

## Pantheon Report

Generated at 2017-10-12 14:21:22 (UTC).

Data path: AWS California 1 Ethernet (*local*) → Stanford Ethernet (*remote*).

Repeated the test of 14 congestion control schemes 10 times.

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

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

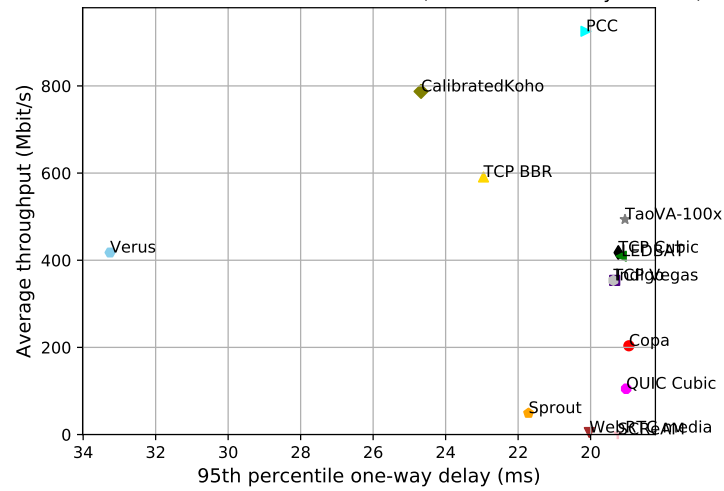
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo\_fast**).

