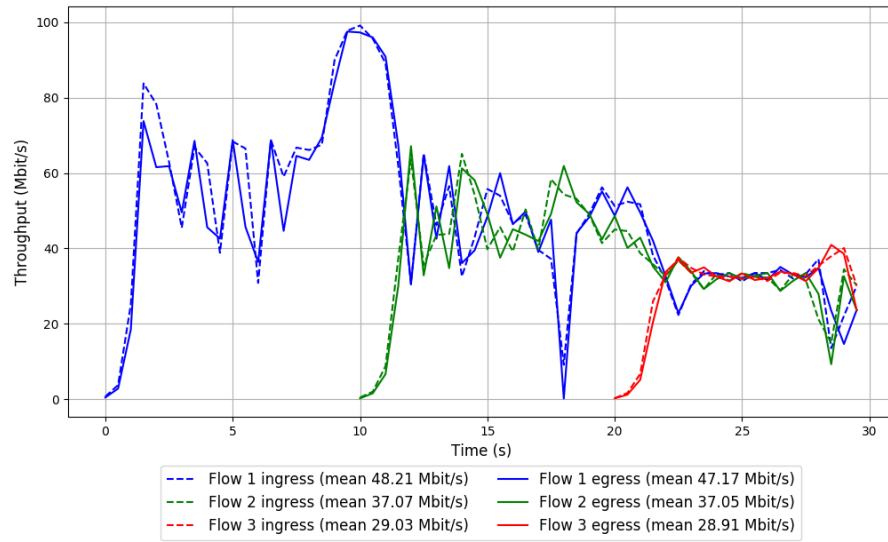
-- Flow 3:

Average throughput: 28.91 Mbit/s

95th percentile per-packet one-way delay: 113.282 ms

Loss rate: 2.39%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-04-17 16:25:16

End at: 2018-04-17 16:25:46

Local clock offset: -4.492 ms

Remote clock offset: 4.813 ms

Below is generated by plot.py at 2018-04-17 20:36:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.84 Mbit/s

95th percentile per-packet one-way delay: 118.304 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 56.76 Mbit/s

95th percentile per-packet one-way delay: 118.384 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.11 Mbit/s

95th percentile per-packet one-way delay: 118.361 ms

Loss rate: 1.99%

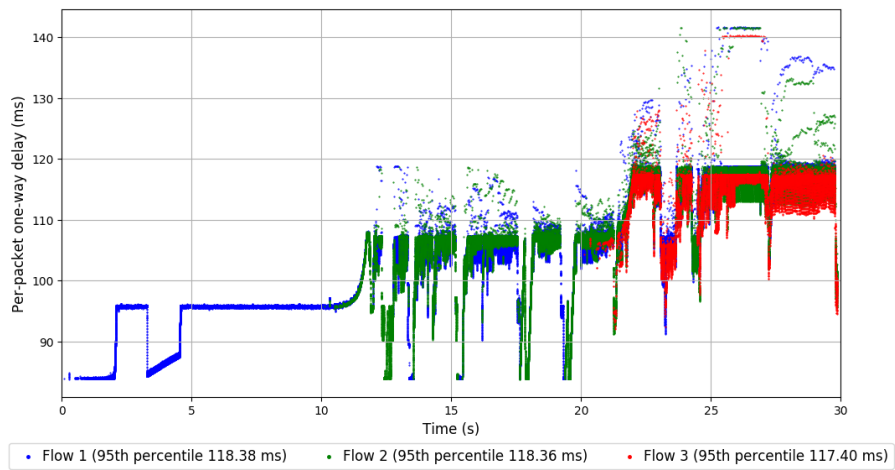
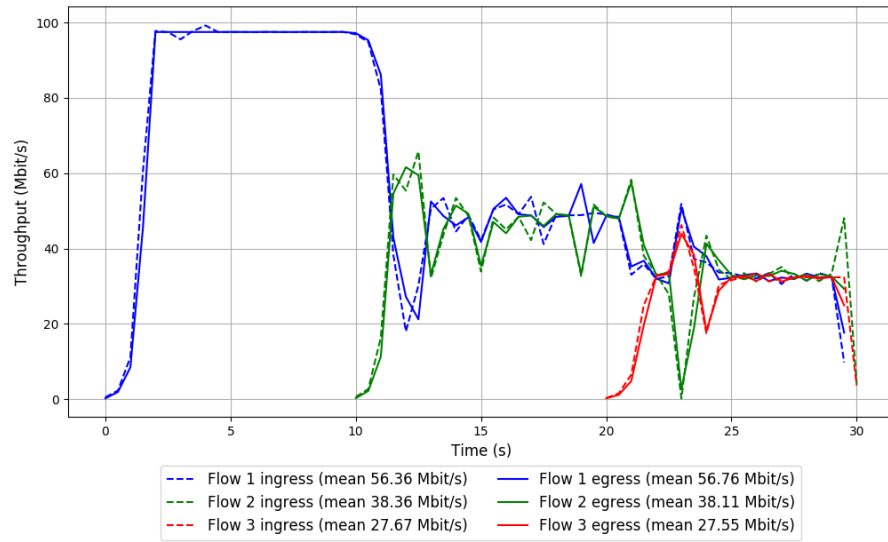
-- Flow 3:

Average throughput: 27.55 Mbit/s

95th percentile per-packet one-way delay: 117.397 ms

Loss rate: 3.35%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-04-17 13:09:24

End at: 2018-04-17 13:09:54

Local clock offset: -5.734 ms

Remote clock offset: 5.076 ms

Below is generated by plot.py at 2018-04-17 20:36:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.10 Mbit/s

95th percentile per-packet one-way delay: 120.380 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 49.11 Mbit/s

95th percentile per-packet one-way delay: 120.061 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 38.61 Mbit/s

95th percentile per-packet one-way delay: 120.536 ms

Loss rate: 1.46%

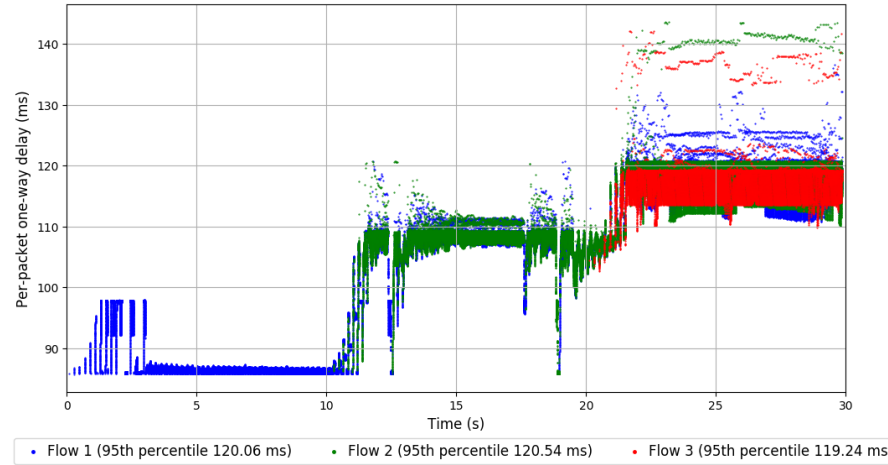
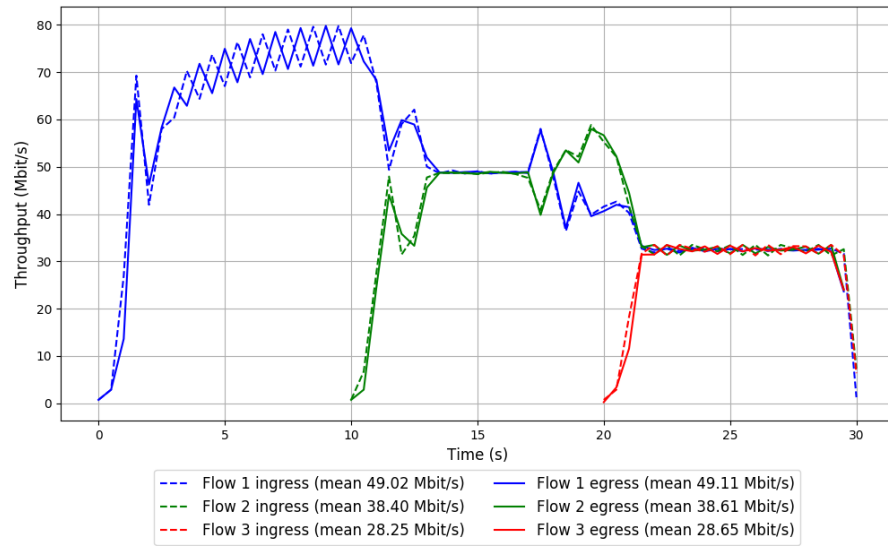
-- Flow 3:

Average throughput: 28.65 Mbit/s

95th percentile per-packet one-way delay: 119.242 ms

Loss rate: 3.81%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-04-17 13:31:58

End at: 2018-04-17 13:32:28

Local clock offset: -2.573 ms

Remote clock offset: 5.787 ms

Below is generated by plot.py at 2018-04-17 20:36:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.72 Mbit/s

95th percentile per-packet one-way delay: 120.481 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 48.30 Mbit/s

95th percentile per-packet one-way delay: 119.419 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 39.83 Mbit/s

95th percentile per-packet one-way delay: 119.342 ms

Loss rate: 1.36%

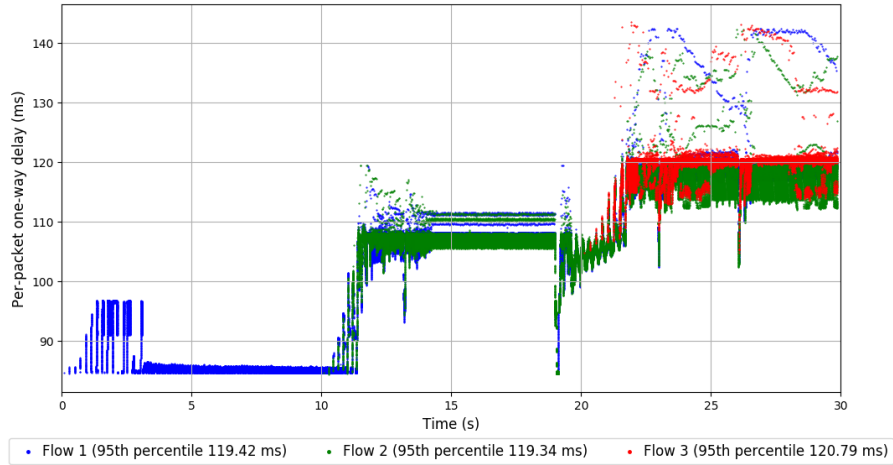
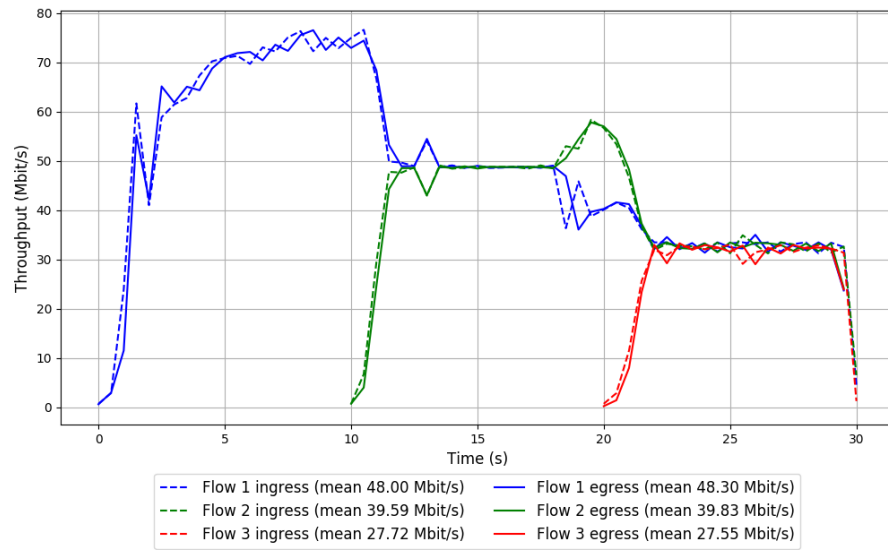
-- Flow 3:

Average throughput: 27.55 Mbit/s

95th percentile per-packet one-way delay: 120.789 ms

Loss rate: 3.03%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-04-17 13:54:17

End at: 2018-04-17 13:54:47

Local clock offset: -0.617 ms

Remote clock offset: 6.261 ms

Below is generated by plot.py at 2018-04-17 20:36:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.76 Mbit/s

95th percentile per-packet one-way delay: 120.953 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 51.94 Mbit/s

95th percentile per-packet one-way delay: 119.393 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 39.15 Mbit/s

95th percentile per-packet one-way delay: 121.232 ms

Loss rate: 1.44%

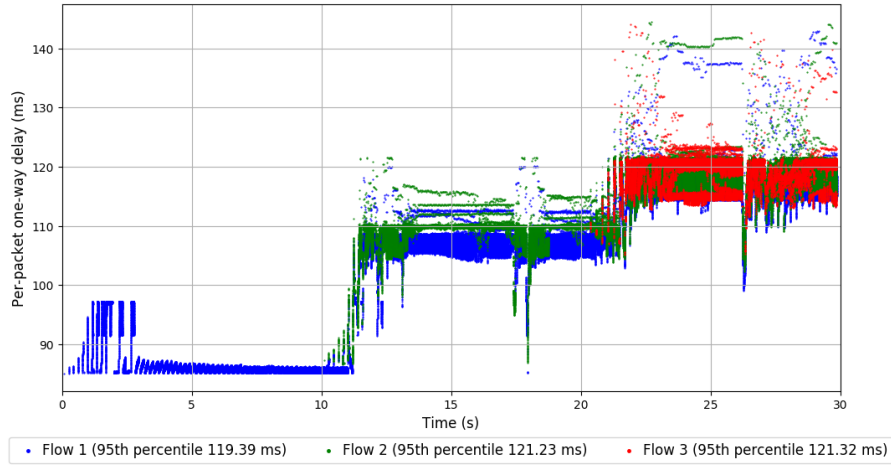
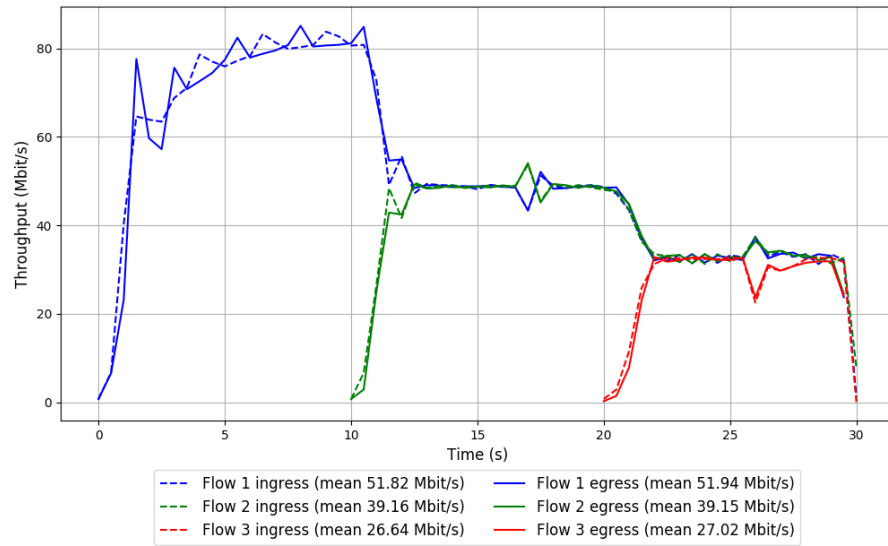
-- Flow 3:

Average throughput: 27.02 Mbit/s

95th percentile per-packet one-way delay: 121.318 ms

Loss rate: 2.97%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-04-17 14:16:30

End at: 2018-04-17 14:17:00

Local clock offset: -4.679 ms

Remote clock offset: 5.393 ms

Below is generated by plot.py at 2018-04-17 20:36:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.99 Mbit/s

95th percentile per-packet one-way delay: 96.294 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 31.23 Mbit/s

95th percentile per-packet one-way delay: 95.201 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 15.71 Mbit/s

95th percentile per-packet one-way delay: 93.168 ms

Loss rate: 1.40%

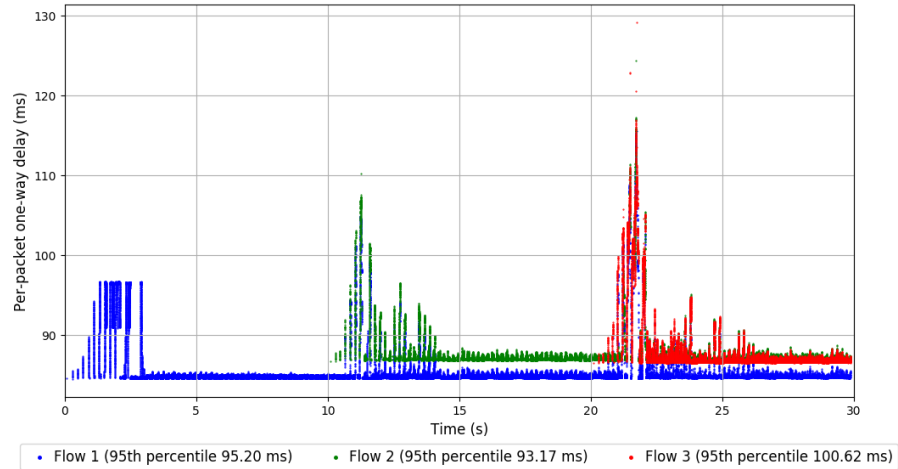
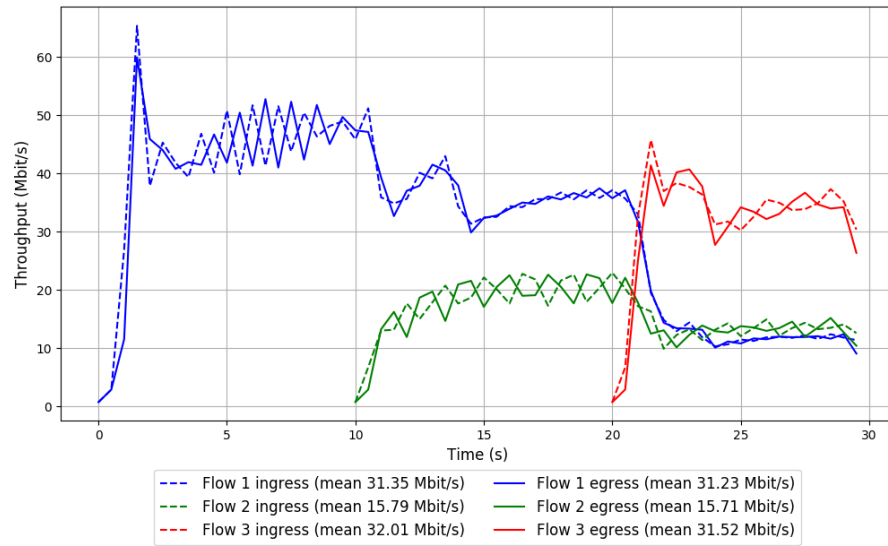
-- Flow 3:

Average throughput: 31.52 Mbit/s

95th percentile per-packet one-way delay: 100.625 ms

Loss rate: 3.33%

Run 4: Report of TCP Cubic — Data Link

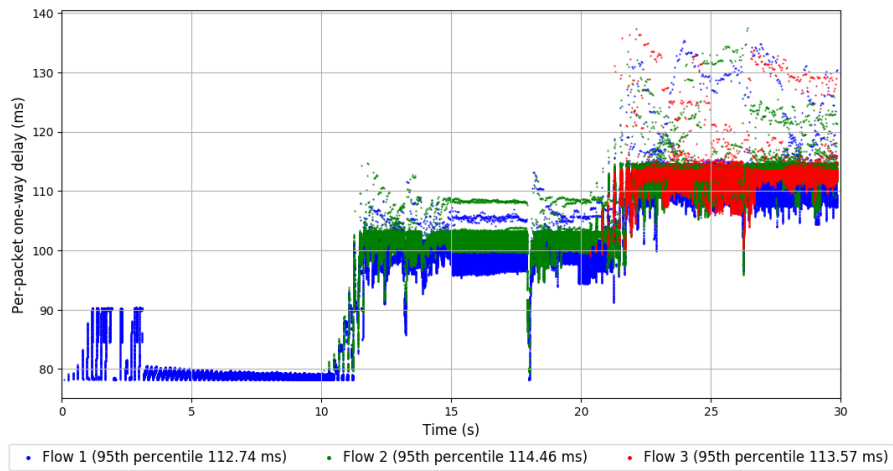
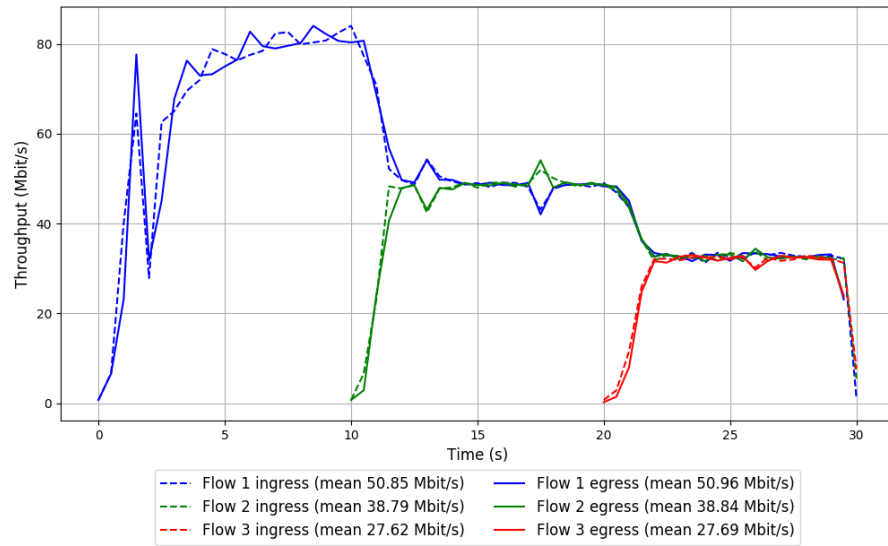


Run 5: Statistics of TCP Cubic

Start at: 2018-04-17 14:38:47
End at: 2018-04-17 14:39:17
Local clock offset: -5.648 ms
Remote clock offset: 10.566 ms

Below is generated by plot.py at 2018-04-17 20:36:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.80 Mbit/s
95th percentile per-packet one-way delay: 113.588 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 50.96 Mbit/s
95th percentile per-packet one-way delay: 112.744 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 38.84 Mbit/s
95th percentile per-packet one-way delay: 114.460 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 27.69 Mbit/s
95th percentile per-packet one-way delay: 113.570 ms
Loss rate: 4.09%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-04-17 15:01:12

End at: 2018-04-17 15:01:42

Local clock offset: -5.411 ms

Remote clock offset: 4.548 ms

Below is generated by plot.py at 2018-04-17 20:36:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.38 Mbit/s

95th percentile per-packet one-way delay: 119.097 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 51.42 Mbit/s

95th percentile per-packet one-way delay: 119.711 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 38.89 Mbit/s

95th percentile per-packet one-way delay: 118.860 ms

Loss rate: 1.43%

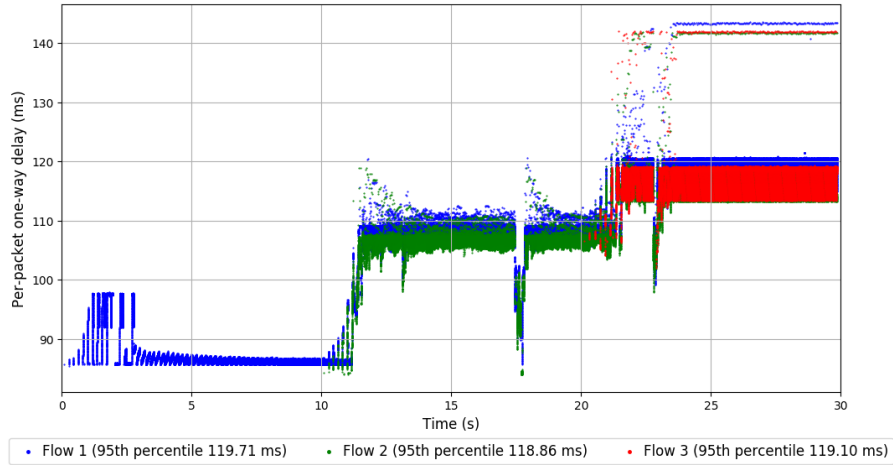
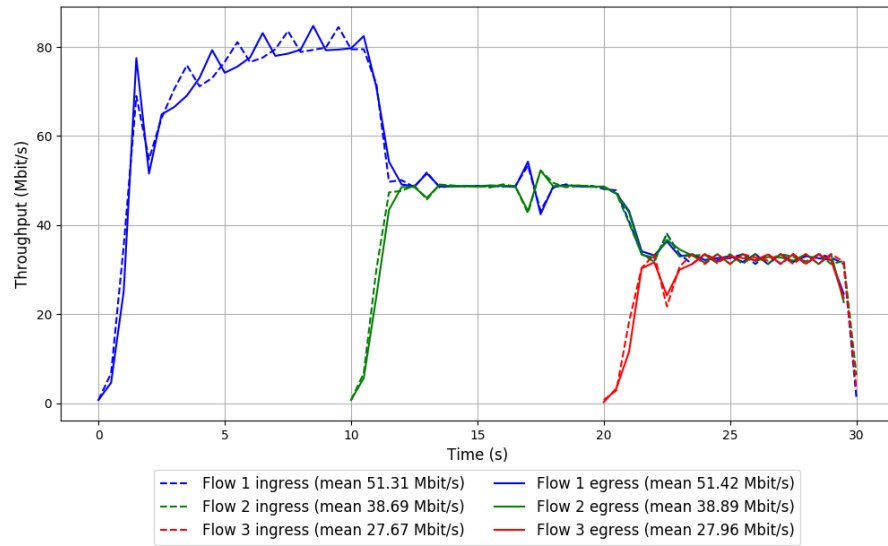
-- Flow 3:

Average throughput: 27.96 Mbit/s

95th percentile per-packet one-way delay: 119.102 ms

Loss rate: 3.42%

Run 6: Report of TCP Cubic — Data Link

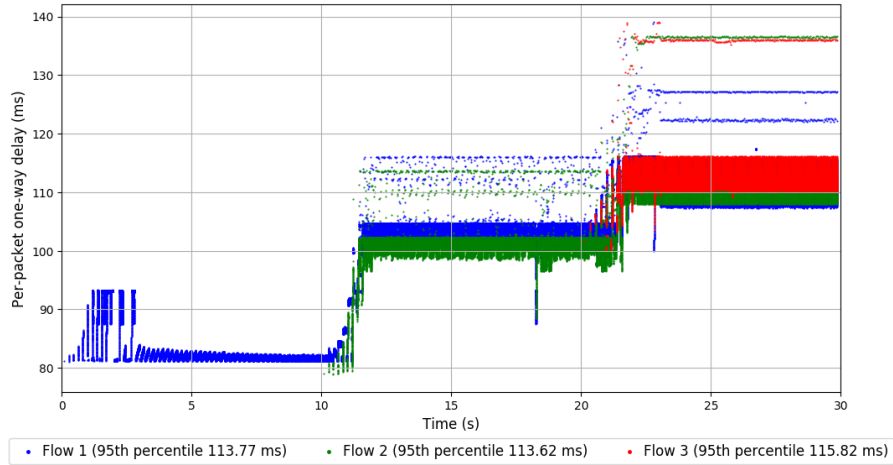
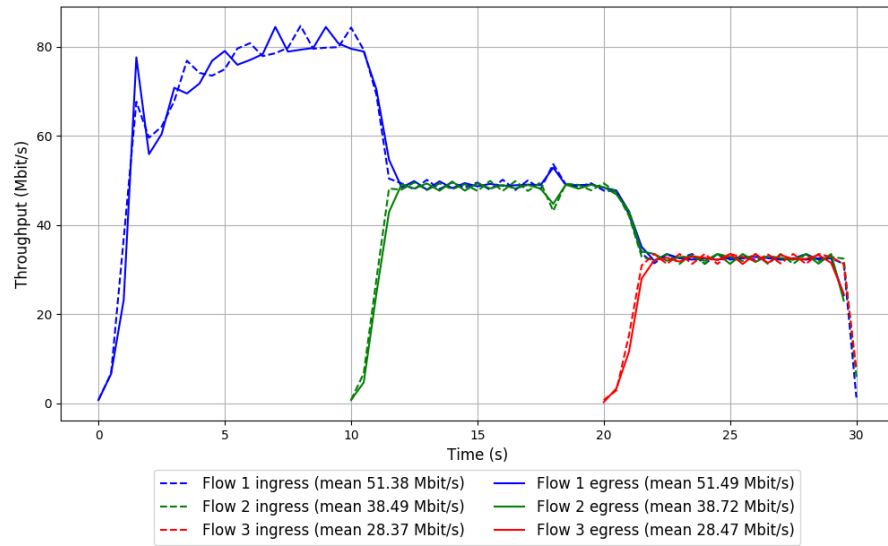


Run 7: Statistics of TCP Cubic

Start at: 2018-04-17 15:23:27
End at: 2018-04-17 15:23:57
Local clock offset: -5.482 ms
Remote clock offset: 10.795 ms

Below is generated by plot.py at 2018-04-17 20:37:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.49 Mbit/s
95th percentile per-packet one-way delay: 114.188 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 51.49 Mbit/s
95th percentile per-packet one-way delay: 113.772 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 38.72 Mbit/s
95th percentile per-packet one-way delay: 113.617 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 28.47 Mbit/s
95th percentile per-packet one-way delay: 115.817 ms
Loss rate: 3.91%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-04-17 15:45:46

End at: 2018-04-17 15:46:16

Local clock offset: -4.797 ms

Remote clock offset: 5.714 ms

Below is generated by plot.py at 2018-04-17 20:37:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 50.94 Mbit/s

95th percentile per-packet one-way delay: 97.801 ms

Loss rate: 2.26%

-- Flow 1:

Average throughput: 23.30 Mbit/s

95th percentile per-packet one-way delay: 97.793 ms

Loss rate: 1.70%

-- Flow 2:

Average throughput: 23.58 Mbit/s

95th percentile per-packet one-way delay: 98.689 ms

Loss rate: 2.55%

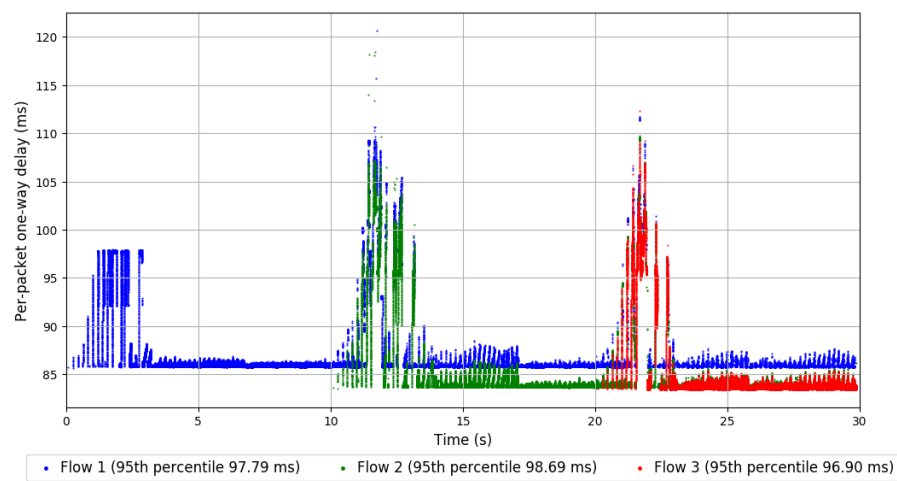
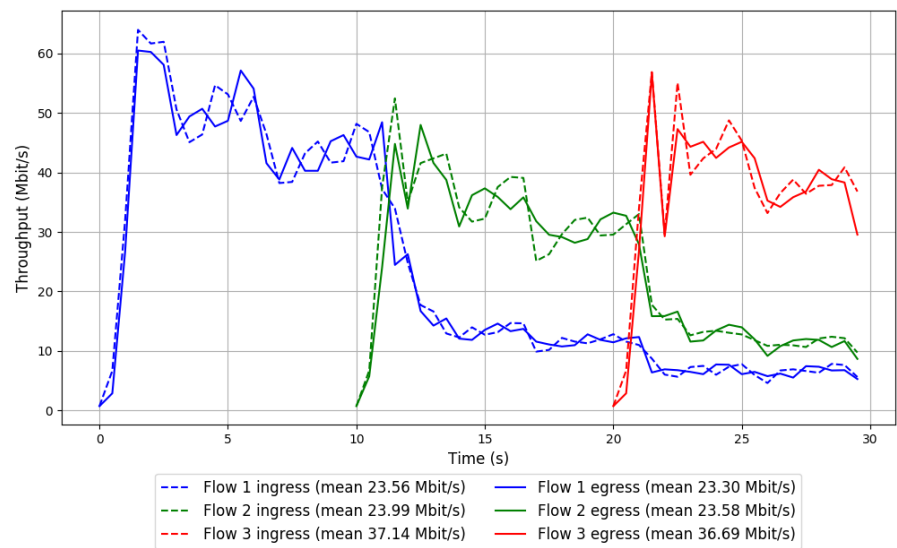
-- Flow 3:

Average throughput: 36.69 Mbit/s

95th percentile per-packet one-way delay: 96.900 ms

Loss rate: 2.97%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-04-17 16:08:06

End at: 2018-04-17 16:08:36

Local clock offset: -4.834 ms

Remote clock offset: 3.737 ms

Below is generated by plot.py at 2018-04-17 20:37:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.20 Mbit/s

95th percentile per-packet one-way delay: 96.759 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 30.03 Mbit/s

95th percentile per-packet one-way delay: 98.165 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 19.80 Mbit/s

95th percentile per-packet one-way delay: 96.613 ms

Loss rate: 1.48%

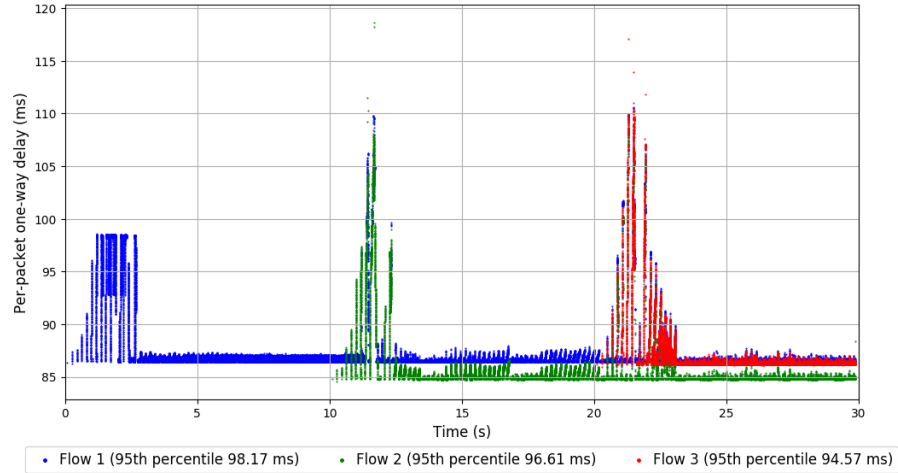
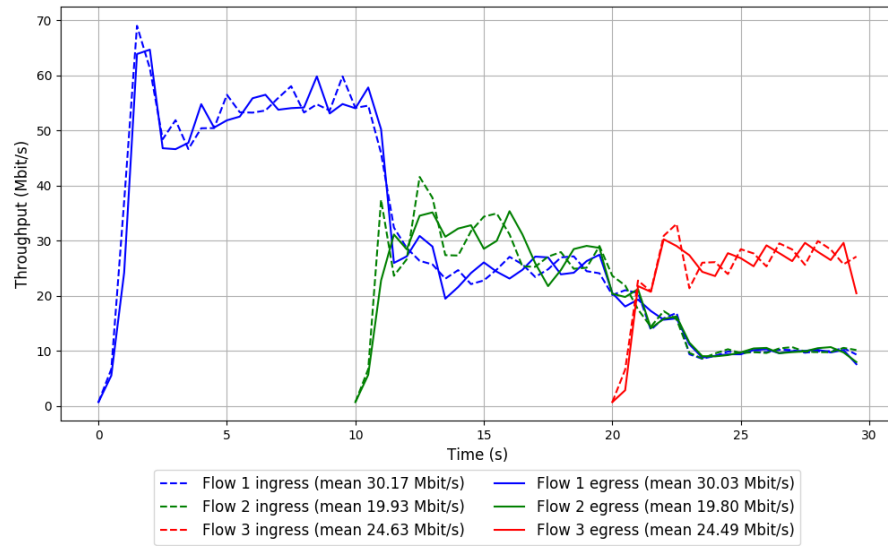
-- Flow 3:

Average throughput: 24.49 Mbit/s

95th percentile per-packet one-way delay: 94.573 ms

Loss rate: 2.16%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-04-17 16:30:32

End at: 2018-04-17 16:31:02

Local clock offset: -3.394 ms

Remote clock offset: 3.96 ms

Below is generated by plot.py at 2018-04-17 20:37:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.06 Mbit/s

95th percentile per-packet one-way delay: 117.898 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 51.07 Mbit/s

95th percentile per-packet one-way delay: 117.038 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 38.75 Mbit/s

95th percentile per-packet one-way delay: 118.246 ms

Loss rate: 1.32%

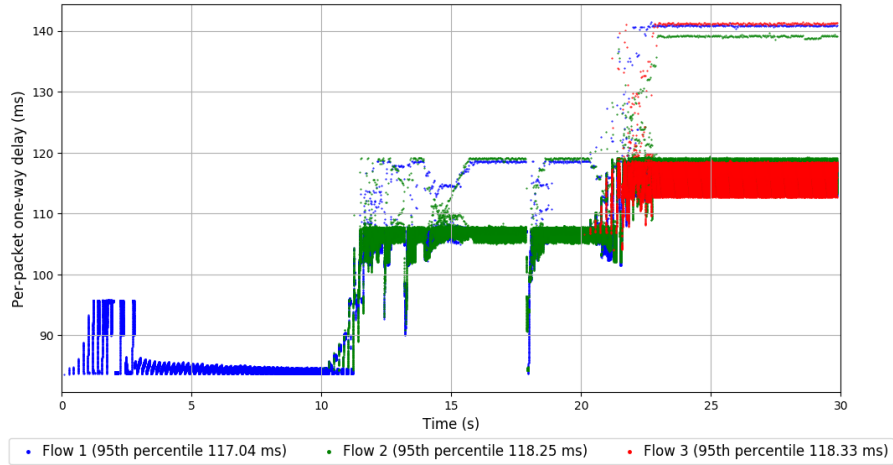
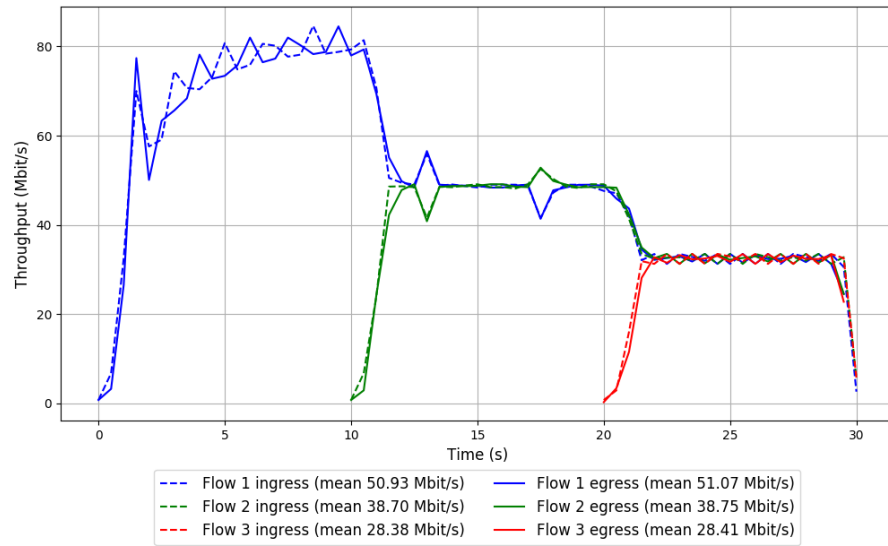
-- Flow 3:

Average throughput: 28.41 Mbit/s

95th percentile per-packet one-way delay: 118.327 ms

Loss rate: 3.91%

Run 10: Report of TCP Cubic — Data Link

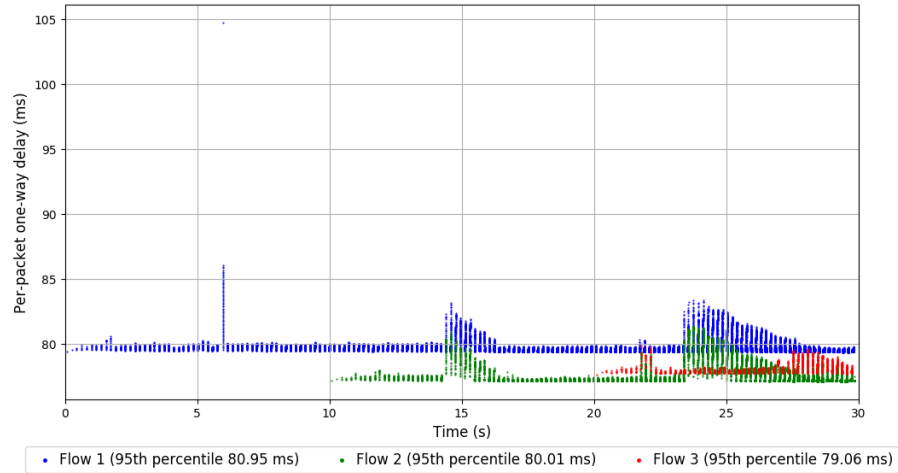
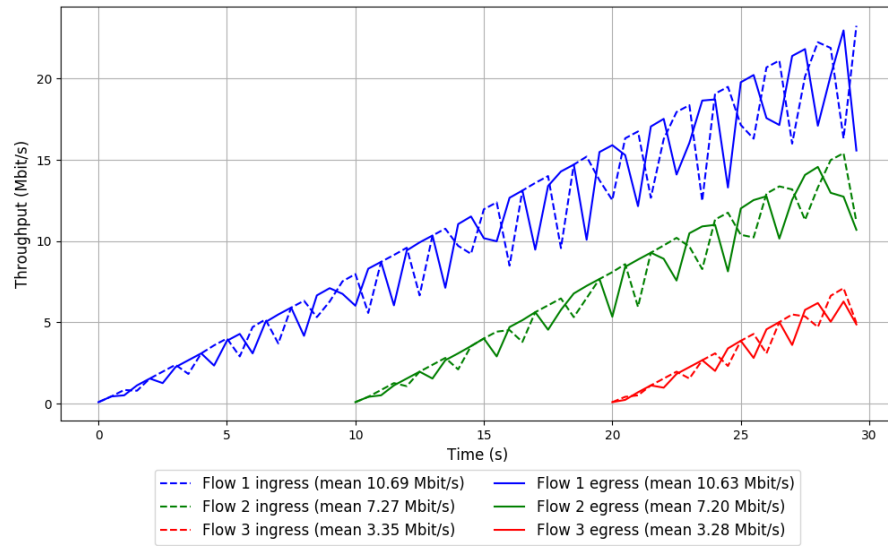



```
Run 1: Statistics of LEDBAT

Start at: 2018-04-17 13:25:28
End at: 2018-04-17 13:25:58
Local clock offset: -4.635 ms
Remote clock offset: 11.96 ms

# Below is generated by plot.py at 2018-04-17 20:37:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.46 Mbit/s
95th percentile per-packet one-way delay: 80.674 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 10.63 Mbit/s
95th percentile per-packet one-way delay: 80.950 ms
Loss rate: 1.23%
-- Flow 2:
Average throughput: 7.20 Mbit/s
95th percentile per-packet one-way delay: 80.009 ms
Loss rate: 1.79%
-- Flow 3:
Average throughput: 3.28 Mbit/s
95th percentile per-packet one-way delay: 79.061 ms
Loss rate: 3.81%
```

Run 1: Report of LEDBAT — Data Link

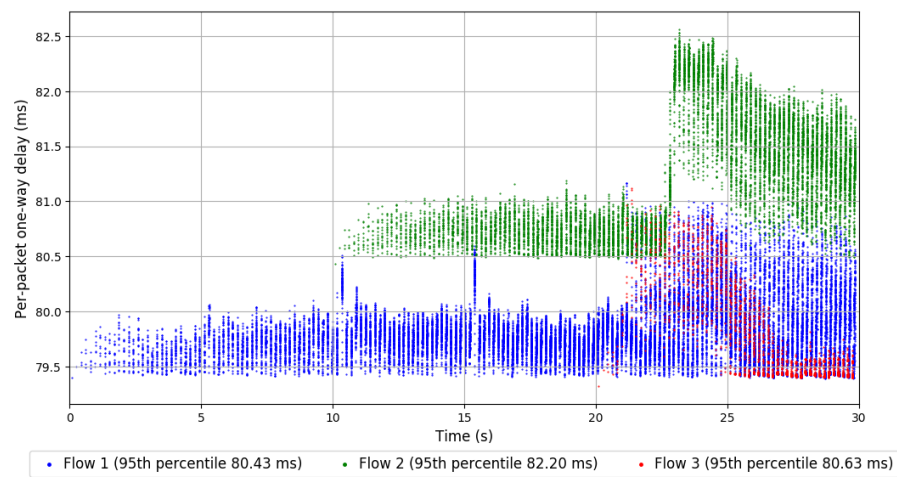
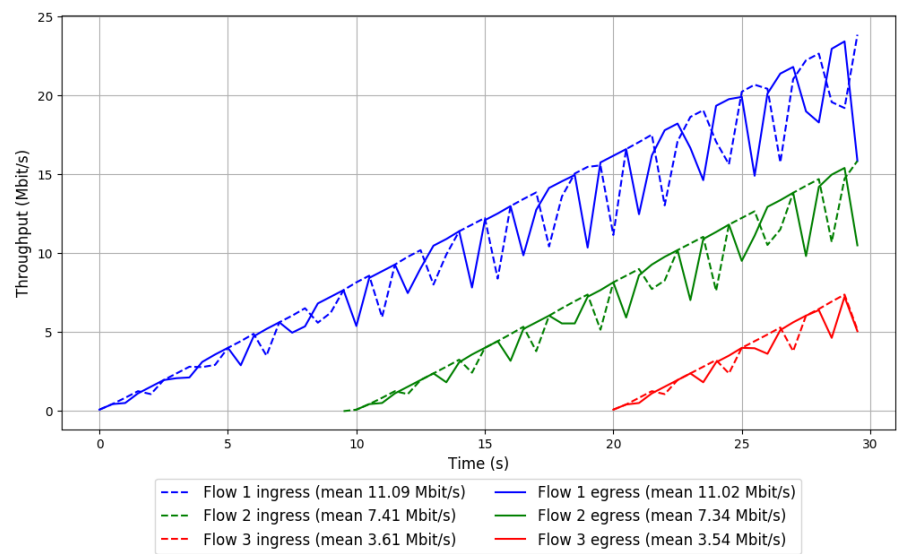


Run 2: Statistics of LEDBAT

Start at: 2018-04-17 13:47:48
End at: 2018-04-17 13:48:18
Local clock offset: -1.006 ms
Remote clock offset: 11.899 ms

Below is generated by plot.py at 2018-04-17 20:37:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 17.04 Mbit/s
95th percentile per-packet one-way delay: 81.789 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 11.02 Mbit/s
95th percentile per-packet one-way delay: 80.433 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 7.34 Mbit/s
95th percentile per-packet one-way delay: 82.201 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 3.54 Mbit/s
95th percentile per-packet one-way delay: 80.629 ms
Loss rate: 3.67%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-04-17 14:10:03

End at: 2018-04-17 14:10:33

Local clock offset: -5.728 ms

Remote clock offset: 5.463 ms

Below is generated by plot.py at 2018-04-17 20:37:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.82 Mbit/s

95th percentile per-packet one-way delay: 85.632 ms

Loss rate: 1.56%

-- Flow 1:

Average throughput: 10.89 Mbit/s

95th percentile per-packet one-way delay: 85.498 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 7.21 Mbit/s

95th percentile per-packet one-way delay: 84.513 ms

Loss rate: 1.83%

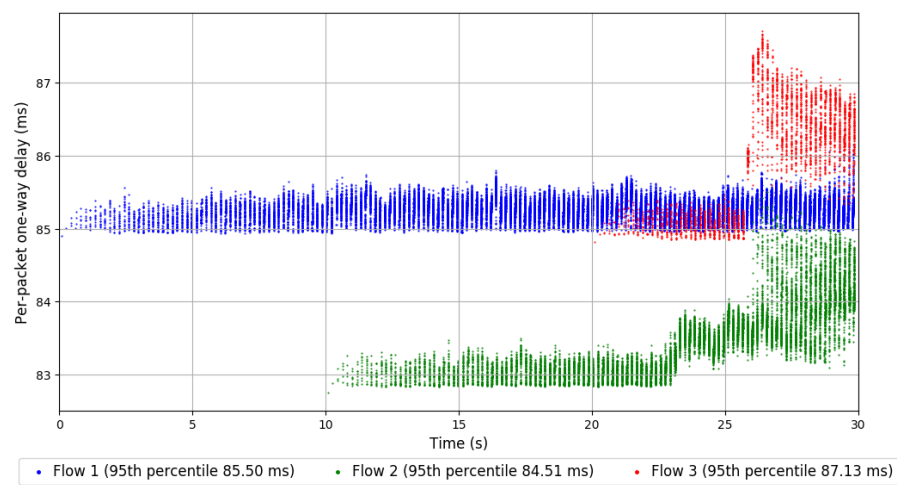
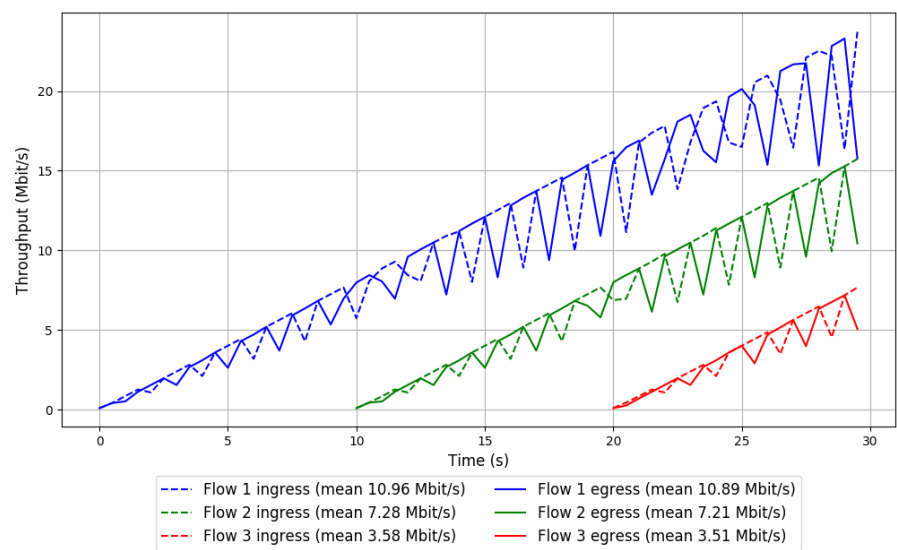
-- Flow 3:

Average throughput: 3.51 Mbit/s

95th percentile per-packet one-way delay: 87.133 ms

Loss rate: 3.67%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-04-17 14:32:14

End at: 2018-04-17 14:32:44

Local clock offset: -5.085 ms

Remote clock offset: 5.95 ms

Below is generated by plot.py at 2018-04-17 20:37:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.18 Mbit/s

95th percentile per-packet one-way delay: 88.121 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 10.77 Mbit/s

95th percentile per-packet one-way delay: 88.146 ms

Loss rate: 1.20%

-- Flow 2:

Average throughput: 5.36 Mbit/s

95th percentile per-packet one-way delay: 88.210 ms

Loss rate: 2.12%

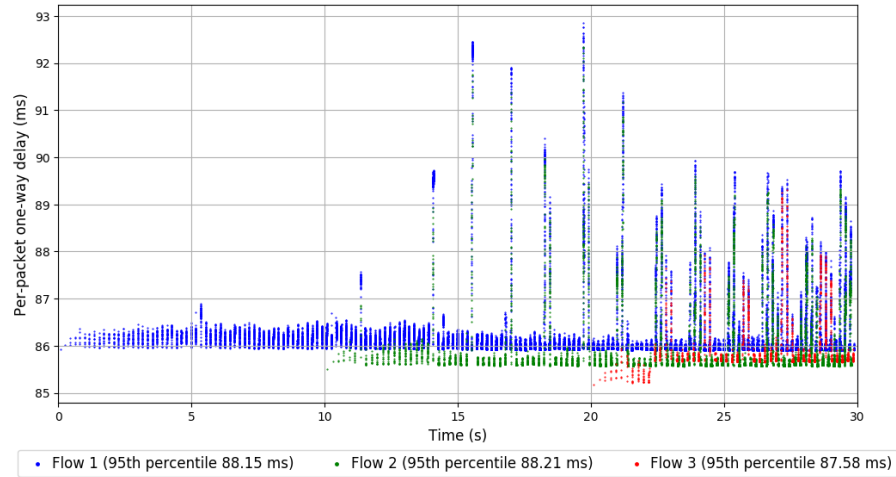
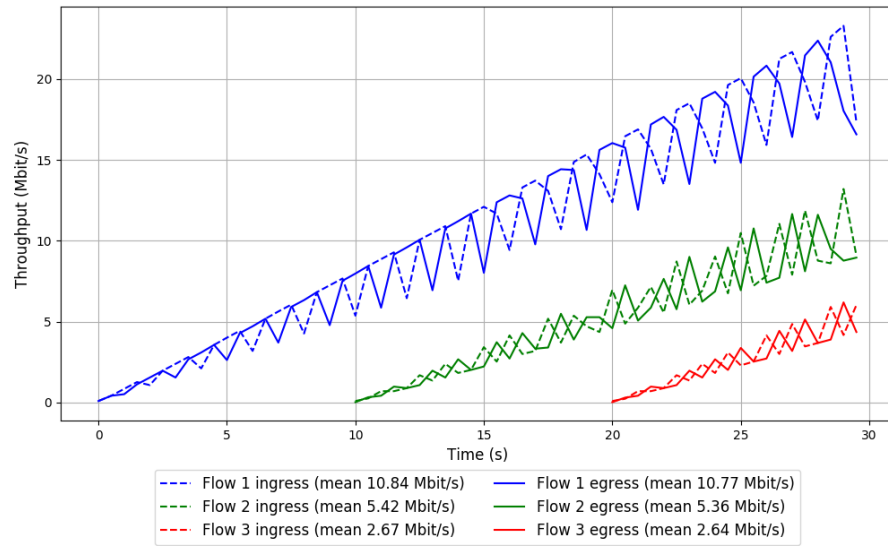
-- Flow 3:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 87.585 ms

Loss rate: 3.14%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-04-17 14:54:40

End at: 2018-04-17 14:55:10

Local clock offset: -5.485 ms

Remote clock offset: 4.559 ms

Below is generated by plot.py at 2018-04-17 20:37:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.74 Mbit/s

95th percentile per-packet one-way delay: 87.958 ms

Loss rate: 1.56%

-- Flow 1:

Average throughput: 9.97 Mbit/s

95th percentile per-packet one-way delay: 87.704 ms

Loss rate: 1.20%

-- Flow 2:

Average throughput: 7.08 Mbit/s

95th percentile per-packet one-way delay: 88.468 ms

Loss rate: 1.81%

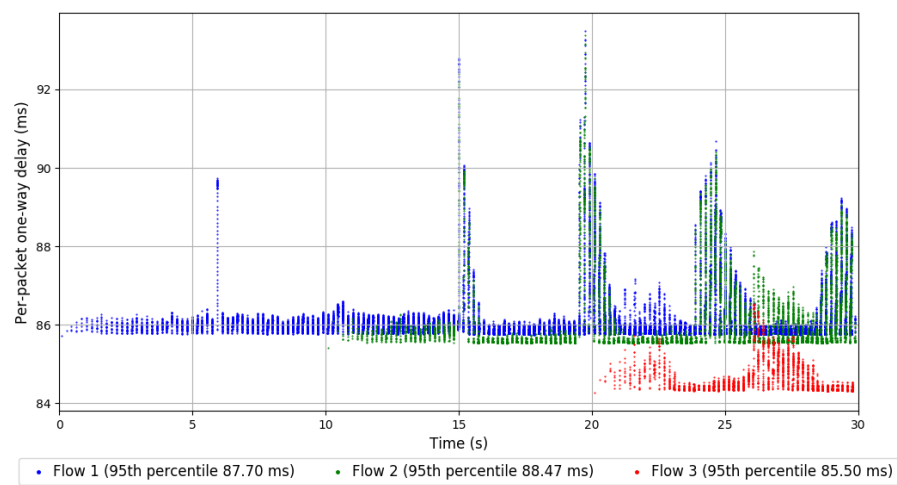
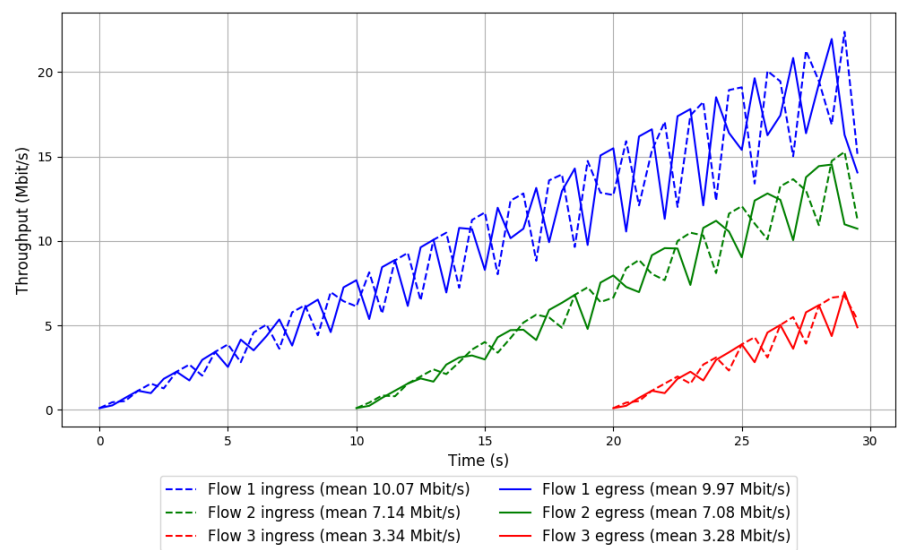
-- Flow 3:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 85.496 ms

Loss rate: 3.81%

Run 5: Report of LEDBAT — Data Link

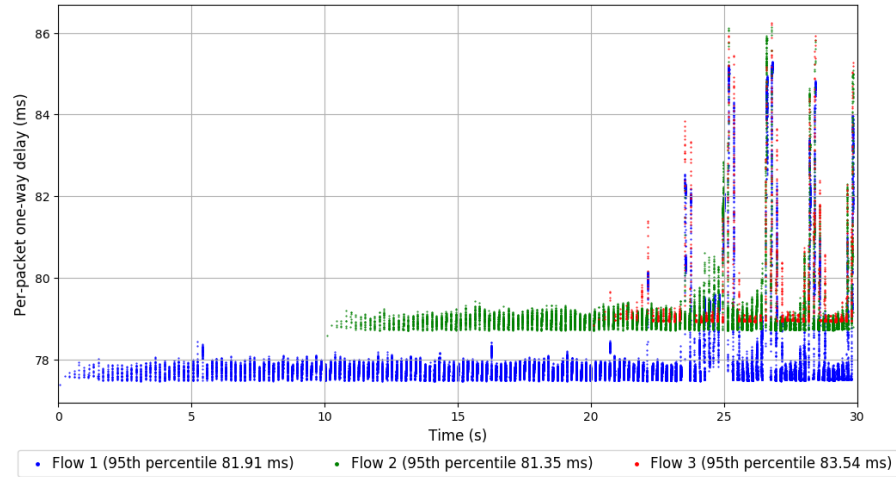
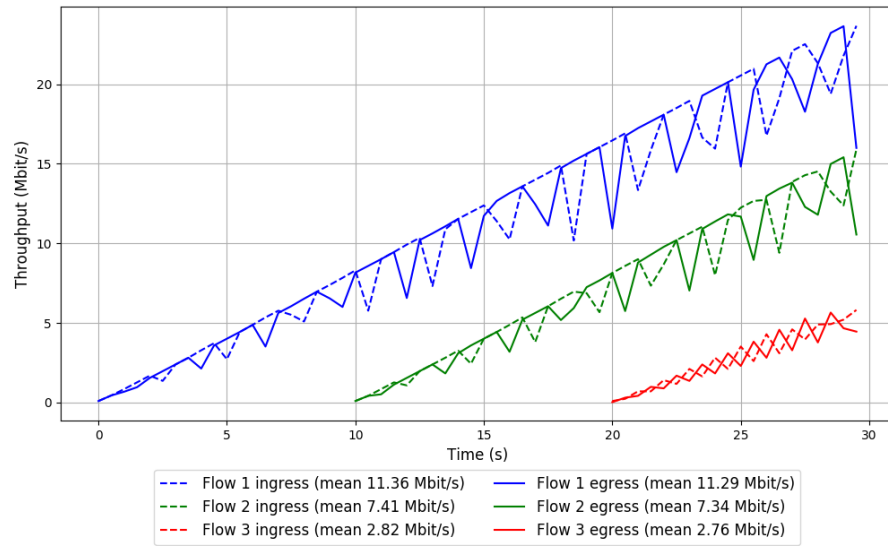


Run 6: Statistics of LEDBAT

Start at: 2018-04-17 15:16:57
End at: 2018-04-17 15:17:27
Local clock offset: -6.307 ms
Remote clock offset: 11.456 ms

Below is generated by plot.py at 2018-04-17 20:37:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 17.07 Mbit/s
95th percentile per-packet one-way delay: 81.904 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 11.29 Mbit/s
95th percentile per-packet one-way delay: 81.912 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 7.34 Mbit/s
95th percentile per-packet one-way delay: 81.346 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 2.76 Mbit/s
95th percentile per-packet one-way delay: 83.540 ms
Loss rate: 4.11%

