

Pantheon Report

Generated at 2018-02-13 22:23:13 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

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

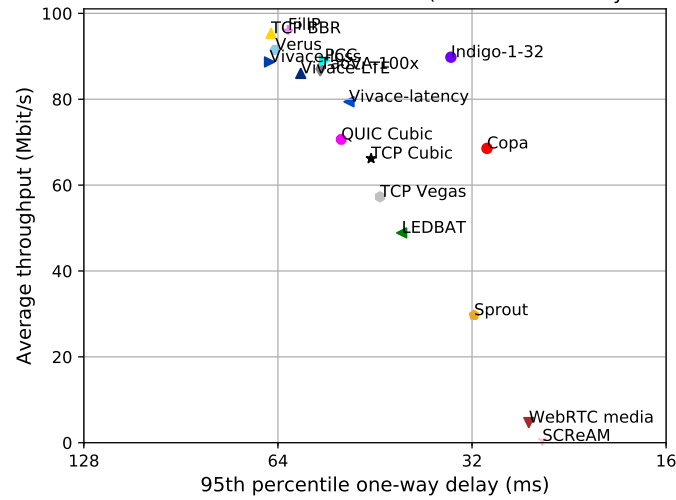
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

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

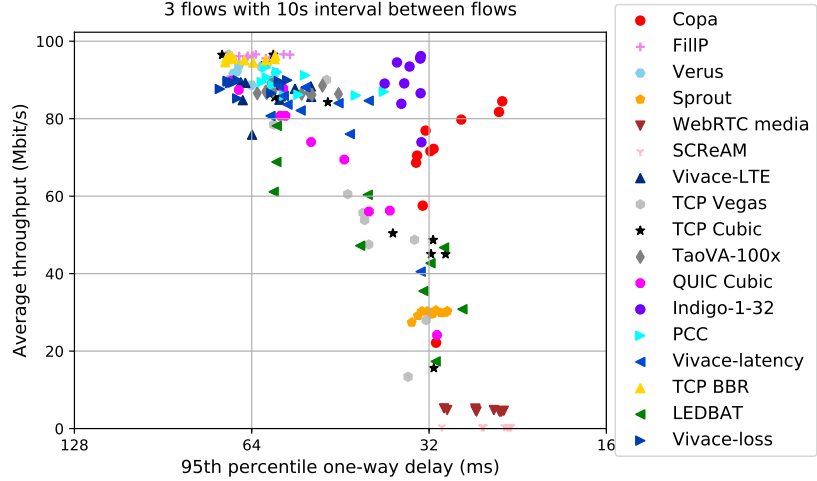
Git summary:

```
branch: master @ 2efdad57c2c56a9458b0d01ff33345e11732665
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eae30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



| scheme | # runs | mean avg tput (Mbit/s) | | | mean 95th-%ile delay (ms) | | | mean loss rate (%) | | |
|----------------|--------|------------------------|--------|--------|---------------------------|--------|--------|--------------------|--------|--------|
| | | flow 1 | flow 2 | flow 3 | flow 1 | flow 2 | flow 3 | flow 1 | flow 2 | flow 3 |
| TCP BBR | 10 | 58.70 | 39.53 | 31.34 | 60.82 | 64.63 | 65.72 | 0.54 | 0.71 | 1.23 |
| TCP Cubic | 10 | 38.80 | 27.59 | 27.31 | 41.88 | 46.67 | 46.47 | 0.29 | 0.44 | 0.77 |
| LEDBAT | 10 | 28.25 | 22.42 | 17.31 | 40.75 | 41.71 | 39.67 | 0.35 | 0.48 | 0.93 |
| PCC | 10 | 61.94 | 30.29 | 21.80 | 52.53 | 53.10 | 54.66 | 0.44 | 0.66 | 1.16 |
| QUIC Cubic | 10 | 39.76 | 28.82 | 35.77 | 46.93 | 48.12 | 51.02 | 0.42 | 0.60 | 1.06 |
| SCReAM | 10 | 0.22 | 0.21 | 0.22 | 24.92 | 24.65 | 24.93 | 0.28 | 0.39 | 0.35 |
| WebRTC media | 10 | 2.47 | 1.58 | 0.66 | 25.94 | 26.33 | 26.06 | 0.30 | 0.40 | 0.27 |
| Sprout | 10 | 15.20 | 14.74 | 14.31 | 30.83 | 32.43 | 32.36 | 0.28 | 0.44 | 0.66 |
| TaoVA-100x | 10 | 50.15 | 39.39 | 32.44 | 53.37 | 53.72 | 56.56 | 0.44 | 0.58 | 1.14 |
| TCP Vegas | 10 | 28.02 | 27.96 | 32.21 | 40.34 | 40.68 | 45.68 | 0.37 | 0.48 | 0.64 |
| Verus | 10 | 55.94 | 39.18 | 29.06 | 59.93 | 61.68 | 66.35 | 0.50 | 0.65 | 1.31 |
| Copa | 10 | 39.54 | 32.50 | 22.31 | 29.92 | 30.65 | 31.17 | 0.35 | 0.47 | 0.92 |
| FillP | 9 | 59.41 | 39.20 | 32.35 | 56.83 | 61.13 | 60.70 | 0.63 | 0.80 | 1.63 |
| Indigo-1-32 | 10 | 54.57 | 36.71 | 33.27 | 34.23 | 34.95 | 34.40 | 0.39 | 0.53 | 0.83 |
| Vivace-latency | 10 | 54.14 | 26.51 | 23.30 | 47.38 | 52.35 | 40.42 | 0.37 | 0.60 | 1.04 |
| Vivace-loss | 10 | 54.45 | 36.00 | 31.40 | 61.57 | 66.98 | 60.07 | 0.75 | 1.17 | 1.60 |
| Vivace-LTE | 10 | 56.62 | 32.45 | 23.94 | 52.73 | 58.30 | 60.96 | 0.45 | 0.65 | 1.39 |

Run 1: Statistics of TCP BBR

Start at: 2018-02-13 13:52:18

End at: 2018-02-13 13:52:48

Local clock offset: -0.479 ms

Remote clock offset: 2.006 ms

Below is generated by plot.py at 2018-02-13 21:59:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.09 Mbit/s

95th percentile per-packet one-way delay: 69.430 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 63.65 Mbit/s

95th percentile per-packet one-way delay: 47.143 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 36.61 Mbit/s

95th percentile per-packet one-way delay: 69.940 ms

Loss rate: 0.32%

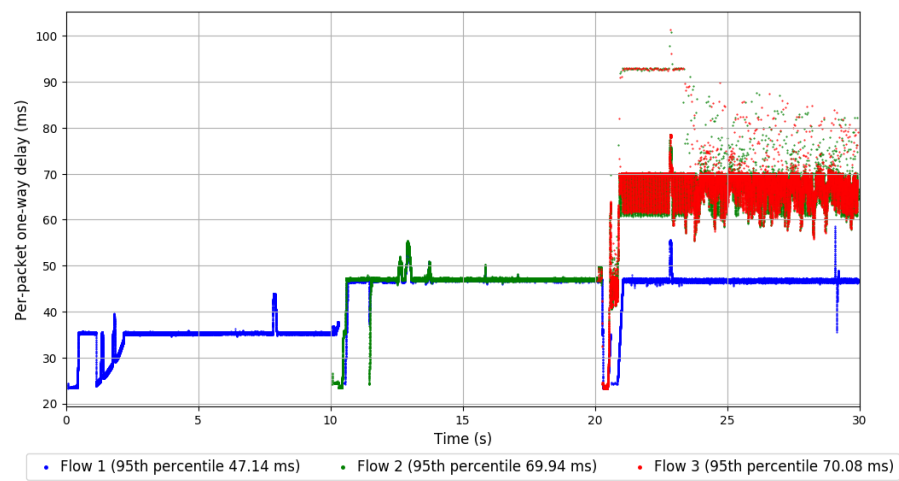
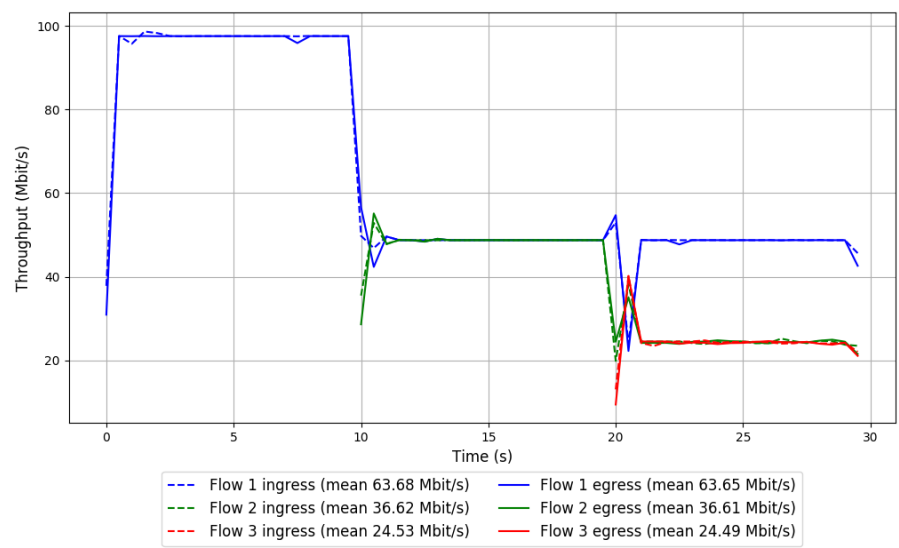
-- Flow 3:

Average throughput: 24.49 Mbit/s

95th percentile per-packet one-way delay: 70.084 ms

Loss rate: 1.03%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-13 14:16:50

End at: 2018-02-13 14:17:20

Local clock offset: 2.013 ms

Remote clock offset: 2.425 ms

Below is generated by plot.py at 2018-02-13 21:59:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.50 Mbit/s

95th percentile per-packet one-way delay: 69.377 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 55.86 Mbit/s

95th percentile per-packet one-way delay: 69.337 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 35.86 Mbit/s

95th percentile per-packet one-way delay: 69.664 ms

Loss rate: 0.75%

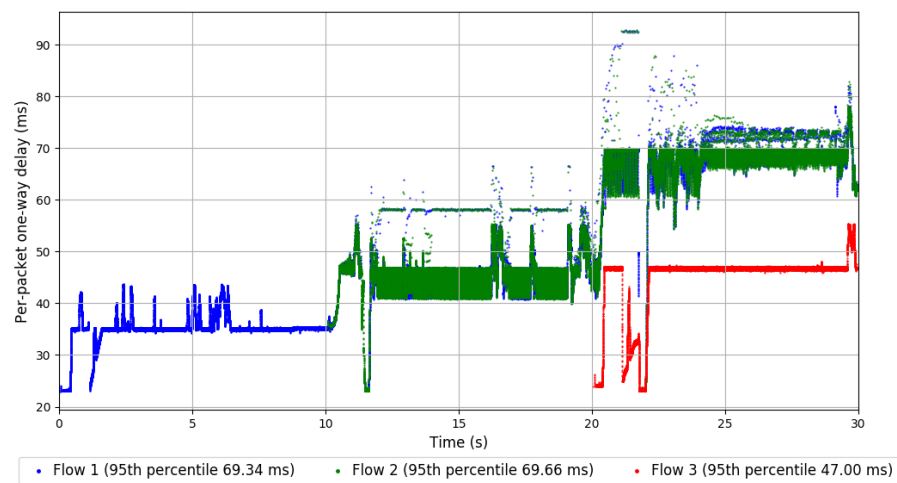
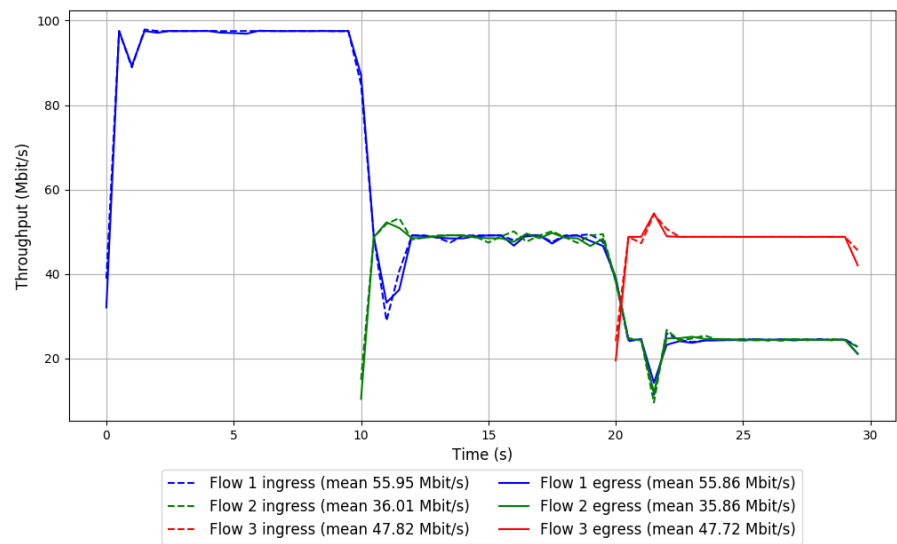
-- Flow 3:

Average throughput: 47.72 Mbit/s

95th percentile per-packet one-way delay: 47.000 ms

Loss rate: 0.85%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-13 14:41:43

End at: 2018-02-13 14:42:13

Local clock offset: 1.138 ms

Remote clock offset: 1.826 ms

Below is generated by plot.py at 2018-02-13 21:59:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.11 Mbit/s

95th percentile per-packet one-way delay: 65.905 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 57.72 Mbit/s

95th percentile per-packet one-way delay: 64.028 ms

Loss rate: 0.95%

-- Flow 2:

Average throughput: 40.16 Mbit/s

95th percentile per-packet one-way delay: 66.098 ms

Loss rate: 0.95%

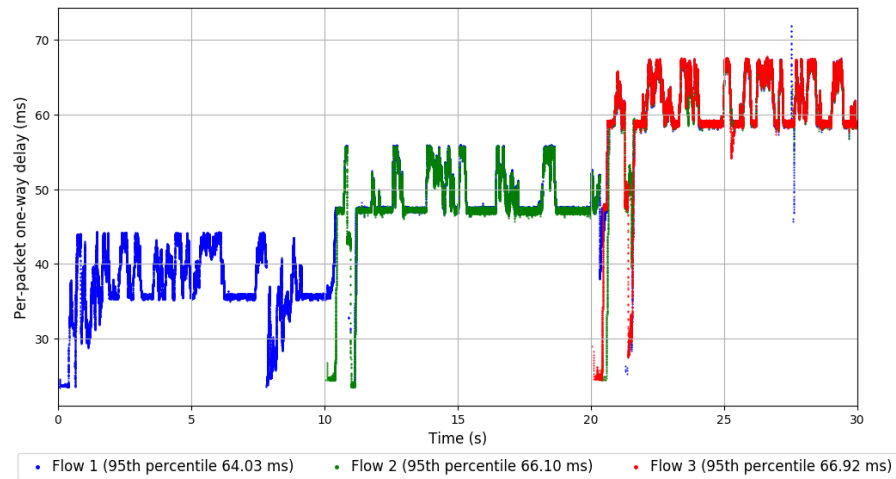
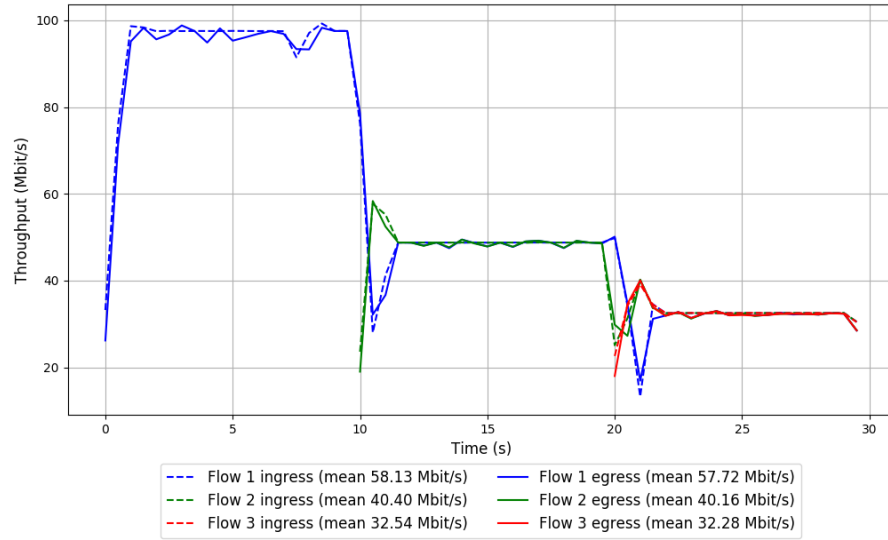
-- Flow 3:

Average throughput: 32.28 Mbit/s

95th percentile per-packet one-way delay: 66.922 ms

Loss rate: 1.54%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-13 15:06:44

End at: 2018-02-13 15:07:14

Local clock offset: 0.767 ms

Remote clock offset: 9.419 ms

Below is generated by plot.py at 2018-02-13 21:59:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.08 Mbit/s

95th percentile per-packet one-way delay: 60.560 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 58.09 Mbit/s

95th percentile per-packet one-way delay: 58.567 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 39.78 Mbit/s

95th percentile per-packet one-way delay: 61.233 ms

Loss rate: 0.63%

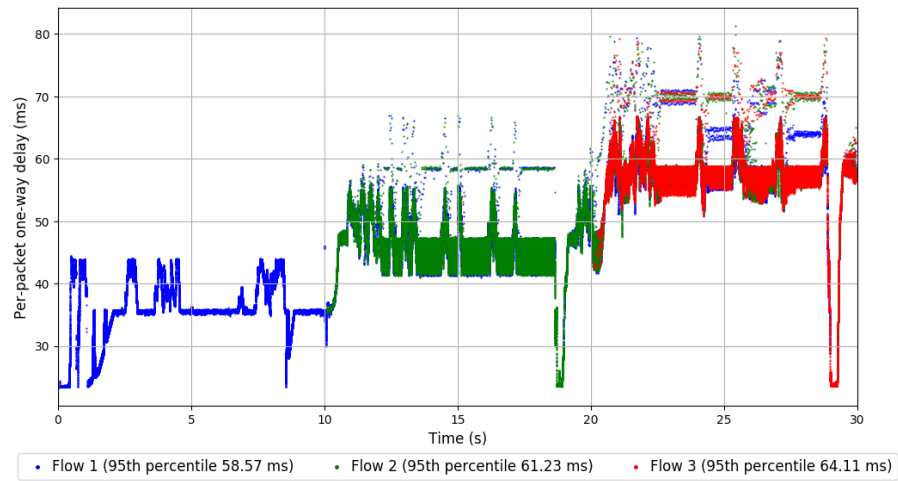
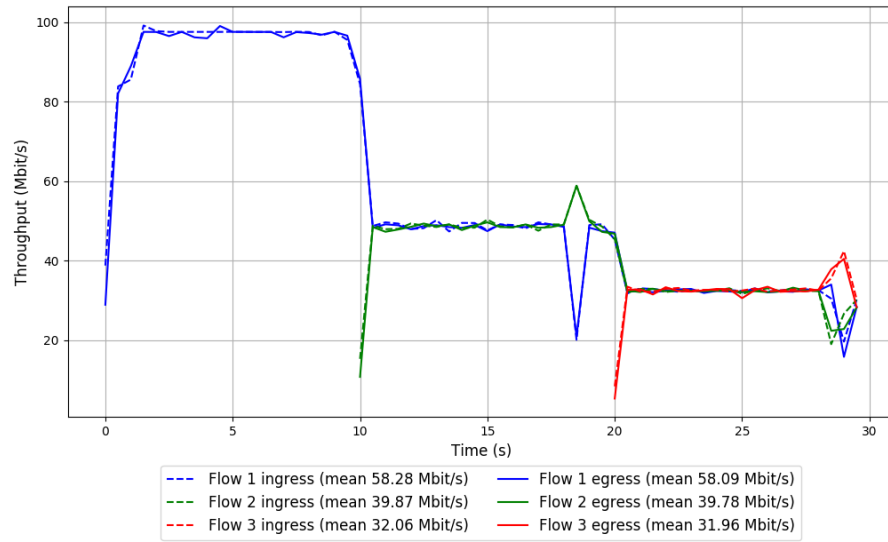
-- Flow 3:

Average throughput: 31.96 Mbit/s

95th percentile per-packet one-way delay: 64.105 ms

Loss rate: 1.25%

Run 4: Report of TCP BBR — Data Link

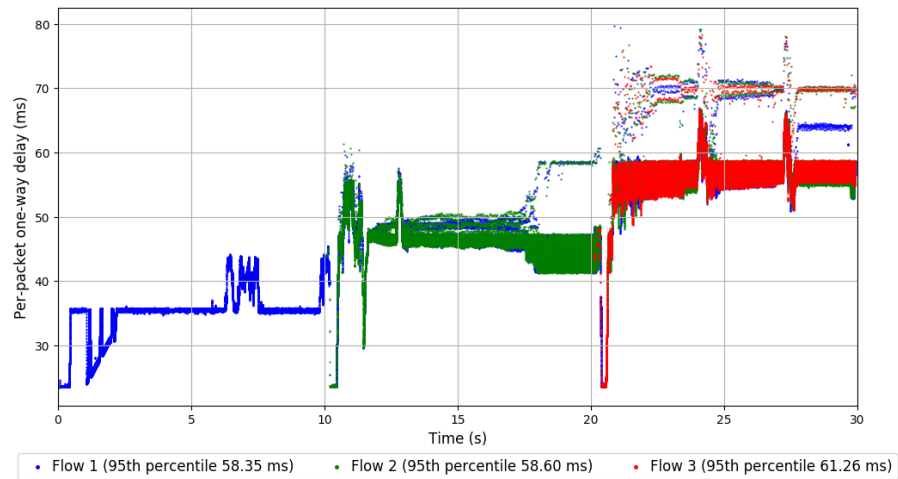
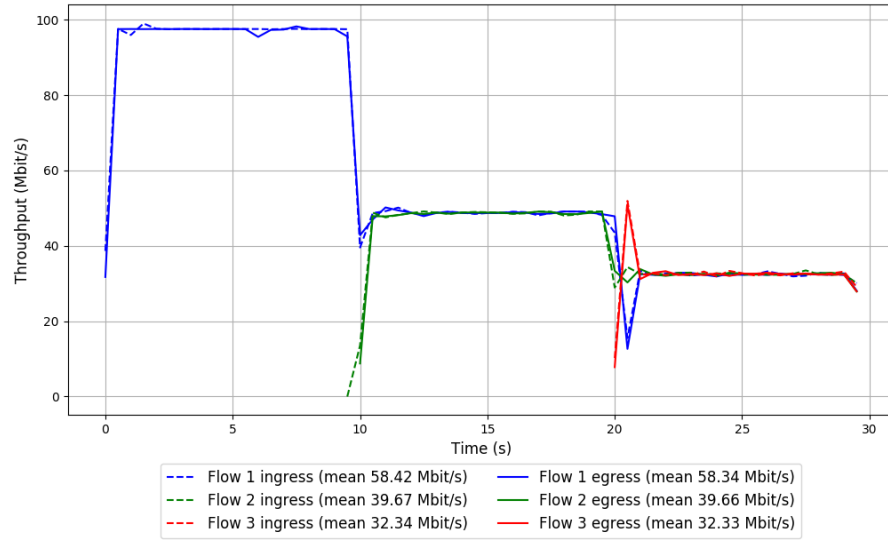


Run 5: Statistics of TCP BBR

Start at: 2018-02-13 15:31:35
End at: 2018-02-13 15:32:05
Local clock offset: 0.898 ms
Remote clock offset: 13.635 ms

Below is generated by plot.py at 2018-02-13 21:59:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.39 Mbit/s
95th percentile per-packet one-way delay: 58.529 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 58.34 Mbit/s
95th percentile per-packet one-way delay: 58.354 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 39.66 Mbit/s
95th percentile per-packet one-way delay: 58.596 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 32.33 Mbit/s
95th percentile per-packet one-way delay: 61.256 ms
Loss rate: 0.95%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-13 15:56:49

End at: 2018-02-13 15:57:19

Local clock offset: -0.502 ms

Remote clock offset: 14.53 ms

Below is generated by plot.py at 2018-02-13 21:59:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.40 Mbit/s

95th percentile per-packet one-way delay: 68.594 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 58.52 Mbit/s

95th percentile per-packet one-way delay: 67.855 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 39.92 Mbit/s

95th percentile per-packet one-way delay: 68.755 ms

Loss rate: 1.10%

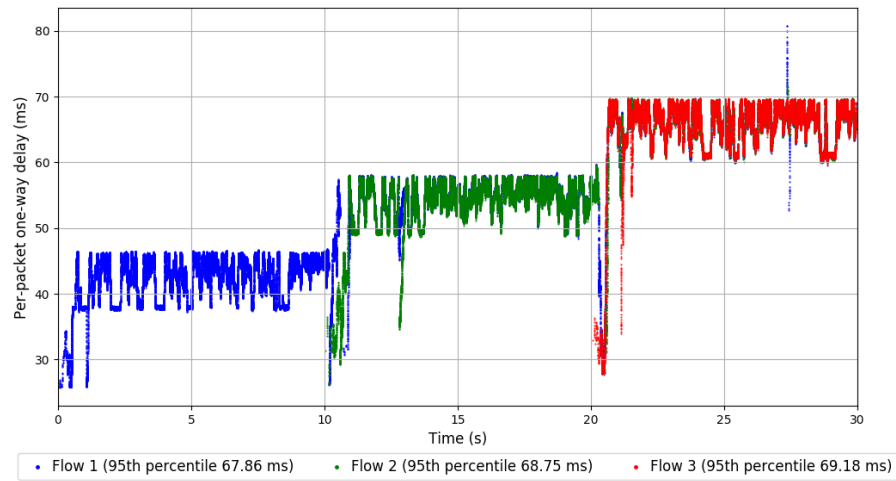
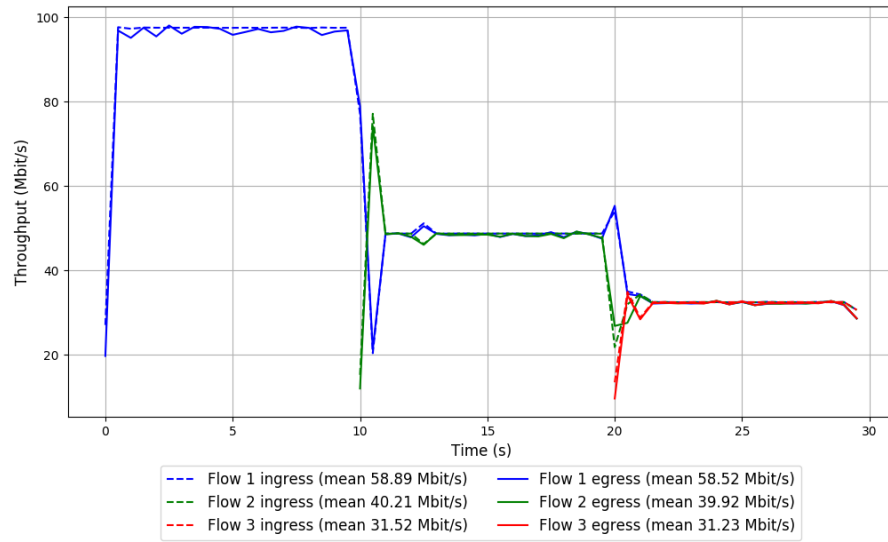
-- Flow 3:

Average throughput: 31.23 Mbit/s

95th percentile per-packet one-way delay: 69.184 ms

Loss rate: 1.69%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-13 16:23:20

End at: 2018-02-13 16:23:50

Local clock offset: -0.749 ms

Remote clock offset: 8.417 ms

Below is generated by plot.py at 2018-02-13 21:59:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.24 Mbit/s

95th percentile per-packet one-way delay: 58.389 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 58.49 Mbit/s

95th percentile per-packet one-way delay: 58.310 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 40.25 Mbit/s

95th percentile per-packet one-way delay: 58.477 ms

Loss rate: 0.40%

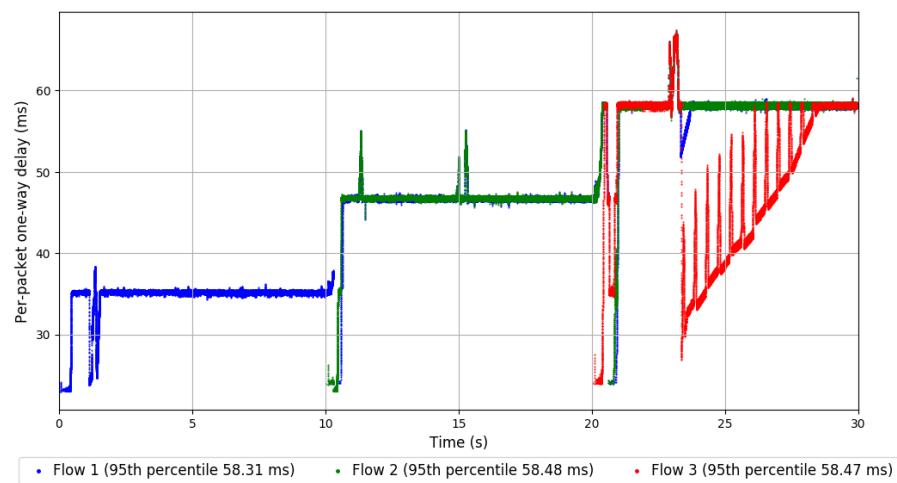
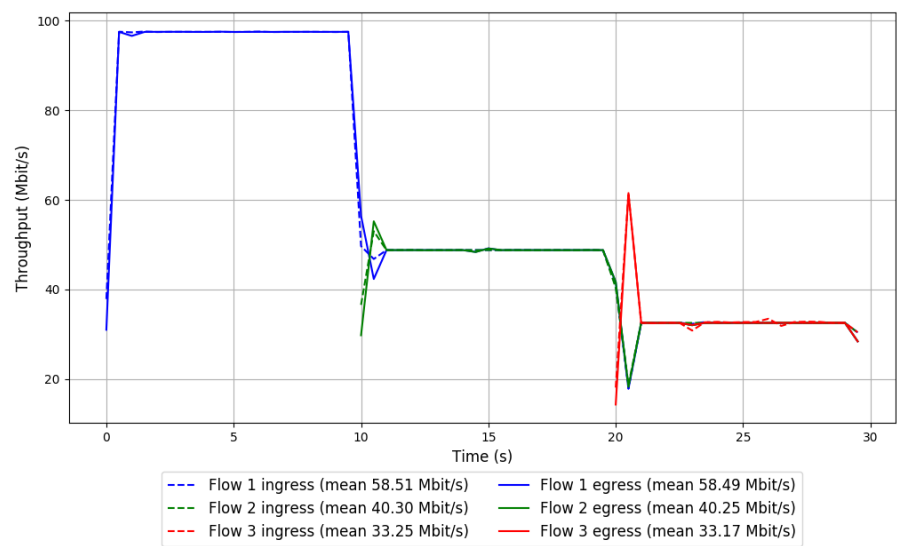
-- Flow 3:

Average throughput: 33.17 Mbit/s

95th percentile per-packet one-way delay: 58.471 ms

Loss rate: 0.95%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-13 16:47:55

End at: 2018-02-13 16:48:25

Local clock offset: 0.367 ms

Remote clock offset: 8.087 ms

Below is generated by plot.py at 2018-02-13 21:59:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.67 Mbit/s

95th percentile per-packet one-way delay: 70.672 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 55.88 Mbit/s

95th percentile per-packet one-way delay: 70.084 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 47.61 Mbit/s

95th percentile per-packet one-way delay: 54.801 ms

Loss rate: 0.82%

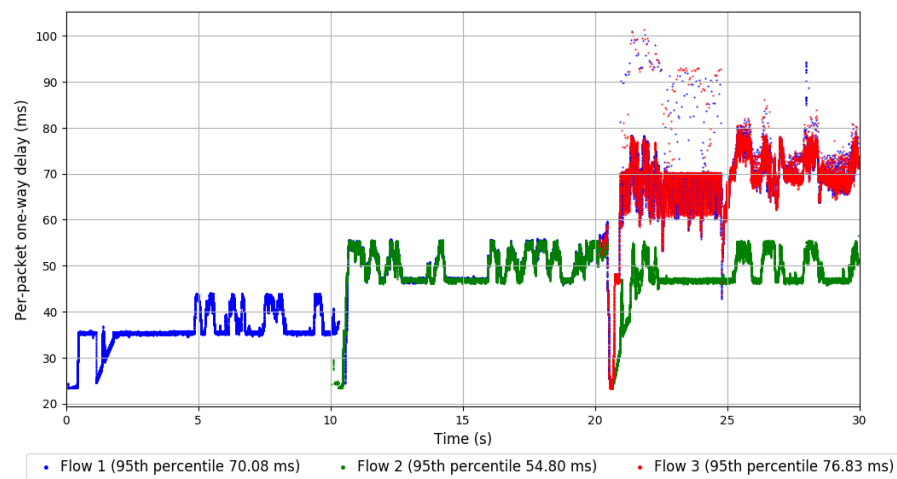
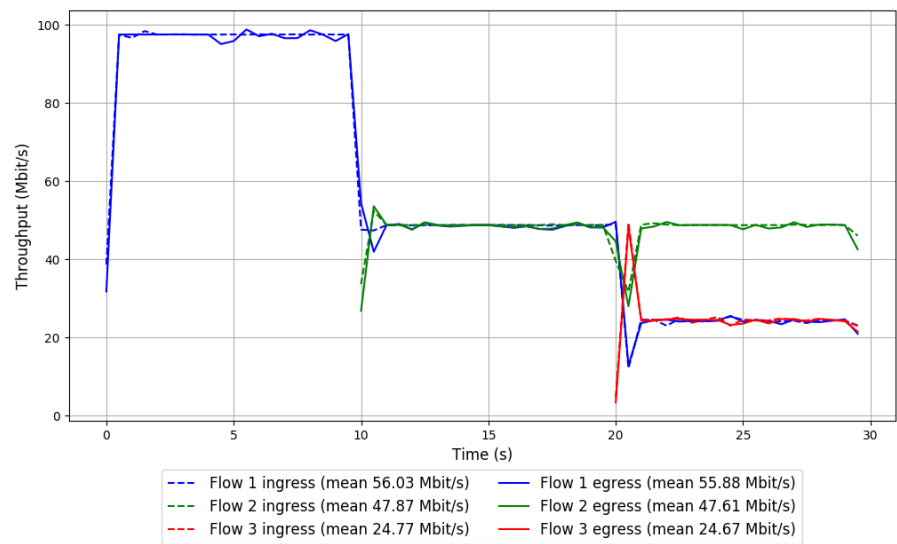
-- Flow 3:

Average throughput: 24.67 Mbit/s

95th percentile per-packet one-way delay: 76.833 ms

Loss rate: 1.26%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-13 17:12:37

End at: 2018-02-13 17:13:07

Local clock offset: 2.57 ms

Remote clock offset: 7.165 ms

Below is generated by plot.py at 2018-02-13 22:00:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.57 Mbit/s

95th percentile per-packet one-way delay: 70.966 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 62.83 Mbit/s

95th percentile per-packet one-way delay: 54.152 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 35.92 Mbit/s

95th percentile per-packet one-way delay: 74.649 ms

Loss rate: 0.79%

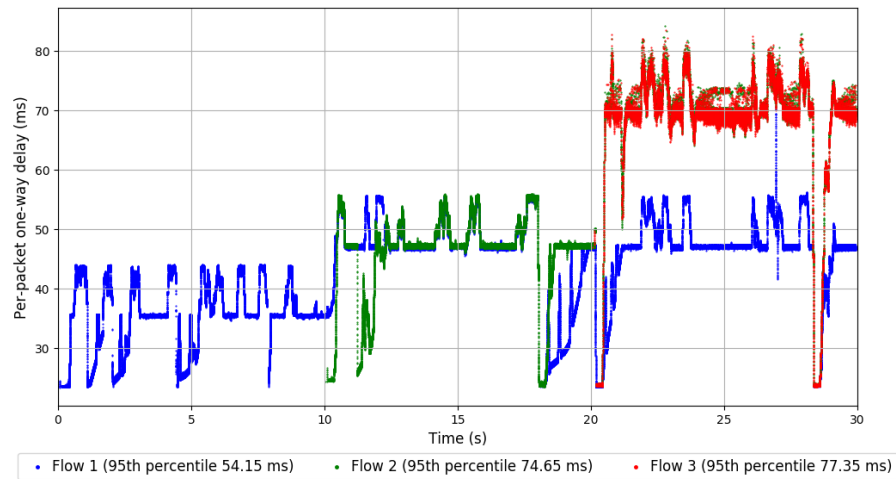
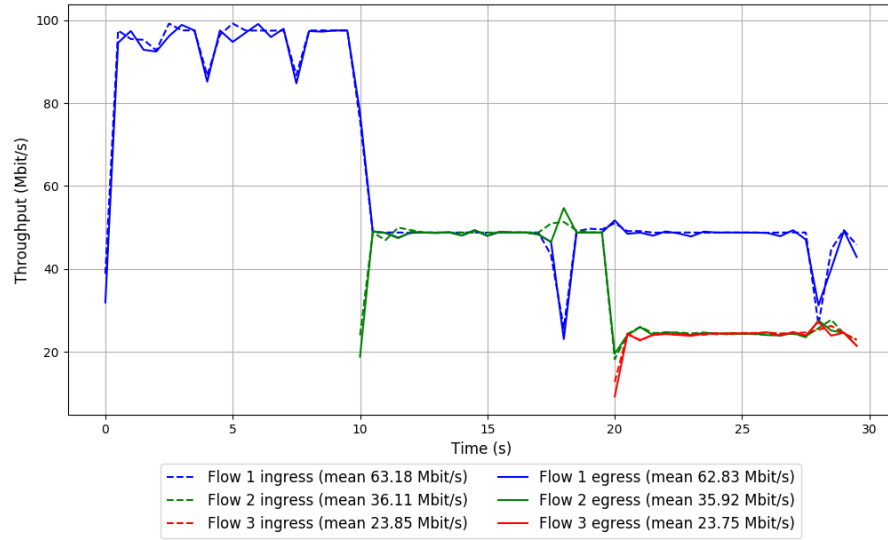
-- Flow 3:

Average throughput: 23.75 Mbit/s

95th percentile per-packet one-way delay: 77.349 ms

Loss rate: 1.41%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-13 17:37:28

End at: 2018-02-13 17:37:58

Local clock offset: 1.172 ms

Remote clock offset: 8.562 ms

Below is generated by plot.py at 2018-02-13 22:00:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.49 Mbit/s

95th percentile per-packet one-way delay: 63.641 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 57.64 Mbit/s

95th percentile per-packet one-way delay: 60.407 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 39.56 Mbit/s

95th percentile per-packet one-way delay: 64.079 ms

Loss rate: 0.86%

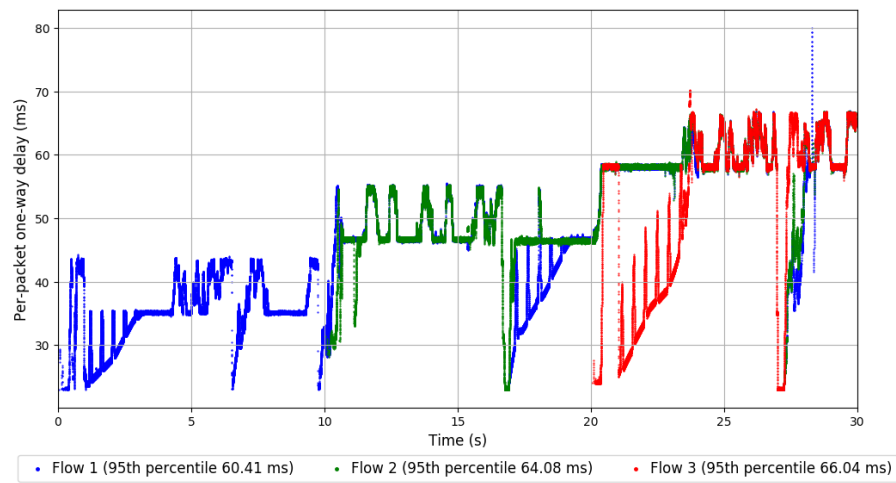
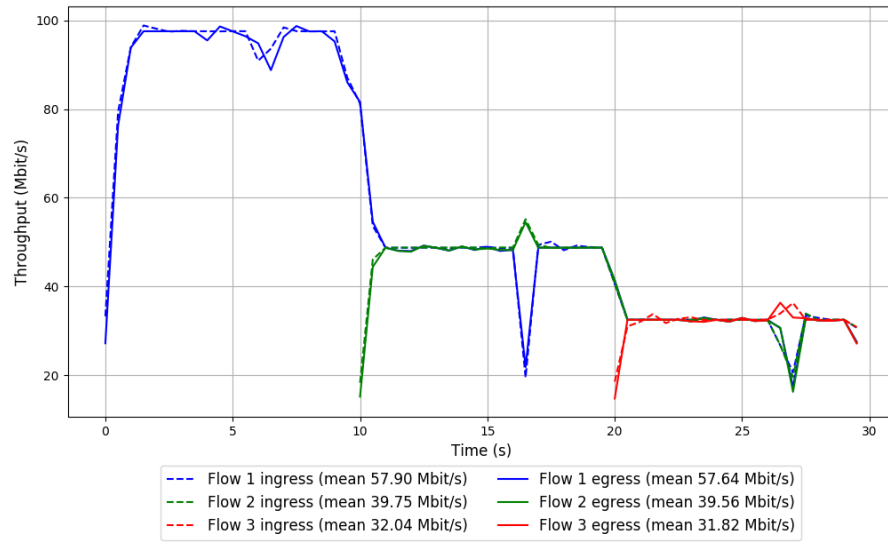
-- Flow 3:

Average throughput: 31.82 Mbit/s

95th percentile per-packet one-way delay: 66.037 ms

Loss rate: 1.40%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-13 13:46:48

End at: 2018-02-13 13:47:18

Local clock offset: -0.869 ms

Remote clock offset: 2.365 ms

Below is generated by plot.py at 2018-02-13 22:01:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.51 Mbit/s

95th percentile per-packet one-way delay: 58.811 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 59.23 Mbit/s

95th percentile per-packet one-way delay: 58.717 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 40.23 Mbit/s

95th percentile per-packet one-way delay: 58.837 ms

Loss rate: 0.43%

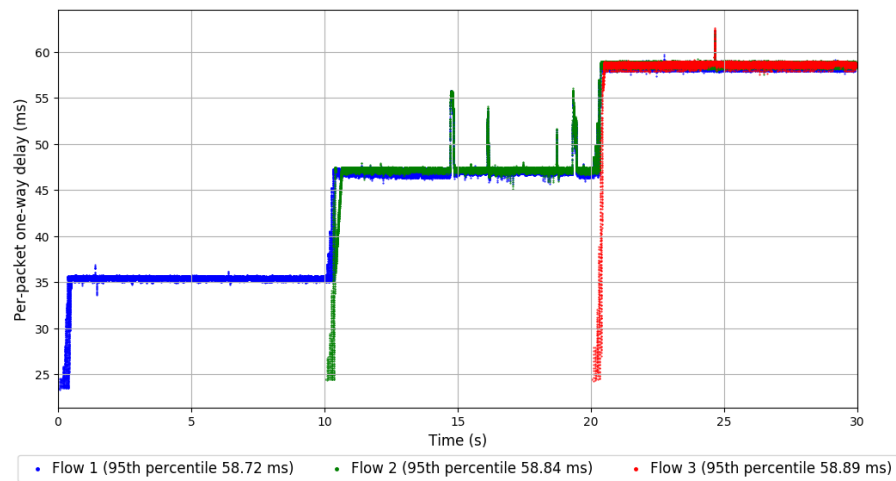
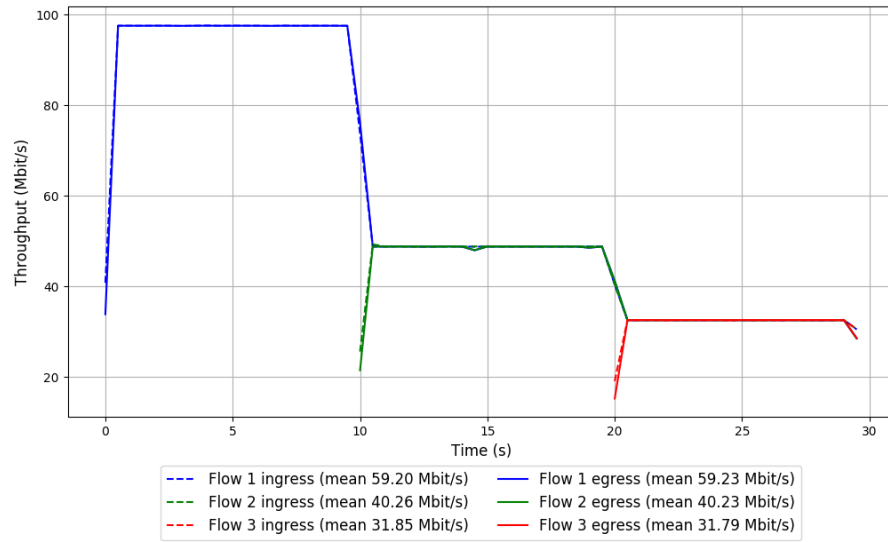
-- Flow 3:

Average throughput: 31.79 Mbit/s

95th percentile per-packet one-way delay: 58.888 ms

Loss rate: 0.92%

Run 1: Report of TCP Cubic — Data Link

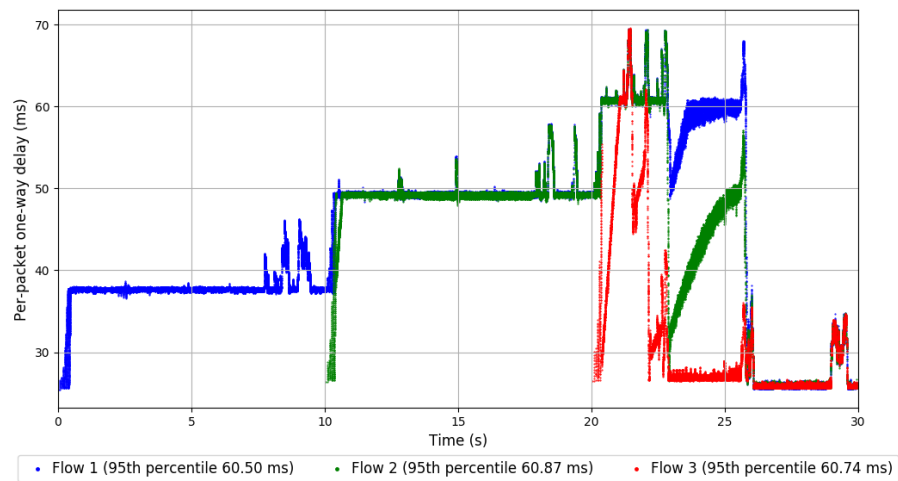
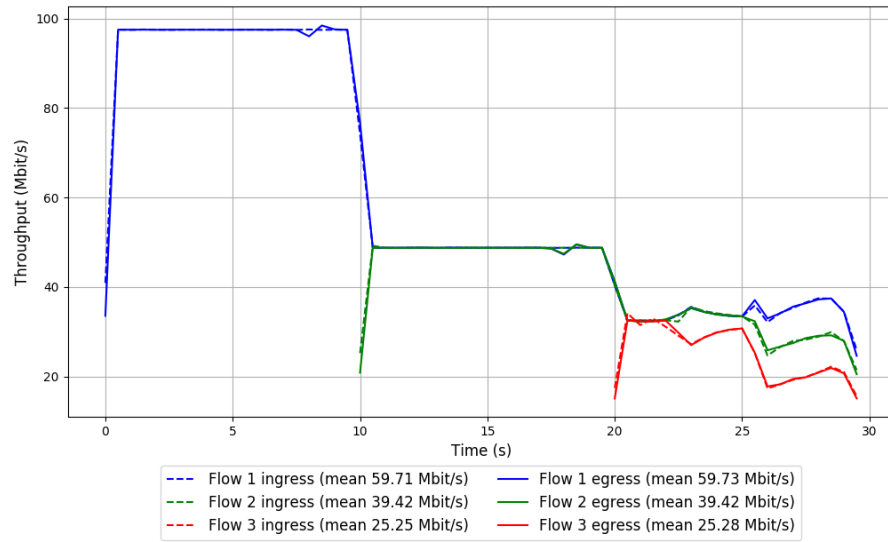


Run 2: Statistics of TCP Cubic

Start at: 2018-02-13 14:11:20
End at: 2018-02-13 14:11:50
Local clock offset: 1.877 ms
Remote clock offset: -0.233 ms

Below is generated by plot.py at 2018-02-13 22:01:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.32 Mbit/s
95th percentile per-packet one-way delay: 60.665 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 59.73 Mbit/s
95th percentile per-packet one-way delay: 60.496 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 39.42 Mbit/s
95th percentile per-packet one-way delay: 60.868 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 25.28 Mbit/s
95th percentile per-packet one-way delay: 60.745 ms
Loss rate: 0.50%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-13 14:36:06

End at: 2018-02-13 14:36:36

Local clock offset: 1.281 ms

Remote clock offset: 2.297 ms

Below is generated by plot.py at 2018-02-13 22:01:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.63 Mbit/s

95th percentile per-packet one-way delay: 31.409 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 8.57 Mbit/s

95th percentile per-packet one-way delay: 31.185 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 31.419 ms

Loss rate: 0.73%

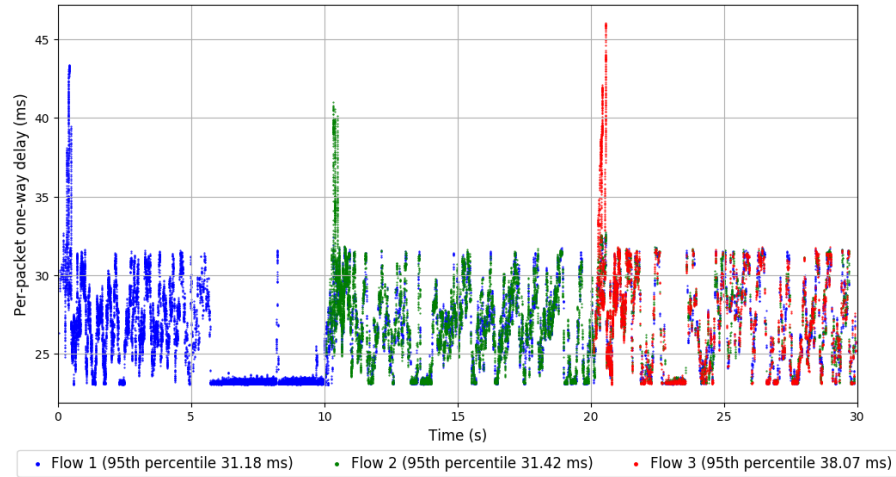
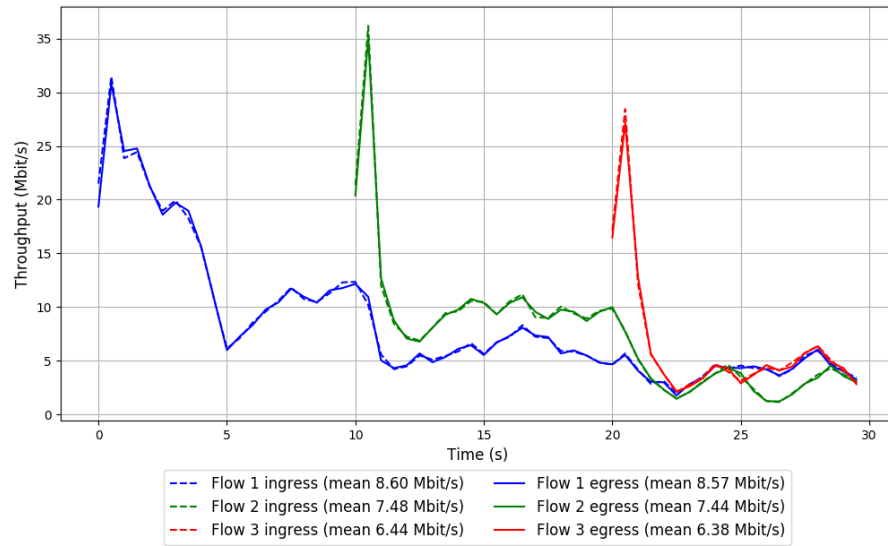
-- Flow 3:

Average throughput: 6.38 Mbit/s

95th percentile per-packet one-way delay: 38.071 ms

Loss rate: 1.39%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-13 15:01:00

End at: 2018-02-13 15:01:30

Local clock offset: 0.769 ms

Remote clock offset: 7.134 ms

Below is generated by plot.py at 2018-02-13 22:01:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.26 Mbit/s

95th percentile per-packet one-way delay: 47.529 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 45.89 Mbit/s

95th percentile per-packet one-way delay: 35.821 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 45.01 Mbit/s

95th percentile per-packet one-way delay: 47.802 ms

Loss rate: 0.31%

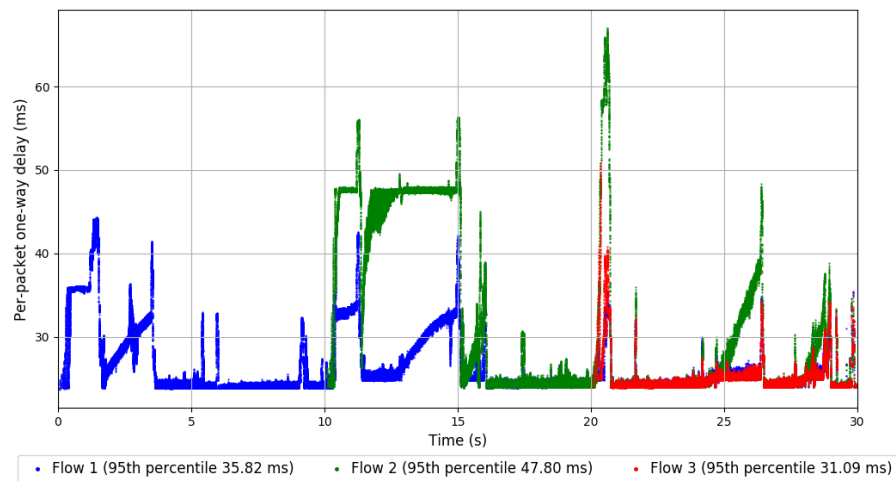
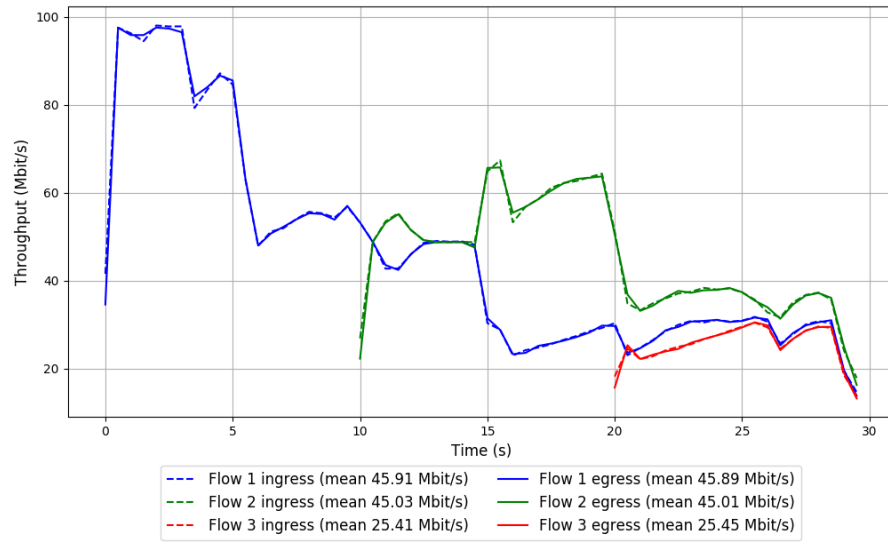
-- Flow 3:

Average throughput: 25.45 Mbit/s

95th percentile per-packet one-way delay: 31.088 ms

Loss rate: 0.37%

Run 4: Report of TCP Cubic — Data Link

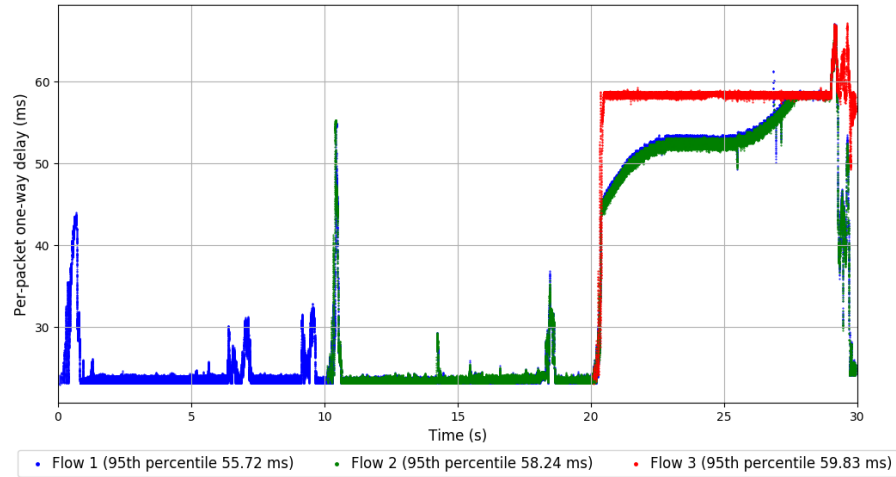
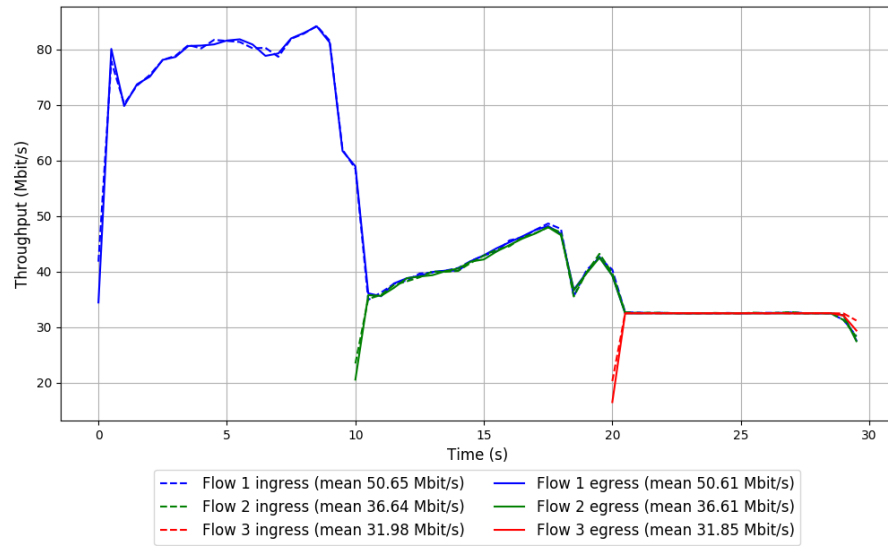


Run 5: Statistics of TCP Cubic

Start at: 2018-02-13 15:25:59
End at: 2018-02-13 15:26:29
Local clock offset: 0.996 ms
Remote clock offset: 13.288 ms

Below is generated by plot.py at 2018-02-13 22:01:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.51 Mbit/s
95th percentile per-packet one-way delay: 58.538 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 50.61 Mbit/s
95th percentile per-packet one-way delay: 55.721 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 36.61 Mbit/s
95th percentile per-packet one-way delay: 58.244 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 31.85 Mbit/s
95th percentile per-packet one-way delay: 59.829 ms
Loss rate: 0.94%

Run 5: Report of TCP Cubic — Data Link

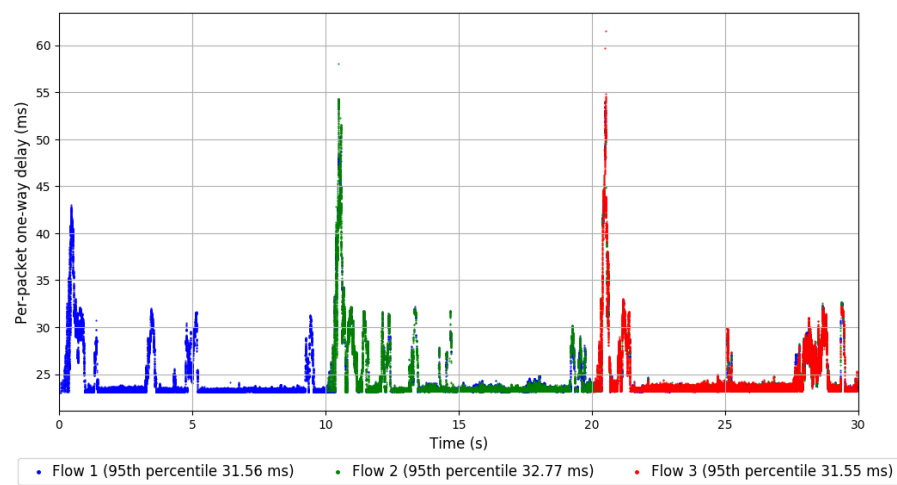
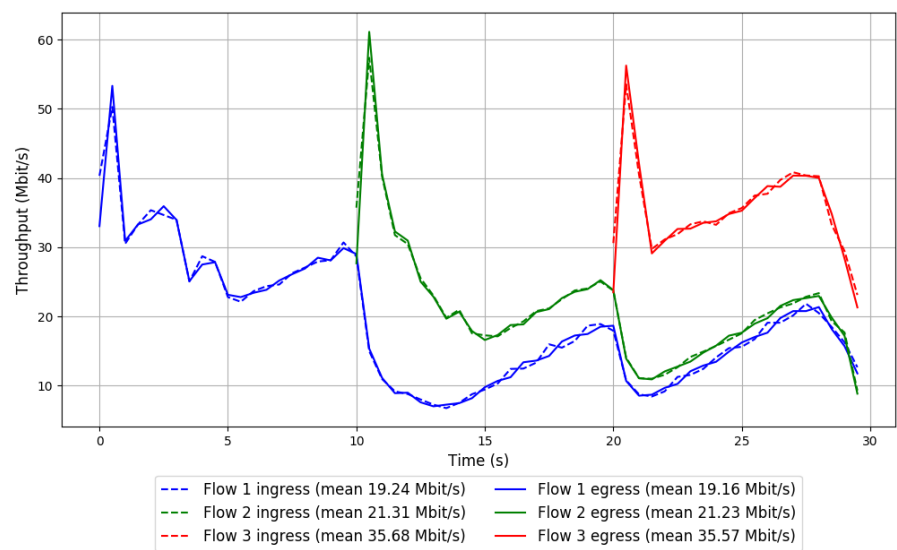


Run 6: Statistics of TCP Cubic

Start at: 2018-02-13 15:50:55
End at: 2018-02-13 15:51:26
Local clock offset: -0.375 ms
Remote clock offset: 16.455 ms

Below is generated by plot.py at 2018-02-13 22:01:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 45.05 Mbit/s
95th percentile per-packet one-way delay: 31.752 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 19.16 Mbit/s
95th percentile per-packet one-way delay: 31.559 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 21.23 Mbit/s
95th percentile per-packet one-way delay: 32.766 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 35.57 Mbit/s
95th percentile per-packet one-way delay: 31.551 ms
Loss rate: 0.85%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-13 16:17:49

End at: 2018-02-13 16:18:19

Local clock offset: -0.735 ms

Remote clock offset: 6.853 ms

Below is generated by plot.py at 2018-02-13 22:01:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.48 Mbit/s

95th percentile per-packet one-way delay: 71.849 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 64.45 Mbit/s

95th percentile per-packet one-way delay: 49.421 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 36.41 Mbit/s

95th percentile per-packet one-way delay: 71.990 ms

Loss rate: 0.42%

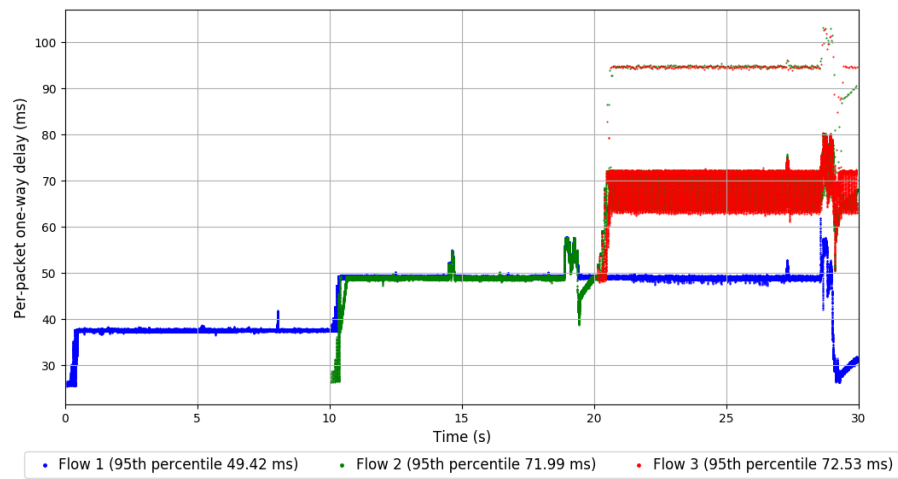
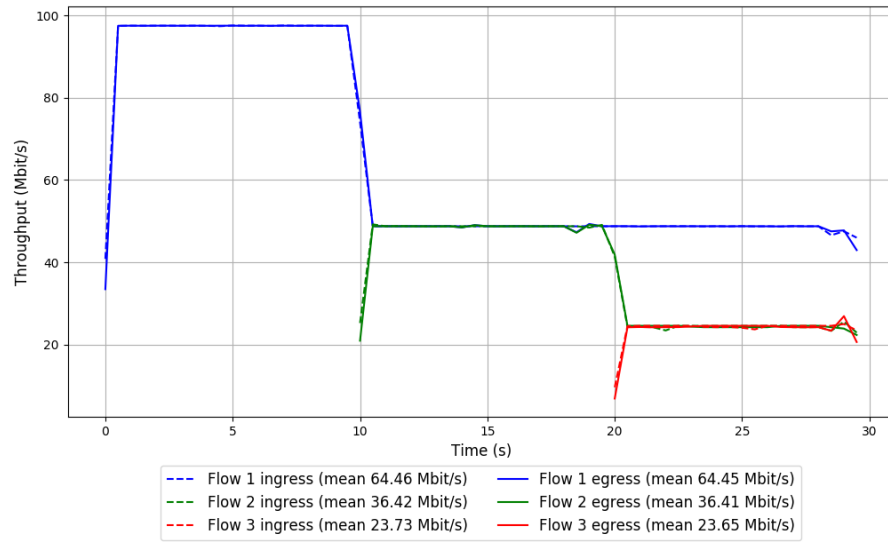
-- Flow 3:

Average throughput: 23.65 Mbit/s

95th percentile per-packet one-way delay: 72.526 ms

Loss rate: 1.20%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-13 16:42:24

End at: 2018-02-13 16:42:54

Local clock offset: -0.808 ms

Remote clock offset: 7.766 ms

Below is generated by plot.py at 2018-02-13 22:01:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 48.68 Mbit/s

95th percentile per-packet one-way delay: 31.494 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 28.71 Mbit/s

95th percentile per-packet one-way delay: 31.064 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 12.88 Mbit/s

95th percentile per-packet one-way delay: 29.162 ms

Loss rate: 0.57%

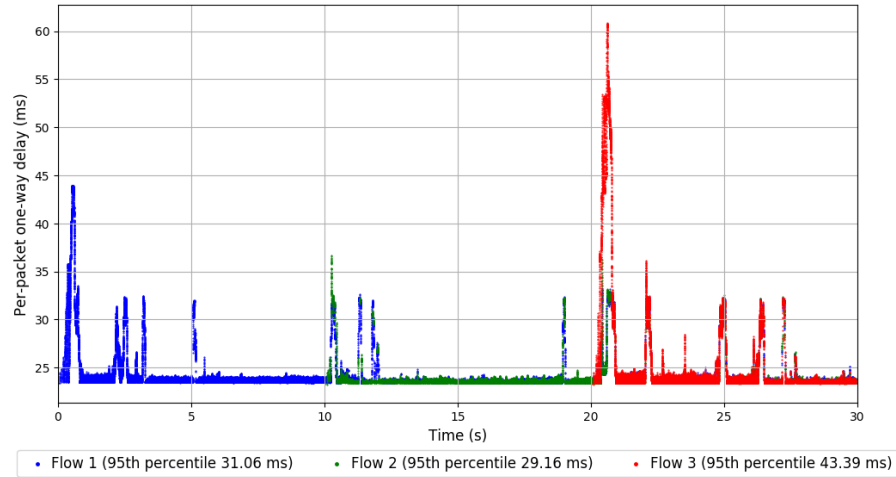
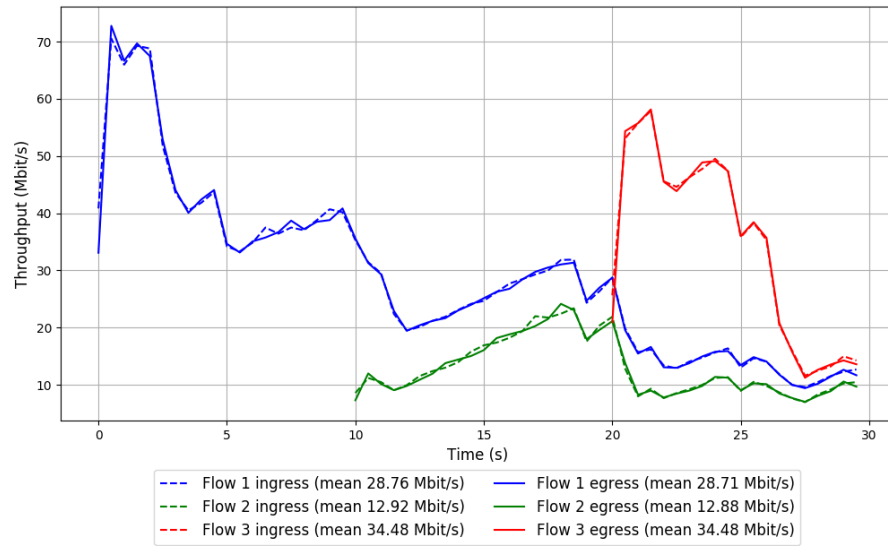
-- Flow 3:

Average throughput: 34.48 Mbit/s

95th percentile per-packet one-way delay: 43.388 ms

Loss rate: 0.55%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-13 17:07:10

End at: 2018-02-13 17:07:40

Local clock offset: 2.226 ms

Remote clock offset: 7.386 ms

Below is generated by plot.py at 2018-02-13 22:01:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 50.41 Mbit/s

95th percentile per-packet one-way delay: 36.853 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 27.60 Mbit/s

95th percentile per-packet one-way delay: 35.233 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 17.39 Mbit/s

95th percentile per-packet one-way delay: 45.475 ms

Loss rate: 0.48%

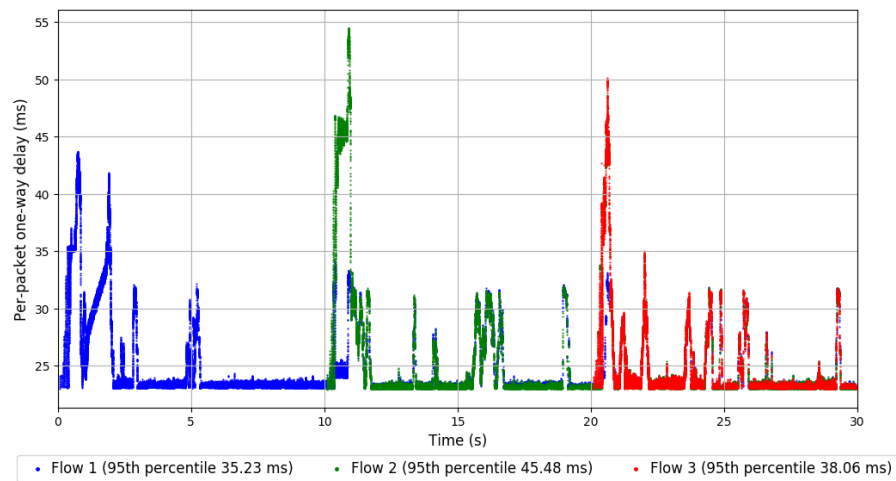
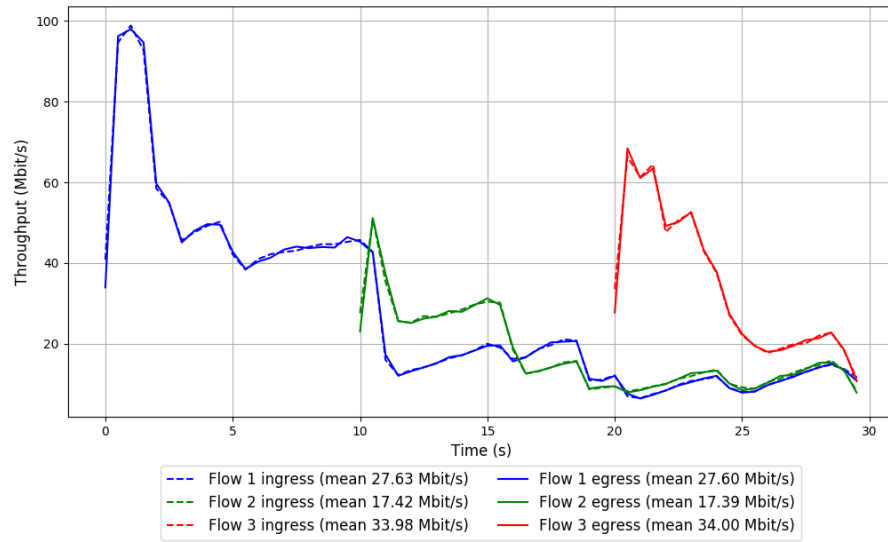
-- Flow 3:

Average throughput: 34.00 Mbit/s

95th percentile per-packet one-way delay: 38.061 ms

Loss rate: 0.47%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-13 17:31:52

End at: 2018-02-13 17:32:22

Local clock offset: 1.335 ms

Remote clock offset: 8.345 ms

Below is generated by plot.py at 2018-02-13 22:01:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 45.00 Mbit/s

95th percentile per-packet one-way delay: 29.992 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 24.04 Mbit/s

95th percentile per-packet one-way delay: 29.615 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 19.31 Mbit/s

95th percentile per-packet one-way delay: 30.112 ms

Loss rate: 0.25%

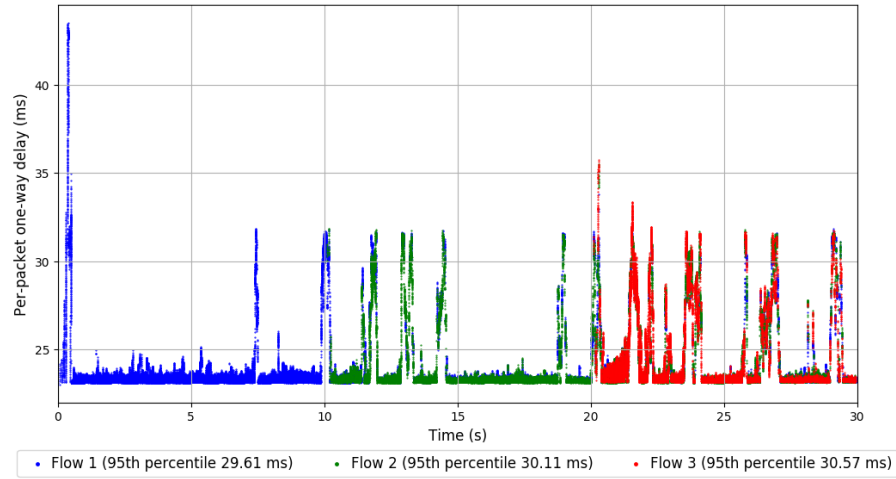
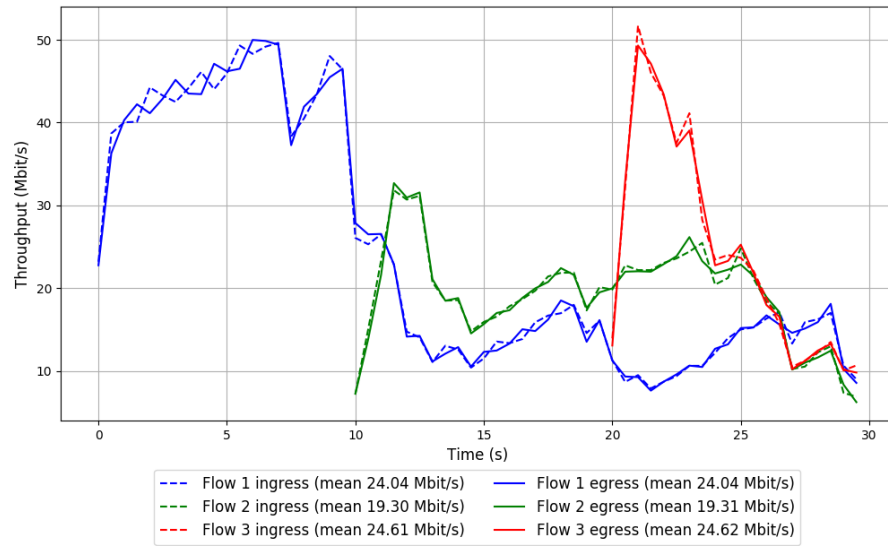
-- Flow 3:

Average throughput: 24.62 Mbit/s

95th percentile per-packet one-way delay: 30.575 ms

Loss rate: 0.51%

Run 10: Report of TCP Cubic — Data Link

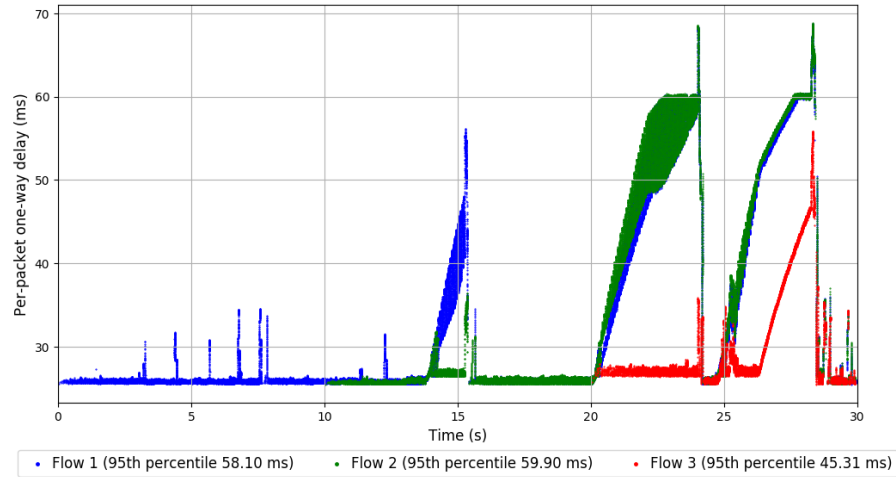
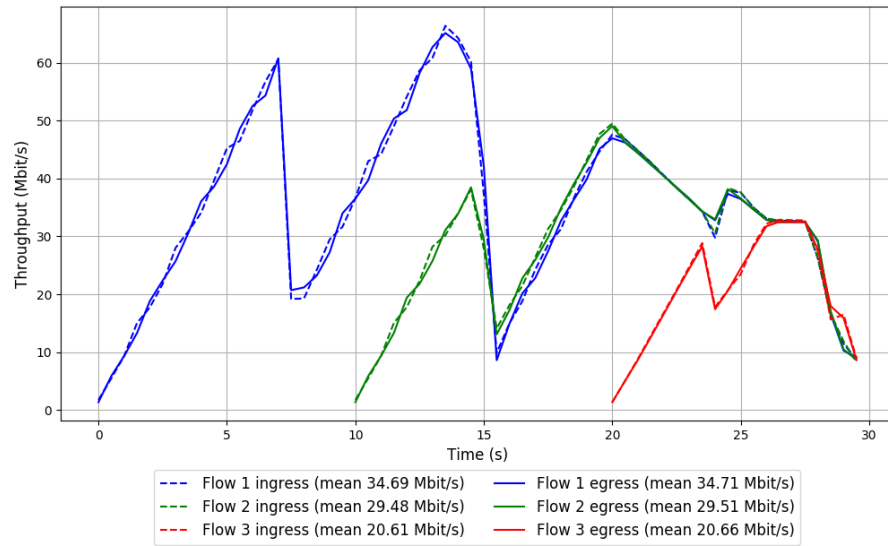


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-13 13:48:10
End at: 2018-02-13 13:48:40
Local clock offset: -0.87 ms
Remote clock offset: 0.125 ms

# Below is generated by plot.py at 2018-02-13 22:01:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.12 Mbit/s
95th percentile per-packet one-way delay: 58.748 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 34.71 Mbit/s
95th percentile per-packet one-way delay: 58.104 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 29.51 Mbit/s
95th percentile per-packet one-way delay: 59.895 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 20.66 Mbit/s
95th percentile per-packet one-way delay: 45.311 ms
Loss rate: 0.31%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-02-13 14:12:42

End at: 2018-02-13 14:13:12

Local clock offset: 1.958 ms

Remote clock offset: 1.846 ms

Below is generated by plot.py at 2018-02-13 22:02:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.83 Mbit/s

95th percentile per-packet one-way delay: 58.128 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 41.70 Mbit/s

95th percentile per-packet one-way delay: 58.173 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 28.97 Mbit/s

95th percentile per-packet one-way delay: 58.077 ms

Loss rate: 0.27%

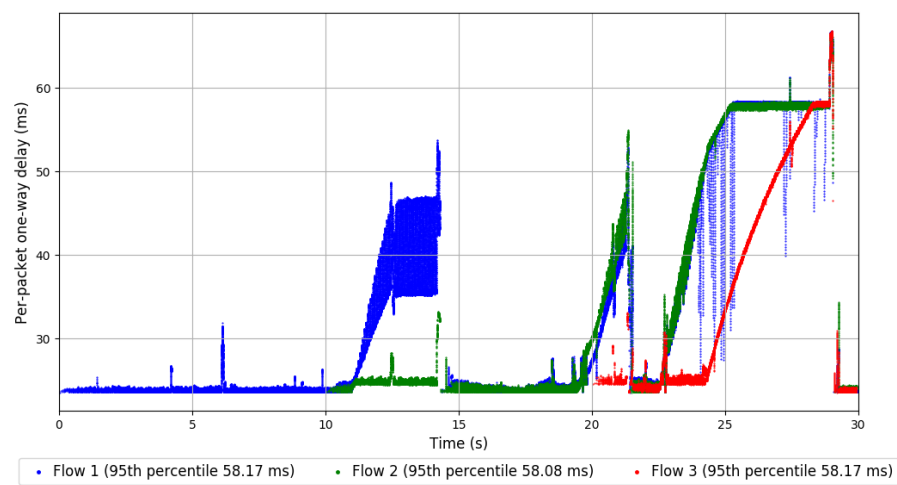
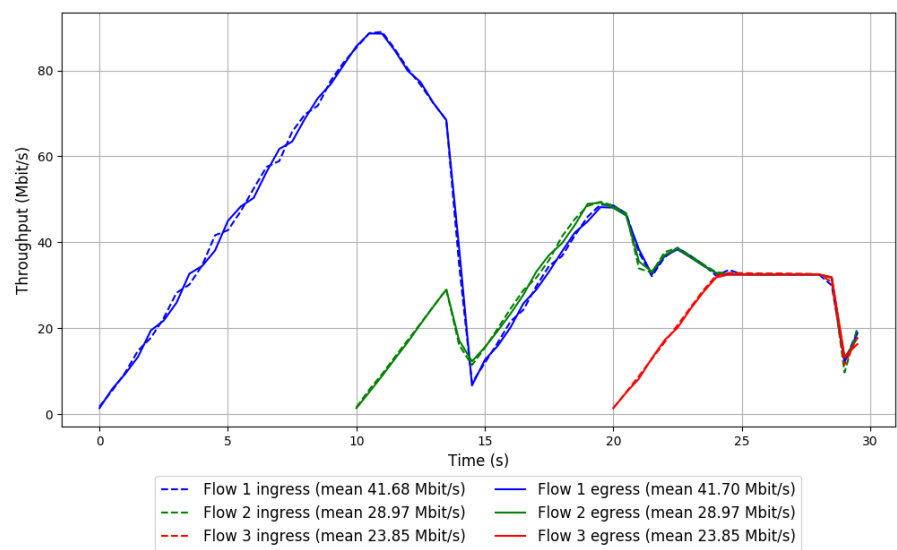
-- Flow 3:

Average throughput: 23.85 Mbit/s

95th percentile per-packet one-way delay: 58.171 ms

Loss rate: 0.53%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-13 14:37:25

End at: 2018-02-13 14:37:55

Local clock offset: 1.307 ms

Remote clock offset: 2.39 ms

Below is generated by plot.py at 2018-02-13 22:02:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.34 Mbit/s

95th percentile per-packet one-way delay: 31.187 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 8.84 Mbit/s

95th percentile per-packet one-way delay: 31.155 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 7.18 Mbit/s

95th percentile per-packet one-way delay: 31.232 ms

Loss rate: 0.92%

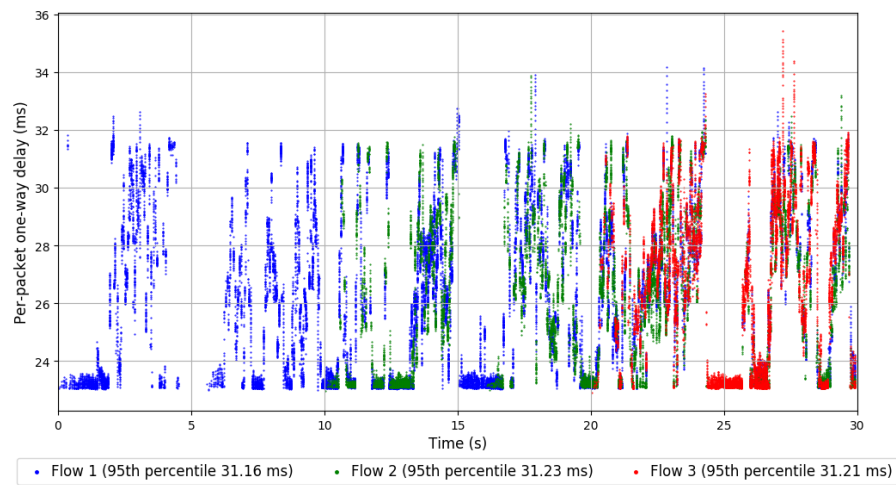
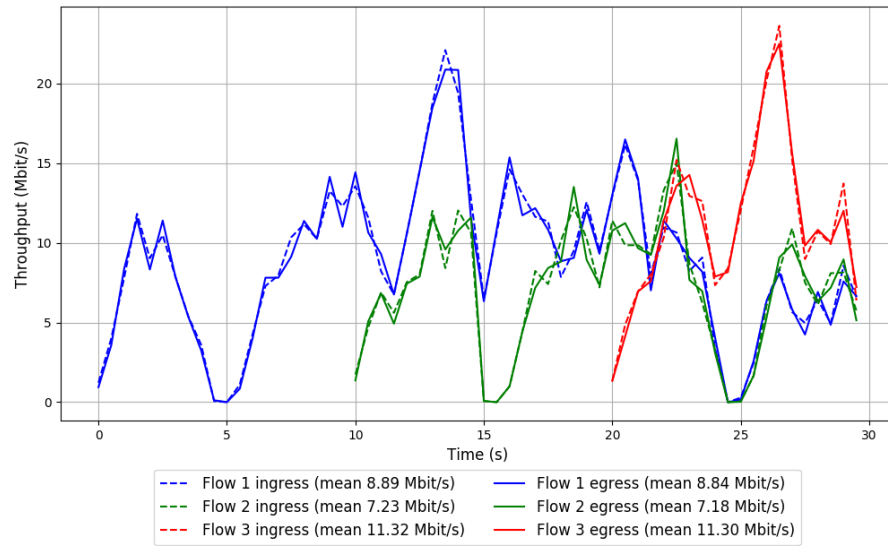
-- Flow 3:

Average throughput: 11.30 Mbit/s

95th percentile per-packet one-way delay: 31.207 ms

Loss rate: 0.74%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-13 15:02:24

End at: 2018-02-13 15:02:54

Local clock offset: 0.713 ms

Remote clock offset: 7.842 ms

Below is generated by plot.py at 2018-02-13 22:02:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 46.73 Mbit/s

95th percentile per-packet one-way delay: 30.177 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 27.32 Mbit/s

95th percentile per-packet one-way delay: 29.561 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 20.42 Mbit/s

95th percentile per-packet one-way delay: 29.704 ms

Loss rate: 0.44%

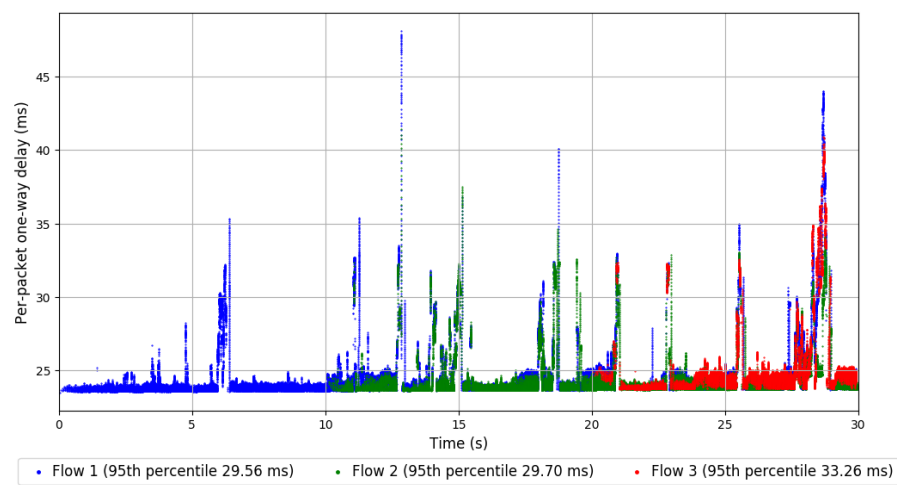
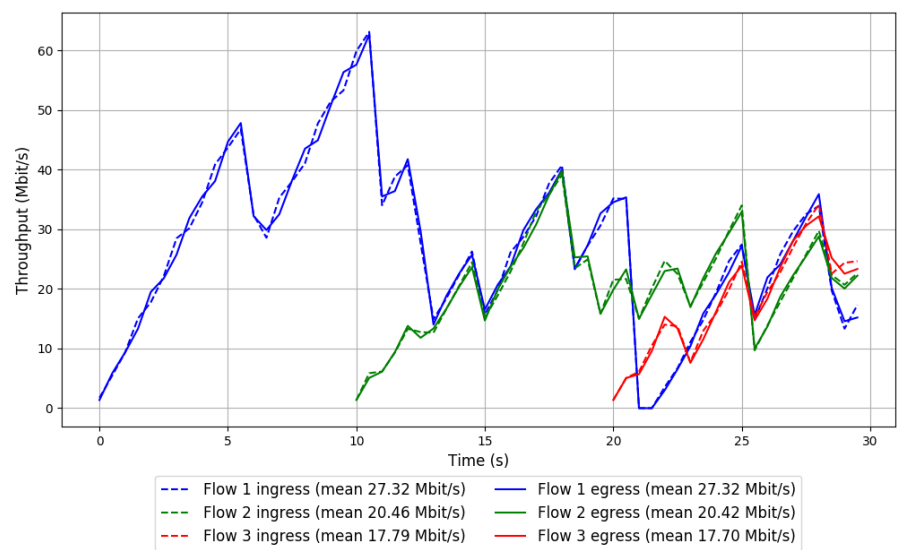
-- Flow 3:

Average throughput: 17.70 Mbit/s

95th percentile per-packet one-way delay: 33.257 ms

Loss rate: 1.04%

Run 4: Report of LEDBAT — Data Link

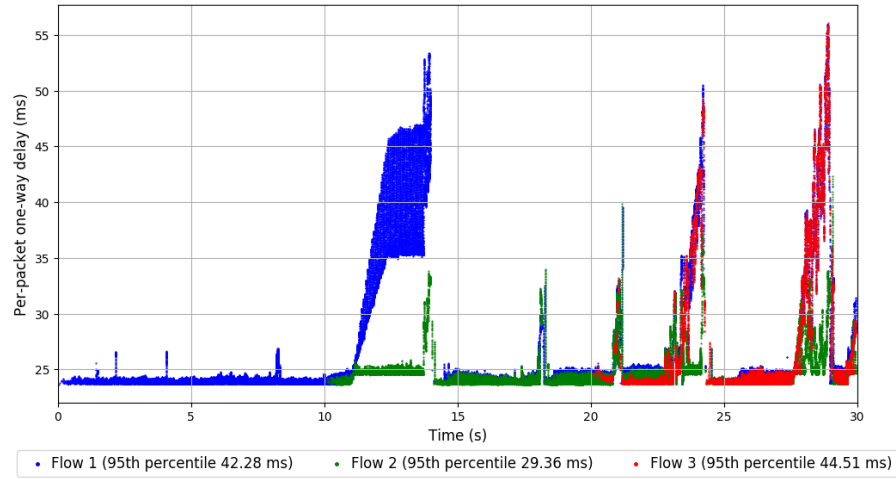
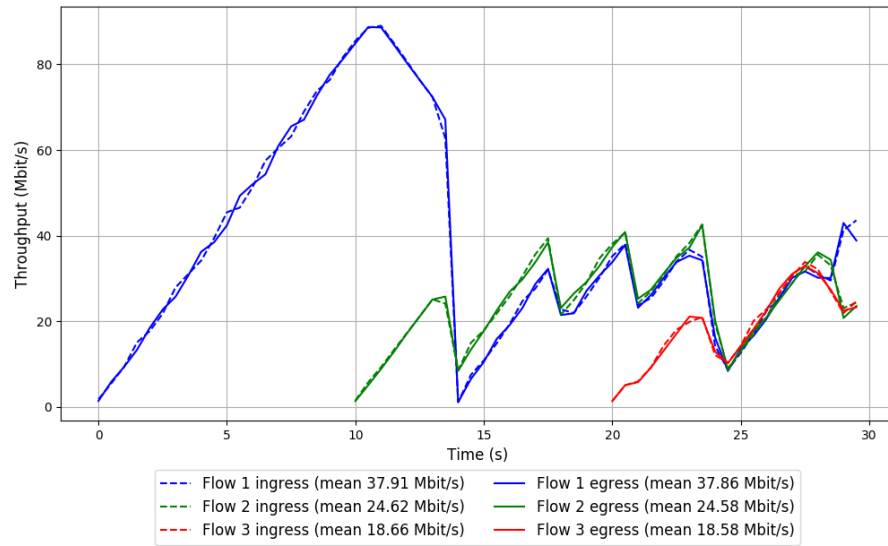


Run 5: Statistics of LEDBAT

Start at: 2018-02-13 15:27:21
End at: 2018-02-13 15:27:51
Local clock offset: 0.96 ms
Remote clock offset: 12.997 ms

Below is generated by plot.py at 2018-02-13 22:02:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 60.35 Mbit/s
95th percentile per-packet one-way delay: 40.672 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 37.86 Mbit/s
95th percentile per-packet one-way delay: 42.281 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 24.58 Mbit/s
95th percentile per-packet one-way delay: 29.362 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 18.58 Mbit/s
95th percentile per-packet one-way delay: 44.509 ms
Loss rate: 0.97%

Run 5: Report of LEDBAT — Data Link

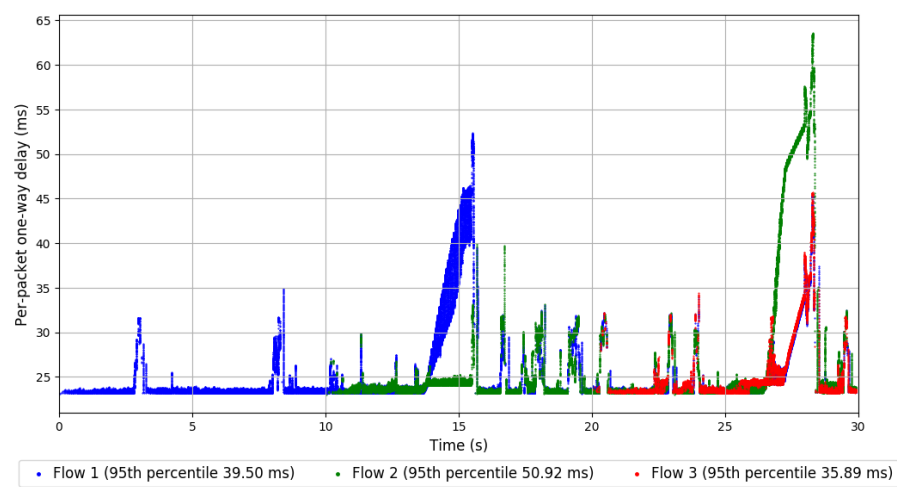
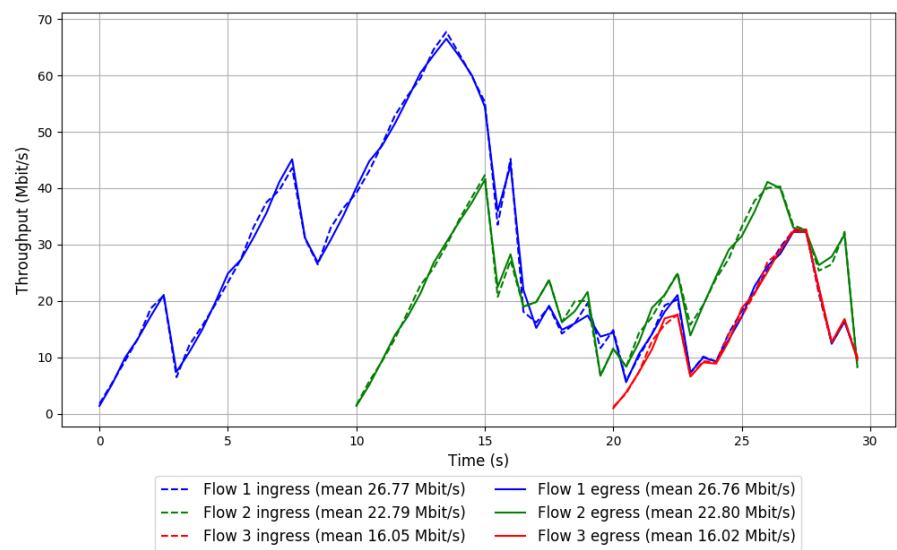


Run 6: Statistics of LEDBAT

Start at: 2018-02-13 15:52:16
End at: 2018-02-13 15:52:46
Local clock offset: -0.419 ms
Remote clock offset: 16.613 ms

Below is generated by plot.py at 2018-02-13 22:02:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 47.20 Mbit/s
95th percentile per-packet one-way delay: 41.888 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 26.76 Mbit/s
95th percentile per-packet one-way delay: 39.501 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 22.80 Mbit/s
95th percentile per-packet one-way delay: 50.921 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 16.02 Mbit/s
95th percentile per-packet one-way delay: 35.886 ms
Loss rate: 0.72%

Run 6: Report of LEDBAT — Data Link

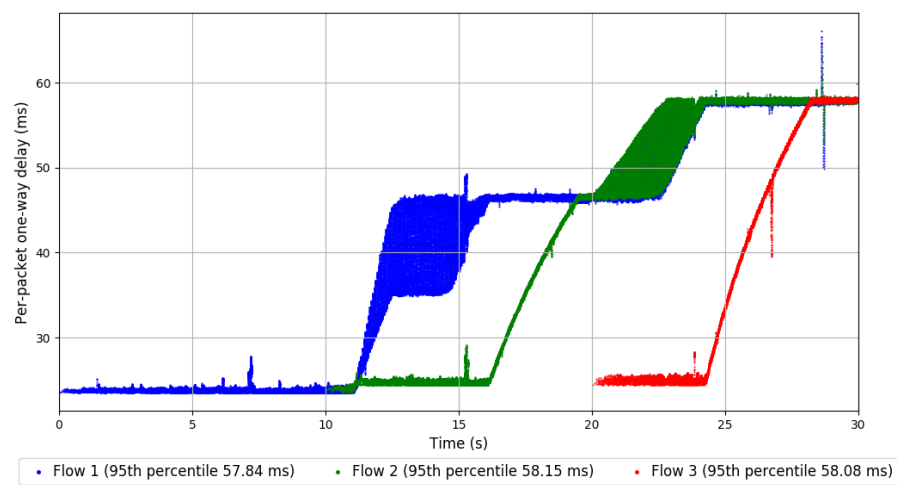
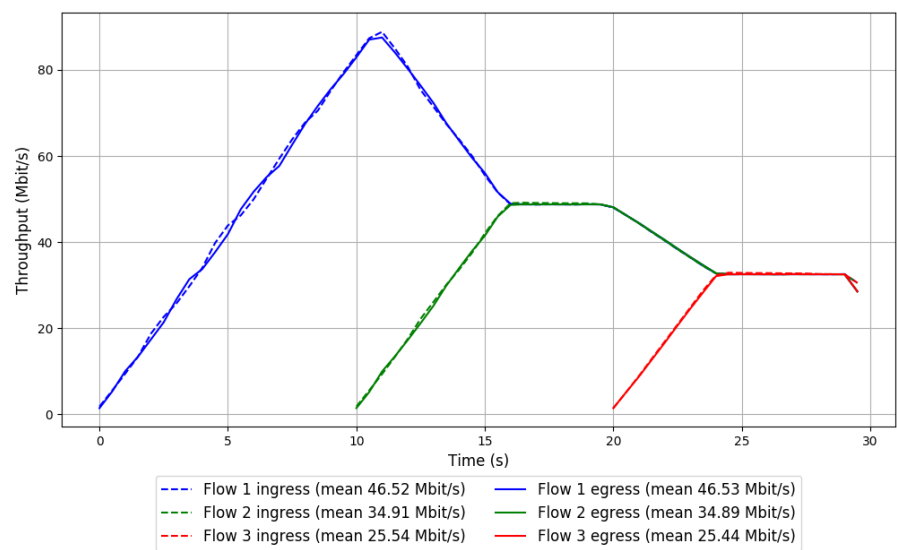


Run 7: Statistics of LEDBAT

Start at: 2018-02-13 16:19:11
End at: 2018-02-13 16:19:41
Local clock offset: -0.727 ms
Remote clock offset: 8.62 ms