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

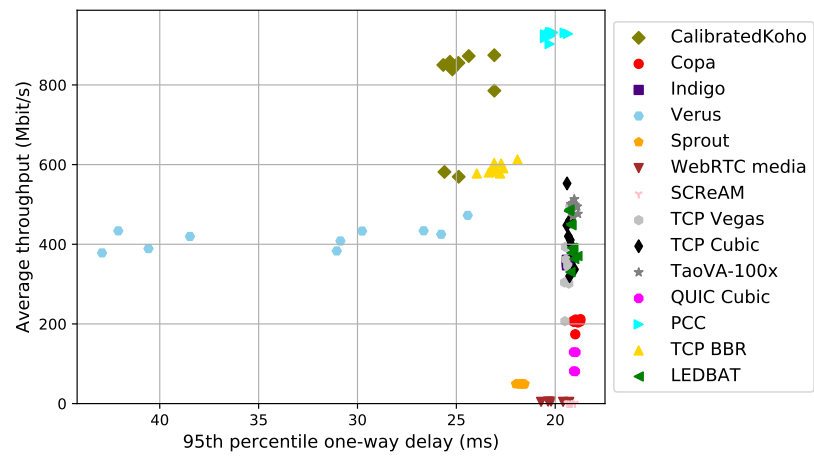
Git summary:

```
branch: indigos @ 45998d6404be7c5106956530acb9cfc43bd06e7d
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
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/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from AWS California 1 Ethernet to Stanford Ethernet, 10 runs of 30s each per scheme  
3 flows with 10s interval between flows (mean of all runs by scheme)



test from AWS California 1 Ethernet to Stanford 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     | 320.49                 | 277.71 | 243.24 | 23.77                     | 21.52  | 21.01  | 16.12              | 19.47  | 22.66  |
| TCP Cubic      | 10     | 225.47                 | 194.62 | 187.93 | 19.09                     | 18.92  | 18.96  | 0.07               | 0.10   | 0.12   |
| LEDBAT         | 10     | 227.50                 | 198.25 | 150.23 | 18.79                     | 19.07  | 19.15  | 0.02               | 0.02   | 0.03   |
| PCC            | 10     | 791.83                 | 157.35 | 88.05  | 20.01                     | 20.16  | 20.22  | 0.44               | 0.24   | 0.34   |
| QUIC Cubic     | 4      | 185.00                 | 67.39  | 61.23  | 18.89                     | 19.00  | 19.04  | 0.00               | 0.00   | 0.00   |
| SCReAM         | 10     | 0.22                   | 0.22   | 0.22   | 19.00                     | 19.20  | 19.09  | 0.00               | 0.00   | 0.00   |
| WebRTC media   | 5      | 2.38                   | 1.66   | 0.63   | 20.12                     | 19.89  | 19.78  | 0.00               | 0.00   | 0.00   |
| Sprout         | 10     | 24.69                  | 24.66  | 24.38  | 21.75                     | 21.60  | 21.26  | 0.08               | 0.11   | 0.08   |
| TaoVA-100x     | 10     | 261.41                 | 253.01 | 246.41 | 18.94                     | 19.05  | 19.27  | 0.01               | 0.01   | 0.01   |
| TCP Vegas      | 10     | 201.44                 | 156.22 | 145.09 | 19.19                     | 19.40  | 19.24  | 0.05               | 0.09   | 0.06   |
| Verus          | 10     | 214.10                 | 207.88 | 198.05 | 40.13                     | 25.44  | 24.06  | 16.07              | 16.35  | 17.60  |
| Copa           | 10     | 103.40                 | 107.60 | 110.38 | 18.89                     | 18.73  | 18.89  | 0.01               | 0.01   | 0.01   |
| CalibratedKoho | 9      | 539.30                 | 436.75 | 284.09 | 544.77                    | 23.18  | 21.86  | 30.37              | 44.60  | 54.00  |
| Indigo         | 10     | 186.17                 | 174.33 | 161.12 | 19.23                     | 19.17  | 19.58  | 0.01               | 0.01   | 0.02   |

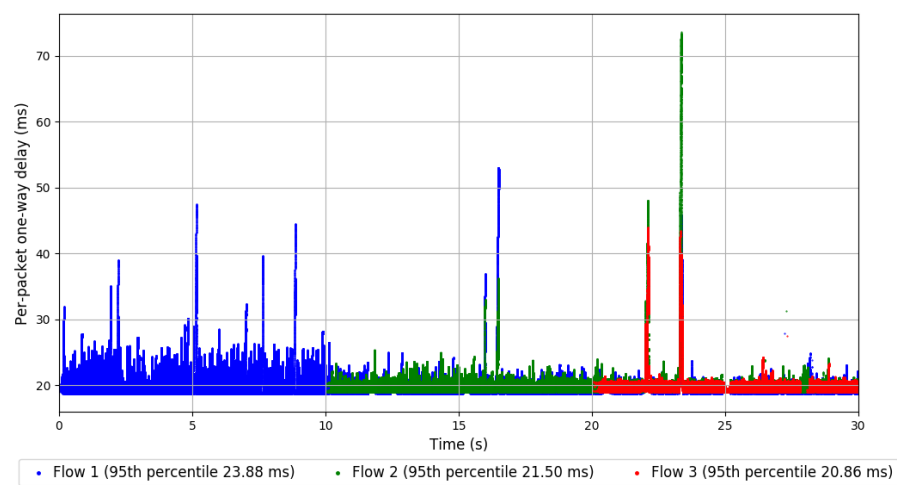
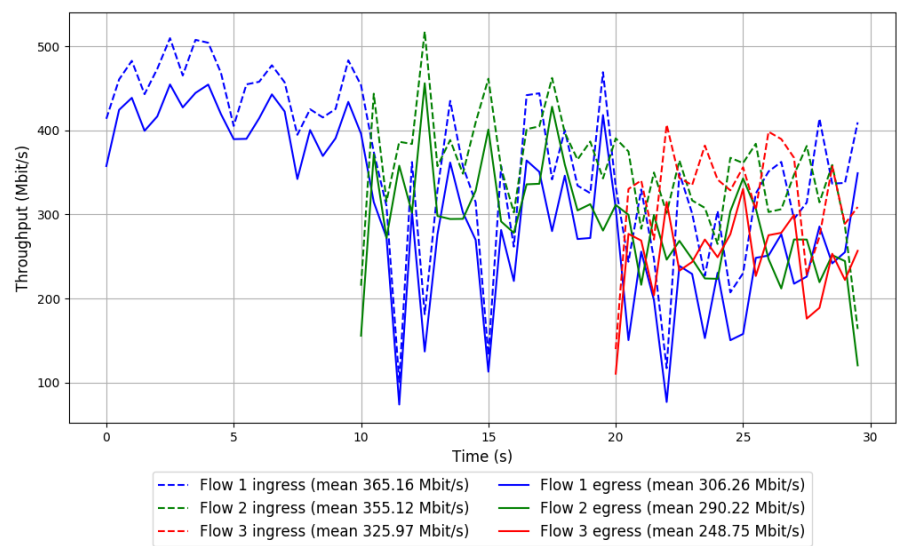
Run 1: Statistics of TCP BBR

Start at: 2017-10-12 07:11:41  
End at: 2017-10-12 07:12:11  
Local clock offset: 1.432 ms  
Remote clock offset: -1.051 ms

# Below is generated by plot.py at 2017-10-12 12:50:34  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 582.16 Mbit/s  
95th percentile per-packet one-way delay: 22.980 ms  
Loss rate: 17.99%  
-- Flow 1:  
Average throughput: 306.26 Mbit/s  
95th percentile per-packet one-way delay: 23.884 ms  
Loss rate: 16.13%  
-- Flow 2:  
Average throughput: 290.22 Mbit/s  
95th percentile per-packet one-way delay: 21.495 ms  
Loss rate: 18.27%  
-- Flow 3:  
Average throughput: 248.75 Mbit/s  
95th percentile per-packet one-way delay: 20.856 ms  
Loss rate: 23.68%



Run 1: Report of TCP BBR — Data Link

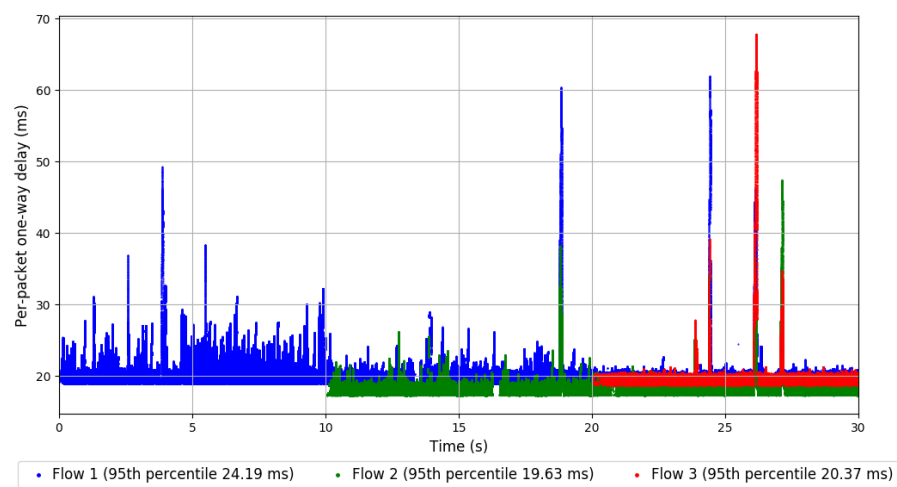
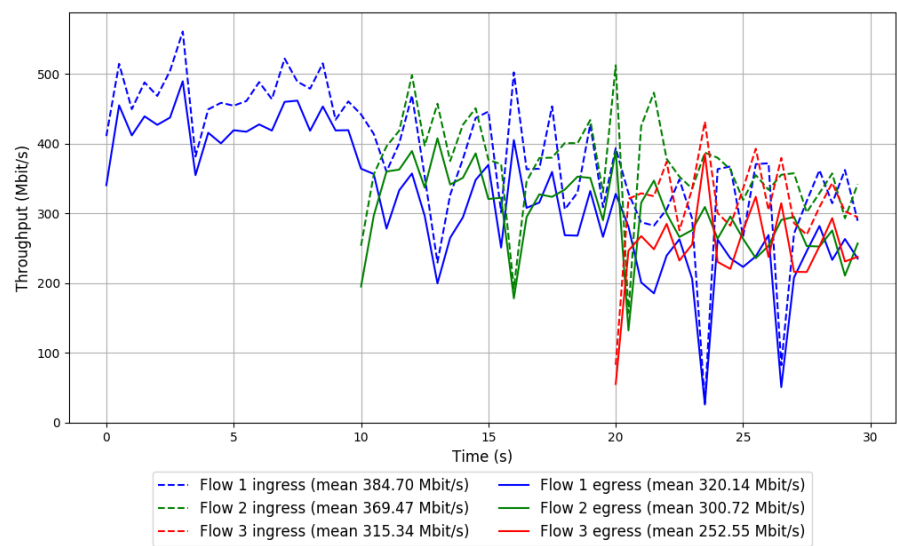


Run 2: Statistics of TCP BBR

Start at: 2017-10-12 07:32:02  
End at: 2017-10-12 07:32:32  
Local clock offset: 1.701 ms  
Remote clock offset: -1.333 ms

# Below is generated by plot.py at 2017-10-12 12:50:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 604.10 Mbit/s  
95th percentile per-packet one-way delay: 23.085 ms  
Loss rate: 17.84%  
-- Flow 1:  
Average throughput: 320.14 Mbit/s  
95th percentile per-packet one-way delay: 24.194 ms  
Loss rate: 16.78%  
-- Flow 2:  
Average throughput: 300.72 Mbit/s  
95th percentile per-packet one-way delay: 19.627 ms  
Loss rate: 18.61%  
-- Flow 3:  
Average throughput: 252.55 Mbit/s  
95th percentile per-packet one-way delay: 20.369 ms  
Loss rate: 19.90%

Run 2: Report of TCP BBR — Data Link

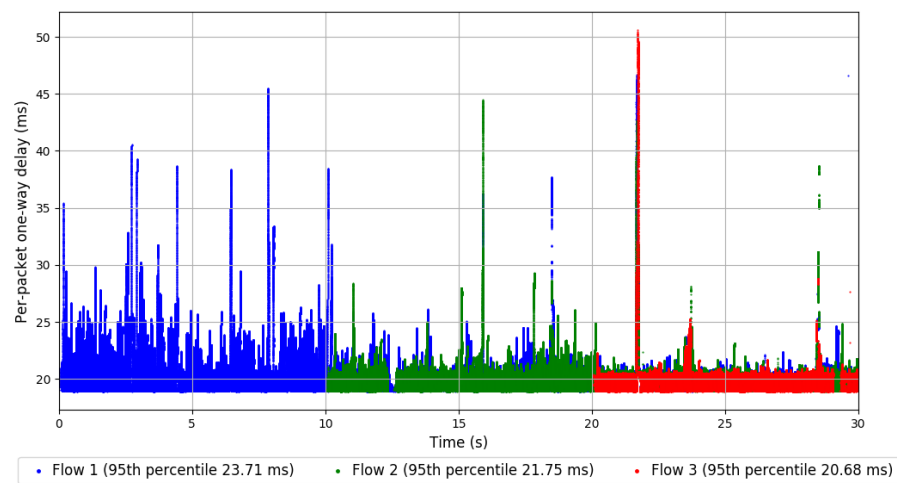
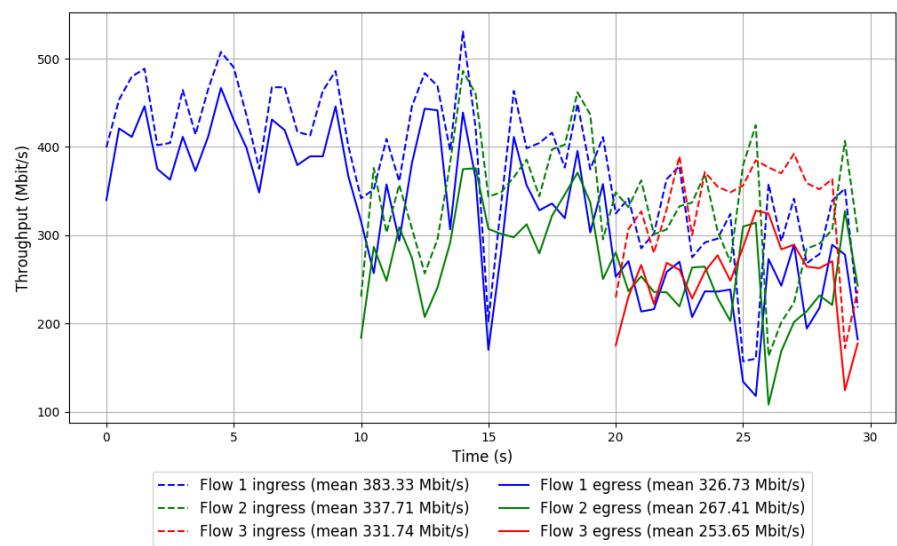


Run 3: Statistics of TCP BBR

Start at: 2017-10-12 07:52:47  
End at: 2017-10-12 07:53:17  
Local clock offset: 2.072 ms  
Remote clock offset: -1.663 ms

# Below is generated by plot.py at 2017-10-12 12:50:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 587.51 Mbit/s  
95th percentile per-packet one-way delay: 22.981 ms  
Loss rate: 18.04%  
-- Flow 1:  
Average throughput: 326.73 Mbit/s  
95th percentile per-packet one-way delay: 23.715 ms  
Loss rate: 14.82%  
-- Flow 2:  
Average throughput: 267.41 Mbit/s  
95th percentile per-packet one-way delay: 21.752 ms  
Loss rate: 20.82%  
-- Flow 3:  
Average throughput: 253.65 Mbit/s  
95th percentile per-packet one-way delay: 20.681 ms  
Loss rate: 23.55%

Run 3: Report of TCP BBR — Data Link

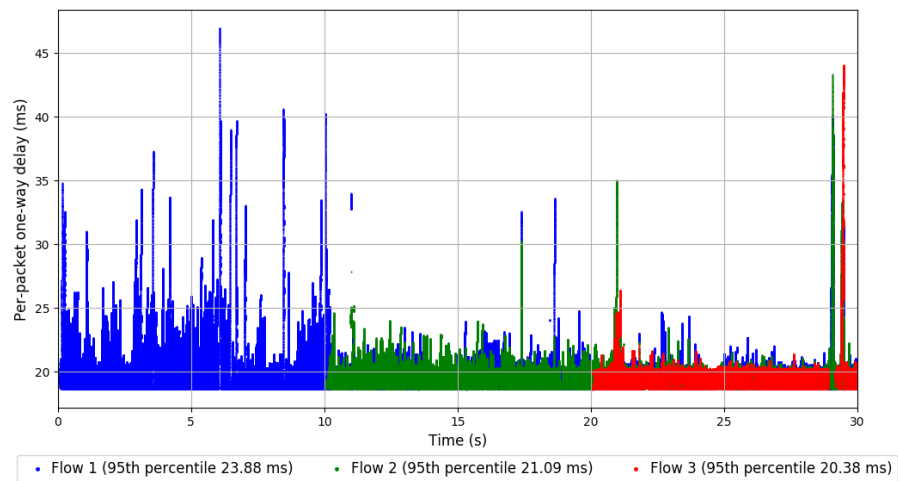
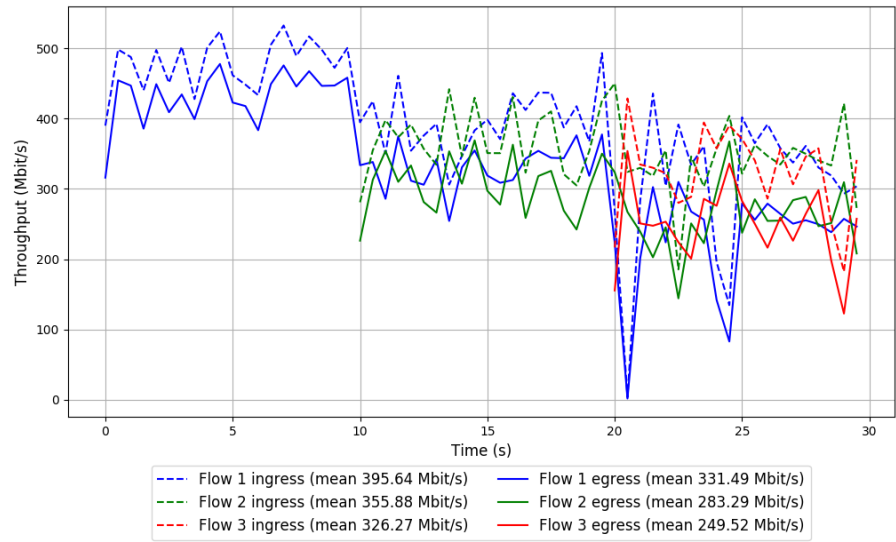


Run 4: Statistics of TCP BBR

Start at: 2017-10-12 08:13:55  
End at: 2017-10-12 08:14:25  
Local clock offset: 2.307 ms  
Remote clock offset: -1.361 ms

# Below is generated by plot.py at 2017-10-12 12:50:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 602.85 Mbit/s  
95th percentile per-packet one-way delay: 22.732 ms  
Loss rate: 18.62%  
-- Flow 1:  
Average throughput: 331.49 Mbit/s  
95th percentile per-packet one-way delay: 23.880 ms  
Loss rate: 16.21%  
-- Flow 2:  
Average throughput: 283.29 Mbit/s  
95th percentile per-packet one-way delay: 21.093 ms  
Loss rate: 20.39%  
-- Flow 3:  
Average throughput: 249.52 Mbit/s  
95th percentile per-packet one-way delay: 20.384 ms  
Loss rate: 23.51%

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



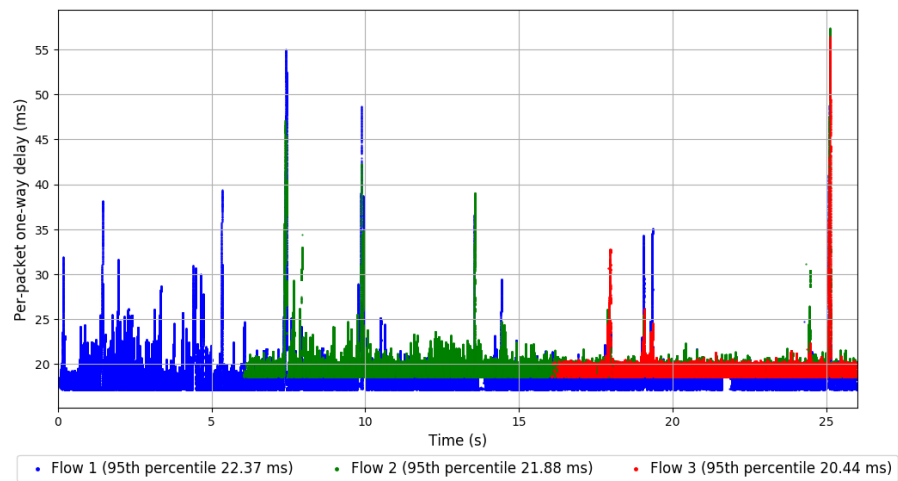
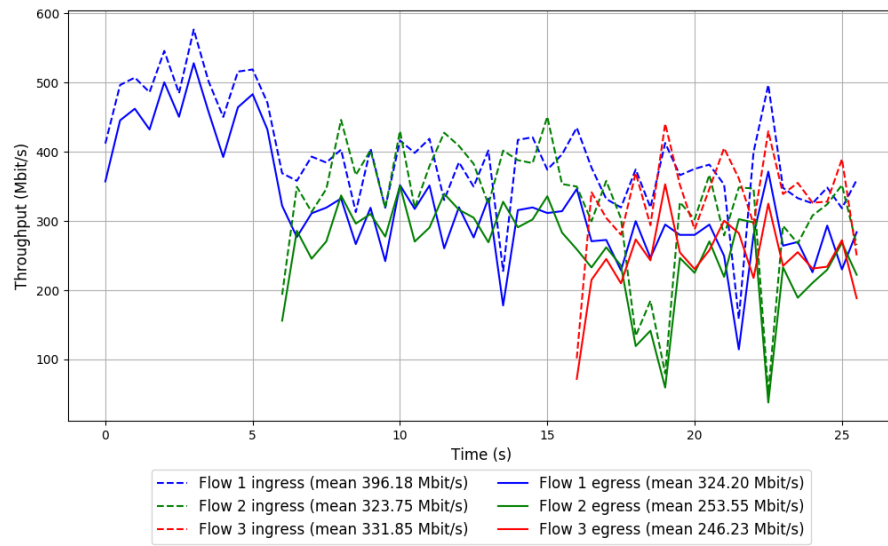
Run 5: Statistics of TCP BBR

Start at: 2017-10-12 08:34:57  
End at: 2017-10-12 08:35:27  
Local clock offset: 2.389 ms  
Remote clock offset: -1.536 ms

# Below is generated by plot.py at 2017-10-12 12:50:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 613.12 Mbit/s  
95th percentile per-packet one-way delay: 21.910 ms  
Loss rate: 20.56%  
-- Flow 1:  
Average throughput: 324.20 Mbit/s  
95th percentile per-packet one-way delay: 22.372 ms  
Loss rate: 18.17%  
-- Flow 2:  
Average throughput: 253.55 Mbit/s  
95th percentile per-packet one-way delay: 21.882 ms  
Loss rate: 21.69%  
-- Flow 3:  
Average throughput: 246.23 Mbit/s  
95th percentile per-packet one-way delay: 20.436 ms  
Loss rate: 25.80%



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

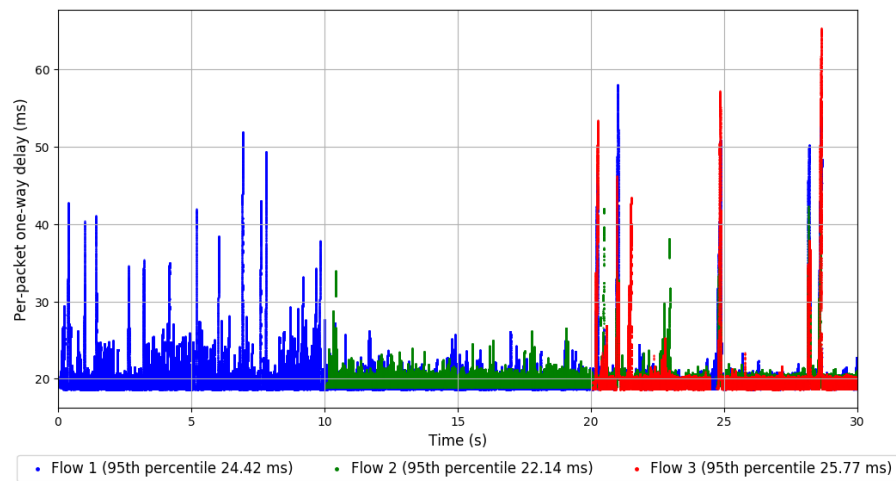
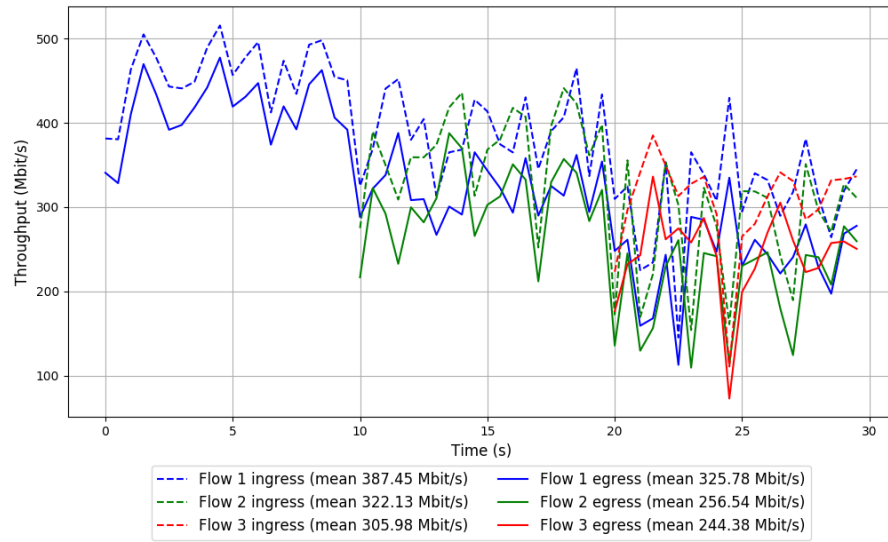


Run 6: Statistics of TCP BBR

Start at: 2017-10-12 08:55:48  
End at: 2017-10-12 08:56:18  
Local clock offset: 2.307 ms  
Remote clock offset: -1.787 ms

# Below is generated by plot.py at 2017-10-12 12:50:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 577.67 Mbit/s  
95th percentile per-packet one-way delay: 23.966 ms  
Loss rate: 17.88%  
-- Flow 1:  
Average throughput: 325.78 Mbit/s  
95th percentile per-packet one-way delay: 24.419 ms  
Loss rate: 15.92%  
-- Flow 2:  
Average throughput: 256.54 Mbit/s  
95th percentile per-packet one-way delay: 22.140 ms  
Loss rate: 20.36%  
-- Flow 3:  
Average throughput: 244.38 Mbit/s  
95th percentile per-packet one-way delay: 25.771 ms  
Loss rate: 20.13%

# Run 6: Report of TCP BBR — Data Link

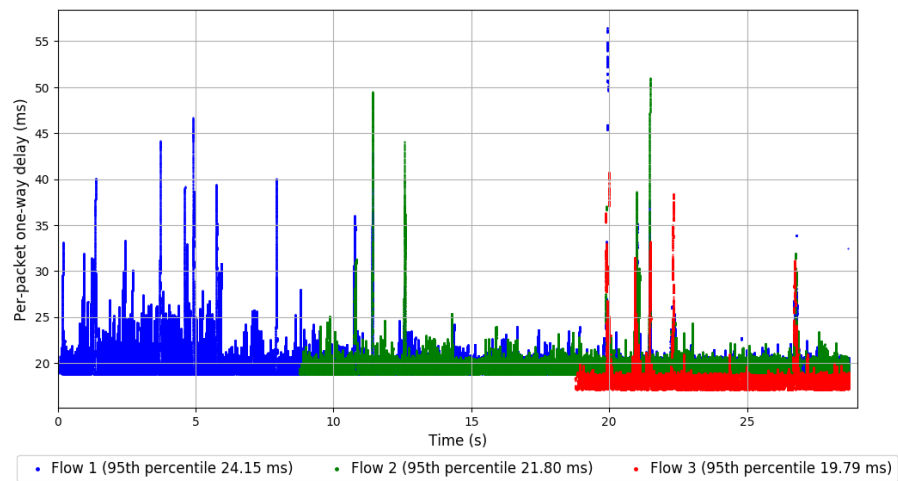
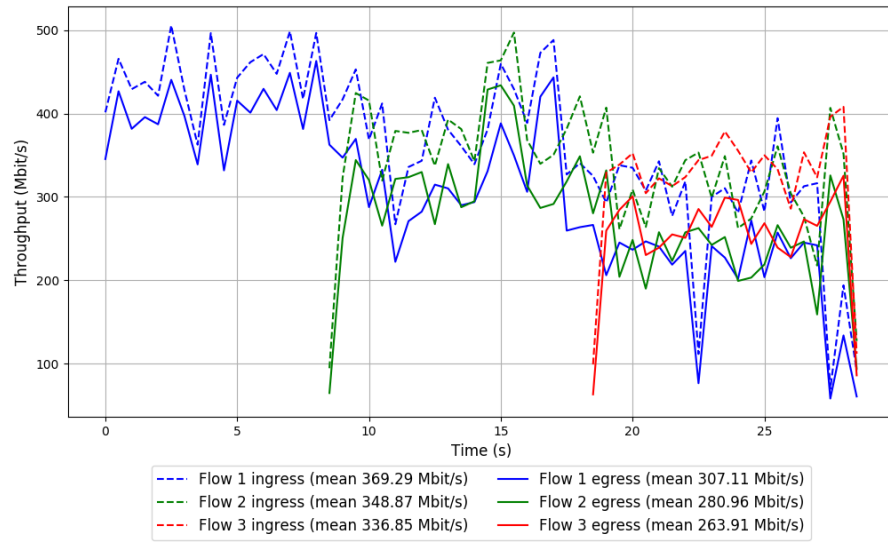


Run 7: Statistics of TCP BBR

Start at: 2017-10-12 09:16:20  
End at: 2017-10-12 09:16:50  
Local clock offset: 2.238 ms  
Remote clock offset: -1.863 ms

# Below is generated by plot.py at 2017-10-12 12:50:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 594.08 Mbit/s  
95th percentile per-packet one-way delay: 23.123 ms  
Loss rate: 18.48%  
-- Flow 1:  
Average throughput: 307.11 Mbit/s  
95th percentile per-packet one-way delay: 24.148 ms  
Loss rate: 16.84%  
-- Flow 2:  
Average throughput: 280.96 Mbit/s  
95th percentile per-packet one-way delay: 21.796 ms  
Loss rate: 19.46%  
-- Flow 3:  
Average throughput: 263.91 Mbit/s  
95th percentile per-packet one-way delay: 19.792 ms  
Loss rate: 21.65%

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

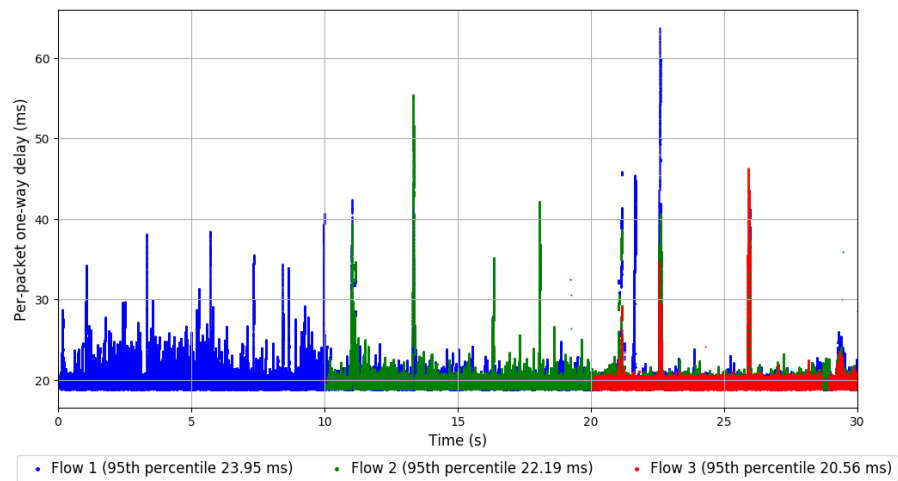
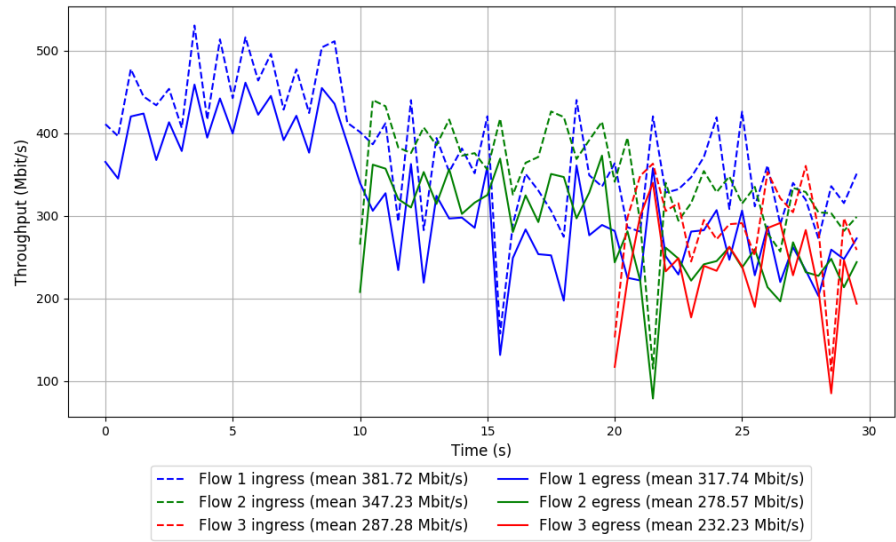


Run 8: Statistics of TCP BBR

Start at: 2017-10-12 09:37:01  
End at: 2017-10-12 09:37:31  
Local clock offset: 1.9 ms  
Remote clock offset: -2.177 ms

# Below is generated by plot.py at 2017-10-12 12:50:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 580.29 Mbit/s  
95th percentile per-packet one-way delay: 23.357 ms  
Loss rate: 18.05%  
-- Flow 1:  
Average throughput: 317.74 Mbit/s  
95th percentile per-packet one-way delay: 23.946 ms  
Loss rate: 16.76%  
-- Flow 2:  
Average throughput: 278.57 Mbit/s  
95th percentile per-packet one-way delay: 22.188 ms  
Loss rate: 19.73%  
-- Flow 3:  
Average throughput: 232.23 Mbit/s  
95th percentile per-packet one-way delay: 20.559 ms  
Loss rate: 19.15%

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



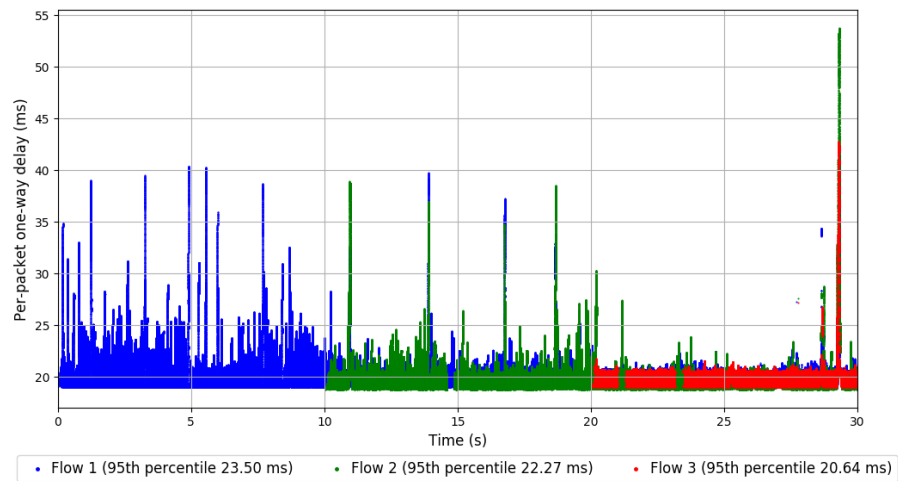
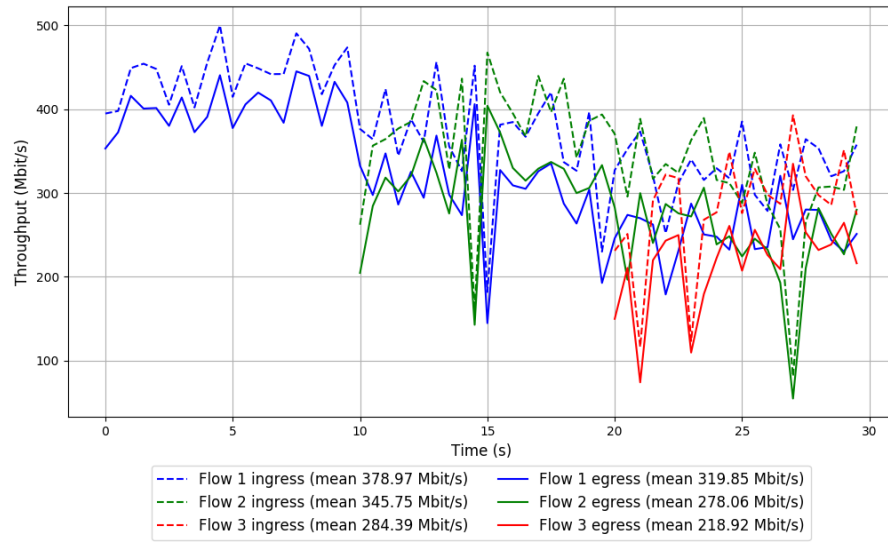
Run 9: Statistics of TCP BBR

Start at: 2017-10-12 09:57:53  
End at: 2017-10-12 09:58:23  
Local clock offset: 1.397 ms  
Remote clock offset: -2.187 ms

# Below is generated by plot.py at 2017-10-12 12:58:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 577.67 Mbit/s  
95th percentile per-packet one-way delay: 22.788 ms  
Loss rate: 17.89%  
-- Flow 1:  
Average throughput: 319.85 Mbit/s  
95th percentile per-packet one-way delay: 23.503 ms  
Loss rate: 15.60%  
-- Flow 2:  
Average throughput: 278.06 Mbit/s  
95th percentile per-packet one-way delay: 22.268 ms  
Loss rate: 19.57%  
-- Flow 3:  
Average throughput: 218.92 Mbit/s  
95th percentile per-packet one-way delay: 20.643 ms  
Loss rate: 23.01%



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

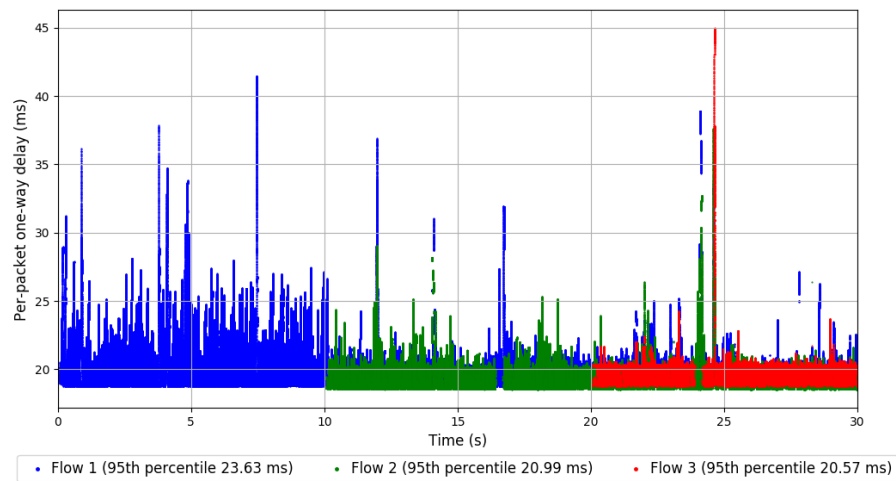
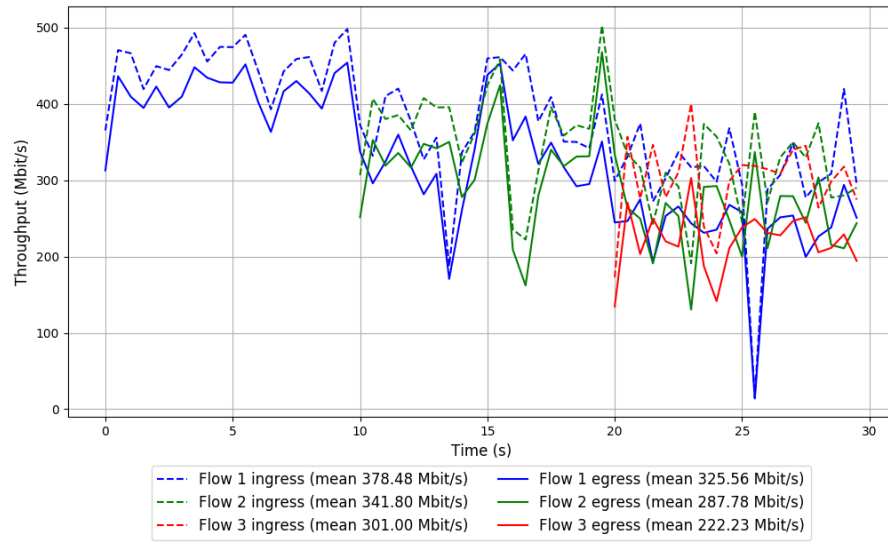


Run 10: Statistics of TCP BBR

Start at: 2017-10-12 10:18:48  
End at: 2017-10-12 10:19:18  
Local clock offset: 1.198 ms  
Remote clock offset: -2.162 ms

# Below is generated by plot.py at 2017-10-12 12:58:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 590.80 Mbit/s  
95th percentile per-packet one-way delay: 22.627 ms  
Loss rate: 16.29%  
-- Flow 1:  
Average throughput: 325.56 Mbit/s  
95th percentile per-packet one-way delay: 23.633 ms  
Loss rate: 13.98%  
-- Flow 2:  
Average throughput: 287.78 Mbit/s  
95th percentile per-packet one-way delay: 20.988 ms  
Loss rate: 15.80%  
-- Flow 3:  
Average throughput: 222.23 Mbit/s  
95th percentile per-packet one-way delay: 20.574 ms  
Loss rate: 26.17%

# Run 10: Report of TCP BBR — Data Link

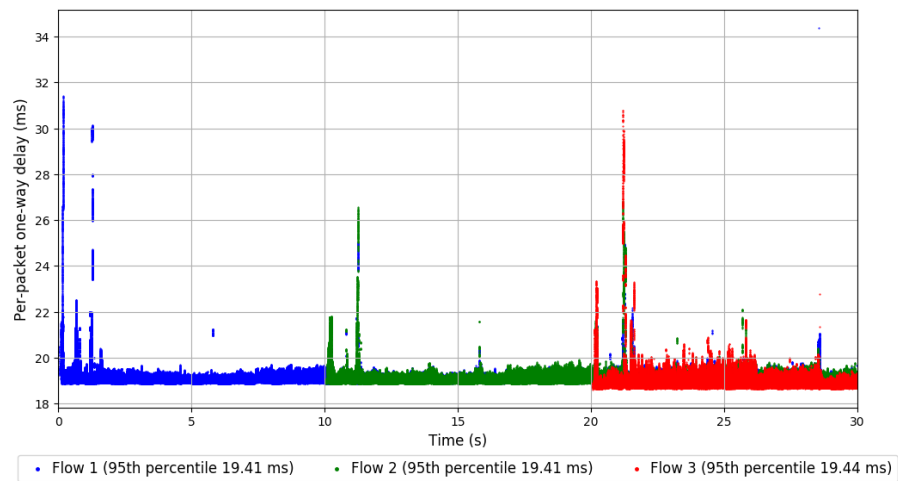
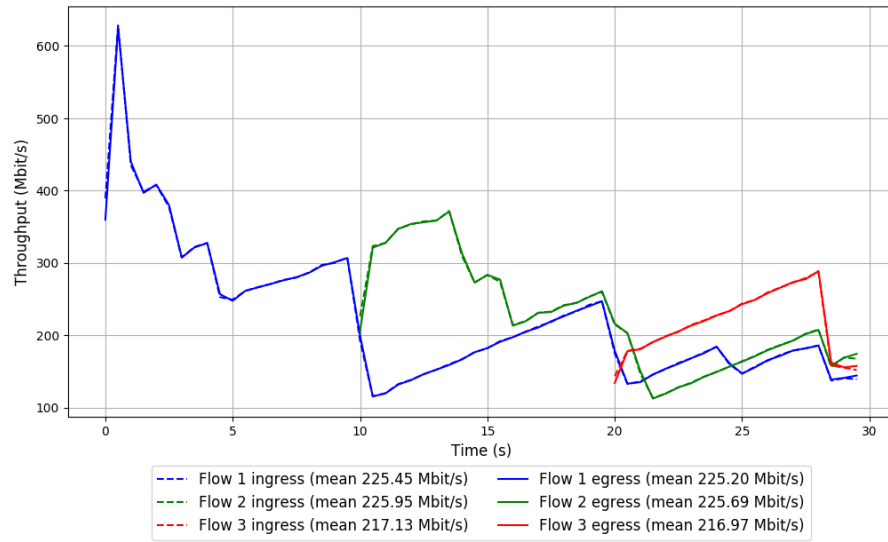


Run 1: Statistics of TCP Cubic

Start at: 2017-10-12 07:08:35  
End at: 2017-10-12 07:09:05  
Local clock offset: 1.526 ms  
Remote clock offset: -0.969 ms

# Below is generated by plot.py at 2017-10-12 12:58:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 447.53 Mbit/s  
95th percentile per-packet one-way delay: 19.413 ms  
Loss rate: 0.11%  
-- Flow 1:  
Average throughput: 225.20 Mbit/s  
95th percentile per-packet one-way delay: 19.414 ms  
Loss rate: 0.11%  
-- Flow 2:  
Average throughput: 225.69 Mbit/s  
95th percentile per-packet one-way delay: 19.405 ms  
Loss rate: 0.11%  
-- Flow 3:  
Average throughput: 216.97 Mbit/s  
95th percentile per-packet one-way delay: 19.441 ms  
Loss rate: 0.07%

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

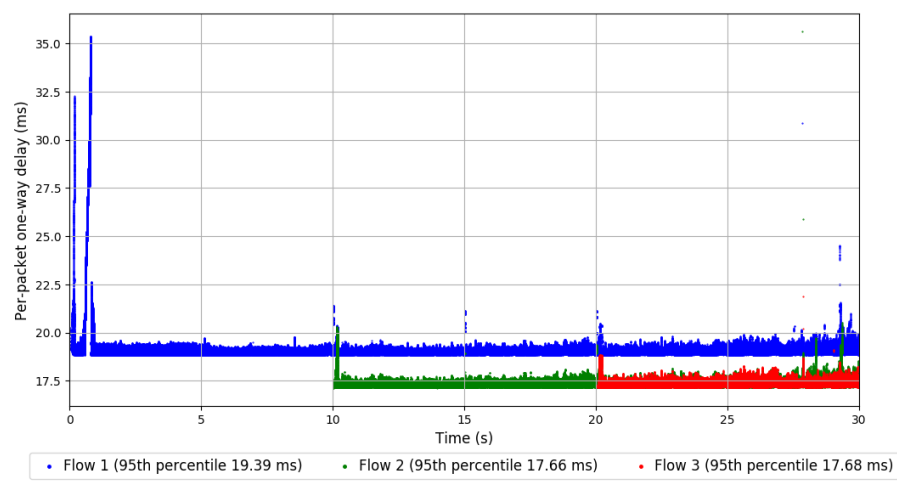
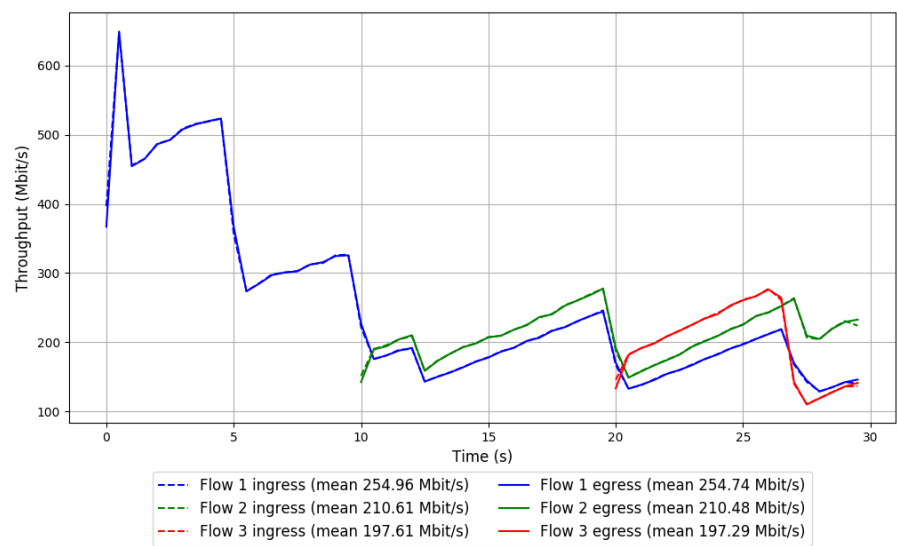


Run 2: Statistics of TCP Cubic

Start at: 2017-10-12 07:29:00  
End at: 2017-10-12 07:29:30  
Local clock offset: 1.733 ms  
Remote clock offset: -1.309 ms

# Below is generated by plot.py at 2017-10-12 12:58:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 460.54 Mbit/s  
95th percentile per-packet one-way delay: 19.266 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 254.74 Mbit/s  
95th percentile per-packet one-way delay: 19.392 ms  
Loss rate: 0.09%  
-- Flow 2:  
Average throughput: 210.48 Mbit/s  
95th percentile per-packet one-way delay: 17.658 ms  
Loss rate: 0.06%  
-- Flow 3:  
Average throughput: 197.29 Mbit/s  
95th percentile per-packet one-way delay: 17.682 ms  
Loss rate: 0.16%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-10-12 07:49:38

End at: 2017-10-12 07:50:08

Local clock offset: 2.022 ms

Remote clock offset: -1.55 ms

# Below is generated by plot.py at 2017-10-12 12:58:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 552.75 Mbit/s

95th percentile per-packet one-way delay: 19.401 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 341.90 Mbit/s

95th percentile per-packet one-way delay: 19.425 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 217.42 Mbit/s

95th percentile per-packet one-way delay: 19.360 ms

Loss rate: 0.05%

-- Flow 3:

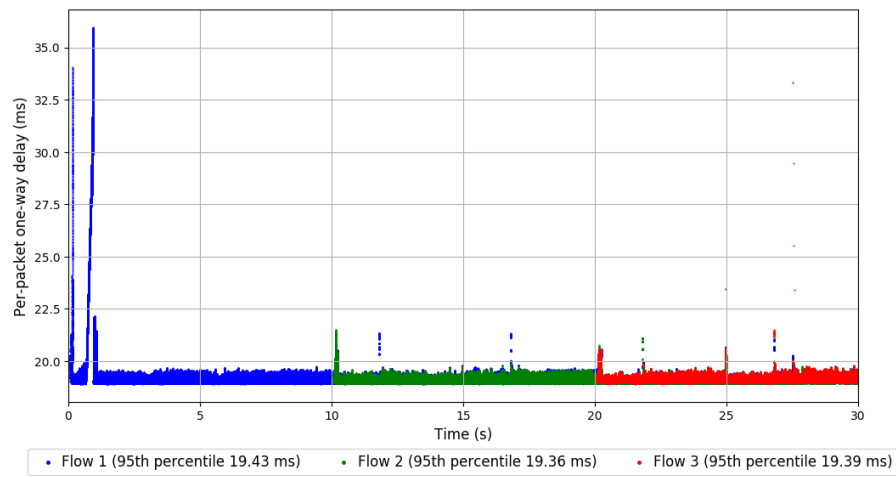
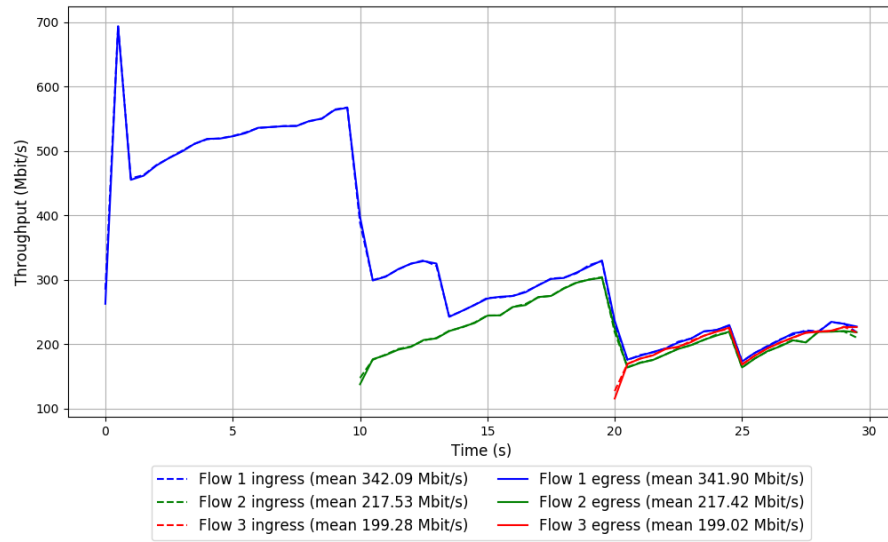
Average throughput: 199.02 Mbit/s

95th percentile per-packet one-way delay: 19.386 ms

Loss rate: 0.13%



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

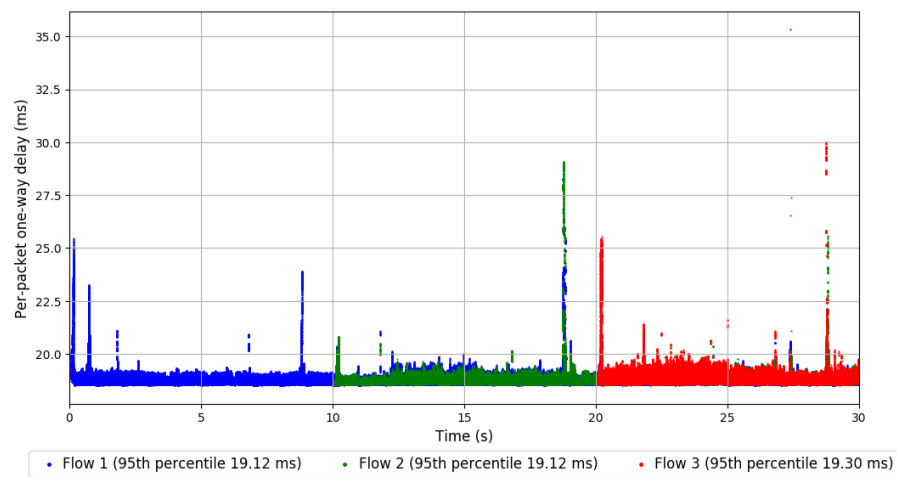
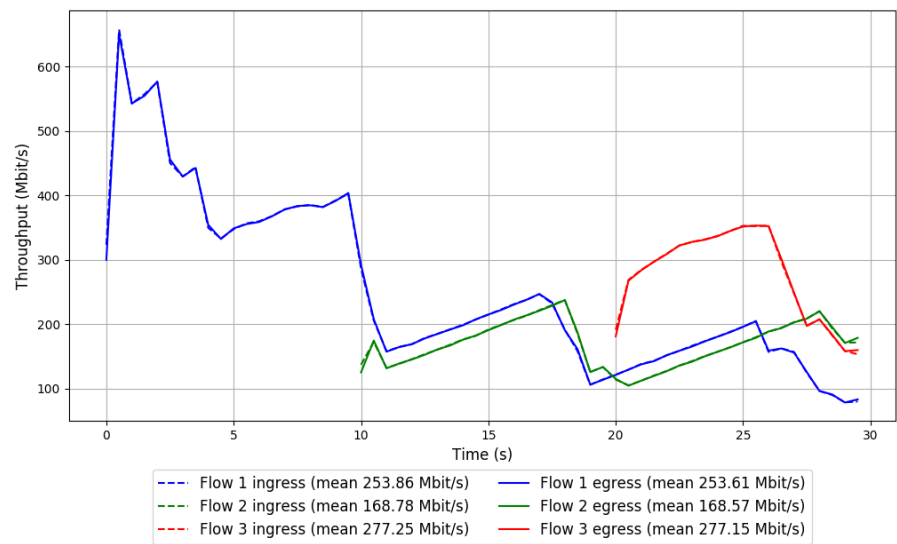


Run 4: Statistics of TCP Cubic

Start at: 2017-10-12 08:10:47  
End at: 2017-10-12 08:11:17  
Local clock offset: 2.309 ms  
Remote clock offset: -1.449 ms

# Below is generated by plot.py at 2017-10-12 12:58:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 457.86 Mbit/s  
95th percentile per-packet one-way delay: 19.176 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 253.61 Mbit/s  
95th percentile per-packet one-way delay: 19.119 ms  
Loss rate: 0.10%  
-- Flow 2:  
Average throughput: 168.57 Mbit/s  
95th percentile per-packet one-way delay: 19.121 ms  
Loss rate: 0.12%  
-- Flow 3:  
Average throughput: 277.15 Mbit/s  
95th percentile per-packet one-way delay: 19.297 ms  
Loss rate: 0.03%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-10-12 08:32:01

End at: 2017-10-12 08:32:31

Local clock offset: 2.291 ms

Remote clock offset: -1.56 ms

# Below is generated by plot.py at 2017-10-12 12:58:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 398.86 Mbit/s

95th percentile per-packet one-way delay: 19.198 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 247.63 Mbit/s

95th percentile per-packet one-way delay: 19.175 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 116.54 Mbit/s

95th percentile per-packet one-way delay: 19.133 ms

Loss rate: 0.25%

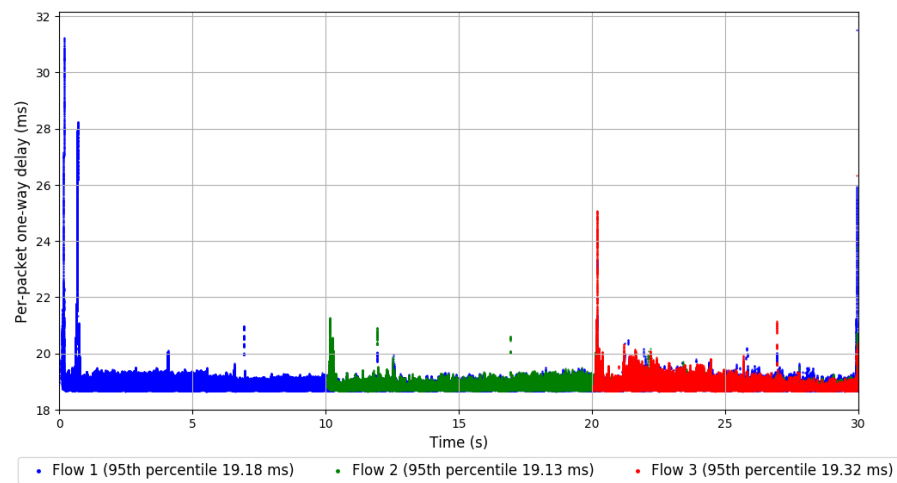
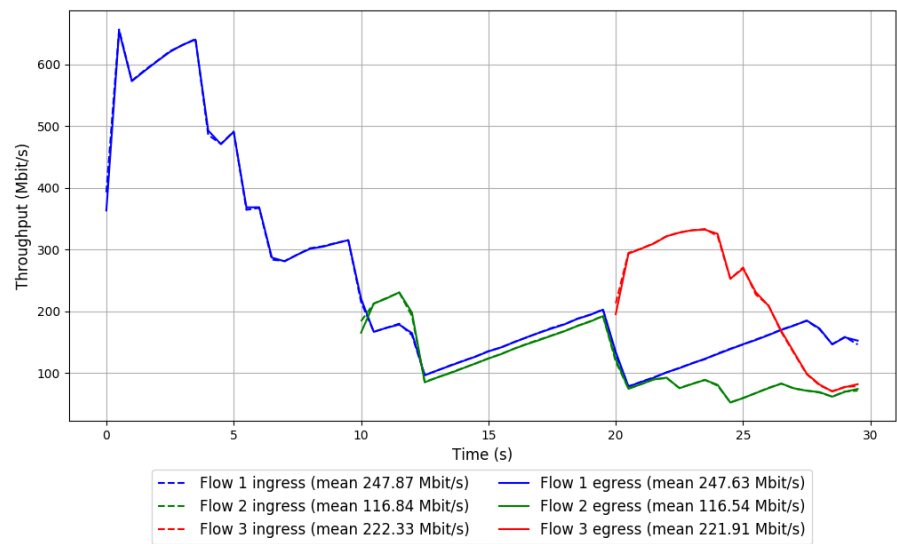
-- Flow 3:

Average throughput: 221.91 Mbit/s

95th percentile per-packet one-way delay: 19.321 ms

Loss rate: 0.19%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-10-12 08:52:51

End at: 2017-10-12 08:53:21

Local clock offset: 2.366 ms

Remote clock offset: -1.73 ms

# Below is generated by plot.py at 2017-10-12 12:58:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 336.65 Mbit/s

95th percentile per-packet one-way delay: 19.027 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 199.93 Mbit/s

95th percentile per-packet one-way delay: 19.005 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 162.31 Mbit/s

95th percentile per-packet one-way delay: 19.064 ms

Loss rate: 0.13%

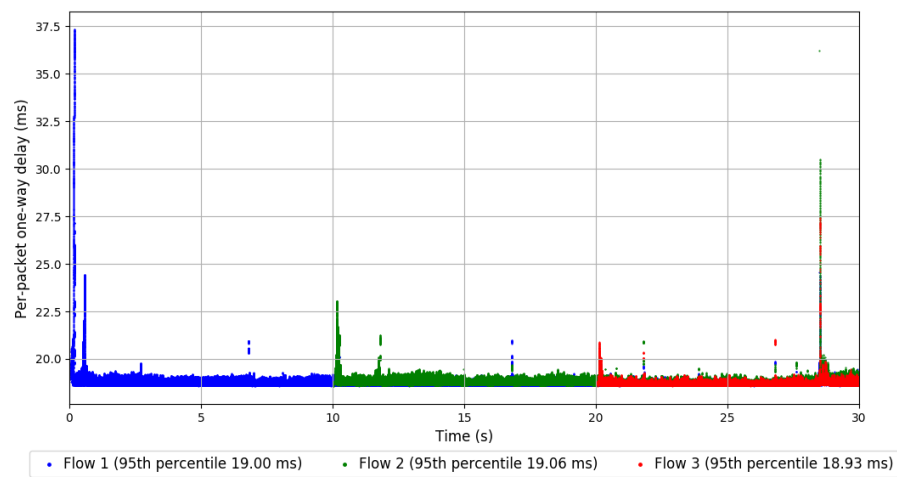
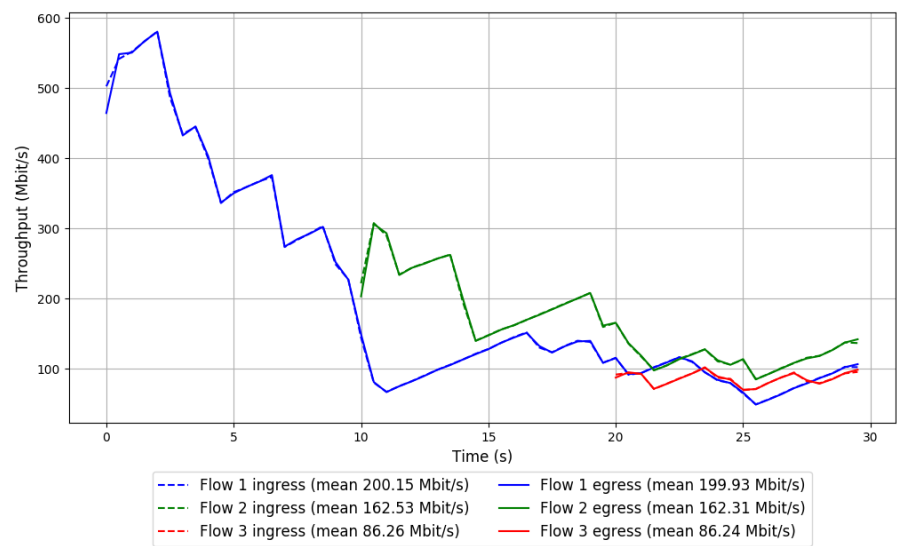
-- Flow 3:

Average throughput: 86.24 Mbit/s

95th percentile per-packet one-way delay: 18.930 ms

Loss rate: 0.02%

Run 6: Report of TCP Cubic — Data Link



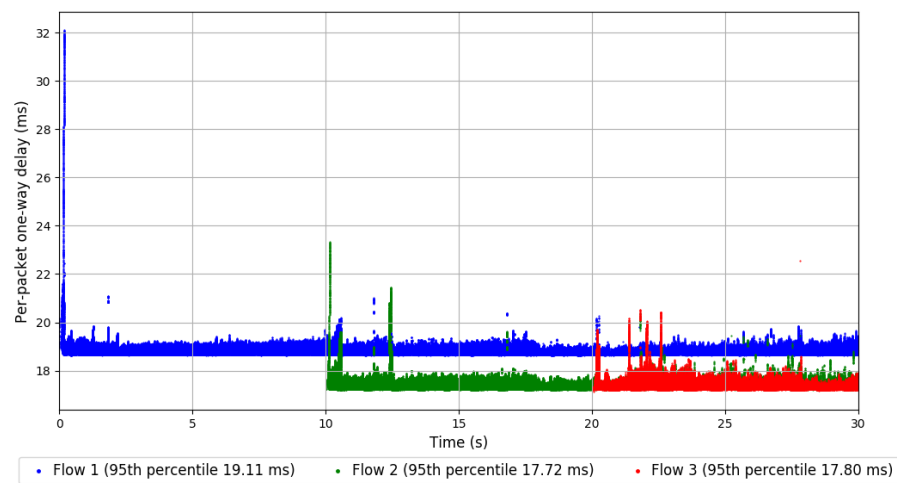
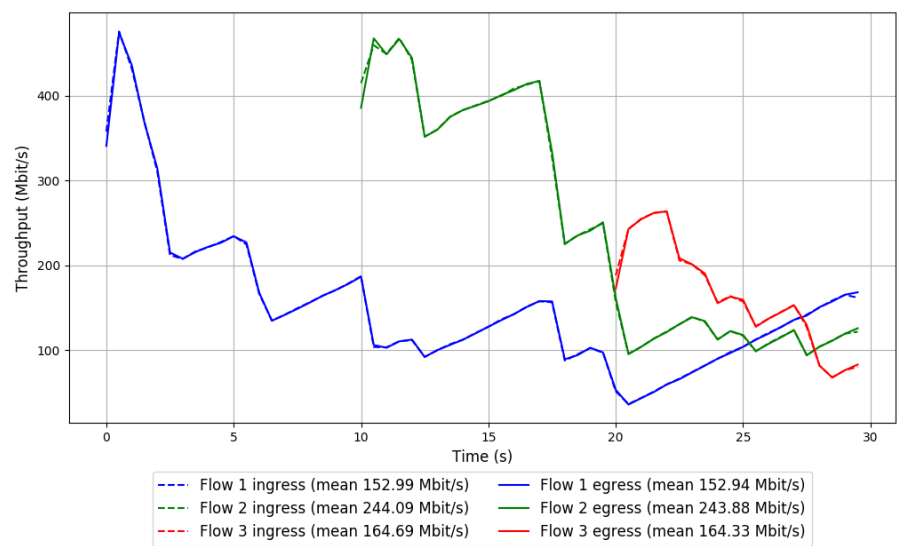
Run 7: Statistics of TCP Cubic

Start at: 2017-10-12 09:13:22  
End at: 2017-10-12 09:13:52  
Local clock offset: 2.208 ms  
Remote clock offset: -1.856 ms

# Below is generated by plot.py at 2017-10-12 13:00:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 369.93 Mbit/s  
95th percentile per-packet one-way delay: 19.032 ms  
Loss rate: 0.08%  
-- Flow 1:  
Average throughput: 152.94 Mbit/s  
95th percentile per-packet one-way delay: 19.109 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 243.88 Mbit/s  
95th percentile per-packet one-way delay: 17.716 ms  
Loss rate: 0.08%  
-- Flow 3:  
Average throughput: 164.33 Mbit/s  
95th percentile per-packet one-way delay: 17.795 ms  
Loss rate: 0.21%



Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-10-12 09:34:06

End at: 2017-10-12 09:34:36

Local clock offset: 1.864 ms

Remote clock offset: -2.13 ms

# Below is generated by plot.py at 2017-10-12 13:00:18

# Datalink statistics

-- Total of 3 flows:

Average throughput: 319.93 Mbit/s

95th percentile per-packet one-way delay: 19.271 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 182.25 Mbit/s

95th percentile per-packet one-way delay: 19.229 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 131.91 Mbit/s

95th percentile per-packet one-way delay: 19.339 ms

Loss rate: 0.06%

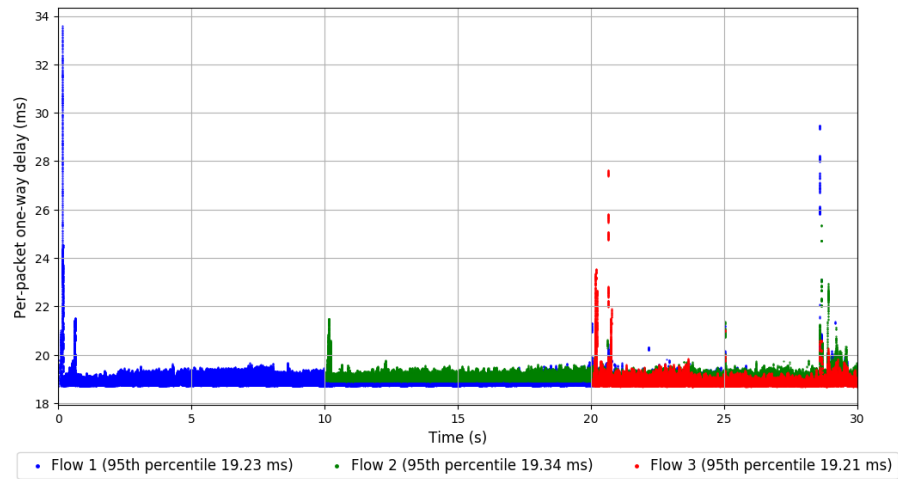
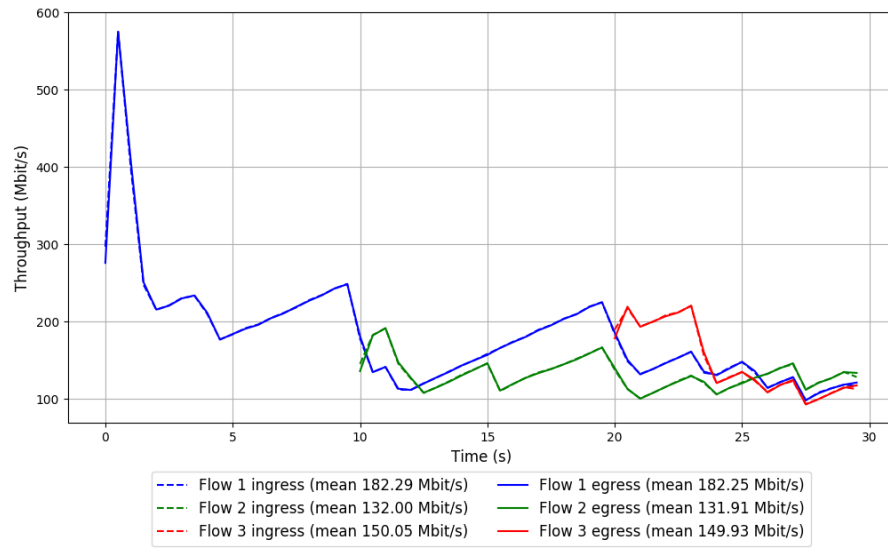
-- Flow 3:

Average throughput: 149.93 Mbit/s

95th percentile per-packet one-way delay: 19.214 ms

Loss rate: 0.08%

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

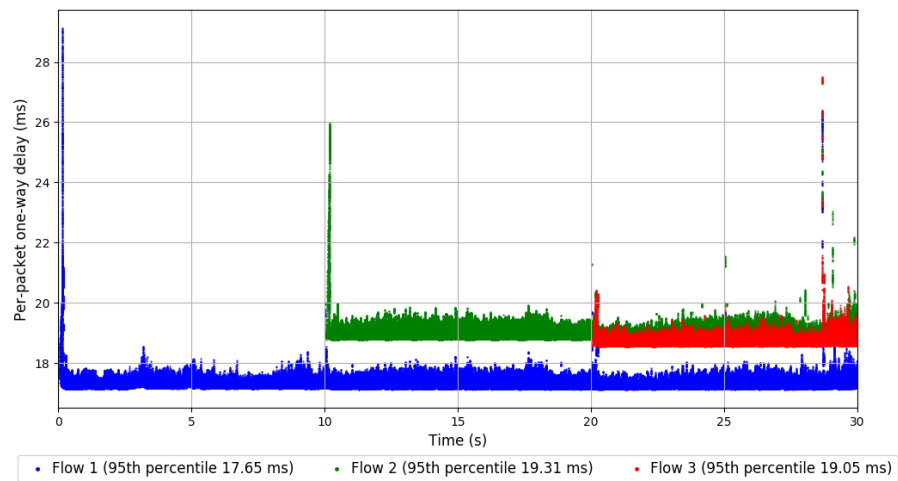
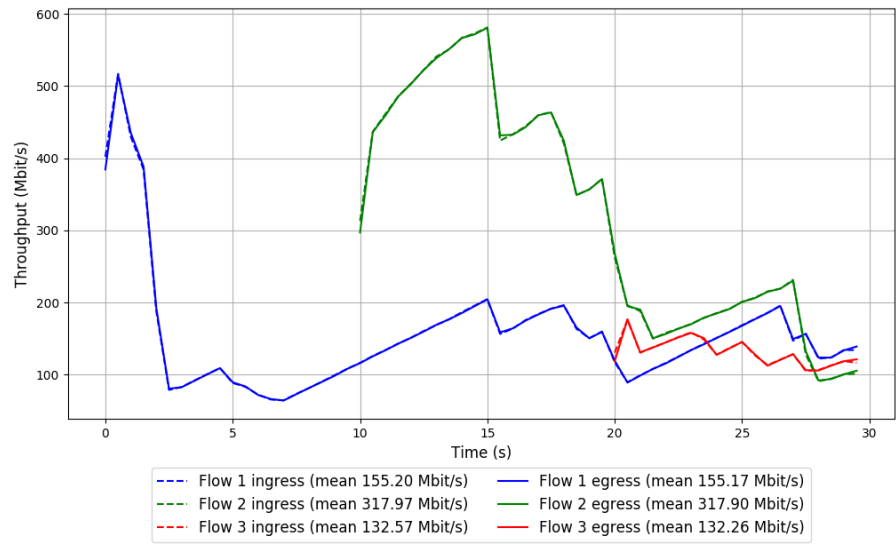


Run 9: Statistics of TCP Cubic

Start at: 2017-10-12 09:54:54  
End at: 2017-10-12 09:55:24  
Local clock offset: 1.581 ms  
Remote clock offset: -2.296 ms

# Below is generated by plot.py at 2017-10-12 13:01:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 410.70 Mbit/s  
95th percentile per-packet one-way delay: 19.239 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 155.17 Mbit/s  
95th percentile per-packet one-way delay: 17.649 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 317.90 Mbit/s  
95th percentile per-packet one-way delay: 19.306 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 132.26 Mbit/s  
95th percentile per-packet one-way delay: 19.050 ms  
Loss rate: 0.23%

# Run 9: Report of TCP Cubic — Data Link

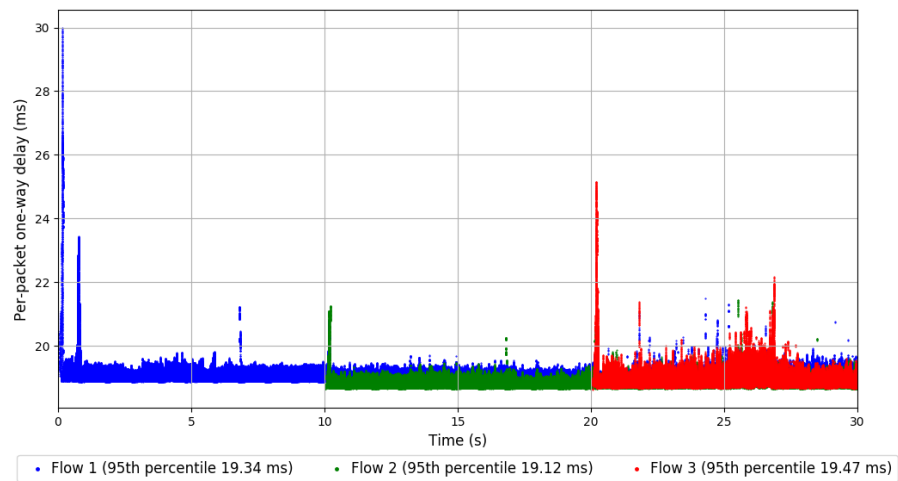
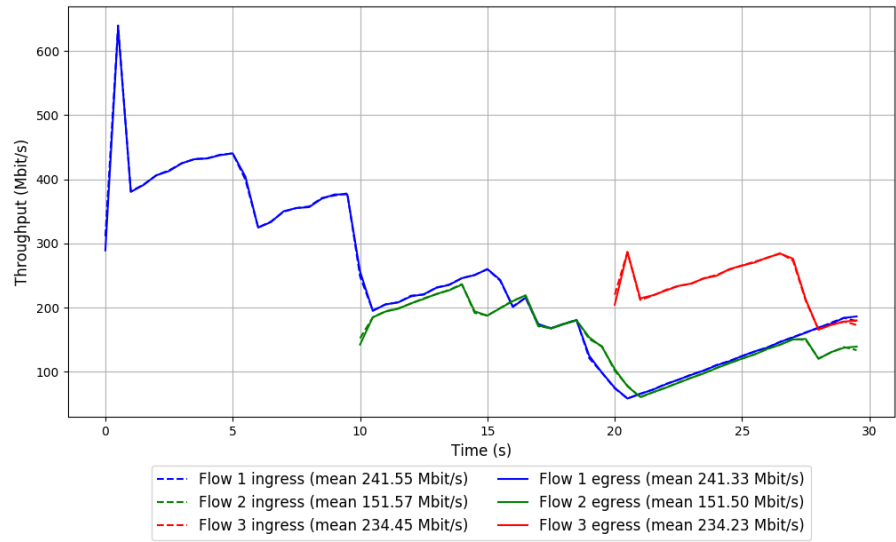


Run 10: Statistics of TCP Cubic

Start at: 2017-10-12 10:15:44  
End at: 2017-10-12 10:16:14  
Local clock offset: 1.248 ms  
Remote clock offset: -2.116 ms

# Below is generated by plot.py at 2017-10-12 13:02:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 419.97 Mbit/s  
95th percentile per-packet one-way delay: 19.336 ms  
Loss rate: 0.08%  
-- Flow 1:  
Average throughput: 241.33 Mbit/s  
95th percentile per-packet one-way delay: 19.345 ms  
Loss rate: 0.09%  
-- Flow 2:  
Average throughput: 151.50 Mbit/s  
95th percentile per-packet one-way delay: 19.116 ms  
Loss rate: 0.07%  
-- Flow 3:  
Average throughput: 234.23 Mbit/s  
95th percentile per-packet one-way delay: 19.474 ms  
Loss rate: 0.09%

# Run 10: Report of TCP Cubic — Data Link



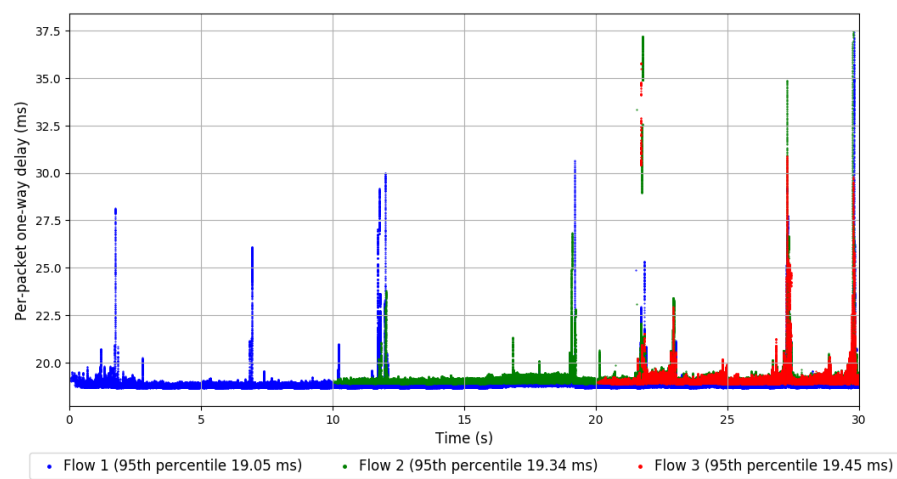
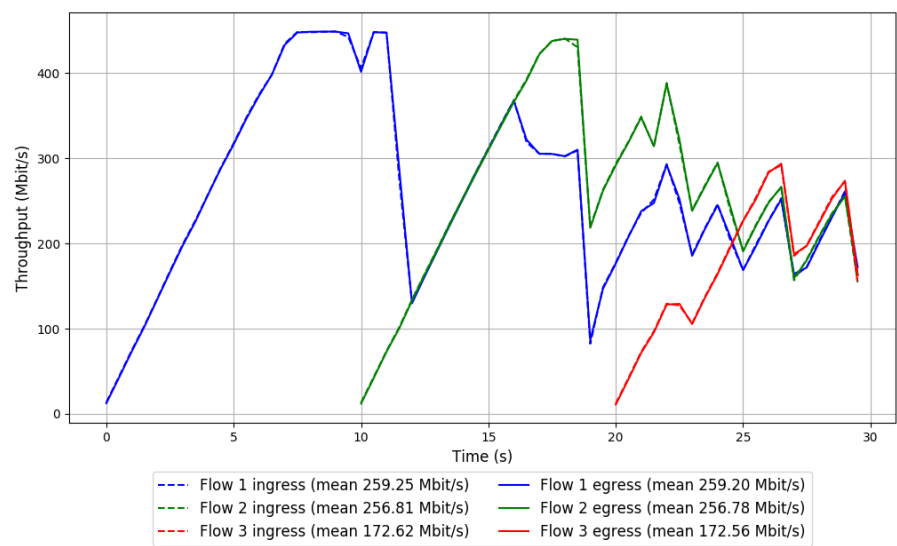
Run 1: Statistics of LEDBAT

Start at: 2017-10-12 07:10:04  
End at: 2017-10-12 07:10:34  
Local clock offset: 1.503 ms  
Remote clock offset: -1.012 ms

# Below is generated by plot.py at 2017-10-12 13:03:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 487.38 Mbit/s  
95th percentile per-packet one-way delay: 19.279 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 259.20 Mbit/s  
95th percentile per-packet one-way delay: 19.049 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 256.78 Mbit/s  
95th percentile per-packet one-way delay: 19.339 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 172.56 Mbit/s  
95th percentile per-packet one-way delay: 19.455 ms  
Loss rate: 0.03%



Run 1: Report of LEDBAT — Data Link

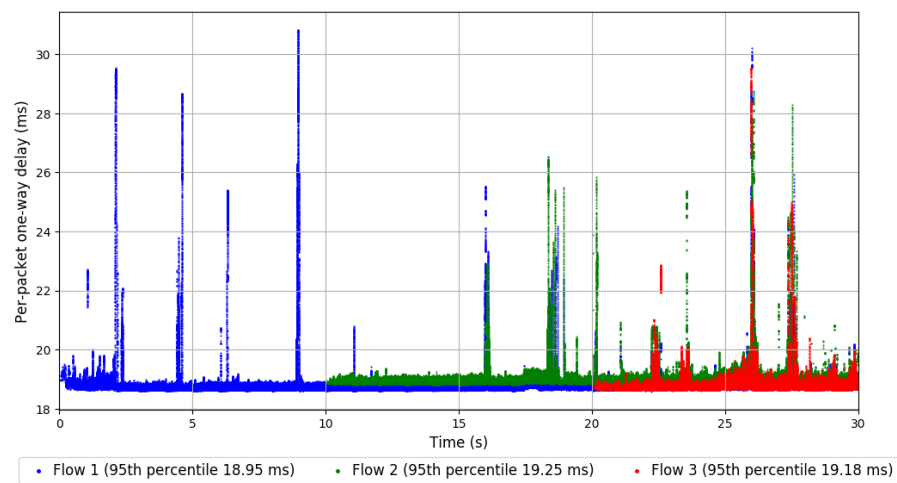
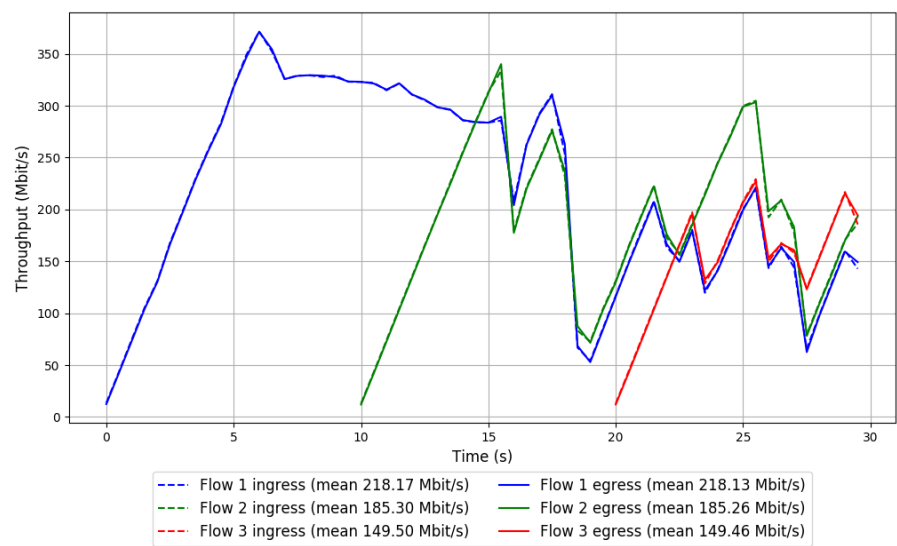


Run 2: Statistics of LEDBAT

Start at: 2017-10-12 07:30:30  
End at: 2017-10-12 07:31:00  
Local clock offset: 1.774 ms  
Remote clock offset: -1.284 ms

# Below is generated by plot.py at 2017-10-12 13:03:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 391.13 Mbit/s  
95th percentile per-packet one-way delay: 19.148 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 218.13 Mbit/s  
95th percentile per-packet one-way delay: 18.950 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 185.26 Mbit/s  
95th percentile per-packet one-way delay: 19.249 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 149.46 Mbit/s  
95th percentile per-packet one-way delay: 19.176 ms  
Loss rate: 0.03%

Run 2: Report of LEDBAT — Data Link

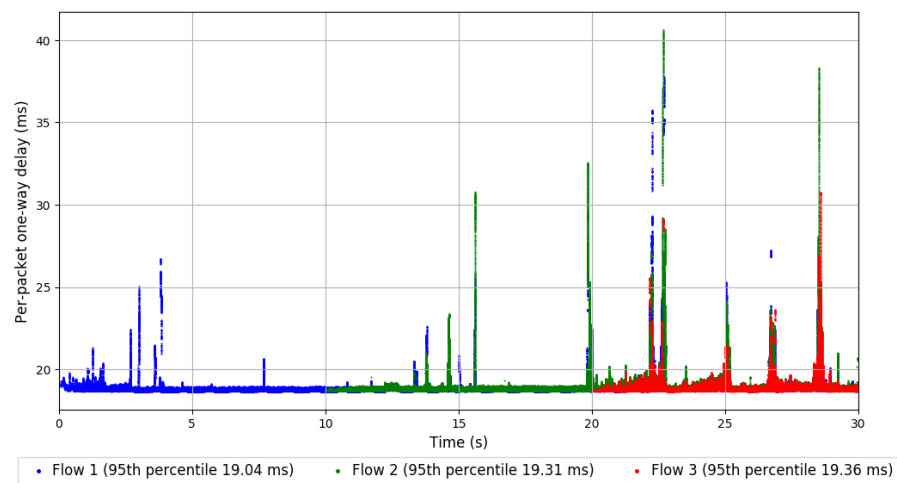
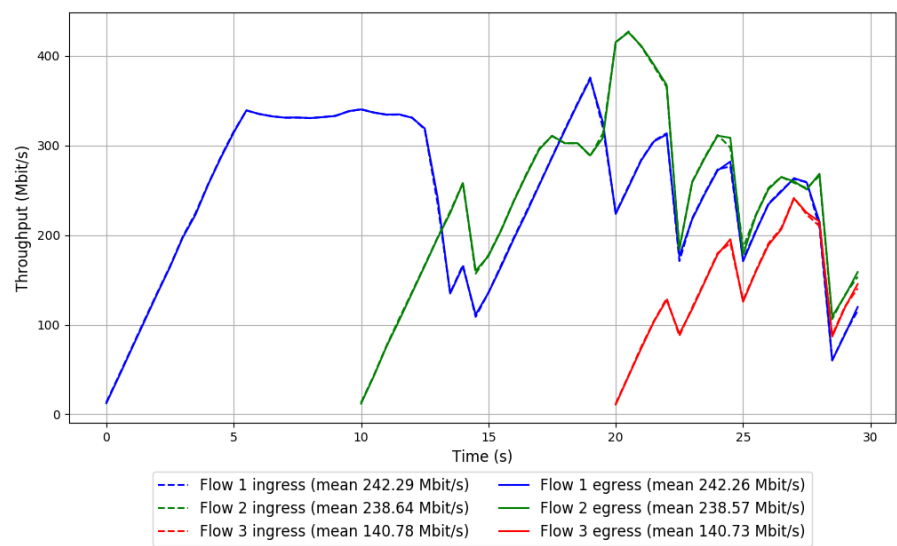


Run 3: Statistics of LEDBAT

Start at: 2017-10-12 07:51:12  
End at: 2017-10-12 07:51:42  
Local clock offset: 2.037 ms  
Remote clock offset: -1.646 ms

# Below is generated by plot.py at 2017-10-12 13:04:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 447.82 Mbit/s  
95th percentile per-packet one-way delay: 19.177 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 242.26 Mbit/s  
95th percentile per-packet one-way delay: 19.042 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 238.57 Mbit/s  
95th percentile per-packet one-way delay: 19.310 ms  
Loss rate: 0.03%  
-- Flow 3:  
Average throughput: 140.73 Mbit/s  
95th percentile per-packet one-way delay: 19.358 ms  
Loss rate: 0.03%

Run 3: Report of LEDBAT — Data Link

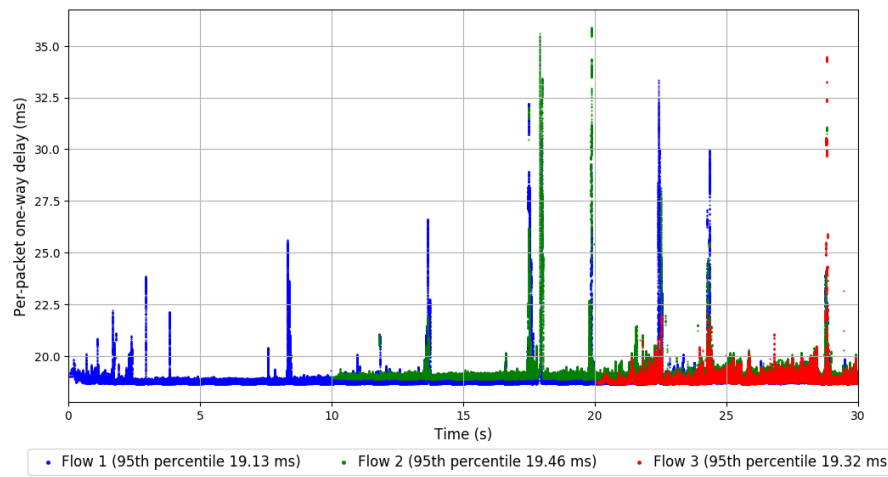
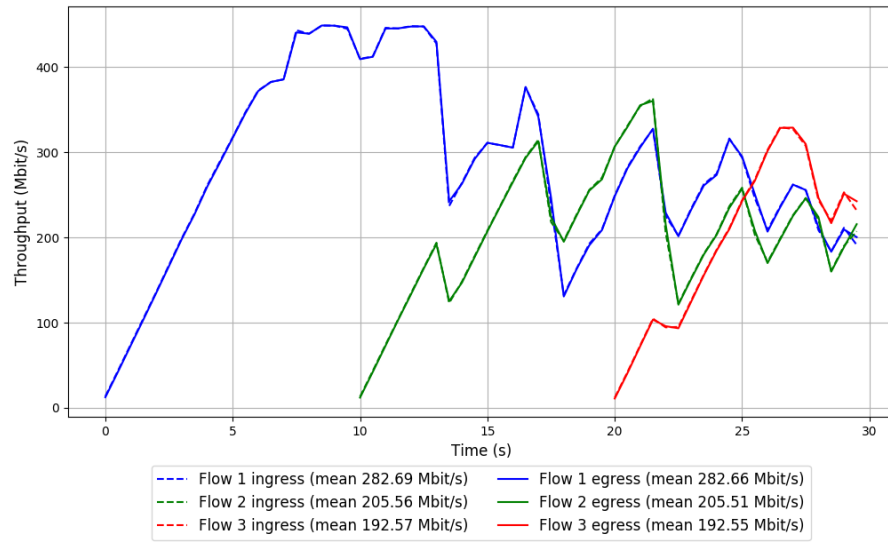


Run 4: Statistics of LEDBAT

Start at: 2017-10-12 08:12:17  
End at: 2017-10-12 08:12:47  
Local clock offset: 2.196 ms  
Remote clock offset: -1.441 ms

# Below is generated by plot.py at 2017-10-12 13:05:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 483.37 Mbit/s  
95th percentile per-packet one-way delay: 19.313 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 282.66 Mbit/s  
95th percentile per-packet one-way delay: 19.134 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 205.51 Mbit/s  
95th percentile per-packet one-way delay: 19.460 ms  
Loss rate: 0.03%  
-- Flow 3:  
Average throughput: 192.55 Mbit/s  
95th percentile per-packet one-way delay: 19.325 ms  
Loss rate: 0.01%

# Run 4: Report of LEDBAT — Data Link



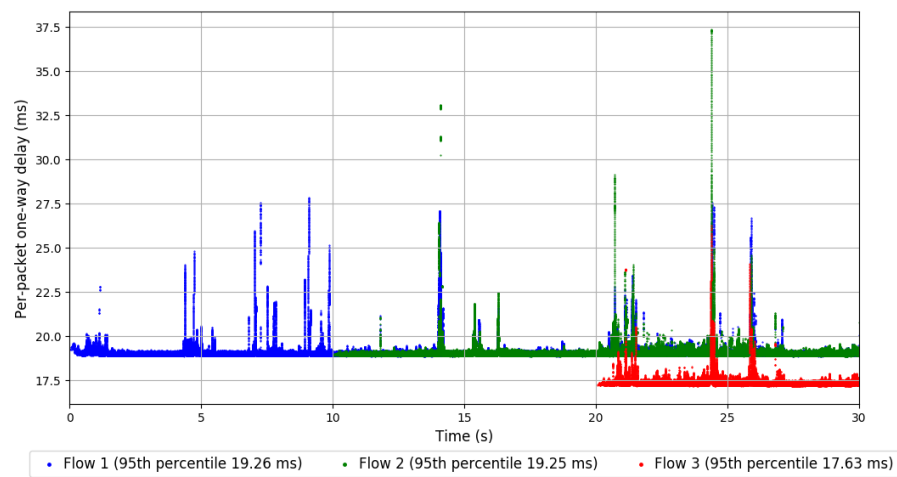
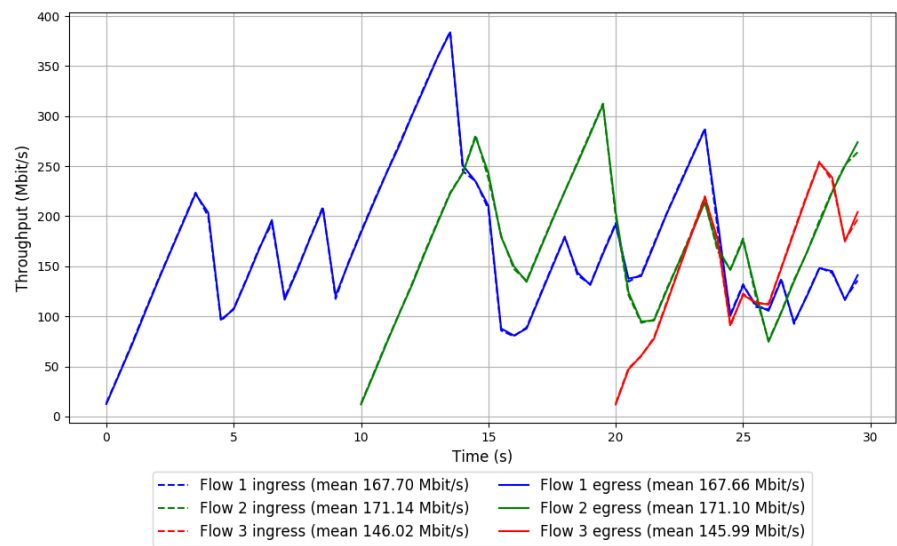
Run 5: Statistics of LEDBAT

Start at: 2017-10-12 08:33:28  
End at: 2017-10-12 08:33:58  
Local clock offset: 2.38 ms  
Remote clock offset: -1.472 ms

# Below is generated by plot.py at 2017-10-12 13:05:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 329.98 Mbit/s  
95th percentile per-packet one-way delay: 19.230 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 167.66 Mbit/s  
95th percentile per-packet one-way delay: 19.263 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 171.10 Mbit/s  
95th percentile per-packet one-way delay: 19.255 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 145.99 Mbit/s  
95th percentile per-packet one-way delay: 17.632 ms  
Loss rate: 0.02%



Run 5: Report of LEDBAT — Data Link

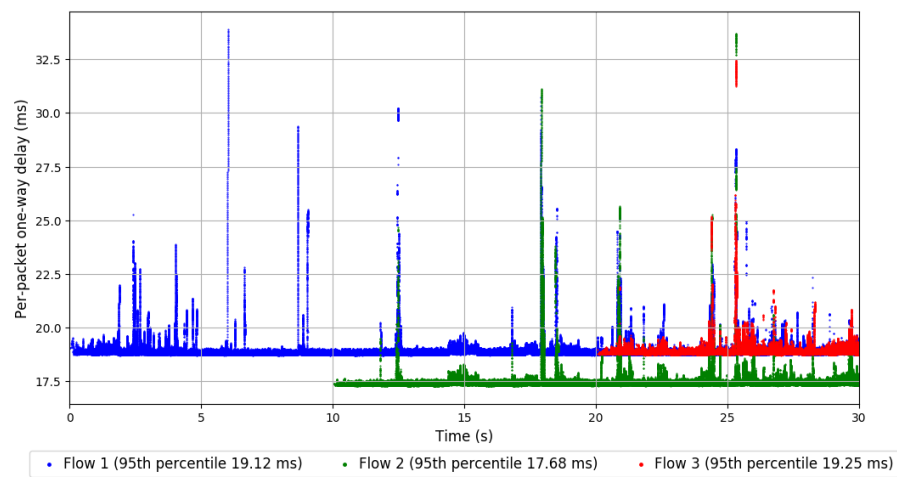
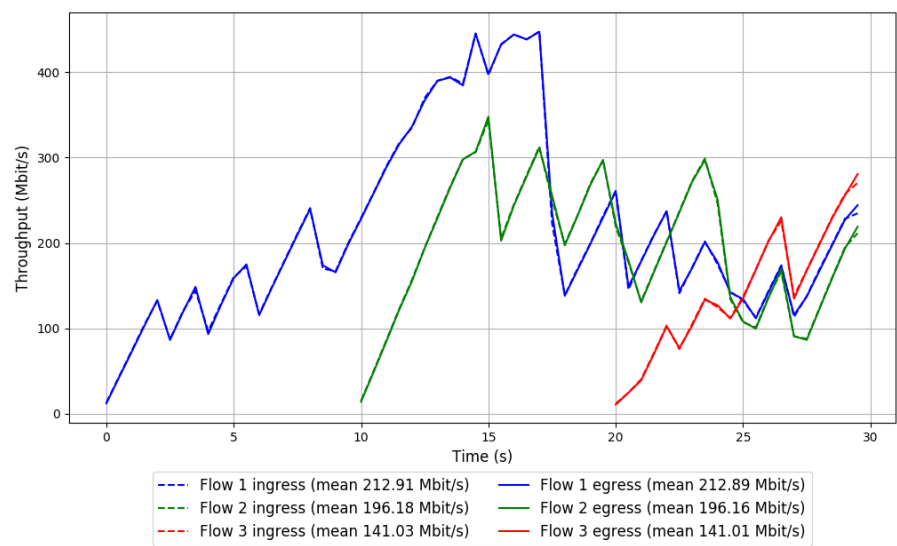


Run 6: Statistics of LEDBAT

Start at: 2017-10-12 08:54:16  
End at: 2017-10-12 08:54:46  
Local clock offset: 2.282 ms  
Remote clock offset: -1.684 ms

# Below is generated by plot.py at 2017-10-12 13:05:58  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 390.25 Mbit/s  
95th percentile per-packet one-way delay: 19.085 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 212.89 Mbit/s  
95th percentile per-packet one-way delay: 19.125 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 196.16 Mbit/s  
95th percentile per-packet one-way delay: 17.675 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 141.01 Mbit/s  
95th percentile per-packet one-way delay: 19.250 ms  
Loss rate: 0.01%

Run 6: Report of LEDBAT — Data Link

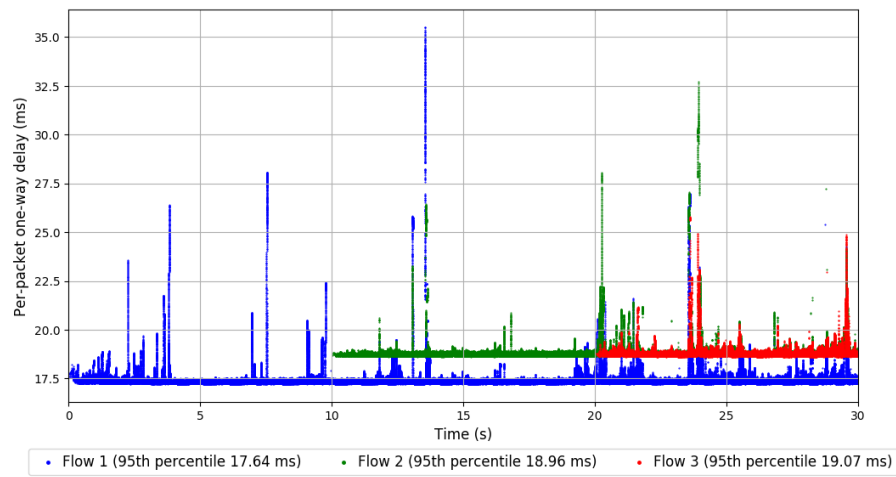
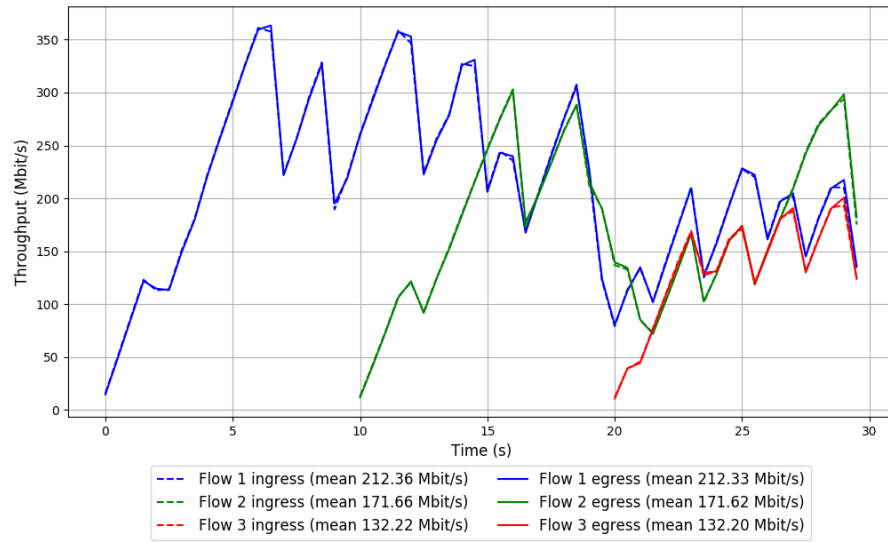


Run 7: Statistics of LEDBAT

Start at: 2017-10-12 09:14:48  
End at: 2017-10-12 09:15:18  
Local clock offset: 2.186 ms  
Remote clock offset: -1.853 ms

# Below is generated by plot.py at 2017-10-12 13:07:09  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 370.41 Mbit/s  
95th percentile per-packet one-way delay: 18.879 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 212.33 Mbit/s  
95th percentile per-packet one-way delay: 17.637 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 171.62 Mbit/s  
95th percentile per-packet one-way delay: 18.956 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 132.20 Mbit/s  
95th percentile per-packet one-way delay: 19.067 ms  
Loss rate: 0.02%

## Run 7: Report of LEDBAT — Data Link

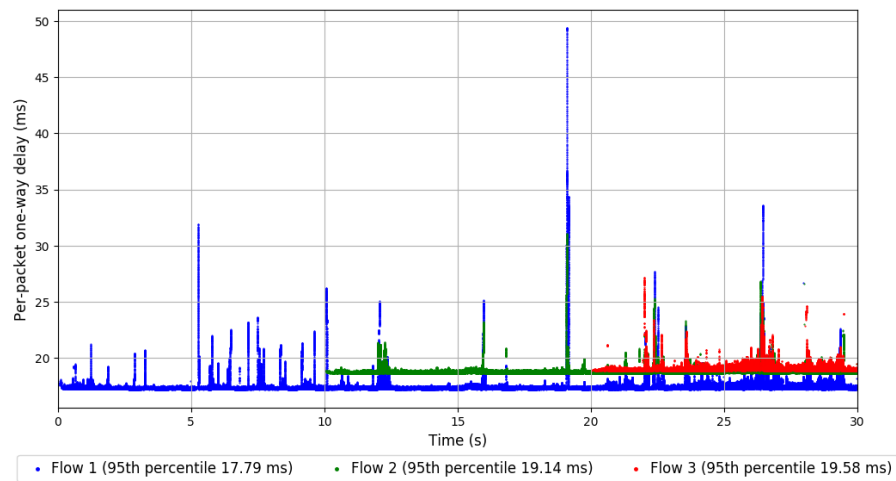
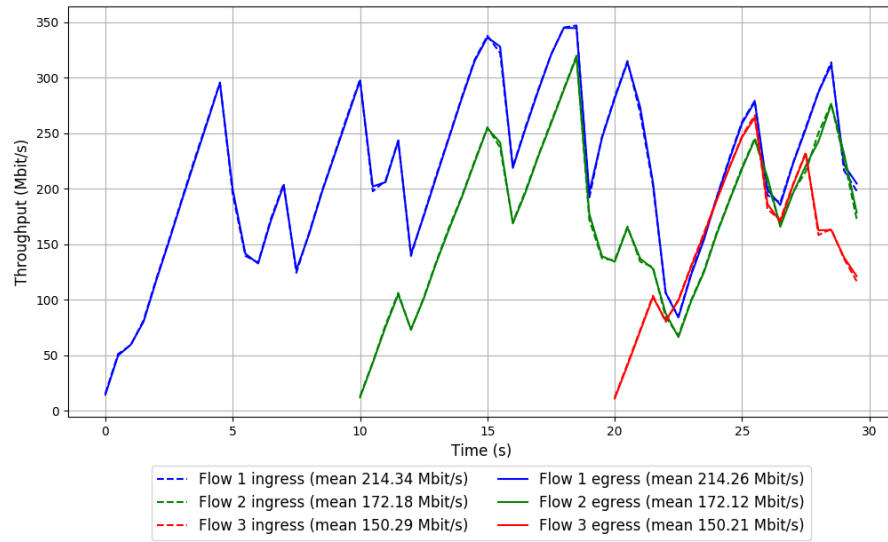


Run 8: Statistics of LEDBAT

Start at: 2017-10-12 09:35:30  
End at: 2017-10-12 09:36:00  
Local clock offset: 1.815 ms  
Remote clock offset: -2.222 ms

# Below is generated by plot.py at 2017-10-12 13:07:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 378.68 Mbit/s  
95th percentile per-packet one-way delay: 19.187 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 214.26 Mbit/s  
95th percentile per-packet one-way delay: 17.790 ms  
Loss rate: 0.04%  
-- Flow 2:  
Average throughput: 172.12 Mbit/s  
95th percentile per-packet one-way delay: 19.140 ms  
Loss rate: 0.03%  
-- Flow 3:  
Average throughput: 150.21 Mbit/s  
95th percentile per-packet one-way delay: 19.579 ms  
Loss rate: 0.05%

## Run 8: Report of LEDBAT — Data Link



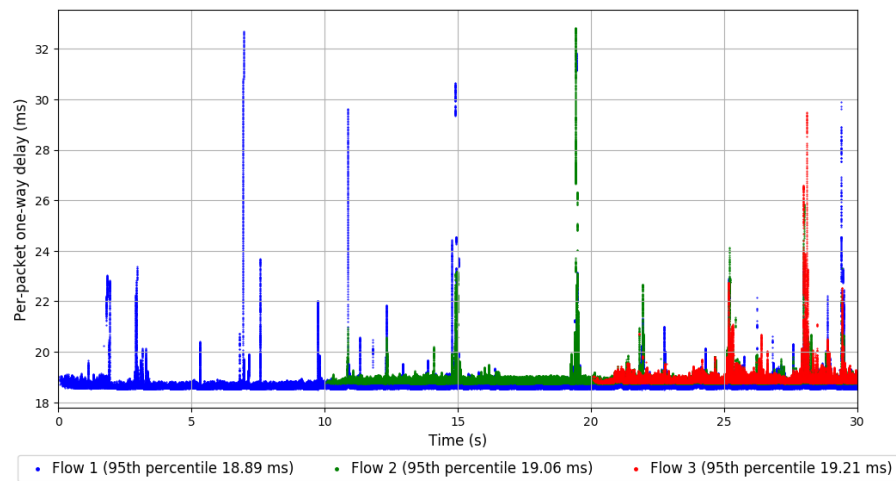
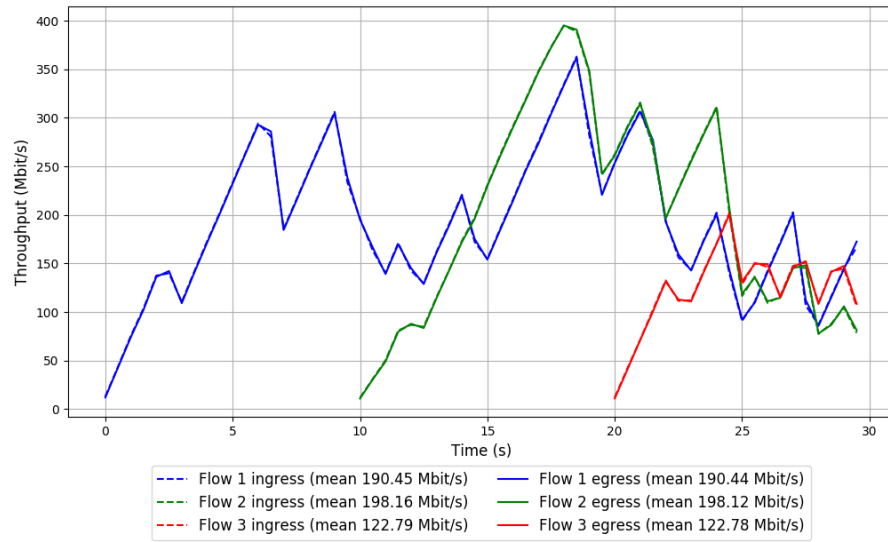
Run 9: Statistics of LEDBAT

Start at: 2017-10-12 09:56:22  
End at: 2017-10-12 09:56:52  
Local clock offset: 1.549 ms  
Remote clock offset: -2.292 ms

# Below is generated by plot.py at 2017-10-12 13:08:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 363.00 Mbit/s  
95th percentile per-packet one-way delay: 19.039 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 190.44 Mbit/s  
95th percentile per-packet one-way delay: 18.895 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 198.12 Mbit/s  
95th percentile per-packet one-way delay: 19.059 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 122.78 Mbit/s  
95th percentile per-packet one-way delay: 19.215 ms  
Loss rate: 0.02%



## Run 9: Report of LEDBAT — Data Link

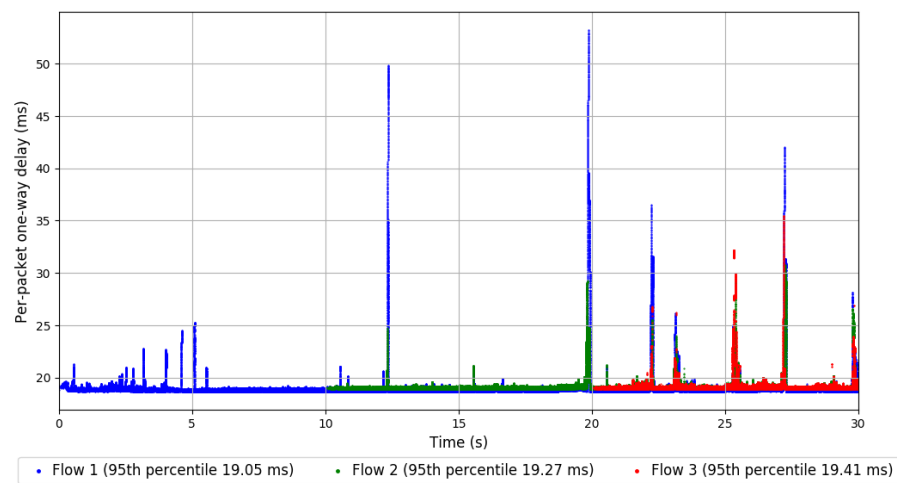
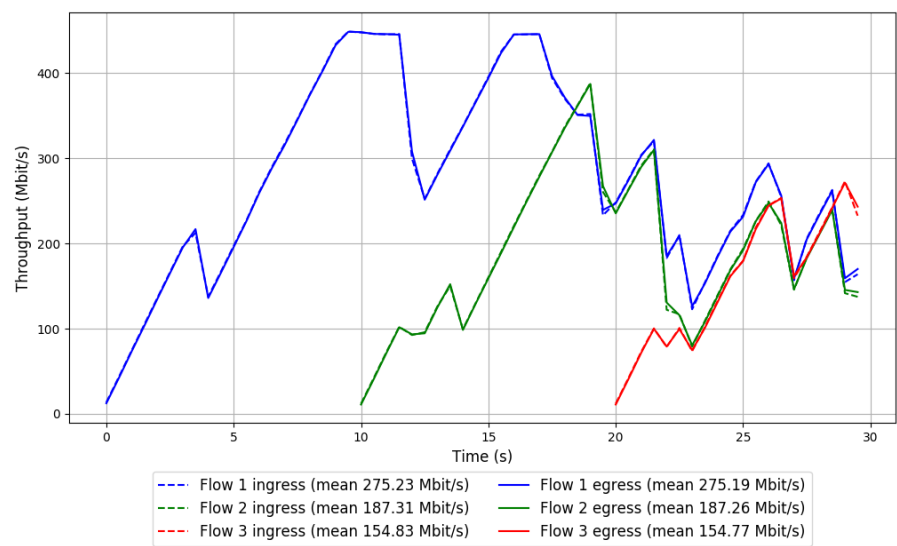


Run 10: Statistics of LEDBAT

Start at: 2017-10-12 10:17:12  
End at: 2017-10-12 10:17:42  
Local clock offset: 1.14 ms  
Remote clock offset: -2.168 ms

# Below is generated by plot.py at 2017-10-12 13:09:35  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 451.10 Mbit/s  
95th percentile per-packet one-way delay: 19.203 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 275.19 Mbit/s  
95th percentile per-packet one-way delay: 19.046 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 187.26 Mbit/s  
95th percentile per-packet one-way delay: 19.271 ms  
Loss rate: 0.03%  
-- Flow 3:  
Average throughput: 154.77 Mbit/s  
95th percentile per-packet one-way delay: 19.408 ms  
Loss rate: 0.04%

Run 10: Report of LEDBAT — Data Link

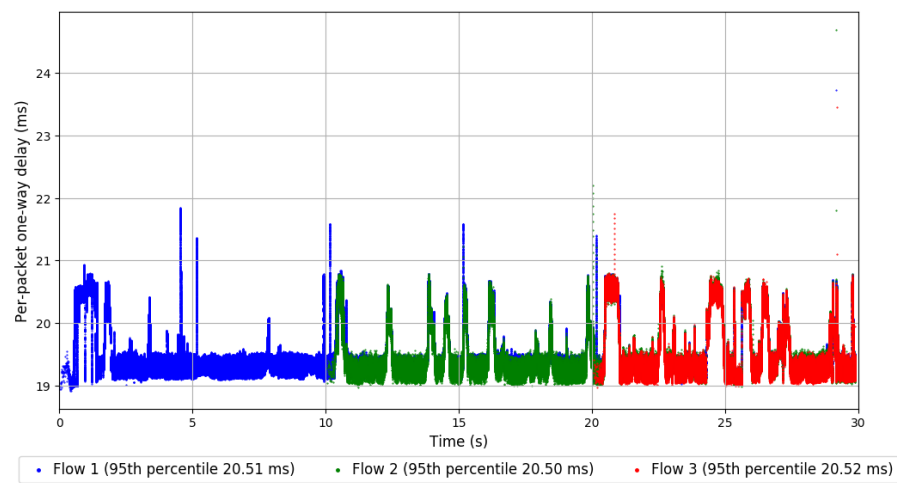
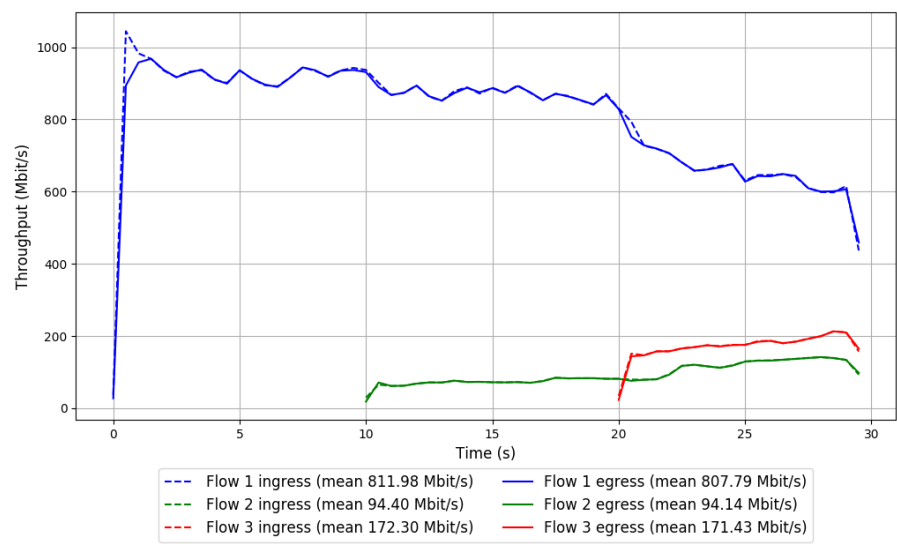


Run 1: Statistics of PCC

Start at: 2017-10-12 07:27:21  
End at: 2017-10-12 07:27:51  
Local clock offset: 1.621 ms  
Remote clock offset: -1.203 ms

# Below is generated by plot.py at 2017-10-12 13:16:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 926.84 Mbit/s  
95th percentile per-packet one-way delay: 20.514 ms  
Loss rate: 0.50%  
-- Flow 1:  
Average throughput: 807.79 Mbit/s  
95th percentile per-packet one-way delay: 20.514 ms  
Loss rate: 0.51%  
-- Flow 2:  
Average throughput: 94.14 Mbit/s  
95th percentile per-packet one-way delay: 20.501 ms  
Loss rate: 0.28%  
-- Flow 3:  
Average throughput: 171.43 Mbit/s  
95th percentile per-packet one-way delay: 20.525 ms  
Loss rate: 0.50%

Run 1: Report of PCC — Data Link

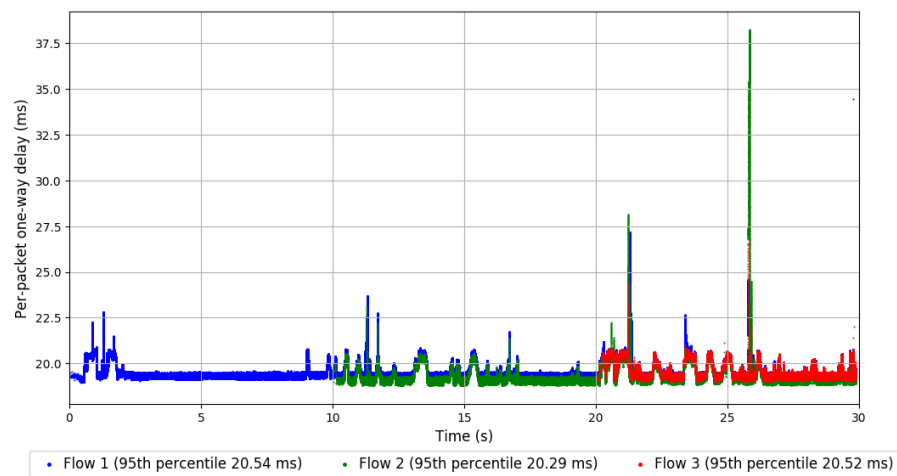
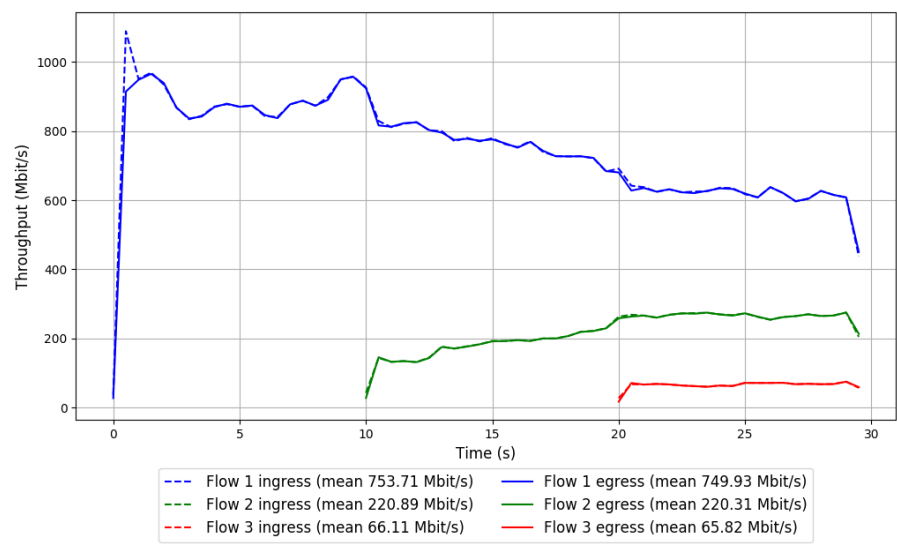


Run 2: Statistics of PCC

Start at: 2017-10-12 07:47:59  
End at: 2017-10-12 07:48:29  
Local clock offset: 1.973 ms  
Remote clock offset: -1.446 ms

# Below is generated by plot.py at 2017-10-12 13:17:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 918.11 Mbit/s  
95th percentile per-packet one-way delay: 20.515 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 749.93 Mbit/s  
95th percentile per-packet one-way delay: 20.538 ms  
Loss rate: 0.50%  
-- Flow 2:  
Average throughput: 220.31 Mbit/s  
95th percentile per-packet one-way delay: 20.286 ms  
Loss rate: 0.26%  
-- Flow 3:  
Average throughput: 65.82 Mbit/s  
95th percentile per-packet one-way delay: 20.522 ms  
Loss rate: 0.44%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-10-12 08:09:08

End at: 2017-10-12 08:09:38

Local clock offset: 2.199 ms

Remote clock offset: -1.45 ms

# Below is generated by plot.py at 2017-10-12 13:18:48

# Datalink statistics

-- Total of 3 flows:

Average throughput: 930.80 Mbit/s

95th percentile per-packet one-way delay: 19.521 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 754.69 Mbit/s

95th percentile per-packet one-way delay: 18.782 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 220.14 Mbit/s

95th percentile per-packet one-way delay: 20.179 ms

Loss rate: 0.26%

-- Flow 3:

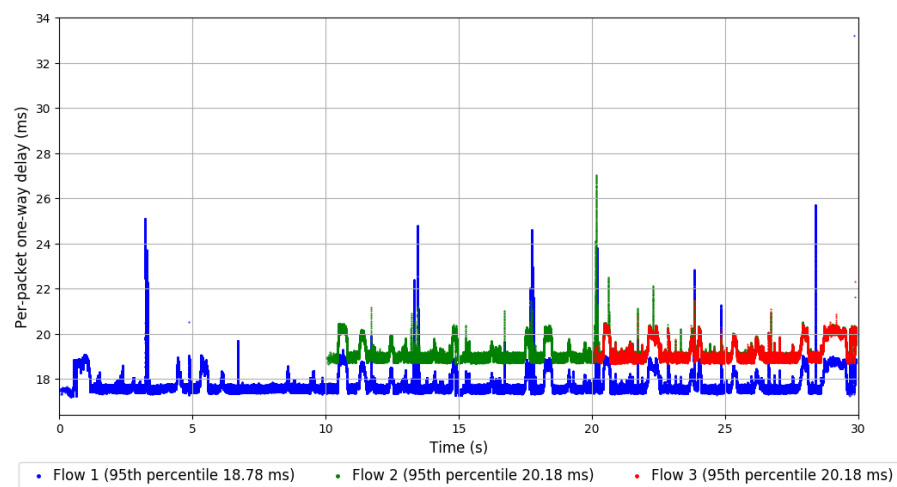
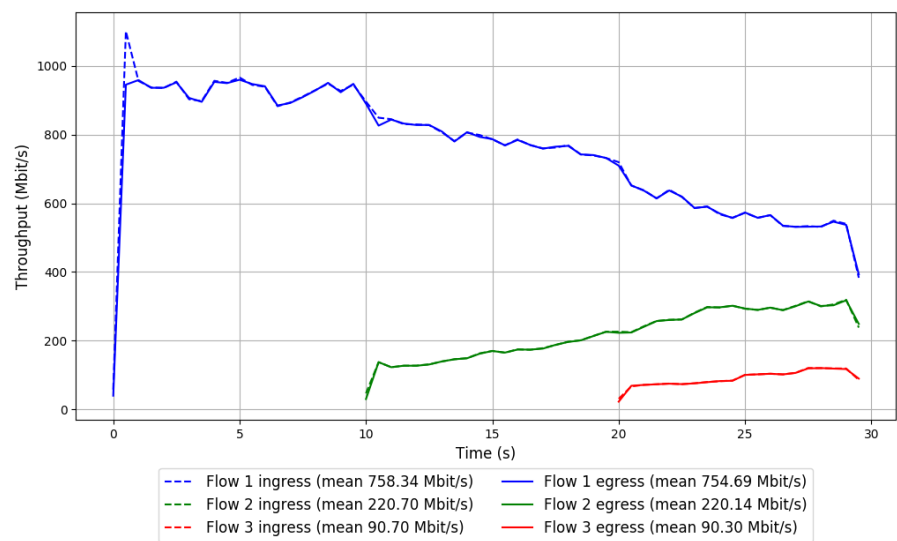
Average throughput: 90.30 Mbit/s

95th percentile per-packet one-way delay: 20.182 ms

Loss rate: 0.44%



Run 3: Report of PCC — Data Link

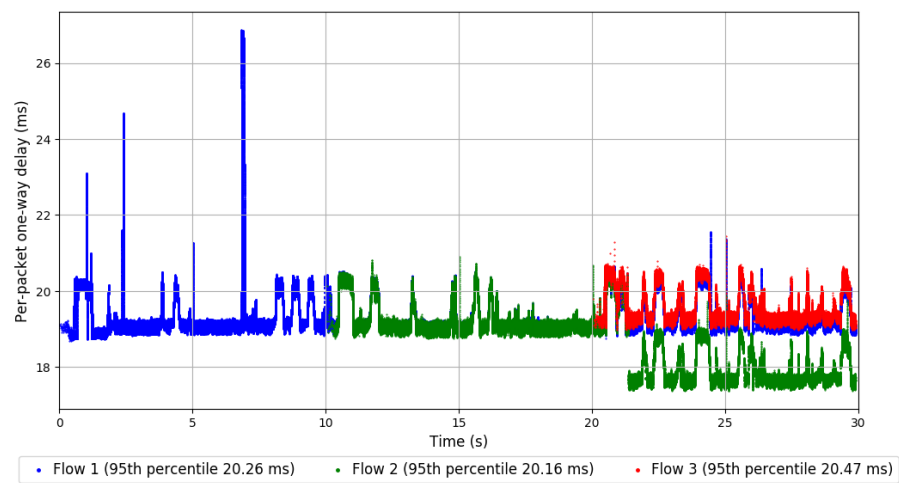
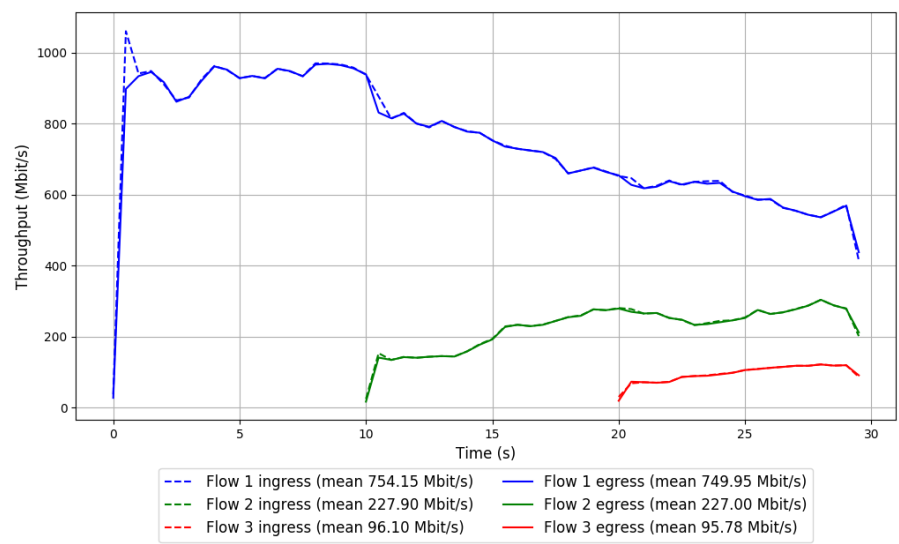


Run 4: Statistics of PCC

Start at: 2017-10-12 08:30:21  
End at: 2017-10-12 08:30:51  
Local clock offset: 2.282 ms  
Remote clock offset: -1.526 ms

# Below is generated by plot.py at 2017-10-12 13:19:09  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 932.22 Mbit/s  
95th percentile per-packet one-way delay: 20.263 ms  
Loss rate: 0.53%  
-- Flow 1:  
Average throughput: 749.95 Mbit/s  
95th percentile per-packet one-way delay: 20.264 ms  
Loss rate: 0.56%  
-- Flow 2:  
Average throughput: 227.00 Mbit/s  
95th percentile per-packet one-way delay: 20.164 ms  
Loss rate: 0.40%  
-- Flow 3:  
Average throughput: 95.78 Mbit/s  
95th percentile per-packet one-way delay: 20.468 ms  
Loss rate: 0.35%

Run 4: Report of PCC — Data Link

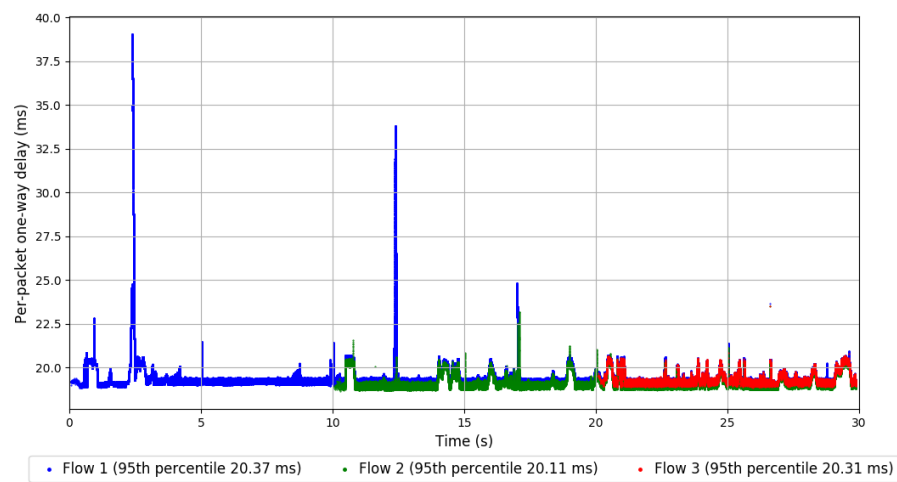
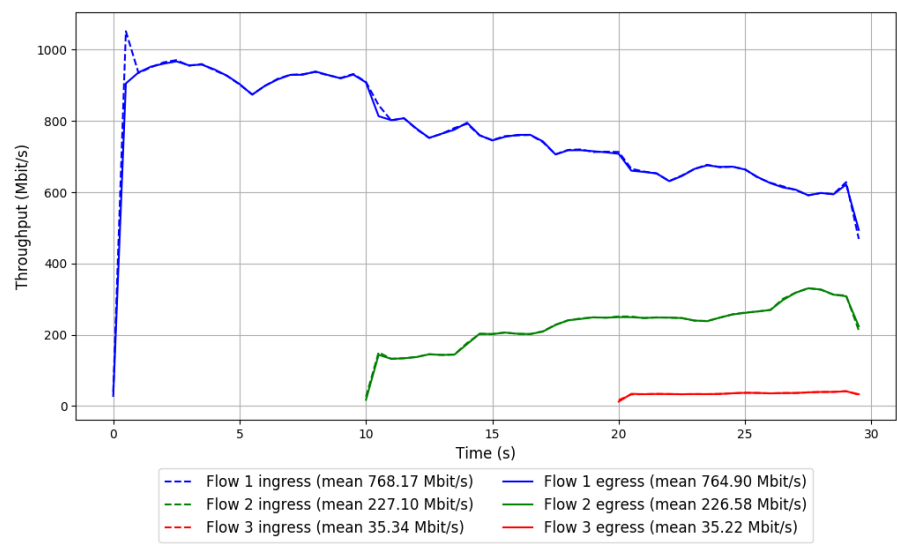


Run 5: Statistics of PCC

Start at: 2017-10-12 08:51:11  
End at: 2017-10-12 08:51:41  
Local clock offset: 2.288 ms  
Remote clock offset: -1.723 ms

# Below is generated by plot.py at 2017-10-12 13:20:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 927.04 Mbit/s  
95th percentile per-packet one-way delay: 20.332 ms  
Loss rate: 0.39%  
-- Flow 1:  
Average throughput: 764.90 Mbit/s  
95th percentile per-packet one-way delay: 20.372 ms  
Loss rate: 0.43%  
-- Flow 2:  
Average throughput: 226.58 Mbit/s  
95th percentile per-packet one-way delay: 20.106 ms  
Loss rate: 0.23%  
-- Flow 3:  
Average throughput: 35.22 Mbit/s  
95th percentile per-packet one-way delay: 20.306 ms  
Loss rate: 0.34%

Run 5: Report of PCC — Data Link

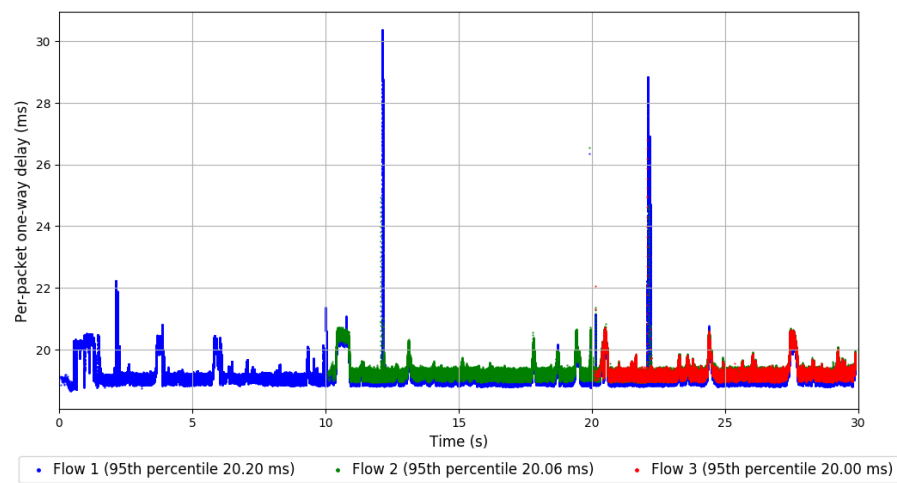
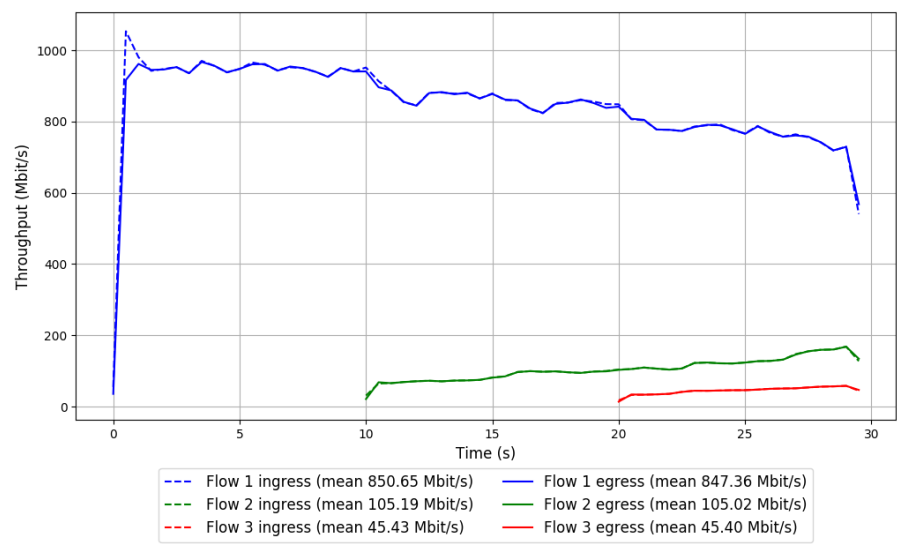


Run 6: Statistics of PCC

Start at: 2017-10-12 09:11:42  
End at: 2017-10-12 09:12:12  
Local clock offset: 2.234 ms  
Remote clock offset: -1.801 ms

