

## Pantheon Report

Generated at 2017-12-06 03:23:28 (UTC).

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

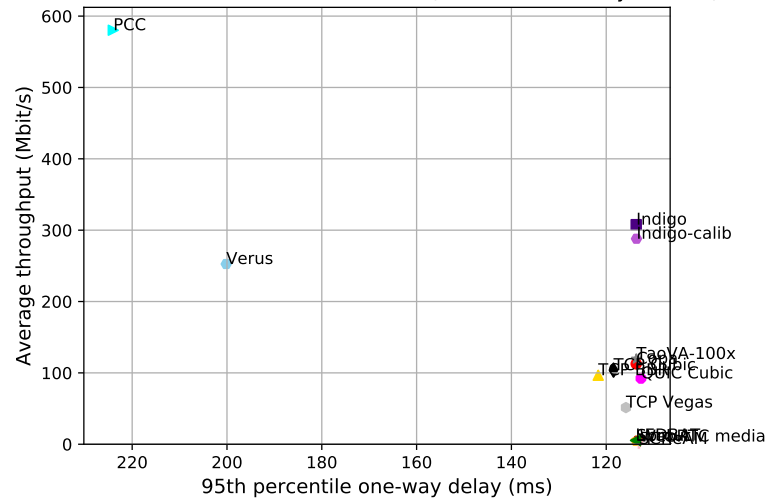
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

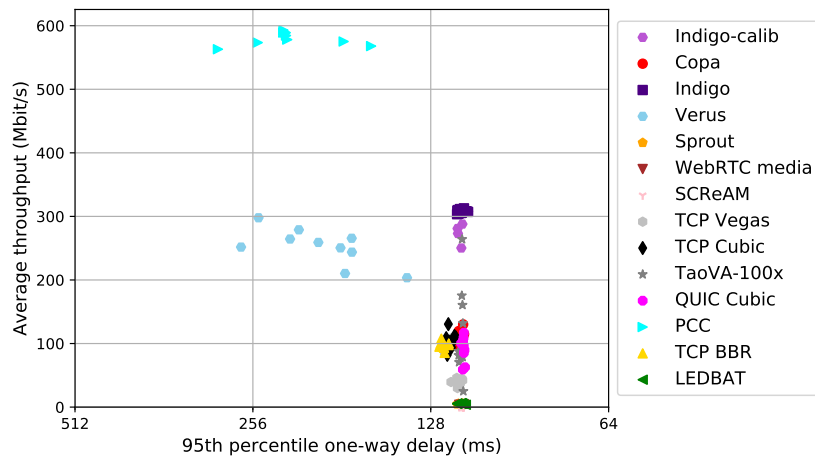
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeab30b267cde681
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 GCE London Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme  
3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE London Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme  
3 flows with 10s interval between flows



| scheme       | # runs | mean avg tput (Mbit/s) |        |        | mean 95th-%ile delay (ms) |        |        | mean loss rate (%) |        |        |
|--------------|--------|------------------------|--------|--------|---------------------------|--------|--------|--------------------|--------|--------|
|              |        | flow 1                 | flow 2 | flow 3 | flow 1                    | flow 2 | flow 3 | flow 1             | flow 2 | flow 3 |
| TCP BBR      | 10     | 48.07                  | 49.70  | 47.90  | 121.29                    | 121.53 | 122.88 | 0.02               | 0.16   | 0.09   |
| TCP Cubic    | 10     | 51.74                  | 54.55  | 47.90  | 117.63                    | 118.26 | 119.27 | 0.27               | 0.11   | 0.07   |
| LEDBAT       | 10     | 2.70                   | 3.14   | 1.62   | 113.78                    | 113.80 | 113.59 | 0.36               | 0.51   | 1.20   |
| PCC          | 10     | 508.55                 | 85.56  | 46.90  | 226.86                    | 212.03 | 205.57 | 2.09               | 1.57   | 1.66   |
| QUIC Cubic   | 10     | 53.69                  | 53.83  | 36.46  | 112.25                    | 111.95 | 111.77 | 0.00               | 0.00   | 0.01   |
| SCReAM       | 10     | 0.22                   | 0.20   | 0.21   | 112.39                    | 112.78 | 112.26 | 0.00               | 0.00   | 0.00   |
| WebRTC media | 10     | 2.07                   | 1.28   | 0.44   | 112.42                    | 112.61 | 112.84 | 0.00               | 0.00   | 0.00   |
| Sprout       | 10     | 2.39                   | 2.35   | 2.00   | 113.83                    | 113.37 | 113.27 | 0.06               | 0.08   | 0.06   |
| TaoVA-100x   | 9      | 53.52                  | 53.82  | 111.11 | 113.58                    | 113.54 | 113.64 | 0.03               | 0.00   | 0.02   |
| TCP Vegas    | 10     | 20.68                  | 31.60  | 29.25  | 115.04                    | 115.15 | 115.78 | 0.20               | 0.13   | 0.29   |
| Verus        | 10     | 141.55                 | 130.85 | 77.22  | 192.60                    | 221.62 | 178.07 | 1.49               | 1.66   | 1.49   |
| Copa         | 10     | 67.60                  | 52.82  | 39.51  | 113.48                    | 113.39 | 112.82 | 0.00               | 0.01   | 0.03   |
| Indigo       | 10     | 162.78                 | 154.16 | 129.24 | 113.38                    | 113.99 | 114.45 | 0.03               | 0.01   | 0.04   |
| Indigo-calib | 7      | 147.64                 | 137.60 | 120.38 | 113.40                    | 113.89 | 113.98 | 0.07               | 0.05   | 0.06   |

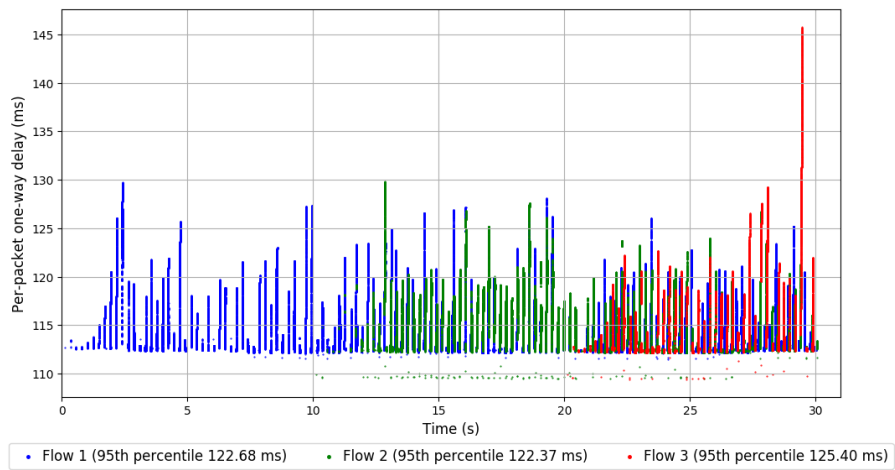
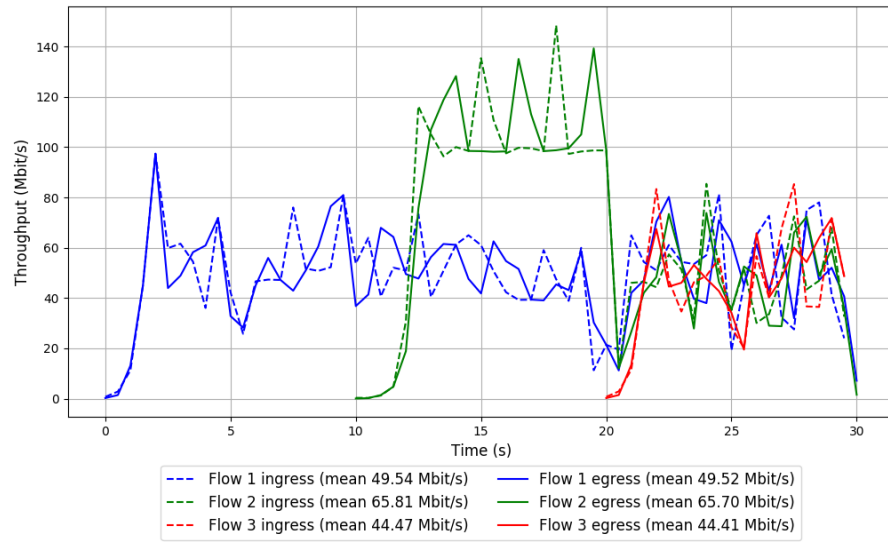
```
Run 1: Statistics of TCP BBR

Start at: 2017-12-05 23:31:03
End at: 2017-12-05 23:31:33

# Below is generated by plot.py at 2017-12-06 02:37:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 107.70 Mbit/s
95th percentile per-packet one-way delay: 122.813 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 49.52 Mbit/s
95th percentile per-packet one-way delay: 122.681 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 65.70 Mbit/s
95th percentile per-packet one-way delay: 122.370 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 44.41 Mbit/s
95th percentile per-packet one-way delay: 125.396 ms
Loss rate: 0.00%
```



# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-05 23:44:27

End at: 2017-12-05 23:44:57

# Below is generated by plot.py at 2017-12-06 02:37:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 95.74 Mbit/s

95th percentile per-packet one-way delay: 121.926 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.87 Mbit/s

95th percentile per-packet one-way delay: 121.262 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.00 Mbit/s

95th percentile per-packet one-way delay: 121.464 ms

Loss rate: 0.00%

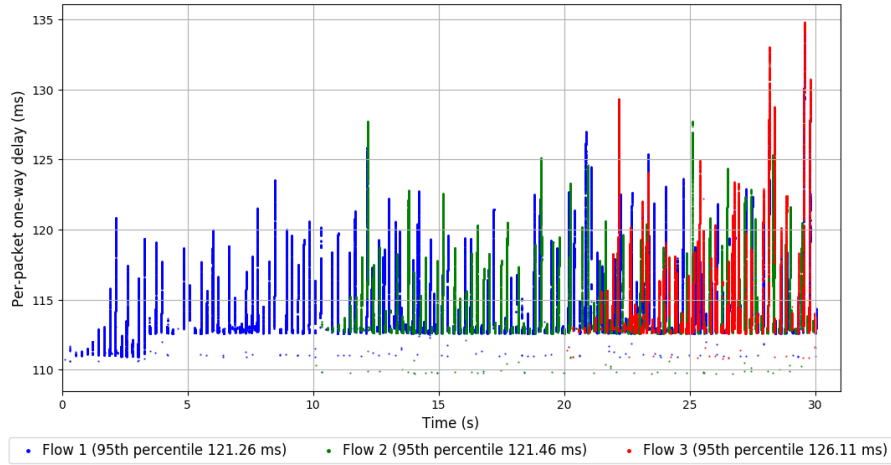
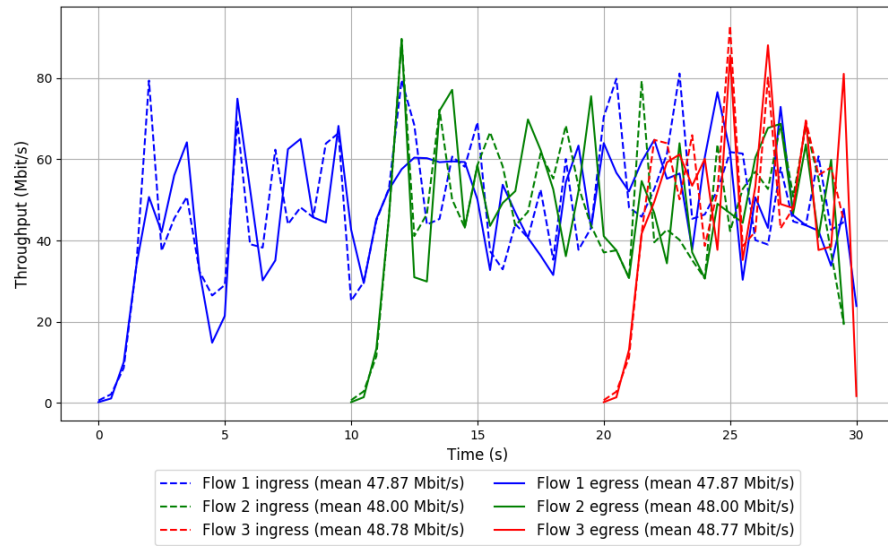
-- Flow 3:

Average throughput: 48.77 Mbit/s

95th percentile per-packet one-way delay: 126.110 ms

Loss rate: 0.00%

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



Run 3: Statistics of TCP BBR

Start at: 2017-12-05 23:57:40

End at: 2017-12-05 23:58:10

# Below is generated by plot.py at 2017-12-06 02:37:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 100.07 Mbit/s

95th percentile per-packet one-way delay: 119.335 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 53.78 Mbit/s

95th percentile per-packet one-way delay: 119.348 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 42.28 Mbit/s

95th percentile per-packet one-way delay: 118.767 ms

Loss rate: 0.02%

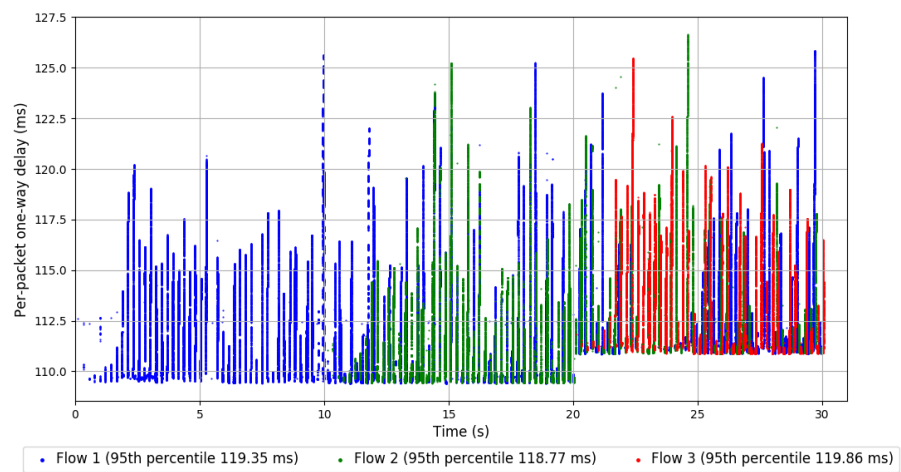
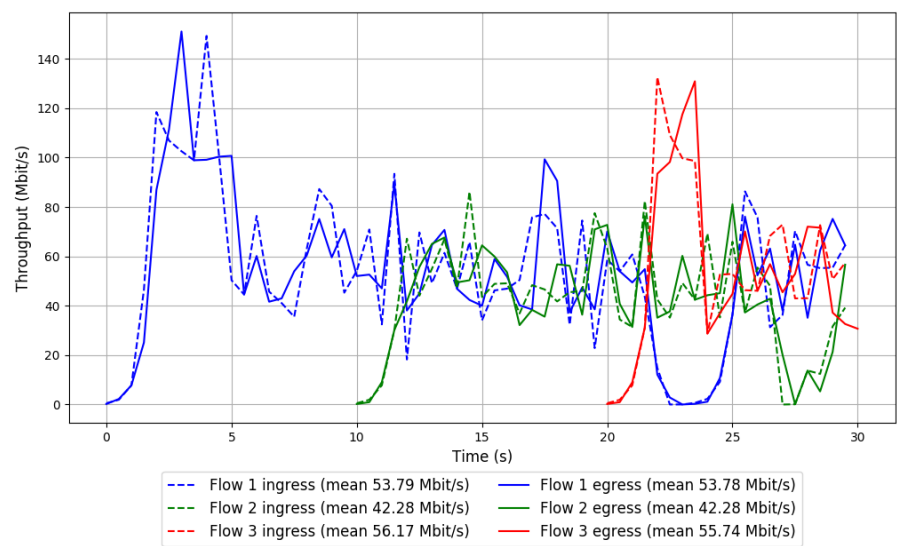
-- Flow 3:

