

## Pantheon Report

Generated at 2018-03-01 06:48:16 (UTC).

Data path: GCE Sydney Ethernet (*local*) → GCE Tokyo Ethernet (*remote*).

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.

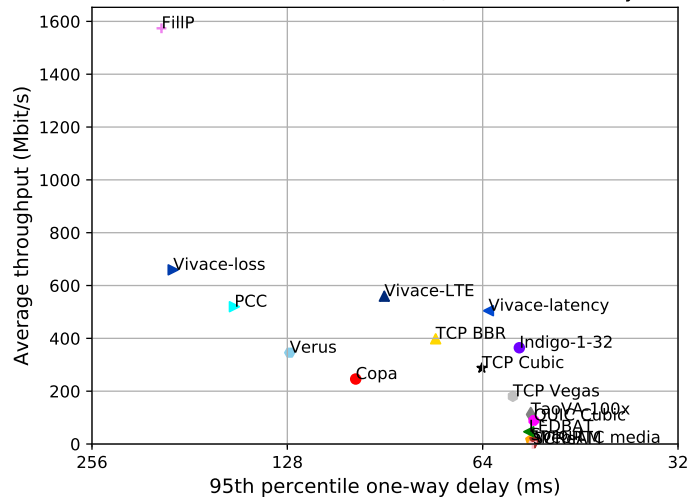
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

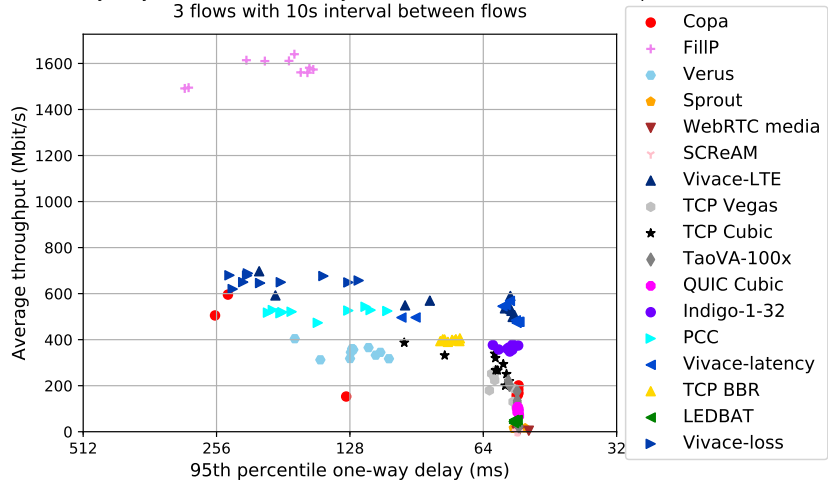
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
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 GCE Sydney Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme  
3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Sydney Ethernet to GCE Tokyo 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     | 206.01                 | 197.23 | 183.92 | 73.86                     | 75.67  | 77.91  | 0.04               | 0.06   | 0.15   |
| TCP Cubic      | 10     | 160.27                 | 148.96 | 85.09  | 63.03                     | 63.24  | 65.51  | 0.04               | 0.06   | 0.10   |
| LEDBAT         | 10     | 29.13                  | 20.88  | 10.46  | 54.31                     | 54.40  | 53.58  | 0.02               | 0.04   | 0.00   |
| PCC            | 10     | 463.91                 | 61.60  | 45.36  | 154.02                    | 151.56 | 152.98 | 1.08               | 1.19   | 1.42   |
| QUIC Cubic     | 10     | 49.53                  | 42.52  | 35.15  | 52.82                     | 52.41  | 52.38  | 0.00               | 0.01   | 0.01   |
| SCReAM         | 10     | 0.21                   | 0.21   | 0.22   | 52.80                     | 52.27  | 52.61  | 0.04               | 0.00   | 0.00   |
| WebRTC media   | 10     | 2.31                   | 1.49   | 0.67   | 53.19                     | 51.95  | 52.73  | 0.09               | 0.14   | 0.25   |
| Sprout         | 10     | 7.79                   | 7.71   | 7.50   | 53.97                     | 53.98  | 54.02  | 0.00               | 0.00   | 0.00   |
| TaoVA-100x     | 10     | 51.56                  | 83.53  | 89.64  | 53.45                     | 53.80  | 54.96  | 0.01               | 0.01   | 0.01   |
| TCP Vegas      | 10     | 88.18                  | 92.31  | 92.83  | 57.04                     | 57.48  | 56.50  | 0.00               | 0.01   | 0.01   |
| Verus          | 10     | 199.75                 | 169.43 | 106.21 | 121.07                    | 134.83 | 134.67 | 0.73               | 0.79   | 0.64   |
| Copa           | 10     | 130.12                 | 143.41 | 61.50  | 107.19                    | 91.48  | 83.42  | 8.18               | 5.69   | 5.27   |
| FillP          | 10     | 835.82                 | 768.64 | 683.29 | 183.28                    | 194.70 | 204.09 | 7.60               | 10.42  | 13.17  |
| Indigo-1-32    | 10     | 195.88                 | 181.36 | 149.55 | 55.53                     | 56.49  | 57.22  | 0.00               | 0.00   | 0.01   |
| Vivace-latency | 10     | 317.87                 | 250.96 | 60.54  | 53.66                     | 80.42  | 51.88  | 0.00               | 0.03   | 0.01   |
| Vivace-loss    | 10     | 364.40                 | 311.39 | 268.07 | 154.21                    | 194.97 | 189.86 | 0.82               | 1.72   | 1.87   |
| Vivace-LTE     | 10     | 318.61                 | 264.20 | 199.50 | 87.49                     | 68.26  | 88.78  | 0.12               | 0.00   | 0.16   |

Run 1: Statistics of TCP BBR

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

End at: 2018-02-28 23:02:58

# Below is generated by plot.py at 2018-03-01 04:36:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 400.02 Mbit/s

95th percentile per-packet one-way delay: 73.820 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 203.25 Mbit/s

95th percentile per-packet one-way delay: 72.213 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 200.07 Mbit/s

95th percentile per-packet one-way delay: 74.266 ms

Loss rate: 0.06%

-- Flow 3:

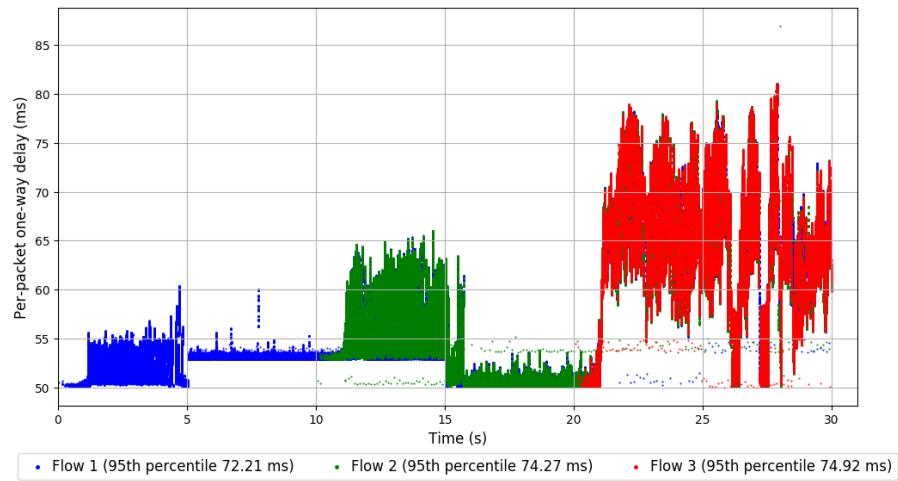
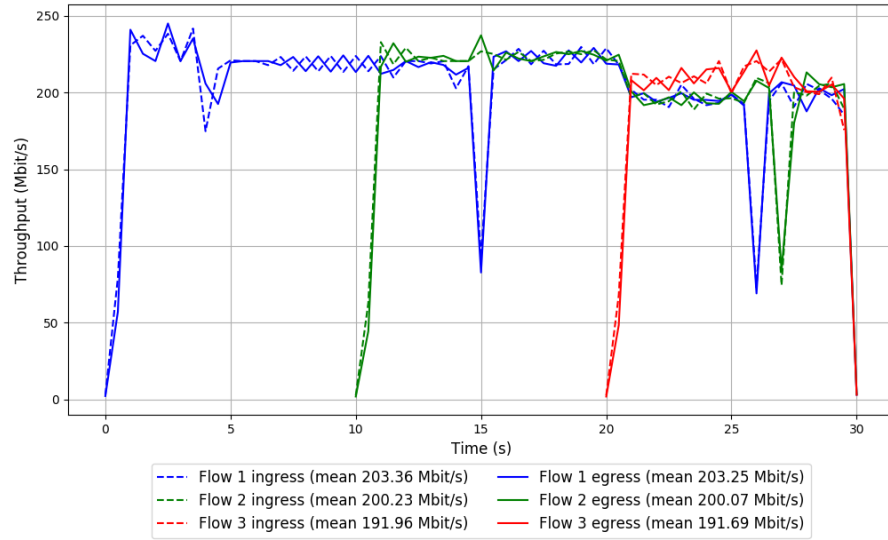
Average throughput: 191.69 Mbit/s

95th percentile per-packet one-way delay: 74.924 ms

Loss rate: 0.13%



# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-28 23:20:13

End at: 2018-02-28 23:20:43

# Below is generated by plot.py at 2018-03-01 04:36:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 405.89 Mbit/s

95th percentile per-packet one-way delay: 72.286 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 213.27 Mbit/s

95th percentile per-packet one-way delay: 70.703 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 195.83 Mbit/s

95th percentile per-packet one-way delay: 72.633 ms

Loss rate: 0.08%

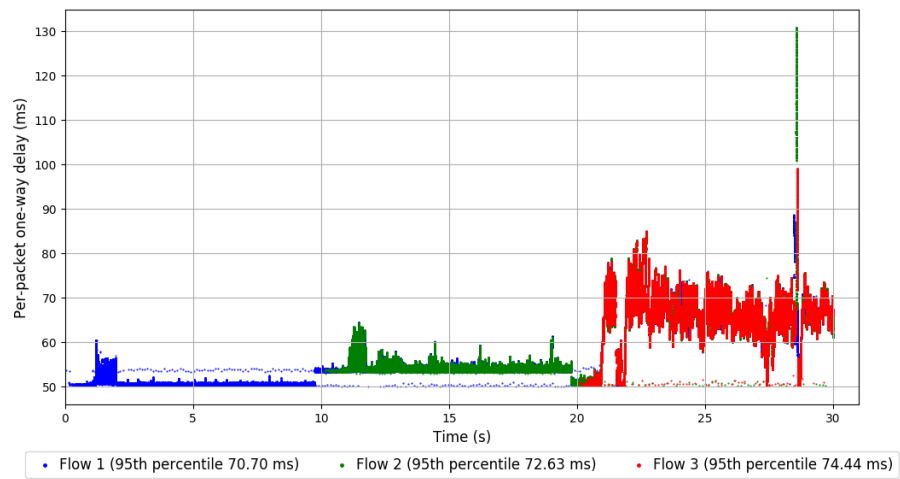
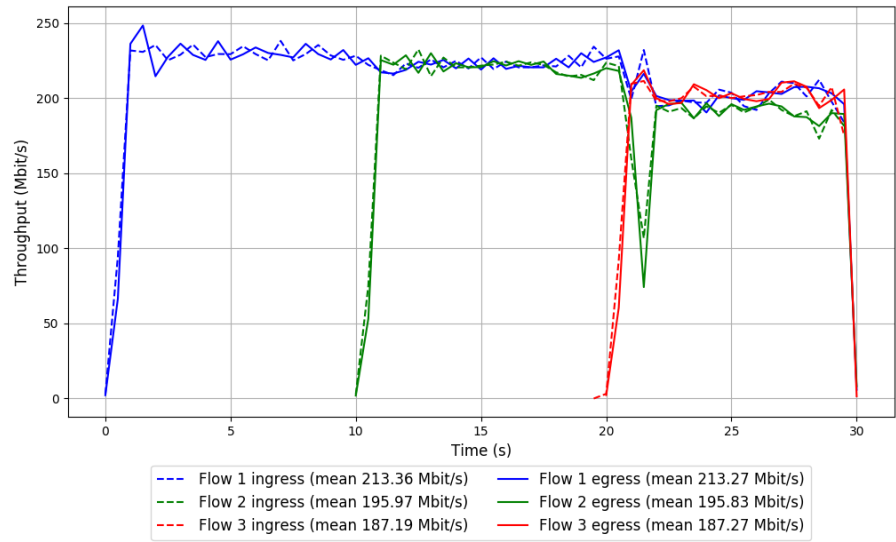
-- Flow 3:

Average throughput: 187.27 Mbit/s

95th percentile per-packet one-way delay: 74.435 ms

Loss rate: 0.06%

## Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-28 23:37:53

End at: 2018-02-28 23:38:23

# Below is generated by plot.py at 2018-03-01 04:36:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 390.52 Mbit/s

95th percentile per-packet one-way delay: 76.917 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 198.54 Mbit/s

95th percentile per-packet one-way delay: 75.678 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 195.94 Mbit/s

95th percentile per-packet one-way delay: 76.526 ms

Loss rate: 0.00%

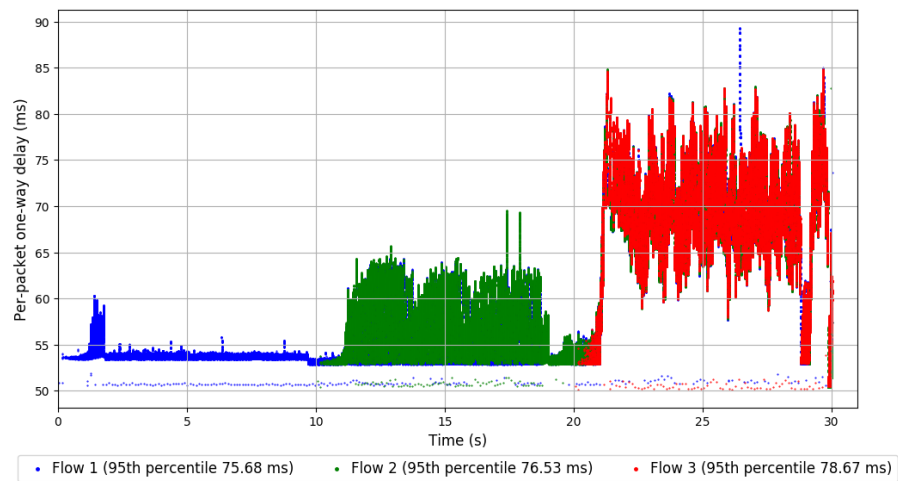
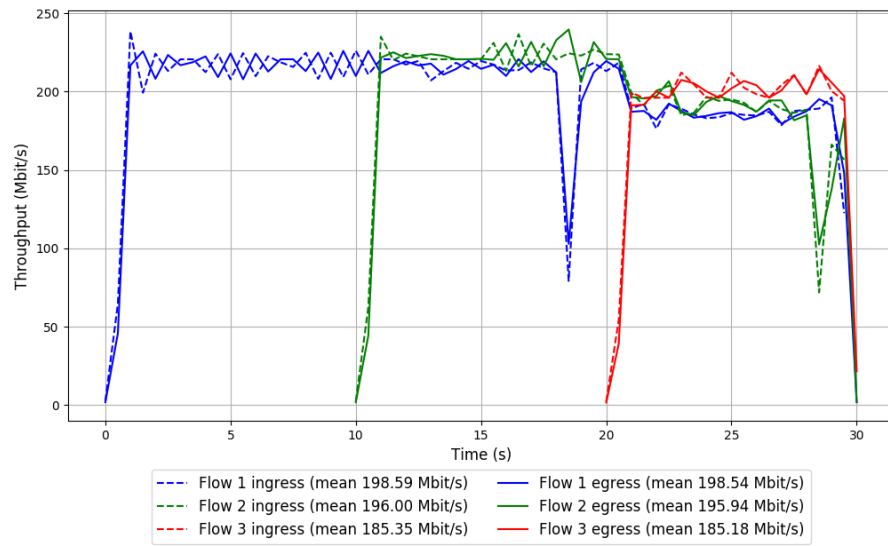
-- Flow 3:

Average throughput: 185.18 Mbit/s

95th percentile per-packet one-way delay: 78.673 ms

Loss rate: 0.00%

### Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-28 23:55:15

End at: 2018-02-28 23:55:45

# Below is generated by plot.py at 2018-03-01 04:36:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 401.15 Mbit/s

95th percentile per-packet one-way delay: 78.279 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 209.36 Mbit/s

95th percentile per-packet one-way delay: 76.882 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 197.15 Mbit/s

95th percentile per-packet one-way delay: 77.974 ms

Loss rate: 0.04%

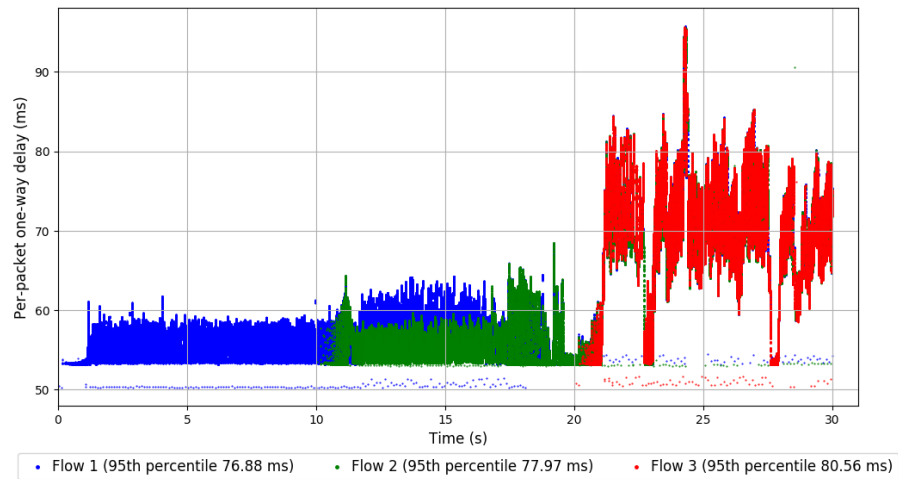
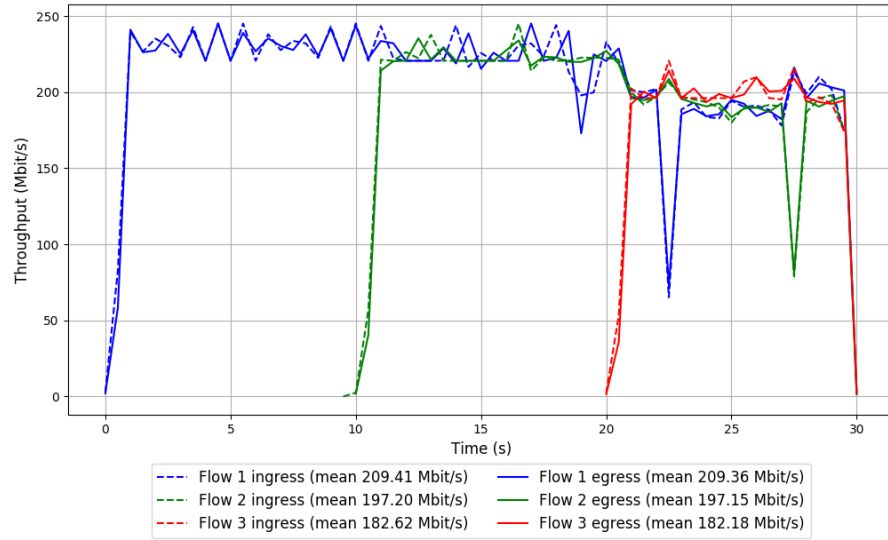
-- Flow 3:

Average throughput: 182.18 Mbit/s

95th percentile per-packet one-way delay: 80.555 ms

Loss rate: 0.23%

#### Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-03-01 00:12:37

End at: 2018-03-01 00:13:07

# Below is generated by plot.py at 2018-03-01 04:36:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 396.12 Mbit/s

95th percentile per-packet one-way delay: 74.354 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 205.17 Mbit/s

95th percentile per-packet one-way delay: 72.770 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 192.59 Mbit/s

95th percentile per-packet one-way delay: 74.759 ms

Loss rate: 0.08%

-- Flow 3:

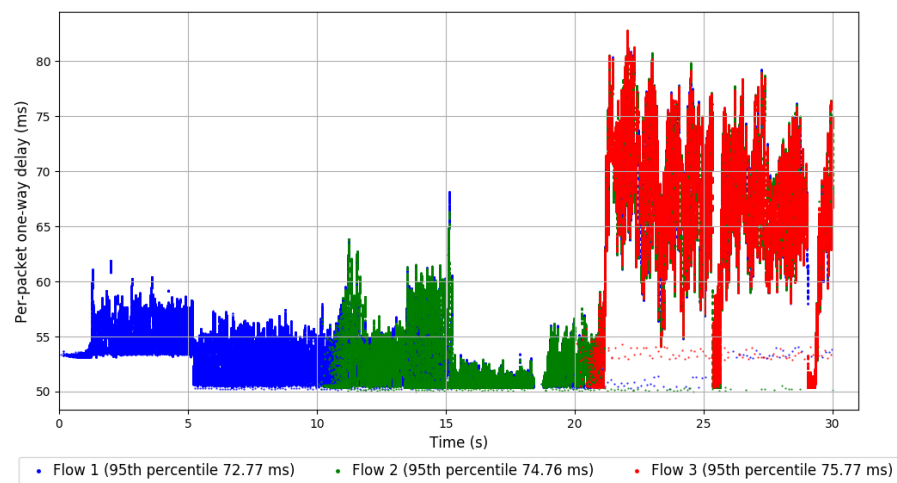
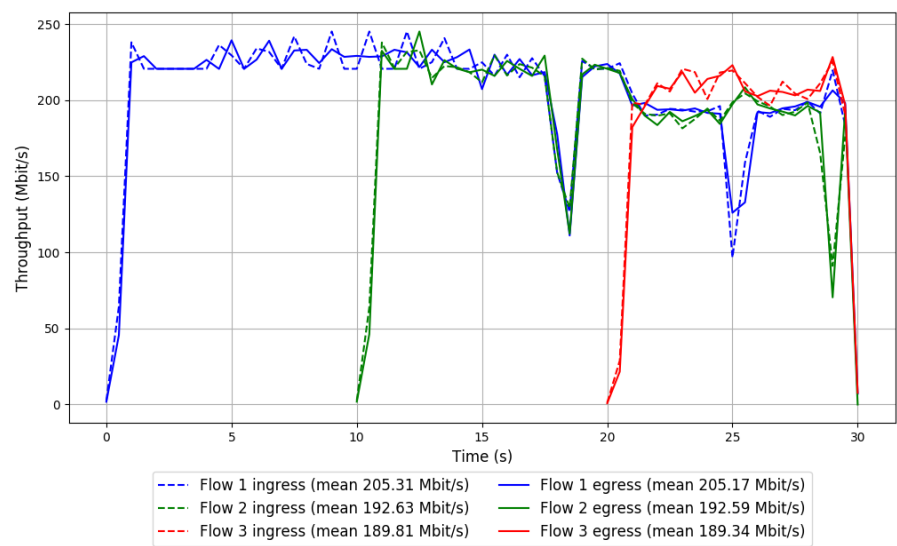
Average throughput: 189.34 Mbit/s

95th percentile per-packet one-way delay: 75.772 ms

Loss rate: 0.28%



Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-03-01 00:30:23

End at: 2018-03-01 00:30:53

# Below is generated by plot.py at 2018-03-01 04:36:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 399.14 Mbit/s

95th percentile per-packet one-way delay: 75.269 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 206.97 Mbit/s

95th percentile per-packet one-way delay: 72.558 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 197.96 Mbit/s

95th percentile per-packet one-way delay: 74.716 ms

Loss rate: 0.00%

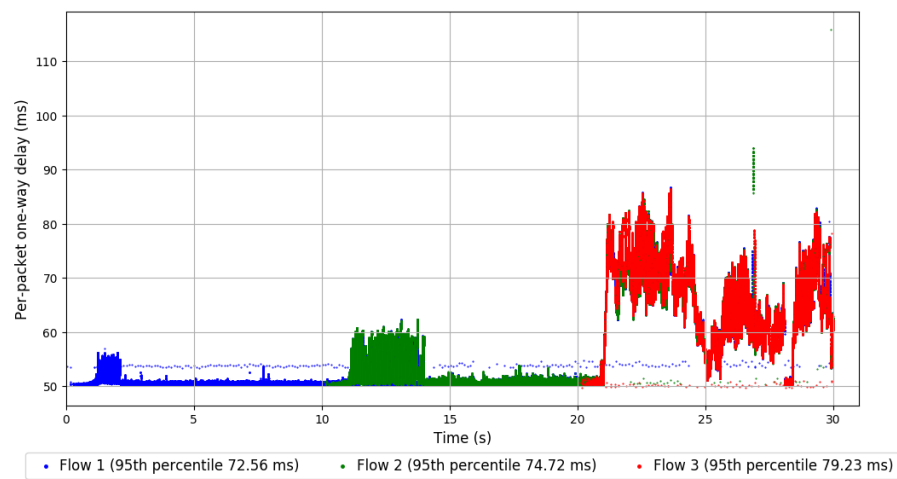
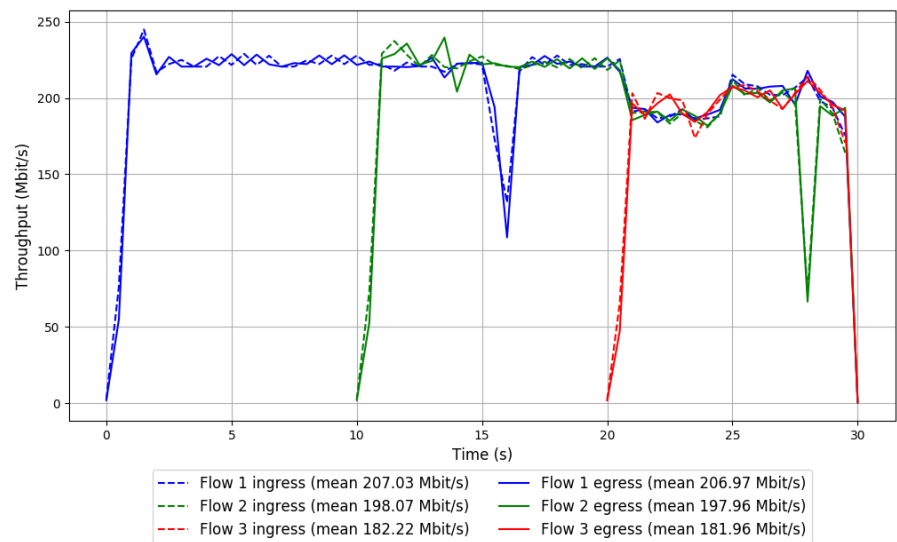
-- Flow 3:

Average throughput: 181.96 Mbit/s

95th percentile per-packet one-way delay: 79.229 ms

Loss rate: 0.13%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-03-01 00:48:19

End at: 2018-03-01 00:48:49

# Below is generated by plot.py at 2018-03-01 04:36:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 393.96 Mbit/s

95th percentile per-packet one-way delay: 72.466 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 202.43 Mbit/s

95th percentile per-packet one-way delay: 71.214 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 198.20 Mbit/s

95th percentile per-packet one-way delay: 72.051 ms

Loss rate: 0.00%

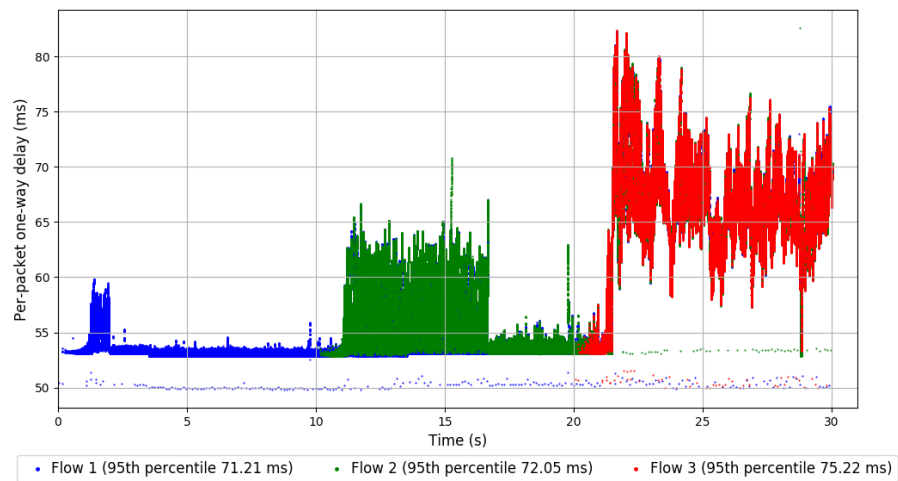
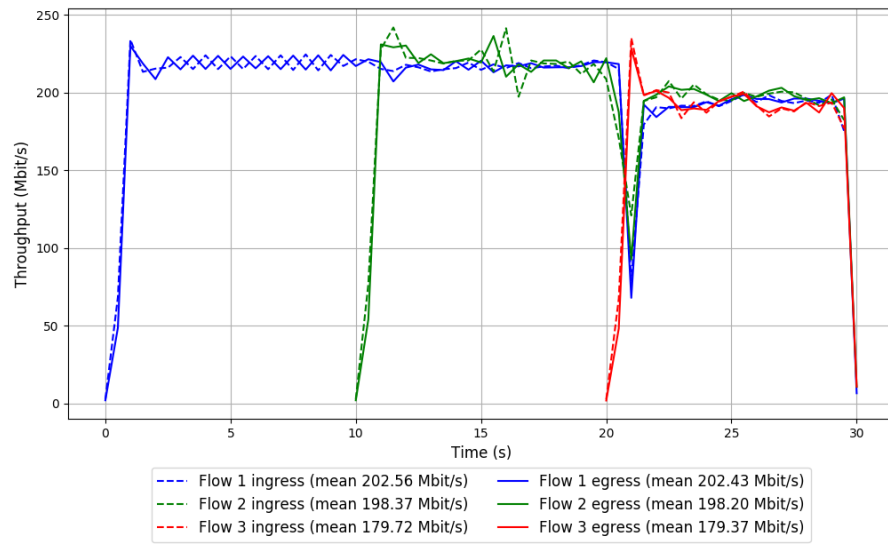
-- Flow 3:

Average throughput: 179.37 Mbit/s

95th percentile per-packet one-way delay: 75.217 ms

Loss rate: 0.00%

## Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-03-01 01:06:10

End at: 2018-03-01 01:06:40

# Below is generated by plot.py at 2018-03-01 04:36:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 393.75 Mbit/s

95th percentile per-packet one-way delay: 80.012 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 207.82 Mbit/s

95th percentile per-packet one-way delay: 78.004 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 191.55 Mbit/s

95th percentile per-packet one-way delay: 80.302 ms

Loss rate: 0.08%

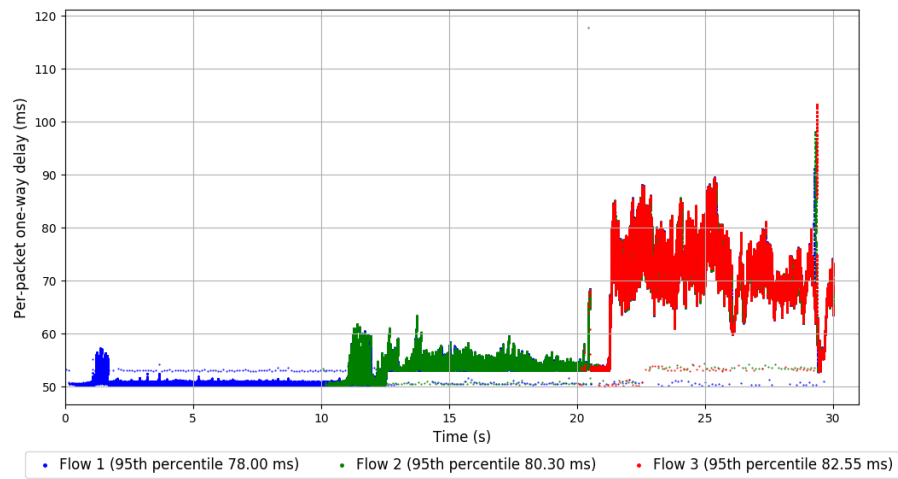
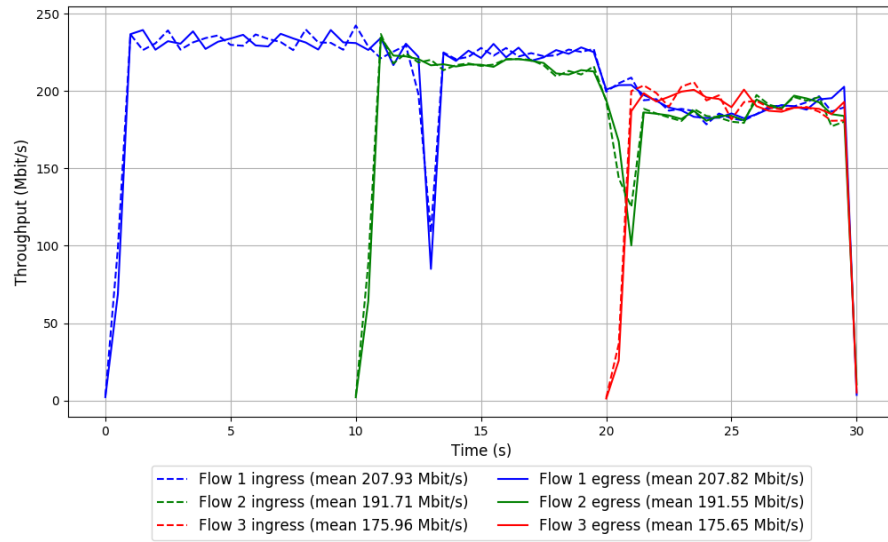
-- Flow 3:

Average throughput: 175.65 Mbit/s

95th percentile per-packet one-way delay: 82.546 ms

Loss rate: 0.14%

## Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-03-01 01:23:50

End at: 2018-03-01 01:24:20

# Below is generated by plot.py at 2018-03-01 04:42:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 401.56 Mbit/s

95th percentile per-packet one-way delay: 79.004 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 206.77 Mbit/s

95th percentile per-packet one-way delay: 76.535 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 205.05 Mbit/s

95th percentile per-packet one-way delay: 79.344 ms

Loss rate: 0.13%

-- Flow 3:

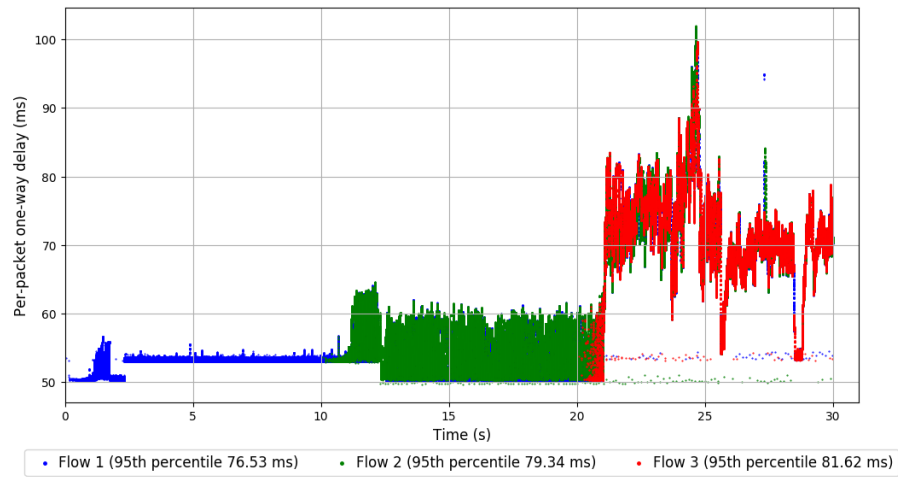
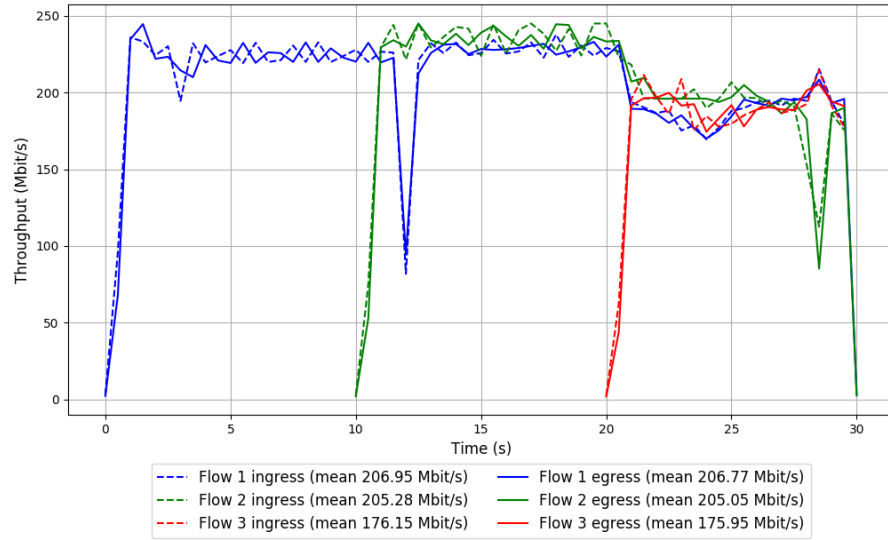
Average throughput: 175.95 Mbit/s

95th percentile per-packet one-way delay: 81.625 ms

Loss rate: 0.29%



# Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-03-01 01:41:44

End at: 2018-03-01 01:42:14

# Below is generated by plot.py at 2018-03-01 04:42:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 401.63 Mbit/s

95th percentile per-packet one-way delay: 73.793 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 206.55 Mbit/s

95th percentile per-packet one-way delay: 72.067 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 197.99 Mbit/s

95th percentile per-packet one-way delay: 74.159 ms

Loss rate: 0.12%

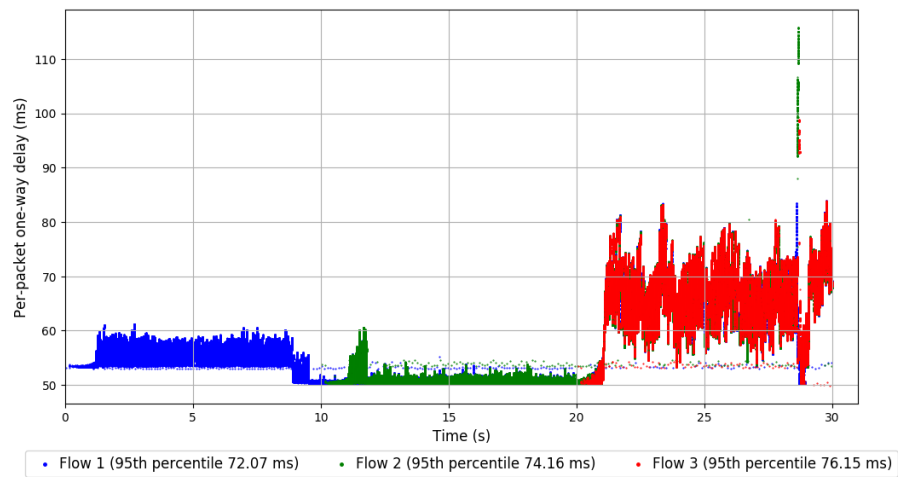
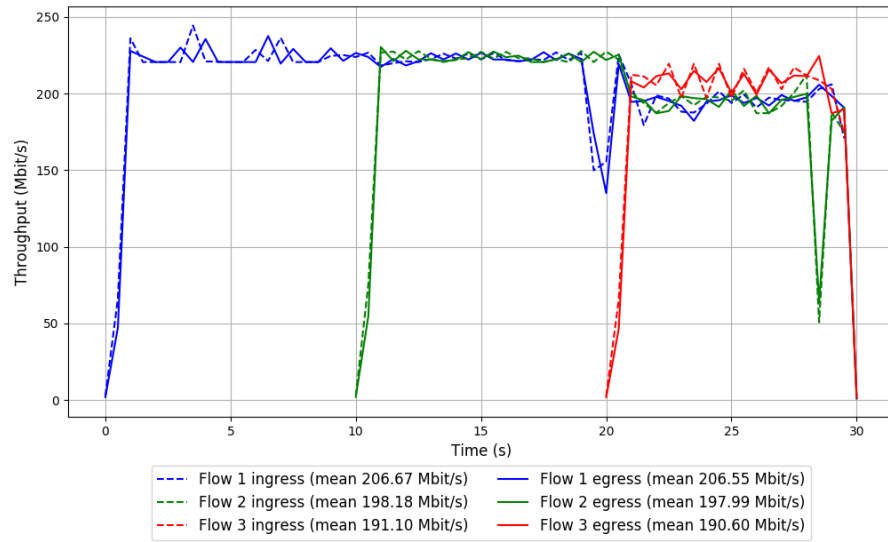
-- Flow 3:

Average throughput: 190.60 Mbit/s

95th percentile per-packet one-way delay: 76.153 ms

Loss rate: 0.29%

# Run 10: Report of TCP BBR — Data Link

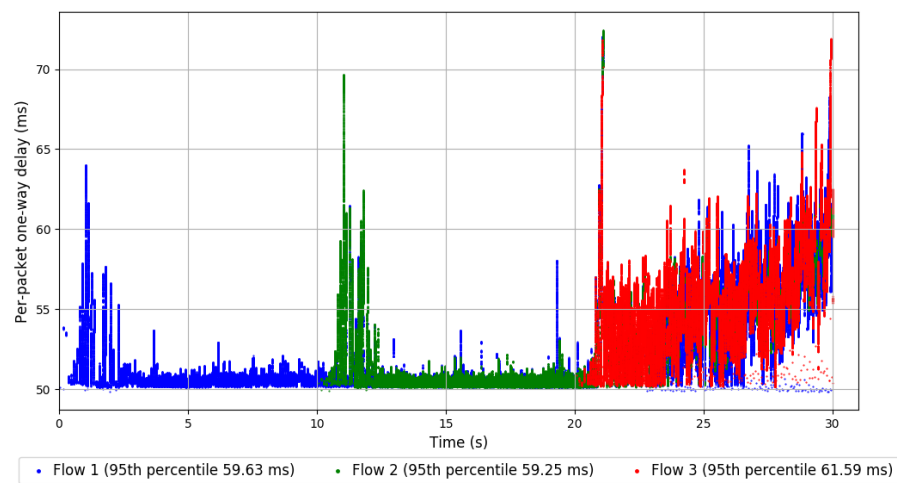
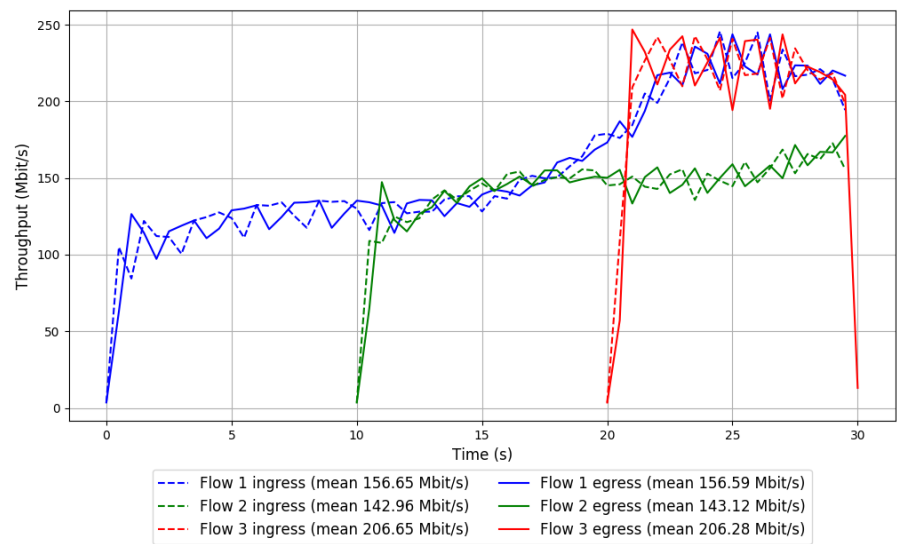


```
Run 1: Statistics of TCP Cubic

Start at: 2018-02-28 22:59:22
End at: 2018-02-28 22:59:52

# Below is generated by plot.py at 2018-03-01 04:42:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.03 Mbit/s
95th percentile per-packet one-way delay: 60.081 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 156.59 Mbit/s
95th percentile per-packet one-way delay: 59.633 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 143.12 Mbit/s
95th percentile per-packet one-way delay: 59.251 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 206.28 Mbit/s
95th percentile per-packet one-way delay: 61.588 ms
Loss rate: 0.18%
```

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-28 23:17:11

End at: 2018-02-28 23:17:41

# Below is generated by plot.py at 2018-03-01 04:42:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 293.88 Mbit/s

95th percentile per-packet one-way delay: 57.673 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 171.21 Mbit/s

95th percentile per-packet one-way delay: 58.055 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 136.27 Mbit/s

95th percentile per-packet one-way delay: 55.037 ms

Loss rate: 0.00%

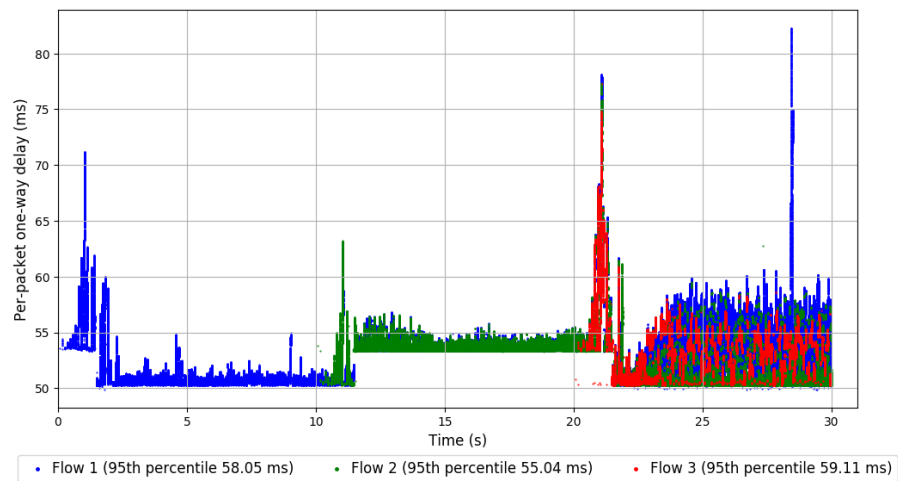
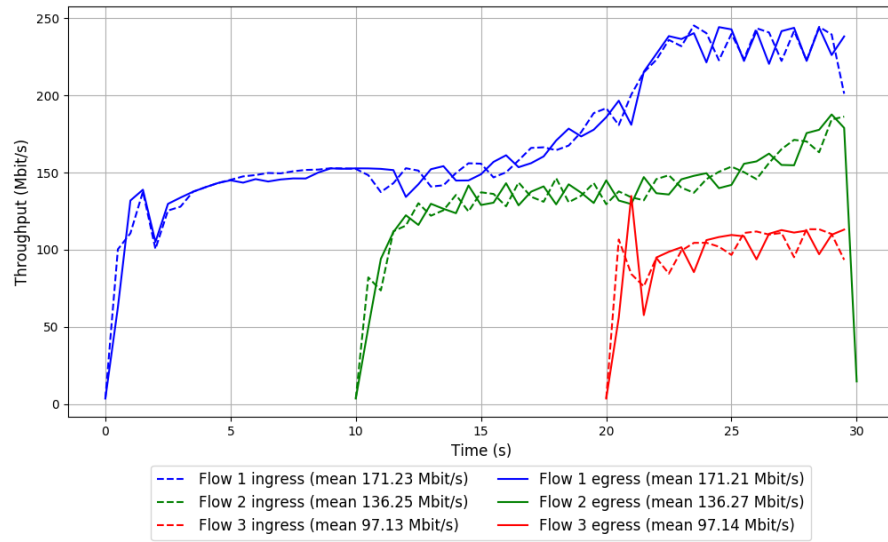
-- Flow 3:

Average throughput: 97.14 Mbit/s

95th percentile per-packet one-way delay: 59.108 ms

Loss rate: 0.00%

## Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-28 23:34:55

End at: 2018-02-28 23:35:25

# Below is generated by plot.py at 2018-03-01 04:42:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 250.54 Mbit/s

95th percentile per-packet one-way delay: 56.719 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 139.30 Mbit/s

95th percentile per-packet one-way delay: 56.069 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 105.68 Mbit/s

95th percentile per-packet one-way delay: 56.227 ms

Loss rate: 0.00%

-- Flow 3:

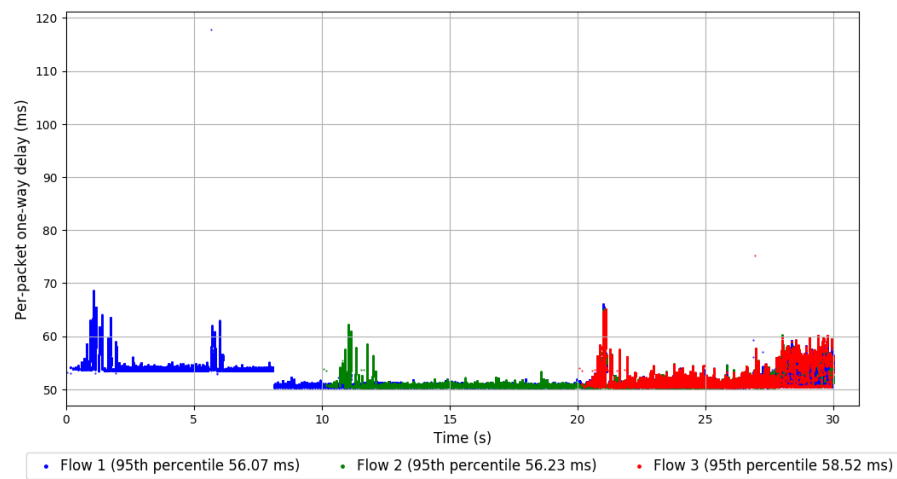
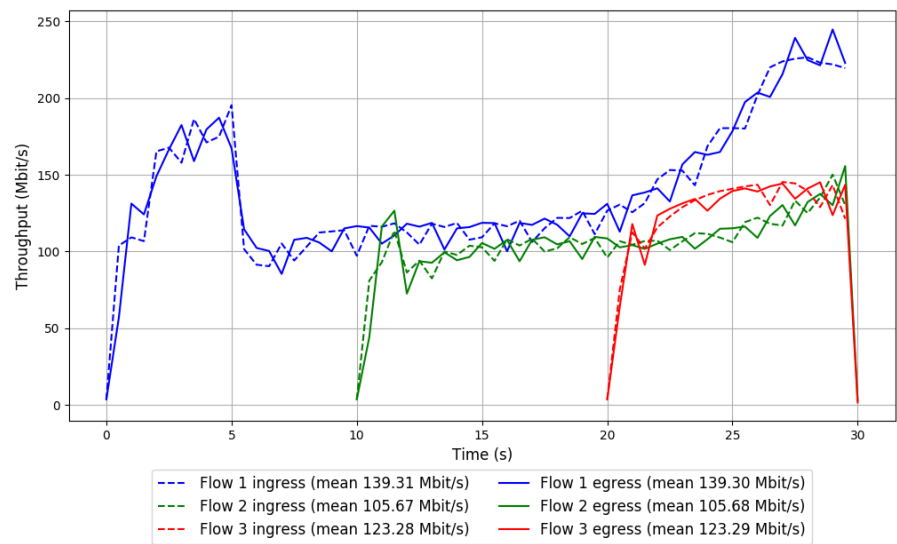
Average throughput: 123.29 Mbit/s

95th percentile per-packet one-way delay: 58.522 ms

Loss rate: 0.00%



Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-28 23:52:15

End at: 2018-02-28 23:52:45

# Below is generated by plot.py at 2018-03-01 04:42:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 219.59 Mbit/s

95th percentile per-packet one-way delay: 55.947 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 132.62 Mbit/s

95th percentile per-packet one-way delay: 56.085 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 127.79 Mbit/s

95th percentile per-packet one-way delay: 55.747 ms

Loss rate: 0.00%

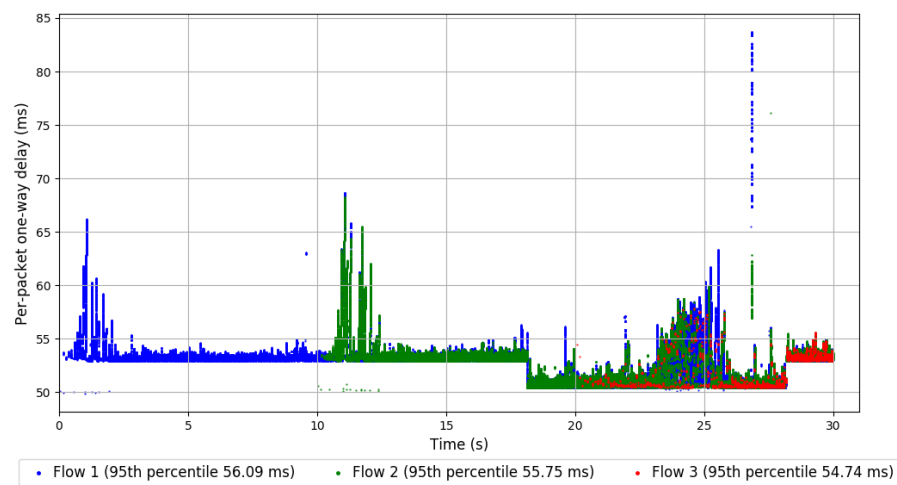
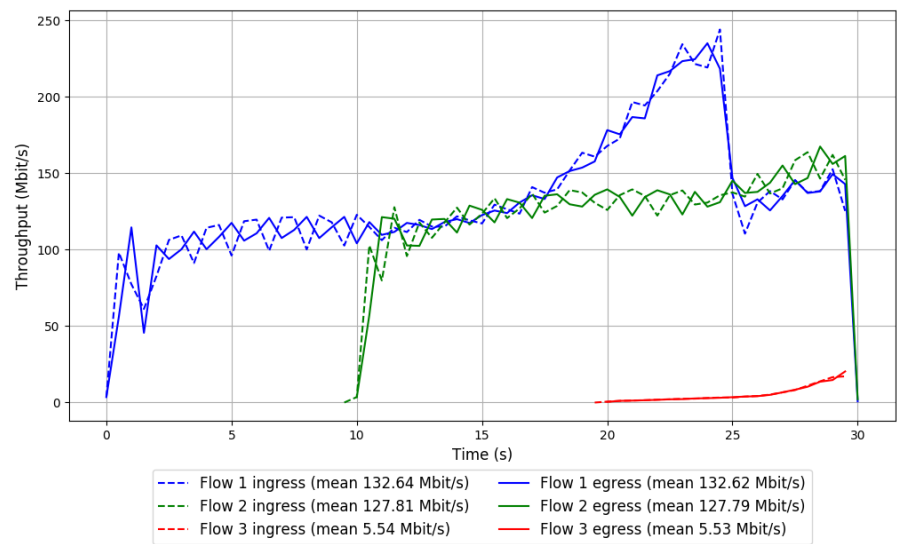
-- Flow 3:

Average throughput: 5.53 Mbit/s

95th percentile per-packet one-way delay: 54.737 ms

Loss rate: 0.13%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-03-01 00:09:36

End at: 2018-03-01 00:10:06

# Below is generated by plot.py at 2018-03-01 04:42:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 200.22 Mbit/s

95th percentile per-packet one-way delay: 57.077 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 165.35 Mbit/s

95th percentile per-packet one-way delay: 57.197 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.93 Mbit/s

95th percentile per-packet one-way delay: 56.006 ms

Loss rate: 0.00%

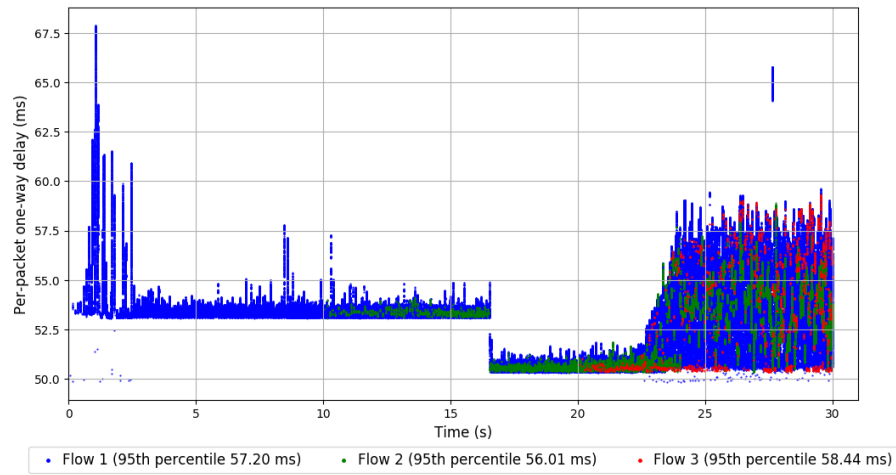
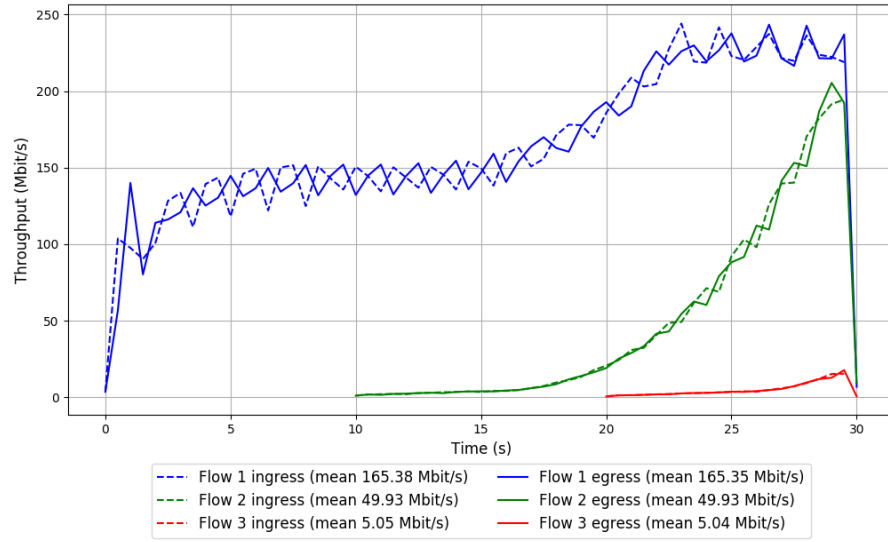
-- Flow 3:

Average throughput: 5.04 Mbit/s

95th percentile per-packet one-way delay: 58.435 ms

Loss rate: 0.19%

# Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-03-01 00:27:17

End at: 2018-03-01 00:27:47

# Below is generated by plot.py at 2018-03-01 04:42:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 387.02 Mbit/s

95th percentile per-packet one-way delay: 96.496 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 215.33 Mbit/s

95th percentile per-packet one-way delay: 87.114 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 204.58 Mbit/s

95th percentile per-packet one-way delay: 96.801 ms

Loss rate: 0.32%

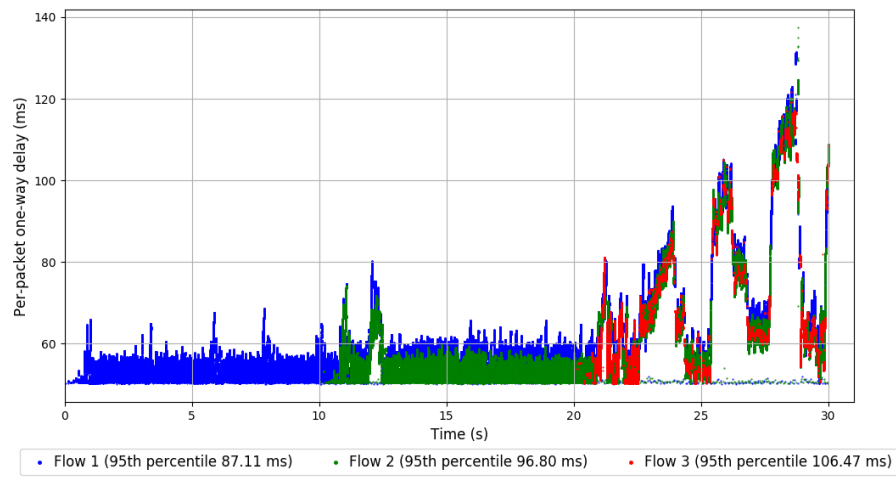
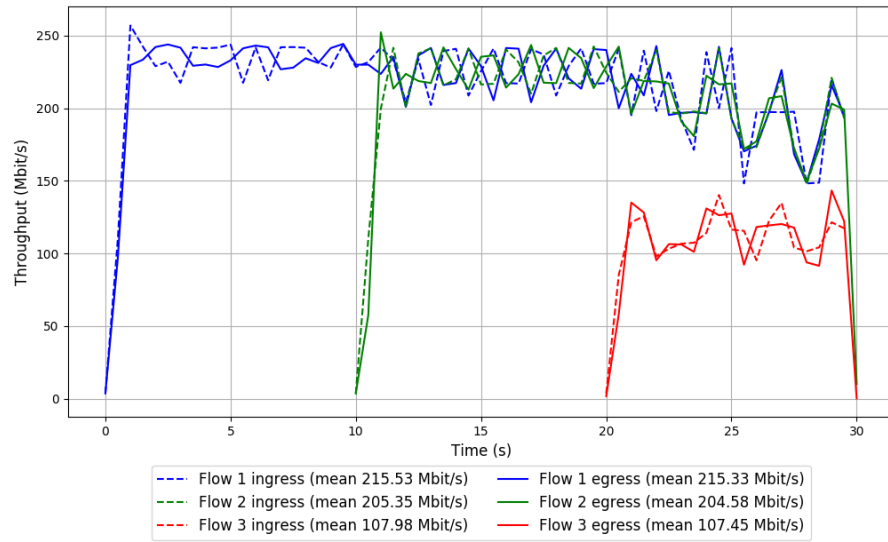
-- Flow 3:

Average throughput: 107.45 Mbit/s

95th percentile per-packet one-way delay: 106.469 ms

Loss rate: 0.15%

## Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-03-01 00:44:46

End at: 2018-03-01 00:45:16

# Below is generated by plot.py at 2018-03-01 04:45:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 338.95 Mbit/s

95th percentile per-packet one-way delay: 60.283 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 203.14 Mbit/s

95th percentile per-packet one-way delay: 60.500 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 201.50 Mbit/s

95th percentile per-packet one-way delay: 59.861 ms

Loss rate: 0.00%

-- Flow 3:

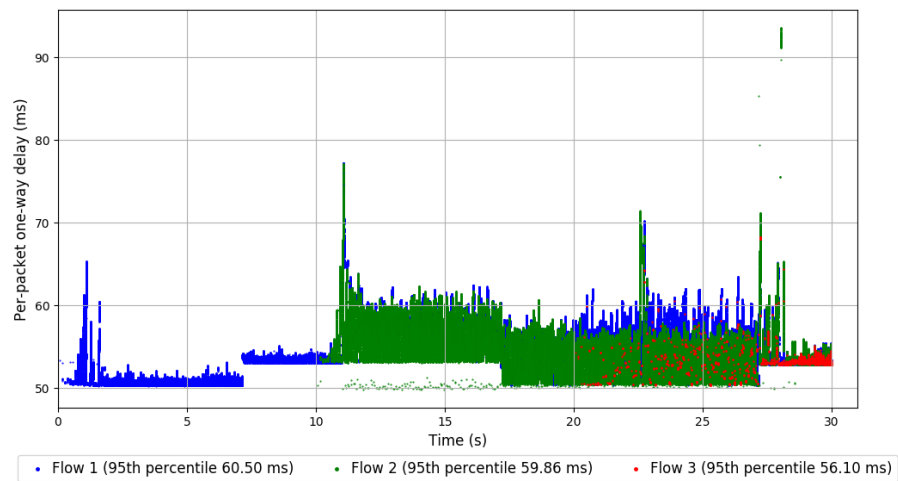
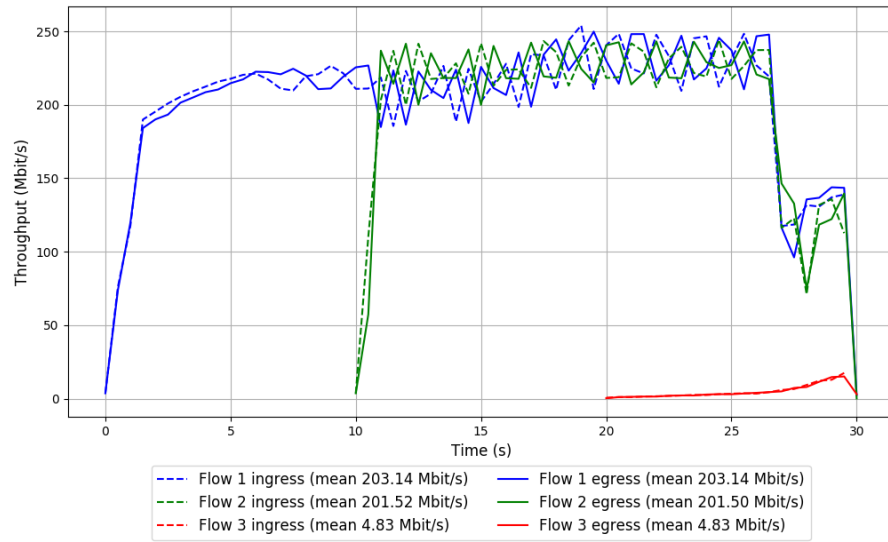
Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 56.100 ms

Loss rate: 0.20%



## Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-03-01 01:03:05

End at: 2018-03-01 01:03:35

# Below is generated by plot.py at 2018-03-01 04:45:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 266.34 Mbit/s

95th percentile per-packet one-way delay: 59.374 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 150.24 Mbit/s

95th percentile per-packet one-way delay: 59.829 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 120.15 Mbit/s

95th percentile per-packet one-way delay: 56.774 ms

Loss rate: 0.00%

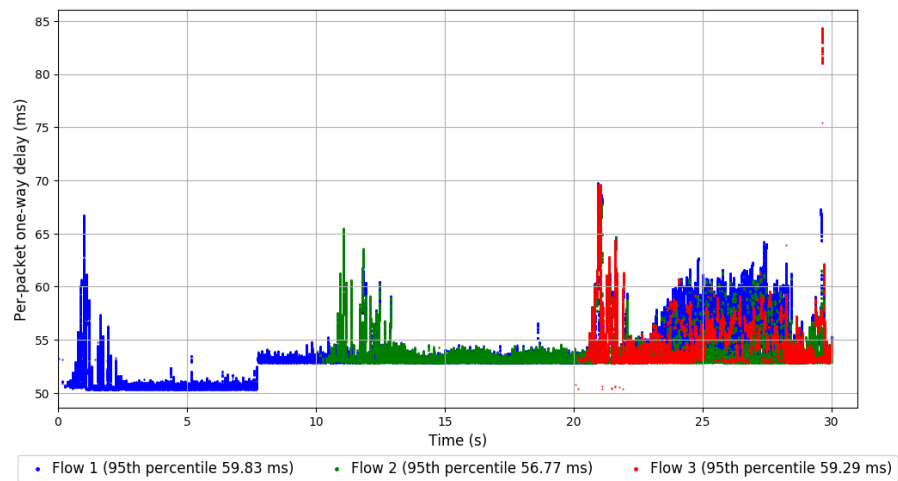
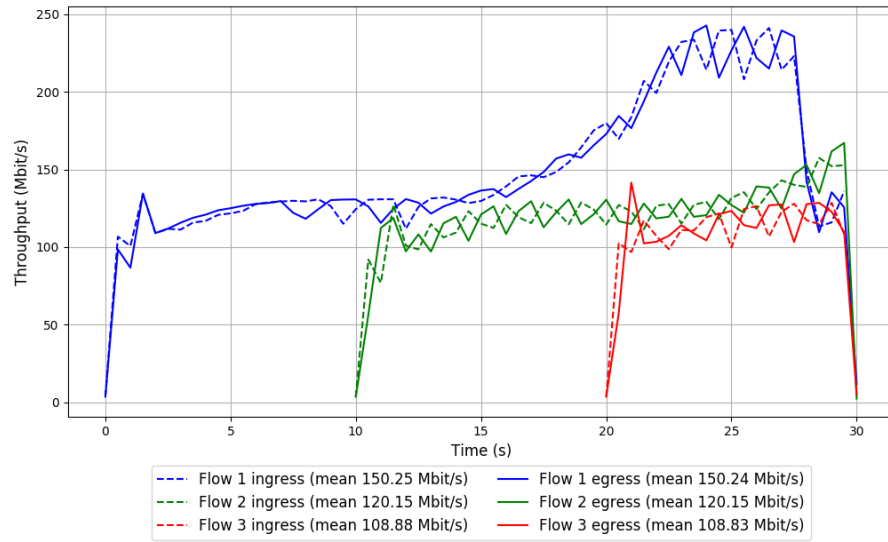
-- Flow 3:

Average throughput: 108.83 Mbit/s

95th percentile per-packet one-way delay: 59.286 ms

Loss rate: 0.01%

## Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-03-01 01:20:49

End at: 2018-03-01 01:21:19

# Below is generated by plot.py at 2018-03-01 04:45:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 331.75 Mbit/s

95th percentile per-packet one-way delay: 78.213 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 133.56 Mbit/s

95th percentile per-packet one-way delay: 75.607 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 204.77 Mbit/s

95th percentile per-packet one-way delay: 77.044 ms

Loss rate: 0.23%

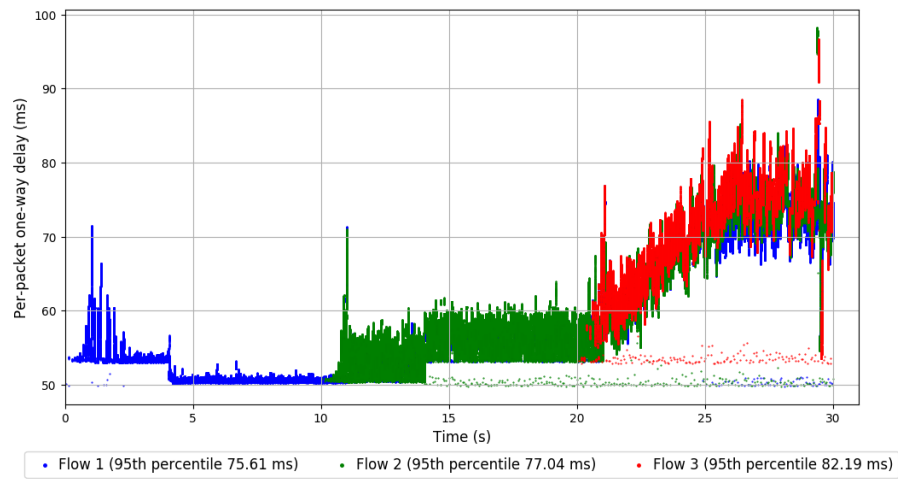
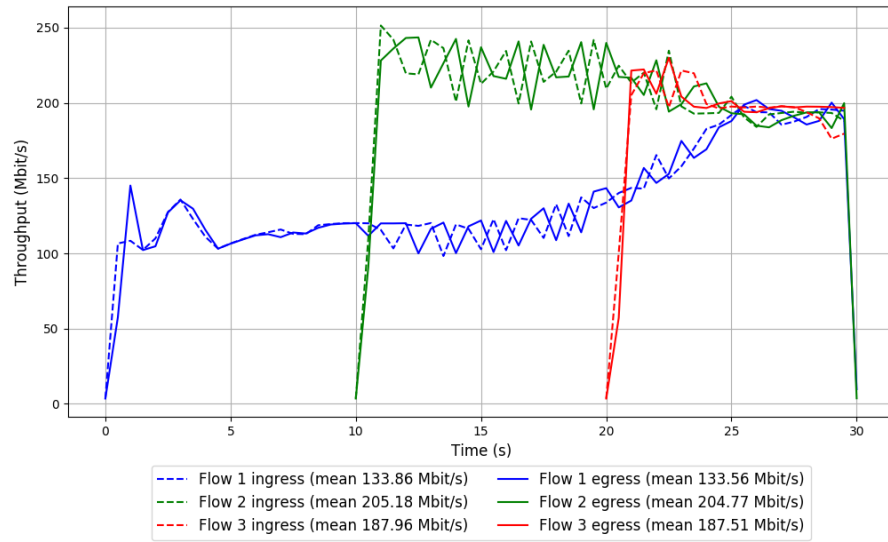
-- Flow 3:

Average throughput: 187.51 Mbit/s

95th percentile per-packet one-way delay: 82.191 ms

Loss rate: 0.00%

# Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-03-01 01:38:13

End at: 2018-03-01 01:38:43

# Below is generated by plot.py at 2018-03-01 04:45:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 267.34 Mbit/s

95th percentile per-packet one-way delay: 59.996 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 135.37 Mbit/s

95th percentile per-packet one-way delay: 60.221 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 195.82 Mbit/s

95th percentile per-packet one-way delay: 59.679 ms

Loss rate: 0.00%

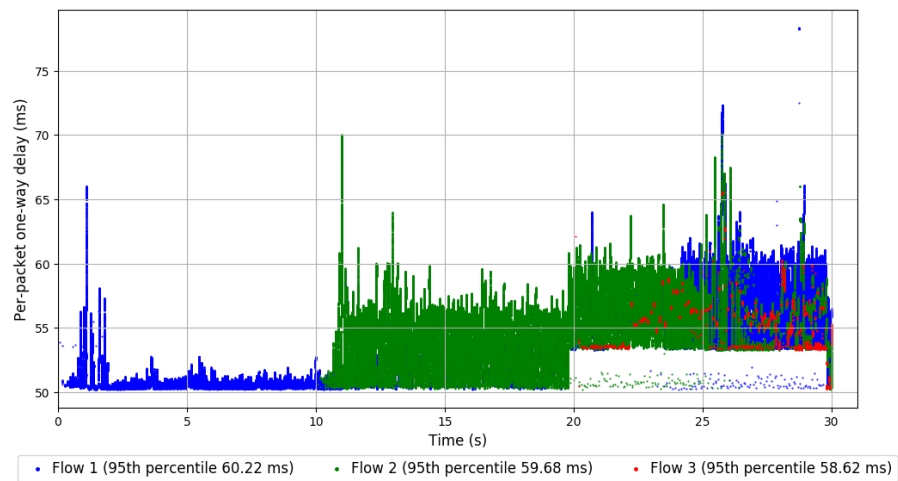
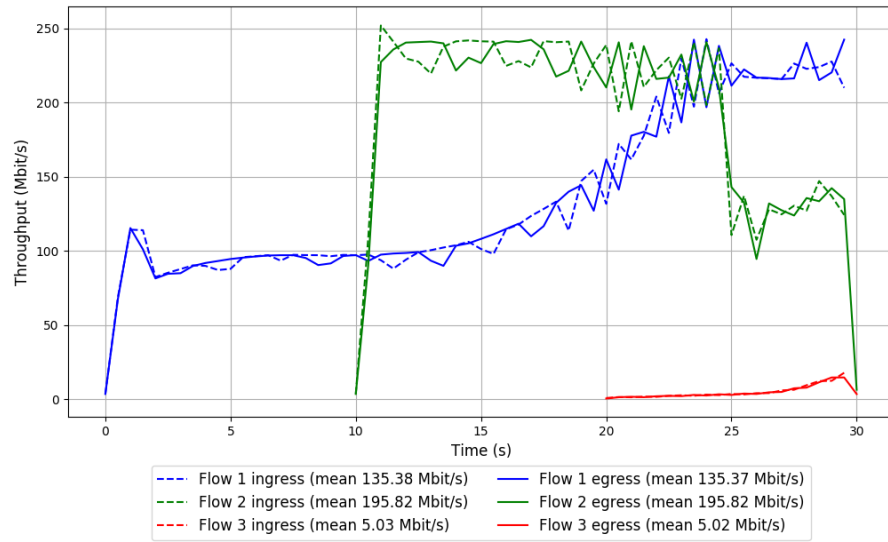
-- Flow 3:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 58.622 ms

