

## Pantheon Report

Generated at 2018-10-03 11:22:58 (UTC).

Data path: GCE London on **ens4** (*local*) → GCE Iowa on **ens4** (*remote*).

Repeated the test of 18 congestion control schemes 5 times.

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

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

### System info:

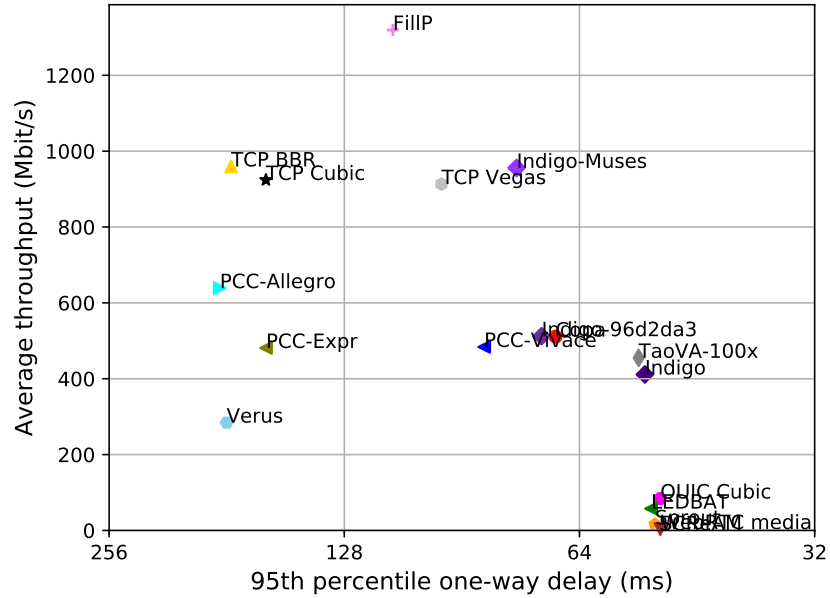
```
Linux 4.15.0-1019-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

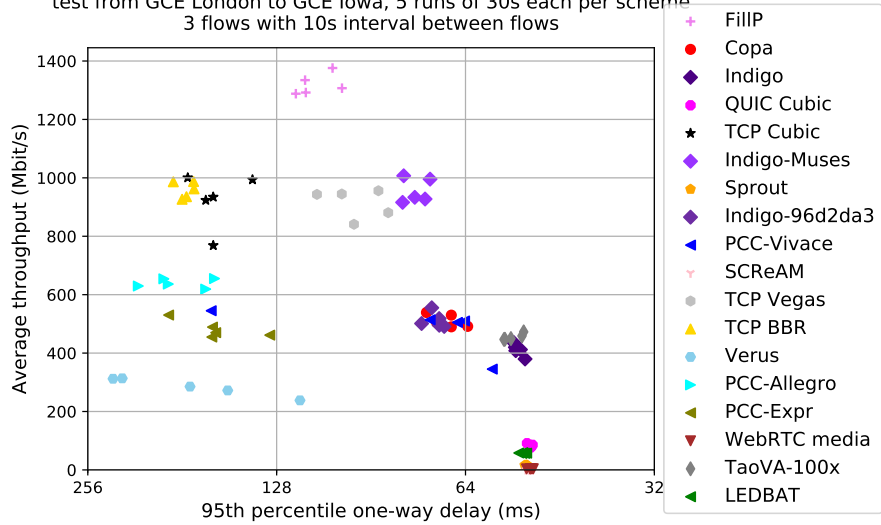
```
branch: muses @ 2e19c0464530faa92c63f8217c9971438a26a3be
third_party/fillp @ 5332fc9127c63565e13f4933b336c02d1aabdac6
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/indigo-96d2da3 @ 8413272d46f8aa0bcb967ed7048b6a8f994abb95
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
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 @ 2baf86211435ae071a32f96b7d8c504587f5d7f4  
third\_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from GCE London to GCE Iowa, 5 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE London to GCE Iowa, 5 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        | 5      | 505.91                 | 462.58 | 438.81 | 180.32                    | 174.13 | 174.42 | 1.36               | 1.07   | 2.59   |
| Copa           | 5      | 267.04                 | 258.26 | 215.75 | 66.77                     | 67.19  | 84.76  | 0.00               | 0.01   | 0.05   |
| TCP Cubic      | 5      | 459.61                 | 469.11 | 456.59 | 119.36                    | 151.28 | 144.48 | 0.13               | 0.39   | 0.72   |
| FillP          | 5      | 726.45                 | 630.59 | 521.40 | 112.91                    | 112.67 | 90.58  | 0.57               | 0.65   | 0.46   |
| Indigo         | 5      | 218.31                 | 200.99 | 182.10 | 52.75                     | 53.09  | 51.52  | 0.00               | 0.00   | 0.00   |
| Indigo-96d2da3 | 5      | 262.39                 | 258.17 | 239.66 | 72.34                     | 71.13  | 70.48  | 0.02               | 0.08   | 0.05   |
| LEDBAT         | 5      | 36.91                  | 24.88  | 12.39  | 51.99                     | 51.13  | 50.73  | 0.00               | 0.00   | 0.00   |
| Indigo-Muses   | 5      | 524.48                 | 459.54 | 387.59 | 79.62                     | 76.07  | 70.40  | 0.02               | 0.00   | 0.12   |
| PCC-Allegro    | 5      | 351.81                 | 305.46 | 254.49 | 190.10                    | 165.48 | 136.69 | 1.60               | 2.37   | 0.43   |
| PCC-Expr       | 5      | 272.45                 | 229.67 | 168.92 | 158.31                    | 126.85 | 90.36  | 6.23               | 0.44   | 0.91   |
| QUIC Cubic     | 5      | 46.86                  | 37.68  | 37.53  | 50.14                     | 49.80  | 49.89  | 0.00               | 0.00   | 0.00   |
| SCReAM         | 5      | 0.22                   | 0.22   | 0.22   | 50.30                     | 49.97  | 50.12  | 0.00               | 0.00   | 0.00   |
| Sprout         | 5      | 8.17                   | 8.15   | 7.75   | 51.10                     | 51.01  | 50.45  | 0.00               | 0.00   | 0.00   |
| TaoVA-100x     | 5      | 234.48                 | 224.51 | 213.72 | 53.42                     | 53.49  | 54.28  | 0.08               | 0.10   | 0.22   |
| TCP Vegas      | 5      | 470.25                 | 466.02 | 398.58 | 85.56                     | 93.73  | 111.63 | 0.06               | 0.15   | 0.28   |
| Verus          | 5      | 157.77                 | 134.64 | 113.57 | 135.74                    | 149.19 | 136.05 | 0.74               | 3.68   | 0.07   |
| PCC-Vivace     | 5      | 294.27                 | 216.00 | 138.56 | 75.99                     | 77.01  | 83.94  | 0.04               | 0.11   | 0.05   |
| WebRTC media   | 5      | 2.00                   | 1.27   | 0.50   | 50.03                     | 50.36  | 50.05  | 0.00               | 0.00   | 0.00   |

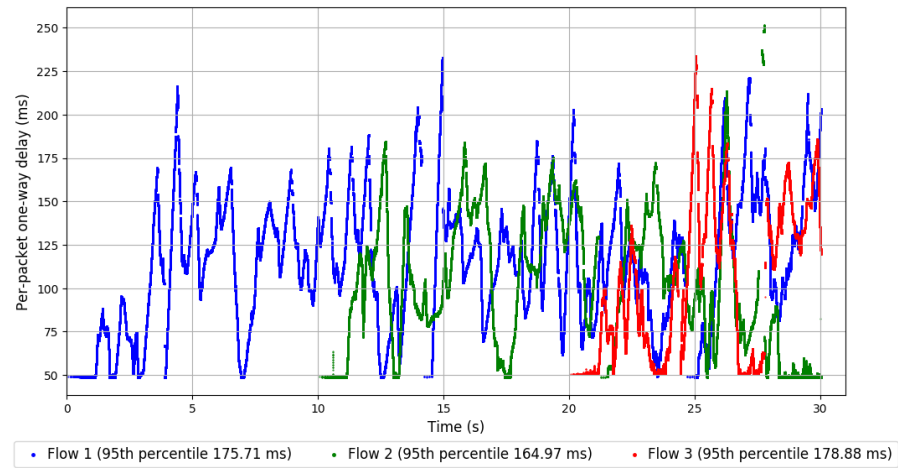
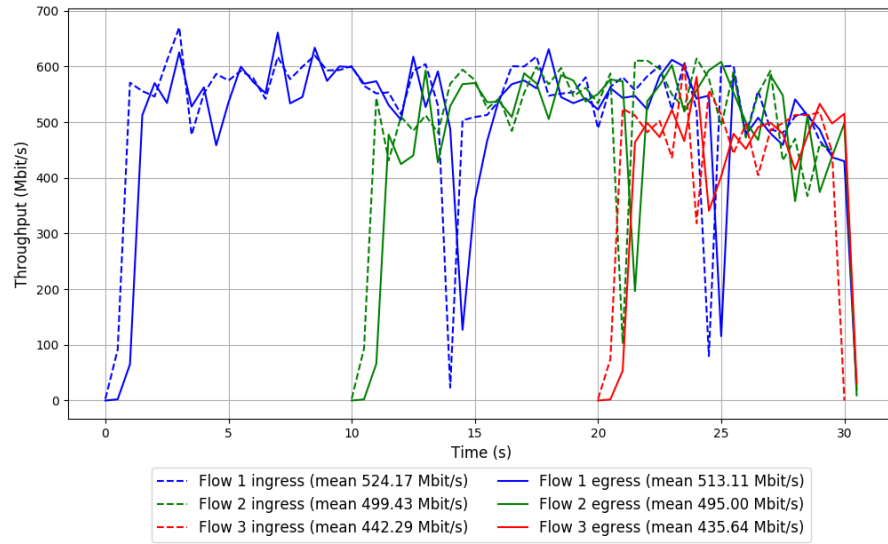


Run 1: Statistics of TCP BBR

Start at: 2018-10-03 06:52:01  
End at: 2018-10-03 06:52:31  
Local clock offset: -0.039 ms  
Remote clock offset: -0.235 ms

# Below is generated by plot.py at 2018-10-03 09:33:35  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 987.42 Mbit/s  
95th percentile per-packet one-way delay: 173.635 ms  
Loss rate: 1.76%  
-- Flow 1:  
Average throughput: 513.11 Mbit/s  
95th percentile per-packet one-way delay: 175.705 ms  
Loss rate: 2.18%  
-- Flow 2:  
Average throughput: 495.00 Mbit/s  
95th percentile per-packet one-way delay: 164.975 ms  
Loss rate: 1.00%  
-- Flow 3:  
Average throughput: 435.64 Mbit/s  
95th percentile per-packet one-way delay: 178.881 ms  
Loss rate: 2.02%

# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-10-03 07:22:29

End at: 2018-10-03 07:22:59

Local clock offset: -0.381 ms

Remote clock offset: 0.156 ms

# Below is generated by plot.py at 2018-10-03 09:33:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 986.54 Mbit/s

95th percentile per-packet one-way delay: 187.028 ms

Loss rate: 2.14%

-- Flow 1:

Average throughput: 501.28 Mbit/s

95th percentile per-packet one-way delay: 196.759 ms

Loss rate: 1.81%

-- Flow 2:

Average throughput: 506.52 Mbit/s

95th percentile per-packet one-way delay: 165.725 ms

Loss rate: 1.58%

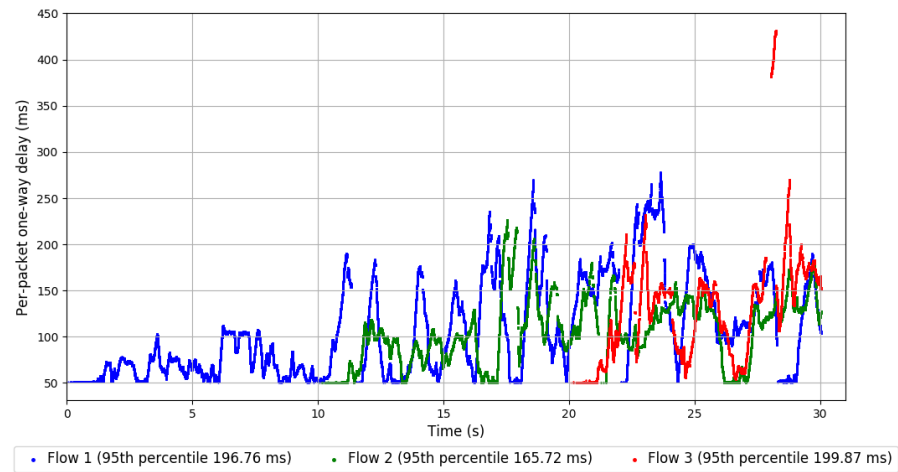
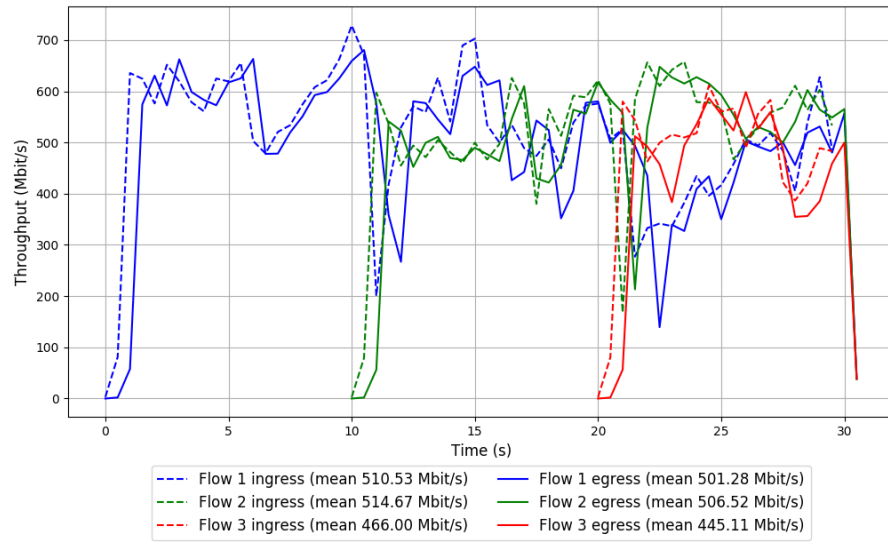
-- Flow 3:

Average throughput: 445.11 Mbit/s

95th percentile per-packet one-way delay: 199.868 ms

Loss rate: 4.48%

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



Run 3: Statistics of TCP BBR

Start at: 2018-10-03 07:53:01

End at: 2018-10-03 07:53:31

Local clock offset: -0.163 ms

Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2018-10-03 09:33:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 962.39 Mbit/s

95th percentile per-packet one-way delay: 173.351 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 524.31 Mbit/s

95th percentile per-packet one-way delay: 176.009 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 439.13 Mbit/s

95th percentile per-packet one-way delay: 171.959 ms

Loss rate: 0.61%

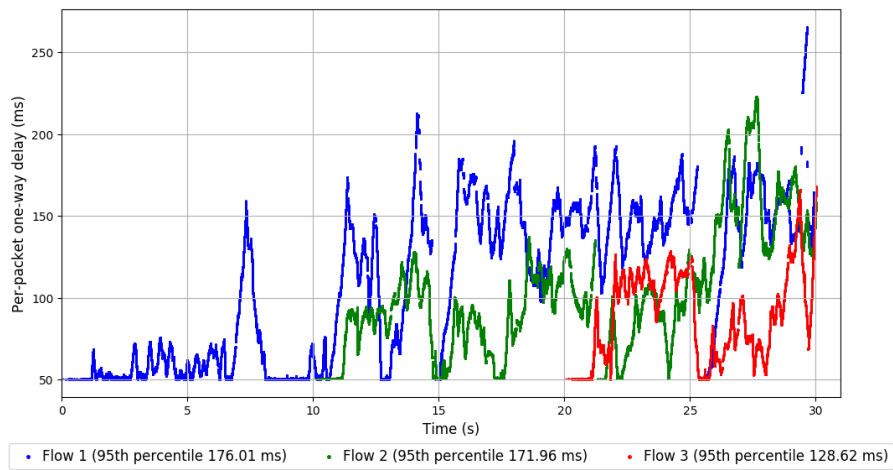
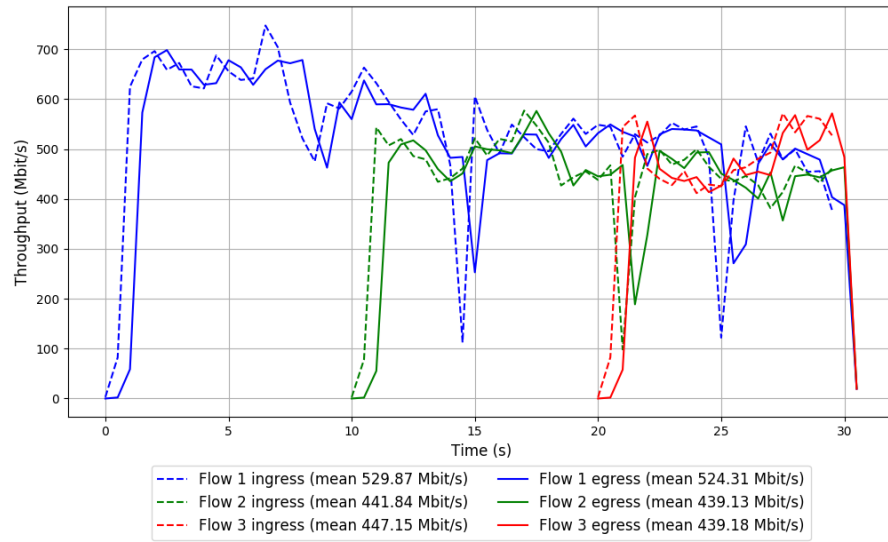
-- Flow 3:

Average throughput: 439.18 Mbit/s

95th percentile per-packet one-way delay: 128.617 ms

Loss rate: 1.78%

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



Run 4: Statistics of TCP BBR

Start at: 2018-10-03 08:23:18

End at: 2018-10-03 08:23:48

Local clock offset: -0.209 ms

Remote clock offset: 0.147 ms

# Below is generated by plot.py at 2018-10-03 09:33:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 926.68 Mbit/s

95th percentile per-packet one-way delay: 181.099 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 490.55 Mbit/s

95th percentile per-packet one-way delay: 178.265 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 435.46 Mbit/s

95th percentile per-packet one-way delay: 183.337 ms

Loss rate: 0.80%

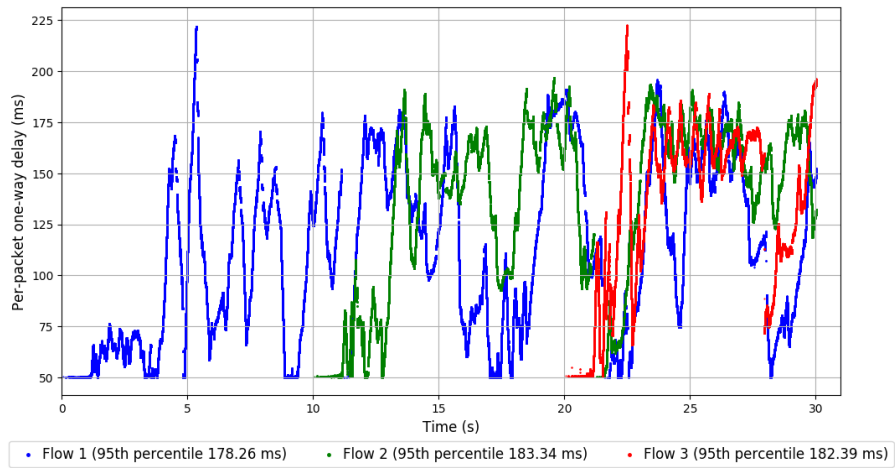
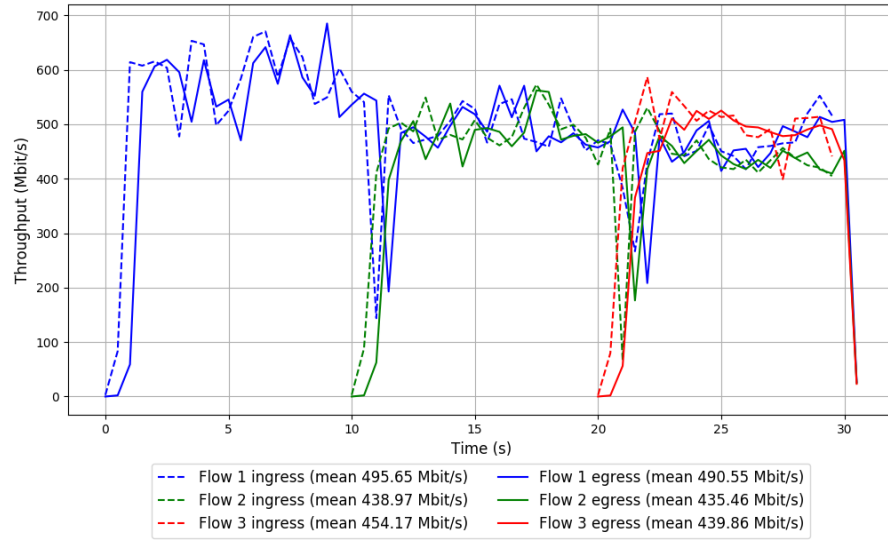
-- Flow 3:

Average throughput: 439.86 Mbit/s

95th percentile per-packet one-way delay: 182.387 ms

Loss rate: 3.13%

# Run 4: Report of TCP BBR — Data Link



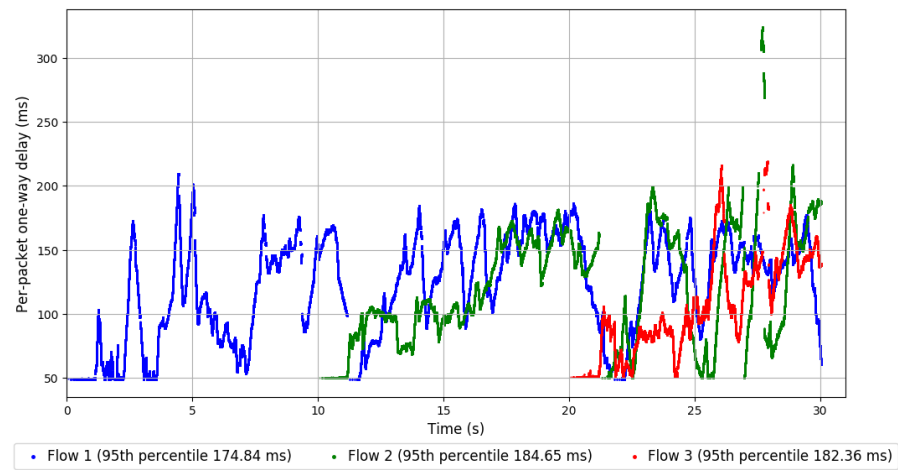
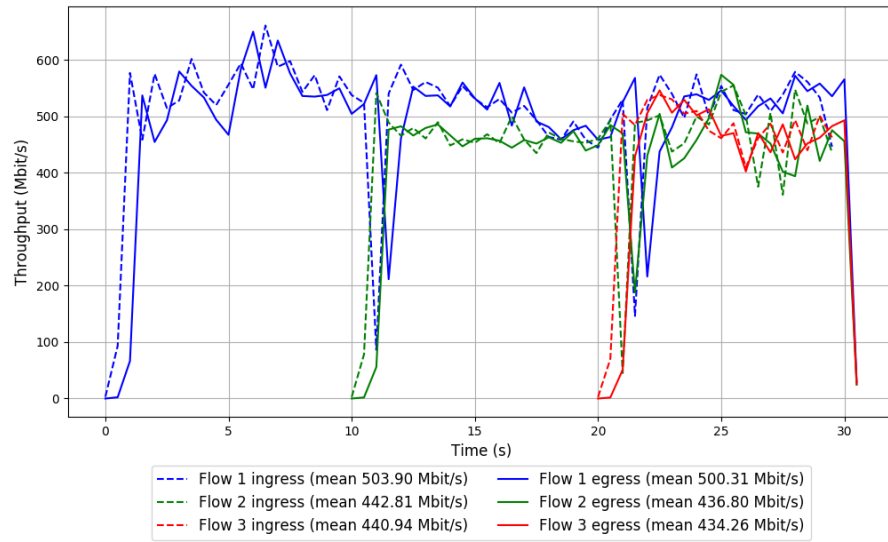


Run 5: Statistics of TCP BBR

Start at: 2018-10-03 08:53:06  
End at: 2018-10-03 08:53:36  
Local clock offset: -0.156 ms  
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2018-10-03 09:33:35  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 935.50 Mbit/s  
95th percentile per-packet one-way delay: 178.229 ms  
Loss rate: 1.04%  
-- Flow 1:  
Average throughput: 500.31 Mbit/s  
95th percentile per-packet one-way delay: 174.838 ms  
Loss rate: 0.71%  
-- Flow 2:  
Average throughput: 436.80 Mbit/s  
95th percentile per-packet one-way delay: 184.646 ms  
Loss rate: 1.35%  
-- Flow 3:  
Average throughput: 434.26 Mbit/s  
95th percentile per-packet one-way delay: 182.363 ms  
Loss rate: 1.52%

# Run 5: Report of TCP BBR — Data Link

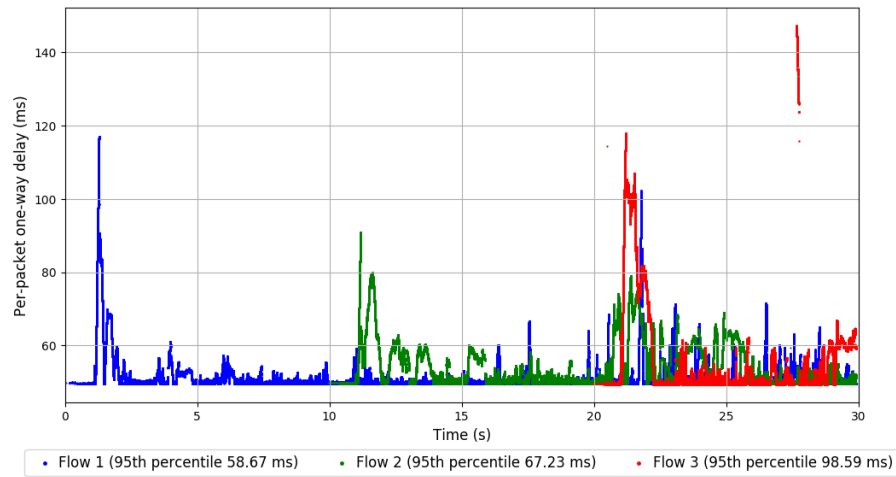
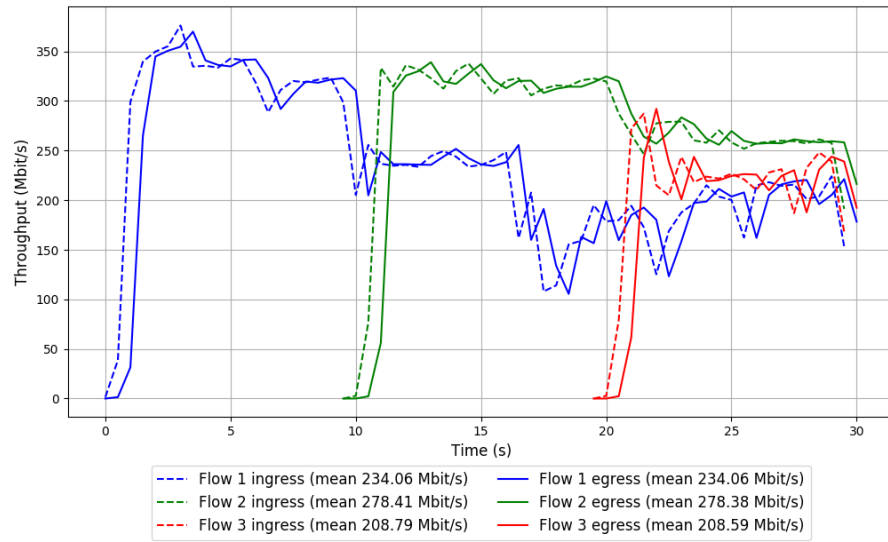


Run 1: Statistics of Copa

Start at: 2018-10-03 06:41:09  
End at: 2018-10-03 06:41:39  
Local clock offset: -0.092 ms  
Remote clock offset: -0.393 ms

# Below is generated by plot.py at 2018-10-03 09:33:35  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 489.84 Mbit/s  
95th percentile per-packet one-way delay: 67.422 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 234.06 Mbit/s  
95th percentile per-packet one-way delay: 58.669 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 278.38 Mbit/s  
95th percentile per-packet one-way delay: 67.228 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 208.59 Mbit/s  
95th percentile per-packet one-way delay: 98.592 ms  
Loss rate: 0.10%

## Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-10-03 07:11:31

End at: 2018-10-03 07:12:01

Local clock offset: -0.397 ms

Remote clock offset: 0.092 ms

# Below is generated by plot.py at 2018-10-03 09:33:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 539.01 Mbit/s

95th percentile per-packet one-way delay: 73.867 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 273.92 Mbit/s

95th percentile per-packet one-way delay: 81.601 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 277.43 Mbit/s

95th percentile per-packet one-way delay: 62.044 ms

Loss rate: 0.00%

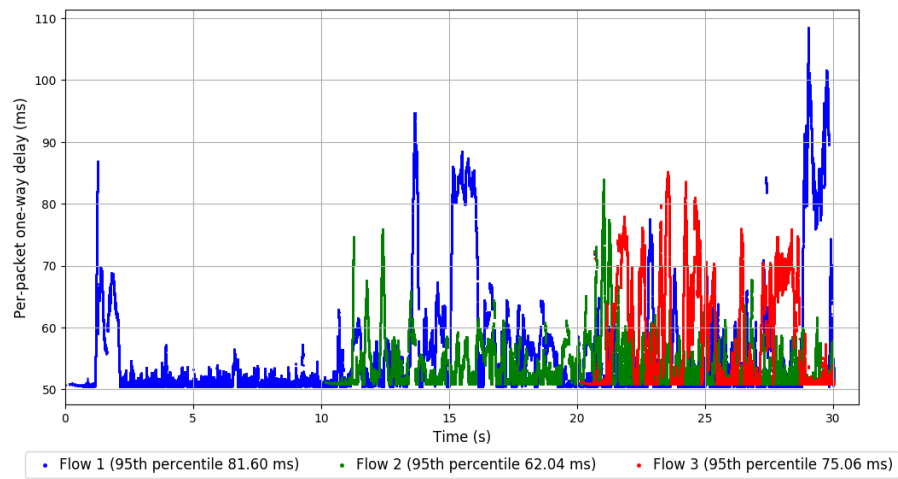
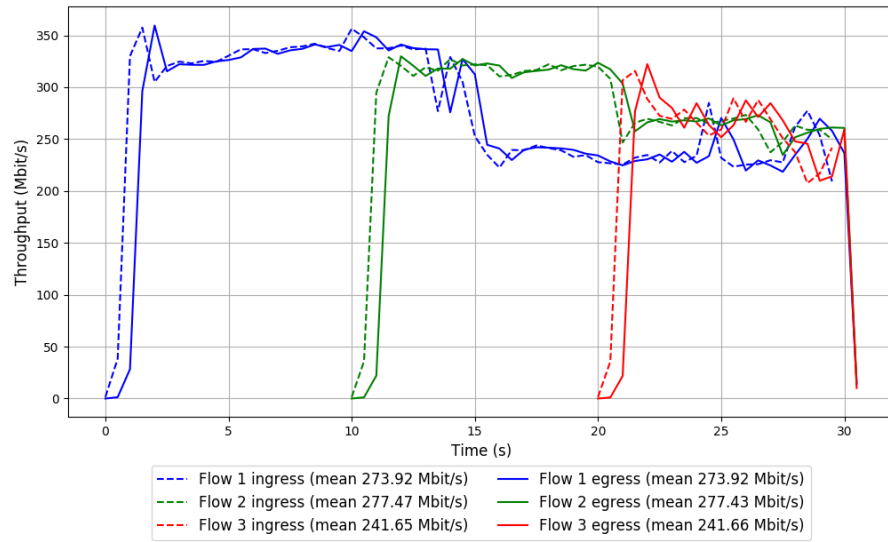
-- Flow 3:

Average throughput: 241.66 Mbit/s

95th percentile per-packet one-way delay: 75.057 ms

Loss rate: 0.00%

## Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-10-03 07:42:12

End at: 2018-10-03 07:42:42

Local clock offset: -0.505 ms

Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2018-10-03 09:33:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 505.41 Mbit/s

95th percentile per-packet one-way delay: 71.189 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 273.16 Mbit/s

95th percentile per-packet one-way delay: 68.275 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 239.16 Mbit/s

95th percentile per-packet one-way delay: 75.270 ms

Loss rate: 0.05%

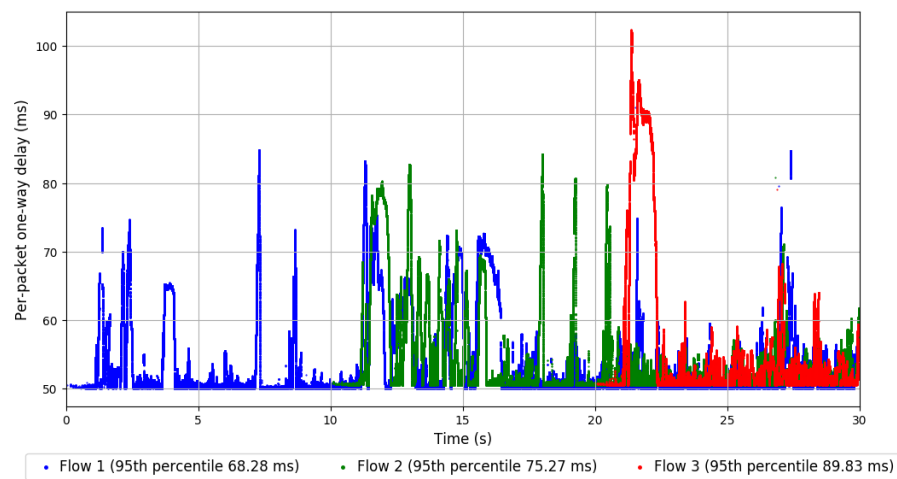
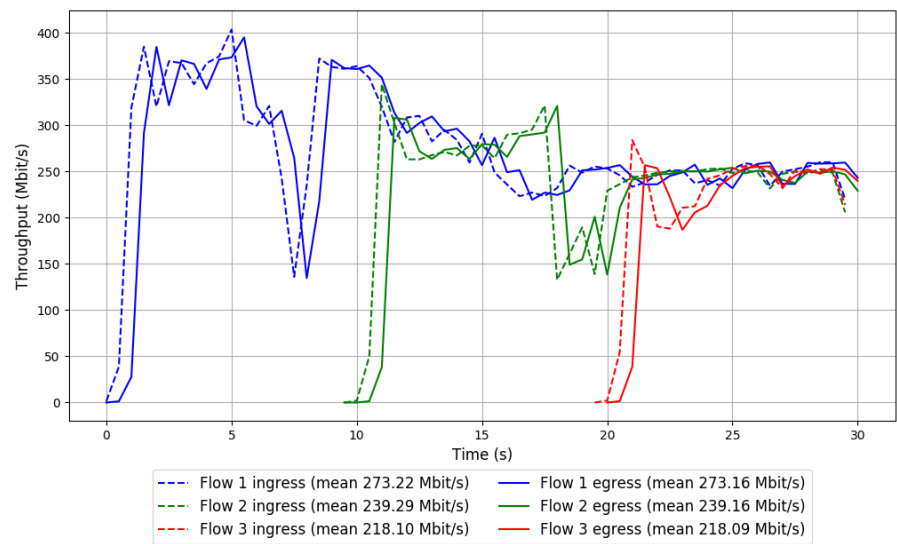
-- Flow 3:

Average throughput: 218.09 Mbit/s

95th percentile per-packet one-way delay: 89.830 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link





Run 4: Statistics of Copa

Start at: 2018-10-03 08:12:13

End at: 2018-10-03 08:12:43

Local clock offset: -0.174 ms

Remote clock offset: 0.088 ms

# Below is generated by plot.py at 2018-10-03 09:48:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 529.91 Mbit/s

95th percentile per-packet one-way delay: 67.419 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 282.83 Mbit/s

95th percentile per-packet one-way delay: 63.788 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 264.49 Mbit/s

95th percentile per-packet one-way delay: 69.847 ms

Loss rate: 0.00%

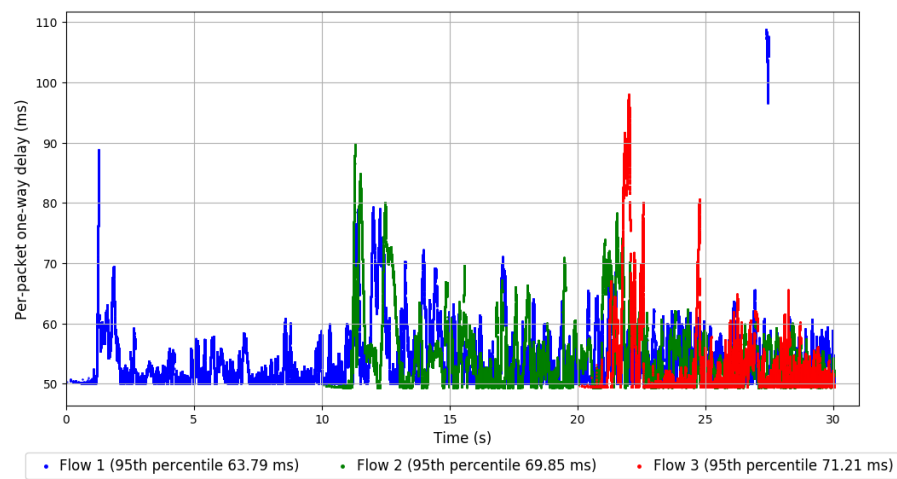
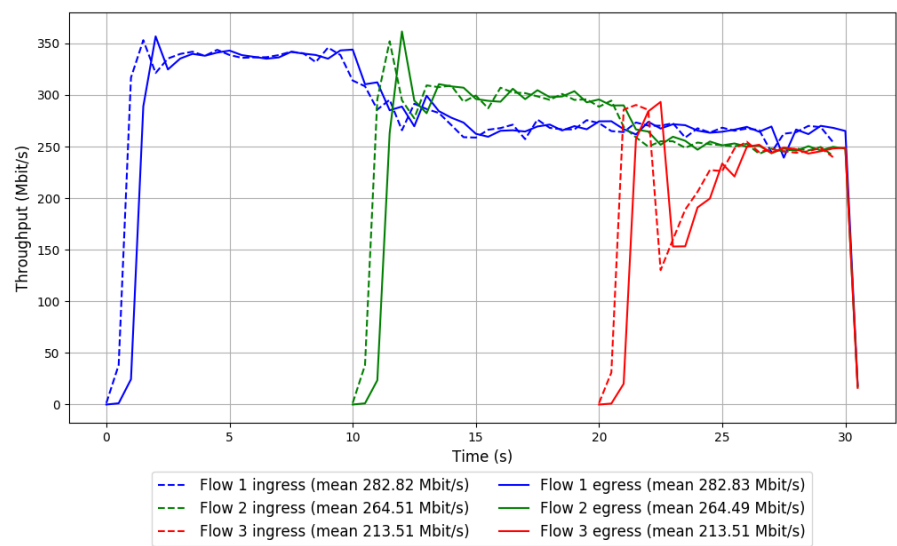
-- Flow 3:

Average throughput: 213.51 Mbit/s

95th percentile per-packet one-way delay: 71.207 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link

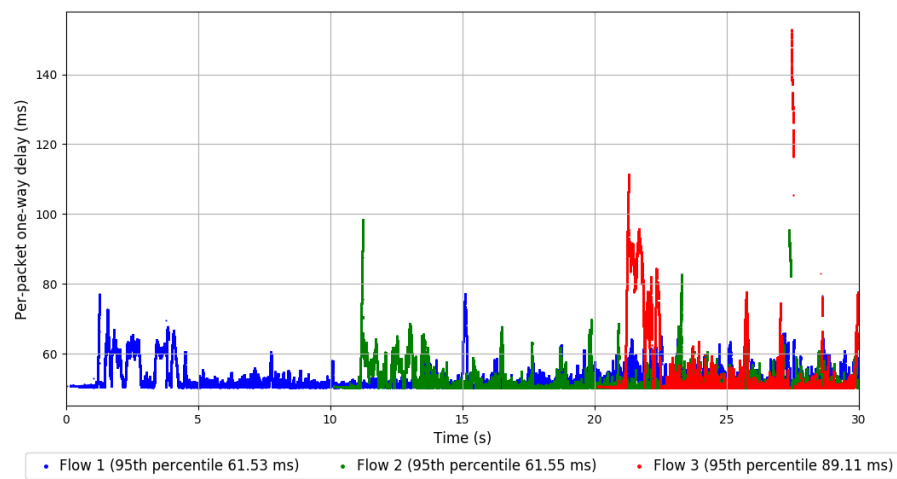
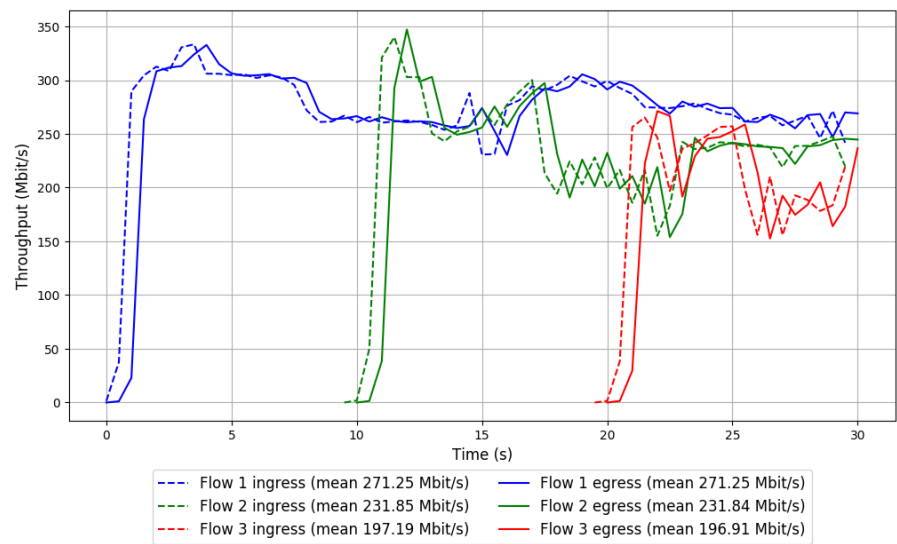