Average throughput: 55.74 Mbit/s

95th percentile per-packet one-way delay: 119.861 ms

Loss rate: 0.78%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-06 00:10:56

End at: 2017-12-06 00:11:26

# Below is generated by plot.py at 2017-12-06 02:37:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 97.63 Mbit/s

95th percentile per-packet one-way delay: 119.449 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 48.25 Mbit/s

95th percentile per-packet one-way delay: 119.666 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 49.95 Mbit/s

95th percentile per-packet one-way delay: 117.507 ms

Loss rate: 0.15%

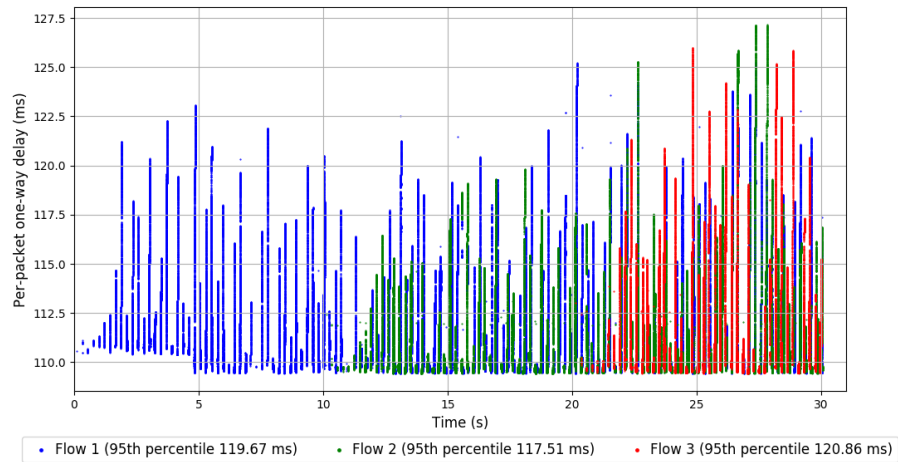
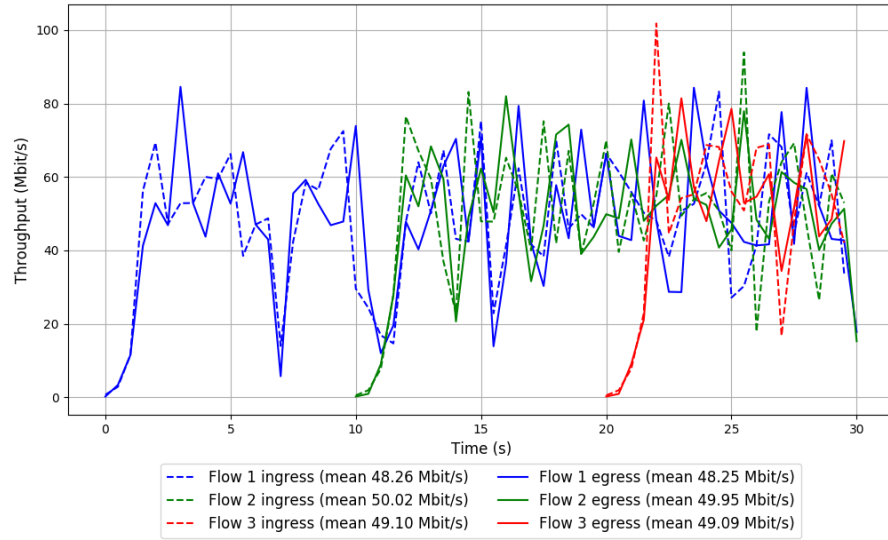
-- Flow 3:

Average throughput: 49.09 Mbit/s

95th percentile per-packet one-way delay: 120.858 ms

Loss rate: 0.00%

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



Run 5: Statistics of TCP BBR

Start at: 2017-12-06 00:24:19

End at: 2017-12-06 00:24:49

# Below is generated by plot.py at 2017-12-06 02:37:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 95.03 Mbit/s

95th percentile per-packet one-way delay: 123.744 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 47.40 Mbit/s

95th percentile per-packet one-way delay: 123.356 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 48.59 Mbit/s

95th percentile per-packet one-way delay: 123.010 ms

Loss rate: 0.04%

-- Flow 3:

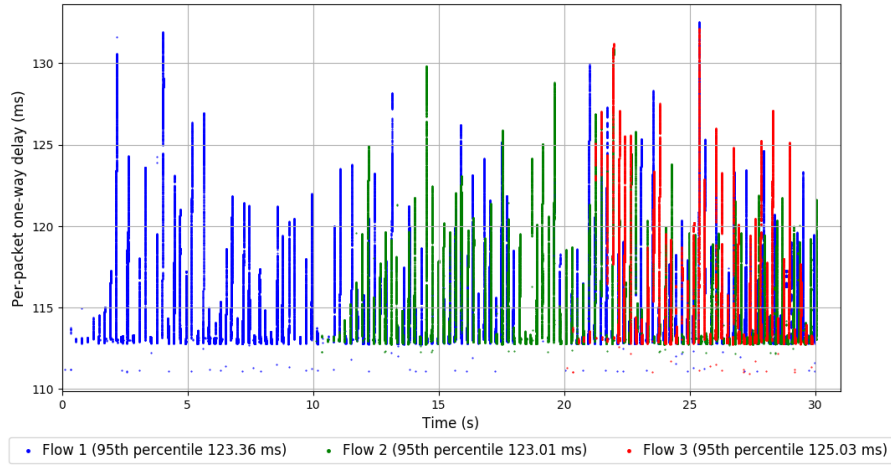
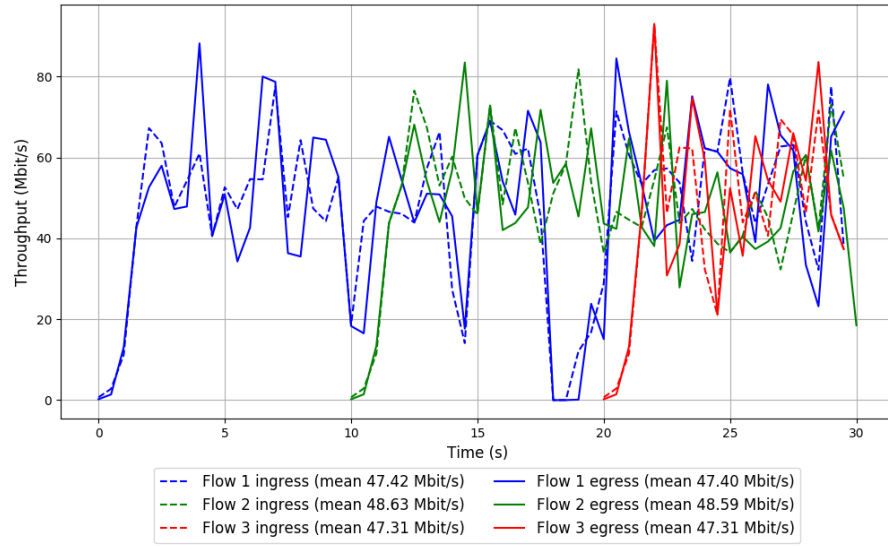
Average throughput: 47.31 Mbit/s

95th percentile per-packet one-way delay: 125.032 ms

Loss rate: 0.00%



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



Run 6: Statistics of TCP BBR

Start at: 2017-12-06 00:37:56

End at: 2017-12-06 00:38:26

# Below is generated by plot.py at 2017-12-06 02:37:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 97.64 Mbit/s

95th percentile per-packet one-way delay: 121.534 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 48.58 Mbit/s

95th percentile per-packet one-way delay: 119.662 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.33 Mbit/s

95th percentile per-packet one-way delay: 122.943 ms

Loss rate: 0.00%

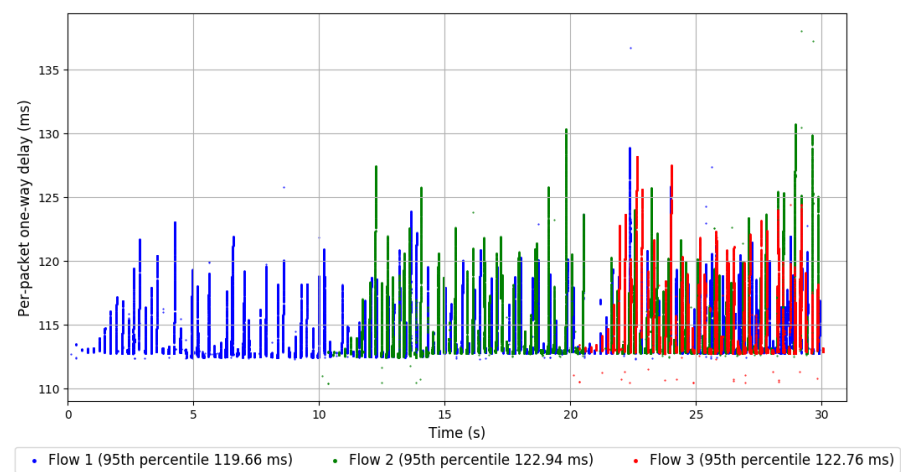
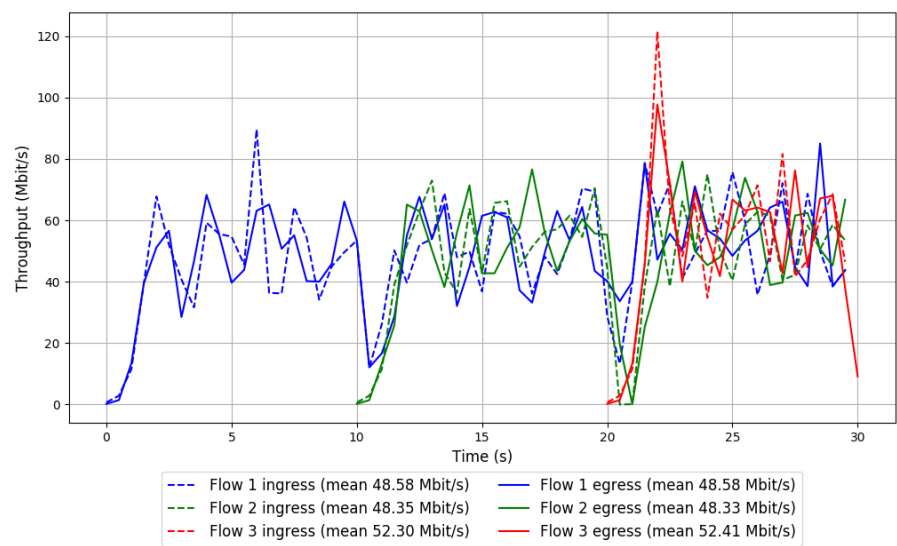
-- Flow 3:

Average throughput: 52.41 Mbit/s

95th percentile per-packet one-way delay: 122.764 ms

Loss rate: 0.07%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-06 00:51:11

End at: 2017-12-06 00:51:41

# Below is generated by plot.py at 2017-12-06 02:37:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 95.10 Mbit/s

95th percentile per-packet one-way delay: 122.065 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 49.05 Mbit/s

95th percentile per-packet one-way delay: 122.878 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 46.75 Mbit/s

95th percentile per-packet one-way delay: 121.059 ms

Loss rate: 0.00%

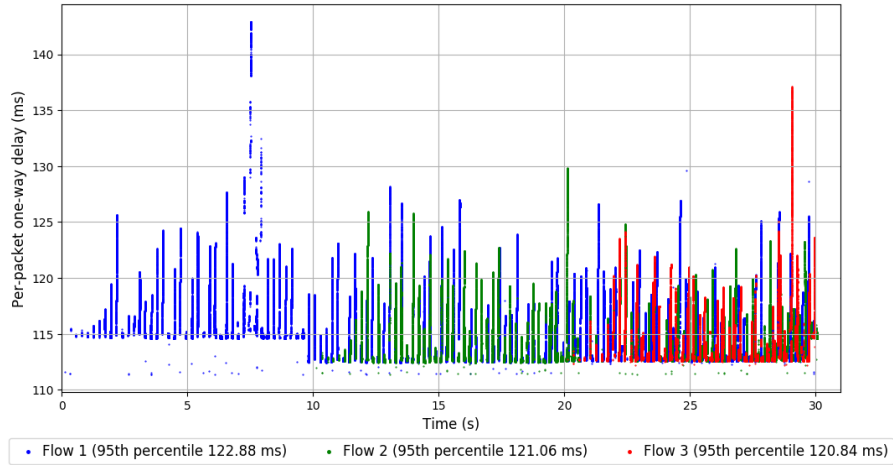
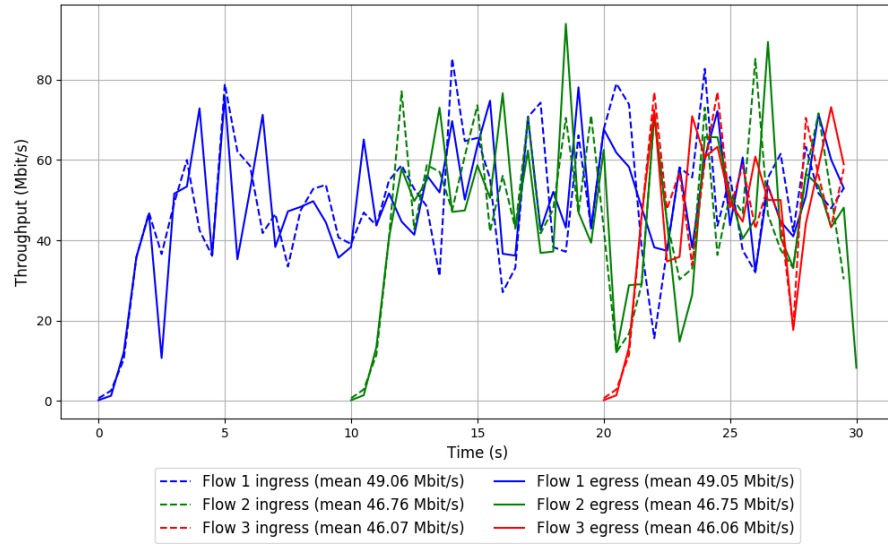
-- Flow 3:

Average throughput: 46.06 Mbit/s

95th percentile per-packet one-way delay: 120.839 ms

Loss rate: 0.00%

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



Run 8: Statistics of TCP BBR

Start at: 2017-12-06 01:04:28

End at: 2017-12-06 01:04:58

# Below is generated by plot.py at 2017-12-06 02:37:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.36 Mbit/s

95th percentile per-packet one-way delay: 121.562 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 45.33 Mbit/s

95th percentile per-packet one-way delay: 121.281 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.43 Mbit/s

