

## Pantheon Report

Generated at 2018-10-26 04:44:14 (UTC).

Data path: AWS India 1 on `ens5` (*local*) → India on `em1` (*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 `nets.org.sg` and have been applied to correct the timestamps in logs.

### System info:

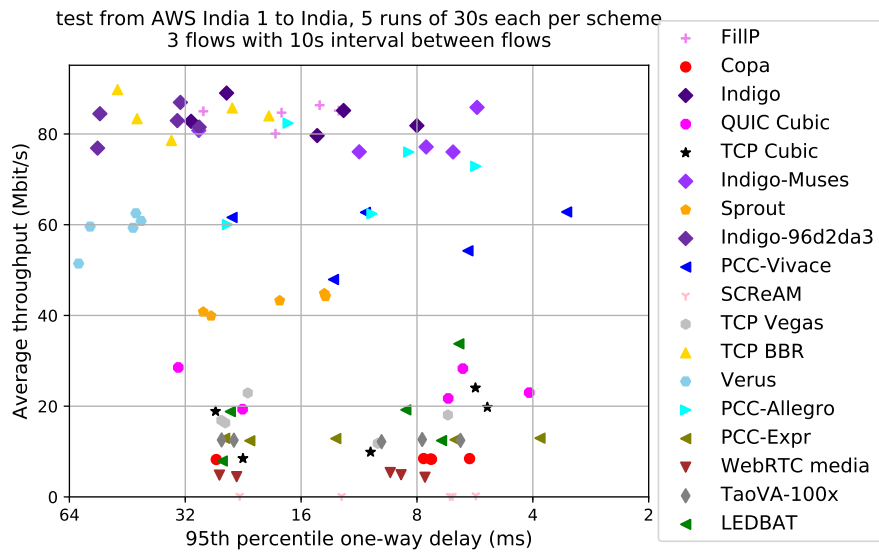
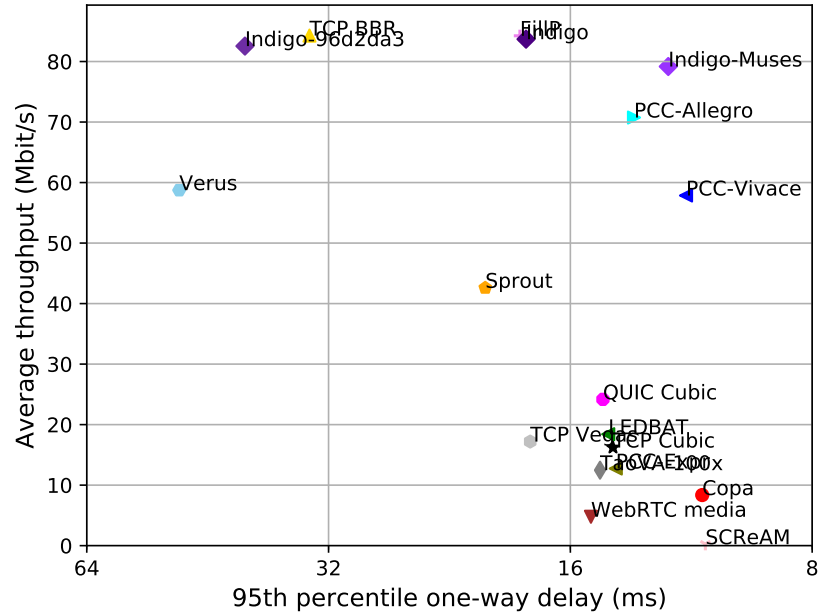
```
Linux 4.15.0-1023-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

```
branch: muses @ 2e19c0464530faa92c63f8217c9971438a26a3be
third_party/fillp @ 5332fc9127c63565e13f4933b336c02d1aabdac6
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
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 AWS India 1 to India, 5 runs of 30s each per scheme  
 3 flows with 10s interval between flows (mean of all runs by scheme)



| 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      | 52.03                  | 32.34  | 33.56  | 31.95                     | 38.10  | 26.92  | 12.32              | 12.50  | 15.17  |
| Copa           | 5      | 0.00                   | 9.80   | 5.53   | 10.07                     | 13.03  | 9.81   | 98.60              | 69.28  | 74.18  |
| TCP Cubic      | 5      | 8.38                   | 8.23   | 7.10   | 10.21                     | 6.54   | 13.56  | 1.25               | 1.18   | 1.90   |
| FillP          | 5      | 52.07                  | 33.50  | 29.93  | 15.91                     | 17.07  | 14.10  | 25.20              | 33.50  | 36.56  |
| Indigo         | 5      | 49.51                  | 35.22  | 34.65  | 14.95                     | 15.56  | 14.97  | 16.17              | 21.96  | 26.70  |
| Indigo-96d2da3 | 5      | 58.56                  | 25.77  | 22.32  | 41.42                     | 33.76  | 32.80  | 45.85              | 47.79  | 53.58  |
| LEDBAT         | 5      | 9.16                   | 9.04   | 10.05  | 14.46                     | 14.15  | 10.60  | 2.20               | 1.94   | 2.03   |
| Indigo-Muses   | 5      | 43.73                  | 42.22  | 22.37  | 8.13                      | 12.31  | 12.07  | 10.58              | 12.94  | 18.50  |
| PCC-Allegro    | 5      | 64.15                  | 6.39   | 7.13   | 10.95                     | 14.98  | 13.47  | 8.90               | 9.06   | 8.58   |
| PCC-Expr       | 5      | 8.26                   | 4.32   | 4.90   | 14.07                     | 14.05  | 14.04  | 42.24              | 30.81  | 25.02  |
| QUIC Cubic     | 5      | 12.11                  | 13.42  | 9.51   | 14.57                     | 11.82  | 10.48  | 3.53               | 3.36   | 5.11   |
| SCReAM         | 5      | 0.10                   | 0.13   | 0.16   | 6.81                      | 10.82  | 7.15   | 1.96               | 1.14   | 1.36   |
| Sprout         | 5      | 22.75                  | 18.68  | 22.51  | 13.24                     | 22.36  | 13.98  | 3.94               | 5.71   | 4.21   |
| TaoVA-100x     | 5      | 6.67                   | 8.31   | 1.72   | 14.72                     | 14.12  | 13.91  | 87.23              | 90.62  | 93.33  |
| TCP Vegas      | 5      | 9.52                   | 7.65   | 7.77   | 15.68                     | 14.07  | 20.61  | 3.12               | 1.63   | 2.33   |
| Verus          | 5      | 34.83                  | 27.94  | 20.07  | 47.44                     | 45.95  | 46.87  | 46.17              | 56.57  | 37.64  |
| PCC-Vivace     | 5      | 39.94                  | 20.94  | 12.15  | 6.34                      | 11.91  | 12.29  | 7.01               | 7.12   | 7.67   |
| WebRTC media   | 5      | 2.77                   | 1.55   | 0.46   | 8.81                      | 12.45  | 12.41  | 1.94               | 2.23   | 3.13   |

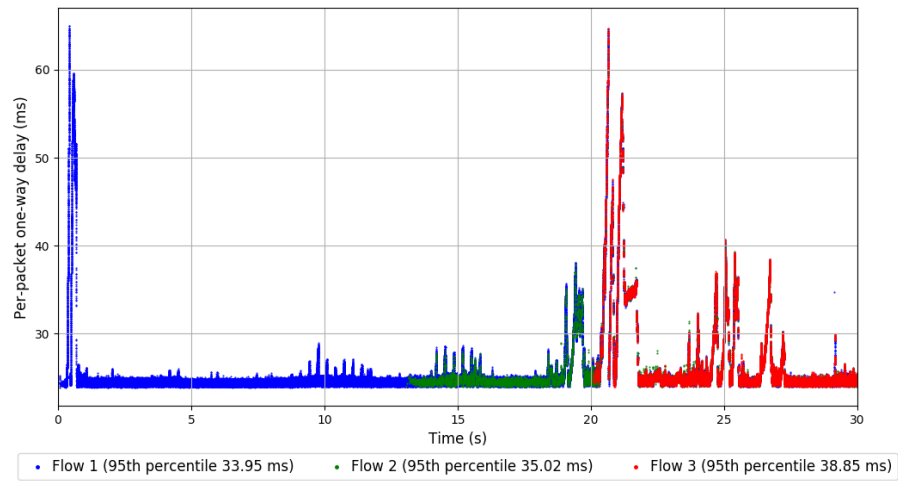
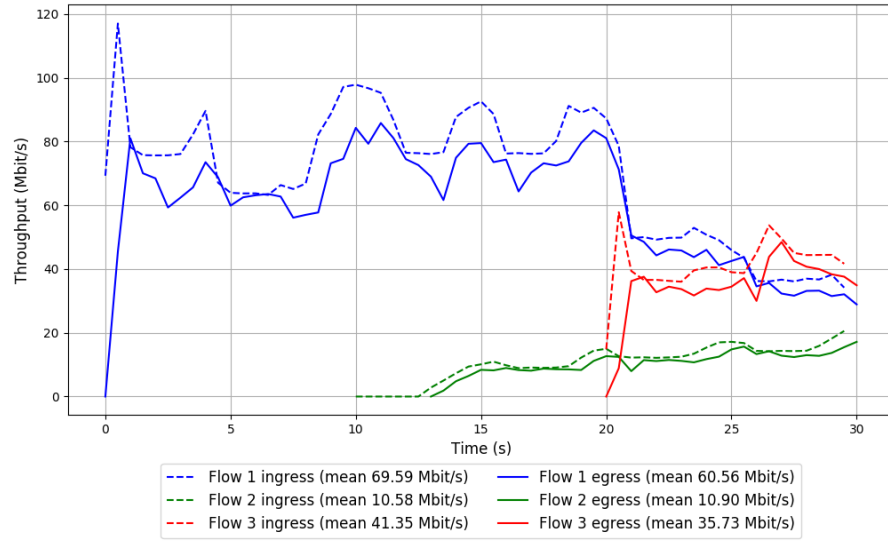


Run 1: Statistics of TCP BBR

Start at: 2018-10-26 03:03:59  
End at: 2018-10-26 03:04:29  
Local clock offset: 1.471 ms  
Remote clock offset: -5.458 ms

# Below is generated by plot.py at 2018-10-26 04:37:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 78.57 Mbit/s  
95th percentile per-packet one-way delay: 34.759 ms  
Loss rate: 13.11%  
-- Flow 1:  
Average throughput: 60.56 Mbit/s  
95th percentile per-packet one-way delay: 33.953 ms  
Loss rate: 13.02%  
-- Flow 2:  
Average throughput: 10.90 Mbit/s  
95th percentile per-packet one-way delay: 35.019 ms  
Loss rate: 12.69%  
-- Flow 3:  
Average throughput: 35.73 Mbit/s  
95th percentile per-packet one-way delay: 38.847 ms  
Loss rate: 13.78%

## Run 1: Report of TCP BBR — Data Link

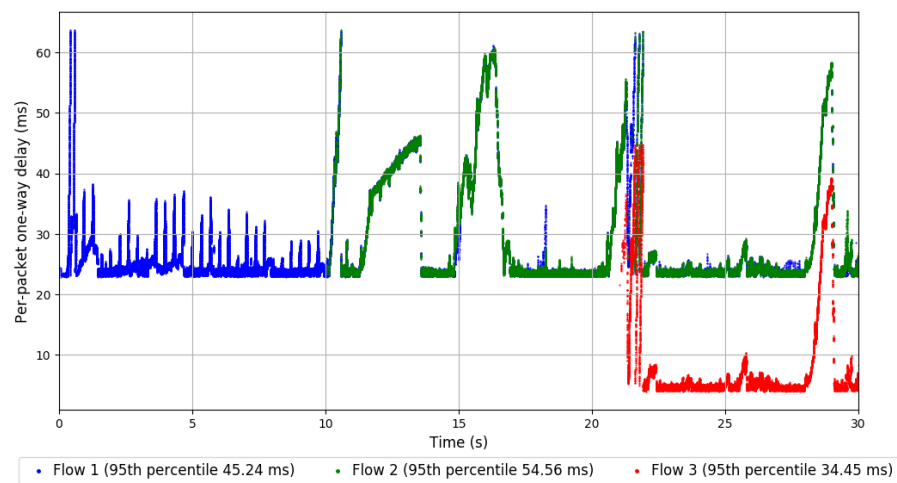
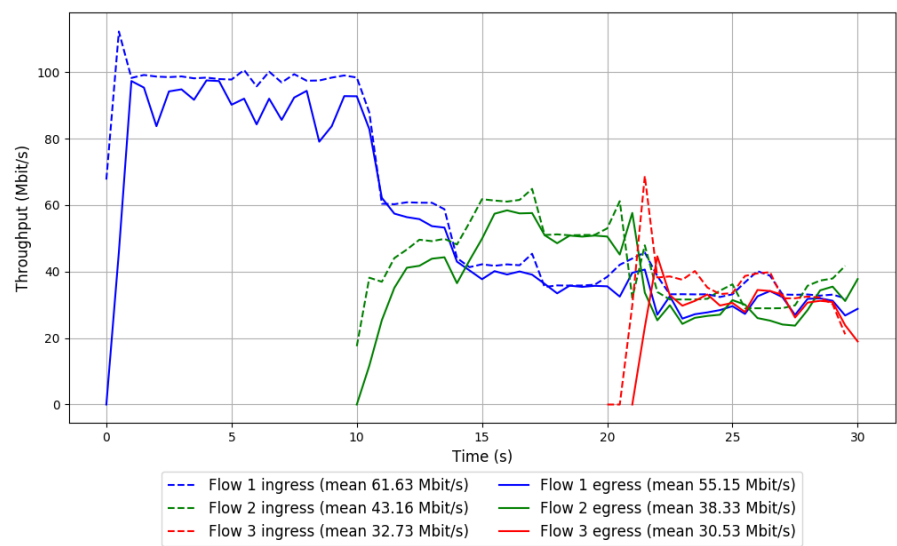


Run 2: Statistics of TCP BBR

Start at: 2018-10-26 03:25:13  
End at: 2018-10-26 03:25:43  
Local clock offset: 3.823 ms  
Remote clock offset: -5.152 ms

# Below is generated by plot.py at 2018-10-26 04:38:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 89.78 Mbit/s  
95th percentile per-packet one-way delay: 47.979 ms  
Loss rate: 11.39%  
-- Flow 1:  
Average throughput: 55.15 Mbit/s  
95th percentile per-packet one-way delay: 45.238 ms  
Loss rate: 10.57%  
-- Flow 2:  
Average throughput: 38.33 Mbit/s  
95th percentile per-packet one-way delay: 54.558 ms  
Loss rate: 11.29%  
-- Flow 3:  
Average throughput: 30.53 Mbit/s  
95th percentile per-packet one-way delay: 34.445 ms  
Loss rate: 16.31%

Run 2: Report of TCP BBR — Data Link

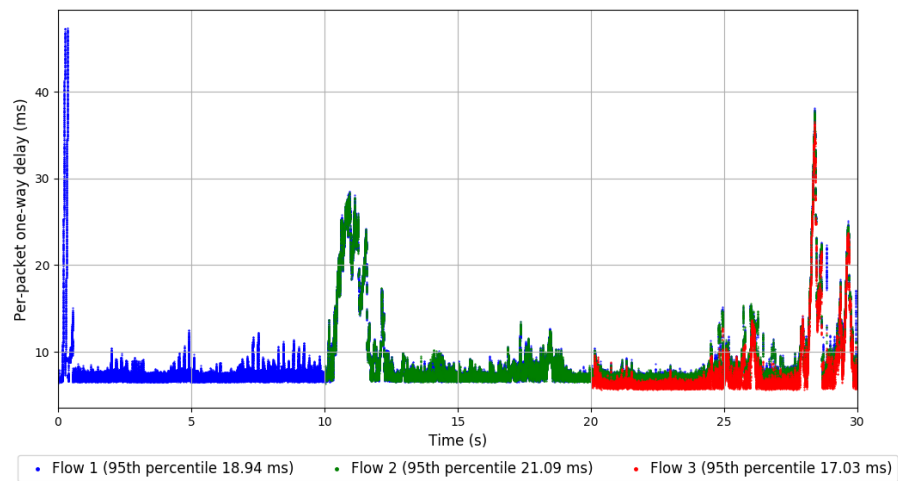
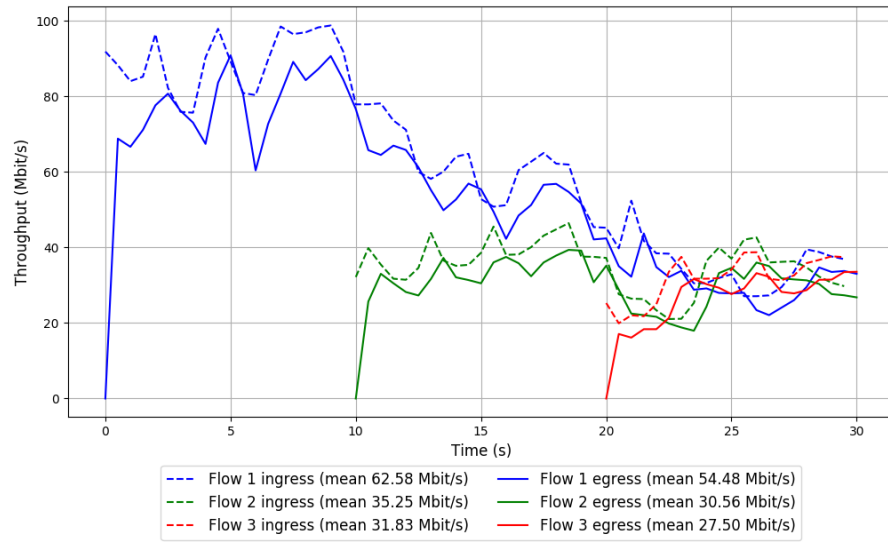


Run 3: Statistics of TCP BBR

Start at: 2018-10-26 03:46:29  
End at: 2018-10-26 03:46:59  
Local clock offset: 0.008 ms  
Remote clock offset: -5.987 ms

# Below is generated by plot.py at 2018-10-26 04:38:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 83.99 Mbit/s  
95th percentile per-packet one-way delay: 19.400 ms  
Loss rate: 13.10%  
-- Flow 1:  
Average throughput: 54.48 Mbit/s  
95th percentile per-packet one-way delay: 18.944 ms  
Loss rate: 12.95%  
-- Flow 2:  
Average throughput: 30.56 Mbit/s  
95th percentile per-packet one-way delay: 21.087 ms  
Loss rate: 13.32%  
-- Flow 3:  
Average throughput: 27.50 Mbit/s  
95th percentile per-packet one-way delay: 17.032 ms  
Loss rate: 13.57%

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

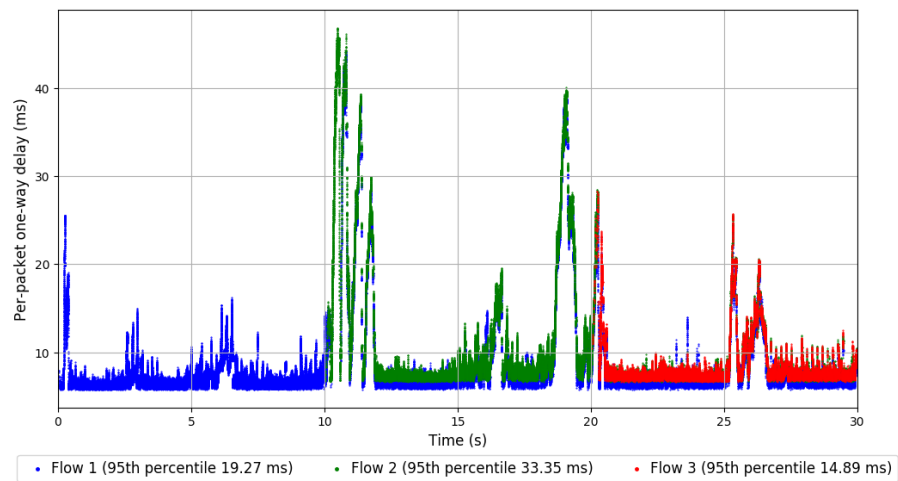
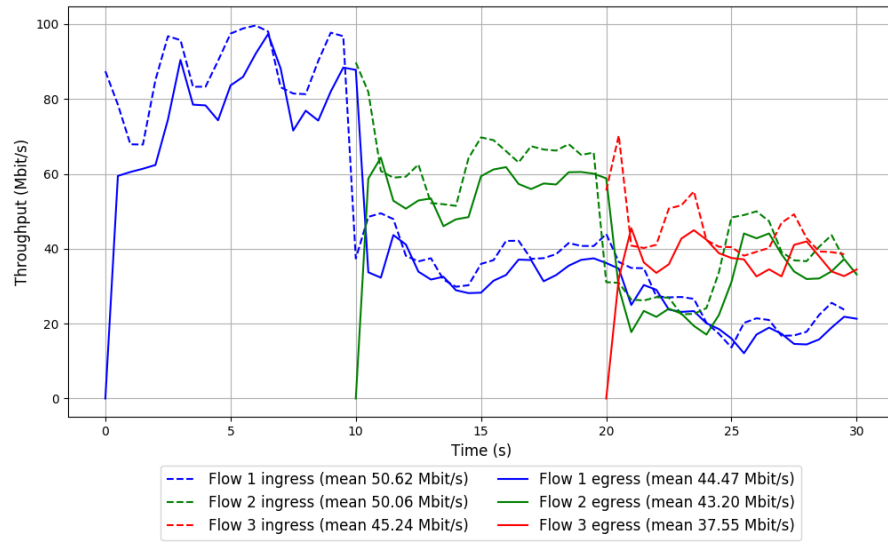


Run 4: Statistics of TCP BBR

Start at: 2018-10-26 04:07:37  
End at: 2018-10-26 04:08:07  
Local clock offset: 0.421 ms  
Remote clock offset: -5.604 ms

# Below is generated by plot.py at 2018-10-26 04:38:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.73 Mbit/s  
95th percentile per-packet one-way delay: 24.159 ms  
Loss rate: 13.41%  
-- Flow 1:  
Average throughput: 44.47 Mbit/s  
95th percentile per-packet one-way delay: 19.267 ms  
Loss rate: 12.15%  
-- Flow 2:  
Average throughput: 43.20 Mbit/s  
95th percentile per-packet one-way delay: 33.347 ms  
Loss rate: 13.69%  
-- Flow 3:  
Average throughput: 37.55 Mbit/s  
95th percentile per-packet one-way delay: 14.887 ms  
Loss rate: 17.01%

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



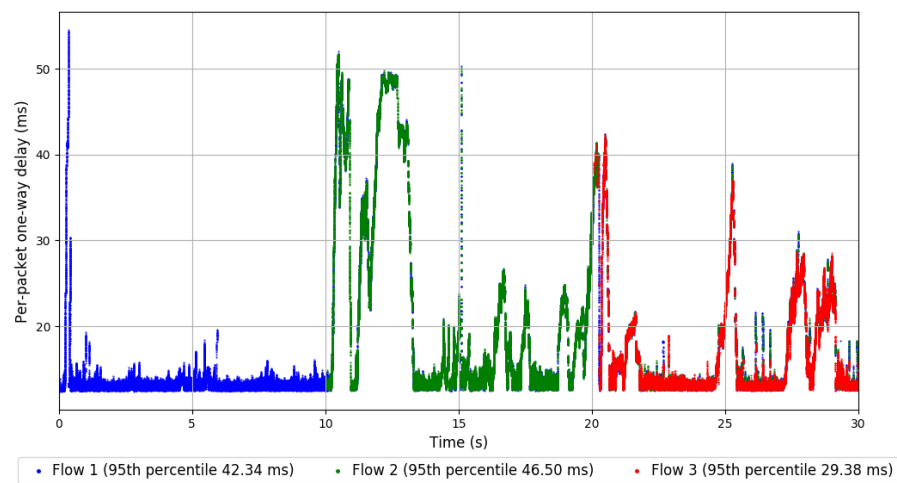
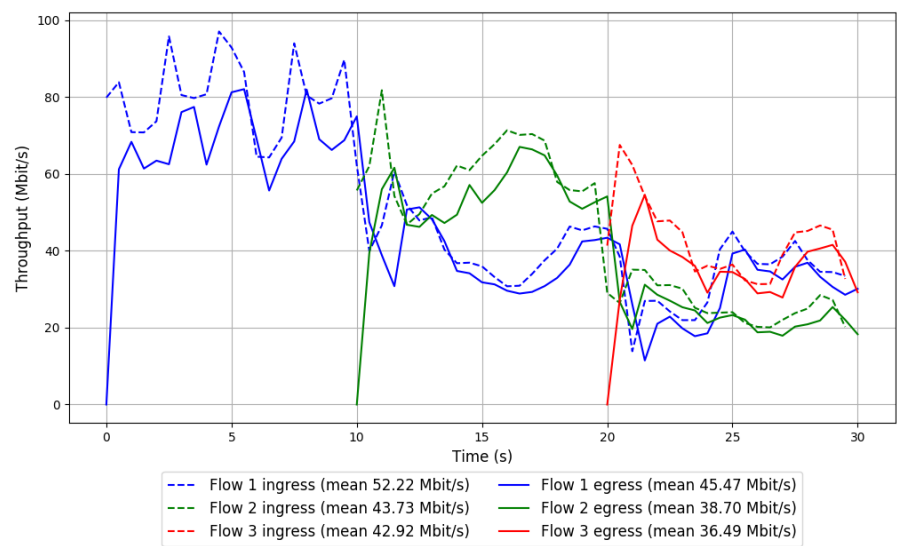


Run 5: Statistics of TCP BBR

Start at: 2018-10-26 04:29:04  
End at: 2018-10-26 04:29:34  
Local clock offset: -0.402 ms  
Remote clock offset: -1.065 ms

# Below is generated by plot.py at 2018-10-26 04:38:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 83.38 Mbit/s  
95th percentile per-packet one-way delay: 42.690 ms  
Loss rate: 12.83%  
-- Flow 1:  
Average throughput: 45.47 Mbit/s  
95th percentile per-packet one-way delay: 42.339 ms  
Loss rate: 12.93%  
-- Flow 2:  
Average throughput: 38.70 Mbit/s  
95th percentile per-packet one-way delay: 46.503 ms  
Loss rate: 11.50%  
-- Flow 3:  
Average throughput: 36.49 Mbit/s  
95th percentile per-packet one-way delay: 29.375 ms  
Loss rate: 15.19%

Run 5: Report of TCP BBR — Data Link

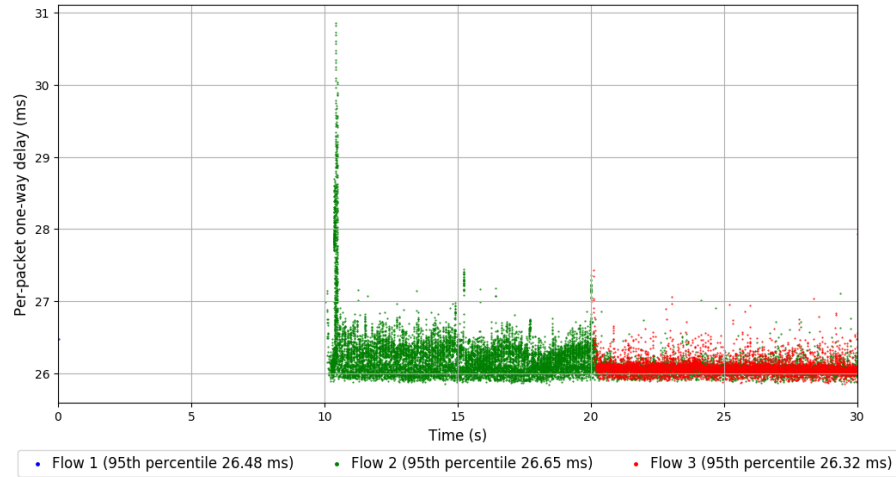
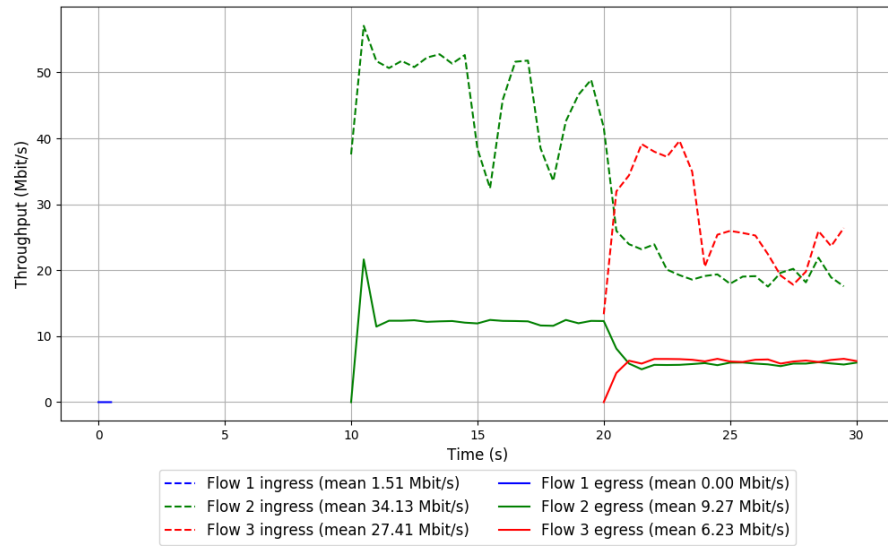


Run 1: Statistics of Copa

Start at: 2018-10-26 02:53:27  
End at: 2018-10-26 02:53:57  
Local clock offset: 0.313 ms  
Remote clock offset: -4.129 ms

# Below is generated by plot.py at 2018-10-26 04:38:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.24 Mbit/s  
95th percentile per-packet one-way delay: 26.581 ms  
Loss rate: 74.14%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 26.477 ms  
Loss rate: 98.60%  
-- Flow 2:  
Average throughput: 9.27 Mbit/s  
95th percentile per-packet one-way delay: 26.647 ms  
Loss rate: 72.87%  
-- Flow 3:  
Average throughput: 6.23 Mbit/s  
95th percentile per-packet one-way delay: 26.318 ms  
Loss rate: 77.29%

## Run 1: Report of Copa — Data Link

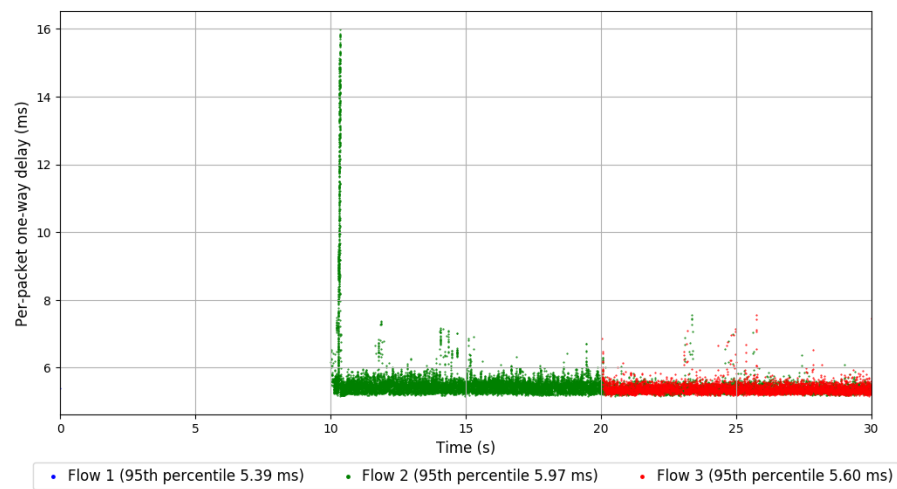
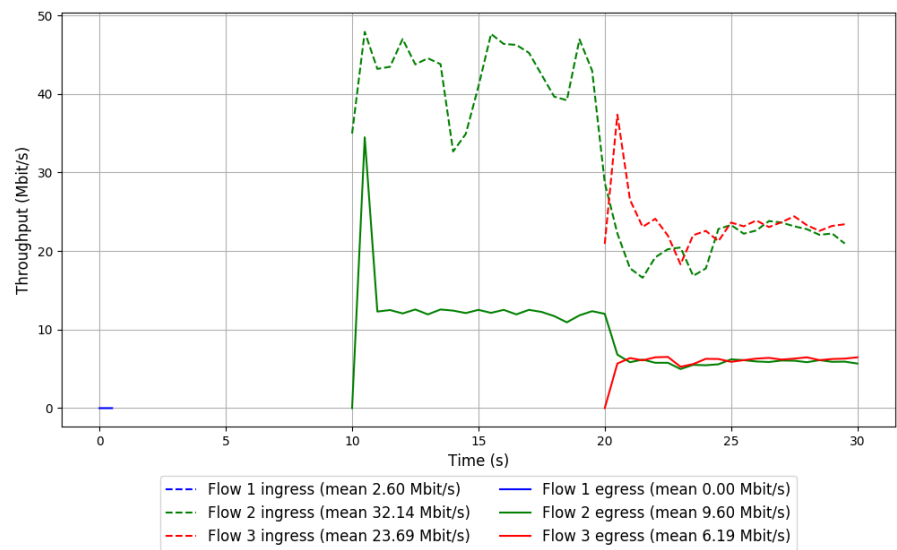


Run 2: Statistics of Copa

Start at: 2018-10-26 03:14:43  
End at: 2018-10-26 03:15:13  
Local clock offset: 2.806 ms  
Remote clock offset: -5.441 ms

# Below is generated by plot.py at 2018-10-26 04:38:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.45 Mbit/s  
95th percentile per-packet one-way delay: 5.840 ms  
Loss rate: 71.15%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 5.387 ms  
Loss rate: 98.60%  
-- Flow 2:  
Average throughput: 9.60 Mbit/s  
95th percentile per-packet one-way delay: 5.966 ms  
Loss rate: 70.14%  
-- Flow 3:  
Average throughput: 6.19 Mbit/s  
95th percentile per-packet one-way delay: 5.602 ms  
Loss rate: 73.89%

Run 2: Report of Copa — Data Link

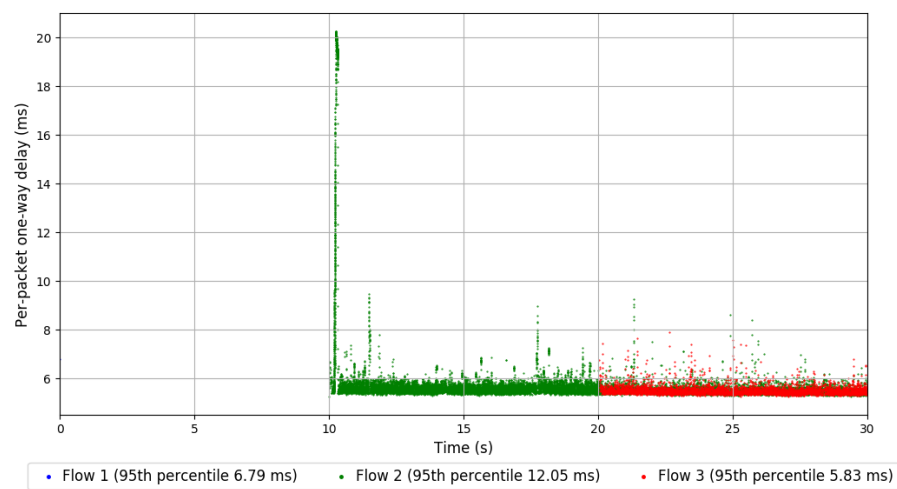
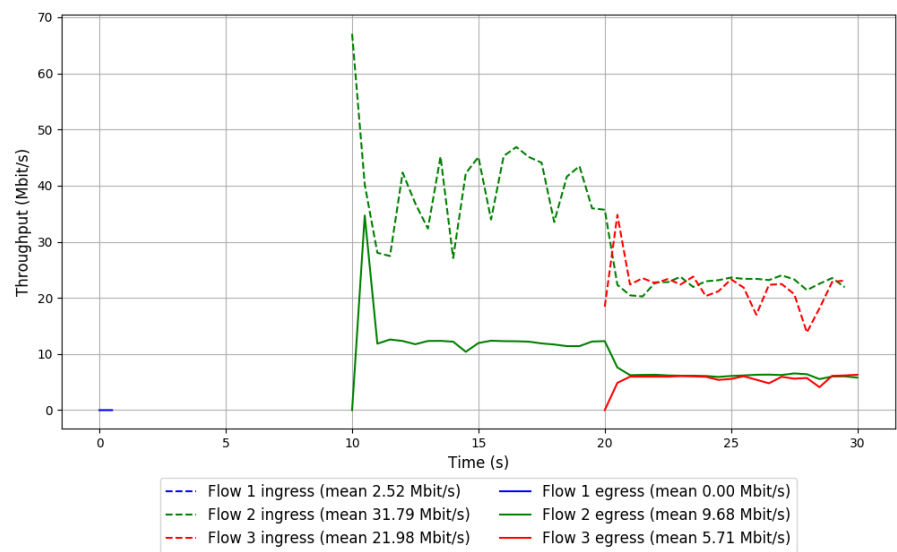


Run 3: Statistics of Copa

Start at: 2018-10-26 03:35:48  
End at: 2018-10-26 03:36:18  
Local clock offset: 3.373 ms  
Remote clock offset: -4.536 ms

# Below is generated by plot.py at 2018-10-26 04:38:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.35 Mbit/s  
95th percentile per-packet one-way delay: 7.378 ms  
Loss rate: 70.69%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 6.788 ms  
Loss rate: 98.60%  
-- Flow 2:  
Average throughput: 9.68 Mbit/s  
95th percentile per-packet one-way delay: 12.046 ms  
Loss rate: 69.55%  
-- Flow 3:  
Average throughput: 5.71 Mbit/s  
95th percentile per-packet one-way delay: 5.828 ms  
Loss rate: 74.01%

Run 3: Report of Copa — Data Link



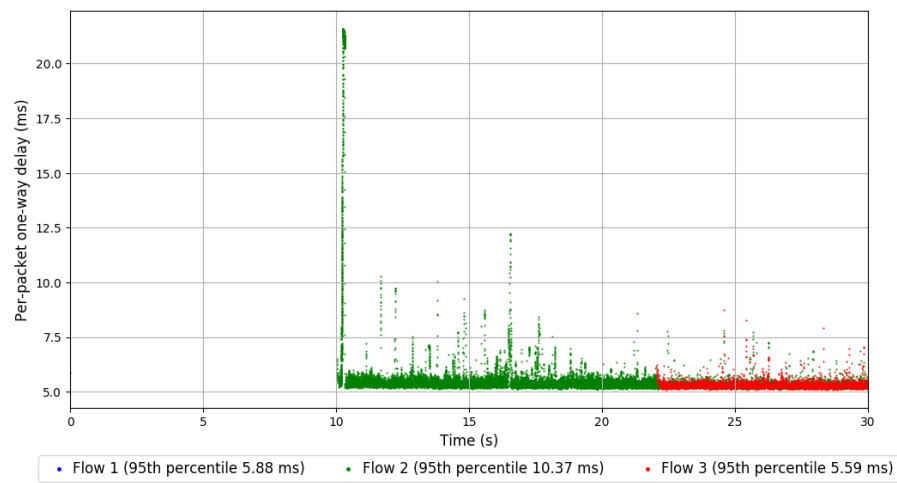
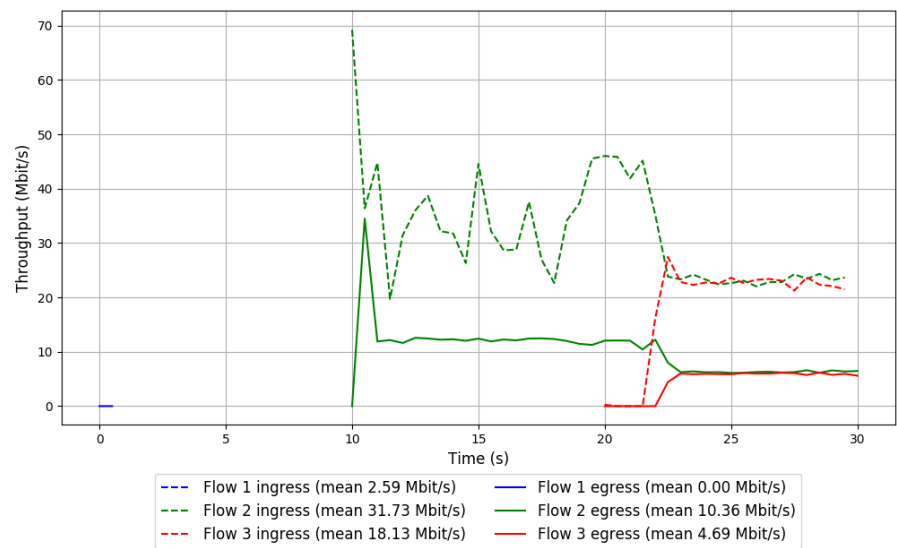


Run 4: Statistics of Copa

Start at: 2018-10-26 03:57:06  
End at: 2018-10-26 03:57:36  
Local clock offset: 2.193 ms  
Remote clock offset: -5.003 ms

# Below is generated by plot.py at 2018-10-26 04:38:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.46 Mbit/s  
95th percentile per-packet one-way delay: 7.688 ms  
Loss rate: 68.87%  
-- Flow 1:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 5.878 ms  
Loss rate: 98.60%  
-- Flow 2:  
Average throughput: 10.36 Mbit/s  
95th percentile per-packet one-way delay: 10.374 ms  
Loss rate: 67.37%  
-- Flow 3:  
Average throughput: 4.69 Mbit/s  
95th percentile per-packet one-way delay: 5.592 ms  
Loss rate: 74.10%

Run 4: Report of Copa — Data Link

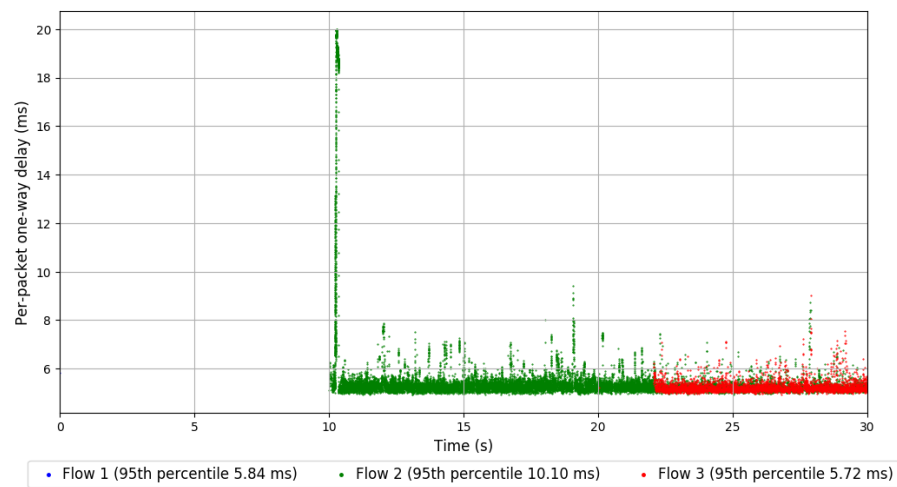
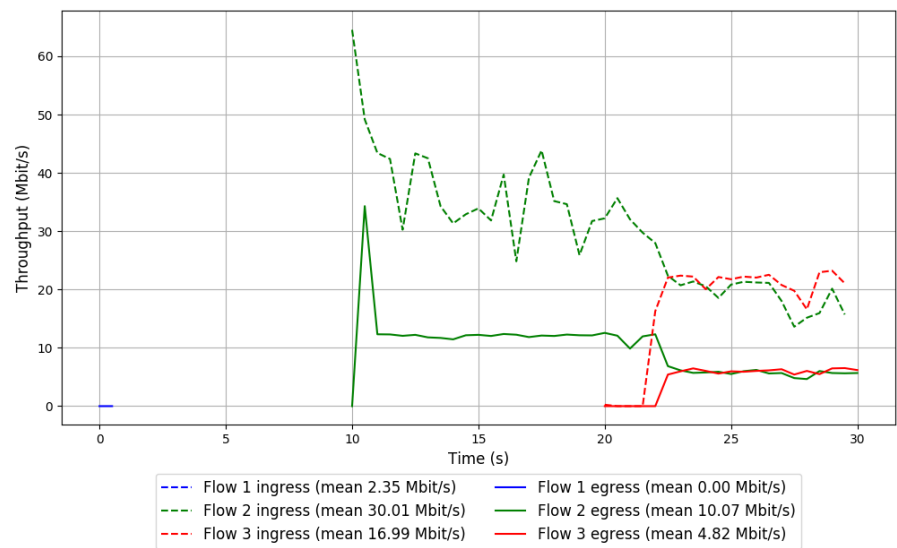