```
# Below is generated by plot.py at 2017-10-12 13:21:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 932.08 Mbit/s
95th percentile per-packet one-way delay: 20.193 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 847.36 Mbit/s
95th percentile per-packet one-way delay: 20.198 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 105.02 Mbit/s
95th percentile per-packet one-way delay: 20.062 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 45.40 Mbit/s
95th percentile per-packet one-way delay: 20.001 ms
Loss rate: 0.13%
```

Run 6: Report of PCC — Data Link



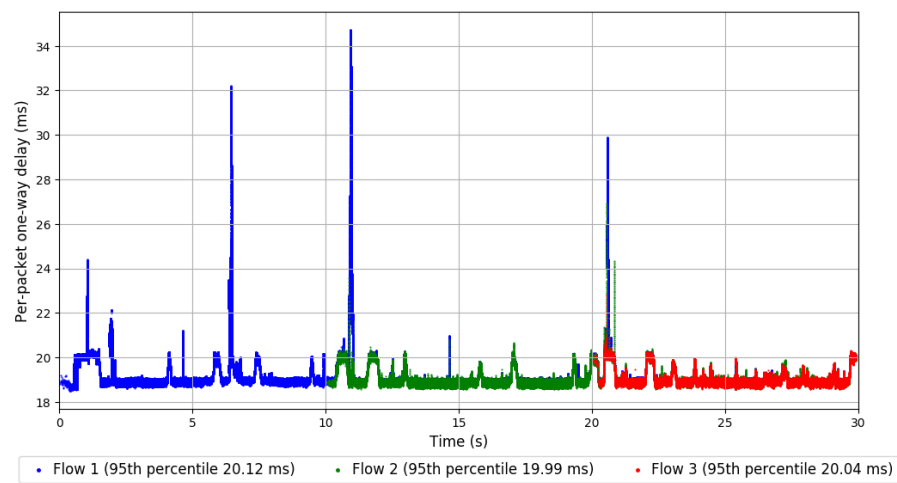
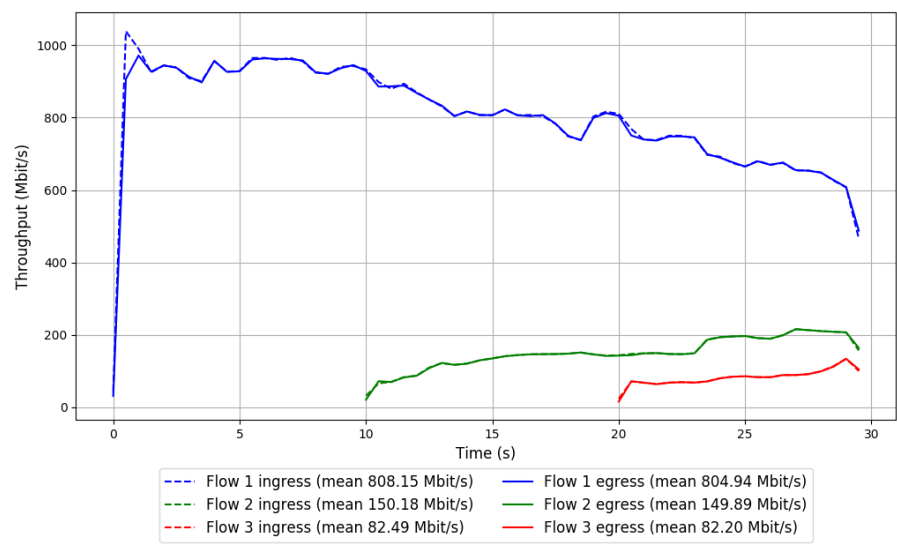
Run 7: Statistics of PCC

Start at: 2017-10-12 09:32:26  
End at: 2017-10-12 09:32:56  
Local clock offset: 1.969 ms  
Remote clock offset: -2.158 ms

# Below is generated by plot.py at 2017-10-12 13:22:03  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 931.64 Mbit/s  
95th percentile per-packet one-way delay: 20.107 ms  
Loss rate: 0.37%  
-- Flow 1:  
Average throughput: 804.94 Mbit/s  
95th percentile per-packet one-way delay: 20.116 ms  
Loss rate: 0.39%  
-- Flow 2:  
Average throughput: 149.89 Mbit/s  
95th percentile per-packet one-way delay: 19.994 ms  
Loss rate: 0.18%  
-- Flow 3:  
Average throughput: 82.20 Mbit/s  
95th percentile per-packet one-way delay: 20.037 ms  
Loss rate: 0.36%



Run 7: Report of PCC — Data Link

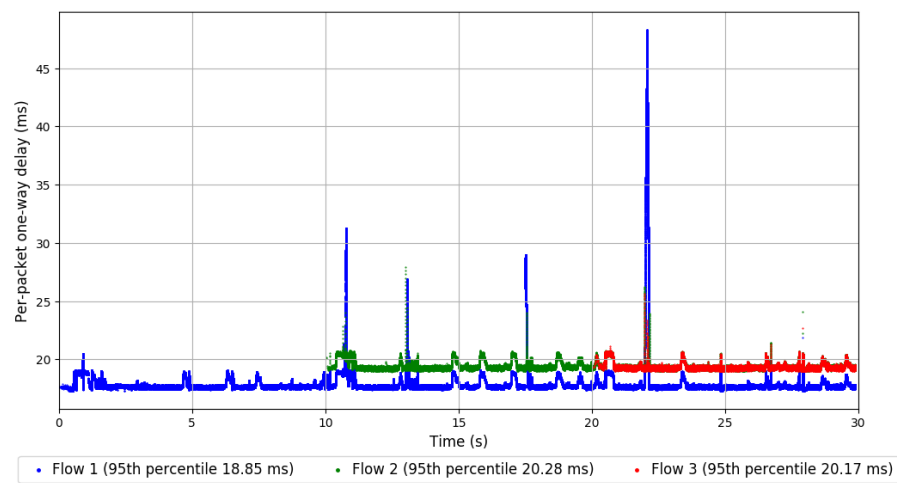
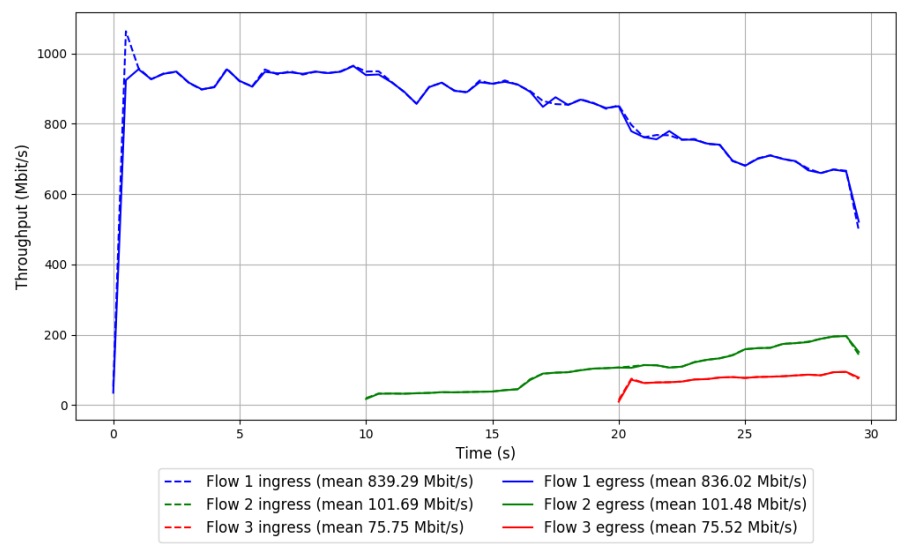


Run 8: Statistics of PCC

Start at: 2017-10-12 09:53:15  
End at: 2017-10-12 09:53:45  
Local clock offset: 1.504 ms  
Remote clock offset: -2.205 ms

# Below is generated by plot.py at 2017-10-12 13:23:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 928.27 Mbit/s  
95th percentile per-packet one-way delay: 19.355 ms  
Loss rate: 0.38%  
-- Flow 1:  
Average throughput: 836.02 Mbit/s  
95th percentile per-packet one-way delay: 18.853 ms  
Loss rate: 0.39%  
-- Flow 2:  
Average throughput: 101.48 Mbit/s  
95th percentile per-packet one-way delay: 20.277 ms  
Loss rate: 0.21%  
-- Flow 3:  
Average throughput: 75.52 Mbit/s  
95th percentile per-packet one-way delay: 20.169 ms  
Loss rate: 0.38%

Run 8: Report of PCC — Data Link

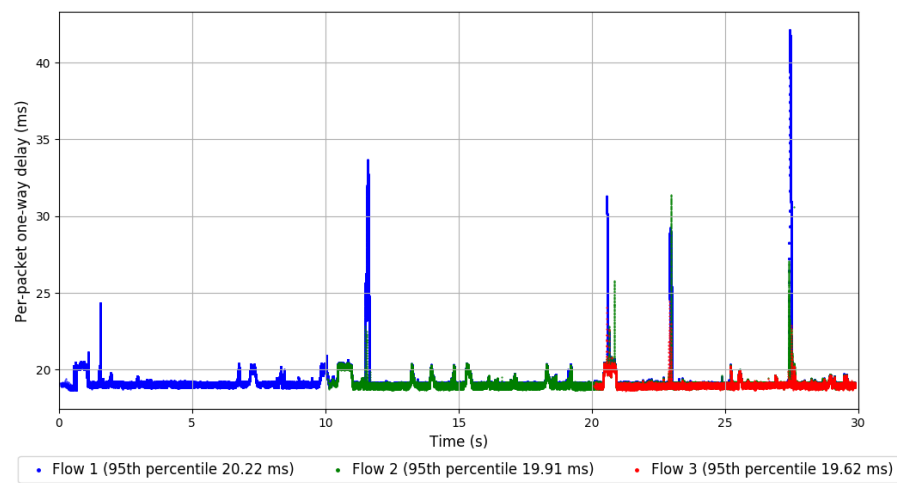
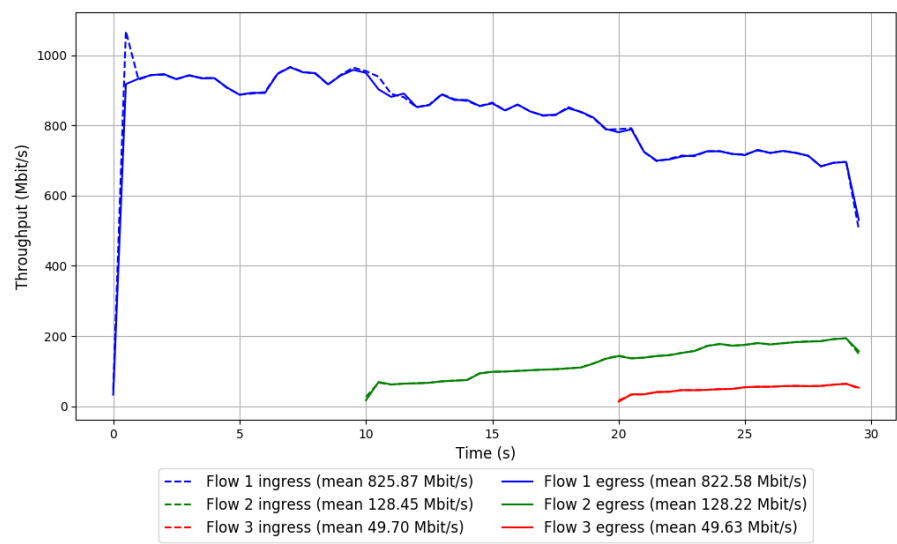


Run 9: Statistics of PCC

Start at: 2017-10-12 10:14:05  
End at: 2017-10-12 10:14:35  
Local clock offset: 1.253 ms  
Remote clock offset: -2.123 ms

# Below is generated by plot.py at 2017-10-12 13:30:03  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 924.04 Mbit/s  
95th percentile per-packet one-way delay: 20.204 ms  
Loss rate: 0.37%  
-- Flow 1:  
Average throughput: 822.58 Mbit/s  
95th percentile per-packet one-way delay: 20.219 ms  
Loss rate: 0.40%  
-- Flow 2:  
Average throughput: 128.22 Mbit/s  
95th percentile per-packet one-way delay: 19.915 ms  
Loss rate: 0.18%  
-- Flow 3:  
Average throughput: 49.63 Mbit/s  
95th percentile per-packet one-way delay: 19.623 ms  
Loss rate: 0.14%

Run 9: Report of PCC — Data Link

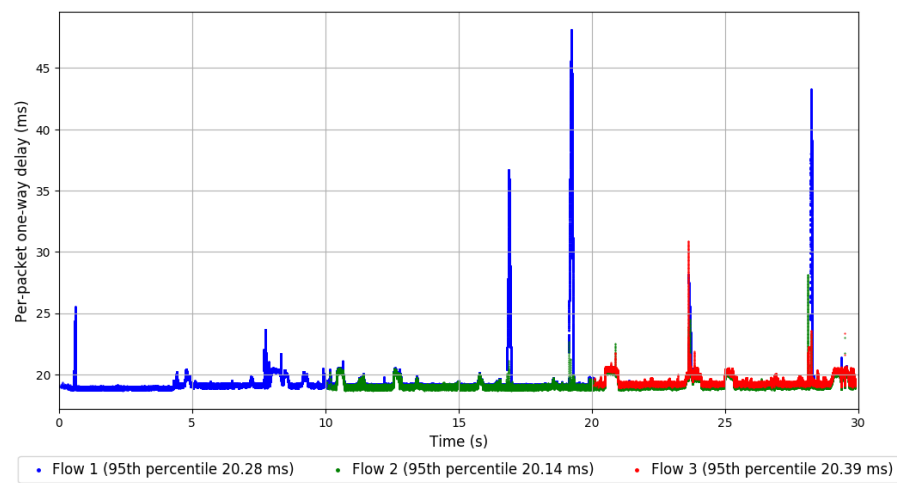
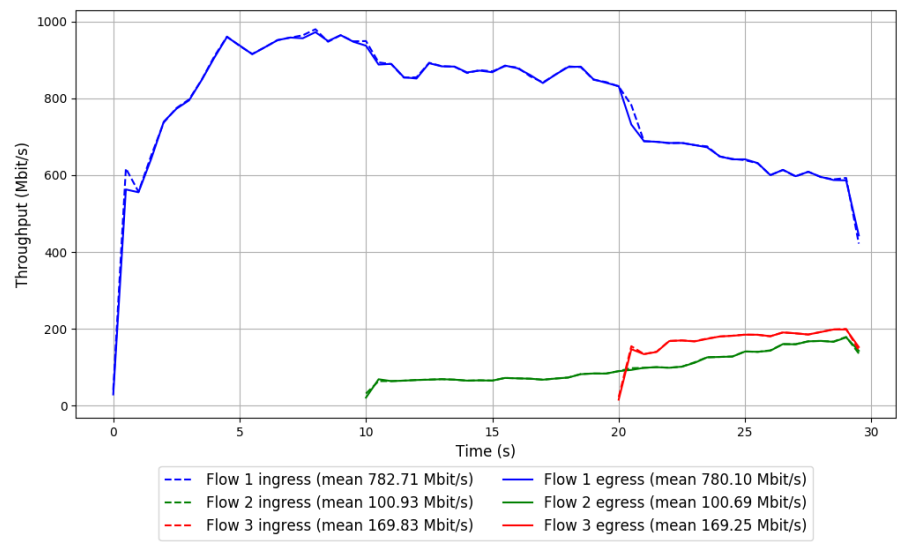


Run 10: Statistics of PCC

Start at: 2017-10-12 10:35:09  
End at: 2017-10-12 10:35:39  
Local clock offset: 0.544 ms  
Remote clock offset: -1.824 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 902.77 Mbit/s  
95th percentile per-packet one-way delay: 20.282 ms  
Loss rate: 0.33%  
-- Flow 1:  
Average throughput: 780.10 Mbit/s  
95th percentile per-packet one-way delay: 20.281 ms  
Loss rate: 0.33%  
-- Flow 2:  
Average throughput: 100.69 Mbit/s  
95th percentile per-packet one-way delay: 20.138 ms  
Loss rate: 0.24%  
-- Flow 3:  
Average throughput: 169.25 Mbit/s  
95th percentile per-packet one-way delay: 20.395 ms  
Loss rate: 0.34%

Run 10: Report of PCC — Data Link



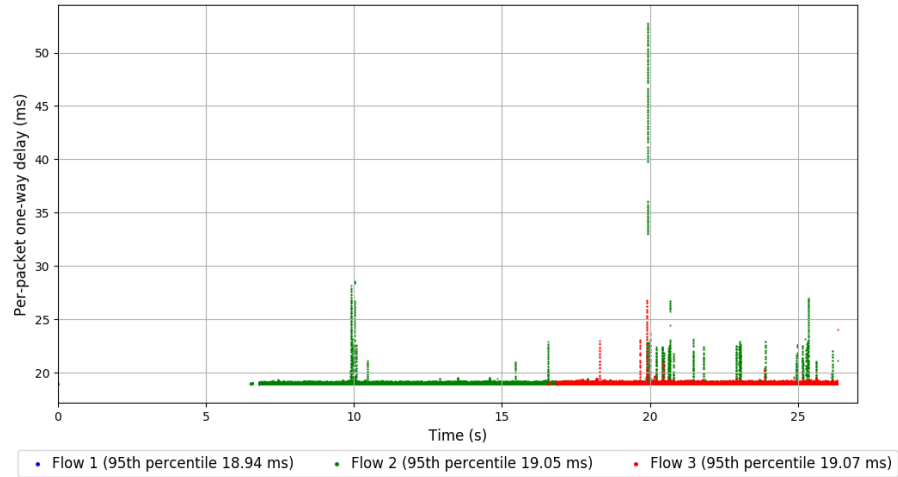
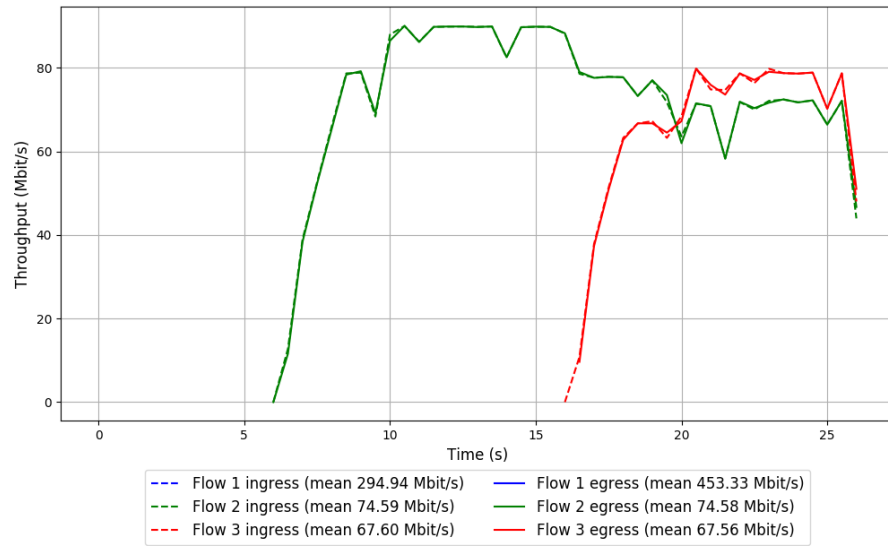
Run 1: Statistics of QUIC Cubic

Start at: 2017-10-12 07:18:52  
End at: 2017-10-12 07:19:22  
Local clock offset: 1.485 ms  
Remote clock offset: -1.178 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 81.44 Mbit/s  
95th percentile per-packet one-way delay: 19.063 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 453.33 Mbit/s  
95th percentile per-packet one-way delay: 18.940 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 74.58 Mbit/s  
95th percentile per-packet one-way delay: 19.053 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 67.56 Mbit/s  
95th percentile per-packet one-way delay: 19.075 ms  
Loss rate: 0.00%



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



Run 2: Statistics of QUIC Cubic

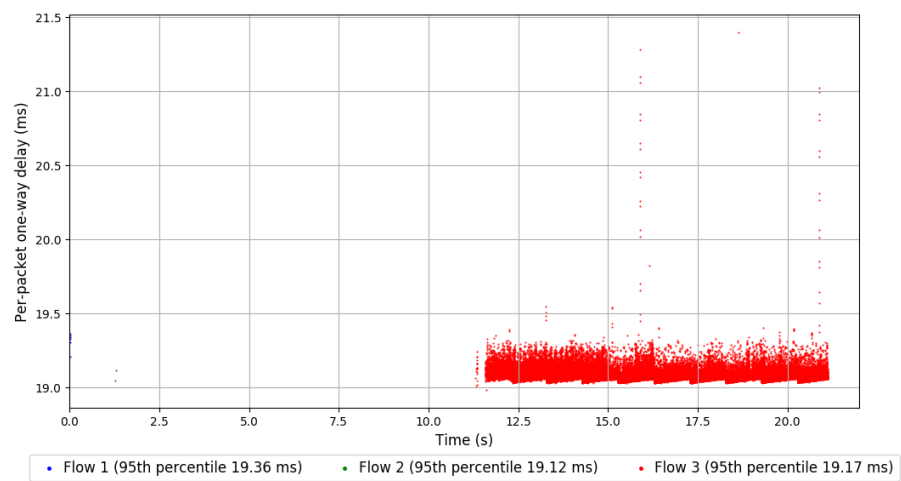
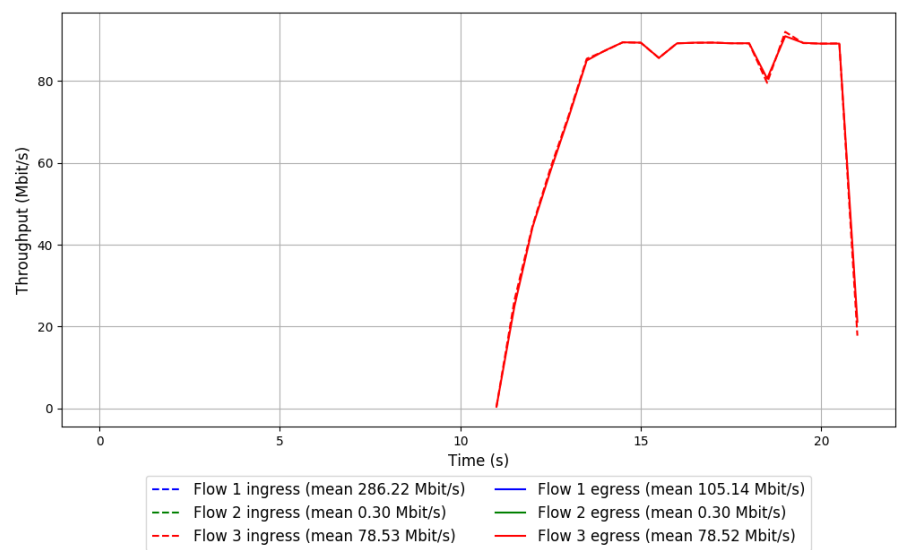
Start at: 2017-10-12 07:39:12

End at: 2017-10-12 07:39:42

Local clock offset: 1.826 ms

Remote clock offset: -1.273 ms

Run 2: Report of QUIC Cubic — Data Link

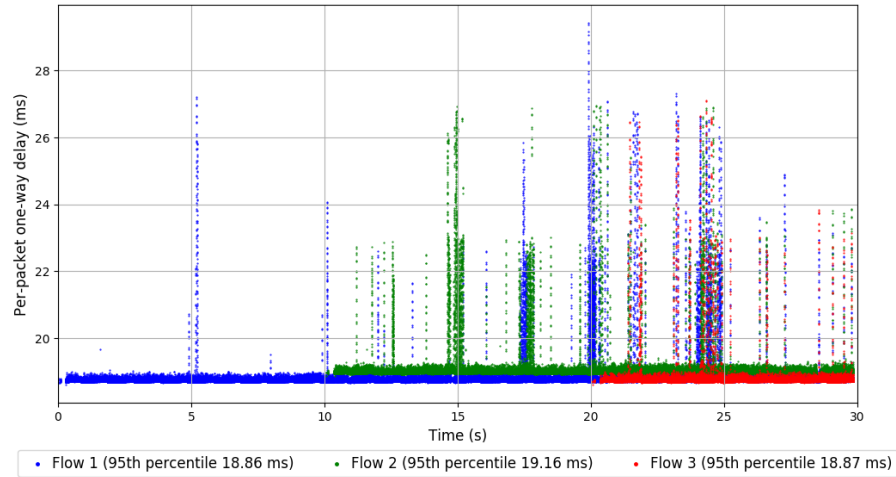
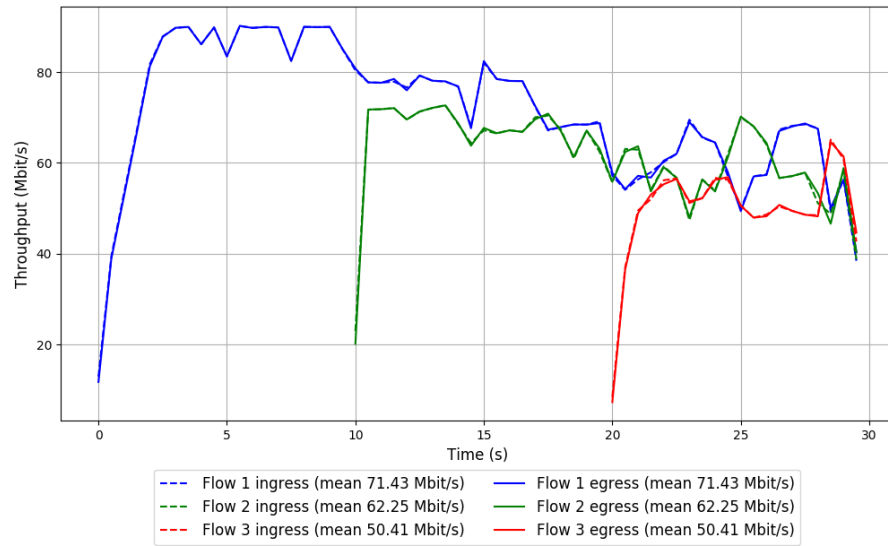


Run 3: Statistics of QUIC Cubic

Start at: 2017-10-12 07:59:53  
End at: 2017-10-12 08:00:23  
Local clock offset: 2.162 ms  
Remote clock offset: -1.546 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 129.31 Mbit/s  
95th percentile per-packet one-way delay: 19.067 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 71.43 Mbit/s  
95th percentile per-packet one-way delay: 18.855 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 62.25 Mbit/s  
95th percentile per-packet one-way delay: 19.156 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 50.41 Mbit/s  
95th percentile per-packet one-way delay: 18.869 ms  
Loss rate: 0.00%

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



Run 4: Statistics of QUIC Cubic

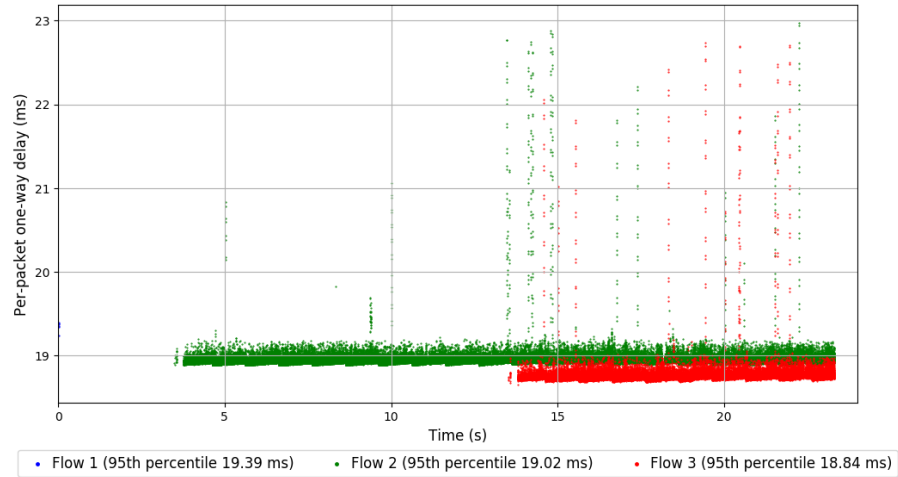
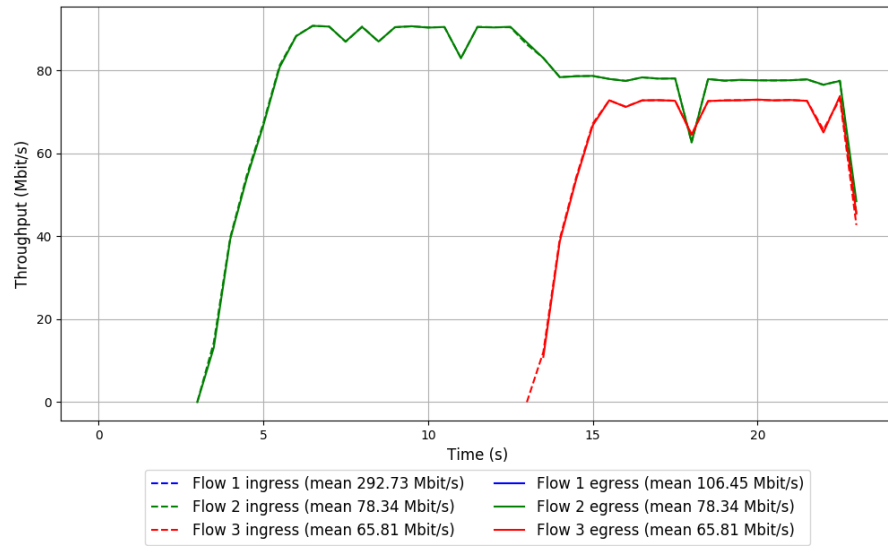
Start at: 2017-10-12 08:21:05

End at: 2017-10-12 08:21:35

Local clock offset: 2.247 ms

Remote clock offset: -1.42 ms

# Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-10-12 08:41:57

End at: 2017-10-12 08:42:27

Local clock offset: 2.382 ms

Remote clock offset: -1.7 ms

# Below is generated by plot.py at 2017-10-12 13:30:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 128.92 Mbit/s

95th percentile per-packet one-way delay: 18.959 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.04 Mbit/s

95th percentile per-packet one-way delay: 18.735 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.95 Mbit/s

95th percentile per-packet one-way delay: 18.995 ms

Loss rate: 0.00%

-- Flow 3:

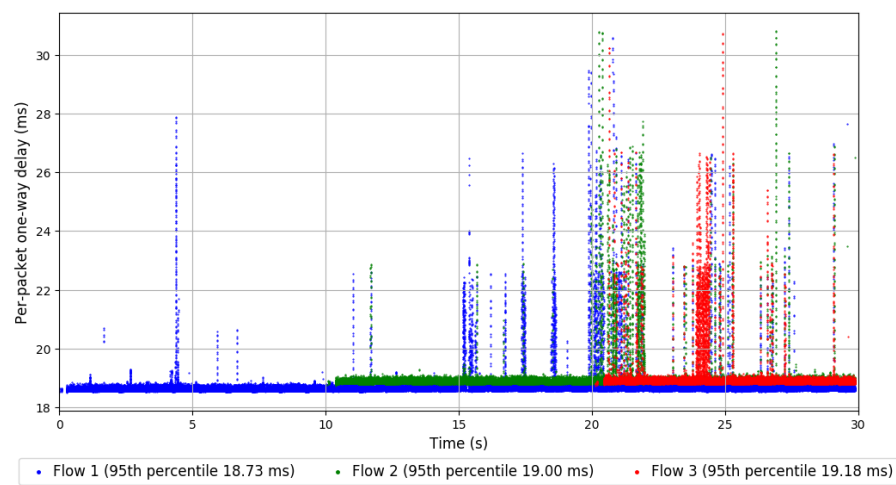
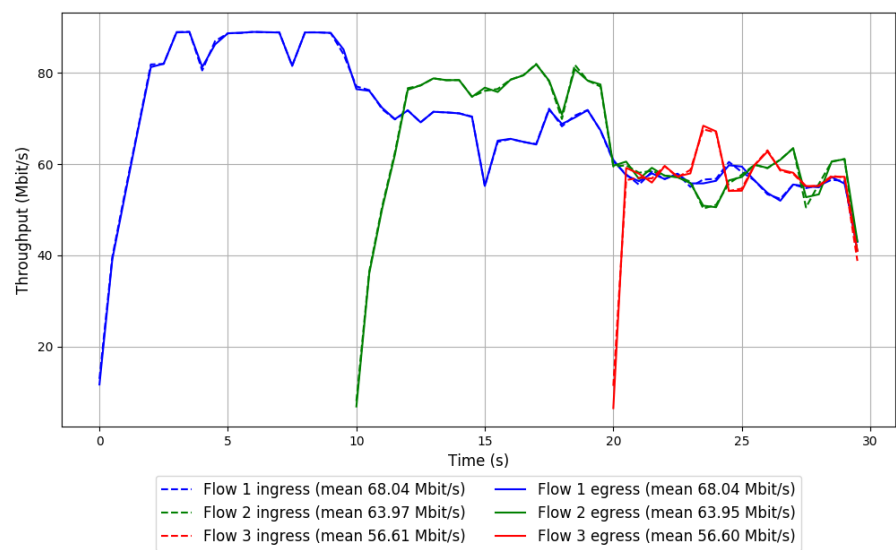
Average throughput: 56.60 Mbit/s

95th percentile per-packet one-way delay: 19.176 ms

Loss rate: 0.00%



Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

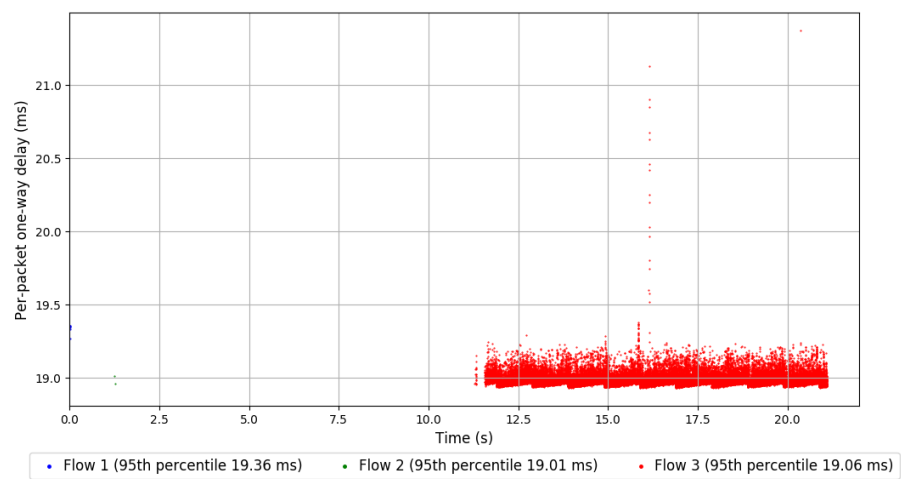
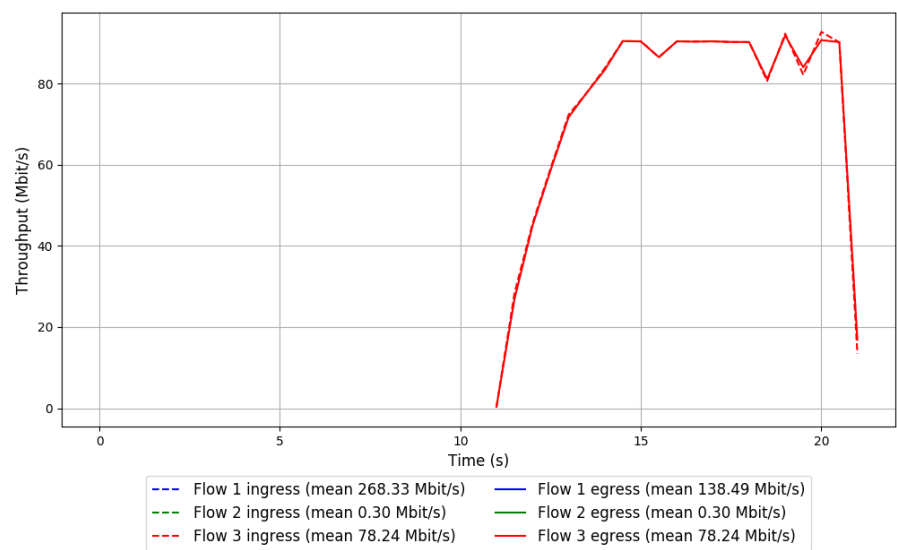
Start at: 2017-10-12 09:02:58

End at: 2017-10-12 09:03:28

Local clock offset: 2.286 ms

Remote clock offset: -1.784 ms

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

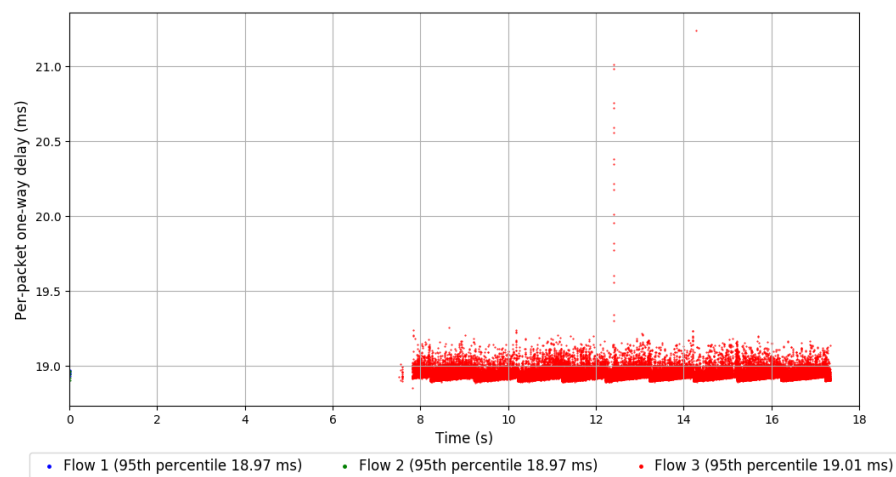
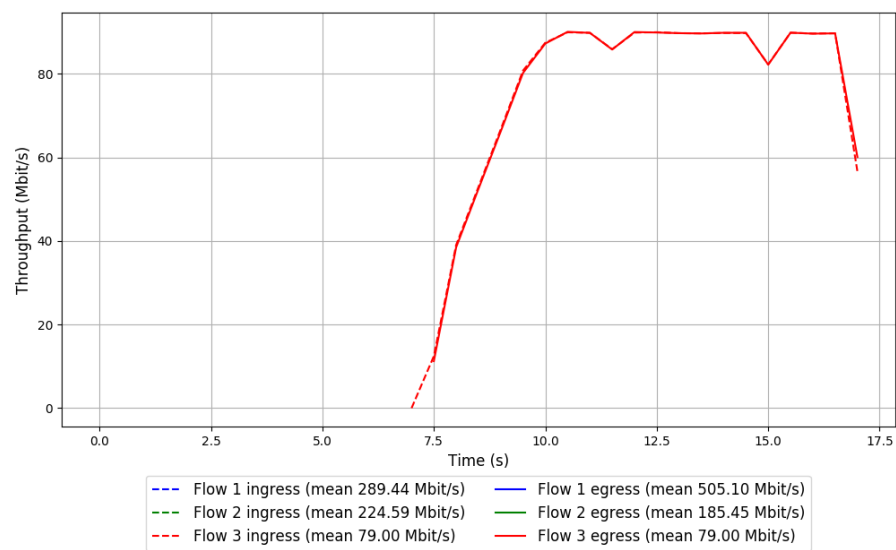
Start at: 2017-10-12 09:23:25

End at: 2017-10-12 09:23:55

Local clock offset: 1.994 ms

Remote clock offset: -1.946 ms

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

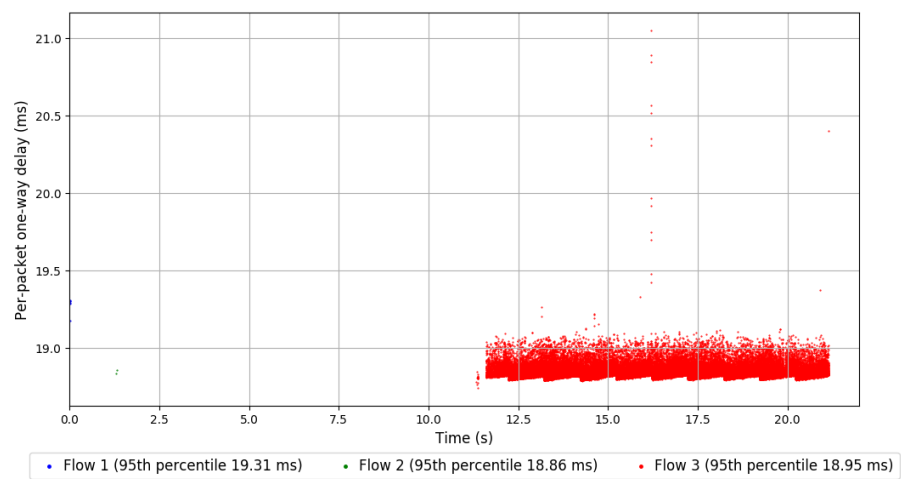
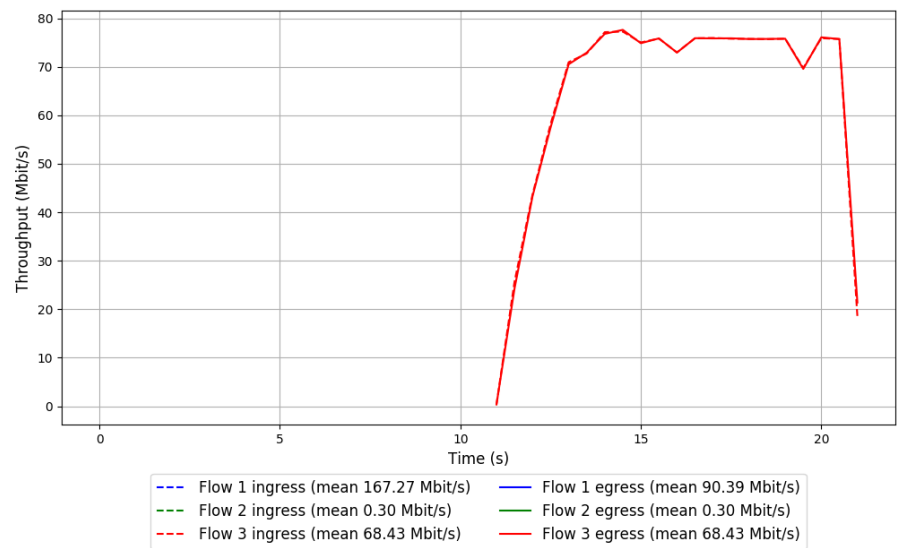
Start at: 2017-10-12 09:44:07

End at: 2017-10-12 09:44:37

Local clock offset: 1.772 ms

Remote clock offset: -2.198 ms

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-10-12 10:04:56

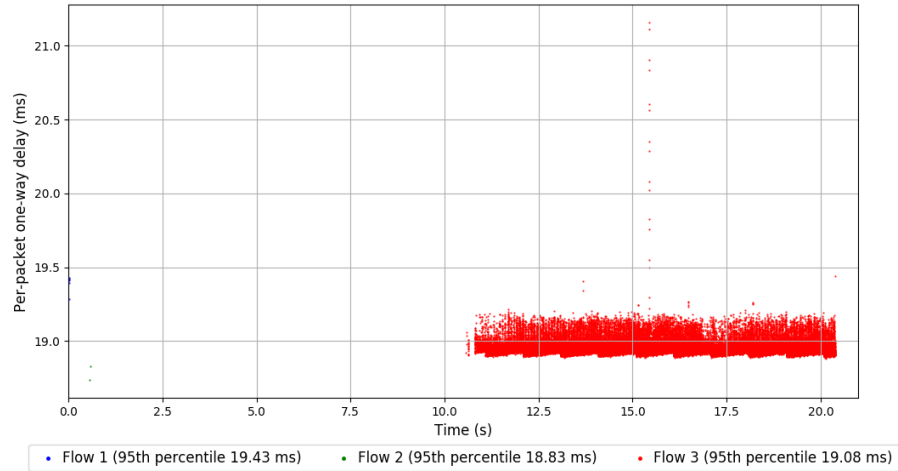
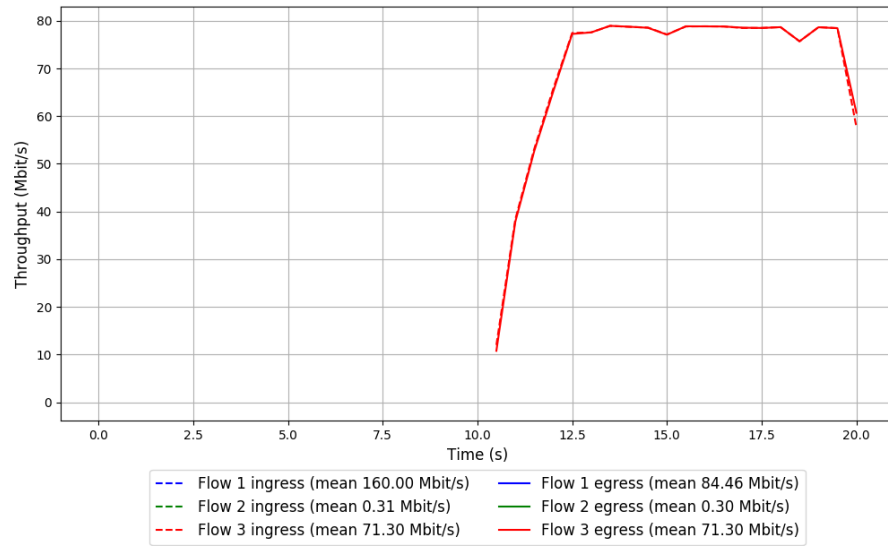
End at: 2017-10-12 10:05:26

Local clock offset: 1.295 ms

Remote clock offset: -2.257 ms



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

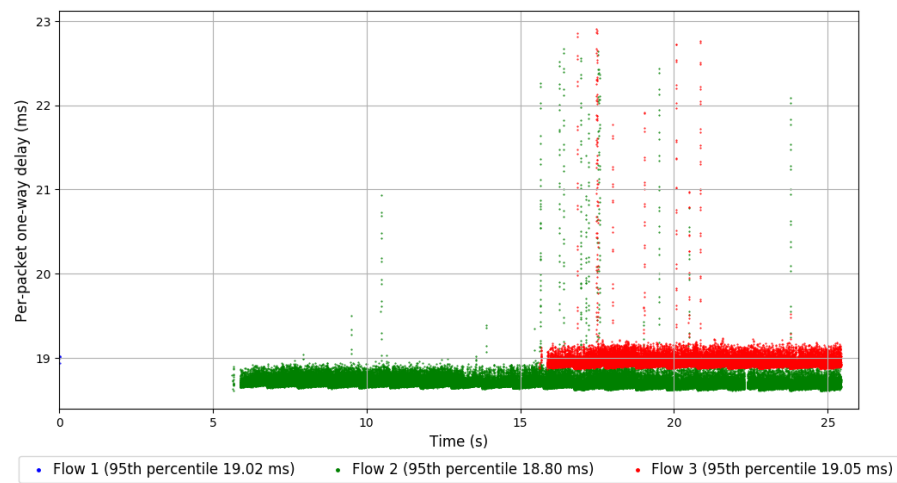
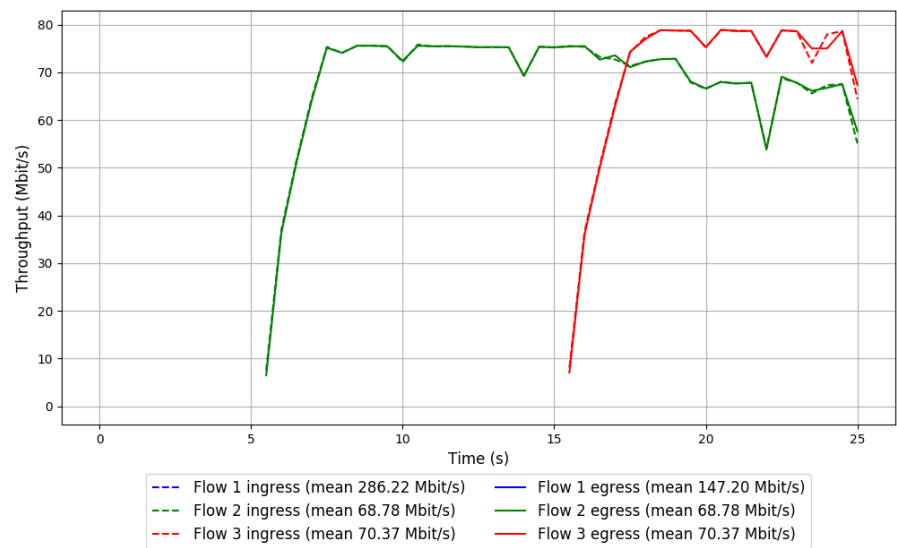


Run 10: Statistics of QUIC Cubic

Start at: 2017-10-12 10:25:56  
End at: 2017-10-12 10:26:26  
Local clock offset: 0.837 ms  
Remote clock offset: -2.033 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 80.83 Mbit/s  
95th percentile per-packet one-way delay: 18.987 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 147.20 Mbit/s  
95th percentile per-packet one-way delay: 19.024 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 68.78 Mbit/s  
95th percentile per-packet one-way delay: 18.804 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 70.37 Mbit/s  
95th percentile per-packet one-way delay: 19.050 ms  
Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

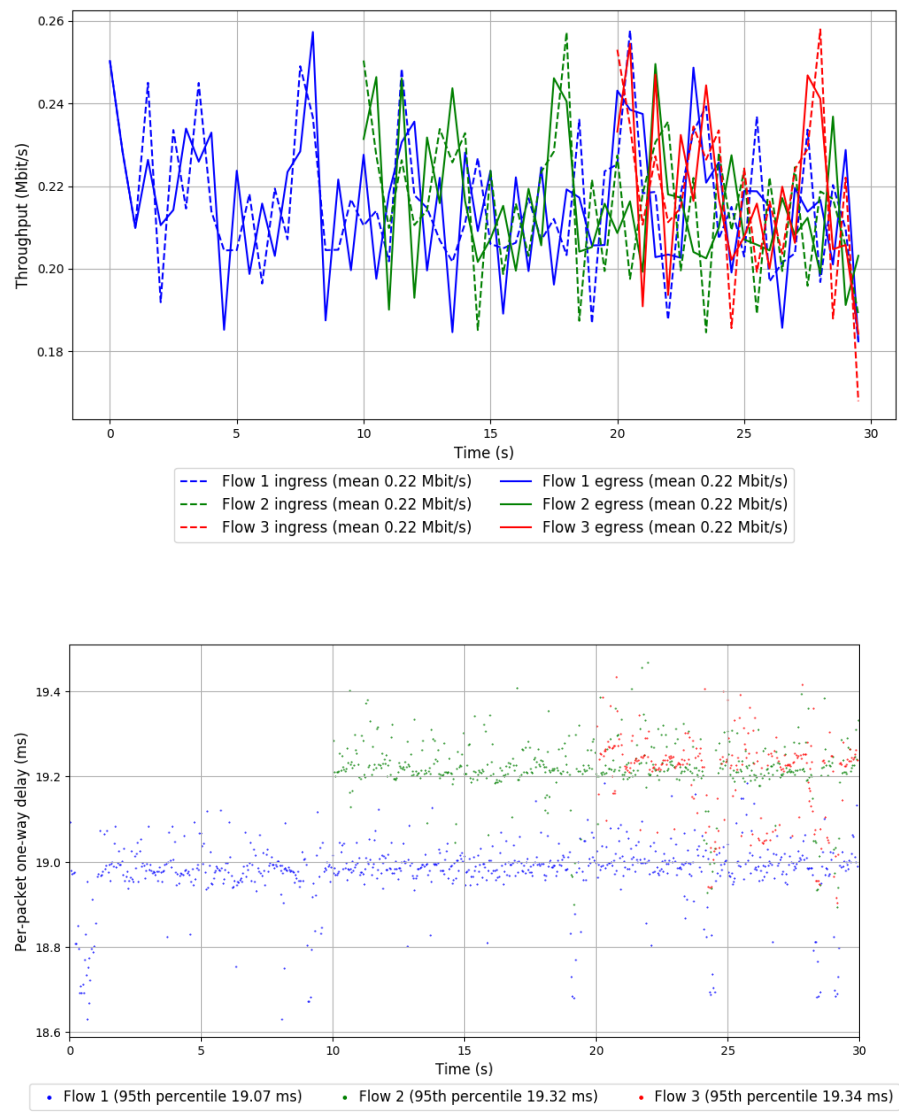


```
Run 1: Statistics of SReAM

Start at: 2017-10-12 07:21:27
End at: 2017-10-12 07:21:57
Local clock offset: 1.583 ms
Remote clock offset: -1.16 ms

# Below is generated by plot.py at 2017-10-12 13:30:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 19.293 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.069 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.320 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.338 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