```
# Below is generated by plot.py at 2018-02-13 22:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.15 Mbit/s
95th percentile per-packet one-way delay: 58.043 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 46.53 Mbit/s
95th percentile per-packet one-way delay: 57.845 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 34.89 Mbit/s
95th percentile per-packet one-way delay: 58.147 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 25.44 Mbit/s
95th percentile per-packet one-way delay: 58.080 ms
Loss rate: 1.13%
```

Run 7: Report of LEDBAT — Data Link

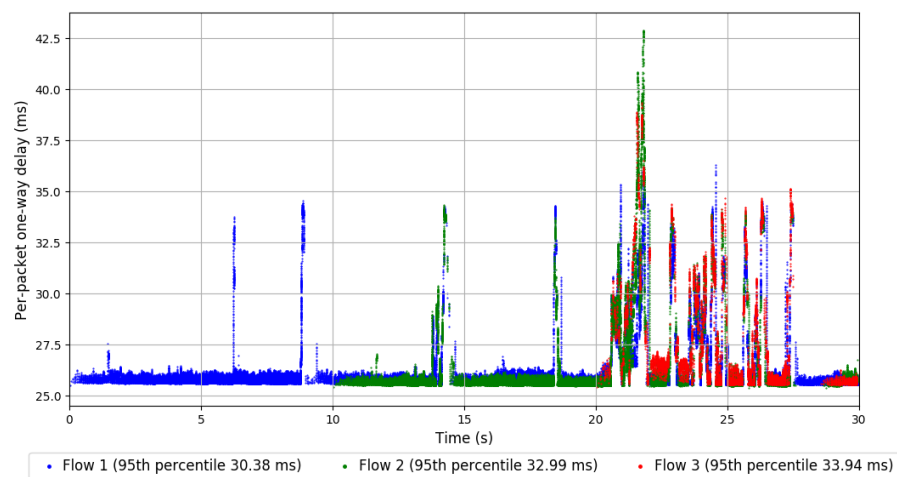
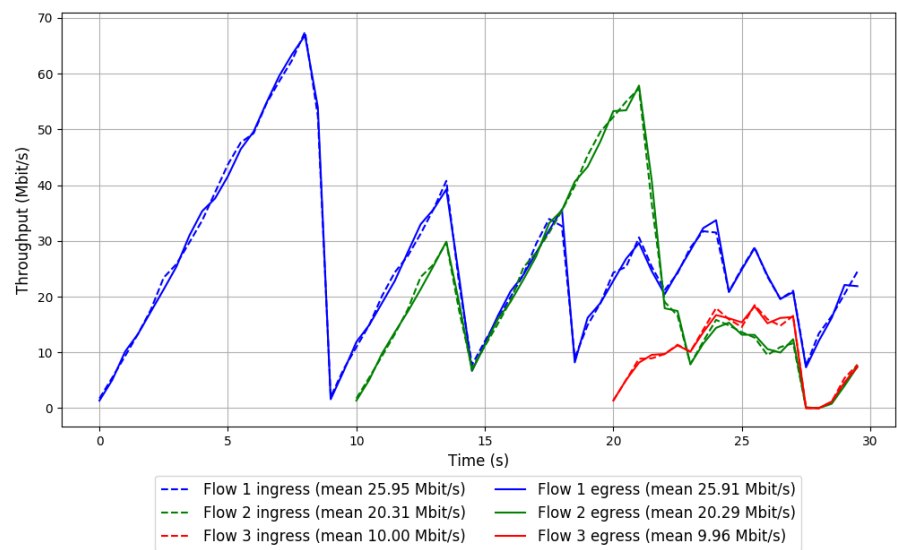


Run 8: Statistics of LEDBAT

Start at: 2018-02-13 16:43:44
End at: 2018-02-13 16:44:14
Local clock offset: -0.434 ms
Remote clock offset: 5.796 ms

```
# Below is generated by plot.py at 2018-02-13 22:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.69 Mbit/s
95th percentile per-packet one-way delay: 31.820 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 30.376 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 20.29 Mbit/s
95th percentile per-packet one-way delay: 32.994 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 9.96 Mbit/s
95th percentile per-packet one-way delay: 33.943 ms
Loss rate: 0.90%
```

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-13 17:08:30

End at: 2018-02-13 17:09:00

Local clock offset: 2.292 ms

Remote clock offset: 6.843 ms

Below is generated by plot.py at 2018-02-13 22:02:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 30.81 Mbit/s

95th percentile per-packet one-way delay: 28.088 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 15.26 Mbit/s

95th percentile per-packet one-way delay: 28.180 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 16.54 Mbit/s

95th percentile per-packet one-way delay: 27.981 ms

Loss rate: 0.76%

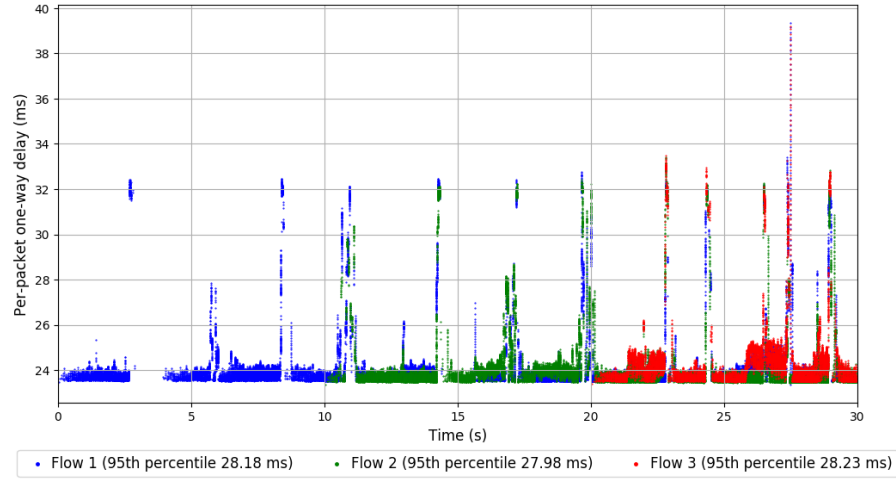
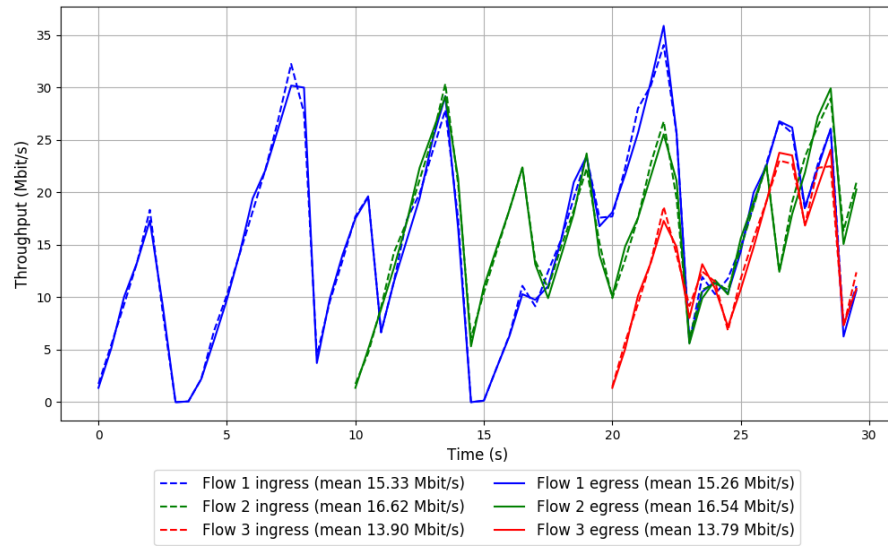
-- Flow 3:

Average throughput: 13.79 Mbit/s

95th percentile per-packet one-way delay: 28.229 ms

Loss rate: 1.26%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-13 17:33:14

End at: 2018-02-13 17:33:44

Local clock offset: 1.209 ms

Remote clock offset: 7.791 ms

Below is generated by plot.py at 2018-02-13 22:02:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 35.51 Mbit/s

95th percentile per-packet one-way delay: 32.708 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 17.63 Mbit/s

95th percentile per-packet one-way delay: 32.322 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 19.03 Mbit/s

95th percentile per-packet one-way delay: 38.800 ms

Loss rate: 0.82%

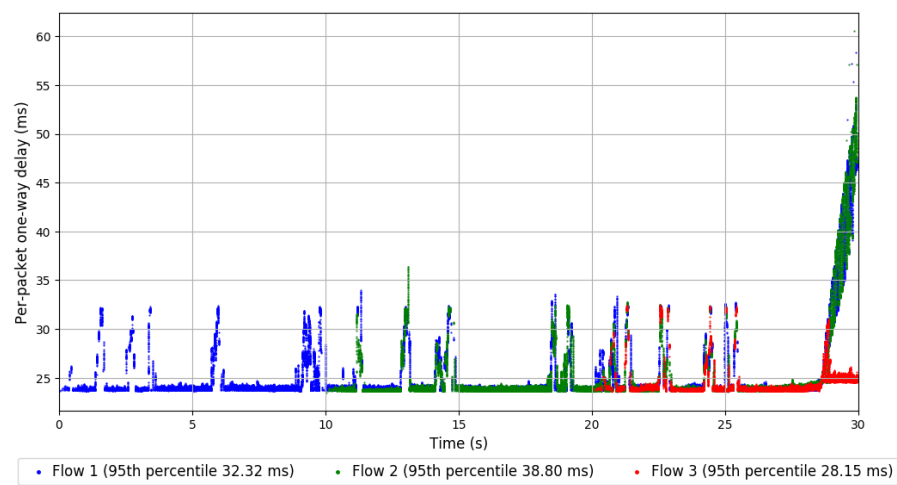
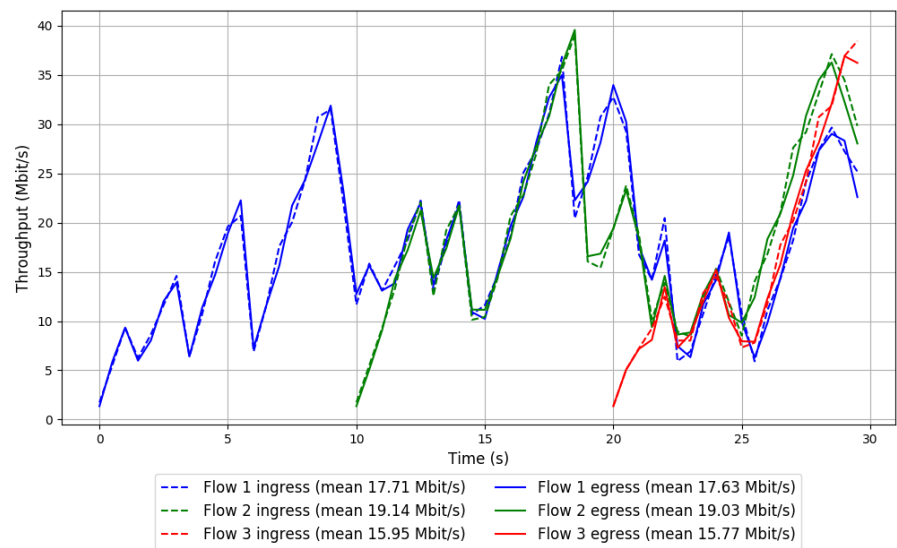
-- Flow 3:

Average throughput: 15.77 Mbit/s

95th percentile per-packet one-way delay: 28.148 ms

Loss rate: 1.66%

Run 10: Report of LEDBAT — Data Link

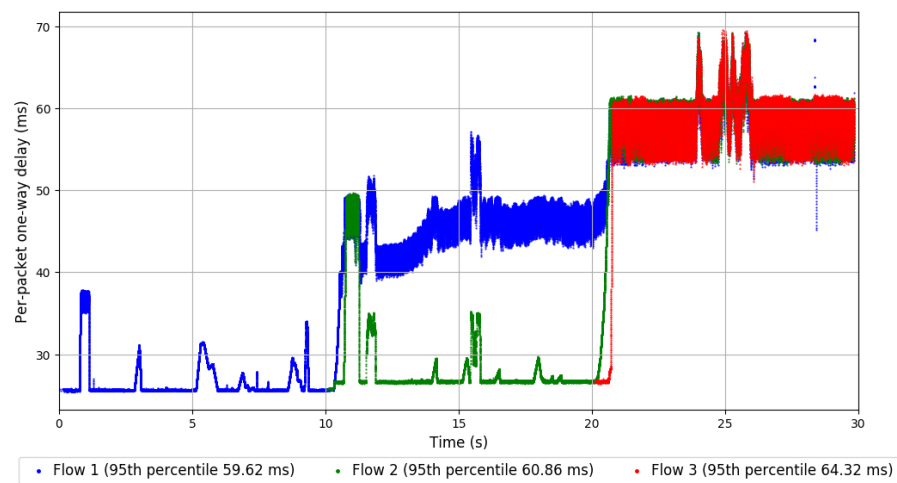
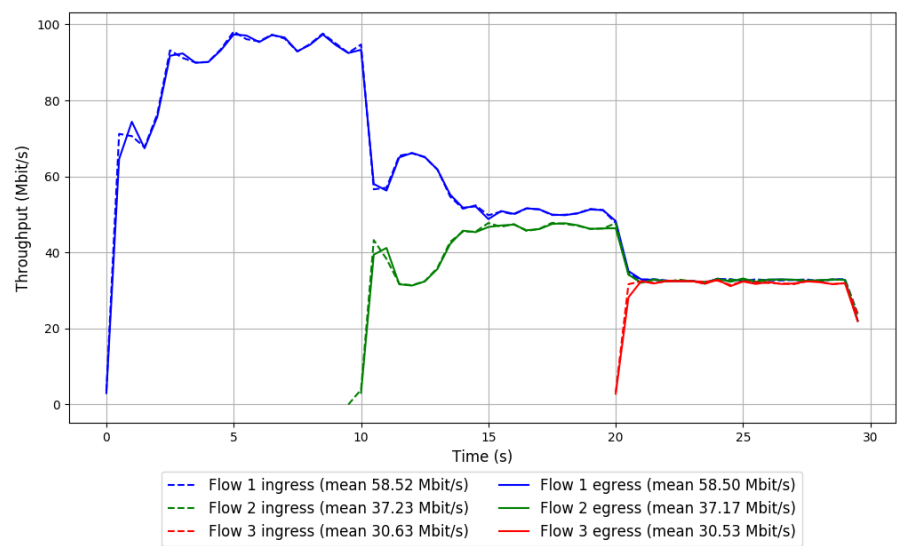


```
Run 1: Statistics of PCC

Start at: 2018-02-13 13:41:22
End at: 2018-02-13 13:41:52
Local clock offset: -0.691 ms
Remote clock offset: 0.274 ms

# Below is generated by plot.py at 2018-02-13 22:03:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.24 Mbit/s
95th percentile per-packet one-way delay: 60.592 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 58.50 Mbit/s
95th percentile per-packet one-way delay: 59.618 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 37.17 Mbit/s
95th percentile per-packet one-way delay: 60.857 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 30.53 Mbit/s
95th percentile per-packet one-way delay: 64.316 ms
Loss rate: 1.05%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-02-13 14:06:01

End at: 2018-02-13 14:06:31

Local clock offset: 1.632 ms

Remote clock offset: 1.716 ms

Below is generated by plot.py at 2018-02-13 22:03:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.05 Mbit/s

95th percentile per-packet one-way delay: 57.987 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 57.15 Mbit/s

95th percentile per-packet one-way delay: 57.036 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 37.45 Mbit/s

95th percentile per-packet one-way delay: 57.960 ms

Loss rate: 0.39%

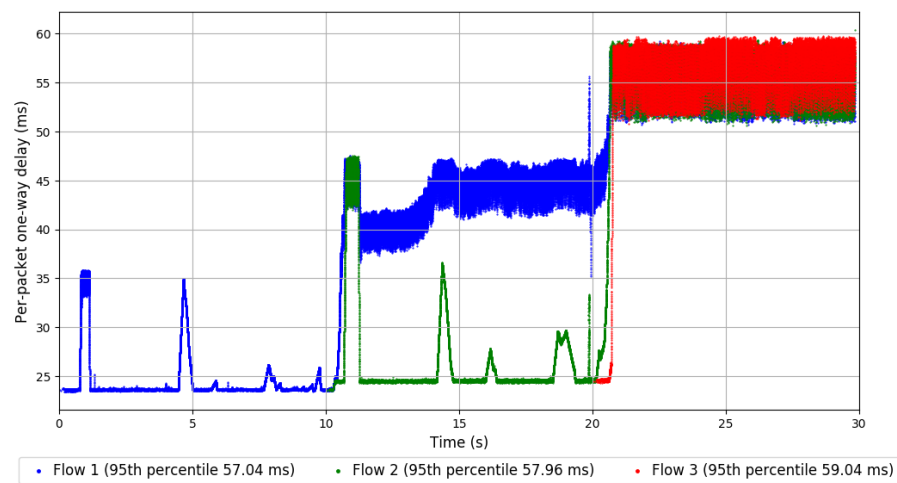
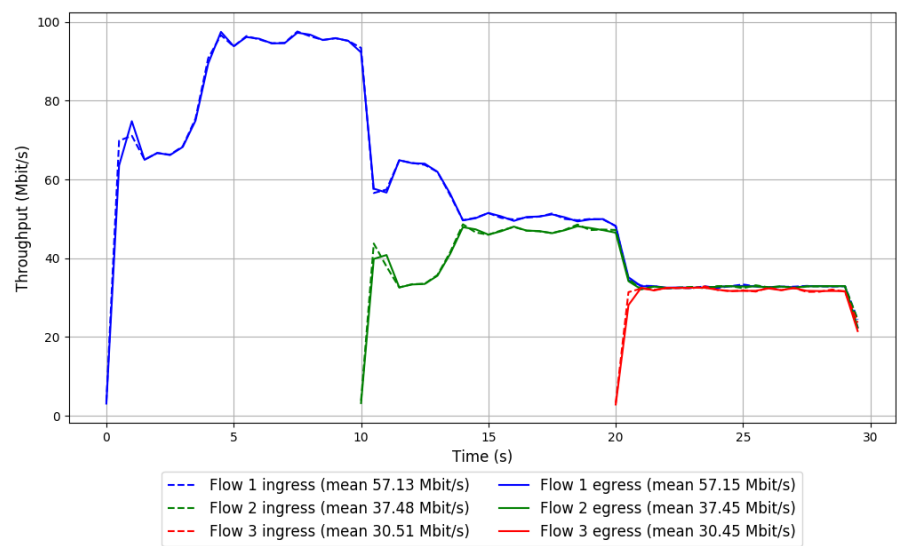
-- Flow 3:

Average throughput: 30.45 Mbit/s

95th percentile per-packet one-way delay: 59.042 ms

Loss rate: 0.94%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-13 14:30:35

End at: 2018-02-13 14:31:05

Local clock offset: 1.612 ms

Remote clock offset: 1.713 ms

Below is generated by plot.py at 2018-02-13 22:03:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.17 Mbit/s

95th percentile per-packet one-way delay: 53.320 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 64.35 Mbit/s

95th percentile per-packet one-way delay: 52.394 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 18.07 Mbit/s

95th percentile per-packet one-way delay: 53.695 ms

Loss rate: 0.71%

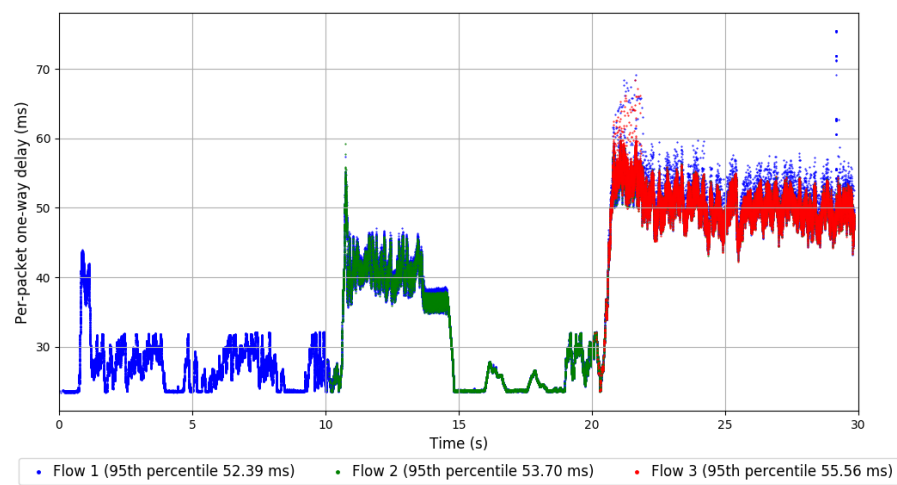
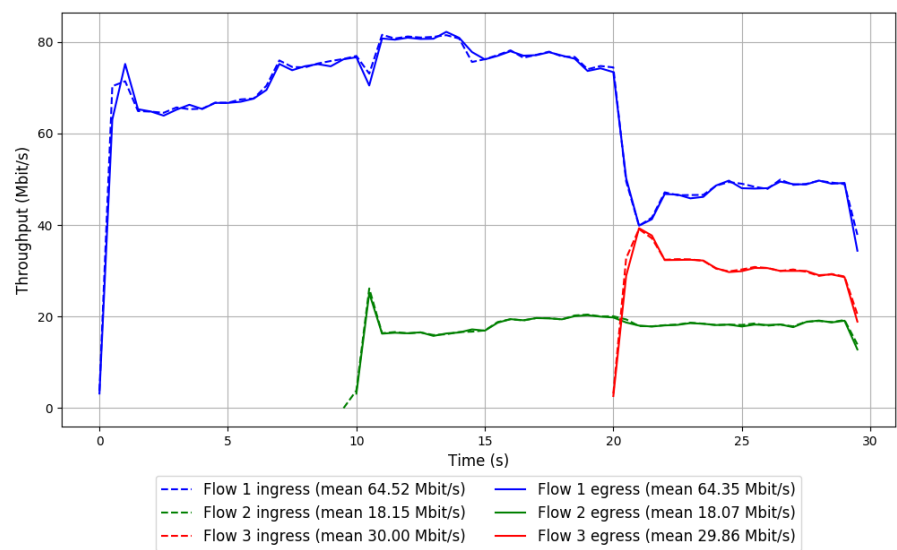
-- Flow 3:

Average throughput: 29.86 Mbit/s

95th percentile per-packet one-way delay: 55.563 ms

Loss rate: 1.08%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-13 14:55:37

End at: 2018-02-13 14:56:07

Local clock offset: 0.675 ms

Remote clock offset: 1.735 ms

Below is generated by plot.py at 2018-02-13 22:03:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.20 Mbit/s

95th percentile per-packet one-way delay: 51.941 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 63.21 Mbit/s

95th percentile per-packet one-way delay: 52.873 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 41.36 Mbit/s

95th percentile per-packet one-way delay: 39.585 ms

Loss rate: 0.76%

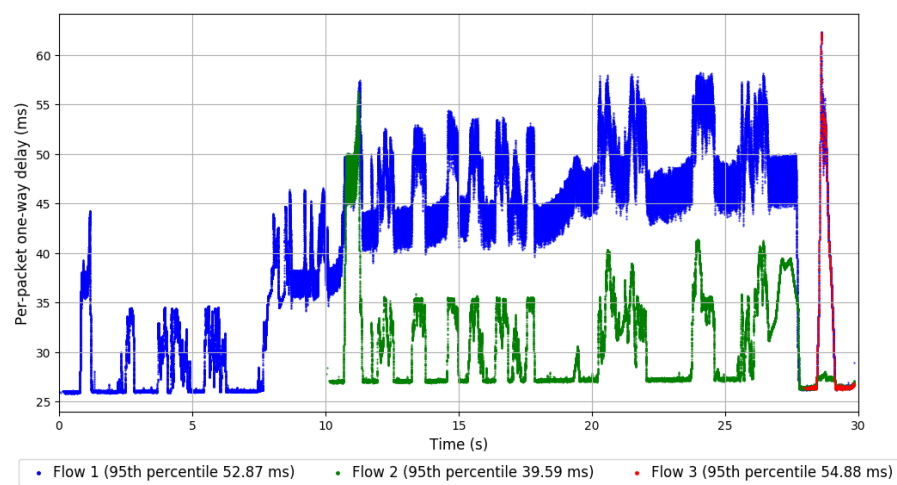
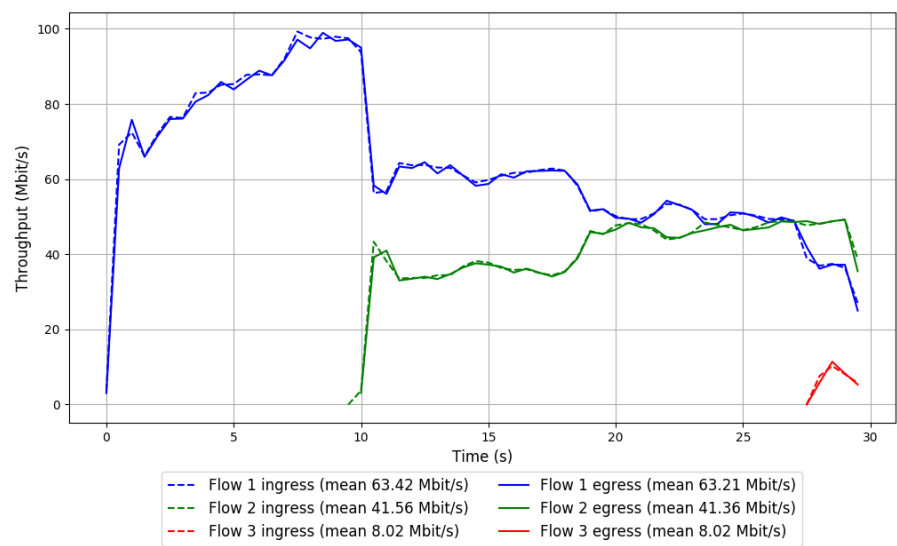
-- Flow 3:

Average throughput: 8.02 Mbit/s

95th percentile per-packet one-way delay: 54.879 ms

Loss rate: 2.75%

Run 4: Report of PCC — Data Link

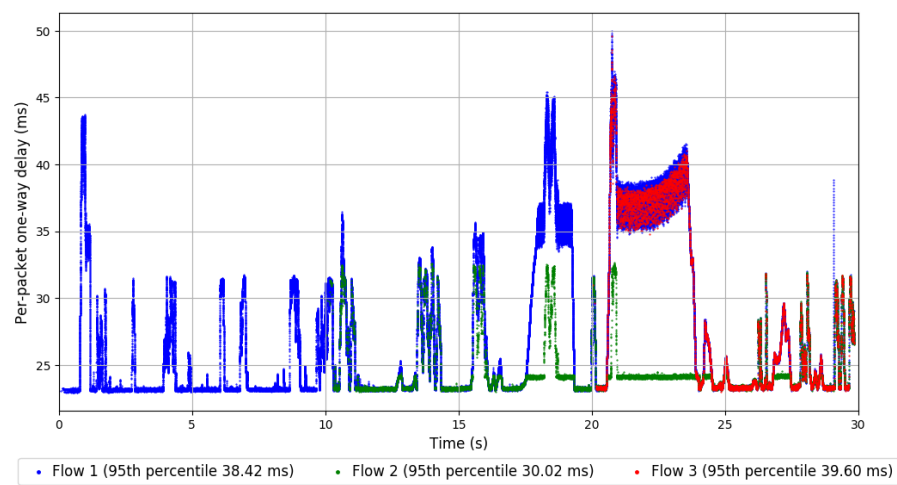
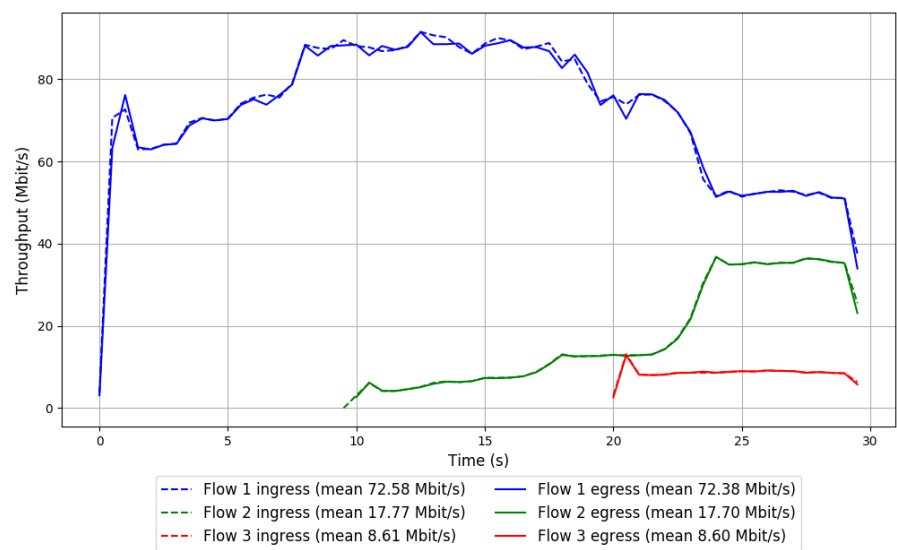


Run 5: Statistics of PCC

Start at: 2018-02-13 15:20:39
End at: 2018-02-13 15:21:09
Local clock offset: 0.953 ms
Remote clock offset: 12.603 ms

Below is generated by plot.py at 2018-02-13 22:03:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.96 Mbit/s
95th percentile per-packet one-way delay: 38.183 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 72.38 Mbit/s
95th percentile per-packet one-way delay: 38.419 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 17.70 Mbit/s
95th percentile per-packet one-way delay: 30.018 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 8.60 Mbit/s
95th percentile per-packet one-way delay: 39.603 ms
Loss rate: 0.64%

Run 5: Report of PCC — Data Link

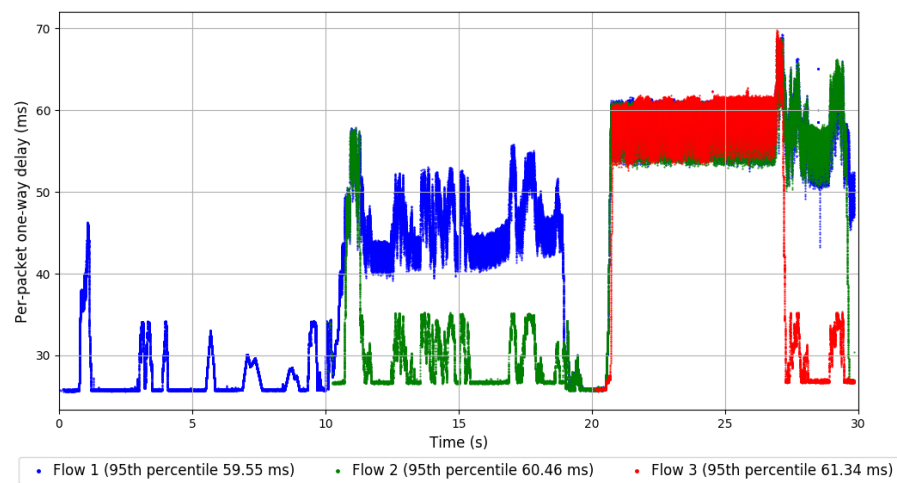
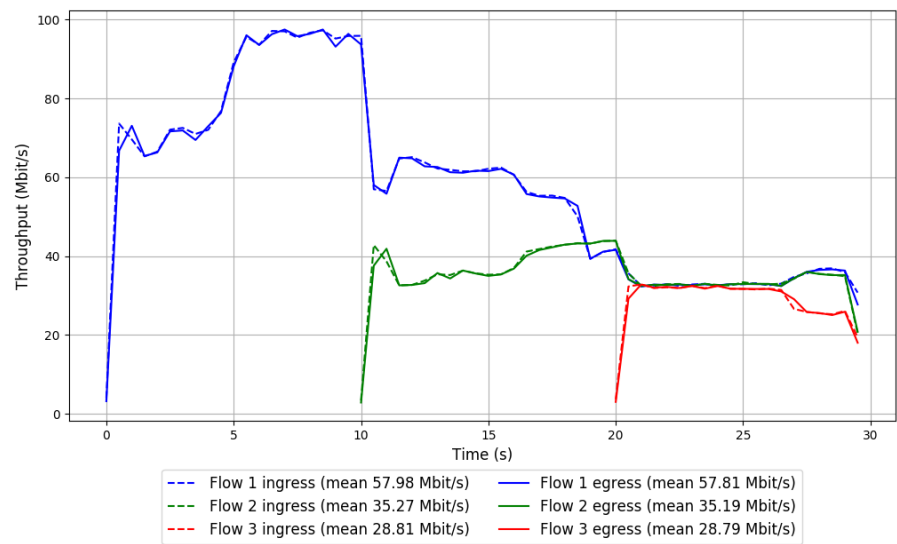


Run 6: Statistics of PCC

Start at: 2018-02-13 15:45:32
End at: 2018-02-13 15:46:02
Local clock offset: -0.144 ms
Remote clock offset: 13.223 ms

Below is generated by plot.py at 2018-02-13 22:03:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.65 Mbit/s
95th percentile per-packet one-way delay: 60.360 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 57.81 Mbit/s
95th percentile per-packet one-way delay: 59.552 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 35.19 Mbit/s
95th percentile per-packet one-way delay: 60.464 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 28.79 Mbit/s
95th percentile per-packet one-way delay: 61.344 ms
Loss rate: 0.61%

Run 6: Report of PCC — Data Link

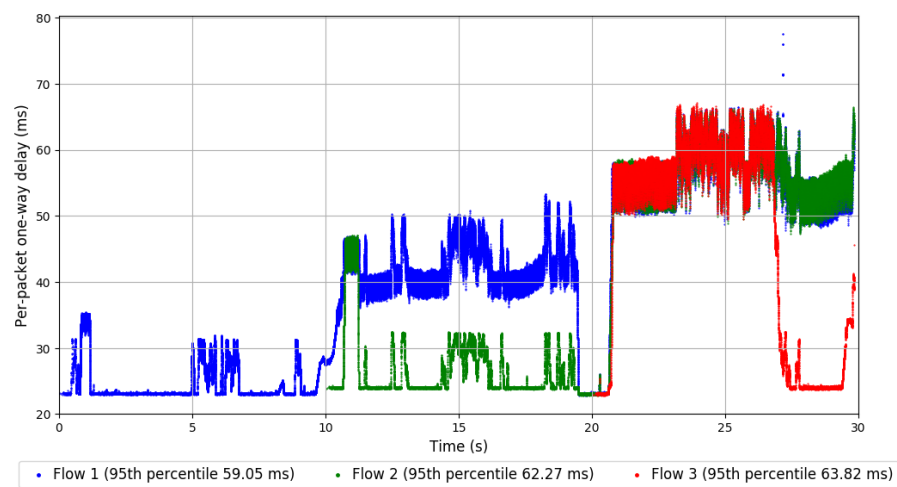
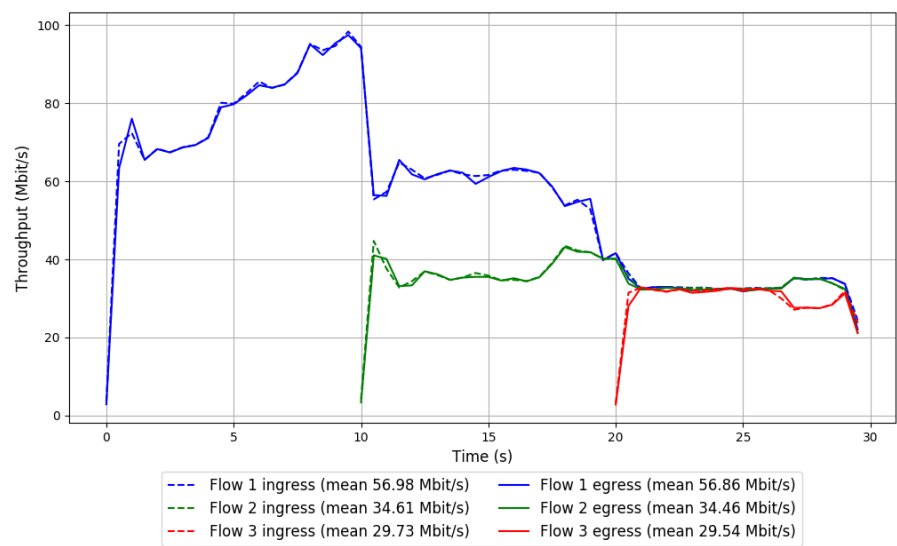


Run 7: Statistics of PCC

Start at: 2018-02-13 16:12:21
End at: 2018-02-13 16:12:51
Local clock offset: -0.704 ms
Remote clock offset: 10.682 ms

Below is generated by plot.py at 2018-02-13 22:03:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.46 Mbit/s
95th percentile per-packet one-way delay: 61.549 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 56.86 Mbit/s
95th percentile per-packet one-way delay: 59.051 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 34.46 Mbit/s
95th percentile per-packet one-way delay: 62.274 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 29.54 Mbit/s
95th percentile per-packet one-way delay: 63.818 ms
Loss rate: 1.12%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-13 16:37:02

End at: 2018-02-13 16:37:32

Local clock offset: -0.877 ms

Remote clock offset: 6.845 ms

Below is generated by plot.py at 2018-02-13 22:03:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.00 Mbit/s

95th percentile per-packet one-way delay: 42.600 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 76.30 Mbit/s

95th percentile per-packet one-way delay: 41.768 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 6.19 Mbit/s

95th percentile per-packet one-way delay: 44.218 ms

Loss rate: 0.65%

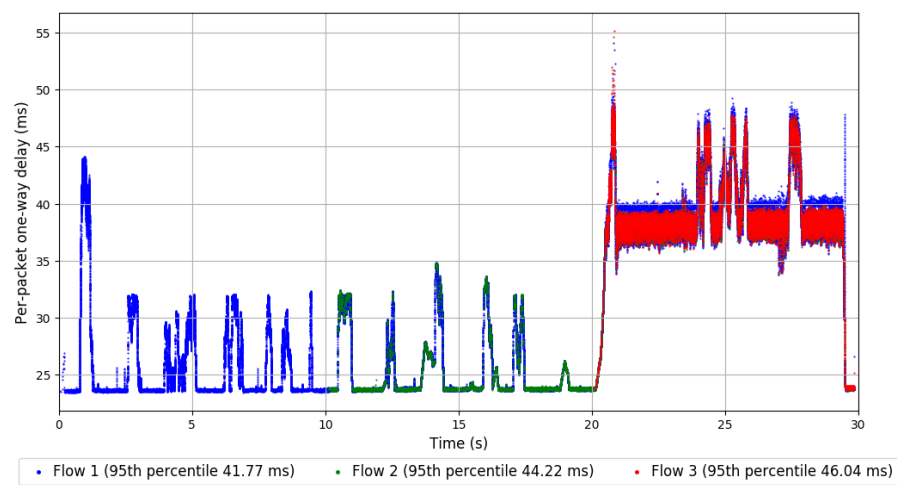
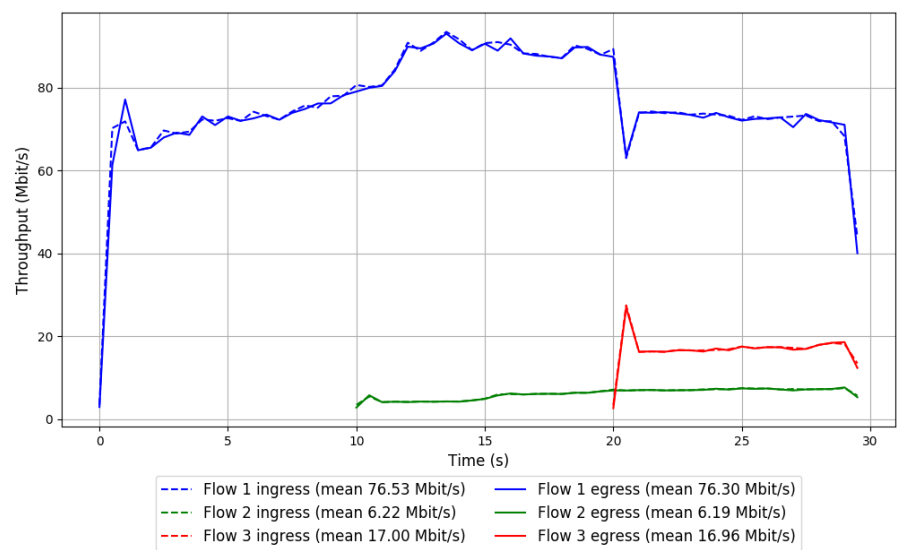
-- Flow 3:

Average throughput: 16.96 Mbit/s

95th percentile per-packet one-way delay: 46.043 ms

Loss rate: 0.77%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-13 17:01:50

End at: 2018-02-13 17:02:20

Local clock offset: 1.956 ms

Remote clock offset: 5.333 ms

Below is generated by plot.py at 2018-02-13 22:04:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.92 Mbit/s

95th percentile per-packet one-way delay: 56.333 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 53.50 Mbit/s

95th percentile per-packet one-way delay: 55.608 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 39.54 Mbit/s

95th percentile per-packet one-way delay: 58.667 ms

Loss rate: 0.59%

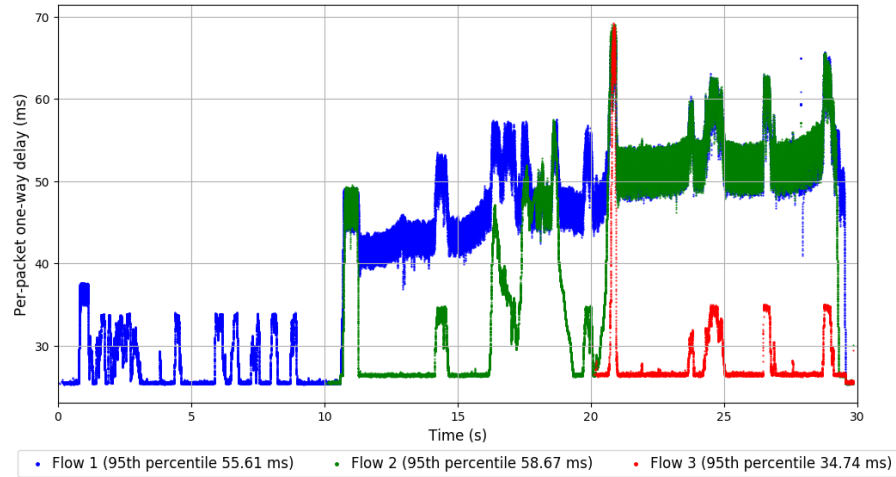
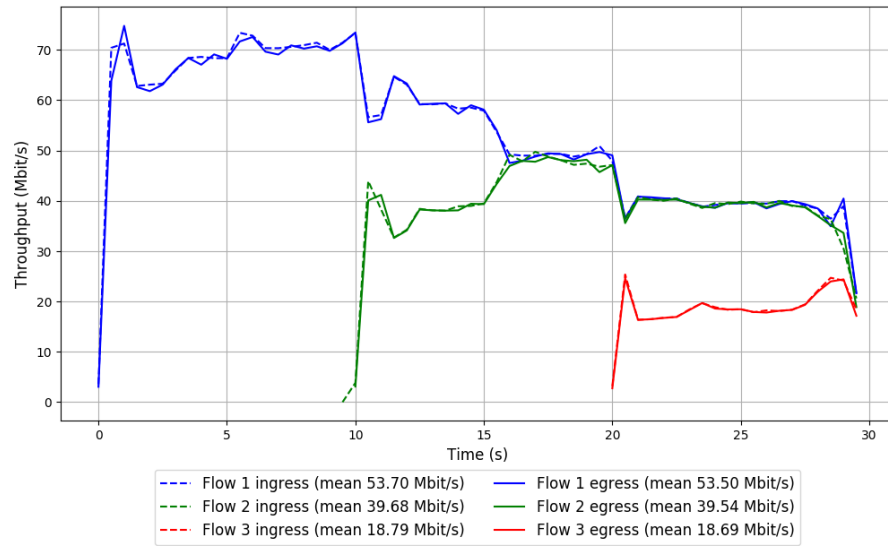
-- Flow 3:

Average throughput: 18.69 Mbit/s

95th percentile per-packet one-way delay: 34.745 ms

Loss rate: 1.08%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-02-13 17:26:21

End at: 2018-02-13 17:26:51

Local clock offset: 1.526 ms

Remote clock offset: 8.126 ms

Below is generated by plot.py at 2018-02-13 22:04:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.60 Mbit/s

95th percentile per-packet one-way delay: 58.915 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 59.37 Mbit/s

95th percentile per-packet one-way delay: 49.000 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 35.77 Mbit/s

95th percentile per-packet one-way delay: 63.247 ms

Loss rate: 0.97%

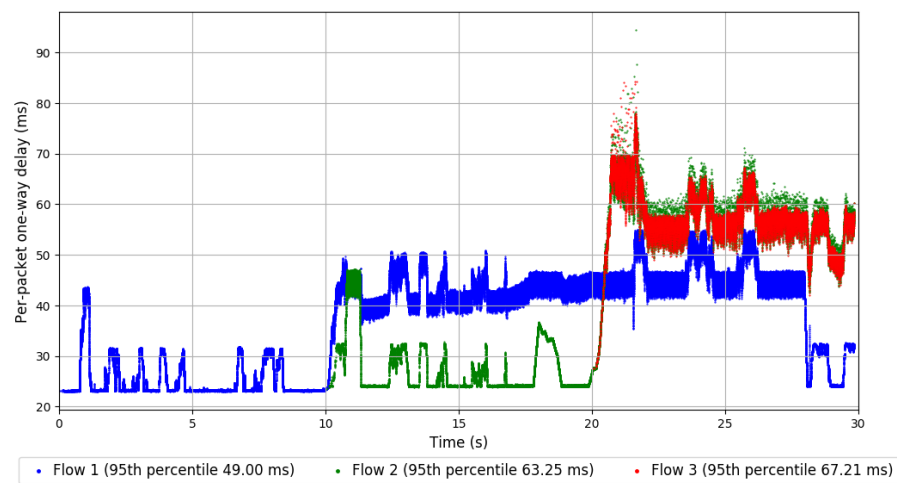
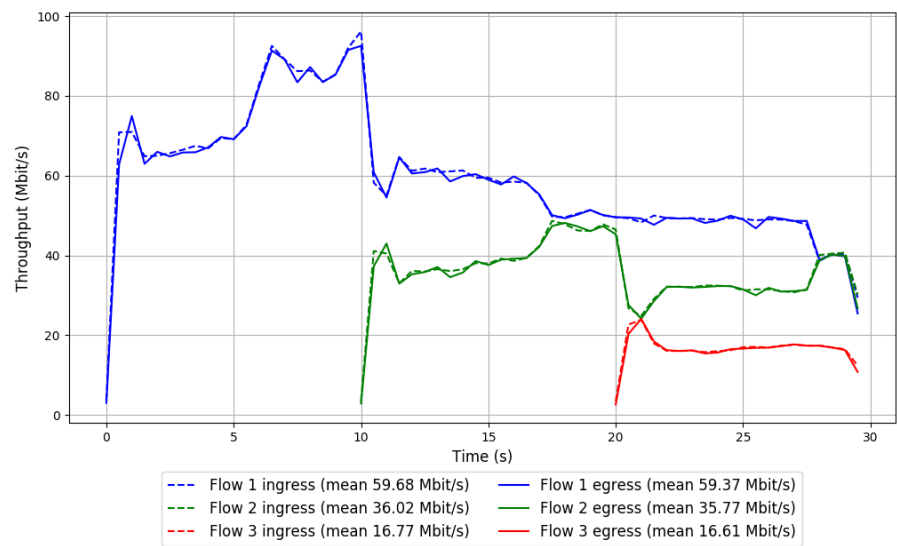
-- Flow 3:

Average throughput: 16.61 Mbit/s

95th percentile per-packet one-way delay: 67.210 ms

Loss rate: 1.53%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-02-13 13:35:51

End at: 2018-02-13 13:36:21

Local clock offset: -0.54 ms

Remote clock offset: 2.573 ms

Below is generated by plot.py at 2018-02-13 22:04:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.82 Mbit/s

95th percentile per-packet one-way delay: 56.569 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 50.95 Mbit/s

95th percentile per-packet one-way delay: 56.597 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 40.22 Mbit/s

95th percentile per-packet one-way delay: 56.491 ms

Loss rate: 0.39%

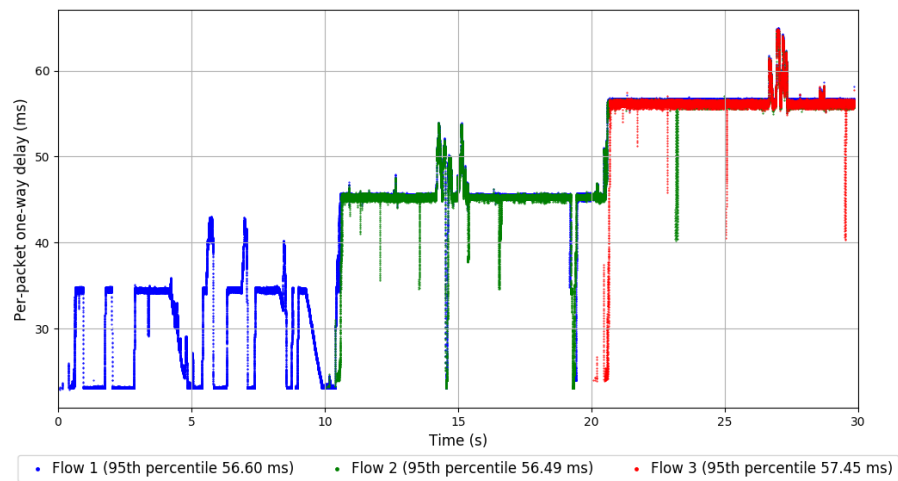
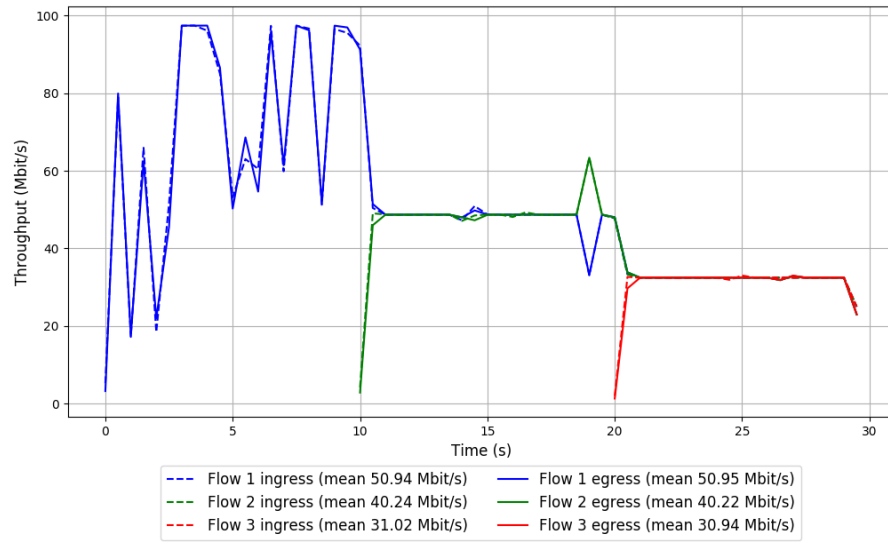
-- Flow 3:

Average throughput: 30.94 Mbit/s

95th percentile per-packet one-way delay: 57.454 ms

Loss rate: 0.94%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-13 14:00:28

End at: 2018-02-13 14:00:58

Local clock offset: 1.12 ms

Remote clock offset: 1.736 ms

Below is generated by plot.py at 2018-02-13 22:04:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.42 Mbit/s

95th percentile per-packet one-way delay: 67.317 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 47.99 Mbit/s

95th percentile per-packet one-way delay: 67.305 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 36.52 Mbit/s

95th percentile per-packet one-way delay: 67.448 ms

Loss rate: 0.35%

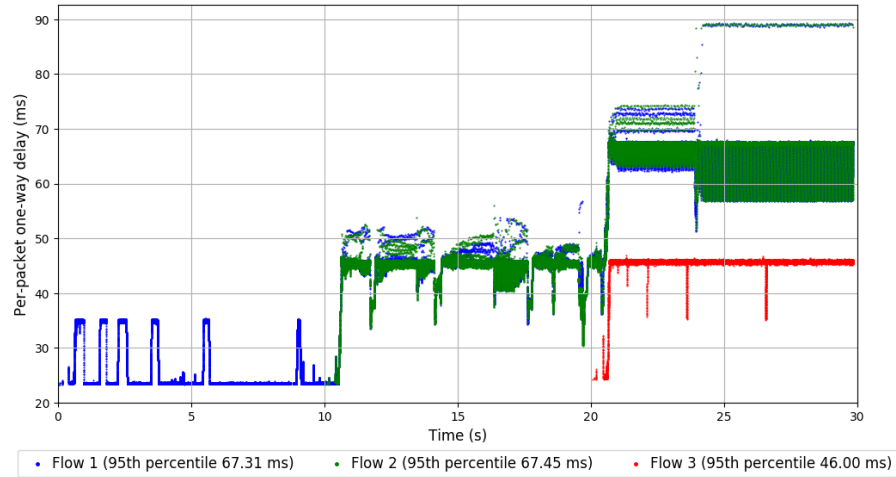
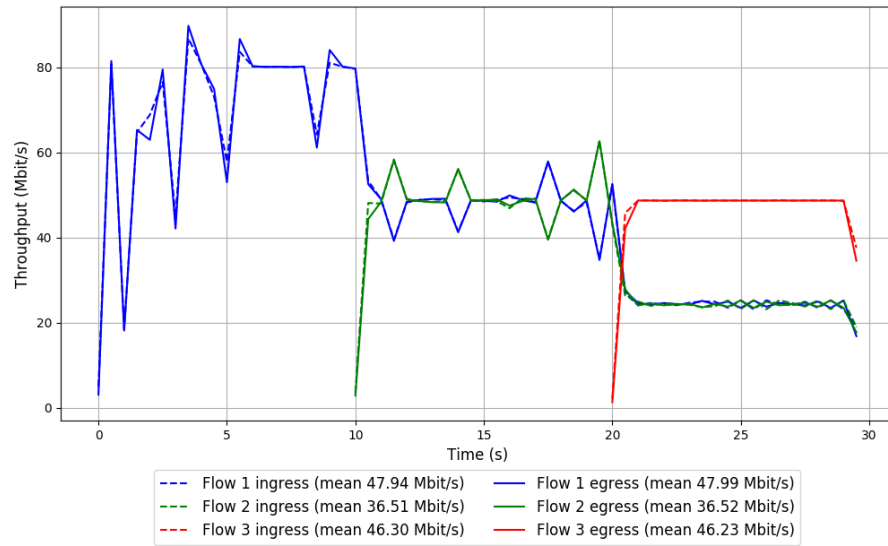
-- Flow 3:

Average throughput: 46.23 Mbit/s

95th percentile per-packet one-way delay: 45.998 ms

Loss rate: 0.82%

Run 2: Report of QUIC Cubic — Data Link

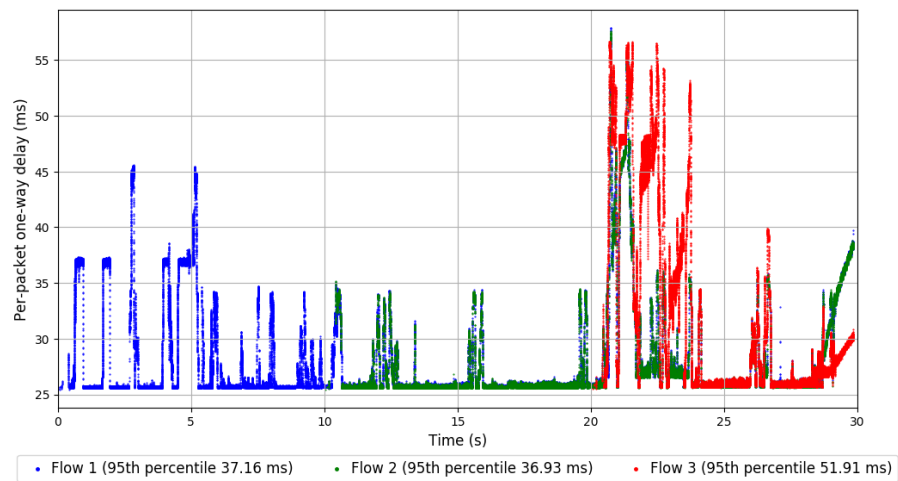
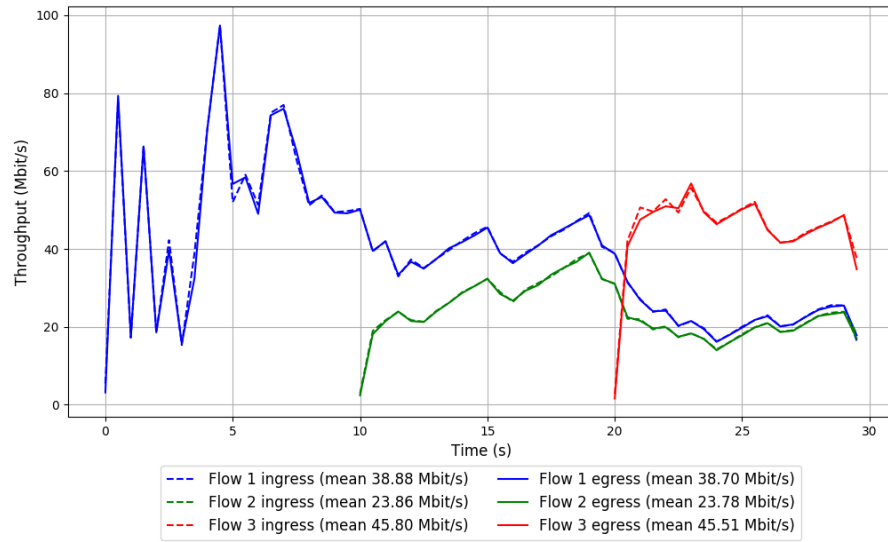


Run 3: Statistics of QUIC Cubic

Start at: 2018-02-13 14:24:59
End at: 2018-02-13 14:25:29
Local clock offset: 2.215 ms
Remote clock offset: -0.209 ms

Below is generated by plot.py at 2018-02-13 22:04:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 69.44 Mbit/s
95th percentile per-packet one-way delay: 44.568 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 38.70 Mbit/s
95th percentile per-packet one-way delay: 37.159 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 23.78 Mbit/s
95th percentile per-packet one-way delay: 36.926 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 45.51 Mbit/s
95th percentile per-packet one-way delay: 51.914 ms
Loss rate: 1.16%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-13 14:50:04

End at: 2018-02-13 14:50:34

Local clock offset: 0.805 ms

Remote clock offset: 1.827 ms

Below is generated by plot.py at 2018-02-13 22:04:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.98 Mbit/s

95th percentile per-packet one-way delay: 50.743 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 36.62 Mbit/s

95th percentile per-packet one-way delay: 38.320 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 35.97 Mbit/s

95th percentile per-packet one-way delay: 44.405 ms

Loss rate: 0.43%

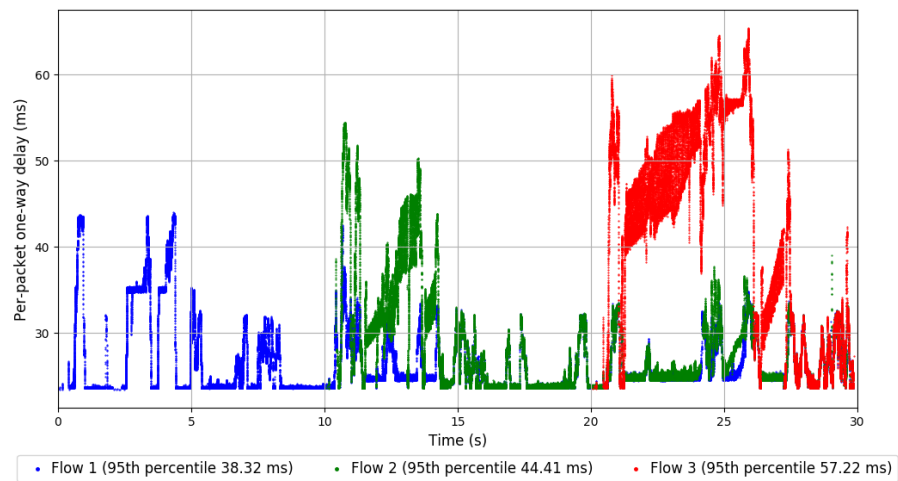
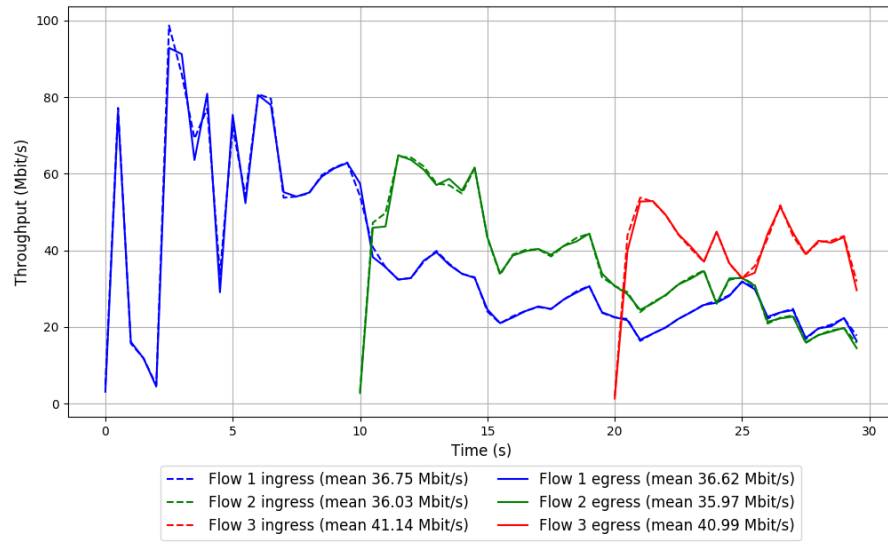
-- Flow 3:

Average throughput: 40.99 Mbit/s

95th percentile per-packet one-way delay: 57.219 ms

Loss rate: 0.87%

Run 4: Report of QUIC Cubic — Data Link

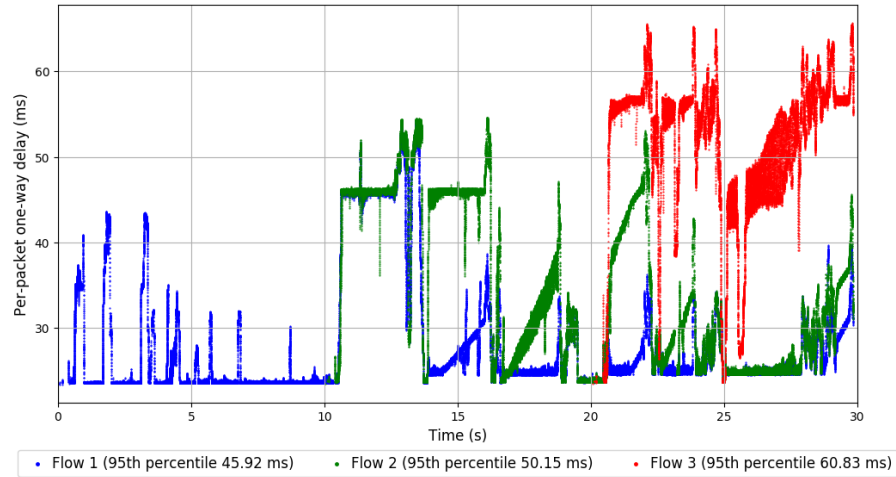
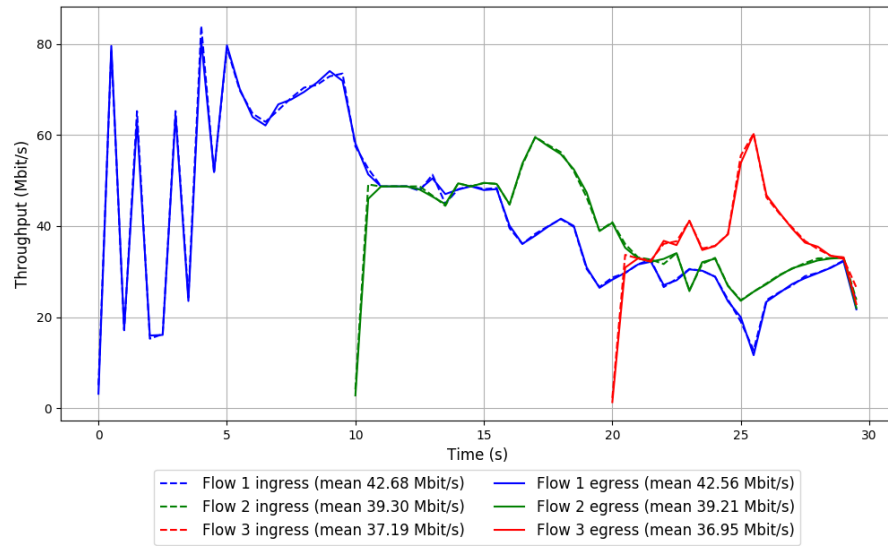


Run 5: Statistics of QUIC Cubic

Start at: 2018-02-13 15:15:01
End at: 2018-02-13 15:15:31
Local clock offset: 0.894 ms
Remote clock offset: 11.186 ms

Below is generated by plot.py at 2018-02-13 22:05:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 80.75 Mbit/s
95th percentile per-packet one-way delay: 56.090 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 42.56 Mbit/s
95th percentile per-packet one-way delay: 45.921 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 39.21 Mbit/s
95th percentile per-packet one-way delay: 50.150 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 36.95 Mbit/s
95th percentile per-packet one-way delay: 60.834 ms
Loss rate: 1.24%

Run 5: Report of QUIC Cubic — Data Link

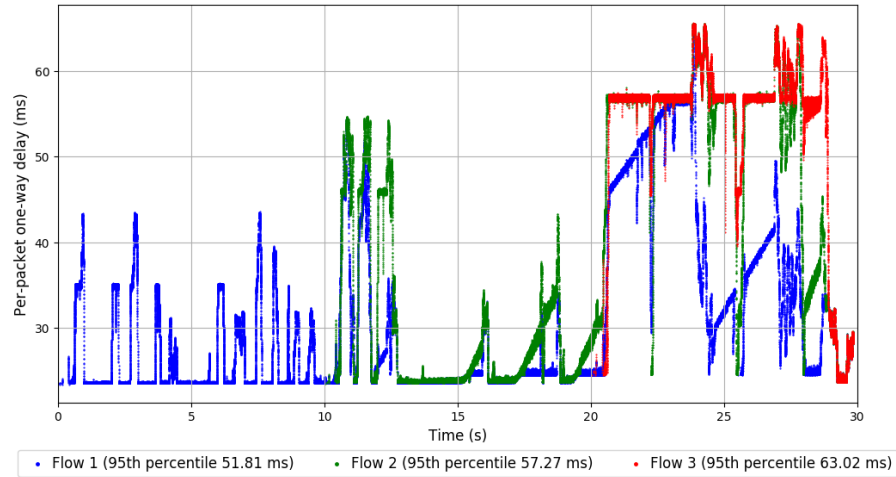
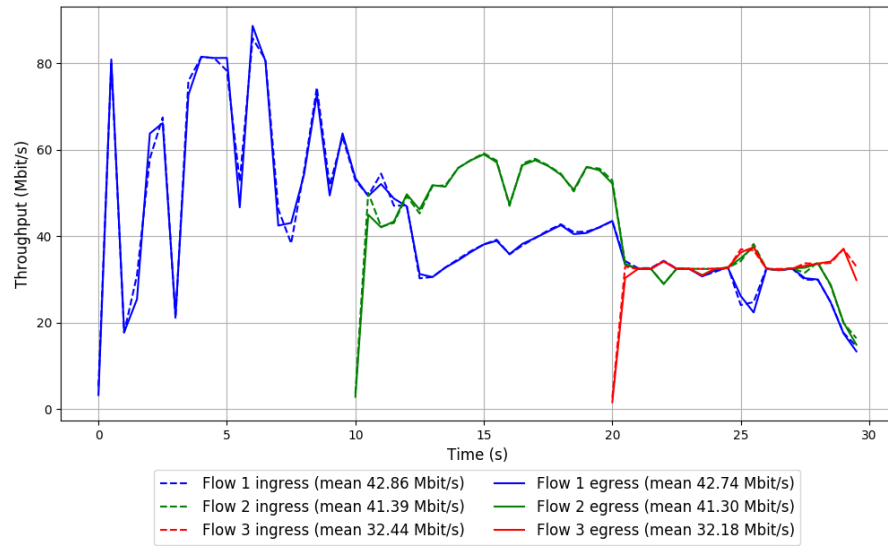


Run 6: Statistics of QUIC Cubic

Start at: 2018-02-13 15:39:51
End at: 2018-02-13 15:40:21
Local clock offset: 0.155 ms
Remote clock offset: 14.561 ms

Below is generated by plot.py at 2018-02-13 22:05:17
Datalink statistics
-- Total of 3 flows:
Average throughput: 80.76 Mbit/s
95th percentile per-packet one-way delay: 57.234 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 42.74 Mbit/s
95th percentile per-packet one-way delay: 51.806 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 41.30 Mbit/s
95th percentile per-packet one-way delay: 57.271 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 32.18 Mbit/s
95th percentile per-packet one-way delay: 63.025 ms
Loss rate: 1.33%

Run 6: Report of QUIC Cubic — Data Link

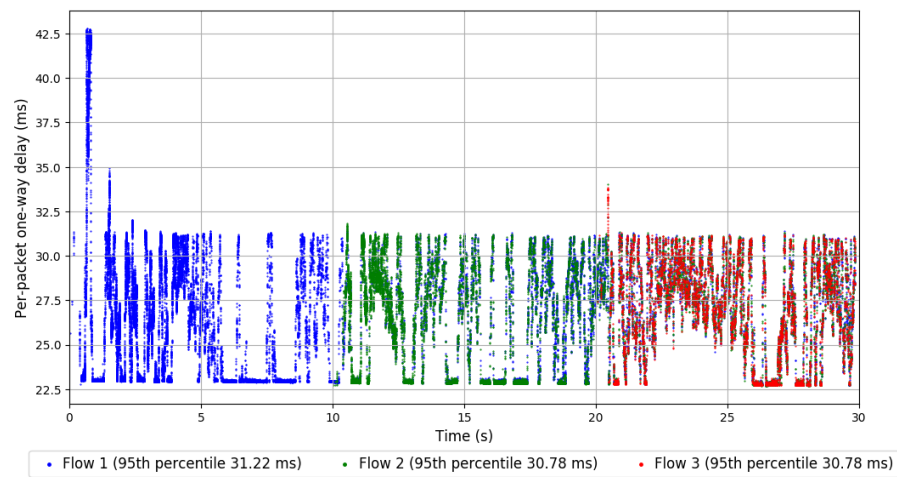
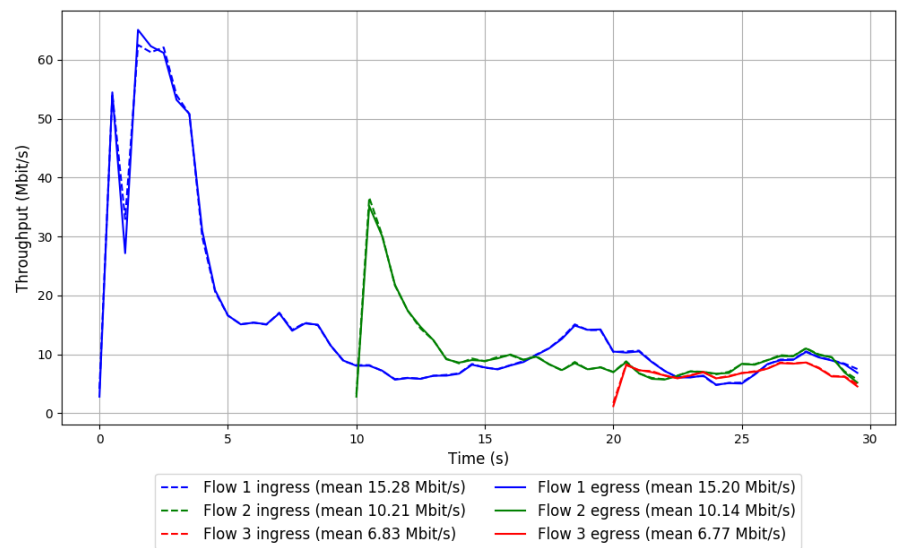


Run 7: Statistics of QUIC Cubic

Start at: 2018-02-13 16:06:24
End at: 2018-02-13 16:06:54
Local clock offset: -0.693 ms
Remote clock offset: 13.547 ms

Below is generated by plot.py at 2018-02-13 22:05:17
Datalink statistics
-- Total of 3 flows:
Average throughput: 24.16 Mbit/s
95th percentile per-packet one-way delay: 31.015 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 15.20 Mbit/s
95th percentile per-packet one-way delay: 31.223 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 10.14 Mbit/s
95th percentile per-packet one-way delay: 30.784 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 6.77 Mbit/s
95th percentile per-packet one-way delay: 30.781 ms
Loss rate: 1.50%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-13 16:31:30

End at: 2018-02-13 16:32:00

Local clock offset: -0.932 ms

Remote clock offset: 4.824 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.82 Mbit/s

95th percentile per-packet one-way delay: 69.318 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 58.55 Mbit/s

95th percentile per-packet one-way delay: 69.226 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 24.21 Mbit/s

95th percentile per-packet one-way delay: 69.545 ms

Loss rate: 0.46%

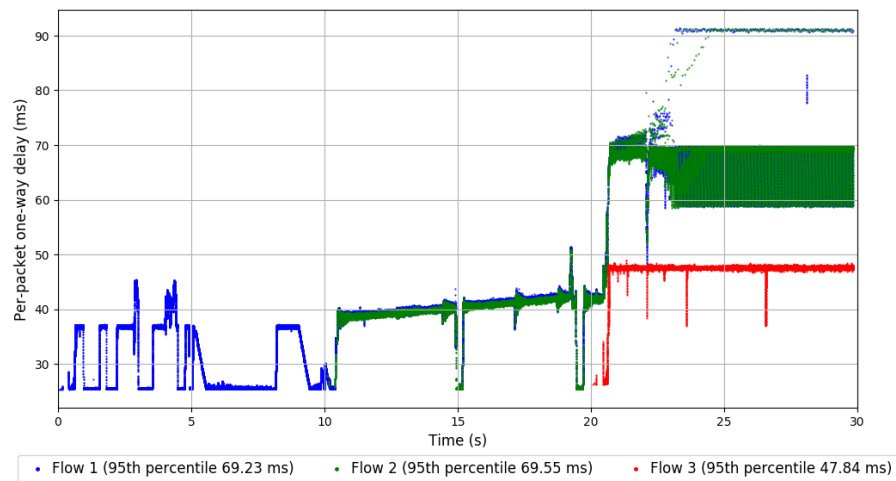
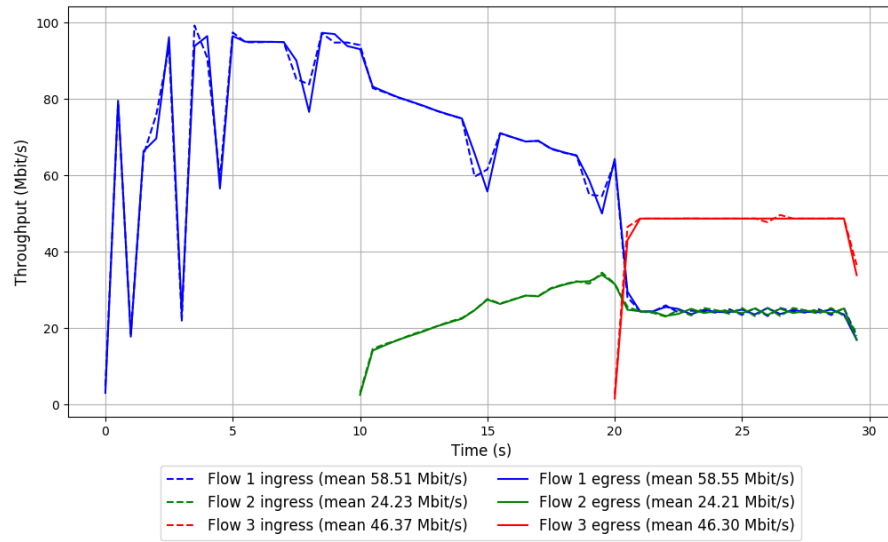
-- Flow 3:

Average throughput: 46.30 Mbit/s

95th percentile per-packet one-way delay: 47.841 ms

Loss rate: 0.80%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-13 16:56:10

End at: 2018-02-13 16:56:40

Local clock offset: 1.509 ms

Remote clock offset: 5.574 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 56.26 Mbit/s

95th percentile per-packet one-way delay: 37.298 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 31.67 Mbit/s

95th percentile per-packet one-way delay: 37.020 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 20.03 Mbit/s

95th percentile per-packet one-way delay: 36.961 ms

Loss rate: 1.19%

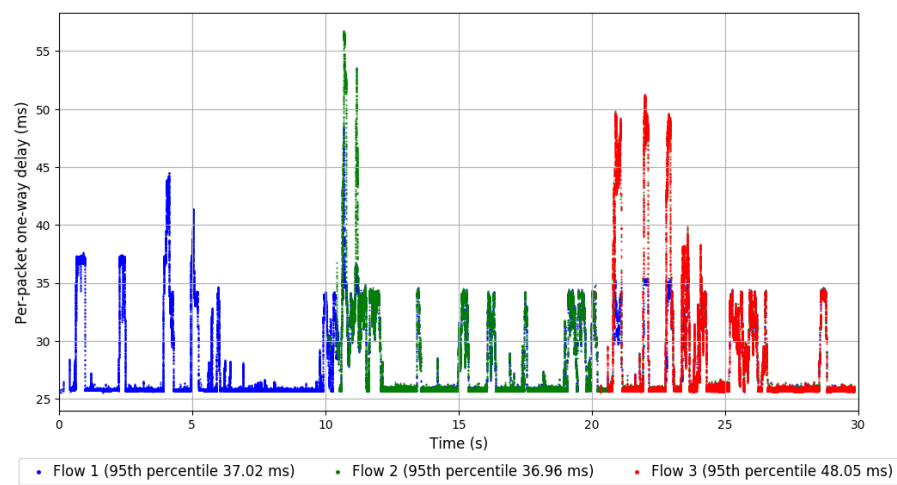
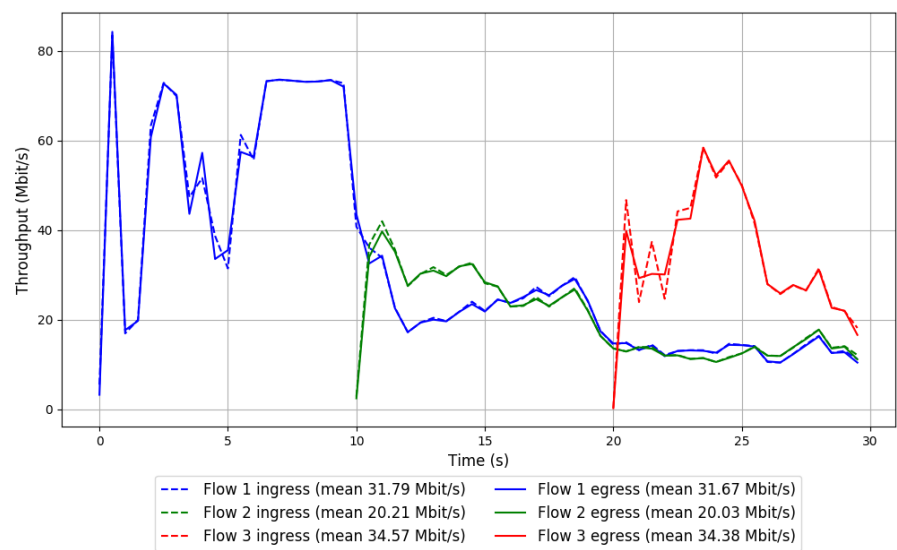
-- Flow 3:

Average throughput: 34.38 Mbit/s

95th percentile per-packet one-way delay: 48.047 ms

Loss rate: 1.19%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-13 17:20:47

End at: 2018-02-13 17:21:17

Local clock offset: 1.863 ms

Remote clock offset: 8.042 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 56.03 Mbit/s

95th percentile per-packet one-way delay: 40.482 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 32.57 Mbit/s

95th percentile per-packet one-way delay: 34.696 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 16.81 Mbit/s

95th percentile per-packet one-way delay: 31.173 ms

Loss rate: 0.67%

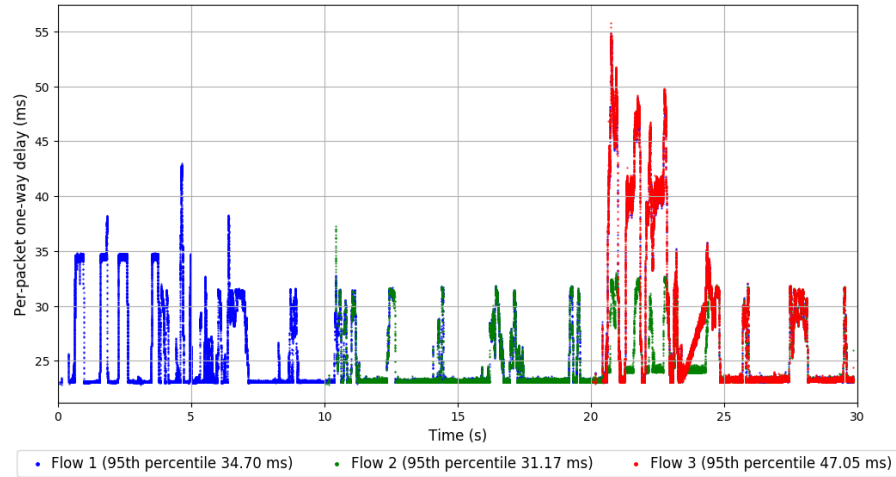
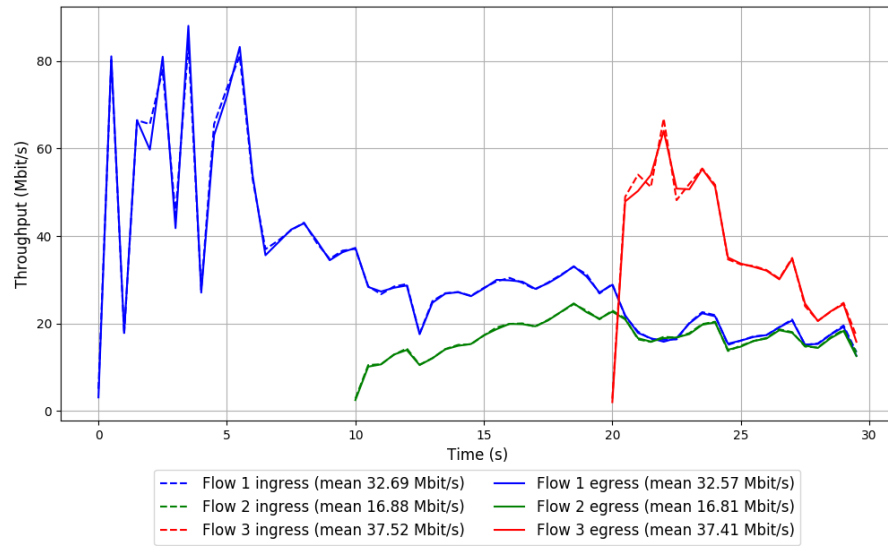
-- Flow 3:

Average throughput: 37.41 Mbit/s

95th percentile per-packet one-way delay: 47.052 ms

Loss rate: 0.80%

Run 10: Report of QUIC Cubic — Data Link

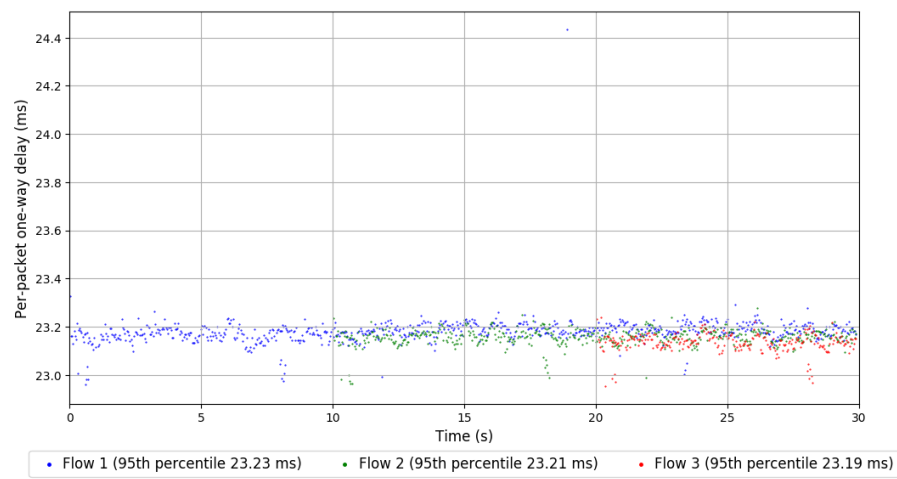
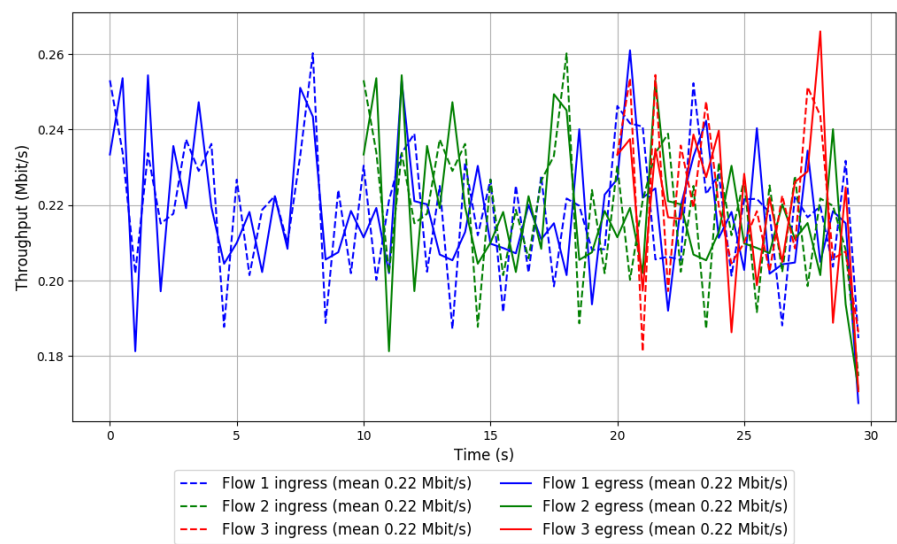


```
Run 1: Statistics of SReAM

Start at: 2018-02-13 13:29:05
End at: 2018-02-13 13:29:35
Local clock offset: -0.575 ms
Remote clock offset: 2.351 ms

# Below is generated by plot.py at 2018-02-13 22:06:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 23.221 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.227 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.209 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.188 ms
Loss rate: 0.35%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SReAM

Start at: 2018-02-13 13:53:40

End at: 2018-02-13 13:54:10

Local clock offset: -0.148 ms

Remote clock offset: 1.993 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 23.372 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.381 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.352 ms

Loss rate: 0.40%

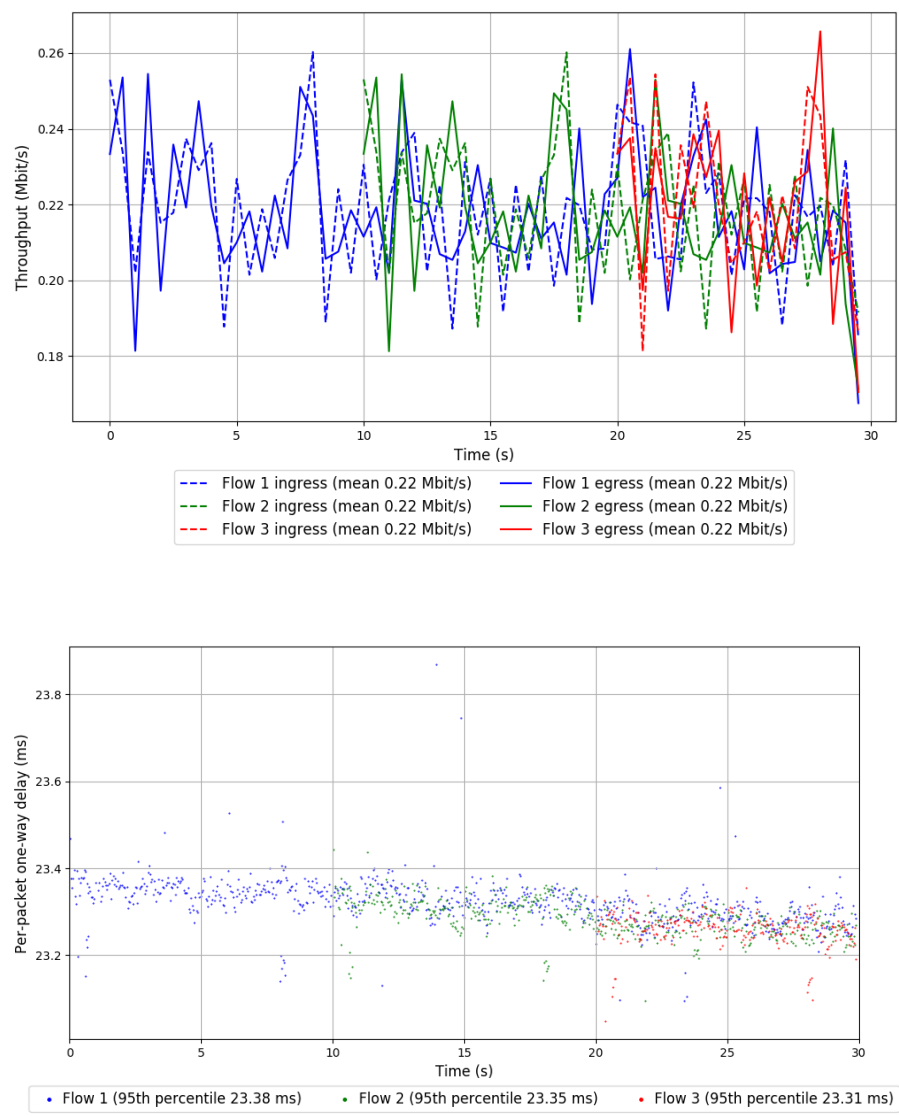
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.308 ms

Loss rate: 0.35%

Run 2: Report of SReAM — Data Link

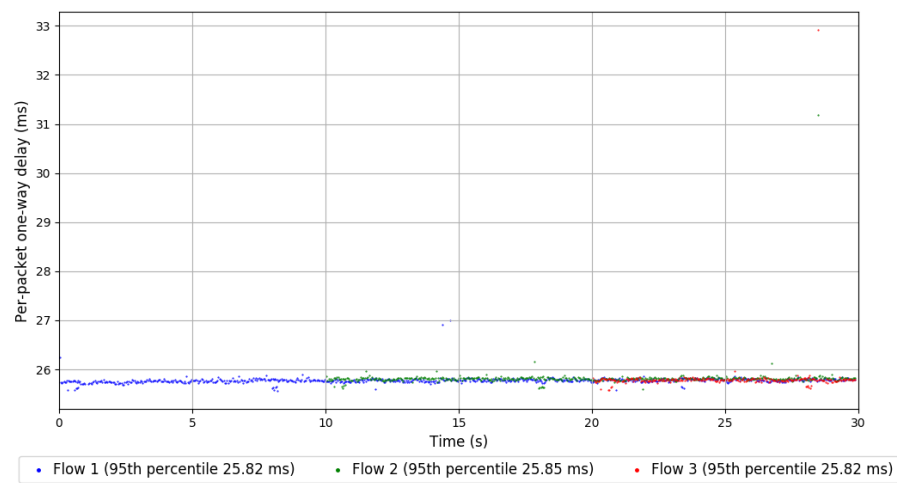
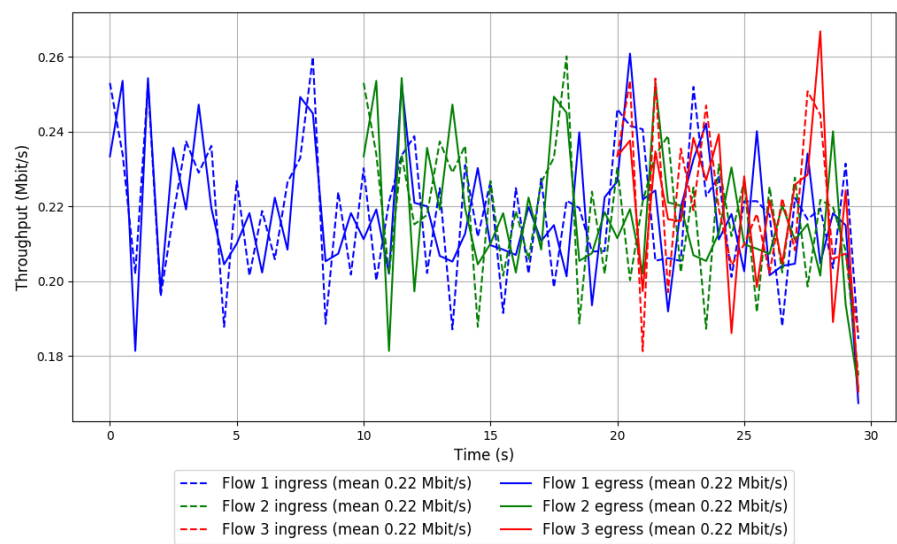


Run 3: Statistics of SReAM

Start at: 2018-02-13 14:18:12
End at: 2018-02-13 14:18:42
Local clock offset: 2.149 ms
Remote clock offset: -0.136 ms

Below is generated by plot.py at 2018-02-13 22:06:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 25.833 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 25.816 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 25.851 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 25.824 ms
Loss rate: 0.35%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2018-02-13 14:43:06

End at: 2018-02-13 14:43:36

Local clock offset: 1.071 ms

Remote clock offset: 1.754 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 26.027 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 26.615 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.774 ms

Loss rate: 0.20%

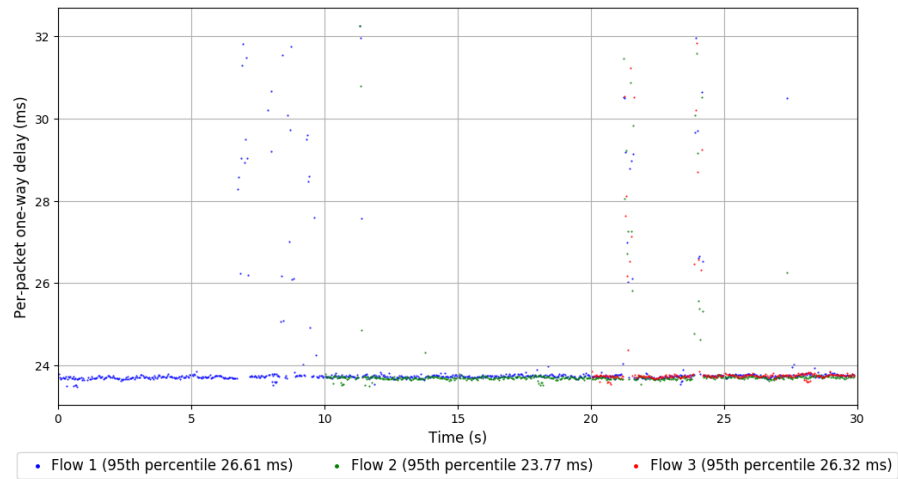
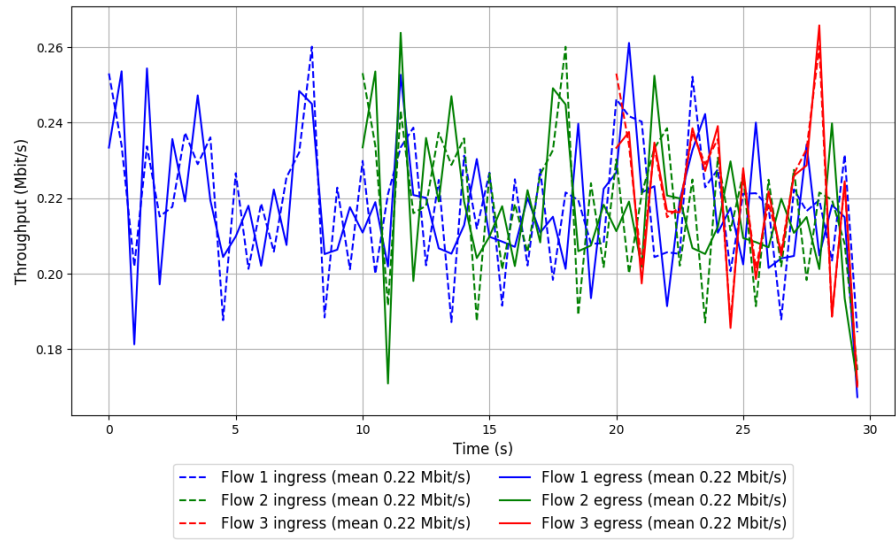
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 26.323 ms

Loss rate: 0.35%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-02-13 15:08:08

End at: 2018-02-13 15:08:38

Local clock offset: 0.896 ms

Remote clock offset: 9.796 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 23.841 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.820 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.979 ms

Loss rate: 0.40%

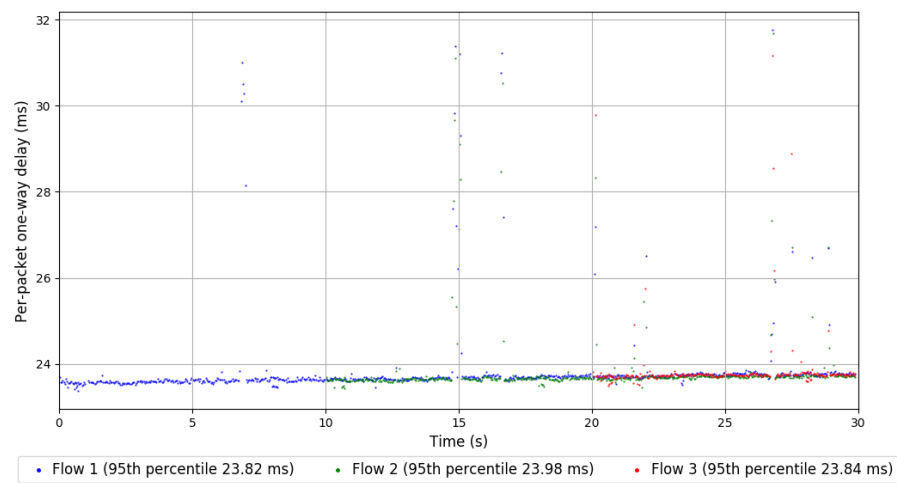
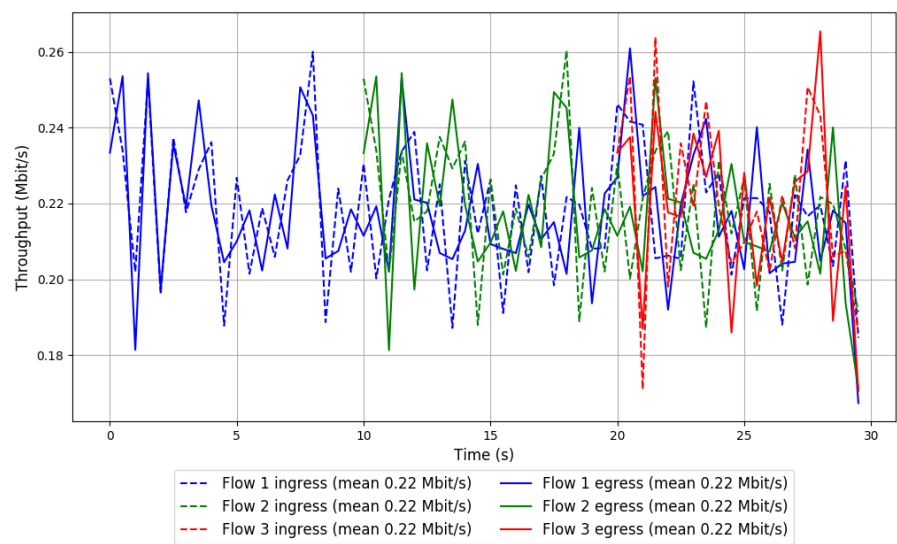
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.842 ms

Loss rate: 0.35%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-02-13 15:32:58

End at: 2018-02-13 15:33:28

Local clock offset: 0.935 ms

Remote clock offset: 11.64 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 25.950 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 25.915 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 25.976 ms

Loss rate: 0.20%

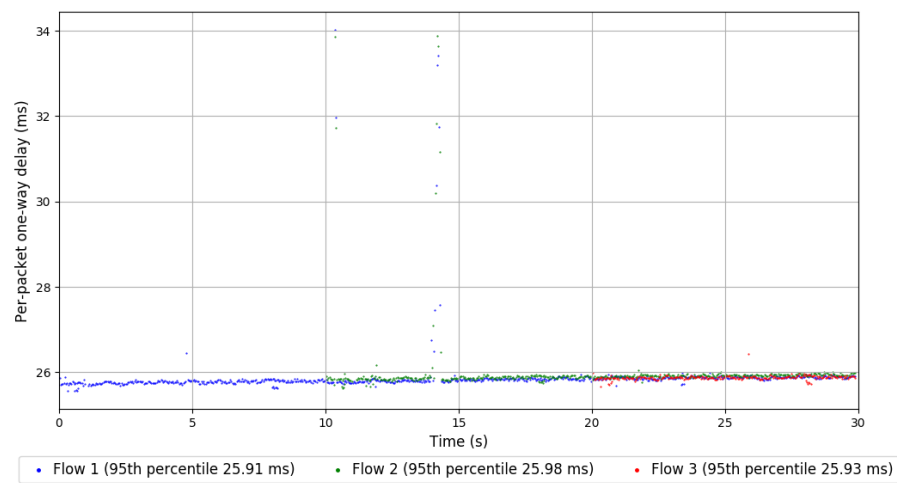
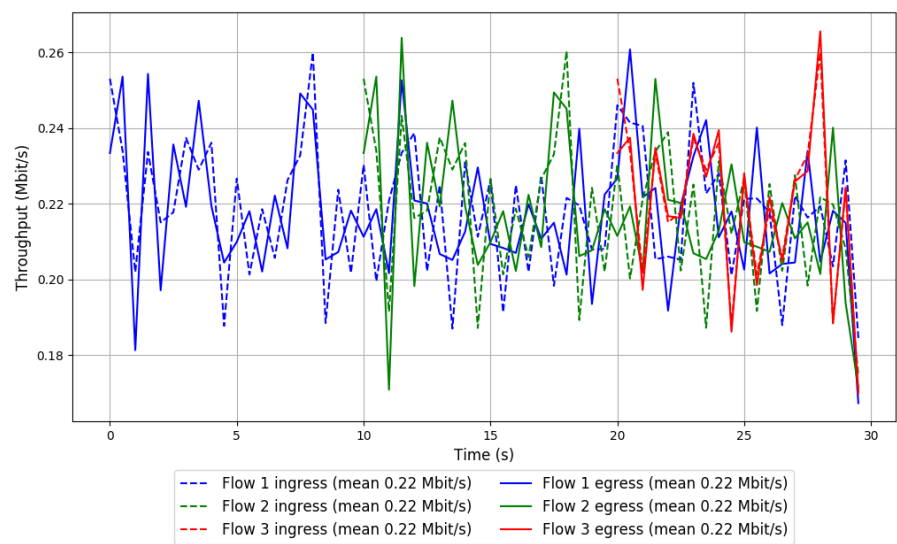
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 25.933 ms

Loss rate: 0.35%

Run 6: Report of SReAM — Data Link

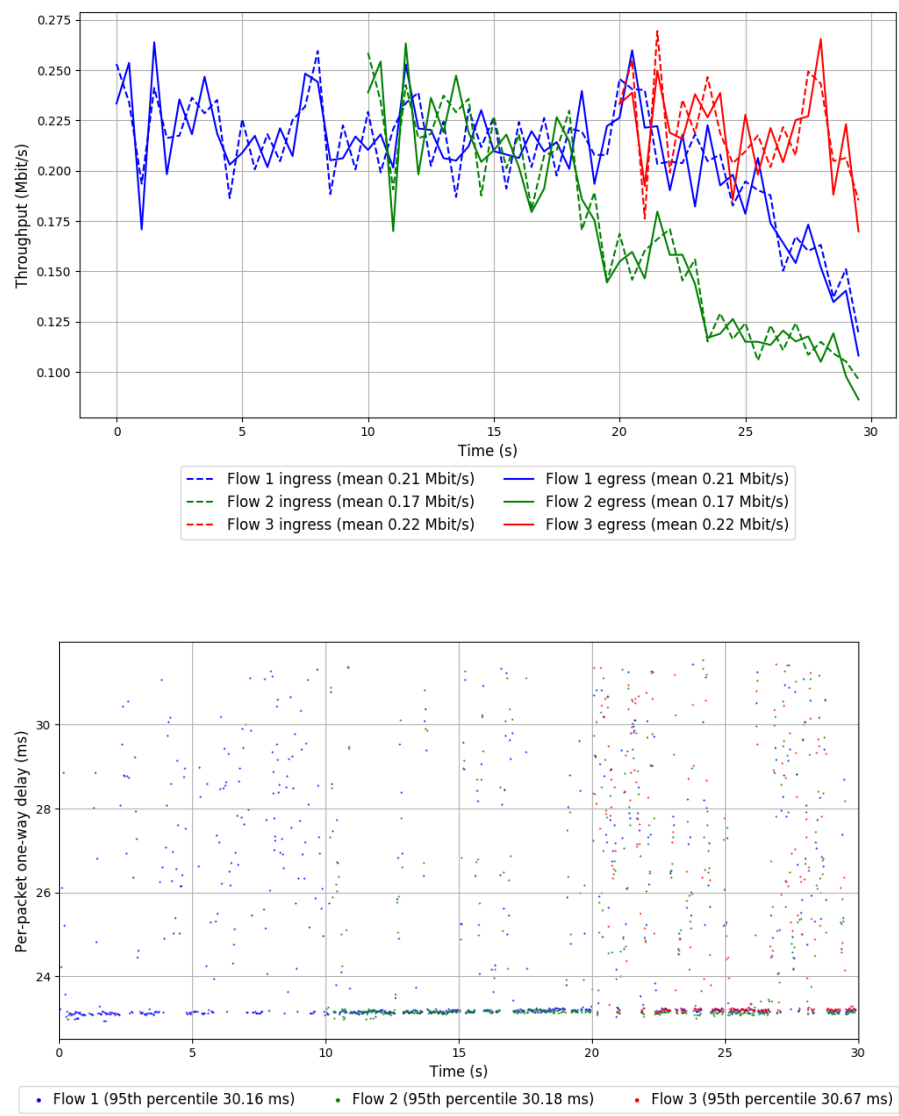


Run 7: Statistics of SReAM

Start at: 2018-02-13 15:58:36
End at: 2018-02-13 15:59:06
Local clock offset: -0.647 ms
Remote clock offset: 17.366 ms

Below is generated by plot.py at 2018-02-13 22:06:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 30.432 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.165 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 30.179 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.670 ms
Loss rate: 0.35%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-02-13 16:24:42

End at: 2018-02-13 16:25:12

Local clock offset: -0.778 ms

Remote clock offset: 7.755 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 23.596 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.580 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.611 ms

Loss rate: 0.40%

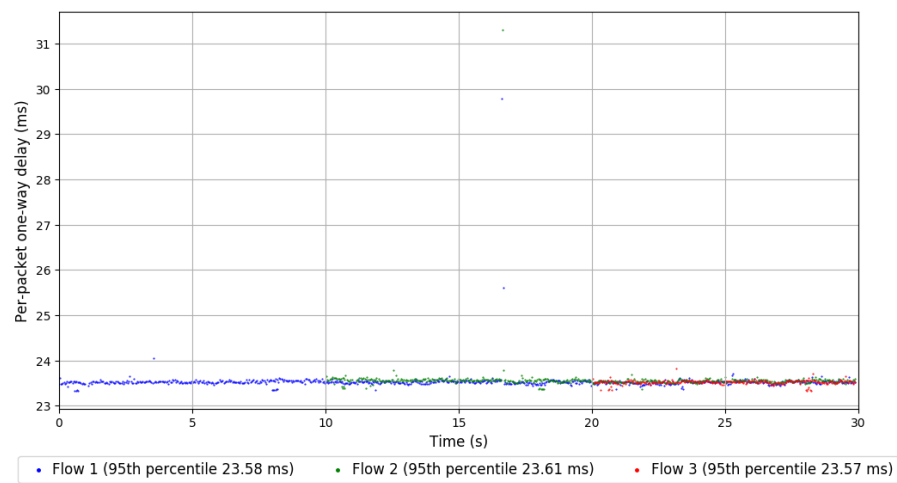
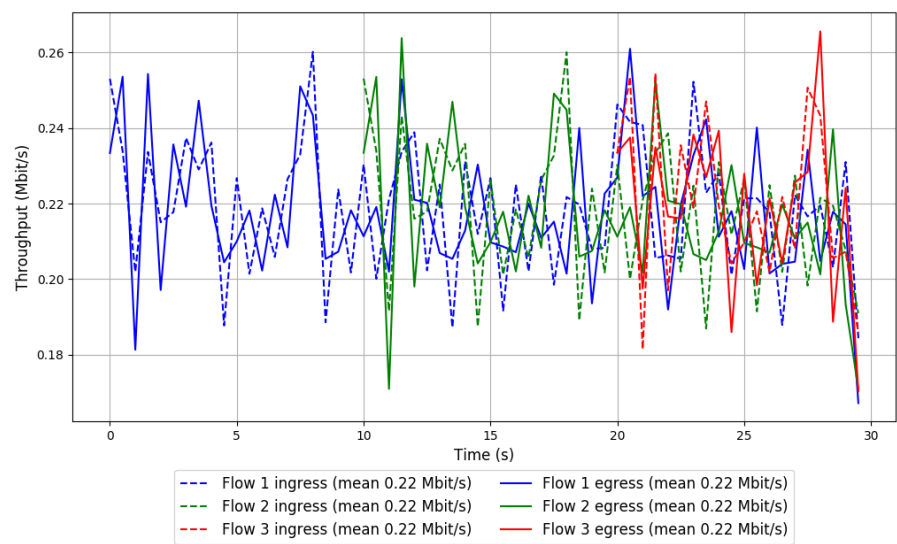
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.565 ms

Loss rate: 0.35%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-02-13 16:49:24

End at: 2018-02-13 16:49:54

Local clock offset: 0.635 ms

Remote clock offset: 8.128 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 23.452 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.469 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 23.354 ms

Loss rate: 0.62%

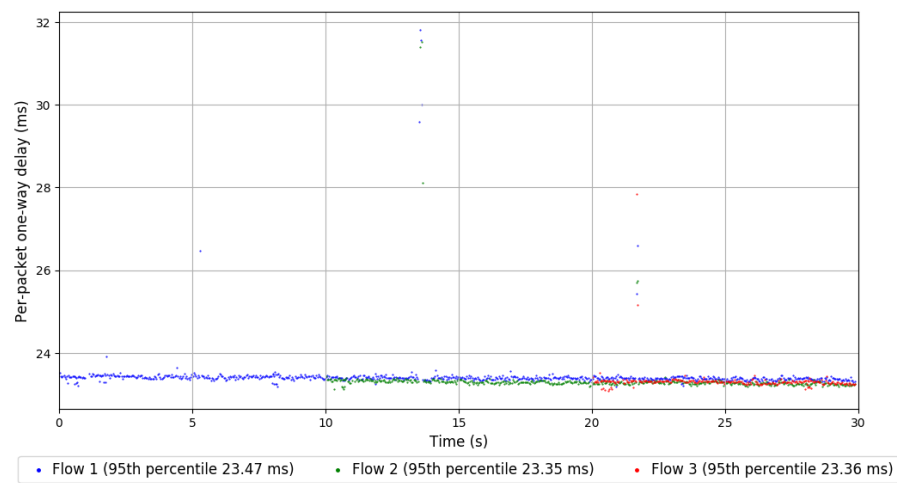
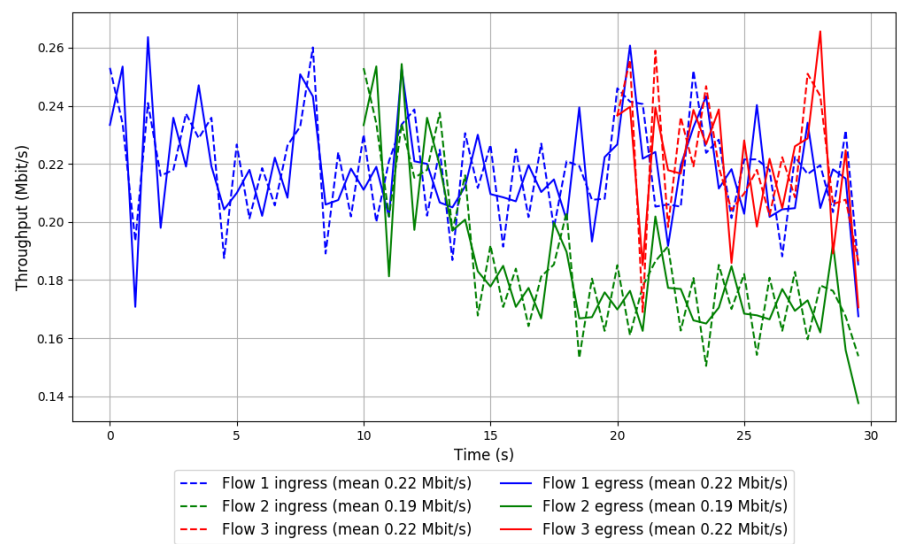
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.358 ms

Loss rate: 0.35%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-02-13 17:14:00

End at: 2018-02-13 17:14:30

Local clock offset: 2.665 ms

Remote clock offset: 7.684 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 23.222 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.212 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.209 ms

Loss rate: 0.40%

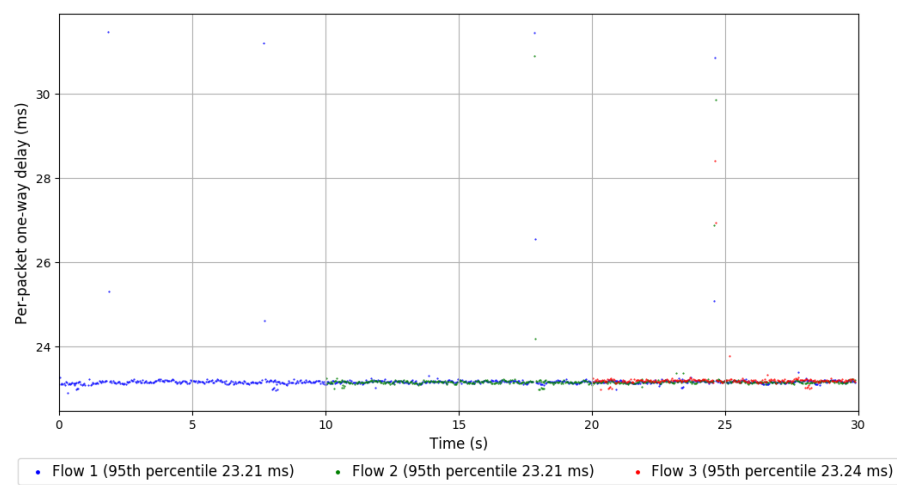
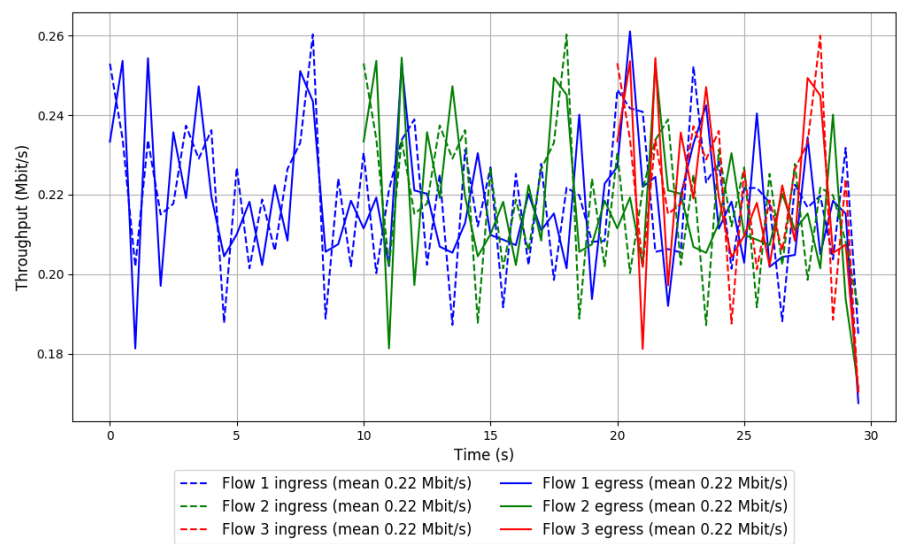
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 23.239 ms

Loss rate: 0.35%

Run 10: Report of SCReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-02-13 13:44:00

End at: 2018-02-13 13:44:30

Local clock offset: -0.708 ms

Remote clock offset: 0.497 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 26.583 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 26.457 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 26.591 ms

Loss rate: 0.19%

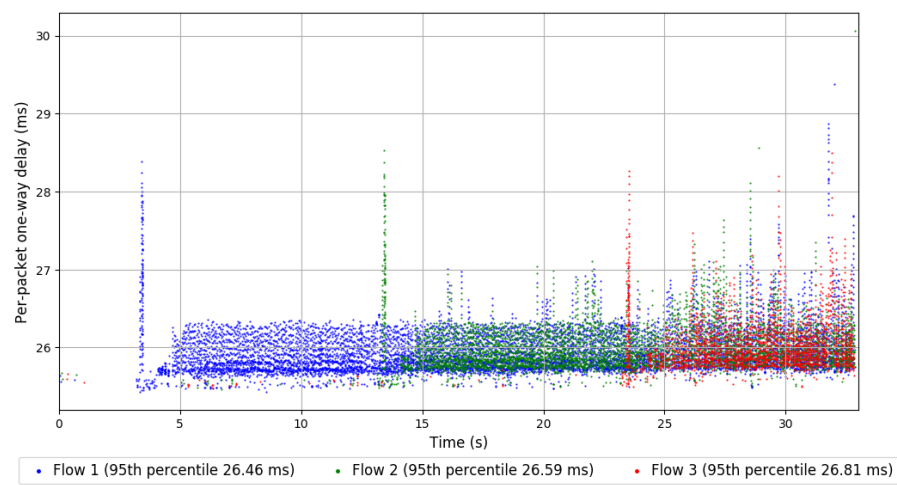
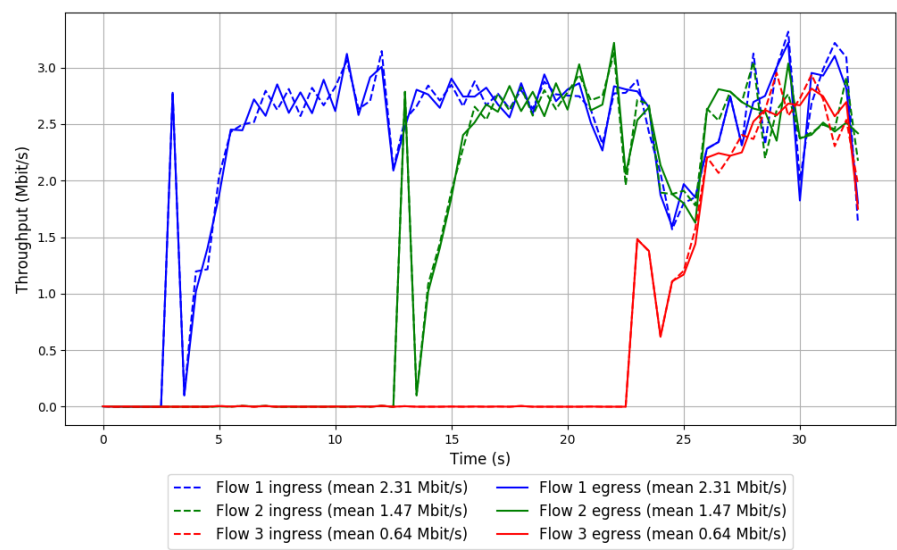
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 26.810 ms

Loss rate: 0.52%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-13 14:08:40

End at: 2018-02-13 14:09:10

Local clock offset: 1.789 ms

Remote clock offset: 1.84 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 24.300 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 24.125 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 24.388 ms

Loss rate: 0.45%

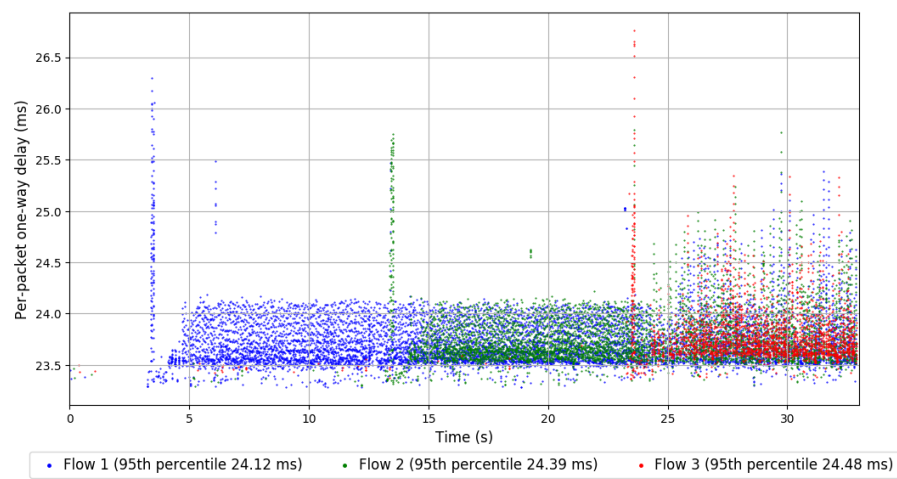
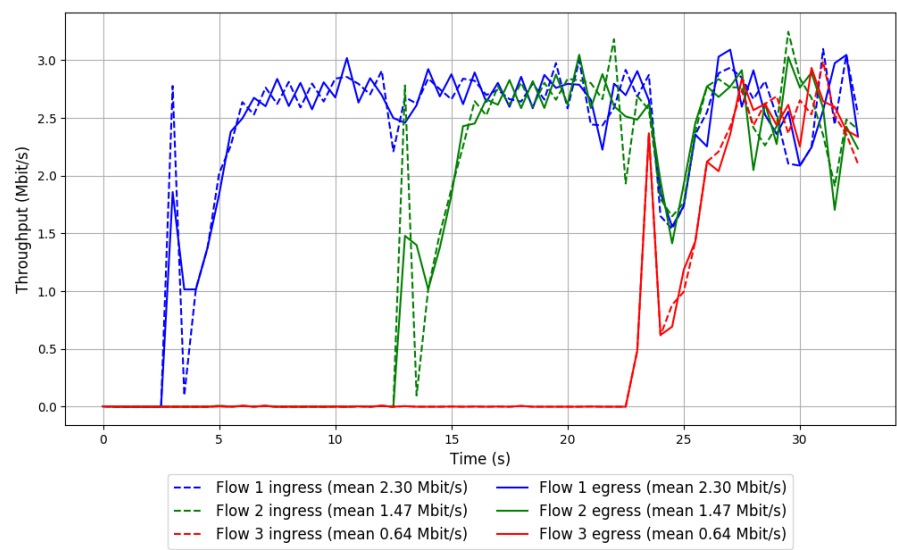
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 24.485 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-13 14:33:16

End at: 2018-02-13 14:33:46

Local clock offset: 1.549 ms

Remote clock offset: 1.884 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.21 Mbit/s

95th percentile per-packet one-way delay: 30.176 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 2.75 Mbit/s

95th percentile per-packet one-way delay: 30.140 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 30.385 ms

Loss rate: 0.50%

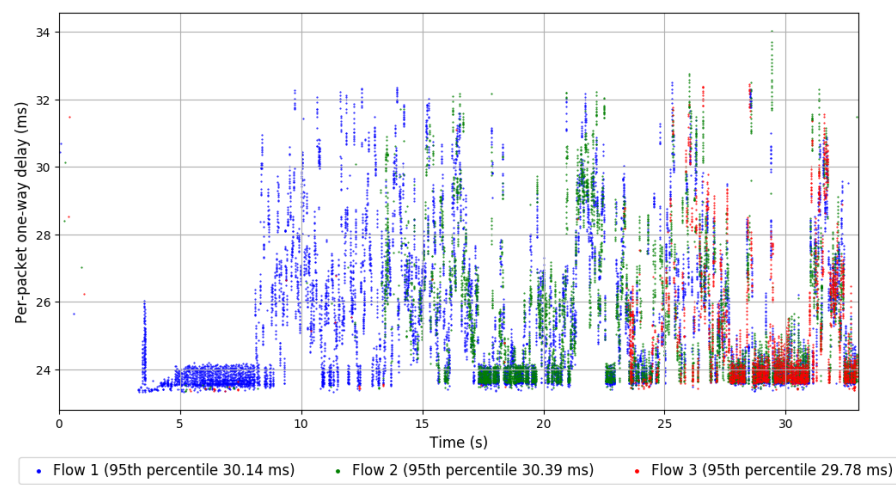
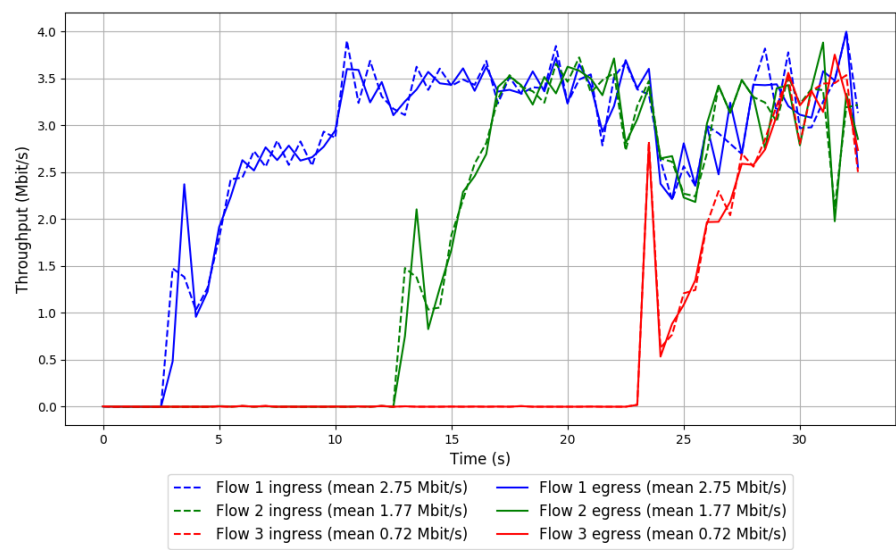
-- Flow 3:

Average throughput: 0.72 Mbit/s

95th percentile per-packet one-way delay: 29.776 ms

Loss rate: 0.09%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-13 14:58:16

End at: 2018-02-13 14:58:46

Local clock offset: 0.707 ms

Remote clock offset: 6.25 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.78 Mbit/s

95th percentile per-packet one-way delay: 24.836 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 24.668 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 24.881 ms

Loss rate: 0.46%

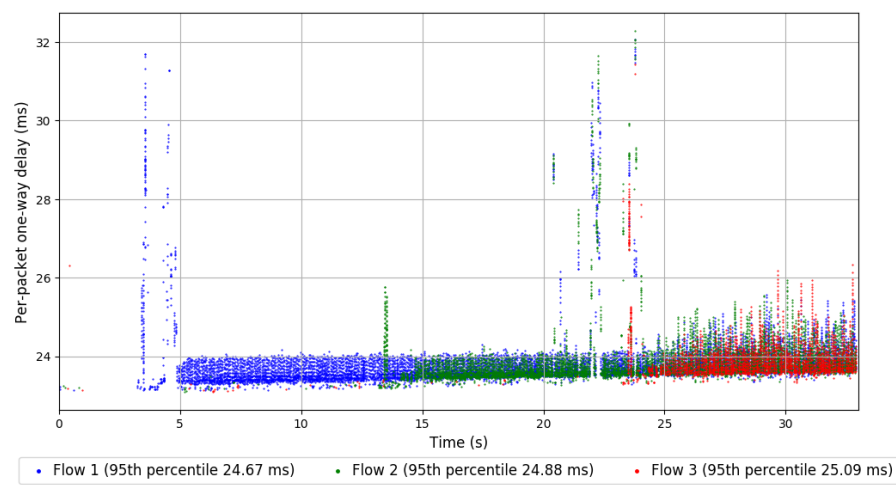
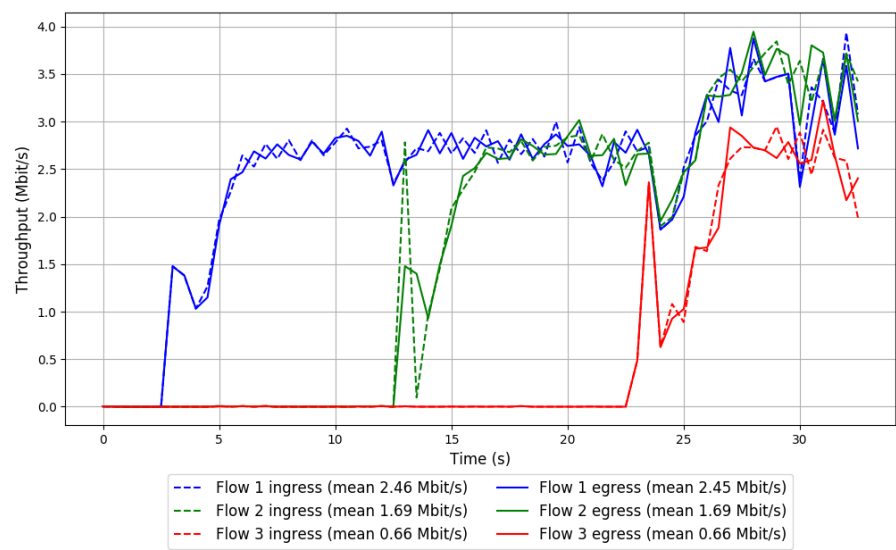
-- Flow 3:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 25.086 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link

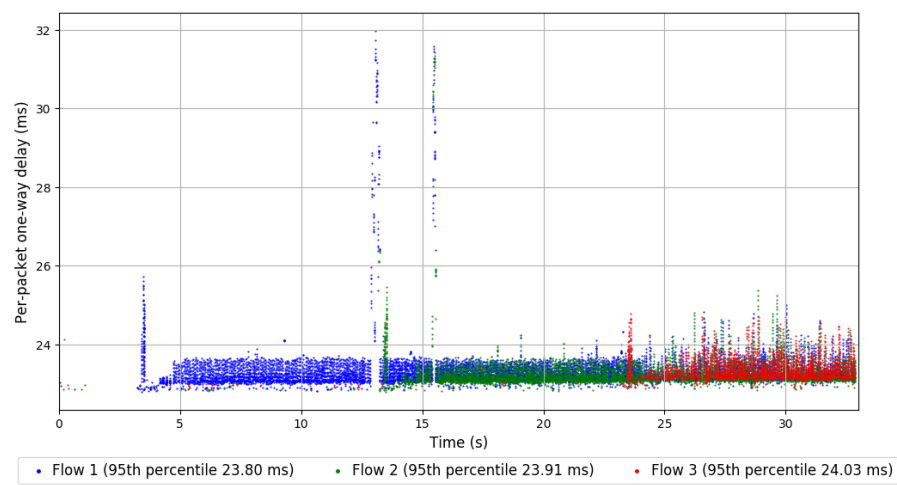
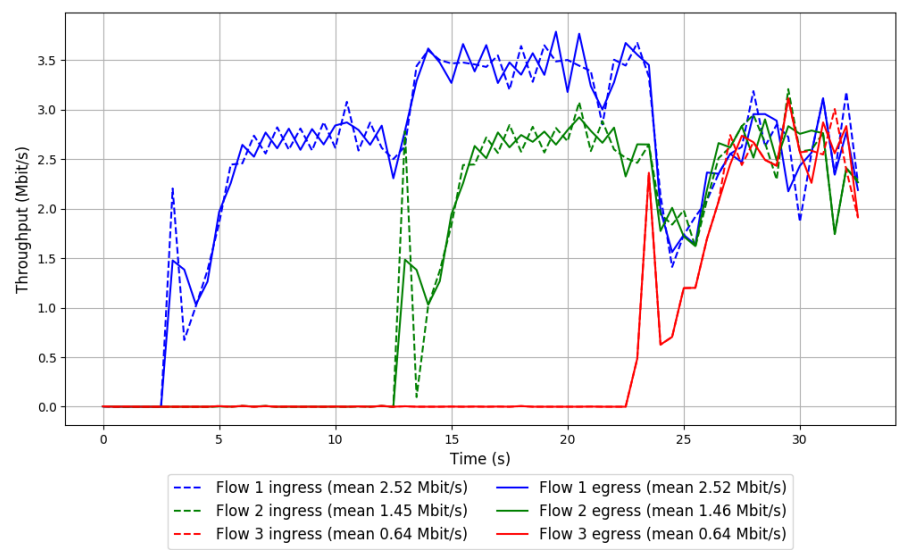


Run 5: Statistics of WebRTC media

Start at: 2018-02-13 15:23:18
End at: 2018-02-13 15:23:48
Local clock offset: 0.862 ms
Remote clock offset: 13.011 ms

Below is generated by plot.py at 2018-02-13 22:06:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.59 Mbit/s
95th percentile per-packet one-way delay: 23.895 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 2.52 Mbit/s
95th percentile per-packet one-way delay: 23.799 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 23.913 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 24.029 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-13 15:48:12

End at: 2018-02-13 15:48:42

Local clock offset: -0.353 ms

Remote clock offset: 13.44 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.79 Mbit/s

95th percentile per-packet one-way delay: 29.804 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 29.607 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 30.535 ms

Loss rate: 0.55%

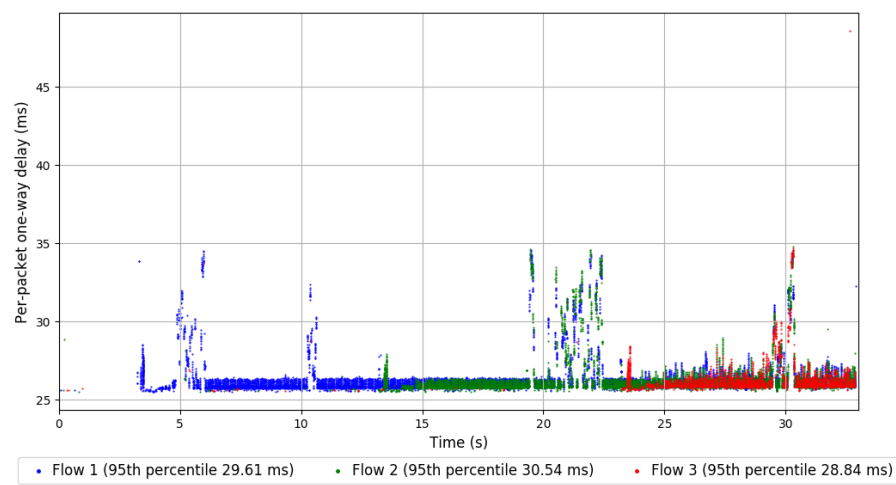
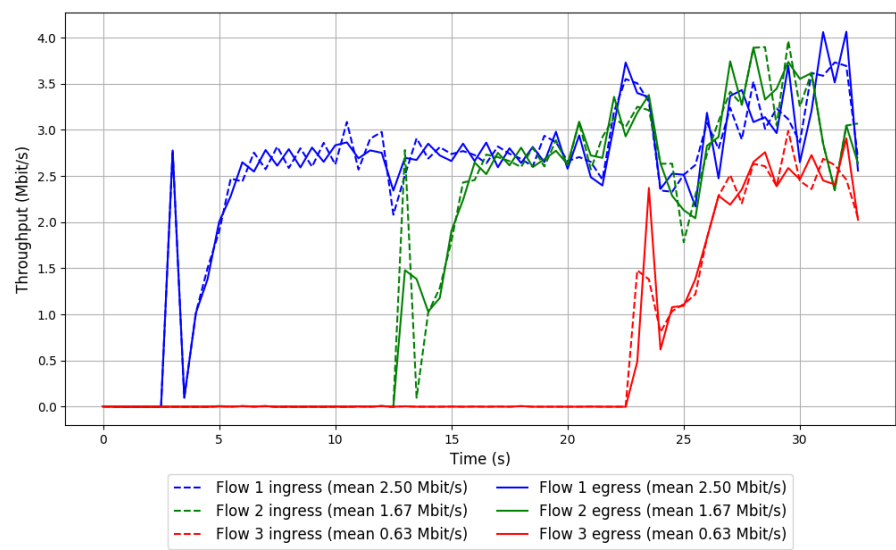
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 28.835 ms

Loss rate: 0.10%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-13 16:15:05

End at: 2018-02-13 16:15:35

Local clock offset: -0.79 ms

Remote clock offset: 9.605 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 24.102 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 23.928 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 24.228 ms

Loss rate: 0.34%

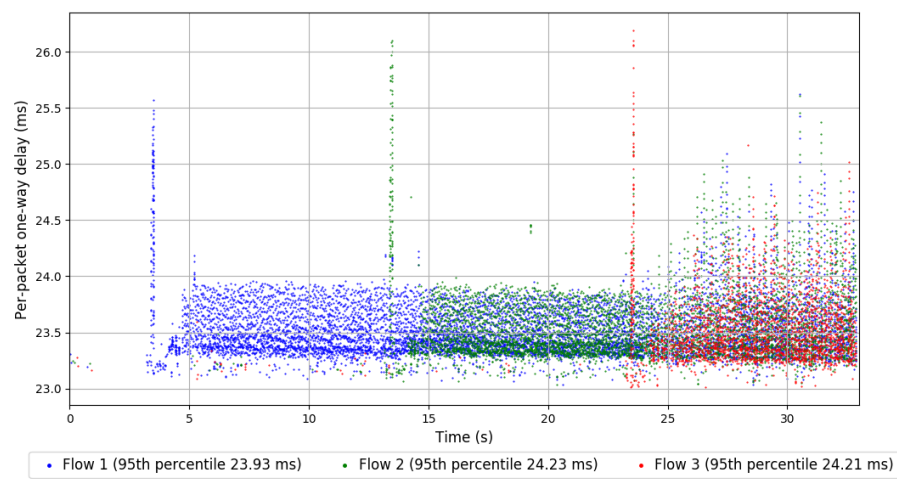
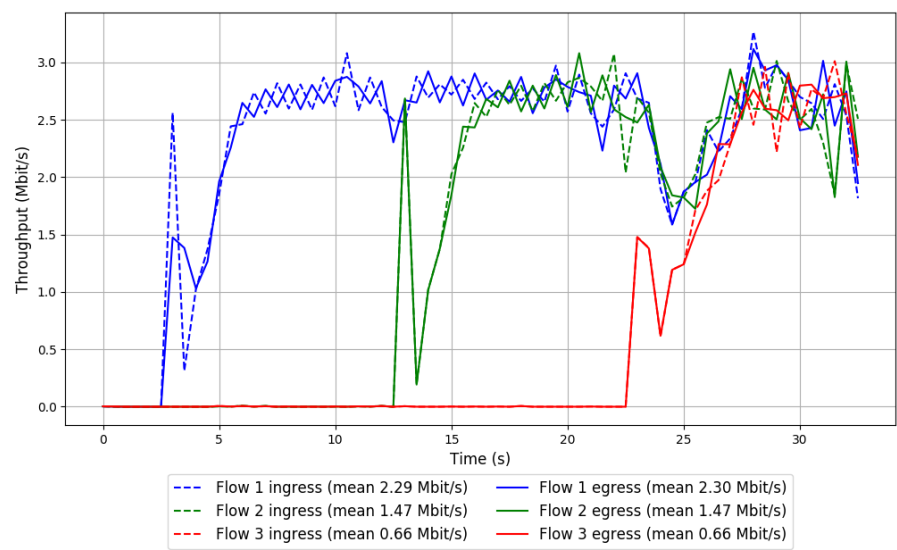
-- Flow 3:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 24.212 ms

Loss rate: 0.49%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-13 16:39:41

End at: 2018-02-13 16:40:11

Local clock offset: -0.906 ms

Remote clock offset: 7.859 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 24.183 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 24.019 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 24.230 ms

Loss rate: 0.45%

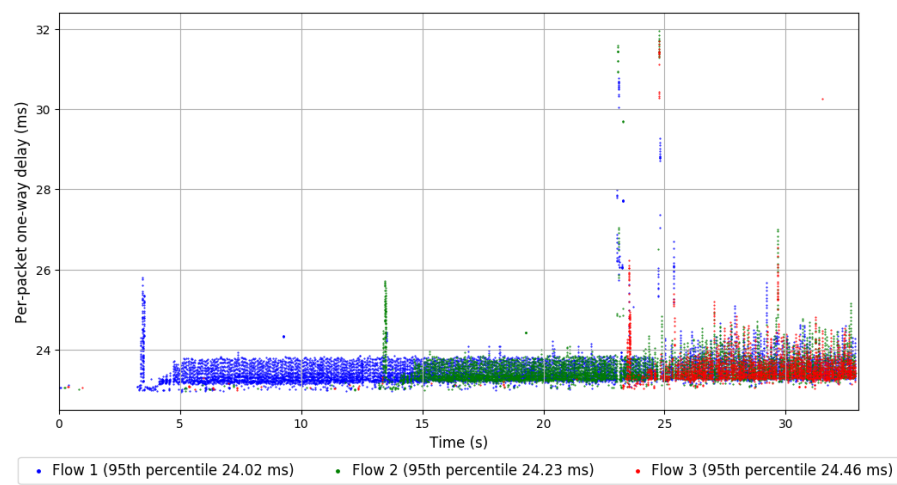
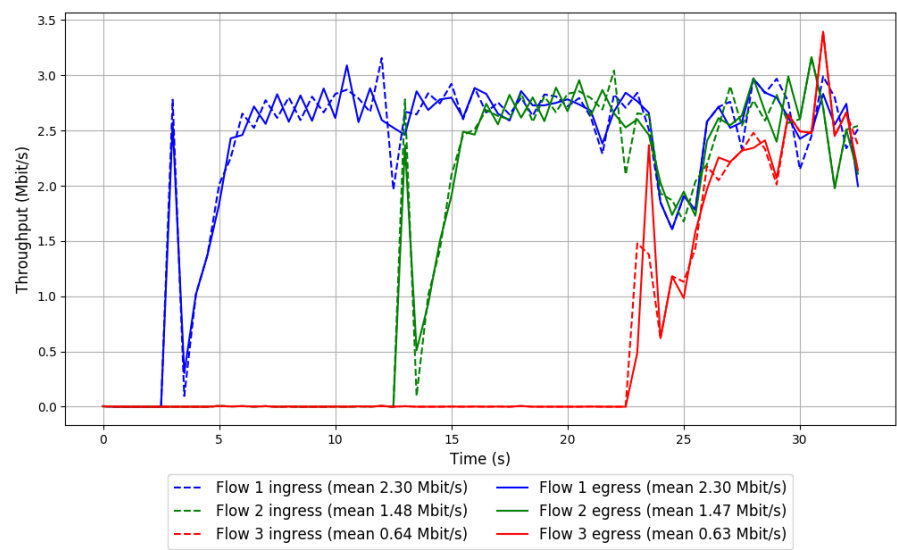
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 24.465 ms

Loss rate: 0.55%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-13 17:04:29

End at: 2018-02-13 17:04:59

Local clock offset: 2.049 ms

Remote clock offset: 7.074 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.18 Mbit/s

95th percentile per-packet one-way delay: 26.704 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 2.72 Mbit/s

95th percentile per-packet one-way delay: 26.815 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 26.891 ms

Loss rate: 0.49%

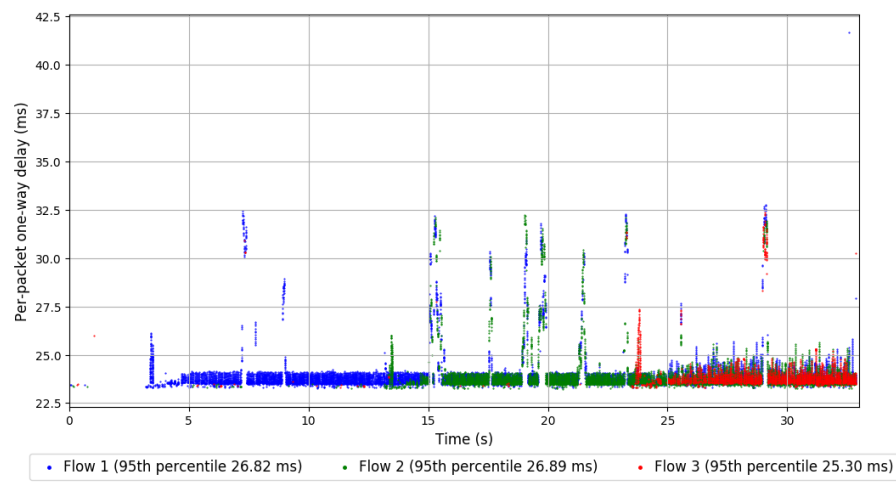
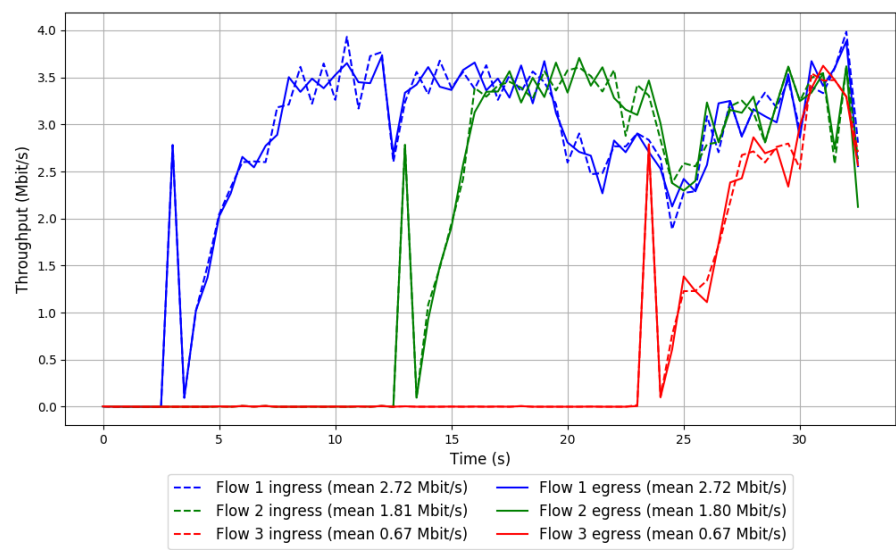
-- Flow 3:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 25.296 ms

Loss rate: 0.38%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-13 17:29:01

End at: 2018-02-13 17:29:31

Local clock offset: 1.304 ms

Remote clock offset: 7.671 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.72 Mbit/s

95th percentile per-packet one-way delay: 26.668 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 25.800 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 27.279 ms

Loss rate: 0.57%

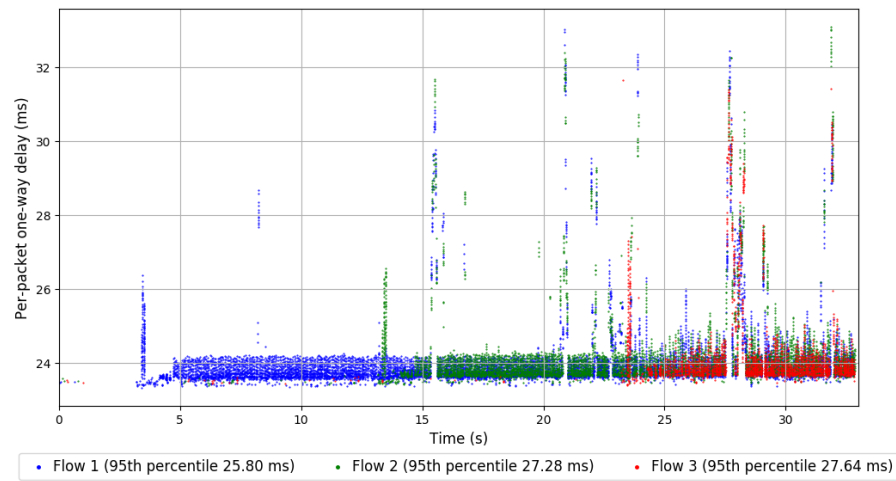
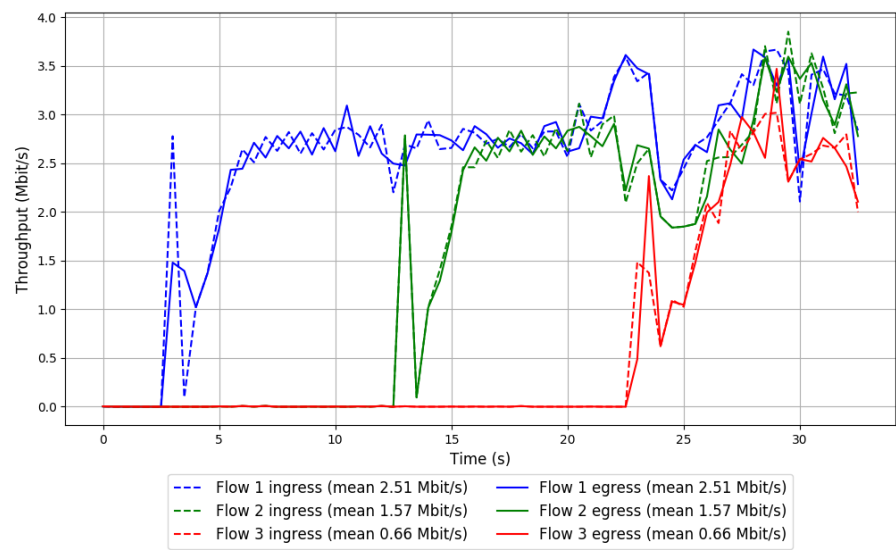
-- Flow 3:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 27.637 ms

Loss rate: 0.52%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-13 13:42:42

End at: 2018-02-13 13:43:12

Local clock offset: -0.663 ms

Remote clock offset: 2.519 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.88 Mbit/s

95th percentile per-packet one-way delay: 30.514 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 15.20 Mbit/s

95th percentile per-packet one-way delay: 30.692 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 14.84 Mbit/s

95th percentile per-packet one-way delay: 30.732 ms

Loss rate: 0.36%

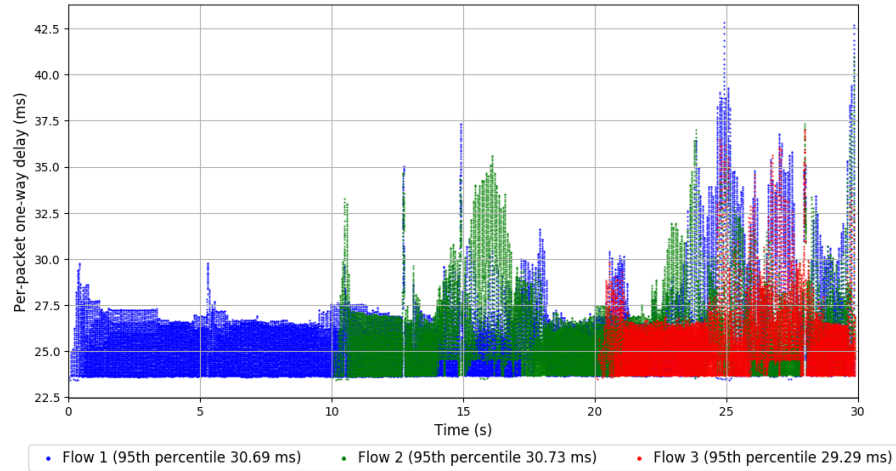
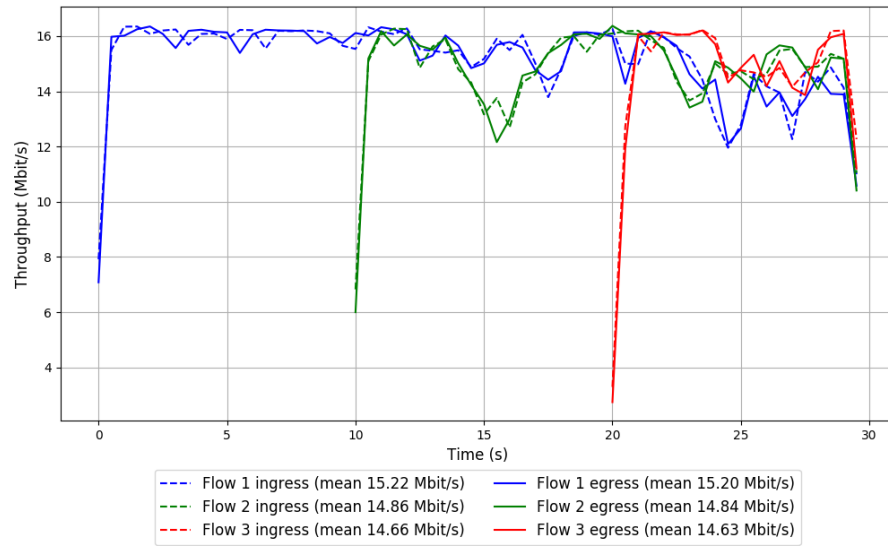
-- Flow 3:

Average throughput: 14.63 Mbit/s

95th percentile per-packet one-way delay: 29.286 ms

Loss rate: 0.77%

Run 1: Report of Sprout — Data Link

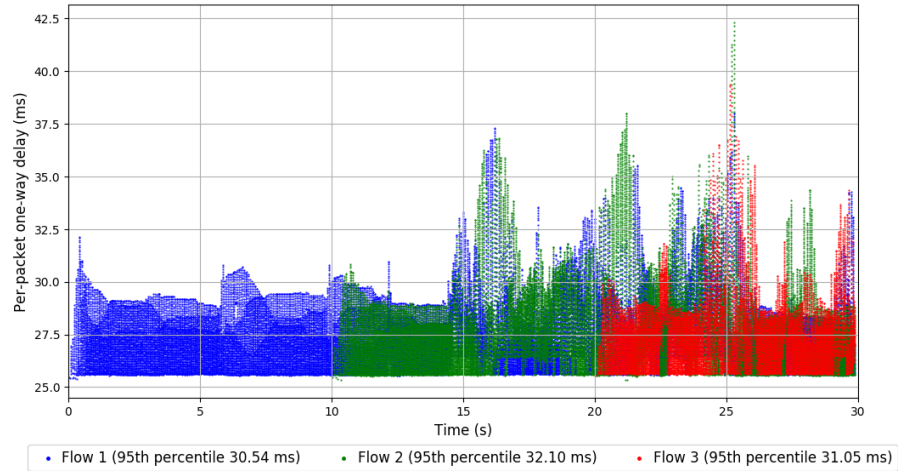
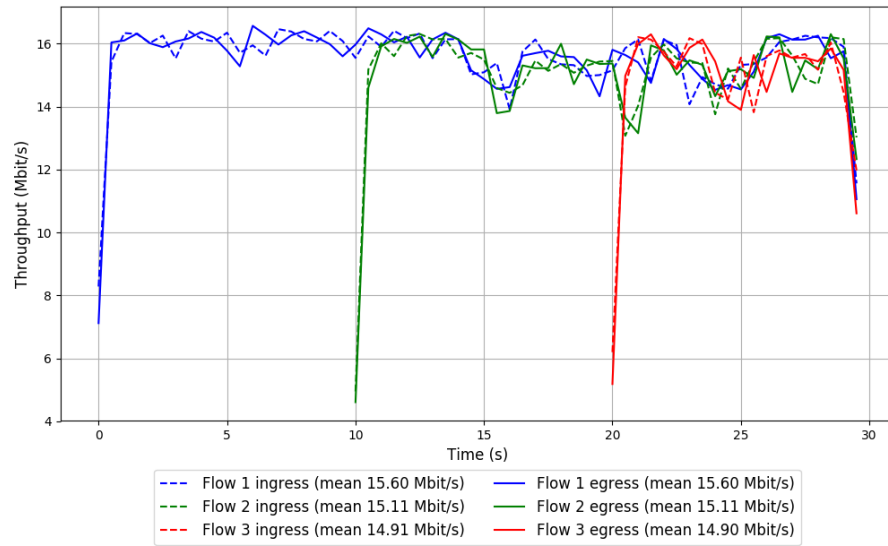


Run 2: Statistics of Sprout

Start at: 2018-02-13 14:07:21
End at: 2018-02-13 14:07:51
Local clock offset: 1.647 ms
Remote clock offset: -0.253 ms

Below is generated by plot.py at 2018-02-13 22:06:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 30.54 Mbit/s
95th percentile per-packet one-way delay: 31.164 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 15.60 Mbit/s
95th percentile per-packet one-way delay: 30.543 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 15.11 Mbit/s
95th percentile per-packet one-way delay: 32.105 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 14.90 Mbit/s
95th percentile per-packet one-way delay: 31.054 ms
Loss rate: 0.65%

Run 2: Report of Sprout — Data Link

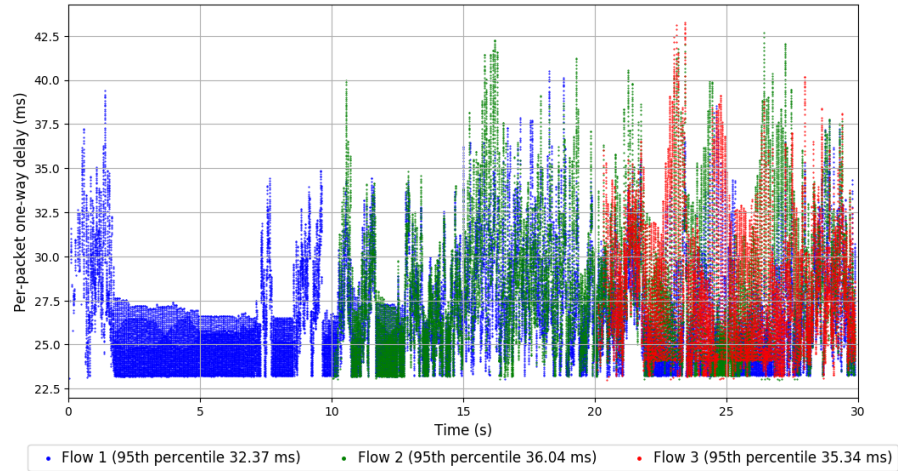
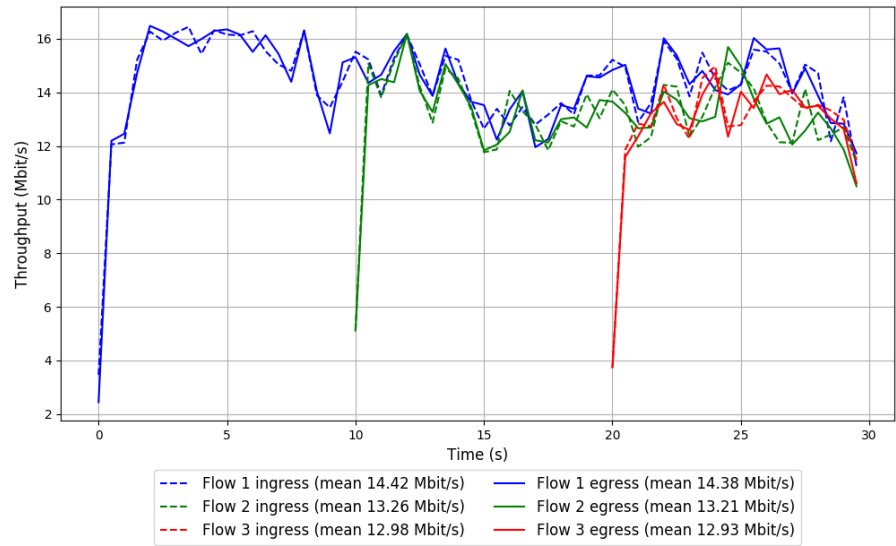


Run 3: Statistics of Sprout

Start at: 2018-02-13 14:31:57
End at: 2018-02-13 14:32:27
Local clock offset: 1.626 ms
Remote clock offset: 2.262 ms