95th percentile per-packet one-way delay: 121.591 ms

Loss rate: 0.03%

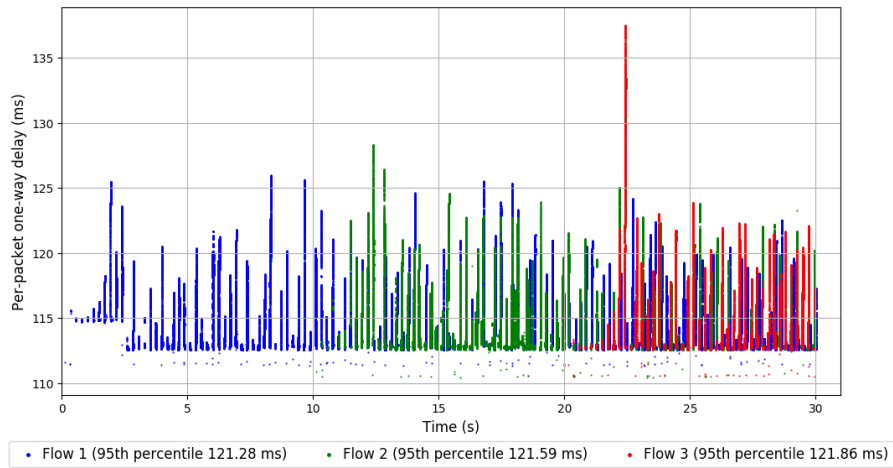
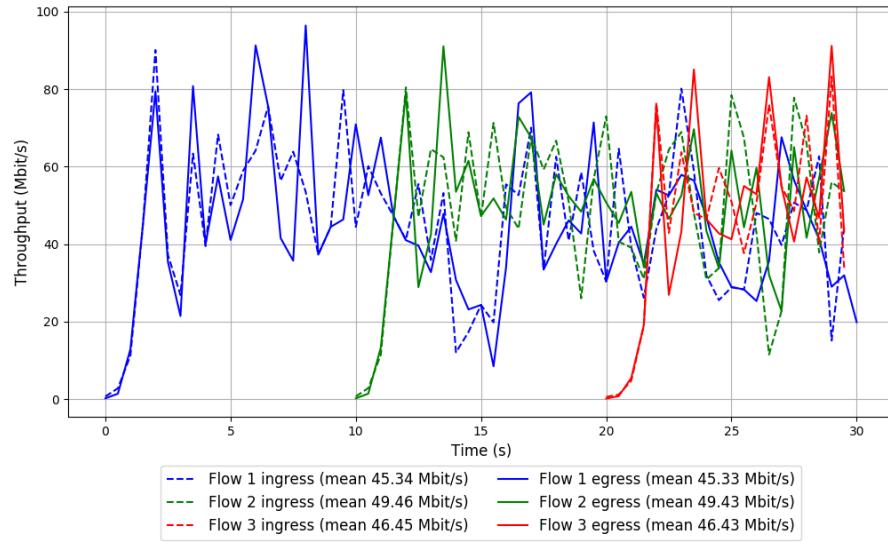
-- Flow 3:

Average throughput: 46.43 Mbit/s

95th percentile per-packet one-way delay: 121.865 ms

Loss rate: 0.04%

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



Run 9: Statistics of TCP BBR

Start at: 2017-12-06 01:17:38

End at: 2017-12-06 01:18:08

# Below is generated by plot.py at 2017-12-06 02:39:15

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.37 Mbit/s

95th percentile per-packet one-way delay: 121.248 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.21 Mbit/s

95th percentile per-packet one-way delay: 119.601 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 44.83 Mbit/s

95th percentile per-packet one-way delay: 121.969 ms

Loss rate: 0.00%

-- Flow 3:

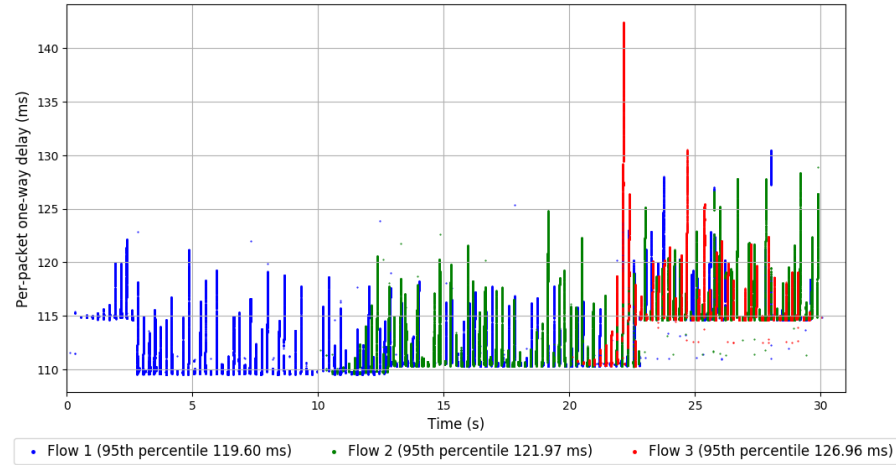
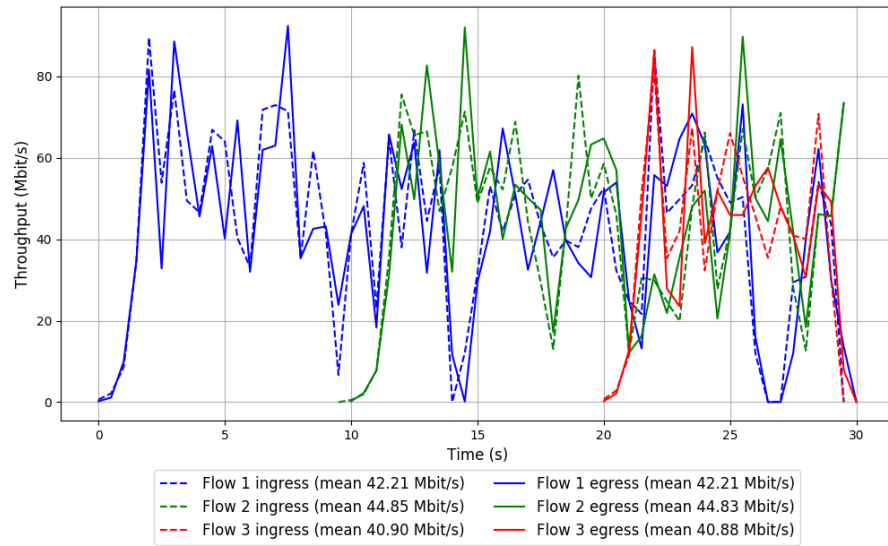
Average throughput: 40.88 Mbit/s

95th percentile per-packet one-way delay: 126.957 ms

Loss rate: 0.00%



# Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-06 01:31:00

End at: 2017-12-06 01:31:30

# Below is generated by plot.py at 2017-12-06 02:39:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 99.55 Mbit/s

95th percentile per-packet one-way delay: 123.199 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 48.75 Mbit/s

95th percentile per-packet one-way delay: 123.137 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 53.15 Mbit/s

95th percentile per-packet one-way delay: 124.632 ms

Loss rate: 1.17%

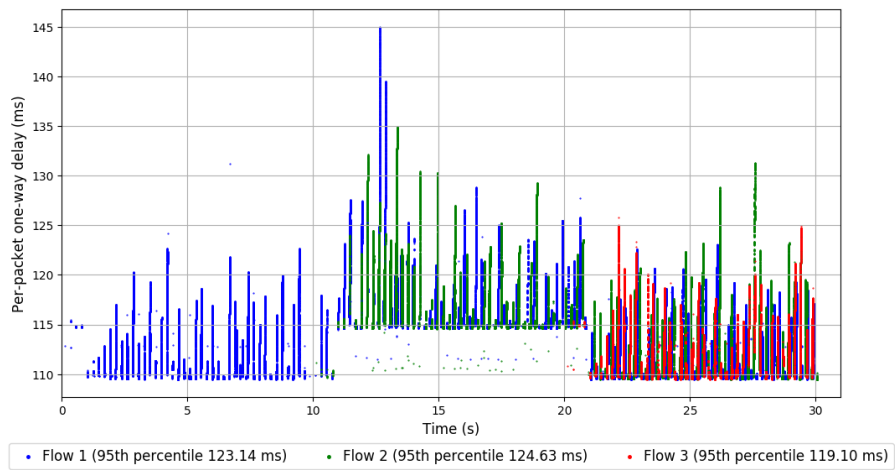
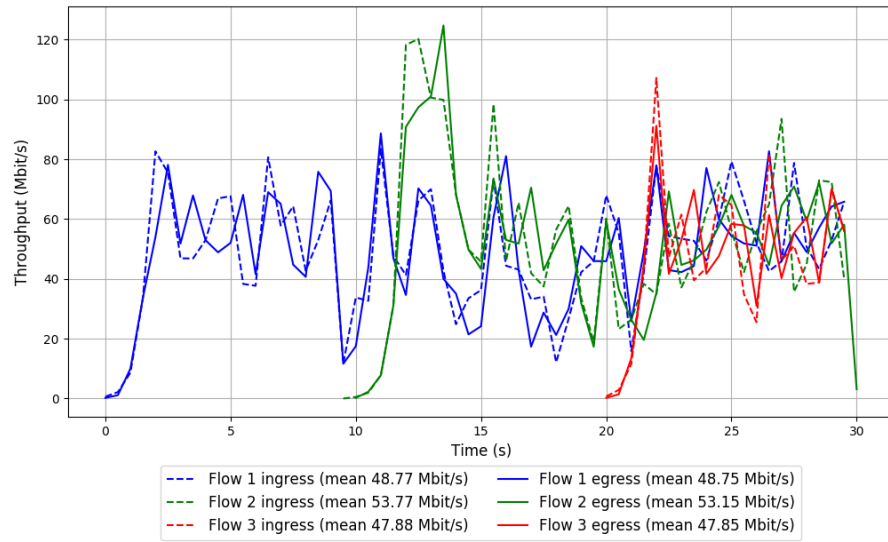
-- Flow 3:

Average throughput: 47.85 Mbit/s

95th percentile per-packet one-way delay: 119.104 ms

Loss rate: 0.00%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-05 23:26:19

End at: 2017-12-05 23:26:49

# Below is generated by plot.py at 2017-12-06 02:40:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 130.50 Mbit/s

95th percentile per-packet one-way delay: 119.507 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 56.18 Mbit/s

95th percentile per-packet one-way delay: 118.853 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 89.03 Mbit/s

95th percentile per-packet one-way delay: 119.984 ms

Loss rate: 0.02%

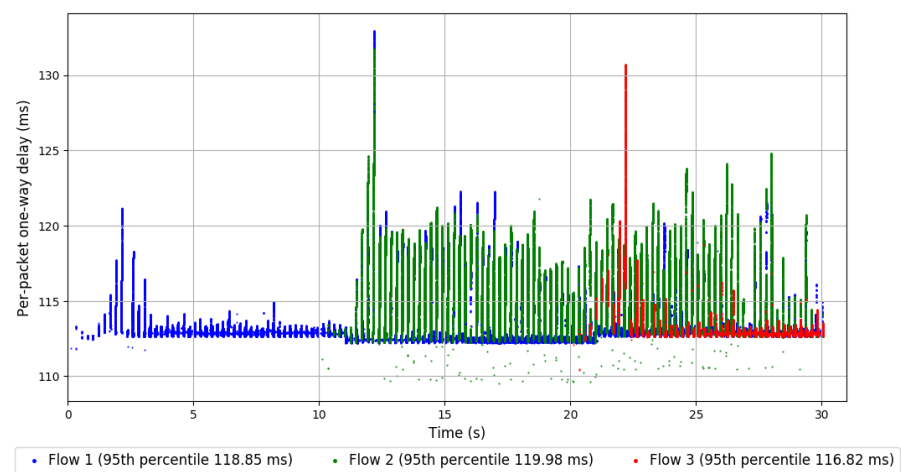
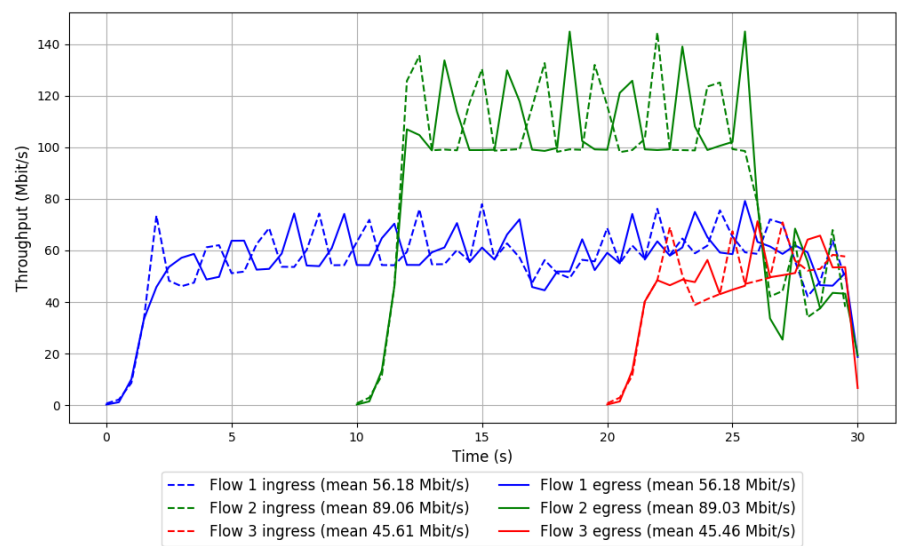
-- Flow 3:

Average throughput: 45.46 Mbit/s

95th percentile per-packet one-way delay: 116.817 ms

Loss rate: 0.33%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-05 23:39:37

End at: 2017-12-05 23:40:07

# Below is generated by plot.py at 2017-12-06 02:40:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 95.48 Mbit/s

95th percentile per-packet one-way delay: 118.441 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 48.35 Mbit/s

95th percentile per-packet one-way delay: 118.557 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 47.75 Mbit/s

95th percentile per-packet one-way delay: 117.516 ms

Loss rate: 0.00%

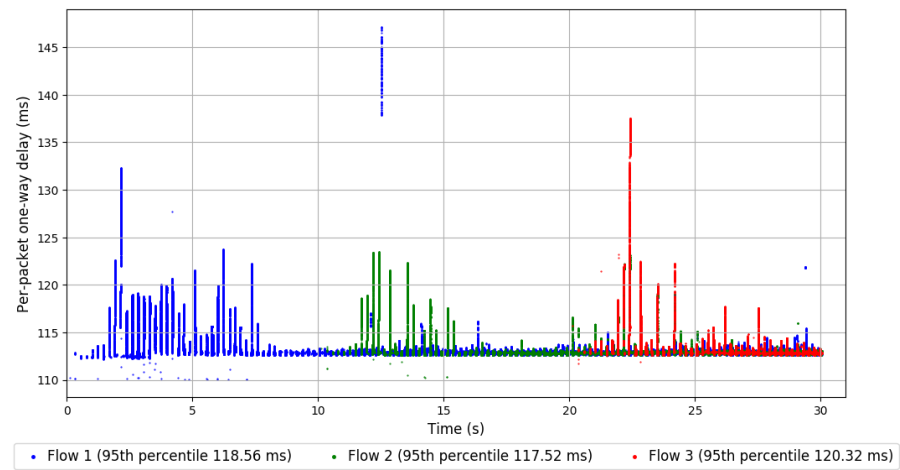
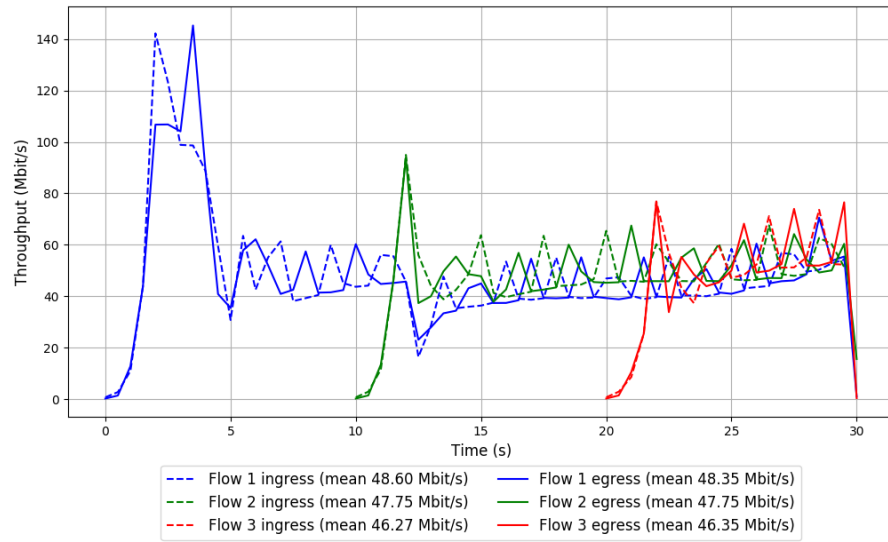
-- Flow 3:

Average throughput: 46.35 Mbit/s

95th percentile per-packet one-way delay: 120.323 ms

Loss rate: 0.00%

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



Run 3: Statistics of TCP Cubic

Start at: 2017-12-05 23:53:01

End at: 2017-12-05 23:53:31

# Below is generated by plot.py at 2017-12-06 02:40:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 109.65 Mbit/s

95th percentile per-packet one-way delay: 116.051 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 51.95 Mbit/s

95th percentile per-packet one-way delay: 113.076 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 62.01 Mbit/s

95th percentile per-packet one-way delay: 116.765 ms

Loss rate: 0.00%

-- Flow 3:

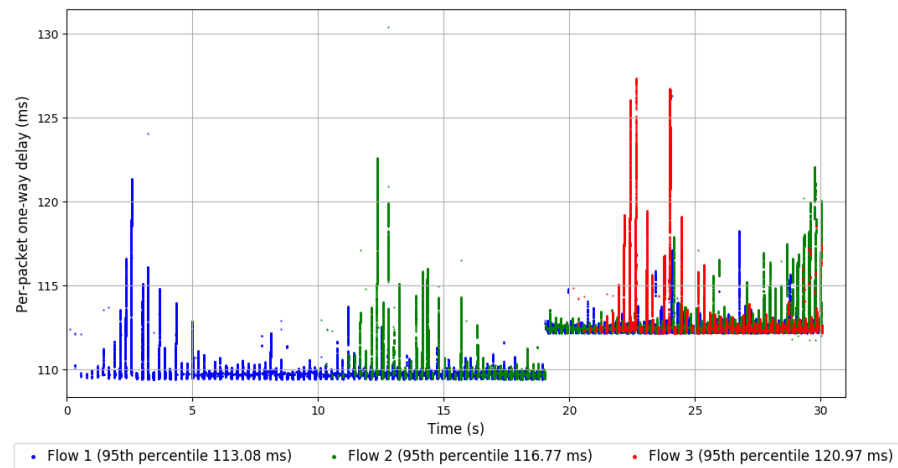
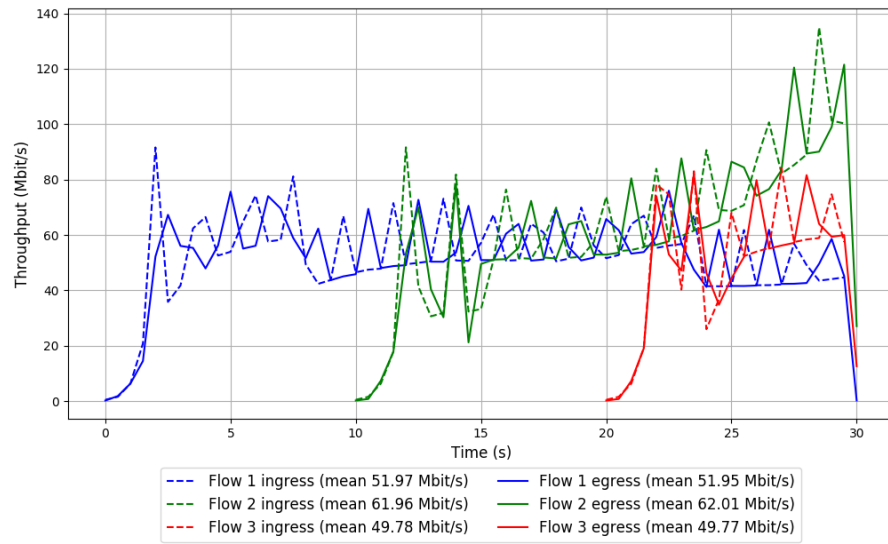
Average throughput: 49.77 Mbit/s

95th percentile per-packet one-way delay: 120.973 ms

Loss rate: 0.05%



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



Run 4: Statistics of TCP Cubic

Start at: 2017-12-06 00:06:11

End at: 2017-12-06 00:06:41

# Below is generated by plot.py at 2017-12-06 02:40:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 82.18 Mbit/s

95th percentile per-packet one-way delay: 119.994 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 37.51 Mbit/s

95th percentile per-packet one-way delay: 121.771 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 37.83 Mbit/s

95th percentile per-packet one-way delay: 113.981 ms

Loss rate: 0.15%

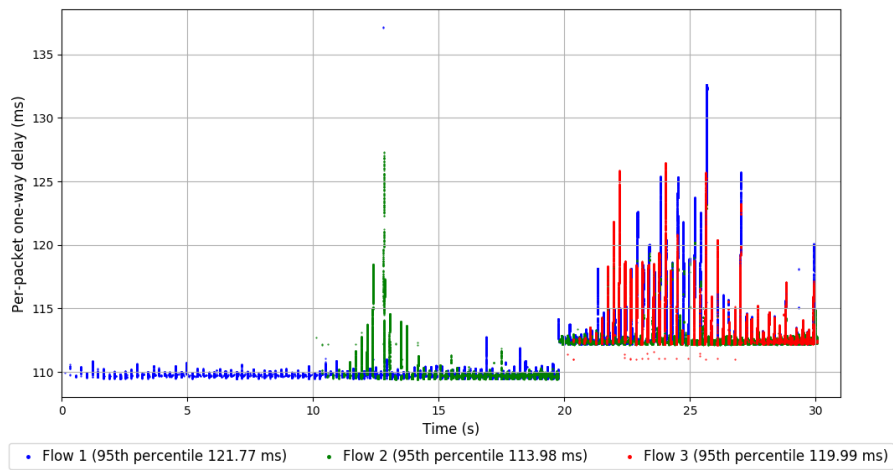
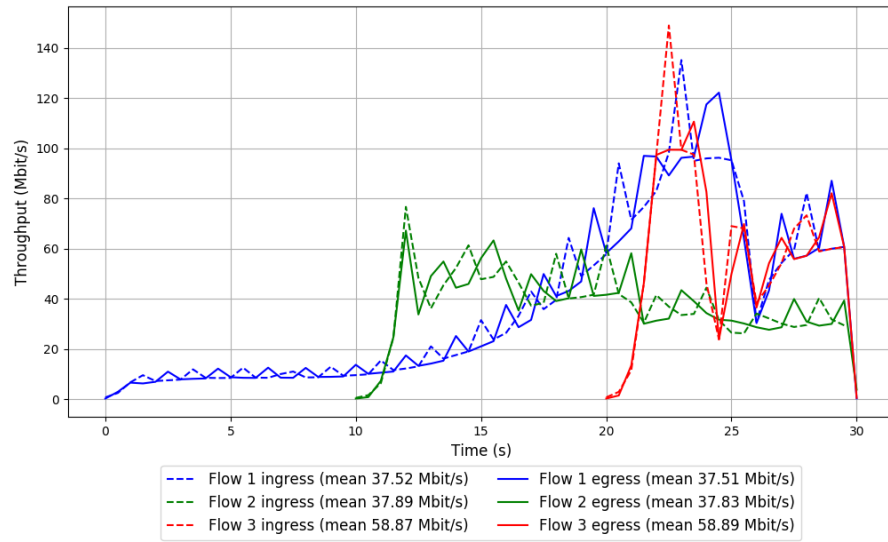
-- Flow 3:

Average throughput: 58.89 Mbit/s

95th percentile per-packet one-way delay: 119.989 ms

Loss rate: 0.00%

# Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-06 00:19:29

End at: 2017-12-06 00:19:59

# Below is generated by plot.py at 2017-12-06 02:40:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 111.92 Mbit/s

95th percentile per-packet one-way delay: 116.694 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 66.36 Mbit/s

95th percentile per-packet one-way delay: 116.537 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 46.34 Mbit/s

95th percentile per-packet one-way delay: 117.195 ms

Loss rate: 0.12%

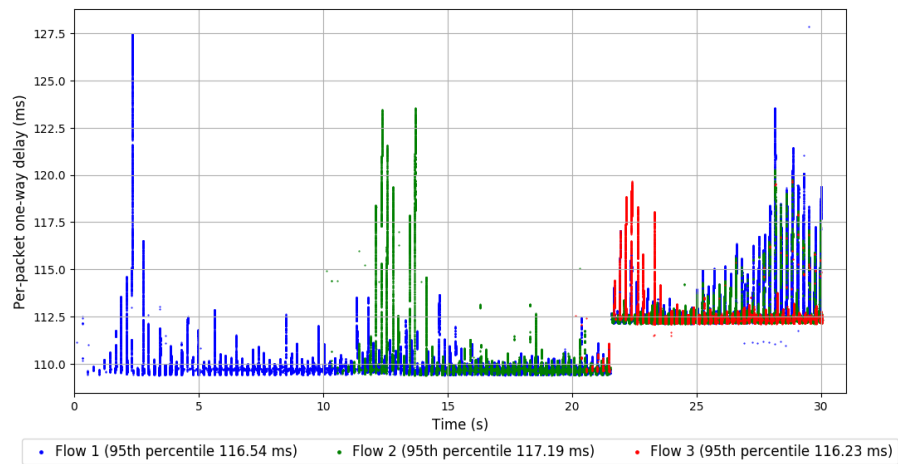
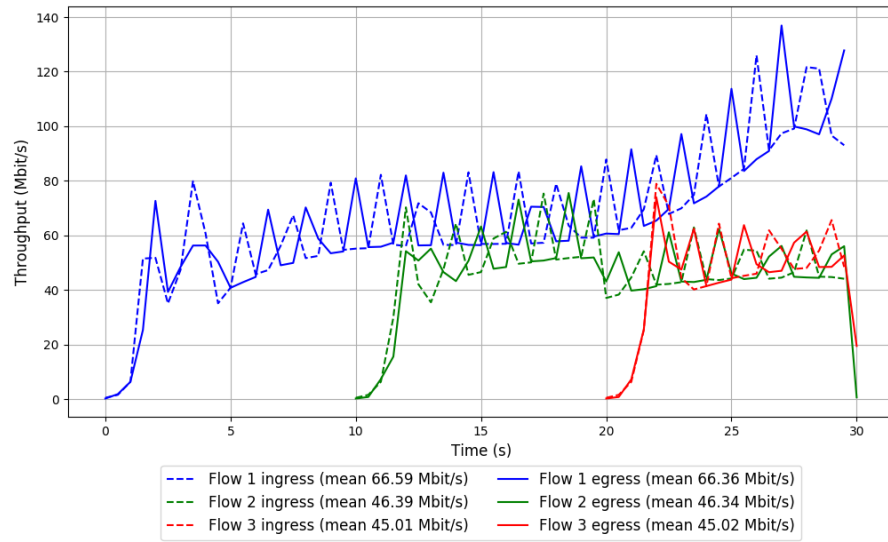
-- Flow 3:

Average throughput: 45.02 Mbit/s

95th percentile per-packet one-way delay: 116.231 ms

Loss rate: 0.00%

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



Run 6: Statistics of TCP Cubic

Start at: 2017-12-06 00:32:54

End at: 2017-12-06 00:33:24

# Below is generated by plot.py at 2017-12-06 02:40:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 102.68 Mbit/s

95th percentile per-packet one-way delay: 119.214 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 46.88 Mbit/s

95th percentile per-packet one-way delay: 117.567 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 62.87 Mbit/s

95th percentile per-packet one-way delay: 119.018 ms

Loss rate: 0.06%

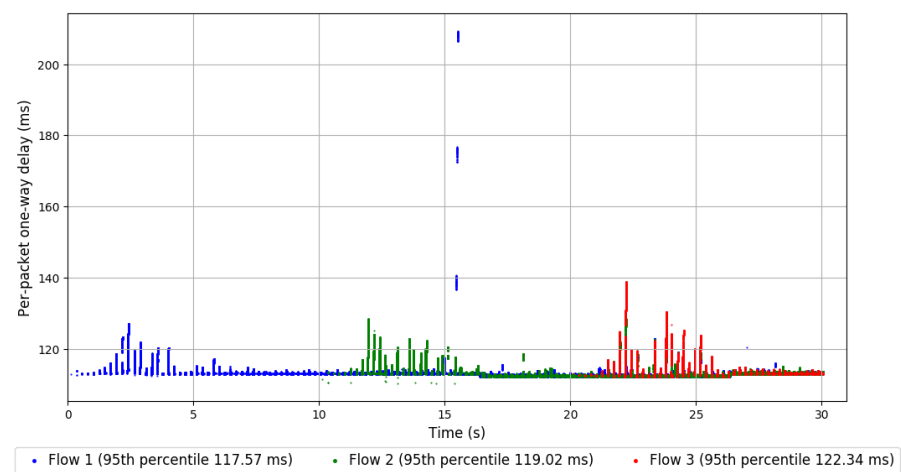
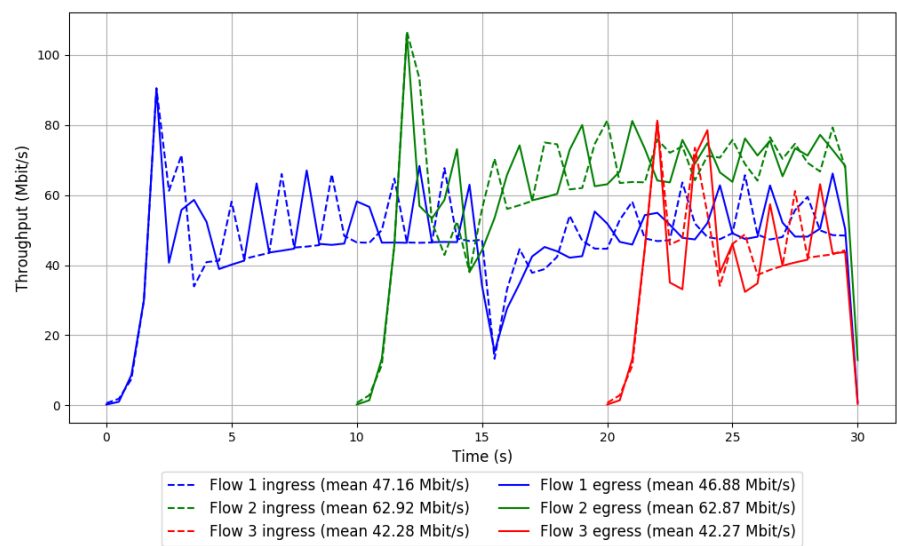
-- Flow 3:

Average throughput: 42.27 Mbit/s

95th percentile per-packet one-way delay: 122.337 ms

Loss rate: 0.04%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-06 00:46:29

End at: 2017-12-06 00:46:59

# Below is generated by plot.py at 2017-12-06 02:41:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.92 Mbit/s

95th percentile per-packet one-way delay: 118.102 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 46.04 Mbit/s

95th percentile per-packet one-way delay: 116.834 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 46.91 Mbit/s

95th percentile per-packet one-way delay: 120.338 ms

Loss rate: 0.01%

-- Flow 3:

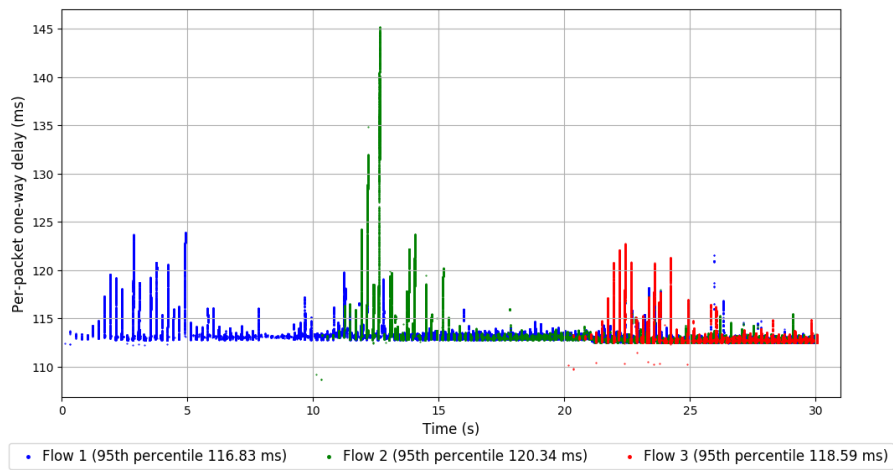
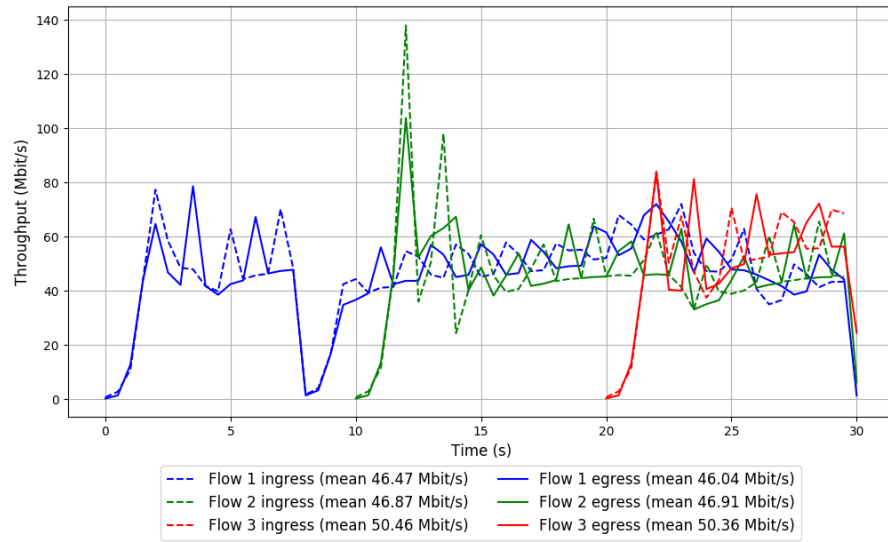
Average throughput: 50.36 Mbit/s

95th percentile per-packet one-way delay: 118.591 ms

Loss rate: 0.19%



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



Run 8: Statistics of TCP Cubic

Start at: 2017-12-06 00:59:44

End at: 2017-12-06 01:00:14

# Below is generated by plot.py at 2017-12-06 02:41:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 104.02 Mbit/s

95th percentile per-packet one-way delay: 117.946 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 48.71 Mbit/s

95th percentile per-packet one-way delay: 115.421 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.60 Mbit/s

95th percentile per-packet one-way delay: 119.139 ms

Loss rate: 0.00%

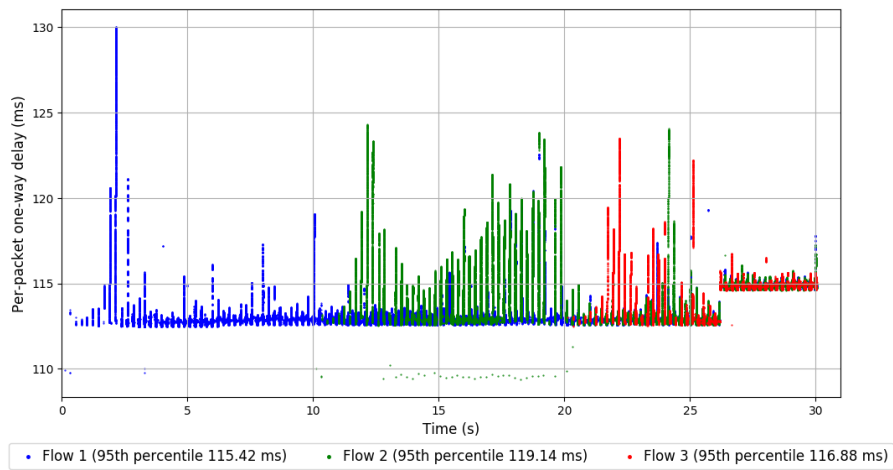
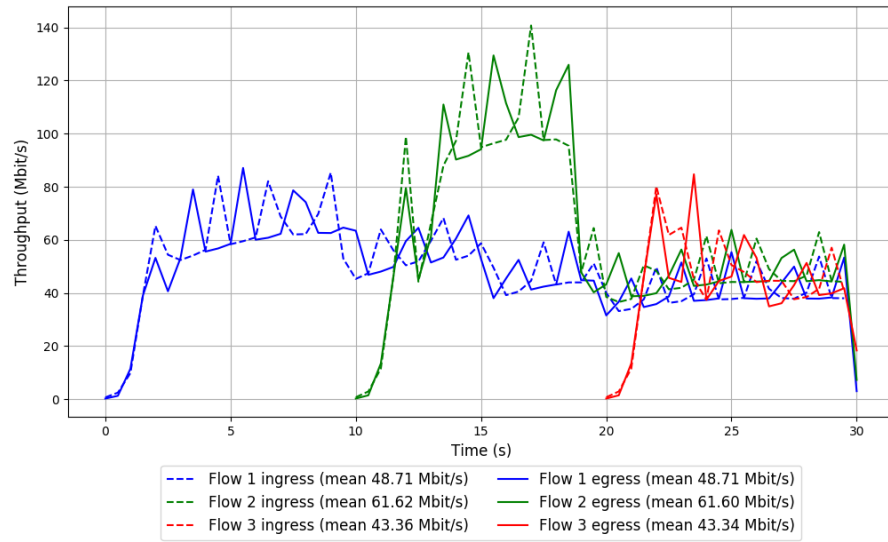
-- Flow 3:

Average throughput: 43.34 Mbit/s

95th percentile per-packet one-way delay: 116.880 ms

Loss rate: 0.03%

# Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-06 01:12:53

End at: 2017-12-06 01:13:23

# Below is generated by plot.py at 2017-12-06 02:41:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 108.53 Mbit/s

95th percentile per-packet one-way delay: 120.505 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 63.99 Mbit/s

95th percentile per-packet one-way delay: 120.100 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.59 Mbit/s

95th percentile per-packet one-way delay: 119.736 ms

Loss rate: 0.02%

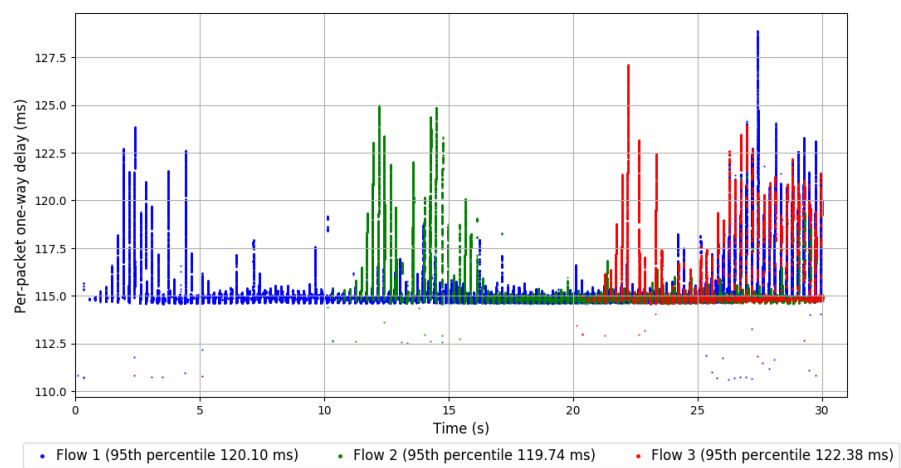
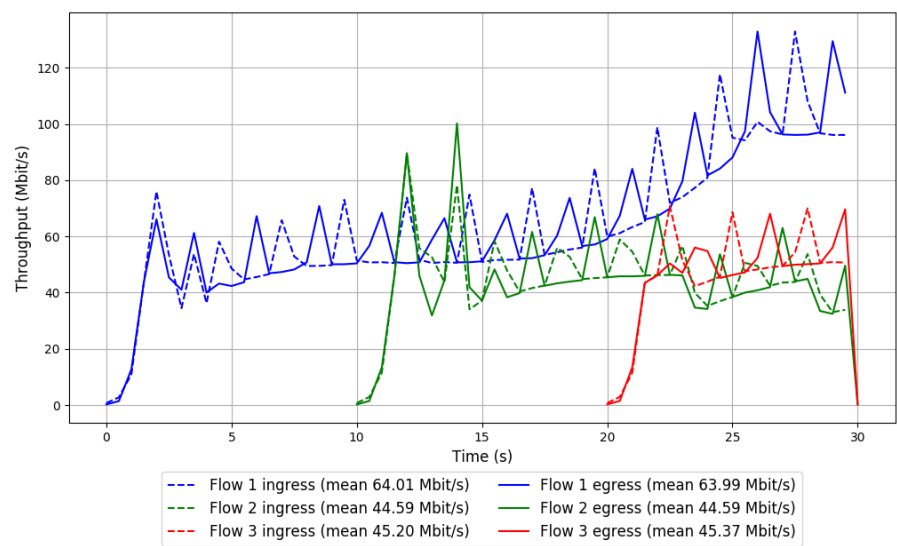
-- Flow 3:

Average throughput: 45.37 Mbit/s

95th percentile per-packet one-way delay: 122.381 ms

Loss rate: 0.03%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-06 01:26:19

End at: 2017-12-06 01:26:49

# Below is generated by plot.py at 2017-12-06 02:41:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 99.62 Mbit/s

95th percentile per-packet one-way delay: 118.147 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 51.42 Mbit/s

95th percentile per-packet one-way delay: 117.592 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 46.52 Mbit/s

95th percentile per-packet one-way delay: 118.975 ms

Loss rate: 0.72%

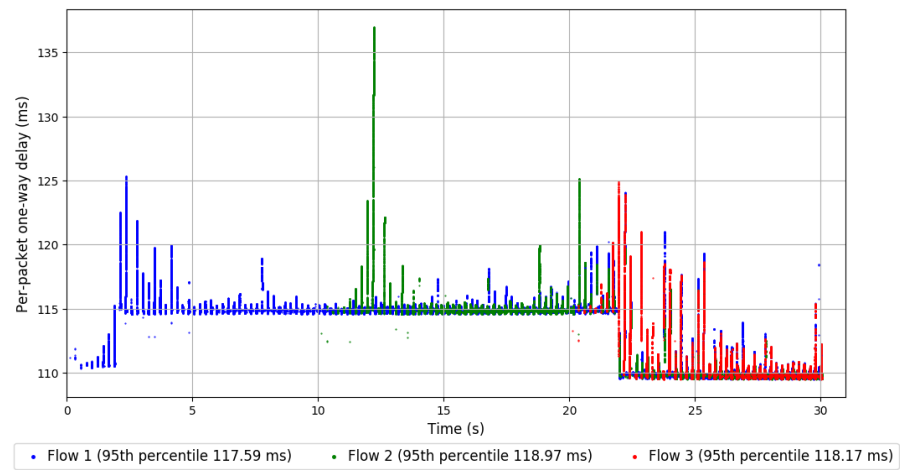
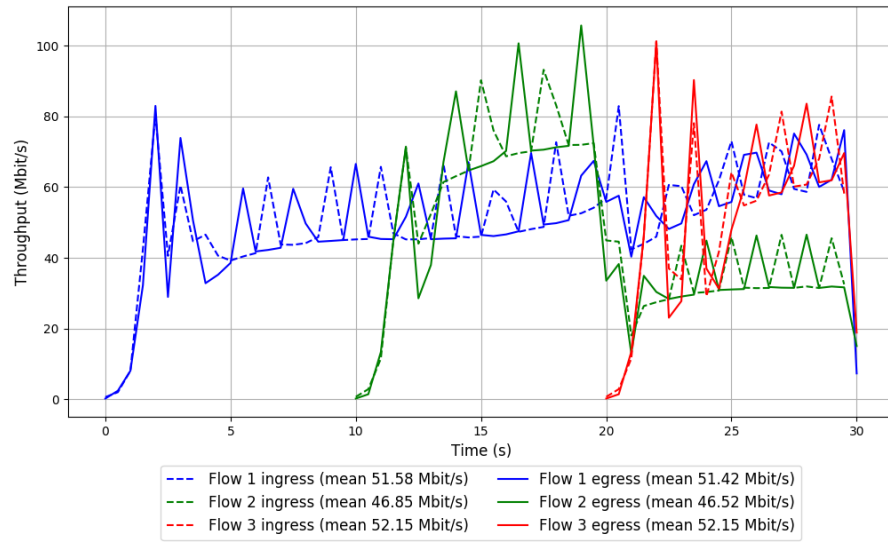
-- Flow 3:

Average throughput: 52.15 Mbit/s

95th percentile per-packet one-way delay: 118.167 ms

Loss rate: 0.03%

# Run 10: Report of TCP Cubic — Data Link



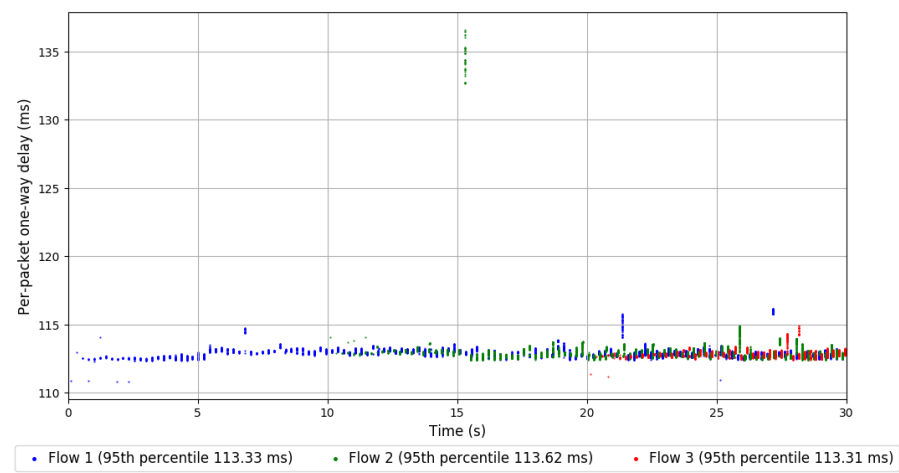
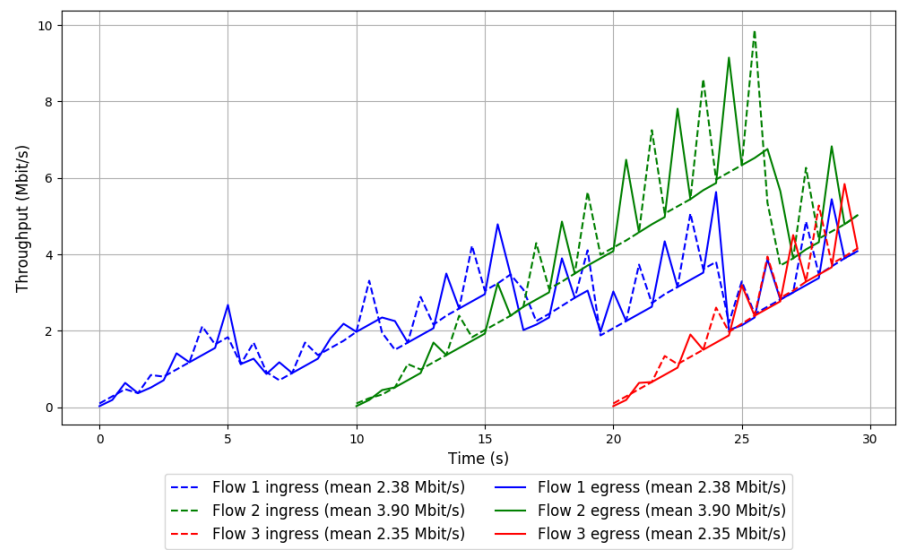
```
Run 1: Statistics of LEDBAT

Start at: 2017-12-05 23:27:15
End at: 2017-12-05 23:27:45

# Below is generated by plot.py at 2017-12-06 02:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.73 Mbit/s
95th percentile per-packet one-way delay: 113.505 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 2.38 Mbit/s
95th percentile per-packet one-way delay: 113.328 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 113.620 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 113.311 ms
Loss rate: 0.00%
```