Run 6: Report of LEDBAT — Data Link

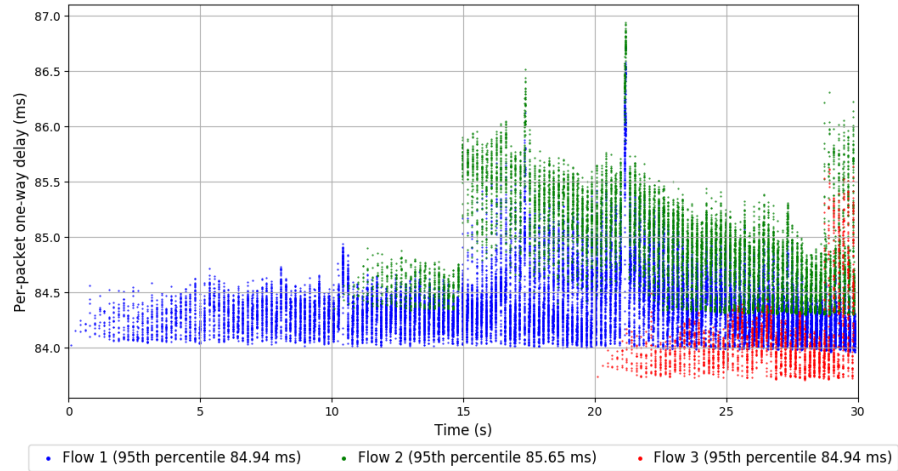
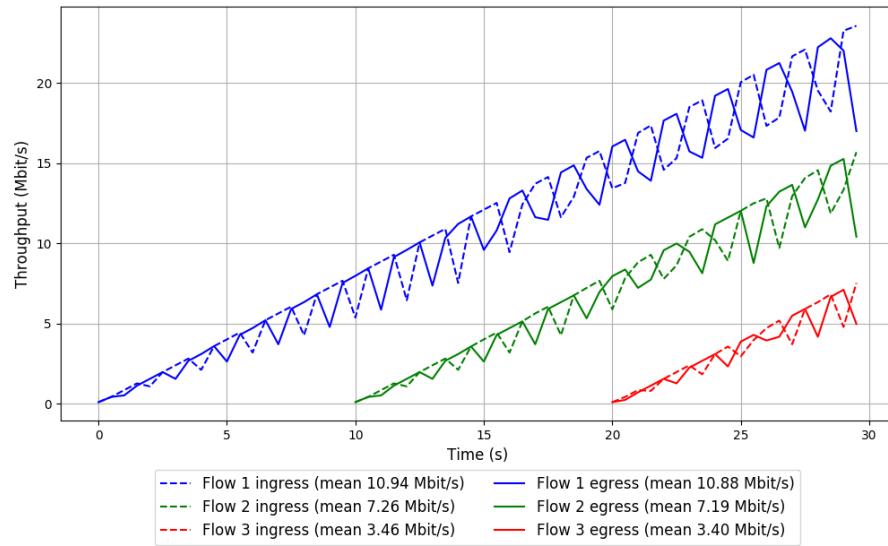


Run 7: Statistics of LEDBAT

Start at: 2018-04-17 15:39:16
End at: 2018-04-17 15:39:46
Local clock offset: -6.354 ms
Remote clock offset: 6.621 ms

Below is generated by plot.py at 2018-04-17 20:37:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 16.75 Mbit/s
95th percentile per-packet one-way delay: 85.359 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 10.88 Mbit/s
95th percentile per-packet one-way delay: 84.943 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 7.19 Mbit/s
95th percentile per-packet one-way delay: 85.654 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 3.40 Mbit/s
95th percentile per-packet one-way delay: 84.935 ms
Loss rate: 3.73%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-04-17 16:01:35

End at: 2018-04-17 16:02:05

Local clock offset: -4.805 ms

Remote clock offset: 4.793 ms

Below is generated by plot.py at 2018-04-17 20:37:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.49 Mbit/s

95th percentile per-packet one-way delay: 85.644 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 10.89 Mbit/s

95th percentile per-packet one-way delay: 84.599 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 7.23 Mbit/s

95th percentile per-packet one-way delay: 85.564 ms

Loss rate: 1.83%

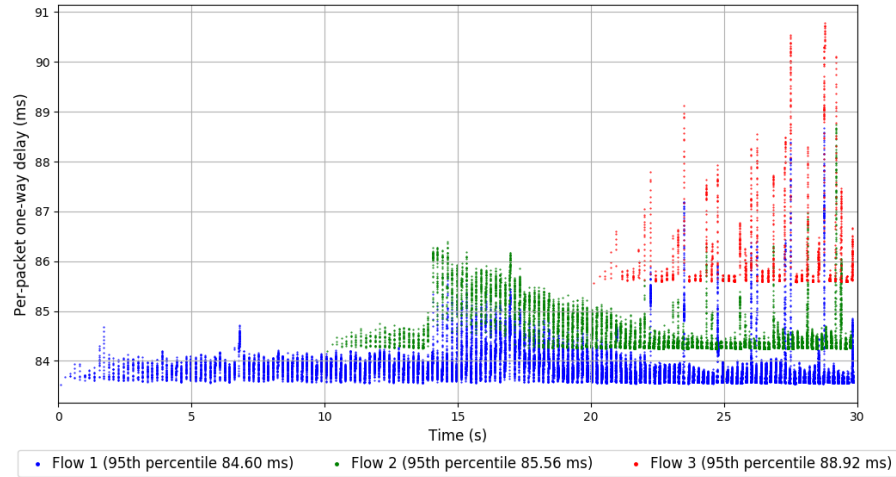
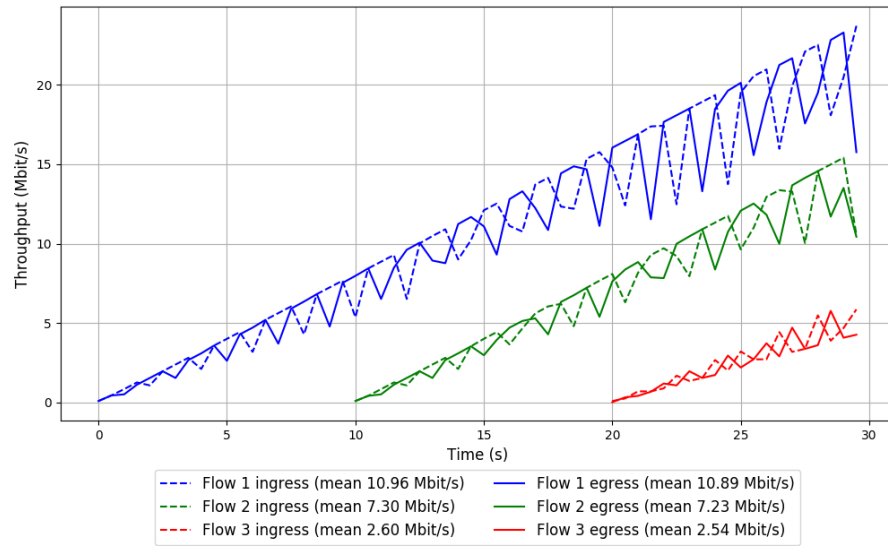
-- Flow 3:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 88.916 ms

Loss rate: 4.28%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-04-17 16:24:00

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

Local clock offset: -4.63 ms

Remote clock offset: 4.766 ms

Below is generated by plot.py at 2018-04-17 20:37:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.37 Mbit/s

95th percentile per-packet one-way delay: 86.684 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 10.61 Mbit/s

95th percentile per-packet one-way delay: 86.912 ms

Loss rate: 1.23%

-- Flow 2:

Average throughput: 5.46 Mbit/s

95th percentile per-packet one-way delay: 85.822 ms

Loss rate: 2.09%

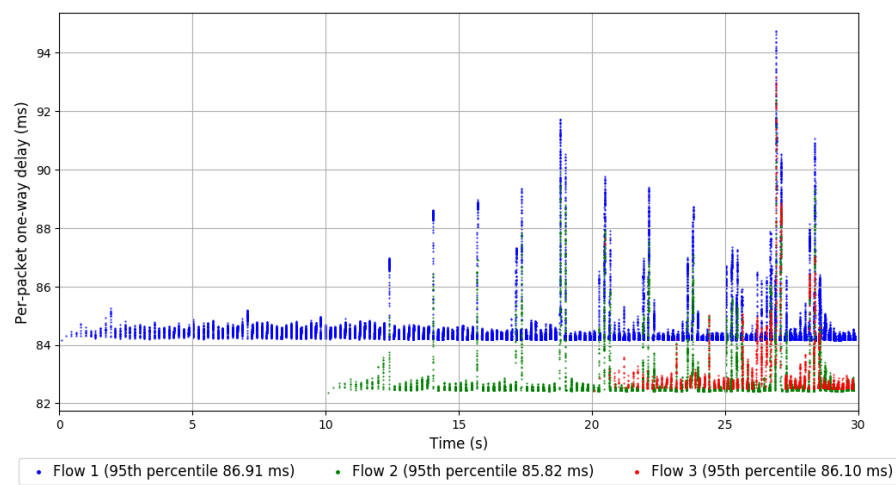
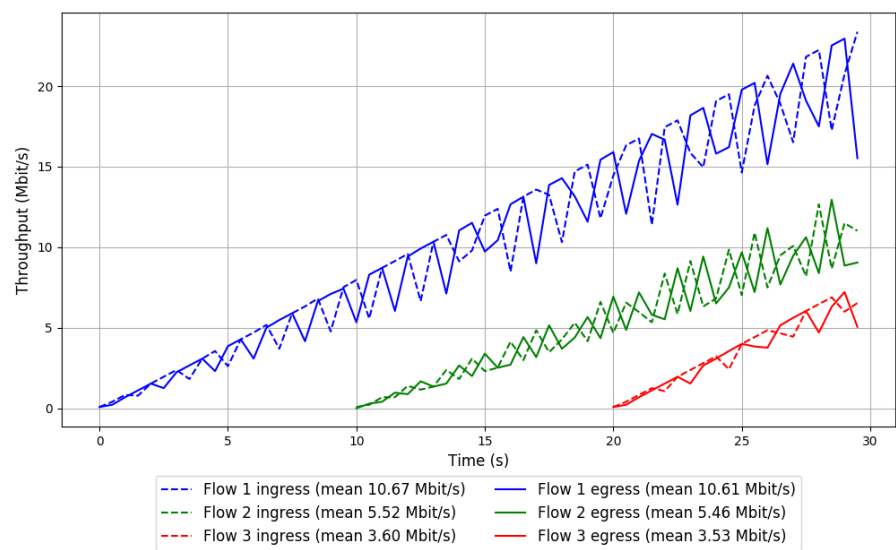
-- Flow 3:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 86.097 ms

Loss rate: 3.67%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-04-17 16:46:22

End at: 2018-04-17 16:46:52

Local clock offset: -2.701 ms

Remote clock offset: 4.709 ms

Below is generated by plot.py at 2018-04-17 20:37:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.04 Mbit/s

95th percentile per-packet one-way delay: 86.790 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 8.17 Mbit/s

95th percentile per-packet one-way delay: 86.904 ms

Loss rate: 1.40%

-- Flow 2:

Average throughput: 5.65 Mbit/s

95th percentile per-packet one-way delay: 86.453 ms

Loss rate: 1.21%

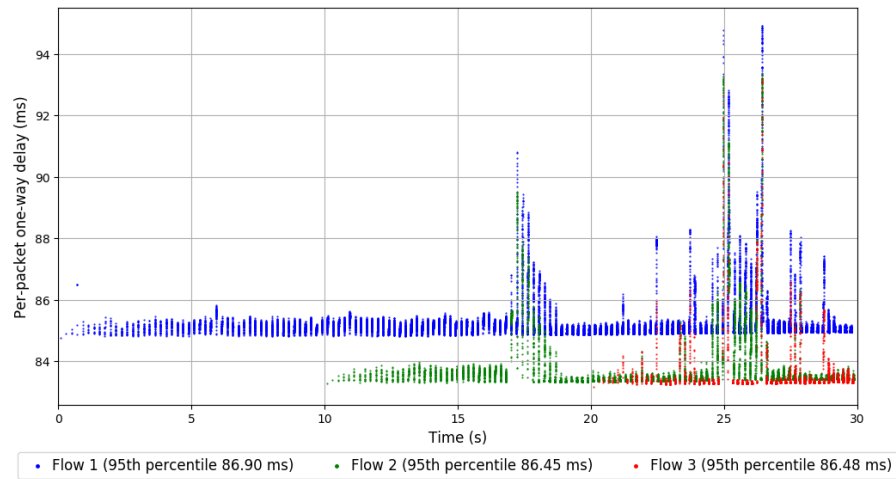
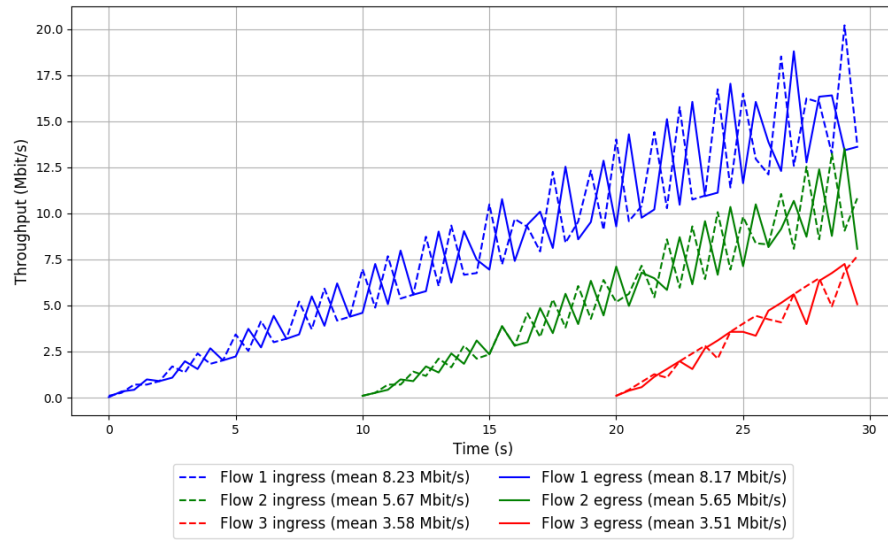
-- Flow 3:

Average throughput: 3.51 Mbit/s

95th percentile per-packet one-way delay: 86.478 ms

Loss rate: 3.67%

Run 10: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2018-04-17 13:18:50

End at: 2018-04-17 13:19:20

Local clock offset: -5.664 ms

Remote clock offset: 5.975 ms

Below is generated by plot.py at 2018-04-17 20:38:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.22 Mbit/s

95th percentile per-packet one-way delay: 116.767 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 60.13 Mbit/s

95th percentile per-packet one-way delay: 115.182 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 32.47 Mbit/s

95th percentile per-packet one-way delay: 117.623 ms

Loss rate: 1.03%

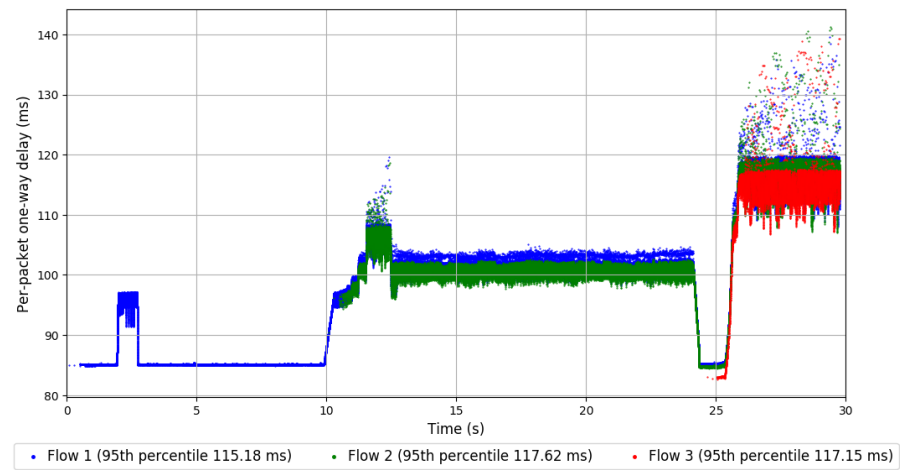
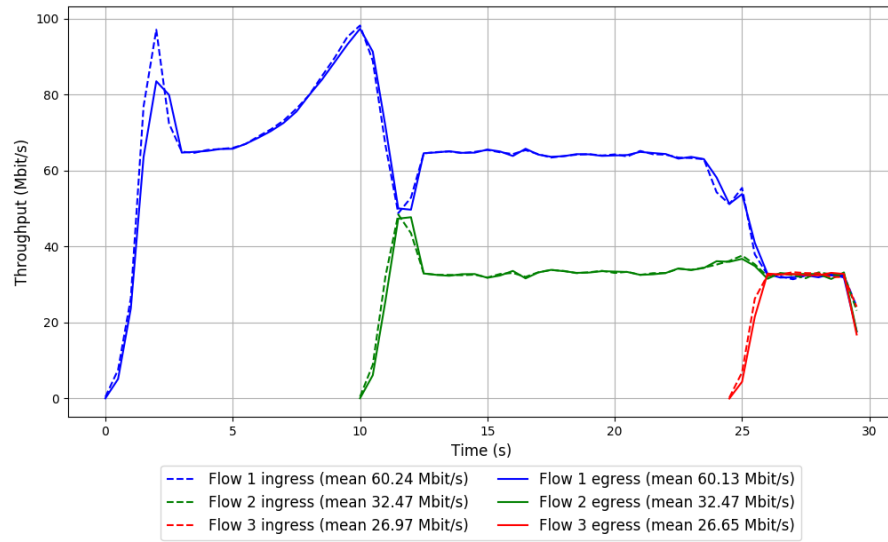
-- Flow 3:

Average throughput: 26.65 Mbit/s

95th percentile per-packet one-way delay: 117.152 ms

Loss rate: 4.91%

Run 1: Report of PCC-Allegro — Data Link

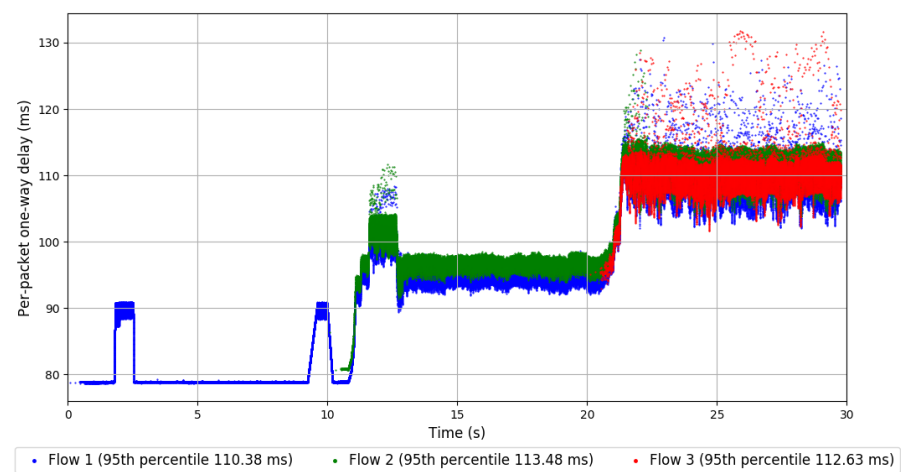
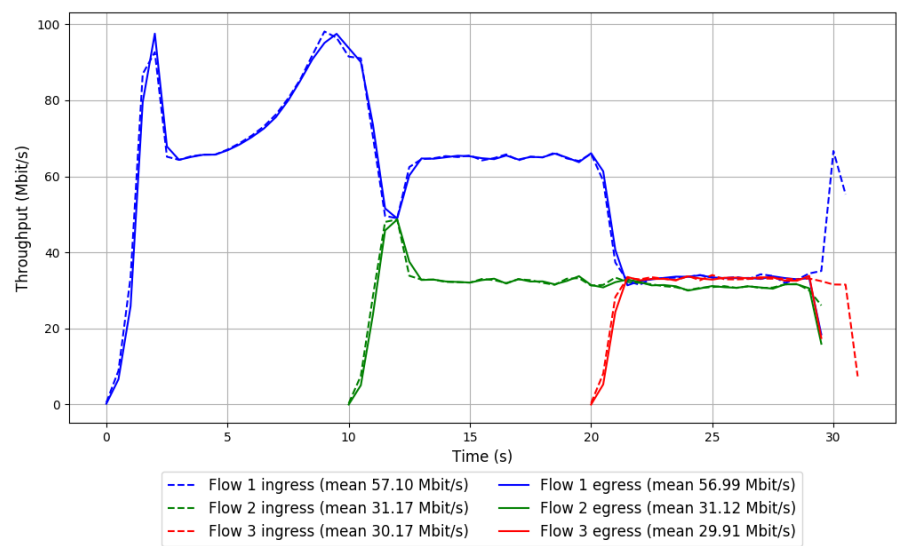


Run 2: Statistics of PCC-Allegro

Start at: 2018-04-17 13:41:11
End at: 2018-04-17 13:41:41
Local clock offset: -1.489 ms
Remote clock offset: 11.674 ms

Below is generated by plot.py at 2018-04-17 20:38:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.34 Mbit/s
95th percentile per-packet one-way delay: 112.293 ms
Loss rate: 4.70%
-- Flow 1:
Average throughput: 56.99 Mbit/s
95th percentile per-packet one-way delay: 110.382 ms
Loss rate: 4.15%
-- Flow 2:
Average throughput: 31.12 Mbit/s
95th percentile per-packet one-way delay: 113.478 ms
Loss rate: 1.35%
-- Flow 3:
Average throughput: 29.91 Mbit/s
95th percentile per-packet one-way delay: 112.629 ms
Loss rate: 13.77%

Run 2: Report of PCC-Allegro — Data Link

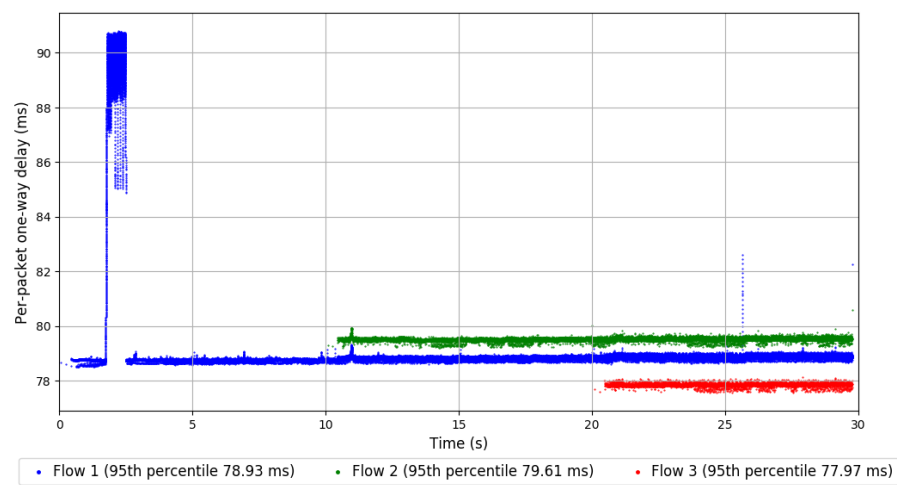
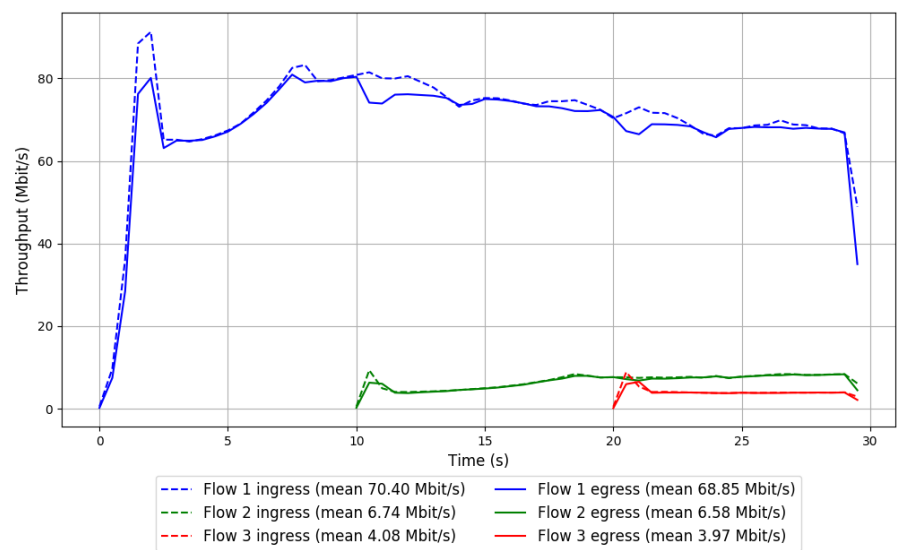


Run 3: Statistics of PCC-Allegro

Start at: 2018-04-17 14:03:28
End at: 2018-04-17 14:03:58
Local clock offset: -3.757 ms
Remote clock offset: 12.094 ms

Below is generated by plot.py at 2018-04-17 20:38:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 74.51 Mbit/s
95th percentile per-packet one-way delay: 79.533 ms
Loss rate: 2.83%
-- Flow 1:
Average throughput: 68.85 Mbit/s
95th percentile per-packet one-way delay: 78.929 ms
Loss rate: 2.77%
-- Flow 2:
Average throughput: 6.58 Mbit/s
95th percentile per-packet one-way delay: 79.612 ms
Loss rate: 3.26%
-- Flow 3:
Average throughput: 3.97 Mbit/s
95th percentile per-packet one-way delay: 77.973 ms
Loss rate: 4.48%

Run 3: Report of PCC-Allegro — Data Link

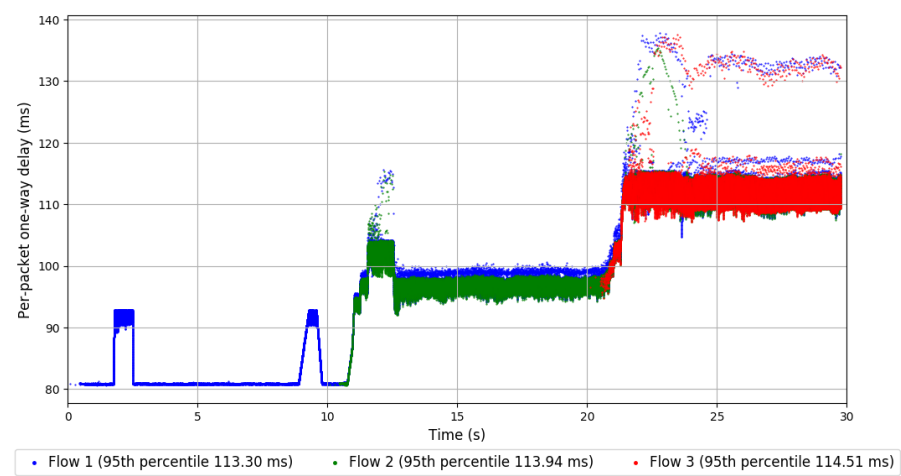
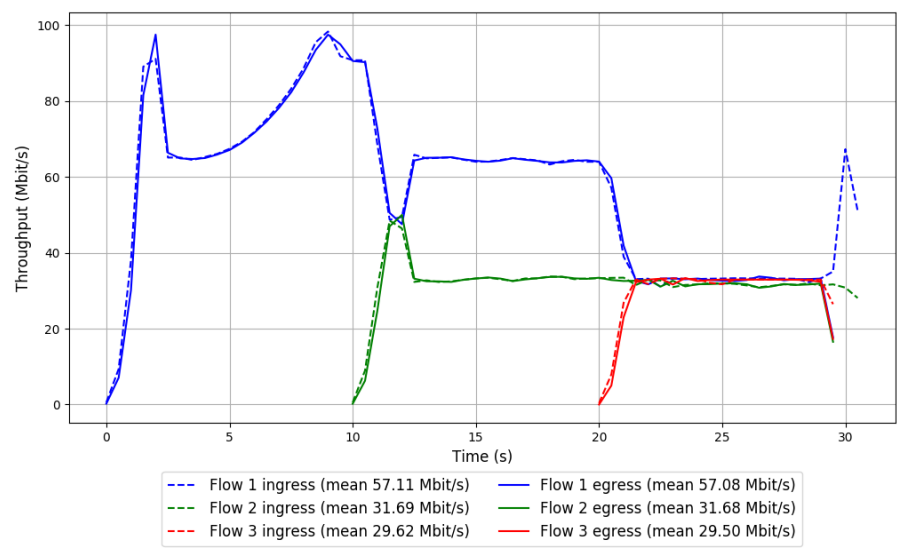


Run 4: Statistics of PCC-Allegro

Start at: 2018-04-17 14:25:38
End at: 2018-04-17 14:26:08
Local clock offset: -5.807 ms
Remote clock offset: 10.198 ms

Below is generated by plot.py at 2018-04-17 20:38:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.65 Mbit/s
95th percentile per-packet one-way delay: 113.800 ms
Loss rate: 4.42%
-- Flow 1:
Average throughput: 57.08 Mbit/s
95th percentile per-packet one-way delay: 113.299 ms
Loss rate: 4.06%
-- Flow 2:
Average throughput: 31.68 Mbit/s
95th percentile per-packet one-way delay: 113.935 ms
Loss rate: 6.09%
-- Flow 3:
Average throughput: 29.50 Mbit/s
95th percentile per-packet one-way delay: 114.512 ms
Loss rate: 2.82%

Run 4: Report of PCC-Allegro — Data Link

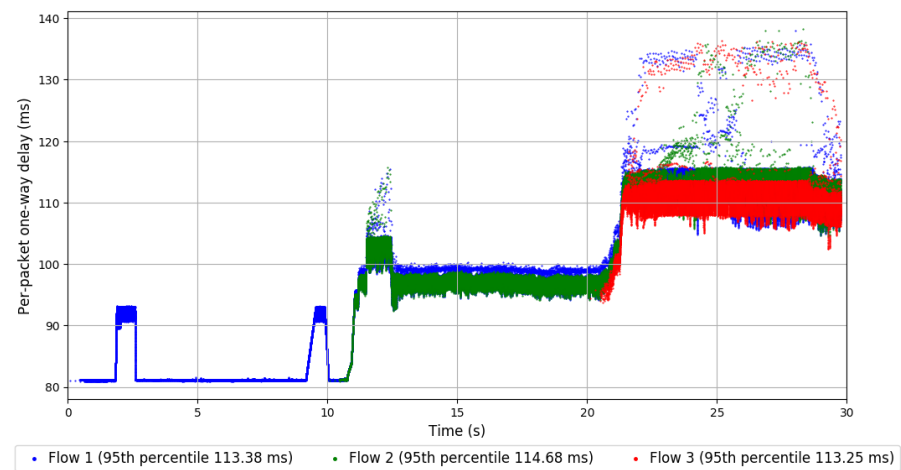
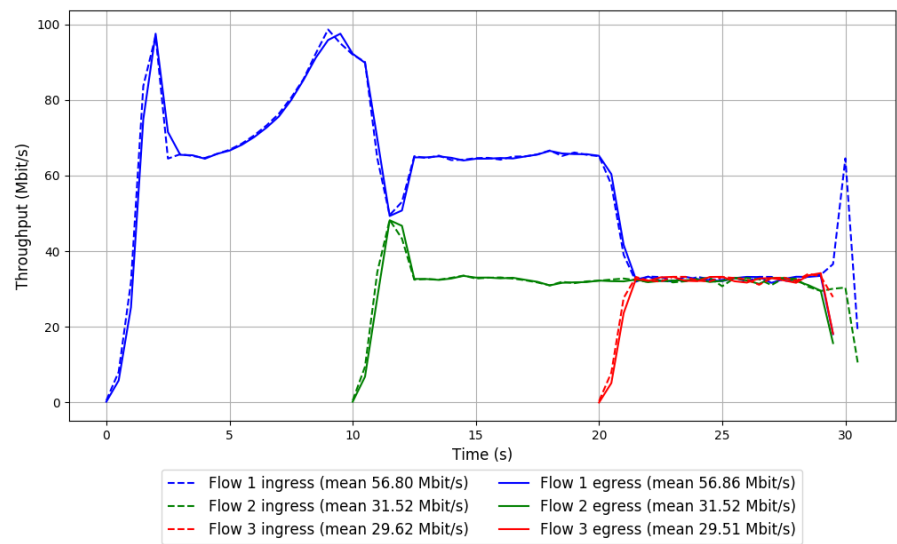


Run 5: Statistics of PCC-Allegro

Start at: 2018-04-17 14:47:57
End at: 2018-04-17 14:48:27
Local clock offset: -4.689 ms
Remote clock offset: 10.302 ms

Below is generated by plot.py at 2018-04-17 20:38:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.35 Mbit/s
95th percentile per-packet one-way delay: 113.895 ms
Loss rate: 3.50%
-- Flow 1:
Average throughput: 56.86 Mbit/s
95th percentile per-packet one-way delay: 113.377 ms
Loss rate: 3.12%
-- Flow 2:
Average throughput: 31.52 Mbit/s
95th percentile per-packet one-way delay: 114.678 ms
Loss rate: 4.76%
-- Flow 3:
Average throughput: 29.51 Mbit/s
95th percentile per-packet one-way delay: 113.249 ms
Loss rate: 2.91%

Run 5: Report of PCC-Allegro — Data Link

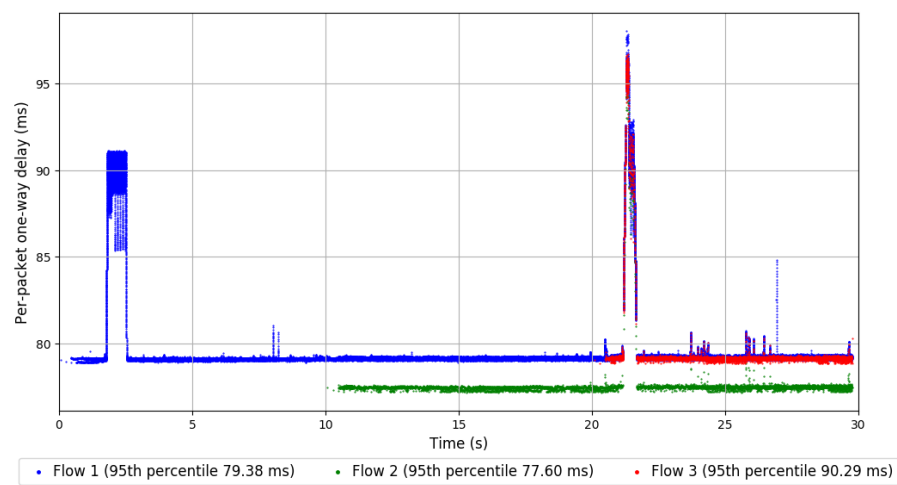
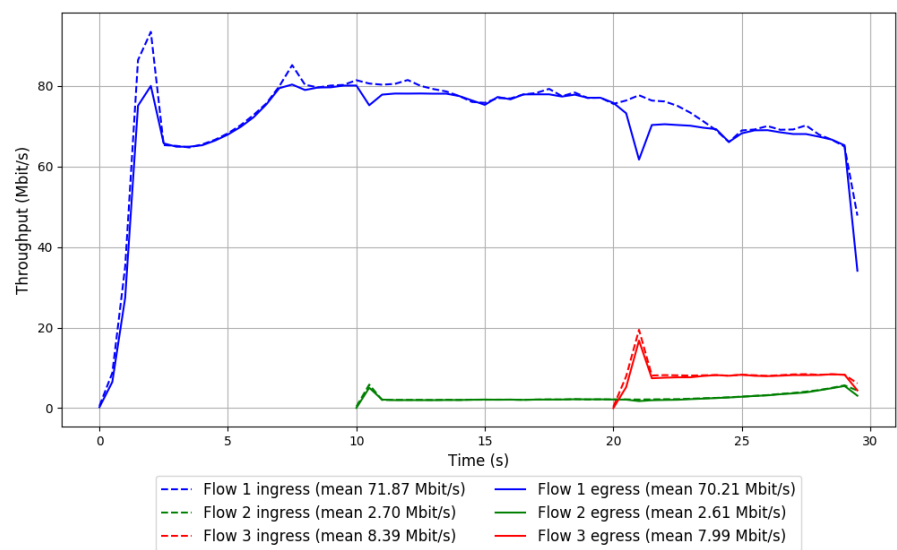


Run 6: Statistics of PCC-Allegro

Start at: 2018-04-17 15:10:21
End at: 2018-04-17 15:10:51
Local clock offset: -5.507 ms
Remote clock offset: 11.873 ms

Below is generated by plot.py at 2018-04-17 20:38:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 74.54 Mbit/s
95th percentile per-packet one-way delay: 79.460 ms
Loss rate: 3.06%
-- Flow 1:
Average throughput: 70.21 Mbit/s
95th percentile per-packet one-way delay: 79.380 ms
Loss rate: 2.90%
-- Flow 2:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 77.598 ms
Loss rate: 4.40%
-- Flow 3:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 90.289 ms
Loss rate: 6.43%

Run 6: Report of PCC-Allegro — Data Link

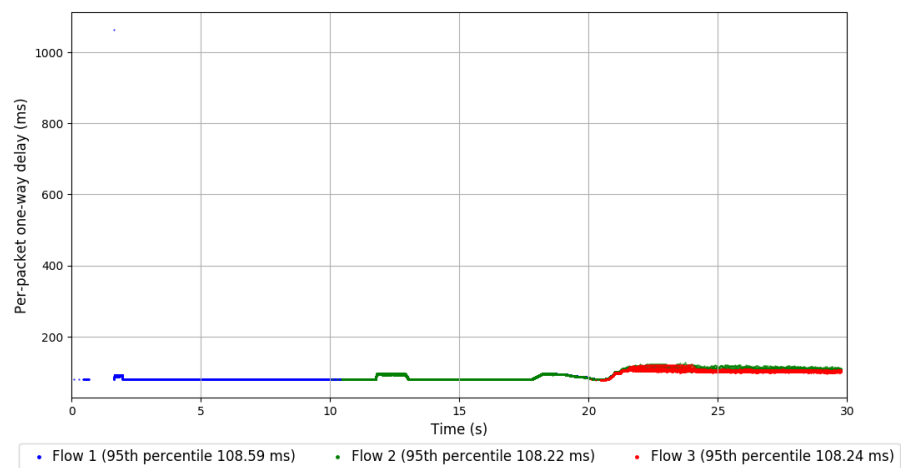
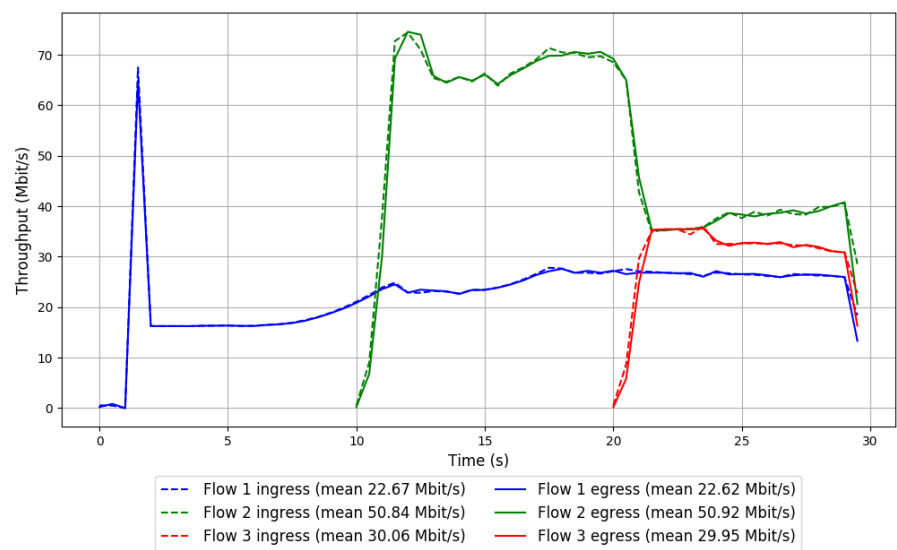


Run 7: Statistics of PCC-Allegro

Start at: 2018-04-17 15:32:40
End at: 2018-04-17 15:33:10
Local clock offset: -4.778 ms
Remote clock offset: 12.597 ms

Below is generated by plot.py at 2018-04-17 20:38:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 66.14 Mbit/s
95th percentile per-packet one-way delay: 108.354 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 22.62 Mbit/s
95th percentile per-packet one-way delay: 108.586 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 50.92 Mbit/s
95th percentile per-packet one-way delay: 108.221 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 29.95 Mbit/s
95th percentile per-packet one-way delay: 108.238 ms
Loss rate: 2.17%

Run 7: Report of PCC-Allegro — Data Link



Run 8: Statistics of PCC-Allegro

Start at: 2018-04-17 15:54:58

End at: 2018-04-17 15:55:28

Local clock offset: -4.81 ms

Remote clock offset: 9.816 ms

Below is generated by plot.py at 2018-04-17 20:39:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.41 Mbit/s

95th percentile per-packet one-way delay: 80.815 ms

Loss rate: 2.23%

-- Flow 1:

Average throughput: 71.28 Mbit/s

95th percentile per-packet one-way delay: 80.819 ms

Loss rate: 2.19%

-- Flow 2:

Average throughput: 2.70 Mbit/s

95th percentile per-packet one-way delay: 80.523 ms

Loss rate: 2.98%

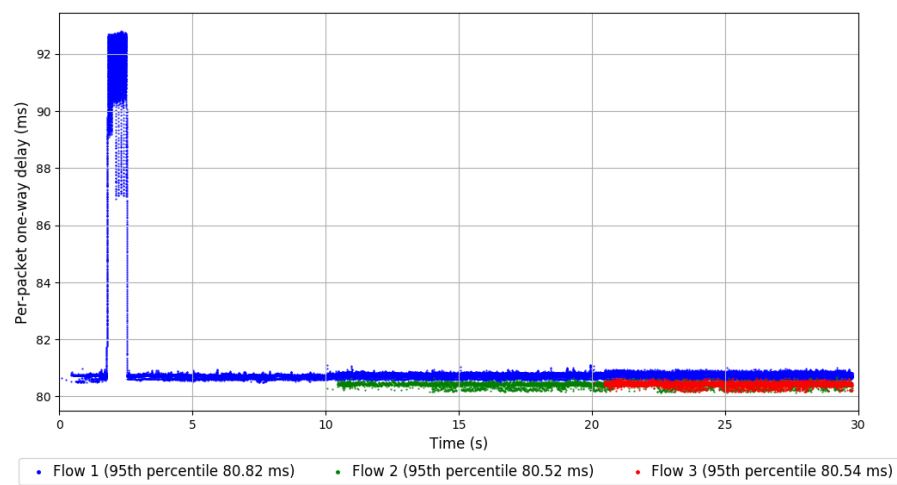
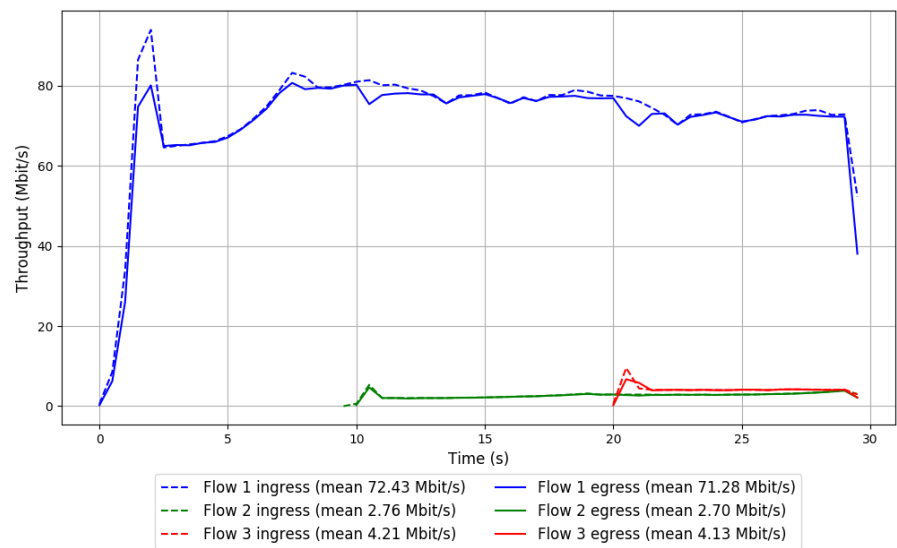
-- Flow 3:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 80.539 ms

Loss rate: 3.63%

Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-04-17 16:17:25

End at: 2018-04-17 16:17:55

Local clock offset: -5.379 ms

Remote clock offset: 3.896 ms

Below is generated by plot.py at 2018-04-17 20:40:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.66 Mbit/s

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

Loss rate: 1.55%

-- Flow 1:

Average throughput: 57.06 Mbit/s

95th percentile per-packet one-way delay: 117.256 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 31.60 Mbit/s

95th percentile per-packet one-way delay: 116.851 ms

Loss rate: 2.37%

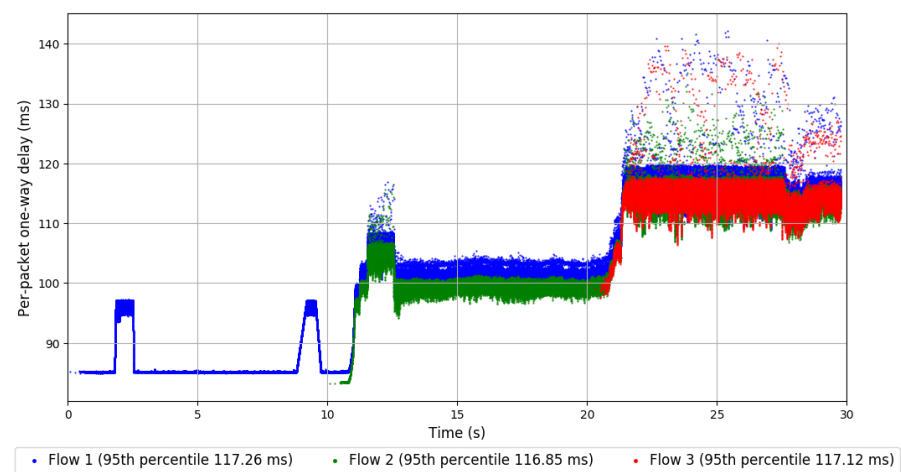
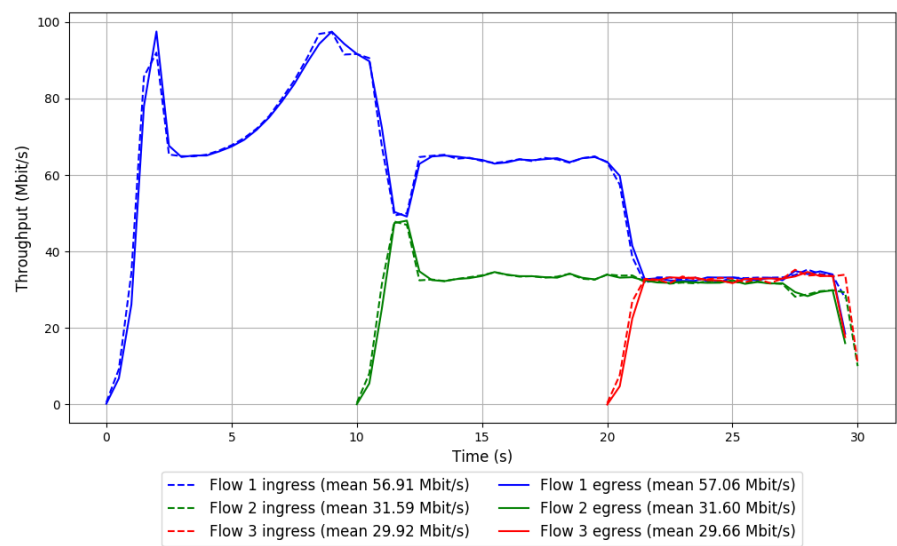
-- Flow 3:

Average throughput: 29.66 Mbit/s

95th percentile per-packet one-way delay: 117.118 ms

Loss rate: 5.73%

Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-04-17 16:39:45

End at: 2018-04-17 16:40:15

Local clock offset: -3.757 ms

Remote clock offset: 8.655 ms

Below is generated by plot.py at 2018-04-17 20:40:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.98 Mbit/s

95th percentile per-packet one-way delay: 111.810 ms

Loss rate: 3.14%

-- Flow 1:

Average throughput: 55.86 Mbit/s

95th percentile per-packet one-way delay: 111.127 ms

Loss rate: 2.70%

-- Flow 2:

Average throughput: 30.78 Mbit/s

95th percentile per-packet one-way delay: 112.449 ms

Loss rate: 1.28%

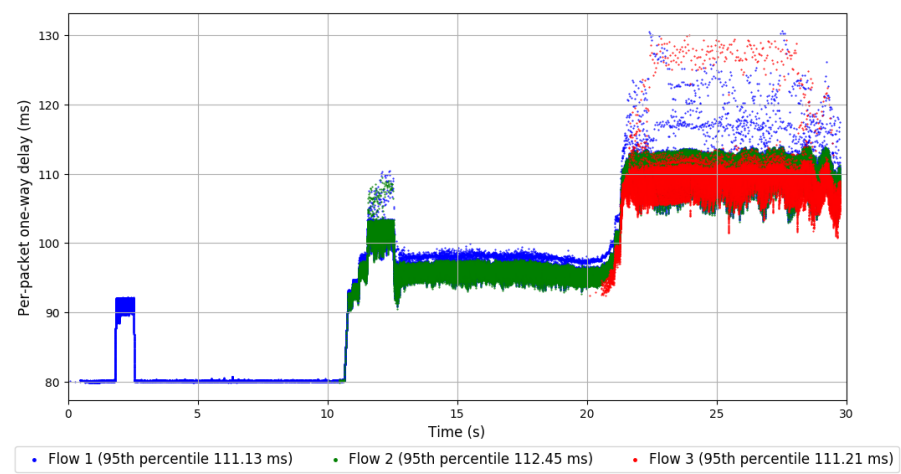
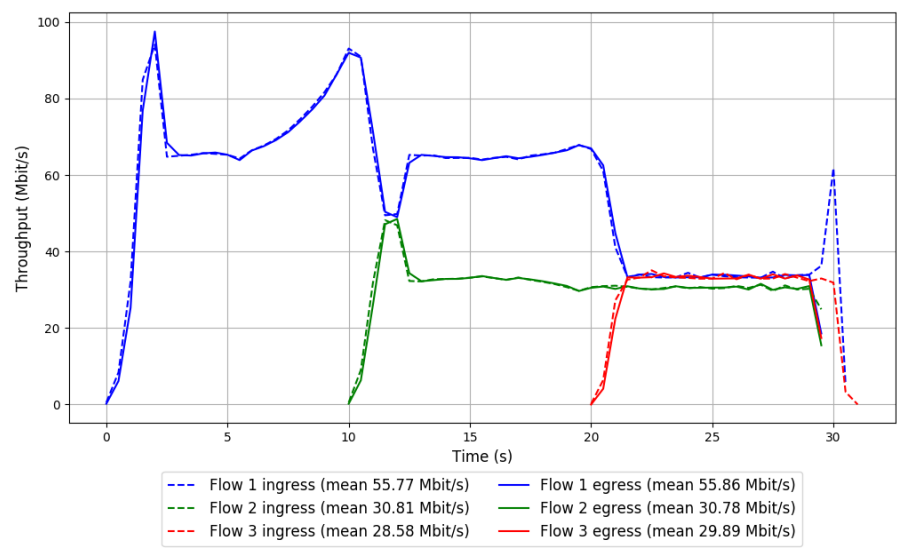
-- Flow 3:

Average throughput: 29.89 Mbit/s

95th percentile per-packet one-way delay: 111.207 ms

Loss rate: 9.07%

Run 10: Report of PCC-Allegro — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-04-17 13:22:49

End at: 2018-04-17 13:23:19

Local clock offset: -4.753 ms

Remote clock offset: 6.135 ms

Below is generated by plot.py at 2018-04-17 20:40:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.69 Mbit/s

95th percentile per-packet one-way delay: 107.673 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 41.01 Mbit/s

95th percentile per-packet one-way delay: 107.278 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 24.09 Mbit/s

95th percentile per-packet one-way delay: 108.046 ms

Loss rate: 1.12%

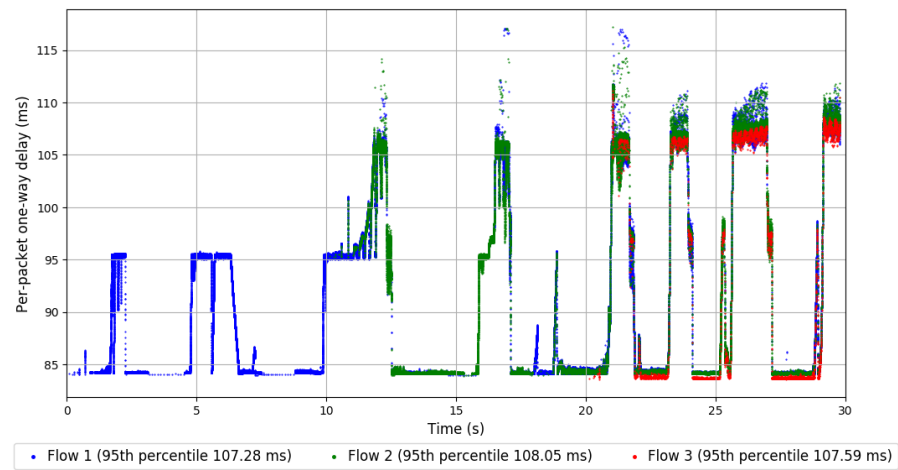
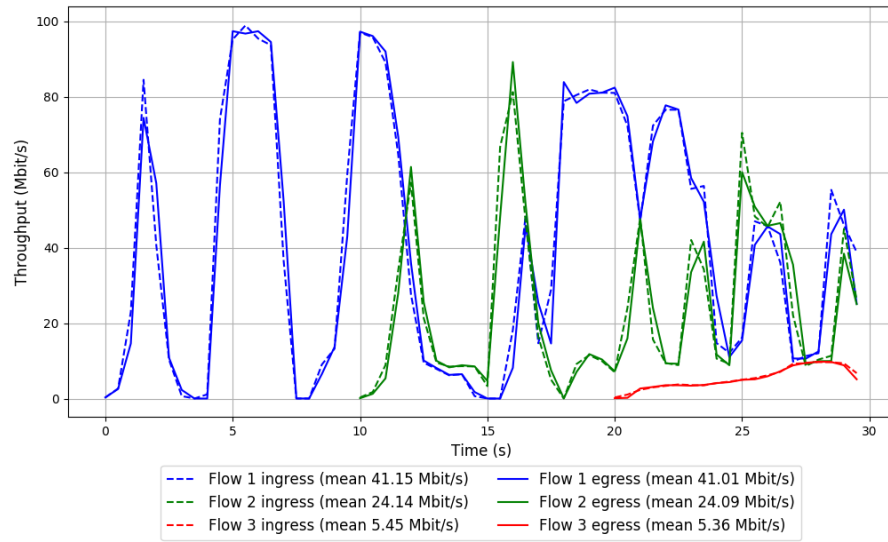
-- Flow 3:

Average throughput: 5.36 Mbit/s

95th percentile per-packet one-way delay: 107.593 ms

Loss rate: 3.40%

Run 1: Report of QUIC Cubic — Data Link

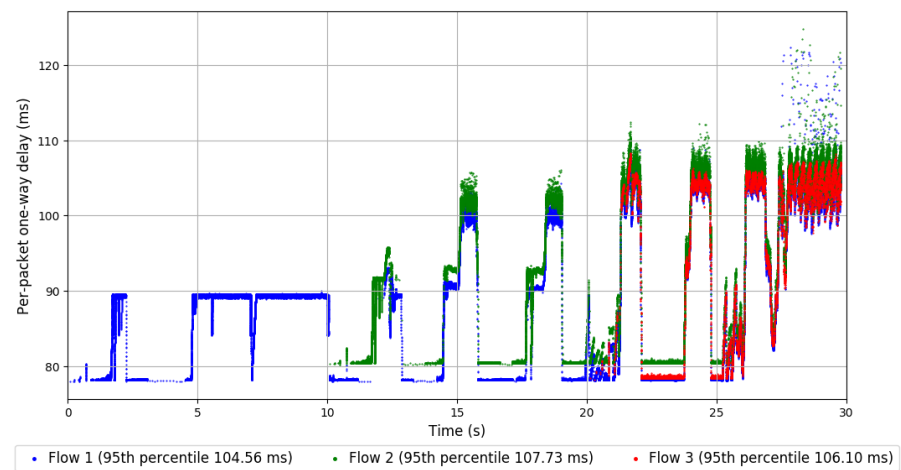
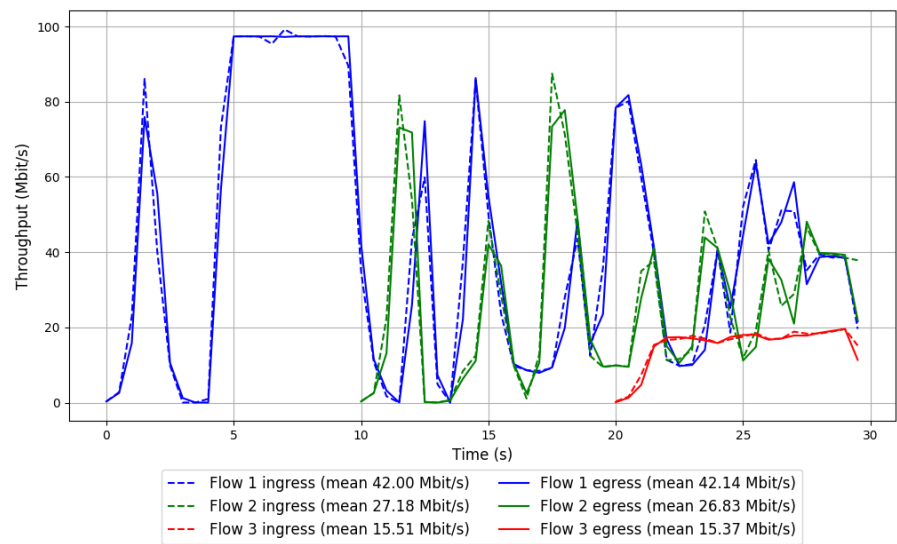


Run 2: Statistics of QUIC Cubic

Start at: 2018-04-17 13:45:08
End at: 2018-04-17 13:45:38
Local clock offset: -2.775 ms
Remote clock offset: 10.874 ms

Below is generated by plot.py at 2018-04-17 20:40:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 64.91 Mbit/s
95th percentile per-packet one-way delay: 106.375 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 42.14 Mbit/s
95th percentile per-packet one-way delay: 104.565 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 26.83 Mbit/s
95th percentile per-packet one-way delay: 107.729 ms
Loss rate: 2.14%
-- Flow 3:
Average throughput: 15.37 Mbit/s
95th percentile per-packet one-way delay: 106.101 ms
Loss rate: 2.69%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-04-17 14:07:24

End at: 2018-04-17 14:07:54

Local clock offset: -4.493 ms

Remote clock offset: 6.306 ms

Below is generated by plot.py at 2018-04-17 20:40:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.88 Mbit/s

95th percentile per-packet one-way delay: 114.933 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 36.96 Mbit/s

95th percentile per-packet one-way delay: 111.280 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 36.90 Mbit/s

95th percentile per-packet one-way delay: 115.314 ms

Loss rate: 1.14%

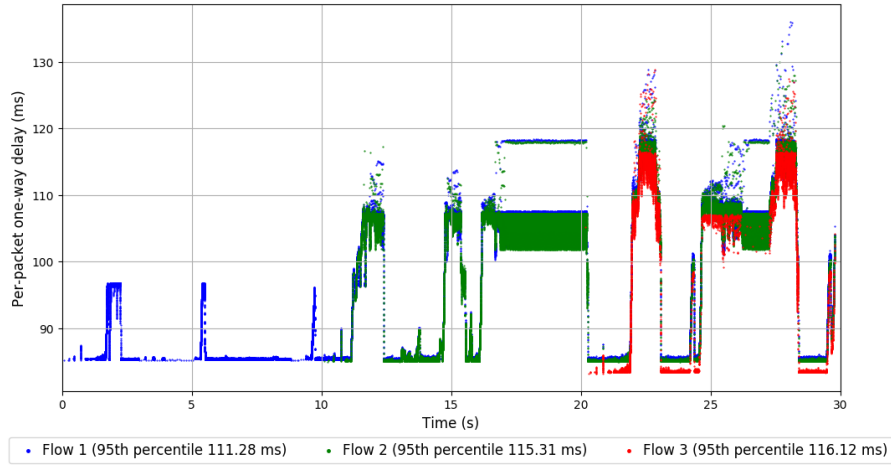
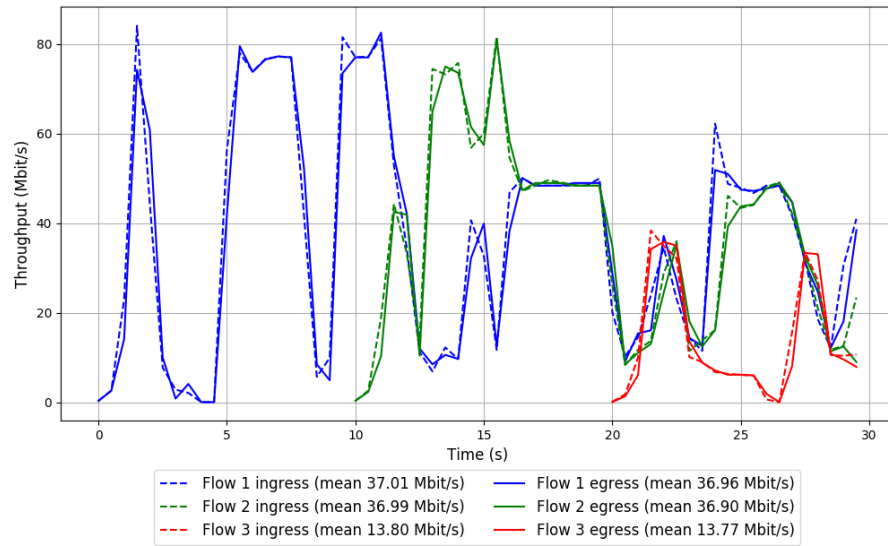
-- Flow 3:

Average throughput: 13.77 Mbit/s

95th percentile per-packet one-way delay: 116.121 ms

Loss rate: 1.96%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-04-17 14:29:35

End at: 2018-04-17 14:30:05

Local clock offset: -5.974 ms

Remote clock offset: 10.94 ms

Below is generated by plot.py at 2018-04-17 20:40:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.46 Mbit/s

95th percentile per-packet one-way delay: 111.738 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 33.77 Mbit/s

95th percentile per-packet one-way delay: 110.758 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 43.34 Mbit/s

95th percentile per-packet one-way delay: 112.497 ms

Loss rate: 0.20%

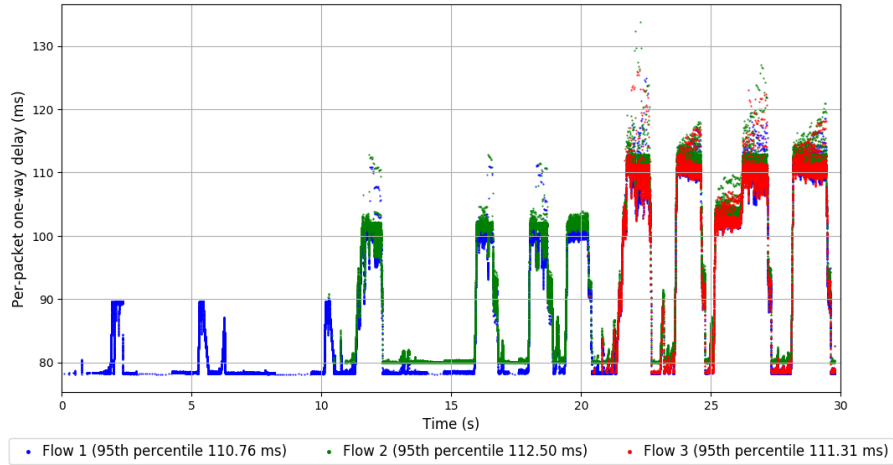
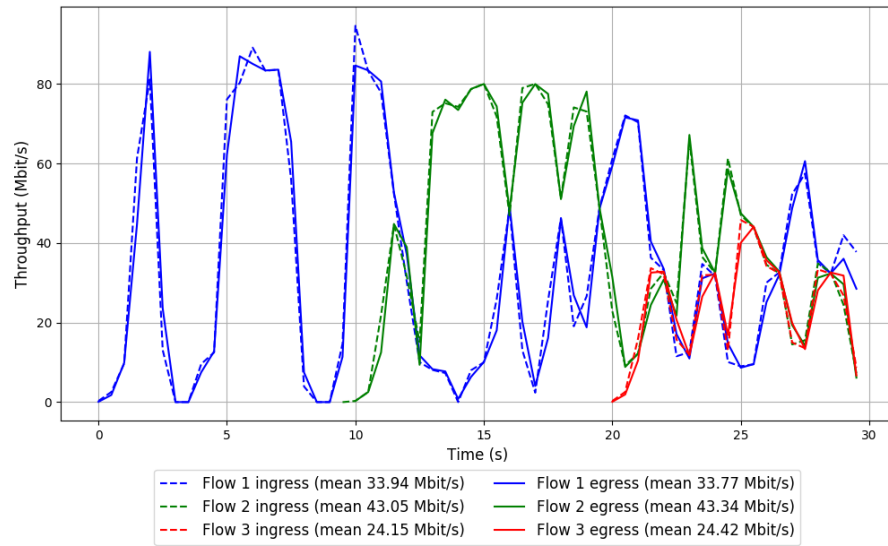
-- Flow 3:

Average throughput: 24.42 Mbit/s

95th percentile per-packet one-way delay: 111.313 ms

Loss rate: 0.91%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-04-17 14:51:54

End at: 2018-04-17 14:52:24

Local clock offset: -5.426 ms

Remote clock offset: 5.425 ms

Below is generated by plot.py at 2018-04-17 20:40:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 43.24 Mbit/s

95th percentile per-packet one-way delay: 99.221 ms

Loss rate: 4.17%

-- Flow 1:

Average throughput: 26.23 Mbit/s

95th percentile per-packet one-way delay: 96.558 ms

Loss rate: 3.81%

-- Flow 2:

Average throughput: 15.29 Mbit/s

95th percentile per-packet one-way delay: 96.319 ms

Loss rate: 2.17%

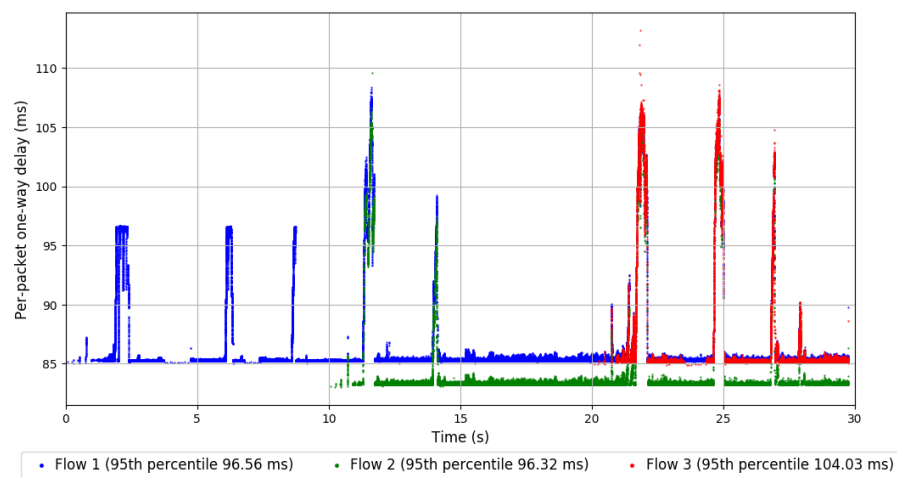
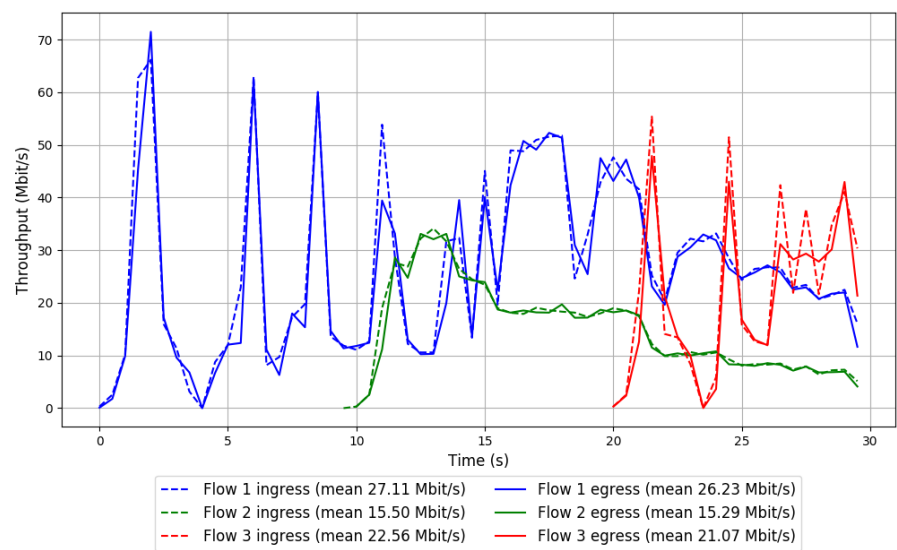
-- Flow 3:

Average throughput: 21.07 Mbit/s

95th percentile per-packet one-way delay: 104.025 ms

Loss rate: 8.26%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-04-17 15:14:16

End at: 2018-04-17 15:14:46

Local clock offset: -4.684 ms

Remote clock offset: 5.597 ms

Below is generated by plot.py at 2018-04-17 20:40:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.57 Mbit/s

95th percentile per-packet one-way delay: 119.140 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 34.42 Mbit/s

95th percentile per-packet one-way delay: 119.114 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 36.28 Mbit/s

95th percentile per-packet one-way delay: 119.249 ms

Loss rate: 0.33%

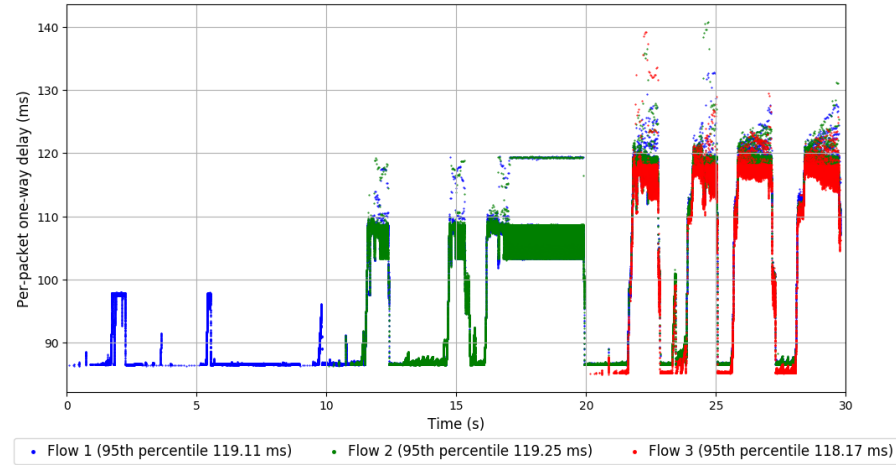
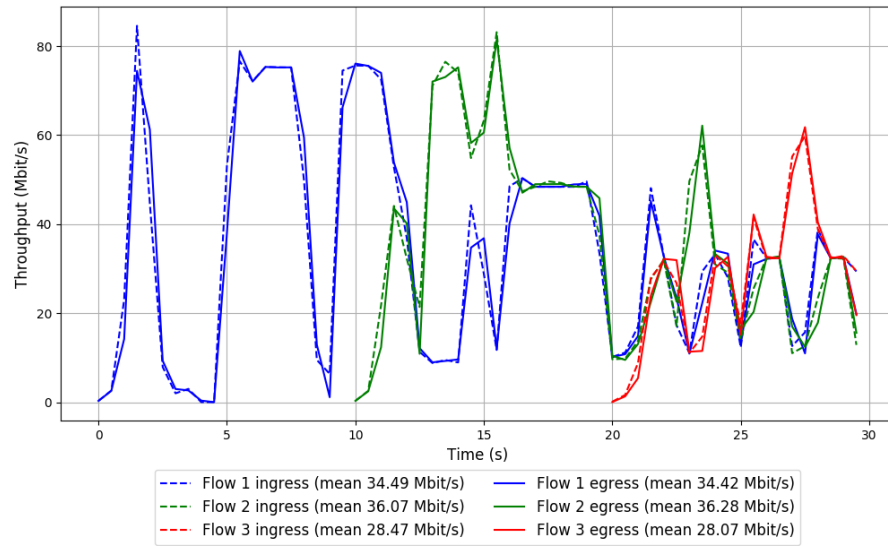
-- Flow 3:

Average throughput: 28.07 Mbit/s

95th percentile per-packet one-way delay: 118.167 ms

Loss rate: 3.17%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

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

End at: 2018-04-17 15:37:06

Local clock offset: -5.613 ms

Remote clock offset: 6.2 ms

Below is generated by plot.py at 2018-04-17 20:41:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.00 Mbit/s

95th percentile per-packet one-way delay: 117.697 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 35.29 Mbit/s

95th percentile per-packet one-way delay: 116.064 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 35.90 Mbit/s

95th percentile per-packet one-way delay: 116.496 ms

Loss rate: 0.39%

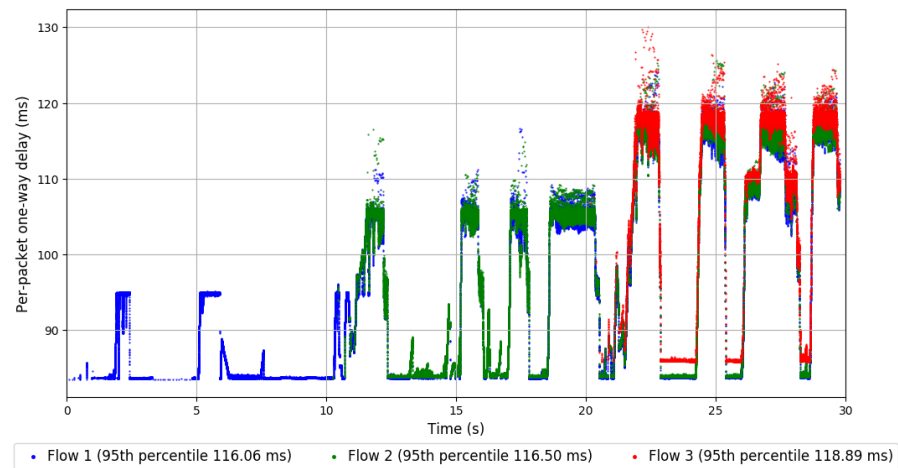
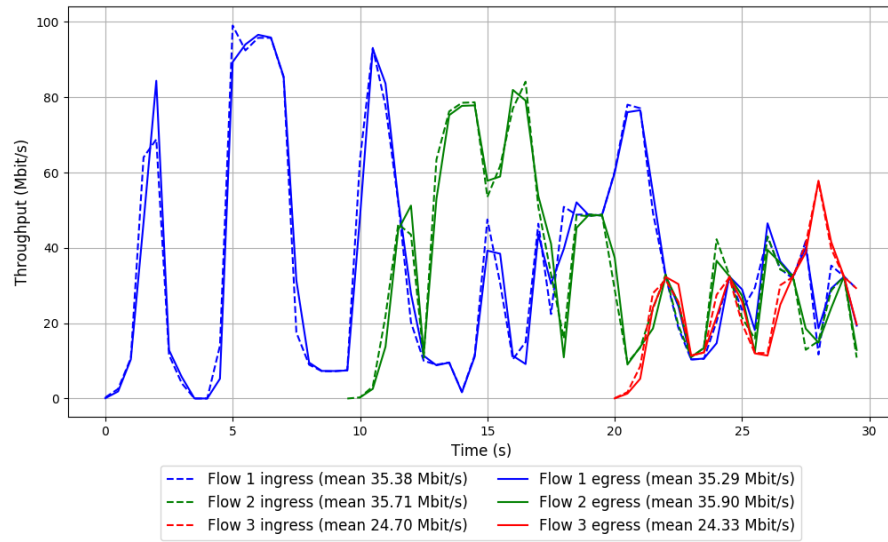
-- Flow 3:

Average throughput: 24.33 Mbit/s

95th percentile per-packet one-way delay: 118.895 ms

Loss rate: 3.54%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-04-17 15:58:55

End at: 2018-04-17 15:59:25

Local clock offset: -5.536 ms

Remote clock offset: 4.038 ms

Below is generated by plot.py at 2018-04-17 20:41:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.71 Mbit/s

95th percentile per-packet one-way delay: 108.029 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 37.97 Mbit/s

95th percentile per-packet one-way delay: 107.913 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 28.27 Mbit/s

95th percentile per-packet one-way delay: 107.880 ms

Loss rate: 1.57%

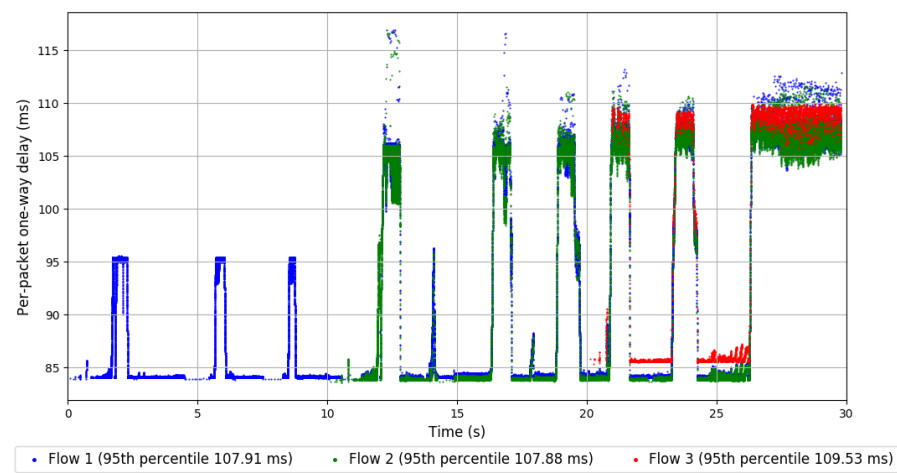
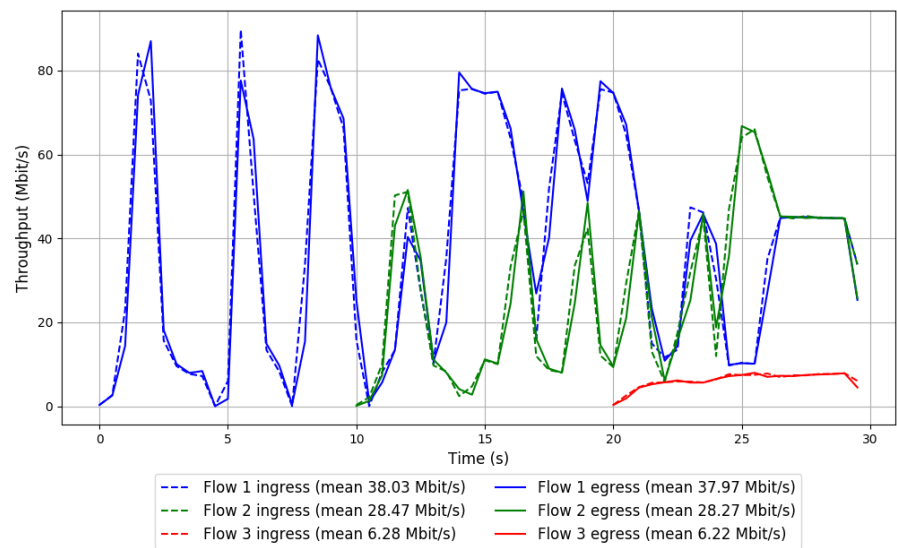
-- Flow 3:

Average throughput: 6.22 Mbit/s

95th percentile per-packet one-way delay: 109.531 ms

Loss rate: 2.65%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-04-17 16:21:21

End at: 2018-04-17 16:21:51

Local clock offset: -4.839 ms

Remote clock offset: 9.653 ms

Below is generated by plot.py at 2018-04-17 20:41:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.60 Mbit/s

95th percentile per-packet one-way delay: 79.761 ms

Loss rate: 1.70%

-- Flow 1:

Average throughput: 32.13 Mbit/s

95th percentile per-packet one-way delay: 82.560 ms

Loss rate: 1.84%

-- Flow 2:

Average throughput: 22.18 Mbit/s

95th percentile per-packet one-way delay: 79.300 ms

Loss rate: 1.20%

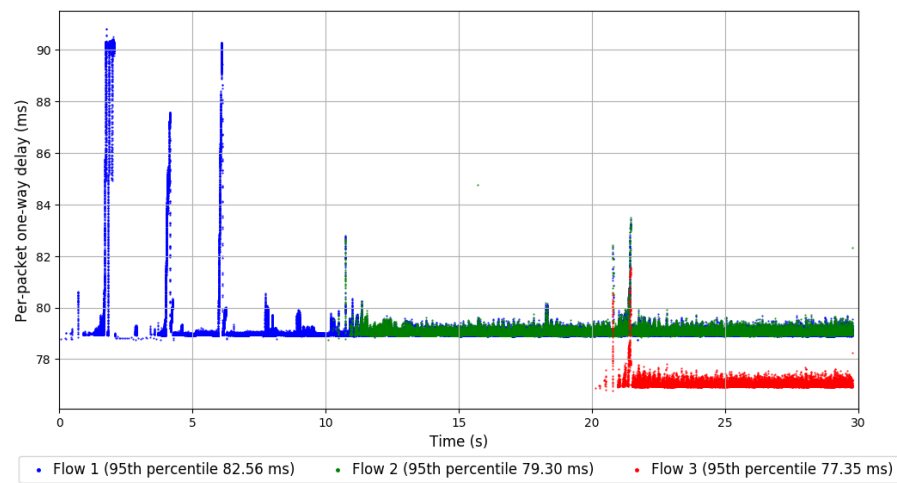
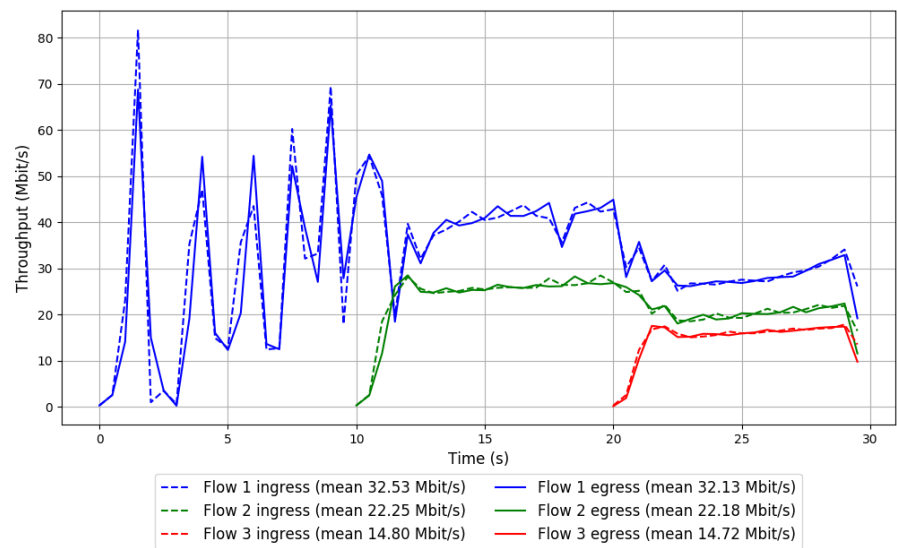
-- Flow 3:

Average throughput: 14.72 Mbit/s

95th percentile per-packet one-way delay: 77.351 ms

Loss rate: 2.31%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-04-17 16:43:42

End at: 2018-04-17 16:44:12

Local clock offset: -2.737 ms

Remote clock offset: 4.667 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.82 Mbit/s

95th percentile per-packet one-way delay: 115.711 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 39.74 Mbit/s

95th percentile per-packet one-way delay: 114.318 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 26.64 Mbit/s

95th percentile per-packet one-way delay: 115.193 ms

Loss rate: 1.26%

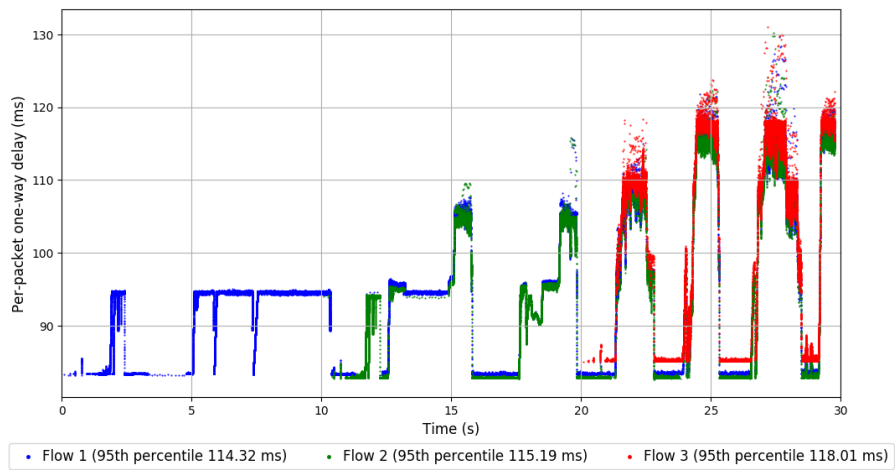
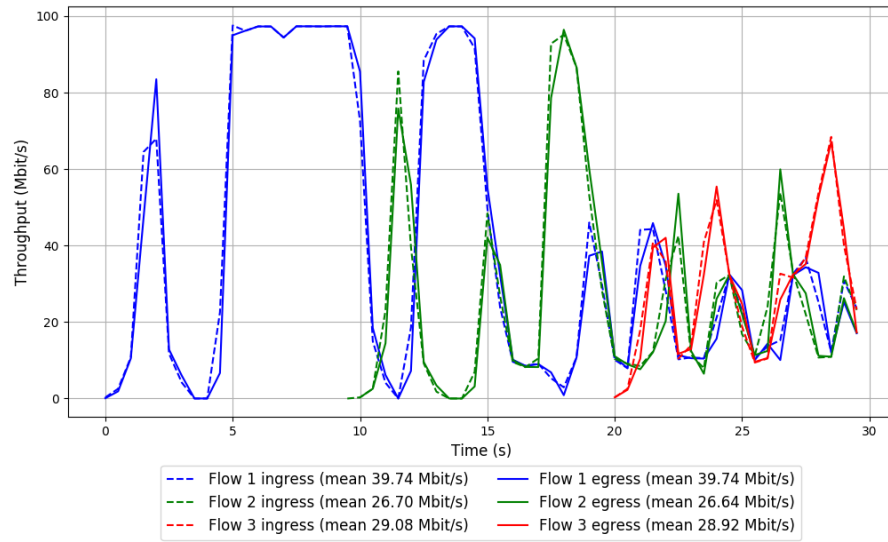
-- Flow 3:

Average throughput: 28.92 Mbit/s

95th percentile per-packet one-way delay: 118.011 ms

Loss rate: 2.37%

Run 10: Report of QUIC Cubic — Data Link

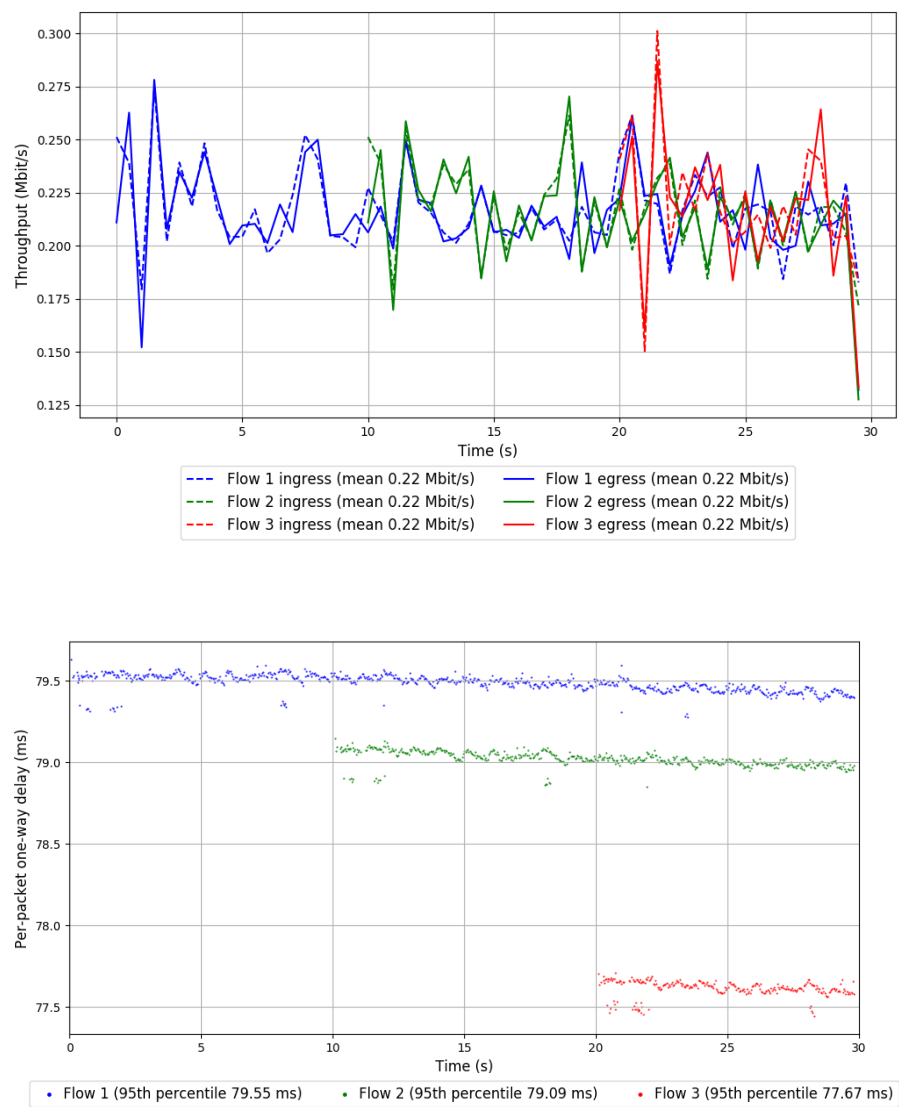


```
Run 1: Statistics of SReAM

Start at: 2018-04-17 13:21:35
End at: 2018-04-17 13:22:05
Local clock offset: -6.445 ms
Remote clock offset: 10.918 ms

# Below is generated by plot.py at 2018-04-17 20:41:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 79.541 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.554 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.086 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.672 ms
Loss rate: 1.49%
```

Run 1: Report of SReAM — Data Link

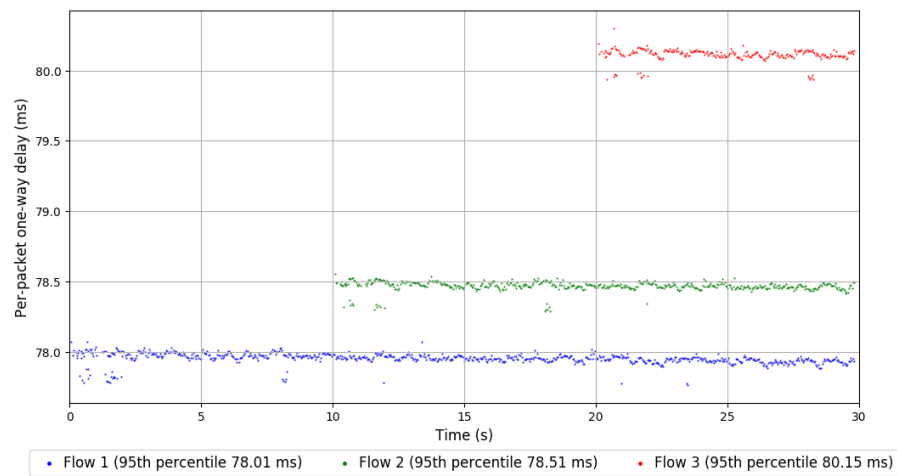
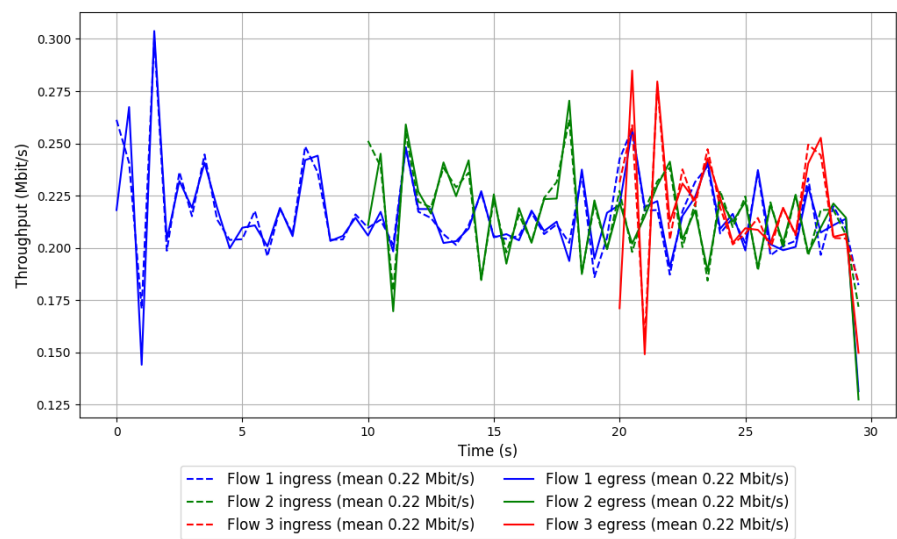


Run 2: Statistics of SReAM

Start at: 2018-04-17 13:43:54
End at: 2018-04-17 13:44:24
Local clock offset: -2.038 ms
Remote clock offset: 11.708 ms

Below is generated by plot.py at 2018-04-17 20:41:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 80.135 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.006 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.511 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.154 ms
Loss rate: 1.50%

Run 2: Report of SReAM — Data Link

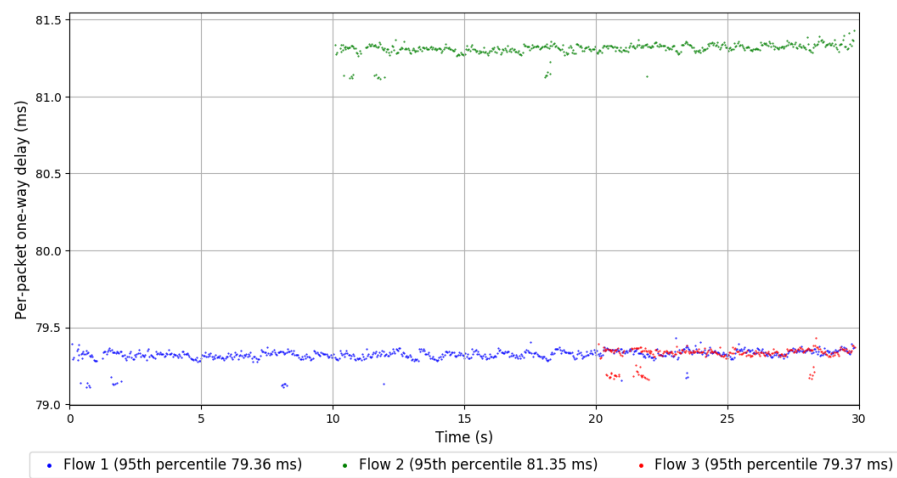
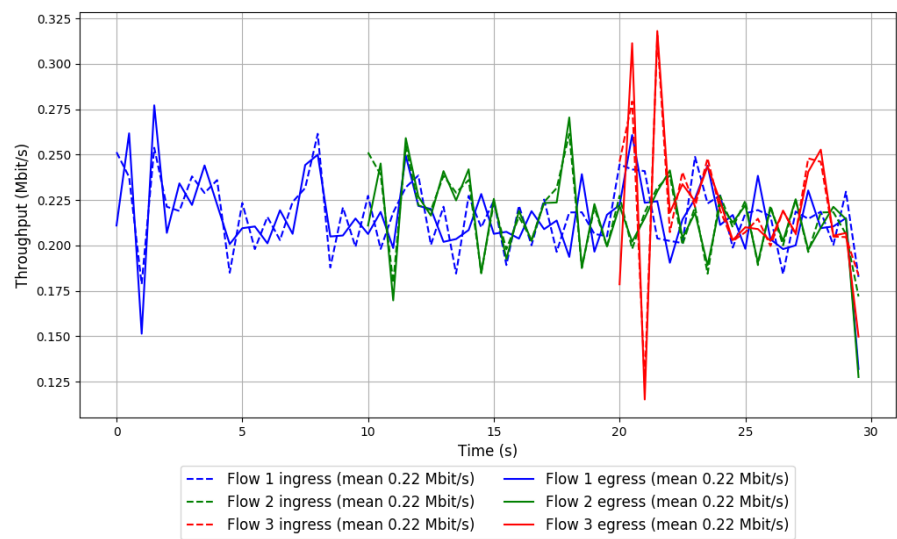


Run 3: Statistics of SReAM

Start at: 2018-04-17 14:06:09
End at: 2018-04-17 14:06:39
Local clock offset: -4.314 ms
Remote clock offset: 10.403 ms

Below is generated by plot.py at 2018-04-17 20:41:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 81.337 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.362 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.352 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.368 ms
Loss rate: 1.48%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2018-04-17 14:28:21

End at: 2018-04-17 14:28:51

Local clock offset: -5.161 ms

Remote clock offset: 5.31 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 86.651 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.659 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.230 ms

Loss rate: 0.84%

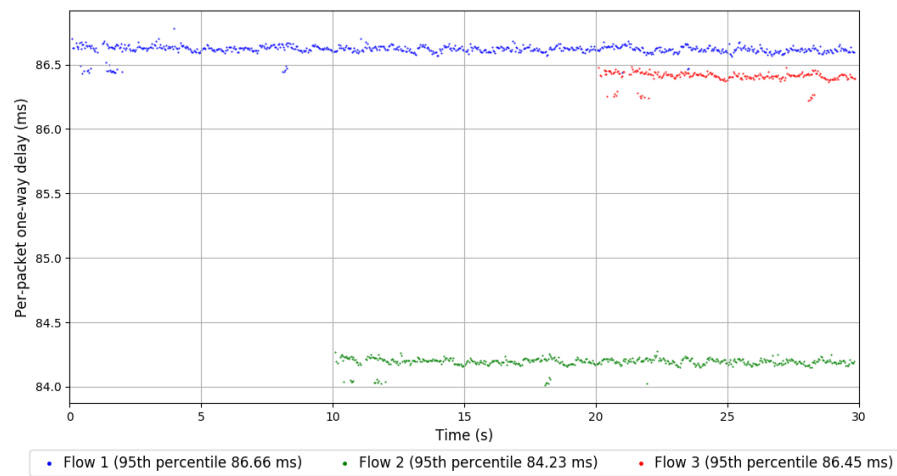
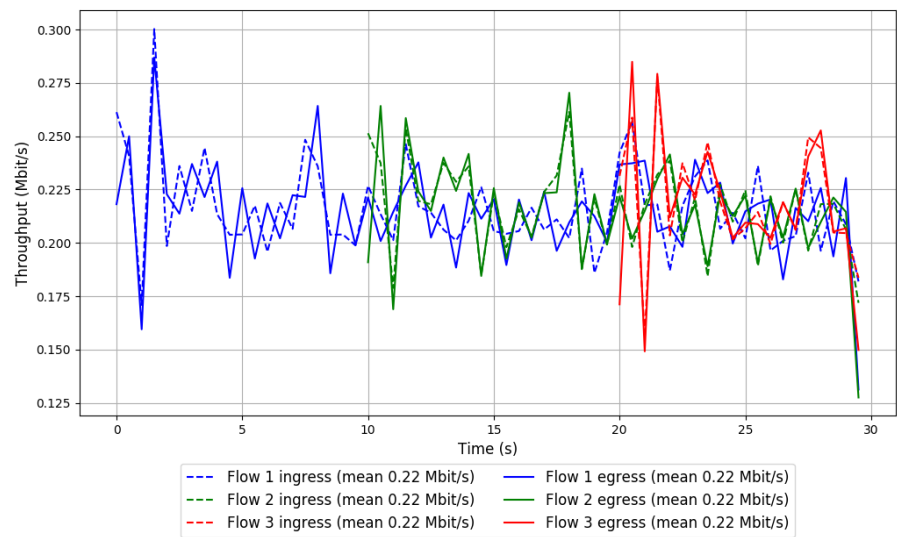
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.451 ms

Loss rate: 1.50%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-04-17 14:50:40

End at: 2018-04-17 14:51:10

Local clock offset: -5.424 ms

Remote clock offset: 5.439 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 84.803 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.812 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 83.431 ms

Loss rate: 0.84%

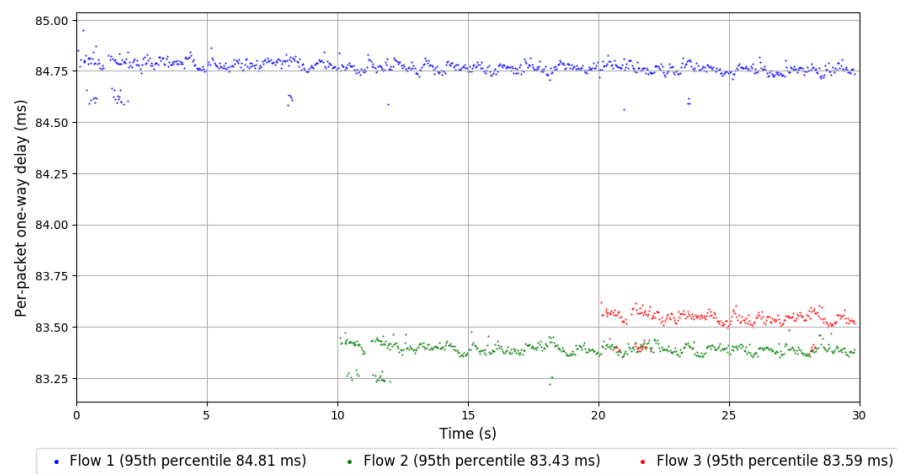
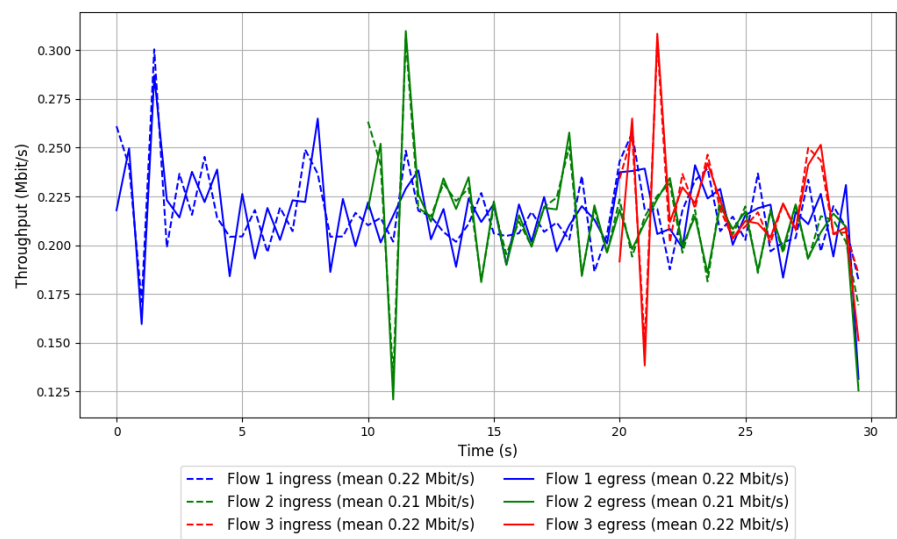
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.586 ms

Loss rate: 1.50%

Run 5: Report of SReAM — Data Link

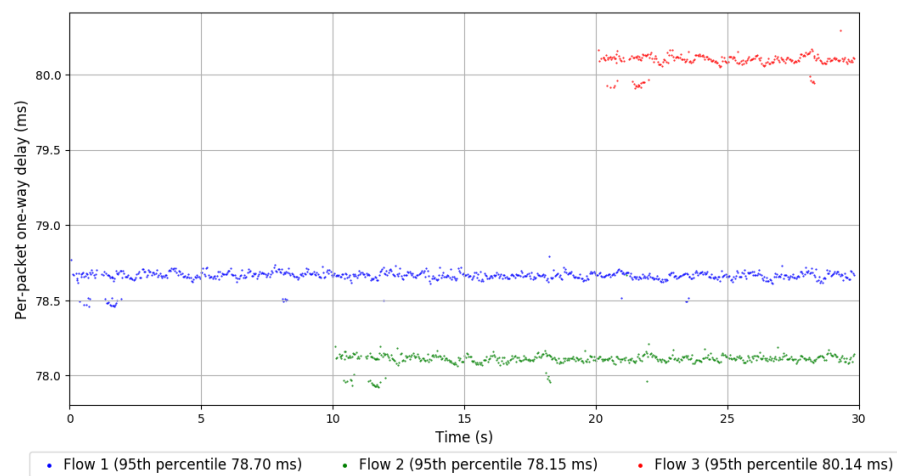
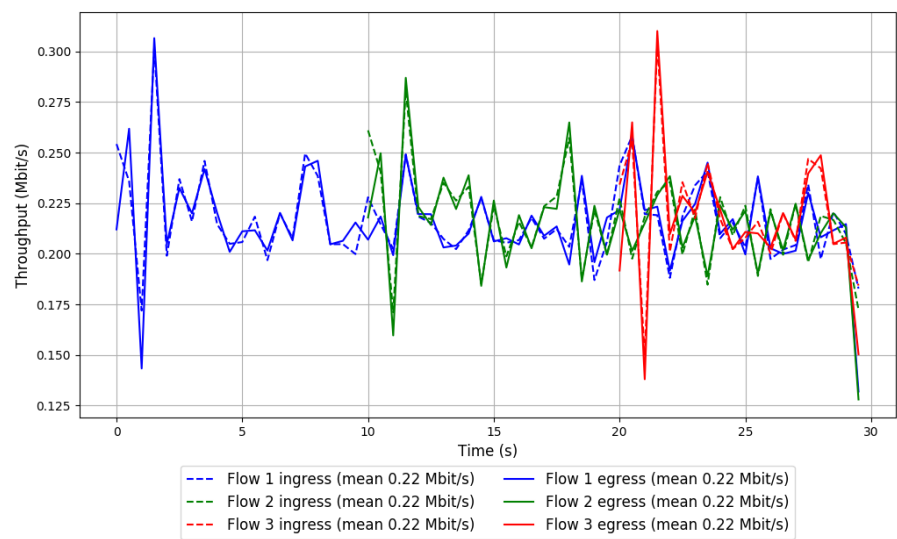


Run 6: Statistics of SReAM

Start at: 2018-04-17 15:13:02
End at: 2018-04-17 15:13:32
Local clock offset: -6.193 ms
Remote clock offset: 10.295 ms

Below is generated by plot.py at 2018-04-17 20:41:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 80.113 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.705 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.148 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.140 ms
Loss rate: 1.50%

Run 6: Report of SReAM — Data Link

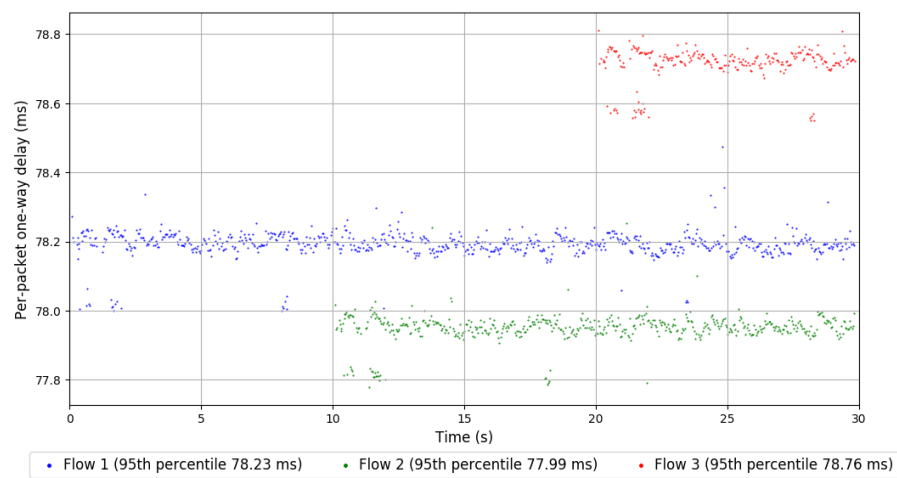
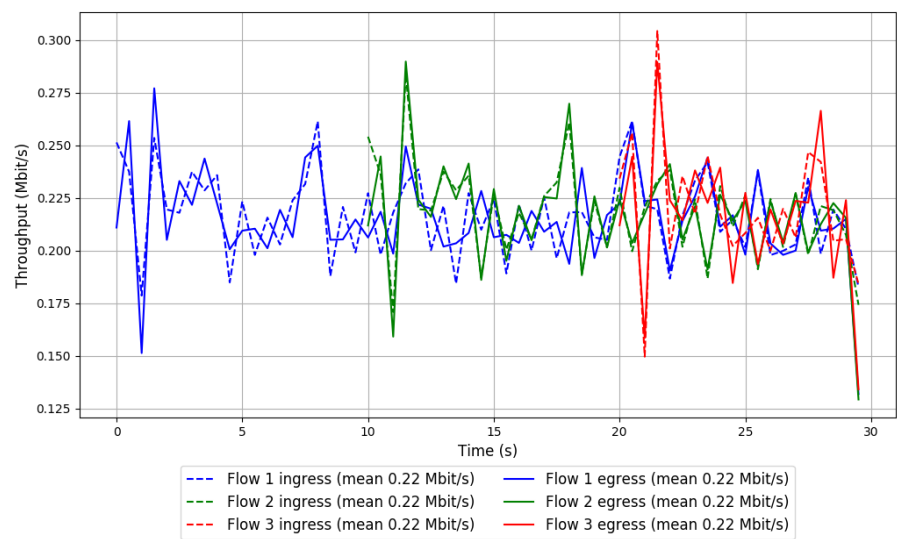


Run 7: Statistics of SReAM

Start at: 2018-04-17 15:35:22
End at: 2018-04-17 15:35:52
Local clock offset: -4.789 ms
Remote clock offset: 12.608 ms

Below is generated by plot.py at 2018-04-17 20:41:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 78.738 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.233 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.991 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.761 ms
Loss rate: 1.50%

Run 7: Report of SReAM — Data Link

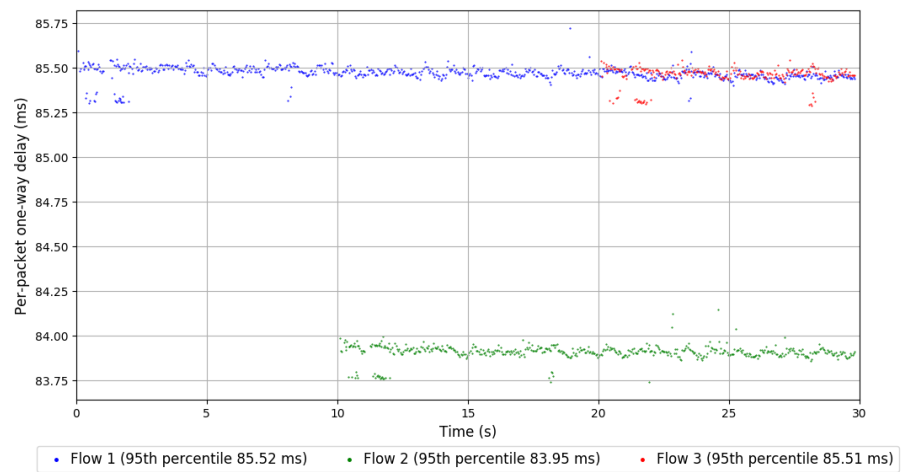
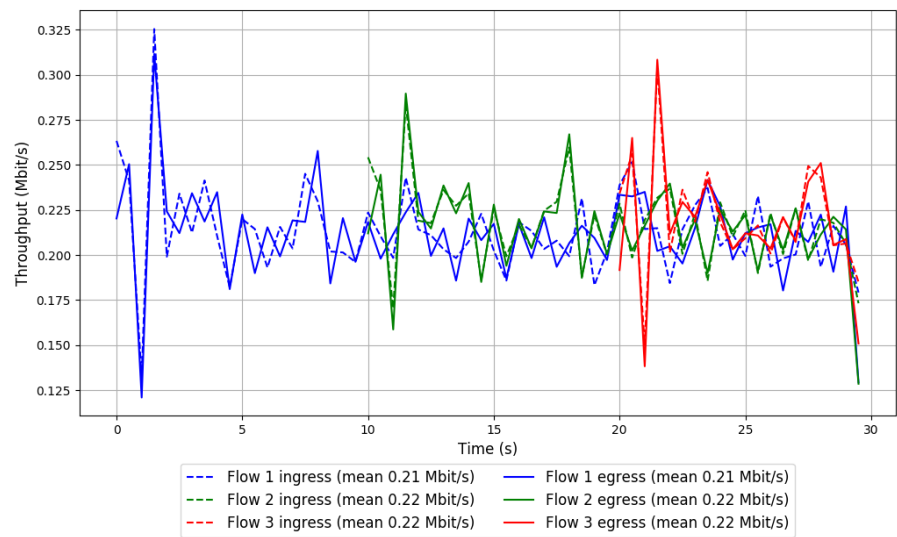


Run 8: Statistics of SReAM

Start at: 2018-04-17 15:57:41
End at: 2018-04-17 15:58:11
Local clock offset: -5.653 ms
Remote clock offset: 3.985 ms

Below is generated by plot.py at 2018-04-17 20:41:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 85.512 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 85.518 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.953 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.509 ms
Loss rate: 1.50%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-04-17 16:20:07

End at: 2018-04-17 16:20:37

Local clock offset: -5.085 ms

Remote clock offset: 3.936 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 84.942 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.789 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 82.704 ms

Loss rate: 0.85%

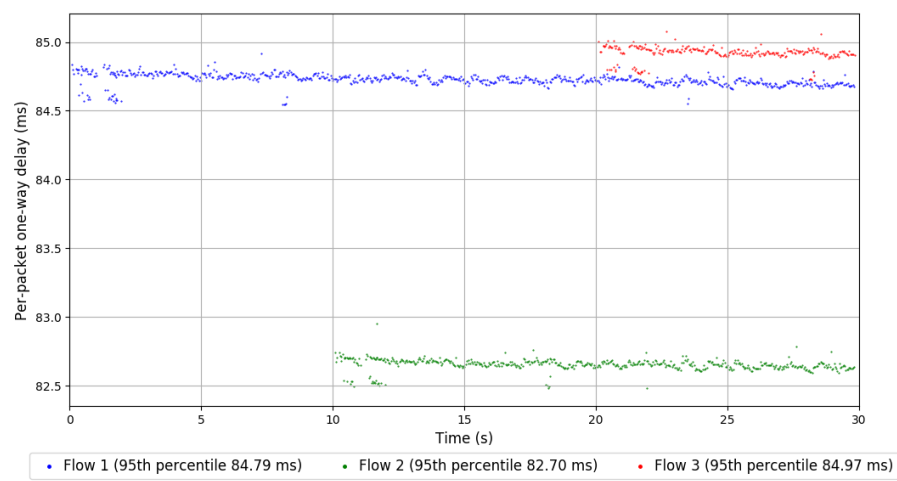
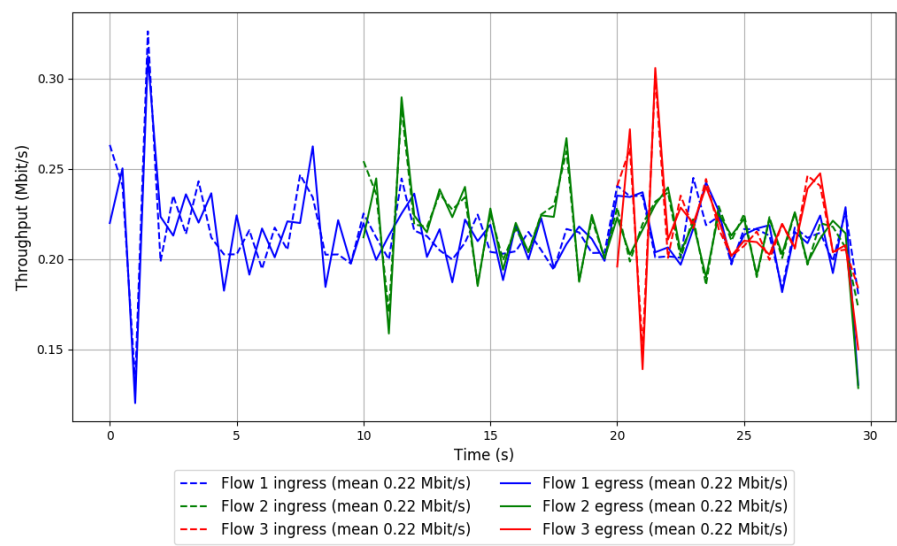
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.975 ms

Loss rate: 1.49%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-04-17 16:42:28

End at: 2018-04-17 16:42:58

Local clock offset: -2.785 ms

Remote clock offset: 9.427 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 80.479 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 80.492 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 78.427 ms

Loss rate: 0.84%

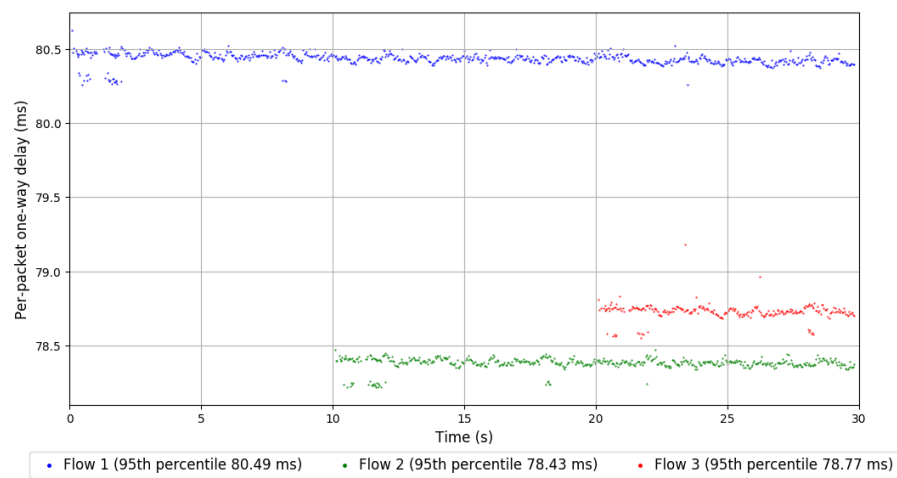
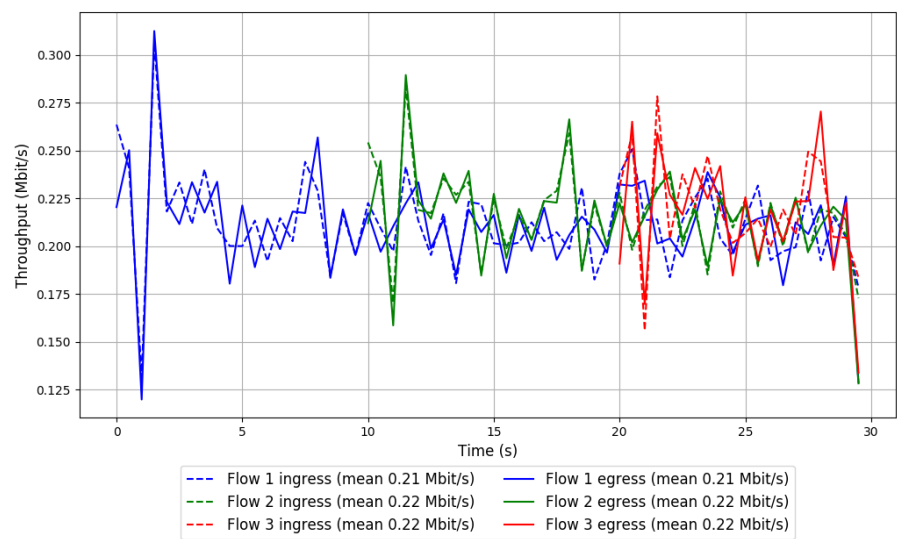
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 78.774 ms

Loss rate: 1.50%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-04-17 13:05:24

End at: 2018-04-17 13:05:54

Local clock offset: -5.682 ms

Remote clock offset: 5.196 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 85.249 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 84.723 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 85.402 ms

Loss rate: 0.00%

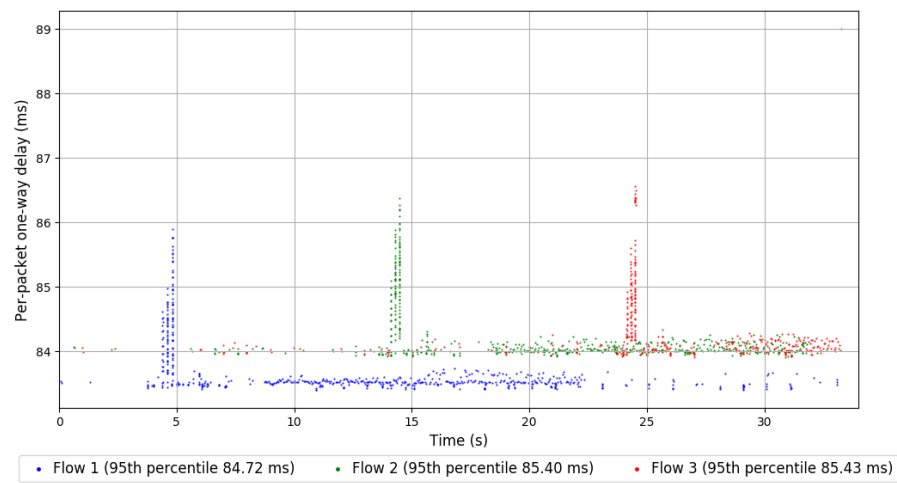
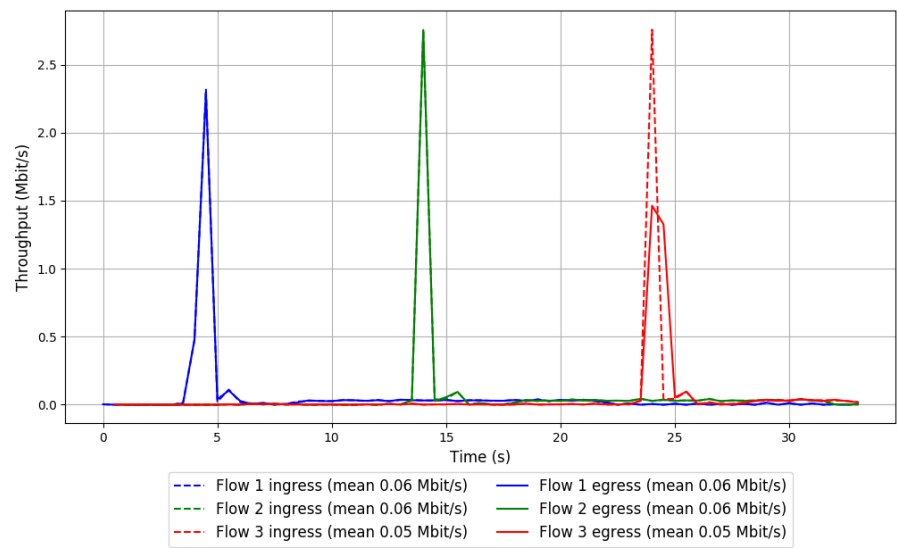
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.426 ms

Loss rate: 0.28%

Run 1: Report of WebRTC media — Data Link

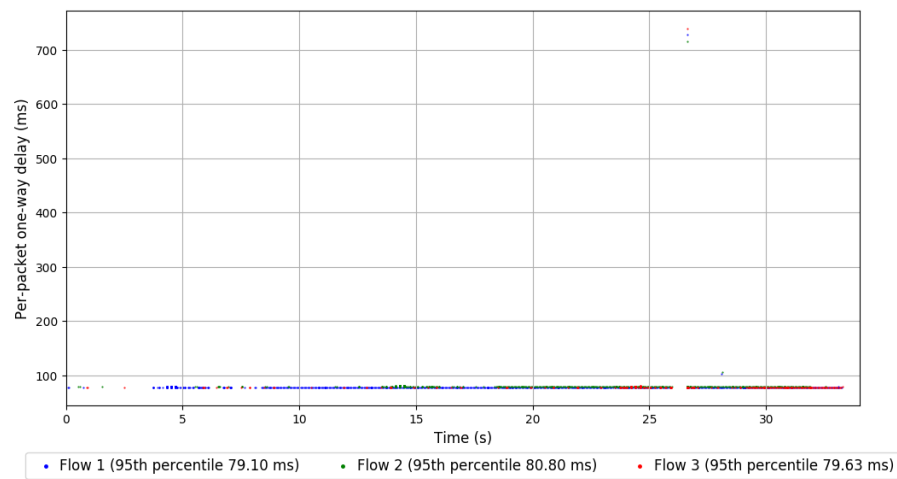
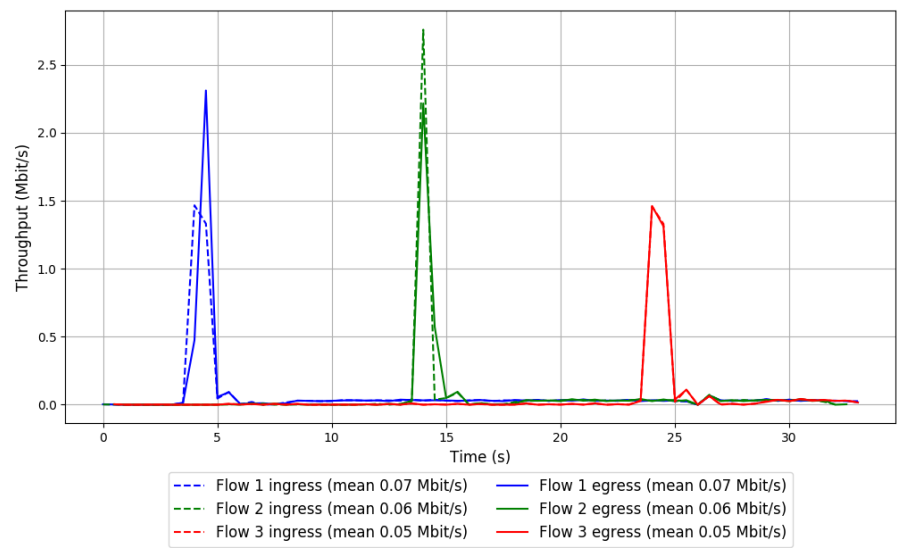


Run 2: Statistics of WebRTC media

Start at: 2018-04-17 13:28:05
End at: 2018-04-17 13:28:35
Local clock offset: -4.032 ms
Remote clock offset: 11.271 ms

Below is generated by plot.py at 2018-04-17 20:41:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 80.101 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 79.101 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 80.804 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 79.633 ms
Loss rate: 0.23%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-04-17 13:50:24

End at: 2018-04-17 13:50:54

Local clock offset: -0.854 ms

Remote clock offset: 6.264 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 87.580 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 85.093 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 87.818 ms