```
# Below is generated by plot.py at 2018-02-13 22:06:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.42 Mbit/s
95th percentile per-packet one-way delay: 34.245 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 14.38 Mbit/s
95th percentile per-packet one-way delay: 32.371 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 13.21 Mbit/s
95th percentile per-packet one-way delay: 36.043 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 35.341 ms
Loss rate: 0.83%
```


Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-13 14:56:58

End at: 2018-02-13 14:57:28

Local clock offset: 0.728 ms

Remote clock offset: 5.069 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.15 Mbit/s

95th percentile per-packet one-way delay: 33.425 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 14.61 Mbit/s

95th percentile per-packet one-way delay: 33.776 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 14.60 Mbit/s

95th percentile per-packet one-way delay: 33.981 ms

Loss rate: 0.43%

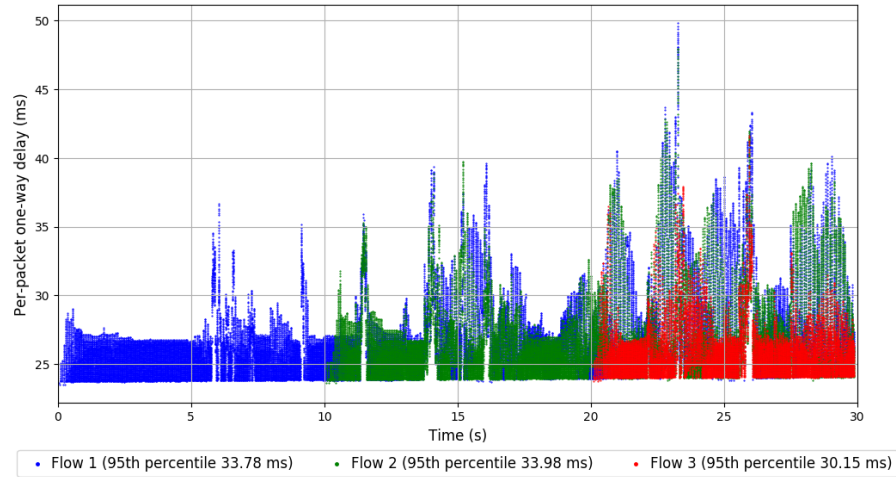
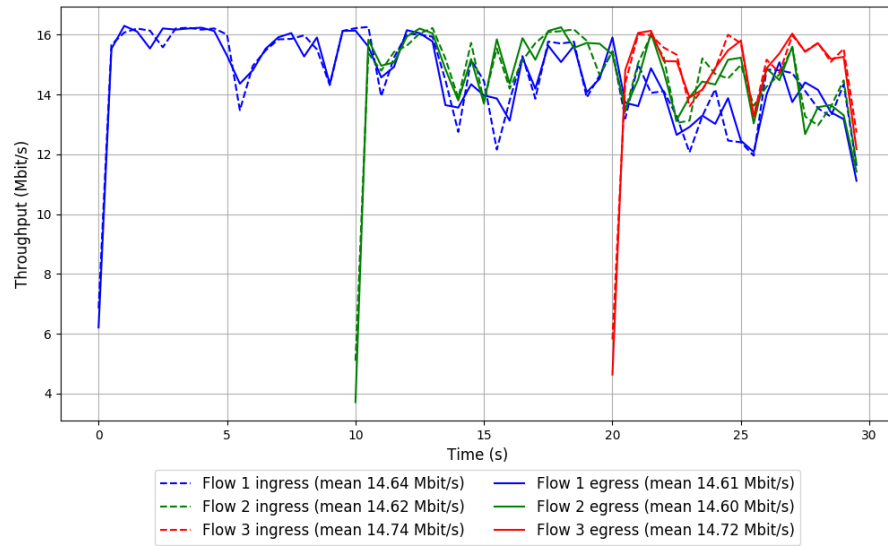
-- Flow 3:

Average throughput: 14.72 Mbit/s

95th percentile per-packet one-way delay: 30.154 ms

Loss rate: 0.56%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-13 15:22:00

End at: 2018-02-13 15:22:30

Local clock offset: 0.869 ms

Remote clock offset: 12.69 ms

Below is generated by plot.py at 2018-02-13 22:06:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 30.33 Mbit/s

95th percentile per-packet one-way delay: 29.780 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 15.64 Mbit/s

95th percentile per-packet one-way delay: 28.035 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 15.15 Mbit/s

95th percentile per-packet one-way delay: 29.473 ms

Loss rate: 0.29%

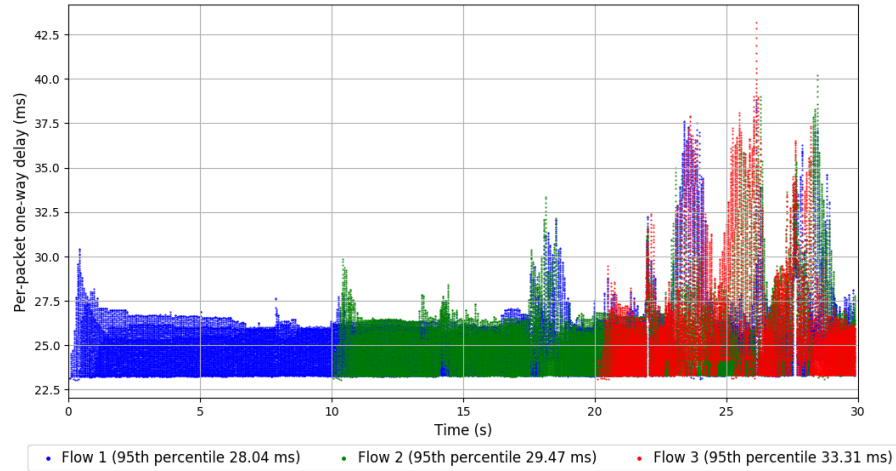
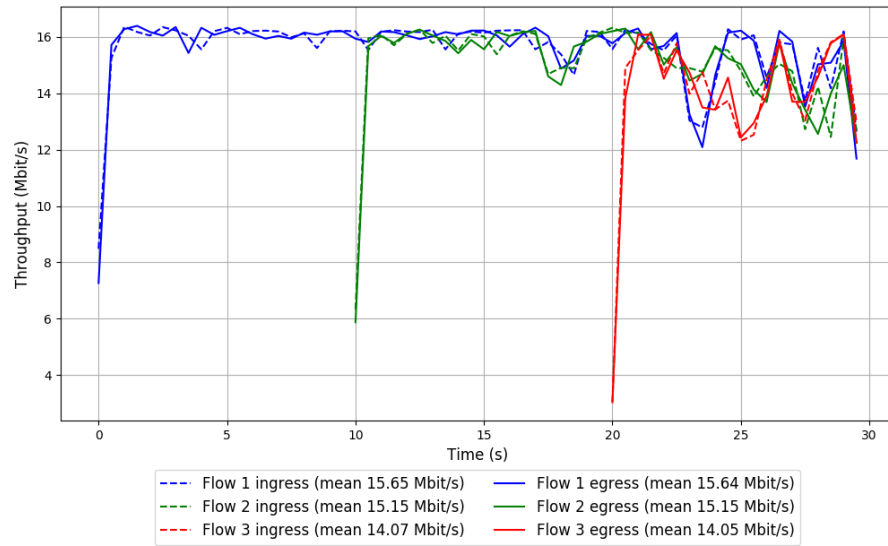
-- Flow 3:

Average throughput: 14.05 Mbit/s

95th percentile per-packet one-way delay: 33.312 ms

Loss rate: 0.48%

Run 5: Report of Sprout — Data Link

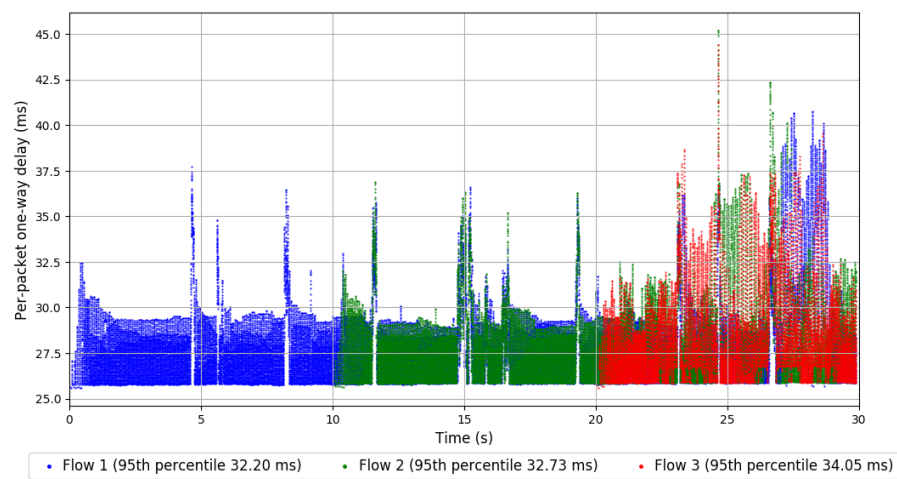
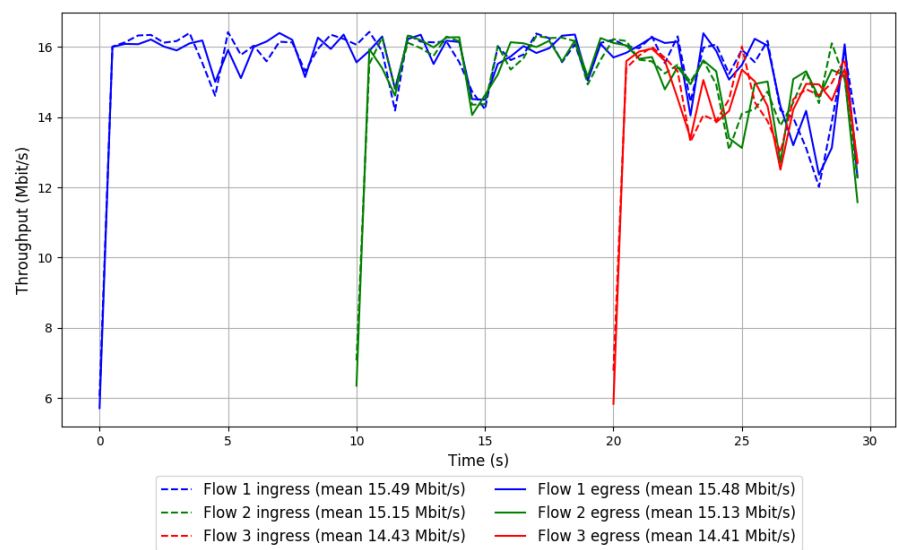


Run 6: Statistics of Sprout

Start at: 2018-02-13 15:46:53
End at: 2018-02-13 15:47:23
Local clock offset: -0.331 ms
Remote clock offset: 13.204 ms

Below is generated by plot.py at 2018-02-13 22:06:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 30.29 Mbit/s
95th percentile per-packet one-way delay: 32.903 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 15.48 Mbit/s
95th percentile per-packet one-way delay: 32.198 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 15.13 Mbit/s
95th percentile per-packet one-way delay: 32.725 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 14.41 Mbit/s
95th percentile per-packet one-way delay: 34.047 ms
Loss rate: 0.52%

Run 6: Report of Sprout — Data Link

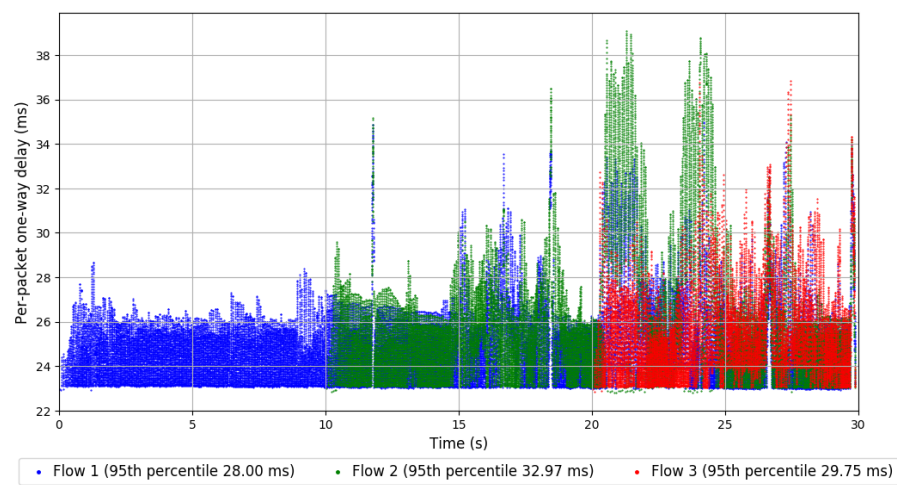
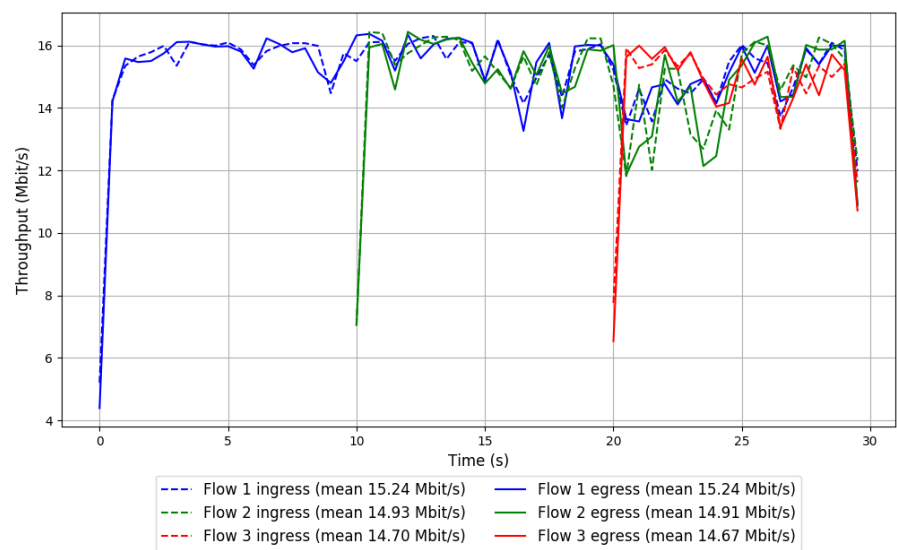


Run 7: Statistics of Sprout

Start at: 2018-02-13 16:13:44
End at: 2018-02-13 16:14:14
Local clock offset: -0.789 ms
Remote clock offset: 10.222 ms

```
# Below is generated by plot.py at 2018-02-13 22:06:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.98 Mbit/s
95th percentile per-packet one-way delay: 30.054 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 15.24 Mbit/s
95th percentile per-packet one-way delay: 27.995 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 14.91 Mbit/s
95th percentile per-packet one-way delay: 32.966 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 14.67 Mbit/s
95th percentile per-packet one-way delay: 29.754 ms
Loss rate: 0.61%
```


Run 7: Report of Sprout — Data Link

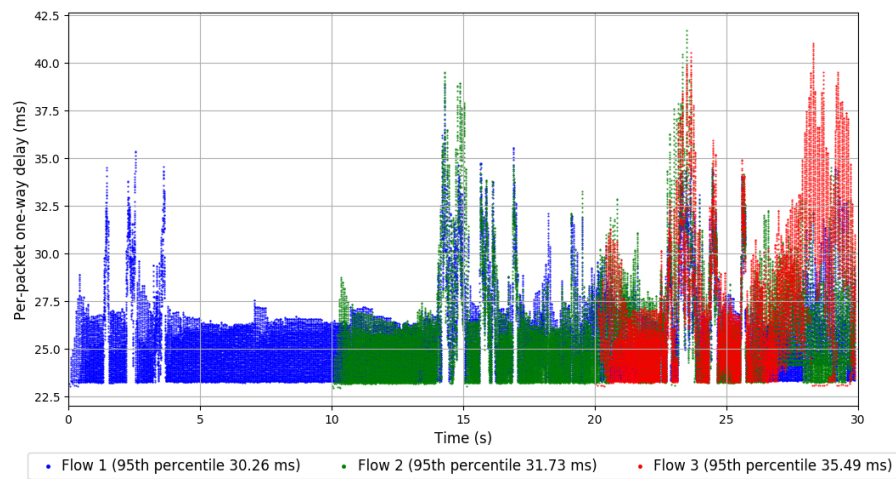
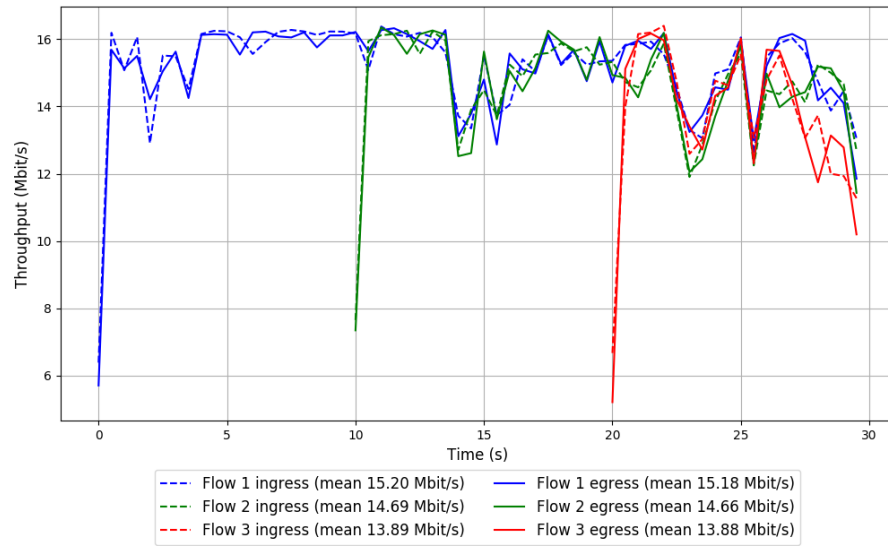


Run 8: Statistics of Sprout

Start at: 2018-02-13 16:38:23
End at: 2018-02-13 16:38:53
Local clock offset: -0.916 ms
Remote clock offset: 7.61 ms