Run 5: Statistics of Copa

Start at: 2018-10-03 08:42:35  
End at: 2018-10-03 08:43:05  
Local clock offset: -0.137 ms  
Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2018-10-03 09:48:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 491.42 Mbit/s  
95th percentile per-packet one-way delay: 63.490 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 271.25 Mbit/s  
95th percentile per-packet one-way delay: 61.527 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 231.84 Mbit/s  
95th percentile per-packet one-way delay: 61.548 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 196.91 Mbit/s  
95th percentile per-packet one-way delay: 89.112 ms  
Loss rate: 0.14%

Run 5: Report of Copa — Data Link

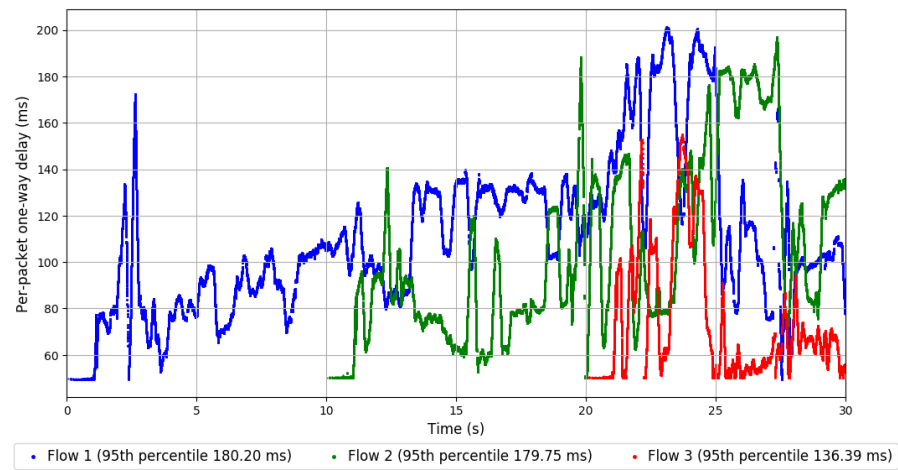
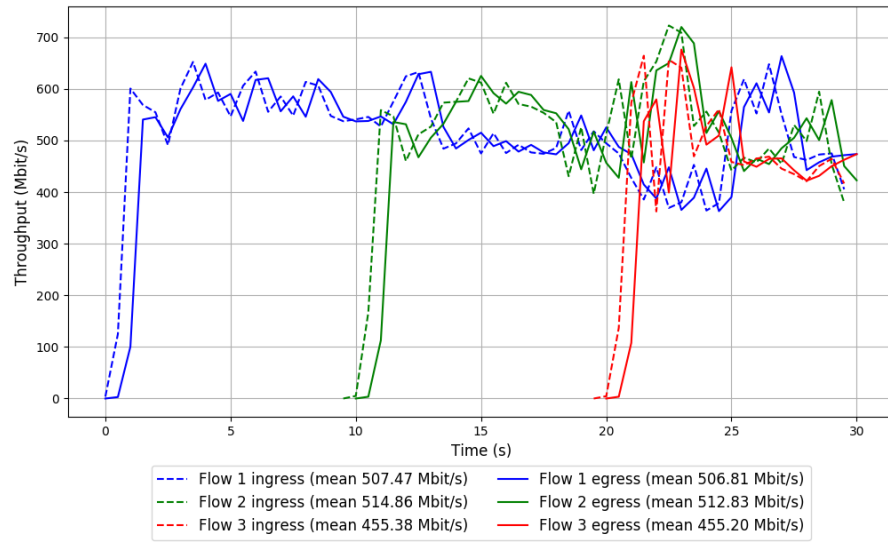


Run 1: Statistics of TCP Cubic

Start at: 2018-10-03 06:44:39  
End at: 2018-10-03 06:45:09  
Local clock offset: -0.061 ms  
Remote clock offset: -0.417 ms

# Below is generated by plot.py at 2018-10-03 09:48:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1000.43 Mbit/s  
95th percentile per-packet one-way delay: 177.391 ms  
Loss rate: 0.21%  
-- Flow 1:  
Average throughput: 506.81 Mbit/s  
95th percentile per-packet one-way delay: 180.201 ms  
Loss rate: 0.13%  
-- Flow 2:  
Average throughput: 512.83 Mbit/s  
95th percentile per-packet one-way delay: 179.751 ms  
Loss rate: 0.39%  
-- Flow 3:  
Average throughput: 455.20 Mbit/s  
95th percentile per-packet one-way delay: 136.394 ms  
Loss rate: 0.05%

# Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-10-03 07:15:06

End at: 2018-10-03 07:15:36

Local clock offset: -0.047 ms

Remote clock offset: 0.124 ms

# Below is generated by plot.py at 2018-10-03 09:48:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 993.66 Mbit/s

95th percentile per-packet one-way delay: 139.870 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 524.10 Mbit/s

95th percentile per-packet one-way delay: 138.152 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 478.85 Mbit/s

95th percentile per-packet one-way delay: 138.372 ms

Loss rate: 0.38%

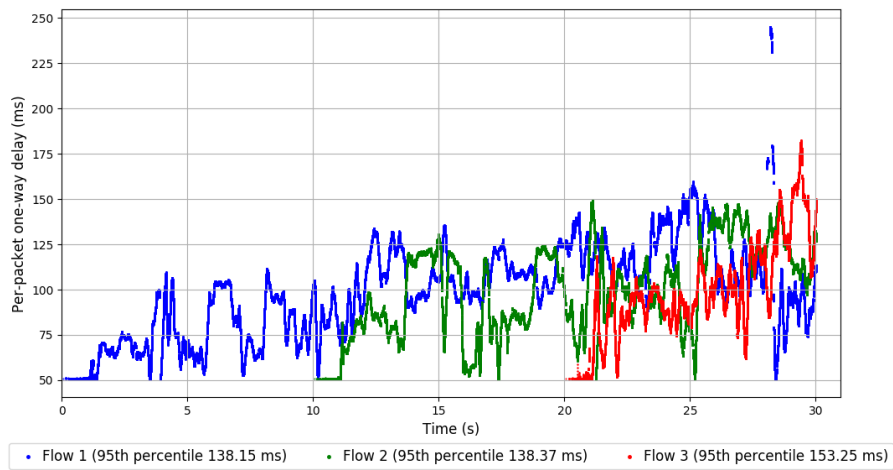
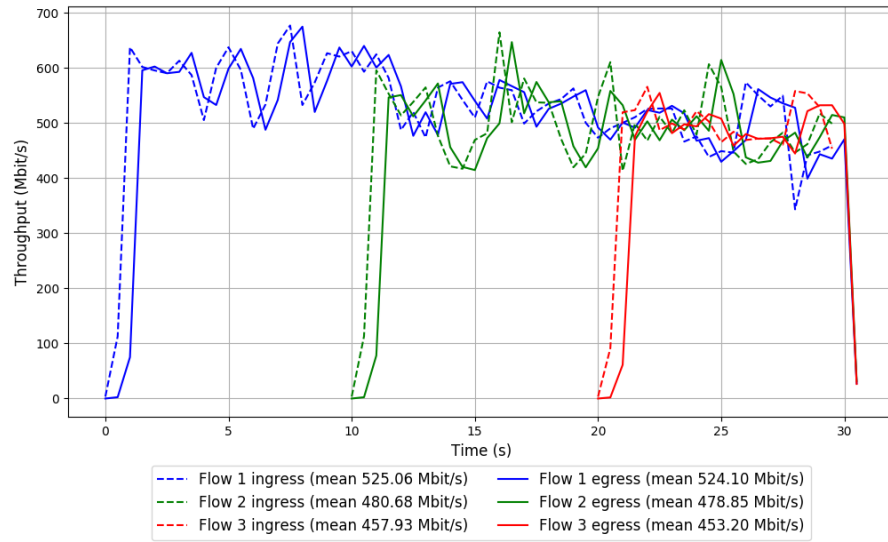
-- Flow 3:

Average throughput: 453.20 Mbit/s

95th percentile per-packet one-way delay: 153.246 ms

Loss rate: 1.03%

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





Run 3: Statistics of TCP Cubic

Start at: 2018-10-03 07:45:44

End at: 2018-10-03 07:46:14

Local clock offset: -0.082 ms

Remote clock offset: 0.072 ms

# Below is generated by plot.py at 2018-10-03 09:48:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 923.44 Mbit/s

95th percentile per-packet one-way delay: 166.032 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 485.08 Mbit/s

95th percentile per-packet one-way delay: 82.590 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 440.93 Mbit/s

95th percentile per-packet one-way delay: 86.381 ms

Loss rate: 0.08%

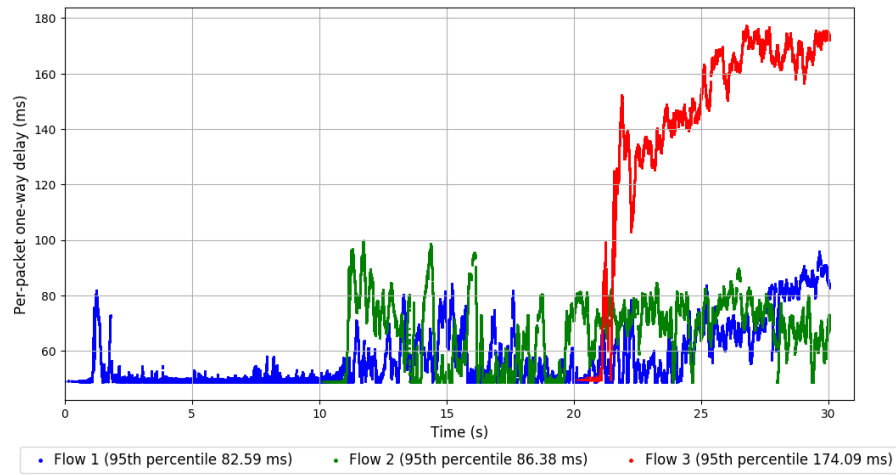
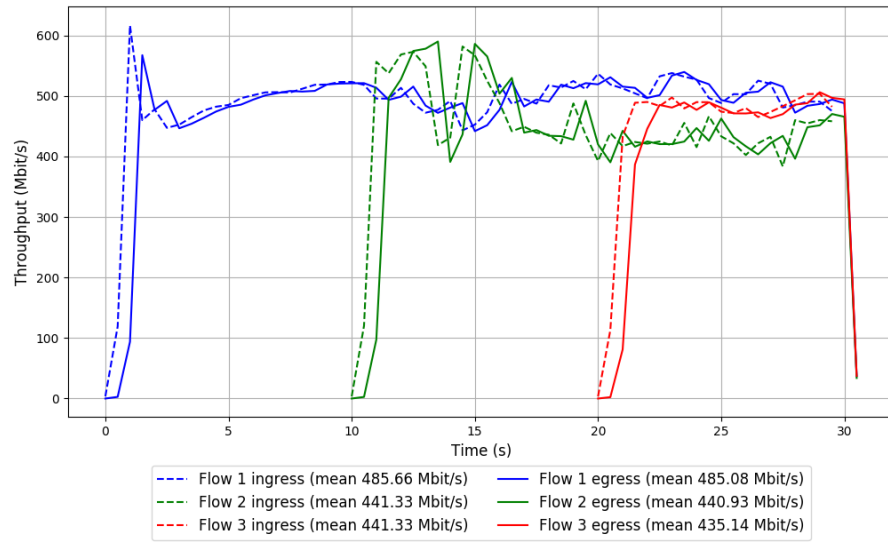
-- Flow 3:

Average throughput: 435.14 Mbit/s

95th percentile per-packet one-way delay: 174.094 ms

Loss rate: 1.38%

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



Run 4: Statistics of TCP Cubic

Start at: 2018-10-03 08:15:49

End at: 2018-10-03 08:16:19

Local clock offset: -0.163 ms

Remote clock offset: 0.161 ms

# Below is generated by plot.py at 2018-10-03 09:48:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 934.38 Mbit/s

95th percentile per-packet one-way delay: 161.549 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 501.54 Mbit/s

95th percentile per-packet one-way delay: 144.072 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 420.05 Mbit/s

95th percentile per-packet one-way delay: 183.890 ms

Loss rate: 0.61%

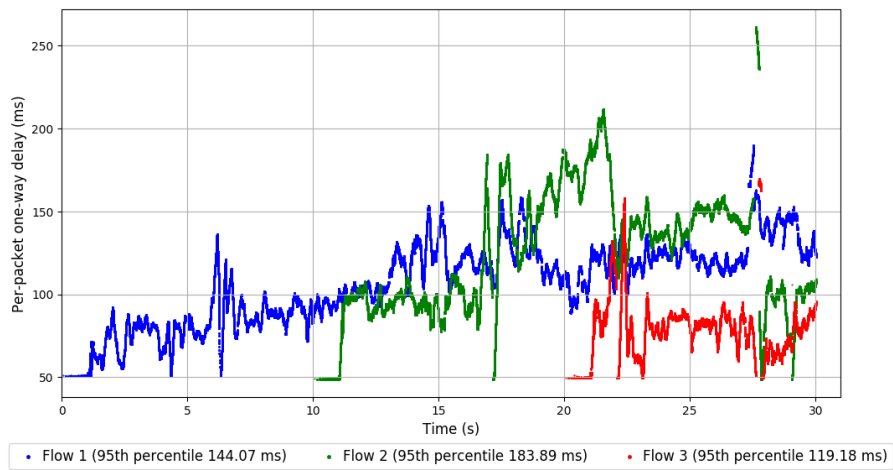
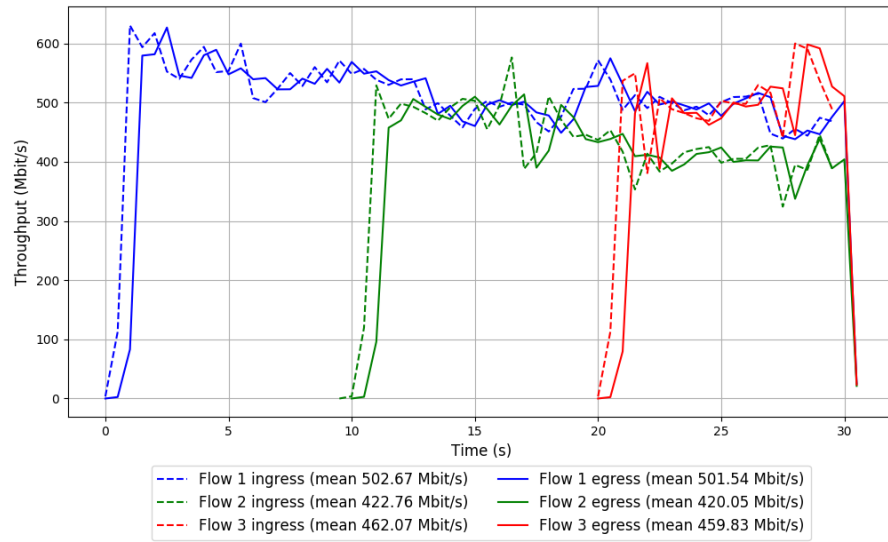
-- Flow 3:

Average throughput: 459.83 Mbit/s

95th percentile per-packet one-way delay: 119.177 ms

Loss rate: 0.47%

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



Run 5: Statistics of TCP Cubic

Start at: 2018-10-03 08:46:04

End at: 2018-10-03 08:46:34

Local clock offset: 0.21 ms

Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2018-10-03 09:48:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 768.50 Mbit/s

95th percentile per-packet one-way delay: 161.521 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 280.54 Mbit/s

95th percentile per-packet one-way delay: 51.772 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 492.90 Mbit/s

95th percentile per-packet one-way delay: 167.996 ms

Loss rate: 0.49%

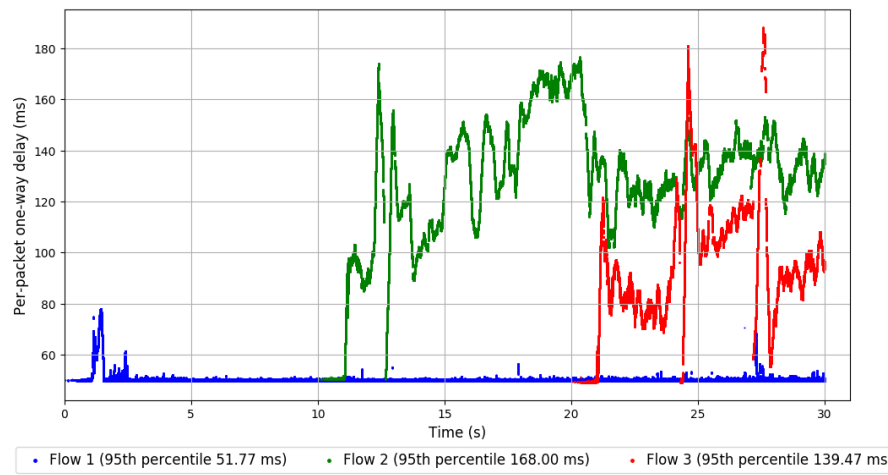
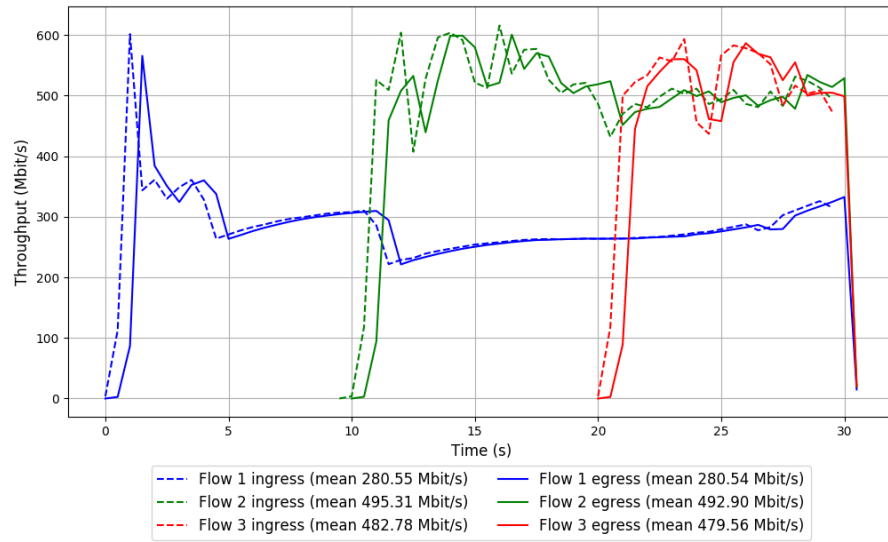
-- Flow 3:

Average throughput: 479.56 Mbit/s

95th percentile per-packet one-way delay: 139.474 ms

Loss rate: 0.65%

# Run 5: Report of TCP Cubic — Data Link

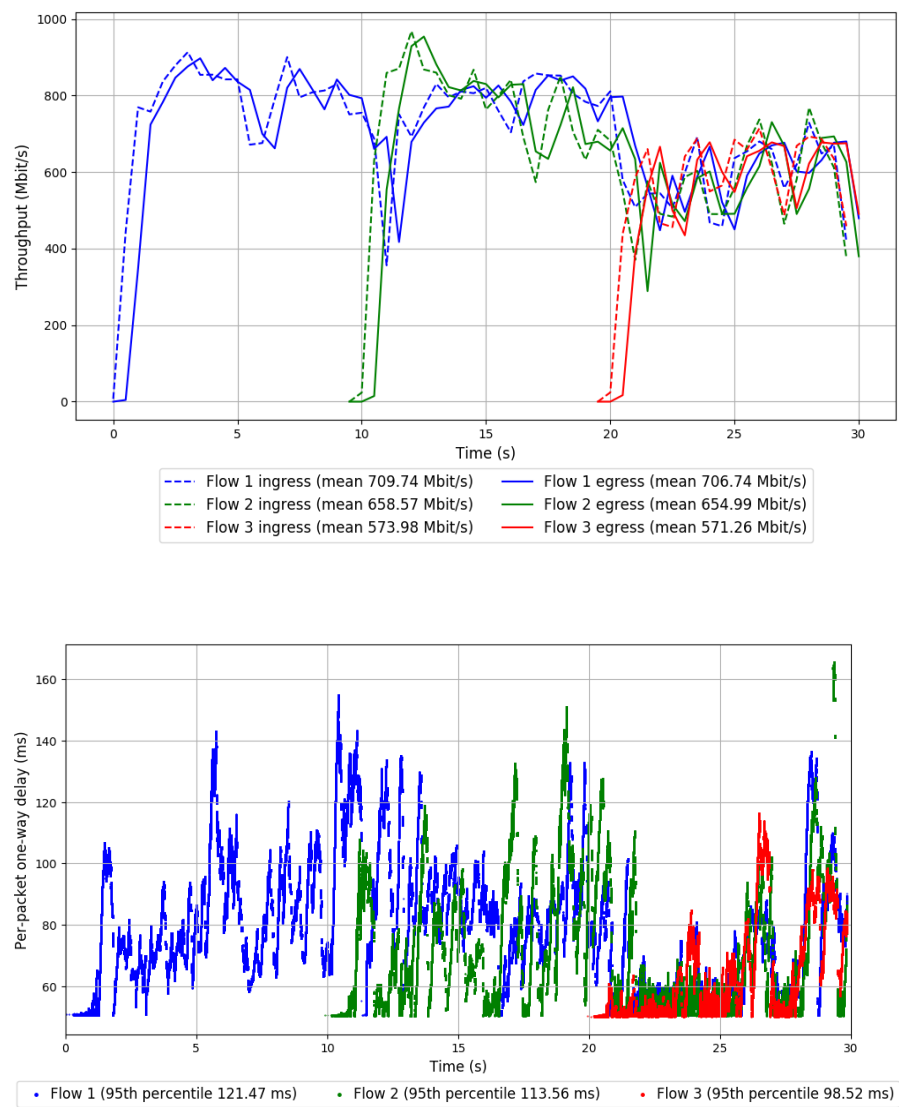


Run 1: Statistics of FillP

Start at: 2018-10-03 06:58:23  
End at: 2018-10-03 06:58:53  
Local clock offset: -0.064 ms  
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2018-10-03 09:59:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1334.57 Mbit/s  
95th percentile per-packet one-way delay: 115.319 ms  
Loss rate: 0.47%  
-- Flow 1:  
Average throughput: 706.74 Mbit/s  
95th percentile per-packet one-way delay: 121.465 ms  
Loss rate: 0.42%  
-- Flow 2:  
Average throughput: 654.99 Mbit/s  
95th percentile per-packet one-way delay: 113.559 ms  
Loss rate: 0.54%  
-- Flow 3:  
Average throughput: 571.26 Mbit/s  
95th percentile per-packet one-way delay: 98.515 ms  
Loss rate: 0.49%

Run 1: Report of FillP — Data Link





Run 2: Statistics of FillP

Start at: 2018-10-03 07:28:52

End at: 2018-10-03 07:29:22

Local clock offset: -0.069 ms

Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2018-10-03 10:14:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1376.04 Mbit/s

95th percentile per-packet one-way delay: 104.258 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 737.27 Mbit/s

95th percentile per-packet one-way delay: 108.927 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 682.95 Mbit/s

95th percentile per-packet one-way delay: 100.994 ms

Loss rate: 0.18%

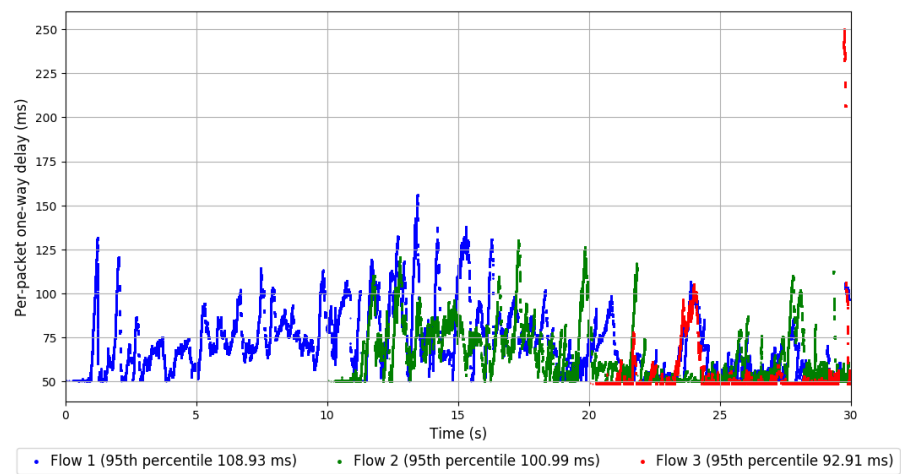
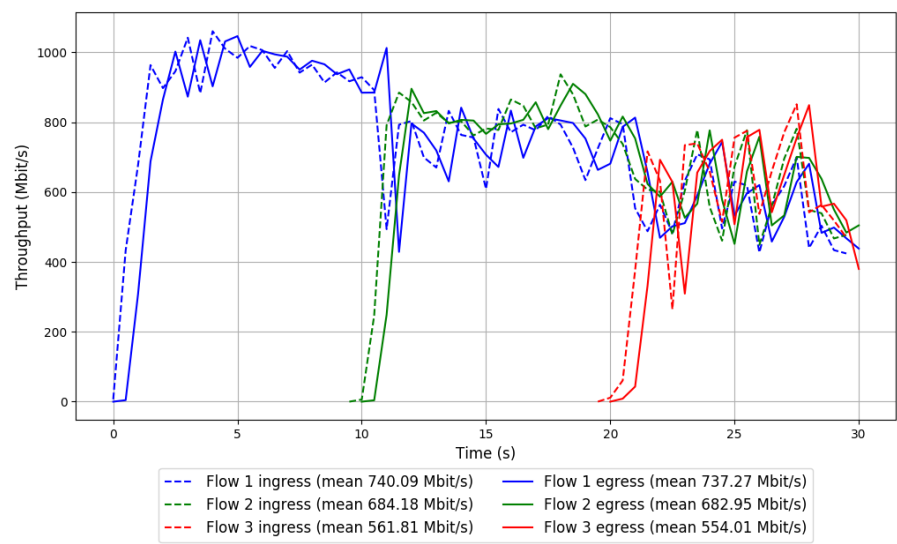
-- Flow 3:

Average throughput: 554.01 Mbit/s

95th percentile per-packet one-way delay: 92.914 ms

Loss rate: 1.39%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-10-03 07:59:14

End at: 2018-10-03 07:59:44

Local clock offset: -0.16 ms

Remote clock offset: 0.043 ms

# Below is generated by plot.py at 2018-10-03 10:14:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1292.11 Mbit/s

95th percentile per-packet one-way delay: 115.003 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 715.96 Mbit/s

95th percentile per-packet one-way delay: 116.617 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 618.66 Mbit/s

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

Loss rate: 0.16%

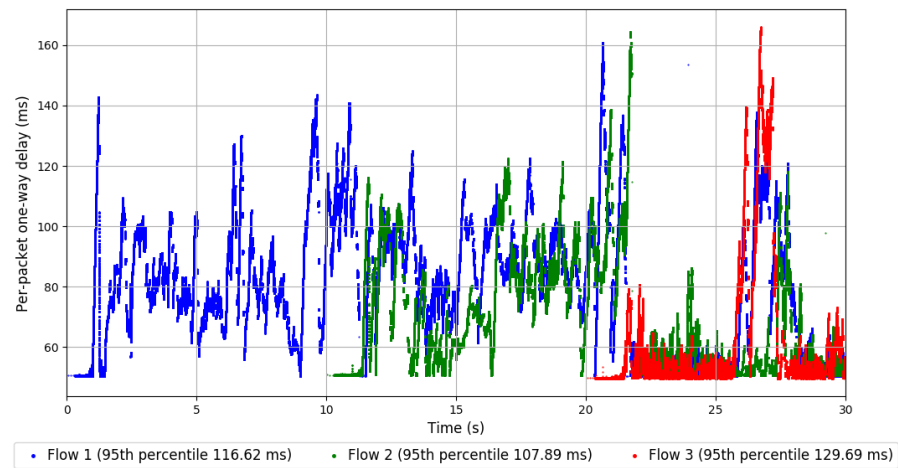
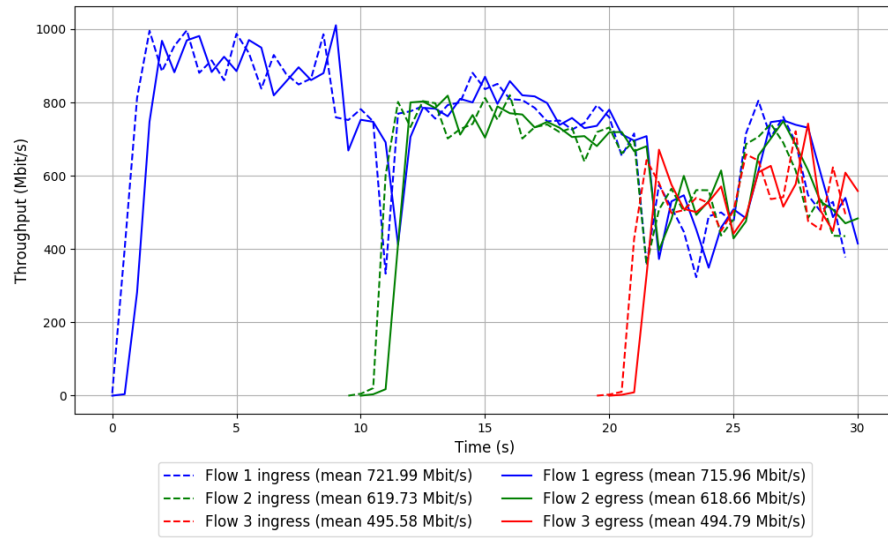
-- Flow 3:

Average throughput: 494.79 Mbit/s

95th percentile per-packet one-way delay: 129.694 ms

Loss rate: 0.15%

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



Run 4: Statistics of FillP

Start at: 2018-10-03 08:29:33

End at: 2018-10-03 08:30:03

Local clock offset: -0.17 ms

Remote clock offset: 0.174 ms

# Below is generated by plot.py at 2018-10-03 10:15:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1307.04 Mbit/s

95th percentile per-packet one-way delay: 100.701 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 732.75 Mbit/s

95th percentile per-packet one-way delay: 102.649 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 620.07 Mbit/s

95th percentile per-packet one-way delay: 104.705 ms

Loss rate: 0.75%

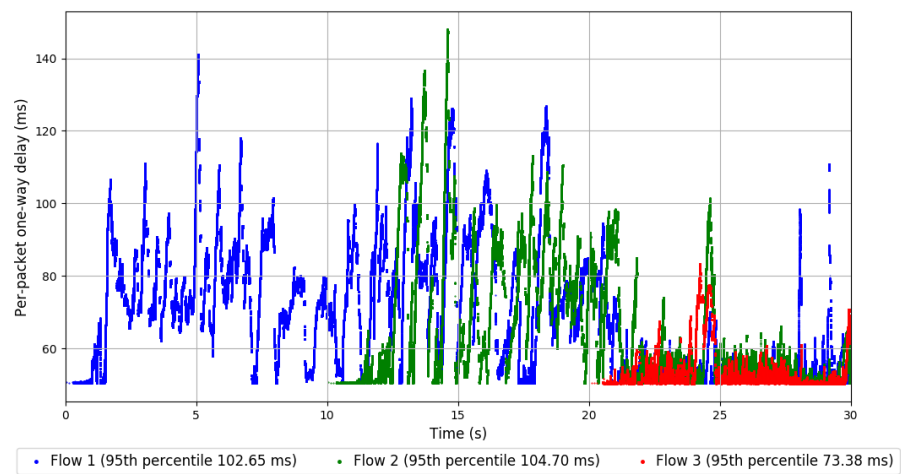
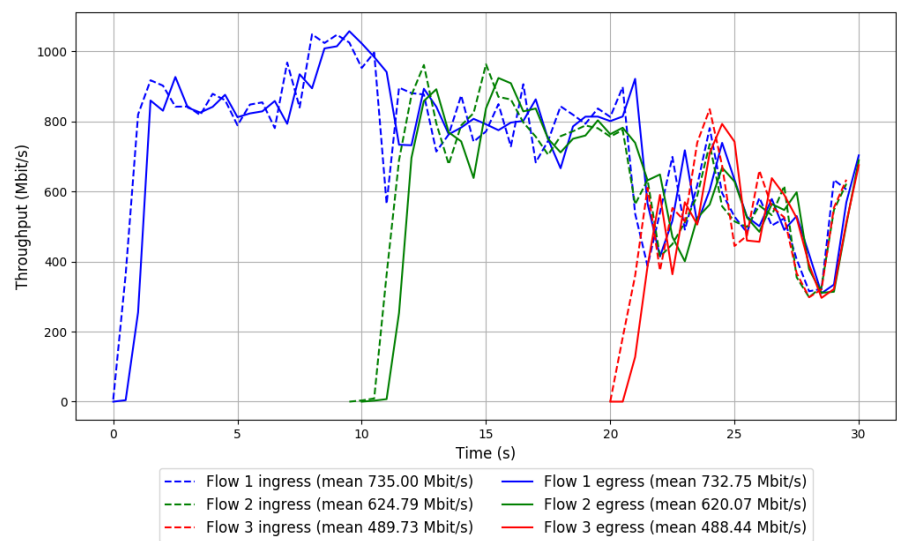
-- Flow 3:

Average throughput: 488.44 Mbit/s

95th percentile per-packet one-way delay: 73.383 ms

Loss rate: 0.26%

Run 4: Report of FillP — Data Link

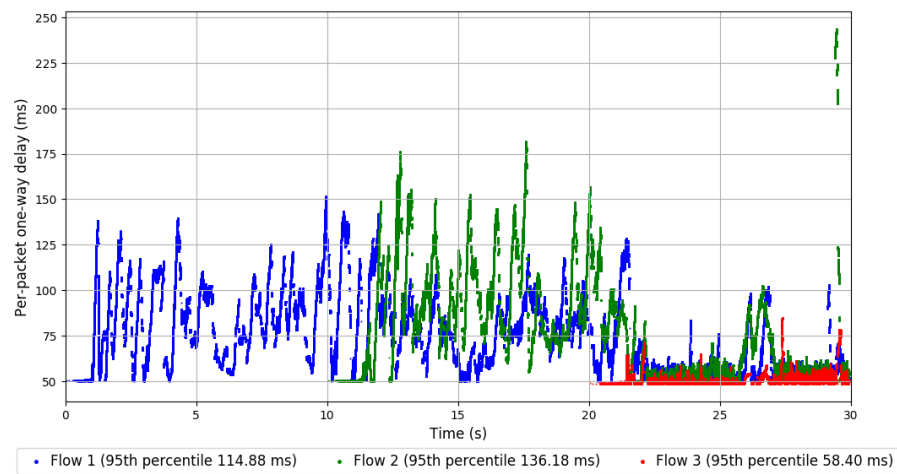
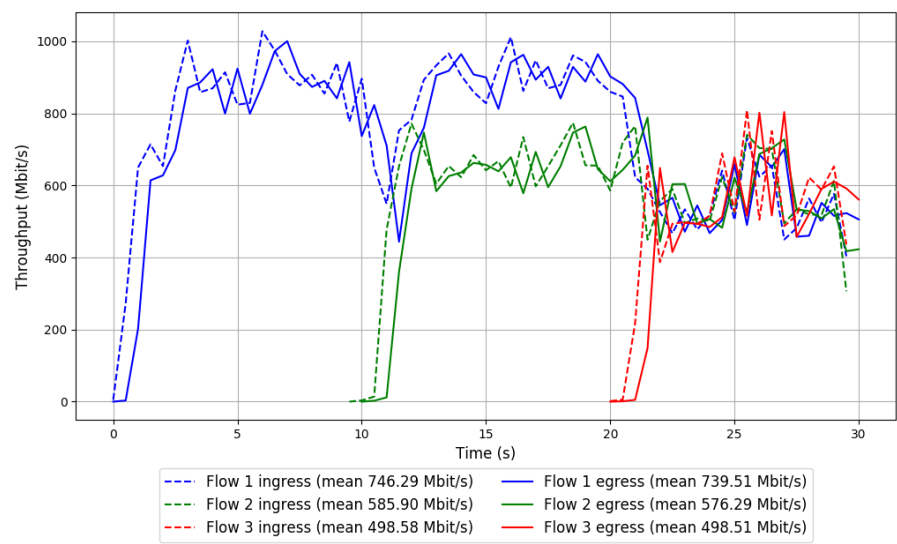


Run 5: Statistics of FillP

Start at: 2018-10-03 08:59:25  
End at: 2018-10-03 08:59:55  
Local clock offset: -0.139 ms  
Remote clock offset: -0.188 ms

# Below is generated by plot.py at 2018-10-03 10:15:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1288.07 Mbit/s  
95th percentile per-packet one-way delay: 119.289 ms  
Loss rate: 1.01%  
-- Flow 1:  
Average throughput: 739.51 Mbit/s  
95th percentile per-packet one-way delay: 114.881 ms  
Loss rate: 0.91%  
-- Flow 2:  
Average throughput: 576.29 Mbit/s  
95th percentile per-packet one-way delay: 136.179 ms  
Loss rate: 1.62%  
-- Flow 3:  
Average throughput: 498.51 Mbit/s  
95th percentile per-packet one-way delay: 58.399 ms  
Loss rate: 0.00%