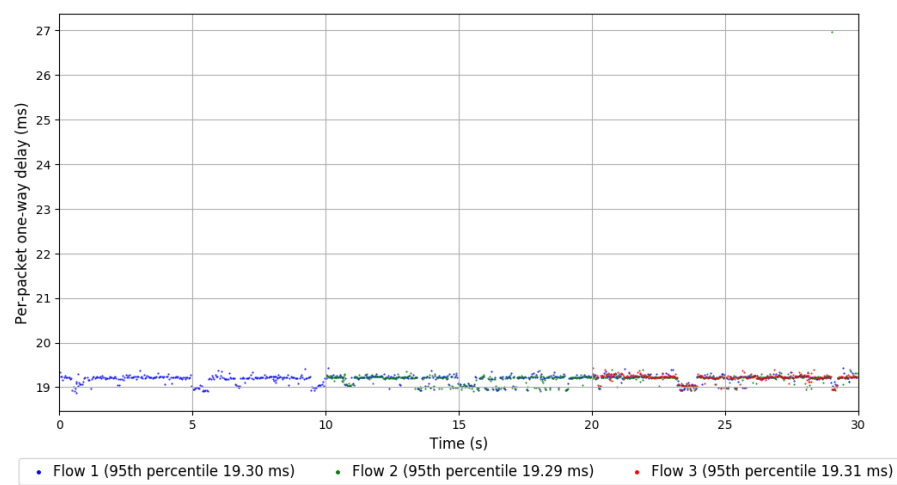
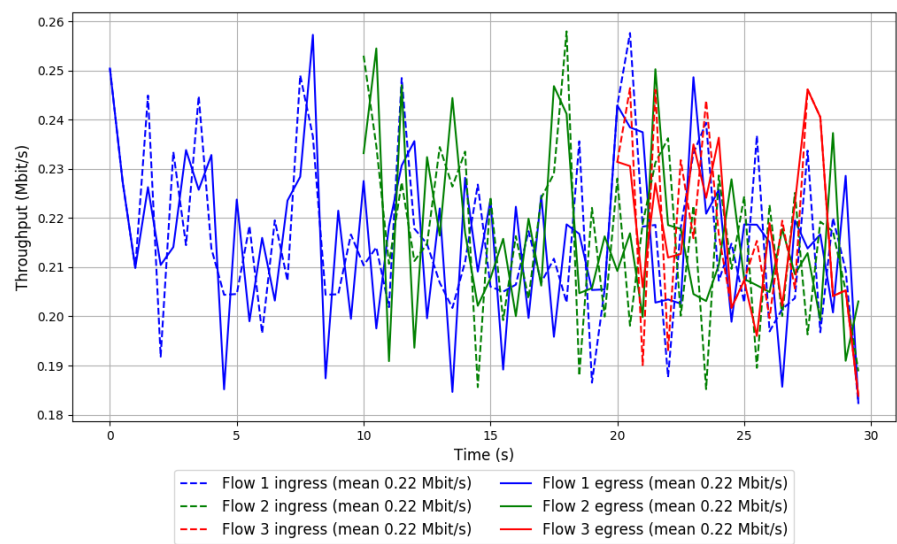


Run 2: Statistics of SReAM

Start at: 2017-10-12 07:42:07  
End at: 2017-10-12 07:42:37  
Local clock offset: 1.887 ms  
Remote clock offset: -1.415 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 19.300 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.298 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.287 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.313 ms  
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



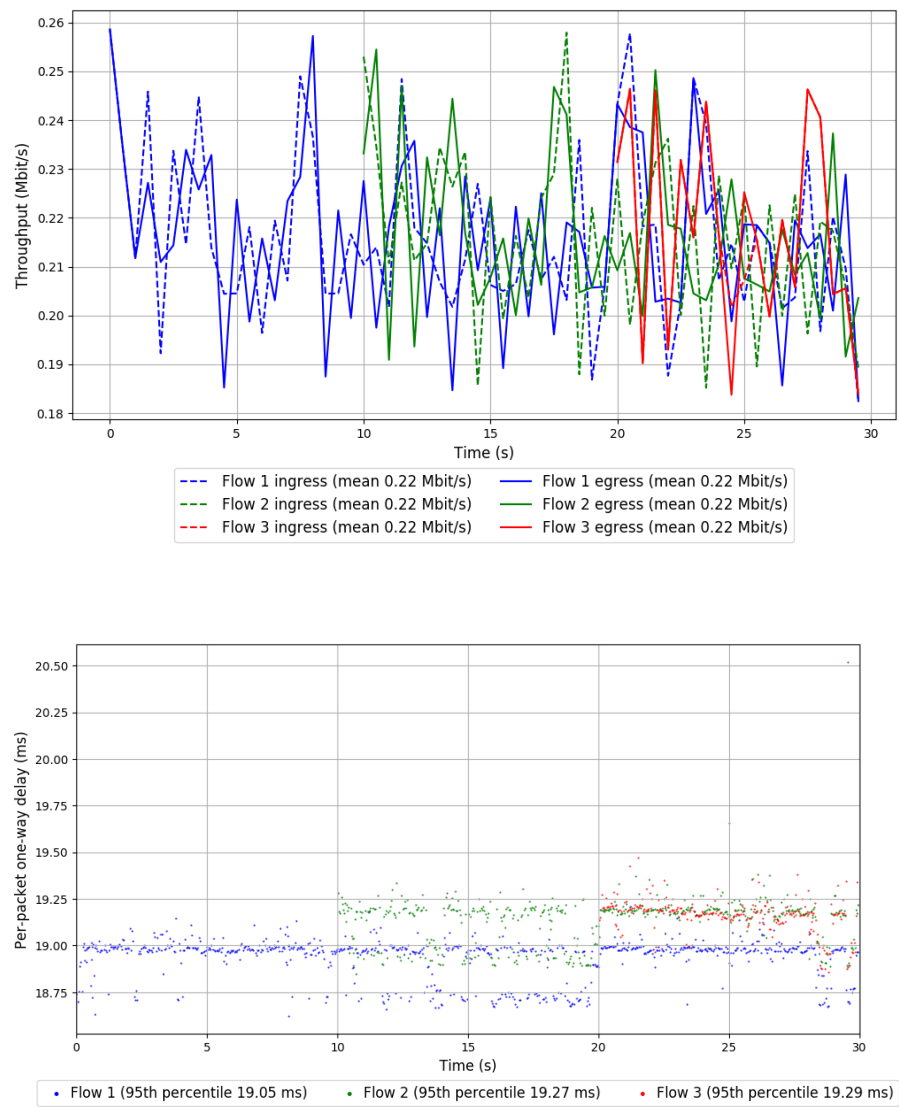
Run 3: Statistics of SReAM

Start at: 2017-10-12 08:03:16  
End at: 2017-10-12 08:03:46  
Local clock offset: 2.244 ms  
Remote clock offset: -1.497 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 19.239 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.050 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.268 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.294 ms  
Loss rate: 0.00%



Run 3: Report of SReAM — Data Link

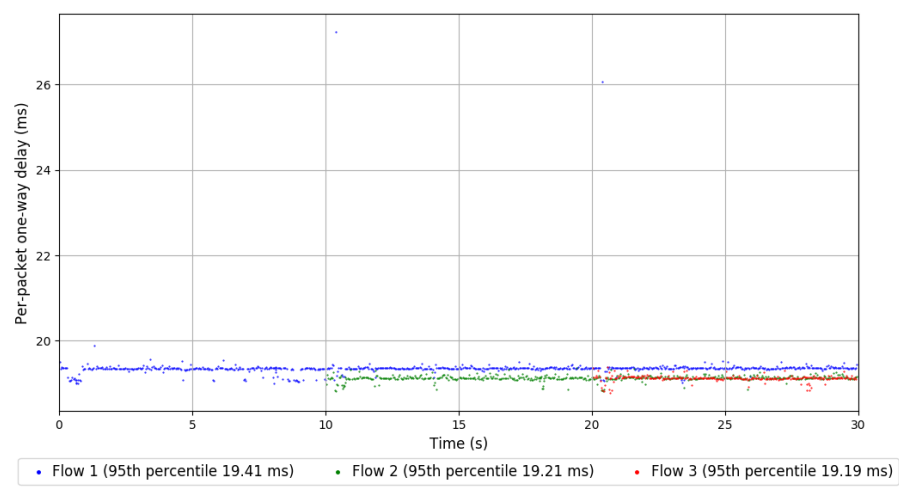
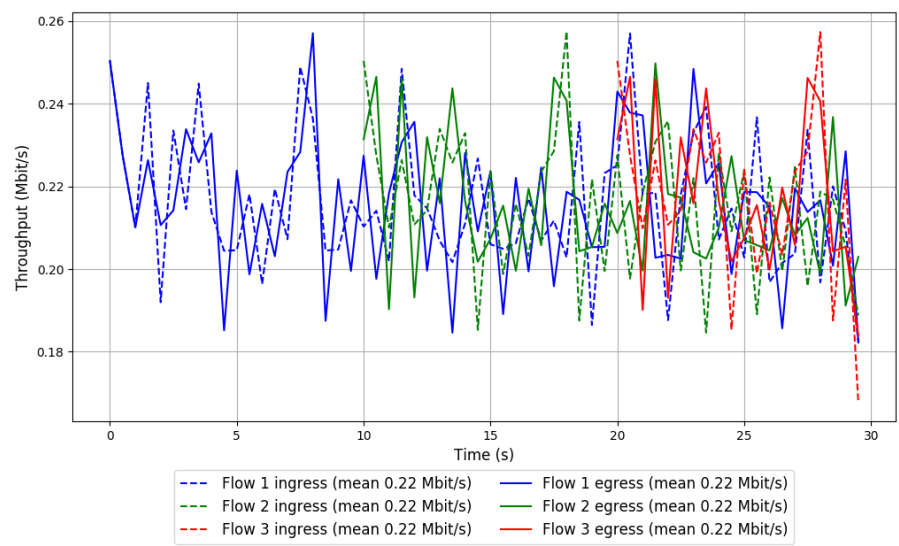


Run 4: Statistics of SReAM

Start at: 2017-10-12 08:24:28  
End at: 2017-10-12 08:24:58  
Local clock offset: 2.249 ms  
Remote clock offset: -1.401 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 19.387 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.412 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.215 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.191 ms  
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

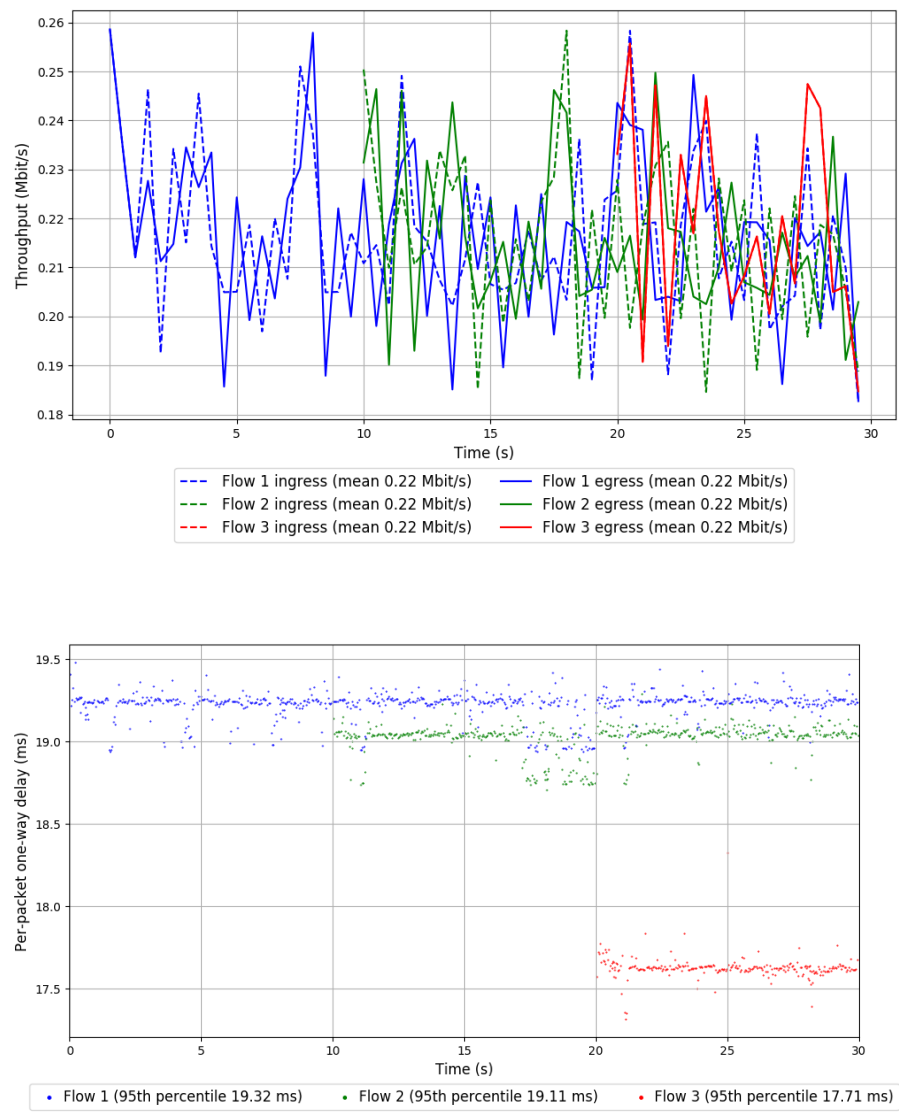


Run 5: Statistics of SReAM

Start at: 2017-10-12 08:45:18  
End at: 2017-10-12 08:45:48  
Local clock offset: 2.304 ms  
Remote clock offset: -1.649 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 19.285 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.323 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.110 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 17.709 ms  
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

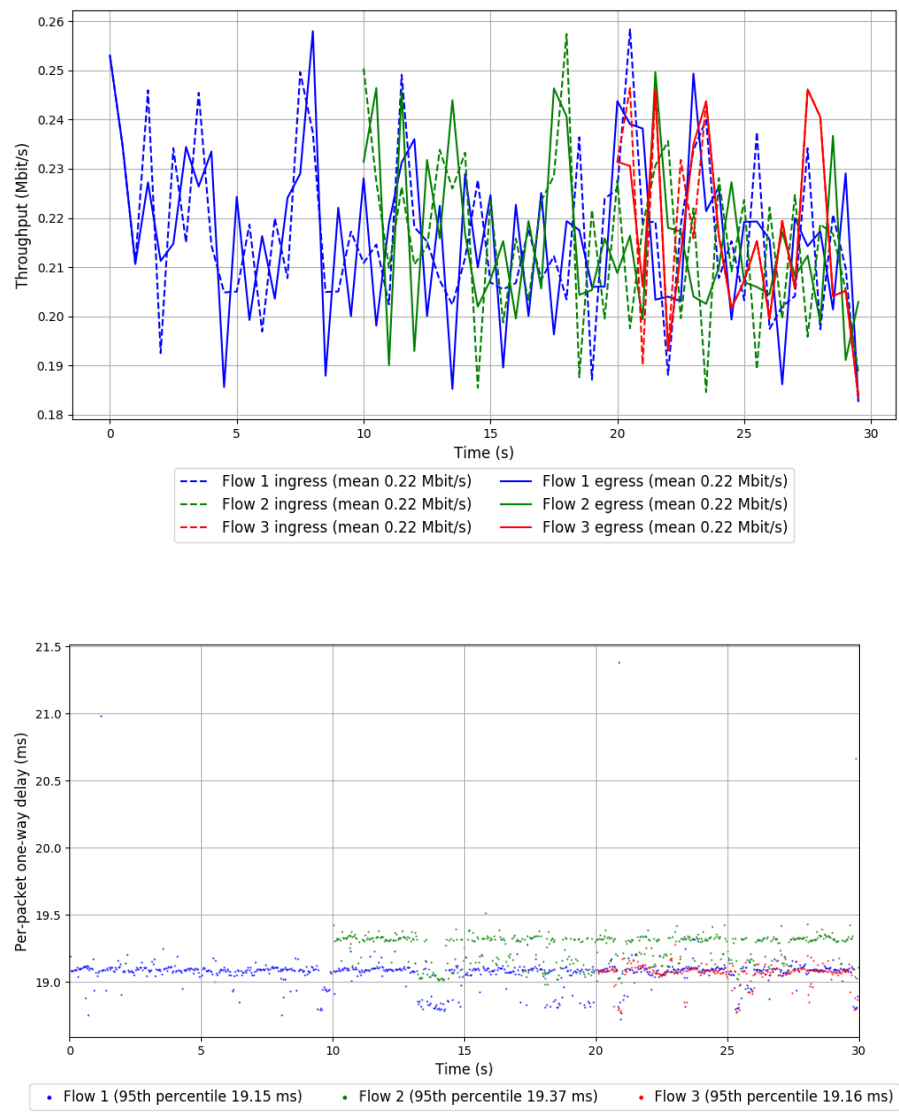


Run 6: Statistics of SReAM

Start at: 2017-10-12 09:05:49  
End at: 2017-10-12 09:06:19  
Local clock offset: 2.291 ms  
Remote clock offset: -1.766 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 19.333 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.147 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.370 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.164 ms  
Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



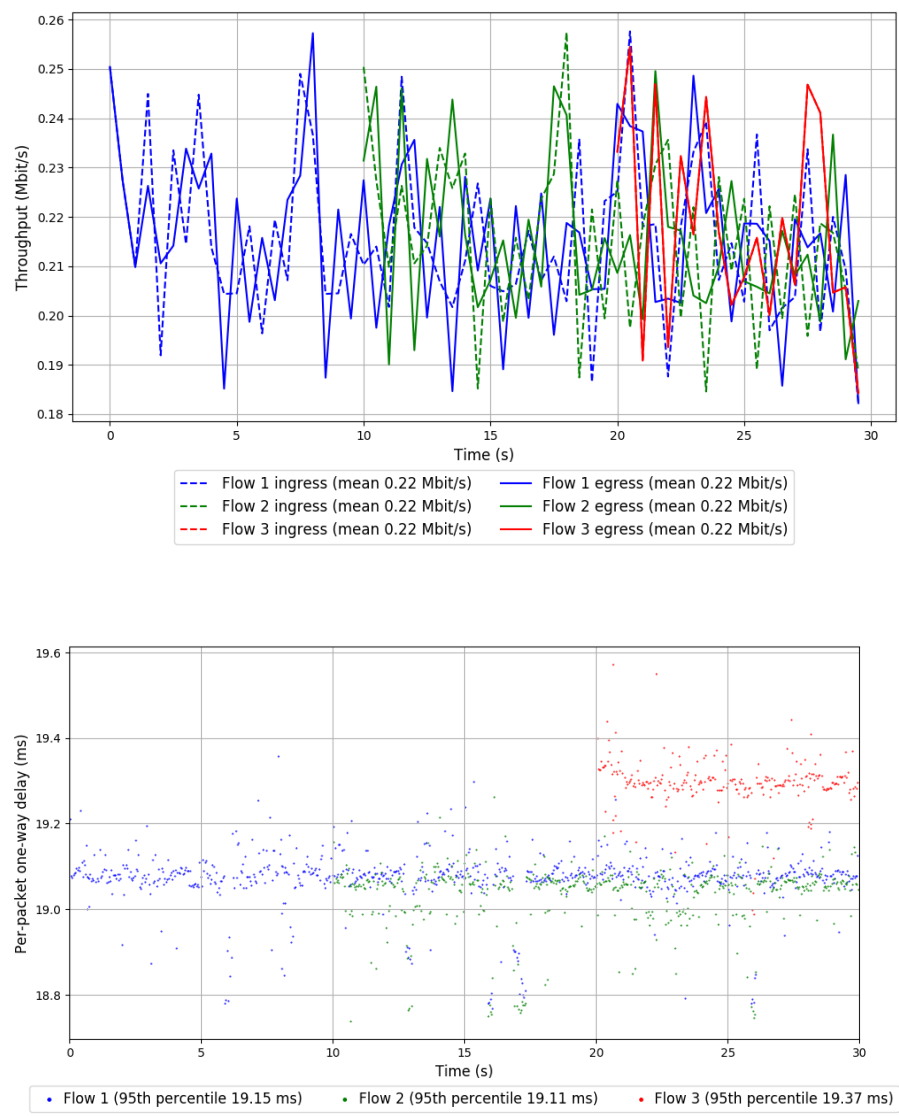
Run 7: Statistics of SReAM

Start at: 2017-10-12 09:26:36  
End at: 2017-10-12 09:27:06  
Local clock offset: 1.971 ms  
Remote clock offset: -1.935 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 19.309 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.152 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.110 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.369 ms  
Loss rate: 0.00%



Run 7: Report of SReAM — Data Link

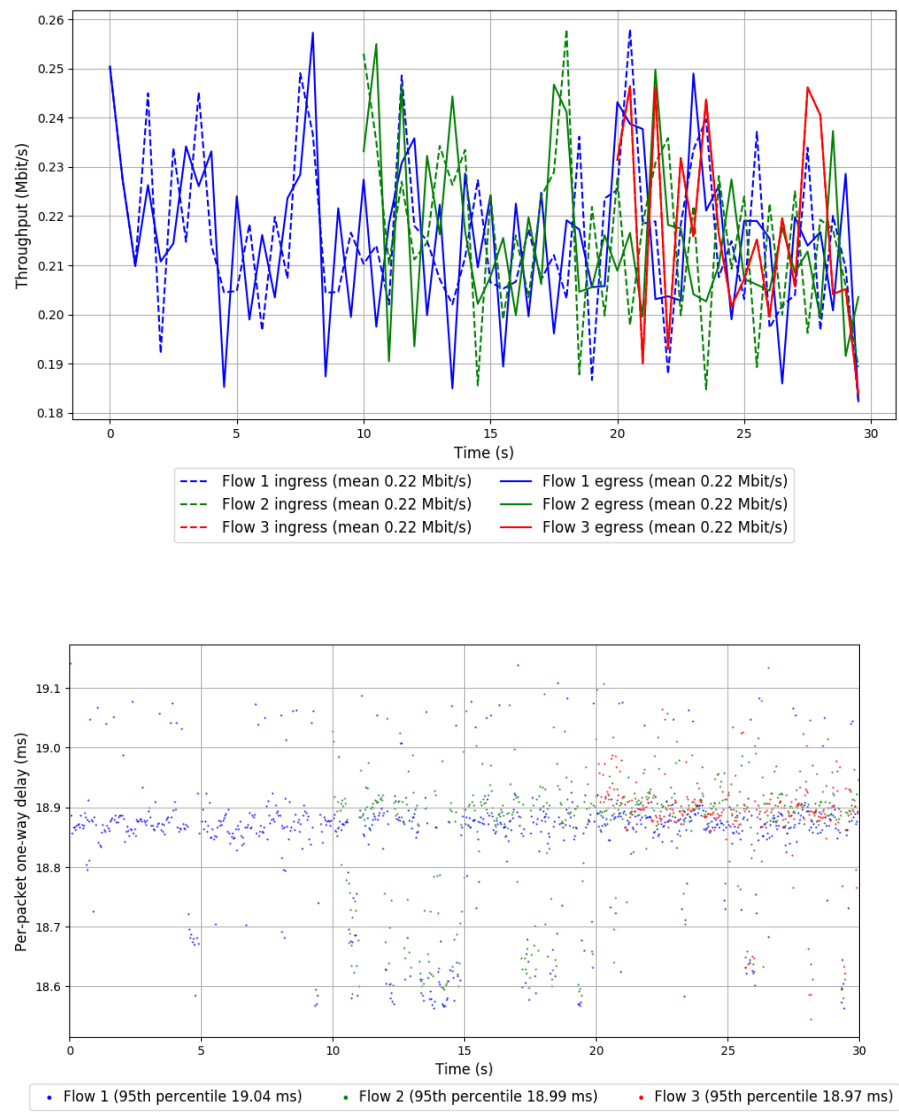


Run 8: Statistics of SReAM

Start at: 2017-10-12 09:47:22  
End at: 2017-10-12 09:47:52  
Local clock offset: 1.725 ms  
Remote clock offset: -2.242 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 19.004 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.041 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 18.991 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 18.974 ms  
Loss rate: 0.00%

Run 8: Report of SReAM — Data Link

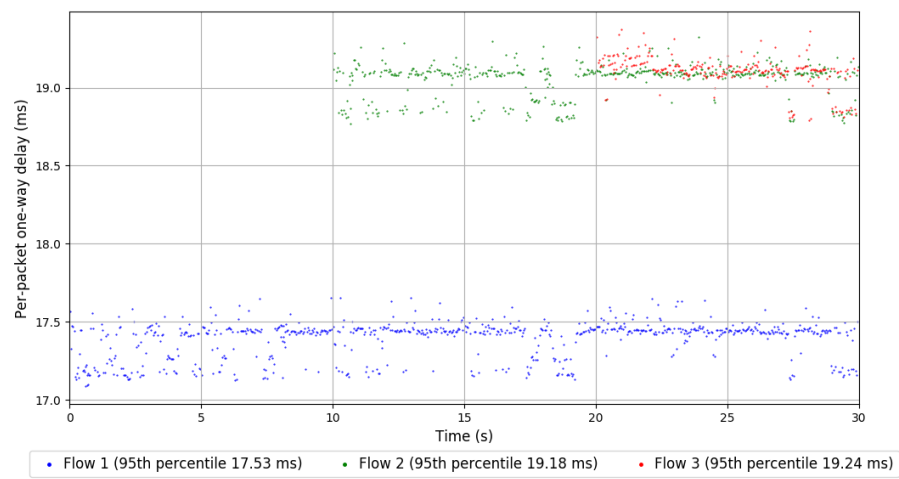
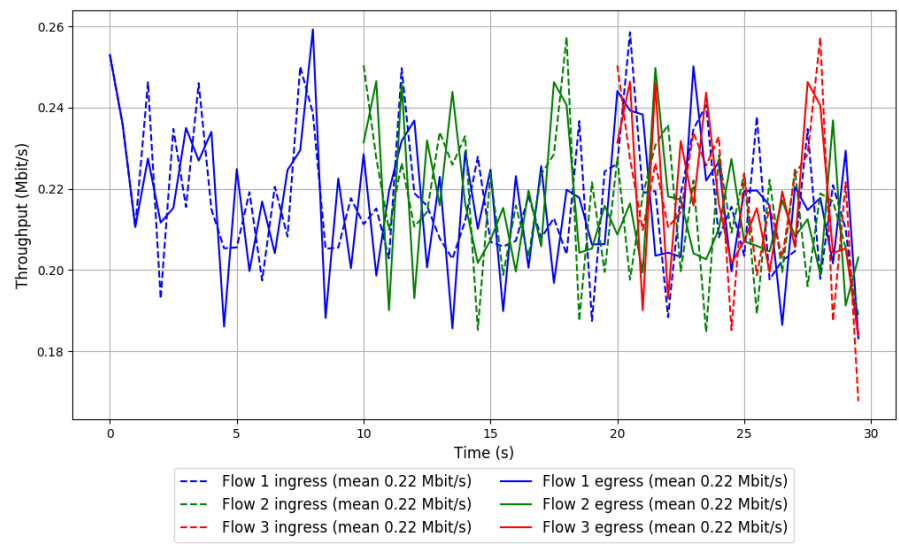


Run 9: Statistics of SReAM

Start at: 2017-10-12 10:08:14  
End at: 2017-10-12 10:08:44  
Local clock offset: 1.365 ms  
Remote clock offset: -2.239 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 19.166 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 17.527 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.178 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.240 ms  
Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

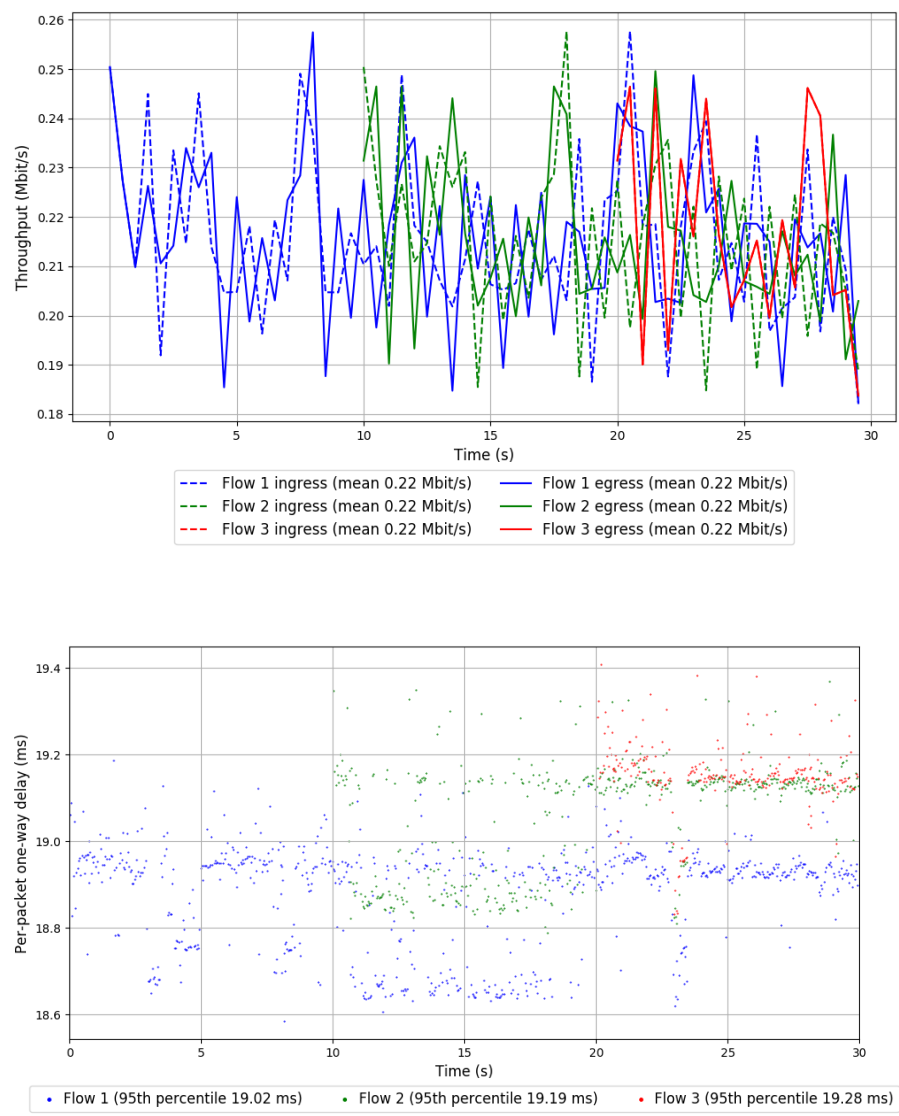


Run 10: Statistics of SReAM

Start at: 2017-10-12 10:29:19  
End at: 2017-10-12 10:29:49  
Local clock offset: 0.834 ms  
Remote clock offset: -1.908 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.43 Mbit/s  
95th percentile per-packet one-way delay: 19.190 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.017 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.191 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.280 ms  
Loss rate: 0.00%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2017-10-12 07:16:11

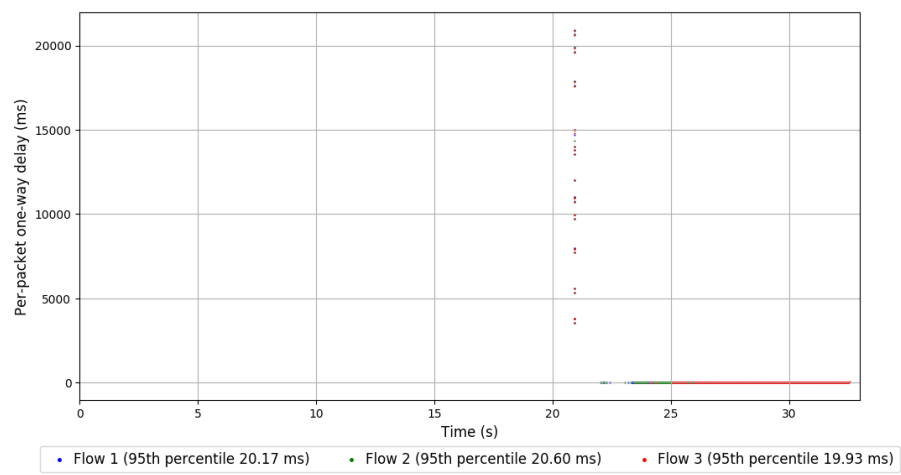
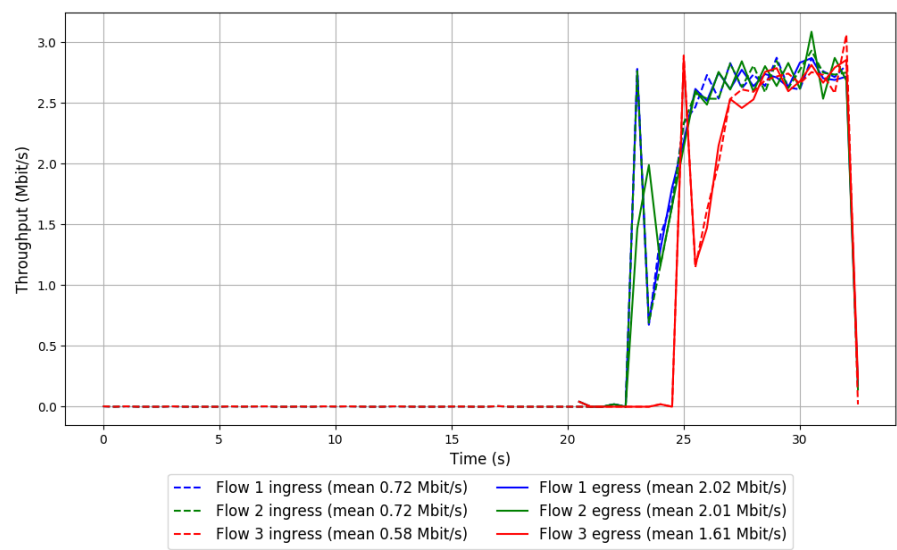
End at: 2017-10-12 07:16:41

Local clock offset: 1.561 ms

Remote clock offset: -1.114 ms



Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-10-12 07:36:35

End at: 2017-10-12 07:37:05

Local clock offset: 1.78 ms

Remote clock offset: -1.36 ms

# Below is generated by plot.py at 2017-10-12 13:30:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 19.602 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 20.249 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 17.984 ms

Loss rate: 0.00%

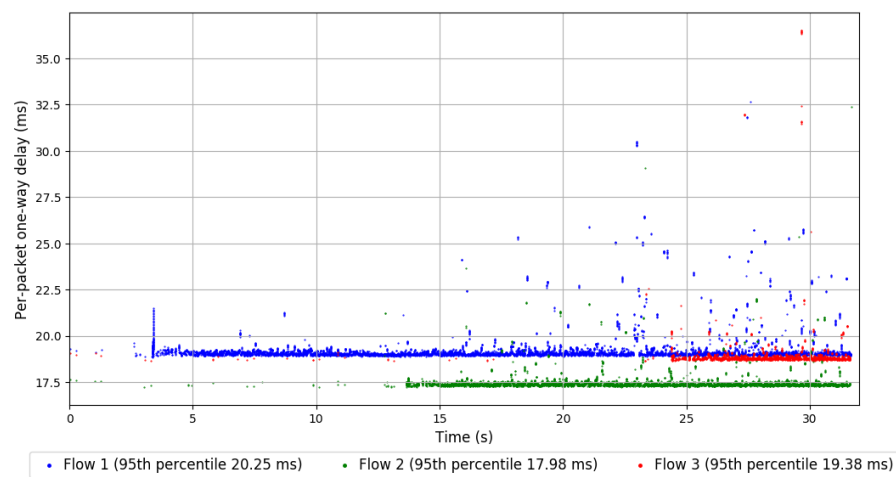
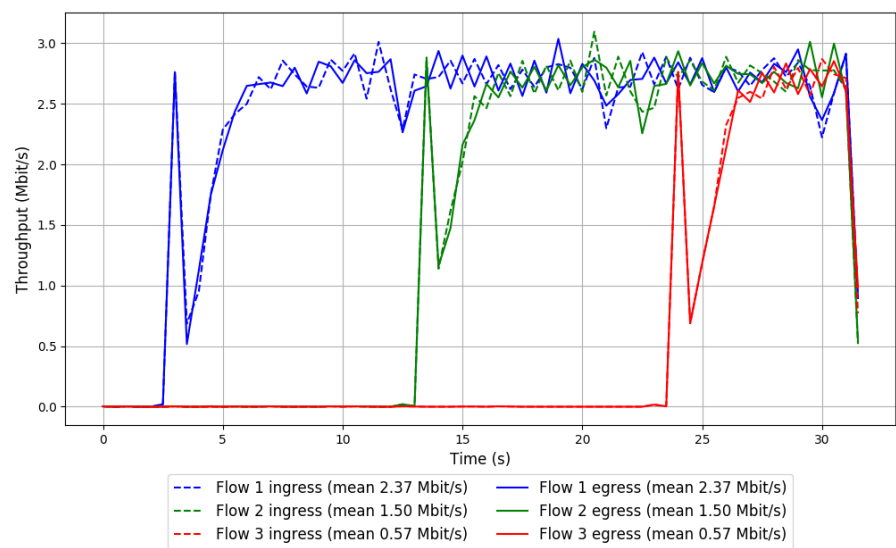
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 19.378 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

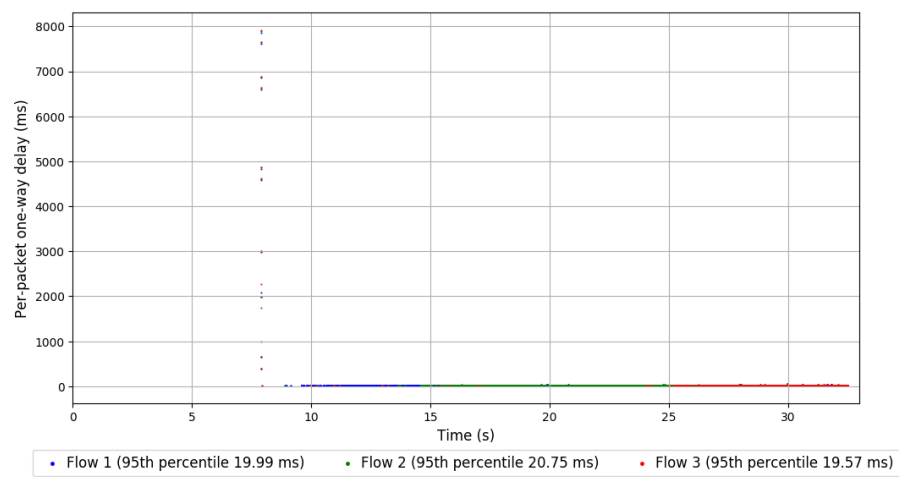
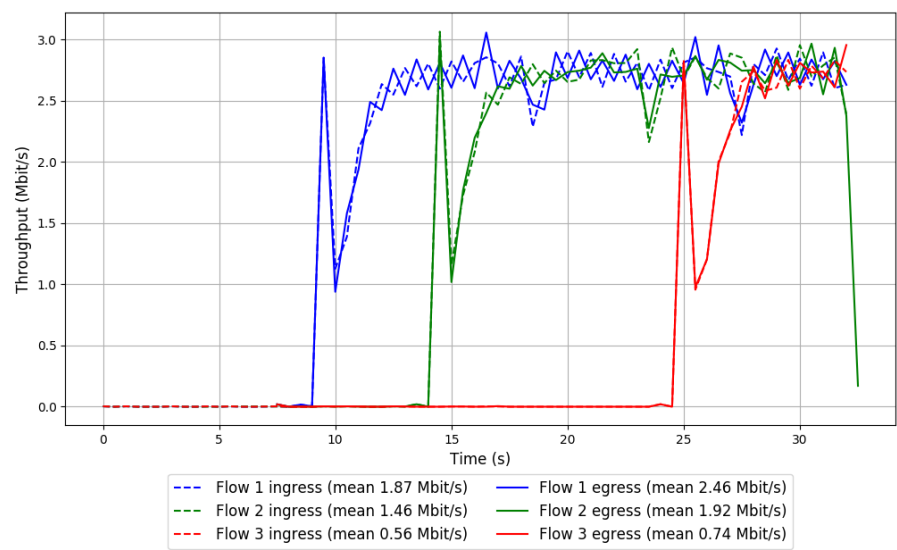


Run 3: Statistics of WebRTC media

Start at: 2017-10-12 07:57:17  
End at: 2017-10-12 07:57:47  
Local clock offset: 2.145 ms  
Remote clock offset: -1.605 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 5.12 Mbit/s  
95th percentile per-packet one-way delay: 20.211 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.46 Mbit/s  
95th percentile per-packet one-way delay: 19.993 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.92 Mbit/s  
95th percentile per-packet one-way delay: 20.753 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.74 Mbit/s  
95th percentile per-packet one-way delay: 19.575 ms  
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

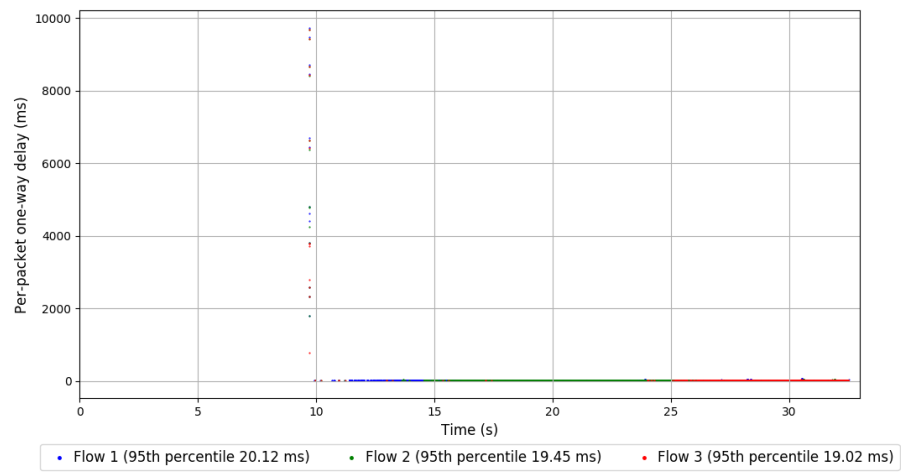
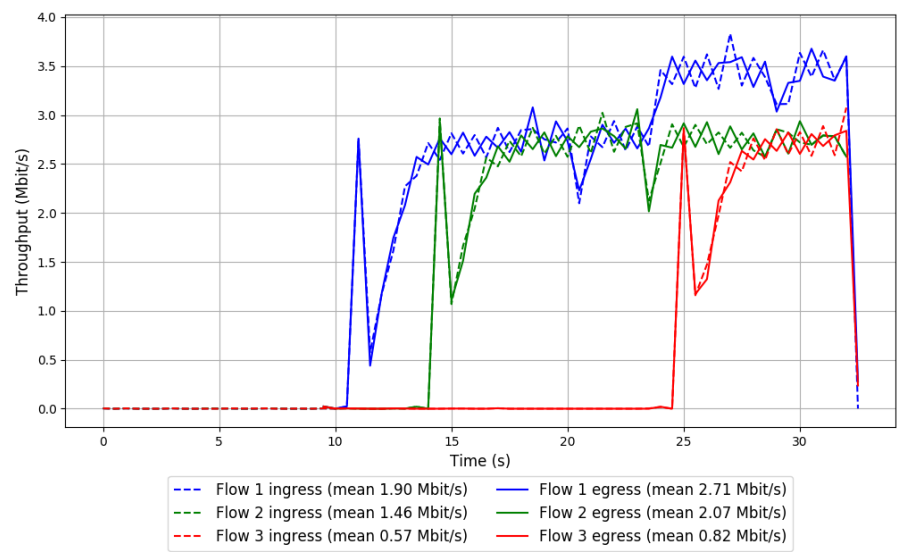
Start at: 2017-10-12 08:18:27

End at: 2017-10-12 08:18:57

Local clock offset: 2.318 ms

Remote clock offset: -1.373 ms

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-10-12 08:39:27

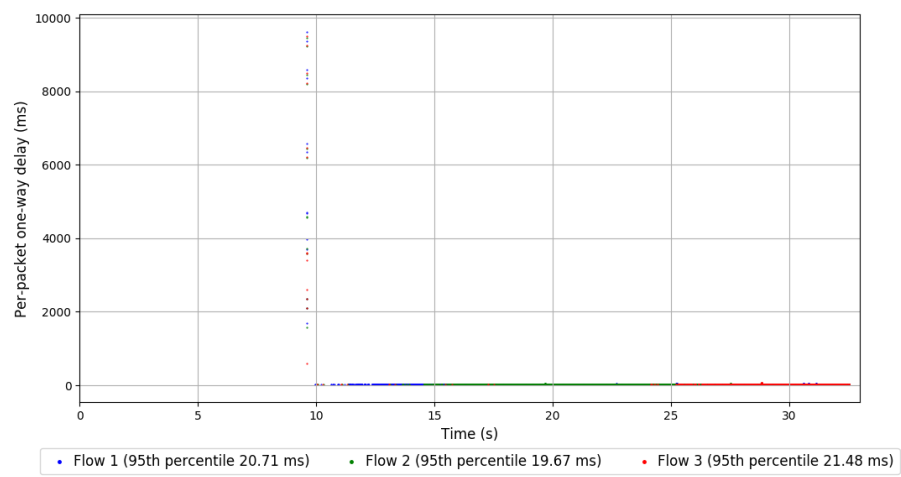
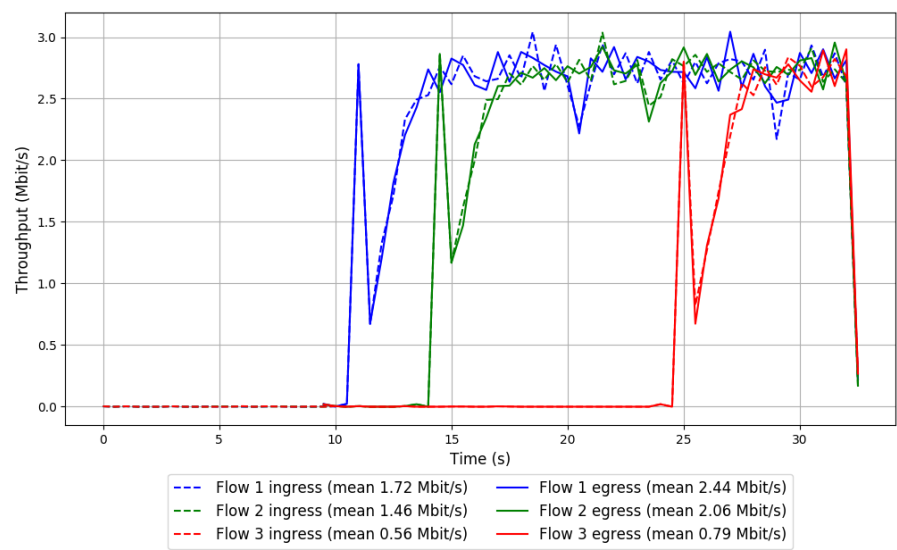
End at: 2017-10-12 08:39:57

Local clock offset: 2.276 ms

Remote clock offset: -1.654 ms



Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

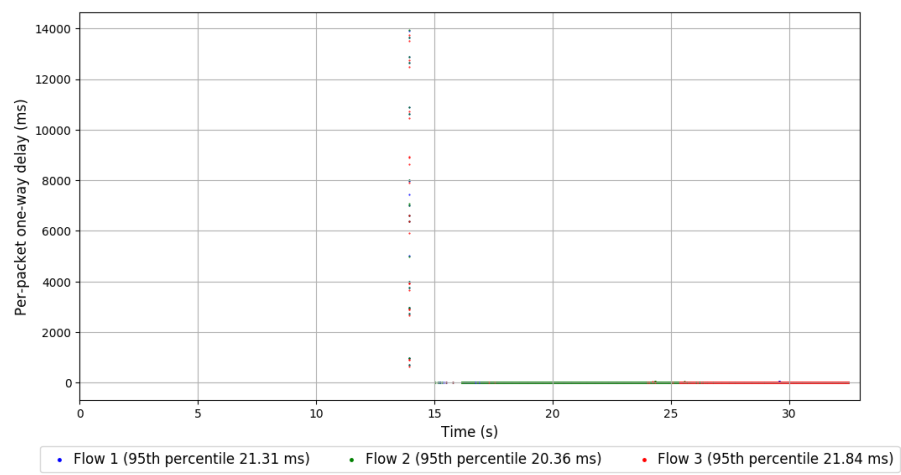
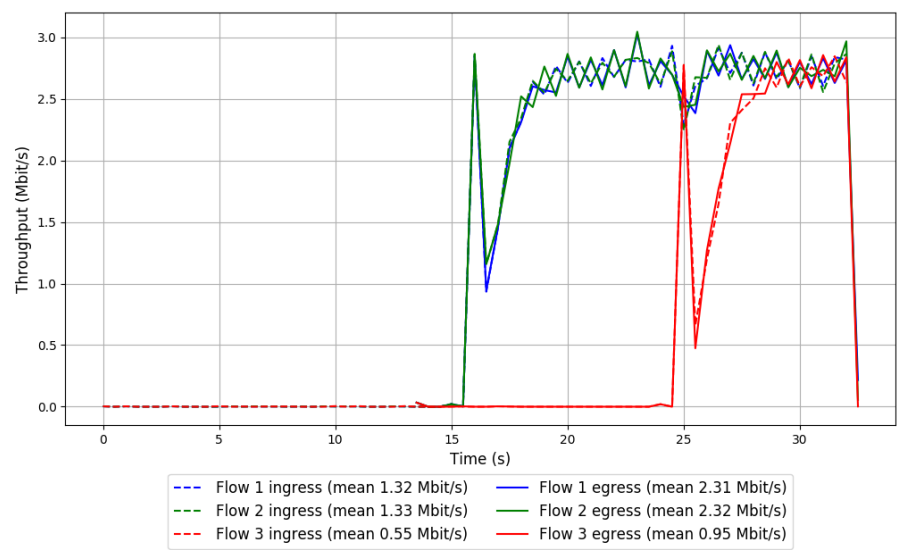
Start at: 2017-10-12 09:00:22

End at: 2017-10-12 09:00:52

Local clock offset: 2.384 ms

Remote clock offset: -1.776 ms

Run 6: Report of WebRTC media — Data Link

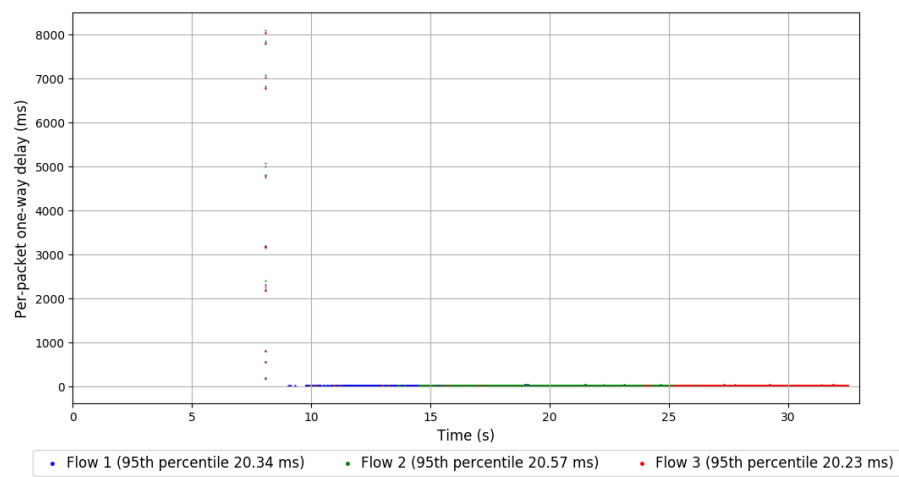
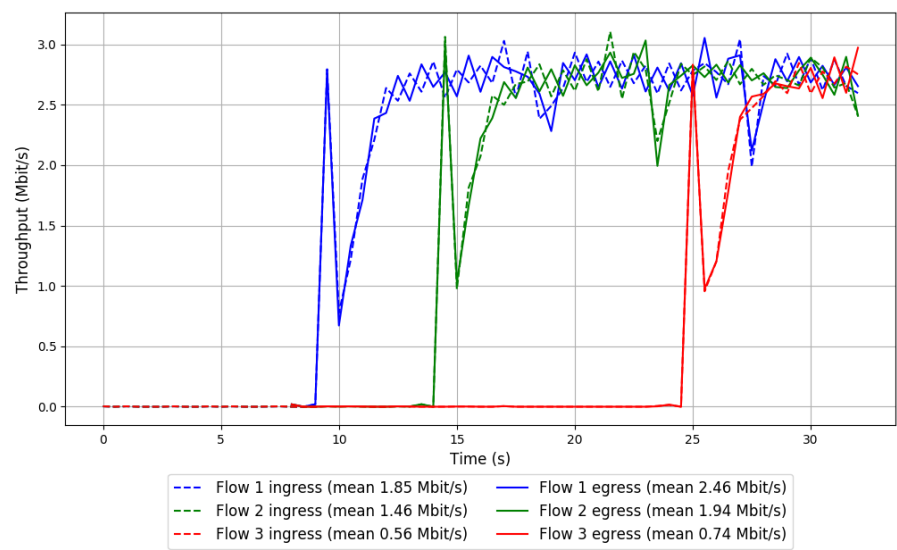


Run 7: Statistics of WebRTC media

Start at: 2017-10-12 09:20:50  
End at: 2017-10-12 09:21:20  
Local clock offset: 2.072 ms  
Remote clock offset: -1.752 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 5.14 Mbit/s  
95th percentile per-packet one-way delay: 20.359 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.46 Mbit/s  
95th percentile per-packet one-way delay: 20.341 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.94 Mbit/s  
95th percentile per-packet one-way delay: 20.565 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.74 Mbit/s  
95th percentile per-packet one-way delay: 20.226 ms  
Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link

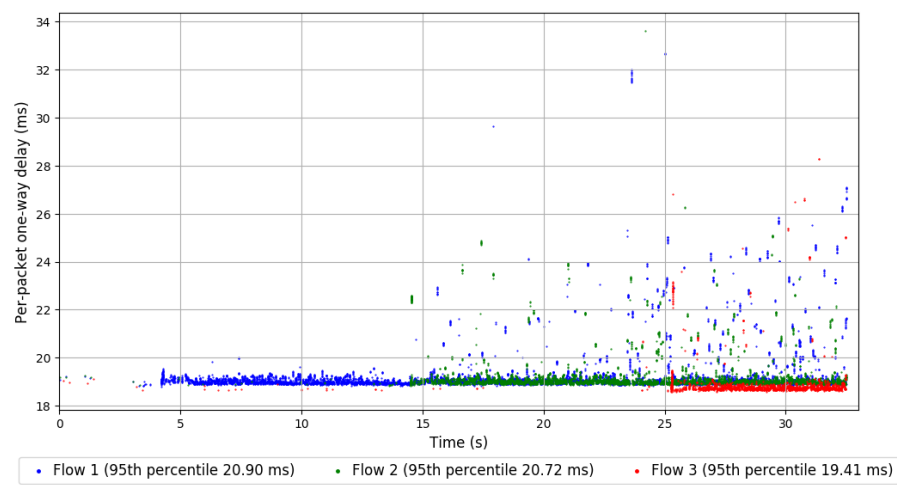
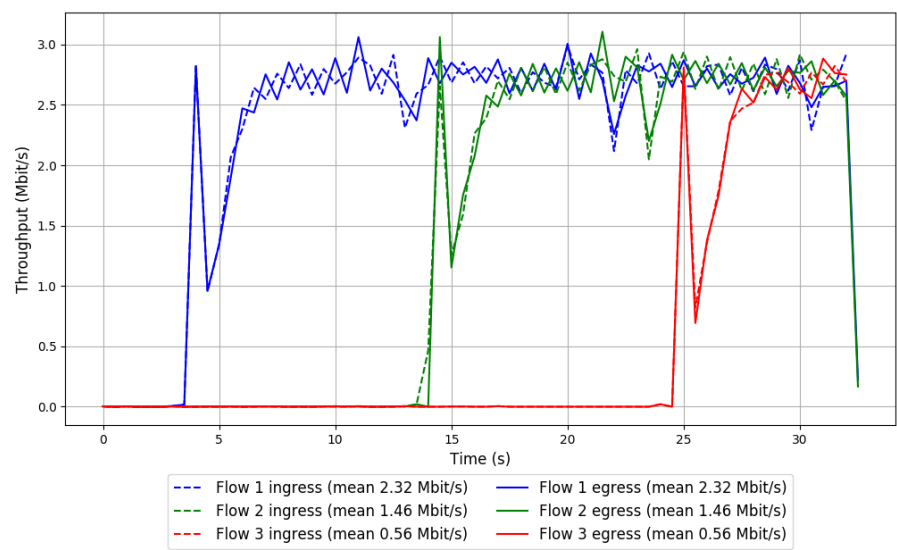


Run 8: Statistics of WebRTC media

Start at: 2017-10-12 09:41:32  
End at: 2017-10-12 09:42:02  
Local clock offset: 1.82 ms  
Remote clock offset: -2.146 ms

```
# Below is generated by plot.py at 2017-10-12 13:30:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.33 Mbit/s
95th percentile per-packet one-way delay: 20.715 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 20.898 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 20.722 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 19.414 ms
Loss rate: 0.00%
```

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-10-12 10:02:21

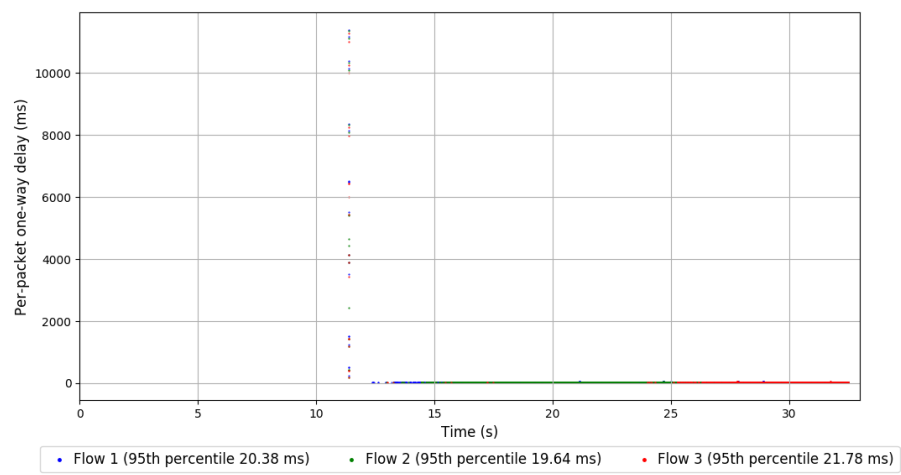
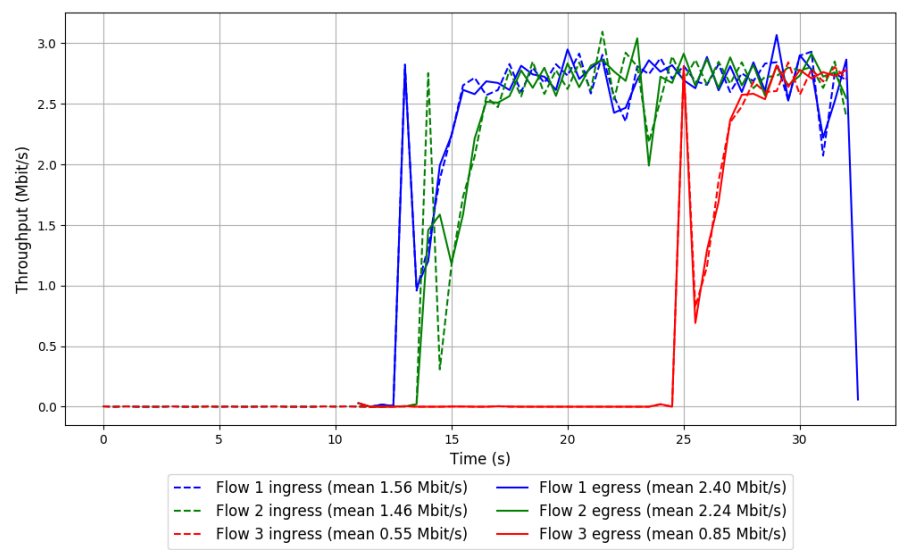
End at: 2017-10-12 10:02:51

Local clock offset: 1.44 ms

Remote clock offset: -2.209 ms



Run 9: Report of WebRTC media — Data Link

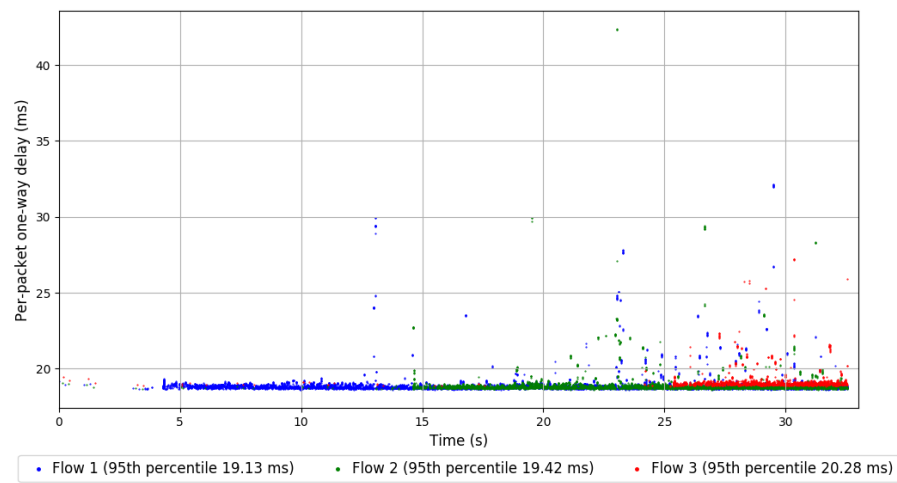
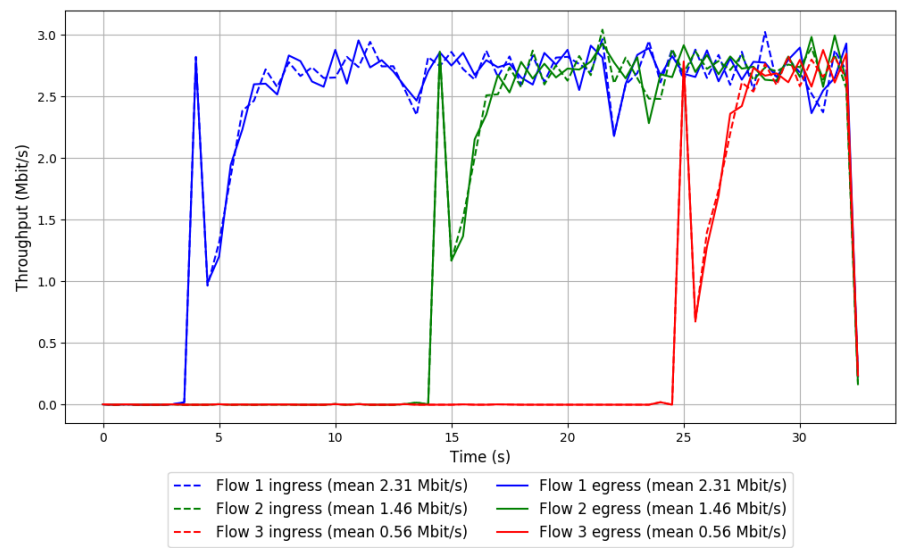


Run 10: Statistics of WebRTC media

Start at: 2017-10-12 10:23:16  
End at: 2017-10-12 10:23:46  
Local clock offset: 0.911 ms  
Remote clock offset: -2.097 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 4.32 Mbit/s  
95th percentile per-packet one-way delay: 19.293 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 19.129 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 1.46 Mbit/s  
95th percentile per-packet one-way delay: 19.417 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 0.56 Mbit/s  
95th percentile per-packet one-way delay: 20.283 ms  
Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

