

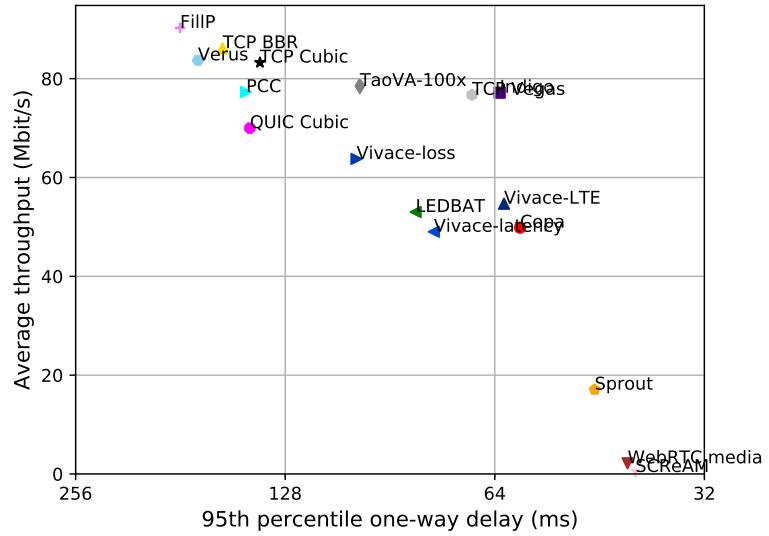
## Pantheon Report

Generated at 2018-01-17 07:10:08 (UTC).  
Data path: China Ethernet (*remote*) → AWS Korea Ethernet (*local*).  
Repeated the test of 17 congestion control schemes 10 times.  
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.  
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).  
Tested BBR with qdisc of Fair Queueing (**fq**), and other schemes with the default Linux qdisc (**pfifo\_fast**).  
NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

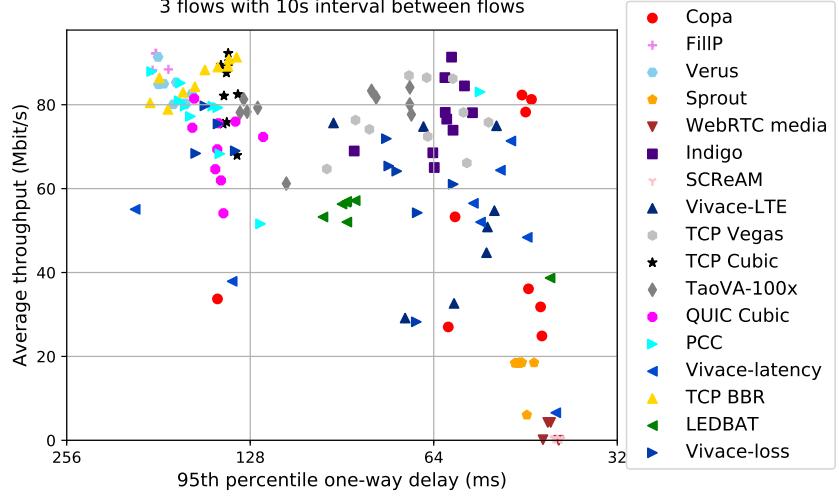
Git summary:

```
branch: master @ 386976fcf771de1359acd909bfb98a156d79009
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 423cbca3e8ea1d599e7b5cf725835e8a2b6bfac6
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from China Ethernet to AWS Korea Ethernet, 10 runs of 30s each per scheme  
3 flows with 10s interval between flows



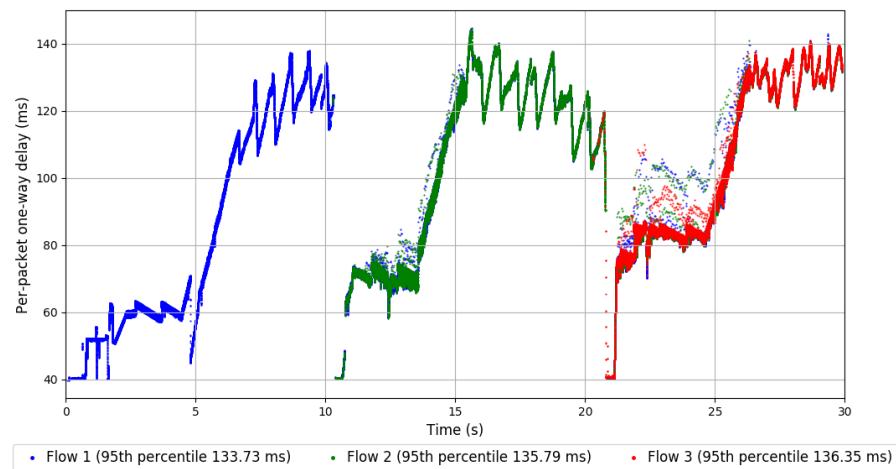
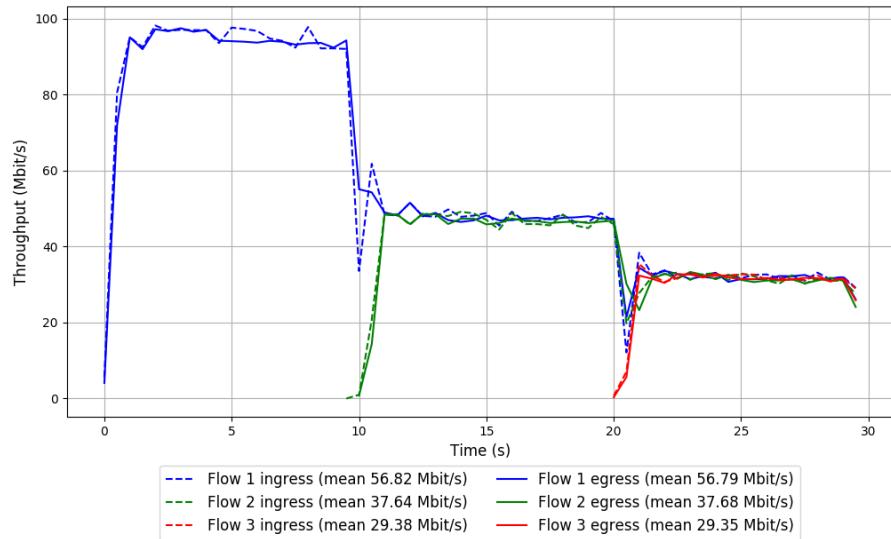
| scheme         | # runs | mean avg tput (Mbit/s) |        |        | mean 95th-%ile delay (ms) |        |        | mean loss rate (%) |        |        |
|----------------|--------|------------------------|--------|--------|---------------------------|--------|--------|--------------------|--------|--------|
|                |        | flow 1                 | flow 2 | flow 3 | flow 1                    | flow 2 | flow 3 | flow 1             | flow 2 | flow 3 |
| TCP BBR        | 10     | 54.12                  | 35.22  | 26.74  | 152.92                    | 159.78 | 166.45 | 0.89               | 1.80   | 3.69   |
| TCP Cubic      |        | 59.95                  | 27.04  | 16.49  | 132.75                    | 145.44 | 146.77 | 0.44               | 1.03   | 2.31   |
| LEDBAT         |        | 37.13                  | 21.15  | 5.75   | 82.39                     | 83.97  | 85.65  | 0.61               | 0.97   | 2.74   |
| PCC            |        | 65.96                  | 11.32  | 11.61  | 144.33                    | 146.78 | 148.87 | 1.88               | 2.90   | 5.42   |
| QUIC Cubic     |        | 39.69                  | 33.61  | 24.42  | 130.05                    | 144.54 | 151.01 | 0.58               | 0.96   | 2.06   |
| SCReAM         |        | 29.65                  | 0.22   | 0.22   | 386.16                    | 40.09  | 40.15  | 0.24               | 0.42   | 0.74   |
| WebRTC media   |        | 1.18                   | 0.71   | 0.27   | 41.00                     | 43.49  | 41.40  | 1.47               | 1.54   | 2.73   |
| Sprout         |        | 8.79                   | 8.47   | 8.11   | 45.91                     | 45.96  | 45.76  | 0.26               | 0.43   | 1.03   |
| TaoVA-100x     |        | 47.59                  | 35.58  | 29.19  | 93.54                     | 101.84 | 105.25 | 3.64               | 4.17   | 4.91   |
| TCP Vegas      |        | 56.42                  | 23.66  | 13.96  | 68.38                     | 71.60  | 69.82  | 0.24               | 0.42   | 1.11   |
| Verus          |        | 56.23                  | 31.11  | 21.11  | 162.80                    | 174.27 | 180.39 | 0.79               | 2.30   | 3.50   |
| Copa           |        | 30.15                  | 24.75  | 13.99  | 52.44                     | 58.42  | 47.37  | 0.71               | 0.80   | 0.97   |
| FillP          |        | 52.17                  | 42.33  | 31.55  | 179.01                    | 181.82 | 182.25 | 6.18               | 9.81   | 21.03  |
| Indigo         |        | 50.17                  | 29.93  | 21.77  | 60.44                     | 67.30  | 67.12  | 0.28               | 0.40   | 0.97   |
| Vivace-latency |        | 37.63                  | 13.25  | 8.13   | 78.49                     | 395.16 | 74.88  | 1.69               | 2.01   | 3.15   |
| Vivace-loss    |        | 47.26                  | 17.59  | 14.86  | 102.08                    | 91.37  | 83.16  | 4.22               | 5.61   | 7.86   |
| Vivace-LTE     |        | 46.22                  | 14.60  | 12.54  | 61.61                     | 69.32  | 71.32  | 2.26               | 3.00   | 3.29   |

Run 1: Statistics of TCP BBR

```
Start at: 2018-01-16 22:57:55
End at: 2018-01-16 22:58:25
Local clock offset: -1.097 ms
Remote clock offset: -7.142 ms

# Below is generated by plot.py at 2018-01-17 06:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.33 Mbit/s
95th percentile per-packet one-way delay: 134.778 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 56.79 Mbit/s
95th percentile per-packet one-way delay: 133.729 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 37.68 Mbit/s
95th percentile per-packet one-way delay: 135.790 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 29.35 Mbit/s
95th percentile per-packet one-way delay: 136.352 ms
Loss rate: 1.99%
```

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

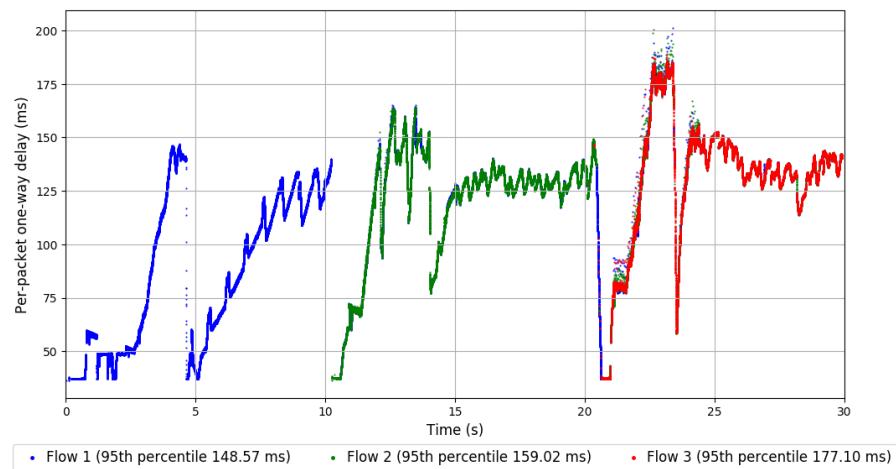
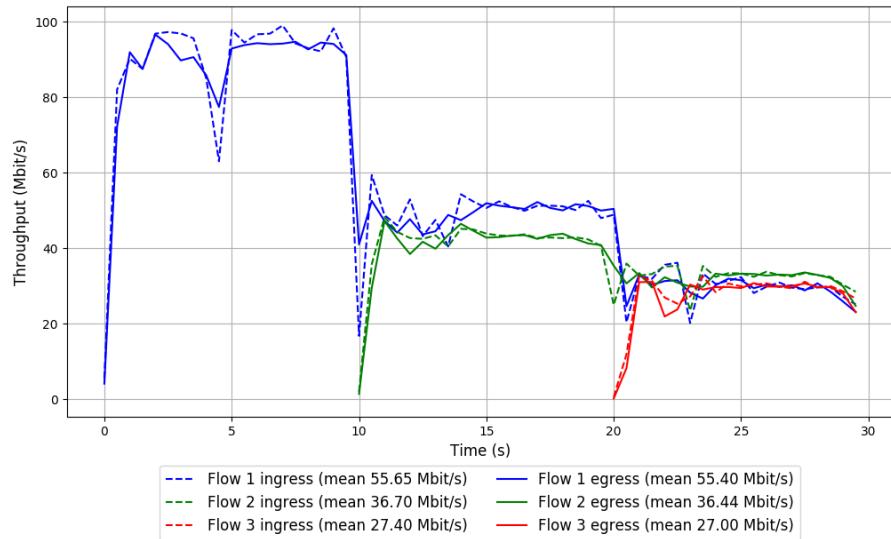


Run 2: Statistics of TCP BBR

```
Start at: 2018-01-16 23:20:40
End at: 2018-01-16 23:21:10
Local clock offset: -4.199 ms
Remote clock offset: -5.943 ms

# Below is generated by plot.py at 2018-01-17 06:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.30 Mbit/s
95th percentile per-packet one-way delay: 151.935 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 55.40 Mbit/s
95th percentile per-packet one-way delay: 148.574 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 36.44 Mbit/s
95th percentile per-packet one-way delay: 159.023 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 27.00 Mbit/s
95th percentile per-packet one-way delay: 177.098 ms
Loss rate: 3.20%
```

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

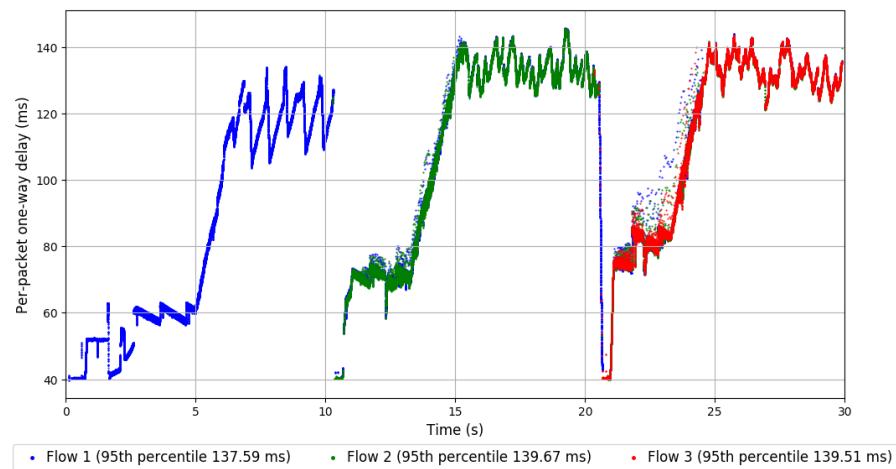
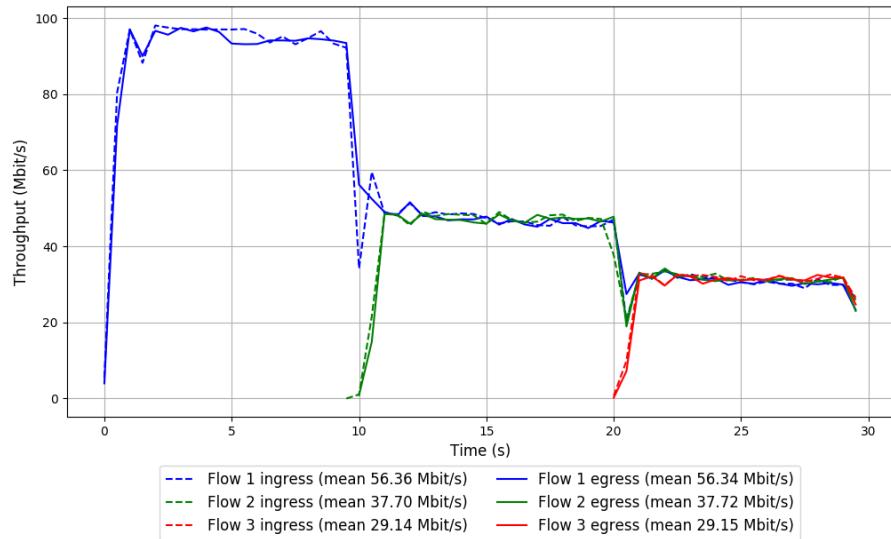


Run 3: Statistics of TCP BBR

```
Start at: 2018-01-16 23:43:38
End at: 2018-01-16 23:44:08
Local clock offset: -1.308 ms
Remote clock offset: -5.085 ms

# Below is generated by plot.py at 2018-01-17 06:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.84 Mbit/s
95th percentile per-packet one-way delay: 138.771 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 56.34 Mbit/s
95th percentile per-packet one-way delay: 137.593 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 37.72 Mbit/s
95th percentile per-packet one-way delay: 139.672 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 29.15 Mbit/s
95th percentile per-packet one-way delay: 139.511 ms
Loss rate: 1.74%
```

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

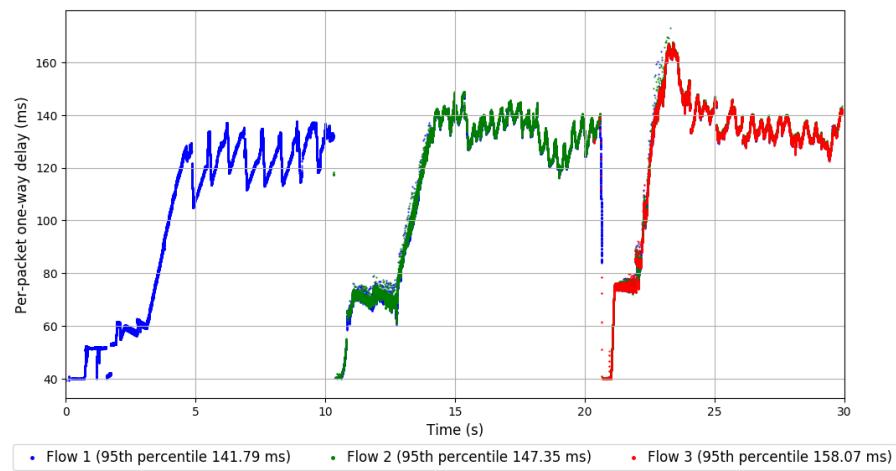
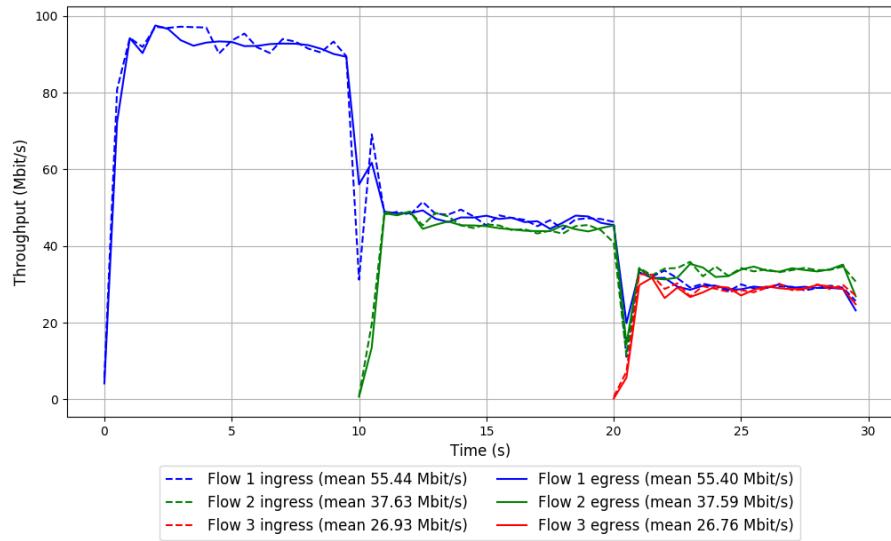


Run 4: Statistics of TCP BBR

```
Start at: 2018-01-17 00:06:22
End at: 2018-01-17 00:06:52
Local clock offset: -1.404 ms
Remote clock offset: -5.409 ms

# Below is generated by plot.py at 2018-01-17 06:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.98 Mbit/s
95th percentile per-packet one-way delay: 144.682 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 55.40 Mbit/s
95th percentile per-packet one-way delay: 141.794 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 37.59 Mbit/s
95th percentile per-packet one-way delay: 147.346 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 26.76 Mbit/s
95th percentile per-packet one-way delay: 158.074 ms
Loss rate: 2.45%
```

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

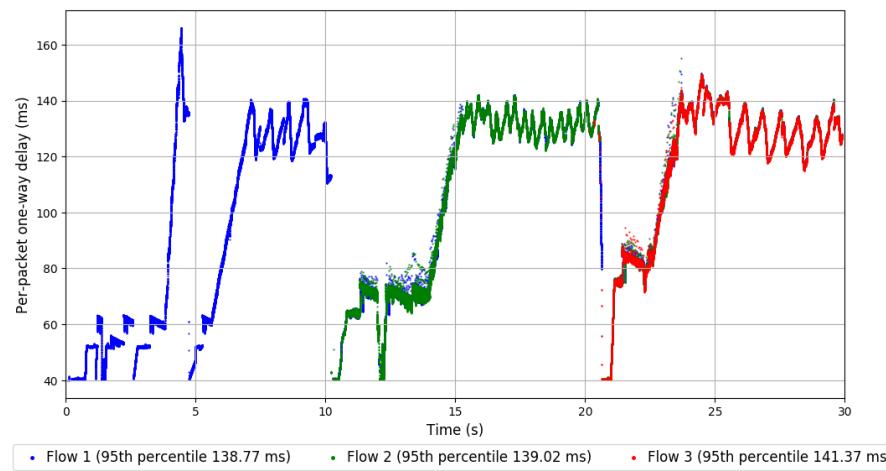
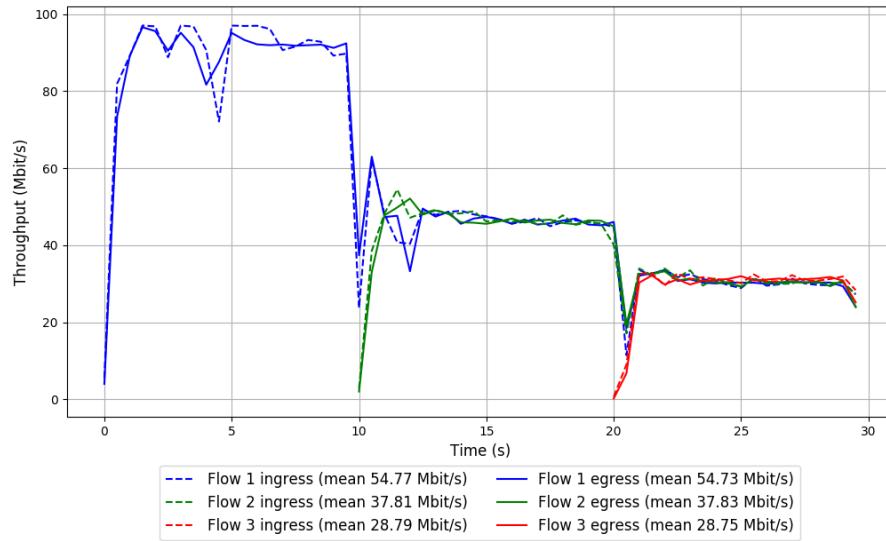


Run 5: Statistics of TCP BBR

```
Start at: 2018-01-17 00:29:49
End at: 2018-01-17 00:30:19
Local clock offset: -1.478 ms
Remote clock offset: -6.66 ms

# Below is generated by plot.py at 2018-01-17 06:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.17 Mbit/s
95th percentile per-packet one-way delay: 139.228 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 54.73 Mbit/s
95th percentile per-packet one-way delay: 138.771 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 37.83 Mbit/s
95th percentile per-packet one-way delay: 139.023 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 28.75 Mbit/s
95th percentile per-packet one-way delay: 141.370 ms
Loss rate: 2.02%
```

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

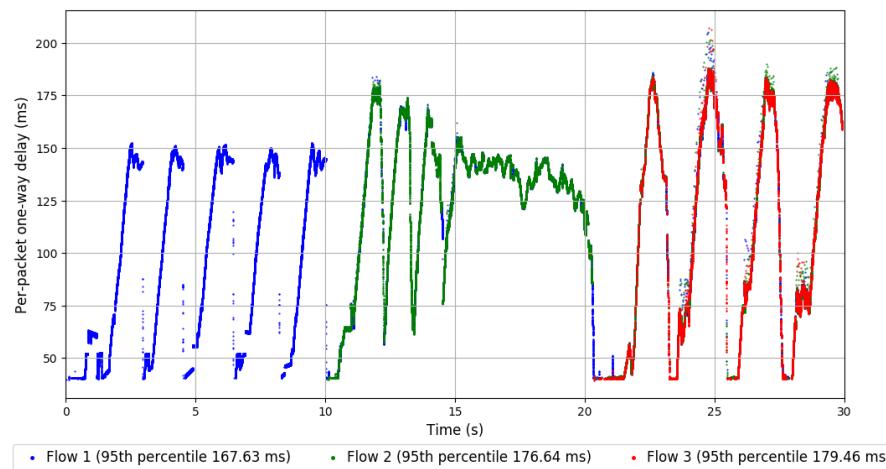
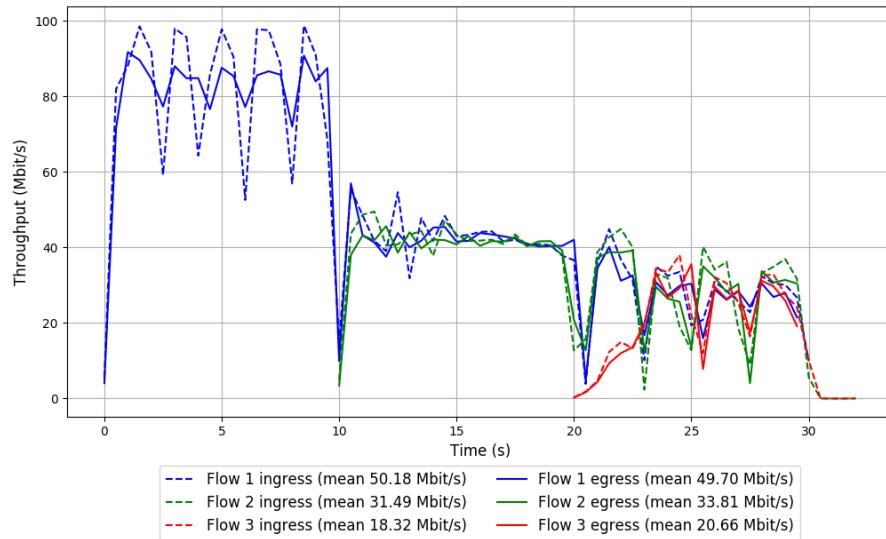


Run 6: Statistics of TCP BBR

```
Start at: 2018-01-17 00:52:56
End at: 2018-01-17 00:53:27
Local clock offset: -1.615 ms
Remote clock offset: -6.207 ms

# Below is generated by plot.py at 2018-01-17 06:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.89 Mbit/s
95th percentile per-packet one-way delay: 174.694 ms
Loss rate: 2.93%
-- Flow 1:
Average throughput: 49.70 Mbit/s
95th percentile per-packet one-way delay: 167.634 ms
Loss rate: 1.98%
-- Flow 2:
Average throughput: 33.81 Mbit/s
95th percentile per-packet one-way delay: 176.639 ms
Loss rate: 3.26%
-- Flow 3:
Average throughput: 20.66 Mbit/s
95th percentile per-packet one-way delay: 179.459 ms
Loss rate: 8.39%
```

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

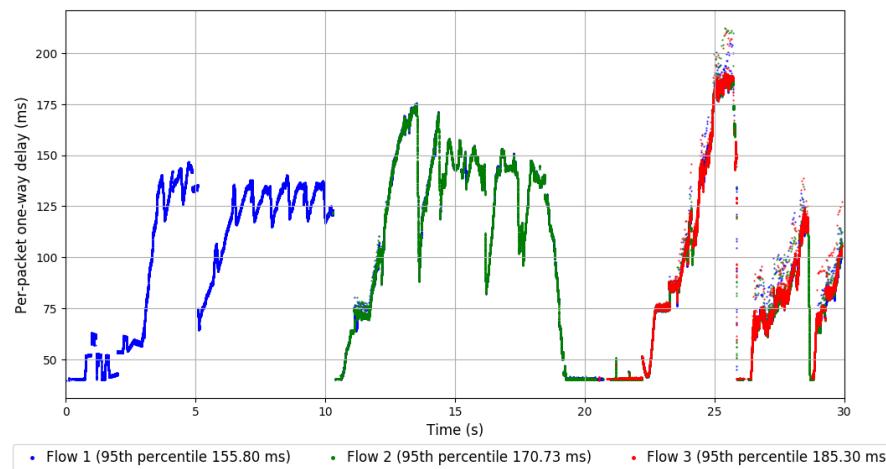
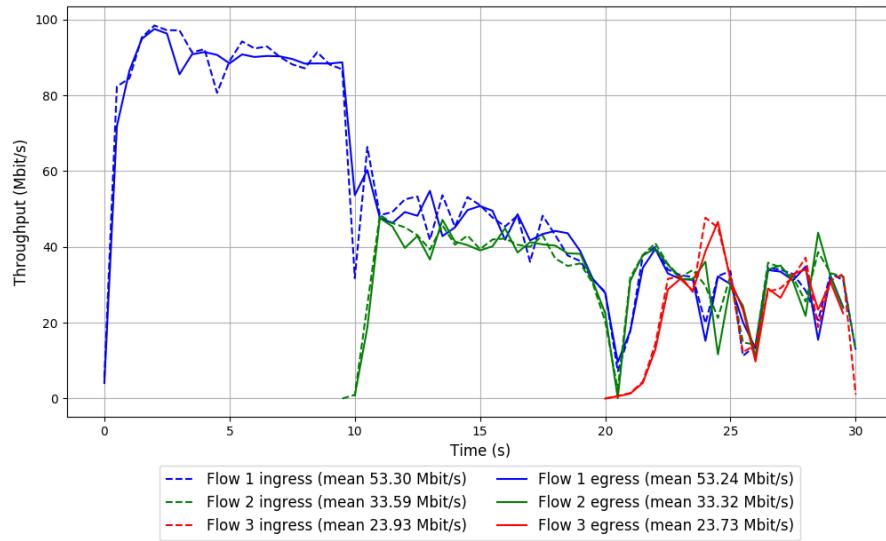


Run 7: Statistics of TCP BBR

```
Start at: 2018-01-17 01:16:17
End at: 2018-01-17 01:16:47
Local clock offset: -1.776 ms
Remote clock offset: -5.801 ms

# Below is generated by plot.py at 2018-01-17 06:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.95 Mbit/s
95th percentile per-packet one-way delay: 164.944 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 53.24 Mbit/s
95th percentile per-packet one-way delay: 155.799 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 33.32 Mbit/s
95th percentile per-packet one-way delay: 170.734 ms
Loss rate: 2.73%
-- Flow 3:
Average throughput: 23.73 Mbit/s
95th percentile per-packet one-way delay: 185.299 ms
Loss rate: 3.82%
```

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

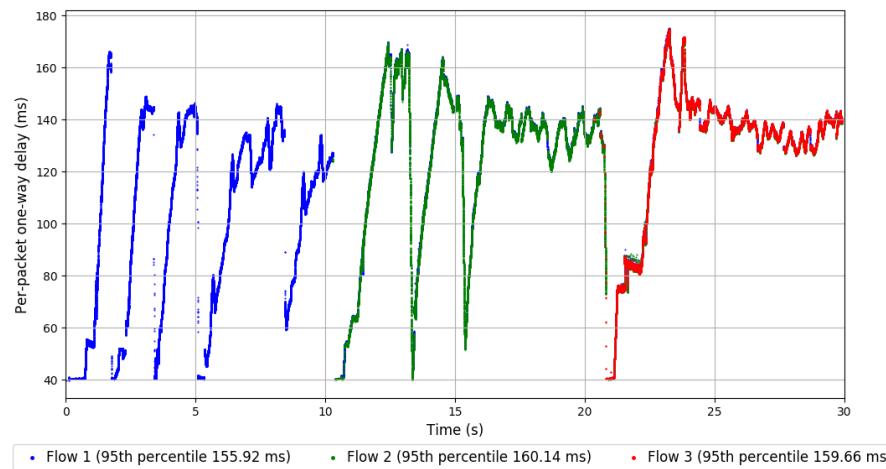
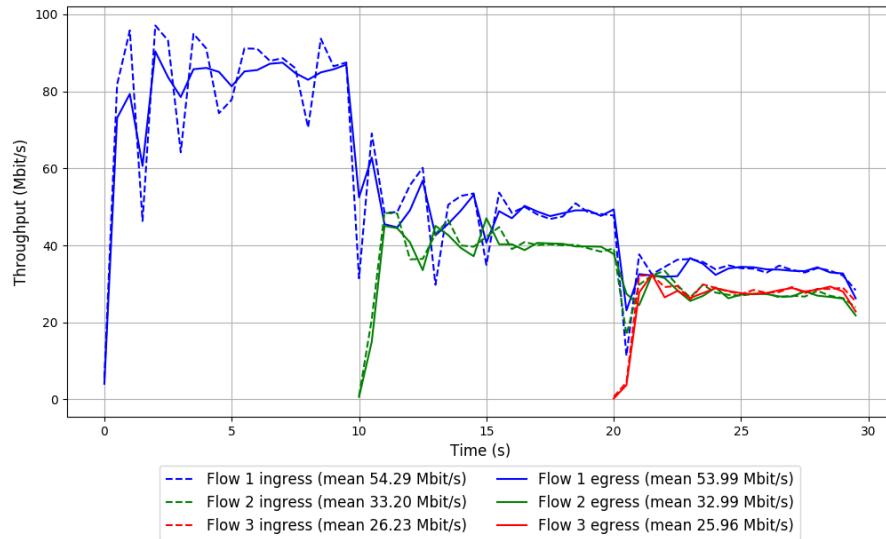


Run 8: Statistics of TCP BBR

```
Start at: 2018-01-17 01:39:40
End at: 2018-01-17 01:40:10
Local clock offset: -1.875 ms
Remote clock offset: -6.071 ms

# Below is generated by plot.py at 2018-01-17 06:48:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.30 Mbit/s
95th percentile per-packet one-way delay: 157.772 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 53.99 Mbit/s
95th percentile per-packet one-way delay: 155.921 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 32.99 Mbit/s
95th percentile per-packet one-way delay: 160.137 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 25.96 Mbit/s
95th percentile per-packet one-way delay: 159.658 ms
Loss rate: 2.81%
```

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

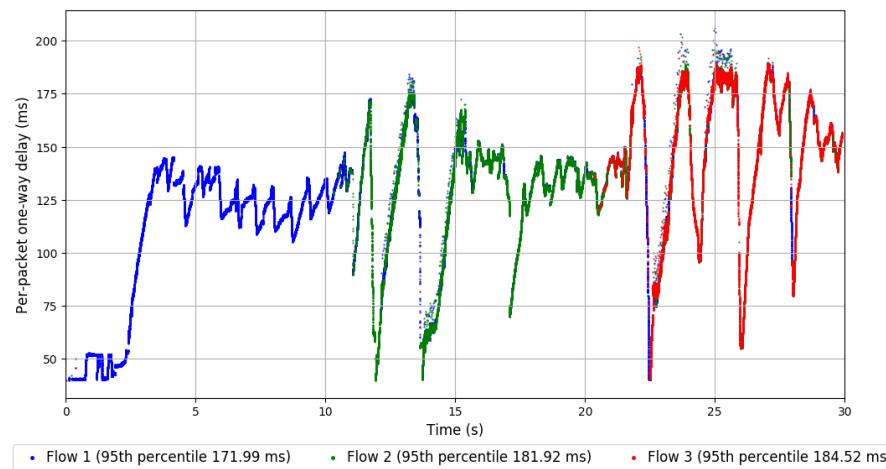
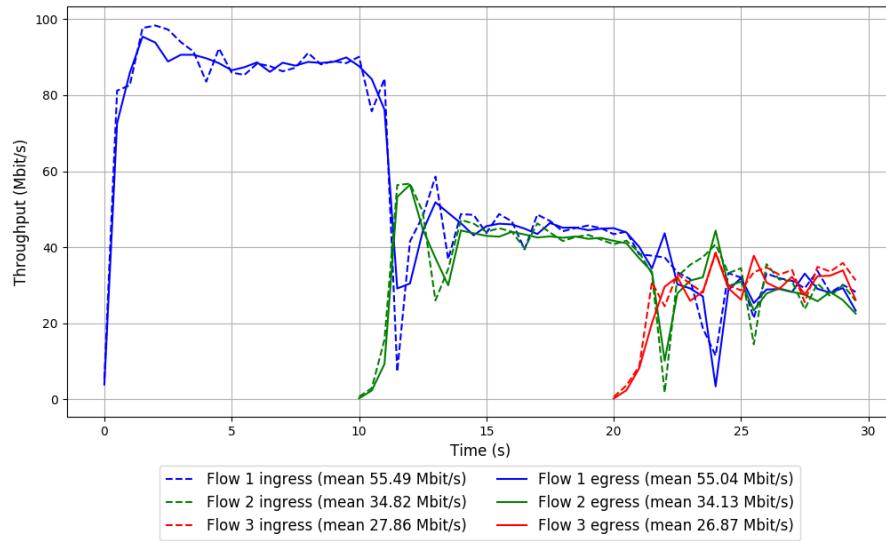


Run 9: Statistics of TCP BBR

```
Start at: 2018-01-17 02:02:53
End at: 2018-01-17 02:03:23
Local clock offset: -1.545 ms
Remote clock offset: -6.127 ms

# Below is generated by plot.py at 2018-01-17 06:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.38 Mbit/s
95th percentile per-packet one-way delay: 180.383 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 55.04 Mbit/s
95th percentile per-packet one-way delay: 171.988 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 34.13 Mbit/s
95th percentile per-packet one-way delay: 181.921 ms
Loss rate: 2.79%
-- Flow 3:
Average throughput: 26.87 Mbit/s
95th percentile per-packet one-way delay: 184.516 ms
Loss rate: 5.42%
```

### Run 9: Report of TCP BBR — Data Link

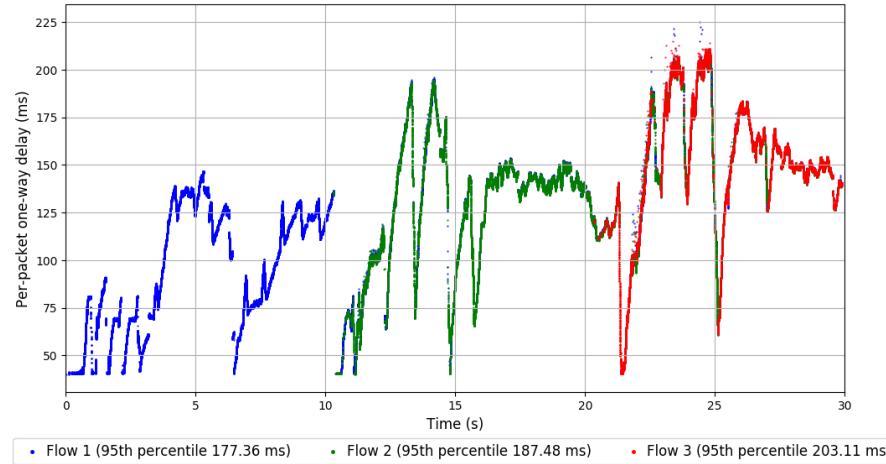
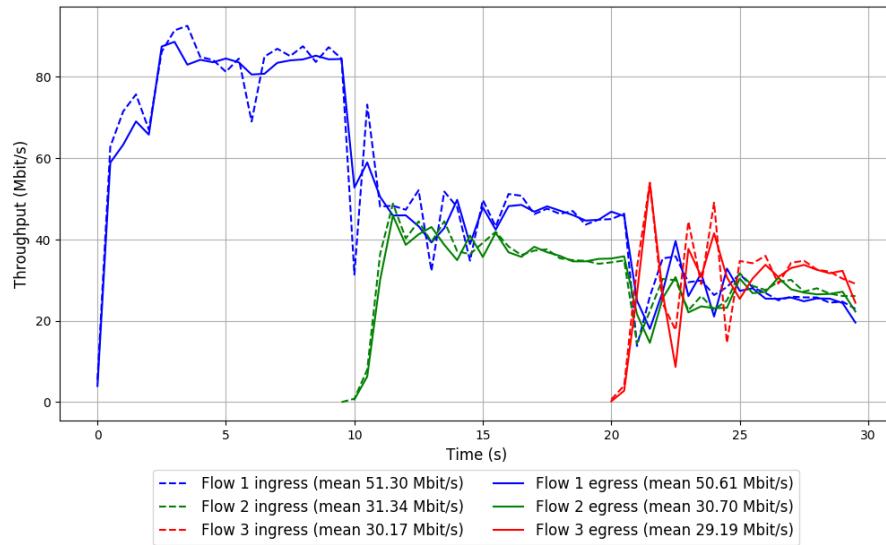


Run 10: Statistics of TCP BBR

```
Start at: 2018-01-17 02:27:32
End at: 2018-01-17 02:28:02
Local clock offset: -1.022 ms
Remote clock offset: -5.55 ms

# Below is generated by plot.py at 2018-01-17 06:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.45 Mbit/s
95th percentile per-packet one-way delay: 186.802 ms
Loss rate: 2.38%
-- Flow 1:
Average throughput: 50.61 Mbit/s
95th percentile per-packet one-way delay: 177.364 ms
Loss rate: 1.64%
-- Flow 2:
Average throughput: 30.70 Mbit/s
95th percentile per-packet one-way delay: 187.476 ms
Loss rate: 2.92%
-- Flow 3:
Average throughput: 29.19 Mbit/s
95th percentile per-packet one-way delay: 203.113 ms
Loss rate: 5.04%
```

Run 10: Report of TCP BBR — Data Link

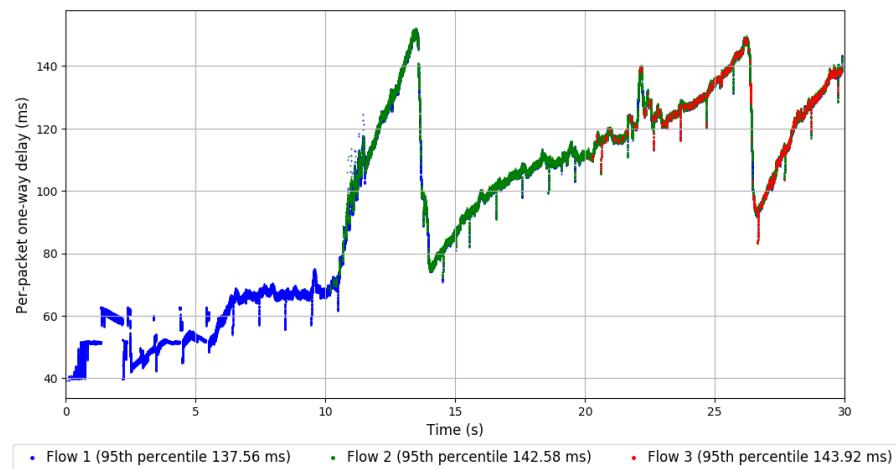
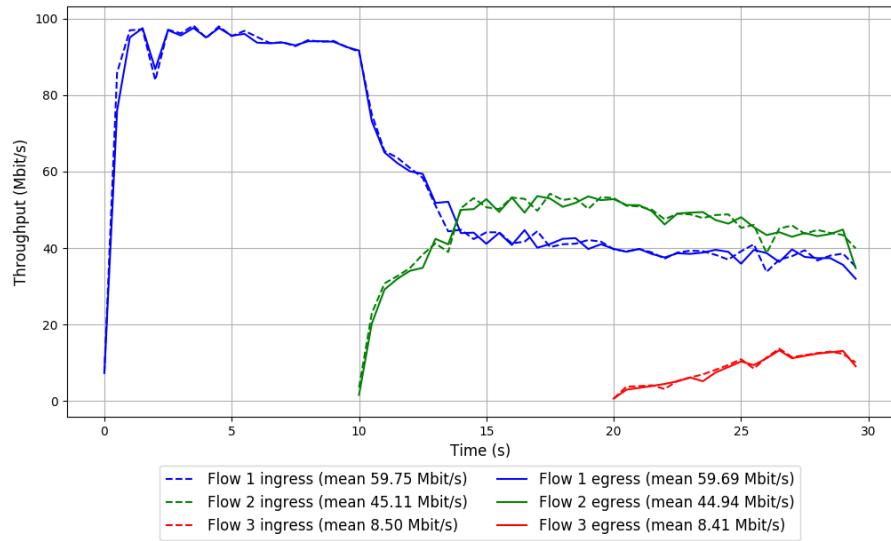


```
Run 1: Statistics of TCP Cubic
```

```
Start at: 2018-01-16 23:06:51
End at: 2018-01-16 23:07:21
Local clock offset: -1.389 ms
Remote clock offset: -6.639 ms

# Below is generated by plot.py at 2018-01-17 06:50:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.27 Mbit/s
95th percentile per-packet one-way delay: 139.111 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 59.69 Mbit/s
95th percentile per-packet one-way delay: 137.564 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 44.94 Mbit/s
95th percentile per-packet one-way delay: 142.583 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 8.41 Mbit/s
95th percentile per-packet one-way delay: 143.922 ms
Loss rate: 2.71%
```

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

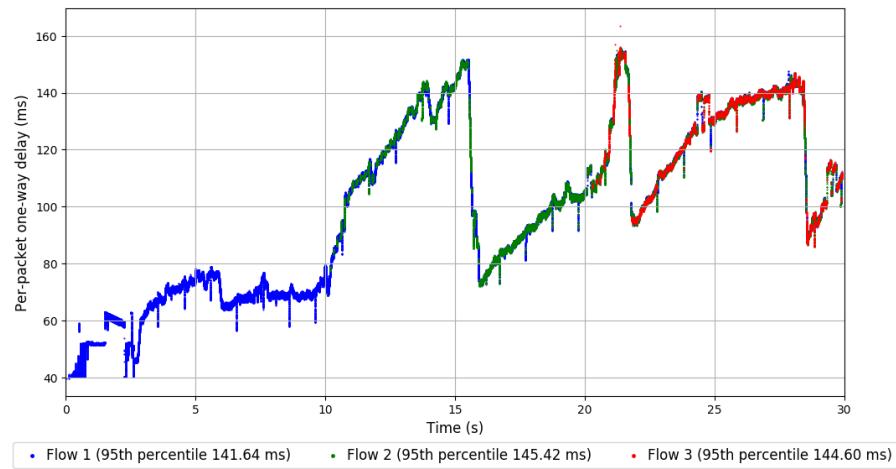
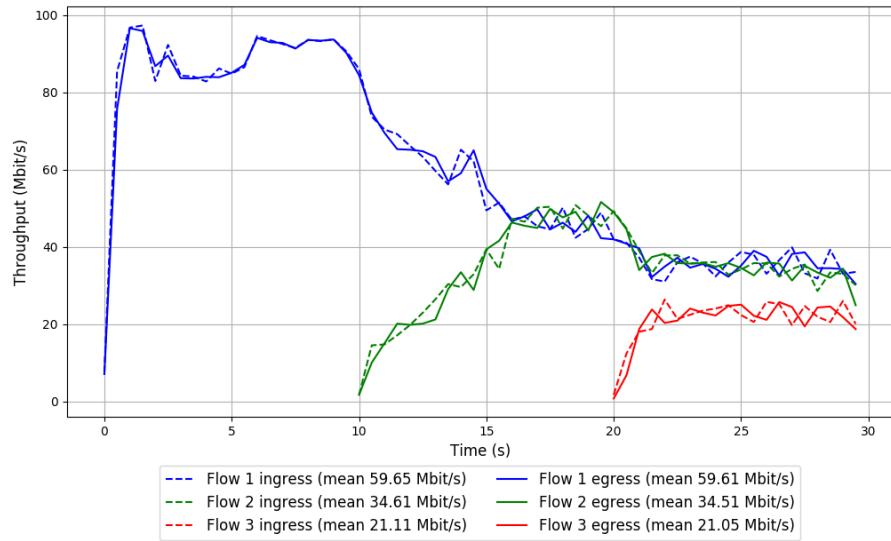


Run 2: Statistics of TCP Cubic

```
Start at: 2018-01-16 23:29:31
End at: 2018-01-16 23:30:01
Local clock offset: -1.411 ms
Remote clock offset: -5.426 ms

# Below is generated by plot.py at 2018-01-17 06:50:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.42 Mbit/s
95th percentile per-packet one-way delay: 142.979 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 59.61 Mbit/s
95th percentile per-packet one-way delay: 141.643 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 34.51 Mbit/s
95th percentile per-packet one-way delay: 145.419 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 21.05 Mbit/s
95th percentile per-packet one-way delay: 144.603 ms
Loss rate: 1.86%
```

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

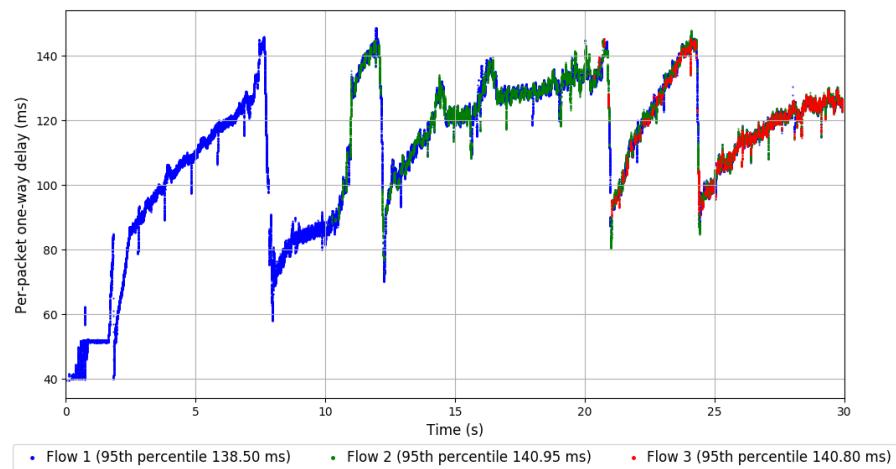
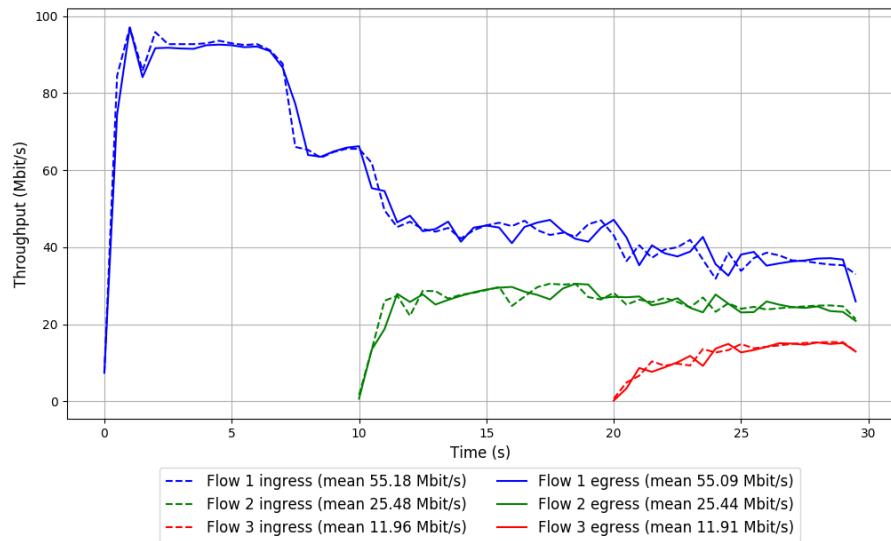


Run 3: Statistics of TCP Cubic

```
Start at: 2018-01-16 23:52:34
End at: 2018-01-16 23:53:04
Local clock offset: -1.638 ms
Remote clock offset: -5.001 ms

# Below is generated by plot.py at 2018-01-17 06:50:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.82 Mbit/s
95th percentile per-packet one-way delay: 139.859 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 55.09 Mbit/s
95th percentile per-packet one-way delay: 138.495 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 25.44 Mbit/s
95th percentile per-packet one-way delay: 140.948 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 11.91 Mbit/s
95th percentile per-packet one-way delay: 140.803 ms
Loss rate: 2.21%
```

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

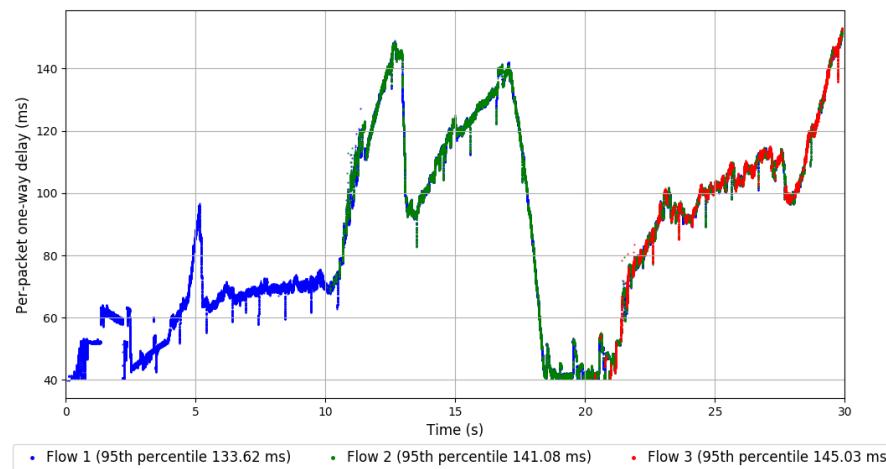
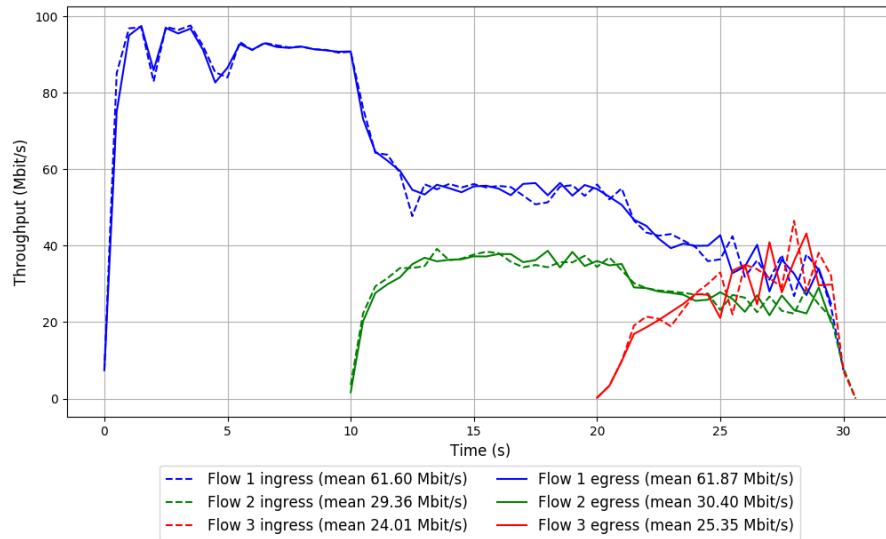


Run 4: Statistics of TCP Cubic

```
Start at: 2018-01-17 00:15:40
End at: 2018-01-17 00:16:10
Local clock offset: -1.414 ms
Remote clock offset: -6.428 ms

# Below is generated by plot.py at 2018-01-17 06:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.31 Mbit/s
95th percentile per-packet one-way delay: 138.550 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 61.87 Mbit/s
95th percentile per-packet one-way delay: 133.616 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 30.40 Mbit/s
95th percentile per-packet one-way delay: 141.078 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 25.35 Mbit/s
95th percentile per-packet one-way delay: 145.031 ms
Loss rate: 3.63%
```

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

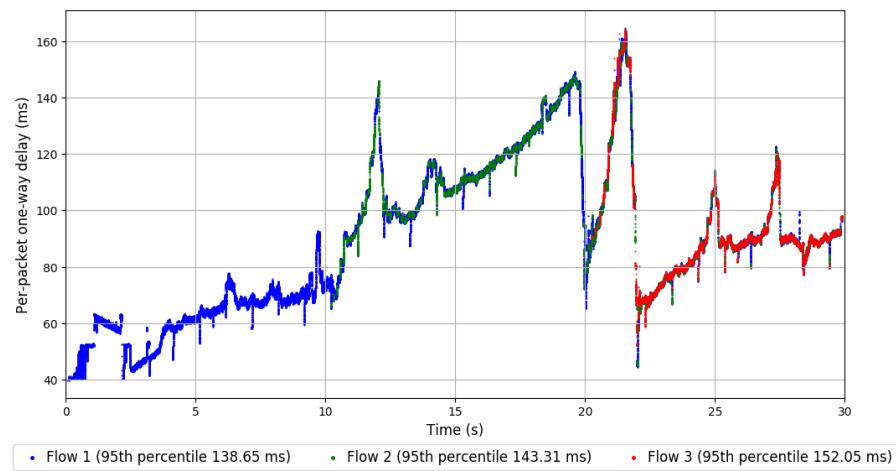
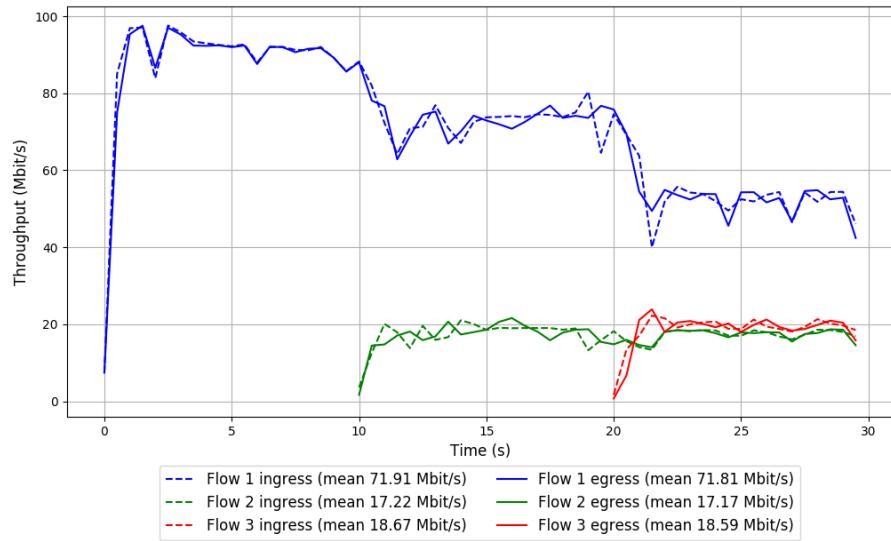


Run 5: Statistics of TCP Cubic

```
Start at: 2018-01-17 00:38:35
End at: 2018-01-17 00:39:05
Local clock offset: -1.581 ms
Remote clock offset: -6.451 ms

# Below is generated by plot.py at 2018-01-17 06:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.28 Mbit/s
95th percentile per-packet one-way delay: 139.394 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 71.81 Mbit/s
95th percentile per-packet one-way delay: 138.648 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 17.17 Mbit/s
95th percentile per-packet one-way delay: 143.314 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 18.59 Mbit/s
95th percentile per-packet one-way delay: 152.049 ms
Loss rate: 1.78%
```

Run 5: Report of TCP Cubic — Data Link

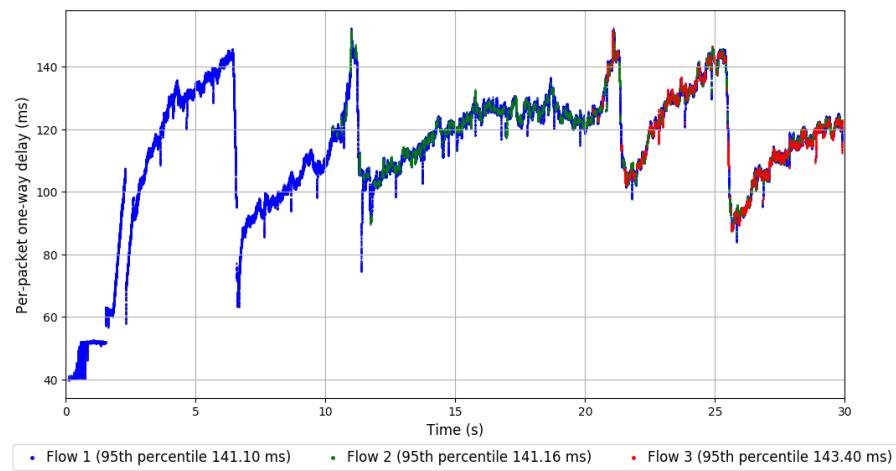
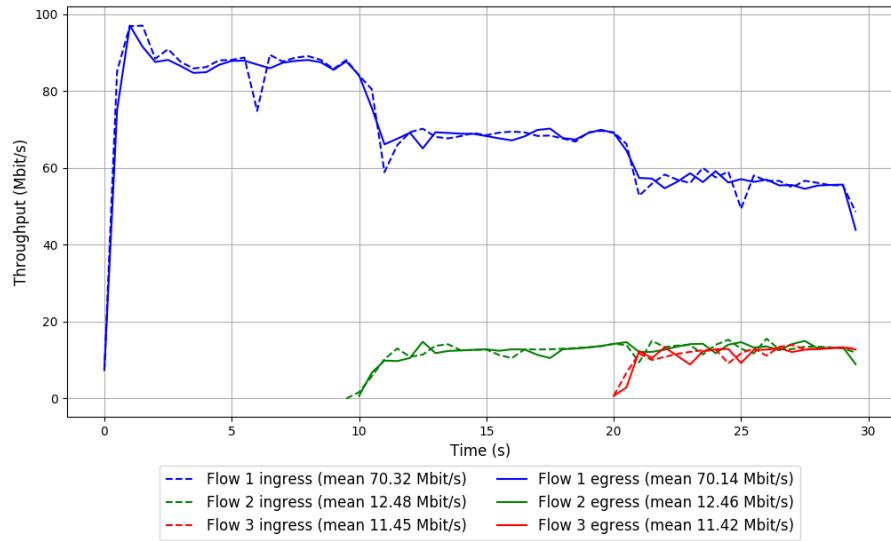


Run 6: Statistics of TCP Cubic

```
Start at: 2018-01-17 01:02:06
End at: 2018-01-17 01:02:36
Local clock offset: -1.851 ms
Remote clock offset: -5.969 ms

# Below is generated by plot.py at 2018-01-17 06:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.11 Mbit/s
95th percentile per-packet one-way delay: 141.347 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 70.14 Mbit/s
95th percentile per-packet one-way delay: 141.098 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 12.46 Mbit/s
95th percentile per-packet one-way delay: 141.158 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 11.42 Mbit/s
95th percentile per-packet one-way delay: 143.395 ms
Loss rate: 1.99%
```

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

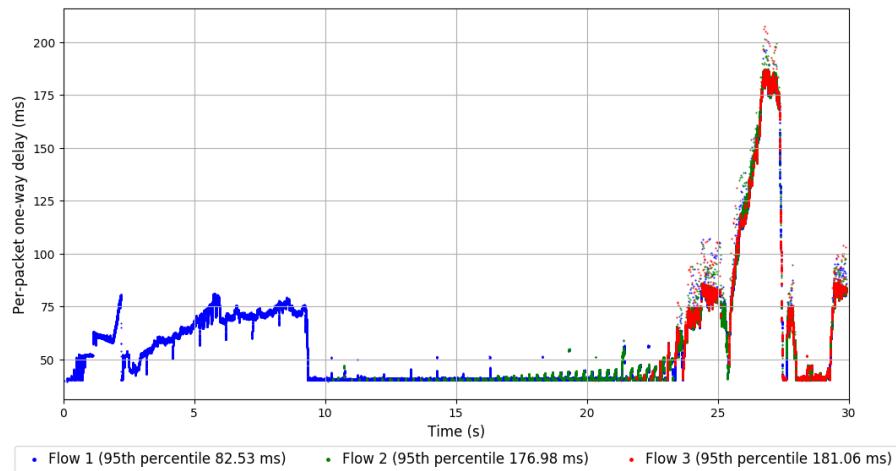
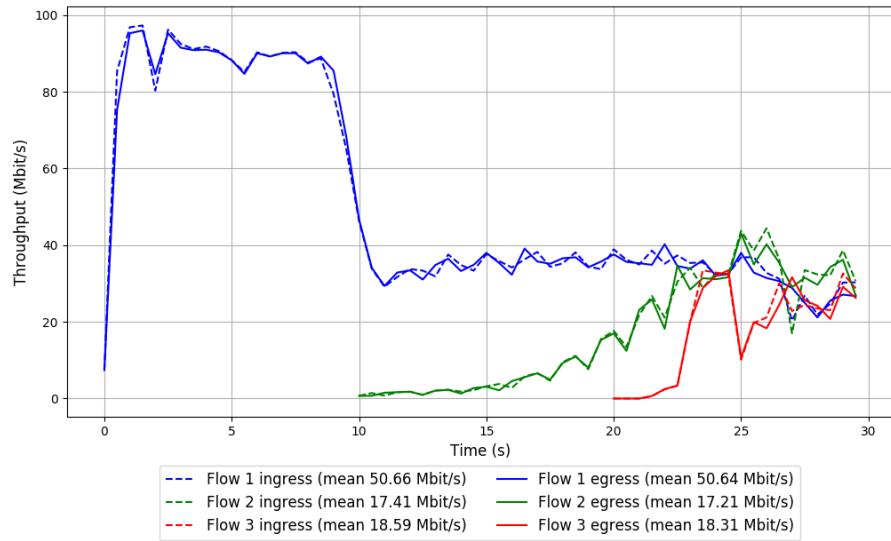


Run 7: Statistics of TCP Cubic

```
Start at: 2018-01-17 01:25:38
End at: 2018-01-17 01:26:08
Local clock offset: -1.716 ms
Remote clock offset: -5.945 ms

# Below is generated by plot.py at 2018-01-17 06:51:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.93 Mbit/s
95th percentile per-packet one-way delay: 134.546 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 50.64 Mbit/s
95th percentile per-packet one-way delay: 82.535 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 17.21 Mbit/s
95th percentile per-packet one-way delay: 176.982 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 18.31 Mbit/s
95th percentile per-packet one-way delay: 181.063 ms
Loss rate: 2.70%
```

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

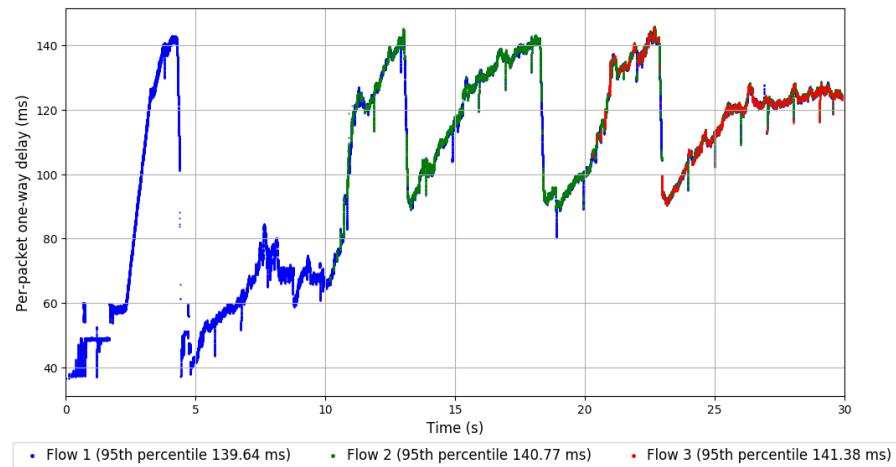
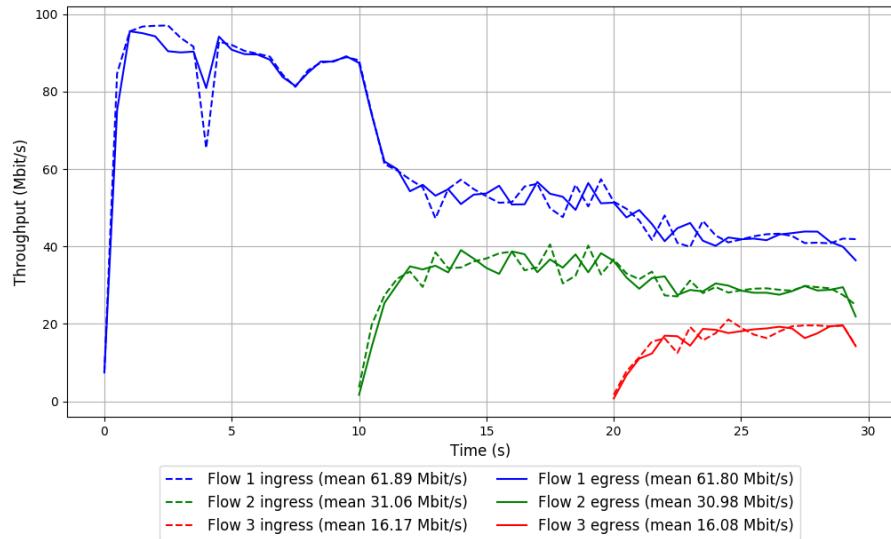


Run 8: Statistics of TCP Cubic

```
Start at: 2018-01-17 01:48:53
End at: 2018-01-17 01:49:23
Local clock offset: -4.555 ms
Remote clock offset: -6.111 ms