Run 5: Report of FillP — Data Link



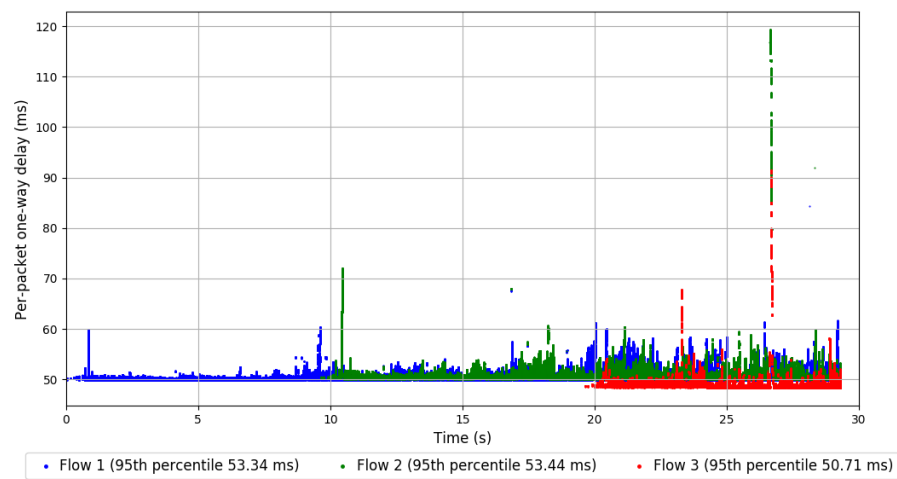
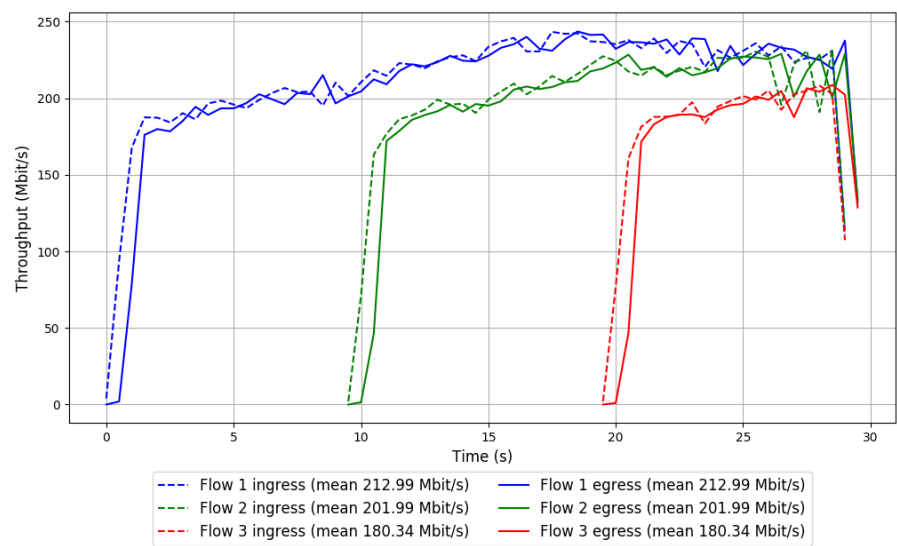


```
Run 1: Statistics of Indigo

Start at: 2018-10-03 06:48:22
End at: 2018-10-03 06:48:52
Local clock offset: 0.322 ms
Remote clock offset: -0.417 ms

# Below is generated by plot.py at 2018-10-03 10:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 408.29 Mbit/s
95th percentile per-packet one-way delay: 53.218 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 212.99 Mbit/s
95th percentile per-packet one-way delay: 53.335 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 201.99 Mbit/s
95th percentile per-packet one-way delay: 53.443 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 180.34 Mbit/s
95th percentile per-packet one-way delay: 50.708 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-10-03 07:18:49

End at: 2018-10-03 07:19:19

Local clock offset: -0.042 ms

Remote clock offset: 0.153 ms

# Below is generated by plot.py at 2018-10-03 10:15:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 412.01 Mbit/s

95th percentile per-packet one-way delay: 52.310 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 218.91 Mbit/s

95th percentile per-packet one-way delay: 51.781 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 203.18 Mbit/s

95th percentile per-packet one-way delay: 53.093 ms

Loss rate: 0.02%

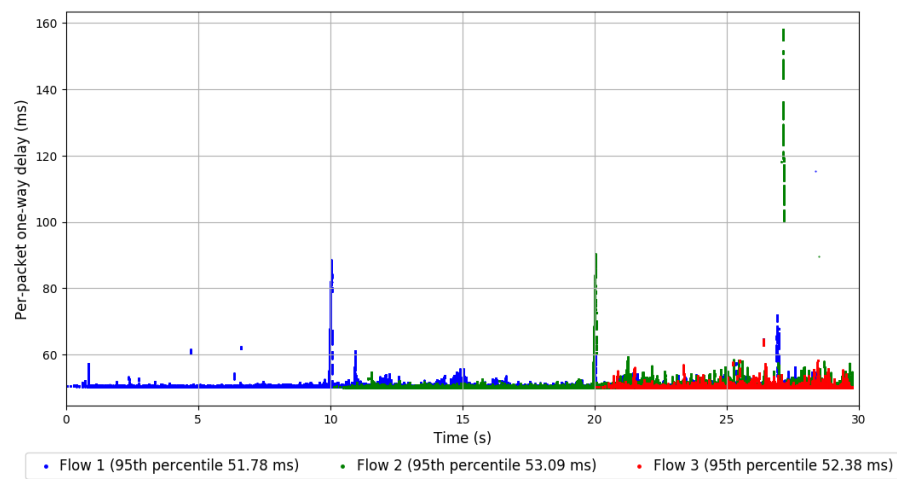
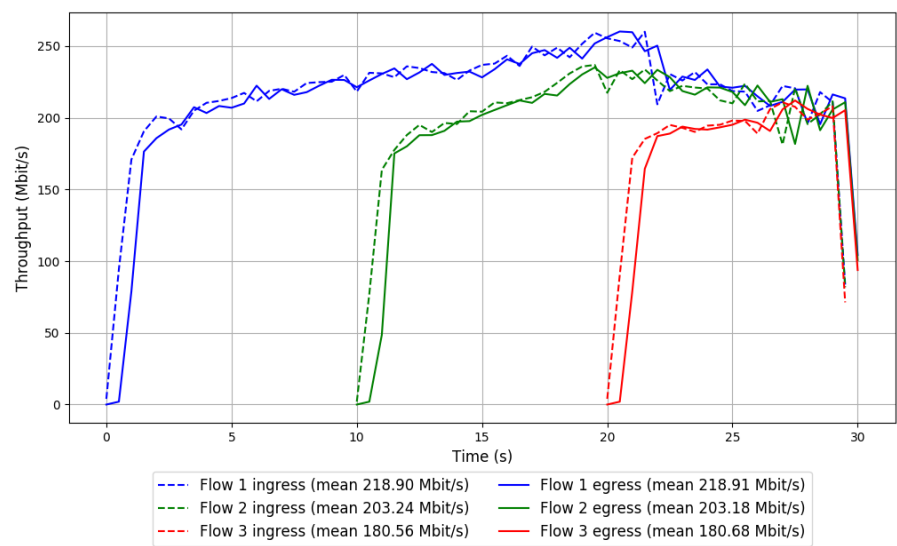
-- Flow 3:

Average throughput: 180.68 Mbit/s

95th percentile per-packet one-way delay: 52.377 ms

Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-10-03 07:49:24

End at: 2018-10-03 07:49:54

Local clock offset: -0.147 ms

Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2018-10-03 10:15:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 379.81 Mbit/s

95th percentile per-packet one-way delay: 51.434 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 203.04 Mbit/s

95th percentile per-packet one-way delay: 51.140 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 184.05 Mbit/s

95th percentile per-packet one-way delay: 51.716 ms

Loss rate: 0.00%

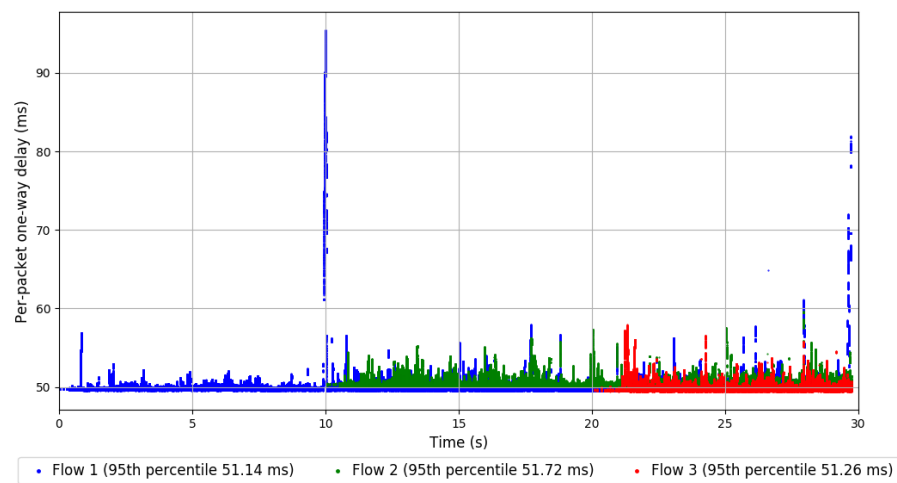
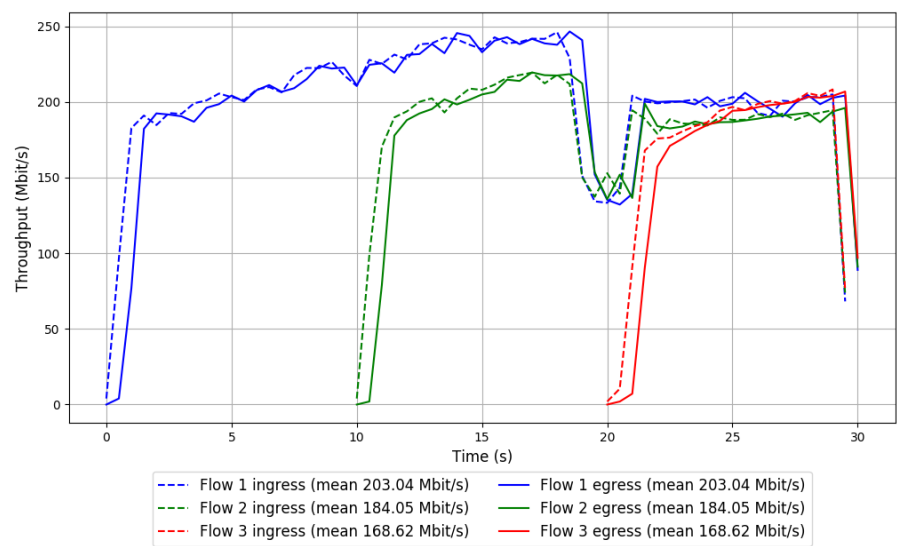
-- Flow 3:

Average throughput: 168.62 Mbit/s

95th percentile per-packet one-way delay: 51.256 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-10-03 08:19:33

End at: 2018-10-03 08:20:03

Local clock offset: 0.191 ms

Remote clock offset: 0.197 ms

# Below is generated by plot.py at 2018-10-03 10:15:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 436.40 Mbit/s

95th percentile per-packet one-way delay: 53.642 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 234.31 Mbit/s

95th percentile per-packet one-way delay: 53.745 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 212.42 Mbit/s

95th percentile per-packet one-way delay: 54.358 ms

Loss rate: 0.00%

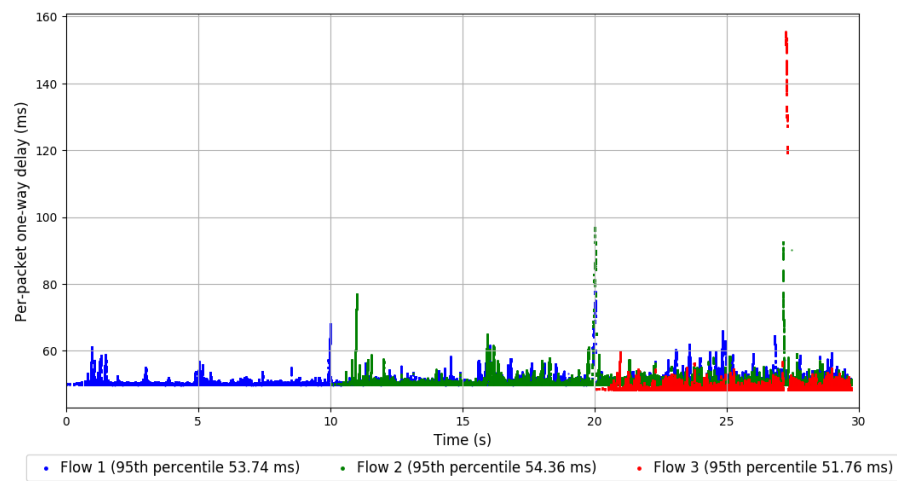
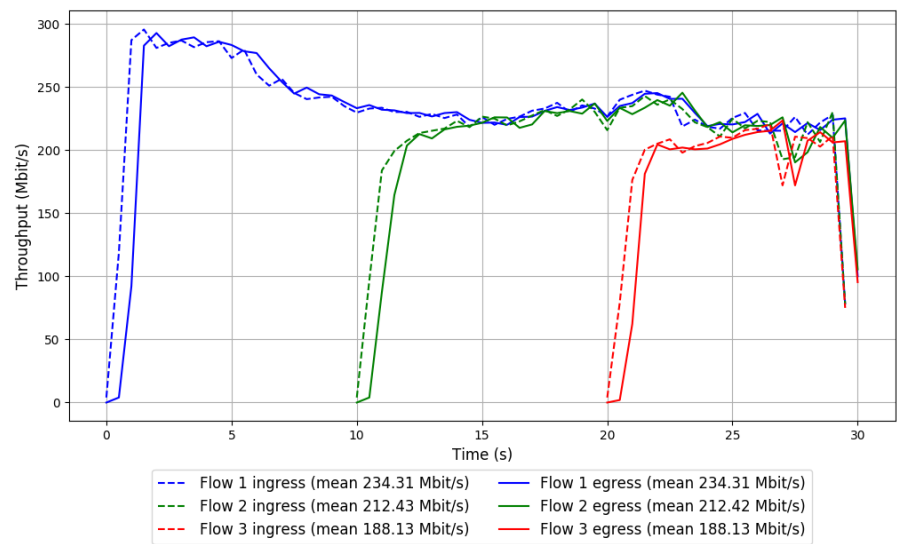
-- Flow 3:

Average throughput: 188.13 Mbit/s

95th percentile per-packet one-way delay: 51.762 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link





Run 5: Statistics of Indigo

Start at: 2018-10-03 08:49:26

End at: 2018-10-03 08:49:56

Local clock offset: -0.157 ms

Remote clock offset: -0.13 ms

# Below is generated by plot.py at 2018-10-03 10:15:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 419.73 Mbit/s

95th percentile per-packet one-way delay: 53.302 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 222.29 Mbit/s

95th percentile per-packet one-way delay: 53.729 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 203.32 Mbit/s

95th percentile per-packet one-way delay: 52.857 ms

Loss rate: 0.00%

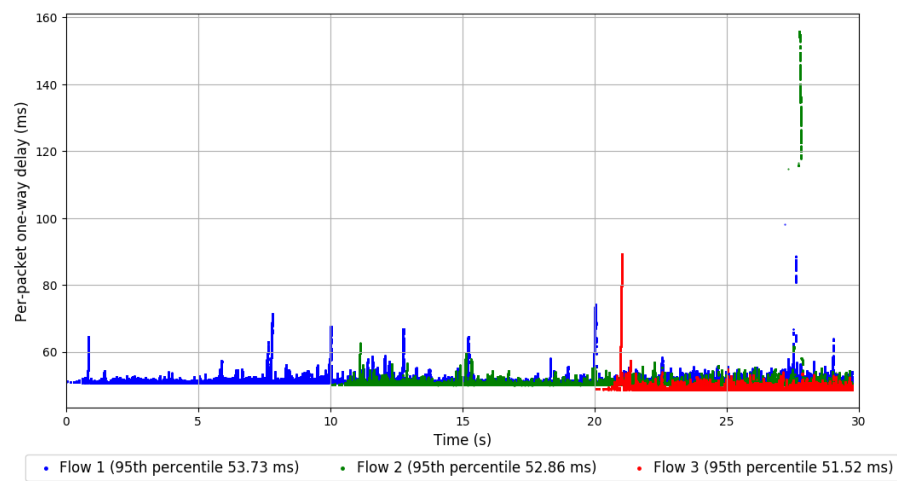
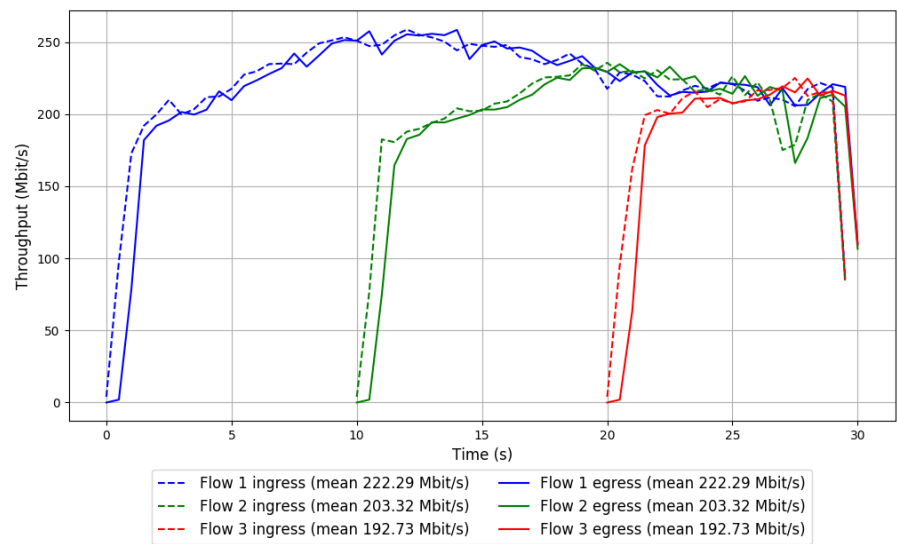
-- Flow 3:

Average throughput: 192.73 Mbit/s

95th percentile per-packet one-way delay: 51.517 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link

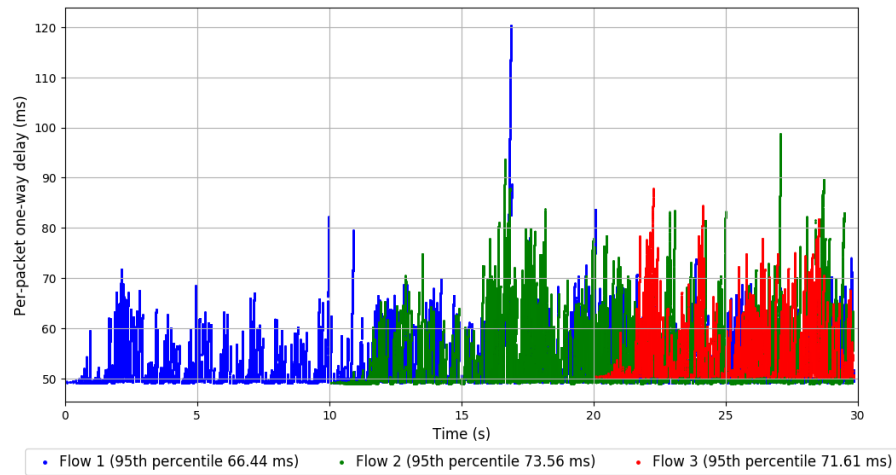
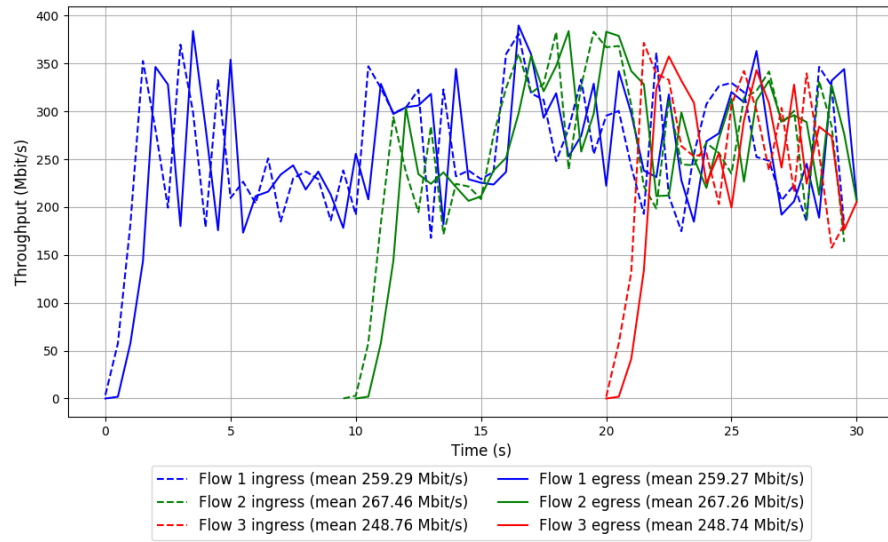


Run 1: Statistics of Indigo-96d2da3

Start at: 2018-10-03 06:43:03  
End at: 2018-10-03 06:43:33  
Local clock offset: 0.287 ms  
Remote clock offset: -0.421 ms

# Below is generated by plot.py at 2018-10-03 10:15:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 518.18 Mbit/s  
95th percentile per-packet one-way delay: 70.494 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 259.27 Mbit/s  
95th percentile per-packet one-way delay: 66.443 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 267.26 Mbit/s  
95th percentile per-packet one-way delay: 73.558 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 248.74 Mbit/s  
95th percentile per-packet one-way delay: 71.609 ms  
Loss rate: 0.00%

# Run 1: Report of Indigo-96d2da3 — Data Link



Run 2: Statistics of Indigo-96d2da3

Start at: 2018-10-03 07:13:30

End at: 2018-10-03 07:14:00

Local clock offset: -0.398 ms

Remote clock offset: 0.131 ms

# Below is generated by plot.py at 2018-10-03 10:15:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 501.25 Mbit/s

95th percentile per-packet one-way delay: 75.195 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 260.00 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 253.05 Mbit/s

95th percentile per-packet one-way delay: 70.752 ms

Loss rate: 0.05%

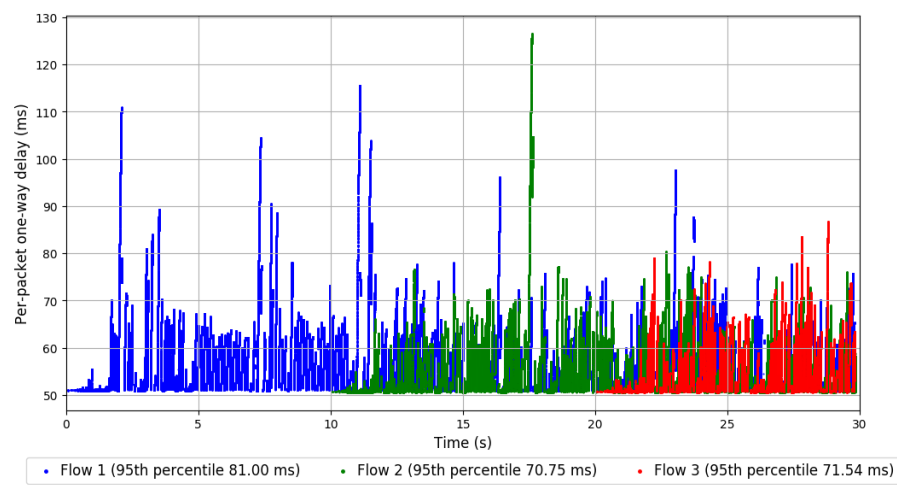
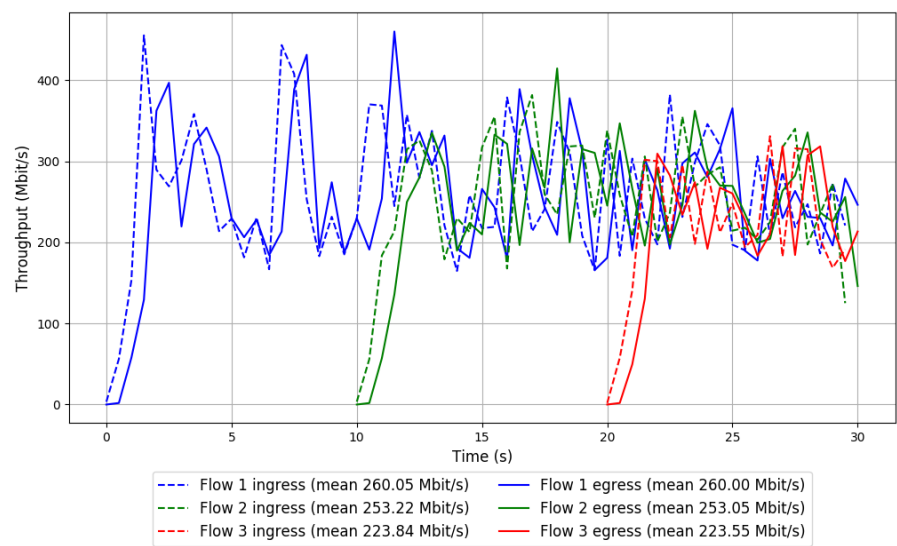
-- Flow 3:

Average throughput: 223.55 Mbit/s

95th percentile per-packet one-way delay: 71.537 ms

Loss rate: 0.00%

Run 2: Report of Indigo-96d2da3 — Data Link



Run 3: Statistics of Indigo-96d2da3

Start at: 2018-10-03 07:44:09

End at: 2018-10-03 07:44:39

Local clock offset: -0.154 ms

Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2018-10-03 10:18:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 495.30 Mbit/s

95th percentile per-packet one-way delay: 70.471 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 258.83 Mbit/s

95th percentile per-packet one-way delay: 70.543 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 242.27 Mbit/s

95th percentile per-packet one-way delay: 70.096 ms

Loss rate: 0.14%

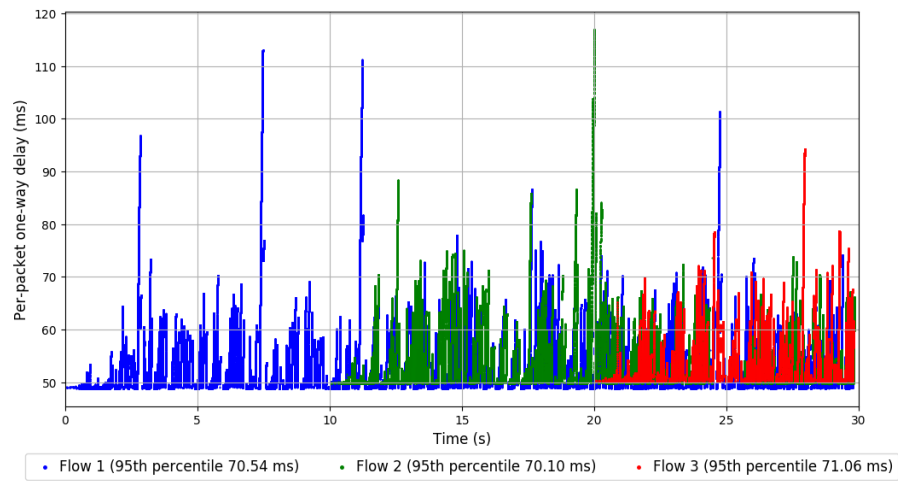
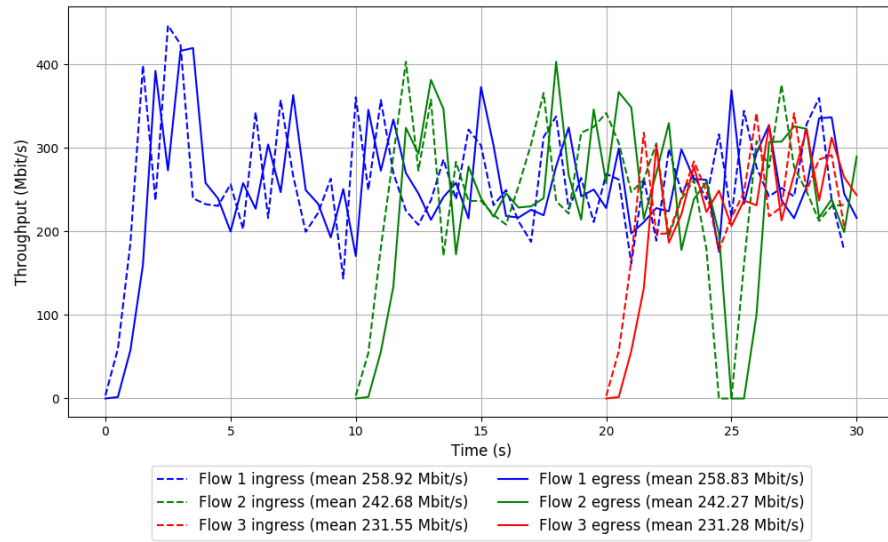
-- Flow 3:

Average throughput: 231.28 Mbit/s

95th percentile per-packet one-way delay: 71.055 ms

Loss rate: 0.00%

### Run 3: Report of Indigo-96d2da3 — Data Link





Run 4: Statistics of Indigo-96d2da3

Start at: 2018-10-03 08:14:11

End at: 2018-10-03 08:14:41

Local clock offset: -0.189 ms

Remote clock offset: 0.116 ms

# Below is generated by plot.py at 2018-10-03 10:19:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 555.13 Mbit/s

95th percentile per-packet one-way delay: 72.438 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 285.97 Mbit/s

95th percentile per-packet one-way delay: 73.604 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 280.21 Mbit/s

95th percentile per-packet one-way delay: 72.384 ms

Loss rate: 0.00%

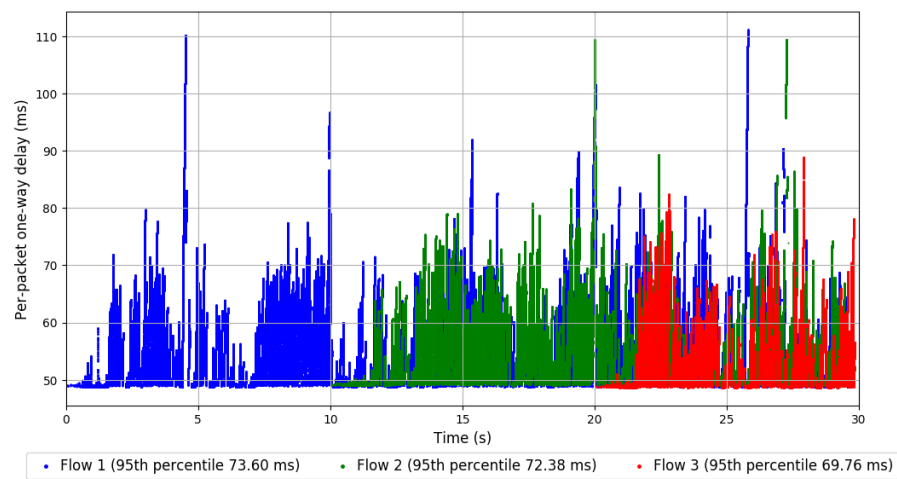
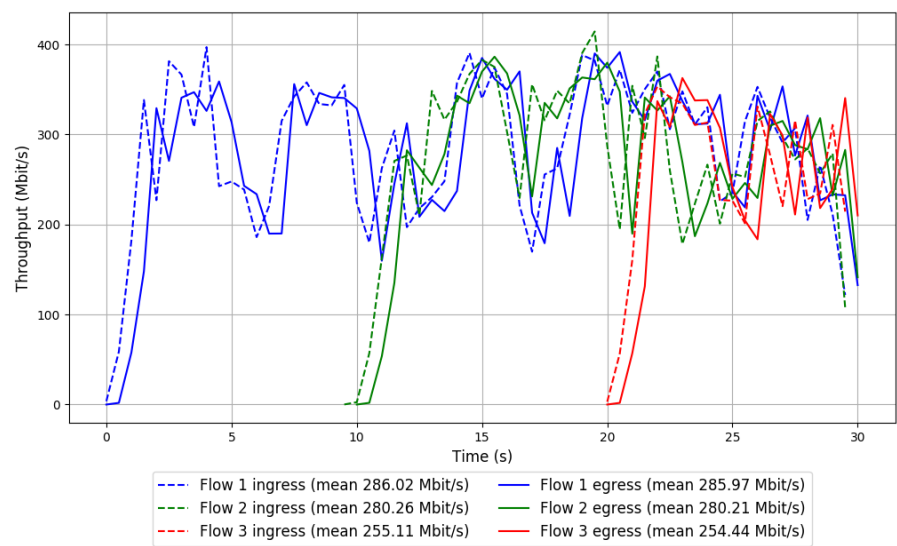
-- Flow 3:

Average throughput: 254.44 Mbit/s

95th percentile per-packet one-way delay: 69.759 ms

Loss rate: 0.24%

Run 4: Report of Indigo-96d2da3 — Data Link

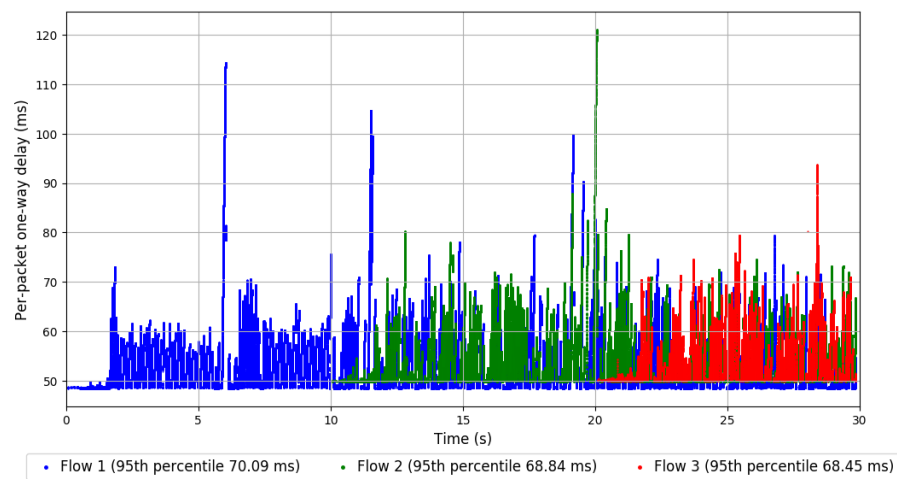
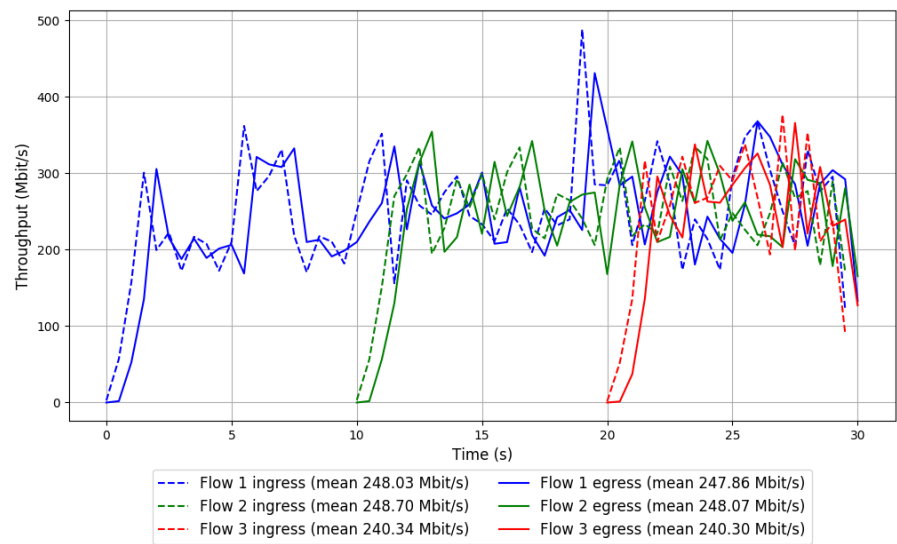


Run 5: Statistics of Indigo-96d2da3

Start at: 2018-10-03 08:44:30  
End at: 2018-10-03 08:45:00  
Local clock offset: 0.192 ms  
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2018-10-03 10:21:42  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 491.25 Mbit/s  
95th percentile per-packet one-way delay: 69.202 ms  
Loss rate: 0.11%  
-- Flow 1:  
Average throughput: 247.86 Mbit/s  
95th percentile per-packet one-way delay: 70.090 ms  
Loss rate: 0.07%  
-- Flow 2:  
Average throughput: 248.07 Mbit/s  
95th percentile per-packet one-way delay: 68.838 ms  
Loss rate: 0.22%  
-- Flow 3:  
Average throughput: 240.30 Mbit/s  
95th percentile per-packet one-way delay: 68.454 ms  
Loss rate: 0.01%

Run 5: Report of Indigo-96d2da3 — Data Link

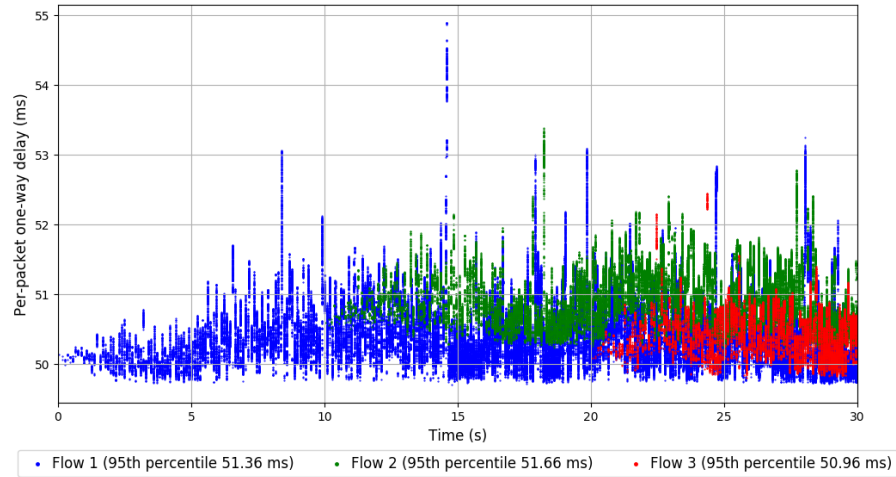
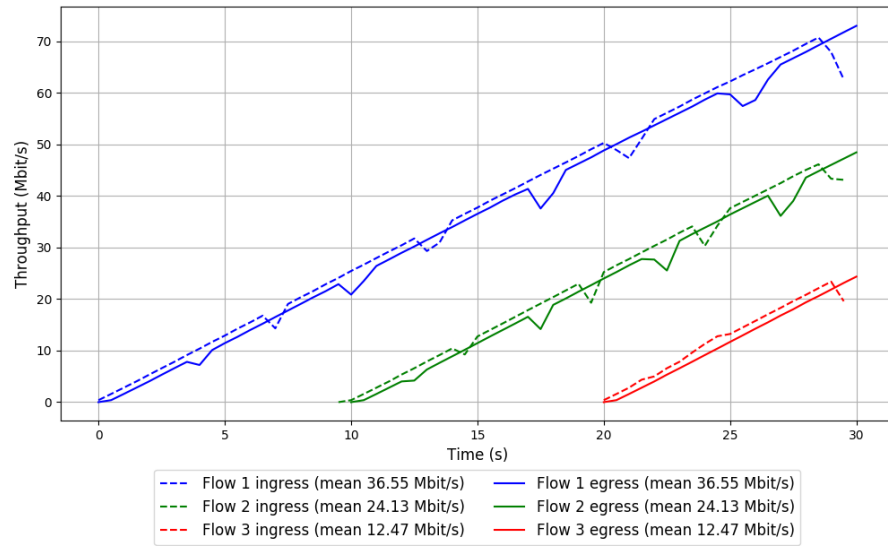


```
Run 1: Statistics of LEDBAT

Start at: 2018-10-03 06:38:02
End at: 2018-10-03 06:38:32
Local clock offset: 0.304 ms
Remote clock offset: -0.392 ms