Run 5: Statistics of Copa

Start at: 2018-10-26 04:18:30  
End at: 2018-10-26 04:19:00  
Local clock offset: 2.95 ms  
Remote clock offset: -5.071 ms

```
# Below is generated by plot.py at 2018-10-26 04:38:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.31 Mbit/s
95th percentile per-packet one-way delay: 7.334 ms
Loss rate: 67.59%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5.841 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 10.07 Mbit/s
95th percentile per-packet one-way delay: 10.101 ms
Loss rate: 66.45%
-- Flow 3:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 5.716 ms
Loss rate: 71.63%
```

Run 5: Report of Copa — Data Link

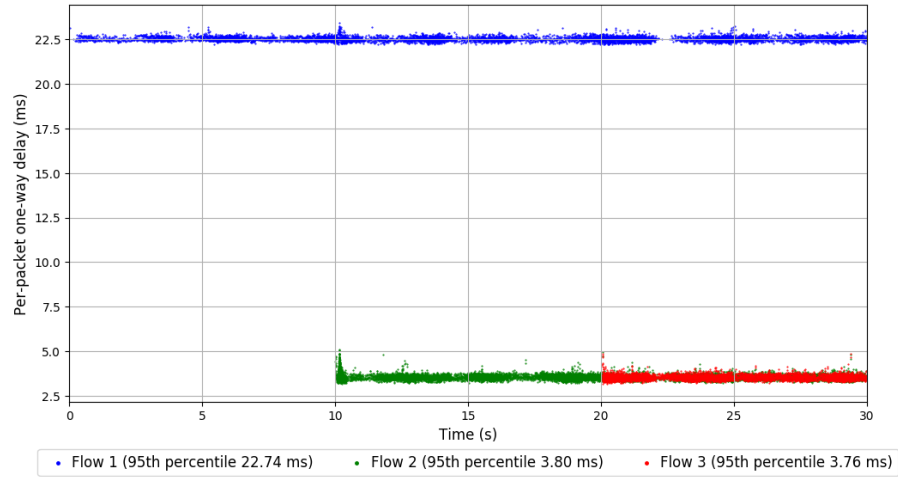
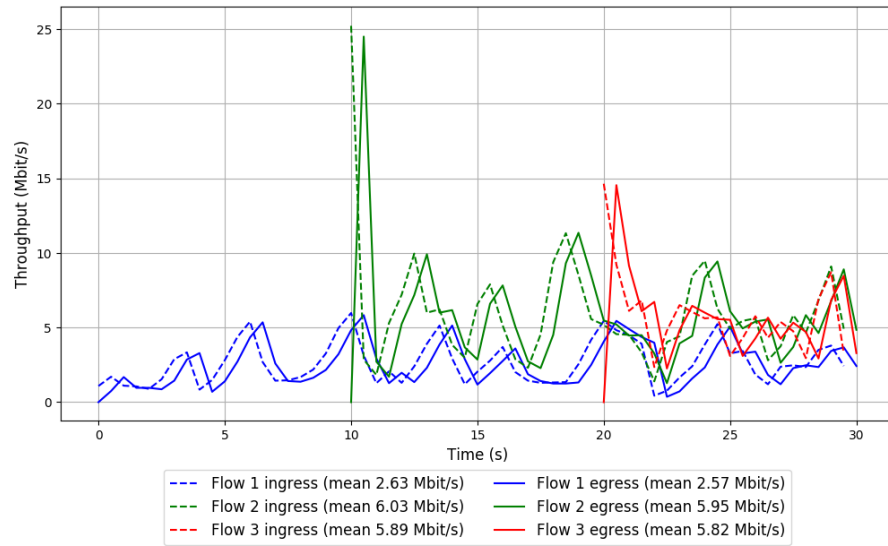


Run 1: Statistics of TCP Cubic

Start at: 2018-10-26 03:00:31  
End at: 2018-10-26 03:01:01  
Local clock offset: 3.347 ms  
Remote clock offset: -4.981 ms

# Below is generated by plot.py at 2018-10-26 04:38:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.47 Mbit/s  
95th percentile per-packet one-way delay: 22.661 ms  
Loss rate: 1.61%  
-- Flow 1:  
Average throughput: 2.57 Mbit/s  
95th percentile per-packet one-way delay: 22.743 ms  
Loss rate: 2.37%  
-- Flow 2:  
Average throughput: 5.95 Mbit/s  
95th percentile per-packet one-way delay: 3.802 ms  
Loss rate: 1.36%  
-- Flow 3:  
Average throughput: 5.82 Mbit/s  
95th percentile per-packet one-way delay: 3.762 ms  
Loss rate: 1.08%

# Run 1: Report of TCP Cubic — Data Link

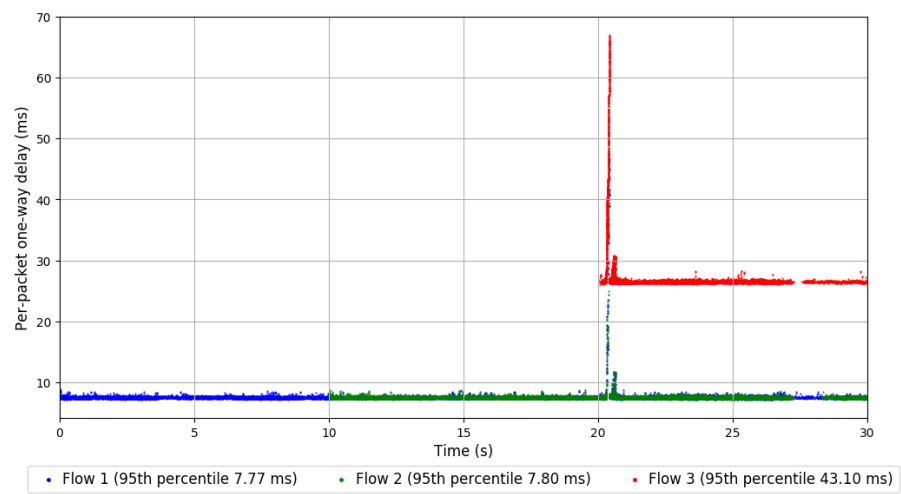
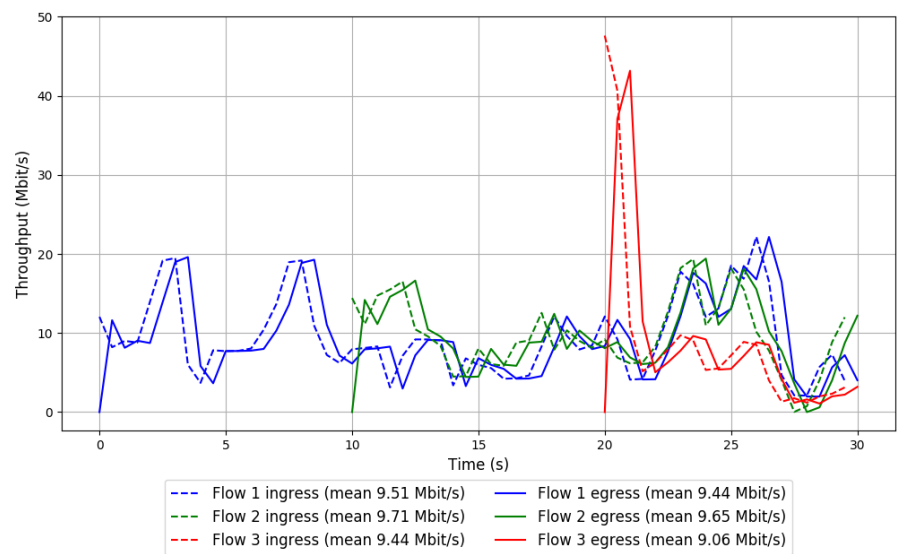


Run 2: Statistics of TCP Cubic

Start at: 2018-10-26 03:21:42  
End at: 2018-10-26 03:22:12  
Local clock offset: 0.643 ms  
Remote clock offset: -4.959 ms

# Below is generated by plot.py at 2018-10-26 04:38:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 18.88 Mbit/s  
95th percentile per-packet one-way delay: 26.691 ms  
Loss rate: 1.24%  
-- Flow 1:  
Average throughput: 9.44 Mbit/s  
95th percentile per-packet one-way delay: 7.774 ms  
Loss rate: 0.69%  
-- Flow 2:  
Average throughput: 9.65 Mbit/s  
95th percentile per-packet one-way delay: 7.796 ms  
Loss rate: 0.62%  
-- Flow 3:  
Average throughput: 9.06 Mbit/s  
95th percentile per-packet one-way delay: 43.096 ms  
Loss rate: 4.21%

Run 2: Report of TCP Cubic — Data Link



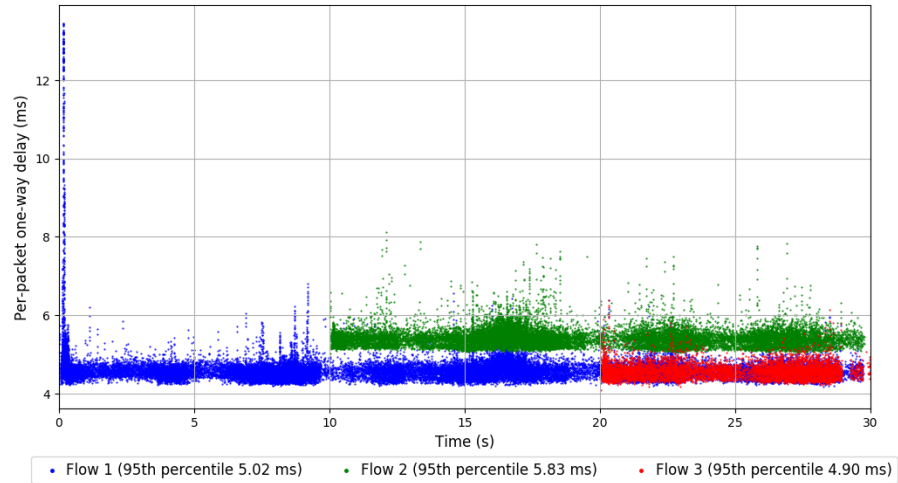
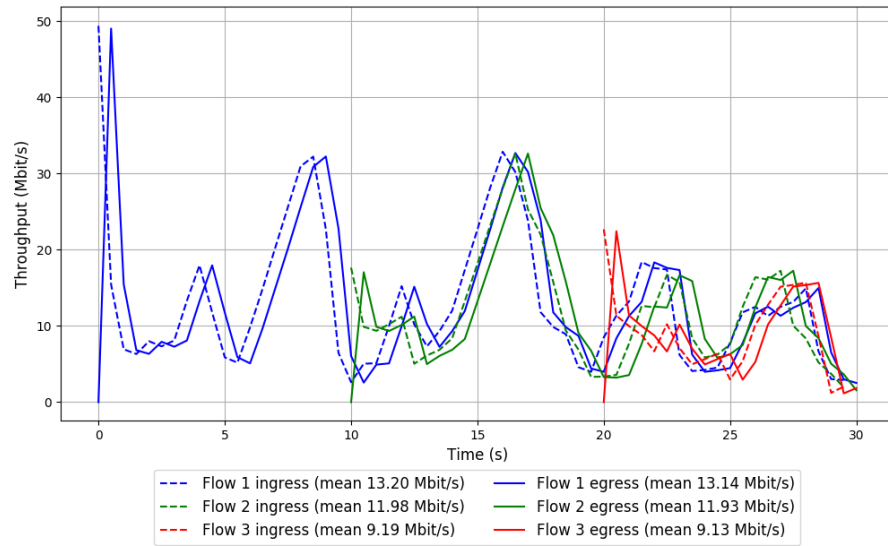


Run 3: Statistics of TCP Cubic

Start at: 2018-10-26 03:42:59  
End at: 2018-10-26 03:43:29  
Local clock offset: 1.846 ms  
Remote clock offset: -5.715 ms

# Below is generated by plot.py at 2018-10-26 04:38:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 24.04 Mbit/s  
95th percentile per-packet one-way delay: 5.638 ms  
Loss rate: 0.49%  
-- Flow 1:  
Average throughput: 13.14 Mbit/s  
95th percentile per-packet one-way delay: 5.019 ms  
Loss rate: 0.42%  
-- Flow 2:  
Average throughput: 11.93 Mbit/s  
95th percentile per-packet one-way delay: 5.829 ms  
Loss rate: 0.56%  
-- Flow 3:  
Average throughput: 9.13 Mbit/s  
95th percentile per-packet one-way delay: 4.904 ms  
Loss rate: 0.62%

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

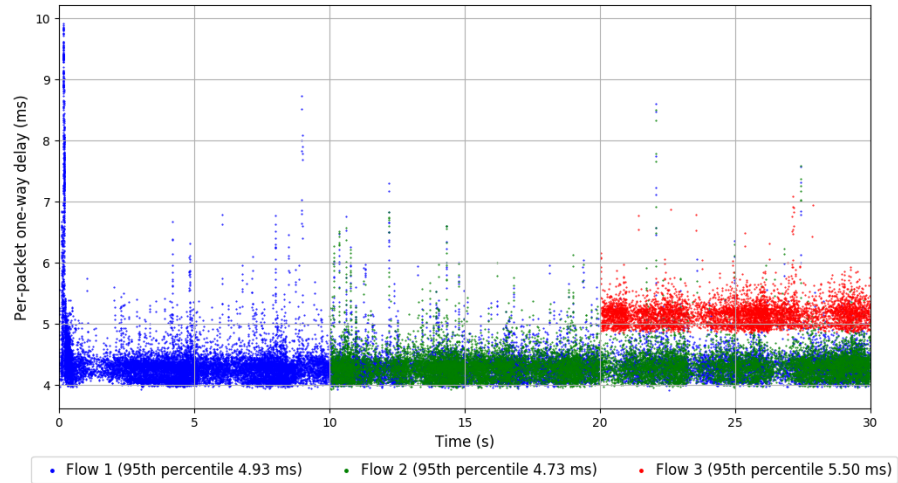
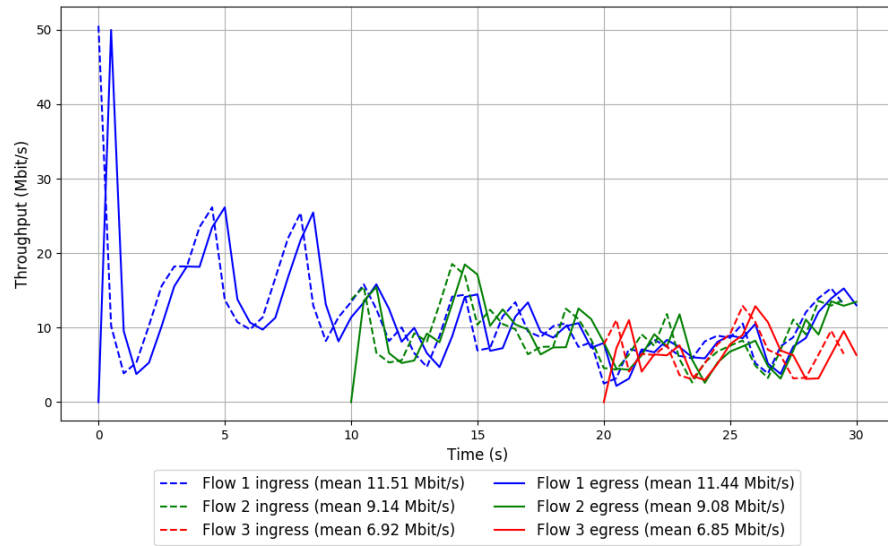


Run 4: Statistics of TCP Cubic

Start at: 2018-10-26 04:04:07  
End at: 2018-10-26 04:04:37  
Local clock offset: 2.672 ms  
Remote clock offset: -4.996 ms

# Below is generated by plot.py at 2018-10-26 04:38:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 19.77 Mbit/s  
95th percentile per-packet one-way delay: 5.250 ms  
Loss rate: 0.64%  
-- Flow 1:  
Average throughput: 11.44 Mbit/s  
95th percentile per-packet one-way delay: 4.927 ms  
Loss rate: 0.54%  
-- Flow 2:  
Average throughput: 9.08 Mbit/s  
95th percentile per-packet one-way delay: 4.732 ms  
Loss rate: 0.65%  
-- Flow 3:  
Average throughput: 6.85 Mbit/s  
95th percentile per-packet one-way delay: 5.498 ms  
Loss rate: 1.08%

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

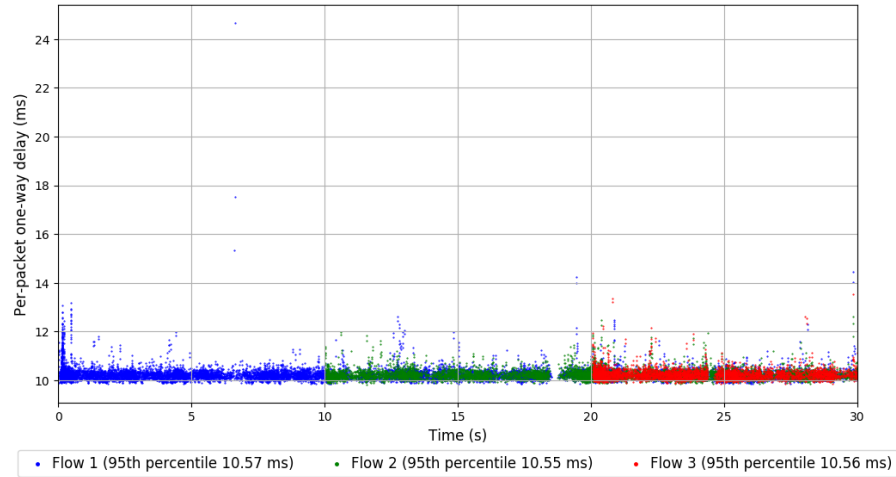
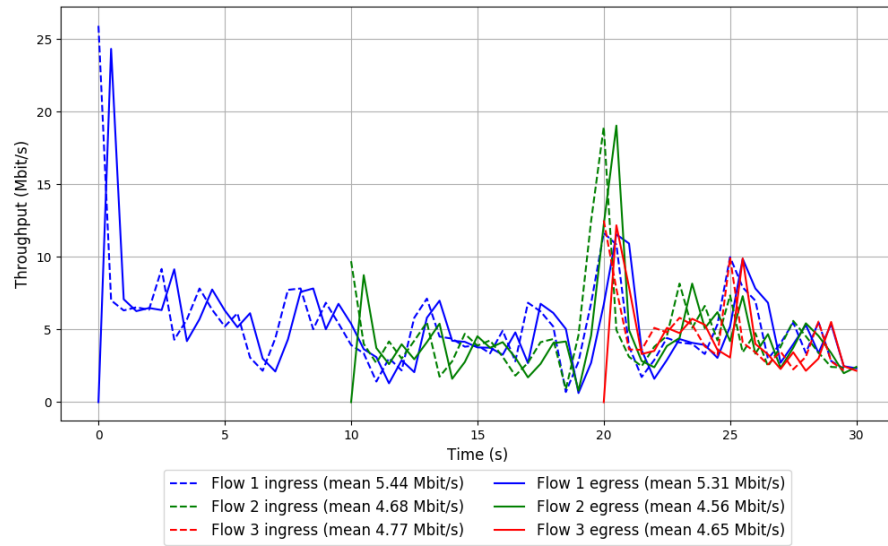


Run 5: Statistics of TCP Cubic

Start at: 2018-10-26 04:25:33  
End at: 2018-10-26 04:26:03  
Local clock offset: 1.846 ms  
Remote clock offset: -1.358 ms

# Below is generated by plot.py at 2018-10-26 04:38:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 9.89 Mbit/s  
95th percentile per-packet one-way delay: 10.561 ms  
Loss rate: 2.43%  
-- Flow 1:  
Average throughput: 5.31 Mbit/s  
95th percentile per-packet one-way delay: 10.567 ms  
Loss rate: 2.25%  
-- Flow 2:  
Average throughput: 4.56 Mbit/s  
95th percentile per-packet one-way delay: 10.555 ms  
Loss rate: 2.71%  
-- Flow 3:  
Average throughput: 4.65 Mbit/s  
95th percentile per-packet one-way delay: 10.560 ms  
Loss rate: 2.50%

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

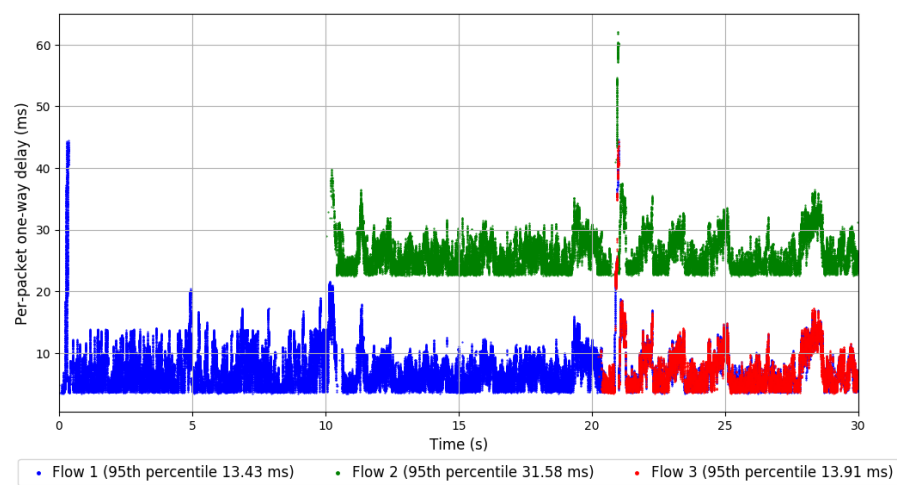
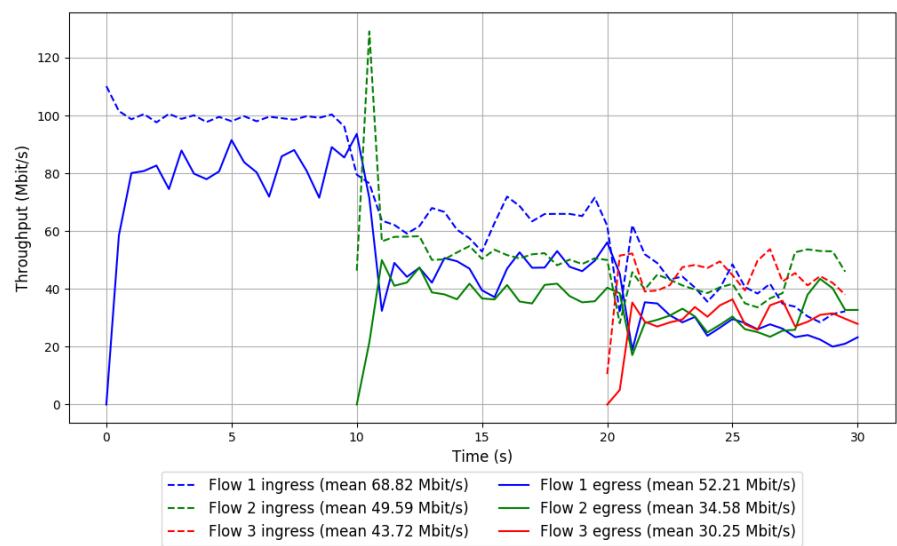


Run 1: Statistics of FillP

Start at: 2018-10-26 03:08:59  
End at: 2018-10-26 03:09:29  
Local clock offset: 3.779 ms  
Remote clock offset: -4.755 ms

# Below is generated by plot.py at 2018-10-26 04:38:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.00 Mbit/s  
95th percentile per-packet one-way delay: 28.716 ms  
Loss rate: 26.90%  
-- Flow 1:  
Average throughput: 52.21 Mbit/s  
95th percentile per-packet one-way delay: 13.434 ms  
Loss rate: 24.13%  
-- Flow 2:  
Average throughput: 34.58 Mbit/s  
95th percentile per-packet one-way delay: 31.581 ms  
Loss rate: 30.32%  
-- Flow 3:  
Average throughput: 30.25 Mbit/s  
95th percentile per-packet one-way delay: 13.911 ms  
Loss rate: 32.24%

Run 1: Report of FillP — Data Link



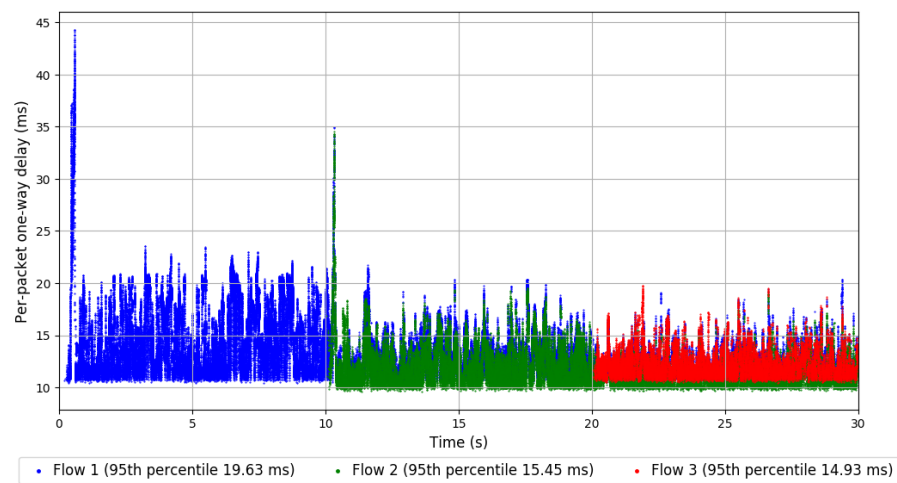
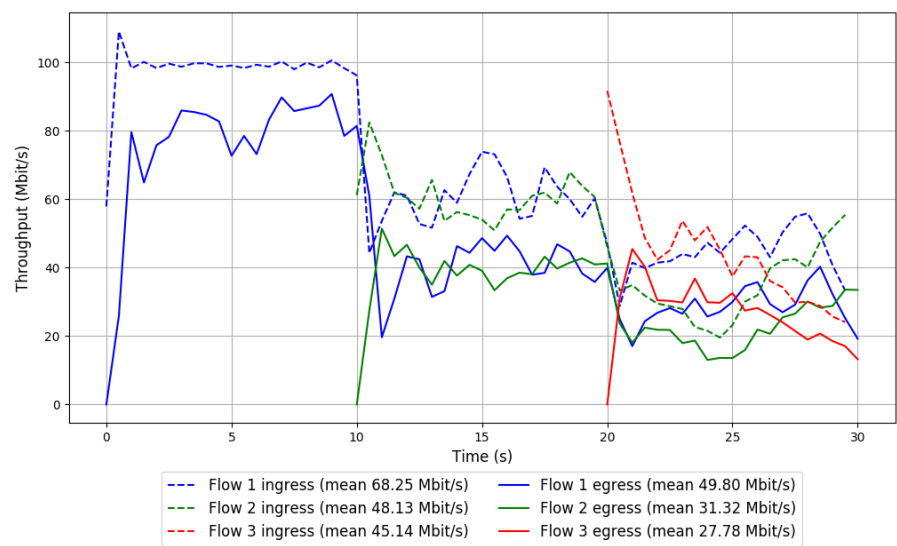


Run 2: Statistics of FillP

Start at: 2018-10-26 03:30:05  
End at: 2018-10-26 03:30:35  
Local clock offset: -2.24 ms  
Remote clock offset: -5.404 ms

# Below is generated by plot.py at 2018-10-26 04:38:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 80.07 Mbit/s  
95th percentile per-packet one-way delay: 18.652 ms  
Loss rate: 31.01%  
-- Flow 1:  
Average throughput: 49.80 Mbit/s  
95th percentile per-packet one-way delay: 19.628 ms  
Loss rate: 27.52%  
-- Flow 2:  
Average throughput: 31.32 Mbit/s  
95th percentile per-packet one-way delay: 15.453 ms  
Loss rate: 34.94%  
-- Flow 3:  
Average throughput: 27.78 Mbit/s  
95th percentile per-packet one-way delay: 14.925 ms  
Loss rate: 38.48%

Run 2: Report of FillP — Data Link

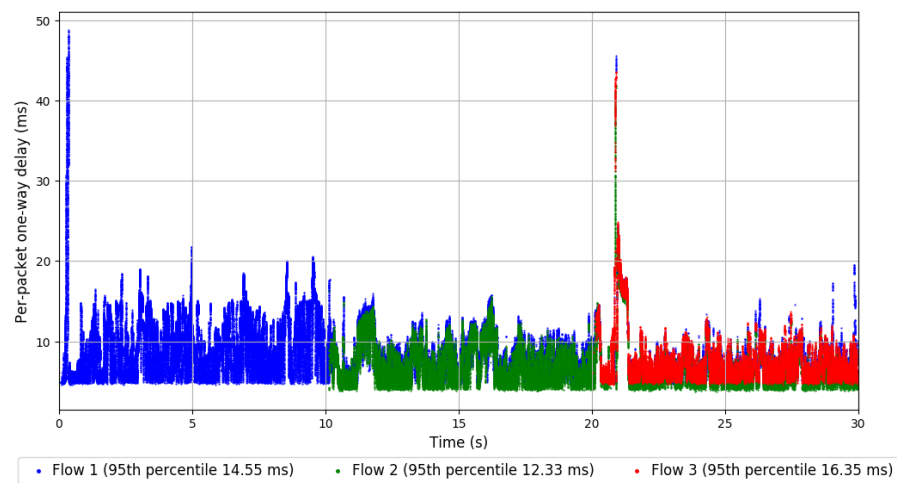
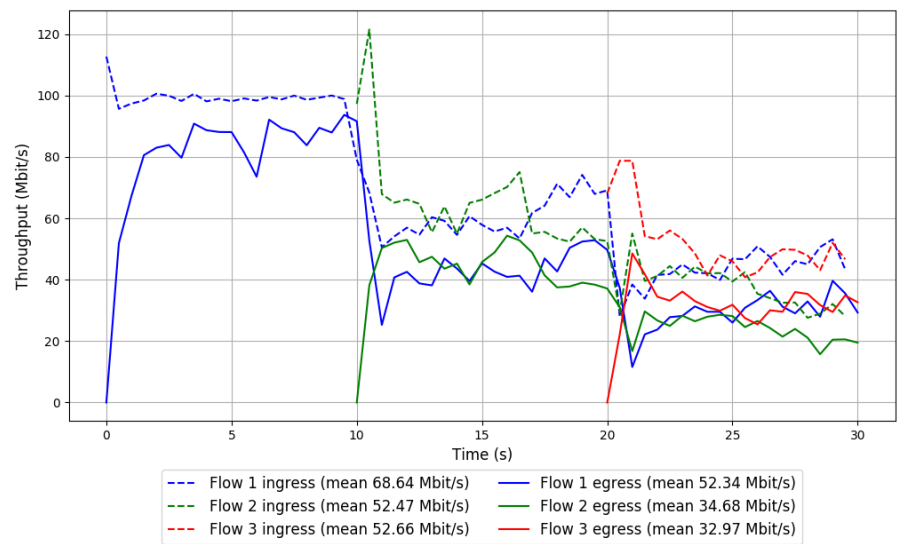


Run 3: Statistics of FillP

Start at: 2018-10-26 03:51:22  
End at: 2018-10-26 03:51:52  
Local clock offset: 2.429 ms  
Remote clock offset: -5.107 ms

# Below is generated by plot.py at 2018-10-26 04:38:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.34 Mbit/s  
95th percentile per-packet one-way delay: 14.319 ms  
Loss rate: 28.65%  
-- Flow 1:  
Average throughput: 52.34 Mbit/s  
95th percentile per-packet one-way delay: 14.553 ms  
Loss rate: 23.75%  
-- Flow 2:  
Average throughput: 34.68 Mbit/s  
95th percentile per-packet one-way delay: 12.331 ms  
Loss rate: 33.92%  
-- Flow 3:  
Average throughput: 32.97 Mbit/s  
95th percentile per-packet one-way delay: 16.347 ms  
Loss rate: 37.39%

Run 3: Report of FillP — Data Link

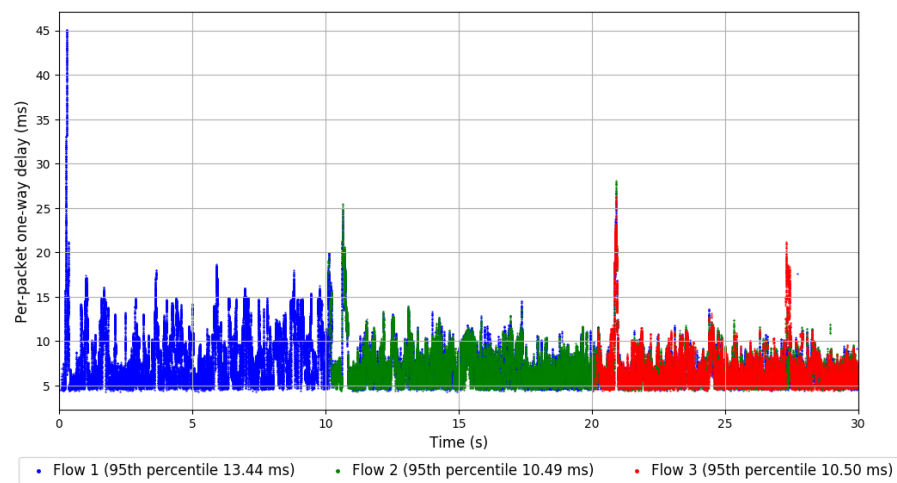
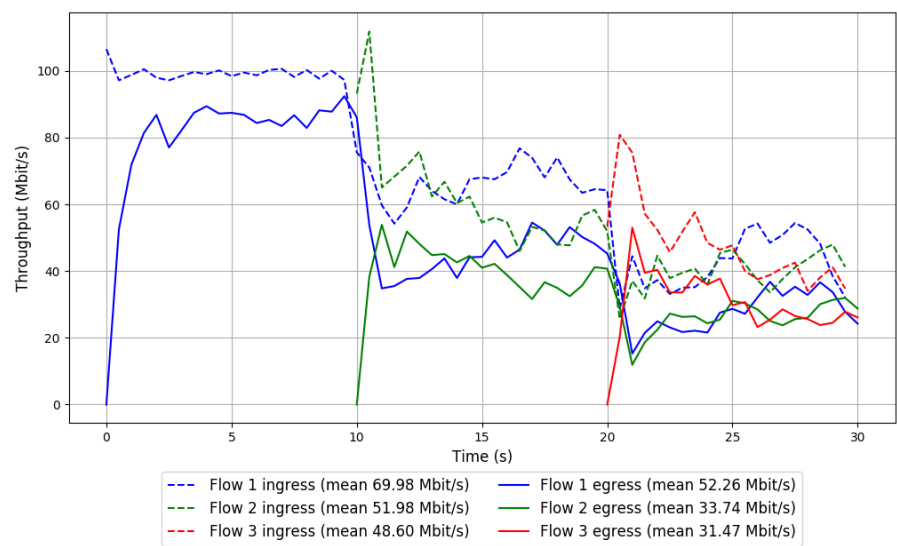


Run 4: Statistics of FillP

Start at: 2018-10-26 04:12:42  
End at: 2018-10-26 04:13:12  
Local clock offset: 2.188 ms  
Remote clock offset: -6.067 ms

# Below is generated by plot.py at 2018-10-26 04:39:18  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.15 Mbit/s  
95th percentile per-packet one-way delay: 12.778 ms  
Loss rate: 29.44%  
-- Flow 1:  
Average throughput: 52.26 Mbit/s  
95th percentile per-packet one-way delay: 13.437 ms  
Loss rate: 25.31%  
-- Flow 2:  
Average throughput: 33.74 Mbit/s  
95th percentile per-packet one-way delay: 10.490 ms  
Loss rate: 35.09%  
-- Flow 3:  
Average throughput: 31.47 Mbit/s  
95th percentile per-packet one-way delay: 10.502 ms  
Loss rate: 35.25%

Run 4: Report of FillP — Data Link

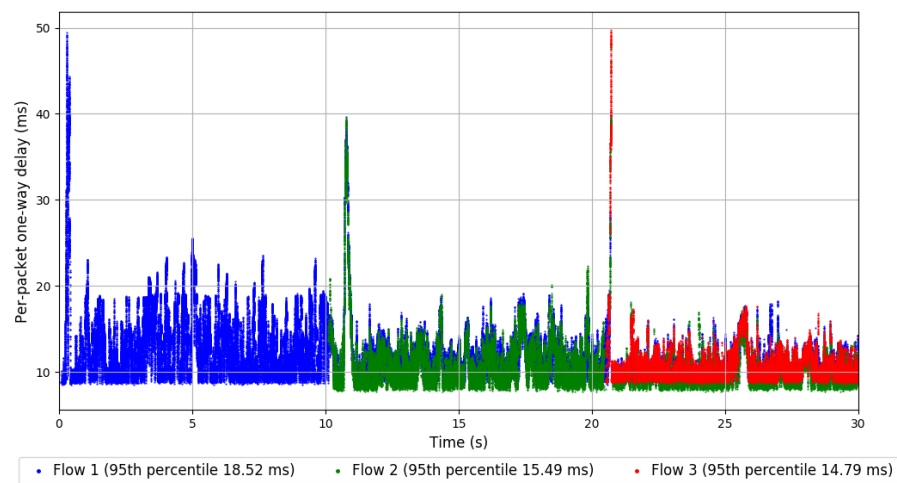
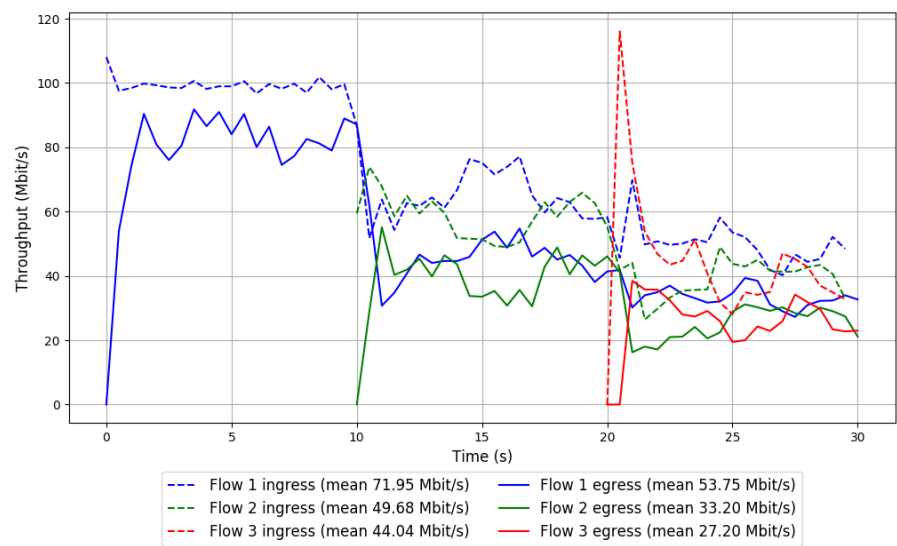


Run 5: Statistics of FillP

Start at: 2018-10-26 04:33:53  
End at: 2018-10-26 04:34:23  
Local clock offset: 3.216 ms  
Remote clock offset: -1.521 ms

# Below is generated by plot.py at 2018-10-26 04:39:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 84.70 Mbit/s  
95th percentile per-packet one-way delay: 17.984 ms  
Loss rate: 29.21%  
-- Flow 1:  
Average throughput: 53.75 Mbit/s  
95th percentile per-packet one-way delay: 18.516 ms  
Loss rate: 25.29%  
-- Flow 2:  
Average throughput: 33.20 Mbit/s  
95th percentile per-packet one-way delay: 15.493 ms  
Loss rate: 33.21%  
-- Flow 3:  
Average throughput: 27.20 Mbit/s  
95th percentile per-packet one-way delay: 14.793 ms  
Loss rate: 39.46%

Run 5: Report of FillP — Data Link



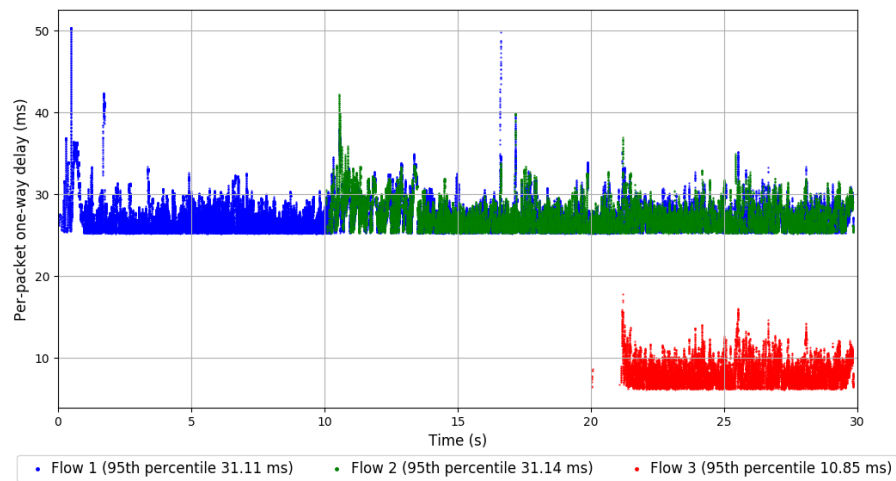
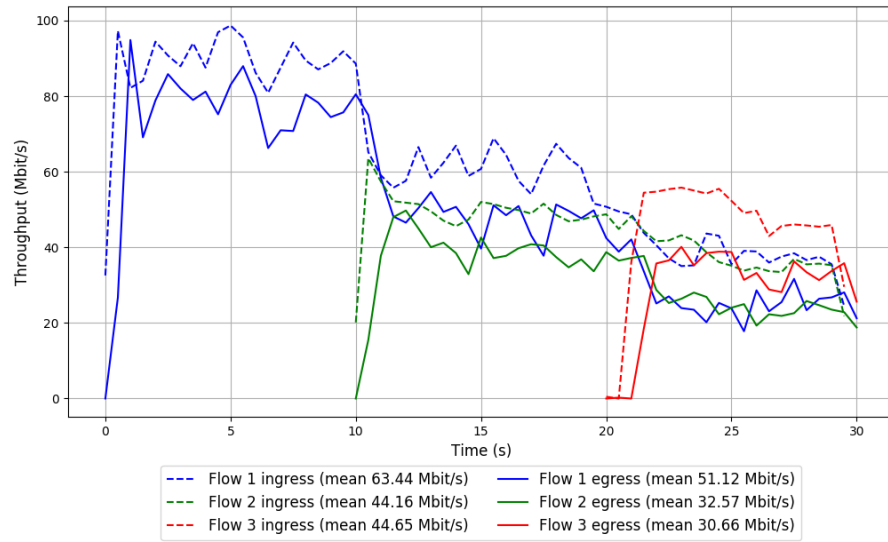


```
Run 1: Statistics of Indigo

Start at: 2018-10-26 03:05:15
End at: 2018-10-26 03:05:46
Local clock offset: 0.971 ms
Remote clock offset: -4.79 ms

# Below is generated by plot.py at 2018-10-26 04:39:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.79 Mbit/s
95th percentile per-packet one-way delay: 30.904 ms
Loss rate: 22.93%
-- Flow 1:
Average throughput: 51.12 Mbit/s
95th percentile per-packet one-way delay: 31.111 ms
Loss rate: 19.46%
-- Flow 2:
Average throughput: 32.57 Mbit/s
95th percentile per-packet one-way delay: 31.143 ms
Loss rate: 26.25%
-- Flow 3:
Average throughput: 30.66 Mbit/s
95th percentile per-packet one-way delay: 10.846 ms
Loss rate: 31.33%
```