# Below is generated by plot.py at 2018-01-17 06:51:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.60 Mbit/s
95th percentile per-packet one-way delay: 140.015 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 61.80 Mbit/s
95th percentile per-packet one-way delay: 139.638 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 30.98 Mbit/s
95th percentile per-packet one-way delay: 140.768 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 16.08 Mbit/s
95th percentile per-packet one-way delay: 141.375 ms
Loss rate: 2.09%
```

Run 8: Report of TCP Cubic — Data Link

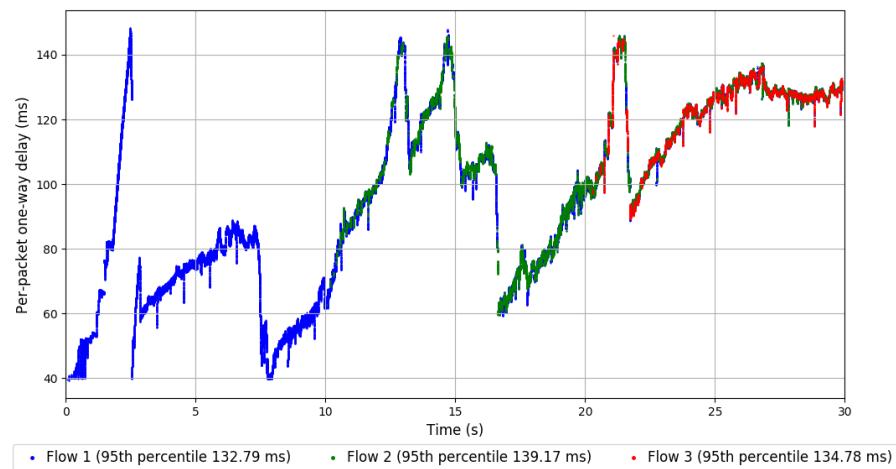
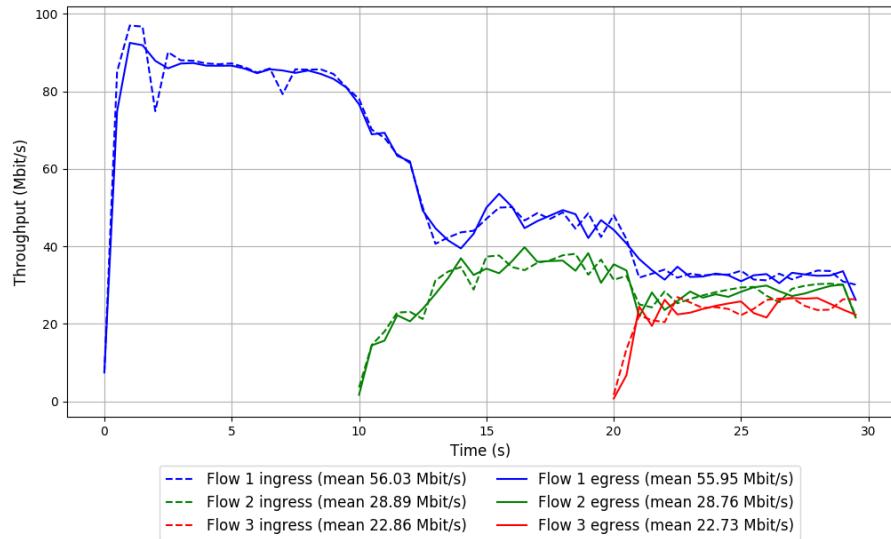


Run 9: Statistics of TCP Cubic

```
Start at: 2018-01-17 02:11:56
End at: 2018-01-17 02:12:26
Local clock offset: -1.975 ms
Remote clock offset: -5.842 ms

# Below is generated by plot.py at 2018-01-17 06:51:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.48 Mbit/s
95th percentile per-packet one-way delay: 134.085 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 55.95 Mbit/s
95th percentile per-packet one-way delay: 132.791 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 28.76 Mbit/s
95th percentile per-packet one-way delay: 139.168 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 22.73 Mbit/s
95th percentile per-packet one-way delay: 134.776 ms
Loss rate: 2.04%
```

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

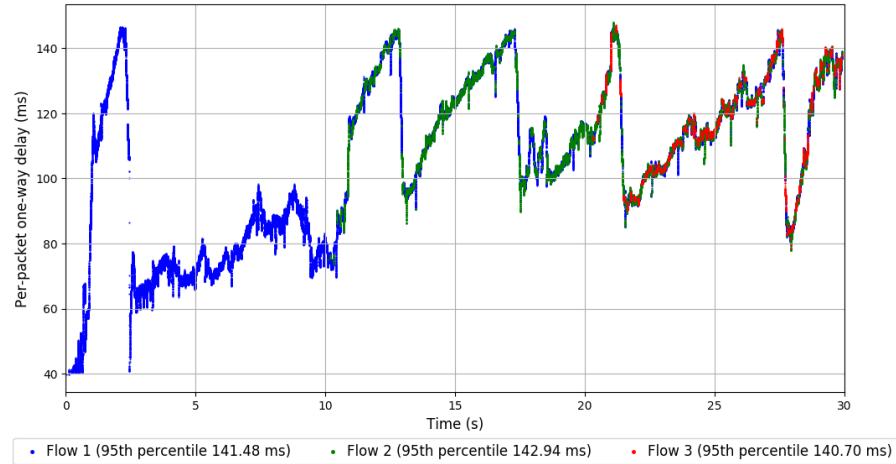
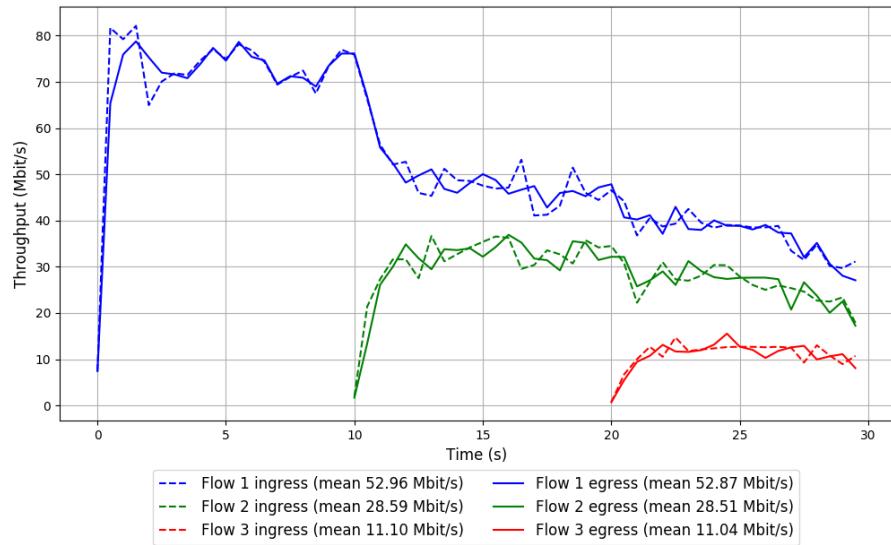


Run 10: Statistics of TCP Cubic

```
Start at: 2018-01-17 02:36:58
End at: 2018-01-17 02:37:28
Local clock offset: -0.618 ms
Remote clock offset: -5.127 ms

# Below is generated by plot.py at 2018-01-17 06:51:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.40 Mbit/s
95th percentile per-packet one-way delay: 141.802 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 52.87 Mbit/s
95th percentile per-packet one-way delay: 141.476 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 28.51 Mbit/s
95th percentile per-packet one-way delay: 142.936 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 11.04 Mbit/s
95th percentile per-packet one-way delay: 140.698 ms
Loss rate: 2.13%
```

## Run 10: Report of TCP Cubic — Data Link

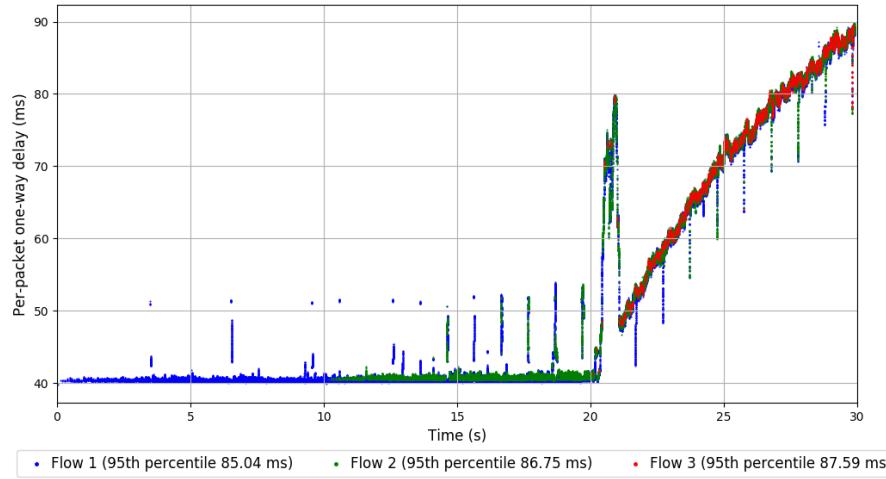
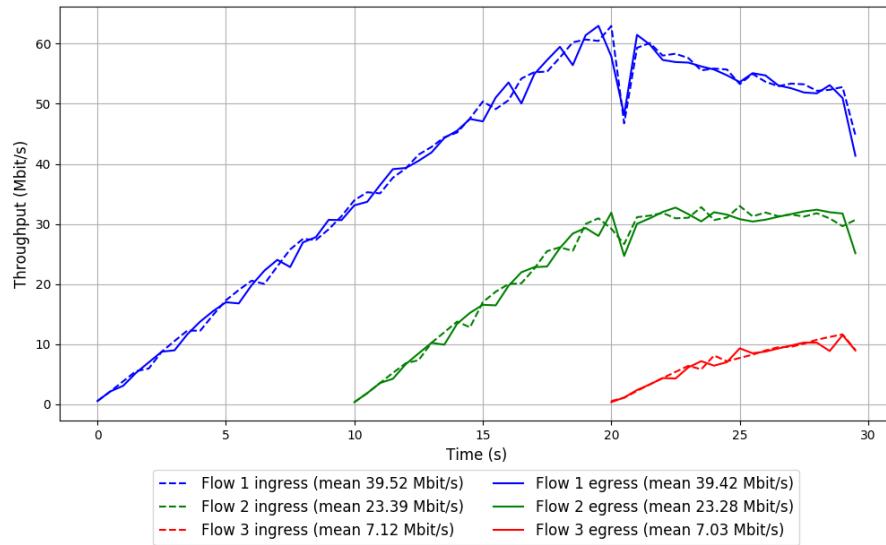


```
Run 1: Statistics of LEDBAT
```

```
Start at: 2018-01-16 23:10:44
End at: 2018-01-16 23:11:14
Local clock offset: -1.183 ms
Remote clock offset: -6.489 ms

# Below is generated by plot.py at 2018-01-17 06:51:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.15 Mbit/s
95th percentile per-packet one-way delay: 86.113 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 39.42 Mbit/s
95th percentile per-packet one-way delay: 85.037 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 23.28 Mbit/s
95th percentile per-packet one-way delay: 86.751 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 7.03 Mbit/s
95th percentile per-packet one-way delay: 87.589 ms
Loss rate: 2.15%
```

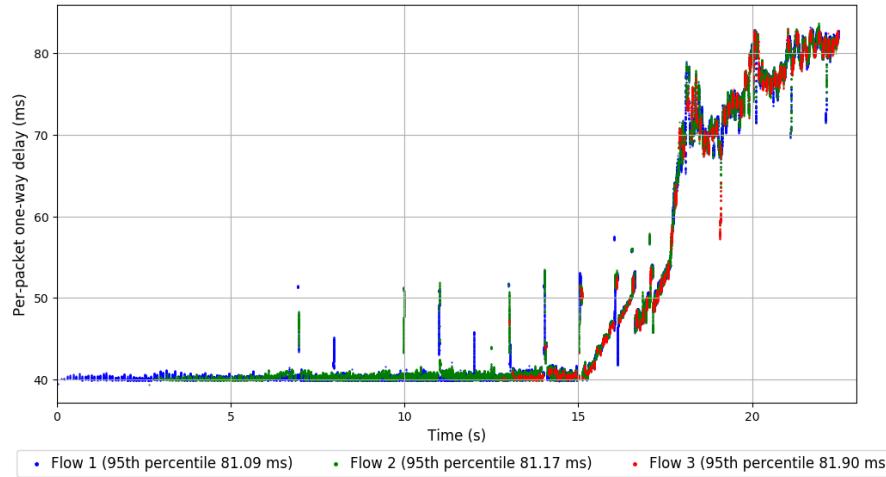
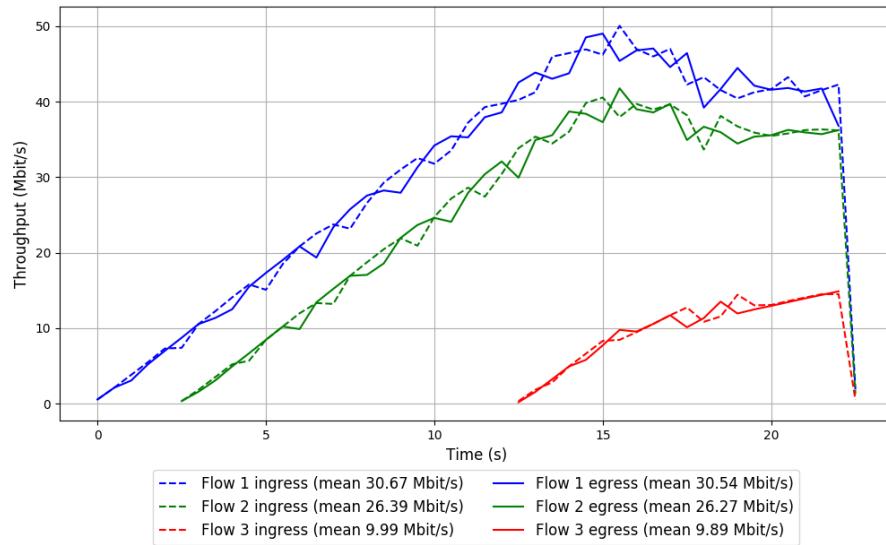
Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-01-16 23:33:18  
End at: 2018-01-16 23:33:48  
Local clock offset: -1.434 ms  
Remote clock offset: -5.399 ms

Run 2: Report of LEDBAT — Data Link

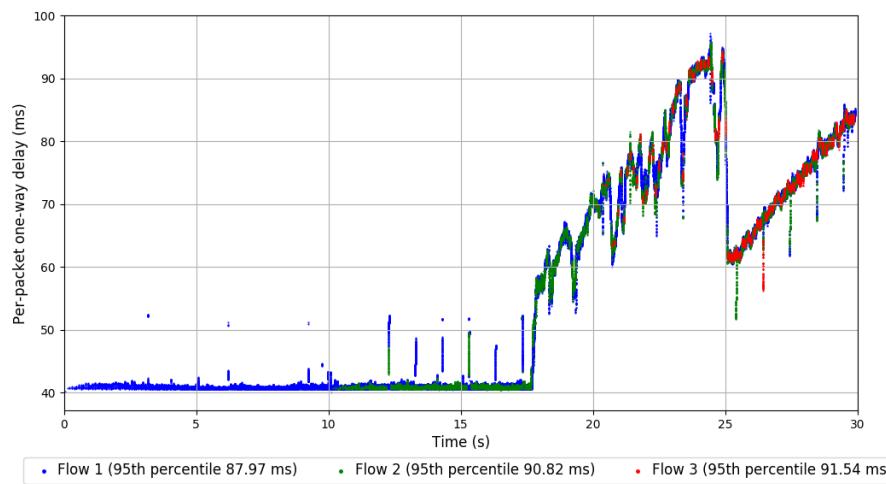
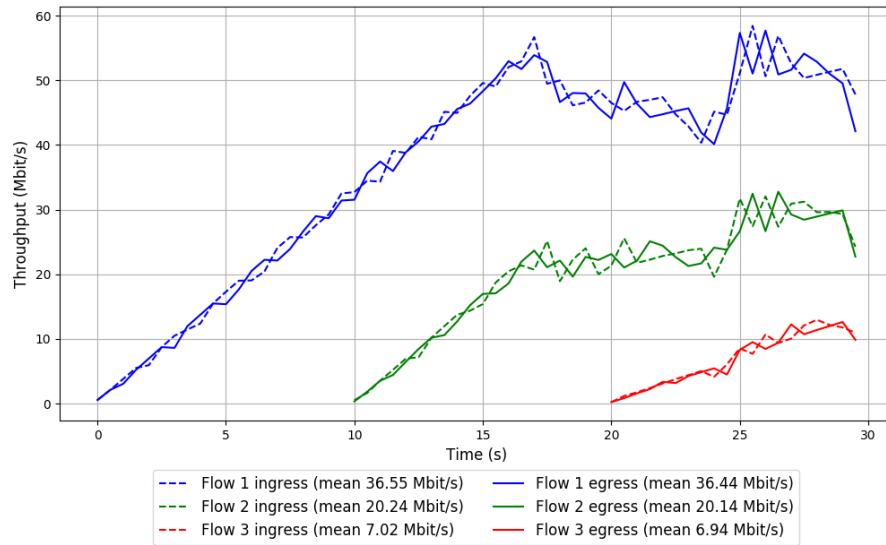


Run 3: Statistics of LEDBAT

```
Start at: 2018-01-16 23:56:18
End at: 2018-01-16 23:56:48
Local clock offset: -1.106 ms
Remote clock offset: -5.027 ms

# Below is generated by plot.py at 2018-01-17 06:51:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.03 Mbit/s
95th percentile per-packet one-way delay: 88.867 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 36.44 Mbit/s
95th percentile per-packet one-way delay: 87.970 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 20.14 Mbit/s
95th percentile per-packet one-way delay: 90.820 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 91.537 ms
Loss rate: 2.43%
```

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

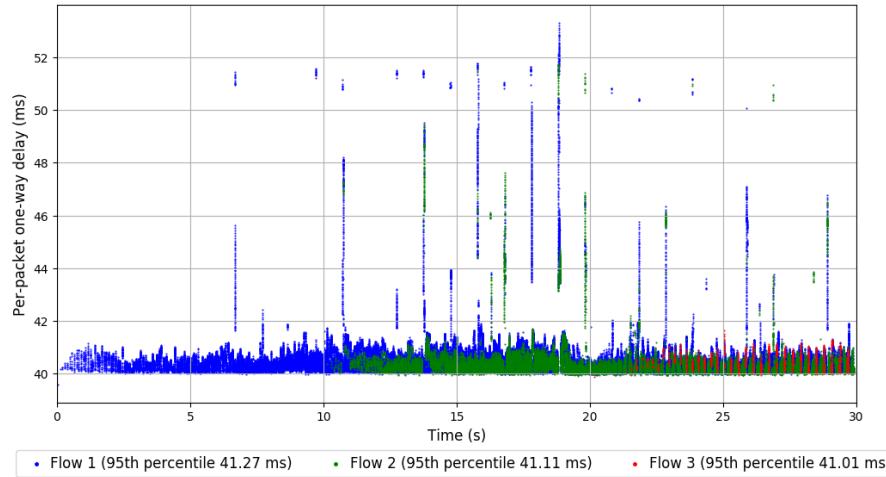
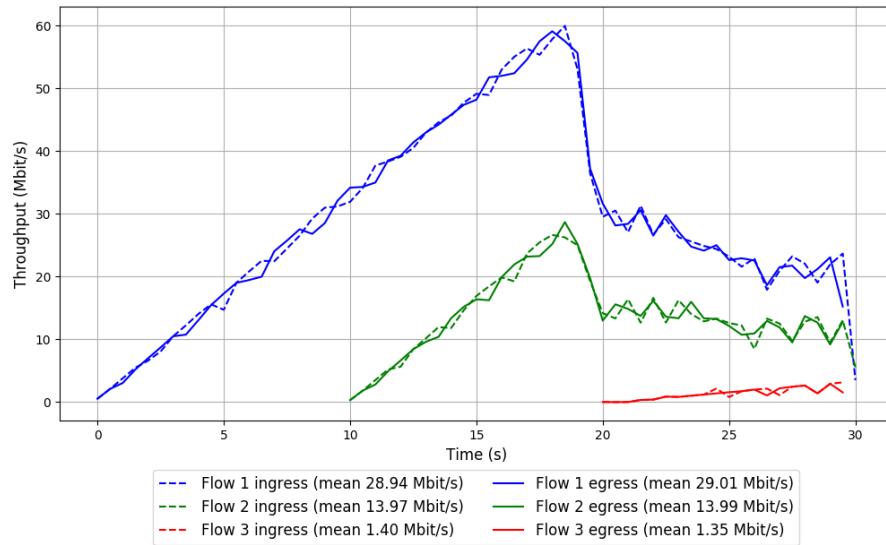


Run 4: Statistics of LEDBAT

```
Start at: 2018-01-17 00:19:33
End at: 2018-01-17 00:20:03
Local clock offset: -1.492 ms
Remote clock offset: -6.824 ms

# Below is generated by plot.py at 2018-01-17 06:51:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.71 Mbit/s
95th percentile per-packet one-way delay: 41.246 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 29.01 Mbit/s
95th percentile per-packet one-way delay: 41.274 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 13.99 Mbit/s
95th percentile per-packet one-way delay: 41.108 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 41.014 ms
Loss rate: 5.87%
```

## Run 4: Report of LEDBAT — Data Link

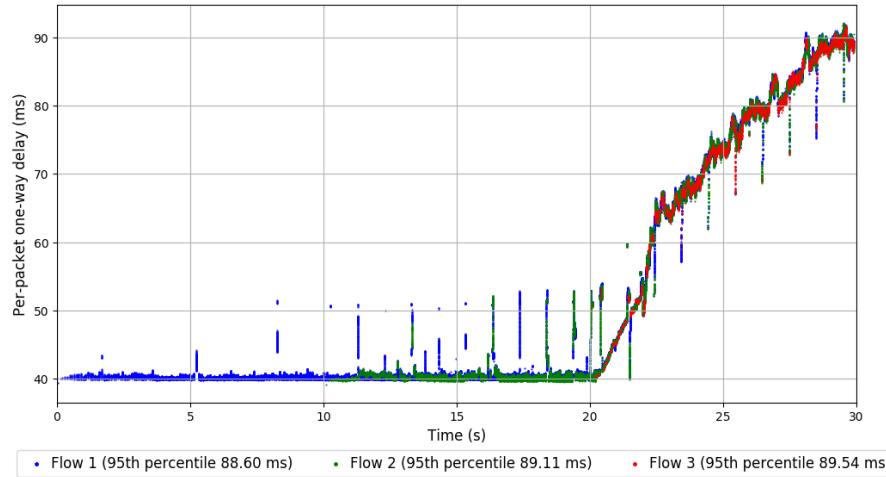
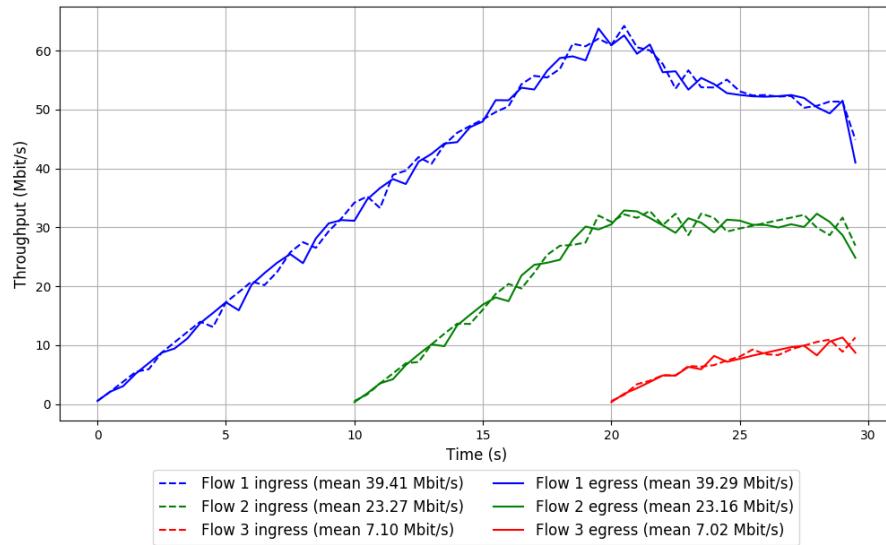


Run 5: Statistics of LEDBAT

```
Start at: 2018-01-17 00:42:33
End at: 2018-01-17 00:43:03
Local clock offset: -2.041 ms
Remote clock offset: -6.408 ms

# Below is generated by plot.py at 2018-01-17 06:51:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.95 Mbit/s
95th percentile per-packet one-way delay: 88.902 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 39.29 Mbit/s
95th percentile per-packet one-way delay: 88.599 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 23.16 Mbit/s
95th percentile per-packet one-way delay: 89.115 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 7.02 Mbit/s
95th percentile per-packet one-way delay: 89.541 ms
Loss rate: 2.09%
```

Run 5: Report of LEDBAT — Data Link

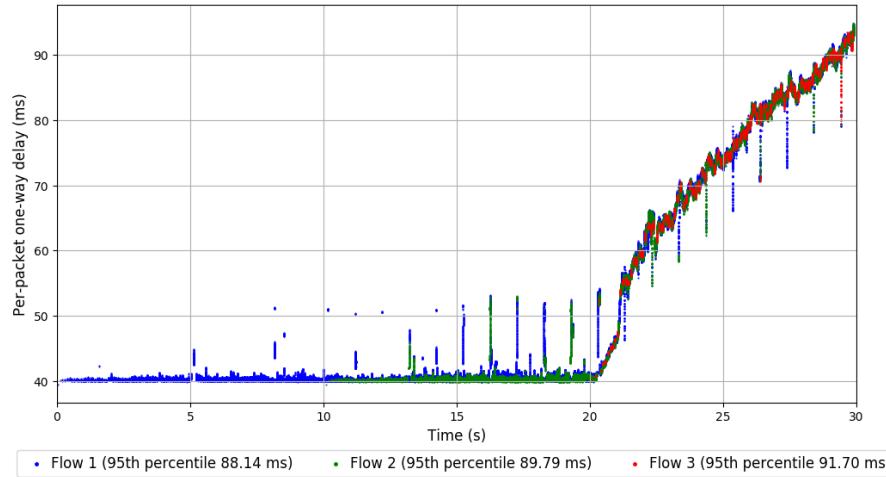
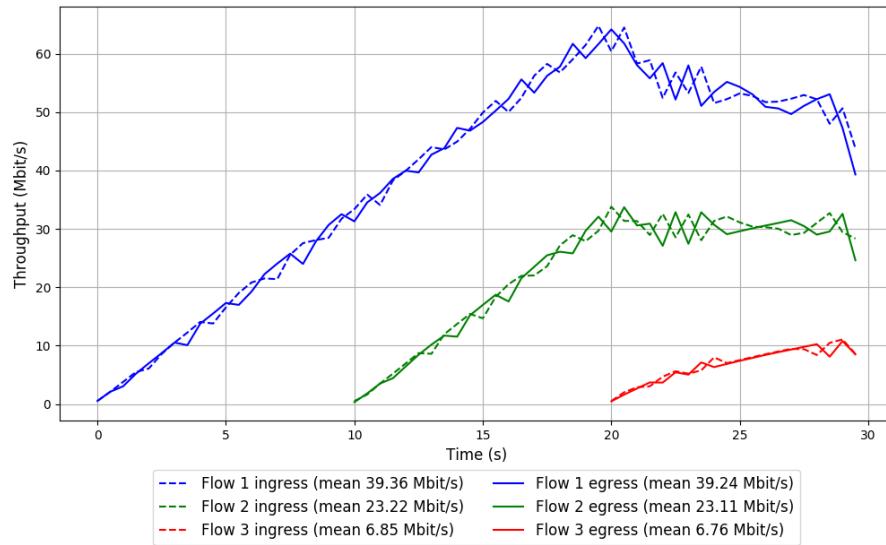


Run 6: Statistics of LEDBAT

```
Start at: 2018-01-17 01:05:47
End at: 2018-01-17 01:06:17
Local clock offset: -1.841 ms
Remote clock offset: -5.816 ms

# Below is generated by plot.py at 2018-01-17 06:51:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.77 Mbit/s
95th percentile per-packet one-way delay: 89.238 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 39.24 Mbit/s
95th percentile per-packet one-way delay: 88.144 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 23.11 Mbit/s
95th percentile per-packet one-way delay: 89.786 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 6.76 Mbit/s
95th percentile per-packet one-way delay: 91.702 ms
Loss rate: 2.13%
```

Run 6: Report of LEDBAT — Data Link

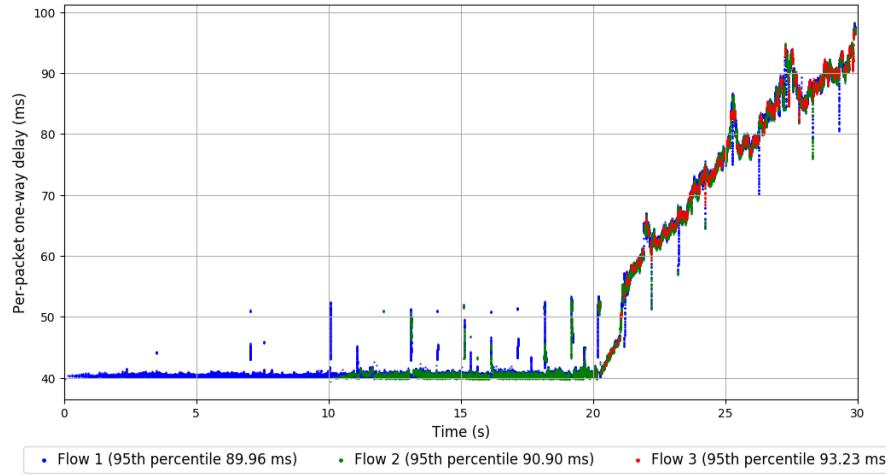
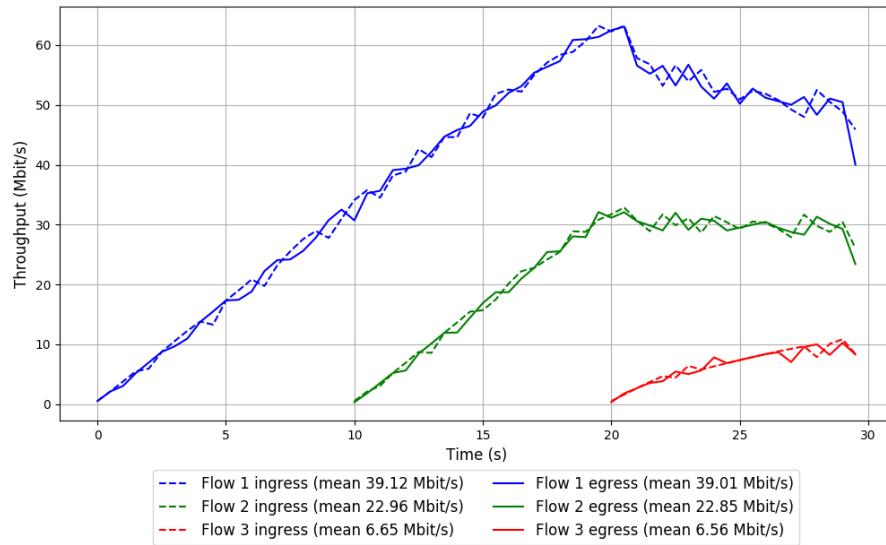


Run 7: Statistics of LEDBAT

```
Start at: 2018-01-17 01:29:23
End at: 2018-01-17 01:29:53
Local clock offset: -1.898 ms
Remote clock offset: -5.981 ms

# Below is generated by plot.py at 2018-01-17 06:51:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.31 Mbit/s
95th percentile per-packet one-way delay: 90.505 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 39.01 Mbit/s
95th percentile per-packet one-way delay: 89.956 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 22.85 Mbit/s
95th percentile per-packet one-way delay: 90.897 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 6.56 Mbit/s
95th percentile per-packet one-way delay: 93.229 ms
Loss rate: 2.14%
```

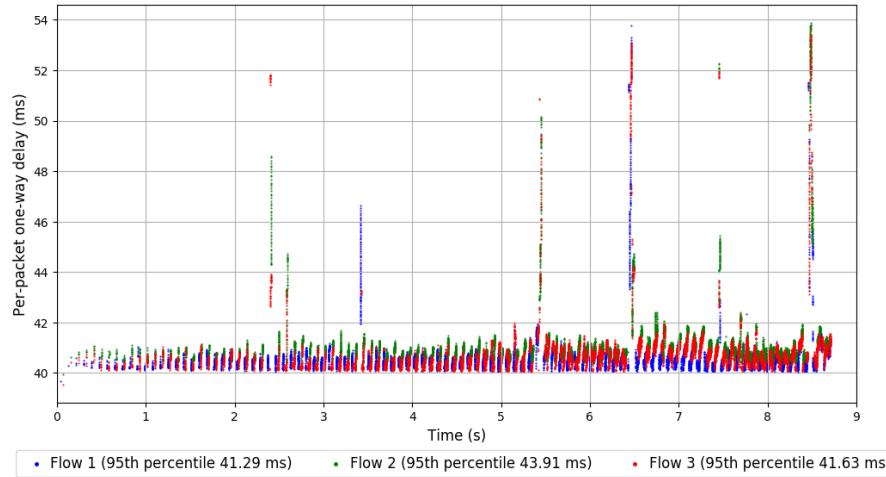
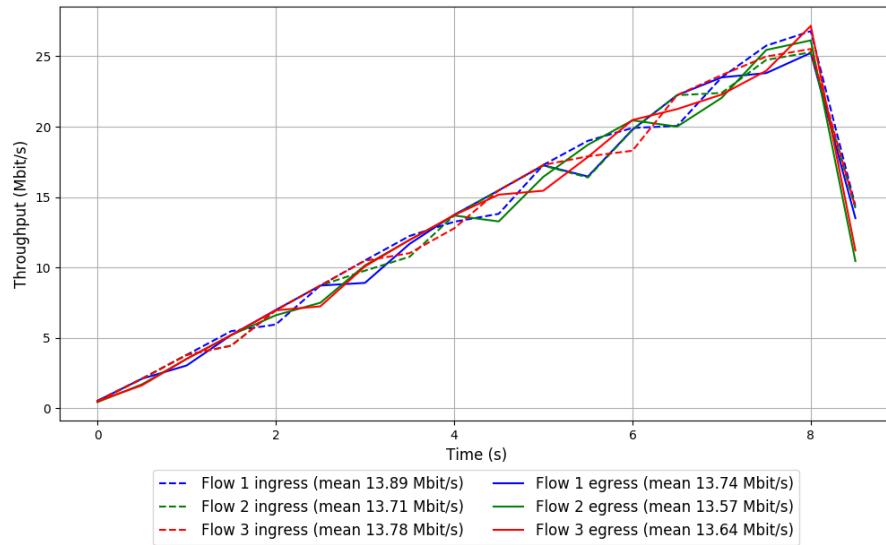
## Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-17 01:52:53  
End at: 2018-01-17 01:53:23  
Local clock offset: -1.478 ms  
Remote clock offset: -6.1 ms

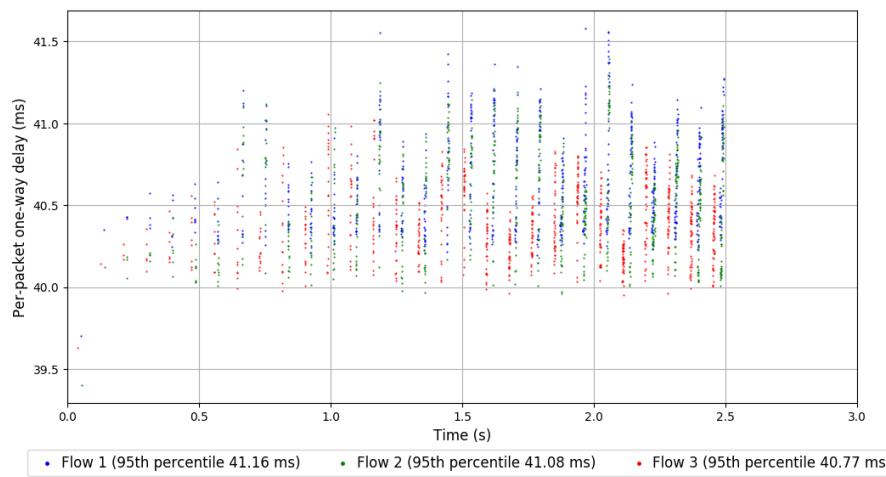
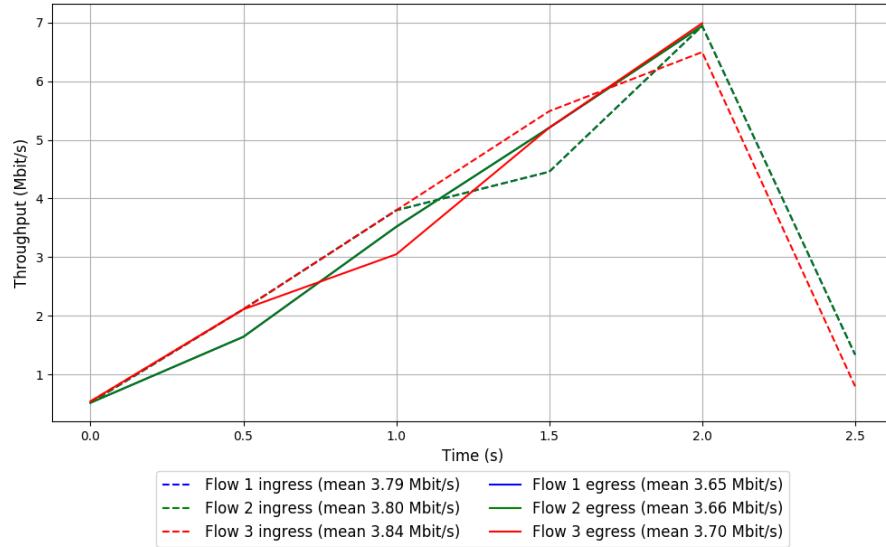
Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-17 02:15:55  
End at: 2018-01-17 02:16:25  
Local clock offset: -1.248 ms  
Remote clock offset: -5.591 ms

## Run 9: Report of LEDBAT — Data Link

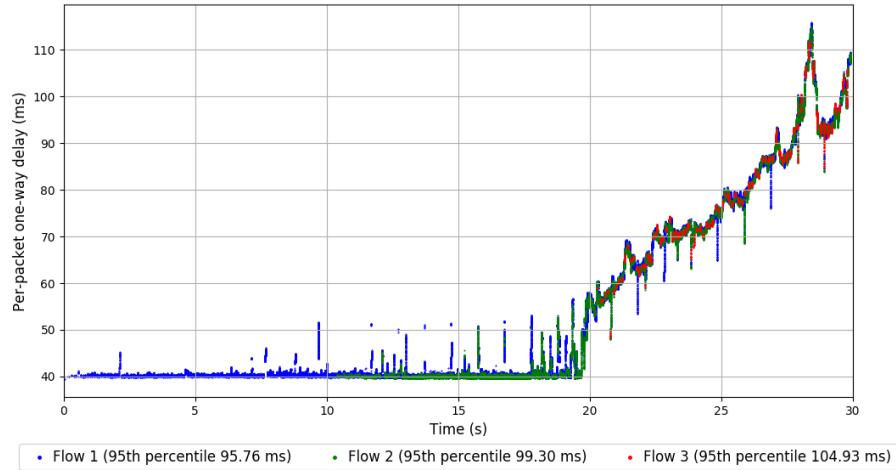
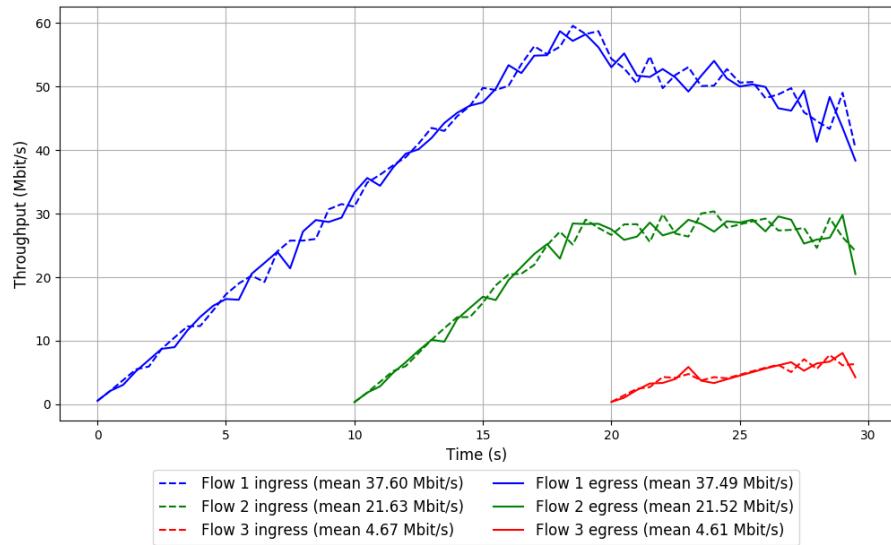


Run 10: Statistics of LEDBAT

```
Start at: 2018-01-17 02:40:50
End at: 2018-01-17 02:41:20
Local clock offset: -1.282 ms
Remote clock offset: -5.003 ms

# Below is generated by plot.py at 2018-01-17 06:51:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.25 Mbit/s
95th percentile per-packet one-way delay: 97.262 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 37.49 Mbit/s
95th percentile per-packet one-way delay: 95.757 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 21.52 Mbit/s
95th percentile per-packet one-way delay: 99.303 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 4.61 Mbit/s
95th percentile per-packet one-way delay: 104.934 ms
Loss rate: 2.37%
```

## Run 10: Report of LEDBAT — Data Link

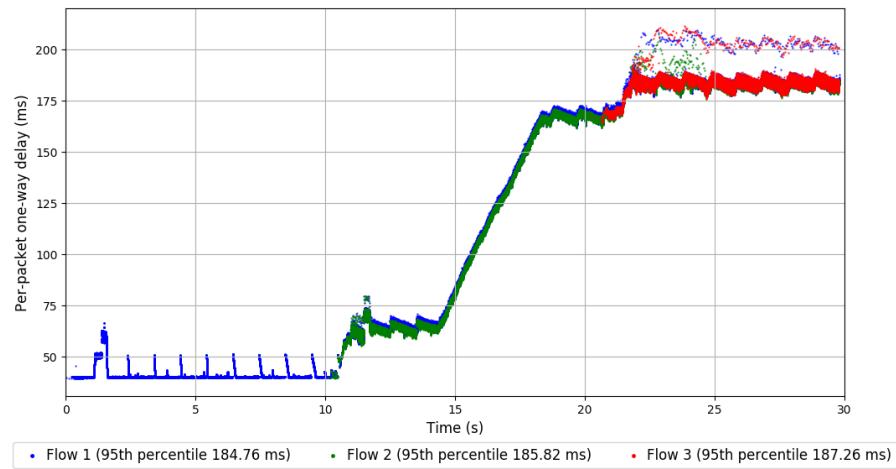
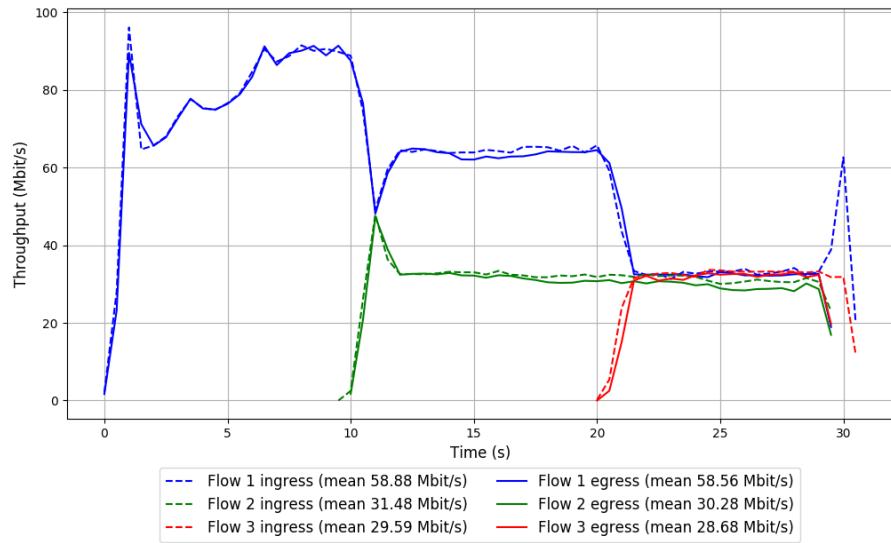


```
Run 1: Statistics of PCC

Start at: 2018-01-16 23:08:07
End at: 2018-01-16 23:08:37
Local clock offset: -1.509 ms
Remote clock offset: -6.604 ms

# Below is generated by plot.py at 2018-01-17 06:52:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.91 Mbit/s
95th percentile per-packet one-way delay: 185.742 ms
Loss rate: 4.80%
-- Flow 1:
Average throughput: 58.56 Mbit/s
95th percentile per-packet one-way delay: 184.760 ms
Loss rate: 3.54%
-- Flow 2:
Average throughput: 30.28 Mbit/s
95th percentile per-packet one-way delay: 185.824 ms
Loss rate: 4.41%
-- Flow 3:
Average throughput: 28.68 Mbit/s
95th percentile per-packet one-way delay: 187.257 ms
Loss rate: 12.83%
```

## Run 1: Report of PCC — Data Link

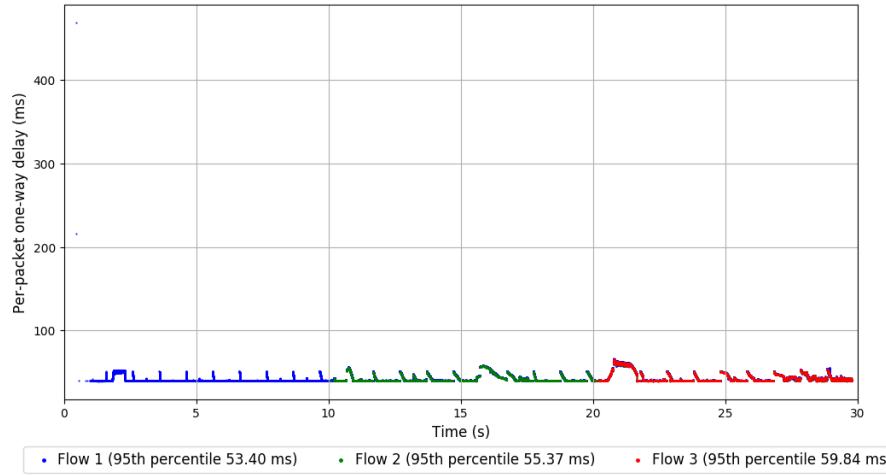
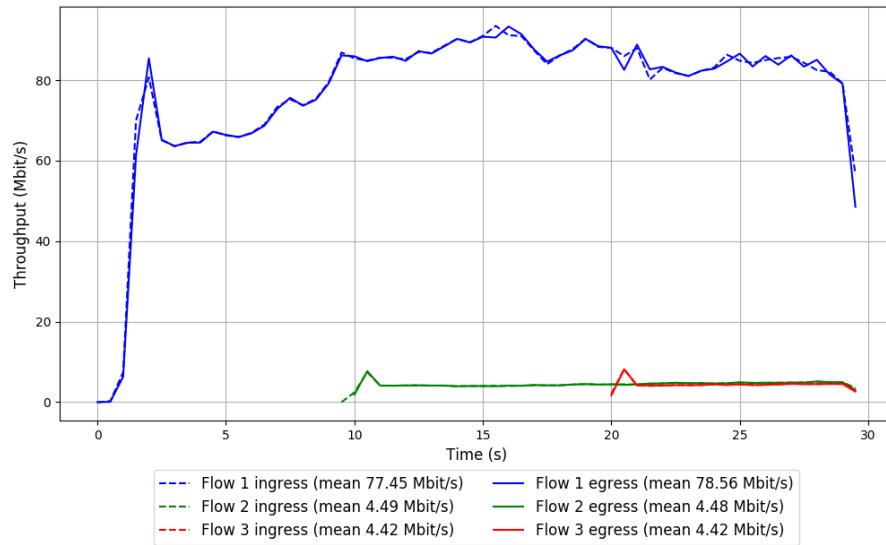


Run 2: Statistics of PCC

```
Start at: 2018-01-16 23:30:47
End at: 2018-01-16 23:31:17
Local clock offset: -1.59 ms
Remote clock offset: -5.452 ms

# Below is generated by plot.py at 2018-01-17 06:52:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.05 Mbit/s
95th percentile per-packet one-way delay: 53.712 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 78.56 Mbit/s
95th percentile per-packet one-way delay: 53.399 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 4.48 Mbit/s
95th percentile per-packet one-way delay: 55.372 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 4.42 Mbit/s
95th percentile per-packet one-way delay: 59.845 ms
Loss rate: 0.92%
```

## Run 2: Report of PCC — Data Link

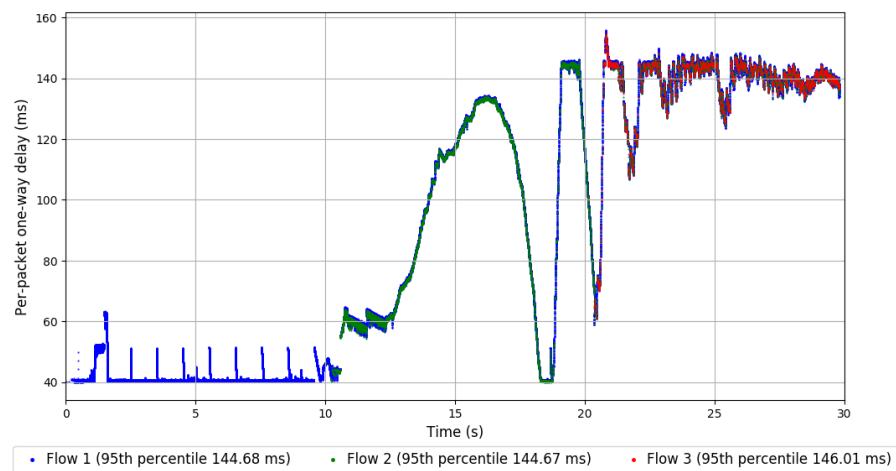
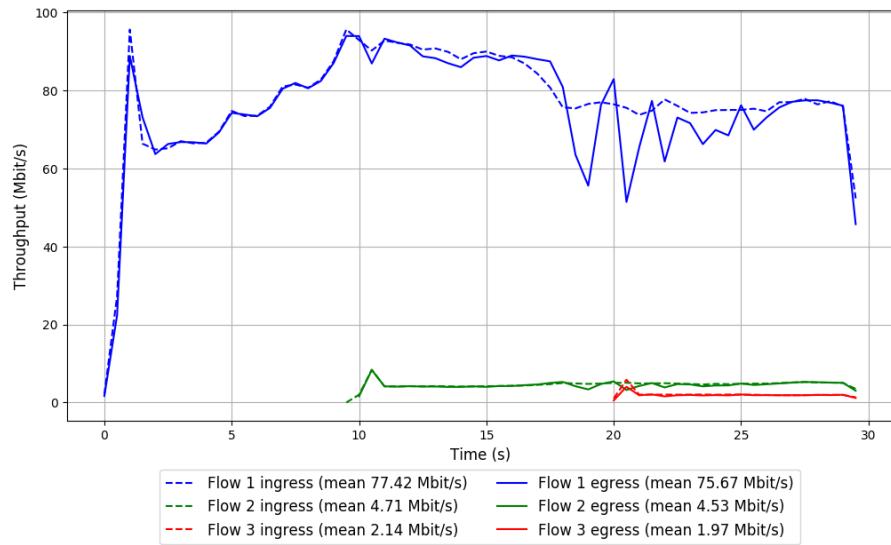


Run 3: Statistics of PCC

```
Start at: 2018-01-16 23:53:49
End at: 2018-01-16 23:54:19
Local clock offset: -1.109 ms
Remote clock offset: -4.983 ms

# Below is generated by plot.py at 2018-01-17 06:52:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.31 Mbit/s
95th percentile per-packet one-way delay: 144.695 ms
Loss rate: 2.67%
-- Flow 1:
Average throughput: 75.67 Mbit/s
95th percentile per-packet one-way delay: 144.681 ms
Loss rate: 2.54%
-- Flow 2:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 144.669 ms
Loss rate: 4.41%
-- Flow 3:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 146.007 ms
Loss rate: 9.44%
```

### Run 3: Report of PCC — Data Link

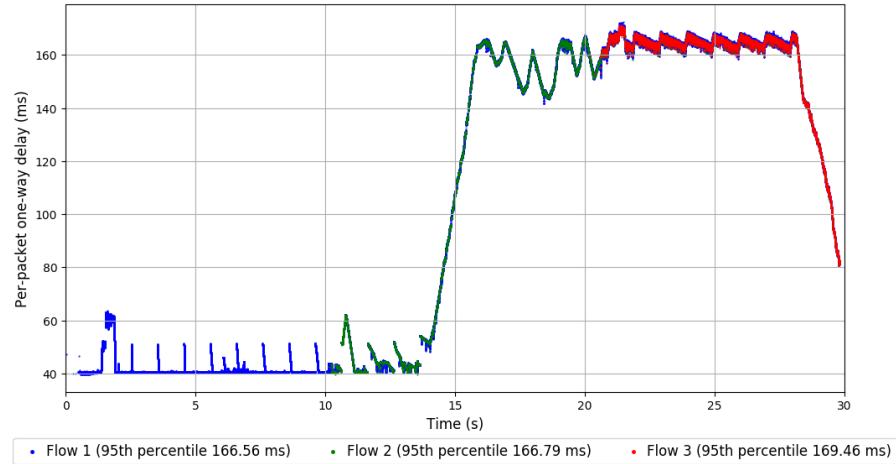
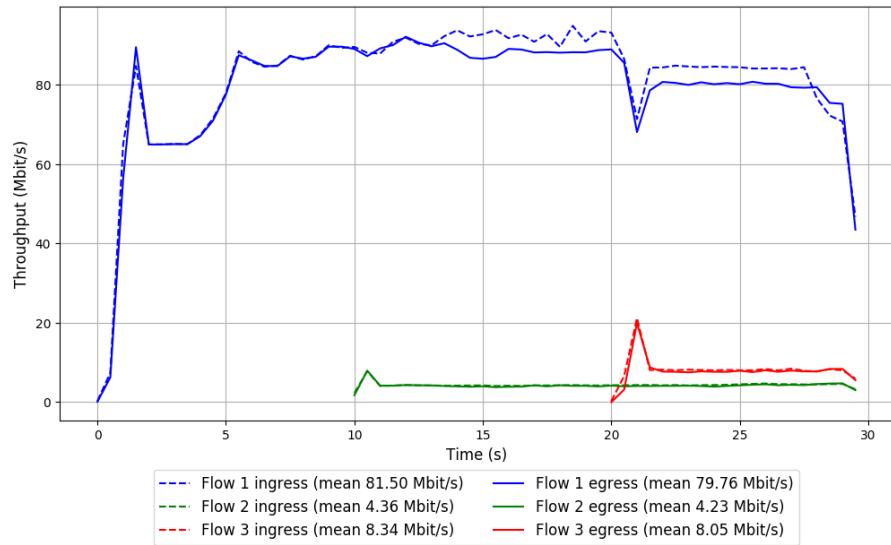


Run 4: Statistics of PCC

```
Start at: 2018-01-17 00:17:01
End at: 2018-01-17 00:17:31
Local clock offset: -1.365 ms
Remote clock offset: -6.574 ms

# Below is generated by plot.py at 2018-01-17 06:52:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.16 Mbit/s
95th percentile per-packet one-way delay: 166.673 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 79.76 Mbit/s
95th percentile per-packet one-way delay: 166.558 ms
Loss rate: 2.45%
-- Flow 2:
Average throughput: 4.23 Mbit/s
95th percentile per-packet one-way delay: 166.794 ms
Loss rate: 3.46%
-- Flow 3:
Average throughput: 8.05 Mbit/s
95th percentile per-packet one-way delay: 169.460 ms
Loss rate: 5.44%
```

## Run 4: Report of PCC — Data Link

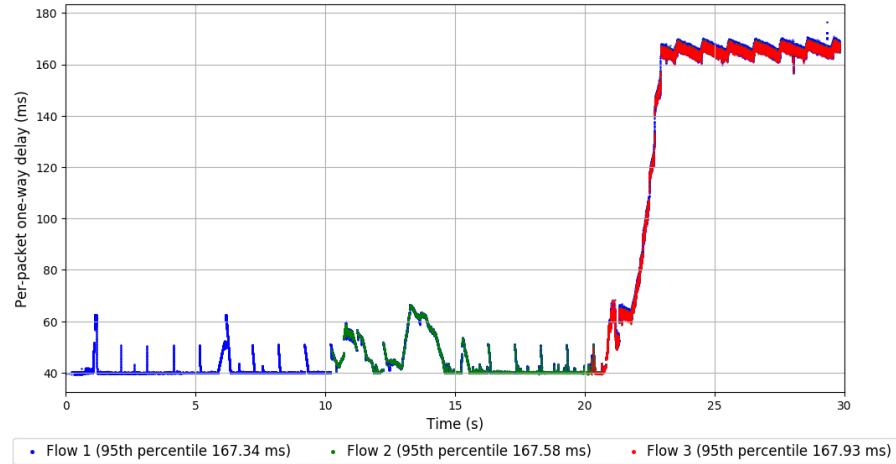
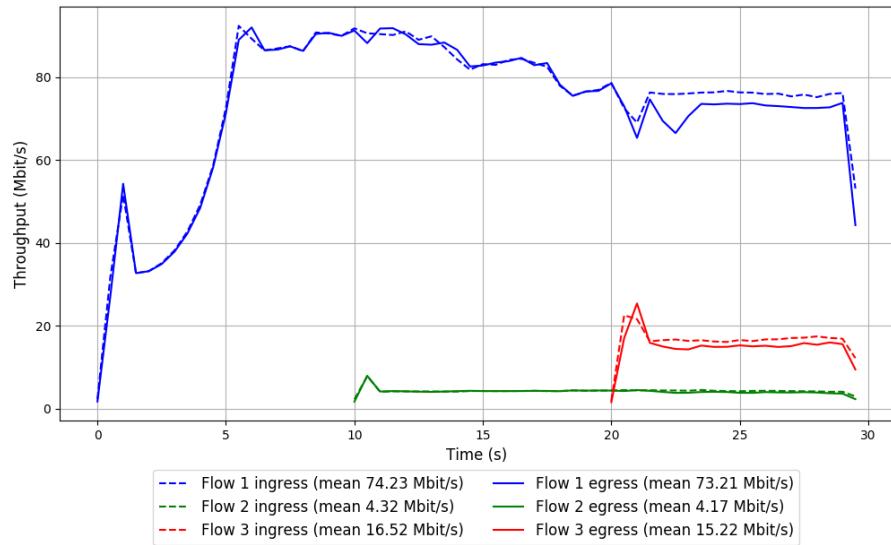


Run 5: Statistics of PCC

```
Start at: 2018-01-17 00:39:50
End at: 2018-01-17 00:40:20
Local clock offset: -1.853 ms
Remote clock offset: -6.437 ms

# Below is generated by plot.py at 2018-01-17 06:53:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.96 Mbit/s
95th percentile per-packet one-way delay: 167.428 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 73.21 Mbit/s
95th percentile per-packet one-way delay: 167.337 ms
Loss rate: 1.70%
-- Flow 2:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 167.584 ms
Loss rate: 4.03%
-- Flow 3:
Average throughput: 15.22 Mbit/s
95th percentile per-packet one-way delay: 167.933 ms
Loss rate: 8.73%
```

## Run 5: Report of PCC — Data Link

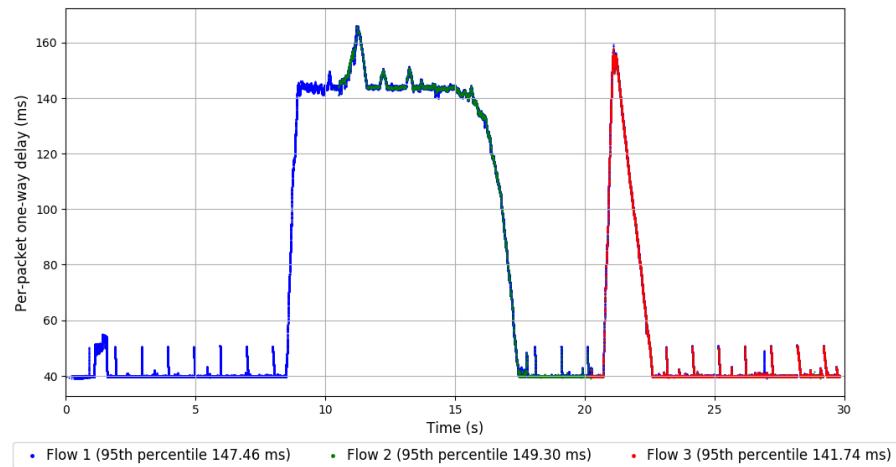
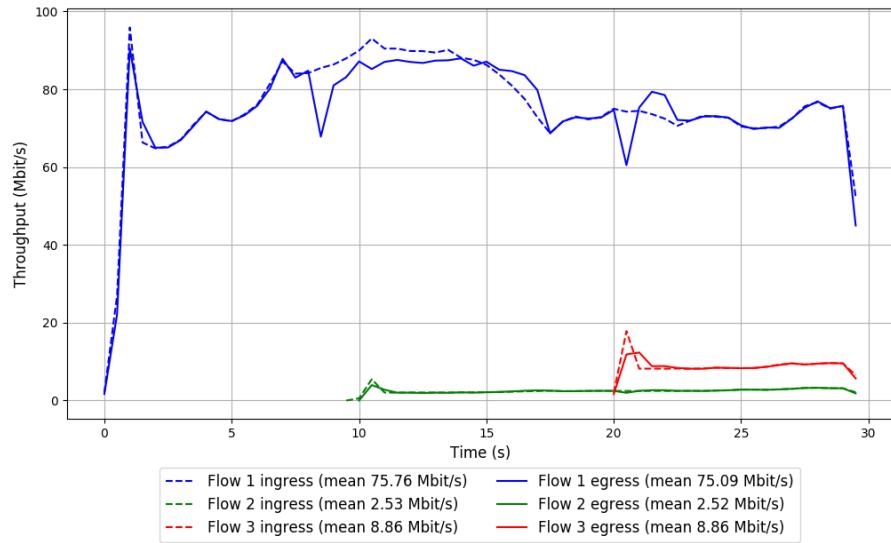


Run 6: Statistics of PCC

```
Start at: 2018-01-17 01:03:22
End at: 2018-01-17 01:03:52
Local clock offset: -2.321 ms
Remote clock offset: -5.922 ms

# Below is generated by plot.py at 2018-01-17 06:53:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.66 Mbit/s
95th percentile per-packet one-way delay: 147.459 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 75.09 Mbit/s
95th percentile per-packet one-way delay: 147.459 ms
Loss rate: 1.17%
-- Flow 2:
Average throughput: 2.52 Mbit/s
95th percentile per-packet one-way delay: 149.302 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 8.86 Mbit/s
95th percentile per-packet one-way delay: 141.736 ms
Loss rate: 0.92%
```

## Run 6: Report of PCC — Data Link

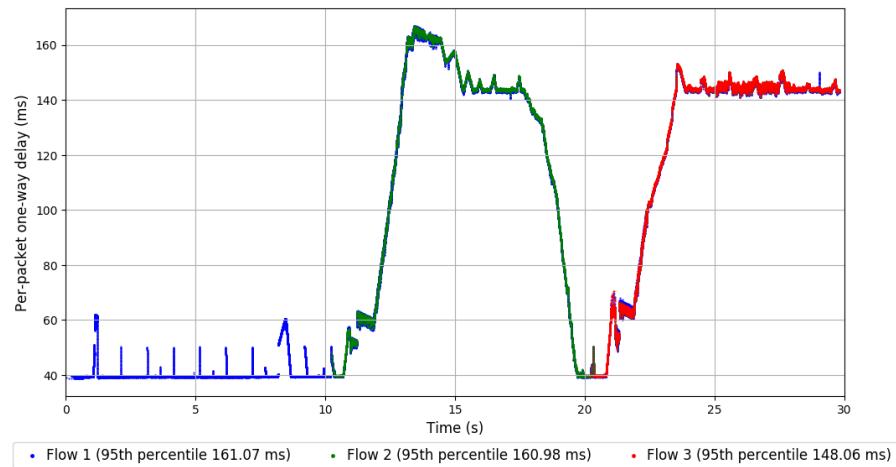
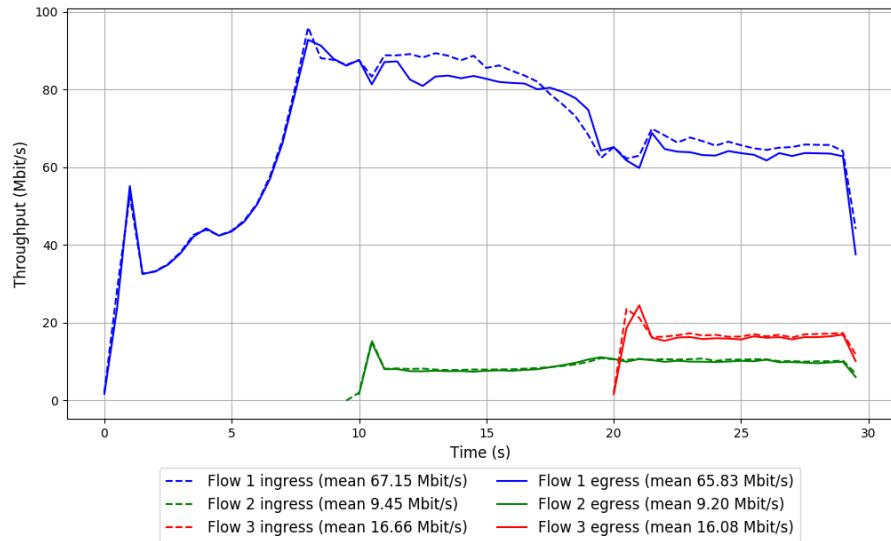


Run 7: Statistics of PCC

```
Start at: 2018-01-17 01:26:53
End at: 2018-01-17 01:27:23
Local clock offset: -2.401 ms
Remote clock offset: -5.967 ms

# Below is generated by plot.py at 2018-01-17 06:53:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.21 Mbit/s
95th percentile per-packet one-way delay: 160.474 ms
Loss rate: 2.47%
-- Flow 1:
Average throughput: 65.83 Mbit/s
95th percentile per-packet one-way delay: 161.069 ms
Loss rate: 2.26%
-- Flow 2:
Average throughput: 9.20 Mbit/s
95th percentile per-packet one-way delay: 160.977 ms
Loss rate: 3.07%
-- Flow 3:
Average throughput: 16.08 Mbit/s
95th percentile per-packet one-way delay: 148.062 ms
Loss rate: 4.37%
```

## Run 7: Report of PCC — Data Link

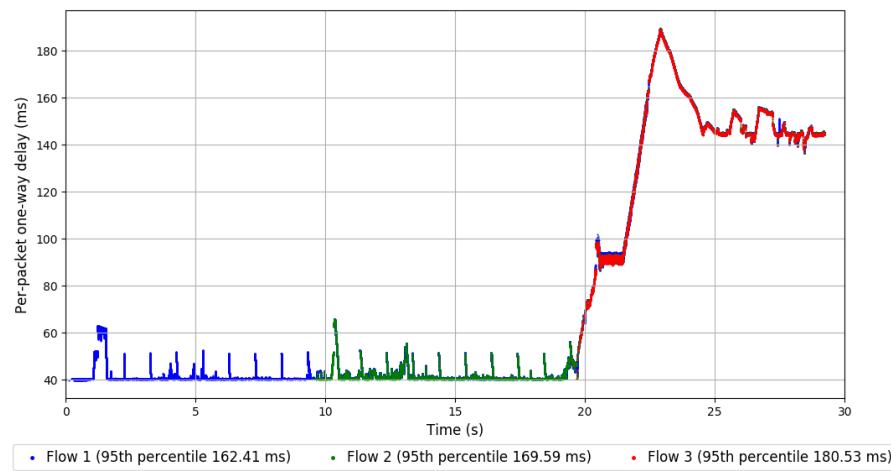
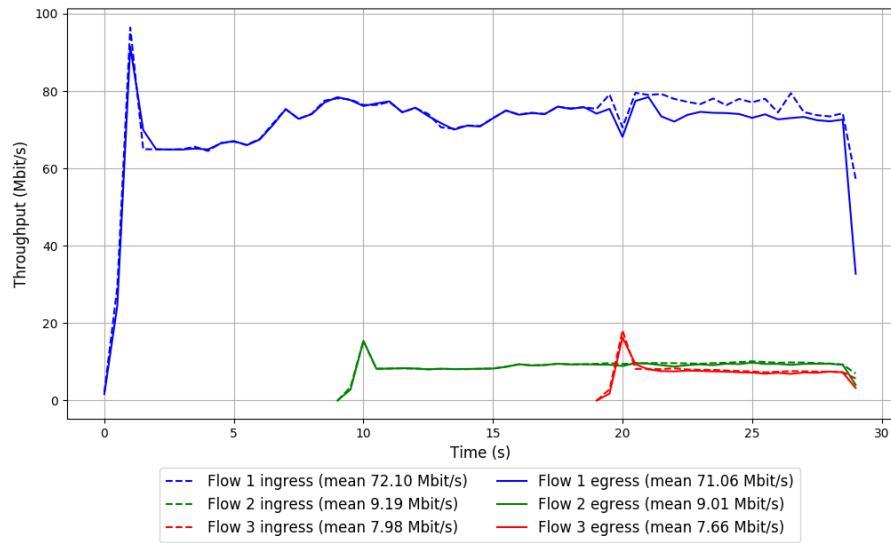


Run 8: Statistics of PCC

```
Start at: 2018-01-17 01:50:08
End at: 2018-01-17 01:50:38
Local clock offset: -1.485 ms
Remote clock offset: -6.134 ms

# Below is generated by plot.py at 2018-01-17 06:53:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.72 Mbit/s
95th percentile per-packet one-way delay: 163.670 ms
Loss rate: 2.30%
-- Flow 1:
Average throughput: 71.06 Mbit/s
95th percentile per-packet one-way delay: 162.407 ms
Loss rate: 2.10%
-- Flow 2:
Average throughput: 9.01 Mbit/s
95th percentile per-packet one-way delay: 169.593 ms
Loss rate: 2.93%
-- Flow 3:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 180.531 ms
Loss rate: 6.00%
```

## Run 8: Report of PCC — Data Link

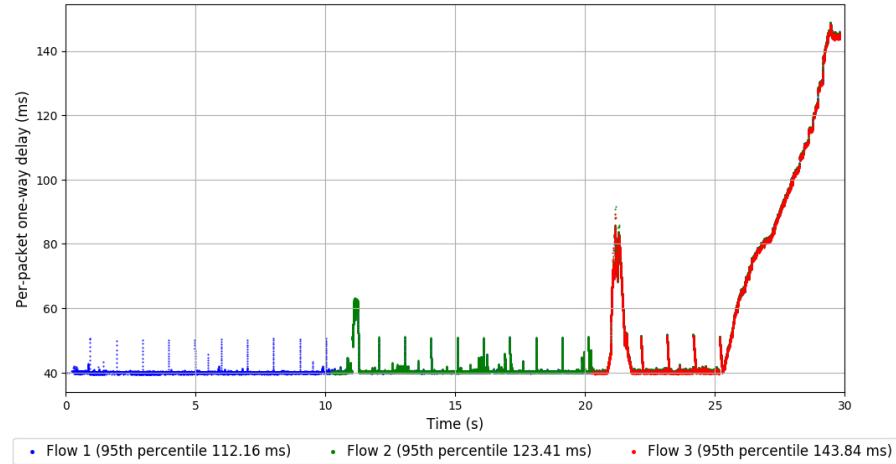
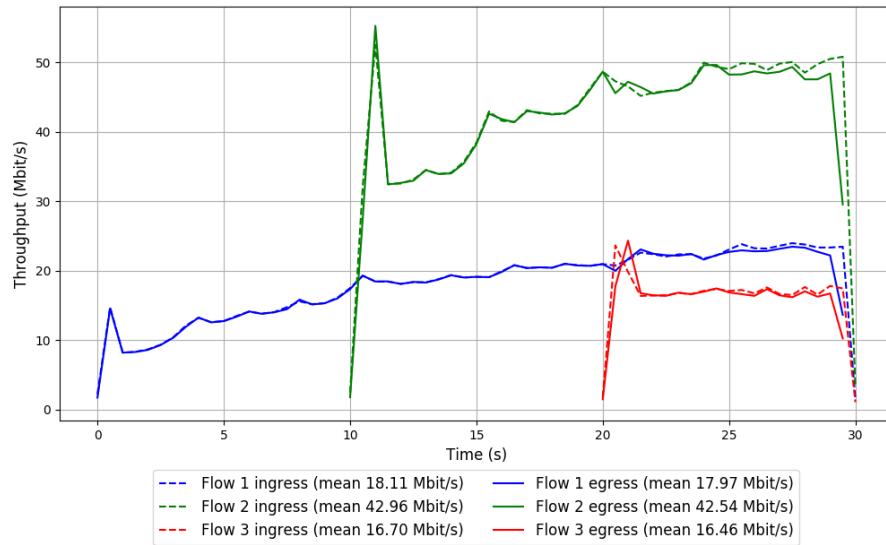


Run 9: Statistics of PCC