Loss rate: 0.04%

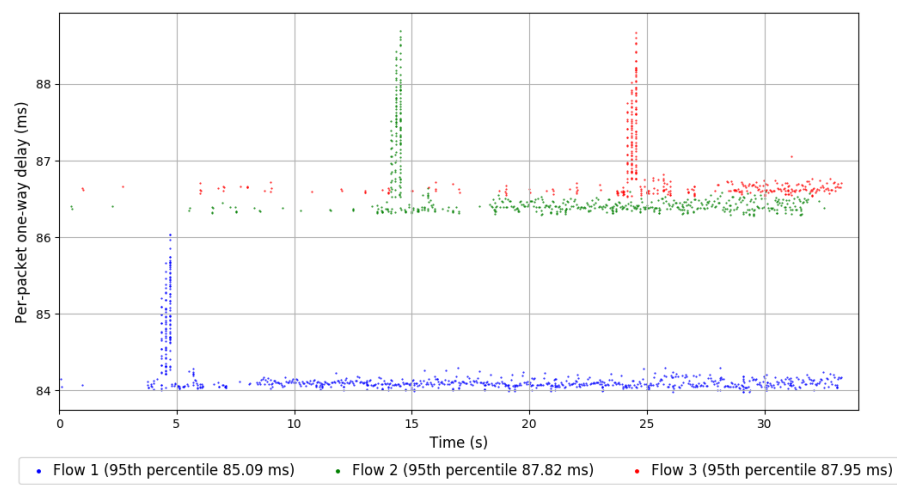
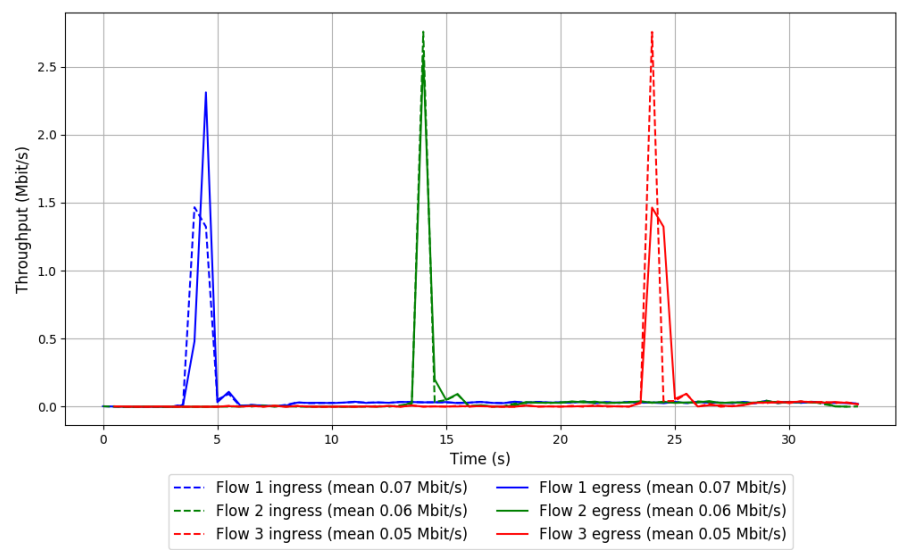
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 87.954 ms

Loss rate: 0.27%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-04-17 14:12:39

End at: 2018-04-17 14:13:09

Local clock offset: -5.994 ms

Remote clock offset: 6.278 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 85.286 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 85.176 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 85.286 ms

Loss rate: 0.00%

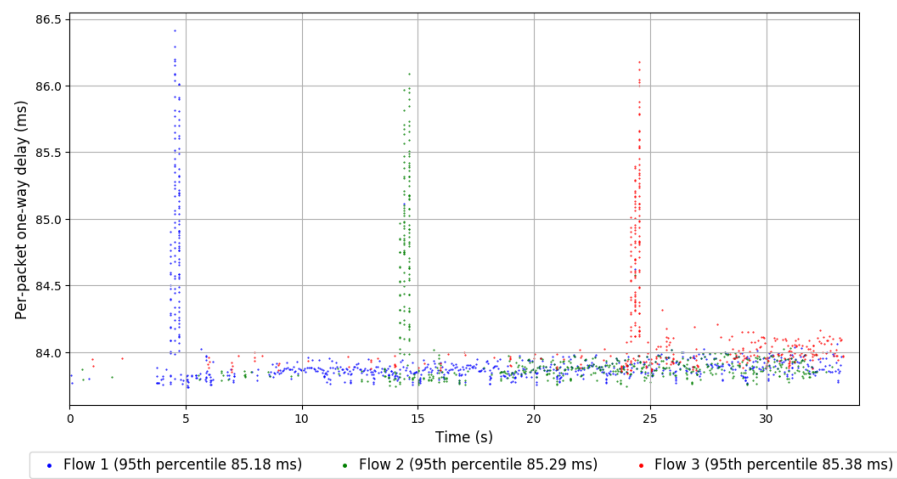
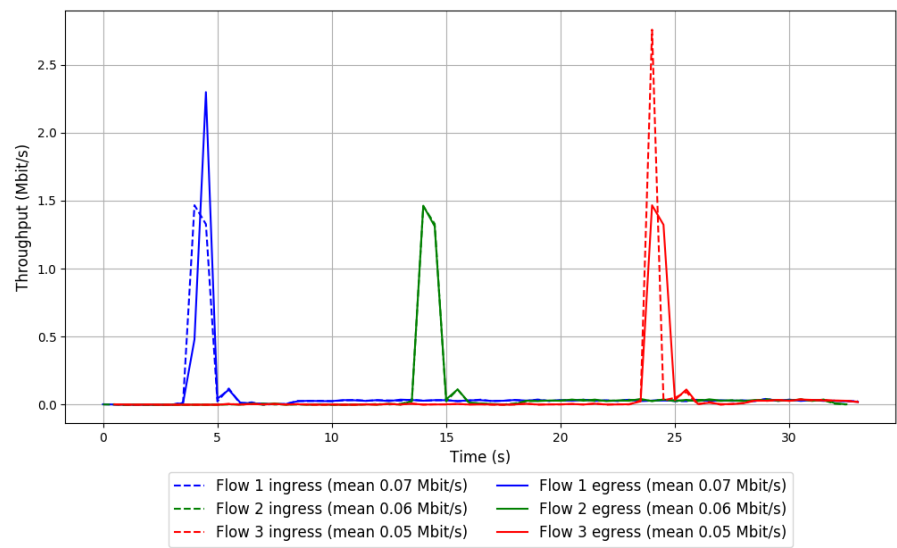
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.381 ms

Loss rate: 0.23%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-04-17 14:34:51

End at: 2018-04-17 14:35:21

Local clock offset: -5.712 ms

Remote clock offset: 5.772 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 84.285 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 83.760 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 84.326 ms

Loss rate: 0.04%

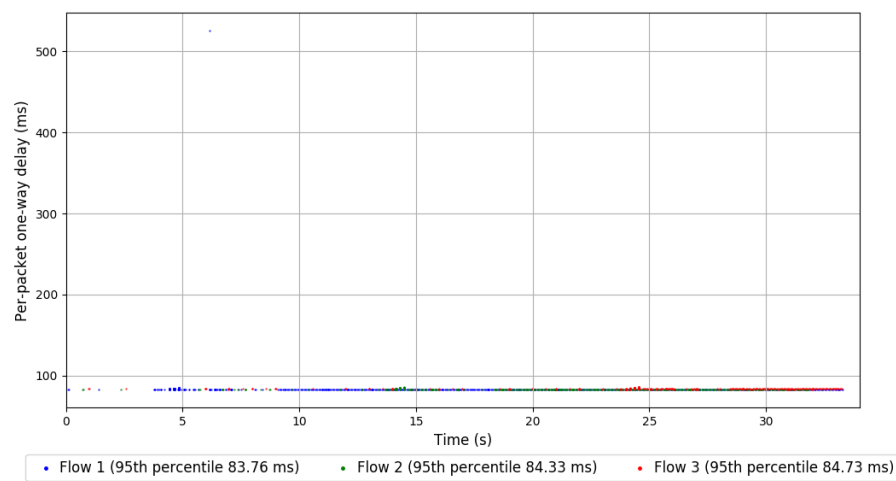
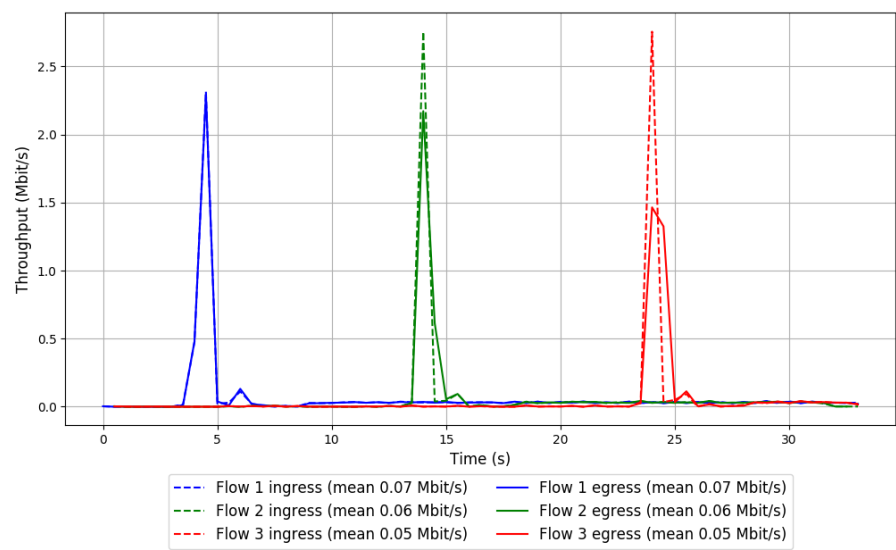
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 84.734 ms

Loss rate: 0.31%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-04-17 14:57:17

End at: 2018-04-17 14:57:47

Local clock offset: -6.203 ms

Remote clock offset: 5.376 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 84.405 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 0.06 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 83.301 ms

Loss rate: 0.04%

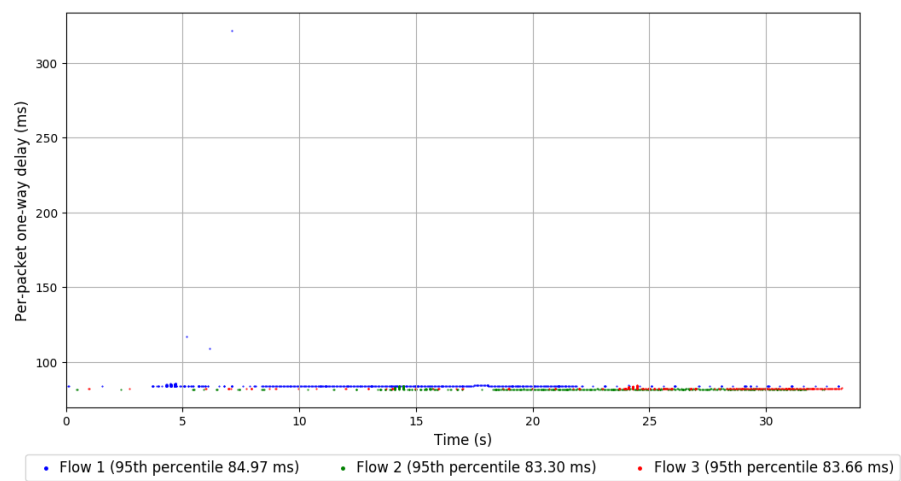
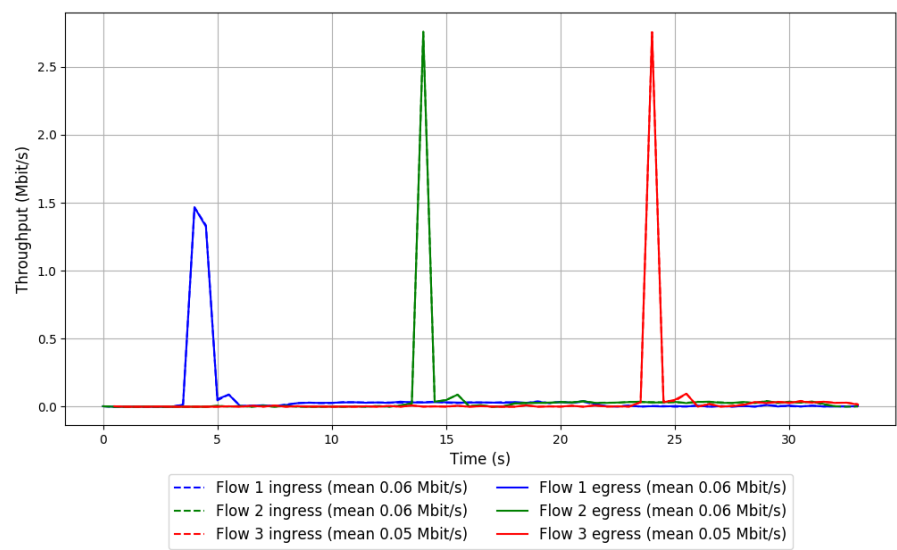
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 83.663 ms

Loss rate: 0.23%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-04-17 15:19:34

End at: 2018-04-17 15:20:04

Local clock offset: -5.467 ms

Remote clock offset: 6.626 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 85.567 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 86.036 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 84.562 ms

Loss rate: 0.00%

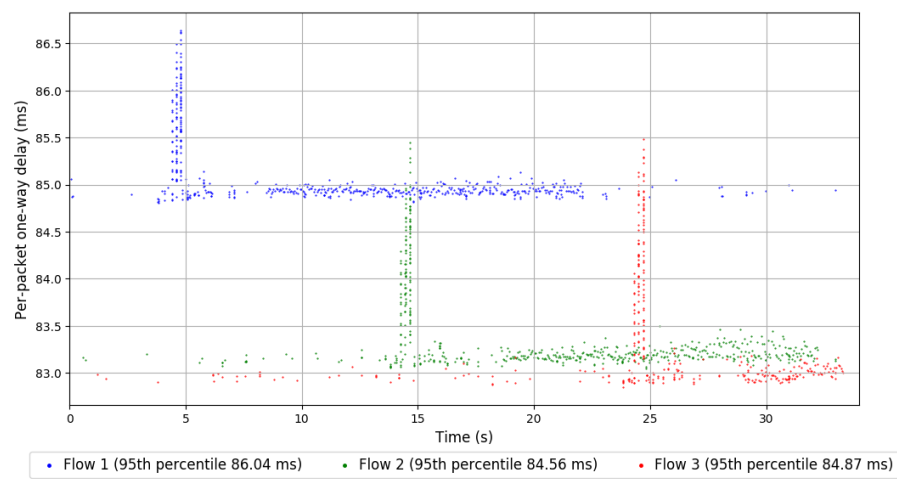
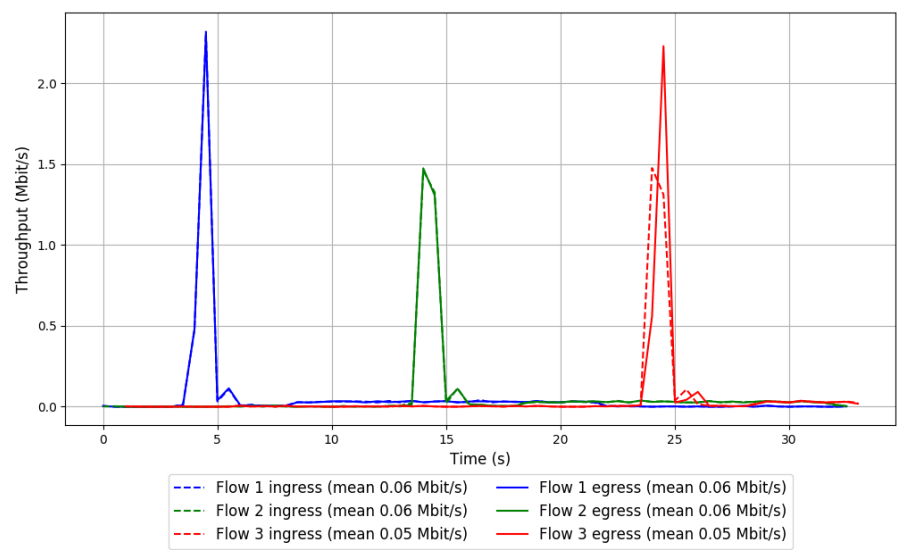
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 84.870 ms

Loss rate: 0.31%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-04-17 15:41:53

End at: 2018-04-17 15:42:23

Local clock offset: -4.79 ms

Remote clock offset: 6.236 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 86.888 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.189 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 87.059 ms

Loss rate: 0.00%

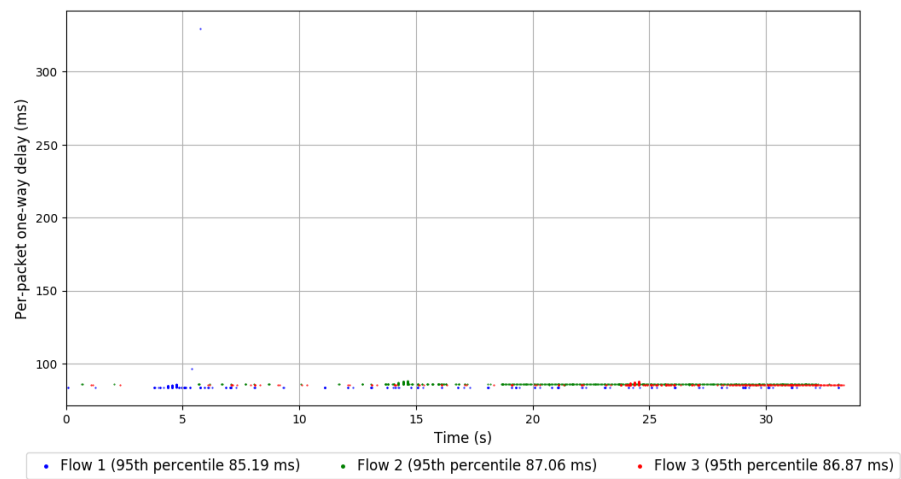
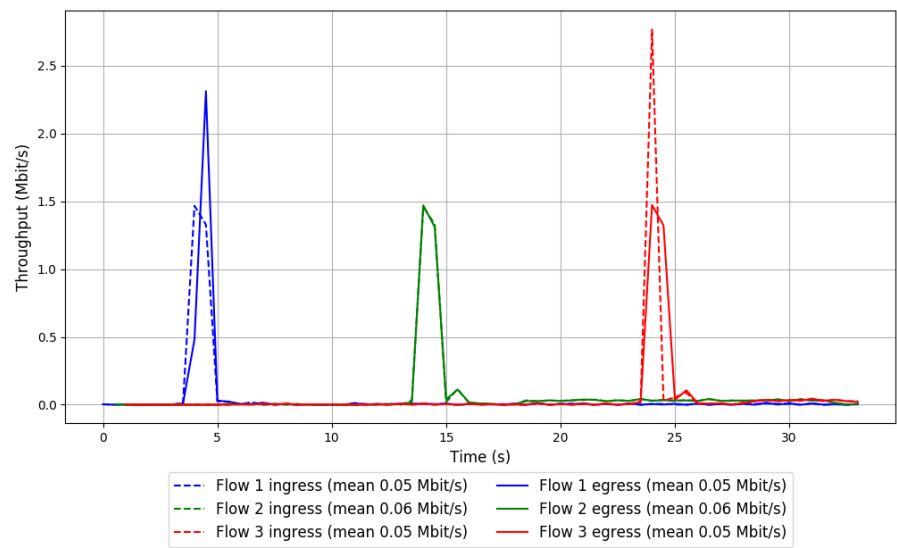
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.874 ms

Loss rate: 0.35%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-04-17 16:04:12

End at: 2018-04-17 16:04:42

Local clock offset: -6.335 ms

Remote clock offset: 9.477 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 79.786 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 78.141 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 78.408 ms

Loss rate: 0.00%

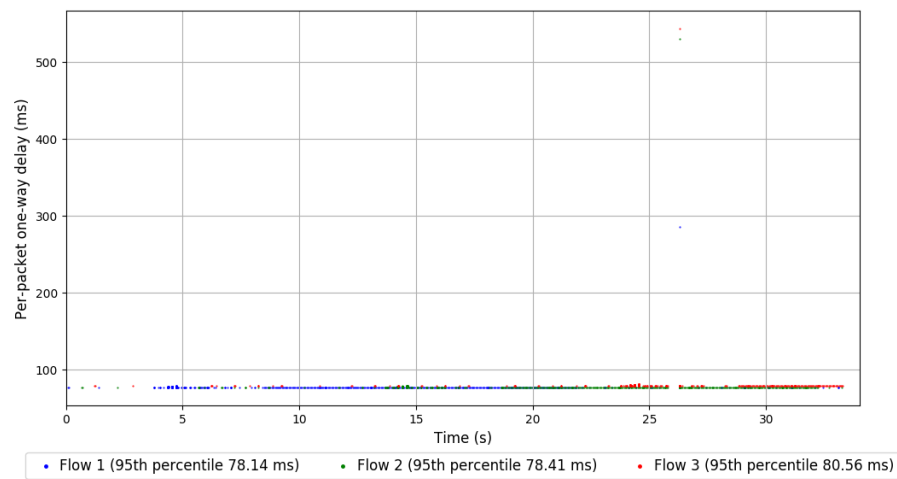
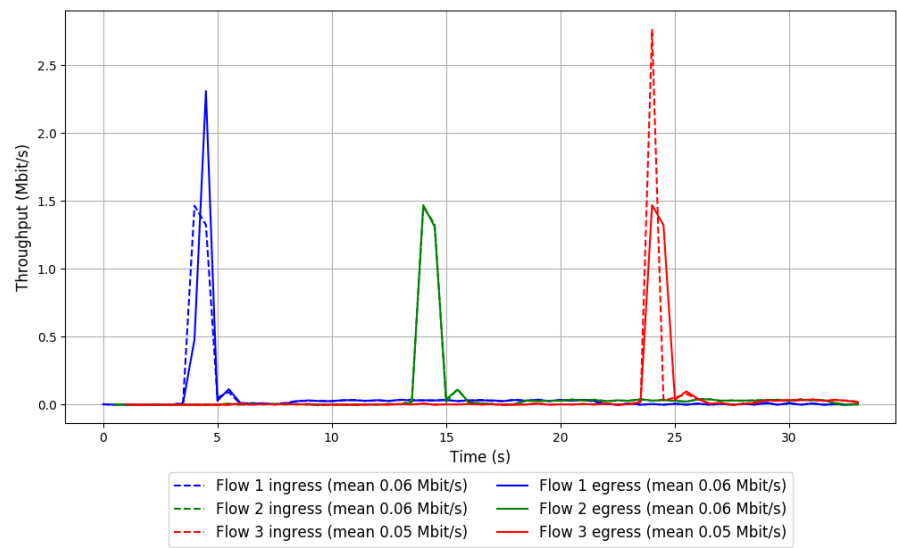
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 80.558 ms

Loss rate: 0.31%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-04-17 16:26:37

End at: 2018-04-17 16:27:07

Local clock offset: -3.607 ms

Remote clock offset: 4.822 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

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

Loss rate: 0.17%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 84.157 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 84.472 ms

Loss rate: 0.13%

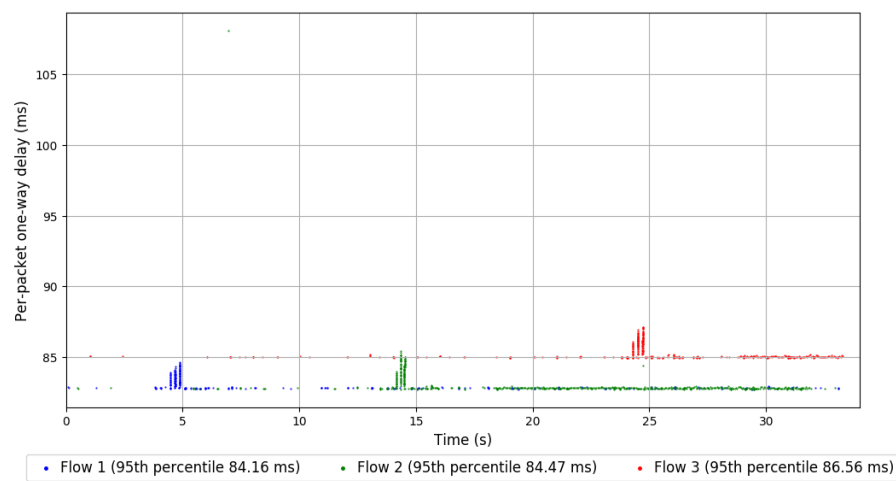
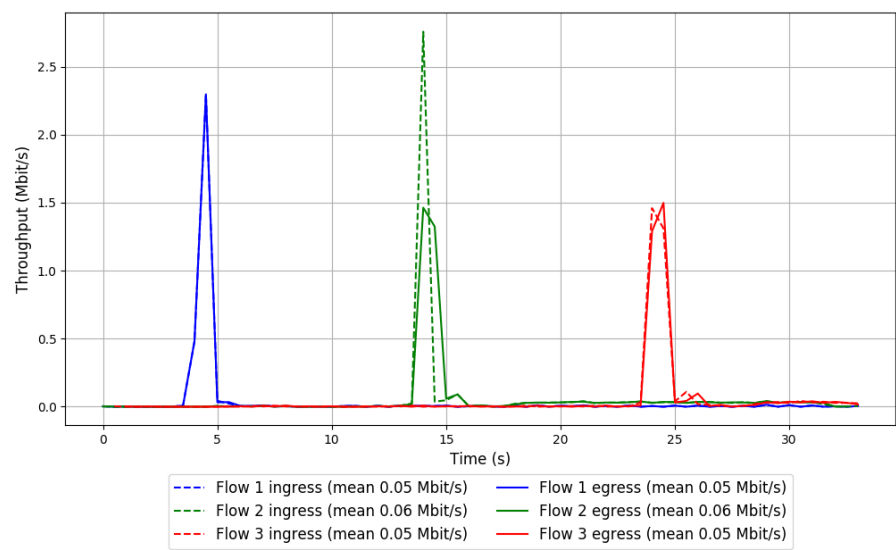
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.564 ms

Loss rate: 0.35%

Run 10: Report of WebRTC media — Data Link

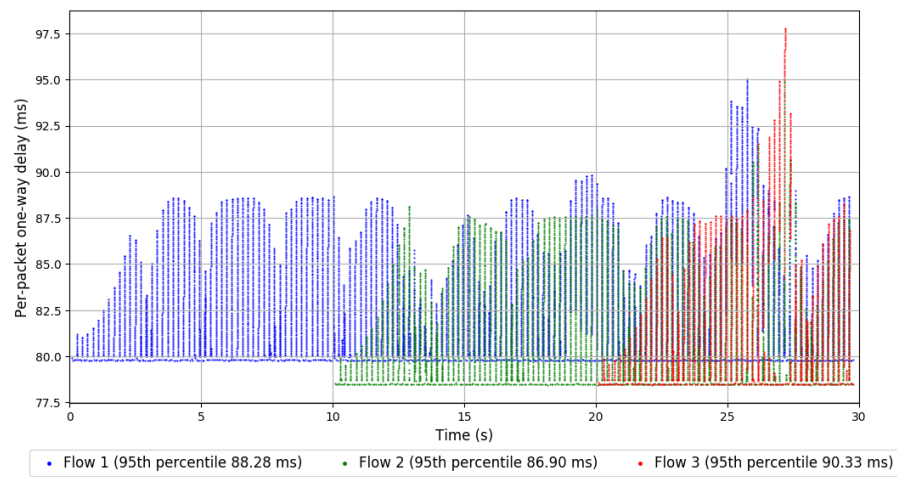
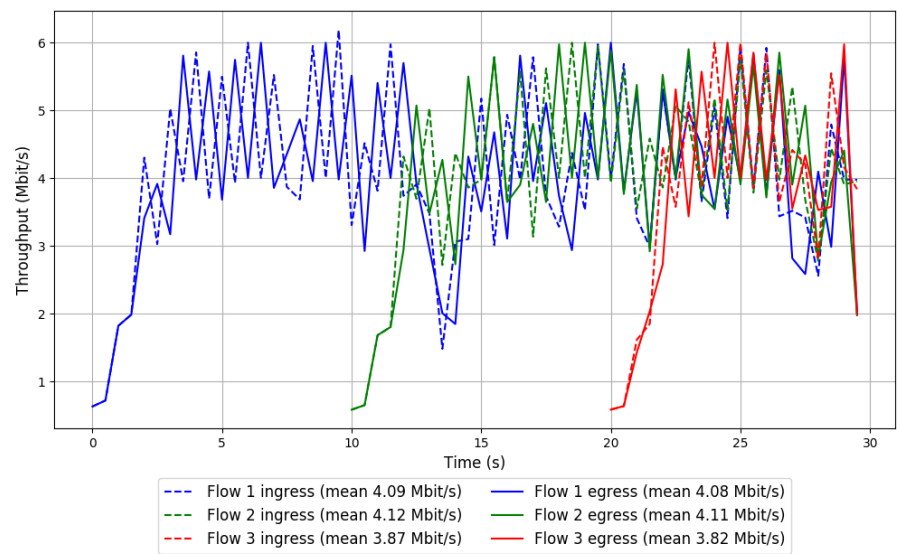


Run 1: Statistics of Sprout

Start at: 2018-04-17 13:14:44
End at: 2018-04-17 13:15:14
Local clock offset: -5.672 ms
Remote clock offset: 10.839 ms

Below is generated by plot.py at 2018-04-17 20:41:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.05 Mbit/s
95th percentile per-packet one-way delay: 88.031 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 88.276 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 86.896 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 90.331 ms
Loss rate: 2.63%

Run 1: Report of Sprout — Data Link

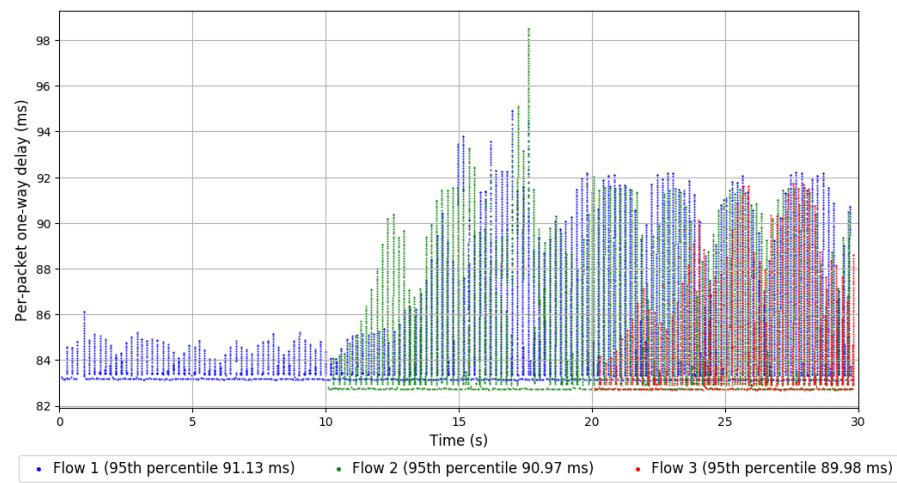
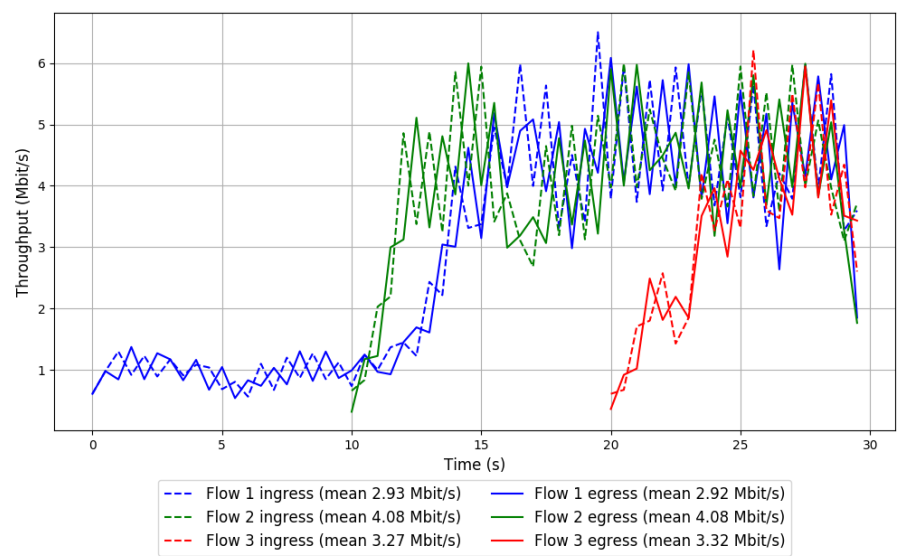


Run 2: Statistics of Sprout

Start at: 2018-04-17 13:37:14
End at: 2018-04-17 13:37:44
Local clock offset: -2.628 ms
Remote clock offset: 6.731 ms

```
# Below is generated by plot.py at 2018-04-17 20:41:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.70 Mbit/s
95th percentile per-packet one-way delay: 90.921 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 2.92 Mbit/s
95th percentile per-packet one-way delay: 91.129 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 90.967 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 3.32 Mbit/s
95th percentile per-packet one-way delay: 89.981 ms
Loss rate: 0.01%
```

Run 2: Report of Sprout — Data Link

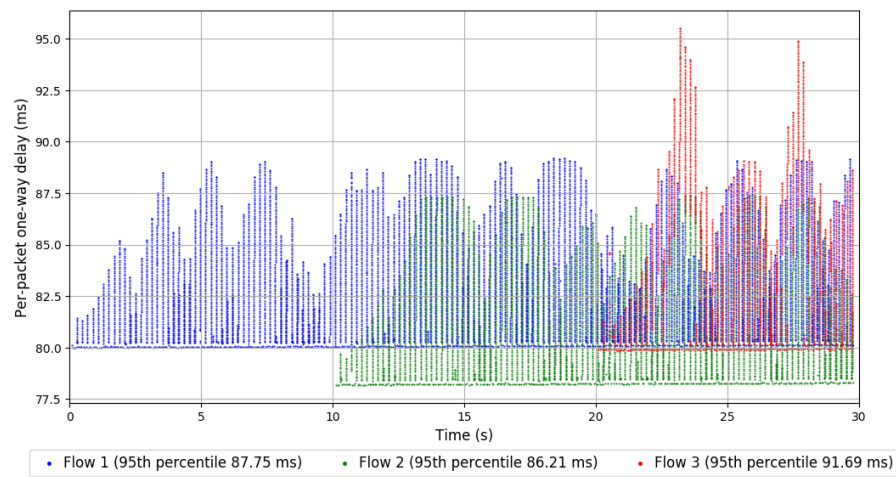
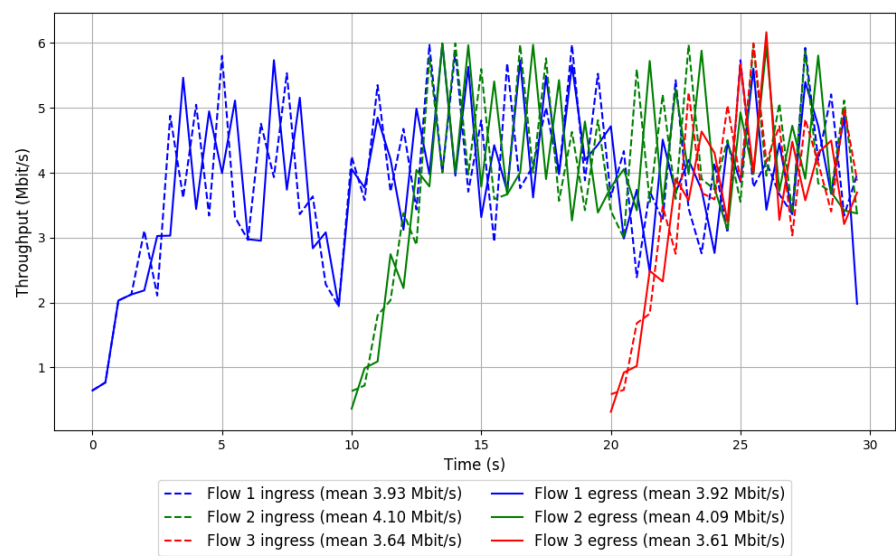


Run 3: Statistics of Sprout

Start at: 2018-04-17 13:59:33
End at: 2018-04-17 14:00:03
Local clock offset: -2.6 ms
Remote clock offset: 11.598 ms

```
# Below is generated by plot.py at 2018-04-17 20:41:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.80 Mbit/s
95th percentile per-packet one-way delay: 87.891 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 87.751 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 86.206 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 3.61 Mbit/s
95th percentile per-packet one-way delay: 91.692 ms
Loss rate: 2.76%
```

Run 3: Report of Sprout — Data Link

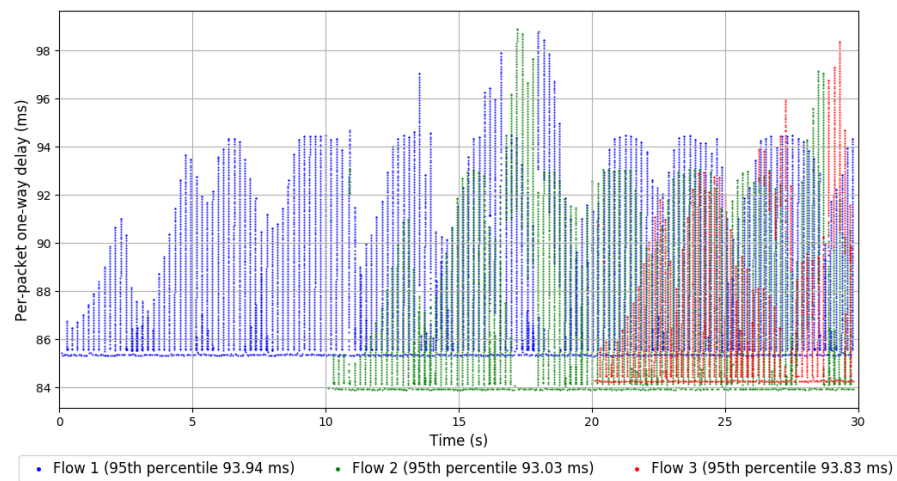
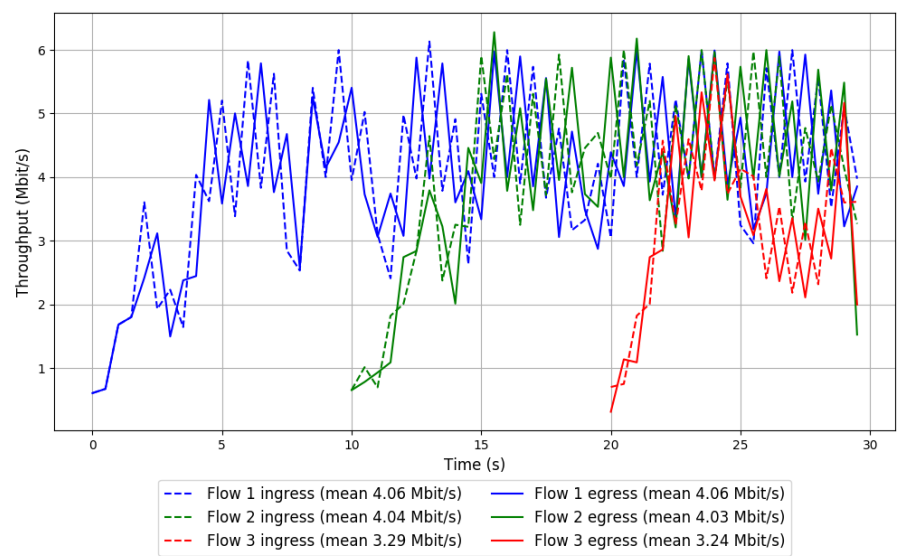


Run 4: Statistics of Sprout

Start at: 2018-04-17 14:21:43
End at: 2018-04-17 14:22:13
Local clock offset: -5.705 ms
Remote clock offset: 5.32 ms

```
# Below is generated by plot.py at 2018-04-17 20:41:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.78 Mbit/s
95th percentile per-packet one-way delay: 93.807 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 4.06 Mbit/s
95th percentile per-packet one-way delay: 93.942 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 93.031 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 3.24 Mbit/s
95th percentile per-packet one-way delay: 93.829 ms
Loss rate: 2.76%
```

Run 4: Report of Sprout — Data Link

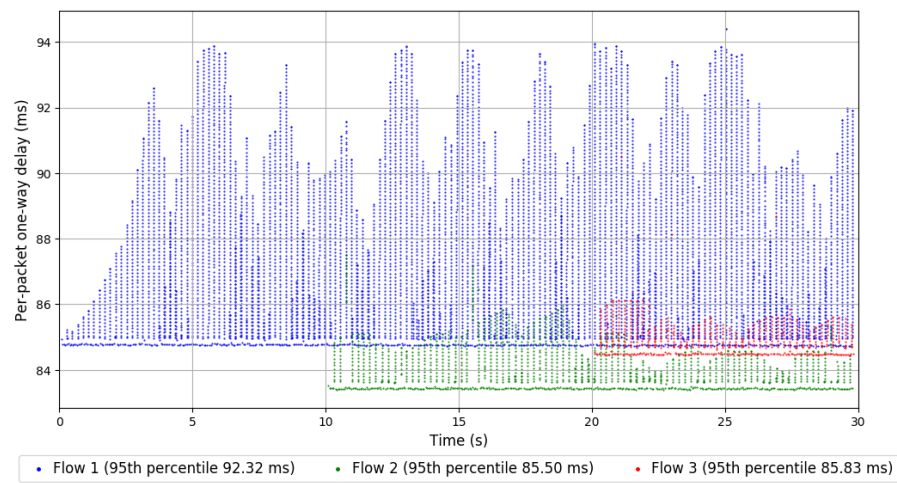
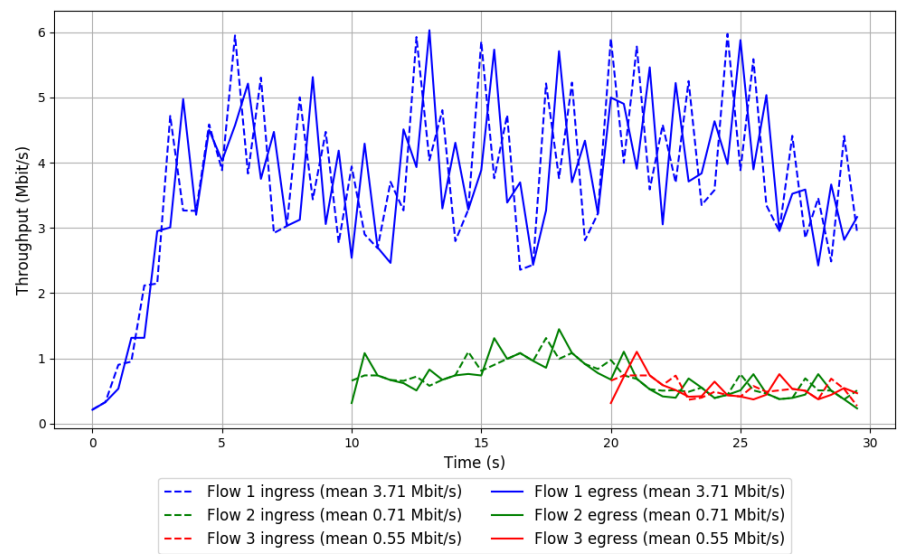


Run 5: Statistics of Sprout

Start at: 2018-04-17 14:44:01
End at: 2018-04-17 14:44:31
Local clock offset: -6.186 ms
Remote clock offset: 4.755 ms

Below is generated by plot.py at 2018-04-17 20:41:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 92.037 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 3.71 Mbit/s
95th percentile per-packet one-way delay: 92.324 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 85.505 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 85.832 ms
Loss rate: 0.39%

Run 5: Report of Sprout — Data Link

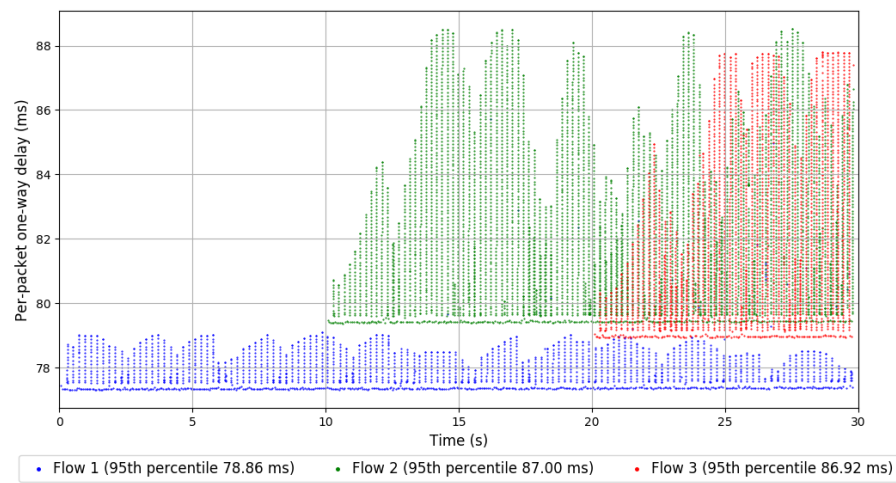
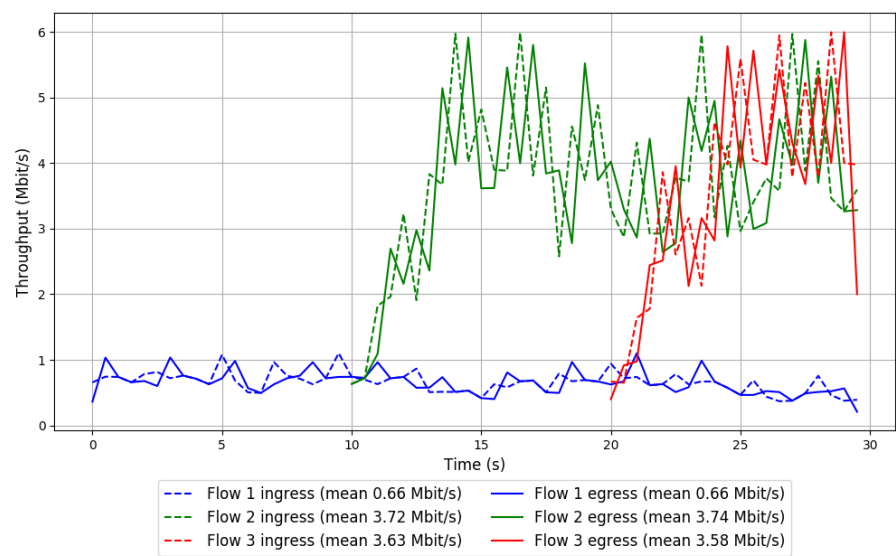


Run 6: Statistics of Sprout

Start at: 2018-04-17 15:06:28
End at: 2018-04-17 15:06:58
Local clock offset: -5.442 ms
Remote clock offset: 11.454 ms

```
# Below is generated by plot.py at 2018-04-17 20:41:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.31 Mbit/s
95th percentile per-packet one-way delay: 86.764 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 78.861 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 86.998 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 86.918 ms
Loss rate: 2.76%
```

Run 6: Report of Sprout — Data Link

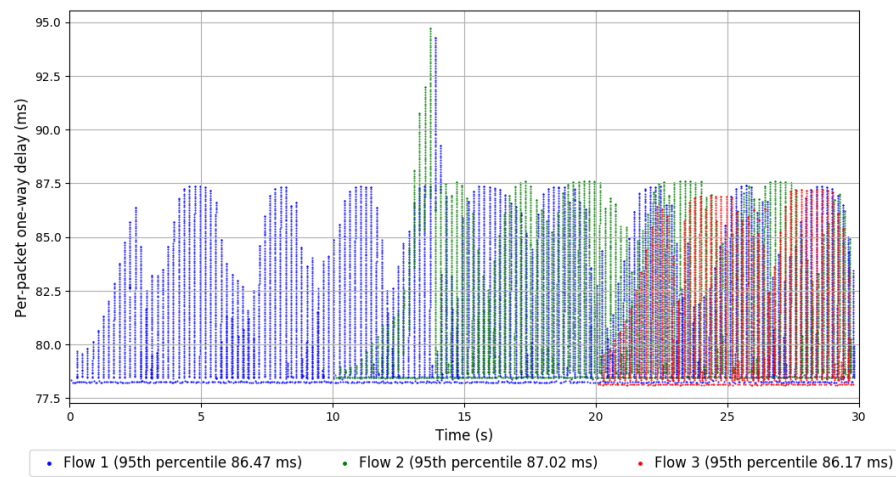
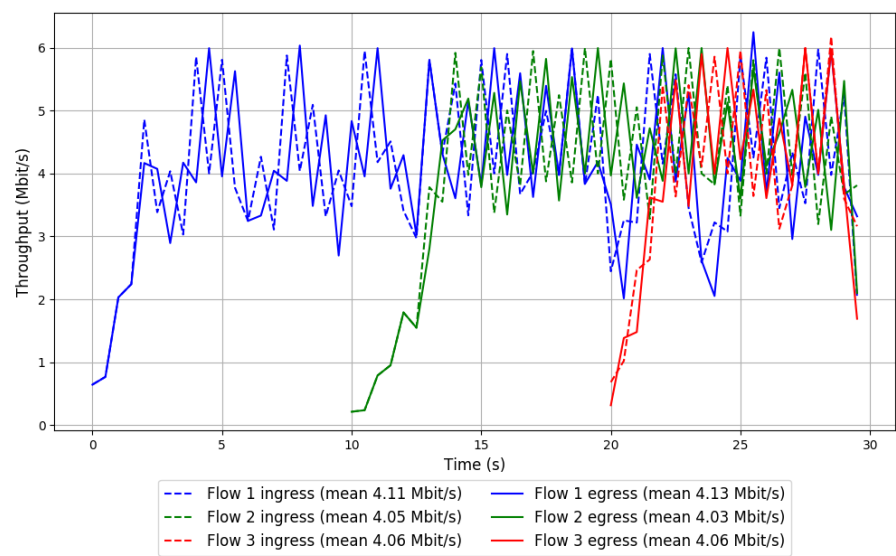


Run 7: Statistics of Sprout

Start at: 2018-04-17 15:28:44
End at: 2018-04-17 15:29:14
Local clock offset: -5.582 ms
Remote clock offset: 11.724 ms

Below is generated by plot.py at 2018-04-17 20:41:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 86.618 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 86.470 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 4.03 Mbit/s
95th percentile per-packet one-way delay: 87.024 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 4.06 Mbit/s
95th percentile per-packet one-way delay: 86.174 ms
Loss rate: 1.84%

Run 7: Report of Sprout — Data Link

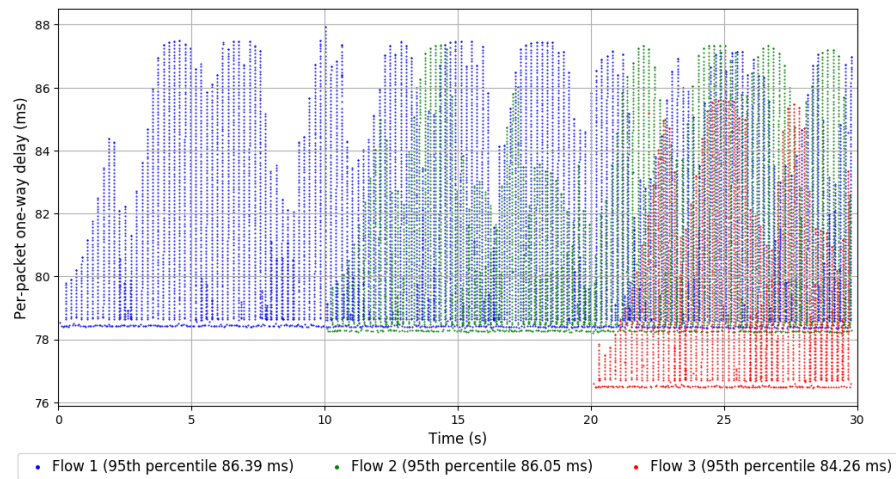
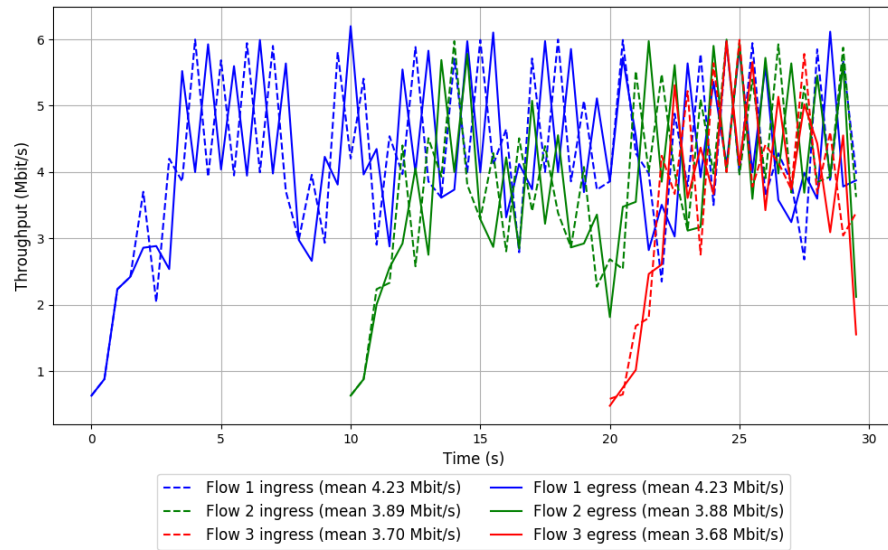


Run 8: Statistics of Sprout

Start at: 2018-04-17 15:51:01
End at: 2018-04-17 15:51:31
Local clock offset: -6.395 ms
Remote clock offset: 11.014 ms

Below is generated by plot.py at 2018-04-17 20:41:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.00 Mbit/s
95th percentile per-packet one-way delay: 86.147 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 4.23 Mbit/s
95th percentile per-packet one-way delay: 86.391 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 86.054 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 84.261 ms
Loss rate: 2.52%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-04-17 16:13:28

End at: 2018-04-17 16:13:58

Local clock offset: -6.27 ms

Remote clock offset: 4.561 ms

Below is generated by plot.py at 2018-04-17 20:41:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.18 Mbit/s

95th percentile per-packet one-way delay: 90.028 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 1.84 Mbit/s

95th percentile per-packet one-way delay: 86.412 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.34 Mbit/s

95th percentile per-packet one-way delay: 90.601 ms

Loss rate: 0.00%

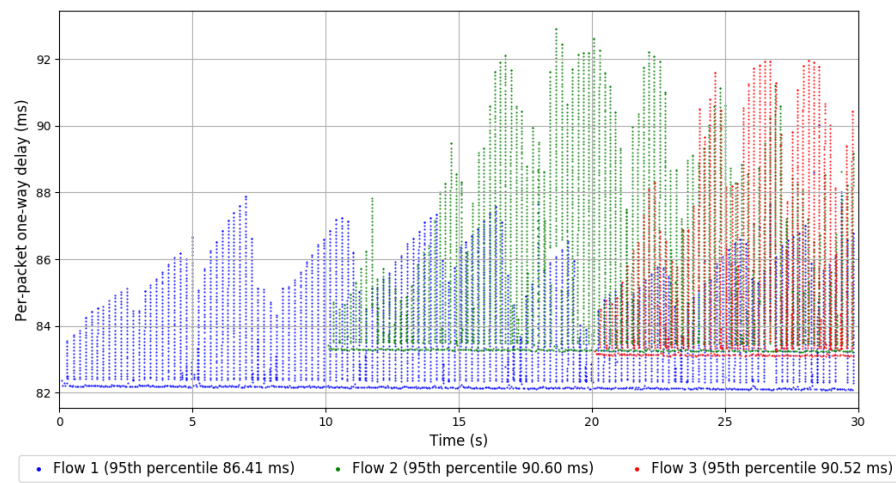
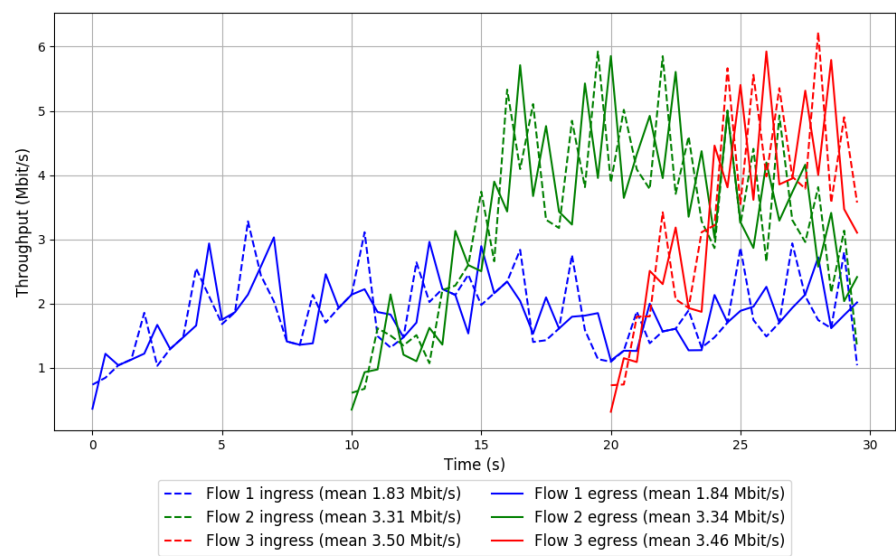
-- Flow 3:

Average throughput: 3.46 Mbit/s

95th percentile per-packet one-way delay: 90.523 ms

Loss rate: 2.76%

Run 9: Report of Sprout — Data Link

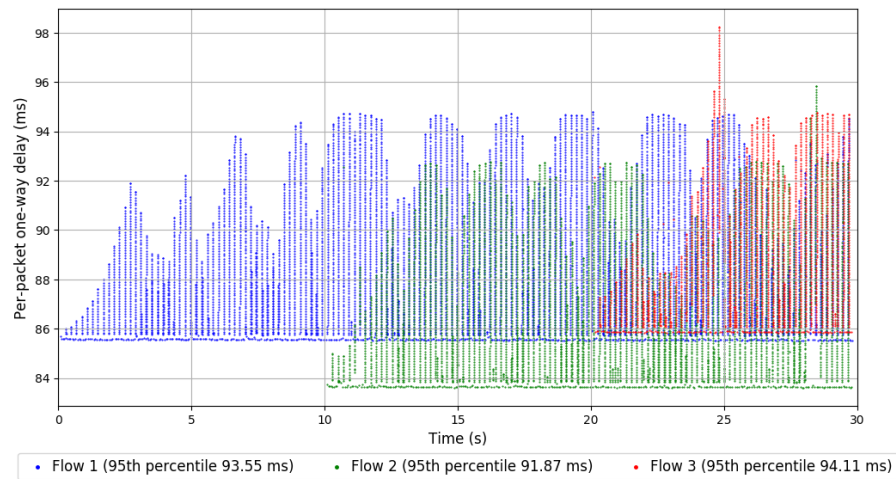
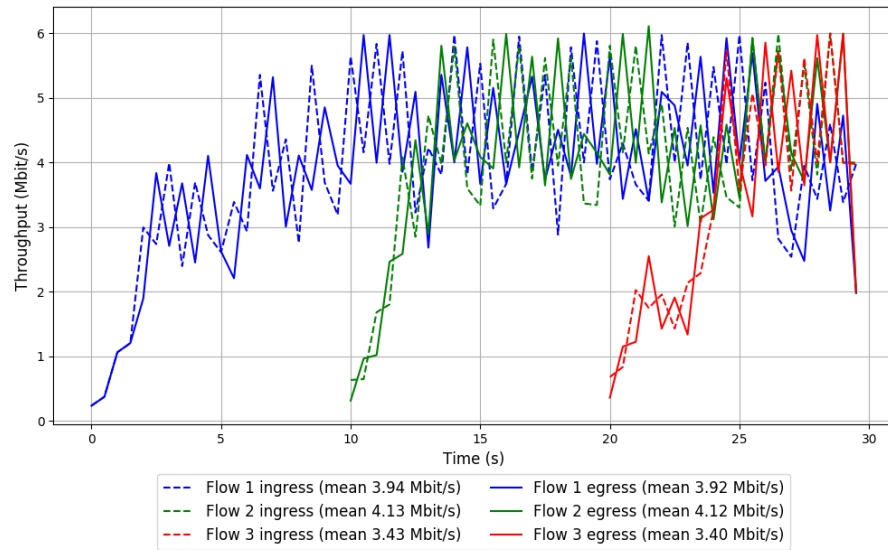


Run 10: Statistics of Sprout

Start at: 2018-04-17 16:35:48
End at: 2018-04-17 16:36:18
Local clock offset: -3.033 ms
Remote clock offset: 3.848 ms

```
# Below is generated by plot.py at 2018-04-17 20:41:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.76 Mbit/s
95th percentile per-packet one-way delay: 93.245 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 3.92 Mbit/s
95th percentile per-packet one-way delay: 93.545 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 91.866 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 3.40 Mbit/s
95th percentile per-packet one-way delay: 94.110 ms
Loss rate: 2.92%
```