Loss rate: 0.14%

# Run 10: Report of TCP Cubic — Data Link



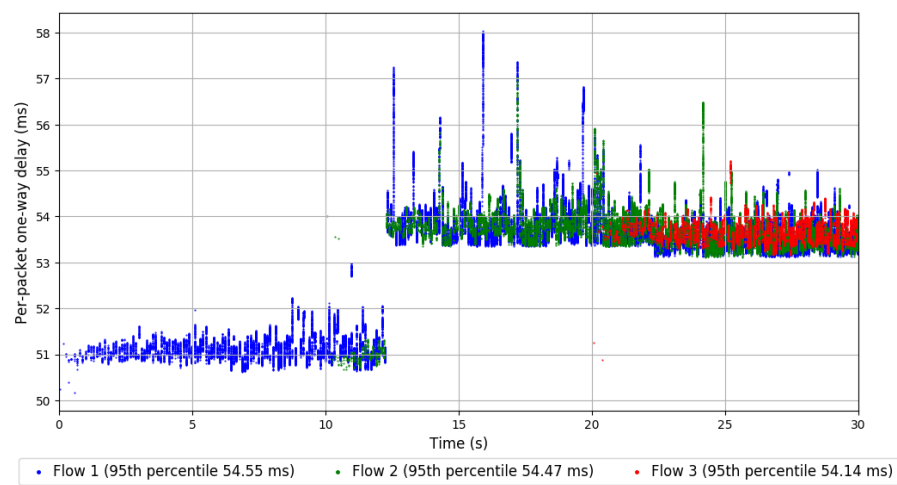
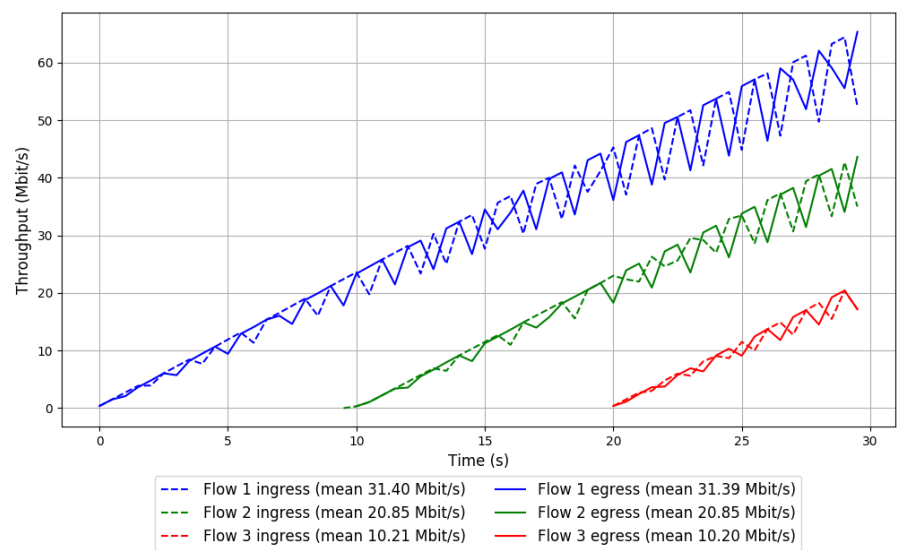
```
Run 1: Statistics of LEDBAT

Start at: 2018-02-28 22:45:30
End at: 2018-02-28 22:46:00

# Below is generated by plot.py at 2018-03-01 04:45:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.61 Mbit/s
95th percentile per-packet one-way delay: 54.497 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 31.39 Mbit/s
95th percentile per-packet one-way delay: 54.555 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.85 Mbit/s
95th percentile per-packet one-way delay: 54.470 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.20 Mbit/s
95th percentile per-packet one-way delay: 54.142 ms
Loss rate: 0.00%
```



Run 1: Report of LEDBAT — Data Link

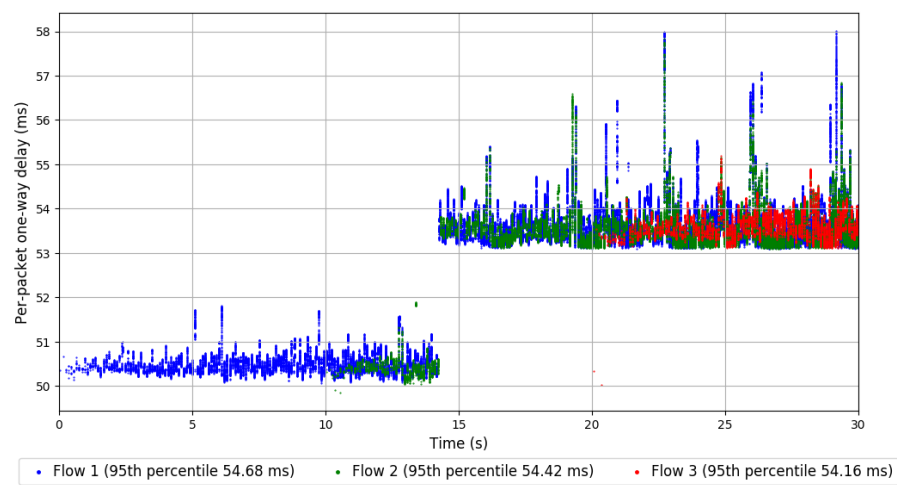
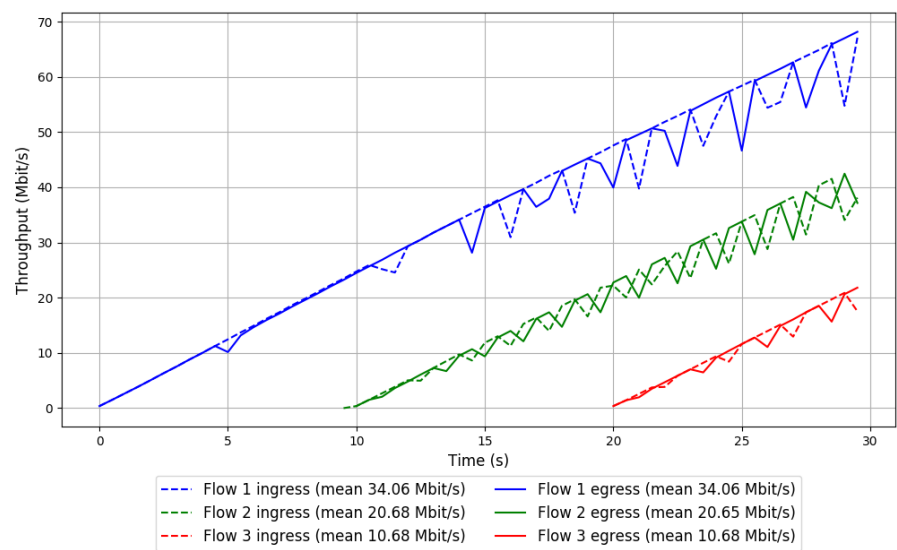


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-28 23:03:28
End at: 2018-02-28 23:03:58

# Below is generated by plot.py at 2018-03-01 04:45:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.34 Mbit/s
95th percentile per-packet one-way delay: 54.550 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 34.06 Mbit/s
95th percentile per-packet one-way delay: 54.682 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.65 Mbit/s
95th percentile per-packet one-way delay: 54.419 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 10.68 Mbit/s
95th percentile per-packet one-way delay: 54.162 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-28 23:21:16

End at: 2018-02-28 23:21:46

# Below is generated by plot.py at 2018-03-01 04:45:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 49.61 Mbit/s

95th percentile per-packet one-way delay: 54.524 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 31.47 Mbit/s

95th percentile per-packet one-way delay: 54.502 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.19 Mbit/s

95th percentile per-packet one-way delay: 54.648 ms

Loss rate: 0.00%

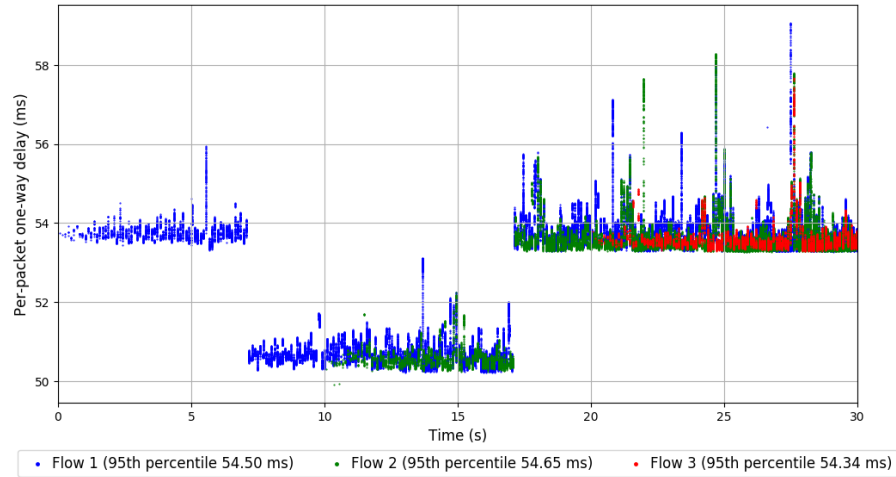
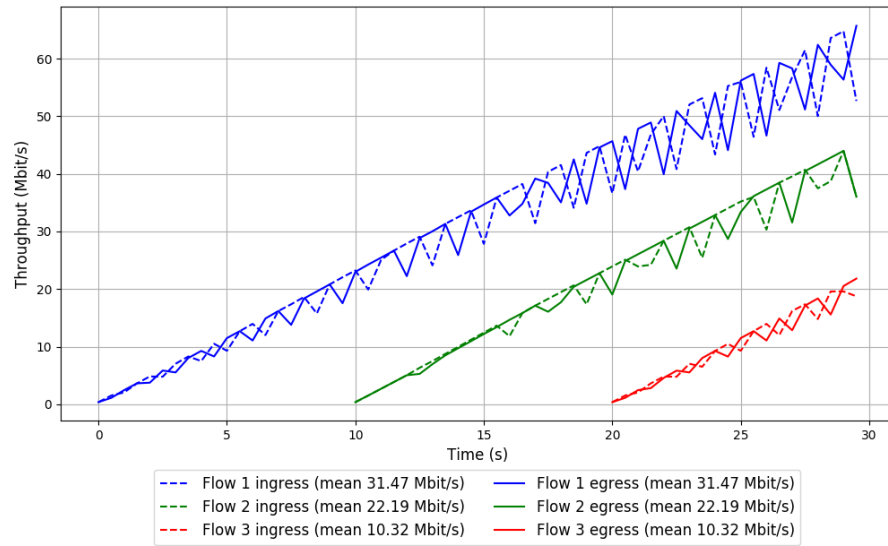
-- Flow 3:

Average throughput: 10.32 Mbit/s

95th percentile per-packet one-way delay: 54.338 ms

Loss rate: 0.00%

### Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-28 23:38:53

End at: 2018-02-28 23:39:23

# Below is generated by plot.py at 2018-03-01 04:45:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 44.16 Mbit/s

95th percentile per-packet one-way delay: 54.536 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 26.37 Mbit/s

95th percentile per-packet one-way delay: 54.275 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.86 Mbit/s

95th percentile per-packet one-way delay: 54.744 ms

Loss rate: 0.00%

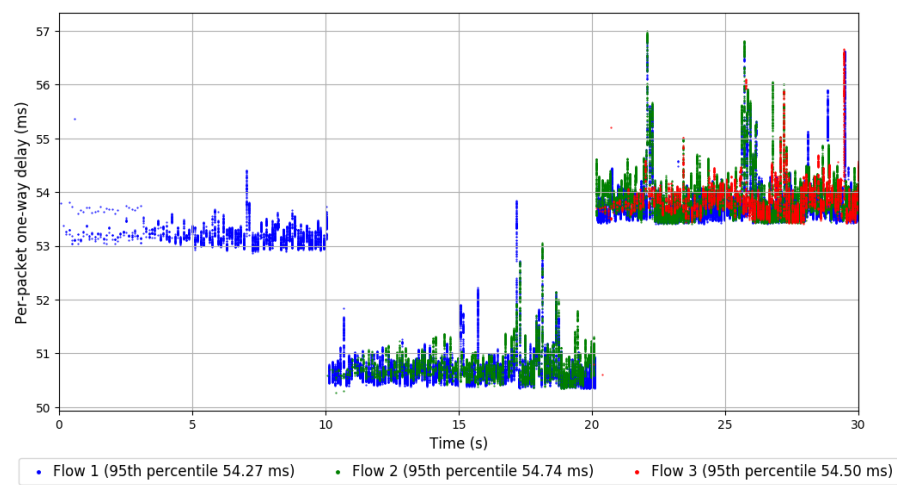
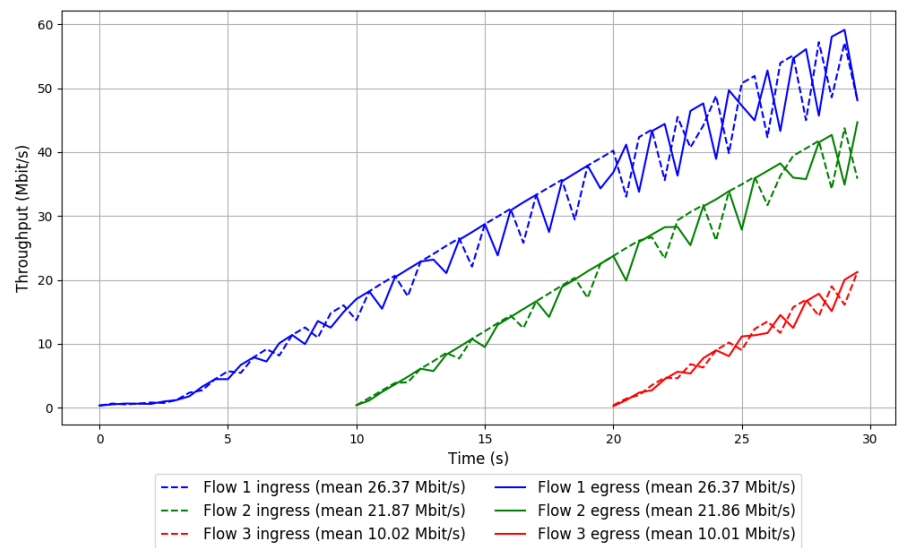
-- Flow 3:

Average throughput: 10.01 Mbit/s

95th percentile per-packet one-way delay: 54.504 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-28 23:56:15

End at: 2018-02-28 23:56:45

# Below is generated by plot.py at 2018-03-01 04:45:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 51.20 Mbit/s

95th percentile per-packet one-way delay: 53.538 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.46 Mbit/s

95th percentile per-packet one-way delay: 53.597 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.43 Mbit/s

95th percentile per-packet one-way delay: 53.361 ms

Loss rate: 0.00%

-- Flow 3:

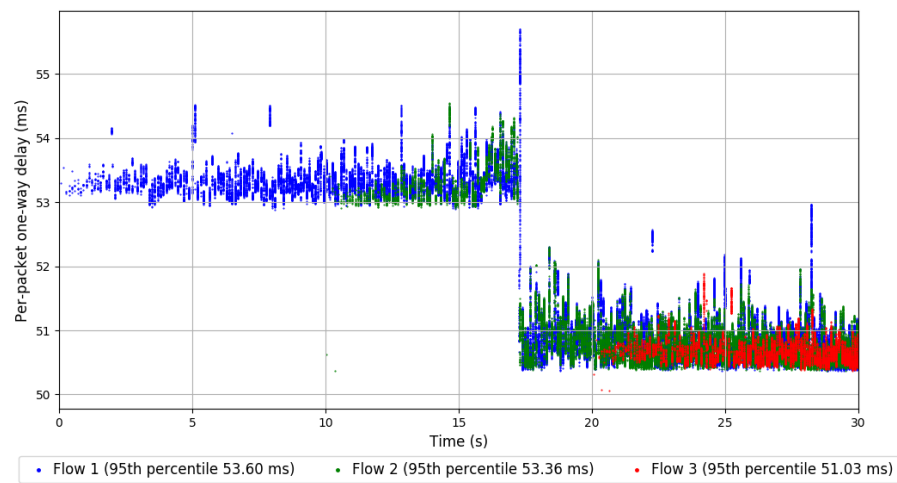
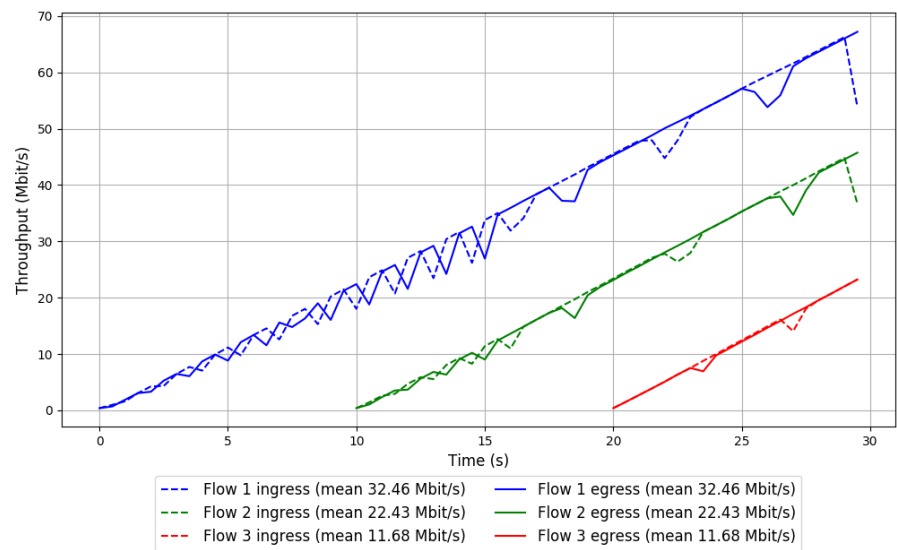
Average throughput: 11.68 Mbit/s

95th percentile per-packet one-way delay: 51.031 ms

Loss rate: 0.00%



Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-03-01 00:13:38

End at: 2018-03-01 00:14:08

# Below is generated by plot.py at 2018-03-01 04:45:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 44.36 Mbit/s

95th percentile per-packet one-way delay: 54.575 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 26.51 Mbit/s

95th percentile per-packet one-way delay: 54.362 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 21.45 Mbit/s

95th percentile per-packet one-way delay: 54.916 ms

Loss rate: 0.09%

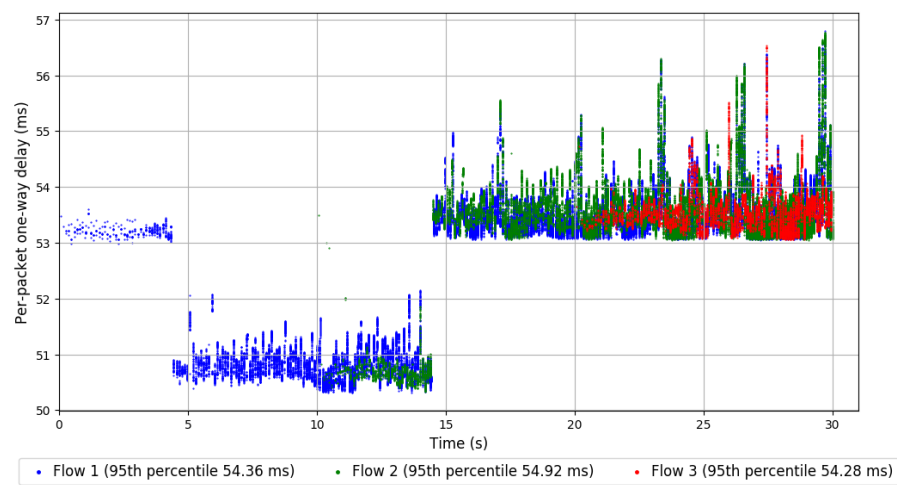
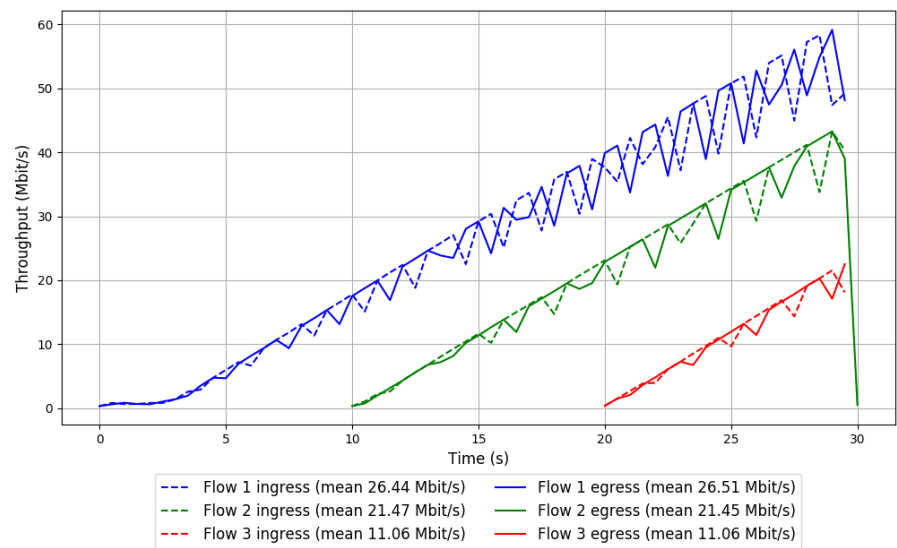
-- Flow 3:

Average throughput: 11.06 Mbit/s

95th percentile per-packet one-way delay: 54.278 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-03-01 00:31:24

End at: 2018-03-01 00:31:54

# Below is generated by plot.py at 2018-03-01 04:45:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 43.90 Mbit/s

95th percentile per-packet one-way delay: 54.629 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 31.18 Mbit/s

95th percentile per-packet one-way delay: 54.715 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.76 Mbit/s

95th percentile per-packet one-way delay: 54.620 ms

Loss rate: 0.00%

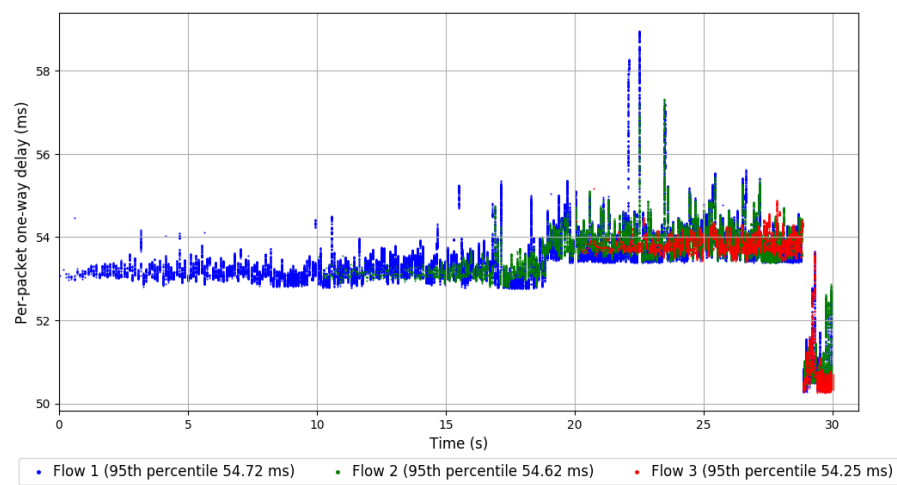
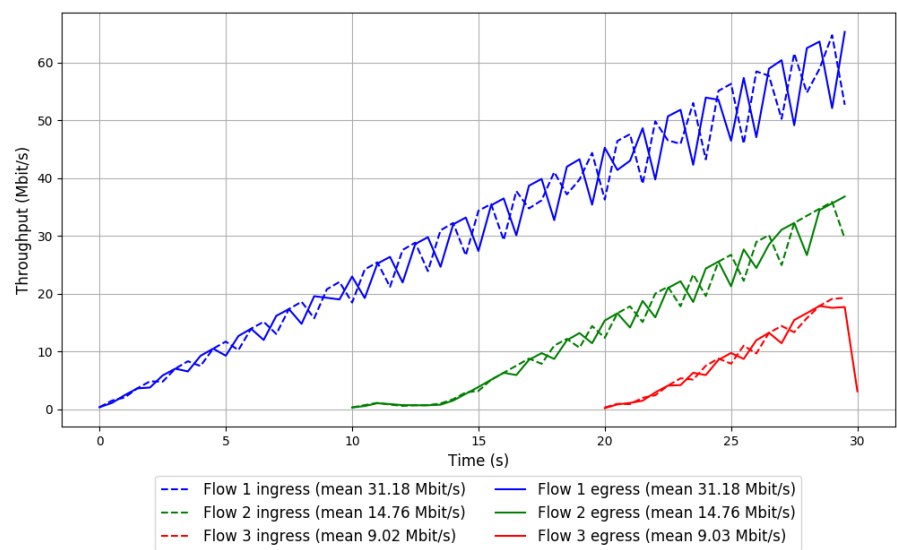
-- Flow 3:

Average throughput: 9.03 Mbit/s

95th percentile per-packet one-way delay: 54.246 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-03-01 00:49:20

End at: 2018-03-01 00:49:50

# Below is generated by plot.py at 2018-03-01 04:45:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 49.55 Mbit/s

95th percentile per-packet one-way delay: 54.029 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 31.62 Mbit/s

95th percentile per-packet one-way delay: 54.072 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.72 Mbit/s

95th percentile per-packet one-way delay: 53.986 ms

Loss rate: 0.00%

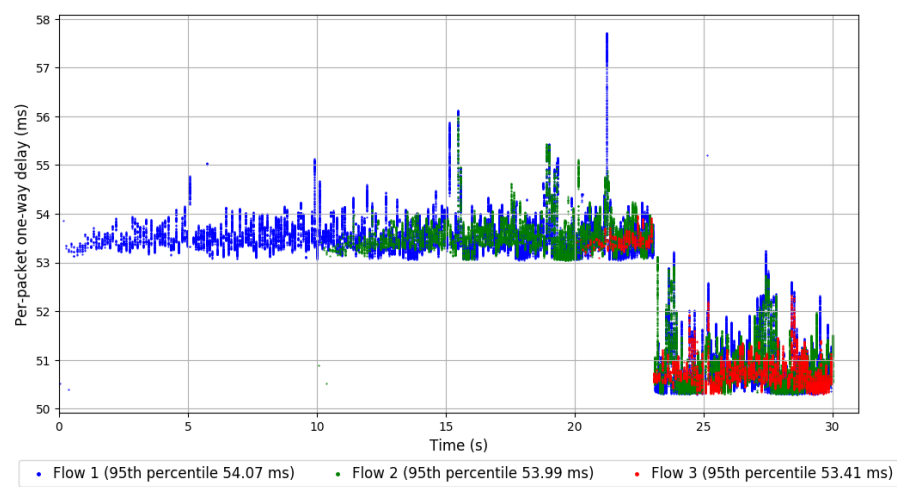
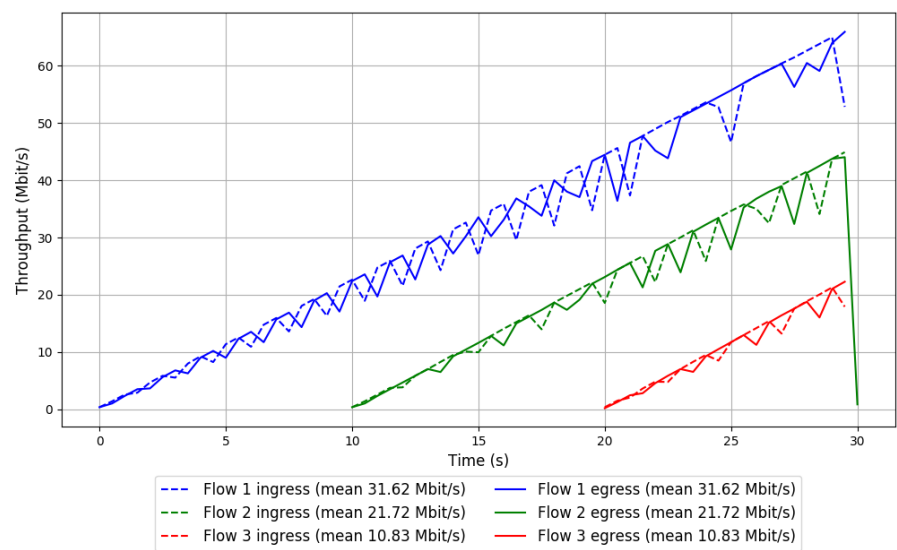
-- Flow 3:

Average throughput: 10.83 Mbit/s

95th percentile per-packet one-way delay: 53.412 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-03-01 01:07:12

End at: 2018-03-01 01:07:42

# Below is generated by plot.py at 2018-03-01 04:45:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 44.16 Mbit/s

95th percentile per-packet one-way delay: 53.999 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 26.62 Mbit/s

95th percentile per-packet one-way delay: 53.847 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.99 Mbit/s

95th percentile per-packet one-way delay: 54.235 ms

Loss rate: 0.00%

-- Flow 3:

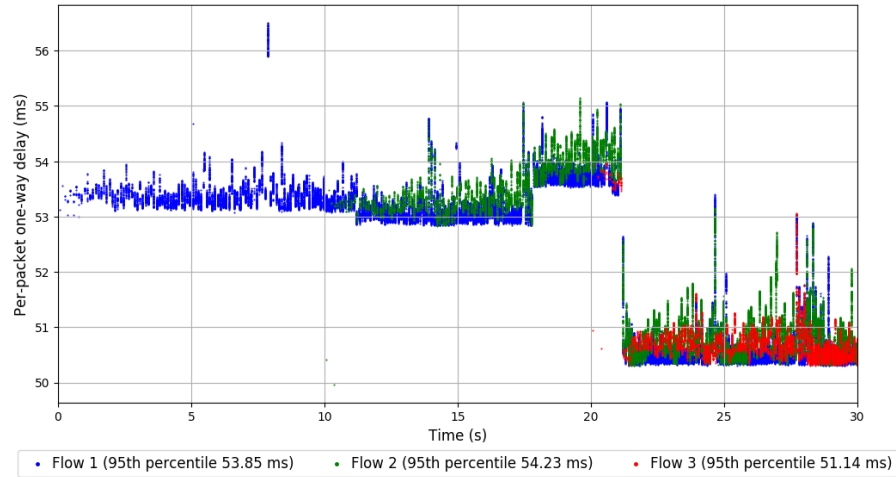
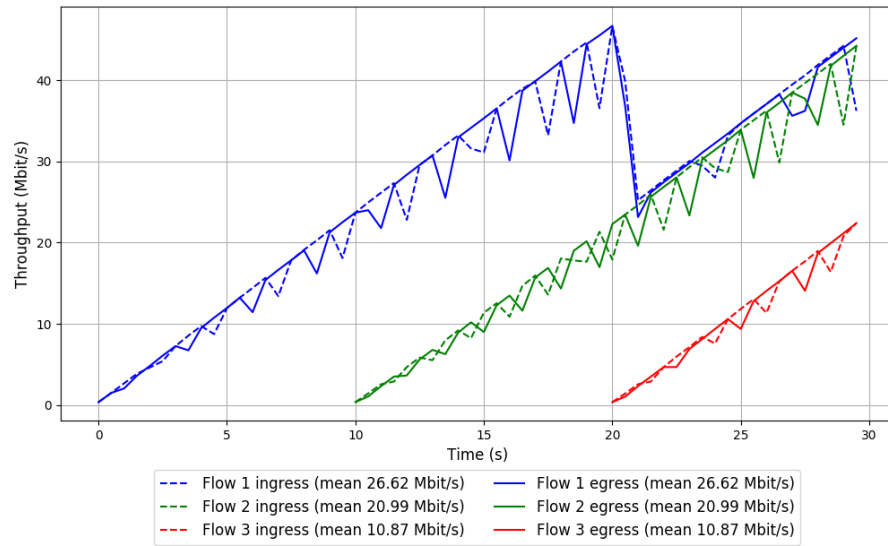
Average throughput: 10.87 Mbit/s

95th percentile per-packet one-way delay: 51.144 ms

Loss rate: 0.00%



## Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-03-01 01:24:51

End at: 2018-03-01 01:25:21

# Below is generated by plot.py at 2018-03-01 04:45:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 37.48 Mbit/s

95th percentile per-packet one-way delay: 54.555 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 19.61 Mbit/s

95th percentile per-packet one-way delay: 54.508 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 21.88 Mbit/s

95th percentile per-packet one-way delay: 54.578 ms

Loss rate: 0.20%

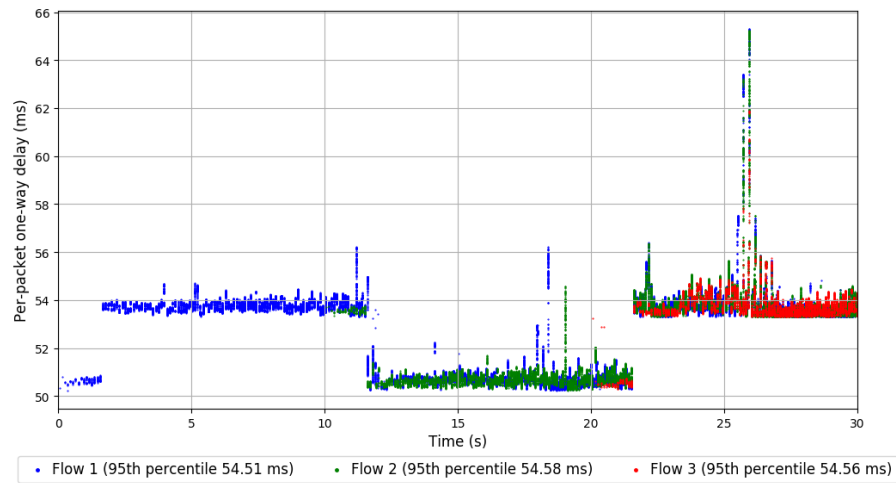
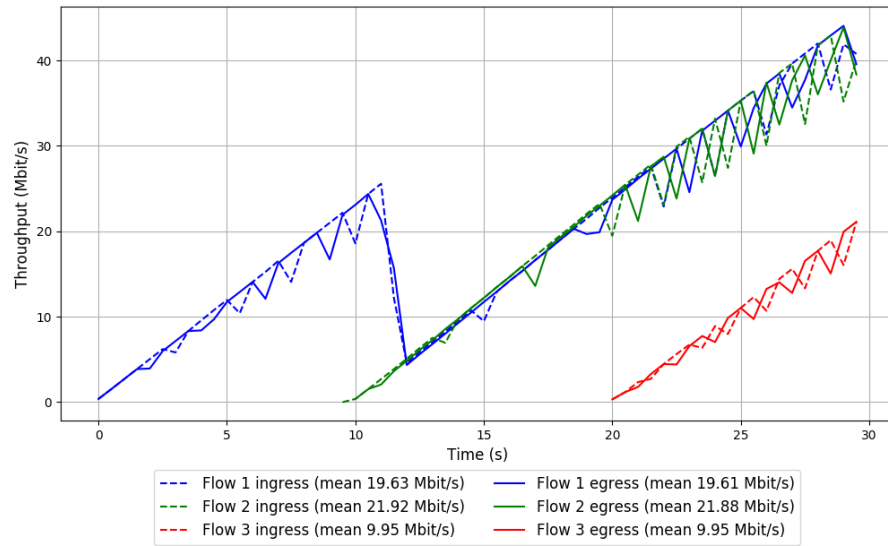
-- Flow 3:

Average throughput: 9.95 Mbit/s

95th percentile per-packet one-way delay: 54.562 ms

Loss rate: 0.00%

# Run 10: Report of LEDBAT — Data Link

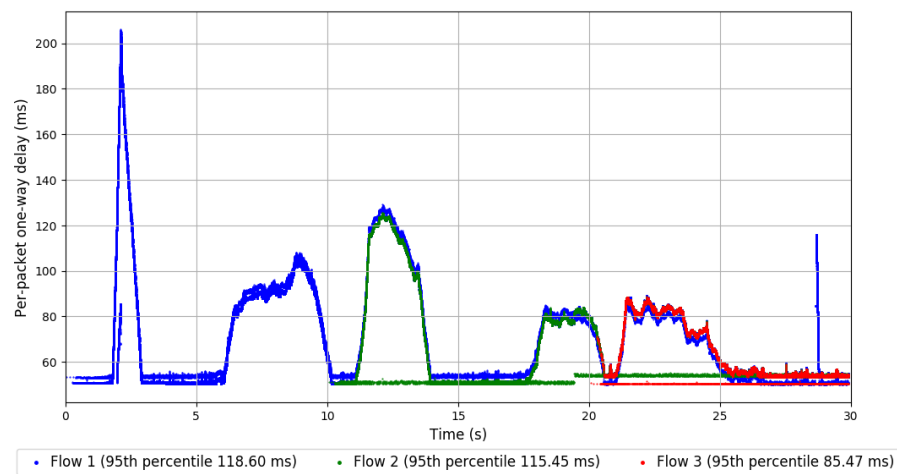
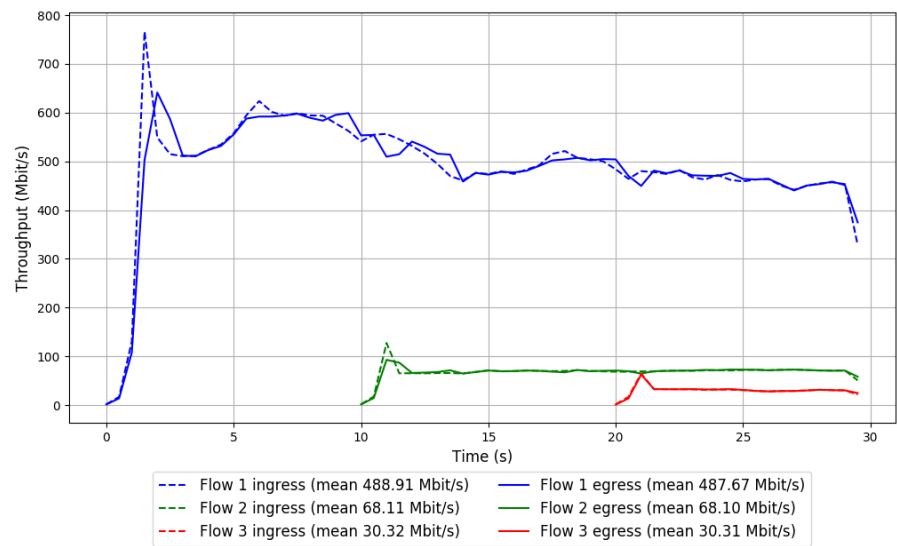


```
Run 1: Statistics of PCC

Start at: 2018-02-28 22:46:13
End at: 2018-02-28 22:46:43

# Below is generated by plot.py at 2018-03-01 04:53:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 542.94 Mbit/s
95th percentile per-packet one-way delay: 118.005 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 487.67 Mbit/s
95th percentile per-packet one-way delay: 118.602 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 68.10 Mbit/s
95th percentile per-packet one-way delay: 115.454 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 30.31 Mbit/s
95th percentile per-packet one-way delay: 85.475 ms
Loss rate: 0.02%
```

Run 1: Report of PCC — Data Link

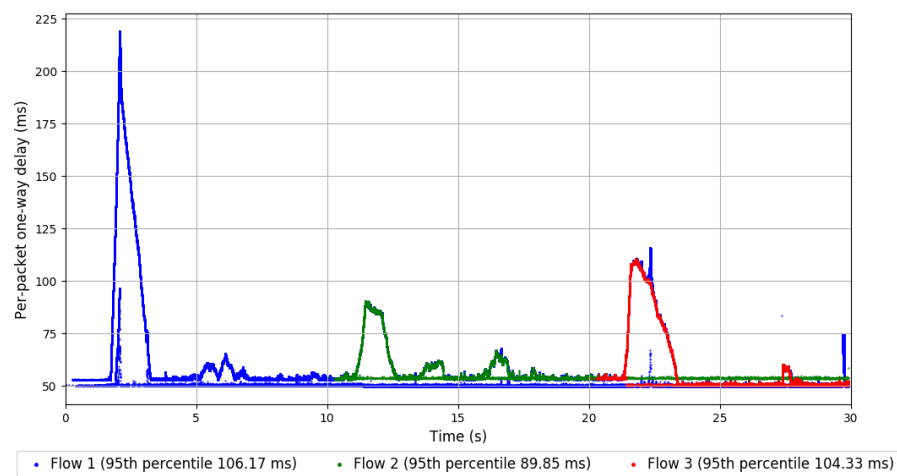
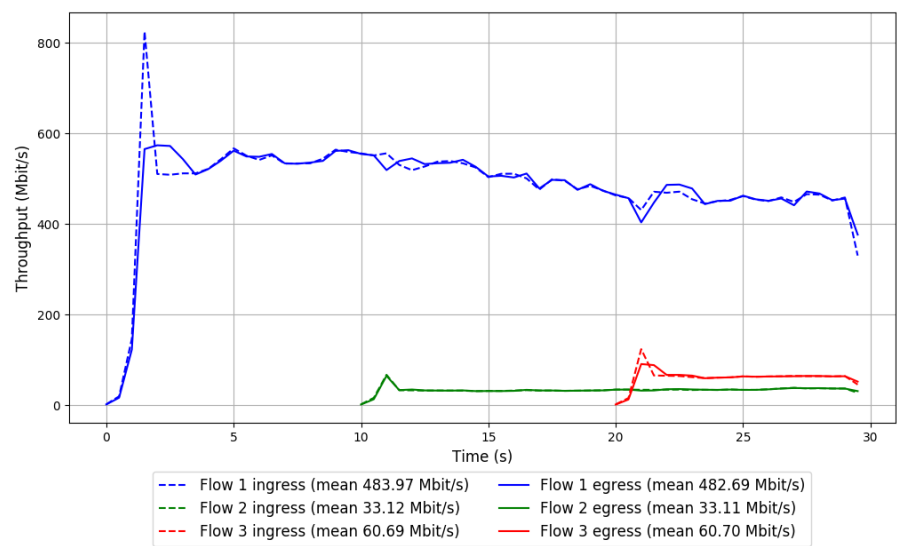


```
Run 2: Statistics of PCC

Start at: 2018-02-28 23:04:11
End at: 2018-02-28 23:04:41

# Below is generated by plot.py at 2018-03-01 04:53:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 524.58 Mbit/s
95th percentile per-packet one-way delay: 105.364 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 482.69 Mbit/s
95th percentile per-packet one-way delay: 106.166 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 33.11 Mbit/s
95th percentile per-packet one-way delay: 89.851 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 60.70 Mbit/s
95th percentile per-packet one-way delay: 104.332 ms
Loss rate: 0.02%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-28 23:21:58

End at: 2018-02-28 23:22:28

# Below is generated by plot.py at 2018-03-01 04:53:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 519.33 Mbit/s

95th percentile per-packet one-way delay: 181.811 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 453.12 Mbit/s

95th percentile per-packet one-way delay: 180.220 ms

Loss rate: 1.30%

-- Flow 2:

Average throughput: 67.25 Mbit/s

95th percentile per-packet one-way delay: 184.196 ms

Loss rate: 1.42%

-- Flow 3:

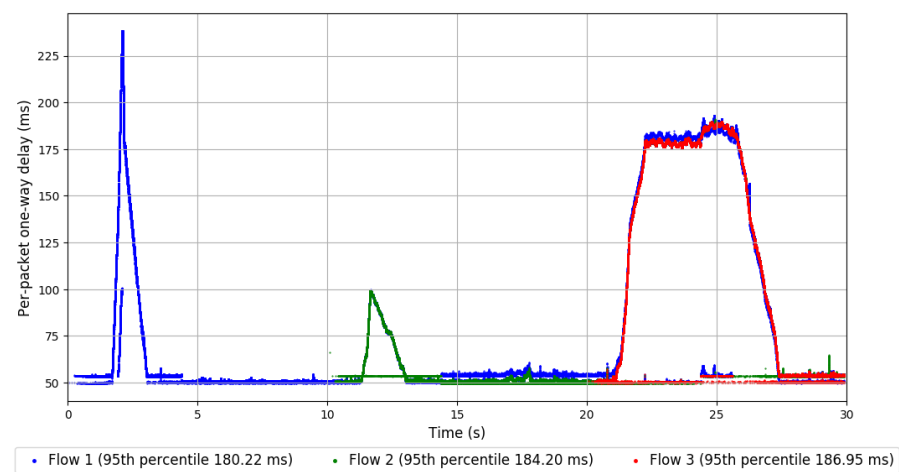
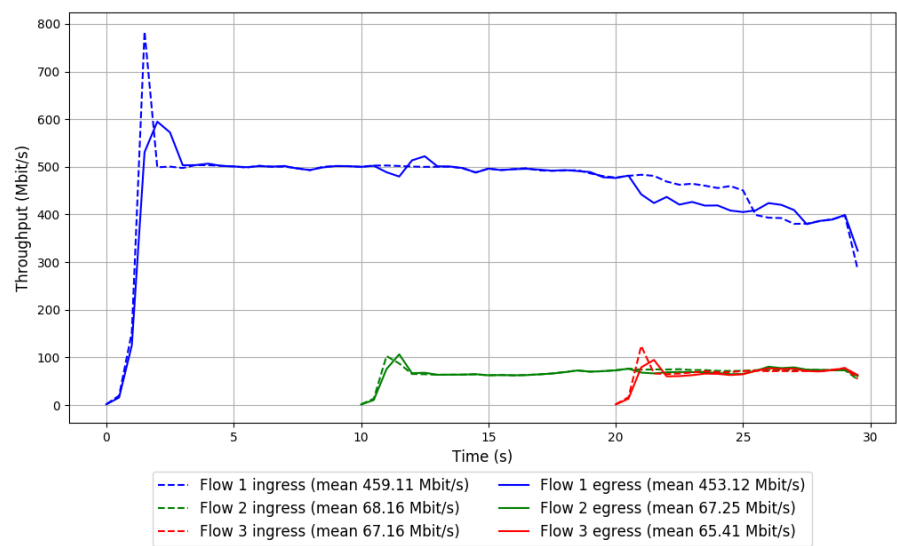
Average throughput: 65.41 Mbit/s

95th percentile per-packet one-way delay: 186.954 ms

Loss rate: 2.61%



Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-28 23:39:35

End at: 2018-02-28 23:40:05

# Below is generated by plot.py at 2018-03-01 04:53:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 521.38 Mbit/s

95th percentile per-packet one-way delay: 173.286 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 437.11 Mbit/s

95th percentile per-packet one-way delay: 169.974 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 72.76 Mbit/s

95th percentile per-packet one-way delay: 175.340 ms

Loss rate: 0.05%

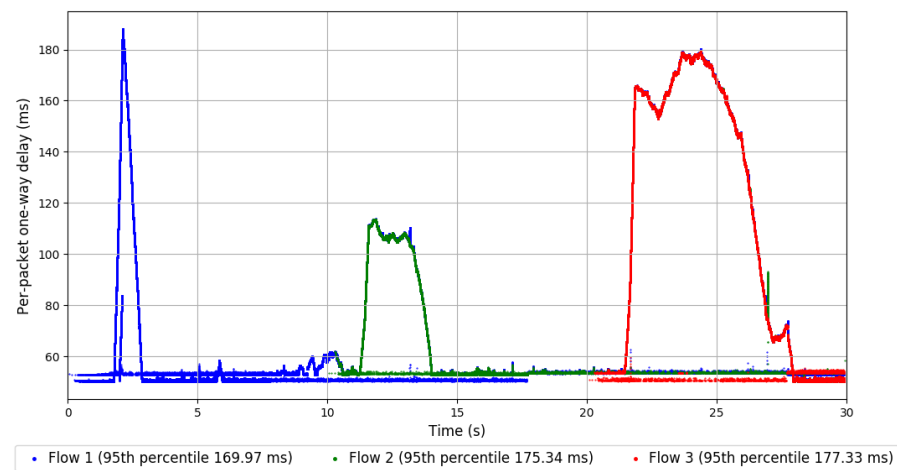
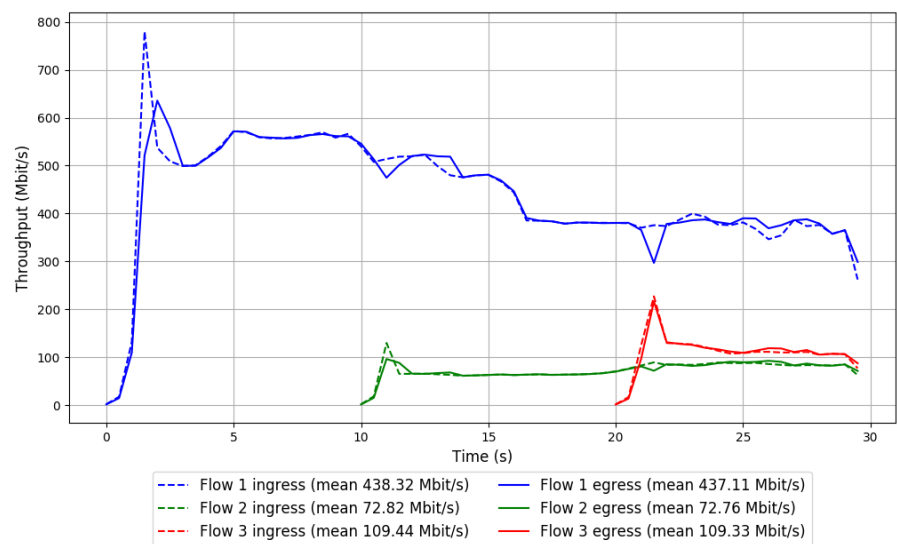
-- Flow 3:

Average throughput: 109.33 Mbit/s

95th percentile per-packet one-way delay: 177.329 ms

Loss rate: 0.11%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-28 23:56:58

End at: 2018-02-28 23:57:28

# Below is generated by plot.py at 2018-03-01 04:53:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 528.64 Mbit/s

95th percentile per-packet one-way delay: 191.063 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 485.91 Mbit/s

95th percentile per-packet one-way delay: 190.933 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 60.05 Mbit/s

95th percentile per-packet one-way delay: 191.762 ms

Loss rate: 0.91%

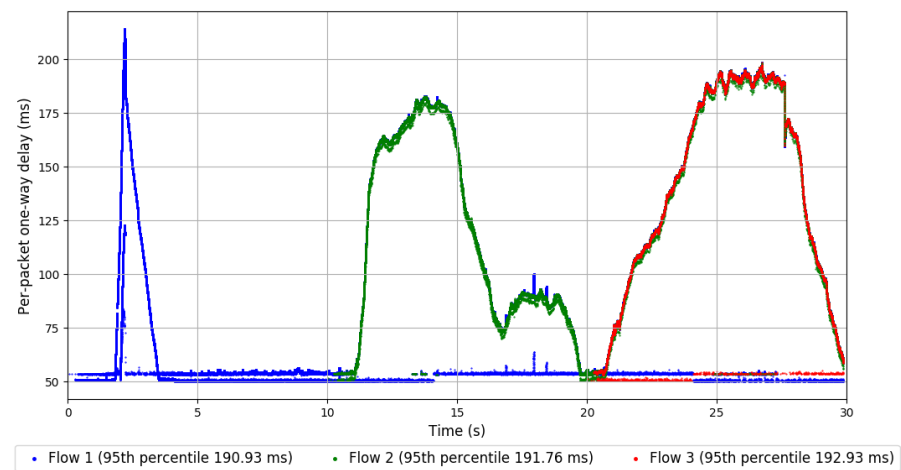
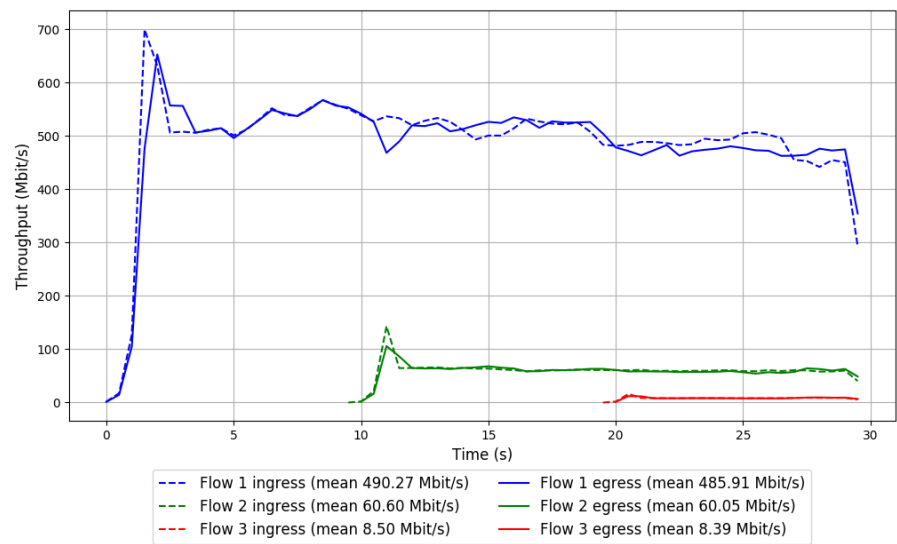
-- Flow 3:

Average throughput: 8.39 Mbit/s

95th percentile per-packet one-way delay: 192.929 ms

Loss rate: 1.29%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-03-01 00:14:21

End at: 2018-03-01 00:14:51

# Below is generated by plot.py at 2018-03-01 04:54:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 526.45 Mbit/s

95th percentile per-packet one-way delay: 129.066 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 468.18 Mbit/s

95th percentile per-packet one-way delay: 129.437 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 55.88 Mbit/s

95th percentile per-packet one-way delay: 113.718 ms

Loss rate: 0.06%

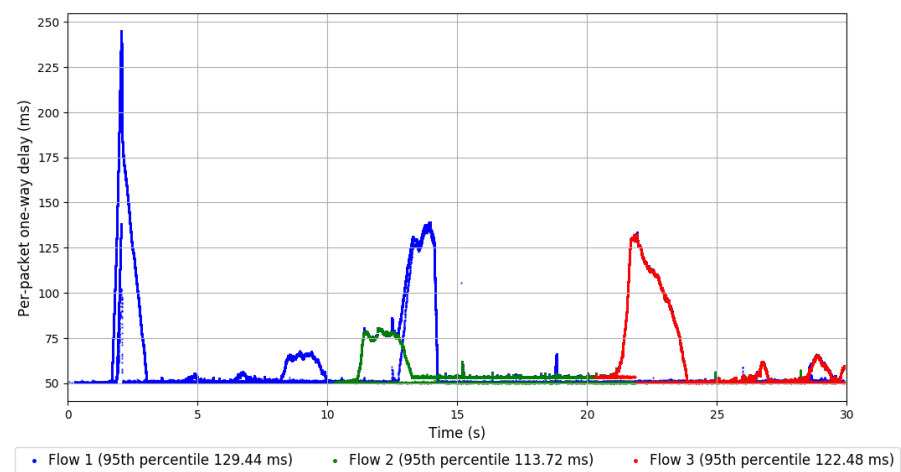
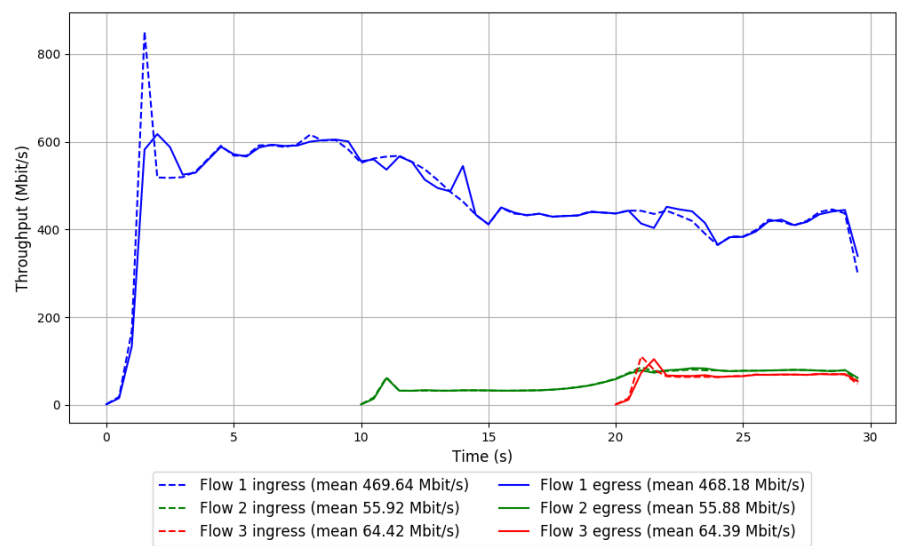
-- Flow 3:

Average throughput: 64.39 Mbit/s

95th percentile per-packet one-way delay: 122.482 ms

Loss rate: 0.08%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-03-01 00:32:07

End at: 2018-03-01 00:32:37

# Below is generated by plot.py at 2018-03-01 04:54:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 528.48 Mbit/s

95th percentile per-packet one-way delay: 114.946 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 511.36 Mbit/s

95th percentile per-packet one-way delay: 114.938 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 17.81 Mbit/s

95th percentile per-packet one-way delay: 113.805 ms

Loss rate: 0.01%

-- Flow 3:

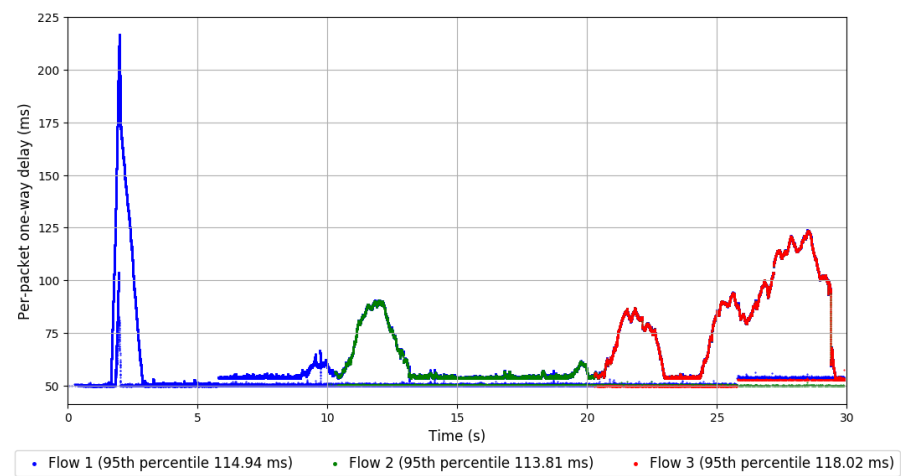
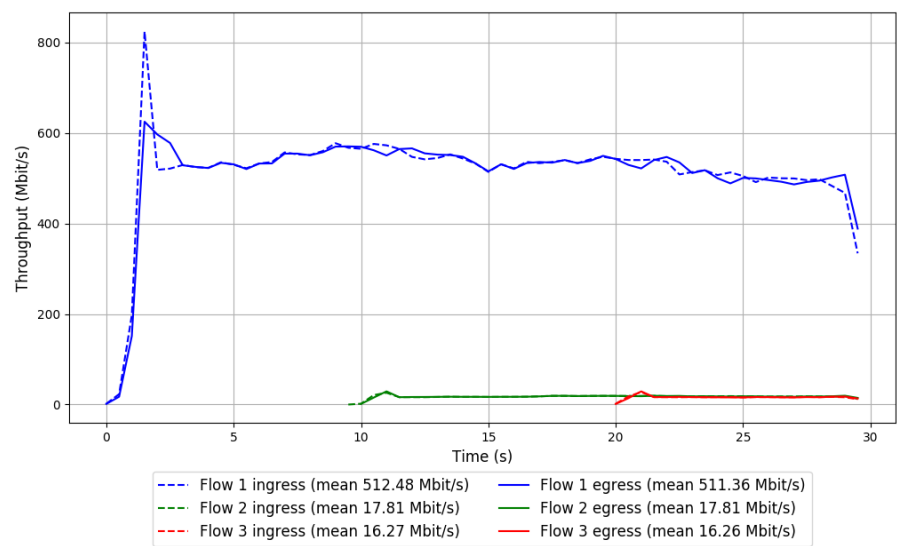
Average throughput: 16.26 Mbit/s

95th percentile per-packet one-way delay: 118.020 ms

Loss rate: 0.01%



Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-03-01 00:50:03

End at: 2018-03-01 00:50:33

# Below is generated by plot.py at 2018-03-01 04:54:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 517.49 Mbit/s

95th percentile per-packet one-way delay: 195.960 ms

Loss rate: 5.89%

-- Flow 1:

Average throughput: 439.49 Mbit/s

95th percentile per-packet one-way delay: 195.809 ms

Loss rate: 5.58%

-- Flow 2:

Average throughput: 116.52 Mbit/s

95th percentile per-packet one-way delay: 196.621 ms

Loss rate: 7.59%

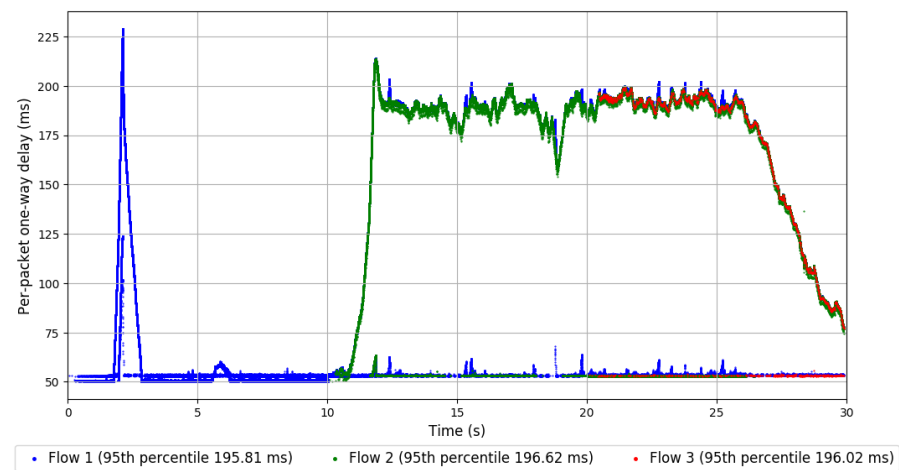
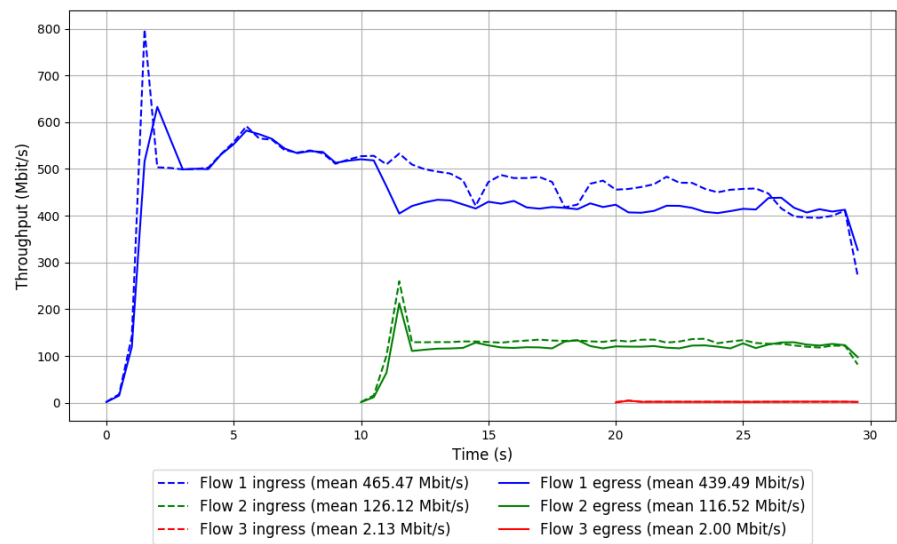
-- Flow 3:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 196.022 ms

Loss rate: 6.26%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-03-01 01:07:55

End at: 2018-03-01 01:08:25

# Below is generated by plot.py at 2018-03-01 05:02:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 514.93 Mbit/s

95th percentile per-packet one-way delay: 183.640 ms

Loss rate: 1.73%

-- Flow 1:

Average throughput: 425.07 Mbit/s

95th percentile per-packet one-way delay: 183.792 ms

Loss rate: 1.66%

-- Flow 2:

Average throughput: 120.11 Mbit/s

95th percentile per-packet one-way delay: 183.123 ms

Loss rate: 1.84%

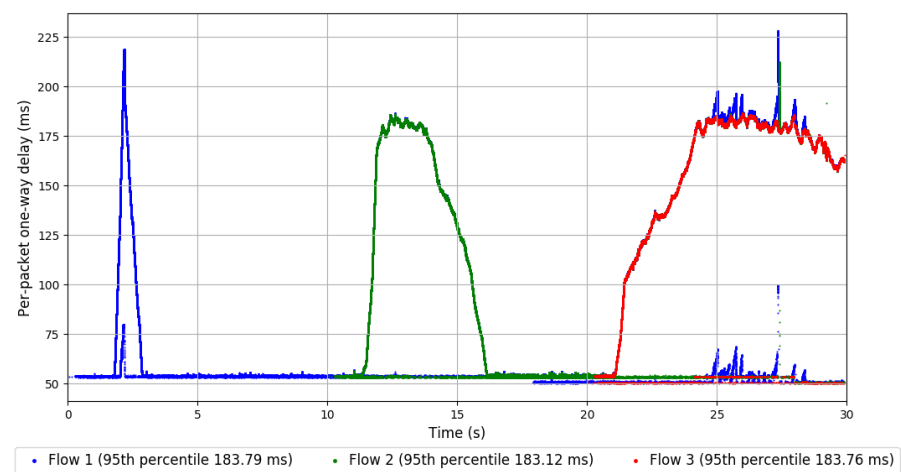
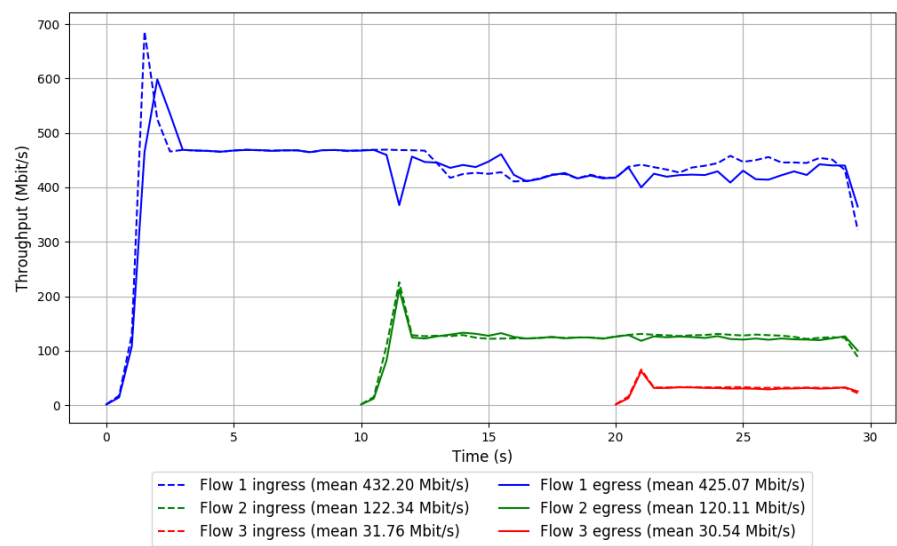
-- Flow 3:

Average throughput: 30.54 Mbit/s

95th percentile per-packet one-way delay: 183.762 ms

Loss rate: 3.81%

Run 9: Report of PCC — Data Link

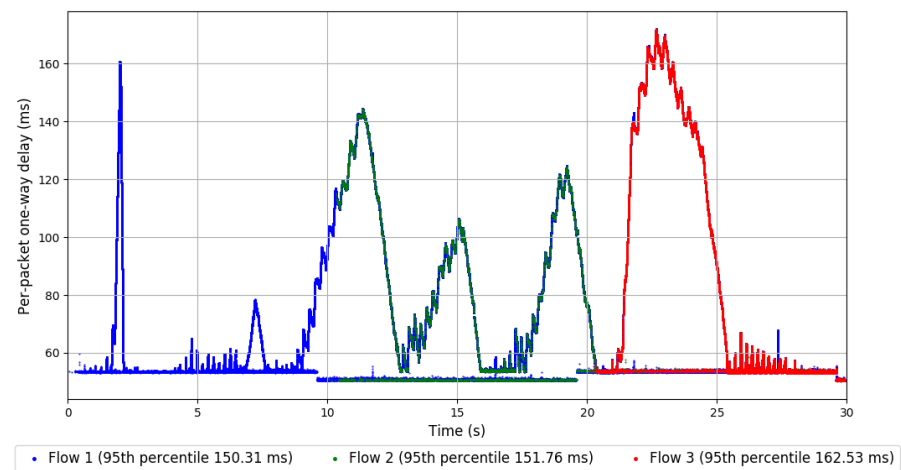
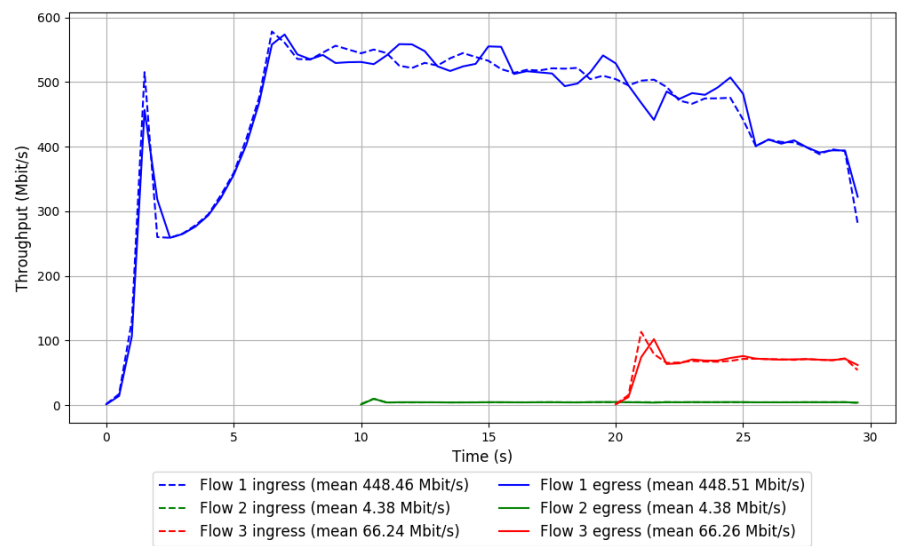


```
Run 10: Statistics of PCC

Start at: 2018-03-01 01:25:33
End at: 2018-03-01 01:26:03

# Below is generated by plot.py at 2018-03-01 05:02:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 473.24 Mbit/s
95th percentile per-packet one-way delay: 151.255 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 448.51 Mbit/s
95th percentile per-packet one-way delay: 150.314 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.38 Mbit/s
95th percentile per-packet one-way delay: 151.759 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 66.26 Mbit/s
95th percentile per-packet one-way delay: 162.525 ms
Loss rate: 0.00%
```

Run 10: Report of PCC — Data Link



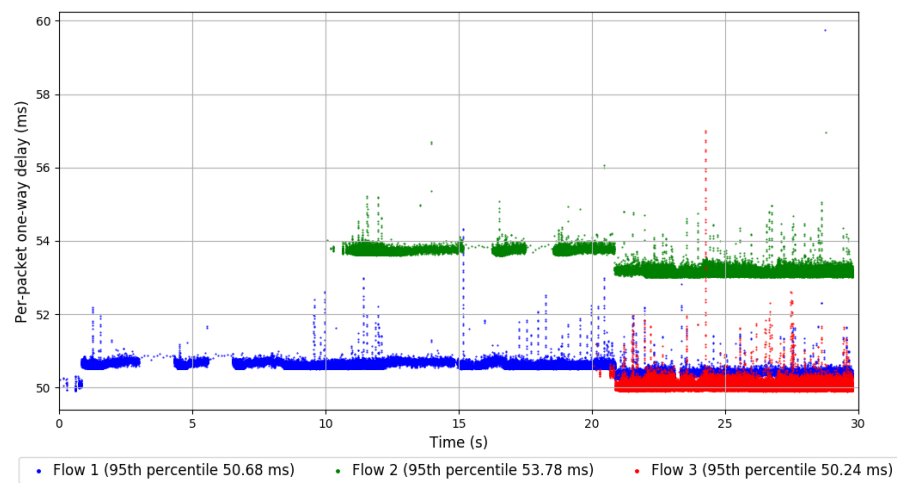
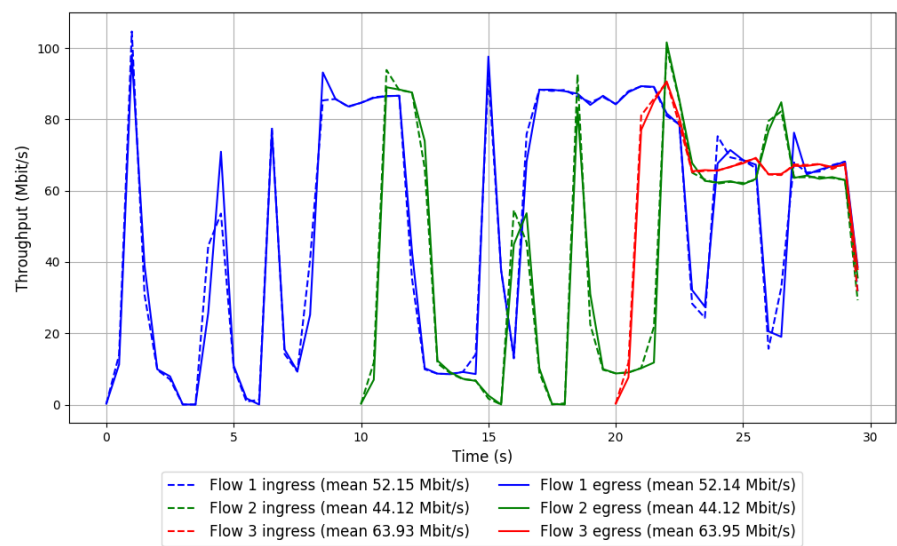
```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-28 22:53:02
End at: 2018-02-28 22:53:32