```
Start at: 2018-01-17 02:13:11
End at: 2018-01-17 02:13:41
Local clock offset: -1.571 ms
Remote clock offset: -5.845 ms

# Below is generated by plot.py at 2018-01-17 06:53:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.60 Mbit/s
95th percentile per-packet one-way delay: 123.103 ms
Loss rate: 2.28%
-- Flow 1:
Average throughput: 17.97 Mbit/s
95th percentile per-packet one-way delay: 112.159 ms
Loss rate: 1.69%
-- Flow 2:
Average throughput: 42.54 Mbit/s
95th percentile per-packet one-way delay: 123.405 ms
Loss rate: 2.30%
-- Flow 3:
Average throughput: 16.46 Mbit/s
95th percentile per-packet one-way delay: 143.839 ms
Loss rate: 4.06%
```

## Run 9: Report of PCC — Data Link

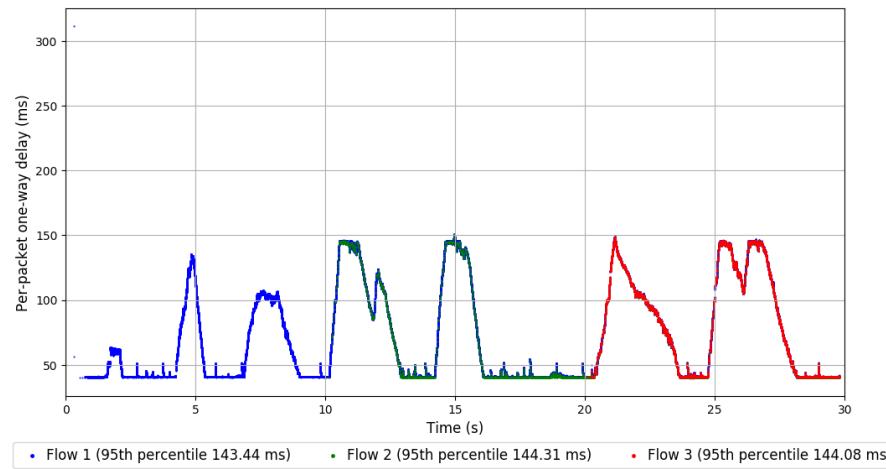
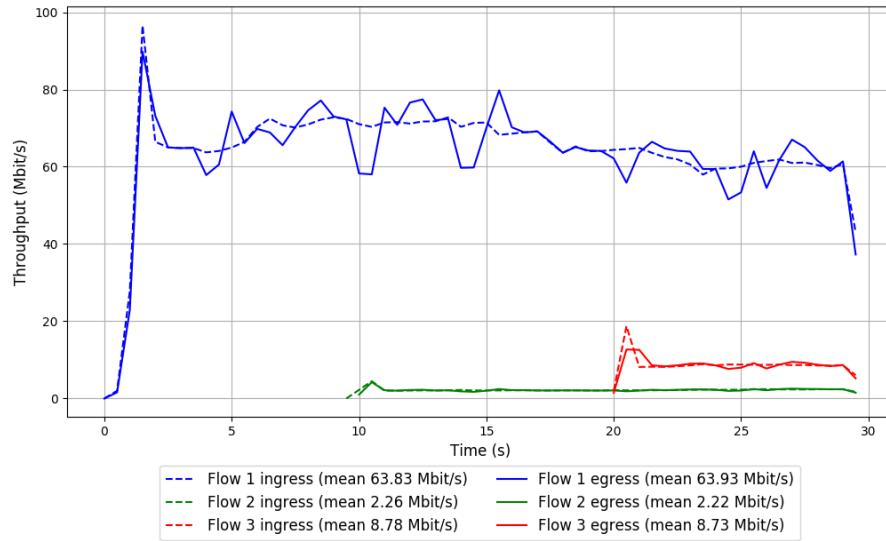


Run 10: Statistics of PCC

```
Start at: 2018-01-17 02:38:15
End at: 2018-01-17 02:38:45
Local clock offset: -0.614 ms
Remote clock offset: -5.107 ms

# Below is generated by plot.py at 2018-01-17 06:53:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.30 Mbit/s
95th percentile per-packet one-way delay: 143.550 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 63.93 Mbit/s
95th percentile per-packet one-way delay: 143.442 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 144.313 ms
Loss rate: 2.33%
-- Flow 3:
Average throughput: 8.73 Mbit/s
95th percentile per-packet one-way delay: 144.076 ms
Loss rate: 1.49%
```

## Run 10: Report of PCC — Data Link

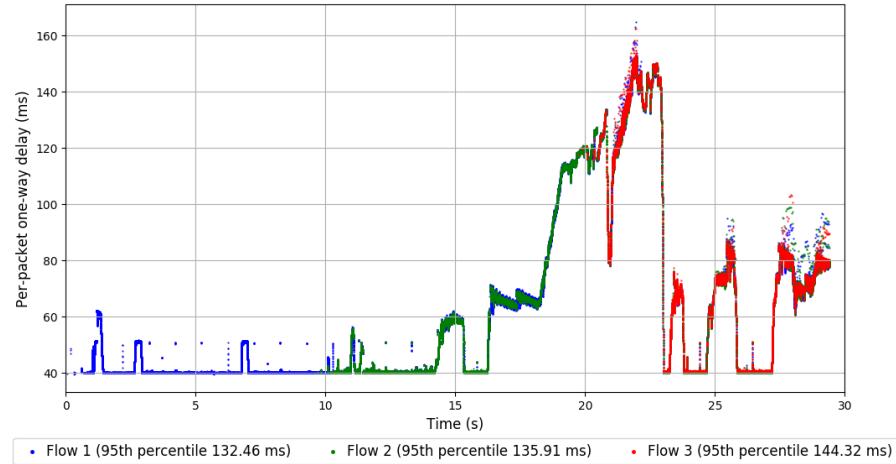
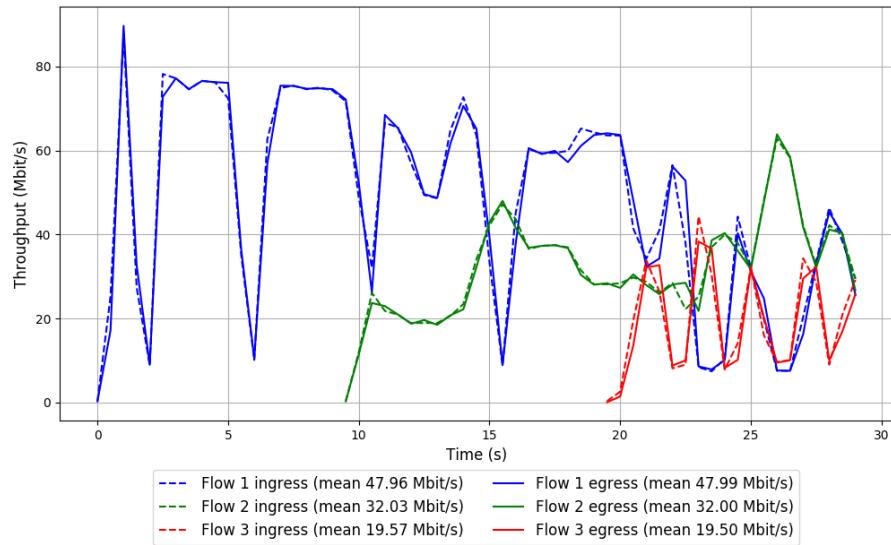


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-16 23:14:26
End at: 2018-01-16 23:14:56
Local clock offset: -1.374 ms
Remote clock offset: -6.328 ms

# Below is generated by plot.py at 2018-01-17 06:53:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.98 Mbit/s
95th percentile per-packet one-way delay: 135.364 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 47.99 Mbit/s
95th percentile per-packet one-way delay: 132.457 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 32.00 Mbit/s
95th percentile per-packet one-way delay: 135.907 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 19.50 Mbit/s
95th percentile per-packet one-way delay: 144.317 ms
Loss rate: 2.19%
```

Run 1: Report of QUIC Cubic — Data Link

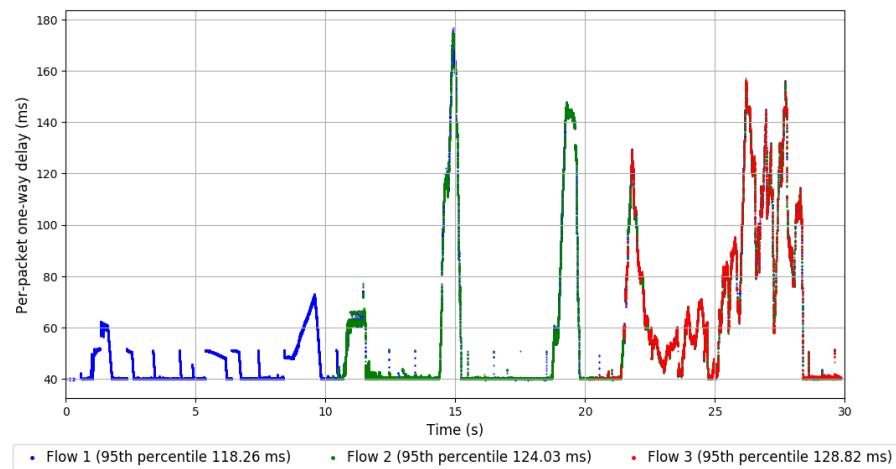
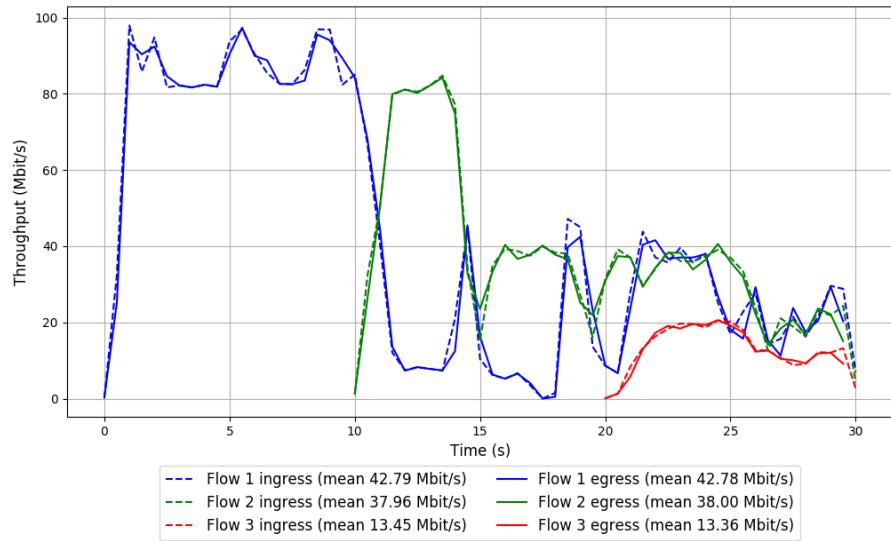


Run 2: Statistics of QUIC Cubic

```
Start at: 2018-01-16 23:36:59
End at: 2018-01-16 23:37:29
Local clock offset: -1.304 ms
Remote clock offset: -5.316 ms

# Below is generated by plot.py at 2018-01-17 06:53:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.32 Mbit/s
95th percentile per-packet one-way delay: 121.899 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 42.78 Mbit/s
95th percentile per-packet one-way delay: 118.259 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 38.00 Mbit/s
95th percentile per-packet one-way delay: 124.034 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 13.36 Mbit/s
95th percentile per-packet one-way delay: 128.819 ms
Loss rate: 3.61%
```

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

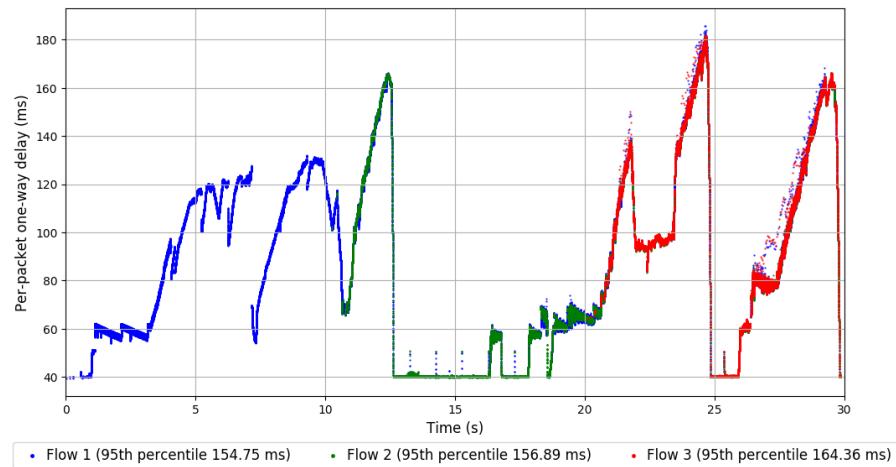
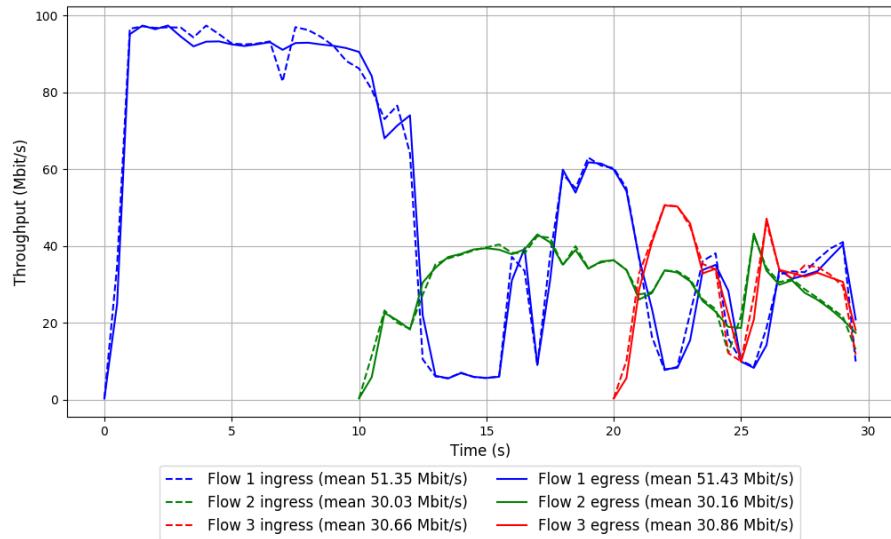


Run 3: Statistics of QUIC Cubic

```
Start at: 2018-01-16 23:59:59
End at: 2018-01-17 00:00:29
Local clock offset: -1.409 ms
Remote clock offset: -4.968 ms

# Below is generated by plot.py at 2018-01-17 06:54:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.46 Mbit/s
95th percentile per-packet one-way delay: 158.202 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 51.43 Mbit/s
95th percentile per-packet one-way delay: 154.749 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 30.16 Mbit/s
95th percentile per-packet one-way delay: 156.889 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 30.86 Mbit/s
95th percentile per-packet one-way delay: 164.356 ms
Loss rate: 0.44%
```

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

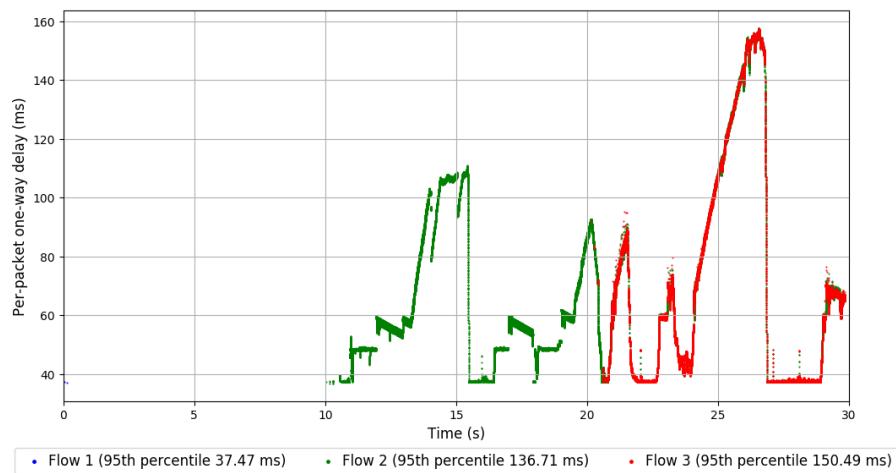
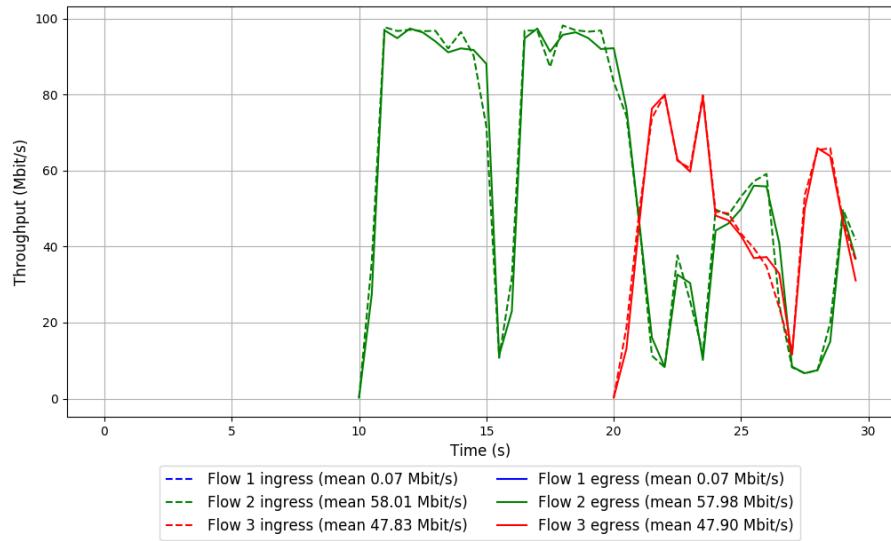


Run 4: Statistics of QUIC Cubic

```
Start at: 2018-01-17 00:23:22
End at: 2018-01-17 00:23:52
Local clock offset: -4.171 ms
Remote clock offset: -6.826 ms

# Below is generated by plot.py at 2018-01-17 06:54:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.12 Mbit/s
95th percentile per-packet one-way delay: 141.638 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 37.471 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 57.98 Mbit/s
95th percentile per-packet one-way delay: 136.711 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 47.90 Mbit/s
95th percentile per-packet one-way delay: 150.486 ms
Loss rate: 1.33%
```

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

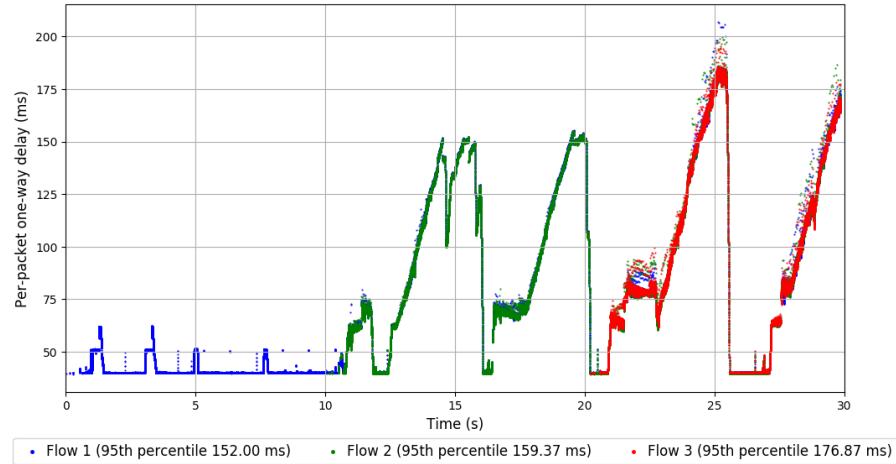
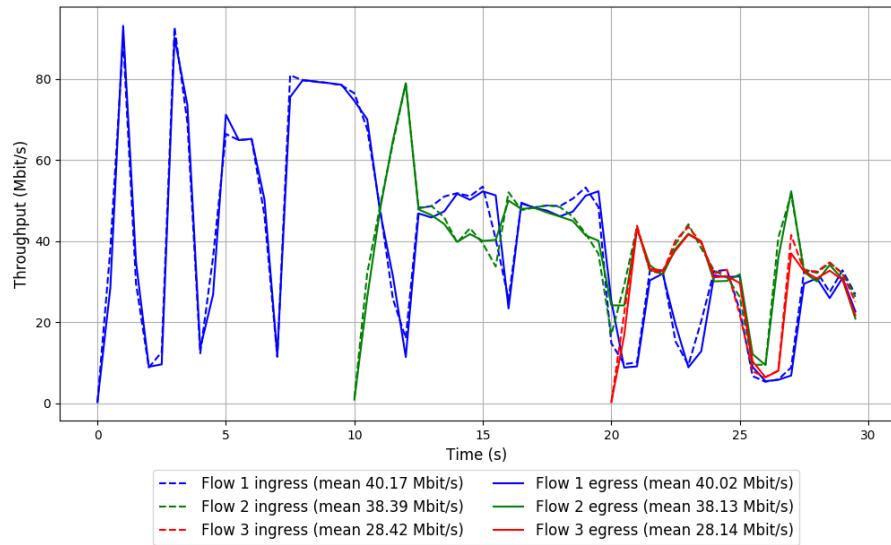


Run 5: Statistics of QUIC Cubic

```
Start at: 2018-01-17 00:46:20
End at: 2018-01-17 00:46:50
Local clock offset: -1.932 ms
Remote clock offset: -6.32 ms

# Below is generated by plot.py at 2018-01-17 06:54:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.51 Mbit/s
95th percentile per-packet one-way delay: 159.290 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 40.02 Mbit/s
95th percentile per-packet one-way delay: 151.997 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 38.13 Mbit/s
95th percentile per-packet one-way delay: 159.369 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 28.14 Mbit/s
95th percentile per-packet one-way delay: 176.868 ms
Loss rate: 2.62%
```

Run 5: Report of QUIC Cubic — Data Link

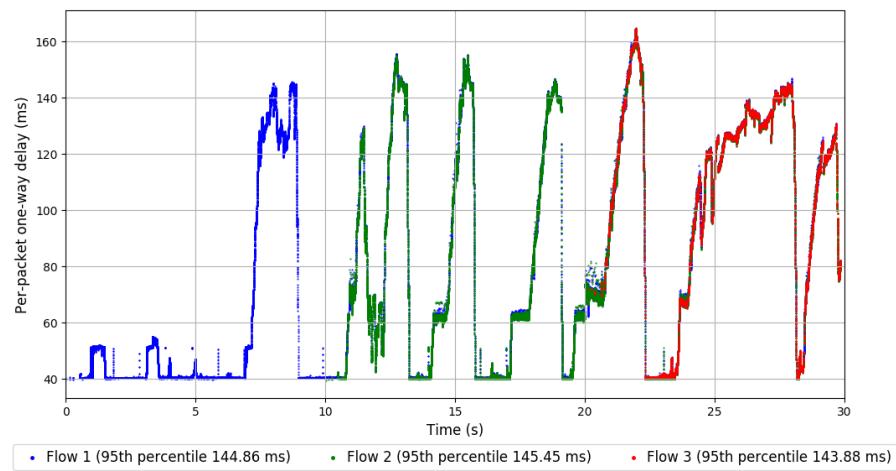
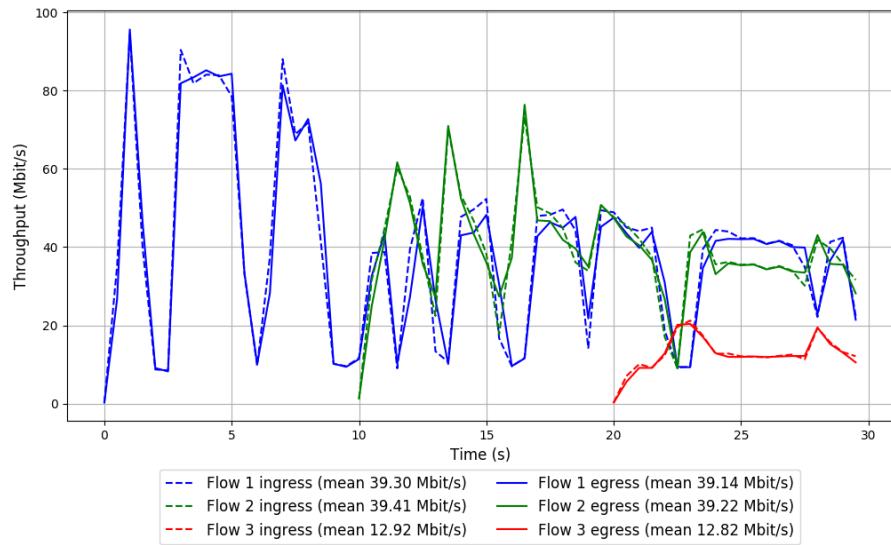


Run 6: Statistics of QUIC Cubic

```
Start at: 2018-01-17 01:09:39
End at: 2018-01-17 01:10:09
Local clock offset: -1.938 ms
Remote clock offset: -5.779 ms

# Below is generated by plot.py at 2018-01-17 06:54:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.38 Mbit/s
95th percentile per-packet one-way delay: 144.970 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 39.14 Mbit/s
95th percentile per-packet one-way delay: 144.856 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 39.22 Mbit/s
95th percentile per-packet one-way delay: 145.446 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 12.82 Mbit/s
95th percentile per-packet one-way delay: 143.876 ms
Loss rate: 1.96%
```

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

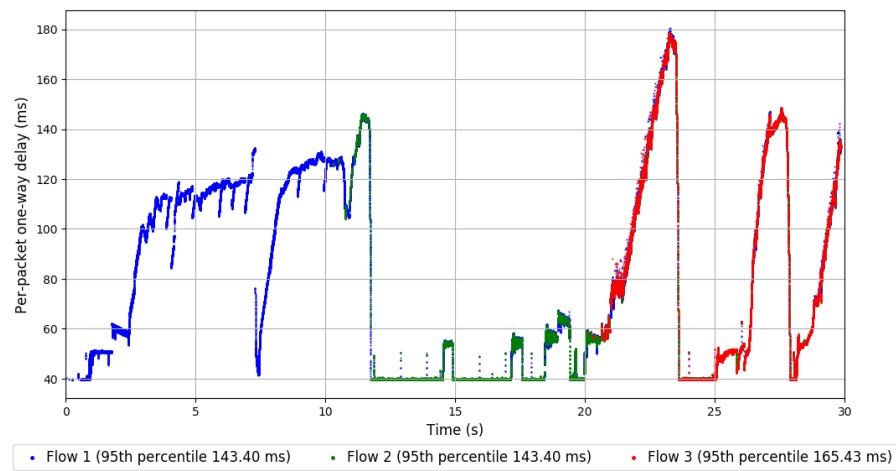
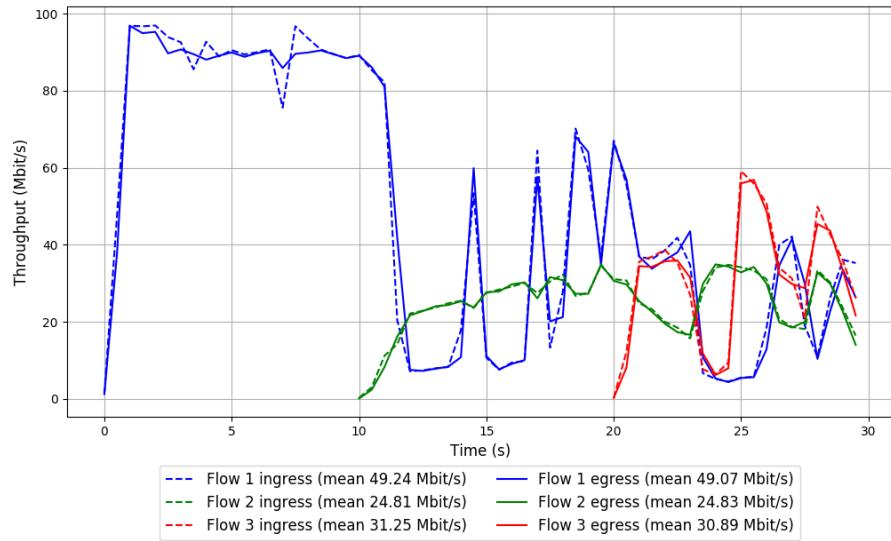


Run 7: Statistics of QUIC Cubic

```
Start at: 2018-01-17 01:33:06
End at: 2018-01-17 01:38:36
Local clock offset: -2.009 ms
Remote clock offset: -6.036 ms

# Below is generated by plot.py at 2018-01-17 06:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.58 Mbit/s
95th percentile per-packet one-way delay: 144.329 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 49.07 Mbit/s
95th percentile per-packet one-way delay: 143.399 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 24.83 Mbit/s
95th percentile per-packet one-way delay: 143.396 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 30.89 Mbit/s
95th percentile per-packet one-way delay: 165.429 ms
Loss rate: 2.22%
```

Run 7: Report of QUIC Cubic — Data Link

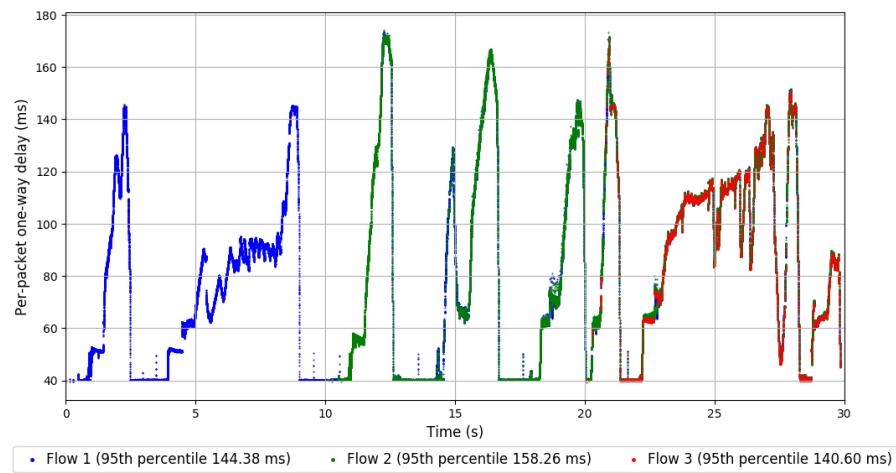
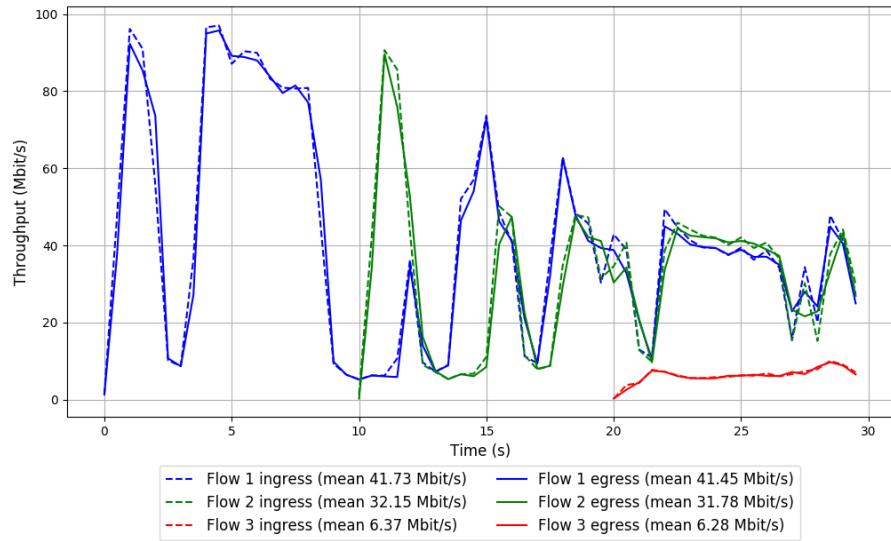


Run 8: Statistics of QUIC Cubic

```
Start at: 2018-01-17 01:56:36
End at: 2018-01-17 01:57:06
Local clock offset: -1.687 ms
Remote clock offset: -6.142 ms

# Below is generated by plot.py at 2018-01-17 06:55:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.62 Mbit/s
95th percentile per-packet one-way delay: 146.047 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 41.45 Mbit/s
95th percentile per-packet one-way delay: 144.379 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 31.78 Mbit/s
95th percentile per-packet one-way delay: 158.263 ms
Loss rate: 1.56%
-- Flow 3:
Average throughput: 6.28 Mbit/s
95th percentile per-packet one-way delay: 140.597 ms
Loss rate: 2.21%
```

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



Run 9: Statistics of QUIC Cubic

/home/ubuntu/pantheon\_data/2018-01-16T22-53-China-to-AWS-Korea-10-runs-3-flows/quic\_stats\_ru

Run 9: Report of QUIC Cubic — Data Link

Figure is missing

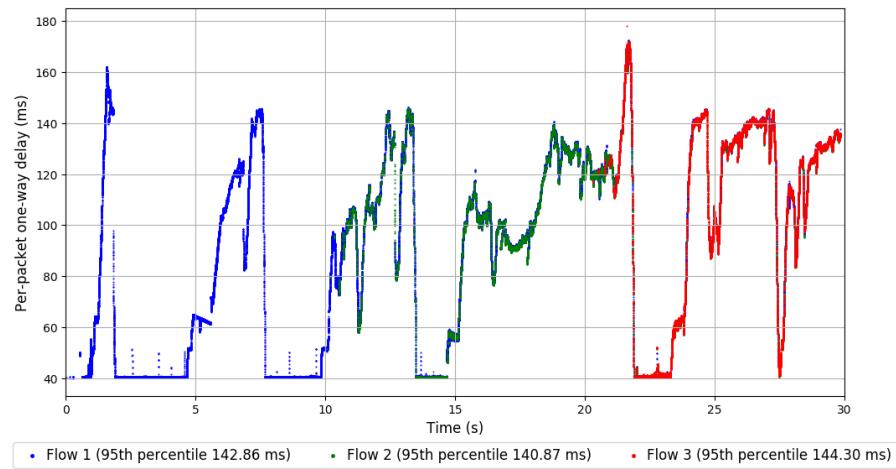
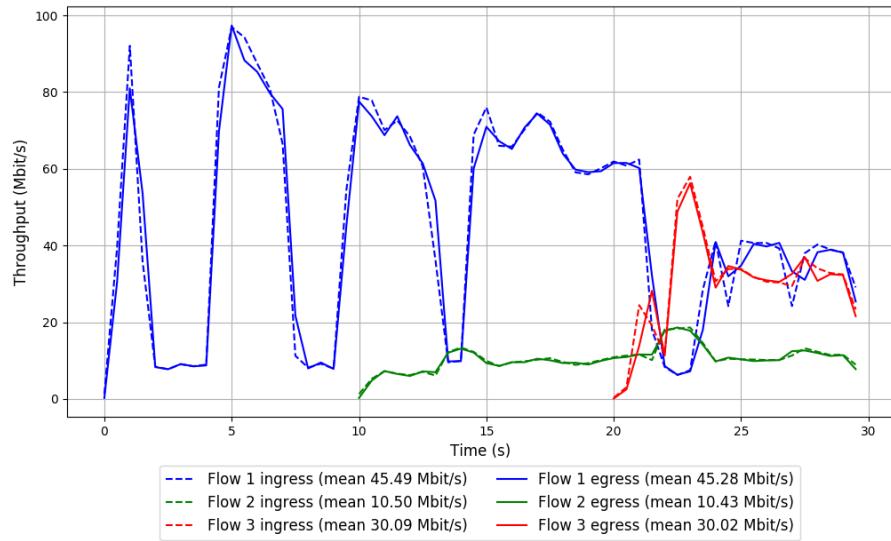
Figure is missing

Run 10: Statistics of QUIC Cubic

```
Start at: 2018-01-17 02:44:31
End at: 2018-01-17 02:45:01
Local clock offset: -0.487 ms
Remote clock offset: -4.89 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.96 Mbit/s
95th percentile per-packet one-way delay: 142.966 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 45.28 Mbit/s
95th percentile per-packet one-way delay: 142.860 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 10.43 Mbit/s
95th percentile per-packet one-way delay: 140.867 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 30.02 Mbit/s
95th percentile per-packet one-way delay: 144.298 ms
Loss rate: 1.98%
```

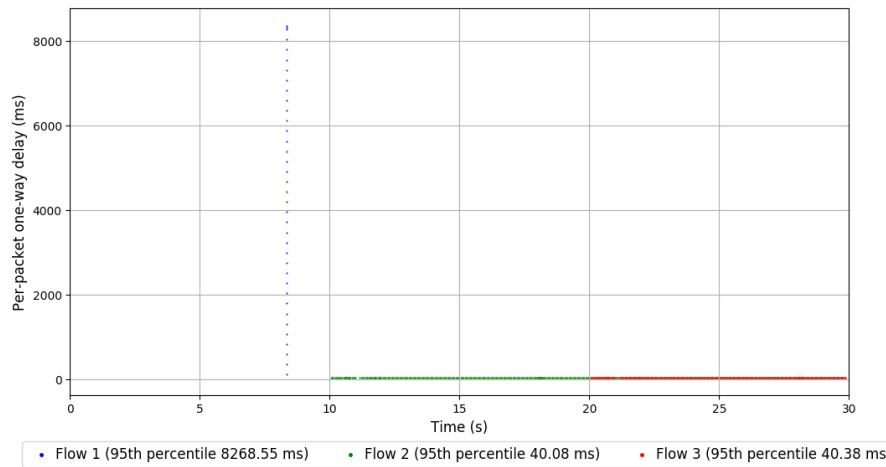
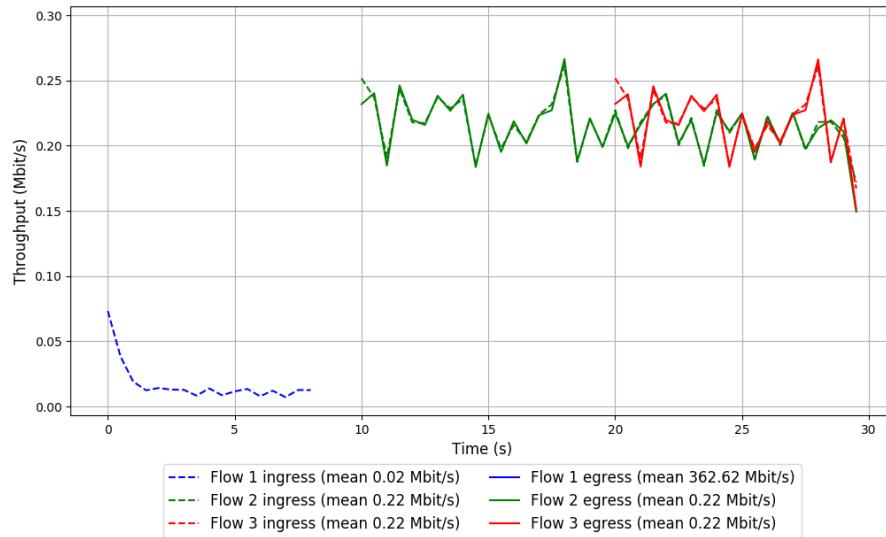
Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of SCReAM

Start at: 2018-01-16 23:11:59  
End at: 2018-01-16 23:12:29  
Local clock offset: -1.382 ms  
Remote clock offset: -6.418 ms

## Run 1: Report of SCReAM — Data Link

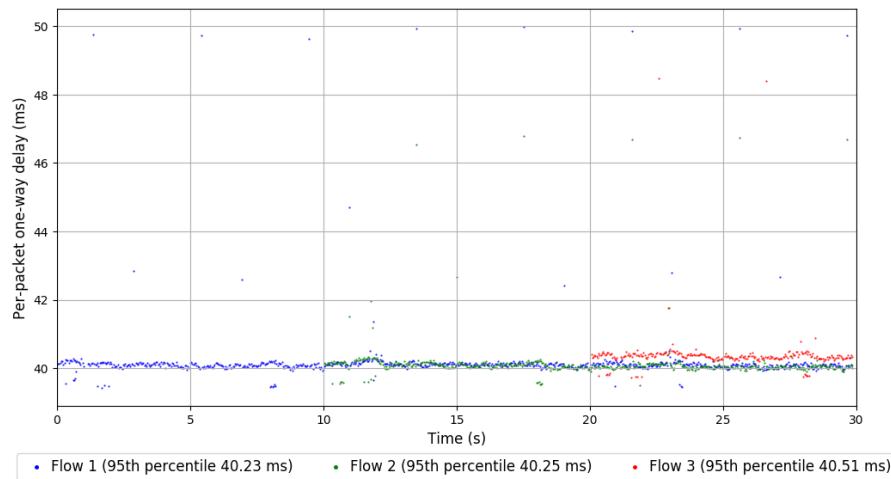
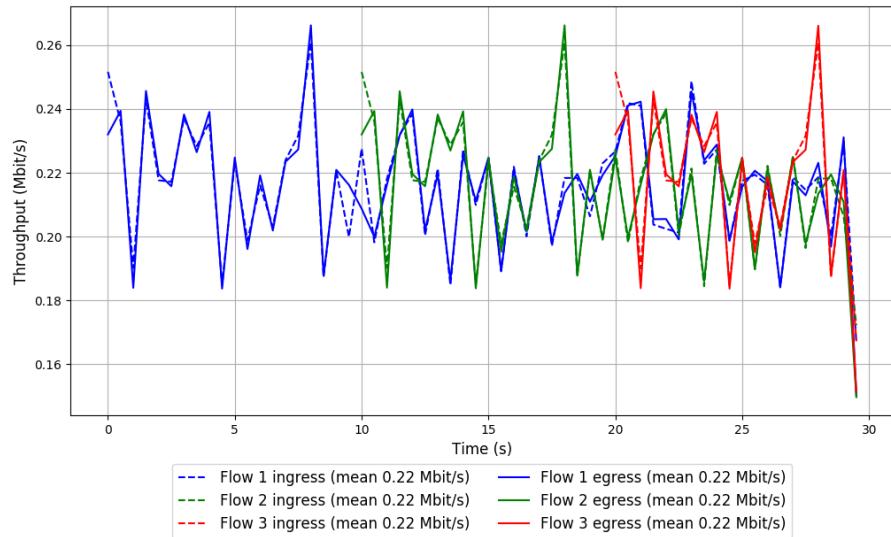


Run 2: Statistics of SCReAM

```
Start at: 2018-01-16 23:34:31
End at: 2018-01-16 23:35:01
Local clock offset: -1.292 ms
Remote clock offset: -5.352 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 40.426 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.233 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.253 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.505 ms
Loss rate: 0.73%
```

Run 2: Report of SCReAM — Data Link

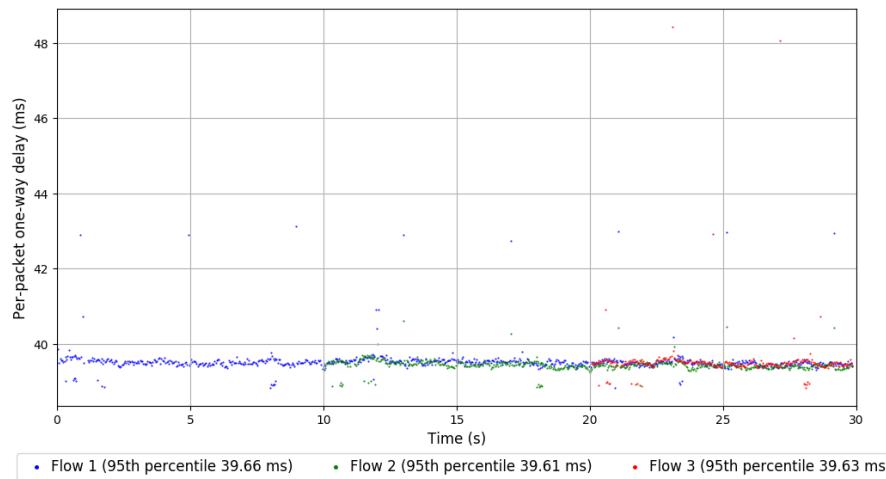
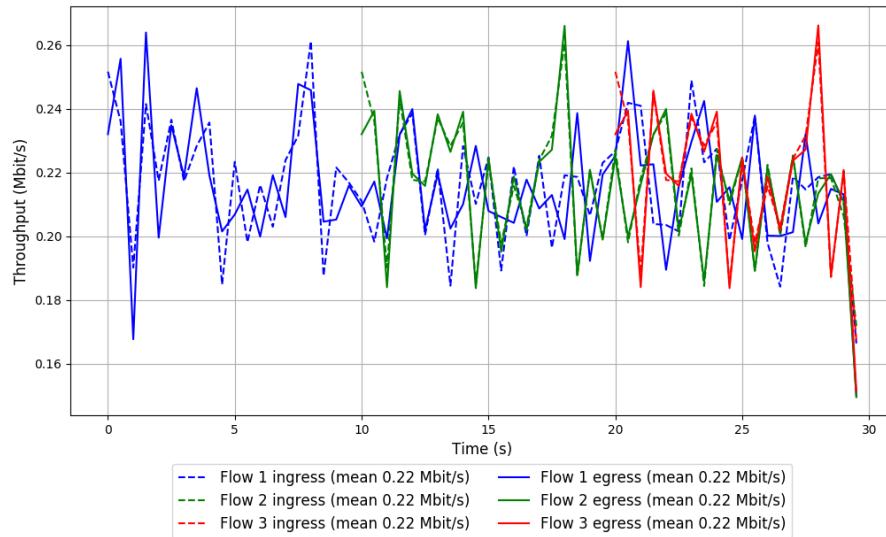


Run 3: Statistics of SCReAM

```
Start at: 2018-01-16 23:57:32
End at: 2018-01-16 23:58:02
Local clock offset: -1.898 ms
Remote clock offset: -4.949 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 39.643 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.661 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.606 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.634 ms
Loss rate: 0.73%
```

Run 3: Report of SCReAM — Data Link

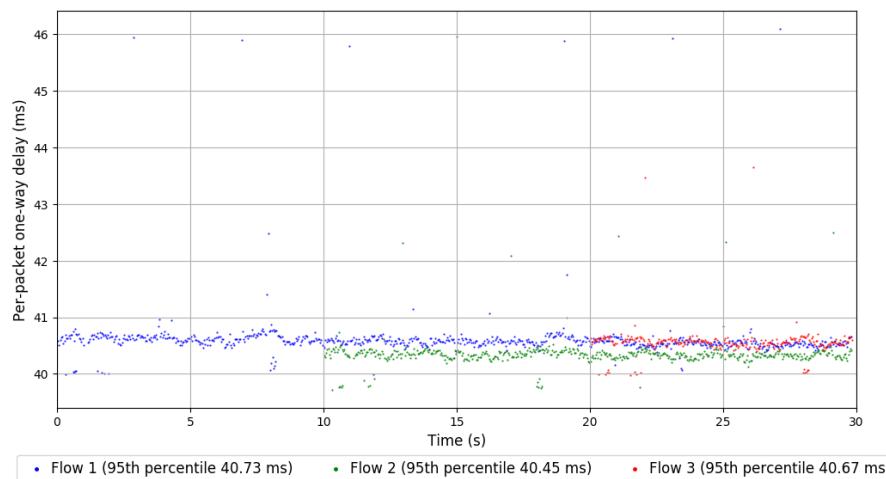
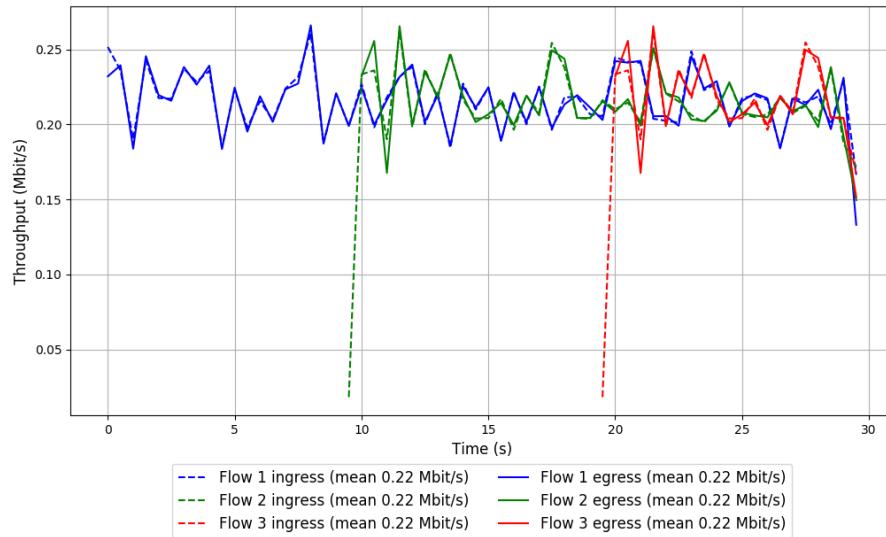


Run 4: Statistics of SCReAM

```
Start at: 2018-01-17 00:20:54
End at: 2018-01-17 00:21:24
Local clock offset: -1.27 ms
Remote clock offset: -6.859 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 40.697 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.734 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.446 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.668 ms
Loss rate: 0.73%
```

## Run 4: Report of SCReAM — Data Link

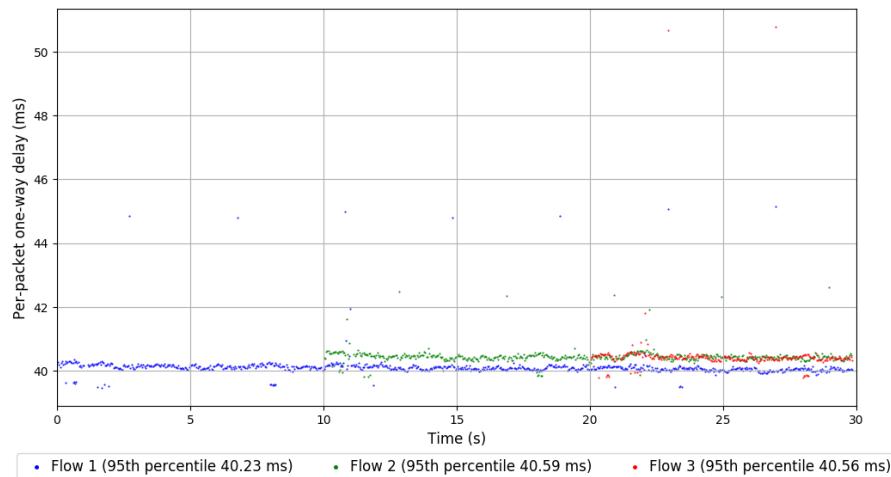
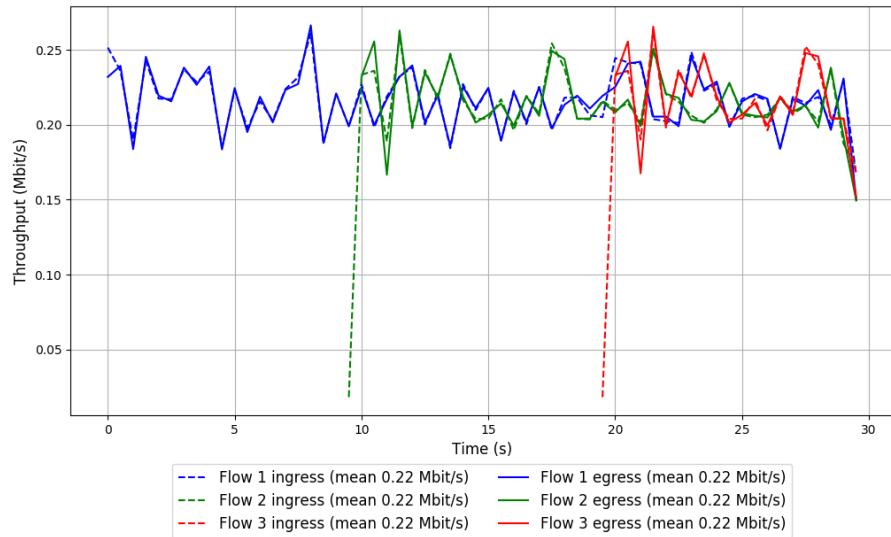


Run 5: Statistics of SCReAM

```
Start at: 2018-01-17 00:43:48
End at: 2018-01-17 00:44:18
Local clock offset: -1.546 ms
Remote clock offset: -6.365 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 40.548 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.233 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.592 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.556 ms
Loss rate: 0.73%
```

Run 5: Report of SCReAM — Data Link

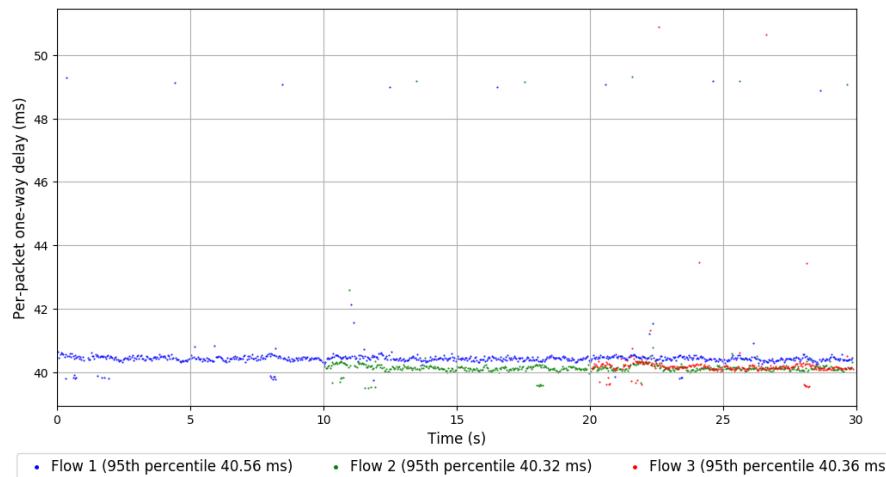
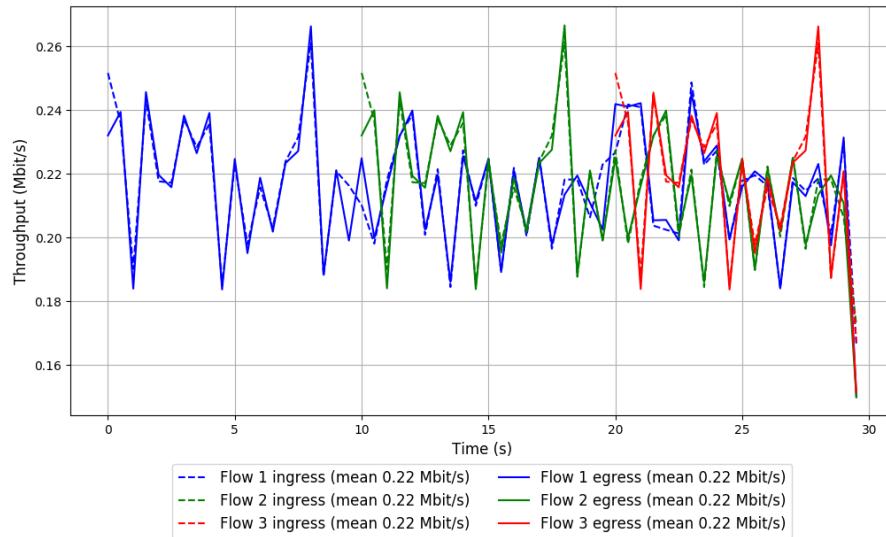


Run 6: Statistics of SCReAM

```
Start at: 2018-01-17 01:07:01
End at: 2018-01-17 01:07:31
Local clock offset: -1.675 ms
Remote clock offset: -5.784 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 40.537 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.563 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.320 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.363 ms
Loss rate: 0.73%
```

Run 6: Report of SCReAM — Data Link

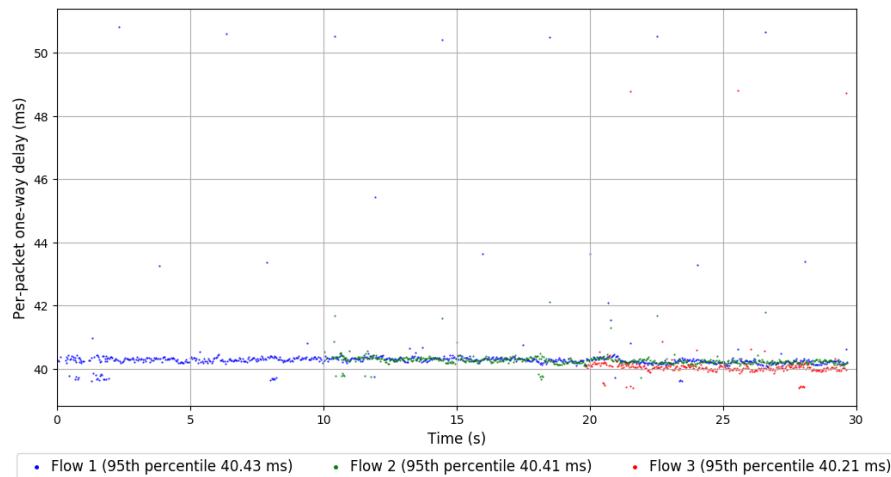
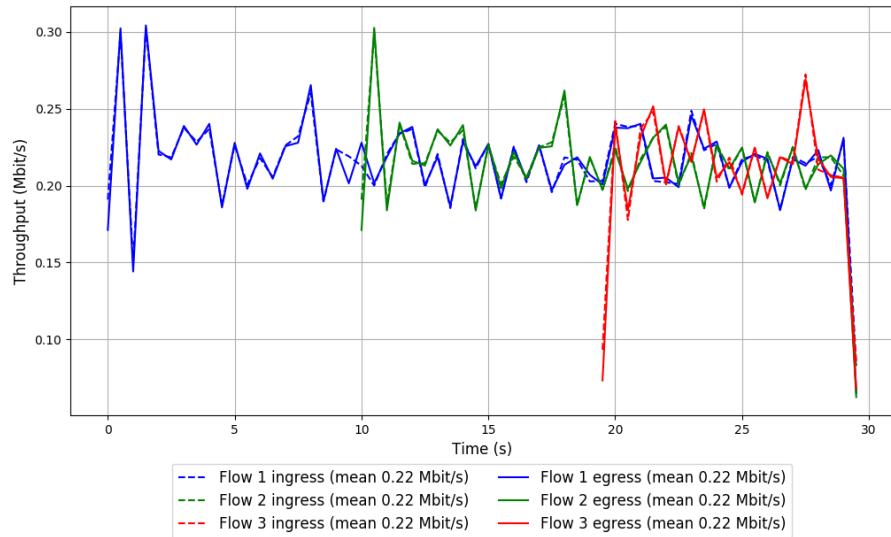


Run 7: Statistics of SCReAM

```
Start at: 2018-01-17 01:30:39
End at: 2018-01-17 01:31:09
Local clock offset: -1.787 ms
Remote clock offset: -5.982 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 40.418 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.428 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.415 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 40.213 ms
Loss rate: 0.76%
```

Run 7: Report of SCReAM — Data Link

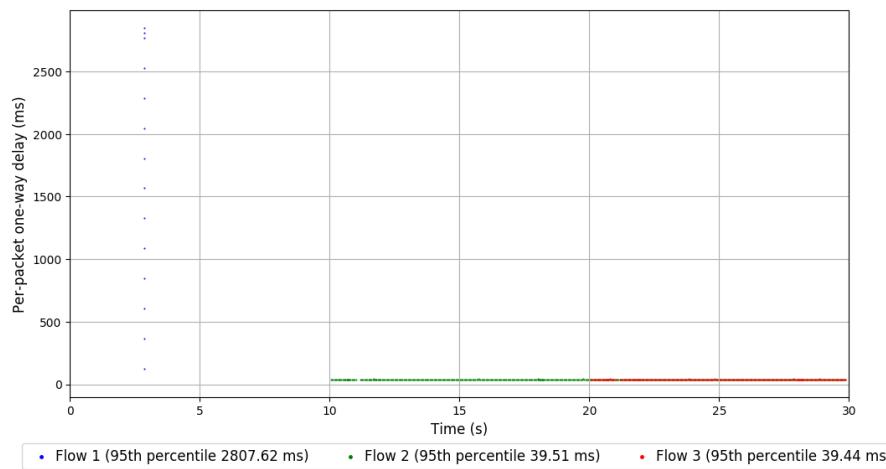
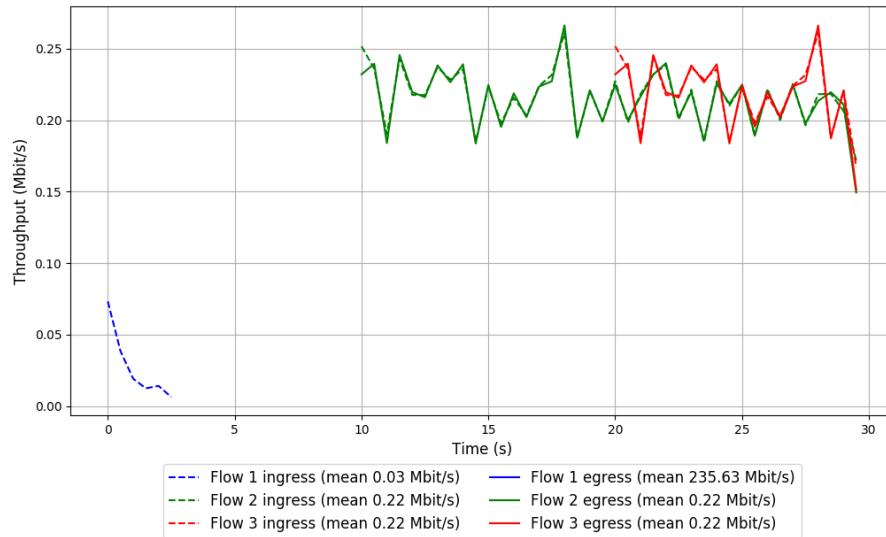


Run 8: Statistics of SCReAM

```
Start at: 2018-01-17 01:54:04
End at: 2018-01-17 01:54:34
Local clock offset: -2.288 ms
Remote clock offset: -6.095 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 39.529 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 235.63 Mbit/s
95th percentile per-packet one-way delay: 2807.620 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.507 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.439 ms
Loss rate: 0.74%
```

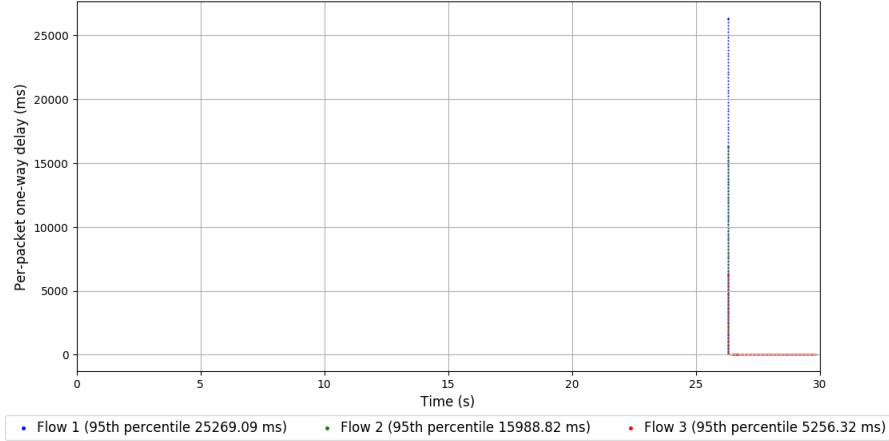
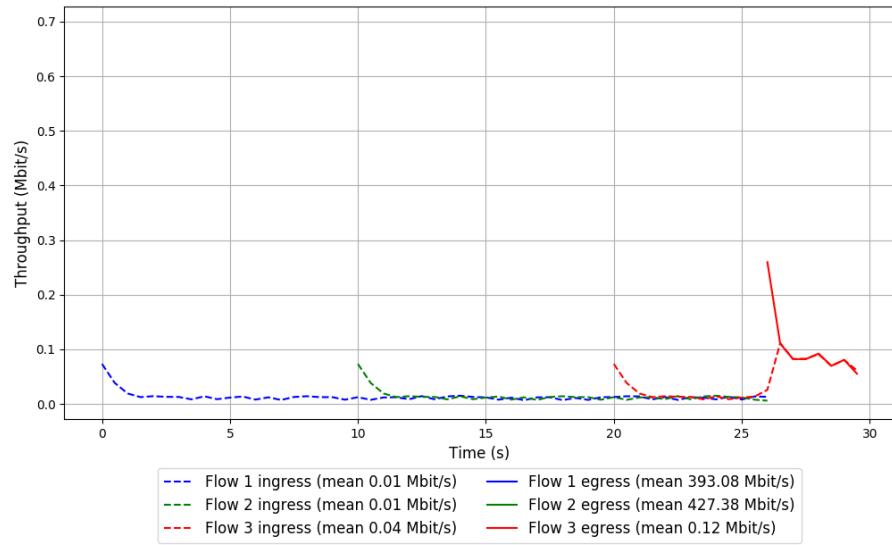
Run 8: Report of SCReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-17 02:17:05  
End at: 2018-01-17 02:17:35  
Local clock offset: -1.069 ms  
Remote clock offset: -5.695 ms

Run 9: Report of SCReAM — Data Link

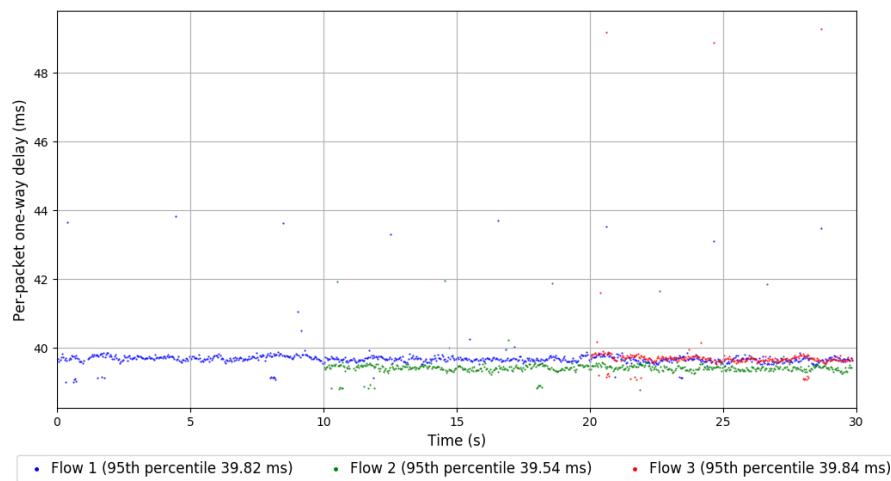
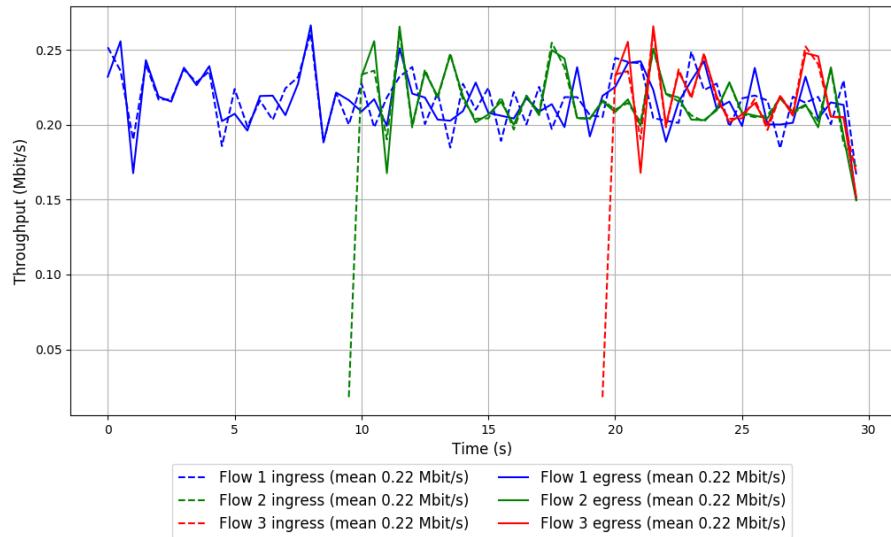


Run 10: Statistics of SCReAM

```
Start at: 2018-01-17 02:42:05
End at: 2018-01-17 02:42:35
Local clock offset: -1.383 ms
Remote clock offset: -4.935 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 39.807 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.817 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.544 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.840 ms
Loss rate: 0.74%
```