Run 10: Report of Sprout — Data Link

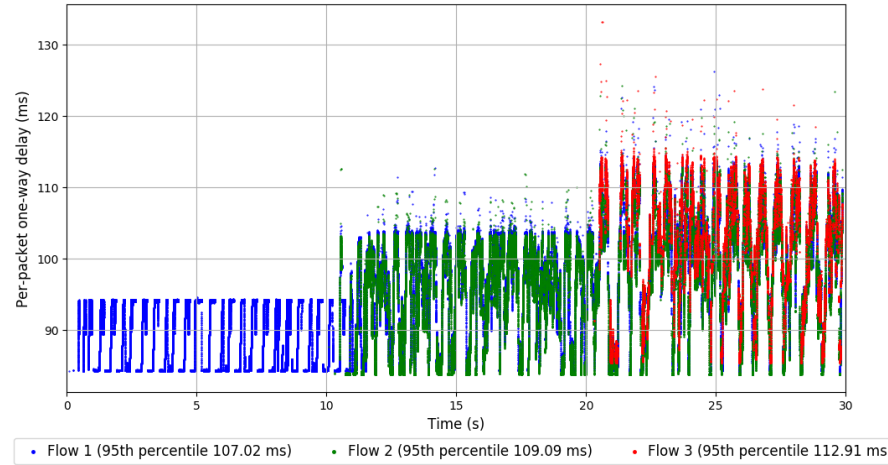
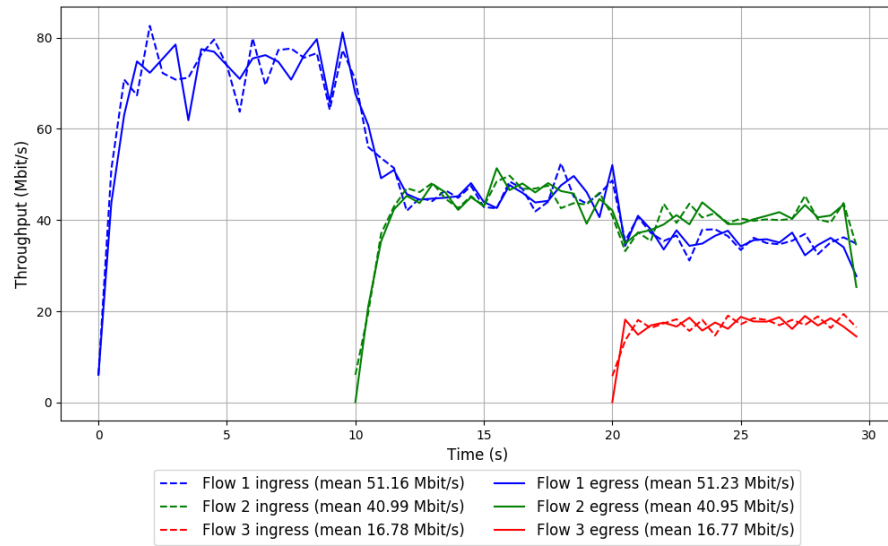



```
Run 1: Statistics of TaoVA-100x

Start at: 2018-04-17 13:13:19
End at: 2018-04-17 13:13:50
Local clock offset: -5.716 ms
Remote clock offset: 5.152 ms

# Below is generated by plot.py at 2018-04-17 20:43:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.91 Mbit/s
95th percentile per-packet one-way delay: 109.095 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 51.23 Mbit/s
95th percentile per-packet one-way delay: 107.022 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 40.95 Mbit/s
95th percentile per-packet one-way delay: 109.088 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 16.77 Mbit/s
95th percentile per-packet one-way delay: 112.911 ms
Loss rate: 2.14%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-04-17 13:35:51

End at: 2018-04-17 13:36:21

Local clock offset: -2.786 ms

Remote clock offset: 6.769 ms

Below is generated by plot.py at 2018-04-17 20:43:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.72 Mbit/s

95th percentile per-packet one-way delay: 106.102 ms

Loss rate: 12.63%

-- Flow 1:

Average throughput: 46.93 Mbit/s

95th percentile per-packet one-way delay: 102.875 ms

Loss rate: 10.88%

-- Flow 2:

Average throughput: 30.76 Mbit/s

95th percentile per-packet one-way delay: 107.323 ms

Loss rate: 15.79%

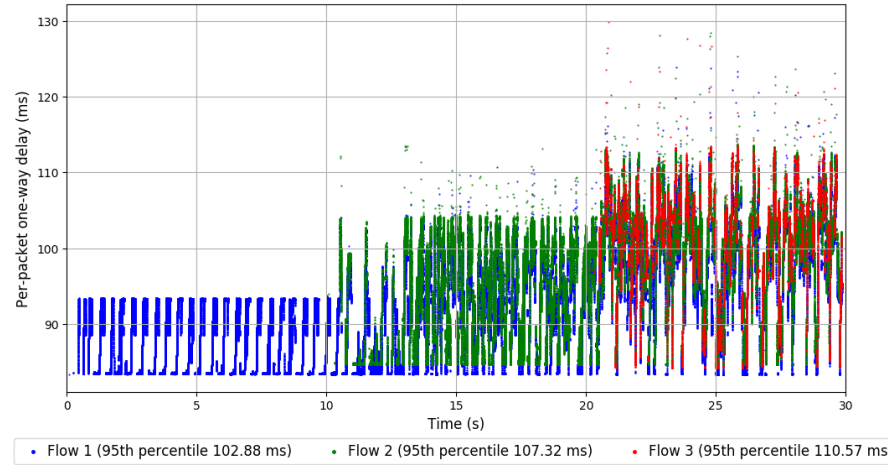
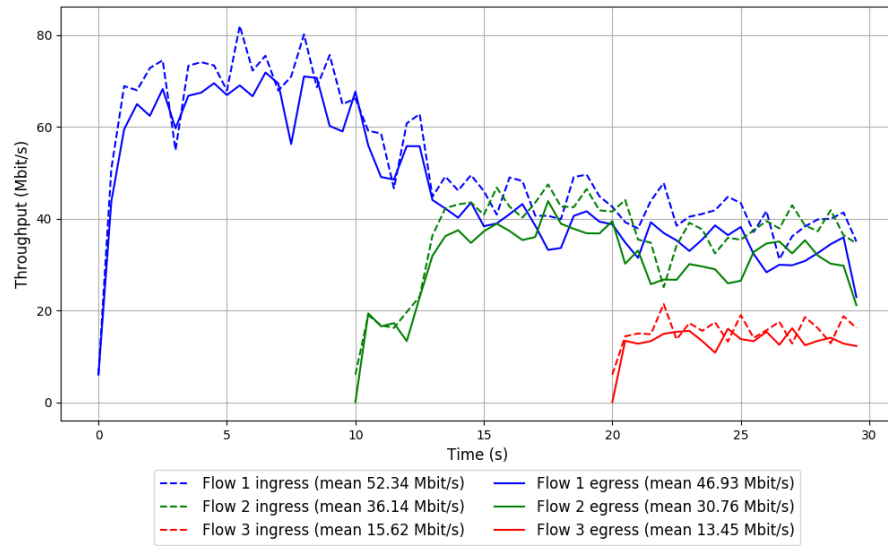
-- Flow 3:

Average throughput: 13.45 Mbit/s

95th percentile per-packet one-way delay: 110.572 ms

Loss rate: 15.72%

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

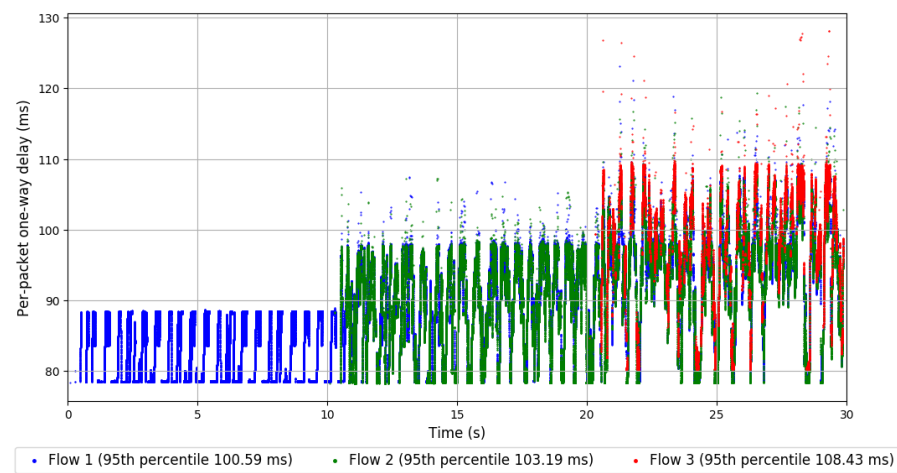
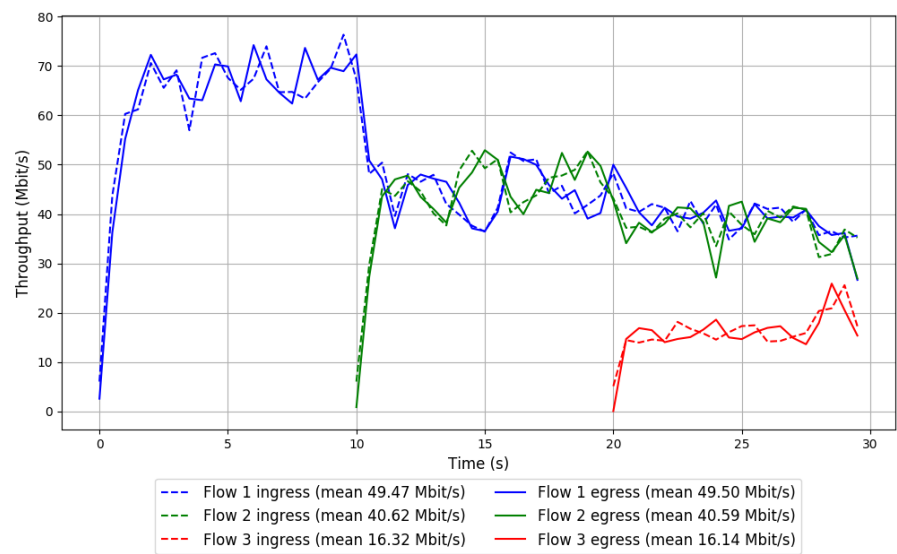


Run 3: Statistics of TaoVA-100x

Start at: 2018-04-17 13:58:10
End at: 2018-04-17 13:58:40
Local clock offset: -2.13 ms
Remote clock offset: 11.679 ms

Below is generated by plot.py at 2018-04-17 20:43:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 81.74 Mbit/s
95th percentile per-packet one-way delay: 103.458 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 49.50 Mbit/s
95th percentile per-packet one-way delay: 100.592 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 40.59 Mbit/s
95th percentile per-packet one-way delay: 103.191 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 16.14 Mbit/s
95th percentile per-packet one-way delay: 108.428 ms
Loss rate: 2.16%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-04-17 14:20:20

End at: 2018-04-17 14:20:50

Local clock offset: -5.73 ms

Remote clock offset: 6.195 ms

Below is generated by plot.py at 2018-04-17 20:43:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.29 Mbit/s

95th percentile per-packet one-way delay: 107.929 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 52.03 Mbit/s

95th percentile per-packet one-way delay: 106.723 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 40.86 Mbit/s

95th percentile per-packet one-way delay: 108.988 ms

Loss rate: 0.88%

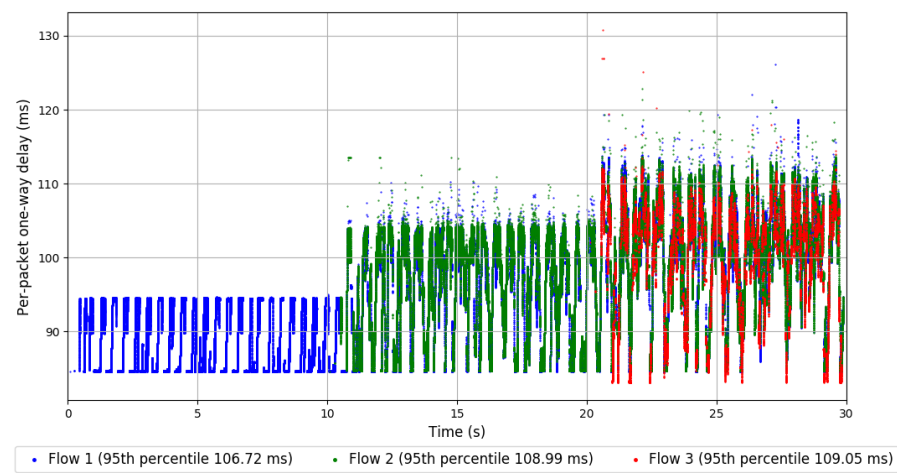
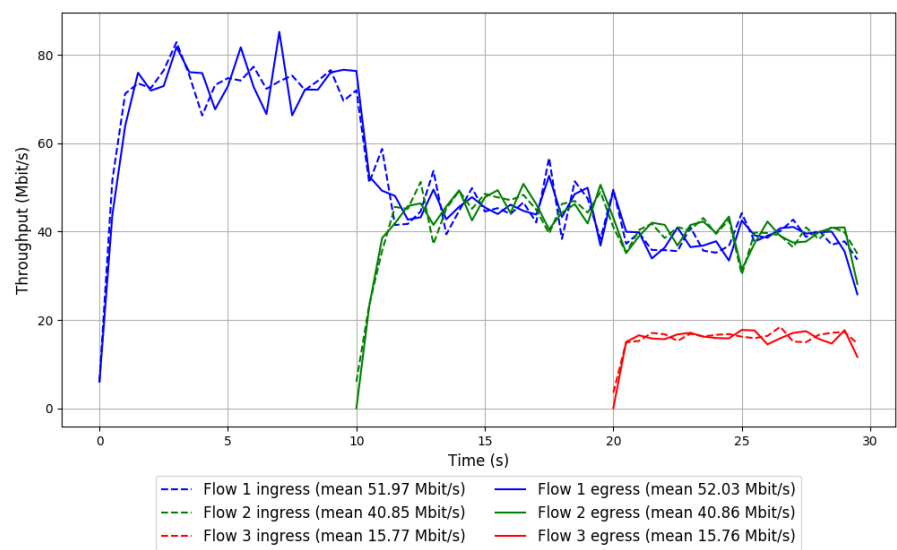
-- Flow 3:

Average throughput: 15.76 Mbit/s

95th percentile per-packet one-way delay: 109.049 ms

Loss rate: 2.35%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-04-17 14:42:38

End at: 2018-04-17 14:43:08

Local clock offset: -5.489 ms

Remote clock offset: 9.579 ms

Below is generated by plot.py at 2018-04-17 20:43:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.08 Mbit/s

95th percentile per-packet one-way delay: 104.612 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 52.44 Mbit/s

95th percentile per-packet one-way delay: 102.153 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 38.71 Mbit/s

95th percentile per-packet one-way delay: 105.218 ms

Loss rate: 0.90%

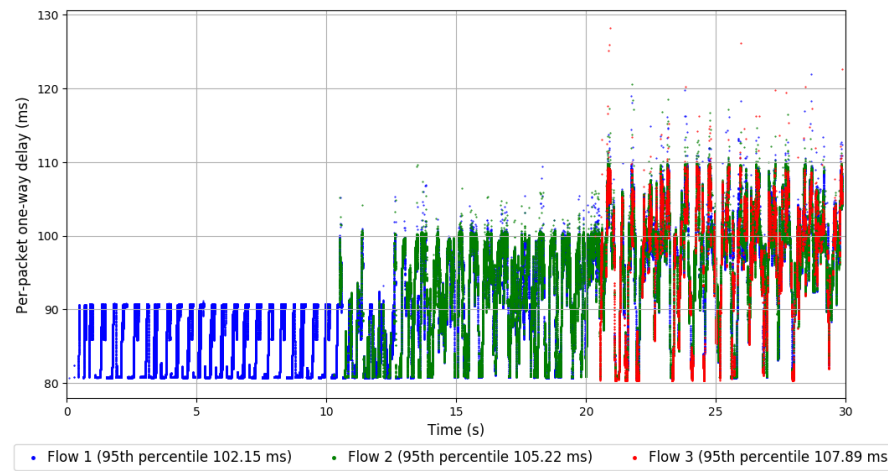
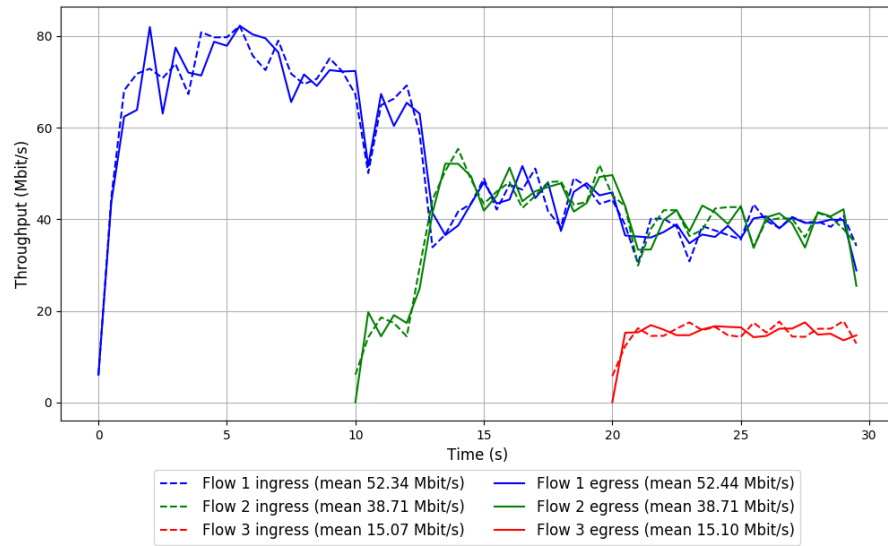
-- Flow 3:

Average throughput: 15.10 Mbit/s

95th percentile per-packet one-way delay: 107.888 ms

Loss rate: 1.78%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-04-17 15:05:05

End at: 2018-04-17 15:05:35

Local clock offset: -4.699 ms

Remote clock offset: 5.543 ms

Below is generated by plot.py at 2018-04-17 20:43:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.22 Mbit/s

95th percentile per-packet one-way delay: 109.171 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 48.16 Mbit/s

95th percentile per-packet one-way delay: 109.059 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 40.94 Mbit/s

95th percentile per-packet one-way delay: 108.598 ms

Loss rate: 0.88%

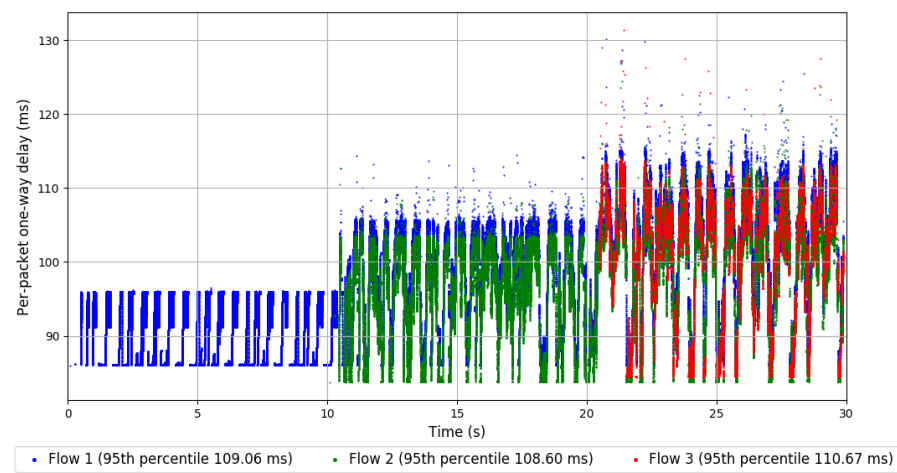
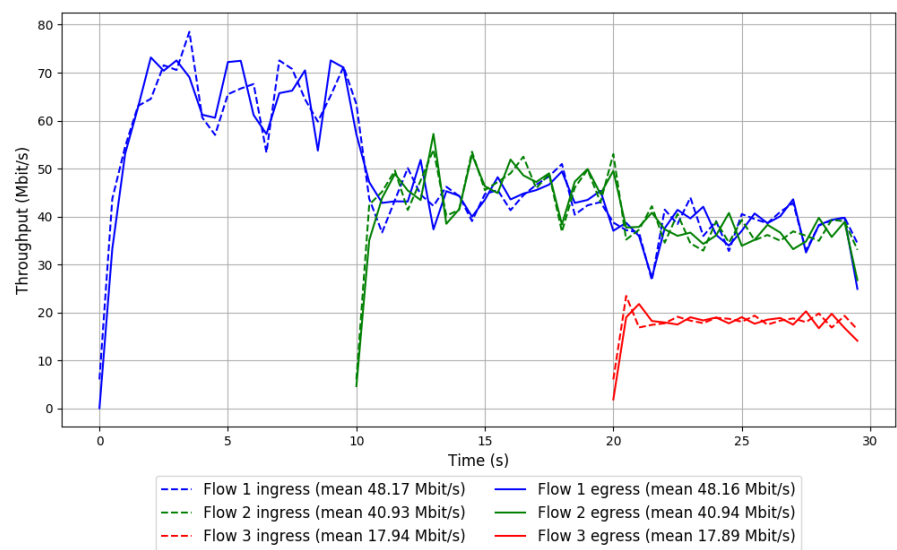
-- Flow 3:

Average throughput: 17.89 Mbit/s

95th percentile per-packet one-way delay: 110.666 ms

Loss rate: 2.05%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-04-17 15:27:20

End at: 2018-04-17 15:27:50

Local clock offset: -6.314 ms

Remote clock offset: 5.935 ms

Below is generated by plot.py at 2018-04-17 20:43:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.60 Mbit/s

95th percentile per-packet one-way delay: 108.437 ms

Loss rate: 4.87%

-- Flow 1:

Average throughput: 50.19 Mbit/s

95th percentile per-packet one-way delay: 104.197 ms

Loss rate: 3.59%

-- Flow 2:

Average throughput: 38.20 Mbit/s

95th percentile per-packet one-way delay: 109.960 ms

Loss rate: 6.36%

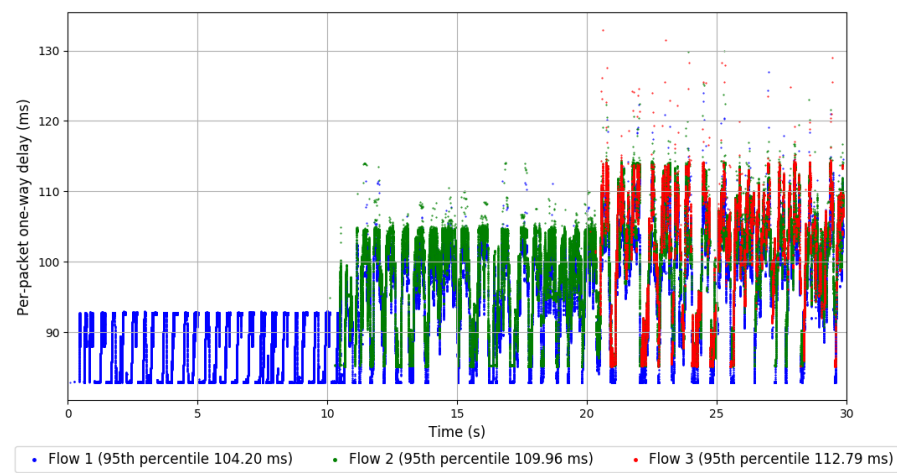
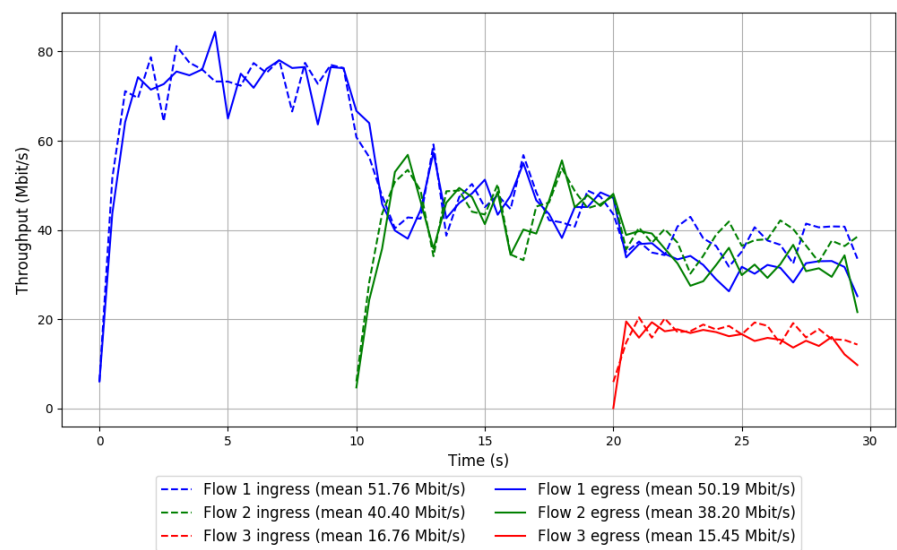
-- Flow 3:

Average throughput: 15.45 Mbit/s

95th percentile per-packet one-way delay: 112.791 ms

Loss rate: 9.67%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-04-17 15:49:37

End at: 2018-04-17 15:50:07

Local clock offset: -5.564 ms

Remote clock offset: 5.367 ms

Below is generated by plot.py at 2018-04-17 20:43:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.99 Mbit/s

95th percentile per-packet one-way delay: 111.686 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 49.31 Mbit/s

95th percentile per-packet one-way delay: 112.361 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 37.96 Mbit/s

95th percentile per-packet one-way delay: 111.180 ms

Loss rate: 0.89%

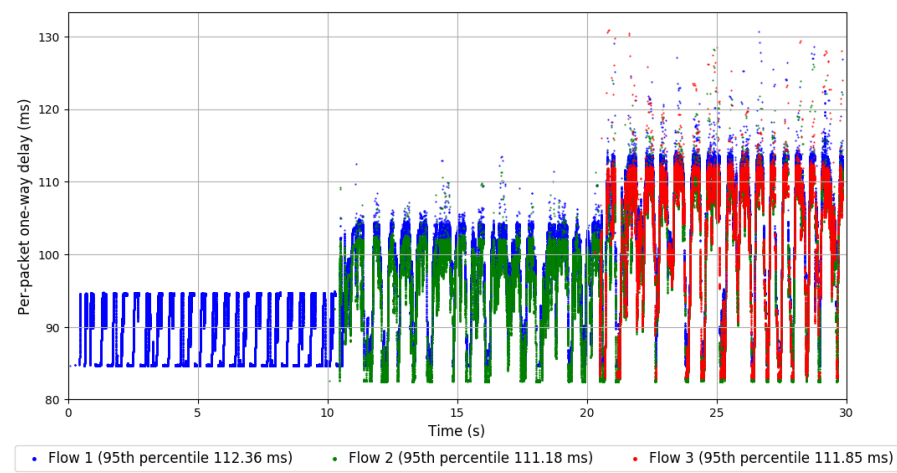
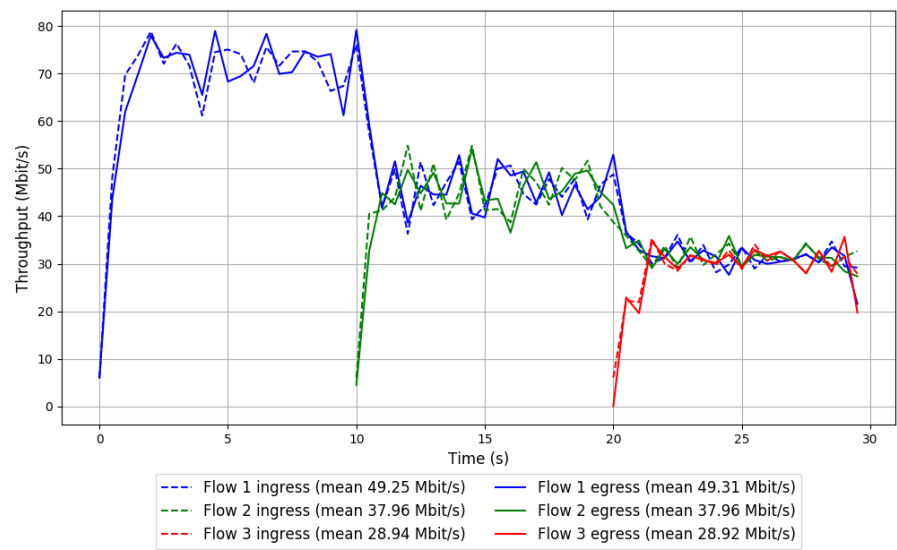
-- Flow 3:

Average throughput: 28.92 Mbit/s

95th percentile per-packet one-way delay: 111.846 ms

Loss rate: 2.05%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-04-17 16:12:05

End at: 2018-04-17 16:12:35

Local clock offset: -5.589 ms

Remote clock offset: 3.639 ms

Below is generated by plot.py at 2018-04-17 20:45:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.35 Mbit/s

95th percentile per-packet one-way delay: 108.801 ms

Loss rate: 13.64%

-- Flow 1:

Average throughput: 45.27 Mbit/s

95th percentile per-packet one-way delay: 105.577 ms

Loss rate: 12.27%

-- Flow 2:

Average throughput: 33.23 Mbit/s

95th percentile per-packet one-way delay: 110.515 ms

Loss rate: 16.73%

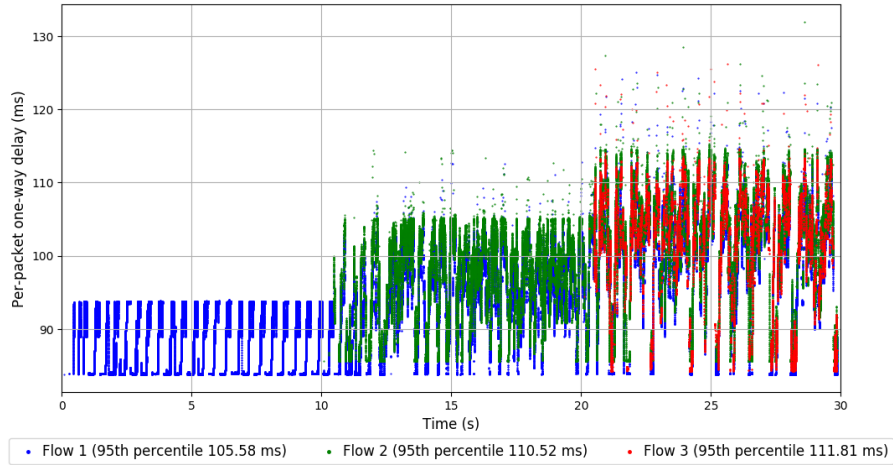
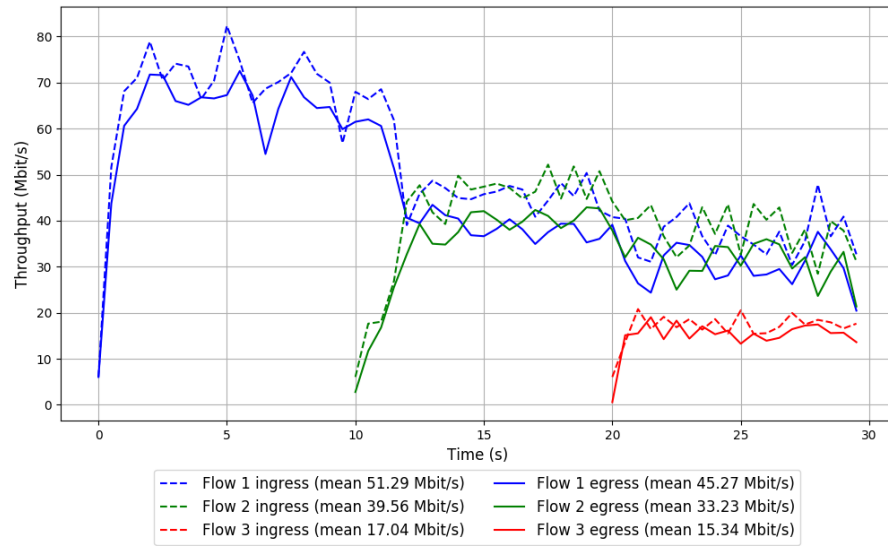
-- Flow 3:

Average throughput: 15.34 Mbit/s

95th percentile per-packet one-way delay: 111.806 ms

Loss rate: 11.69%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-04-17 16:34:25

End at: 2018-04-17 16:34:55

Local clock offset: -3.103 ms

Remote clock offset: 8.746 ms

Below is generated by plot.py at 2018-04-17 20:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.07 Mbit/s

95th percentile per-packet one-way delay: 108.313 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 50.32 Mbit/s

95th percentile per-packet one-way delay: 106.378 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 35.49 Mbit/s

95th percentile per-packet one-way delay: 108.768 ms

Loss rate: 1.04%

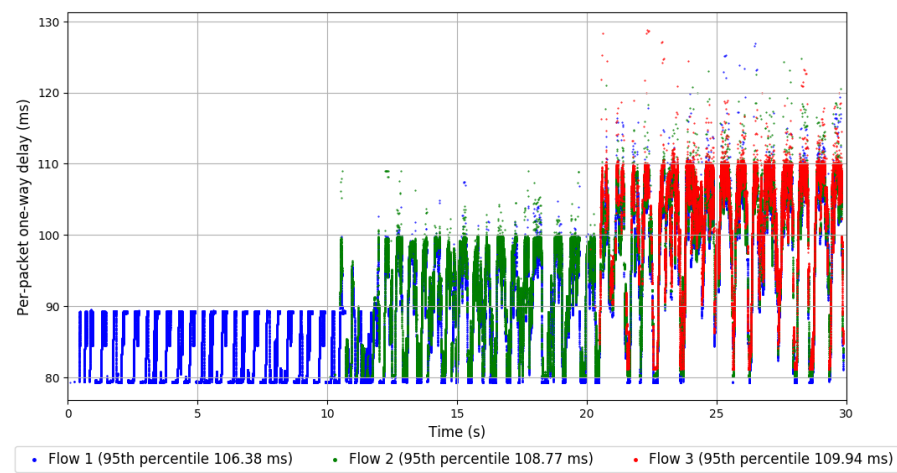
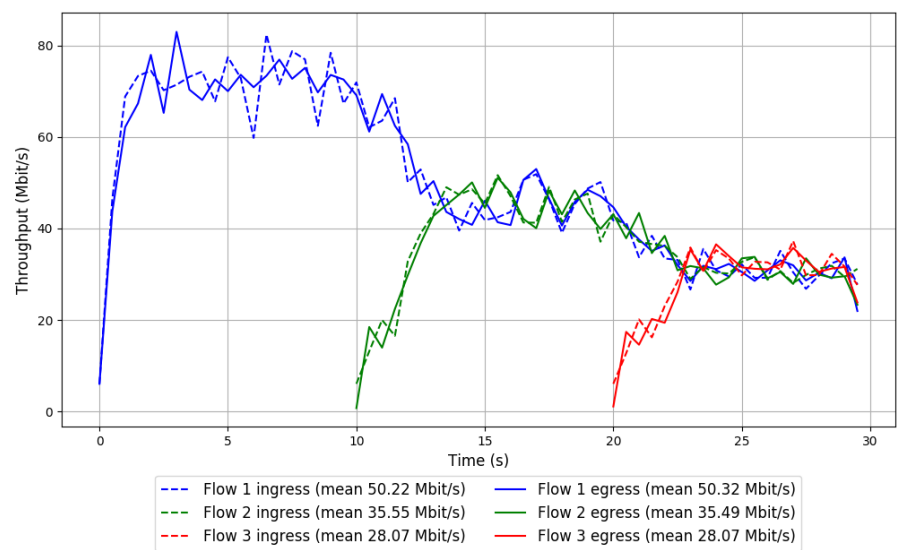
-- Flow 3:

Average throughput: 28.07 Mbit/s

95th percentile per-packet one-way delay: 109.942 ms

Loss rate: 1.99%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-04-17 13:06:38

End at: 2018-04-17 13:07:08

Local clock offset: -4.917 ms

Remote clock offset: 5.939 ms

Below is generated by plot.py at 2018-04-17 20:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 43.73 Mbit/s

95th percentile per-packet one-way delay: 97.340 ms

Loss rate: 1.89%

-- Flow 1:

Average throughput: 14.38 Mbit/s

95th percentile per-packet one-way delay: 97.735 ms

Loss rate: 2.01%

-- Flow 2:

Average throughput: 30.27 Mbit/s

95th percentile per-packet one-way delay: 97.307 ms

Loss rate: 1.55%

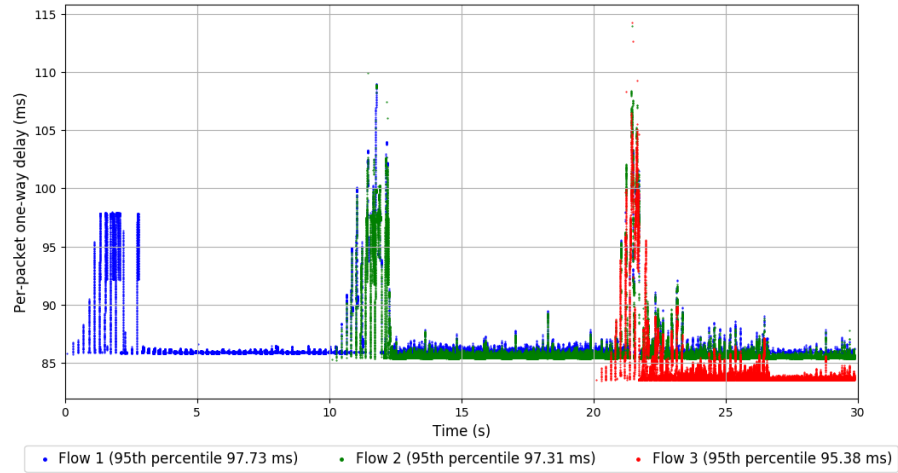
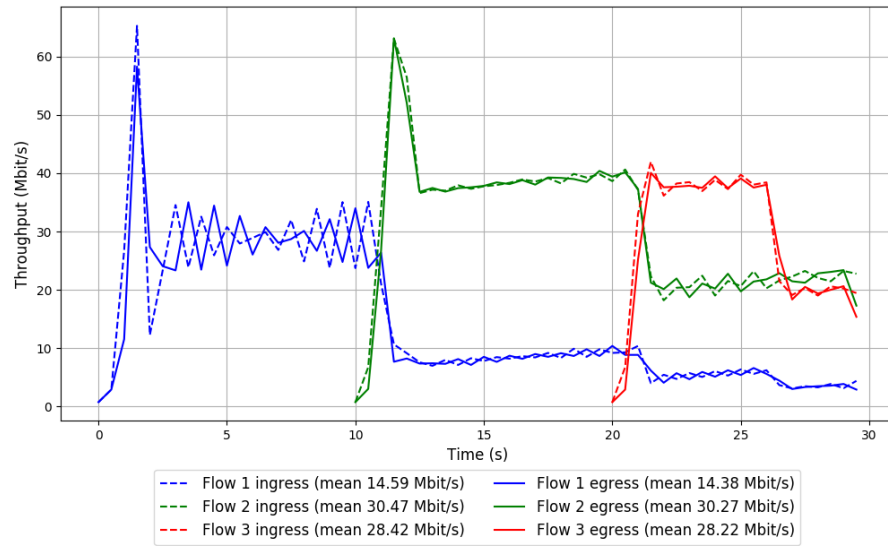
-- Flow 3:

Average throughput: 28.22 Mbit/s

95th percentile per-packet one-way delay: 95.380 ms

Loss rate: 2.43%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-04-17 13:29:19

End at: 2018-04-17 13:29:49

Local clock offset: -3.784 ms

Remote clock offset: 6.545 ms

Below is generated by plot.py at 2018-04-17 20:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.85 Mbit/s

95th percentile per-packet one-way delay: 103.507 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 24.99 Mbit/s

95th percentile per-packet one-way delay: 104.018 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 37.29 Mbit/s

95th percentile per-packet one-way delay: 102.729 ms

Loss rate: 1.08%

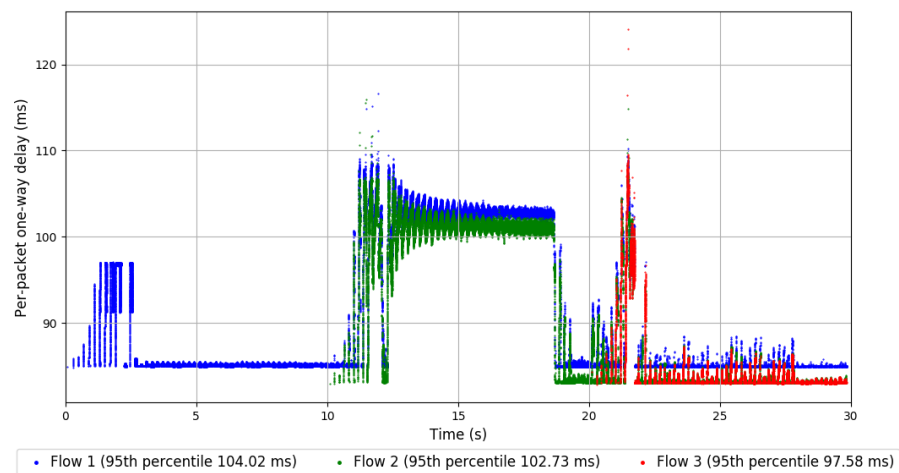
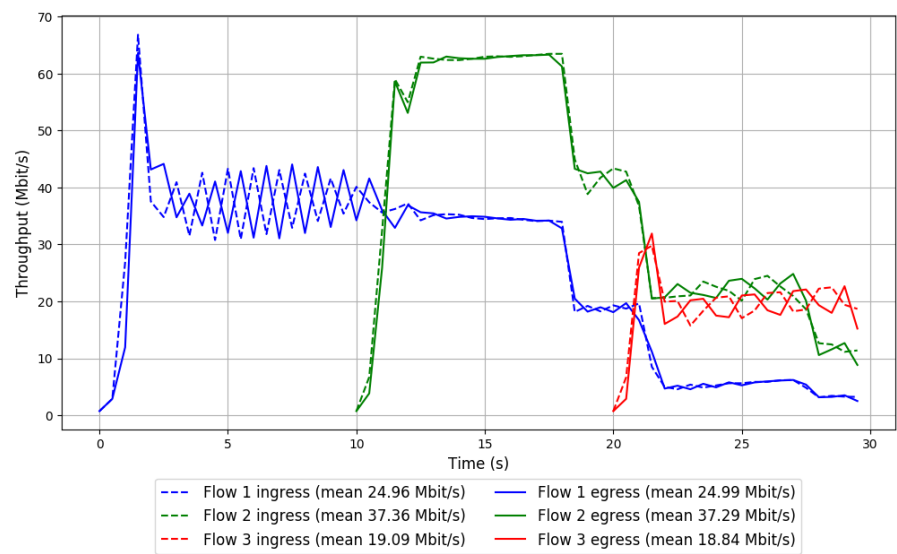
-- Flow 3:

Average throughput: 18.84 Mbit/s

95th percentile per-packet one-way delay: 97.581 ms

Loss rate: 3.12%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-04-17 13:51:38

End at: 2018-04-17 13:52:08

Local clock offset: -1.609 ms

Remote clock offset: 7.107 ms

Below is generated by plot.py at 2018-04-17 20:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.42 Mbit/s

95th percentile per-packet one-way delay: 118.018 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 37.30 Mbit/s

95th percentile per-packet one-way delay: 116.686 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 37.38 Mbit/s

95th percentile per-packet one-way delay: 118.004 ms

Loss rate: 0.98%

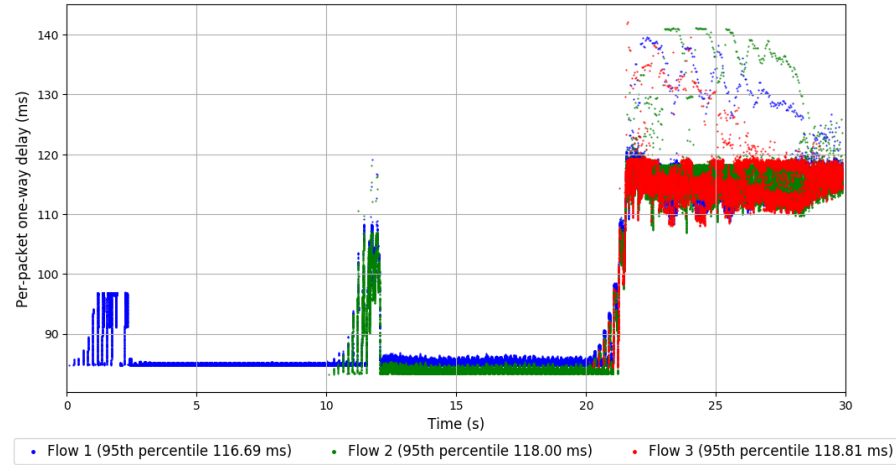
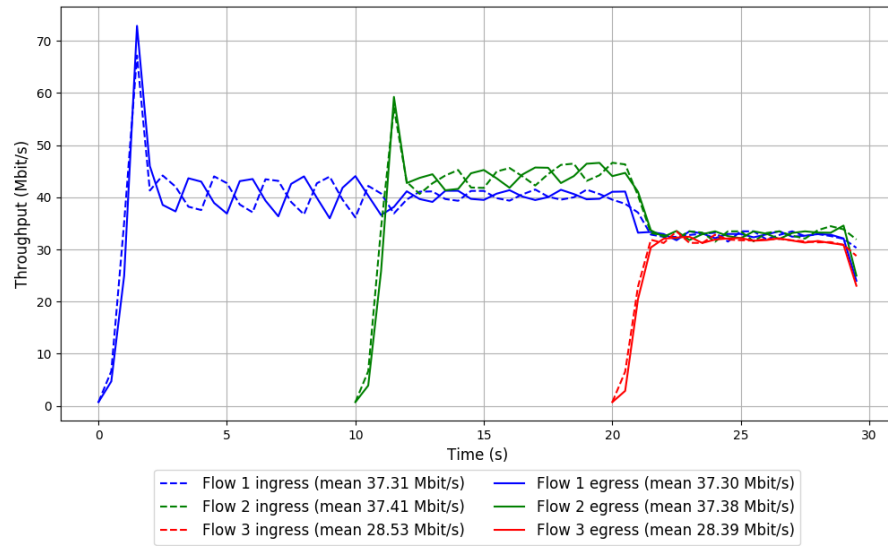
-- Flow 3:

Average throughput: 28.39 Mbit/s

95th percentile per-packet one-way delay: 118.813 ms

Loss rate: 2.31%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-04-17 14:13:53

End at: 2018-04-17 14:14:23

Local clock offset: -4.495 ms

Remote clock offset: 6.246 ms

Below is generated by plot.py at 2018-04-17 20:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 45.90 Mbit/s

95th percentile per-packet one-way delay: 95.760 ms

Loss rate: 1.48%

-- Flow 1:

Average throughput: 27.82 Mbit/s

95th percentile per-packet one-way delay: 94.603 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 17.32 Mbit/s

95th percentile per-packet one-way delay: 95.756 ms

Loss rate: 1.92%

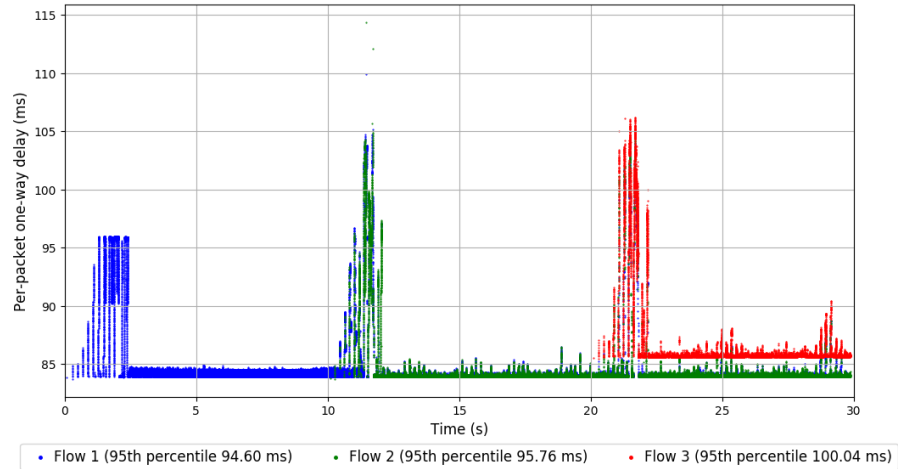
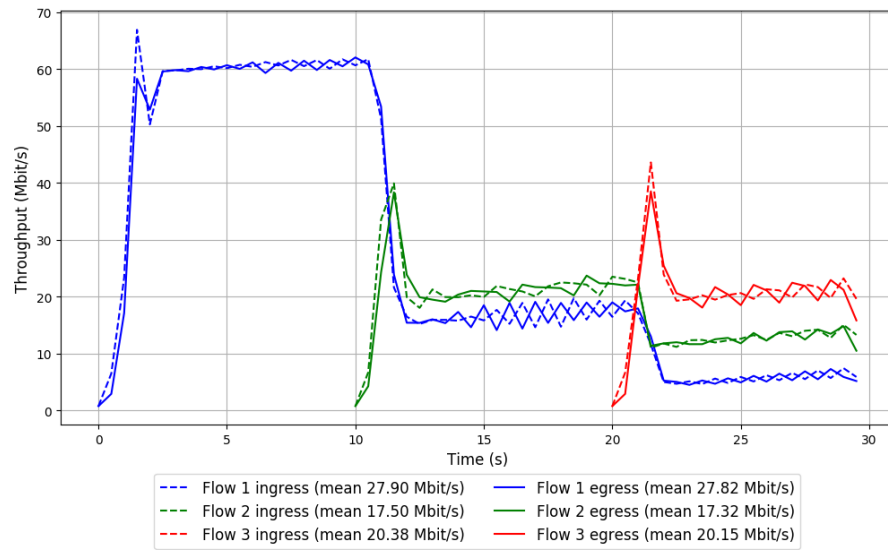
-- Flow 3:

Average throughput: 20.15 Mbit/s

95th percentile per-packet one-way delay: 100.044 ms

Loss rate: 2.88%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-04-17 14:36:05

End at: 2018-04-17 14:36:35

Local clock offset: -6.487 ms

Remote clock offset: 4.983 ms

Below is generated by plot.py at 2018-04-17 20:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.69 Mbit/s

95th percentile per-packet one-way delay: 115.776 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 33.04 Mbit/s

95th percentile per-packet one-way delay: 114.900 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 46.65 Mbit/s

95th percentile per-packet one-way delay: 114.132 ms

Loss rate: 0.75%

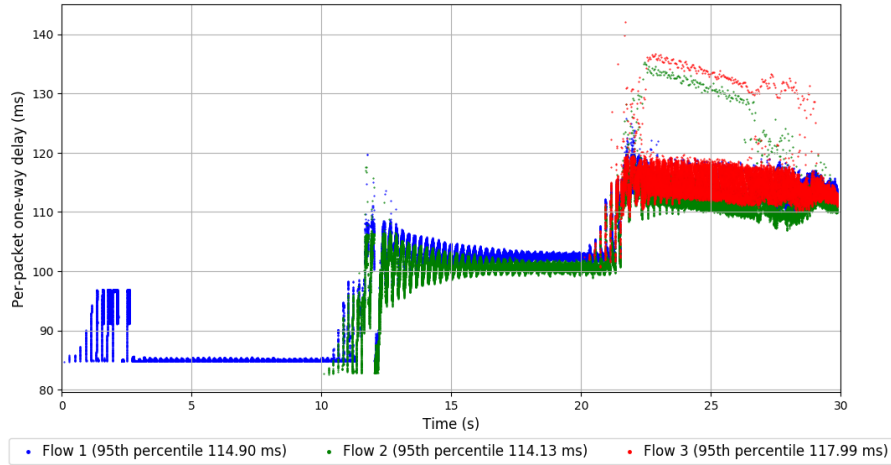
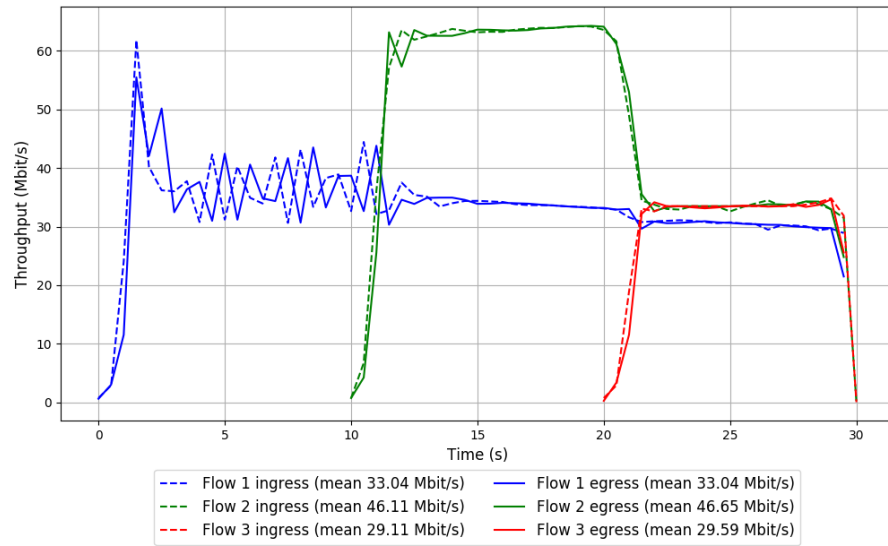
-- Flow 3:

Average throughput: 29.59 Mbit/s

95th percentile per-packet one-way delay: 117.988 ms

Loss rate: 2.44%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-04-17 14:58:31

End at: 2018-04-17 14:59:01

Local clock offset: -5.426 ms

Remote clock offset: 4.571 ms

Below is generated by plot.py at 2018-04-17 20:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.91 Mbit/s

95th percentile per-packet one-way delay: 113.893 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 41.14 Mbit/s

95th percentile per-packet one-way delay: 111.927 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 43.53 Mbit/s

95th percentile per-packet one-way delay: 114.517 ms

Loss rate: 1.00%

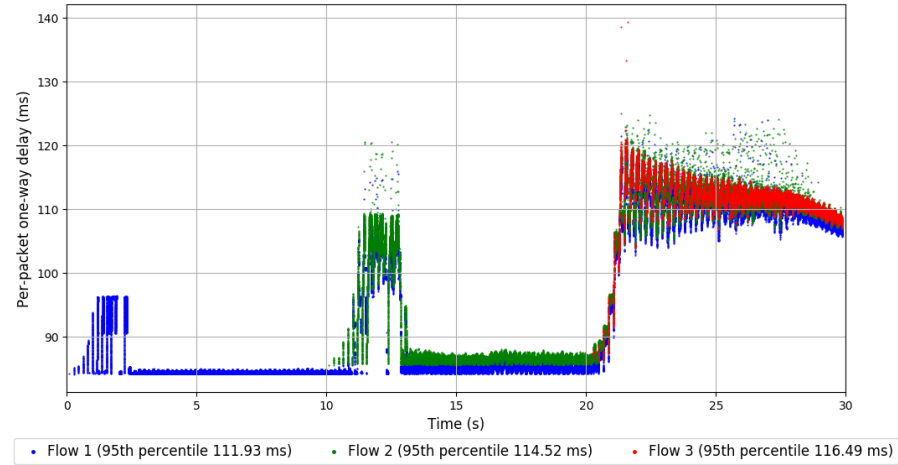
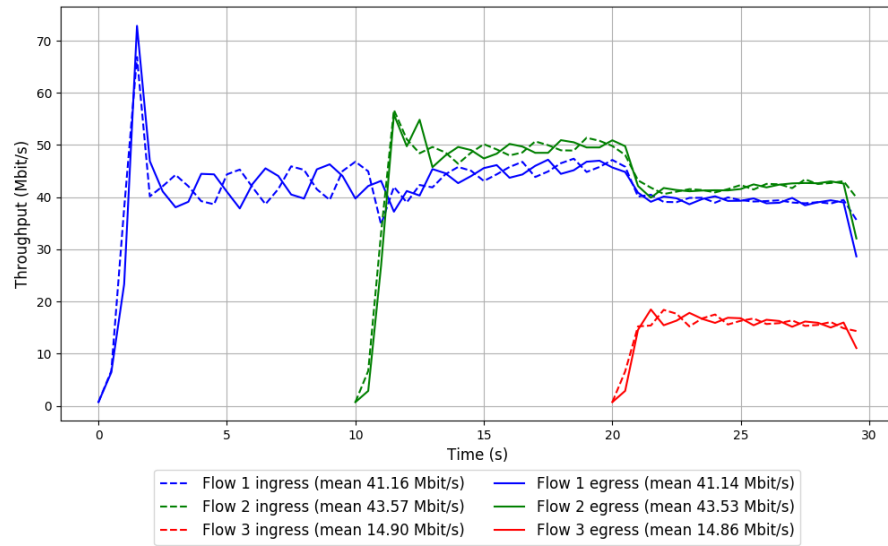
-- Flow 3:

Average throughput: 14.86 Mbit/s

95th percentile per-packet one-way delay: 116.491 ms

Loss rate: 2.09%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-04-17 15:20:48

End at: 2018-04-17 15:21:18

Local clock offset: -6.243 ms

Remote clock offset: 5.883 ms

Below is generated by plot.py at 2018-04-17 20:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.13 Mbit/s

95th percentile per-packet one-way delay: 119.061 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 38.96 Mbit/s

95th percentile per-packet one-way delay: 118.001 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 37.33 Mbit/s

95th percentile per-packet one-way delay: 119.658 ms

Loss rate: 0.93%

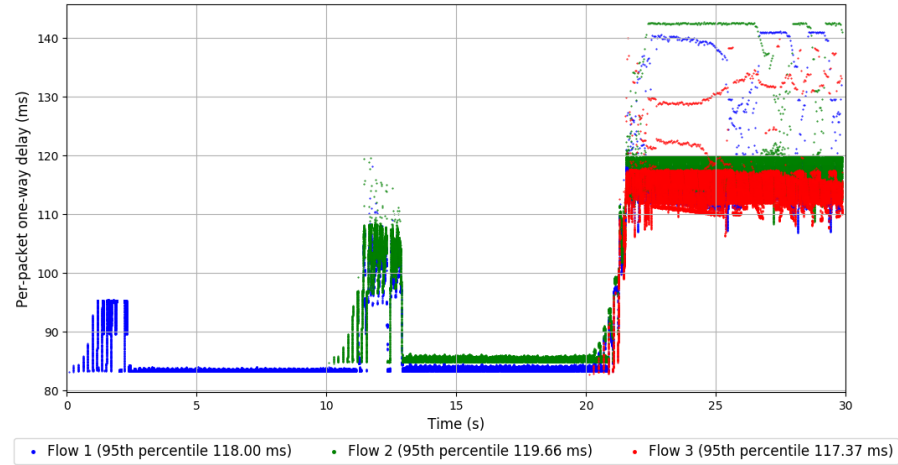
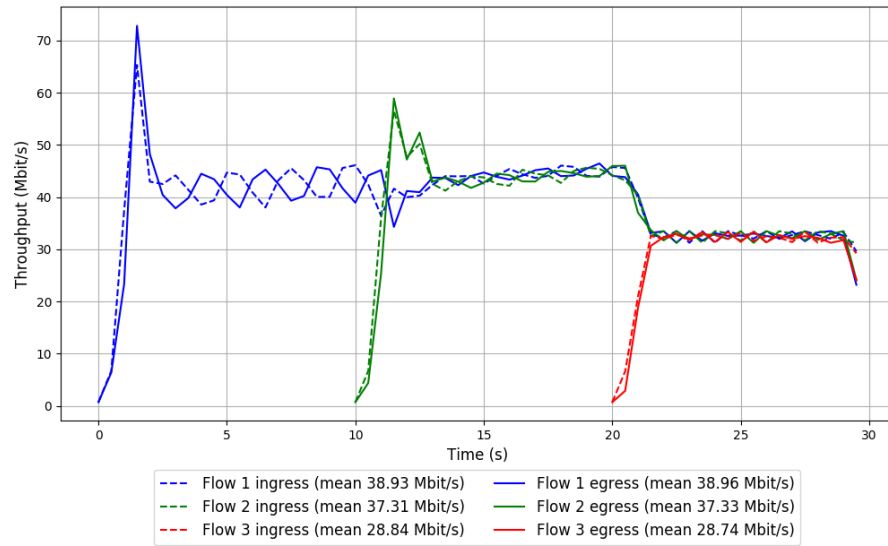
-- Flow 3:

Average throughput: 28.74 Mbit/s

95th percentile per-packet one-way delay: 117.367 ms

Loss rate: 2.34%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-04-17 15:43:07

End at: 2018-04-17 15:43:37

Local clock offset: -5.577 ms

Remote clock offset: 5.153 ms

Below is generated by plot.py at 2018-04-17 20:45:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.02 Mbit/s

95th percentile per-packet one-way delay: 112.326 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 42.27 Mbit/s

95th percentile per-packet one-way delay: 110.797 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 40.02 Mbit/s

95th percentile per-packet one-way delay: 112.140 ms

Loss rate: 0.97%

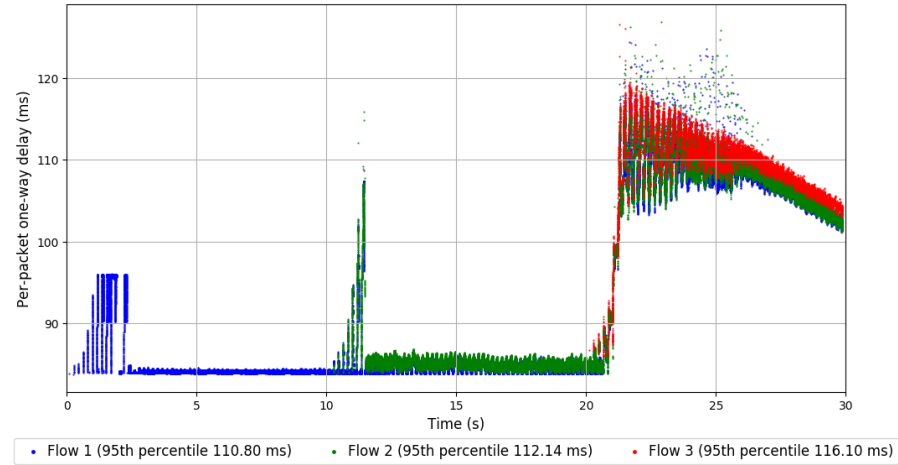
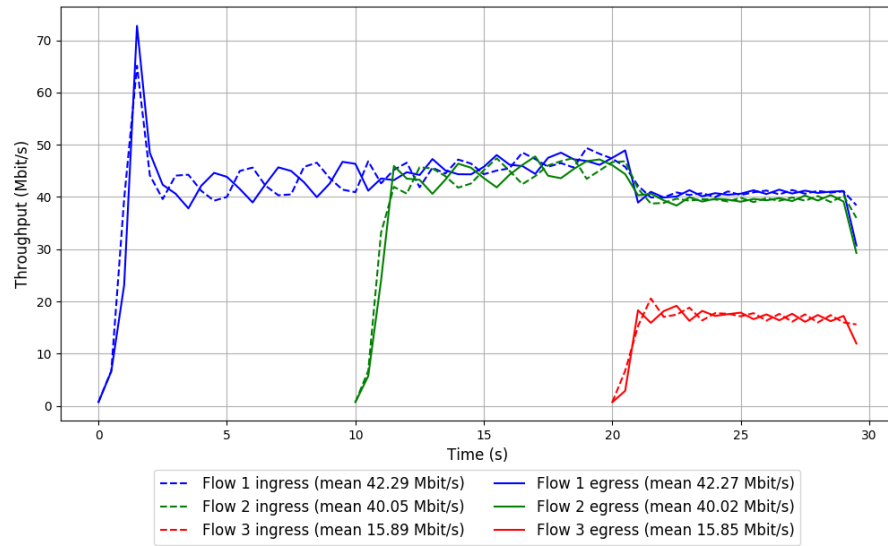
-- Flow 3:

Average throughput: 15.85 Mbit/s

95th percentile per-packet one-way delay: 116.098 ms

Loss rate: 2.05%

Run 8: Report of TCP Vegas — Data Link

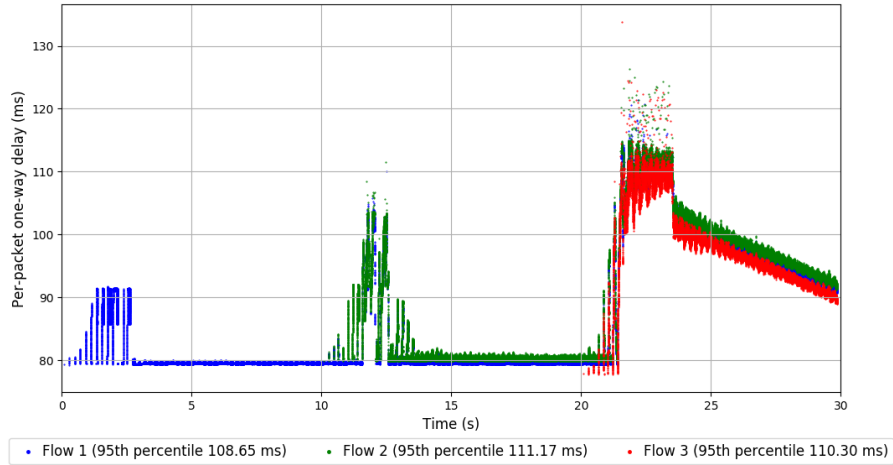
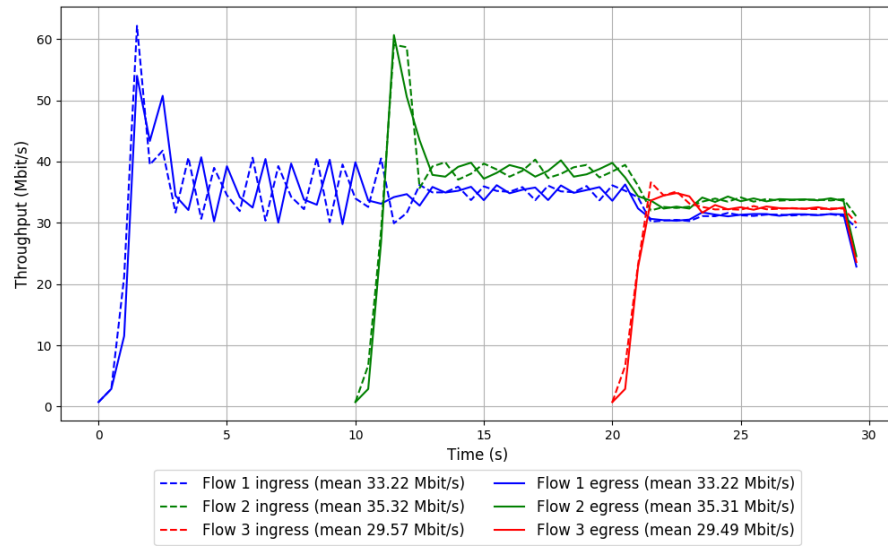


Run 9: Statistics of TCP Vegas

Start at: 2018-04-17 16:05:26
End at: 2018-04-17 16:05:56
Local clock offset: -4.826 ms
Remote clock offset: 10.307 ms

Below is generated by plot.py at 2018-04-17 20:45:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 66.32 Mbit/s
95th percentile per-packet one-way delay: 110.247 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 33.22 Mbit/s
95th percentile per-packet one-way delay: 108.649 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 35.31 Mbit/s
95th percentile per-packet one-way delay: 111.174 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 29.49 Mbit/s
95th percentile per-packet one-way delay: 110.302 ms
Loss rate: 2.07%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-04-17 16:27:51

End at: 2018-04-17 16:28:21

Local clock offset: -2.743 ms

Remote clock offset: 4.016 ms

Below is generated by plot.py at 2018-04-17 20:45:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.25 Mbit/s

95th percentile per-packet one-way delay: 119.806 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 36.28 Mbit/s

95th percentile per-packet one-way delay: 119.720 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 44.61 Mbit/s

95th percentile per-packet one-way delay: 116.390 ms

Loss rate: 0.76%

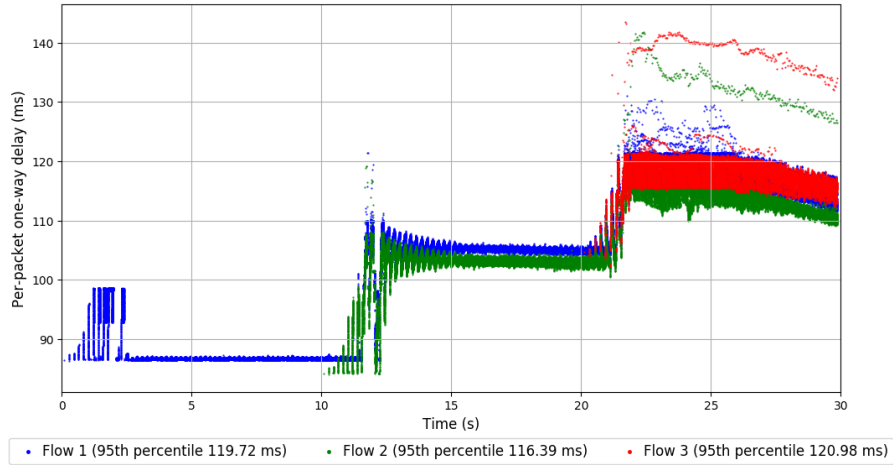
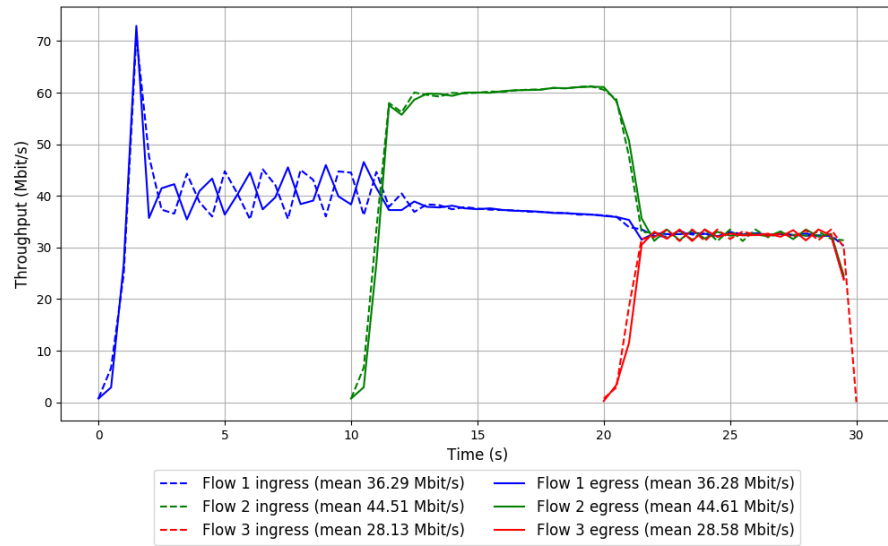
-- Flow 3:

Average throughput: 28.58 Mbit/s

95th percentile per-packet one-way delay: 120.984 ms

Loss rate: 2.49%

Run 10: Report of TCP Vegas — Data Link

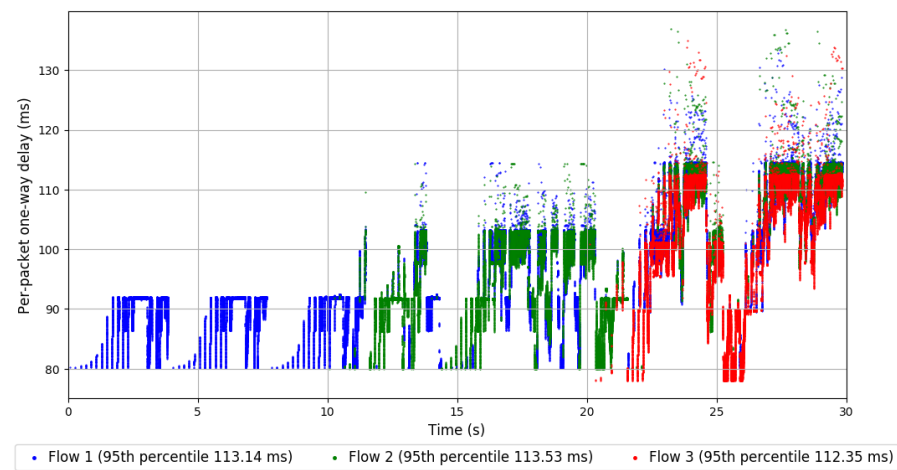
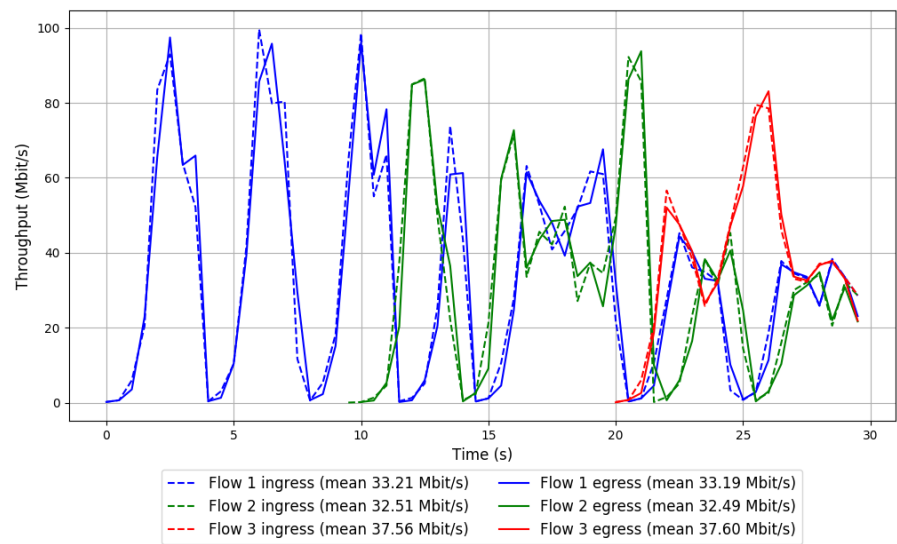


Run 1: Statistics of Verus

Start at: 2018-04-17 13:15:59
End at: 2018-04-17 13:16:29
Local clock offset: -5.766 ms
Remote clock offset: 10.804 ms

Below is generated by plot.py at 2018-04-17 20:45:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 67.04 Mbit/s
95th percentile per-packet one-way delay: 112.956 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 33.19 Mbit/s
95th percentile per-packet one-way delay: 113.138 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 32.49 Mbit/s
95th percentile per-packet one-way delay: 113.527 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 37.60 Mbit/s
95th percentile per-packet one-way delay: 112.351 ms
Loss rate: 1.90%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-04-17 13:38:29

End at: 2018-04-17 13:38:59

Local clock offset: -2.515 ms

Remote clock offset: 12.36 ms

Below is generated by plot.py at 2018-04-17 20:45:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.85 Mbit/s

95th percentile per-packet one-way delay: 111.058 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 31.23 Mbit/s

95th percentile per-packet one-way delay: 110.135 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 44.95 Mbit/s

95th percentile per-packet one-way delay: 109.911 ms

Loss rate: 1.24%

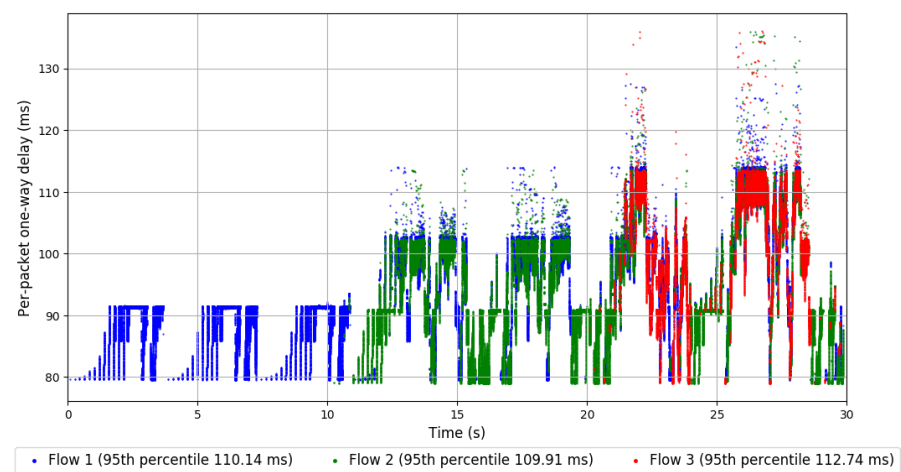
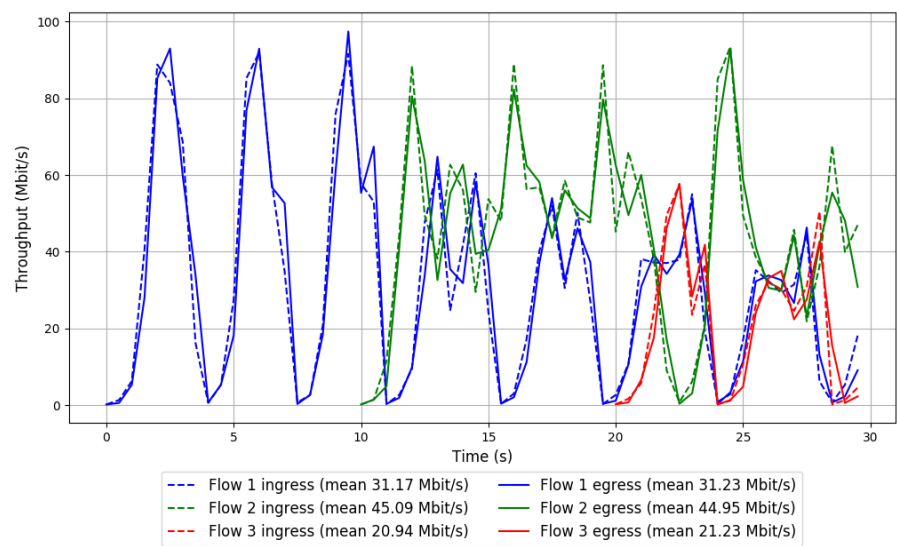
-- Flow 3:

Average throughput: 21.23 Mbit/s

95th percentile per-packet one-way delay: 112.738 ms

Loss rate: 0.74%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-04-17 14:00:48

End at: 2018-04-17 14:01:18

Local clock offset: -3.034 ms

Remote clock offset: 5.769 ms

Below is generated by plot.py at 2018-04-17 20:45:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.02 Mbit/s

95th percentile per-packet one-way delay: 119.435 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 33.16 Mbit/s

95th percentile per-packet one-way delay: 119.127 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 29.38 Mbit/s

95th percentile per-packet one-way delay: 118.072 ms

Loss rate: 0.01%

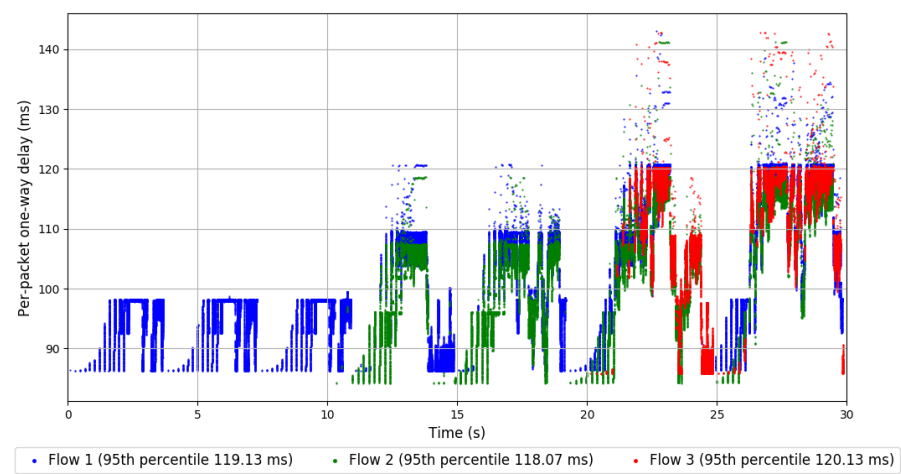
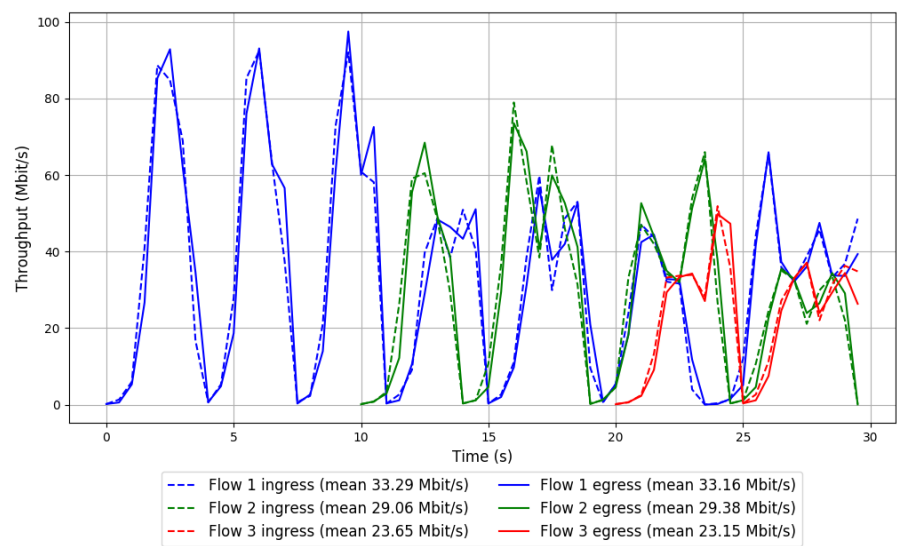
-- Flow 3:

Average throughput: 23.15 Mbit/s

95th percentile per-packet one-way delay: 120.134 ms

Loss rate: 3.92%

Run 3: Report of Verus — Data Link

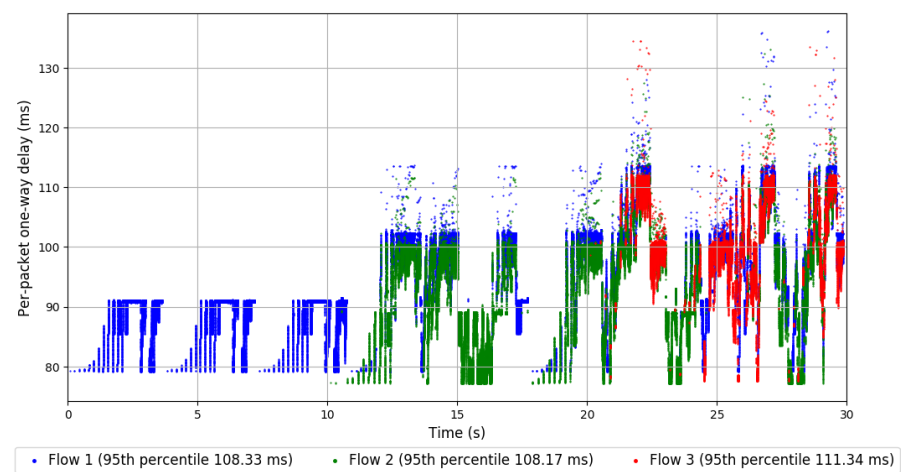
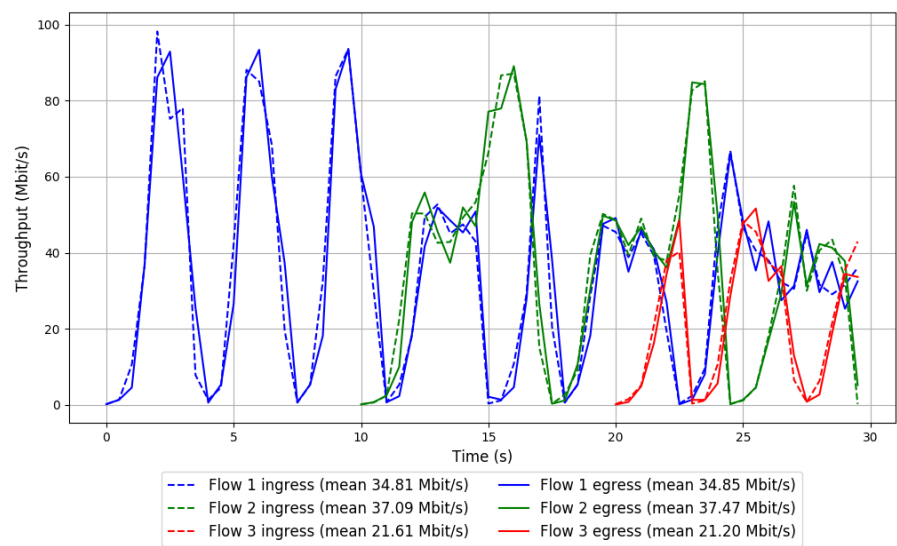


Run 4: Statistics of Verus

Start at: 2018-04-17 14:22:57
End at: 2018-04-17 14:23:27
Local clock offset: -6.512 ms
Remote clock offset: 10.989 ms

Below is generated by plot.py at 2018-04-17 20:46:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 66.57 Mbit/s
95th percentile per-packet one-way delay: 109.289 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 34.85 Mbit/s
95th percentile per-packet one-way delay: 108.327 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 37.47 Mbit/s
95th percentile per-packet one-way delay: 108.173 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 21.20 Mbit/s
95th percentile per-packet one-way delay: 111.337 ms
Loss rate: 3.86%

Run 4: Report of Verus — Data Link

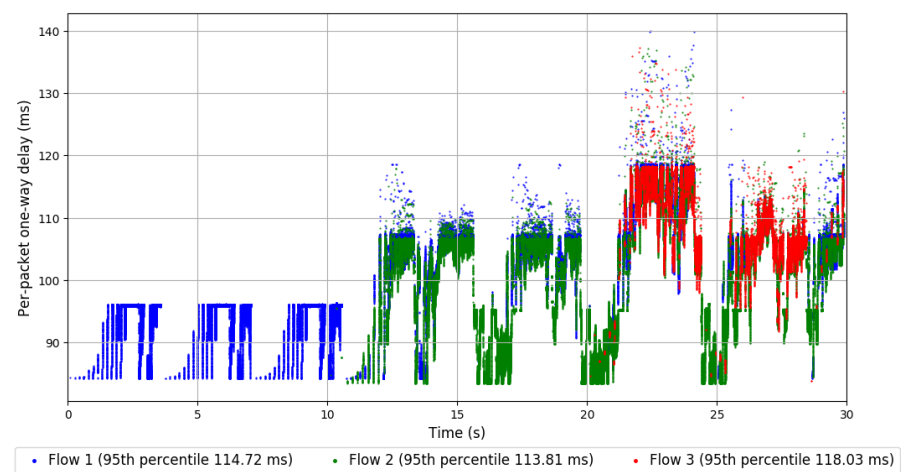
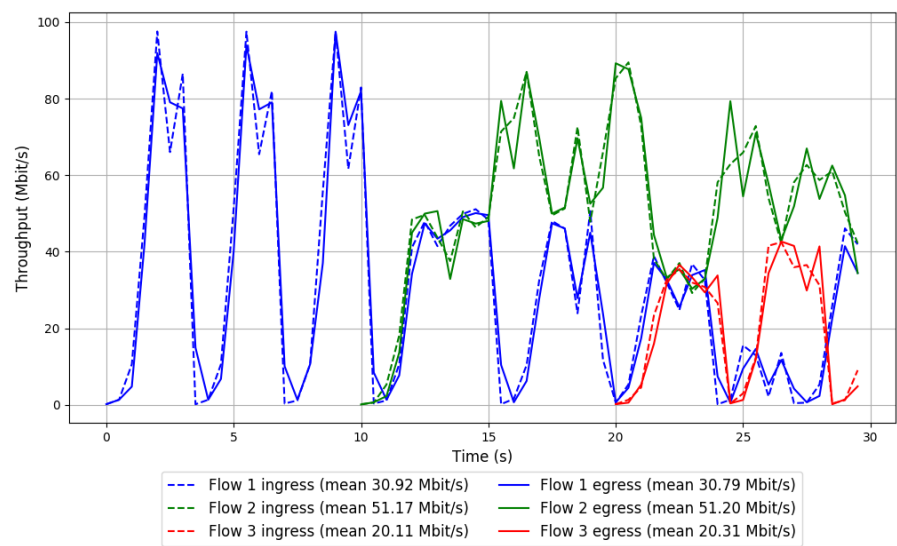


Run 5: Statistics of Verus

Start at: 2018-04-17 14:45:16
End at: 2018-04-17 14:45:46
Local clock offset: -5.455 ms
Remote clock offset: 4.671 ms