# Below is generated by plot.py at 2018-10-03 10:21:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.73 Mbit/s
95th percentile per-packet one-way delay: 51.500 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 36.55 Mbit/s
95th percentile per-packet one-way delay: 51.362 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.13 Mbit/s
95th percentile per-packet one-way delay: 51.657 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 50.960 ms
Loss rate: 0.00%
```

## Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-10-03 07:08:22

End at: 2018-10-03 07:08:52

Local clock offset: -0.066 ms

Remote clock offset: 0.096 ms

# Below is generated by plot.py at 2018-10-03 10:21:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 56.54 Mbit/s

95th percentile per-packet one-way delay: 52.052 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 36.14 Mbit/s

95th percentile per-packet one-way delay: 52.321 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.54 Mbit/s

95th percentile per-packet one-way delay: 51.051 ms

Loss rate: 0.00%

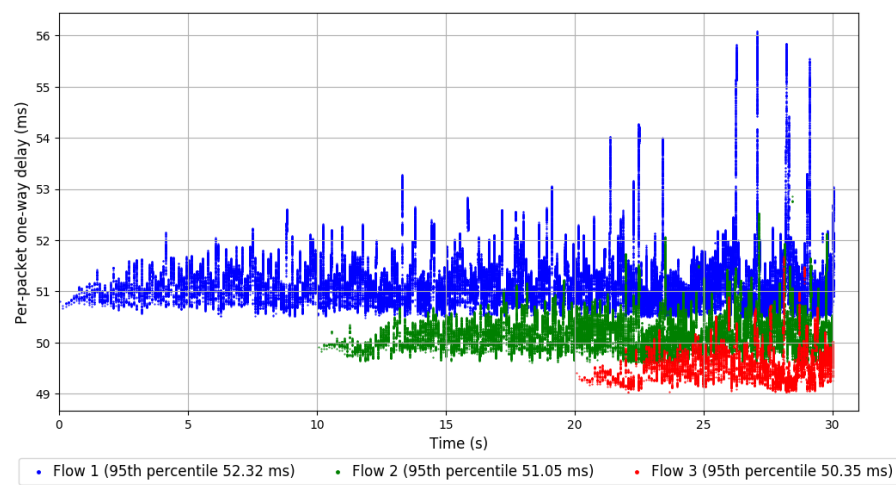
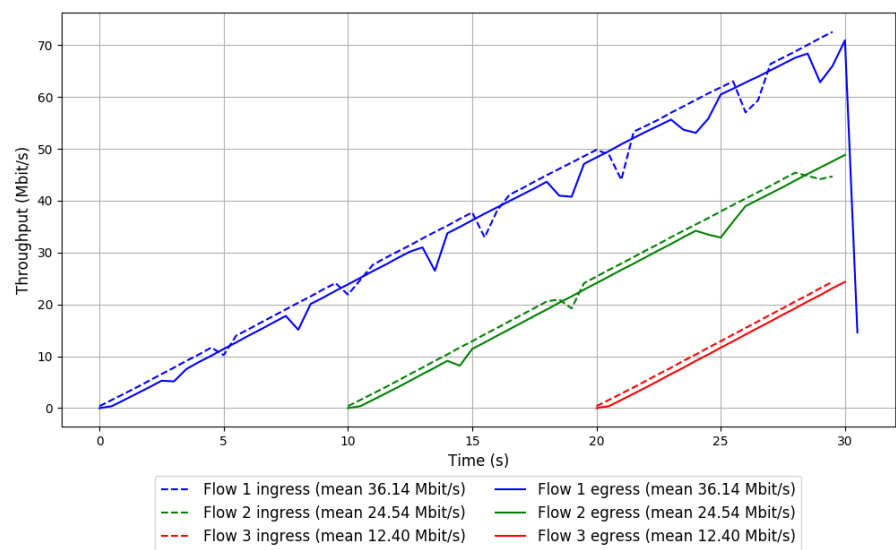
-- Flow 3:

Average throughput: 12.40 Mbit/s

95th percentile per-packet one-way delay: 50.355 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link





Run 3: Statistics of LEDBAT

Start at: 2018-10-03 07:39:04

End at: 2018-10-03 07:39:34

Local clock offset: -0.483 ms

Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2018-10-03 10:21:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 59.19 Mbit/s

95th percentile per-packet one-way delay: 51.842 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 37.69 Mbit/s

95th percentile per-packet one-way delay: 52.056 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 26.04 Mbit/s

95th percentile per-packet one-way delay: 50.174 ms

Loss rate: 0.00%

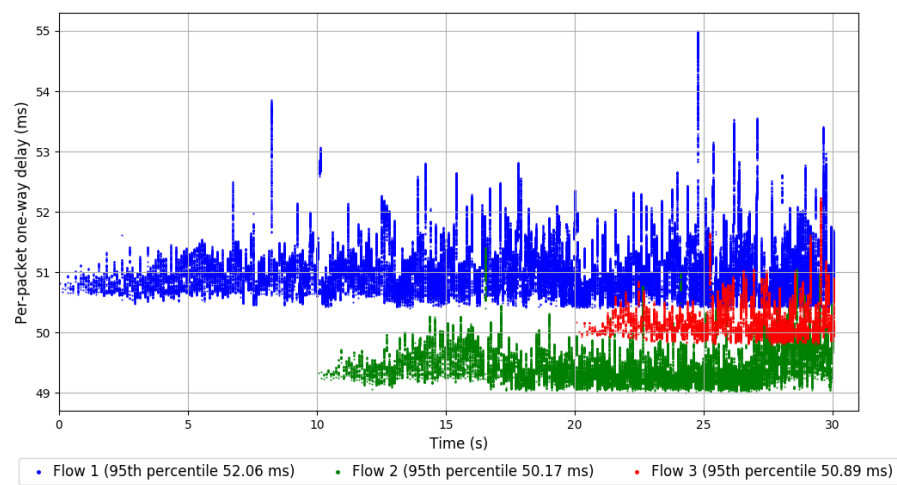
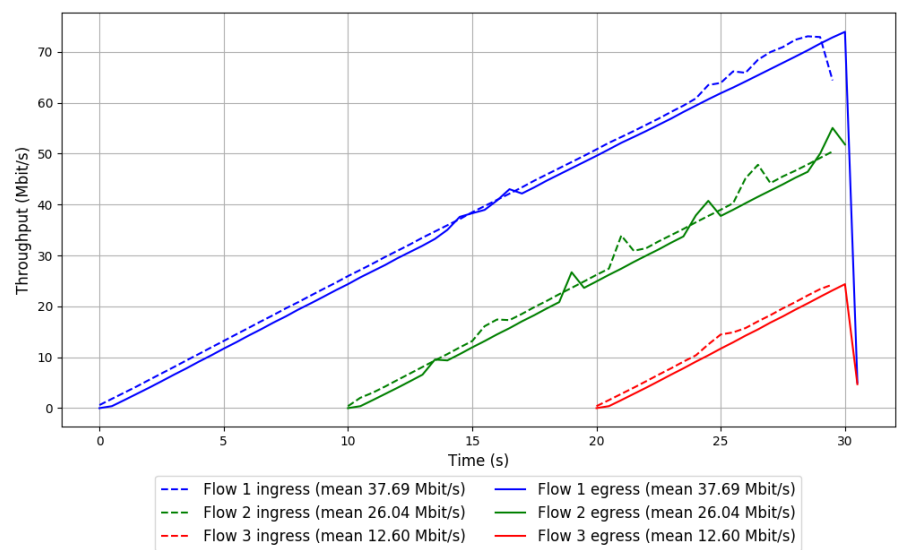
-- Flow 3:

Average throughput: 12.60 Mbit/s

95th percentile per-packet one-way delay: 50.891 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

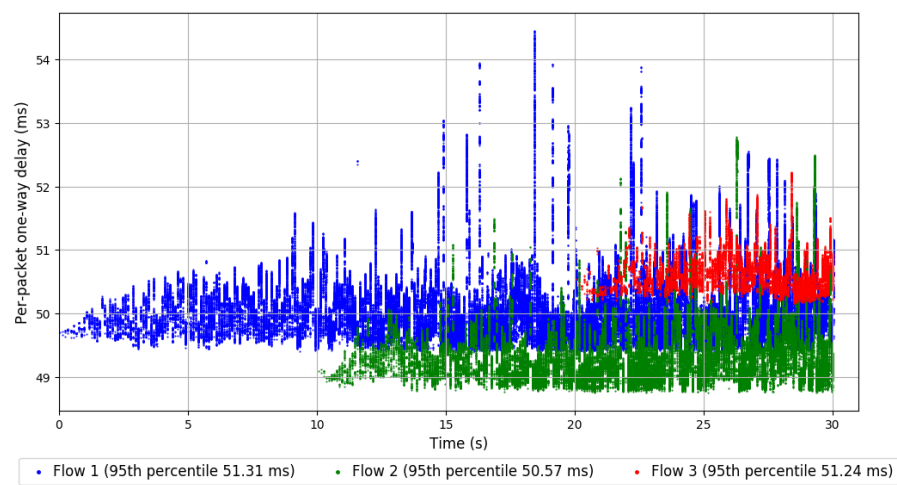
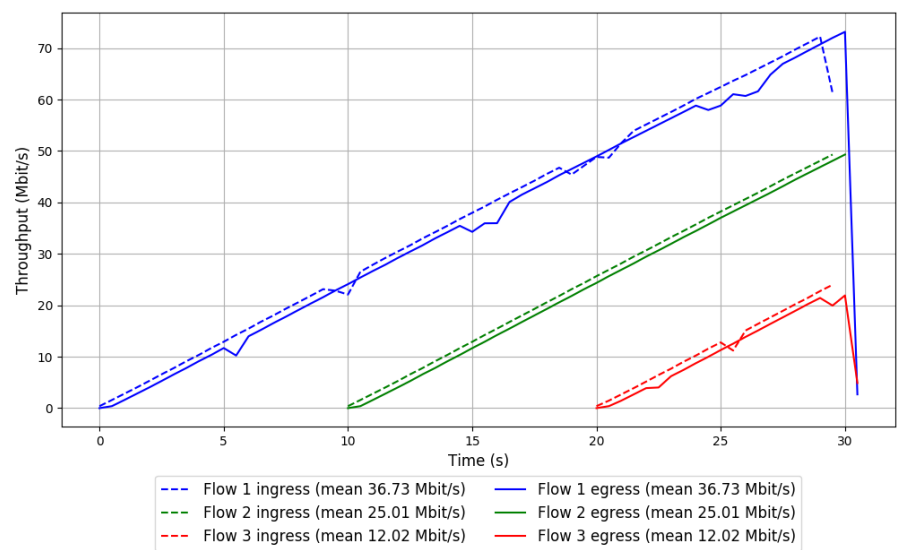


Run 4: Statistics of LEDBAT

Start at: 2018-10-03 08:09:05  
End at: 2018-10-03 08:09:35  
Local clock offset: -0.194 ms  
Remote clock offset: 0.106 ms

# Below is generated by plot.py at 2018-10-03 10:21:42  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 57.34 Mbit/s  
95th percentile per-packet one-way delay: 51.132 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 36.73 Mbit/s  
95th percentile per-packet one-way delay: 51.309 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 25.01 Mbit/s  
95th percentile per-packet one-way delay: 50.571 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 12.02 Mbit/s  
95th percentile per-packet one-way delay: 51.242 ms  
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

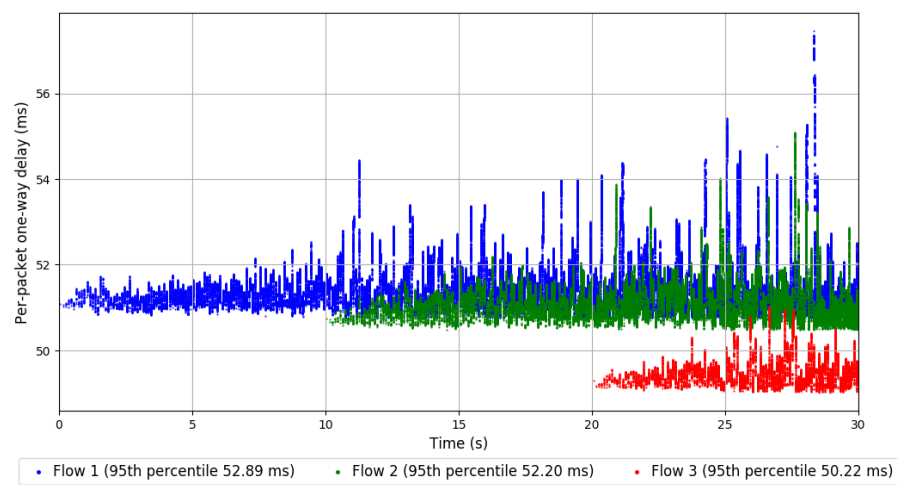
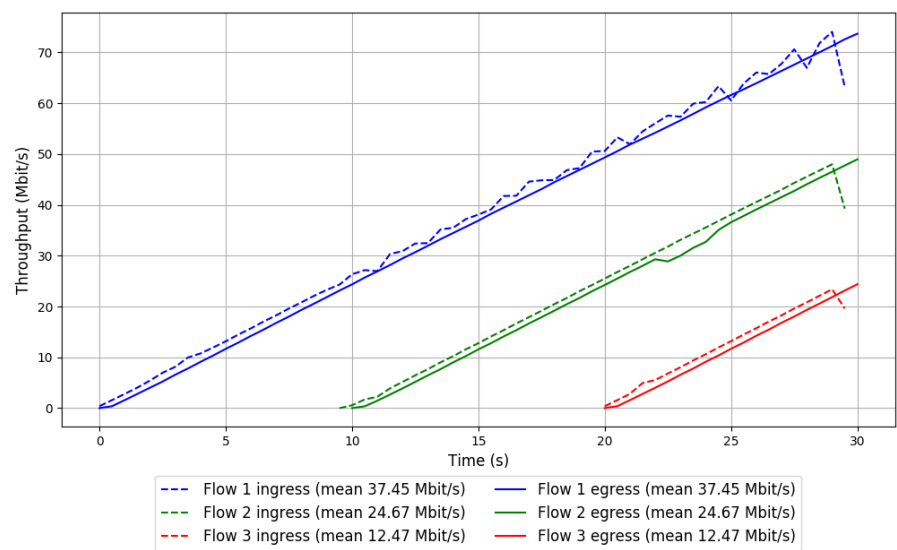


Run 5: Statistics of LEDBAT

Start at: 2018-10-03 08:39:29  
End at: 2018-10-03 08:39:59  
Local clock offset: -0.517 ms  
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-10-03 10:21:42  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 57.99 Mbit/s  
95th percentile per-packet one-way delay: 52.638 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 37.45 Mbit/s  
95th percentile per-packet one-way delay: 52.889 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 24.67 Mbit/s  
95th percentile per-packet one-way delay: 52.198 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 12.47 Mbit/s  
95th percentile per-packet one-way delay: 50.216 ms  
Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link

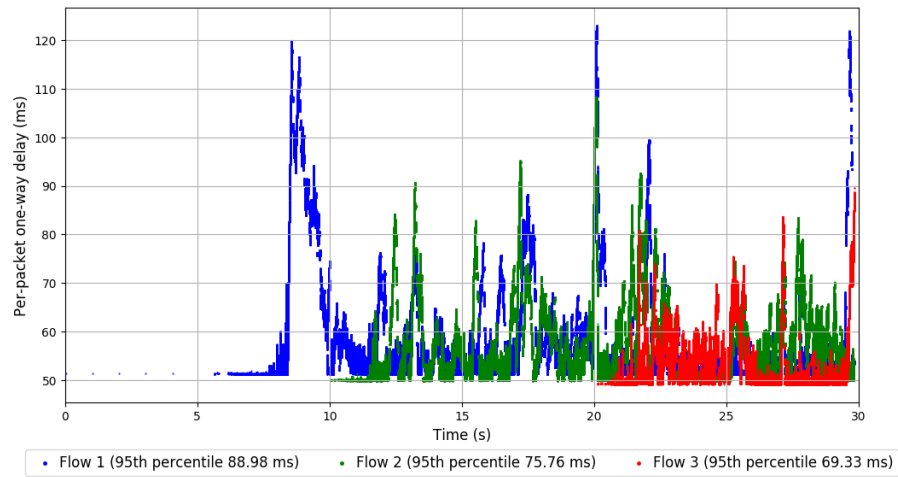
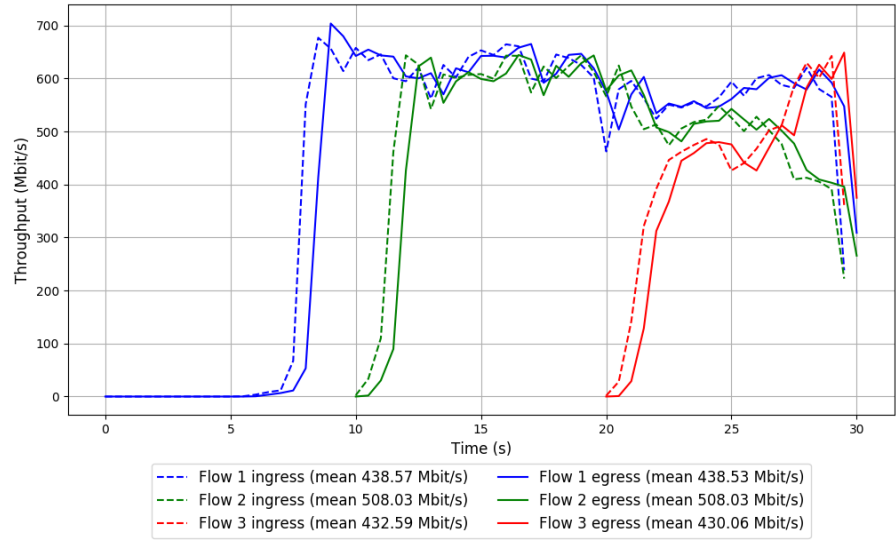


Run 1: Statistics of Indigo-Muses

Start at: 2018-10-03 06:36:07  
End at: 2018-10-03 06:36:37  
Local clock offset: -0.446 ms  
Remote clock offset: -0.373 ms

# Below is generated by plot.py at 2018-10-03 10:30:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 916.07 Mbit/s  
95th percentile per-packet one-way delay: 80.621 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 438.53 Mbit/s  
95th percentile per-packet one-way delay: 88.980 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 508.03 Mbit/s  
95th percentile per-packet one-way delay: 75.761 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 430.06 Mbit/s  
95th percentile per-packet one-way delay: 69.330 ms  
Loss rate: 0.56%

# Run 1: Report of Indigo-Muses — Data Link





Run 2: Statistics of Indigo-Muses

Start at: 2018-10-03 07:06:24

End at: 2018-10-03 07:06:54

Local clock offset: -0.054 ms

Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2018-10-03 10:32:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 995.60 Mbit/s

95th percentile per-packet one-way delay: 72.887 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 569.53 Mbit/s

95th percentile per-packet one-way delay: 72.607 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 453.21 Mbit/s

95th percentile per-packet one-way delay: 74.896 ms

Loss rate: 0.00%

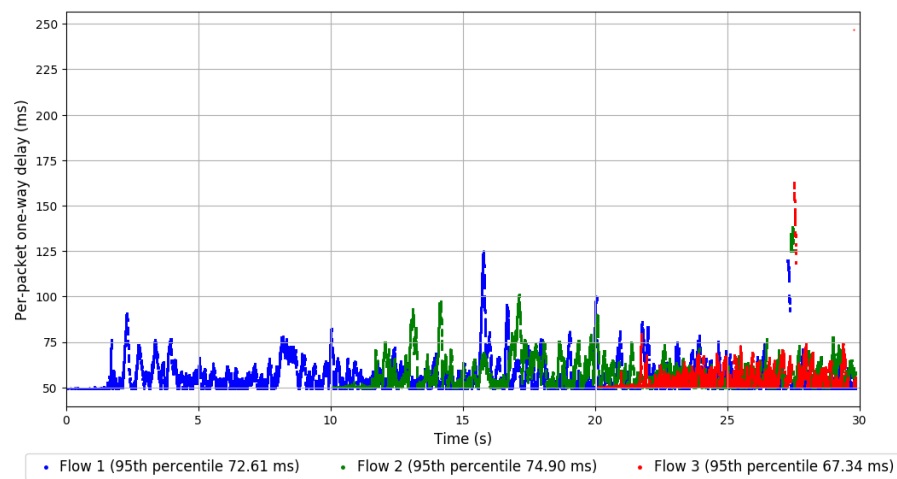
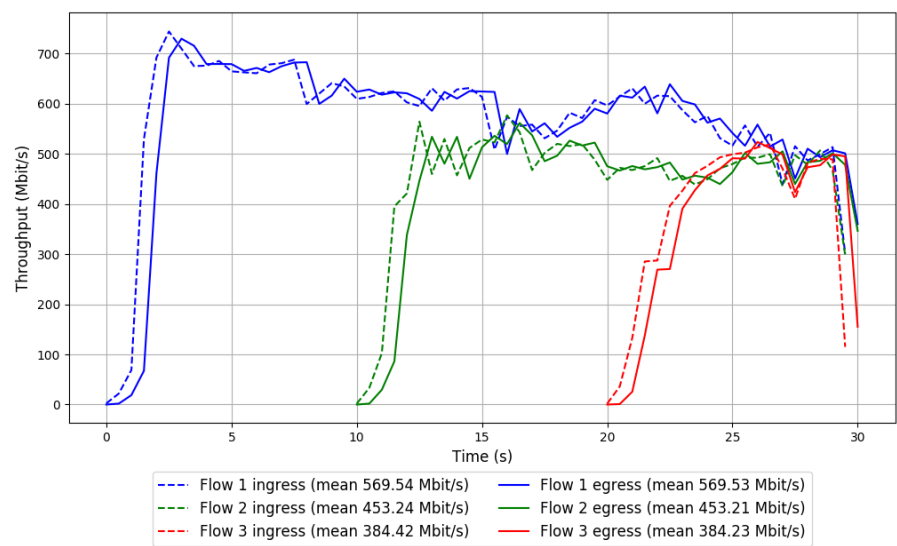
-- Flow 3:

Average throughput: 384.23 Mbit/s

95th percentile per-packet one-way delay: 67.337 ms

Loss rate: 0.00%

Run 2: Report of Indigo-Muses — Data Link



### Run 3: Statistics of Indigo-Muses

Start at: 2018-10-03 07:37:04

End at: 2018-10-03 07:37:34

Local clock offset: -0.118 ms

Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2018-10-03 10:32:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1007.06 Mbit/s

95th percentile per-packet one-way delay: 80.295 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 552.95 Mbit/s

95th percentile per-packet one-way delay: 81.932 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 495.57 Mbit/s

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

Loss rate: 0.00%

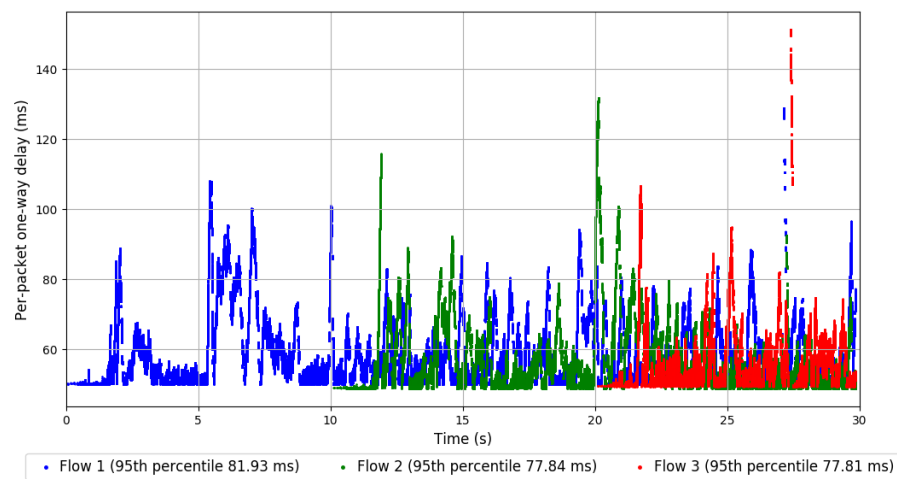
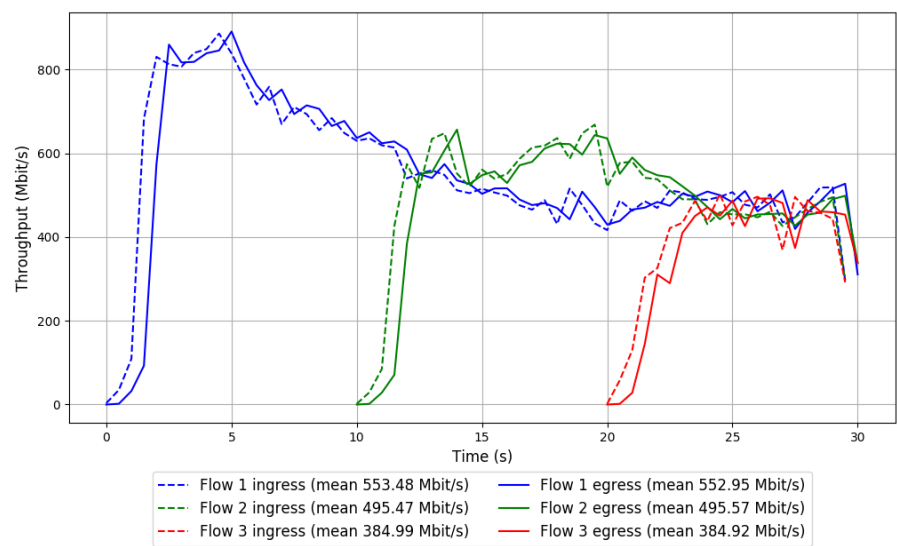
-- Flow 3:

Average throughput: 384.92 Mbit/s

95th percentile per-packet one-way delay: 77.806 ms

Loss rate: 0.00%

Run 3: Report of Indigo-Muses — Data Link



#### Run 4: Statistics of Indigo-Muses

Start at: 2018-10-03 08:07:10

End at: 2018-10-03 08:07:40

Local clock offset: -0.176 ms

Remote clock offset: 0.095 ms

# Below is generated by plot.py at 2018-10-03 10:32:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 927.47 Mbit/s

95th percentile per-packet one-way delay: 74.237 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 508.93 Mbit/s

95th percentile per-packet one-way delay: 75.493 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 440.67 Mbit/s

95th percentile per-packet one-way delay: 73.626 ms

Loss rate: 0.00%

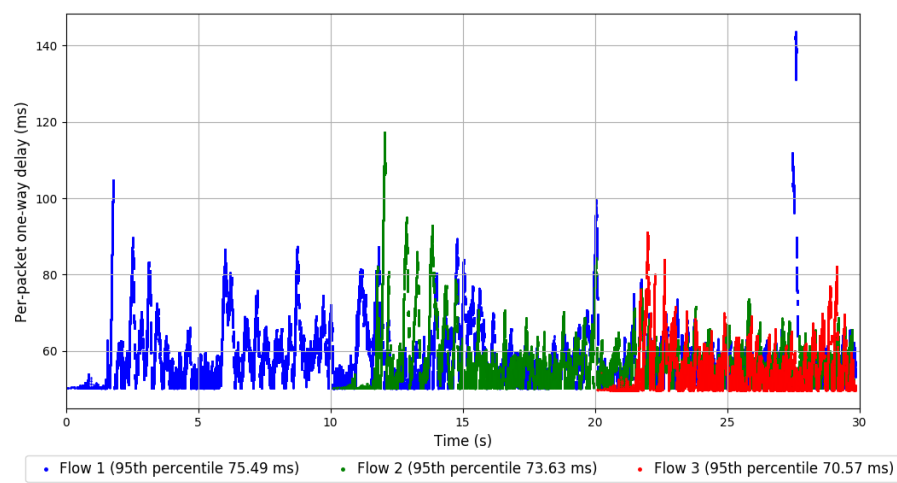
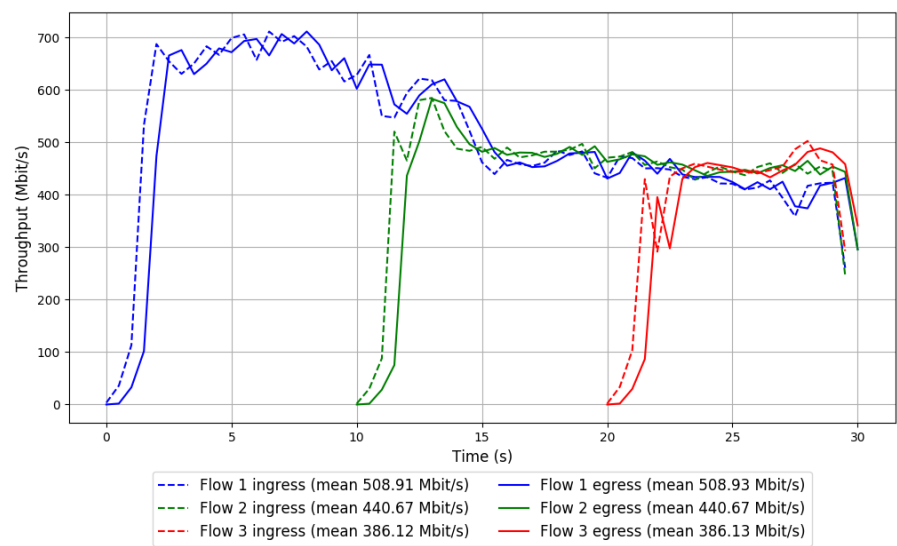
-- Flow 3:

Average throughput: 386.13 Mbit/s

95th percentile per-packet one-way delay: 70.571 ms

Loss rate: 0.00%

Run 4: Report of Indigo-Muses — Data Link



Run 5: Statistics of Indigo-Muses

Start at: 2018-10-03 08:37:34

End at: 2018-10-03 08:38:04

Local clock offset: -0.142 ms

Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2018-10-03 10:32:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 933.31 Mbit/s

95th percentile per-packet one-way delay: 77.095 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 552.48 Mbit/s

95th percentile per-packet one-way delay: 79.068 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 400.24 Mbit/s

95th percentile per-packet one-way delay: 78.231 ms

Loss rate: 0.00%

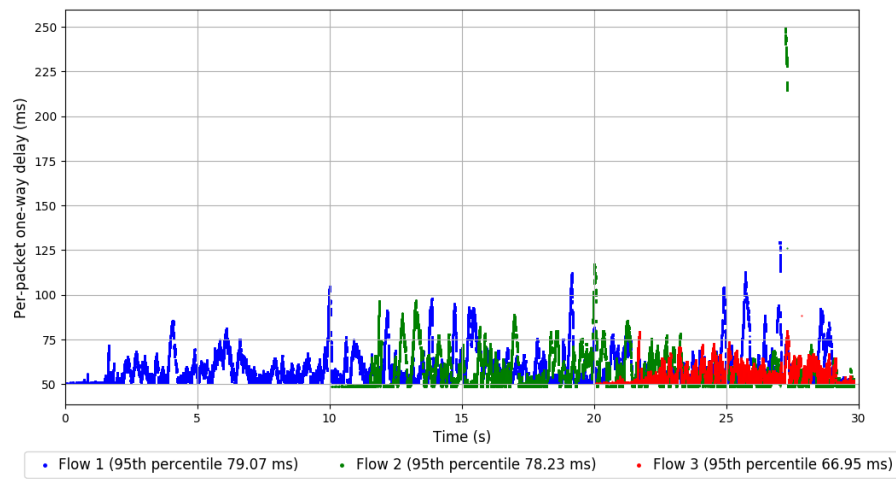
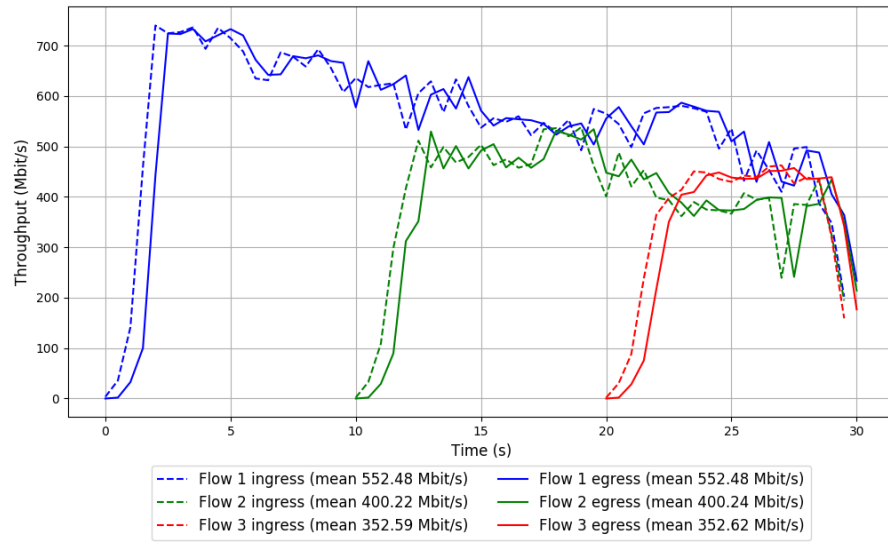
-- Flow 3:

Average throughput: 352.62 Mbit/s

95th percentile per-packet one-way delay: 66.951 ms

Loss rate: 0.03%

# Run 5: Report of Indigo-Muses — Data Link



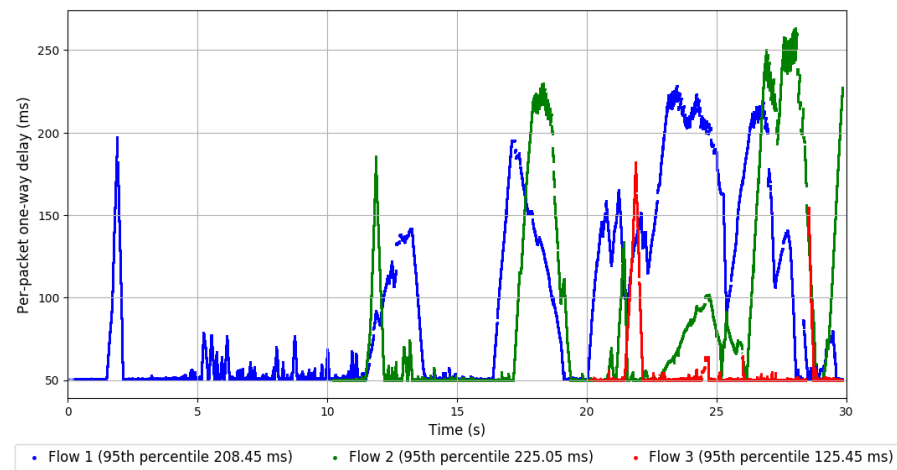
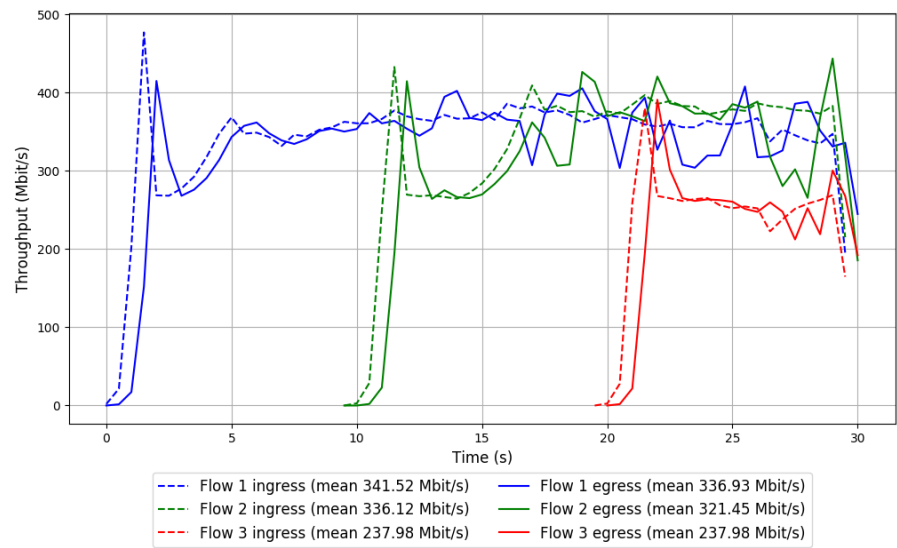


Run 1: Statistics of PCC-Allegro

Start at: 2018-10-03 06:39:18  
End at: 2018-10-03 06:39:48  
Local clock offset: -0.413 ms  
Remote clock offset: -0.405 ms

# Below is generated by plot.py at 2018-10-03 10:38:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 629.66 Mbit/s  
95th percentile per-packet one-way delay: 212.672 ms  
Loss rate: 2.24%  
-- Flow 1:  
Average throughput: 336.93 Mbit/s  
95th percentile per-packet one-way delay: 208.448 ms  
Loss rate: 1.36%  
-- Flow 2:  
Average throughput: 321.45 Mbit/s  
95th percentile per-packet one-way delay: 225.053 ms  
Loss rate: 4.36%  
-- Flow 3:  
Average throughput: 237.98 Mbit/s  
95th percentile per-packet one-way delay: 125.450 ms  
Loss rate: 0.00%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-10-03 07:09:38

End at: 2018-10-03 07:10:08

Local clock offset: -0.035 ms

Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2018-10-03 10:39:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 654.22 Mbit/s

95th percentile per-packet one-way delay: 193.628 ms

Loss rate: 2.30%

-- Flow 1:

Average throughput: 361.75 Mbit/s

95th percentile per-packet one-way delay: 192.467 ms

Loss rate: 3.05%

-- Flow 2:

Average throughput: 314.05 Mbit/s

95th percentile per-packet one-way delay: 198.927 ms

Loss rate: 1.89%

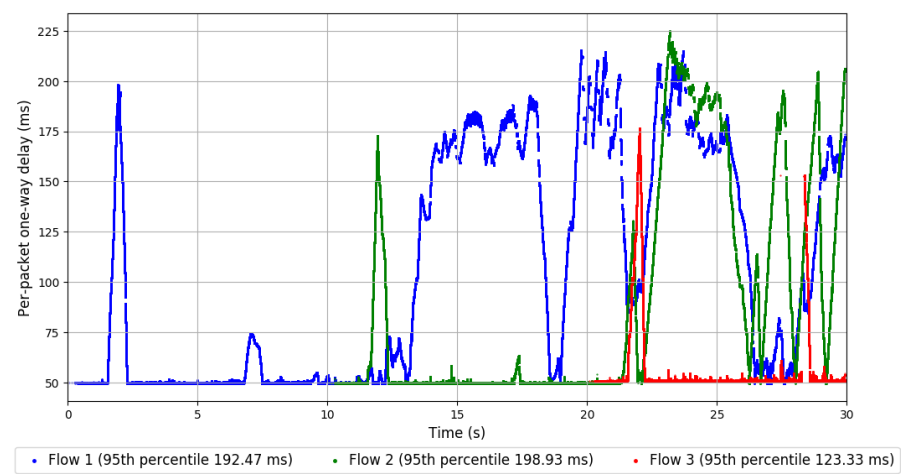
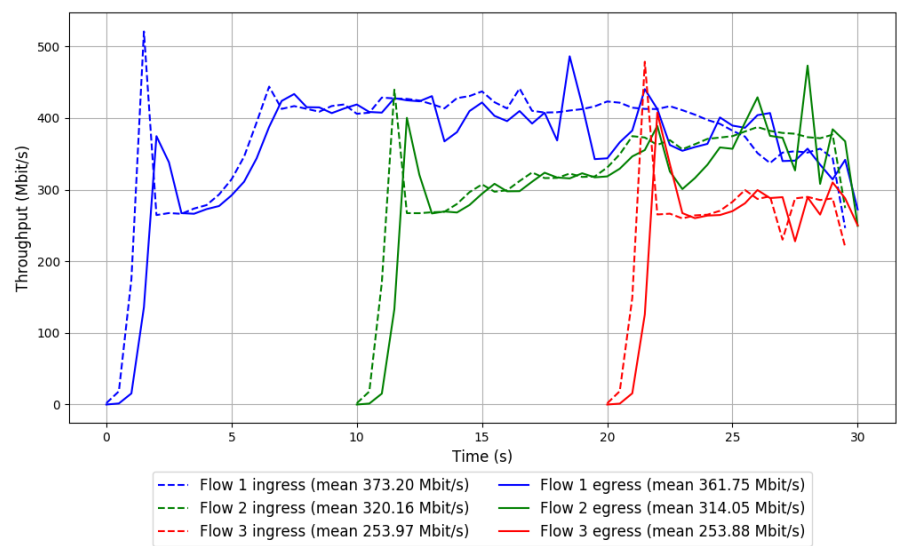
-- Flow 3:

Average throughput: 253.88 Mbit/s

95th percentile per-packet one-way delay: 123.326 ms

Loss rate: 0.01%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-10-03 07:40:20

End at: 2018-10-03 07:40:50

Local clock offset: -0.477 ms

Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2018-10-03 10:42:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 655.16 Mbit/s

95th percentile per-packet one-way delay: 160.788 ms

Loss rate: 1.70%

-- Flow 1:

Average throughput: 363.49 Mbit/s

95th percentile per-packet one-way delay: 181.849 ms

Loss rate: 1.86%

-- Flow 2:

Average throughput: 300.44 Mbit/s

95th percentile per-packet one-way delay: 92.308 ms

Loss rate: 2.15%

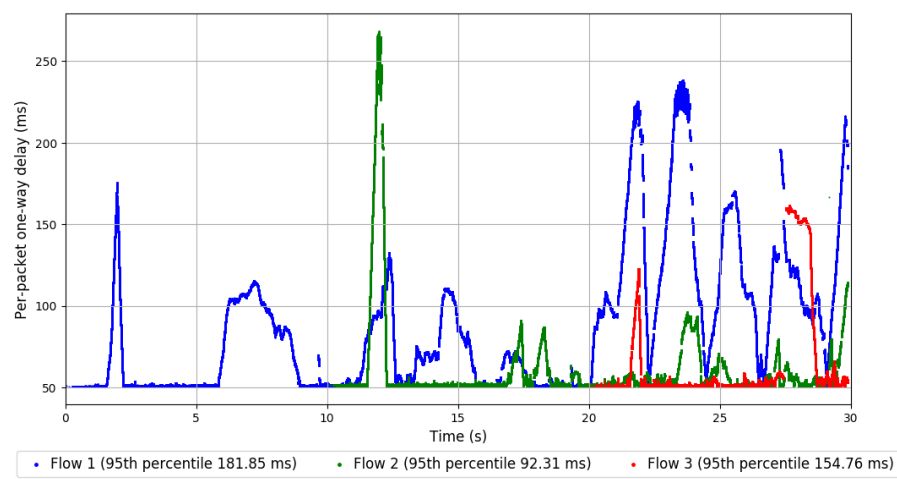
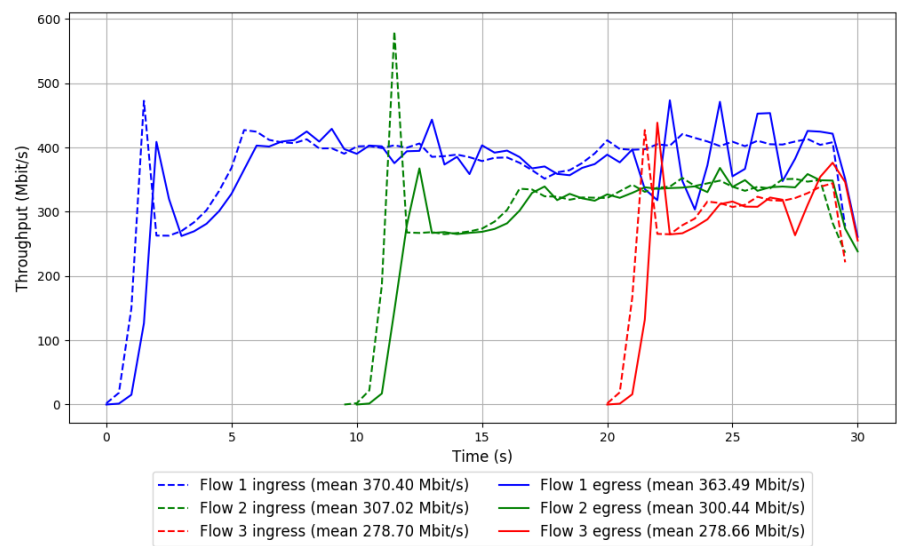
-- Flow 3:

Average throughput: 278.66 Mbit/s

95th percentile per-packet one-way delay: 154.758 ms

Loss rate: 0.02%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-10-03 08:10:21

End at: 2018-10-03 08:10:51

Local clock offset: 0.208 ms

Remote clock offset: 0.128 ms

# Below is generated by plot.py at 2018-10-03 10:52:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 636.29 Mbit/s

95th percentile per-packet one-way delay: 190.513 ms

Loss rate: 1.64%

-- Flow 1:

Average throughput: 354.43 Mbit/s

95th percentile per-packet one-way delay: 186.396 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 297.20 Mbit/s

95th percentile per-packet one-way delay: 204.979 ms

Loss rate: 2.54%

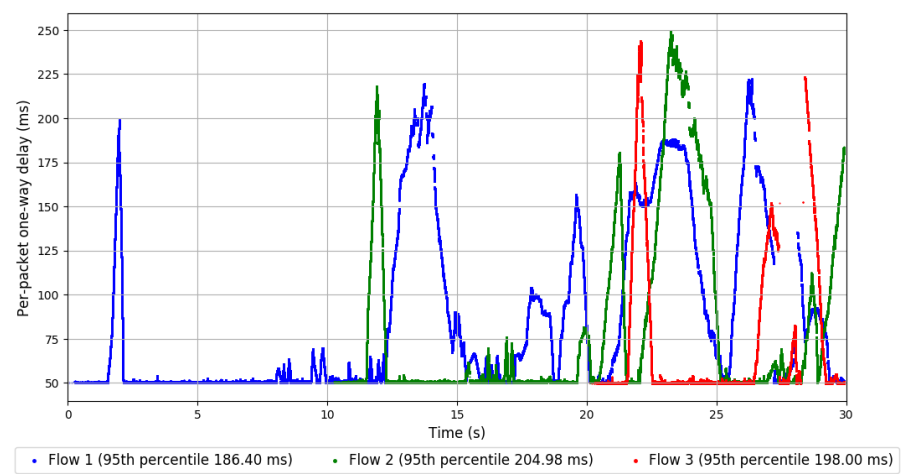
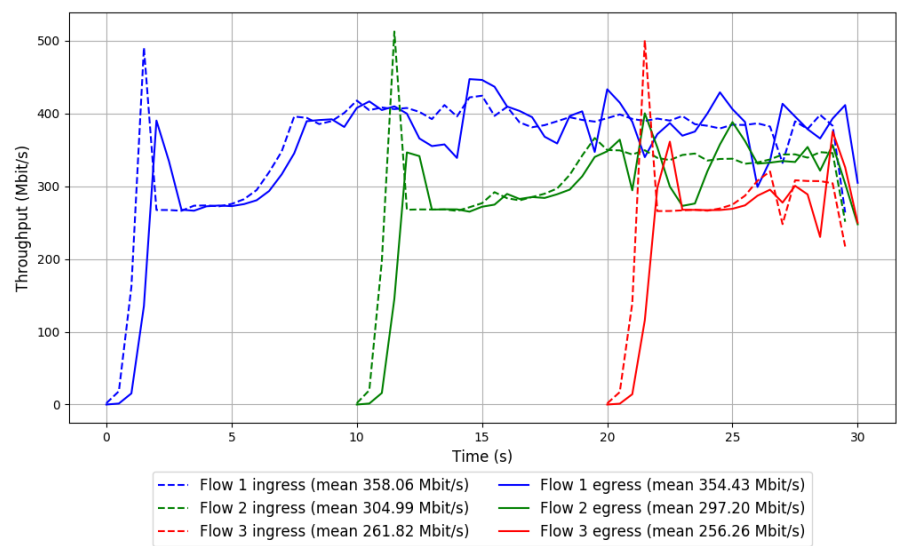
-- Flow 3:

Average throughput: 256.26 Mbit/s

95th percentile per-packet one-way delay: 198.002 ms

Loss rate: 2.12%

Run 4: Report of PCC-Allegro — Data Link



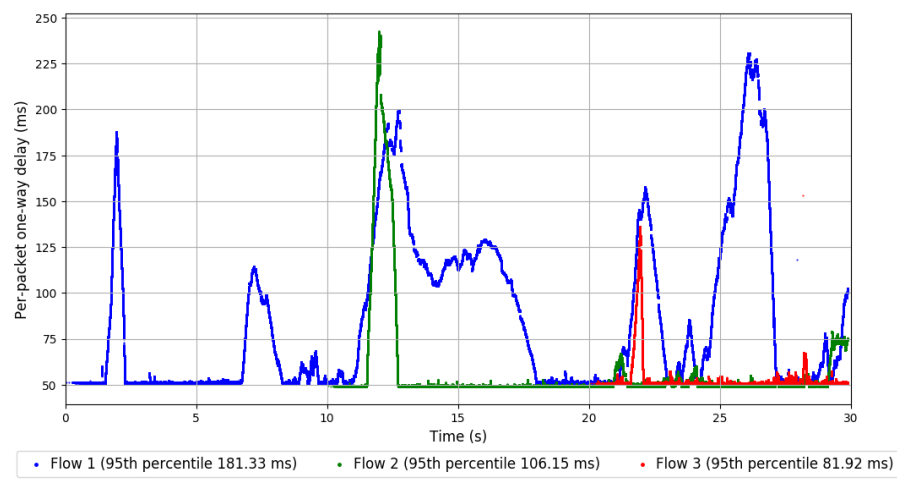
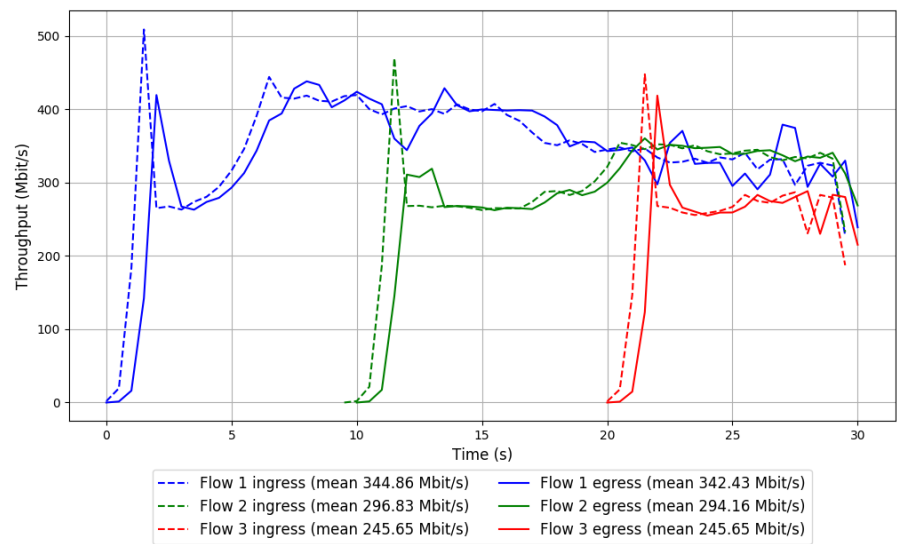


Run 5: Statistics of PCC-Allegro

Start at: 2018-10-03 08:40:45  
End at: 2018-10-03 08:41:15  
Local clock offset: -0.545 ms  
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-10-03 10:52:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 619.07 Mbit/s  
95th percentile per-packet one-way delay: 166.061 ms  
Loss rate: 0.67%  
-- Flow 1:  
Average throughput: 342.43 Mbit/s  
95th percentile per-packet one-way delay: 181.333 ms  
Loss rate: 0.71%  
-- Flow 2:  
Average throughput: 294.16 Mbit/s  
95th percentile per-packet one-way delay: 106.147 ms  
Loss rate: 0.89%  
-- Flow 3:  
Average throughput: 245.65 Mbit/s  
95th percentile per-packet one-way delay: 81.921 ms  
Loss rate: 0.00%

Run 5: Report of PCC-Allegro — Data Link

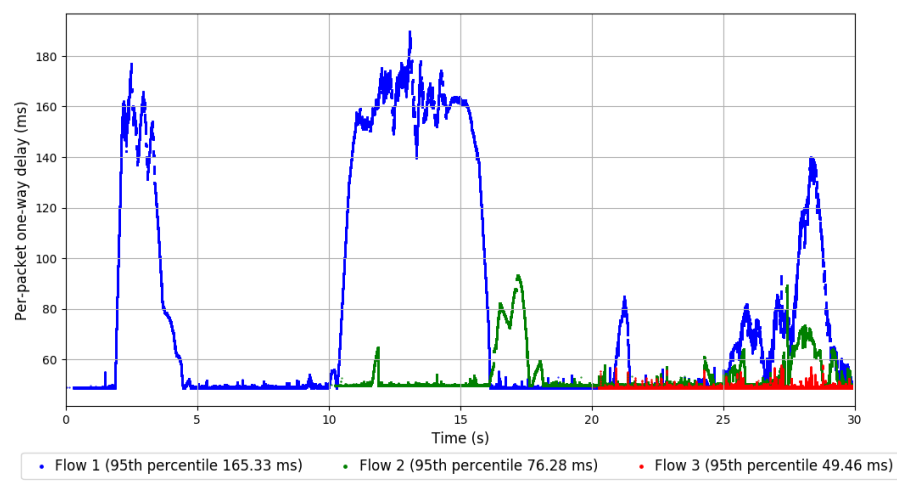
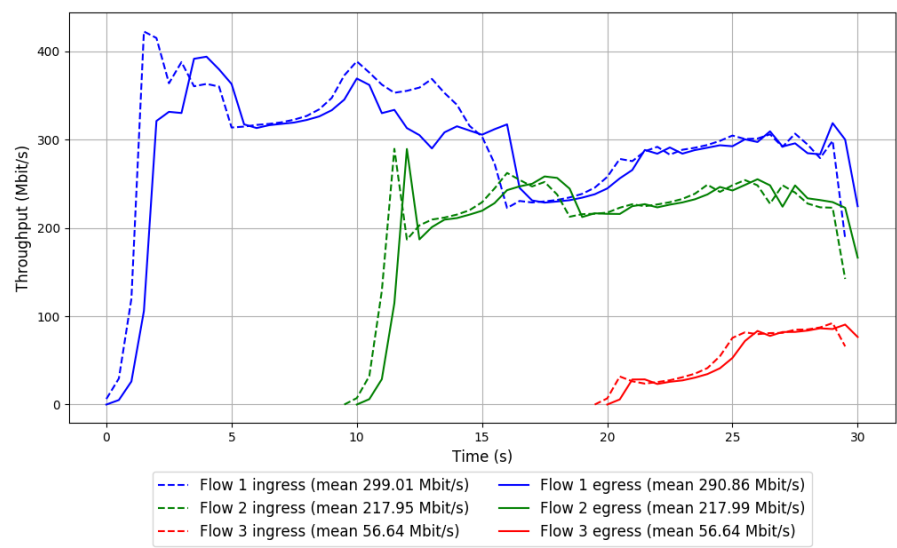