```
# Below is generated by plot.py at 2018-02-13 22:06:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.49 Mbit/s
95th percentile per-packet one-way delay: 31.855 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 15.18 Mbit/s
95th percentile per-packet one-way delay: 30.264 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 14.66 Mbit/s
95th percentile per-packet one-way delay: 31.731 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 13.88 Mbit/s
95th percentile per-packet one-way delay: 35.492 ms
Loss rate: 0.50%
```

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-13 17:03:11

End at: 2018-02-13 17:03:41

Local clock offset: 1.976 ms

Remote clock offset: 5.234 ms

Below is generated by plot.py at 2018-02-13 22:06:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 30.29 Mbit/s

95th percentile per-packet one-way delay: 32.186 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 15.38 Mbit/s

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

Loss rate: 0.43%

-- Flow 2:

Average throughput: 15.21 Mbit/s

95th percentile per-packet one-way delay: 32.637 ms

Loss rate: 0.60%

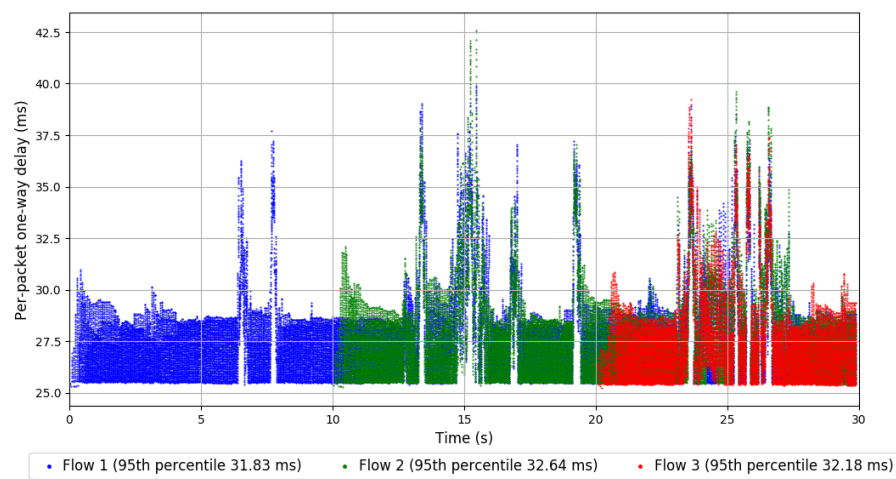
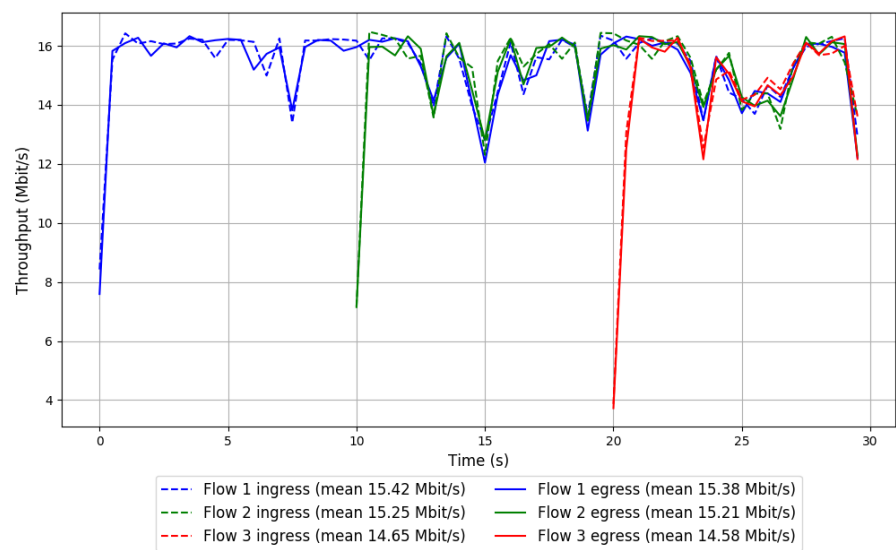
-- Flow 3:

Average throughput: 14.58 Mbit/s

95th percentile per-packet one-way delay: 32.176 ms

Loss rate: 1.06%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-13 17:27:43

End at: 2018-02-13 17:28:13

Local clock offset: 1.446 ms

Remote clock offset: 7.599 ms

Below is generated by plot.py at 2018-02-13 22:06:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.71 Mbit/s

95th percentile per-packet one-way delay: 31.538 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 15.29 Mbit/s

95th percentile per-packet one-way delay: 30.577 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 14.61 Mbit/s

95th percentile per-packet one-way delay: 31.870 ms

Loss rate: 0.51%

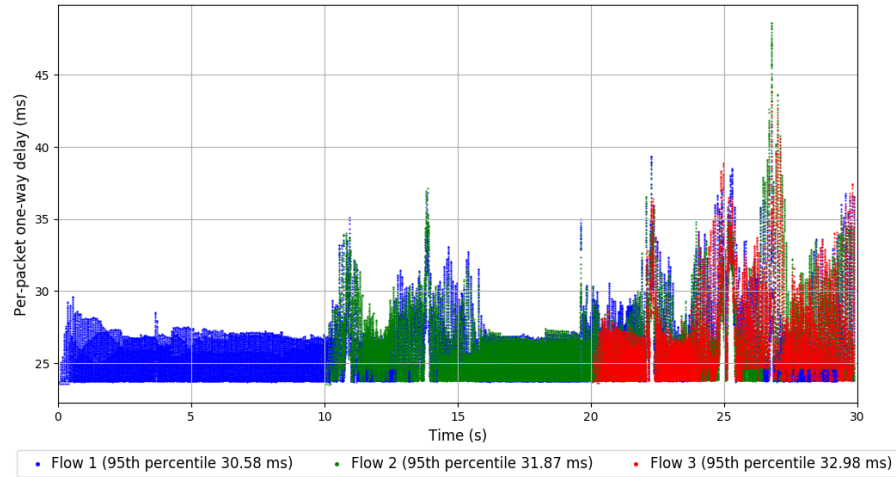
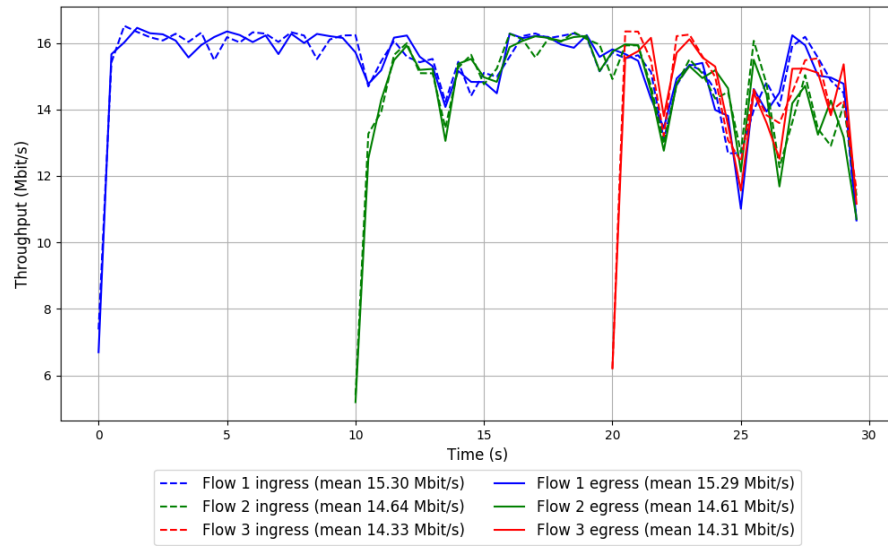
-- Flow 3:

Average throughput: 14.31 Mbit/s

95th percentile per-packet one-way delay: 32.975 ms

Loss rate: 0.61%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-02-13 13:34:26

End at: 2018-02-13 13:34:56

Local clock offset: -0.498 ms

Remote clock offset: 2.169 ms

Below is generated by plot.py at 2018-02-13 22:08:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.35 Mbit/s

95th percentile per-packet one-way delay: 45.586 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 51.89 Mbit/s

95th percentile per-packet one-way delay: 45.315 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 42.59 Mbit/s

95th percentile per-packet one-way delay: 59.968 ms

Loss rate: 0.35%

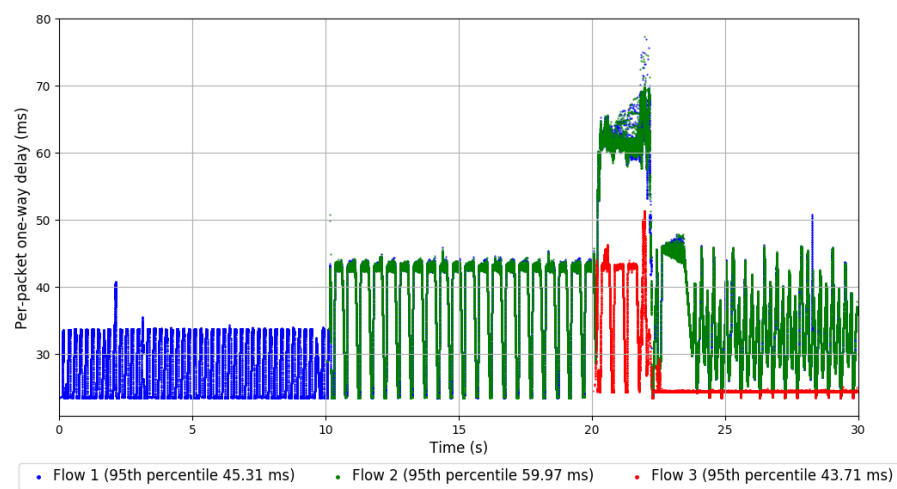
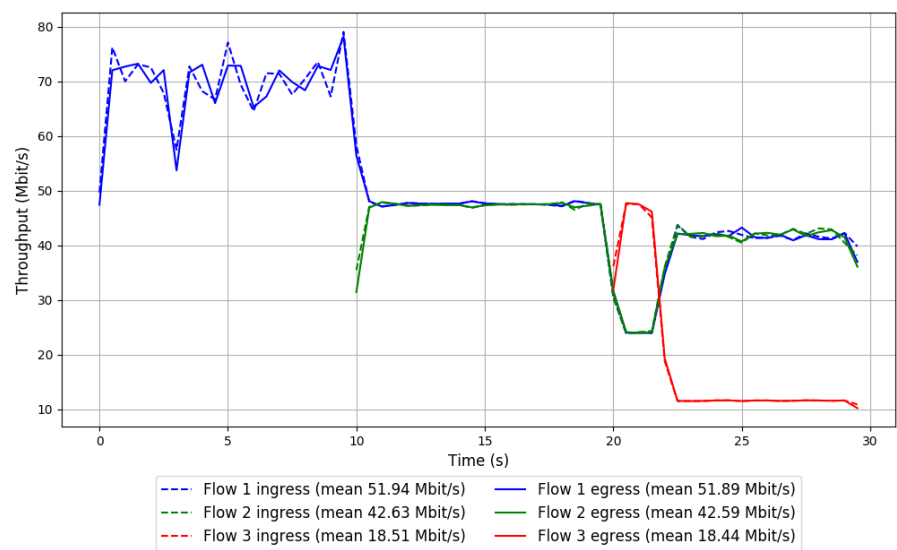
-- Flow 3:

Average throughput: 18.44 Mbit/s

95th percentile per-packet one-way delay: 43.714 ms

Loss rate: 0.87%

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

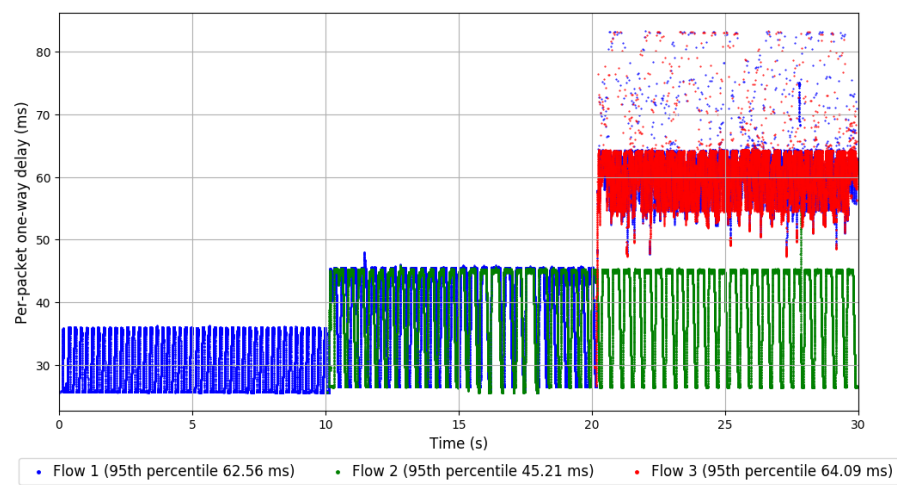
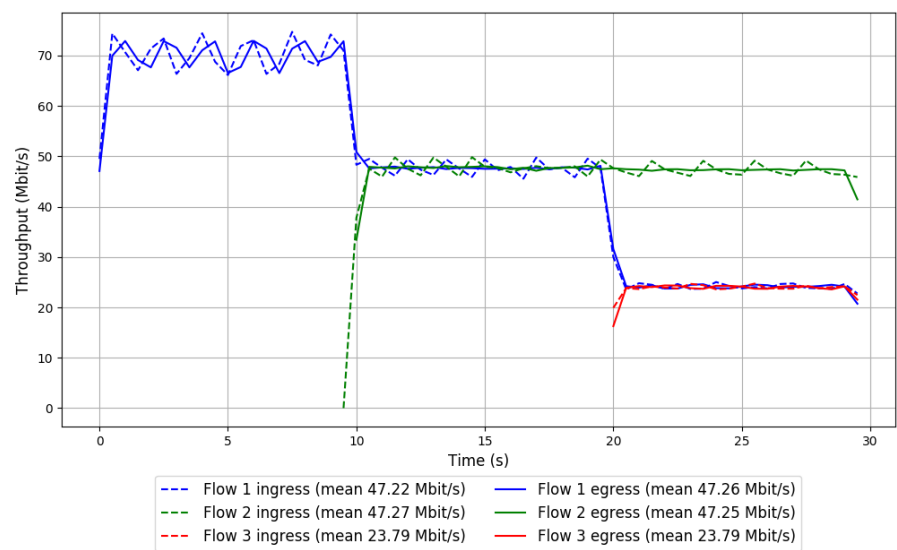


Run 2: Statistics of TaoVA-100x

Start at: 2018-02-13 13:59:04
End at: 2018-02-13 13:59:34
Local clock offset: 0.948 ms
Remote clock offset: -0.431 ms

Below is generated by plot.py at 2018-02-13 22:08:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.57 Mbit/s
95th percentile per-packet one-way delay: 62.626 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 47.26 Mbit/s
95th percentile per-packet one-way delay: 62.558 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 47.25 Mbit/s
95th percentile per-packet one-way delay: 45.206 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 23.79 Mbit/s
95th percentile per-packet one-way delay: 64.092 ms
Loss rate: 0.85%

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

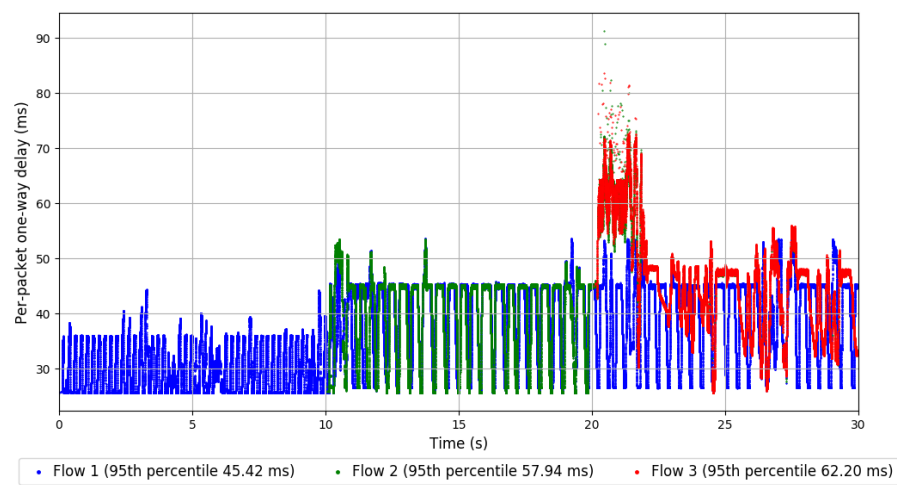
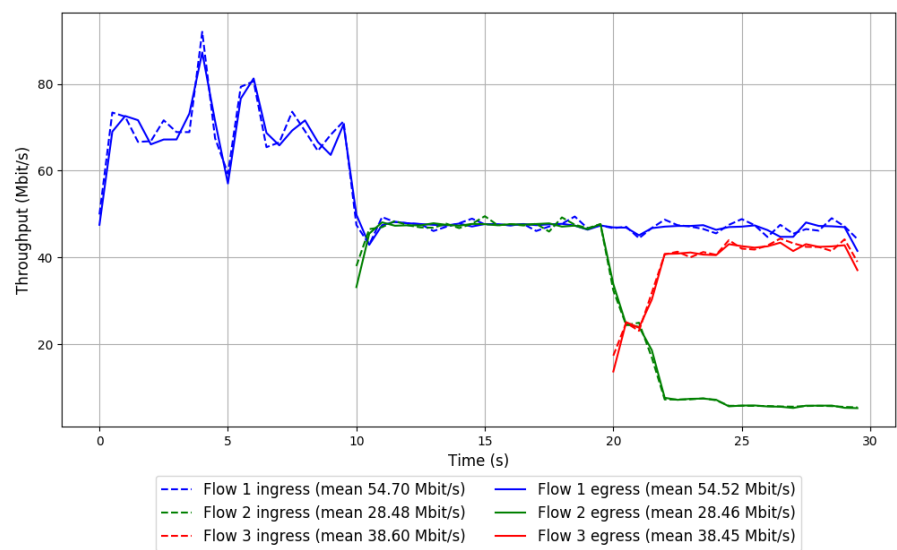


Run 3: Statistics of TaoVA-100x

Start at: 2018-02-13 14:23:33
End at: 2018-02-13 14:24:03
Local clock offset: 2.277 ms
Remote clock offset: -0.226 ms

Below is generated by plot.py at 2018-02-13 22:08:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.16 Mbit/s
95th percentile per-packet one-way delay: 50.561 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 54.52 Mbit/s
95th percentile per-packet one-way delay: 45.416 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 28.46 Mbit/s
95th percentile per-packet one-way delay: 57.938 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 38.45 Mbit/s
95th percentile per-packet one-way delay: 62.204 ms
Loss rate: 1.13%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-13 14:48:34

End at: 2018-02-13 14:49:04

Local clock offset: 0.842 ms

Remote clock offset: 1.883 ms

Below is generated by plot.py at 2018-02-13 22:08:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.74 Mbit/s

95th percentile per-packet one-way delay: 51.123 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 43.02 Mbit/s

95th percentile per-packet one-way delay: 49.510 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 46.63 Mbit/s

95th percentile per-packet one-way delay: 47.755 ms

Loss rate: 0.83%

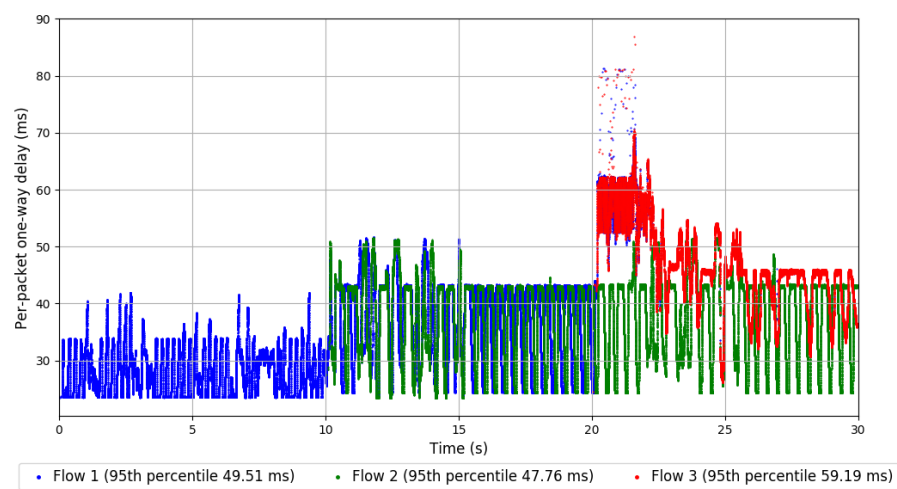
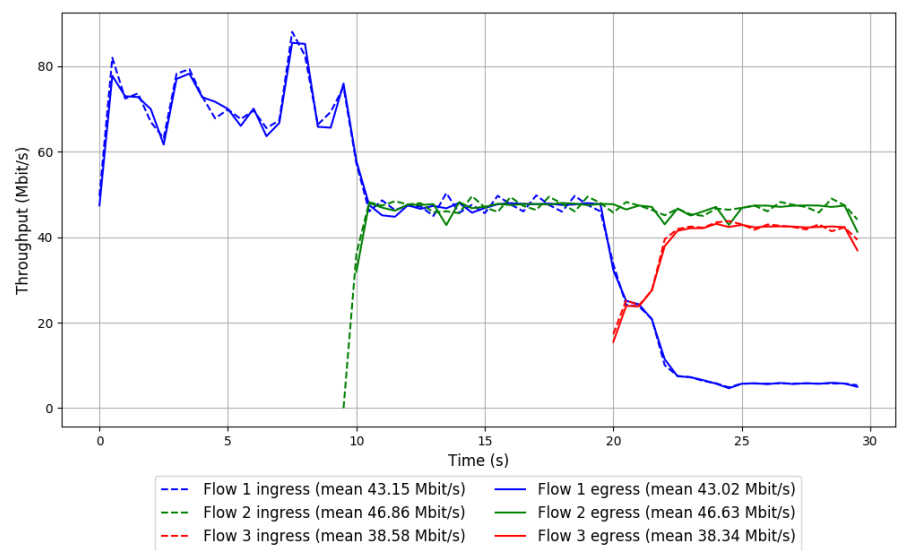
-- Flow 3:

Average throughput: 38.34 Mbit/s

95th percentile per-packet one-way delay: 59.191 ms

Loss rate: 1.17%

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

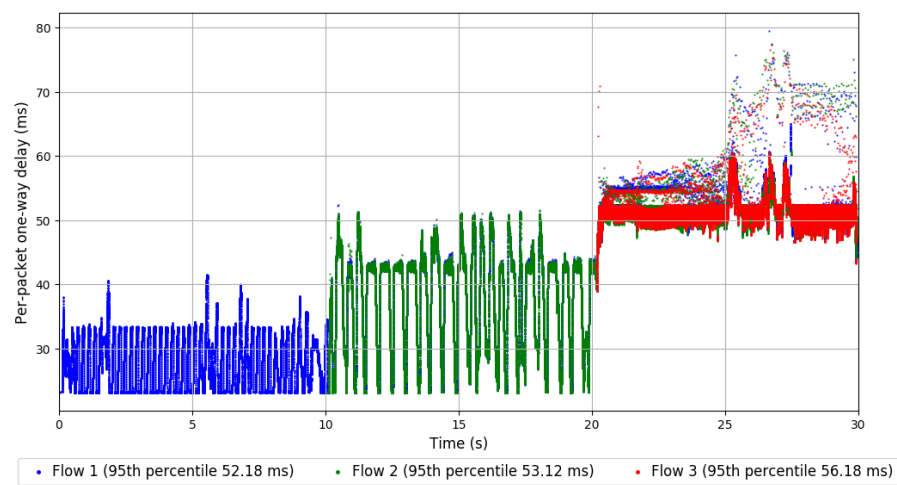
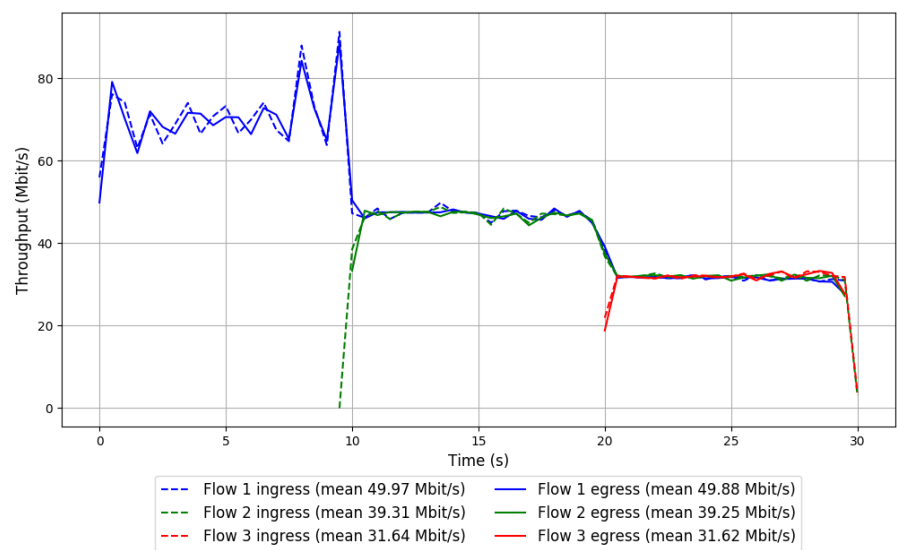


Run 5: Statistics of TaoVA-100x

Start at: 2018-02-13 15:13:30
End at: 2018-02-13 15:14:00
Local clock offset: 0.822 ms
Remote clock offset: 11.305 ms

Below is generated by plot.py at 2018-02-13 22:08:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.43 Mbit/s
95th percentile per-packet one-way delay: 52.653 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 49.88 Mbit/s
95th percentile per-packet one-way delay: 52.176 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 39.25 Mbit/s
95th percentile per-packet one-way delay: 53.116 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 31.62 Mbit/s
95th percentile per-packet one-way delay: 56.179 ms
Loss rate: 1.68%

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

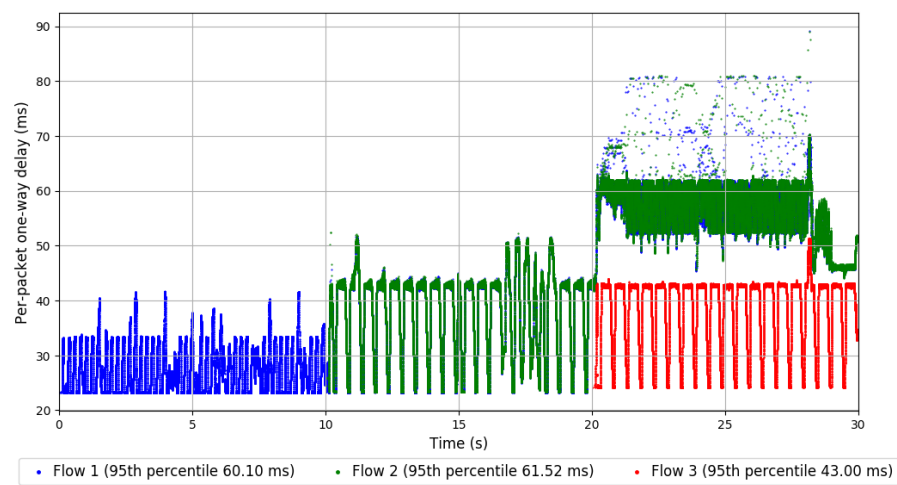
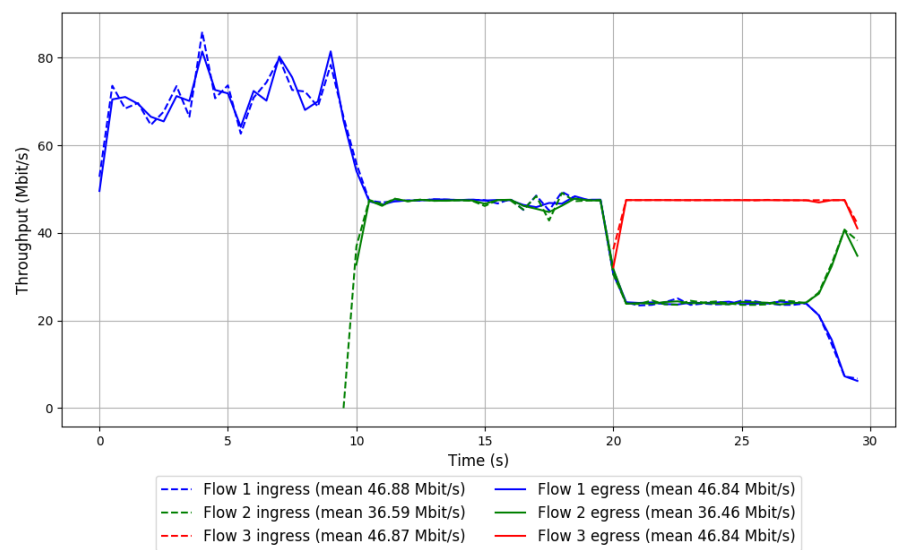


Run 6: Statistics of TaoVA-100x

Start at: 2018-02-13 15:38:19
End at: 2018-02-13 15:38:49
Local clock offset: 0.364 ms
Remote clock offset: 14.854 ms

Below is generated by plot.py at 2018-02-13 22:08:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.61 Mbit/s
95th percentile per-packet one-way delay: 60.363 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 46.84 Mbit/s
95th percentile per-packet one-way delay: 60.100 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 36.46 Mbit/s
95th percentile per-packet one-way delay: 61.516 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 46.84 Mbit/s
95th percentile per-packet one-way delay: 42.998 ms
Loss rate: 0.61%

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

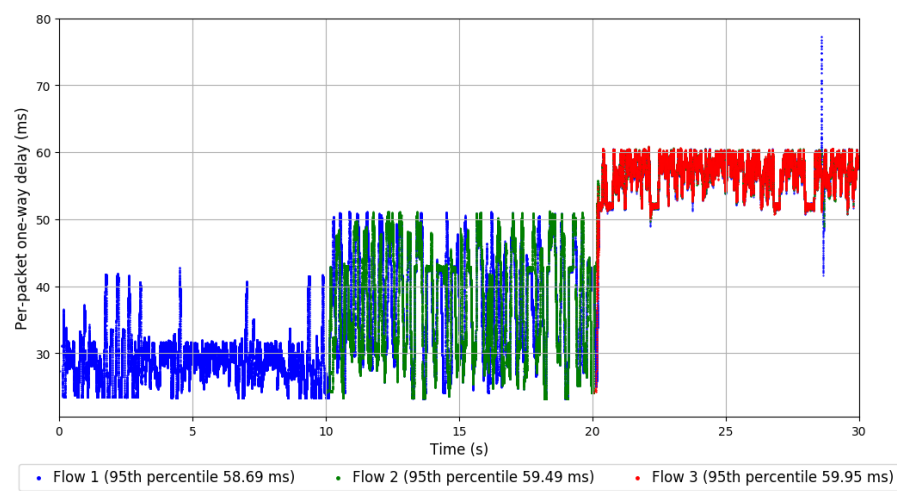
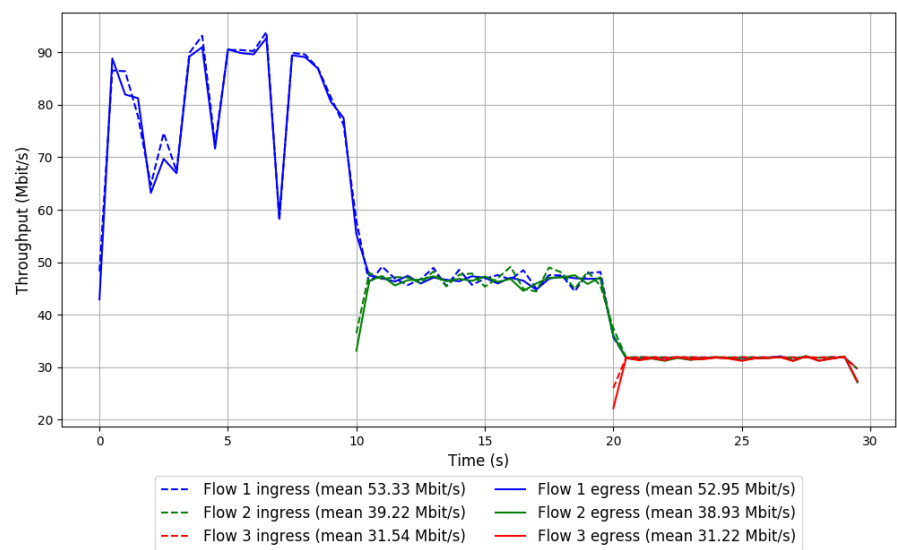


Run 7: Statistics of TaoVA-100x

Start at: 2018-02-13 16:04:34
End at: 2018-02-13 16:05:04
Local clock offset: -0.664 ms
Remote clock offset: 14.321 ms

Below is generated by plot.py at 2018-02-13 22:08:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.20 Mbit/s
95th percentile per-packet one-way delay: 59.371 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 52.95 Mbit/s
95th percentile per-packet one-way delay: 58.685 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 38.93 Mbit/s
95th percentile per-packet one-way delay: 59.491 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 31.22 Mbit/s
95th percentile per-packet one-way delay: 59.948 ms
Loss rate: 1.68%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-13 16:30:05

End at: 2018-02-13 16:30:35

Local clock offset: -0.908 ms

Remote clock offset: 7.422 ms

Below is generated by plot.py at 2018-02-13 22:08:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.06 Mbit/s

95th percentile per-packet one-way delay: 60.561 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 47.83 Mbit/s

95th percentile per-packet one-way delay: 60.556 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 47.16 Mbit/s

95th percentile per-packet one-way delay: 42.730 ms

Loss rate: 0.38%

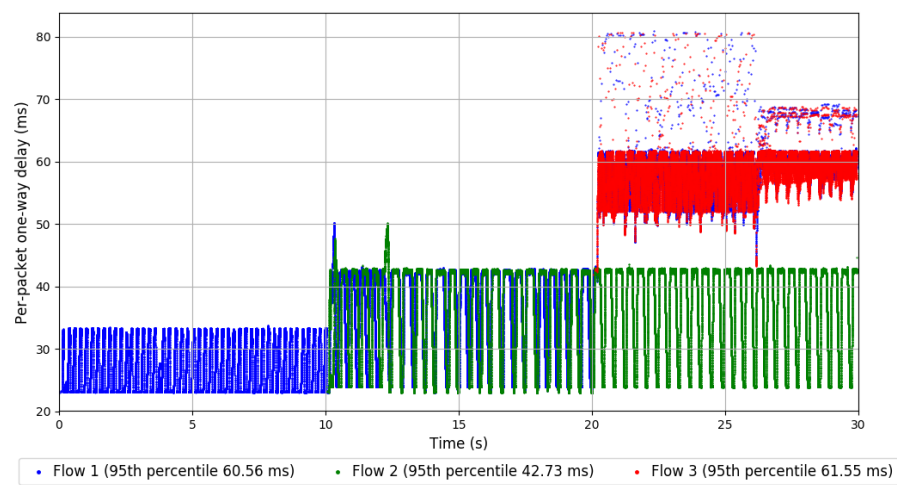
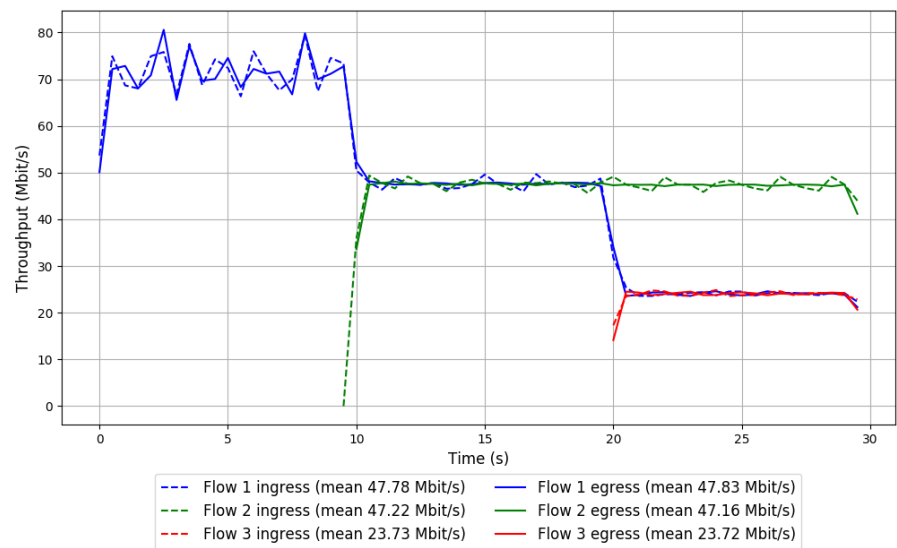
-- Flow 3:

Average throughput: 23.72 Mbit/s

95th percentile per-packet one-way delay: 61.548 ms

Loss rate: 0.98%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-13 16:54:45

End at: 2018-02-13 16:55:15

Local clock offset: 1.294 ms

Remote clock offset: 8.255 ms

Below is generated by plot.py at 2018-02-13 22:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.54 Mbit/s

95th percentile per-packet one-way delay: 48.537 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 56.73 Mbit/s

95th percentile per-packet one-way delay: 42.674 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 27.66 Mbit/s

95th percentile per-packet one-way delay: 50.069 ms

Loss rate: 0.35%

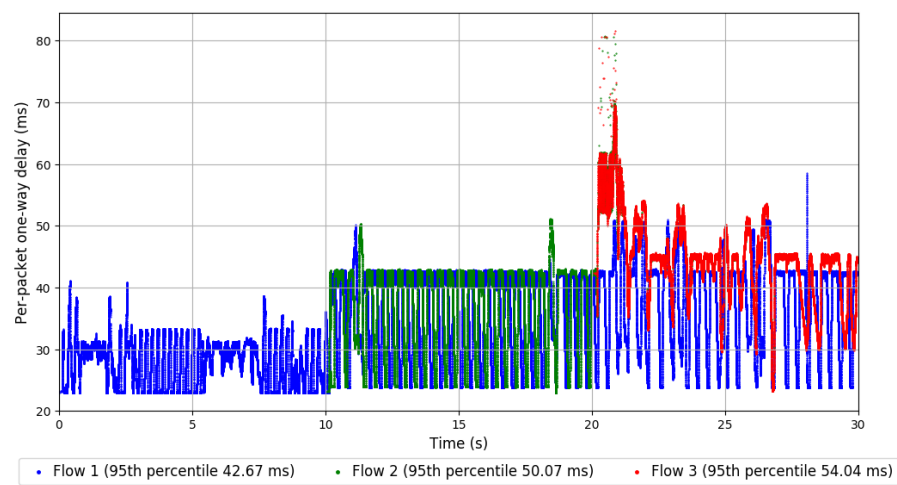
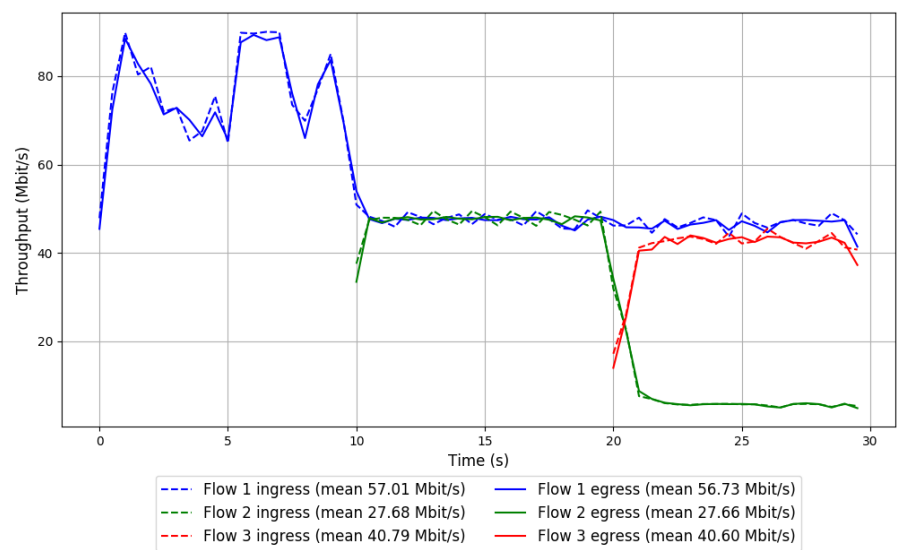
-- Flow 3:

Average throughput: 40.60 Mbit/s

95th percentile per-packet one-way delay: 54.041 ms

Loss rate: 1.21%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-02-13 17:19:22

End at: 2018-02-13 17:19:52

Local clock offset: 2.116 ms

Remote clock offset: 5.328 ms

Below is generated by plot.py at 2018-02-13 22:10:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.18 Mbit/s

95th percentile per-packet one-way delay: 58.909 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 50.54 Mbit/s

95th percentile per-packet one-way delay: 56.696 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 39.46 Mbit/s

95th percentile per-packet one-way delay: 59.392 ms

Loss rate: 0.52%

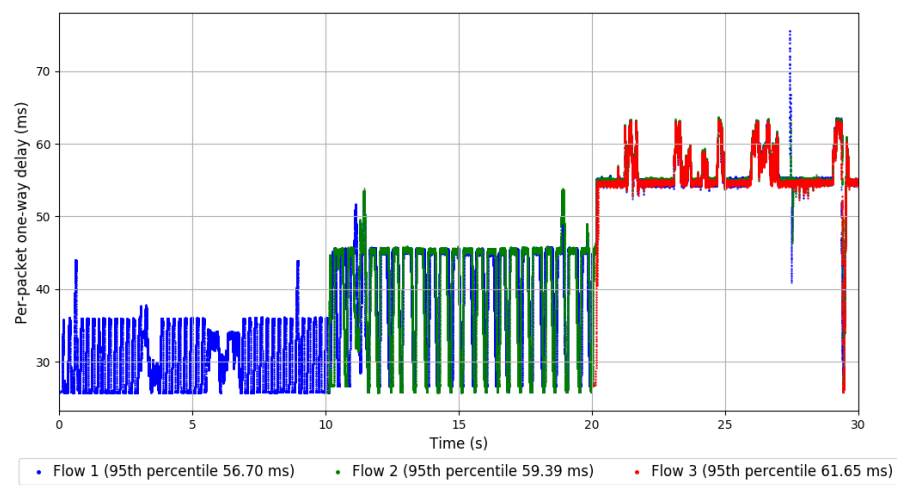
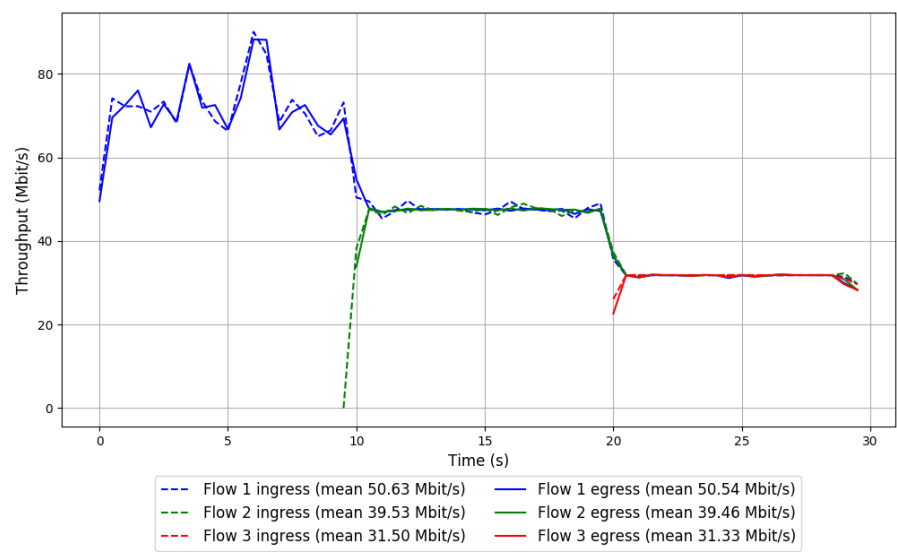
-- Flow 3:

Average throughput: 31.33 Mbit/s

95th percentile per-packet one-way delay: 61.645 ms

Loss rate: 1.22%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-13 13:33:06

End at: 2018-02-13 13:33:36

Local clock offset: -0.541 ms

Remote clock offset: 2.049 ms

Below is generated by plot.py at 2018-02-13 22:10:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.47 Mbit/s

95th percentile per-packet one-way delay: 58.736 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 37.50 Mbit/s

95th percentile per-packet one-way delay: 39.291 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 45.48 Mbit/s

95th percentile per-packet one-way delay: 58.803 ms

Loss rate: 0.29%

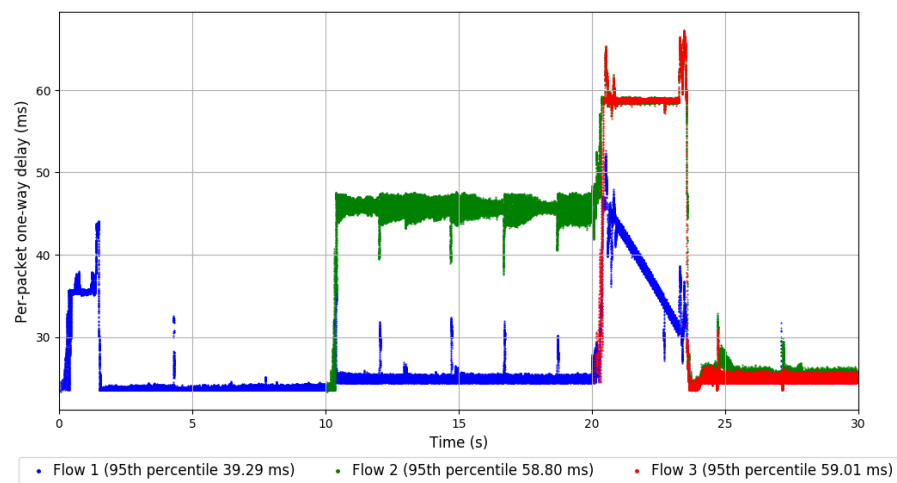
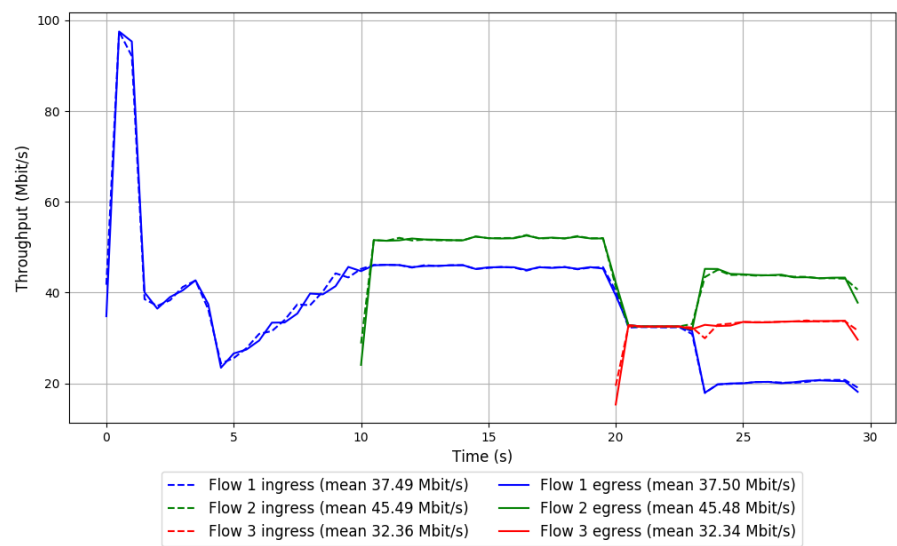
-- Flow 3:

Average throughput: 32.34 Mbit/s

95th percentile per-packet one-way delay: 59.010 ms

Loss rate: 0.61%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-13 13:57:41

End at: 2018-02-13 13:58:11

Local clock offset: 0.749 ms

Remote clock offset: 1.764 ms

Below is generated by plot.py at 2018-02-13 22:10:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.56 Mbit/s

95th percentile per-packet one-way delay: 70.043 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 56.76 Mbit/s

95th percentile per-packet one-way delay: 70.026 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 48.16 Mbit/s

95th percentile per-packet one-way delay: 47.360 ms

Loss rate: 0.28%

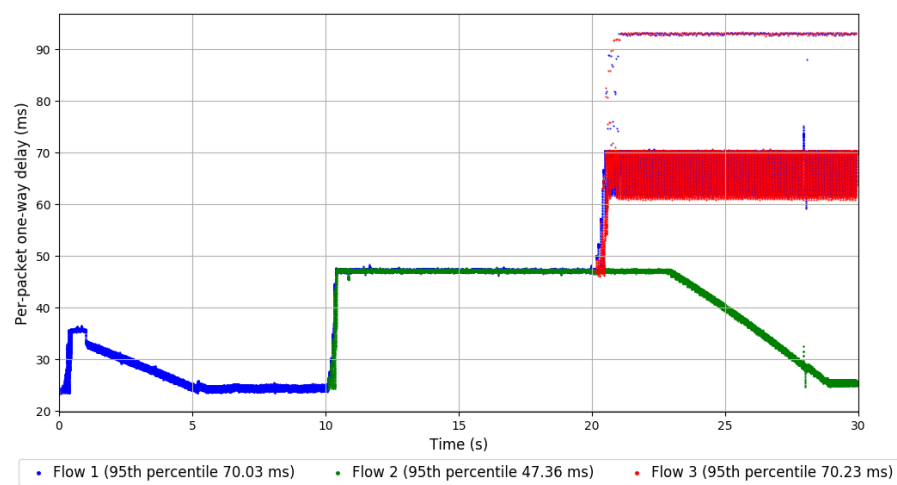
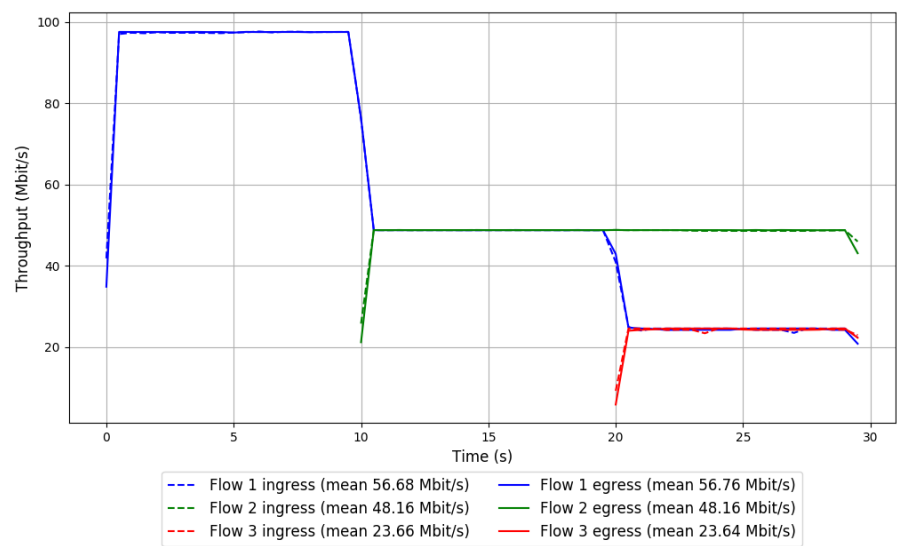
-- Flow 3:

Average throughput: 23.64 Mbit/s

95th percentile per-packet one-way delay: 70.233 ms

Loss rate: 0.97%

Run 2: Report of TCP Vegas — Data Link

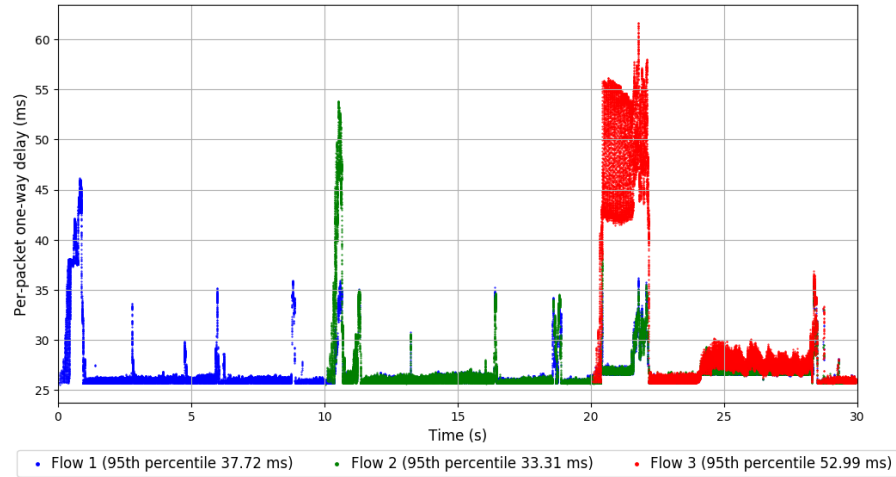
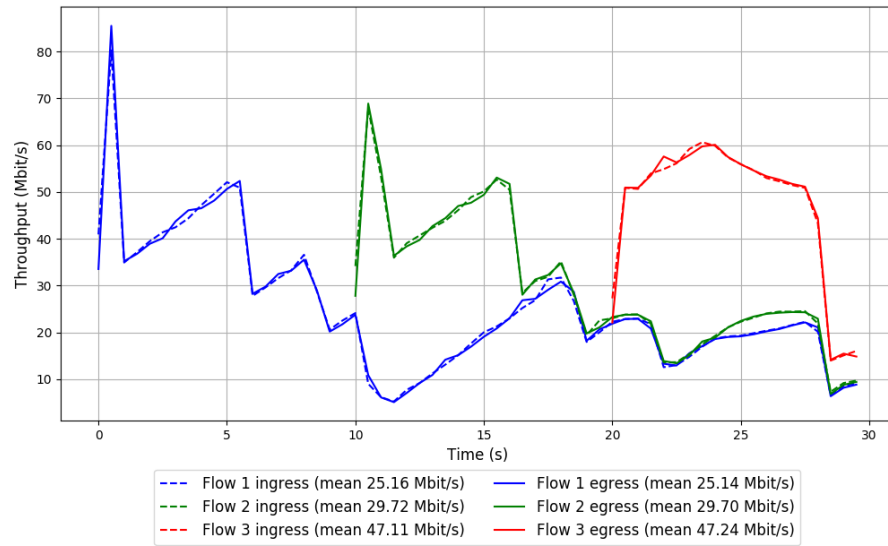


Run 3: Statistics of TCP Vegas

Start at: 2018-02-13 14:22:13
End at: 2018-02-13 14:22:43
Local clock offset: 2.254 ms
Remote clock offset: -0.181 ms

Below is generated by plot.py at 2018-02-13 22:10:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 60.51 Mbit/s
95th percentile per-packet one-way delay: 43.967 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 25.14 Mbit/s
95th percentile per-packet one-way delay: 37.724 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 29.70 Mbit/s
95th percentile per-packet one-way delay: 33.315 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 47.24 Mbit/s
95th percentile per-packet one-way delay: 52.987 ms
Loss rate: 0.28%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-13 14:47:14

End at: 2018-02-13 14:47:44

Local clock offset: 0.866 ms

Remote clock offset: 1.82 ms

Below is generated by plot.py at 2018-02-13 22:10:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 27.99 Mbit/s

95th percentile per-packet one-way delay: 32.371 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 13.01 Mbit/s

95th percentile per-packet one-way delay: 34.351 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 14.33 Mbit/s

95th percentile per-packet one-way delay: 31.019 ms

Loss rate: 0.77%

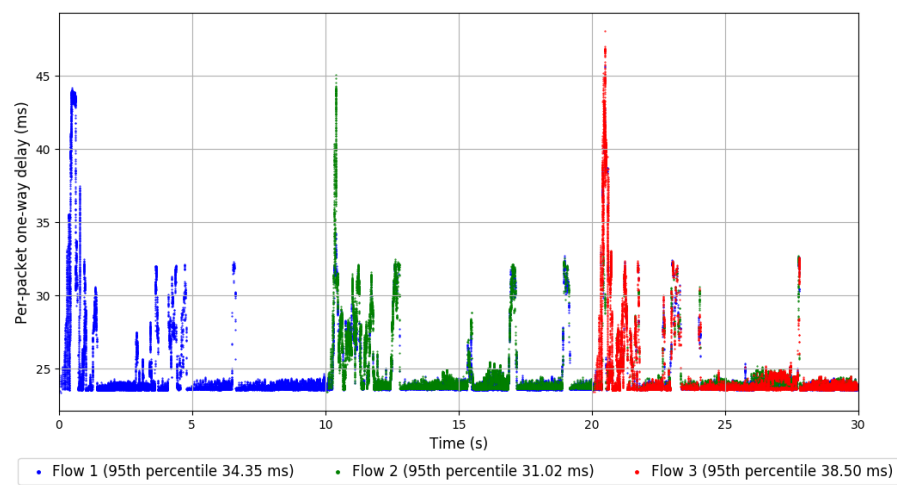
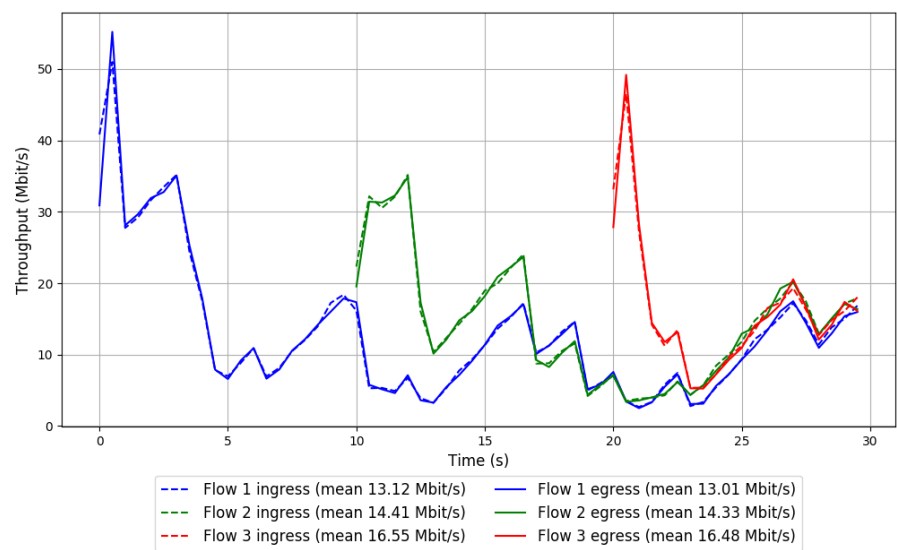
-- Flow 3:

Average throughput: 16.48 Mbit/s

95th percentile per-packet one-way delay: 38.499 ms

Loss rate: 0.97%

Run 4: Report of TCP Vegas — Data Link

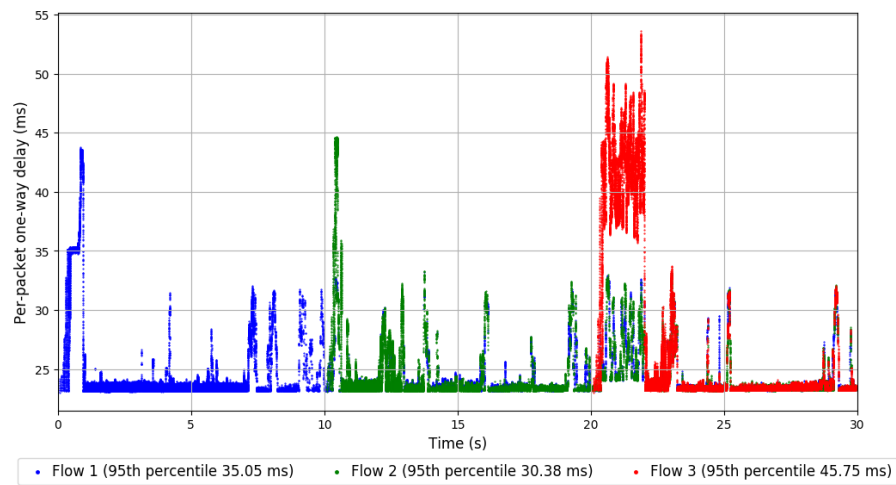
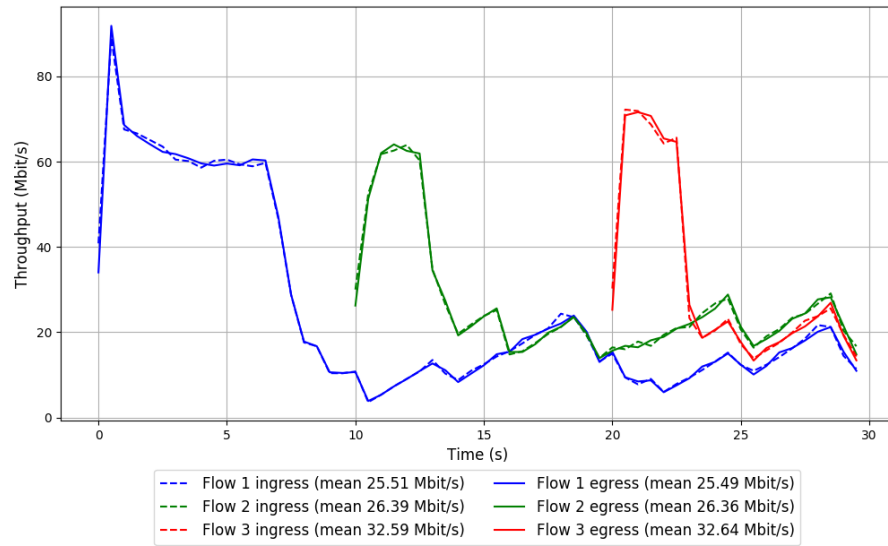


Run 5: Statistics of TCP Vegas

Start at: 2018-02-13 15:12:10
End at: 2018-02-13 15:12:40
Local clock offset: 0.829 ms
Remote clock offset: 11.076 ms

Below is generated by plot.py at 2018-02-13 22:10:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 53.82 Mbit/s
95th percentile per-packet one-way delay: 41.158 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 25.49 Mbit/s
95th percentile per-packet one-way delay: 35.055 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 26.36 Mbit/s
95th percentile per-packet one-way delay: 30.383 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 32.64 Mbit/s
95th percentile per-packet one-way delay: 45.751 ms
Loss rate: 0.38%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-13 15:36:59

End at: 2018-02-13 15:37:29

Local clock offset: 0.49 ms

Remote clock offset: 12.25 ms

Below is generated by plot.py at 2018-02-13 22:10:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 48.74 Mbit/s

95th percentile per-packet one-way delay: 33.867 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 27.19 Mbit/s

95th percentile per-packet one-way delay: 37.695 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 19.23 Mbit/s

95th percentile per-packet one-way delay: 30.399 ms

Loss rate: 0.41%

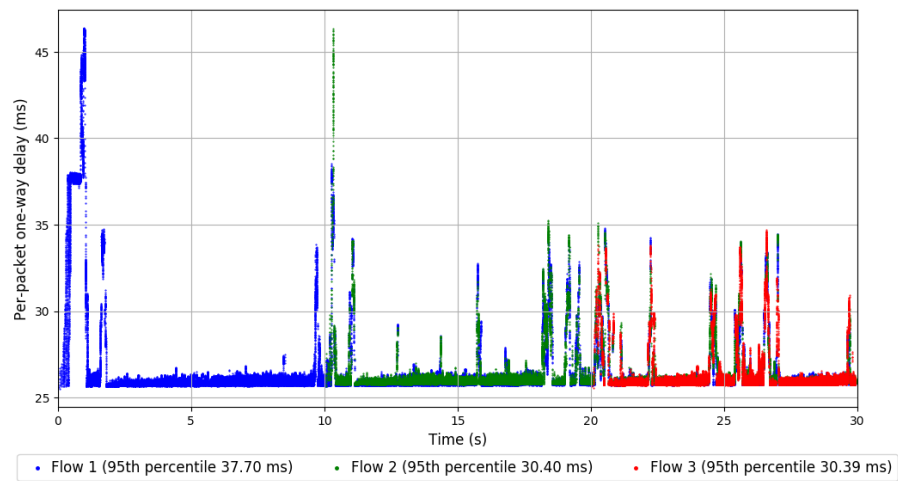
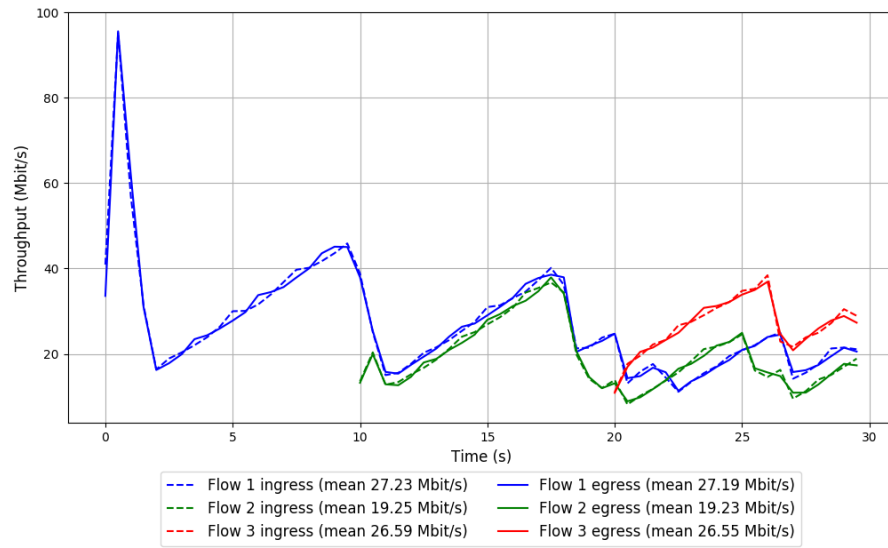
-- Flow 3:

Average throughput: 26.55 Mbit/s

95th percentile per-packet one-way delay: 30.390 ms

Loss rate: 0.69%

Run 6: Report of TCP Vegas — Data Link

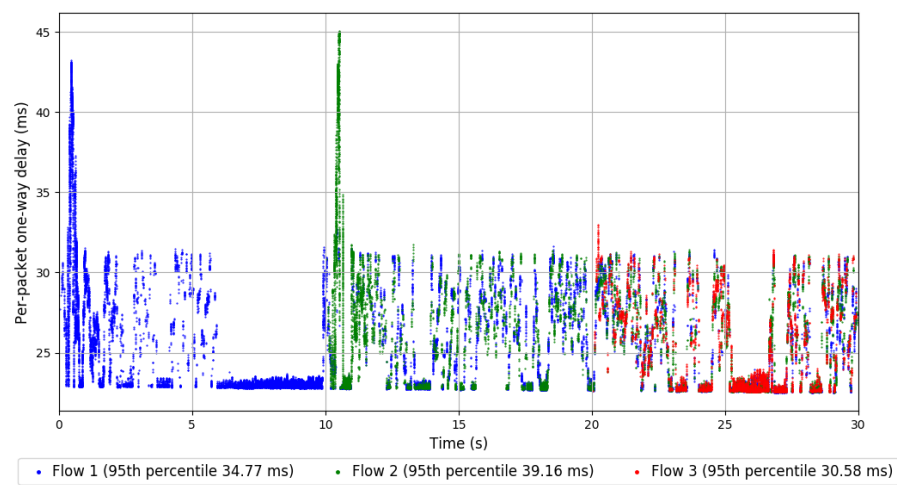
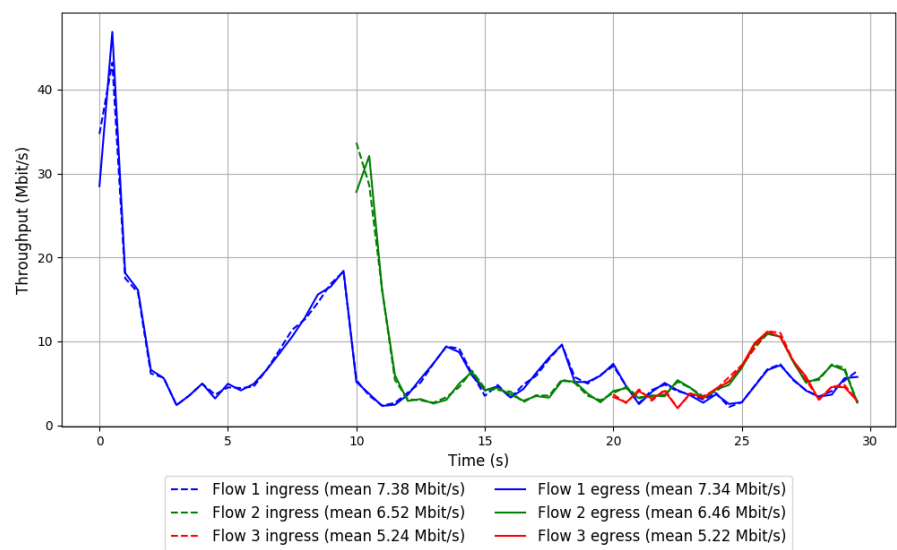


Run 7: Statistics of TCP Vegas

Start at: 2018-02-13 16:03:14
End at: 2018-02-13 16:03:44
Local clock offset: -0.738 ms
Remote clock offset: 15.821 ms

```
# Below is generated by plot.py at 2018-02-13 22:10:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.37 Mbit/s
95th percentile per-packet one-way delay: 34.735 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 7.34 Mbit/s
95th percentile per-packet one-way delay: 34.772 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 6.46 Mbit/s
95th percentile per-packet one-way delay: 39.161 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 30.579 ms
Loss rate: 0.90%
```


Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-13 16:28:44

End at: 2018-02-13 16:29:14

Local clock offset: -0.839 ms

Remote clock offset: 5.122 ms

Below is generated by plot.py at 2018-02-13 22:10:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.03 Mbit/s

95th percentile per-packet one-way delay: 47.778 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 44.88 Mbit/s

95th percentile per-packet one-way delay: 43.978 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 47.36 Mbit/s

95th percentile per-packet one-way delay: 48.425 ms

Loss rate: 0.22%

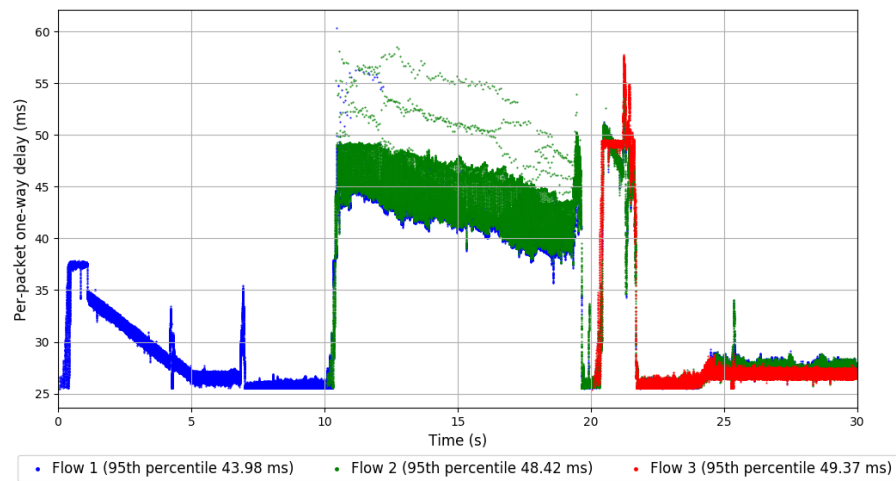
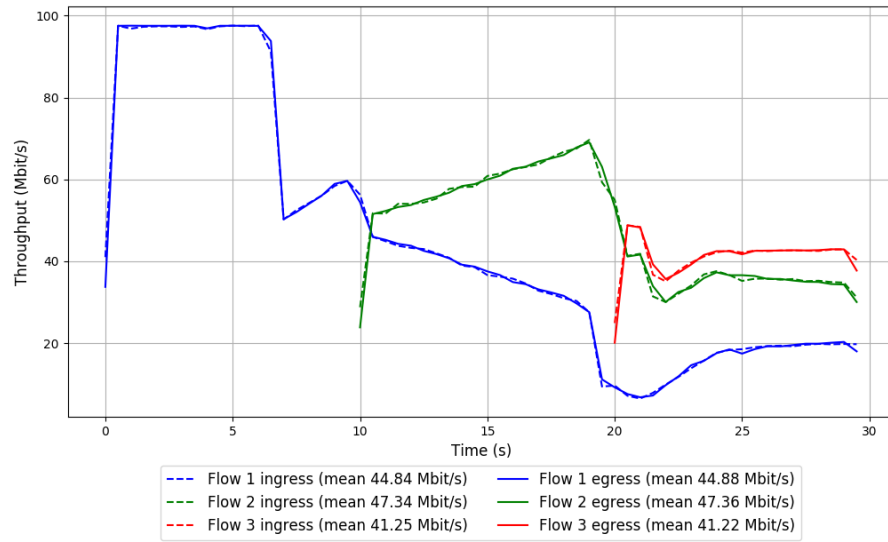
-- Flow 3:

Average throughput: 41.22 Mbit/s

95th percentile per-packet one-way delay: 49.372 ms

Loss rate: 0.60%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-13 16:53:25

End at: 2018-02-13 16:53:55

Local clock offset: 1.215 ms

Remote clock offset: 5.78 ms

Below is generated by plot.py at 2018-02-13 22:10:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 47.52 Mbit/s

95th percentile per-packet one-way delay: 40.505 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 21.12 Mbit/s

95th percentile per-packet one-way delay: 35.019 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 16.42 Mbit/s

95th percentile per-packet one-way delay: 45.658 ms

Loss rate: 0.72%

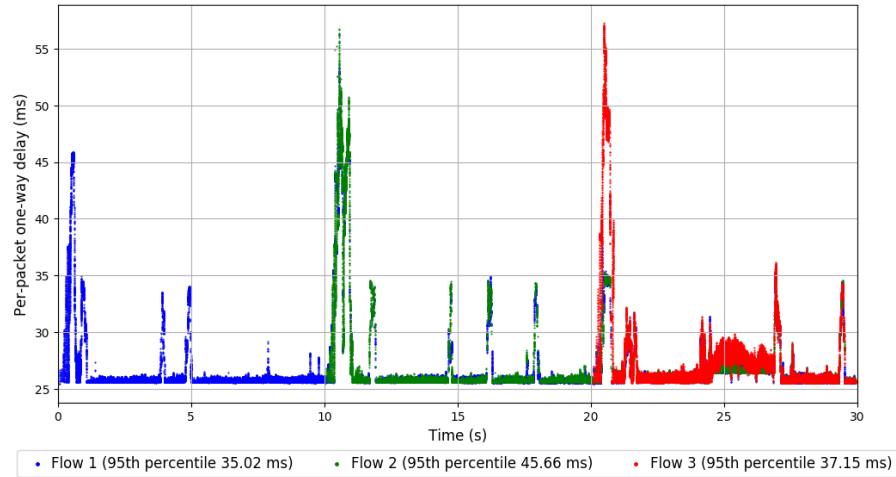
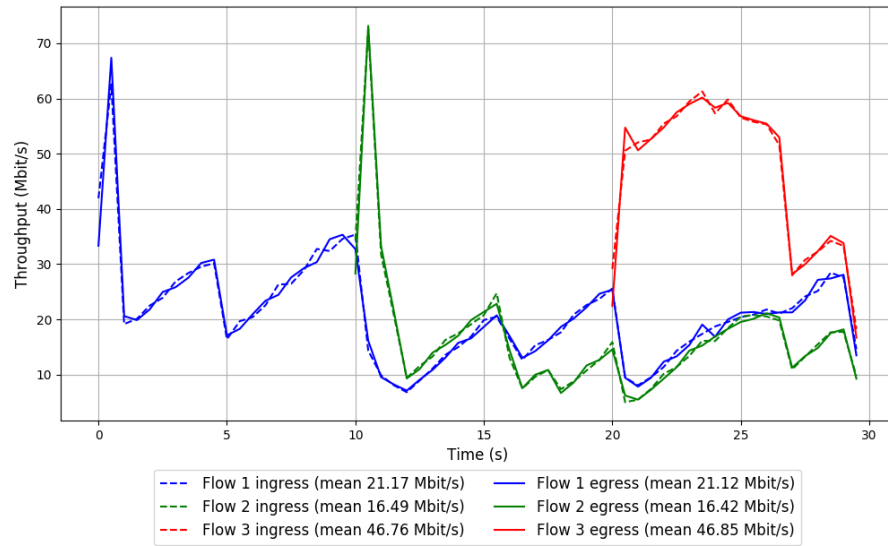
-- Flow 3:

Average throughput: 46.85 Mbit/s

95th percentile per-packet one-way delay: 37.145 ms

Loss rate: 0.39%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-13 17:18:01

End at: 2018-02-13 17:18:31

Local clock offset: 2.25 ms

Remote clock offset: 7.422 ms

Below is generated by plot.py at 2018-02-13 22:10:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.67 Mbit/s

95th percentile per-packet one-way delay: 41.418 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 21.80 Mbit/s

95th percentile per-packet one-way delay: 35.504 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 26.11 Mbit/s

95th percentile per-packet one-way delay: 42.288 ms

Loss rate: 0.27%

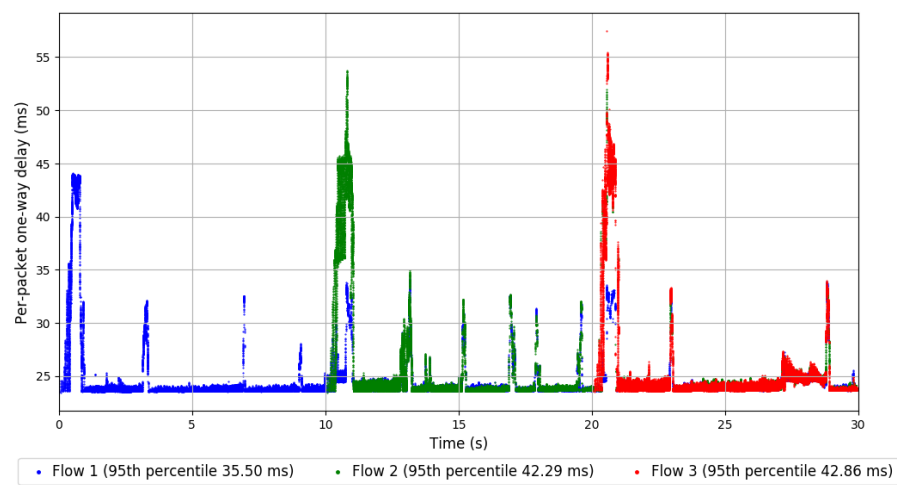
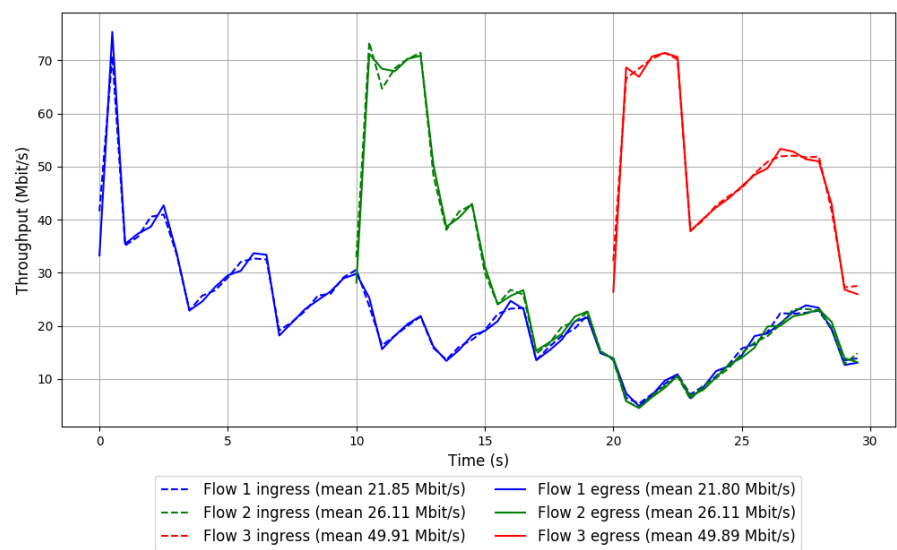
-- Flow 3:

Average throughput: 49.89 Mbit/s

95th percentile per-packet one-way delay: 42.858 ms

Loss rate: 0.59%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-02-13 13:45:18

End at: 2018-02-13 13:45:48

Local clock offset: -0.745 ms

Remote clock offset: 0.461 ms

Below is generated by plot.py at 2018-02-13 22:11:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.00 Mbit/s

95th percentile per-packet one-way delay: 60.374 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 59.63 Mbit/s

95th percentile per-packet one-way delay: 60.265 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 37.63 Mbit/s

95th percentile per-packet one-way delay: 60.406 ms

Loss rate: 0.54%

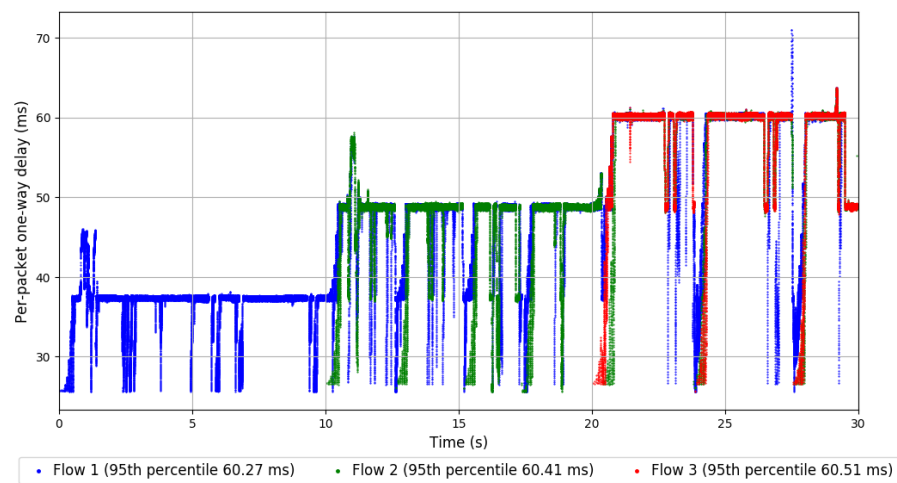
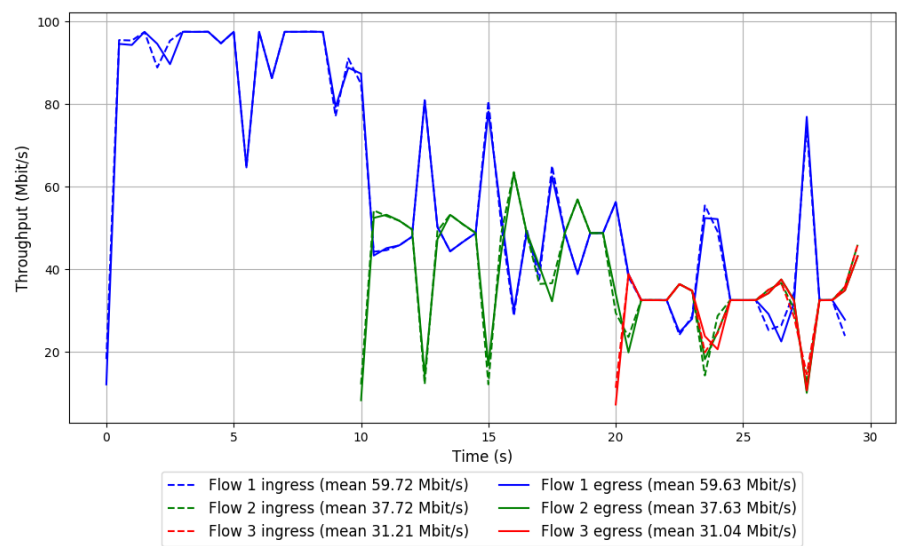
-- Flow 3:

Average throughput: 31.04 Mbit/s

95th percentile per-packet one-way delay: 60.514 ms

Loss rate: 1.21%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-13 14:09:57

End at: 2018-02-13 14:10:27

Local clock offset: 1.866 ms

Remote clock offset: 1.891 ms

Below is generated by plot.py at 2018-02-13 22:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.80 Mbit/s

95th percentile per-packet one-way delay: 67.251 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 66.63 Mbit/s

95th percentile per-packet one-way delay: 47.079 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 27.05 Mbit/s

95th percentile per-packet one-way delay: 69.304 ms

Loss rate: 0.52%

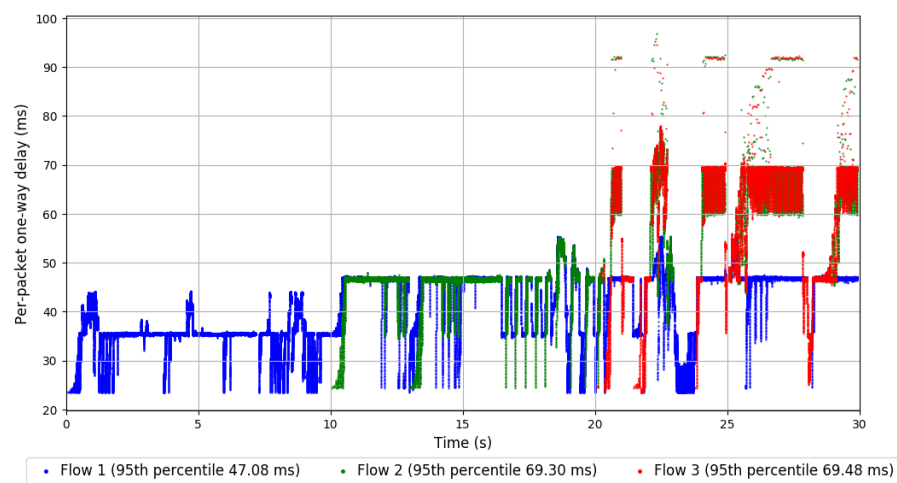
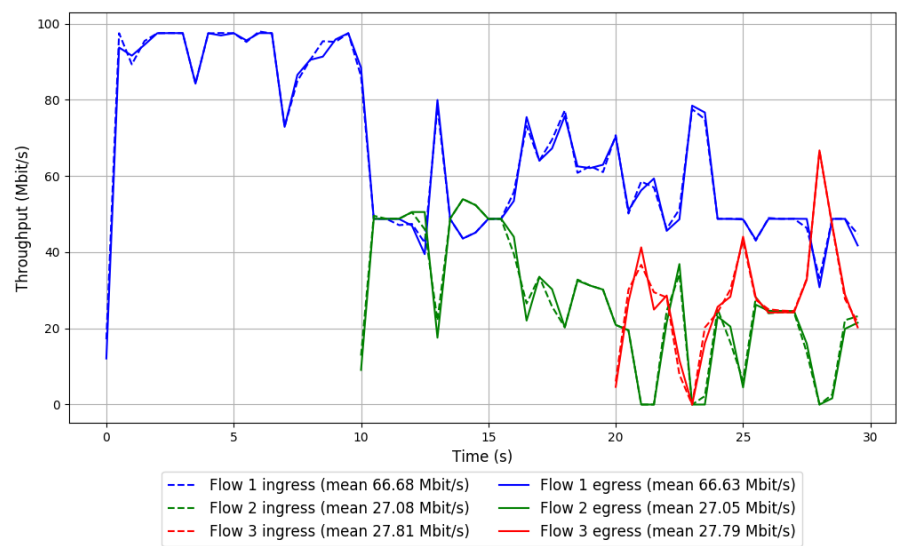
-- Flow 3:

Average throughput: 27.79 Mbit/s

95th percentile per-packet one-way delay: 69.485 ms

Loss rate: 0.89%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-13 14:34:34

End at: 2018-02-13 14:35:04

Local clock offset: 1.445 ms

Remote clock offset: 1.808 ms

Below is generated by plot.py at 2018-02-13 22:11:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.38 Mbit/s

95th percentile per-packet one-way delay: 69.684 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 51.38 Mbit/s

95th percentile per-packet one-way delay: 69.610 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 45.09 Mbit/s

95th percentile per-packet one-way delay: 54.644 ms

Loss rate: 0.76%

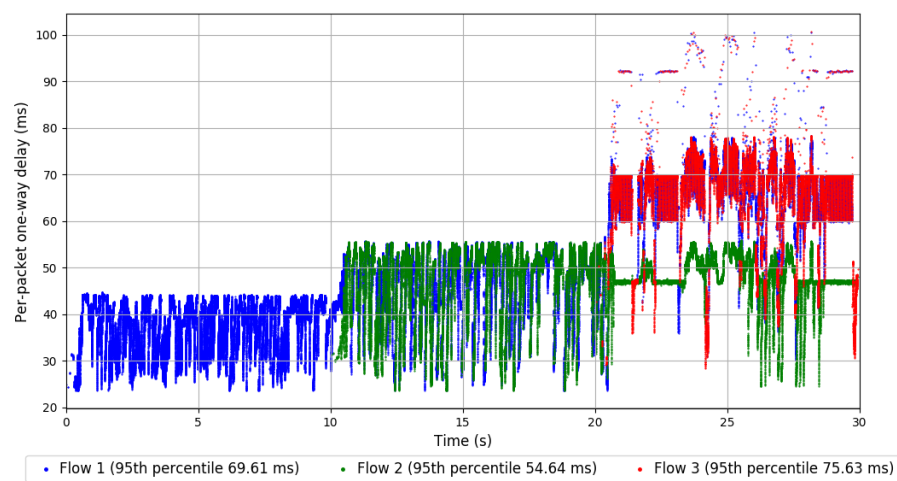
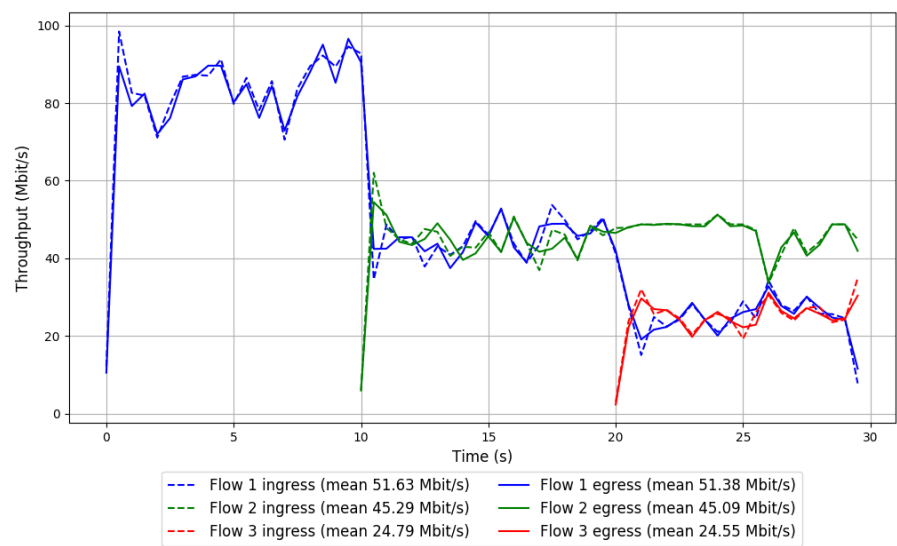
-- Flow 3:

Average throughput: 24.55 Mbit/s

95th percentile per-packet one-way delay: 75.626 ms

Loss rate: 1.79%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-13 14:59:34

End at: 2018-02-13 15:00:04

Local clock offset: 0.705 ms

Remote clock offset: 7.05 ms

Below is generated by plot.py at 2018-02-13 22:11:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.16 Mbit/s

95th percentile per-packet one-way delay: 67.834 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 57.54 Mbit/s

95th percentile per-packet one-way delay: 51.683 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 40.96 Mbit/s

95th percentile per-packet one-way delay: 69.353 ms

Loss rate: 0.57%

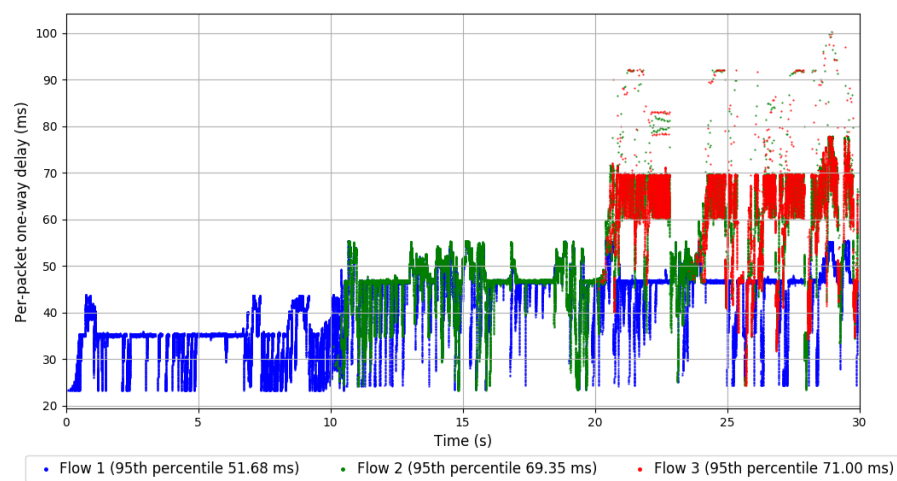
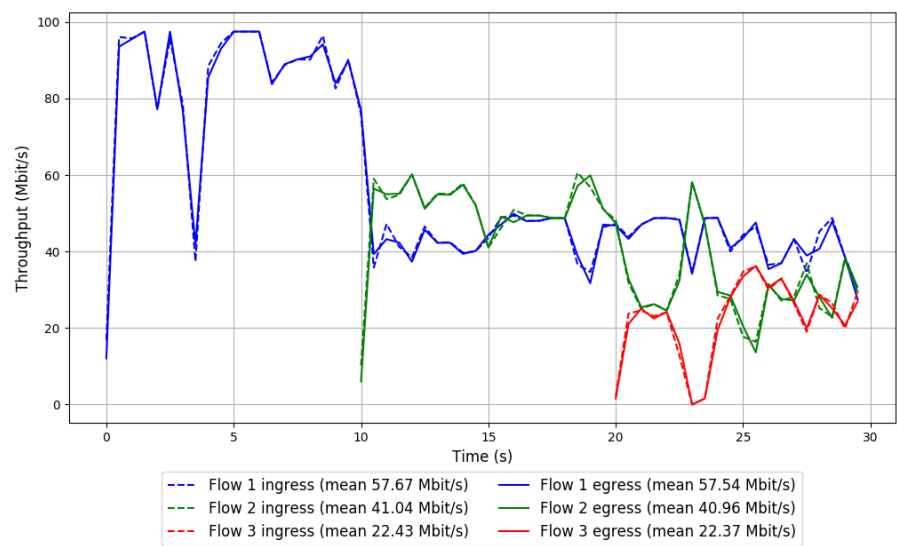
-- Flow 3:

Average throughput: 22.37 Mbit/s

95th percentile per-packet one-way delay: 71.000 ms

Loss rate: 1.28%

Run 4: Report of Verus — Data Link

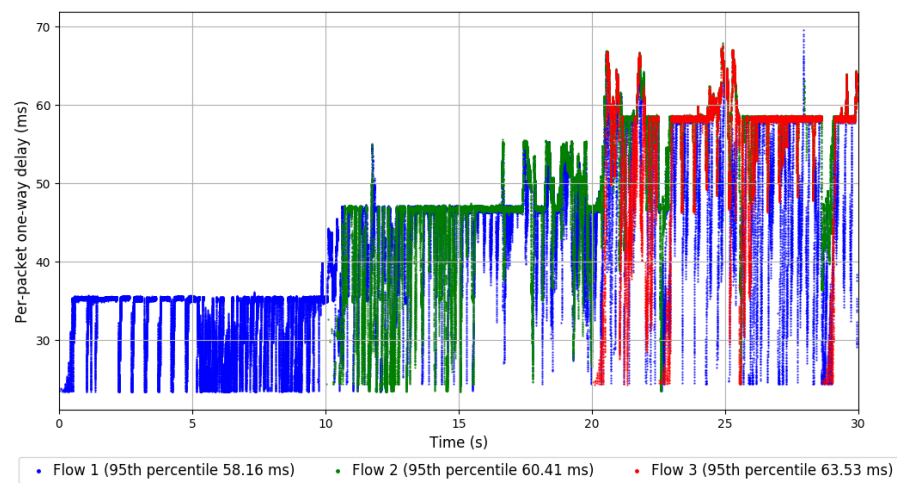
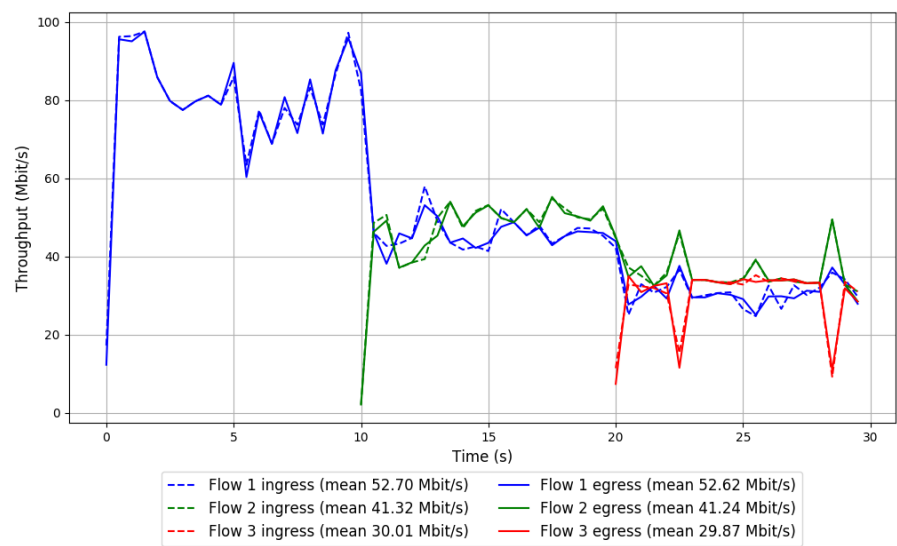


Run 5: Statistics of Verus

Start at: 2018-02-13 15:24:36
End at: 2018-02-13 15:25:06
Local clock offset: 0.89 ms
Remote clock offset: 12.725 ms