```
# Below is generated by plot.py at 2018-04-17 20:46:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.39 Mbit/s
95th percentile per-packet one-way delay: 115.556 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 30.79 Mbit/s
95th percentile per-packet one-way delay: 114.723 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 51.20 Mbit/s
95th percentile per-packet one-way delay: 113.813 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 20.31 Mbit/s
95th percentile per-packet one-way delay: 118.026 ms
Loss rate: 1.05%
```

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-04-17 15:07:43

End at: 2018-04-17 15:08:13

Local clock offset: -5.47 ms

Remote clock offset: 5.052 ms

Below is generated by plot.py at 2018-04-17 20:46:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 46.13 Mbit/s

95th percentile per-packet one-way delay: 107.056 ms

Loss rate: 9.22%

-- Flow 1:

Average throughput: 23.98 Mbit/s

95th percentile per-packet one-way delay: 106.109 ms

Loss rate: 8.90%

-- Flow 2:

Average throughput: 28.14 Mbit/s

95th percentile per-packet one-way delay: 107.091 ms

Loss rate: 9.44%

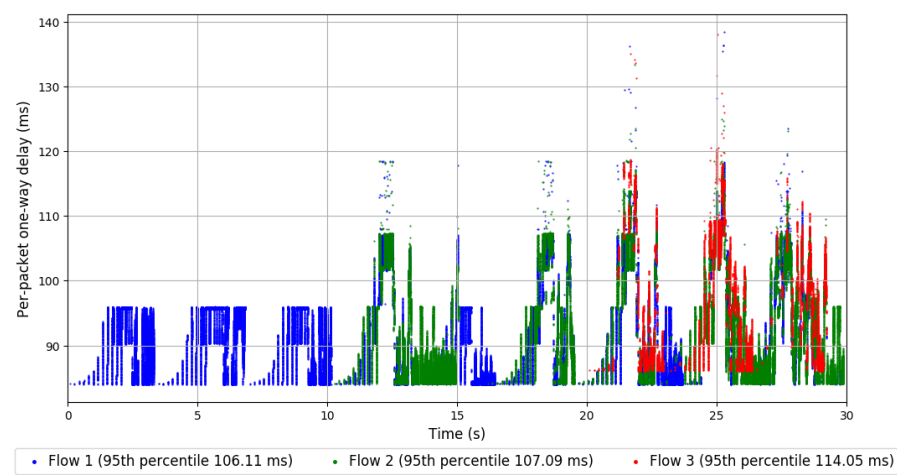
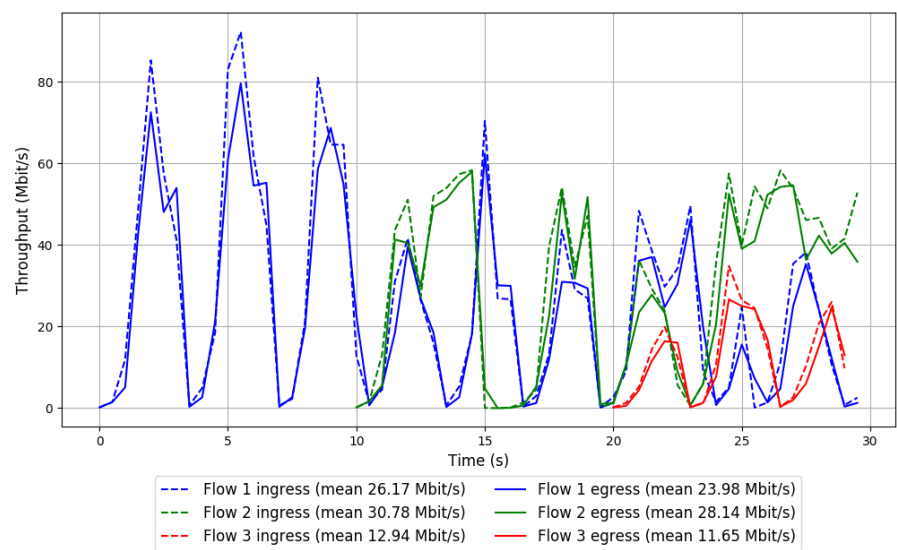
-- Flow 3:

Average throughput: 11.65 Mbit/s

95th percentile per-packet one-way delay: 114.050 ms

Loss rate: 10.16%

Run 6: Report of Verus — Data Link

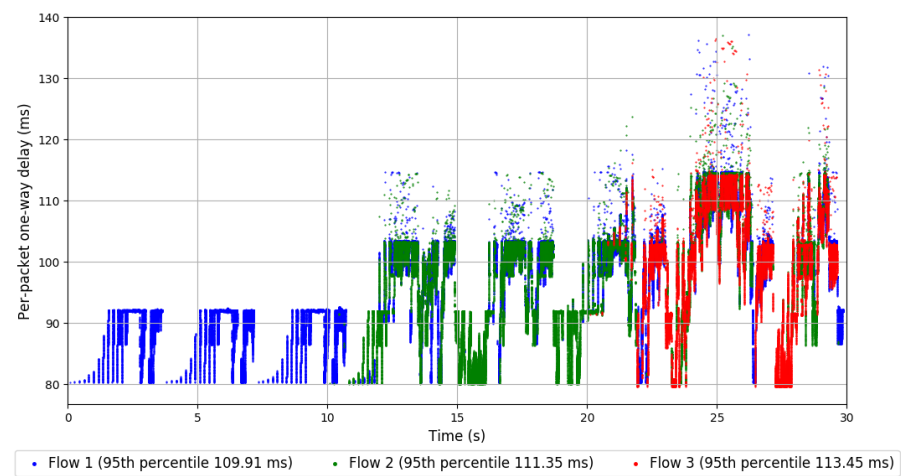
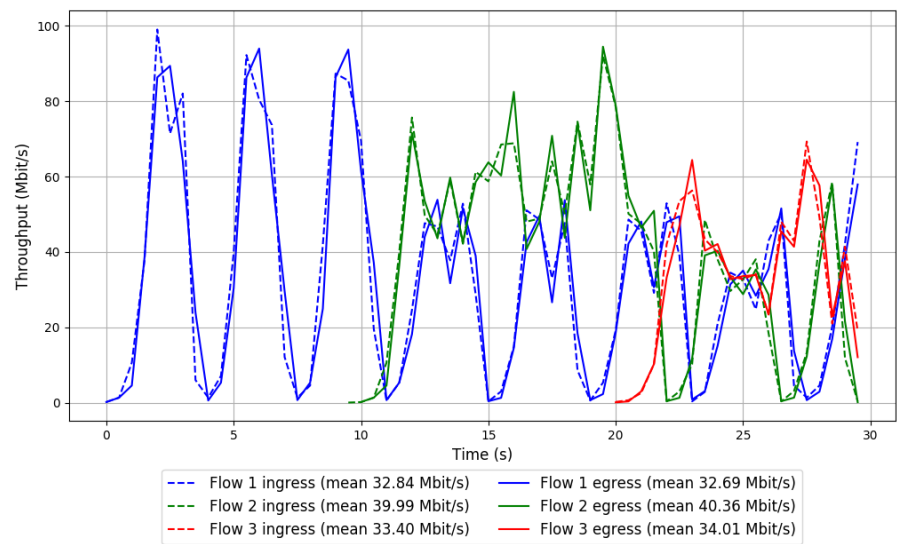


Run 7: Statistics of Verus

Start at: 2018-04-17 15:29:58
End at: 2018-04-17 15:30:28
Local clock offset: -5.539 ms
Remote clock offset: 11.702 ms

Below is generated by plot.py at 2018-04-17 20:46:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 70.09 Mbit/s
95th percentile per-packet one-way delay: 111.522 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 32.69 Mbit/s
95th percentile per-packet one-way delay: 109.906 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 40.36 Mbit/s
95th percentile per-packet one-way delay: 111.347 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 34.01 Mbit/s
95th percentile per-packet one-way delay: 113.452 ms
Loss rate: 2.66%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-04-17 15:52:16

End at: 2018-04-17 15:52:46

Local clock offset: -5.581 ms

Remote clock offset: 5.159 ms

Below is generated by plot.py at 2018-04-17 20:46:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.25 Mbit/s

95th percentile per-packet one-way delay: 111.340 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 46.88 Mbit/s

95th percentile per-packet one-way delay: 106.287 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 33.72 Mbit/s

95th percentile per-packet one-way delay: 112.883 ms

Loss rate: 0.04%

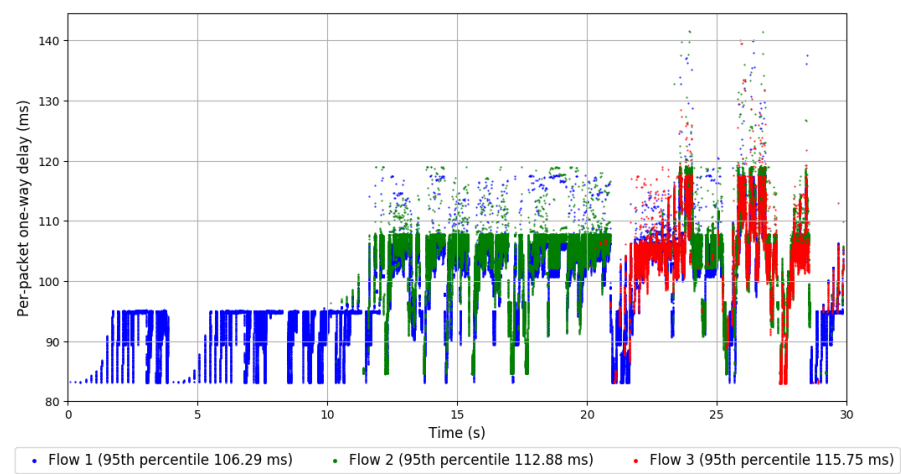
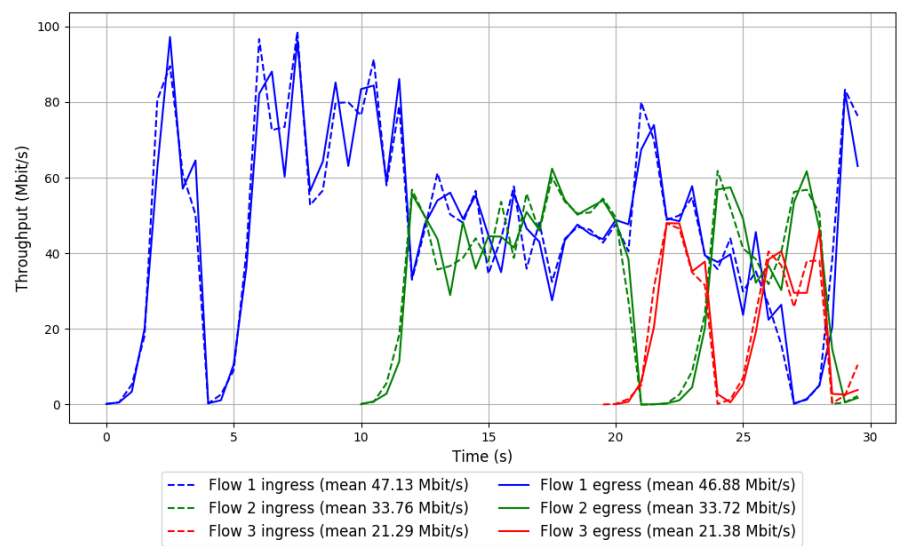
-- Flow 3:

Average throughput: 21.38 Mbit/s

95th percentile per-packet one-way delay: 115.752 ms

Loss rate: 1.57%

Run 8: Report of Verus — Data Link

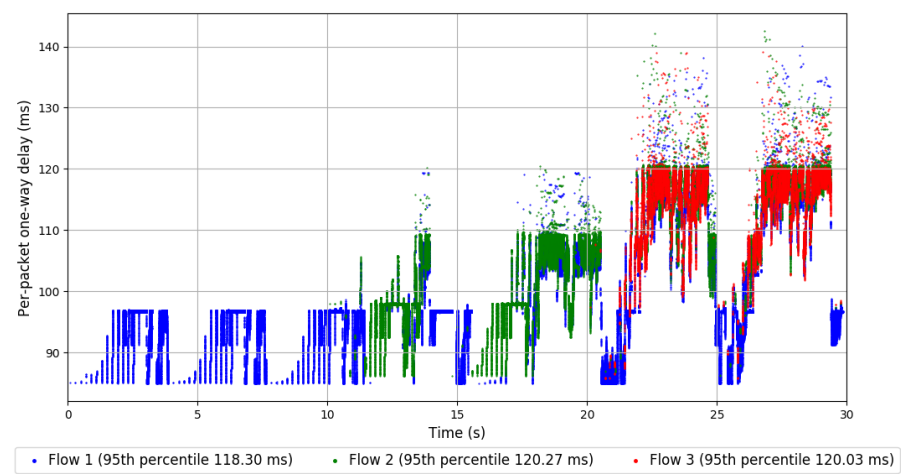
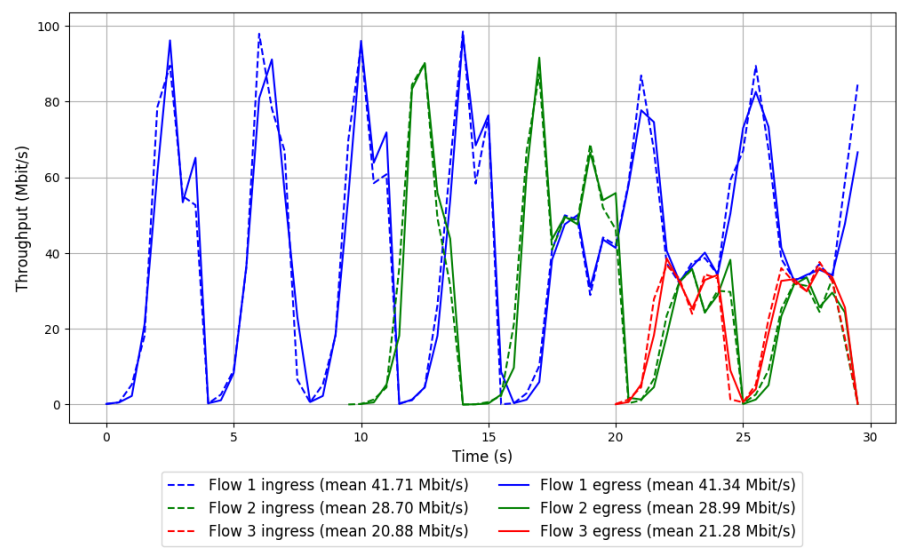


Run 9: Statistics of Verus

Start at: 2018-04-17 16:14:43
End at: 2018-04-17 16:15:13
Local clock offset: -4.418 ms
Remote clock offset: 3.841 ms

Below is generated by plot.py at 2018-04-17 20:46:38
Datalink statistics
-- Total of 3 flows:
Average throughput: 67.43 Mbit/s
95th percentile per-packet one-way delay: 119.342 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 41.34 Mbit/s
95th percentile per-packet one-way delay: 118.303 ms
Loss rate: 1.47%
-- Flow 2:
Average throughput: 28.99 Mbit/s
95th percentile per-packet one-way delay: 120.274 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 21.28 Mbit/s
95th percentile per-packet one-way delay: 120.033 ms
Loss rate: 0.05%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-04-17 16:37:03

End at: 2018-04-17 16:37:33

Local clock offset: -3.031 ms

Remote clock offset: 4.675 ms

Below is generated by plot.py at 2018-04-17 20:46:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.46 Mbit/s

95th percentile per-packet one-way delay: 118.788 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 36.32 Mbit/s

95th percentile per-packet one-way delay: 118.590 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 37.97 Mbit/s

95th percentile per-packet one-way delay: 118.535 ms

Loss rate: 0.28%

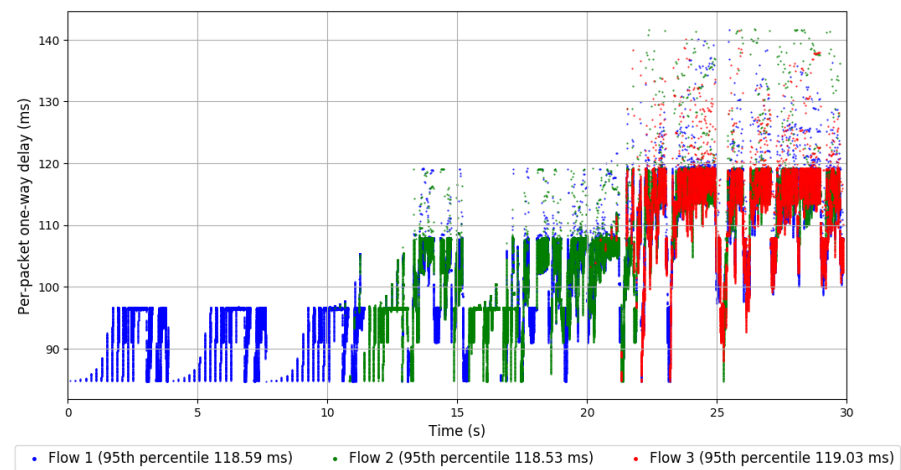
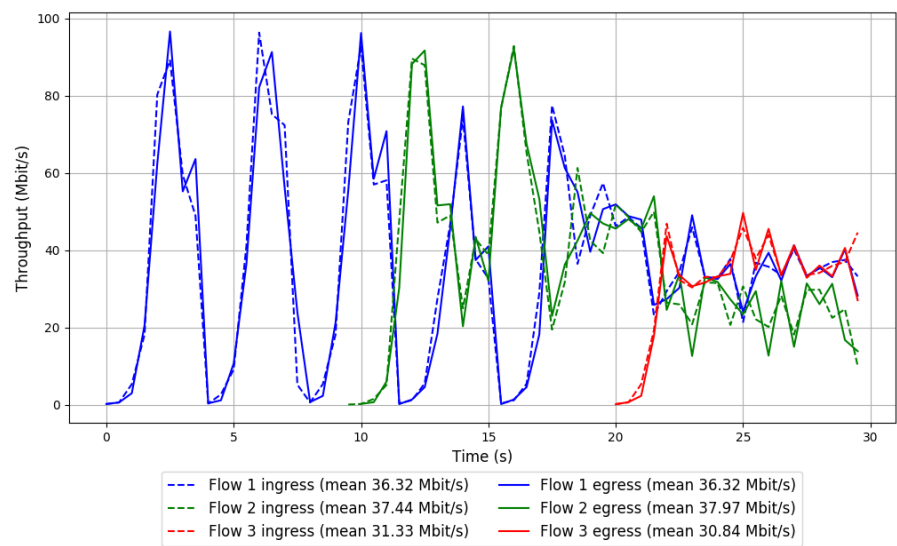
-- Flow 3:

Average throughput: 30.84 Mbit/s

95th percentile per-packet one-way delay: 119.027 ms

Loss rate: 3.76%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-04-17 13:20:09

End at: 2018-04-17 13:20:39

Local clock offset: -6.488 ms

Remote clock offset: 5.179 ms

Below is generated by plot.py at 2018-04-17 20:48:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.29 Mbit/s

95th percentile per-packet one-way delay: 98.038 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 74.85 Mbit/s

95th percentile per-packet one-way delay: 98.058 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 16.67 Mbit/s

95th percentile per-packet one-way delay: 97.890 ms

Loss rate: 1.04%

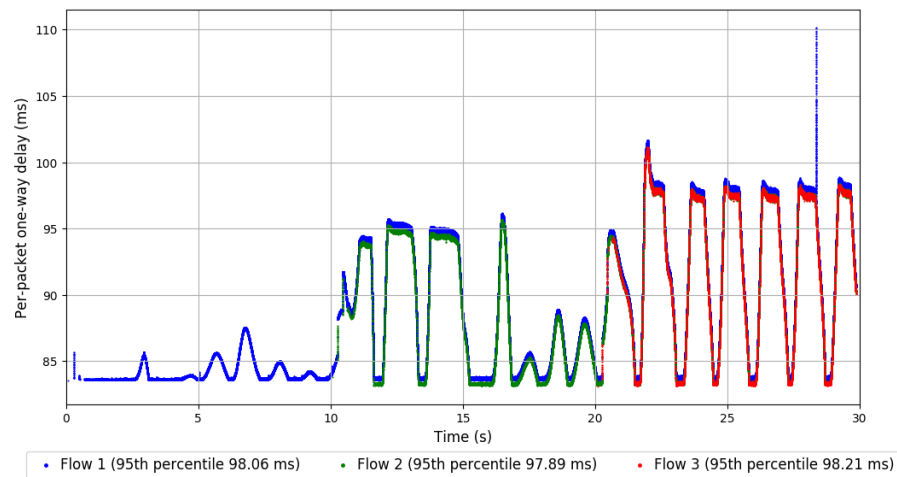
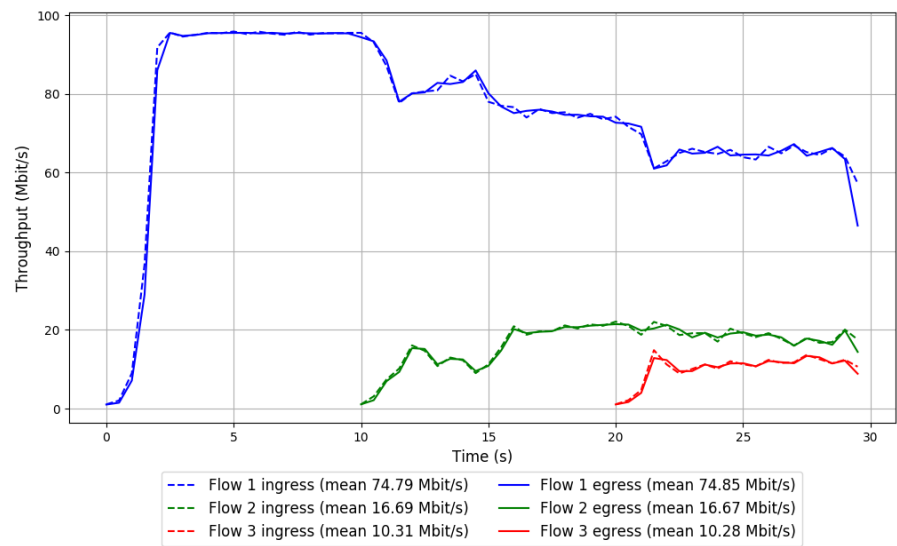
-- Flow 3:

Average throughput: 10.28 Mbit/s

95th percentile per-packet one-way delay: 98.209 ms

Loss rate: 2.02%

Run 1: Report of Copa — Data Link

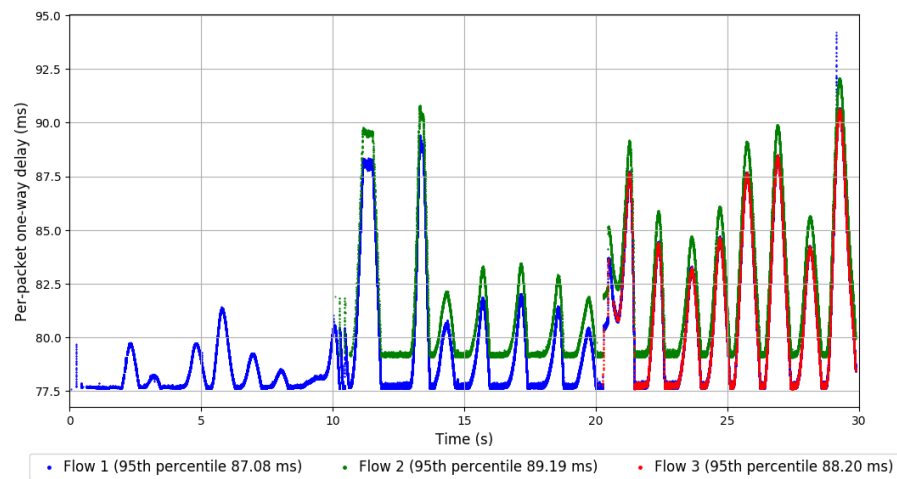
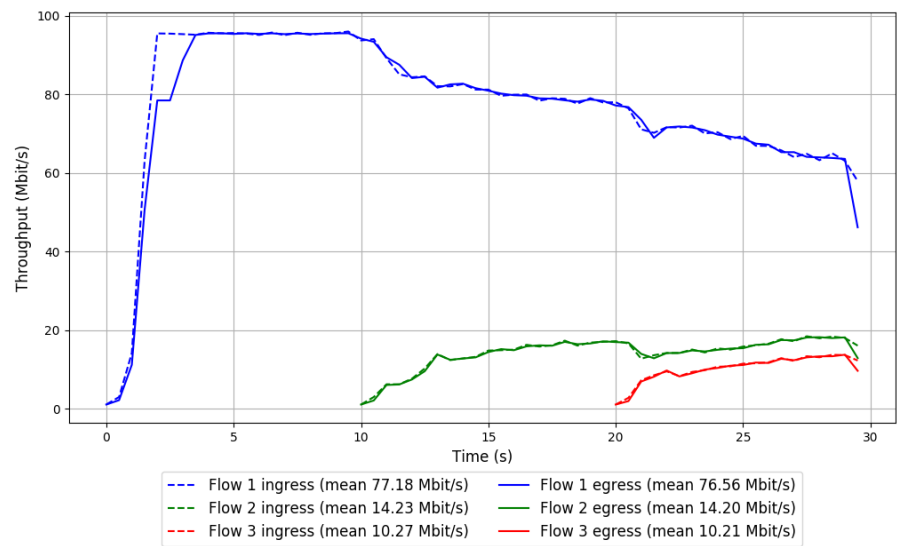


Run 2: Statistics of Copa

Start at: 2018-04-17 13:42:30
End at: 2018-04-17 13:43:00
Local clock offset: -2.946 ms
Remote clock offset: 11.719 ms

Below is generated by plot.py at 2018-04-17 20:48:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.34 Mbit/s
95th percentile per-packet one-way delay: 87.462 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 76.56 Mbit/s
95th percentile per-packet one-way delay: 87.085 ms
Loss rate: 1.40%
-- Flow 2:
Average throughput: 14.20 Mbit/s
95th percentile per-packet one-way delay: 89.185 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 10.21 Mbit/s
95th percentile per-packet one-way delay: 88.205 ms
Loss rate: 2.40%

Run 2: Report of Copa — Data Link

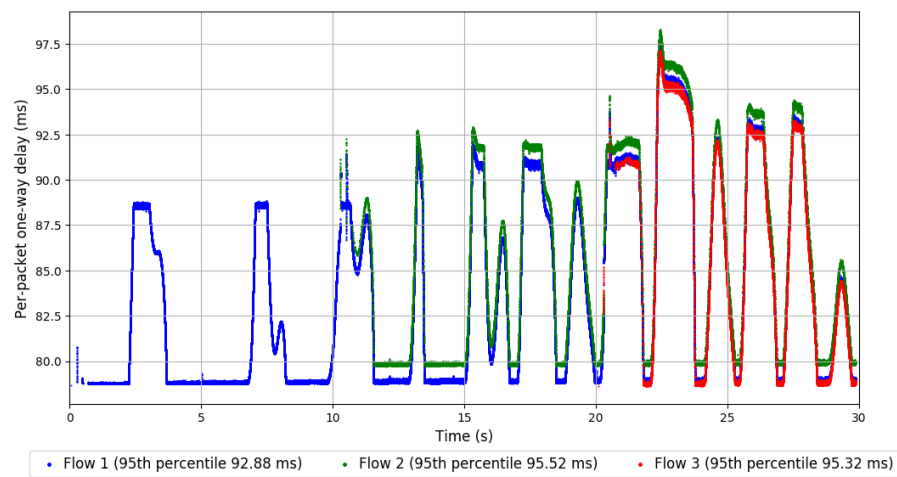
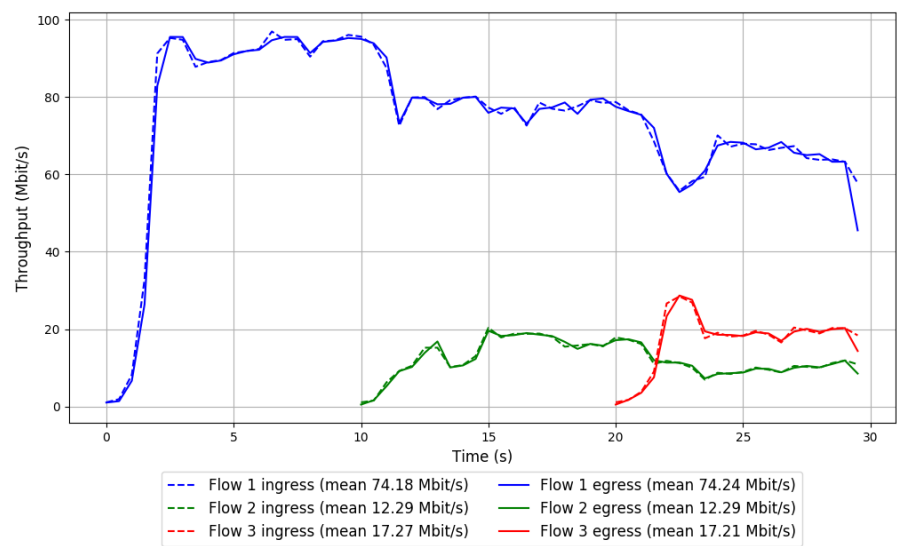


Run 3: Statistics of Copa

Start at: 2018-04-17 14:04:46
End at: 2018-04-17 14:05:16
Local clock offset: -4.092 ms
Remote clock offset: 11.289 ms

Below is generated by plot.py at 2018-04-17 20:48:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.05 Mbit/s
95th percentile per-packet one-way delay: 93.584 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 74.24 Mbit/s
95th percentile per-packet one-way delay: 92.875 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 12.29 Mbit/s
95th percentile per-packet one-way delay: 95.522 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 17.21 Mbit/s
95th percentile per-packet one-way delay: 95.323 ms
Loss rate: 2.13%

Run 3: Report of Copa — Data Link

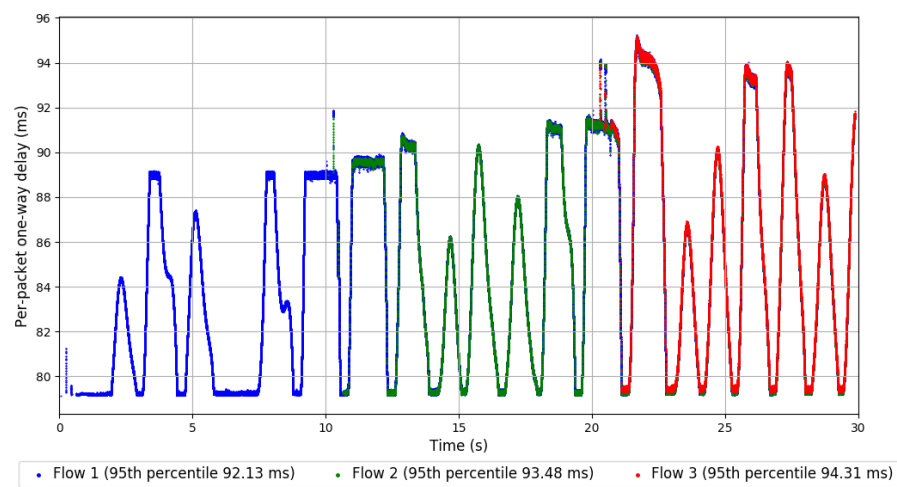
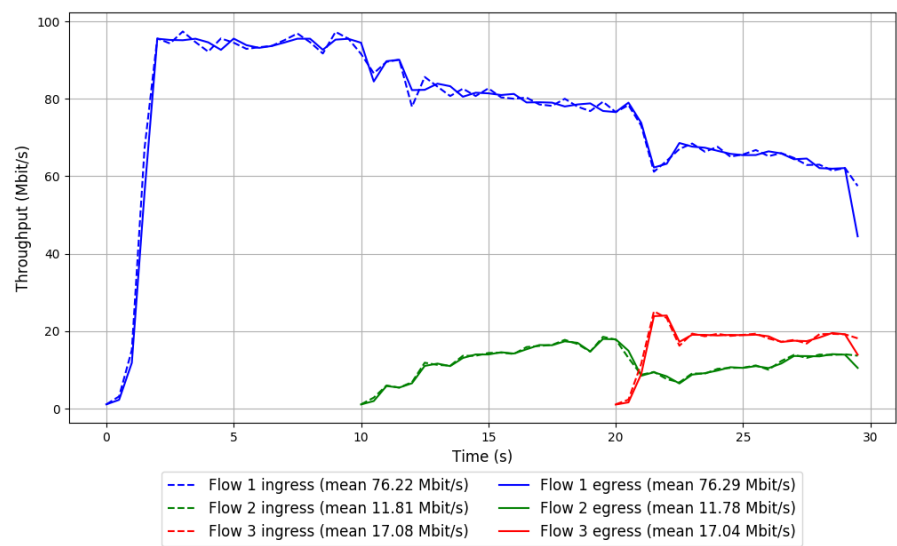


Run 4: Statistics of Copa

Start at: 2018-04-17 14:26:57
End at: 2018-04-17 14:27:27
Local clock offset: -5.847 ms
Remote clock offset: 11.779 ms

Below is generated by plot.py at 2018-04-17 20:48:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.69 Mbit/s
95th percentile per-packet one-way delay: 93.263 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 76.29 Mbit/s
95th percentile per-packet one-way delay: 92.132 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 11.78 Mbit/s
95th percentile per-packet one-way delay: 93.482 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 17.04 Mbit/s
95th percentile per-packet one-way delay: 94.307 ms
Loss rate: 2.18%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-04-17 14:49:16

End at: 2018-04-17 14:49:46

Local clock offset: -5.408 ms

Remote clock offset: 4.66 ms

Below is generated by plot.py at 2018-04-17 20:48:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.75 Mbit/s

95th percentile per-packet one-way delay: 97.307 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 74.87 Mbit/s

95th percentile per-packet one-way delay: 97.057 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 18.54 Mbit/s

95th percentile per-packet one-way delay: 97.766 ms

Loss rate: 0.98%

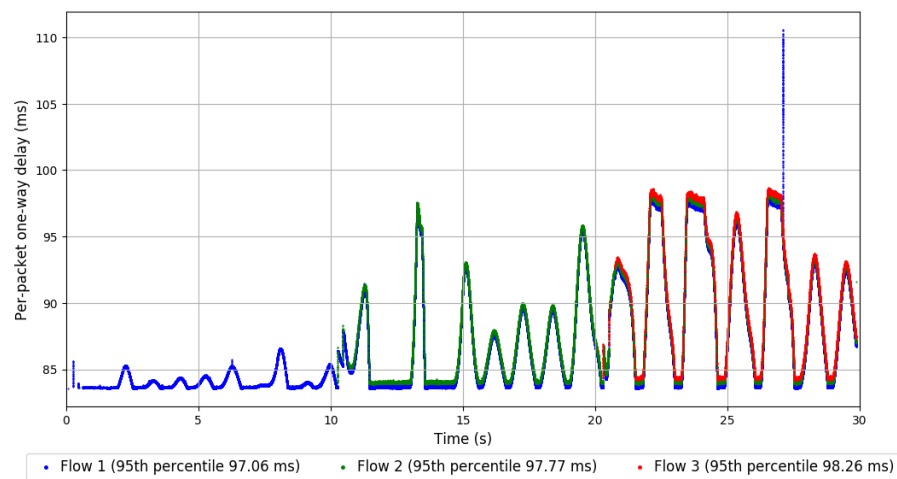
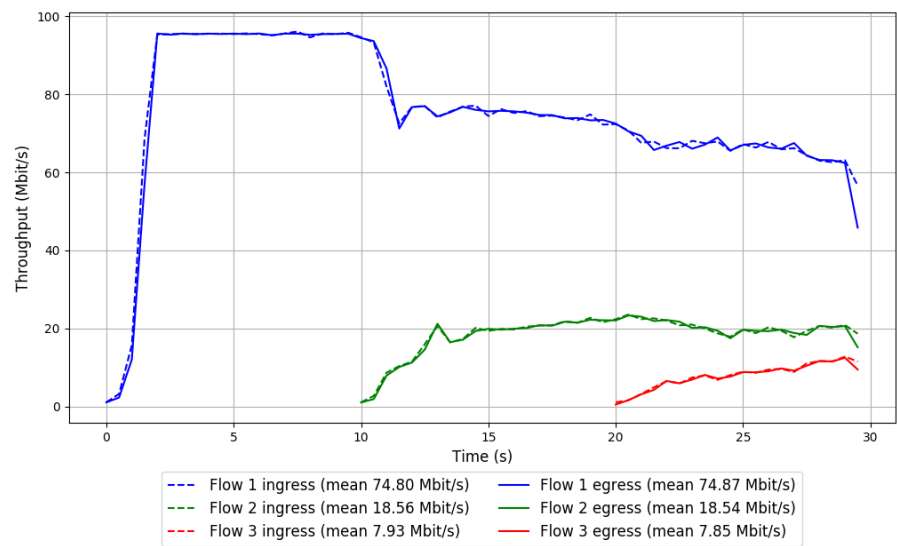
-- Flow 3:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 98.256 ms

Loss rate: 2.83%

Run 5: Report of Copa — Data Link

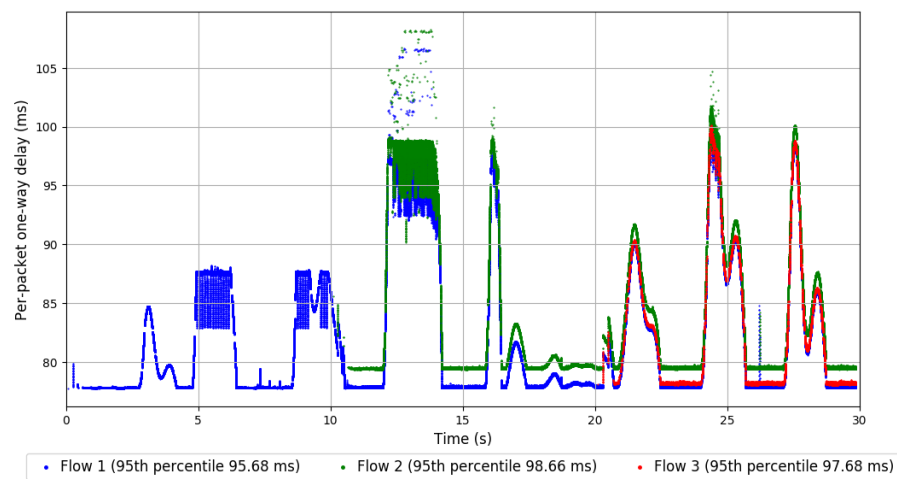
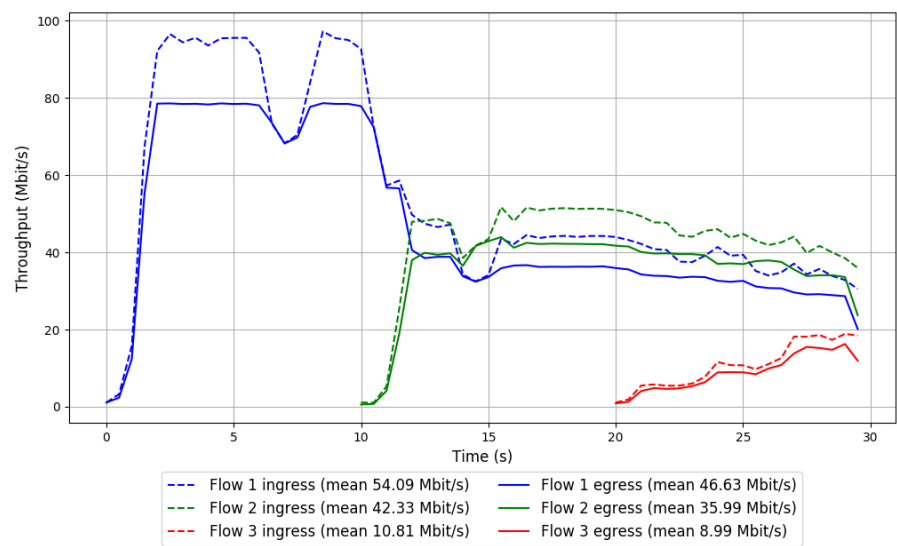


Run 6: Statistics of Copa

Start at: 2018-04-17 15:11:39
End at: 2018-04-17 15:12:09
Local clock offset: -6.218 ms
Remote clock offset: 11.012 ms