```
Run 1: Statistics of PCC-Expr

Start at: 2018-10-03 06:34:16
End at: 2018-10-03 06:34:46
Local clock offset: -0.067 ms
Remote clock offset: -0.396 ms

# Below is generated by plot.py at 2018-10-03 10:52:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 454.84 Mbit/s
95th percentile per-packet one-way delay: 162.401 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 290.86 Mbit/s
95th percentile per-packet one-way delay: 165.330 ms
Loss rate: 2.72%
-- Flow 2:
Average throughput: 217.99 Mbit/s
95th percentile per-packet one-way delay: 76.277 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 56.64 Mbit/s
95th percentile per-packet one-way delay: 49.458 ms
Loss rate: 0.00%
```

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2018-10-03 07:04:33

End at: 2018-10-03 07:05:03

Local clock offset: -0.016 ms

Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2018-10-03 10:52:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 461.46 Mbit/s

95th percentile per-packet one-way delay: 131.282 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 250.71 Mbit/s

95th percentile per-packet one-way delay: 122.522 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 230.92 Mbit/s

95th percentile per-packet one-way delay: 152.914 ms

Loss rate: 0.20%

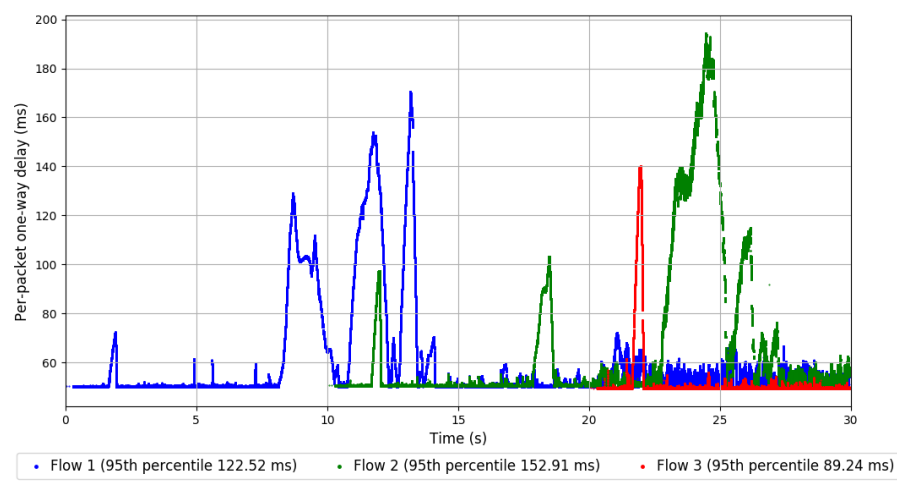
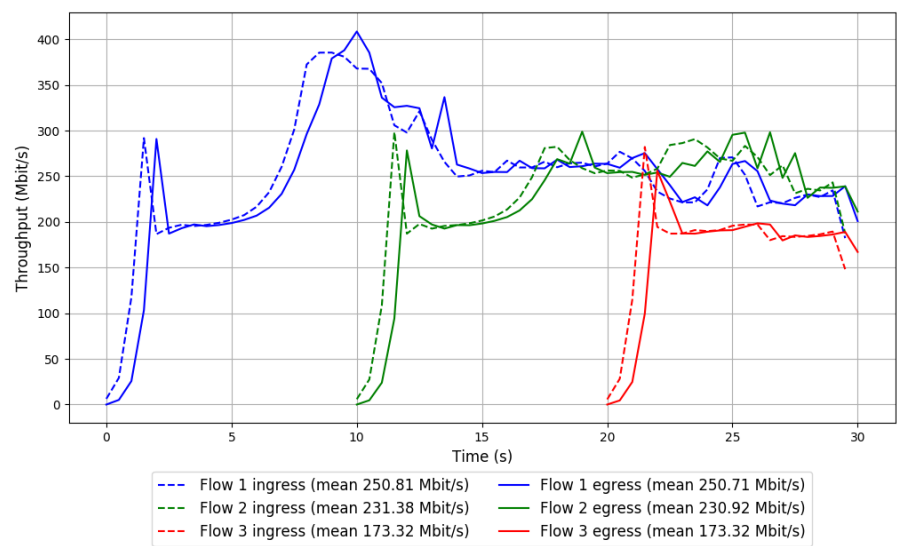
-- Flow 3:

Average throughput: 173.32 Mbit/s

95th percentile per-packet one-way delay: 89.236 ms

Loss rate: 0.00%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-10-03 07:35:04

End at: 2018-10-03 07:35:34

Local clock offset: -0.109 ms

Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2018-10-03 10:52:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 530.24 Mbit/s

95th percentile per-packet one-way delay: 190.305 ms

Loss rate: 16.90%

-- Flow 1:

Average throughput: 313.28 Mbit/s

95th percentile per-packet one-way delay: 197.586 ms

Loss rate: 25.61%

-- Flow 2:

Average throughput: 230.43 Mbit/s

95th percentile per-packet one-way delay: 79.809 ms

Loss rate: 0.00%

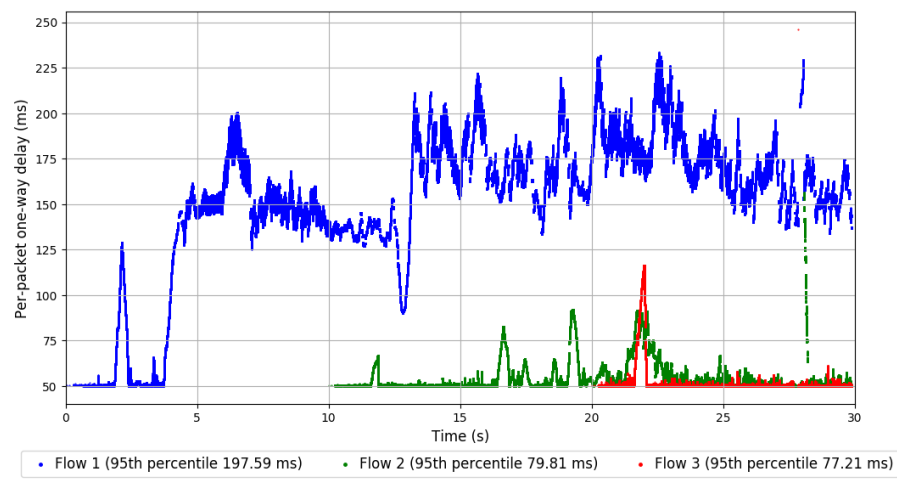
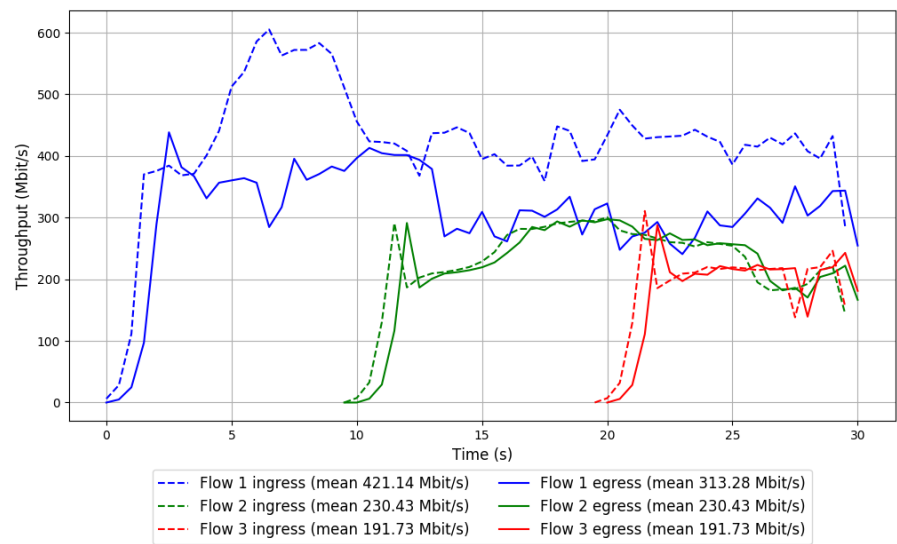
-- Flow 3:

Average throughput: 191.73 Mbit/s

95th percentile per-packet one-way delay: 77.210 ms

Loss rate: 0.00%

Run 3: Report of PCC-Expr — Data Link





Run 4: Statistics of PCC-Expr

Start at: 2018-10-03 08:05:15

End at: 2018-10-03 08:05:45

Local clock offset: -0.517 ms

Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2018-10-03 10:54:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 488.99 Mbit/s

95th percentile per-packet one-way delay: 162.013 ms

Loss rate: 1.67%

-- Flow 1:

Average throughput: 258.51 Mbit/s

95th percentile per-packet one-way delay: 165.355 ms

Loss rate: 2.44%

-- Flow 2:

Average throughput: 251.80 Mbit/s

95th percentile per-packet one-way delay: 162.692 ms

Loss rate: 1.09%

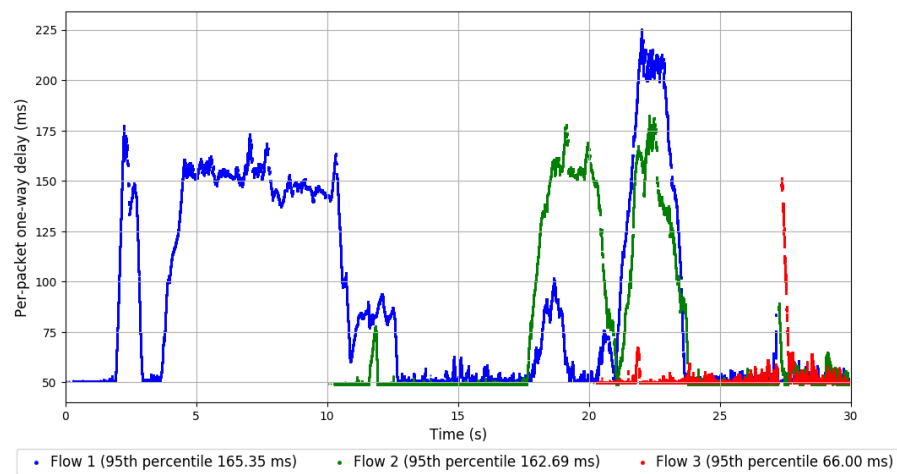
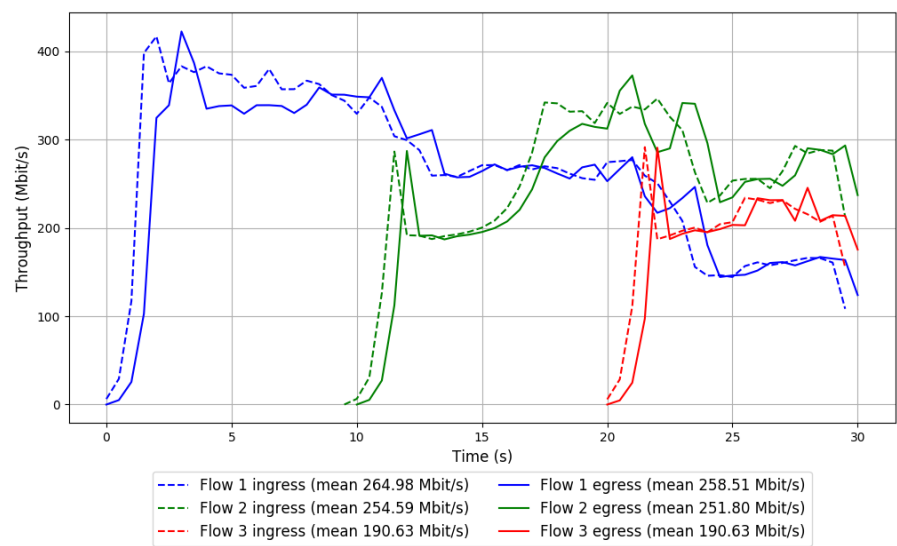
-- Flow 3:

Average throughput: 190.63 Mbit/s

95th percentile per-packet one-way delay: 65.997 ms

Loss rate: 0.00%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-10-03 08:35:42

End at: 2018-10-03 08:36:12

Local clock offset: -0.141 ms

Remote clock offset: 0.042 ms

# Below is generated by plot.py at 2018-10-03 10:55:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 469.97 Mbit/s

95th percentile per-packet one-way delay: 160.102 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 248.87 Mbit/s

95th percentile per-packet one-way delay: 140.749 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 217.22 Mbit/s

95th percentile per-packet one-way delay: 162.538 ms

Loss rate: 0.93%

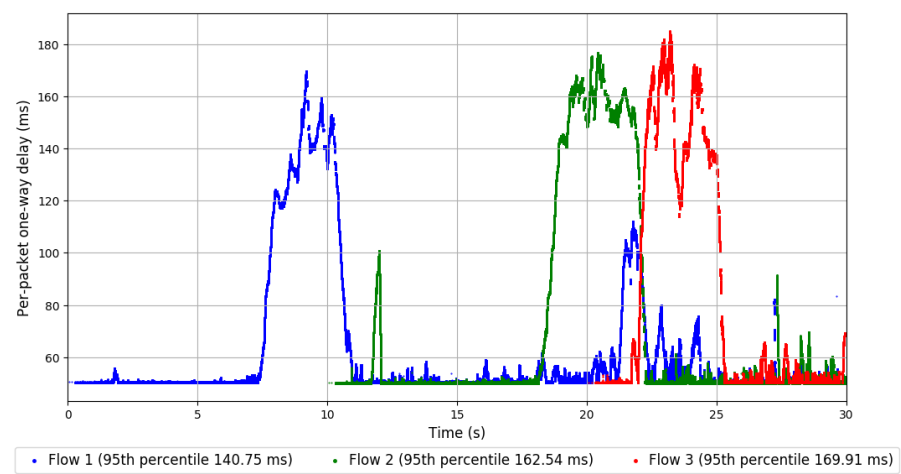
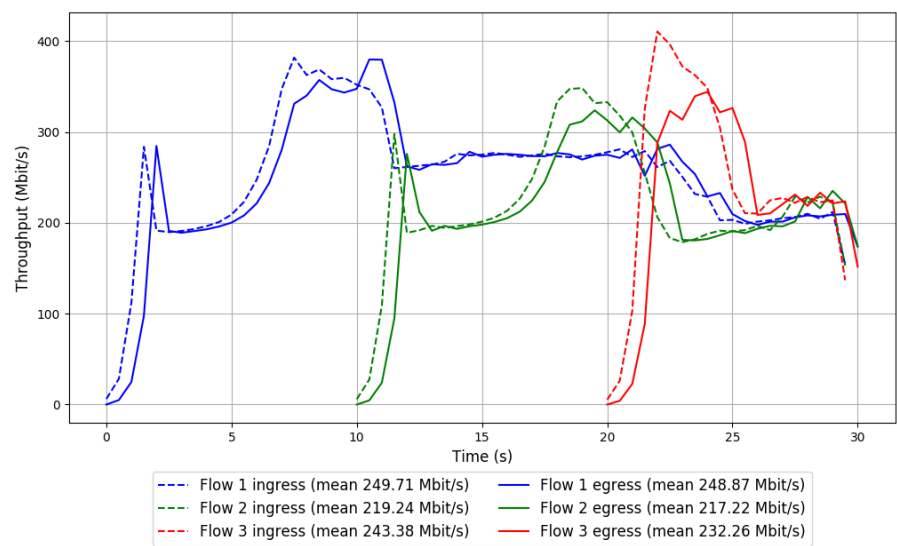
-- Flow 3:

Average throughput: 232.26 Mbit/s

95th percentile per-packet one-way delay: 169.910 ms

Loss rate: 4.57%

Run 5: Report of PCC-Expr — Data Link

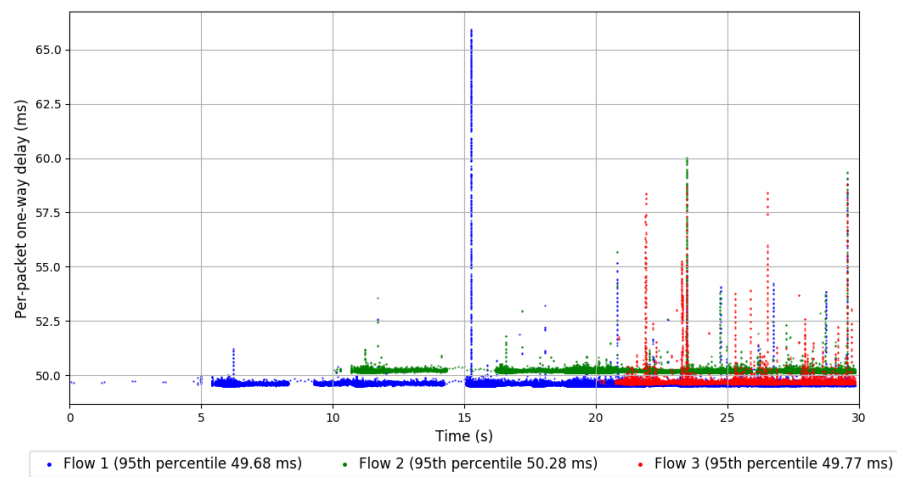
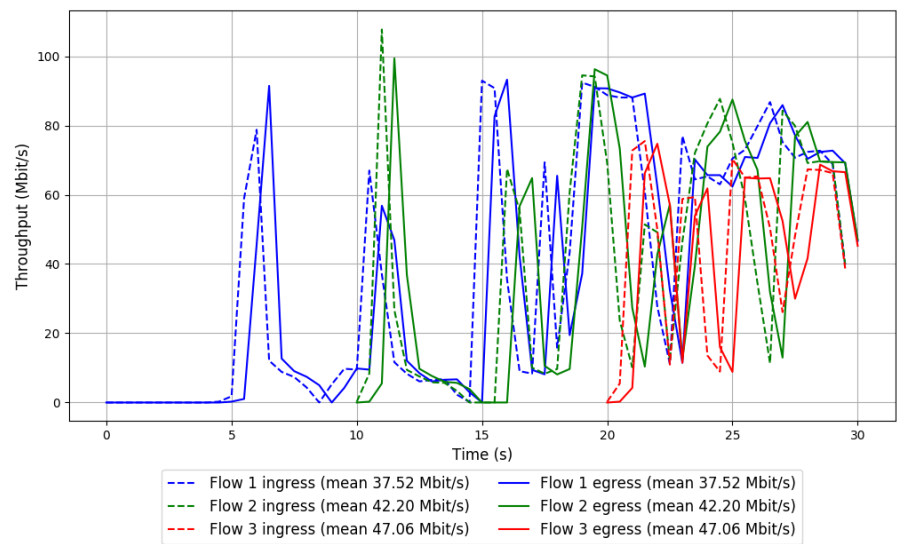


Run 1: Statistics of QUIC Cubic

Start at: 2018-10-03 06:31:26  
End at: 2018-10-03 06:31:56  
Local clock offset: -0.088 ms  
Remote clock offset: -0.392 ms

# Below is generated by plot.py at 2018-10-03 10:55:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 80.99 Mbit/s  
95th percentile per-packet one-way delay: 50.239 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 37.52 Mbit/s  
95th percentile per-packet one-way delay: 49.682 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 42.20 Mbit/s  
95th percentile per-packet one-way delay: 50.276 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 47.06 Mbit/s  
95th percentile per-packet one-way delay: 49.767 ms  
Loss rate: 0.00%

Run 1: Report of QUIC Cubic — Data Link

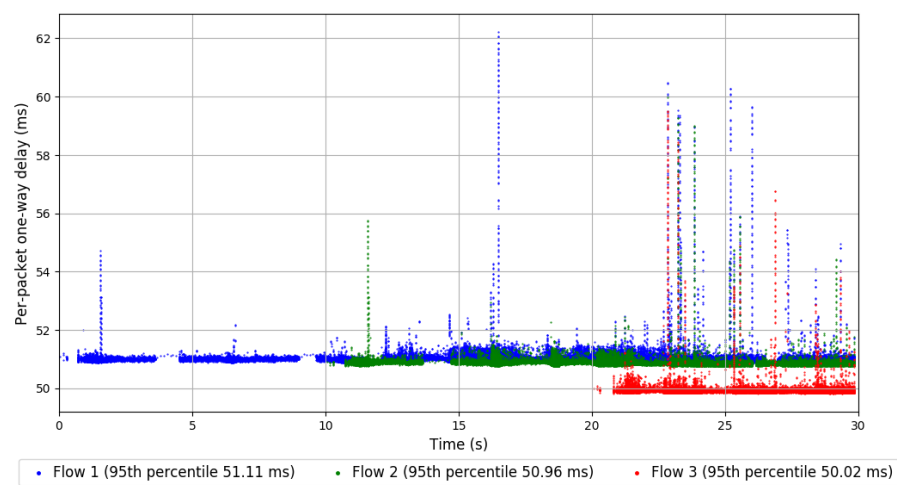
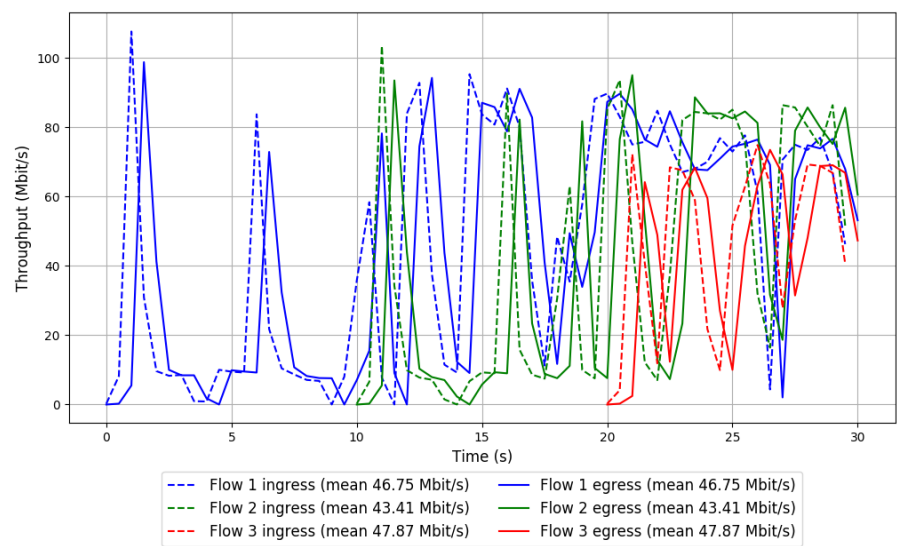


Run 2: Statistics of QUIC Cubic

Start at: 2018-10-03 07:01:37  
End at: 2018-10-03 07:02:07  
Local clock offset: -0.383 ms  
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2018-10-03 10:55:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 91.27 Mbit/s  
95th percentile per-packet one-way delay: 51.064 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 46.75 Mbit/s  
95th percentile per-packet one-way delay: 51.106 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 43.41 Mbit/s  
95th percentile per-packet one-way delay: 50.960 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 47.87 Mbit/s  
95th percentile per-packet one-way delay: 50.020 ms  
Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link





Run 3: Statistics of QUIC Cubic

Start at: 2018-10-03 07:32:10

End at: 2018-10-03 07:32:40

Local clock offset: -0.094 ms

Remote clock offset: 0.044 ms

# Below is generated by plot.py at 2018-10-03 10:55:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 77.25 Mbit/s

95th percentile per-packet one-way delay: 50.323 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.42 Mbit/s

95th percentile per-packet one-way delay: 50.344 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 30.07 Mbit/s

95th percentile per-packet one-way delay: 49.253 ms

Loss rate: 0.00%

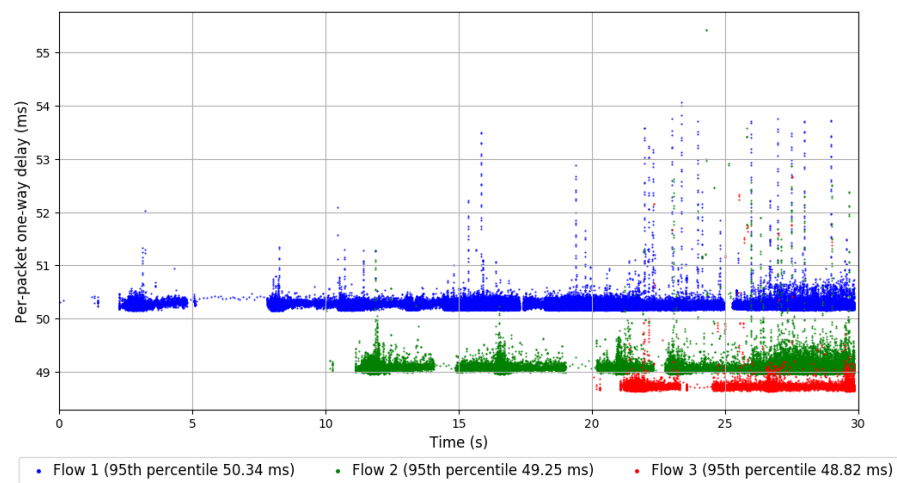
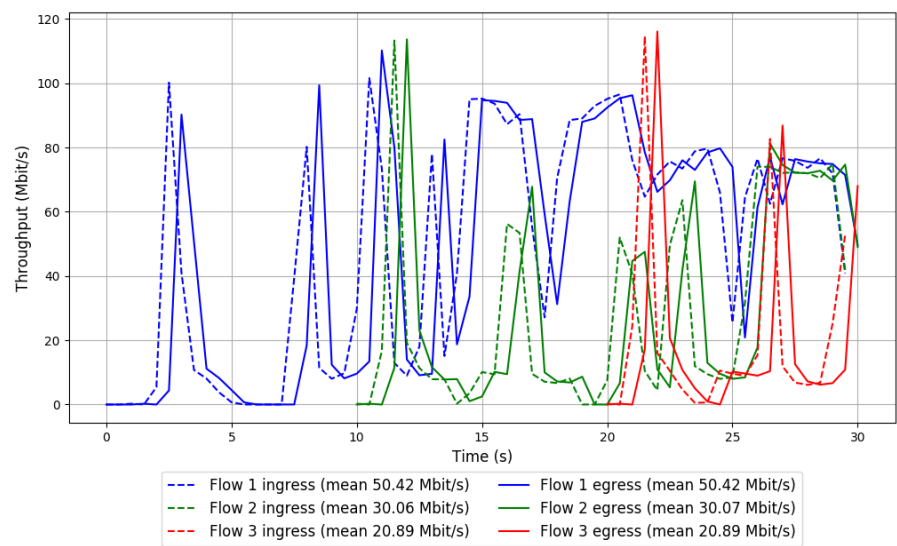
-- Flow 3:

Average throughput: 20.89 Mbit/s

95th percentile per-packet one-way delay: 48.817 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-10-03 08:02:27

End at: 2018-10-03 08:02:57

Local clock offset: 0.197 ms

Remote clock offset: 0.091 ms

# Below is generated by plot.py at 2018-10-03 10:55:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.69 Mbit/s

95th percentile per-packet one-way delay: 50.034 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.48 Mbit/s

95th percentile per-packet one-way delay: 49.291 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.80 Mbit/s

95th percentile per-packet one-way delay: 48.504 ms

Loss rate: 0.00%

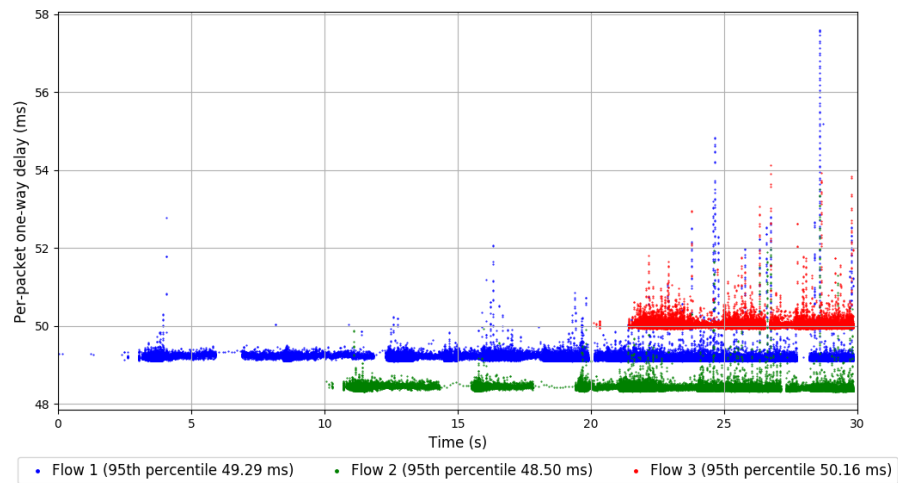
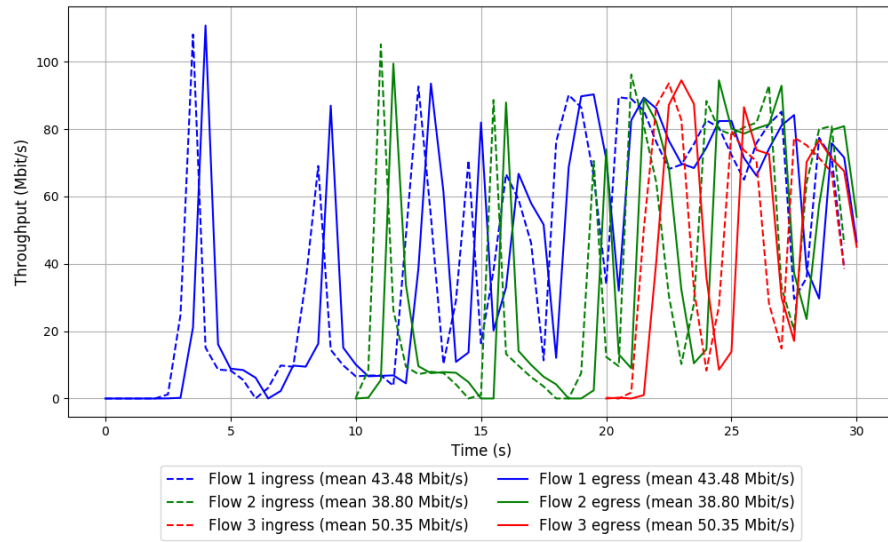
-- Flow 3:

Average throughput: 50.35 Mbit/s

95th percentile per-packet one-way delay: 50.158 ms

Loss rate: 0.00%

#### Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-10-03 08:32:47

End at: 2018-10-03 08:33:17

Local clock offset: -0.174 ms

Remote clock offset: 0.131 ms

# Below is generated by plot.py at 2018-10-03 10:55:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.69 Mbit/s

95th percentile per-packet one-way delay: 50.555 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.13 Mbit/s

95th percentile per-packet one-way delay: 50.289 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 33.92 Mbit/s

95th percentile per-packet one-way delay: 49.989 ms

Loss rate: 0.00%

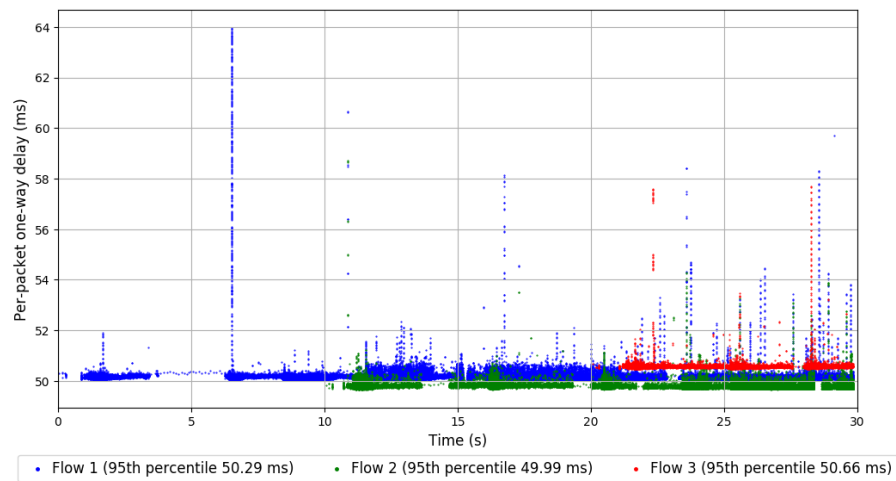
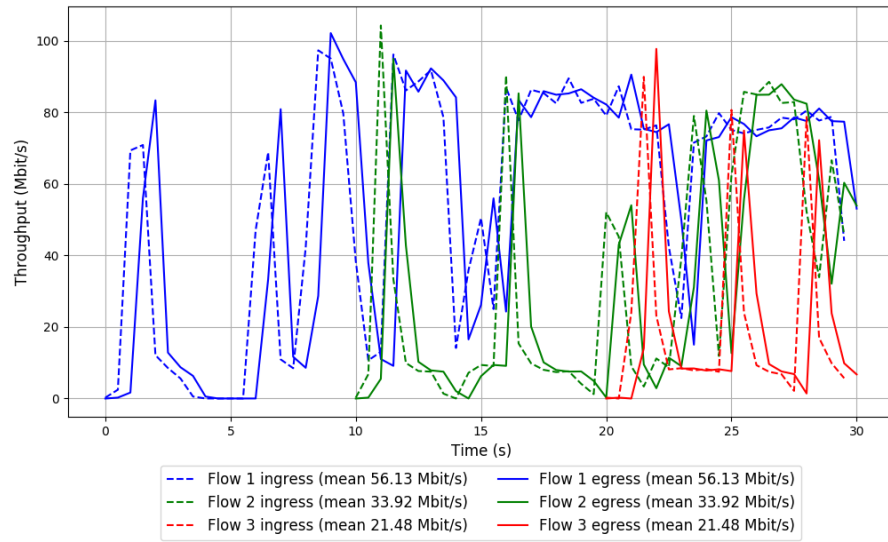
-- Flow 3:

Average throughput: 21.48 Mbit/s

95th percentile per-packet one-way delay: 50.664 ms

Loss rate: 0.00%

## Run 5: Report of QUIC Cubic — Data Link

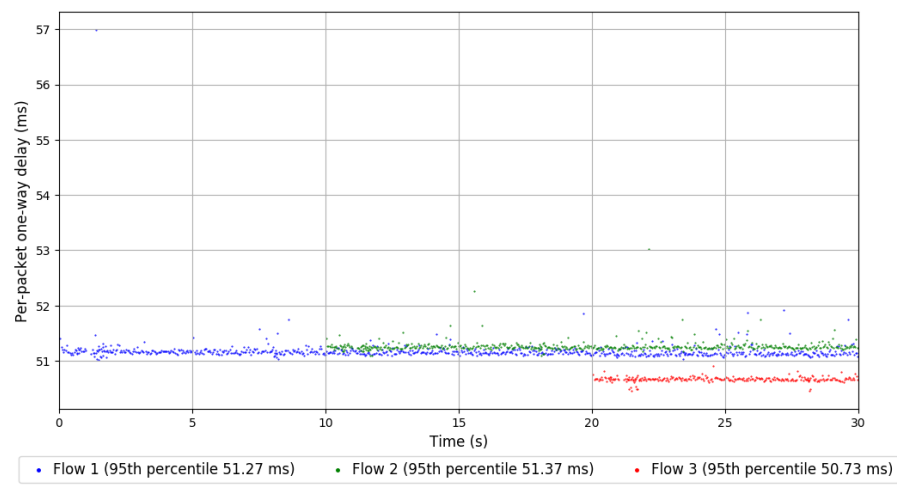
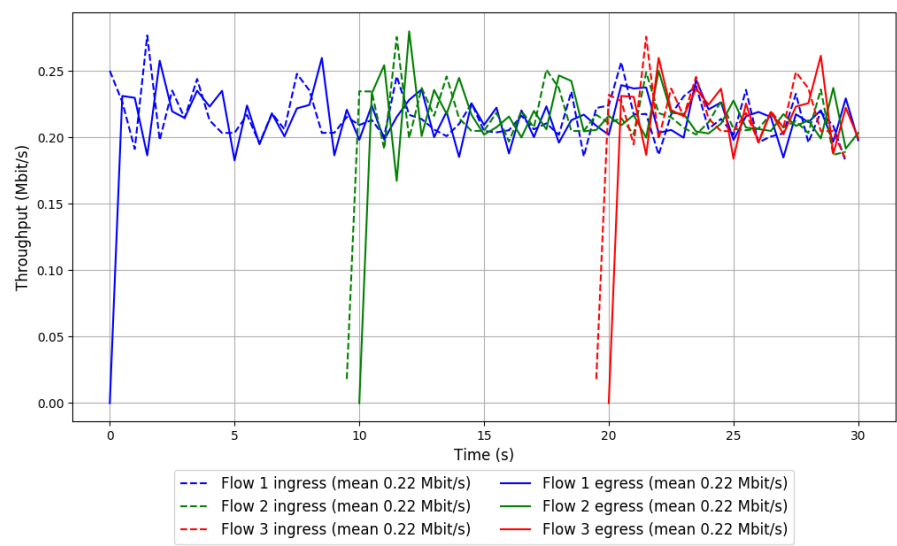