Run 1: Report of LEDBAT — Data Link

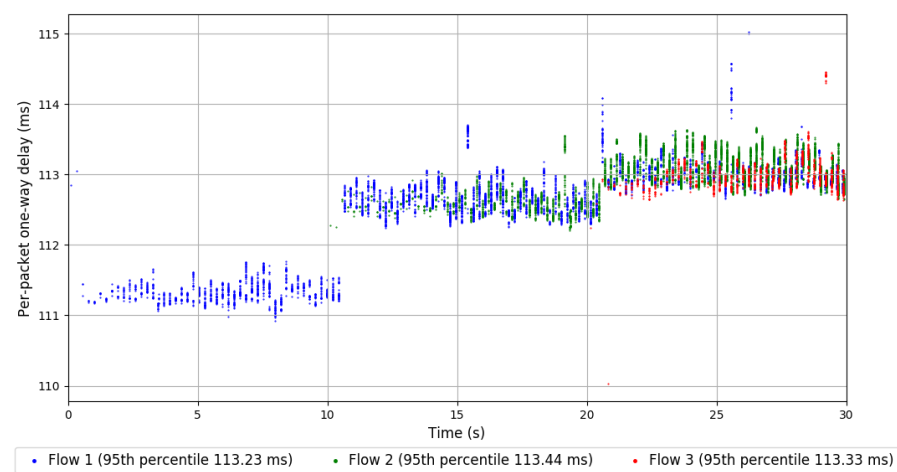
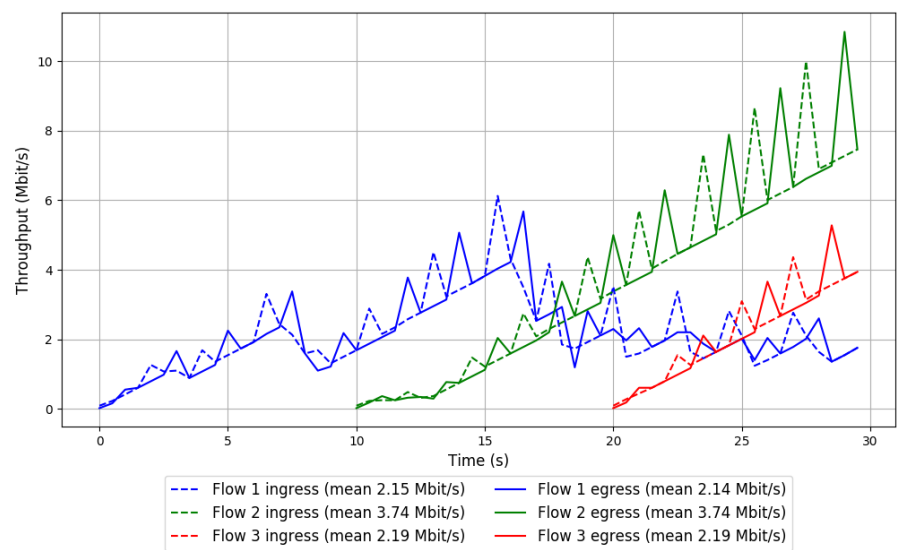


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-05 23:40:30
End at: 2017-12-05 23:41:00

# Below is generated by plot.py at 2017-12-06 02:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.34 Mbit/s
95th percentile per-packet one-way delay: 113.417 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 113.235 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 113.443 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 113.327 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-05 23:53:56

End at: 2017-12-05 23:54:26

# Below is generated by plot.py at 2017-12-06 02:41:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 112.795 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 112.708 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 112.711 ms

Loss rate: 0.00%

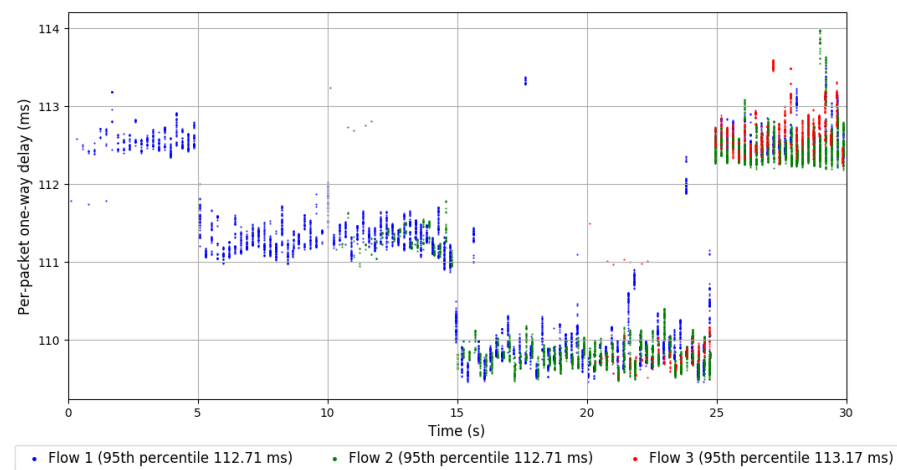
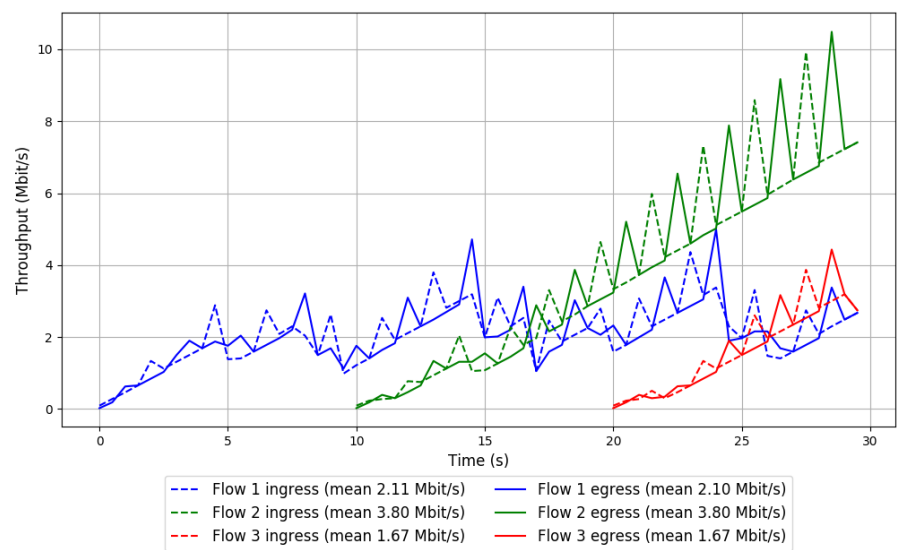
-- Flow 3:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 113.171 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-06 00:07:03

End at: 2017-12-06 00:07:33

# Below is generated by plot.py at 2017-12-06 02:41:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 111.647 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 2.69 Mbit/s

95th percentile per-packet one-way delay: 111.659 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 111.590 ms

Loss rate: 2.74%

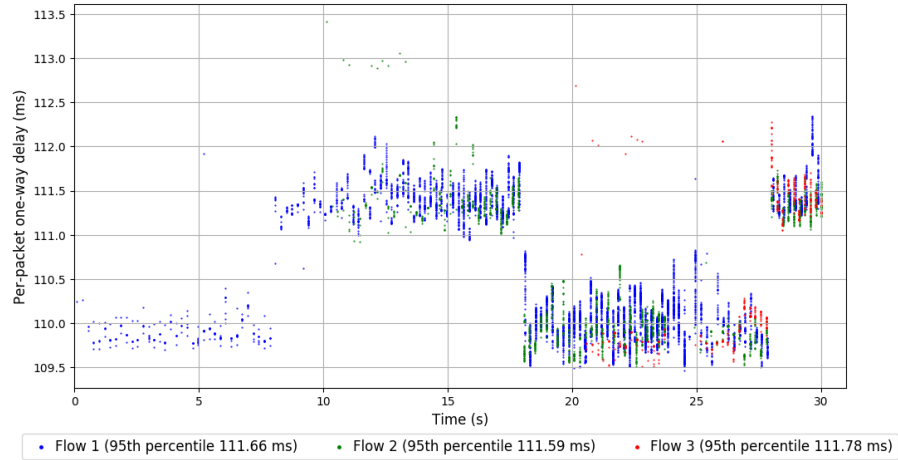
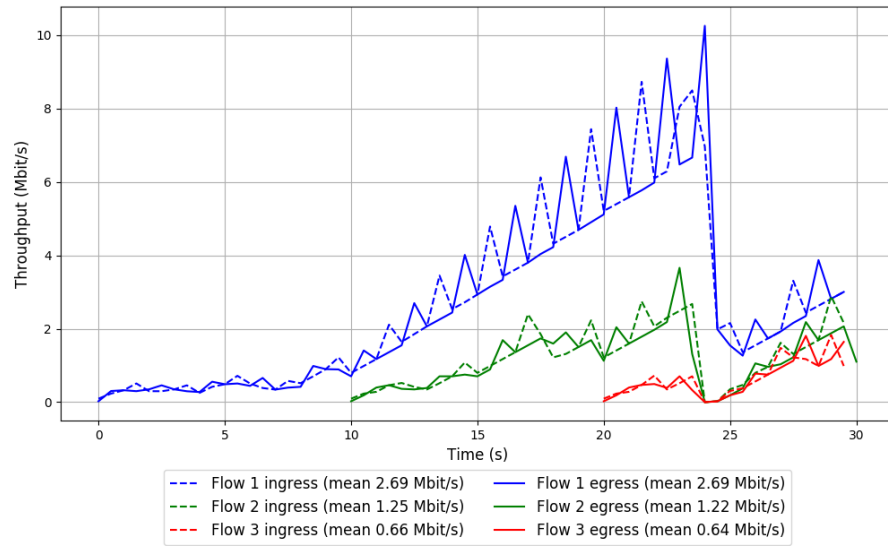
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 111.781 ms

Loss rate: 2.87%

# Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-06 00:20:23

End at: 2017-12-06 00:20:53

# Below is generated by plot.py at 2017-12-06 02:41:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.44 Mbit/s

95th percentile per-packet one-way delay: 113.464 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 113.627 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 113.280 ms

Loss rate: 0.04%

-- Flow 3:

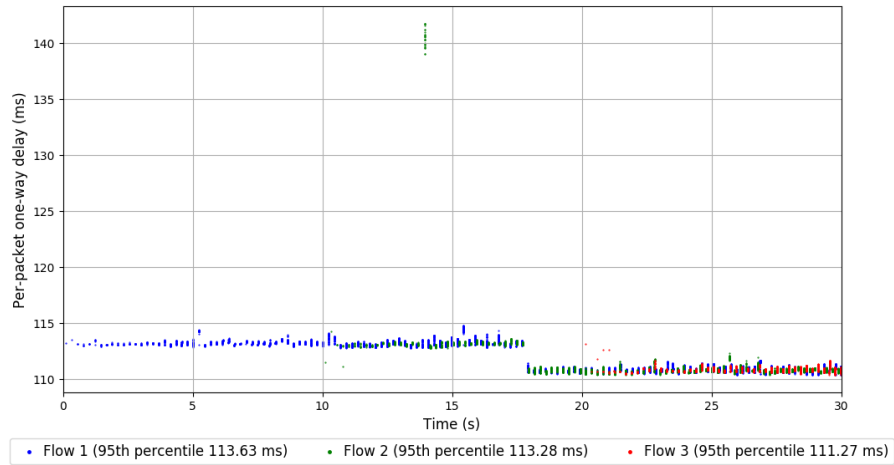
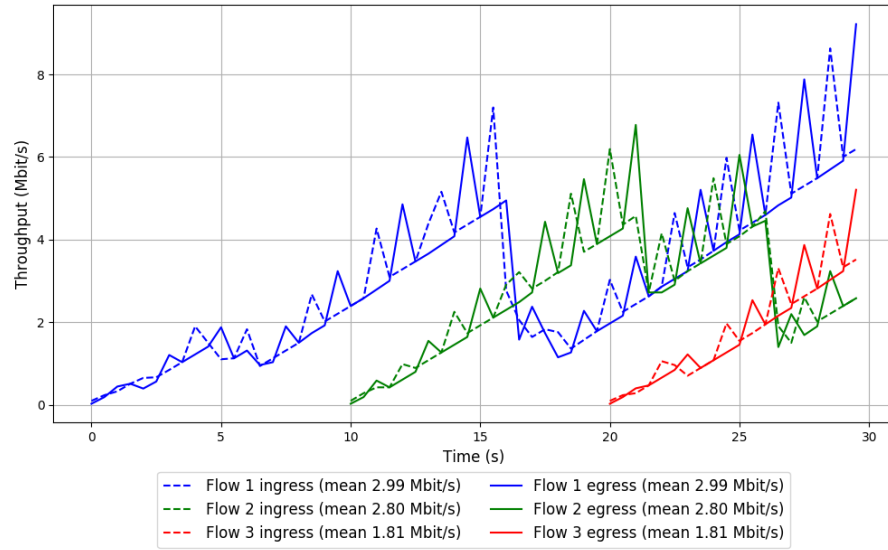
Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 111.270 ms

Loss rate: 0.00%



## Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-06 00:33:47

End at: 2017-12-06 00:34:17

# Below is generated by plot.py at 2017-12-06 02:41:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.28 Mbit/s

95th percentile per-packet one-way delay: 113.523 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 113.518 ms

Loss rate: 1.39%

-- Flow 2:

Average throughput: 2.74 Mbit/s

95th percentile per-packet one-way delay: 113.543 ms

Loss rate: 0.19%

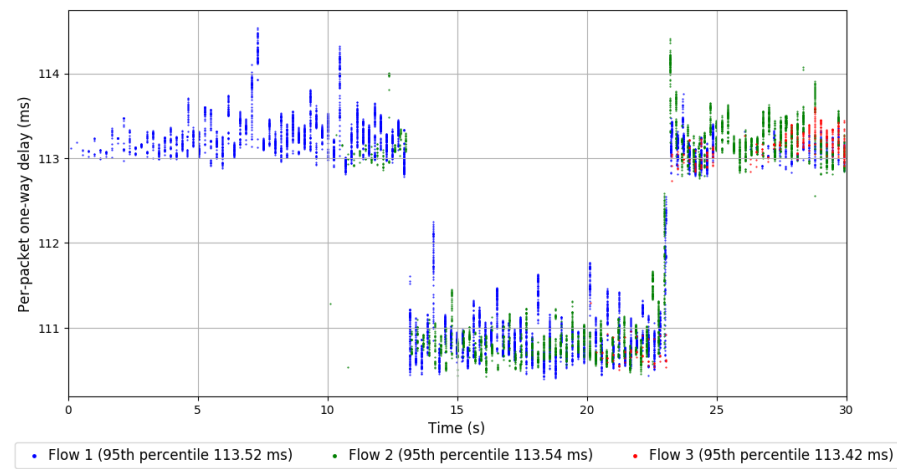
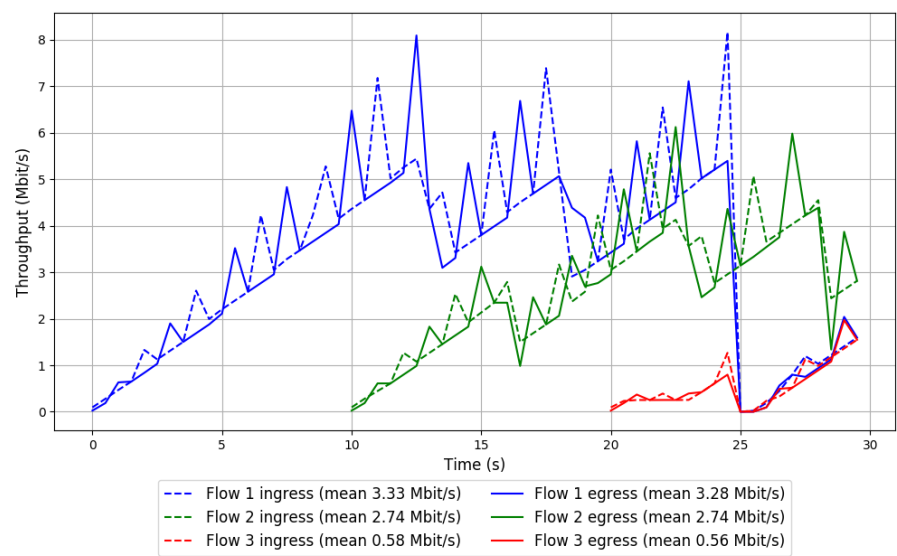
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 113.423 ms