## Run 10: Report of SCReAM — Data Link

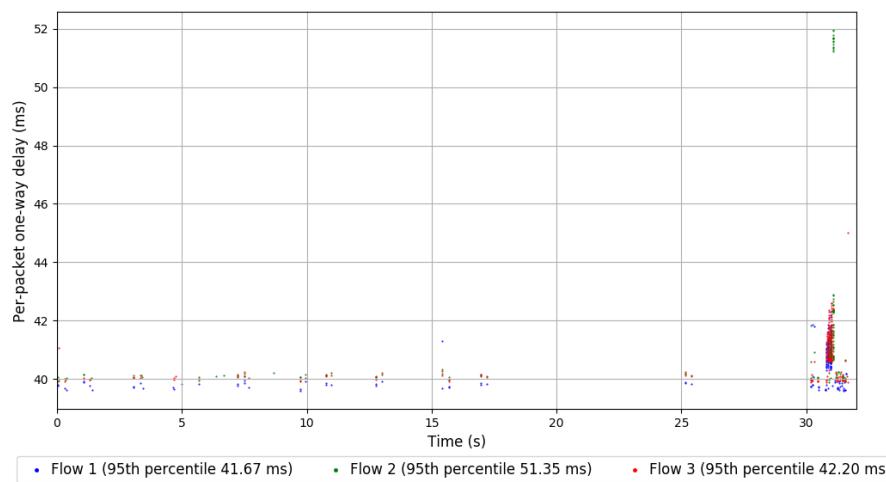
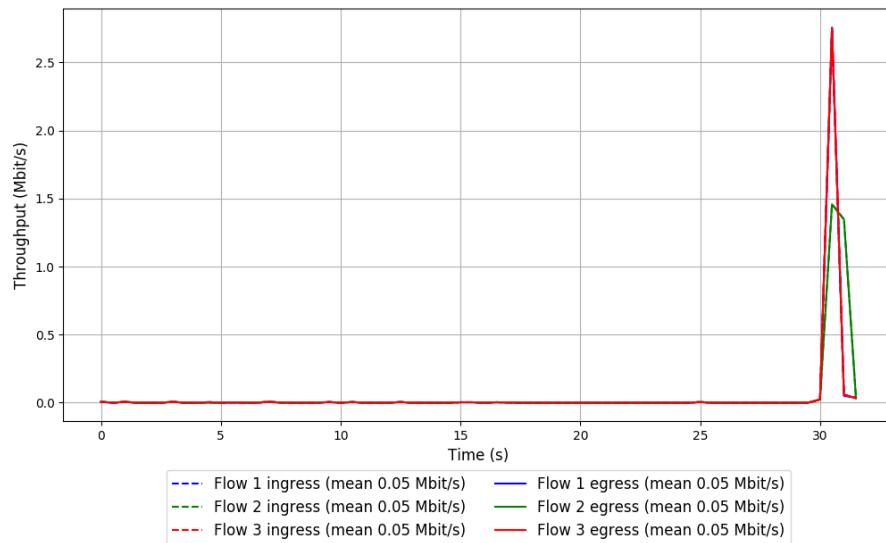


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-16 23:03:01
End at: 2018-01-16 23:03:31
Local clock offset: -1.002 ms
Remote clock offset: -6.878 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 42.364 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 41.666 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 51.355 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 42.203 ms
Loss rate: 0.16%
```

### Run 1: Report of WebRTC media — Data Link

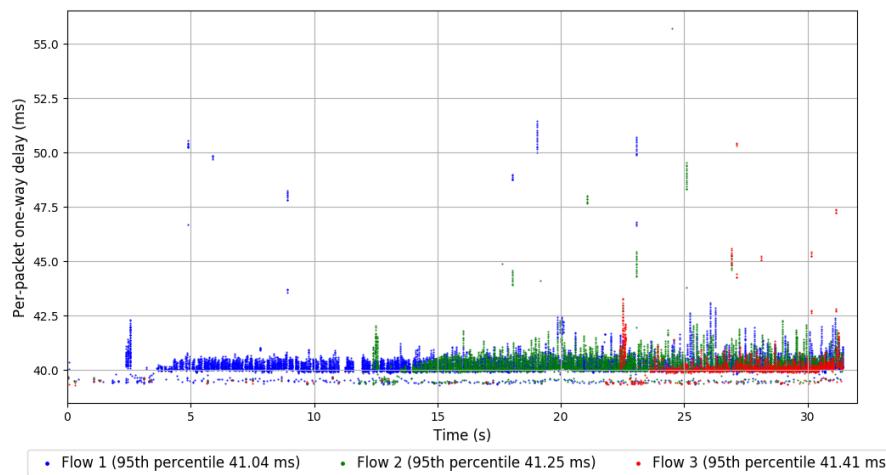
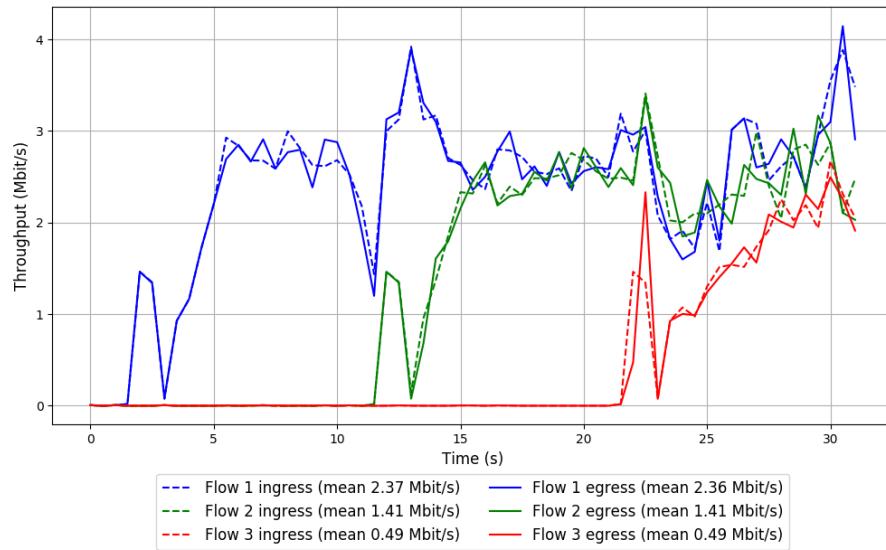


Run 2: Statistics of WebRTC media

```
Start at: 2018-01-16 23:25:43
End at: 2018-01-16 23:26:13
Local clock offset: -1.582 ms
Remote clock offset: -5.687 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.25 Mbit/s
95th percentile per-packet one-way delay: 41.159 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 41.038 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 41.248 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 41.409 ms
Loss rate: 1.21%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

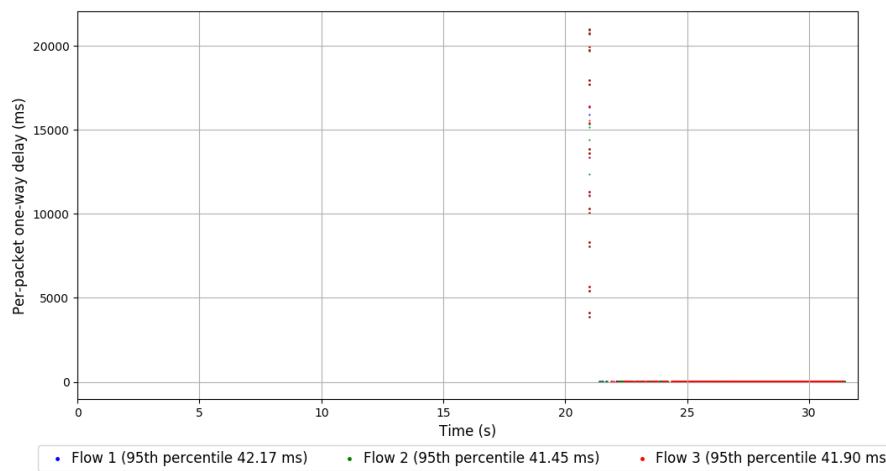
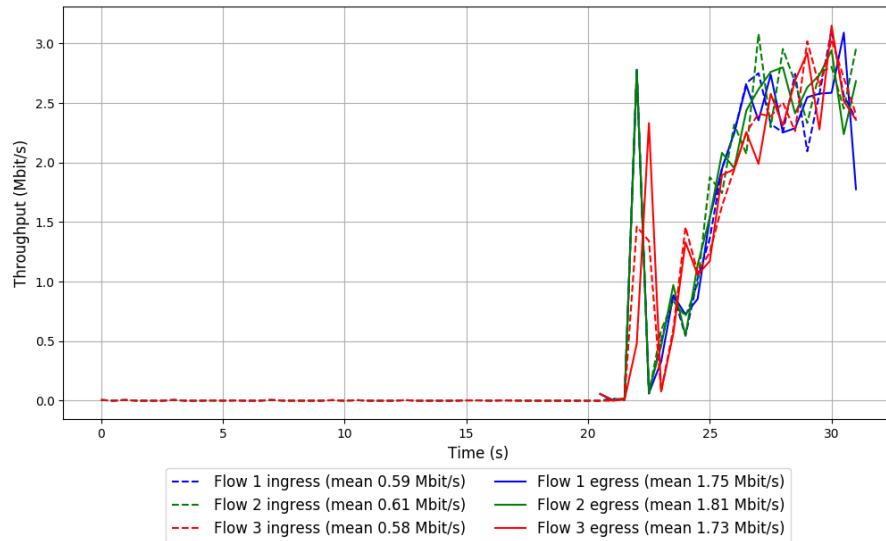
Start at: 2018-01-16 23:48:52

End at: 2018-01-16 23:49:22

Local clock offset: -1.184 ms

Remote clock offset: -5.028 ms

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

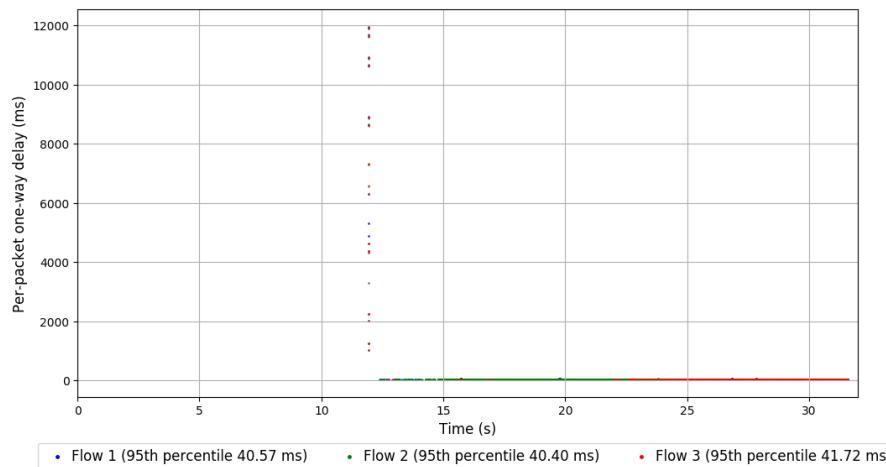
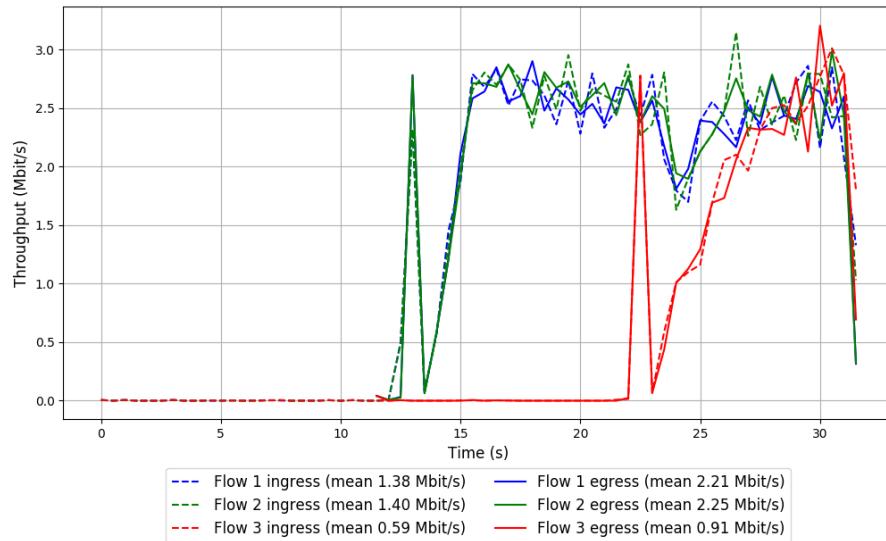
Start at: 2018-01-17 00:11:45

End at: 2018-01-17 00:12:15

Local clock offset: -2.09 ms

Remote clock offset: -6.083 ms

Run 4: Report of WebRTC media — Data Link

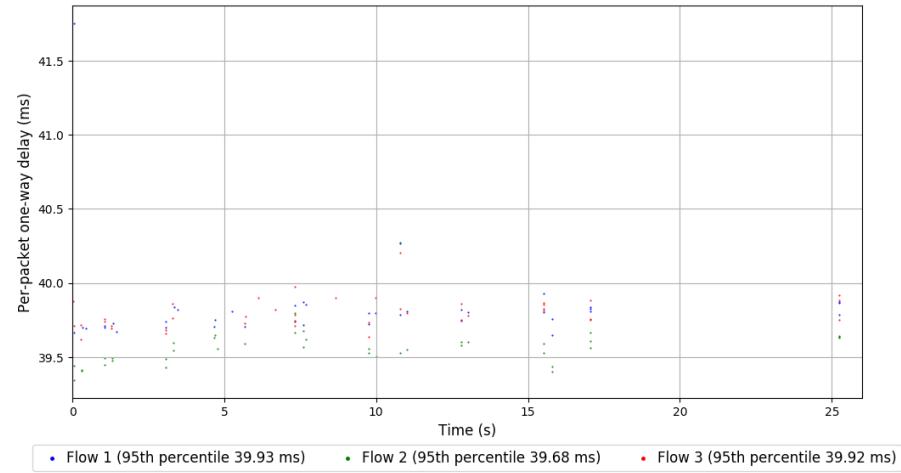
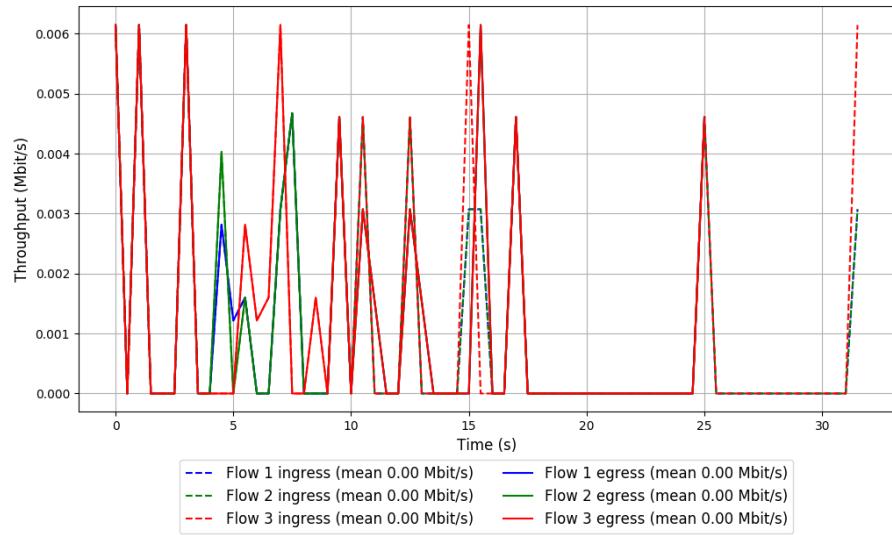


Run 5: Statistics of WebRTC media

```
Start at: 2018-01-17 00:34:54
End at: 2018-01-17 00:35:24
Local clock offset: -1.657 ms
Remote clock offset: -6.573 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 39.919 ms
Loss rate: 6.29%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 39.927 ms
Loss rate: 4.80%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 39.677 ms
Loss rate: 4.80%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 39.919 ms
Loss rate: 9.15%
```

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

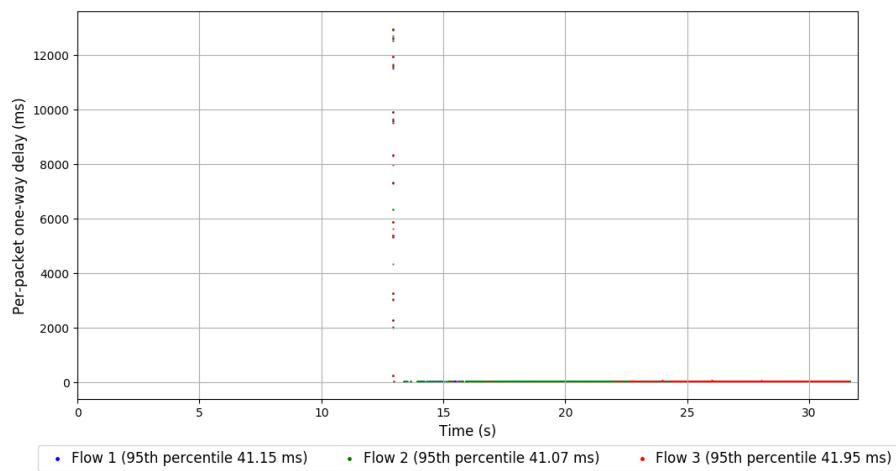
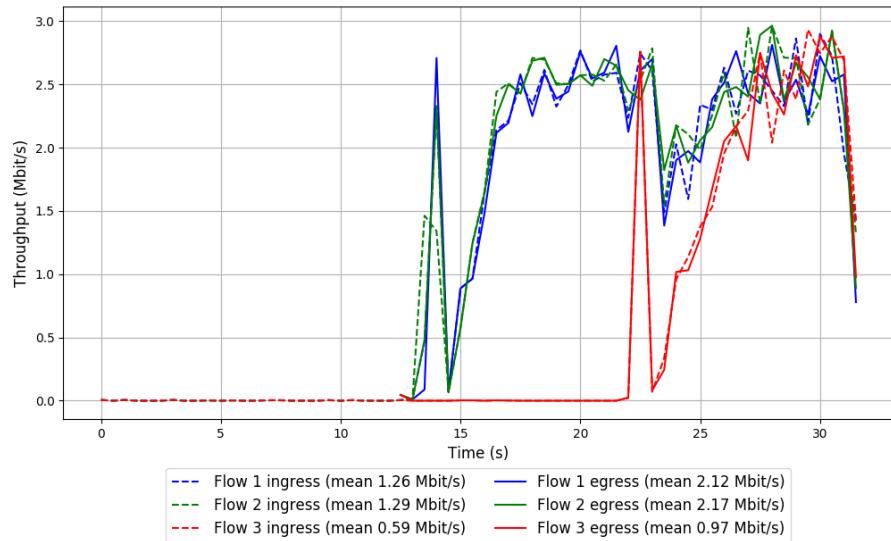
Start at: 2018-01-17 00:58:20

End at: 2018-01-17 00:58:50

Local clock offset: -1.696 ms

Remote clock offset: -6.08 ms

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

/home/ubuntu/pantheon\_data/2018-01-16T22-53-China-to-AWS-Korea-10-runs-3-flows/webrtc\_stats\_

Run 7: Report of WebRTC media — Data Link

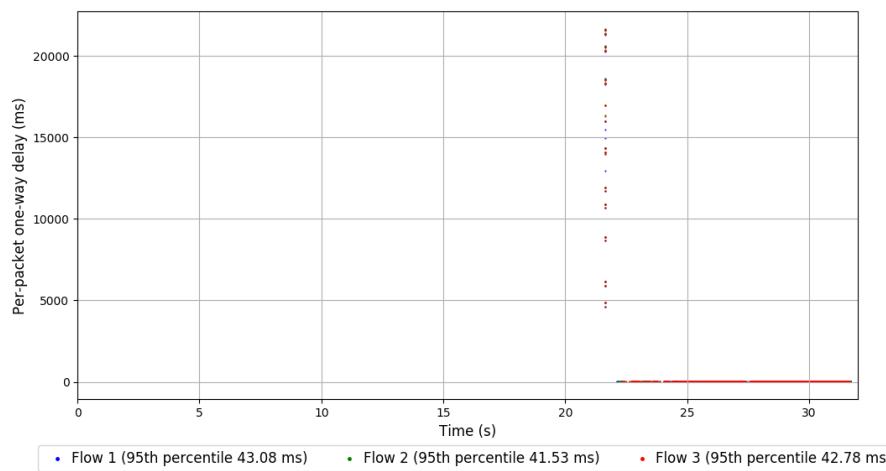
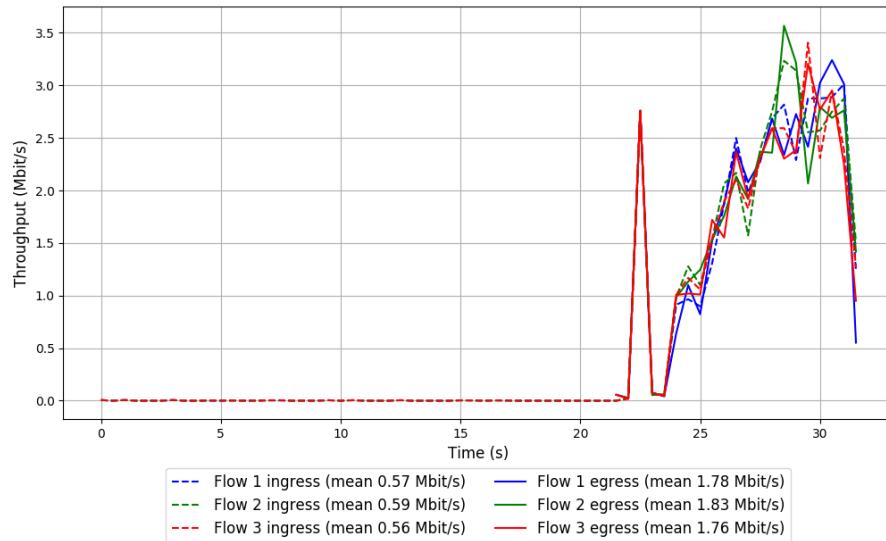
Figure is missing

Figure is missing

Run 8: Statistics of WebRTC media

Start at: 2018-01-17 01:44:55  
End at: 2018-01-17 01:45:25  
Local clock offset: -1.676 ms  
Remote clock offset: -6.115 ms

### Run 8: Report of WebRTC media — Data Link

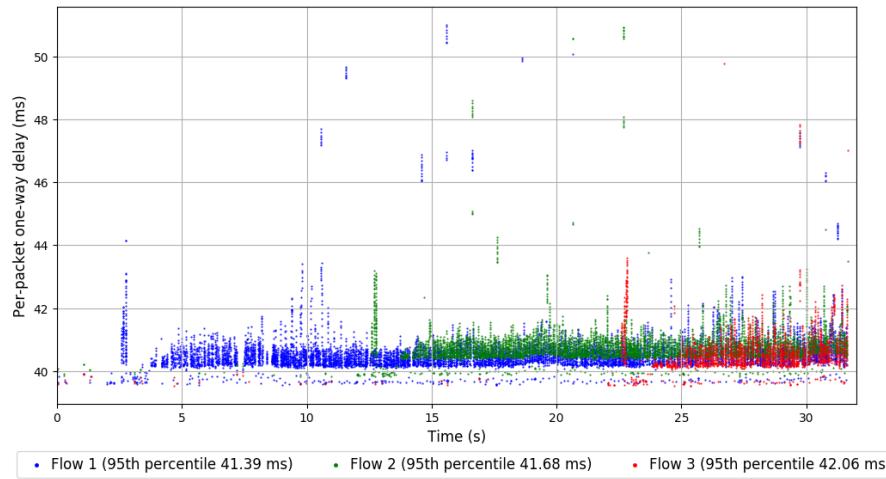
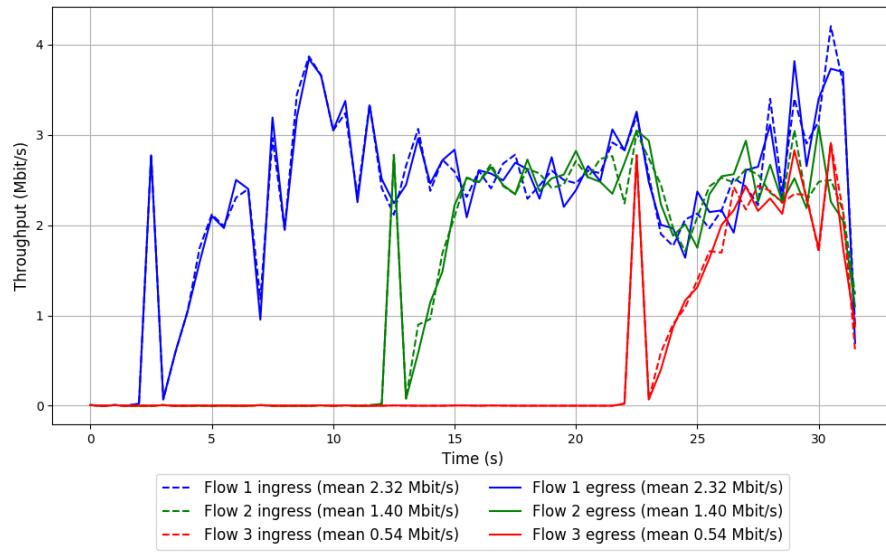


Run 9: Statistics of WebRTC media

```
Start at: 2018-01-17 02:08:04
End at: 2018-01-17 02:08:34
Local clock offset: -1.298 ms
Remote clock offset: -6.056 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.25 Mbit/s
95th percentile per-packet one-way delay: 41.603 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 41.386 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 41.676 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 42.058 ms
Loss rate: 0.41%
```

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

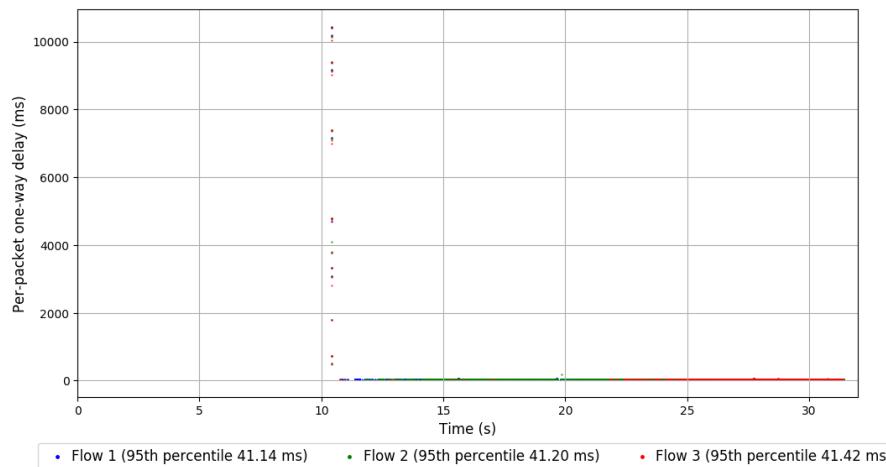
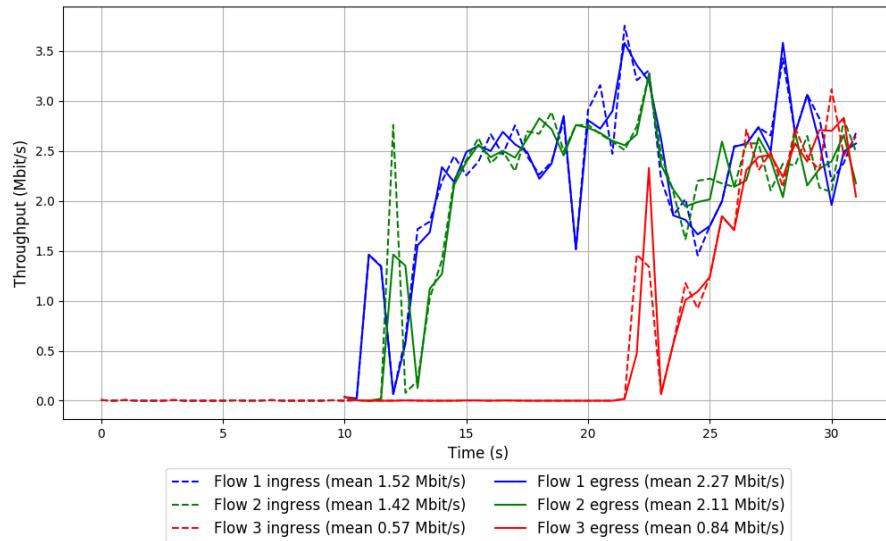
Start at: 2018-01-17 02:32:59

End at: 2018-01-17 02:33:29

Local clock offset: -0.922 ms

Remote clock offset: -5.307 ms

Run 10: Report of WebRTC media — Data Link

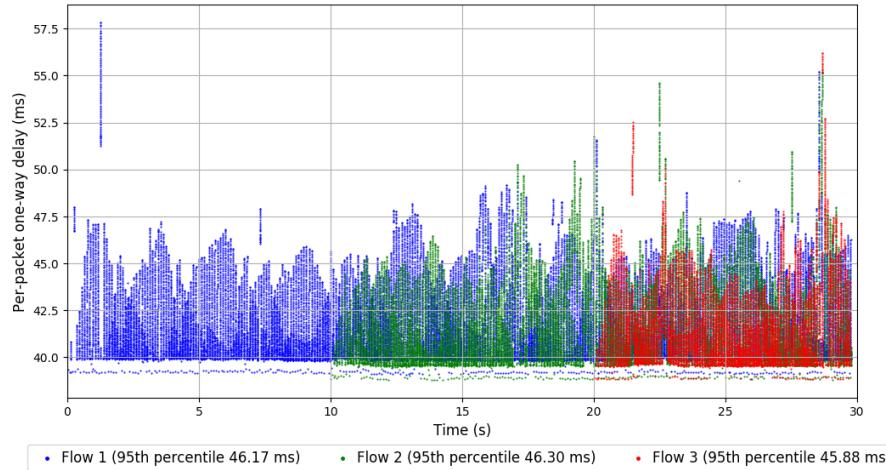
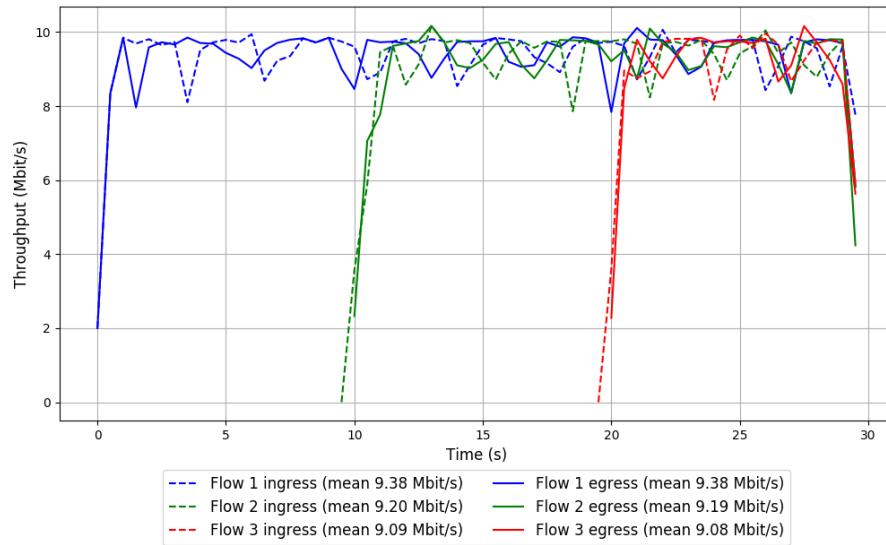


Run 1: Statistics of Sprout

```
Start at: 2018-01-16 23:15:41
End at: 2018-01-16 23:16:11
Local clock offset: -1.83 ms
Remote clock offset: -6.2 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.47 Mbit/s
95th percentile per-packet one-way delay: 46.176 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 9.38 Mbit/s
95th percentile per-packet one-way delay: 46.173 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 9.19 Mbit/s
95th percentile per-packet one-way delay: 46.301 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 9.08 Mbit/s
95th percentile per-packet one-way delay: 45.876 ms
Loss rate: 1.10%
```

Run 1: Report of Sprout — Data Link

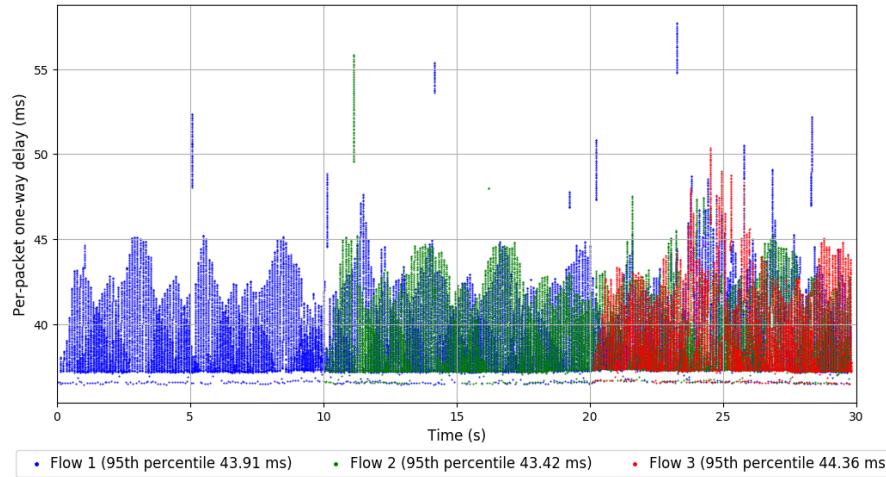
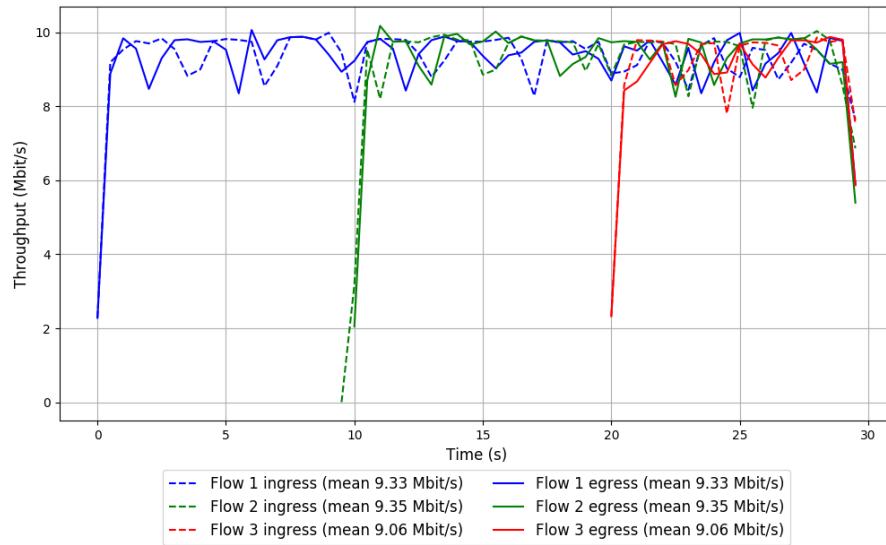


Run 2: Statistics of Sprout

```
Start at: 2018-01-16 23:38:23
End at: 2018-01-16 23:38:53
Local clock offset: -4.217 ms
Remote clock offset: -5.255 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.50 Mbit/s
95th percentile per-packet one-way delay: 43.815 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 9.33 Mbit/s
95th percentile per-packet one-way delay: 43.912 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 9.35 Mbit/s
95th percentile per-packet one-way delay: 43.424 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 9.06 Mbit/s
95th percentile per-packet one-way delay: 44.364 ms
Loss rate: 0.94%
```

Run 2: Report of Sprout — Data Link

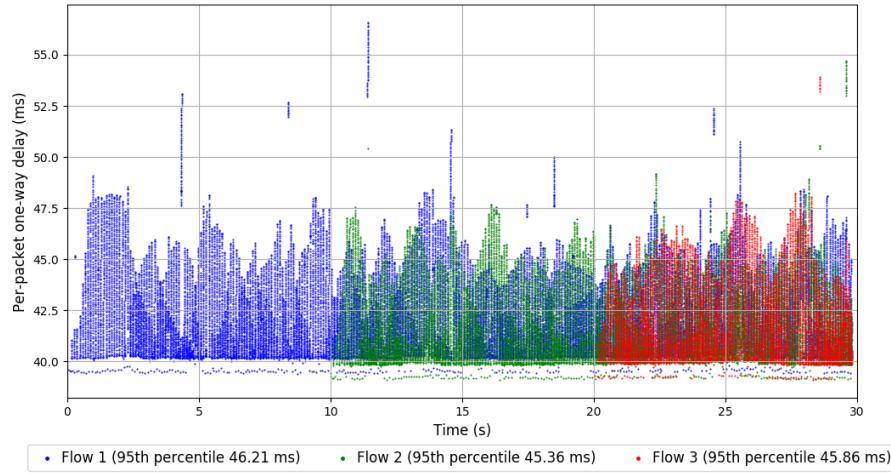
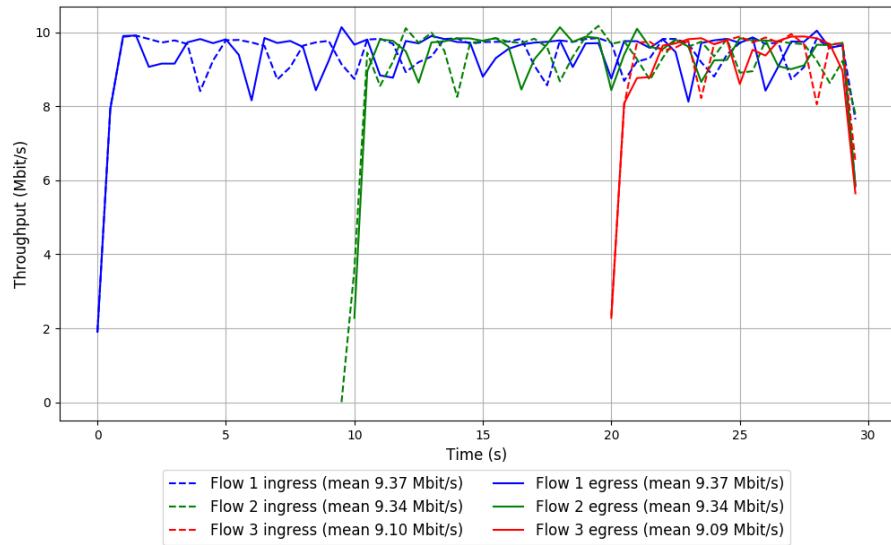


Run 3: Statistics of Sprout

```
Start at: 2018-01-17 00:01:22
End at: 2018-01-17 00:01:52
Local clock offset: -1.627 ms
Remote clock offset: -4.958 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.56 Mbit/s
95th percentile per-packet one-way delay: 45.873 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 9.37 Mbit/s
95th percentile per-packet one-way delay: 46.210 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 9.34 Mbit/s
95th percentile per-packet one-way delay: 45.356 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 9.09 Mbit/s
95th percentile per-packet one-way delay: 45.856 ms
Loss rate: 0.89%
```

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

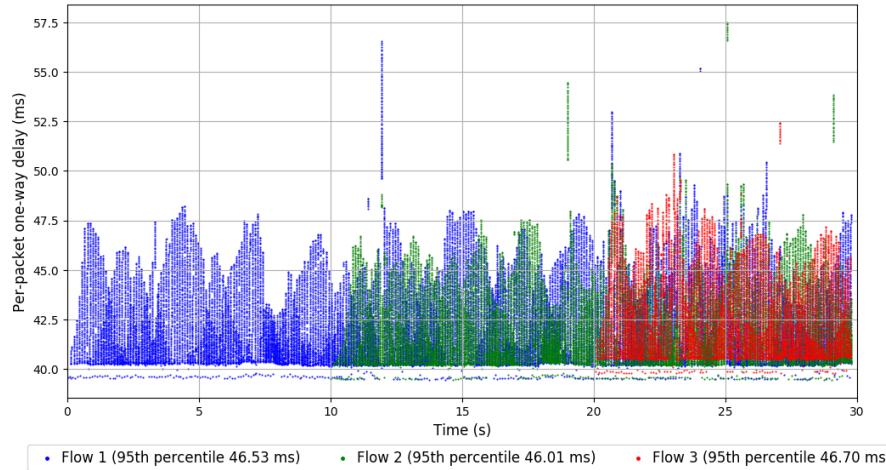
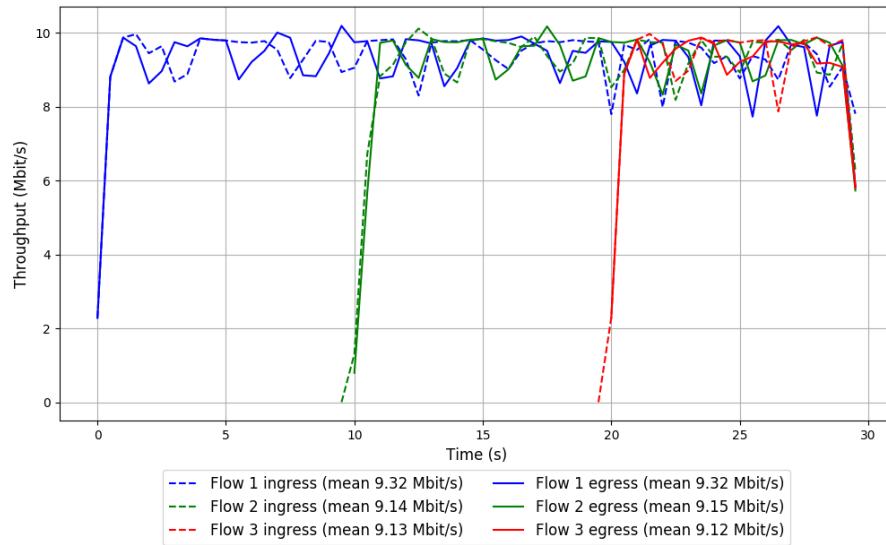


Run 4: Statistics of Sprout

```
Start at: 2018-01-17 00:24:41
End at: 2018-01-17 00:25:11
Local clock offset: -1.463 ms
Remote clock offset: -6.787 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.37 Mbit/s
95th percentile per-packet one-way delay: 46.420 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 9.32 Mbit/s
95th percentile per-packet one-way delay: 46.528 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 9.15 Mbit/s
95th percentile per-packet one-way delay: 46.007 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 9.12 Mbit/s
95th percentile per-packet one-way delay: 46.704 ms
Loss rate: 1.09%
```

Run 4: Report of Sprout — Data Link

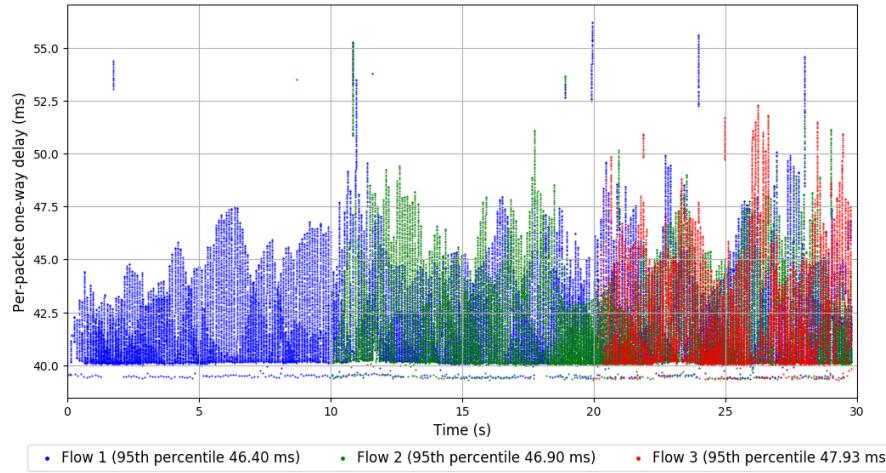
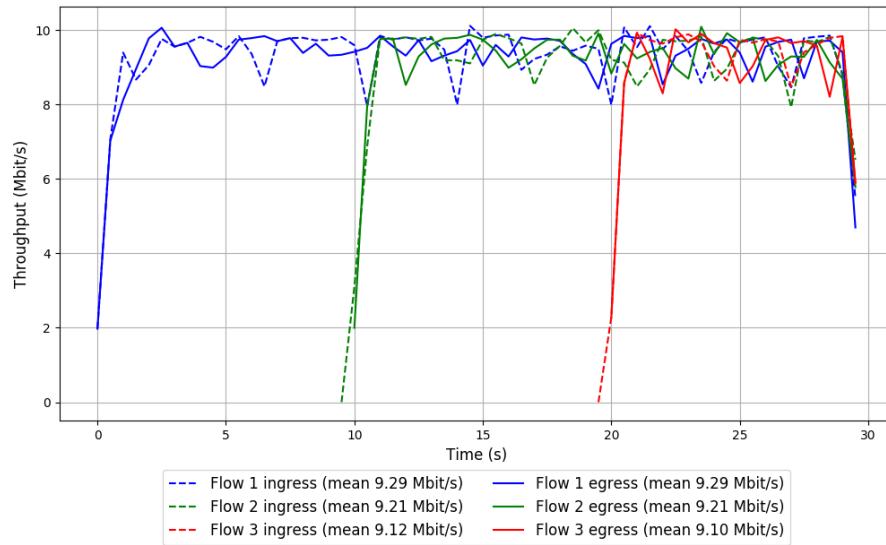


Run 5: Statistics of Sprout

```
Start at: 2018-01-17 00:47:35
End at: 2018-01-17 00:48:05
Local clock offset: -1.696 ms
Remote clock offset: -6.289 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.39 Mbit/s
95th percentile per-packet one-way delay: 46.833 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 9.29 Mbit/s
95th percentile per-packet one-way delay: 46.397 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 9.21 Mbit/s
95th percentile per-packet one-way delay: 46.901 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 9.10 Mbit/s
95th percentile per-packet one-way delay: 47.931 ms
Loss rate: 1.09%
```

Run 5: Report of Sprout — Data Link

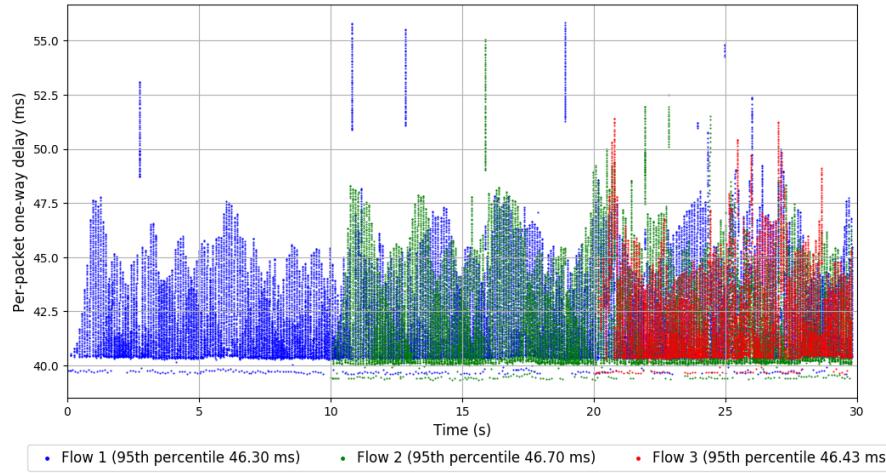
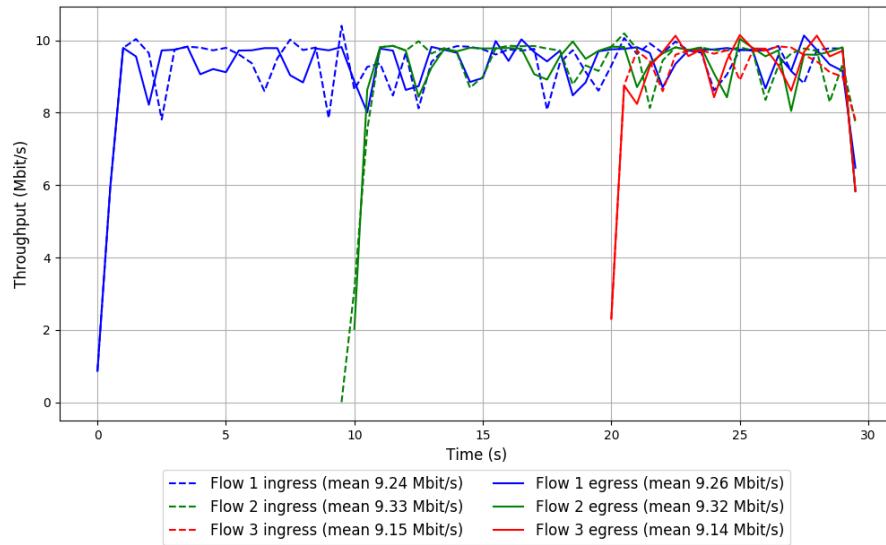


Run 6: Statistics of Sprout

```
Start at: 2018-01-17 01:10:54
End at: 2018-01-17 01:11:24
Local clock offset: -1.816 ms
Remote clock offset: -5.658 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.44 Mbit/s
95th percentile per-packet one-way delay: 46.455 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 9.26 Mbit/s
95th percentile per-packet one-way delay: 46.302 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 9.32 Mbit/s
95th percentile per-packet one-way delay: 46.696 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 9.14 Mbit/s
95th percentile per-packet one-way delay: 46.427 ms
Loss rate: 1.10%
```

## Run 6: Report of Sprout — Data Link

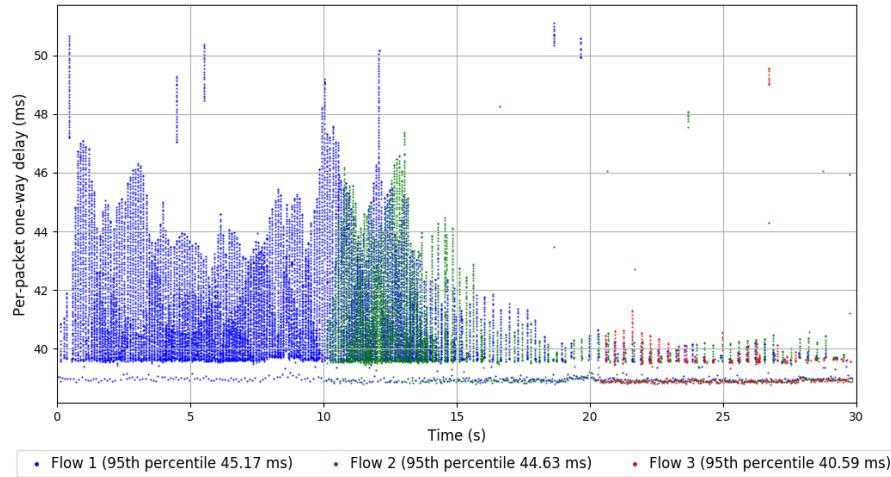
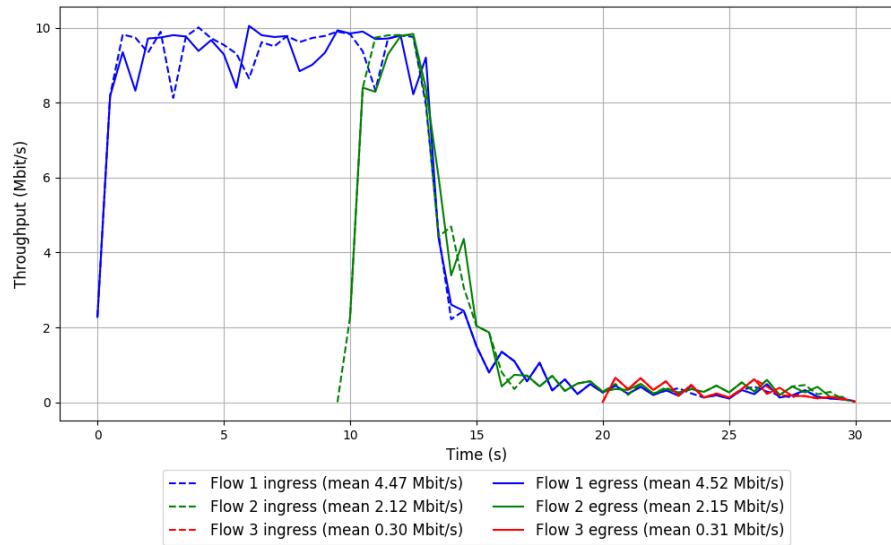


Run 7: Statistics of Sprout

```
Start at: 2018-01-17 01:34:21
End at: 2018-01-17 01:34:51
Local clock offset: -2.305 ms
Remote clock offset: -6.035 ms

# Below is generated by plot.py at 2018-01-17 06:55:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.04 Mbit/s
95th percentile per-packet one-way delay: 45.025 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 45.169 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 44.630 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 40.586 ms
Loss rate: 0.86%
```

Run 7: Report of Sprout — Data Link

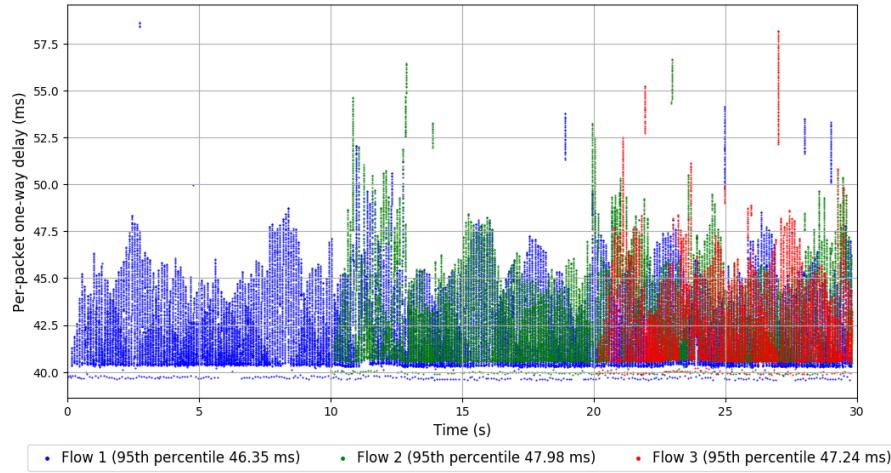
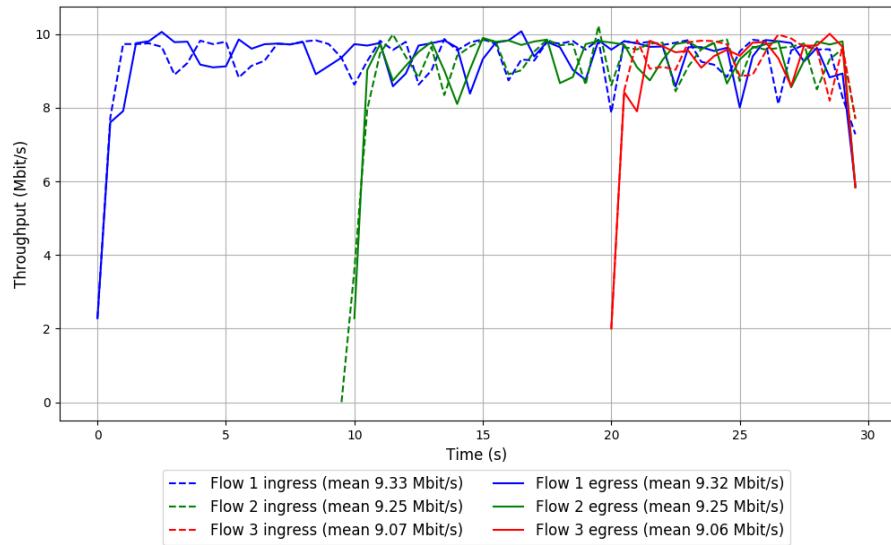


Run 8: Statistics of Sprout

```
Start at: 2018-01-17 01:57:50
End at: 2018-01-17 01:58:20
Local clock offset: -1.377 ms
Remote clock offset: -6.156 ms

# Below is generated by plot.py at 2018-01-17 06:55:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.43 Mbit/s
95th percentile per-packet one-way delay: 47.087 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 9.32 Mbit/s
95th percentile per-packet one-way delay: 46.352 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 9.25 Mbit/s
95th percentile per-packet one-way delay: 47.982 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 9.06 Mbit/s
95th percentile per-packet one-way delay: 47.238 ms
Loss rate: 1.05%
```

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

/home/ubuntu/pantheon\_data/2018-01-16T22-53-China-to-AWS-Korea-10-runs-3-flows/sprout\_stats\_

Run 9: Report of Sprout — Data Link

Figure is missing

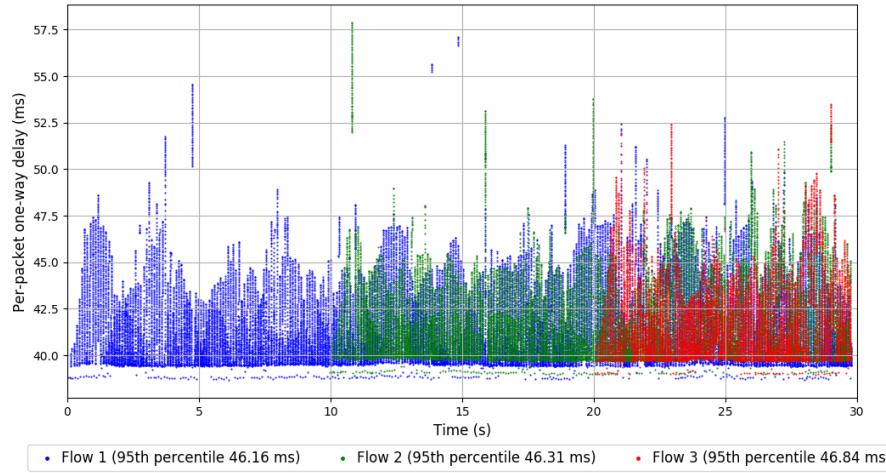
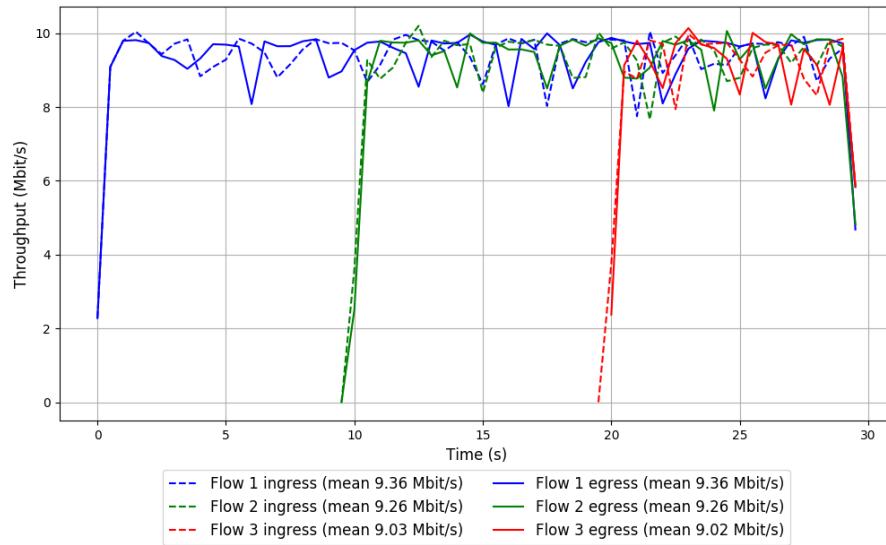
Figure is missing

Run 10: Statistics of Sprout

```
Start at: 2018-01-17 02:45:46
End at: 2018-01-17 02:46:16
Local clock offset: -1.355 ms
Remote clock offset: -4.805 ms

# Below is generated by plot.py at 2018-01-17 06:55:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.47 Mbit/s
95th percentile per-packet one-way delay: 46.285 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 9.36 Mbit/s
95th percentile per-packet one-way delay: 46.164 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 9.26 Mbit/s
95th percentile per-packet one-way delay: 46.311 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 9.02 Mbit/s
95th percentile per-packet one-way delay: 46.844 ms
Loss rate: 1.11%
```

Run 10: Report of Sprout — Data Link

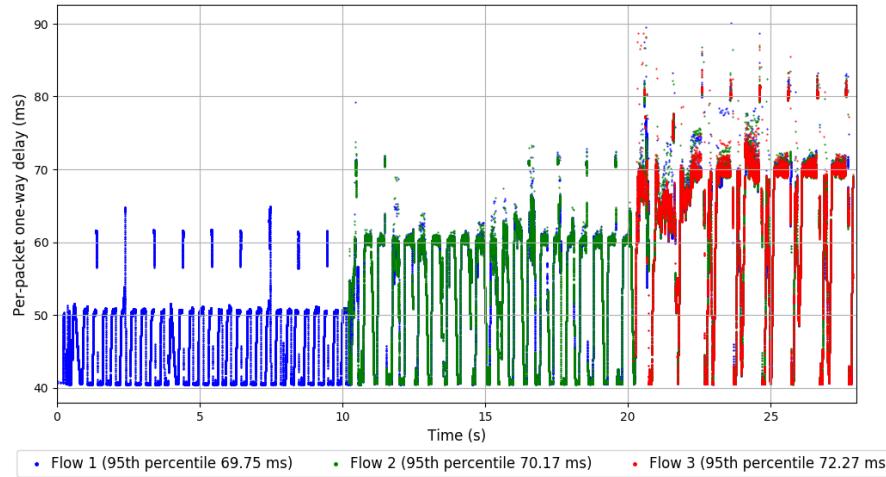
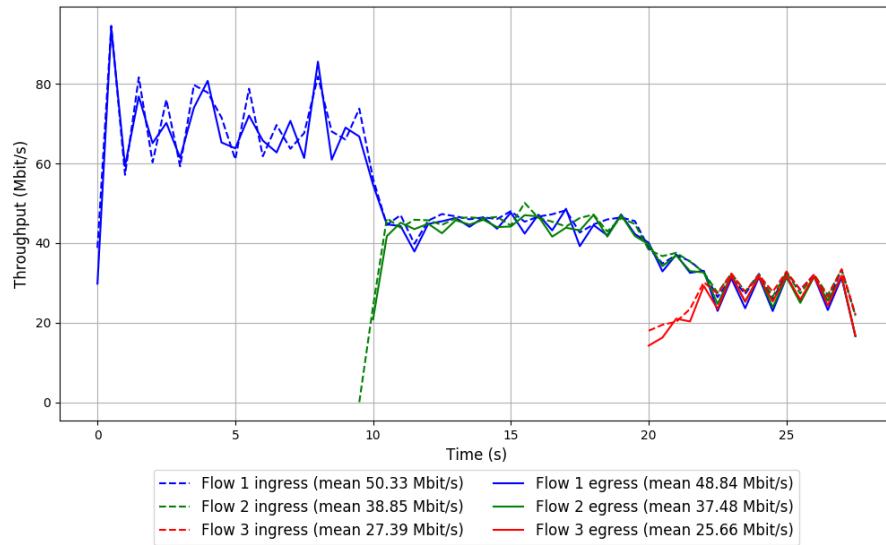


Run 1: Statistics of TaoVA-100x

```
Start at: 2018-01-16 22:59:11
End at: 2018-01-16 22:59:41
Local clock offset: -1.001 ms
Remote clock offset: -7.083 ms

# Below is generated by plot.py at 2018-01-17 06:57:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.07 Mbit/s
95th percentile per-packet one-way delay: 70.072 ms
Loss rate: 3.90%
-- Flow 1:
Average throughput: 48.84 Mbit/s
95th percentile per-packet one-way delay: 69.747 ms
Loss rate: 3.27%
-- Flow 2:
Average throughput: 37.48 Mbit/s
95th percentile per-packet one-way delay: 70.172 ms
Loss rate: 4.03%
-- Flow 3:
Average throughput: 25.66 Mbit/s
95th percentile per-packet one-way delay: 72.268 ms
Loss rate: 7.59%
```

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

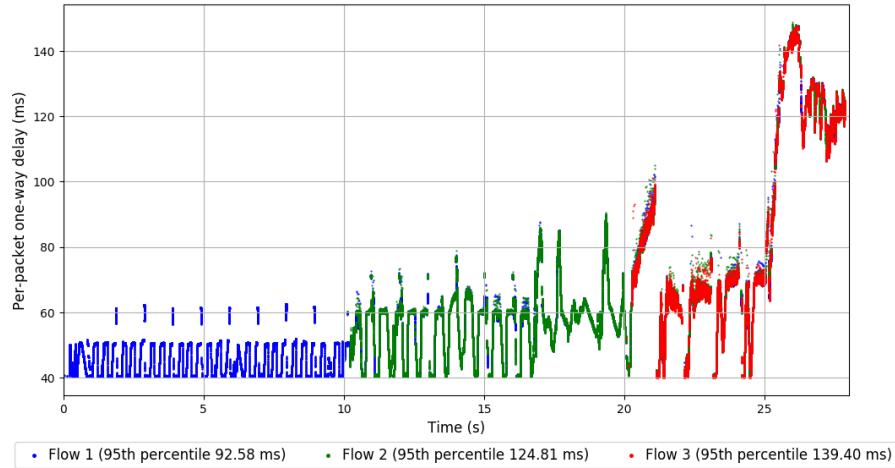
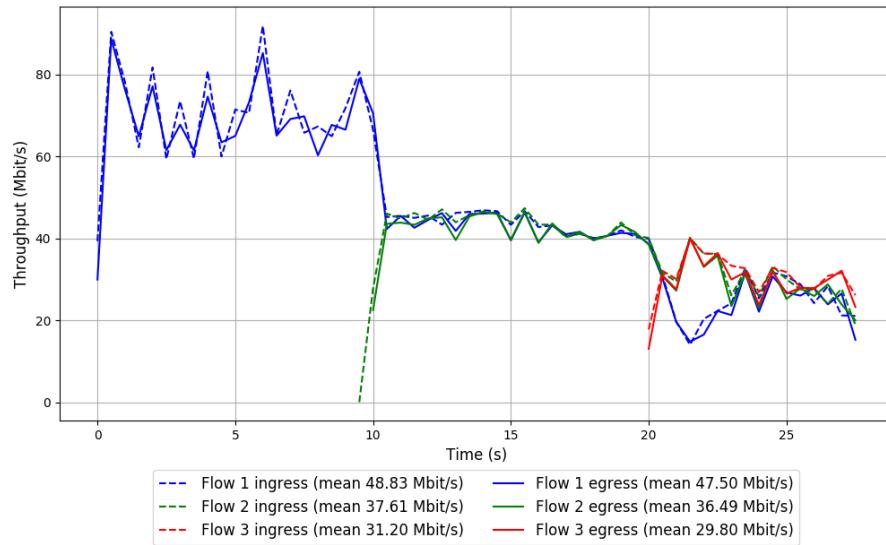


Run 2: Statistics of TaoVA-100x

```
Start at: 2018-01-16 23:21:55
End at: 2018-01-16 23:22:25
Local clock offset: -1.263 ms
Remote clock offset: -5.927 ms

# Below is generated by plot.py at 2018-01-17 06:57:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.26 Mbit/s
95th percentile per-packet one-way delay: 124.449 ms
Loss rate: 3.35%
-- Flow 1:
Average throughput: 47.50 Mbit/s
95th percentile per-packet one-way delay: 92.580 ms
Loss rate: 2.87%
-- Flow 2:
Average throughput: 36.49 Mbit/s
95th percentile per-packet one-way delay: 124.815 ms
Loss rate: 3.47%
-- Flow 3:
Average throughput: 29.80 Mbit/s
95th percentile per-packet one-way delay: 139.400 ms
Loss rate: 5.65%
```

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

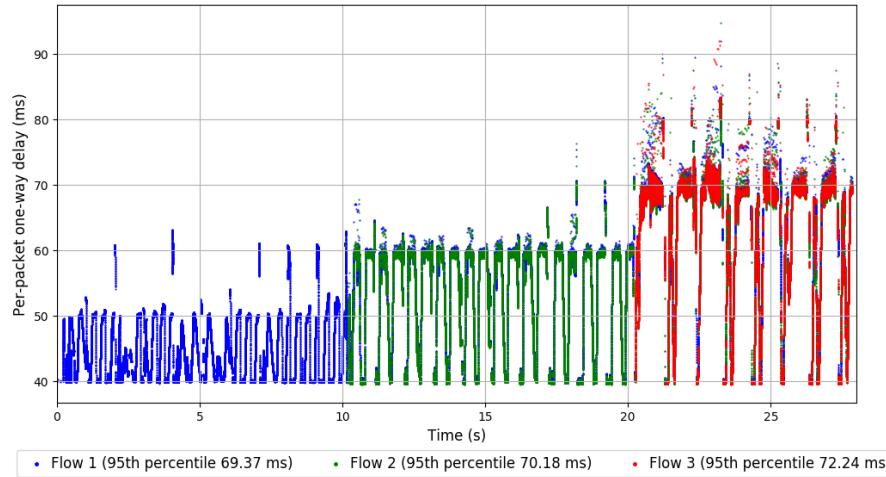
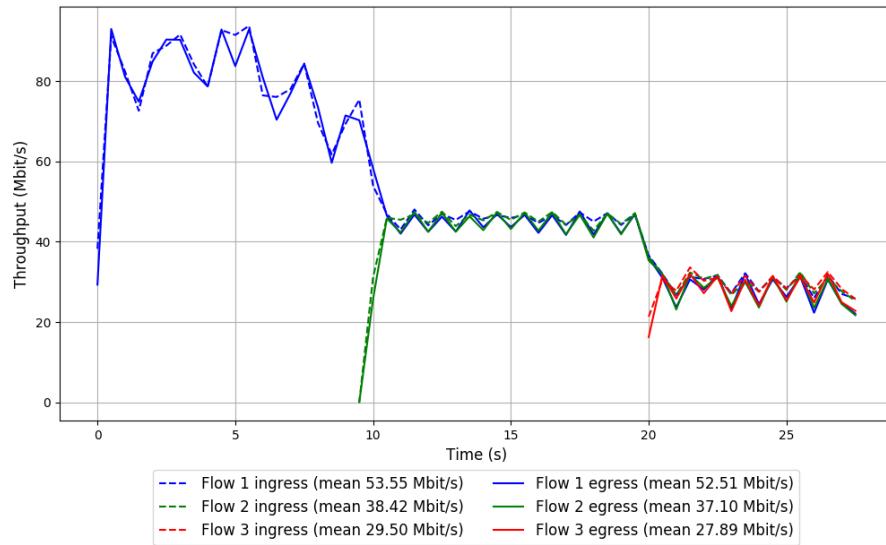


Run 3: Statistics of TaoVA-100x

```
Start at: 2018-01-16 23:44:54
End at: 2018-01-16 23:45:24
Local clock offset: -1.732 ms
Remote clock offset: -5.036 ms

# Below is generated by plot.py at 2018-01-17 06:57:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.14 Mbit/s
95th percentile per-packet one-way delay: 70.040 ms
Loss rate: 3.23%
-- Flow 1:
Average throughput: 52.51 Mbit/s
95th percentile per-packet one-way delay: 69.370 ms
Loss rate: 2.30%
-- Flow 2:
Average throughput: 37.10 Mbit/s
95th percentile per-packet one-way delay: 70.181 ms
Loss rate: 3.99%
-- Flow 3:
Average throughput: 27.89 Mbit/s
95th percentile per-packet one-way delay: 72.236 ms
Loss rate: 6.90%
```