# Below is generated by plot.py at 2018-03-01 05:02:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 102.32 Mbit/s
95th percentile per-packet one-way delay: 53.695 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 52.14 Mbit/s
95th percentile per-packet one-way delay: 50.680 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.12 Mbit/s
95th percentile per-packet one-way delay: 53.783 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 63.95 Mbit/s
95th percentile per-packet one-way delay: 50.237 ms
Loss rate: 0.00%
```



Run 1: Report of QUIC Cubic — Data Link

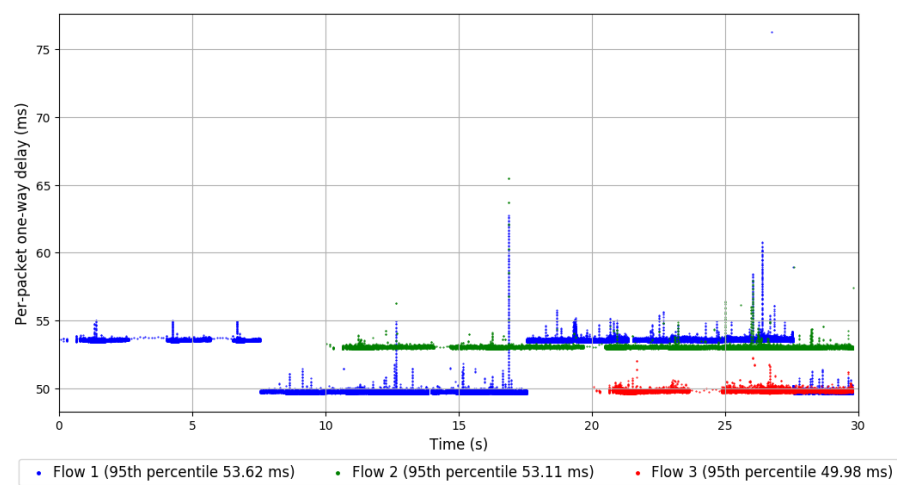
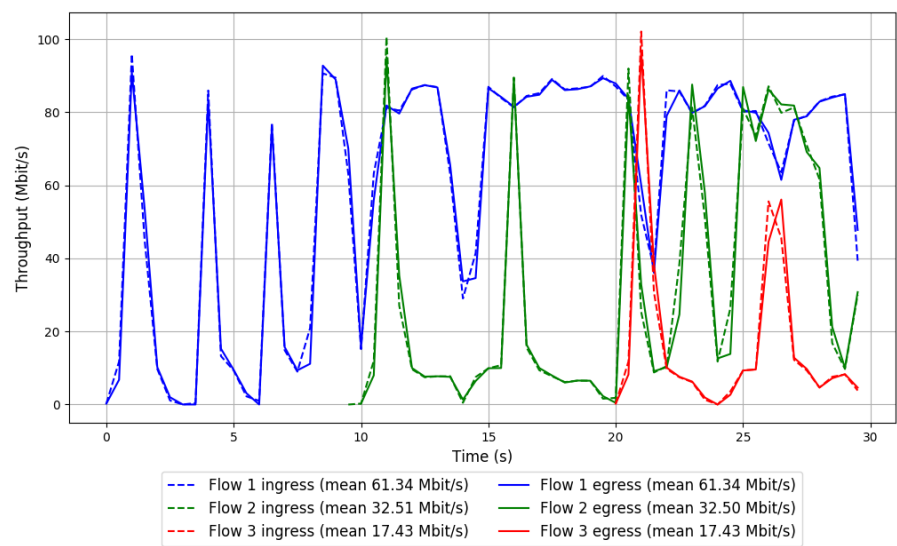


```
Run 2: Statistics of QUIC Cubic

Start at: 2018-02-28 23:10:55
End at: 2018-02-28 23:11:25

# Below is generated by plot.py at 2018-03-01 05:02:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.61 Mbit/s
95th percentile per-packet one-way delay: 53.602 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.34 Mbit/s
95th percentile per-packet one-way delay: 53.624 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 32.50 Mbit/s
95th percentile per-packet one-way delay: 53.109 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 17.43 Mbit/s
95th percentile per-packet one-way delay: 49.984 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-28 23:28:43

End at: 2018-02-28 23:29:13

# Below is generated by plot.py at 2018-03-01 05:02:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 83.29 Mbit/s

95th percentile per-packet one-way delay: 53.582 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.03 Mbit/s

95th percentile per-packet one-way delay: 53.585 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.01 Mbit/s

95th percentile per-packet one-way delay: 50.236 ms

Loss rate: 0.00%

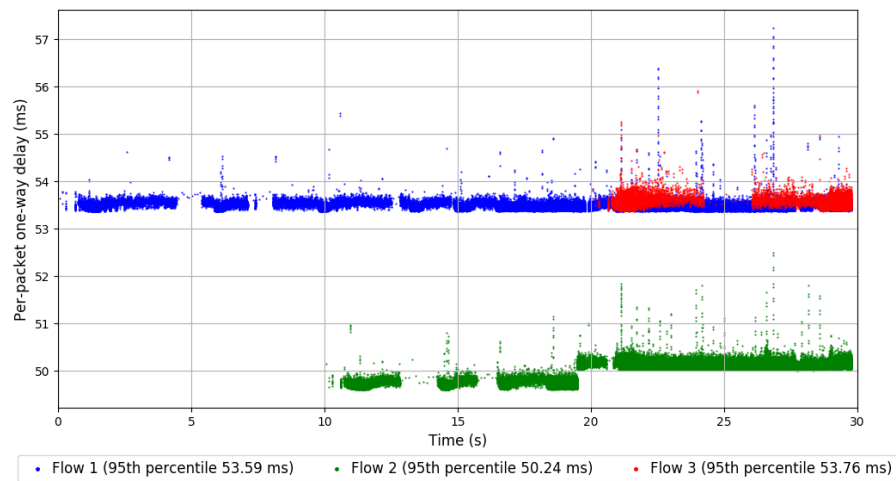
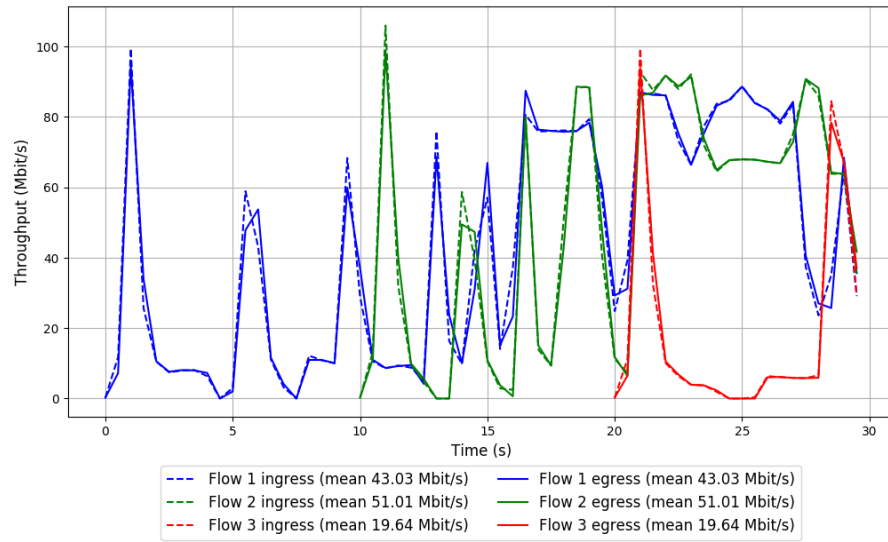
-- Flow 3:

Average throughput: 19.64 Mbit/s

95th percentile per-packet one-way delay: 53.757 ms

Loss rate: 0.00%

### Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-28 23:46:17

End at: 2018-02-28 23:46:47

# Below is generated by plot.py at 2018-03-01 05:02:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 68.52 Mbit/s

95th percentile per-packet one-way delay: 53.101 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 38.38 Mbit/s

95th percentile per-packet one-way delay: 50.380 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.41 Mbit/s

95th percentile per-packet one-way delay: 53.060 ms

Loss rate: 0.00%

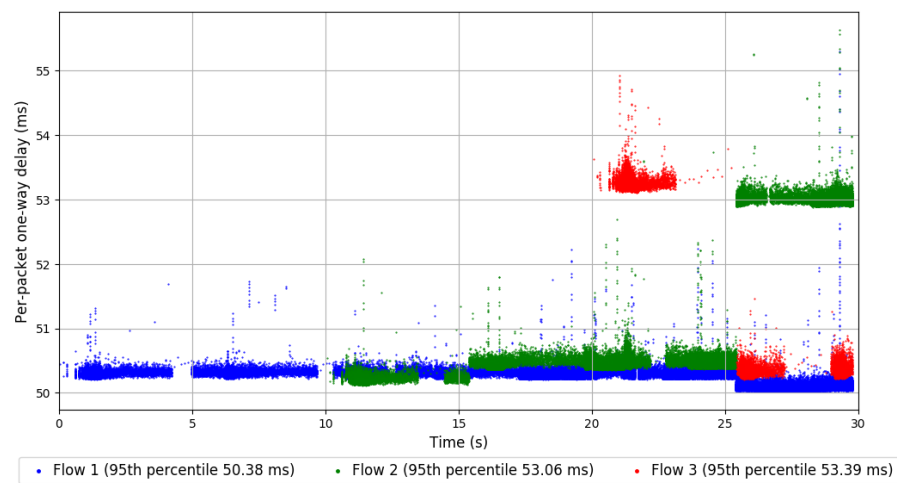
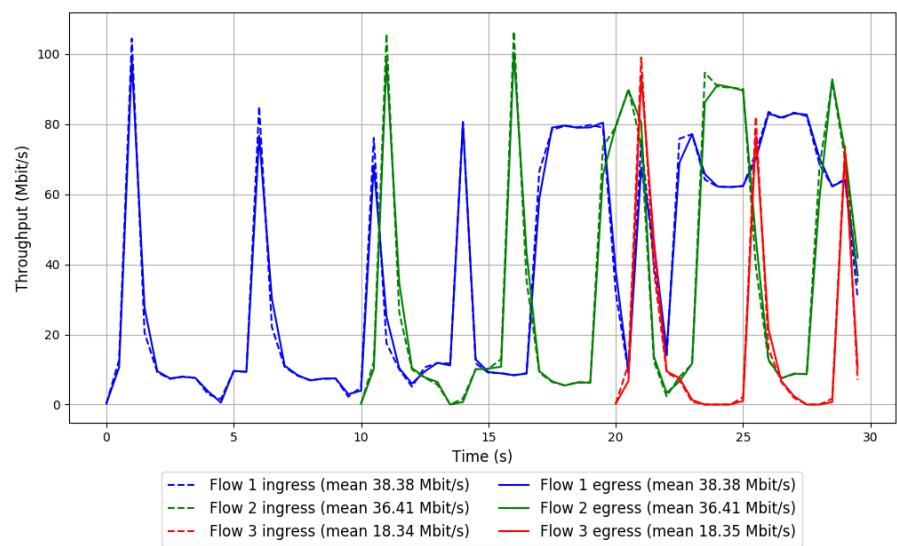
-- Flow 3:

Average throughput: 18.35 Mbit/s

95th percentile per-packet one-way delay: 53.387 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-03-01 00:03:35

End at: 2018-03-01 00:04:05

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 99.08 Mbit/s

95th percentile per-packet one-way delay: 53.247 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 57.36 Mbit/s

95th percentile per-packet one-way delay: 53.236 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 38.28 Mbit/s

95th percentile per-packet one-way delay: 53.288 ms

Loss rate: 0.03%

-- Flow 3:

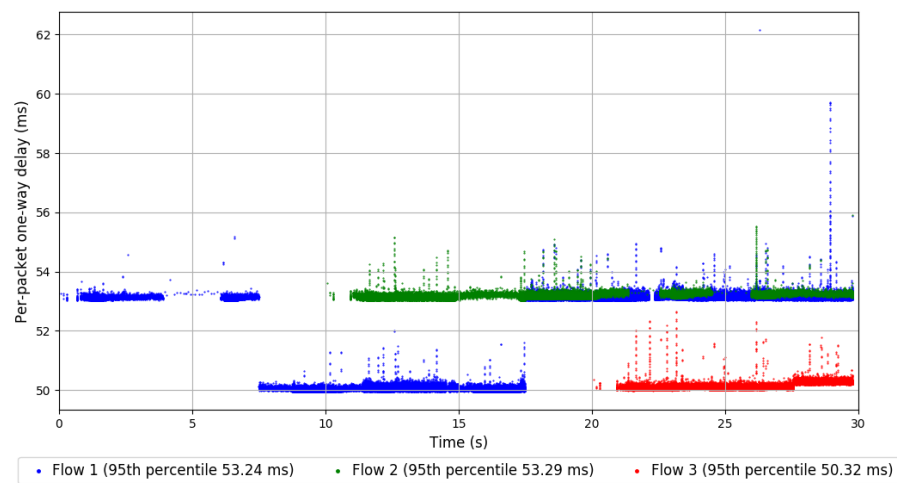
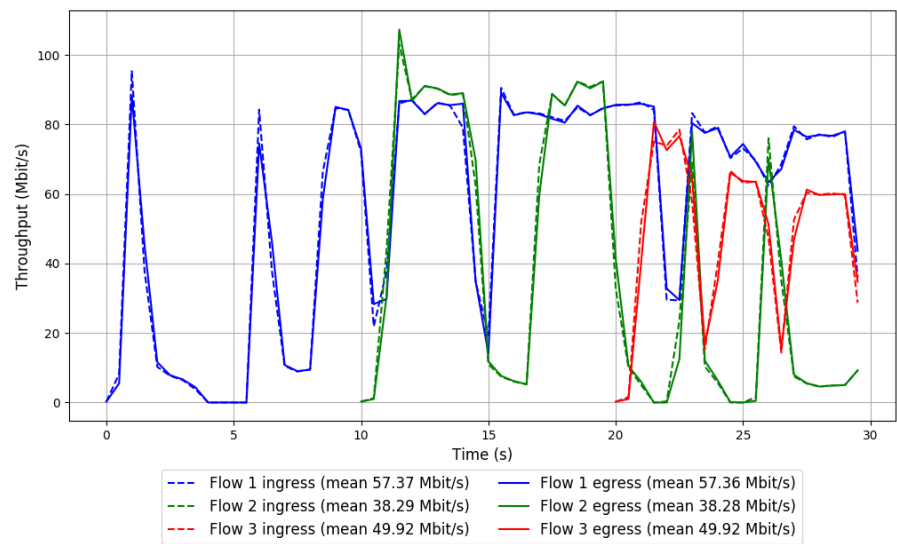
Average throughput: 49.92 Mbit/s

95th percentile per-packet one-way delay: 50.324 ms

Loss rate: 0.00%



Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-03-01 00:21:05

End at: 2018-03-01 00:21:35

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 108.27 Mbit/s

95th percentile per-packet one-way delay: 53.599 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 50.36 Mbit/s

95th percentile per-packet one-way delay: 53.652 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 64.33 Mbit/s

95th percentile per-packet one-way delay: 53.219 ms

Loss rate: 0.00%

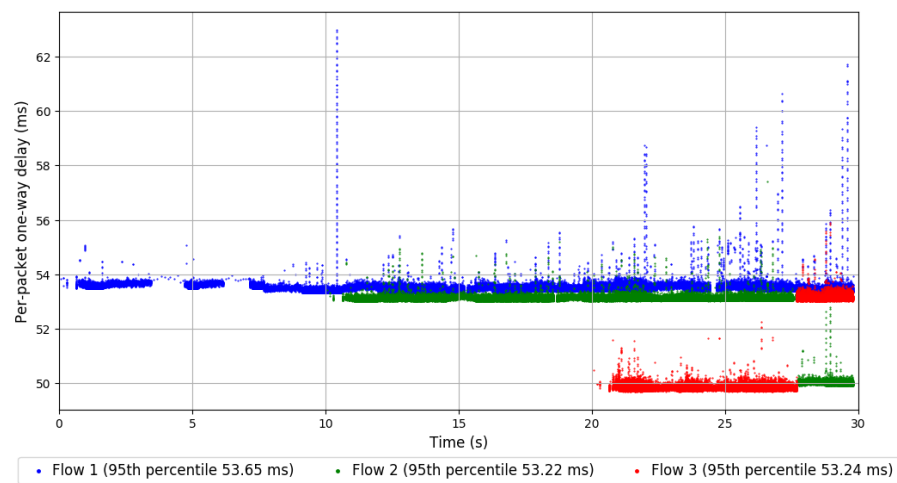
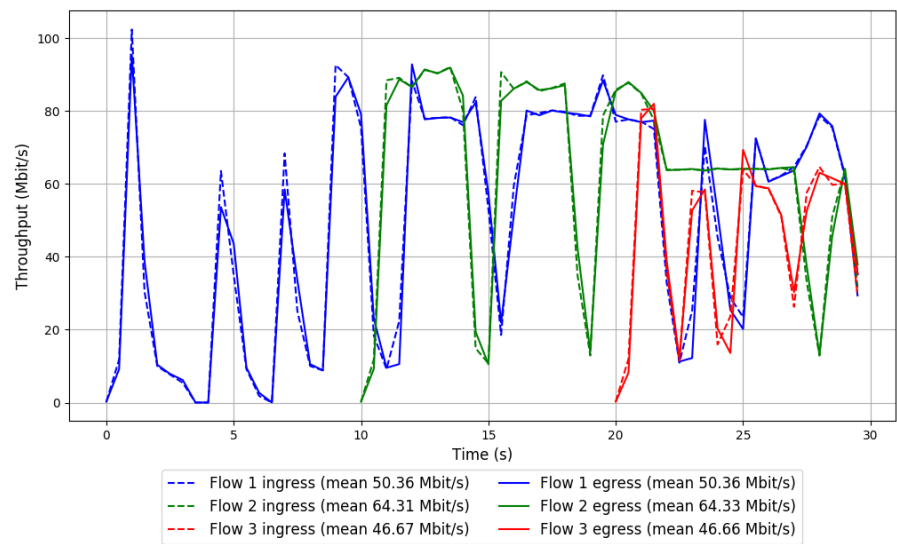
-- Flow 3:

Average throughput: 46.66 Mbit/s

95th percentile per-packet one-way delay: 53.239 ms

Loss rate: 0.03%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-03-01 00:38:54

End at: 2018-03-01 00:39:24

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 70.62 Mbit/s

95th percentile per-packet one-way delay: 53.142 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 40.08 Mbit/s

95th percentile per-packet one-way delay: 53.139 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 36.05 Mbit/s

95th percentile per-packet one-way delay: 53.157 ms

Loss rate: 0.03%

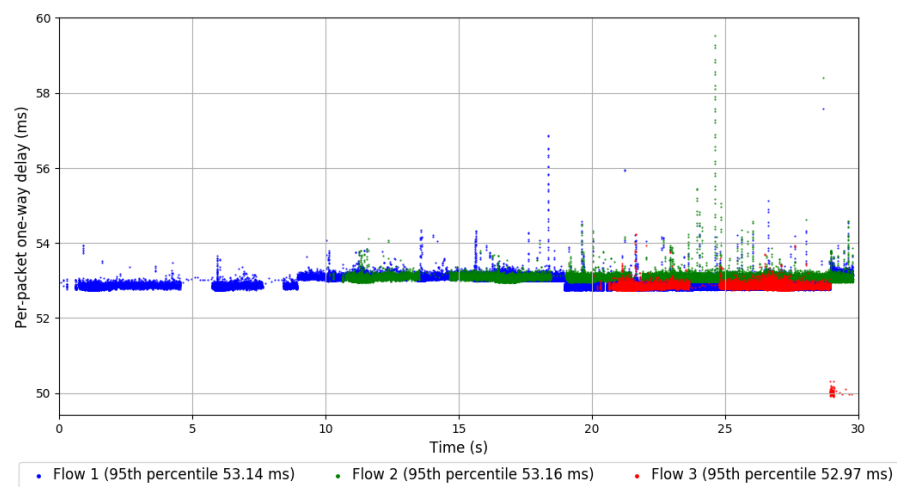
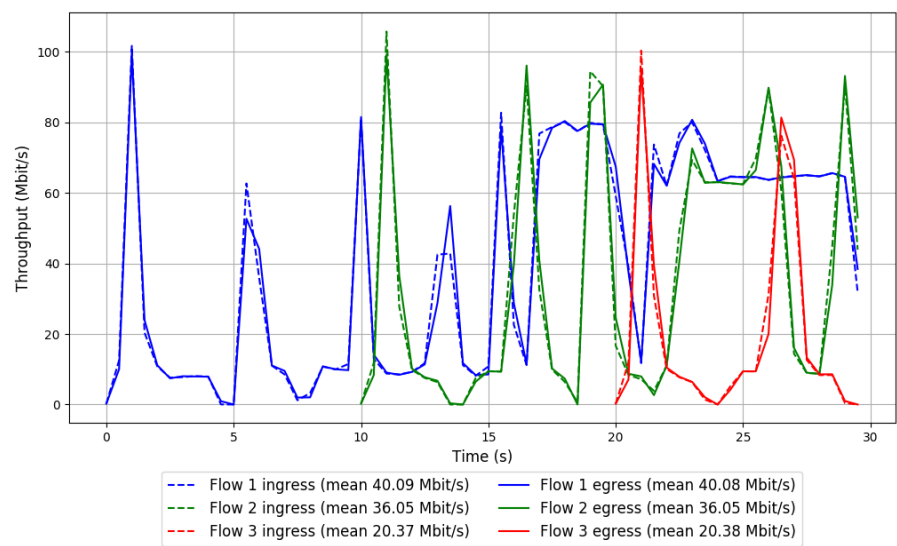
-- Flow 3:

Average throughput: 20.38 Mbit/s

95th percentile per-packet one-way delay: 52.967 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-03-01 00:56:52

End at: 2018-03-01 00:57:22

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 72.83 Mbit/s

95th percentile per-packet one-way delay: 53.182 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 38.92 Mbit/s

95th percentile per-packet one-way delay: 53.200 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.63 Mbit/s

95th percentile per-packet one-way delay: 50.142 ms

Loss rate: 0.00%

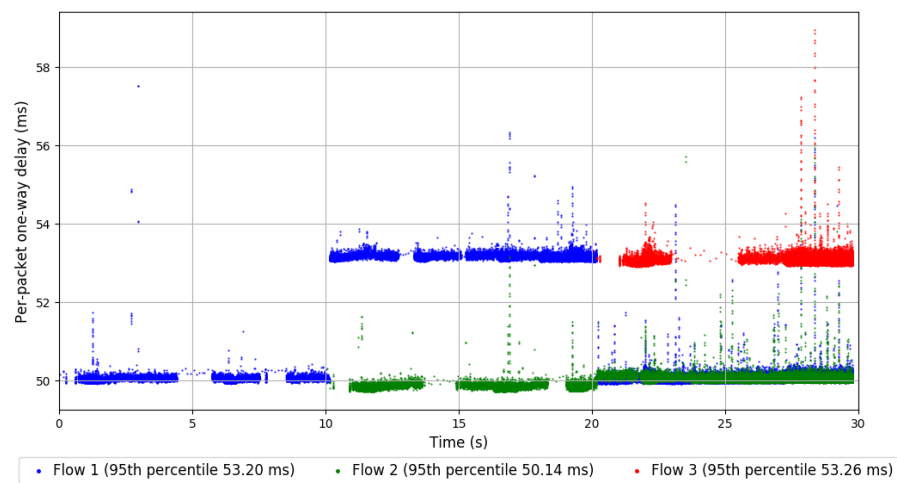
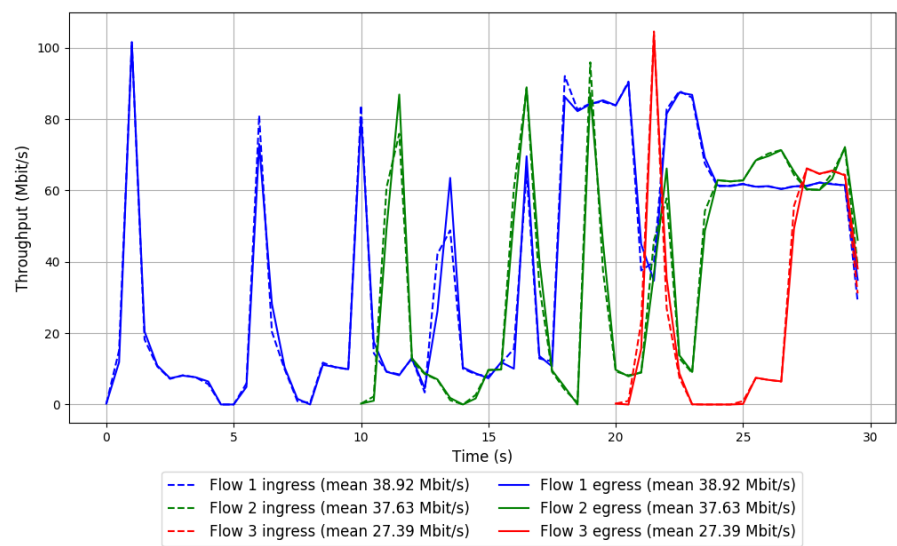
-- Flow 3:

Average throughput: 27.39 Mbit/s

95th percentile per-packet one-way delay: 53.256 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-03-01 01:14:46

End at: 2018-03-01 01:15:16

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 108.14 Mbit/s

95th percentile per-packet one-way delay: 53.466 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 59.09 Mbit/s

95th percentile per-packet one-way delay: 53.451 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 45.31 Mbit/s

95th percentile per-packet one-way delay: 53.385 ms

Loss rate: 0.00%

-- Flow 3:

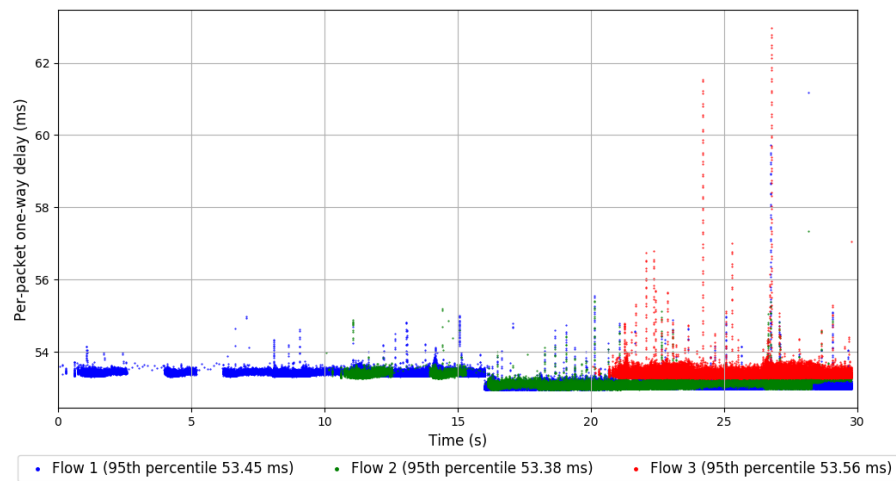
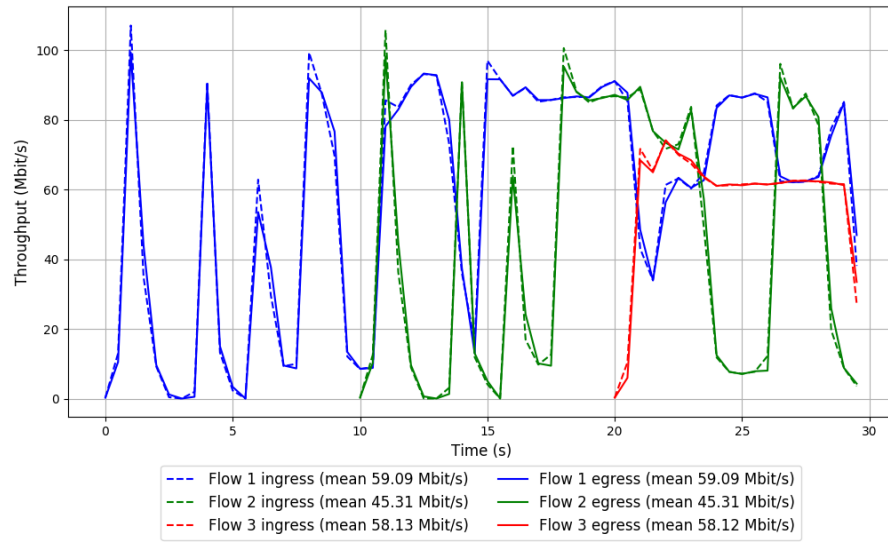
Average throughput: 58.12 Mbit/s

95th percentile per-packet one-way delay: 53.561 ms

Loss rate: 0.03%



## Run 9: Report of QUIC Cubic — Data Link

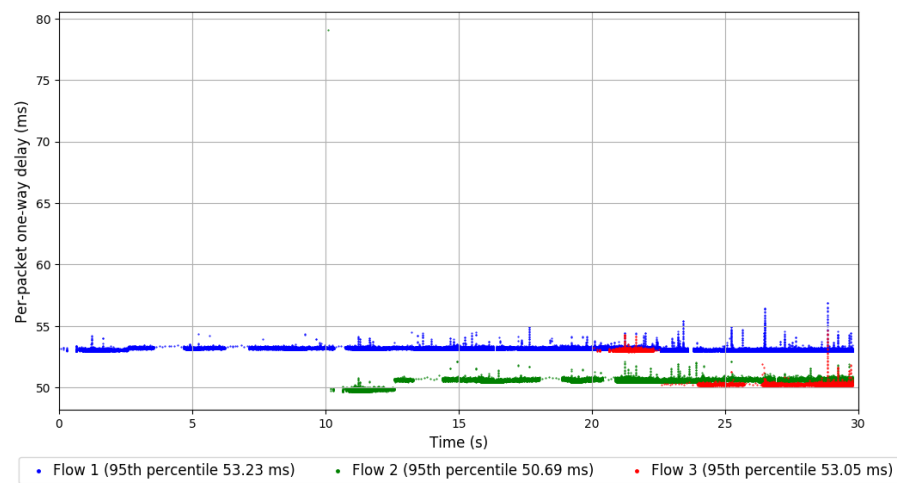
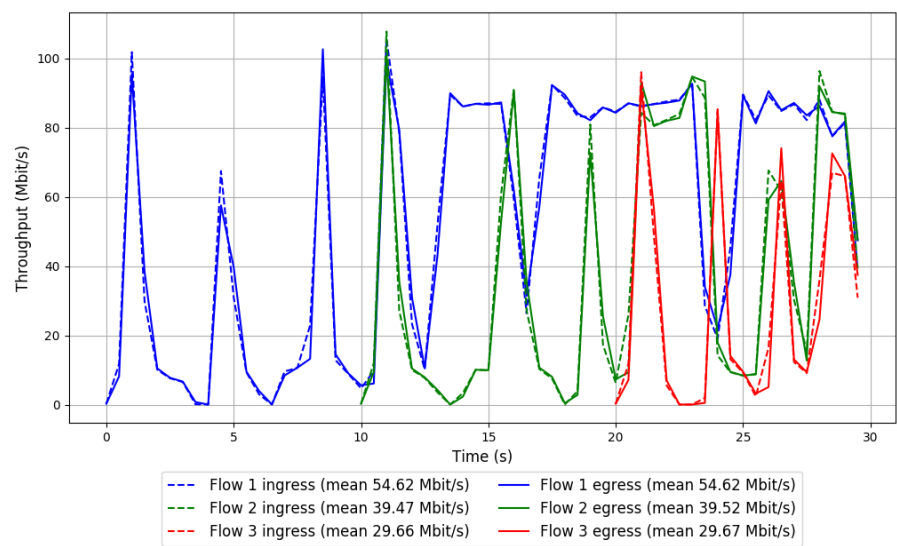


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-03-01 01:32:10
End at: 2018-03-01 01:32:40

# Below is generated by plot.py at 2018-03-01 05:02:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.50 Mbit/s
95th percentile per-packet one-way delay: 53.201 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.62 Mbit/s
95th percentile per-packet one-way delay: 53.225 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.52 Mbit/s
95th percentile per-packet one-way delay: 50.687 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.67 Mbit/s
95th percentile per-packet one-way delay: 53.046 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

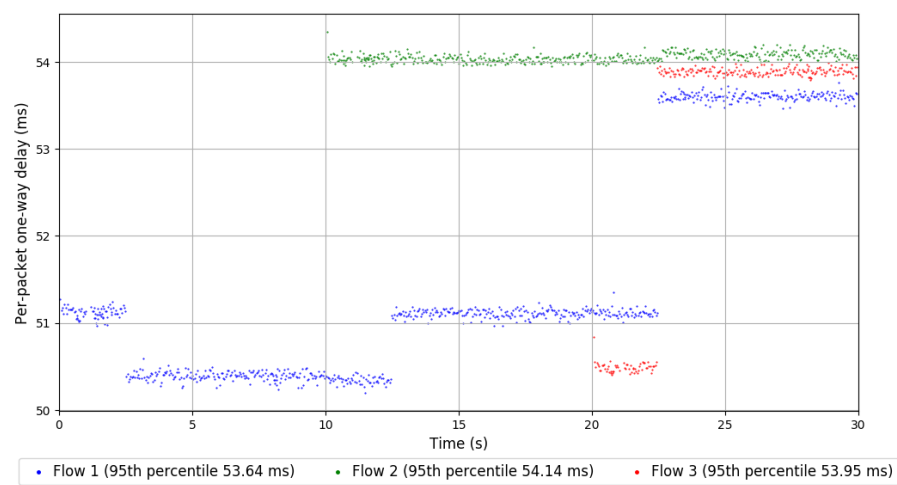
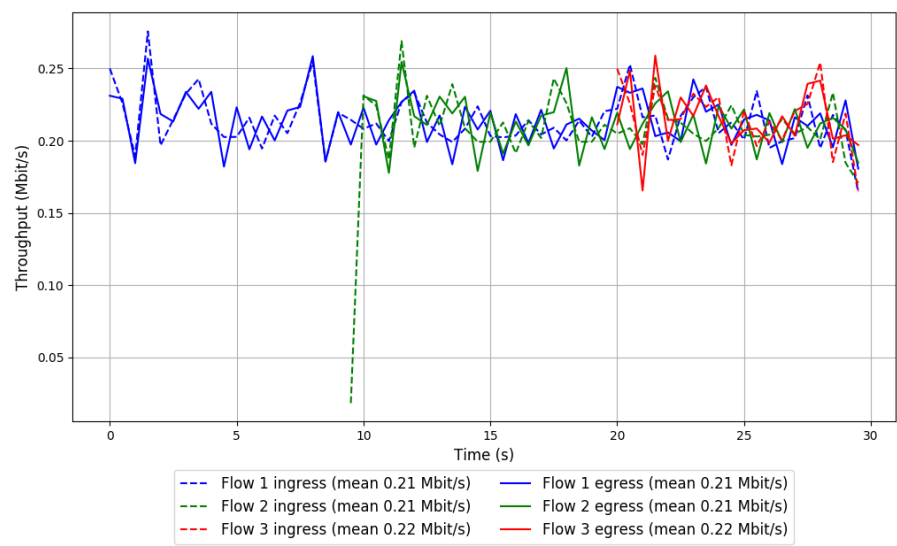


```
Run 1: Statistics of SCReAM

Start at: 2018-02-28 22:49:20
End at: 2018-02-28 22:49:50

# Below is generated by plot.py at 2018-03-01 05:02:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 54.105 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.636 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.142 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.951 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

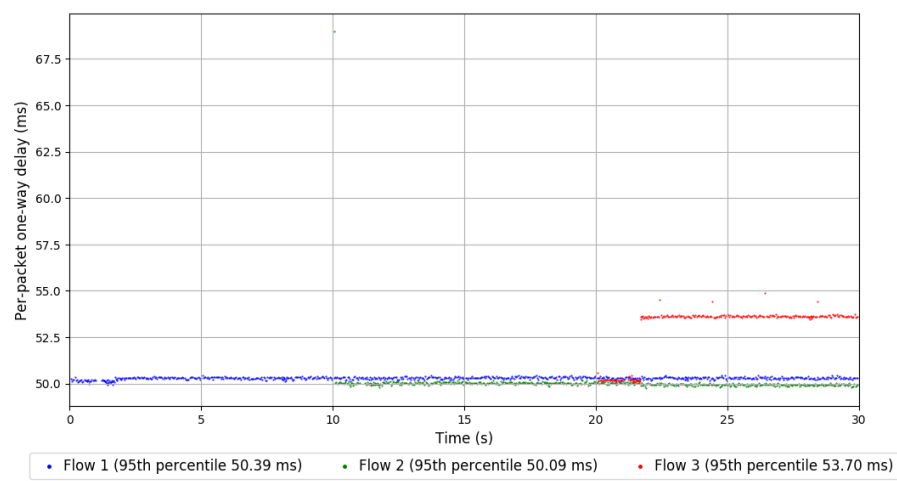
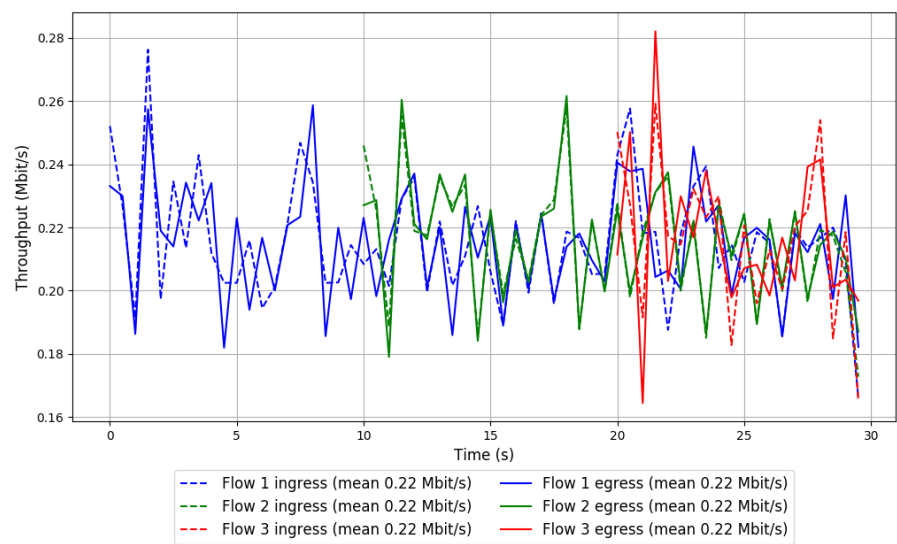


```
Run 2: Statistics of SCReAM

Start at: 2018-02-28 23:07:11
End at: 2018-02-28 23:07:41

# Below is generated by plot.py at 2018-03-01 05:02:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.633 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.386 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.095 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.701 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



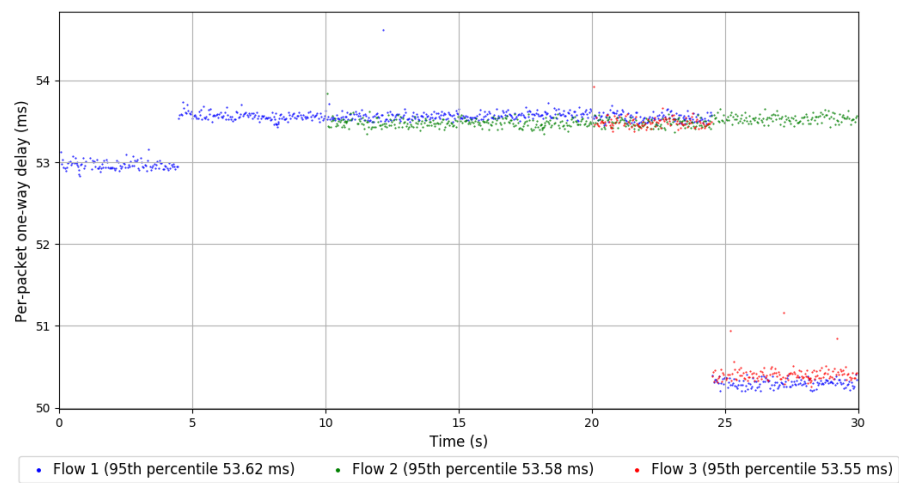
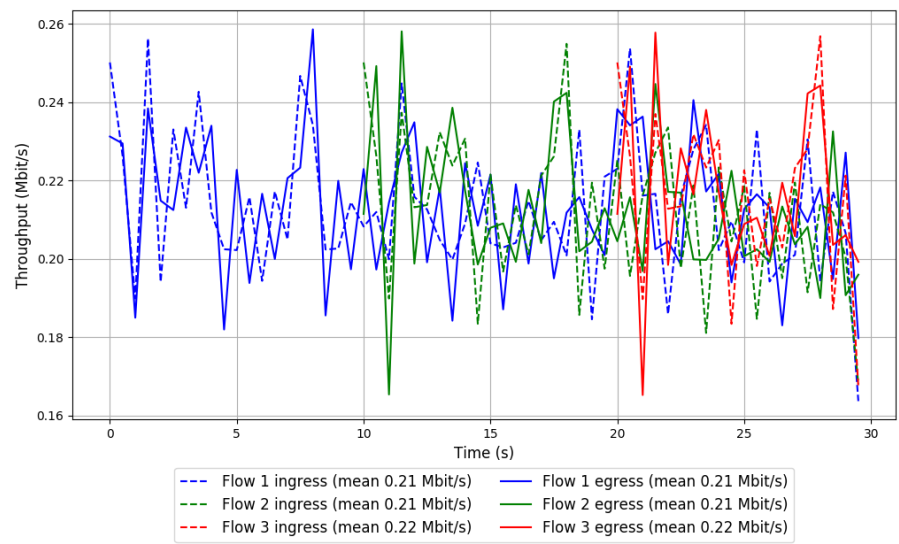
```
Run 3: Statistics of SCReAM

Start at: 2018-02-28 23:24:58
End at: 2018-02-28 23:25:28

# Below is generated by plot.py at 2018-03-01 05:02:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.611 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.624 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.582 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.547 ms
Loss rate: 0.00%
```



Run 3: Report of SReAM — Data Link

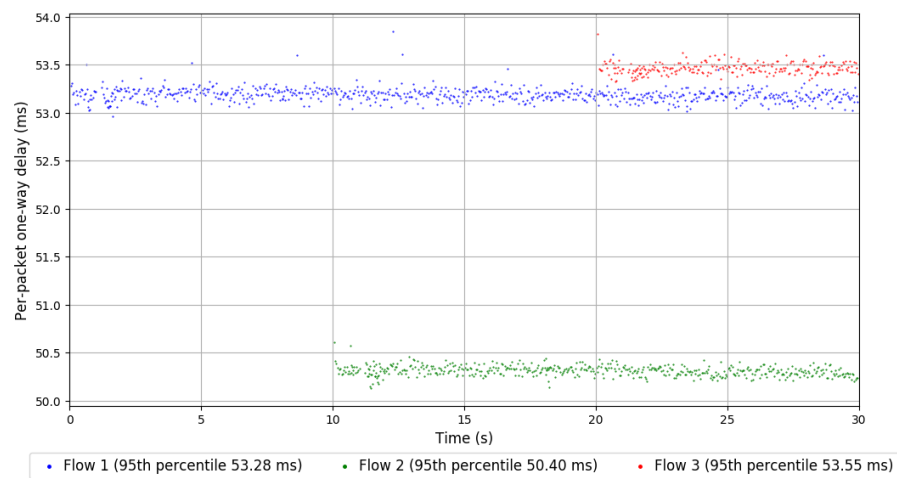
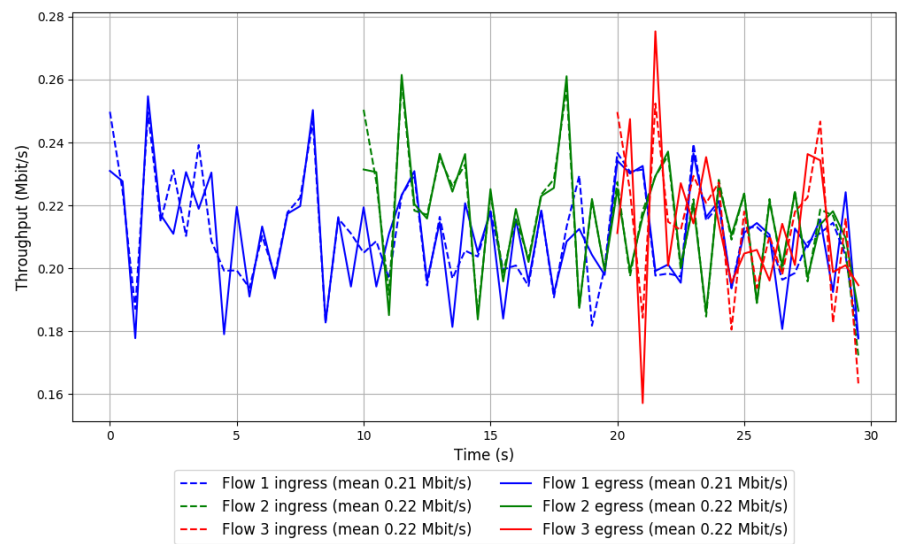


```
Run 4: Statistics of SCReAM

Start at: 2018-02-28 23:42:33
End at: 2018-02-28 23:43:03

# Below is generated by plot.py at 2018-03-01 05:02:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.498 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.283 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.397 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.554 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link

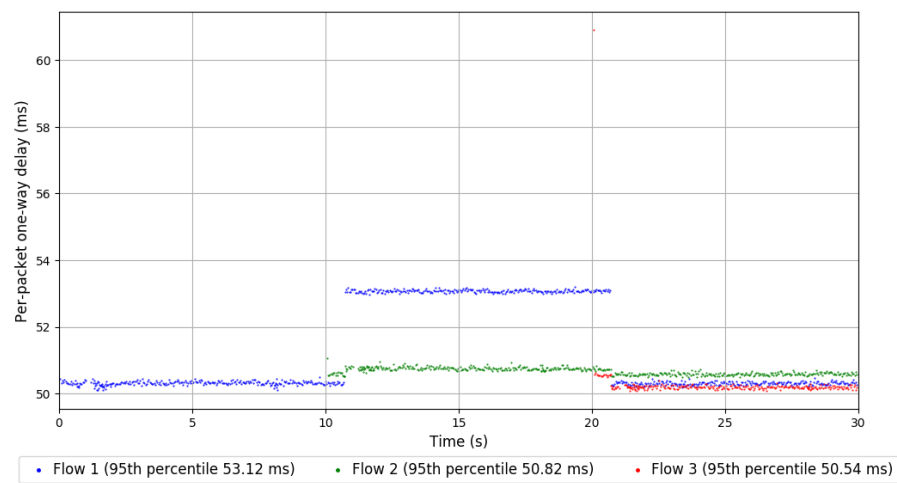
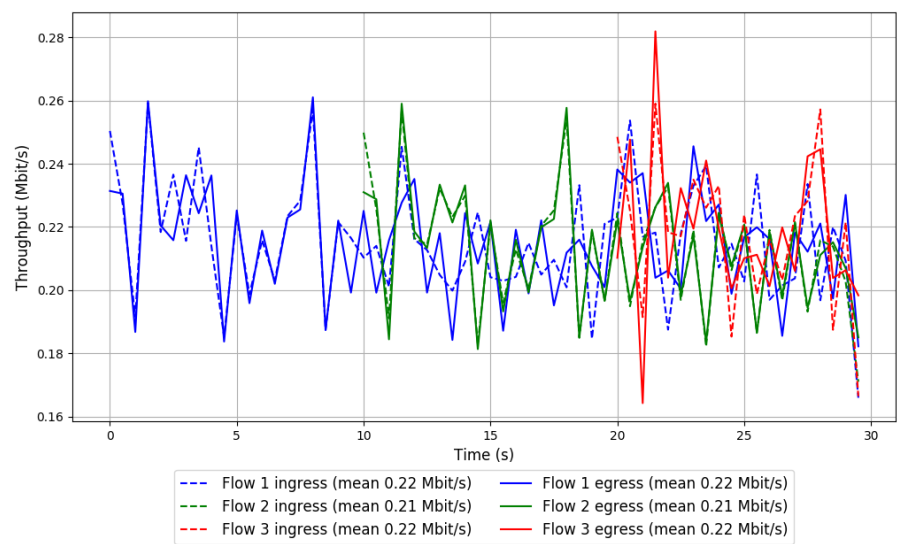


```
Run 5: Statistics of SCReAM

Start at: 2018-02-28 23:59:52
End at: 2018-03-01 00:00:22

# Below is generated by plot.py at 2018-03-01 05:02:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.098 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.118 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.821 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.538 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link

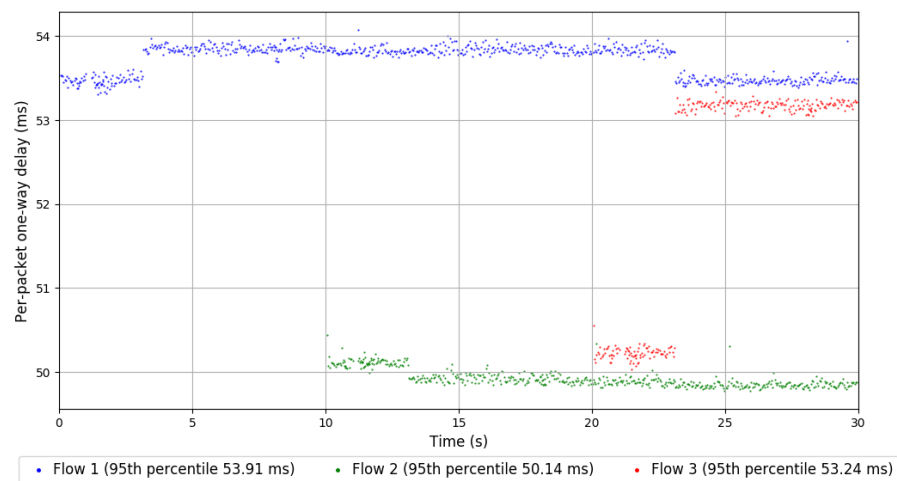
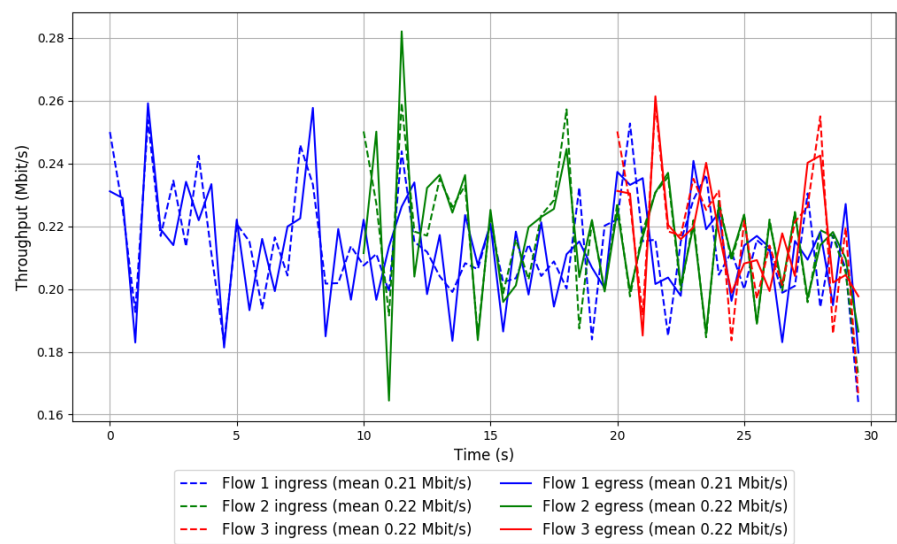


```
Run 6: Statistics of SCReAM

Start at: 2018-03-01 00:17:19
End at: 2018-03-01 00:17:50

# Below is generated by plot.py at 2018-03-01 05:02:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.886 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.910 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.143 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.238 ms
Loss rate: 0.00%
```

Run 6: Report of SReAM — Data Link



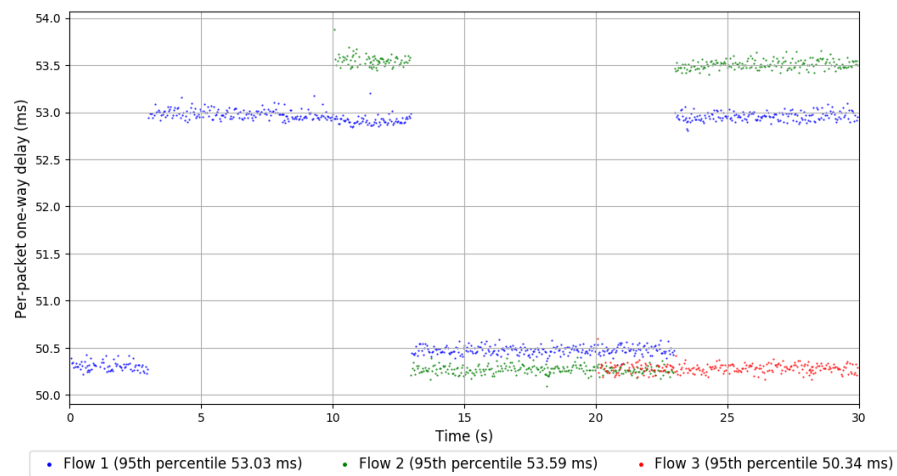
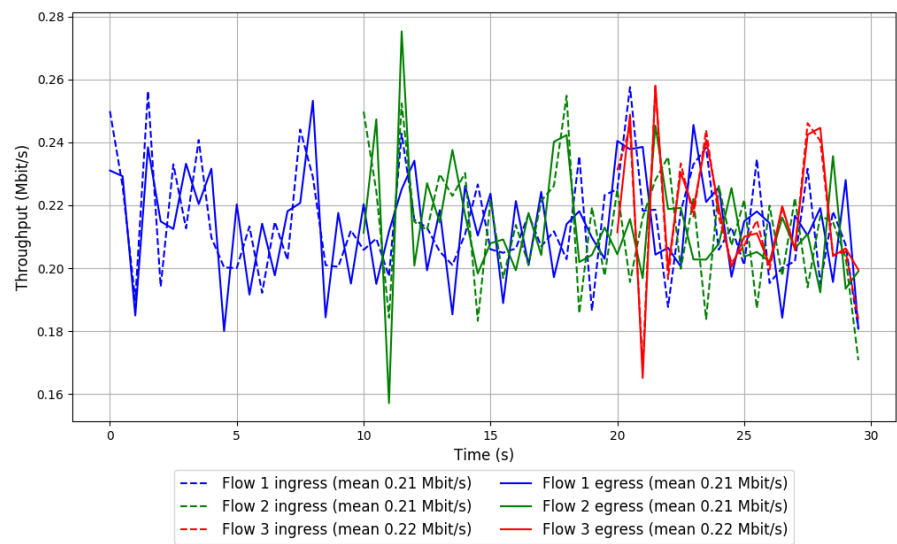
```
Run 7: Statistics of SReAM

Start at: 2018-03-01 00:35:10
End at: 2018-03-01 00:35:40

# Below is generated by plot.py at 2018-03-01 05:02:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.550 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.034 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.587 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.345 ms
Loss rate: 0.00%
```



Run 7: Report of SReAM — Data Link

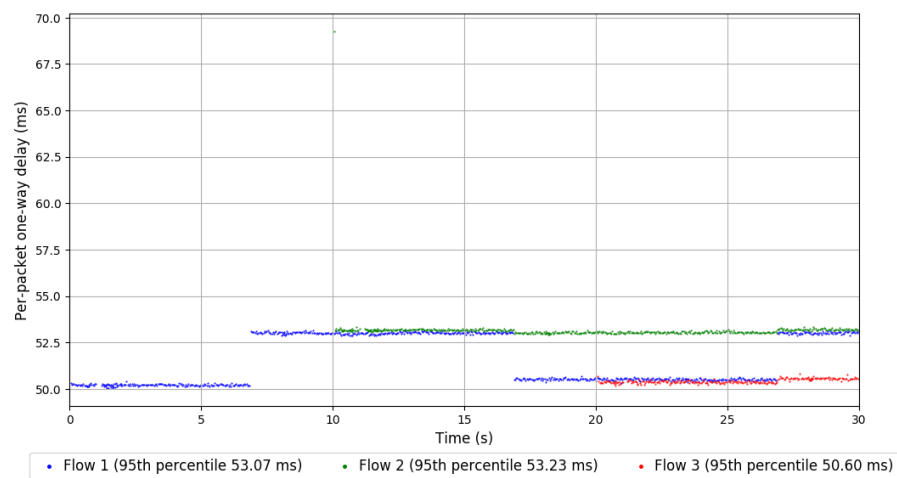
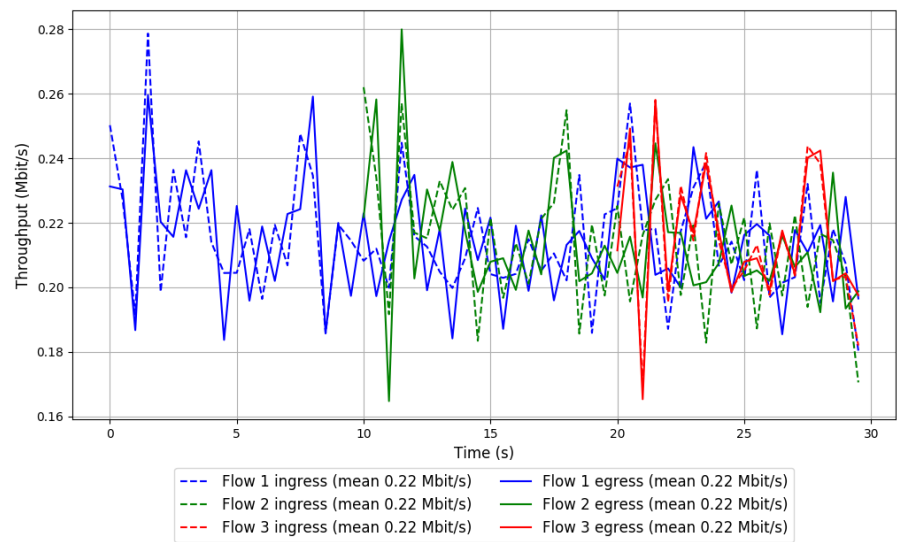


```
Run 8: Statistics of SCReAM

Start at: 2018-03-01 00:53:06
End at: 2018-03-01 00:53:36

# Below is generated by plot.py at 2018-03-01 05:02:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.200 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.073 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.231 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.601 ms
Loss rate: 0.00%
```

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-03-01 01:10:59

End at: 2018-03-01 01:11:29

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.687 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.713 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.473 ms

Loss rate: 0.00%

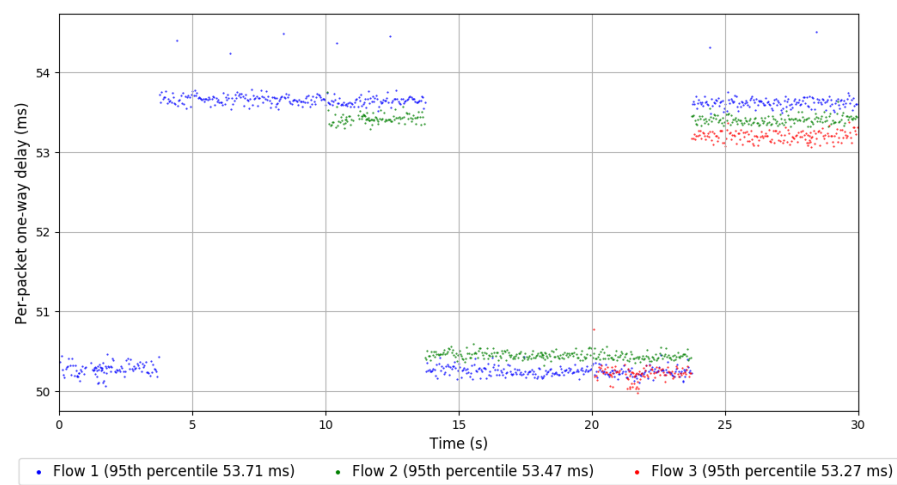
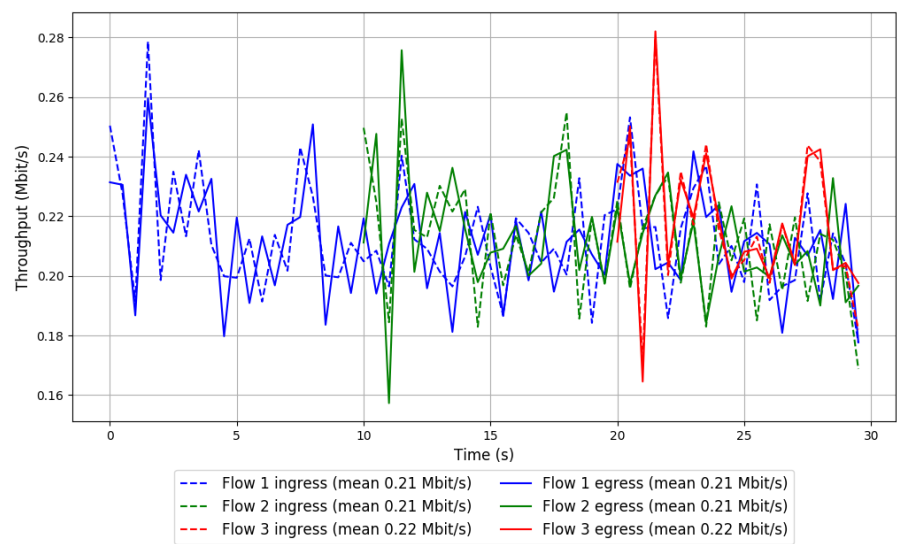
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.274 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

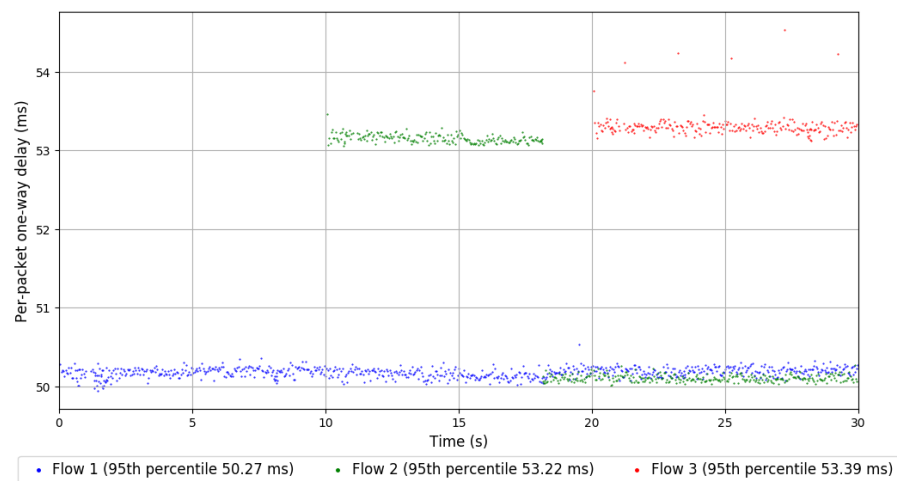
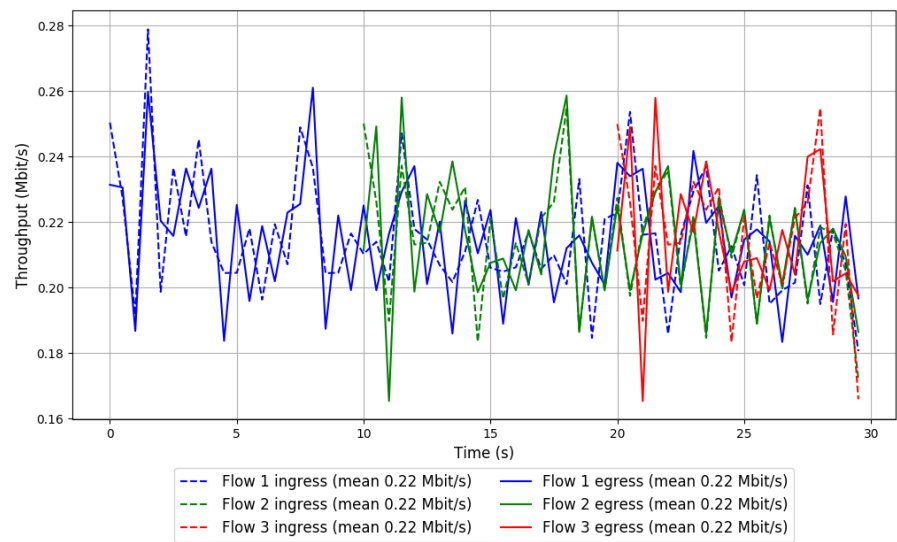


```
Run 10: Statistics of SReAM

Start at: 2018-03-01 01:28:24
End at: 2018-03-01 01:28:55

# Below is generated by plot.py at 2018-03-01 05:02:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.325 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.269 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.221 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.393 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link



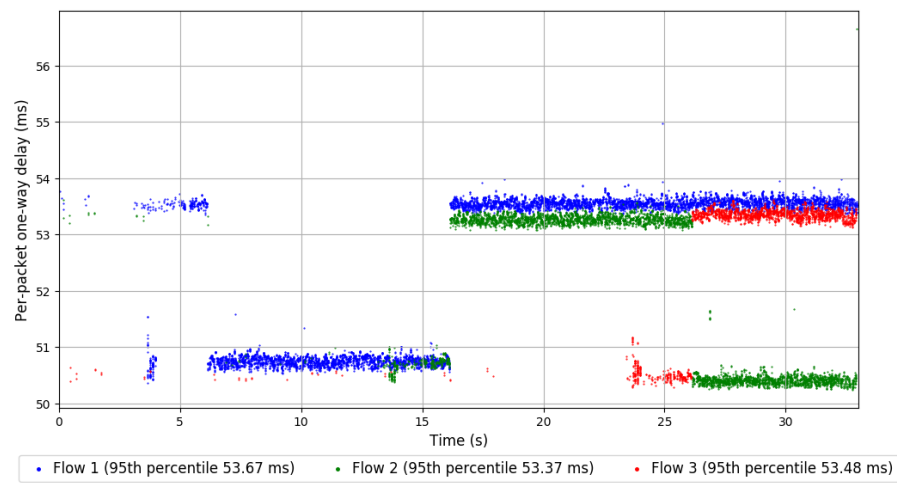
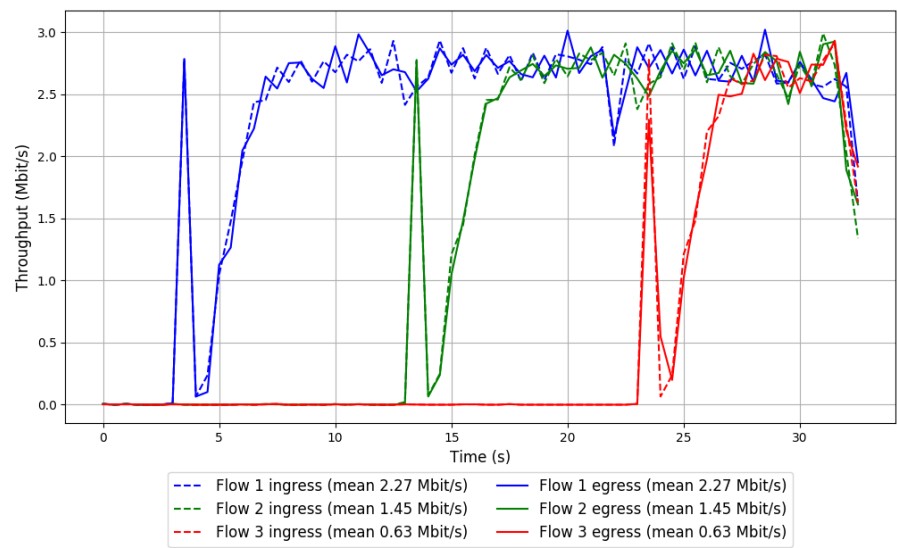
```
Run 1: Statistics of WebRTC media