Loss rate: 4.14%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-06 00:47:22

End at: 2017-12-06 00:47:52

# Below is generated by plot.py at 2017-12-06 02:41:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 113.603 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 113.670 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 113.431 ms

Loss rate: 0.00%

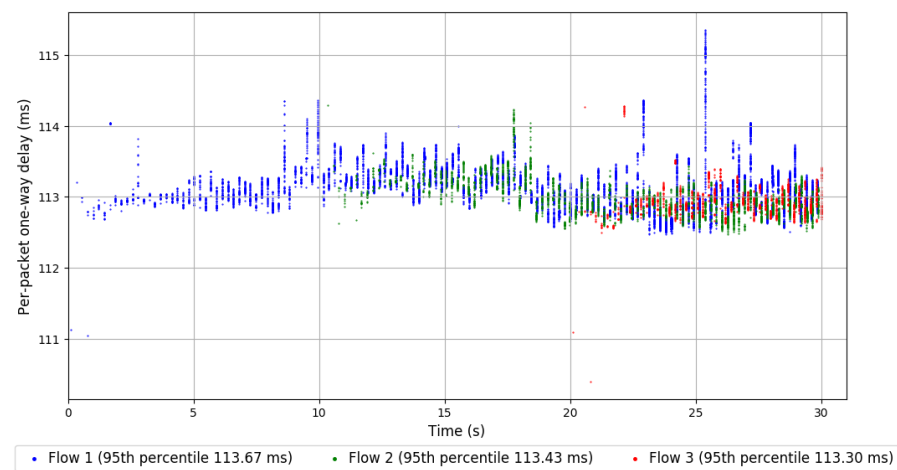
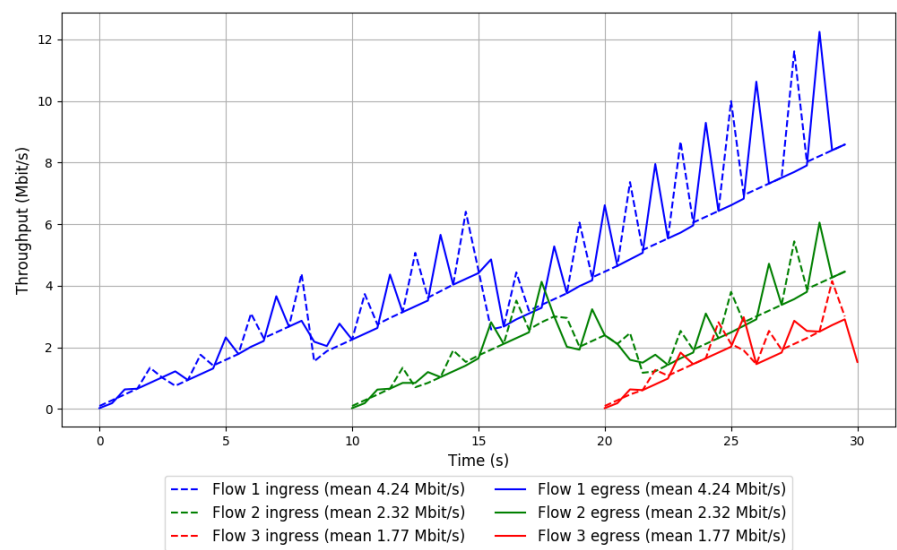
-- Flow 3:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 113.297 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-06 01:00:38

End at: 2017-12-06 01:01:08

# Below is generated by plot.py at 2017-12-06 02:41:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.37 Mbit/s

95th percentile per-packet one-way delay: 115.481 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 115.215 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 4.02 Mbit/s

95th percentile per-packet one-way delay: 115.604 ms

Loss rate: 0.00%

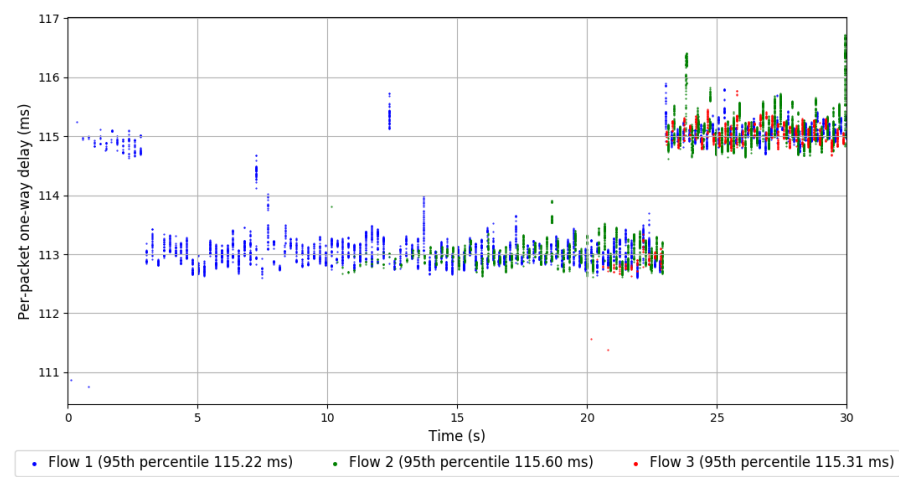
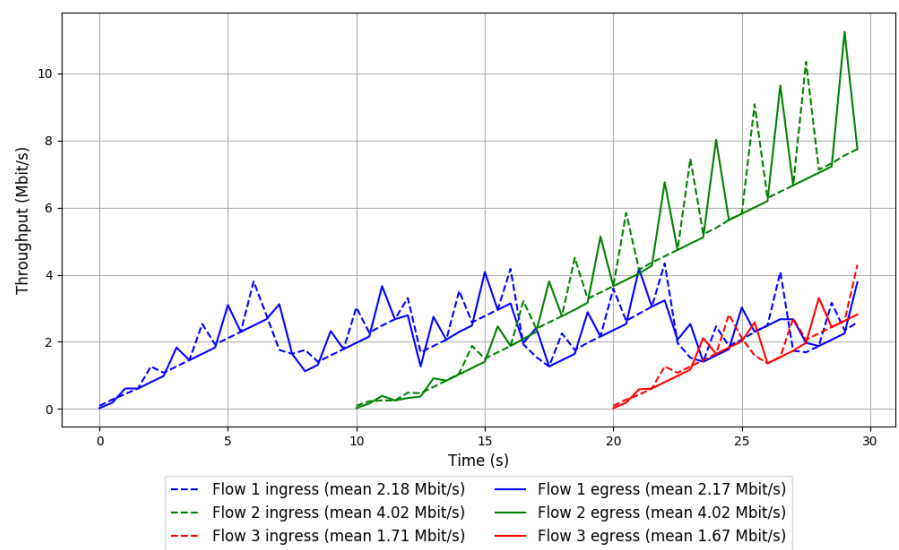
-- Flow 3:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 115.307 ms

Loss rate: 4.63%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-06 01:13:47

End at: 2017-12-06 01:14:17

# Below is generated by plot.py at 2017-12-06 02:41:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.03 Mbit/s

95th percentile per-packet one-way delay: 115.443 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 115.387 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 115.402 ms

Loss rate: 2.10%

-- Flow 3:

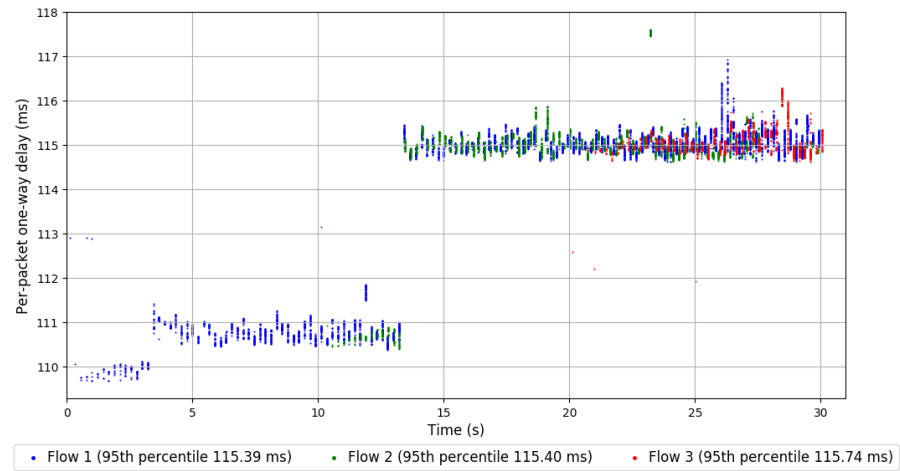
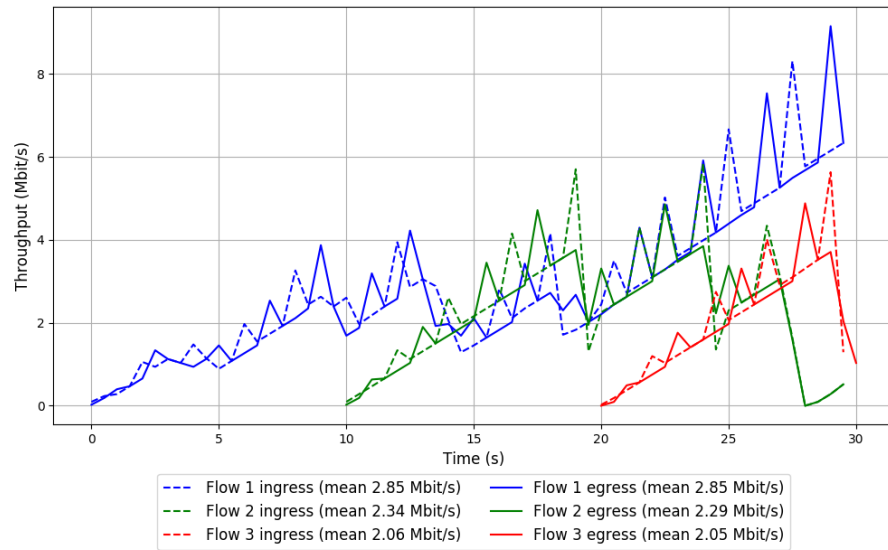
Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 115.741 ms

Loss rate: 0.34%



# Run 9: Report of LEDBAT — Data Link

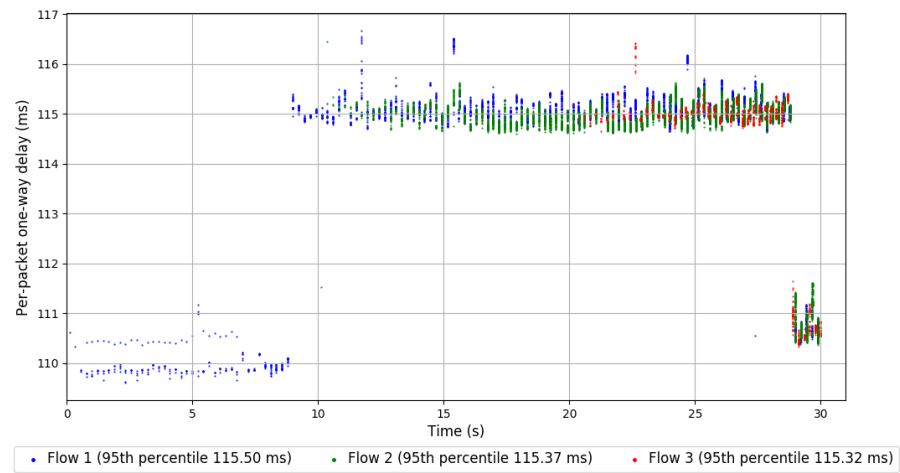
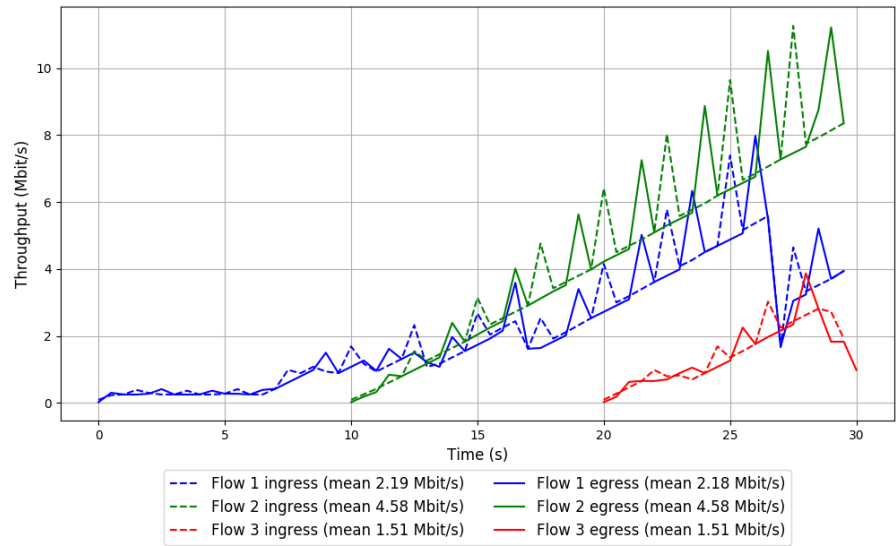


```
Run 10: Statistics of LEDBAT

Start at: 2017-12-06 01:27:12
End at: 2017-12-06 01:27:42

# Below is generated by plot.py at 2017-12-06 02:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.70 Mbit/s
95th percentile per-packet one-way delay: 115.410 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 115.496 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 115.371 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 115.321 ms
Loss rate: 0.00%
```