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

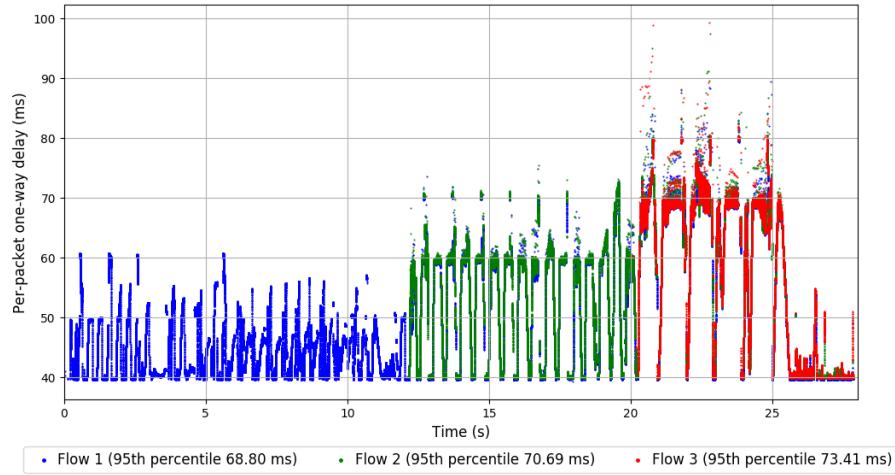
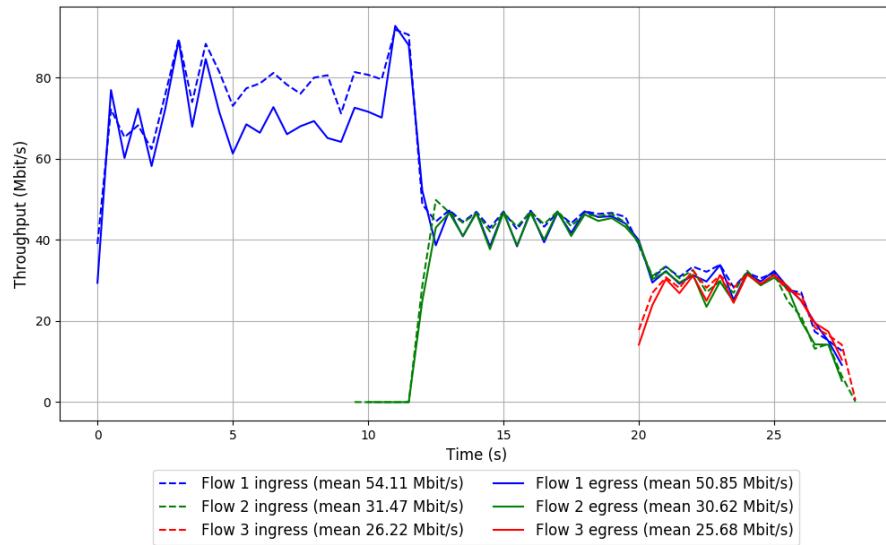


Run 4: Statistics of TaoVA-100x

```
Start at: 2018-01-17 00:07:38
End at: 2018-01-17 00:08:08
Local clock offset: -1.706 ms
Remote clock offset: -5.623 ms

# Below is generated by plot.py at 2018-01-17 06:57:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.68 Mbit/s
95th percentile per-packet one-way delay: 69.636 ms
Loss rate: 5.63%
-- Flow 1:
Average throughput: 50.85 Mbit/s
95th percentile per-packet one-way delay: 68.799 ms
Loss rate: 6.47%
-- Flow 2:
Average throughput: 30.62 Mbit/s
95th percentile per-packet one-way delay: 70.688 ms
Loss rate: 3.77%
-- Flow 3:
Average throughput: 25.68 Mbit/s
95th percentile per-packet one-way delay: 73.407 ms
Loss rate: 4.62%
```

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

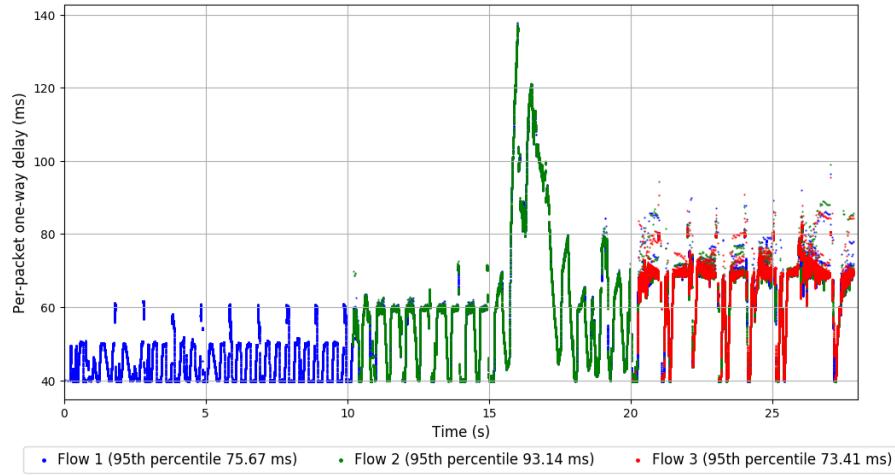
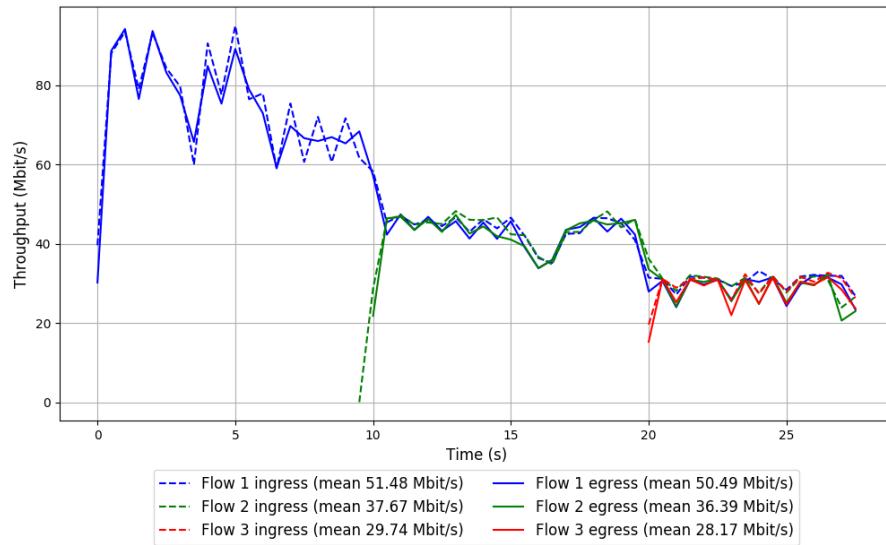


Run 5: Statistics of TaoVA-100x

```
Start at: 2018-01-17 00:31:06
End at: 2018-01-17 00:31:36
Local clock offset: -1.779 ms
Remote clock offset: -6.635 ms

# Below is generated by plot.py at 2018-01-17 06:57:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.74 Mbit/s
95th percentile per-packet one-way delay: 79.536 ms
Loss rate: 3.18%
-- Flow 1:
Average throughput: 50.49 Mbit/s
95th percentile per-packet one-way delay: 75.675 ms
Loss rate: 2.29%
-- Flow 2:
Average throughput: 36.39 Mbit/s
95th percentile per-packet one-way delay: 93.145 ms
Loss rate: 3.97%
-- Flow 3:
Average throughput: 28.17 Mbit/s
95th percentile per-packet one-way delay: 73.413 ms
Loss rate: 6.34%
```

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

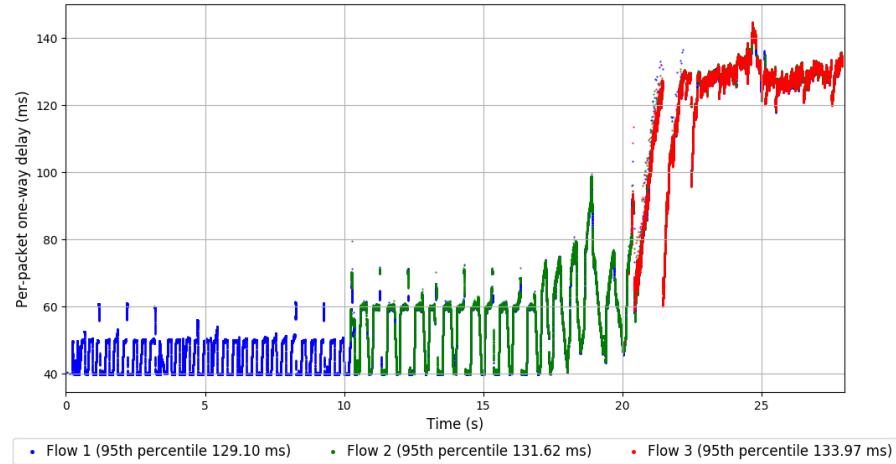
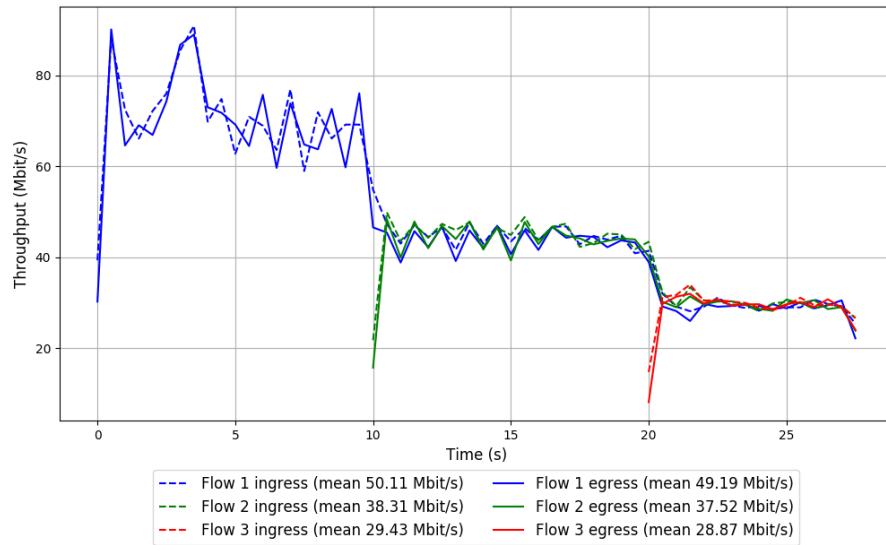


Run 6: Statistics of TaoVA-100x

```
Start at: 2018-01-17 00:54:23
End at: 2018-01-17 00:54:53
Local clock offset: -1.956 ms
Remote clock offset: -6.156 ms

# Below is generated by plot.py at 2018-01-17 06:57:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.28 Mbit/s
95th percentile per-packet one-way delay: 131.191 ms
Loss rate: 2.35%
-- Flow 1:
Average throughput: 49.19 Mbit/s
95th percentile per-packet one-way delay: 129.097 ms
Loss rate: 2.14%
-- Flow 2:
Average throughput: 37.52 Mbit/s
95th percentile per-packet one-way delay: 131.618 ms
Loss rate: 2.53%
-- Flow 3:
Average throughput: 28.87 Mbit/s
95th percentile per-packet one-way delay: 133.965 ms
Loss rate: 3.04%
```

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

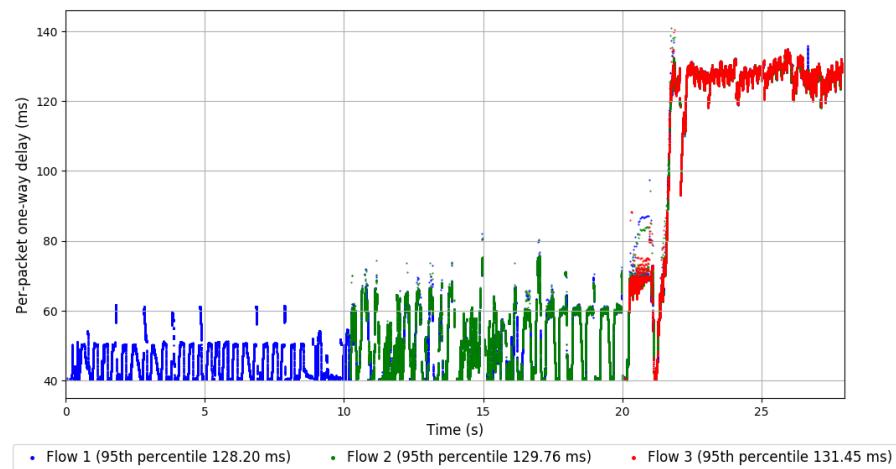
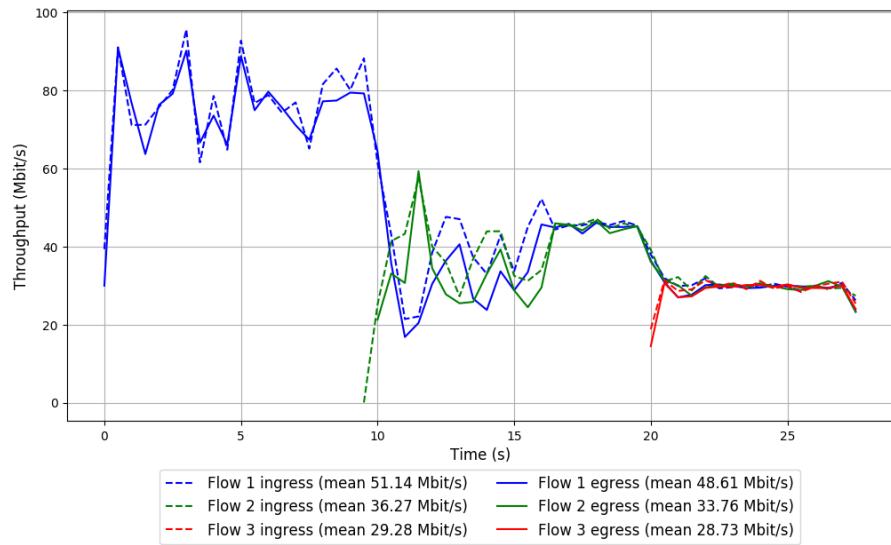


Run 7: Statistics of TaoVA-100x

```
Start at: 2018-01-17 01:17:40
End at: 2018-01-17 01:18:10
Local clock offset: -1.935 ms
Remote clock offset: -5.789 ms

# Below is generated by plot.py at 2018-01-17 06:57:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.32 Mbit/s
95th percentile per-packet one-way delay: 129.515 ms
Loss rate: 5.61%
-- Flow 1:
Average throughput: 48.61 Mbit/s
95th percentile per-packet one-way delay: 128.198 ms
Loss rate: 5.23%
-- Flow 2:
Average throughput: 33.76 Mbit/s
95th percentile per-packet one-way delay: 129.761 ms
Loss rate: 7.40%
-- Flow 3:
Average throughput: 28.73 Mbit/s
95th percentile per-packet one-way delay: 131.448 ms
Loss rate: 2.96%
```

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

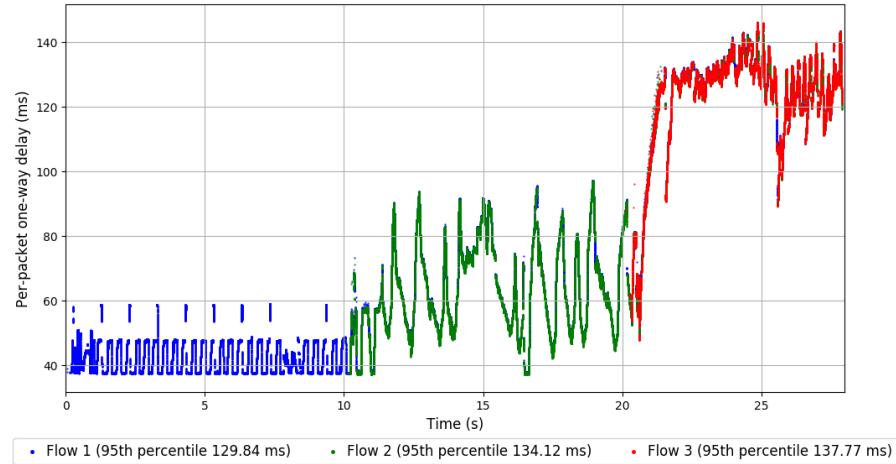
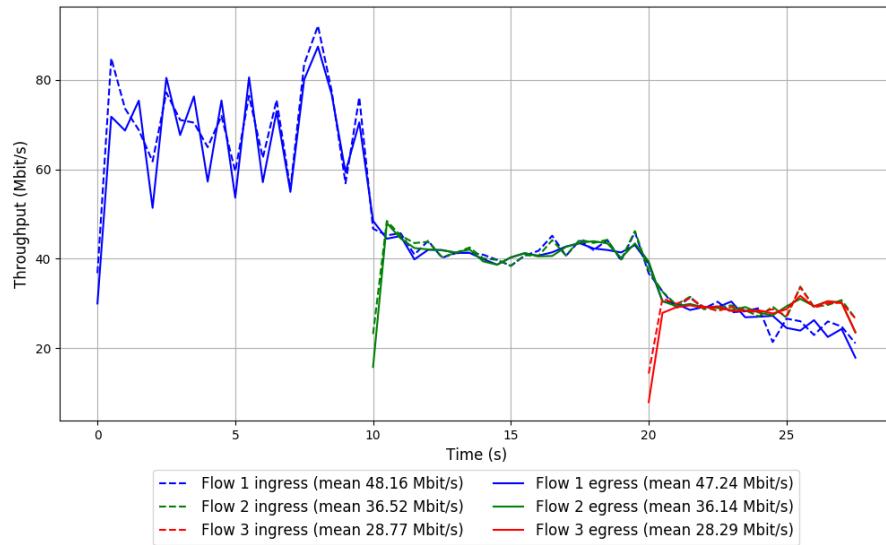


Run 8: Statistics of TaoVA-100x

```
Start at: 2018-01-17 01:40:56
End at: 2018-01-17 01:41:26
Local clock offset: -4.455 ms
Remote clock offset: -6.117 ms

# Below is generated by plot.py at 2018-01-17 06:57:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.16 Mbit/s
95th percentile per-packet one-way delay: 132.986 ms
Loss rate: 2.21%
-- Flow 1:
Average throughput: 47.24 Mbit/s
95th percentile per-packet one-way delay: 129.843 ms
Loss rate: 2.32%
-- Flow 2:
Average throughput: 36.14 Mbit/s
95th percentile per-packet one-way delay: 134.120 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 28.29 Mbit/s
95th percentile per-packet one-way delay: 137.766 ms
Loss rate: 3.40%
```

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

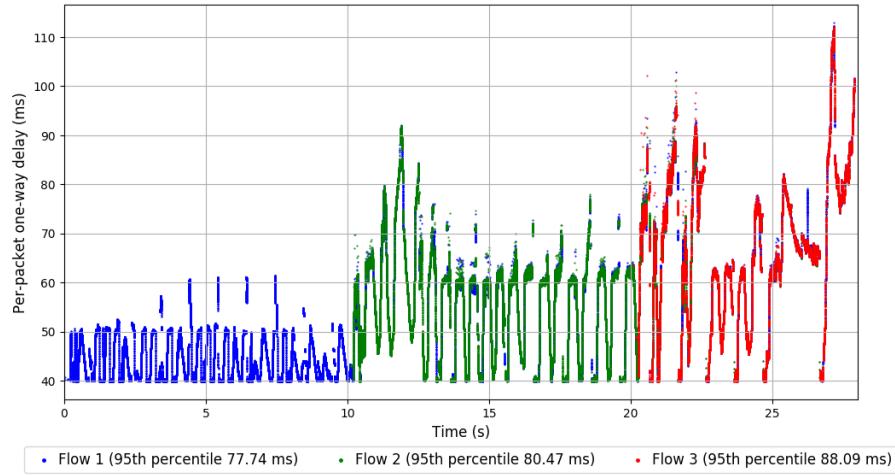
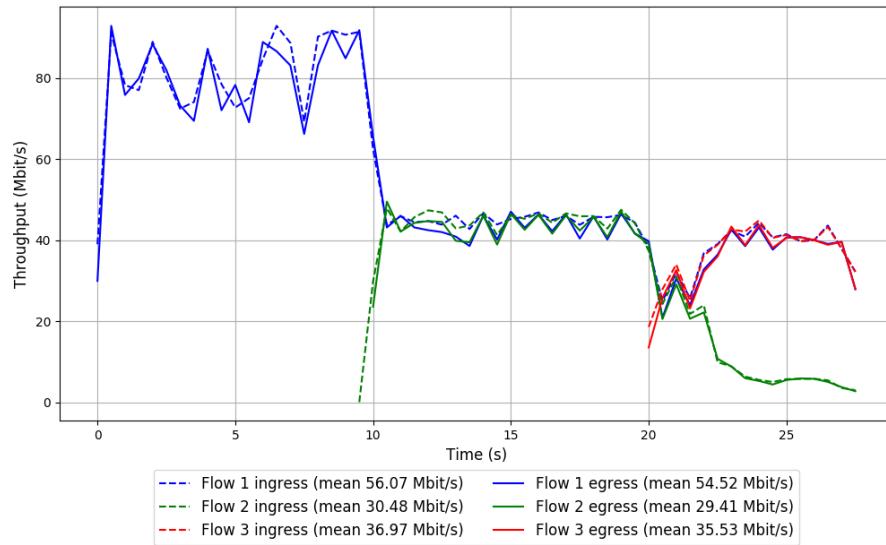


Run 9: Statistics of TaoVA-100x

```
Start at: 2018-01-17 02:04:08
End at: 2018-01-17 02:04:38
Local clock offset: -1.575 ms
Remote clock offset: -6.11 ms

# Below is generated by plot.py at 2018-01-17 06:59:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.32 Mbit/s
95th percentile per-packet one-way delay: 80.950 ms
Loss rate: 3.53%
-- Flow 1:
Average throughput: 54.52 Mbit/s
95th percentile per-packet one-way delay: 77.743 ms
Loss rate: 3.05%
-- Flow 2:
Average throughput: 29.41 Mbit/s
95th percentile per-packet one-way delay: 80.472 ms
Loss rate: 4.02%
-- Flow 3:
Average throughput: 35.53 Mbit/s
95th percentile per-packet one-way delay: 88.095 ms
Loss rate: 5.19%
```

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

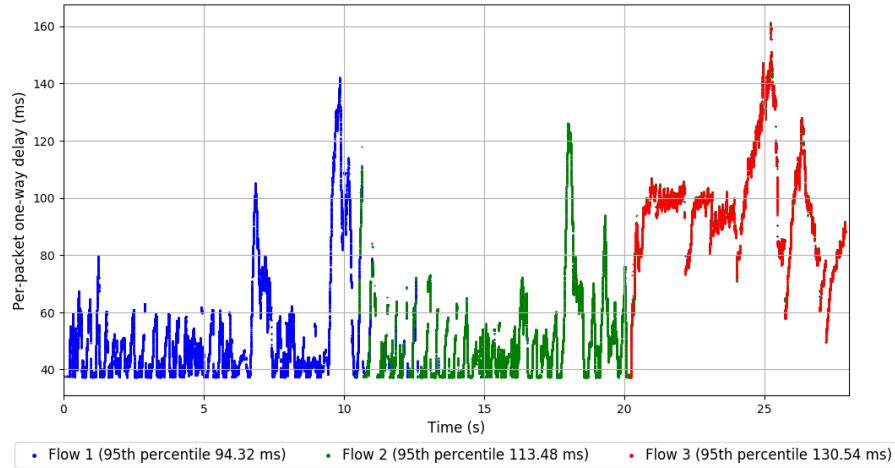
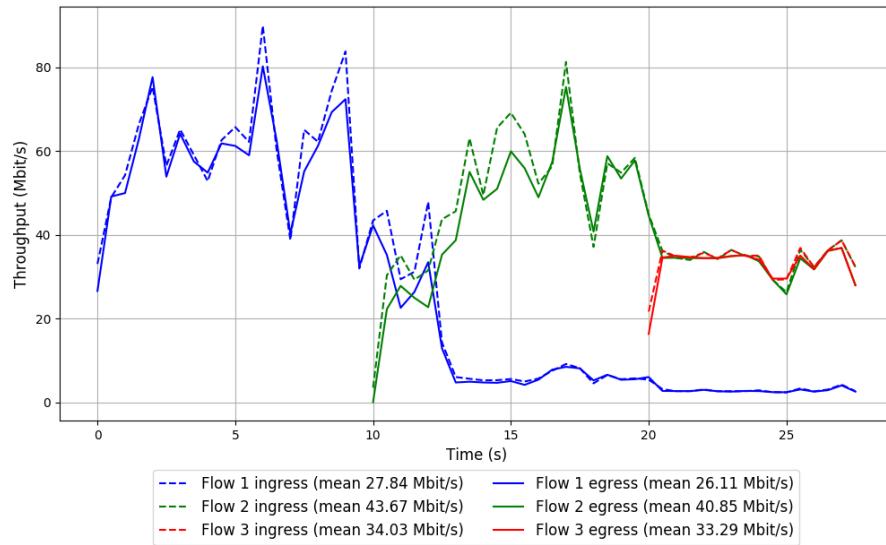


Run 10: Statistics of TaoVA-100x

```
Start at: 2018-01-17 02:28:48
End at: 2018-01-17 02:29:18
Local clock offset: -4.015 ms
Remote clock offset: -5.476 ms

# Below is generated by plot.py at 2018-01-17 06:59:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.20 Mbit/s
95th percentile per-packet one-way delay: 111.676 ms
Loss rate: 6.21%
-- Flow 1:
Average throughput: 26.11 Mbit/s
95th percentile per-packet one-way delay: 94.324 ms
Loss rate: 6.48%
-- Flow 2:
Average throughput: 40.85 Mbit/s
95th percentile per-packet one-way delay: 113.476 ms
Loss rate: 6.92%
-- Flow 3:
Average throughput: 33.29 Mbit/s
95th percentile per-packet one-way delay: 130.542 ms
Loss rate: 3.38%
```

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

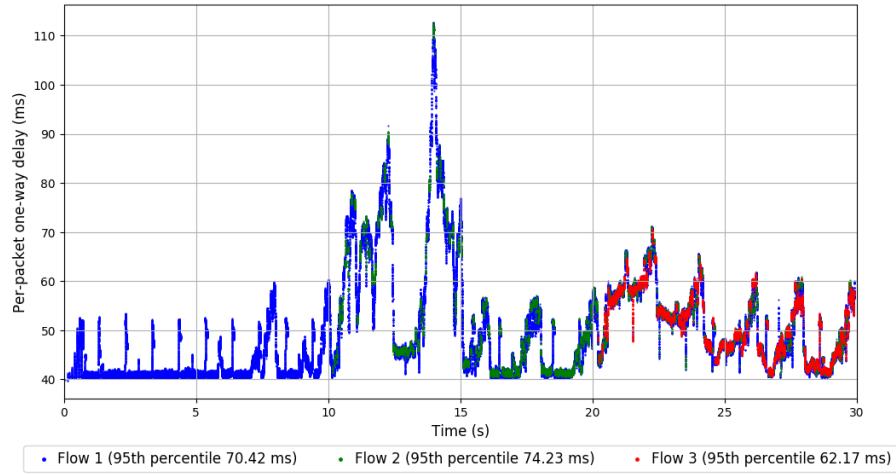
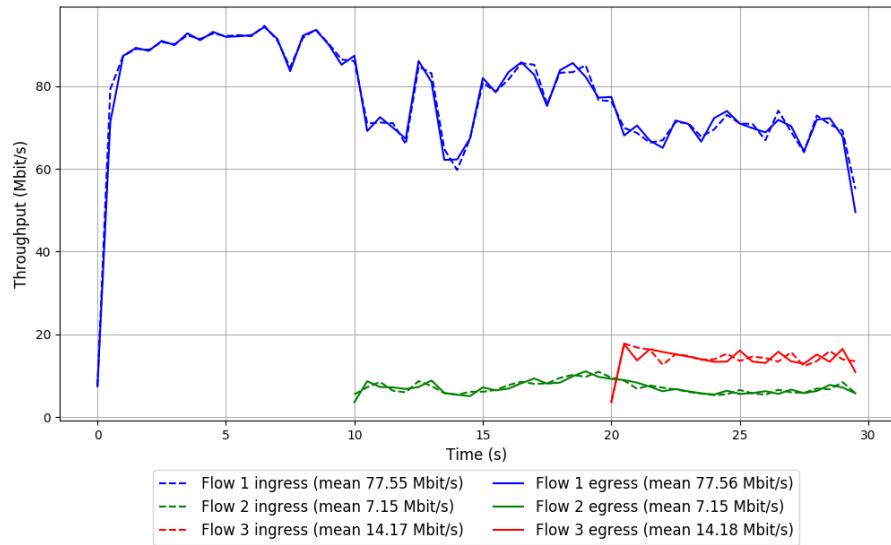


Run 1: Statistics of TCP Vegas

```
Start at: 2018-01-16 23:04:11
End at: 2018-01-16 23:04:41
Local clock offset: -0.988 ms
Remote clock offset: -6.834 ms

# Below is generated by plot.py at 2018-01-17 06:59:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.96 Mbit/s
95th percentile per-packet one-way delay: 70.274 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 77.56 Mbit/s
95th percentile per-packet one-way delay: 70.421 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 7.15 Mbit/s
95th percentile per-packet one-way delay: 74.235 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 14.18 Mbit/s
95th percentile per-packet one-way delay: 62.172 ms
Loss rate: 0.96%
```

Run 1: Report of TCP Vegas — Data Link

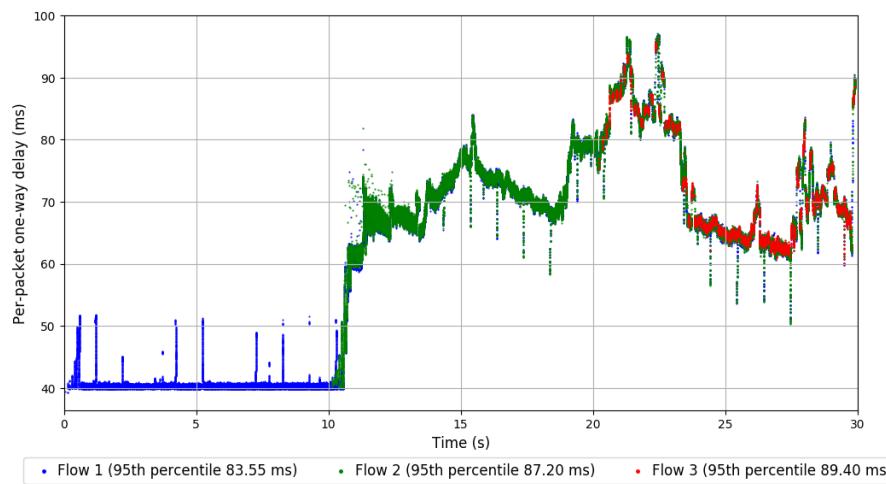
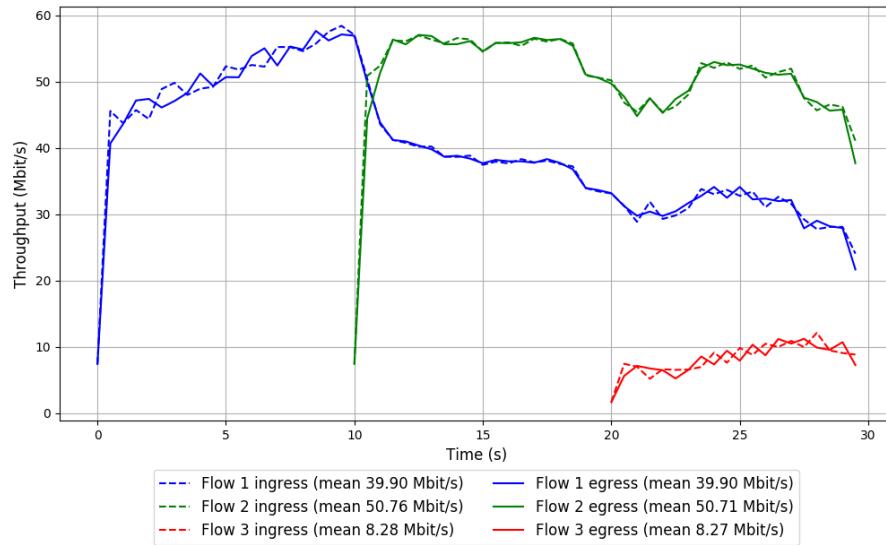


Run 2: Statistics of TCP Vegas

```
Start at: 2018-01-16 23:26:54
End at: 2018-01-16 23:27:24
Local clock offset: -1.455 ms
Remote clock offset: -5.643 ms

# Below is generated by plot.py at 2018-01-17 06:59:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.33 Mbit/s
95th percentile per-packet one-way delay: 86.000 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 39.90 Mbit/s
95th percentile per-packet one-way delay: 83.549 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 50.71 Mbit/s
95th percentile per-packet one-way delay: 87.203 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 89.400 ms
Loss rate: 1.35%
```

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

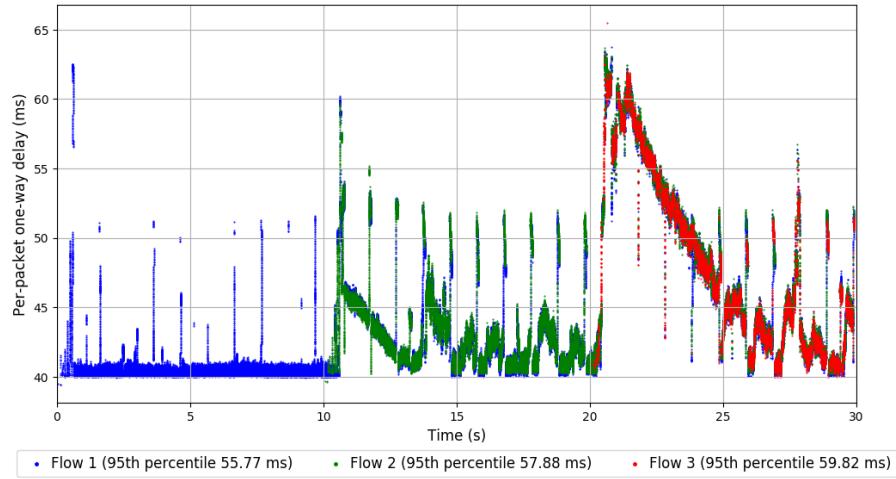
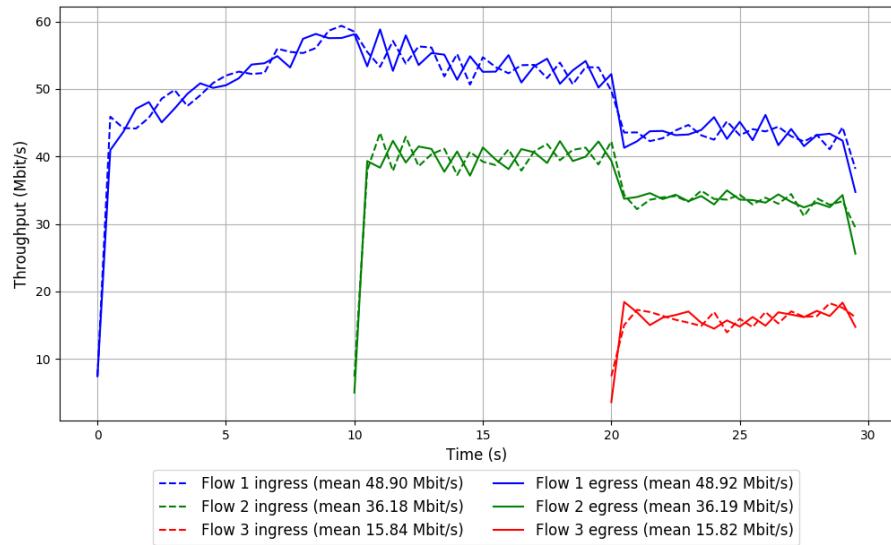


Run 3: Statistics of TCP Vegas

```
Start at: 2018-01-16 23:50:02
End at: 2018-01-16 23:50:32
Local clock offset: -1.37 ms
Remote clock offset: -5.03 ms

# Below is generated by plot.py at 2018-01-17 06:59:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.17 Mbit/s
95th percentile per-packet one-way delay: 57.208 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 48.92 Mbit/s
95th percentile per-packet one-way delay: 55.769 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 36.19 Mbit/s
95th percentile per-packet one-way delay: 57.884 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 15.82 Mbit/s
95th percentile per-packet one-way delay: 59.822 ms
Loss rate: 1.02%
```

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

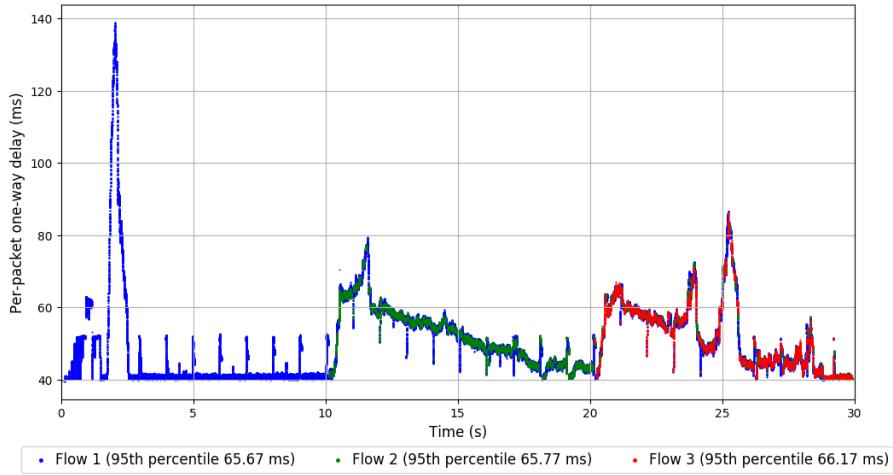
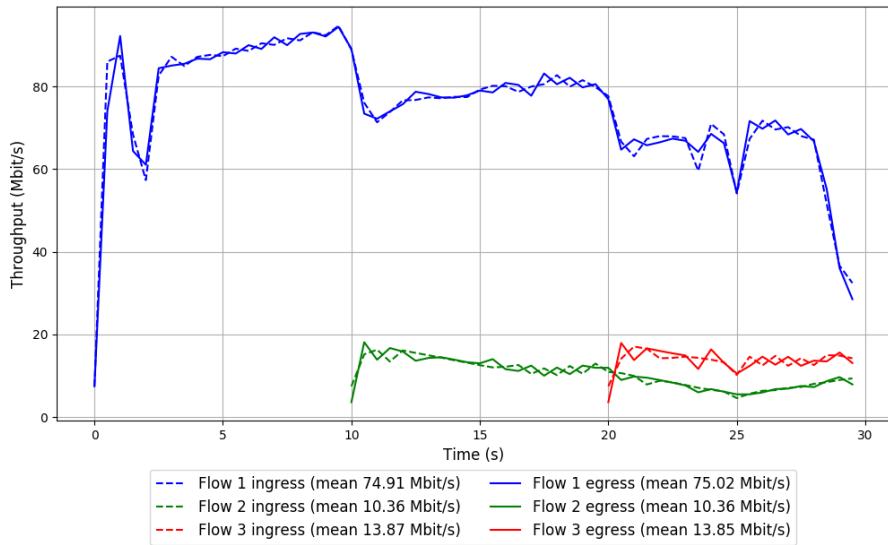


Run 4: Statistics of TCP Vegas

```
Start at: 2018-01-17 00:13:09
End at: 2018-01-17 00:13:39
Local clock offset: -1.367 ms
Remote clock offset: -6.177 ms

# Below is generated by plot.py at 2018-01-17 06:59:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.46 Mbit/s
95th percentile per-packet one-way delay: 65.732 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 75.02 Mbit/s
95th percentile per-packet one-way delay: 65.668 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 10.36 Mbit/s
95th percentile per-packet one-way delay: 65.769 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 13.85 Mbit/s
95th percentile per-packet one-way delay: 66.171 ms
Loss rate: 1.03%
```

Run 4: Report of TCP Vegas — Data Link

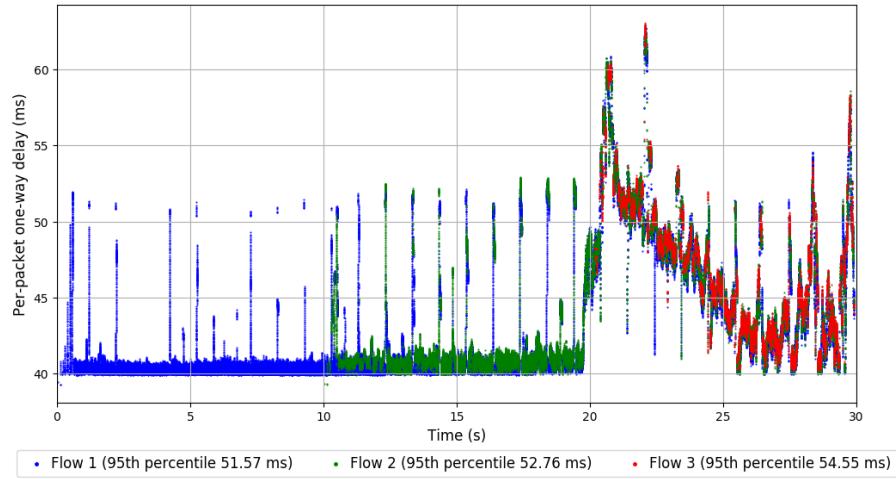
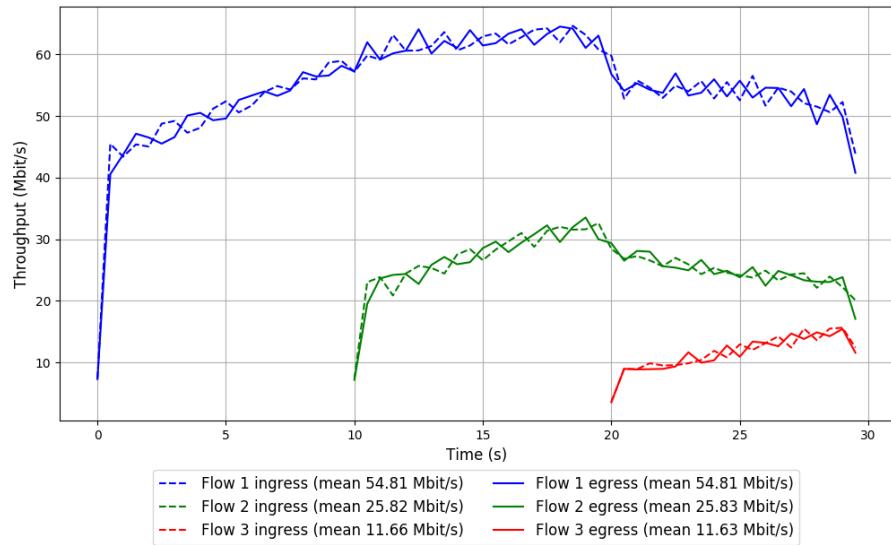


Run 5: Statistics of TCP Vegas

```
Start at: 2018-01-17 00:36:04
End at: 2018-01-17 00:36:34
Local clock offset: -1.696 ms
Remote clock offset: -6.513 ms

# Below is generated by plot.py at 2018-01-17 06:59:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.80 Mbit/s
95th percentile per-packet one-way delay: 52.040 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 54.81 Mbit/s
95th percentile per-packet one-way delay: 51.568 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 25.83 Mbit/s
95th percentile per-packet one-way delay: 52.759 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 11.63 Mbit/s
95th percentile per-packet one-way delay: 54.549 ms
Loss rate: 1.17%
```

Run 5: Report of TCP Vegas — Data Link

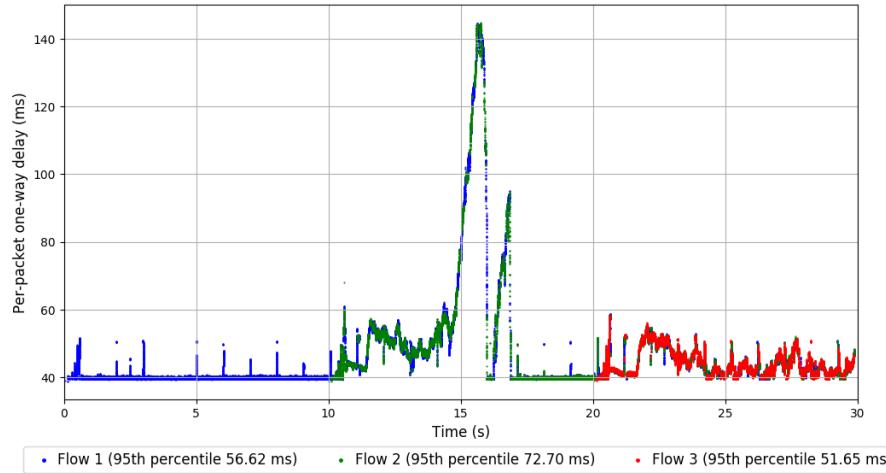
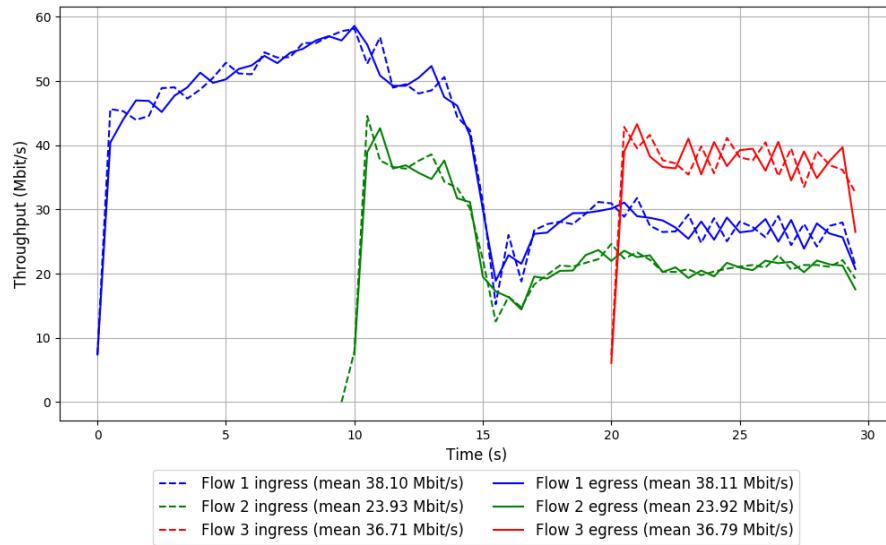


Run 6: Statistics of TCP Vegas

```
Start at: 2018-01-17 00:59:30
End at: 2018-01-17 01:00:00
Local clock offset: -2.388 ms
Remote clock offset: -6.003 ms

# Below is generated by plot.py at 2018-01-17 06:59:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.12 Mbit/s
95th percentile per-packet one-way delay: 56.483 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 38.11 Mbit/s
95th percentile per-packet one-way delay: 56.622 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 23.92 Mbit/s
95th percentile per-packet one-way delay: 72.697 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 36.79 Mbit/s
95th percentile per-packet one-way delay: 51.653 ms
Loss rate: 0.90%
```

Run 6: Report of TCP Vegas — Data Link

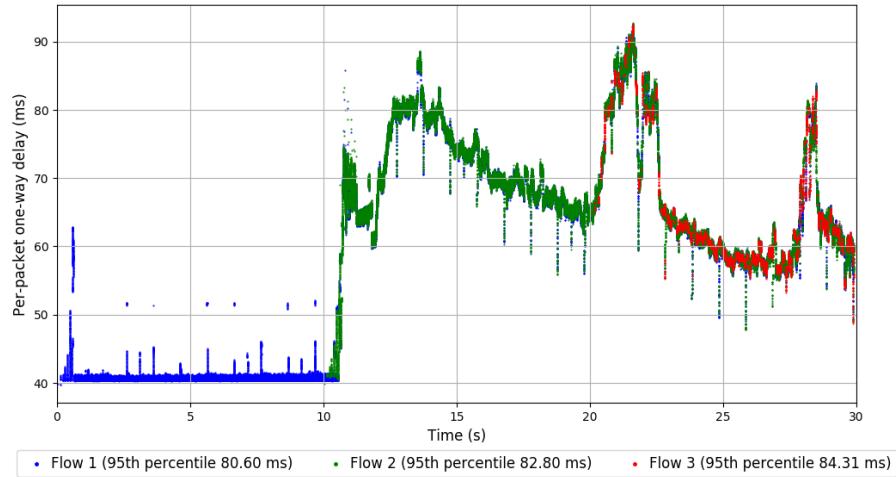
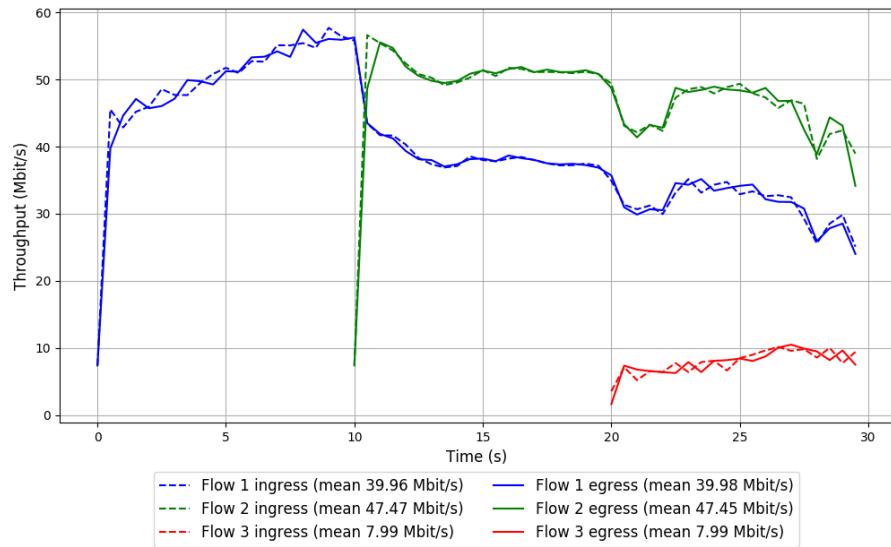


Run 7: Statistics of TCP Vegas

```
Start at: 2018-01-17 01:23:08
End at: 2018-01-17 01:23:38
Local clock offset: -1.849 ms
Remote clock offset: -5.907 ms

# Below is generated by plot.py at 2018-01-17 06:59:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.14 Mbit/s
95th percentile per-packet one-way delay: 81.606 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 39.98 Mbit/s
95th percentile per-packet one-way delay: 80.598 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 47.45 Mbit/s
95th percentile per-packet one-way delay: 82.802 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 84.313 ms
Loss rate: 1.23%
```

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

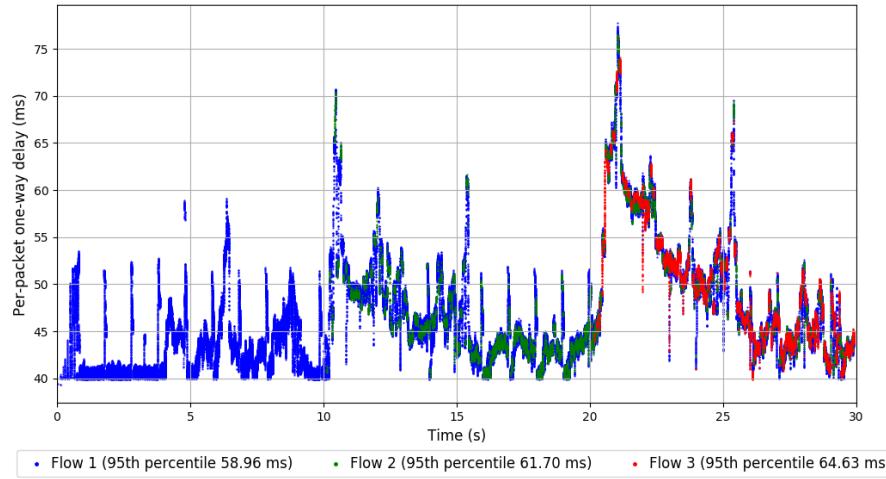
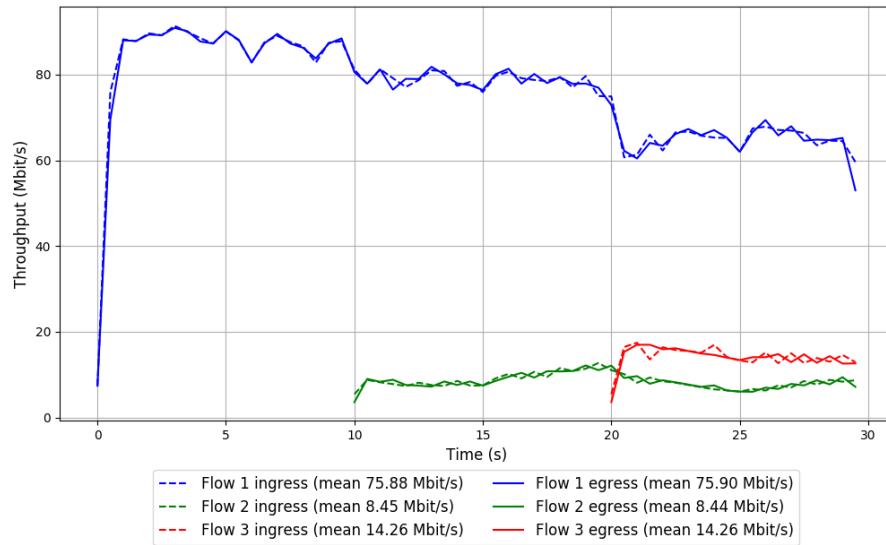


Run 8: Statistics of TCP Vegas

```
Start at: 2018-01-17 01:46:05
End at: 2018-01-17 01:46:35
Local clock offset: -1.757 ms
Remote clock offset: -6.066 ms

# Below is generated by plot.py at 2018-01-17 06:59:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.20 Mbit/s
95th percentile per-packet one-way delay: 59.562 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 75.90 Mbit/s
95th percentile per-packet one-way delay: 58.961 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 8.44 Mbit/s
95th percentile per-packet one-way delay: 61.705 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 14.26 Mbit/s
95th percentile per-packet one-way delay: 64.633 ms
Loss rate: 0.90%
```

Run 8: Report of TCP Vegas — Data Link

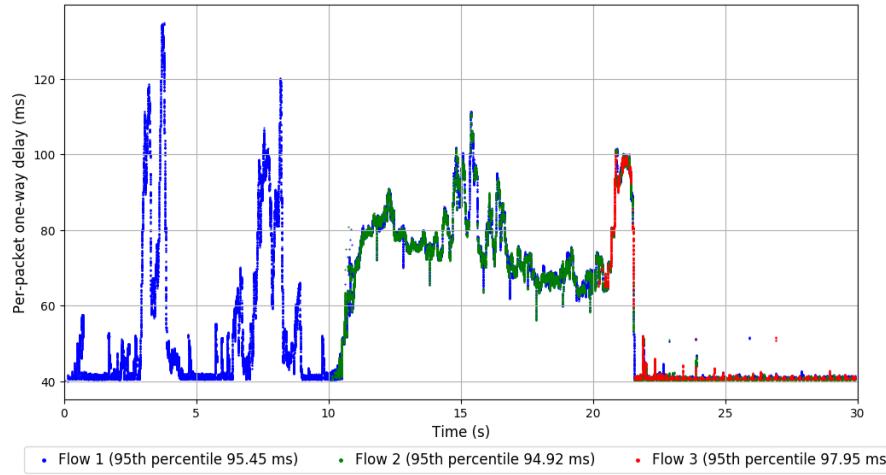
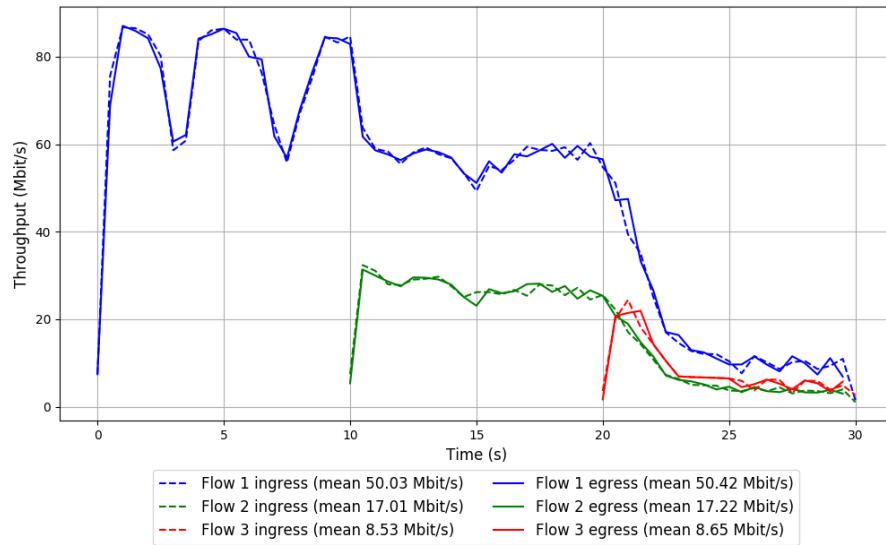


Run 9: Statistics of TCP Vegas

```
Start at: 2018-01-17 02:09:15
End at: 2018-01-17 02:09:45
Local clock offset: -1.19 ms
Remote clock offset: -5.943 ms

# Below is generated by plot.py at 2018-01-17 06:59:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.69 Mbit/s
95th percentile per-packet one-way delay: 95.837 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 50.42 Mbit/s
95th percentile per-packet one-way delay: 95.452 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 17.22 Mbit/s
95th percentile per-packet one-way delay: 94.917 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 8.65 Mbit/s
95th percentile per-packet one-way delay: 97.953 ms
Loss rate: 1.84%
```

Run 9: Report of TCP Vegas — Data Link

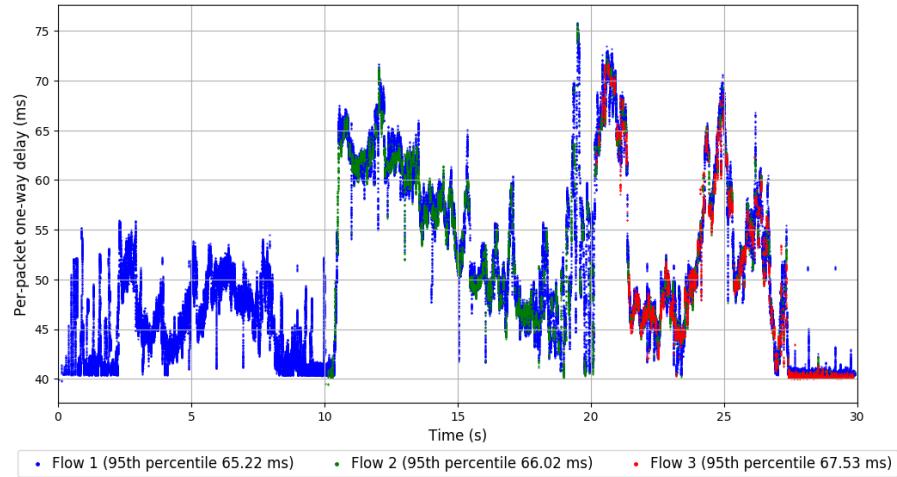
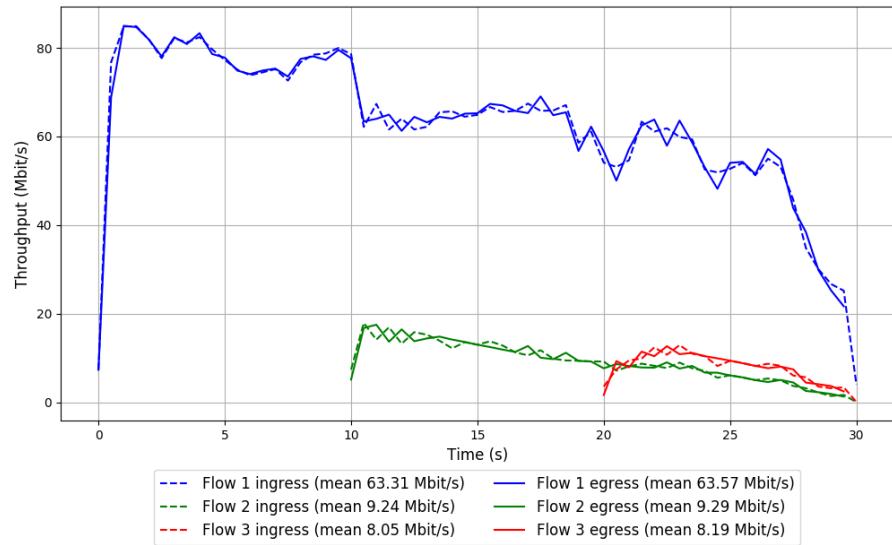


Run 10: Statistics of TCP Vegas

```
Start at: 2018-01-17 02:34:10
End at: 2018-01-17 02:34:40
Local clock offset: -0.871 ms
Remote clock offset: -5.211 ms

# Below is generated by plot.py at 2018-01-17 06:59:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.43 Mbit/s
95th percentile per-packet one-way delay: 65.464 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 63.57 Mbit/s
95th percentile per-packet one-way delay: 65.218 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 9.29 Mbit/s
95th percentile per-packet one-way delay: 66.015 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 67.531 ms
Loss rate: 0.74%
```

Run 10: Report of TCP Vegas — Data Link

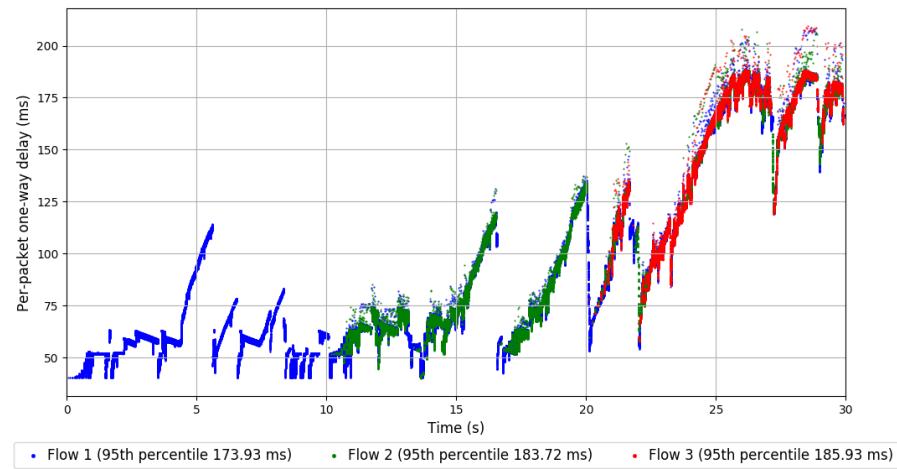
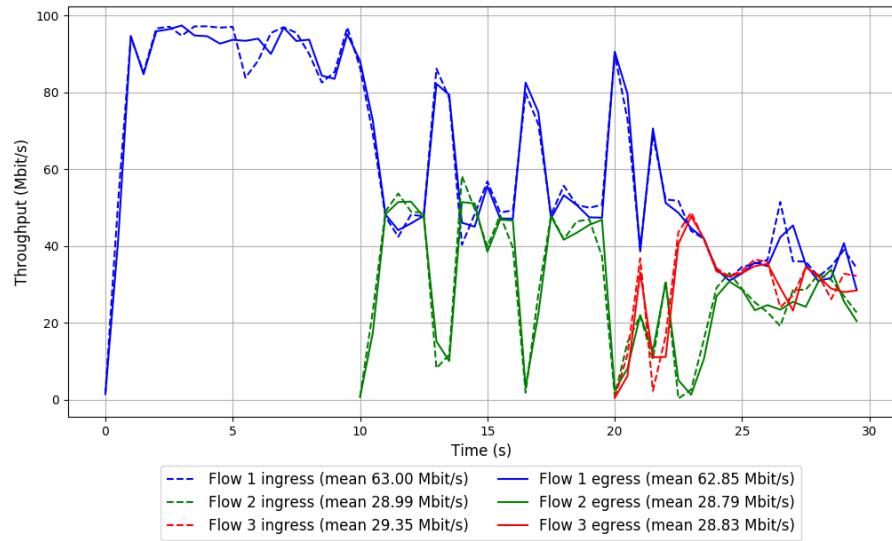


Run 1: Statistics of Verus

```
Start at: 2018-01-16 23:01:44
End at: 2018-01-16 23:02:14
Local clock offset: -1.361 ms
Remote clock offset: -6.923 ms

# Below is generated by plot.py at 2018-01-17 07:00:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.38 Mbit/s
95th percentile per-packet one-way delay: 181.295 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 62.85 Mbit/s
95th percentile per-packet one-way delay: 173.925 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 28.79 Mbit/s
95th percentile per-packet one-way delay: 183.725 ms
Loss rate: 1.51%
-- Flow 3:
Average throughput: 28.83 Mbit/s
95th percentile per-packet one-way delay: 185.934 ms
Loss rate: 3.17%
```

Run 1: Report of Verus — Data Link

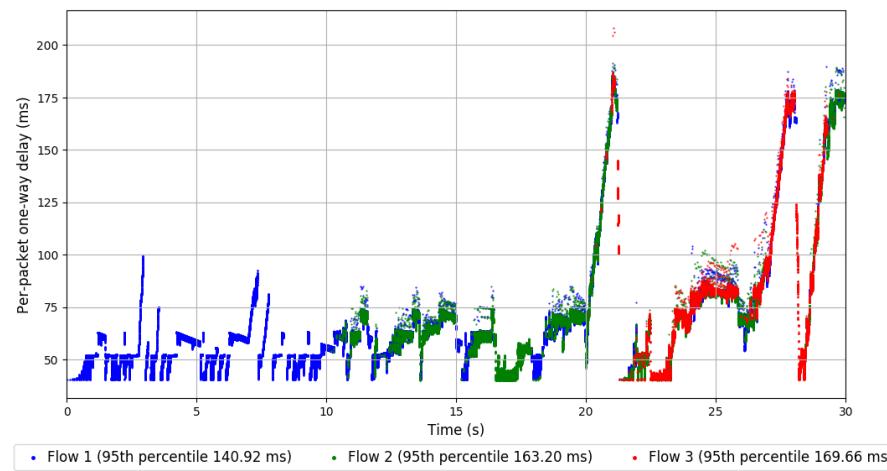
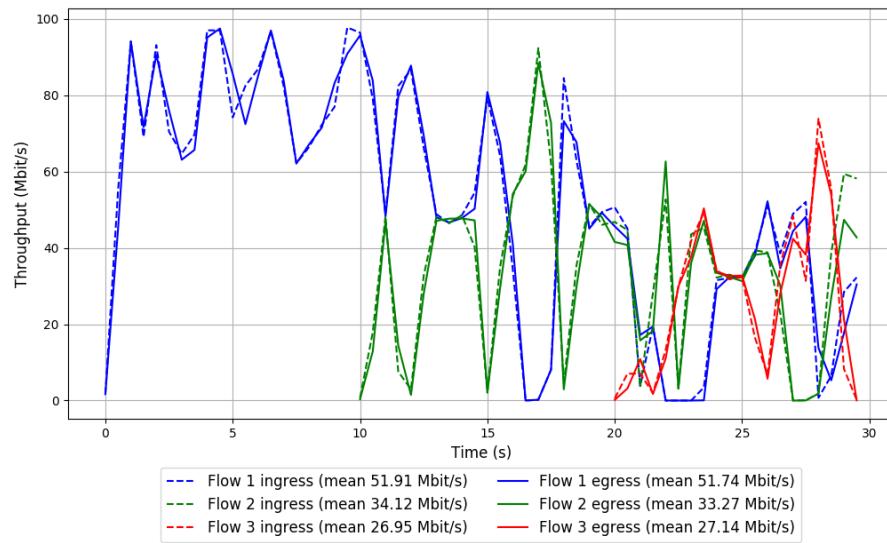


Run 2: Statistics of Verus

```
Start at: 2018-01-16 23:24:27
End at: 2018-01-16 23:24:57
Local clock offset: -1.214 ms
Remote clock offset: -5.743 ms

# Below is generated by plot.py at 2018-01-17 07:00:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.57 Mbit/s
95th percentile per-packet one-way delay: 159.575 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 51.74 Mbit/s
95th percentile per-packet one-way delay: 140.923 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 33.27 Mbit/s
95th percentile per-packet one-way delay: 163.202 ms
Loss rate: 3.02%
-- Flow 3:
Average throughput: 27.14 Mbit/s
95th percentile per-packet one-way delay: 169.655 ms
Loss rate: 0.58%
```

## Run 2: Report of Verus — Data Link

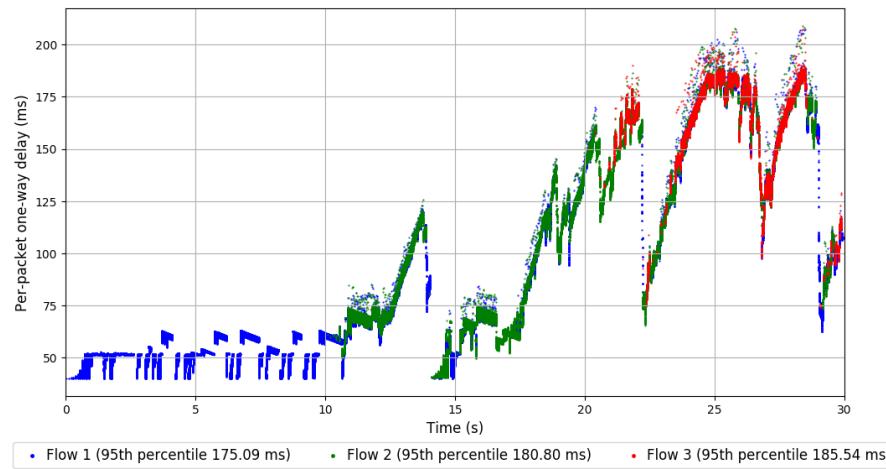
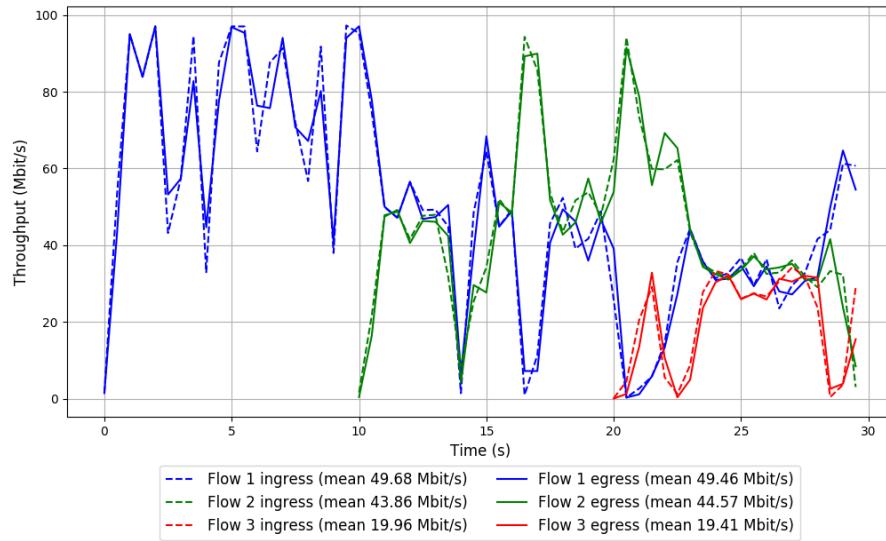