```
# Below is generated by plot.py at 2018-02-13 22:11:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.93 Mbit/s
95th percentile per-packet one-way delay: 58.739 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 52.62 Mbit/s
95th percentile per-packet one-way delay: 58.162 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 41.24 Mbit/s
95th percentile per-packet one-way delay: 60.406 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 29.87 Mbit/s
95th percentile per-packet one-way delay: 63.533 ms
Loss rate: 1.17%
```


Run 5: Report of Verus — Data Link

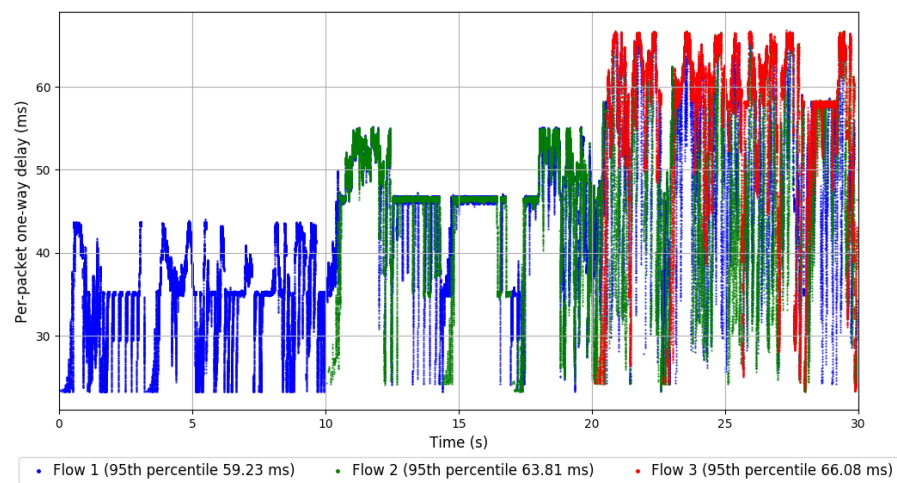
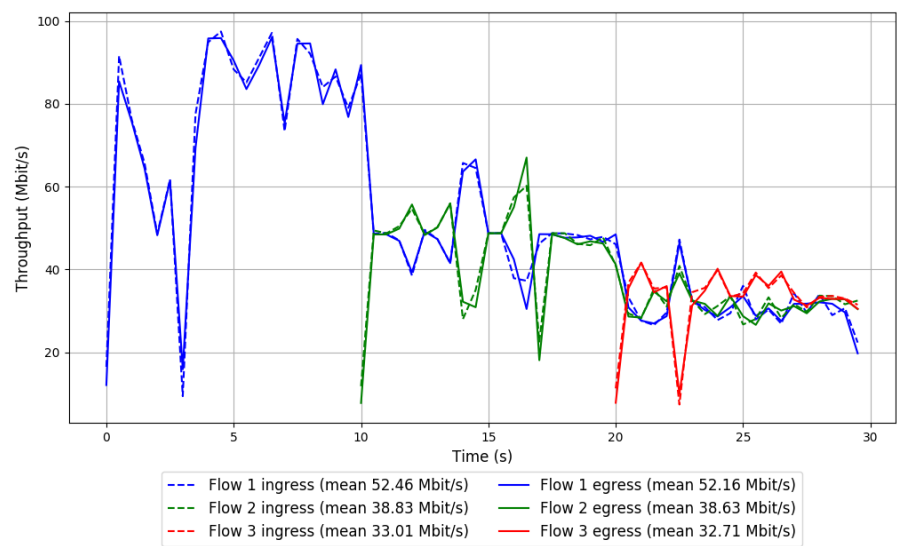


Run 6: Statistics of Verus

Start at: 2018-02-13 15:49:29
End at: 2018-02-13 15:49:59
Local clock offset: -0.411 ms
Remote clock offset: 16.132 ms

Below is generated by plot.py at 2018-02-13 22:12:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.66 Mbit/s
95th percentile per-packet one-way delay: 64.036 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 52.16 Mbit/s
95th percentile per-packet one-way delay: 59.233 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 38.63 Mbit/s
95th percentile per-packet one-way delay: 63.812 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 32.71 Mbit/s
95th percentile per-packet one-way delay: 66.084 ms
Loss rate: 1.44%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-13 16:16:23

End at: 2018-02-13 16:16:53

Local clock offset: -0.743 ms

Remote clock offset: 9.587 ms

Below is generated by plot.py at 2018-02-13 22:12:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.65 Mbit/s

95th percentile per-packet one-way delay: 68.755 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 52.71 Mbit/s

95th percentile per-packet one-way delay: 68.609 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 49.50 Mbit/s

95th percentile per-packet one-way delay: 46.691 ms

Loss rate: 0.38%

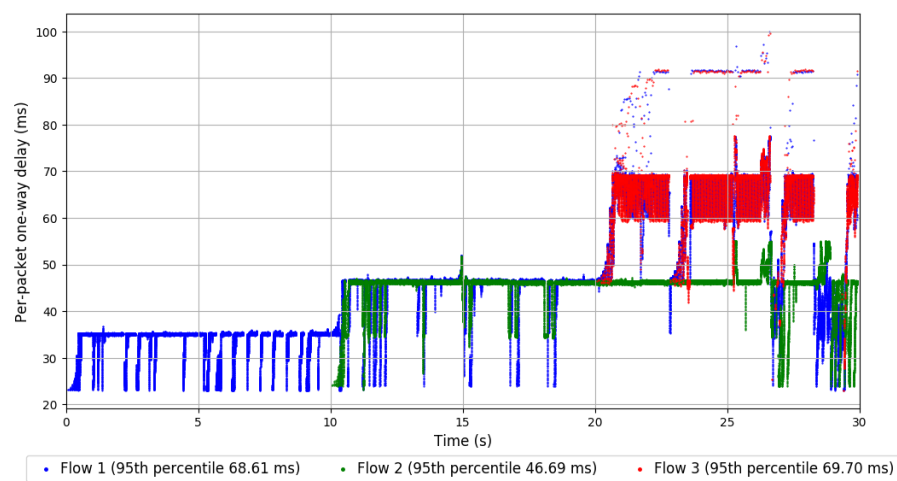
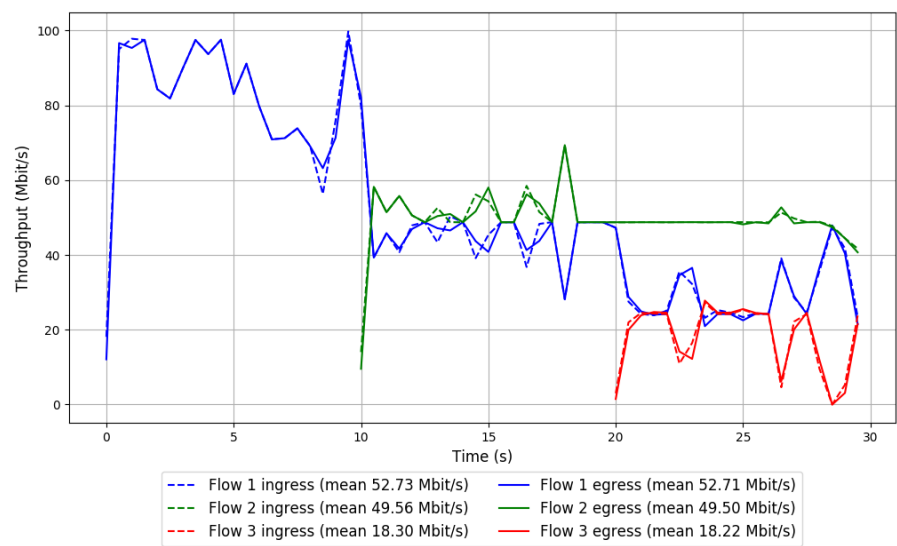
-- Flow 3:

Average throughput: 18.22 Mbit/s

95th percentile per-packet one-way delay: 69.699 ms

Loss rate: 1.34%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-13 16:40:59

End at: 2018-02-13 16:41:29

Local clock offset: -0.891 ms

Remote clock offset: 8.019 ms

Below is generated by plot.py at 2018-02-13 22:12:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.91 Mbit/s

95th percentile per-packet one-way delay: 58.289 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 57.39 Mbit/s

95th percentile per-packet one-way delay: 58.149 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 35.25 Mbit/s

95th percentile per-packet one-way delay: 58.280 ms

Loss rate: 0.85%

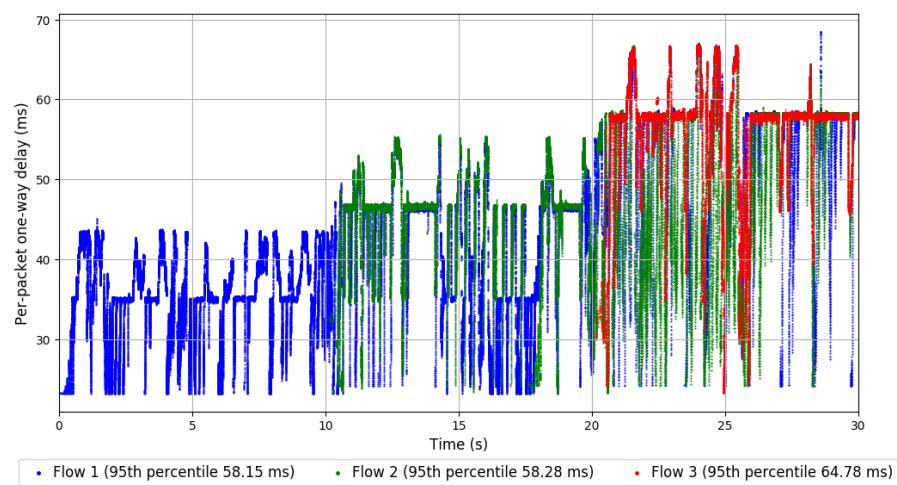
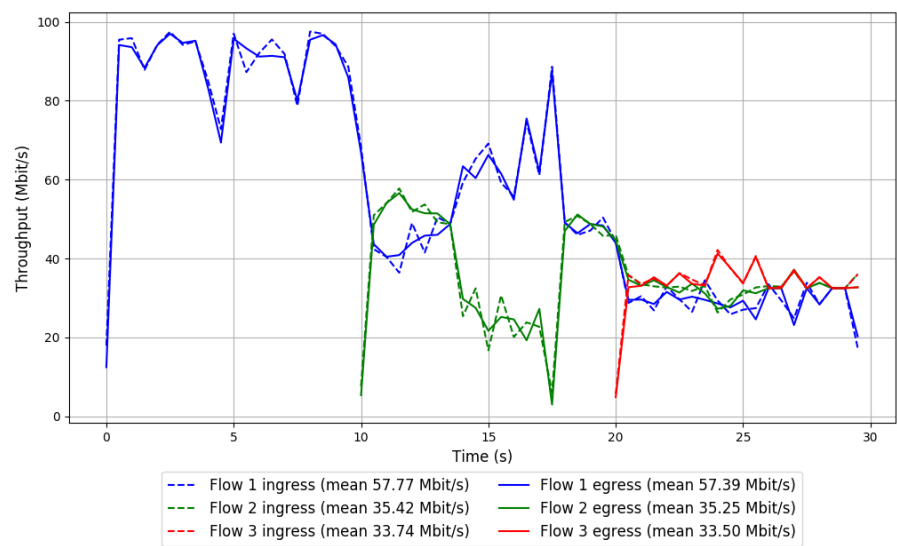
-- Flow 3:

Average throughput: 33.50 Mbit/s

95th percentile per-packet one-way delay: 64.778 ms

Loss rate: 1.40%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-13 17:05:46

End at: 2018-02-13 17:06:16

Local clock offset: 2.219 ms

Remote clock offset: 7.091 ms

Below is generated by plot.py at 2018-02-13 22:12:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.41 Mbit/s

95th percentile per-packet one-way delay: 61.612 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 56.46 Mbit/s

95th percentile per-packet one-way delay: 58.444 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 41.39 Mbit/s

95th percentile per-packet one-way delay: 62.282 ms

Loss rate: 0.49%

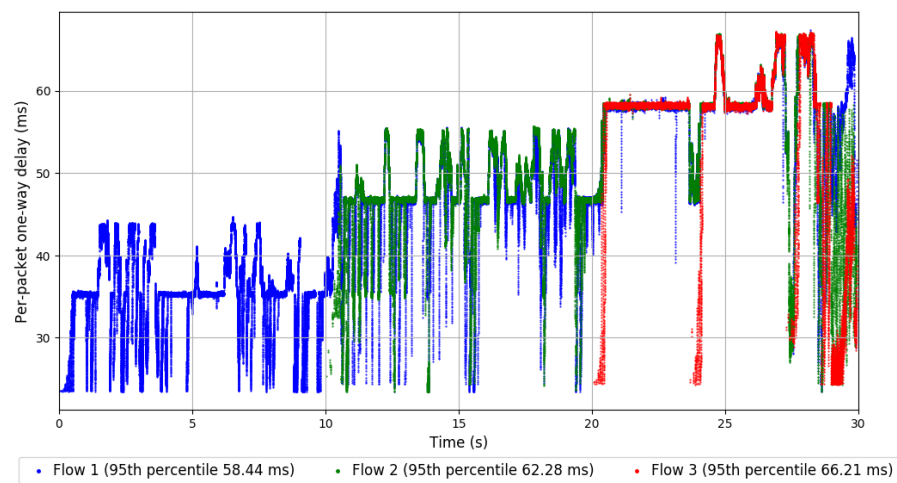
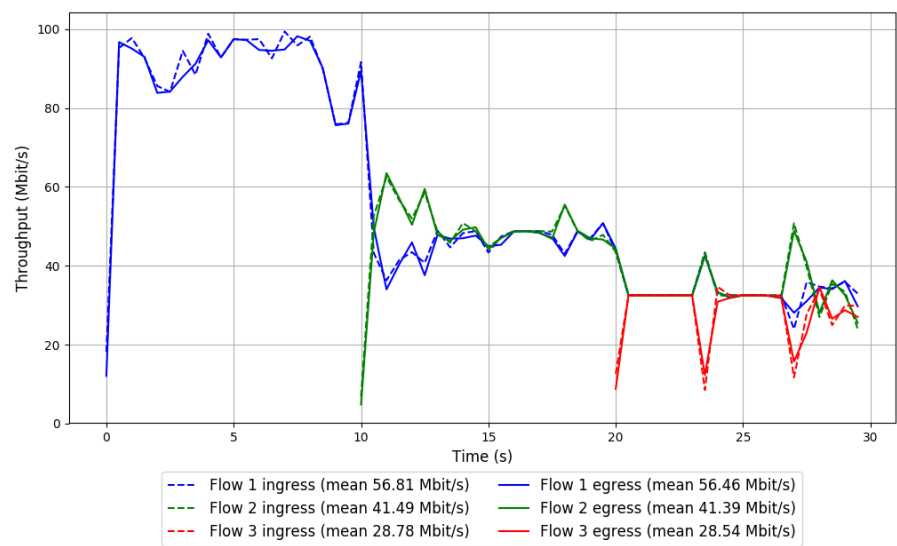
-- Flow 3:

Average throughput: 28.54 Mbit/s

95th percentile per-packet one-way delay: 66.212 ms

Loss rate: 1.31%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-13 17:30:19

End at: 2018-02-13 17:30:49

Local clock offset: 1.347 ms

Remote clock offset: 5.733 ms

Below is generated by plot.py at 2018-02-13 22:12:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.07 Mbit/s

95th percentile per-packet one-way delay: 69.758 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 52.88 Mbit/s

95th percentile per-packet one-way delay: 68.046 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 35.08 Mbit/s

95th percentile per-packet one-way delay: 71.577 ms

Loss rate: 1.07%

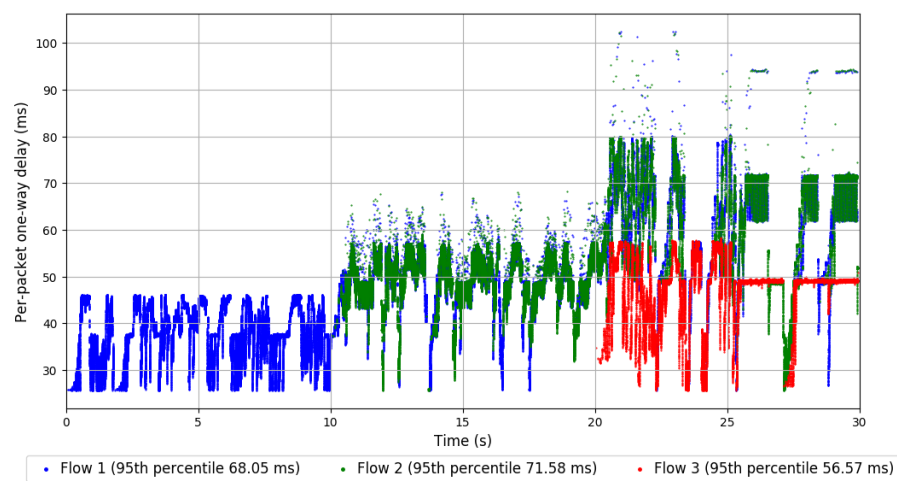
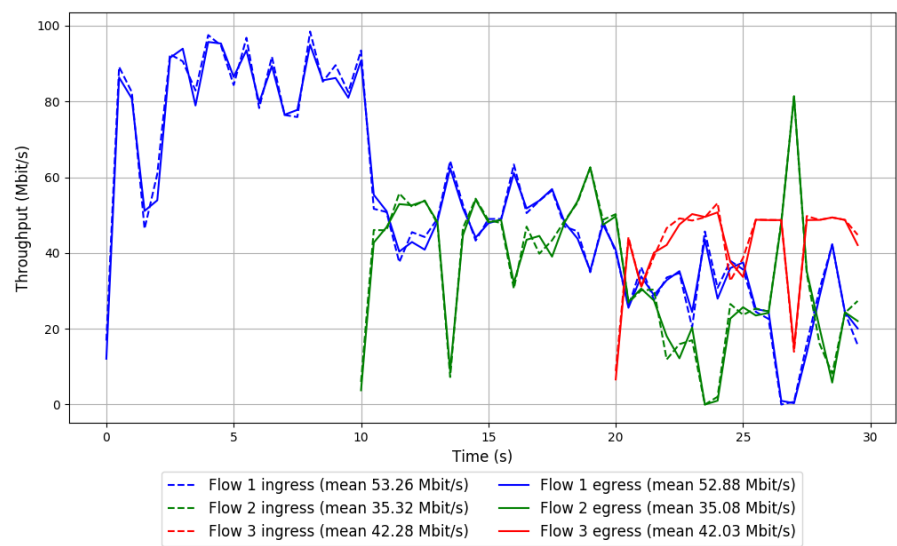
-- Flow 3:

Average throughput: 42.03 Mbit/s

95th percentile per-packet one-way delay: 56.567 ms

Loss rate: 1.32%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-13 13:38:35

End at: 2018-02-13 13:39:05

Local clock offset: -0.606 ms

Remote clock offset: 2.354 ms

Below is generated by plot.py at 2018-02-13 22:13:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.76 Mbit/s

95th percentile per-packet one-way delay: 28.208 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 45.68 Mbit/s

95th percentile per-packet one-way delay: 27.675 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 38.39 Mbit/s

95th percentile per-packet one-way delay: 29.195 ms

Loss rate: 0.39%

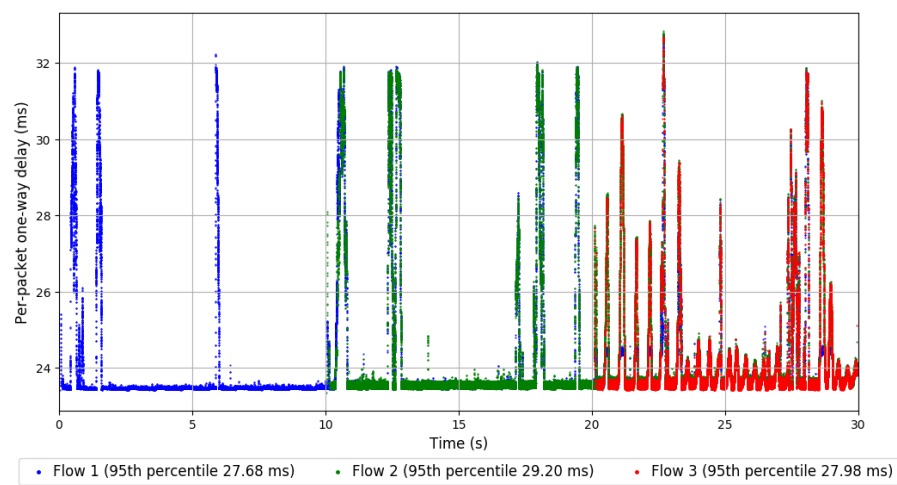
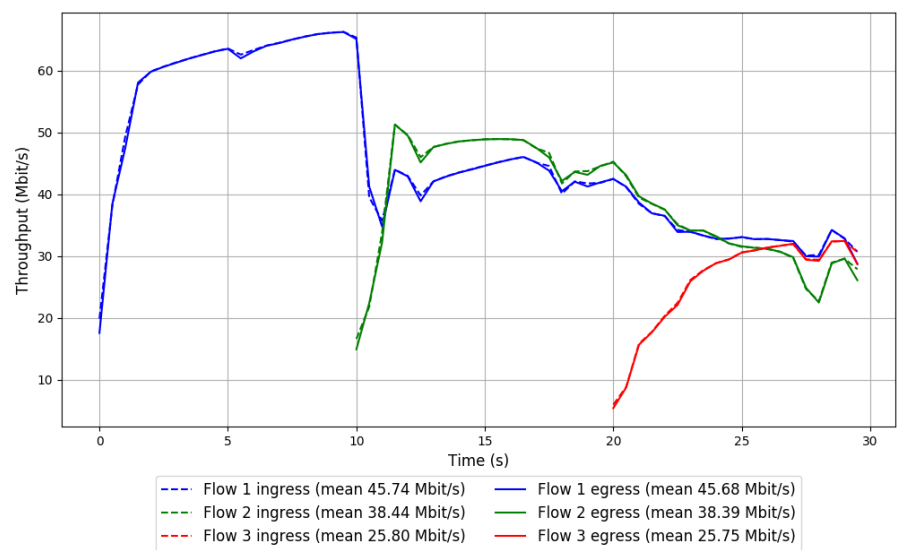
-- Flow 3:

Average throughput: 25.75 Mbit/s

95th percentile per-packet one-way delay: 27.984 ms

Loss rate: 0.75%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-13 14:03:13

End at: 2018-02-13 14:03:43

Local clock offset: 1.439 ms

Remote clock offset: 2.278 ms

Below is generated by plot.py at 2018-02-13 22:14:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.49 Mbit/s

95th percentile per-packet one-way delay: 24.032 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 48.38 Mbit/s

95th percentile per-packet one-way delay: 23.773 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 41.12 Mbit/s

95th percentile per-packet one-way delay: 24.581 ms

Loss rate: 0.22%

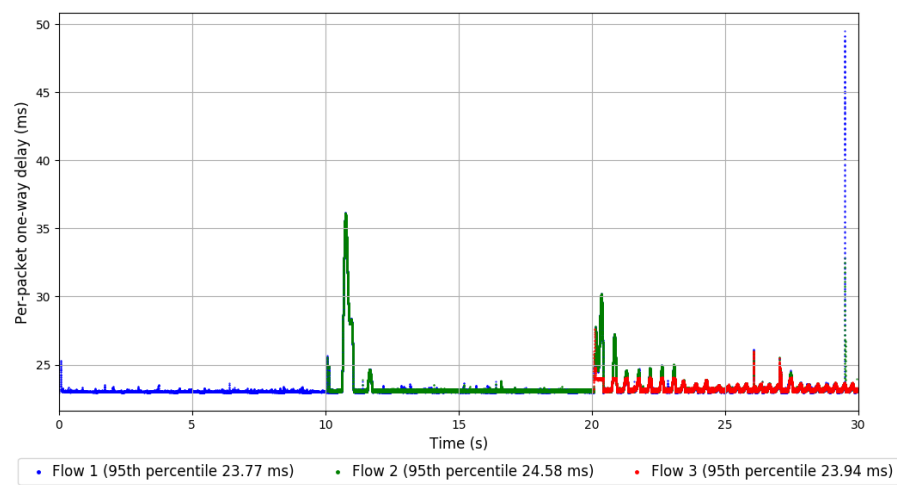
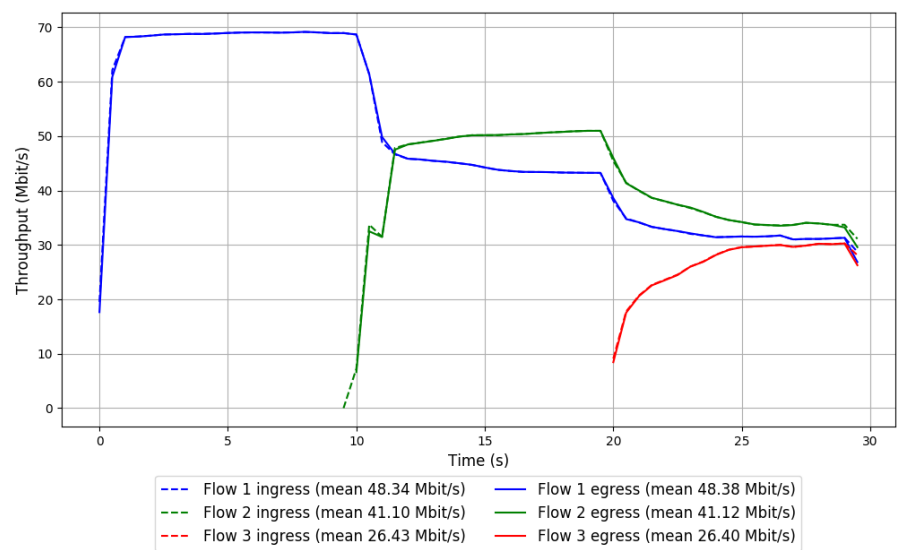
-- Flow 3:

Average throughput: 26.40 Mbit/s

95th percentile per-packet one-way delay: 23.944 ms

Loss rate: 0.62%

Run 2: Report of Copa — Data Link

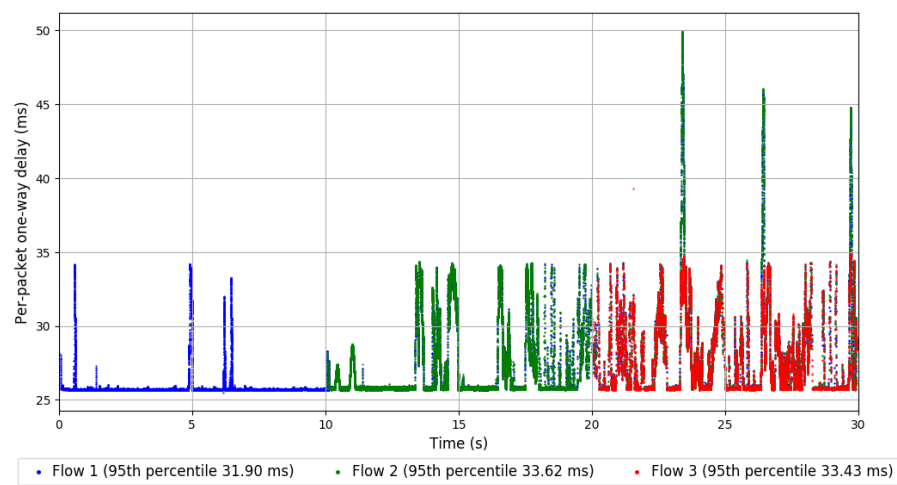
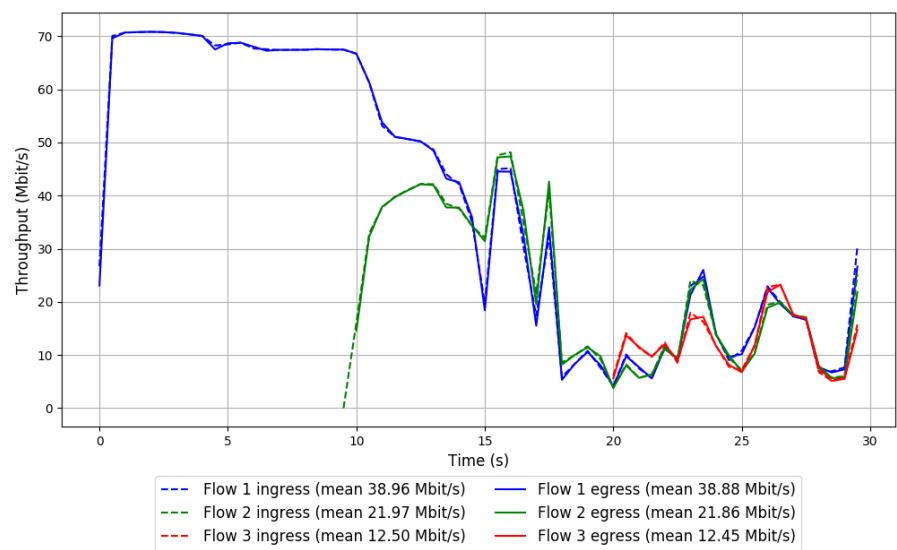


Run 3: Statistics of Copa

Start at: 2018-02-13 14:27:45
End at: 2018-02-13 14:28:15
Local clock offset: 2.014 ms
Remote clock offset: -0.198 ms

Below is generated by plot.py at 2018-02-13 22:14:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 57.55 Mbit/s
95th percentile per-packet one-way delay: 32.796 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 38.88 Mbit/s
95th percentile per-packet one-way delay: 31.896 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 21.86 Mbit/s
95th percentile per-packet one-way delay: 33.622 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 12.45 Mbit/s
95th percentile per-packet one-way delay: 33.428 ms
Loss rate: 0.97%

Run 3: Report of Copa — Data Link

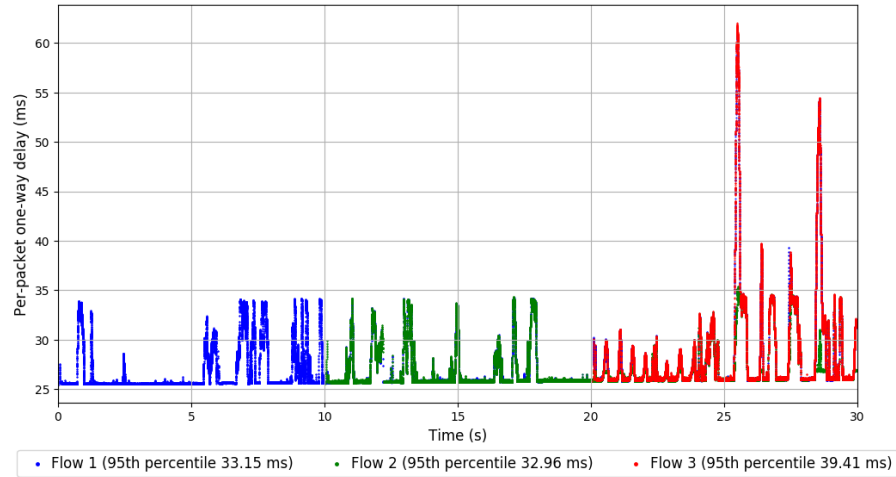
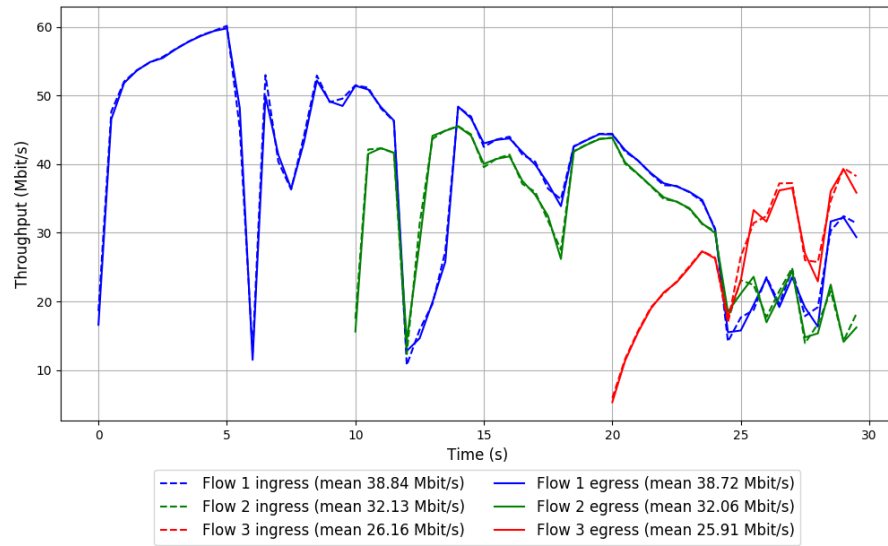


Run 4: Statistics of Copa

Start at: 2018-02-13 14:52:50
End at: 2018-02-13 14:53:20
Local clock offset: 0.724 ms
Remote clock offset: -0.148 ms

Below is generated by plot.py at 2018-02-13 22:14:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 68.63 Mbit/s
95th percentile per-packet one-way delay: 33.660 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 38.72 Mbit/s
95th percentile per-packet one-way delay: 33.151 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 32.06 Mbit/s
95th percentile per-packet one-way delay: 32.959 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 39.413 ms
Loss rate: 1.51%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-13 15:17:51

End at: 2018-02-13 15:18:21

Local clock offset: 0.97 ms

Remote clock offset: 9.558 ms

Below is generated by plot.py at 2018-02-13 22:14:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.93 Mbit/s

95th percentile per-packet one-way delay: 32.434 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 44.25 Mbit/s

95th percentile per-packet one-way delay: 31.666 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 35.67 Mbit/s

95th percentile per-packet one-way delay: 32.549 ms

Loss rate: 0.48%

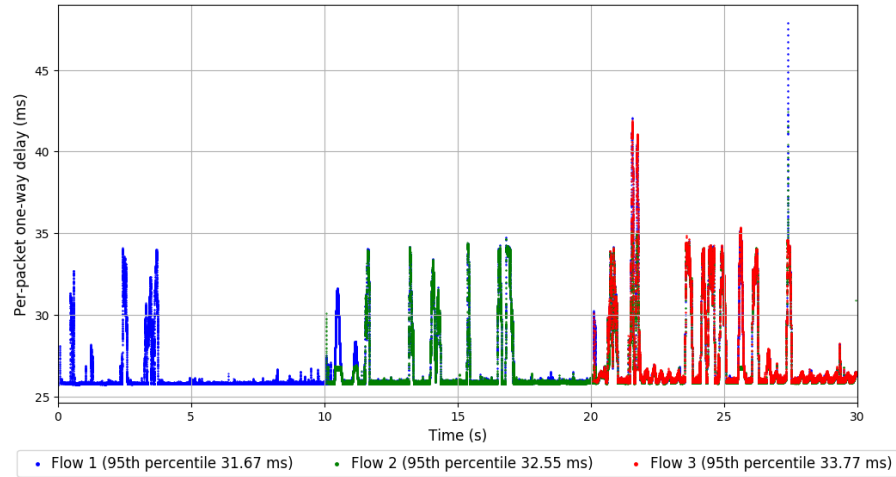
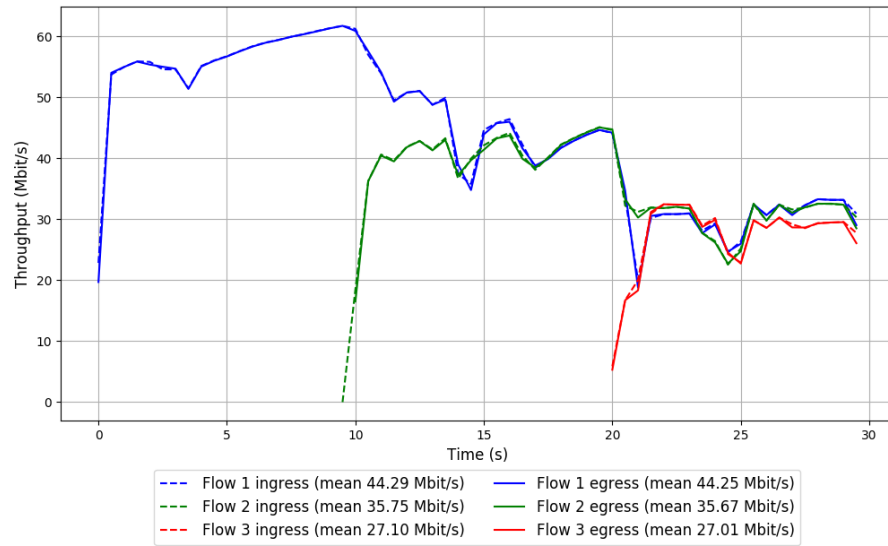
-- Flow 3:

Average throughput: 27.01 Mbit/s

95th percentile per-packet one-way delay: 33.769 ms

Loss rate: 0.85%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-13 15:42:36

End at: 2018-02-13 15:43:06

Local clock offset: -0.002 ms

Remote clock offset: 12.78 ms

Below is generated by plot.py at 2018-02-13 22:14:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.63 Mbit/s

95th percentile per-packet one-way delay: 31.831 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 39.63 Mbit/s

95th percentile per-packet one-way delay: 31.628 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 35.75 Mbit/s

95th percentile per-packet one-way delay: 32.265 ms

Loss rate: 0.39%

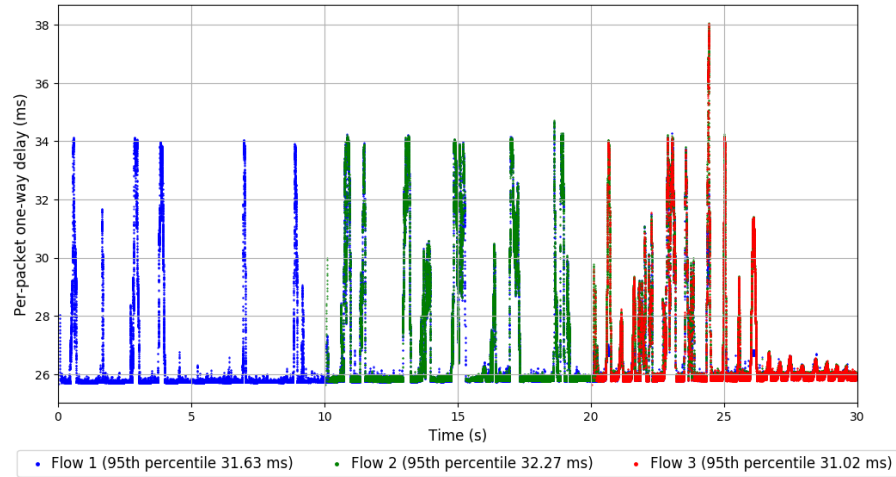
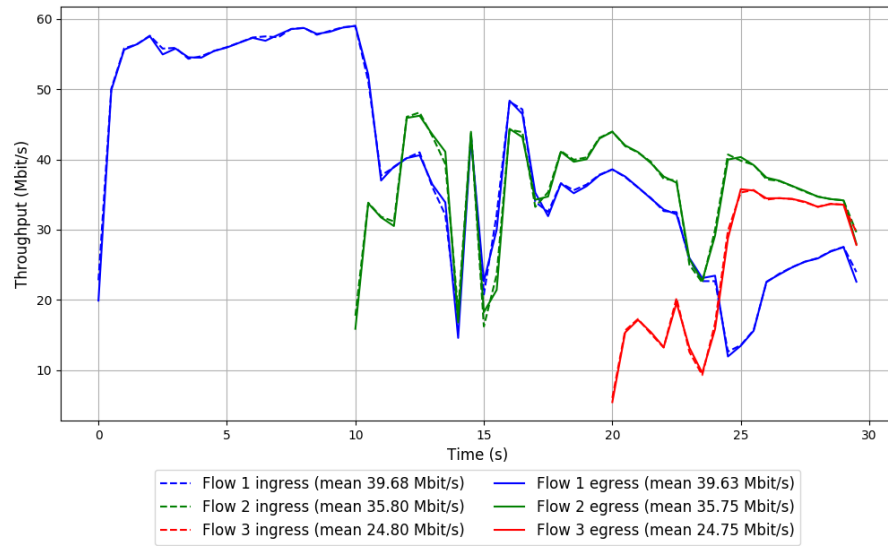
-- Flow 3:

Average throughput: 24.75 Mbit/s

95th percentile per-packet one-way delay: 31.021 ms

Loss rate: 0.73%

Run 6: Report of Copa — Data Link

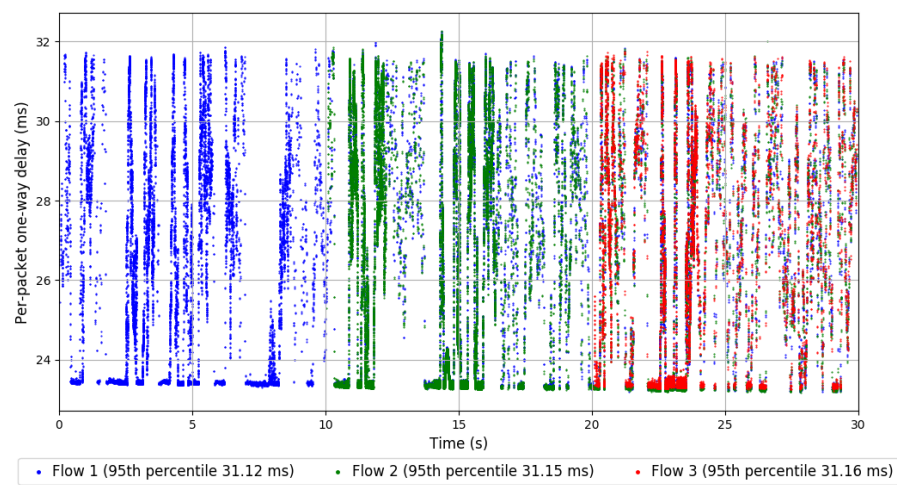
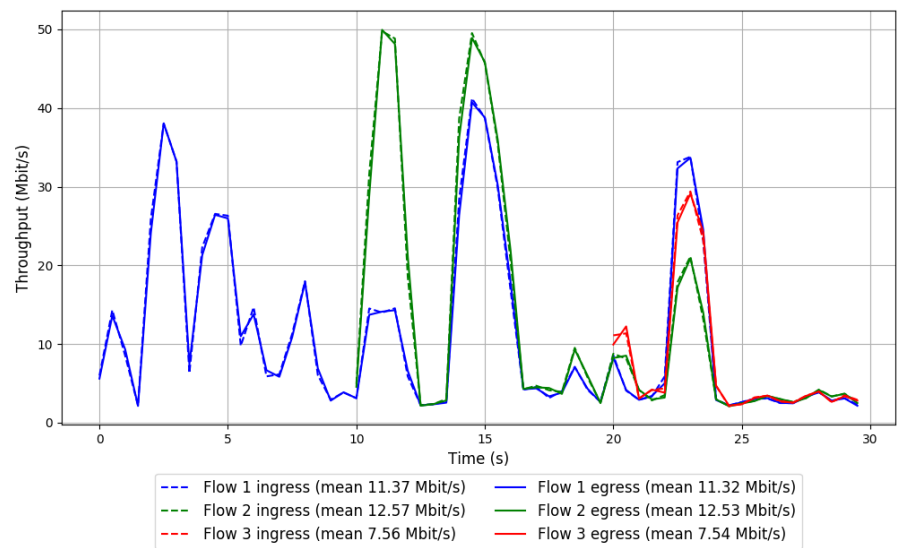


Run 7: Statistics of Copa

Start at: 2018-02-13 16:09:28
End at: 2018-02-13 16:09:58
Local clock offset: -0.797 ms
Remote clock offset: 11.416 ms

```
# Below is generated by plot.py at 2018-02-13 22:14:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.15 Mbit/s
95th percentile per-packet one-way delay: 31.134 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 11.32 Mbit/s
95th percentile per-packet one-way delay: 31.117 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 12.53 Mbit/s
95th percentile per-packet one-way delay: 31.146 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 7.54 Mbit/s
95th percentile per-packet one-way delay: 31.155 ms
Loss rate: 0.73%
```


Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-13 16:34:15

End at: 2018-02-13 16:34:45

Local clock offset: -0.865 ms

Remote clock offset: 6.649 ms

Below is generated by plot.py at 2018-02-13 22:14:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.74 Mbit/s

95th percentile per-packet one-way delay: 24.343 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 46.48 Mbit/s

95th percentile per-packet one-way delay: 23.939 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 40.07 Mbit/s

95th percentile per-packet one-way delay: 25.124 ms

Loss rate: 0.23%

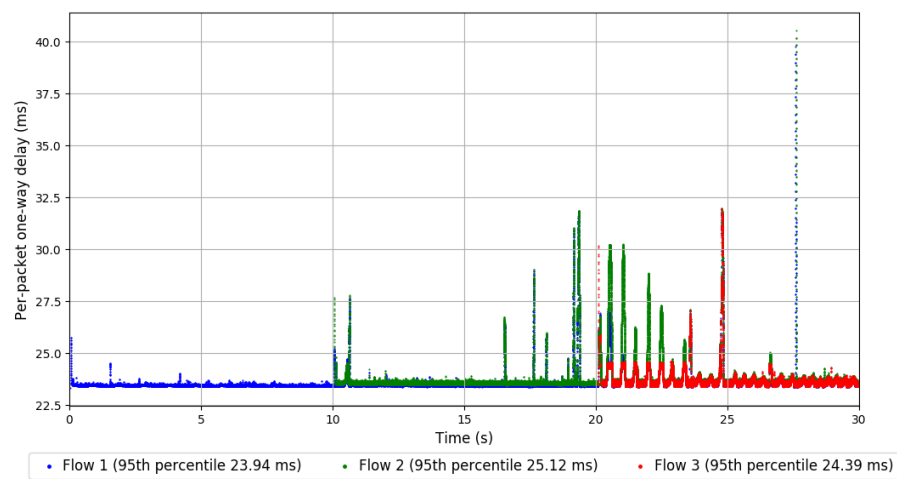
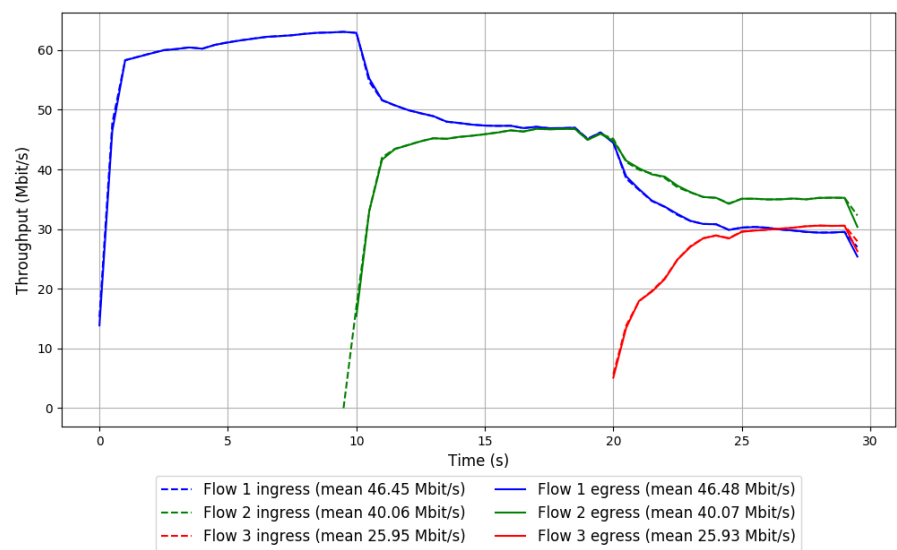
-- Flow 3:

Average throughput: 25.93 Mbit/s

95th percentile per-packet one-way delay: 24.387 ms

Loss rate: 0.61%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-13 16:58:54

End at: 2018-02-13 16:59:24

Local clock offset: 1.638 ms

Remote clock offset: 7.513 ms

Below is generated by plot.py at 2018-02-13 22:15:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.21 Mbit/s

95th percentile per-packet one-way delay: 31.435 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 41.37 Mbit/s

95th percentile per-packet one-way delay: 31.187 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 33.60 Mbit/s

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

Loss rate: 0.56%

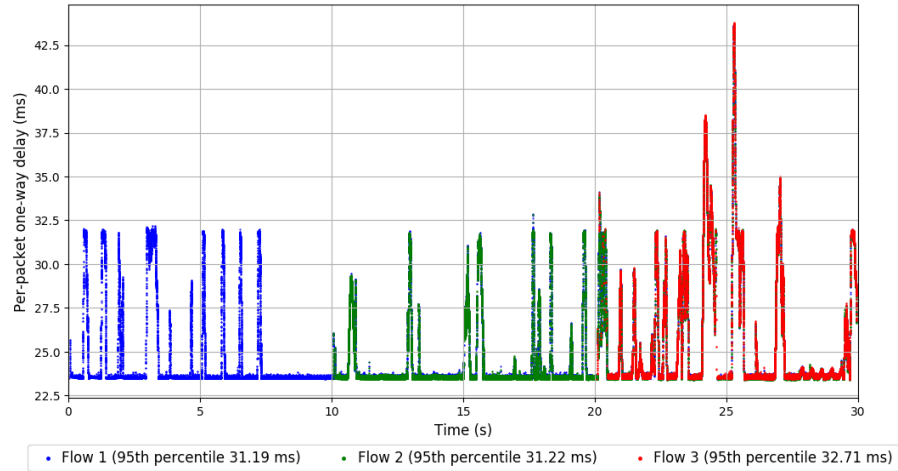
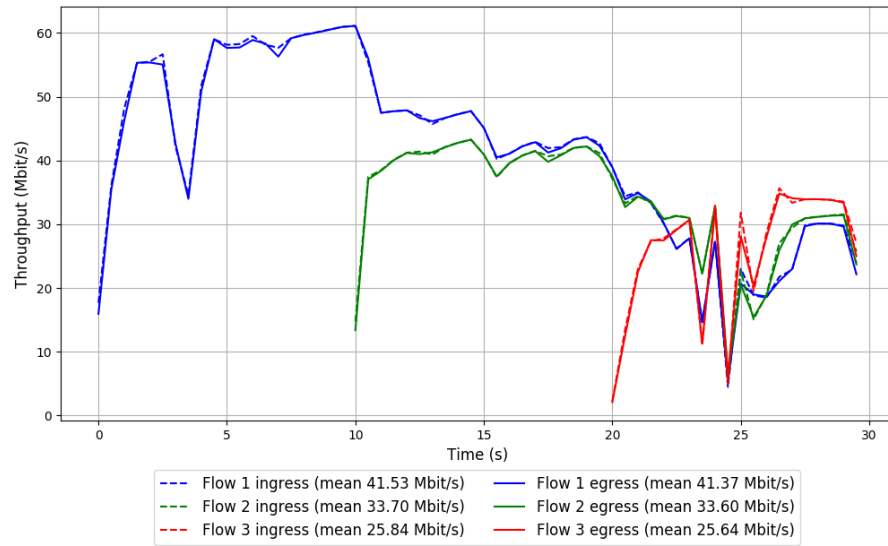
-- Flow 3:

Average throughput: 25.64 Mbit/s

95th percentile per-packet one-way delay: 32.712 ms

Loss rate: 1.32%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-13 17:23:30

End at: 2018-02-13 17:24:00

Local clock offset: 1.716 ms

Remote clock offset: 5.514 ms

Below is generated by plot.py at 2018-02-13 22:15:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.47 Mbit/s

95th percentile per-packet one-way delay: 33.530 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 40.69 Mbit/s

95th percentile per-packet one-way delay: 33.137 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 33.95 Mbit/s

95th percentile per-packet one-way delay: 33.824 ms

Loss rate: 0.52%

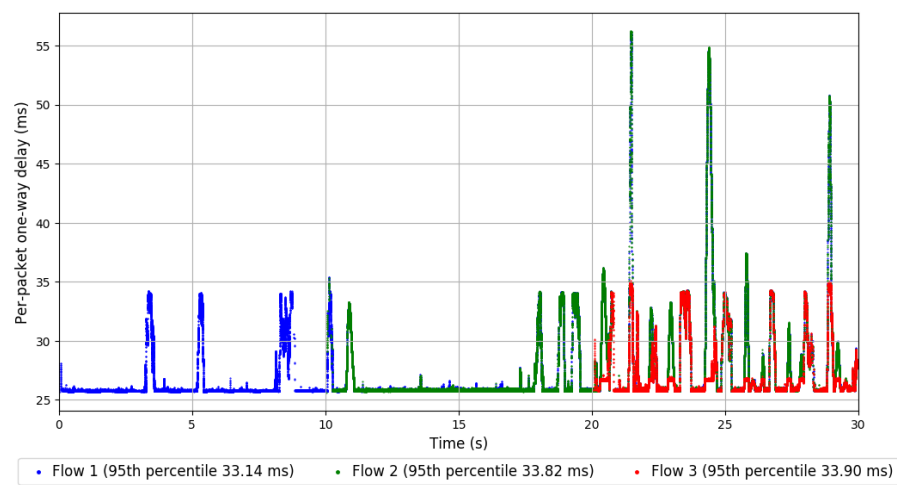
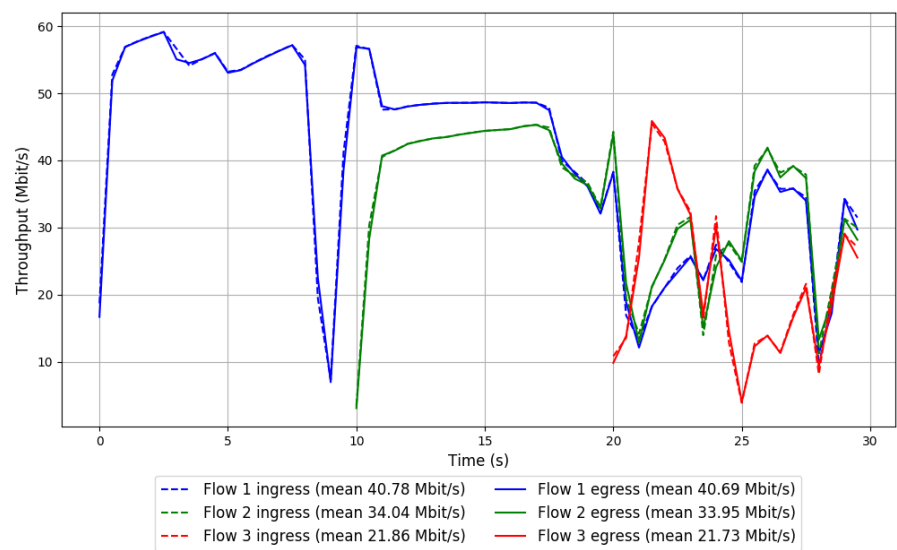
-- Flow 3:

Average throughput: 21.73 Mbit/s

95th percentile per-packet one-way delay: 33.898 ms

Loss rate: 1.15%

Run 10: Report of Copa — Data Link

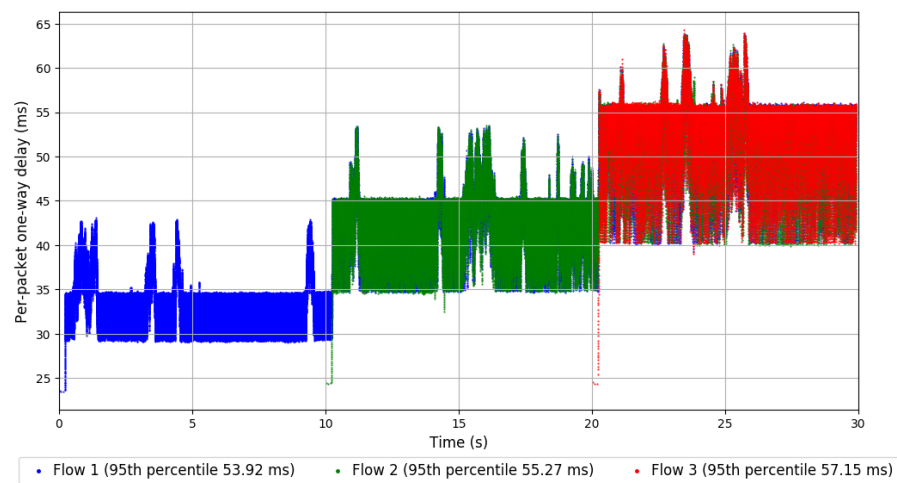
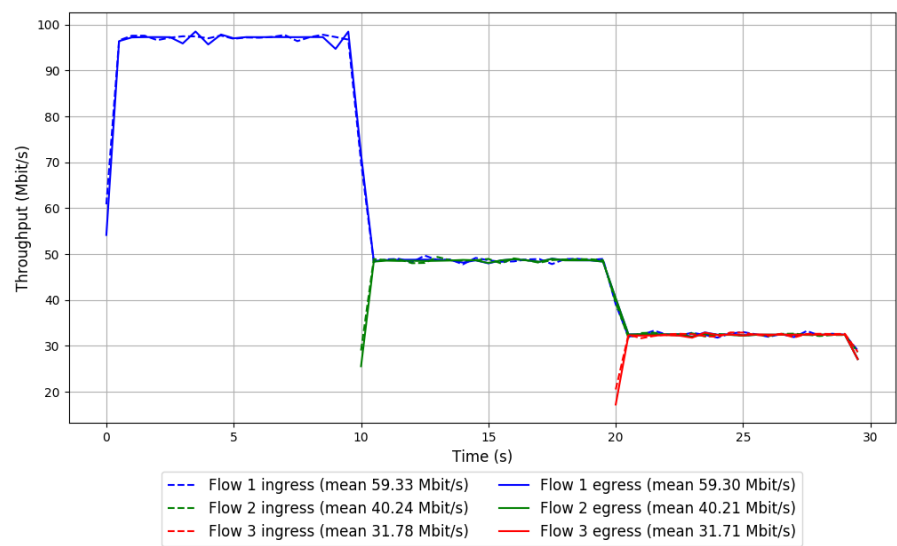


```
Run 1: Statistics of FillP

Start at: 2018-02-13 13:30:22
End at: 2018-02-13 13:30:52
Local clock offset: -0.569 ms
Remote clock offset: 1.964 ms