Start at: 2018-02-28 22:49:59
End at: 2018-02-28 22:50:29

# Below is generated by plot.py at 2018-03-01 05:02:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 53.634 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 53.666 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 53.373 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 53.476 ms
Loss rate: 0.00%
```



Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-28 23:07:50

End at: 2018-02-28 23:08:20

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 53.508 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.540 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 50.330 ms

Loss rate: 0.00%

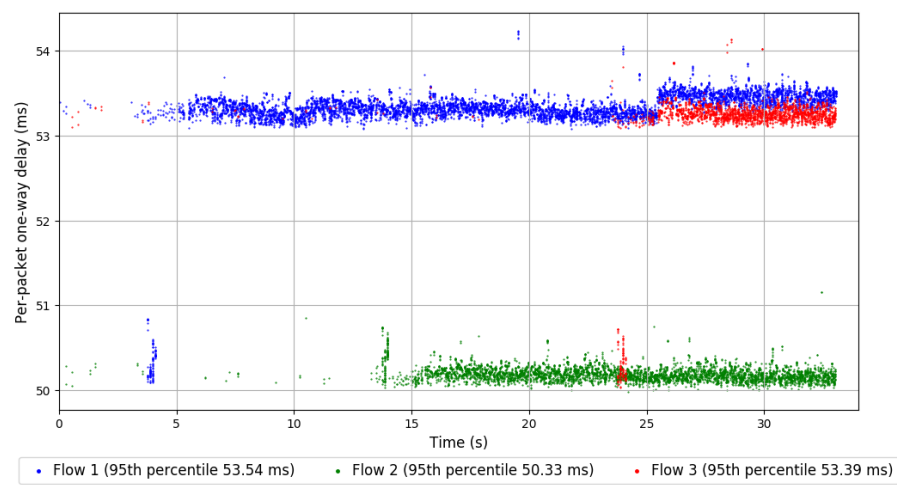
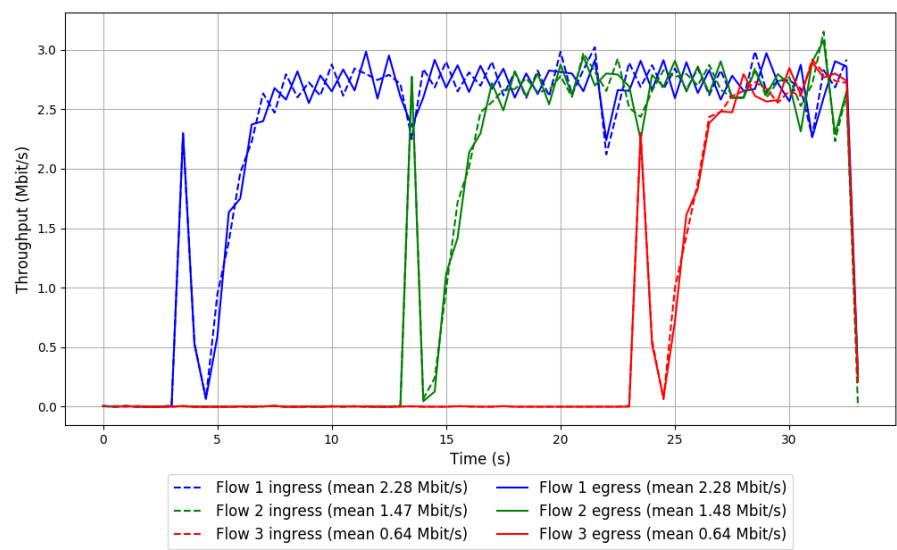
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.389 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-28 23:25:38

End at: 2018-02-28 23:26:08

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 50.519 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.518 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 50.080 ms

Loss rate: 0.00%

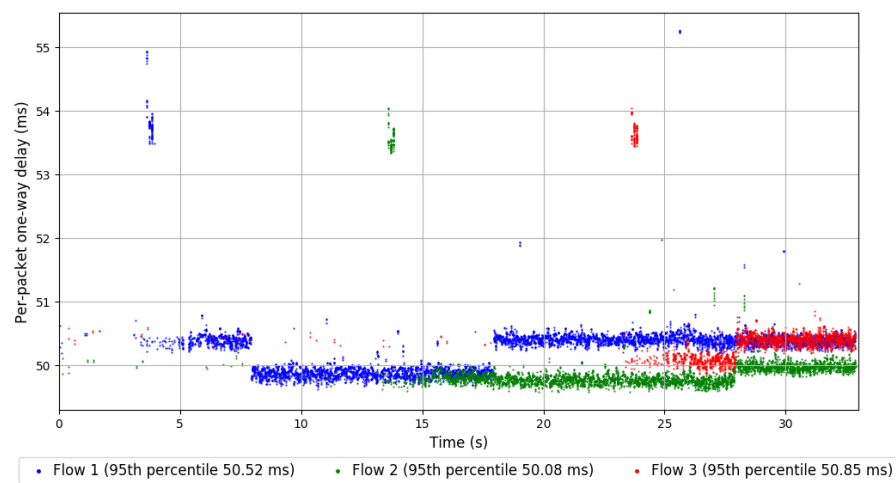
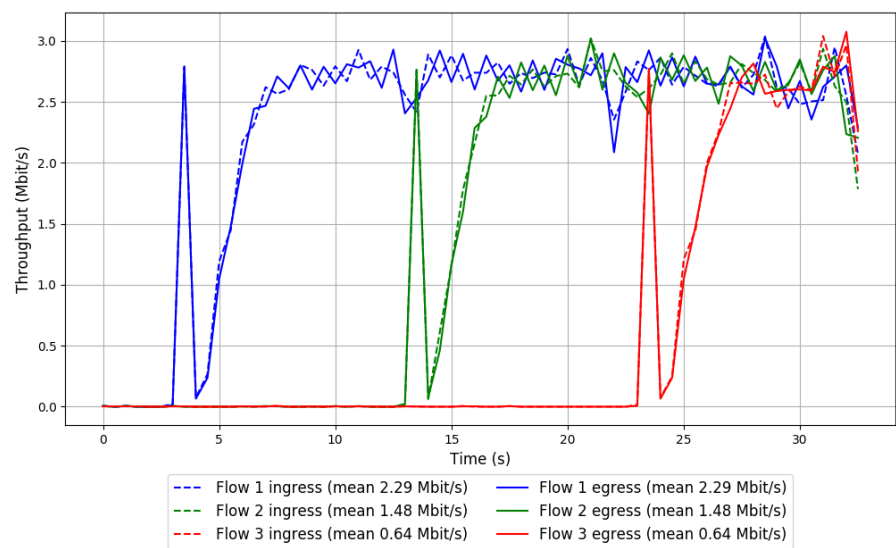
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 50.851 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-28 23:43:12

End at: 2018-02-28 23:43:42

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 53.129 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.123 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 50.865 ms

Loss rate: 0.00%

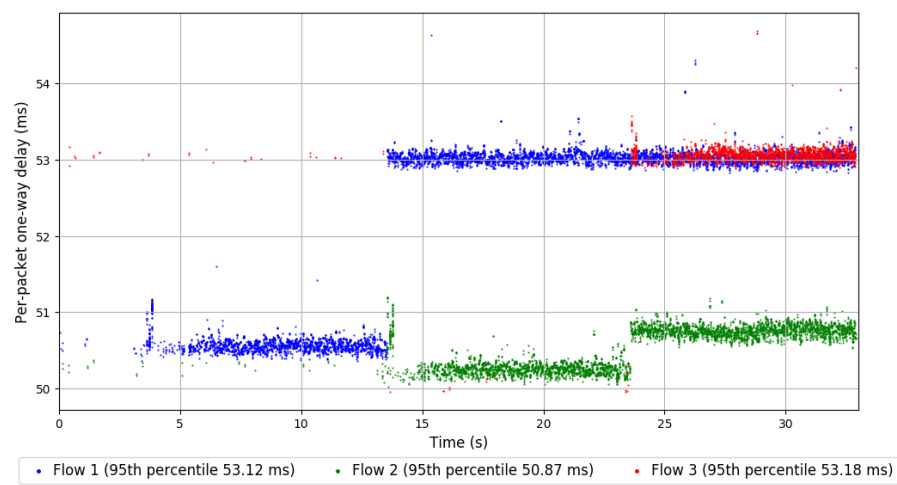
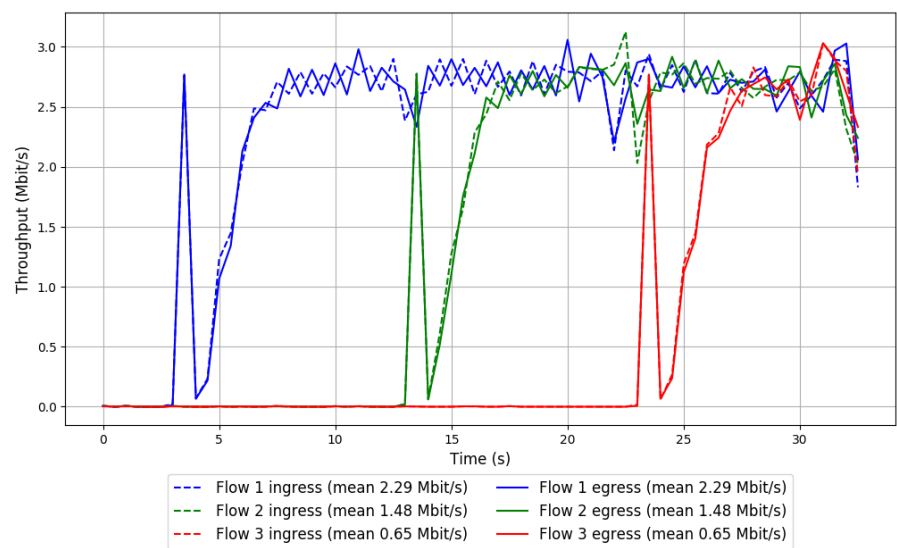
-- Flow 3:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 53.182 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-03-01 00:00:31

End at: 2018-03-01 00:01:01

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 53.427 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 53.453 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 50.574 ms

Loss rate: 0.00%

-- Flow 3:

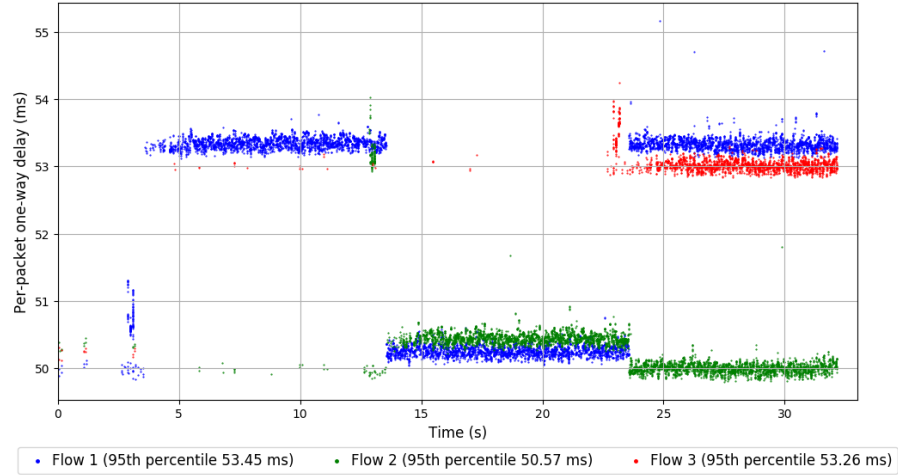
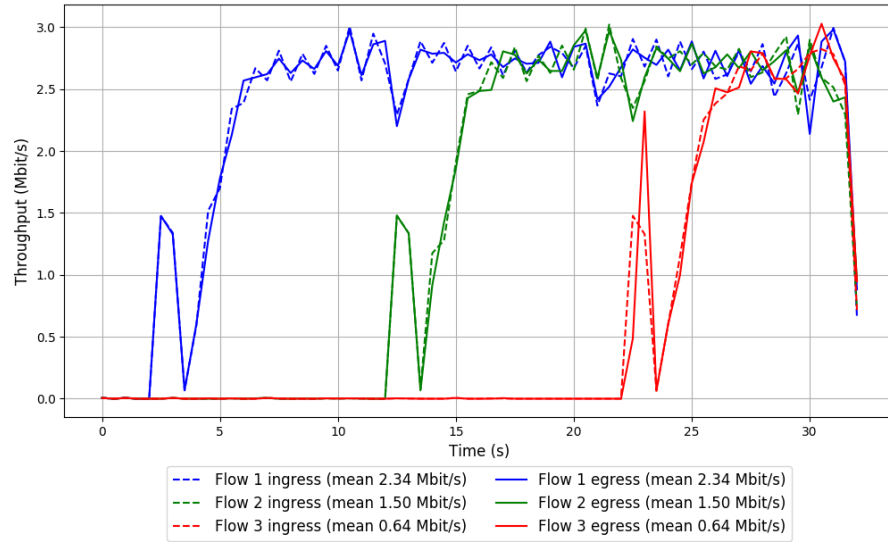
Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.262 ms

Loss rate: 0.00%



## Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-03-01 00:17:59

End at: 2018-03-01 00:18:29

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 53.800 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 53.826 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 53.733 ms

Loss rate: 0.00%

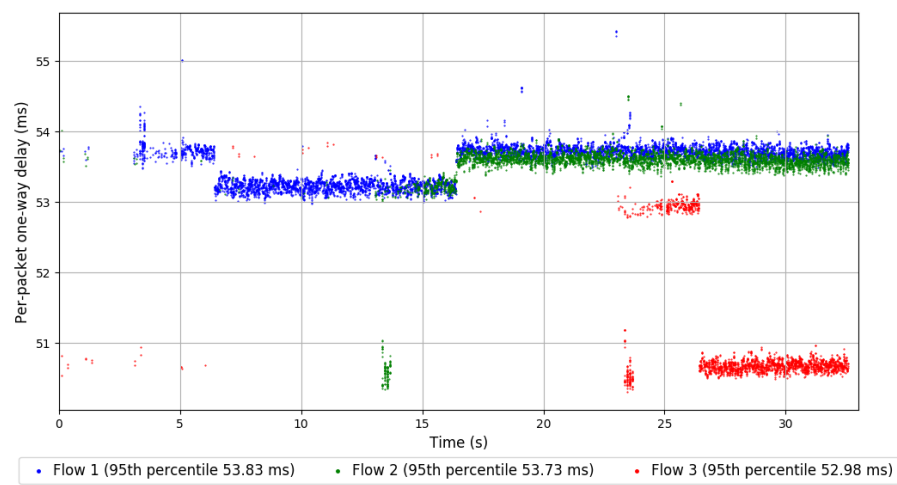
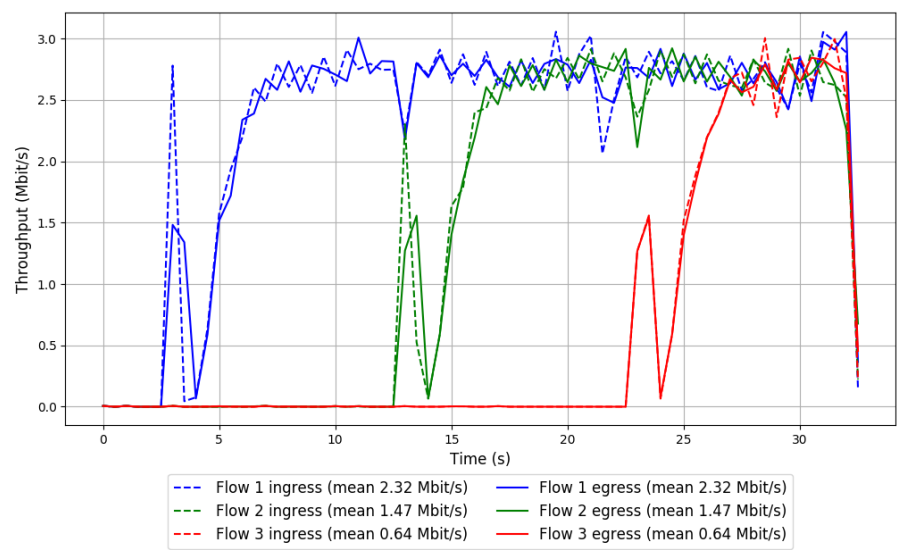
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 52.983 ms

Loss rate: 0.01%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-03-01 00:35:49

End at: 2018-03-01 00:36:19

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.02 Mbit/s

95th percentile per-packet one-way delay: 53.586 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 2.47 Mbit/s

95th percentile per-packet one-way delay: 53.613 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 50.417 ms

Loss rate: 1.39%

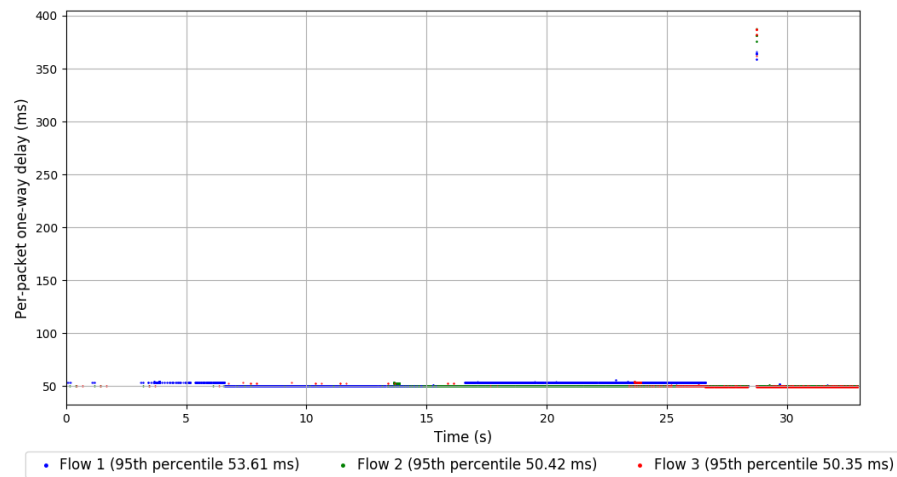
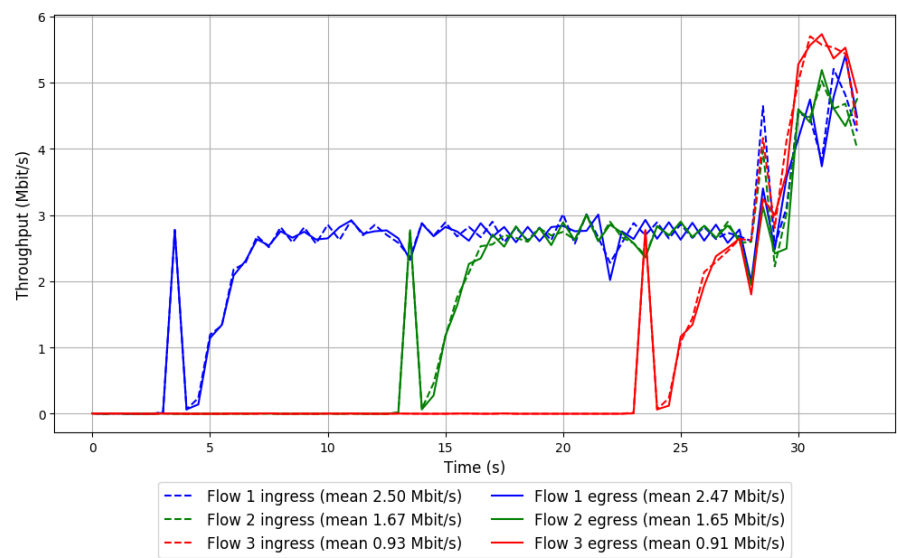
-- Flow 3:

Average throughput: 0.91 Mbit/s

95th percentile per-packet one-way delay: 50.351 ms

Loss rate: 2.51%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-03-01 00:53:45

End at: 2018-03-01 00:54:15

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 53.455 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.336 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 53.349 ms

Loss rate: 0.00%

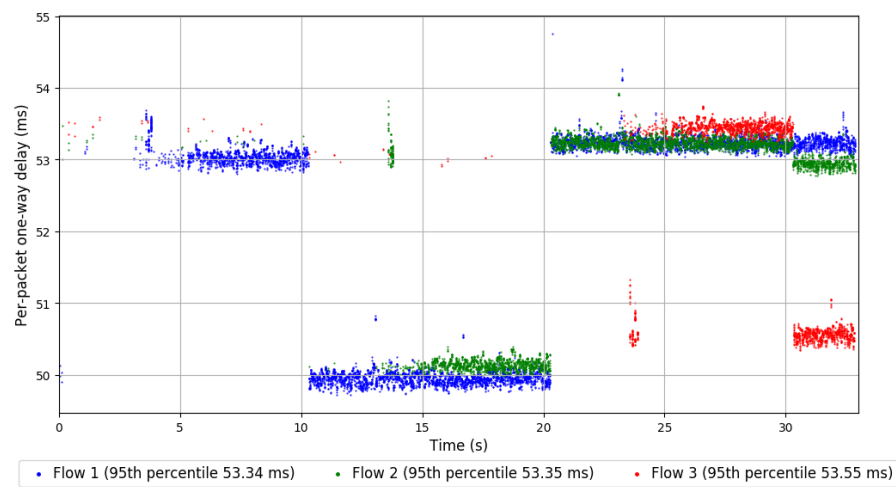
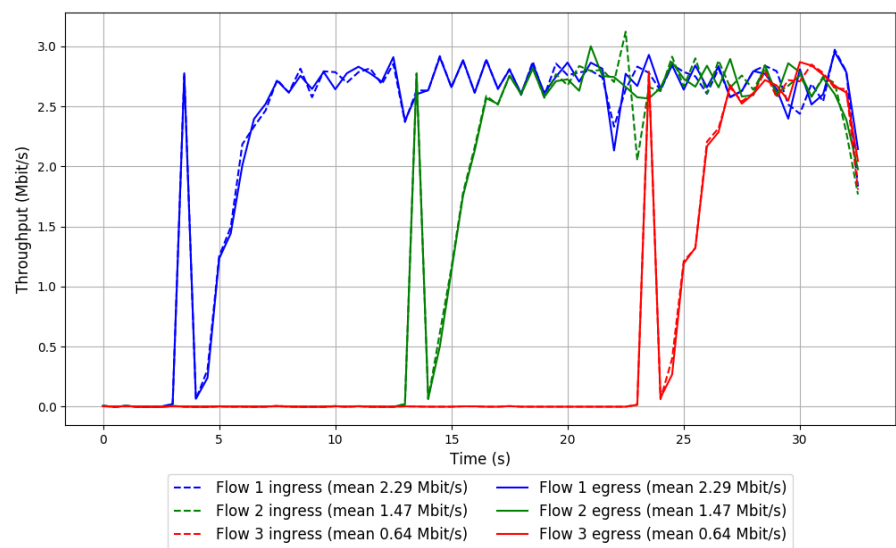
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.554 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-03-01 01:11:38

End at: 2018-03-01 01:12:08

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 53.435 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.471 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 53.167 ms

Loss rate: 0.00%

-- Flow 3:

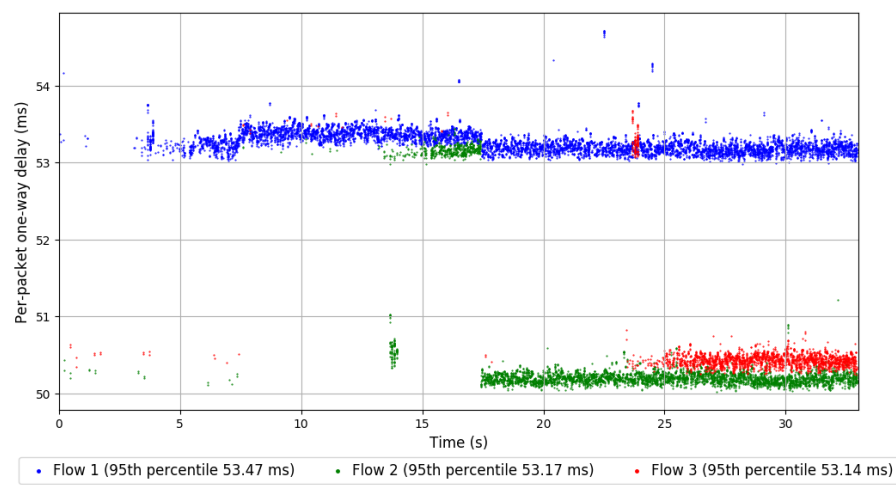
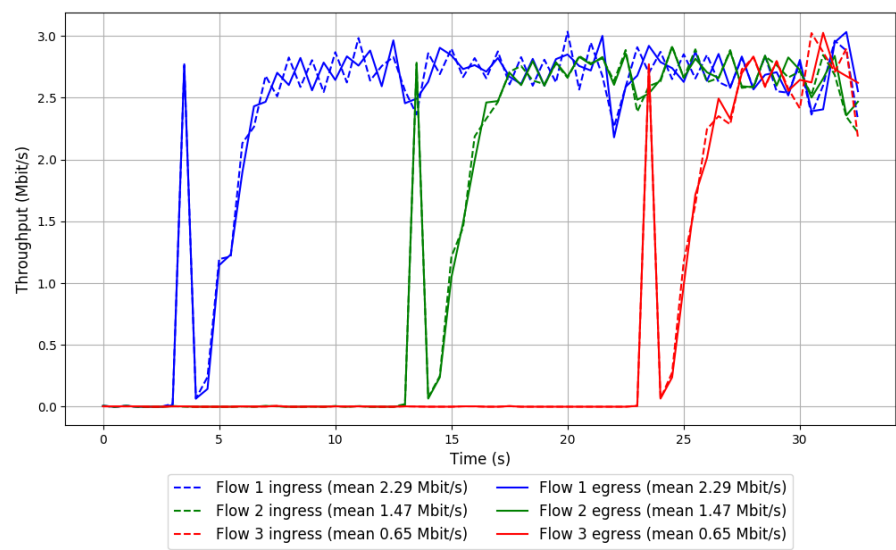
Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 53.140 ms

Loss rate: 0.01%



Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-03-01 01:29:04

End at: 2018-03-01 01:29:34

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 53.377 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.378 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 53.634 ms

Loss rate: 0.02%

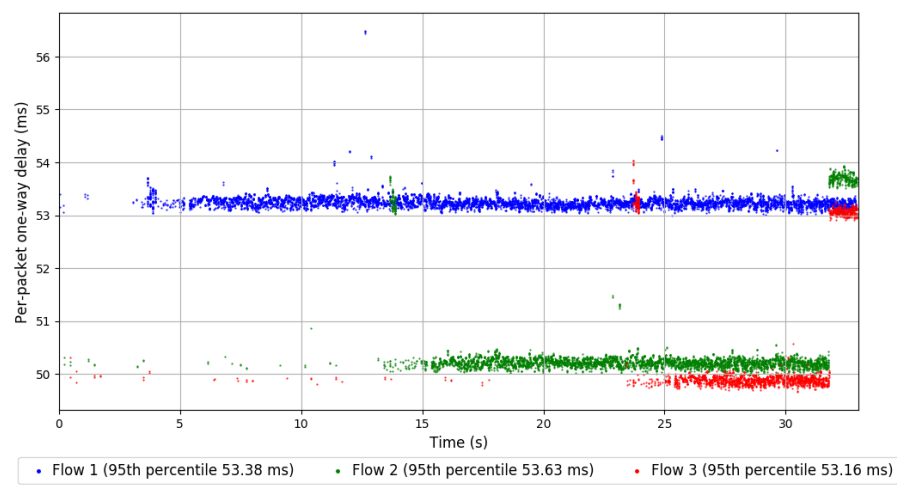
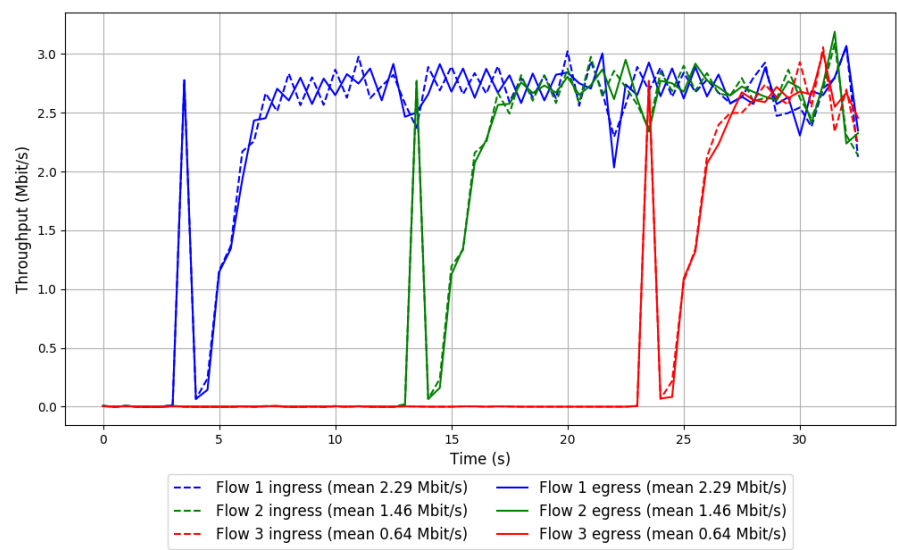
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.159 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

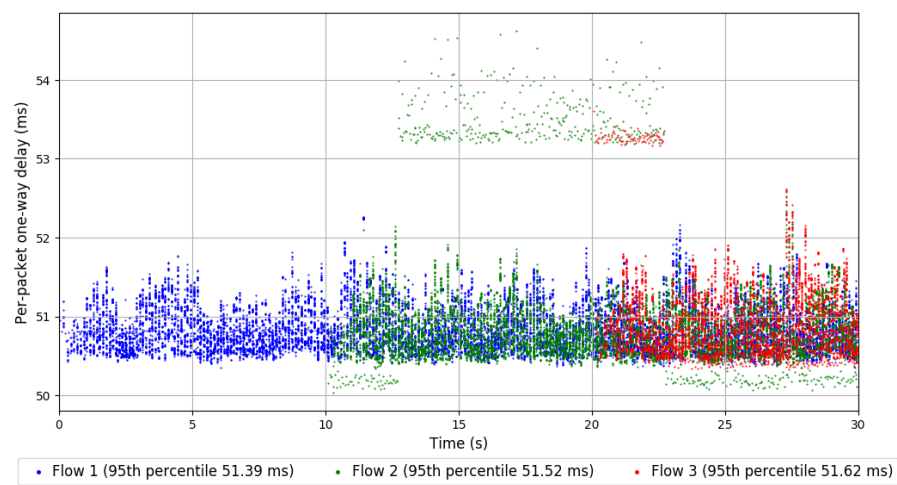
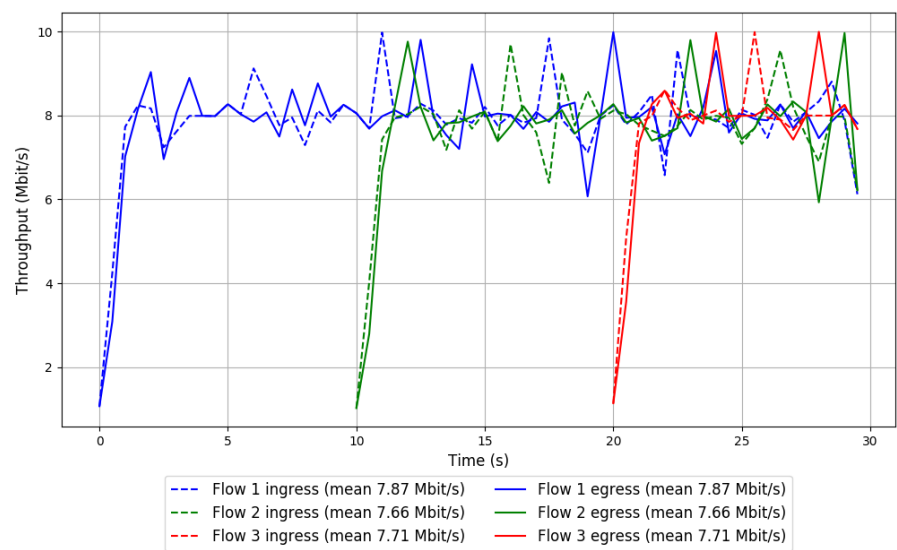


```
Run 1: Statistics of Sprout

Start at: 2018-02-28 22:48:40
End at: 2018-02-28 22:49:10

# Below is generated by plot.py at 2018-03-01 05:02:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.50 Mbit/s
95th percentile per-packet one-way delay: 51.480 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 51.392 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 51.515 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 51.619 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-28 23:06:31

End at: 2018-02-28 23:07:01

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.38 Mbit/s

95th percentile per-packet one-way delay: 54.156 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 54.241 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 54.011 ms

Loss rate: 0.00%

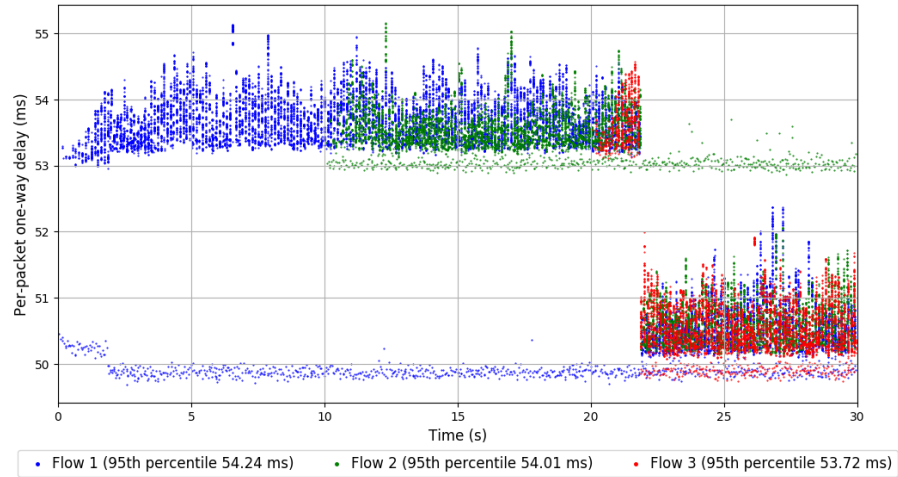
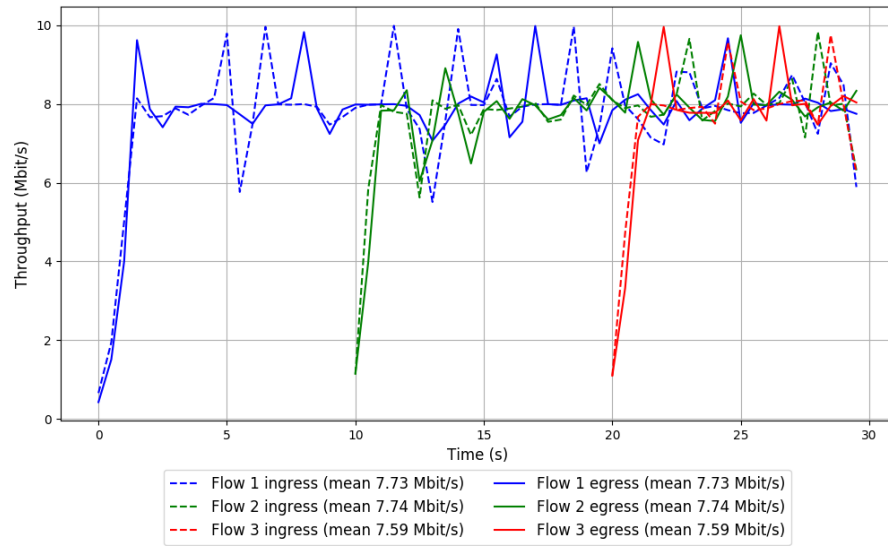
-- Flow 3:

Average throughput: 7.59 Mbit/s

95th percentile per-packet one-way delay: 53.721 ms

Loss rate: 0.00%

## Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-28 23:24:18

End at: 2018-02-28 23:24:48

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.41 Mbit/s

95th percentile per-packet one-way delay: 54.536 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 54.502 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 54.609 ms

Loss rate: 0.00%

-- Flow 3:

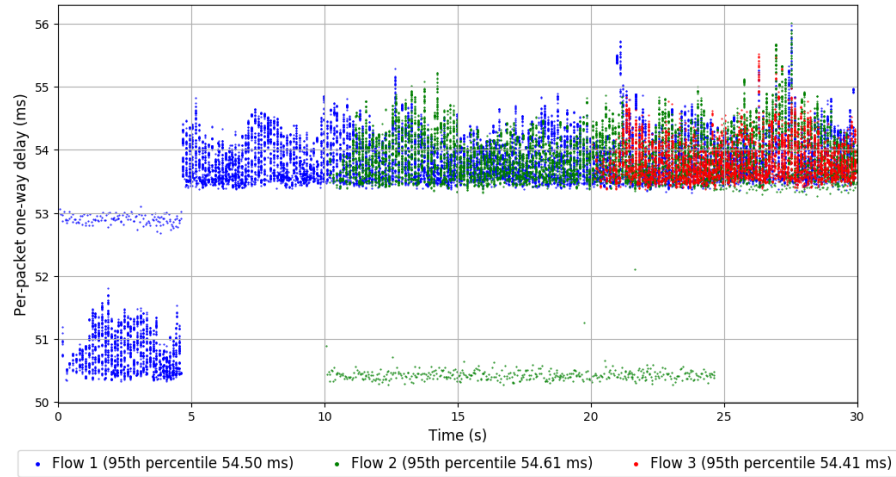
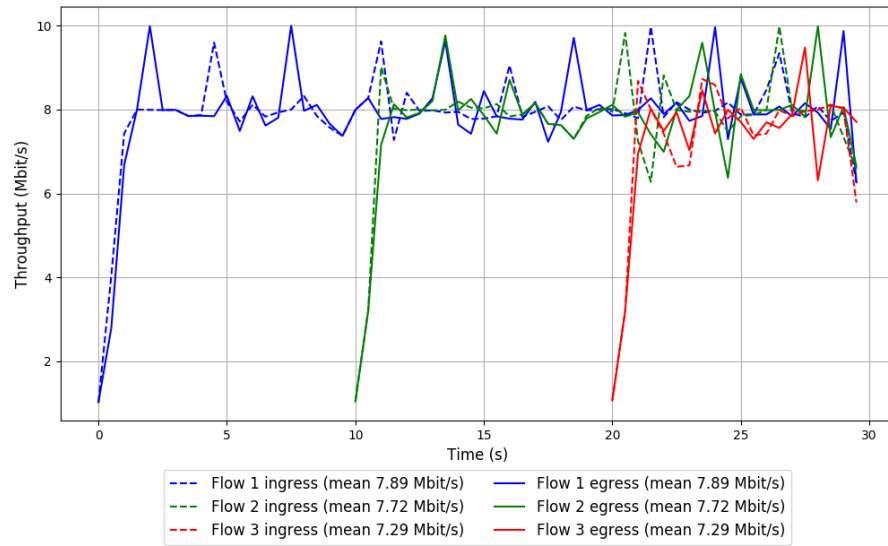
Average throughput: 7.29 Mbit/s

95th percentile per-packet one-way delay: 54.414 ms

Loss rate: 0.00%



### Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-28 23:41:53

End at: 2018-02-28 23:42:23

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.31 Mbit/s

95th percentile per-packet one-way delay: 54.674 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 54.607 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 54.553 ms

Loss rate: 0.00%

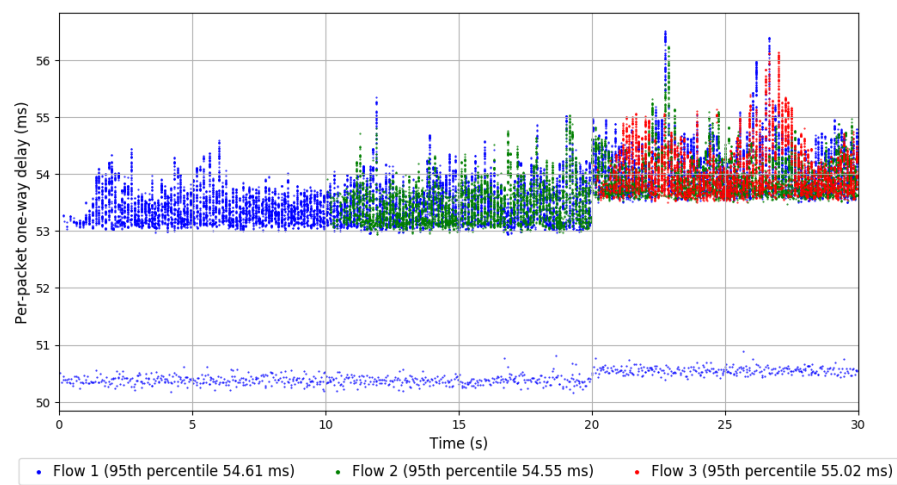
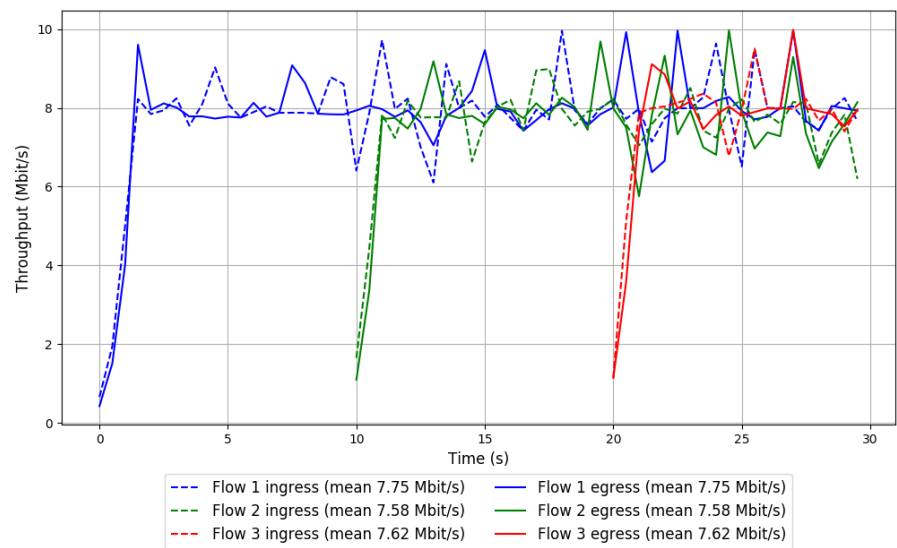
-- Flow 3:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 55.022 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-28 23:59:12

End at: 2018-02-28 23:59:42

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.44 Mbit/s

95th percentile per-packet one-way delay: 54.190 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 54.102 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 54.188 ms

Loss rate: 0.00%

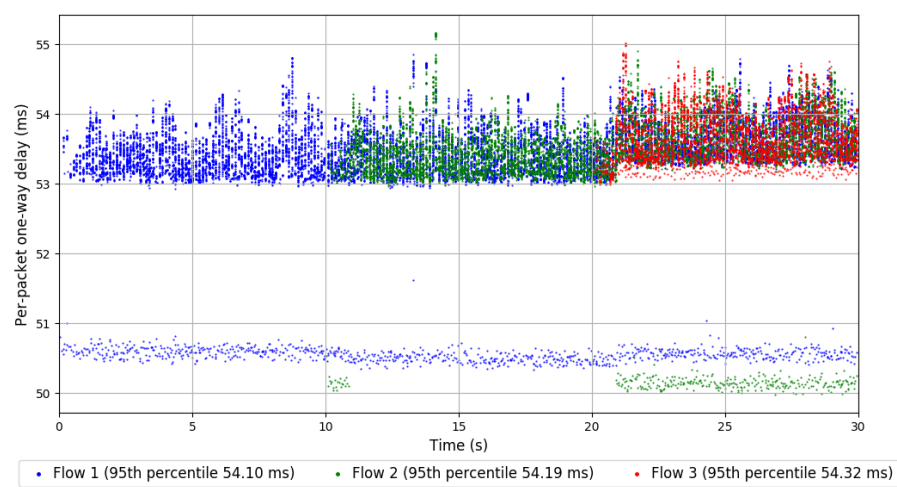
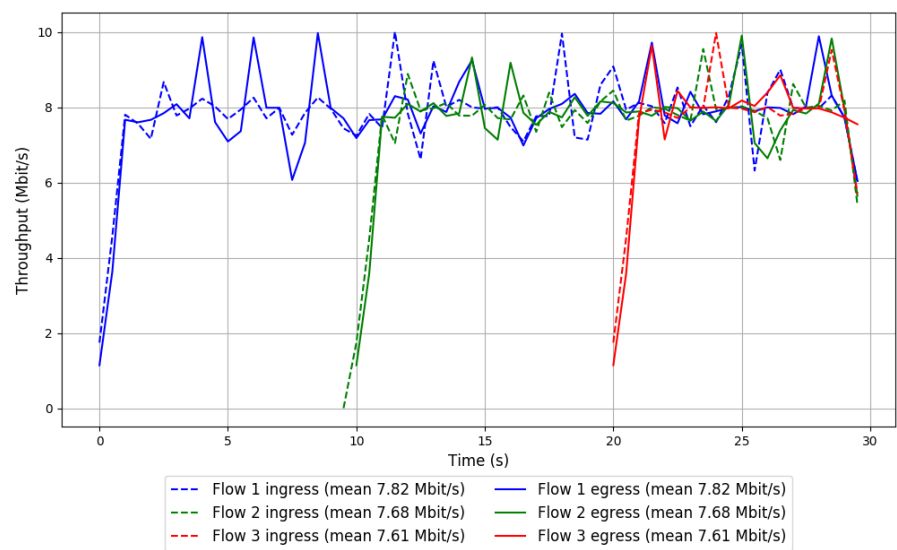
-- Flow 3:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 54.321 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-03-01 00:16:39

End at: 2018-03-01 00:17:09

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.58 Mbit/s

95th percentile per-packet one-way delay: 54.452 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 54.565 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 54.329 ms

Loss rate: 0.00%

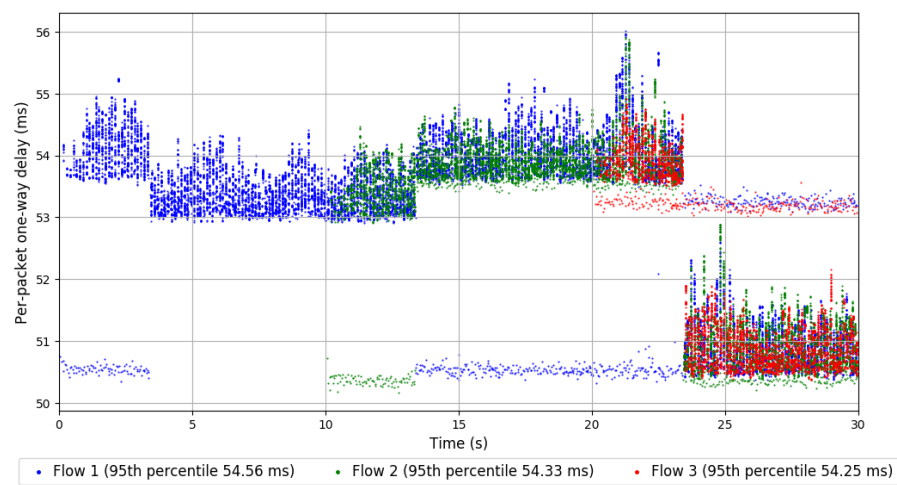
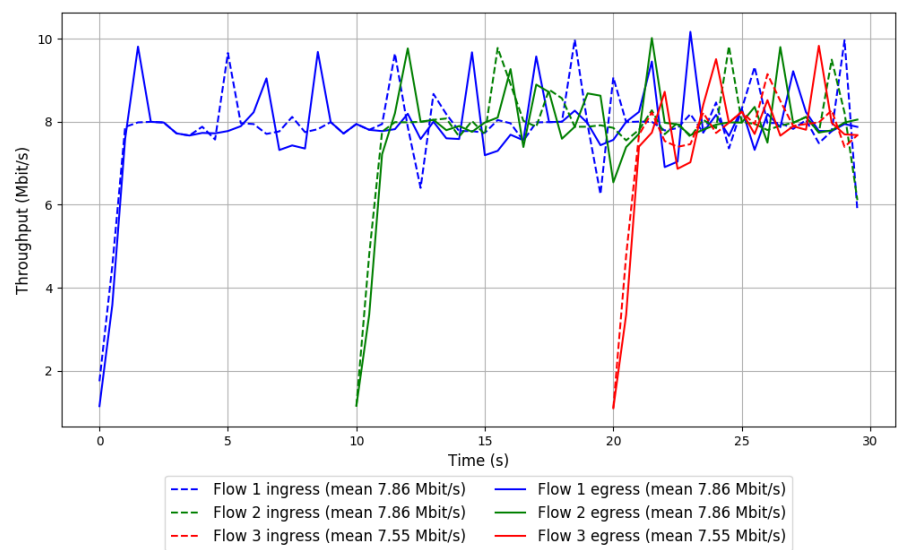
-- Flow 3:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 54.250 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-03-01 00:34:29

End at: 2018-03-01 00:34:59

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.23 Mbit/s

95th percentile per-packet one-way delay: 53.981 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 53.976 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.69 Mbit/s

95th percentile per-packet one-way delay: 53.935 ms

Loss rate: 0.00%

-- Flow 3:

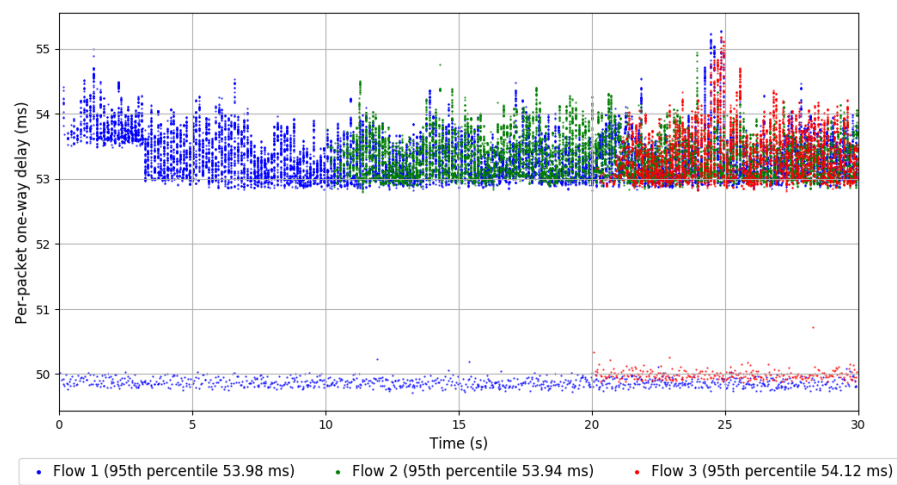
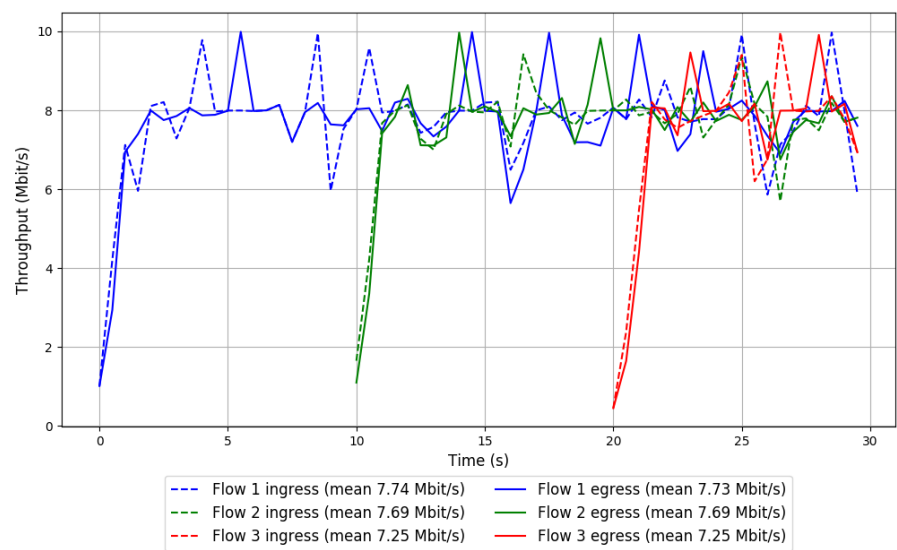
Average throughput: 7.25 Mbit/s

95th percentile per-packet one-way delay: 54.118 ms

Loss rate: 0.00%



Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-03-01 00:52:25

End at: 2018-03-01 00:52:55

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.45 Mbit/s

95th percentile per-packet one-way delay: 53.886 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 53.782 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.66 Mbit/s

95th percentile per-packet one-way delay: 53.949 ms

Loss rate: 0.00%

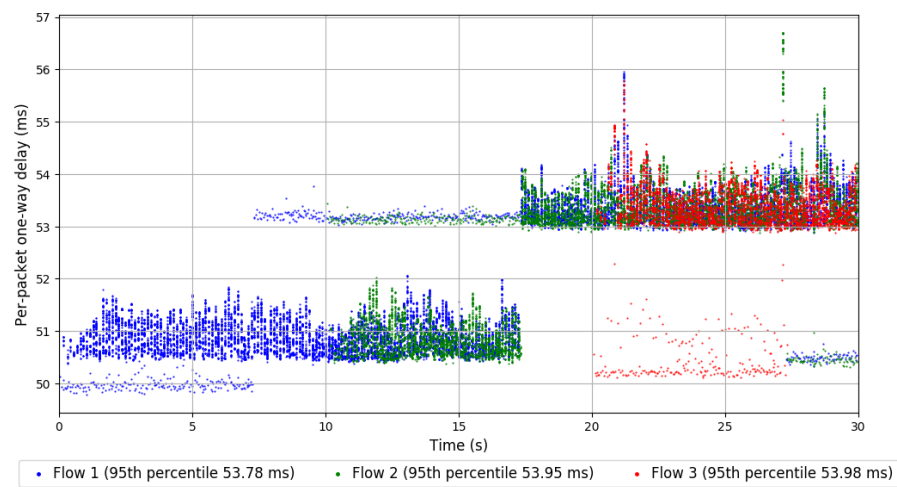
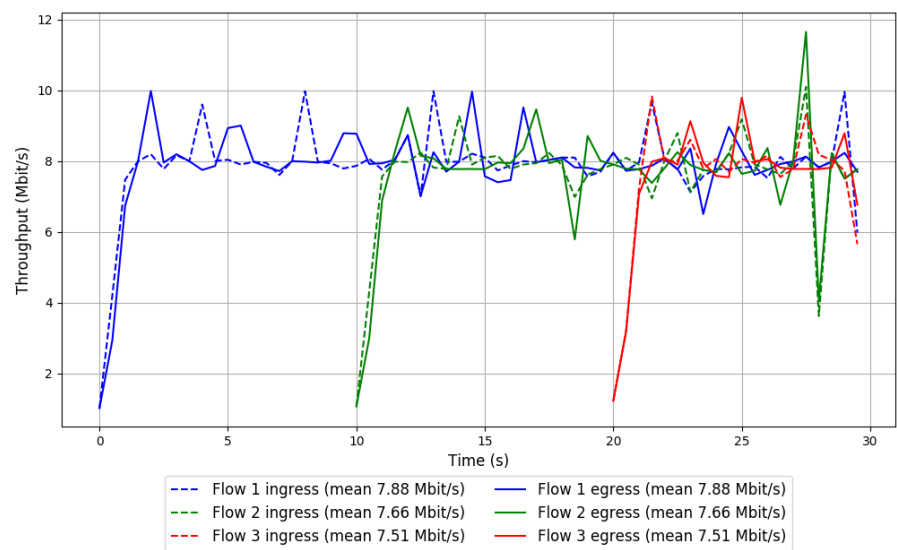
-- Flow 3:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 53.983 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-03-01 01:10:19

End at: 2018-03-01 01:10:49

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.29 Mbit/s

95th percentile per-packet one-way delay: 54.435 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 54.394 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.71 Mbit/s

95th percentile per-packet one-way delay: 54.481 ms

Loss rate: 0.00%

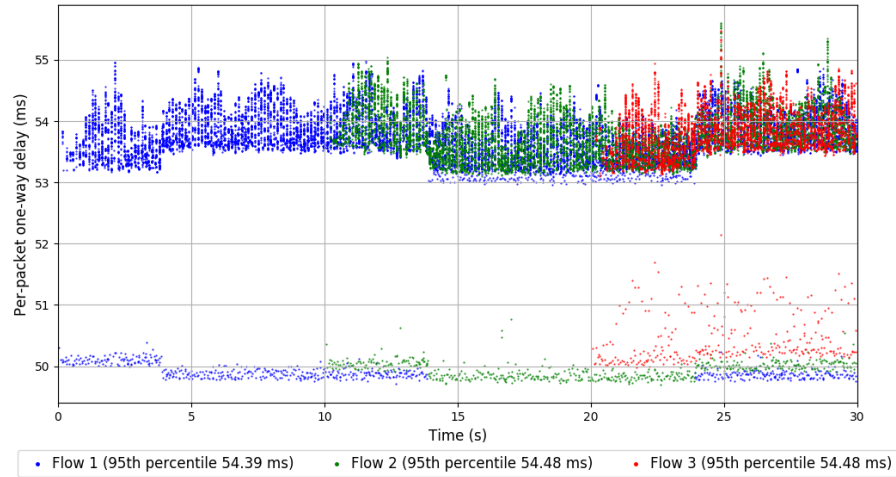
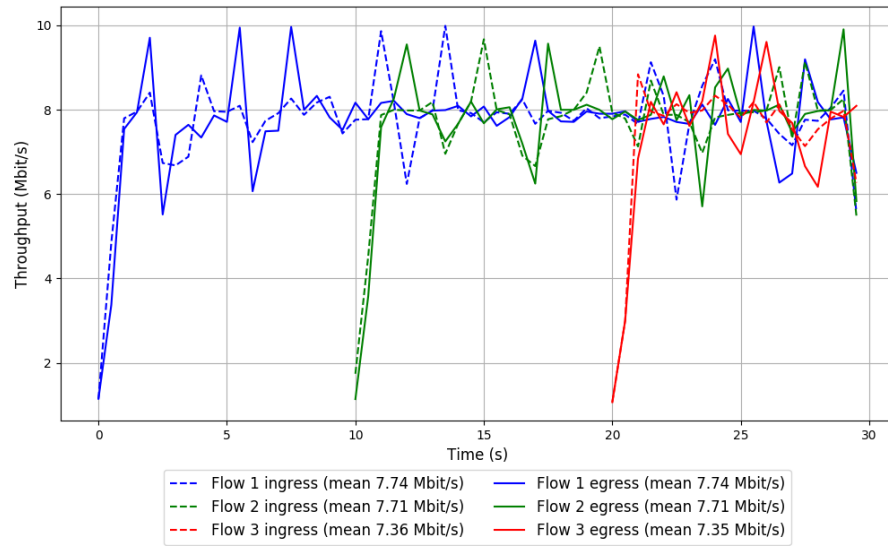
-- Flow 3:

Average throughput: 7.35 Mbit/s

95th percentile per-packet one-way delay: 54.479 ms

Loss rate: 0.00%

## Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-03-01 01:27:44

End at: 2018-03-01 01:28:14

# Below is generated by plot.py at 2018-03-01 05:02:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.32 Mbit/s

95th percentile per-packet one-way delay: 54.206 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 54.140 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 54.226 ms

Loss rate: 0.00%

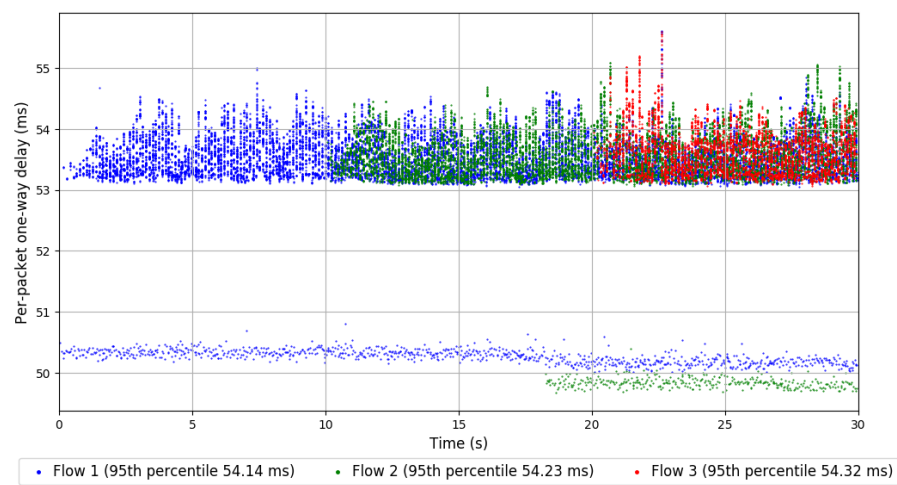
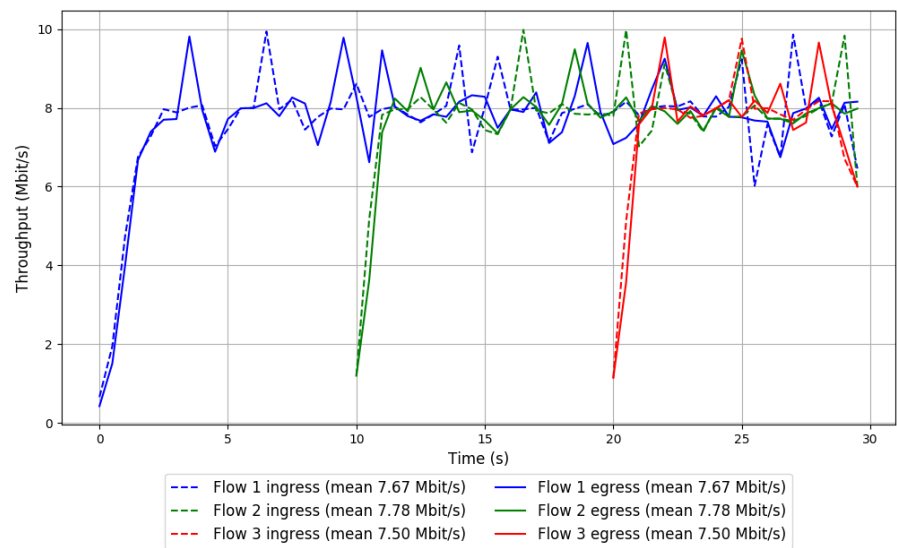
-- Flow 3:

Average throughput: 7.50 Mbit/s

95th percentile per-packet one-way delay: 54.316 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link



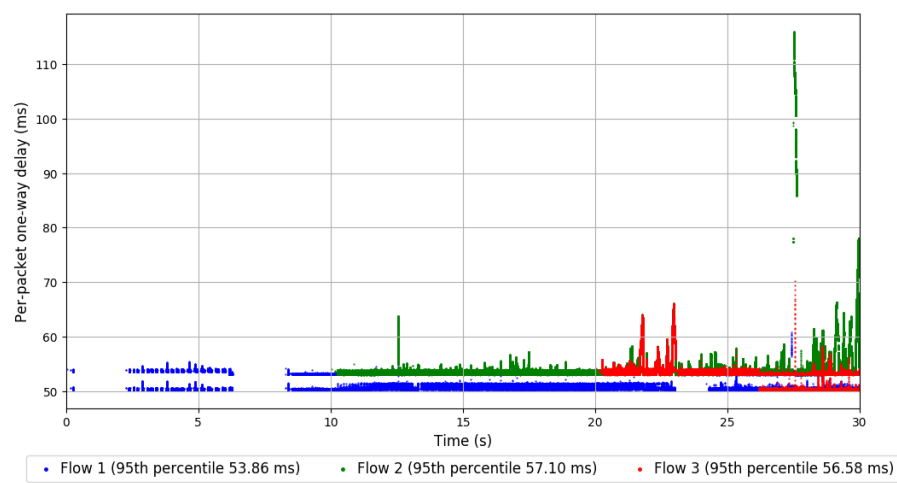
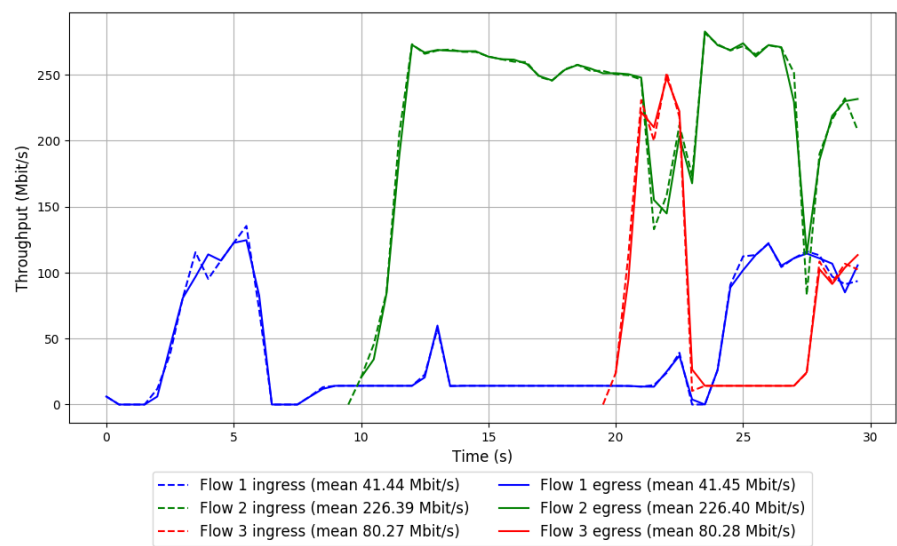
```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-28 22:53:46
End at: 2018-02-28 22:54:16

# Below is generated by plot.py at 2018-03-01 05:04:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 218.96 Mbit/s
95th percentile per-packet one-way delay: 56.206 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.45 Mbit/s
95th percentile per-packet one-way delay: 53.859 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 226.40 Mbit/s
95th percentile per-packet one-way delay: 57.099 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 80.28 Mbit/s
95th percentile per-packet one-way delay: 56.582 ms
Loss rate: 0.00%
```



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

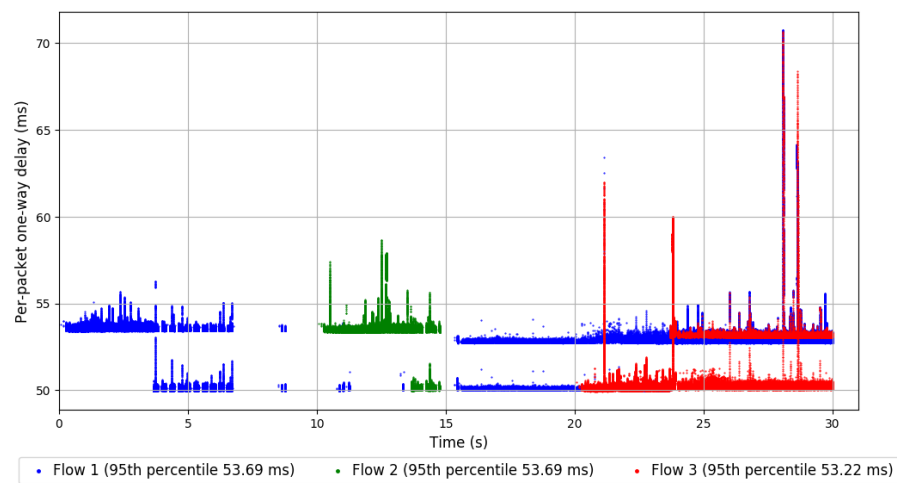
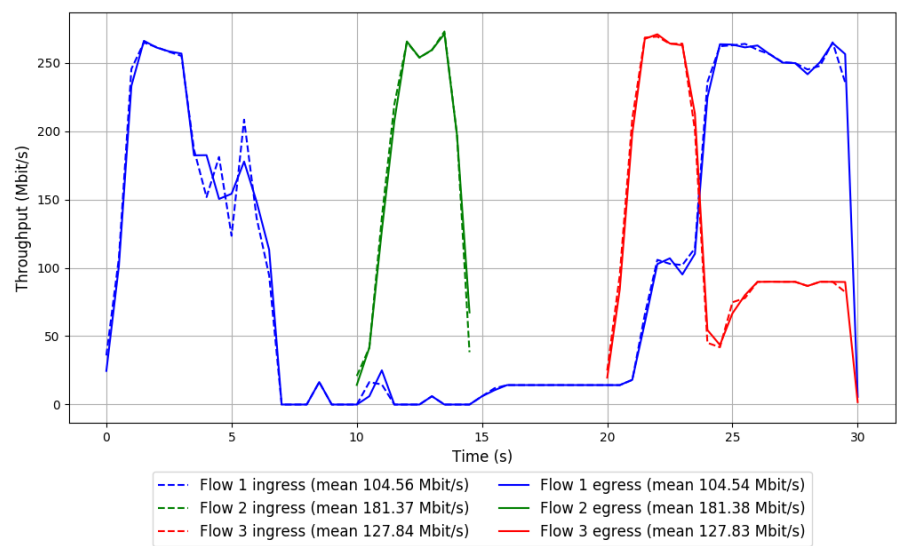


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-28 23:11:39
End at: 2018-02-28 23:12:09

# Below is generated by plot.py at 2018-03-01 05:04:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 175.42 Mbit/s
95th percentile per-packet one-way delay: 53.668 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 104.54 Mbit/s
95th percentile per-packet one-way delay: 53.687 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 181.38 Mbit/s
95th percentile per-packet one-way delay: 53.691 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 127.83 Mbit/s
95th percentile per-packet one-way delay: 53.223 ms
Loss rate: 0.02%
```

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

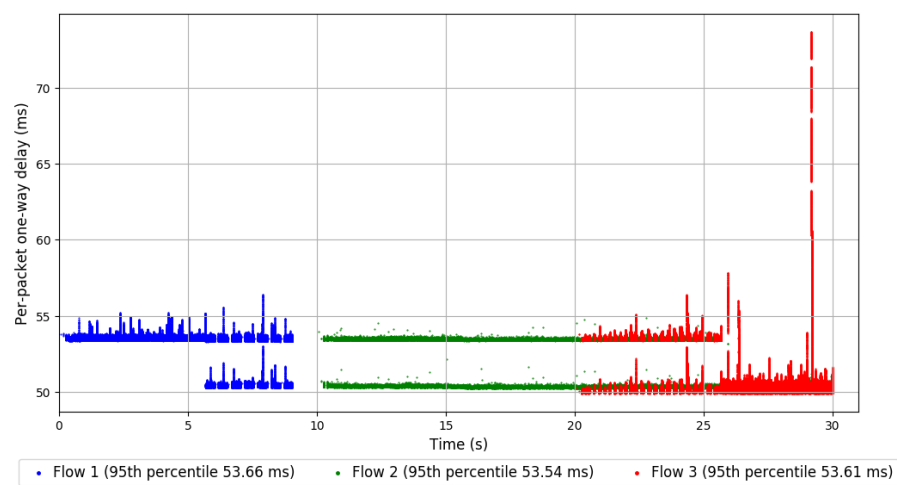
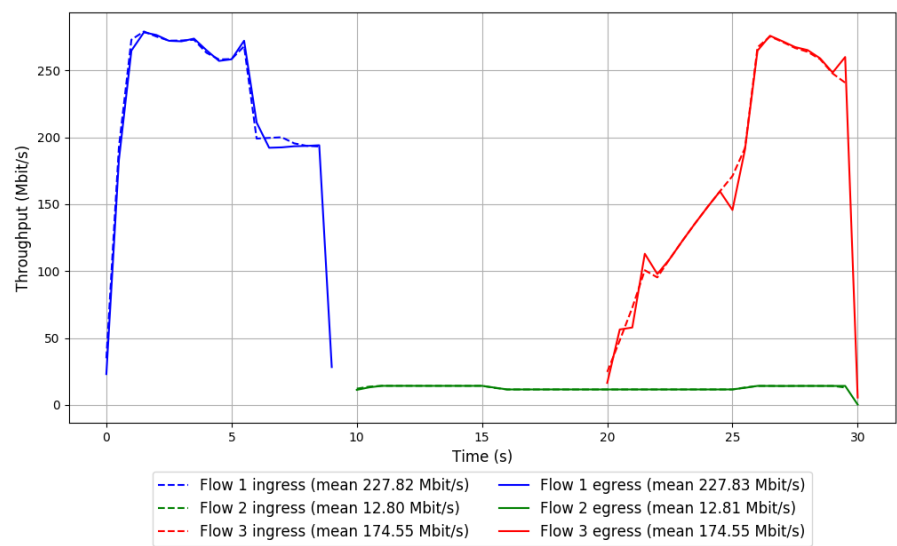


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-28 23:29:27
End at: 2018-02-28 23:29:57

# Below is generated by plot.py at 2018-03-01 05:04:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 134.88 Mbit/s
95th percentile per-packet one-way delay: 53.639 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 227.83 Mbit/s
95th percentile per-packet one-way delay: 53.655 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 12.81 Mbit/s
95th percentile per-packet one-way delay: 53.544 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 174.55 Mbit/s
95th percentile per-packet one-way delay: 53.609 ms
Loss rate: 0.00%
```

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

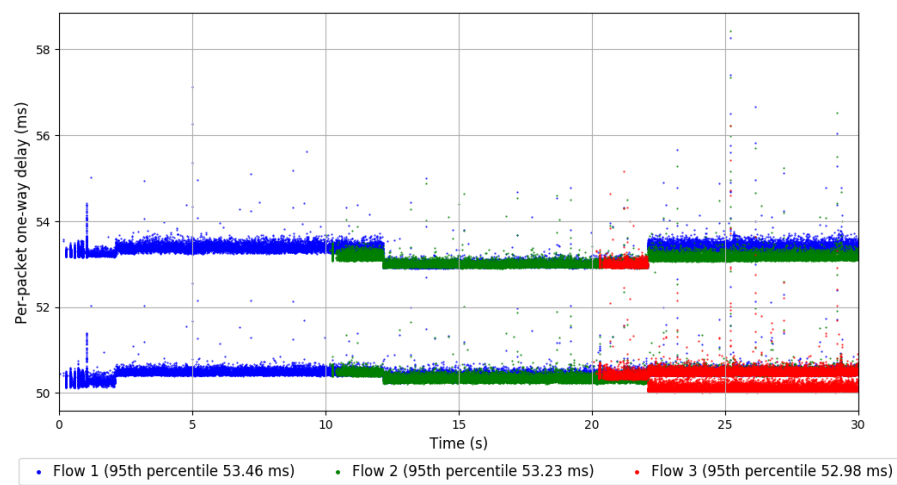
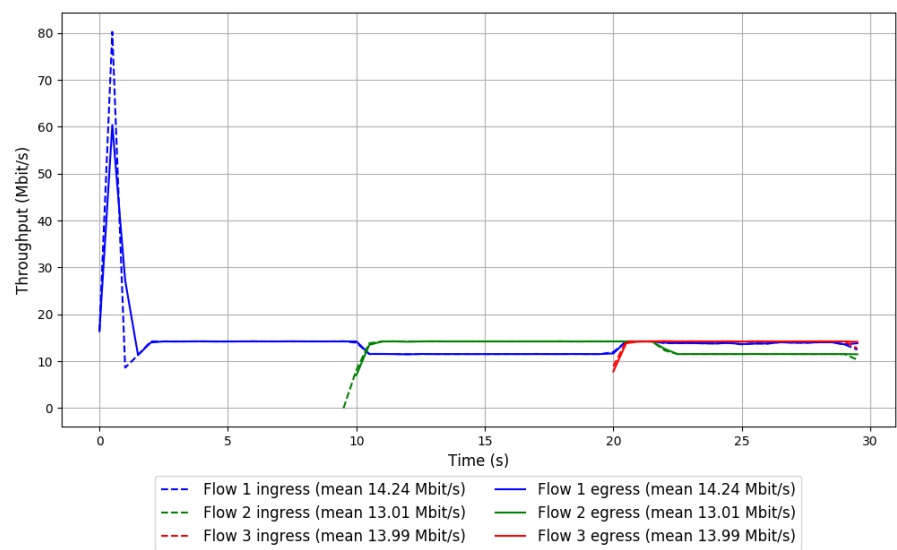


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-28 23:47:01
End at: 2018-02-28 23:47:31

# Below is generated by plot.py at 2018-03-01 05:04:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.54 Mbit/s
95th percentile per-packet one-way delay: 53.414 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 14.24 Mbit/s
95th percentile per-packet one-way delay: 53.463 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 13.01 Mbit/s
95th percentile per-packet one-way delay: 53.235 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.99 Mbit/s
95th percentile per-packet one-way delay: 52.975 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-03-01 00:04:20

End at: 2018-03-01 00:04:50

# Below is generated by plot.py at 2018-03-01 05:04:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 25.15 Mbit/s

95th percentile per-packet one-way delay: 53.259 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 12.59 Mbit/s

95th percentile per-packet one-way delay: 53.225 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 13.11 Mbit/s

95th percentile per-packet one-way delay: 53.291 ms

Loss rate: 0.01%

-- Flow 3:

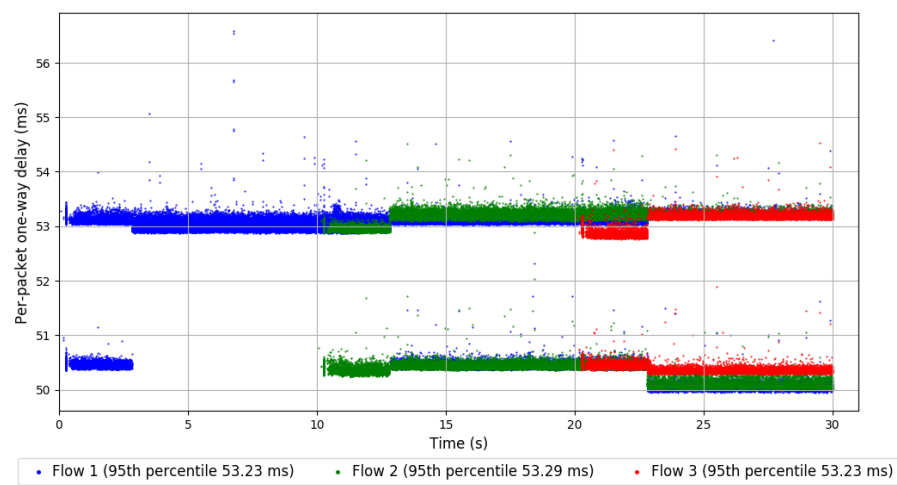
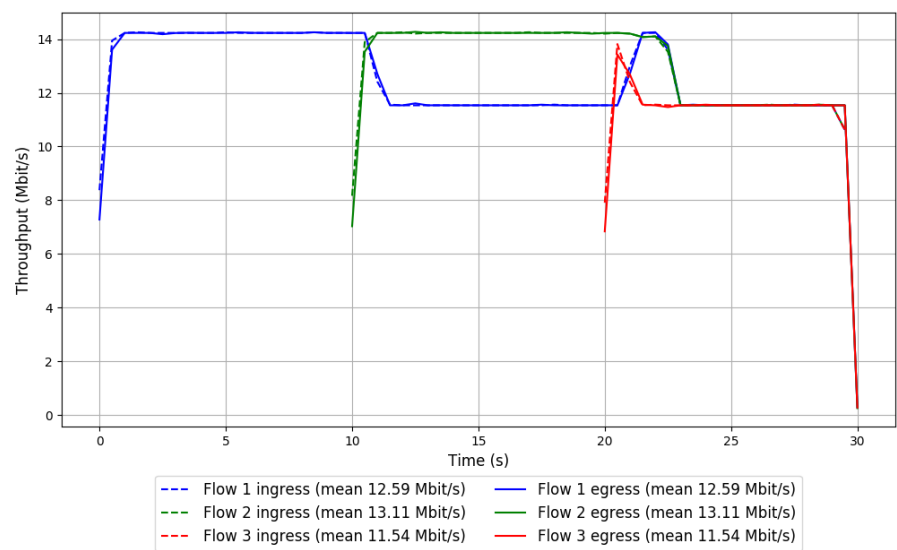
Average throughput: 11.54 Mbit/s

95th percentile per-packet one-way delay: 53.235 ms

Loss rate: 0.02%



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



Run 6: Statistics of TaoVA-100x

Start at: 2018-03-01 00:21:50

End at: 2018-03-01 00:22:20

# Below is generated by plot.py at 2018-03-01 05:04:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 126.22 Mbit/s

95th percentile per-packet one-way delay: 53.638 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 42.79 Mbit/s

95th percentile per-packet one-way delay: 53.616 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 11.74 Mbit/s