Run 3: Statistics of Verus

```
Start at: 2018-01-16 23:47:35
End at: 2018-01-16 23:48:05
Local clock offset: -1.371 ms
Remote clock offset: -5.172 ms

# Below is generated by plot.py at 2018-01-17 07:00:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.86 Mbit/s
95th percentile per-packet one-way delay: 181.053 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 49.46 Mbit/s
95th percentile per-packet one-way delay: 175.090 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 44.57 Mbit/s
95th percentile per-packet one-way delay: 180.799 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 19.41 Mbit/s
95th percentile per-packet one-way delay: 185.543 ms
Loss rate: 5.21%
```

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

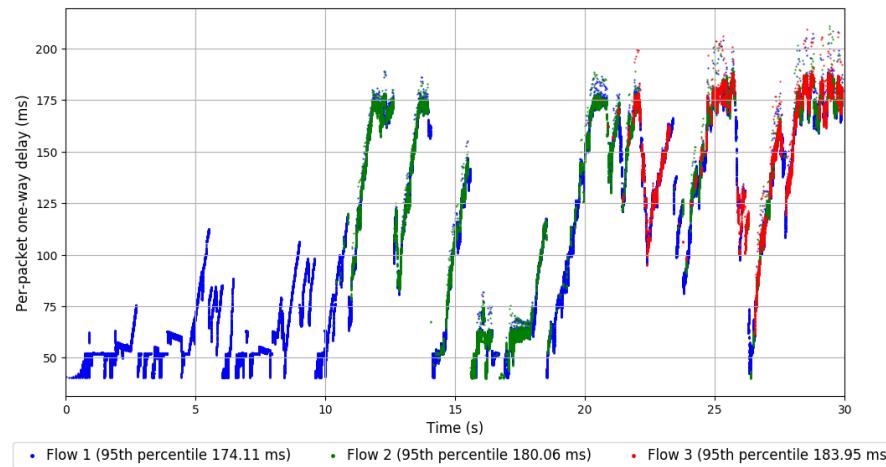
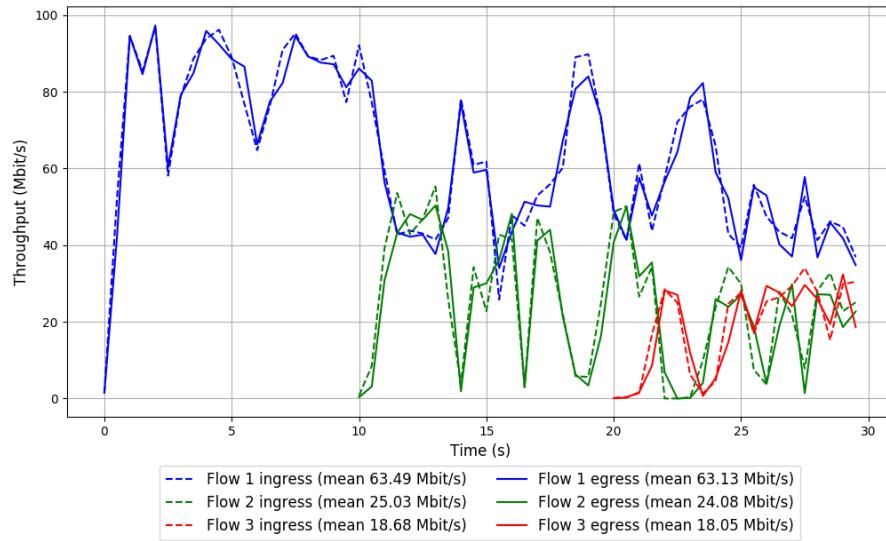


Run 4: Statistics of Verus

```
Start at: 2018-01-17 00:10:28
End at: 2018-01-17 00:10:58
Local clock offset: -1.32 ms
Remote clock offset: -5.923 ms

# Below is generated by plot.py at 2018-01-17 07:00:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.98 Mbit/s
95th percentile per-packet one-way delay: 177.387 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 63.13 Mbit/s
95th percentile per-packet one-way delay: 174.111 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 24.08 Mbit/s
95th percentile per-packet one-way delay: 180.055 ms
Loss rate: 4.38%
-- Flow 3:
Average throughput: 18.05 Mbit/s
95th percentile per-packet one-way delay: 183.947 ms
Loss rate: 5.70%
```

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-17 00:33:43

End at: 2018-01-17 00:34:13

Local clock offset: -1.806 ms

Remote clock offset: -6.56 ms

Run 5: Report of Verus — Data Link

Figure is missing

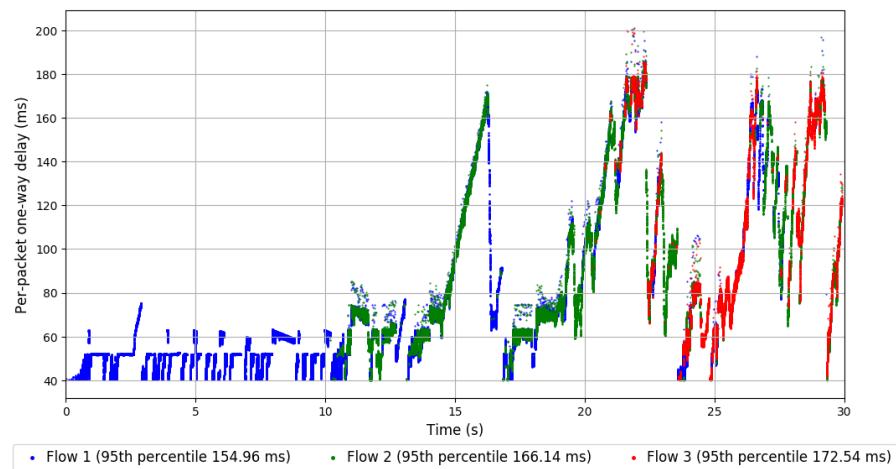
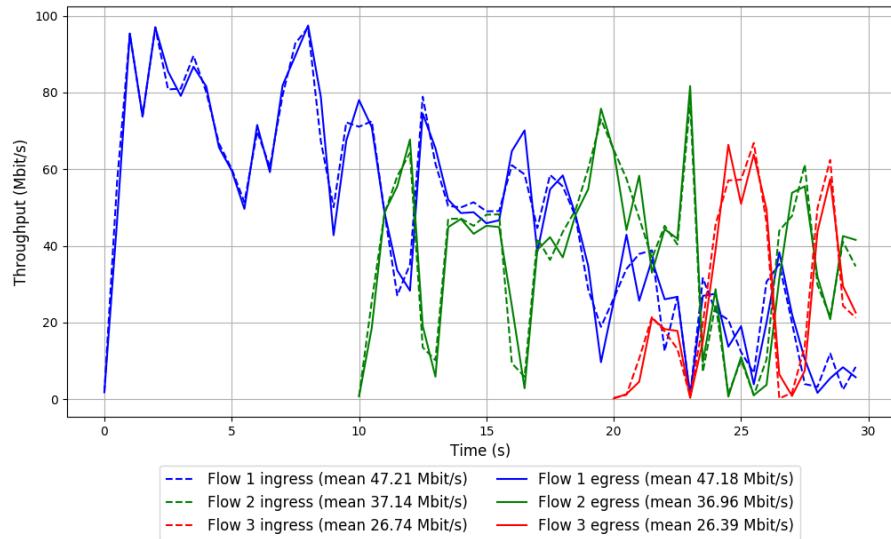
Figure is missing

Run 6: Statistics of Verus

```
Start at: 2018-01-17 00:57:03
End at: 2018-01-17 00:57:33
Local clock offset: -1.704 ms
Remote clock offset: -6.106 ms

# Below is generated by plot.py at 2018-01-17 07:00:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.35 Mbit/s
95th percentile per-packet one-way delay: 163.592 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 47.18 Mbit/s
95th percentile per-packet one-way delay: 154.956 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 36.96 Mbit/s
95th percentile per-packet one-way delay: 166.140 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 26.39 Mbit/s
95th percentile per-packet one-way delay: 172.545 ms
Loss rate: 2.77%
```

## Run 6: Report of Verus — Data Link

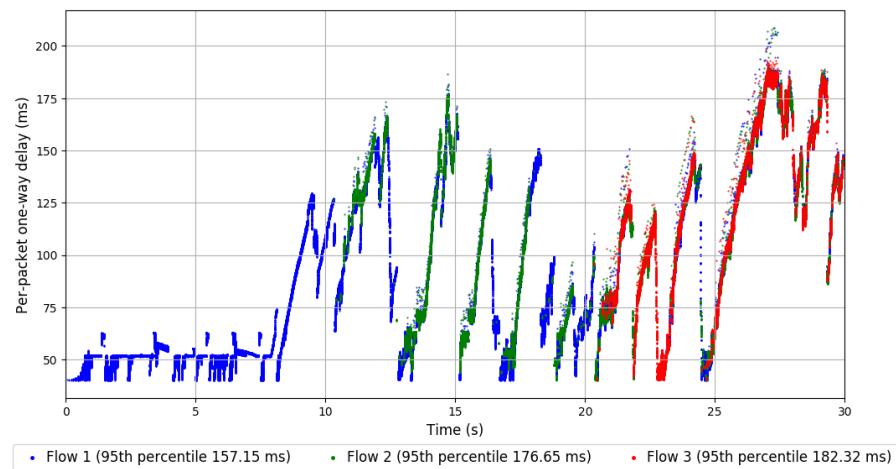
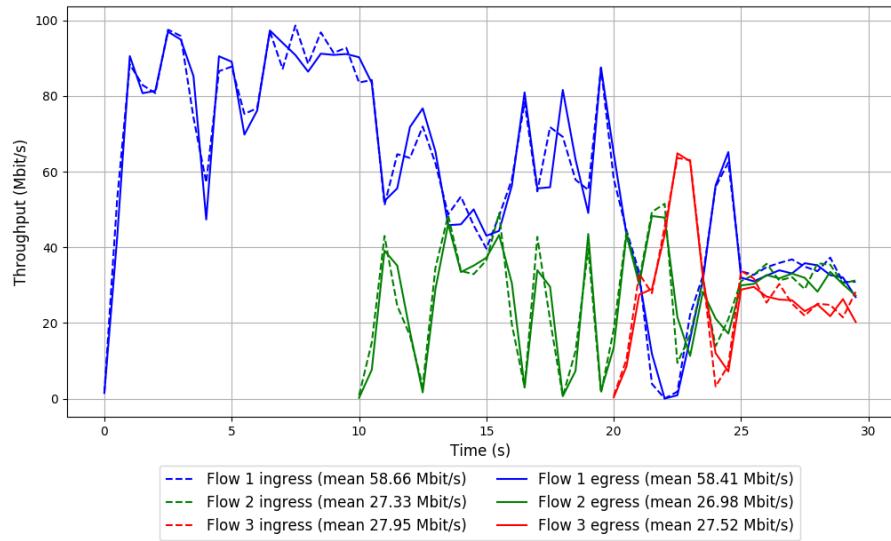


Run 7: Statistics of Verus

```
Start at: 2018-01-17 01:20:16
End at: 2018-01-17 01:20:46
Local clock offset: -1.815 ms
Remote clock offset: -5.899 ms

# Below is generated by plot.py at 2018-01-17 07:01:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.34 Mbit/s
95th percentile per-packet one-way delay: 169.257 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 58.41 Mbit/s
95th percentile per-packet one-way delay: 157.148 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 26.98 Mbit/s
95th percentile per-packet one-way delay: 176.646 ms
Loss rate: 2.08%
-- Flow 3:
Average throughput: 27.52 Mbit/s
95th percentile per-packet one-way delay: 182.319 ms
Loss rate: 2.79%
```

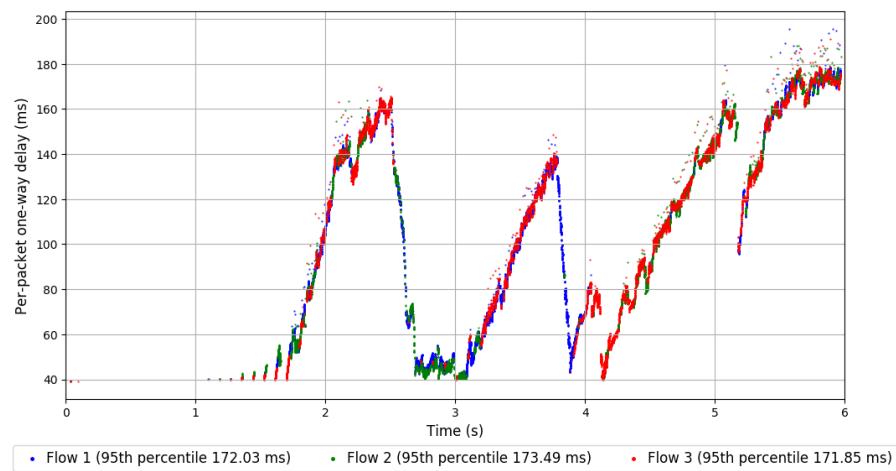
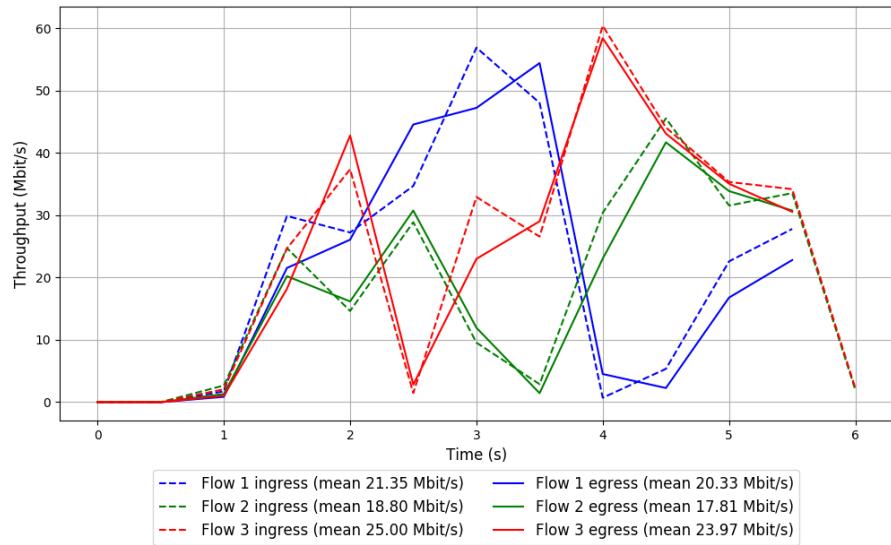
Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-17 01:43:43  
End at: 2018-01-17 01:44:13  
Local clock offset: -1.941 ms  
Remote clock offset: -6.103 ms

## Run 8: Report of Verus — Data Link

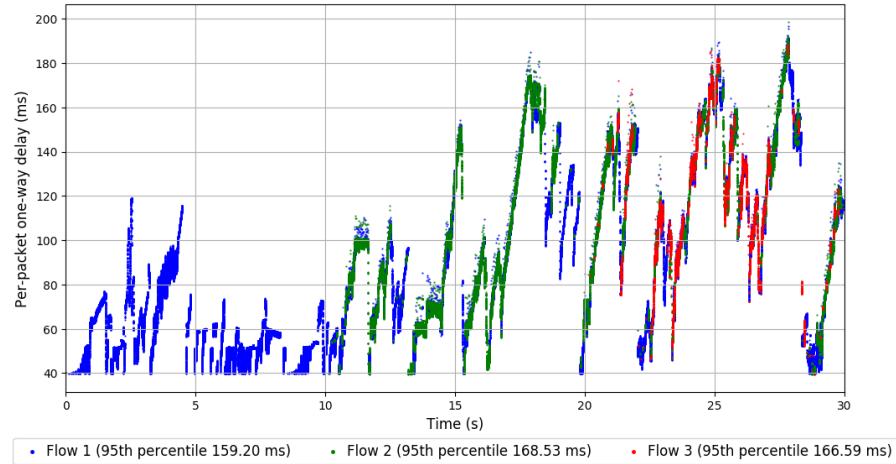
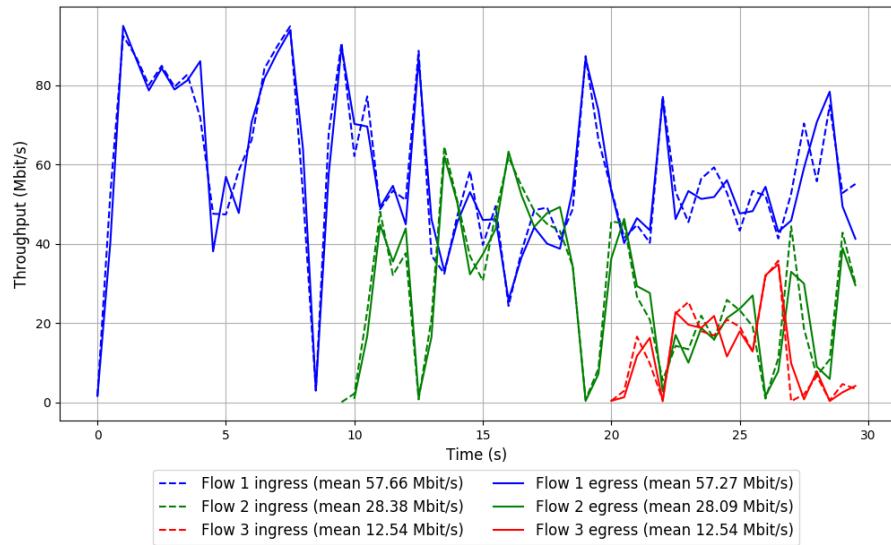


Run 9: Statistics of Verus

```
Start at: 2018-01-17 02:06:47
End at: 2018-01-17 02:07:17
Local clock offset: -2.068 ms
Remote clock offset: -6.098 ms

# Below is generated by plot.py at 2018-01-17 07:01:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.05 Mbit/s
95th percentile per-packet one-way delay: 163.621 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 57.27 Mbit/s
95th percentile per-packet one-way delay: 159.196 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 28.09 Mbit/s
95th percentile per-packet one-way delay: 168.534 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 12.54 Mbit/s
95th percentile per-packet one-way delay: 166.592 ms
Loss rate: 1.24%
```

Run 9: Report of Verus — Data Link

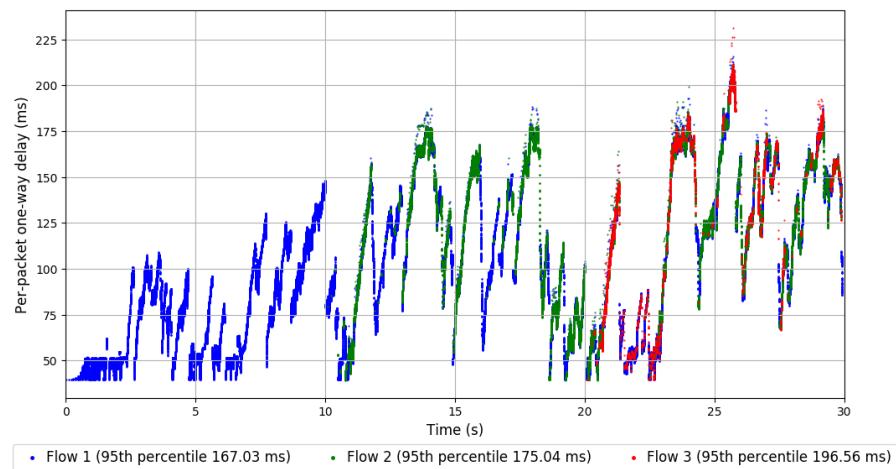
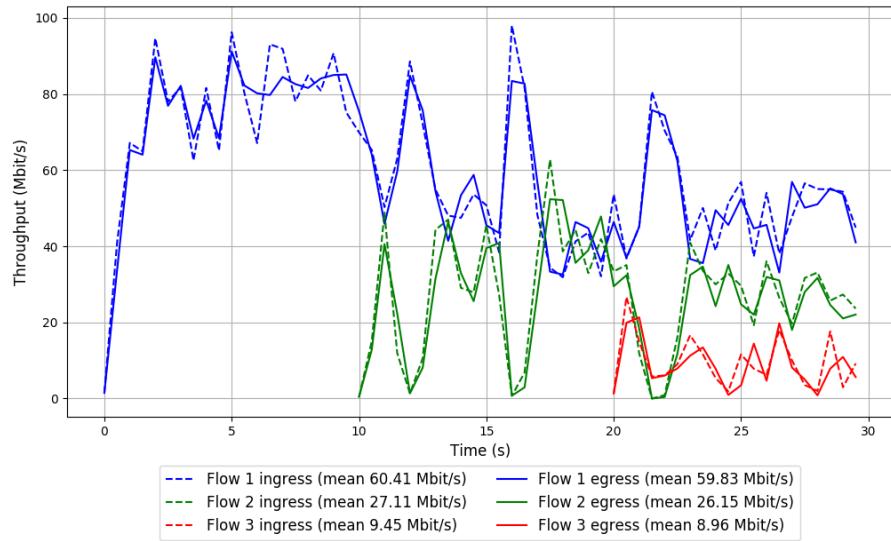


Run 10: Statistics of Verus

```
Start at: 2018-01-17 02:31:37
End at: 2018-01-17 02:32:07
Local clock offset: -1.659 ms
Remote clock offset: -5.34 ms

# Below is generated by plot.py at 2018-01-17 07:01:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.09 Mbit/s
95th percentile per-packet one-way delay: 171.088 ms
Loss rate: 2.18%
-- Flow 1:
Average throughput: 59.83 Mbit/s
95th percentile per-packet one-way delay: 167.030 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 26.15 Mbit/s
95th percentile per-packet one-way delay: 175.039 ms
Loss rate: 4.40%
-- Flow 3:
Average throughput: 8.96 Mbit/s
95th percentile per-packet one-way delay: 196.564 ms
Loss rate: 6.55%
```

Run 10: Report of Verus — Data Link

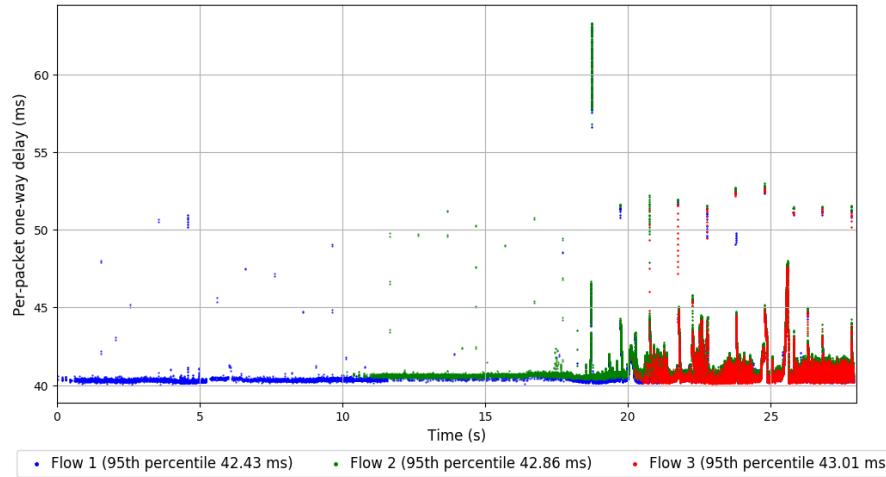
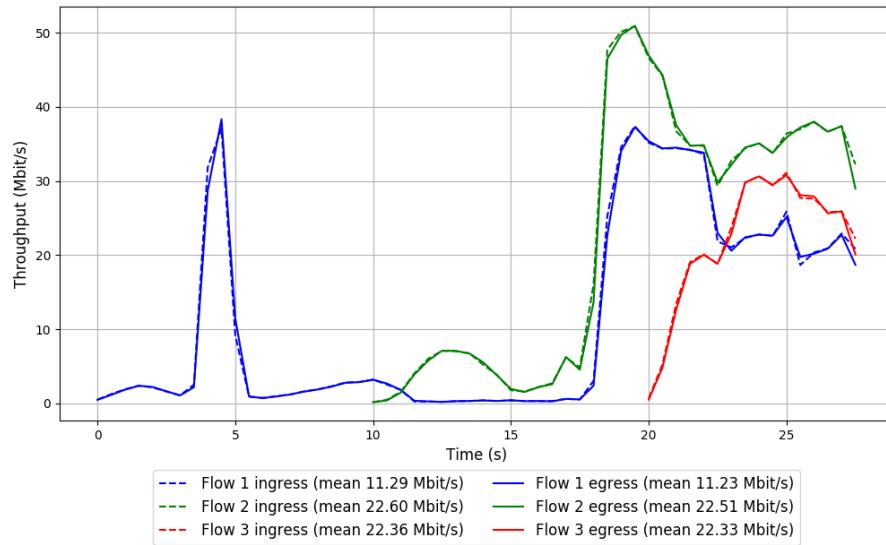


Run 1: Statistics of Copa

```
Start at: 2018-01-16 23:00:30
End at: 2018-01-16 23:01:00
Local clock offset: -1.08 ms
Remote clock offset: -7.024 ms

# Below is generated by plot.py at 2018-01-17 07:01:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.80 Mbit/s
95th percentile per-packet one-way delay: 42.746 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 11.23 Mbit/s
95th percentile per-packet one-way delay: 42.428 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 22.51 Mbit/s
95th percentile per-packet one-way delay: 42.861 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 22.33 Mbit/s
95th percentile per-packet one-way delay: 43.008 ms
Loss rate: 1.23%
```

## Run 1: Report of Copa — Data Link

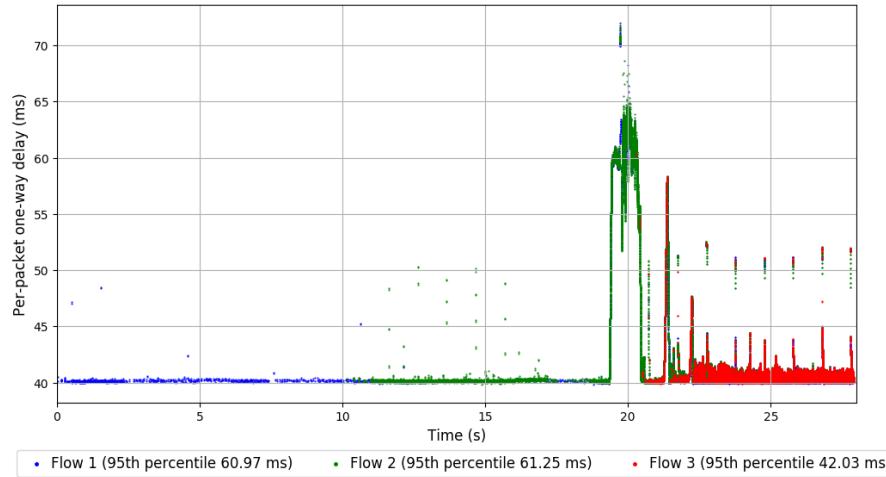
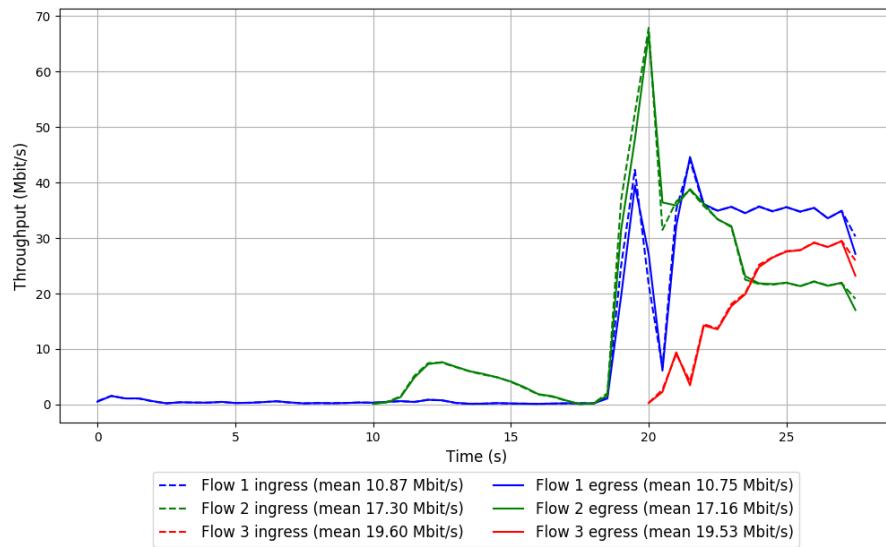


Run 2: Statistics of Copa

```
Start at: 2018-01-16 23:23:14
End at: 2018-01-16 23:23:44
Local clock offset: -1.523 ms
Remote clock offset: -5.804 ms

# Below is generated by plot.py at 2018-01-17 07:01:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.02 Mbit/s
95th percentile per-packet one-way delay: 60.583 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 10.75 Mbit/s
95th percentile per-packet one-way delay: 60.968 ms
Loss rate: 1.44%
-- Flow 2:
Average throughput: 17.16 Mbit/s
95th percentile per-packet one-way delay: 61.253 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 19.53 Mbit/s
95th percentile per-packet one-way delay: 42.033 ms
Loss rate: 1.70%
```

## Run 2: Report of Copa — Data Link

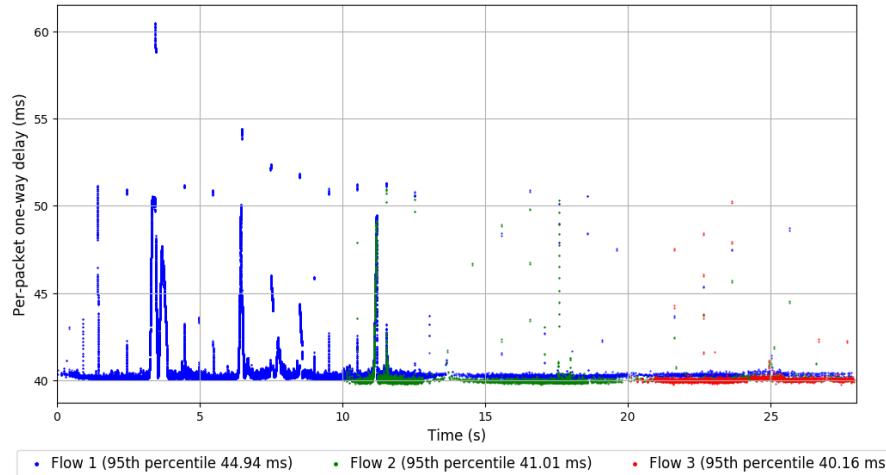
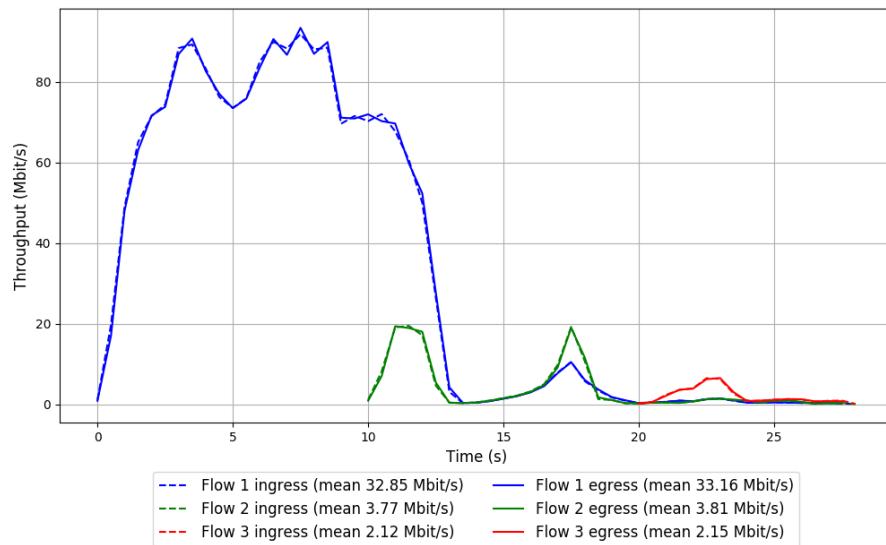


Run 3: Statistics of Copa

```
Start at: 2018-01-16 23:46:18
End at: 2018-01-16 23:46:48
Local clock offset: -1.485 ms
Remote clock offset: -5.076 ms

# Below is generated by plot.py at 2018-01-17 07:01:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.11 Mbit/s
95th percentile per-packet one-way delay: 44.745 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 33.16 Mbit/s
95th percentile per-packet one-way delay: 44.944 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 41.014 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 40.165 ms
Loss rate: 0.99%
```

### Run 3: Report of Copa — Data Link

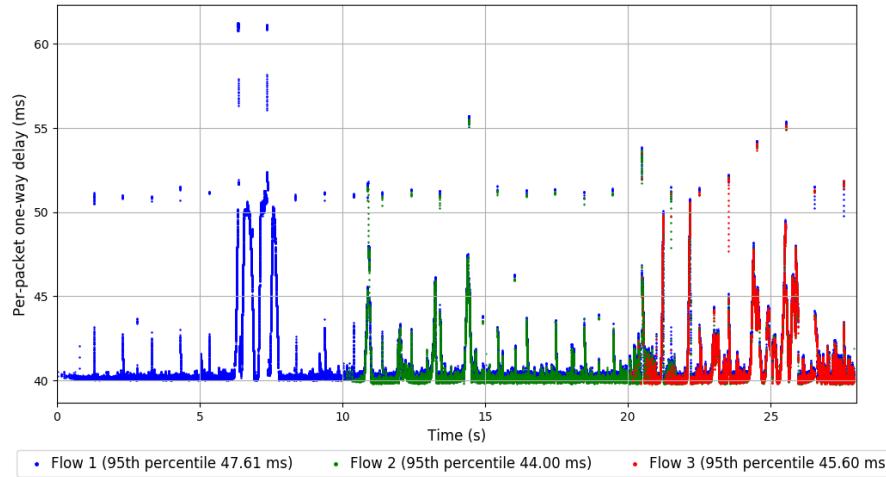
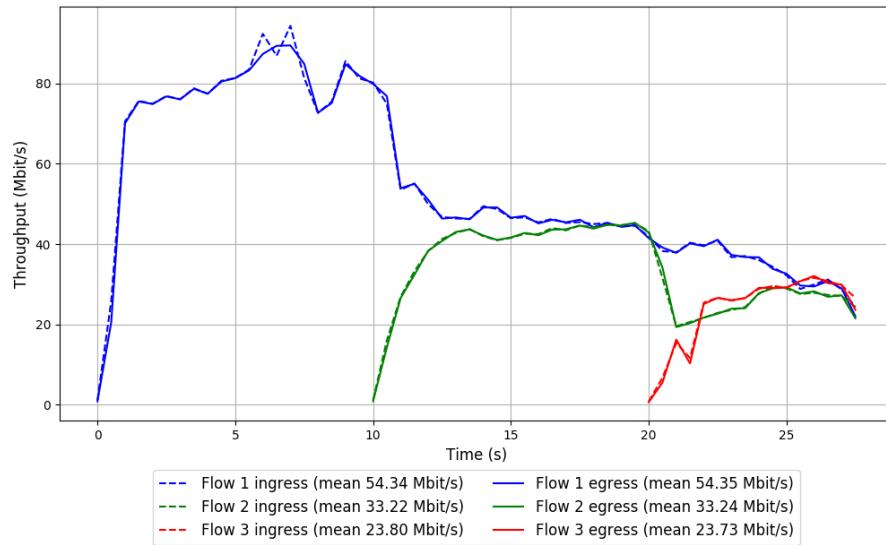


Run 4: Statistics of Copa

```
Start at: 2018-01-17 00:09:10
End at: 2018-01-17 00:09:40
Local clock offset: -1.592 ms
Remote clock offset: -5.832 ms

# Below is generated by plot.py at 2018-01-17 07:02:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.31 Mbit/s
95th percentile per-packet one-way delay: 45.865 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 54.35 Mbit/s
95th percentile per-packet one-way delay: 47.608 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 33.24 Mbit/s
95th percentile per-packet one-way delay: 44.003 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 23.73 Mbit/s
95th percentile per-packet one-way delay: 45.605 ms
Loss rate: 1.39%
```

Run 4: Report of Copa — Data Link

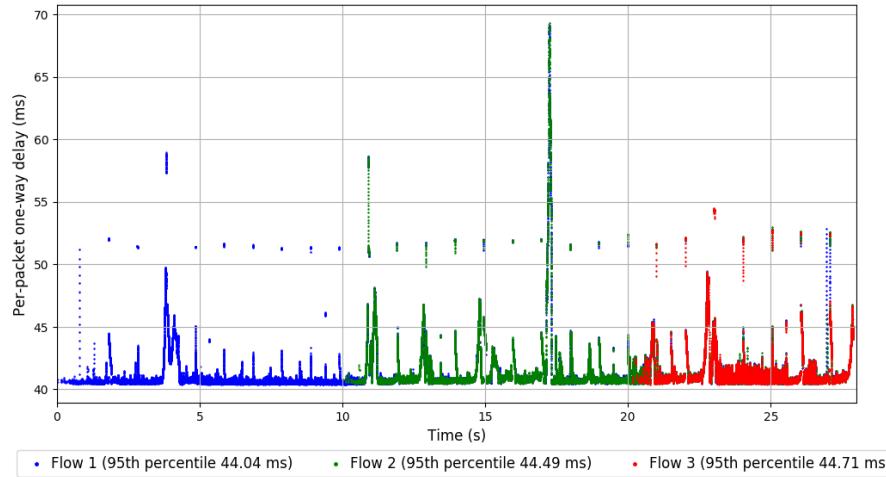
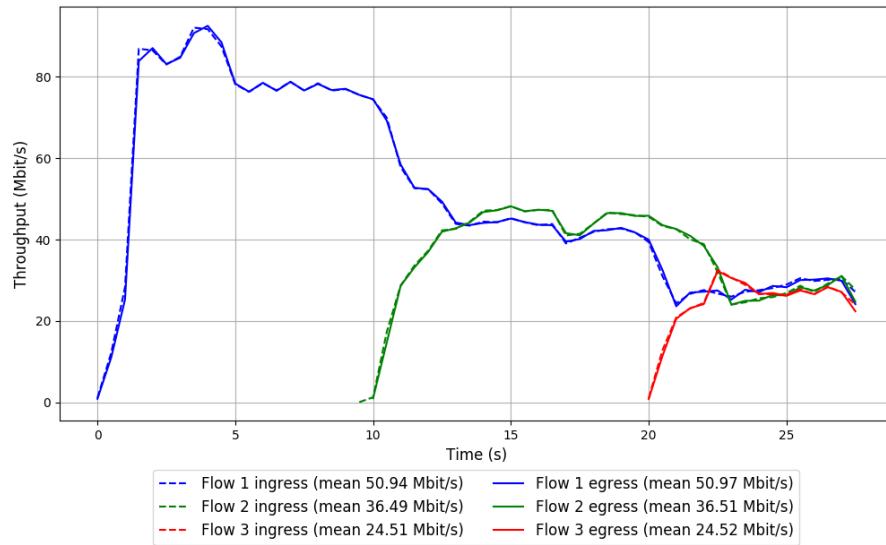


Run 5: Statistics of Copa

```
Start at: 2018-01-17 00:32:25
End at: 2018-01-17 00:32:55
Local clock offset: -1.509 ms
Remote clock offset: -6.711 ms

# Below is generated by plot.py at 2018-01-17 07:02:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.26 Mbit/s
95th percentile per-packet one-way delay: 44.244 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 50.97 Mbit/s
95th percentile per-packet one-way delay: 44.041 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 36.51 Mbit/s
95th percentile per-packet one-way delay: 44.486 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 24.52 Mbit/s
95th percentile per-packet one-way delay: 44.712 ms
Loss rate: 1.04%
```

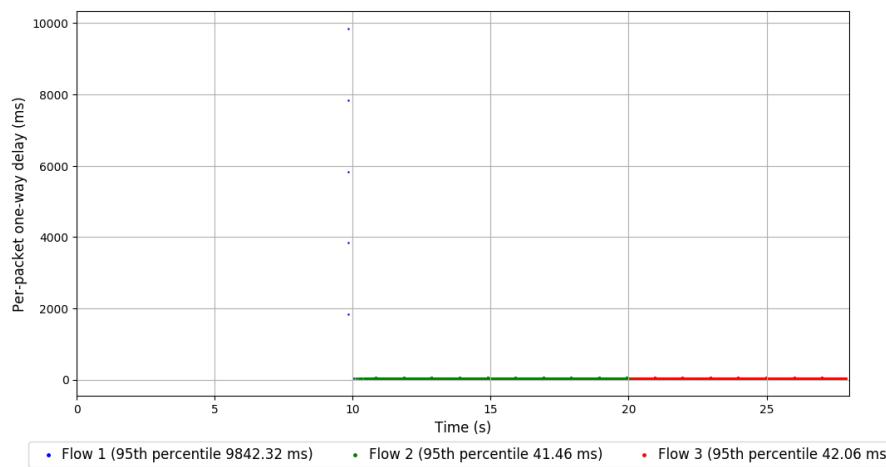
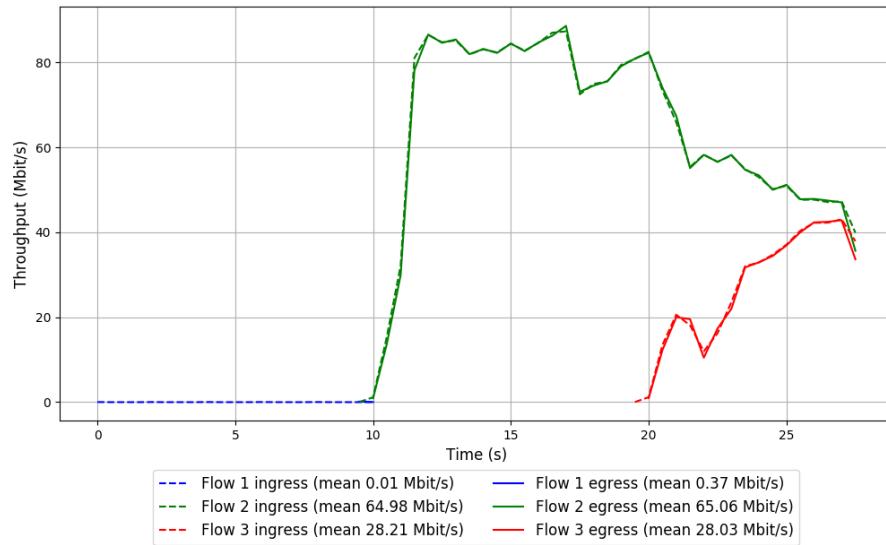
## Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-17 00:55:47  
End at: 2018-01-17 00:56:17  
Local clock offset: -1.501 ms  
Remote clock offset: -6.188 ms

## Run 6: Report of Copa — Data Link

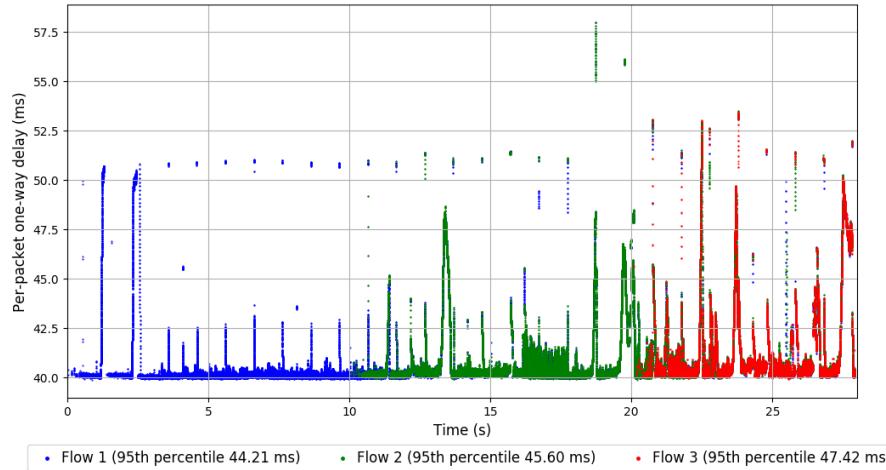
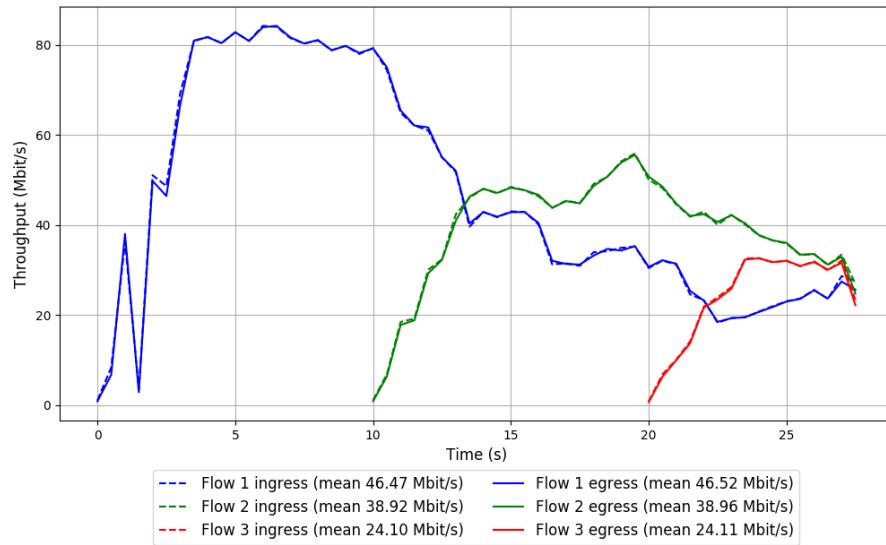


Run 7: Statistics of Copa

```
Start at: 2018-01-17 01:18:58
End at: 2018-01-17 01:19:28
Local clock offset: -2.134 ms
Remote clock offset: -5.819 ms

# Below is generated by plot.py at 2018-01-17 07:02:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.25 Mbit/s
95th percentile per-packet one-way delay: 45.232 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 46.52 Mbit/s
95th percentile per-packet one-way delay: 44.209 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 38.96 Mbit/s
95th percentile per-packet one-way delay: 45.604 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 24.11 Mbit/s
95th percentile per-packet one-way delay: 47.423 ms
Loss rate: 1.10%
```

Run 7: Report of Copa — Data Link

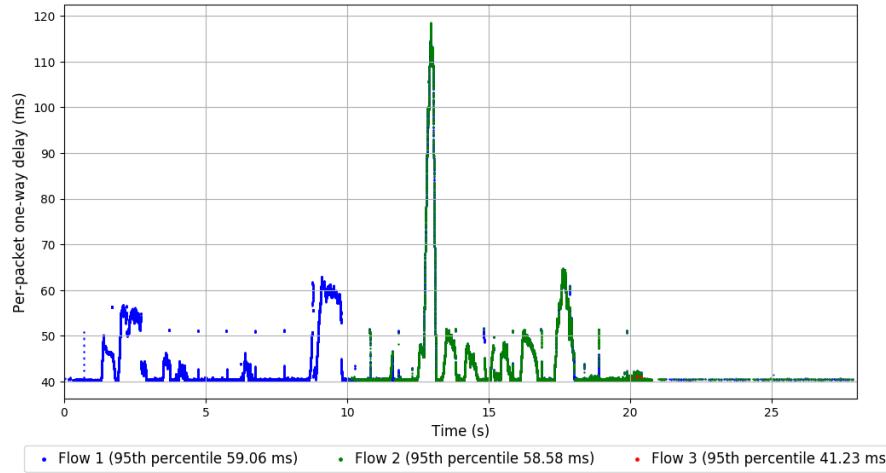
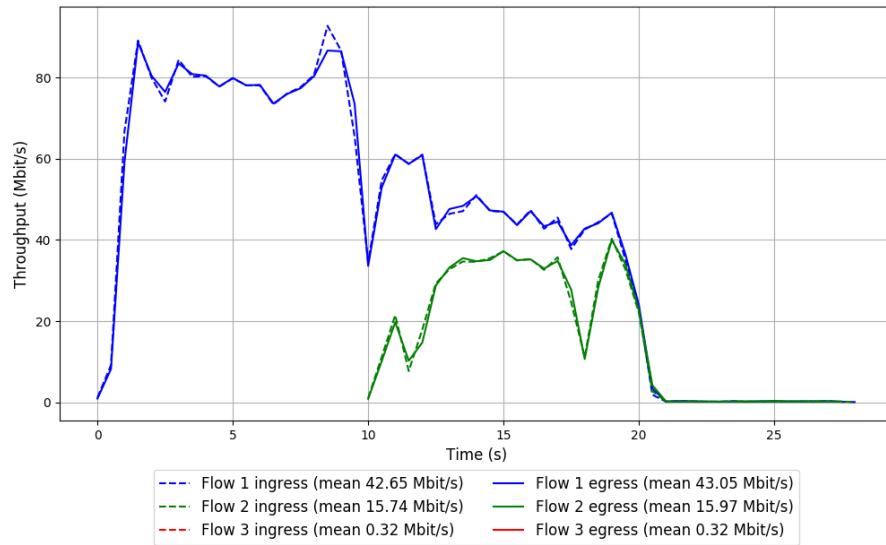


Run 8: Statistics of Copa

```
Start at: 2018-01-17 01:42:14
End at: 2018-01-17 01:42:44
Local clock offset: -1.425 ms
Remote clock offset: -6.166 ms

# Below is generated by plot.py at 2018-01-17 07:02:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.27 Mbit/s
95th percentile per-packet one-way delay: 59.049 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 43.05 Mbit/s
95th percentile per-packet one-way delay: 59.061 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 15.97 Mbit/s
95th percentile per-packet one-way delay: 58.580 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 41.227 ms
Loss rate: 0.00%
```

## Run 8: Report of Copa — Data Link

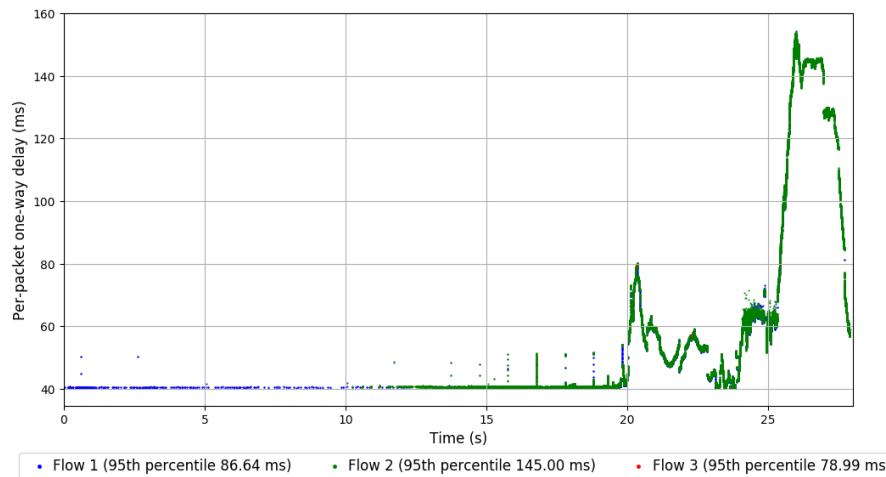
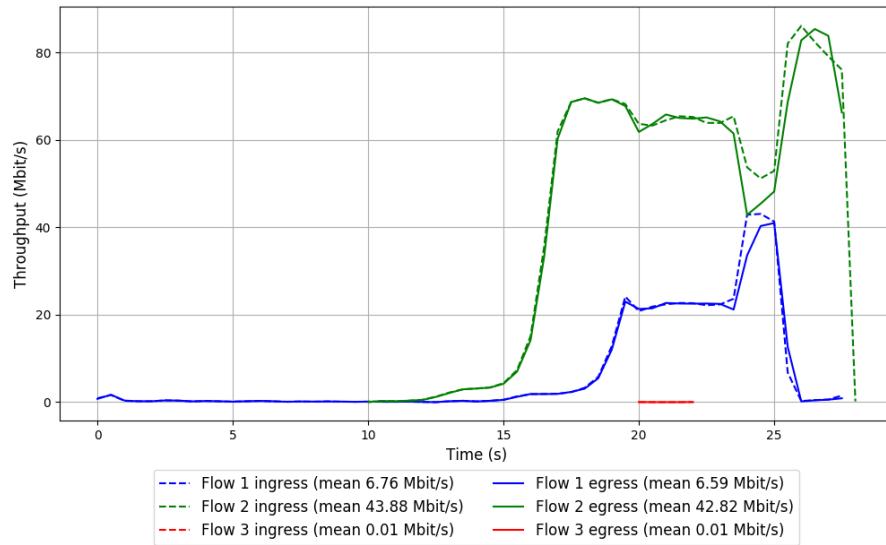


Run 9: Statistics of Copa

```
Start at: 2018-01-17 02:05:27
End at: 2018-01-17 02:05:57
Local clock offset: -1.234 ms
Remote clock offset: -6.115 ms

# Below is generated by plot.py at 2018-01-17 07:02:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.71 Mbit/s
95th percentile per-packet one-way delay: 144.847 ms
Loss rate: 3.17%
-- Flow 1:
Average throughput: 6.59 Mbit/s
95th percentile per-packet one-way delay: 86.637 ms
Loss rate: 3.08%
-- Flow 2:
Average throughput: 42.82 Mbit/s
95th percentile per-packet one-way delay: 144.999 ms
Loss rate: 3.19%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 78.990 ms
Loss rate: 0.00%
```

Run 9: Report of Copa — Data Link

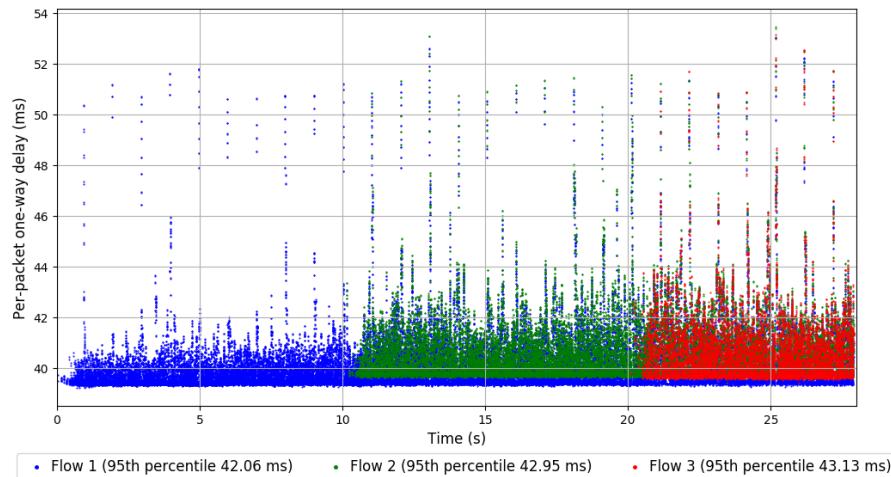
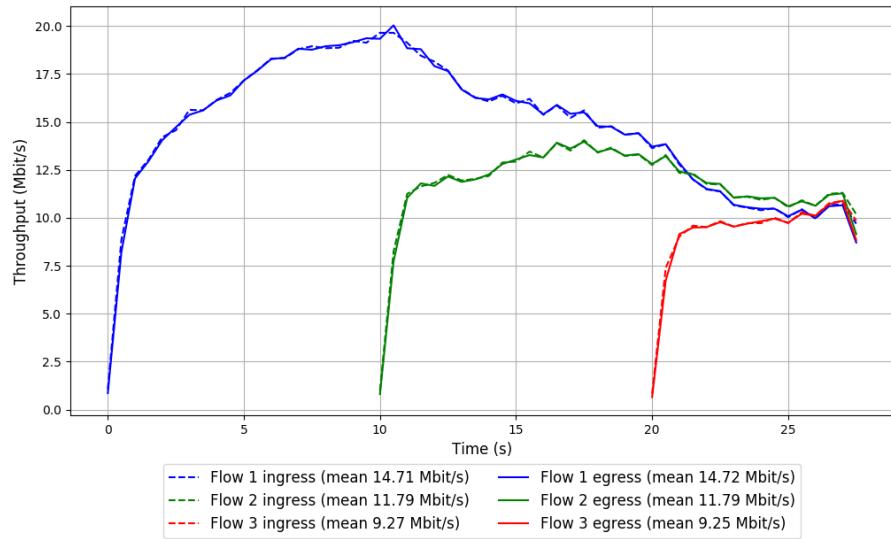


Run 10: Statistics of Copa

```
Start at: 2018-01-17 02:30:05
End at: 2018-01-17 02:30:35
Local clock offset: -1.638 ms
Remote clock offset: -5.35 ms

# Below is generated by plot.py at 2018-01-17 07:02:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 24.87 Mbit/s
95th percentile per-packet one-way delay: 42.536 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 14.72 Mbit/s
95th percentile per-packet one-way delay: 42.063 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 11.79 Mbit/s
95th percentile per-packet one-way delay: 42.945 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 9.25 Mbit/s
95th percentile per-packet one-way delay: 43.127 ms
Loss rate: 1.32%
```

## Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-01-16 22:54:05  
End at: 2018-01-16 22:54:35  
Local clock offset: -1.106 ms  
Remote clock offset: -7.304 ms

Run 1: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of FillP

Start at: 2018-01-16 23:16:53  
End at: 2018-01-16 23:17:23  
Local clock offset: -1.785 ms  
Remote clock offset: -6.19 ms

Run 2: Report of FillP — Data Link

Figure is missing

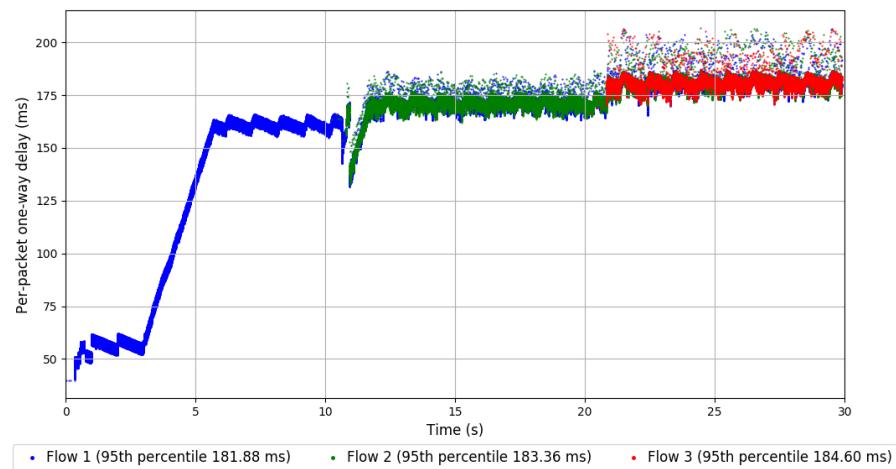
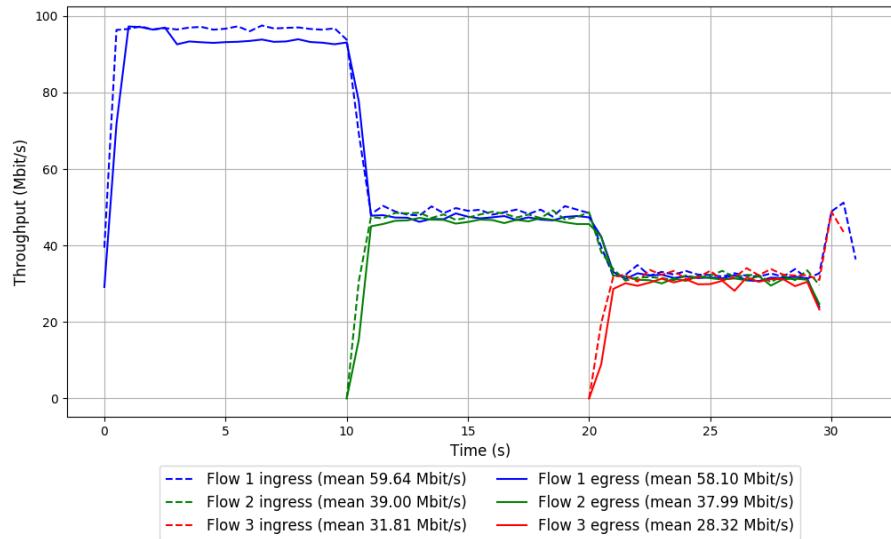
Figure is missing

Run 3: Statistics of FillP

```
Start at: 2018-01-16 23:39:35
End at: 2018-01-16 23:40:05
Local clock offset: -1.214 ms
Remote clock offset: -5.214 ms

# Below is generated by plot.py at 2018-01-17 07:02:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.26 Mbit/s
95th percentile per-packet one-way delay: 183.020 ms
Loss rate: 7.84%
-- Flow 1:
Average throughput: 58.10 Mbit/s
95th percentile per-packet one-way delay: 181.883 ms
Loss rate: 7.07%
-- Flow 2:
Average throughput: 37.99 Mbit/s
95th percentile per-packet one-way delay: 183.359 ms
Loss rate: 3.78%
-- Flow 3:
Average throughput: 28.32 Mbit/s
95th percentile per-packet one-way delay: 184.601 ms
Loss rate: 21.08%
```

Run 3: Report of FillP — Data Link

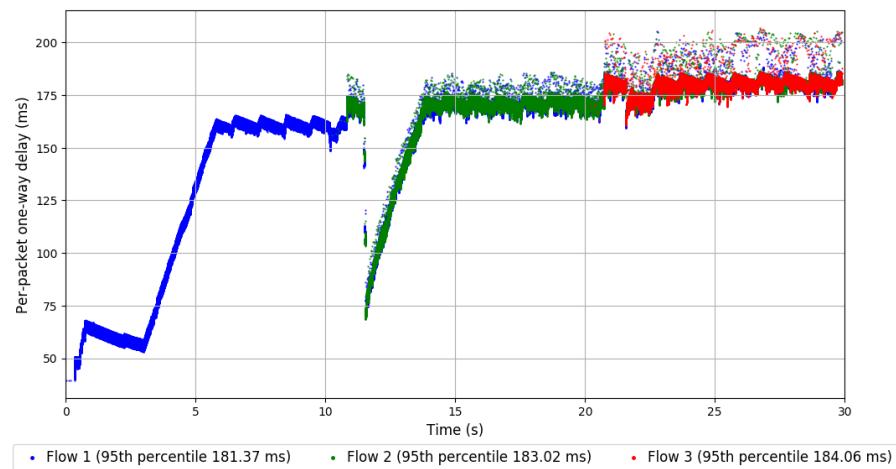
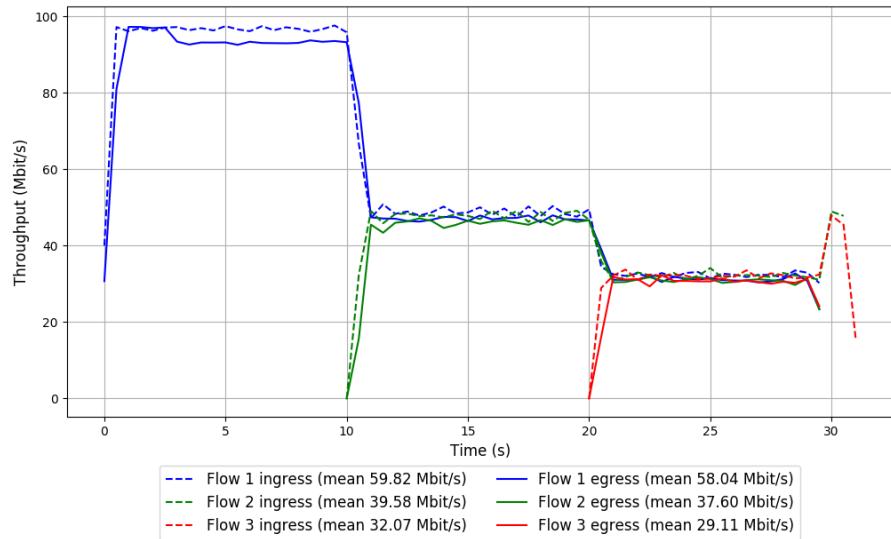


Run 4: Statistics of FillP

```
Start at: 2018-01-17 00:02:34
End at: 2018-01-17 00:03:04
Local clock offset: -1.497 ms
Remote clock offset: -4.96 ms

# Below is generated by plot.py at 2018-01-17 07:03:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.21 Mbit/s
95th percentile per-packet one-way delay: 182.563 ms
Loss rate: 7.58%
-- Flow 1:
Average throughput: 58.04 Mbit/s
95th percentile per-packet one-way delay: 181.373 ms
Loss rate: 3.44%
-- Flow 2:
Average throughput: 37.60 Mbit/s
95th percentile per-packet one-way delay: 183.023 ms
Loss rate: 10.65%
-- Flow 3:
Average throughput: 29.11 Mbit/s
95th percentile per-packet one-way delay: 184.055 ms
Loss rate: 21.20%
```

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-17 00:25:52  
End at: 2018-01-17 00:26:22  
Local clock offset: -1.776 ms  
Remote clock offset: -6.739 ms

Run 5: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 6: Statistics of FillP

Start at: 2018-01-17 00:48:47  
End at: 2018-01-17 00:49:17  
Local clock offset: -1.874 ms  
Remote clock offset: -6.28 ms

Run 6: Report of FillP — Data Link

Figure is missing

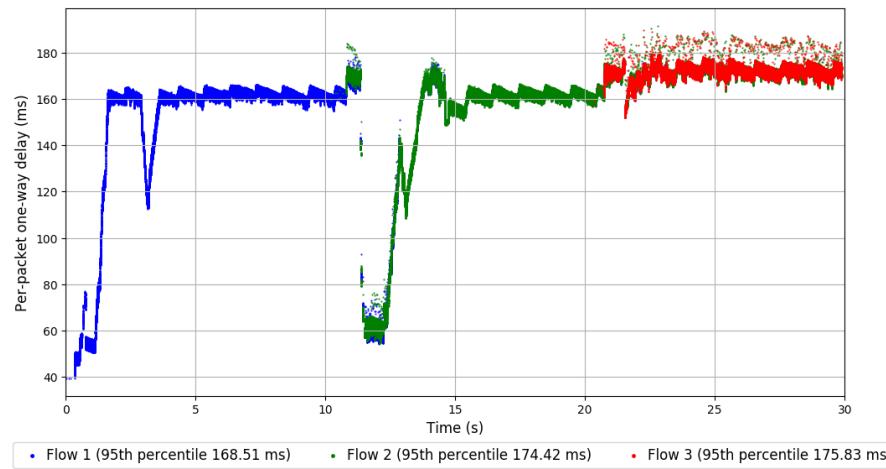
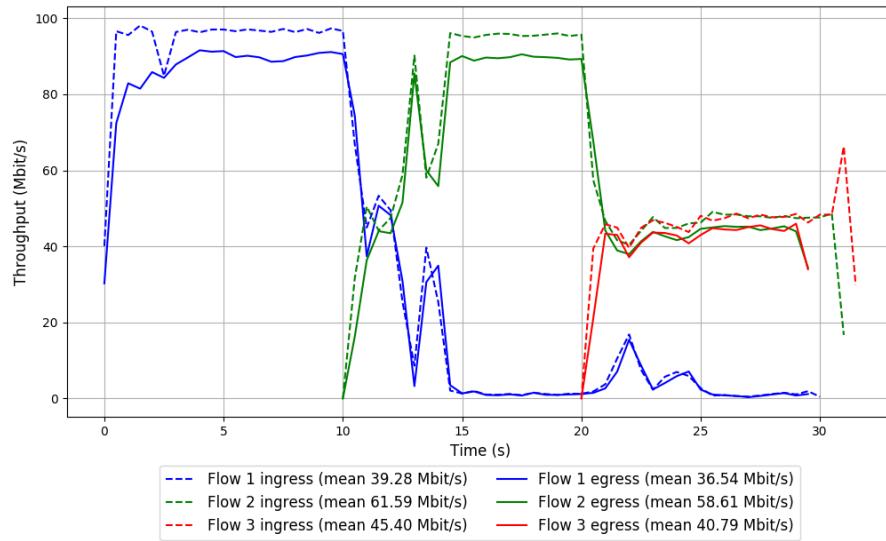
Figure is missing

Run 7: Statistics of FillP

```
Start at: 2018-01-17 01:12:07
End at: 2018-01-17 01:12:37
Local clock offset: -1.905 ms
Remote clock offset: -5.694 ms

# Below is generated by plot.py at 2018-01-17 07:03:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.42 Mbit/s
95th percentile per-packet one-way delay: 174.366 ms
Loss rate: 12.51%
-- Flow 1:
Average throughput: 36.54 Mbit/s
95th percentile per-packet one-way delay: 168.510 ms
Loss rate: 7.87%
-- Flow 2:
Average throughput: 58.61 Mbit/s
95th percentile per-packet one-way delay: 174.416 ms
Loss rate: 11.32%
-- Flow 3:
Average throughput: 40.79 Mbit/s
95th percentile per-packet one-way delay: 175.834 ms
Loss rate: 25.71%
```

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-17 01:35:37  
End at: 2018-01-17 01:36:07  
Local clock offset: -1.668 ms  
Remote clock offset: -6.069 ms

Run 8: Report of FillP — Data Link

Figure is missing

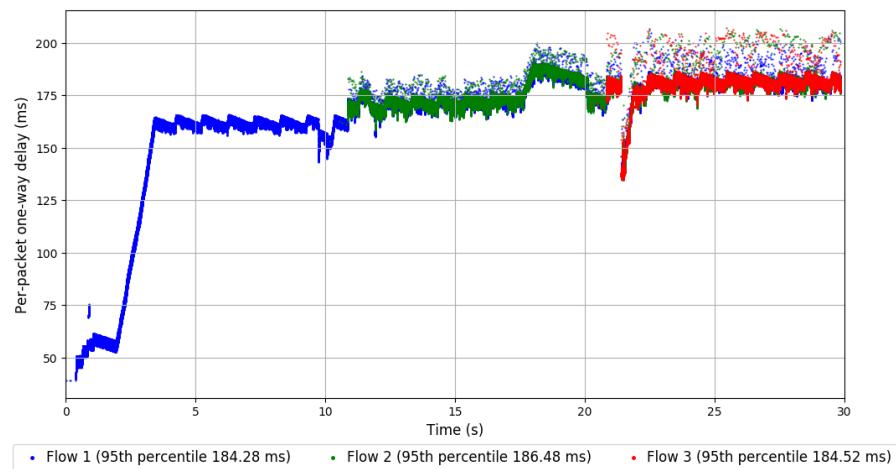
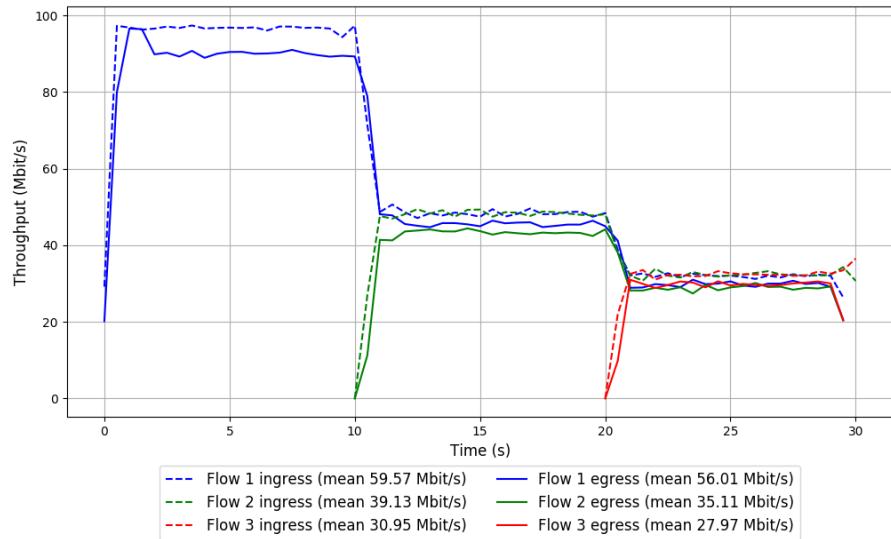
Figure is missing