# Run 1: Report of Indigo — Data Link

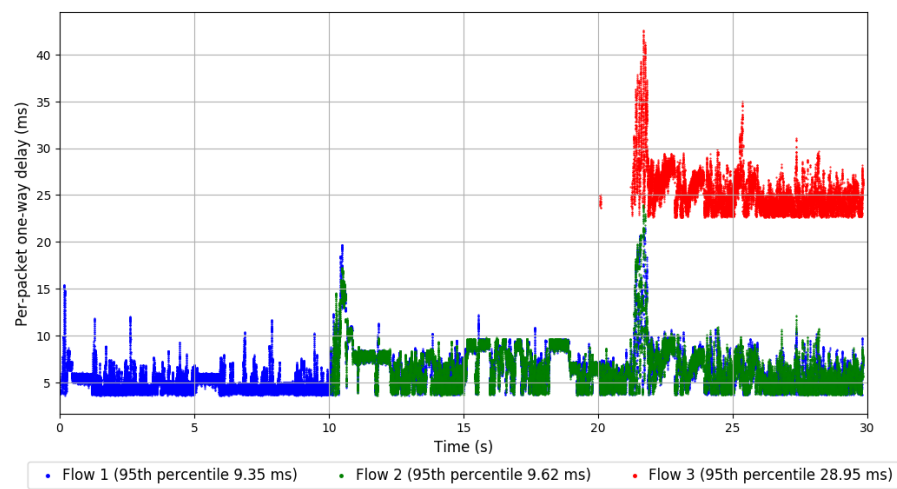
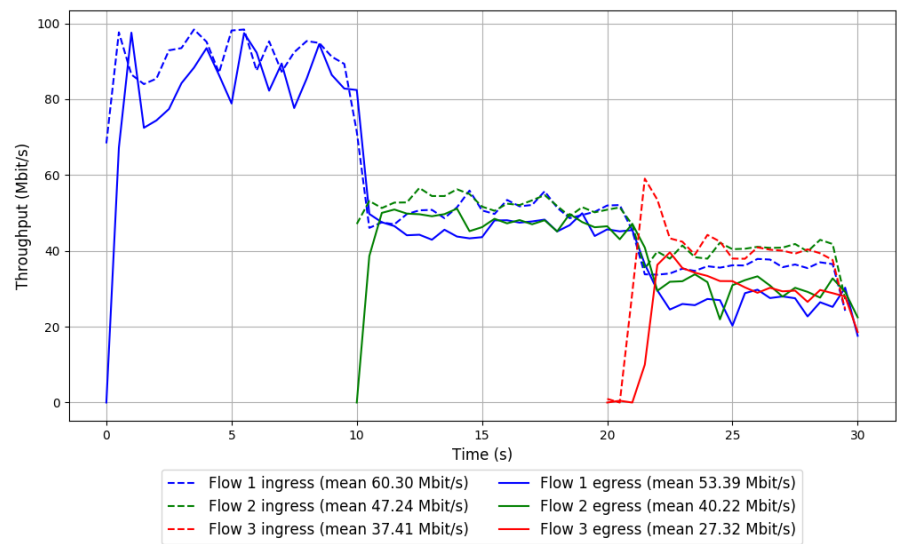


Run 2: Statistics of Indigo

Start at: 2018-10-26 03:26:27  
End at: 2018-10-26 03:26:57  
Local clock offset: 3.86 ms  
Remote clock offset: -5.465 ms

# Below is generated by plot.py at 2018-10-26 04:39:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 89.02 Mbit/s  
95th percentile per-packet one-way delay: 24.989 ms  
Loss rate: 14.32%  
-- Flow 1:  
Average throughput: 53.39 Mbit/s  
95th percentile per-packet one-way delay: 9.353 ms  
Loss rate: 11.45%  
-- Flow 2:  
Average throughput: 40.22 Mbit/s  
95th percentile per-packet one-way delay: 9.619 ms  
Loss rate: 14.84%  
-- Flow 3:  
Average throughput: 27.32 Mbit/s  
95th percentile per-packet one-way delay: 28.948 ms  
Loss rate: 27.12%

Run 2: Report of Indigo — Data Link

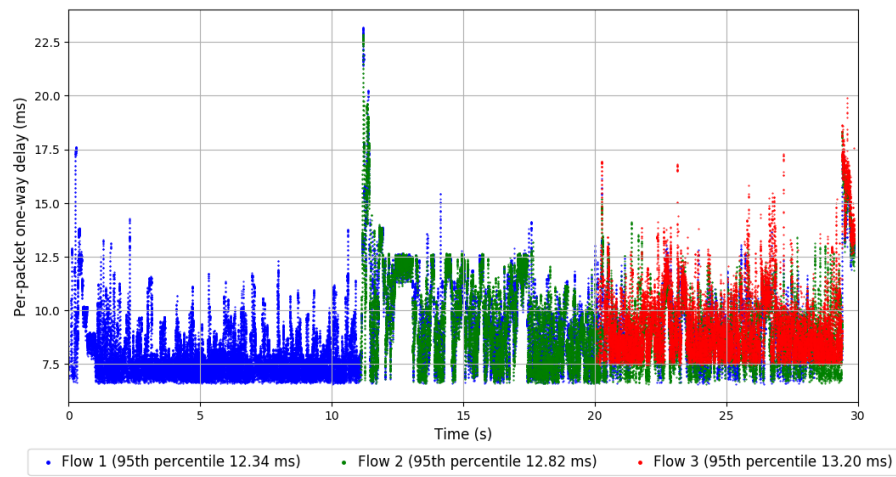
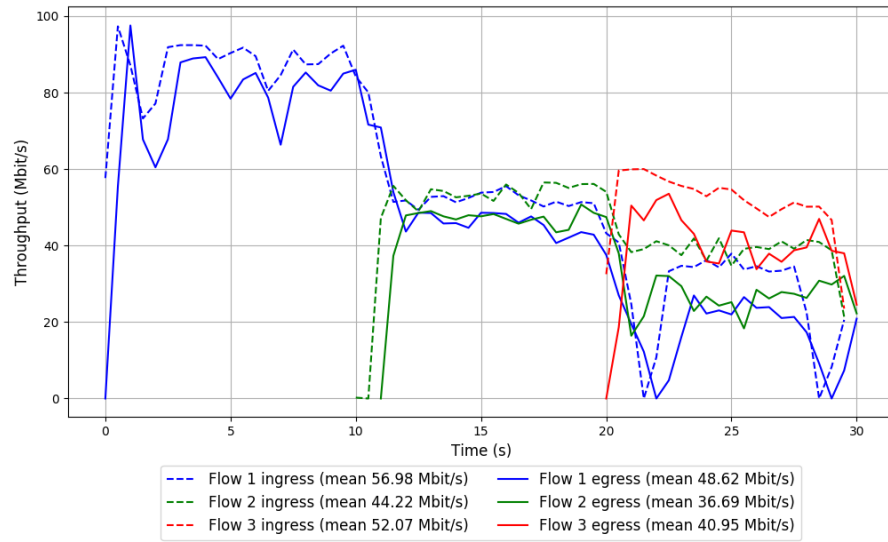


Run 3: Statistics of Indigo

Start at: 2018-10-26 03:47:44  
End at: 2018-10-26 03:48:14  
Local clock offset: -0.367 ms  
Remote clock offset: -5.394 ms

# Below is generated by plot.py at 2018-10-26 04:39:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.18 Mbit/s  
95th percentile per-packet one-way delay: 12.410 ms  
Loss rate: 17.61%  
-- Flow 1:  
Average throughput: 48.62 Mbit/s  
95th percentile per-packet one-way delay: 12.338 ms  
Loss rate: 14.65%  
-- Flow 2:  
Average throughput: 36.69 Mbit/s  
95th percentile per-packet one-way delay: 12.818 ms  
Loss rate: 21.19%  
-- Flow 3:  
Average throughput: 40.95 Mbit/s  
95th percentile per-packet one-way delay: 13.199 ms  
Loss rate: 21.30%

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

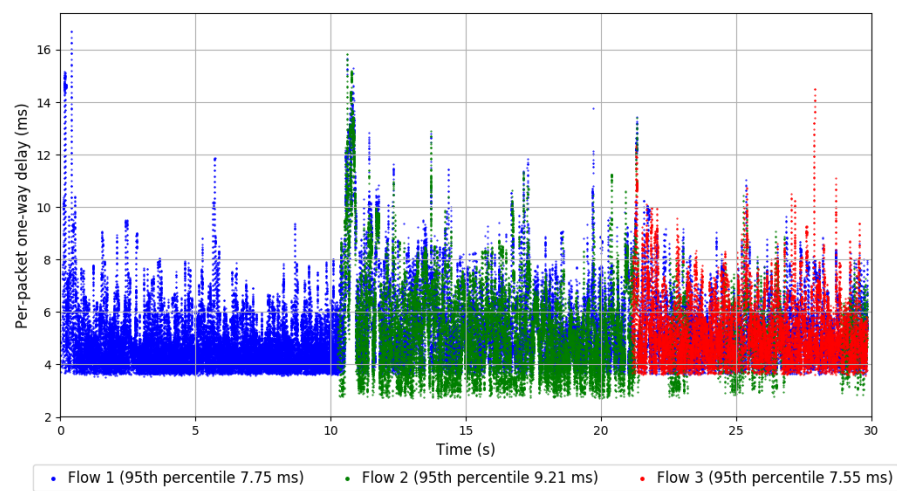
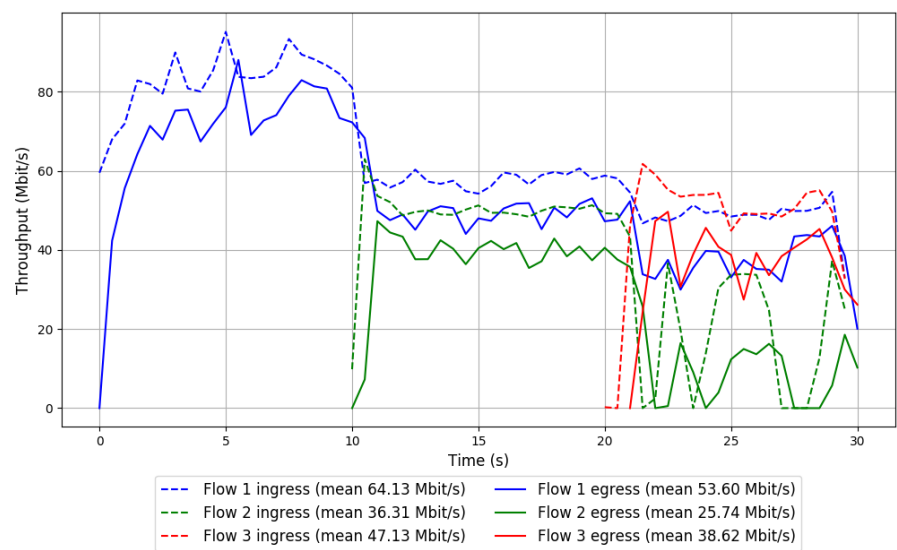


Run 4: Statistics of Indigo

Start at: 2018-10-26 04:08:55  
End at: 2018-10-26 04:09:25  
Local clock offset: 3.105 ms  
Remote clock offset: -6.016 ms

# Below is generated by plot.py at 2018-10-26 04:39:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 81.83 Mbit/s  
95th percentile per-packet one-way delay: 8.004 ms  
Loss rate: 20.84%  
-- Flow 1:  
Average throughput: 53.60 Mbit/s  
95th percentile per-packet one-way delay: 7.746 ms  
Loss rate: 16.41%  
-- Flow 2:  
Average throughput: 25.74 Mbit/s  
95th percentile per-packet one-way delay: 9.207 ms  
Loss rate: 29.10%  
-- Flow 3:  
Average throughput: 38.62 Mbit/s  
95th percentile per-packet one-way delay: 7.549 ms  
Loss rate: 26.46%

Run 4: Report of Indigo — Data Link



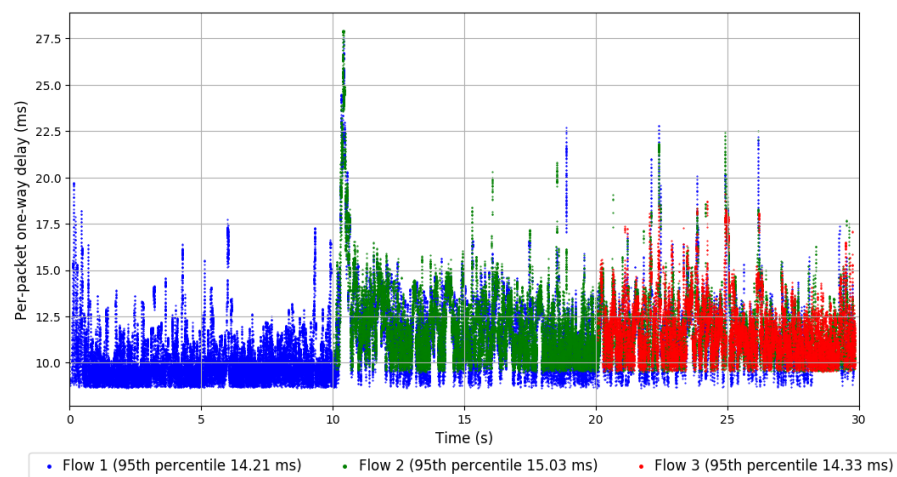
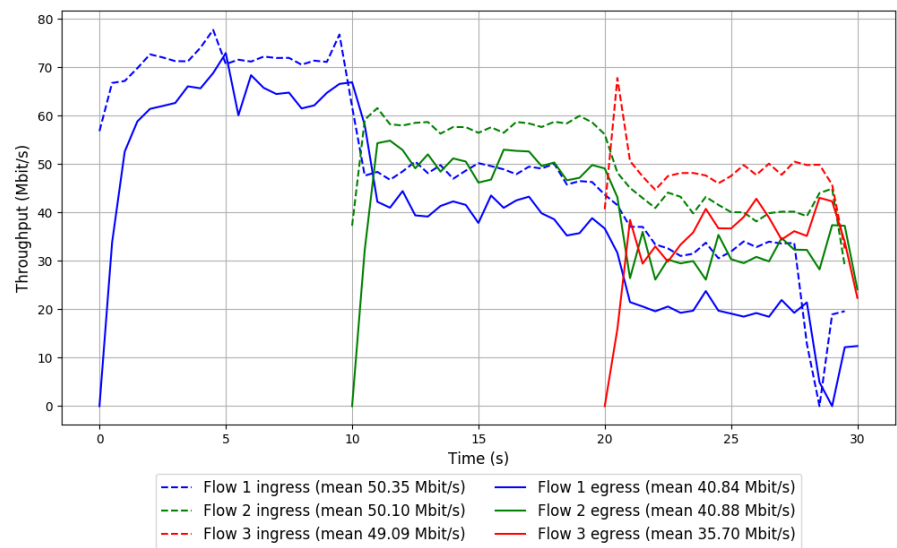


Run 5: Statistics of Indigo

Start at: 2018-10-26 04:30:18  
End at: 2018-10-26 04:30:48  
Local clock offset: 2.98 ms  
Remote clock offset: -0.662 ms

# Below is generated by plot.py at 2018-10-26 04:39:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 79.65 Mbit/s  
95th percentile per-packet one-way delay: 14.535 ms  
Loss rate: 20.08%  
-- Flow 1:  
Average throughput: 40.84 Mbit/s  
95th percentile per-packet one-way delay: 14.210 ms  
Loss rate: 18.88%  
-- Flow 2:  
Average throughput: 40.88 Mbit/s  
95th percentile per-packet one-way delay: 15.033 ms  
Loss rate: 18.41%  
-- Flow 3:  
Average throughput: 35.70 Mbit/s  
95th percentile per-packet one-way delay: 14.332 ms  
Loss rate: 27.28%

Run 5: Report of Indigo — Data Link

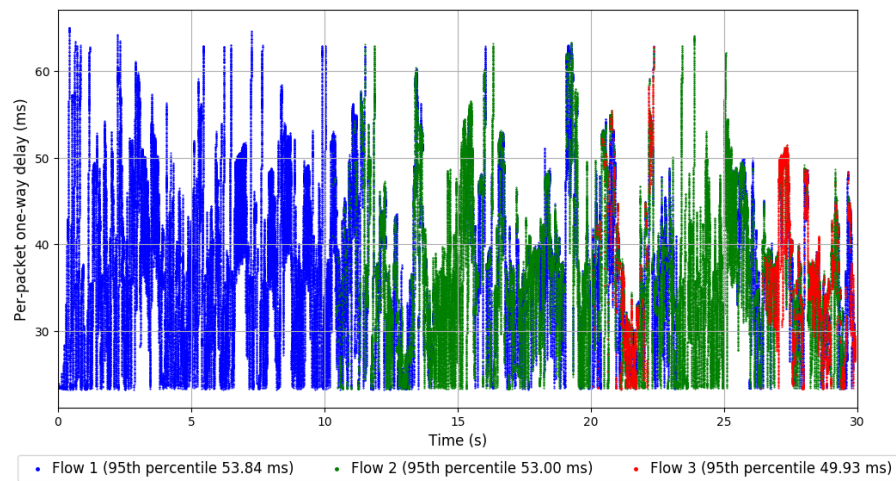
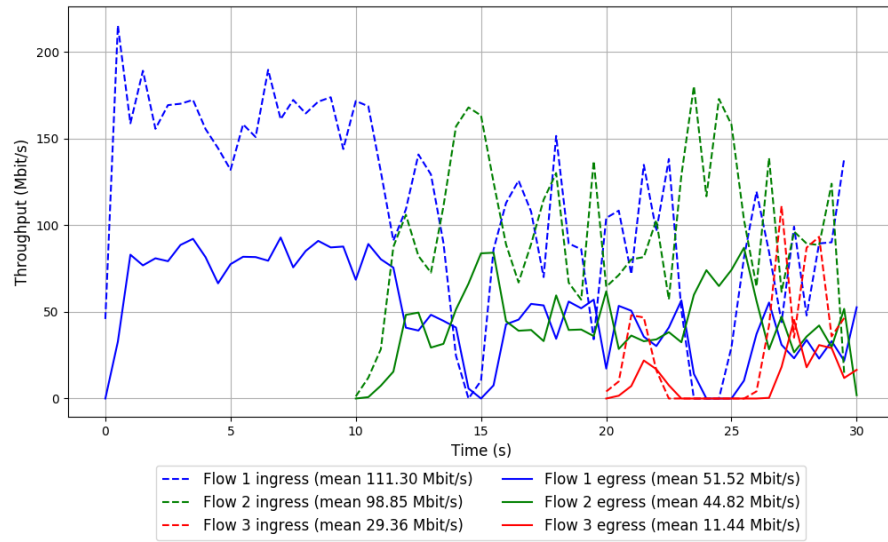


Run 1: Statistics of Indigo-96d2da3

Start at: 2018-10-26 03:02:46  
End at: 2018-10-26 03:03:16  
Local clock offset: 2.616 ms  
Remote clock offset: -4.829 ms

# Below is generated by plot.py at 2018-10-26 04:40:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 84.47 Mbit/s  
95th percentile per-packet one-way delay: 53.323 ms  
Loss rate: 54.48%  
-- Flow 1:  
Average throughput: 51.52 Mbit/s  
95th percentile per-packet one-way delay: 53.842 ms  
Loss rate: 53.70%  
-- Flow 2:  
Average throughput: 44.82 Mbit/s  
95th percentile per-packet one-way delay: 52.996 ms  
Loss rate: 54.82%  
-- Flow 3:  
Average throughput: 11.44 Mbit/s  
95th percentile per-packet one-way delay: 49.930 ms  
Loss rate: 61.10%

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

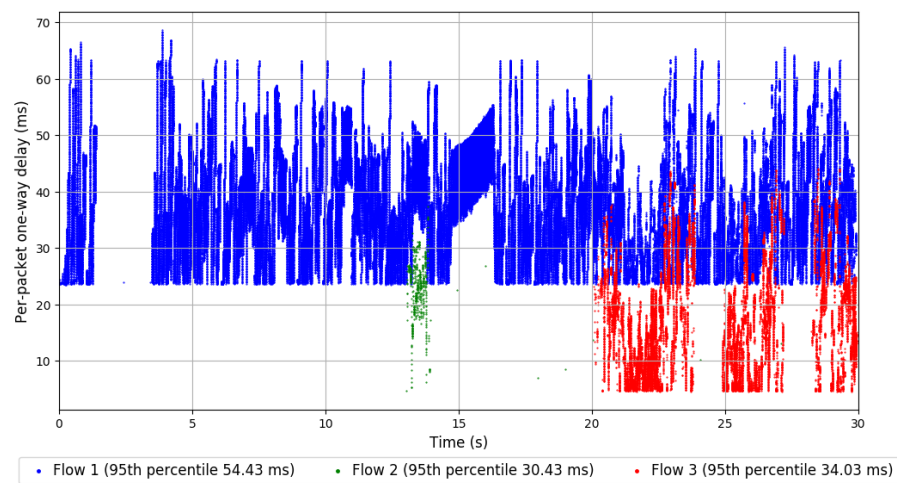
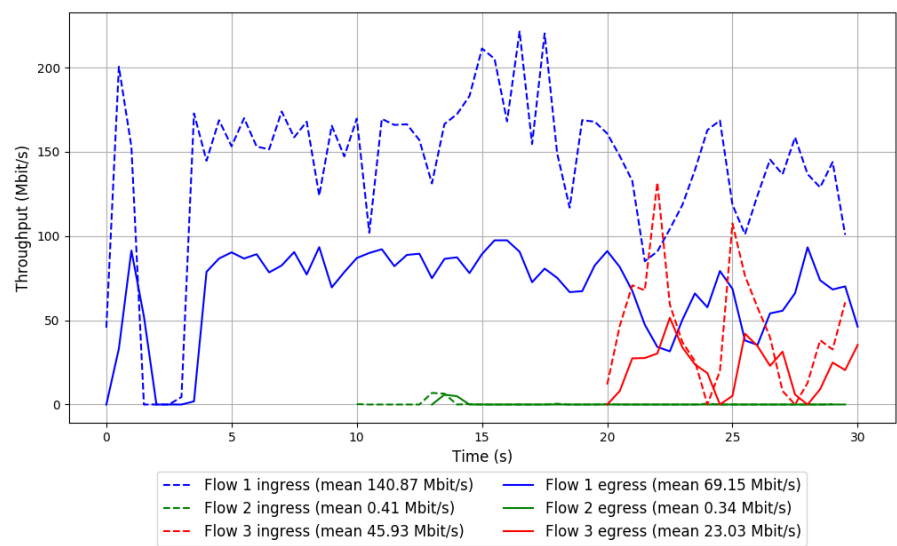


Run 2: Statistics of Indigo-96d2da3

Start at: 2018-10-26 03:23:58  
End at: 2018-10-26 03:24:28  
Local clock offset: 3.224 ms  
Remote clock offset: -5.039 ms

# Below is generated by plot.py at 2018-10-26 04:40:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 76.88 Mbit/s  
95th percentile per-packet one-way delay: 54.073 ms  
Loss rate: 50.82%  
-- Flow 1:  
Average throughput: 69.15 Mbit/s  
95th percentile per-packet one-way delay: 54.430 ms  
Loss rate: 50.95%  
-- Flow 2:  
Average throughput: 0.34 Mbit/s  
95th percentile per-packet one-way delay: 30.426 ms  
Loss rate: 29.41%  
-- Flow 3:  
Average throughput: 23.03 Mbit/s  
95th percentile per-packet one-way delay: 34.031 ms  
Loss rate: 49.92%

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

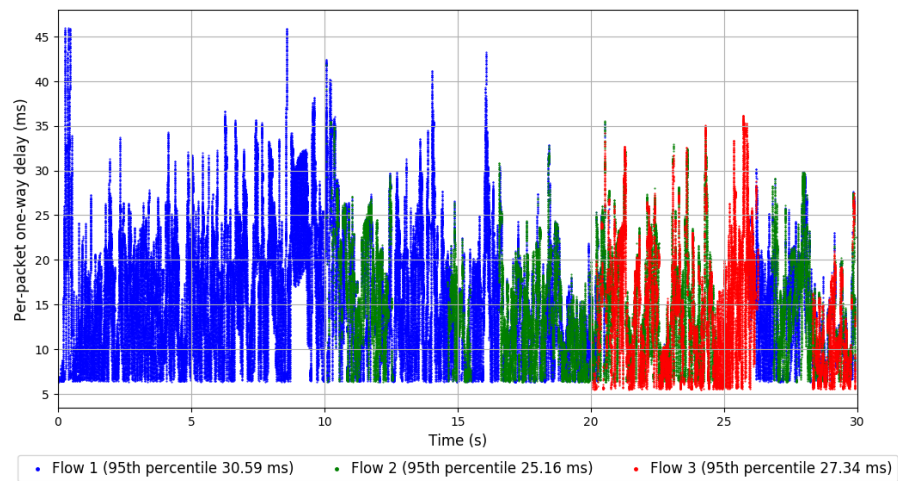
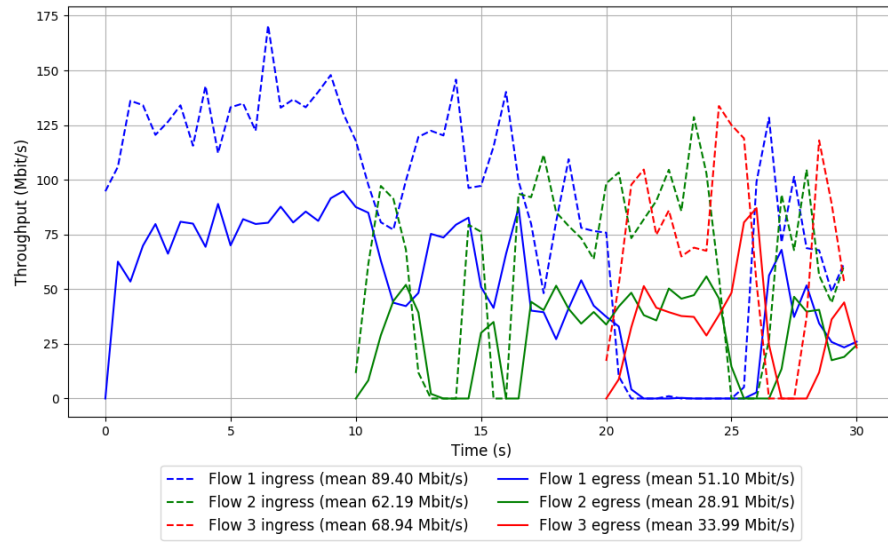


Run 3: Statistics of Indigo-96d2da3

Start at: 2018-10-26 03:45:15  
End at: 2018-10-26 03:45:45  
Local clock offset: 0.273 ms  
Remote clock offset: -5.922 ms

# Below is generated by plot.py at 2018-10-26 04:40:27  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 81.50 Mbit/s  
95th percentile per-packet one-way delay: 29.441 ms  
Loss rate: 46.88%  
-- Flow 1:  
Average throughput: 51.10 Mbit/s  
95th percentile per-packet one-way delay: 30.593 ms  
Loss rate: 42.84%  
-- Flow 2:  
Average throughput: 28.91 Mbit/s  
95th percentile per-packet one-way delay: 25.155 ms  
Loss rate: 53.52%  
-- Flow 3:  
Average throughput: 33.99 Mbit/s  
95th percentile per-packet one-way delay: 27.341 ms  
Loss rate: 50.69%

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





Run 4: Statistics of Indigo-96d2da3

Start at: 2018-10-26 04:06:23

End at: 2018-10-26 04:06:53

Local clock offset: 1.885 ms

Remote clock offset: -5.68 ms

# Below is generated by plot.py at 2018-10-26 04:40:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.96 Mbit/s

95th percentile per-packet one-way delay: 32.945 ms

Loss rate: 41.98%

-- Flow 1:

Average throughput: 58.37 Mbit/s

95th percentile per-packet one-way delay: 33.637 ms

Loss rate: 38.76%

-- Flow 2:

Average throughput: 37.87 Mbit/s

95th percentile per-packet one-way delay: 30.127 ms

Loss rate: 46.97%

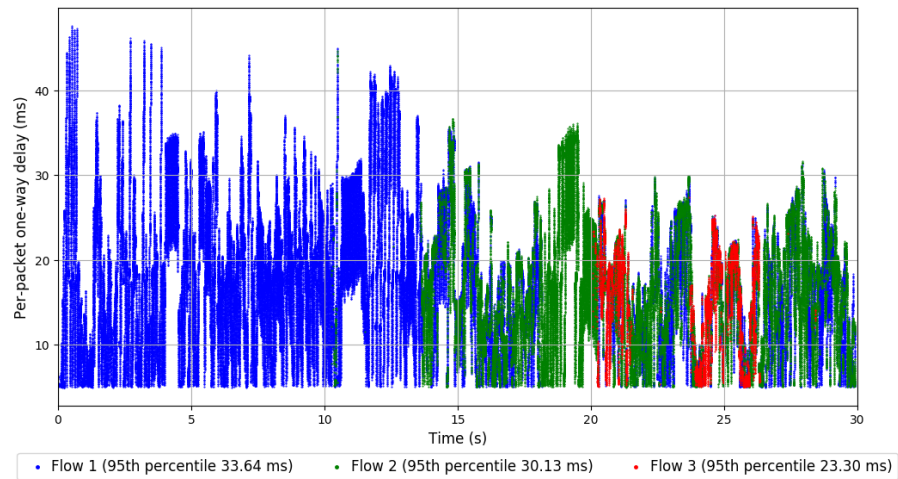
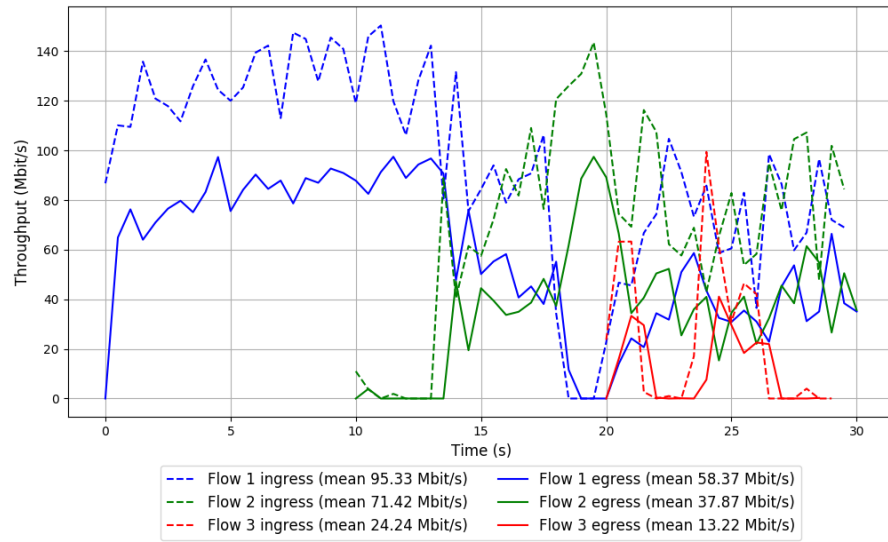
-- Flow 3:

Average throughput: 13.22 Mbit/s

95th percentile per-packet one-way delay: 23.303 ms

Loss rate: 51.53%

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

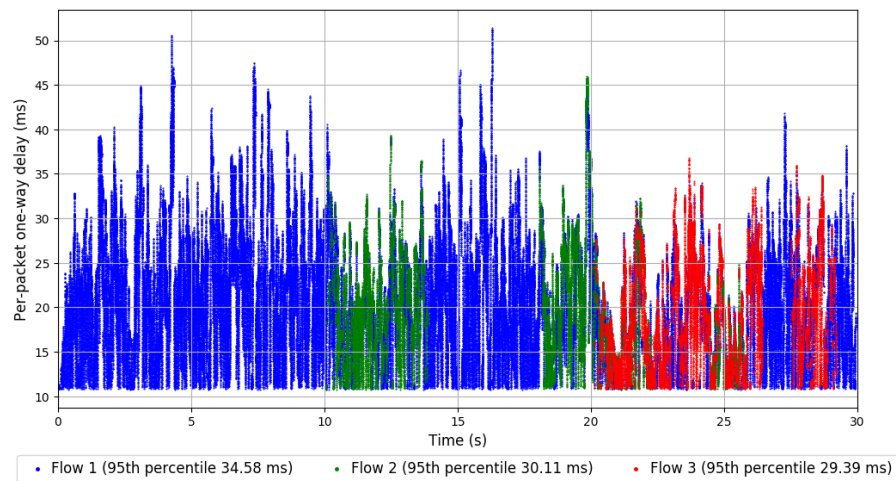
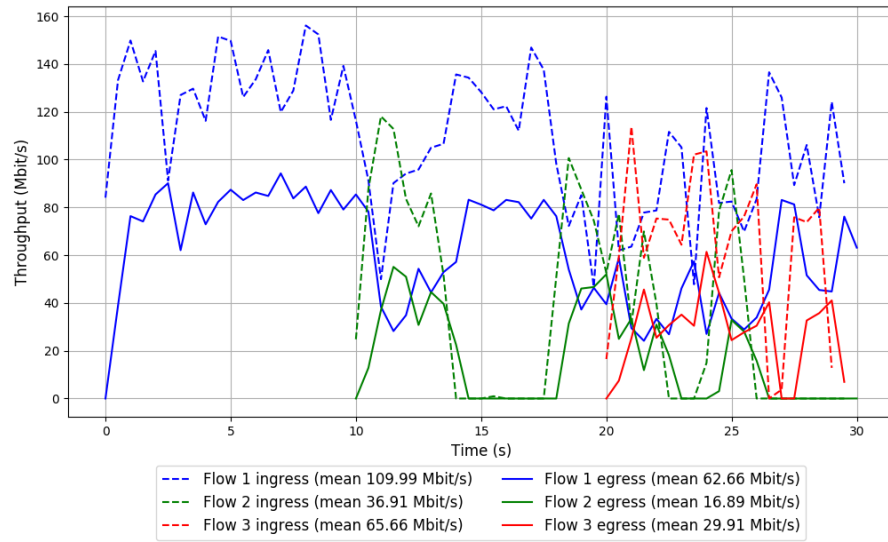


Run 5: Statistics of Indigo-96d2da3

Start at: 2018-10-26 04:27:49  
End at: 2018-10-26 04:28:19  
Local clock offset: 1.503 ms  
Remote clock offset: -0.808 ms

# Below is generated by plot.py at 2018-10-26 04:40:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 82.95 Mbit/s  
95th percentile per-packet one-way delay: 33.559 ms  
Loss rate: 46.30%  
-- Flow 1:  
Average throughput: 62.66 Mbit/s  
95th percentile per-packet one-way delay: 34.576 ms  
Loss rate: 43.01%  
-- Flow 2:  
Average throughput: 16.89 Mbit/s  
95th percentile per-packet one-way delay: 30.111 ms  
Loss rate: 54.23%  
-- Flow 3:  
Average throughput: 29.91 Mbit/s  
95th percentile per-packet one-way delay: 29.395 ms  
Loss rate: 54.64%

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

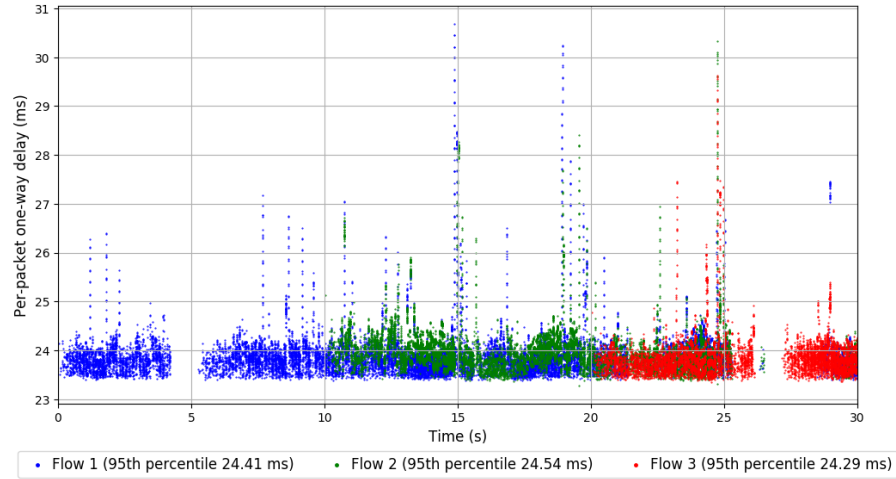
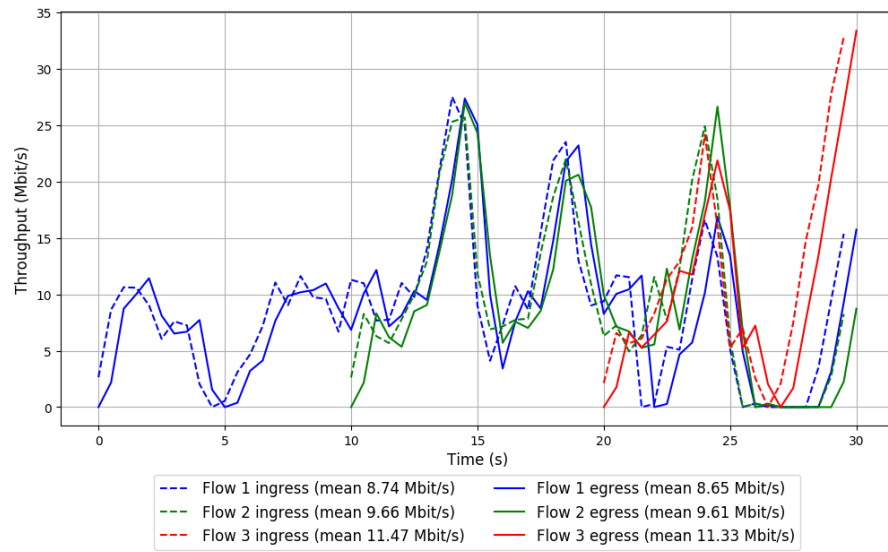


```
Run 1: Statistics of LEDBAT

Start at: 2018-10-26 02:50:04
End at: 2018-10-26 02:50:34
Local clock offset: 2.958 ms
Remote clock offset: -3.878 ms

# Below is generated by plot.py at 2018-10-26 04:40:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.81 Mbit/s
95th percentile per-packet one-way delay: 24.441 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 8.65 Mbit/s
95th percentile per-packet one-way delay: 24.405 ms
Loss rate: 1.17%
-- Flow 2:
Average throughput: 9.61 Mbit/s
95th percentile per-packet one-way delay: 24.544 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 11.33 Mbit/s
95th percentile per-packet one-way delay: 24.289 ms
Loss rate: 1.30%
```

# Run 1: Report of LEDBAT — Data Link

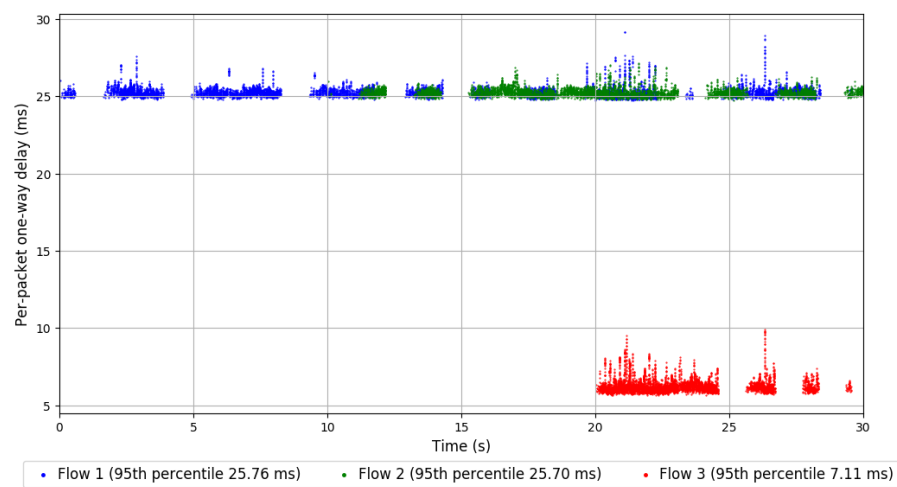
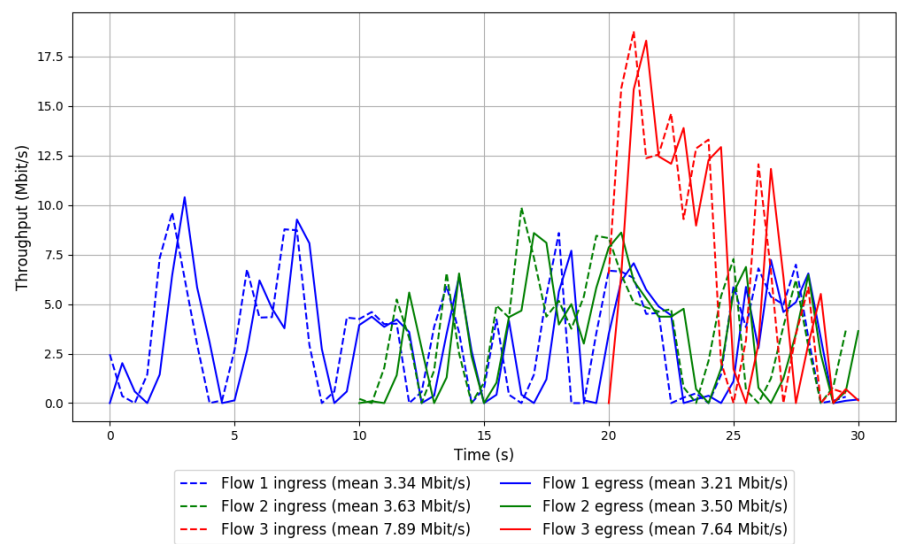


Run 2: Statistics of LEDBAT

Start at: 2018-10-26 03:11:17  
End at: 2018-10-26 03:11:47  
Local clock offset: 1.734 ms  
Remote clock offset: -4.866 ms

# Below is generated by plot.py at 2018-10-26 04:40:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 7.92 Mbit/s  
95th percentile per-packet one-way delay: 25.647 ms  
Loss rate: 3.75%  
-- Flow 1:  
Average throughput: 3.21 Mbit/s  
95th percentile per-packet one-way delay: 25.756 ms  
Loss rate: 4.04%  
-- Flow 2:  
Average throughput: 3.50 Mbit/s  
95th percentile per-packet one-way delay: 25.697 ms  
Loss rate: 3.66%  
-- Flow 3:  
Average throughput: 7.64 Mbit/s  
95th percentile per-packet one-way delay: 7.109 ms  
Loss rate: 3.46%

Run 2: Report of LEDBAT — Data Link





Run 3: Statistics of LEDBAT

Start at: 2018-10-26 03:32:23

End at: 2018-10-26 03:32:53

Local clock offset: 0.7 ms

Remote clock offset: -6.02 ms

# Below is generated by plot.py at 2018-10-26 04:40:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 19.19 Mbit/s

95th percentile per-packet one-way delay: 8.553 ms

Loss rate: 1.58%

-- Flow 1:

Average throughput: 9.89 Mbit/s

95th percentile per-packet one-way delay: 8.729 ms

Loss rate: 1.81%

-- Flow 2:

Average throughput: 9.93 Mbit/s

95th percentile per-packet one-way delay: 8.199 ms

Loss rate: 1.39%

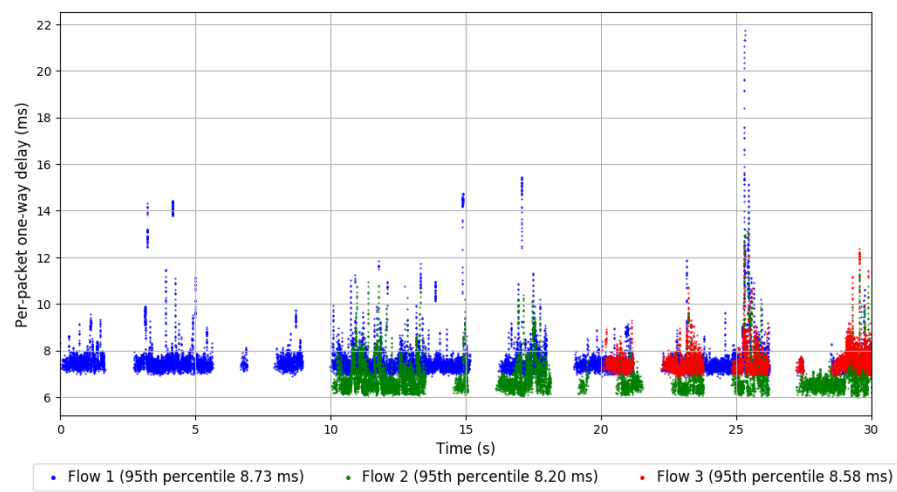
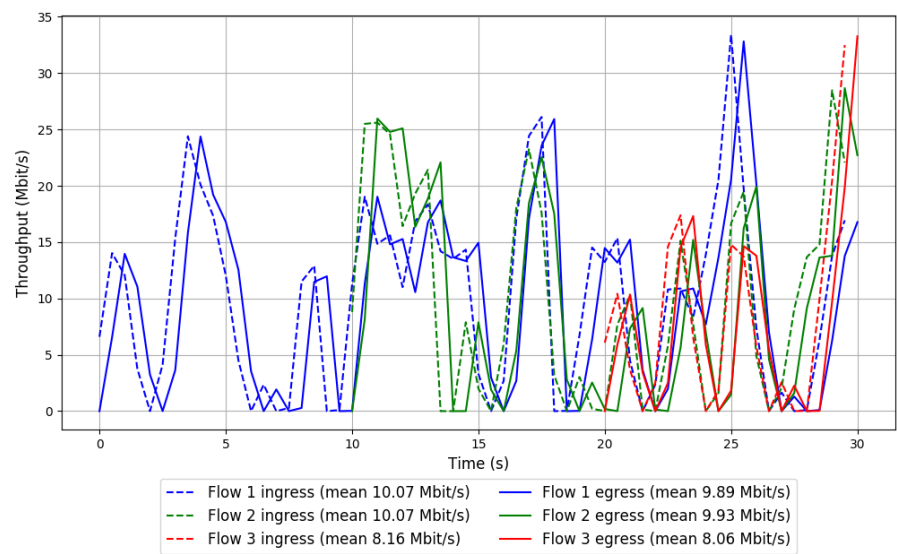
-- Flow 3:

Average throughput: 8.06 Mbit/s

95th percentile per-packet one-way delay: 8.578 ms

Loss rate: 1.21%

Run 3: Report of LEDBAT — Data Link

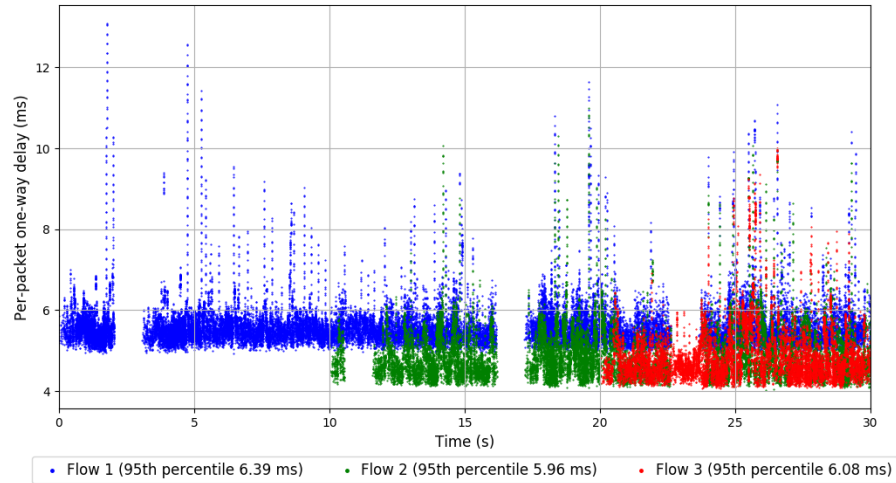
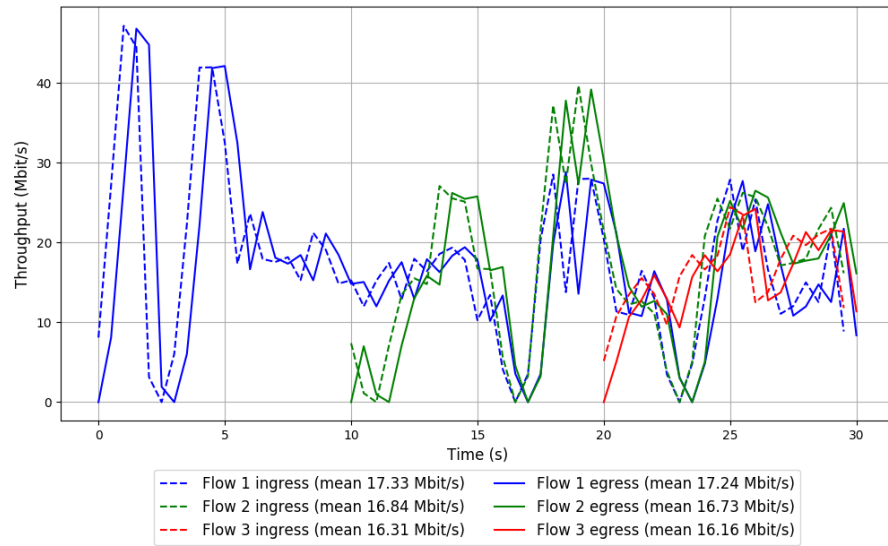


Run 4: Statistics of LEDBAT

Start at: 2018-10-26 03:53:40  
End at: 2018-10-26 03:54:10  
Local clock offset: 1.442 ms  
Remote clock offset: -5.925 ms

# Below is generated by plot.py at 2018-10-26 04:40:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 33.75 Mbit/s  
95th percentile per-packet one-way delay: 6.227 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 17.24 Mbit/s  
95th percentile per-packet one-way delay: 6.388 ms  
Loss rate: 0.55%  
-- Flow 2:  
Average throughput: 16.73 Mbit/s  
95th percentile per-packet one-way delay: 5.961 ms  
Loss rate: 0.62%  
-- Flow 3:  
Average throughput: 16.16 Mbit/s  
95th percentile per-packet one-way delay: 6.077 ms  
Loss rate: 0.87%

#### Run 4: Report of LEDBAT — Data Link

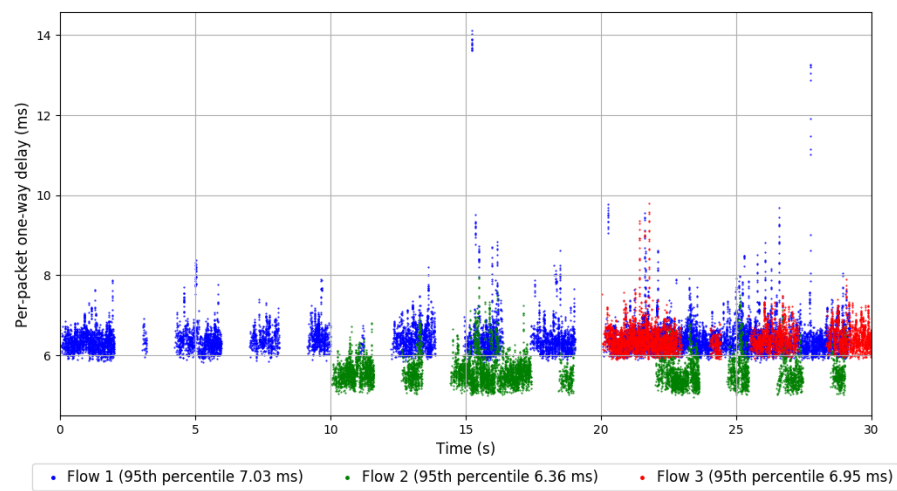
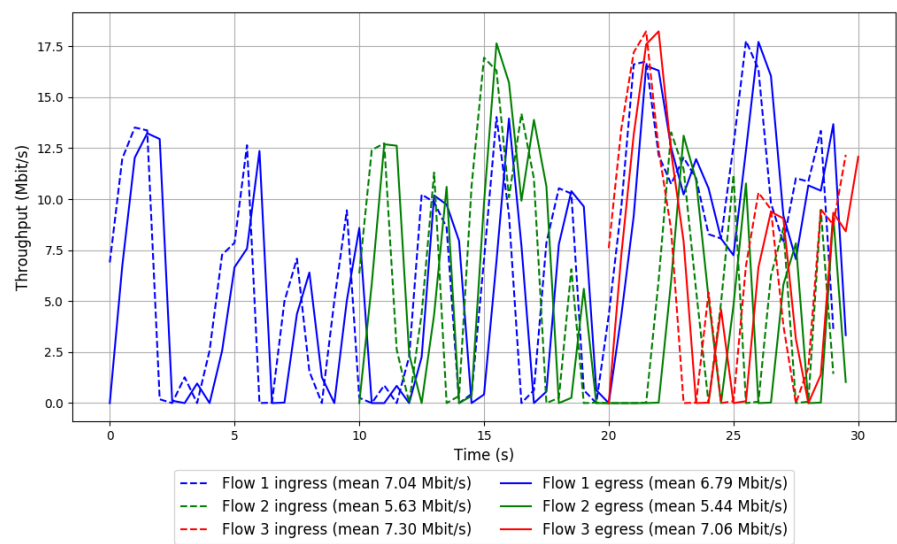


Run 5: Statistics of LEDBAT

Start at: 2018-10-26 04:15:03  
End at: 2018-10-26 04:15:33  
Local clock offset: 0.228 ms  
Remote clock offset: -6.826 ms

# Below is generated by plot.py at 2018-10-26 04:40:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.42 Mbit/s  
95th percentile per-packet one-way delay: 6.907 ms  
Loss rate: 3.42%  
-- Flow 1:  
Average throughput: 6.79 Mbit/s  
95th percentile per-packet one-way delay: 7.026 ms  
Loss rate: 3.42%  
-- Flow 2:  
Average throughput: 5.44 Mbit/s  
95th percentile per-packet one-way delay: 6.357 ms  
Loss rate: 3.49%  
-- Flow 3:  
Average throughput: 7.06 Mbit/s  
95th percentile per-packet one-way delay: 6.947 ms  
Loss rate: 3.29%

Run 5: Report of LEDBAT — Data Link

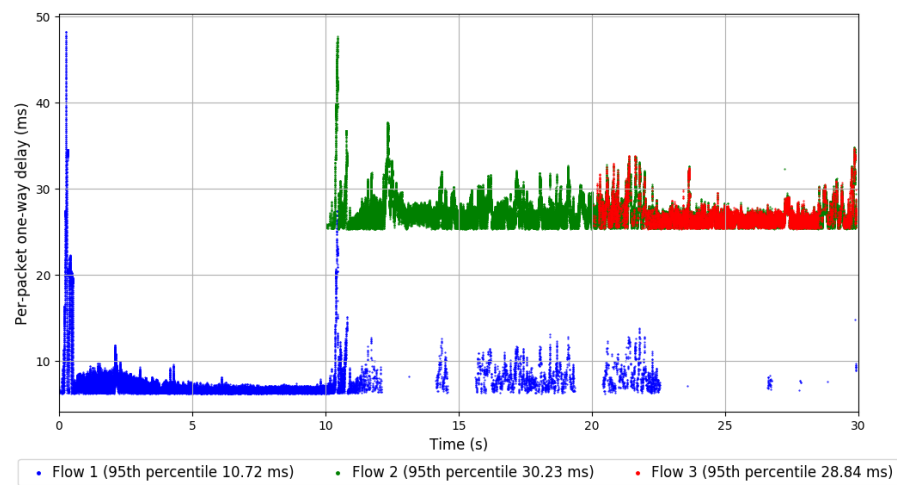
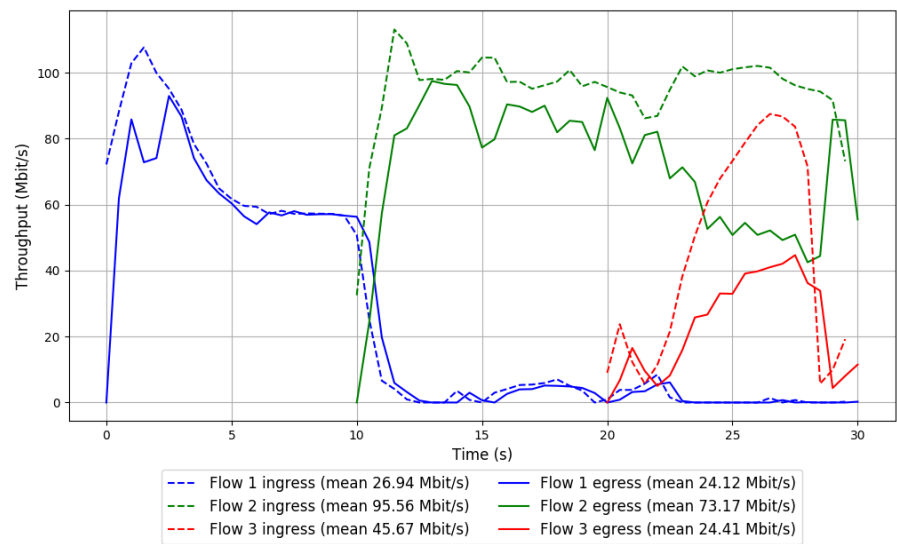


Run 1: Statistics of Indigo-Muses

Start at: 2018-10-26 03:07:46  
End at: 2018-10-26 03:08:16  
Local clock offset: 0.519 ms  
Remote clock offset: -5.309 ms

# Below is generated by plot.py at 2018-10-26 04:41:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 80.77 Mbit/s  
95th percentile per-packet one-way delay: 29.518 ms  
Loss rate: 23.46%  
-- Flow 1:  
Average throughput: 24.12 Mbit/s  
95th percentile per-packet one-way delay: 10.725 ms  
Loss rate: 10.44%  
-- Flow 2:  
Average throughput: 73.17 Mbit/s  
95th percentile per-packet one-way delay: 30.226 ms  
Loss rate: 23.49%  
-- Flow 3:  
Average throughput: 24.41 Mbit/s  
95th percentile per-packet one-way delay: 28.838 ms  
Loss rate: 46.60%

Run 1: Report of Indigo-Muses — Data Link





Run 2: Statistics of Indigo-Muses

Start at: 2018-10-26 03:28:51

End at: 2018-10-26 03:29:21

Local clock offset: 2.893 ms

Remote clock offset: -7.35 ms

# Below is generated by plot.py at 2018-10-26 04:41:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.86 Mbit/s

95th percentile per-packet one-way delay: 5.586 ms

Loss rate: 5.63%

-- Flow 1:

Average throughput: 54.13 Mbit/s

95th percentile per-packet one-way delay: 5.596 ms

Loss rate: 5.86%

-- Flow 2:

Average throughput: 31.71 Mbit/s

95th percentile per-packet one-way delay: 5.794 ms

Loss rate: 4.95%

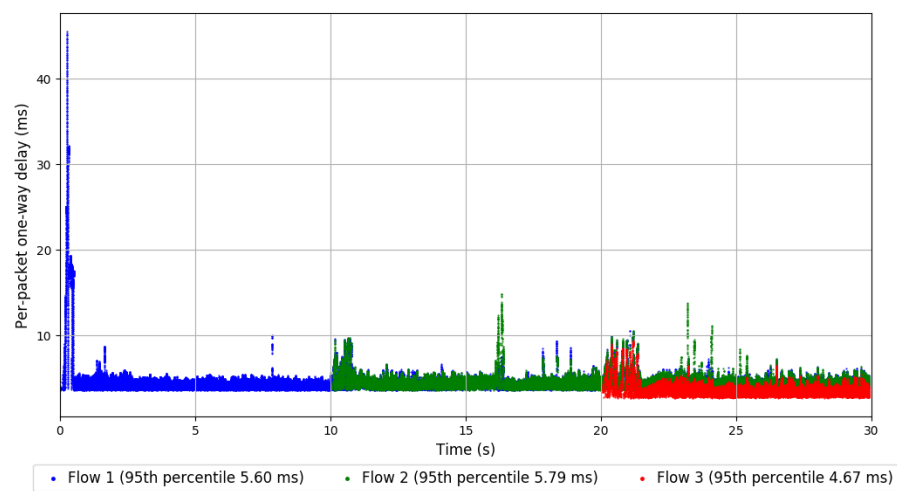
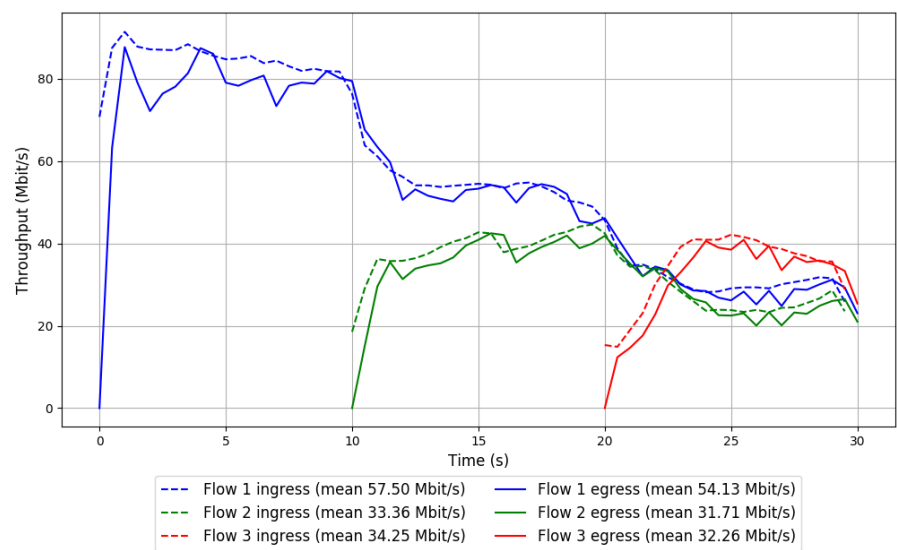
-- Flow 3:

Average throughput: 32.26 Mbit/s

95th percentile per-packet one-way delay: 4.670 ms

Loss rate: 5.80%

Run 2: Report of Indigo-Muses — Data Link

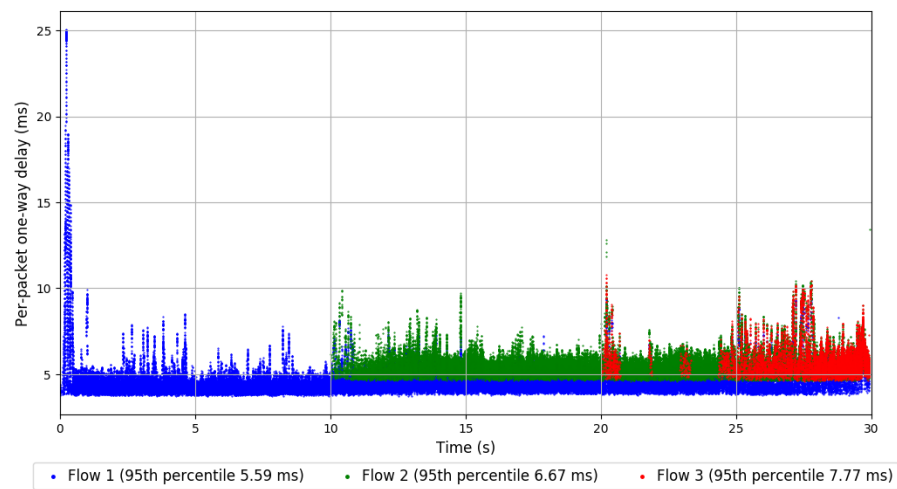
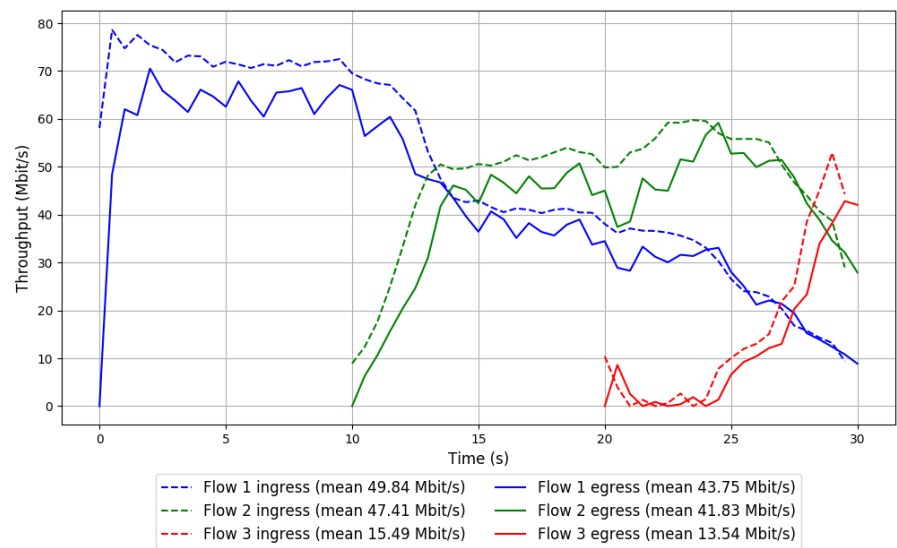


Run 3: Statistics of Indigo-Muses

Start at: 2018-10-26 03:50:09  
End at: 2018-10-26 03:50:39  
Local clock offset: 1.968 ms  
Remote clock offset: -5.796 ms

# Below is generated by plot.py at 2018-10-26 04:41:18  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 76.04 Mbit/s  
95th percentile per-packet one-way delay: 6.447 ms  
Loss rate: 12.07%  
-- Flow 1:  
Average throughput: 43.75 Mbit/s  
95th percentile per-packet one-way delay: 5.592 ms  
Loss rate: 12.22%  
-- Flow 2:  
Average throughput: 41.83 Mbit/s  
95th percentile per-packet one-way delay: 6.665 ms  
Loss rate: 11.74%  
-- Flow 3:  
Average throughput: 13.54 Mbit/s  
95th percentile per-packet one-way delay: 7.771 ms  
Loss rate: 12.56%

Run 3: Report of Indigo-Muses — Data Link

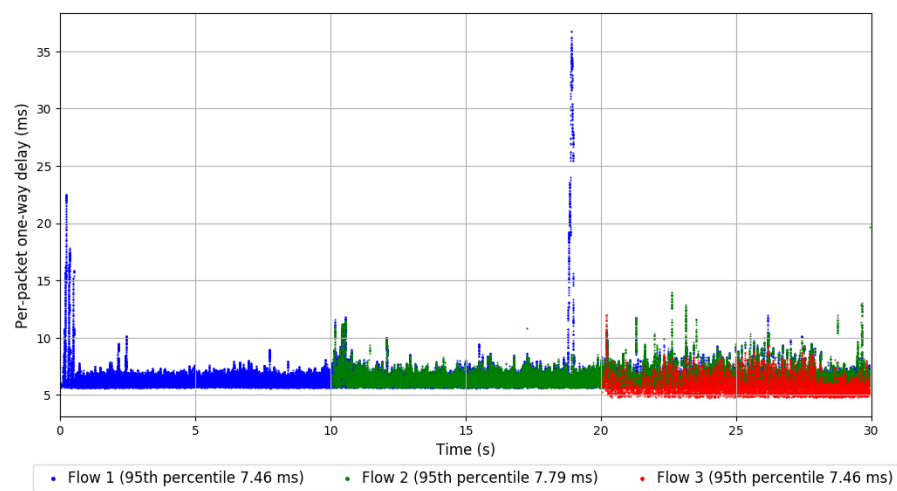
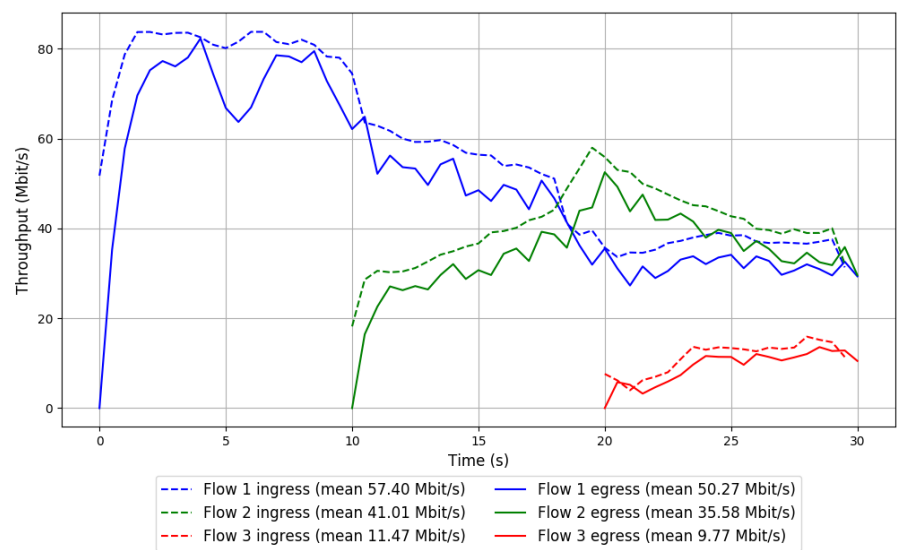


Run 4: Statistics of Indigo-Muses

Start at: 2018-10-26 04:11:31  
End at: 2018-10-26 04:12:01  
Local clock offset: 0.692 ms  
Remote clock offset: -6.528 ms

# Below is generated by plot.py at 2018-10-26 04:41:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 77.15 Mbit/s  
95th percentile per-packet one-way delay: 7.572 ms  
Loss rate: 12.76%  
-- Flow 1:  
Average throughput: 50.27 Mbit/s  
95th percentile per-packet one-way delay: 7.458 ms  
Loss rate: 12.43%  
-- Flow 2:  
Average throughput: 35.58 Mbit/s  
95th percentile per-packet one-way delay: 7.785 ms  
Loss rate: 13.18%  
-- Flow 3:  
Average throughput: 9.77 Mbit/s  
95th percentile per-packet one-way delay: 7.459 ms  
Loss rate: 14.82%

Run 4: Report of Indigo-Muses — Data Link

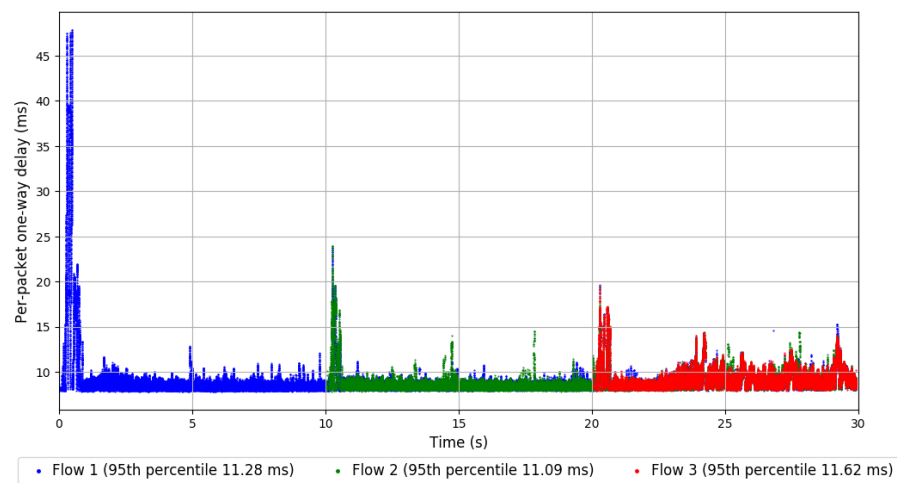
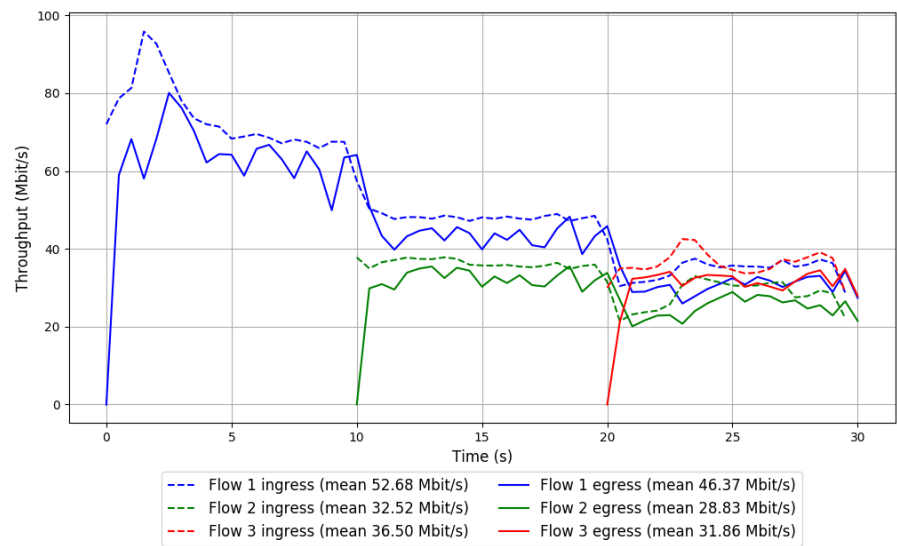


Run 5: Statistics of Indigo-Muses

Start at: 2018-10-26 04:32:42  
End at: 2018-10-26 04:33:12  
Local clock offset: 3.582 ms  
Remote clock offset: -1.886 ms

# Below is generated by plot.py at 2018-10-26 04:41:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 76.07 Mbit/s  
95th percentile per-packet one-way delay: 11.300 ms  
Loss rate: 11.92%  
-- Flow 1:  
Average throughput: 46.37 Mbit/s  
95th percentile per-packet one-way delay: 11.275 ms  
Loss rate: 11.97%  
-- Flow 2:  
Average throughput: 28.83 Mbit/s  
95th percentile per-packet one-way delay: 11.087 ms  
Loss rate: 11.35%  
-- Flow 3:  
Average throughput: 31.86 Mbit/s  
95th percentile per-packet one-way delay: 11.624 ms  
Loss rate: 12.71%

Run 5: Report of Indigo-Muses — Data Link



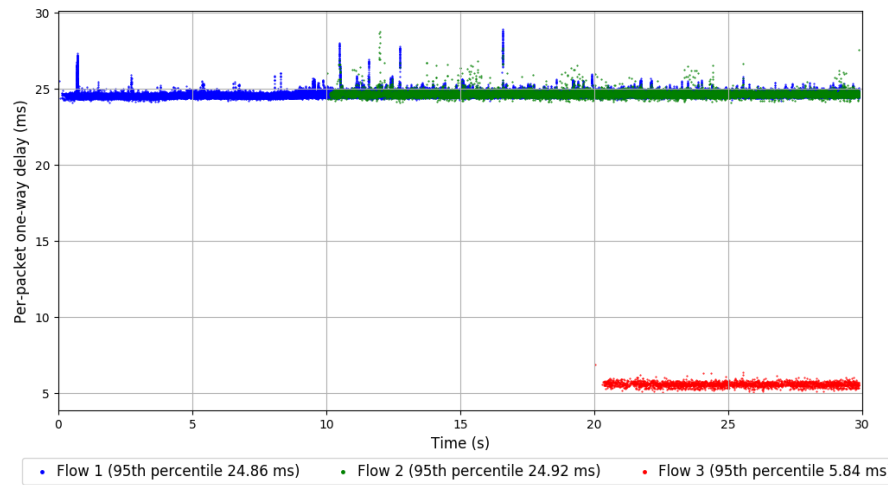
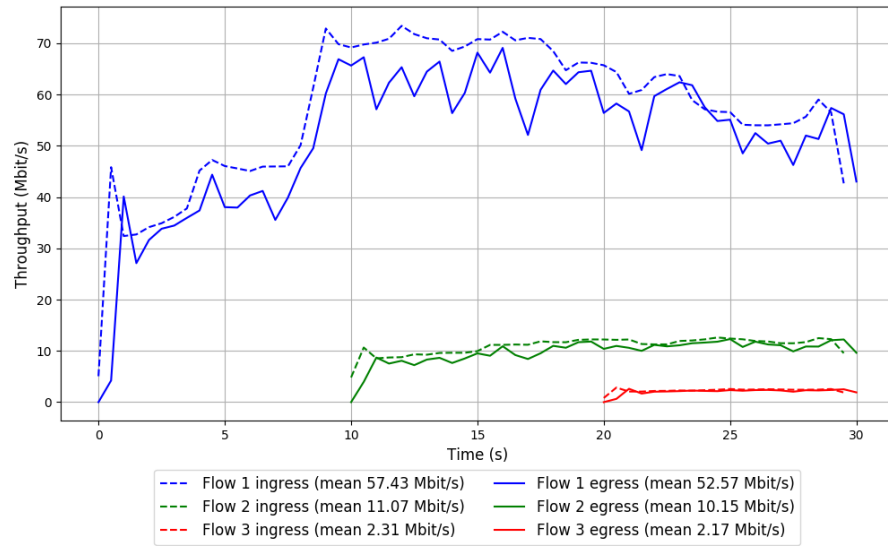


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-10-26 03:06:35
End at: 2018-10-26 03:07:05
Local clock offset: 1.37 ms
Remote clock offset: -5.348 ms

# Below is generated by plot.py at 2018-10-26 04:41:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.03 Mbit/s
95th percentile per-packet one-way delay: 24.865 ms
Loss rate: 8.48%
-- Flow 1:
Average throughput: 52.57 Mbit/s
95th percentile per-packet one-way delay: 24.857 ms
Loss rate: 8.52%
-- Flow 2:
Average throughput: 10.15 Mbit/s
95th percentile per-packet one-way delay: 24.921 ms
Loss rate: 8.40%
-- Flow 3:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 5.837 ms
Loss rate: 6.20%
```

# Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-10-26 03:27:41

End at: 2018-10-26 03:28:11

Local clock offset: 3.87 ms

Remote clock offset: -5.23 ms

# Below is generated by plot.py at 2018-10-26 04:41:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 82.38 Mbit/s

95th percentile per-packet one-way delay: 17.291 ms

Loss rate: 6.48%

-- Flow 1:

Average throughput: 80.18 Mbit/s

95th percentile per-packet one-way delay: 5.651 ms

Loss rate: 6.48%

-- Flow 2:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 25.972 ms

Loss rate: 6.54%

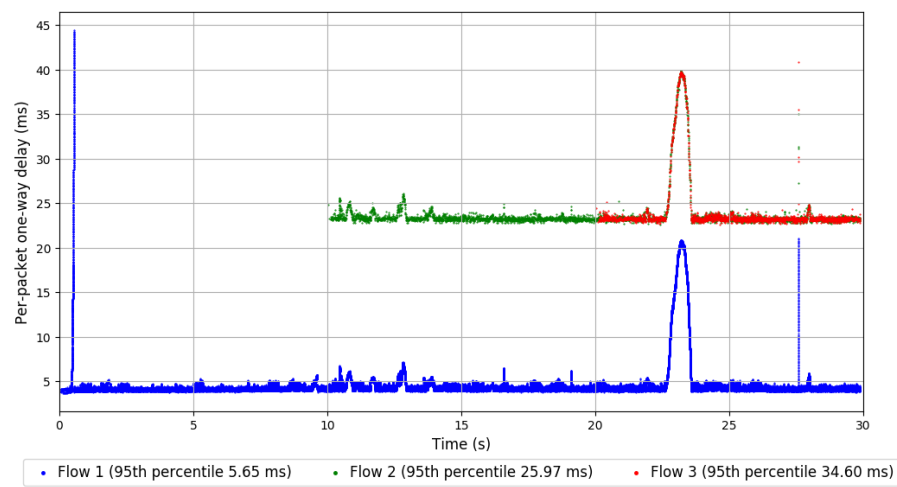
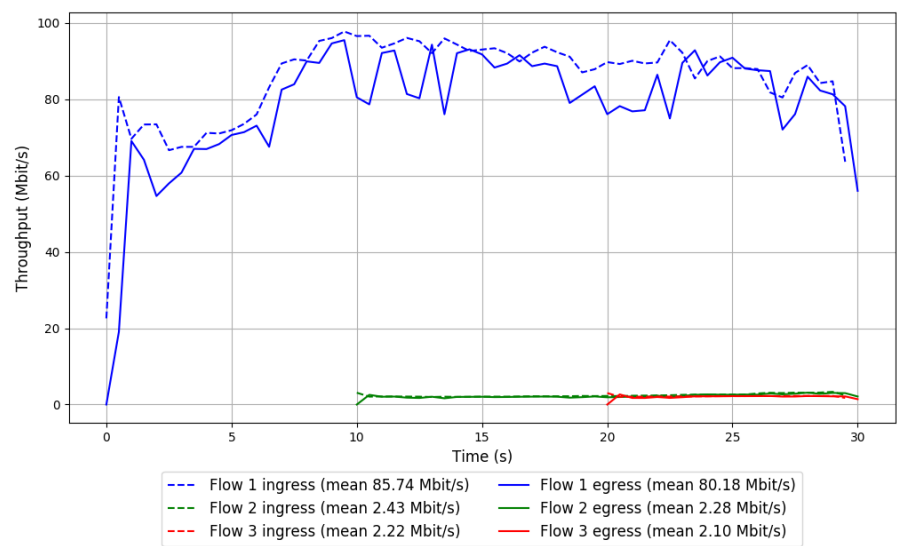
-- Flow 3:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 34.598 ms

Loss rate: 5.57%

Run 2: Report of PCC-Allegro — Data Link

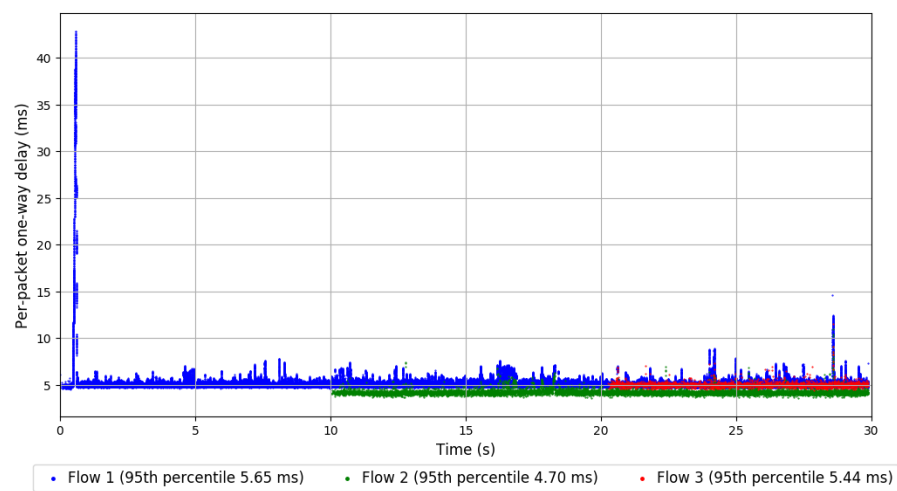
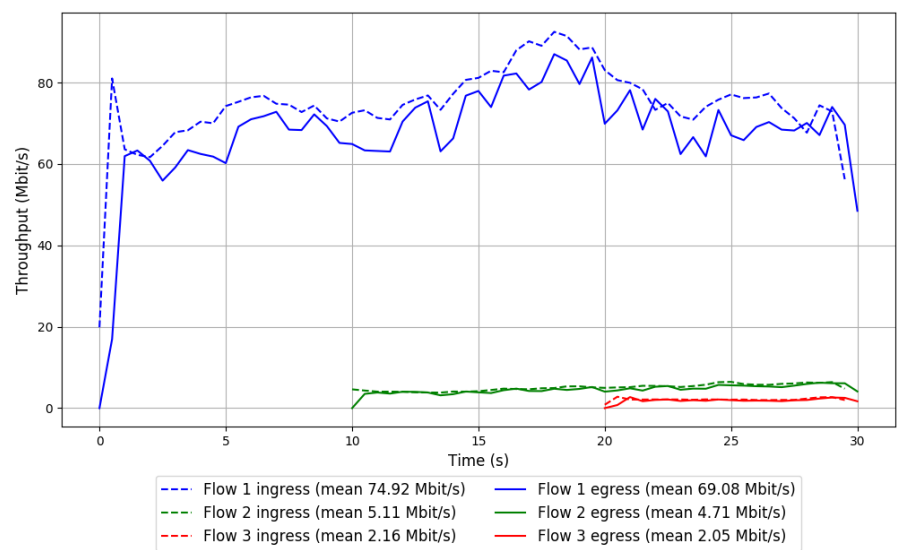


Run 3: Statistics of PCC-Allegro

Start at: 2018-10-26 03:48:57  
End at: 2018-10-26 03:49:27  
Local clock offset: 1.575 ms  
Remote clock offset: -6.172 ms

# Below is generated by plot.py at 2018-10-26 04:41:39  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 72.87 Mbit/s  
95th percentile per-packet one-way delay: 5.626 ms  
Loss rate: 7.80%  
-- Flow 1:  
Average throughput: 69.08 Mbit/s  
95th percentile per-packet one-way delay: 5.653 ms  
Loss rate: 7.80%  
-- Flow 2:  
Average throughput: 4.71 Mbit/s  
95th percentile per-packet one-way delay: 4.701 ms  
Loss rate: 7.93%  
-- Flow 3:  
Average throughput: 2.05 Mbit/s  
95th percentile per-packet one-way delay: 5.442 ms  
Loss rate: 7.64%

Run 3: Report of PCC-Allegro — Data Link

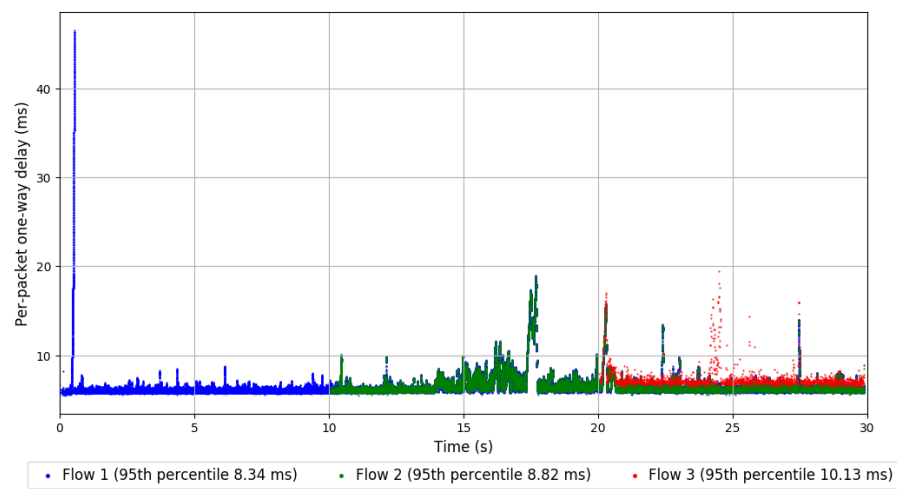
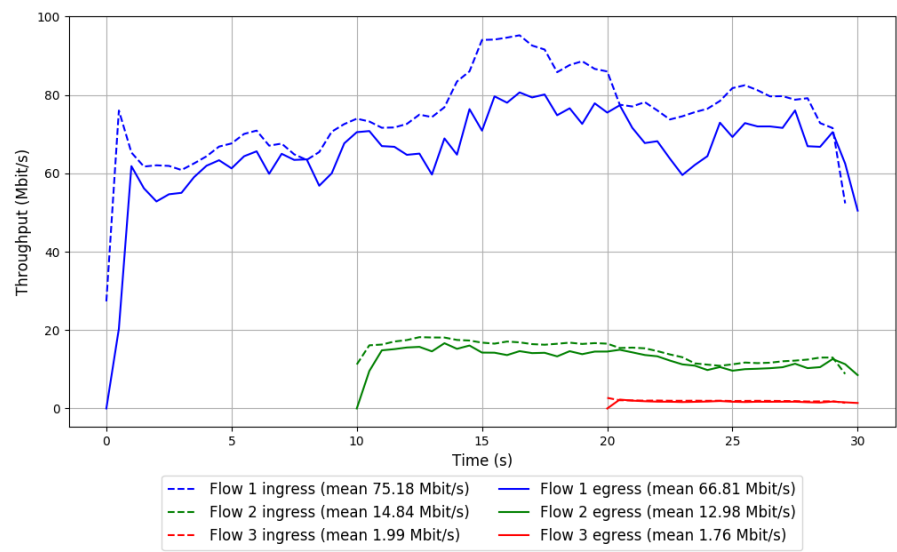


Run 4: Statistics of PCC-Allegro

Start at: 2018-10-26 04:10:14  
End at: 2018-10-26 04:10:44  
Local clock offset: 0.524 ms  
Remote clock offset: -5.701 ms

# Below is generated by plot.py at 2018-10-26 04:42:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 76.02 Mbit/s  
95th percentile per-packet one-way delay: 8.404 ms  
Loss rate: 11.30%  
-- Flow 1:  
Average throughput: 66.81 Mbit/s  
95th percentile per-packet one-way delay: 8.335 ms  
Loss rate: 11.13%  
-- Flow 2:  
Average throughput: 12.98 Mbit/s  
95th percentile per-packet one-way delay: 8.822 ms  
Loss rate: 12.56%  
-- Flow 3:  
Average throughput: 1.76 Mbit/s  
95th percentile per-packet one-way delay: 10.135 ms  
Loss rate: 11.65%

Run 4: Report of PCC-Allegro — Data Link



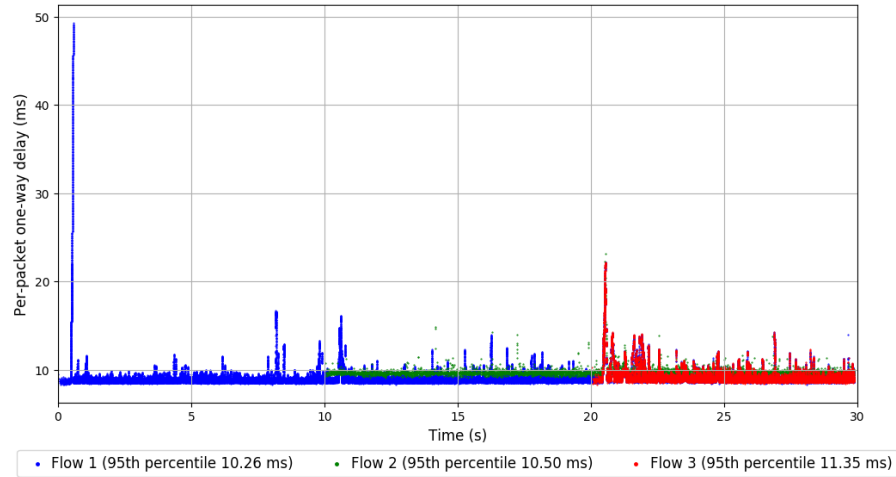
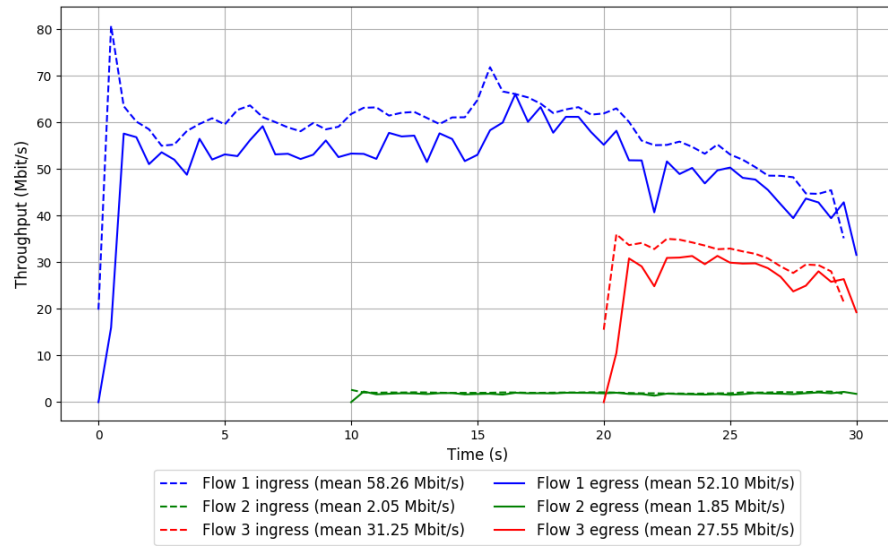


Run 5: Statistics of PCC-Allegro

Start at: 2018-10-26 04:31:32  
End at: 2018-10-26 04:32:02  
Local clock offset: 2.725 ms  
Remote clock offset: -1.181 ms

# Below is generated by plot.py at 2018-10-26 04:42:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 62.42 Mbit/s  
95th percentile per-packet one-way delay: 10.474 ms  
Loss rate: 10.75%  
-- Flow 1:  
Average throughput: 52.10 Mbit/s  
95th percentile per-packet one-way delay: 10.262 ms  
Loss rate: 10.57%  
-- Flow 2:  
Average throughput: 1.85 Mbit/s  
95th percentile per-packet one-way delay: 10.501 ms  
Loss rate: 9.89%  
-- Flow 3:  
Average throughput: 27.55 Mbit/s  
95th percentile per-packet one-way delay: 11.347 ms  
Loss rate: 11.84%

# Run 5: Report of PCC-Allegro — Data Link

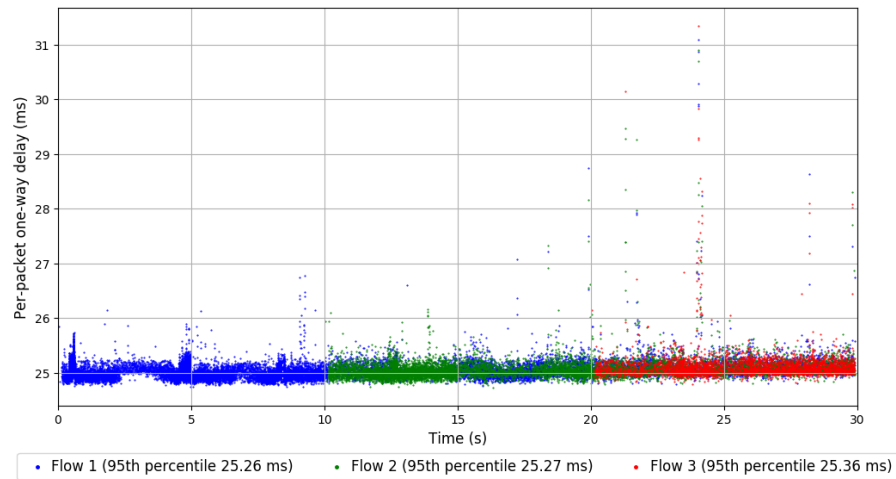
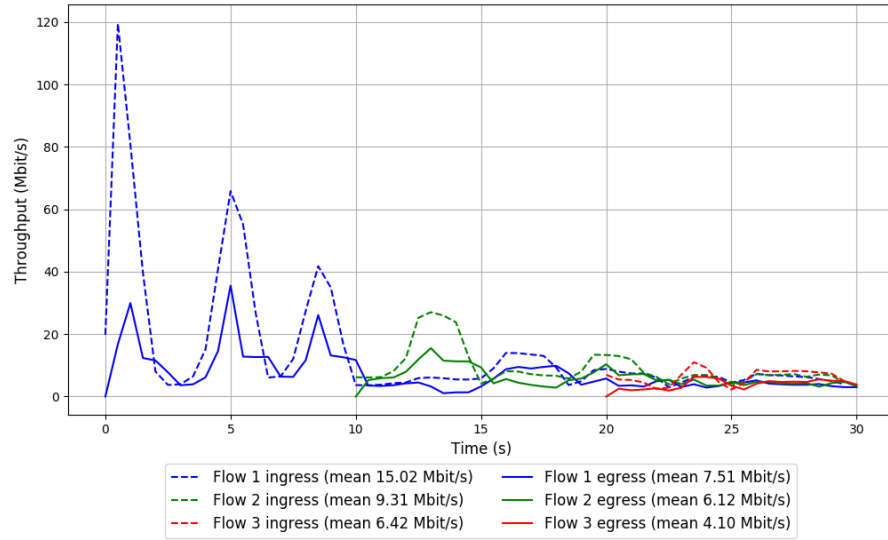