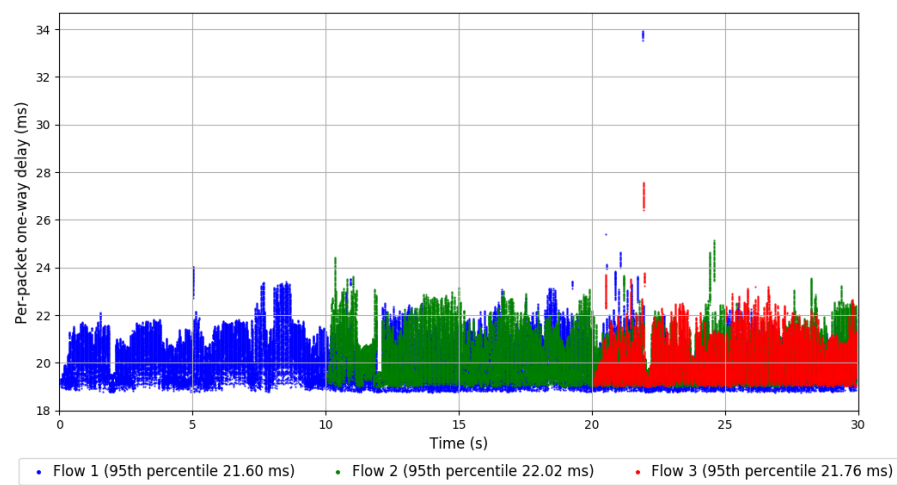
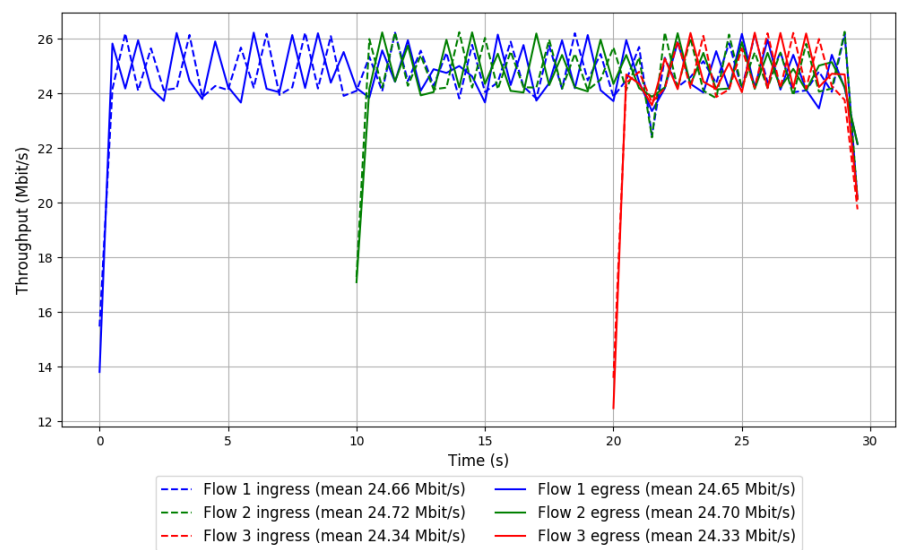


Run 1: Statistics of Sprout

Start at: 2017-10-12 07:14:59  
End at: 2017-10-12 07:15:29  
Local clock offset: 1.458 ms  
Remote clock offset: -1.078 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 49.08 Mbit/s  
95th percentile per-packet one-way delay: 21.788 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 24.65 Mbit/s  
95th percentile per-packet one-way delay: 21.598 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 24.70 Mbit/s  
95th percentile per-packet one-way delay: 22.019 ms  
Loss rate: 0.06%  
-- Flow 3:  
Average throughput: 24.33 Mbit/s  
95th percentile per-packet one-way delay: 21.761 ms  
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

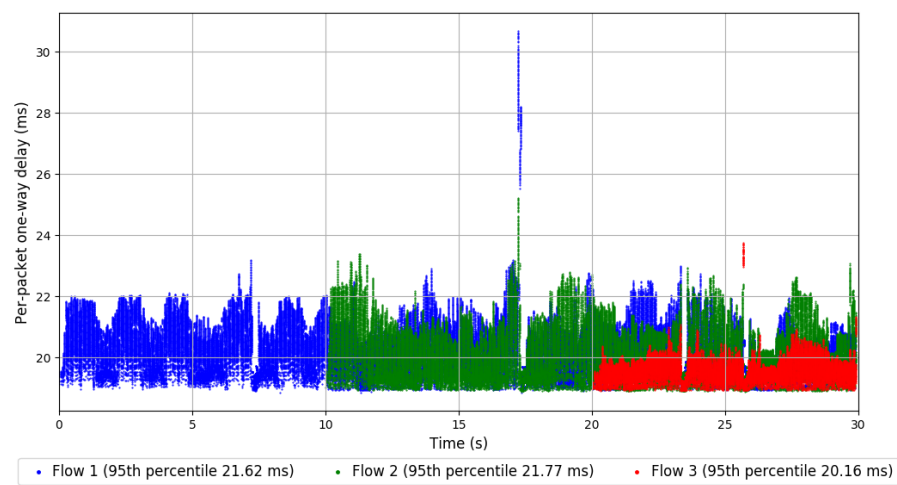
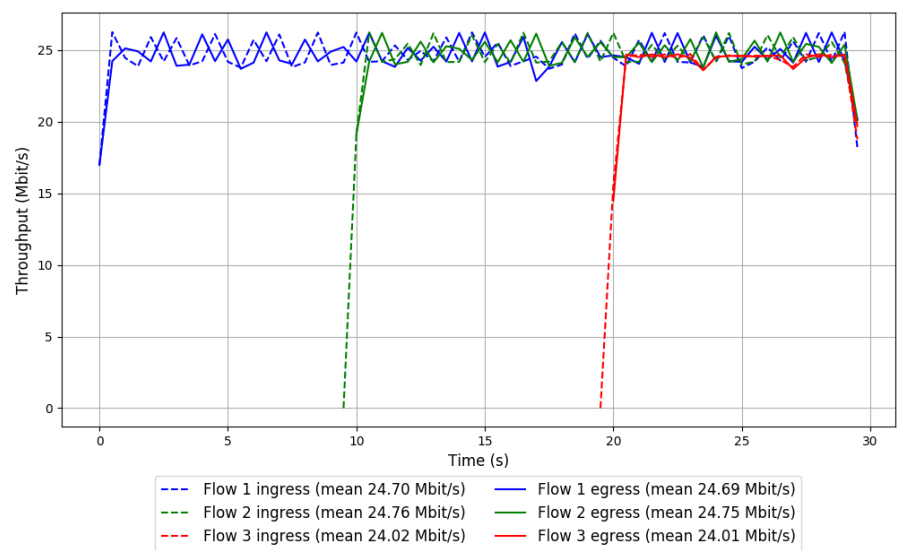


Run 2: Statistics of Sprout

Start at: 2017-10-12 07:35:23  
End at: 2017-10-12 07:35:53  
Local clock offset: 1.768 ms  
Remote clock offset: -1.363 ms

```
# Below is generated by plot.py at 2017-10-12 13:30:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.11 Mbit/s
95th percentile per-packet one-way delay: 21.594 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 24.69 Mbit/s
95th percentile per-packet one-way delay: 21.625 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 24.75 Mbit/s
95th percentile per-packet one-way delay: 21.772 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 24.01 Mbit/s
95th percentile per-packet one-way delay: 20.164 ms
Loss rate: 0.02%
```

Run 2: Report of Sprout — Data Link



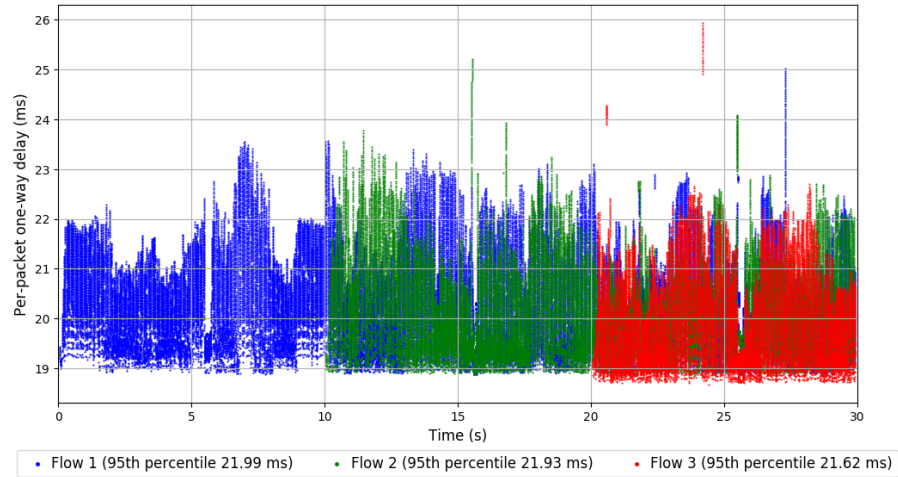
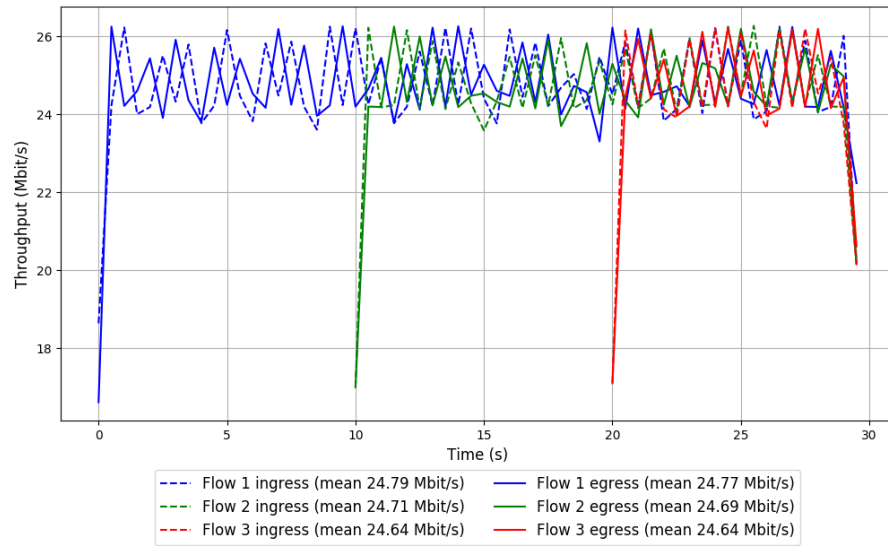
Run 3: Statistics of Sprout

Start at: 2017-10-12 07:56:05  
End at: 2017-10-12 07:56:35  
Local clock offset: 2.187 ms  
Remote clock offset: -1.565 ms

```
# Below is generated by plot.py at 2017-10-12 13:30:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.31 Mbit/s
95th percentile per-packet one-way delay: 21.909 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 24.77 Mbit/s
95th percentile per-packet one-way delay: 21.990 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 24.69 Mbit/s
95th percentile per-packet one-way delay: 21.927 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 24.64 Mbit/s
95th percentile per-packet one-way delay: 21.616 ms
Loss rate: 0.01%
```



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

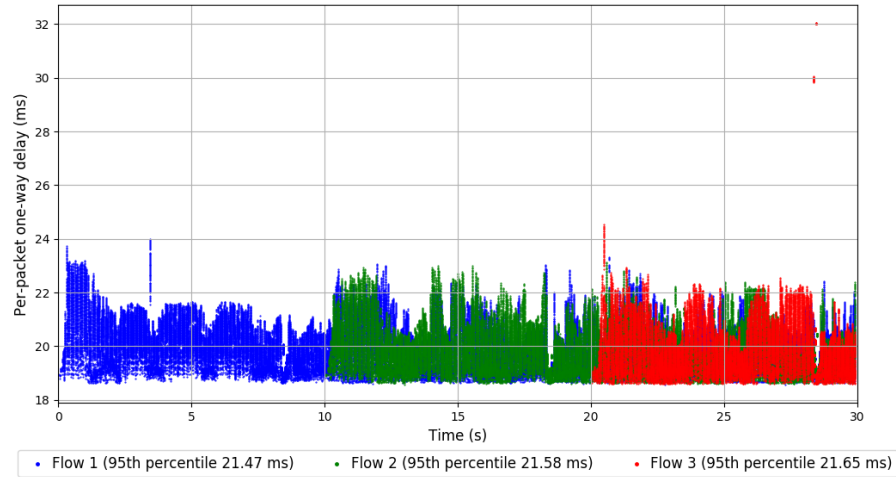
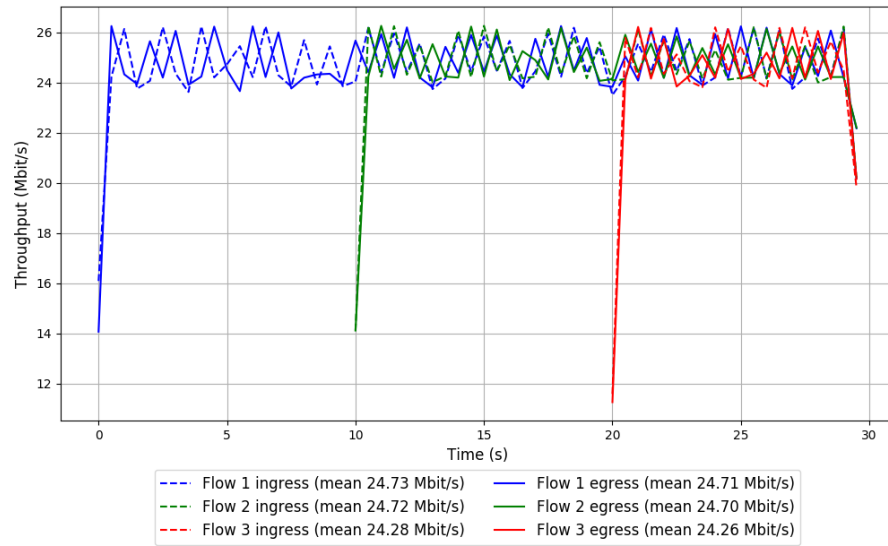


#### Run 4: Statistics of Sprout

Start at: 2017-10-12 08:17:15  
End at: 2017-10-12 08:17:45  
Local clock offset: 2.321 ms  
Remote clock offset: -1.377 ms

```
# Below is generated by plot.py at 2017-10-12 13:30:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.15 Mbit/s
95th percentile per-packet one-way delay: 21.541 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 21.472 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 21.584 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 24.26 Mbit/s
95th percentile per-packet one-way delay: 21.654 ms
Loss rate: 0.08%
```

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

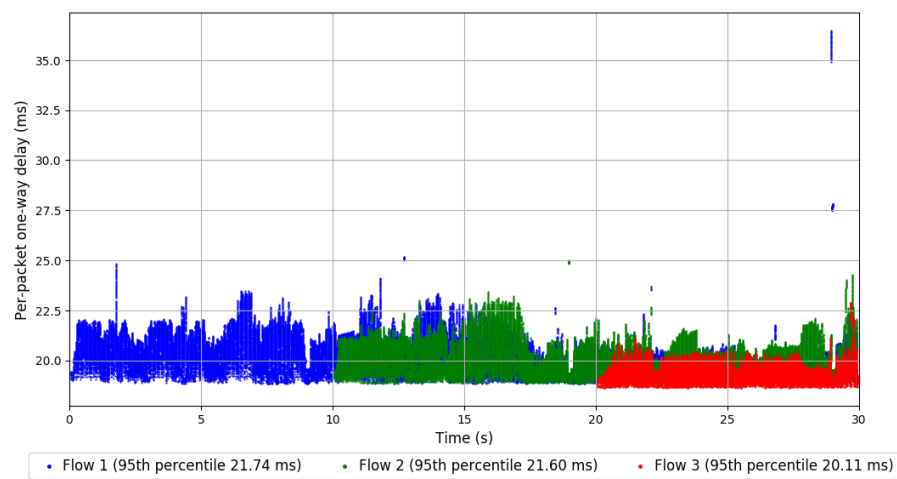
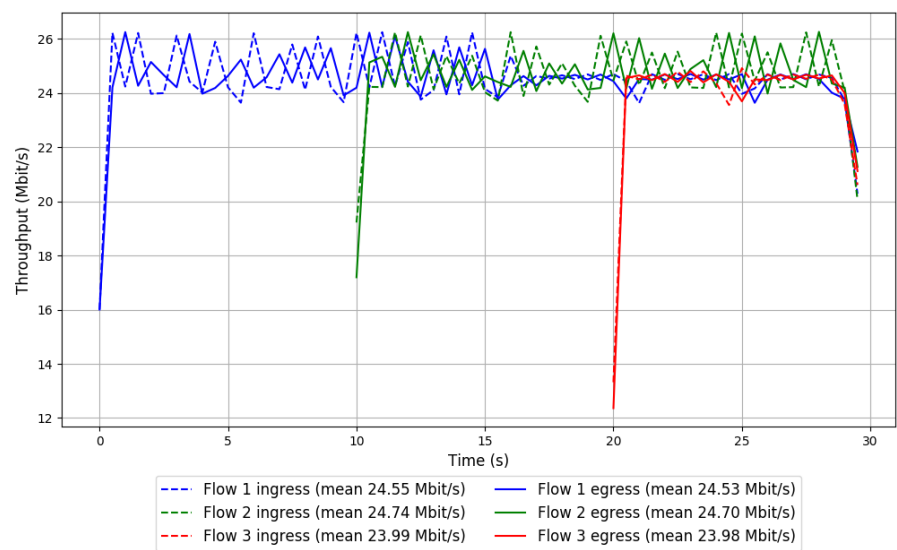


Run 5: Statistics of Sprout

Start at: 2017-10-12 08:38:15  
End at: 2017-10-12 08:38:45  
Local clock offset: 2.397 ms  
Remote clock offset: -1.619 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 48.88 Mbit/s  
95th percentile per-packet one-way delay: 21.599 ms  
Loss rate: 0.10%  
-- Flow 1:  
Average throughput: 24.53 Mbit/s  
95th percentile per-packet one-way delay: 21.737 ms  
Loss rate: 0.08%  
-- Flow 2:  
Average throughput: 24.70 Mbit/s  
95th percentile per-packet one-way delay: 21.602 ms  
Loss rate: 0.15%  
-- Flow 3:  
Average throughput: 23.98 Mbit/s  
95th percentile per-packet one-way delay: 20.111 ms  
Loss rate: 0.03%

Run 5: Report of Sprout — Data Link

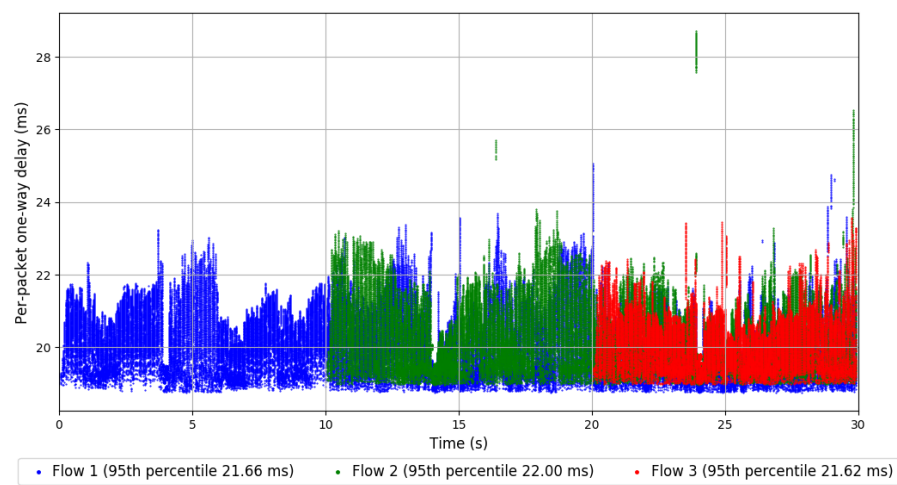
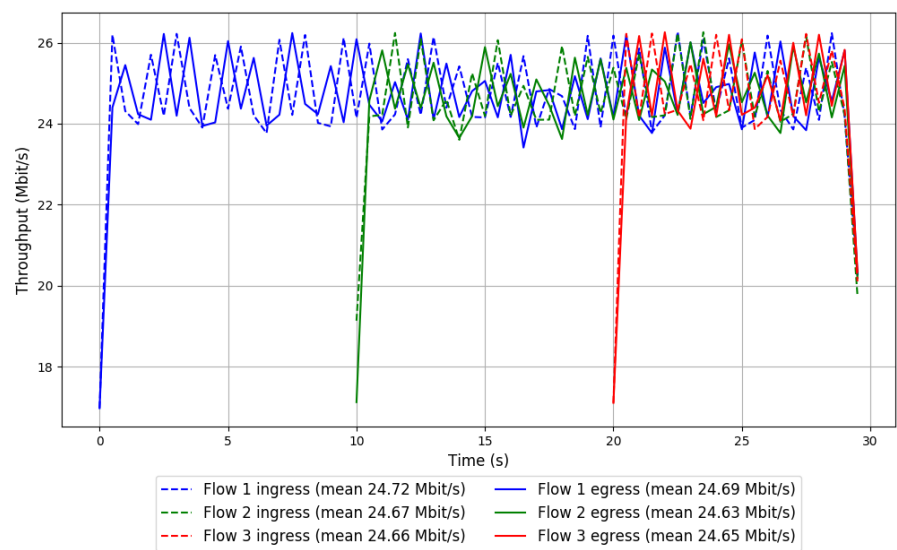


Run 6: Statistics of Sprout

Start at: 2017-10-12 08:59:10  
End at: 2017-10-12 08:59:40  
Local clock offset: 2.283 ms  
Remote clock offset: -1.774 ms

```
# Below is generated by plot.py at 2017-10-12 13:30:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.22 Mbit/s
95th percentile per-packet one-way delay: 21.790 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 24.69 Mbit/s
95th percentile per-packet one-way delay: 21.657 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 24.63 Mbit/s
95th percentile per-packet one-way delay: 22.004 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 24.65 Mbit/s
95th percentile per-packet one-way delay: 21.624 ms
Loss rate: 0.04%
```

Run 6: Report of Sprout — Data Link



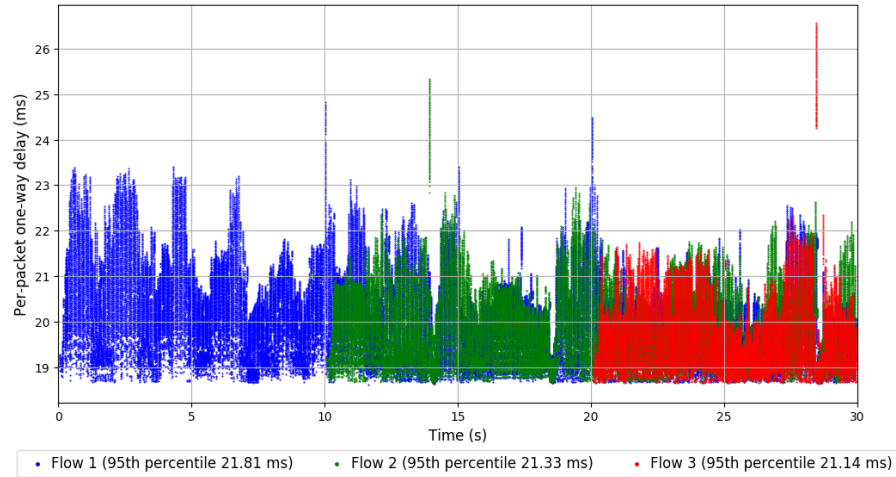
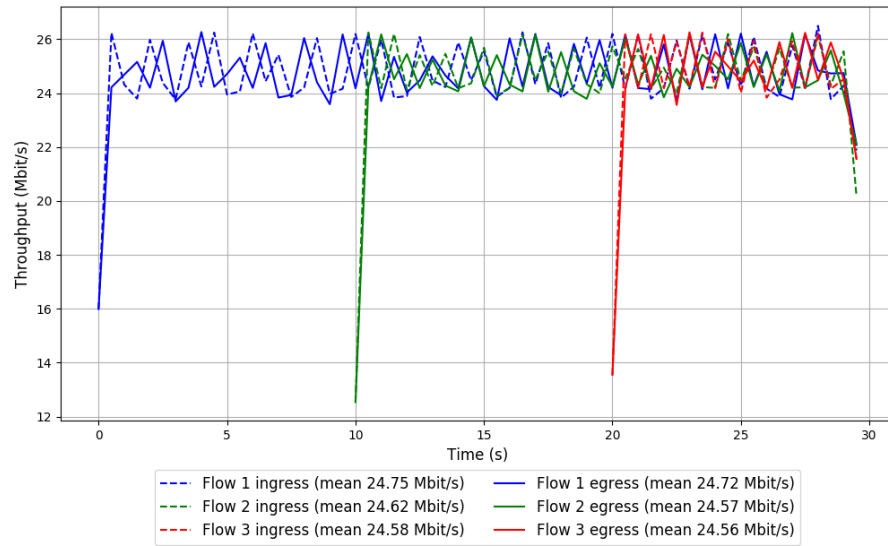
Run 7: Statistics of Sprout

Start at: 2017-10-12 09:19:38  
End at: 2017-10-12 09:20:08  
Local clock offset: 2.091 ms  
Remote clock offset: -1.882 ms

```
# Below is generated by plot.py at 2017-10-12 13:30:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.18 Mbit/s
95th percentile per-packet one-way delay: 21.555 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.72 Mbit/s
95th percentile per-packet one-way delay: 21.813 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 21.327 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 24.56 Mbit/s
95th percentile per-packet one-way delay: 21.144 ms
Loss rate: 0.08%
```



## Run 7: Report of Sprout — Data Link

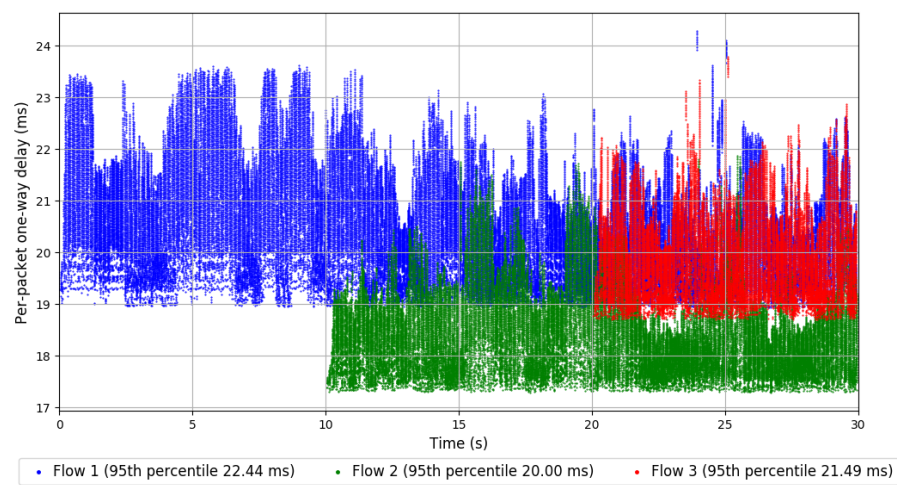
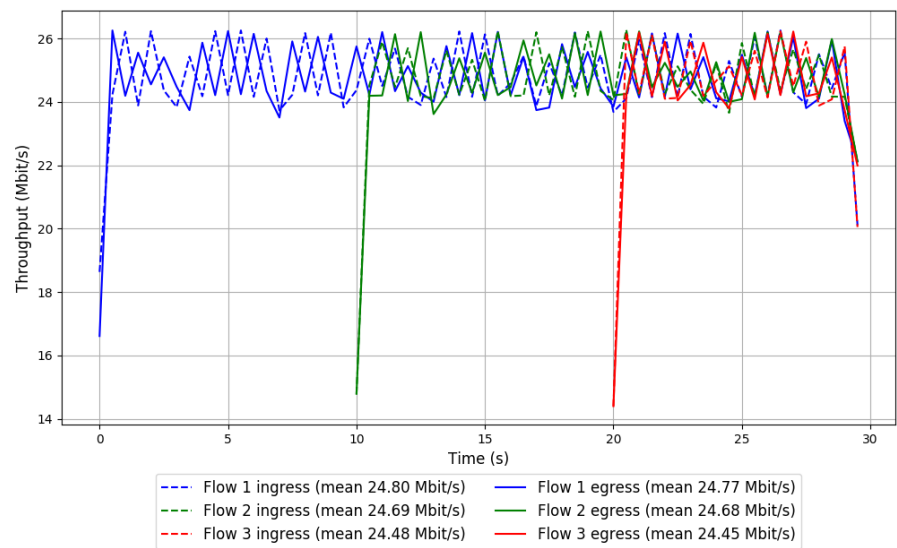


Run 8: Statistics of Sprout

Start at: 2017-10-12 09:40:20  
End at: 2017-10-12 09:40:50  
Local clock offset: 1.722 ms  
Remote clock offset: -2.262 ms

```
# Below is generated by plot.py at 2017-10-12 13:30:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.26 Mbit/s
95th percentile per-packet one-way delay: 21.994 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 24.77 Mbit/s
95th percentile per-packet one-way delay: 22.442 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 20.001 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 24.45 Mbit/s
95th percentile per-packet one-way delay: 21.490 ms
Loss rate: 0.08%
```

Run 8: Report of Sprout — Data Link

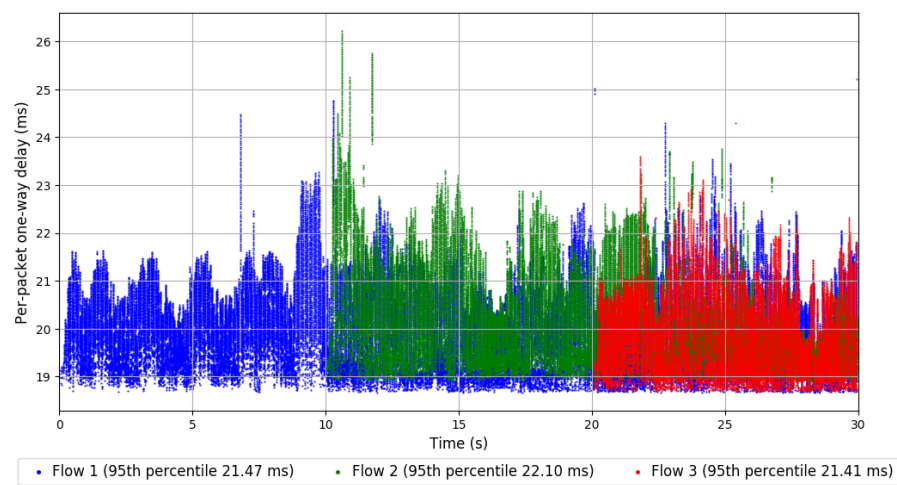
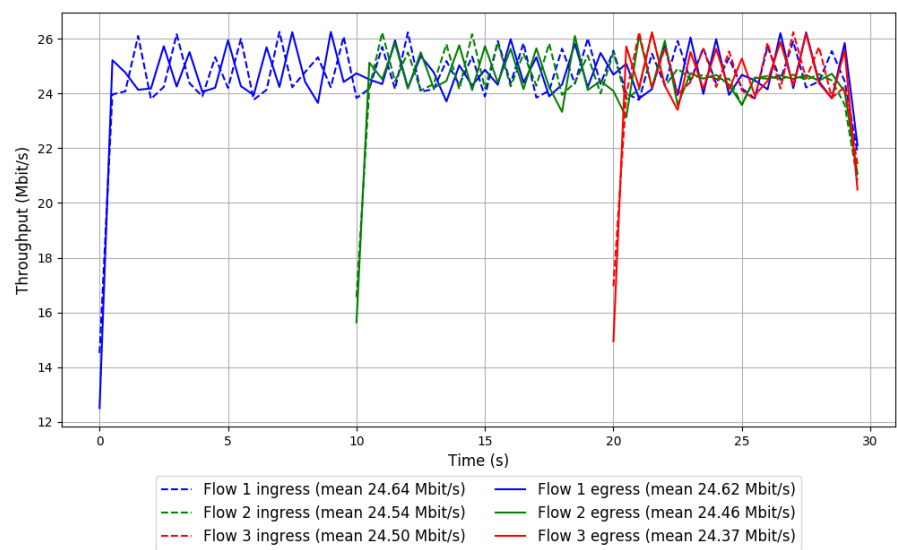


Run 9: Statistics of Sprout

Start at: 2017-10-12 10:01:09  
End at: 2017-10-12 10:01:39  
Local clock offset: 1.369 ms  
Remote clock offset: -2.272 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 48.94 Mbit/s  
95th percentile per-packet one-way delay: 21.717 ms  
Loss rate: 0.23%  
-- Flow 1:  
Average throughput: 24.62 Mbit/s  
95th percentile per-packet one-way delay: 21.470 ms  
Loss rate: 0.11%  
-- Flow 2:  
Average throughput: 24.46 Mbit/s  
95th percentile per-packet one-way delay: 22.102 ms  
Loss rate: 0.30%  
-- Flow 3:  
Average throughput: 24.37 Mbit/s  
95th percentile per-packet one-way delay: 21.412 ms  
Loss rate: 0.44%

Run 9: Report of Sprout — Data Link

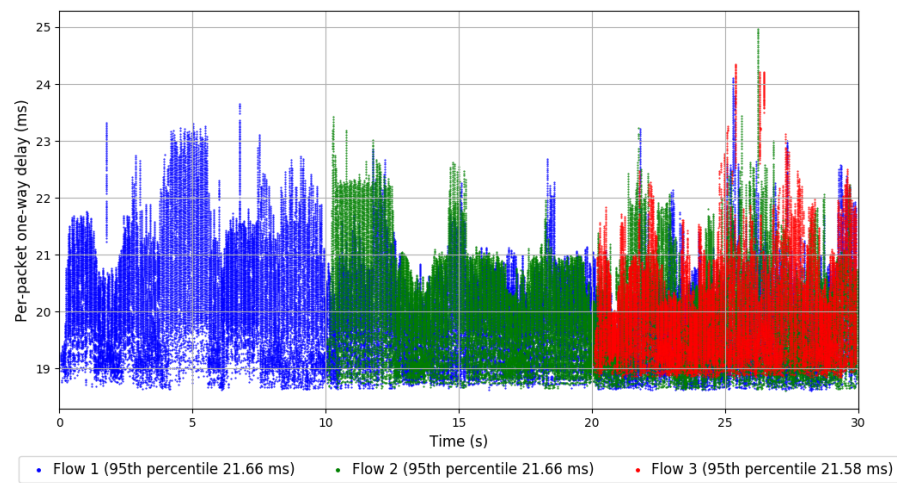
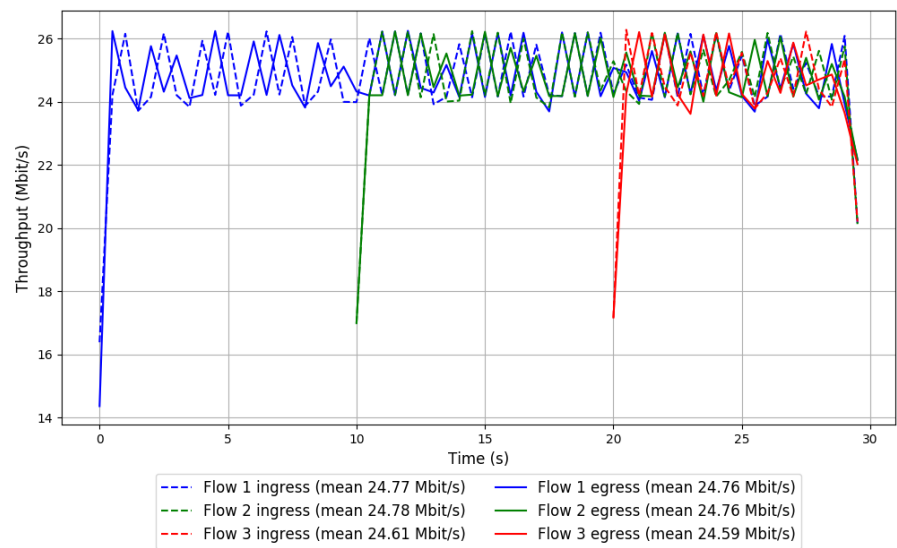


Run 10: Statistics of Sprout

Start at: 2017-10-12 10:22:05  
End at: 2017-10-12 10:22:35  
Local clock offset: 0.979 ms  
Remote clock offset: -2.127 ms

# Below is generated by plot.py at 2017-10-12 13:30:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 49.35 Mbit/s  
95th percentile per-packet one-way delay: 21.644 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 24.76 Mbit/s  
95th percentile per-packet one-way delay: 21.656 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 24.76 Mbit/s  
95th percentile per-packet one-way delay: 21.659 ms  
Loss rate: 0.07%  
-- Flow 3:  
Average throughput: 24.59 Mbit/s  
95th percentile per-packet one-way delay: 21.579 ms  
Loss rate: 0.05%

Run 10: Report of Sprout — Data Link



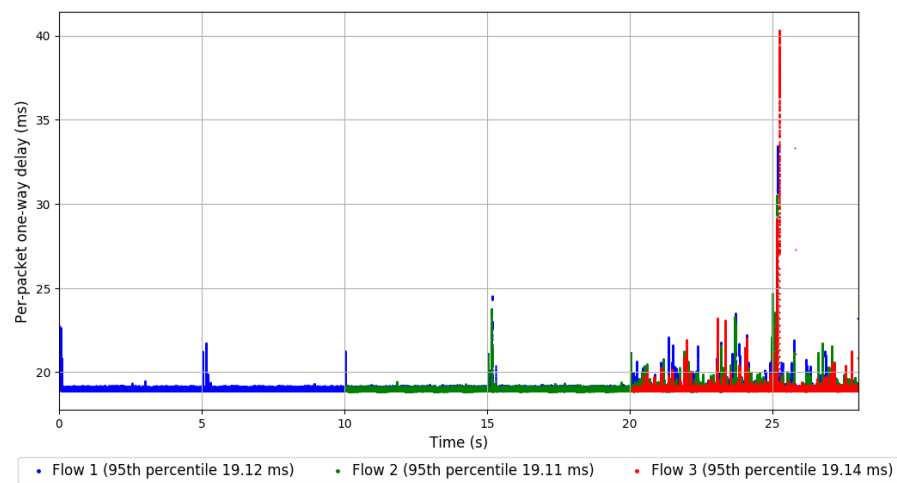
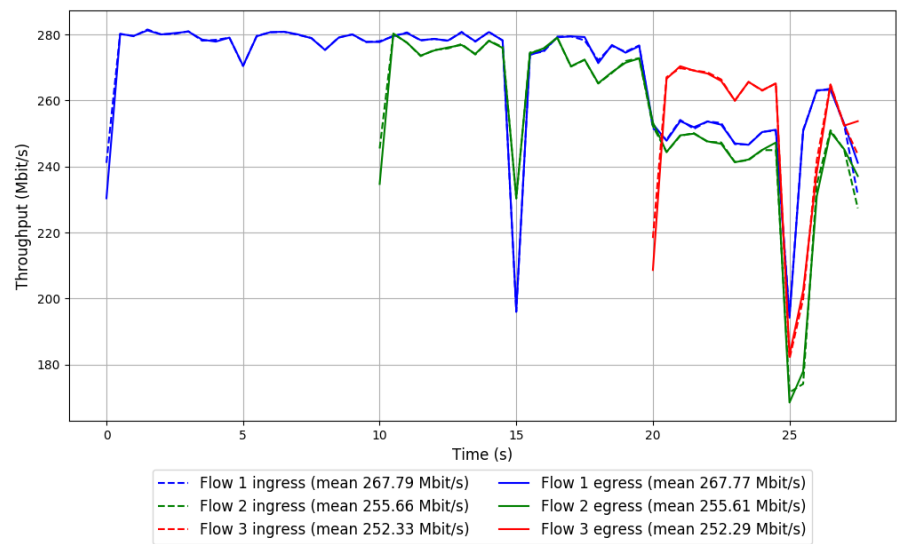
Run 1: Statistics of TaoVA-100x

Start at: 2017-10-12 07:25:34  
End at: 2017-10-12 07:26:04  
Local clock offset: 1.668 ms  
Remote clock offset: -1.206 ms

# Below is generated by plot.py at 2017-10-12 13:35:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 503.37 Mbit/s  
95th percentile per-packet one-way delay: 19.121 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 267.77 Mbit/s  
95th percentile per-packet one-way delay: 19.117 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 255.61 Mbit/s  
95th percentile per-packet one-way delay: 19.114 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 252.29 Mbit/s  
95th percentile per-packet one-way delay: 19.144 ms  
Loss rate: 0.02%



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

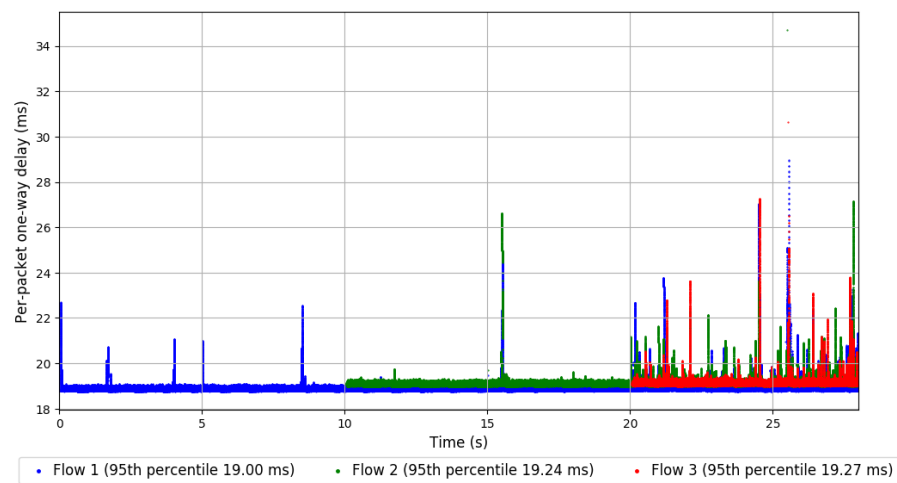
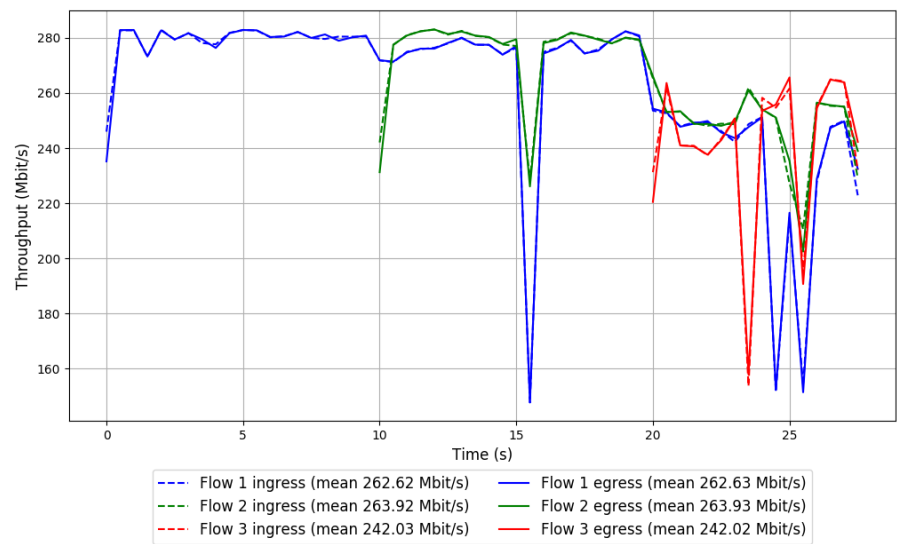


Run 2: Statistics of TaoVA-100x

Start at: 2017-10-12 07:46:13  
End at: 2017-10-12 07:46:43  
Local clock offset: 1.957 ms  
Remote clock offset: -1.401 ms

# Below is generated by plot.py at 2017-10-12 13:35:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 500.84 Mbit/s  
95th percentile per-packet one-way delay: 19.209 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 262.63 Mbit/s  
95th percentile per-packet one-way delay: 19.003 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 263.93 Mbit/s  
95th percentile per-packet one-way delay: 19.238 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 242.02 Mbit/s  
95th percentile per-packet one-way delay: 19.273 ms  
Loss rate: 0.01%

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

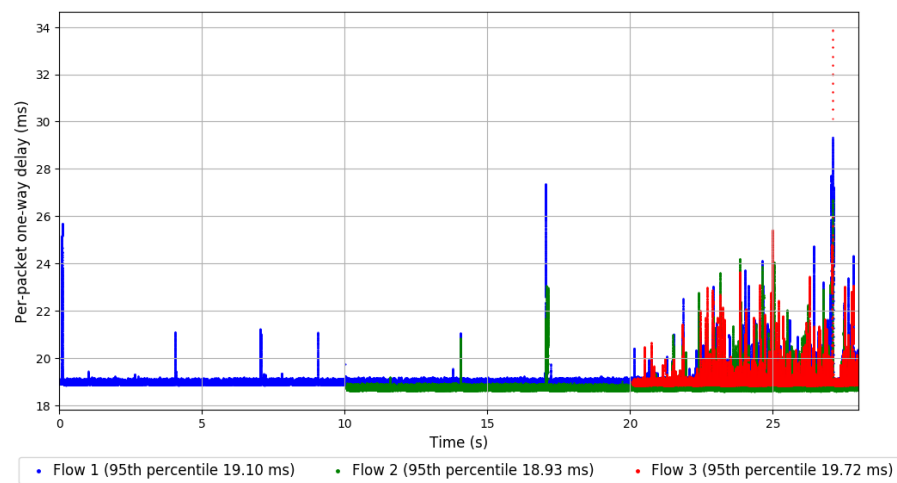
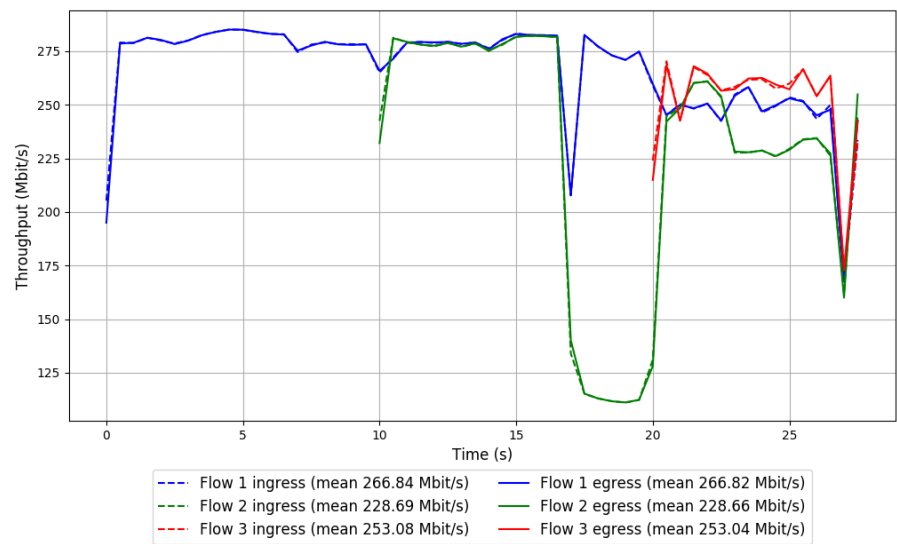


Run 3: Statistics of TaoVA-100x

Start at: 2017-10-12 08:07:22  
End at: 2017-10-12 08:07:52  
Local clock offset: 2.273 ms  
Remote clock offset: -1.436 ms

# Below is generated by plot.py at 2017-10-12 13:35:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 485.37 Mbit/s  
95th percentile per-packet one-way delay: 19.151 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 266.82 Mbit/s  
95th percentile per-packet one-way delay: 19.101 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 228.66 Mbit/s  
95th percentile per-packet one-way delay: 18.929 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 253.04 Mbit/s  
95th percentile per-packet one-way delay: 19.721 ms  
Loss rate: 0.02%

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

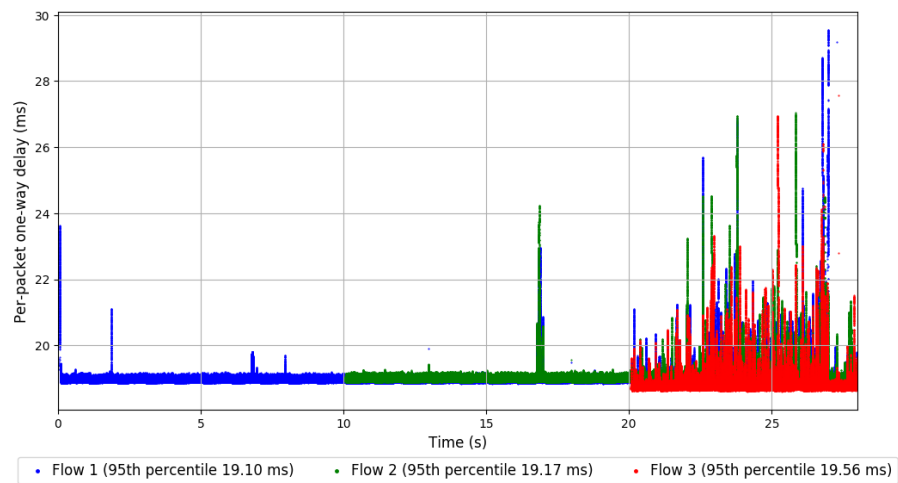
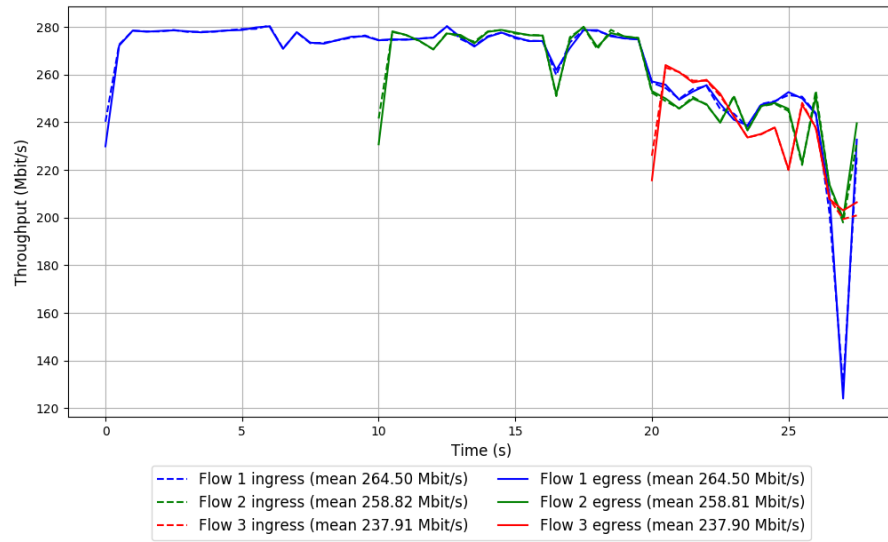


Run 4: Statistics of TaoVA-100x

Start at: 2017-10-12 08:28:35  
End at: 2017-10-12 08:29:05  
Local clock offset: 2.273 ms  
Remote clock offset: -1.612 ms

# Below is generated by plot.py at 2017-10-12 13:35:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 498.23 Mbit/s  
95th percentile per-packet one-way delay: 19.145 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 264.50 Mbit/s  
95th percentile per-packet one-way delay: 19.098 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 258.81 Mbit/s  
95th percentile per-packet one-way delay: 19.170 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 237.90 Mbit/s  
95th percentile per-packet one-way delay: 19.557 ms  
Loss rate: 0.00%

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



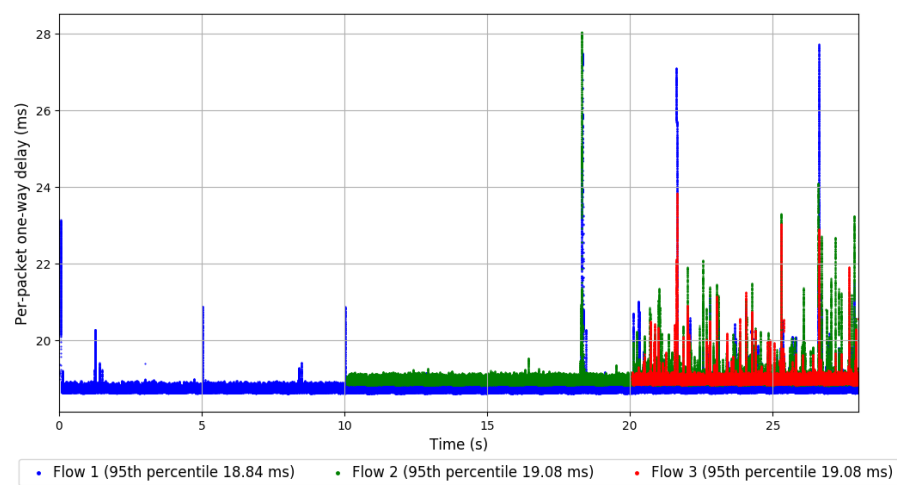
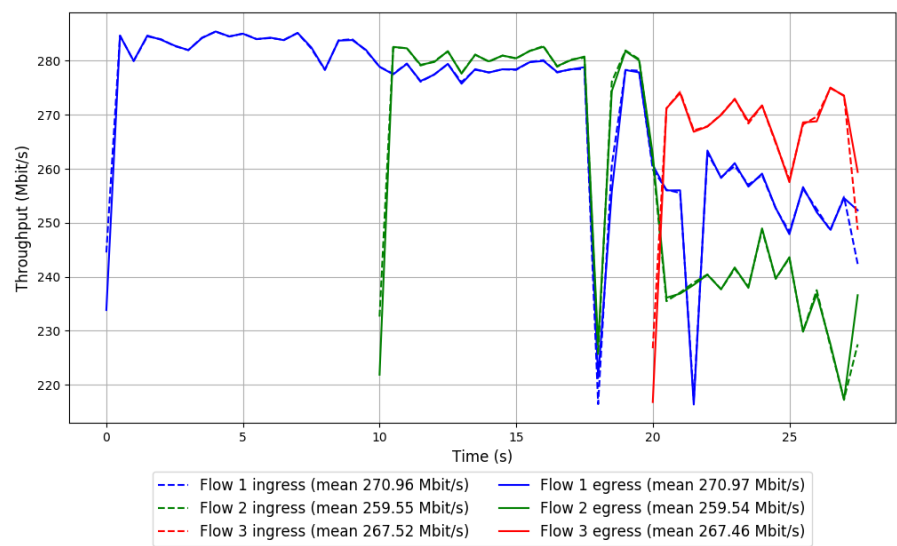
Run 5: Statistics of TaoVA-100x

Start at: 2017-10-12 08:49:23  
End at: 2017-10-12 08:49:53  
Local clock offset: 2.412 ms  
Remote clock offset: -1.628 ms

# Below is generated by plot.py at 2017-10-12 13:36:23  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 513.29 Mbit/s  
95th percentile per-packet one-way delay: 19.034 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 270.97 Mbit/s  
95th percentile per-packet one-way delay: 18.836 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 259.54 Mbit/s  
95th percentile per-packet one-way delay: 19.081 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 267.46 Mbit/s  
95th percentile per-packet one-way delay: 19.083 ms  
Loss rate: 0.00%



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

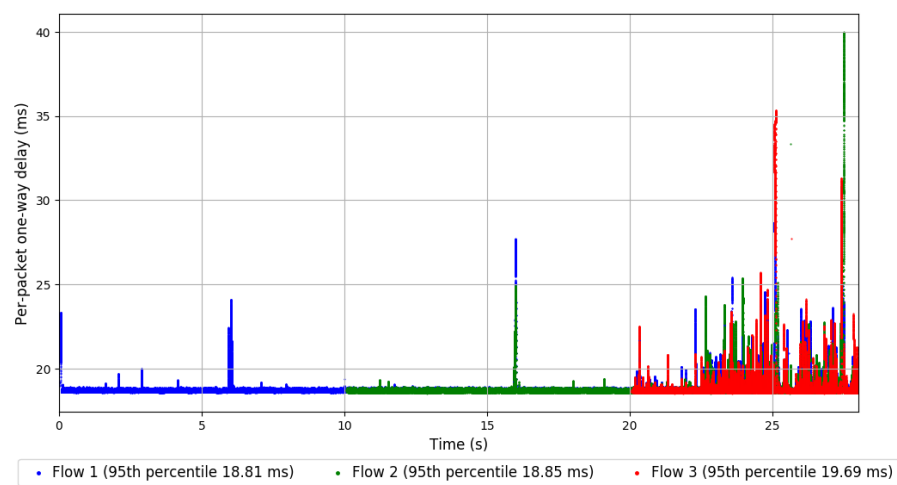
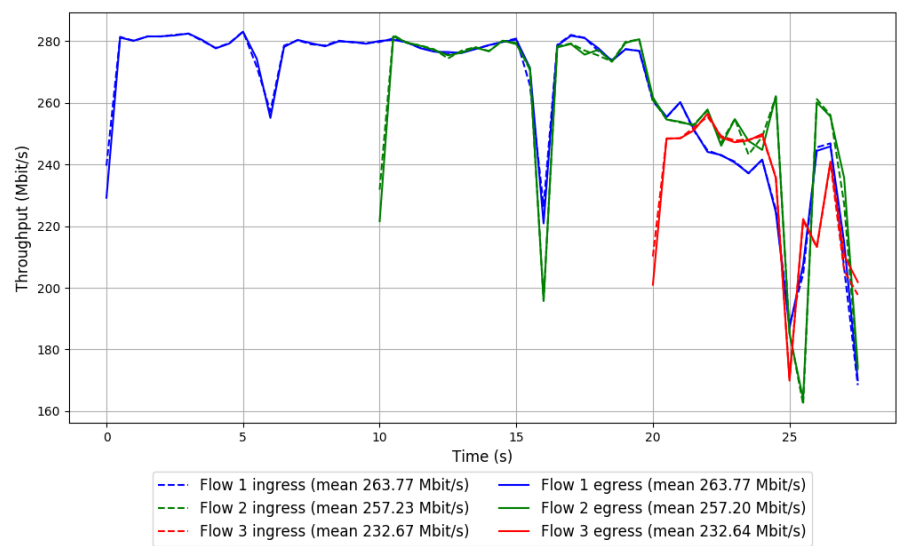


Run 6: Statistics of TaoVA-100x

Start at: 2017-10-12 09:09:56  
End at: 2017-10-12 09:10:26  
Local clock offset: 2.331 ms  
Remote clock offset: -1.867 ms

# Below is generated by plot.py at 2017-10-12 13:36:23  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 494.72 Mbit/s  
95th percentile per-packet one-way delay: 18.887 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 263.77 Mbit/s  
95th percentile per-packet one-way delay: 18.807 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 257.20 Mbit/s  
95th percentile per-packet one-way delay: 18.848 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 232.64 Mbit/s  
95th percentile per-packet one-way delay: 19.689 ms  
Loss rate: 0.01%

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

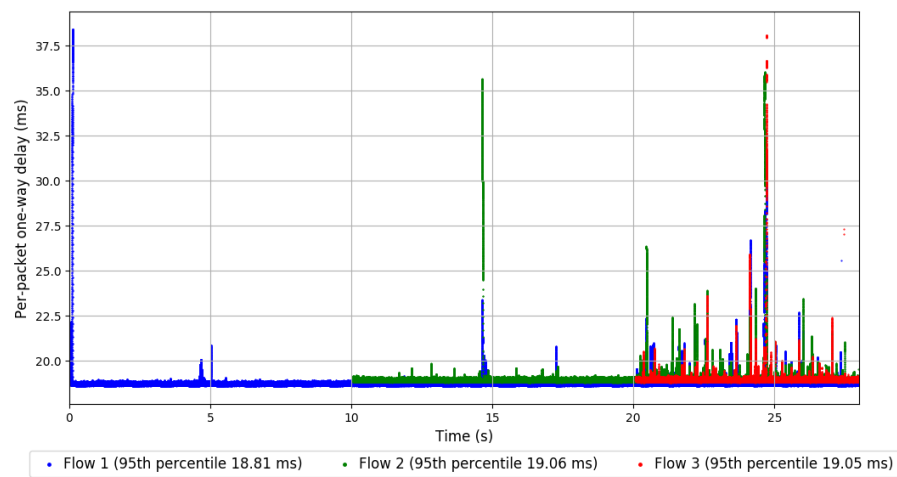
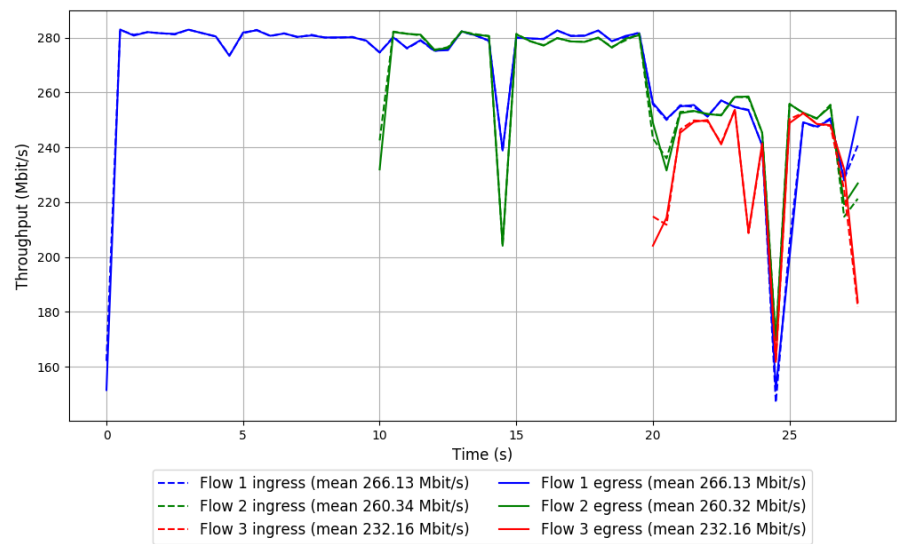


Run 7: Statistics of TaoVA-100x

Start at: 2017-10-12 09:30:40  
End at: 2017-10-12 09:31:10  
Local clock offset: 2.016 ms  
Remote clock offset: -2.063 ms

# Below is generated by plot.py at 2017-10-12 13:42:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 499.12 Mbit/s  
95th percentile per-packet one-way delay: 19.003 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 266.13 Mbit/s  
95th percentile per-packet one-way delay: 18.814 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 260.32 Mbit/s  
95th percentile per-packet one-way delay: 19.058 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 232.16 Mbit/s  
95th percentile per-packet one-way delay: 19.052 ms  
Loss rate: 0.00%

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

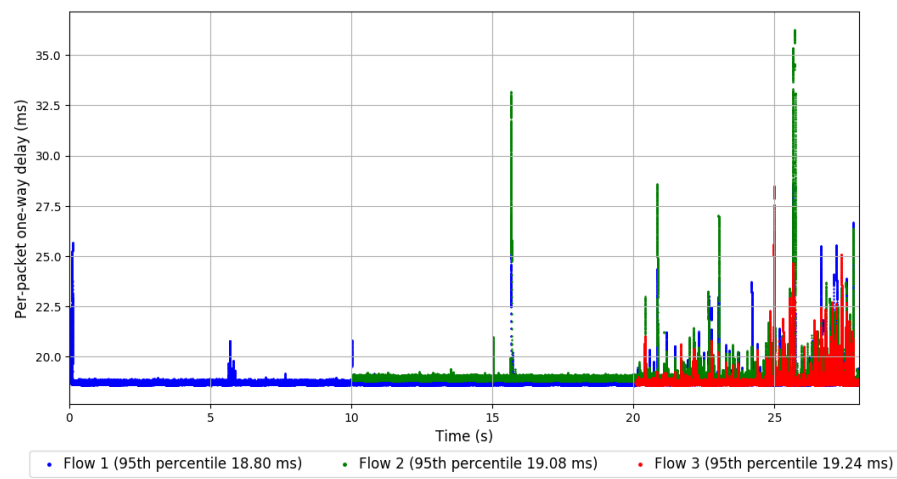
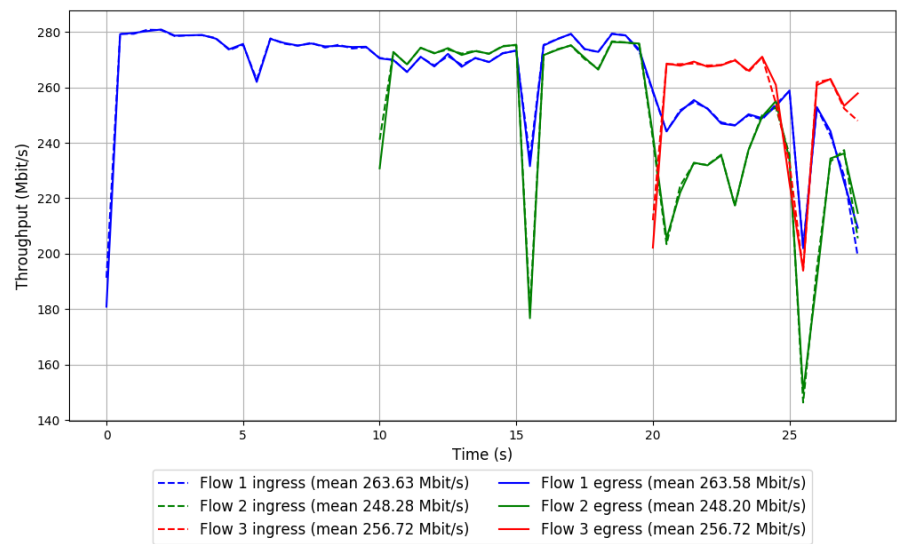


Run 8: Statistics of TaoVA-100x

Start at: 2017-10-12 09:51:29  
End at: 2017-10-12 09:51:59  
Local clock offset: 1.618 ms  
Remote clock offset: -2.315 ms

# Below is generated by plot.py at 2017-10-12 13:42:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 495.63 Mbit/s  
95th percentile per-packet one-way delay: 19.003 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 263.58 Mbit/s  
95th percentile per-packet one-way delay: 18.804 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 248.20 Mbit/s  
95th percentile per-packet one-way delay: 19.079 ms  
Loss rate: 0.03%  
-- Flow 3:  
Average throughput: 256.72 Mbit/s  
95th percentile per-packet one-way delay: 19.239 ms  
Loss rate: 0.00%