Run 9: Statistics of FillP

```
Start at: 2018-01-17 01:59:03
End at: 2018-01-17 01:59:33
Local clock offset: -2.092 ms
Remote clock offset: -6.146 ms

# Below is generated by plot.py at 2018-01-17 07:03:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.22 Mbit/s
95th percentile per-packet one-way delay: 185.073 ms
Loss rate: 9.38%
-- Flow 1:
Average throughput: 56.01 Mbit/s
95th percentile per-packet one-way delay: 184.278 ms
Loss rate: 6.33%
-- Flow 2:
Average throughput: 35.11 Mbit/s
95th percentile per-packet one-way delay: 186.482 ms
Loss rate: 13.48%
-- Flow 3:
Average throughput: 27.97 Mbit/s
95th percentile per-packet one-way delay: 184.521 ms
Loss rate: 16.13%
```

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

/home/ubuntu/pantheon\_data/2018-01-16T22-53-China-to-AWS-Korea-10-runs-3-flows/fillp\_stats\_1

Run 10: Report of FillP — Data Link

Figure is missing

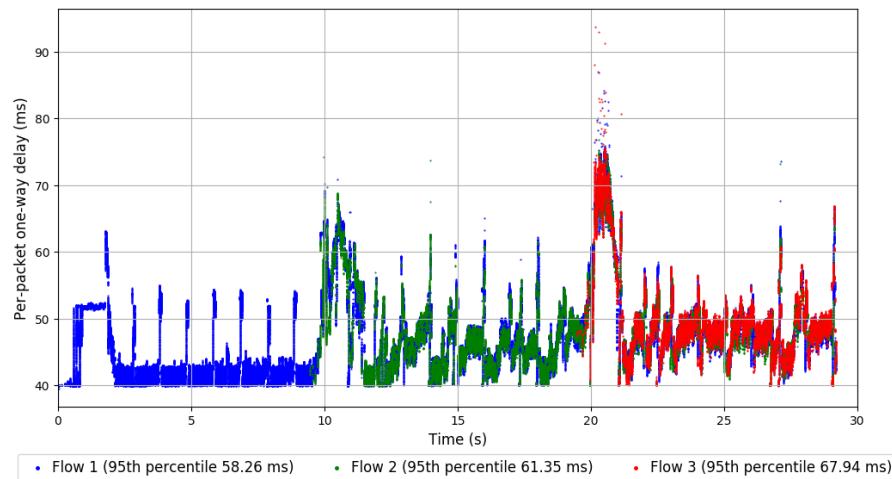
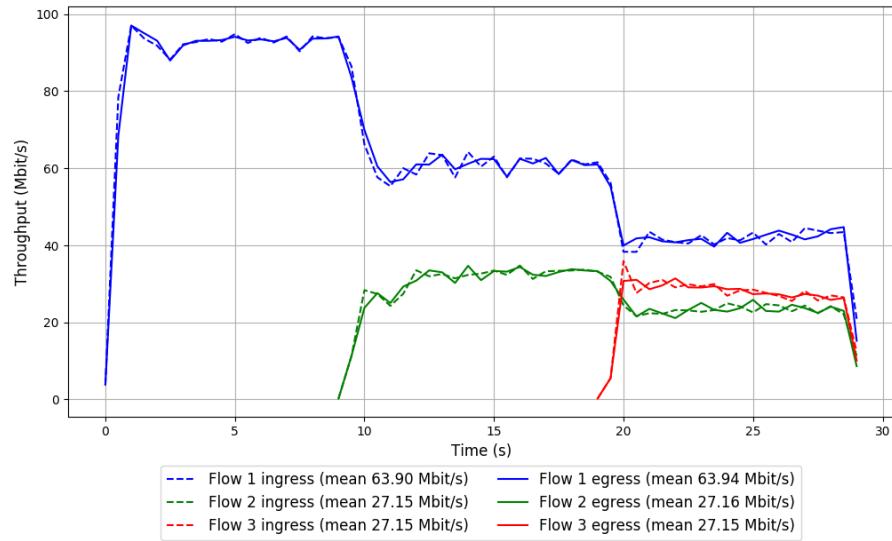
Figure is missing

Run 1: Statistics of Indigo

```
Start at: 2018-01-16 23:05:34
End at: 2018-01-16 23:06:04
Local clock offset: -1.293 ms
Remote clock offset: -6.725 ms

# Below is generated by plot.py at 2018-01-17 07:03:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.35 Mbit/s
95th percentile per-packet one-way delay: 59.835 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 63.94 Mbit/s
95th percentile per-packet one-way delay: 58.262 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 27.16 Mbit/s
95th percentile per-packet one-way delay: 61.352 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 27.15 Mbit/s
95th percentile per-packet one-way delay: 67.939 ms
Loss rate: 0.96%
```

Run 1: Report of Indigo — Data Link

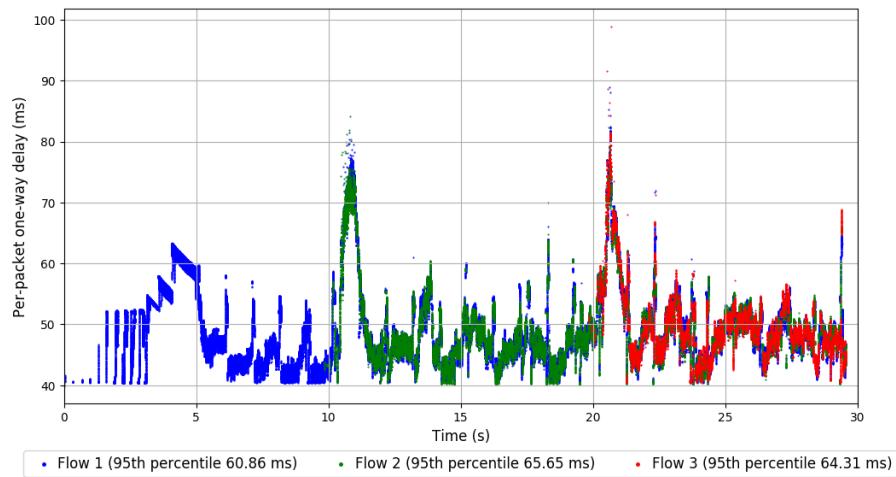
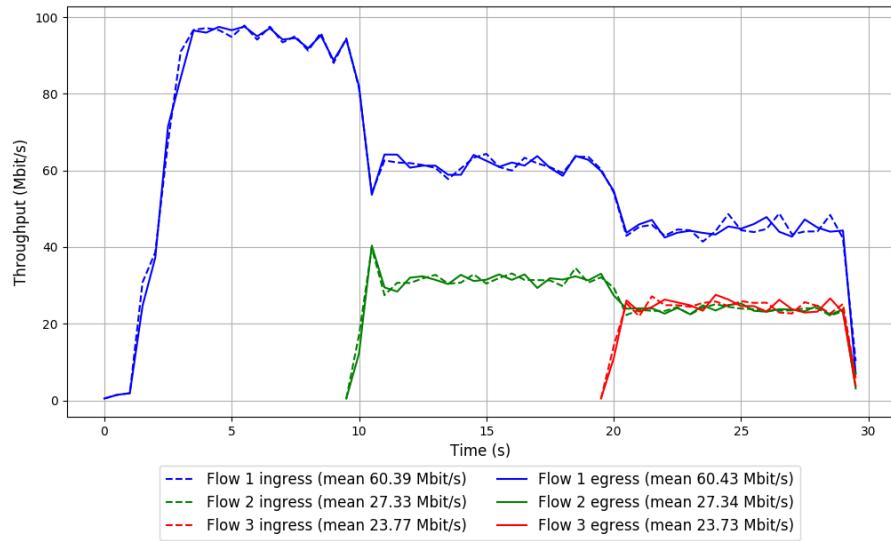


Run 2: Statistics of Indigo

```
Start at: 2018-01-16 23:28:15
End at: 2018-01-16 23:28:45
Local clock offset: -1.178 ms
Remote clock offset: -5.544 ms

# Below is generated by plot.py at 2018-01-17 07:04:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.47 Mbit/s
95th percentile per-packet one-way delay: 61.357 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 60.43 Mbit/s
95th percentile per-packet one-way delay: 60.859 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 27.34 Mbit/s
95th percentile per-packet one-way delay: 65.653 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 23.73 Mbit/s
95th percentile per-packet one-way delay: 64.306 ms
Loss rate: 0.96%
```

Run 2: Report of Indigo — Data Link

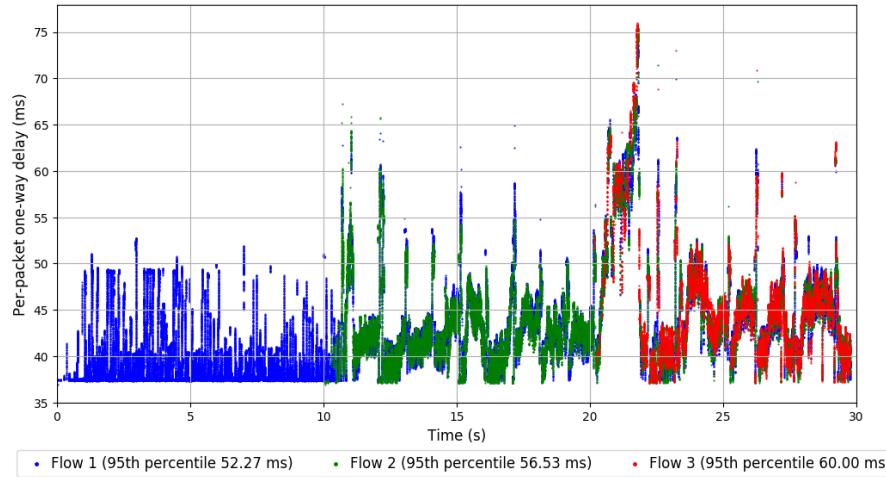
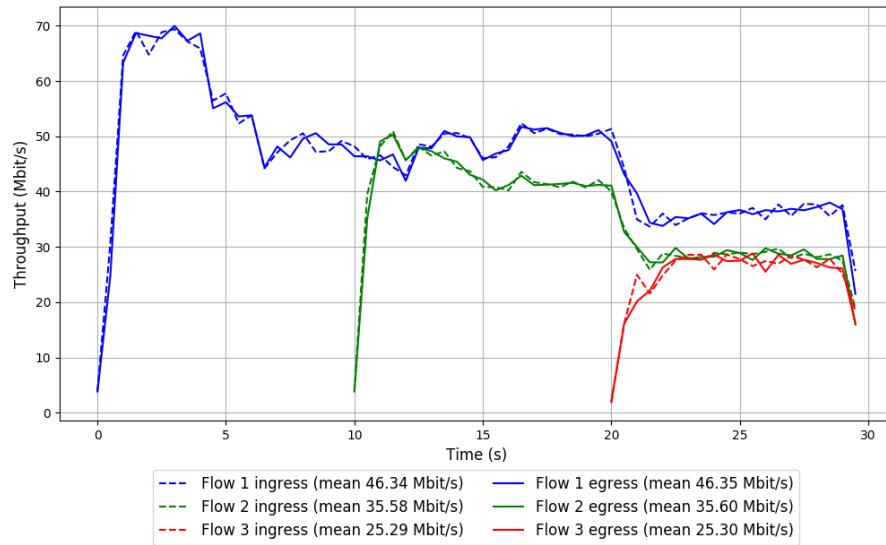


Run 3: Statistics of Indigo

```
Start at: 2018-01-16 23:51:18
End at: 2018-01-16 23:51:48
Local clock offset: -4.247 ms
Remote clock offset: -5.026 ms

# Below is generated by plot.py at 2018-01-17 07:04:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.09 Mbit/s
95th percentile per-packet one-way delay: 55.288 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 46.35 Mbit/s
95th percentile per-packet one-way delay: 52.274 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 35.60 Mbit/s
95th percentile per-packet one-way delay: 56.528 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 25.30 Mbit/s
95th percentile per-packet one-way delay: 59.997 ms
Loss rate: 0.97%
```

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

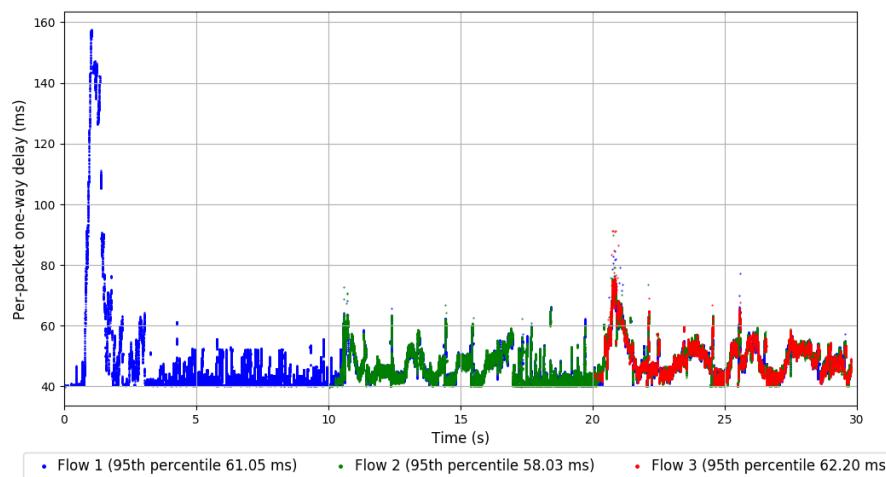
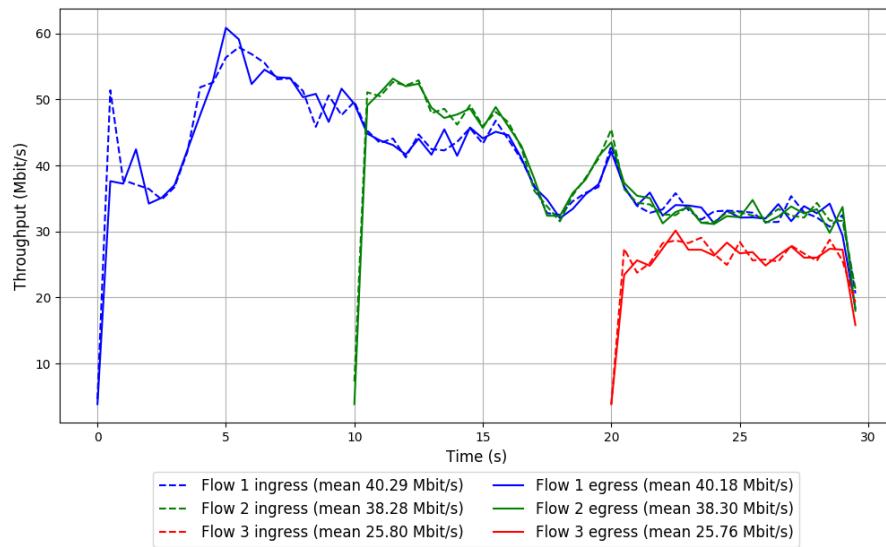


Run 4: Statistics of Indigo

```
Start at: 2018-01-17 00:14:24
End at: 2018-01-17 00:14:54
Local clock offset: -1.569 ms
Remote clock offset: -6.296 ms

# Below is generated by plot.py at 2018-01-17 07:04:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.93 Mbit/s
95th percentile per-packet one-way delay: 59.502 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 40.18 Mbit/s
95th percentile per-packet one-way delay: 61.054 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 38.30 Mbit/s
95th percentile per-packet one-way delay: 58.030 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 25.76 Mbit/s
95th percentile per-packet one-way delay: 62.201 ms
Loss rate: 1.06%
```

## Run 4: Report of Indigo — Data Link

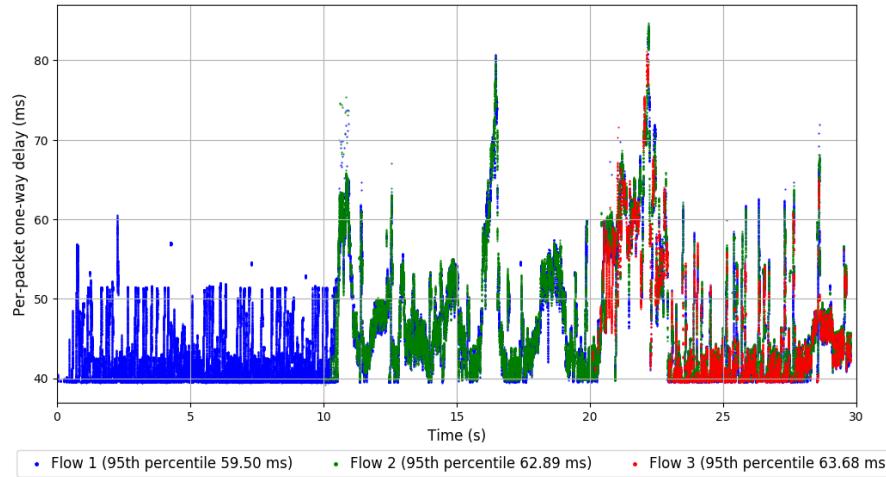
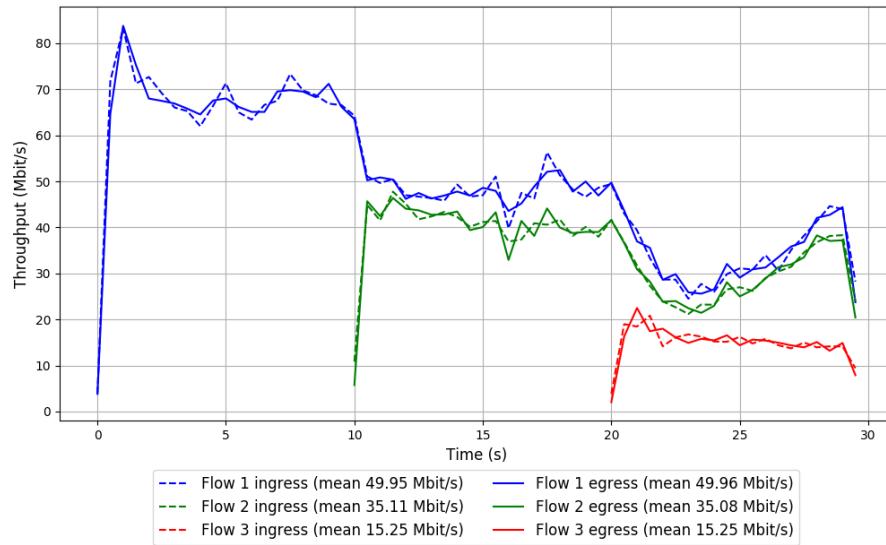


Run 5: Statistics of Indigo

```
Start at: 2018-01-17 00:37:19
End at: 2018-01-17 00:37:49
Local clock offset: -2.12 ms
Remote clock offset: -6.524 ms

# Below is generated by plot.py at 2018-01-17 07:04:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.18 Mbit/s
95th percentile per-packet one-way delay: 61.282 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 49.96 Mbit/s
95th percentile per-packet one-way delay: 59.504 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 35.08 Mbit/s
95th percentile per-packet one-way delay: 62.887 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 15.25 Mbit/s
95th percentile per-packet one-way delay: 63.678 ms
Loss rate: 0.82%
```

Run 5: Report of Indigo — Data Link

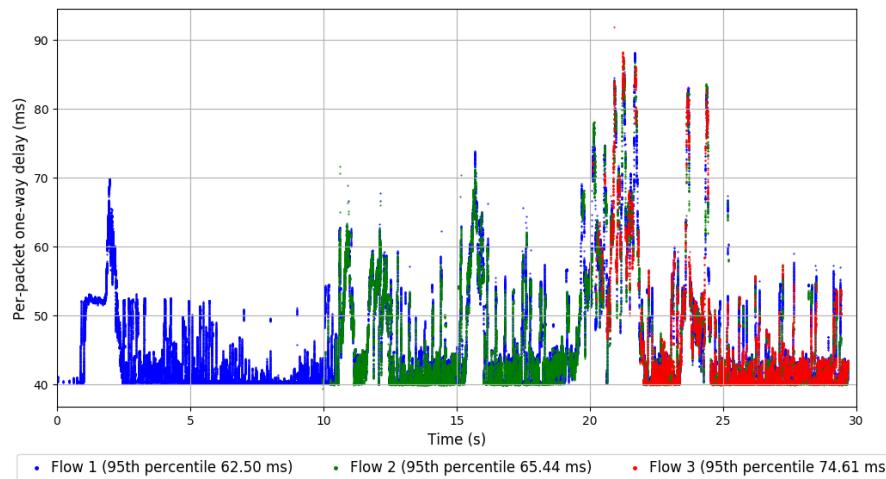
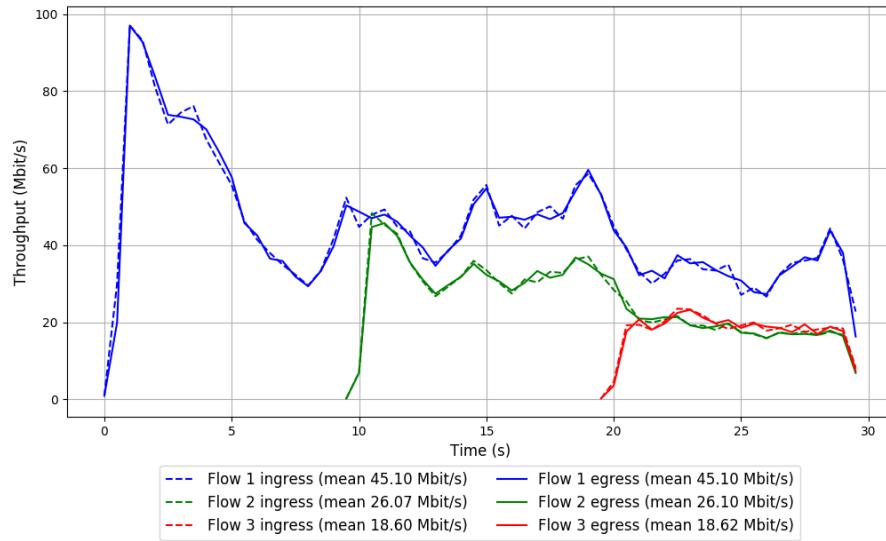


Run 6: Statistics of Indigo

```
Start at: 2018-01-17 01:00:51
End at: 2018-01-17 01:01:21
Local clock offset: -1.747 ms
Remote clock offset: -5.951 ms

# Below is generated by plot.py at 2018-01-17 07:04:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.54 Mbit/s
95th percentile per-packet one-way delay: 64.224 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 45.10 Mbit/s
95th percentile per-packet one-way delay: 62.498 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 26.10 Mbit/s
95th percentile per-packet one-way delay: 65.440 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 18.62 Mbit/s
95th percentile per-packet one-way delay: 74.606 ms
Loss rate: 0.91%
```

Run 6: Report of Indigo — Data Link

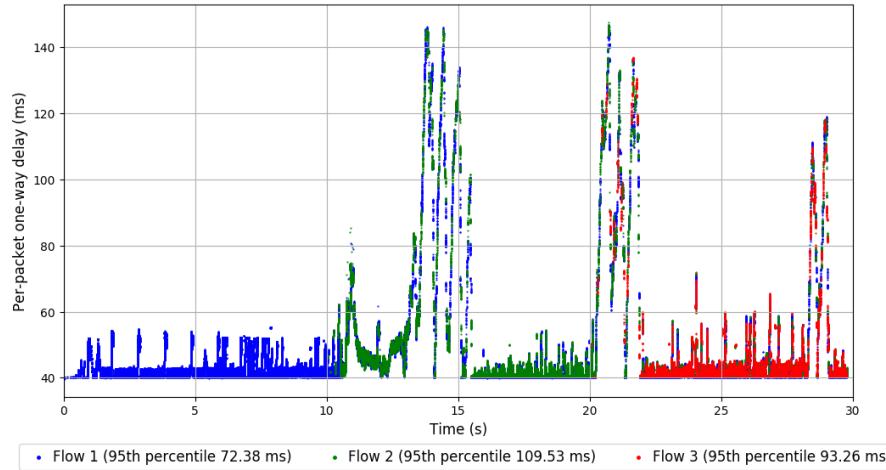
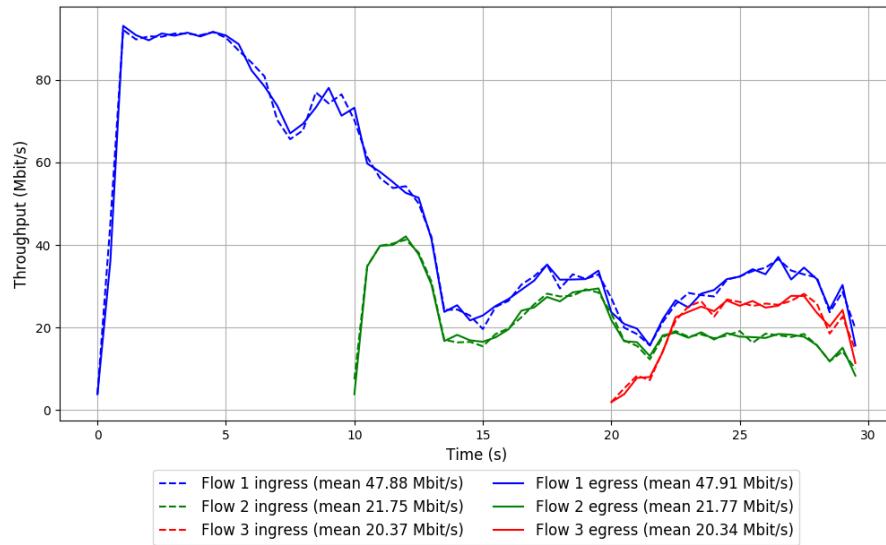


Run 7: Statistics of Indigo

```
Start at: 2018-01-17 01:24:22
End at: 2018-01-17 01:24:52
Local clock offset: -1.758 ms
Remote clock offset: -5.895 ms

# Below is generated by plot.py at 2018-01-17 07:04:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.97 Mbit/s
95th percentile per-packet one-way delay: 86.429 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 47.91 Mbit/s
95th percentile per-packet one-way delay: 72.380 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 21.77 Mbit/s
95th percentile per-packet one-way delay: 109.526 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 20.34 Mbit/s
95th percentile per-packet one-way delay: 93.261 ms
Loss rate: 1.08%
```

## Run 7: Report of Indigo — Data Link

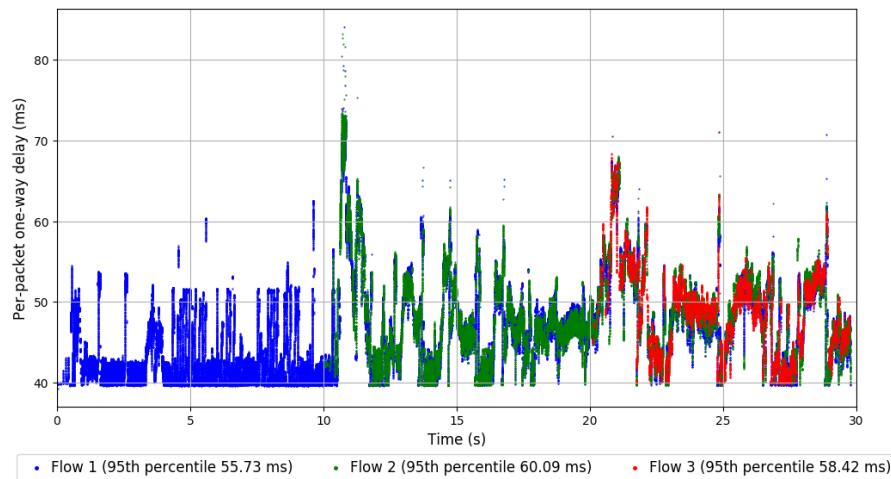
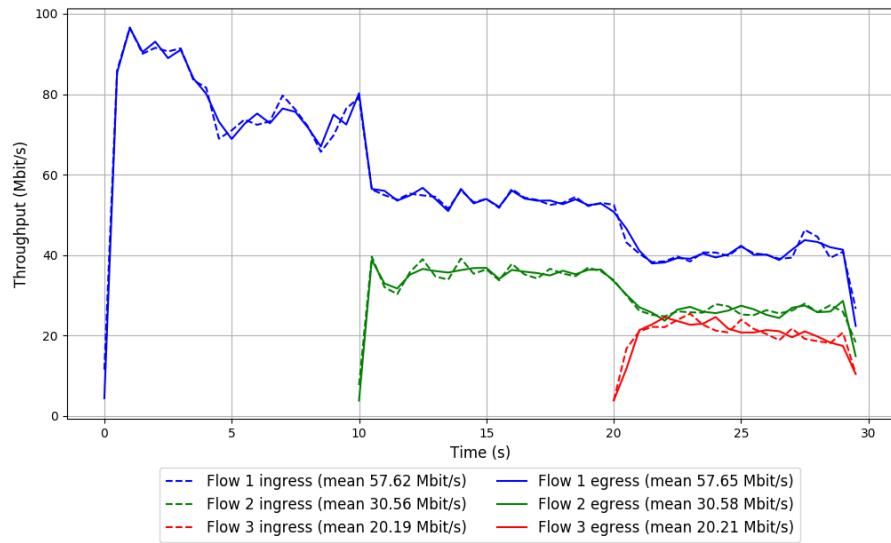


Run 8: Statistics of Indigo

```
Start at: 2018-01-17 01:47:36
End at: 2018-01-17 01:48:06
Local clock offset: -2.02 ms
Remote clock offset: -6.111 ms

# Below is generated by plot.py at 2018-01-17 07:05:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.48 Mbit/s
95th percentile per-packet one-way delay: 56.987 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 57.65 Mbit/s
95th percentile per-packet one-way delay: 55.727 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 30.58 Mbit/s
95th percentile per-packet one-way delay: 60.090 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 20.21 Mbit/s
95th percentile per-packet one-way delay: 58.420 ms
Loss rate: 0.88%
```

Run 8: Report of Indigo — Data Link

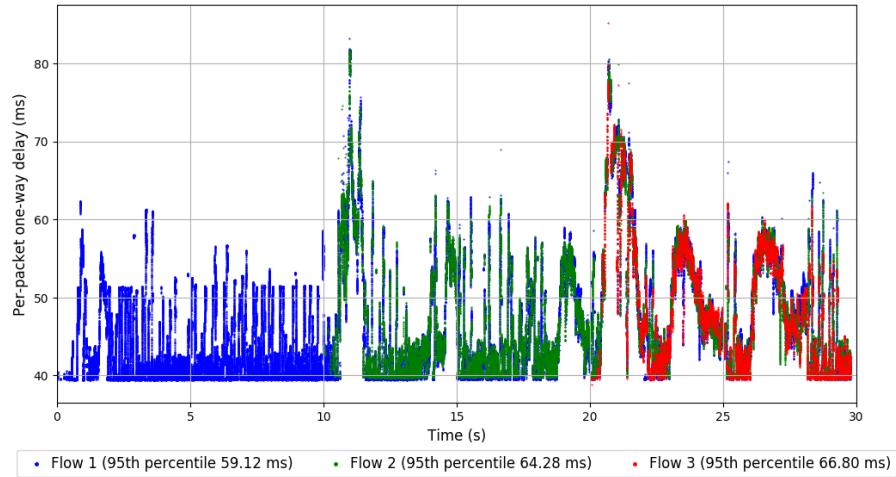
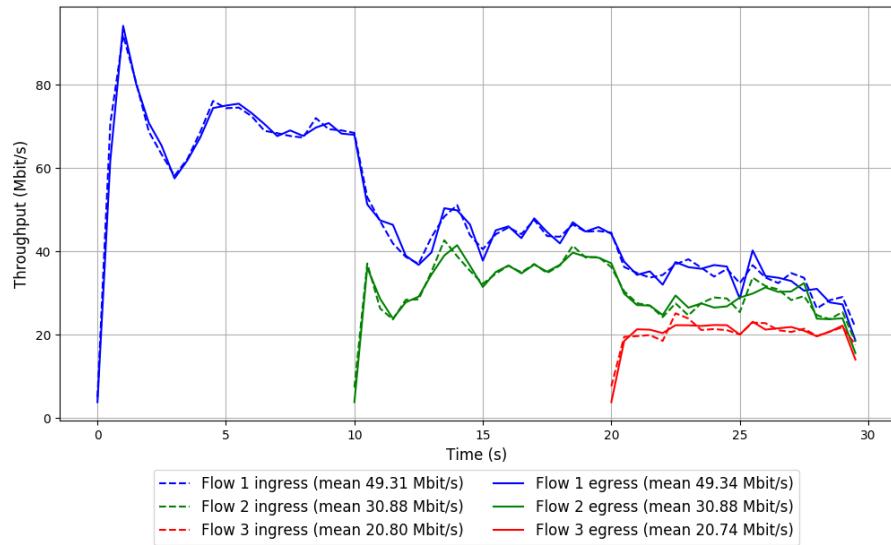


Run 9: Statistics of Indigo

```
Start at: 2018-01-17 02:10:40
End at: 2018-01-17 02:11:10
Local clock offset: -1.989 ms
Remote clock offset: -5.835 ms

# Below is generated by plot.py at 2018-01-17 07:05:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.57 Mbit/s
95th percentile per-packet one-way delay: 60.934 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 49.34 Mbit/s
95th percentile per-packet one-way delay: 59.123 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 30.88 Mbit/s
95th percentile per-packet one-way delay: 64.278 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 20.74 Mbit/s
95th percentile per-packet one-way delay: 66.801 ms
Loss rate: 1.18%
```

## Run 9: Report of Indigo — Data Link

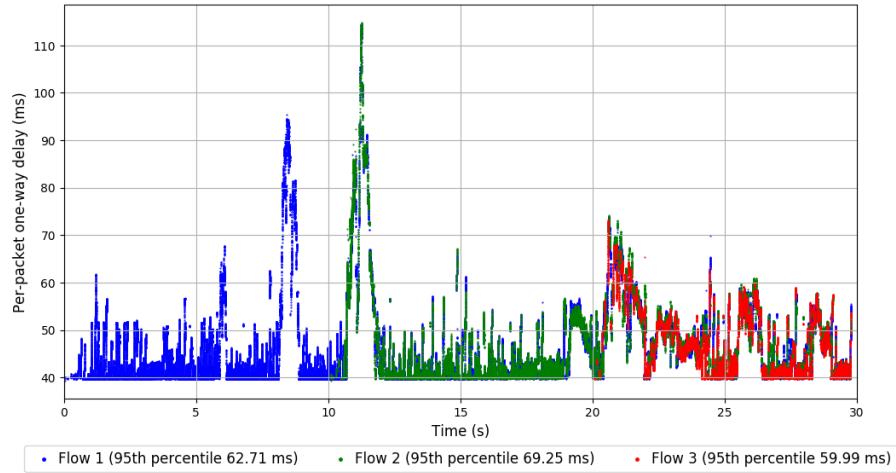
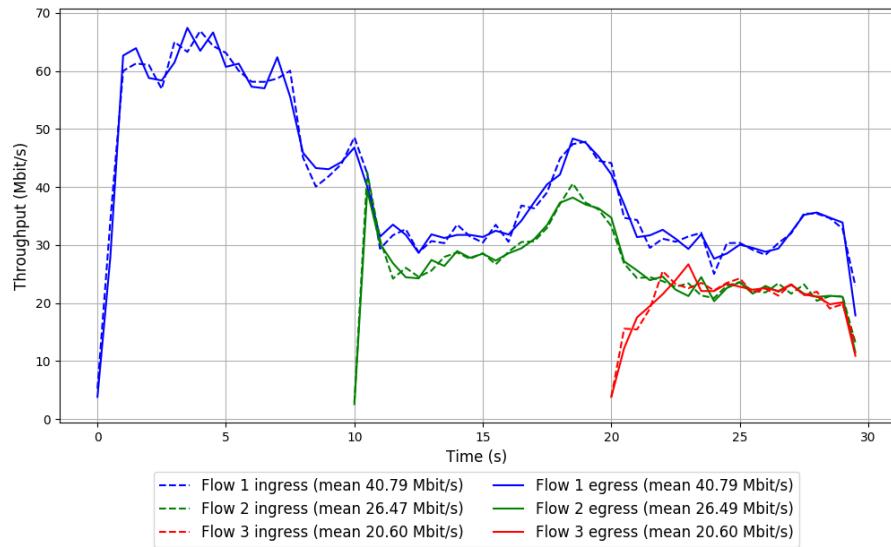


Run 10: Statistics of Indigo

```
Start at: 2018-01-17 02:35:38
End at: 2018-01-17 02:36:08
Local clock offset: -1.467 ms
Remote clock offset: -5.182 ms

# Below is generated by plot.py at 2018-01-17 07:05:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.03 Mbit/s
95th percentile per-packet one-way delay: 63.875 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 40.79 Mbit/s
95th percentile per-packet one-way delay: 62.708 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 26.49 Mbit/s
95th percentile per-packet one-way delay: 69.245 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 20.60 Mbit/s
95th percentile per-packet one-way delay: 59.988 ms
Loss rate: 0.89%
```

## Run 10: Report of Indigo — Data Link



Run 1: Statistics of Vivace-latency

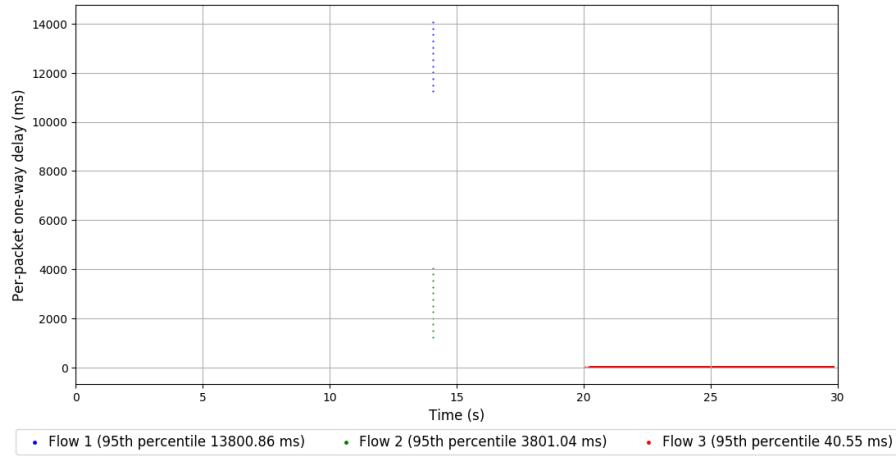
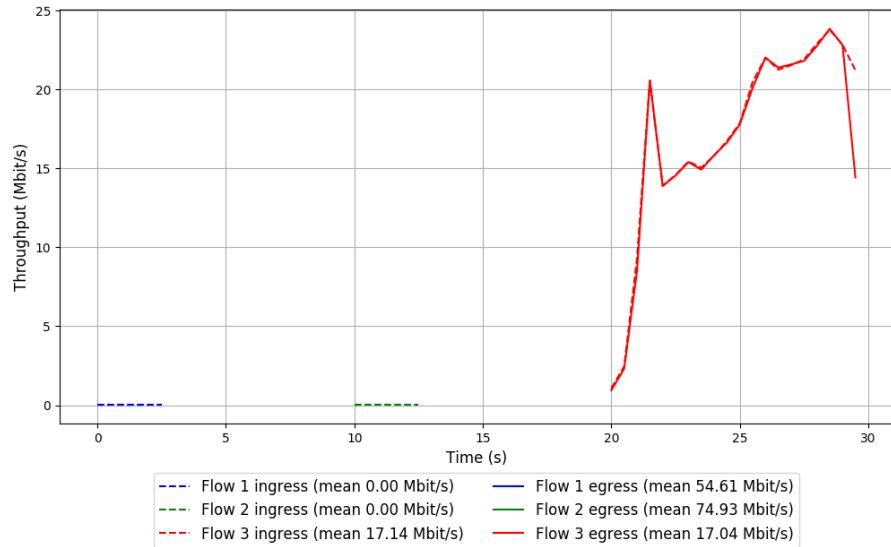
Start at: 2018-01-16 23:09:22

End at: 2018-01-16 23:09:52

Local clock offset: -1.247 ms

Remote clock offset: -6.536 ms

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

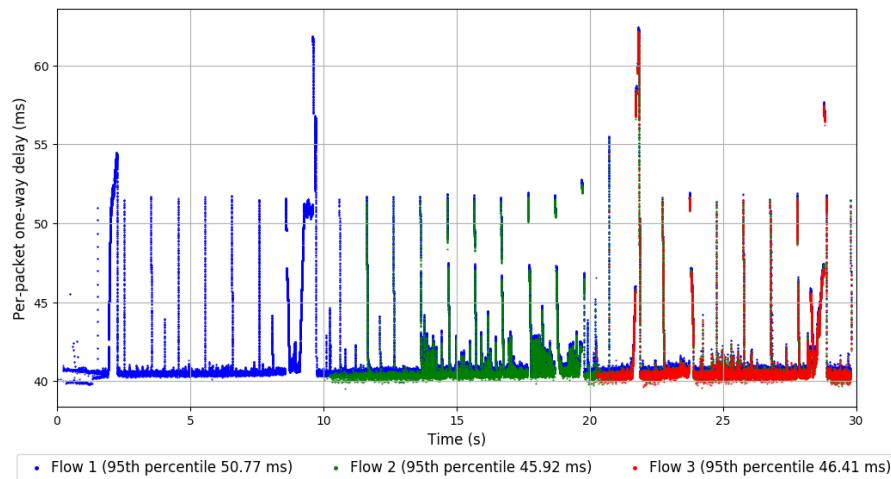
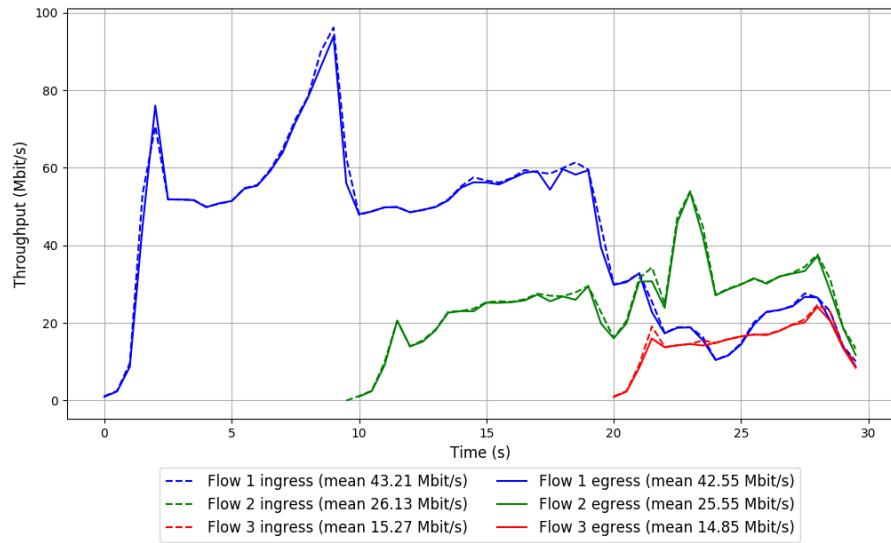


Run 2: Statistics of Vivace-latency

```
Start at: 2018-01-16 23:32:01
End at: 2018-01-16 23:32:31
Local clock offset: -1.066 ms
Remote clock offset: -5.438 ms

# Below is generated by plot.py at 2018-01-17 07:06:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.39 Mbit/s
95th percentile per-packet one-way delay: 49.758 ms
Loss rate: 2.16%
-- Flow 1:
Average throughput: 42.55 Mbit/s
95th percentile per-packet one-way delay: 50.771 ms
Loss rate: 1.80%
-- Flow 2:
Average throughput: 25.55 Mbit/s
95th percentile per-packet one-way delay: 45.923 ms
Loss rate: 2.62%
-- Flow 3:
Average throughput: 14.85 Mbit/s
95th percentile per-packet one-way delay: 46.411 ms
Loss rate: 3.69%
```

Run 2: Report of Vivace-latency — Data Link

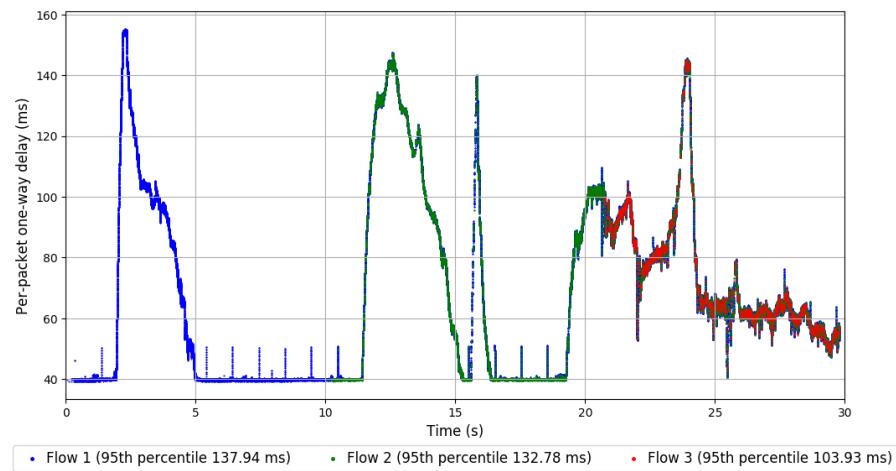
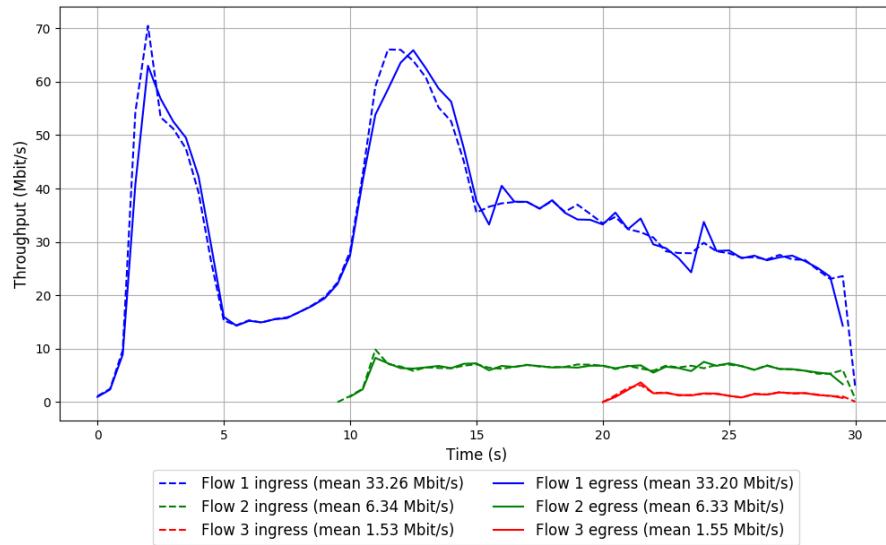


Run 3: Statistics of Vivace-latency

```
Start at: 2018-01-16 23:55:02
End at: 2018-01-16 23:55:32
Local clock offset: -1.51 ms
Remote clock offset: -4.999 ms

# Below is generated by plot.py at 2018-01-17 07:06:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.90 Mbit/s
95th percentile per-packet one-way delay: 137.051 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 33.20 Mbit/s
95th percentile per-packet one-way delay: 137.942 ms
Loss rate: 1.18%
-- Flow 2:
Average throughput: 6.33 Mbit/s
95th percentile per-packet one-way delay: 132.777 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 103.926 ms
Loss rate: 1.84%
```

Run 3: Report of Vivace-latency — Data Link

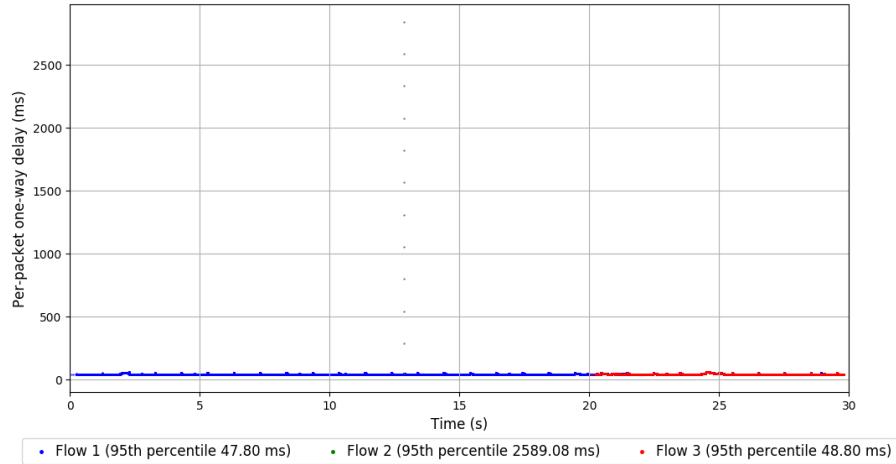
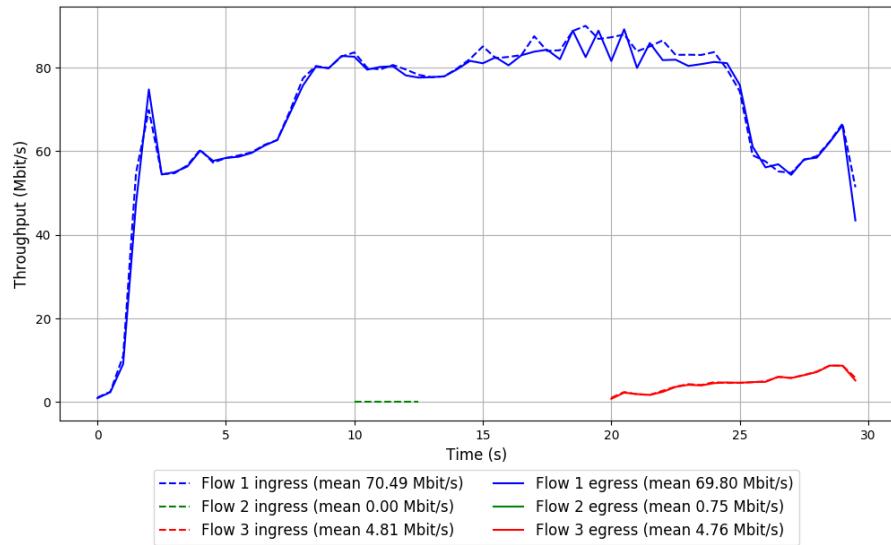


Run 4: Statistics of Vivace-latency

```
Start at: 2018-01-17 00:18:15
End at: 2018-01-17 00:18:45
Local clock offset: -1.491 ms
Remote clock offset: -6.705 ms

# Below is generated by plot.py at 2018-01-17 07:06:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.36 Mbit/s
95th percentile per-packet one-way delay: 47.824 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 69.80 Mbit/s
95th percentile per-packet one-way delay: 47.802 ms
Loss rate: 1.25%
-- Flow 2:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 2589.080 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.76 Mbit/s
95th percentile per-packet one-way delay: 48.796 ms
Loss rate: 2.03%
```

#### Run 4: Report of Vivace-latency — Data Link

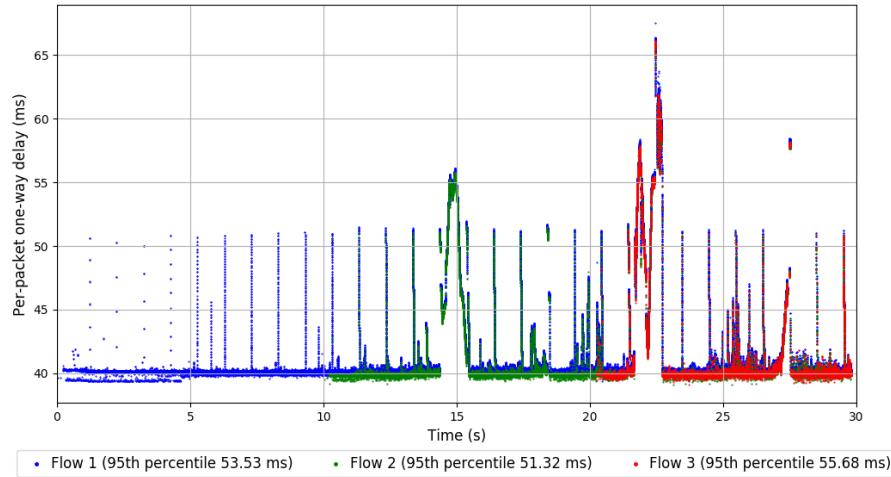
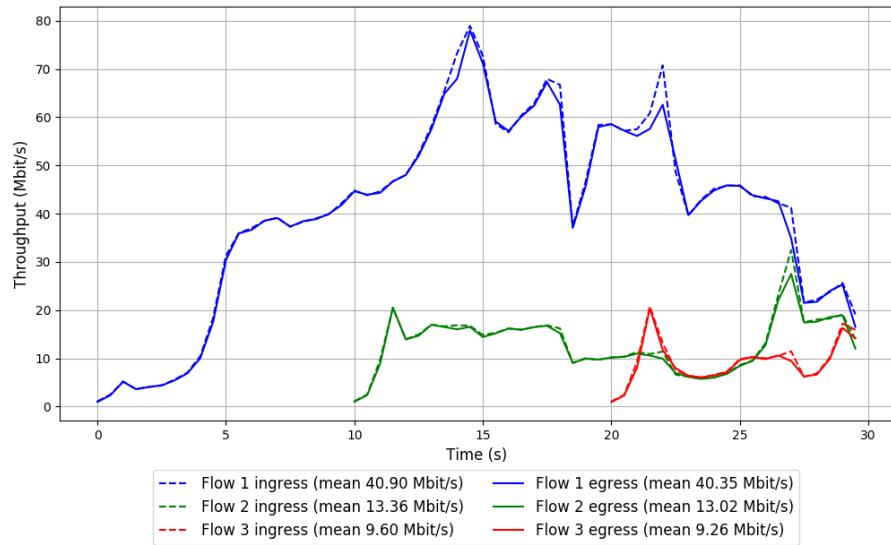


Run 5: Statistics of Vivace-latency

```
Start at: 2018-01-17 00:41:16
End at: 2018-01-17 00:41:46
Local clock offset: -1.882 ms
Remote clock offset: -6.454 ms

# Below is generated by plot.py at 2018-01-17 07:06:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.02 Mbit/s
95th percentile per-packet one-way delay: 53.639 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 40.35 Mbit/s
95th percentile per-packet one-way delay: 53.528 ms
Loss rate: 1.63%
-- Flow 2:
Average throughput: 13.02 Mbit/s
95th percentile per-packet one-way delay: 51.317 ms
Loss rate: 2.90%
-- Flow 3:
Average throughput: 9.26 Mbit/s
95th percentile per-packet one-way delay: 55.683 ms
Loss rate: 4.40%
```

Run 5: Report of Vivace-latency — Data Link

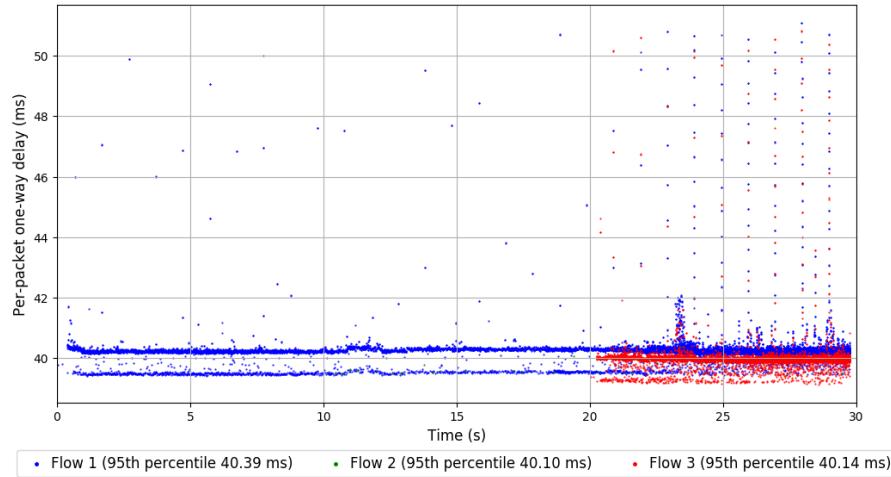
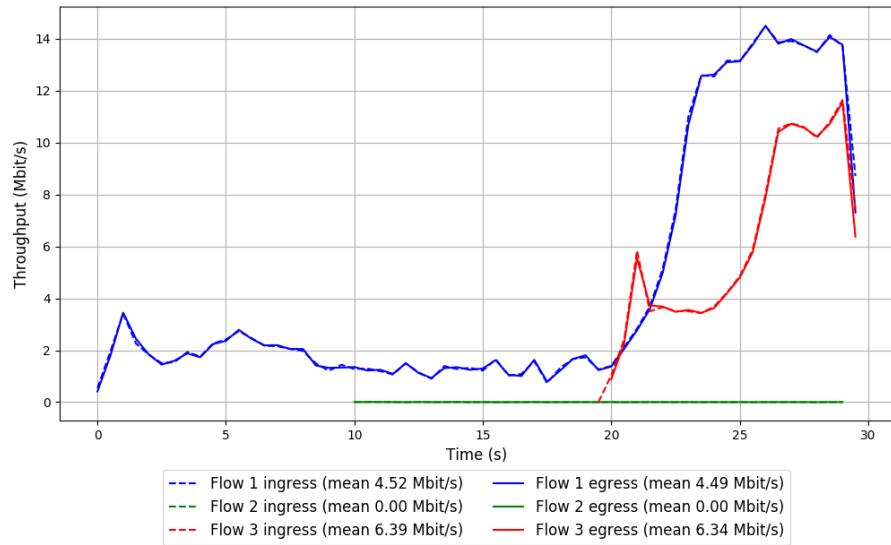


Run 6: Statistics of Vivace-latency

```
Start at: 2018-01-17 01:04:35
End at: 2018-01-17 01:05:05
Local clock offset: -1.936 ms
Remote clock offset: -5.88 ms

# Below is generated by plot.py at 2018-01-17 07:06:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.57 Mbit/s
95th percentile per-packet one-way delay: 40.367 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 4.49 Mbit/s
95th percentile per-packet one-way delay: 40.389 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 40.099 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.34 Mbit/s
95th percentile per-packet one-way delay: 40.136 ms
Loss rate: 1.60%
```

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

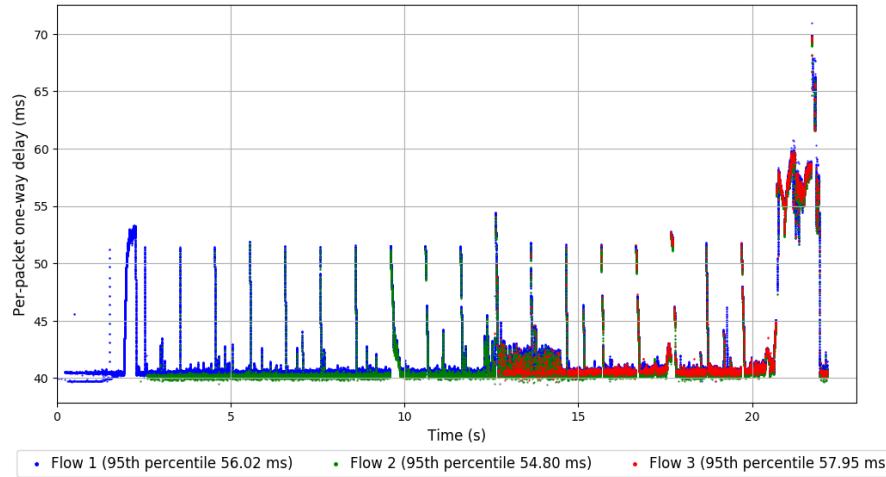
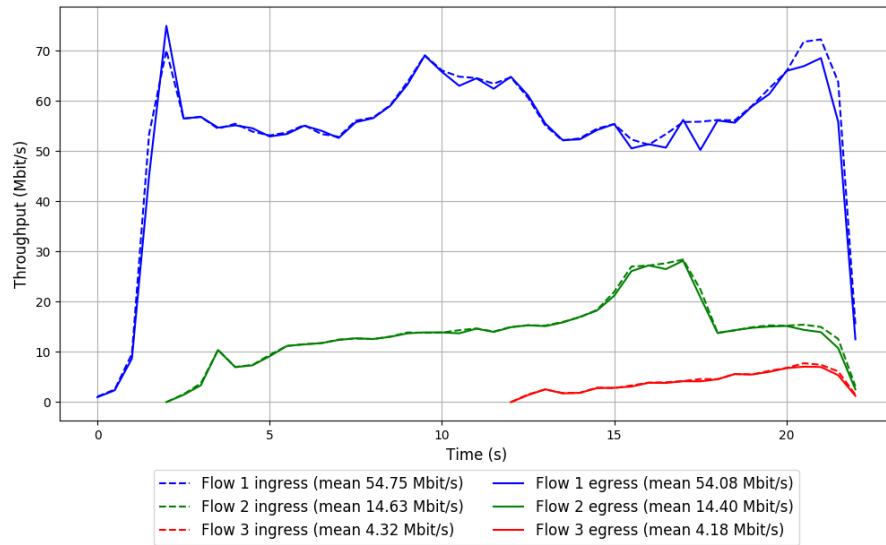
Start at: 2018-01-17 01:28:07

End at: 2018-01-17 01:28:37

Local clock offset: -1.685 ms

Remote clock offset: -5.999 ms

### Run 7: Report of Vivace-latency — Data Link

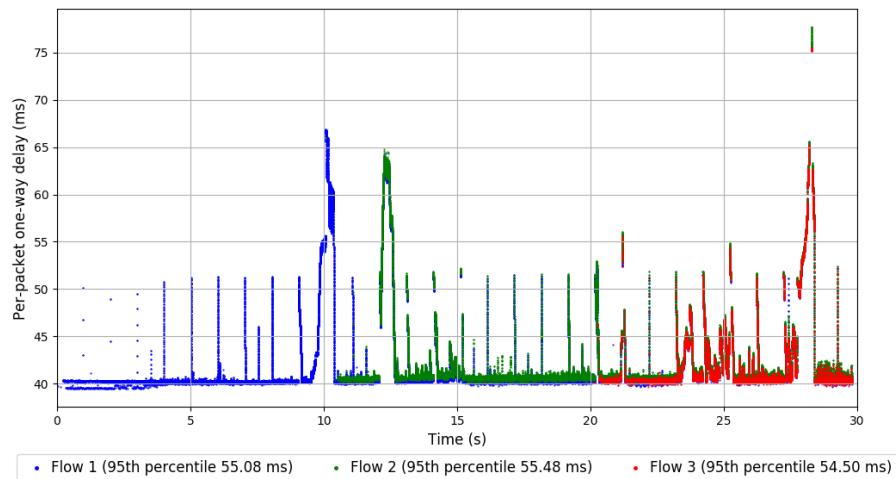
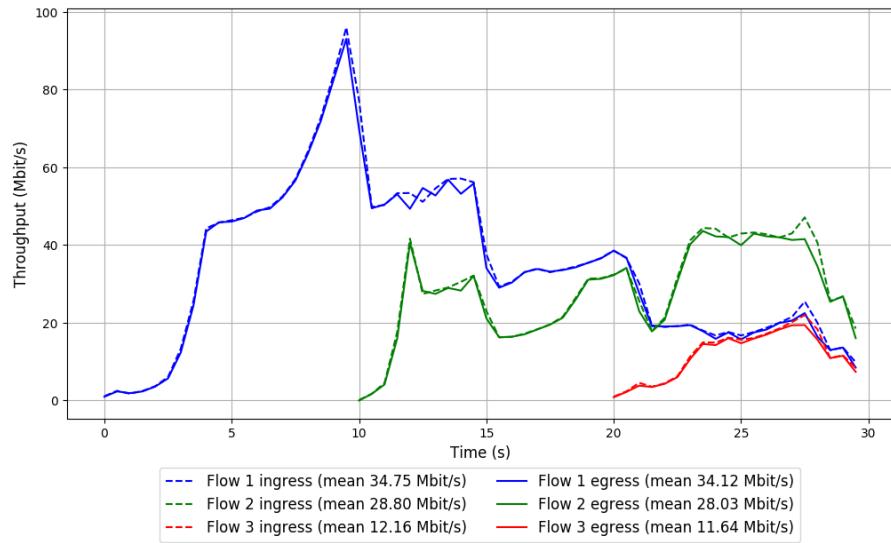


Run 8: Statistics of Vivace-latency

```
Start at: 2018-01-17 01:51:36
End at: 2018-01-17 01:52:06
Local clock offset: -1.353 ms
Remote clock offset: -6.081 ms

# Below is generated by plot.py at 2018-01-17 07:06:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.50 Mbit/s
95th percentile per-packet one-way delay: 55.096 ms
Loss rate: 2.67%
-- Flow 1:
Average throughput: 34.12 Mbit/s
95th percentile per-packet one-way delay: 55.080 ms
Loss rate: 2.10%
-- Flow 2:
Average throughput: 28.03 Mbit/s
95th percentile per-packet one-way delay: 55.481 ms
Loss rate: 3.21%
-- Flow 3:
Average throughput: 11.64 Mbit/s
95th percentile per-packet one-way delay: 54.503 ms
Loss rate: 5.07%
```

Run 8: Report of Vivace-latency — Data Link

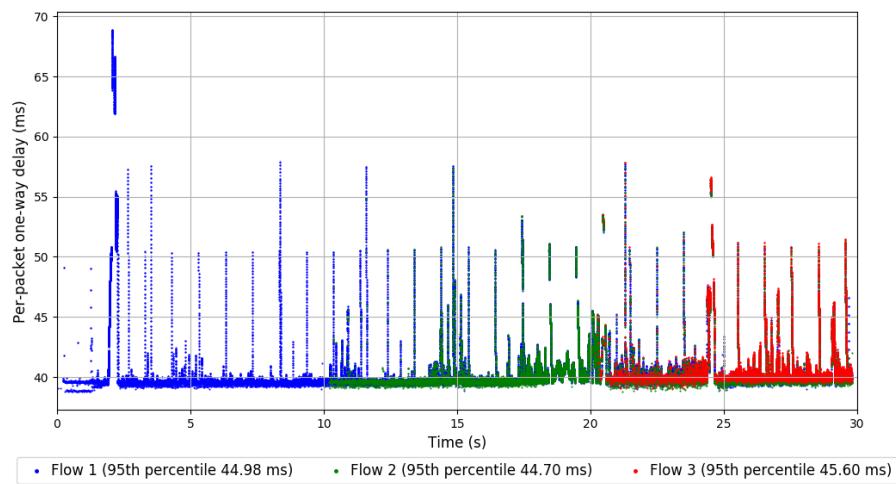
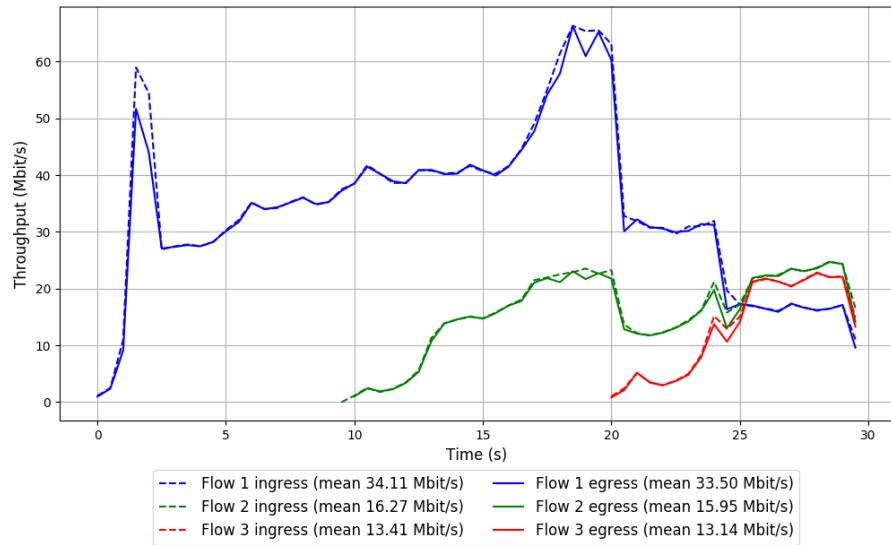


Run 9: Statistics of Vivace-latency

```
Start at: 2018-01-17 02:14:37
End at: 2018-01-17 02:15:07
Local clock offset: -1.897 ms
Remote clock offset: -5.791 ms

# Below is generated by plot.py at 2018-01-17 07:06:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.38 Mbit/s
95th percentile per-packet one-way delay: 44.957 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 33.50 Mbit/s
95th percentile per-packet one-way delay: 44.983 ms
Loss rate: 2.08%
-- Flow 2:
Average throughput: 15.95 Mbit/s
95th percentile per-packet one-way delay: 44.699 ms
Loss rate: 2.39%
-- Flow 3:
Average throughput: 13.14 Mbit/s
95th percentile per-packet one-way delay: 45.604 ms
Loss rate: 2.86%
```