```
Run 1: Statistics of PCC-Expr

Start at: 2018-10-26 03:01:38
End at: 2018-10-26 03:02:08
Local clock offset: 1.319 ms
Remote clock offset: -4.495 ms

# Below is generated by plot.py at 2018-10-26 04:42:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 25.276 ms
Loss rate: 44.63%
-- Flow 1:
Average throughput: 7.51 Mbit/s
95th percentile per-packet one-way delay: 25.264 ms
Loss rate: 50.03%
-- Flow 2:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 25.270 ms
Loss rate: 34.39%
-- Flow 3:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 25.355 ms
Loss rate: 36.33%
```

## Run 1: Report of PCC-Expr — Data Link

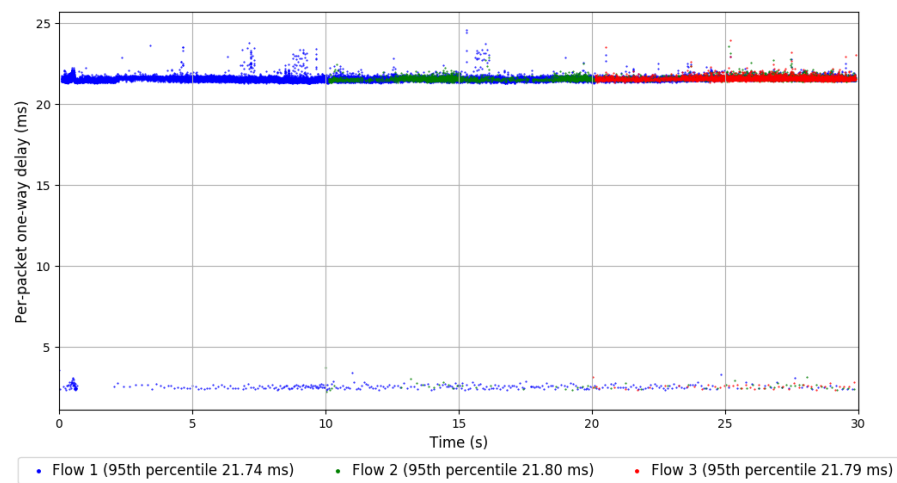
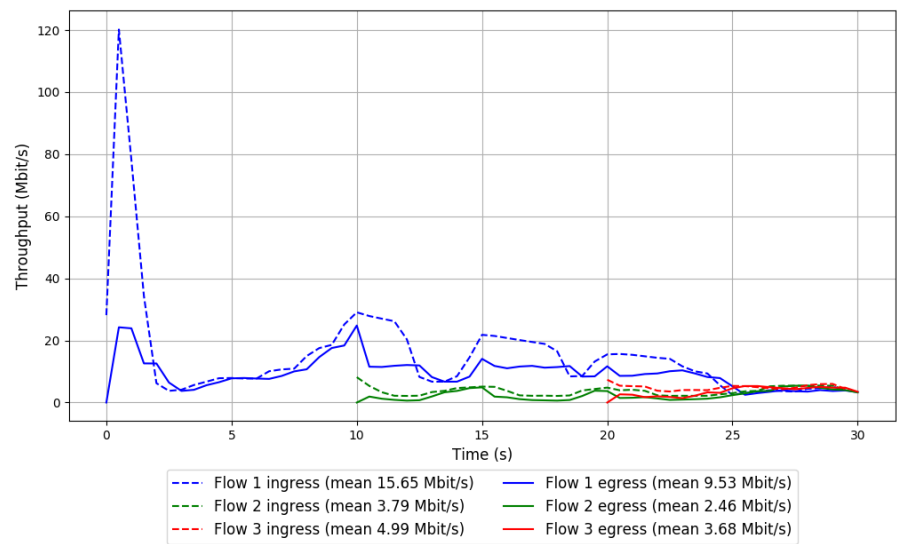


Run 2: Statistics of PCC-Expr

Start at: 2018-10-26 03:22:51  
End at: 2018-10-26 03:23:21  
Local clock offset: 4.376 ms  
Remote clock offset: -6.123 ms

# Below is generated by plot.py at 2018-10-26 04:42:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.38 Mbit/s  
95th percentile per-packet one-way delay: 21.752 ms  
Loss rate: 37.53%  
-- Flow 1:  
Average throughput: 9.53 Mbit/s  
95th percentile per-packet one-way delay: 21.736 ms  
Loss rate: 39.13%  
-- Flow 2:  
Average throughput: 2.46 Mbit/s  
95th percentile per-packet one-way delay: 21.800 ms  
Loss rate: 34.92%  
-- Flow 3:  
Average throughput: 3.68 Mbit/s  
95th percentile per-packet one-way delay: 21.793 ms  
Loss rate: 26.27%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-10-26 03:44:08

End at: 2018-10-26 03:44:38

Local clock offset: 3.82 ms

Remote clock offset: -5.56 ms

# Below is generated by plot.py at 2018-10-26 04:42:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.95 Mbit/s

95th percentile per-packet one-way delay: 3.833 ms

Loss rate: 38.38%

-- Flow 1:

Average throughput: 8.44 Mbit/s

95th percentile per-packet one-way delay: 3.848 ms

Loss rate: 44.25%

-- Flow 2:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 3.868 ms

Loss rate: 26.11%

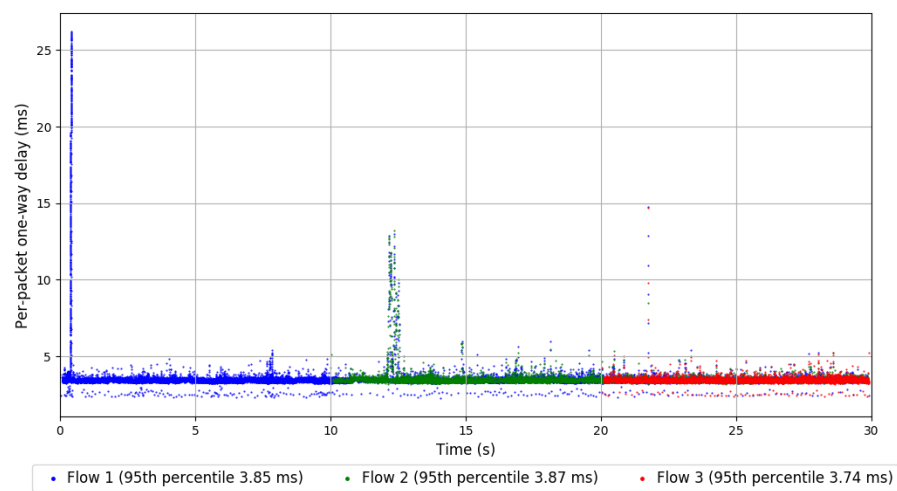
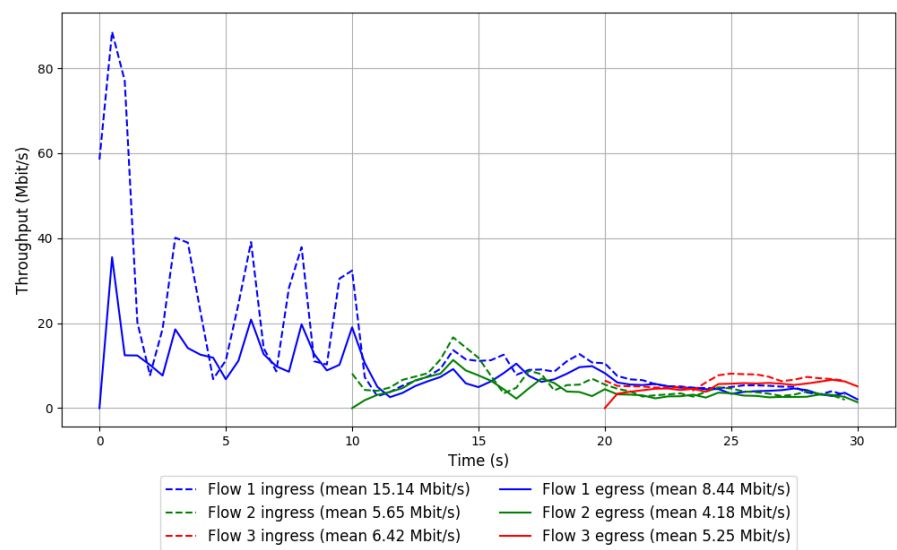
-- Flow 3:

Average throughput: 5.25 Mbit/s

95th percentile per-packet one-way delay: 3.743 ms

Loss rate: 18.20%

Run 3: Report of PCC-Expr — Data Link



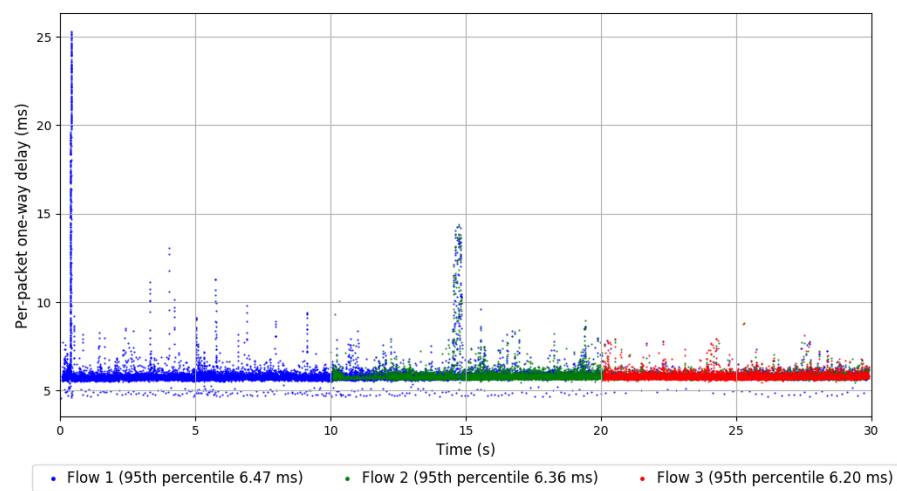
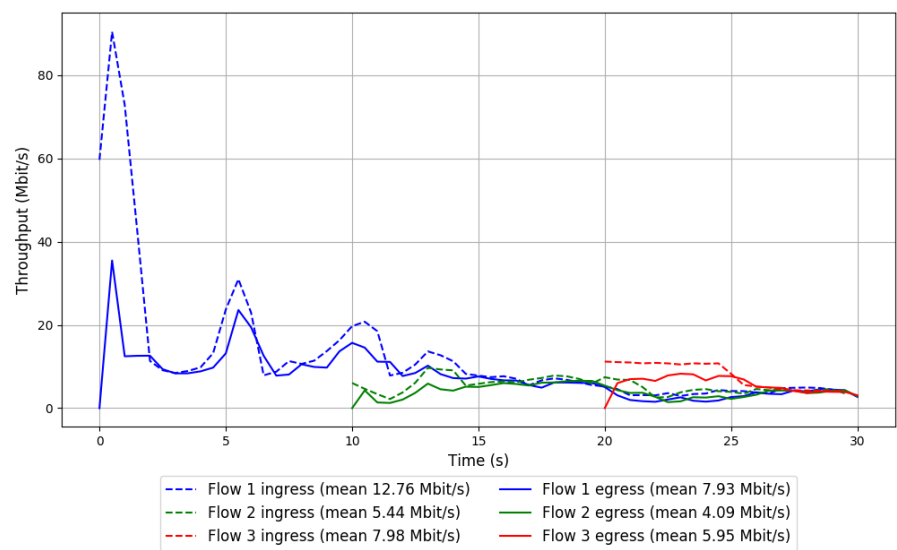


Run 4: Statistics of PCC-Expr

Start at: 2018-10-26 04:05:15  
End at: 2018-10-26 04:05:45  
Local clock offset: 1.141 ms  
Remote clock offset: -5.874 ms

# Below is generated by plot.py at 2018-10-26 04:42:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.61 Mbit/s  
95th percentile per-packet one-way delay: 6.373 ms  
Loss rate: 33.66%  
-- Flow 1:  
Average throughput: 7.93 Mbit/s  
95th percentile per-packet one-way delay: 6.469 ms  
Loss rate: 37.87%  
-- Flow 2:  
Average throughput: 4.09 Mbit/s  
95th percentile per-packet one-way delay: 6.356 ms  
Loss rate: 24.82%  
-- Flow 3:  
Average throughput: 5.95 Mbit/s  
95th percentile per-packet one-way delay: 6.199 ms  
Loss rate: 25.41%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2018-10-26 04:26:41

End at: 2018-10-26 04:27:11

Local clock offset: -0.175 ms

Remote clock offset: -1.03 ms

# Below is generated by plot.py at 2018-10-26 04:42:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.86 Mbit/s

95th percentile per-packet one-way delay: 13.005 ms

Loss rate: 36.13%

-- Flow 1:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 13.036 ms

Loss rate: 39.94%

-- Flow 2:

Average throughput: 4.75 Mbit/s

95th percentile per-packet one-way delay: 12.936 ms

Loss rate: 33.82%

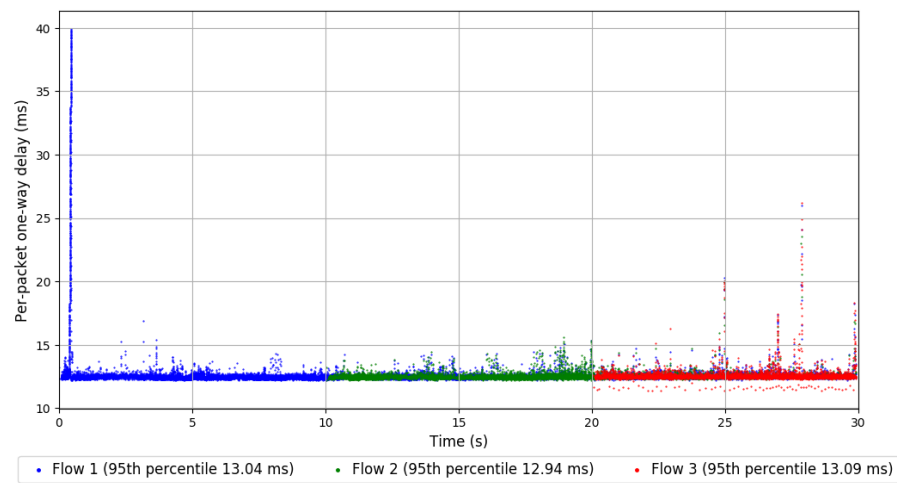
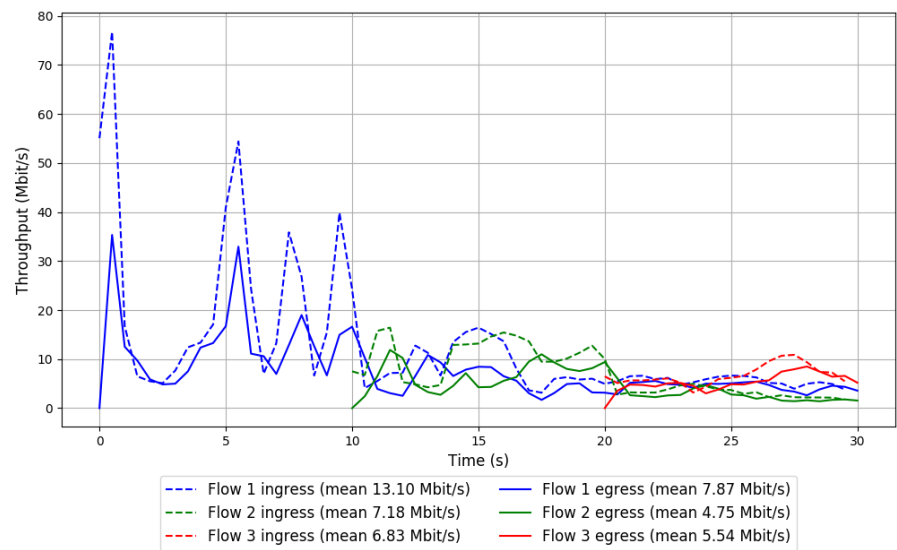
-- Flow 3:

Average throughput: 5.54 Mbit/s

95th percentile per-packet one-way delay: 13.086 ms

Loss rate: 18.87%

Run 5: Report of PCC-Expr — Data Link

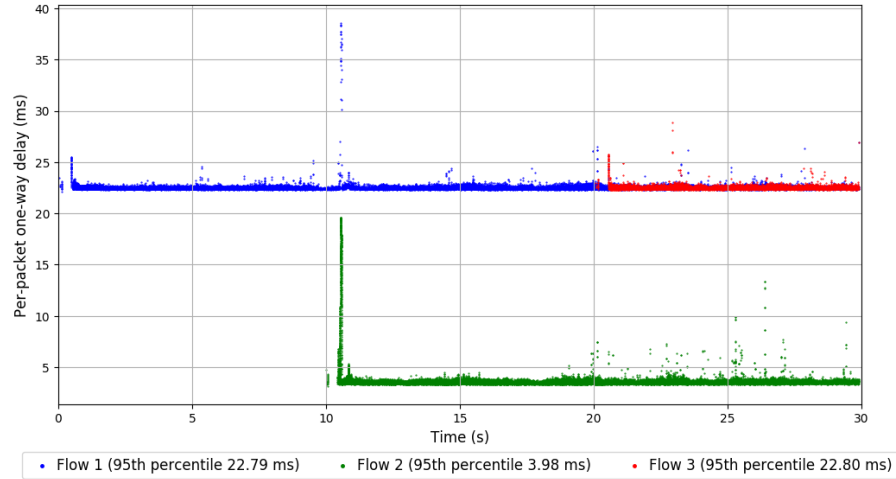
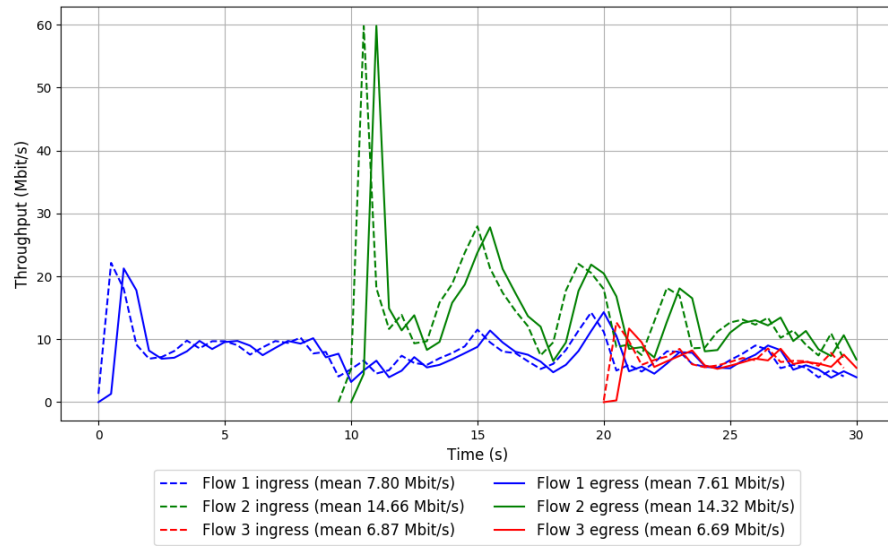


Run 1: Statistics of QUIC Cubic

Start at: 2018-10-26 02:52:19  
End at: 2018-10-26 02:52:49  
Local clock offset: 3.109 ms  
Remote clock offset: -4.828 ms

# Below is generated by plot.py at 2018-10-26 04:42:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 19.34 Mbit/s  
95th percentile per-packet one-way delay: 22.709 ms  
Loss rate: 2.48%  
-- Flow 1:  
Average throughput: 7.61 Mbit/s  
95th percentile per-packet one-way delay: 22.789 ms  
Loss rate: 2.54%  
-- Flow 2:  
Average throughput: 14.32 Mbit/s  
95th percentile per-packet one-way delay: 3.982 ms  
Loss rate: 2.37%  
-- Flow 3:  
Average throughput: 6.69 Mbit/s  
95th percentile per-packet one-way delay: 22.802 ms  
Loss rate: 2.81%

## Run 1: Report of QUIC Cubic — Data Link

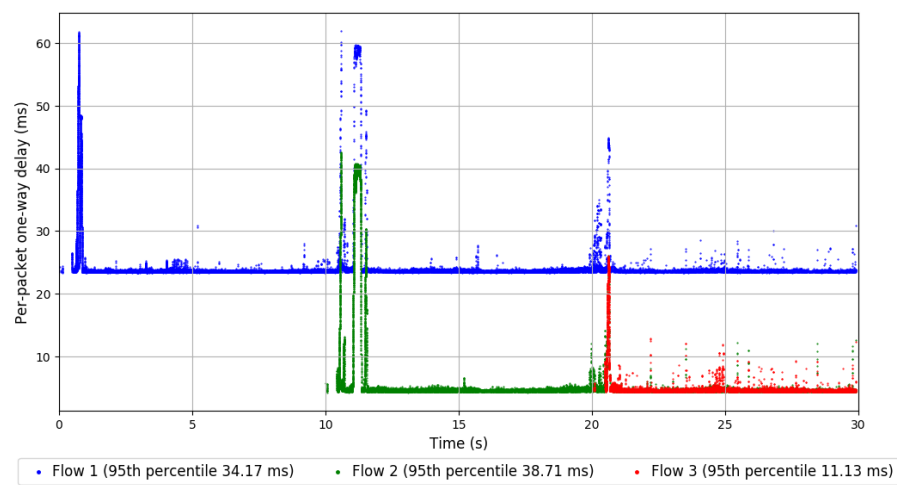
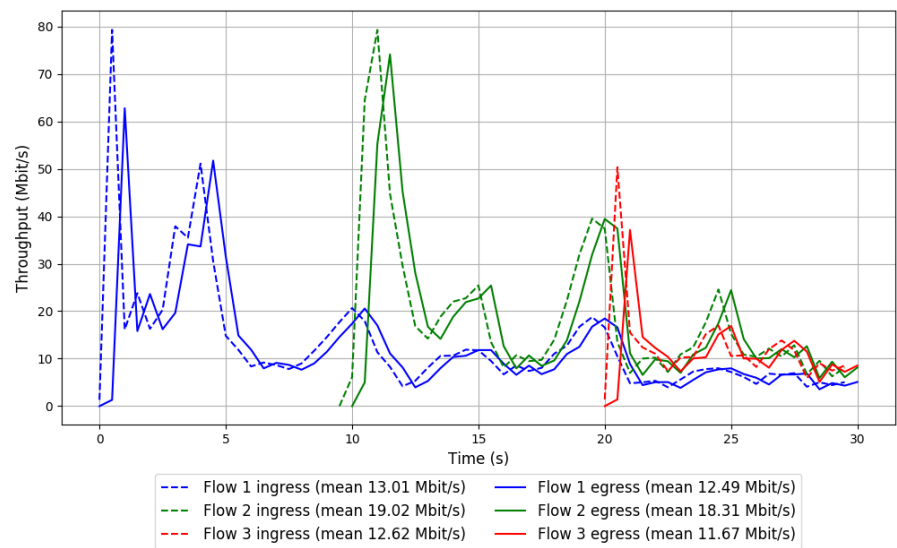


Run 2: Statistics of QUIC Cubic

Start at: 2018-10-26 03:13:33  
End at: 2018-10-26 03:14:03  
Local clock offset: 3.034 ms  
Remote clock offset: -5.006 ms

# Below is generated by plot.py at 2018-10-26 04:42:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 28.54 Mbit/s  
95th percentile per-packet one-way delay: 33.360 ms  
Loss rate: 4.38%  
-- Flow 1:  
Average throughput: 12.49 Mbit/s  
95th percentile per-packet one-way delay: 34.166 ms  
Loss rate: 4.06%  
-- Flow 2:  
Average throughput: 18.31 Mbit/s  
95th percentile per-packet one-way delay: 38.713 ms  
Loss rate: 3.68%  
-- Flow 3:  
Average throughput: 11.67 Mbit/s  
95th percentile per-packet one-way delay: 11.130 ms  
Loss rate: 7.48%

Run 2: Report of QUIC Cubic — Data Link



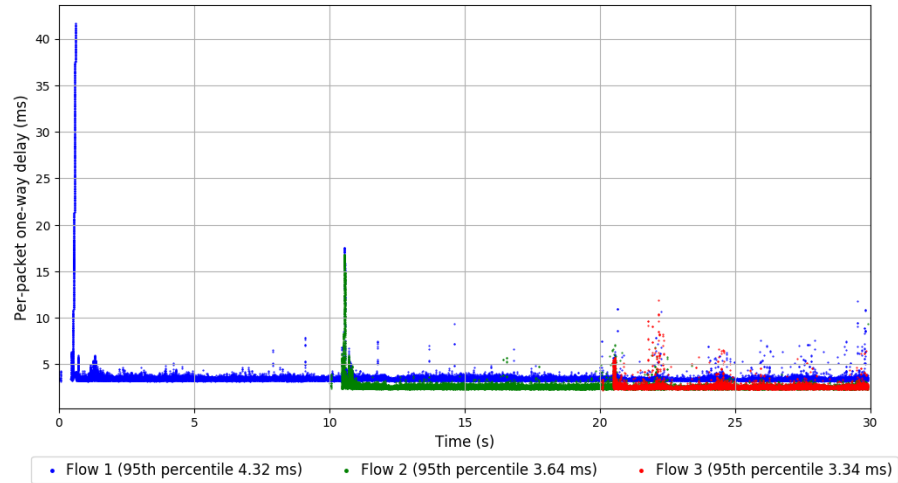
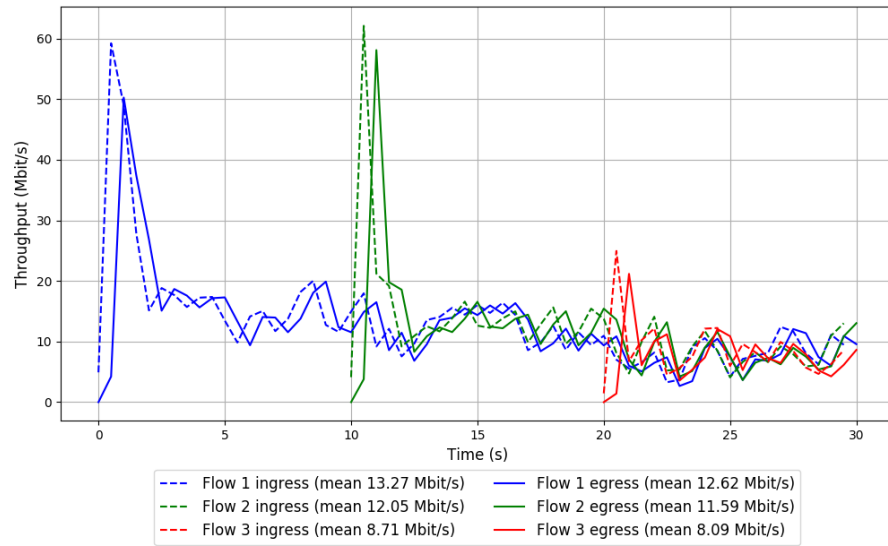


Run 3: Statistics of QUIC Cubic

Start at: 2018-10-26 03:34:39  
End at: 2018-10-26 03:35:09  
Local clock offset: 4.591 ms  
Remote clock offset: -5.478 ms

# Below is generated by plot.py at 2018-10-26 04:42:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 22.99 Mbit/s  
95th percentile per-packet one-way delay: 4.088 ms  
Loss rate: 4.82%  
-- Flow 1:  
Average throughput: 12.62 Mbit/s  
95th percentile per-packet one-way delay: 4.315 ms  
Loss rate: 4.94%  
-- Flow 2:  
Average throughput: 11.59 Mbit/s  
95th percentile per-packet one-way delay: 3.640 ms  
Loss rate: 3.79%  
-- Flow 3:  
Average throughput: 8.09 Mbit/s  
95th percentile per-packet one-way delay: 3.341 ms  
Loss rate: 7.10%

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

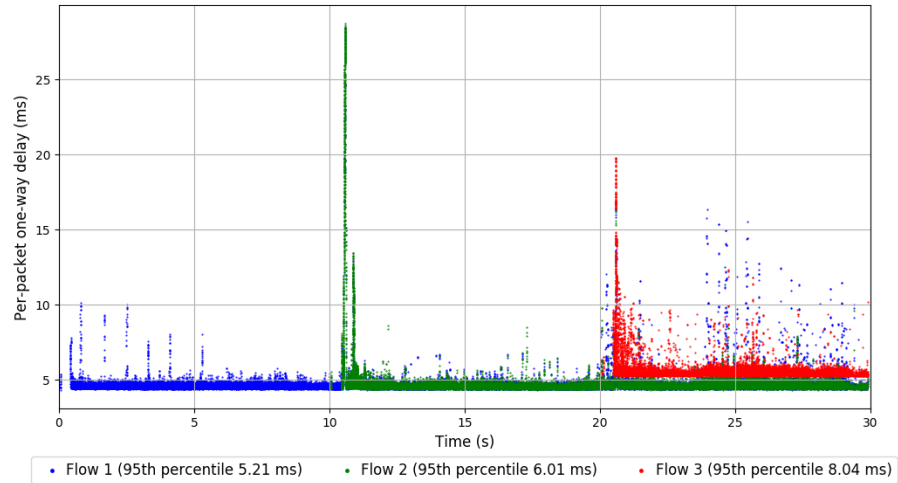
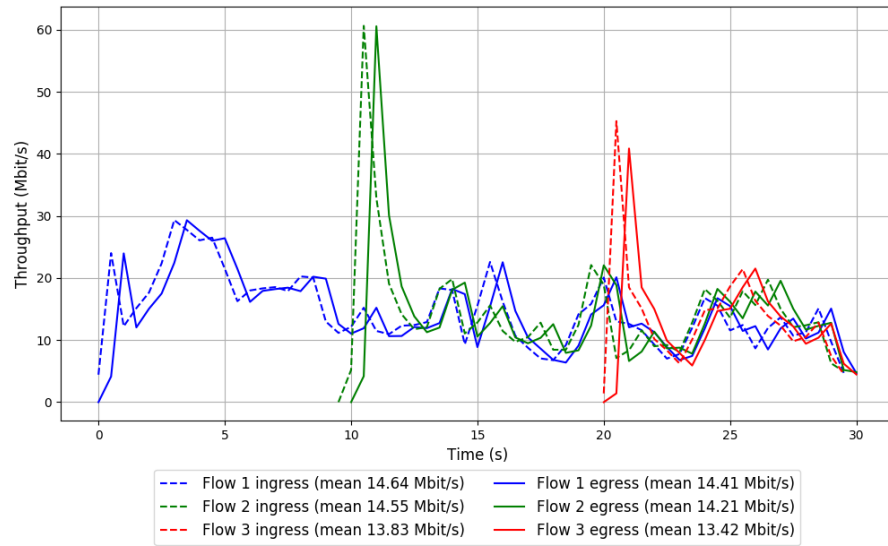


Run 4: Statistics of QUIC Cubic

Start at: 2018-10-26 03:55:55  
End at: 2018-10-26 03:56:25  
Local clock offset: 1.289 ms  
Remote clock offset: -5.743 ms

# Below is generated by plot.py at 2018-10-26 04:42:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 28.29 Mbit/s  
95th percentile per-packet one-way delay: 6.079 ms  
Loss rate: 2.05%  
-- Flow 1:  
Average throughput: 14.41 Mbit/s  