```
Run 1: Statistics of SReAM

Start at: 2018-10-03 06:57:13
End at: 2018-10-03 06:57:43
Local clock offset: -0.363 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2018-10-03 10:55:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 51.313 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.275 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.368 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.730 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link





Run 2: Statistics of SReAM

Start at: 2018-10-03 07:27:42

End at: 2018-10-03 07:28:12

Local clock offset: -0.064 ms

Remote clock offset: 0.081 ms

# Below is generated by plot.py at 2018-10-03 10:55:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 50.529 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.545 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.481 ms

Loss rate: 0.00%

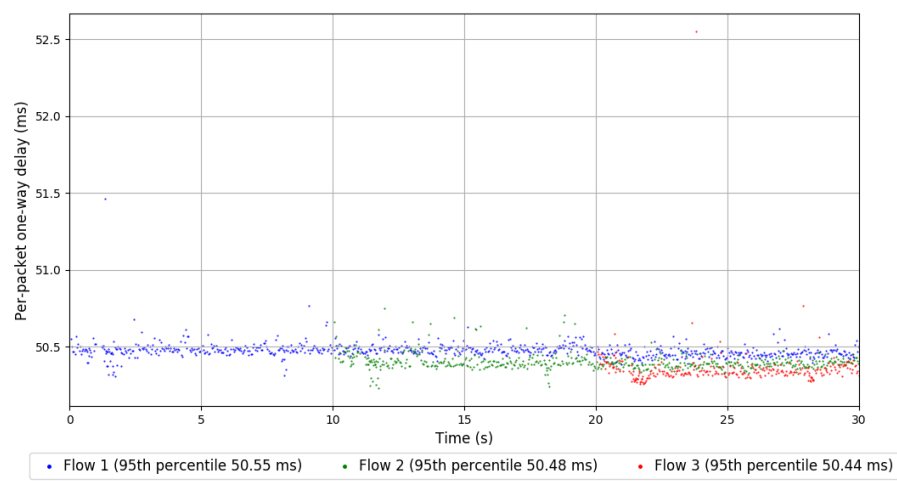
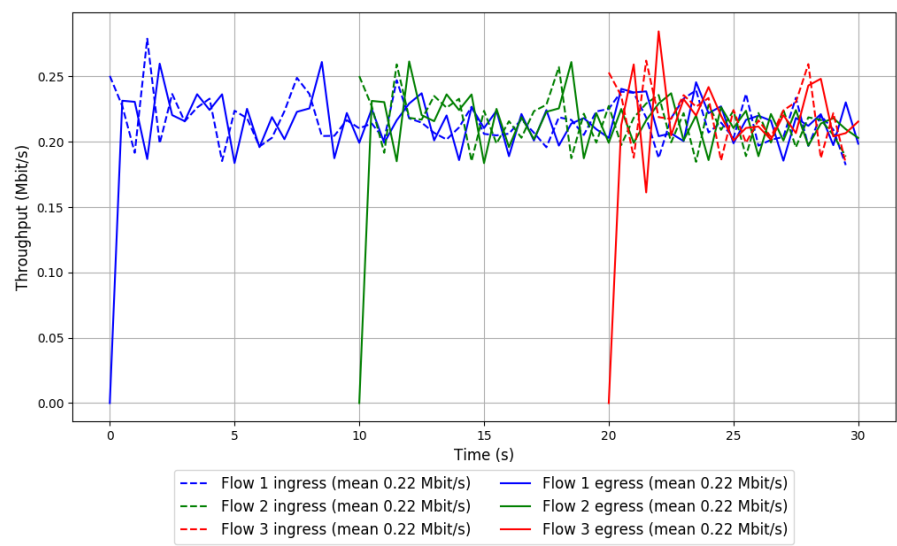
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.435 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2018-10-03 07:58:04

End at: 2018-10-03 07:58:34

Local clock offset: -0.101 ms

Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2018-10-03 10:55:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 50.331 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 49.283 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 48.863 ms

Loss rate: 0.00%

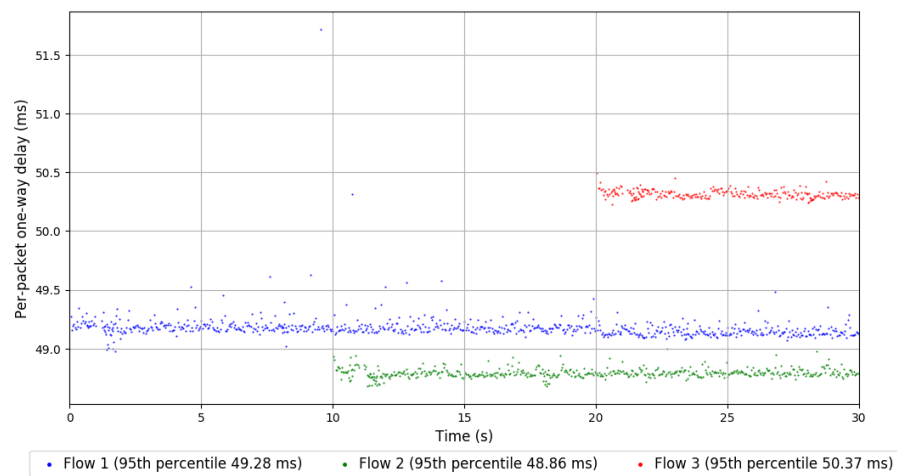
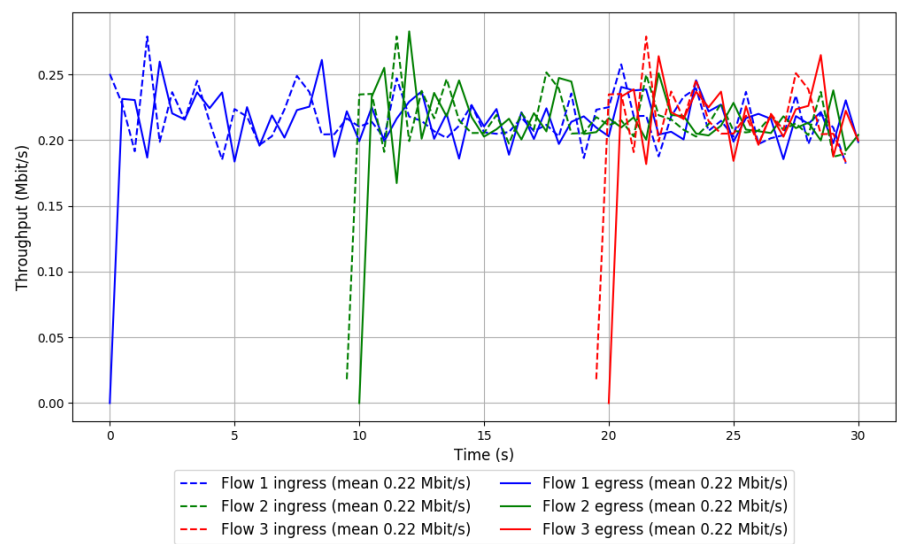
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.372 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

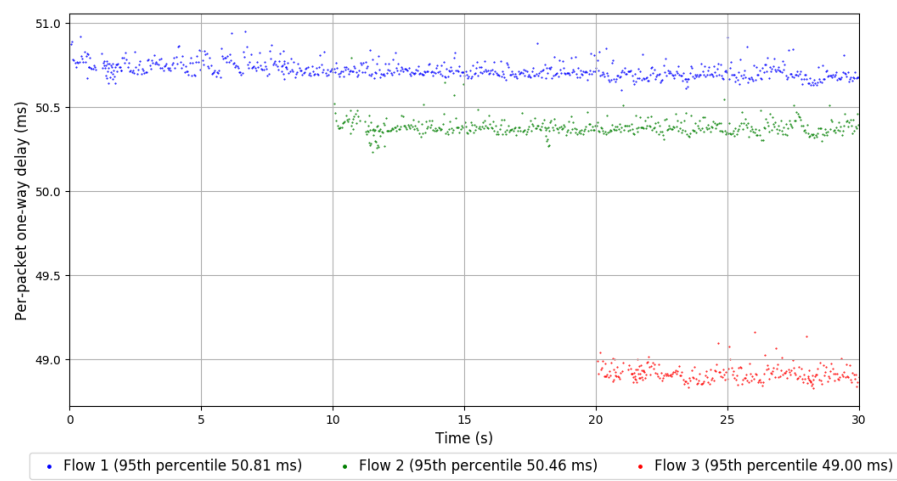
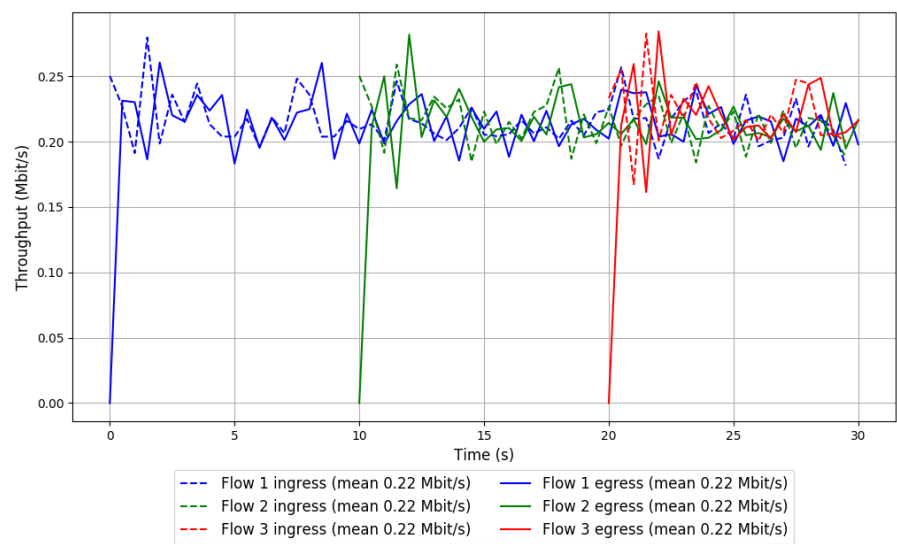


Run 4: Statistics of SReAM

Start at: 2018-10-03 08:28:23  
End at: 2018-10-03 08:28:53  
Local clock offset: -0.136 ms  
Remote clock offset: 0.185 ms

# Below is generated by plot.py at 2018-10-03 10:55:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 50.785 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.813 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.458 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 49.000 ms  
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

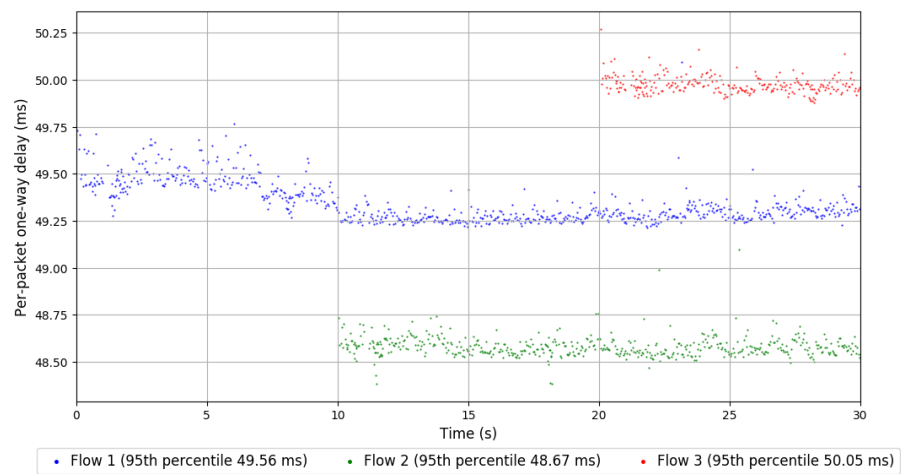
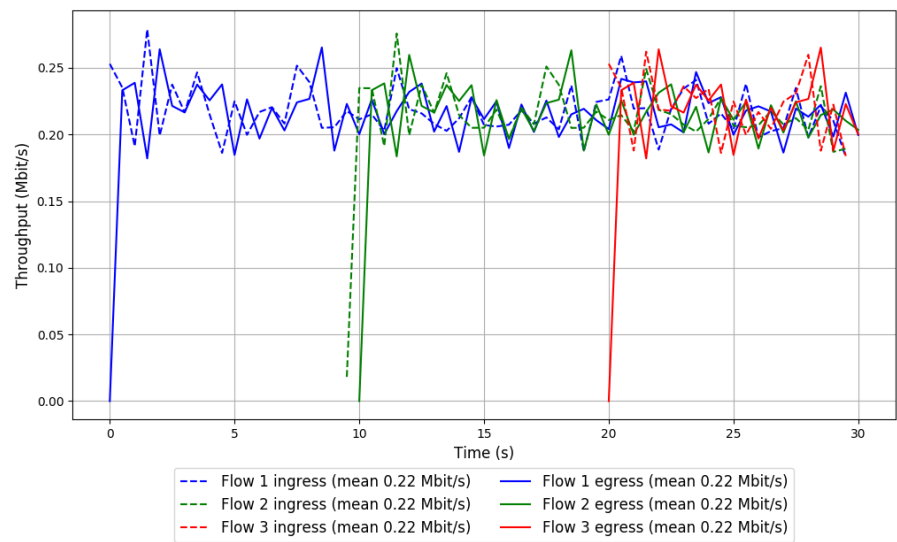


Run 5: Statistics of SReAM

Start at: 2018-10-03 08:58:15  
End at: 2018-10-03 08:58:45  
Local clock offset: 0.178 ms  
Remote clock offset: -0.179 ms

# Below is generated by plot.py at 2018-10-03 10:55:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.44 Mbit/s  
95th percentile per-packet one-way delay: 49.994 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 49.562 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 48.670 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.053 ms  
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



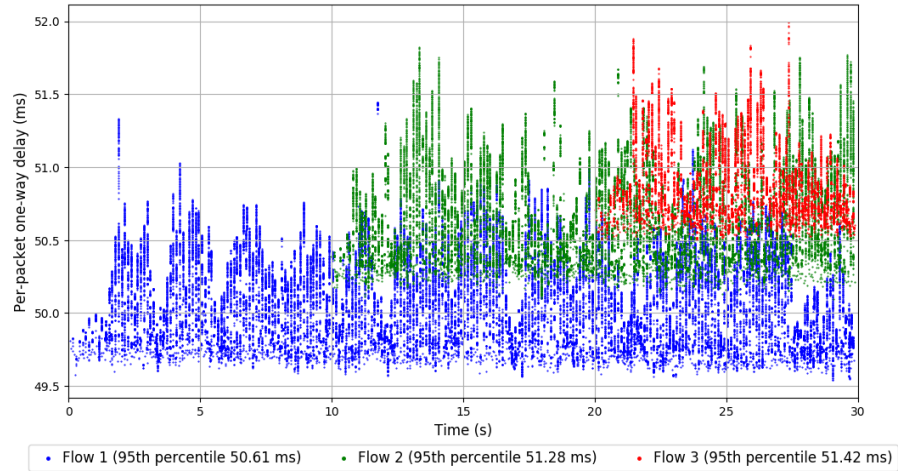
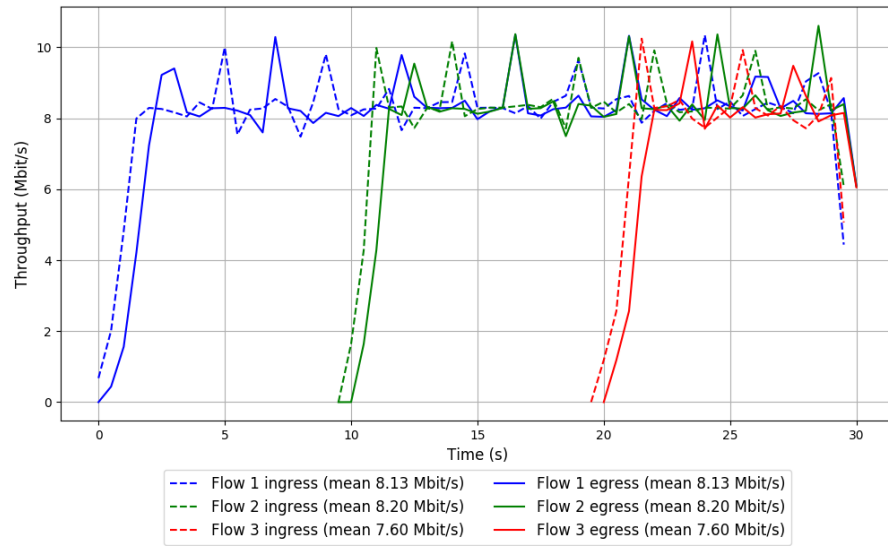


Run 1: Statistics of Sprout

Start at: 2018-10-03 06:54:05  
End at: 2018-10-03 06:54:35  
Local clock offset: -0.001 ms  
Remote clock offset: -0.162 ms

# Below is generated by plot.py at 2018-10-03 10:55:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 16.11 Mbit/s  
95th percentile per-packet one-way delay: 51.185 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 8.13 Mbit/s  
95th percentile per-packet one-way delay: 50.612 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 8.20 Mbit/s  
95th percentile per-packet one-way delay: 51.276 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 7.60 Mbit/s  
95th percentile per-packet one-way delay: 51.417 ms  
Loss rate: 0.00%

## Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-10-03 07:24:32

End at: 2018-10-03 07:25:02

Local clock offset: 0.317 ms

Remote clock offset: 0.128 ms

# Below is generated by plot.py at 2018-10-03 10:55:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 16.15 Mbit/s

95th percentile per-packet one-way delay: 51.019 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 8.15 Mbit/s

95th percentile per-packet one-way delay: 51.040 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.12 Mbit/s

95th percentile per-packet one-way delay: 51.088 ms

Loss rate: 0.00%

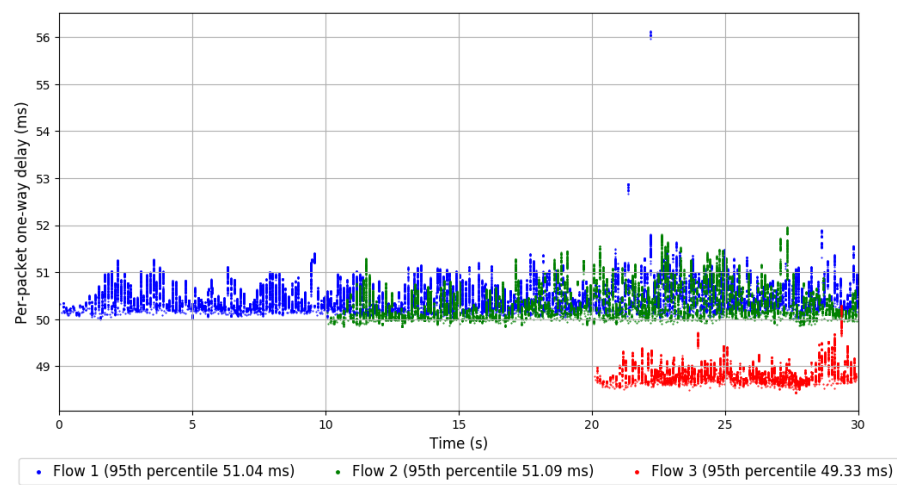
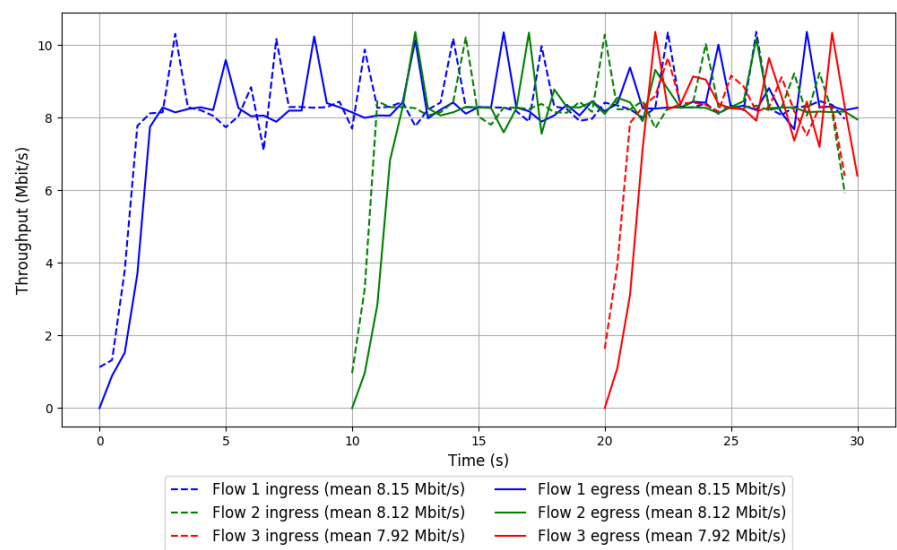
-- Flow 3:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 49.325 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

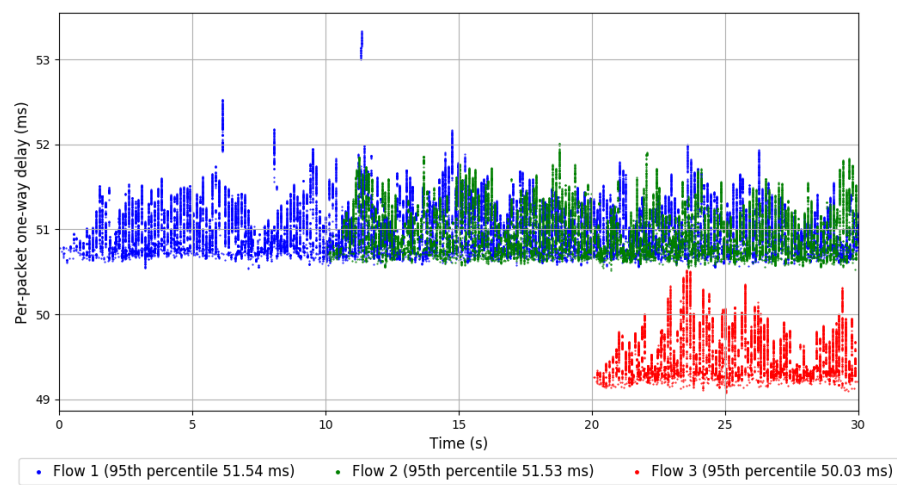
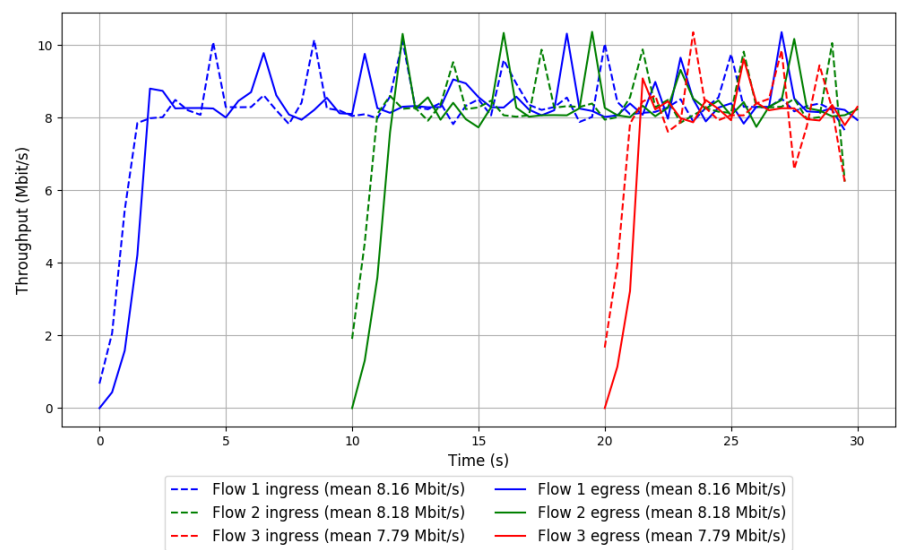