```
# Below is generated by plot.py at 2018-04-17 20:48:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.46 Mbit/s
95th percentile per-packet one-way delay: 97.119 ms
Loss rate: 14.95%
-- Flow 1:
Average throughput: 46.63 Mbit/s
95th percentile per-packet one-way delay: 95.676 ms
Loss rate: 14.30%
-- Flow 2:
Average throughput: 35.99 Mbit/s
95th percentile per-packet one-way delay: 98.659 ms
Loss rate: 15.78%
-- Flow 3:
Average throughput: 8.99 Mbit/s
95th percentile per-packet one-way delay: 97.679 ms
Loss rate: 18.36%
```

Run 6: Report of Copa — Data Link

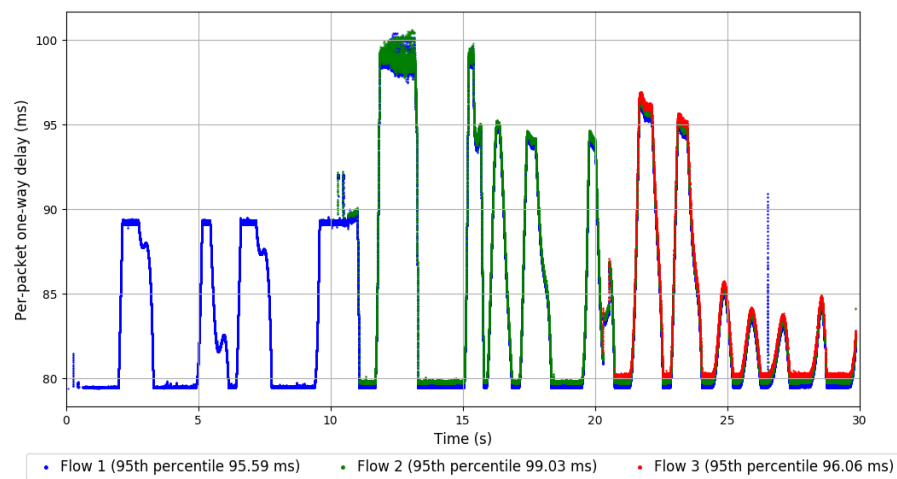
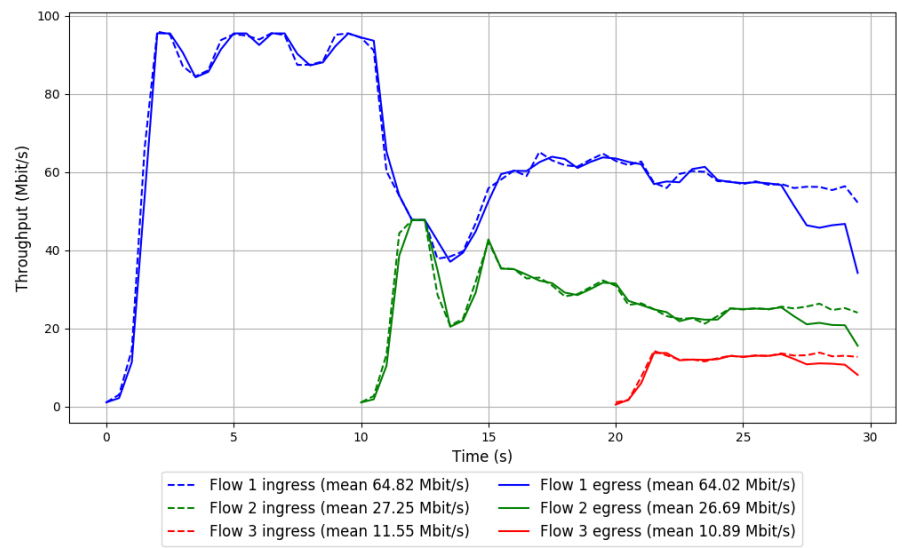


Run 7: Statistics of Copa

Start at: 2018-04-17 15:33:57
End at: 2018-04-17 15:34:27
Local clock offset: -5.524 ms
Remote clock offset: 11.807 ms

Below is generated by plot.py at 2018-04-17 20:48:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.30 Mbit/s
95th percentile per-packet one-way delay: 98.541 ms
Loss rate: 2.31%
-- Flow 1:
Average throughput: 64.02 Mbit/s
95th percentile per-packet one-way delay: 95.589 ms
Loss rate: 1.82%
-- Flow 2:
Average throughput: 26.69 Mbit/s
95th percentile per-packet one-way delay: 99.027 ms
Loss rate: 2.97%
-- Flow 3:
Average throughput: 10.89 Mbit/s
95th percentile per-packet one-way delay: 96.062 ms
Loss rate: 7.44%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-04-17 15:56:16

End at: 2018-04-17 15:56:46

Local clock offset: -5.555 ms

Remote clock offset: 9.797 ms

Below is generated by plot.py at 2018-04-17 20:49:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.61 Mbit/s

95th percentile per-packet one-way delay: 94.439 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 64.44 Mbit/s

95th percentile per-packet one-way delay: 94.166 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 29.16 Mbit/s

95th percentile per-packet one-way delay: 95.827 ms

Loss rate: 0.94%

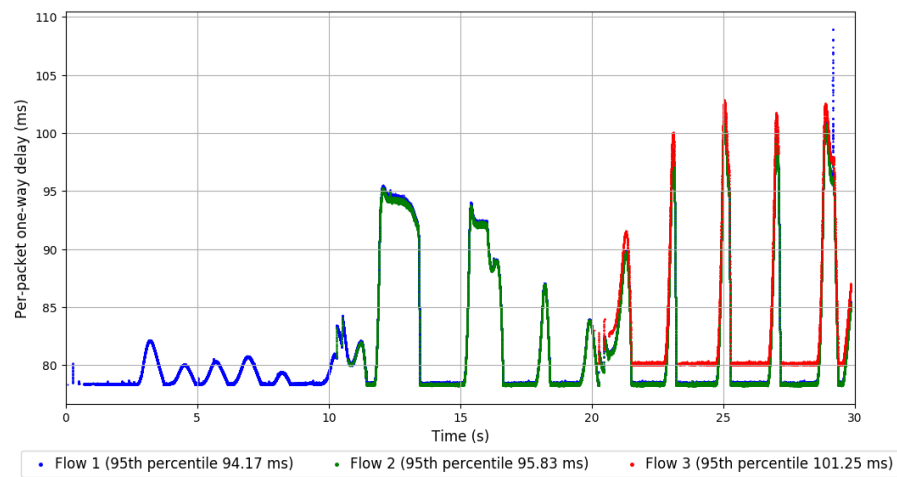
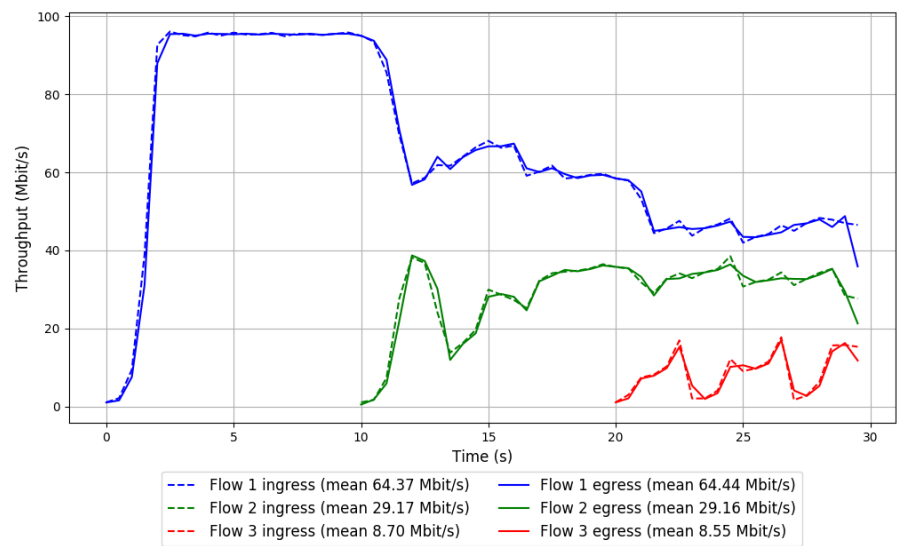
-- Flow 3:

Average throughput: 8.55 Mbit/s

95th percentile per-packet one-way delay: 101.251 ms

Loss rate: 3.55%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-04-17 16:18:43

End at: 2018-04-17 16:19:13

Local clock offset: -4.413 ms

Remote clock offset: 3.85 ms

Below is generated by plot.py at 2018-04-17 20:50:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.15 Mbit/s

95th percentile per-packet one-way delay: 96.784 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 75.44 Mbit/s

95th percentile per-packet one-way delay: 96.601 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 15.78 Mbit/s

95th percentile per-packet one-way delay: 97.201 ms

Loss rate: 1.25%

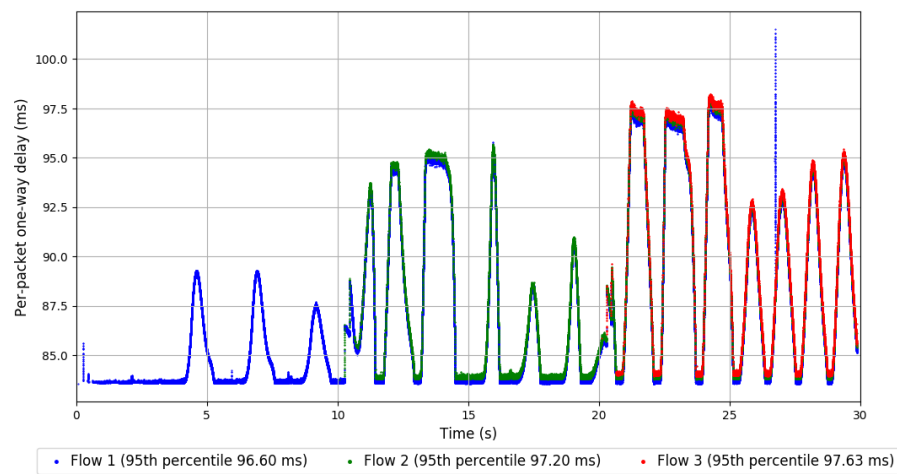
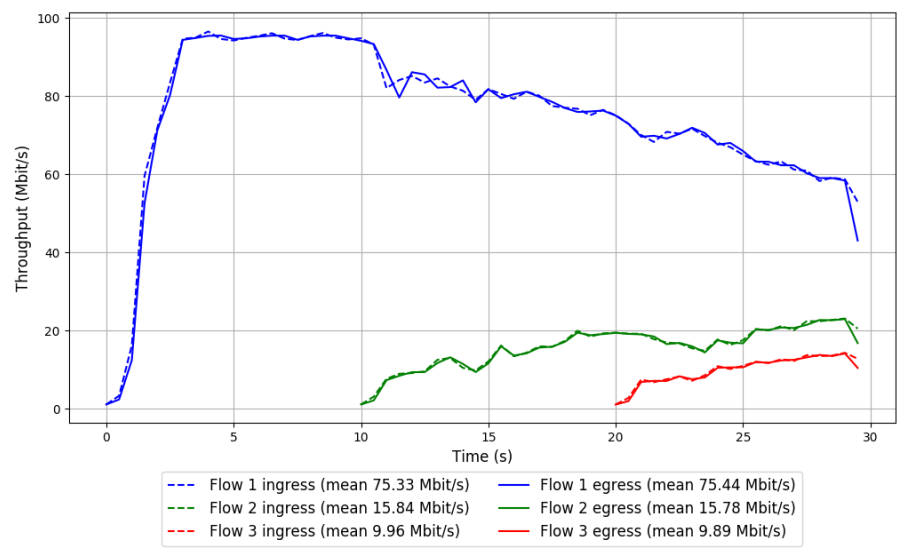
-- Flow 3:

Average throughput: 9.89 Mbit/s

95th percentile per-packet one-way delay: 97.631 ms

Loss rate: 2.50%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-04-17 16:41:04

End at: 2018-04-17 16:41:34

Local clock offset: -2.116 ms

Remote clock offset: 4.689 ms

Below is generated by plot.py at 2018-04-17 20:50:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.98 Mbit/s

95th percentile per-packet one-way delay: 97.222 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 77.23 Mbit/s

95th percentile per-packet one-way delay: 97.091 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 13.98 Mbit/s

95th percentile per-packet one-way delay: 97.364 ms

Loss rate: 1.21%

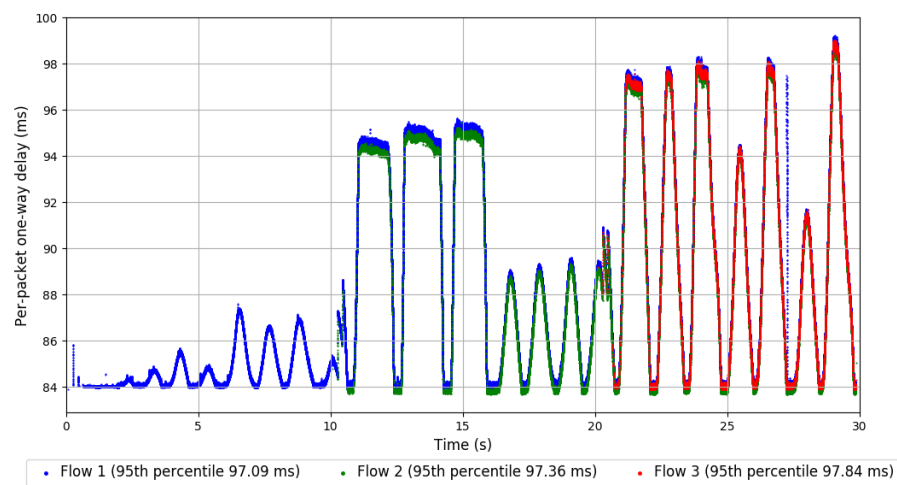
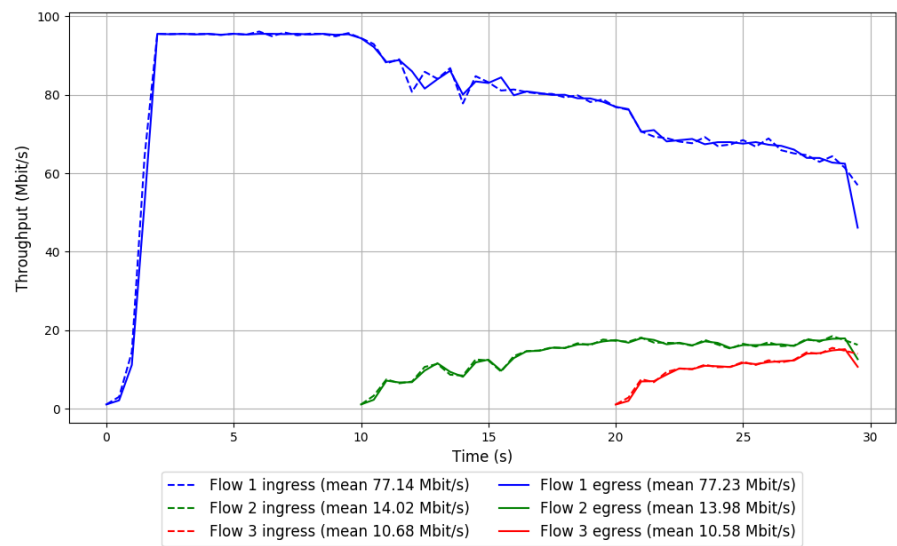
-- Flow 3:

Average throughput: 10.58 Mbit/s

95th percentile per-packet one-way delay: 97.845 ms

Loss rate: 2.79%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-04-17 13:11:59

End at: 2018-04-17 13:12:29

Local clock offset: -5.667 ms

Remote clock offset: 5.033 ms

Below is generated by plot.py at 2018-04-17 20:50:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.29 Mbit/s

95th percentile per-packet one-way delay: 114.396 ms

Loss rate: 4.61%

-- Flow 1:

Average throughput: 56.24 Mbit/s

95th percentile per-packet one-way delay: 113.367 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 38.44 Mbit/s

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

Loss rate: 7.68%

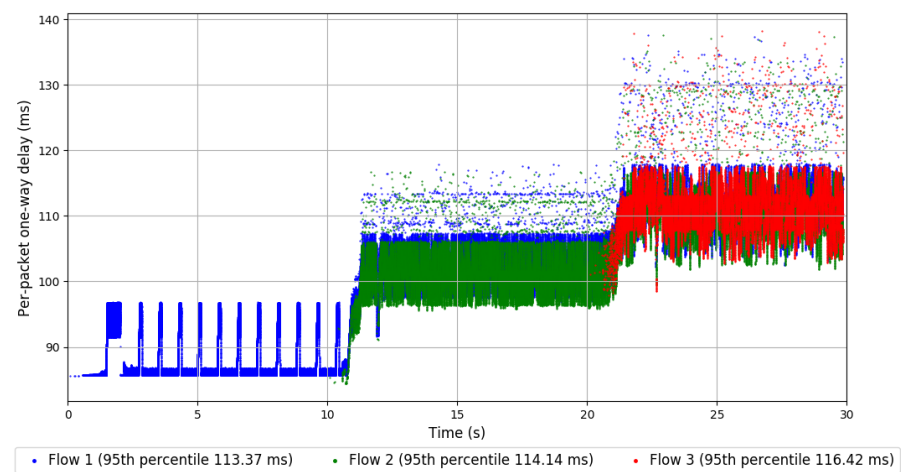
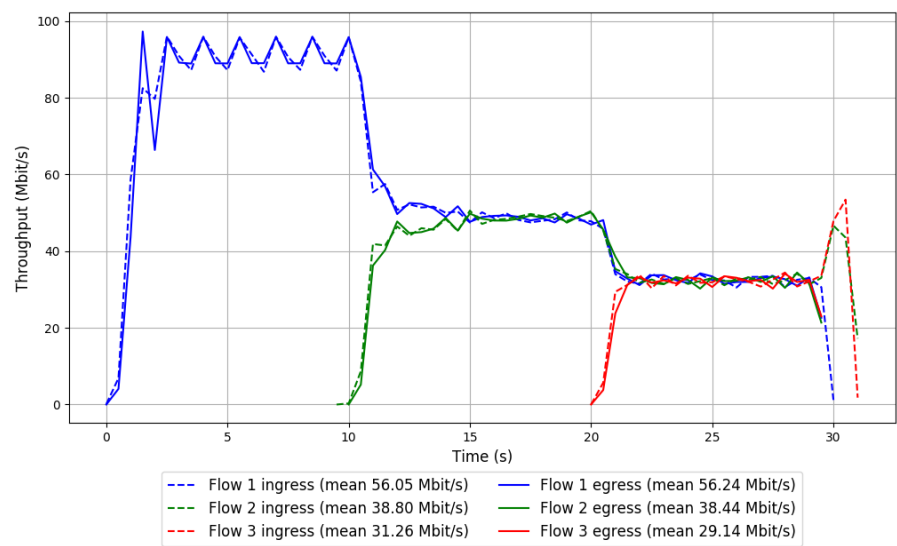
-- Flow 3:

Average throughput: 29.14 Mbit/s

95th percentile per-packet one-way delay: 116.421 ms

Loss rate: 17.48%

Run 1: Report of FillP — Data Link

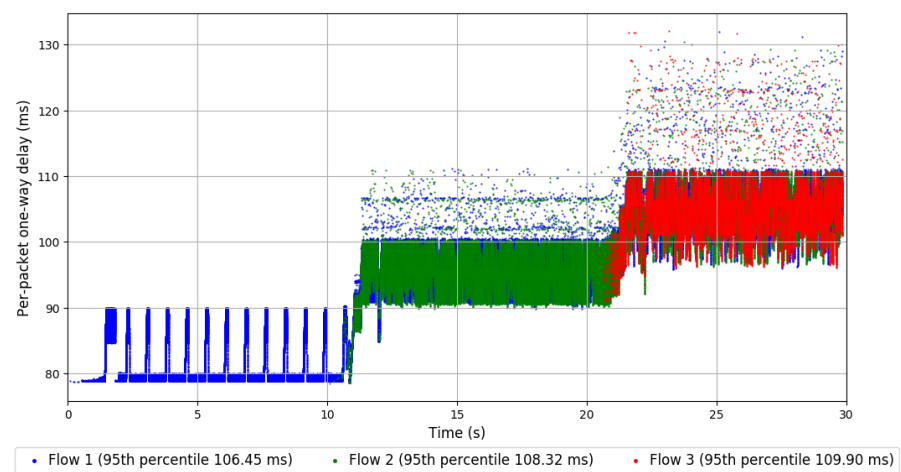
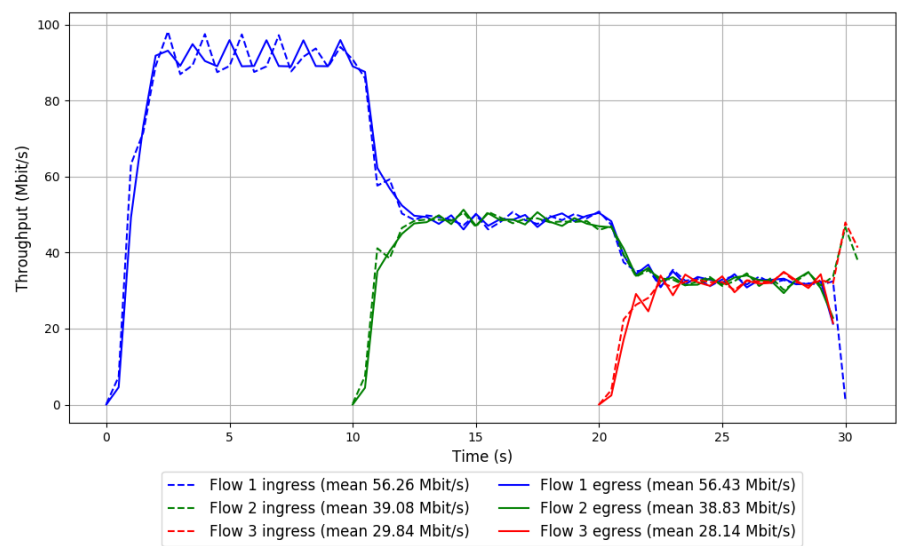


Run 2: Statistics of FillP

Start at: 2018-04-17 13:34:32
End at: 2018-04-17 13:35:02
Local clock offset: -2.194 ms
Remote clock offset: 11.533 ms

Below is generated by plot.py at 2018-04-17 20:50:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.39 Mbit/s
95th percentile per-packet one-way delay: 107.958 ms
Loss rate: 4.00%
-- Flow 1:
Average throughput: 56.43 Mbit/s
95th percentile per-packet one-way delay: 106.450 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 38.83 Mbit/s
95th percentile per-packet one-way delay: 108.318 ms
Loss rate: 6.28%
-- Flow 3:
Average throughput: 28.14 Mbit/s
95th percentile per-packet one-way delay: 109.900 ms
Loss rate: 16.17%

Run 2: Report of FillP — Data Link

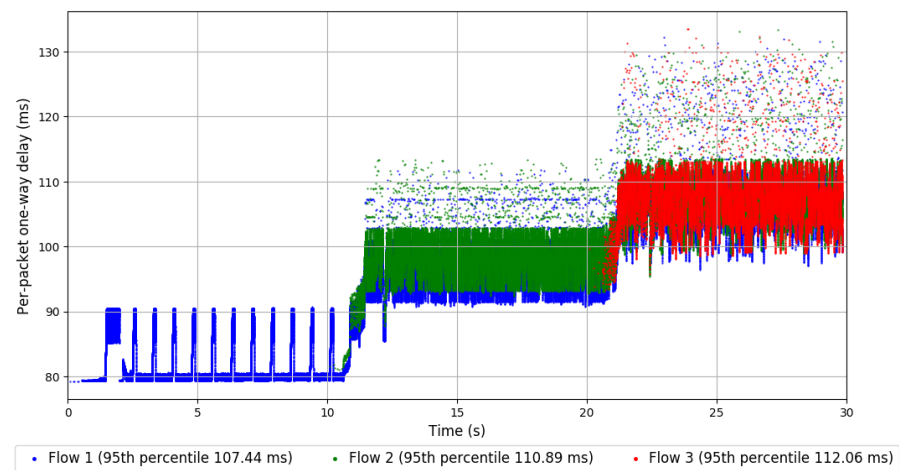
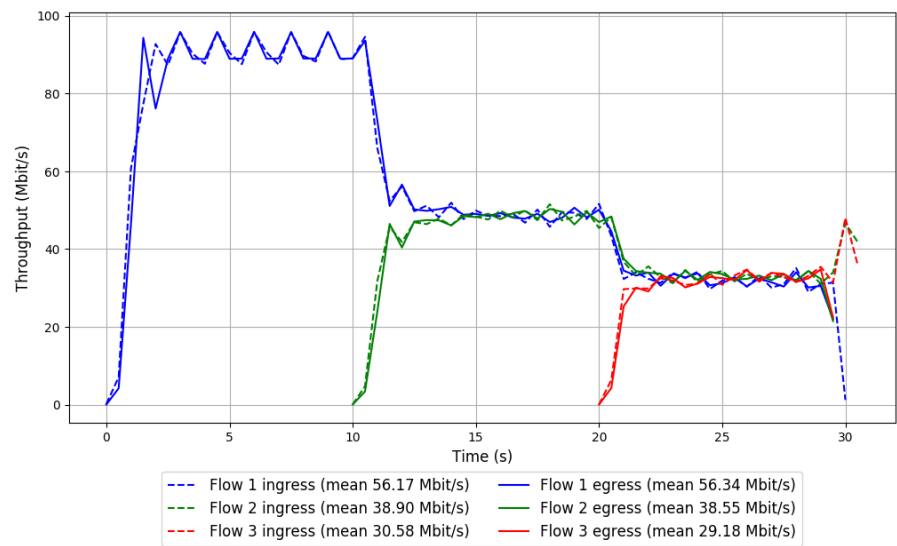


Run 3: Statistics of FillP

Start at: 2018-04-17 13:56:51
End at: 2018-04-17 13:57:21
Local clock offset: -1.477 ms
Remote clock offset: 10.908 ms

Below is generated by plot.py at 2018-04-17 20:50:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.46 Mbit/s
95th percentile per-packet one-way delay: 109.966 ms
Loss rate: 3.97%
-- Flow 1:
Average throughput: 56.34 Mbit/s
95th percentile per-packet one-way delay: 107.442 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 38.55 Mbit/s
95th percentile per-packet one-way delay: 110.894 ms
Loss rate: 6.55%
-- Flow 3:
Average throughput: 29.18 Mbit/s
95th percentile per-packet one-way delay: 112.061 ms
Loss rate: 15.08%

Run 3: Report of FillP — Data Link

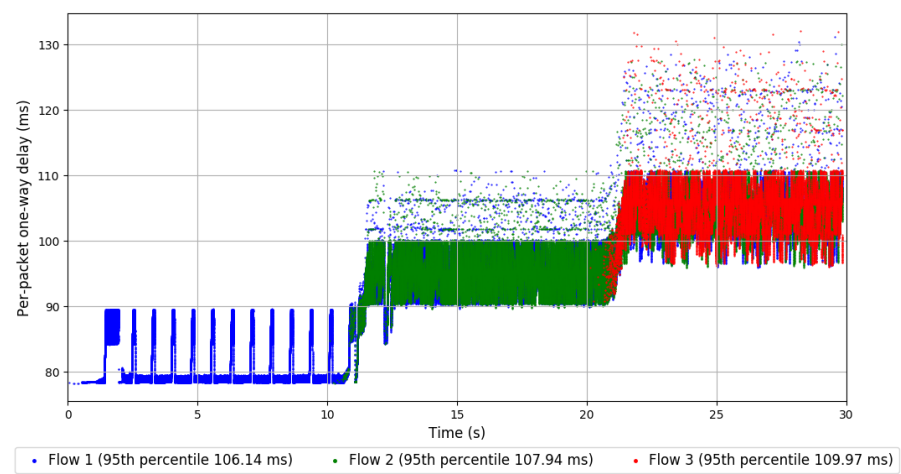
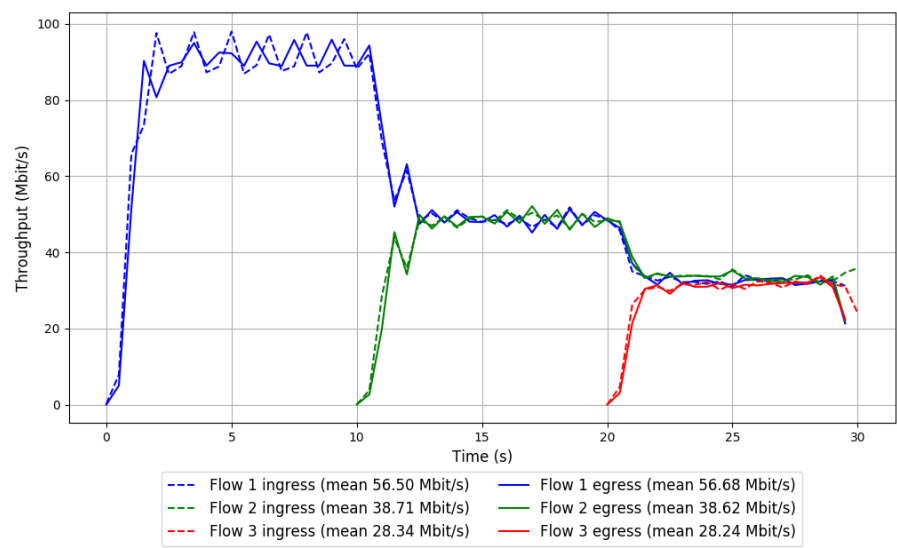


Run 4: Statistics of FillP

Start at: 2018-04-17 14:19:01
End at: 2018-04-17 14:19:31
Local clock offset: -5.569 ms
Remote clock offset: 11.025 ms

Below is generated by plot.py at 2018-04-17 20:50:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.50 Mbit/s
95th percentile per-packet one-way delay: 107.813 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 56.68 Mbit/s
95th percentile per-packet one-way delay: 106.145 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 38.62 Mbit/s
95th percentile per-packet one-way delay: 107.937 ms
Loss rate: 3.46%
-- Flow 3:
Average throughput: 28.24 Mbit/s
95th percentile per-packet one-way delay: 109.967 ms
Loss rate: 6.77%

Run 4: Report of FillP — Data Link

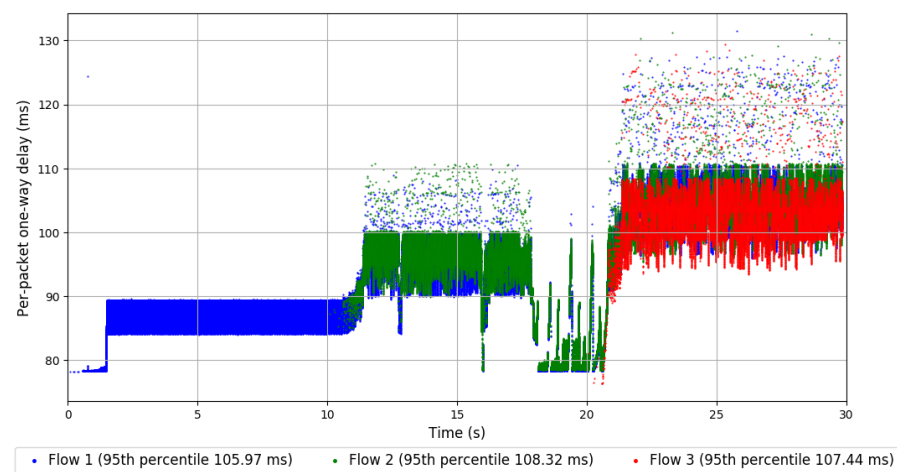
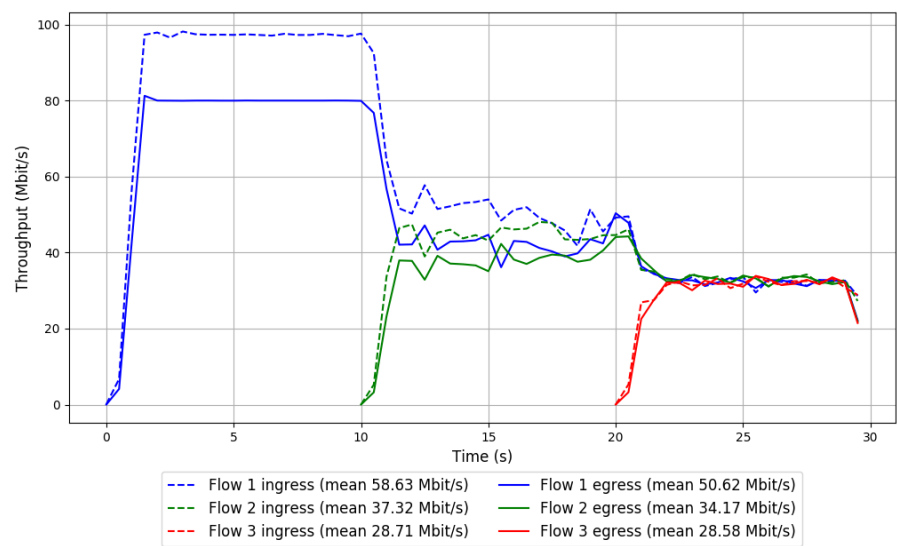


Run 5: Statistics of FillP

Start at: 2018-04-17 14:41:20
End at: 2018-04-17 14:41:50
Local clock offset: -6.285 ms
Remote clock offset: 11.196 ms

Below is generated by plot.py at 2018-04-17 20:50:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 82.61 Mbit/s
95th percentile per-packet one-way delay: 107.079 ms
Loss rate: 11.71%
-- Flow 1:
Average throughput: 50.62 Mbit/s
95th percentile per-packet one-way delay: 105.965 ms
Loss rate: 14.22%
-- Flow 2:
Average throughput: 34.17 Mbit/s
95th percentile per-packet one-way delay: 108.322 ms
Loss rate: 9.38%
-- Flow 3:
Average throughput: 28.58 Mbit/s
95th percentile per-packet one-way delay: 107.440 ms
Loss rate: 2.29%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-04-17 15:03:45

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

Local clock offset: -6.206 ms

Remote clock offset: 5.404 ms

Below is generated by plot.py at 2018-04-17 20:50:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.99 Mbit/s

95th percentile per-packet one-way delay: 113.484 ms

Loss rate: 3.22%

-- Flow 1:

Average throughput: 56.10 Mbit/s

95th percentile per-packet one-way delay: 112.250 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 38.26 Mbit/s

95th percentile per-packet one-way delay: 114.517 ms

Loss rate: 5.15%

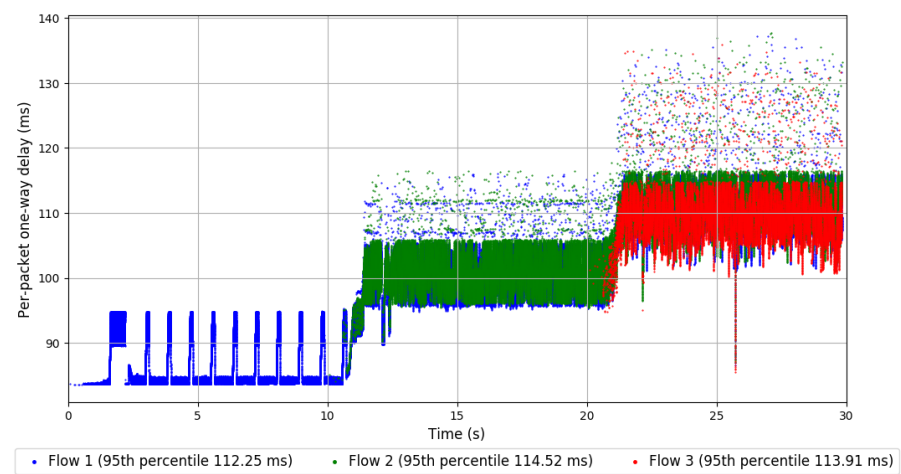
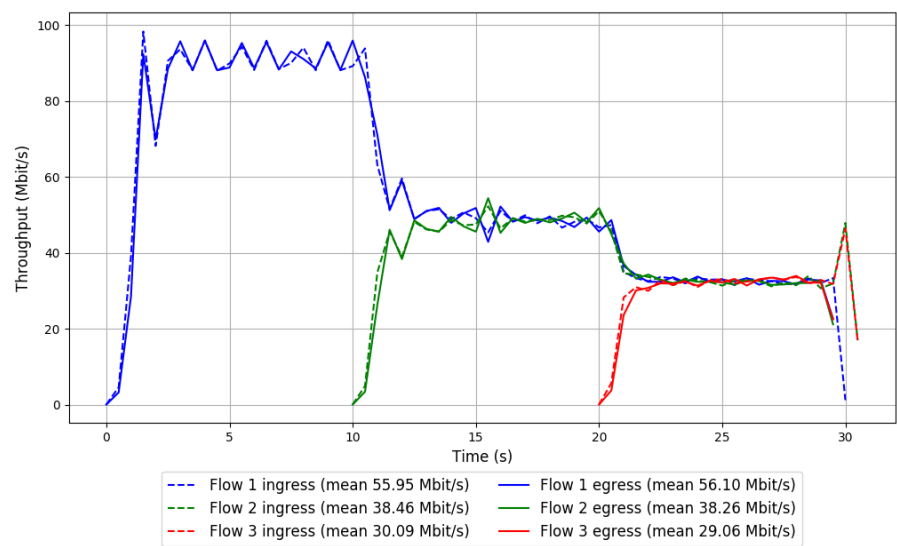
-- Flow 3:

Average throughput: 29.06 Mbit/s

95th percentile per-packet one-way delay: 113.911 ms

Loss rate: 12.40%

Run 6: Report of FillP — Data Link

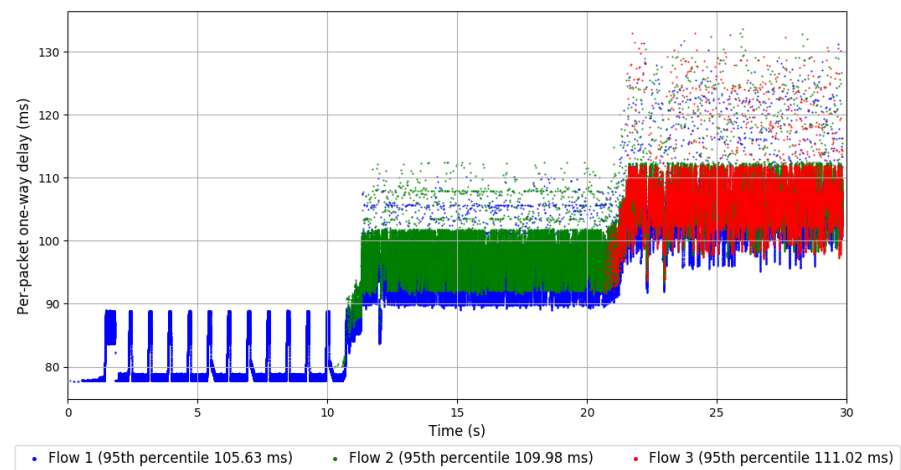
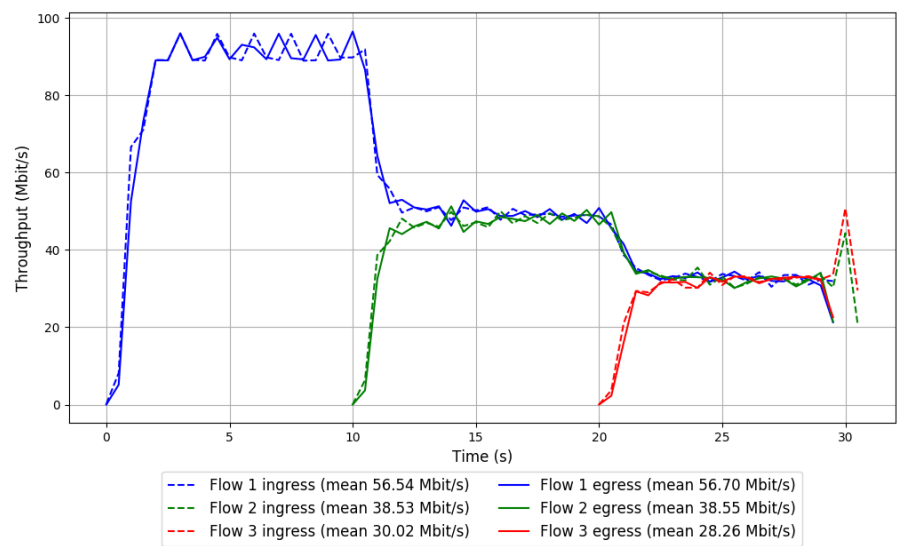


Run 7: Statistics of FillP

Start at: 2018-04-17 15:26:01
End at: 2018-04-17 15:26:31
Local clock offset: -5.477 ms
Remote clock offset: 11.638 ms

Below is generated by plot.py at 2018-04-17 20:51:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.49 Mbit/s
95th percentile per-packet one-way delay: 108.782 ms
Loss rate: 3.49%
-- Flow 1:
Average throughput: 56.70 Mbit/s
95th percentile per-packet one-way delay: 105.633 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 38.55 Mbit/s
95th percentile per-packet one-way delay: 109.977 ms
Loss rate: 5.04%
-- Flow 3:
Average throughput: 28.26 Mbit/s
95th percentile per-packet one-way delay: 111.023 ms
Loss rate: 15.17%

Run 7: Report of FillP — Data Link

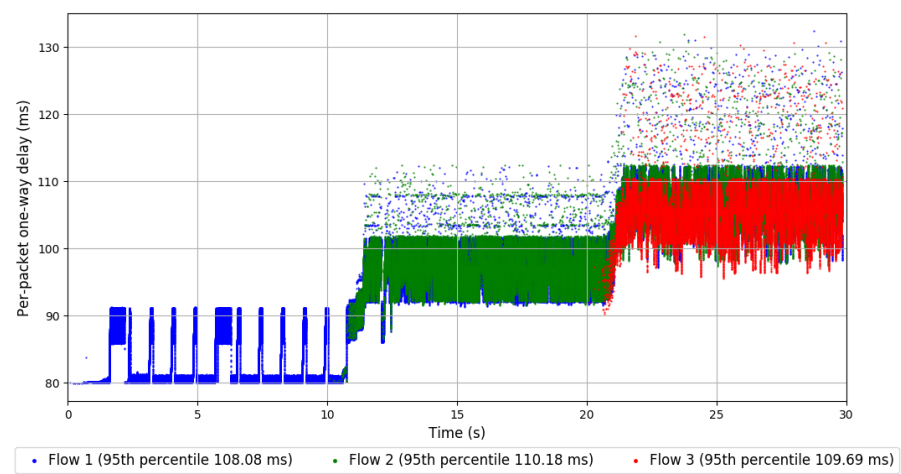
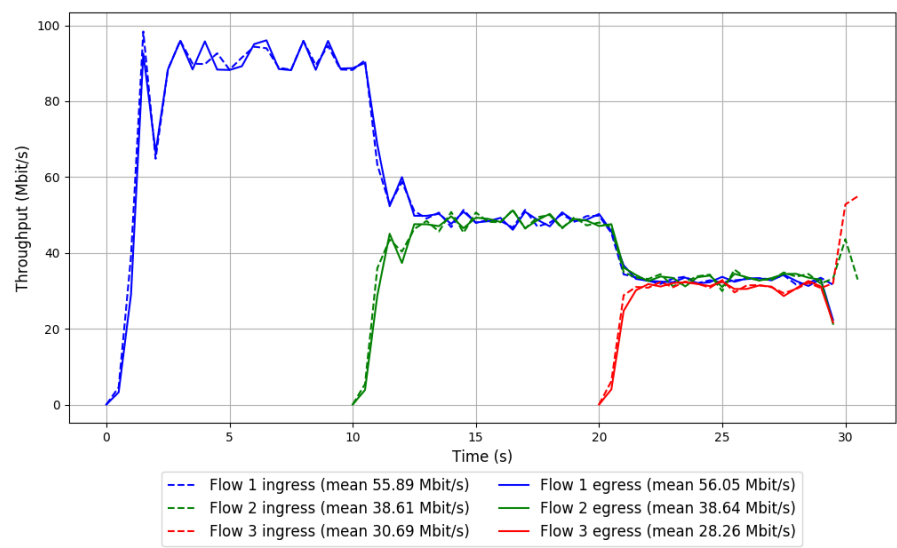


Run 8: Statistics of FillP

Start at: 2018-04-17 15:48:17
End at: 2018-04-17 15:48:47
Local clock offset: -4.78 ms
Remote clock offset: 11.077 ms

Below is generated by plot.py at 2018-04-17 20:51:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.92 Mbit/s
95th percentile per-packet one-way delay: 109.220 ms
Loss rate: 4.17%
-- Flow 1:
Average throughput: 56.05 Mbit/s
95th percentile per-packet one-way delay: 108.083 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 38.64 Mbit/s
95th percentile per-packet one-way delay: 110.177 ms
Loss rate: 5.87%
-- Flow 3:
Average throughput: 28.26 Mbit/s
95th percentile per-packet one-way delay: 109.695 ms
Loss rate: 18.42%

Run 8: Report of FillP — Data Link

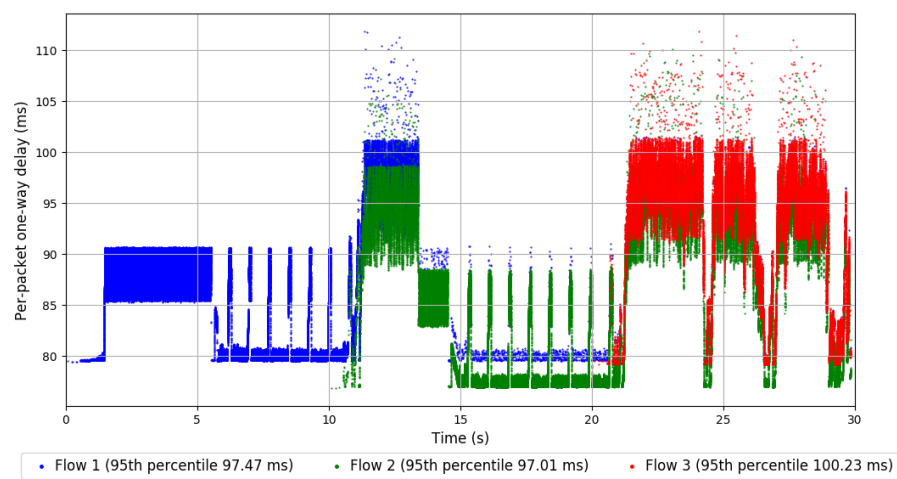
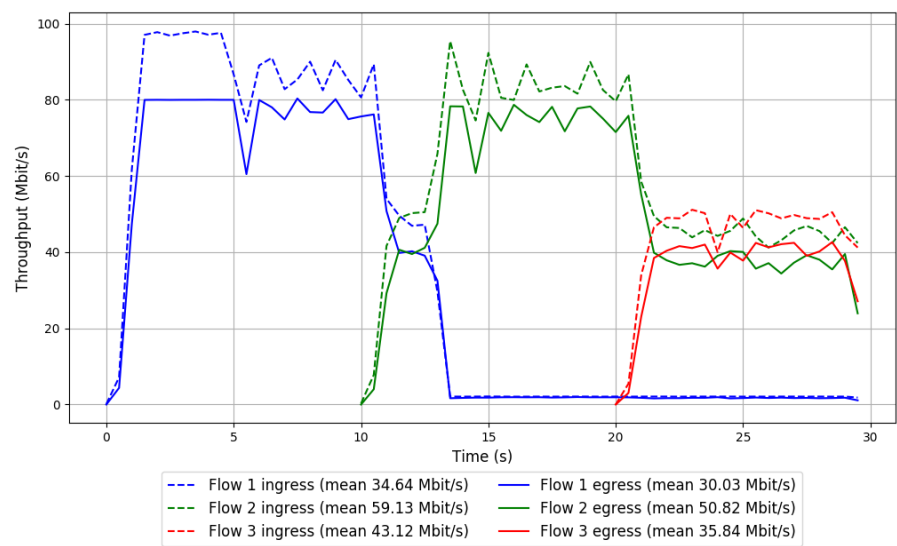


Run 9: Statistics of FillP

Start at: 2018-04-17 16:10:37
End at: 2018-04-17 16:11:07
Local clock offset: -5.591 ms
Remote clock offset: 10.138 ms

Below is generated by plot.py at 2018-04-17 20:51:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 75.47 Mbit/s
95th percentile per-packet one-way delay: 98.260 ms
Loss rate: 15.01%
-- Flow 1:
Average throughput: 30.03 Mbit/s
95th percentile per-packet one-way delay: 97.470 ms
Loss rate: 13.86%
-- Flow 2:
Average throughput: 50.82 Mbit/s
95th percentile per-packet one-way delay: 97.012 ms
Loss rate: 14.80%
-- Flow 3:
Average throughput: 35.84 Mbit/s
95th percentile per-packet one-way delay: 100.227 ms
Loss rate: 18.41%

Run 9: Report of FillP — Data Link

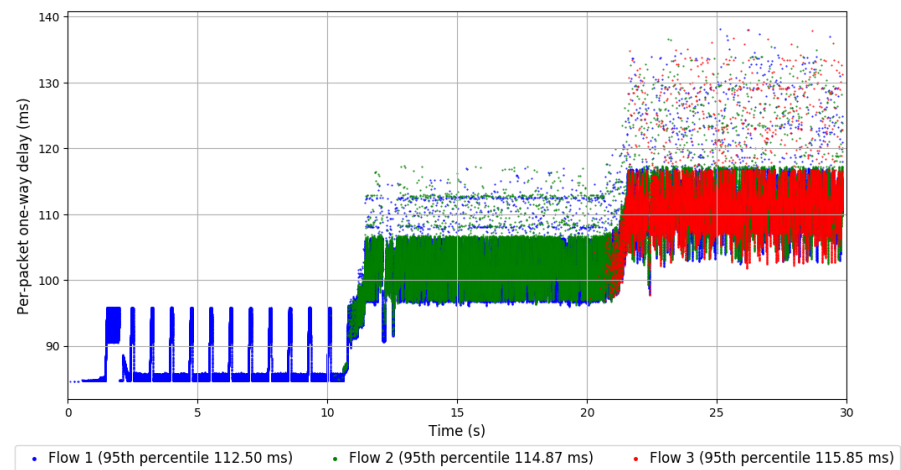
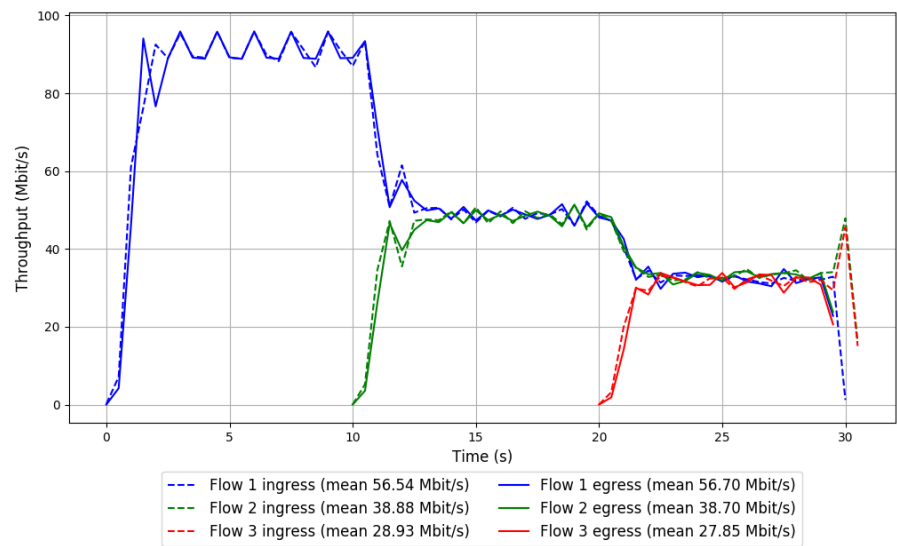


```
Run 10: Statistics of FillP

Start at: 2018-04-17 16:33:05
End at: 2018-04-17 16:33:35
Local clock offset: -3.259 ms
Remote clock offset: 4.794 ms