95th percentile per-packet one-way delay: 5.206 ms  
Loss rate: 1.58%  
-- Flow 2:  
Average throughput: 14.21 Mbit/s  
95th percentile per-packet one-way delay: 6.015 ms  
Loss rate: 2.32%  
-- Flow 3:  
Average throughput: 13.42 Mbit/s  
95th percentile per-packet one-way delay: 8.035 ms  
Loss rate: 2.96%

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

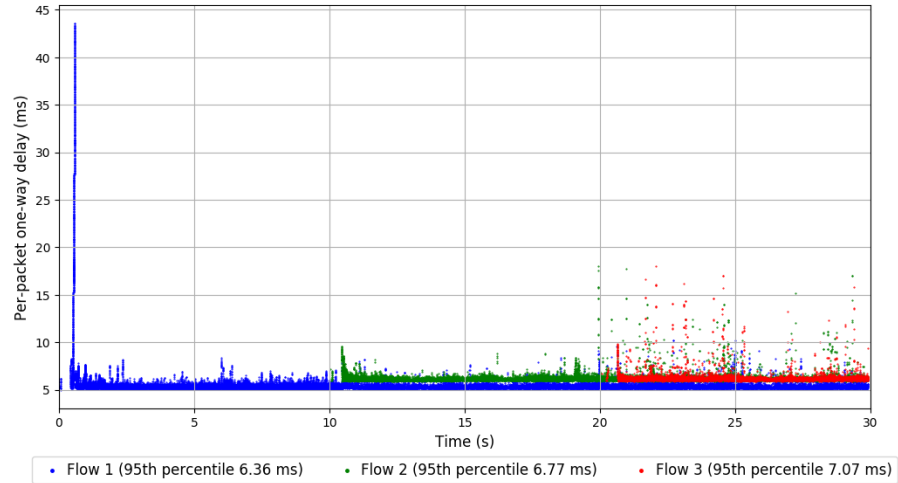
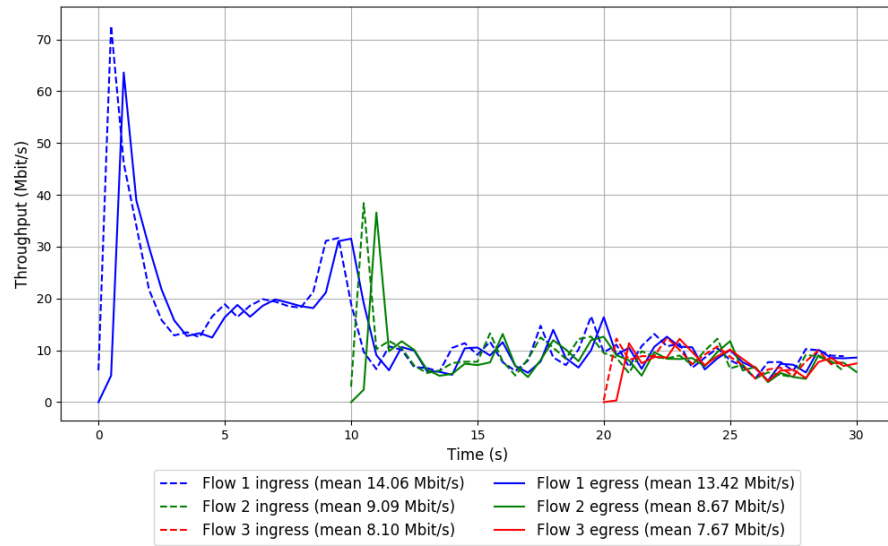


Run 5: Statistics of QUIC Cubic

Start at: 2018-10-26 04:17:21  
End at: 2018-10-26 04:17:51  
Local clock offset: 0.304 ms  
Remote clock offset: -6.694 ms

# Below is generated by plot.py at 2018-10-26 04:42:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 21.71 Mbit/s  
95th percentile per-packet one-way delay: 6.635 ms  
Loss rate: 4.65%  
-- Flow 1:  
Average throughput: 13.42 Mbit/s  
95th percentile per-packet one-way delay: 6.362 ms  
Loss rate: 4.55%  
-- Flow 2:  
Average throughput: 8.67 Mbit/s  
95th percentile per-packet one-way delay: 6.767 ms  
Loss rate: 4.64%  
-- Flow 3:  
Average throughput: 7.67 Mbit/s  
95th percentile per-packet one-way delay: 7.072 ms  
Loss rate: 5.20%

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

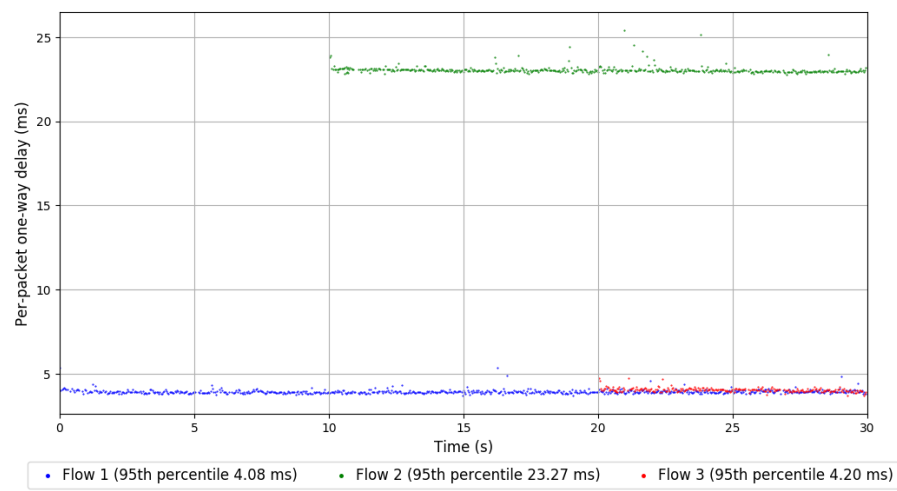
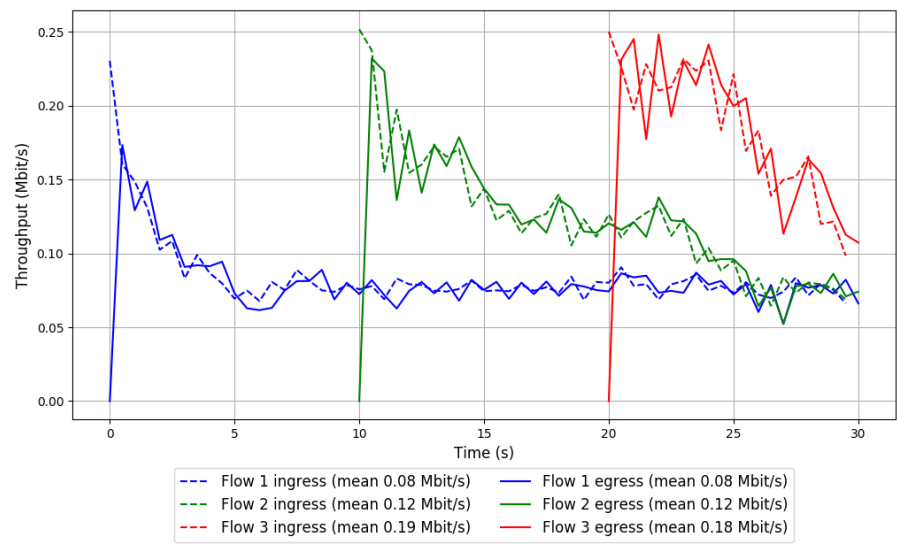


Run 1: Statistics of SCReAM

Start at: 2018-10-26 03:10:11  
End at: 2018-10-26 03:10:41  
Local clock offset: 3.452 ms  
Remote clock offset: -4.959 ms

# Below is generated by plot.py at 2018-10-26 04:42:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 23.109 ms  
Loss rate: 2.64%  
-- Flow 1:  
Average throughput: 0.08 Mbit/s  
95th percentile per-packet one-way delay: 4.079 ms  
Loss rate: 3.64%  
-- Flow 2:  
Average throughput: 0.12 Mbit/s  
95th percentile per-packet one-way delay: 23.266 ms  
Loss rate: 2.18%  
-- Flow 3:  
Average throughput: 0.18 Mbit/s  
95th percentile per-packet one-way delay: 4.202 ms  
Loss rate: 1.88%

Run 1: Report of SReAM — Data Link



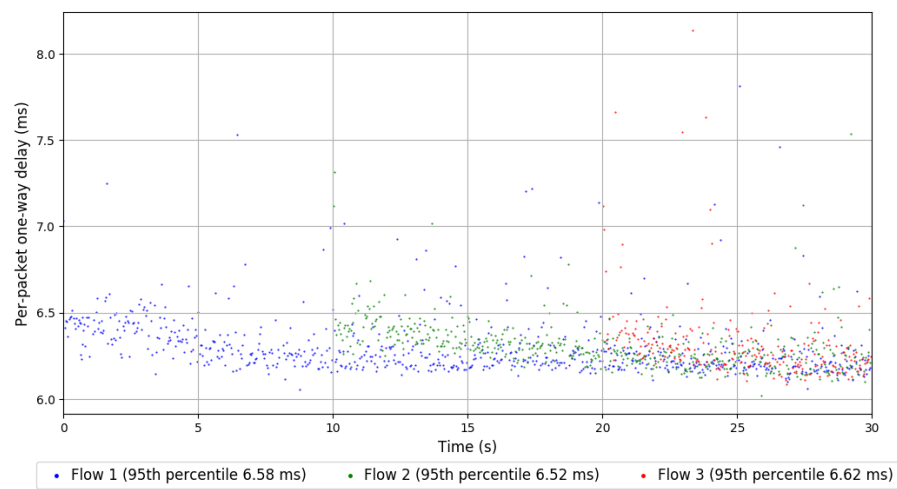
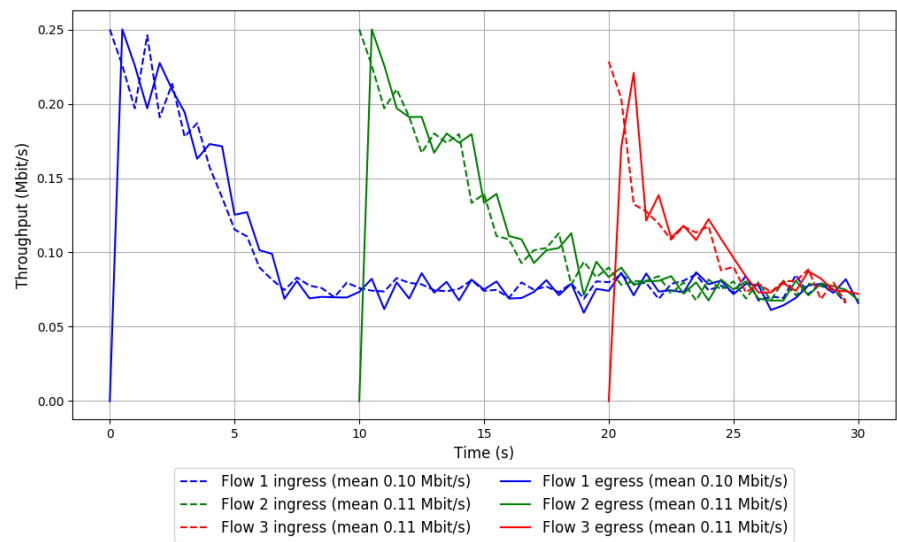


Run 2: Statistics of SReAM

Start at: 2018-10-26 03:31:17  
End at: 2018-10-26 03:31:47  
Local clock offset: 1.987 ms  
Remote clock offset: -5.651 ms

# Below is generated by plot.py at 2018-10-26 04:42:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 6.566 ms  
Loss rate: 1.70%  
-- Flow 1:  
Average throughput: 0.10 Mbit/s  
95th percentile per-packet one-way delay: 6.583 ms  
Loss rate: 2.16%  
-- Flow 2:  
Average throughput: 0.11 Mbit/s  
95th percentile per-packet one-way delay: 6.521 ms  
Loss rate: 0.85%  
-- Flow 3:  
Average throughput: 0.11 Mbit/s  
95th percentile per-packet one-way delay: 6.615 ms  
Loss rate: 2.19%

Run 2: Report of SReAM — Data Link

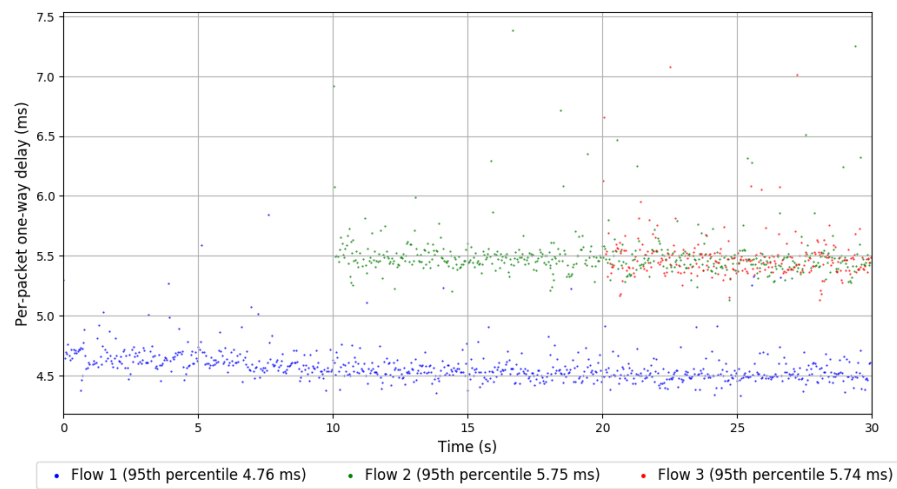
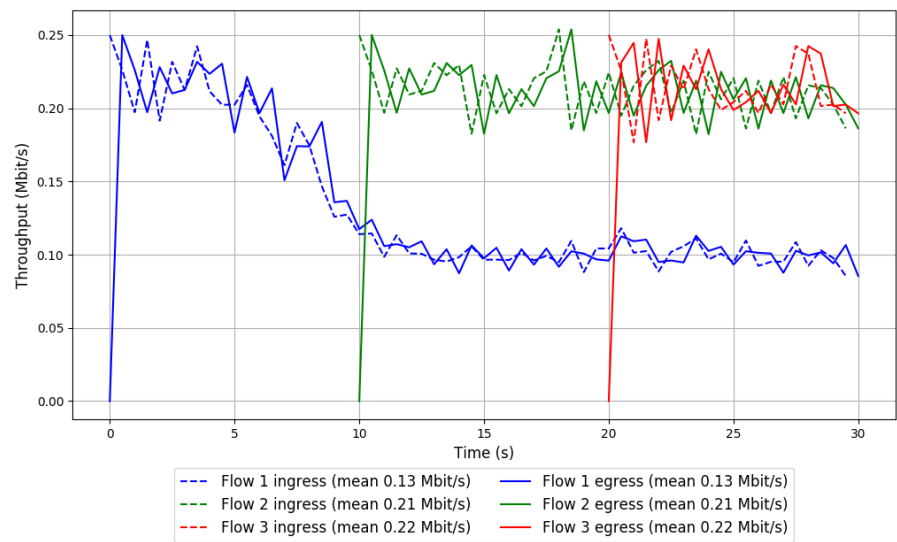


Run 3: Statistics of SReAM

Start at: 2018-10-26 03:52:33  
End at: 2018-10-26 03:53:03  
Local clock offset: 1.623 ms  
Remote clock offset: -5.495 ms

# Below is generated by plot.py at 2018-10-26 04:42:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.35 Mbit/s  
95th percentile per-packet one-way delay: 5.626 ms  
Loss rate: 0.08%  
-- Flow 1:  
Average throughput: 0.13 Mbit/s  
95th percentile per-packet one-way delay: 4.756 ms  
Loss rate: 0.22%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 5.747 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 5.741 ms  
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

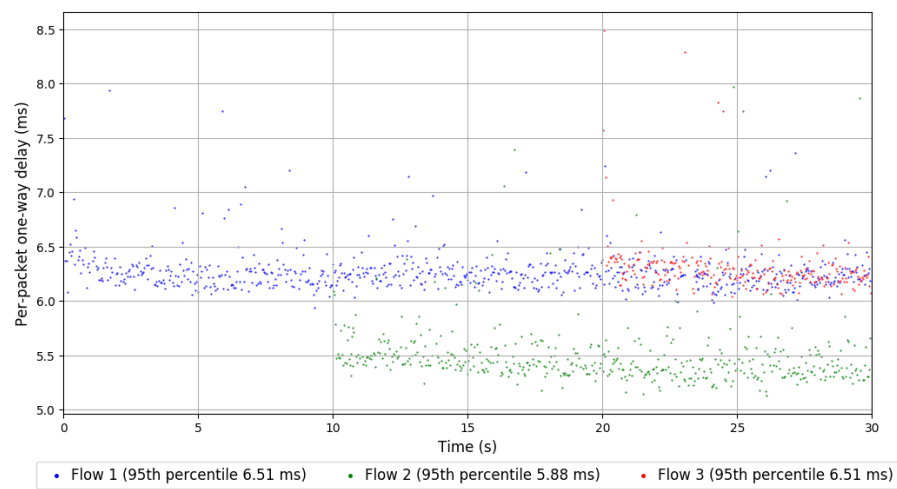
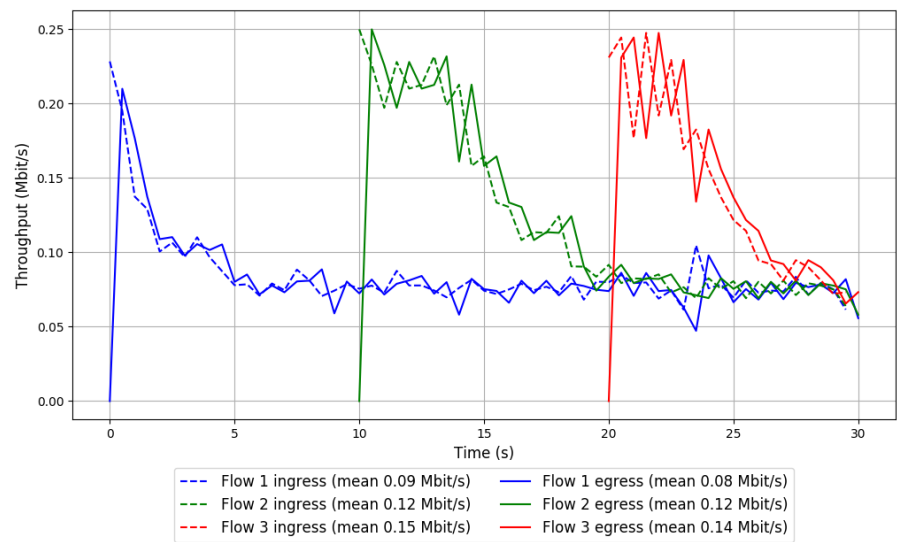


Run 4: Statistics of SCReAM

Start at: 2018-10-26 04:13:56  
End at: 2018-10-26 04:14:26  
Local clock offset: 0.205 ms  
Remote clock offset: -6.564 ms

# Below is generated by plot.py at 2018-10-26 04:42:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 6.468 ms  
Loss rate: 1.74%  
-- Flow 1:  
Average throughput: 0.08 Mbit/s  
95th percentile per-packet one-way delay: 6.510 ms  
Loss rate: 2.26%  
-- Flow 2:  
Average throughput: 0.12 Mbit/s  
95th percentile per-packet one-way delay: 5.878 ms  
Loss rate: 1.35%  
-- Flow 3:  
Average throughput: 0.14 Mbit/s  
95th percentile per-packet one-way delay: 6.512 ms  
Loss rate: 1.45%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-10-26 04:35:13

End at: 2018-10-26 04:35:43

Local clock offset: 0.051 ms

Remote clock offset: -1.39 ms

# Below is generated by plot.py at 2018-10-26 04:42:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 12.557 ms

Loss rate: 1.42%

-- Flow 1:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 12.130 ms

Loss rate: 1.52%

-- Flow 2:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 12.679 ms

Loss rate: 1.34%

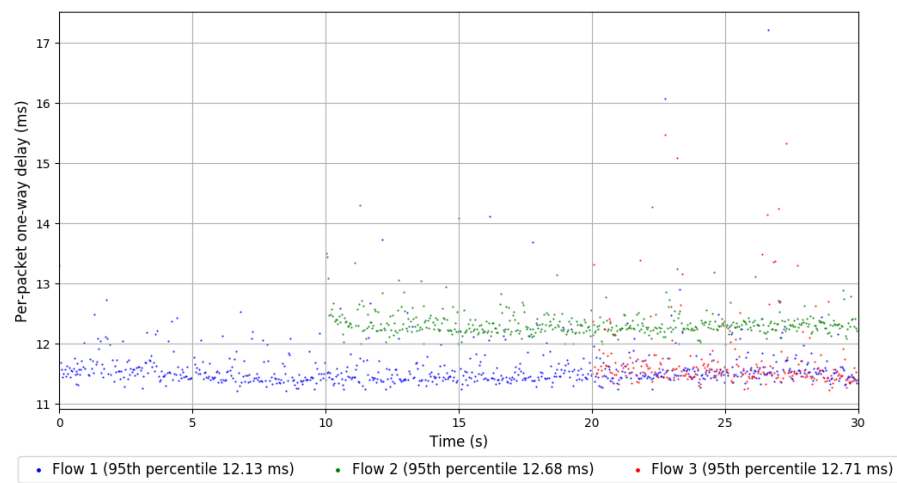
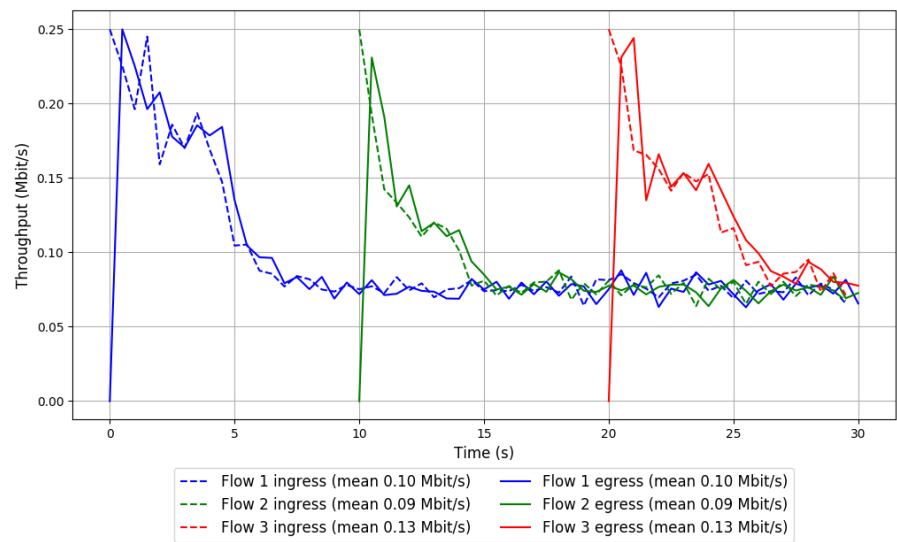
-- Flow 3:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 12.705 ms

Loss rate: 1.30%

Run 5: Report of SReAM — Data Link



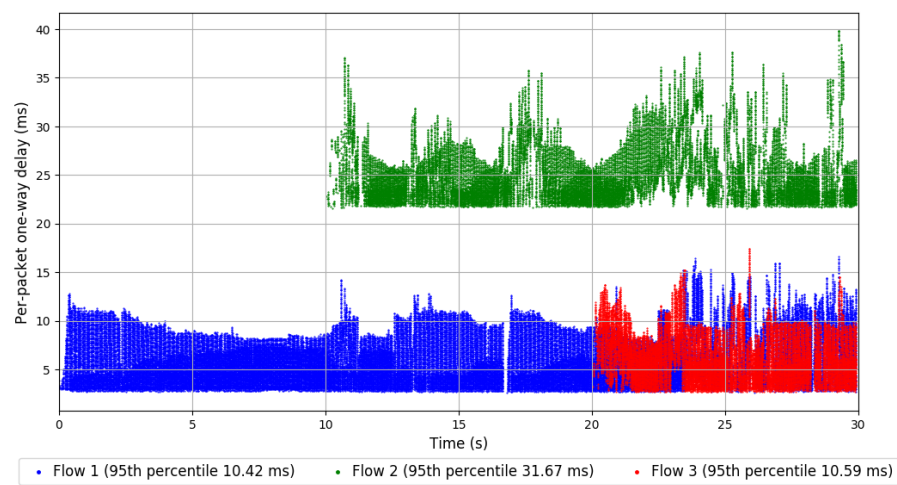
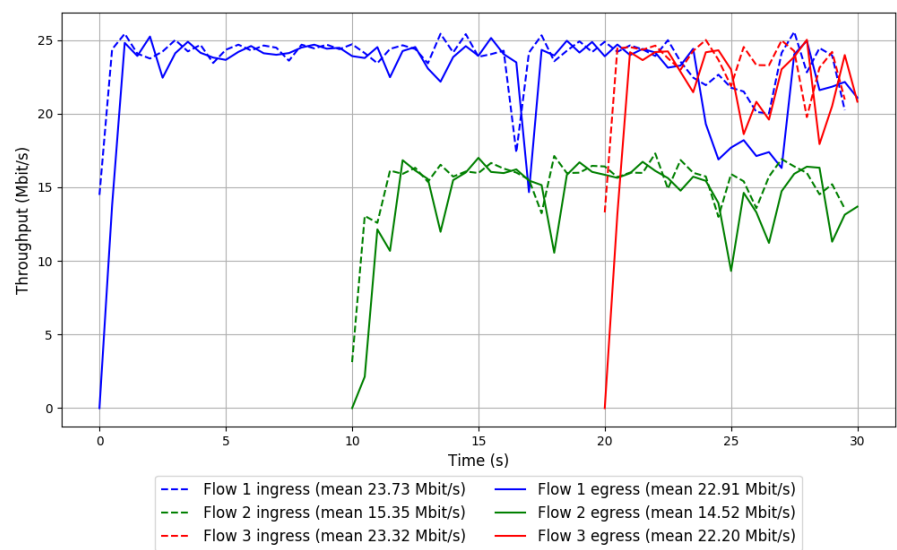


Run 1: Statistics of Sprout

Start at: 2018-10-26 02:58:13  
End at: 2018-10-26 02:58:43  
Local clock offset: 3.75 ms  
Remote clock offset: -5.005 ms

# Below is generated by plot.py at 2018-10-26 04:42:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 39.91 Mbit/s  
95th percentile per-packet one-way delay: 27.429 ms  
Loss rate: 4.18%  
-- Flow 1:  
Average throughput: 22.91 Mbit/s  
95th percentile per-packet one-way delay: 10.420 ms  
Loss rate: 3.45%  
-- Flow 2:  
Average throughput: 14.52 Mbit/s  
95th percentile per-packet one-way delay: 31.671 ms  
Loss rate: 5.46%  
-- Flow 3:  
Average throughput: 22.20 Mbit/s  
95th percentile per-packet one-way delay: 10.594 ms  
Loss rate: 4.73%

Run 1: Report of Sprout — Data Link

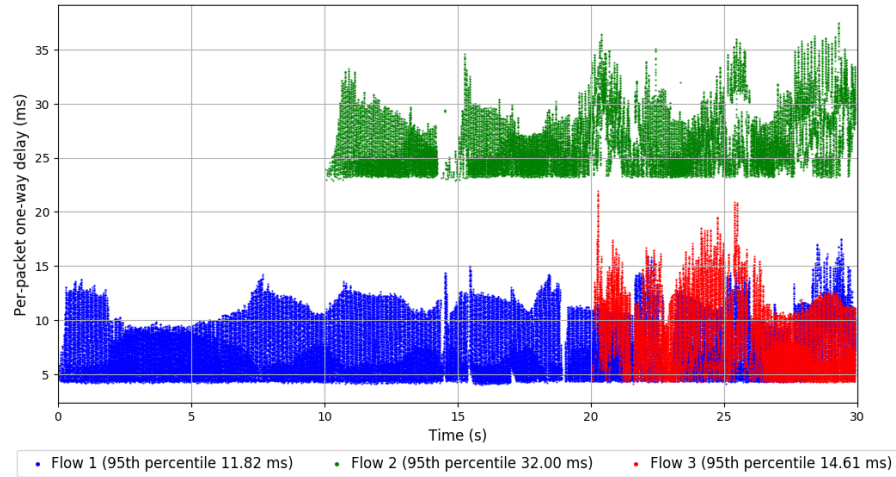
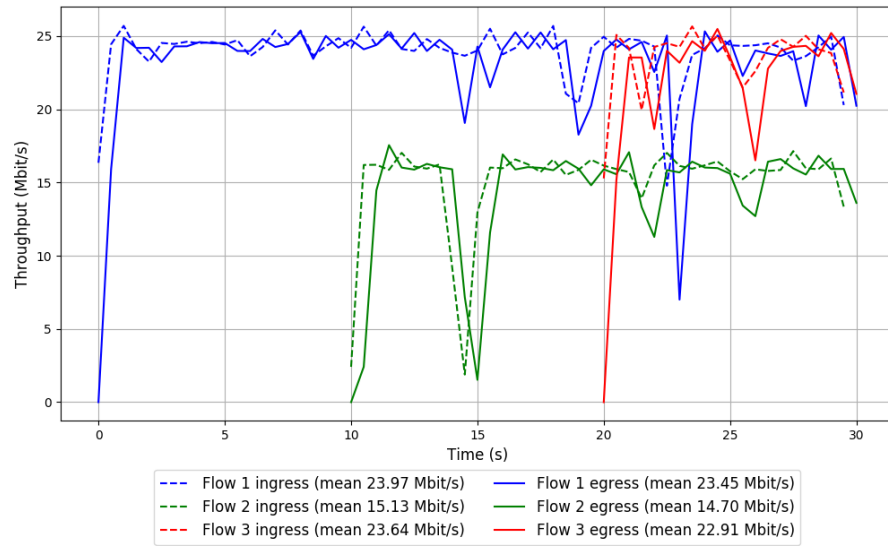


Run 2: Statistics of Sprout

Start at: 2018-10-26 03:19:24  
End at: 2018-10-26 03:19:54  
Local clock offset: 2.874 ms  
Remote clock offset: -5.644 ms

# Below is generated by plot.py at 2018-10-26 04:42:23  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 40.79 Mbit/s  
95th percentile per-packet one-way delay: 28.738 ms  
Loss rate: 2.51%  
-- Flow 1:  
Average throughput: 23.45 Mbit/s  
95th percentile per-packet one-way delay: 11.816 ms  
Loss rate: 2.16%  
-- Flow 2:  
Average throughput: 14.70 Mbit/s  
95th percentile per-packet one-way delay: 32.003 ms  
Loss rate: 2.96%  
-- Flow 3:  
Average throughput: 22.91 Mbit/s  
95th percentile per-packet one-way delay: 14.611 ms  
Loss rate: 3.01%

## Run 2: Report of Sprout — Data Link

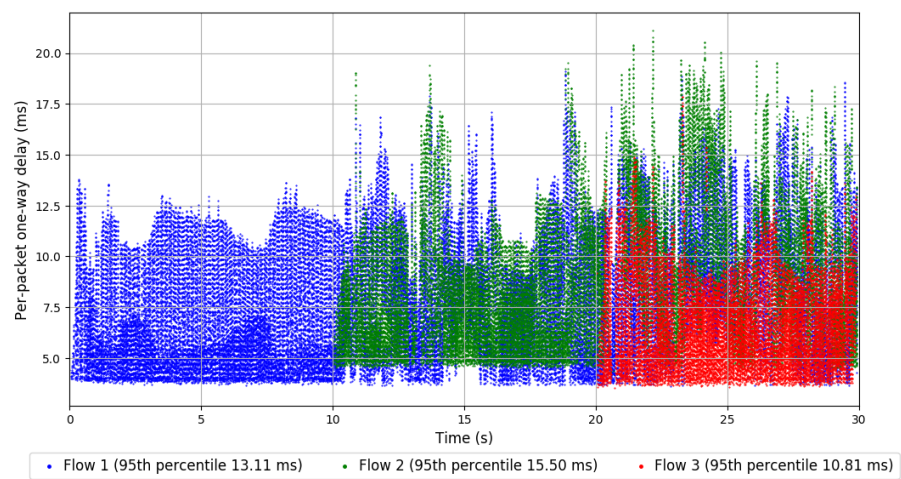
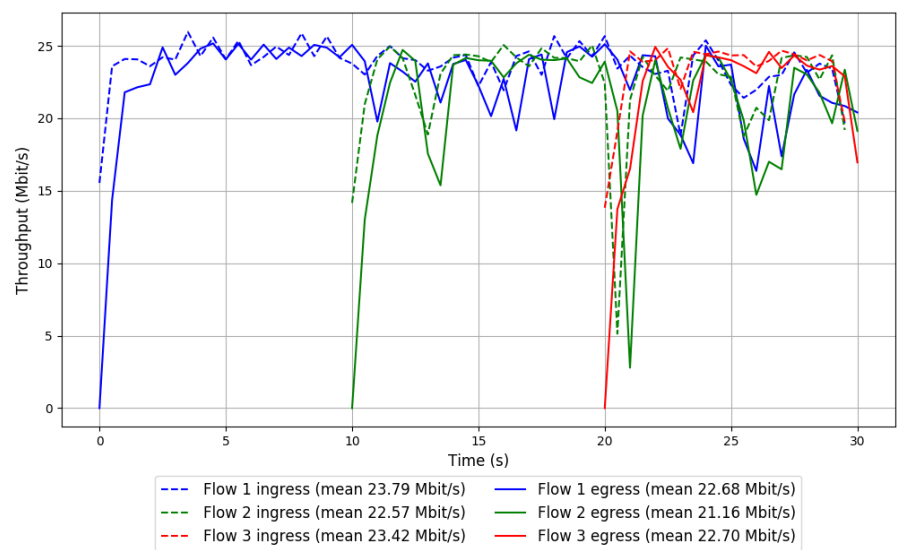


### Run 3: Statistics of Sprout

Start at: 2018-10-26 03:40:41  
End at: 2018-10-26 03:41:11  
Local clock offset: 3.303 ms  
Remote clock offset: -4.971 ms