Run 3: Statistics of Sprout

Start at: 2018-10-03 07:55:01  
End at: 2018-10-03 07:55:31  
Local clock offset: -0.458 ms  
Remote clock offset: 0.052 ms

```
# Below is generated by plot.py at 2018-10-03 10:55:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.17 Mbit/s
95th percentile per-packet one-way delay: 51.502 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 8.16 Mbit/s
95th percentile per-packet one-way delay: 51.536 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.18 Mbit/s
95th percentile per-packet one-way delay: 51.526 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.79 Mbit/s
95th percentile per-packet one-way delay: 50.031 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-10-03 08:25:17

End at: 2018-10-03 08:25:47

Local clock offset: -0.205 ms

Remote clock offset: 0.178 ms

# Below is generated by plot.py at 2018-10-03 10:55:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 16.20 Mbit/s

95th percentile per-packet one-way delay: 51.162 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 8.20 Mbit/s

95th percentile per-packet one-way delay: 51.047 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.11 Mbit/s

95th percentile per-packet one-way delay: 49.877 ms

Loss rate: 0.00%

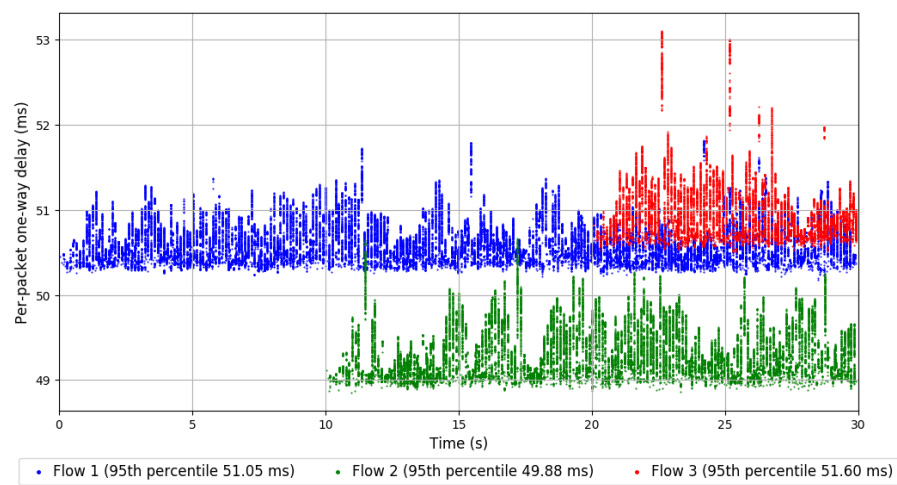
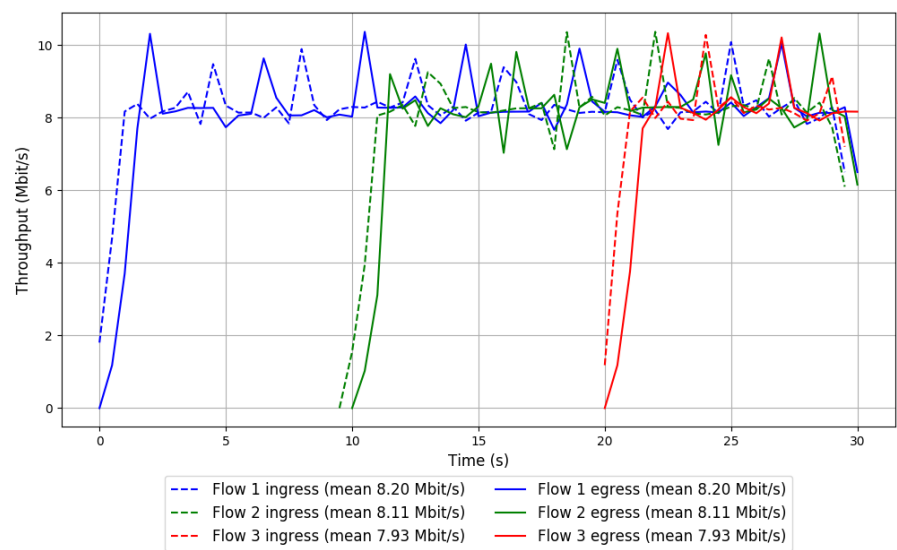
-- Flow 3:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 51.601 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



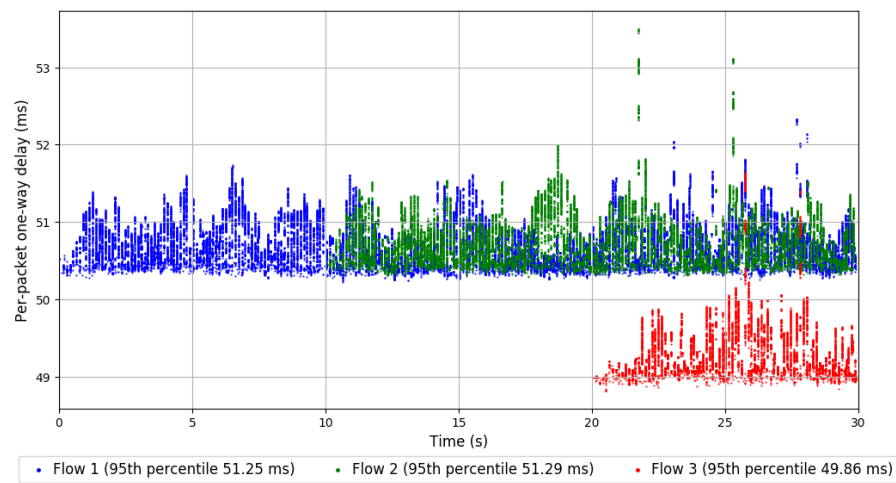
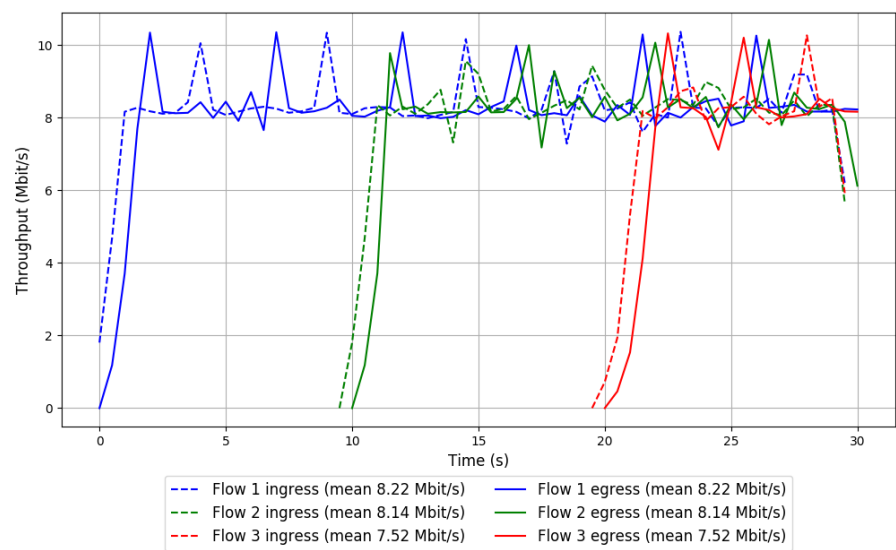


Run 5: Statistics of Sprout

Start at: 2018-10-03 08:55:05  
End at: 2018-10-03 08:55:35  
Local clock offset: -0.176 ms  
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2018-10-03 10:55:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 16.12 Mbit/s  
95th percentile per-packet one-way delay: 51.236 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 8.22 Mbit/s  
95th percentile per-packet one-way delay: 51.246 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 8.14 Mbit/s  
95th percentile per-packet one-way delay: 51.293 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 7.52 Mbit/s  
95th percentile per-packet one-way delay: 49.859 ms  
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link

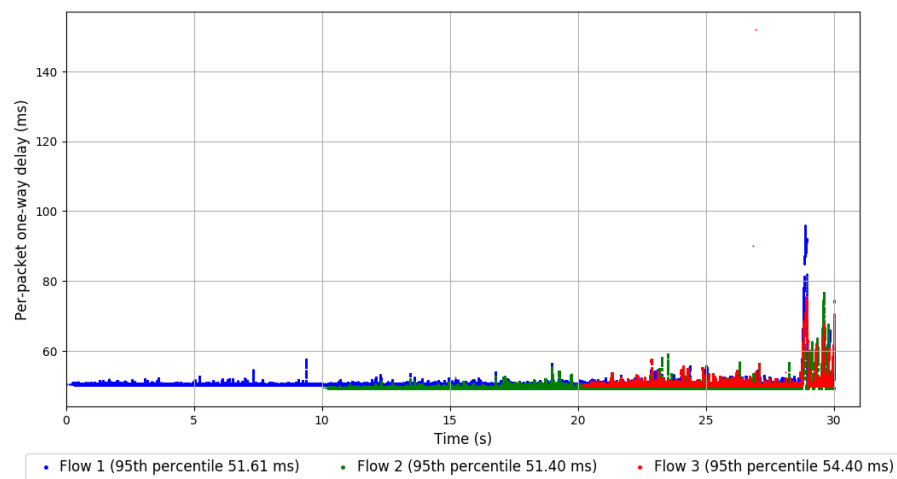
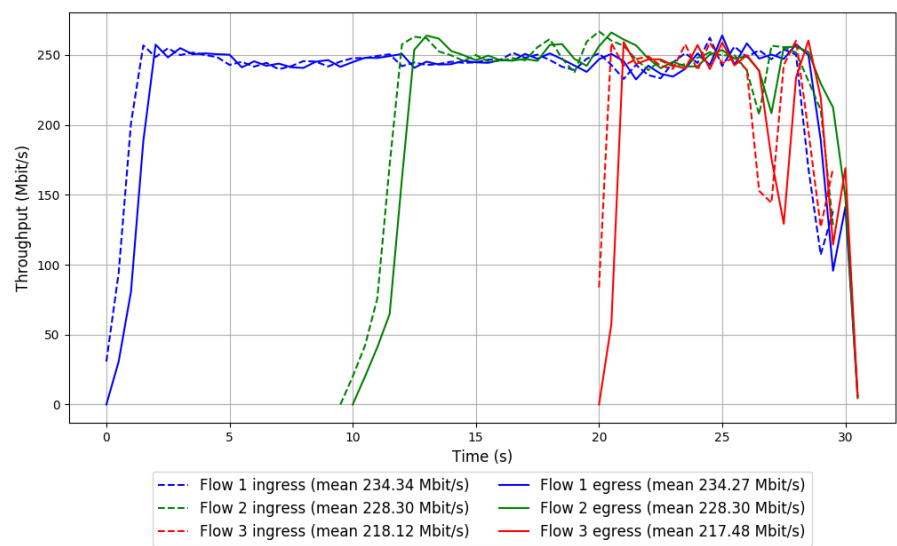


Run 1: Statistics of TaoVA-100x

Start at: 2018-10-03 06:50:10  
End at: 2018-10-03 06:50:40  
Local clock offset: 0.324 ms  
Remote clock offset: -0.335 ms

# Below is generated by plot.py at 2018-10-03 11:03:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 458.68 Mbit/s  
95th percentile per-packet one-way delay: 52.015 ms  
Loss rate: 0.06%  
-- Flow 1:  
Average throughput: 234.27 Mbit/s  
95th percentile per-packet one-way delay: 51.610 ms  
Loss rate: 0.04%  
-- Flow 2:  
Average throughput: 228.30 Mbit/s  
95th percentile per-packet one-way delay: 51.396 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 217.48 Mbit/s  
95th percentile per-packet one-way delay: 54.404 ms  
Loss rate: 0.23%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-10-03 07:20:38

End at: 2018-10-03 07:21:08

Local clock offset: 0.289 ms

Remote clock offset: 0.166 ms

# Below is generated by plot.py at 2018-10-03 11:03:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 446.72 Mbit/s

95th percentile per-packet one-way delay: 55.562 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 230.45 Mbit/s

95th percentile per-packet one-way delay: 53.948 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 216.67 Mbit/s

95th percentile per-packet one-way delay: 58.089 ms

Loss rate: 0.50%

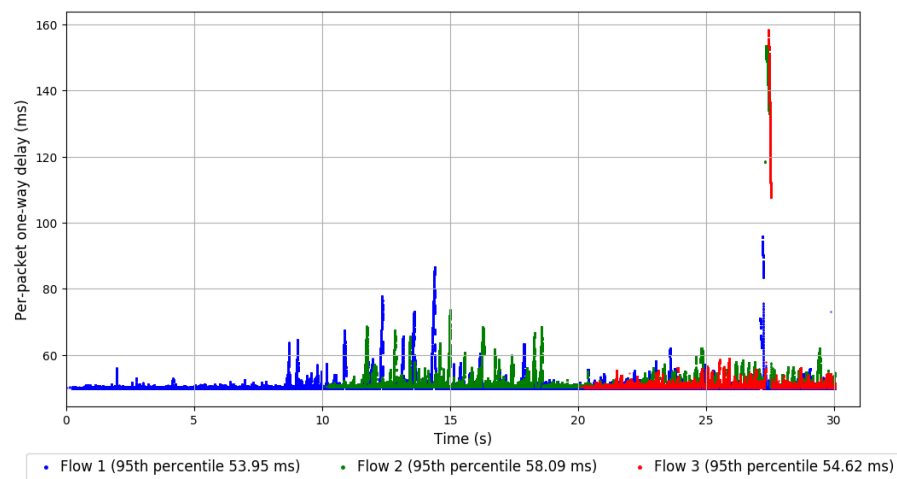
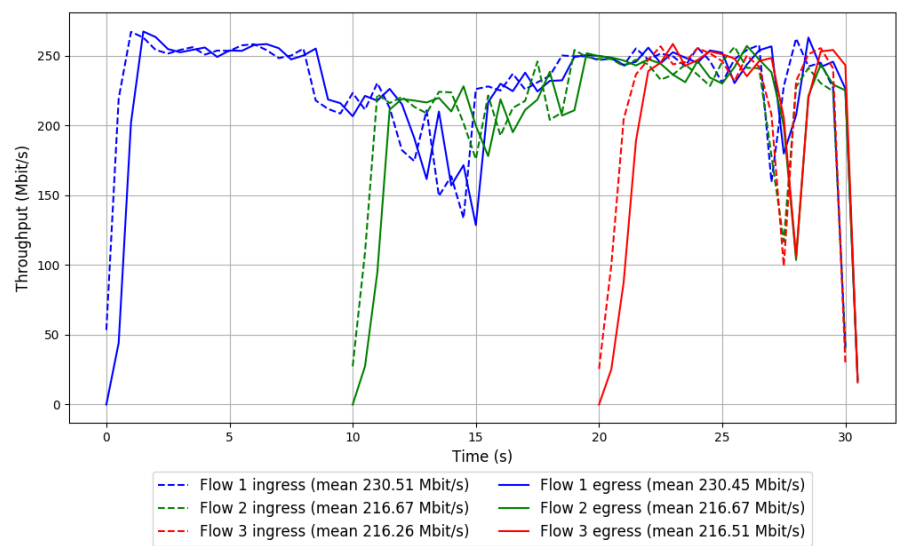
-- Flow 3:

Average throughput: 216.51 Mbit/s

95th percentile per-packet one-way delay: 54.622 ms

Loss rate: 0.88%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-10-03 07:51:10

End at: 2018-10-03 07:51:40

Local clock offset: 0.215 ms

Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2018-10-03 11:03:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 447.45 Mbit/s

95th percentile per-packet one-way delay: 55.382 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 230.73 Mbit/s

95th percentile per-packet one-way delay: 56.327 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 227.02 Mbit/s

95th percentile per-packet one-way delay: 51.747 ms

Loss rate: 0.00%

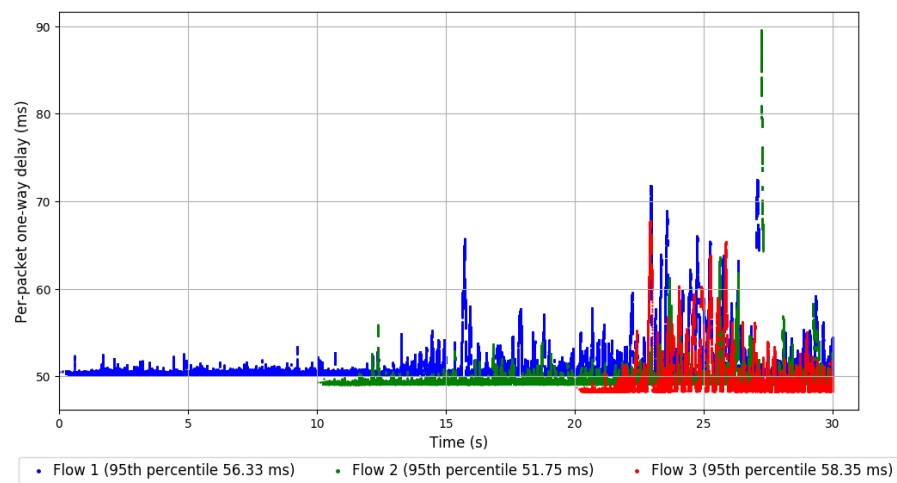
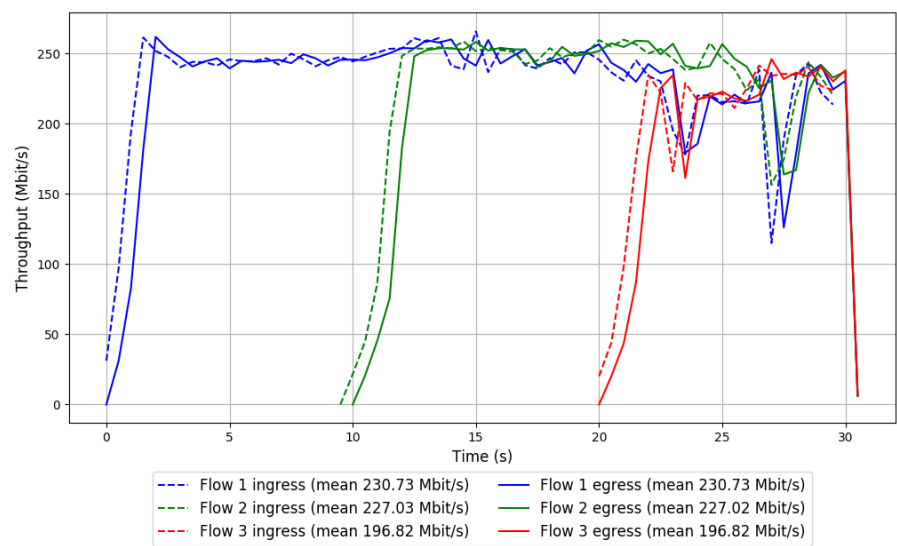
-- Flow 3:

Average throughput: 196.82 Mbit/s

95th percentile per-packet one-way delay: 58.353 ms

Loss rate: 0.00%

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





Run 4: Statistics of TaoVA-100x

Start at: 2018-10-03 08:21:23

End at: 2018-10-03 08:21:53

Local clock offset: -0.219 ms

Remote clock offset: 0.158 ms

# Below is generated by plot.py at 2018-10-03 11:06:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 472.68 Mbit/s

95th percentile per-packet one-way delay: 51.695 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 239.38 Mbit/s

95th percentile per-packet one-way delay: 51.989 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 236.46 Mbit/s

95th percentile per-packet one-way delay: 50.378 ms

Loss rate: 0.00%

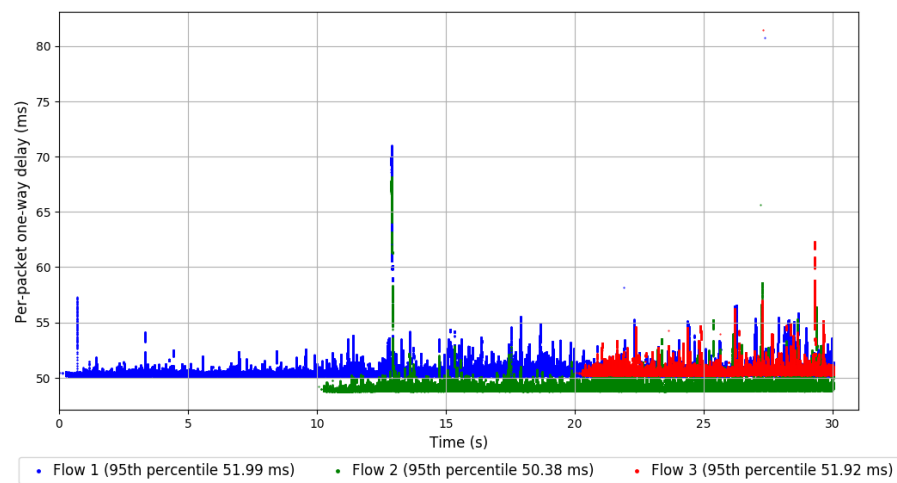
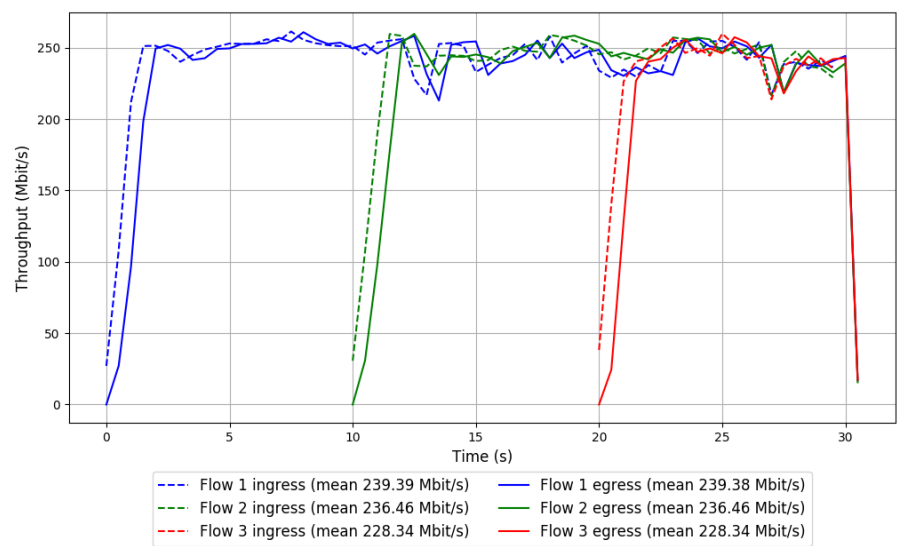
-- Flow 3:

Average throughput: 228.34 Mbit/s

95th percentile per-packet one-way delay: 51.920 ms

Loss rate: 0.00%

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

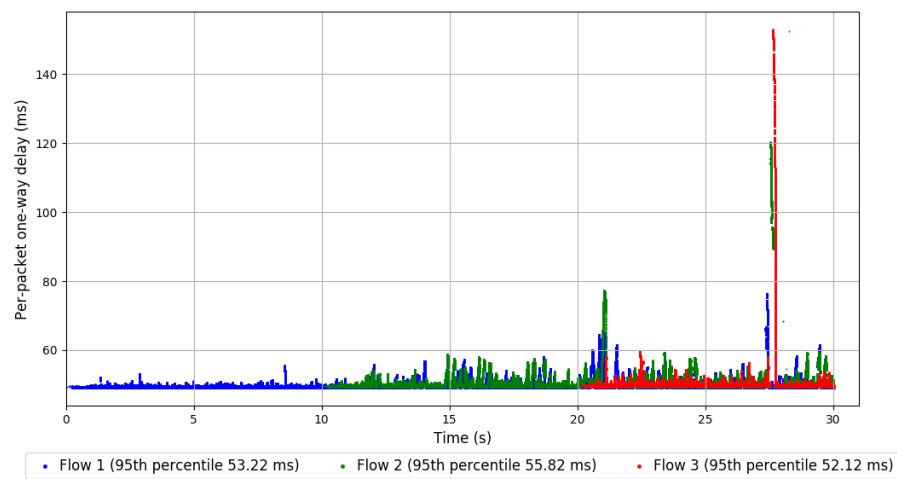
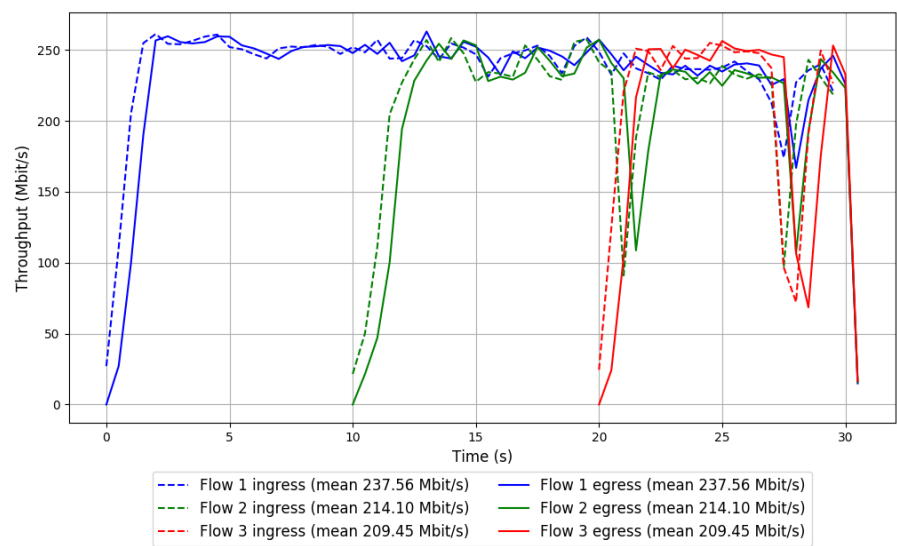


Run 5: Statistics of TaoVA-100x

Start at: 2018-10-03 08:51:15  
End at: 2018-10-03 08:51:45  
Local clock offset: 0.219 ms  
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2018-10-03 11:06:00  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 449.76 Mbit/s  
95th percentile per-packet one-way delay: 54.171 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 237.56 Mbit/s  
95th percentile per-packet one-way delay: 53.215 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 214.10 Mbit/s  
95th percentile per-packet one-way delay: 55.824 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 209.45 Mbit/s  
95th percentile per-packet one-way delay: 52.121 ms  
Loss rate: 0.00%

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

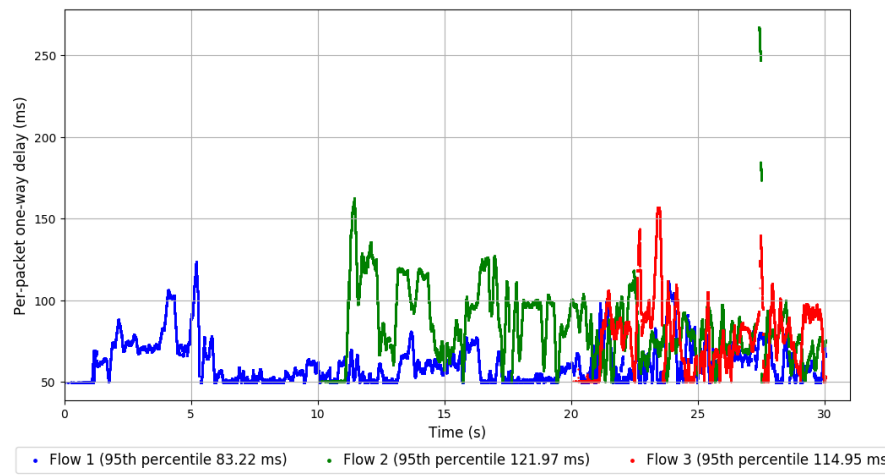
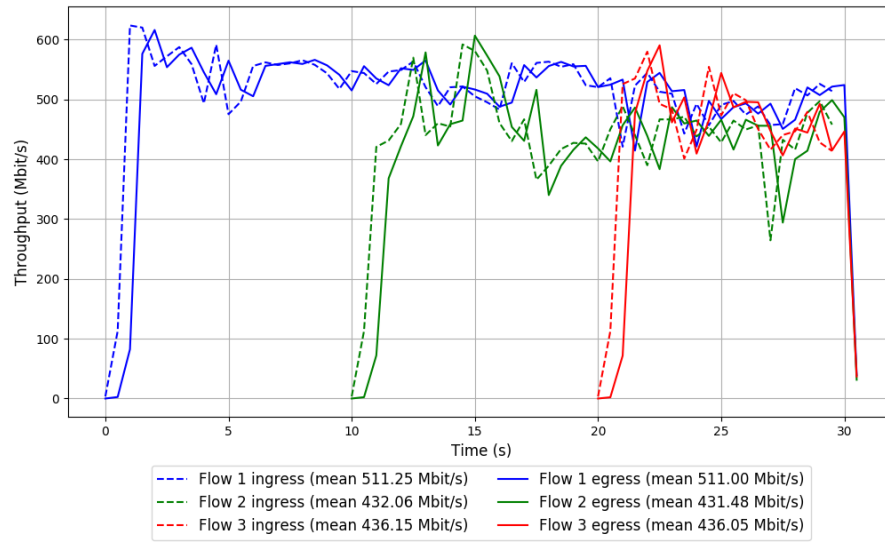


Run 1: Statistics of TCP Vegas

Start at: 2018-10-03 06:55:16  
End at: 2018-10-03 06:55:46  
Local clock offset: -0.062 ms  
Remote clock offset: -0.135 ms

# Below is generated by plot.py at 2018-10-03 11:08:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 943.33 Mbit/s  
95th percentile per-packet one-way delay: 110.401 ms  
Loss rate: 0.07%  
-- Flow 1:  
Average throughput: 511.00 Mbit/s  
95th percentile per-packet one-way delay: 83.222 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 431.48 Mbit/s  
95th percentile per-packet one-way delay: 121.972 ms  
Loss rate: 0.14%  
-- Flow 3:  
Average throughput: 436.05 Mbit/s  
95th percentile per-packet one-way delay: 114.951 ms  
Loss rate: 0.03%

# Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-10-03 07:25:44

End at: 2018-10-03 07:26:14

Local clock offset: -0.032 ms

Remote clock offset: 0.123 ms

# Below is generated by plot.py at 2018-10-03 11:11:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 944.72 Mbit/s

95th percentile per-packet one-way delay: 100.780 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 482.19 Mbit/s

95th percentile per-packet one-way delay: 98.890 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 473.78 Mbit/s

95th percentile per-packet one-way delay: 101.836 ms

Loss rate: 0.21%

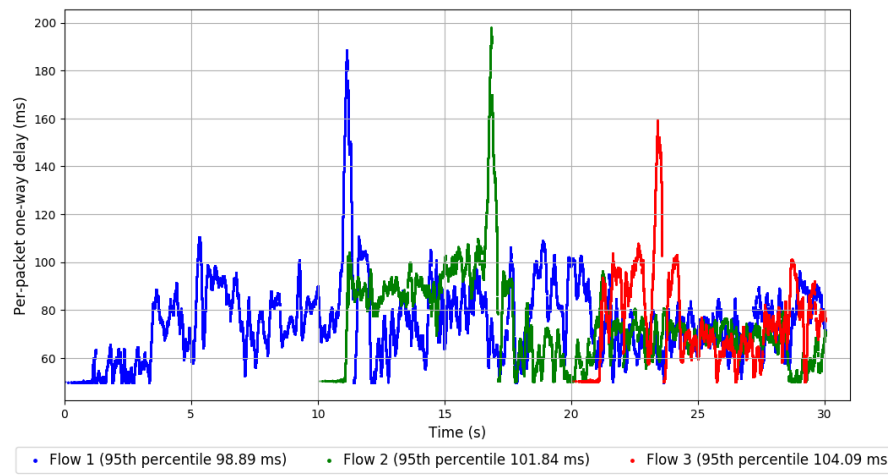
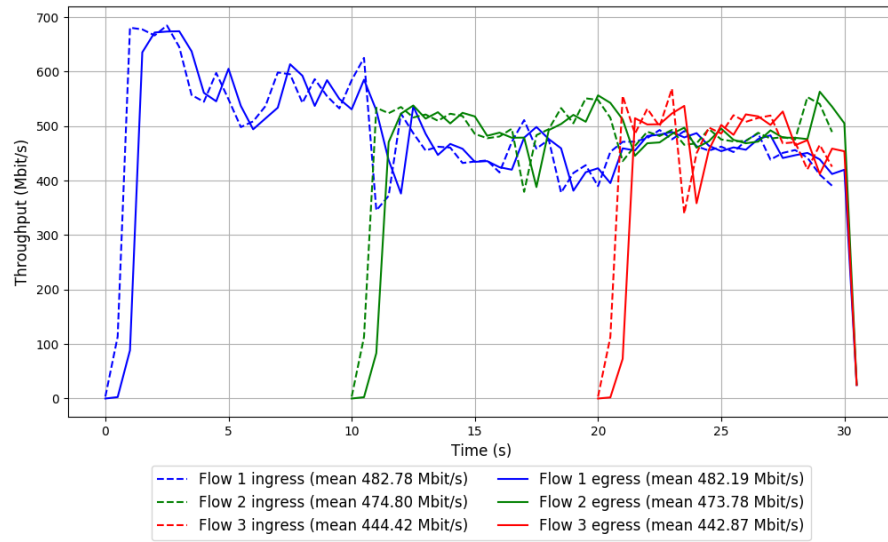
-- Flow 3:

Average throughput: 442.87 Mbit/s

95th percentile per-packet one-way delay: 104.086 ms

Loss rate: 0.34%

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





Run 3: Statistics of TCP Vegas

Start at: 2018-10-03 07:56:12

End at: 2018-10-03 07:56:42

Local clock offset: -0.195 ms

Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2018-10-03 11:11:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 840.97 Mbit/s

95th percentile per-packet one-way delay: 96.374 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 392.35 Mbit/s

95th percentile per-packet one-way delay: 75.485 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 471.30 Mbit/s

95th percentile per-packet one-way delay: 76.959 ms

Loss rate: 0.12%

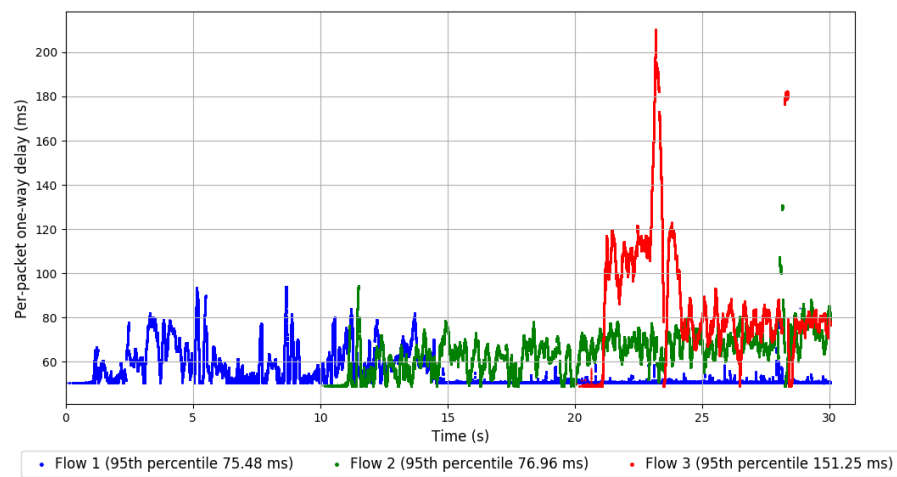
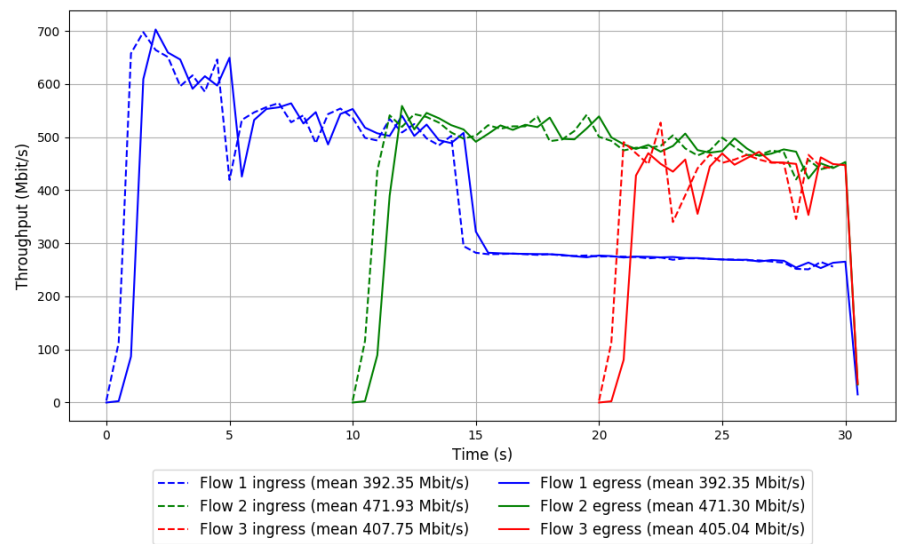
-- Flow 3:

Average throughput: 405.04 Mbit/s

95th percentile per-packet one-way delay: 151.254 ms

Loss rate: 0.65%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-10-03 08:26:29

End at: 2018-10-03 08:26:59

Local clock offset: -0.173 ms

Remote clock offset: 0.194 ms

# Below is generated by plot.py at 2018-10-03 11:19:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 880.71 Mbit/s

95th percentile per-packet one-way delay: 84.989 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 482.27 Mbit/s

95th percentile per-packet one-way delay: 88.266 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 465.22 Mbit/s

95th percentile per-packet one-way delay: 82.439 ms

Loss rate: 0.14%

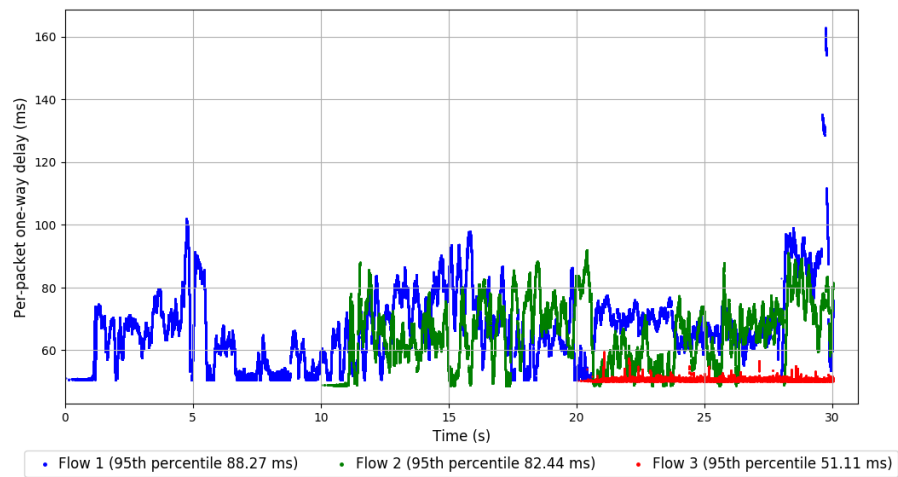
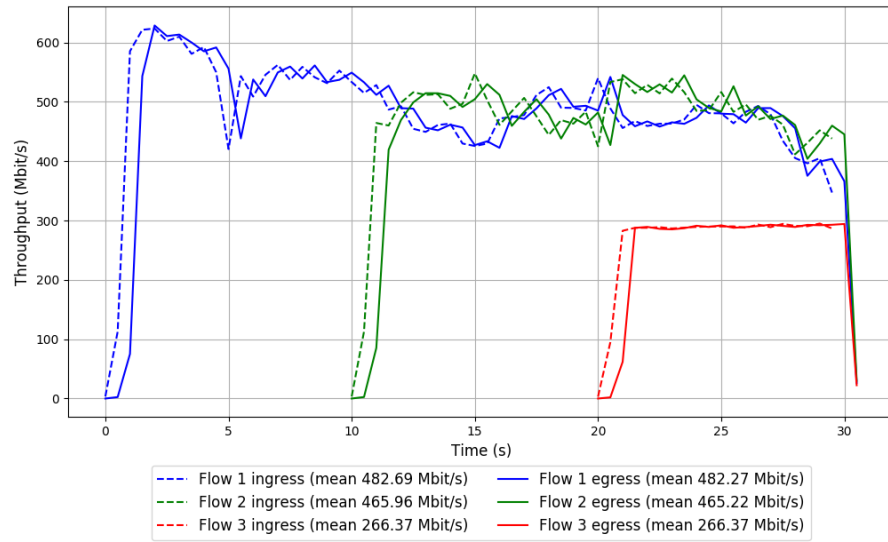
-- Flow 3:

Average throughput: 266.37 Mbit/s

95th percentile per-packet one-way delay: 51.109 ms

Loss rate: 0.00%

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

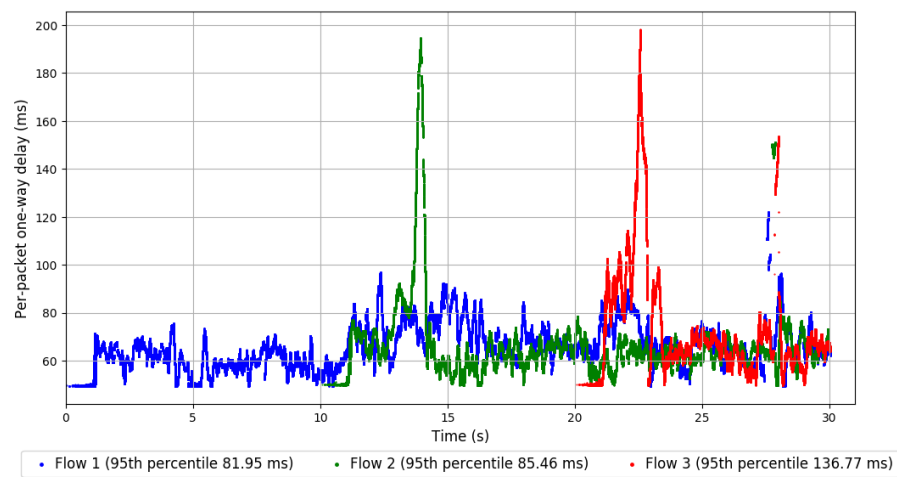
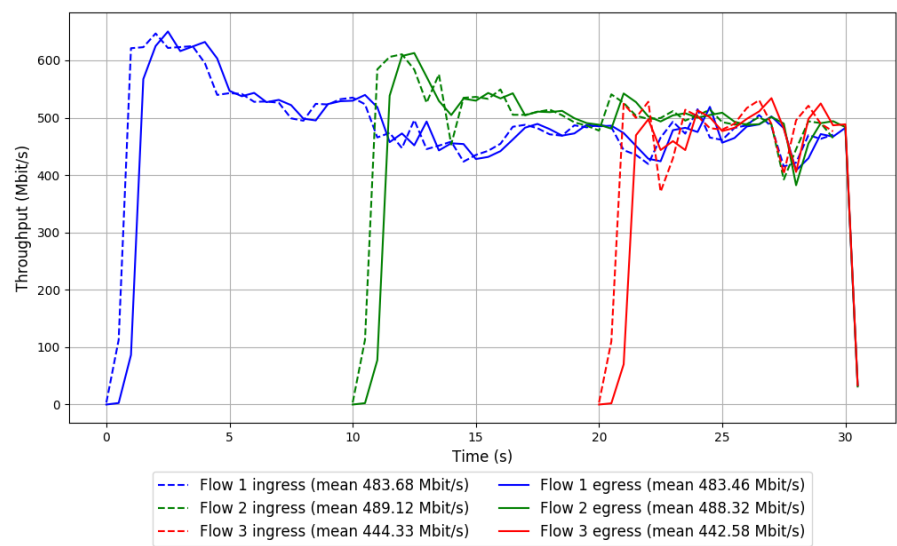


Run 5: Statistics of TCP Vegas

Start at: 2018-10-03 08:56:17  
End at: 2018-10-03 08:56:47  
Local clock offset: -0.52 ms  
Remote clock offset: -0.118 ms

# Below is generated by plot.py at 2018-10-03 11:21:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 955.84 Mbit/s  
95th percentile per-packet one-way delay: 88.100 ms  
Loss rate: 0.13%  
-- Flow 1:  
Average throughput: 483.46 Mbit/s  
95th percentile per-packet one-way delay: 81.950 ms  
Loss rate: 0.04%  
-- Flow 2:  
Average throughput: 488.32 Mbit/s  
95th percentile per-packet one-way delay: 85.462 ms  
Loss rate: 0.16%  
-- Flow 3:  
Average throughput: 442.58 Mbit/s  
95th percentile per-packet one-way delay: 136.773 ms  
Loss rate: 0.38%

Run 5: Report of TCP Vegas — Data Link

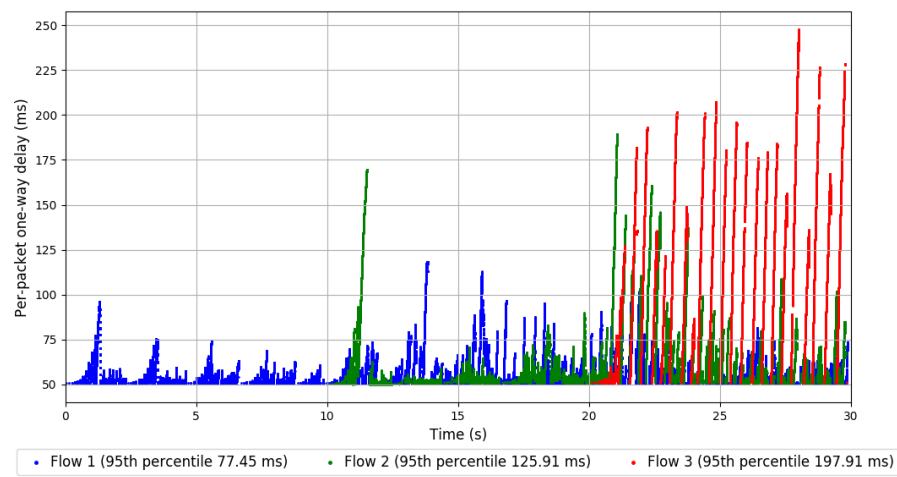
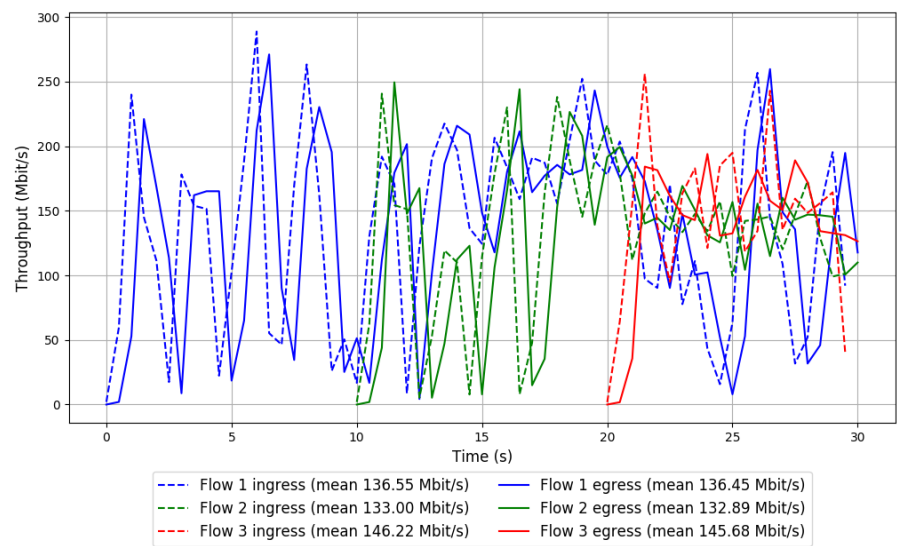


Run 1: Statistics of Verus

Start at: 2018-10-03 06:32:41  
End at: 2018-10-03 06:33:11  
Local clock offset: -0.4 ms  
Remote clock offset: -0.369 ms

# Below is generated by plot.py at 2018-10-03 11:21:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 272.13 Mbit/s  
95th percentile per-packet one-way delay: 153.174 ms  
Loss rate: 0.07%  
-- Flow 1:  
Average throughput: 136.45 Mbit/s  
95th percentile per-packet one-way delay: 77.446 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 132.89 Mbit/s  
95th percentile per-packet one-way delay: 125.907 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 145.68 Mbit/s  
95th percentile per-packet one-way delay: 197.913 ms  
Loss rate: 0.37%

Run 1: Report of Verus — Data Link



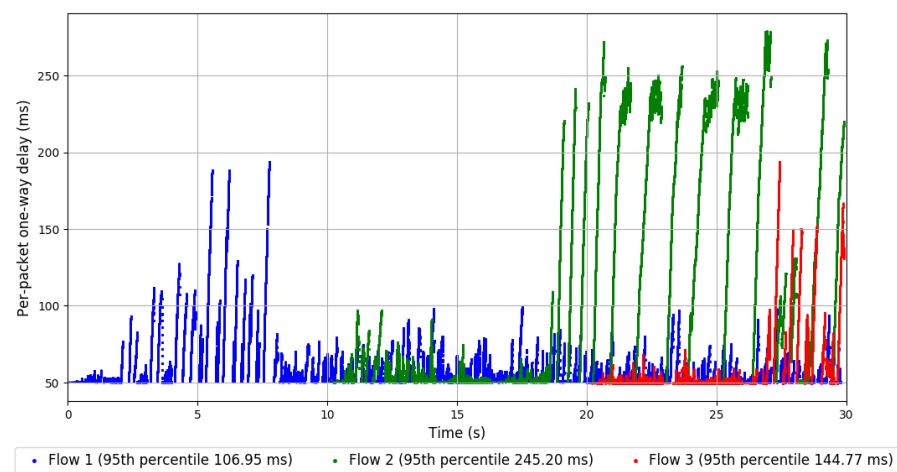
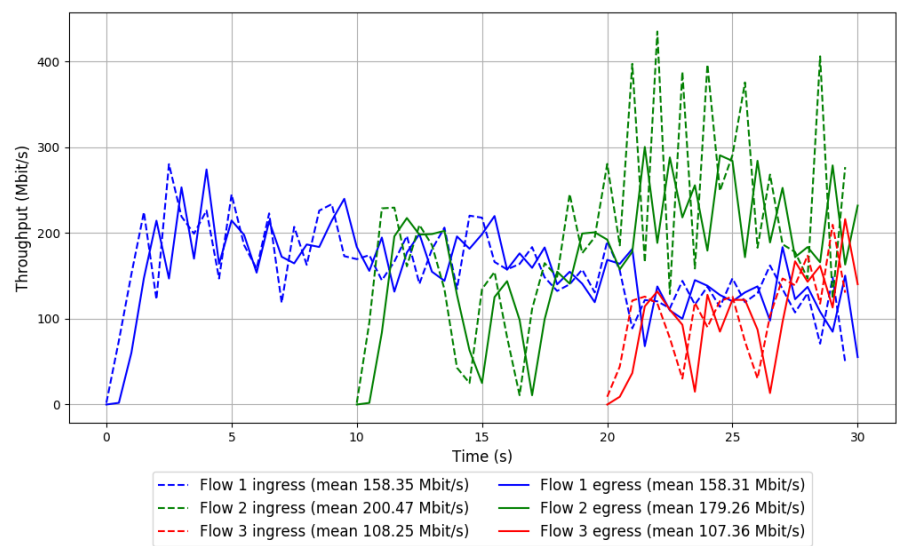


Run 2: Statistics of Verus

Start at: 2018-10-03 07:02:53  
End at: 2018-10-03 07:03:23  
Local clock offset: -0.048 ms  
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2018-10-03 11:21:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 312.08 Mbit/s  
95th percentile per-packet one-way delay: 233.349 ms  
Loss rate: 4.33%  
-- Flow 1:  
Average throughput: 158.31 Mbit/s  
95th percentile per-packet one-way delay: 106.951 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 179.26 Mbit/s  
95th percentile per-packet one-way delay: 245.201 ms  
Loss rate: 10.58%  
-- Flow 3:  
Average throughput: 107.36 Mbit/s  
95th percentile per-packet one-way delay: 144.768 ms  
Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-10-03 07:33:27

End at: 2018-10-03 07:33:57

Local clock offset: -0.065 ms

Remote clock offset: 0.082 ms

# Below is generated by plot.py at 2018-10-03 11:21:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 285.33 Mbit/s

95th percentile per-packet one-way delay: 175.904 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 183.47 Mbit/s

95th percentile per-packet one-way delay: 189.851 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 97.16 Mbit/s

95th percentile per-packet one-way delay: 62.525 ms

Loss rate: 0.00%

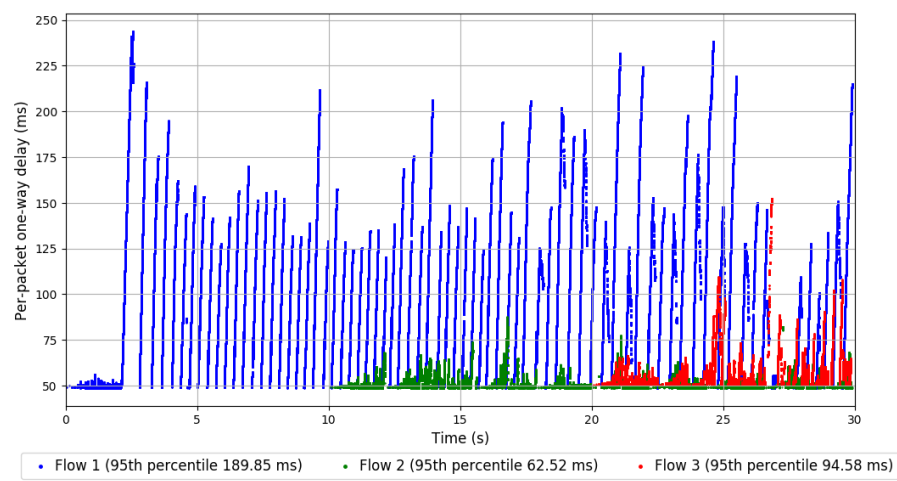
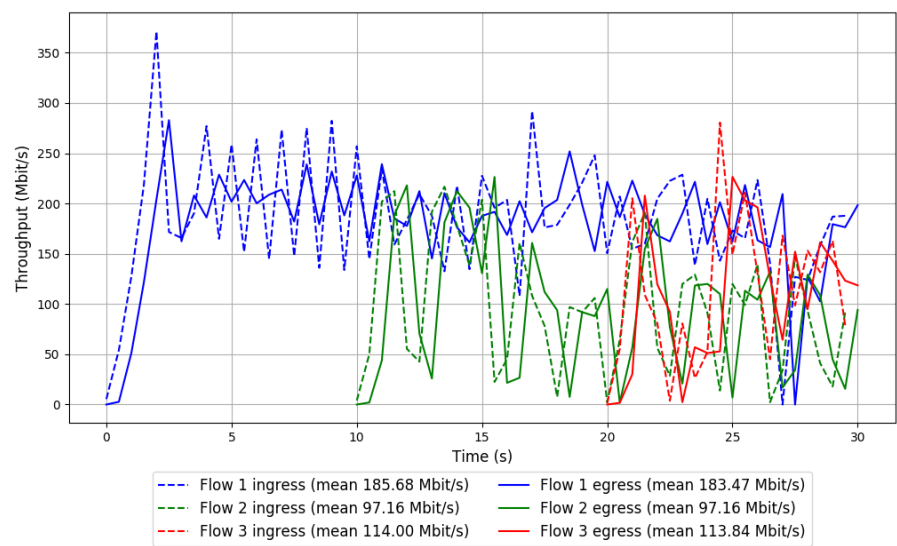
-- Flow 3:

Average throughput: 113.84 Mbit/s

95th percentile per-packet one-way delay: 94.583 ms

Loss rate: 0.00%

Run 3: Report of Verus — Data Link

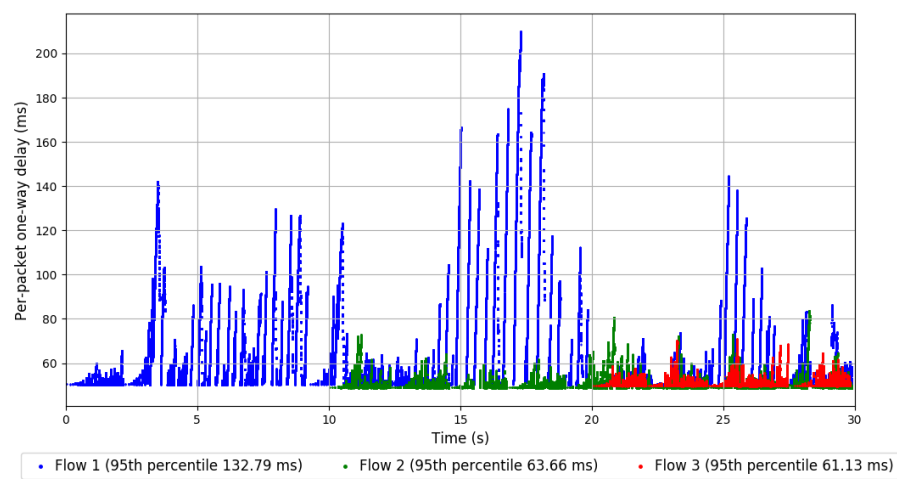
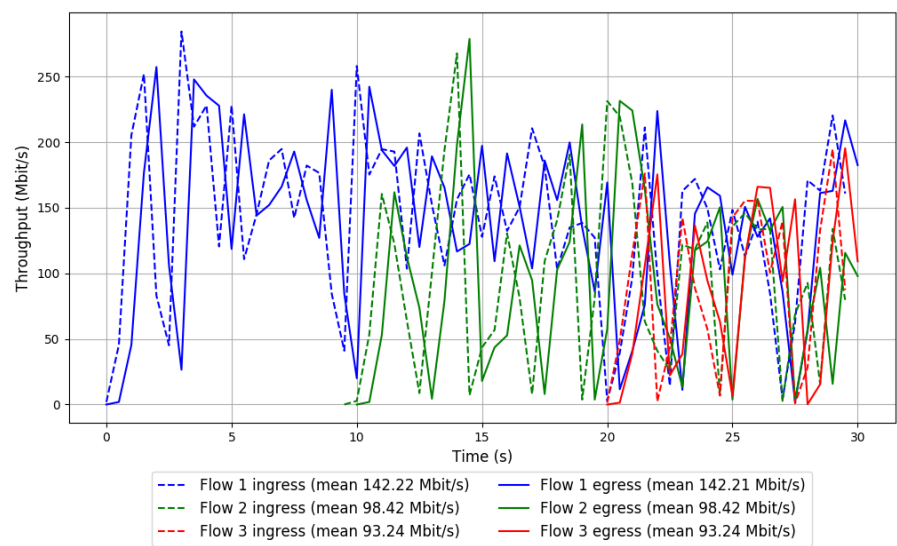


Run 4: Statistics of Verus

Start at: 2018-10-03 08:03:42  
End at: 2018-10-03 08:04:12  
Local clock offset: -0.181 ms  
Remote clock offset: 0.095 ms