# Below is generated by plot.py at 2018-02-13 22:15:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.52 Mbit/s
95th percentile per-packet one-way delay: 55.106 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 59.30 Mbit/s
95th percentile per-packet one-way delay: 53.923 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 40.21 Mbit/s
95th percentile per-packet one-way delay: 55.267 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 31.71 Mbit/s
95th percentile per-packet one-way delay: 57.148 ms
Loss rate: 0.86%
```


Run 1: Report of FillP — Data Link

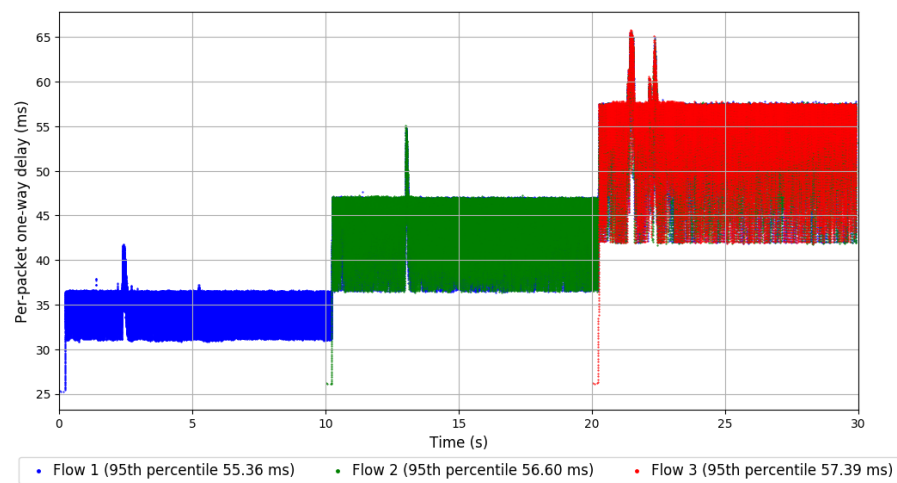
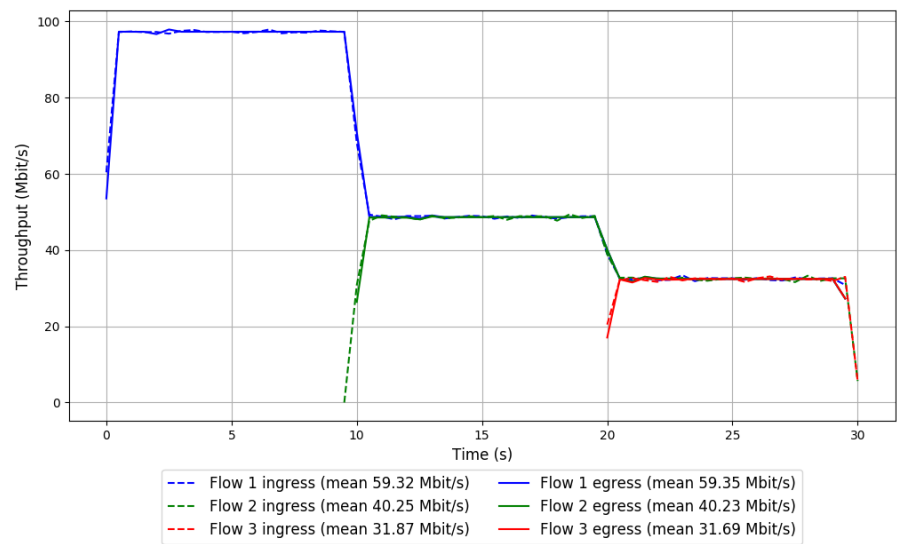


Run 2: Statistics of FillP

Start at: 2018-02-13 13:54:57
End at: 2018-02-13 13:55:27
Local clock offset: 0.112 ms
Remote clock offset: -0.141 ms

Below is generated by plot.py at 2018-02-13 22:15:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 96.60 Mbit/s
95th percentile per-packet one-way delay: 56.493 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 59.35 Mbit/s
95th percentile per-packet one-way delay: 55.356 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 40.23 Mbit/s
95th percentile per-packet one-way delay: 56.605 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 31.69 Mbit/s
95th percentile per-packet one-way delay: 57.389 ms
Loss rate: 2.25%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-13 14:19:29

End at: 2018-02-13 14:19:59

Local clock offset: 2.122 ms

Remote clock offset: 2.549 ms

Below is generated by plot.py at 2018-02-13 22:15:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.23 Mbit/s

95th percentile per-packet one-way delay: 63.730 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 56.45 Mbit/s

95th percentile per-packet one-way delay: 63.048 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 36.29 Mbit/s

95th percentile per-packet one-way delay: 65.188 ms

Loss rate: 0.59%

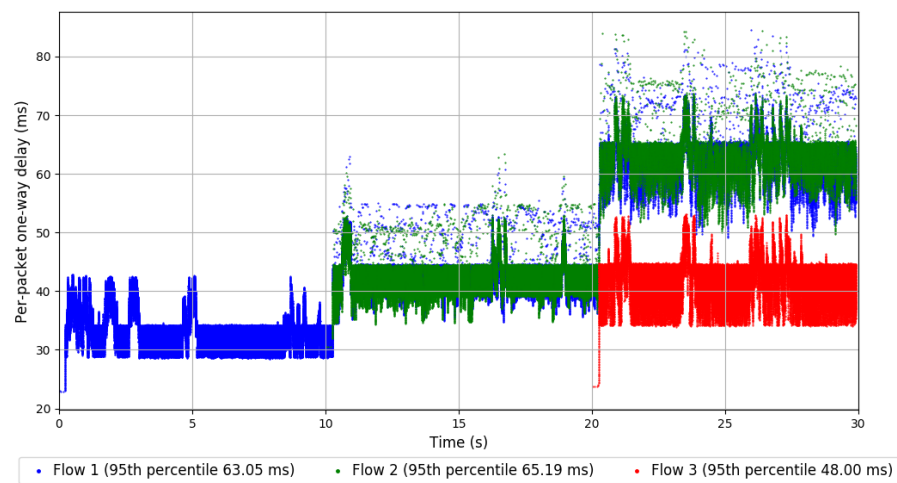
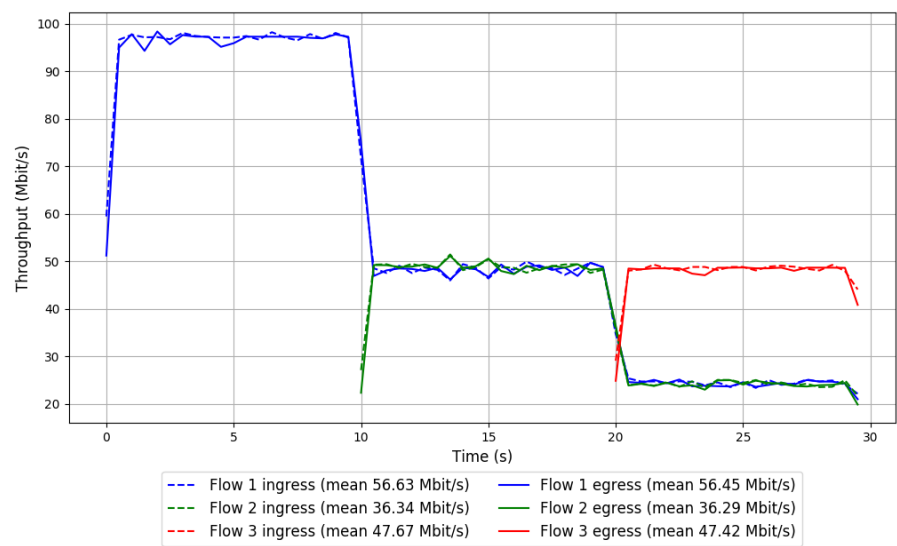
-- Flow 3:

Average throughput: 47.42 Mbit/s

95th percentile per-packet one-way delay: 48.001 ms

Loss rate: 1.12%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-13 14:44:24

End at: 2018-02-13 14:44:54

Local clock offset: 1.024 ms

Remote clock offset: 2.401 ms

Below is generated by plot.py at 2018-02-13 22:15:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.78 Mbit/s

95th percentile per-packet one-way delay: 65.245 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 56.39 Mbit/s

95th percentile per-packet one-way delay: 64.787 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 35.83 Mbit/s

95th percentile per-packet one-way delay: 68.414 ms

Loss rate: 1.00%

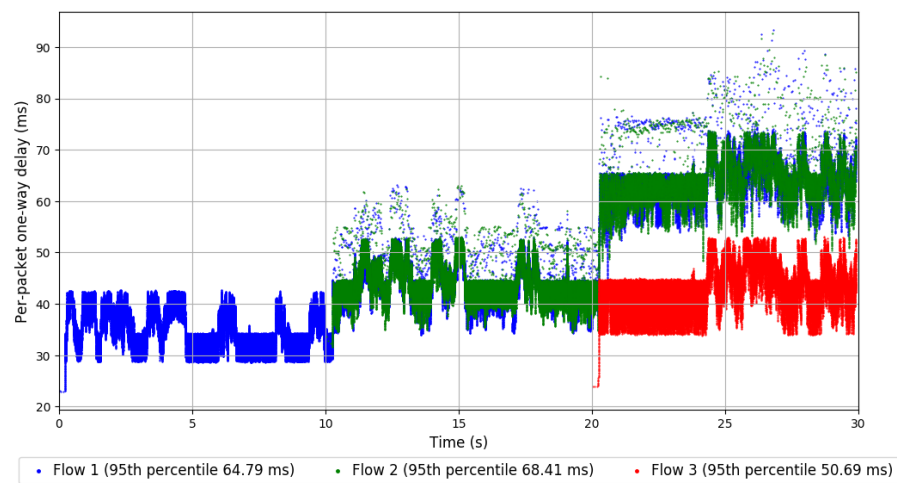
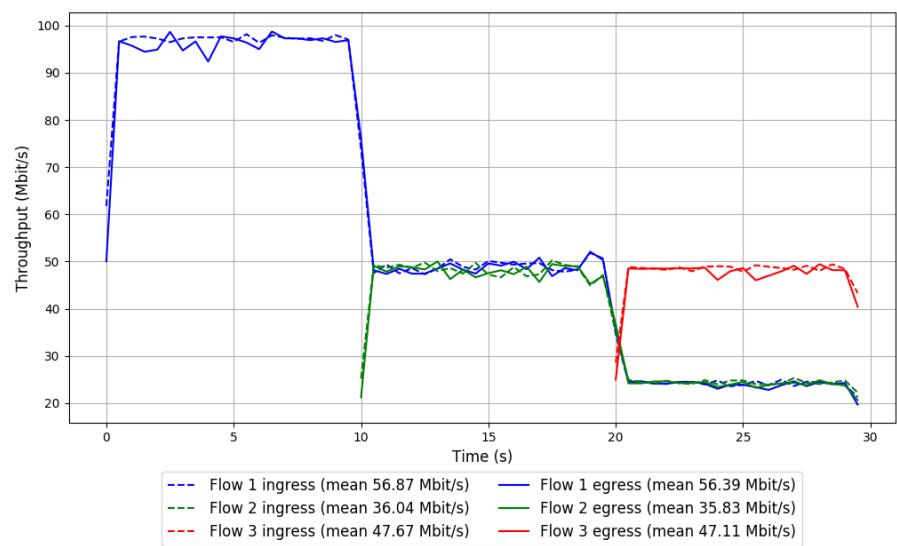
-- Flow 3:

Average throughput: 47.11 Mbit/s

95th percentile per-packet one-way delay: 50.685 ms

Loss rate: 1.74%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-13 15:09:26

End at: 2018-02-13 15:09:56

Local clock offset: 0.805 ms

Remote clock offset: 10.189 ms

Run 5: Report of FillP — Data Link

Figure is missing

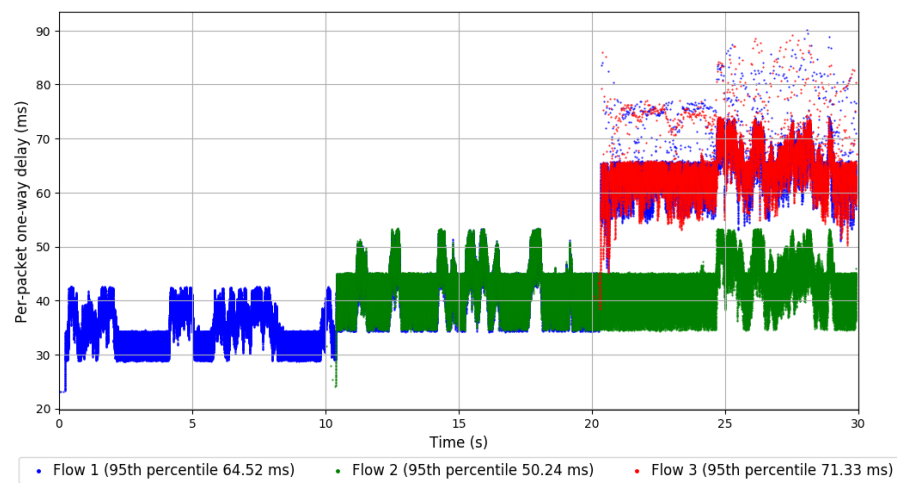
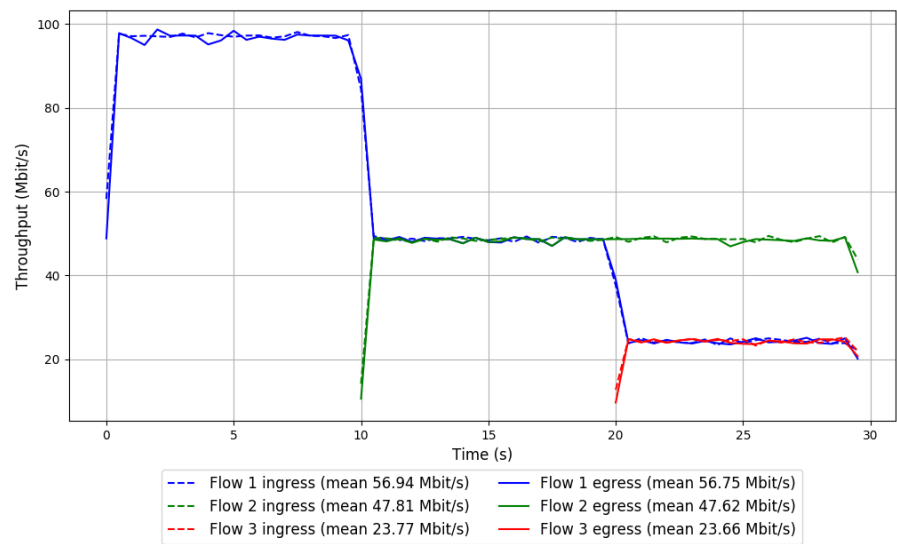
Figure is missing

Run 6: Statistics of FillP

Start at: 2018-02-13 15:34:15
End at: 2018-02-13 15:34:45
Local clock offset: 0.867 ms
Remote clock offset: 14.388 ms

Below is generated by plot.py at 2018-02-13 22:15:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 96.20 Mbit/s
95th percentile per-packet one-way delay: 64.999 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 56.75 Mbit/s
95th percentile per-packet one-way delay: 64.524 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 47.62 Mbit/s
95th percentile per-packet one-way delay: 50.243 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 23.66 Mbit/s
95th percentile per-packet one-way delay: 71.330 ms
Loss rate: 1.34%

Run 6: Report of FillP — Data Link

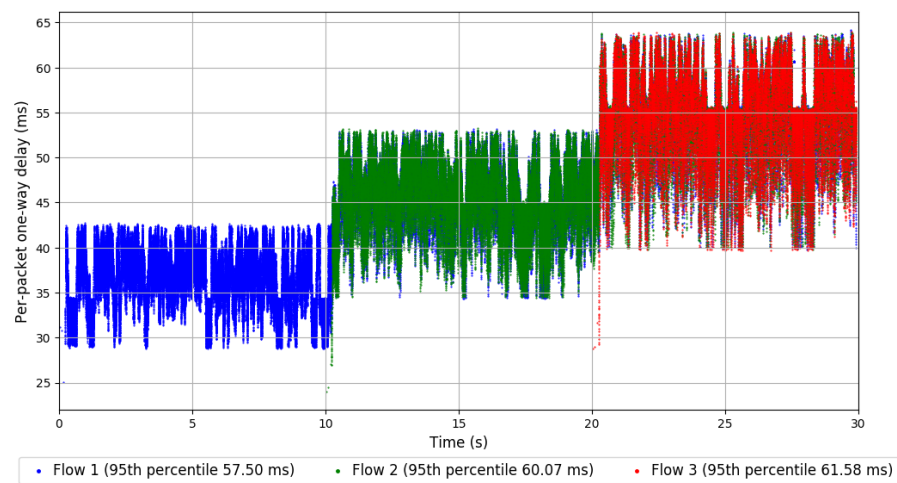
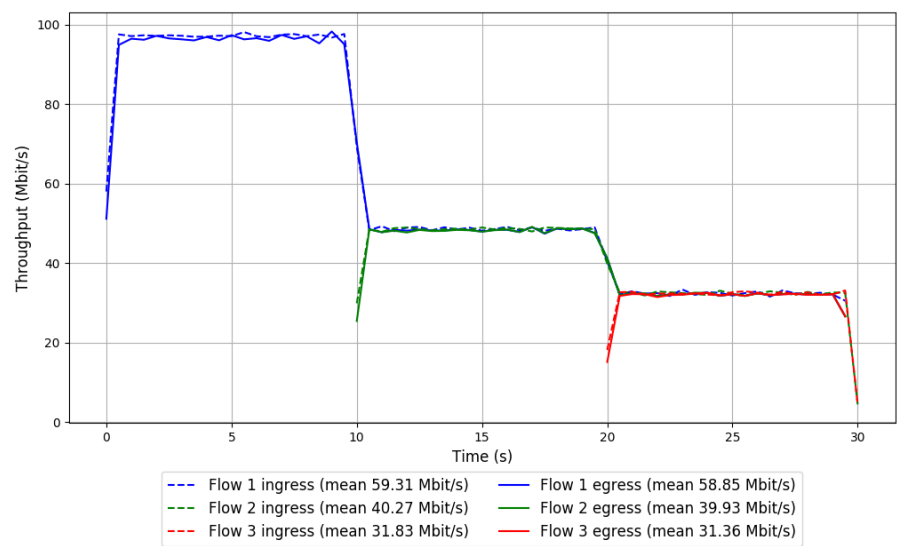


Run 7: Statistics of FillP

Start at: 2018-02-13 15:59:53
End at: 2018-02-13 16:00:23
Local clock offset: -0.583 ms
Remote clock offset: 17.515 ms

Below is generated by plot.py at 2018-02-13 22:16:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.78 Mbit/s
95th percentile per-packet one-way delay: 59.576 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 58.85 Mbit/s
95th percentile per-packet one-way delay: 57.500 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 39.93 Mbit/s
95th percentile per-packet one-way delay: 60.074 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 31.36 Mbit/s
95th percentile per-packet one-way delay: 61.579 ms
Loss rate: 3.05%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-13 16:26:00

End at: 2018-02-13 16:26:30

Local clock offset: -0.763 ms

Remote clock offset: 7.976 ms

Below is generated by plot.py at 2018-02-13 22:16:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.59 Mbit/s

95th percentile per-packet one-way delay: 62.994 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 64.60 Mbit/s

95th percentile per-packet one-way delay: 43.929 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 36.47 Mbit/s

95th percentile per-packet one-way delay: 63.918 ms

Loss rate: 0.30%

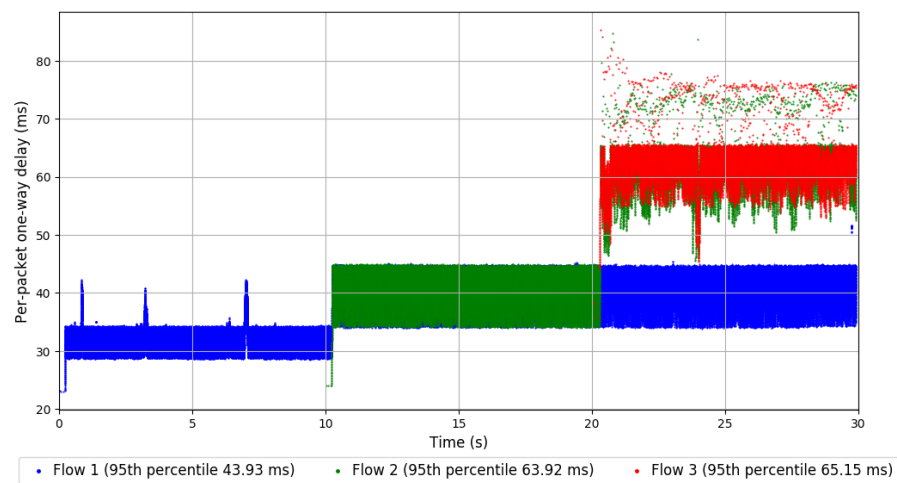
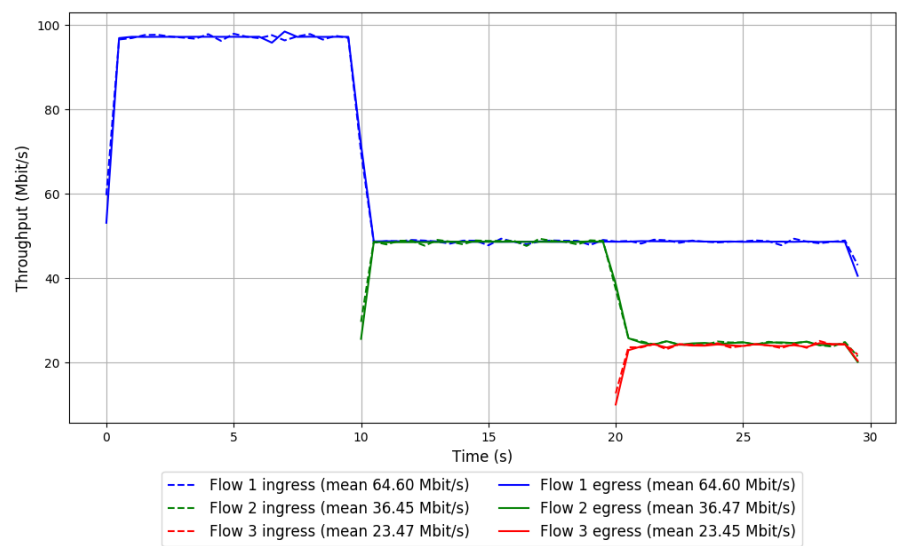
-- Flow 3:

Average throughput: 23.45 Mbit/s

95th percentile per-packet one-way delay: 65.152 ms

Loss rate: 0.95%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-13 16:50:41

End at: 2018-02-13 16:51:11

Local clock offset: 0.911 ms

Remote clock offset: 8.06 ms

Below is generated by plot.py at 2018-02-13 22:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.57 Mbit/s

95th percentile per-packet one-way delay: 60.554 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 58.77 Mbit/s

95th percentile per-packet one-way delay: 59.169 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 39.99 Mbit/s

95th percentile per-packet one-way delay: 60.833 ms

Loss rate: 1.25%

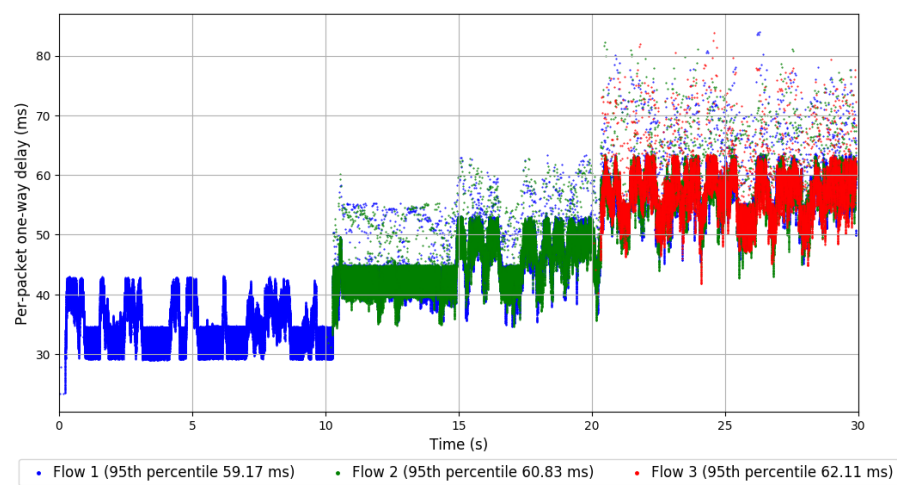
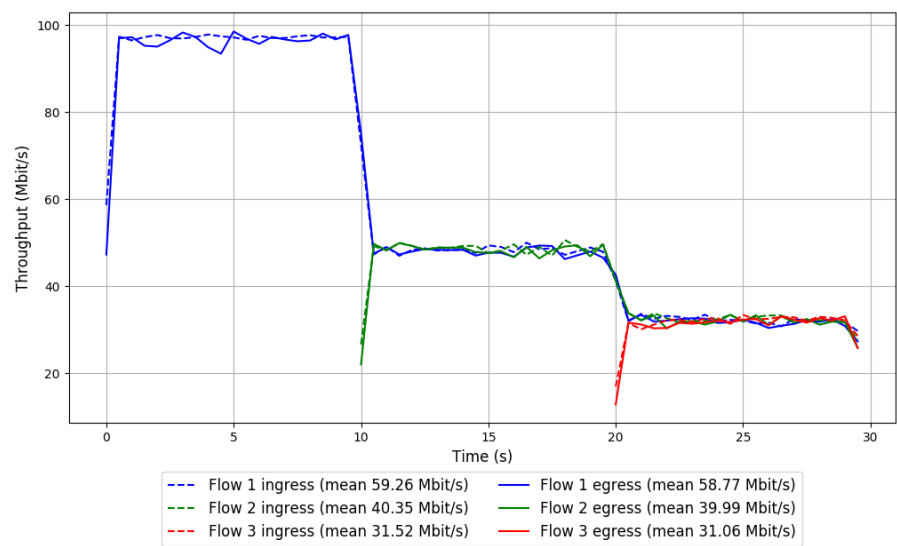
-- Flow 3:

Average throughput: 31.06 Mbit/s

95th percentile per-packet one-way delay: 62.107 ms

Loss rate: 2.20%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-13 17:15:17

End at: 2018-02-13 17:15:47

Local clock offset: 2.704 ms

Remote clock offset: 5.197 ms

Below is generated by plot.py at 2018-02-13 22:17:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.13 Mbit/s

95th percentile per-packet one-way delay: 67.201 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 64.26 Mbit/s

95th percentile per-packet one-way delay: 49.193 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 36.20 Mbit/s

95th percentile per-packet one-way delay: 69.640 ms

Loss rate: 0.51%

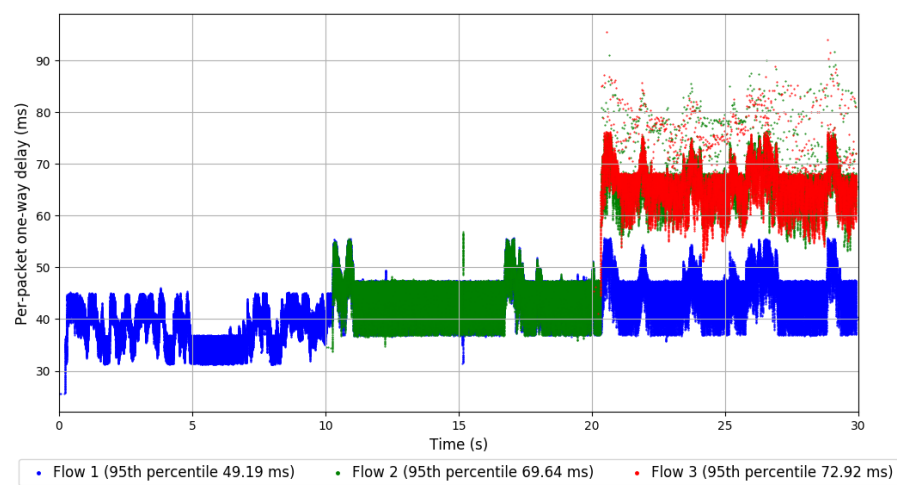
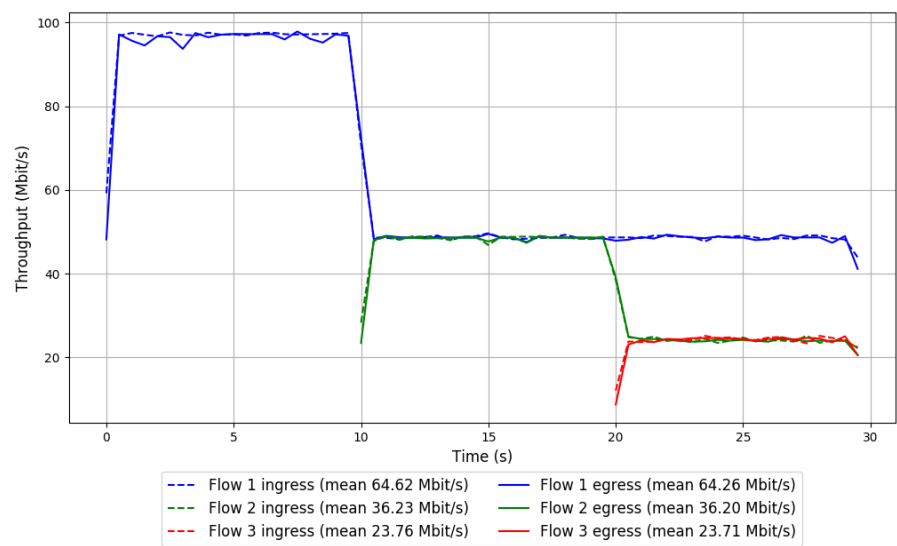
-- Flow 3:

Average throughput: 23.71 Mbit/s

95th percentile per-packet one-way delay: 72.917 ms

Loss rate: 1.18%

Run 10: Report of FillP — Data Link



Run 1: Statistics of Indigo-1-32

Start at: 2018-02-13 13:37:12

End at: 2018-02-13 13:37:42

Local clock offset: -0.52 ms

Remote clock offset: 2.545 ms

Below is generated by plot.py at 2018-02-13 22:17:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.51 Mbit/s

95th percentile per-packet one-way delay: 33.109 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 58.62 Mbit/s

95th percentile per-packet one-way delay: 33.187 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 40.18 Mbit/s

95th percentile per-packet one-way delay: 33.066 ms

Loss rate: 0.27%

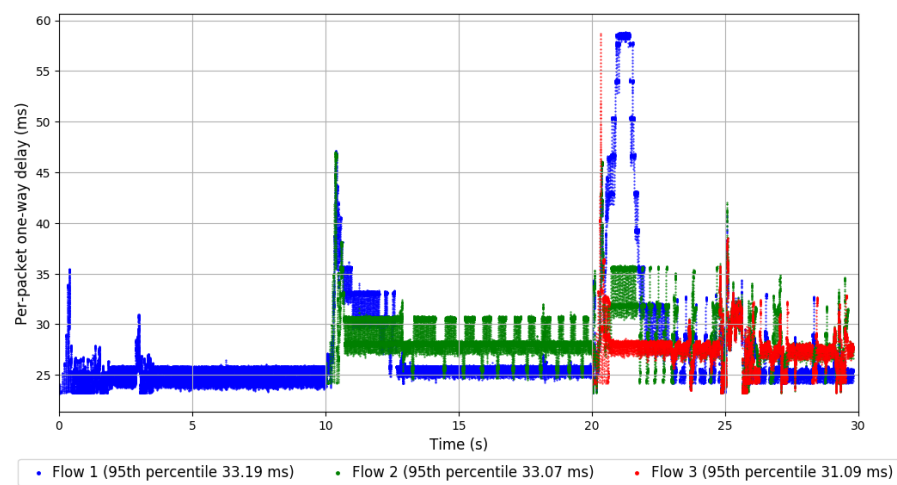
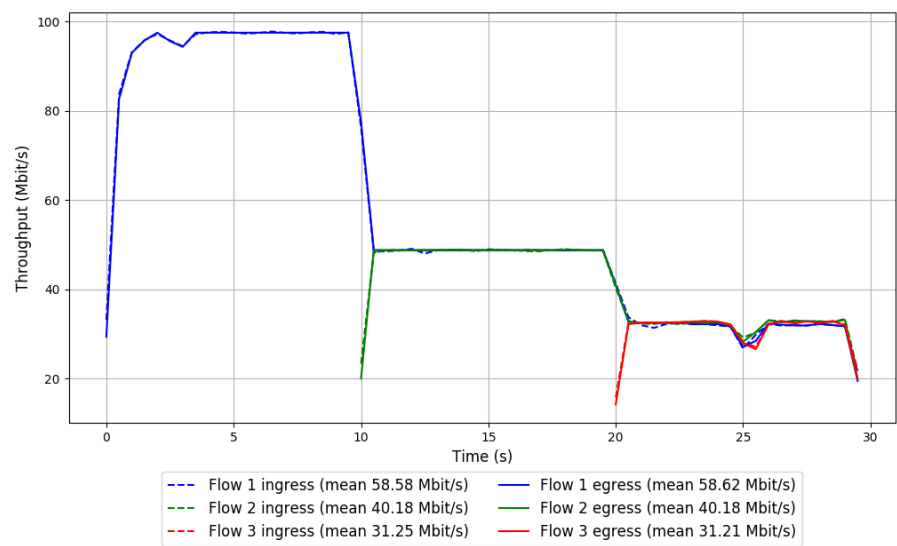
-- Flow 3:

Average throughput: 31.21 Mbit/s

95th percentile per-packet one-way delay: 31.094 ms

Loss rate: 0.70%

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



Run 2: Statistics of Indigo-1-32

Start at: 2018-02-13 14:01:51

End at: 2018-02-13 14:02:21

Local clock offset: 1.292 ms

Remote clock offset: 1.777 ms

Below is generated by plot.py at 2018-02-13 22:17:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.16 Mbit/s

95th percentile per-packet one-way delay: 33.045 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 59.01 Mbit/s

95th percentile per-packet one-way delay: 34.046 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 40.31 Mbit/s

95th percentile per-packet one-way delay: 30.954 ms

Loss rate: 0.24%

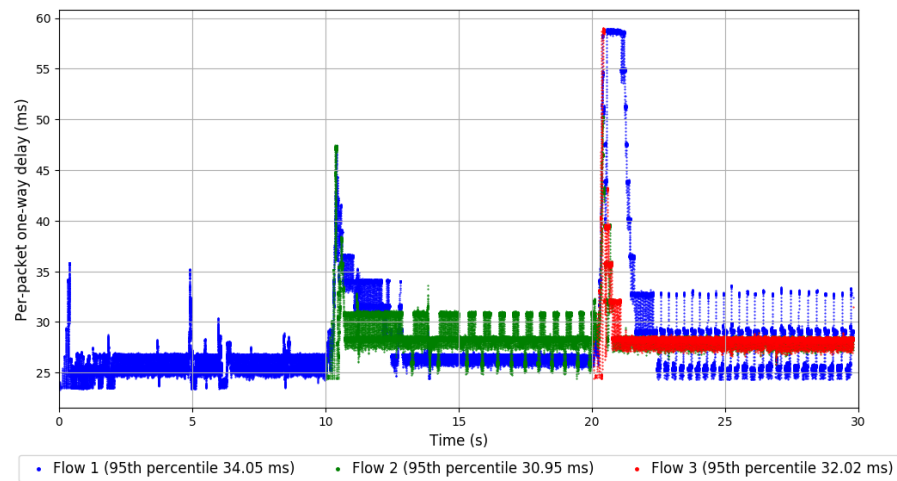
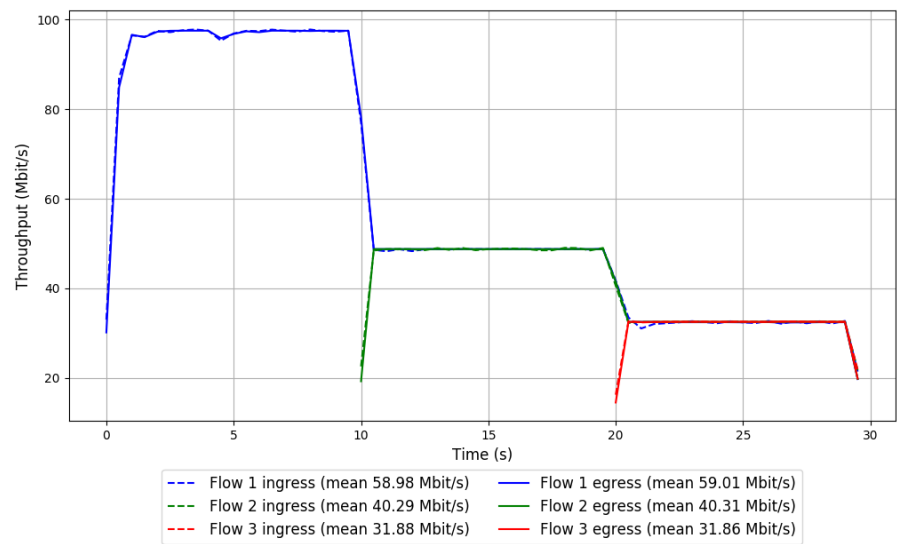
-- Flow 3:

Average throughput: 31.86 Mbit/s

95th percentile per-packet one-way delay: 32.015 ms

Loss rate: 0.61%

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-13 14:26:21

End at: 2018-02-13 14:26:51

Local clock offset: 2.188 ms

Remote clock offset: 1.868 ms

Below is generated by plot.py at 2018-02-13 22:17:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.56 Mbit/s

95th percentile per-packet one-way delay: 33.073 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 51.27 Mbit/s

95th percentile per-packet one-way delay: 32.955 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 38.06 Mbit/s

95th percentile per-packet one-way delay: 33.520 ms

Loss rate: 0.64%

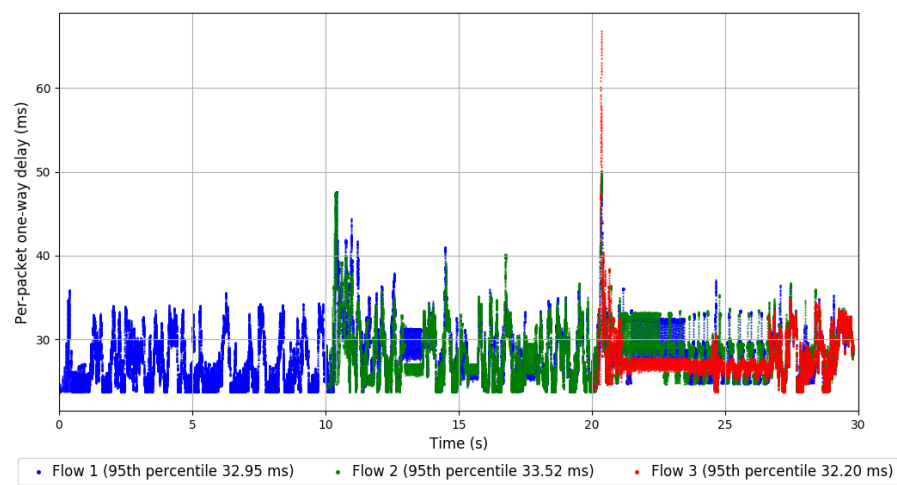
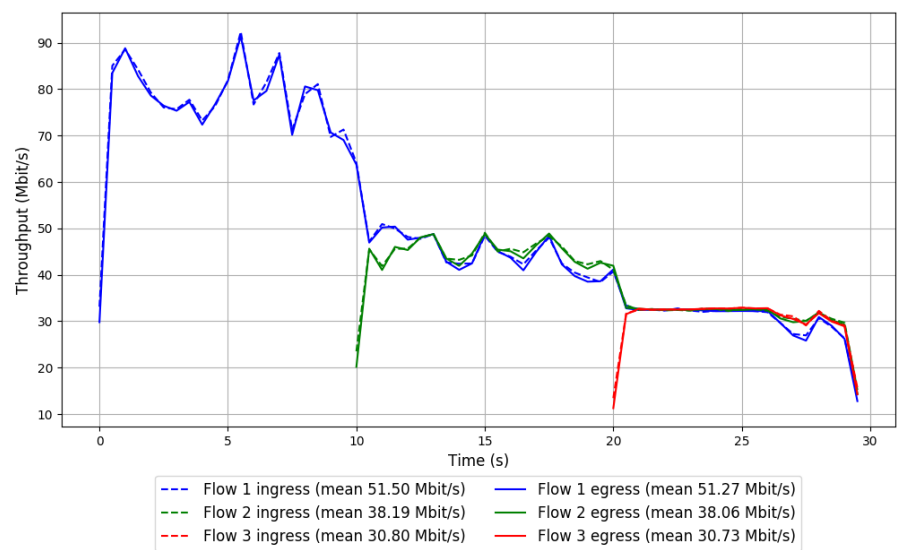
-- Flow 3:

Average throughput: 30.73 Mbit/s

95th percentile per-packet one-way delay: 32.196 ms

Loss rate: 0.79%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-13 14:51:26

End at: 2018-02-13 14:51:56

Local clock offset: 0.865 ms

Remote clock offset: 1.959 ms

Below is generated by plot.py at 2018-02-13 22:17:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.52 Mbit/s

95th percentile per-packet one-way delay: 36.274 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 58.21 Mbit/s

95th percentile per-packet one-way delay: 37.472 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 39.57 Mbit/s

95th percentile per-packet one-way delay: 33.666 ms

Loss rate: 0.34%

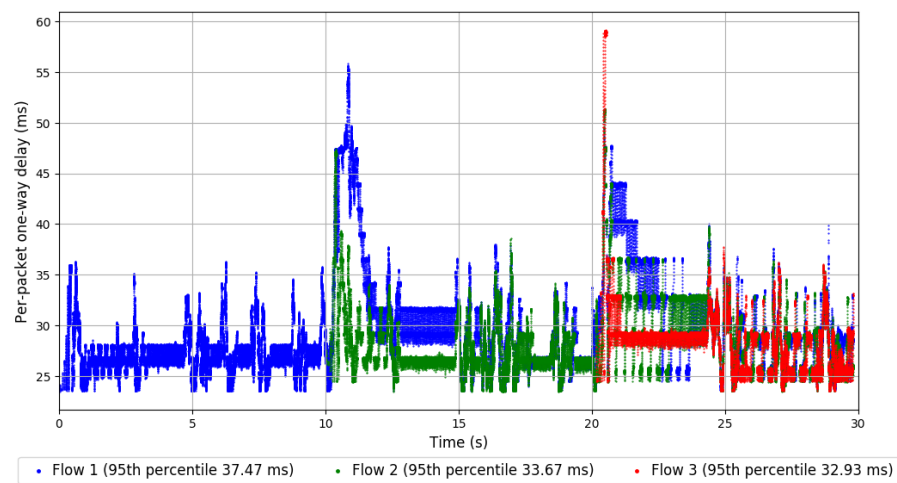
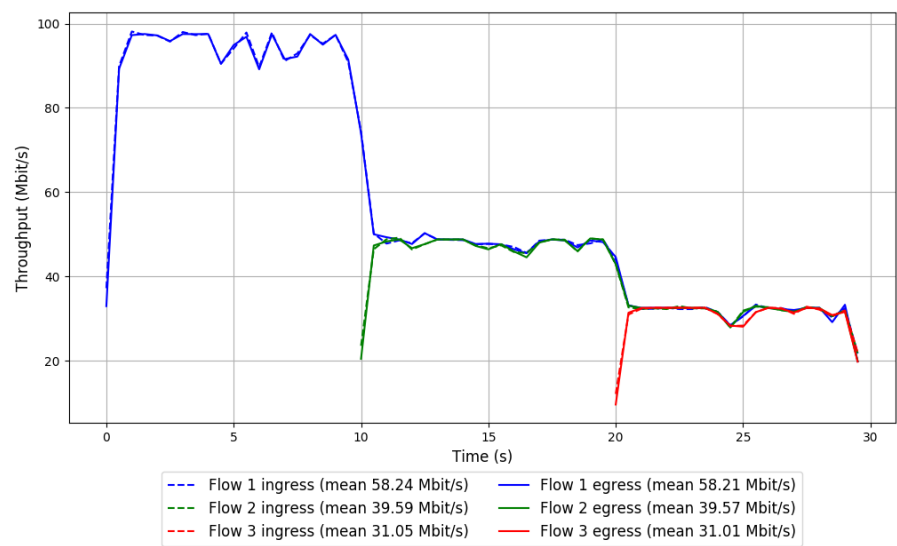
-- Flow 3:

Average throughput: 31.01 Mbit/s

95th percentile per-packet one-way delay: 32.930 ms

Loss rate: 0.68%

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



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-13 15:16:26

End at: 2018-02-13 15:16:56

Local clock offset: 0.858 ms

Remote clock offset: 9.312 ms

Below is generated by plot.py at 2018-02-13 22:17:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.11 Mbit/s

95th percentile per-packet one-way delay: 35.258 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 56.95 Mbit/s

95th percentile per-packet one-way delay: 34.166 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 37.56 Mbit/s

95th percentile per-packet one-way delay: 36.962 ms

Loss rate: 0.41%

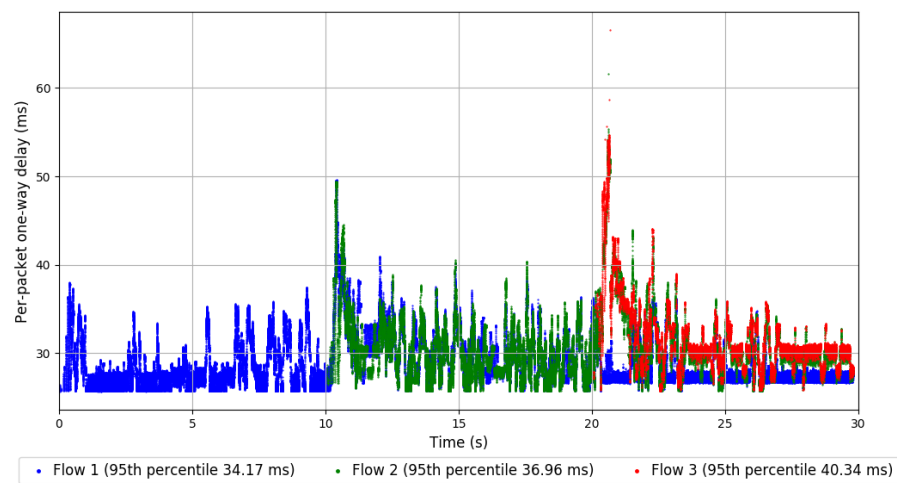
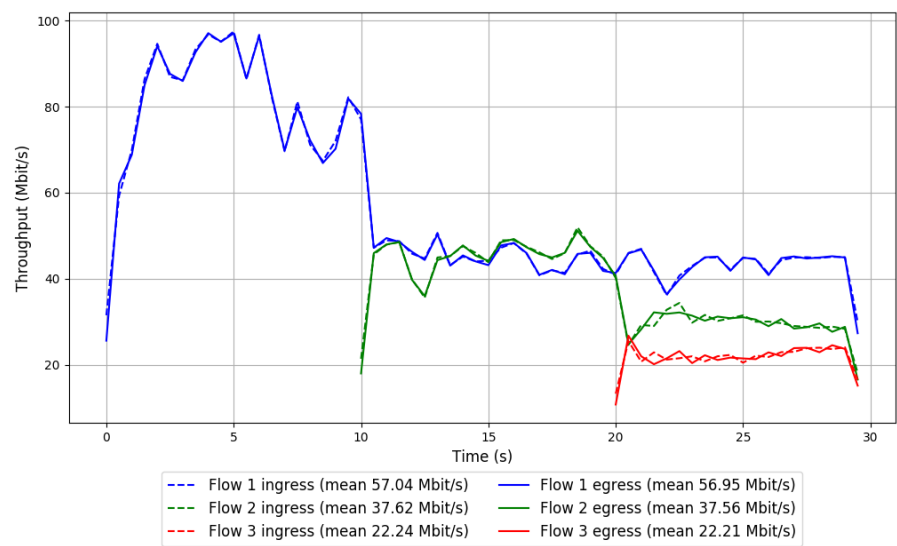
-- Flow 3:

Average throughput: 22.21 Mbit/s

95th percentile per-packet one-way delay: 40.339 ms

Loss rate: 0.71%

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



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-13 15:41:13

End at: 2018-02-13 15:41:43

Local clock offset: 0.109 ms

Remote clock offset: 15.2 ms

Below is generated by plot.py at 2018-02-13 22:18:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.46 Mbit/s

95th percentile per-packet one-way delay: 34.534 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 57.06 Mbit/s

95th percentile per-packet one-way delay: 32.989 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 39.71 Mbit/s

95th percentile per-packet one-way delay: 36.172 ms

Loss rate: 0.48%

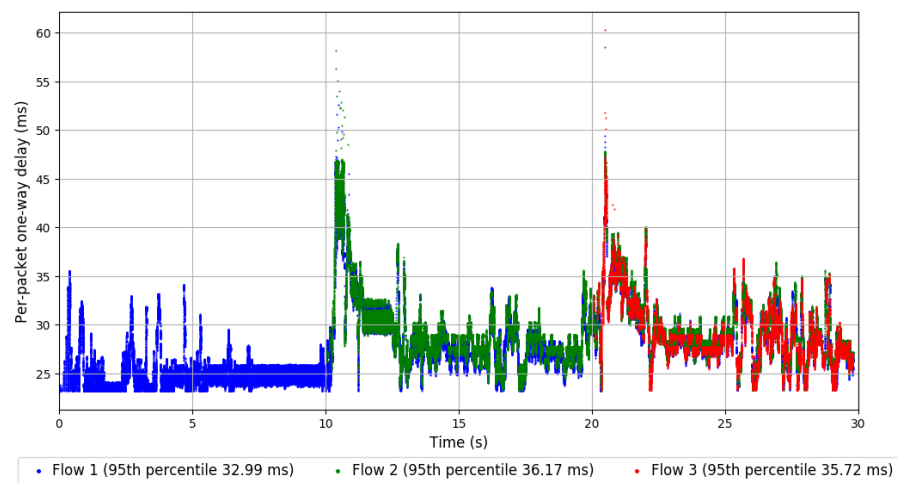
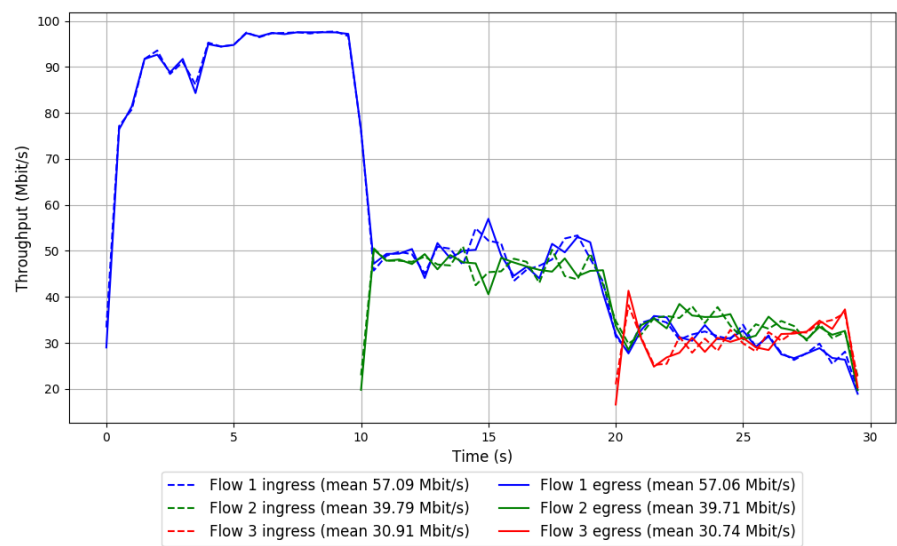
-- Flow 3:

Average throughput: 30.74 Mbit/s

95th percentile per-packet one-way delay: 35.719 ms

Loss rate: 1.04%

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

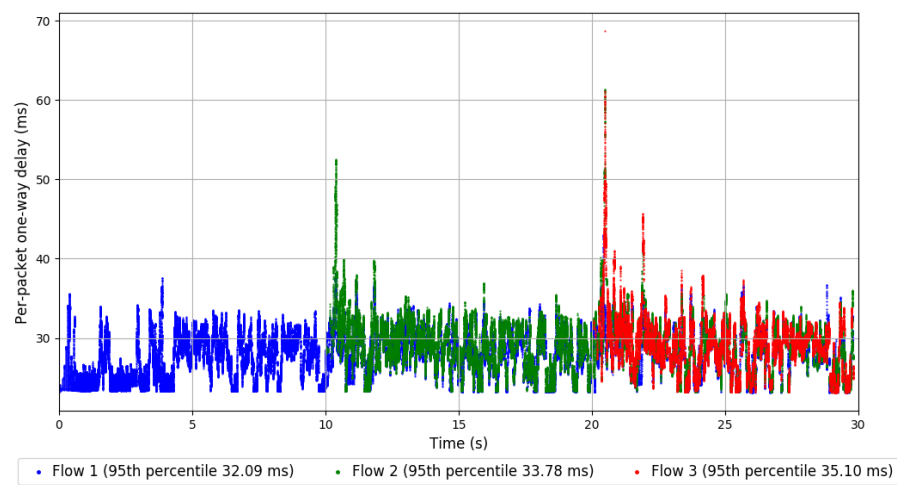
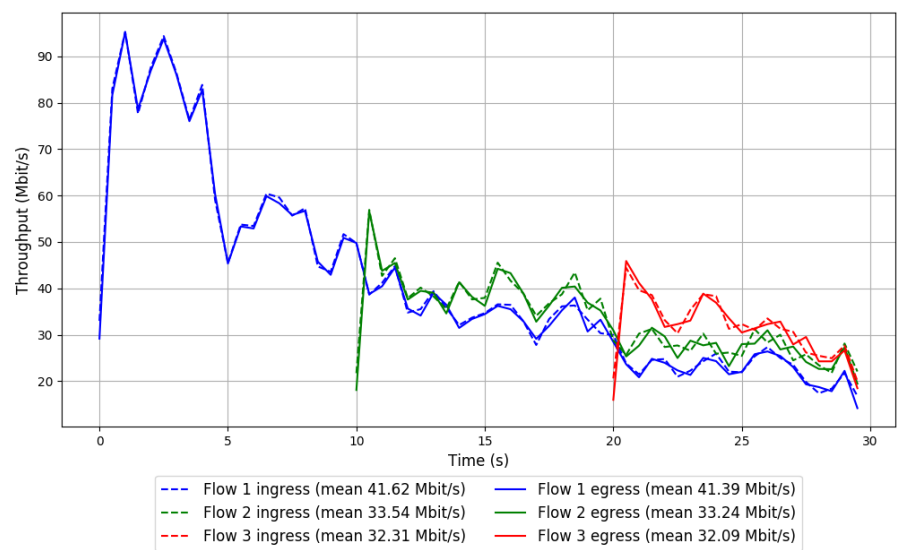


Run 7: Statistics of Indigo-1-32

Start at: 2018-02-13 16:07:48
End at: 2018-02-13 16:08:18
Local clock offset: -0.802 ms
Remote clock offset: 12.238 ms

```
# Below is generated by plot.py at 2018-02-13 22:18:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.92 Mbit/s
95th percentile per-packet one-way delay: 32.966 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 41.39 Mbit/s
95th percentile per-packet one-way delay: 32.086 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 33.24 Mbit/s
95th percentile per-packet one-way delay: 33.777 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 32.09 Mbit/s
95th percentile per-packet one-way delay: 35.097 ms
Loss rate: 1.30%
```


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



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-13 16:32:52

End at: 2018-02-13 16:33:22

Local clock offset: -0.848 ms

Remote clock offset: 6.709 ms

Below is generated by plot.py at 2018-02-13 22:18:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.74 Mbit/s

95th percentile per-packet one-way delay: 33.123 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 58.15 Mbit/s

95th percentile per-packet one-way delay: 32.537 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 33.29 Mbit/s

95th percentile per-packet one-way delay: 36.249 ms

Loss rate: 0.30%

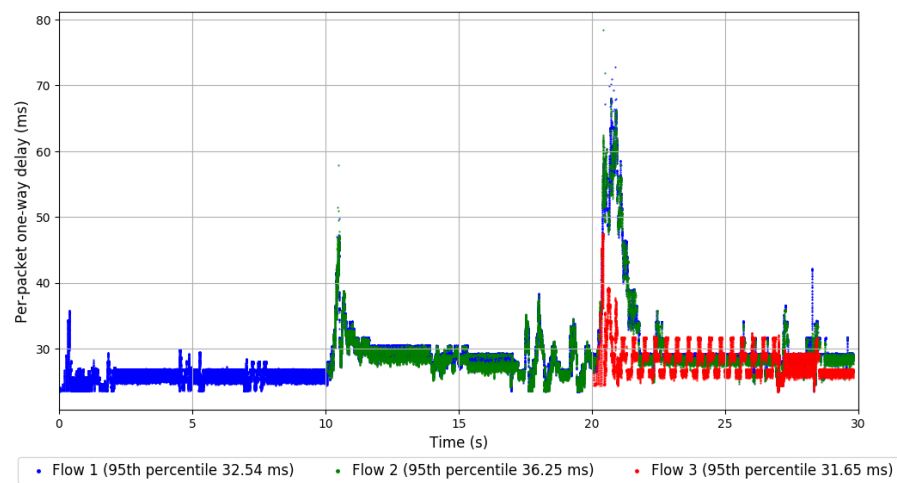
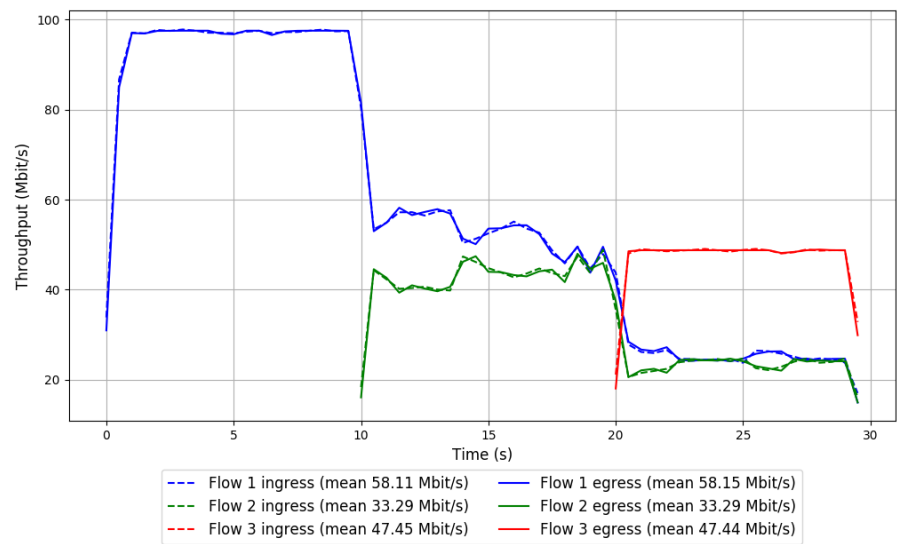
-- Flow 3:

Average throughput: 47.44 Mbit/s

95th percentile per-packet one-way delay: 31.647 ms

Loss rate: 0.59%

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



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-13 16:57:30

End at: 2018-02-13 16:58:00

Local clock offset: 1.535 ms

Remote clock offset: 5.554 ms

Below is generated by plot.py at 2018-02-13 22:18:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.84 Mbit/s

95th percentile per-packet one-way delay: 35.659 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 52.56 Mbit/s

95th percentile per-packet one-way delay: 35.951 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 32.37 Mbit/s

95th percentile per-packet one-way delay: 34.868 ms

Loss rate: 0.77%

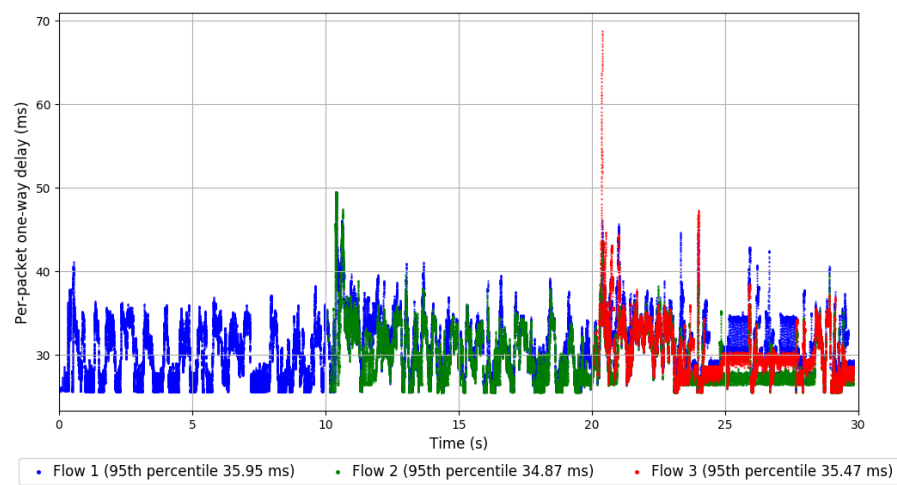
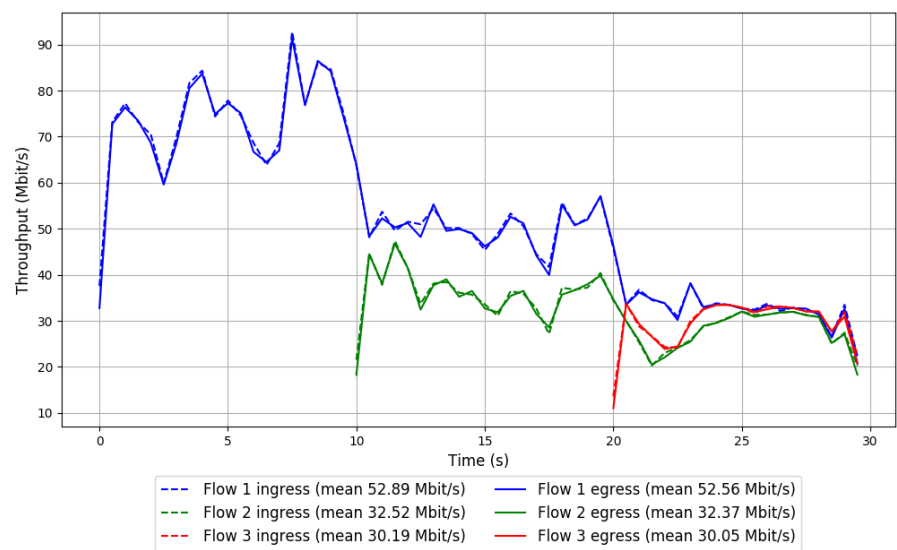
-- Flow 3:

Average throughput: 30.05 Mbit/s

95th percentile per-packet one-way delay: 35.473 ms

Loss rate: 1.03%

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



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-13 17:22:07

End at: 2018-02-13 17:22:37

Local clock offset: 1.734 ms

Remote clock offset: 7.433 ms

Below is generated by plot.py at 2018-02-13 22:18:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.06 Mbit/s

95th percentile per-packet one-way delay: 38.065 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 52.48 Mbit/s

95th percentile per-packet one-way delay: 36.882 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 32.81 Mbit/s

95th percentile per-packet one-way delay: 40.235 ms

Loss rate: 0.73%

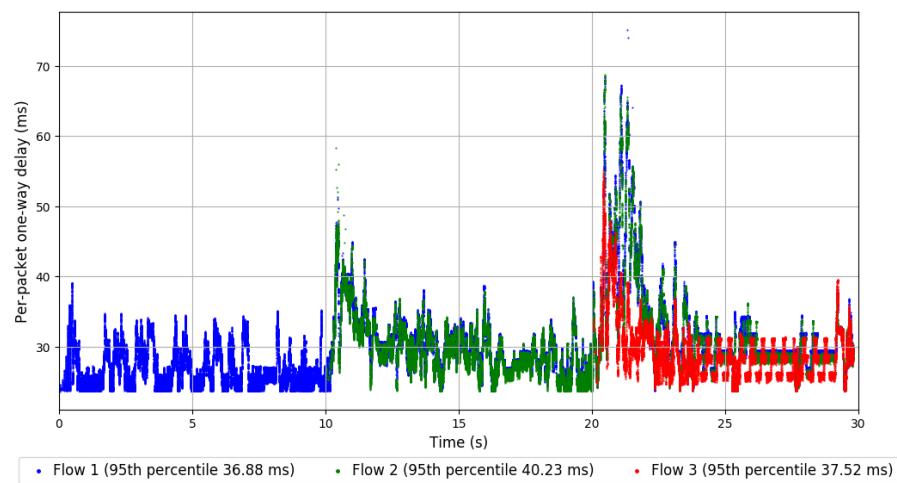
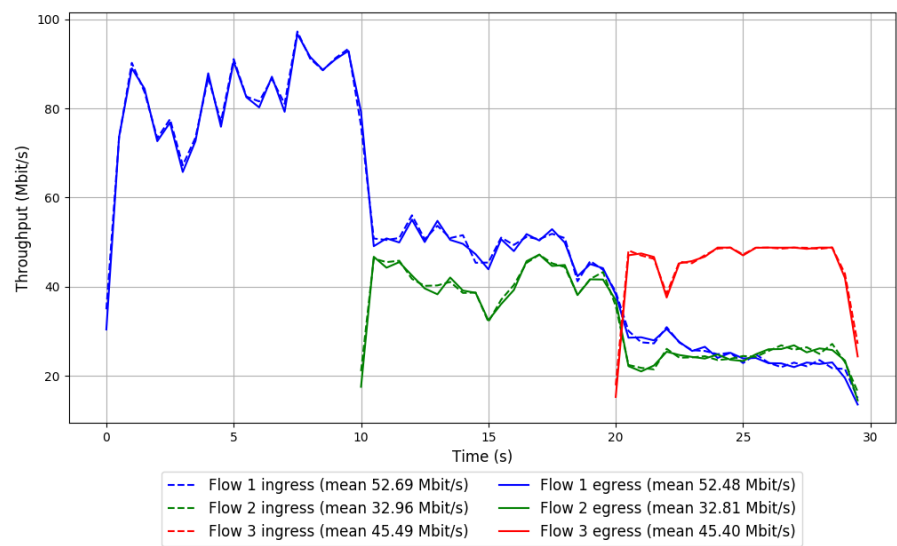
-- Flow 3:

Average throughput: 45.40 Mbit/s

95th percentile per-packet one-way delay: 37.521 ms

Loss rate: 0.83%

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



Run 1: Statistics of Vivace-latency

Start at: 2018-02-13 13:39:59

End at: 2018-02-13 13:40:29

Local clock offset: -0.584 ms

Remote clock offset: 0.16 ms

Below is generated by plot.py at 2018-02-13 22:18:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.64 Mbit/s

95th percentile per-packet one-way delay: 40.519 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 60.84 Mbit/s

95th percentile per-packet one-way delay: 36.354 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 21.24 Mbit/s

95th percentile per-packet one-way delay: 50.130 ms

Loss rate: 0.63%

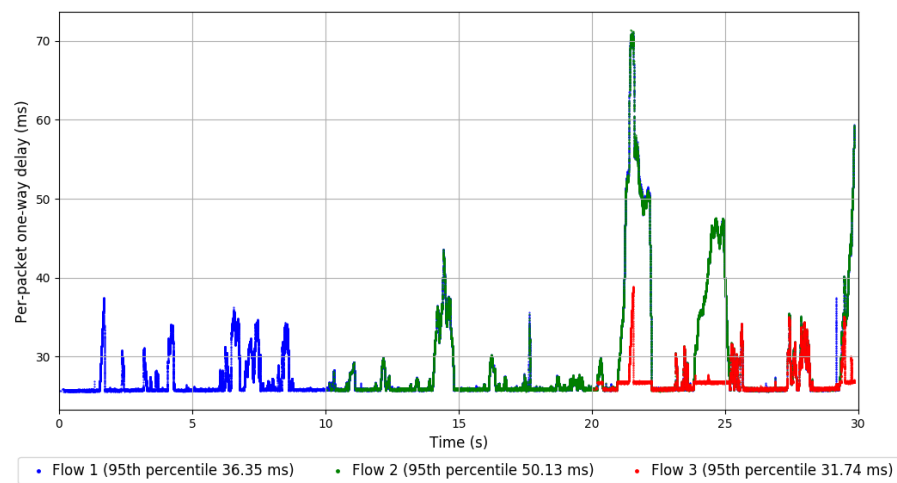
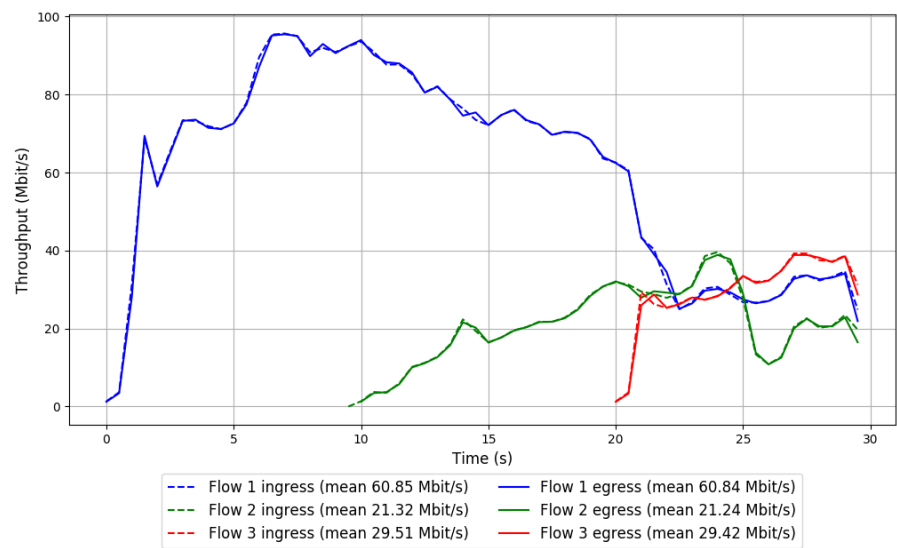
-- Flow 3:

Average throughput: 29.42 Mbit/s

95th percentile per-packet one-way delay: 31.744 ms

Loss rate: 0.87%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-13 14:04:38

End at: 2018-02-13 14:05:08

Local clock offset: 1.546 ms

Remote clock offset: 1.911 ms

Below is generated by plot.py at 2018-02-13 22:18:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.09 Mbit/s

95th percentile per-packet one-way delay: 51.887 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 65.23 Mbit/s

95th percentile per-packet one-way delay: 51.595 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 17.23 Mbit/s

95th percentile per-packet one-way delay: 58.138 ms

Loss rate: 0.26%

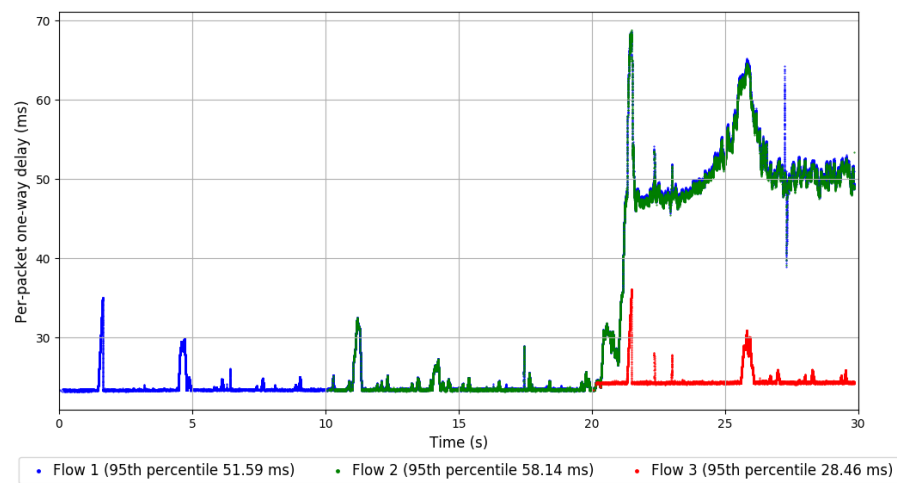
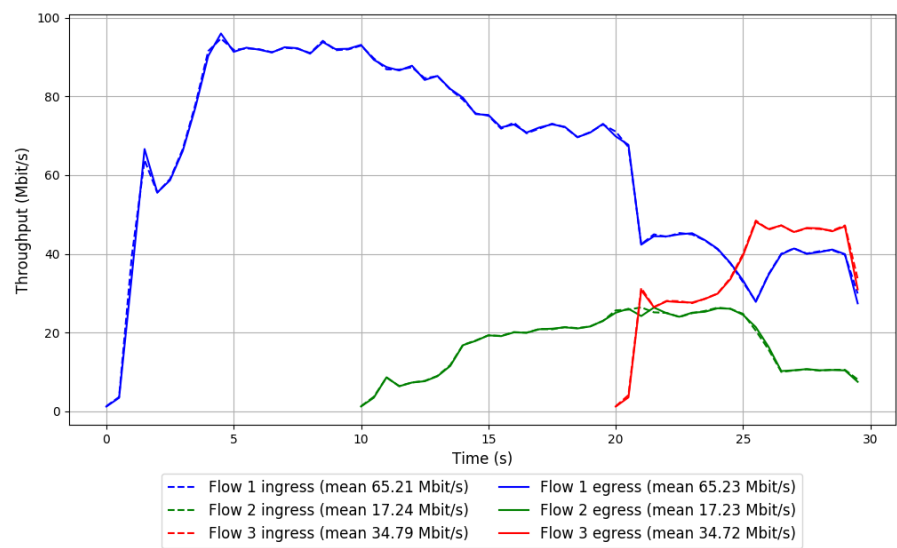
-- Flow 3:

Average throughput: 34.72 Mbit/s

95th percentile per-packet one-way delay: 28.459 ms

Loss rate: 0.75%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-13 14:29:10

End at: 2018-02-13 14:29:40

Local clock offset: 1.837 ms

Remote clock offset: -0.18 ms

Below is generated by plot.py at 2018-02-13 22:18:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.52 Mbit/s

95th percentile per-packet one-way delay: 33.071 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 25.24 Mbit/s

95th percentile per-packet one-way delay: 32.929 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 16.93 Mbit/s

95th percentile per-packet one-way delay: 33.193 ms

Loss rate: 0.85%

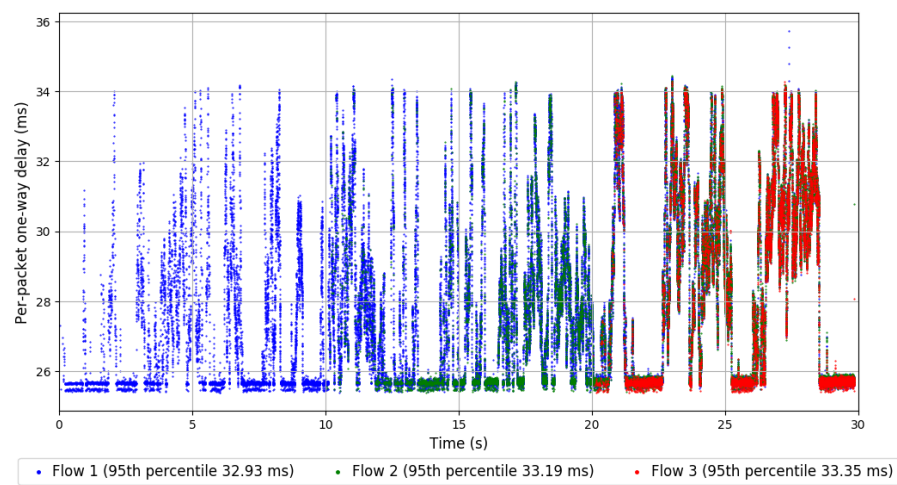
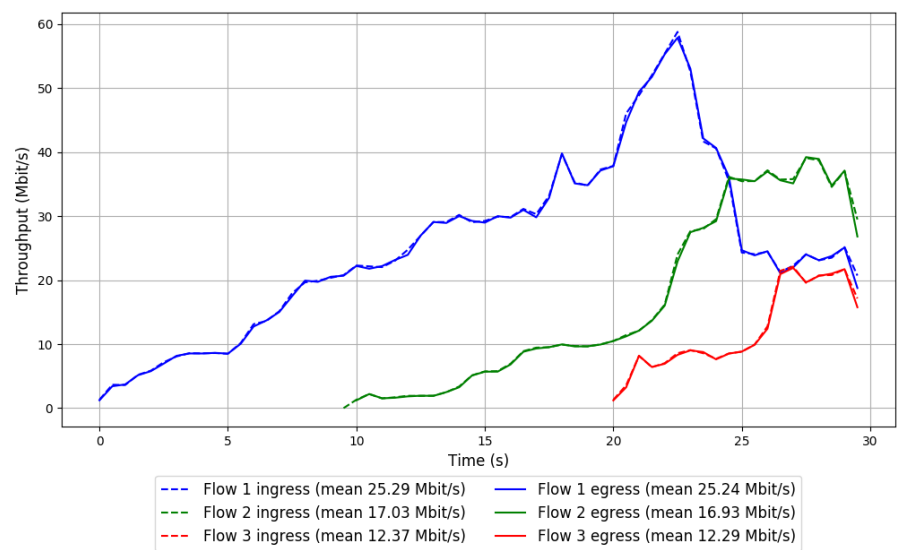
-- Flow 3:

Average throughput: 12.29 Mbit/s

95th percentile per-packet one-way delay: 33.350 ms

Loss rate: 1.22%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-13 14:54:14

End at: 2018-02-13 14:54:44

Local clock offset: 0.768 ms

Remote clock offset: 0.965 ms

Below is generated by plot.py at 2018-02-13 22:19:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.71 Mbit/s

95th percentile per-packet one-way delay: 59.475 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 60.45 Mbit/s

95th percentile per-packet one-way delay: 59.252 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 12.15 Mbit/s

95th percentile per-packet one-way delay: 62.864 ms

Loss rate: 0.87%

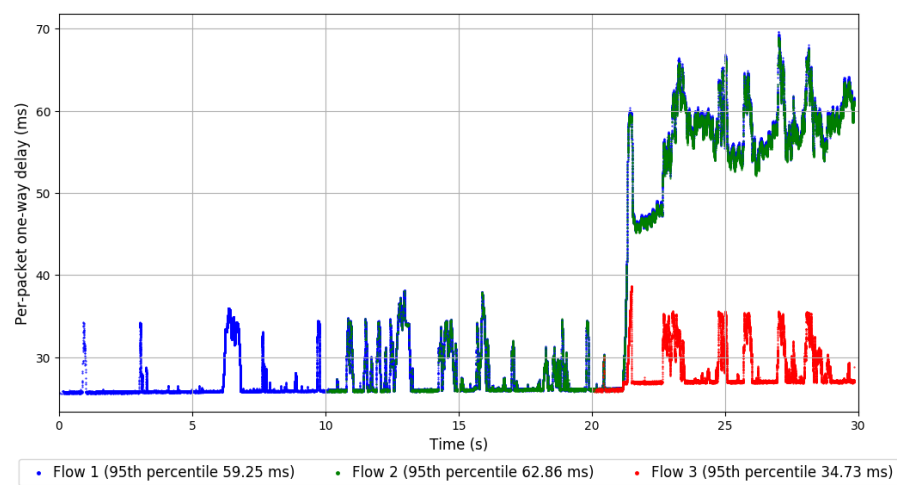
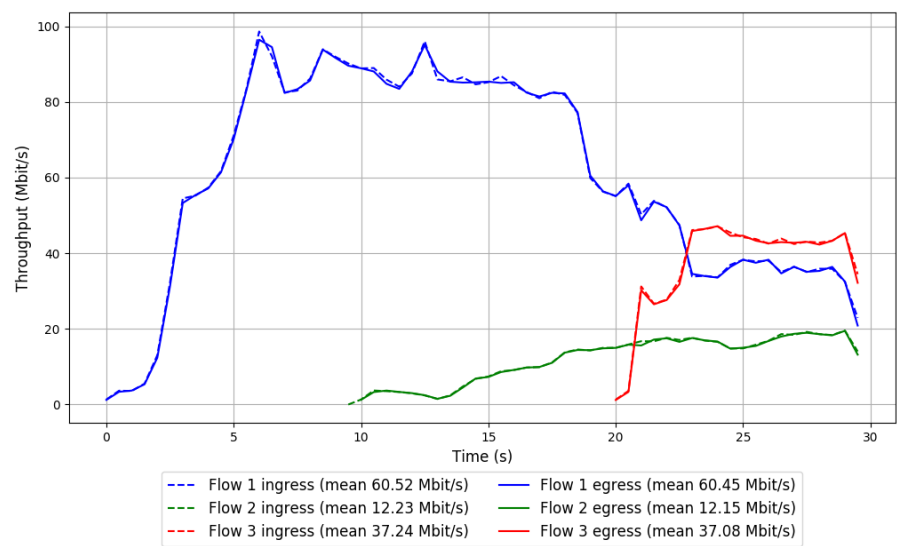
-- Flow 3:

Average throughput: 37.08 Mbit/s

95th percentile per-packet one-way delay: 34.730 ms

Loss rate: 0.97%

Run 4: Report of Vivace-latency — Data Link

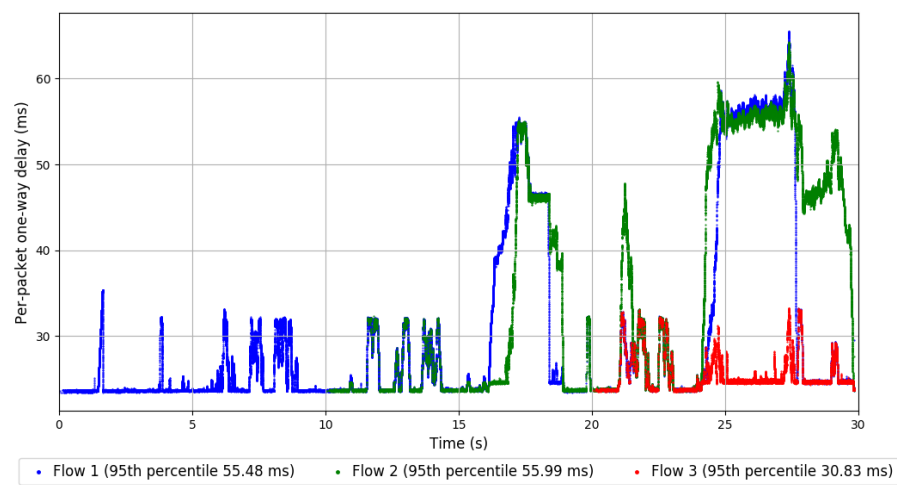
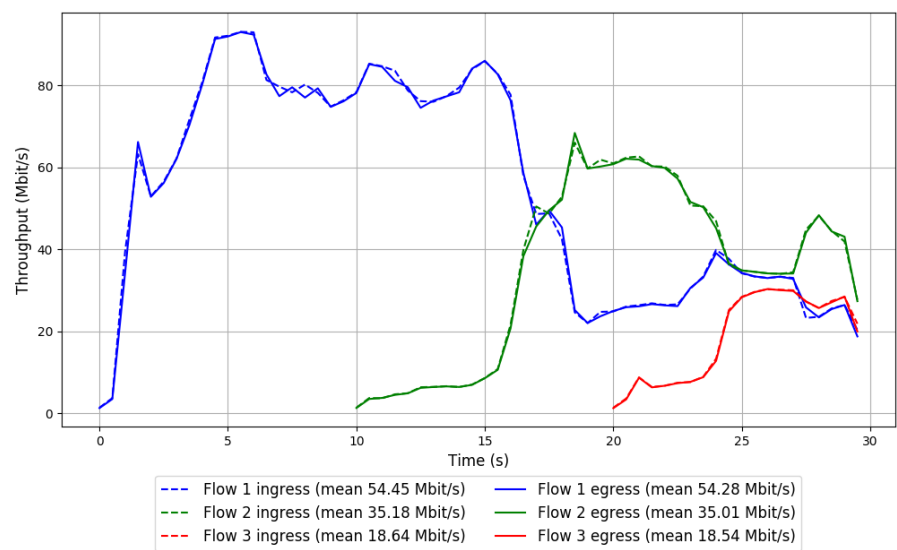


Run 5: Statistics of Vivace-latency

Start at: 2018-02-13 15:19:16
End at: 2018-02-13 15:19:46
Local clock offset: 0.935 ms
Remote clock offset: 11.876 ms

Below is generated by plot.py at 2018-02-13 22:19:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 83.64 Mbit/s
95th percentile per-packet one-way delay: 55.655 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 54.28 Mbit/s
95th percentile per-packet one-way delay: 55.477 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 35.01 Mbit/s
95th percentile per-packet one-way delay: 55.994 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 18.54 Mbit/s
95th percentile per-packet one-way delay: 30.828 ms
Loss rate: 1.07%

Run 5: Report of Vivace-latency — Data Link

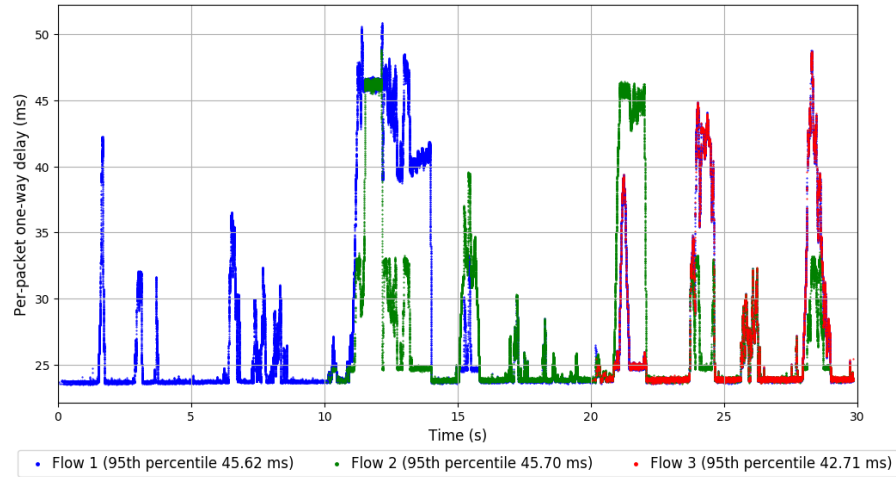
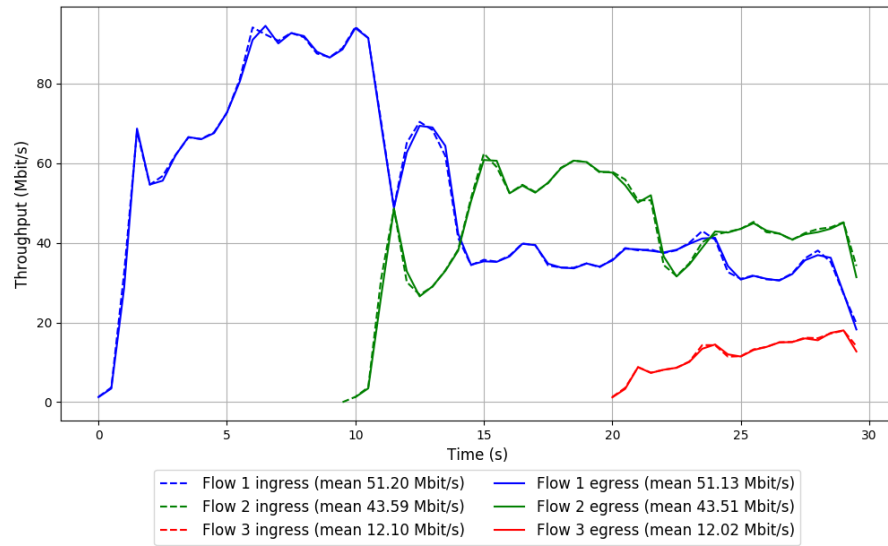


Run 6: Statistics of Vivace-latency

Start at: 2018-02-13 15:44:07
End at: 2018-02-13 15:44:37
Local clock offset: -0.087 ms
Remote clock offset: 14.981 ms

Below is generated by plot.py at 2018-02-13 22:19:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 83.99 Mbit/s
95th percentile per-packet one-way delay: 45.588 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 51.13 Mbit/s
95th percentile per-packet one-way delay: 45.625 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 43.51 Mbit/s
95th percentile per-packet one-way delay: 45.697 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 12.02 Mbit/s
95th percentile per-packet one-way delay: 42.707 ms
Loss rate: 1.18%

Run 6: Report of Vivace-latency — Data Link

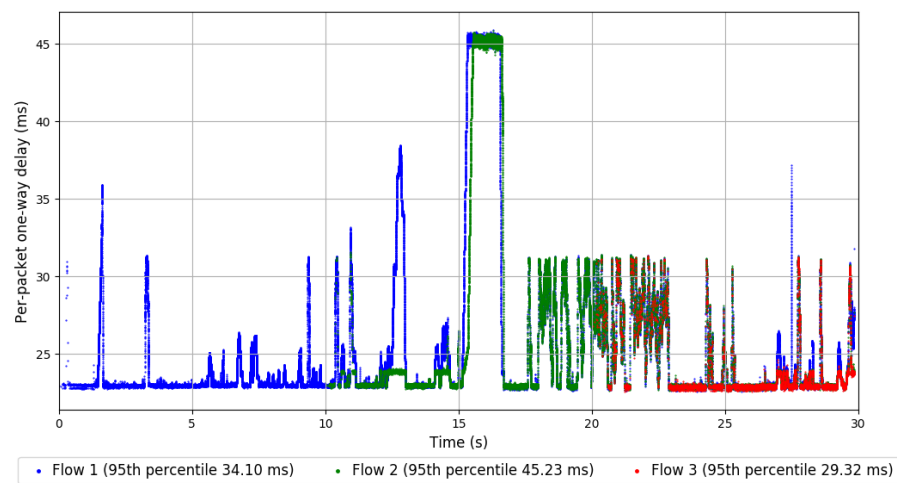
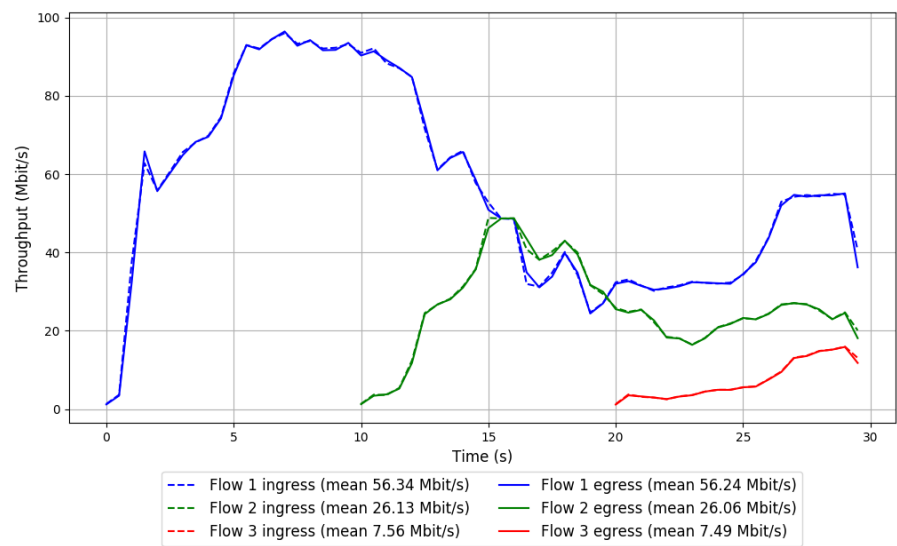


Run 7: Statistics of Vivace-latency

Start at: 2018-02-13 16:10:54
End at: 2018-02-13 16:11:24
Local clock offset: -0.697 ms
Remote clock offset: 11.334 ms

Below is generated by plot.py at 2018-02-13 22:19:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 76.02 Mbit/s
95th percentile per-packet one-way delay: 43.608 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 56.24 Mbit/s
95th percentile per-packet one-way delay: 34.096 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 26.06 Mbit/s
95th percentile per-packet one-way delay: 45.228 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 29.325 ms
Loss rate: 1.49%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-13 16:35:39

End at: 2018-02-13 16:36:09

Local clock offset: -0.865 ms

Remote clock offset: 4.377 ms

Below is generated by plot.py at 2018-02-13 22:20:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.48 Mbit/s

95th percentile per-packet one-way delay: 57.539 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 55.18 Mbit/s

95th percentile per-packet one-way delay: 56.485 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 35.66 Mbit/s

95th percentile per-packet one-way delay: 57.882 ms

Loss rate: 0.24%

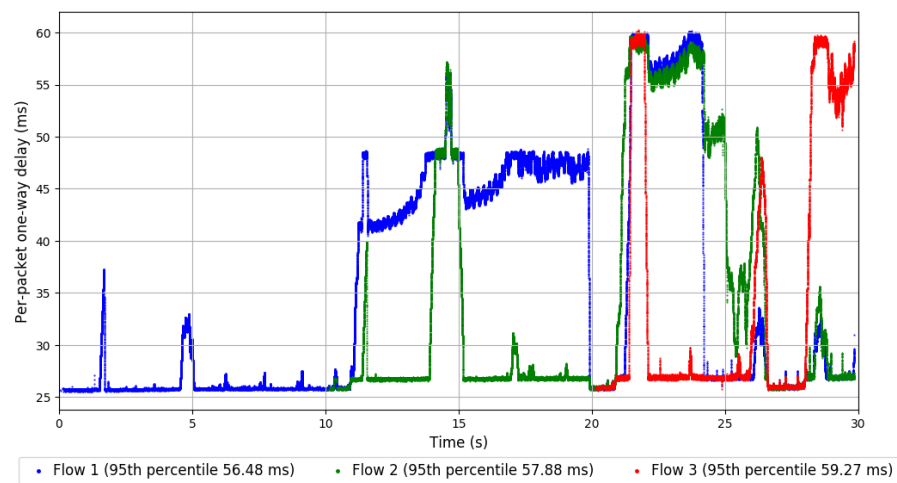
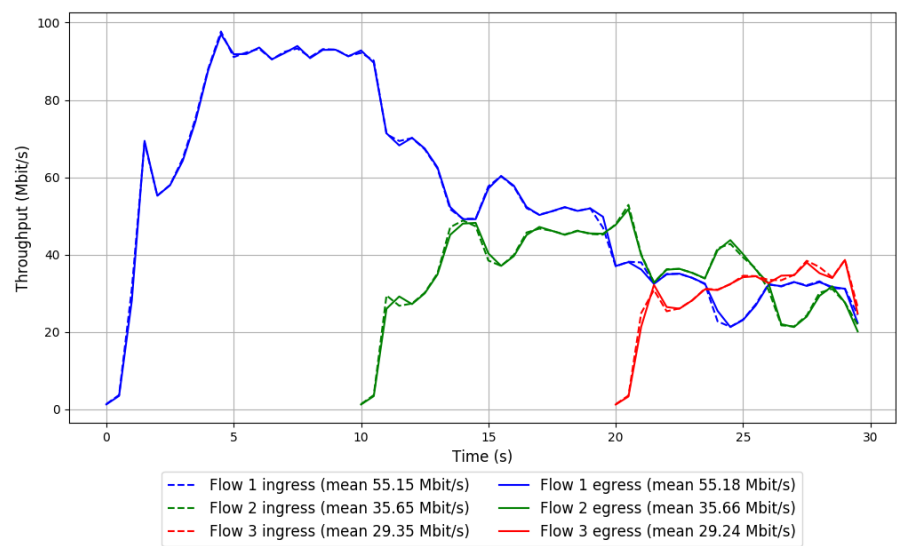
-- Flow 3:

Average throughput: 29.24 Mbit/s

95th percentile per-packet one-way delay: 59.265 ms

Loss rate: 1.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-13 17:00:26

End at: 2018-02-13 17:00:56

Local clock offset: 1.843 ms

Remote clock offset: 7.361 ms

Below is generated by plot.py at 2018-02-13 22:20:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.90 Mbit/s

95th percentile per-packet one-way delay: 56.472 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 59.41 Mbit/s

95th percentile per-packet one-way delay: 54.773 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 26.72 Mbit/s

95th percentile per-packet one-way delay: 58.042 ms

Loss rate: 0.64%

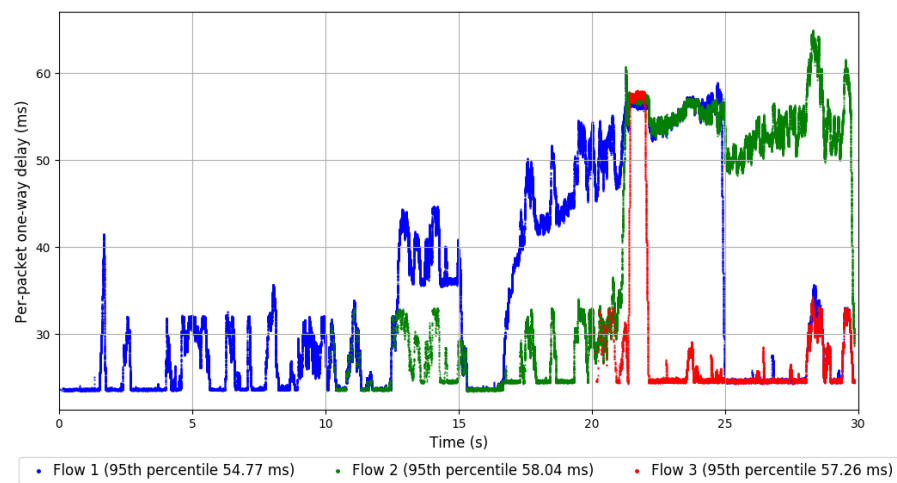
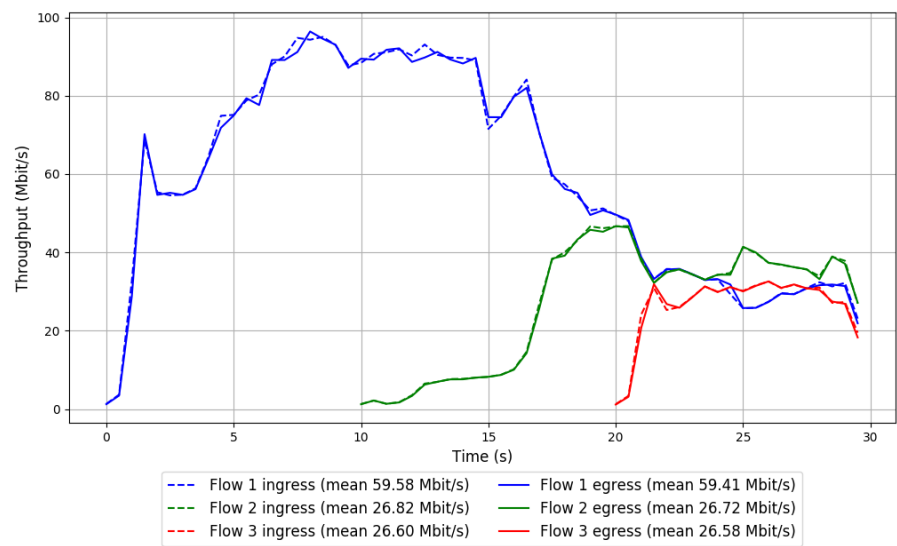
-- Flow 3:

Average throughput: 26.58 Mbit/s

95th percentile per-packet one-way delay: 57.260 ms

Loss rate: 0.65%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-13 17:24:56

End at: 2018-02-13 17:25:26

Local clock offset: 1.581 ms

Remote clock offset: 8.022 ms

Below is generated by plot.py at 2018-02-13 22:20:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.12 Mbit/s

95th percentile per-packet one-way delay: 52.865 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 53.36 Mbit/s

95th percentile per-packet one-way delay: 47.171 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 30.61 Mbit/s

95th percentile per-packet one-way delay: 56.362 ms

Loss rate: 0.82%

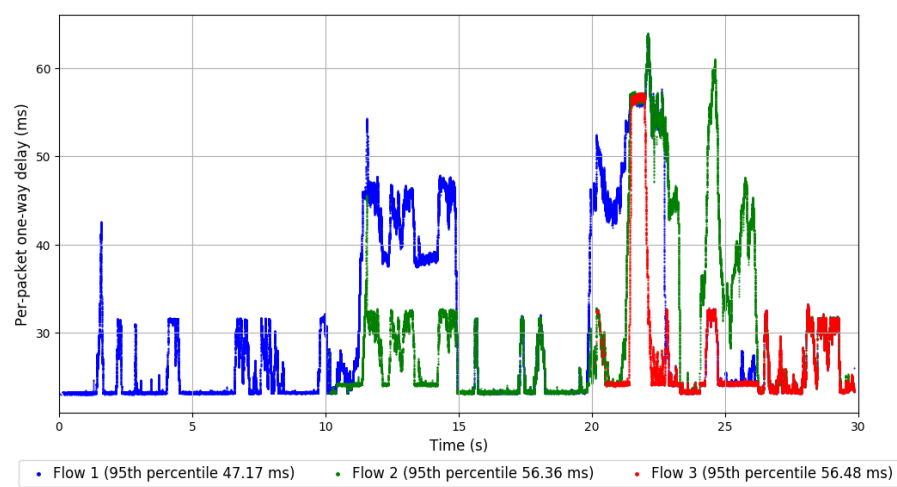
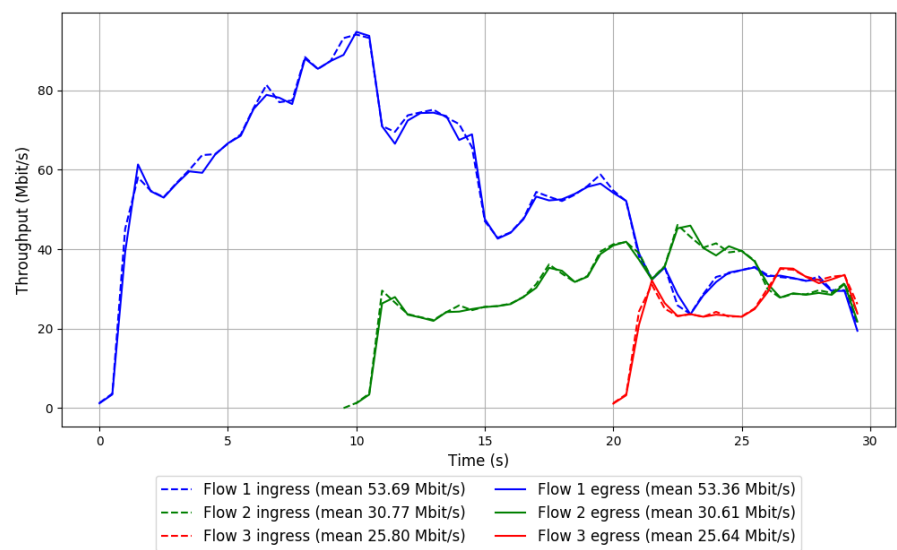
-- Flow 3:

Average throughput: 25.64 Mbit/s

95th percentile per-packet one-way delay: 56.484 ms

Loss rate: 1.22%

Run 10: Report of Vivace-latency — Data Link

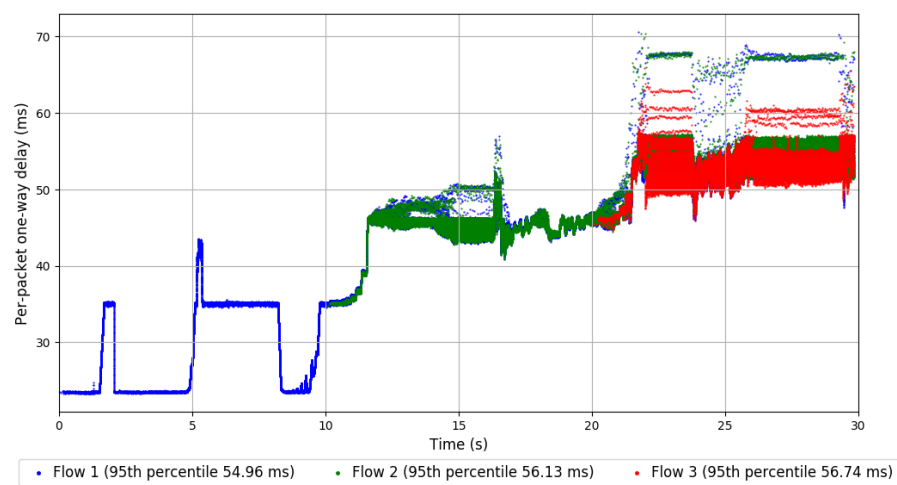
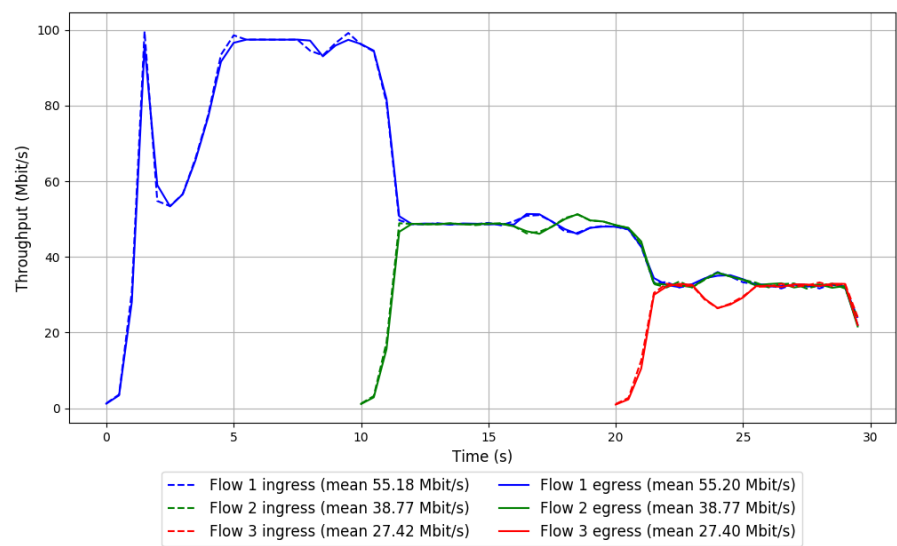


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-13 13:49:32
End at: 2018-02-13 13:50:02
Local clock offset: -0.838 ms
Remote clock offset: 2.155 ms

# Below is generated by plot.py at 2018-02-13 22:20:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.93 Mbit/s
95th percentile per-packet one-way delay: 55.703 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 55.20 Mbit/s
95th percentile per-packet one-way delay: 54.963 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 38.77 Mbit/s
95th percentile per-packet one-way delay: 56.127 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 27.40 Mbit/s
95th percentile per-packet one-way delay: 56.741 ms
Loss rate: 1.02%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-13 14:14:03

End at: 2018-02-13 14:14:33

Local clock offset: 2.007 ms

Remote clock offset: -0.22 ms

Below is generated by plot.py at 2018-02-13 22:20:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.75 Mbit/s

95th percentile per-packet one-way delay: 70.297 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 59.34 Mbit/s

95th percentile per-packet one-way delay: 48.784 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 35.24 Mbit/s

95th percentile per-packet one-way delay: 70.976 ms

Loss rate: 0.51%

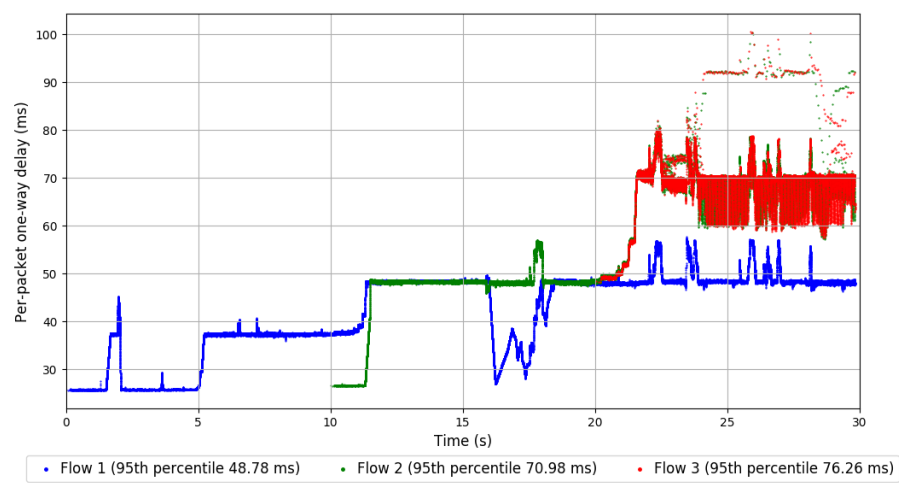
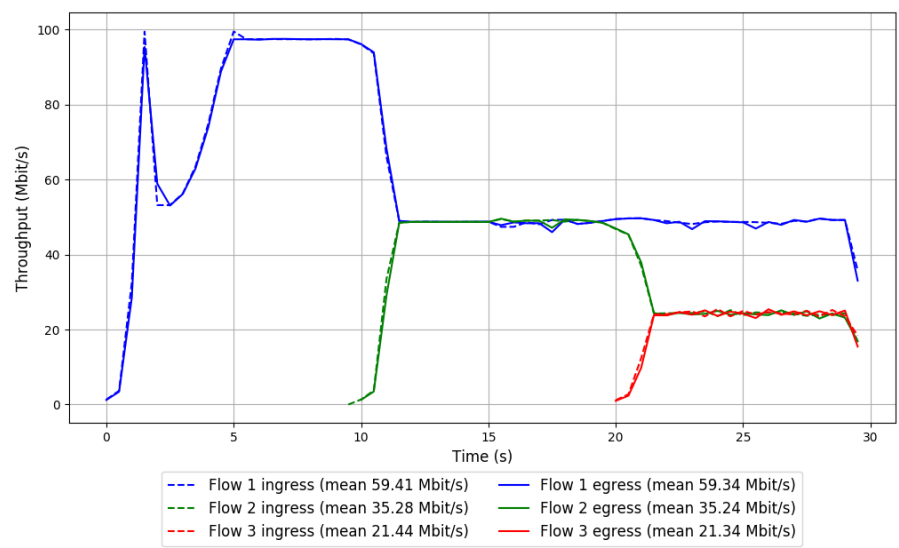
-- Flow 3:

Average throughput: 21.34 Mbit/s

95th percentile per-packet one-way delay: 76.259 ms

Loss rate: 1.52%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-13 14:38:46

End at: 2018-02-13 14:39:16

Local clock offset: 1.212 ms

Remote clock offset: 1.835 ms

Below is generated by plot.py at 2018-02-13 22:20:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.24 Mbit/s

95th percentile per-packet one-way delay: 67.729 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 50.01 Mbit/s

95th percentile per-packet one-way delay: 67.318 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 37.26 Mbit/s

95th percentile per-packet one-way delay: 68.152 ms

Loss rate: 1.38%

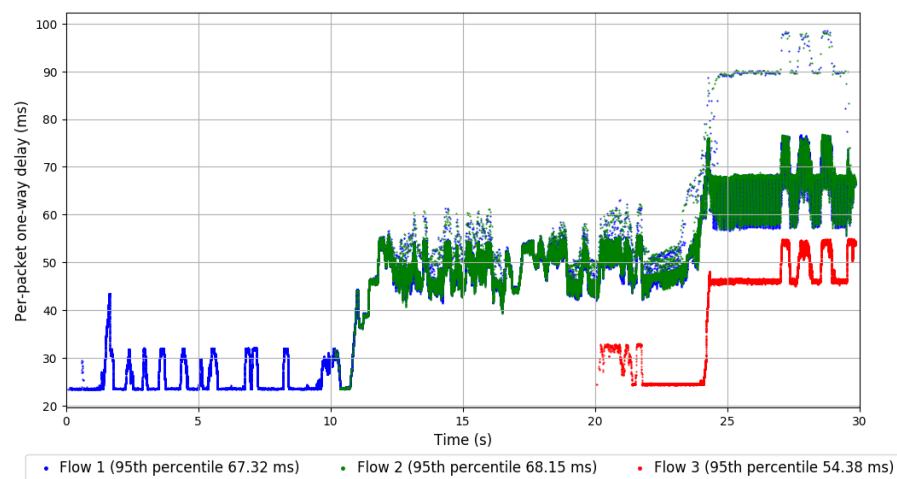
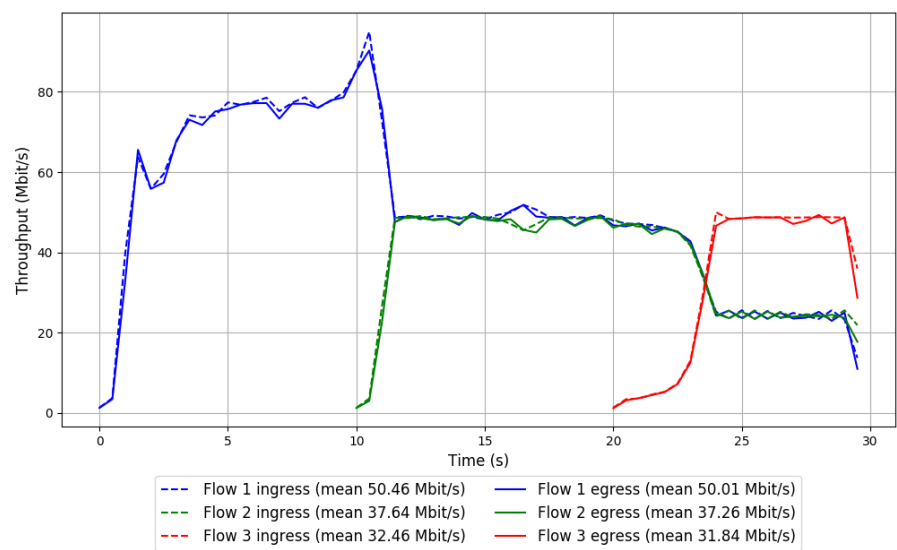
-- Flow 3:

Average throughput: 31.84 Mbit/s

95th percentile per-packet one-way delay: 54.378 ms

Loss rate: 2.56%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-13 15:03:46

End at: 2018-02-13 15:04:16

Local clock offset: 0.756 ms

Remote clock offset: 6.236 ms

Below is generated by plot.py at 2018-02-13 22:21:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.60 Mbit/s

95th percentile per-packet one-way delay: 70.304 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 52.36 Mbit/s

95th percentile per-packet one-way delay: 70.208 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 34.86 Mbit/s

95th percentile per-packet one-way delay: 70.577 ms

Loss rate: 0.56%

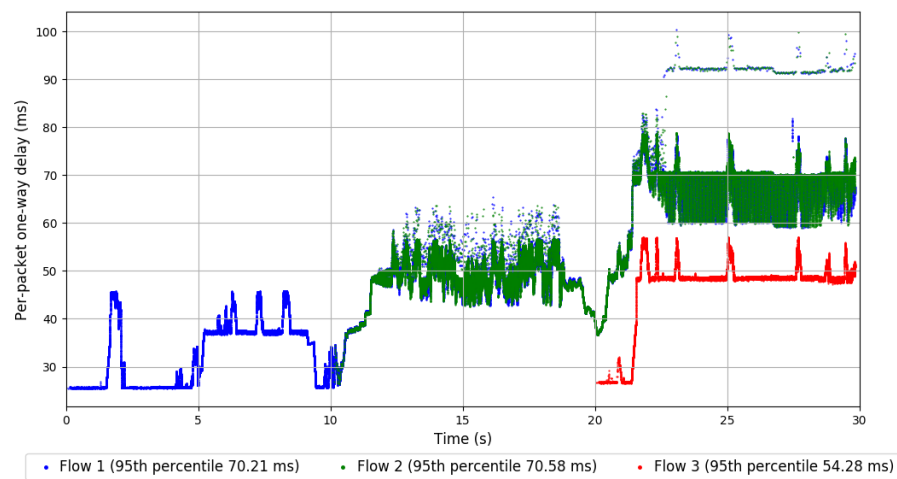
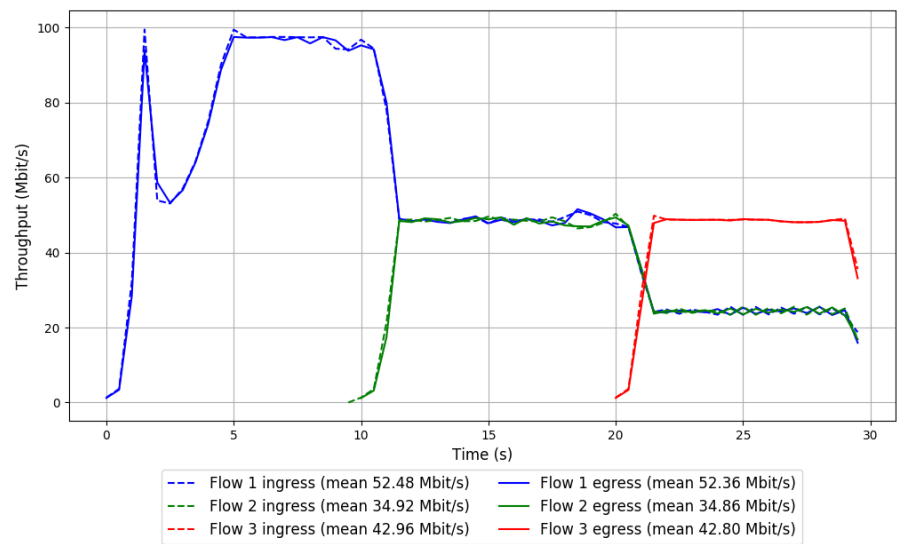
-- Flow 3:

Average throughput: 42.80 Mbit/s

95th percentile per-packet one-way delay: 54.283 ms

Loss rate: 1.03%

Run 4: Report of Vivace-loss — Data Link

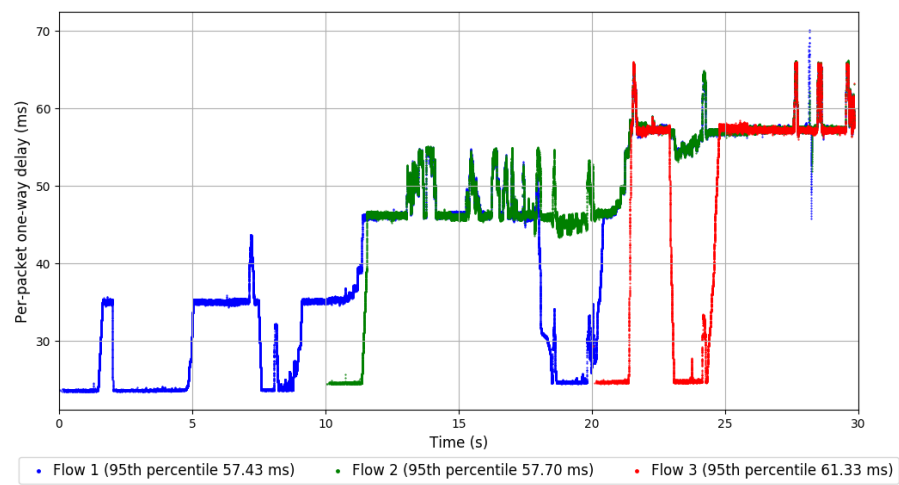
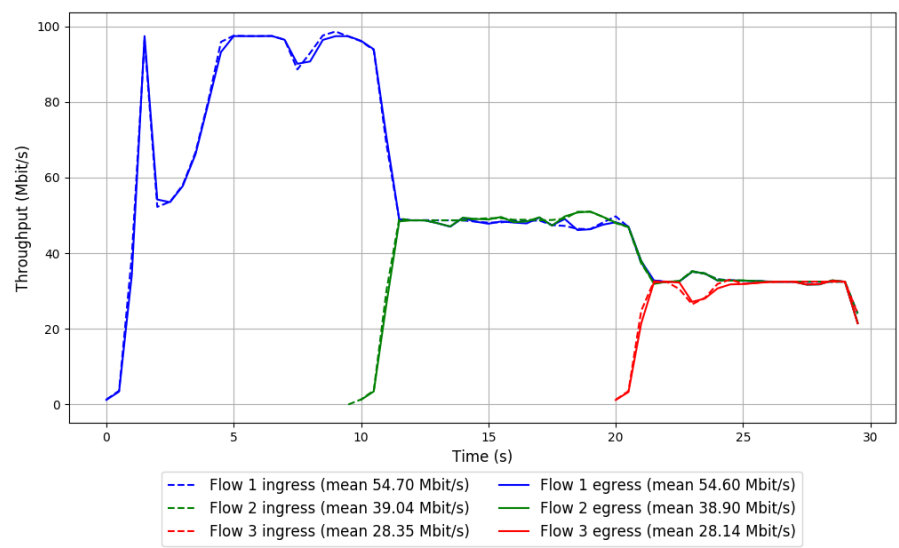


Run 5: Statistics of Vivace-loss

Start at: 2018-02-13 15:28:42
End at: 2018-02-13 15:29:12
Local clock offset: 0.98 ms
Remote clock offset: 13.214 ms

Below is generated by plot.py at 2018-02-13 22:21:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.71 Mbit/s
95th percentile per-packet one-way delay: 57.597 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 54.60 Mbit/s
95th percentile per-packet one-way delay: 57.426 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 38.90 Mbit/s
95th percentile per-packet one-way delay: 57.703 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 28.14 Mbit/s
95th percentile per-packet one-way delay: 61.334 ms
Loss rate: 1.42%

Run 5: Report of Vivace-loss — Data Link

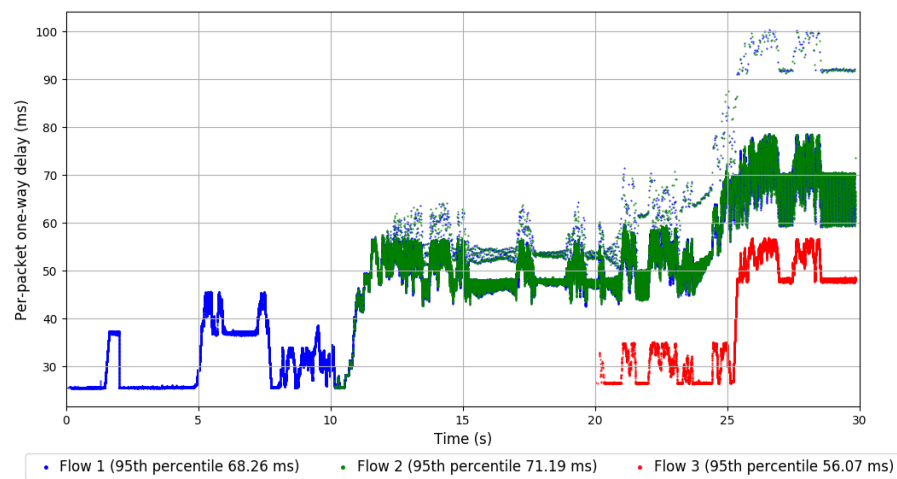
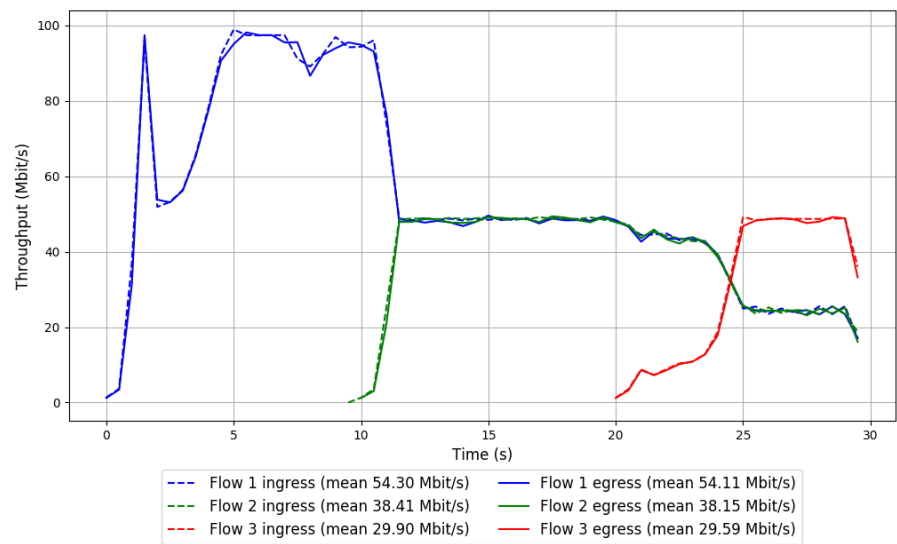


Run 6: Statistics of Vivace-loss

Start at: 2018-02-13 15:53:38
End at: 2018-02-13 15:54:08
Local clock offset: -0.551 ms
Remote clock offset: 14.242 ms