95th percentile per-packet one-way delay: 54.495 ms

Loss rate: 0.02%

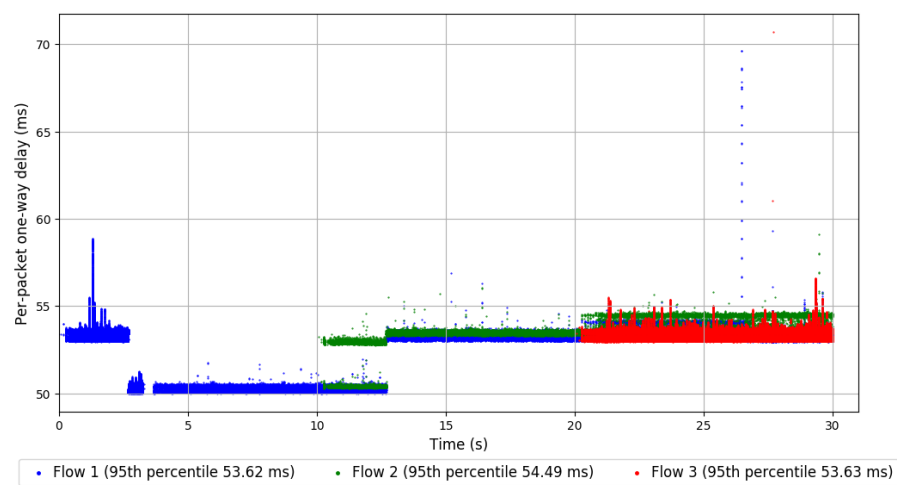
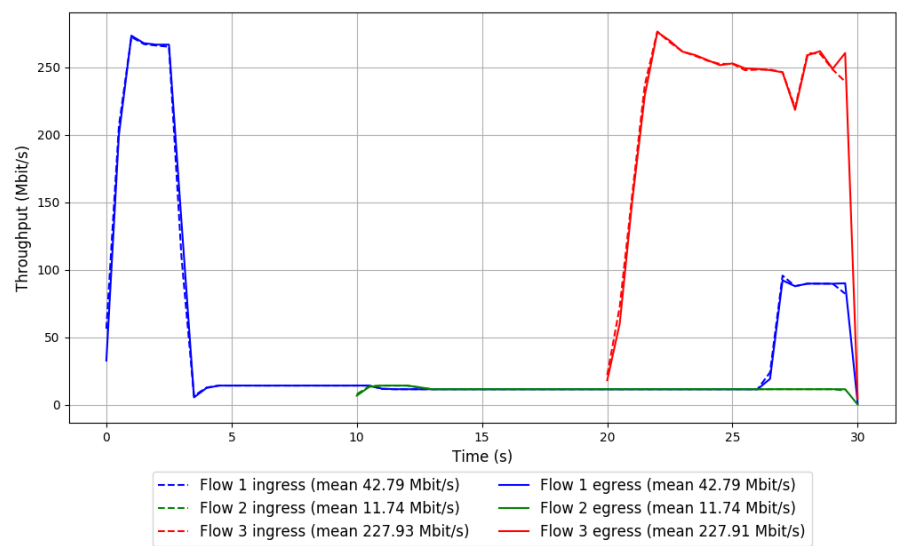
-- Flow 3:

Average throughput: 227.91 Mbit/s

95th percentile per-packet one-way delay: 53.627 ms

Loss rate: 0.04%

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

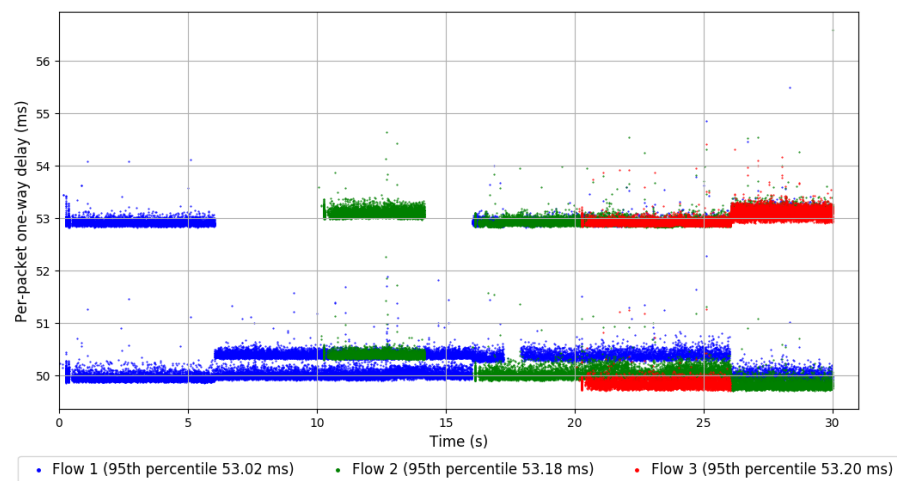
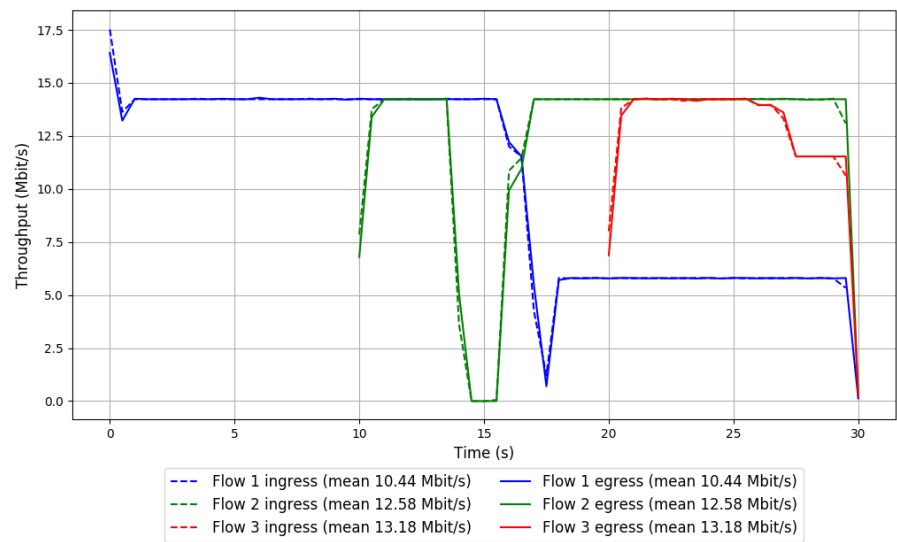


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-03-01 00:39:37
End at: 2018-03-01 00:40:07

# Below is generated by plot.py at 2018-03-01 05:04:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.19 Mbit/s
95th percentile per-packet one-way delay: 53.160 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 10.44 Mbit/s
95th percentile per-packet one-way delay: 53.017 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 12.58 Mbit/s
95th percentile per-packet one-way delay: 53.176 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 13.18 Mbit/s
95th percentile per-packet one-way delay: 53.197 ms
Loss rate: 0.02%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-03-01 00:57:36

End at: 2018-03-01 00:58:06

# Below is generated by plot.py at 2018-03-01 05:05:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 203.03 Mbit/s

95th percentile per-packet one-way delay: 55.862 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 16.14 Mbit/s

95th percentile per-packet one-way delay: 53.040 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 205.94 Mbit/s

95th percentile per-packet one-way delay: 53.137 ms

Loss rate: 0.01%

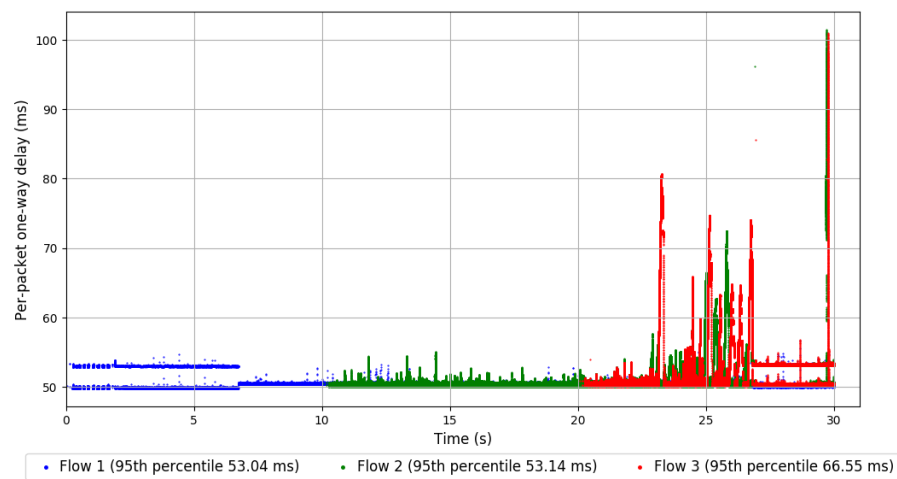
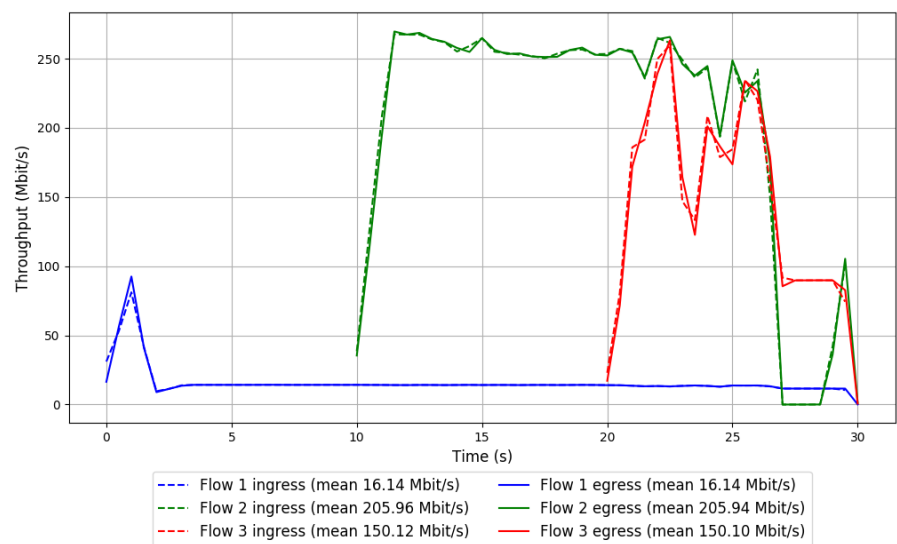
-- Flow 3:

Average throughput: 150.10 Mbit/s

95th percentile per-packet one-way delay: 66.548 ms

Loss rate: 0.01%

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



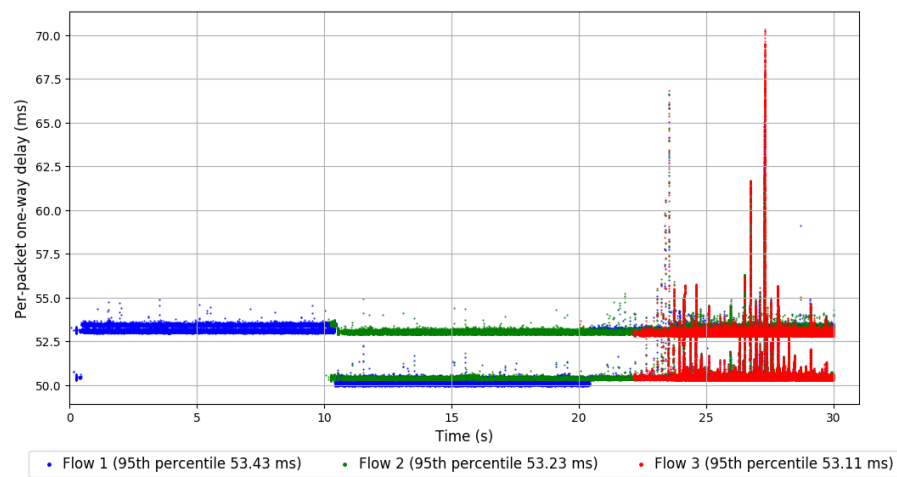
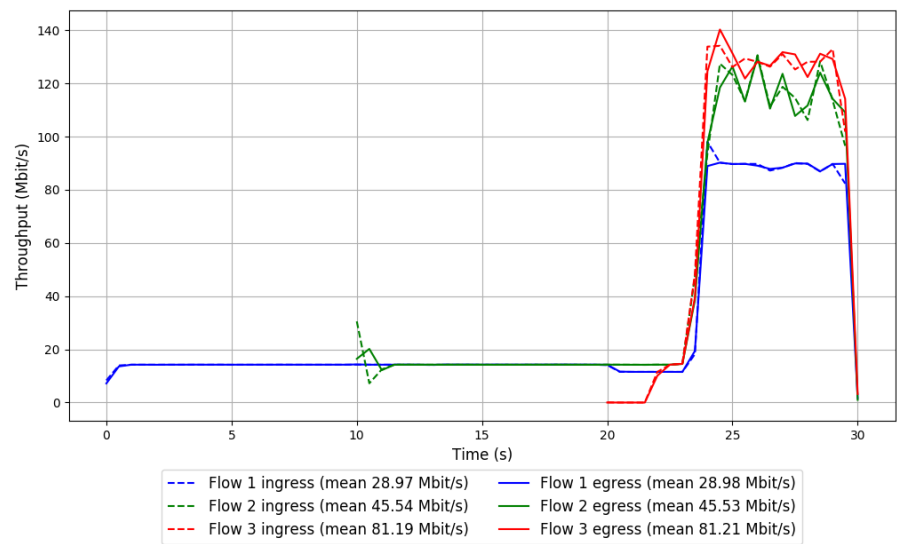
```
Run 9: Statistics of TaoVA-100x

Start at: 2018-03-01 01:15:32
End at: 2018-03-01 01:16:02

# Below is generated by plot.py at 2018-03-01 05:05:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.23 Mbit/s
95th percentile per-packet one-way delay: 53.356 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 28.98 Mbit/s
95th percentile per-packet one-way delay: 53.430 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.53 Mbit/s
95th percentile per-packet one-way delay: 53.235 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 81.21 Mbit/s
95th percentile per-packet one-way delay: 53.111 ms
Loss rate: 0.01%
```



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

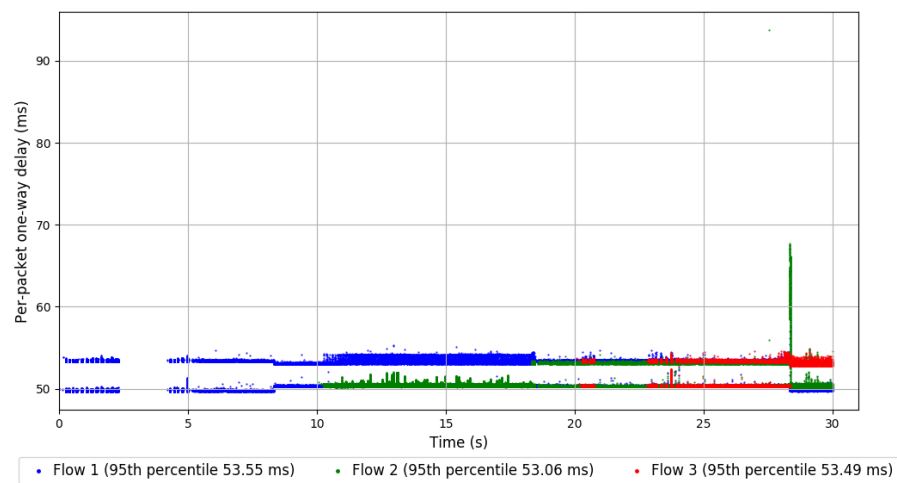
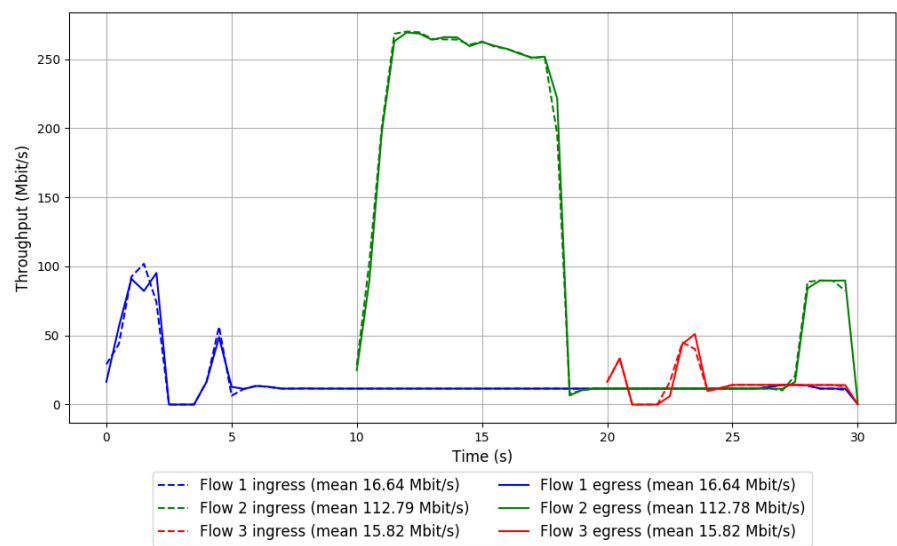


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-03-01 01:32:54
End at: 2018-03-01 01:33:24

# Below is generated by plot.py at 2018-03-01 05:05:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.98 Mbit/s
95th percentile per-packet one-way delay: 53.402 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 16.64 Mbit/s
95th percentile per-packet one-way delay: 53.554 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 112.78 Mbit/s
95th percentile per-packet one-way delay: 53.061 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 15.82 Mbit/s
95th percentile per-packet one-way delay: 53.492 ms
Loss rate: 0.02%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-28 22:54:45

End at: 2018-02-28 22:55:15

# Below is generated by plot.py at 2018-03-01 05:06:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 268.41 Mbit/s

95th percentile per-packet one-way delay: 59.807 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 139.94 Mbit/s

95th percentile per-packet one-way delay: 54.866 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 122.76 Mbit/s

95th percentile per-packet one-way delay: 61.464 ms

Loss rate: 0.00%

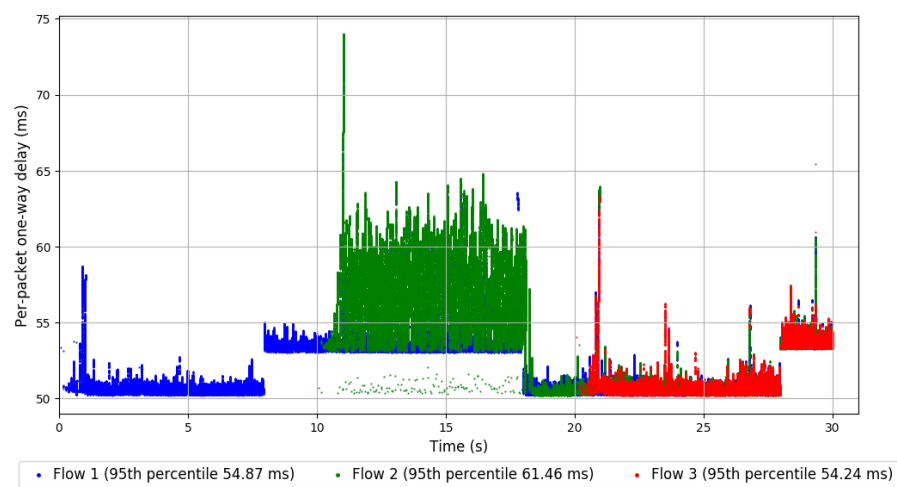
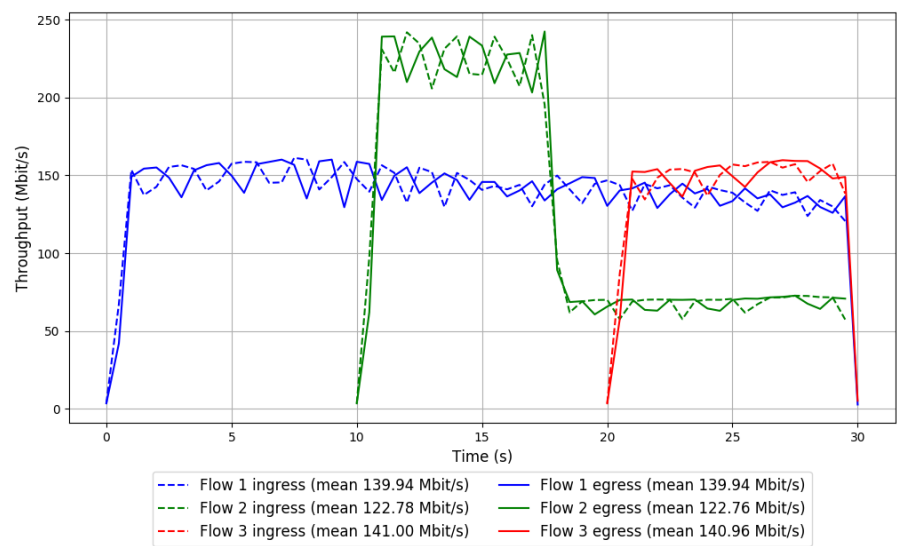
-- Flow 3:

Average throughput: 140.96 Mbit/s

95th percentile per-packet one-way delay: 54.241 ms

Loss rate: 0.06%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-28 23:12:33

End at: 2018-02-28 23:13:03

# Below is generated by plot.py at 2018-03-01 05:06:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 179.41 Mbit/s

95th percentile per-packet one-way delay: 61.997 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.59 Mbit/s

95th percentile per-packet one-way delay: 61.912 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.29 Mbit/s

95th percentile per-packet one-way delay: 62.510 ms

Loss rate: 0.00%

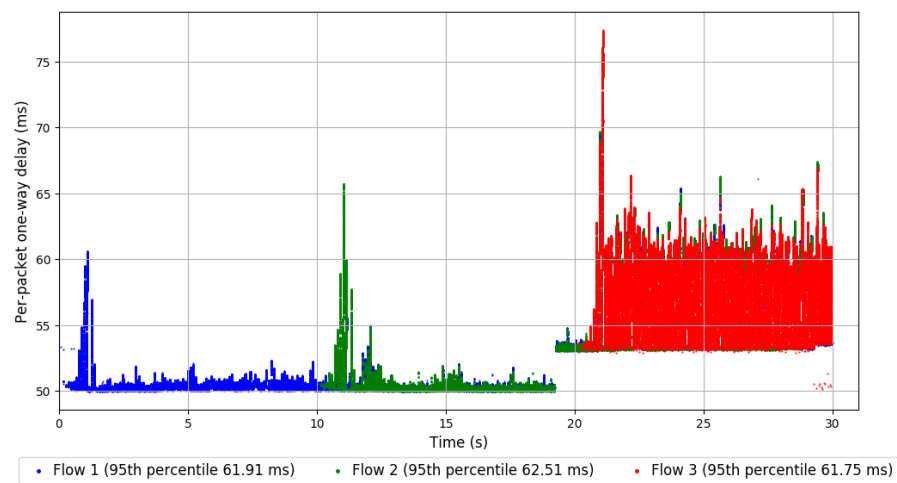
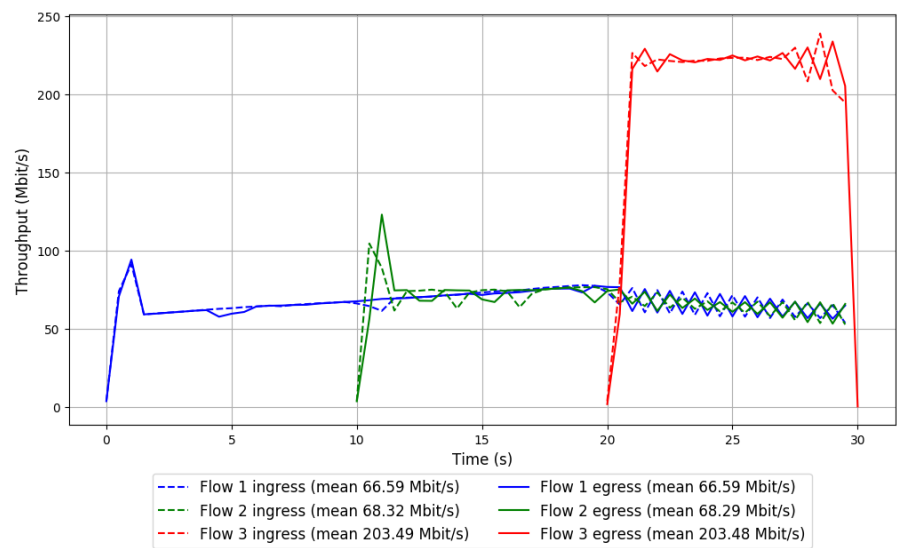
-- Flow 3:

Average throughput: 203.48 Mbit/s

95th percentile per-packet one-way delay: 61.754 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-28 23:30:17

End at: 2018-02-28 23:30:47

# Below is generated by plot.py at 2018-03-01 05:06:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 239.87 Mbit/s

95th percentile per-packet one-way delay: 60.505 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 216.34 Mbit/s

95th percentile per-packet one-way delay: 60.548 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 9.72 Mbit/s

95th percentile per-packet one-way delay: 60.056 ms

Loss rate: 0.09%

-- Flow 3:

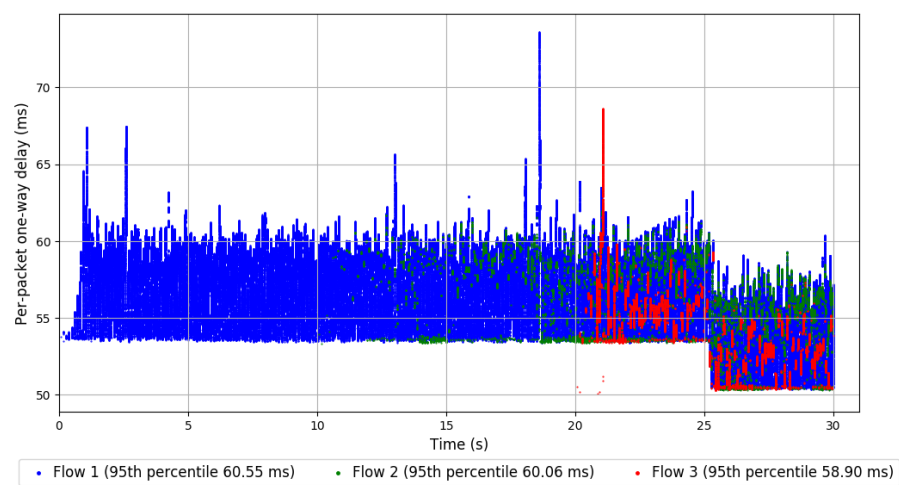
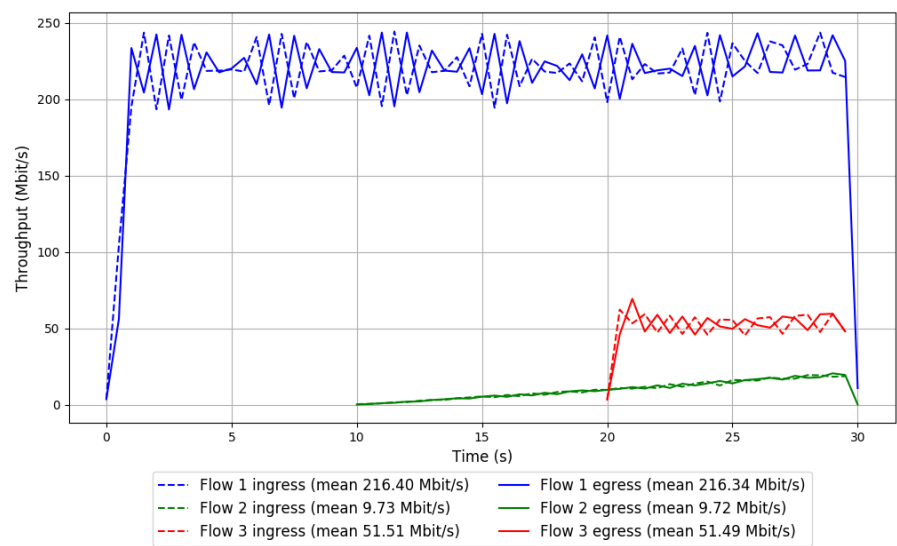
Average throughput: 51.49 Mbit/s

95th percentile per-packet one-way delay: 58.895 ms

Loss rate: 0.00%



Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-28 23:47:43

End at: 2018-02-28 23:48:13

# Below is generated by plot.py at 2018-03-01 05:06:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 130.05 Mbit/s

95th percentile per-packet one-way delay: 54.829 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 92.95 Mbit/s

95th percentile per-packet one-way delay: 54.634 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.35 Mbit/s

95th percentile per-packet one-way delay: 54.651 ms

Loss rate: 0.00%

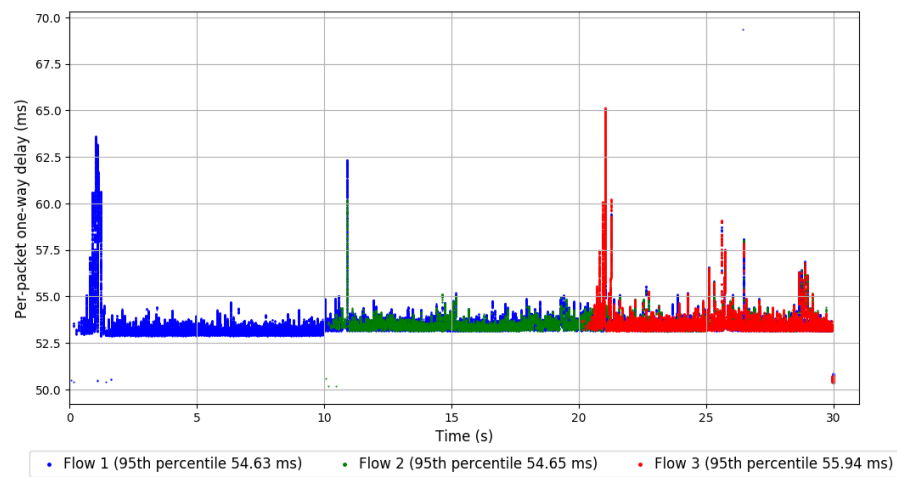
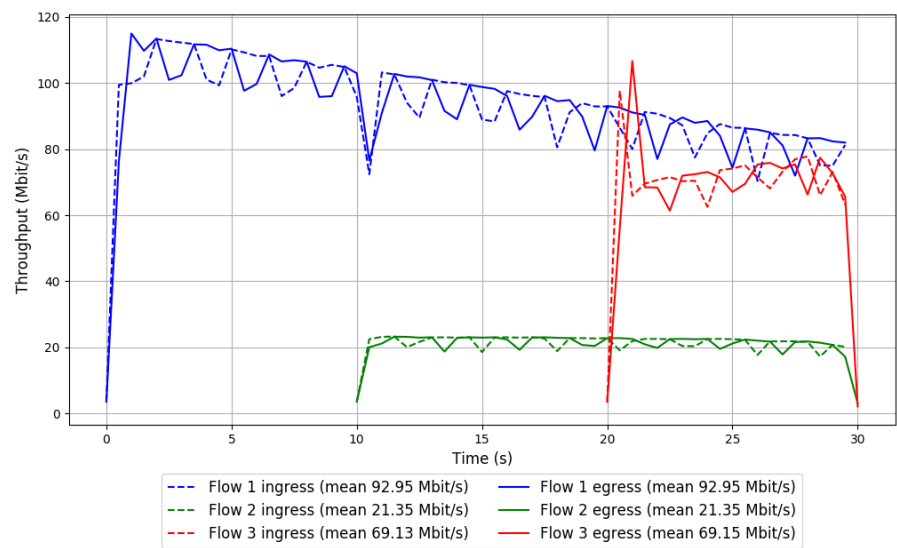
-- Flow 3:

Average throughput: 69.15 Mbit/s

95th percentile per-packet one-way delay: 55.937 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-03-01 00:05:02

End at: 2018-03-01 00:05:32

# Below is generated by plot.py at 2018-03-01 05:07:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 252.54 Mbit/s

95th percentile per-packet one-way delay: 61.279 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 95.74 Mbit/s

95th percentile per-packet one-way delay: 60.974 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 133.64 Mbit/s

95th percentile per-packet one-way delay: 61.882 ms

Loss rate: 0.05%

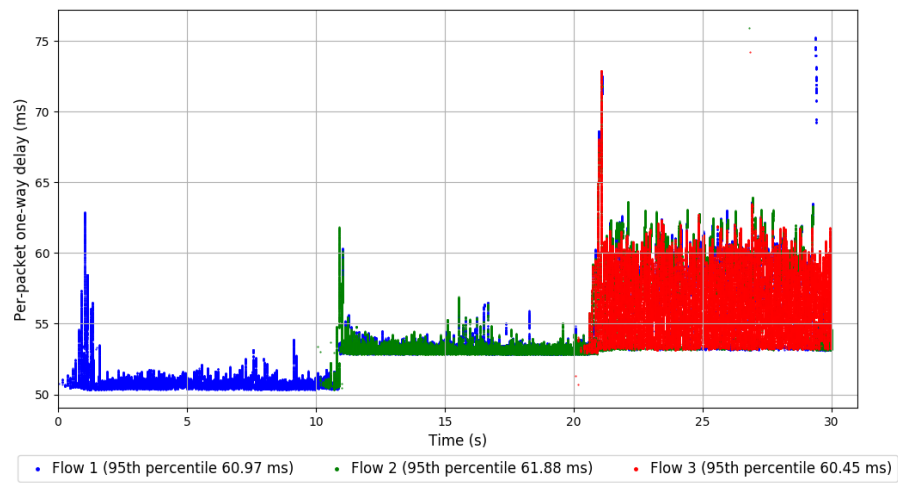
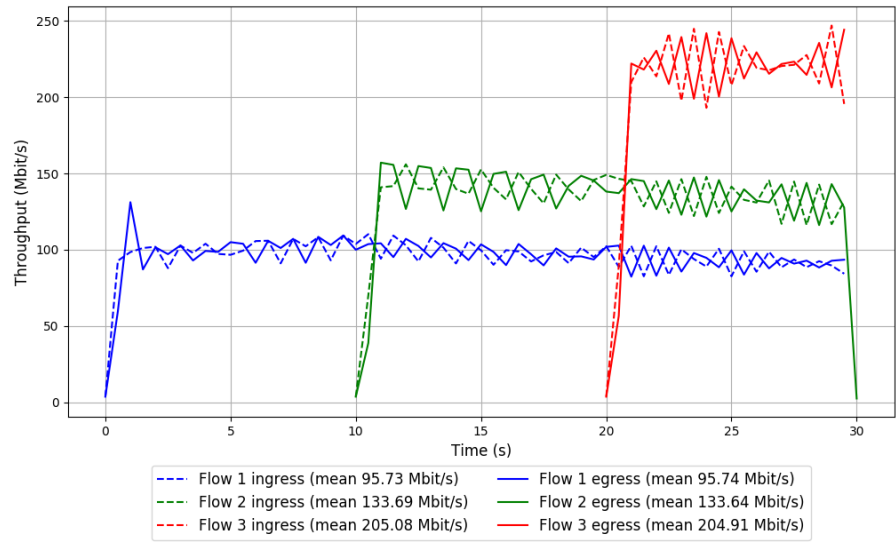
-- Flow 3:

Average throughput: 204.91 Mbit/s

95th percentile per-packet one-way delay: 60.455 ms

Loss rate: 0.00%

# Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-03-01 00:22:41

End at: 2018-03-01 00:23:11

# Below is generated by plot.py at 2018-03-01 05:08:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 223.29 Mbit/s

95th percentile per-packet one-way delay: 60.311 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.42 Mbit/s

95th percentile per-packet one-way delay: 60.525 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 219.76 Mbit/s

95th percentile per-packet one-way delay: 60.166 ms

Loss rate: 0.00%

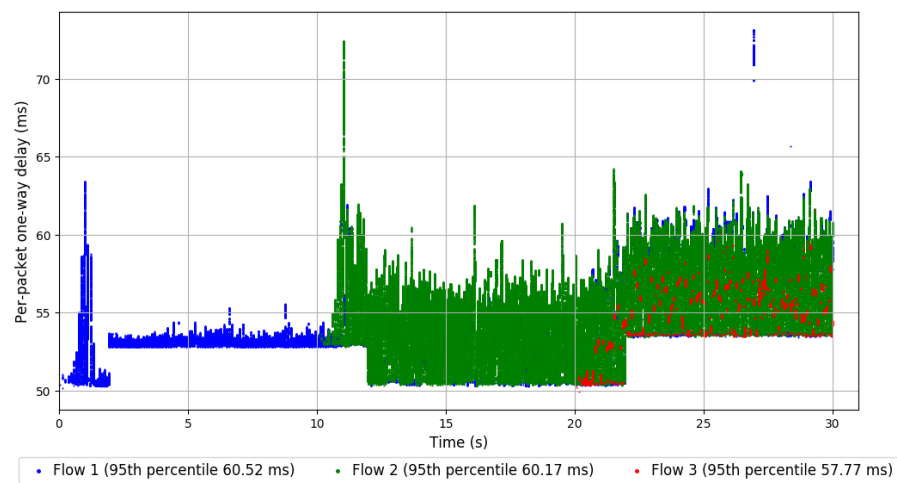
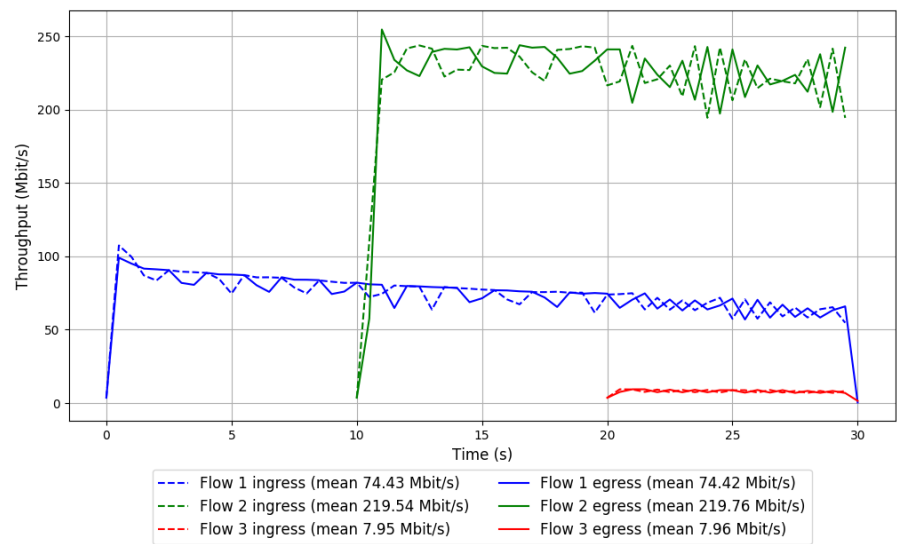
-- Flow 3:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 57.765 ms

Loss rate: 0.02%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-03-01 00:40:18

End at: 2018-03-01 00:40:48

# Below is generated by plot.py at 2018-03-01 05:08:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 103.90 Mbit/s

95th percentile per-packet one-way delay: 53.641 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.10 Mbit/s

95th percentile per-packet one-way delay: 54.255 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.28 Mbit/s

95th percentile per-packet one-way delay: 53.311 ms

Loss rate: 0.00%

-- Flow 3:

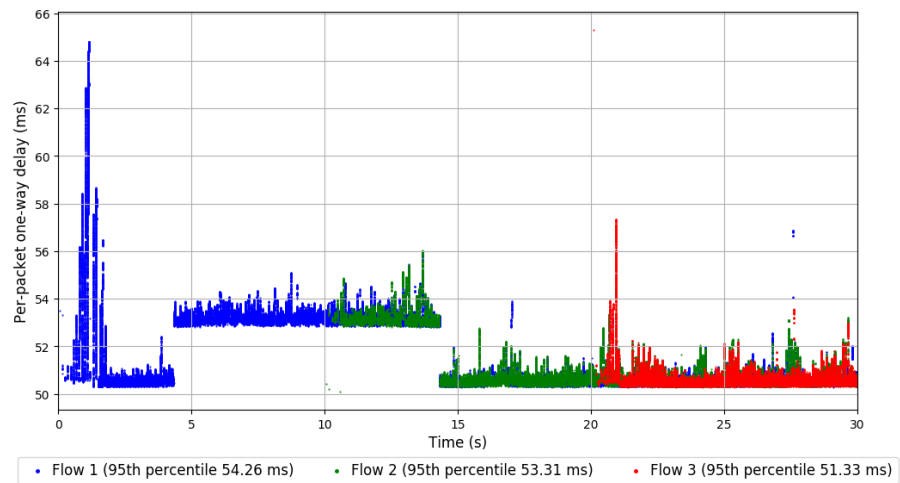
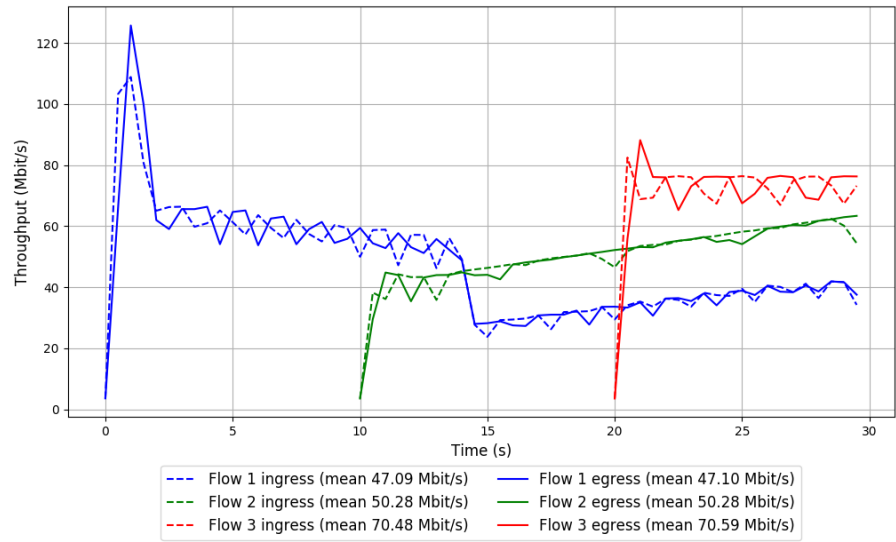
Average throughput: 70.59 Mbit/s

95th percentile per-packet one-way delay: 51.330 ms

Loss rate: 0.00%



# Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-03-01 00:58:34

End at: 2018-03-01 00:59:04

# Below is generated by plot.py at 2018-03-01 05:08:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 188.90 Mbit/s

95th percentile per-packet one-way delay: 54.755 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 77.84 Mbit/s

95th percentile per-packet one-way delay: 54.830 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 141.72 Mbit/s

95th percentile per-packet one-way delay: 54.466 ms

Loss rate: 0.00%

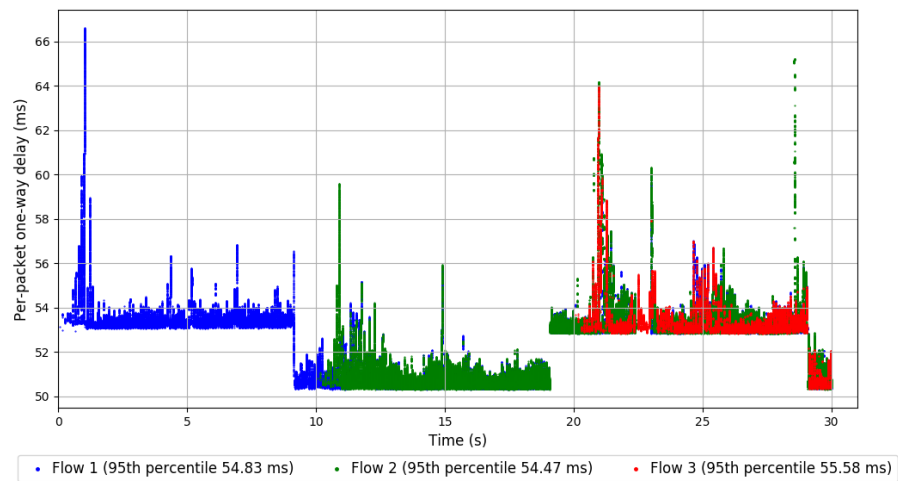
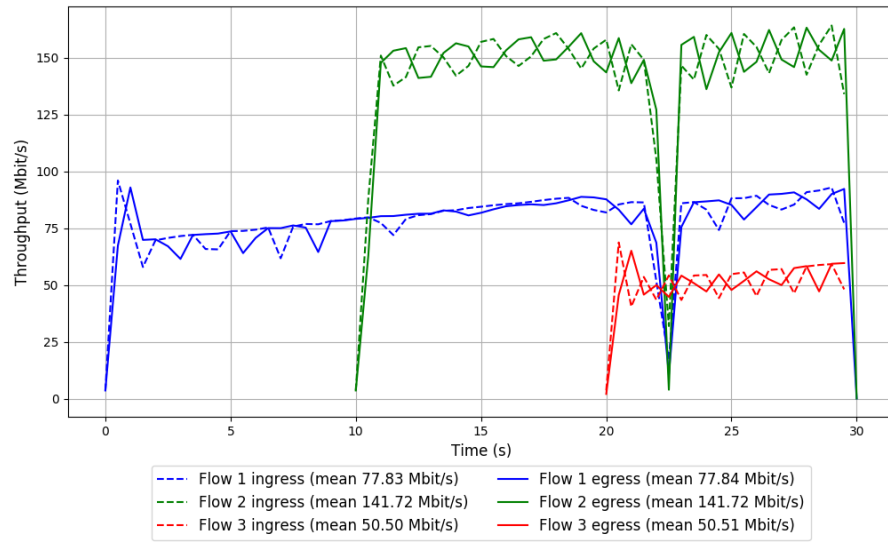
-- Flow 3:

Average throughput: 50.51 Mbit/s

95th percentile per-packet one-way delay: 55.582 ms

Loss rate: 0.00%

# Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-03-01 01:16:19

End at: 2018-03-01 01:16:49

# Below is generated by plot.py at 2018-03-01 05:08:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 105.46 Mbit/s

95th percentile per-packet one-way delay: 53.903 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.81 Mbit/s

95th percentile per-packet one-way delay: 53.867 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 12.27 Mbit/s

95th percentile per-packet one-way delay: 52.298 ms

Loss rate: 0.00%

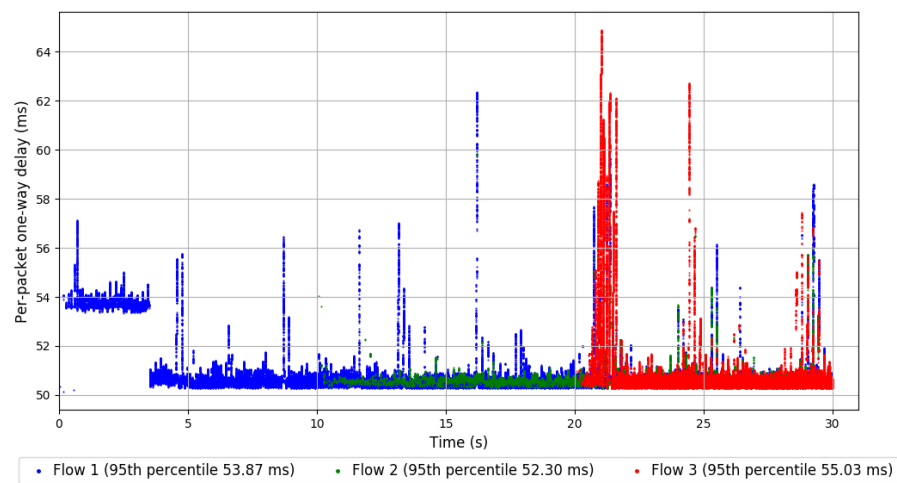
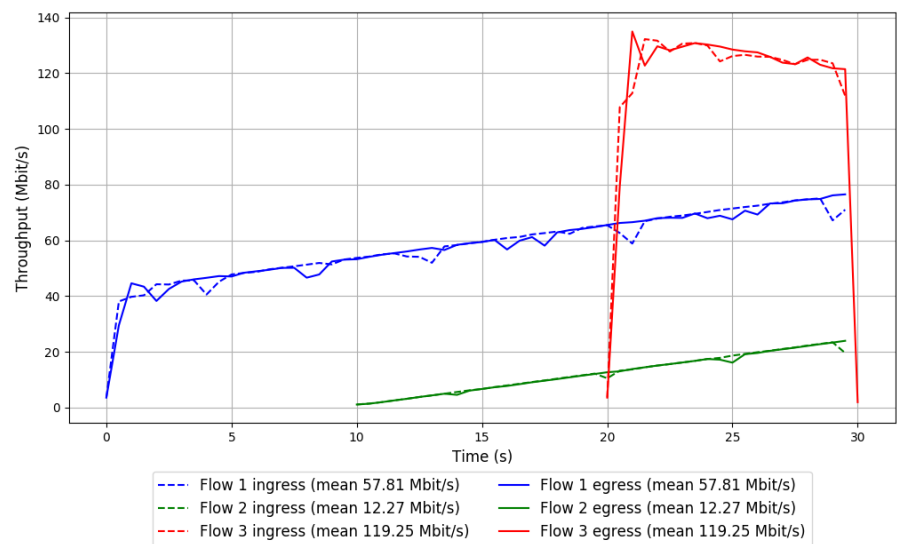
-- Flow 3:

Average throughput: 119.25 Mbit/s

95th percentile per-packet one-way delay: 55.032 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-03-01 01:33:42

End at: 2018-03-01 01:34:12

# Below is generated by plot.py at 2018-03-01 05:08:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 111.76 Mbit/s

95th percentile per-packet one-way delay: 53.964 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 13.10 Mbit/s

95th percentile per-packet one-way delay: 53.991 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 143.27 Mbit/s

95th percentile per-packet one-way delay: 53.954 ms

Loss rate: 0.00%

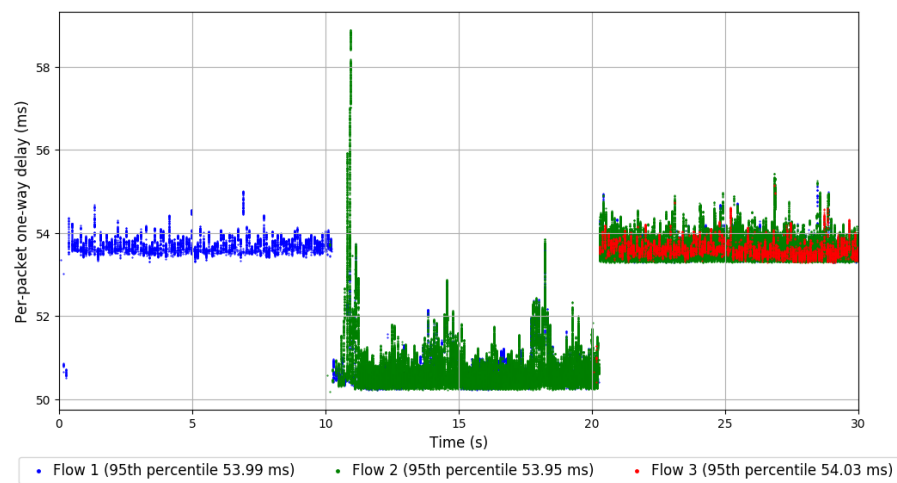
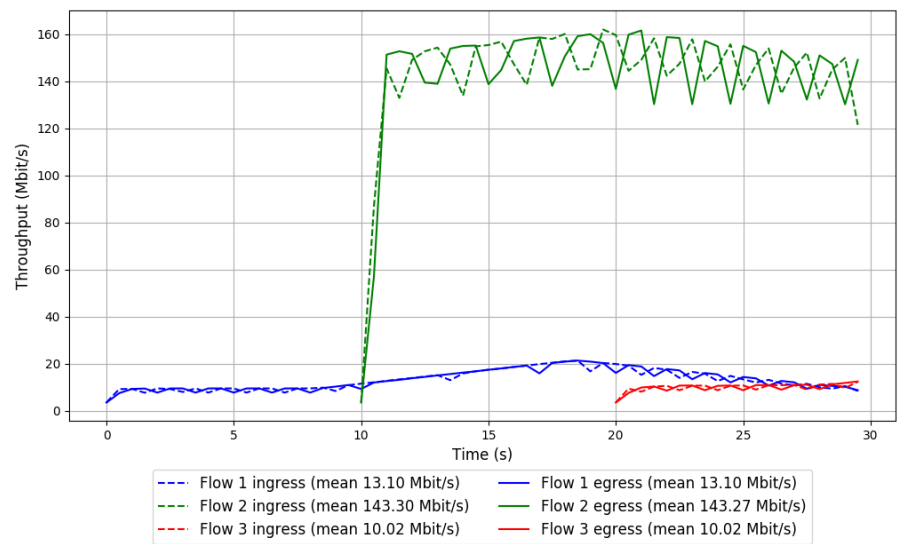
-- Flow 3:

Average throughput: 10.02 Mbit/s

95th percentile per-packet one-way delay: 54.030 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



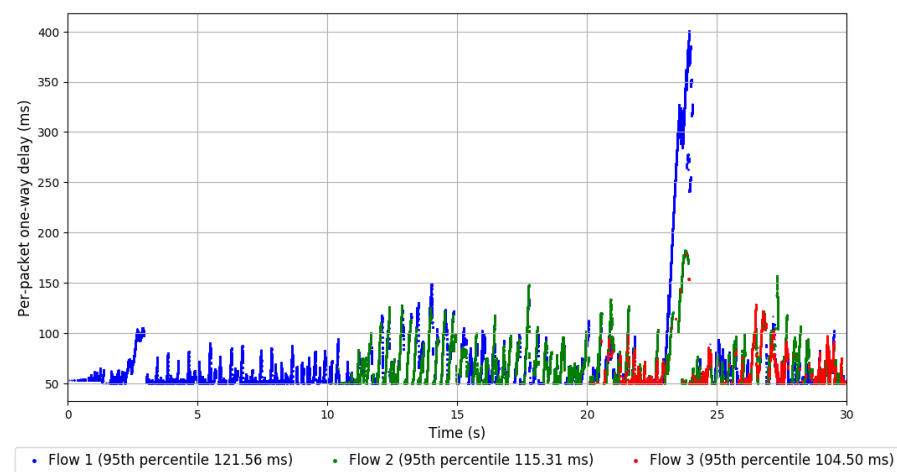
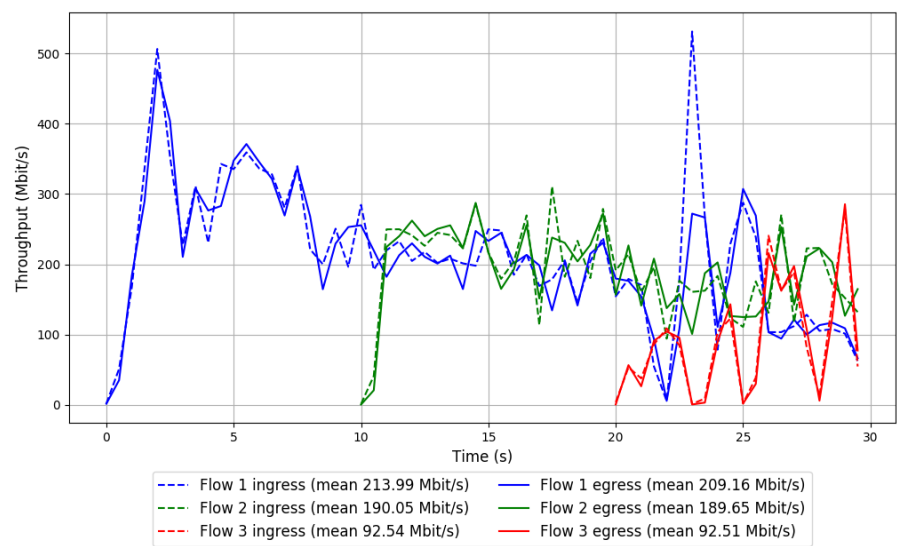
```
Run 1: Statistics of Verus

Start at: 2018-02-28 22:56:41
End at: 2018-02-28 22:57:11

# Below is generated by plot.py at 2018-03-01 05:12:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.48 Mbit/s
95th percentile per-packet one-way delay: 116.186 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 209.16 Mbit/s
95th percentile per-packet one-way delay: 121.560 ms
Loss rate: 2.27%
-- Flow 2:
Average throughput: 189.65 Mbit/s
95th percentile per-packet one-way delay: 115.310 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 92.51 Mbit/s
95th percentile per-packet one-way delay: 104.501 ms
Loss rate: 0.02%
```



Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-28 23:14:26

End at: 2018-02-28 23:14:56

# Below is generated by plot.py at 2018-03-01 05:13:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 404.18 Mbit/s

95th percentile per-packet one-way delay: 170.473 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 236.62 Mbit/s

95th percentile per-packet one-way delay: 149.843 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 210.28 Mbit/s

95th percentile per-packet one-way delay: 207.365 ms

Loss rate: 2.23%

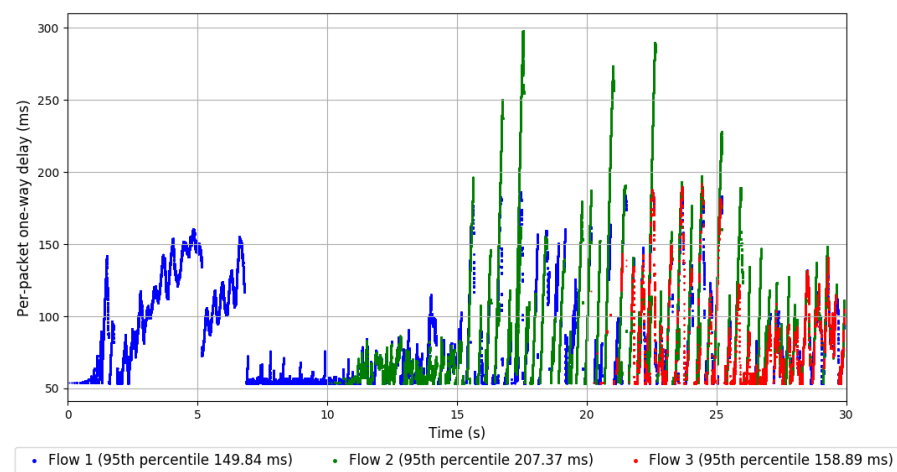
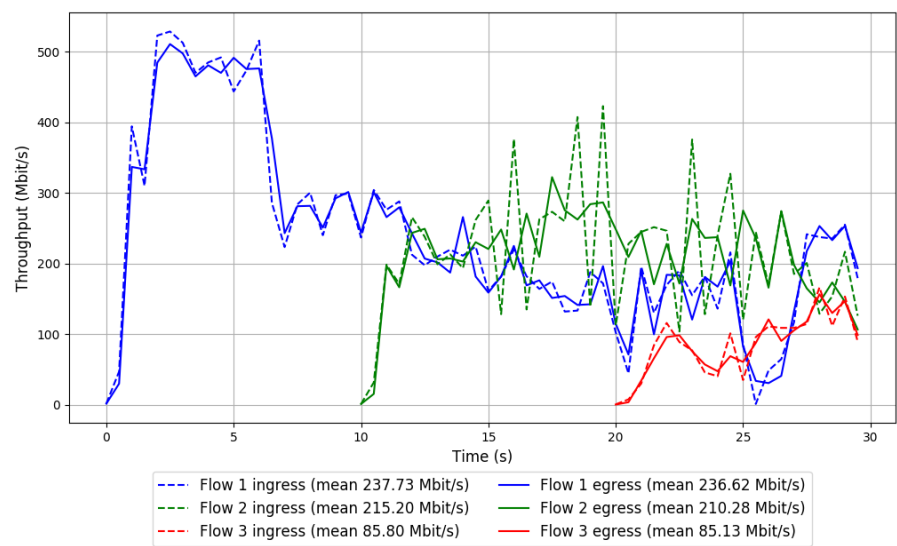
-- Flow 3:

Average throughput: 85.13 Mbit/s

95th percentile per-packet one-way delay: 158.886 ms

Loss rate: 1.46%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-28 23:32:13

End at: 2018-02-28 23:32:43

# Below is generated by plot.py at 2018-03-01 05:13:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 360.94 Mbit/s

95th percentile per-packet one-way delay: 126.553 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 208.99 Mbit/s

95th percentile per-packet one-way delay: 113.202 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 153.43 Mbit/s

95th percentile per-packet one-way delay: 138.269 ms

Loss rate: 0.30%

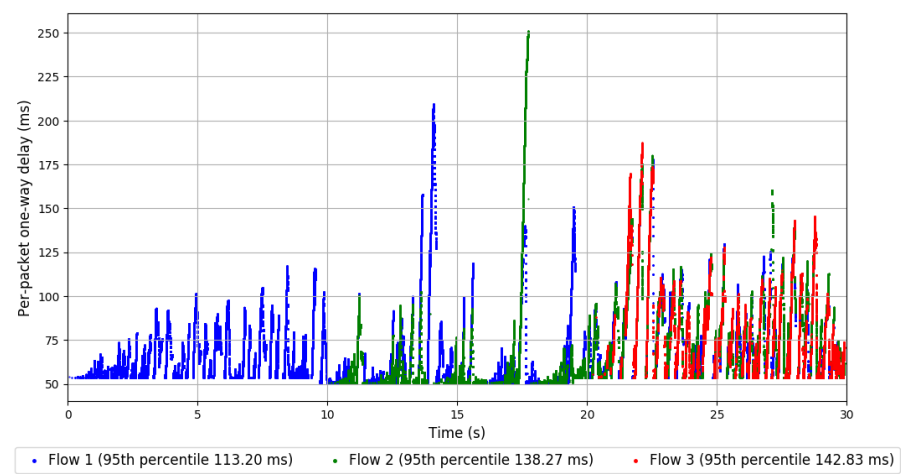
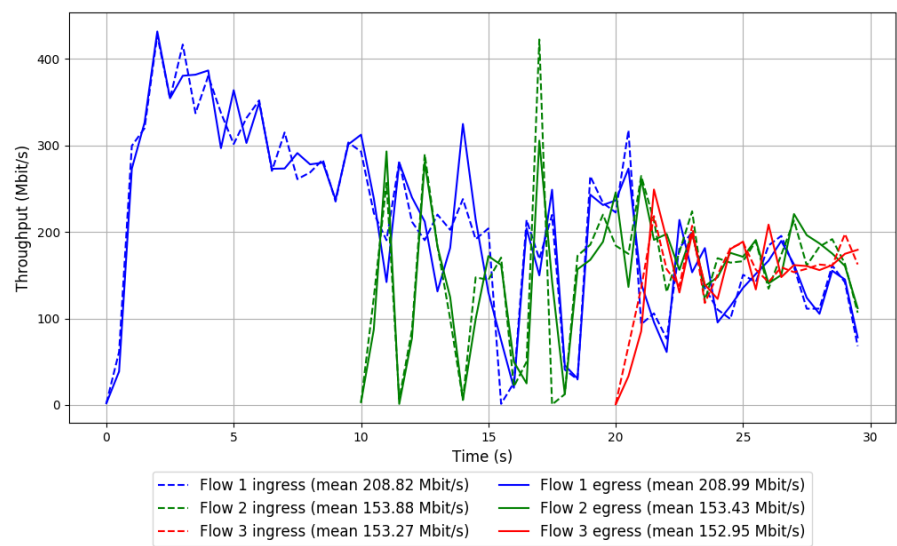
-- Flow 3:

Average throughput: 152.95 Mbit/s

95th percentile per-packet one-way delay: 142.830 ms

Loss rate: 0.39%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-28 23:49:32

End at: 2018-02-28 23:50:02

# Below is generated by plot.py at 2018-03-01 05:13:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 344.87 Mbit/s

95th percentile per-packet one-way delay: 109.236 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 186.62 Mbit/s

95th percentile per-packet one-way delay: 106.179 ms

Loss rate: 2.38%

-- Flow 2:

Average throughput: 187.33 Mbit/s

95th percentile per-packet one-way delay: 116.606 ms

Loss rate: 0.80%

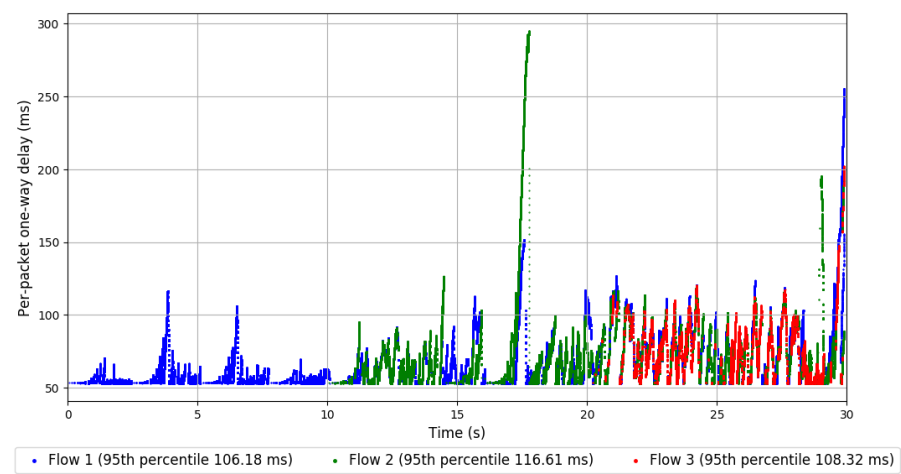
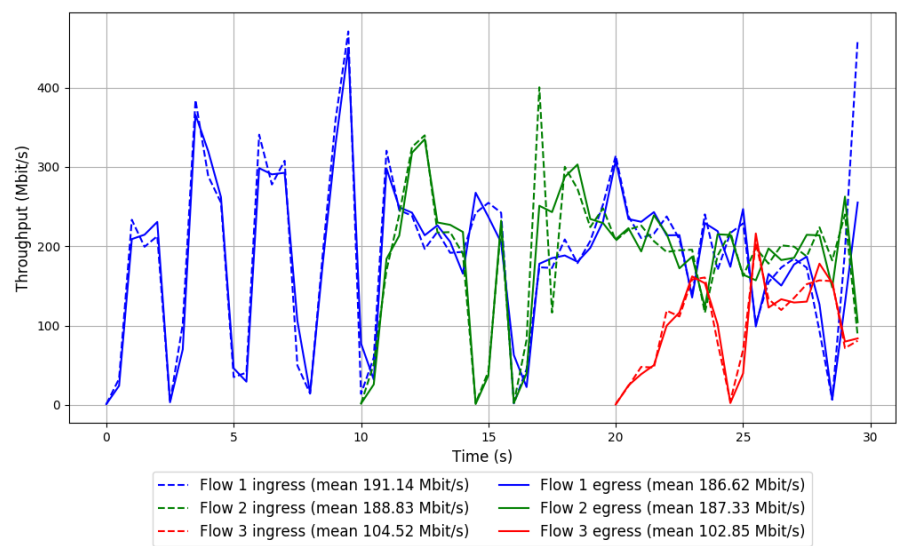
-- Flow 3:

Average throughput: 102.85 Mbit/s

95th percentile per-packet one-way delay: 108.317 ms

Loss rate: 0.76%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-03-01 00:06:57

End at: 2018-03-01 00:07:27

# Below is generated by plot.py at 2018-03-01 05:13:33

# Datalink statistics

-- Total of 3 flows:

Average throughput: 312.47 Mbit/s

95th percentile per-packet one-way delay: 149.259 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 176.78 Mbit/s

95th percentile per-packet one-way delay: 156.103 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 154.92 Mbit/s

95th percentile per-packet one-way delay: 143.578 ms

Loss rate: 0.82%

-- Flow 3:

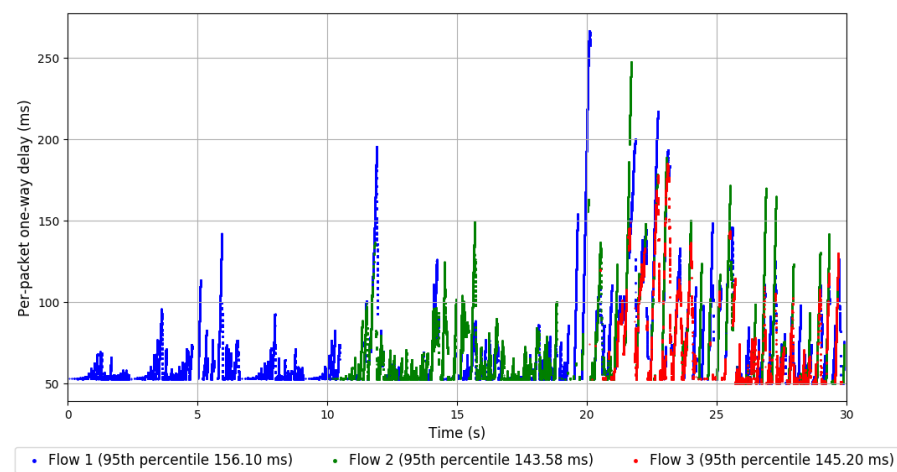
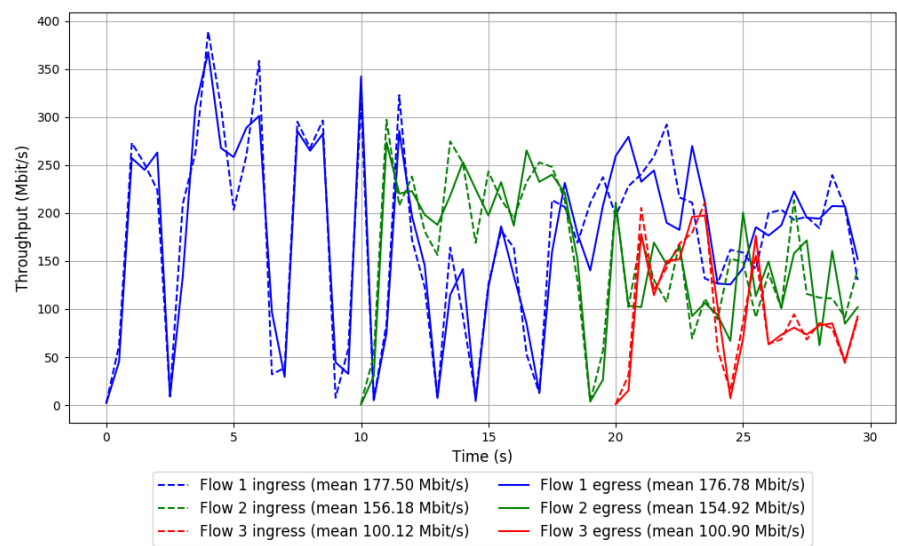
Average throughput: 100.90 Mbit/s

95th percentile per-packet one-way delay: 145.201 ms

Loss rate: 0.66%



Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-03-01 00:24:35

End at: 2018-03-01 00:25:05

# Below is generated by plot.py at 2018-03-01 05:14:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 356.50 Mbit/s

95th percentile per-packet one-way delay: 125.757 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 228.70 Mbit/s

95th percentile per-packet one-way delay: 117.215 ms

Loss rate: 1.30%

-- Flow 2:

Average throughput: 154.48 Mbit/s

95th percentile per-packet one-way delay: 131.807 ms

Loss rate: 0.82%

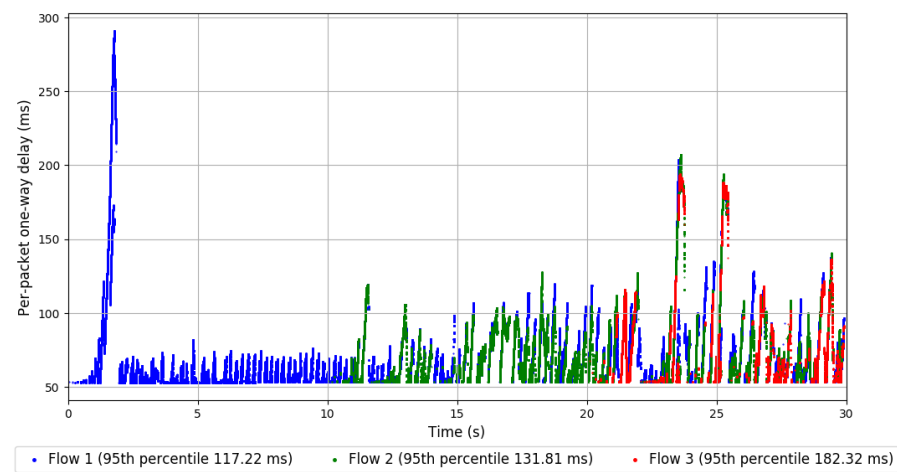
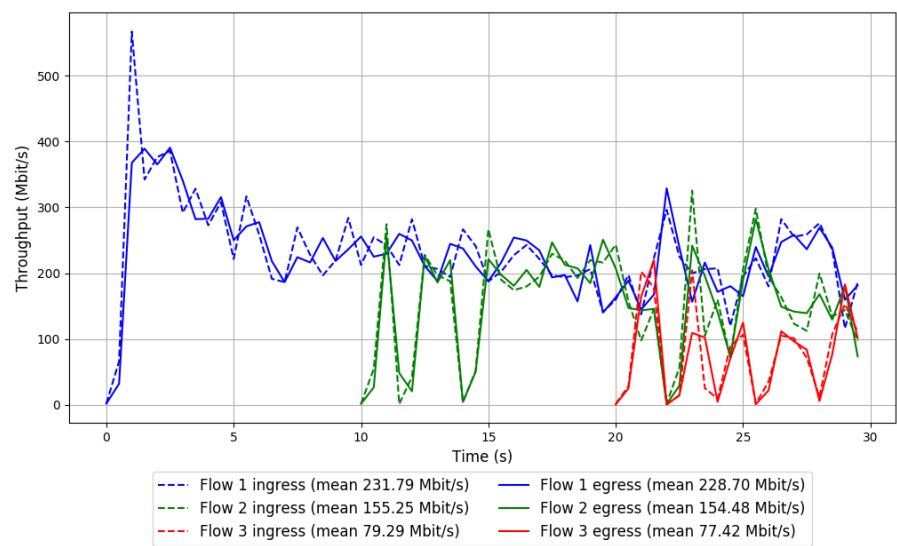
-- Flow 3:

Average throughput: 77.42 Mbit/s

95th percentile per-packet one-way delay: 182.324 ms

Loss rate: 2.50%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-03-01 00:42:06

End at: 2018-03-01 00:42:36

# Below is generated by plot.py at 2018-03-01 05:14:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 317.25 Mbit/s

95th percentile per-packet one-way delay: 104.499 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 172.47 Mbit/s

95th percentile per-packet one-way delay: 94.509 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 173.02 Mbit/s

95th percentile per-packet one-way delay: 106.274 ms

Loss rate: 0.00%

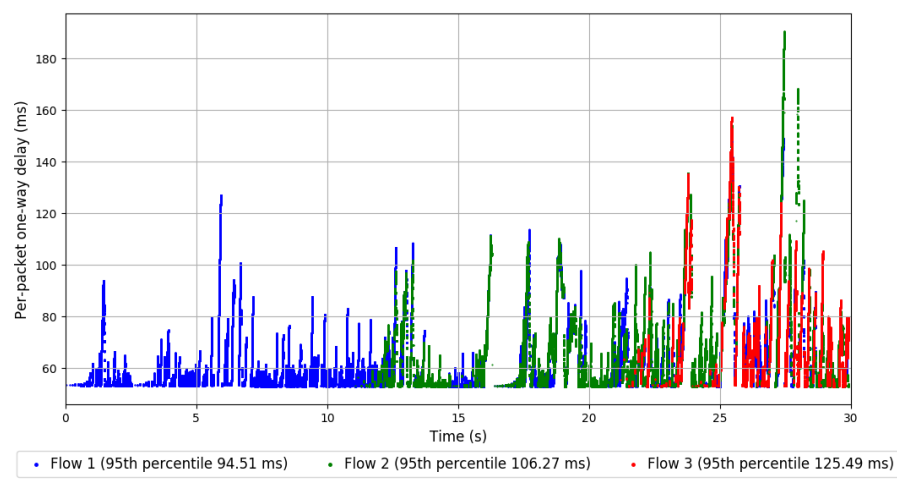
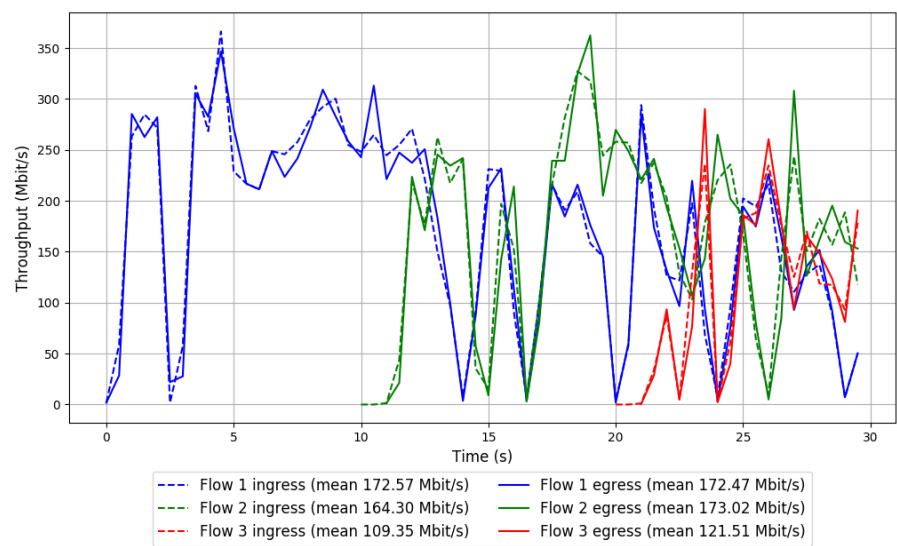
-- Flow 3:

Average throughput: 121.51 Mbit/s

95th percentile per-packet one-way delay: 125.489 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-03-01 01:00:26

End at: 2018-03-01 01:00:56

# Below is generated by plot.py at 2018-03-01 05:14:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 318.13 Mbit/s

95th percentile per-packet one-way delay: 127.914 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 171.35 Mbit/s

95th percentile per-packet one-way delay: 121.577 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 172.57 Mbit/s

95th percentile per-packet one-way delay: 152.203 ms

Loss rate: 2.41%

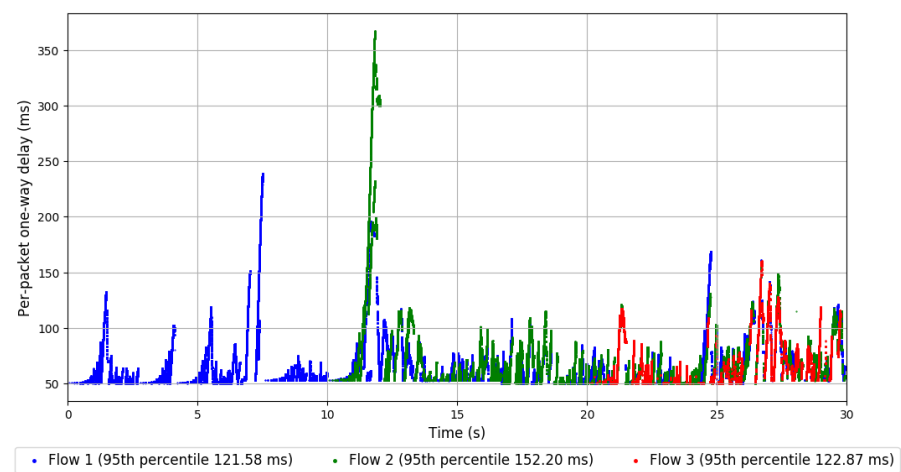
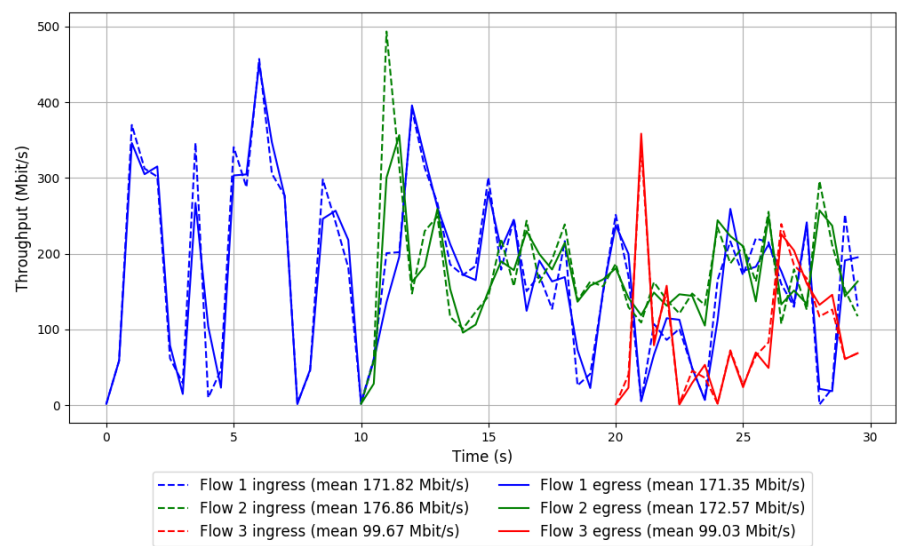
-- Flow 3:

Average throughput: 99.03 Mbit/s

95th percentile per-packet one-way delay: 122.872 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-03-01 01:18:07

End at: 2018-03-01 01:18:37

# Below is generated by plot.py at 2018-03-01 05:18:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 332.64 Mbit/s

95th percentile per-packet one-way delay: 111.908 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 176.99 Mbit/s

95th percentile per-packet one-way delay: 99.676 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 164.43 Mbit/s

95th percentile per-packet one-way delay: 116.934 ms

Loss rate: 0.29%

-- Flow 3:

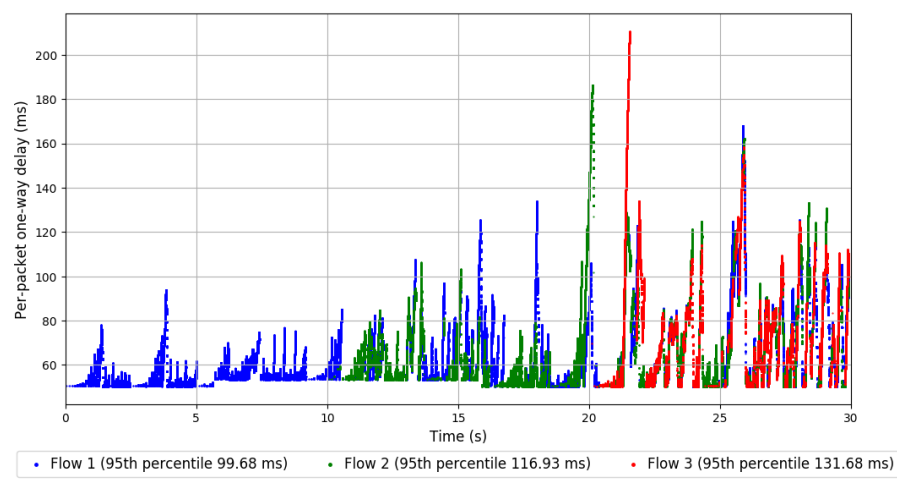
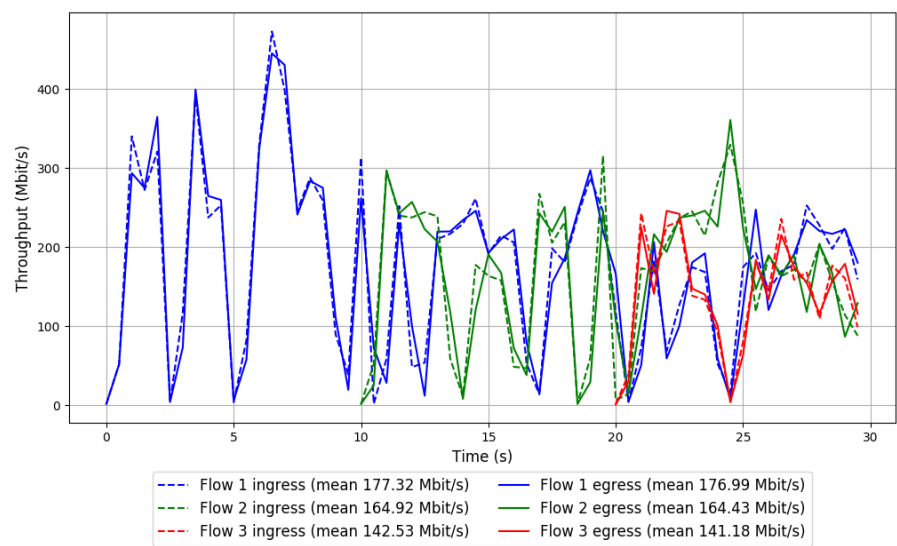
Average throughput: 141.18 Mbit/s

95th percentile per-packet one-way delay: 131.676 ms

Loss rate: 0.64%



Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-03-01 01:35:32

End at: 2018-03-01 01:36:02

# Below is generated by plot.py at 2018-03-01 05:18:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 345.16 Mbit/s

95th percentile per-packet one-way delay: 127.371 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 229.79 Mbit/s

95th percentile per-packet one-way delay: 130.806 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 134.19 Mbit/s

95th percentile per-packet one-way delay: 119.926 ms

Loss rate: 0.01%

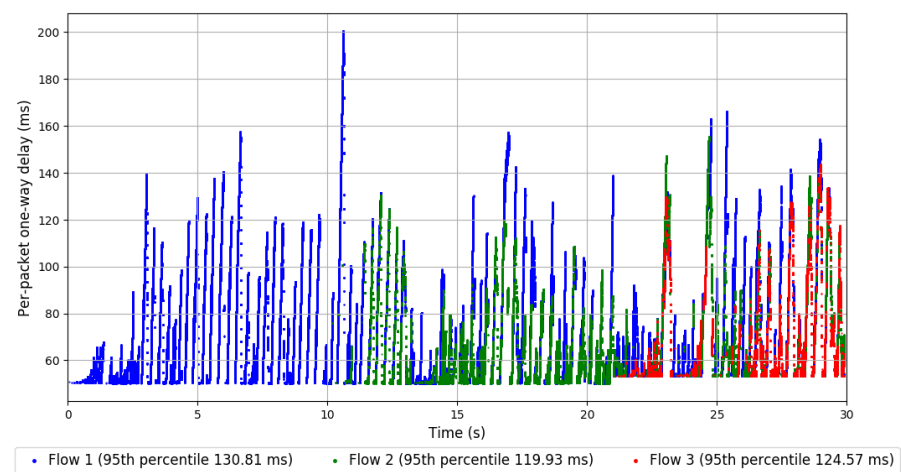
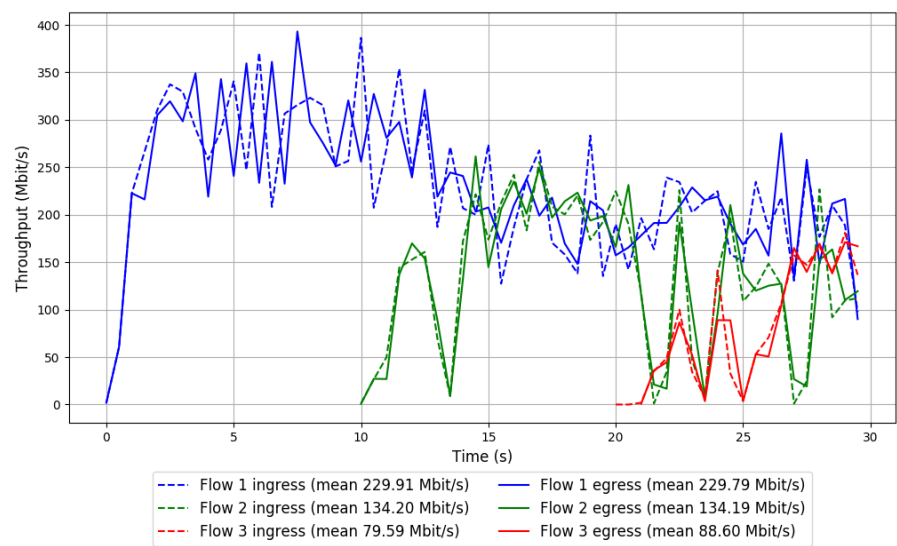
-- Flow 3:

Average throughput: 88.60 Mbit/s

95th percentile per-packet one-way delay: 124.567 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link

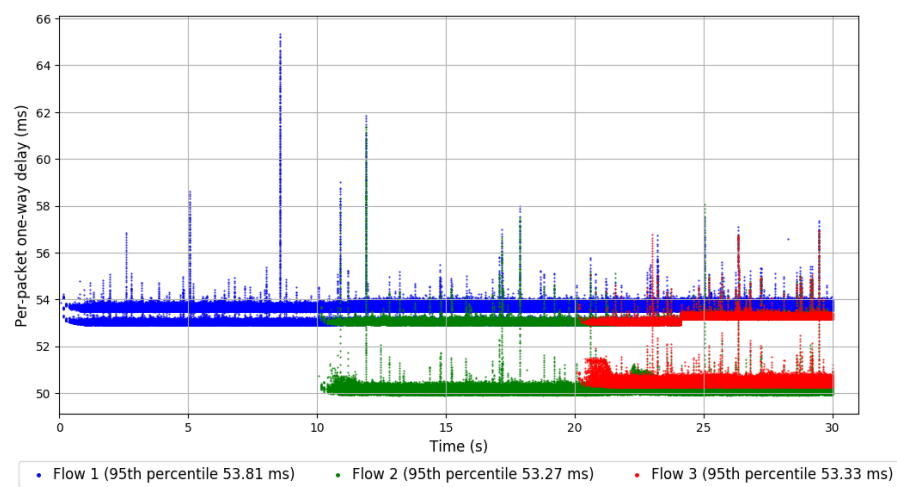
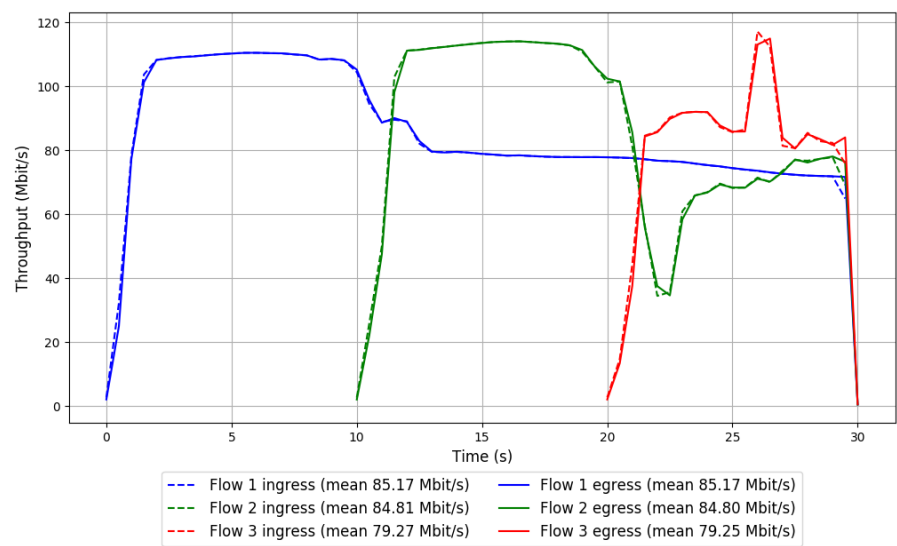


```
Run 1: Statistics of Copa

Start at: 2018-02-28 23:00:19
End at: 2018-02-28 23:00:49

# Below is generated by plot.py at 2018-03-01 05:18:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 167.94 Mbit/s
95th percentile per-packet one-way delay: 53.740 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 85.17 Mbit/s
95th percentile per-packet one-way delay: 53.809 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 84.80 Mbit/s
95th percentile per-packet one-way delay: 53.275 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 79.25 Mbit/s
95th percentile per-packet one-way delay: 53.327 ms
Loss rate: 0.02%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-28 23:18:06

End at: 2018-02-28 23:18:36

# Below is generated by plot.py at 2018-03-01 05:18:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 169.02 Mbit/s

95th percentile per-packet one-way delay: 53.480 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.61 Mbit/s

95th percentile per-packet one-way delay: 53.475 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 96.97 Mbit/s

95th percentile per-packet one-way delay: 53.494 ms

Loss rate: 0.00%

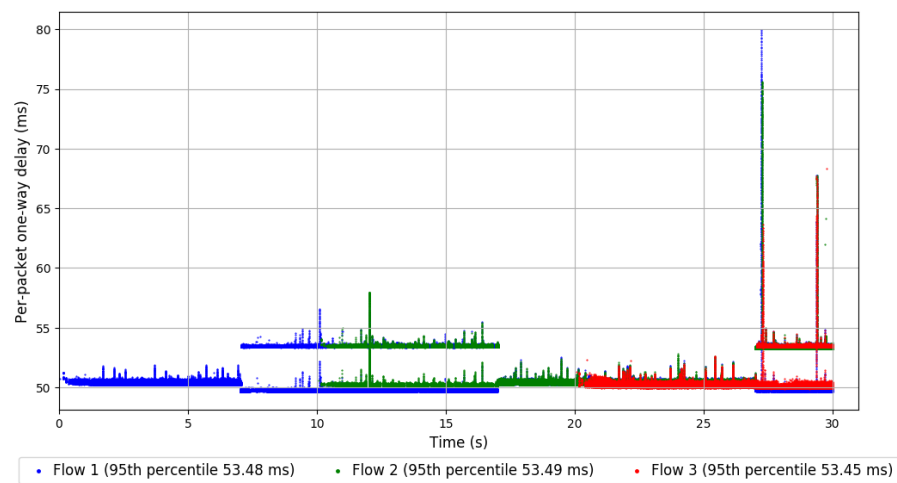
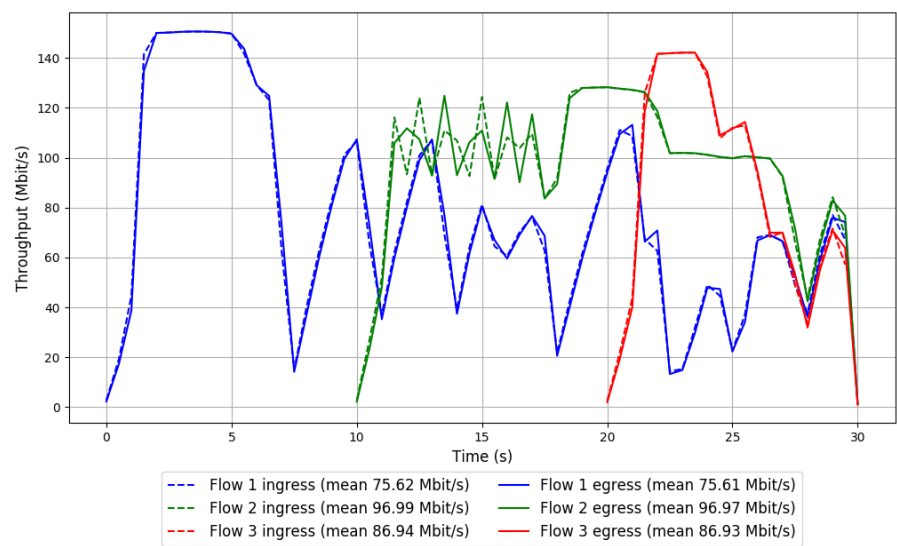
-- Flow 3:

Average throughput: 86.93 Mbit/s

95th percentile per-packet one-way delay: 53.450 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-28 23:35:47

End at: 2018-02-28 23:36:17

# Below is generated by plot.py at 2018-03-01 05:18:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 156.87 Mbit/s

95th percentile per-packet one-way delay: 53.808 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 68.42 Mbit/s

95th percentile per-packet one-way delay: 53.883 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 85.34 Mbit/s

95th percentile per-packet one-way delay: 53.777 ms

Loss rate: 0.01%

-- Flow 3:

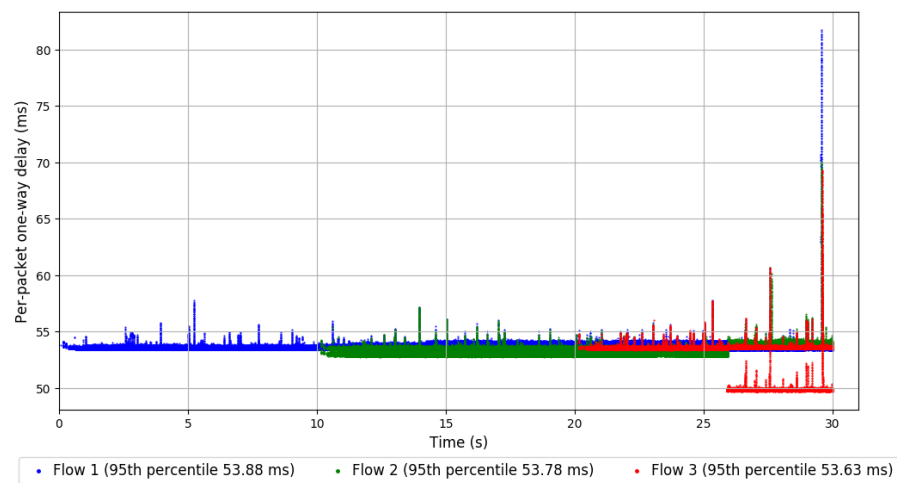
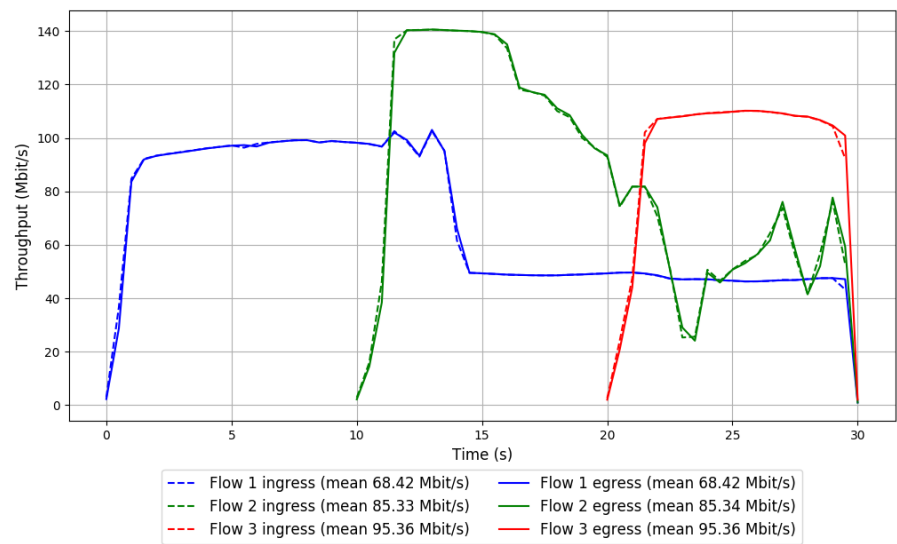
Average throughput: 95.36 Mbit/s

95th percentile per-packet one-way delay: 53.635 ms

Loss rate: 0.03%



Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-28 23:53:06

End at: 2018-02-28 23:53:36

# Below is generated by plot.py at 2018-03-01 05:18:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 167.63 Mbit/s

95th percentile per-packet one-way delay: 53.314 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 86.16 Mbit/s

95th percentile per-packet one-way delay: 53.307 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 83.27 Mbit/s

95th percentile per-packet one-way delay: 53.316 ms

Loss rate: 0.00%

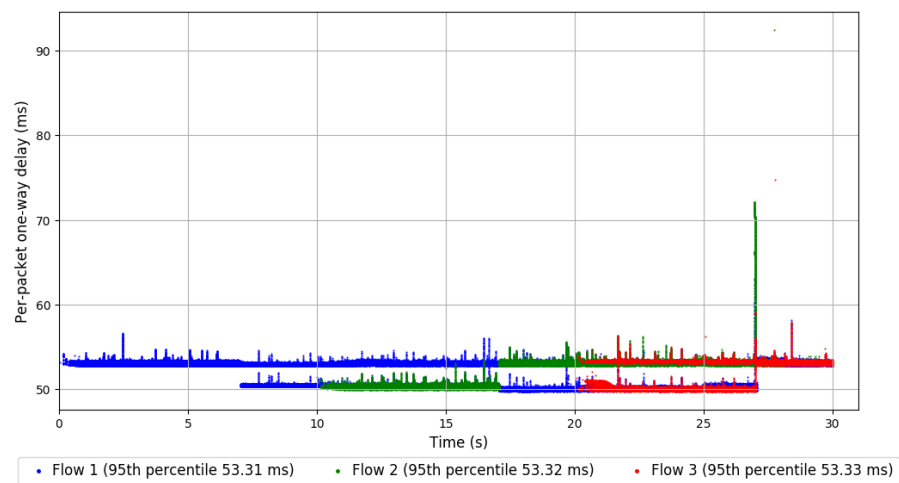
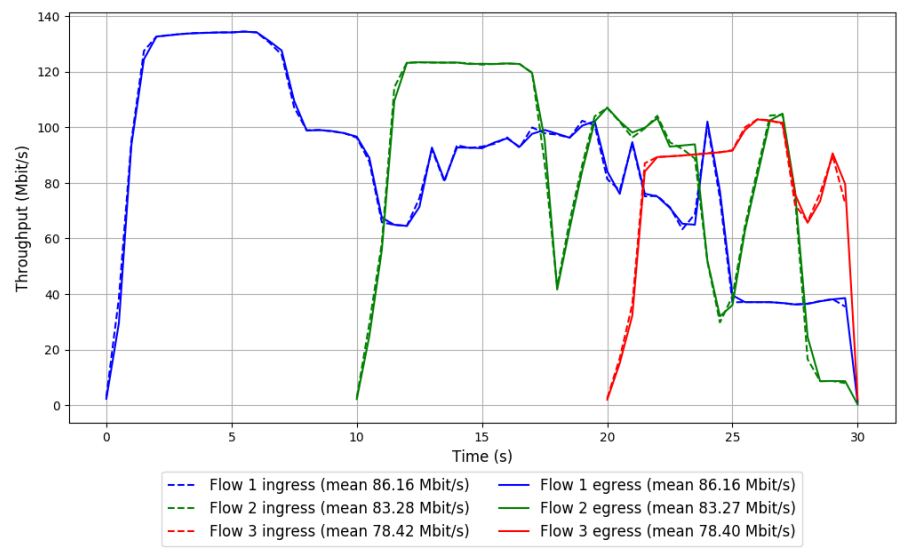
-- Flow 3:

Average throughput: 78.40 Mbit/s

95th percentile per-packet one-way delay: 53.330 ms

Loss rate: 0.03%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-03-01 00:10:26

End at: 2018-03-01 00:10:56

# Below is generated by plot.py at 2018-03-01 05:20:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 201.26 Mbit/s

95th percentile per-packet one-way delay: 53.275 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 134.00 Mbit/s

95th percentile per-packet one-way delay: 53.236 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.50 Mbit/s

95th percentile per-packet one-way delay: 53.297 ms

Loss rate: 0.00%

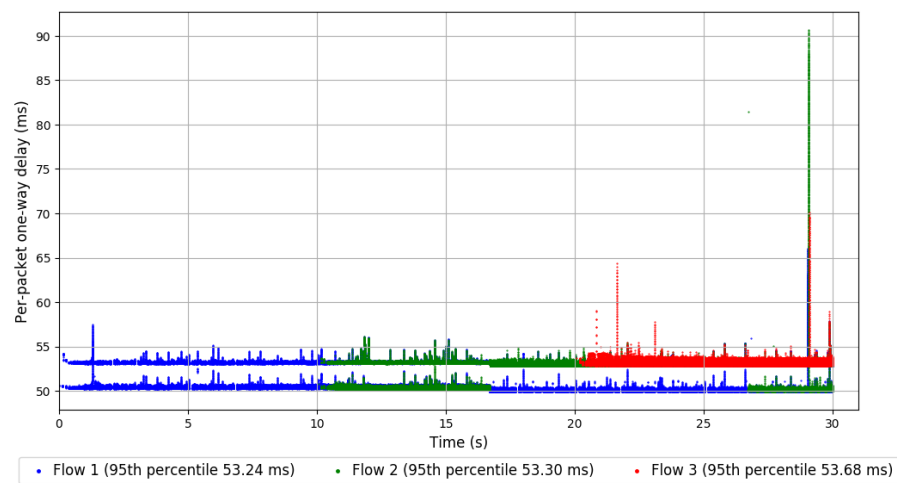
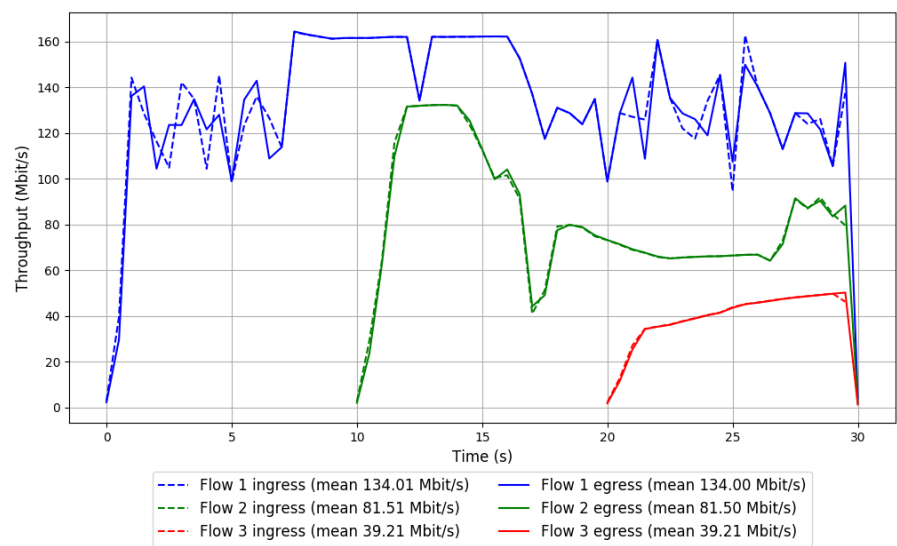
-- Flow 3:

Average throughput: 39.21 Mbit/s

95th percentile per-packet one-way delay: 53.682 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-03-01 00:28:17

End at: 2018-03-01 00:28:47

# Below is generated by plot.py at 2018-03-01 05:20:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 153.00 Mbit/s

95th percentile per-packet one-way delay: 130.503 ms

Loss rate: 13.45%

-- Flow 1:

Average throughput: 76.41 Mbit/s

95th percentile per-packet one-way delay: 196.687 ms

Loss rate: 22.48%

-- Flow 2:

Average throughput: 81.14 Mbit/s

95th percentile per-packet one-way delay: 53.197 ms

Loss rate: 1.47%

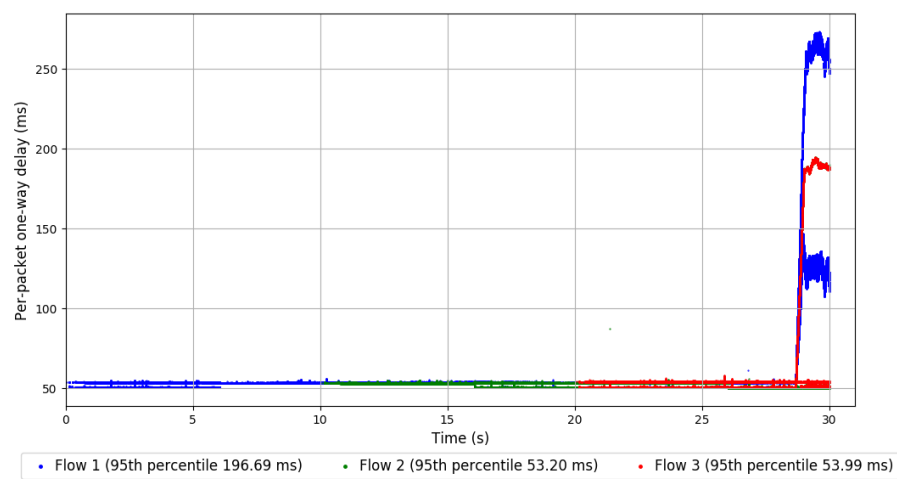
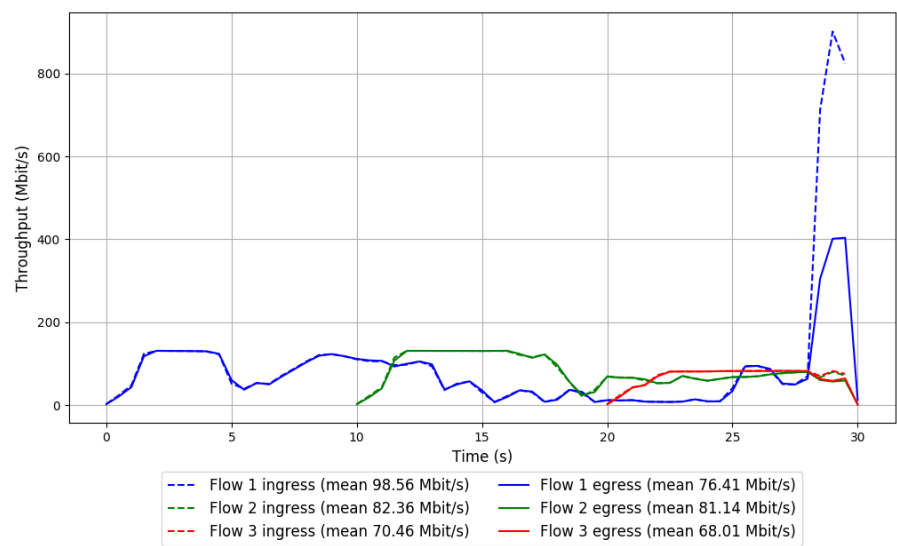
-- Flow 3:

Average throughput: 68.01 Mbit/s

95th percentile per-packet one-way delay: 53.987 ms

Loss rate: 3.48%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-03-01 00:45:42

End at: 2018-03-01 00:46:12

# Below is generated by plot.py at 2018-03-01 05:33:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 505.22 Mbit/s

95th percentile per-packet one-way delay: 258.021 ms

Loss rate: 30.86%

-- Flow 1:

Average throughput: 289.07 Mbit/s

95th percentile per-packet one-way delay: 262.849 ms

Loss rate: 33.97%

-- Flow 2:

Average throughput: 324.49 Mbit/s

95th percentile per-packet one-way delay: 244.483 ms

Loss rate: 26.23%

-- Flow 3:

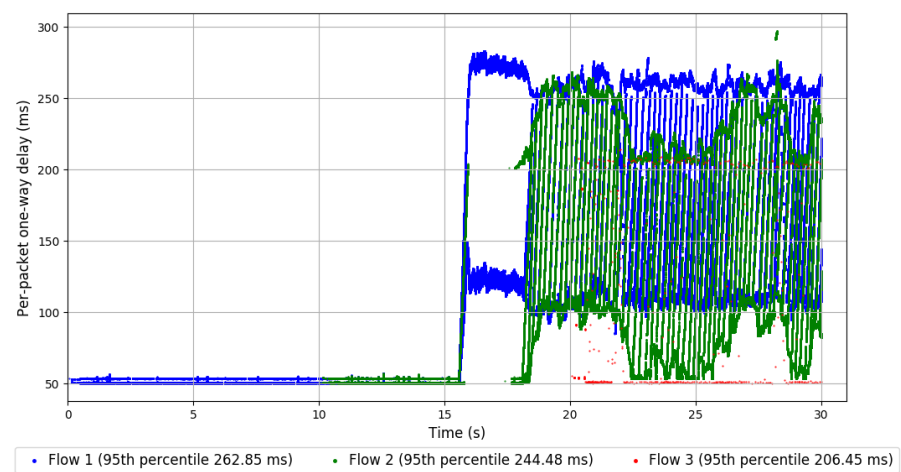
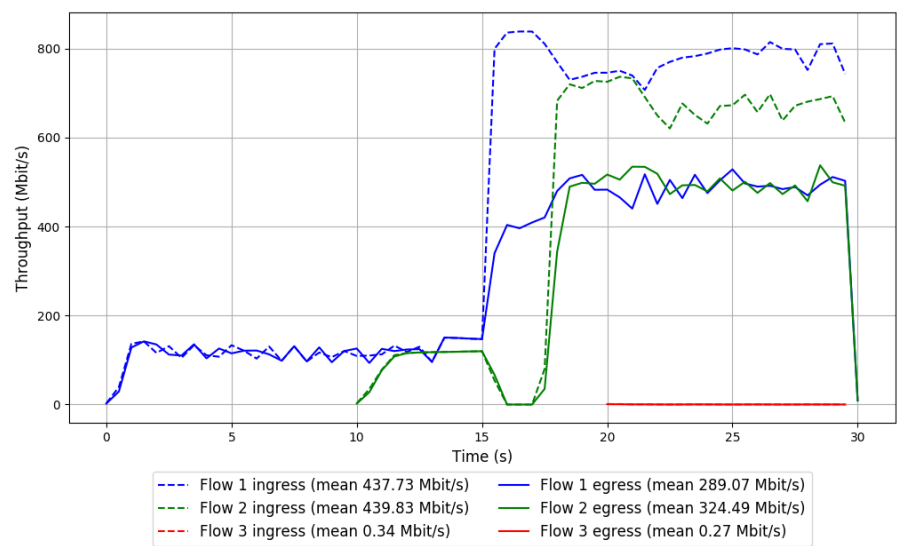
Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 206.448 ms

Loss rate: 21.76%



Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-03-01 01:03:58

End at: 2018-03-01 01:04:28

# Below is generated by plot.py at 2018-03-01 05:33:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 183.57 Mbit/s

95th percentile per-packet one-way delay: 53.348 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.14 Mbit/s

95th percentile per-packet one-way delay: 53.310 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 83.55 Mbit/s

95th percentile per-packet one-way delay: 53.526 ms

Loss rate: 0.00%

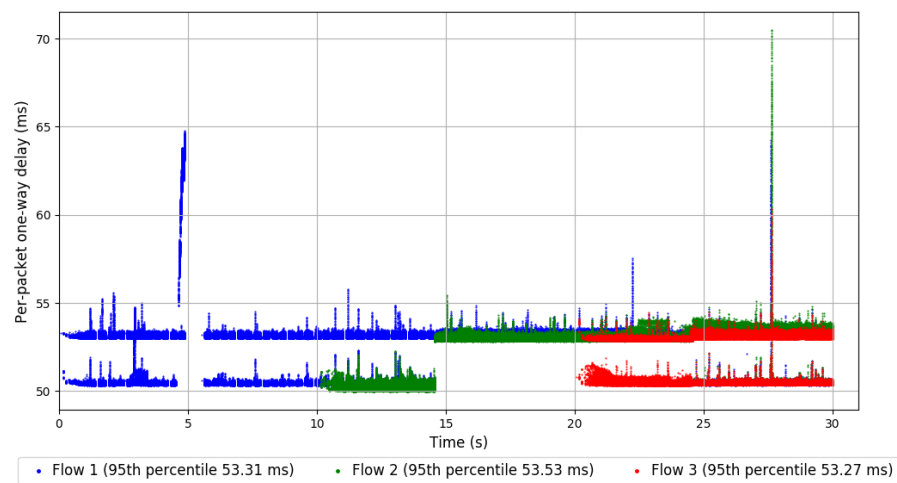
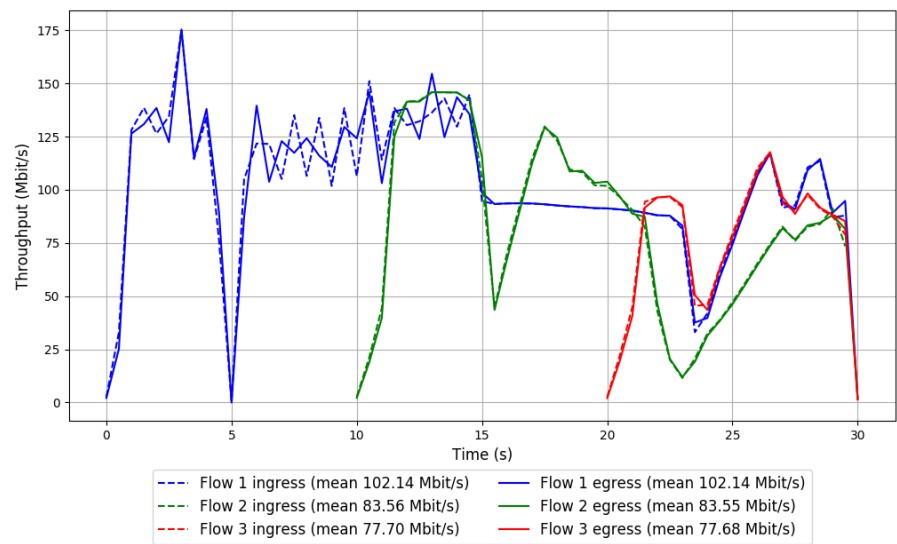
-- Flow 3:

Average throughput: 77.68 Mbit/s

95th percentile per-packet one-way delay: 53.265 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-03-01 01:21:46

End at: 2018-03-01 01:22:16

# Below is generated by plot.py at 2018-03-01 05:33:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 159.85 Mbit/s

95th percentile per-packet one-way delay: 53.492 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.23 Mbit/s

95th percentile per-packet one-way delay: 53.475 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 106.70 Mbit/s

95th percentile per-packet one-way delay: 53.504 ms

Loss rate: 0.00%

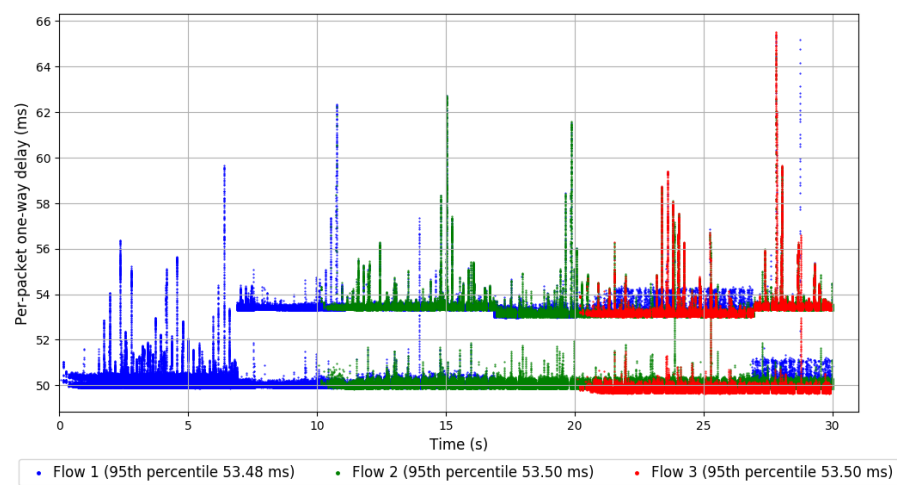
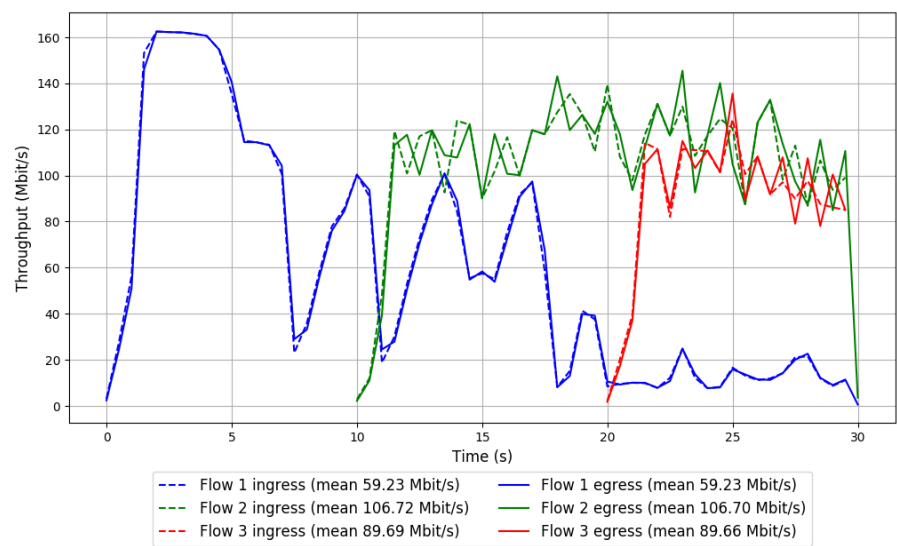
-- Flow 3:

Average throughput: 89.66 Mbit/s

95th percentile per-packet one-way delay: 53.498 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-03-01 01:39:06

End at: 2018-03-01 01:39:36

# Below is generated by plot.py at 2018-03-01 05:38:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 595.73 Mbit/s

95th percentile per-packet one-way delay: 241.266 ms

Loss rate: 27.14%

-- Flow 1:

Average throughput: 325.03 Mbit/s

95th percentile per-packet one-way delay: 237.908 ms

Loss rate: 25.34%

-- Flow 2:

Average throughput: 406.35 Mbit/s

95th percentile per-packet one-way delay: 242.973 ms

Loss rate: 29.18%

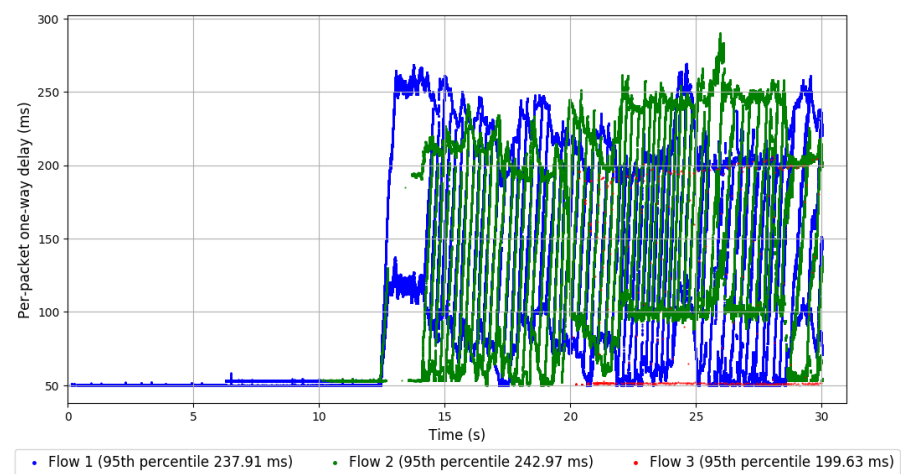
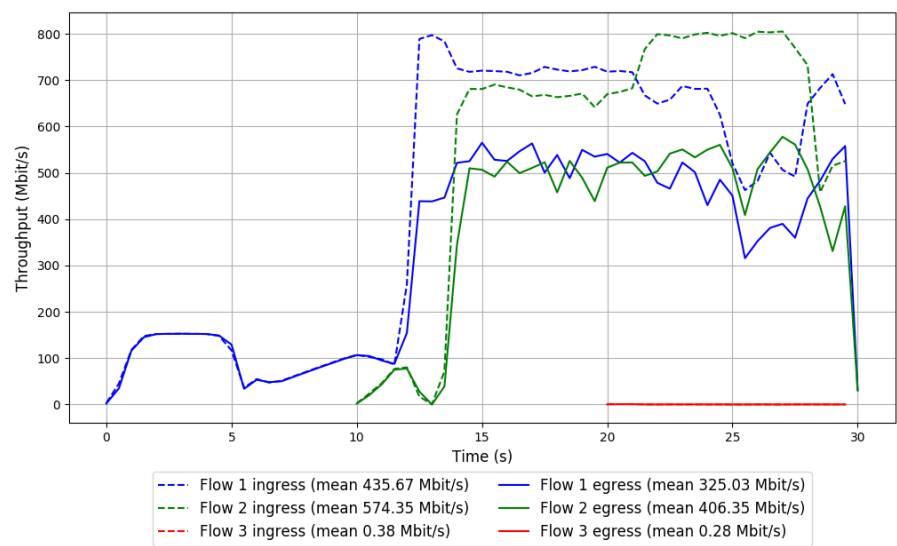
-- Flow 3:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 199.627 ms

Loss rate: 27.38%

Run 10: Report of Copa — Data Link



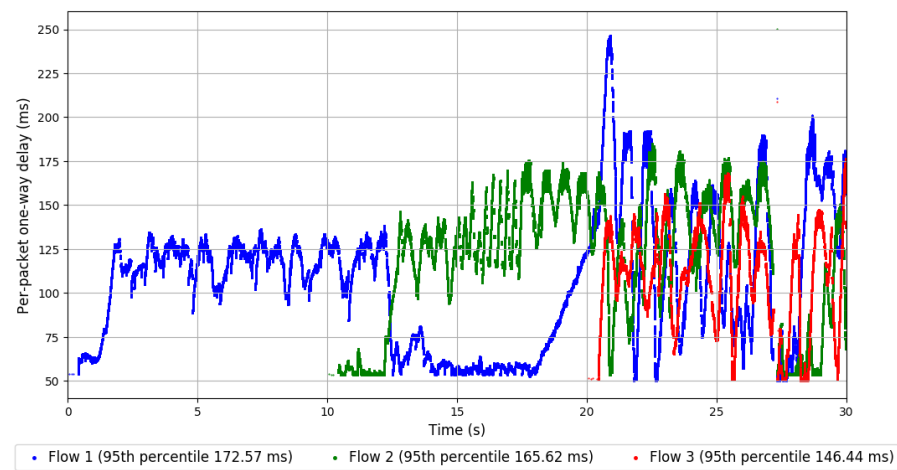
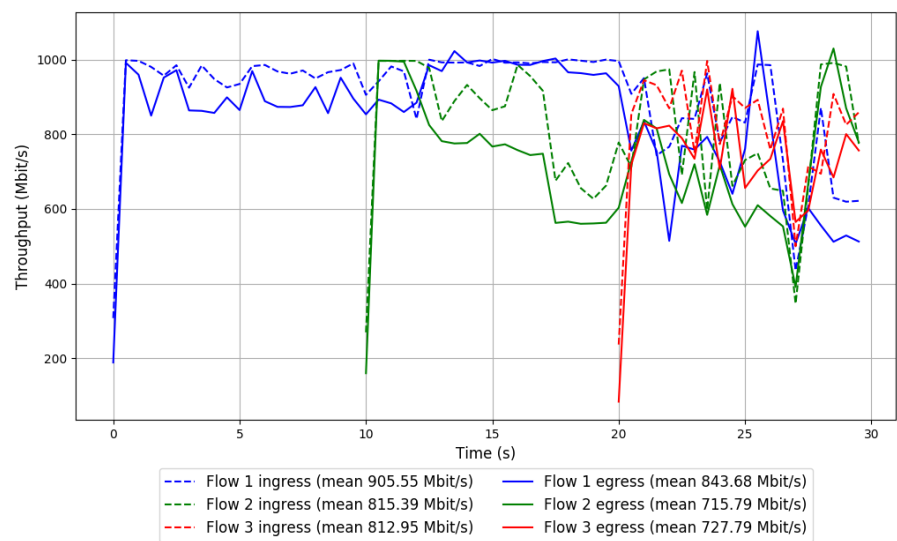
```
Run 1: Statistics of FillP

Start at: 2018-02-28 22:57:45
End at: 2018-02-28 22:58:15

# Below is generated by plot.py at 2018-03-01 05:46:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1561.27 Mbit/s
95th percentile per-packet one-way delay: 165.268 ms
Loss rate: 9.12%
-- Flow 1:
Average throughput: 843.68 Mbit/s
95th percentile per-packet one-way delay: 172.572 ms
Loss rate: 6.84%
-- Flow 2:
Average throughput: 715.79 Mbit/s
95th percentile per-packet one-way delay: 165.620 ms
Loss rate: 12.23%
-- Flow 3:
Average throughput: 727.79 Mbit/s
95th percentile per-packet one-way delay: 146.439 ms
Loss rate: 10.48%
```



Run 1: Report of FillP — Data Link

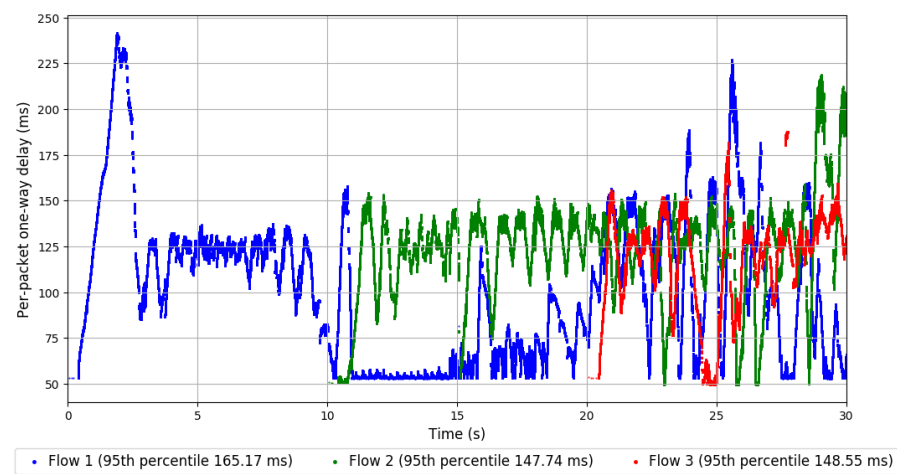
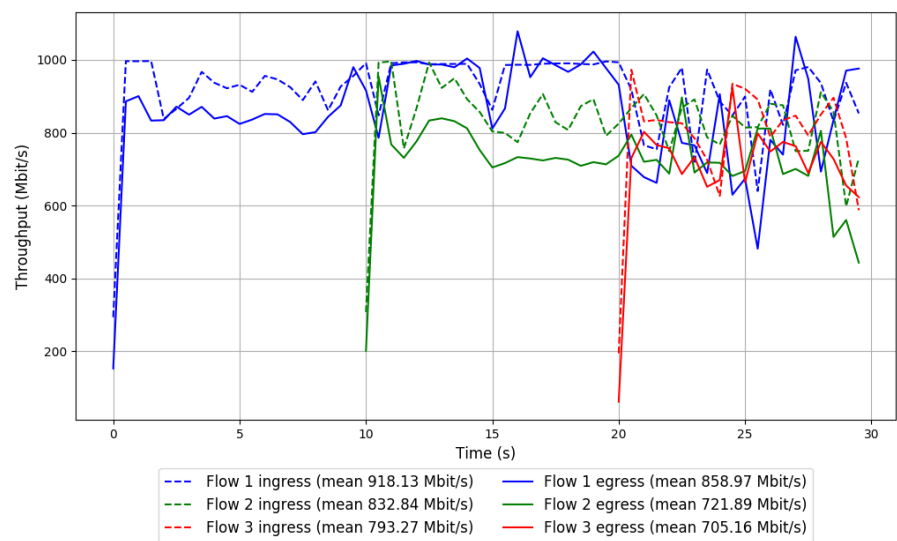


```
Run 2: Statistics of FillP

Start at: 2018-02-28 23:15:31
End at: 2018-02-28 23:16:01

# Below is generated by plot.py at 2018-03-01 05:46:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1573.59 Mbit/s
95th percentile per-packet one-way delay: 154.853 ms
Loss rate: 9.34%
-- Flow 1:
Average throughput: 858.97 Mbit/s
95th percentile per-packet one-way delay: 165.173 ms
Loss rate: 6.44%
-- Flow 2:
Average throughput: 721.89 Mbit/s
95th percentile per-packet one-way delay: 147.739 ms
Loss rate: 13.31%
-- Flow 3:
Average throughput: 705.16 Mbit/s
95th percentile per-packet one-way delay: 148.550 ms
Loss rate: 11.11%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-28 23:33:17

End at: 2018-02-28 23:33:47

# Below is generated by plot.py at 2018-03-01 05:46:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1491.49 Mbit/s

95th percentile per-packet one-way delay: 301.972 ms

Loss rate: 9.60%

-- Flow 1:

Average throughput: 755.97 Mbit/s

95th percentile per-packet one-way delay: 299.154 ms

Loss rate: 9.33%

-- Flow 2:

Average throughput: 832.91 Mbit/s

95th percentile per-packet one-way delay: 266.348 ms

Loss rate: 7.47%

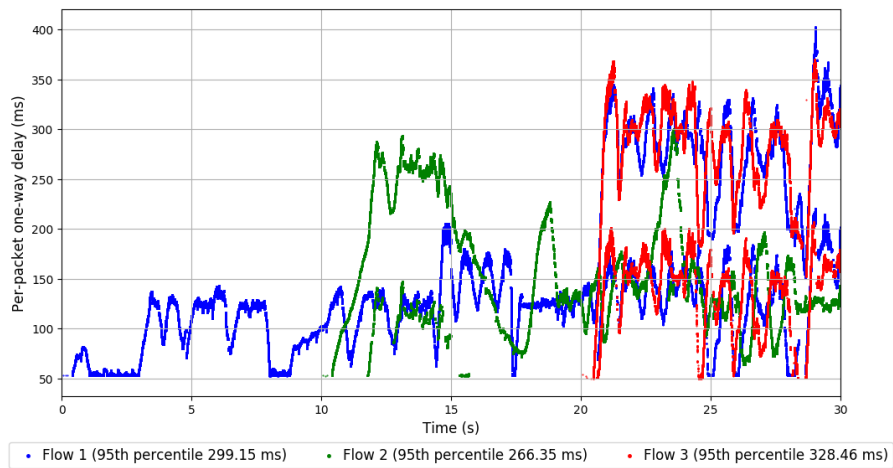
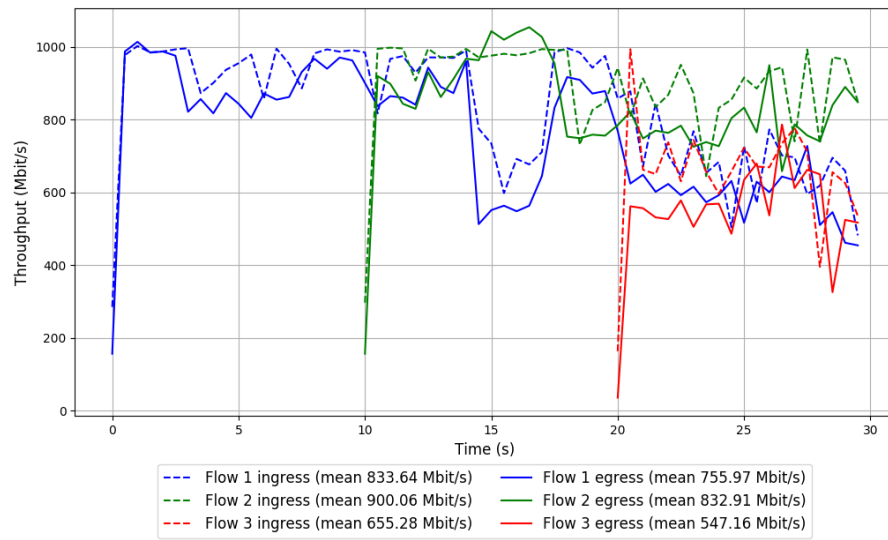
-- Flow 3:

Average throughput: 547.16 Mbit/s

95th percentile per-packet one-way delay: 328.459 ms

Loss rate: 16.53%

### Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-28 23:50:35

End at: 2018-02-28 23:51:05

# Below is generated by plot.py at 2018-03-01 05:47:41

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1494.88 Mbit/s

95th percentile per-packet one-way delay: 295.987 ms

Loss rate: 10.32%

-- Flow 1:

Average throughput: 826.83 Mbit/s

95th percentile per-packet one-way delay: 146.399 ms

Loss rate: 8.99%

-- Flow 2:

Average throughput: 700.01 Mbit/s

95th percentile per-packet one-way delay: 310.804 ms

Loss rate: 11.40%

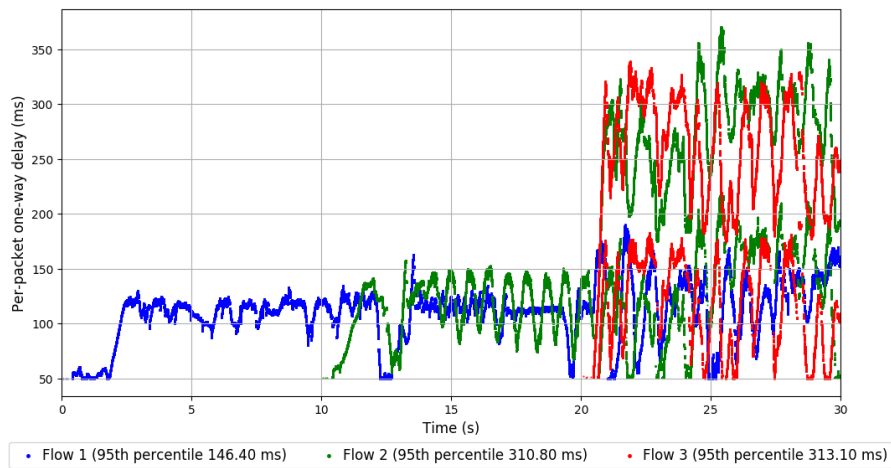
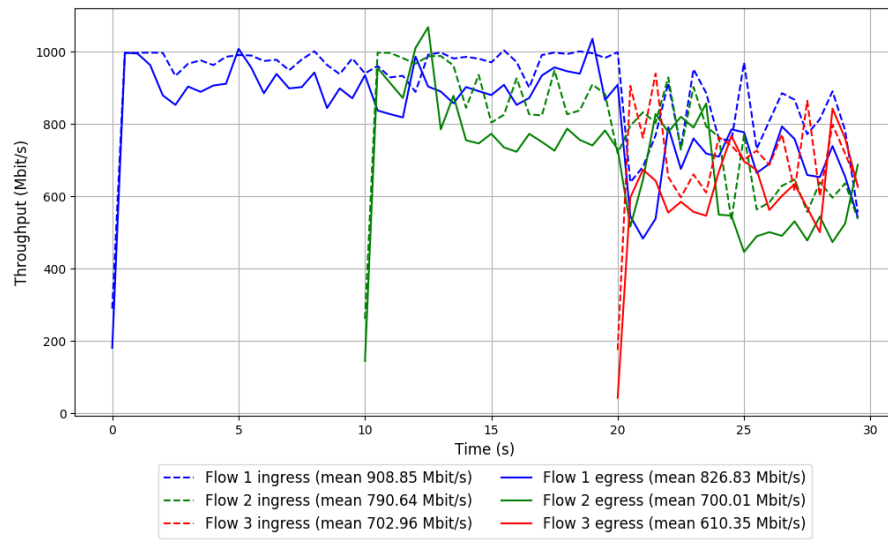
-- Flow 3:

Average throughput: 610.35 Mbit/s

95th percentile per-packet one-way delay: 313.098 ms

Loss rate: 13.08%

# Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-03-01 00:07:57

End at: 2018-03-01 00:08:27

# Below is generated by plot.py at 2018-03-01 05:51:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1614.13 Mbit/s

95th percentile per-packet one-way delay: 219.184 ms

Loss rate: 8.21%

-- Flow 1:

Average throughput: 859.25 Mbit/s

95th percentile per-packet one-way delay: 234.086 ms

Loss rate: 6.17%

-- Flow 2:

Average throughput: 809.09 Mbit/s

95th percentile per-packet one-way delay: 155.925 ms

Loss rate: 8.60%

-- Flow 3:

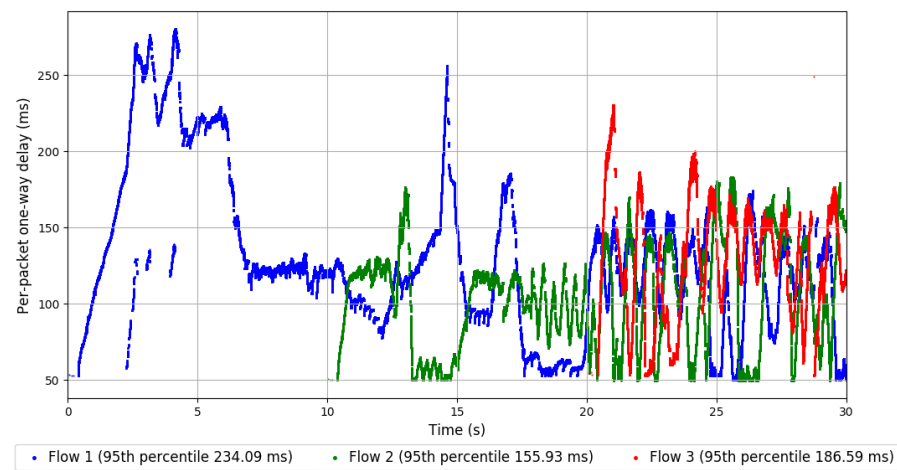
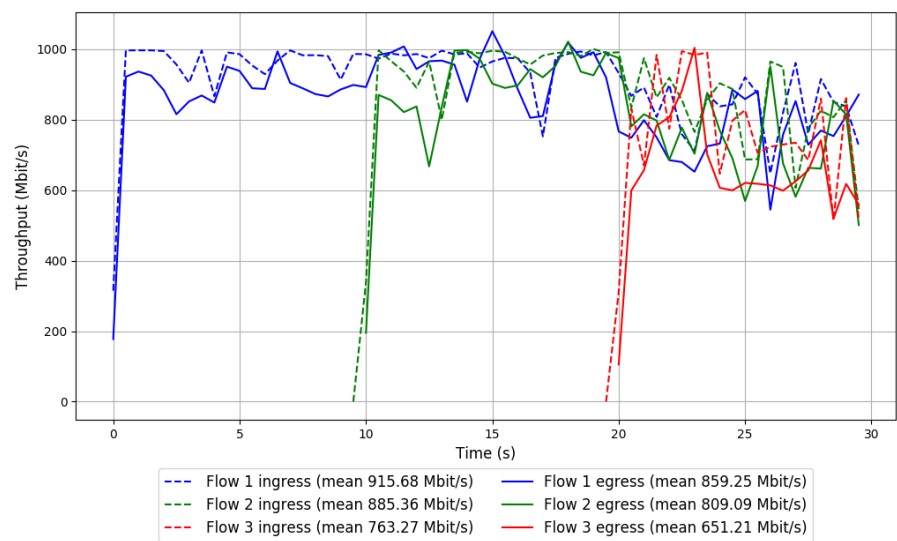
Average throughput: 651.21 Mbit/s

95th percentile per-packet one-way delay: 186.590 ms

Loss rate: 14.69%



Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-03-01 00:25:39

End at: 2018-03-01 00:26:09

# Below is generated by plot.py at 2018-03-01 05:52:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1581.40 Mbit/s

95th percentile per-packet one-way delay: 157.999 ms

Loss rate: 8.95%

-- Flow 1:

Average throughput: 856.17 Mbit/s

95th percentile per-packet one-way delay: 149.424 ms

Loss rate: 6.24%

-- Flow 2:

Average throughput: 719.92 Mbit/s

95th percentile per-packet one-way delay: 164.033 ms

Loss rate: 12.81%

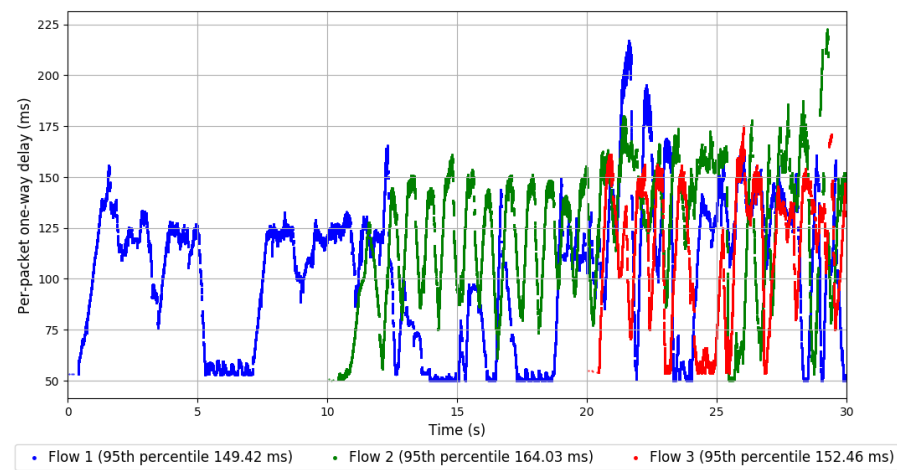
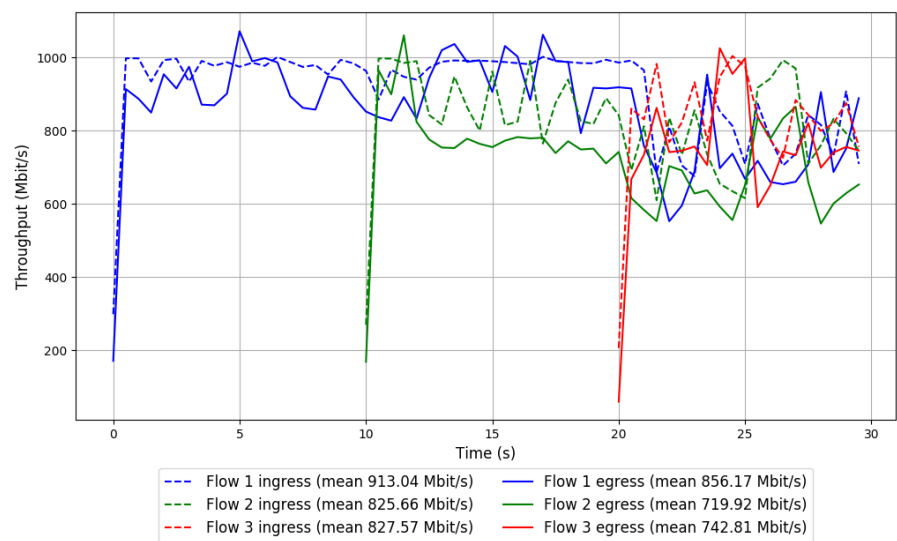
-- Flow 3:

Average throughput: 742.81 Mbit/s

95th percentile per-packet one-way delay: 152.459 ms

Loss rate: 10.28%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-03-01 00:43:07

End at: 2018-03-01 00:43:37

# Below is generated by plot.py at 2018-03-01 06:07:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1610.35 Mbit/s

95th percentile per-packet one-way delay: 199.171 ms

Loss rate: 8.80%

-- Flow 1:

Average throughput: 872.74 Mbit/s

95th percentile per-packet one-way delay: 178.686 ms

Loss rate: 5.99%

-- Flow 2:

Average throughput: 738.90 Mbit/s

95th percentile per-packet one-way delay: 252.248 ms

Loss rate: 11.65%

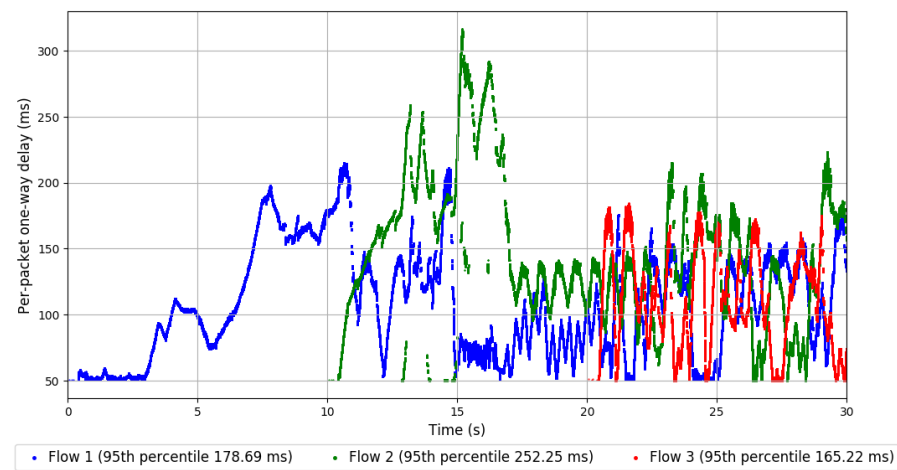
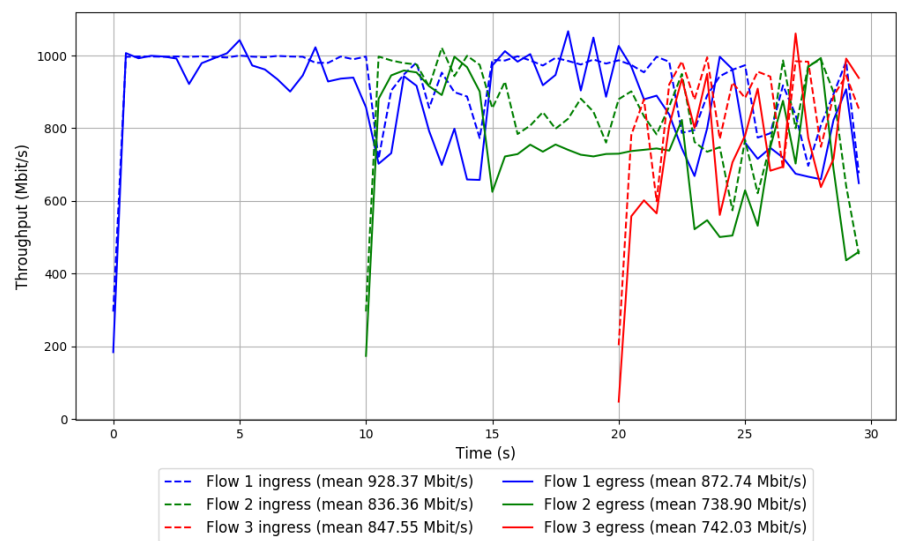
-- Flow 3:

Average throughput: 742.03 Mbit/s

95th percentile per-packet one-way delay: 165.219 ms

Loss rate: 12.46%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-03-01 01:01:27

End at: 2018-03-01 01:01:57

# Below is generated by plot.py at 2018-03-01 06:10:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1559.92 Mbit/s

95th percentile per-packet one-way delay: 159.625 ms

Loss rate: 10.80%

-- Flow 1:

Average throughput: 832.00 Mbit/s

95th percentile per-packet one-way delay: 144.289 ms

Loss rate: 8.46%

-- Flow 2:

Average throughput: 767.81 Mbit/s

95th percentile per-packet one-way delay: 163.674 ms

Loss rate: 11.69%

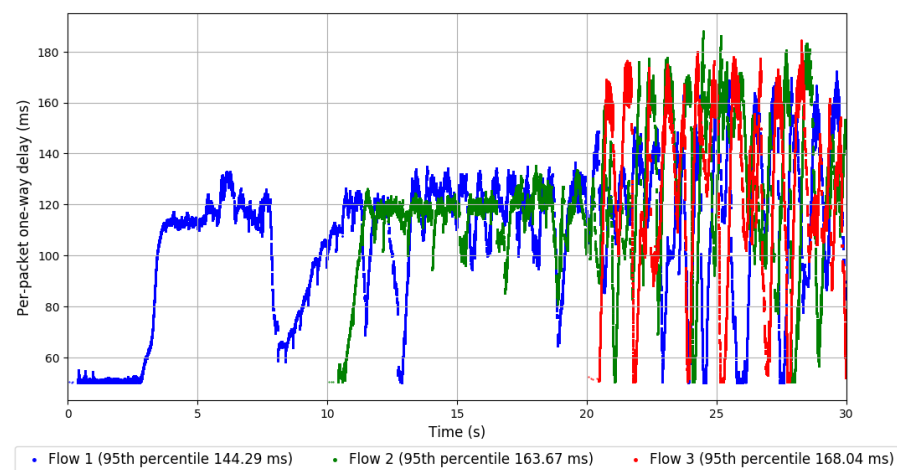
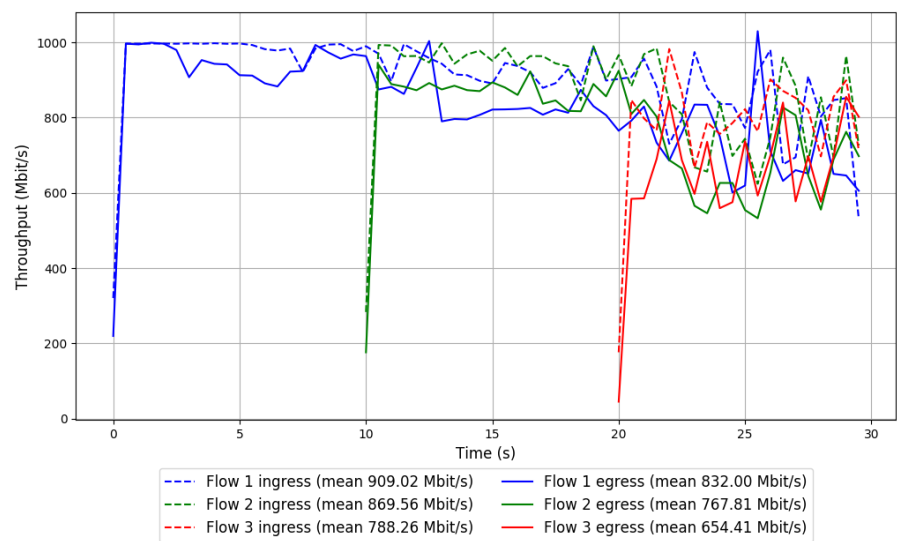
-- Flow 3:

Average throughput: 654.41 Mbit/s

95th percentile per-packet one-way delay: 168.038 ms

Loss rate: 16.97%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-03-01 01:19:08

End at: 2018-03-01 01:19:38

# Below is generated by plot.py at 2018-03-01 06:18:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1640.21 Mbit/s

95th percentile per-packet one-way delay: 170.809 ms

Loss rate: 8.89%

-- Flow 1:

Average throughput: 852.29 Mbit/s

95th percentile per-packet one-way delay: 151.471 ms

Loss rate: 7.74%

-- Flow 2:

Average throughput: 838.17 Mbit/s

95th percentile per-packet one-way delay: 183.718 ms

Loss rate: 7.90%

-- Flow 3:

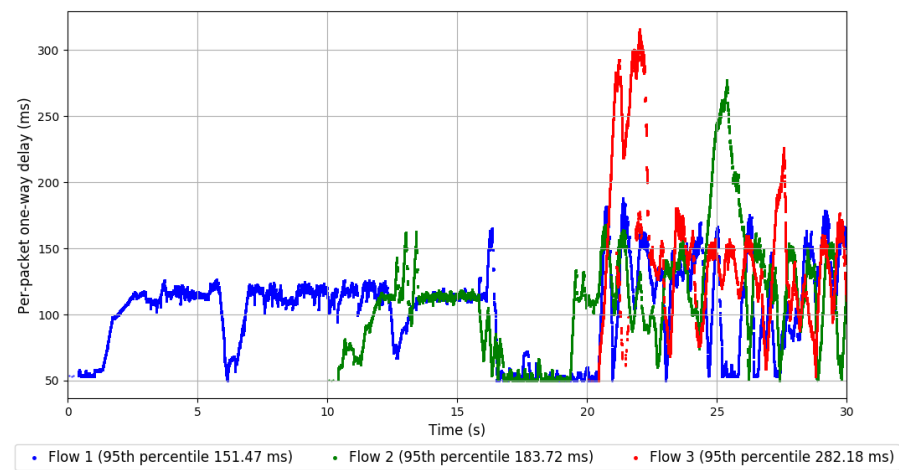
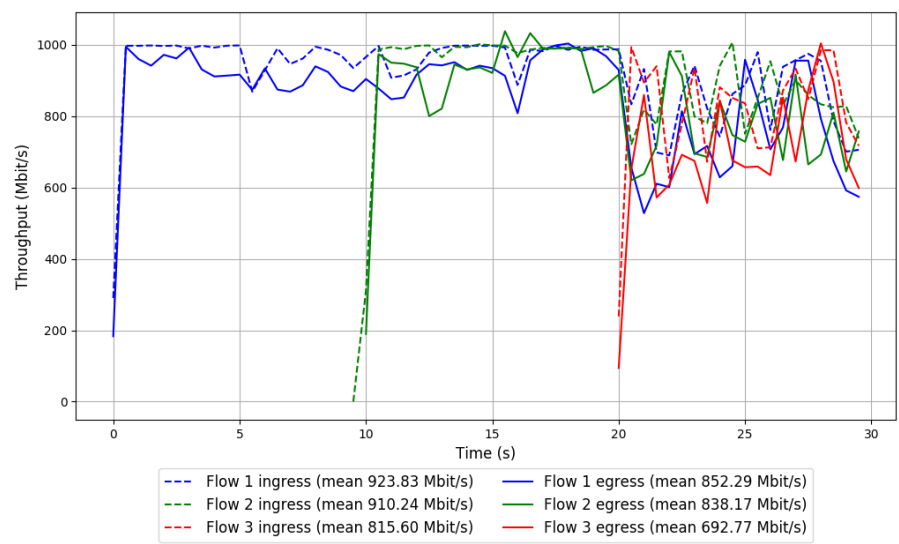
Average throughput: 692.77 Mbit/s

95th percentile per-packet one-way delay: 282.182 ms

Loss rate: 15.03%



Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-03-01 01:36:34

End at: 2018-03-01 01:37:04

# Below is generated by plot.py at 2018-03-01 06:18:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1611.21 Mbit/s

95th percentile per-packet one-way delay: 175.714 ms

Loss rate: 9.12%

-- Flow 1:

Average throughput: 800.33 Mbit/s

95th percentile per-packet one-way delay: 191.523 ms

Loss rate: 9.83%

-- Flow 2:

Average throughput: 841.87 Mbit/s

95th percentile per-packet one-way delay: 136.844 ms

Loss rate: 7.18%

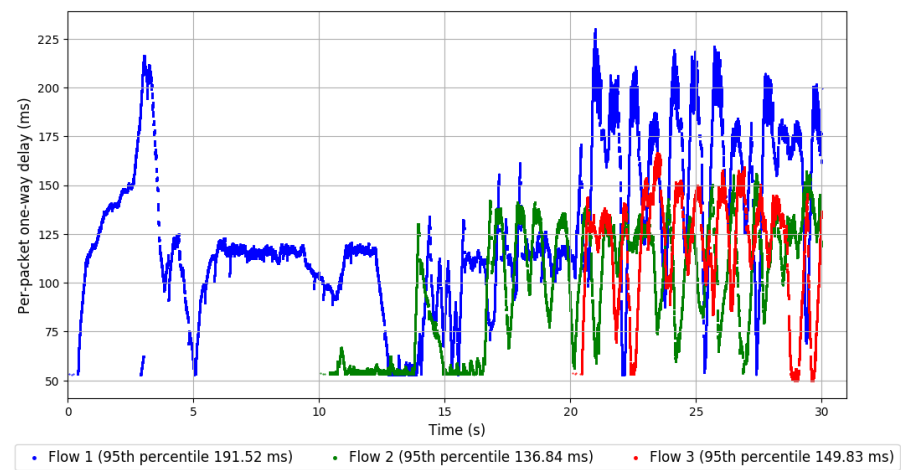
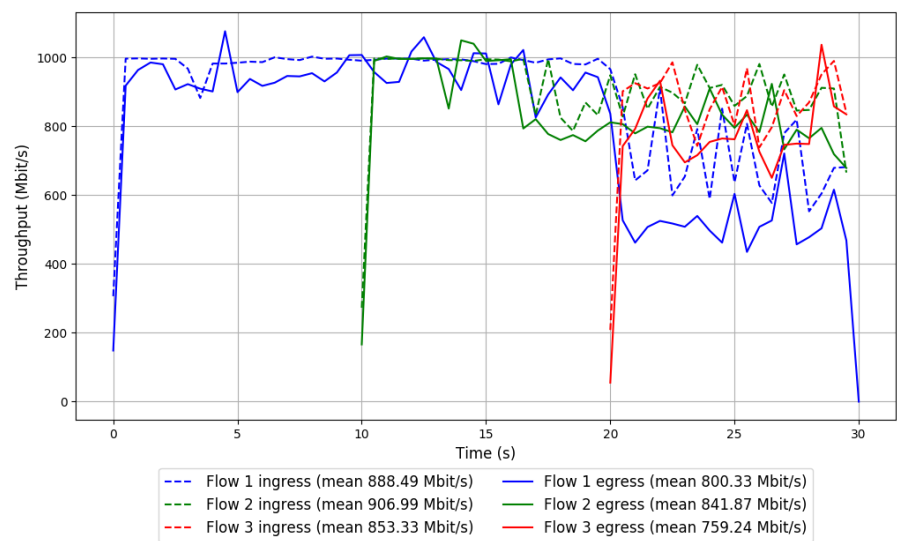
-- Flow 3:

Average throughput: 759.24 Mbit/s

95th percentile per-packet one-way delay: 149.832 ms

Loss rate: 11.03%

Run 10: Report of FillP — Data Link

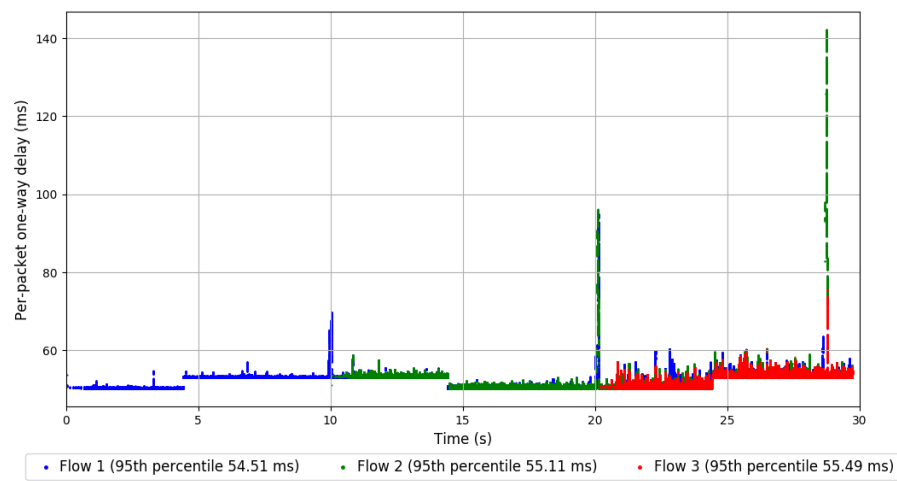
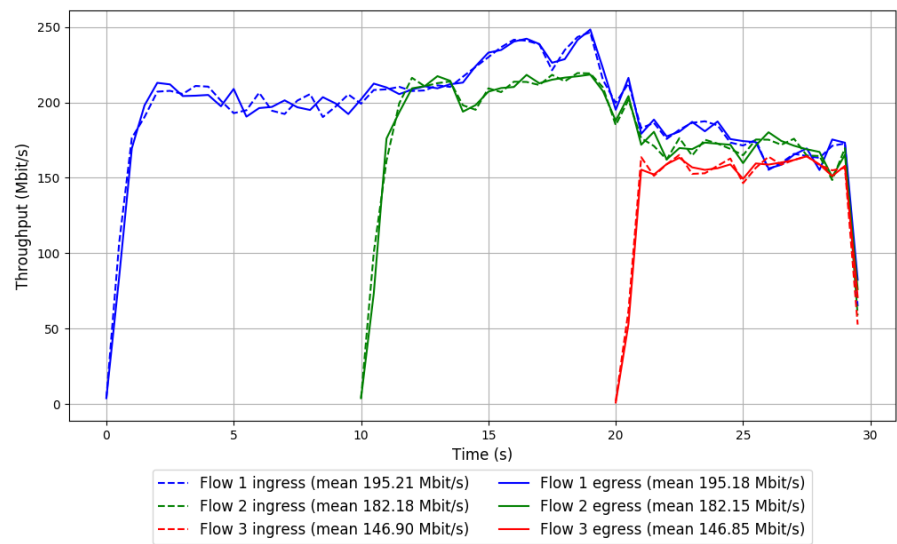


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-28 22:55:38
End at: 2018-02-28 22:56:08

# Below is generated by plot.py at 2018-03-01 06:18:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 363.21 Mbit/s
95th percentile per-packet one-way delay: 54.918 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 195.18 Mbit/s
95th percentile per-packet one-way delay: 54.511 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 182.15 Mbit/s
95th percentile per-packet one-way delay: 55.113 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 146.85 Mbit/s
95th percentile per-packet one-way delay: 55.494 ms
Loss rate: 0.00%
```

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

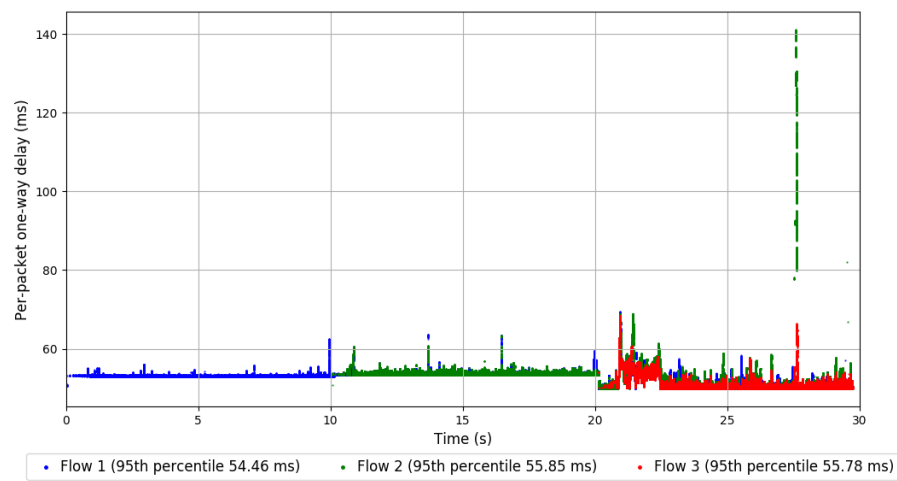
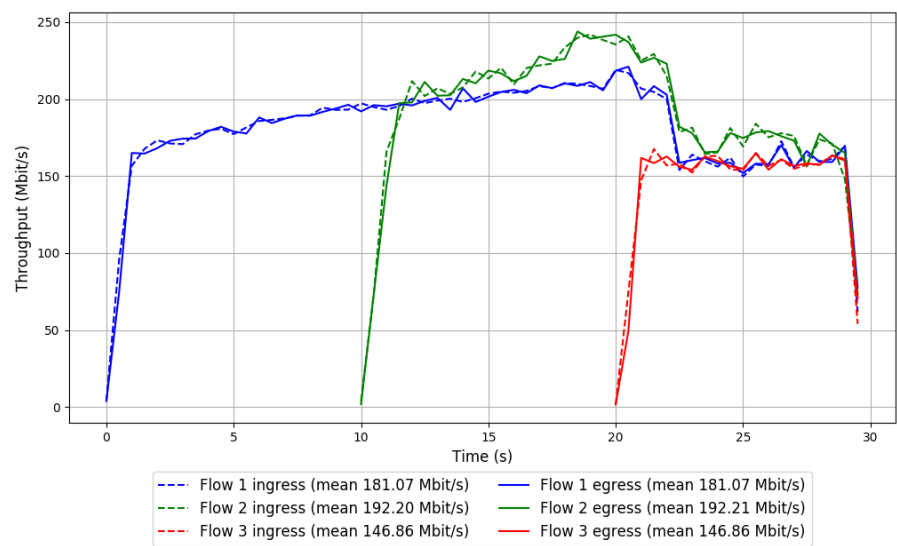


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-28 23:13:22
End at: 2018-02-28 23:13:52

# Below is generated by plot.py at 2018-03-01 06:18:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 356.01 Mbit/s
95th percentile per-packet one-way delay: 55.042 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 181.07 Mbit/s
95th percentile per-packet one-way delay: 54.462 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 192.21 Mbit/s
95th percentile per-packet one-way delay: 55.853 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 146.86 Mbit/s
95th percentile per-packet one-way delay: 55.776 ms
Loss rate: 0.01%
```

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



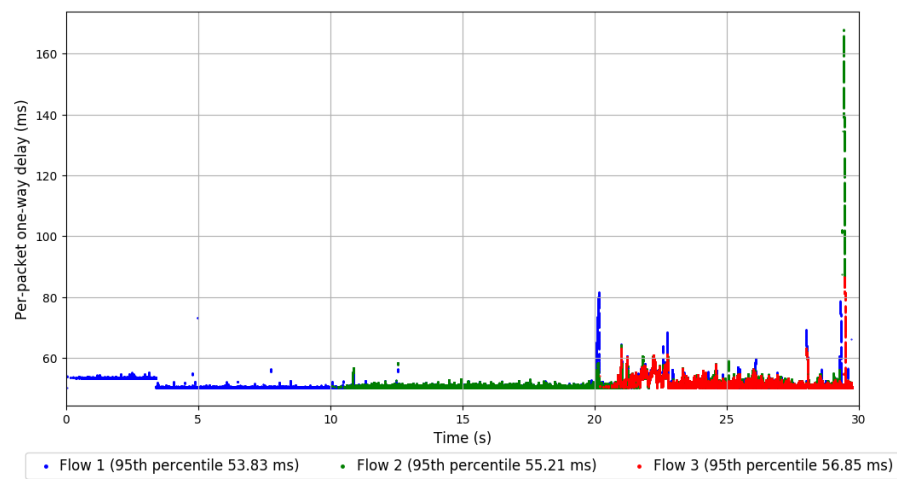
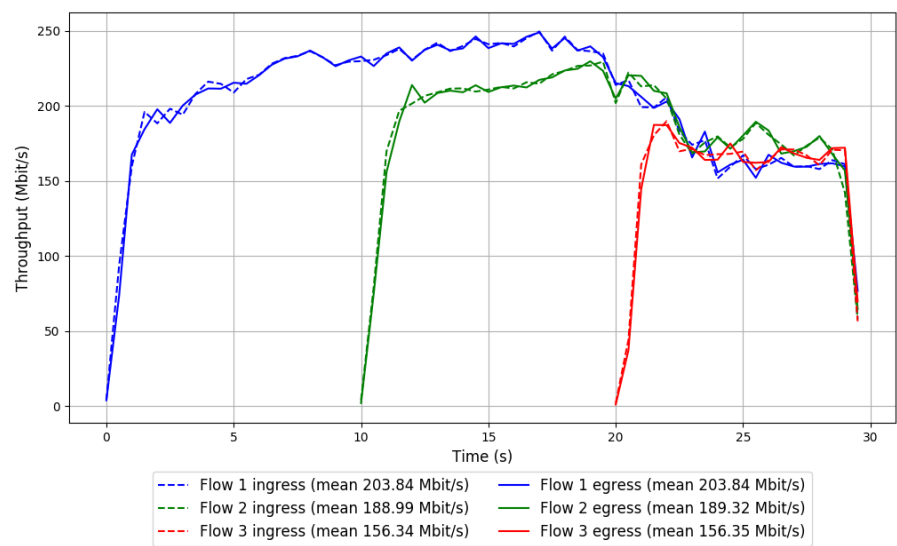
```
Run 3: Statistics of Indigo-1-32

Start at: 2018-02-28 23:31:09
End at: 2018-02-28 23:31:39

# Below is generated by plot.py at 2018-03-01 06:18:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 379.26 Mbit/s
95th percentile per-packet one-way delay: 54.947 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 203.84 Mbit/s
95th percentile per-packet one-way delay: 53.830 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 189.32 Mbit/s
95th percentile per-packet one-way delay: 55.212 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 156.35 Mbit/s
95th percentile per-packet one-way delay: 56.854 ms
Loss rate: 0.00%
```



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



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-28 23:48:29

End at: 2018-02-28 23:48:59

# Below is generated by plot.py at 2018-03-01 06:18:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 374.60 Mbit/s

95th percentile per-packet one-way delay: 53.384 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 202.18 Mbit/s

95th percentile per-packet one-way delay: 53.367 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 184.41 Mbit/s

95th percentile per-packet one-way delay: 53.489 ms

Loss rate: 0.00%

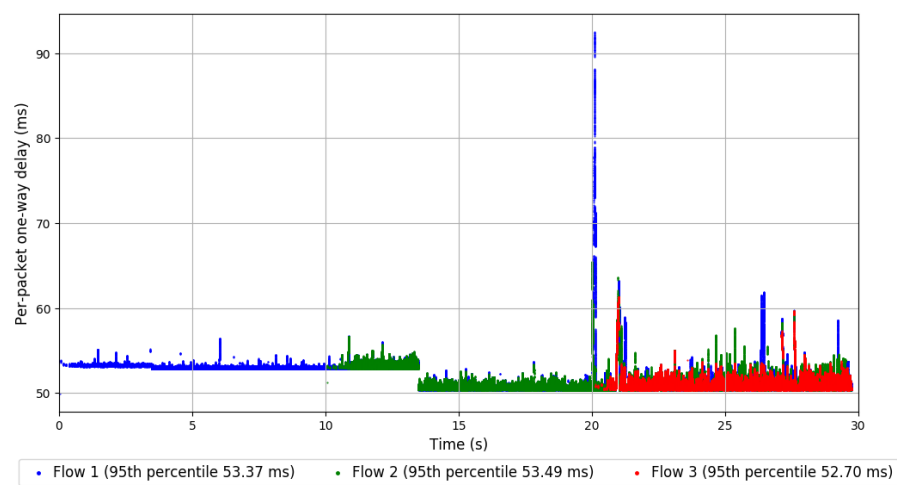
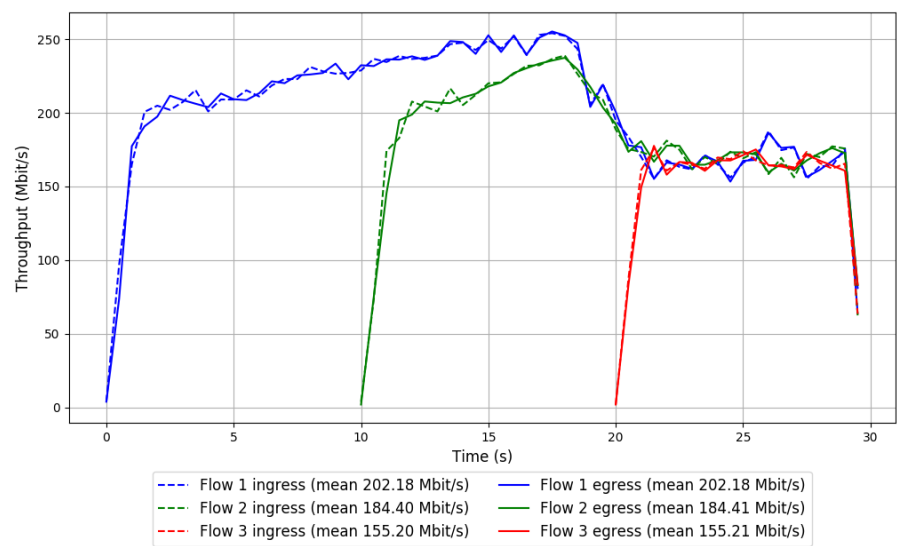
-- Flow 3:

Average throughput: 155.21 Mbit/s

95th percentile per-packet one-way delay: 52.699 ms

Loss rate: 0.00%

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



Run 5: Statistics of Indigo-1-32

Start at: 2018-03-01 00:05:54

End at: 2018-03-01 00:06:24

# Below is generated by plot.py at 2018-03-01 06:18:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 361.92 Mbit/s

95th percentile per-packet one-way delay: 55.387 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 201.87 Mbit/s

95th percentile per-packet one-way delay: 55.108 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 170.30 Mbit/s

95th percentile per-packet one-way delay: 55.336 ms

Loss rate: 0.00%

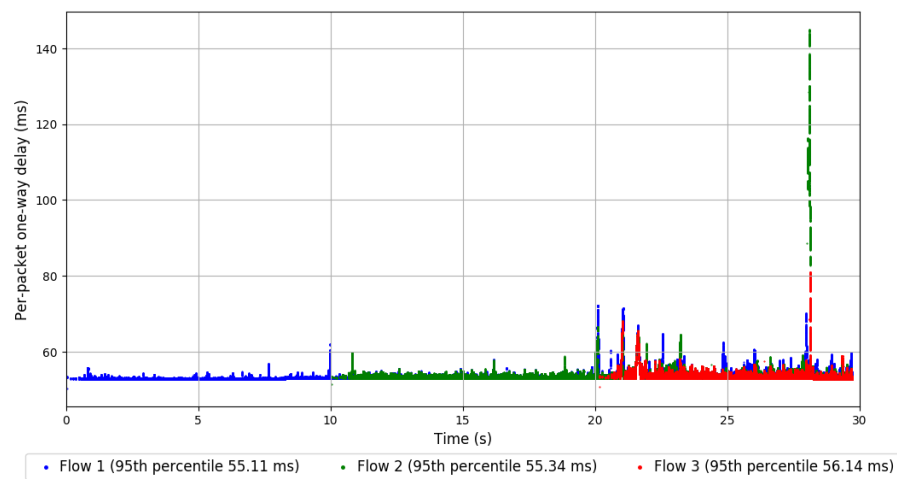
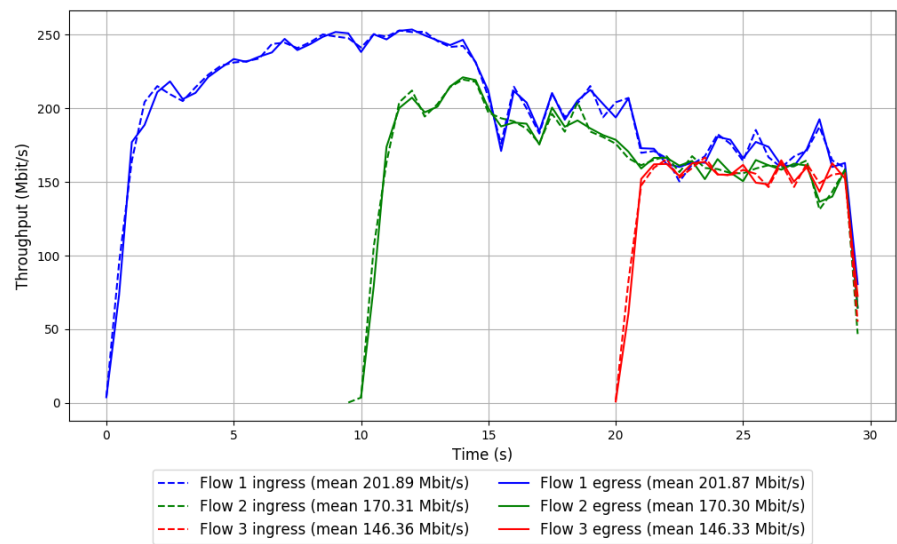
-- Flow 3:

Average throughput: 146.33 Mbit/s

95th percentile per-packet one-way delay: 56.136 ms

Loss rate: 0.00%

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



Run 6: Statistics of Indigo-1-32

Start at: 2018-03-01 00:23:31

End at: 2018-03-01 00:24:01

# Below is generated by plot.py at 2018-03-01 06:18:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 366.04 Mbit/s

95th percentile per-packet one-way delay: 56.000 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 200.13 Mbit/s

95th percentile per-packet one-way delay: 55.430 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 174.29 Mbit/s

95th percentile per-packet one-way delay: 56.551 ms

Loss rate: 0.01%

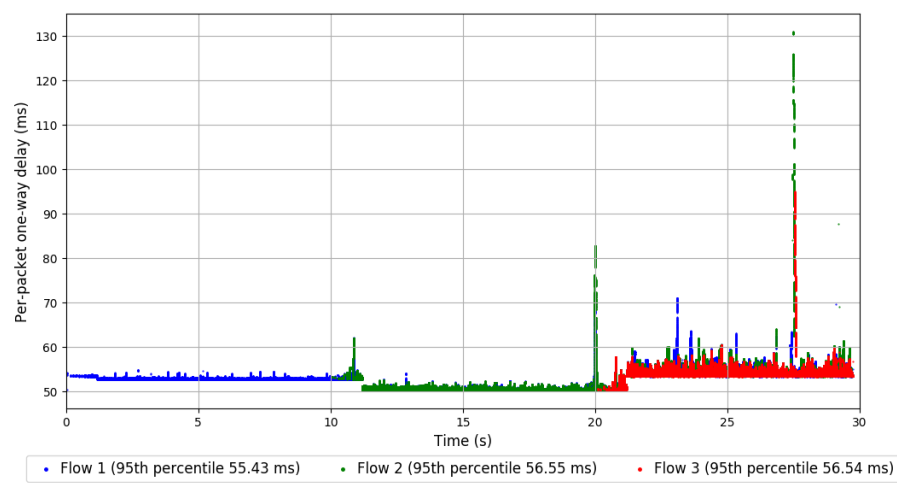
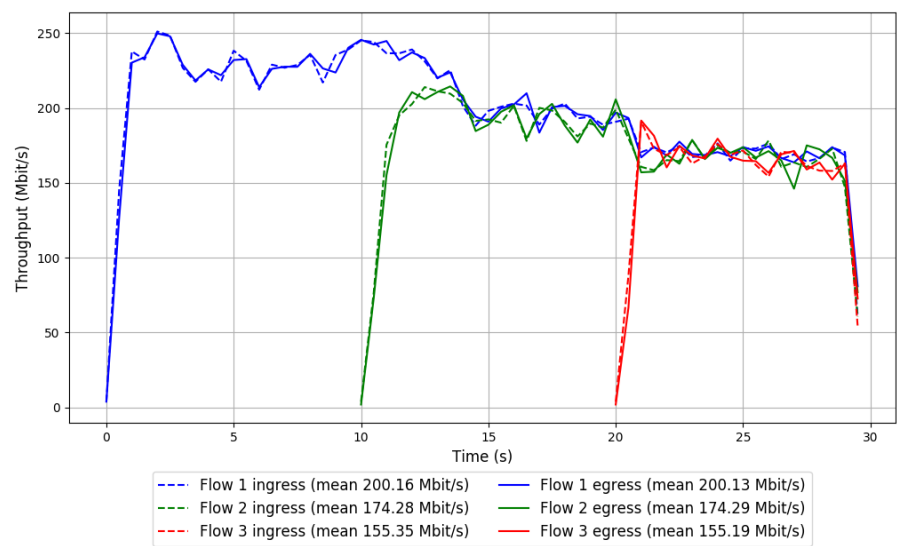
-- Flow 3:

Average throughput: 155.19 Mbit/s

95th percentile per-packet one-way delay: 56.537 ms

Loss rate: 0.05%

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



Run 7: Statistics of Indigo-1-32

Start at: 2018-03-01 00:41:03

End at: 2018-03-01 00:41:33

# Below is generated by plot.py at 2018-03-01 06:18:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 348.48 Mbit/s

95th percentile per-packet one-way delay: 55.760 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 187.12 Mbit/s

95th percentile per-packet one-way delay: 55.402 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 168.22 Mbit/s

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

Loss rate: 0.01%

-- Flow 3:

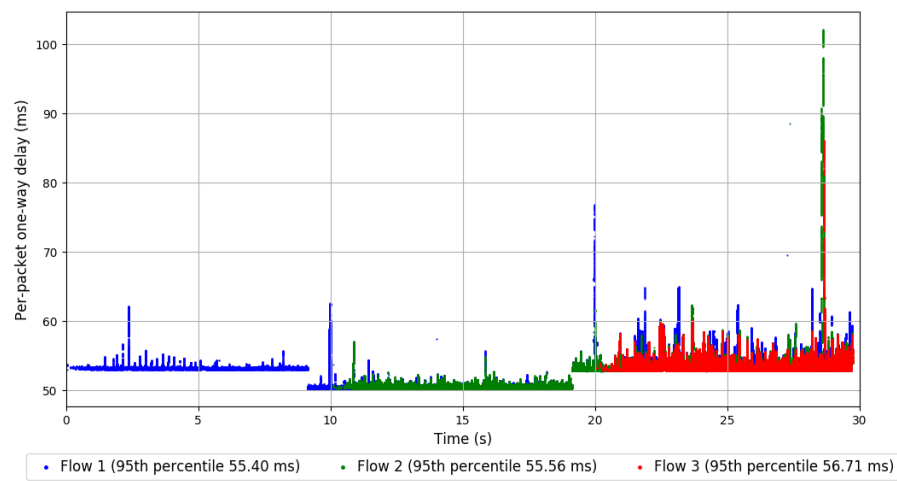
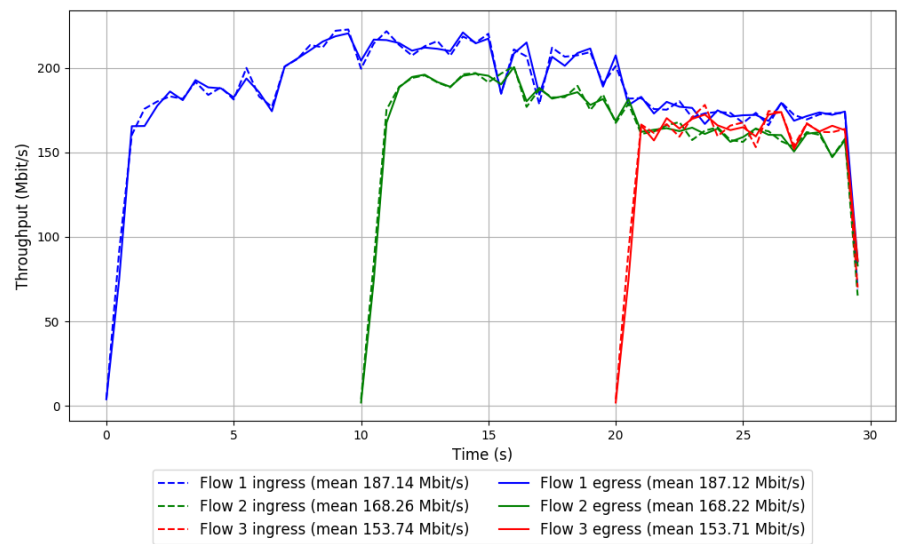
Average throughput: 153.71 Mbit/s

95th percentile per-packet one-way delay: 56.713 ms

Loss rate: 0.01%



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



Run 8: Statistics of Indigo-1-32

Start at: 2018-03-01 00:59:23

End at: 2018-03-01 00:59:53

# Below is generated by plot.py at 2018-03-01 06:18:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 360.35 Mbit/s

95th percentile per-packet one-way delay: 56.495 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 198.09 Mbit/s

95th percentile per-packet one-way delay: 56.367 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 172.41 Mbit/s

95th percentile per-packet one-way delay: 56.264 ms

Loss rate: 0.00%

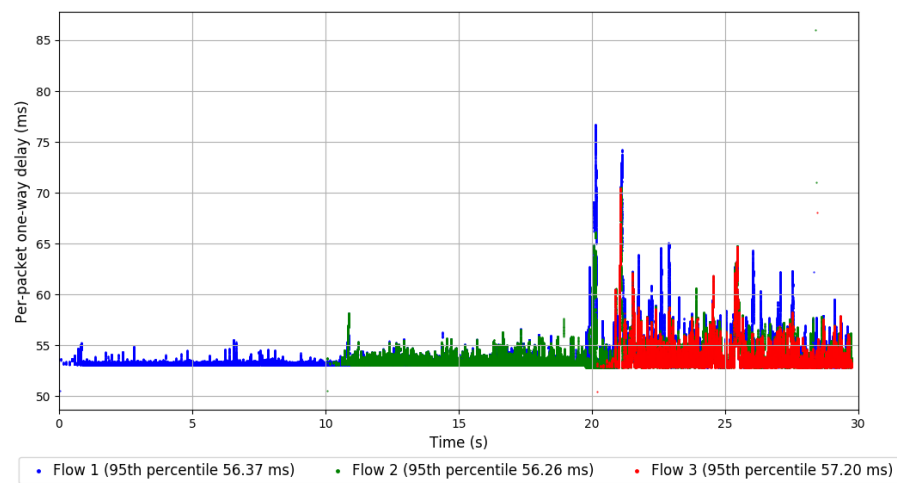
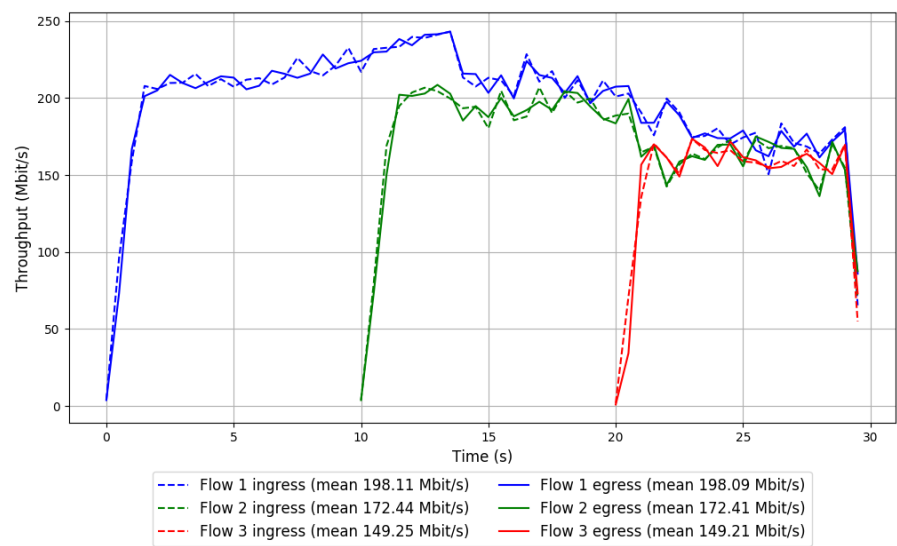
-- Flow 3:

Average throughput: 149.21 Mbit/s

95th percentile per-packet one-way delay: 57.196 ms

Loss rate: 0.00%

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

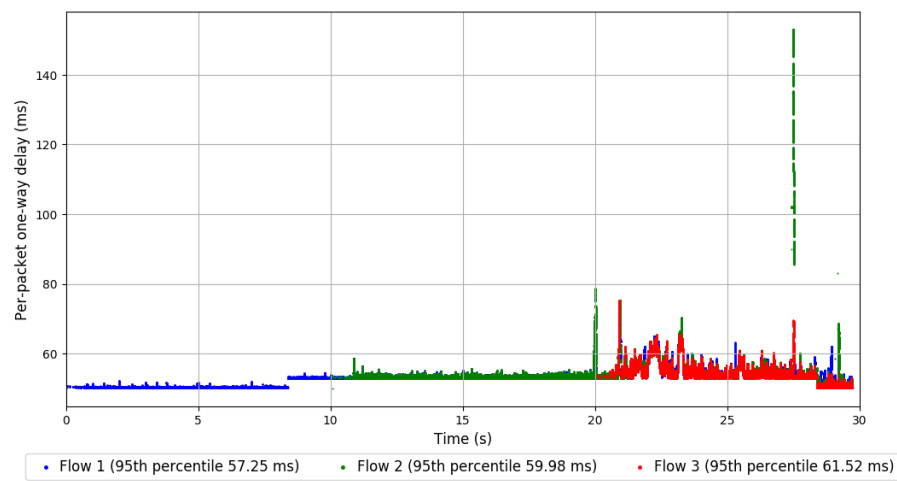
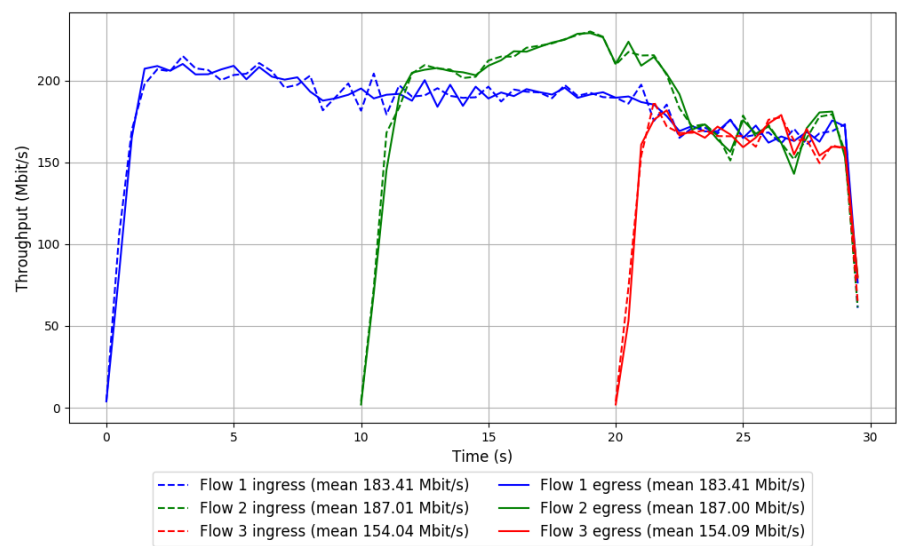


```
Run 9: Statistics of Indigo-1-32

Start at: 2018-03-01 01:17:04
End at: 2018-03-01 01:17:34

# Below is generated by plot.py at 2018-03-01 06:18:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.24 Mbit/s
95th percentile per-packet one-way delay: 59.091 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 183.41 Mbit/s
95th percentile per-packet one-way delay: 57.254 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 187.00 Mbit/s
95th percentile per-packet one-way delay: 59.981 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 154.09 Mbit/s
95th percentile per-packet one-way delay: 61.518 ms
Loss rate: 0.00%
```

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

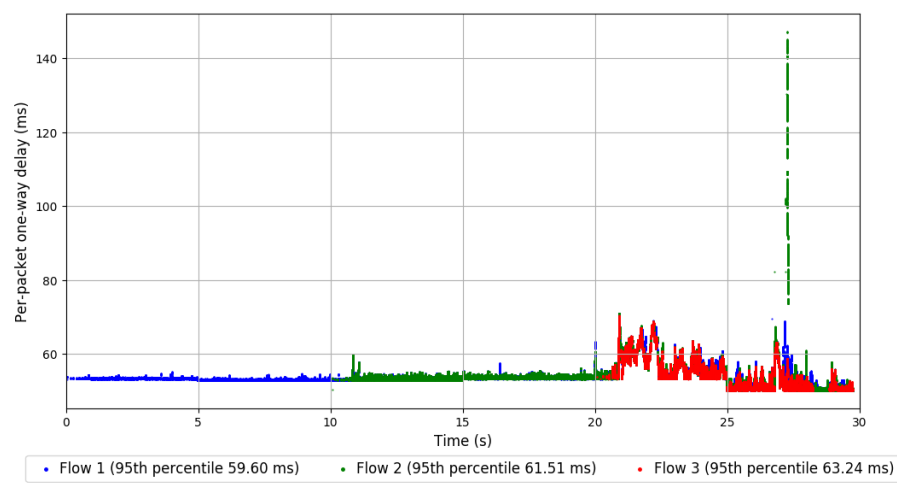
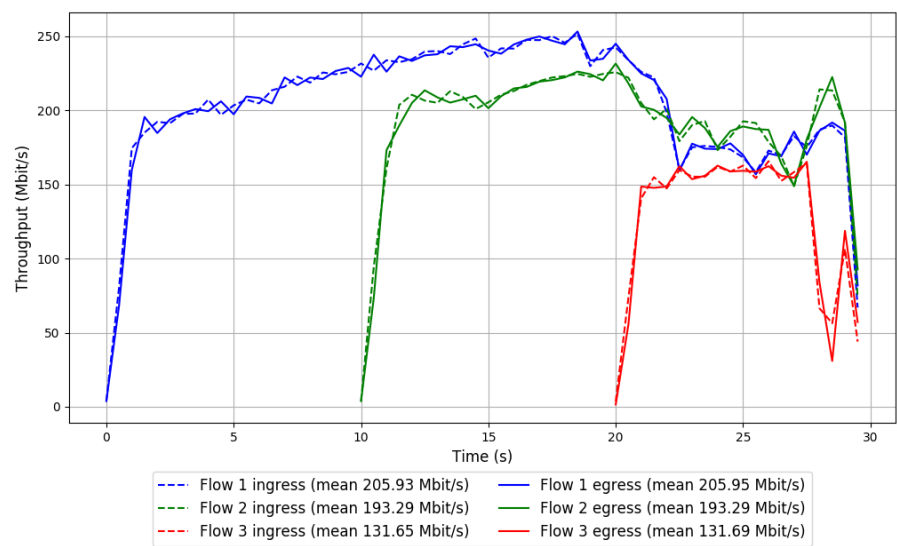


```
Run 10: Statistics of Indigo-1-32

Start at: 2018-03-01 01:34:28
End at: 2018-03-01 01:34:58

# Below is generated by plot.py at 2018-03-01 06:18:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 376.88 Mbit/s
95th percentile per-packet one-way delay: 60.886 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 205.95 Mbit/s
95th percentile per-packet one-way delay: 59.603 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 193.29 Mbit/s
95th percentile per-packet one-way delay: 61.505 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 131.69 Mbit/s
95th percentile per-packet one-way delay: 63.242 ms
Loss rate: 0.01%
```

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



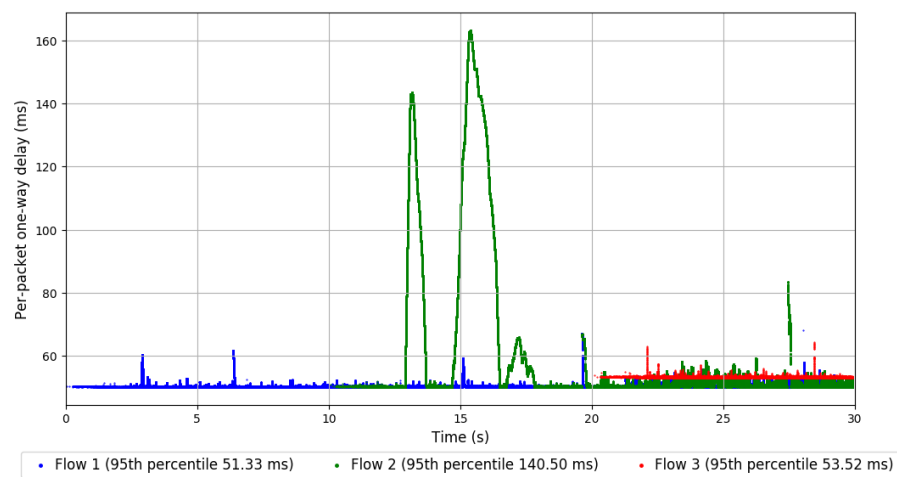
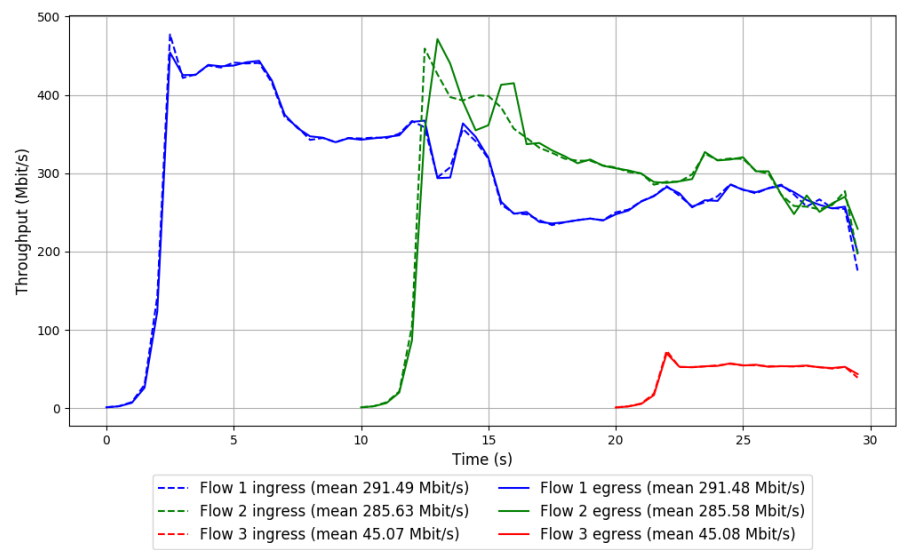
```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-28 23:01:14
End at: 2018-02-28 23:01:44

# Below is generated by plot.py at 2018-03-01 06:18:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 496.09 Mbit/s
95th percentile per-packet one-way delay: 97.944 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 291.48 Mbit/s
95th percentile per-packet one-way delay: 51.334 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 285.58 Mbit/s
95th percentile per-packet one-way delay: 140.502 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 45.08 Mbit/s
95th percentile per-packet one-way delay: 53.518 ms
Loss rate: 0.00%
```



Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-28 23:19:00

End at: 2018-02-28 23:19:30

# Below is generated by plot.py at 2018-03-01 06:18:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 483.96 Mbit/s

95th percentile per-packet one-way delay: 54.031 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 341.34 Mbit/s

95th percentile per-packet one-way delay: 51.767 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 182.56 Mbit/s

95th percentile per-packet one-way delay: 54.764 ms

Loss rate: 0.00%

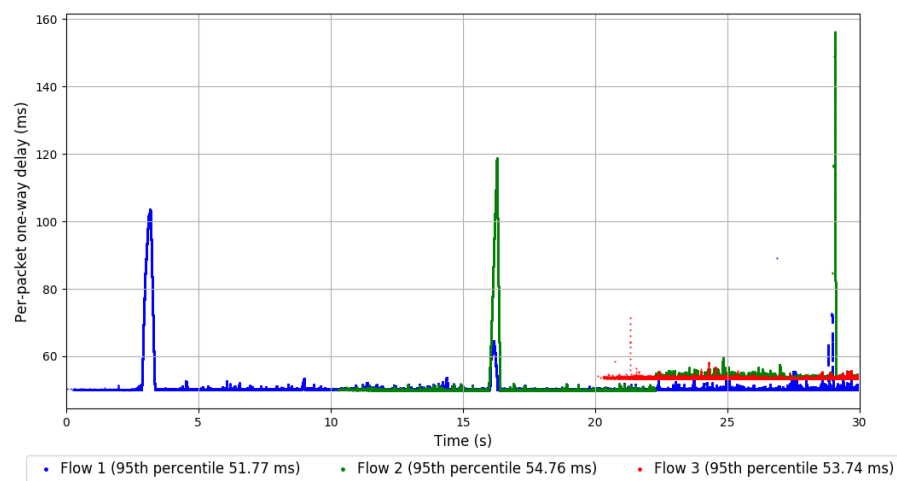
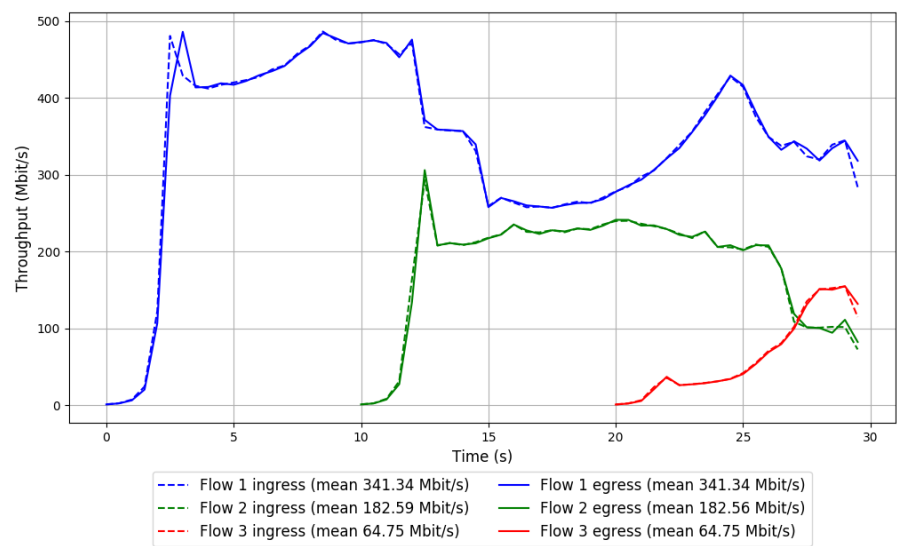
-- Flow 3:

Average throughput: 64.75 Mbit/s

95th percentile per-packet one-way delay: 53.745 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-28 23:36:41

End at: 2018-02-28 23:37:11

# Below is generated by plot.py at 2018-03-01 06:18:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 473.00 Mbit/s

95th percentile per-packet one-way delay: 53.833 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 266.39 Mbit/s

95th percentile per-packet one-way delay: 52.933 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 267.84 Mbit/s

95th percentile per-packet one-way delay: 57.676 ms

Loss rate: 0.00%

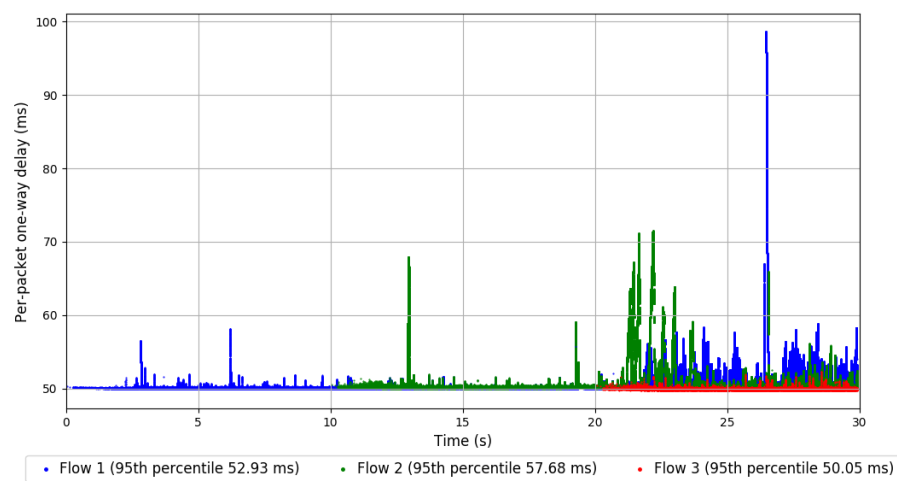
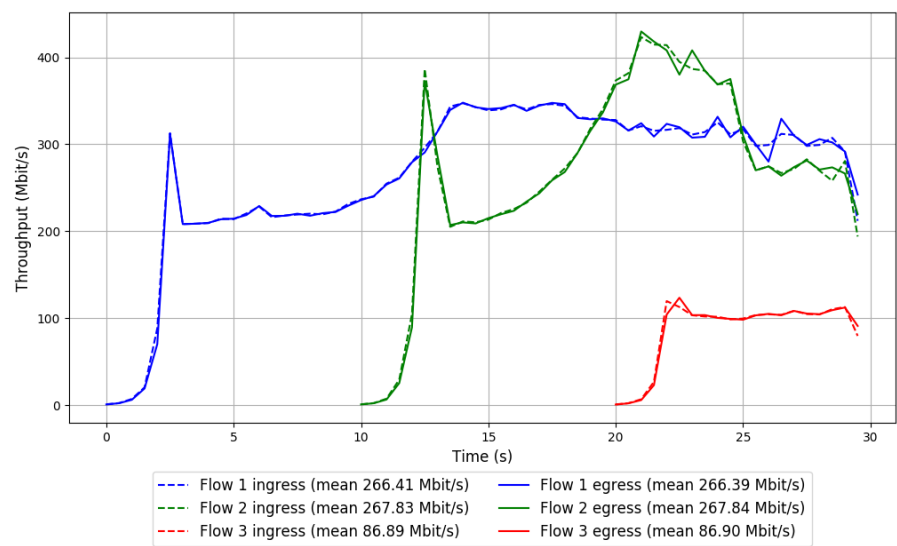
-- Flow 3:

Average throughput: 86.90 Mbit/s

95th percentile per-packet one-way delay: 50.053 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-28 23:54:01

End at: 2018-02-28 23:54:31

# Below is generated by plot.py at 2018-03-01 06:18:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 496.40 Mbit/s

95th percentile per-packet one-way delay: 91.007 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 299.14 Mbit/s

95th percentile per-packet one-way delay: 54.201 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 272.96 Mbit/s

95th percentile per-packet one-way delay: 191.772 ms

Loss rate: 0.28%

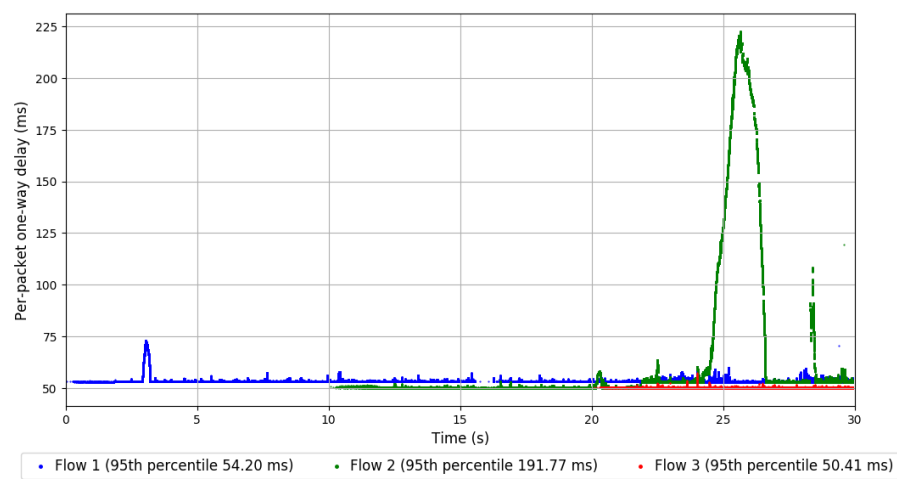
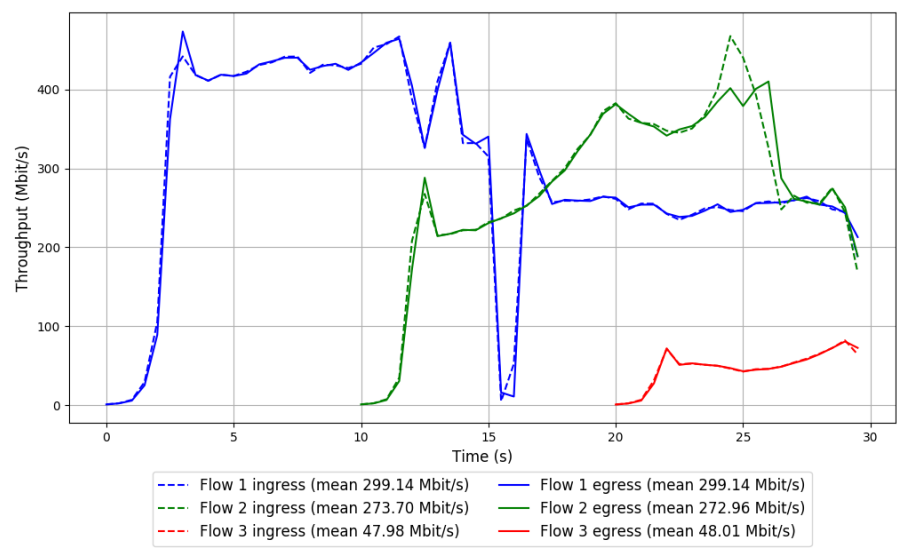
-- Flow 3:

Average throughput: 48.01 Mbit/s

95th percentile per-packet one-way delay: 50.413 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-03-01 00:11:21

End at: 2018-03-01 00:11:51

# Below is generated by plot.py at 2018-03-01 06:18:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 545.15 Mbit/s

95th percentile per-packet one-way delay: 57.928 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 335.04 Mbit/s

95th percentile per-packet one-way delay: 56.750 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 300.23 Mbit/s

95th percentile per-packet one-way delay: 64.567 ms

Loss rate: 0.03%

-- Flow 3:

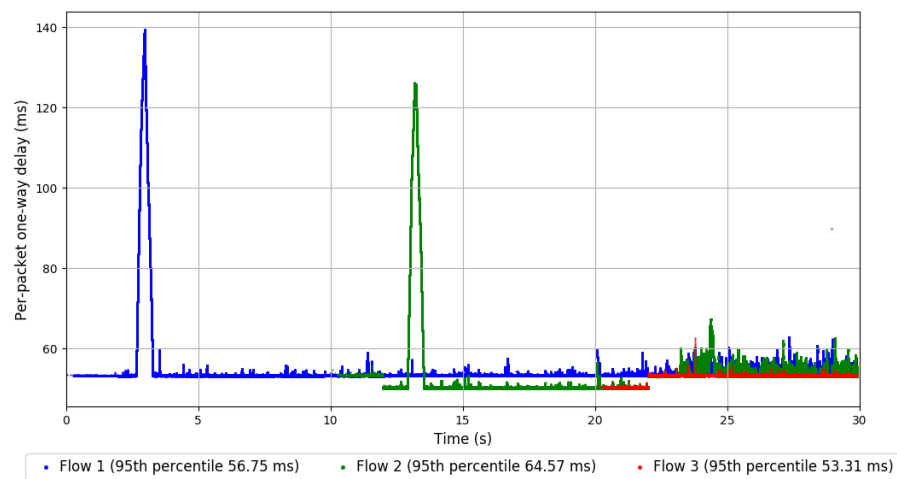
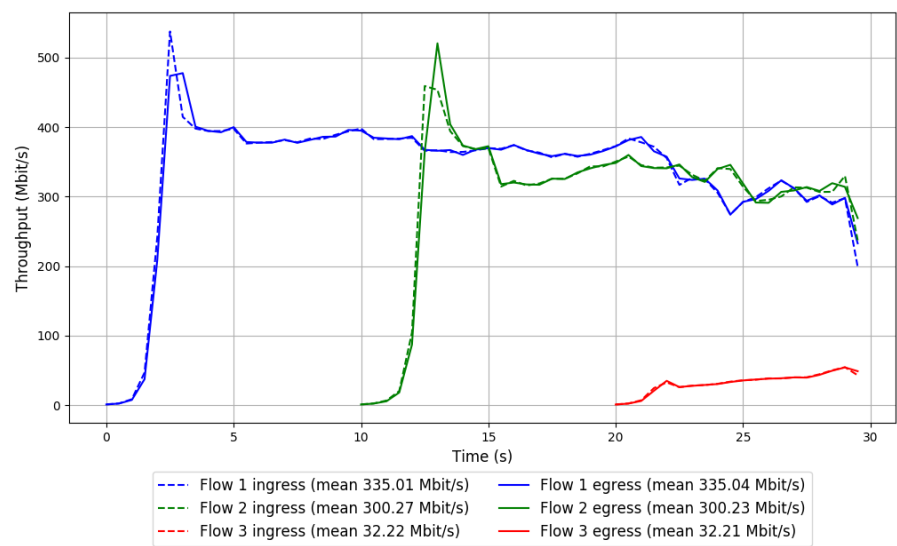
Average throughput: 32.21 Mbit/s

95th percentile per-packet one-way delay: 53.314 ms

Loss rate: 0.05%



Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-03-01 00:29:11

End at: 2018-03-01 00:29:41

# Below is generated by plot.py at 2018-03-01 06:19:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 477.43 Mbit/s

95th percentile per-packet one-way delay: 53.214 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 313.36 Mbit/s

95th percentile per-packet one-way delay: 52.638 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 220.42 Mbit/s

95th percentile per-packet one-way delay: 54.220 ms

Loss rate: 0.00%

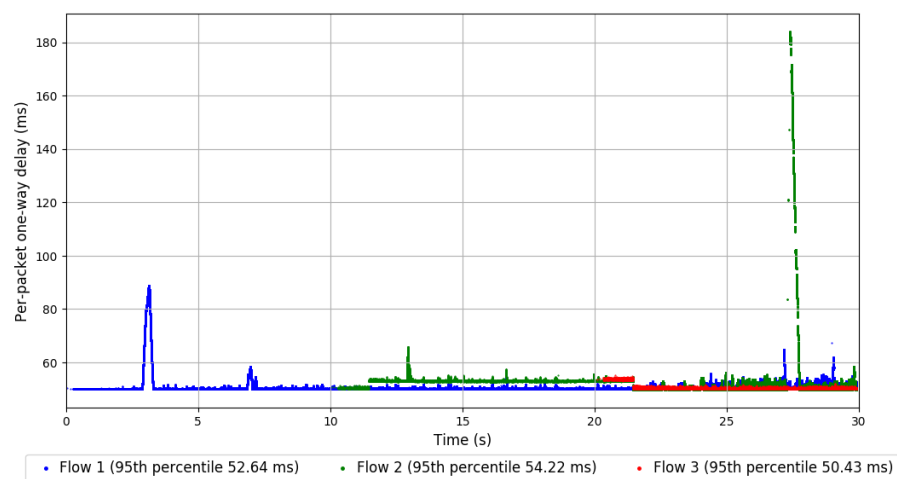
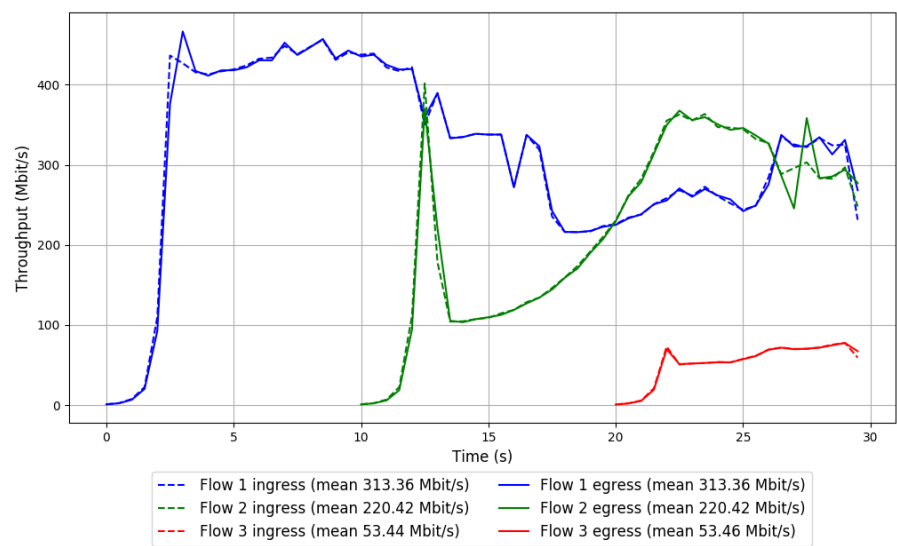
-- Flow 3:

Average throughput: 53.46 Mbit/s

95th percentile per-packet one-way delay: 50.432 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-03-01 00:47:01

End at: 2018-03-01 00:47:31

# Below is generated by plot.py at 2018-03-01 06:23:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 568.32 Mbit/s

95th percentile per-packet one-way delay: 55.740 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 371.88 Mbit/s

95th percentile per-packet one-way delay: 52.787 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 280.52 Mbit/s

95th percentile per-packet one-way delay: 82.670 ms

Loss rate: 0.00%

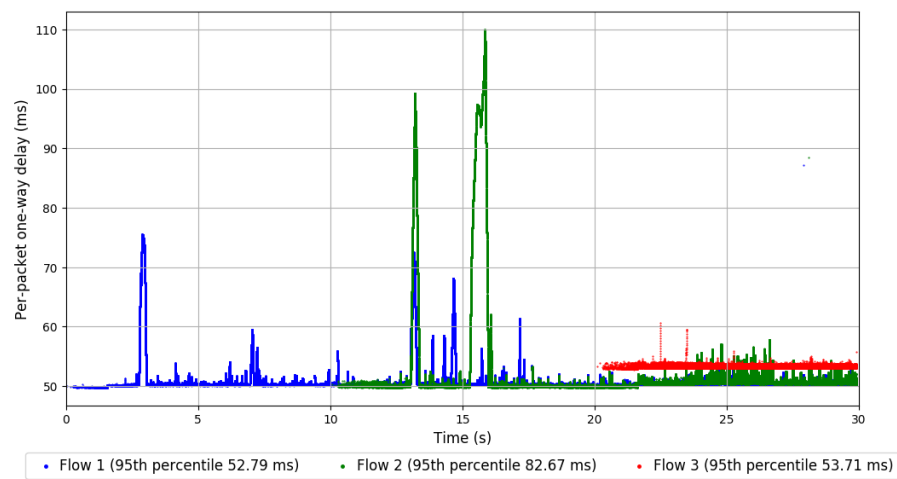
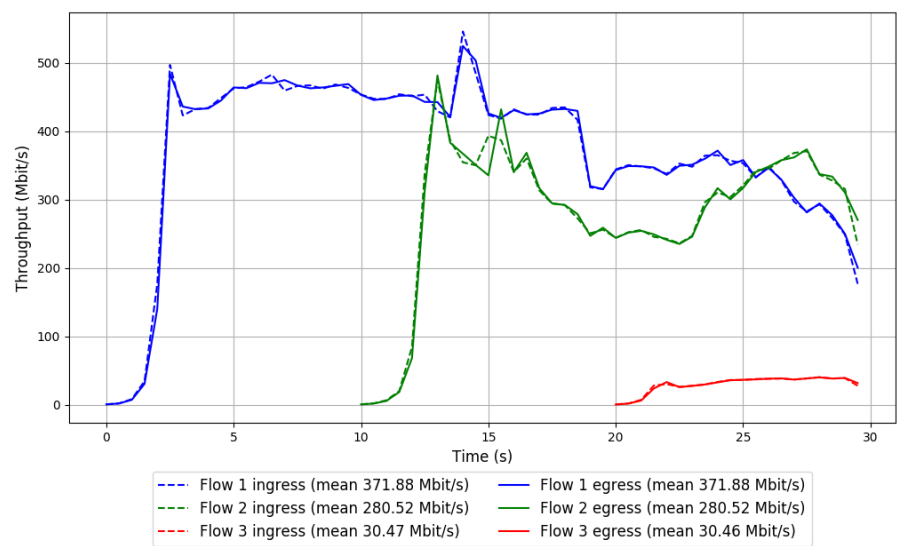
-- Flow 3:

Average throughput: 30.46 Mbit/s

95th percentile per-packet one-way delay: 53.714 ms

Loss rate: 0.02%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-03-01 01:04:53

End at: 2018-03-01 01:05:23

# Below is generated by plot.py at 2018-03-01 06:23:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 550.67 Mbit/s

95th percentile per-packet one-way delay: 56.986 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 364.64 Mbit/s

95th percentile per-packet one-way delay: 60.006 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 255.95 Mbit/s

95th percentile per-packet one-way delay: 53.156 ms

Loss rate: 0.00%

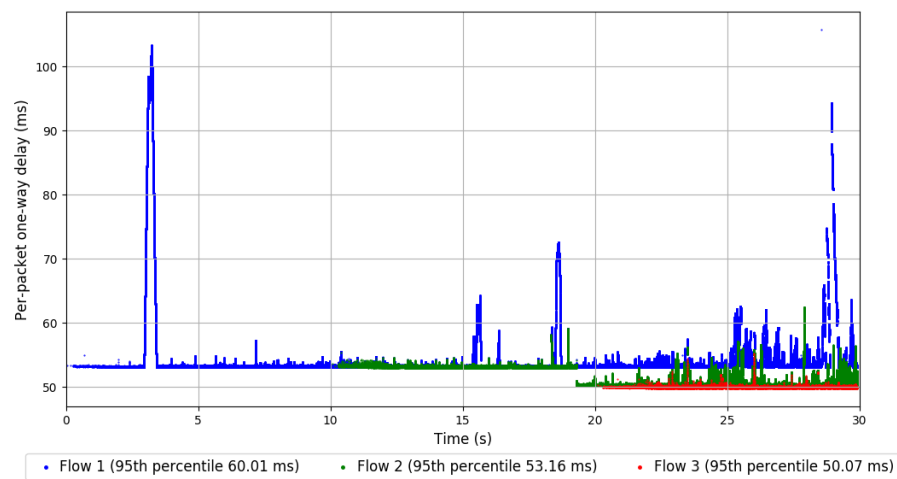
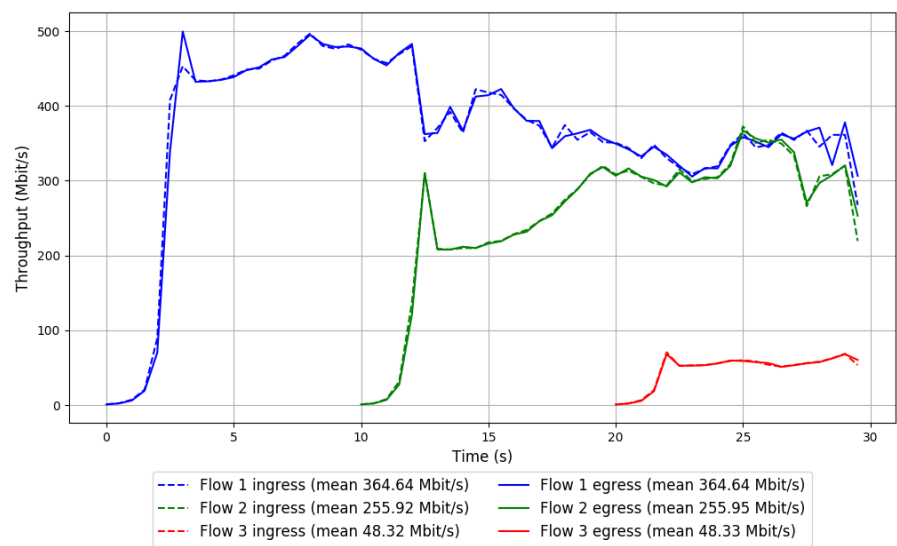
-- Flow 3:

Average throughput: 48.33 Mbit/s

95th percentile per-packet one-way delay: 50.072 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-03-01 01:22:38

End at: 2018-03-01 01:23:08

# Below is generated by plot.py at 2018-03-01 06:23:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 477.34 Mbit/s

95th percentile per-packet one-way delay: 53.367 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 277.74 Mbit/s

95th percentile per-packet one-way delay: 53.383 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 224.38 Mbit/s

95th percentile per-packet one-way delay: 51.814 ms

Loss rate: 0.00%

-- Flow 3:

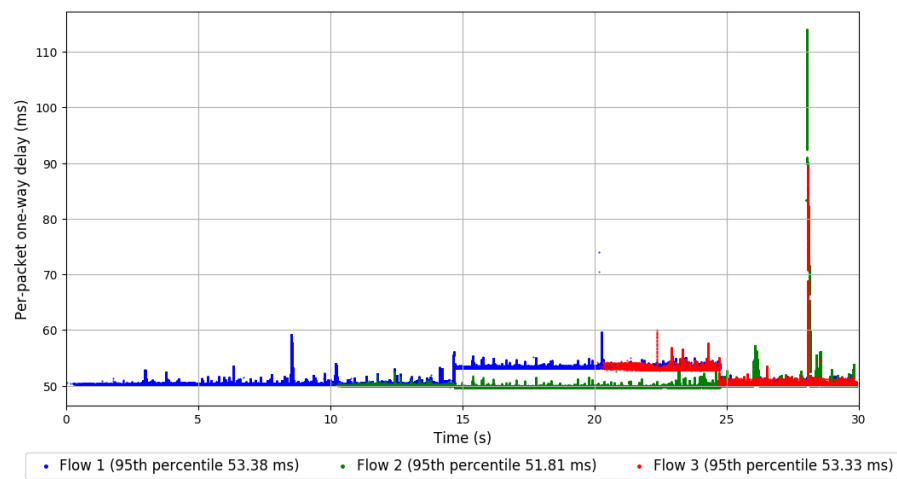
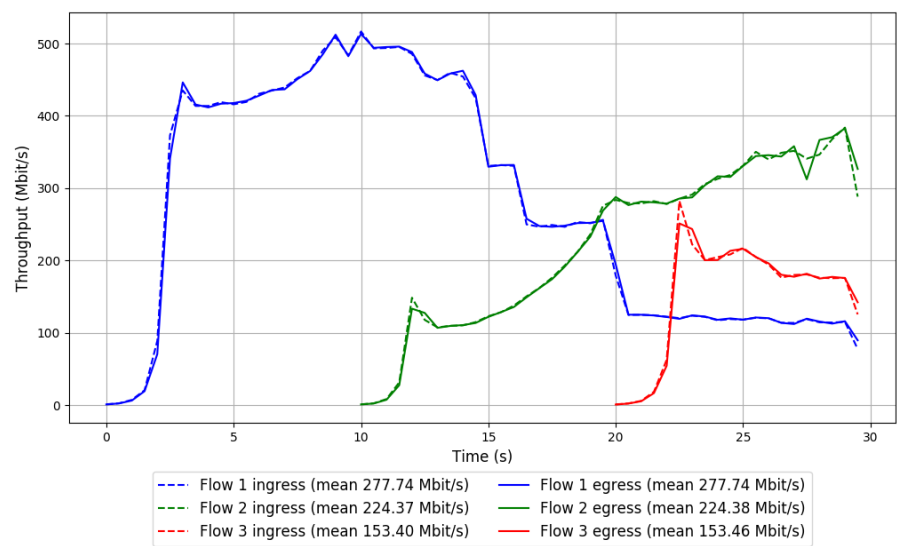
Average throughput: 153.46 Mbit/s

95th percentile per-packet one-way delay: 53.326 ms

Loss rate: 0.00%



Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-03-01 01:40:32

End at: 2018-03-01 01:41:02

# Below is generated by plot.py at 2018-03-01 06:24:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 477.38 Mbit/s

95th percentile per-packet one-way delay: 53.045 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 317.67 Mbit/s

95th percentile per-packet one-way delay: 50.815 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 219.16 Mbit/s

95th percentile per-packet one-way delay: 53.084 ms

Loss rate: 0.00%

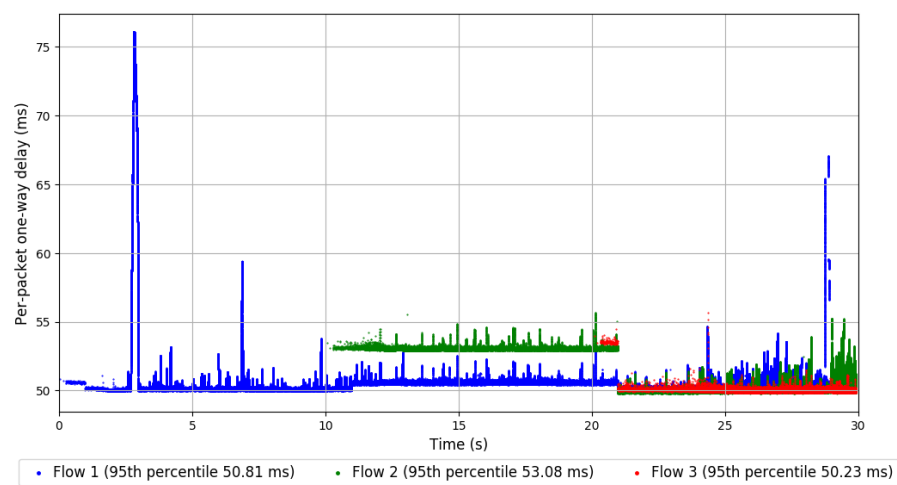
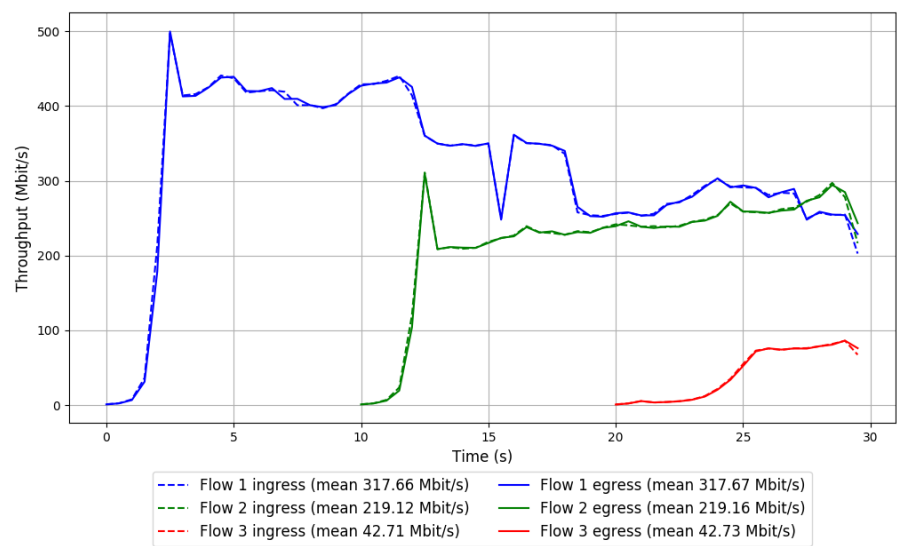
-- Flow 3:

Average throughput: 42.73 Mbit/s

95th percentile per-packet one-way delay: 50.234 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

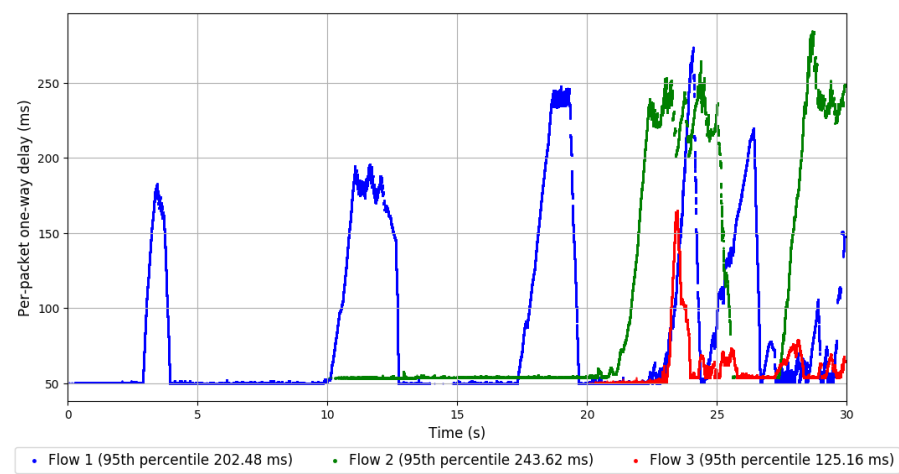
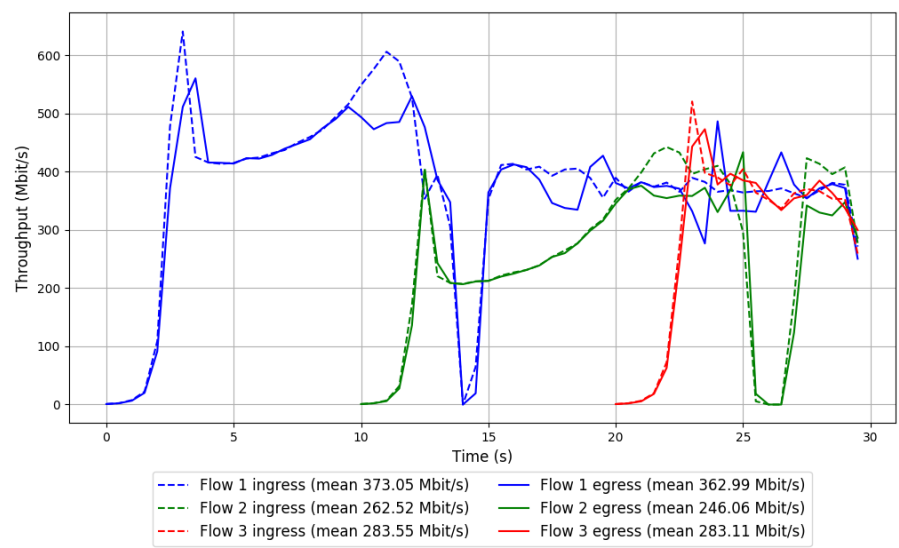


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-28 22:50:39
End at: 2018-02-28 22:51:09

# Below is generated by plot.py at 2018-03-01 06:28:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 619.87 Mbit/s
95th percentile per-packet one-way delay: 235.352 ms
Loss rate: 3.27%
-- Flow 1:
Average throughput: 362.99 Mbit/s
95th percentile per-packet one-way delay: 202.484 ms
Loss rate: 2.67%
-- Flow 2:
Average throughput: 246.06 Mbit/s
95th percentile per-packet one-way delay: 243.618 ms
Loss rate: 6.25%
-- Flow 3:
Average throughput: 283.11 Mbit/s
95th percentile per-packet one-way delay: 125.158 ms
Loss rate: 0.08%
```

Run 1: Report of Vivace-loss — Data Link

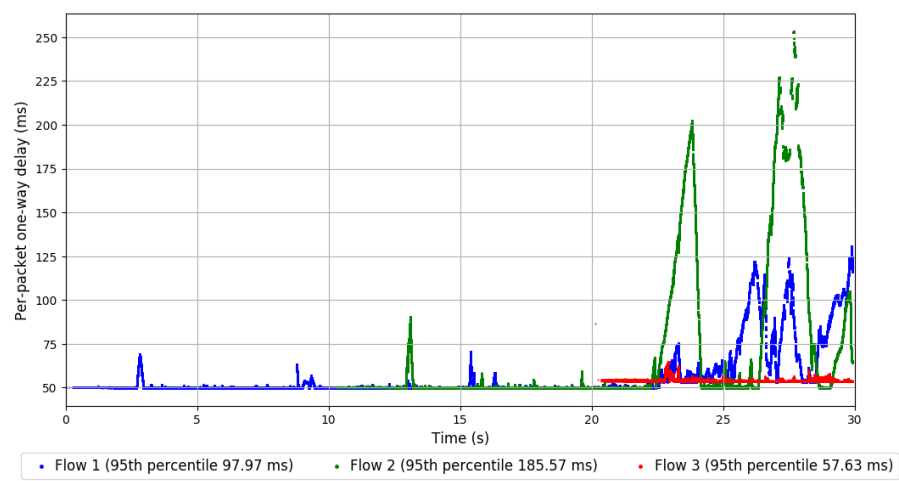
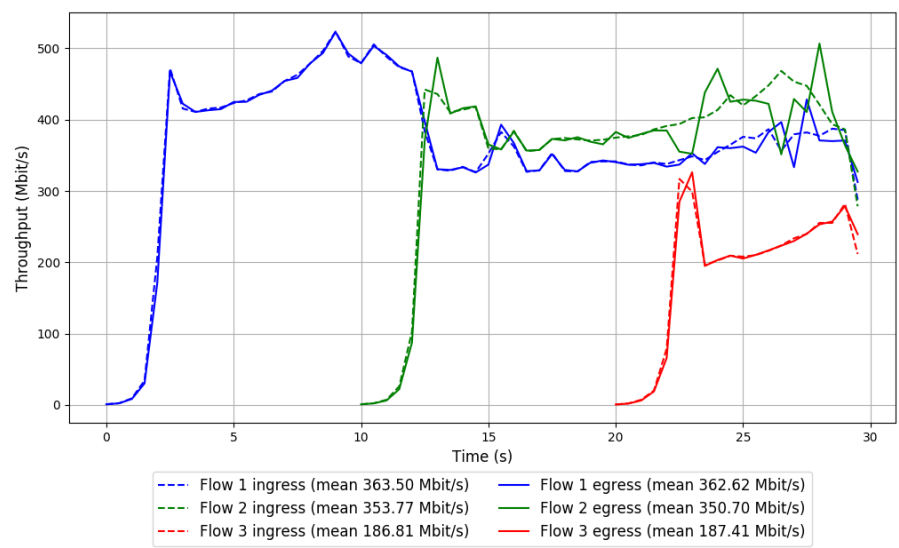


```
Run 2: Statistics of Vivace-loss

Start at: 2018-02-28 23:08:30
End at: 2018-02-28 23:09:00

# Below is generated by plot.py at 2018-03-01 06:29:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 657.00 Mbit/s
95th percentile per-packet one-way delay: 122.289 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 362.62 Mbit/s
95th percentile per-packet one-way delay: 97.971 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 350.70 Mbit/s
95th percentile per-packet one-way delay: 185.573 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 187.41 Mbit/s
95th percentile per-packet one-way delay: 57.626 ms
Loss rate: 0.06%
```

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-28 23:26:18

End at: 2018-02-28 23:26:48

# Below is generated by plot.py at 2018-03-01 06:29:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 648.71 Mbit/s

95th percentile per-packet one-way delay: 129.019 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 344.94 Mbit/s

95th percentile per-packet one-way delay: 58.919 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 316.61 Mbit/s

95th percentile per-packet one-way delay: 110.368 ms

Loss rate: 0.06%

-- Flow 3:

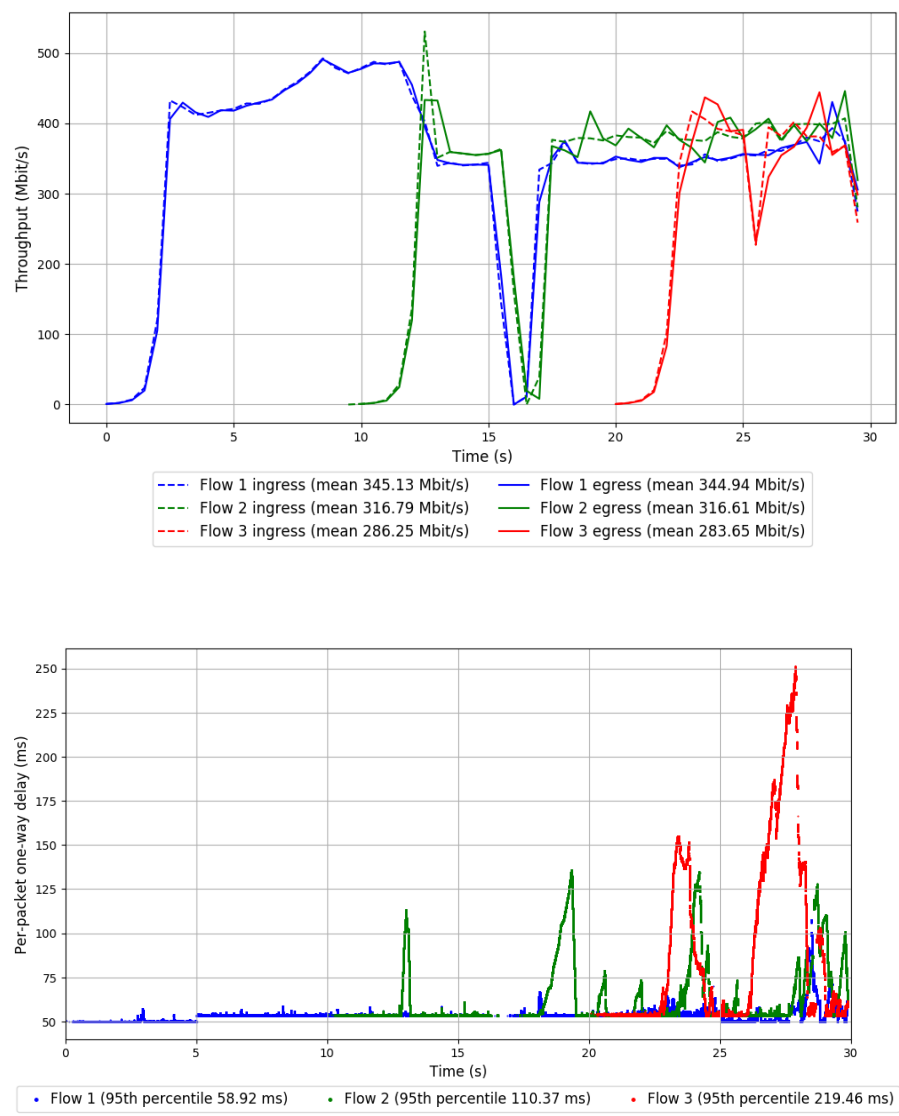
Average throughput: 283.65 Mbit/s

95th percentile per-packet one-way delay: 219.455 ms

Loss rate: 0.93%



Run 3: Report of Vivace-loss — Data Link

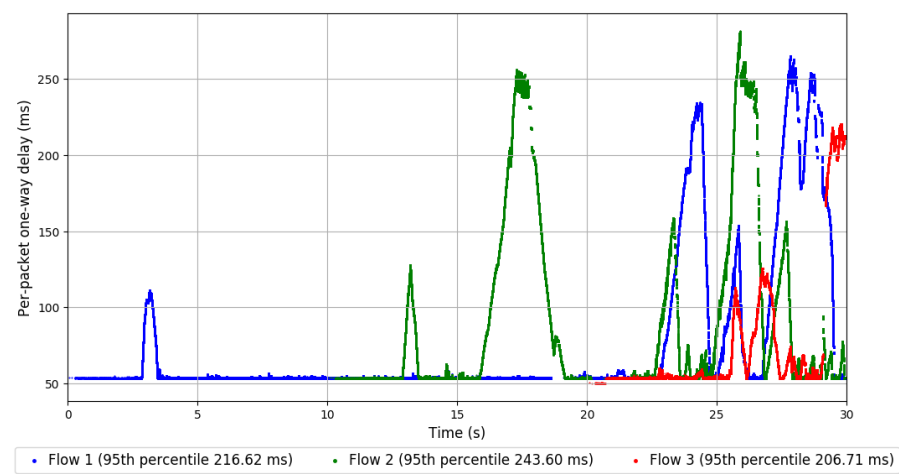
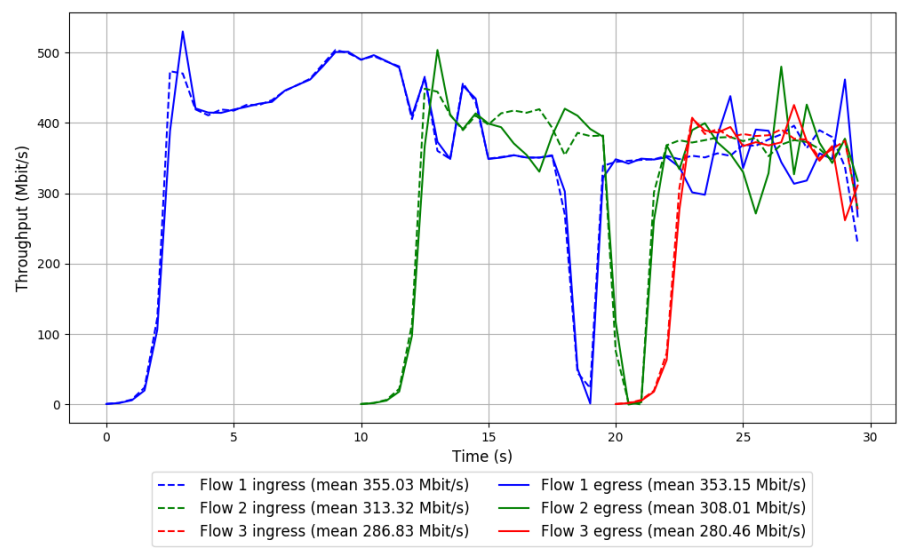


```
Run 4: Statistics of Vivace-loss

Start at: 2018-02-28 23:43:52
End at: 2018-02-28 23:44:22

# Below is generated by plot.py at 2018-03-01 06:30:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 649.96 Mbit/s
95th percentile per-packet one-way delay: 222.861 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 353.15 Mbit/s
95th percentile per-packet one-way delay: 216.615 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 308.01 Mbit/s
95th percentile per-packet one-way delay: 243.601 ms
Loss rate: 1.70%
-- Flow 3:
Average throughput: 280.46 Mbit/s
95th percentile per-packet one-way delay: 206.714 ms
Loss rate: 2.16%
```

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-03-01 00:01:11

End at: 2018-03-01 00:01:41

# Below is generated by plot.py at 2018-03-01 06:34:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 645.96 Mbit/s

95th percentile per-packet one-way delay: 204.164 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 351.00 Mbit/s

95th percentile per-packet one-way delay: 70.789 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 295.12 Mbit/s

95th percentile per-packet one-way delay: 237.976 ms

Loss rate: 2.47%

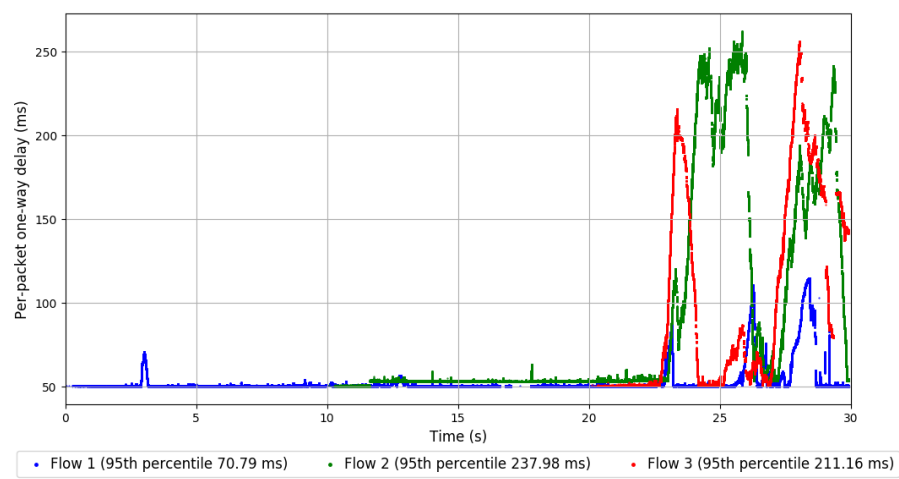
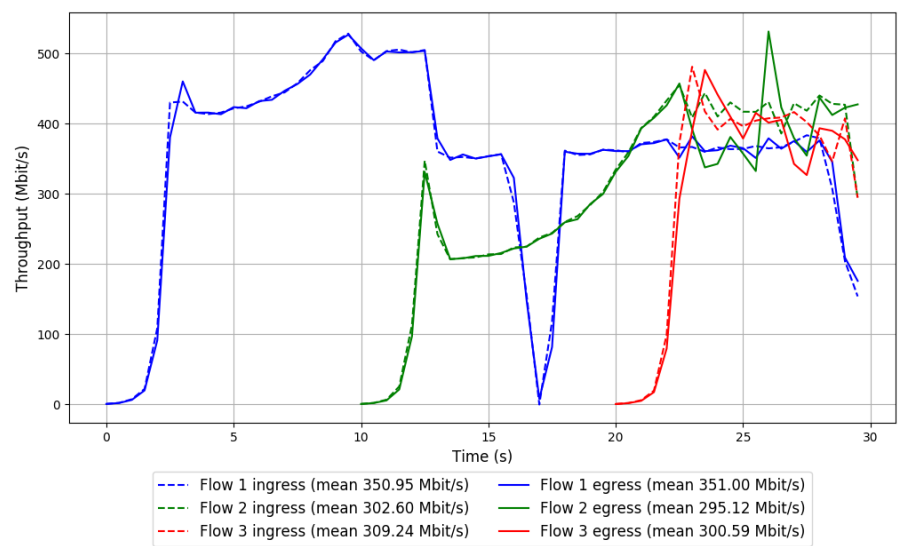
-- Flow 3:

Average throughput: 300.59 Mbit/s

95th percentile per-packet one-way delay: 211.155 ms

Loss rate: 2.79%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-03-01 00:18:39

End at: 2018-03-01 00:19:09

# Below is generated by plot.py at 2018-03-01 06:35:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 676.40 Mbit/s

95th percentile per-packet one-way delay: 146.891 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 406.90 Mbit/s

95th percentile per-packet one-way delay: 134.292 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 315.31 Mbit/s

95th percentile per-packet one-way delay: 185.375 ms

Loss rate: 0.97%

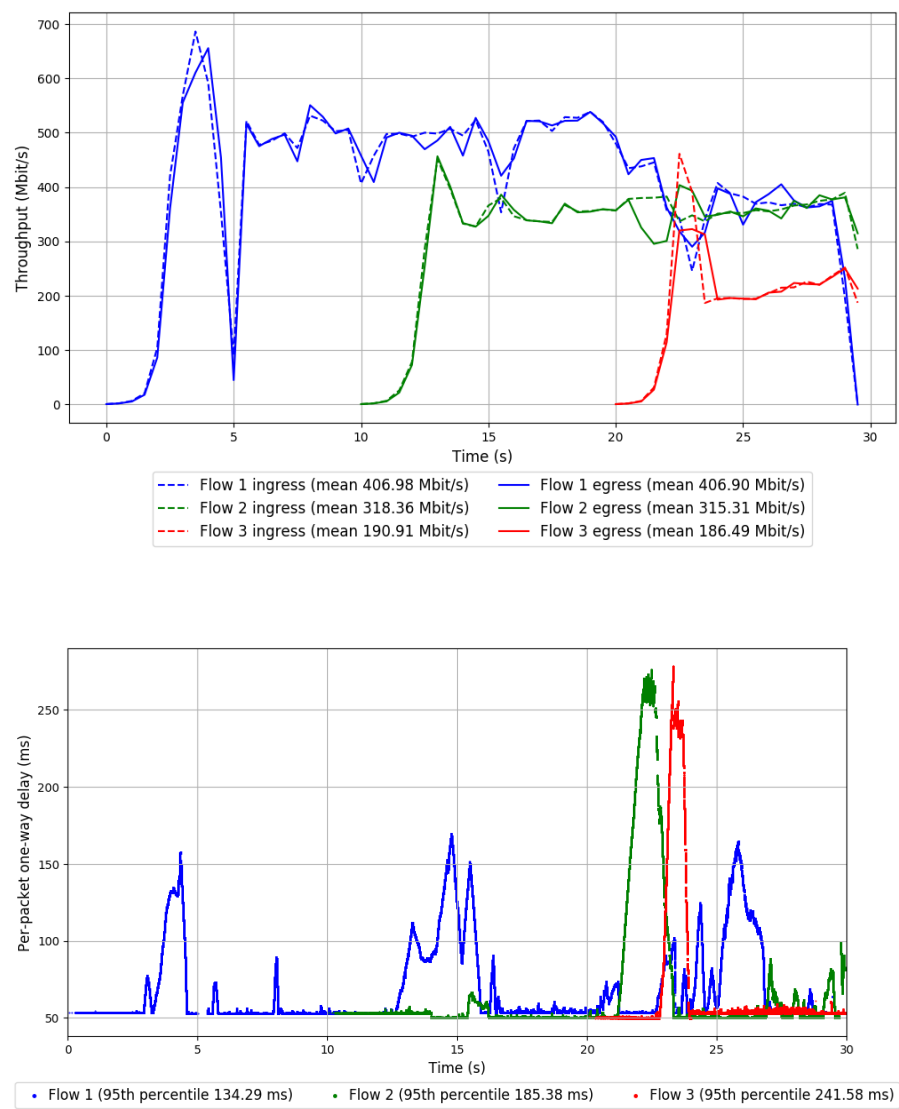
-- Flow 3:

Average throughput: 186.49 Mbit/s

95th percentile per-packet one-way delay: 241.584 ms

Loss rate: 2.32%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-03-01 00:36:29

End at: 2018-03-01 00:36:59

# Below is generated by plot.py at 2018-03-01 06:35:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 649.55 Mbit/s

95th percentile per-packet one-way delay: 183.301 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 359.74 Mbit/s

95th percentile per-packet one-way delay: 144.306 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 294.34 Mbit/s

95th percentile per-packet one-way delay: 204.218 ms

Loss rate: 1.57%

-- Flow 3:

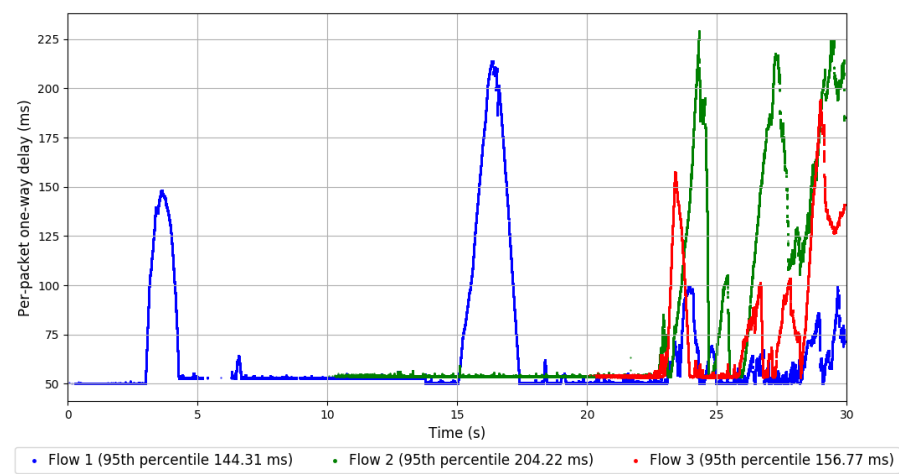
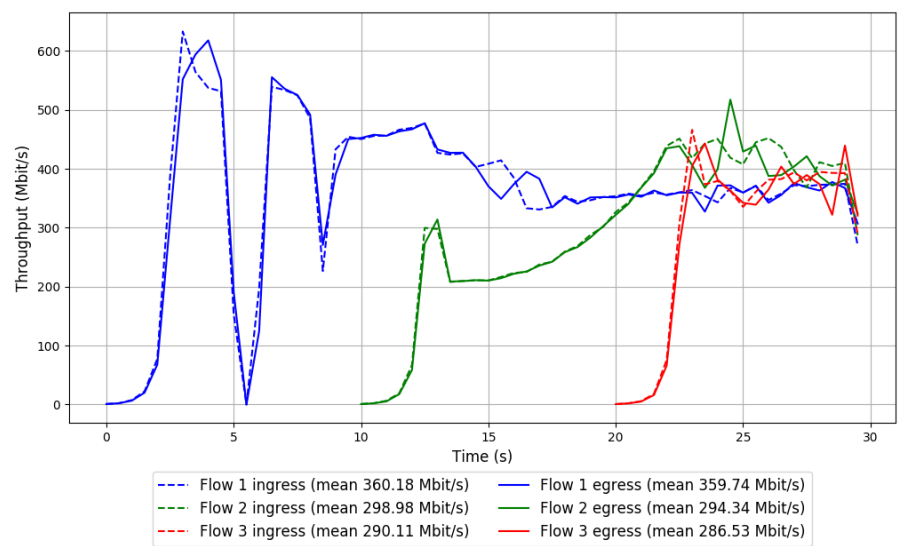
Average throughput: 286.53 Mbit/s

95th percentile per-packet one-way delay: 156.771 ms

Loss rate: 1.27%



Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-03-01 00:54:25

End at: 2018-03-01 00:54:55

# Below is generated by plot.py at 2018-03-01 06:36:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 679.68 Mbit/s

95th percentile per-packet one-way delay: 239.359 ms

Loss rate: 2.38%

-- Flow 1:

Average throughput: 361.07 Mbit/s

95th percentile per-packet one-way delay: 251.379 ms

Loss rate: 3.01%

-- Flow 2:

Average throughput: 336.53 Mbit/s

95th percentile per-packet one-way delay: 211.770 ms

Loss rate: 1.28%

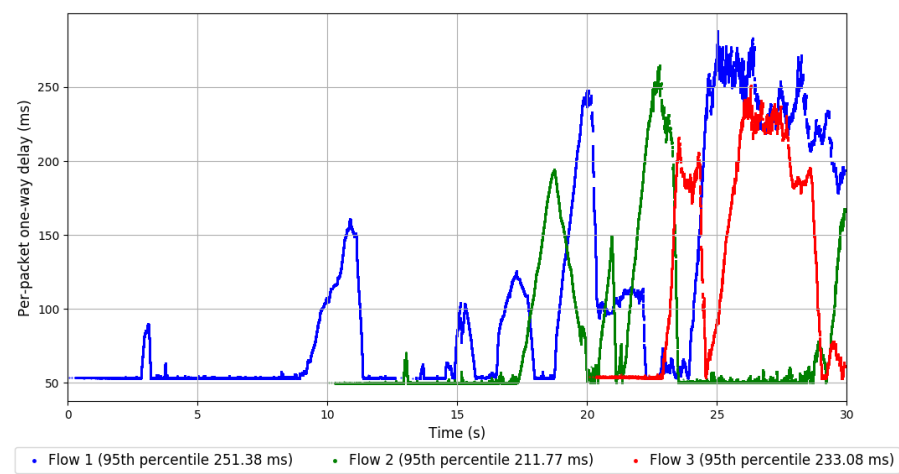
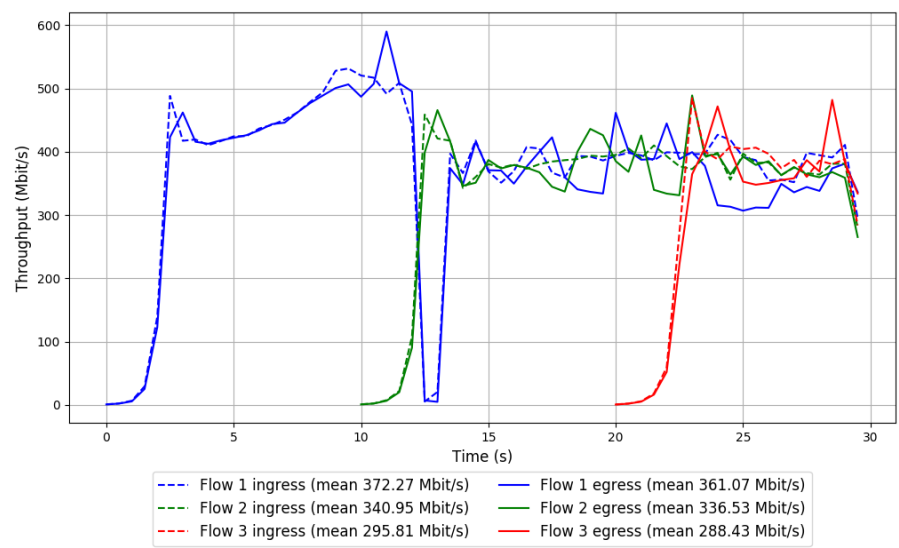
-- Flow 3:

Average throughput: 288.43 Mbit/s

95th percentile per-packet one-way delay: 233.080 ms

Loss rate: 2.51%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-03-01 01:12:18

End at: 2018-03-01 01:12:48

# Below is generated by plot.py at 2018-03-01 06:41:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 678.62 Mbit/s

95th percentile per-packet one-way delay: 218.390 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 370.57 Mbit/s

95th percentile per-packet one-way delay: 179.631 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 314.86 Mbit/s

95th percentile per-packet one-way delay: 222.050 ms

Loss rate: 1.54%

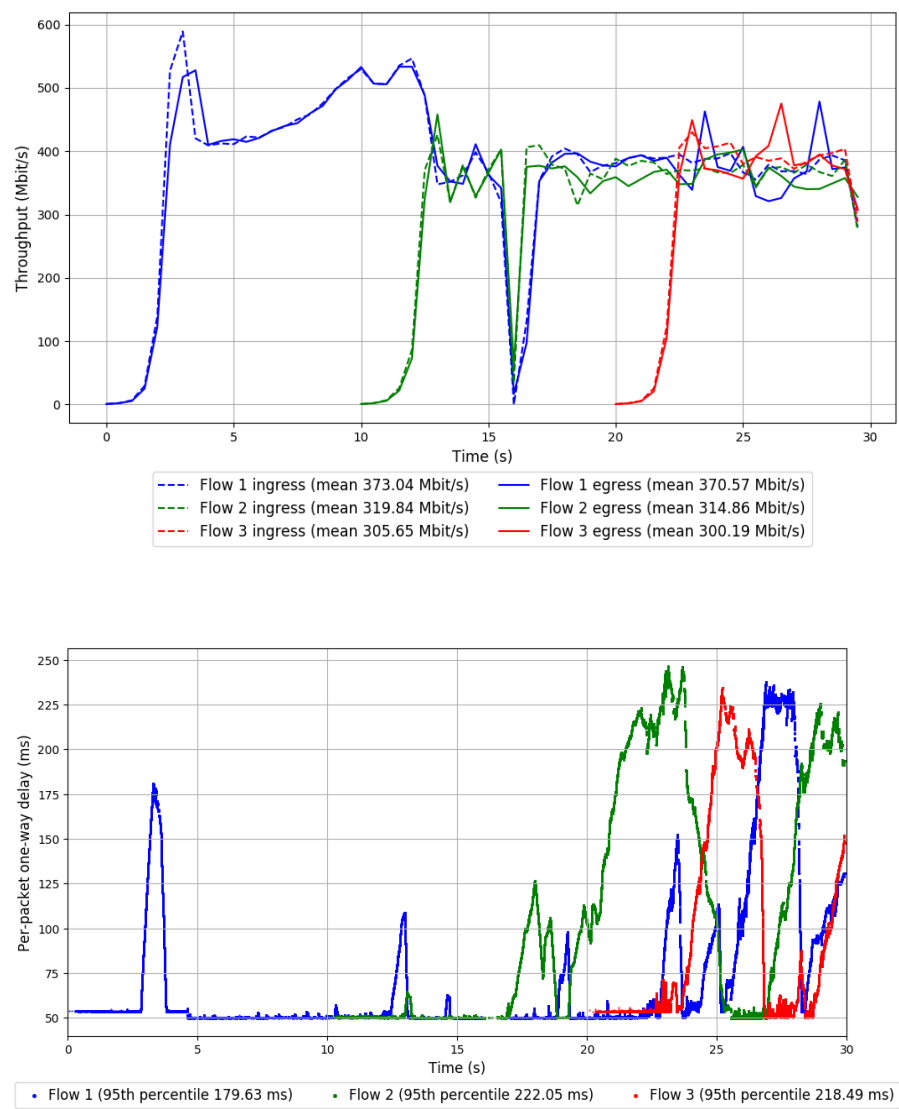
-- Flow 3:

Average throughput: 300.19 Mbit/s

95th percentile per-packet one-way delay: 218.492 ms

Loss rate: 1.79%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-03-01 01:29:44

End at: 2018-03-01 01:30:14

# Below is generated by plot.py at 2018-03-01 06:42:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 687.89 Mbit/s

95th percentile per-packet one-way delay: 217.543 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 371.03 Mbit/s

95th percentile per-packet one-way delay: 185.753 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 336.33 Mbit/s

95th percentile per-packet one-way delay: 105.116 ms

Loss rate: 0.51%

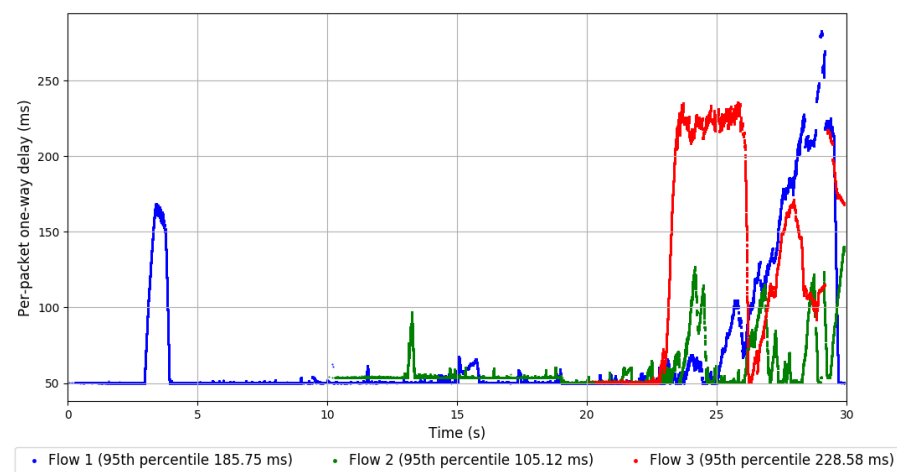
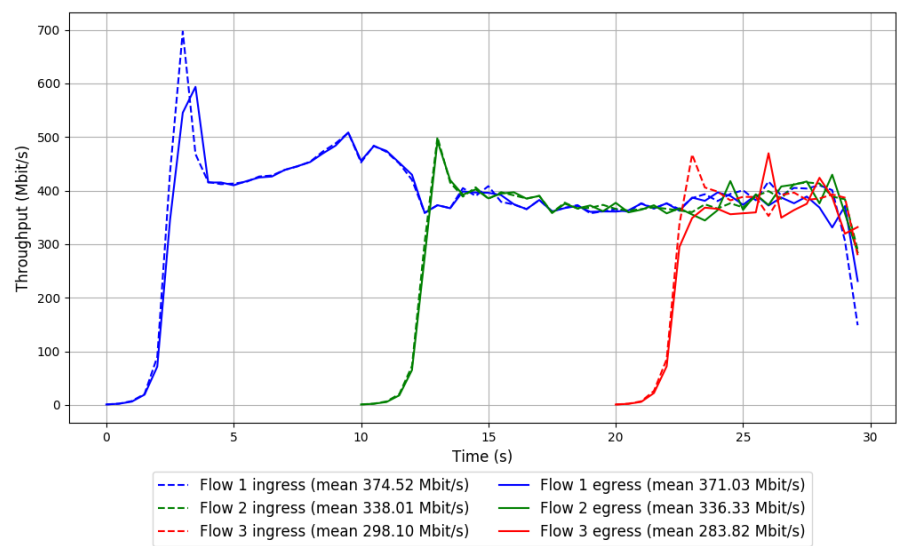
-- Flow 3:

Average throughput: 283.82 Mbit/s

95th percentile per-packet one-way delay: 228.576 ms

Loss rate: 4.80%

Run 10: Report of Vivace-loss — Data Link



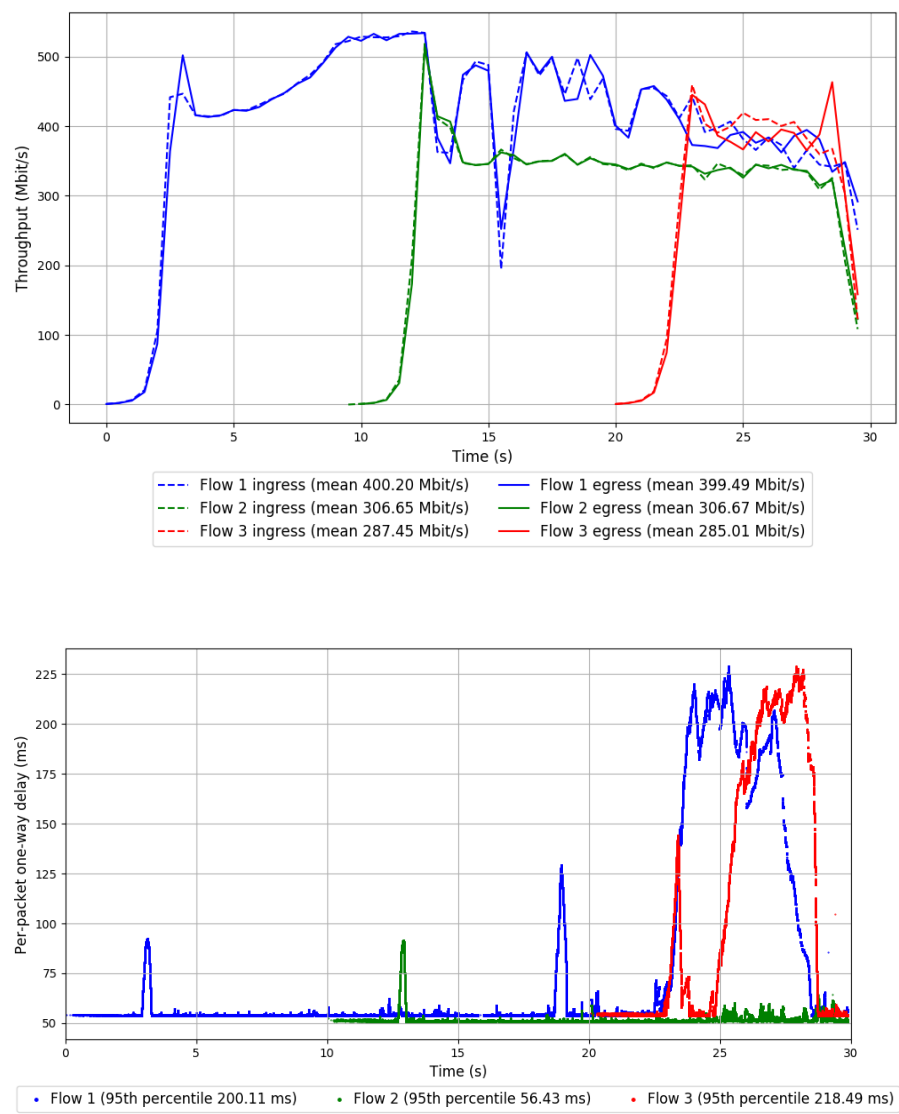
```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-28 22:47:13
End at: 2018-02-28 22:47:43

# Below is generated by plot.py at 2018-03-01 06:42:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 697.32 Mbit/s
95th percentile per-packet one-way delay: 205.119 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 399.49 Mbit/s
95th percentile per-packet one-way delay: 200.112 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 306.67 Mbit/s
95th percentile per-packet one-way delay: 56.427 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 285.01 Mbit/s
95th percentile per-packet one-way delay: 218.489 ms
Loss rate: 0.86%
```



Run 1: Report of Vivace-LTE — Data Link

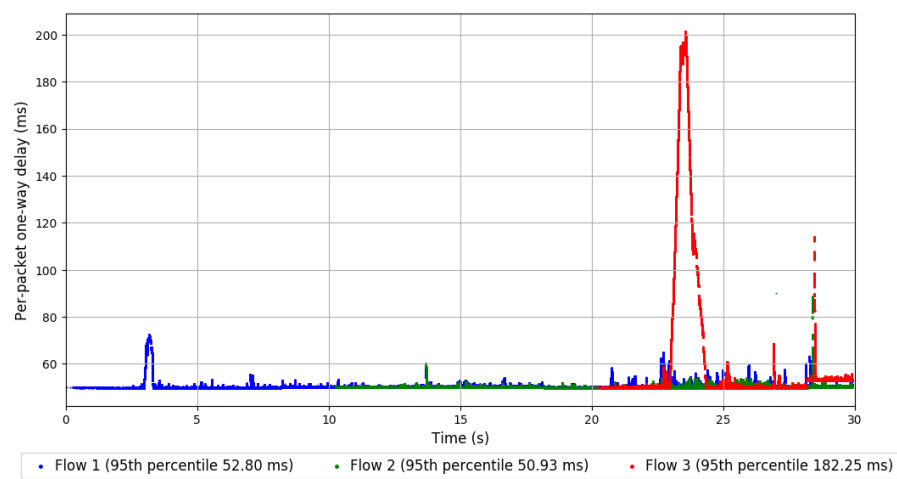
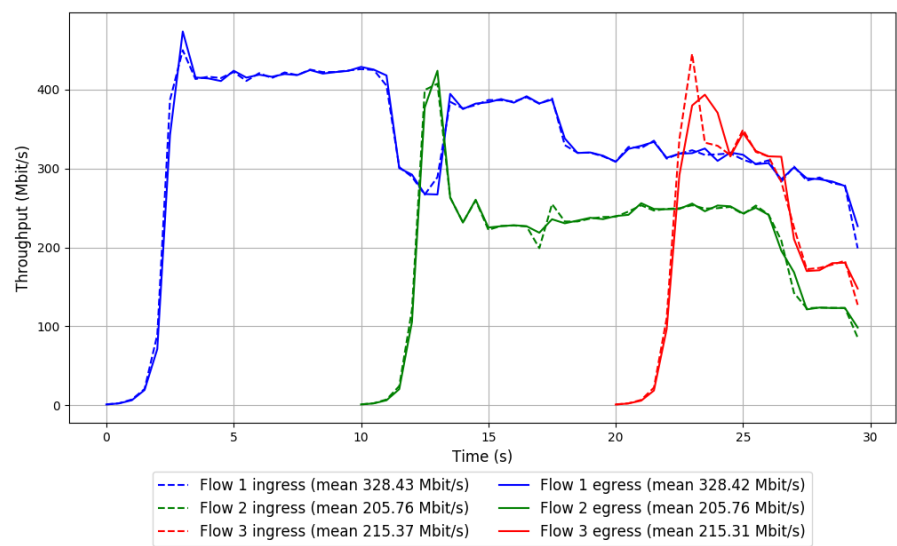


```
Run 2: Statistics of Vivace-LTE

Start at: 2018-02-28 23:05:14
End at: 2018-02-28 23:05:44

# Below is generated by plot.py at 2018-03-01 06:42:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 536.08 Mbit/s
95th percentile per-packet one-way delay: 57.189 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 328.42 Mbit/s
95th percentile per-packet one-way delay: 52.798 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 205.76 Mbit/s
95th percentile per-packet one-way delay: 50.934 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 215.31 Mbit/s
95th percentile per-packet one-way delay: 182.248 ms
Loss rate: 0.00%
```

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-28 23:23:00

End at: 2018-02-28 23:23:30

# Below is generated by plot.py at 2018-03-01 06:44:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 549.20 Mbit/s

95th percentile per-packet one-way delay: 96.093 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 264.85 Mbit/s

95th percentile per-packet one-way delay: 54.104 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 305.23 Mbit/s

95th percentile per-packet one-way delay: 141.489 ms

Loss rate: 0.00%

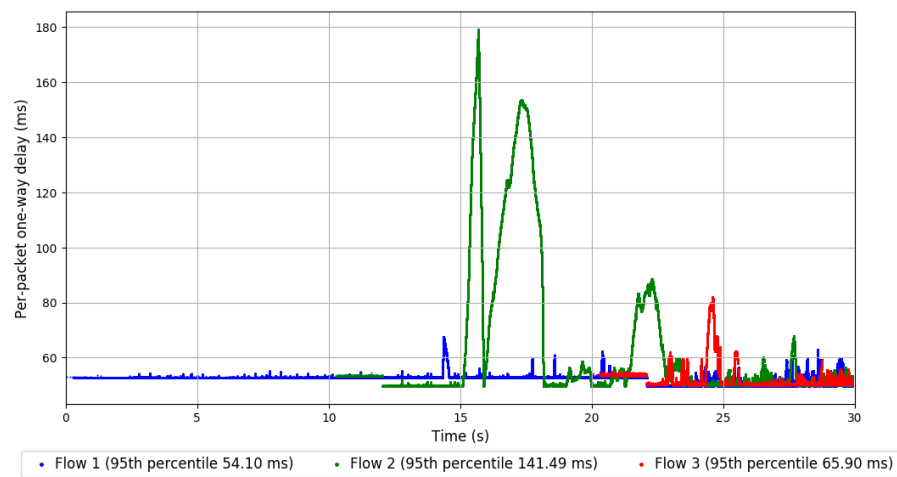
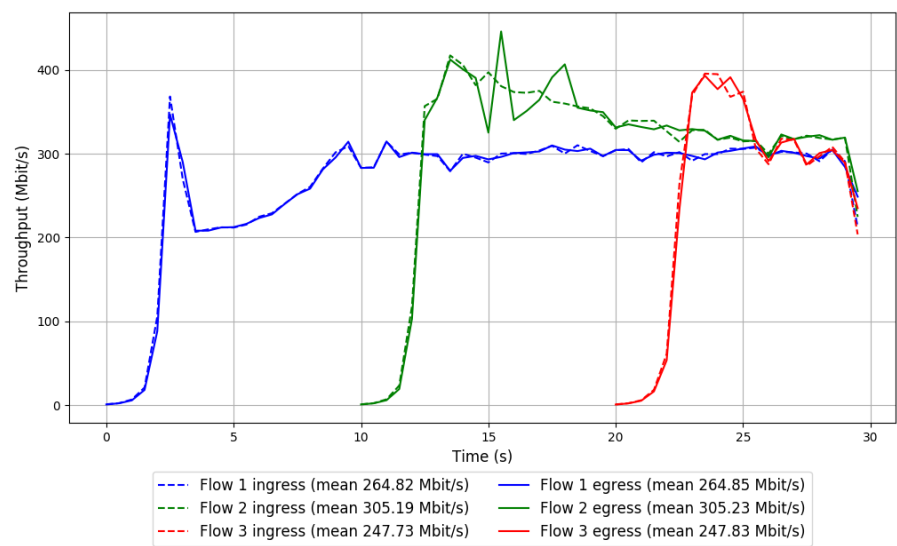
-- Flow 3:

Average throughput: 247.83 Mbit/s

95th percentile per-packet one-way delay: 65.896 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link

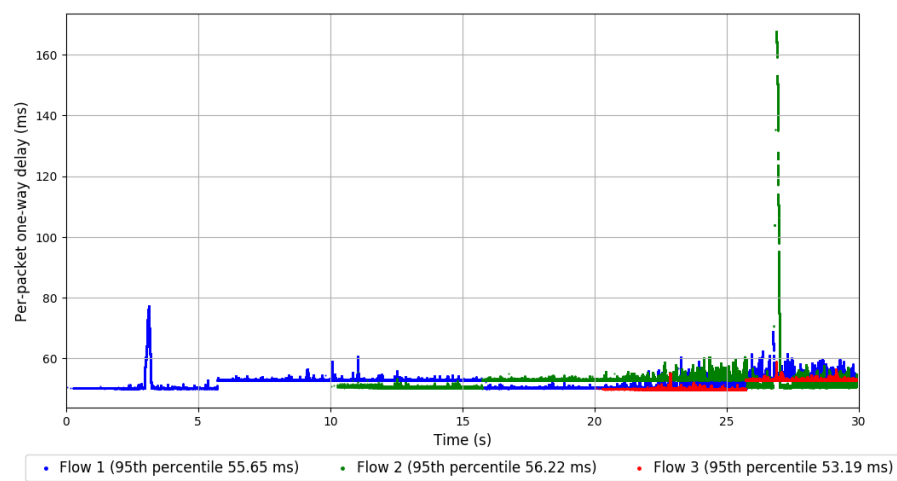
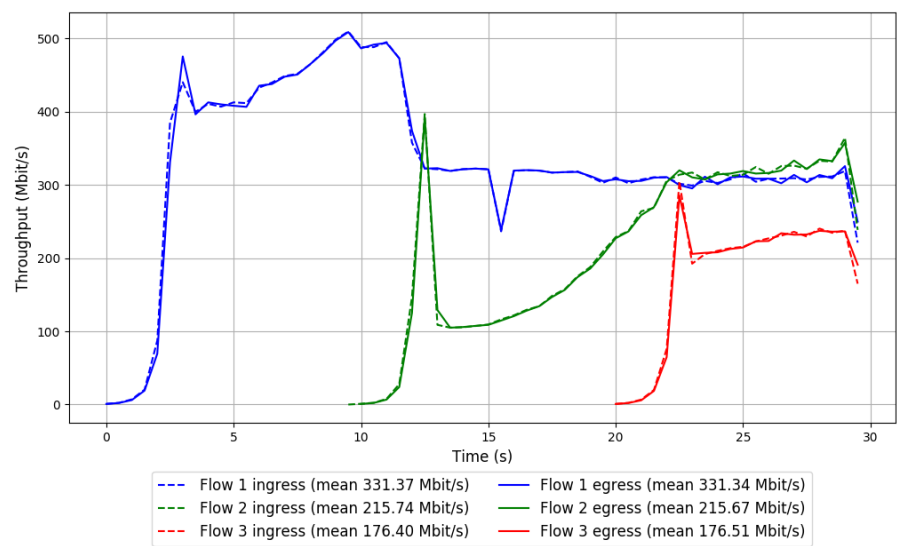


```
Run 4: Statistics of Vivace-LTE

Start at: 2018-02-28 23:40:37
End at: 2018-02-28 23:41:07

# Below is generated by plot.py at 2018-03-01 06:44:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 532.97 Mbit/s
95th percentile per-packet one-way delay: 55.568 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 331.34 Mbit/s
95th percentile per-packet one-way delay: 55.648 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 215.67 Mbit/s
95th percentile per-packet one-way delay: 56.219 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 176.51 Mbit/s
95th percentile per-packet one-way delay: 53.190 ms
Loss rate: 0.00%
```

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-28 23:57:57

End at: 2018-02-28 23:58:27

# Below is generated by plot.py at 2018-03-01 06:44:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 507.13 Mbit/s

95th percentile per-packet one-way delay: 54.425 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 257.26 Mbit/s

95th percentile per-packet one-way delay: 54.495 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 294.03 Mbit/s

95th percentile per-packet one-way delay: 54.317 ms

Loss rate: 0.00%

-- Flow 3:

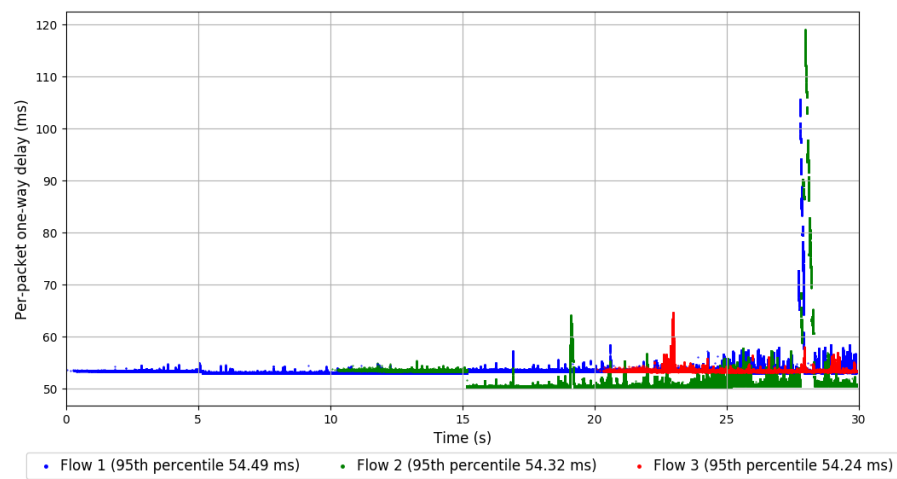
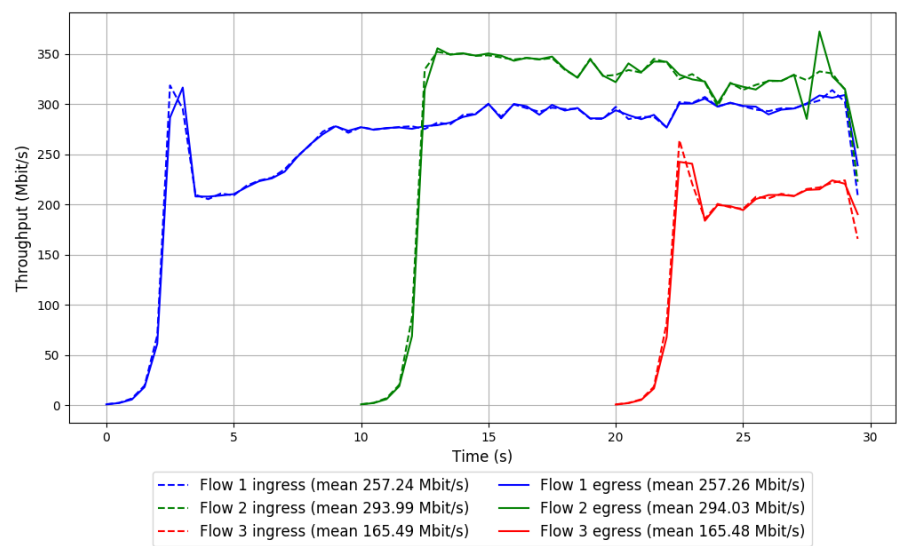
Average throughput: 165.48 Mbit/s

95th percentile per-packet one-way delay: 54.242 ms

Loss rate: 0.04%



Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-03-01 00:15:23

End at: 2018-03-01 00:15:53

# Below is generated by plot.py at 2018-03-01 06:45:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 525.31 Mbit/s

95th percentile per-packet one-way delay: 55.279 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 275.20 Mbit/s

95th percentile per-packet one-way delay: 54.463 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 294.07 Mbit/s

95th percentile per-packet one-way delay: 87.119 ms

Loss rate: 0.00%

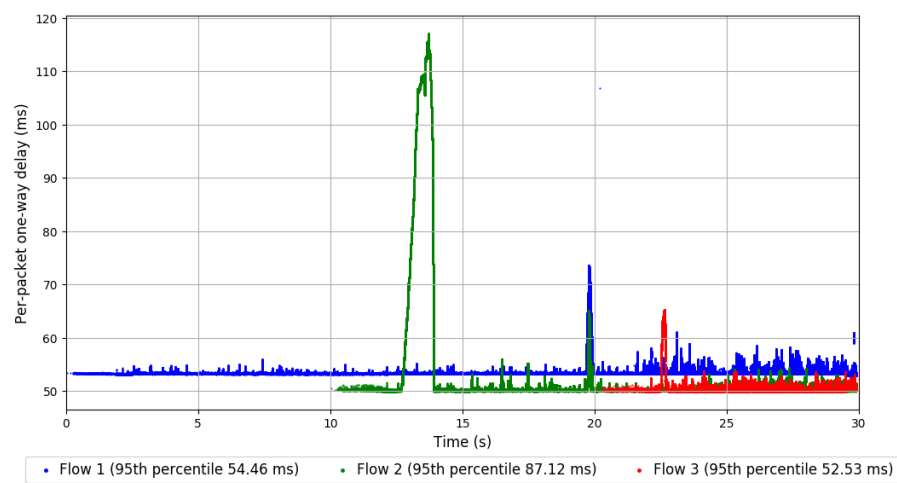
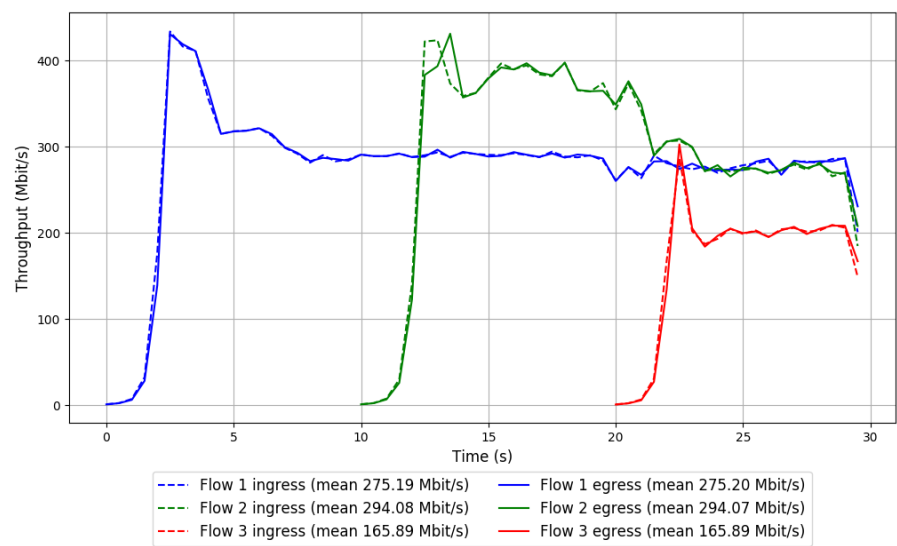
-- Flow 3:

Average throughput: 165.89 Mbit/s

95th percentile per-packet one-way delay: 52.535 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-03-01 00:33:10

End at: 2018-03-01 00:33:40

# Below is generated by plot.py at 2018-03-01 06:47:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 569.61 Mbit/s

95th percentile per-packet one-way delay: 84.493 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 323.86 Mbit/s

95th percentile per-packet one-way delay: 89.734 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 279.87 Mbit/s

95th percentile per-packet one-way delay: 72.163 ms

Loss rate: 0.00%

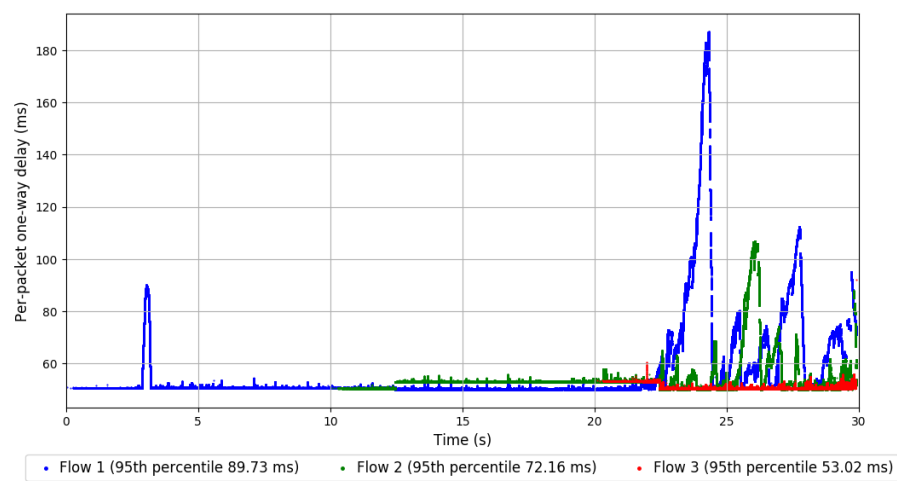
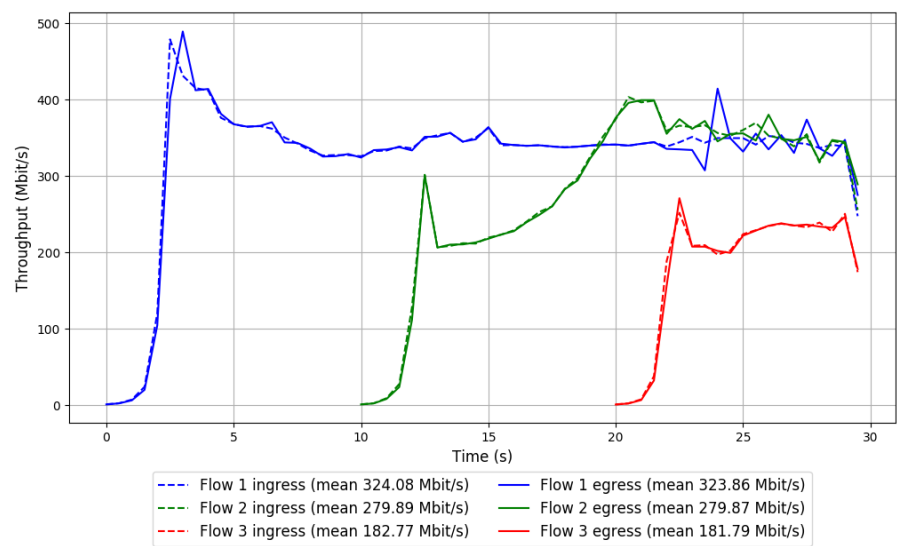
-- Flow 3:

Average throughput: 181.79 Mbit/s

95th percentile per-packet one-way delay: 53.019 ms

Loss rate: 0.55%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-03-01 00:51:06

End at: 2018-03-01 00:51:36

# Below is generated by plot.py at 2018-03-01 06:48:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 589.82 Mbit/s

95th percentile per-packet one-way delay: 55.596 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 342.80 Mbit/s

95th percentile per-packet one-way delay: 54.075 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 240.49 Mbit/s

95th percentile per-packet one-way delay: 53.078 ms

Loss rate: 0.01%

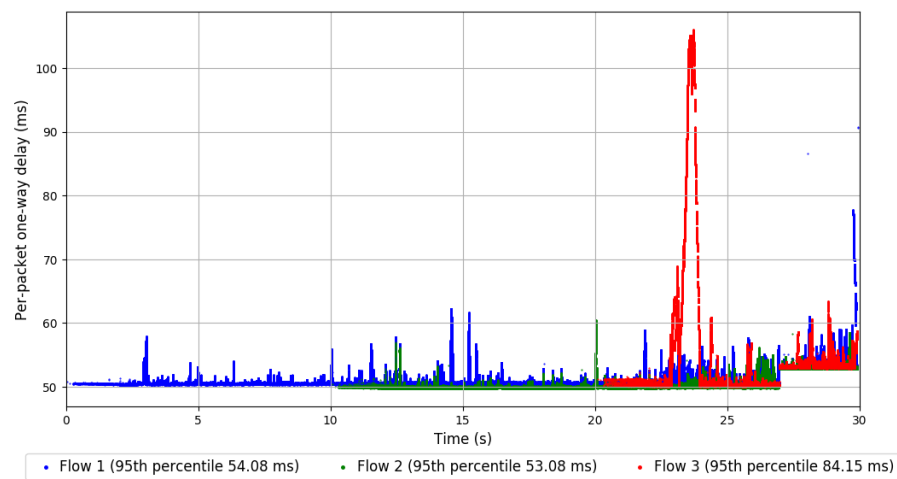
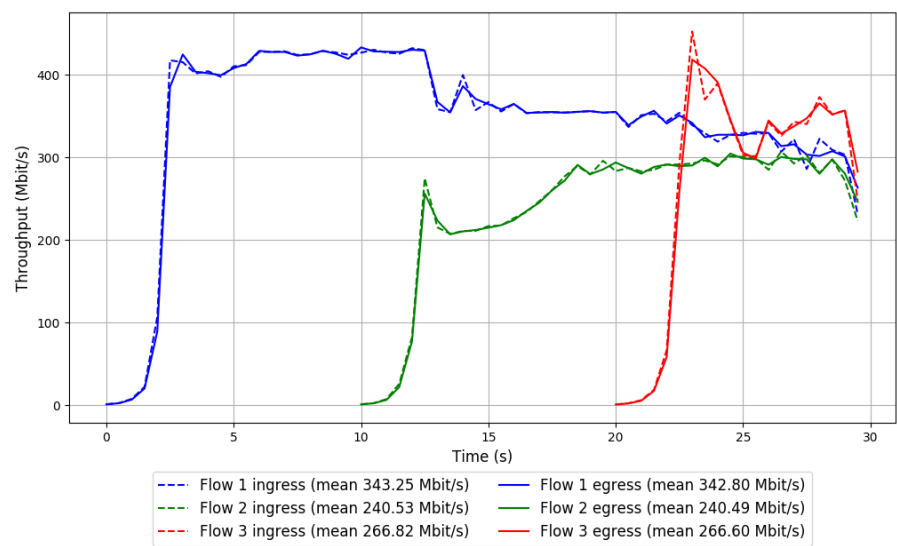
-- Flow 3:

Average throughput: 266.60 Mbit/s

95th percentile per-packet one-way delay: 84.151 ms

Loss rate: 0.08%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-03-01 01:08:58

End at: 2018-03-01 01:09:28

# Below is generated by plot.py at 2018-03-01 06:48:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 592.26 Mbit/s

95th percentile per-packet one-way delay: 188.508 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 366.94 Mbit/s

95th percentile per-packet one-way delay: 205.638 ms

Loss rate: 0.95%

-- Flow 2:

Average throughput: 255.47 Mbit/s

95th percentile per-packet one-way delay: 54.245 ms

Loss rate: 0.01%

-- Flow 3:

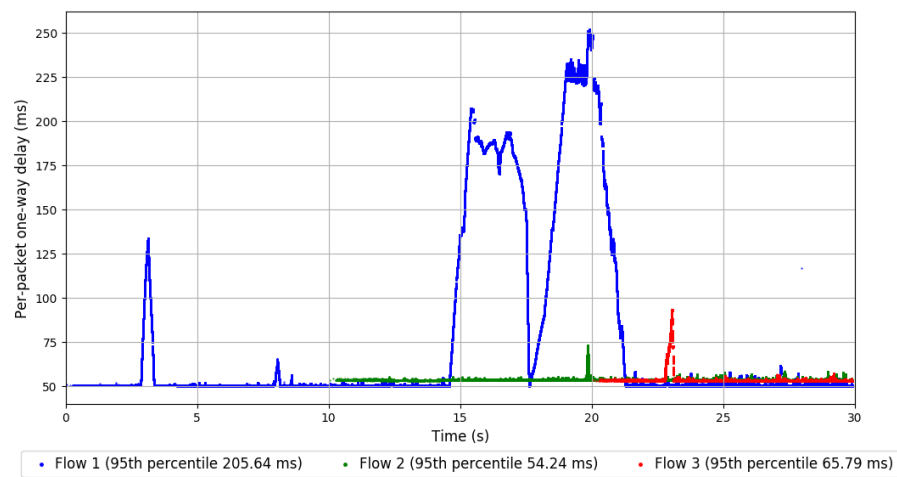
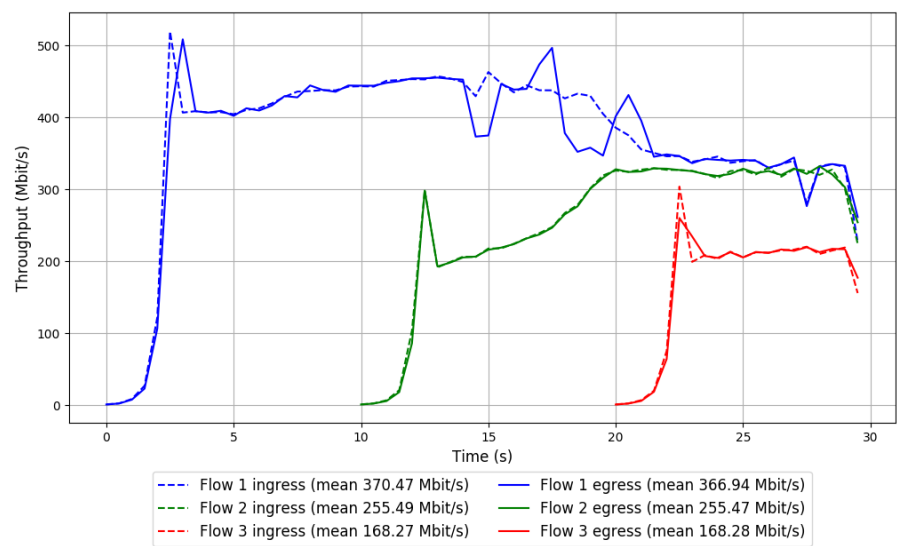
Average throughput: 168.28 Mbit/s

95th percentile per-packet one-way delay: 65.786 ms

Loss rate: 0.01%



Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-03-01 01:26:30
End at: 2018-03-01 01:27:00

# Below is generated by plot.py at 2018-03-01 06:48:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 498.81 Mbit/s
95th percentile per-packet one-way delay: 54.933 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 295.94 Mbit/s
95th percentile per-packet one-way delay: 53.832 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 244.78 Mbit/s
95th percentile per-packet one-way delay: 56.590 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 122.31 Mbit/s
95th percentile per-packet one-way delay: 58.220 ms
Loss rate: 0.03%
```

Run 10: Report of Vivace-LTE — Data Link