```
# Below is generated by plot.py at 2018-10-26 04:42:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.22 Mbit/s
95th percentile per-packet one-way delay: 13.824 ms
Loss rate: 4.97%
-- Flow 1:
Average throughput: 22.68 Mbit/s
95th percentile per-packet one-way delay: 13.114 ms
Loss rate: 4.62%
-- Flow 2:
Average throughput: 21.16 Mbit/s
95th percentile per-packet one-way delay: 15.500 ms
Loss rate: 6.20%
-- Flow 3:
Average throughput: 22.70 Mbit/s
95th percentile per-packet one-way delay: 10.814 ms
Loss rate: 3.64%
```

Run 3: Report of Sprout — Data Link

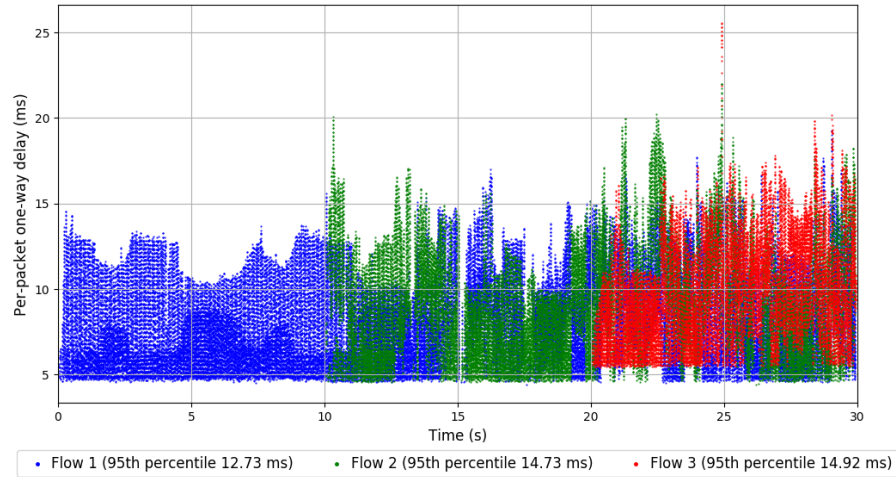
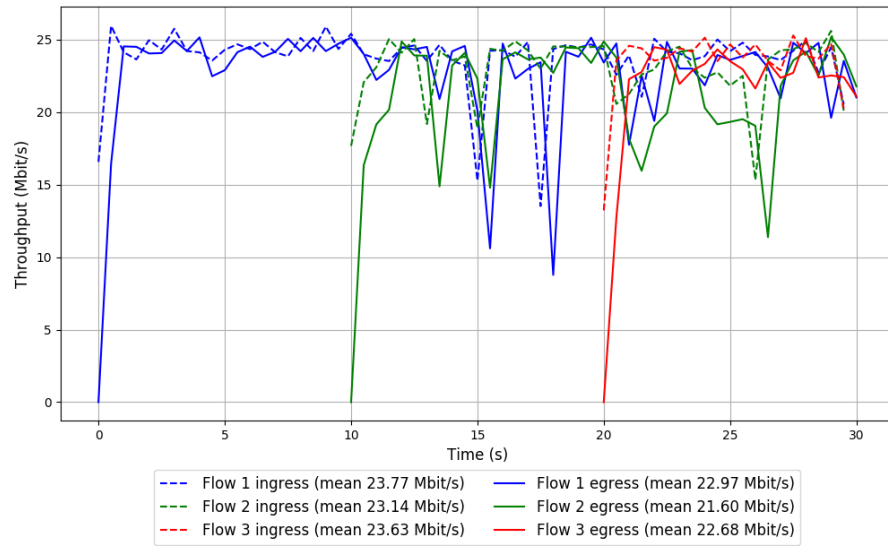


Run 4: Statistics of Sprout

Start at: 2018-10-26 04:01:52  
End at: 2018-10-26 04:02:22  
Local clock offset: 1.784 ms  
Remote clock offset: -5.155 ms

# Below is generated by plot.py at 2018-10-26 04:42:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 44.83 Mbit/s  
95th percentile per-packet one-way delay: 13.926 ms  
Loss rate: 4.54%  
-- Flow 1:  
Average throughput: 22.97 Mbit/s  
95th percentile per-packet one-way delay: 12.730 ms  
Loss rate: 3.38%  
-- Flow 2:  
Average throughput: 21.60 Mbit/s  
95th percentile per-packet one-way delay: 14.729 ms  
Loss rate: 6.64%  
-- Flow 3:  
Average throughput: 22.68 Mbit/s  
95th percentile per-packet one-way delay: 14.923 ms  
Loss rate: 3.95%

#### Run 4: Report of Sprout — Data Link





Run 5: Statistics of Sprout

Start at: 2018-10-26 04:23:17

End at: 2018-10-26 04:23:47

Local clock offset: 2.197 ms

Remote clock offset: -0.95 ms

# Below is generated by plot.py at 2018-10-26 04:42:38

# Datalink statistics

-- Total of 3 flows:

Average throughput: 43.27 Mbit/s

95th percentile per-packet one-way delay: 18.188 ms

Loss rate: 6.44%

-- Flow 1:

Average throughput: 21.74 Mbit/s

95th percentile per-packet one-way delay: 18.110 ms

Loss rate: 6.09%

-- Flow 2:

Average throughput: 21.41 Mbit/s

95th percentile per-packet one-way delay: 17.911 ms

Loss rate: 7.31%

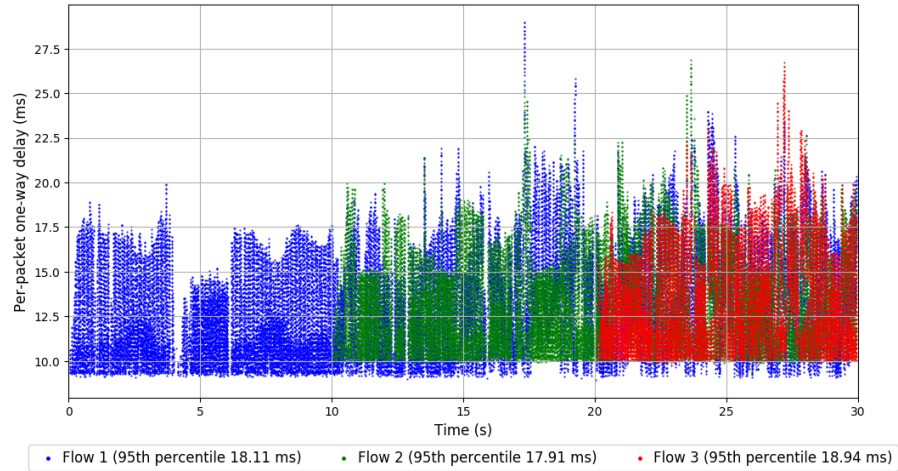
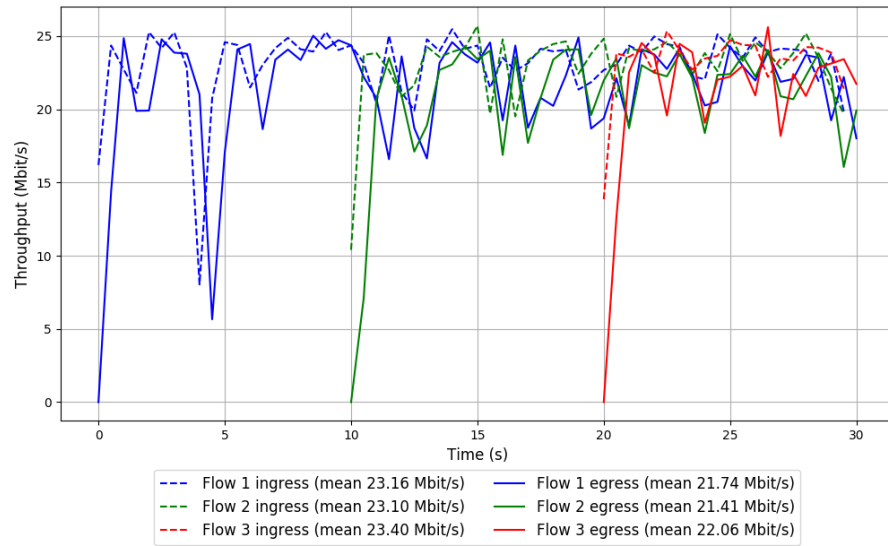
-- Flow 3:

Average throughput: 22.06 Mbit/s

95th percentile per-packet one-way delay: 18.943 ms

Loss rate: 5.72%

## Run 5: Report of Sprout — Data Link

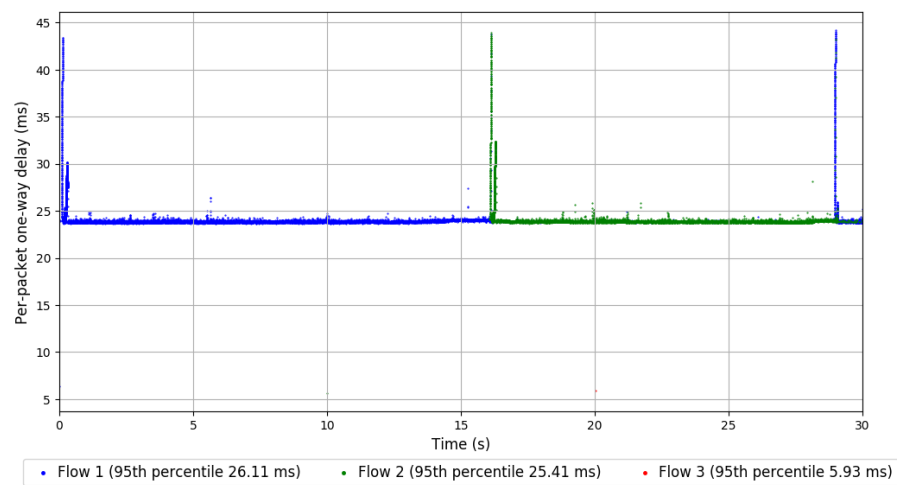
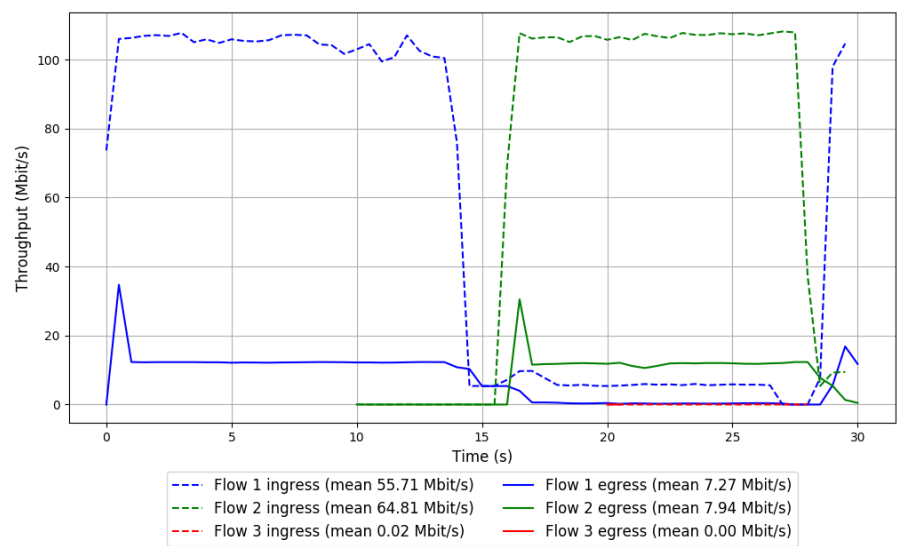


Run 1: Statistics of TaoVA-100x

Start at: 2018-10-26 02:55:48  
End at: 2018-10-26 02:56:18  
Local clock offset: 2.193 ms  
Remote clock offset: -4.518 ms

# Below is generated by plot.py at 2018-10-26 04:42:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.56 Mbit/s  
95th percentile per-packet one-way delay: 25.745 ms  
Loss rate: 87.30%  
-- Flow 1:  
Average throughput: 7.27 Mbit/s  
95th percentile per-packet one-way delay: 26.114 ms  
Loss rate: 86.95%  
-- Flow 2:  
Average throughput: 7.94 Mbit/s  
95th percentile per-packet one-way delay: 25.410 ms  
Loss rate: 87.74%  
-- Flow 3:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 5.928 ms  
Loss rate: 99.16%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-10-26 03:17:04

End at: 2018-10-26 03:17:34

Local clock offset: 4.677 ms

Remote clock offset: -5.86 ms

# Below is generated by plot.py at 2018-10-26 04:42:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 12.50 Mbit/s

95th percentile per-packet one-way delay: 23.924 ms

Loss rate: 85.42%

-- Flow 1:

Average throughput: 6.89 Mbit/s

95th percentile per-packet one-way delay: 22.801 ms

Loss rate: 86.55%

-- Flow 2:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 21.803 ms

Loss rate: 84.16%

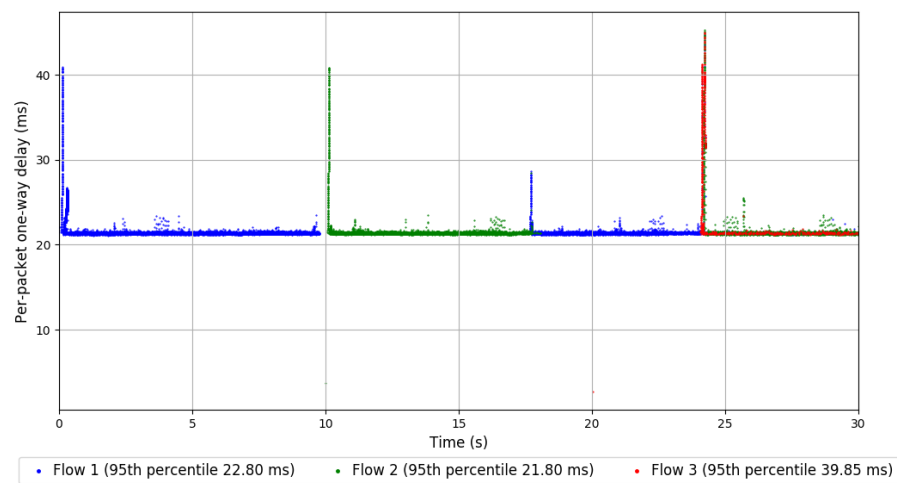
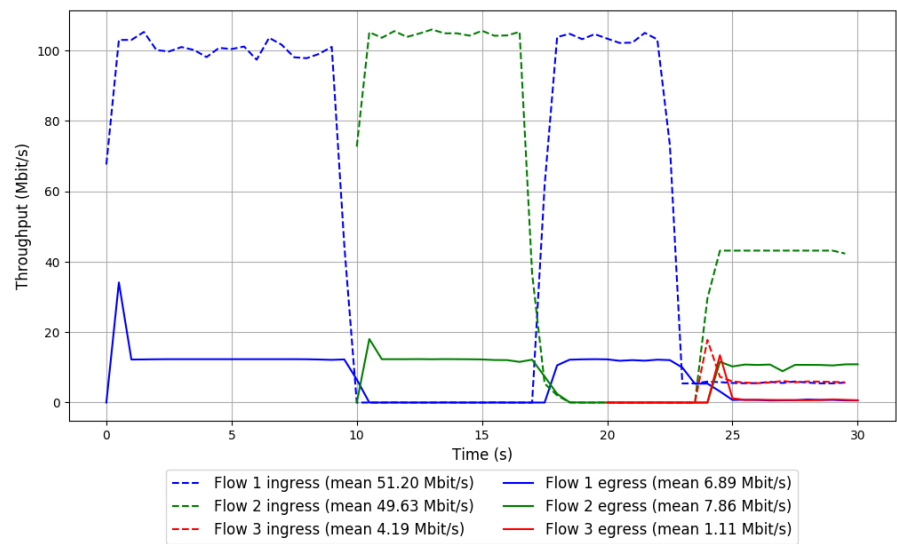
-- Flow 3:

Average throughput: 1.11 Mbit/s

95th percentile per-packet one-way delay: 39.853 ms

Loss rate: 73.59%

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

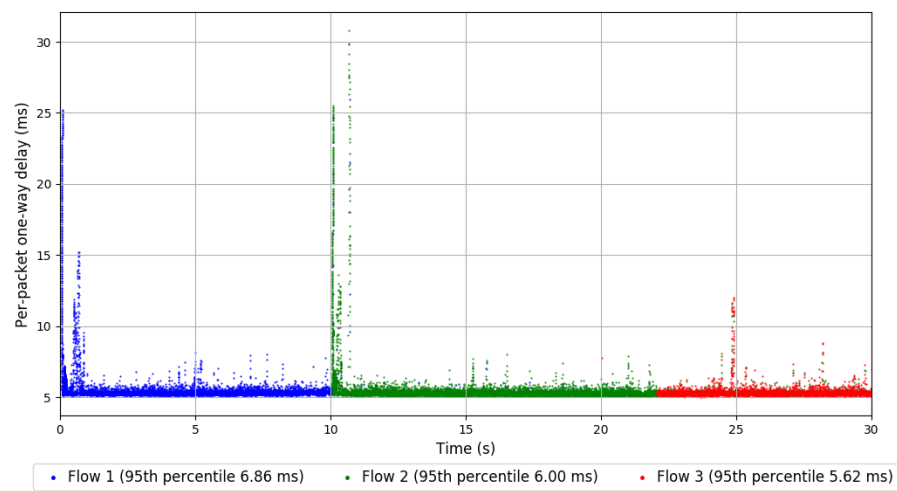
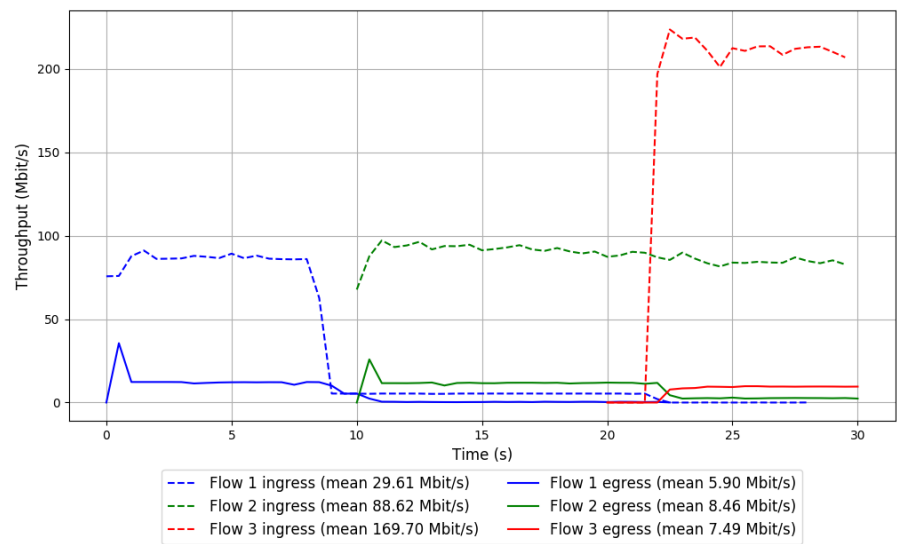


Run 3: Statistics of TaoVA-100x

Start at: 2018-10-26 03:38:14  
End at: 2018-10-26 03:38:44  
Local clock offset: 2.104 ms  
Remote clock offset: -5.759 ms

# Below is generated by plot.py at 2018-10-26 04:42:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.46 Mbit/s  
95th percentile per-packet one-way delay: 6.166 ms  
Loss rate: 91.30%  
-- Flow 1:  
Average throughput: 5.90 Mbit/s  
95th percentile per-packet one-way delay: 6.858 ms  
Loss rate: 84.35%  
-- Flow 2:  
Average throughput: 8.46 Mbit/s  
95th percentile per-packet one-way delay: 5.996 ms  
Loss rate: 90.46%  
-- Flow 3:  
Average throughput: 7.49 Mbit/s  
95th percentile per-packet one-way delay: 5.618 ms  
Loss rate: 95.59%

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



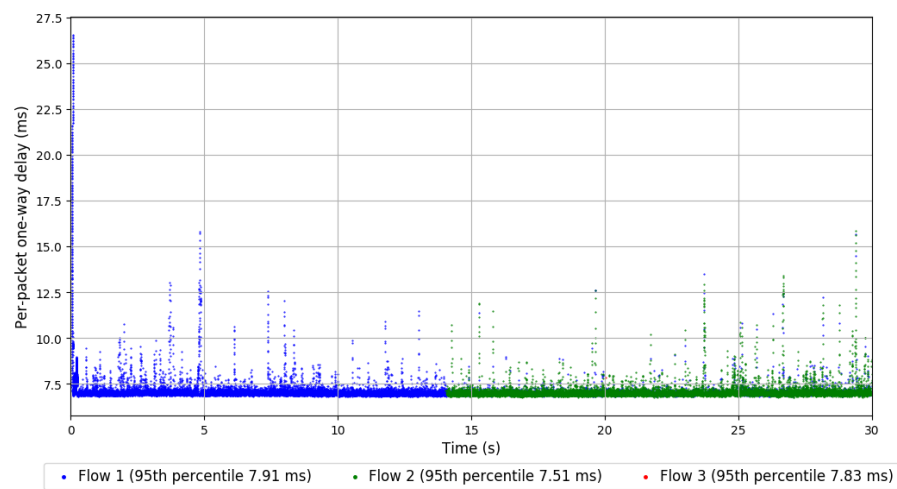
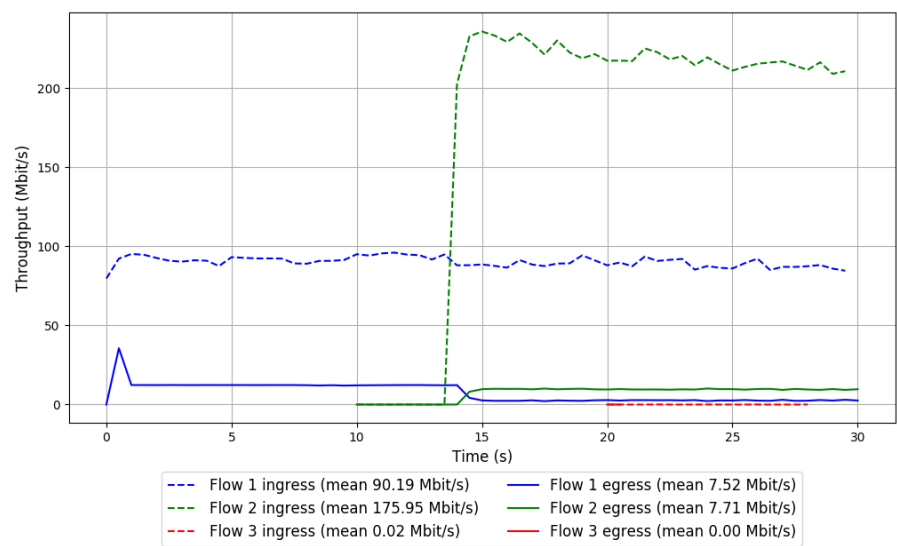


Run 4: Statistics of TaoVA-100x

Start at: 2018-10-26 03:59:28  
End at: 2018-10-26 03:59:58  
Local clock offset: -0.195 ms  
Remote clock offset: -5.659 ms

# Below is generated by plot.py at 2018-10-26 04:43:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.66 Mbit/s  
95th percentile per-packet one-way delay: 7.754 ms  
Loss rate: 93.90%  
-- Flow 1:  
Average throughput: 7.52 Mbit/s  
95th percentile per-packet one-way delay: 7.909 ms  
Loss rate: 91.66%  
-- Flow 2:  
Average throughput: 7.71 Mbit/s  
95th percentile per-packet one-way delay: 7.511 ms  
Loss rate: 95.62%  
-- Flow 3:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 7.833 ms  
Loss rate: 99.16%

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

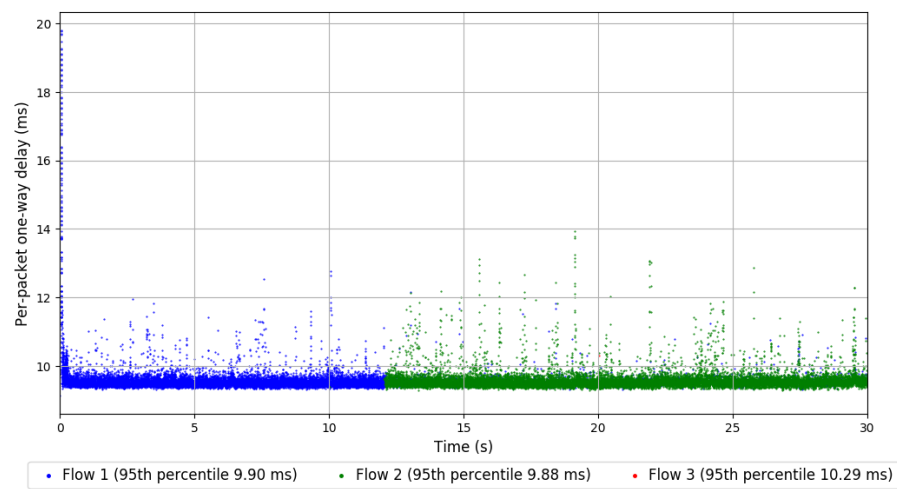
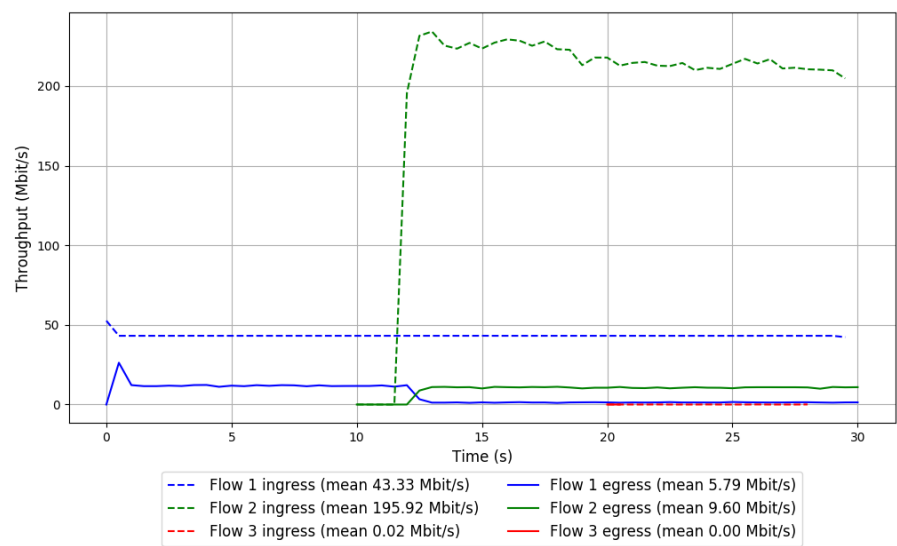


Run 5: Statistics of TaoVA-100x

Start at: 2018-10-26 04:20:52  
End at: 2018-10-26 04:21:22  
Local clock offset: 2.669 ms  
Remote clock offset: -1.019 ms

# Below is generated by plot.py at 2018-10-26 04:43:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.18 Mbit/s  
95th percentile per-packet one-way delay: 9.888 ms  
Loss rate: 92.99%  
-- Flow 1:  
Average throughput: 5.79 Mbit/s  
95th percentile per-packet one-way delay: 9.905 ms  
Loss rate: 86.65%  
-- Flow 2:  
Average throughput: 9.60 Mbit/s  
95th percentile per-packet one-way delay: 9.875 ms  
Loss rate: 95.10%  
-- Flow 3:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 10.293 ms  
Loss rate: 99.16%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-10-26 02:59:23

End at: 2018-10-26 02:59:53

Local clock offset: 2.06 ms

Remote clock offset: -4.65 ms

# Below is generated by plot.py at 2018-10-26 04:43:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 16.33 Mbit/s

95th percentile per-packet one-way delay: 25.198 ms

Loss rate: 1.97%

-- Flow 1:

Average throughput: 8.90 Mbit/s

95th percentile per-packet one-way delay: 5.417 ms

Loss rate: 1.24%

-- Flow 2:

Average throughput: 5.45 Mbit/s

95th percentile per-packet one-way delay: 24.452 ms

Loss rate: 1.54%

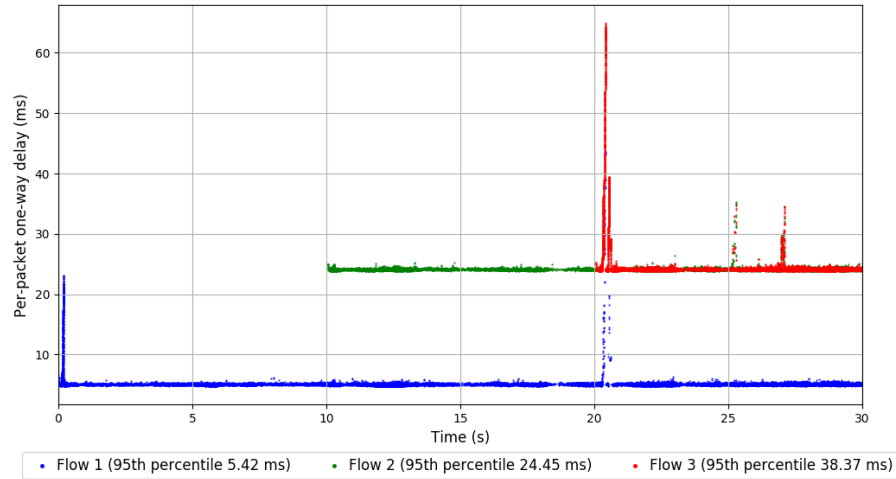
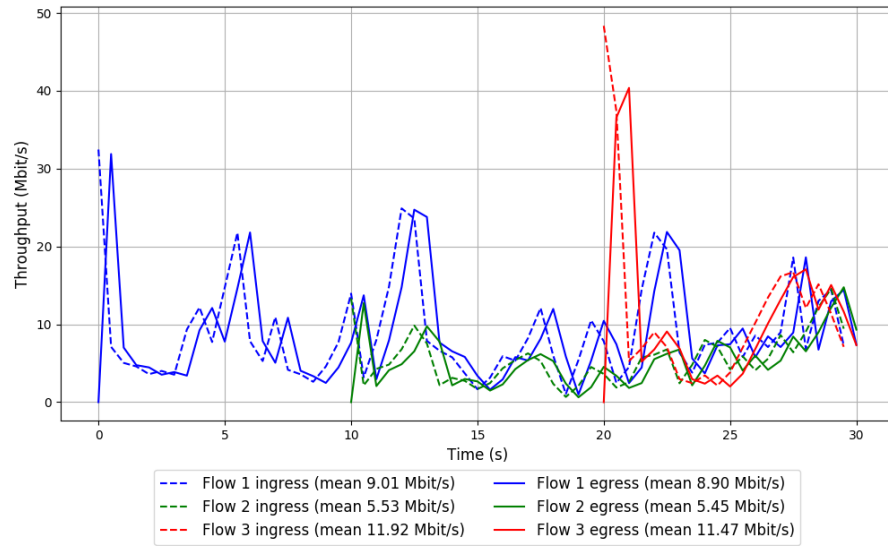
-- Flow 3:

Average throughput: 11.47 Mbit/s

95th percentile per-packet one-way delay: 38.370 ms

Loss rate: 4.01%

# Run 1: Report of TCP Vegas — Data Link

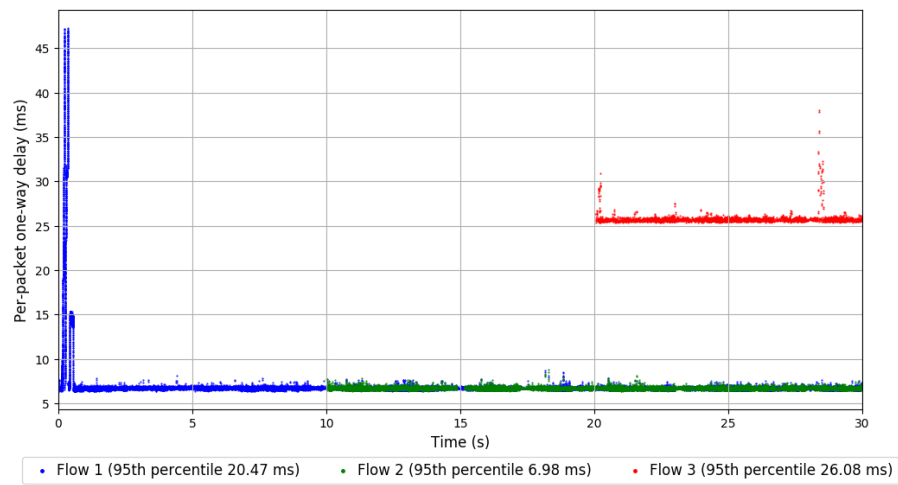
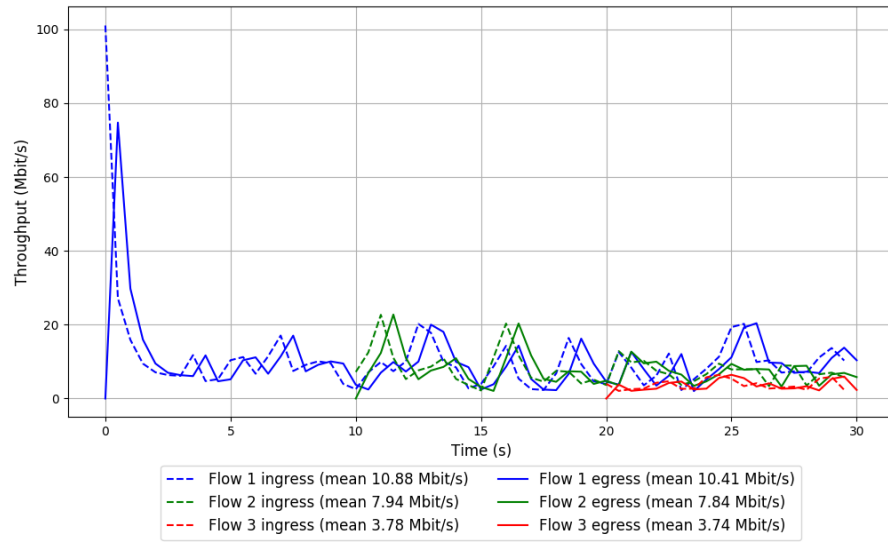


Run 2: Statistics of TCP Vegas

Start at: 2018-10-26 03:20:34  
End at: 2018-10-26 03:21:04  
Local clock offset: 0.888 ms  
Remote clock offset: -5.461 ms

# Below is generated by plot.py at 2018-10-26 04:43:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 16.88 Mbit/s  
95th percentile per-packet one-way delay: 25.778 ms  
Loss rate: 3.18%  
-- Flow 1:  
Average throughput: 10.41 Mbit/s  
95th percentile per-packet one-way delay: 20.474 ms  
Loss rate: 4.33%  
-- Flow 2:  
Average throughput: 7.84 Mbit/s  
95th percentile per-packet one-way delay: 6.977 ms  
Loss rate: 1.23%  
-- Flow 3:  
Average throughput: 3.74 Mbit/s  
95th percentile per-packet one-way delay: 26.077 ms  
Loss rate: 1.43%

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



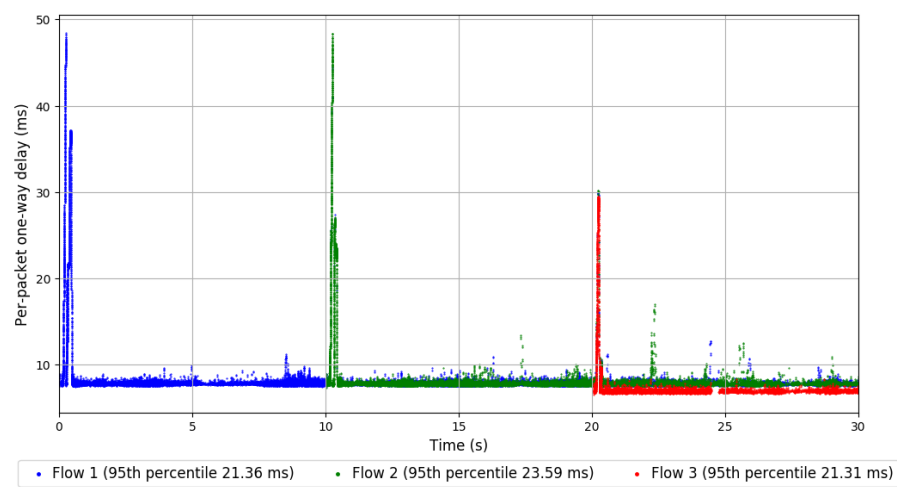
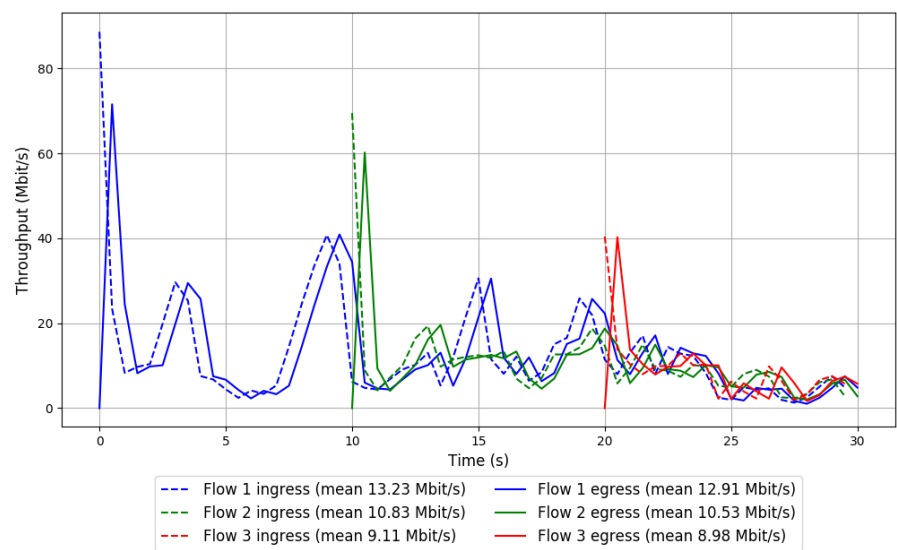


Run 3: Statistics of TCP Vegas

Start at: 2018-10-26 03:41:50  
End at: 2018-10-26 03:42:20  
Local clock offset: -0.036 ms  
Remote clock offset: -5.242 ms

# Below is generated by plot.py at 2018-10-26 04:43:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 22.91 Mbit/s  
95th percentile per-packet one-way delay: 22.016 ms  
Loss rate: 2.41%  
-- Flow 1:  
Average throughput: 12.91 Mbit/s  
95th percentile per-packet one-way delay: 21.358 ms  
Loss rate: 2.45%  
-- Flow 2:  
Average throughput: 10.53 Mbit/s  
95th percentile per-packet one-way delay: 23.590 ms  
Loss rate: 2.75%  
-- Flow 3:  
Average throughput: 8.98 Mbit/s  
95th percentile per-packet one-way delay: 21.306 ms  
Loss rate: 1.44%

Run 3: Report of TCP Vegas — Data Link

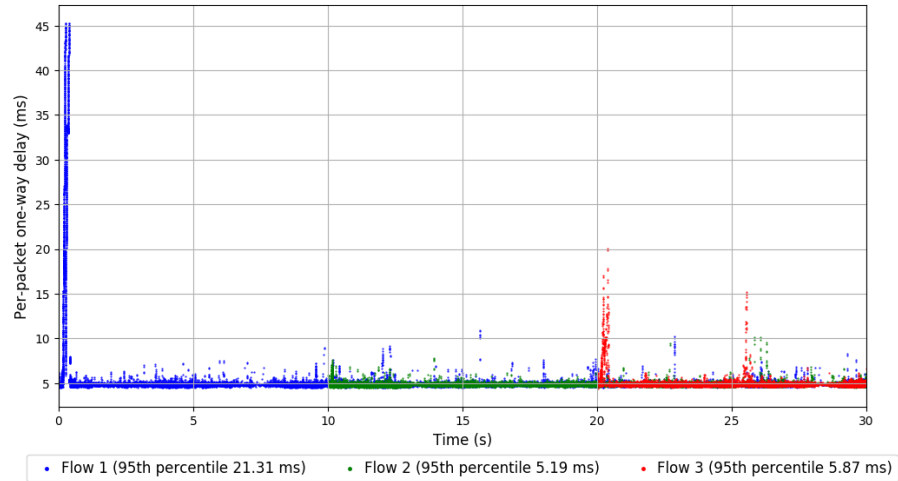
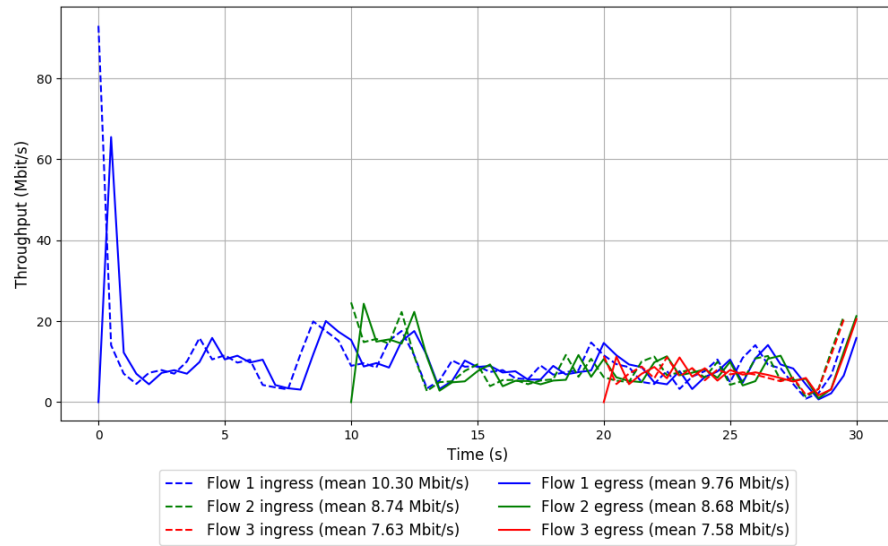


Run 4: Statistics of TCP Vegas

Start at: 2018-10-26 04:03:00  
End at: 2018-10-26 04:03:30  
Local clock offset: 2.466 ms  
Remote clock offset: -5.429 ms

# Below is generated by plot.py at 2018-10-26 04:43:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 18.06 Mbit/s  
95th percentile per-packet one-way delay: 6.650 ms  
Loss rate: 3.22%  
-- Flow 1:  
Average throughput: 9.76 Mbit/s  
95th percentile per-packet one-way delay: 21.310 ms  
Loss rate: 5.28%  
-- Flow 2:  
Average throughput: 8.68 Mbit/s  
95th percentile per-packet one-way delay: 5.192 ms  
Loss rate: 0.68%  
-- Flow 3:  
Average throughput: 7.58 Mbit/s  
95th percentile per-packet one-way delay: 5.865 ms  
Loss rate: 0.71%

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

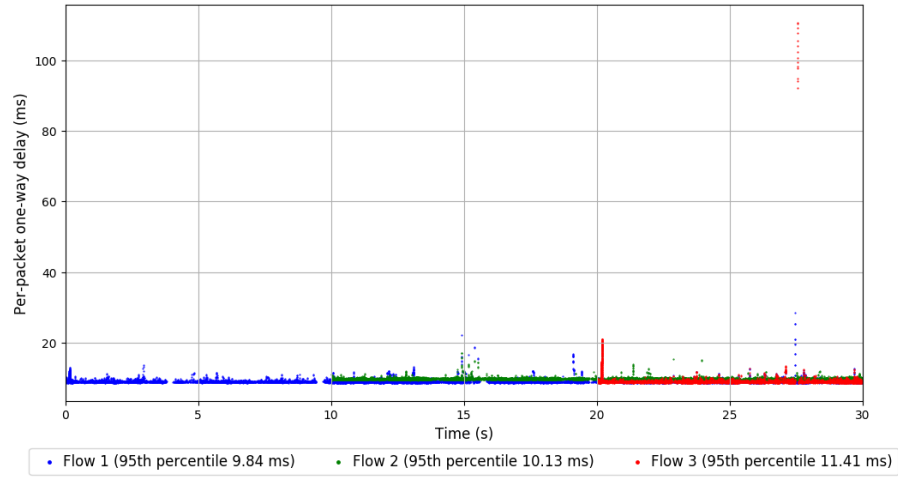
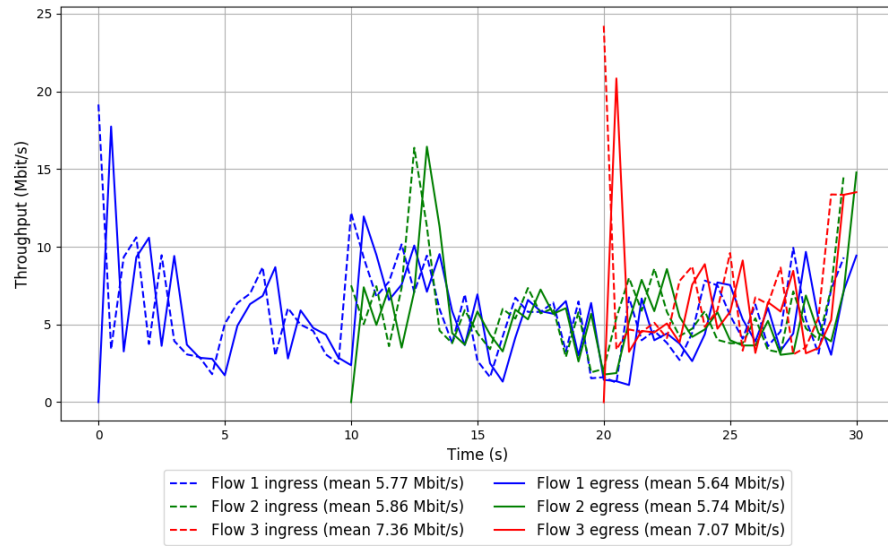


Run 5: Statistics of TCP Vegas

Start at: 2018-10-26 04:24:25  
End at: 2018-10-26 04:24:55  
Local clock offset: 2.607 ms  
Remote clock offset: -1.035 ms

# Below is generated by plot.py at 2018-10-26 04:43:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 11.81 Mbit/s  
95th percentile per-packet one-way delay: 10.114 ms  
Loss rate: 2.54%  
-- Flow 1:  
Average throughput: 5.64 Mbit/s  
95th percentile per-packet one-way delay: 9.837 ms  
Loss rate: 2.31%  
-- Flow 2:  
Average throughput: 5.74 Mbit/s  
95th percentile per-packet one-way delay: 10.132 ms  
Loss rate: 1.93%  
-- Flow 3:  
Average throughput: 7.07 Mbit/s  
95th percentile per-packet one-way delay: 11.413 ms  
Loss rate: 4.06%

# Run 5: Report of TCP Vegas — Data Link

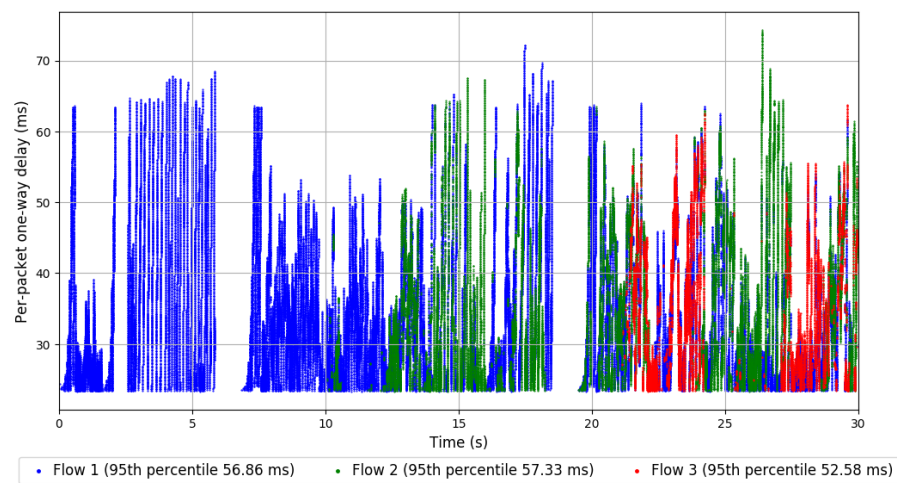
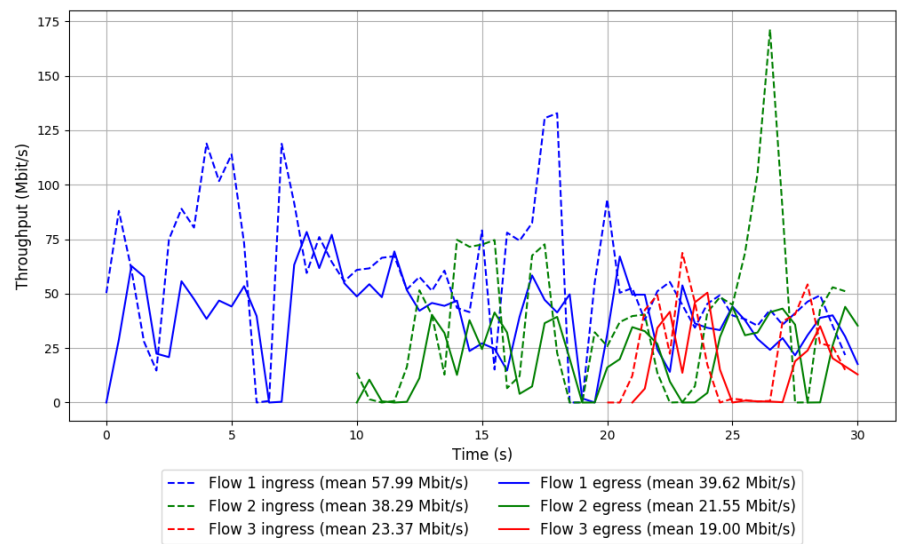


Run 1: Statistics of Verus

Start at: 2018-10-26 02:54:35  
End at: 2018-10-26 02:55:05  
Local clock offset: 2.85 ms  
Remote clock offset: -4.128 ms

# Below is generated by plot.py at 2018-10-26 04:43:34  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 59.59 Mbit/s  
95th percentile per-packet one-way delay: 56.545 ms  
Loss rate: 34.63%  
-- Flow 1:  
Average throughput: 39.62 Mbit/s  
95th percentile per-packet one-way delay: 56.862 ms  
Loss rate: 31.67%  
-- Flow 2:  
Average throughput: 21.55 Mbit/s  
95th percentile per-packet one-way delay: 57.327 ms  
Loss rate: 43.68%  
-- Flow 3:  
Average throughput: 19.00 Mbit/s  
95th percentile per-packet one-way delay: 52.582 ms  
Loss rate: 27.09%

Run 1: Report of Verus — Data Link



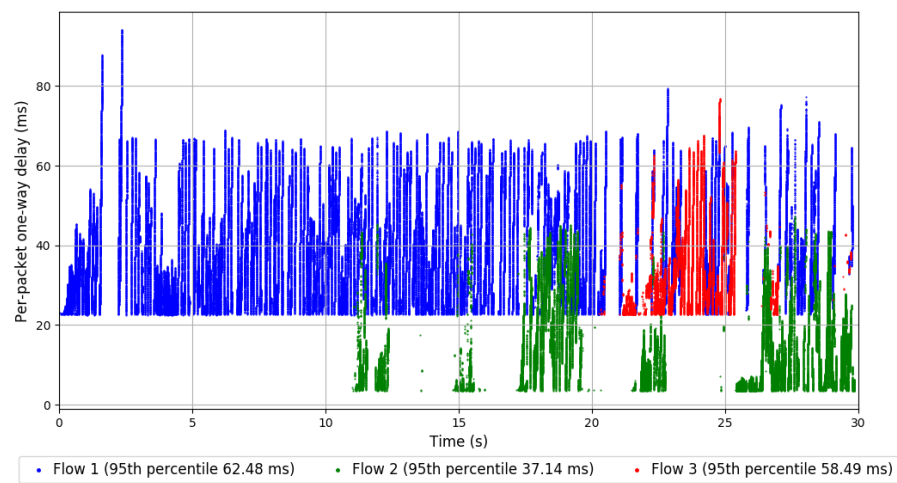
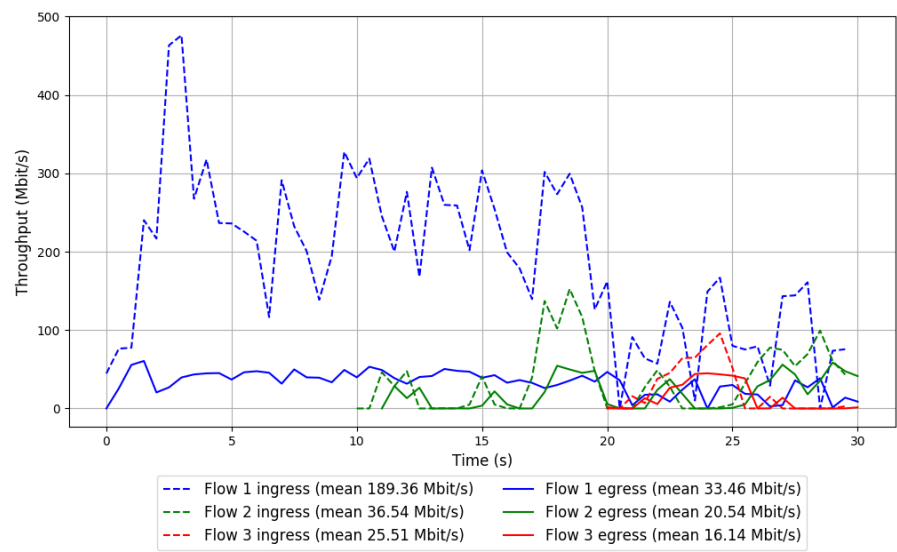