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



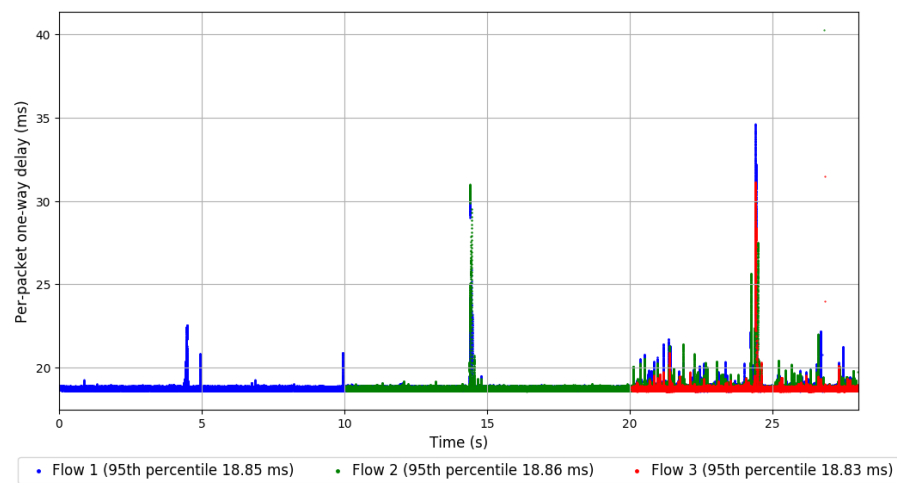
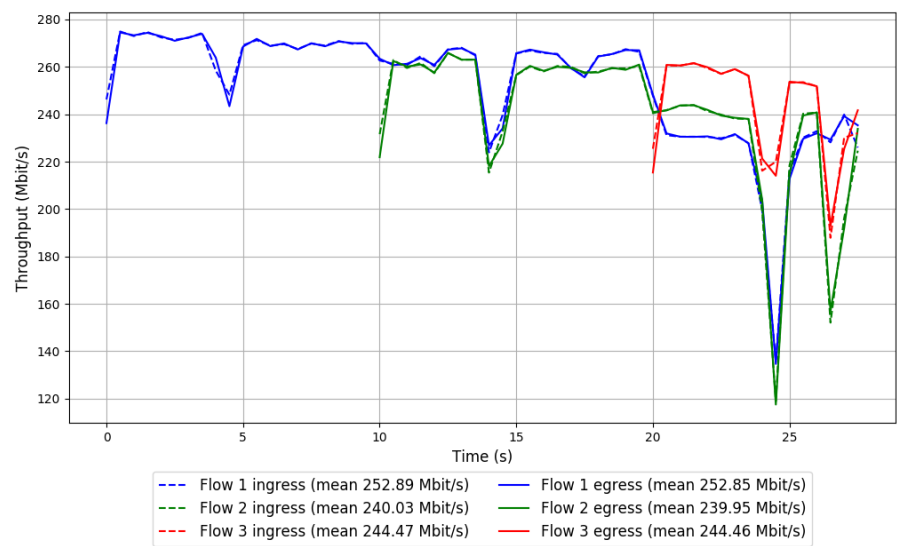
Run 9: Statistics of TaoVA-100x

Start at: 2017-10-12 10:12:20  
End at: 2017-10-12 10:12:50  
Local clock offset: 1.278 ms  
Remote clock offset: -2.213 ms

# Below is generated by plot.py at 2017-10-12 13:47:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 476.33 Mbit/s  
95th percentile per-packet one-way delay: 18.850 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 252.85 Mbit/s  
95th percentile per-packet one-way delay: 18.847 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 239.95 Mbit/s  
95th percentile per-packet one-way delay: 18.863 ms  
Loss rate: 0.03%  
-- Flow 3:  
Average throughput: 244.46 Mbit/s  
95th percentile per-packet one-way delay: 18.830 ms  
Loss rate: 0.00%



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

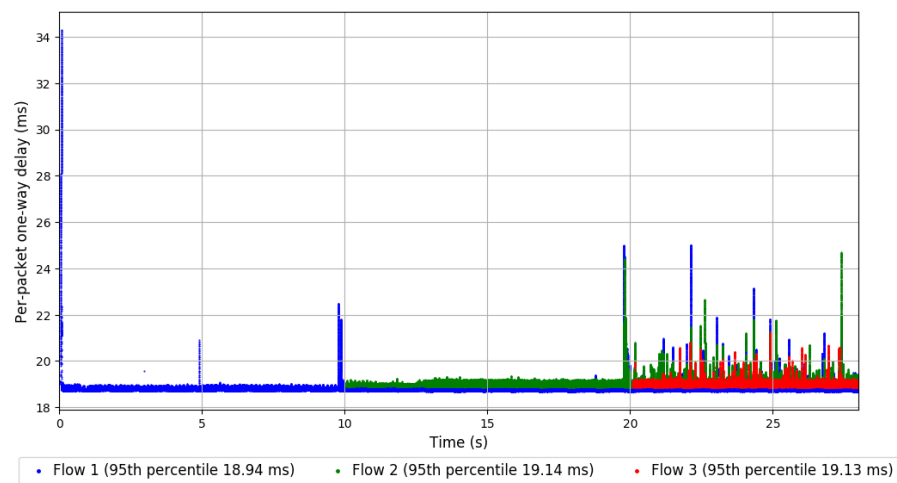
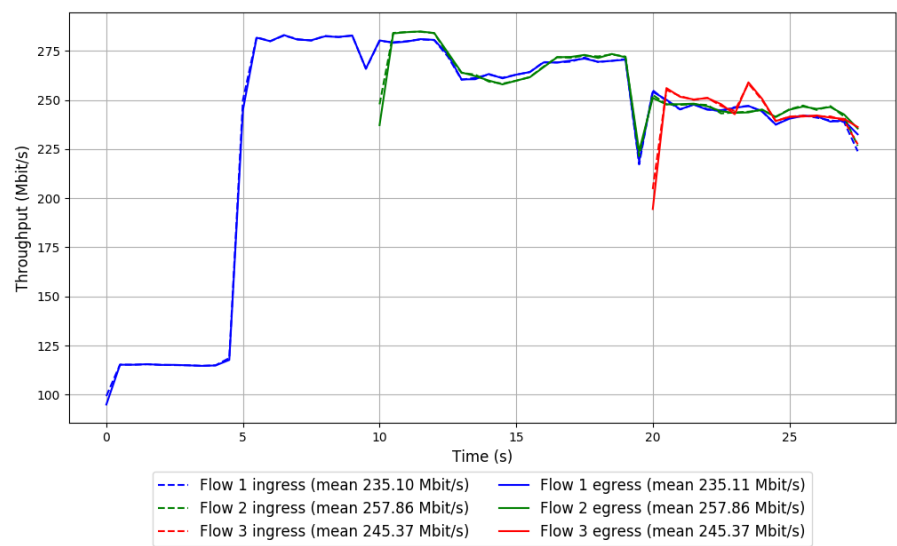


Run 10: Statistics of TaoVA-100x

Start at: 2017-10-12 10:33:25  
End at: 2017-10-12 10:33:55  
Local clock offset: 0.603 ms  
Remote clock offset: -1.872 ms

# Below is generated by plot.py at 2017-10-12 13:47:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 470.15 Mbit/s  
95th percentile per-packet one-way delay: 19.109 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 235.11 Mbit/s  
95th percentile per-packet one-way delay: 18.937 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 257.86 Mbit/s  
95th percentile per-packet one-way delay: 19.138 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 245.37 Mbit/s  
95th percentile per-packet one-way delay: 19.131 ms  
Loss rate: 0.00%

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

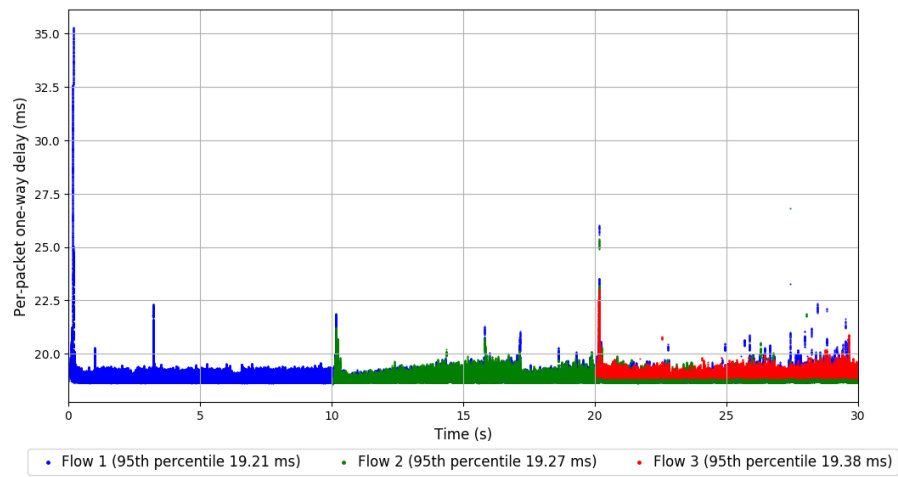
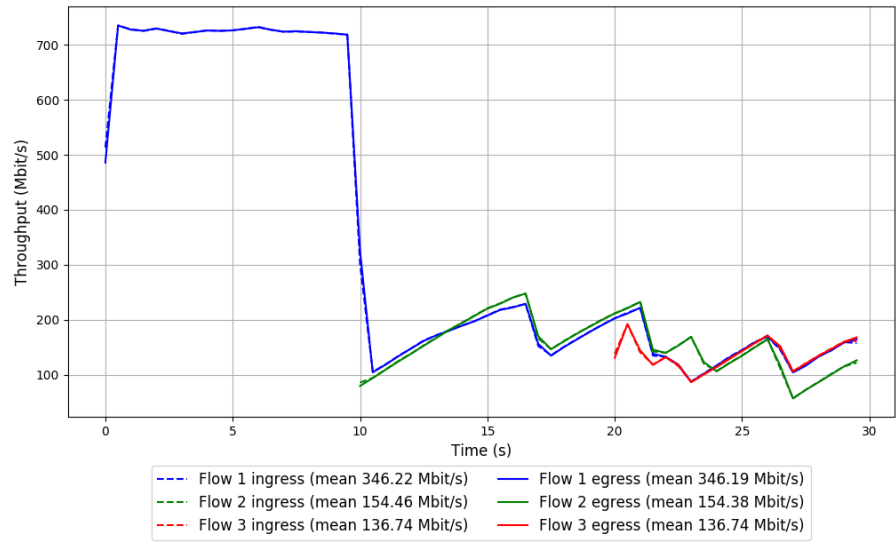


Run 1: Statistics of TCP Vegas

Start at: 2017-10-12 07:17:21  
End at: 2017-10-12 07:17:51  
Local clock offset: 1.492 ms  
Remote clock offset: -1.189 ms

# Below is generated by plot.py at 2017-10-12 13:47:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 494.36 Mbit/s  
95th percentile per-packet one-way delay: 19.253 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 346.19 Mbit/s  
95th percentile per-packet one-way delay: 19.209 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 154.38 Mbit/s  
95th percentile per-packet one-way delay: 19.269 ms  
Loss rate: 0.05%  
-- Flow 3:  
Average throughput: 136.74 Mbit/s  
95th percentile per-packet one-way delay: 19.379 ms  
Loss rate: 0.00%

# Run 1: Report of TCP Vegas — Data Link

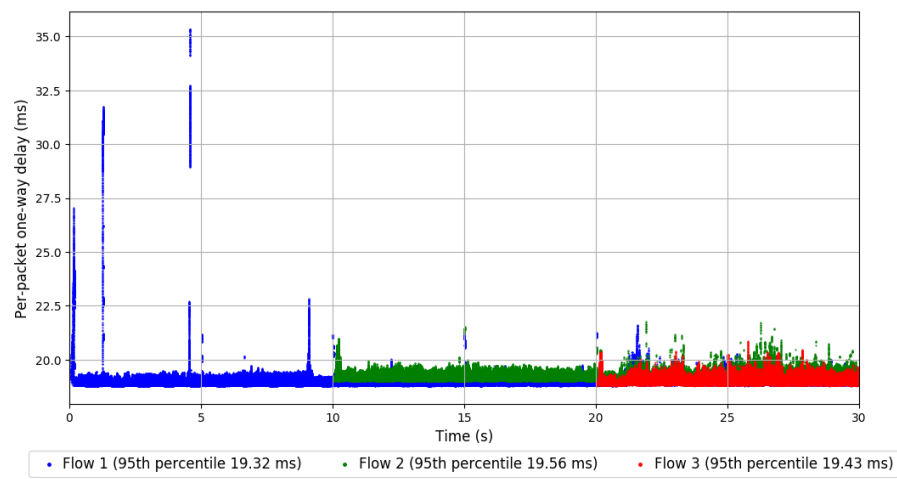
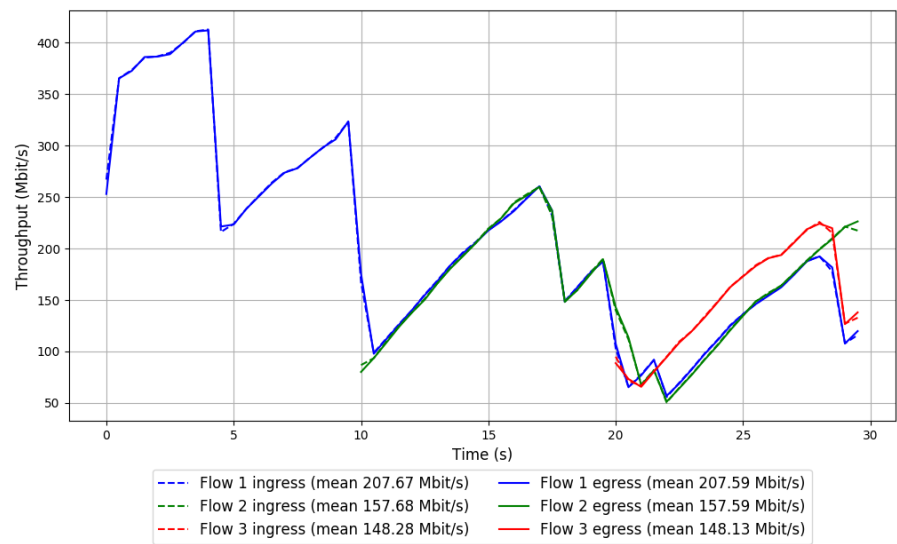


Run 2: Statistics of TCP Vegas

Start at: 2017-10-12 07:37:46  
End at: 2017-10-12 07:38:16  
Local clock offset: 1.787 ms  
Remote clock offset: -1.305 ms

# Below is generated by plot.py at 2017-10-12 13:47:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 361.69 Mbit/s  
95th percentile per-packet one-way delay: 19.462 ms  
Loss rate: 0.05%  
-- Flow 1:  
Average throughput: 207.59 Mbit/s  
95th percentile per-packet one-way delay: 19.315 ms  
Loss rate: 0.04%  
-- Flow 2:  
Average throughput: 157.59 Mbit/s  
95th percentile per-packet one-way delay: 19.560 ms  
Loss rate: 0.06%  
-- Flow 3:  
Average throughput: 148.13 Mbit/s  
95th percentile per-packet one-way delay: 19.432 ms  
Loss rate: 0.09%

Run 2: Report of TCP Vegas — Data Link



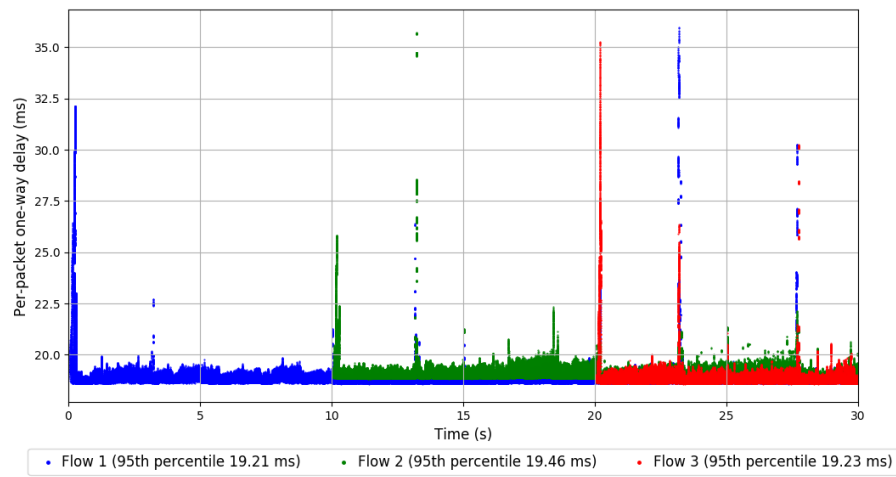
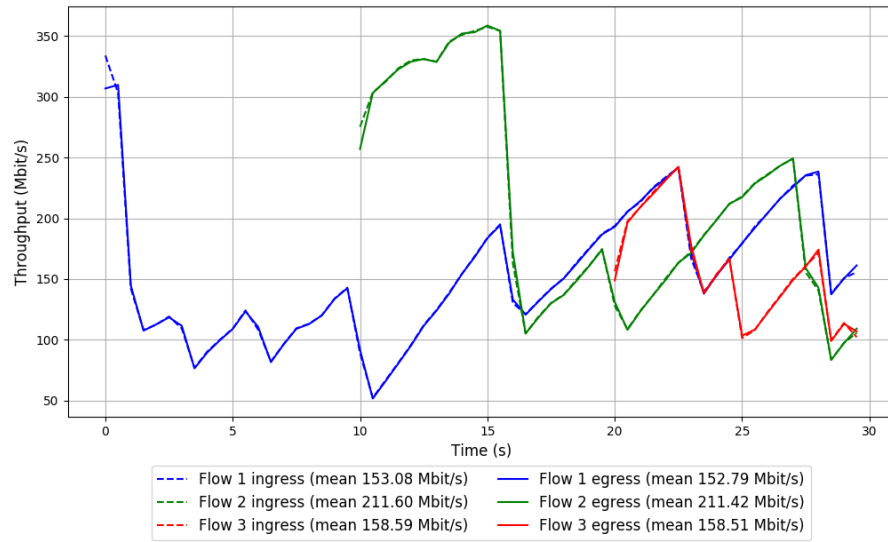
Run 3: Statistics of TCP Vegas

Start at: 2017-10-12 07:58:28  
End at: 2017-10-12 07:58:58  
Local clock offset: 2.224 ms  
Remote clock offset: -1.599 ms

# Below is generated by plot.py at 2017-10-12 13:47:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 346.26 Mbit/s  
95th percentile per-packet one-way delay: 19.367 ms  
Loss rate: 0.12%  
-- Flow 1:  
Average throughput: 152.79 Mbit/s  
95th percentile per-packet one-way delay: 19.211 ms  
Loss rate: 0.19%  
-- Flow 2:  
Average throughput: 211.42 Mbit/s  
95th percentile per-packet one-way delay: 19.460 ms  
Loss rate: 0.09%  
-- Flow 3:  
Average throughput: 158.51 Mbit/s  
95th percentile per-packet one-way delay: 19.233 ms  
Loss rate: 0.05%



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

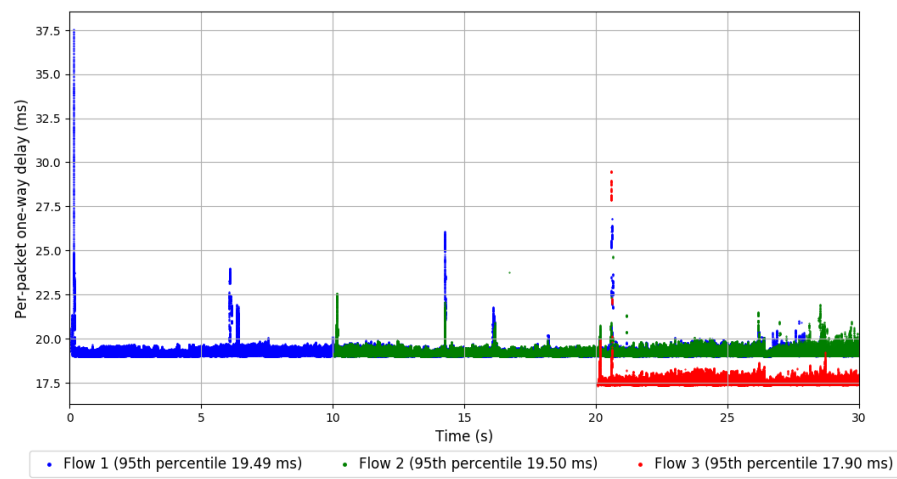
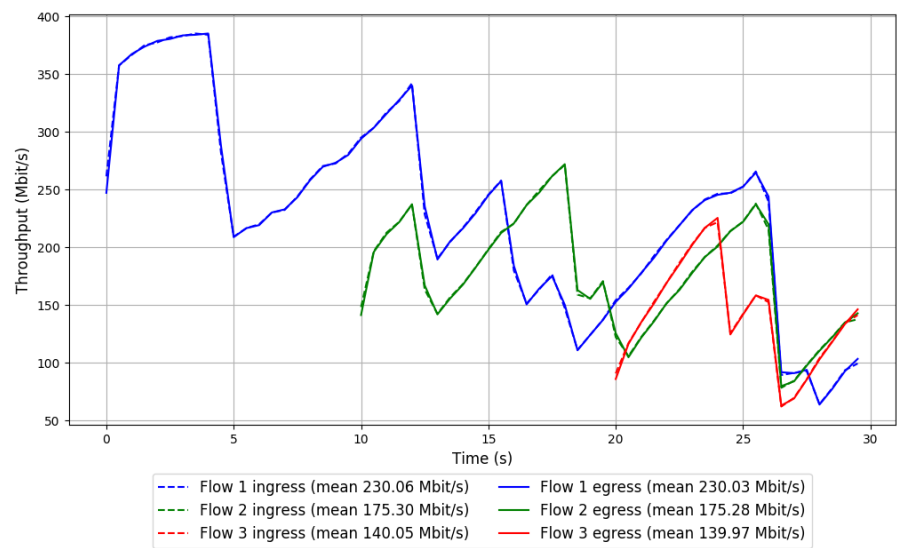


Run 4: Statistics of TCP Vegas

Start at: 2017-10-12 08:19:38  
End at: 2017-10-12 08:20:08  
Local clock offset: 2.219 ms  
Remote clock offset: -1.327 ms

# Below is generated by plot.py at 2017-10-12 13:47:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 393.23 Mbit/s  
95th percentile per-packet one-way delay: 19.483 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 230.03 Mbit/s  
95th percentile per-packet one-way delay: 19.494 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 175.28 Mbit/s  
95th percentile per-packet one-way delay: 19.502 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 139.97 Mbit/s  
95th percentile per-packet one-way delay: 17.899 ms  
Loss rate: 0.05%

Run 4: Report of TCP Vegas — Data Link

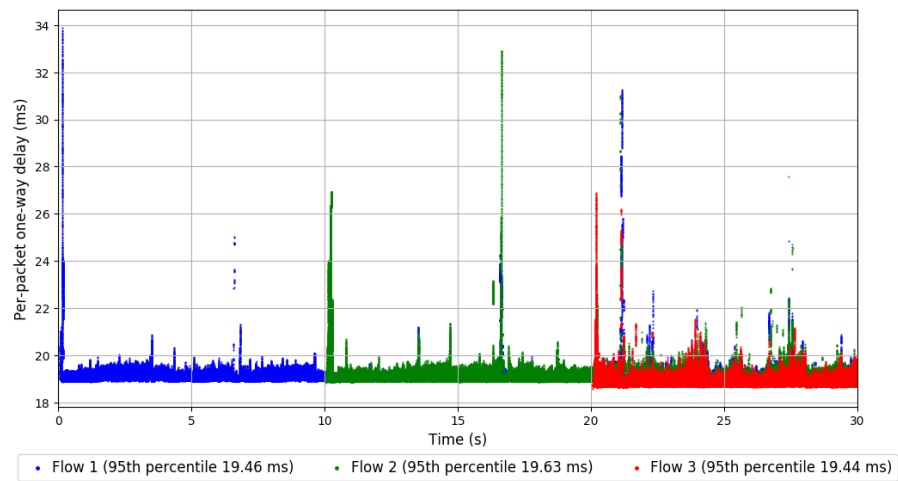
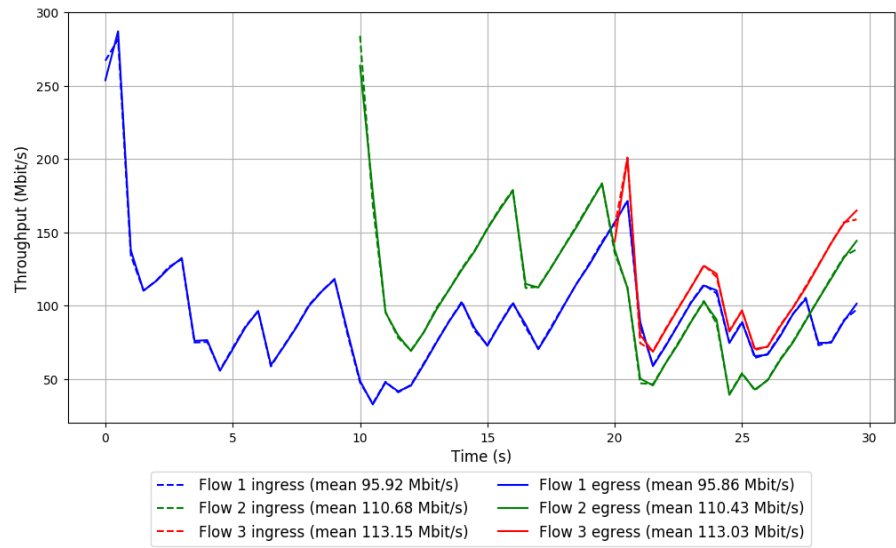


Run 5: Statistics of TCP Vegas

Start at: 2017-10-12 08:40:37  
End at: 2017-10-12 08:41:07  
Local clock offset: 2.301 ms  
Remote clock offset: -1.676 ms

# Below is generated by plot.py at 2017-10-12 13:47:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 206.88 Mbit/s  
95th percentile per-packet one-way delay: 19.509 ms  
Loss rate: 0.13%  
-- Flow 1:  
Average throughput: 95.86 Mbit/s  
95th percentile per-packet one-way delay: 19.463 ms  
Loss rate: 0.07%  
-- Flow 2:  
Average throughput: 110.43 Mbit/s  
95th percentile per-packet one-way delay: 19.629 ms  
Loss rate: 0.23%  
-- Flow 3:  
Average throughput: 113.03 Mbit/s  
95th percentile per-packet one-way delay: 19.438 ms  
Loss rate: 0.11%

# Run 5: Report of TCP Vegas — Data Link

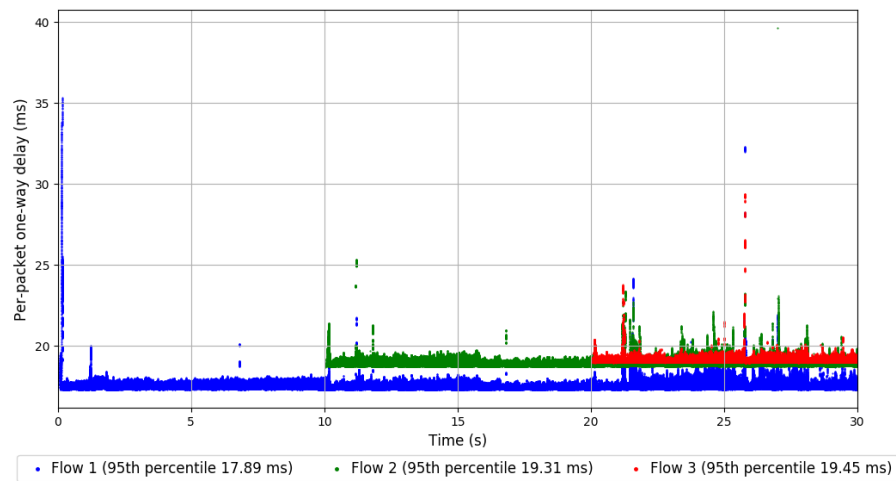
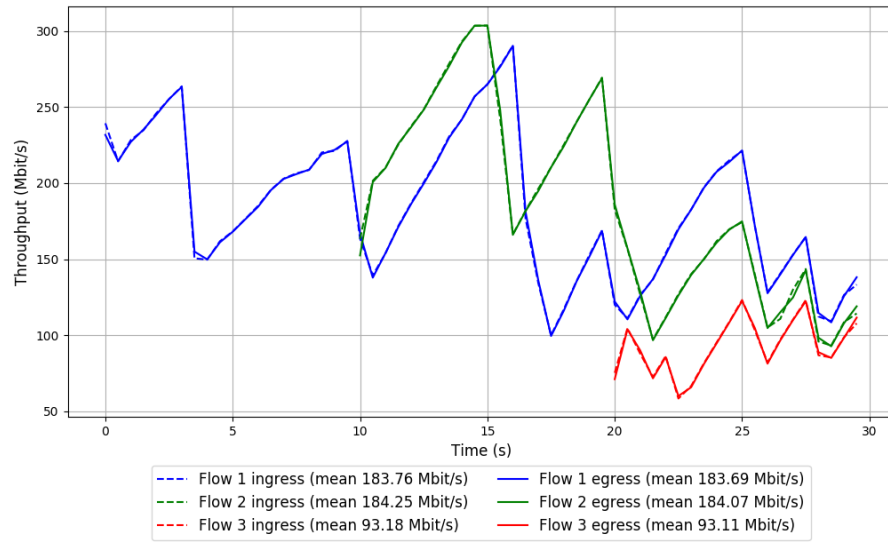


Run 6: Statistics of TCP Vegas

Start at: 2017-10-12 09:01:33  
End at: 2017-10-12 09:02:03  
Local clock offset: 2.296 ms  
Remote clock offset: -1.782 ms

# Below is generated by plot.py at 2017-10-12 13:47:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 337.18 Mbit/s  
95th percentile per-packet one-way delay: 19.246 ms  
Loss rate: 0.06%  
-- Flow 1:  
Average throughput: 183.69 Mbit/s  
95th percentile per-packet one-way delay: 17.895 ms  
Loss rate: 0.04%  
-- Flow 2:  
Average throughput: 184.07 Mbit/s  
95th percentile per-packet one-way delay: 19.306 ms  
Loss rate: 0.10%  
-- Flow 3:  
Average throughput: 93.11 Mbit/s  
95th percentile per-packet one-way delay: 19.449 ms  
Loss rate: 0.07%

# Run 6: Report of TCP Vegas — Data Link



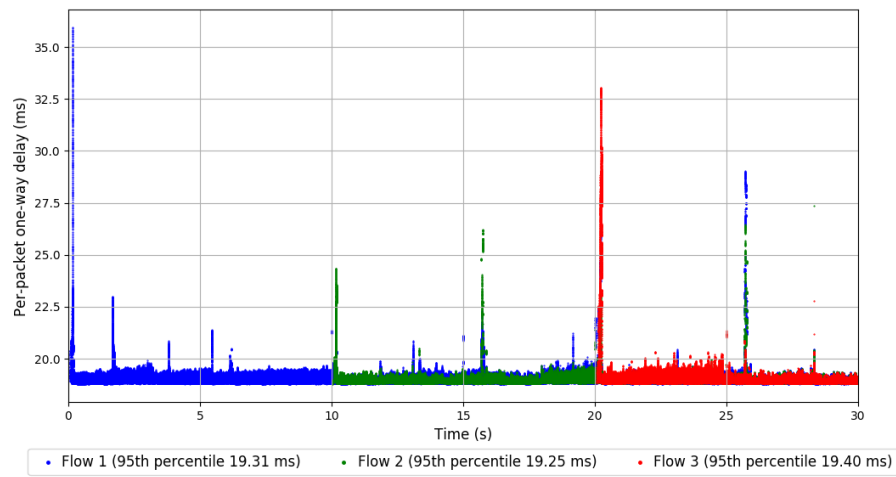
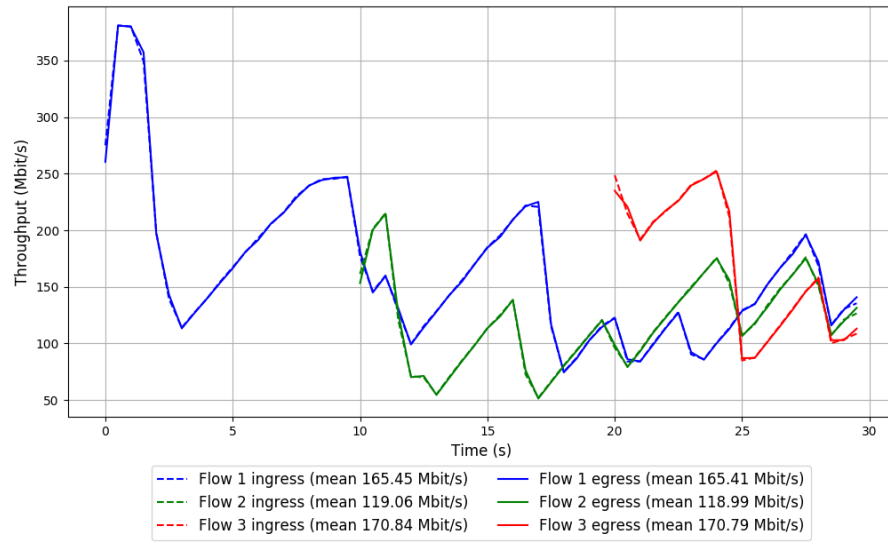
Run 7: Statistics of TCP Vegas

Start at: 2017-10-12 09:22:01  
End at: 2017-10-12 09:22:31  
Local clock offset: 2.132 ms  
Remote clock offset: -1.915 ms

# Below is generated by plot.py at 2017-10-12 13:47:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 301.27 Mbit/s  
95th percentile per-packet one-way delay: 19.314 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 165.41 Mbit/s  
95th percentile per-packet one-way delay: 19.309 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 118.99 Mbit/s  
95th percentile per-packet one-way delay: 19.251 ms  
Loss rate: 0.06%  
-- Flow 3:  
Average throughput: 170.79 Mbit/s  
95th percentile per-packet one-way delay: 19.401 ms  
Loss rate: 0.03%



# Run 7: Report of TCP Vegas — Data Link

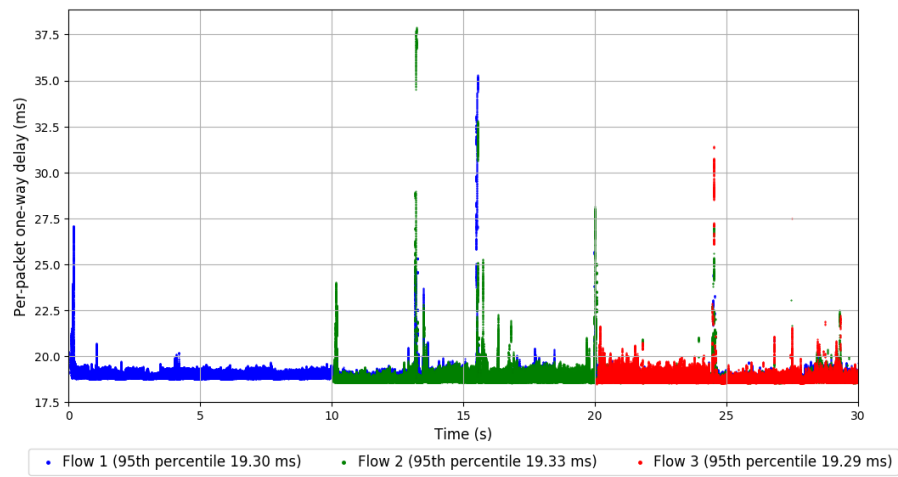
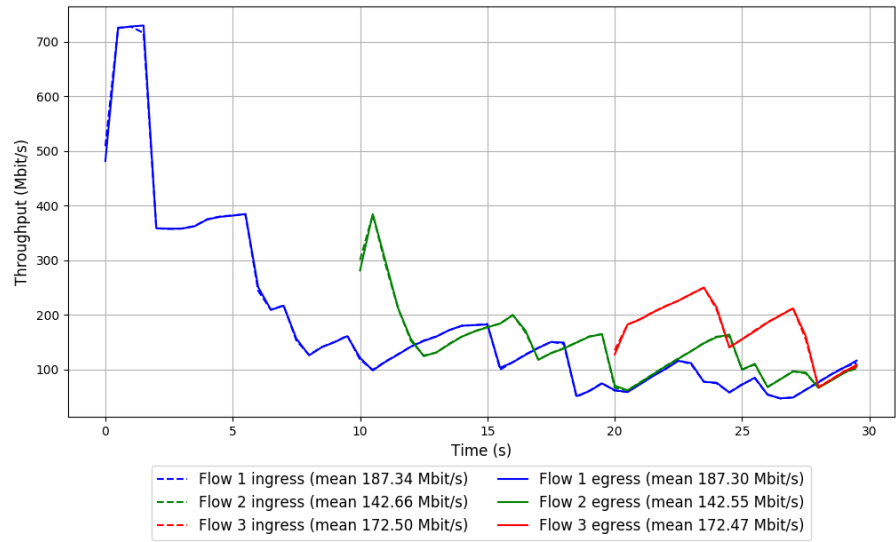


Run 8: Statistics of TCP Vegas

Start at: 2017-10-12 09:42:43  
End at: 2017-10-12 09:43:13  
Local clock offset: 1.793 ms  
Remote clock offset: -2.233 ms

# Below is generated by plot.py at 2017-10-12 13:47:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 339.48 Mbit/s  
95th percentile per-packet one-way delay: 19.303 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 187.30 Mbit/s  
95th percentile per-packet one-way delay: 19.300 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 142.55 Mbit/s  
95th percentile per-packet one-way delay: 19.331 ms  
Loss rate: 0.08%  
-- Flow 3:  
Average throughput: 172.47 Mbit/s  
95th percentile per-packet one-way delay: 19.287 ms  
Loss rate: 0.04%

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

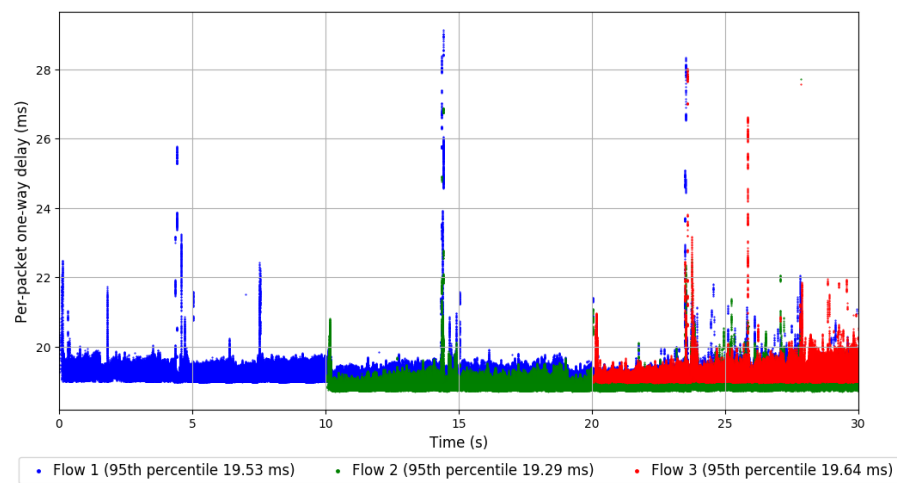
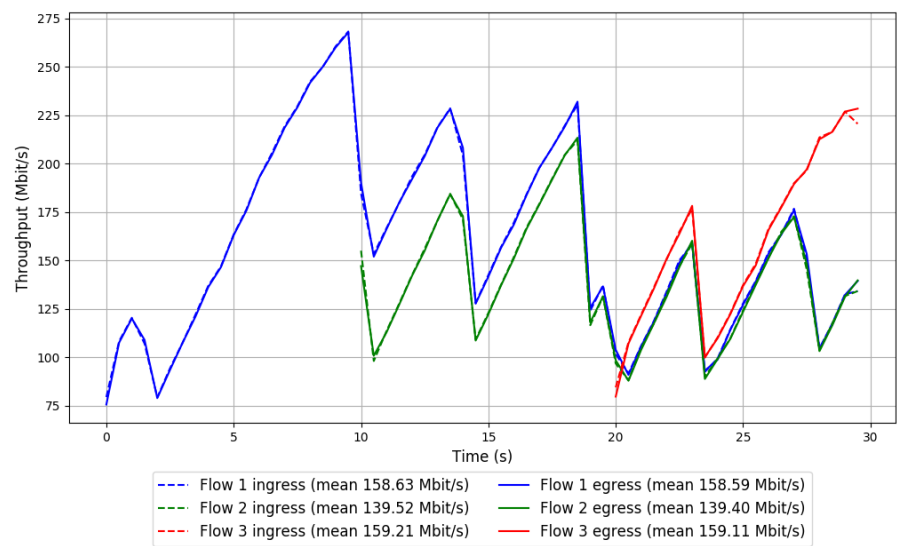


Run 9: Statistics of TCP Vegas

Start at: 2017-10-12 10:03:32  
End at: 2017-10-12 10:04:02  
Local clock offset: 1.334 ms  
Remote clock offset: -2.175 ms

# Below is generated by plot.py at 2017-10-12 13:47:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 304.25 Mbit/s  
95th percentile per-packet one-way delay: 19.525 ms  
Loss rate: 0.05%  
-- Flow 1:  
Average throughput: 158.59 Mbit/s  
95th percentile per-packet one-way delay: 19.532 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 139.40 Mbit/s  
95th percentile per-packet one-way delay: 19.289 ms  
Loss rate: 0.09%  
-- Flow 3:  
Average throughput: 159.11 Mbit/s  
95th percentile per-packet one-way delay: 19.640 ms  
Loss rate: 0.06%

Run 9: Report of TCP Vegas — Data Link

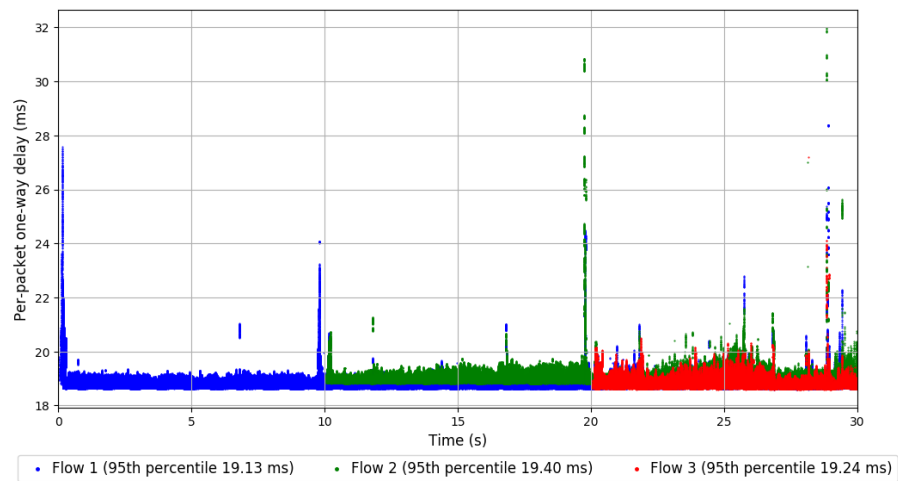
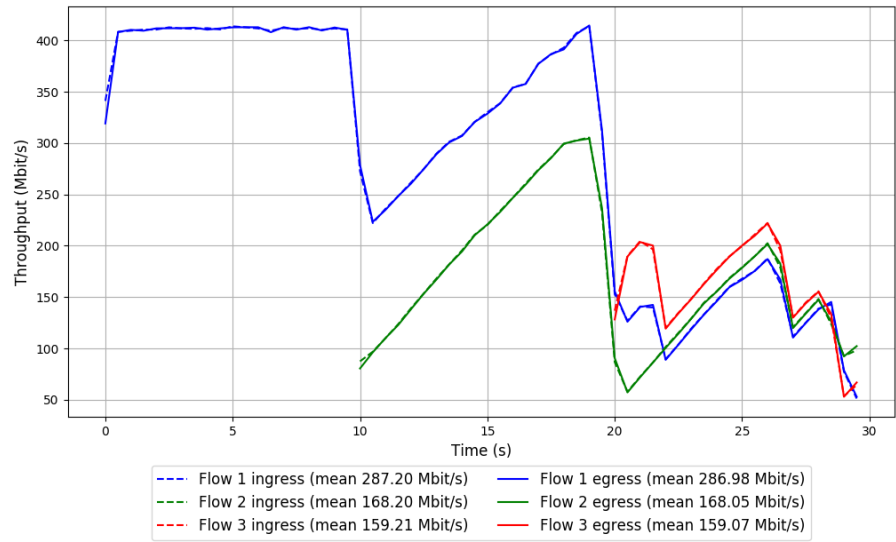


Run 10: Statistics of TCP Vegas

Start at: 2017-10-12 10:24:27  
End at: 2017-10-12 10:24:57  
Local clock offset: 0.968 ms  
Remote clock offset: -2.016 ms

# Below is generated by plot.py at 2017-10-12 13:49:18  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 451.71 Mbit/s  
95th percentile per-packet one-way delay: 19.260 ms  
Loss rate: 0.08%  
-- Flow 1:  
Average throughput: 286.98 Mbit/s  
95th percentile per-packet one-way delay: 19.133 ms  
Loss rate: 0.08%  
-- Flow 2:  
Average throughput: 168.05 Mbit/s  
95th percentile per-packet one-way delay: 19.398 ms  
Loss rate: 0.09%  
-- Flow 3:  
Average throughput: 159.07 Mbit/s  
95th percentile per-packet one-way delay: 19.237 ms  
Loss rate: 0.09%

# Run 10: Report of TCP Vegas — Data Link



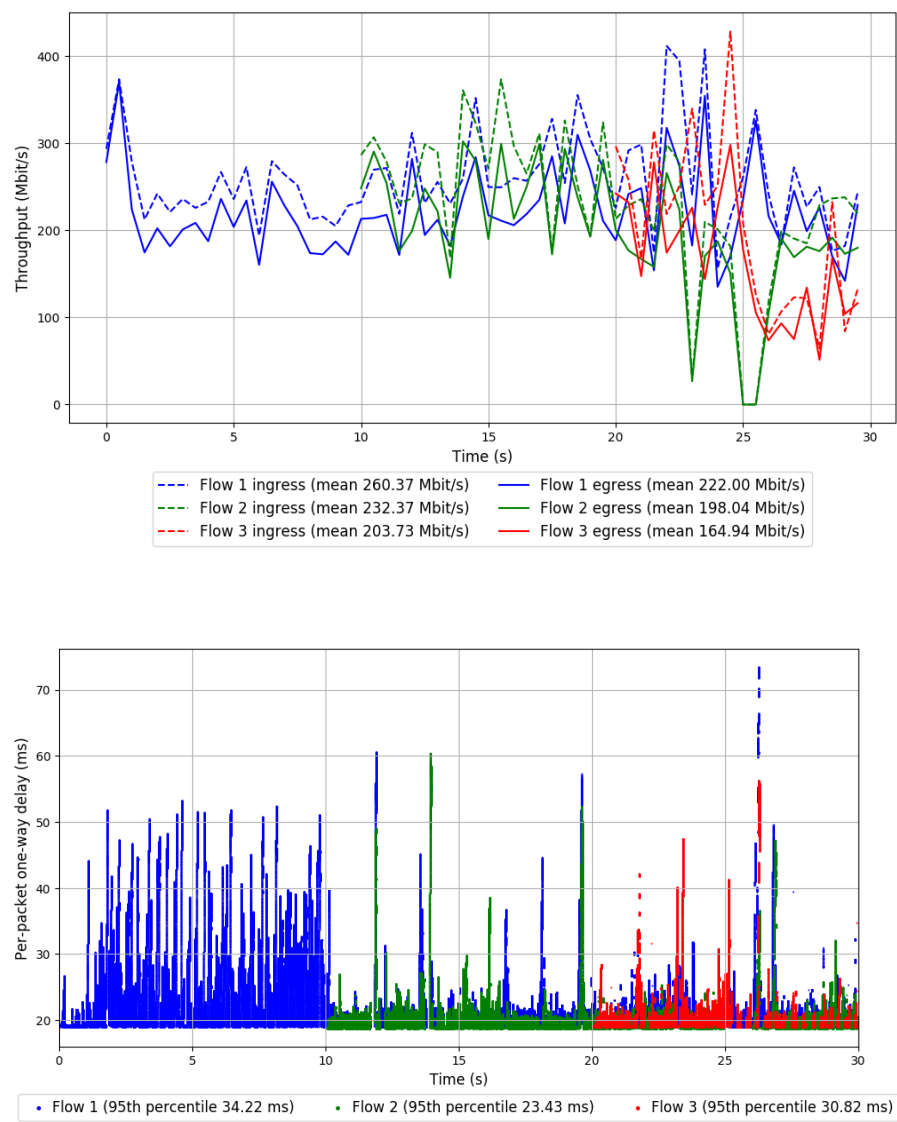
Run 1: Statistics of Verus

Start at: 2017-10-12 07:13:25  
End at: 2017-10-12 07:13:55  
Local clock offset: 1.449 ms  
Remote clock offset: -1.069 ms

# Below is generated by plot.py at 2017-10-12 13:49:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 408.30 Mbit/s  
95th percentile per-packet one-way delay: 30.862 ms  
Loss rate: 15.35%  
-- Flow 1:  
Average throughput: 222.00 Mbit/s  
95th percentile per-packet one-way delay: 34.219 ms  
Loss rate: 14.74%  
-- Flow 2:  
Average throughput: 198.04 Mbit/s  
95th percentile per-packet one-way delay: 23.430 ms  
Loss rate: 14.77%  
-- Flow 3:  
Average throughput: 164.94 Mbit/s  
95th percentile per-packet one-way delay: 30.818 ms  
Loss rate: 19.04%



Run 1: Report of Verus — Data Link

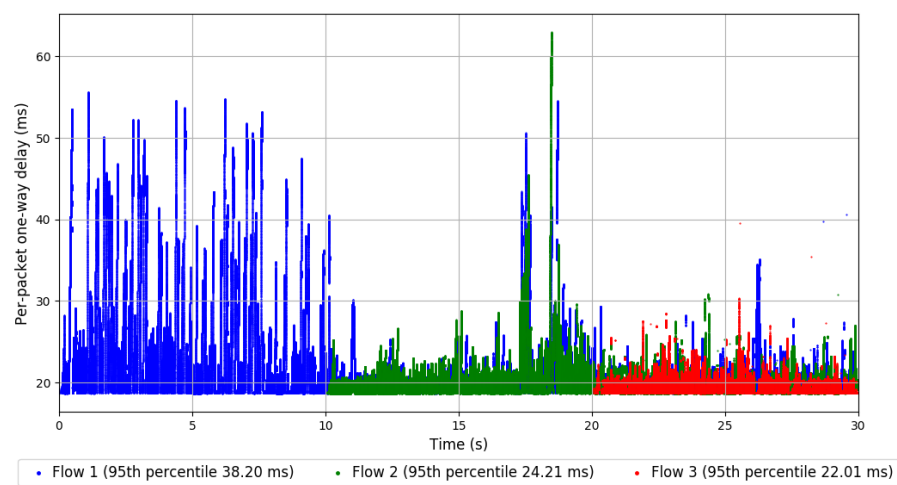
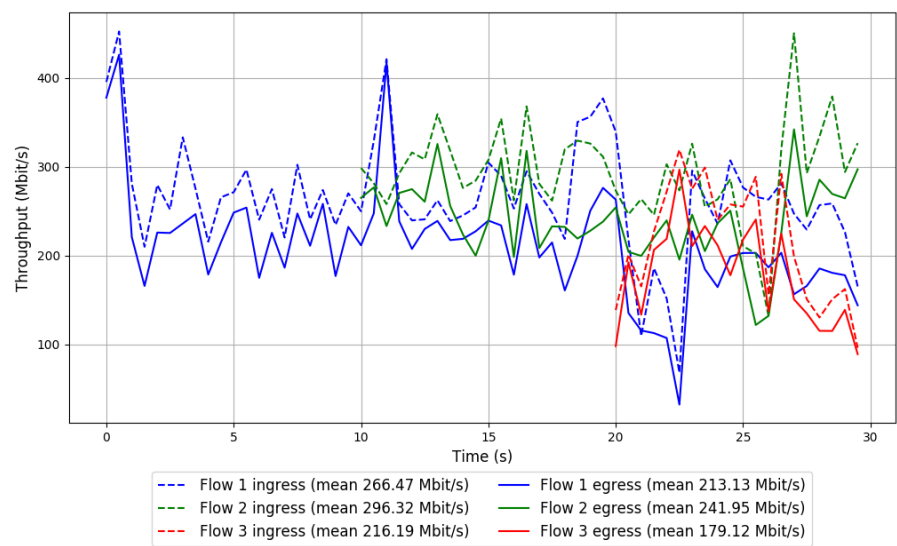


Run 2: Statistics of Verus

Start at: 2017-10-12 07:33:47  
End at: 2017-10-12 07:34:17  
Local clock offset: 1.822 ms  
Remote clock offset: -1.259 ms

```
# Below is generated by plot.py at 2017-10-12 13:52:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 433.20 Mbit/s
95th percentile per-packet one-way delay: 29.766 ms
Loss rate: 19.02%
-- Flow 1:
Average throughput: 213.13 Mbit/s
95th percentile per-packet one-way delay: 38.203 ms
Loss rate: 20.01%
-- Flow 2:
Average throughput: 241.95 Mbit/s
95th percentile per-packet one-way delay: 24.209 ms
Loss rate: 18.34%
-- Flow 3:
Average throughput: 179.12 Mbit/s
95th percentile per-packet one-way delay: 22.007 ms
Loss rate: 17.15%
```

Run 2: Report of Verus — Data Link

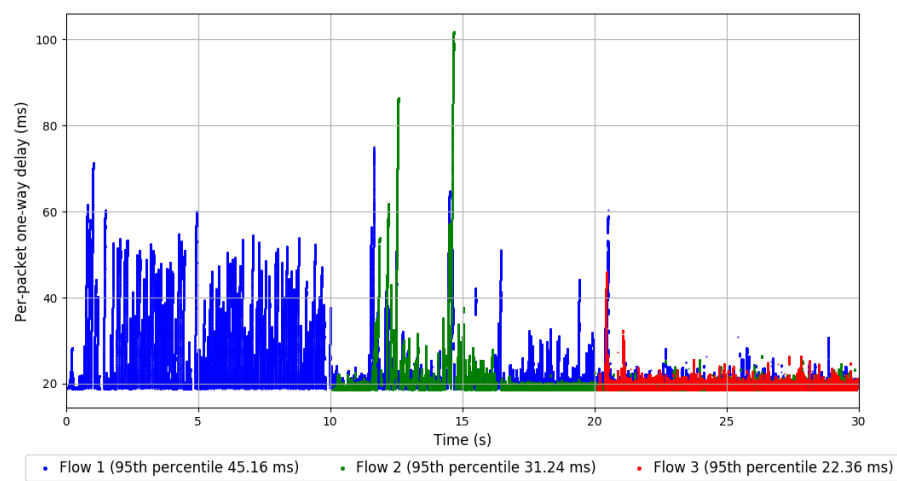
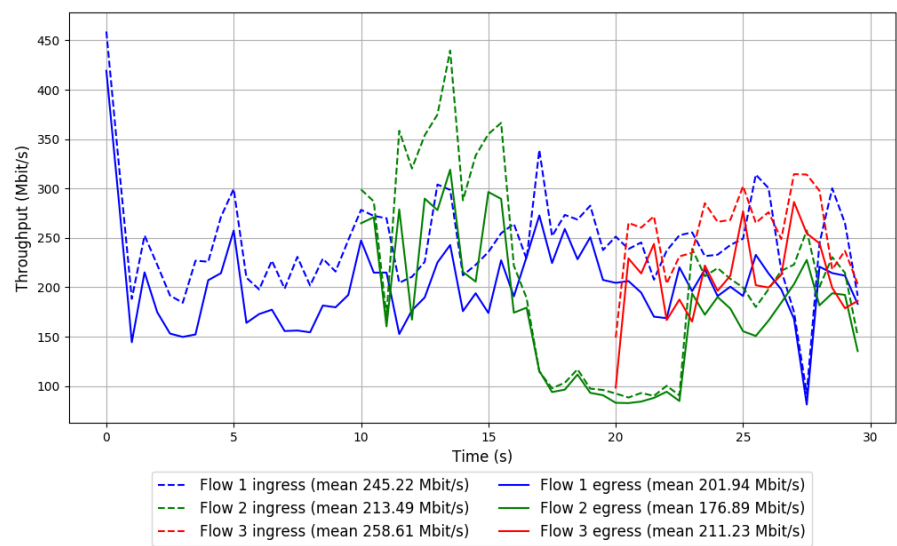


Run 3: Statistics of Verus

Start at: 2017-10-12 07:54:32  
End at: 2017-10-12 07:55:02  
Local clock offset: 2.18 ms  
Remote clock offset: -1.641 ms

# Below is generated by plot.py at 2017-10-12 13:52:03  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 389.16 Mbit/s  
95th percentile per-packet one-way delay: 40.571 ms  
Loss rate: 17.62%  
-- Flow 1:  
Average throughput: 201.94 Mbit/s  
95th percentile per-packet one-way delay: 45.165 ms  
Loss rate: 17.65%  
-- Flow 2:  
Average throughput: 176.89 Mbit/s  
95th percentile per-packet one-way delay: 31.241 ms  
Loss rate: 17.14%  
-- Flow 3:  
Average throughput: 211.23 Mbit/s  
95th percentile per-packet one-way delay: 22.365 ms  
Loss rate: 18.32%

Run 3: Report of Verus — Data Link

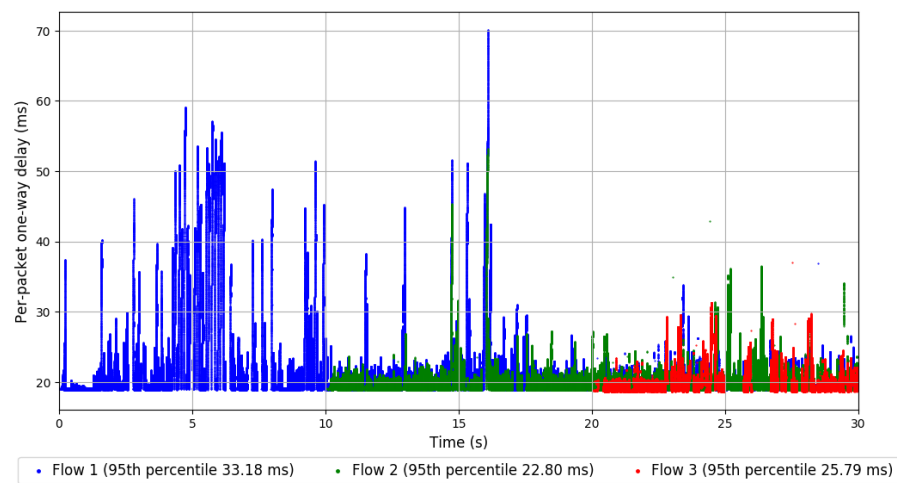
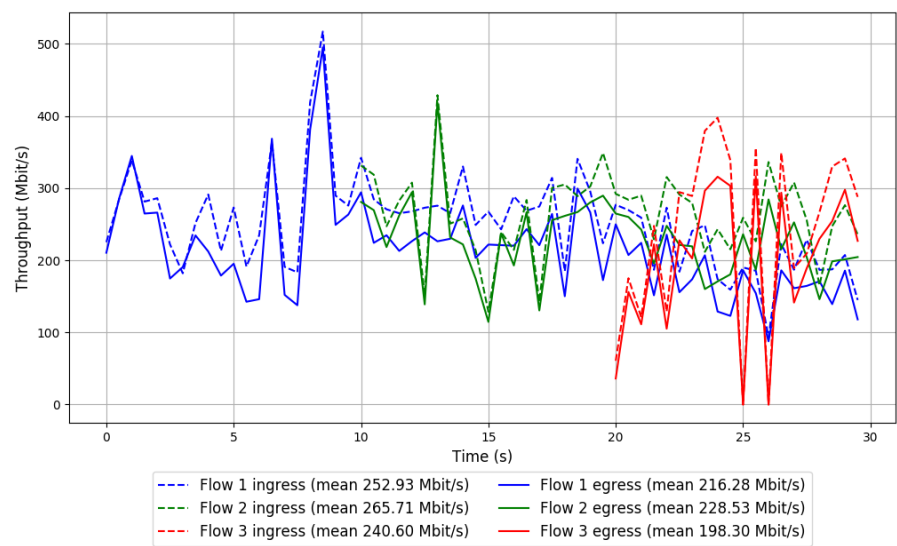


Run 4: Statistics of Verus

Start at: 2017-10-12 08:15:40  
End at: 2017-10-12 08:16:10  
Local clock offset: 2.222 ms  
Remote clock offset: -1.392 ms

# Below is generated by plot.py at 2017-10-12 13:53:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 433.82 Mbit/s  
95th percentile per-packet one-way delay: 26.654 ms  
Loss rate: 14.79%  
-- Flow 1:  
Average throughput: 216.28 Mbit/s  
95th percentile per-packet one-way delay: 33.184 ms  
Loss rate: 14.49%  
-- Flow 2:  
Average throughput: 228.53 Mbit/s  
95th percentile per-packet one-way delay: 22.802 ms  
Loss rate: 13.99%  
-- Flow 3:  
Average throughput: 198.30 Mbit/s  
95th percentile per-packet one-way delay: 25.791 ms  
Loss rate: 17.57%

Run 4: Report of Verus — Data Link



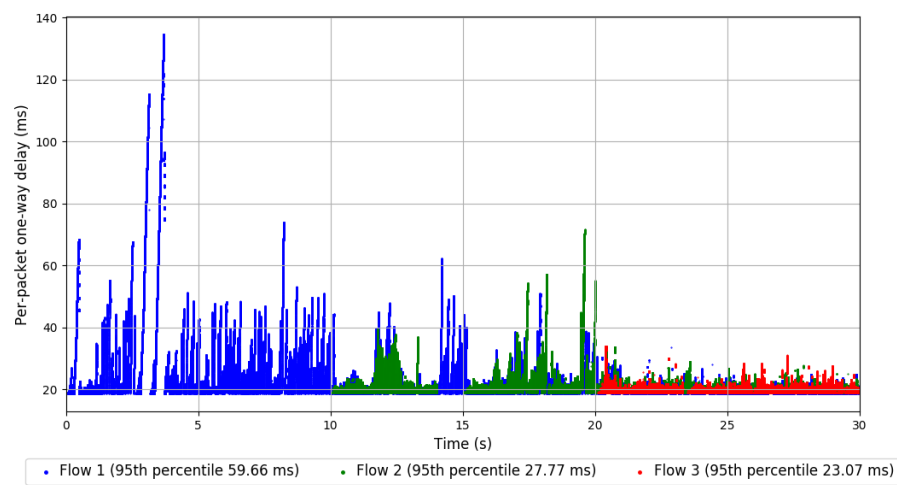
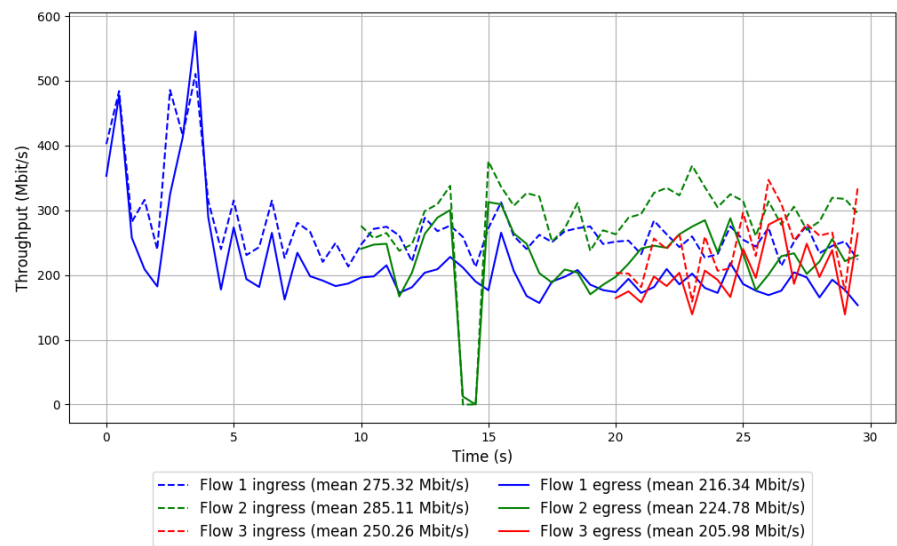
Run 5: Statistics of Verus