```
# Below is generated by plot.py at 2018-02-13 22:21:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.16 Mbit/s
95th percentile per-packet one-way delay: 69.683 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 54.11 Mbit/s
95th percentile per-packet one-way delay: 68.261 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 38.15 Mbit/s
95th percentile per-packet one-way delay: 71.194 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 29.59 Mbit/s
95th percentile per-packet one-way delay: 56.068 ms
Loss rate: 1.71%
```

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-13 16:20:33

End at: 2018-02-13 16:21:03

Local clock offset: -0.823 ms

Remote clock offset: 8.329 ms

Below is generated by plot.py at 2018-02-13 22:21:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.91 Mbit/s

95th percentile per-packet one-way delay: 67.602 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 52.60 Mbit/s

95th percentile per-packet one-way delay: 67.459 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 35.03 Mbit/s

95th percentile per-packet one-way delay: 67.918 ms

Loss rate: 2.13%

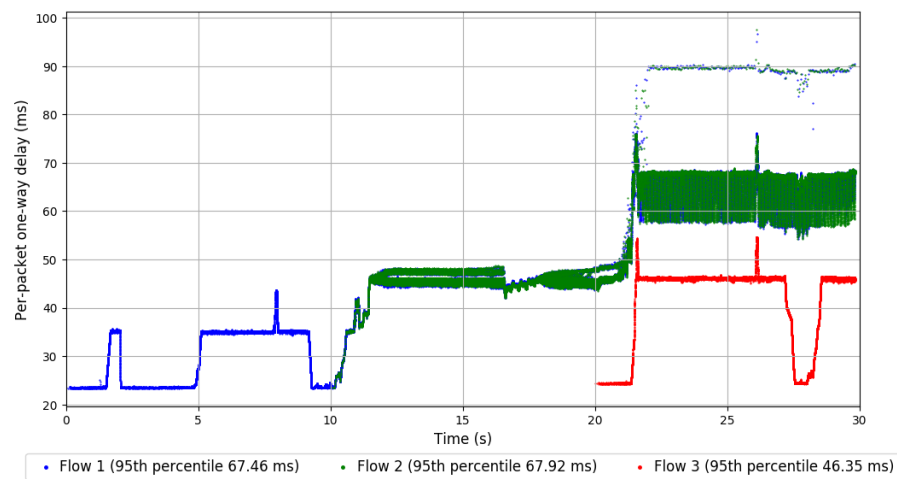
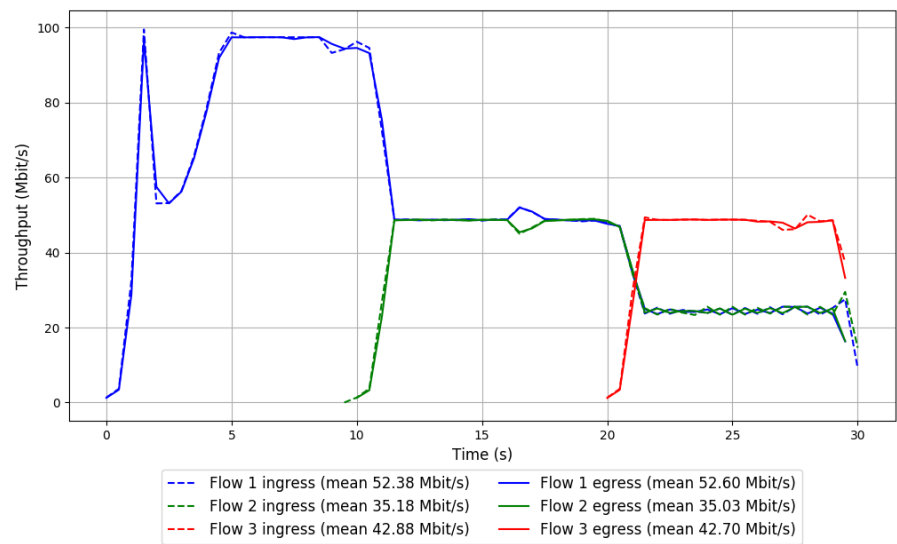
-- Flow 3:

Average throughput: 42.70 Mbit/s

95th percentile per-packet one-way delay: 46.353 ms

Loss rate: 1.09%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-13 16:45:05

End at: 2018-02-13 16:45:35

Local clock offset: -0.216 ms

Remote clock offset: 5.974 ms

Below is generated by plot.py at 2018-02-13 22:21:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.66 Mbit/s

95th percentile per-packet one-way delay: 72.494 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 56.64 Mbit/s

95th percentile per-packet one-way delay: 71.193 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 25.61 Mbit/s

95th percentile per-packet one-way delay: 75.086 ms

Loss rate: 1.45%

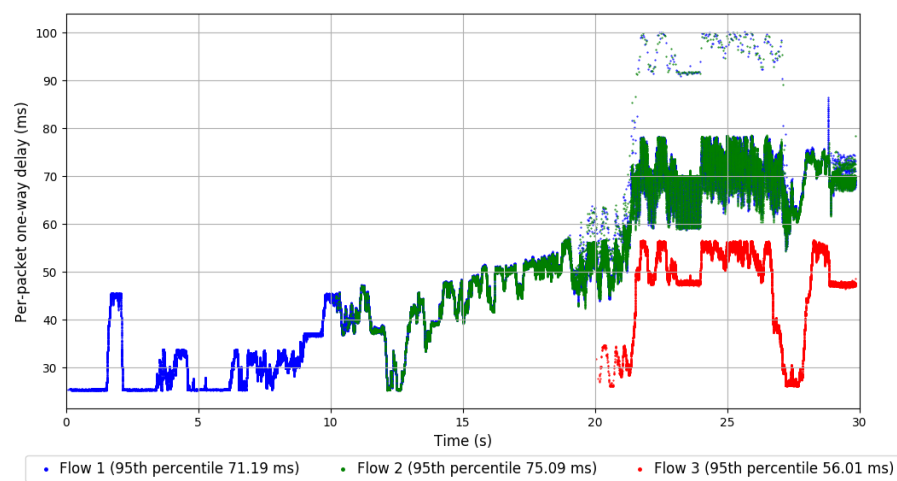
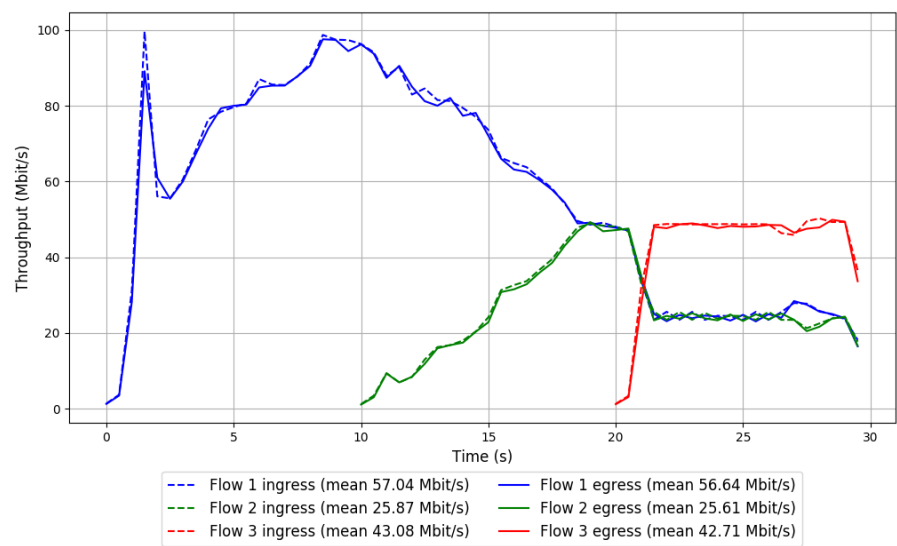
-- Flow 3:

Average throughput: 42.71 Mbit/s

95th percentile per-packet one-way delay: 56.006 ms

Loss rate: 1.57%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-13 17:09:50

End at: 2018-02-13 17:10:20

Local clock offset: 2.443 ms

Remote clock offset: 7.505 ms

Below is generated by plot.py at 2018-02-13 22:21:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.56 Mbit/s

95th percentile per-packet one-way delay: 59.267 ms

Loss rate: 1.92%

-- Flow 1:

Average throughput: 50.19 Mbit/s

95th percentile per-packet one-way delay: 56.864 ms

Loss rate: 1.60%

-- Flow 2:

Average throughput: 40.79 Mbit/s

95th percentile per-packet one-way delay: 59.443 ms

Loss rate: 2.62%

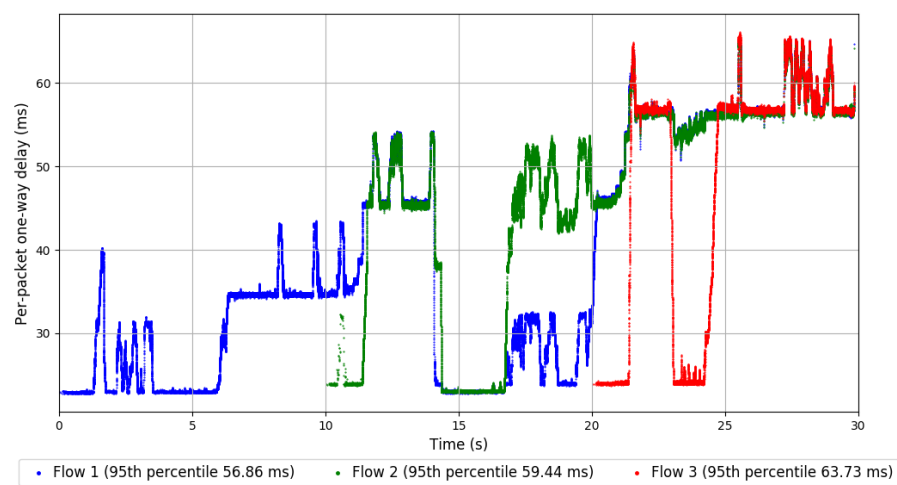
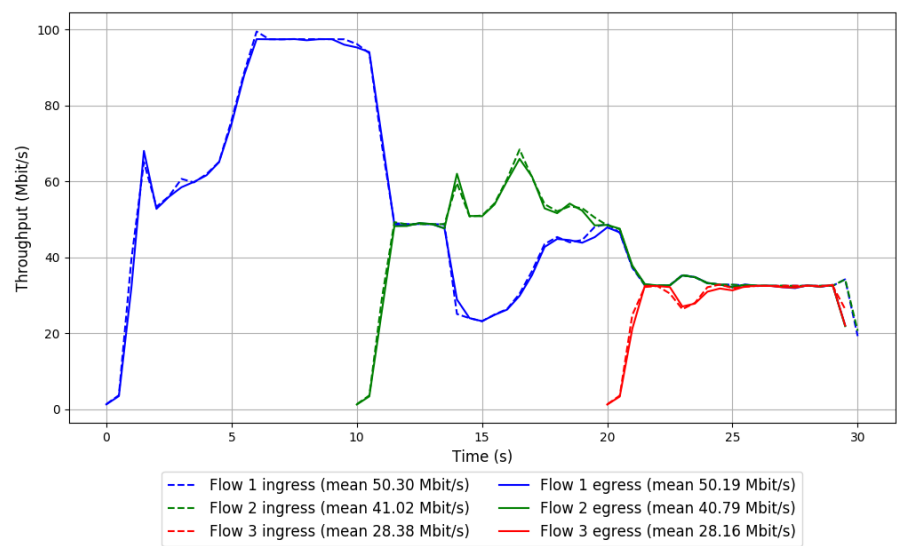
-- Flow 3:

Average throughput: 28.16 Mbit/s

95th percentile per-packet one-way delay: 63.732 ms

Loss rate: 1.65%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-13 17:34:35

End at: 2018-02-13 17:35:05

Local clock offset: 1.298 ms

Remote clock offset: 8.355 ms

Below is generated by plot.py at 2018-02-13 22:22:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.30 Mbit/s

95th percentile per-packet one-way delay: 68.841 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 59.46 Mbit/s

95th percentile per-packet one-way delay: 53.273 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 35.40 Mbit/s

95th percentile per-packet one-way delay: 72.609 ms

Loss rate: 1.03%

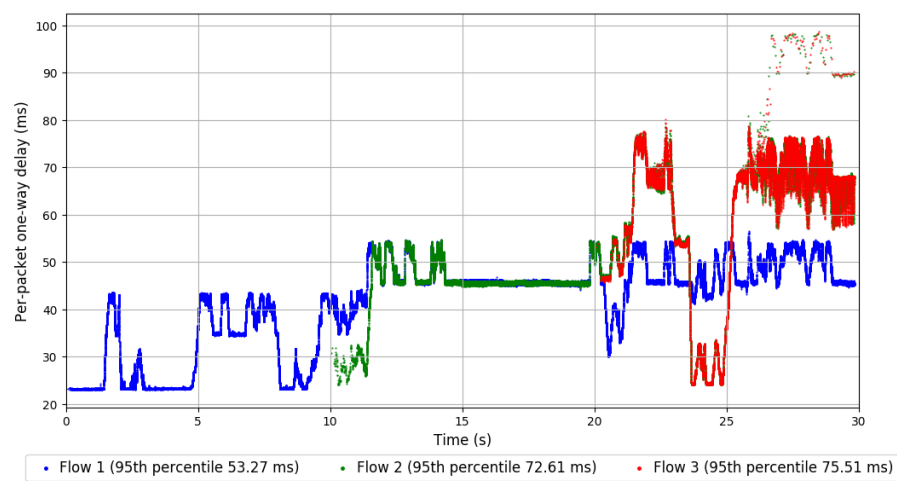
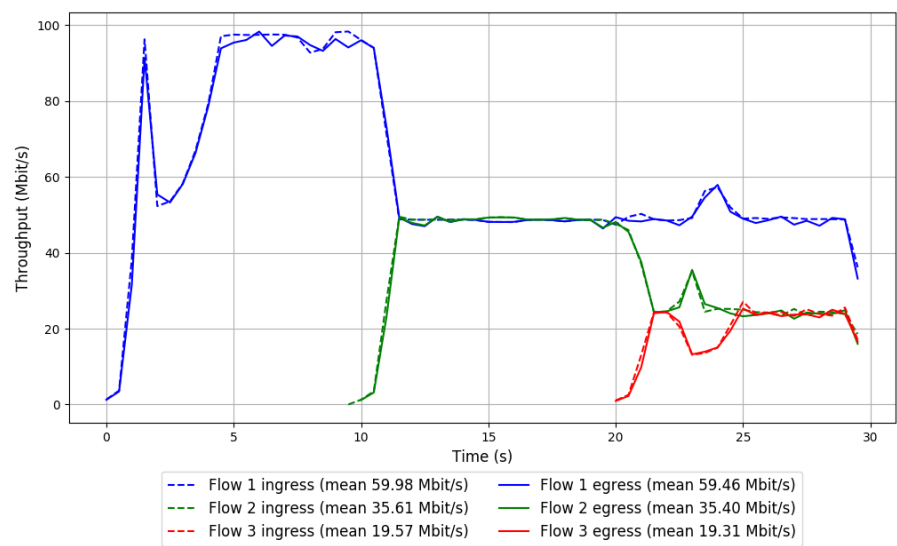
-- Flow 3:

Average throughput: 19.31 Mbit/s

95th percentile per-packet one-way delay: 75.511 ms

Loss rate: 2.39%

Run 10: Report of Vivace-loss — Data Link



Run 1: Statistics of Vivace-LTE

Start at: 2018-02-13 13:31:43

End at: 2018-02-13 13:32:13

Local clock offset: -0.581 ms

Remote clock offset: 2.343 ms

Below is generated by plot.py at 2018-02-13 22:22:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.63 Mbit/s

95th percentile per-packet one-way delay: 50.720 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 58.59 Mbit/s

95th percentile per-packet one-way delay: 46.891 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 33.32 Mbit/s

95th percentile per-packet one-way delay: 64.771 ms

Loss rate: 0.39%

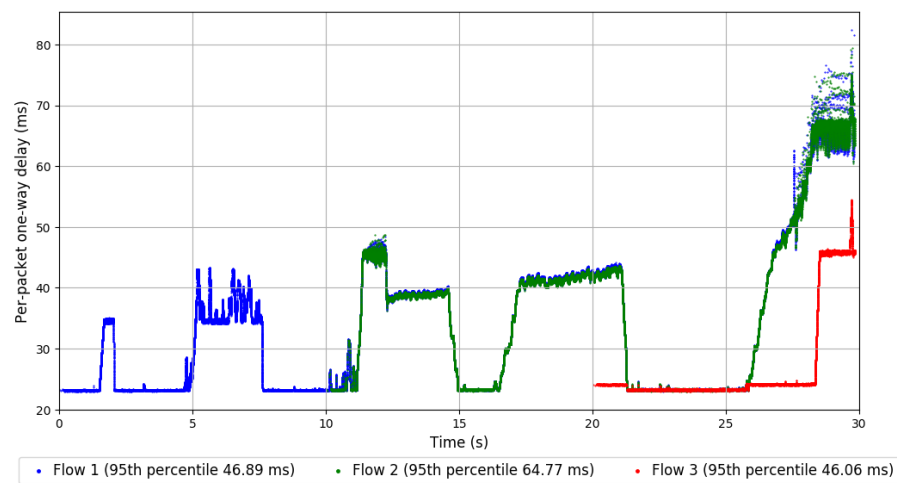
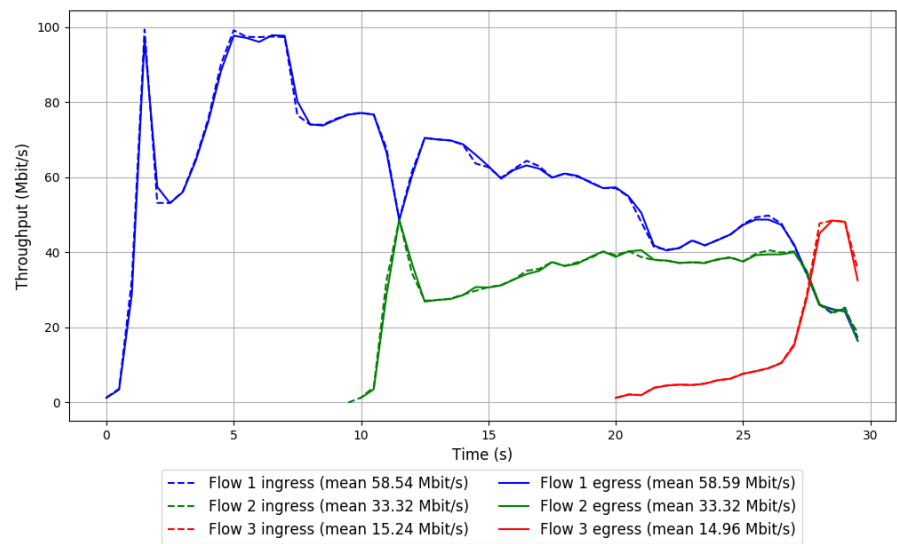
-- Flow 3:

Average throughput: 14.96 Mbit/s

95th percentile per-packet one-way delay: 46.065 ms

Loss rate: 2.49%

Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-13 13:56:18

End at: 2018-02-13 13:56:48

Local clock offset: 0.516 ms

Remote clock offset: 2.232 ms

Below is generated by plot.py at 2018-02-13 22:22:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.39 Mbit/s

95th percentile per-packet one-way delay: 66.784 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 54.83 Mbit/s

95th percentile per-packet one-way delay: 66.509 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 33.11 Mbit/s

95th percentile per-packet one-way delay: 67.297 ms

Loss rate: 0.45%

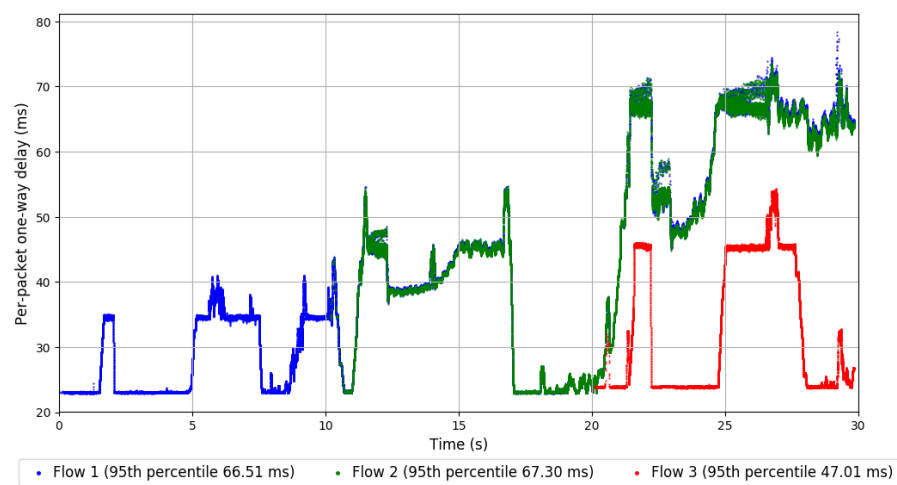
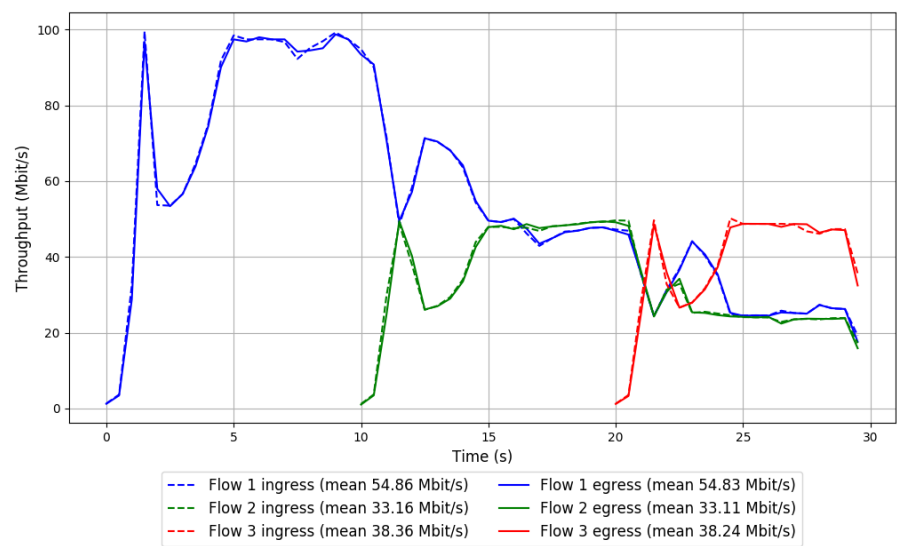
-- Flow 3:

Average throughput: 38.24 Mbit/s

95th percentile per-packet one-way delay: 47.011 ms

Loss rate: 0.87%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-13 14:20:50

End at: 2018-02-13 14:21:20

Local clock offset: 2.209 ms

Remote clock offset: 2.435 ms

Below is generated by plot.py at 2018-02-13 22:22:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.70 Mbit/s

95th percentile per-packet one-way delay: 54.034 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 54.53 Mbit/s

95th percentile per-packet one-way delay: 53.540 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 41.83 Mbit/s

95th percentile per-packet one-way delay: 38.893 ms

Loss rate: 0.46%

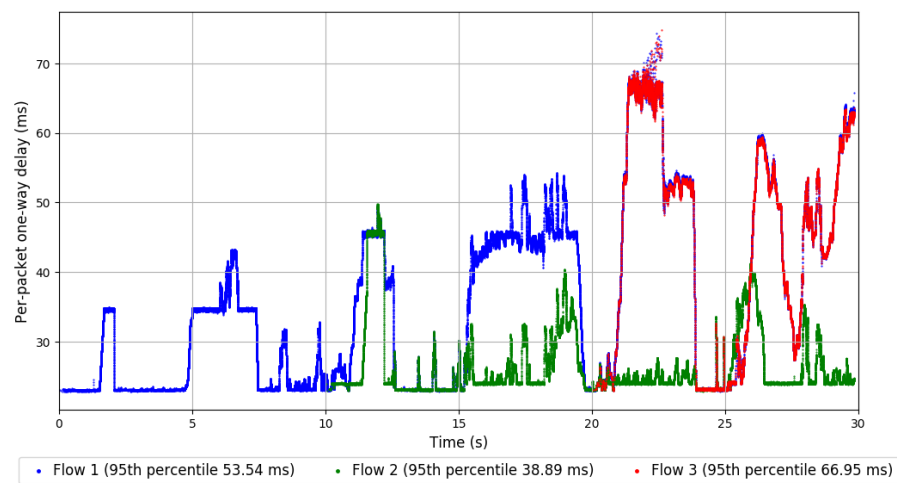
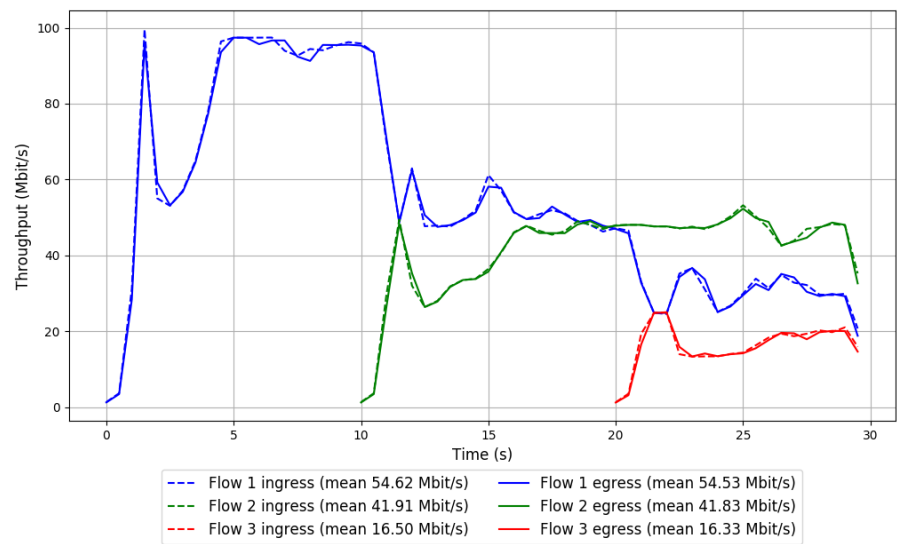
-- Flow 3:

Average throughput: 16.33 Mbit/s

95th percentile per-packet one-way delay: 66.946 ms

Loss rate: 1.58%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-13 14:45:46

End at: 2018-02-13 14:46:16

Local clock offset: 1.006 ms

Remote clock offset: 2.332 ms

Below is generated by plot.py at 2018-02-13 22:22:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.90 Mbit/s

95th percentile per-packet one-way delay: 57.436 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 54.63 Mbit/s

95th percentile per-packet one-way delay: 55.923 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 32.60 Mbit/s

95th percentile per-packet one-way delay: 58.903 ms

Loss rate: 0.95%

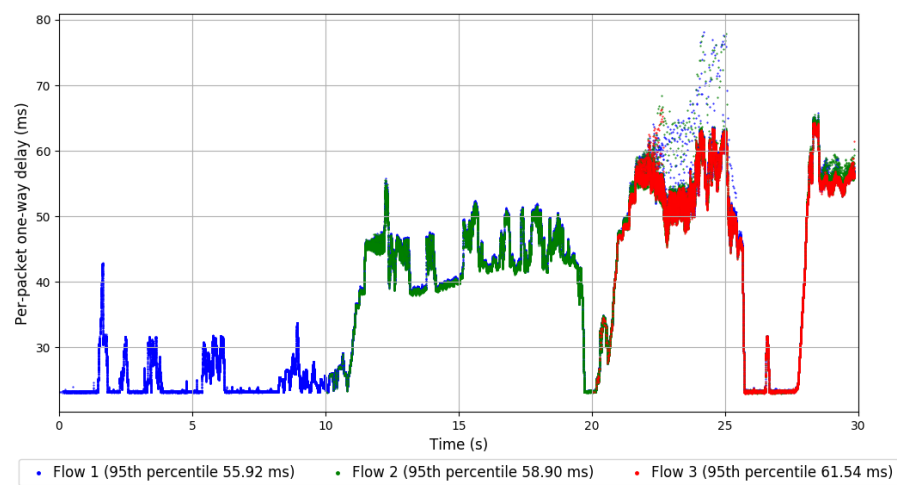
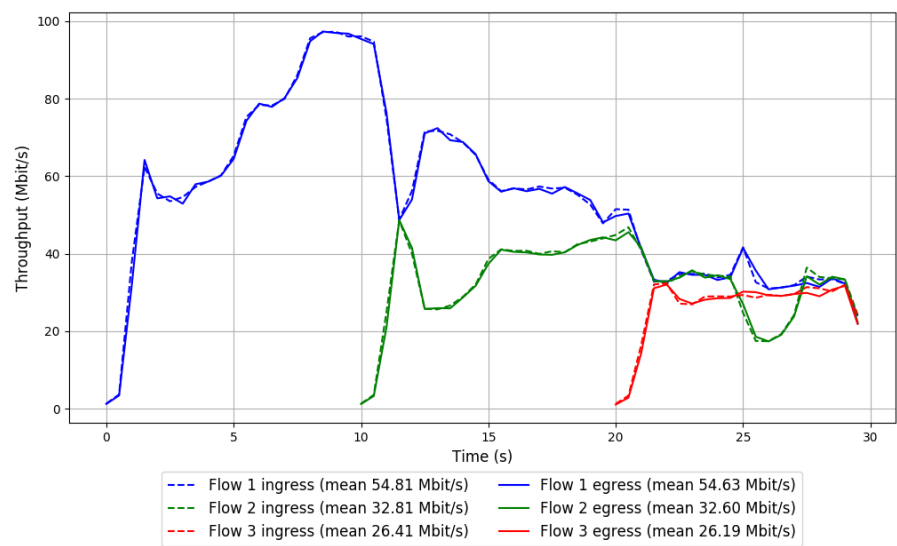
-- Flow 3:

Average throughput: 26.19 Mbit/s

95th percentile per-packet one-way delay: 61.536 ms

Loss rate: 1.47%

Run 4: Report of Vivace-LTE — Data Link

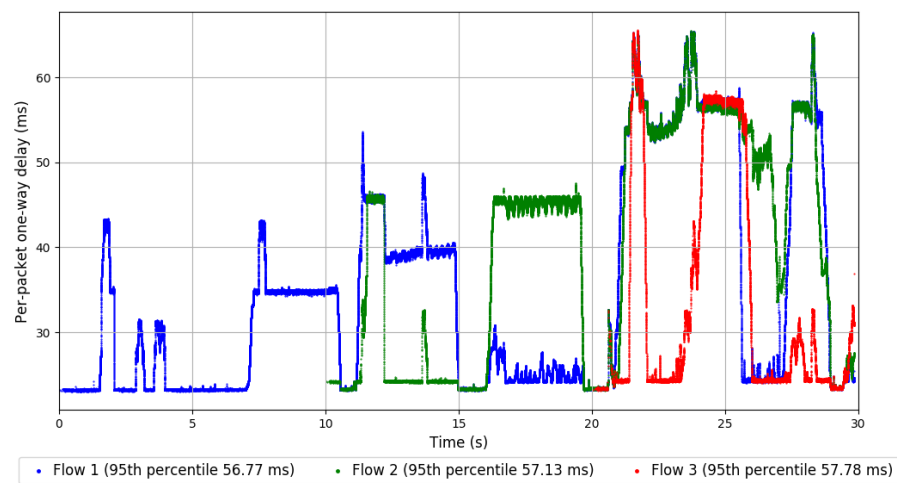
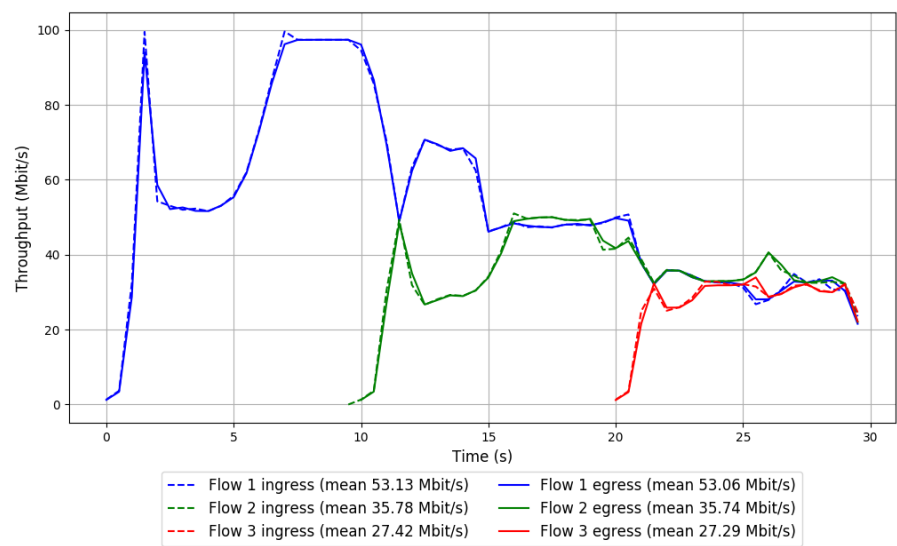


Run 5: Statistics of Vivace-LTE

Start at: 2018-02-13 15:10:46
End at: 2018-02-13 15:11:16
Local clock offset: 0.91 ms
Remote clock offset: 10.792 ms

```
# Below is generated by plot.py at 2018-02-13 22:22:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.77 Mbit/s
95th percentile per-packet one-way delay: 57.143 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 53.06 Mbit/s
95th percentile per-packet one-way delay: 56.769 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 35.74 Mbit/s
95th percentile per-packet one-way delay: 57.132 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 27.29 Mbit/s
95th percentile per-packet one-way delay: 57.785 ms
Loss rate: 0.97%
```


Run 5: Report of Vivace-LTE — Data Link

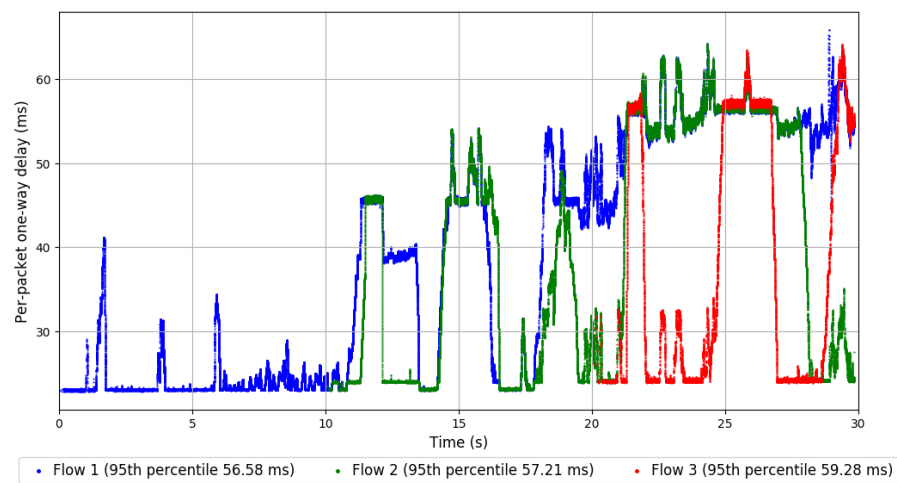
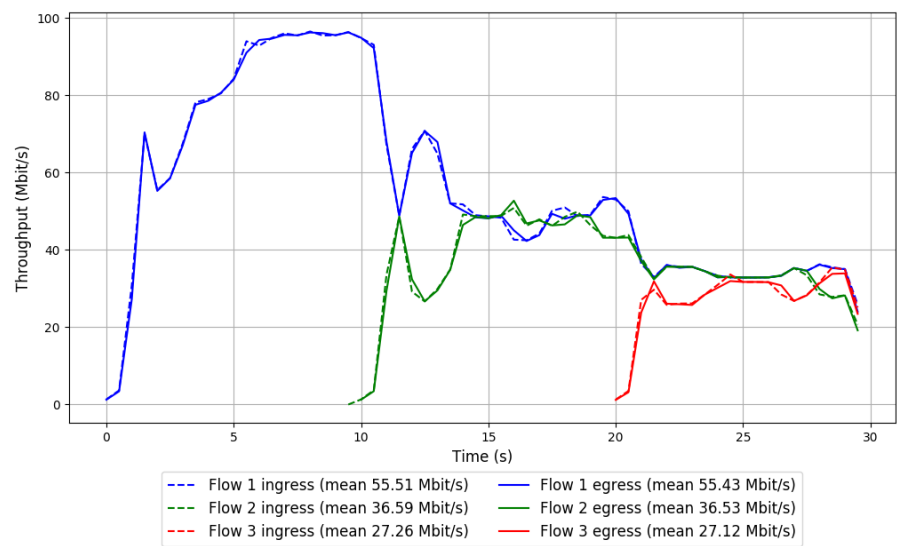


Run 6: Statistics of Vivace-LTE

Start at: 2018-02-13 15:35:36
End at: 2018-02-13 15:36:06
Local clock offset: 0.588 ms
Remote clock offset: 14.634 ms

Below is generated by plot.py at 2018-02-13 22:22:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.62 Mbit/s
95th percentile per-packet one-way delay: 57.236 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 55.43 Mbit/s
95th percentile per-packet one-way delay: 56.581 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 36.53 Mbit/s
95th percentile per-packet one-way delay: 57.210 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 27.12 Mbit/s
95th percentile per-packet one-way delay: 59.281 ms
Loss rate: 1.21%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-13 16:01:30

End at: 2018-02-13 16:02:00

Local clock offset: -0.703 ms

Remote clock offset: 17.7 ms

Below is generated by plot.py at 2018-02-13 22:22:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.79 Mbit/s

95th percentile per-packet one-way delay: 66.289 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 60.83 Mbit/s

95th percentile per-packet one-way delay: 64.601 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 24.64 Mbit/s

95th percentile per-packet one-way delay: 46.648 ms

Loss rate: 1.19%

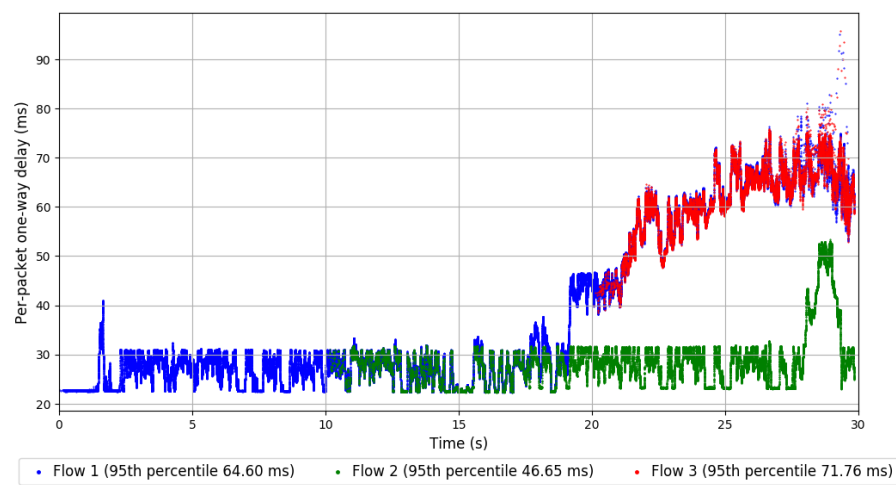
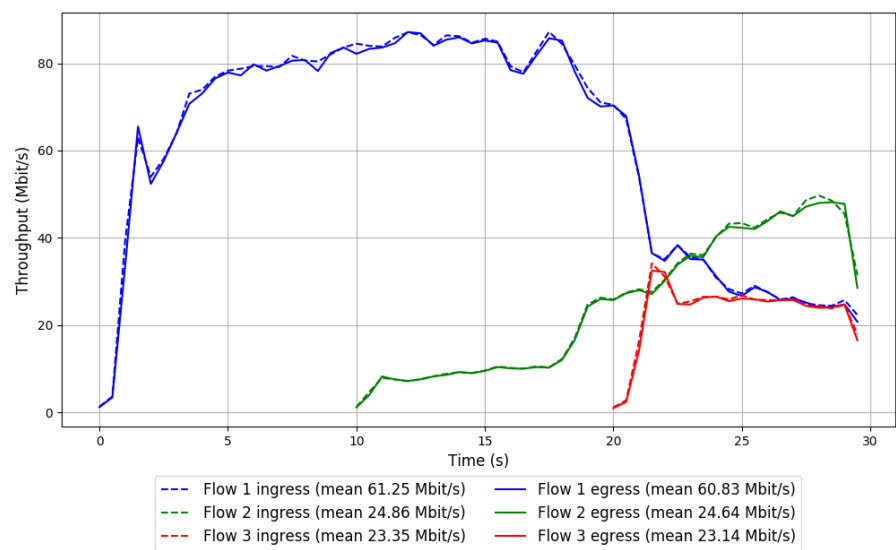
-- Flow 3:

Average throughput: 23.14 Mbit/s

95th percentile per-packet one-way delay: 71.759 ms

Loss rate: 1.62%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-13 16:27:20

End at: 2018-02-13 16:27:51

Local clock offset: -0.8 ms

Remote clock offset: 7.39 ms

Below is generated by plot.py at 2018-02-13 22:23:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.25 Mbit/s

95th percentile per-packet one-way delay: 65.615 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 60.17 Mbit/s

95th percentile per-packet one-way delay: 46.218 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 34.72 Mbit/s

95th percentile per-packet one-way delay: 67.326 ms

Loss rate: 0.49%

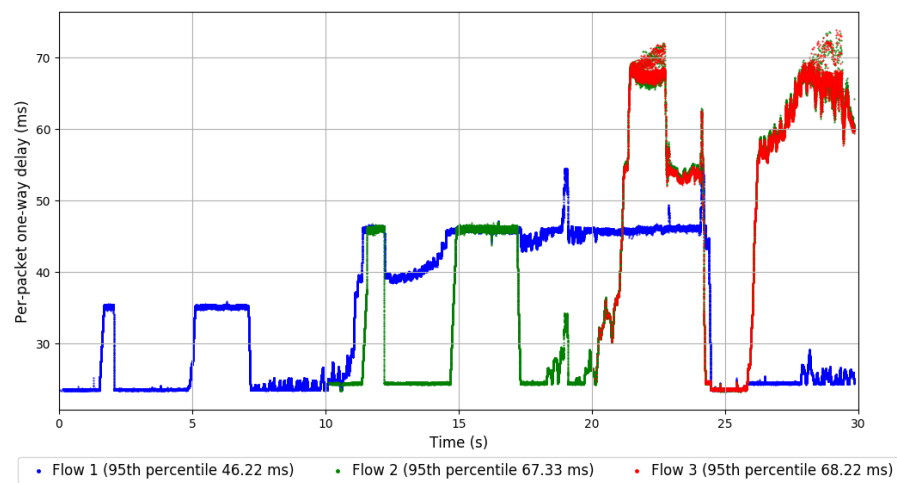
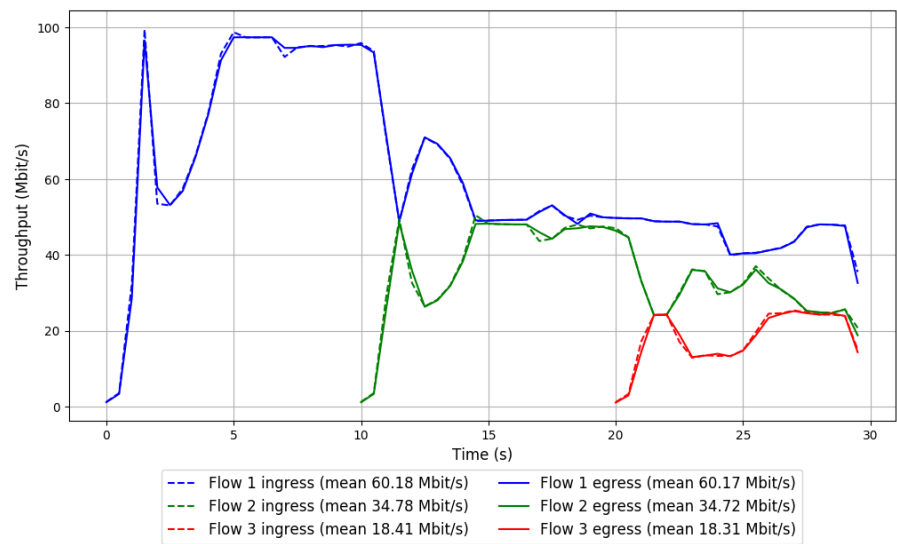
-- Flow 3:

Average throughput: 18.31 Mbit/s

95th percentile per-packet one-way delay: 68.216 ms

Loss rate: 1.10%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-13 16:52:02

End at: 2018-02-13 16:52:32

Local clock offset: 1.066 ms

Remote clock offset: 7.992 ms

Below is generated by plot.py at 2018-02-13 22:23:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.88 Mbit/s

95th percentile per-packet one-way delay: 63.907 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 49.42 Mbit/s

95th percentile per-packet one-way delay: 35.051 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 30.28 Mbit/s

95th percentile per-packet one-way delay: 68.304 ms

Loss rate: 1.01%

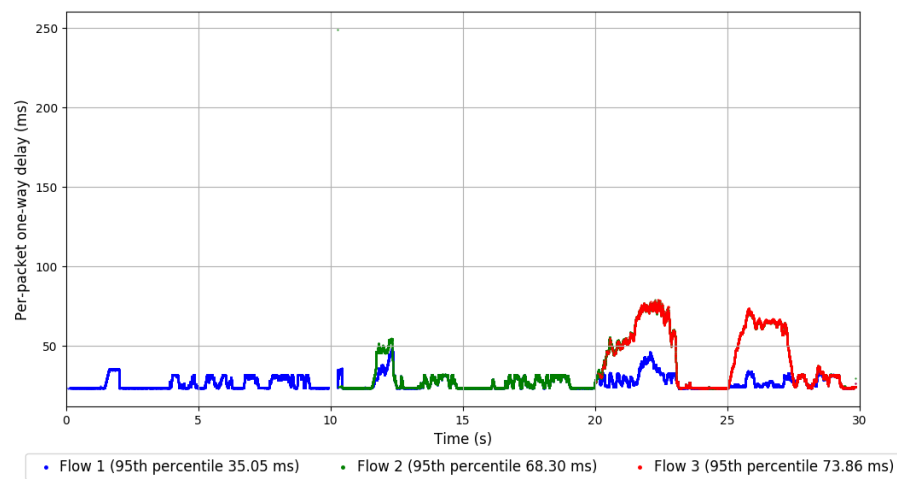
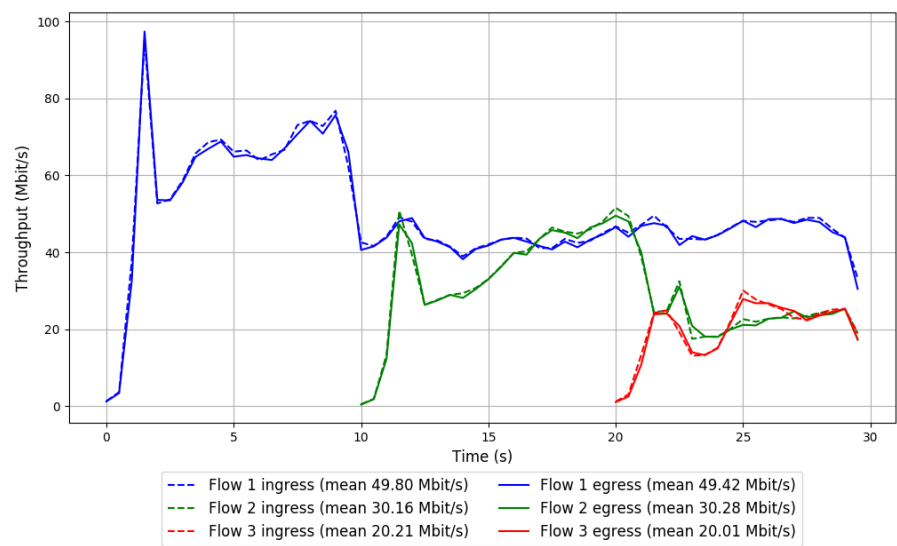
-- Flow 3:

Average throughput: 20.01 Mbit/s

95th percentile per-packet one-way delay: 73.860 ms

Loss rate: 1.57%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-13 17:16:38

End at: 2018-02-13 17:17:08

Local clock offset: 2.516 ms

Remote clock offset: 7.248 ms

Below is generated by plot.py at 2018-02-13 22:23:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.34 Mbit/s

95th percentile per-packet one-way delay: 50.801 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 64.75 Mbit/s

95th percentile per-packet one-way delay: 45.186 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 21.73 Mbit/s

95th percentile per-packet one-way delay: 56.498 ms

Loss rate: 0.78%

-- Flow 3:

Average throughput: 27.84 Mbit/s

95th percentile per-packet one-way delay: 57.133 ms

Loss rate: 1.03%

Run 10: Report of Vivace-LTE — Data Link