Run 2: Statistics of Verus

Start at: 2018-10-26 03:15:51  
End at: 2018-10-26 03:16:21  
Local clock offset: 4.113 ms  
Remote clock offset: -4.968 ms

# Below is generated by plot.py at 2018-10-26 04:44:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 51.44 Mbit/s  
95th percentile per-packet one-way delay: 60.569 ms  
Loss rate: 76.73%  
-- Flow 1:  
Average throughput: 33.46 Mbit/s  
95th percentile per-packet one-way delay: 62.480 ms  
Loss rate: 82.32%  
-- Flow 2:  
Average throughput: 20.54 Mbit/s  
95th percentile per-packet one-way delay: 37.139 ms  
Loss rate: 46.63%  
-- Flow 3:  
Average throughput: 16.14 Mbit/s  
95th percentile per-packet one-way delay: 58.495 ms  
Loss rate: 37.00%

Run 2: Report of Verus — Data Link

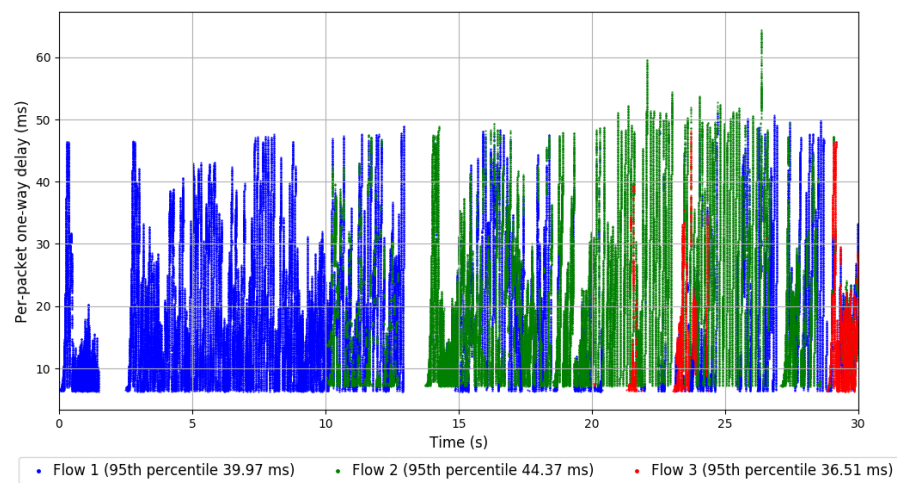
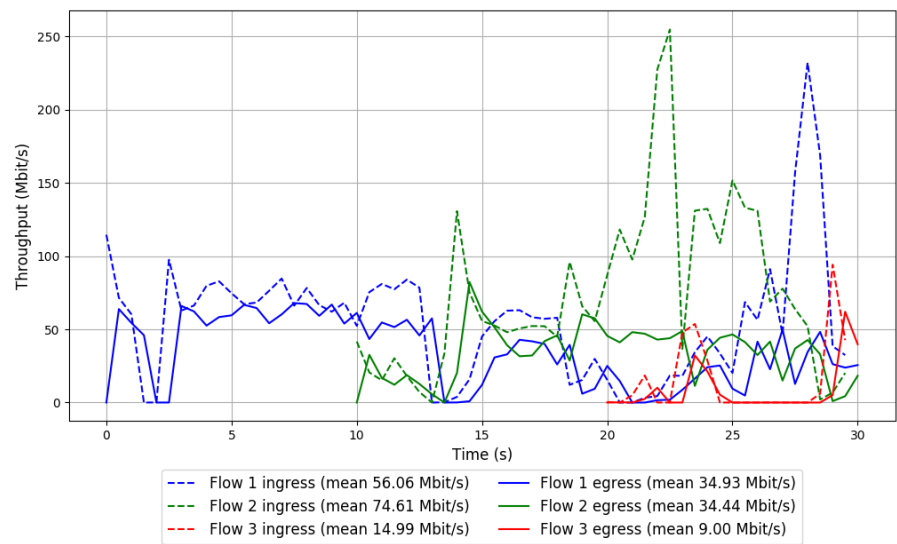


Run 3: Statistics of Verus

Start at: 2018-10-26 03:36:55  
End at: 2018-10-26 03:37:25  
Local clock offset: 0.295 ms  
Remote clock offset: -5.623 ms

# Below is generated by plot.py at 2018-10-26 04:44:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 60.82 Mbit/s  
95th percentile per-packet one-way delay: 41.677 ms  
Loss rate: 45.00%  
-- Flow 1:  
Average throughput: 34.93 Mbit/s  
95th percentile per-packet one-way delay: 39.971 ms  
Loss rate: 37.65%  
-- Flow 2:  
Average throughput: 34.44 Mbit/s  
95th percentile per-packet one-way delay: 44.370 ms  
Loss rate: 53.81%  
-- Flow 3:  
Average throughput: 9.00 Mbit/s  
95th percentile per-packet one-way delay: 36.507 ms  
Loss rate: 39.93%

Run 3: Report of Verus — Data Link

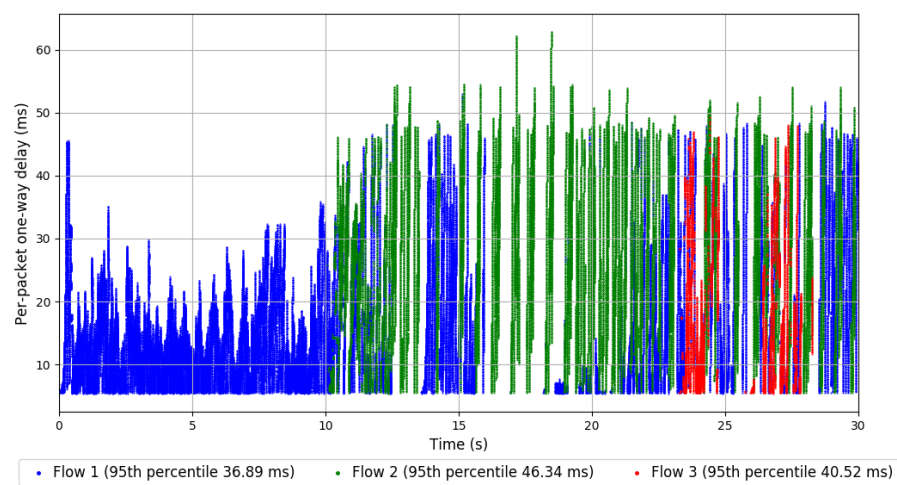
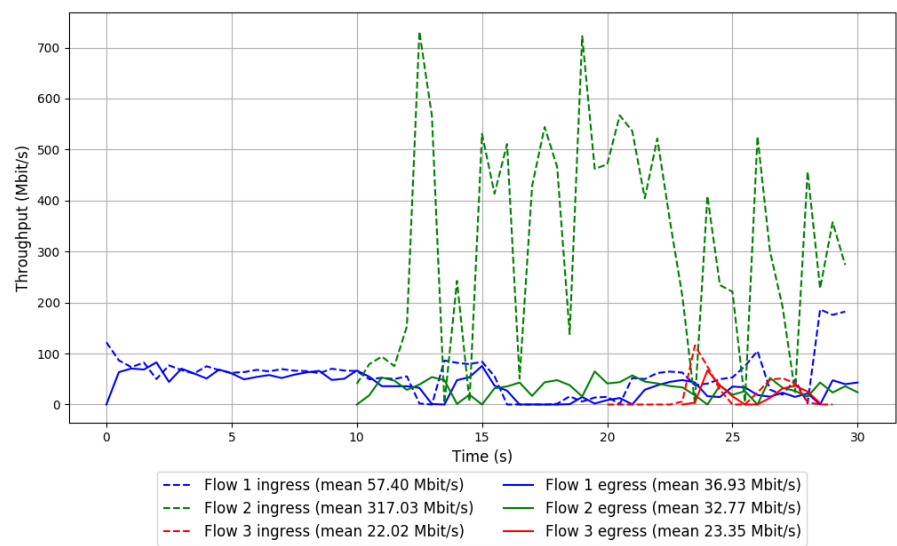


Run 4: Statistics of Verus

Start at: 2018-10-26 03:58:14  
End at: 2018-10-26 03:58:44  
Local clock offset: 0.214 ms  
Remote clock offset: -5.848 ms

# Below is generated by plot.py at 2018-10-26 04:44:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 62.52 Mbit/s  
95th percentile per-packet one-way delay: 42.993 ms  
Loss rate: 77.15%  
-- Flow 1:  
Average throughput: 36.93 Mbit/s  
95th percentile per-packet one-way delay: 36.890 ms  
Loss rate: 35.58%  
-- Flow 2:  
Average throughput: 32.77 Mbit/s  
95th percentile per-packet one-way delay: 46.337 ms  
Loss rate: 89.66%  
-- Flow 3:  
Average throughput: 23.35 Mbit/s  
95th percentile per-packet one-way delay: 40.521 ms  
Loss rate: 40.94%

Run 4: Report of Verus — Data Link

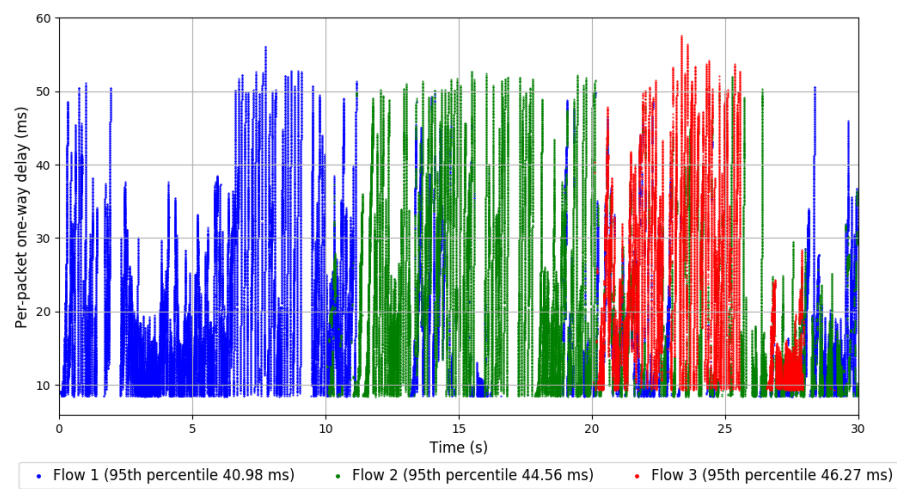
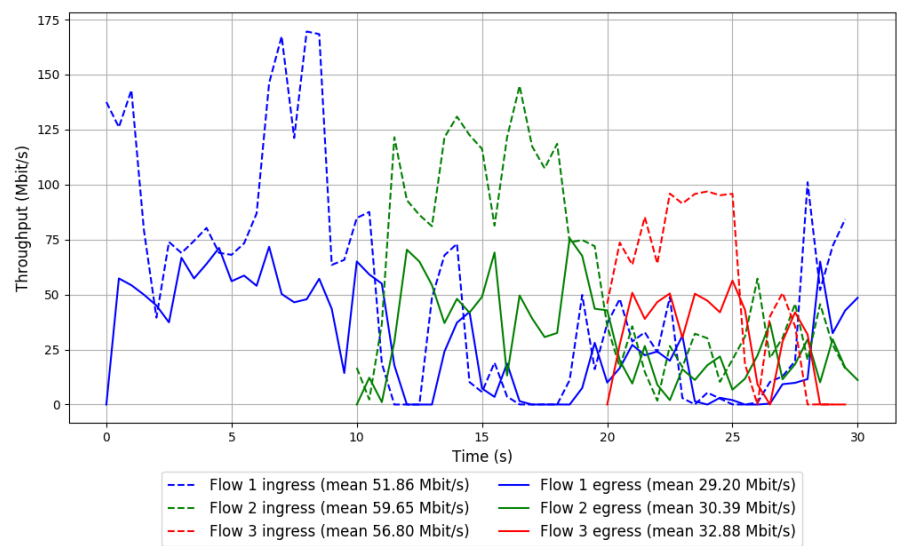


Run 5: Statistics of Verus

Start at: 2018-10-26 04:19:39  
End at: 2018-10-26 04:20:09  
Local clock offset: 2.648 ms  
Remote clock offset: -1.102 ms

# Below is generated by plot.py at 2018-10-26 04:44:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 59.33 Mbit/s  
95th percentile per-packet one-way delay: 43.723 ms  
Loss rate: 45.55%  
-- Flow 1:  
Average throughput: 29.20 Mbit/s  
95th percentile per-packet one-way delay: 40.985 ms  
Loss rate: 43.65%  
-- Flow 2:  
Average throughput: 30.39 Mbit/s  
95th percentile per-packet one-way delay: 44.564 ms  
Loss rate: 49.07%  
-- Flow 3:  
Average throughput: 32.88 Mbit/s  
95th percentile per-packet one-way delay: 46.268 ms  
Loss rate: 43.22%

Run 5: Report of Verus — Data Link





Run 1: Statistics of PCC-Vivace

Start at: 2018-10-26 02:56:57

End at: 2018-10-26 02:57:27

Local clock offset: 1.68 ms

Remote clock offset: -4.93 ms

# Below is generated by plot.py at 2018-10-26 04:44:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 61.60 Mbit/s

95th percentile per-packet one-way delay: 24.189 ms

Loss rate: 6.09%

-- Flow 1:

Average throughput: 41.83 Mbit/s

95th percentile per-packet one-way delay: 5.615 ms

Loss rate: 6.25%

-- Flow 2:

Average throughput: 16.10 Mbit/s

95th percentile per-packet one-way delay: 26.109 ms

Loss rate: 6.14%

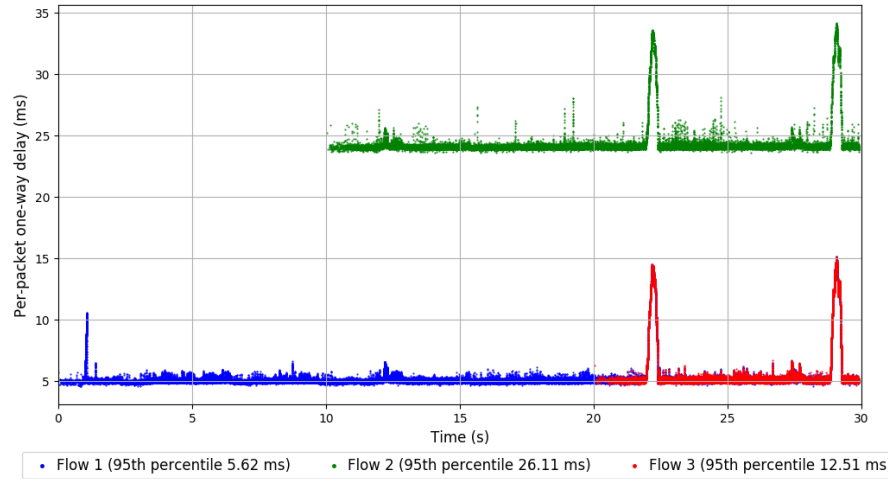
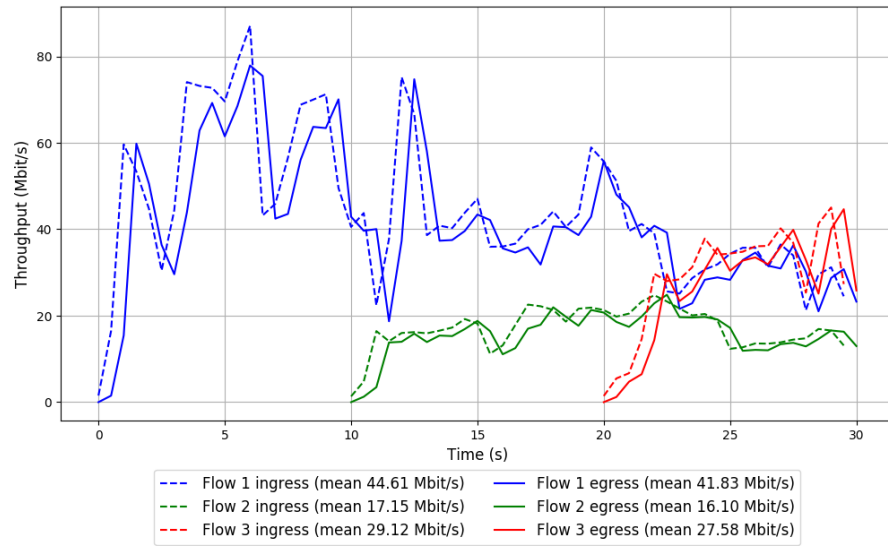
-- Flow 3:

Average throughput: 27.58 Mbit/s

95th percentile per-packet one-way delay: 12.505 ms

Loss rate: 5.30%

# Run 1: Report of PCC-Vivace — Data Link

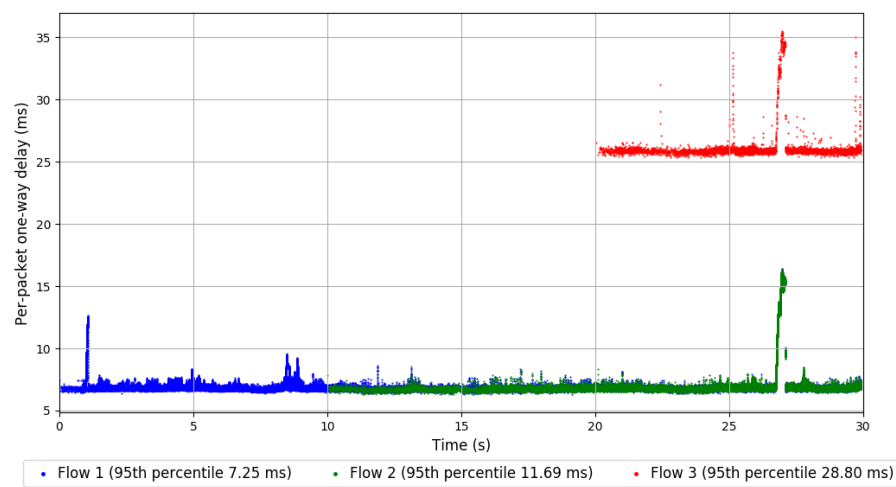
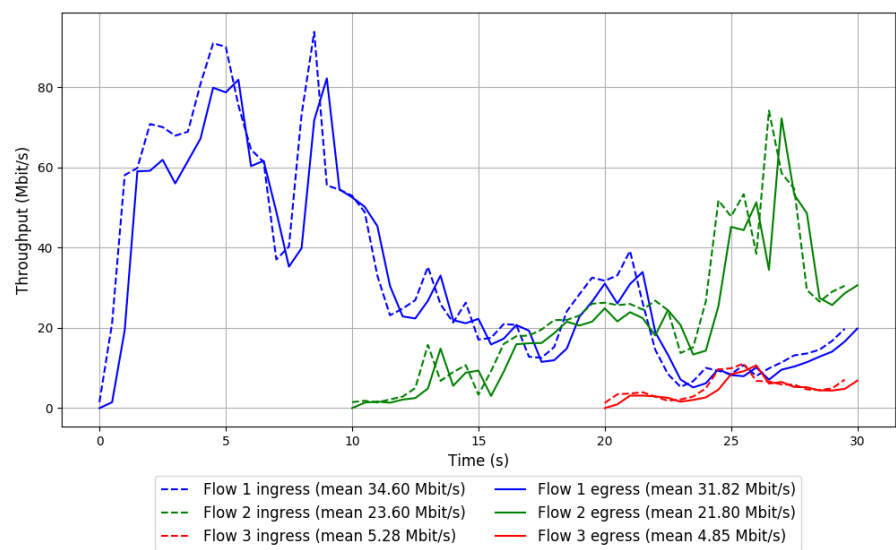


Run 2: Statistics of PCC-Vivace

Start at: 2018-10-26 03:18:12  
End at: 2018-10-26 03:18:43  
Local clock offset: 1.241 ms  
Remote clock offset: -4.828 ms

# Below is generated by plot.py at 2018-10-26 04:44:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 47.92 Mbit/s  
95th percentile per-packet one-way delay: 13.183 ms  
Loss rate: 7.91%  
-- Flow 1:  
Average throughput: 31.82 Mbit/s  
95th percentile per-packet one-way delay: 7.251 ms  
Loss rate: 8.03%  
-- Flow 2:  
Average throughput: 21.80 Mbit/s  
95th percentile per-packet one-way delay: 11.685 ms  
Loss rate: 7.62%  
-- Flow 3:  
Average throughput: 4.85 Mbit/s  
95th percentile per-packet one-way delay: 28.799 ms  
Loss rate: 8.27%

Run 2: Report of PCC-Vivace — Data Link

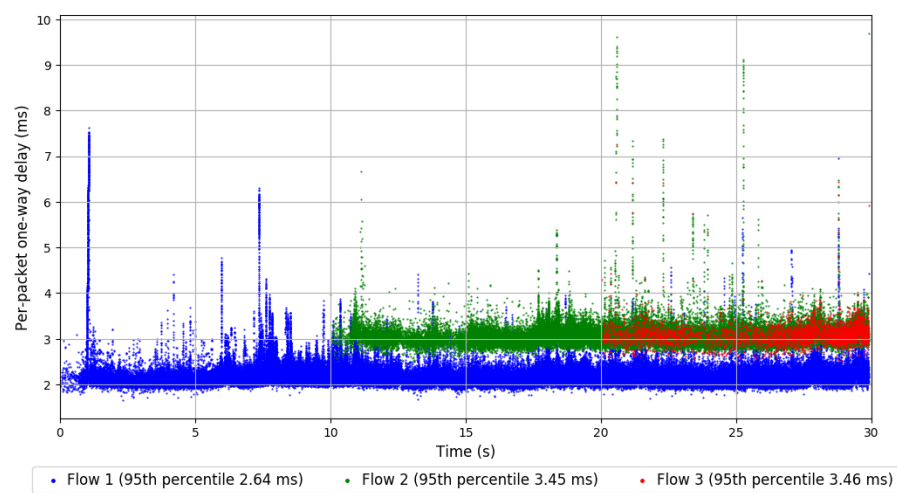
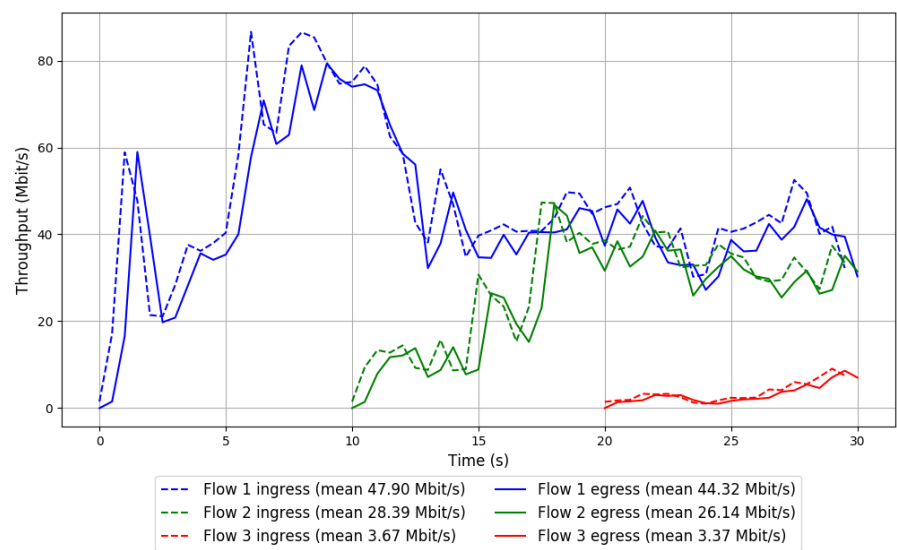


Run 3: Statistics of PCC-Vivace

Start at: 2018-10-26 03:39:24  
End at: 2018-10-26 03:39:54  
Local clock offset: 3.819 ms  
Remote clock offset: -6.291 ms

# Below is generated by plot.py at 2018-10-26 04:44:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 62.81 Mbit/s  
95th percentile per-packet one-way delay: 3.268 ms  
Loss rate: 7.61%  
-- Flow 1:  
Average throughput: 44.32 Mbit/s  
95th percentile per-packet one-way delay: 2.640 ms  
Loss rate: 7.47%  
-- Flow 2:  
Average throughput: 26.14 Mbit/s  
95th percentile per-packet one-way delay: 3.454 ms  
Loss rate: 7.93%  
-- Flow 3:  
Average throughput: 3.37 Mbit/s  
95th percentile per-packet one-way delay: 3.457 ms  
Loss rate: 8.11%

Run 3: Report of PCC-Vivace — Data Link

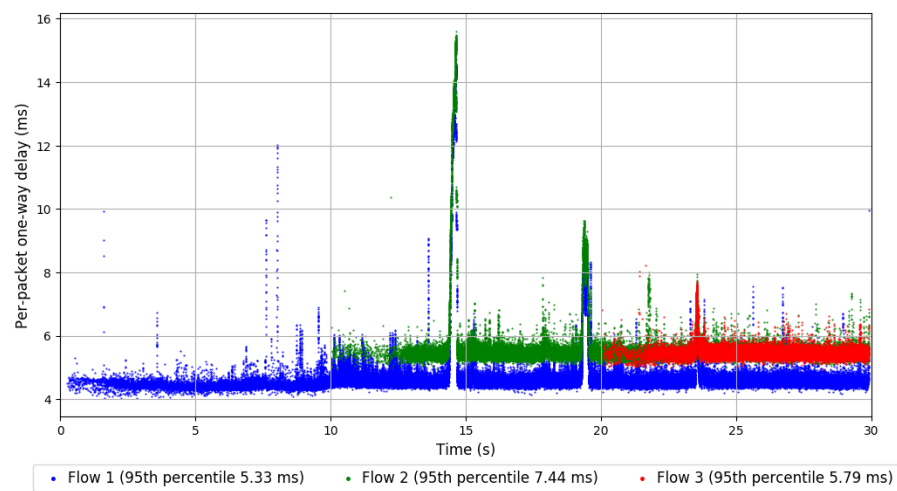
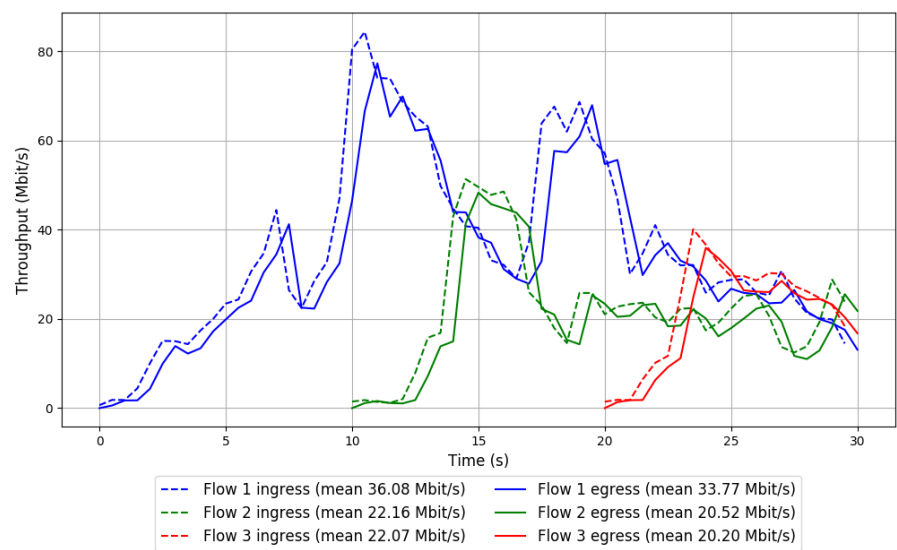


Run 4: Statistics of PCC-Vivace

Start at: 2018-10-26 04:00:38  
End at: 2018-10-26 04:01:08  
Local clock offset: 1.926 ms  
Remote clock offset: -5.171 ms

# Below is generated by plot.py at 2018-10-26 04:44:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 54.25 Mbit/s  
95th percentile per-packet one-way delay: 5.898 ms  
Loss rate: 7.43%  
-- Flow 1:  
Average throughput: 33.77 Mbit/s  
95th percentile per-packet one-way delay: 5.325 ms  
Loss rate: 7.21%  
-- Flow 2:  
Average throughput: 20.52 Mbit/s  
95th percentile per-packet one-way delay: 7.439 ms  
Loss rate: 7.44%  
-- Flow 3:  
Average throughput: 20.20 Mbit/s  
95th percentile per-packet one-way delay: 5.787 ms  
Loss rate: 8.49%

Run 4: Report of PCC-Vivace — Data Link



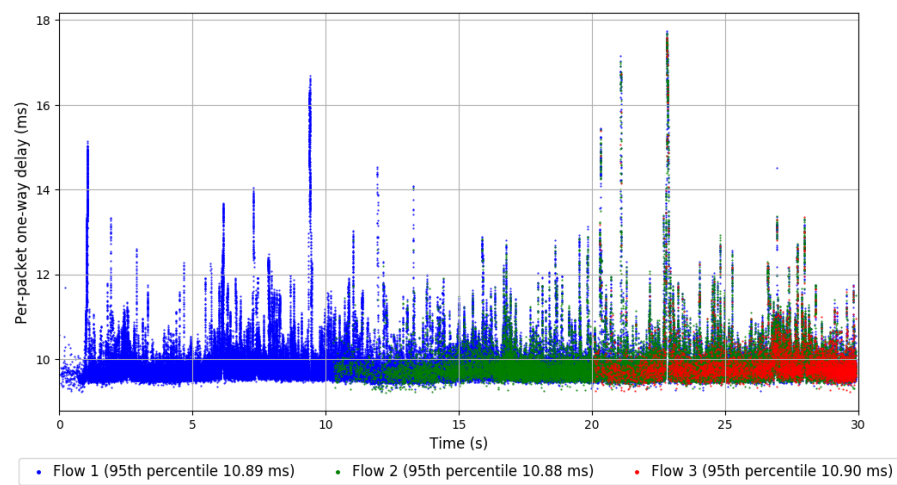
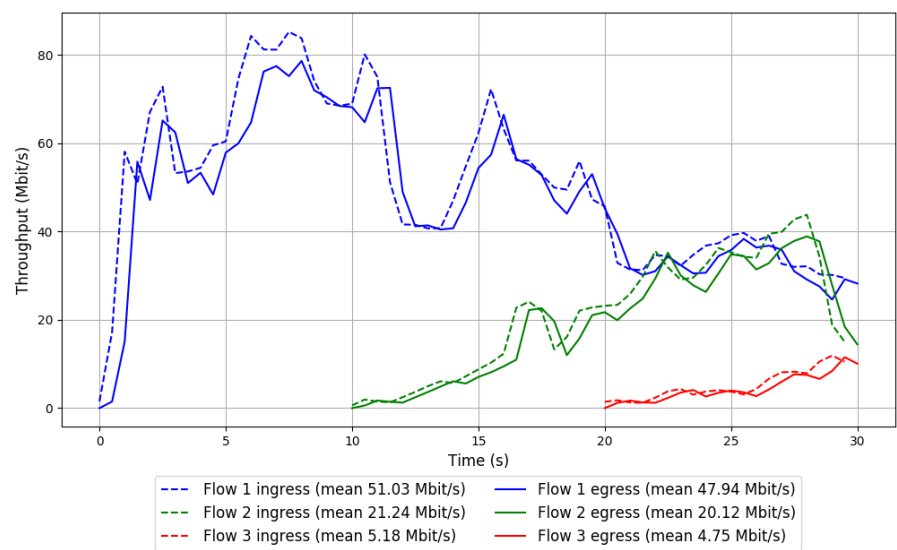


Run 5: Statistics of PCC-Vivace

Start at: 2018-10-26 04:22:02  
End at: 2018-10-26 04:22:32  
Local clock offset: 1.62 ms  
Remote clock offset: -1.157 ms

# Below is generated by plot.py at 2018-10-26 04:44:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 62.71 Mbit/s  
95th percentile per-packet one-way delay: 10.890 ms  
Loss rate: 6.21%  
-- Flow 1:  
Average throughput: 47.94 Mbit/s  
95th percentile per-packet one-way delay: 10.893 ms  
Loss rate: 6.07%  
-- Flow 2:  
Average throughput: 20.12 Mbit/s  
95th percentile per-packet one-way delay: 10.877 ms  
Loss rate: 6.47%  
-- Flow 3:  
Average throughput: 4.75 Mbit/s  
95th percentile per-packet one-way delay: 10.898 ms  
Loss rate: 8.20%

Run 5: Report of PCC-Vivace — Data Link

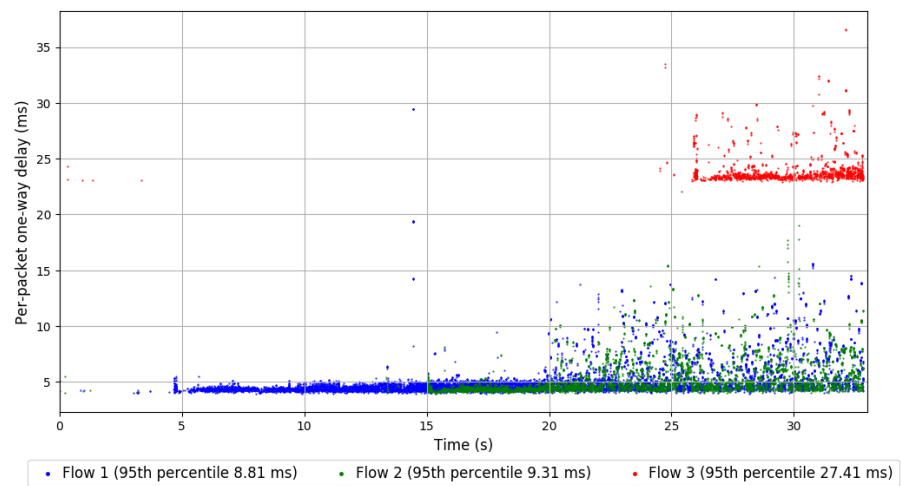
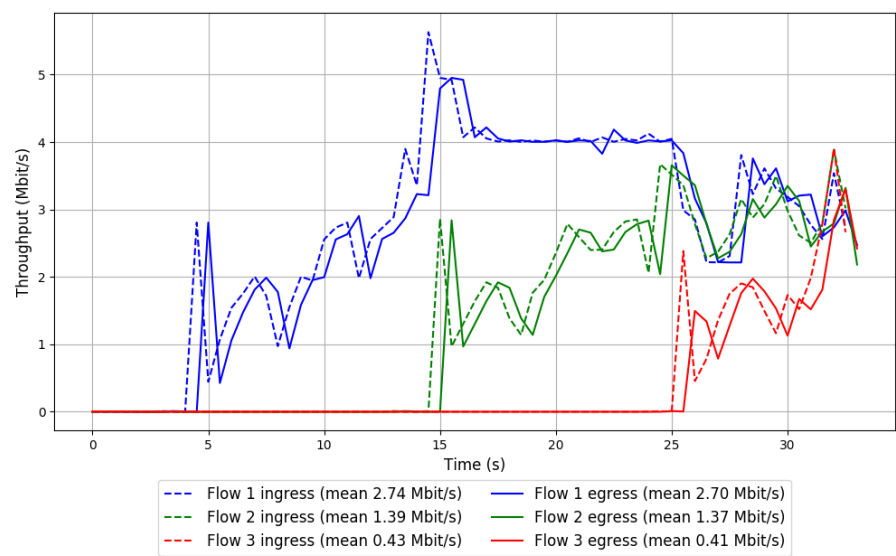


Run 1: Statistics of WebRTC media

Start at: 2018-10-26 02:51:12  
End at: 2018-10-26 02:51:42  
Local clock offset: 3.637 ms  
Remote clock offset: -3.499 ms

# Below is generated by plot.py at 2018-10-26 04:44:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 4.46 Mbit/s  
95th percentile per-packet one-way delay: 23.529 ms  
Loss rate: 1.85%  
-- Flow 1:  
Average throughput: 2.70 Mbit/s  
95th percentile per-packet one-way delay: 8.815 ms  
Loss rate: 1.59%  
-- Flow 2:  
Average throughput: 1.37 Mbit/s  
95th percentile per-packet one-way delay: 9.315 ms  
Loss rate: 1.74%  
-- Flow 3:  
Average throughput: 0.41 Mbit/s  
95th percentile per-packet one-way delay: 27.414 ms  
Loss rate: 3.85%

Run 1: Report of WebRTC media — Data Link

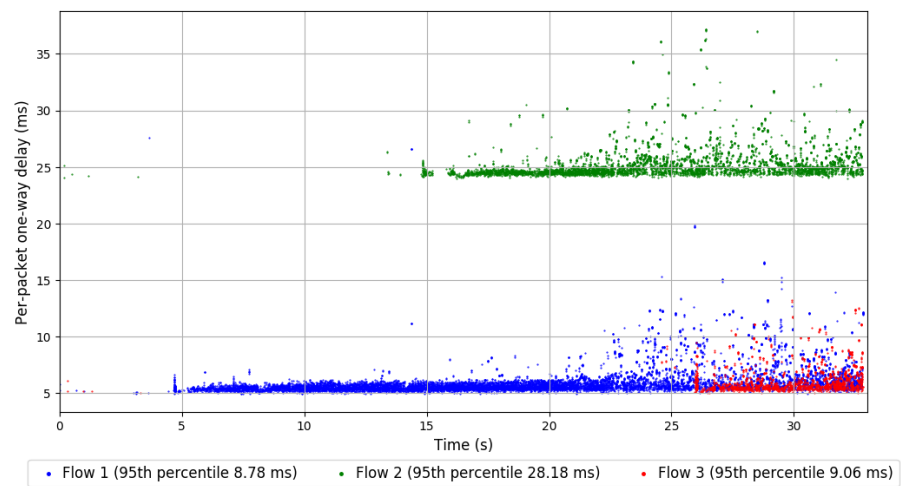
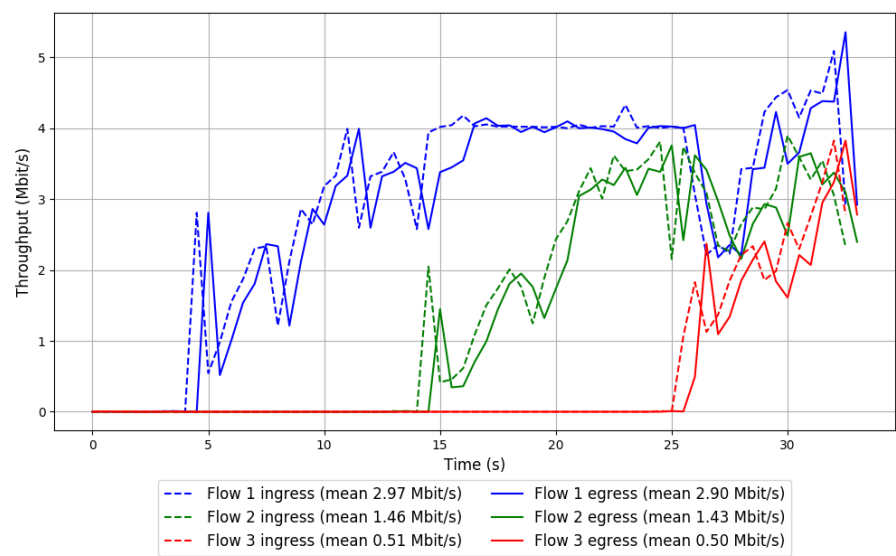


Run 2: Statistics of WebRTC media

Start at: 2018-10-26 03:12:25  
End at: 2018-10-26 03:12:55  
Local clock offset: 1.848 ms  
Remote clock offset: -5.319 ms

# Below is generated by plot.py at 2018-10-26 04:44:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 4.81 Mbit/s  
95th percentile per-packet one-way delay: 26.083 ms  
Loss rate: 2.40%  
-- Flow 1:  
Average throughput: 2.90 Mbit/s  
95th percentile per-packet one-way delay: 8.780 ms  
Loss rate: 2.27%  
-- Flow 2:  
Average throughput: 1.43 Mbit/s  
95th percentile per-packet one-way delay: 28.181 ms  
Loss rate: 2.49%  
-- Flow 3:  
Average throughput: 0.50 Mbit/s  
95th percentile per-packet one-way delay: 9.064 ms  
Loss rate: 2.90%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-10-26 03:33:32

End at: 2018-10-26 03:34:02

Local clock offset: 2.269 ms

Remote clock offset: -5.48 ms

# Below is generated by plot.py at 2018-10-26 04:44:13

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.37 Mbit/s

95th percentile per-packet one-way delay: 9.385 ms

Loss rate: 2.66%

-- Flow 1:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 9.347 ms

Loss rate: 2.84%

-- Flow 2:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 9.067 ms

Loss rate: 2.57%

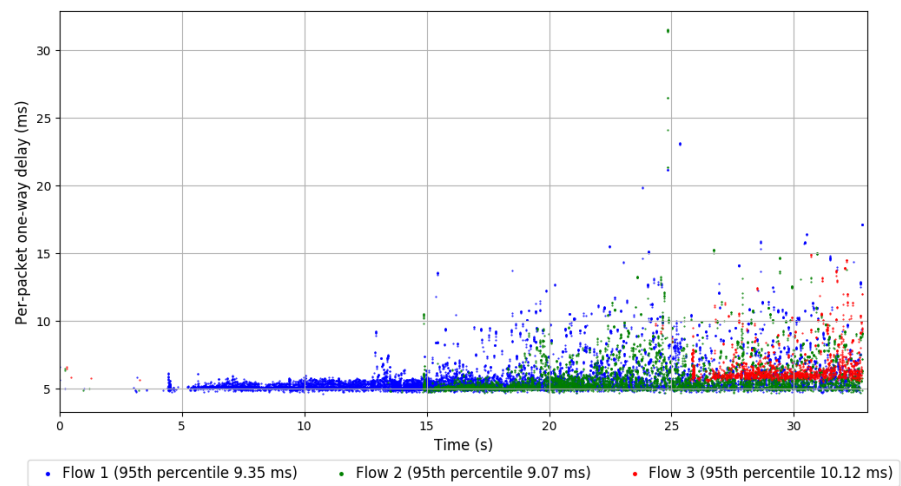
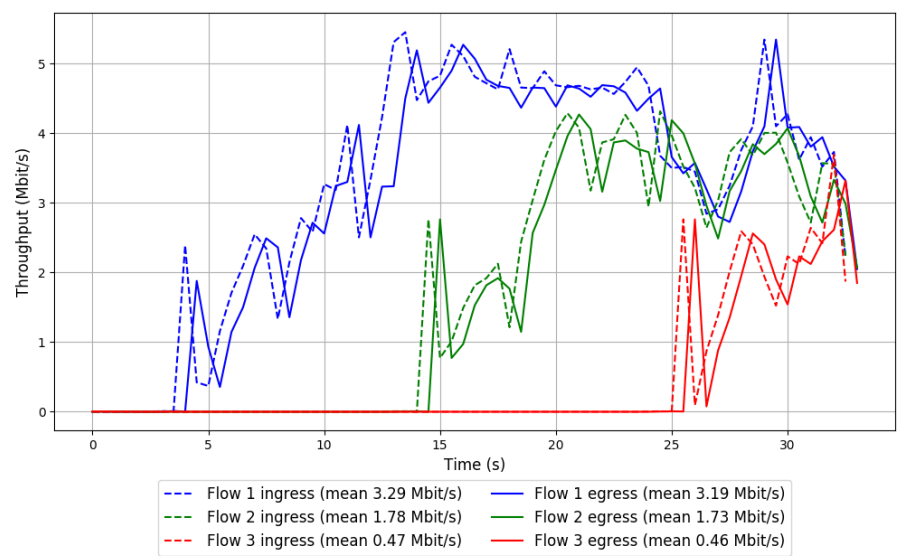
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 10.124 ms

Loss rate: 1.79%

Run 3: Report of WebRTC media — Data Link



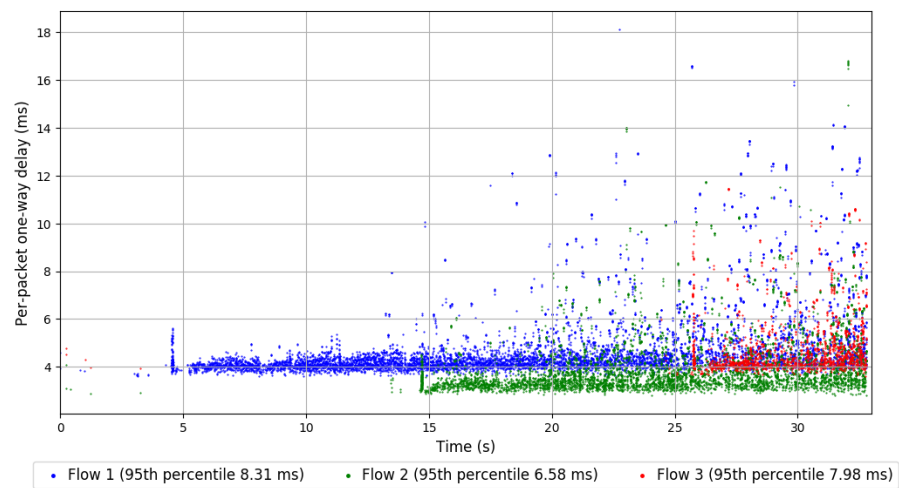
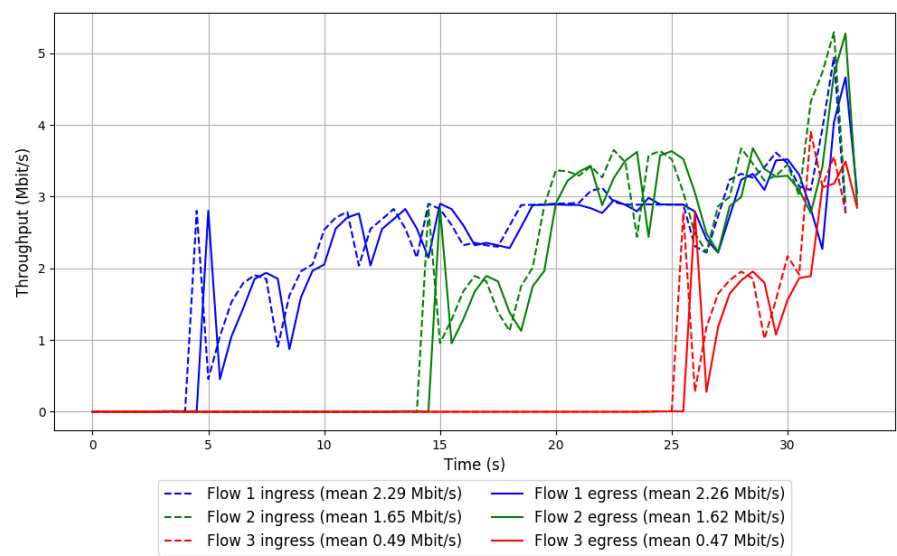


Run 4: Statistics of WebRTC media

Start at: 2018-10-26 03:54:49  
End at: 2018-10-26 03:55:19  
Local clock offset: 2.802 ms  
Remote clock offset: -5.692 ms

# Below is generated by plot.py at 2018-10-26 04:44:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 4.34 Mbit/s  
95th percentile per-packet one-way delay: 7.626 ms  
Loss rate: 1.84%  
-- Flow 1:  
Average throughput: 2.26 Mbit/s  
95th percentile per-packet one-way delay: 8.313 ms  
Loss rate: 1.39%  
-- Flow 2:  
Average throughput: 1.62 Mbit/s  
95th percentile per-packet one-way delay: 6.585 ms  
Loss rate: 1.99%  
-- Flow 3:  
Average throughput: 0.47 Mbit/s  
95th percentile per-packet one-way delay: 7.976 ms  
Loss rate: 3.44%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-10-26 04:16:13  
End at: 2018-10-26 04:16:43  
Local clock offset: 1.724 ms  
Remote clock offset: -6.223 ms

# Below is generated by plot.py at 2018-10-26 04:44:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 4.89 Mbit/s  
95th percentile per-packet one-way delay: 8.796 ms  
Loss rate: 2.06%  
-- Flow 1:  
Average throughput: 2.82 Mbit/s  
95th percentile per-packet one-way delay: 8.817 ms  
Loss rate: 1.63%  
-- Flow 2:  
Average throughput: 1.60 Mbit/s  
95th percentile per-packet one-way delay: 9.086 ms  
Loss rate: 2.34%  
-- Flow 3:  
Average throughput: 0.48 Mbit/s  
95th percentile per-packet one-way delay: 7.447 ms  
Loss rate: 3.66%

Run 5: Report of WebRTC media — Data Link