Start at: 2017-10-12 08:36:38  
End at: 2017-10-12 08:37:08  
Local clock offset: 2.39 ms  
Remote clock offset: -1.576 ms

# Below is generated by plot.py at 2017-10-12 13:53:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 433.67 Mbit/s  
95th percentile per-packet one-way delay: 42.098 ms  
Loss rate: 20.77%  
-- Flow 1:  
Average throughput: 216.34 Mbit/s  
95th percentile per-packet one-way delay: 59.655 ms  
Loss rate: 21.42%  
-- Flow 2:  
Average throughput: 224.78 Mbit/s  
95th percentile per-packet one-way delay: 27.771 ms  
Loss rate: 21.16%  
-- Flow 3:  
Average throughput: 205.98 Mbit/s  
95th percentile per-packet one-way delay: 23.070 ms  
Loss rate: 17.69%



Run 5: Report of Verus — Data Link

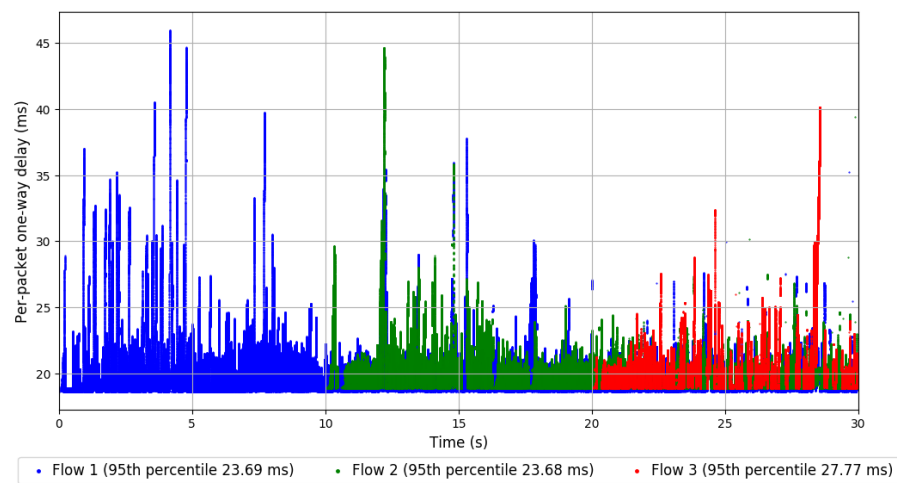
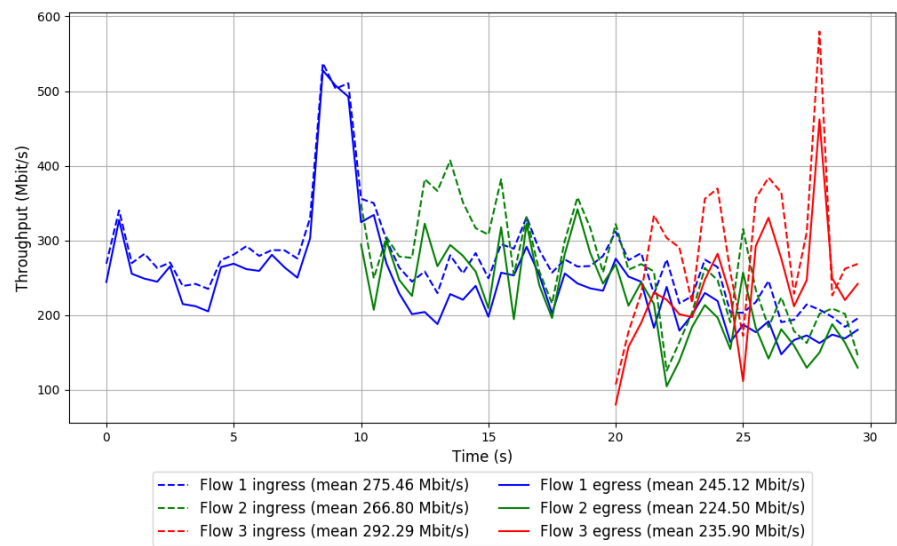


Run 6: Statistics of Verus

Start at: 2017-10-12 08:57:32  
End at: 2017-10-12 08:58:02  
Local clock offset: 2.304 ms  
Remote clock offset: -1.832 ms

# Below is generated by plot.py at 2017-10-12 13:54:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 472.56 Mbit/s  
95th percentile per-packet one-way delay: 24.425 ms  
Loss rate: 14.03%  
-- Flow 1:  
Average throughput: 245.12 Mbit/s  
95th percentile per-packet one-way delay: 23.692 ms  
Loss rate: 11.01%  
-- Flow 2:  
Average throughput: 224.50 Mbit/s  
95th percentile per-packet one-way delay: 23.677 ms  
Loss rate: 15.85%  
-- Flow 3:  
Average throughput: 235.90 Mbit/s  
95th percentile per-packet one-way delay: 27.765 ms  
Loss rate: 19.29%

Run 6: Report of Verus — Data Link

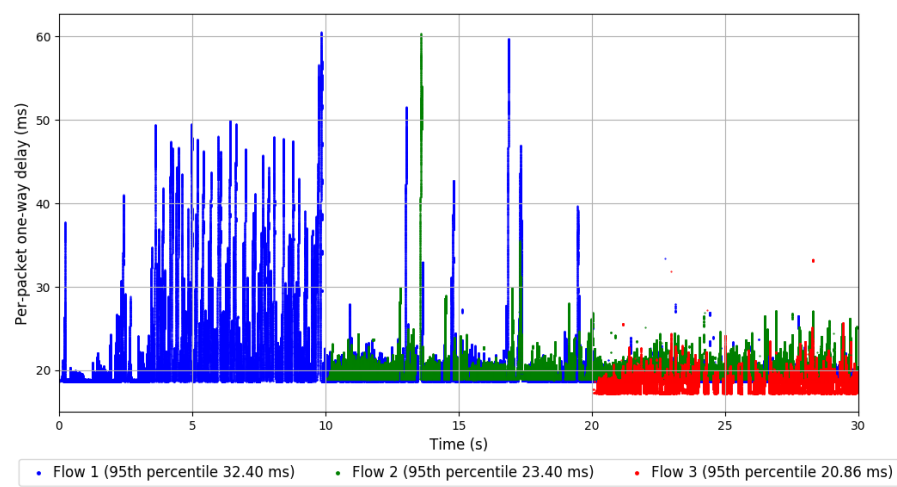
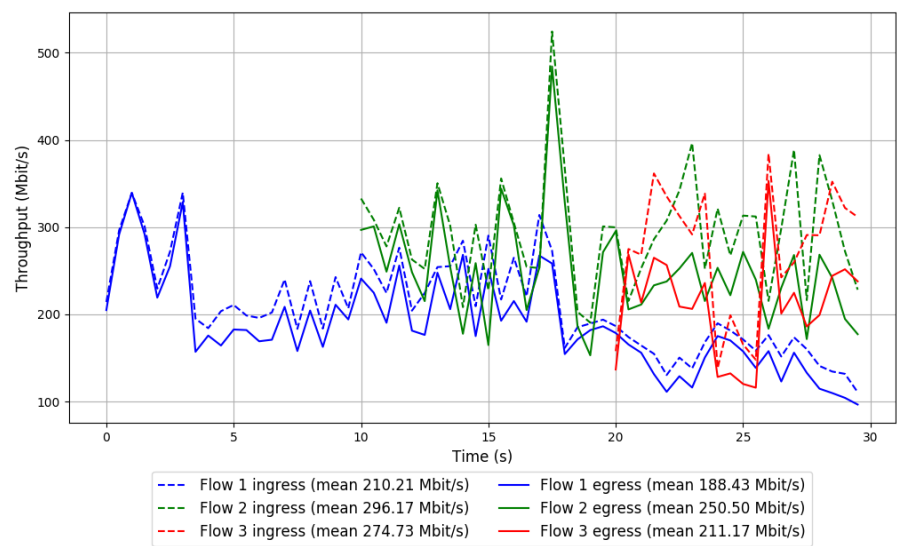


Run 7: Statistics of Verus

Start at: 2017-10-12 09:18:03  
End at: 2017-10-12 09:18:33  
Local clock offset: 2.123 ms  
Remote clock offset: -1.861 ms

# Below is generated by plot.py at 2017-10-12 13:54:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 425.06 Mbit/s  
95th percentile per-packet one-way delay: 25.767 ms  
Loss rate: 14.70%  
-- Flow 1:  
Average throughput: 188.43 Mbit/s  
95th percentile per-packet one-way delay: 32.395 ms  
Loss rate: 10.37%  
-- Flow 2:  
Average throughput: 250.50 Mbit/s  
95th percentile per-packet one-way delay: 23.404 ms  
Loss rate: 15.41%  
-- Flow 3:  
Average throughput: 211.17 Mbit/s  
95th percentile per-packet one-way delay: 20.855 ms  
Loss rate: 23.14%

Run 7: Report of Verus — Data Link

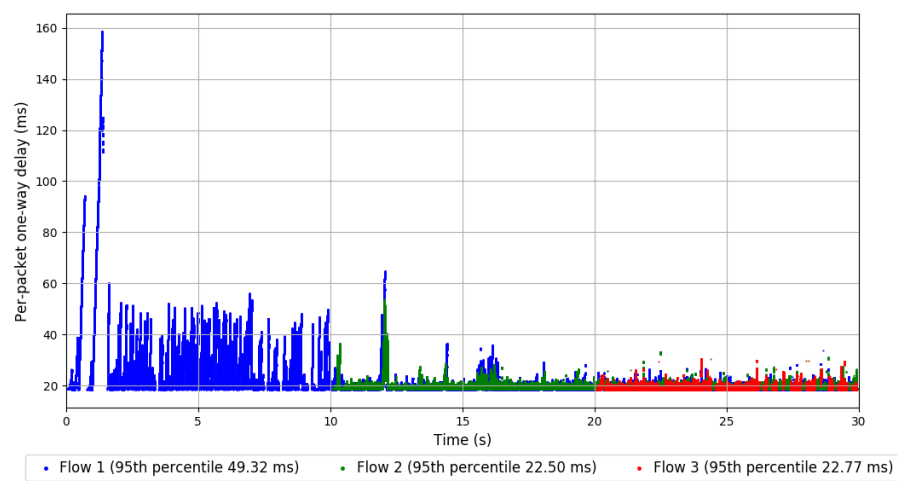
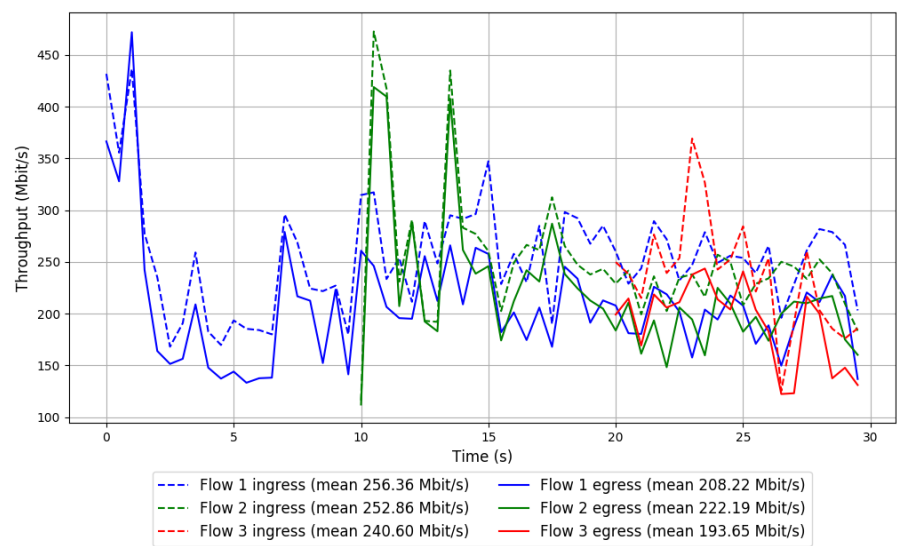


Run 8: Statistics of Verus

Start at: 2017-10-12 09:38:45  
End at: 2017-10-12 09:39:15  
Local clock offset: 1.851 ms  
Remote clock offset: -2.288 ms

# Below is generated by plot.py at 2017-10-12 13:55:35  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 419.61 Mbit/s  
95th percentile per-packet one-way delay: 38.474 ms  
Loss rate: 16.67%  
-- Flow 1:  
Average throughput: 208.22 Mbit/s  
95th percentile per-packet one-way delay: 49.321 ms  
Loss rate: 18.78%  
-- Flow 2:  
Average throughput: 222.19 Mbit/s  
95th percentile per-packet one-way delay: 22.495 ms  
Loss rate: 12.13%  
-- Flow 3:  
Average throughput: 193.65 Mbit/s  
95th percentile per-packet one-way delay: 22.770 ms  
Loss rate: 19.50%

Run 8: Report of Verus — Data Link



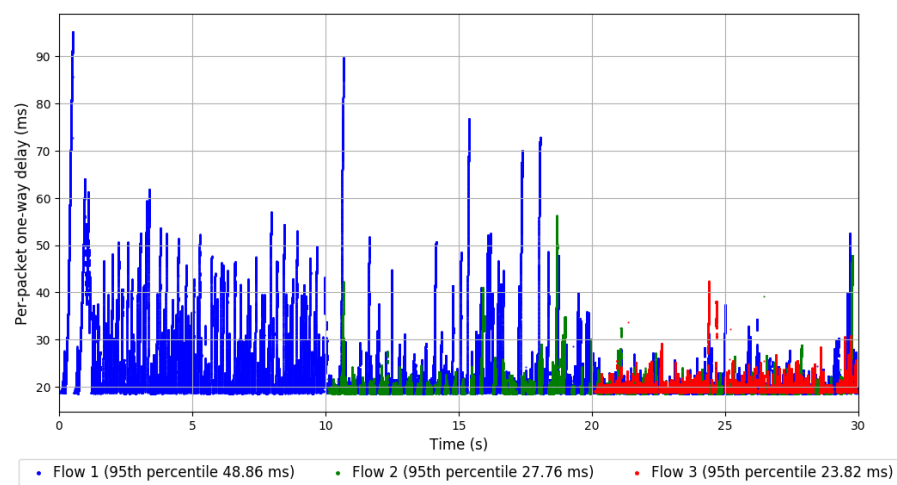
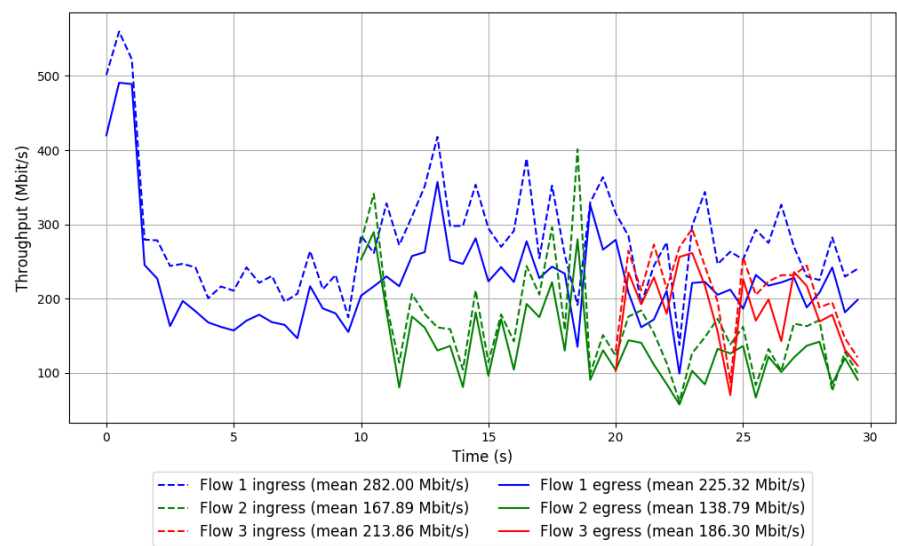
Run 9: Statistics of Verus

Start at: 2017-10-12 09:59:36  
End at: 2017-10-12 10:00:06  
Local clock offset: 1.395 ms  
Remote clock offset: -2.275 ms

# Below is generated by plot.py at 2017-10-12 13:55:35  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 378.26 Mbit/s  
95th percentile per-packet one-way delay: 42.919 ms  
Loss rate: 18.32%  
-- Flow 1:  
Average throughput: 225.32 Mbit/s  
95th percentile per-packet one-way delay: 48.864 ms  
Loss rate: 20.10%  
-- Flow 2:  
Average throughput: 138.79 Mbit/s  
95th percentile per-packet one-way delay: 27.759 ms  
Loss rate: 17.25%  
-- Flow 3:  
Average throughput: 186.30 Mbit/s  
95th percentile per-packet one-way delay: 23.819 ms  
Loss rate: 12.89%



Run 9: Report of Verus — Data Link

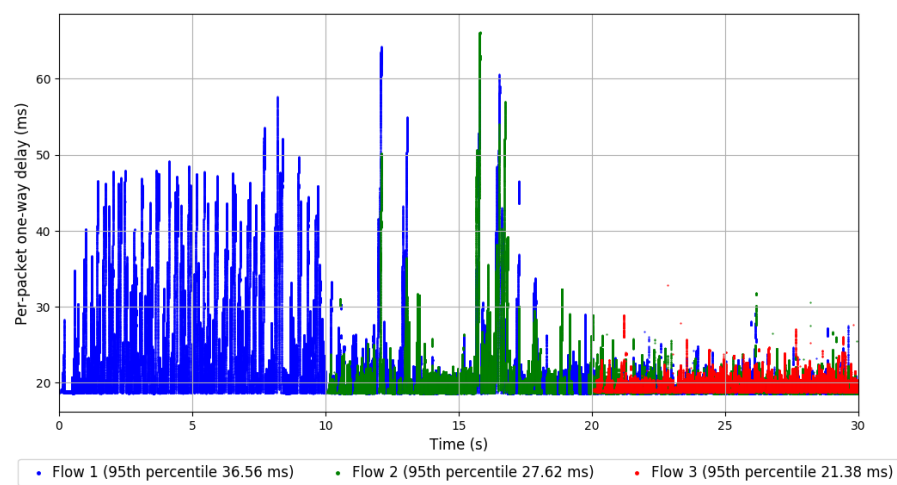
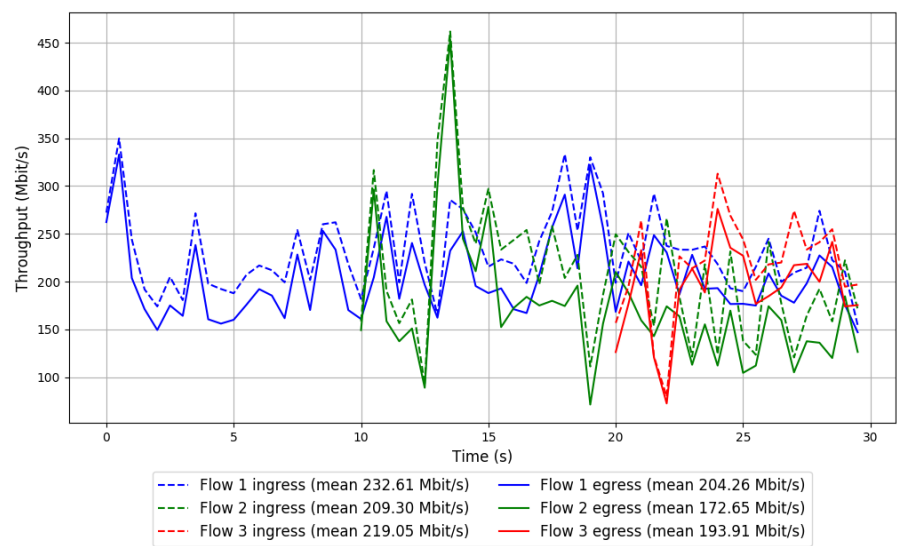


Run 10: Statistics of Verus

Start at: 2017-10-12 10:20:31  
End at: 2017-10-12 10:21:01  
Local clock offset: 1.115 ms  
Remote clock offset: -2.092 ms

# Below is generated by plot.py at 2017-10-12 13:57:34  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 383.31 Mbit/s  
95th percentile per-packet one-way delay: 31.048 ms  
Loss rate: 13.73%  
-- Flow 1:  
Average throughput: 204.26 Mbit/s  
95th percentile per-packet one-way delay: 36.557 ms  
Loss rate: 12.18%  
-- Flow 2:  
Average throughput: 172.65 Mbit/s  
95th percentile per-packet one-way delay: 27.619 ms  
Loss rate: 17.50%  
-- Flow 3:  
Average throughput: 193.91 Mbit/s  
95th percentile per-packet one-way delay: 21.376 ms  
Loss rate: 11.46%

Run 10: Report of Verus — Data Link

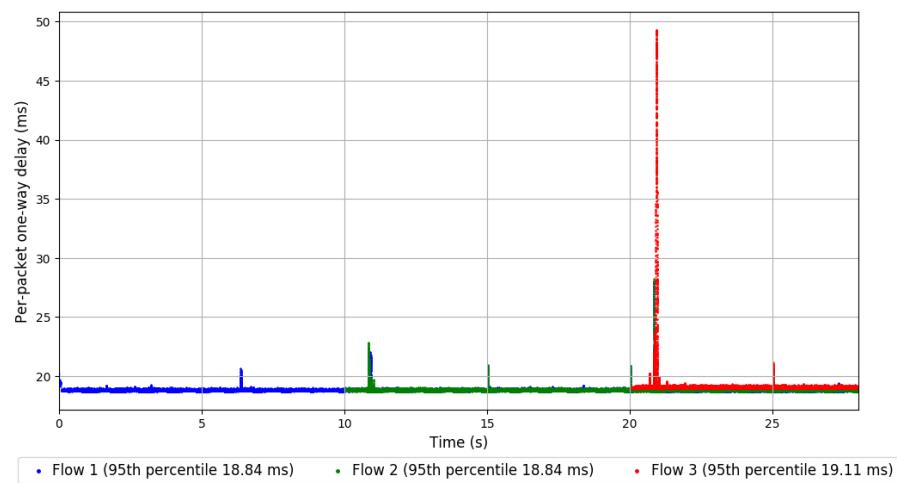
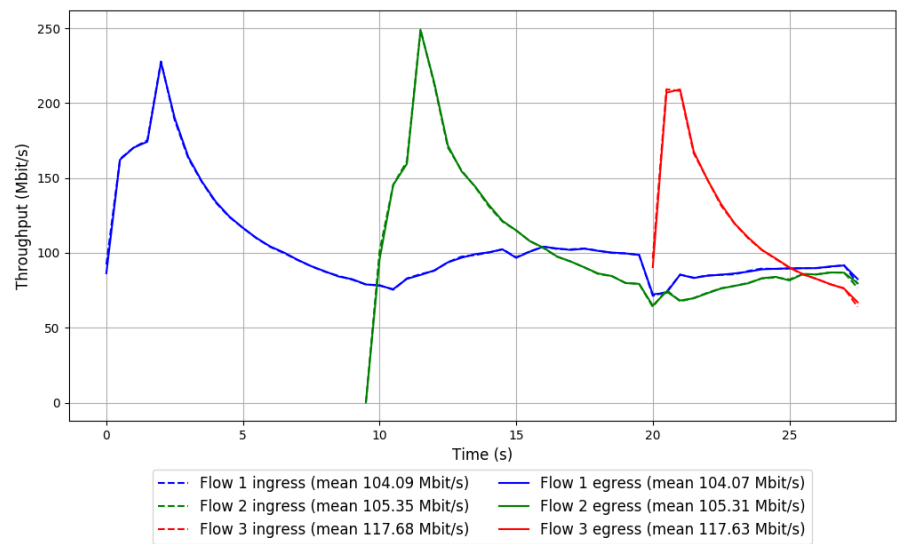


Run 1: Statistics of Copa

Start at: 2017-10-12 07:24:08  
End at: 2017-10-12 07:24:38  
Local clock offset: 1.528 ms  
Remote clock offset: -1.264 ms

# Below is generated by plot.py at 2017-10-12 13:57:34  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 205.14 Mbit/s  
95th percentile per-packet one-way delay: 19.018 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 104.07 Mbit/s  
95th percentile per-packet one-way delay: 18.836 ms  
Loss rate: 0.03%  
-- Flow 2:  
Average throughput: 105.31 Mbit/s  
95th percentile per-packet one-way delay: 18.836 ms  
Loss rate: 0.04%  
-- Flow 3:  
Average throughput: 117.63 Mbit/s  
95th percentile per-packet one-way delay: 19.112 ms  
Loss rate: 0.05%

Run 1: Report of Copa — Data Link

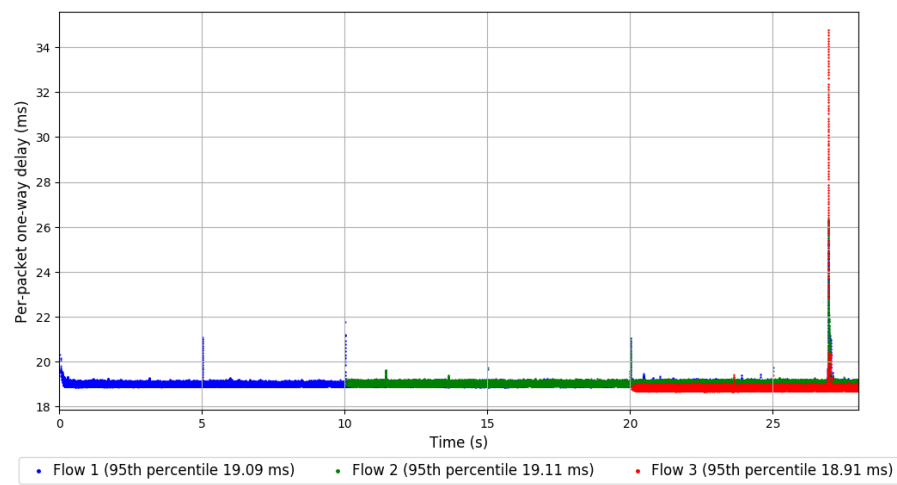
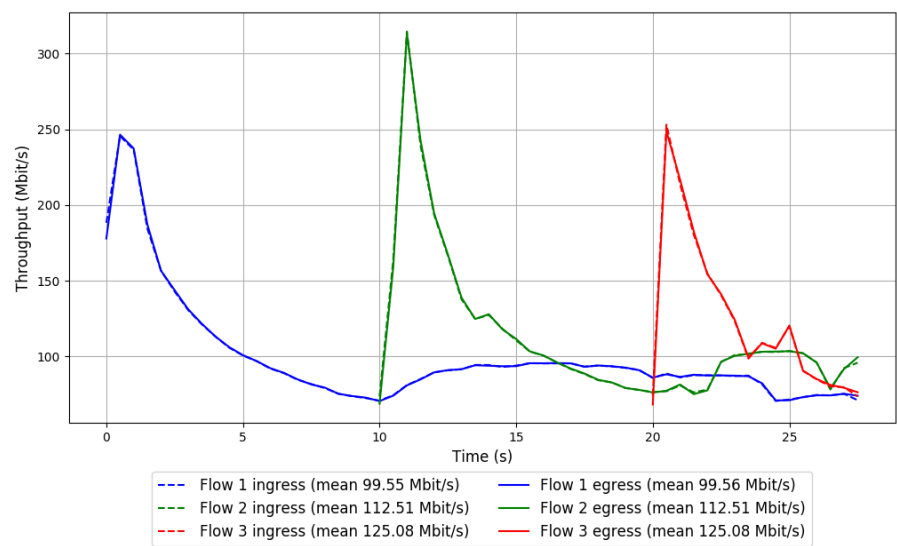


Run 2: Statistics of Copa

Start at: 2017-10-12 07:44:47  
End at: 2017-10-12 07:45:17  
Local clock offset: 1.933 ms  
Remote clock offset: -1.453 ms

# Below is generated by plot.py at 2017-10-12 13:58:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 207.20 Mbit/s  
95th percentile per-packet one-way delay: 19.095 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 99.56 Mbit/s  
95th percentile per-packet one-way delay: 19.092 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 112.51 Mbit/s  
95th percentile per-packet one-way delay: 19.112 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 125.08 Mbit/s  
95th percentile per-packet one-way delay: 18.912 ms  
Loss rate: 0.00%

Run 2: Report of Copa — Data Link



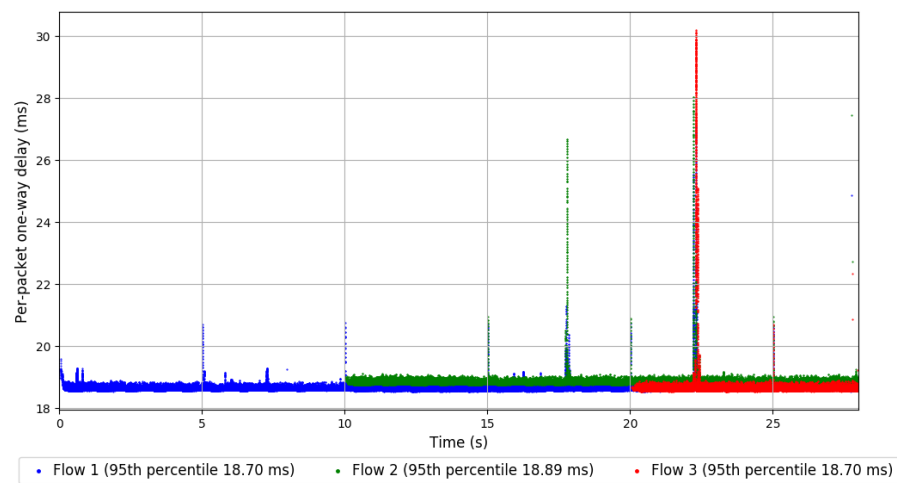
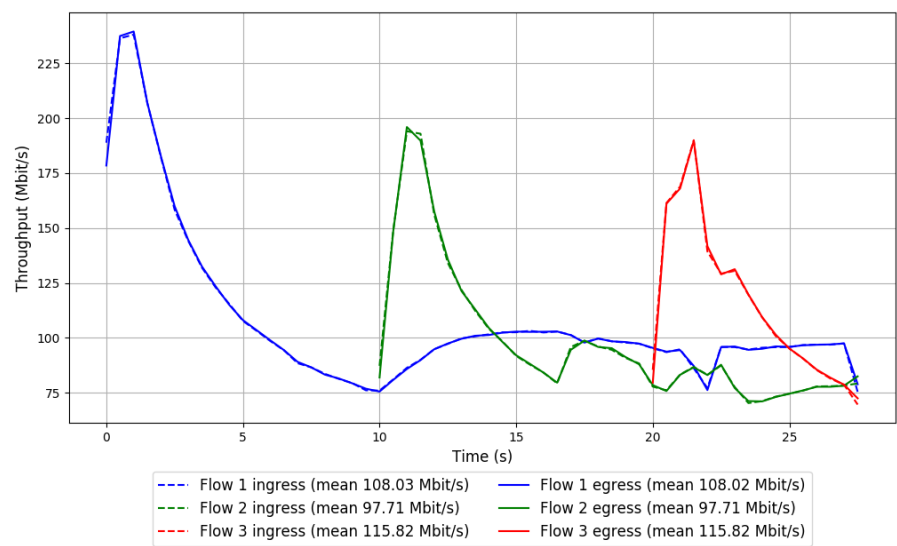
Run 3: Statistics of Copa

Start at: 2017-10-12 08:05:57  
End at: 2017-10-12 08:06:27  
Local clock offset: 2.294 ms  
Remote clock offset: -1.507 ms

# Below is generated by plot.py at 2017-10-12 13:58:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 203.57 Mbit/s  
95th percentile per-packet one-way delay: 18.850 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 108.02 Mbit/s  
95th percentile per-packet one-way delay: 18.699 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 97.71 Mbit/s  
95th percentile per-packet one-way delay: 18.894 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 115.82 Mbit/s  
95th percentile per-packet one-way delay: 18.697 ms  
Loss rate: 0.00%



Run 3: Report of Copa — Data Link

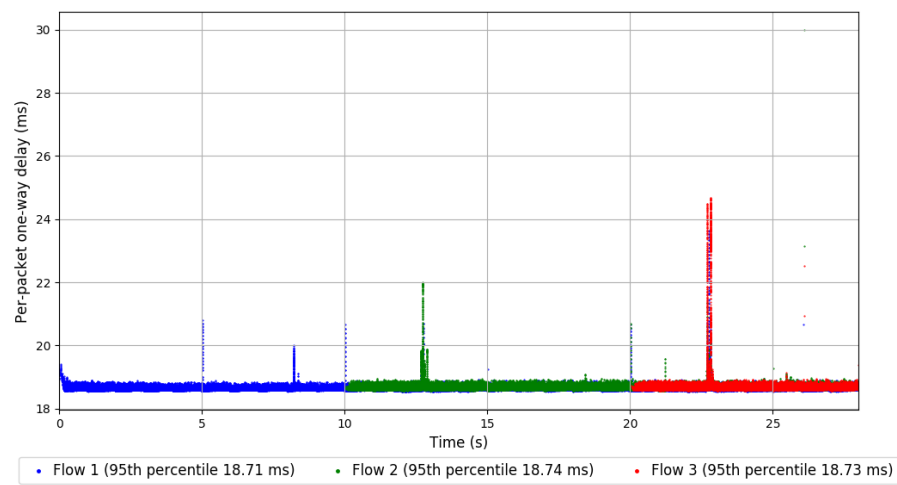
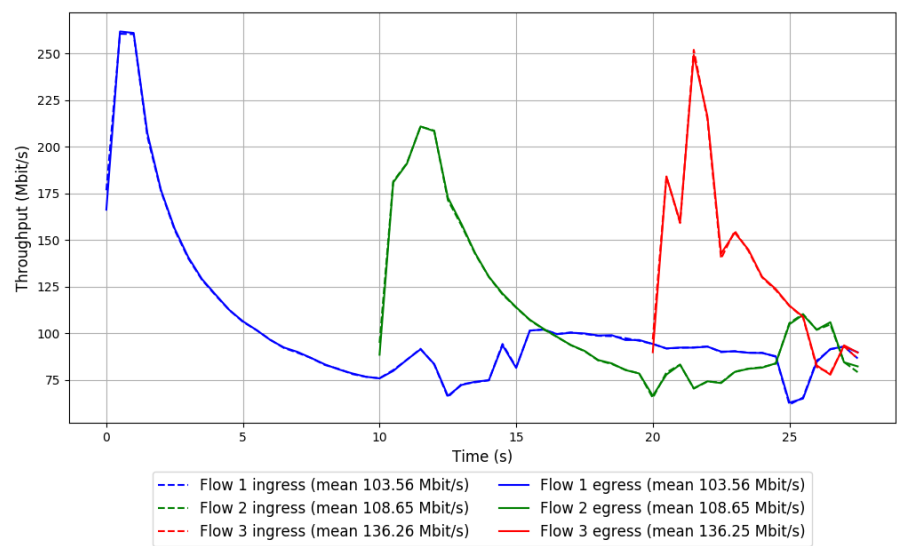


Run 4: Statistics of Copa

Start at: 2017-10-12 08:27:09  
End at: 2017-10-12 08:27:39  
Local clock offset: 2.371 ms  
Remote clock offset: -1.582 ms

```
# Below is generated by plot.py at 2017-10-12 13:59:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 211.88 Mbit/s
95th percentile per-packet one-way delay: 18.723 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 103.56 Mbit/s
95th percentile per-packet one-way delay: 18.710 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 108.65 Mbit/s
95th percentile per-packet one-way delay: 18.736 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 136.25 Mbit/s
95th percentile per-packet one-way delay: 18.731 ms
Loss rate: 0.00%
```

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-10-12 08:47:58

End at: 2017-10-12 08:48:28

Local clock offset: 2.298 ms

Remote clock offset: -1.69 ms

# Below is generated by plot.py at 2017-10-12 13:59:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 206.22 Mbit/s

95th percentile per-packet one-way delay: 19.024 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 101.80 Mbit/s

95th percentile per-packet one-way delay: 19.035 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 110.53 Mbit/s

95th percentile per-packet one-way delay: 18.835 ms

Loss rate: 0.02%

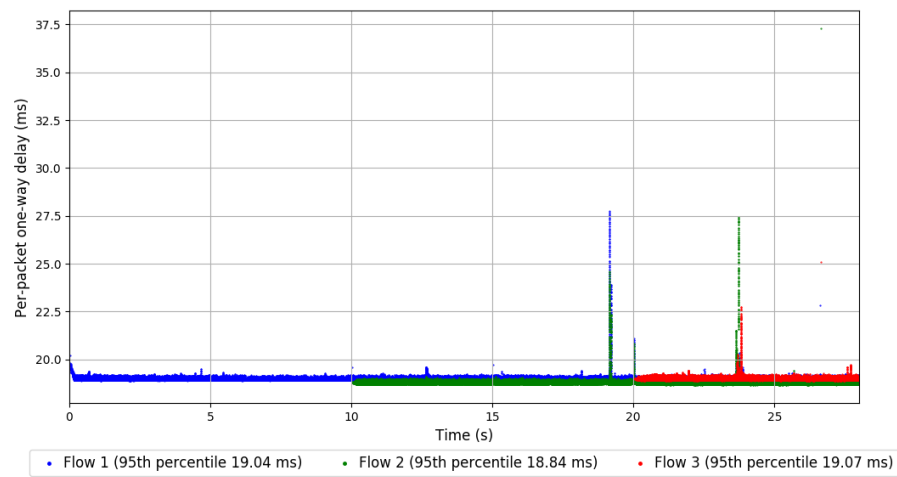
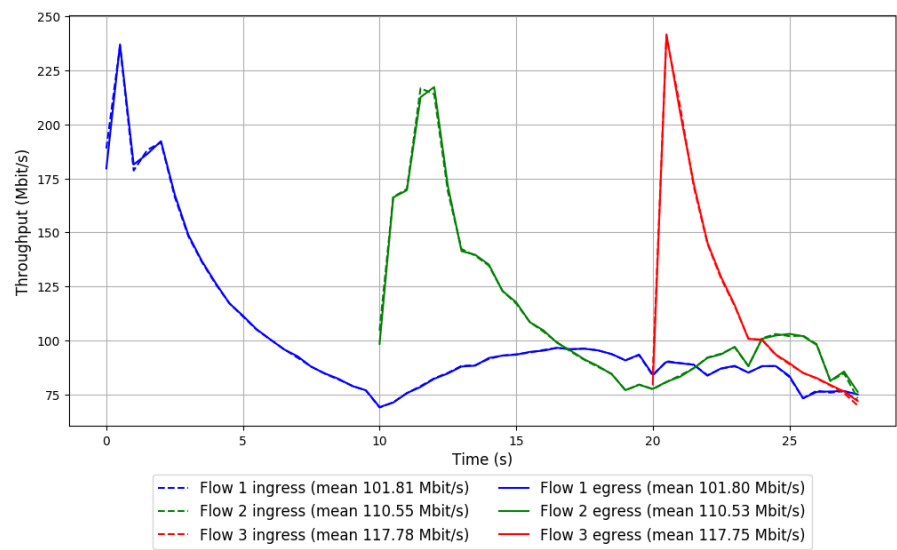
-- Flow 3:

Average throughput: 117.75 Mbit/s

95th percentile per-packet one-way delay: 19.065 ms

Loss rate: 0.02%

Run 5: Report of Copa — Data Link

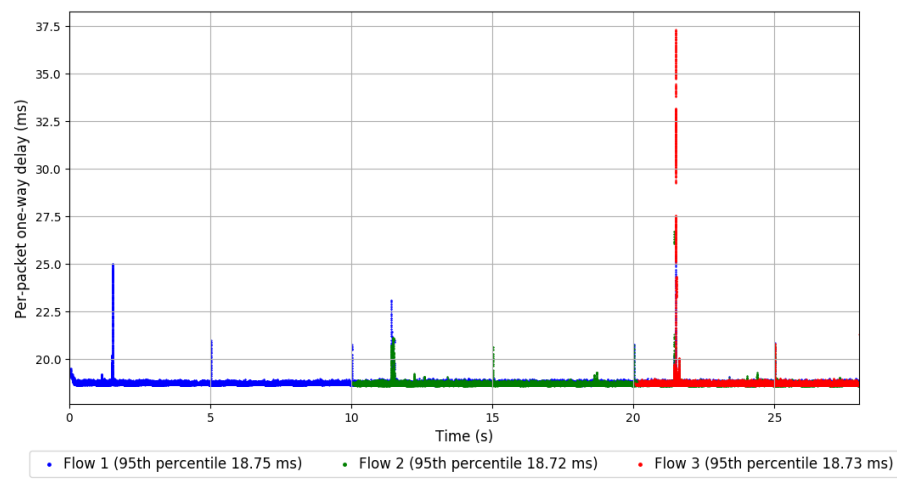
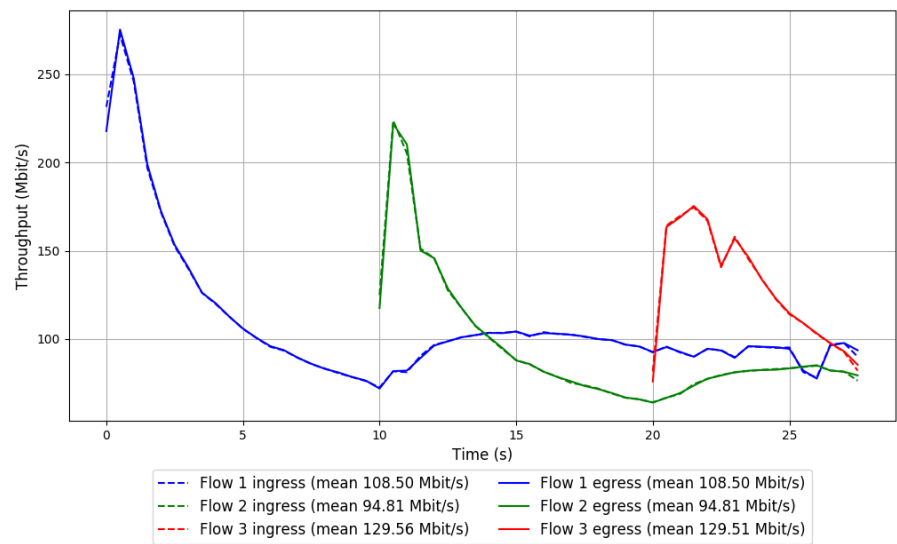


Run 6: Statistics of Copa

Start at: 2017-10-12 09:08:30  
End at: 2017-10-12 09:09:00  
Local clock offset: 2.355 ms  
Remote clock offset: -1.847 ms

# Below is generated by plot.py at 2017-10-12 14:00:29  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 206.09 Mbit/s  
95th percentile per-packet one-way delay: 18.738 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 108.50 Mbit/s  
95th percentile per-packet one-way delay: 18.747 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 94.81 Mbit/s  
95th percentile per-packet one-way delay: 18.720 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 129.51 Mbit/s  
95th percentile per-packet one-way delay: 18.732 ms  
Loss rate: 0.01%

Run 6: Report of Copa — Data Link



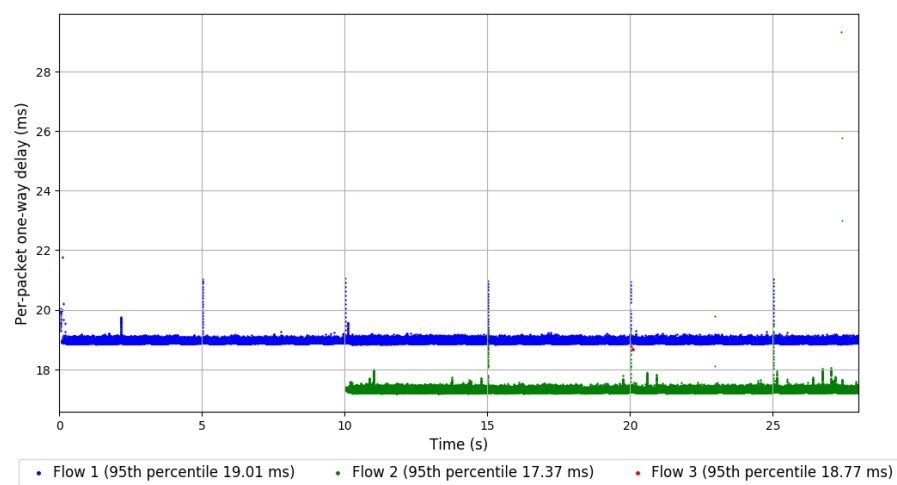
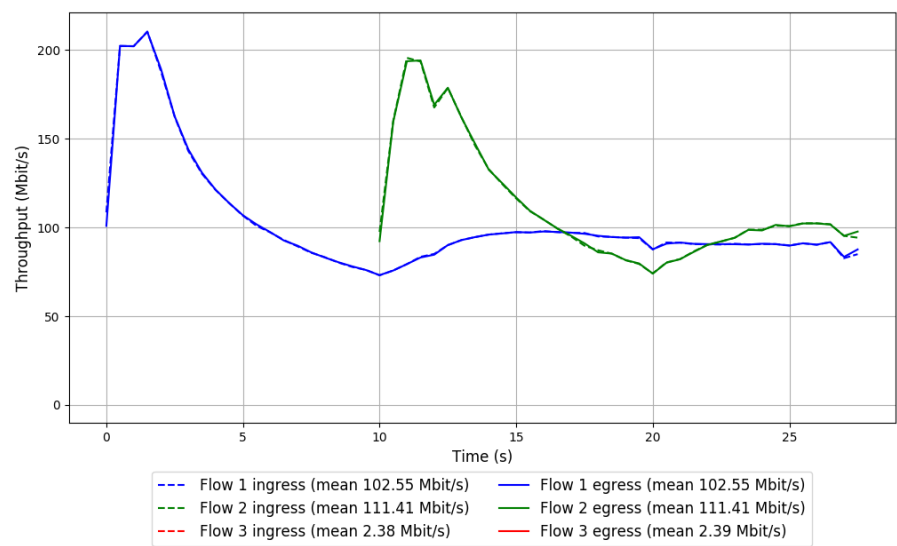
Run 7: Statistics of Copa

Start at: 2017-10-12 09:29:17  
End at: 2017-10-12 09:29:47  
Local clock offset: 1.933 ms  
Remote clock offset: -2.088 ms

# Below is generated by plot.py at 2017-10-12 14:00:29  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 174.08 Mbit/s  
95th percentile per-packet one-way delay: 18.987 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 102.55 Mbit/s  
95th percentile per-packet one-way delay: 19.012 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 111.41 Mbit/s  
95th percentile per-packet one-way delay: 17.372 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 2.39 Mbit/s  
95th percentile per-packet one-way delay: 18.767 ms  
Loss rate: 0.00%



Run 7: Report of Copa — Data Link

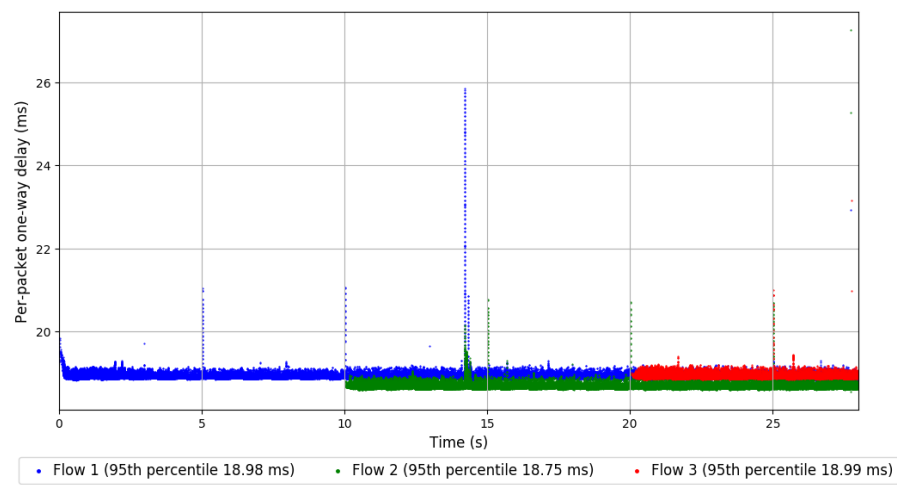
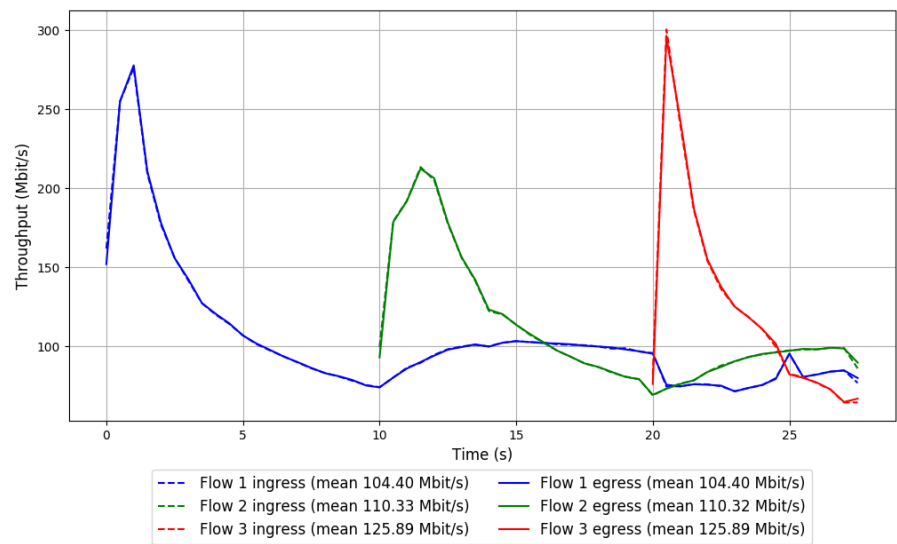


Run 8: Statistics of Copa

Start at: 2017-10-12 09:50:03  
End at: 2017-10-12 09:50:33  
Local clock offset: 1.573 ms  
Remote clock offset: -2.317 ms

```
# Below is generated by plot.py at 2017-10-12 14:02:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 210.91 Mbit/s
95th percentile per-packet one-way delay: 18.964 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 104.40 Mbit/s
95th percentile per-packet one-way delay: 18.977 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 110.32 Mbit/s
95th percentile per-packet one-way delay: 18.745 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 125.89 Mbit/s
95th percentile per-packet one-way delay: 18.991 ms
Loss rate: 0.01%
```

Run 8: Report of Copa — Data Link

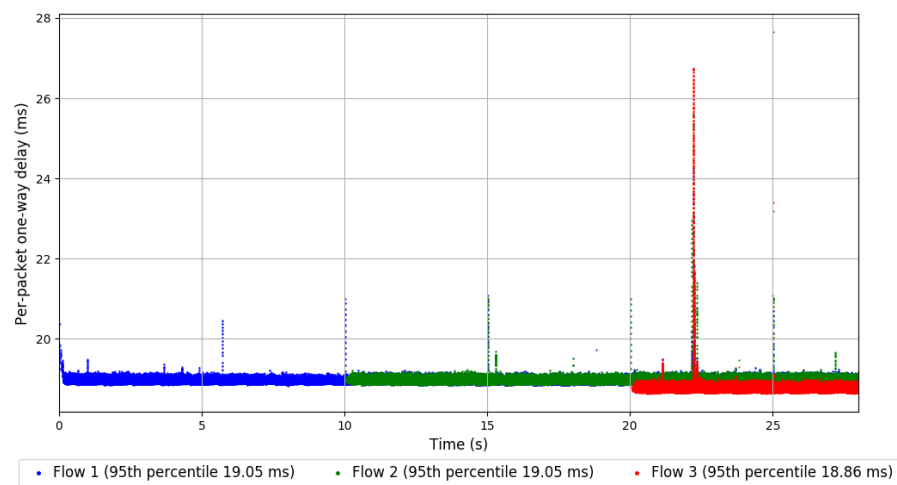
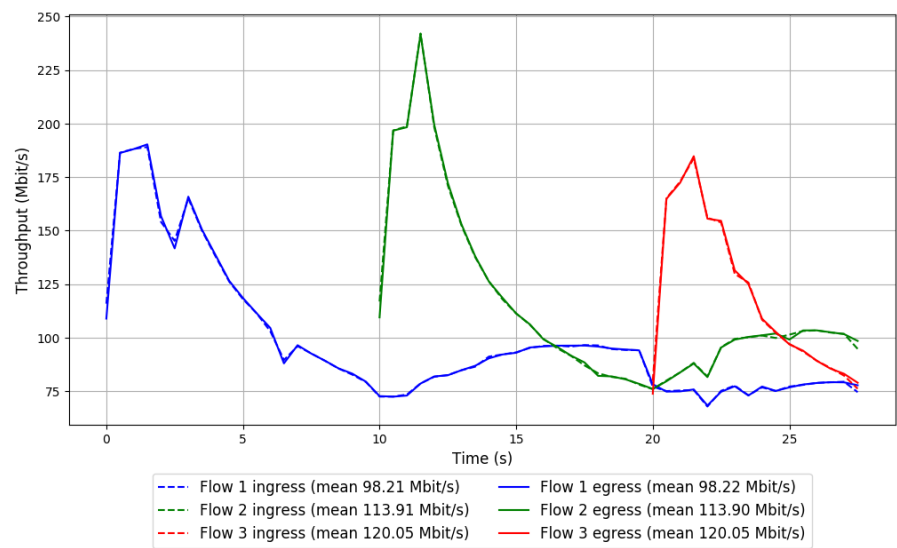


Run 9: Statistics of Copa

Start at: 2017-10-12 10:10:55  
End at: 2017-10-12 10:11:25  
Local clock offset: 1.224 ms  
Remote clock offset: -2.218 ms

# Below is generated by plot.py at 2017-10-12 14:02:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 205.30 Mbit/s  
95th percentile per-packet one-way delay: 19.038 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 98.22 Mbit/s  
95th percentile per-packet one-way delay: 19.046 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 113.90 Mbit/s  
95th percentile per-packet one-way delay: 19.047 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 120.05 Mbit/s  
95th percentile per-packet one-way delay: 18.864 ms  
Loss rate: 0.00%

Run 9: Report of Copa — Data Link

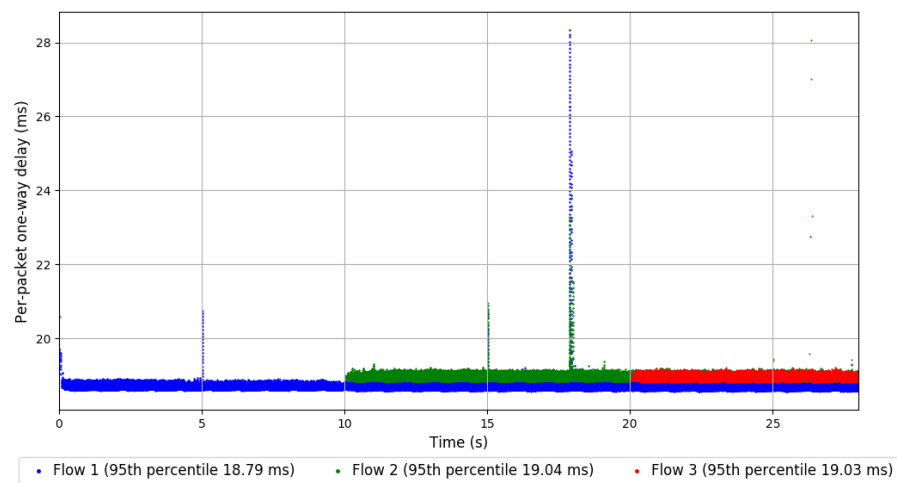
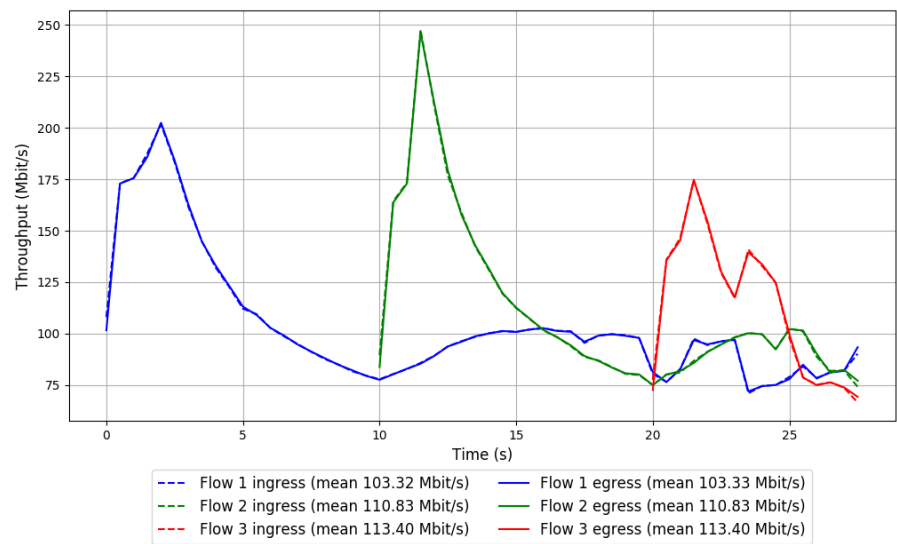


Run 10: Statistics of Copa

Start at: 2017-10-12 10:31:59  
End at: 2017-10-12 10:32:29  
Local clock offset: 0.654 ms  
Remote clock offset: -1.947 ms

# Below is generated by plot.py at 2017-10-12 14:03:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 206.63 Mbit/s  
95th percentile per-packet one-way delay: 19.006 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 103.33 Mbit/s  
95th percentile per-packet one-way delay: 18.785 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 110.83 Mbit/s  
95th percentile per-packet one-way delay: 19.044 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 113.40 Mbit/s  
95th percentile per-packet one-way delay: 19.033 ms  
Loss rate: 0.00%

Run 10: Report of Copa — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-10-12 07:20:06

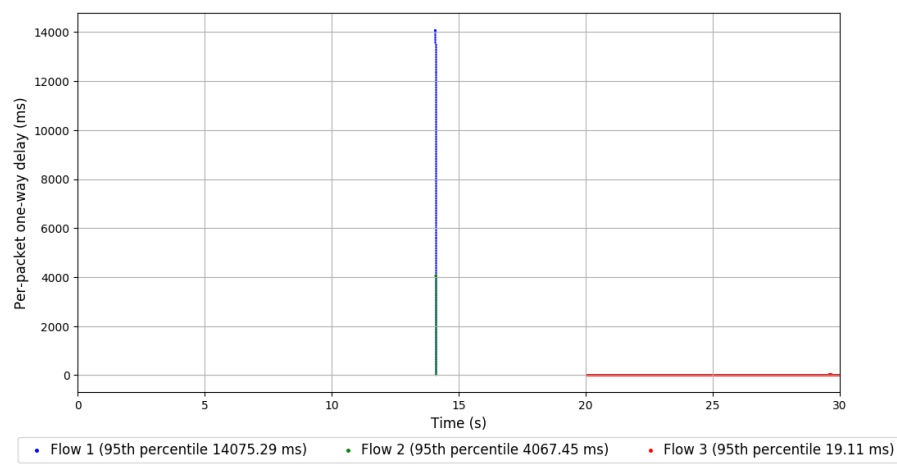
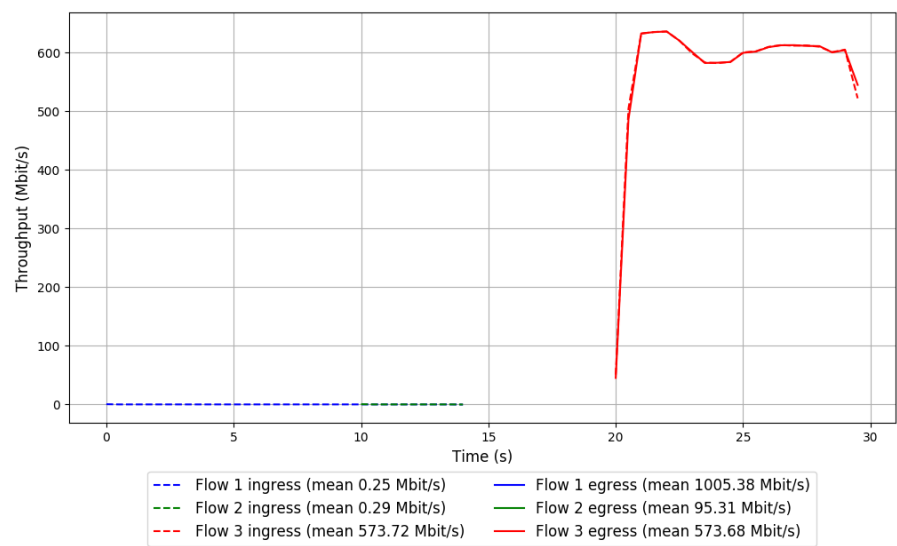
End at: 2017-10-12 07:20:36

Local clock offset: 1.495 ms

Remote clock offset: -1.212 ms



Run 1: Report of CalibratedKoho — Data Link

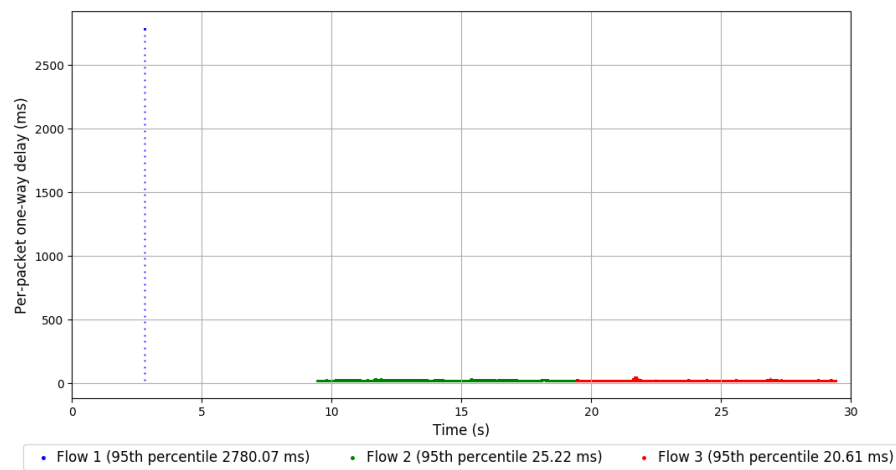
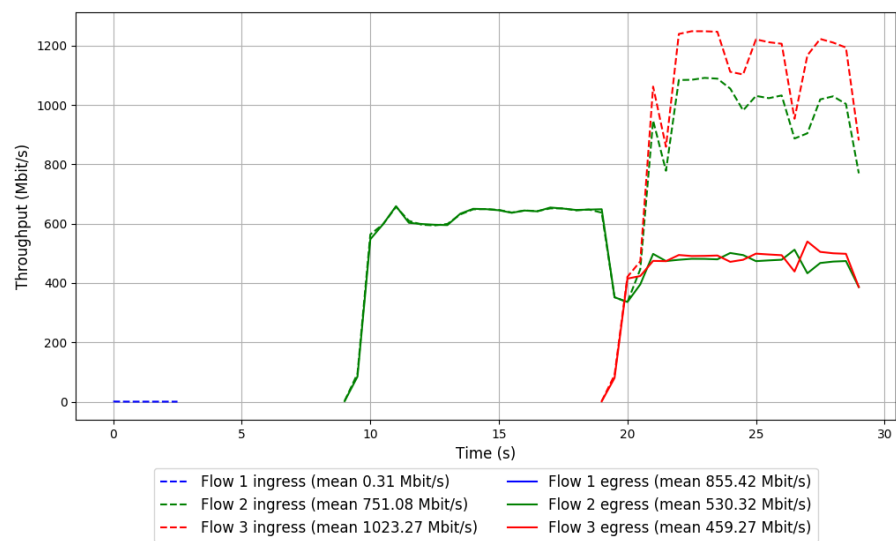


Run 2: Statistics of CalibratedKoho

Start at: 2017-10-12 07:40:24  
End at: 2017-10-12 07:40:54  
Local clock offset: 1.83 ms  
Remote clock offset: -1.326 ms

# Below is generated by plot.py at 2017-10-12 14:06:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 569.49 Mbit/s  
95th percentile per-packet one-way delay: 24.881 ms  
Loss rate: 39.79%  
-- Flow 1:  
Average throughput: 855.42 Mbit/s  
95th percentile per-packet one-way delay: 2780.075 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 530.32 Mbit/s  
95th percentile per-packet one-way delay: 25.218 ms  
Loss rate: 29.39%  
-- Flow 3:  
Average throughput: 459.27 Mbit/s  
95th percentile per-packet one-way delay: 20.615 ms  
Loss rate: 55.11%