Run 9: Report of Vivace-latency — Data Link

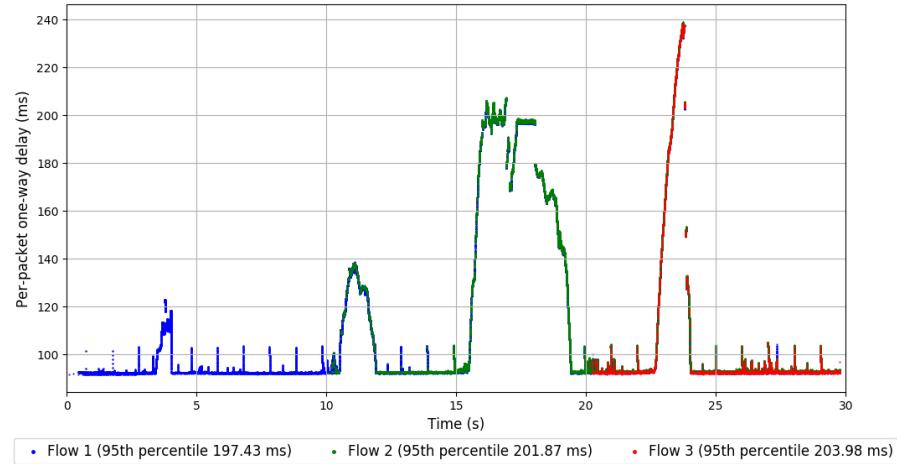
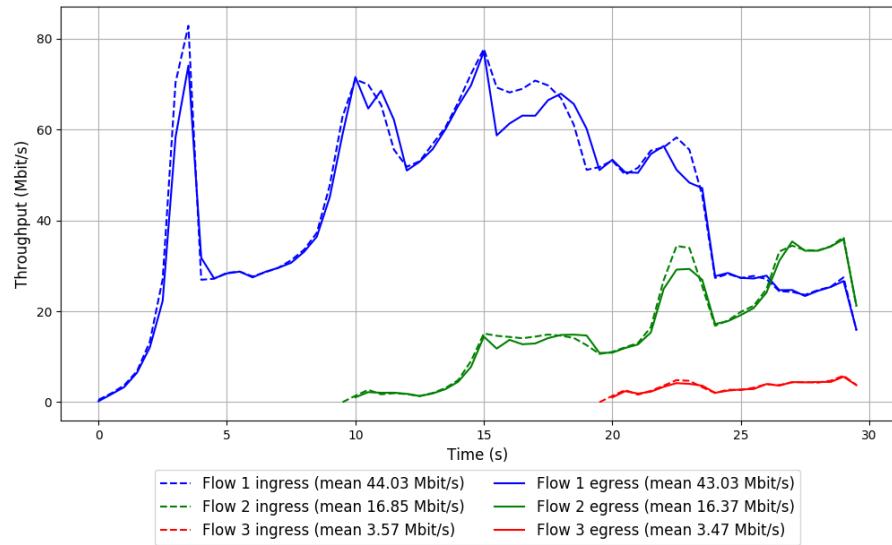


Run 10: Statistics of Vivace-latency

```
Start at: 2018-01-17 02:39:32
End at: 2018-01-17 02:40:02
Local clock offset: -1.088 ms
Remote clock offset: -57.68 ms

# Below is generated by plot.py at 2018-01-17 07:06:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.06 Mbit/s
95th percentile per-packet one-way delay: 197.676 ms
Loss rate: 2.73%
-- Flow 1:
Average throughput: 43.03 Mbit/s
95th percentile per-packet one-way delay: 197.429 ms
Loss rate: 2.55%
-- Flow 2:
Average throughput: 16.37 Mbit/s
95th percentile per-packet one-way delay: 201.872 ms
Loss rate: 3.31%
-- Flow 3:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 203.980 ms
Loss rate: 3.70%
```

## Run 10: Report of Vivace-latency — Data Link

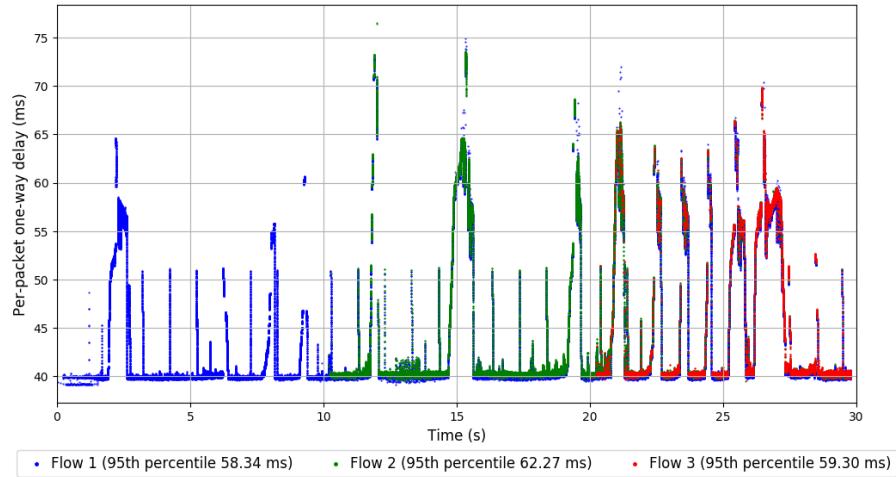
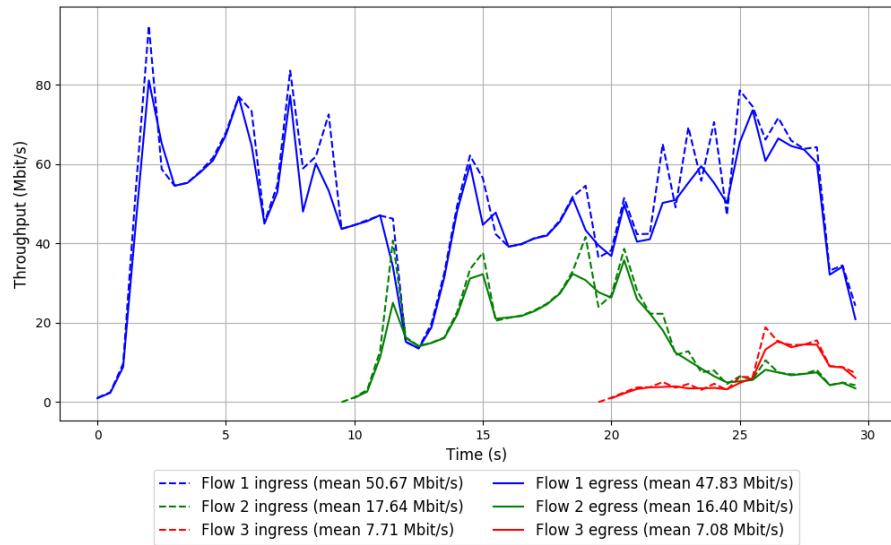


```
Run 1: Statistics of Vivace-loss

Start at: 2018-01-16 22:56:38
End at: 2018-01-16 22:57:08
Local clock offset: -1.382 ms
Remote clock offset: -7.191 ms

# Below is generated by plot.py at 2018-01-17 07:07:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.05 Mbit/s
95th percentile per-packet one-way delay: 59.473 ms
Loss rate: 6.28%
-- Flow 1:
Average throughput: 47.83 Mbit/s
95th percentile per-packet one-way delay: 58.338 ms
Loss rate: 5.89%
-- Flow 2:
Average throughput: 16.40 Mbit/s
95th percentile per-packet one-way delay: 62.266 ms
Loss rate: 7.43%
-- Flow 3:
Average throughput: 7.08 Mbit/s
95th percentile per-packet one-way delay: 59.296 ms
Loss rate: 8.87%
```

Run 1: Report of Vivace-loss — Data Link

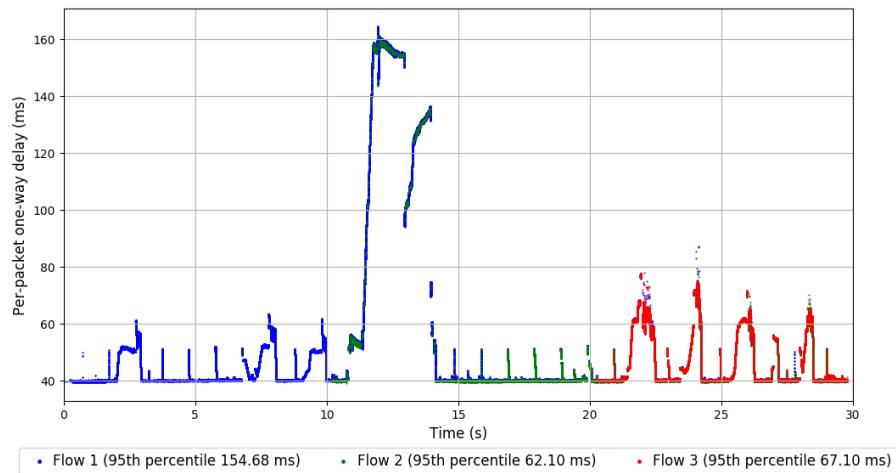
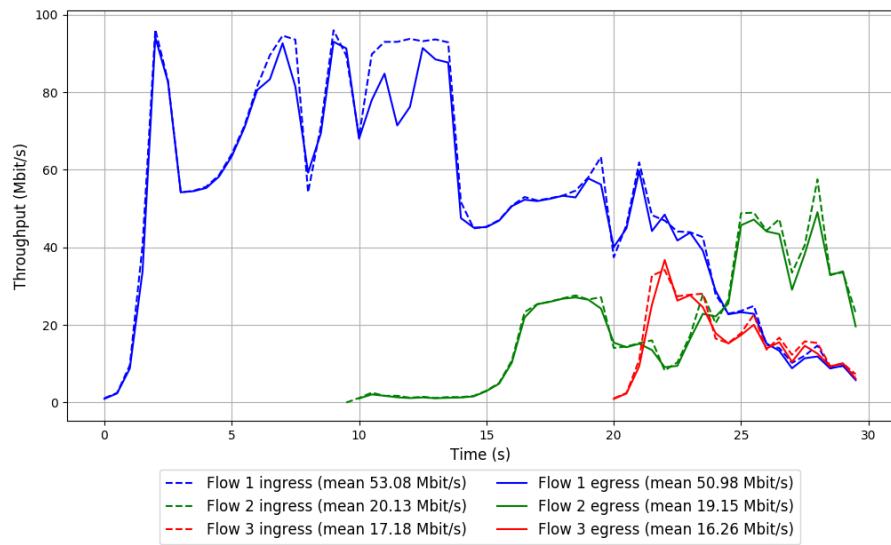


Run 2: Statistics of Vivace-loss

```
Start at: 2018-01-16 23:19:22
End at: 2018-01-16 23:19:52
Local clock offset: -1.441 ms
Remote clock offset: -6.083 ms

# Below is generated by plot.py at 2018-01-17 07:07:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.02 Mbit/s
95th percentile per-packet one-way delay: 135.445 ms
Loss rate: 4.58%
-- Flow 1:
Average throughput: 50.98 Mbit/s
95th percentile per-packet one-way delay: 154.677 ms
Loss rate: 4.24%
-- Flow 2:
Average throughput: 19.15 Mbit/s
95th percentile per-packet one-way delay: 62.104 ms
Loss rate: 5.23%
-- Flow 3:
Average throughput: 16.26 Mbit/s
95th percentile per-packet one-way delay: 67.101 ms
Loss rate: 6.24%
```

Run 2: Report of Vivace-loss — Data Link

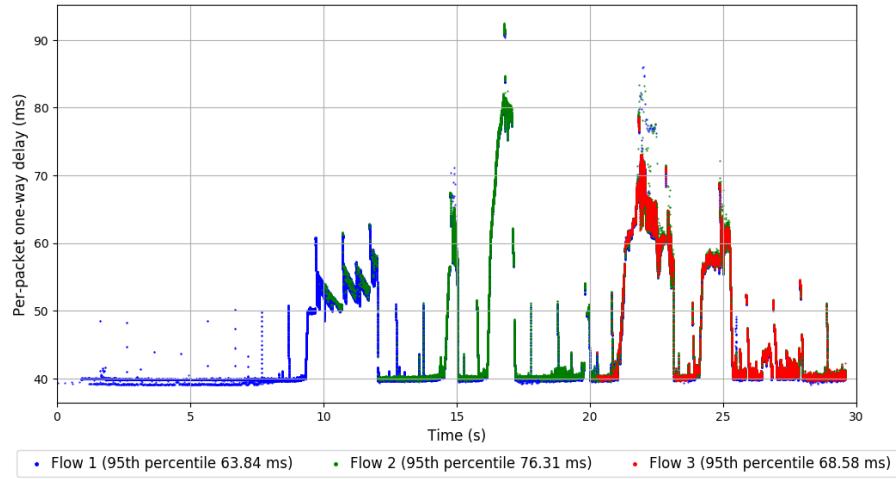
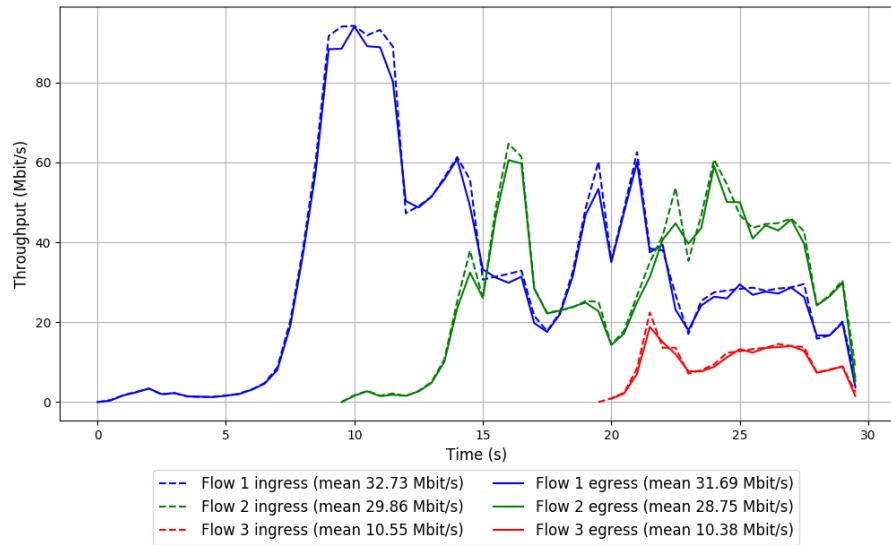


Run 3: Statistics of Vivace-loss

```
Start at: 2018-01-16 23:42:15
End at: 2018-01-16 23:42:45
Local clock offset: -1.481 ms
Remote clock offset: -5.132 ms

# Below is generated by plot.py at 2018-01-17 07:07:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.25 Mbit/s
95th percentile per-packet one-way delay: 68.113 ms
Loss rate: 3.81%
-- Flow 1:
Average throughput: 31.69 Mbit/s
95th percentile per-packet one-way delay: 63.839 ms
Loss rate: 3.45%
-- Flow 2:
Average throughput: 28.75 Mbit/s
95th percentile per-packet one-way delay: 76.312 ms
Loss rate: 4.19%
-- Flow 3:
Average throughput: 10.38 Mbit/s
95th percentile per-packet one-way delay: 68.575 ms
Loss rate: 4.93%
```

Run 3: Report of Vivace-loss — Data Link

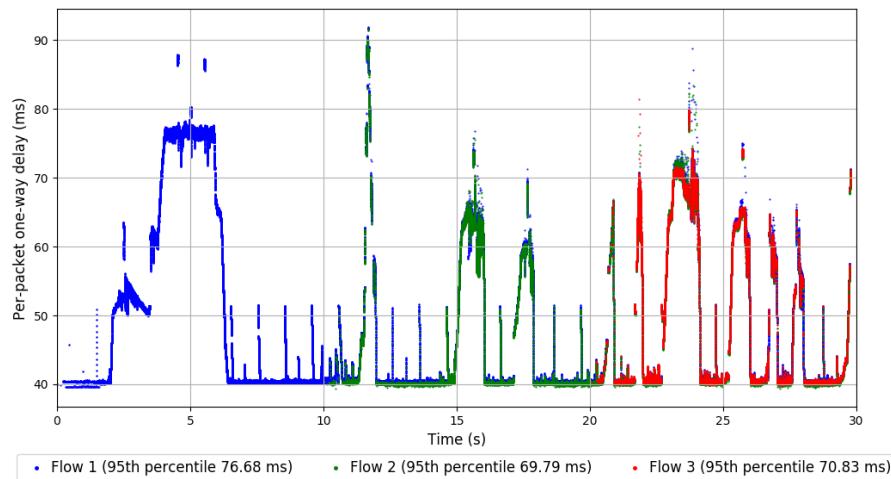
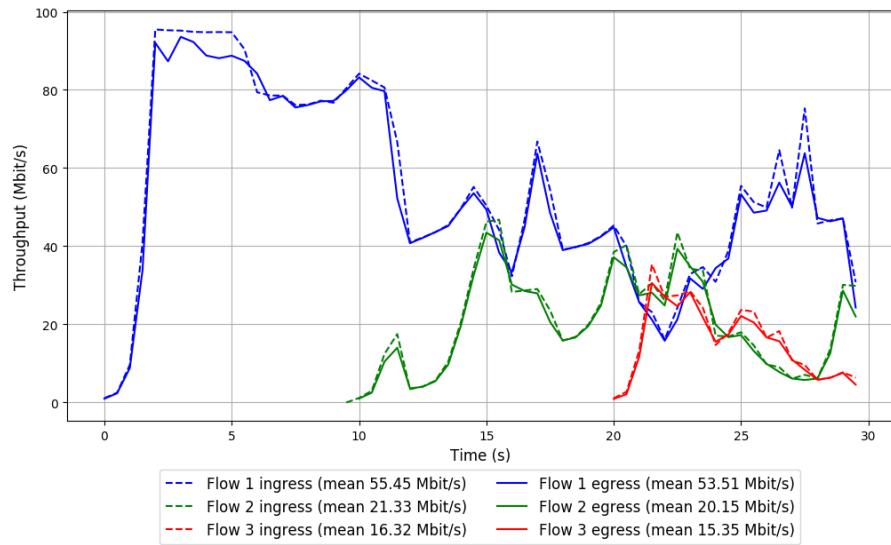


Run 4: Statistics of Vivace-loss

```
Start at: 2018-01-17 00:05:03
End at: 2018-01-17 00:05:33
Local clock offset: -1.424 ms
Remote clock offset: -5.293 ms

# Below is generated by plot.py at 2018-01-17 07:08:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.91 Mbit/s
95th percentile per-packet one-way delay: 76.537 ms
Loss rate: 4.47%
-- Flow 1:
Average throughput: 53.51 Mbit/s
95th percentile per-packet one-way delay: 76.677 ms
Loss rate: 3.84%
-- Flow 2:
Average throughput: 20.15 Mbit/s
95th percentile per-packet one-way delay: 69.792 ms
Loss rate: 6.00%
-- Flow 3:
Average throughput: 15.35 Mbit/s
95th percentile per-packet one-way delay: 70.826 ms
Loss rate: 6.88%
```

Run 4: Report of Vivace-loss — Data Link

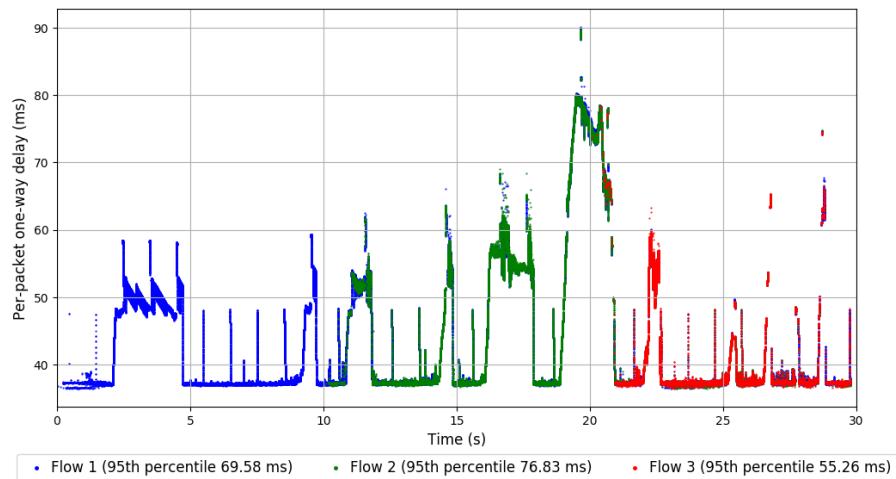
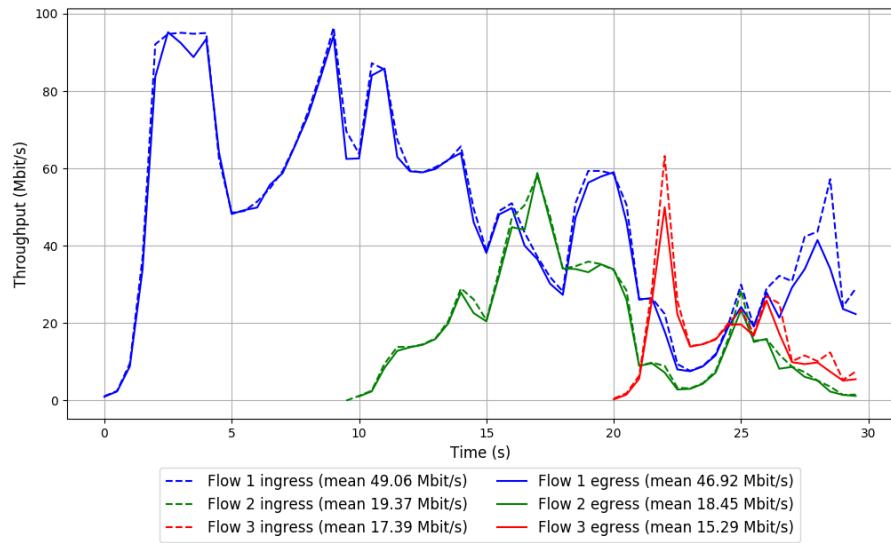


Run 5: Statistics of Vivace-loss

```
Start at: 2018-01-17 00:28:23
End at: 2018-01-17 00:28:53
Local clock offset: -4.443 ms
Remote clock offset: -6.687 ms

# Below is generated by plot.py at 2018-01-17 07:08:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.16 Mbit/s
95th percentile per-packet one-way delay: 73.600 ms
Loss rate: 5.47%
-- Flow 1:
Average throughput: 46.92 Mbit/s
95th percentile per-packet one-way delay: 69.580 ms
Loss rate: 4.66%
-- Flow 2:
Average throughput: 18.45 Mbit/s
95th percentile per-packet one-way delay: 76.833 ms
Loss rate: 5.16%
-- Flow 3:
Average throughput: 15.29 Mbit/s
95th percentile per-packet one-way delay: 55.257 ms
Loss rate: 13.15%
```

Run 5: Report of Vivace-loss — Data Link

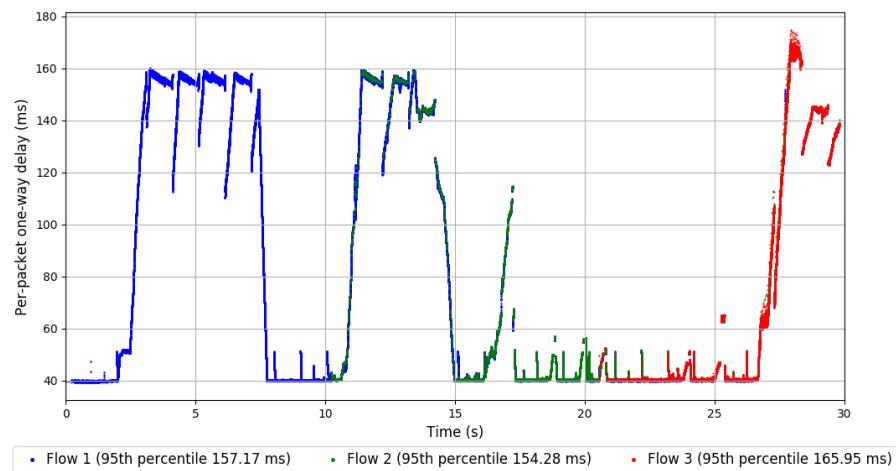
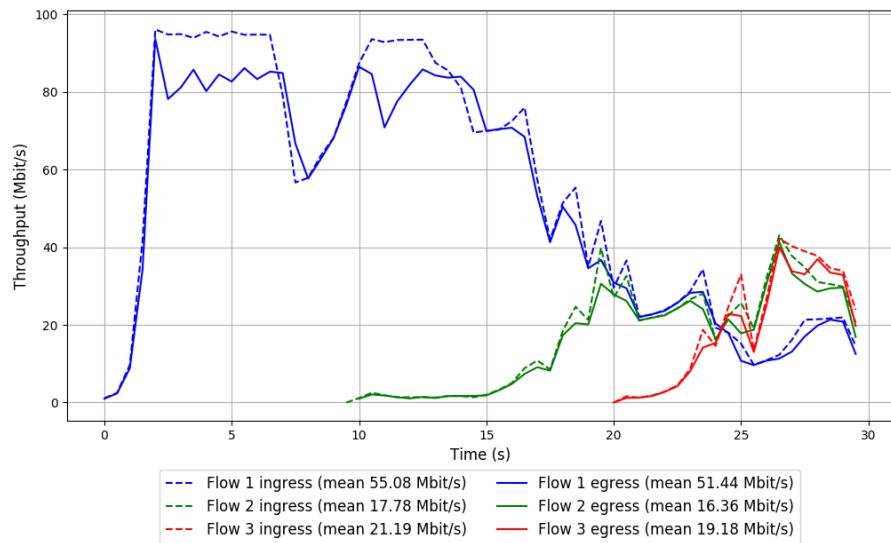


Run 6: Statistics of Vivace-loss

```
Start at: 2018-01-17 00:51:39
End at: 2018-01-17 00:52:09
Local clock offset: -1.765 ms
Remote clock offset: -6.214 ms

# Below is generated by plot.py at 2018-01-17 07:08:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.39 Mbit/s
95th percentile per-packet one-way delay: 157.271 ms
Loss rate: 7.42%
-- Flow 1:
Average throughput: 51.44 Mbit/s
95th percentile per-packet one-way delay: 157.168 ms
Loss rate: 6.87%
-- Flow 2:
Average throughput: 16.36 Mbit/s
95th percentile per-packet one-way delay: 154.275 ms
Loss rate: 8.37%
-- Flow 3:
Average throughput: 19.18 Mbit/s
95th percentile per-packet one-way delay: 165.953 ms
Loss rate: 10.30%
```

Run 6: Report of Vivace-loss — Data Link

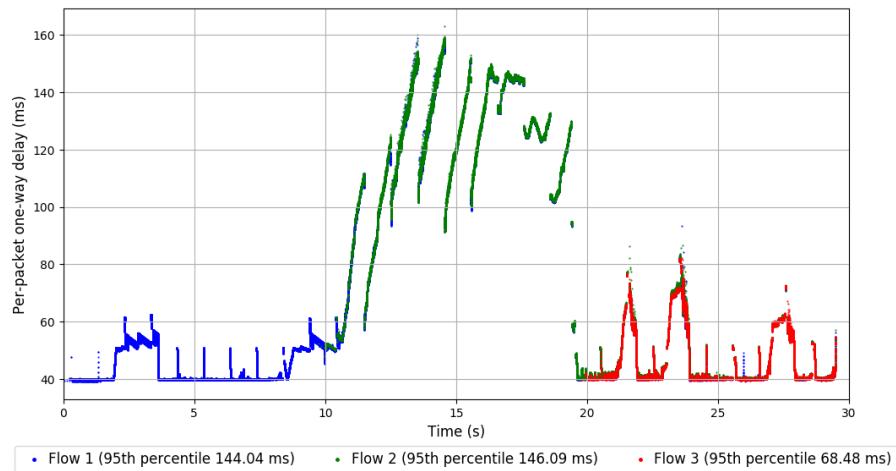
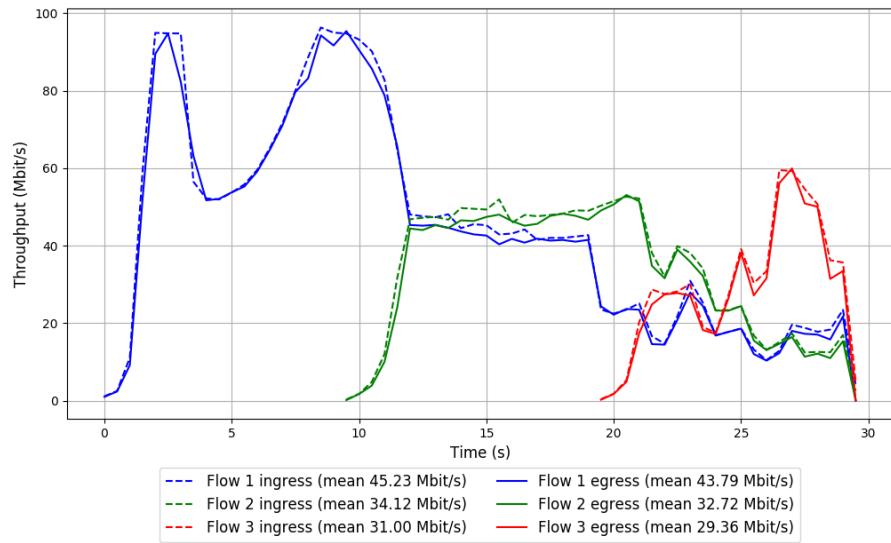


Run 7: Statistics of Vivace-loss

```
Start at: 2018-01-17 01:14:59
End at: 2018-01-17 01:15:29
Local clock offset: -1.876 ms
Remote clock offset: -5.723 ms

# Below is generated by plot.py at 2018-01-17 07:08:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.42 Mbit/s
95th percentile per-packet one-way delay: 144.545 ms
Loss rate: 4.17%
-- Flow 1:
Average throughput: 43.79 Mbit/s
95th percentile per-packet one-way delay: 144.040 ms
Loss rate: 3.49%
-- Flow 2:
Average throughput: 32.72 Mbit/s
95th percentile per-packet one-way delay: 146.093 ms
Loss rate: 4.61%
-- Flow 3:
Average throughput: 29.36 Mbit/s
95th percentile per-packet one-way delay: 68.479 ms
Loss rate: 6.20%
```

Run 7: Report of Vivace-loss — Data Link

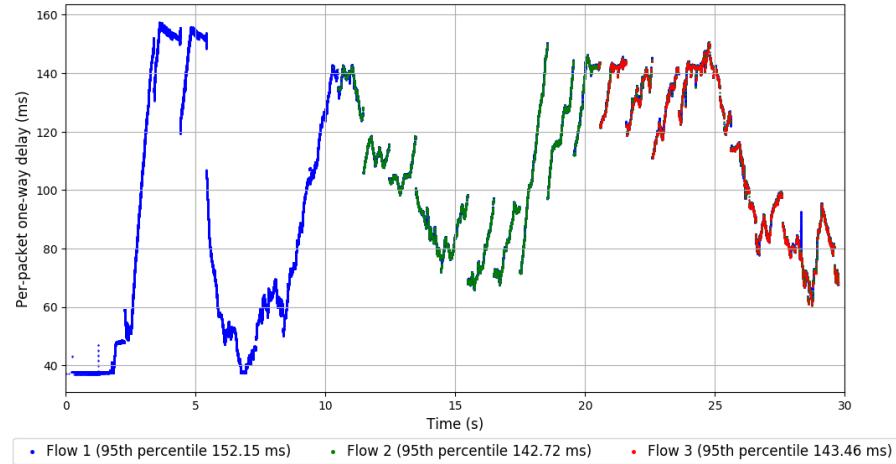
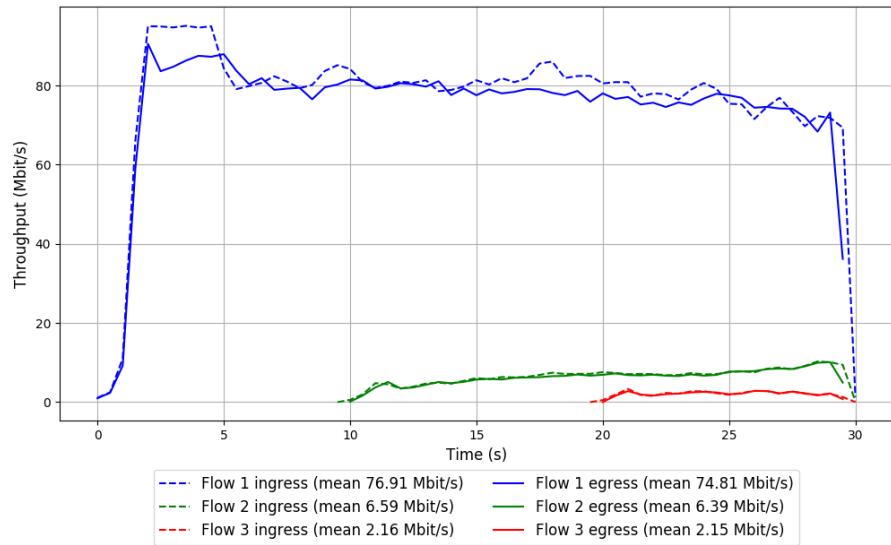


Run 8: Statistics of Vivace-loss

```
Start at: 2018-01-17 01:38:10
End at: 2018-01-17 01:38:40
Local clock offset: -4.372 ms
Remote clock offset: -6.056 ms

# Below is generated by plot.py at 2018-01-17 07:08:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.73 Mbit/s
95th percentile per-packet one-way delay: 151.907 ms
Loss rate: 3.79%
-- Flow 1:
Average throughput: 74.81 Mbit/s
95th percentile per-packet one-way delay: 152.152 ms
Loss rate: 3.71%
-- Flow 2:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 142.718 ms
Loss rate: 4.98%
-- Flow 3:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 143.456 ms
Loss rate: 4.60%
```

Run 8: Report of Vivace-loss — Data Link

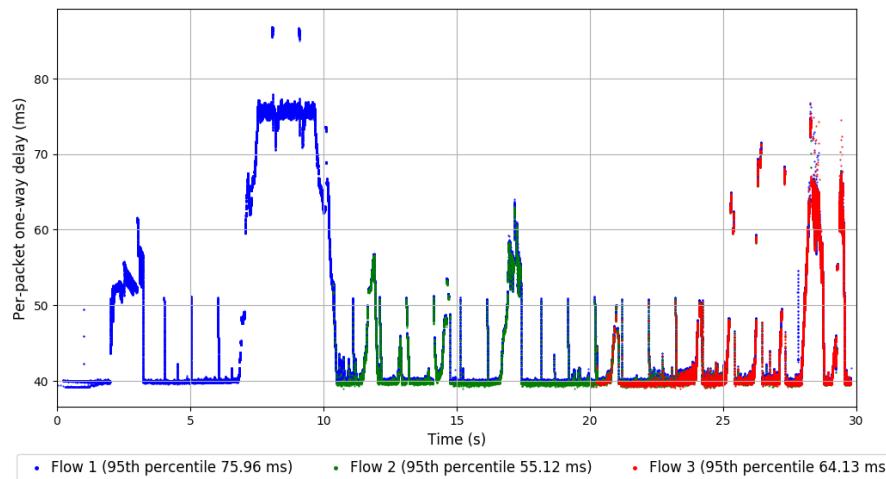
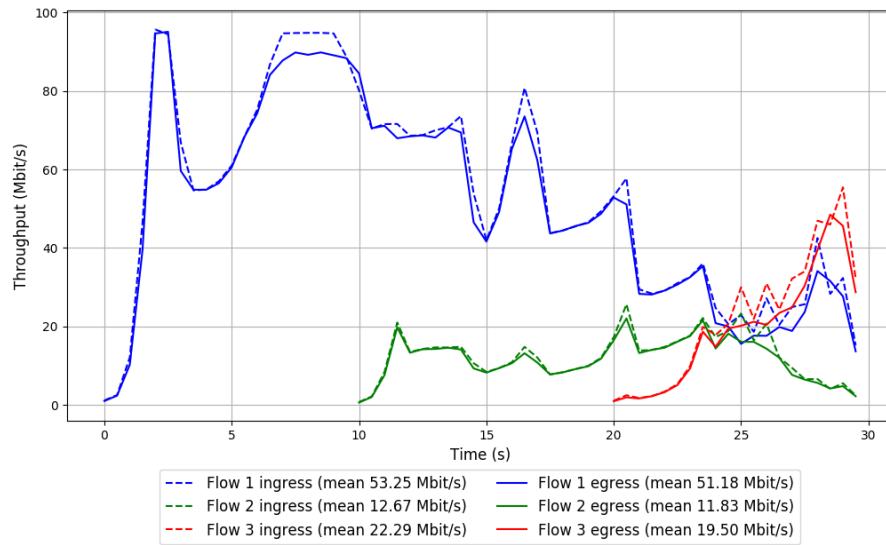


Run 9: Statistics of Vivace-loss

```
Start at: 2018-01-17 02:01:35
End at: 2018-01-17 02:02:05
Local clock offset: -1.929 ms
Remote clock offset: -6.192 ms

# Below is generated by plot.py at 2018-01-17 07:09:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.39 Mbit/s
95th percentile per-packet one-way delay: 75.844 ms
Loss rate: 5.51%
-- Flow 1:
Average throughput: 51.18 Mbit/s
95th percentile per-packet one-way delay: 75.959 ms
Loss rate: 4.17%
-- Flow 2:
Average throughput: 11.83 Mbit/s
95th percentile per-packet one-way delay: 55.124 ms
Loss rate: 7.19%
-- Flow 3:
Average throughput: 19.50 Mbit/s
95th percentile per-packet one-way delay: 64.130 ms
Loss rate: 13.32%
```

Run 9: Report of Vivace-loss — Data Link

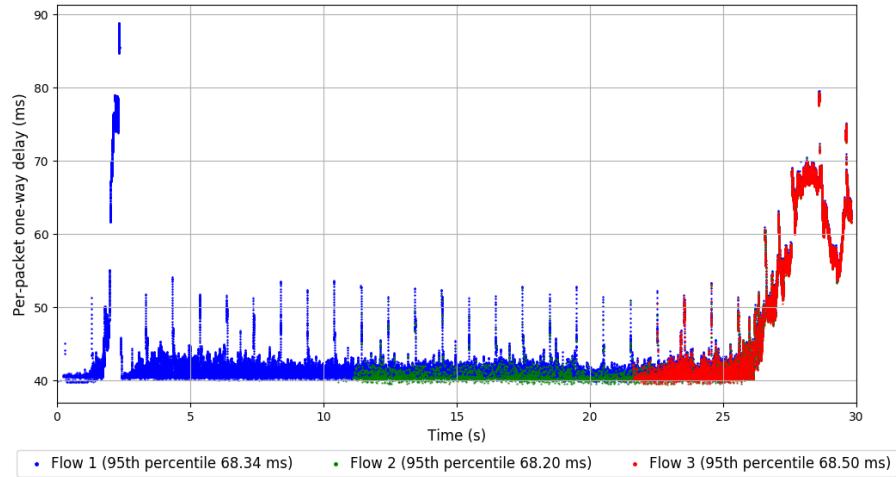
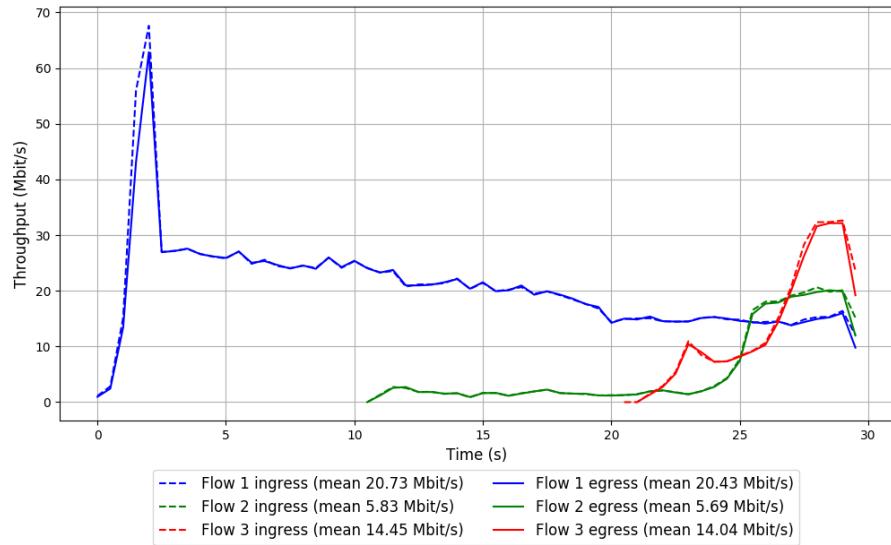


Run 10: Statistics of Vivace-loss

```
Start at: 2018-01-17 02:26:17
End at: 2018-01-17 02:26:47
Local clock offset: -0.939 ms
Remote clock offset: -5.525 ms

# Below is generated by plot.py at 2018-01-17 07:09:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 28.24 Mbit/s
95th percentile per-packet one-way delay: 68.360 ms
Loss rate: 2.33%
-- Flow 1:
Average throughput: 20.43 Mbit/s
95th percentile per-packet one-way delay: 68.342 ms
Loss rate: 1.85%
-- Flow 2:
Average throughput: 5.69 Mbit/s
95th percentile per-packet one-way delay: 68.204 ms
Loss rate: 2.97%
-- Flow 3:
Average throughput: 14.04 Mbit/s
95th percentile per-packet one-way delay: 68.498 ms
Loss rate: 4.08%
```

Run 10: Report of Vivace-loss — Data Link

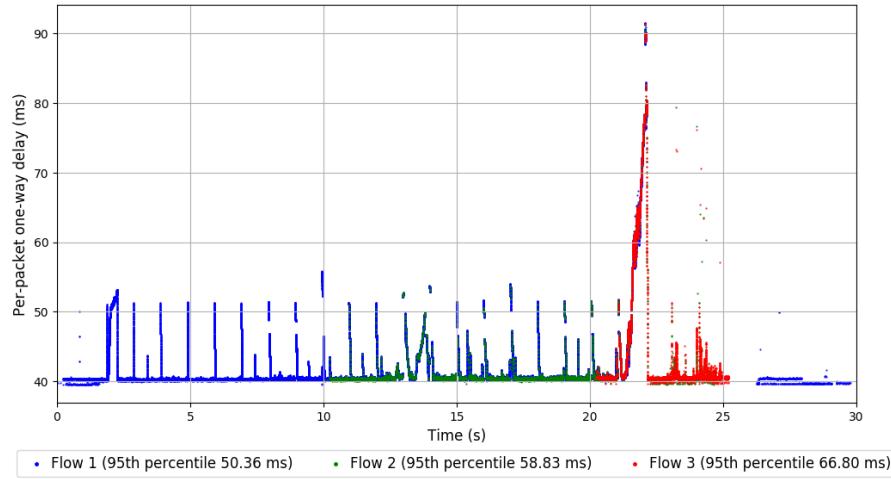
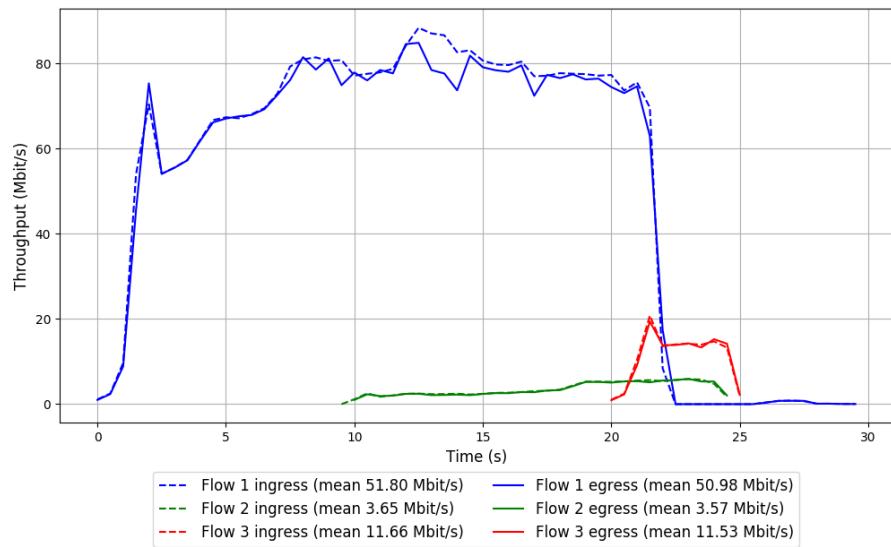


Run 1: Statistics of Vivace-LTE

```
Start at: 2018-01-16 22:55:20
End at: 2018-01-16 22:55:50
Local clock offset: -1.204 ms
Remote clock offset: -7.241 ms

# Below is generated by plot.py at 2018-01-17 07:09:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.75 Mbit/s
95th percentile per-packet one-way delay: 50.895 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 50.98 Mbit/s
95th percentile per-packet one-way delay: 50.359 ms
Loss rate: 2.07%
-- Flow 2:
Average throughput: 3.57 Mbit/s
95th percentile per-packet one-way delay: 58.830 ms
Loss rate: 2.02%
-- Flow 3:
Average throughput: 11.53 Mbit/s
95th percentile per-packet one-way delay: 66.800 ms
Loss rate: 1.33%
```

Run 1: Report of Vivace-LTE — Data Link

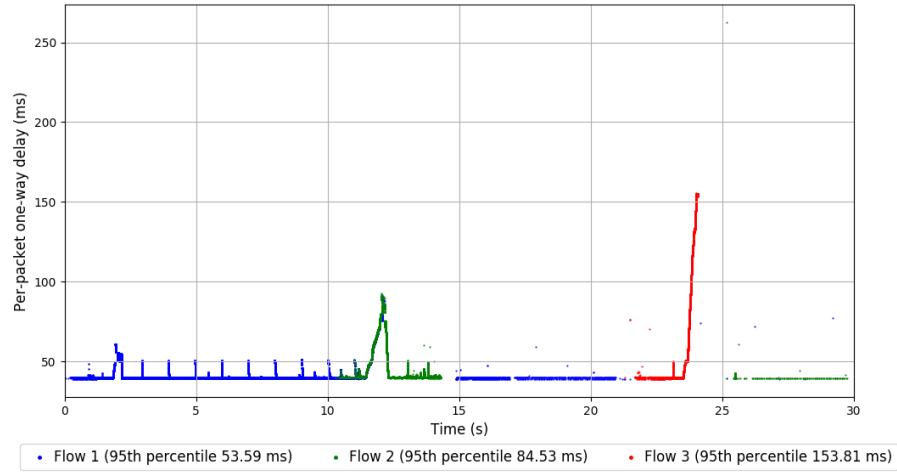
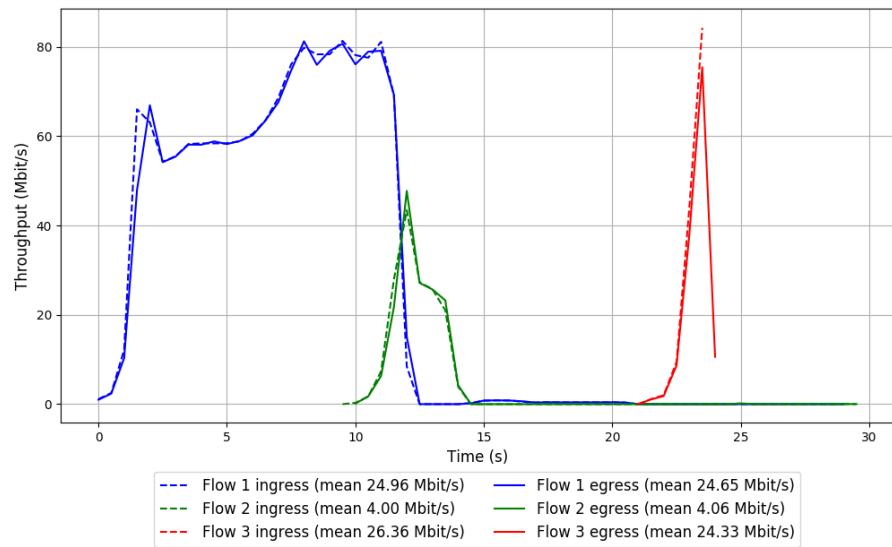


Run 2: Statistics of Vivace-LTE

```
Start at: 2018-01-16 23:18:07
End at: 2018-01-16 23:18:37
Local clock offset: -1.676 ms
Remote clock offset: -6.084 ms

# Below is generated by plot.py at 2018-01-17 07:09:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.14 Mbit/s
95th percentile per-packet one-way delay: 71.303 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 24.65 Mbit/s
95th percentile per-packet one-way delay: 53.588 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 4.06 Mbit/s
95th percentile per-packet one-way delay: 84.530 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 24.33 Mbit/s
95th percentile per-packet one-way delay: 153.811 ms
Loss rate: 3.77%
```

Run 2: Report of Vivace-LTE — Data Link

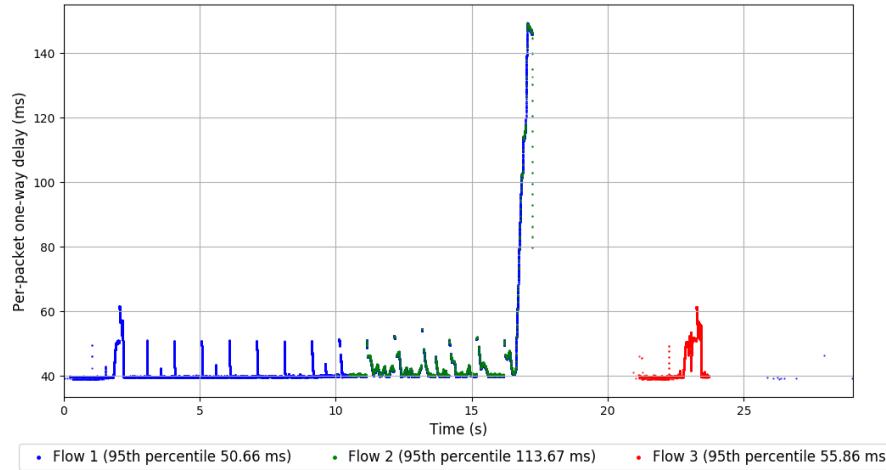
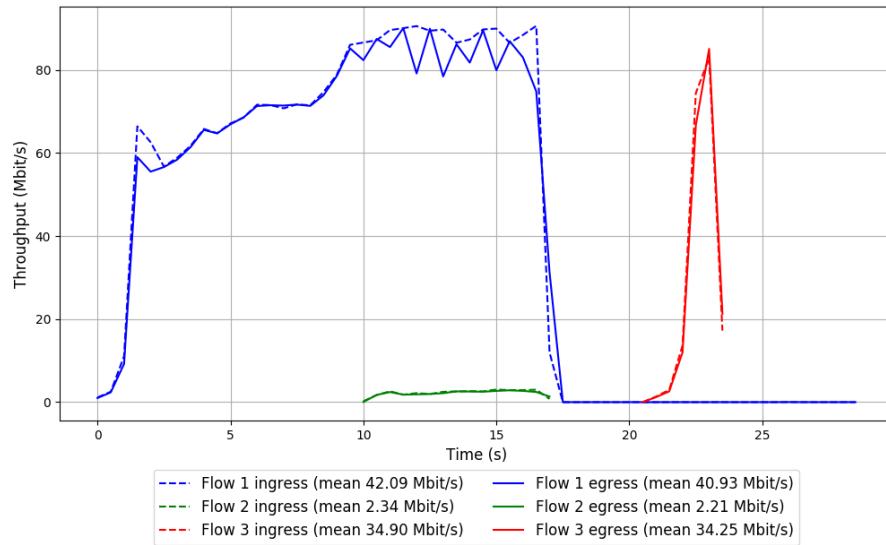


Run 3: Statistics of Vivace-LTE

```
Start at: 2018-01-16 23:40:52
End at: 2018-01-16 23:41:22
Local clock offset: -1.588 ms
Remote clock offset: -5.219 ms

# Below is generated by plot.py at 2018-01-17 07:09:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.73 Mbit/s
95th percentile per-packet one-way delay: 52.432 ms
Loss rate: 2.74%
-- Flow 1:
Average throughput: 40.93 Mbit/s
95th percentile per-packet one-way delay: 50.655 ms
Loss rate: 2.77%
-- Flow 2:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 113.666 ms
Loss rate: 4.96%
-- Flow 3:
Average throughput: 34.25 Mbit/s
95th percentile per-packet one-way delay: 55.859 ms
Loss rate: 1.91%
```

### Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-01-17 00:03:52

End at: 2018-01-17 00:04:22

Local clock offset: -4.315 ms

Remote clock offset: -5.082 ms

Run 4: Report of Vivace-LTE — Data Link

Figure is missing

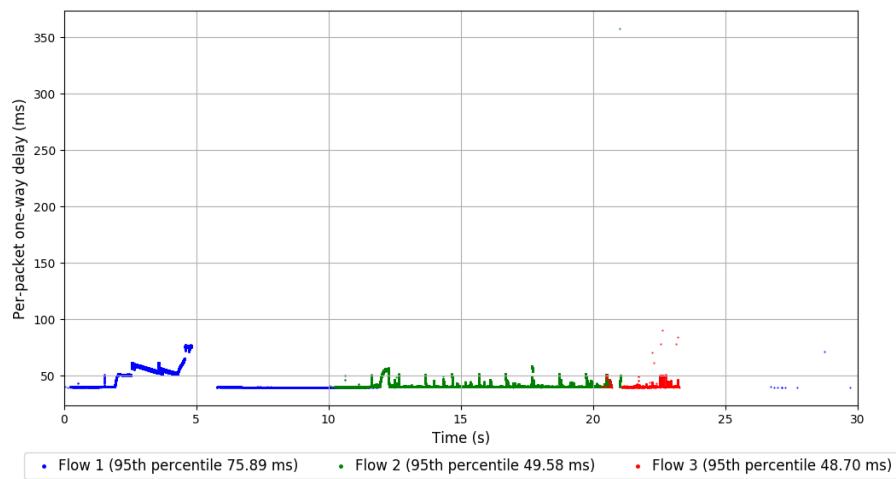
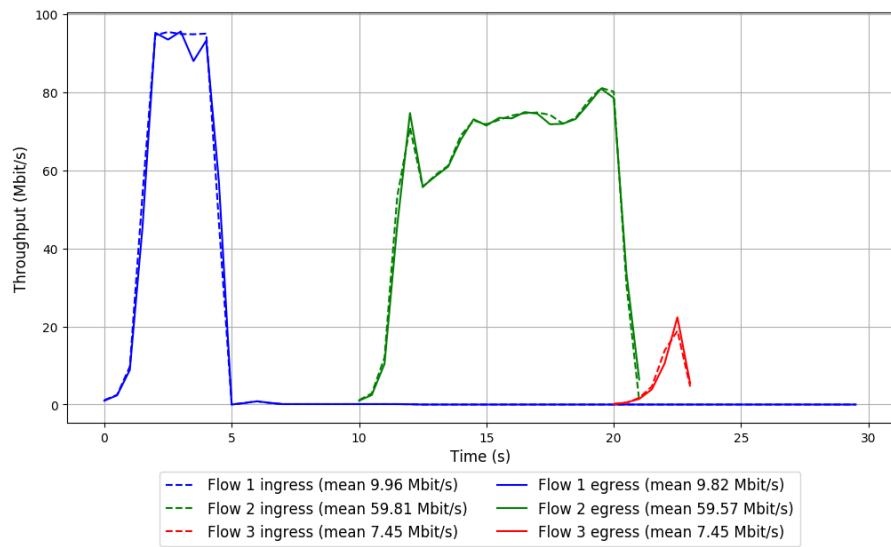
Figure is missing

Run 5: Statistics of Vivace-LTE

```
Start at: 2018-01-17 00:27:06
End at: 2018-01-17 00:27:36
Local clock offset: -1.547 ms
Remote clock offset: -6.758 ms

# Below is generated by plot.py at 2018-01-17 07:09:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.65 Mbit/s
95th percentile per-packet one-way delay: 59.275 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 9.82 Mbit/s
95th percentile per-packet one-way delay: 75.892 ms
Loss rate: 1.41%
-- Flow 2:
Average throughput: 59.57 Mbit/s
95th percentile per-packet one-way delay: 49.578 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 7.45 Mbit/s
95th percentile per-packet one-way delay: 48.704 ms
Loss rate: 0.00%
```

Run 5: Report of Vivace-LTE — Data Link

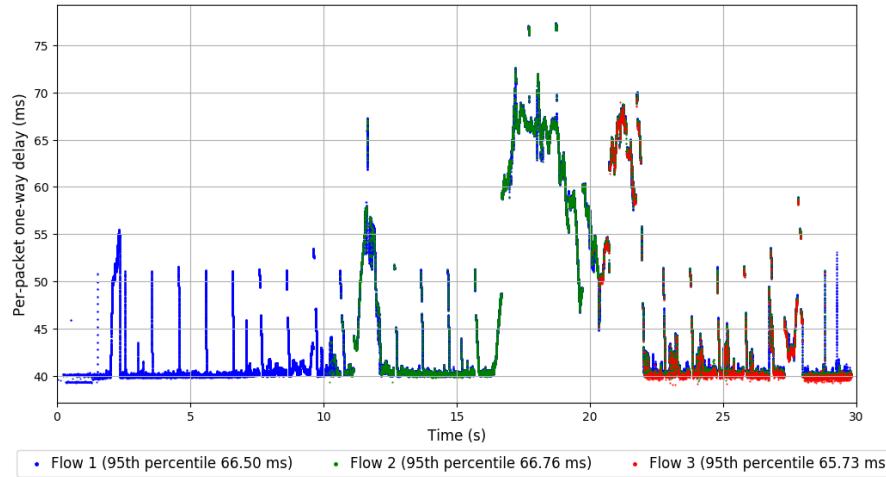
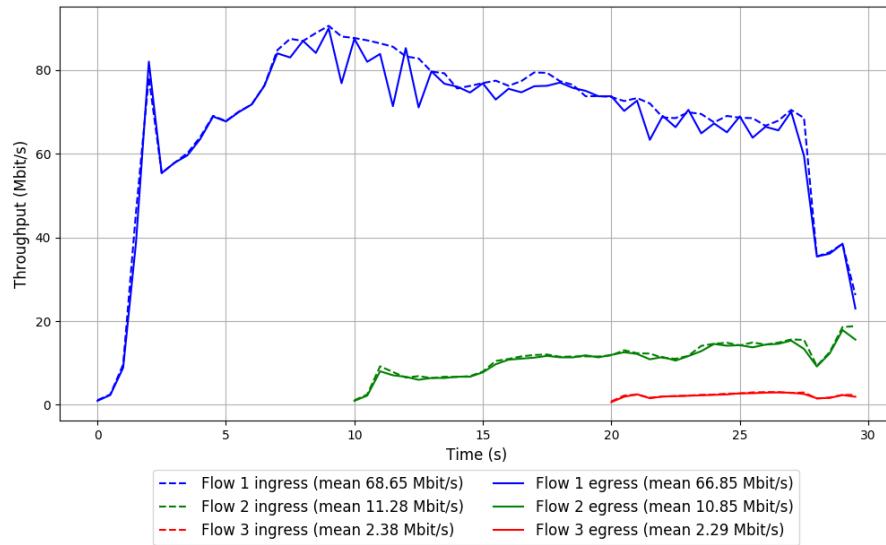


Run 6: Statistics of Vivace-LTE

```
Start at: 2018-01-17 00:50:20
End at: 2018-01-17 00:50:50
Local clock offset: -1.91 ms
Remote clock offset: -6.209 ms

# Below is generated by plot.py at 2018-01-17 07:10:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.80 Mbit/s
95th percentile per-packet one-way delay: 66.529 ms
Loss rate: 3.04%
-- Flow 1:
Average throughput: 66.85 Mbit/s
95th percentile per-packet one-way delay: 66.496 ms
Loss rate: 2.89%
-- Flow 2:
Average throughput: 10.85 Mbit/s
95th percentile per-packet one-way delay: 66.759 ms
Loss rate: 4.20%
-- Flow 3:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 65.729 ms
Loss rate: 4.71%
```

Run 6: Report of Vivace-LTE — Data Link

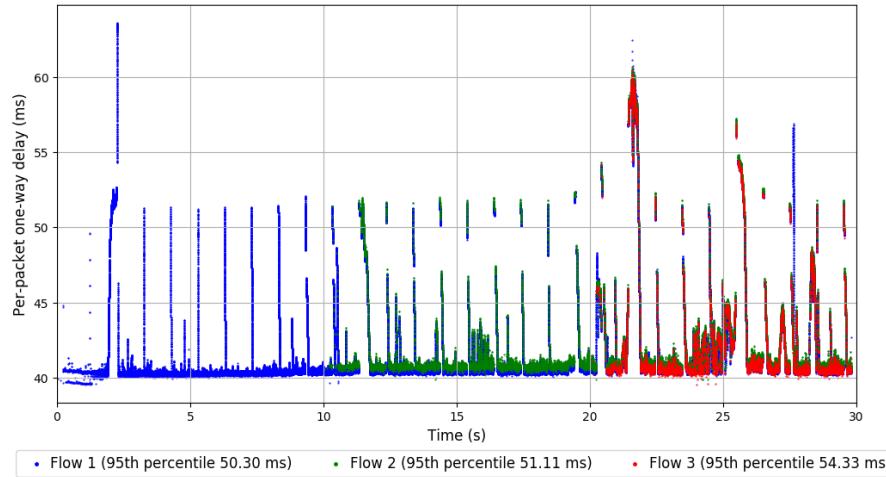
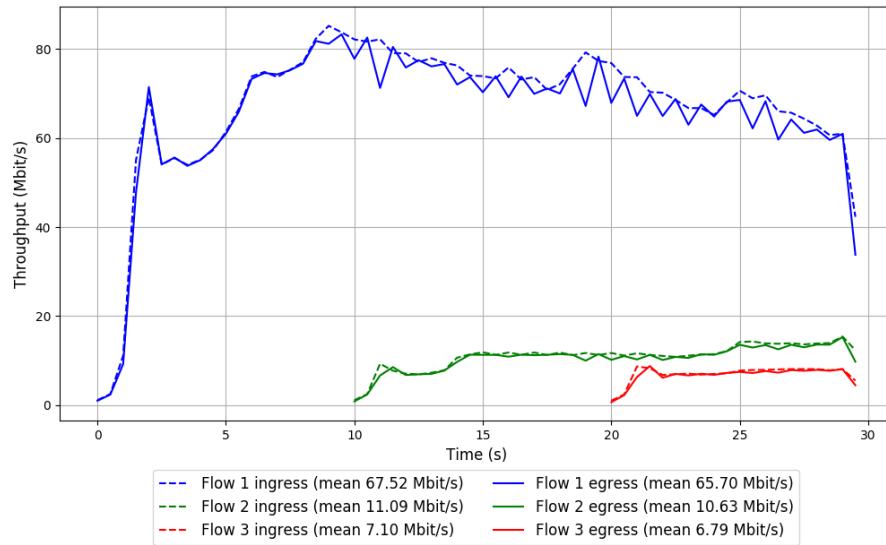


Run 7: Statistics of Vivace-LTE

```
Start at: 2018-01-17 01:13:40
End at: 2018-01-17 01:14:10
Local clock offset: -1.595 ms
Remote clock offset: -5.735 ms

# Below is generated by plot.py at 2018-01-17 07:10:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.99 Mbit/s
95th percentile per-packet one-way delay: 50.489 ms
Loss rate: 3.20%
-- Flow 1:
Average throughput: 65.70 Mbit/s
95th percentile per-packet one-way delay: 50.295 ms
Loss rate: 2.99%
-- Flow 2:
Average throughput: 10.63 Mbit/s
95th percentile per-packet one-way delay: 51.113 ms
Loss rate: 4.55%
-- Flow 3:
Average throughput: 6.79 Mbit/s
95th percentile per-packet one-way delay: 54.331 ms
Loss rate: 5.14%
```

Run 7: Report of Vivace-LTE — Data Link

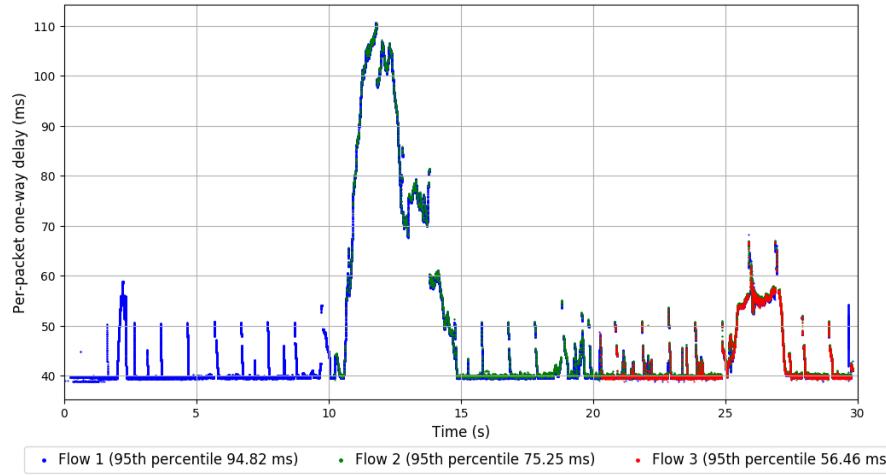
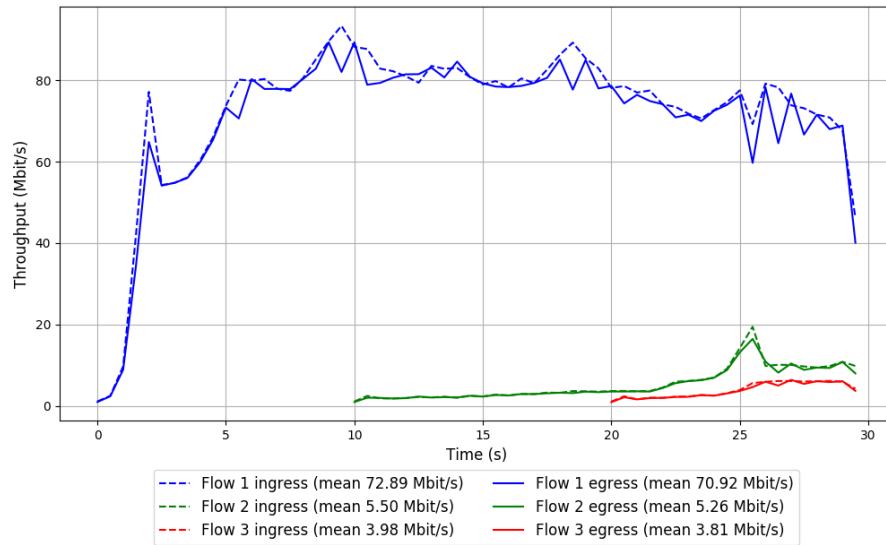


Run 8: Statistics of Vivace-LTE

```
Start at: 2018-01-17 01:36:52
End at: 2018-01-17 01:37:22
Local clock offset: -2.159 ms
Remote clock offset: -6.064 ms

# Below is generated by plot.py at 2018-01-17 07:10:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.66 Mbit/s
95th percentile per-packet one-way delay: 93.454 ms
Loss rate: 3.10%
-- Flow 1:
Average throughput: 70.92 Mbit/s
95th percentile per-packet one-way delay: 94.821 ms
Loss rate: 2.98%
-- Flow 2:
Average throughput: 5.26 Mbit/s
95th percentile per-packet one-way delay: 75.248 ms
Loss rate: 4.80%
-- Flow 3:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 56.463 ms
Loss rate: 5.09%
```

Run 8: Report of Vivace-LTE — Data Link

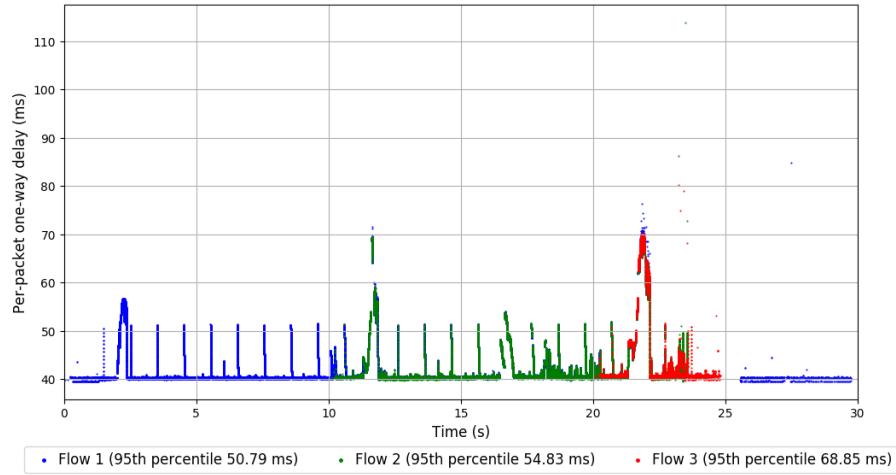
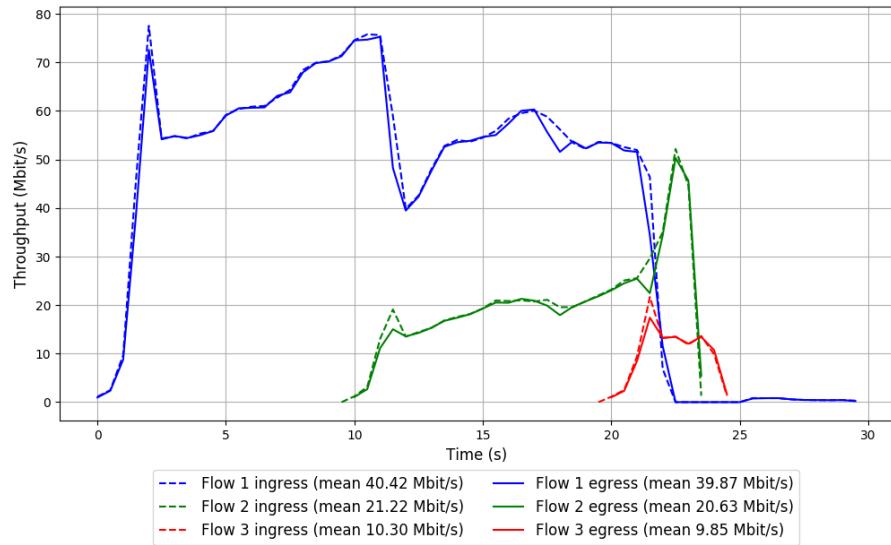


Run 9: Statistics of Vivace-LTE

```
Start at: 2018-01-17 02:00:19
End at: 2018-01-17 02:00:49
Local clock offset: -1.35 ms
Remote clock offset: -6.162 ms

# Below is generated by plot.py at 2018-01-17 07:10:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.86 Mbit/s
95th percentile per-packet one-way delay: 52.242 ms
Loss rate: 2.12%
-- Flow 1:
Average throughput: 39.87 Mbit/s
95th percentile per-packet one-way delay: 50.789 ms
Loss rate: 1.89%
-- Flow 2:
Average throughput: 20.63 Mbit/s
95th percentile per-packet one-way delay: 54.829 ms
Loss rate: 2.72%
-- Flow 3:
Average throughput: 9.85 Mbit/s
95th percentile per-packet one-way delay: 68.847 ms
Loss rate: 4.41%
```

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-01-17 02:25:06

End at: 2018-01-17 02:25:36

Local clock offset: -3.967 ms

Remote clock offset: -5.571 ms

Run 10: Report of Vivace-LTE — Data Link

Figure is missing

Figure is missing