```
# Below is generated by plot.py at 2018-10-03 11:21:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 238.15 Mbit/s
95th percentile per-packet one-way delay: 117.494 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 142.21 Mbit/s
95th percentile per-packet one-way delay: 132.789 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 98.42 Mbit/s
95th percentile per-packet one-way delay: 63.657 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 93.24 Mbit/s
95th percentile per-packet one-way delay: 61.132 ms
Loss rate: 0.00%
```

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-10-03 08:34:02

End at: 2018-10-03 08:34:32

Local clock offset: 0.157 ms

Remote clock offset: 0.1 ms

# Below is generated by plot.py at 2018-10-03 11:21:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 313.55 Mbit/s

95th percentile per-packet one-way delay: 225.607 ms

Loss rate: 4.44%

-- Flow 1:

Average throughput: 168.40 Mbit/s

95th percentile per-packet one-way delay: 171.683 ms

Loss rate: 3.01%

-- Flow 2:

Average throughput: 165.48 Mbit/s

95th percentile per-packet one-way delay: 248.636 ms

Loss rate: 7.83%

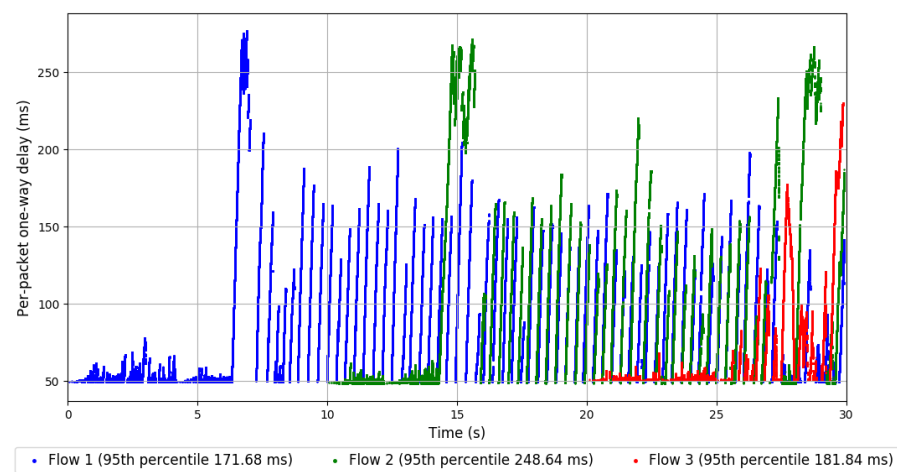
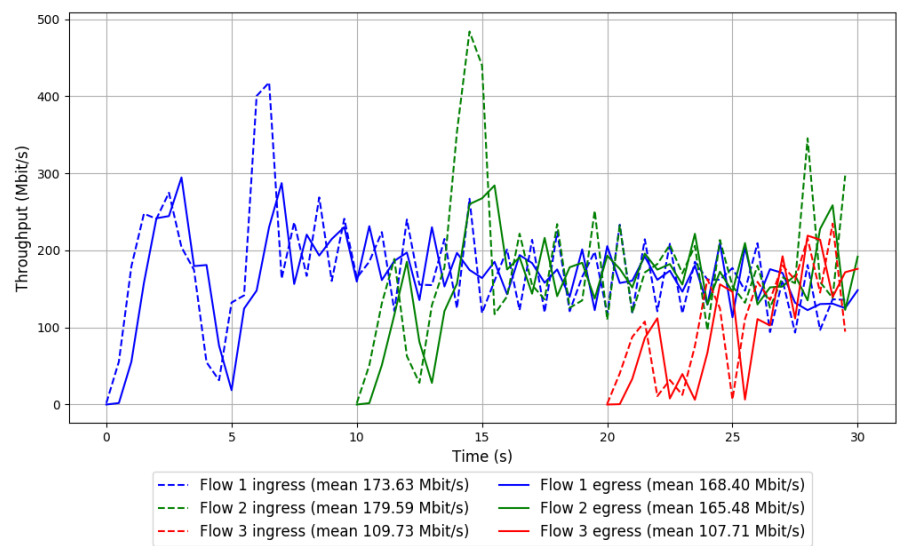
-- Flow 3:

Average throughput: 107.71 Mbit/s

95th percentile per-packet one-way delay: 181.843 ms

Loss rate: 0.00%

Run 5: Report of Verus — Data Link



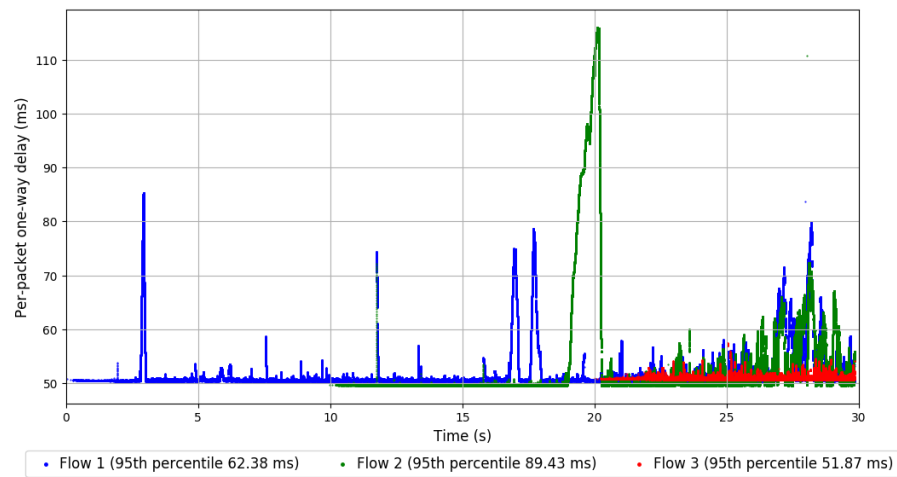
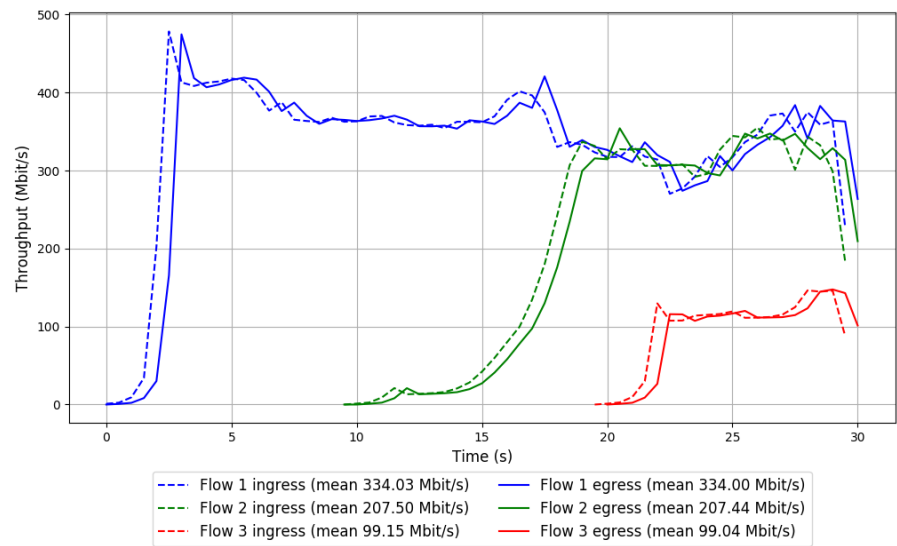


Run 1: Statistics of PCC-Vivace

Start at: 2018-10-03 06:46:39  
End at: 2018-10-03 06:47:09  
Local clock offset: -0.04 ms  
Remote clock offset: -0.375 ms

# Below is generated by plot.py at 2018-10-03 11:21:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 505.03 Mbit/s  
95th percentile per-packet one-way delay: 65.921 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 334.00 Mbit/s  
95th percentile per-packet one-way delay: 62.380 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 207.44 Mbit/s  
95th percentile per-packet one-way delay: 89.429 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 99.04 Mbit/s  
95th percentile per-packet one-way delay: 51.866 ms  
Loss rate: 0.10%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-10-03 07:17:05

End at: 2018-10-03 07:17:35

Local clock offset: -0.041 ms

Remote clock offset: 0.116 ms

# Below is generated by plot.py at 2018-10-03 11:21:57

# Datalink statistics

-- Total of 3 flows:

Average throughput: 513.91 Mbit/s

95th percentile per-packet one-way delay: 72.873 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 325.66 Mbit/s

95th percentile per-packet one-way delay: 85.969 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 250.27 Mbit/s

95th percentile per-packet one-way delay: 55.409 ms

Loss rate: 0.02%

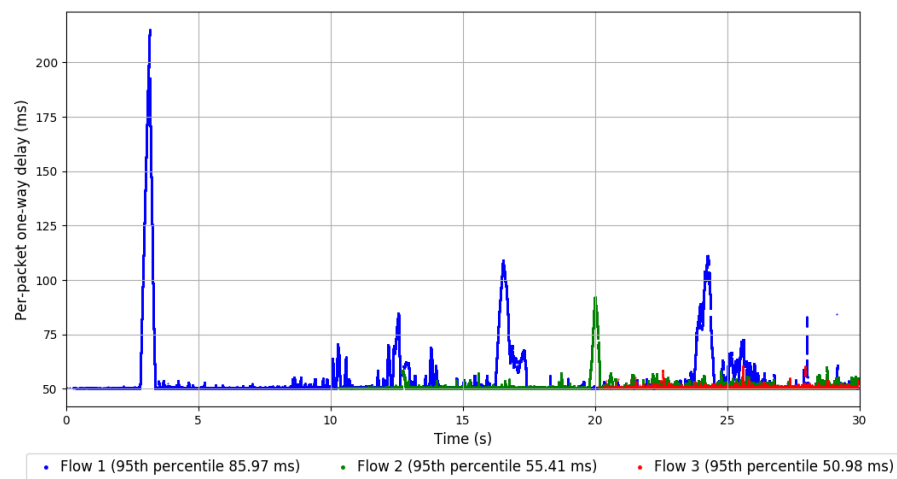
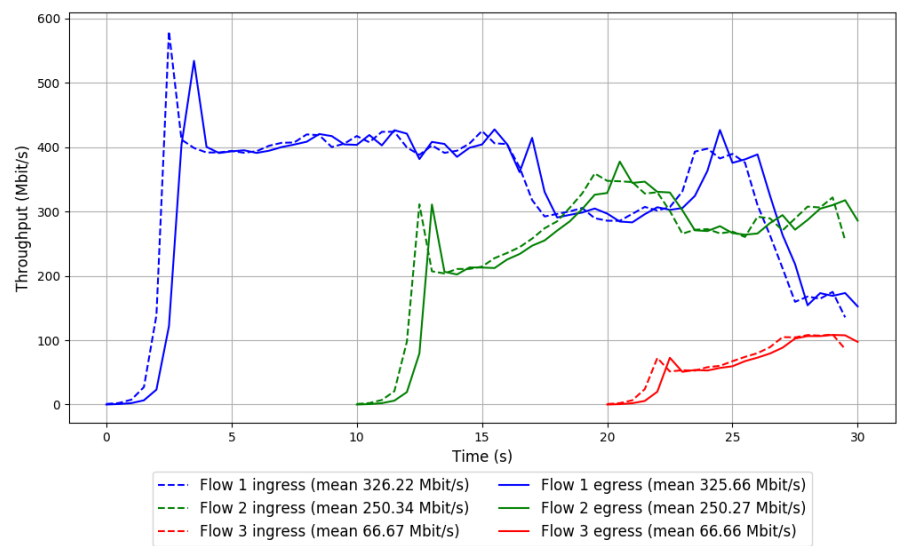
-- Flow 3:

Average throughput: 66.66 Mbit/s

95th percentile per-packet one-way delay: 50.977 ms

Loss rate: 0.01%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-10-03 07:47:40

End at: 2018-10-03 07:48:10

Local clock offset: -0.141 ms

Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2018-10-03 11:22:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 509.91 Mbit/s

95th percentile per-packet one-way delay: 64.222 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 321.65 Mbit/s

95th percentile per-packet one-way delay: 72.668 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 178.37 Mbit/s

95th percentile per-packet one-way delay: 52.884 ms

Loss rate: 0.00%

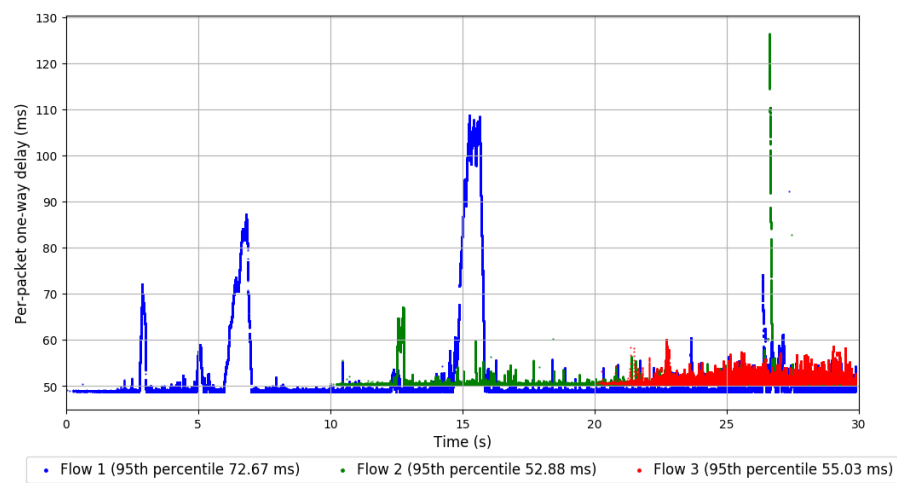
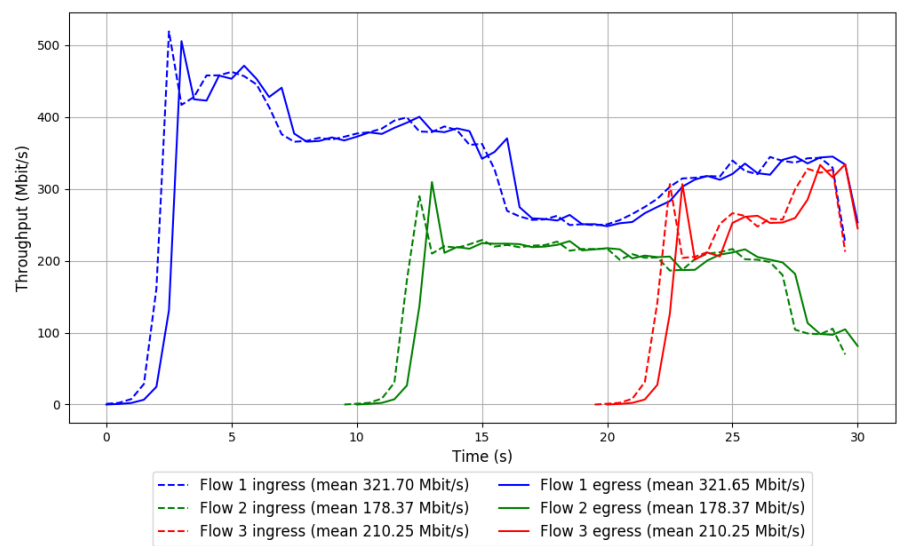
-- Flow 3:

Average throughput: 210.25 Mbit/s

95th percentile per-packet one-way delay: 55.028 ms

Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-10-03 08:17:46

End at: 2018-10-03 08:18:16

Local clock offset: 0.197 ms

Remote clock offset: 0.169 ms

# Below is generated by plot.py at 2018-10-03 11:22:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 545.01 Mbit/s

95th percentile per-packet one-way delay: 162.776 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 303.11 Mbit/s

95th percentile per-packet one-way delay: 97.042 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 230.09 Mbit/s

95th percentile per-packet one-way delay: 136.486 ms

Loss rate: 0.49%

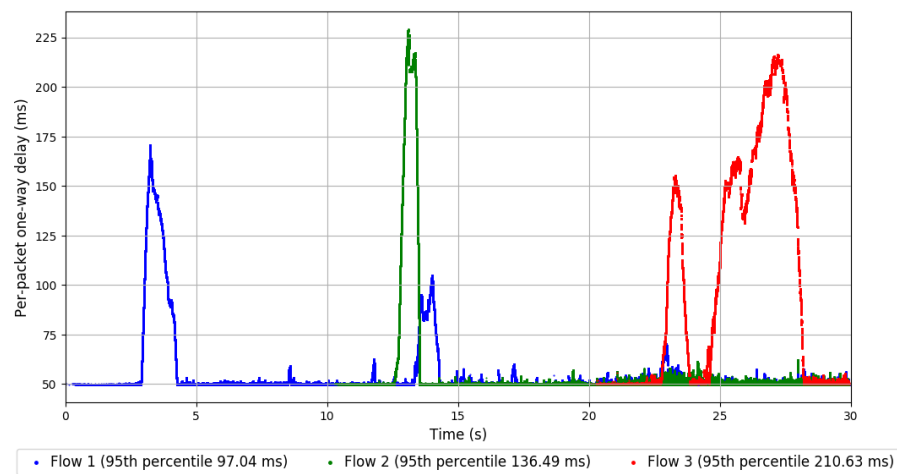
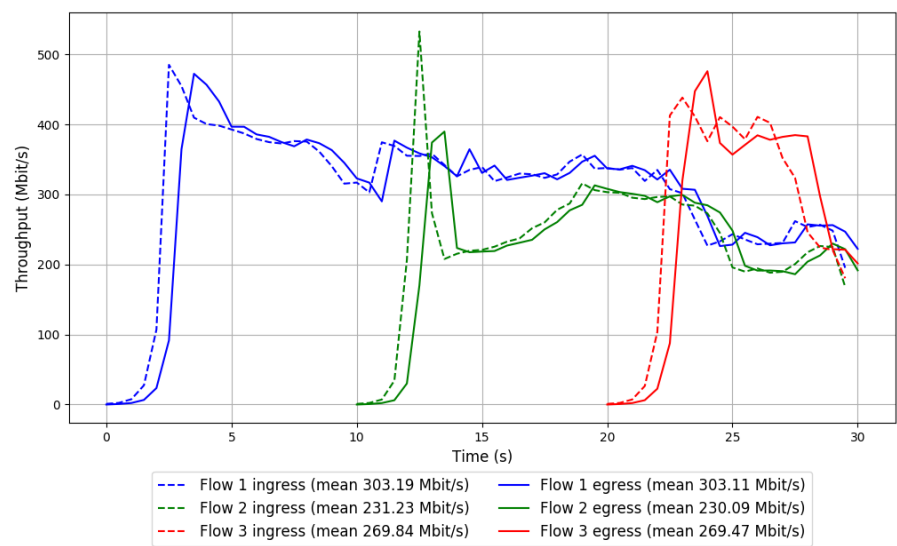
-- Flow 3:

Average throughput: 269.47 Mbit/s

95th percentile per-packet one-way delay: 210.632 ms

Loss rate: 0.14%

Run 4: Report of PCC-Vivace — Data Link



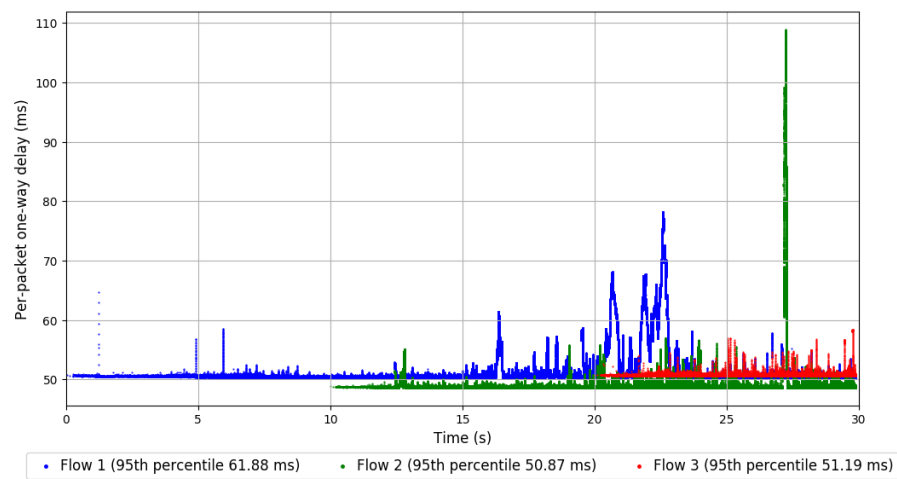
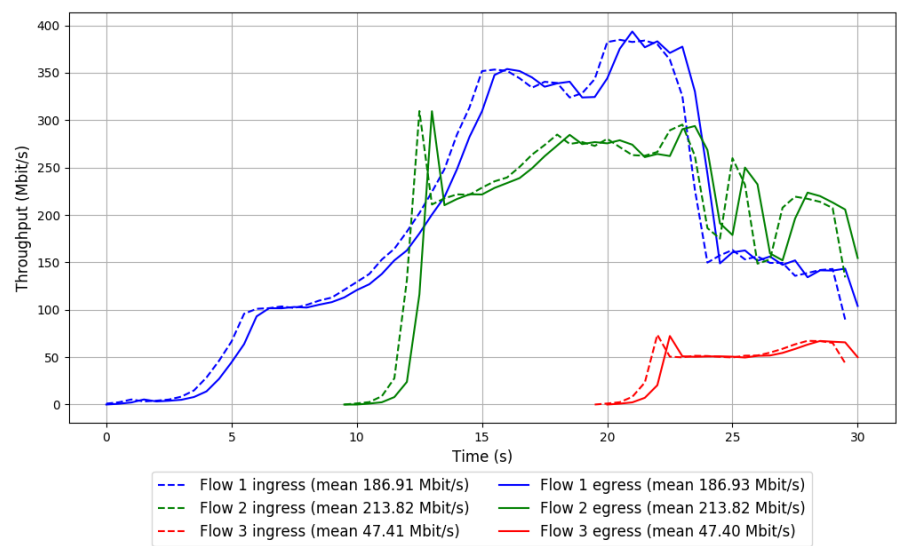


Run 5: Statistics of PCC-Vivace

Start at: 2018-10-03 08:47:53  
End at: 2018-10-03 08:48:23  
Local clock offset: -0.117 ms  
Remote clock offset: -0.132 ms

# Below is generated by plot.py at 2018-10-03 11:22:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 345.13 Mbit/s  
95th percentile per-packet one-way delay: 58.017 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 186.93 Mbit/s  
95th percentile per-packet one-way delay: 61.883 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 213.82 Mbit/s  
95th percentile per-packet one-way delay: 50.866 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 47.40 Mbit/s  
95th percentile per-packet one-way delay: 51.188 ms  
Loss rate: 0.02%

Run 5: Report of PCC-Vivace — Data Link

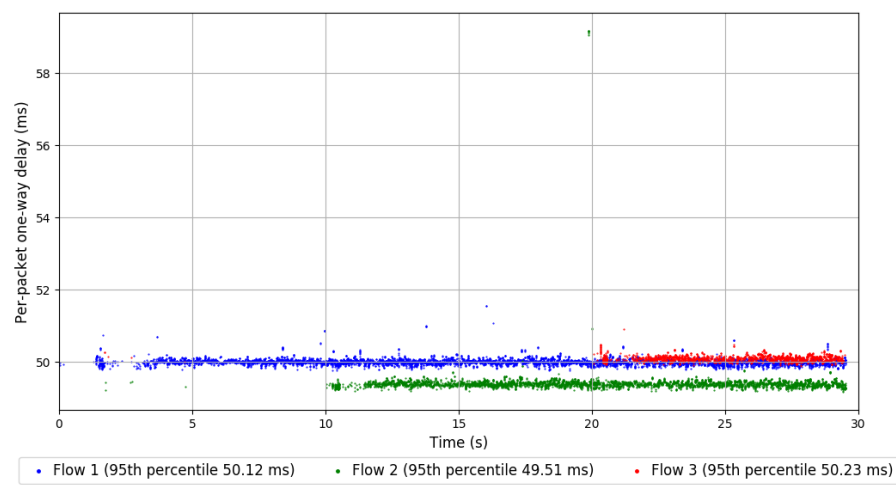
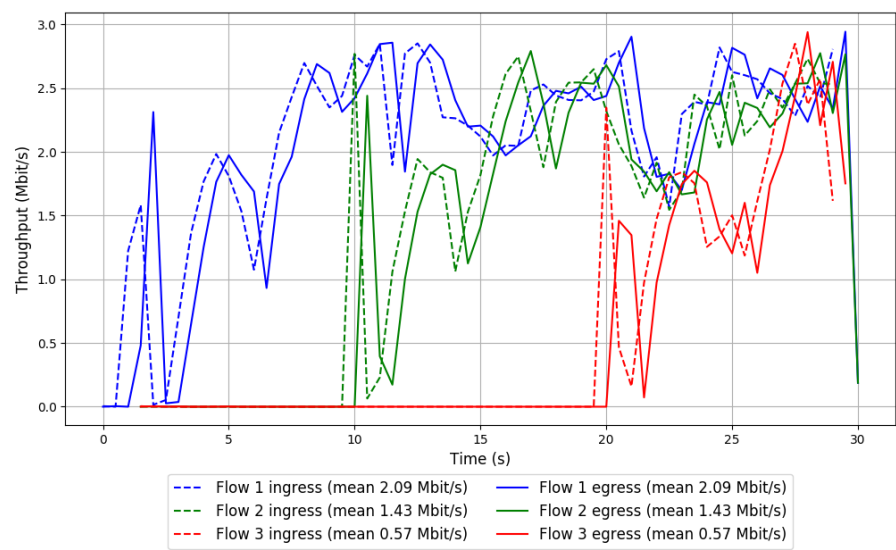


Run 1: Statistics of WebRTC media

Start at: 2018-10-03 06:30:15  
End at: 2018-10-03 06:30:45  
Local clock offset: 0.276 ms  
Remote clock offset: -0.356 ms

# Below is generated by plot.py at 2018-10-03 11:22:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.98 Mbit/s  
95th percentile per-packet one-way delay: 50.142 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.09 Mbit/s  
95th percentile per-packet one-way delay: 50.122 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.43 Mbit/s  
95th percentile per-packet one-way delay: 49.510 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 50.230 ms  
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

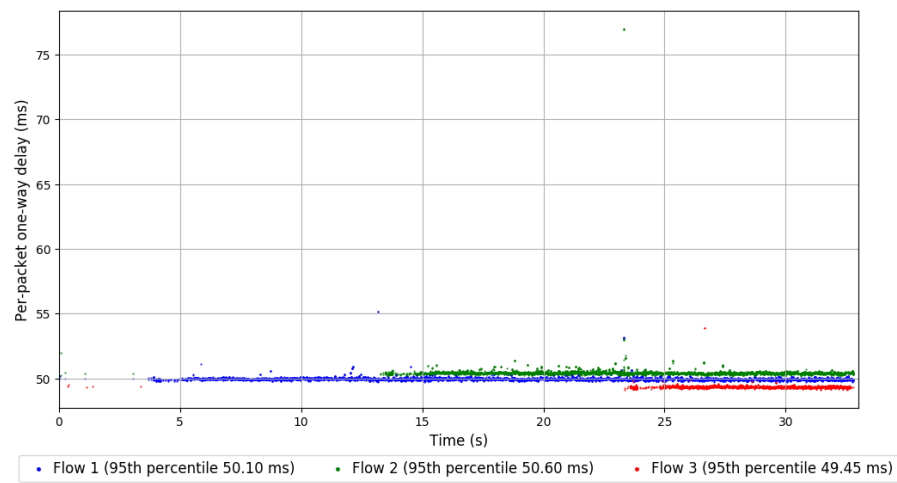
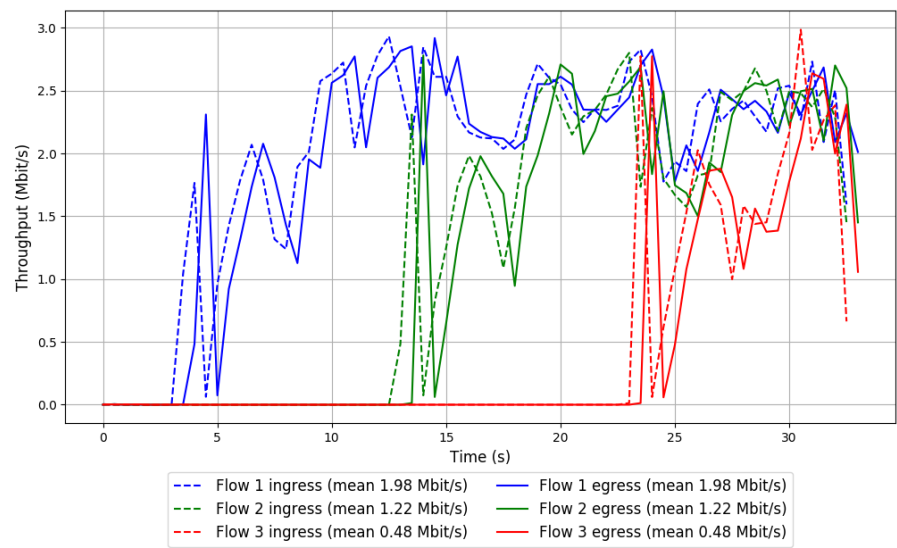


Run 2: Statistics of WebRTC media

Start at: 2018-10-03 07:00:27  
End at: 2018-10-03 07:00:57  
Local clock offset: 0.329 ms  
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2018-10-03 11:22:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 3.68 Mbit/s  
95th percentile per-packet one-way delay: 50.510 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 1.98 Mbit/s  
95th percentile per-packet one-way delay: 50.105 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.22 Mbit/s  
95th percentile per-packet one-way delay: 50.601 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.48 Mbit/s  
95th percentile per-packet one-way delay: 49.452 ms  
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-10-03 07:31:00

End at: 2018-10-03 07:31:30

Local clock offset: -0.476 ms

Remote clock offset: 0.04 ms

# Below is generated by plot.py at 2018-10-03 11:22:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 51.153 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 51.113 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 51.185 ms

Loss rate: 0.00%

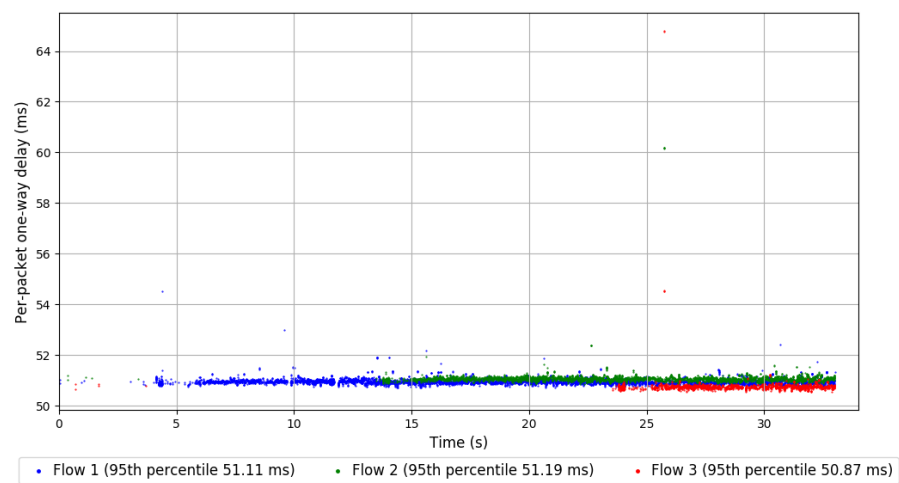
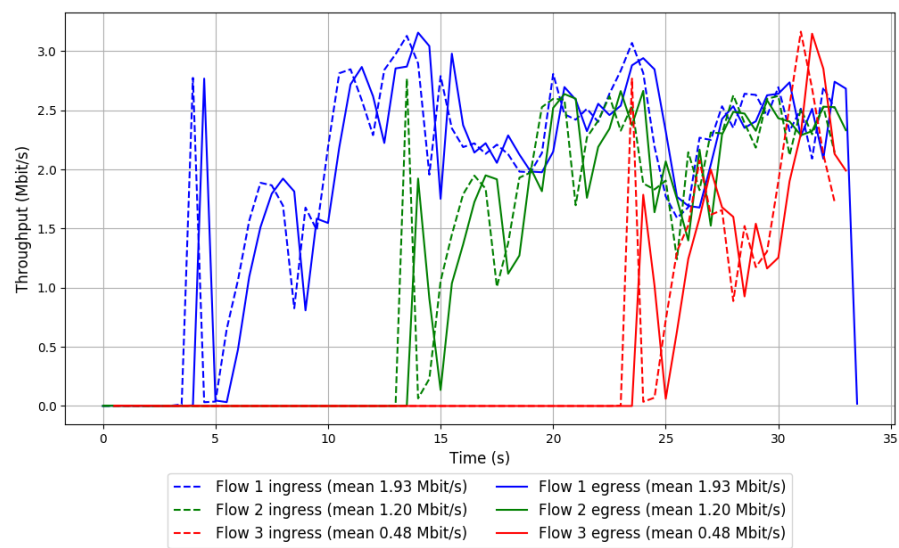
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 50.870 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link





Run 4: Statistics of WebRTC media

Start at: 2018-10-03 08:01:16

End at: 2018-10-03 08:01:46

Local clock offset: -0.146 ms

Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2018-10-03 11:22:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.89 Mbit/s

95th percentile per-packet one-way delay: 49.899 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 49.041 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 49.951 ms

Loss rate: 0.00%

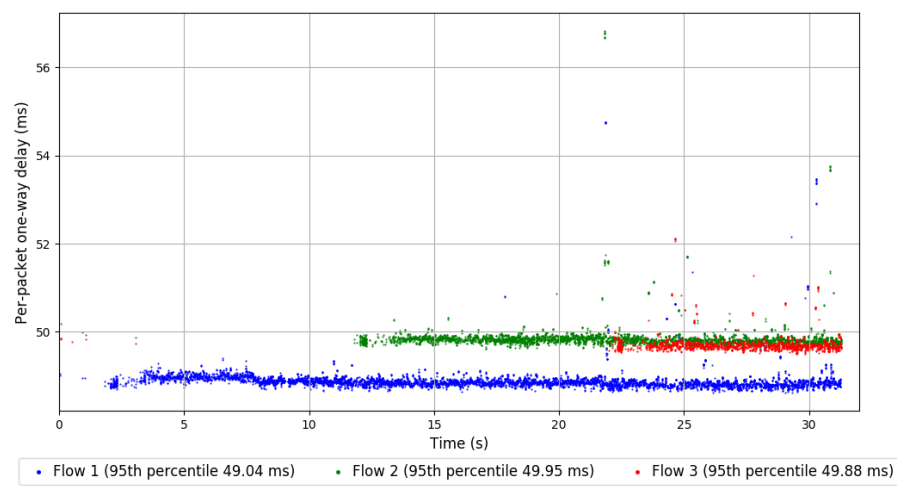
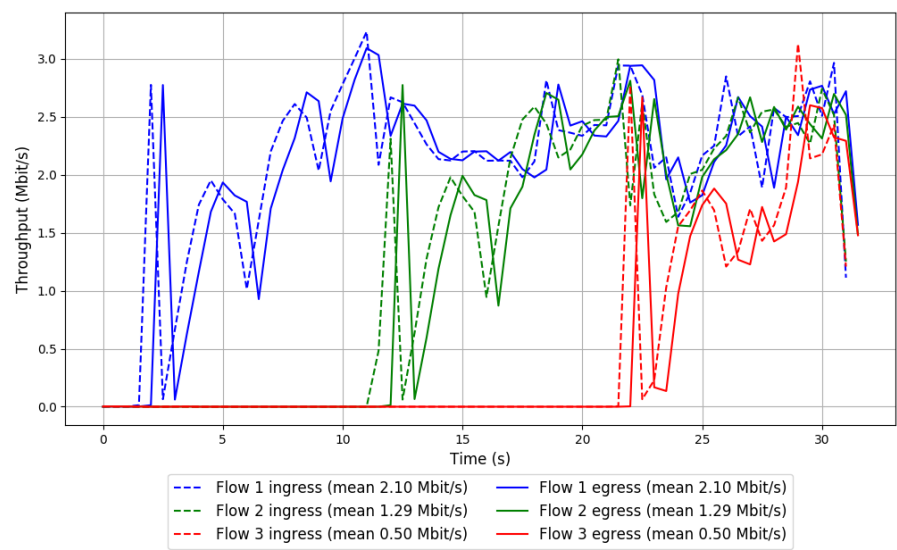
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 49.881 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-10-03 08:31:36

End at: 2018-10-03 08:32:06

Local clock offset: -0.191 ms

Remote clock offset: 0.151 ms

# Below is generated by plot.py at 2018-10-03 11:22:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 50.395 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.91 Mbit/s

95th percentile per-packet one-way delay: 49.773 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 50.546 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 49.817 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