Run 2: Report of CalibratedKoho — Data Link

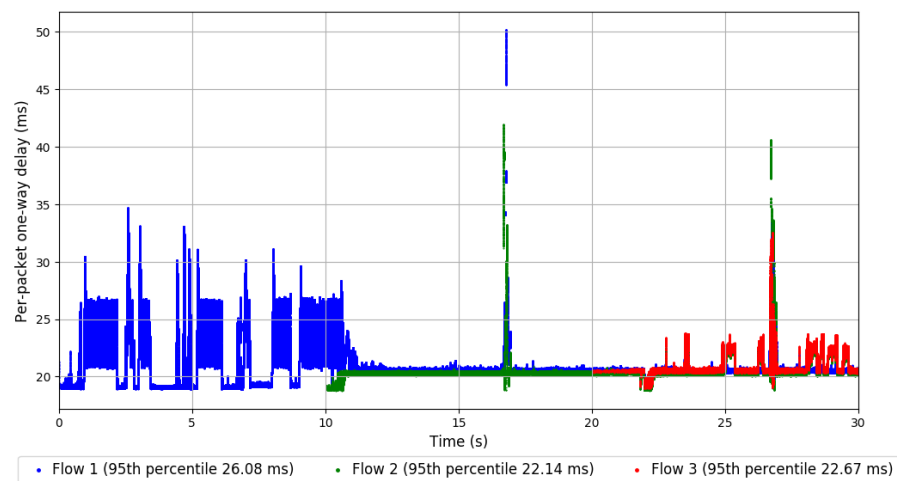
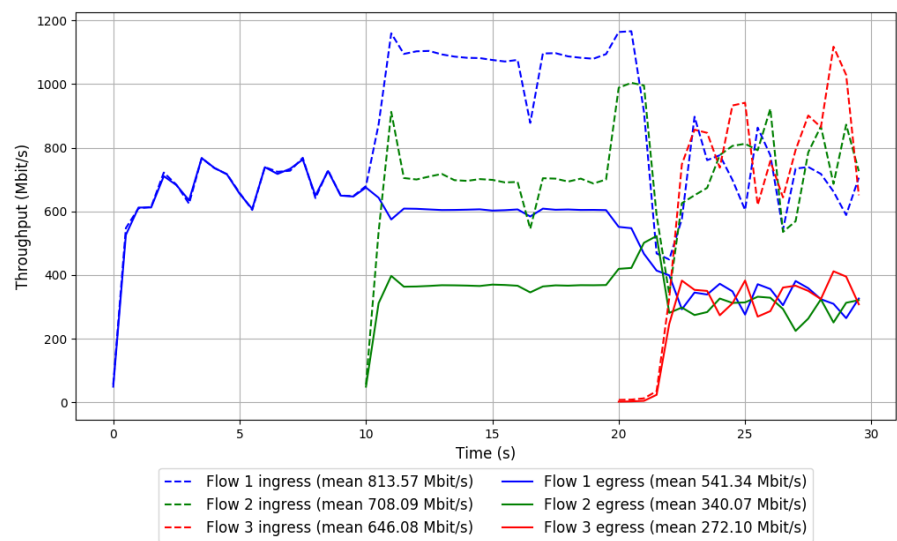


Run 3: Statistics of CalibratedKoho

Start at: 2017-10-12 08:01:09  
End at: 2017-10-12 08:01:39  
Local clock offset: 2.171 ms  
Remote clock offset: -1.497 ms

# Below is generated by plot.py at 2017-10-12 14:13:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 857.99 Mbit/s  
95th percentile per-packet one-way delay: 25.326 ms  
Loss rate: 42.77%  
-- Flow 1:  
Average throughput: 541.34 Mbit/s  
95th percentile per-packet one-way delay: 26.082 ms  
Loss rate: 33.46%  
-- Flow 2:  
Average throughput: 340.07 Mbit/s  
95th percentile per-packet one-way delay: 22.142 ms  
Loss rate: 51.97%  
-- Flow 3:  
Average throughput: 272.10 Mbit/s  
95th percentile per-packet one-way delay: 22.668 ms  
Loss rate: 57.88%

Run 3: Report of CalibratedKoho — Data Link

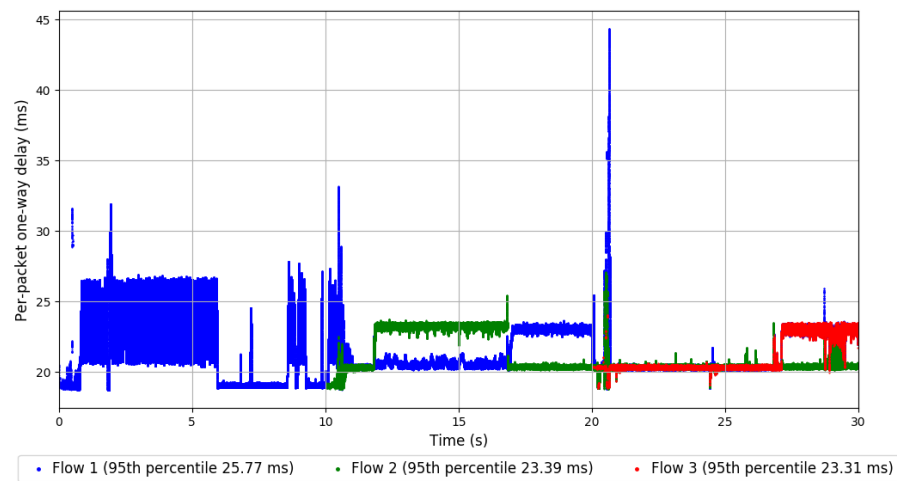
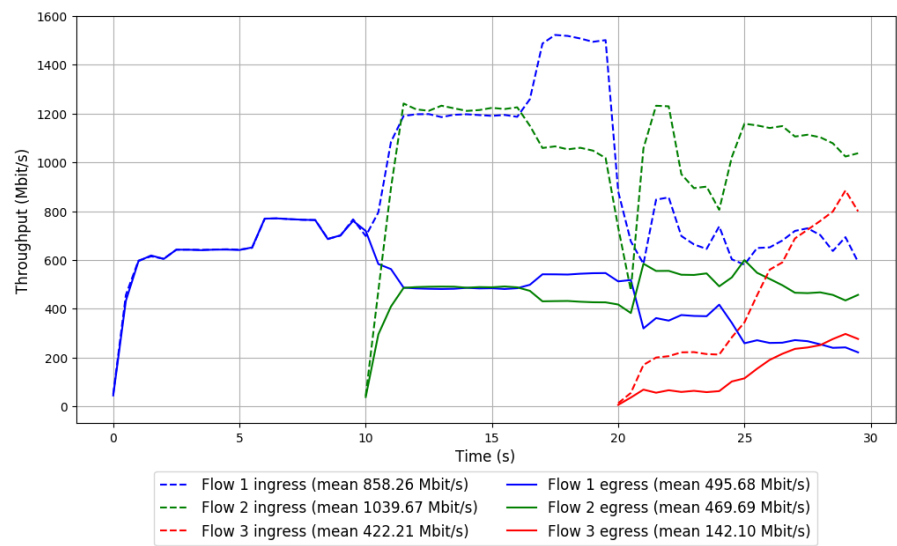


Run 4: Statistics of CalibratedKoho

Start at: 2017-10-12 08:22:18  
End at: 2017-10-12 08:22:48  
Local clock offset: 2.352 ms  
Remote clock offset: -1.477 ms

# Below is generated by plot.py at 2017-10-12 14:14:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 855.26 Mbit/s  
95th percentile per-packet one-way delay: 24.898 ms  
Loss rate: 49.39%  
-- Flow 1:  
Average throughput: 495.68 Mbit/s  
95th percentile per-packet one-way delay: 25.766 ms  
Loss rate: 42.24%  
-- Flow 2:  
Average throughput: 469.69 Mbit/s  
95th percentile per-packet one-way delay: 23.391 ms  
Loss rate: 54.82%  
-- Flow 3:  
Average throughput: 142.10 Mbit/s  
95th percentile per-packet one-way delay: 23.311 ms  
Loss rate: 66.34%

Run 4: Report of CalibratedKoho — Data Link



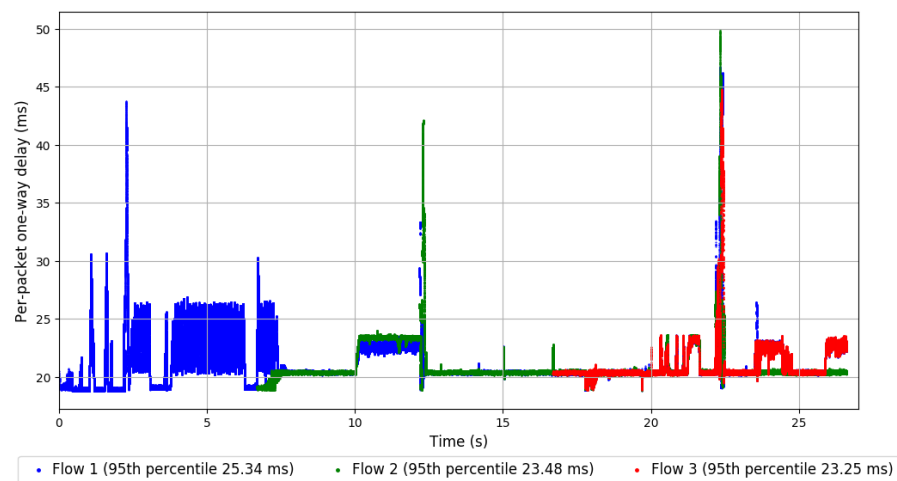
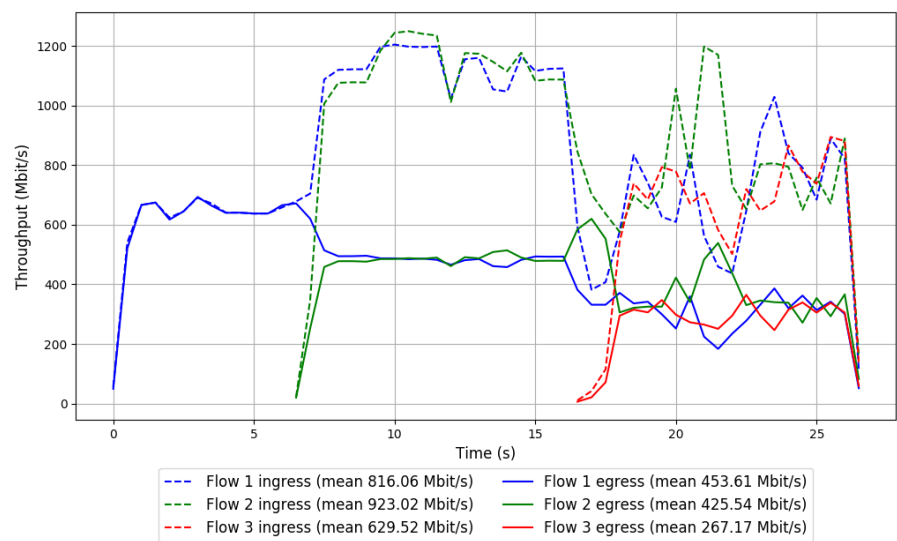
Run 5: Statistics of CalibratedKoho

Start at: 2017-10-12 08:43:13  
End at: 2017-10-12 08:43:43  
Local clock offset: 2.41 ms  
Remote clock offset: -1.648 ms

# Below is generated by plot.py at 2017-10-12 14:14:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 872.50 Mbit/s  
95th percentile per-packet one-way delay: 24.375 ms  
Loss rate: 49.95%  
-- Flow 1:  
Average throughput: 453.61 Mbit/s  
95th percentile per-packet one-way delay: 25.341 ms  
Loss rate: 44.41%  
-- Flow 2:  
Average throughput: 425.54 Mbit/s  
95th percentile per-packet one-way delay: 23.482 ms  
Loss rate: 53.89%  
-- Flow 3:  
Average throughput: 267.17 Mbit/s  
95th percentile per-packet one-way delay: 23.246 ms  
Loss rate: 57.56%



Run 5: Report of CalibratedKoho — Data Link

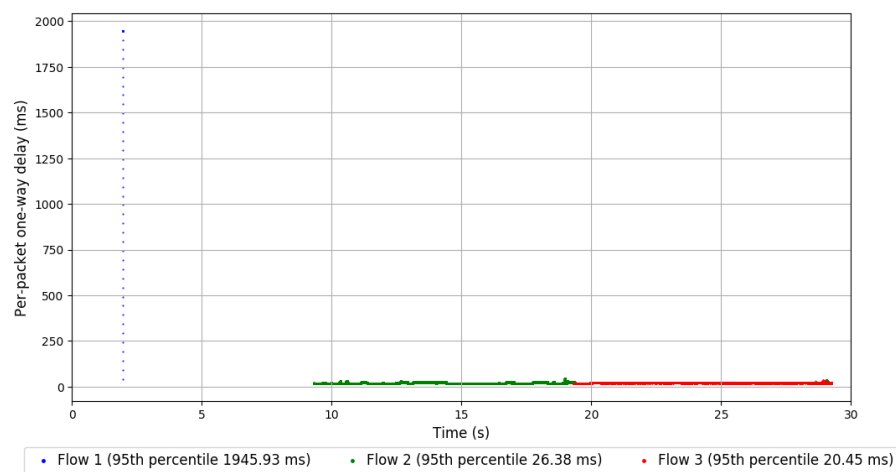
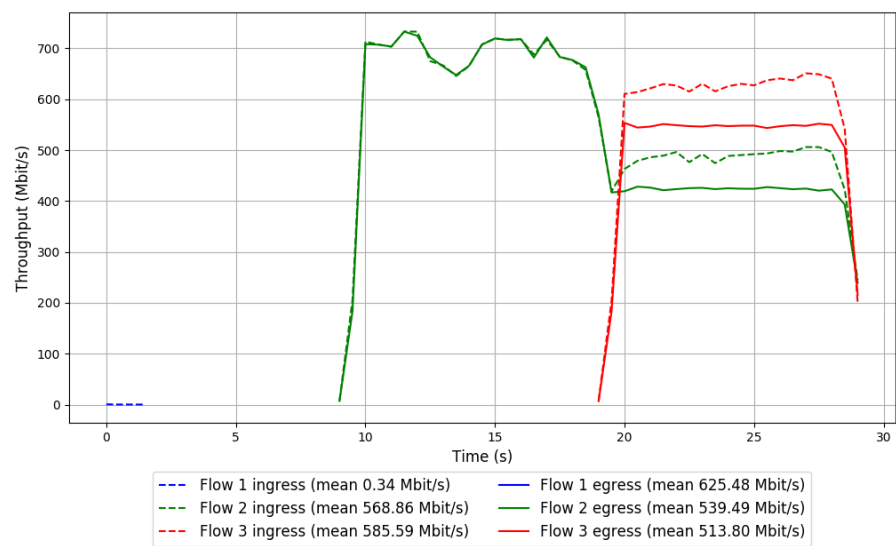


Run 6: Statistics of CalibratedKoho

Start at: 2017-10-12 09:04:09  
End at: 2017-10-12 09:04:39  
Local clock offset: 2.312 ms  
Remote clock offset: -1.794 ms

# Below is generated by plot.py at 2017-10-12 14:14:59  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 581.57 Mbit/s  
95th percentile per-packet one-way delay: 25.601 ms  
Loss rate: 7.56%  
-- Flow 1:  
Average throughput: 625.48 Mbit/s  
95th percentile per-packet one-way delay: 1945.934 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 539.49 Mbit/s  
95th percentile per-packet one-way delay: 26.377 ms  
Loss rate: 5.16%  
-- Flow 3:  
Average throughput: 513.80 Mbit/s  
95th percentile per-packet one-way delay: 20.452 ms  
Loss rate: 12.24%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-10-12 09:24:36

End at: 2017-10-12 09:25:06

Local clock offset: 2.106 ms

Remote clock offset: -1.9 ms

# Below is generated by plot.py at 2017-10-12 14:14:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 874.65 Mbit/s

95th percentile per-packet one-way delay: 23.080 ms

Loss rate: 41.94%

-- Flow 1:

Average throughput: 473.22 Mbit/s

95th percentile per-packet one-way delay: 23.859 ms

Loss rate: 33.67%

-- Flow 2:

Average throughput: 350.78 Mbit/s

95th percentile per-packet one-way delay: 22.729 ms

Loss rate: 43.45%

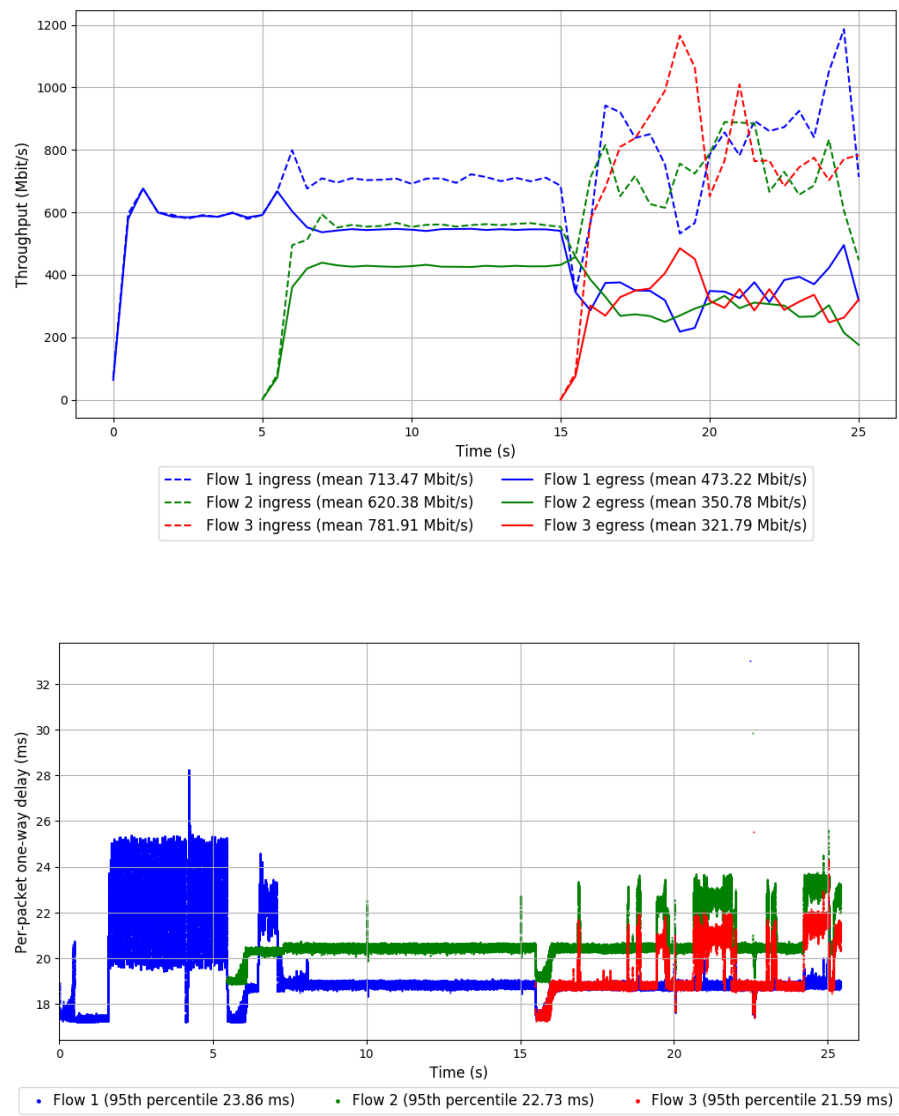
-- Flow 3:

Average throughput: 321.79 Mbit/s

95th percentile per-packet one-way delay: 21.588 ms

Loss rate: 58.84%

Run 7: Report of CalibratedKoho — Data Link

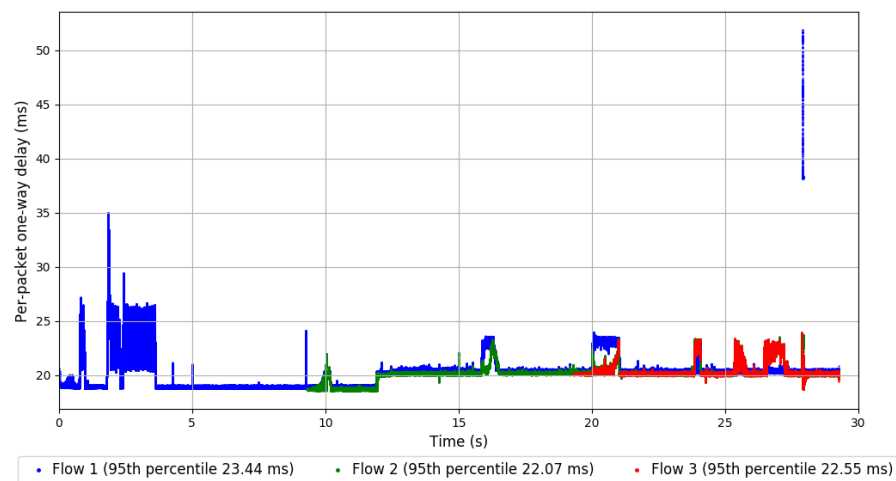
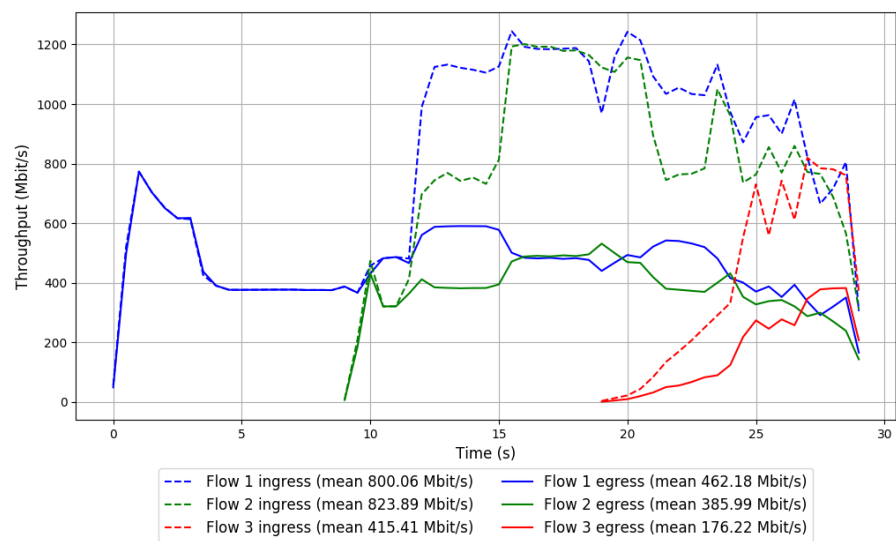


Run 8: Statistics of CalibratedKoho

Start at: 2017-10-12 09:45:19  
End at: 2017-10-12 09:45:49  
Local clock offset: 1.759 ms  
Remote clock offset: -2.205 ms

# Below is generated by plot.py at 2017-10-12 14:15:35  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 785.54 Mbit/s  
95th percentile per-packet one-way delay: 23.079 ms  
Loss rate: 47.75%  
-- Flow 1:  
Average throughput: 462.18 Mbit/s  
95th percentile per-packet one-way delay: 23.441 ms  
Loss rate: 42.23%  
-- Flow 2:  
Average throughput: 385.99 Mbit/s  
95th percentile per-packet one-way delay: 22.070 ms  
Loss rate: 53.15%  
-- Flow 3:  
Average throughput: 176.22 Mbit/s  
95th percentile per-packet one-way delay: 22.555 ms  
Loss rate: 57.58%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-10-12 10:06:08

End at: 2017-10-12 10:06:38

Local clock offset: 1.275 ms

Remote clock offset: -2.15 ms

# Below is generated by plot.py at 2017-10-12 14:17:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 850.13 Mbit/s

95th percentile per-packet one-way delay: 25.661 ms

Loss rate: 47.23%

-- Flow 1:

Average throughput: 493.42 Mbit/s

95th percentile per-packet one-way delay: 26.438 ms

Loss rate: 39.94%

-- Flow 2:

Average throughput: 394.16 Mbit/s

95th percentile per-packet one-way delay: 20.715 ms

Loss rate: 52.87%

-- Flow 3:

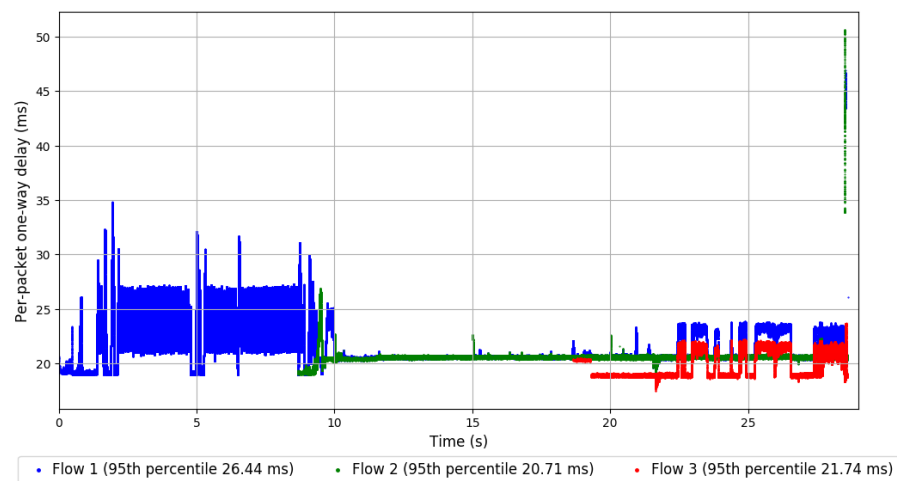
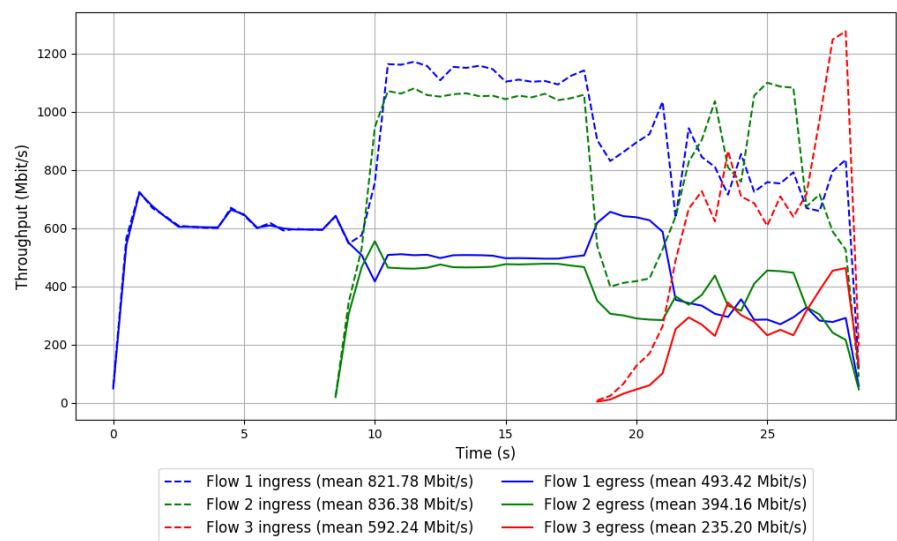
Average throughput: 235.20 Mbit/s

95th percentile per-packet one-way delay: 21.744 ms

Loss rate: 60.29%



Run 9: Report of CalibratedKoho — Data Link

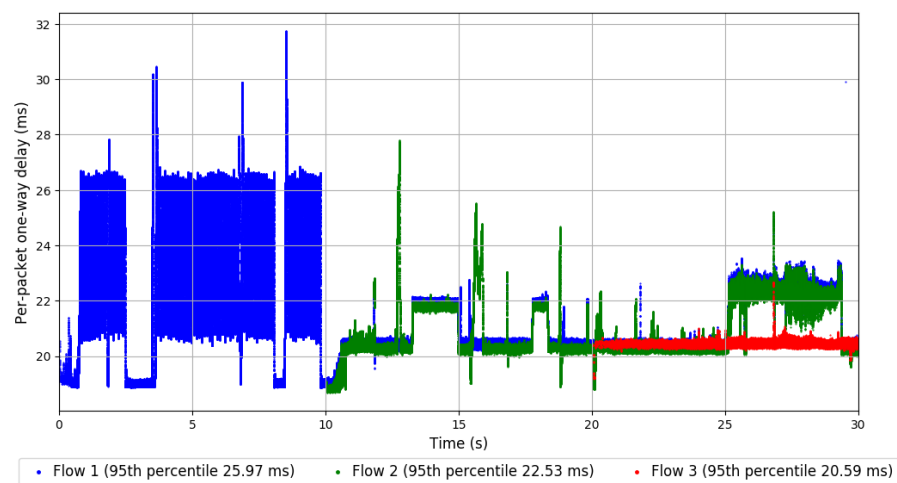
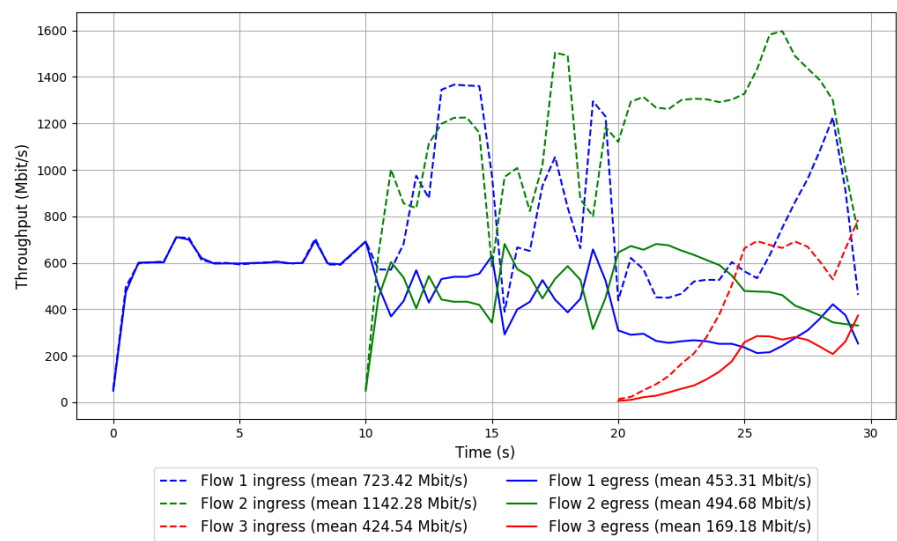


Run 10: Statistics of CalibratedKoho

Start at: 2017-10-12 10:27:10  
End at: 2017-10-12 10:27:40  
Local clock offset: 0.773 ms  
Remote clock offset: -2.018 ms

# Below is generated by plot.py at 2017-10-12 14:21:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 838.95 Mbit/s  
95th percentile per-packet one-way delay: 25.203 ms  
Loss rate: 48.37%  
-- Flow 1:  
Average throughput: 453.31 Mbit/s  
95th percentile per-packet one-way delay: 25.968 ms  
Loss rate: 37.34%  
-- Flow 2:  
Average throughput: 494.68 Mbit/s  
95th percentile per-packet one-way delay: 22.529 ms  
Loss rate: 56.69%  
-- Flow 3:  
Average throughput: 169.18 Mbit/s  
95th percentile per-packet one-way delay: 20.589 ms  
Loss rate: 60.15%

Run 10: Report of CalibratedKoho — Data Link

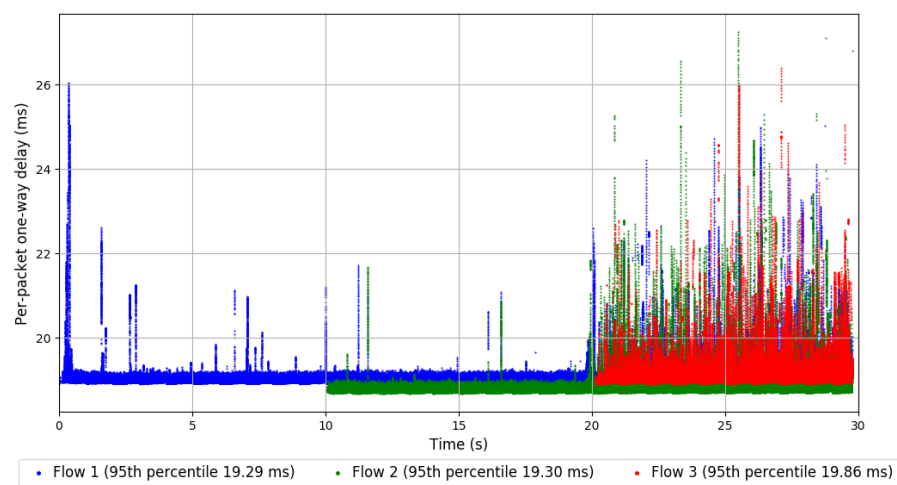
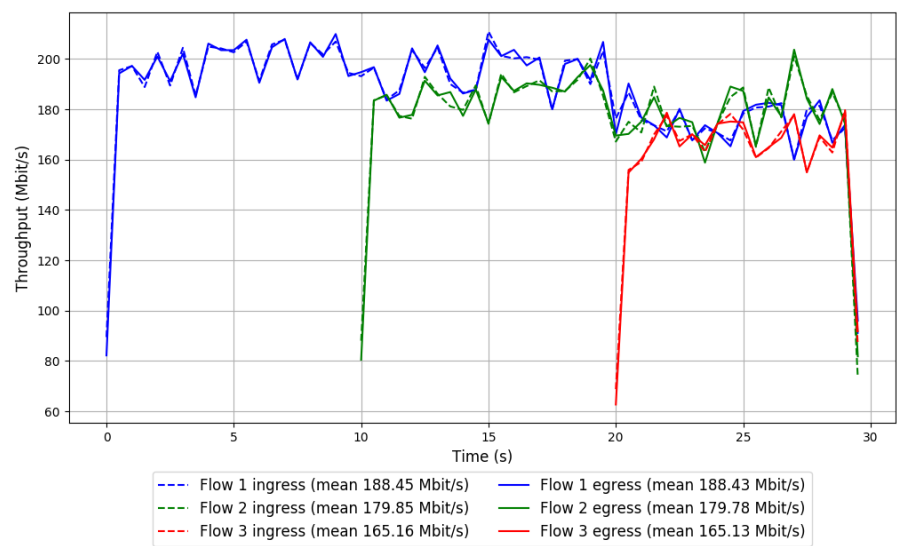


```
Run 1: Statistics of Indigo

Start at: 2017-10-12 07:22:37
End at: 2017-10-12 07:23:08
Local clock offset: 1.523 ms
Remote clock offset: -1.251 ms

# Below is generated by plot.py at 2017-10-12 14:21:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.01 Mbit/s
95th percentile per-packet one-way delay: 19.411 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 188.43 Mbit/s
95th percentile per-packet one-way delay: 19.288 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 179.78 Mbit/s
95th percentile per-packet one-way delay: 19.297 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 165.13 Mbit/s
95th percentile per-packet one-way delay: 19.857 ms
Loss rate: 0.02%
```

Run 1: Report of Indigo — Data Link

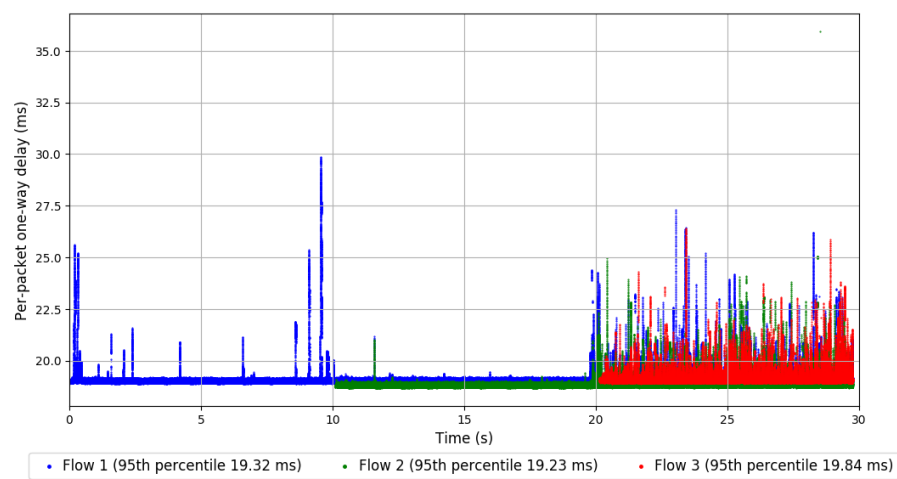
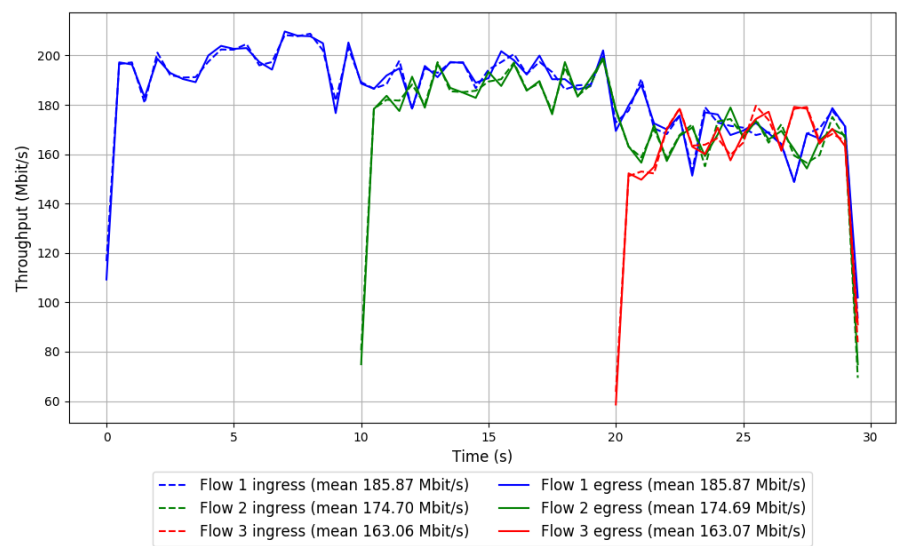


Run 2: Statistics of Indigo

Start at: 2017-10-12 07:43:17  
End at: 2017-10-12 07:43:47  
Local clock offset: 1.916 ms  
Remote clock offset: -1.417 ms

# Below is generated by plot.py at 2017-10-12 14:21:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 354.26 Mbit/s  
95th percentile per-packet one-way delay: 19.416 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 185.87 Mbit/s  
95th percentile per-packet one-way delay: 19.321 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 174.69 Mbit/s  
95th percentile per-packet one-way delay: 19.229 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 163.07 Mbit/s  
95th percentile per-packet one-way delay: 19.839 ms  
Loss rate: 0.00%

Run 2: Report of Indigo — Data Link



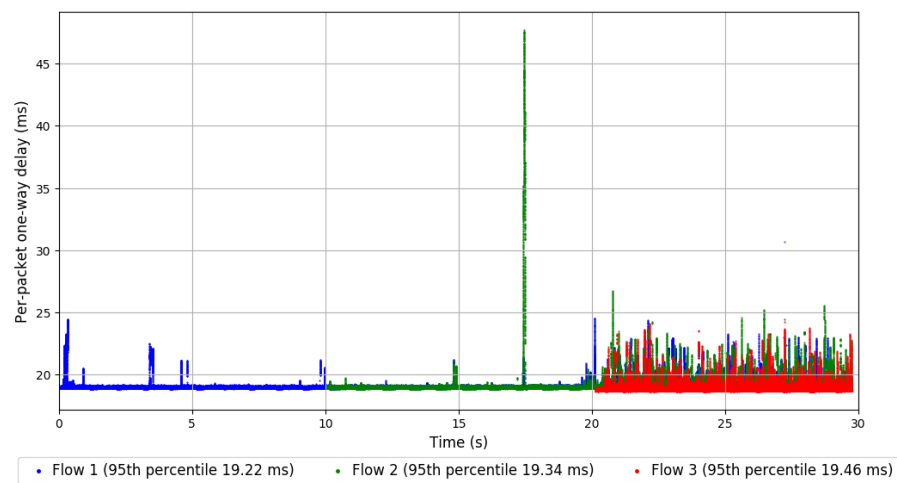
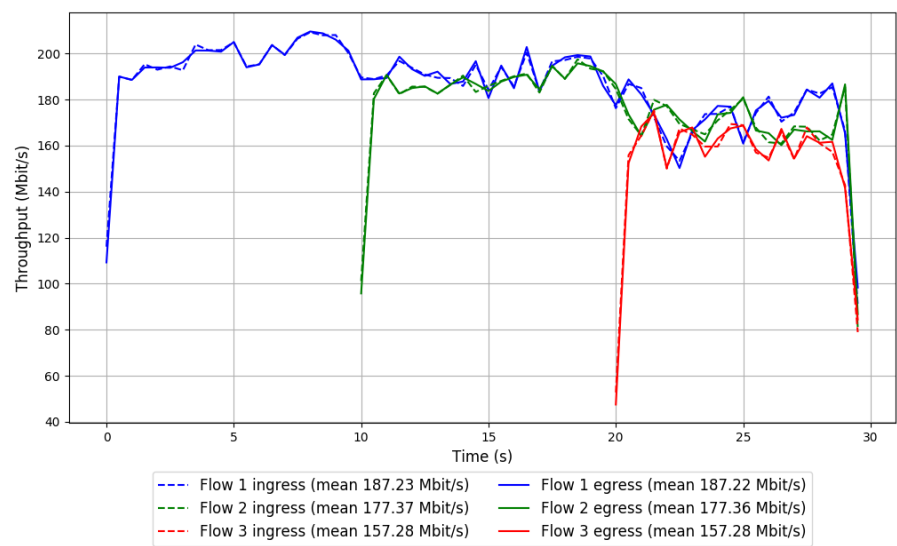
Run 3: Statistics of Indigo

Start at: 2017-10-12 08:04:27  
End at: 2017-10-12 08:04:57  
Local clock offset: 2.171 ms  
Remote clock offset: -1.523 ms

# Below is generated by plot.py at 2017-10-12 14:21:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 355.77 Mbit/s  
95th percentile per-packet one-way delay: 19.289 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 187.22 Mbit/s  
95th percentile per-packet one-way delay: 19.223 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 177.36 Mbit/s  
95th percentile per-packet one-way delay: 19.342 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 157.28 Mbit/s  
95th percentile per-packet one-way delay: 19.465 ms  
Loss rate: 0.00%



Run 3: Report of Indigo — Data Link

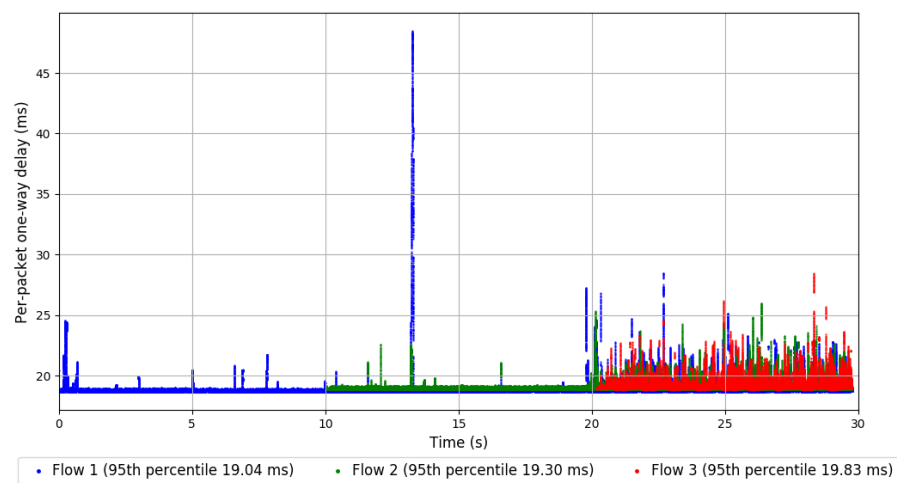
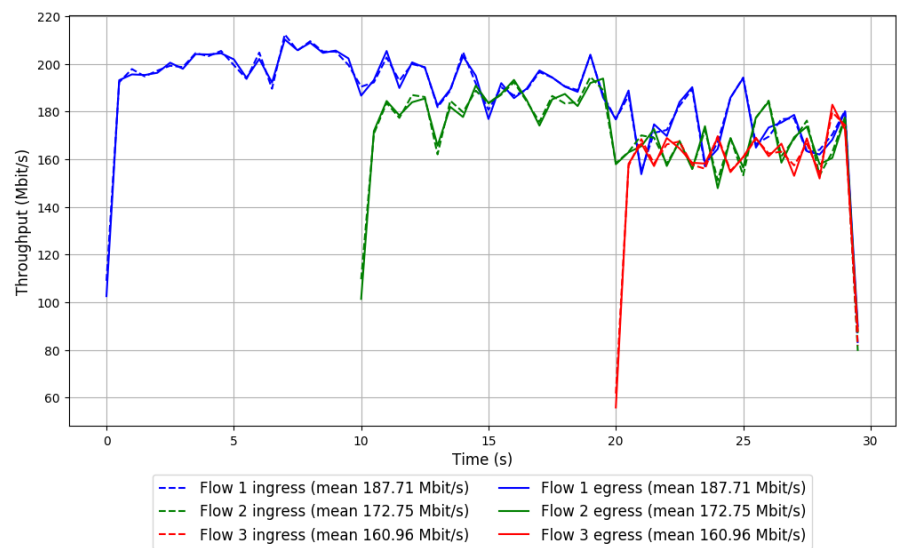


Run 4: Statistics of Indigo

Start at: 2017-10-12 08:25:39  
End at: 2017-10-12 08:26:09  
Local clock offset: 2.28 ms  
Remote clock offset: -1.551 ms

```
# Below is generated by plot.py at 2017-10-12 14:21:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 354.22 Mbit/s
95th percentile per-packet one-way delay: 19.329 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.71 Mbit/s
95th percentile per-packet one-way delay: 19.042 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 172.75 Mbit/s
95th percentile per-packet one-way delay: 19.296 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 160.96 Mbit/s
95th percentile per-packet one-way delay: 19.834 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo — Data Link

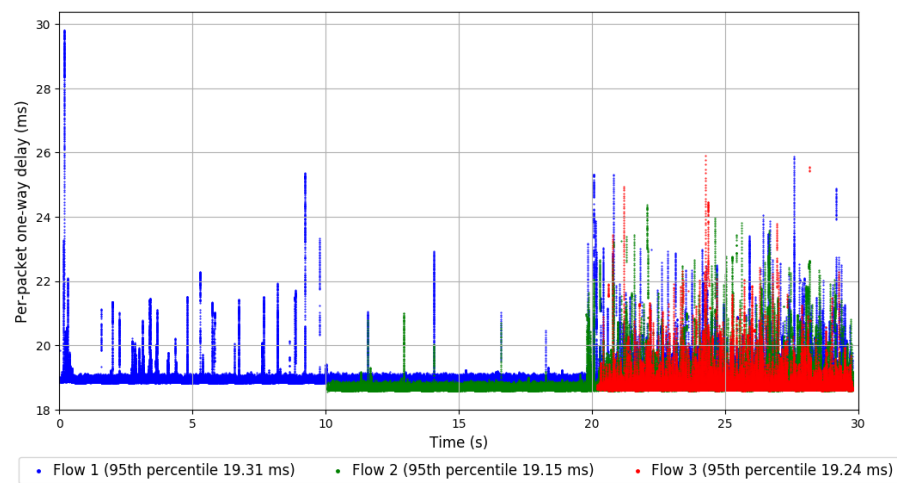
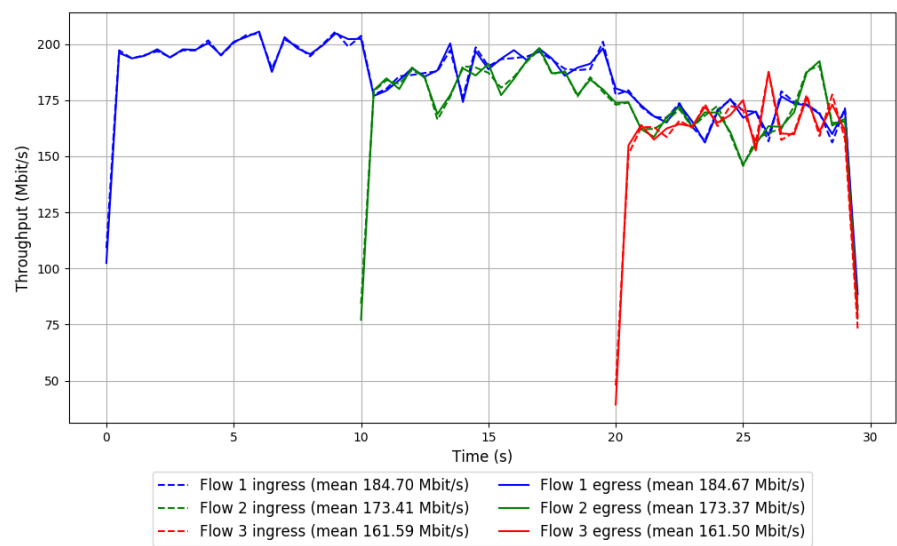


Run 5: Statistics of Indigo

Start at: 2017-10-12 08:46:28  
End at: 2017-10-12 08:46:58  
Local clock offset: 2.38 ms  
Remote clock offset: -1.686 ms

# Below is generated by plot.py at 2017-10-12 14:21:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 351.62 Mbit/s  
95th percentile per-packet one-way delay: 19.250 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 184.67 Mbit/s  
95th percentile per-packet one-way delay: 19.313 ms  
Loss rate: 0.02%  
-- Flow 2:  
Average throughput: 173.37 Mbit/s  
95th percentile per-packet one-way delay: 19.146 ms  
Loss rate: 0.02%  
-- Flow 3:  
Average throughput: 161.50 Mbit/s  
95th percentile per-packet one-way delay: 19.236 ms  
Loss rate: 0.05%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-10-12 09:07:00

End at: 2017-10-12 09:07:30

Local clock offset: 2.305 ms

Remote clock offset: -1.86 ms

# Below is generated by plot.py at 2017-10-12 14:21:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 357.27 Mbit/s

95th percentile per-packet one-way delay: 19.326 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 186.35 Mbit/s

95th percentile per-packet one-way delay: 19.422 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 178.35 Mbit/s

95th percentile per-packet one-way delay: 17.827 ms

Loss rate: 0.02%

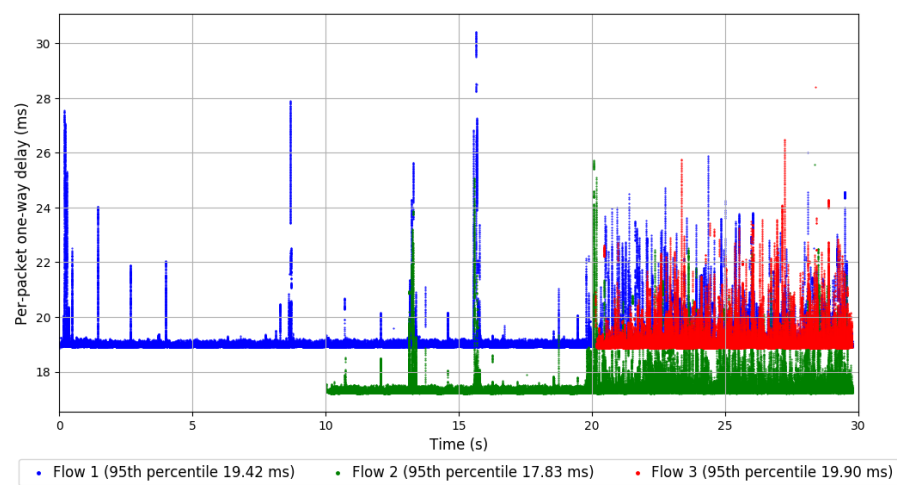
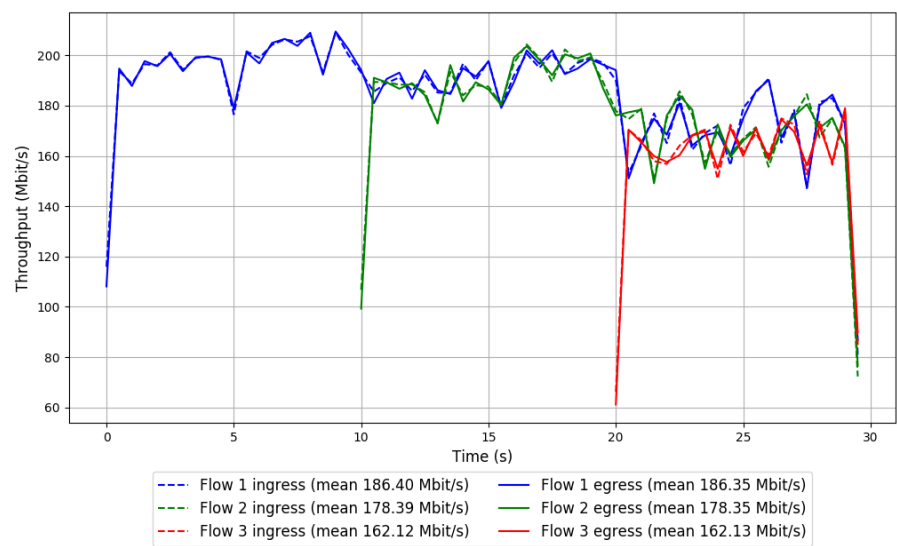
-- Flow 3:

Average throughput: 162.13 Mbit/s

95th percentile per-packet one-way delay: 19.901 ms

Loss rate: 0.02%

Run 6: Report of Indigo — Data Link



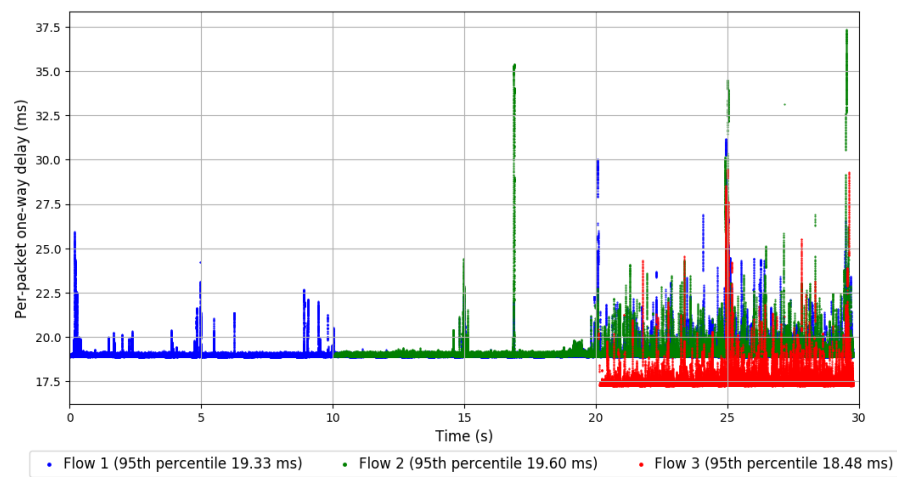
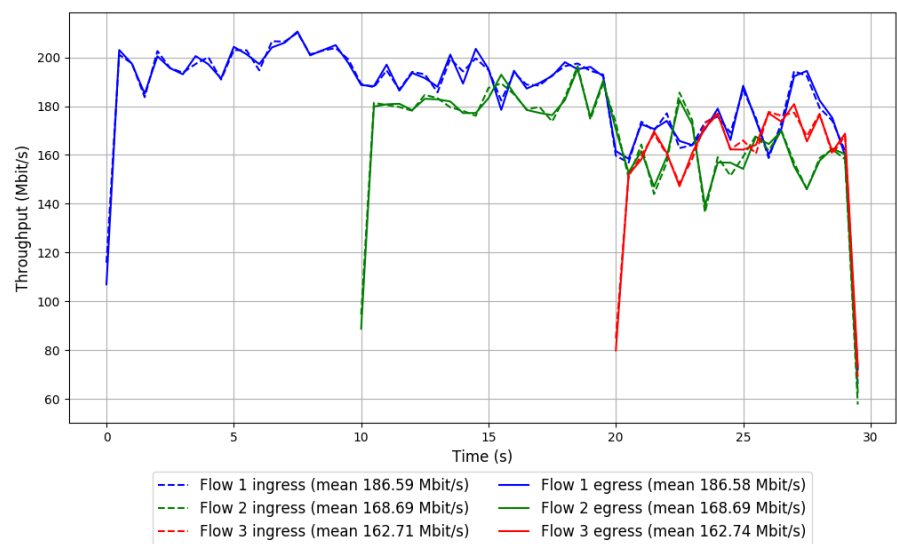
Run 7: Statistics of Indigo

Start at: 2017-10-12 09:27:47  
End at: 2017-10-12 09:28:17  
Local clock offset: 2.034 ms  
Remote clock offset: -1.961 ms

```
# Below is generated by plot.py at 2017-10-12 14:21:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 351.15 Mbit/s
95th percentile per-packet one-way delay: 19.368 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 186.58 Mbit/s
95th percentile per-packet one-way delay: 19.334 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 168.69 Mbit/s
95th percentile per-packet one-way delay: 19.597 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 162.74 Mbit/s
95th percentile per-packet one-way delay: 18.476 ms
Loss rate: 0.01%
```



Run 7: Report of Indigo — Data Link

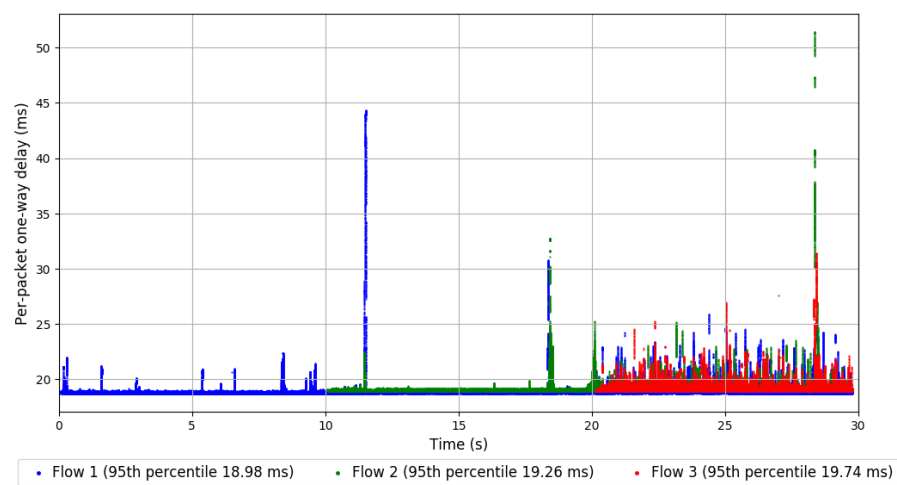
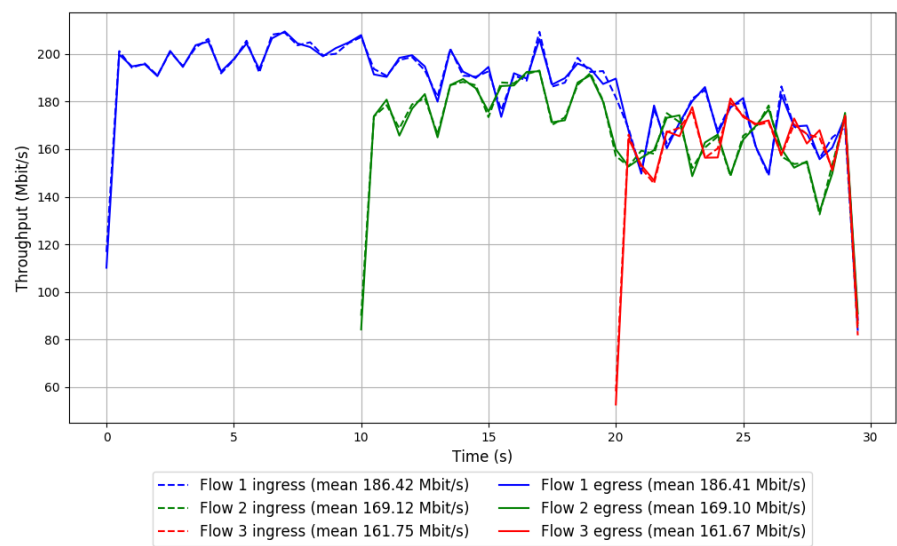


Run 8: Statistics of Indigo

Start at: 2017-10-12 09:48:33  
End at: 2017-10-12 09:49:03  
Local clock offset: 1.599 ms  
Remote clock offset: -2.271 ms

# Below is generated by plot.py at 2017-10-12 14:21:13  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 350.59 Mbit/s  
95th percentile per-packet one-way delay: 19.252 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 186.41 Mbit/s  
95th percentile per-packet one-way delay: 18.978 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 169.10 Mbit/s  
95th percentile per-packet one-way delay: 19.259 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 161.67 Mbit/s  
95th percentile per-packet one-way delay: 19.739 ms  
Loss rate: 0.05%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-10-12 10:09:25

End at: 2017-10-12 10:09:55

Local clock offset: 1.235 ms

Remote clock offset: -2.24 ms

# Below is generated by plot.py at 2017-10-12 14:21:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 354.41 Mbit/s

95th percentile per-packet one-way delay: 19.309 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 185.73 Mbit/s

95th percentile per-packet one-way delay: 19.052 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 176.90 Mbit/s

95th percentile per-packet one-way delay: 19.303 ms

Loss rate: 0.01%

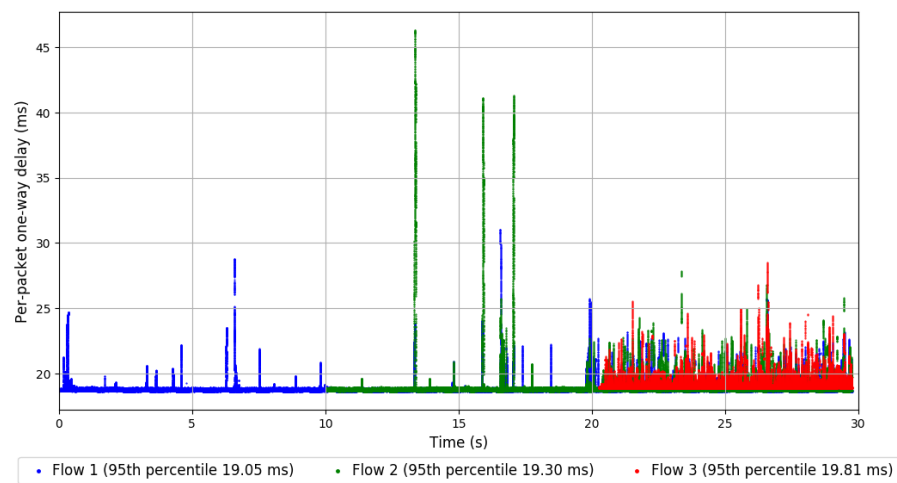
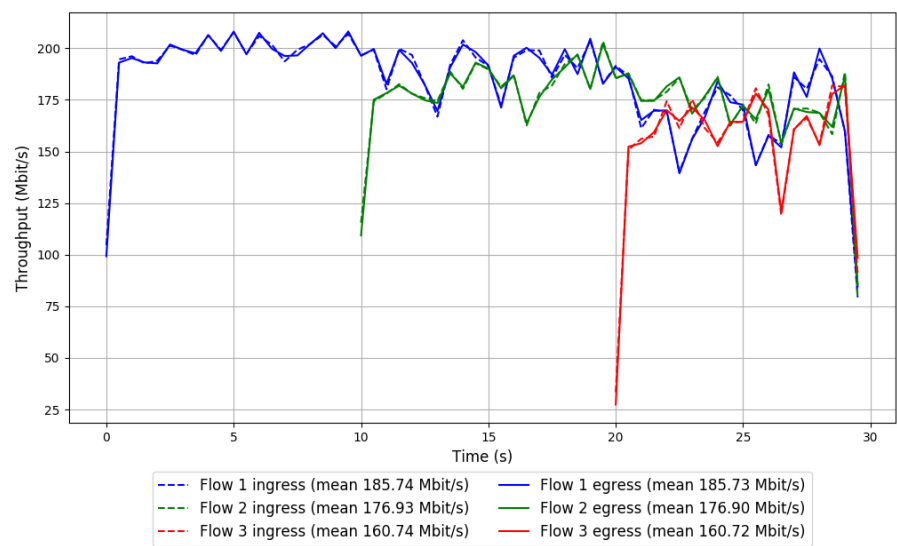
-- Flow 3:

Average throughput: 160.72 Mbit/s

95th percentile per-packet one-way delay: 19.812 ms

Loss rate: 0.01%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-10-12 10:30:29  
End at: 2017-10-12 10:30:59  
Local clock offset: 0.678 ms  
Remote clock offset: -1.872 ms

# Below is generated by plot.py at 2017-10-12 14:21:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 347.30 Mbit/s  
95th percentile per-packet one-way delay: 19.408 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 182.69 Mbit/s  
95th percentile per-packet one-way delay: 19.331 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 172.30 Mbit/s  
95th percentile per-packet one-way delay: 19.388 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 156.00 Mbit/s  
95th percentile per-packet one-way delay: 19.664 ms  
Loss rate: 0.08%

Run 10: Report of Indigo — Data Link