# Below is generated by plot.py at 2018-04-17 20:51:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.47 Mbit/s
95th percentile per-packet one-way delay: 114.189 ms
Loss rate: 3.15%
-- Flow 1:
Average throughput: 56.70 Mbit/s
95th percentile per-packet one-way delay: 112.504 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 38.70 Mbit/s
95th percentile per-packet one-way delay: 114.871 ms
Loss rate: 5.09%
-- Flow 3:
Average throughput: 27.85 Mbit/s
95th percentile per-packet one-way delay: 115.852 ms
Loss rate: 12.45%
```

Run 10: Report of FillP — Data Link



Run 1: Statistics of Indigo-1-32

Start at: 2018-04-17 13:24:07

End at: 2018-04-17 13:24:37

Local clock offset: -4.331 ms

Remote clock offset: 6.224 ms

Below is generated by plot.py at 2018-04-17 20:51:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.66 Mbit/s

95th percentile per-packet one-way delay: 116.750 ms

Loss rate: 16.11%

-- Flow 1:

Average throughput: 49.41 Mbit/s

95th percentile per-packet one-way delay: 114.452 ms

Loss rate: 13.96%

-- Flow 2:

Average throughput: 30.47 Mbit/s

95th percentile per-packet one-way delay: 116.877 ms

Loss rate: 19.96%

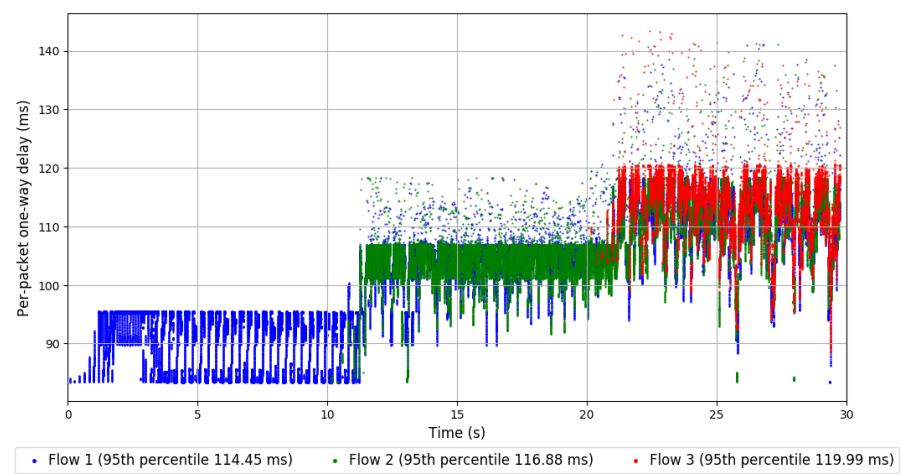
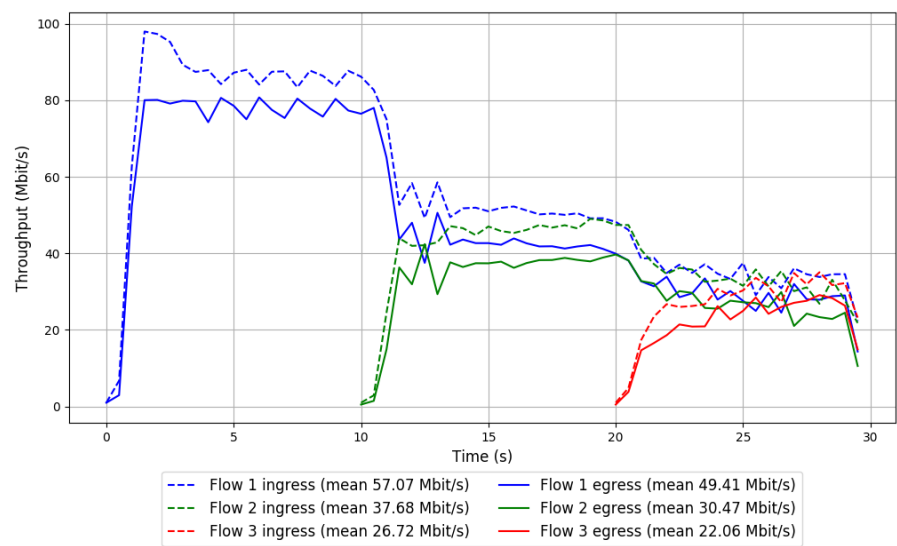
-- Flow 3:

Average throughput: 22.06 Mbit/s

95th percentile per-packet one-way delay: 119.994 ms

Loss rate: 19.16%

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

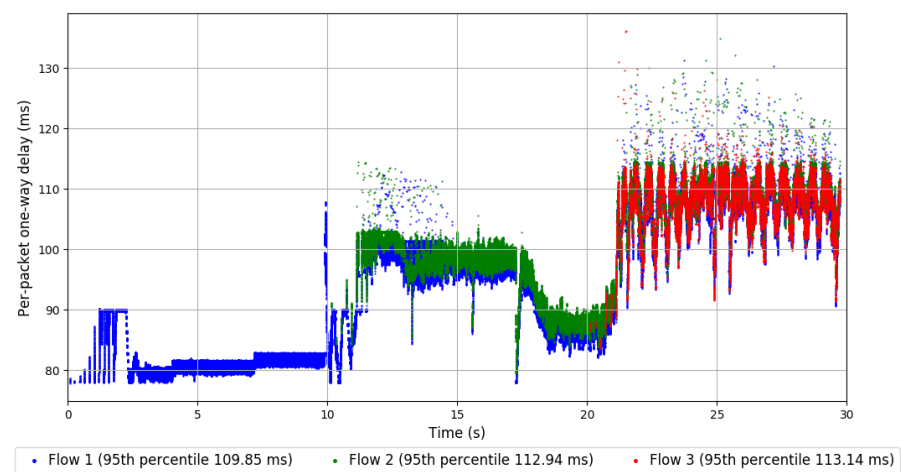
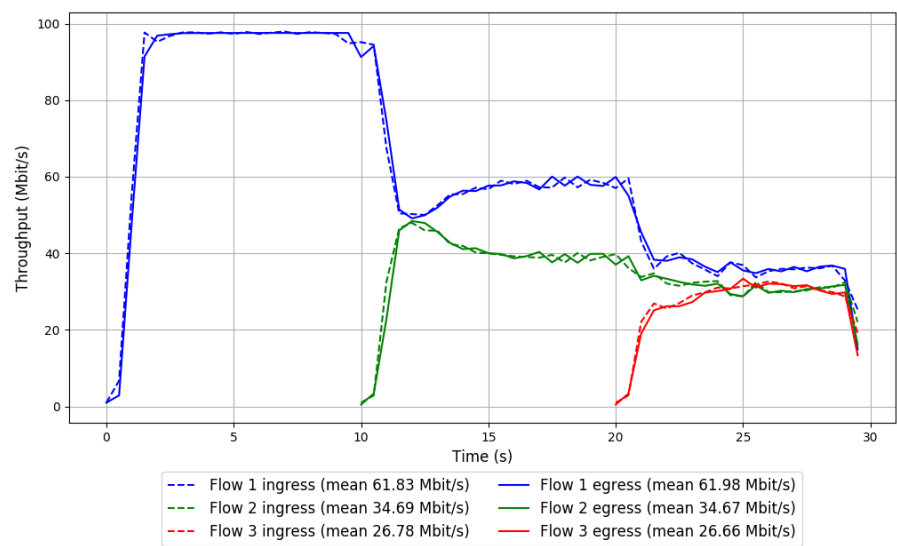


Run 2: Statistics of Indigo-1-32

Start at: 2018-04-17 13:46:26
End at: 2018-04-17 13:46:56
Local clock offset: -2.629 ms
Remote clock offset: 11.784 ms

Below is generated by plot.py at 2018-04-17 20:52:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.49 Mbit/s
95th percentile per-packet one-way delay: 111.747 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 61.98 Mbit/s
95th percentile per-packet one-way delay: 109.854 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 34.67 Mbit/s
95th percentile per-packet one-way delay: 112.935 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 26.66 Mbit/s
95th percentile per-packet one-way delay: 113.135 ms
Loss rate: 2.30%

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

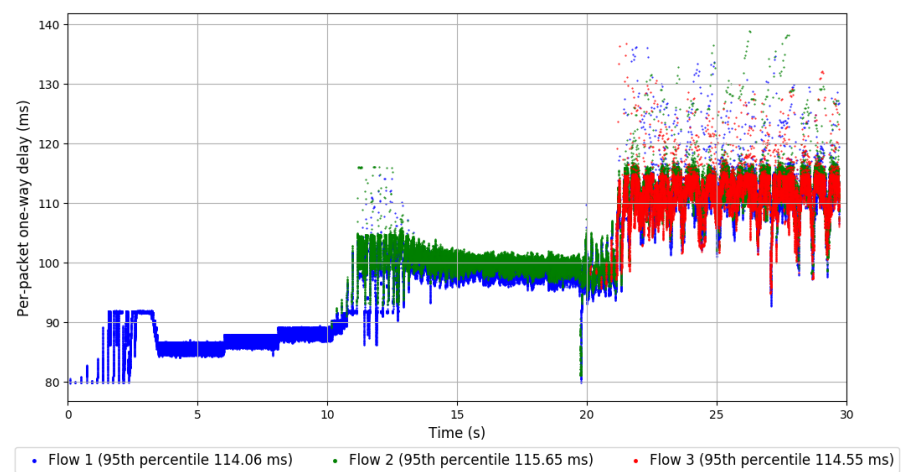
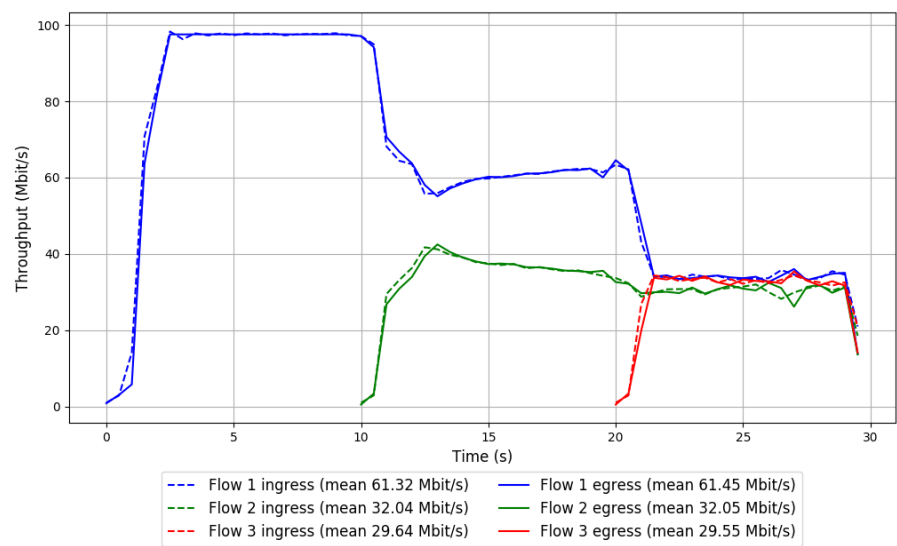


Run 3: Statistics of Indigo-1-32

Start at: 2018-04-17 14:08:42
End at: 2018-04-17 14:09:12
Local clock offset: -3.982 ms
Remote clock offset: 10.289 ms

Below is generated by plot.py at 2018-04-17 20:52:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.14 Mbit/s
95th percentile per-packet one-way delay: 114.569 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 61.45 Mbit/s
95th percentile per-packet one-way delay: 114.060 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 32.05 Mbit/s
95th percentile per-packet one-way delay: 115.648 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 29.55 Mbit/s
95th percentile per-packet one-way delay: 114.553 ms
Loss rate: 2.47%

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

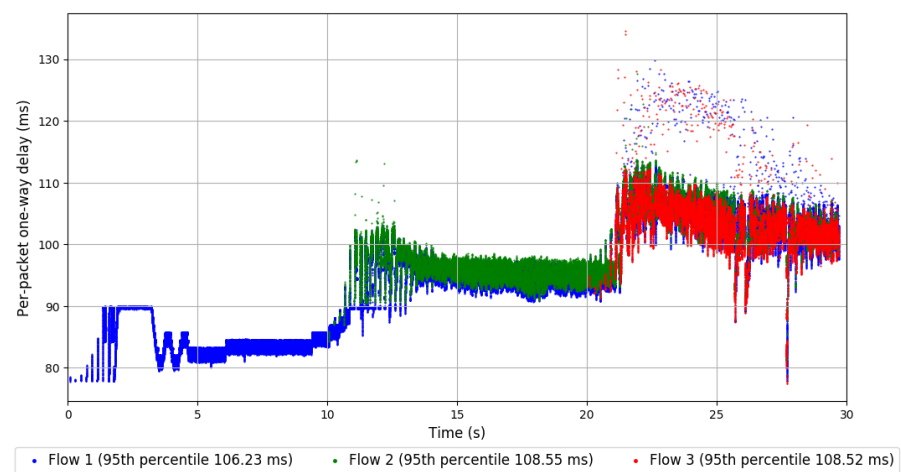
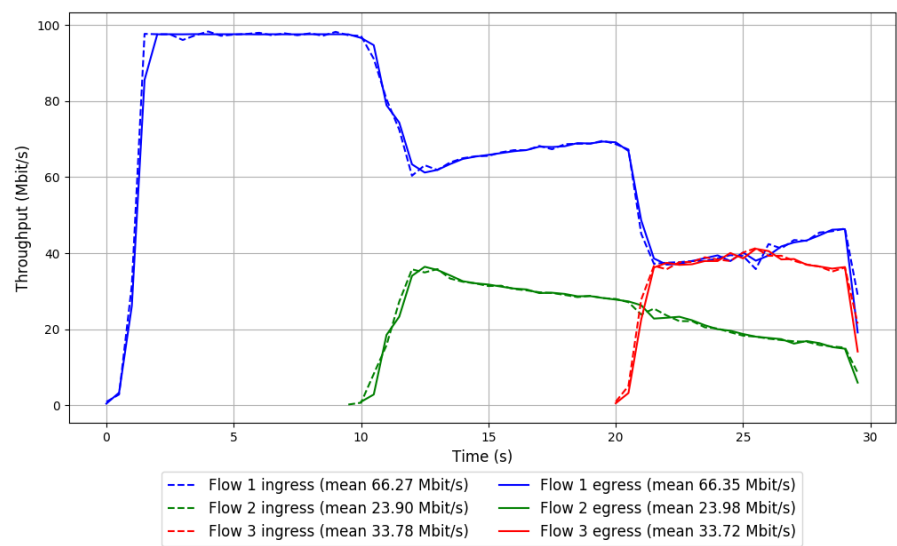


Run 4: Statistics of Indigo-1-32

Start at: 2018-04-17 14:30:53
End at: 2018-04-17 14:31:23
Local clock offset: -5.961 ms
Remote clock offset: 11.664 ms

Below is generated by plot.py at 2018-04-17 20:52:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.15 Mbit/s
95th percentile per-packet one-way delay: 107.202 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 66.35 Mbit/s
95th percentile per-packet one-way delay: 106.234 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 23.98 Mbit/s
95th percentile per-packet one-way delay: 108.547 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 33.72 Mbit/s
95th percentile per-packet one-way delay: 108.523 ms
Loss rate: 2.16%

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

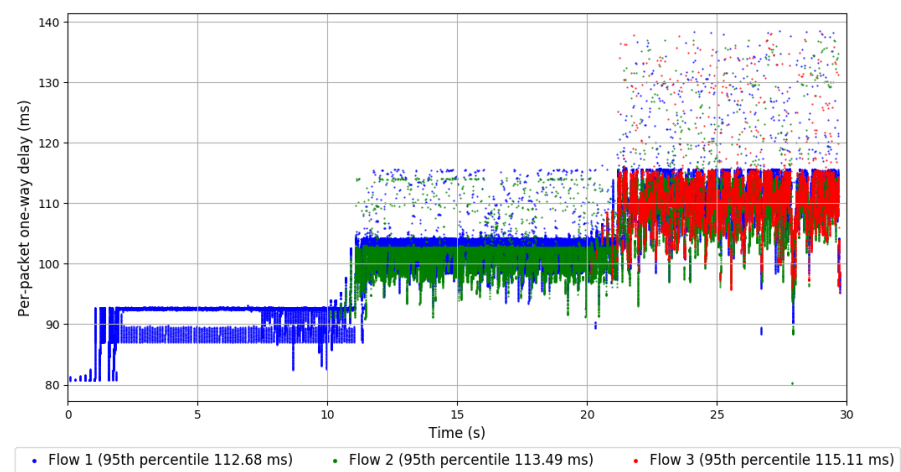
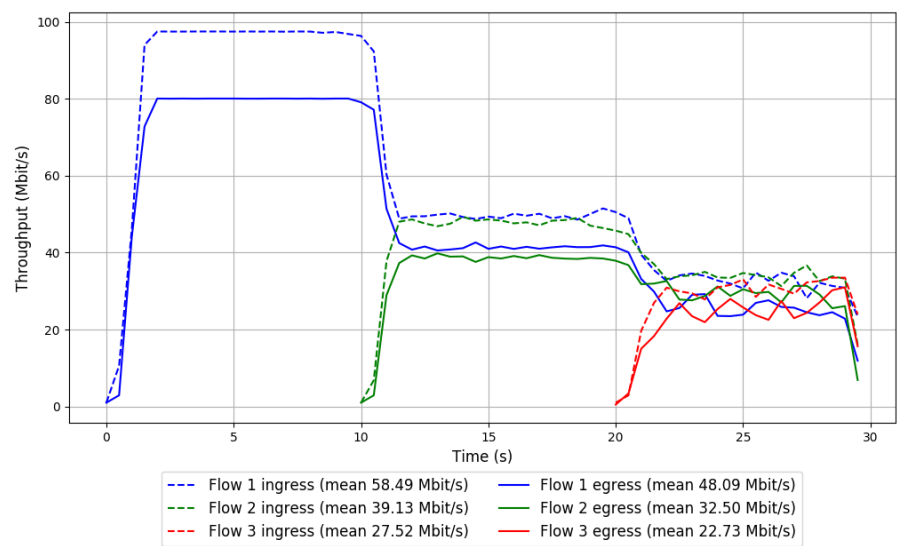


Run 5: Statistics of Indigo-1-32

Start at: 2018-04-17 14:53:11
End at: 2018-04-17 14:53:41
Local clock offset: -4.652 ms
Remote clock offset: 10.203 ms

Below is generated by plot.py at 2018-04-17 20:52:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 76.89 Mbit/s
95th percentile per-packet one-way delay: 113.663 ms
Loss rate: 18.32%
-- Flow 1:
Average throughput: 48.09 Mbit/s
95th percentile per-packet one-way delay: 112.682 ms
Loss rate: 18.30%
-- Flow 2:
Average throughput: 32.50 Mbit/s
95th percentile per-packet one-way delay: 113.489 ms
Loss rate: 18.03%
-- Flow 3:
Average throughput: 22.73 Mbit/s
95th percentile per-packet one-way delay: 115.113 ms
Loss rate: 19.25%

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

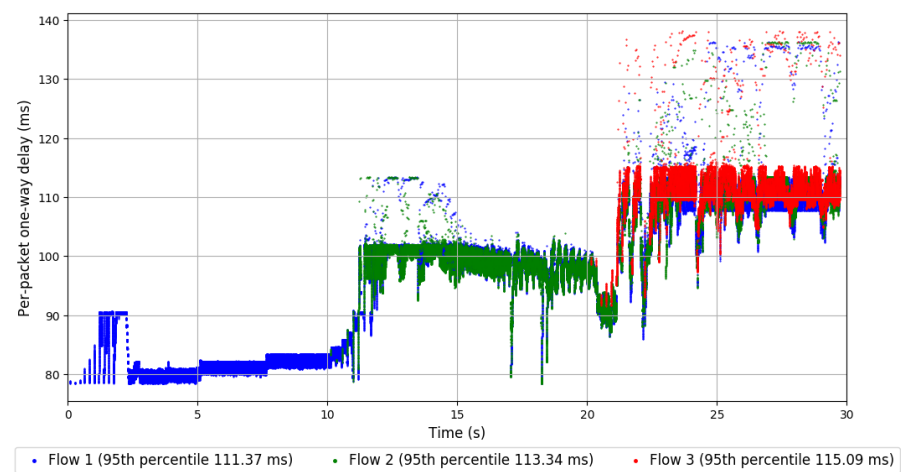
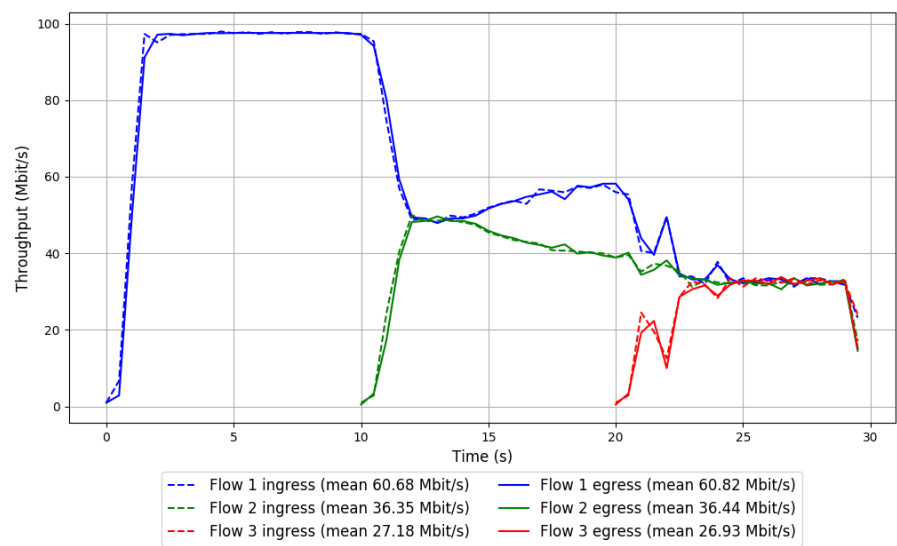


Run 6: Statistics of Indigo-1-32

Start at: 2018-04-17 15:15:35
End at: 2018-04-17 15:16:05
Local clock offset: -5.474 ms
Remote clock offset: 11.245 ms

Below is generated by plot.py at 2018-04-17 20:53:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.60 Mbit/s
95th percentile per-packet one-way delay: 113.283 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 60.82 Mbit/s
95th percentile per-packet one-way delay: 111.369 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 36.44 Mbit/s
95th percentile per-packet one-way delay: 113.337 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 26.93 Mbit/s
95th percentile per-packet one-way delay: 115.087 ms
Loss rate: 2.91%

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

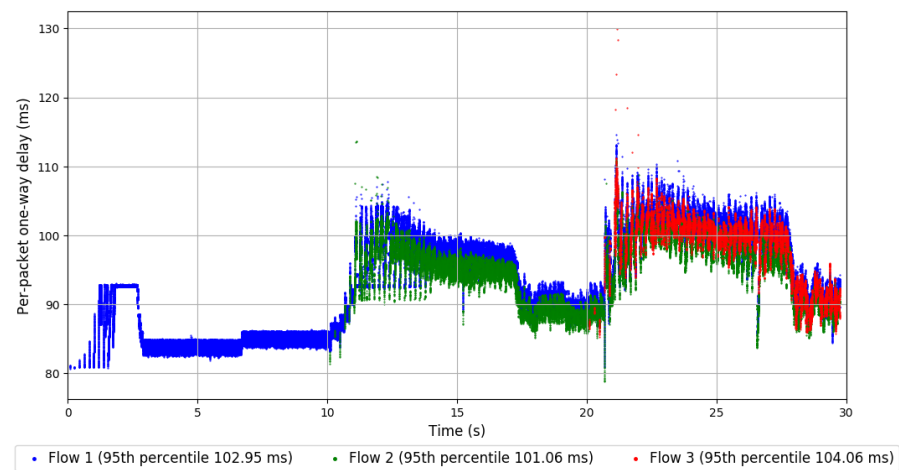
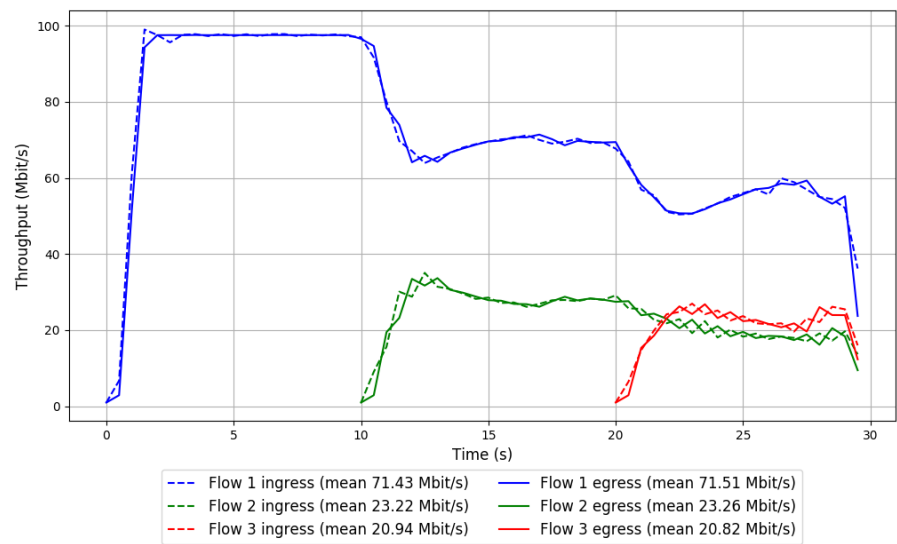


Run 7: Statistics of Indigo-1-32

Start at: 2018-04-17 15:37:54
End at: 2018-04-17 15:38:24
Local clock offset: -5.572 ms
Remote clock offset: 10.819 ms

Below is generated by plot.py at 2018-04-17 20:53:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.67 Mbit/s
95th percentile per-packet one-way delay: 102.856 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 71.51 Mbit/s
95th percentile per-packet one-way delay: 102.955 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 23.26 Mbit/s
95th percentile per-packet one-way delay: 101.060 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 20.82 Mbit/s
95th percentile per-packet one-way delay: 104.063 ms
Loss rate: 2.42%

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



Run 8: Statistics of Indigo-1-32

Start at: 2018-04-17 16:00:13

End at: 2018-04-17 16:00:43

Local clock offset: -5.558 ms

Remote clock offset: 4.767 ms

Below is generated by plot.py at 2018-04-17 20:53:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.61 Mbit/s

95th percentile per-packet one-way delay: 111.128 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 68.36 Mbit/s

95th percentile per-packet one-way delay: 110.706 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 24.89 Mbit/s

95th percentile per-packet one-way delay: 111.842 ms

Loss rate: 0.67%

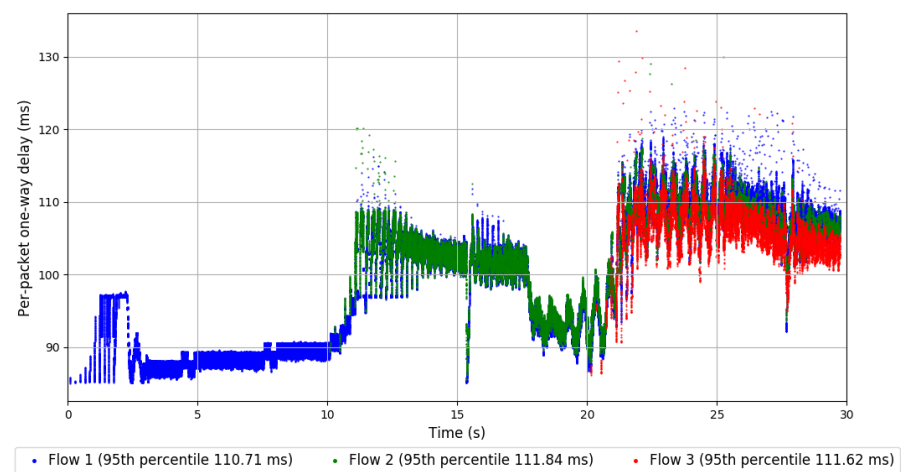
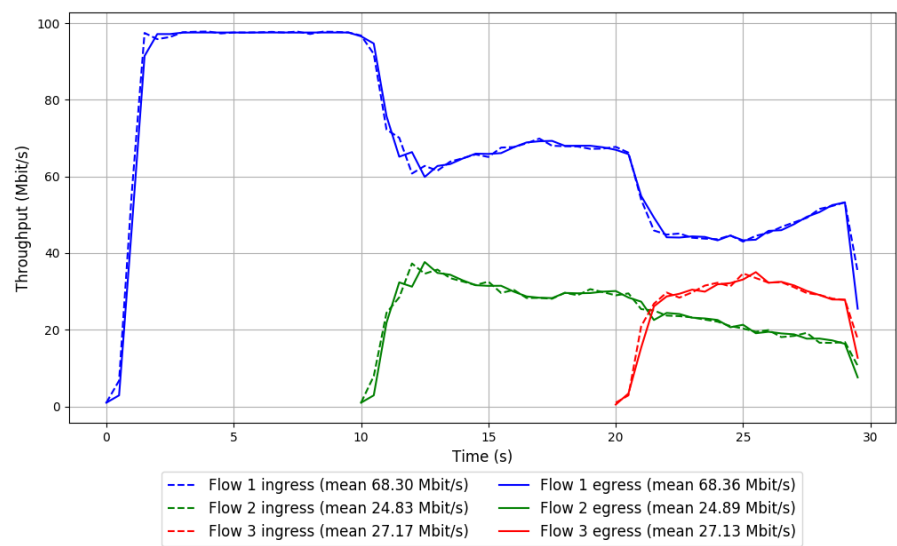
-- Flow 3:

Average throughput: 27.13 Mbit/s

95th percentile per-packet one-way delay: 111.616 ms

Loss rate: 2.04%

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



Run 9: Statistics of Indigo-1-32

Start at: 2018-04-17 16:22:39

End at: 2018-04-17 16:23:09

Local clock offset: -3.19 ms

Remote clock offset: 4.821 ms

Below is generated by plot.py at 2018-04-17 20:53:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.56 Mbit/s

95th percentile per-packet one-way delay: 108.685 ms

Loss rate: 15.46%

-- Flow 1:

Average throughput: 51.41 Mbit/s

95th percentile per-packet one-way delay: 108.261 ms

Loss rate: 14.06%

-- Flow 2:

Average throughput: 38.03 Mbit/s

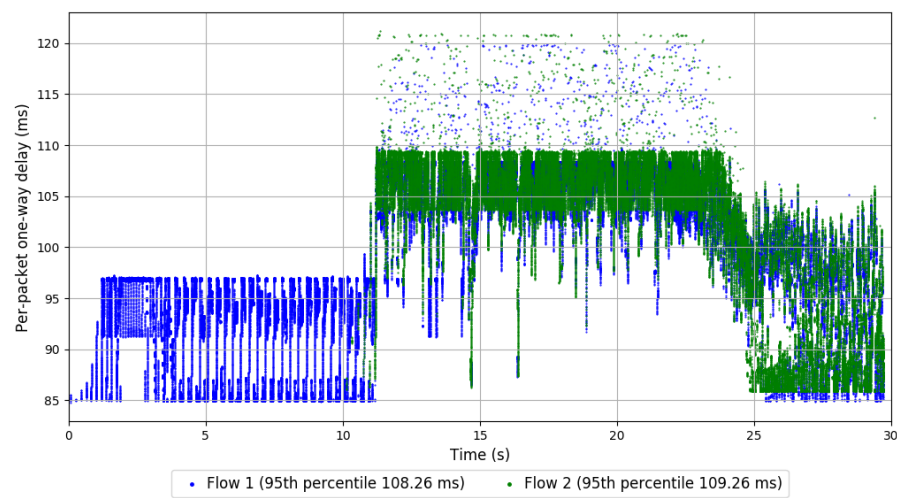
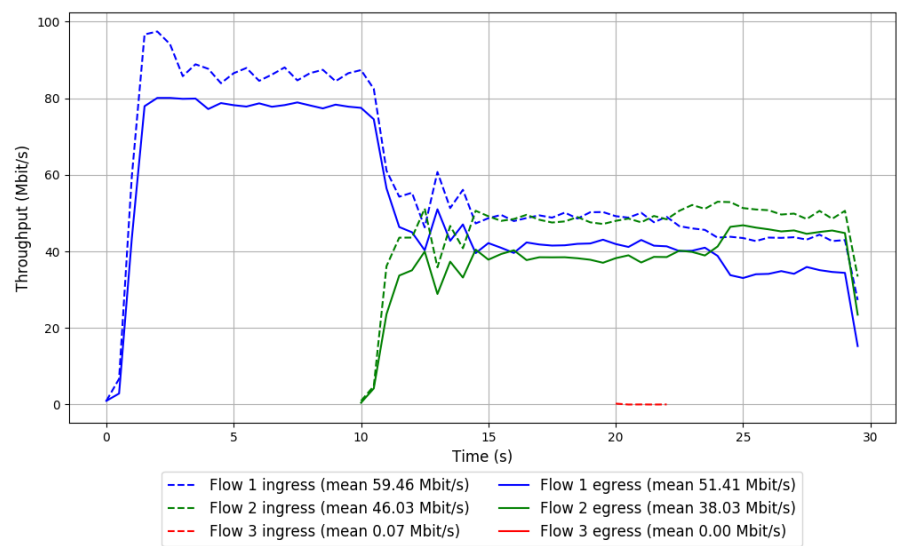
95th percentile per-packet one-way delay: 109.258 ms

Loss rate: 18.16%

-- Flow 3:

Average throughput: 0.00 Mbit/s

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



Run 10: Statistics of Indigo-1-32

Start at: 2018-04-17 16:45:01

End at: 2018-04-17 16:45:31

Local clock offset: -2.727 ms

Remote clock offset: 9.445 ms

Below is generated by plot.py at 2018-04-17 20:53:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.98 Mbit/s

95th percentile per-packet one-way delay: 105.041 ms

Loss rate: 17.54%

-- Flow 1:

Average throughput: 62.59 Mbit/s

95th percentile per-packet one-way delay: 103.439 ms

Loss rate: 16.13%

-- Flow 2:

Average throughput: 17.02 Mbit/s

95th percentile per-packet one-way delay: 107.879 ms

Loss rate: 22.56%

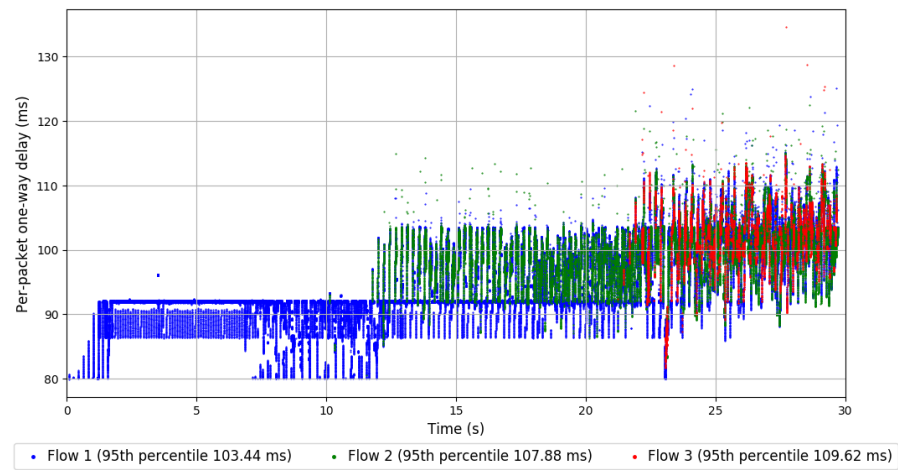
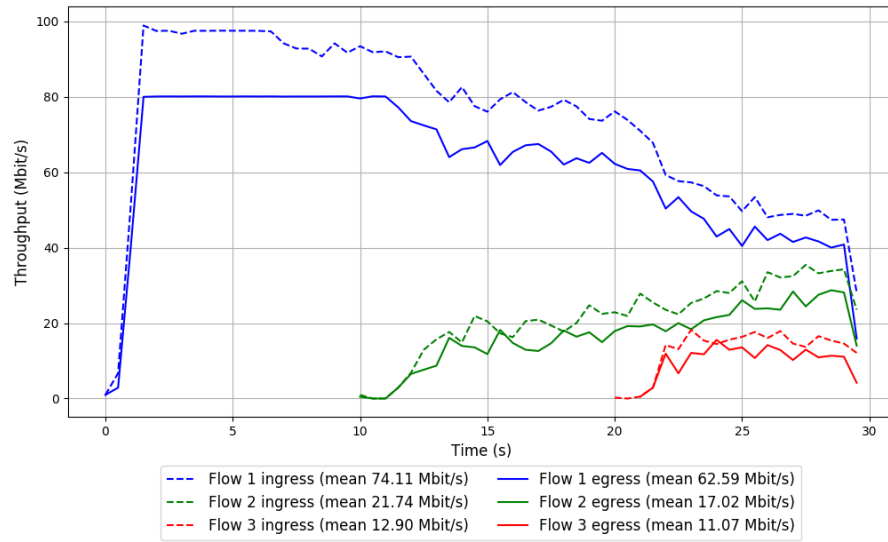
-- Flow 3:

Average throughput: 11.07 Mbit/s

95th percentile per-packet one-way delay: 109.624 ms

Loss rate: 25.24%

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



Run 1: Statistics of PCC-Vivace

Start at: 2018-04-17 13:07:55

End at: 2018-04-17 13:08:25

Local clock offset: -5.742 ms

Remote clock offset: 5.059 ms

Below is generated by plot.py at 2018-04-17 20:53:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.59 Mbit/s

95th percentile per-packet one-way delay: 85.796 ms

Loss rate: 3.06%

-- Flow 1:

Average throughput: 58.41 Mbit/s

95th percentile per-packet one-way delay: 85.809 ms

Loss rate: 2.88%

-- Flow 2:

Average throughput: 8.73 Mbit/s

95th percentile per-packet one-way delay: 84.500 ms

Loss rate: 3.82%

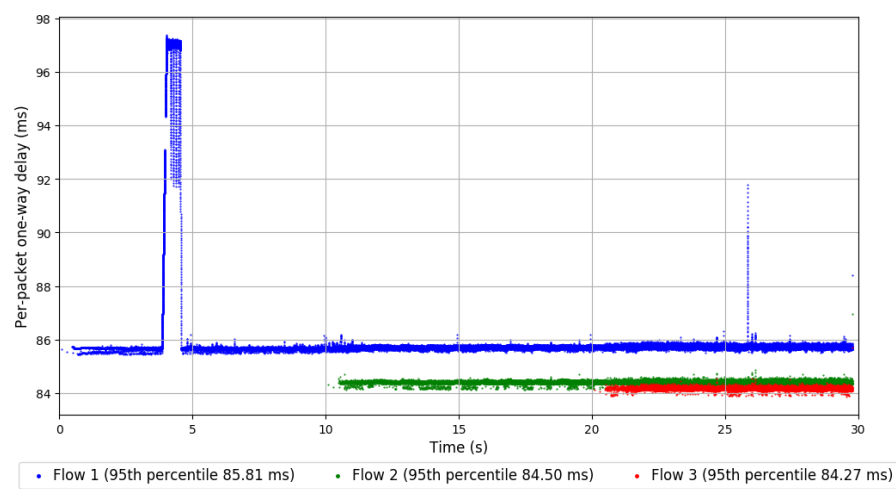
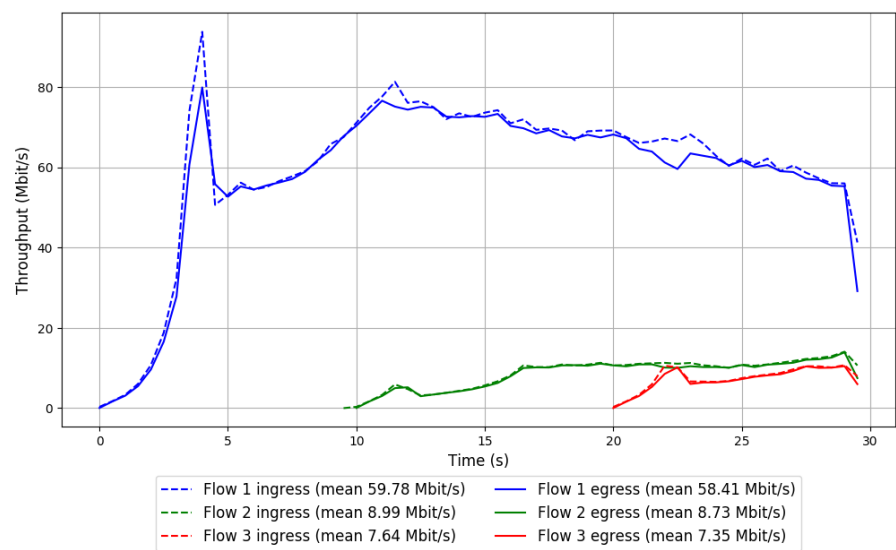
-- Flow 3:

Average throughput: 7.35 Mbit/s

95th percentile per-packet one-way delay: 84.274 ms

Loss rate: 5.57%

Run 1: Report of PCC-Vivace — Data Link

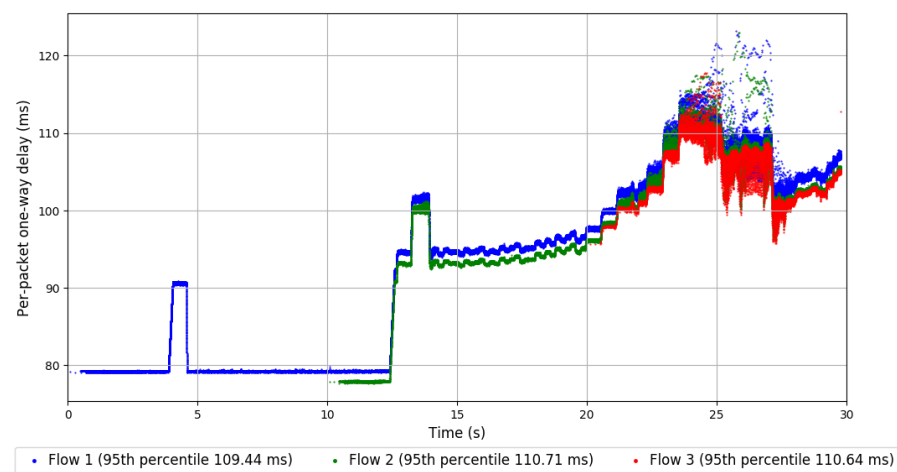
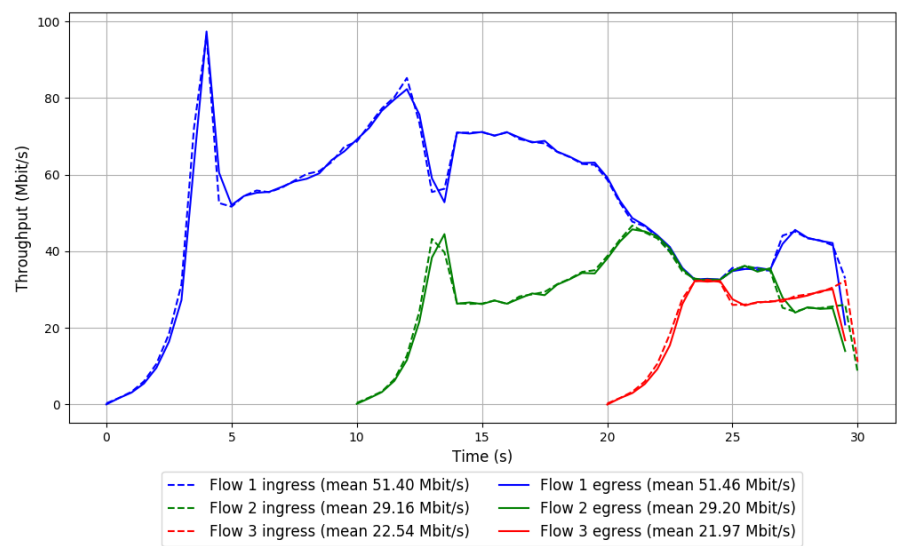


Run 2: Statistics of PCC-Vivace

Start at: 2018-04-17 13:30:37
End at: 2018-04-17 13:31:07
Local clock offset: -4.299 ms
Remote clock offset: 11.372 ms

Below is generated by plot.py at 2018-04-17 20:53:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.95 Mbit/s
95th percentile per-packet one-way delay: 110.366 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 51.46 Mbit/s
95th percentile per-packet one-way delay: 109.435 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 29.20 Mbit/s
95th percentile per-packet one-way delay: 110.709 ms
Loss rate: 2.22%
-- Flow 3:
Average throughput: 21.97 Mbit/s
95th percentile per-packet one-way delay: 110.641 ms
Loss rate: 7.21%

Run 2: Report of PCC-Vivace — Data Link

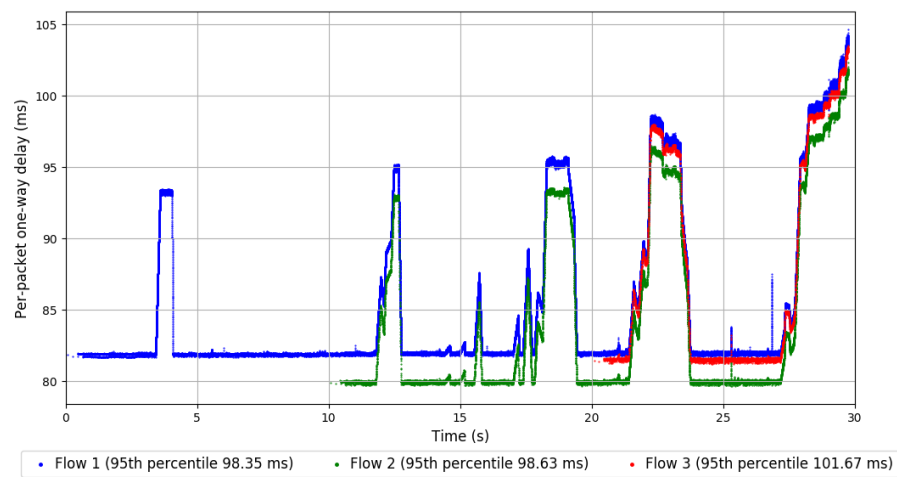
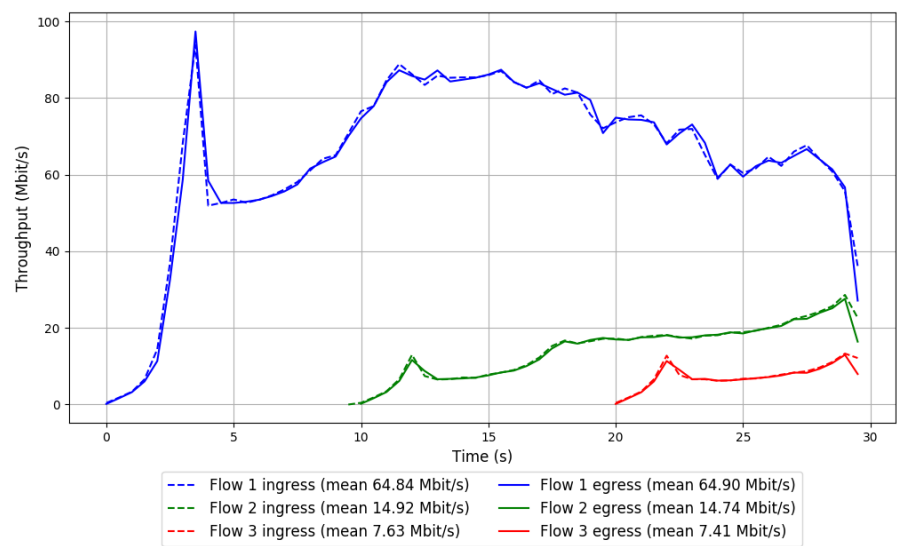


Run 3: Statistics of PCC-Vivace

Start at: 2018-04-17 13:52:57
End at: 2018-04-17 13:53:27
Local clock offset: -0.694 ms
Remote clock offset: 11.183 ms

Below is generated by plot.py at 2018-04-17 20:54:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.08 Mbit/s
95th percentile per-packet one-way delay: 98.719 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 64.90 Mbit/s
95th percentile per-packet one-way delay: 98.354 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 14.74 Mbit/s
95th percentile per-packet one-way delay: 98.631 ms
Loss rate: 2.10%
-- Flow 3:
Average throughput: 7.41 Mbit/s
95th percentile per-packet one-way delay: 101.675 ms
Loss rate: 4.59%

Run 3: Report of PCC-Vivace — Data Link

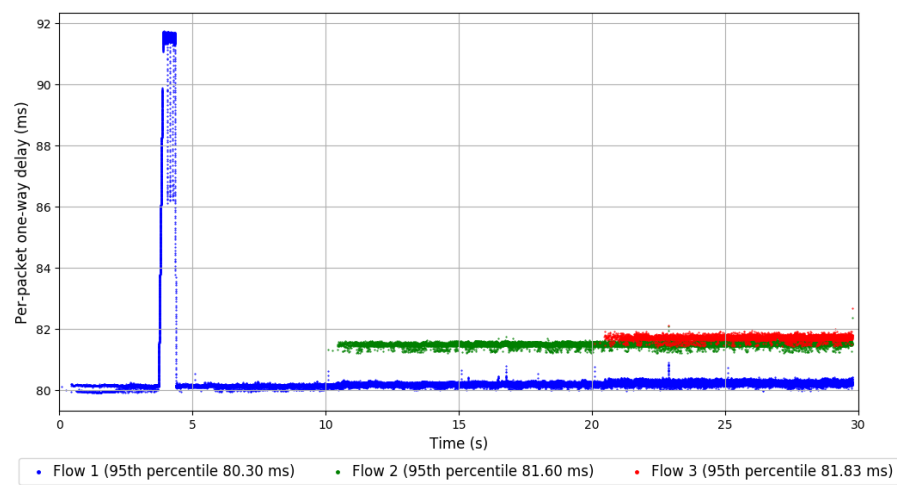
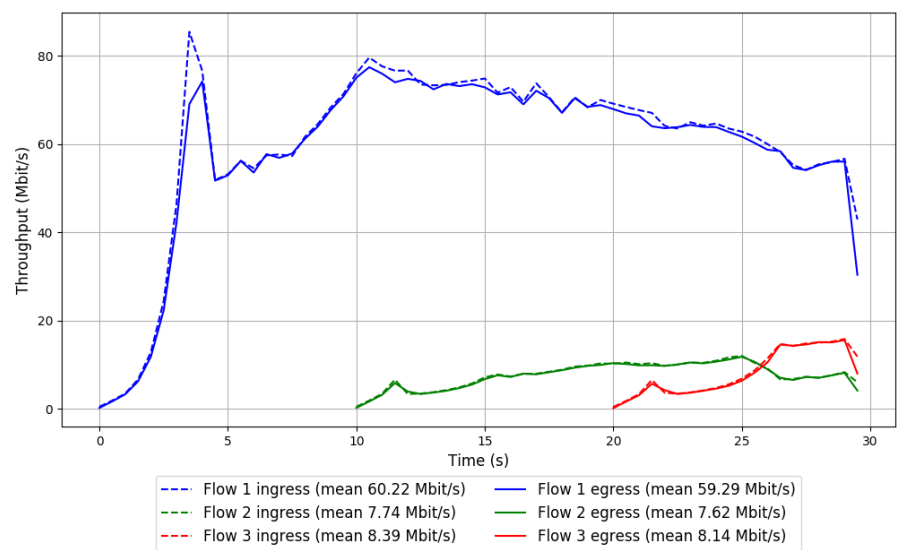


Run 4: Statistics of PCC-Vivace

Start at: 2018-04-17 14:15:10
End at: 2018-04-17 14:15:40
Local clock offset: -4.595 ms
Remote clock offset: 10.259 ms

Below is generated by plot.py at 2018-04-17 20:54:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 67.00 Mbit/s
95th percentile per-packet one-way delay: 81.702 ms
Loss rate: 2.25%
-- Flow 1:
Average throughput: 59.29 Mbit/s
95th percentile per-packet one-way delay: 80.297 ms
Loss rate: 2.12%
-- Flow 2:
Average throughput: 7.62 Mbit/s
95th percentile per-packet one-way delay: 81.603 ms
Loss rate: 2.35%
-- Flow 3:
Average throughput: 8.14 Mbit/s
95th percentile per-packet one-way delay: 81.826 ms
Loss rate: 4.80%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2018-04-17 14:37:23

End at: 2018-04-17 14:37:53

Local clock offset: -5.625 ms

Remote clock offset: 4.911 ms

Below is generated by plot.py at 2018-04-17 20:54:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.57 Mbit/s

95th percentile per-packet one-way delay: 95.478 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 66.78 Mbit/s

95th percentile per-packet one-way delay: 95.405 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 11.61 Mbit/s

95th percentile per-packet one-way delay: 96.430 ms

Loss rate: 1.45%

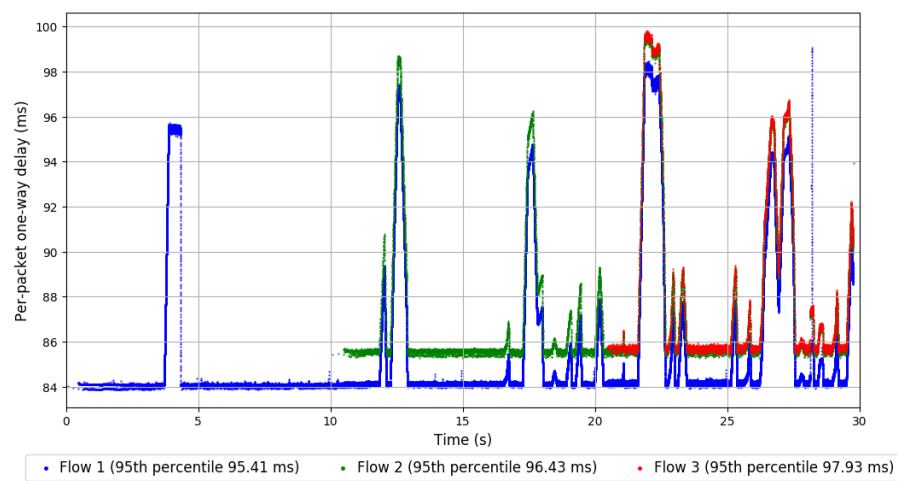
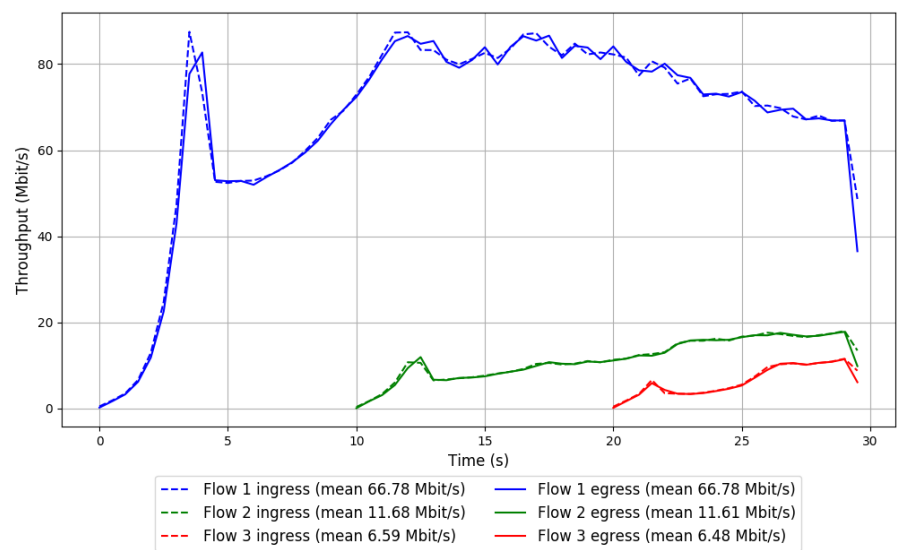
-- Flow 3:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 97.928 ms

Loss rate: 3.57%

Run 5: Report of PCC-Vivace — Data Link



Run 6: Statistics of PCC-Vivace

Start at: 2018-04-17 14:59:50

End at: 2018-04-17 15:00:20

Local clock offset: -5.427 ms

Remote clock offset: 4.506 ms

Below is generated by plot.py at 2018-04-17 20:54:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.68 Mbit/s

95th percentile per-packet one-way delay: 117.281 ms

Loss rate: 4.28%

-- Flow 1:

Average throughput: 51.32 Mbit/s

95th percentile per-packet one-way delay: 117.922 ms

Loss rate: 3.08%

-- Flow 2:

Average throughput: 30.40 Mbit/s

95th percentile per-packet one-way delay: 116.882 ms

Loss rate: 7.43%

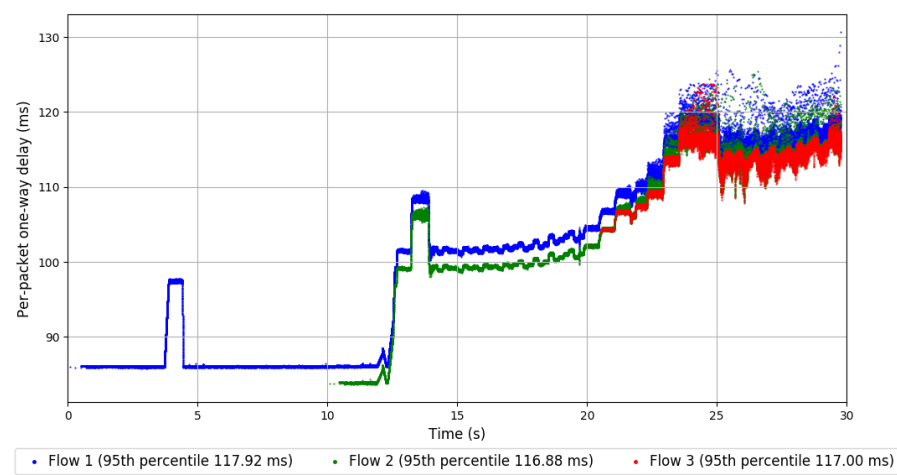
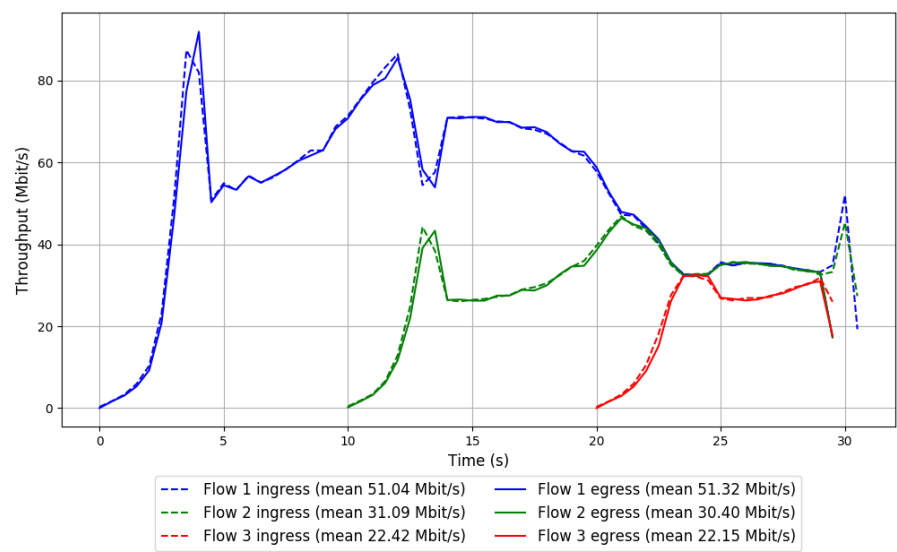
-- Flow 3:

Average throughput: 22.15 Mbit/s

95th percentile per-packet one-way delay: 117.004 ms

Loss rate: 3.59%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-04-17 15:22:06

End at: 2018-04-17 15:22:36

Local clock offset: -6.233 ms

Remote clock offset: 6.754 ms

Below is generated by plot.py at 2018-04-17 20:54:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.84 Mbit/s

95th percentile per-packet one-way delay: 115.404 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 52.39 Mbit/s

95th percentile per-packet one-way delay: 112.450 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 29.84 Mbit/s

95th percentile per-packet one-way delay: 116.779 ms

Loss rate: 0.77%

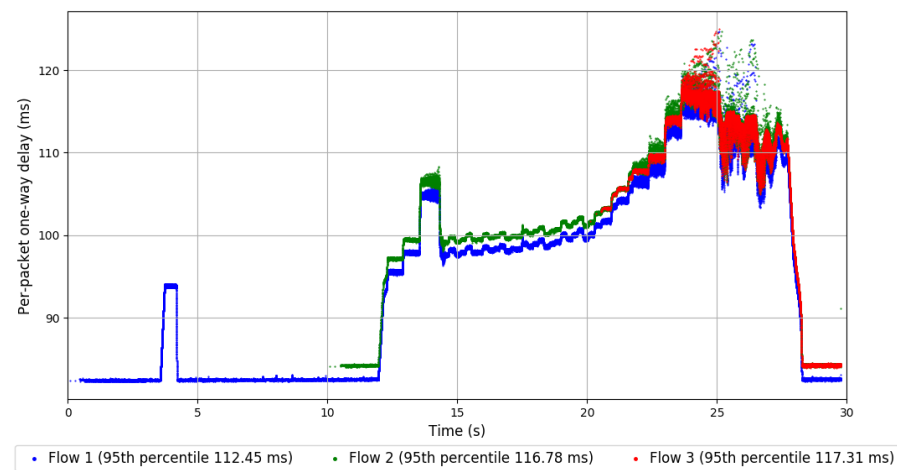
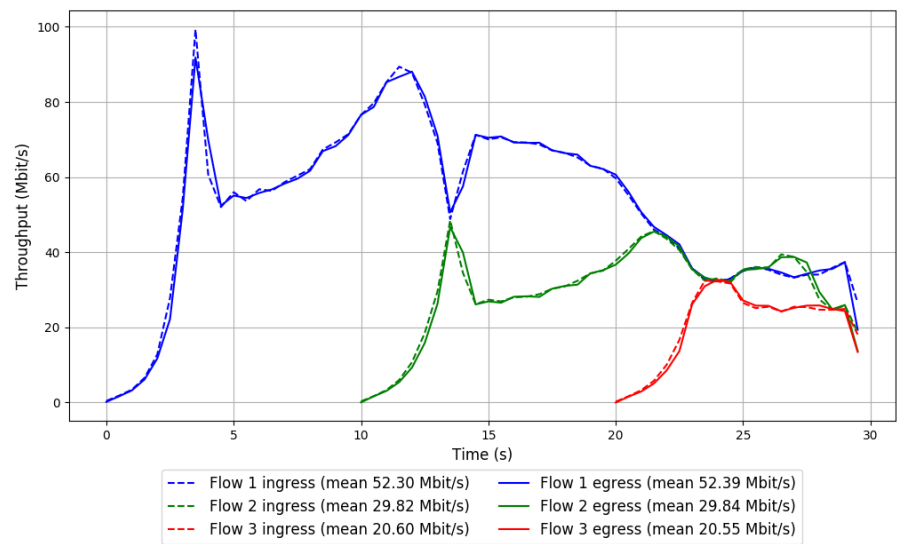
-- Flow 3:

Average throughput: 20.55 Mbit/s

95th percentile per-packet one-way delay: 117.310 ms

Loss rate: 2.24%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-04-17 15:44:26

End at: 2018-04-17 15:44:56

Local clock offset: -5.571 ms

Remote clock offset: 4.989 ms

Below is generated by plot.py at 2018-04-17 20:54:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.34 Mbit/s

95th percentile per-packet one-way delay: 96.091 ms

Loss rate: 3.73%

-- Flow 1:

Average throughput: 63.38 Mbit/s

95th percentile per-packet one-way delay: 96.110 ms

Loss rate: 3.69%

-- Flow 2:

Average throughput: 7.19 Mbit/s

95th percentile per-packet one-way delay: 95.306 ms

Loss rate: 3.98%

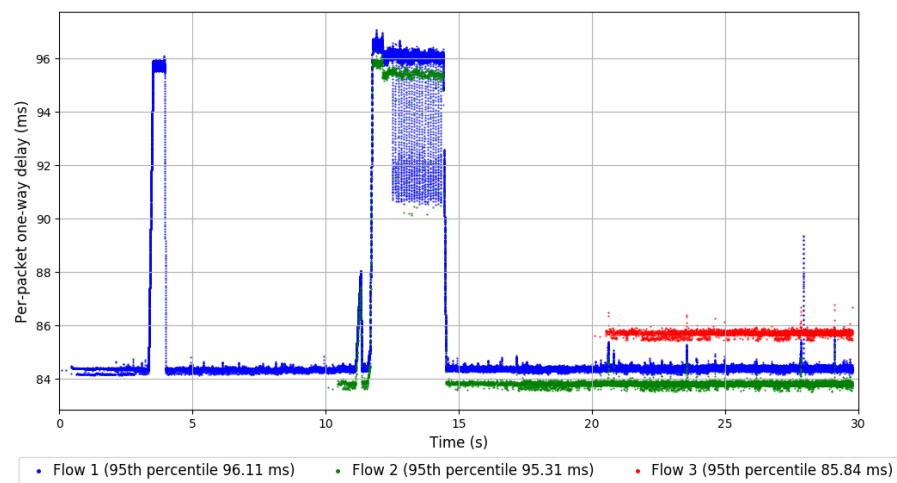
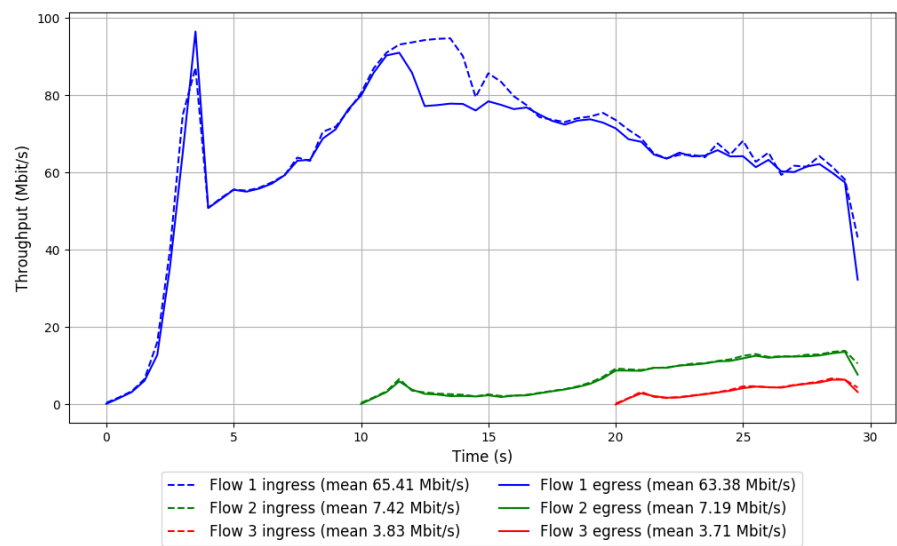
-- Flow 3:

Average throughput: 3.71 Mbit/s

95th percentile per-packet one-way delay: 85.837 ms

Loss rate: 4.74%

Run 8: Report of PCC-Vivace — Data Link



Run 9: Statistics of PCC-Vivace

Start at: 2018-04-17 16:06:45

End at: 2018-04-17 16:07:15

Local clock offset: -5.562 ms

Remote clock offset: 9.377 ms

Below is generated by plot.py at 2018-04-17 20:54:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.89 Mbit/s

95th percentile per-packet one-way delay: 104.059 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 53.41 Mbit/s

95th percentile per-packet one-way delay: 102.945 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 34.35 Mbit/s

95th percentile per-packet one-way delay: 104.252 ms

Loss rate: 1.10%

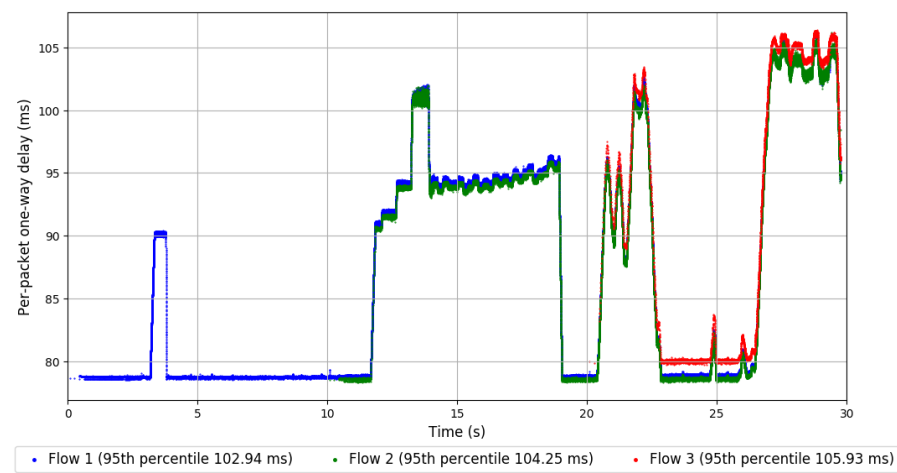
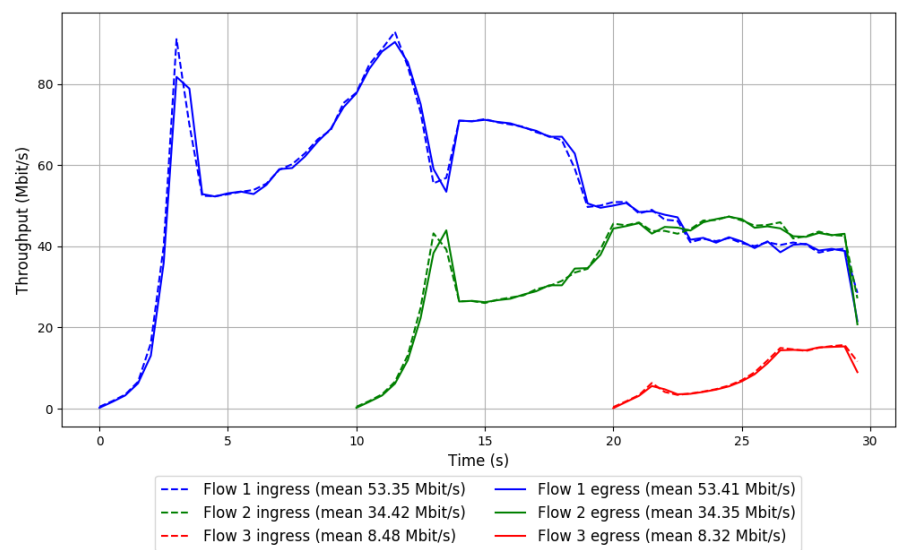
-- Flow 3:

Average throughput: 8.32 Mbit/s

95th percentile per-packet one-way delay: 105.930 ms

Loss rate: 3.69%

Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-04-17 16:29:10

End at: 2018-04-17 16:29:40

Local clock offset: -3.417 ms

Remote clock offset: 9.573 ms

Below is generated by plot.py at 2018-04-17 20:54:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.23 Mbit/s

95th percentile per-packet one-way delay: 111.635 ms

Loss rate: 2.44%

-- Flow 1:

Average throughput: 52.47 Mbit/s

95th percentile per-packet one-way delay: 110.727 ms

Loss rate: 1.87%

-- Flow 2:

Average throughput: 30.96 Mbit/s

95th percentile per-packet one-way delay: 112.685 ms

Loss rate: 1.33%

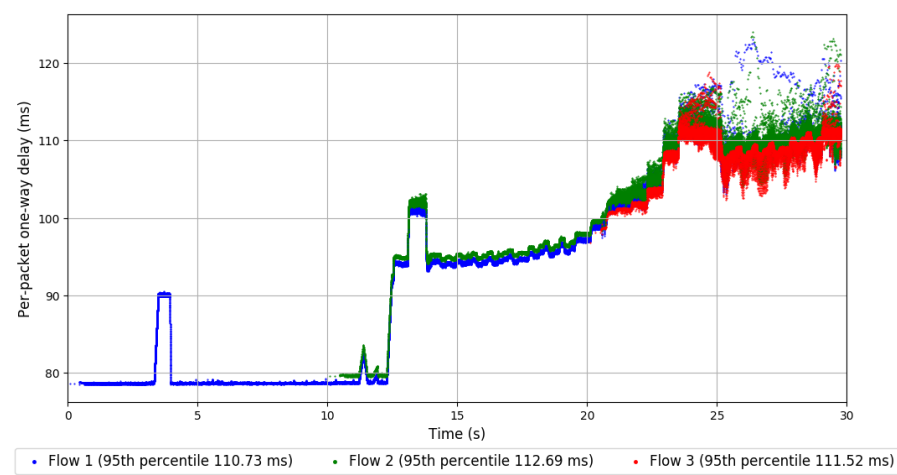
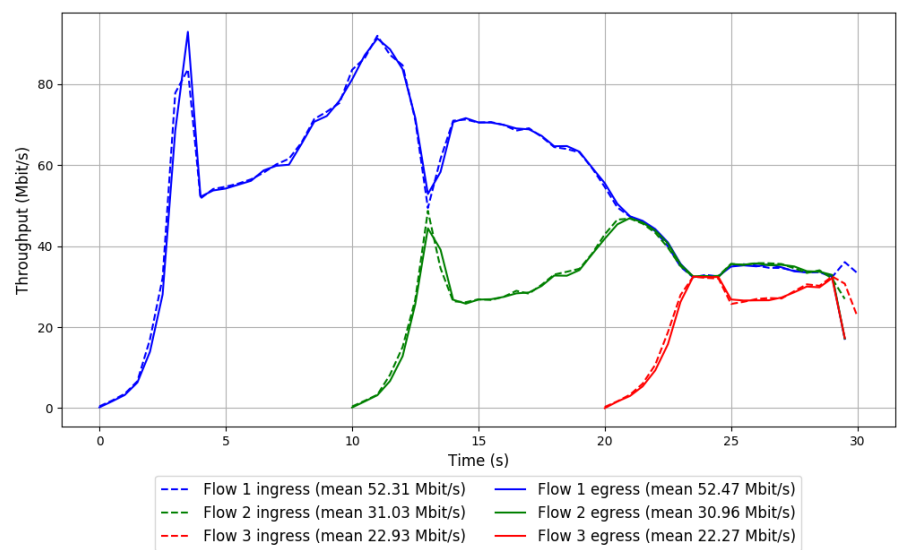
-- Flow 3:

Average throughput: 22.27 Mbit/s

95th percentile per-packet one-way delay: 111.515 ms

Loss rate: 9.20%

Run 10: Report of PCC-Vivace — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2018-04-17 13:10:45

End at: 2018-04-17 13:11:15

Local clock offset: -5.649 ms

Remote clock offset: 5.951 ms

Run 1: Report of PCC-Expr — Data Link

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Run 2: Statistics of PCC-Expr

Start at: 2018-04-17 13:33:18

End at: 2018-04-17 13:33:48

Local clock offset: -2.34 ms

Remote clock offset: 6.678 ms

Run 2: Report of PCC-Expr — Data Link

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Figure is missing

Run 3: Statistics of PCC-Expr

Start at: 2018-04-17 13:55:37

End at: 2018-04-17 13:56:07

Local clock offset: -1.284 ms

Remote clock offset: 6.283 ms

Run 3: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

Run 4: Statistics of PCC-Expr

Start at: 2018-04-17 14:17:47

End at: 2018-04-17 14:18:17

Local clock offset: -6.276 ms

Remote clock offset: 11.008 ms

Run 4: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

Run 5: Statistics of PCC-Expr

Start at: 2018-04-17 14:40:06

End at: 2018-04-17 14:40:36

Local clock offset: -5.537 ms

Remote clock offset: 9.593 ms

Run 5: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

Run 6: Statistics of PCC-Expr

Start at: 2018-04-17 15:02:31

End at: 2018-04-17 15:03:01

Local clock offset: -4.659 ms

Remote clock offset: 5.324 ms

Run 6: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

Run 7: Statistics of PCC-Expr

Start at: 2018-04-17 15:24:47

End at: 2018-04-17 15:25:17

Local clock offset: -4.728 ms

Remote clock offset: 6.732 ms

Run 7: Report of PCC-Expr — Data Link

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Figure is missing

Run 8: Statistics of PCC-Expr

Start at: 2018-04-17 15:47:03

End at: 2018-04-17 15:47:33

Local clock offset: -5.511 ms

Remote clock offset: 4.684 ms

Run 8: Report of PCC-Expr — Data Link

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Figure is missing

Run 9: Statistics of PCC-Expr

Start at: 2018-04-17 16:09:23

End at: 2018-04-17 16:09:53

Local clock offset: -5.578 ms

Remote clock offset: 9.3 ms

Run 9: Report of PCC-Expr — Data Link

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Figure is missing

Run 10: Statistics of PCC-Expr

Start at: 2018-04-17 16:31:51

End at: 2018-04-17 16:32:21

Local clock offset: -2.486 ms

Remote clock offset: 4.783 ms

Run 10: Report of PCC-Expr — Data Link

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Figure is missing