# Run 10: Report of LEDBAT — Data Link

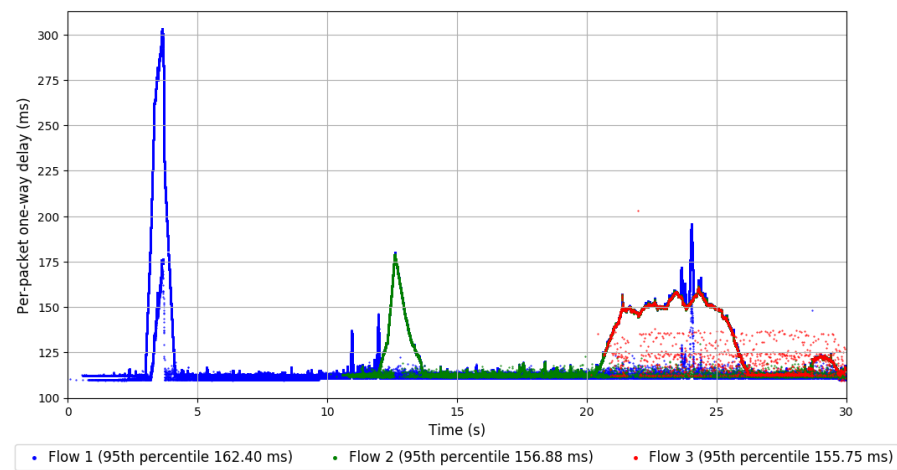
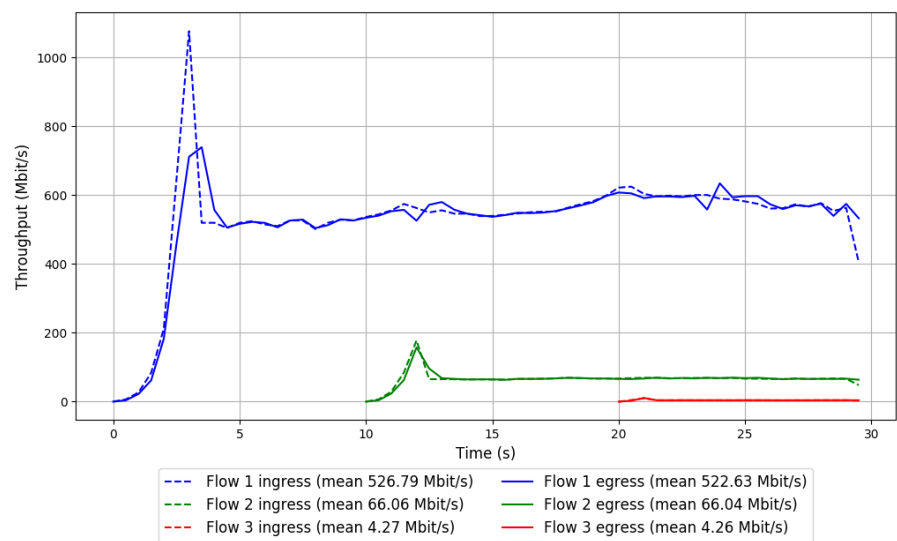


```
Run 1: Statistics of PCC

Start at: 2017-12-05 23:29:01
End at: 2017-12-05 23:29:31

# Below is generated by plot.py at 2017-12-06 02:49:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 567.92 Mbit/s
95th percentile per-packet one-way delay: 161.486 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 522.63 Mbit/s
95th percentile per-packet one-way delay: 162.401 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 66.04 Mbit/s
95th percentile per-packet one-way delay: 156.882 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 155.753 ms
Loss rate: 0.16%
```

Run 1: Report of PCC — Data Link

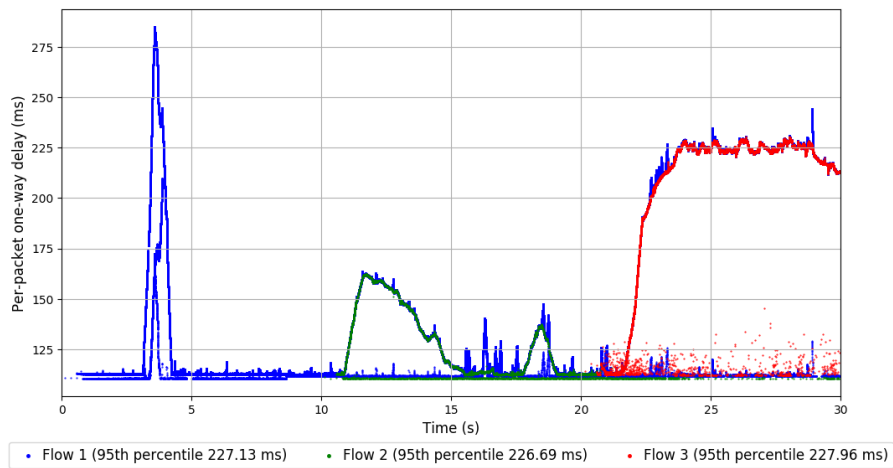
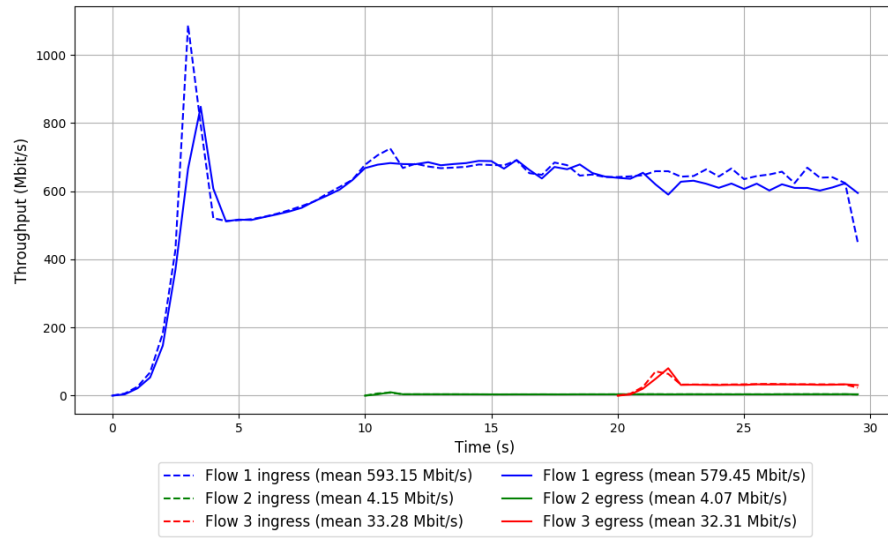


```
Run 2: Statistics of PCC

Start at: 2017-12-05 23:42:22
End at: 2017-12-05 23:42:52

# Below is generated by plot.py at 2017-12-06 02:50:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 592.80 Mbit/s
95th percentile per-packet one-way delay: 227.189 ms
Loss rate: 2.32%
-- Flow 1:
Average throughput: 579.45 Mbit/s
95th percentile per-packet one-way delay: 227.134 ms
Loss rate: 2.31%
-- Flow 2:
Average throughput: 4.07 Mbit/s
95th percentile per-packet one-way delay: 226.692 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 32.31 Mbit/s
95th percentile per-packet one-way delay: 227.958 ms
Loss rate: 2.91%
```

## Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-05 23:55:32

End at: 2017-12-05 23:56:02

# Below is generated by plot.py at 2017-12-06 02:50:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 589.10 Mbit/s

95th percentile per-packet one-way delay: 227.359 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 501.25 Mbit/s

95th percentile per-packet one-way delay: 231.964 ms

Loss rate: 1.39%

-- Flow 2:

Average throughput: 116.22 Mbit/s

95th percentile per-packet one-way delay: 223.450 ms

Loss rate: 1.35%

-- Flow 3:

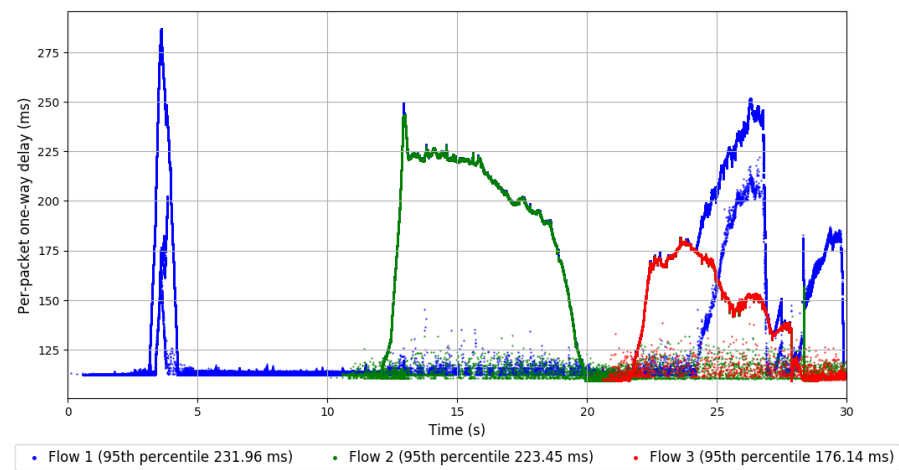
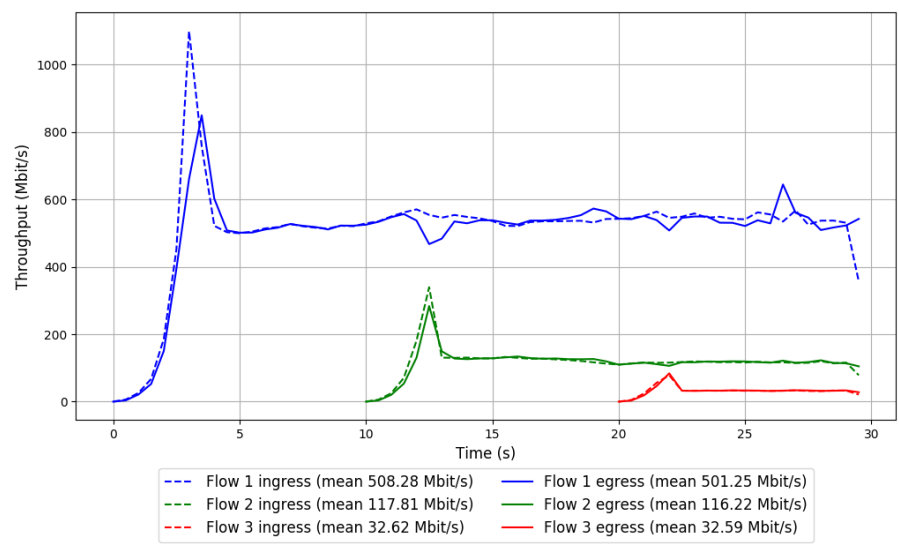
Average throughput: 32.59 Mbit/s

95th percentile per-packet one-way delay: 176.143 ms

Loss rate: 0.03%



Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-06 00:08:50

End at: 2017-12-06 00:09:20

# Below is generated by plot.py at 2017-12-06 02:50:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 589.09 Mbit/s

95th percentile per-packet one-way delay: 225.345 ms

Loss rate: 3.00%

-- Flow 1:

Average throughput: 469.37 Mbit/s

95th percentile per-packet one-way delay: 229.495 ms

Loss rate: 2.84%

-- Flow 2:

Average throughput: 121.48 Mbit/s

95th percentile per-packet one-way delay: 221.771 ms

Loss rate: 3.31%

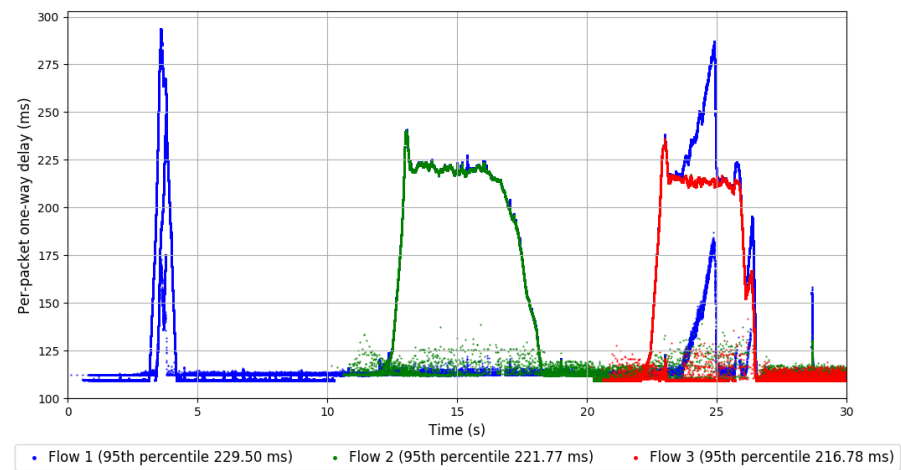
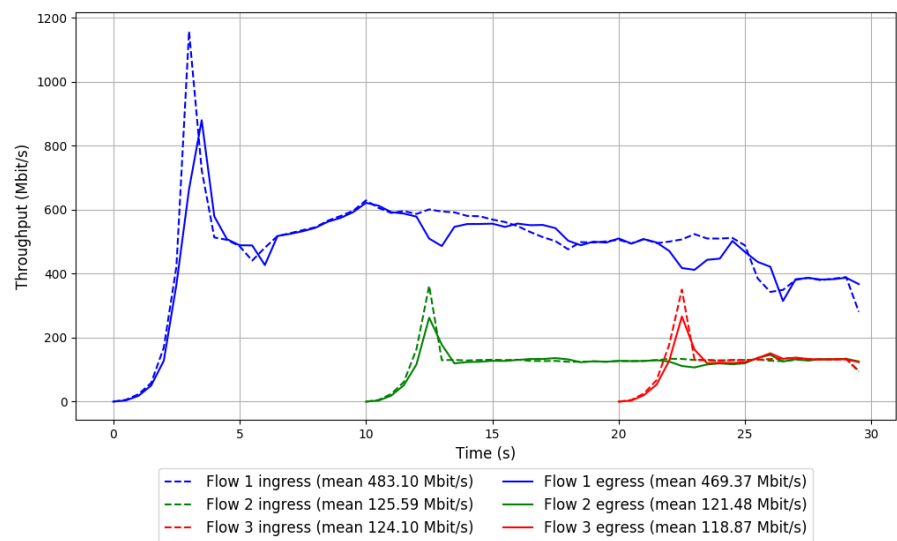
-- Flow 3:

Average throughput: 118.87 Mbit/s

95th percentile per-packet one-way delay: 216.783 ms

Loss rate: 4.28%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-06 00:22:13

End at: 2017-12-06 00:22:43

# Below is generated by plot.py at 2017-12-06 02:50:57

# Datalink statistics

-- Total of 3 flows:

Average throughput: 589.05 Mbit/s

95th percentile per-packet one-way delay: 225.371 ms

Loss rate: 2.59%

-- Flow 1:

Average throughput: 507.23 Mbit/s

95th percentile per-packet one-way delay: 225.386 ms

Loss rate: 2.61%

-- Flow 2:

Average throughput: 120.97 Mbit/s

95th percentile per-packet one-way delay: 225.310 ms

Loss rate: 2.47%

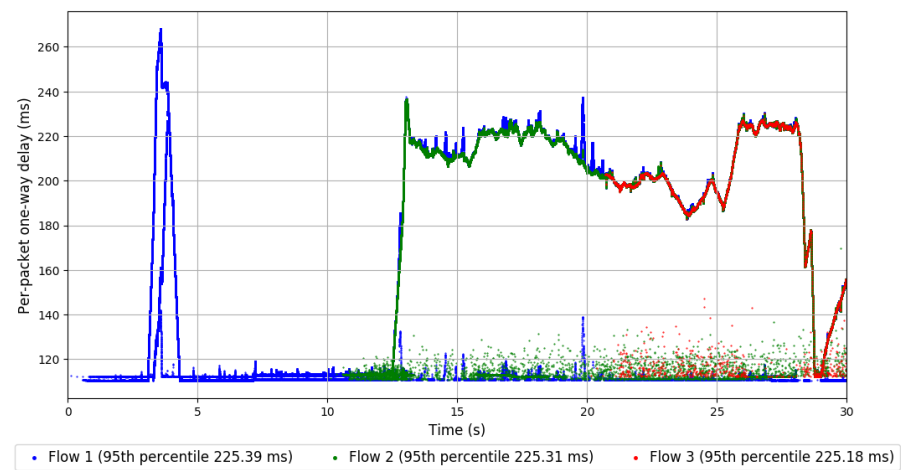
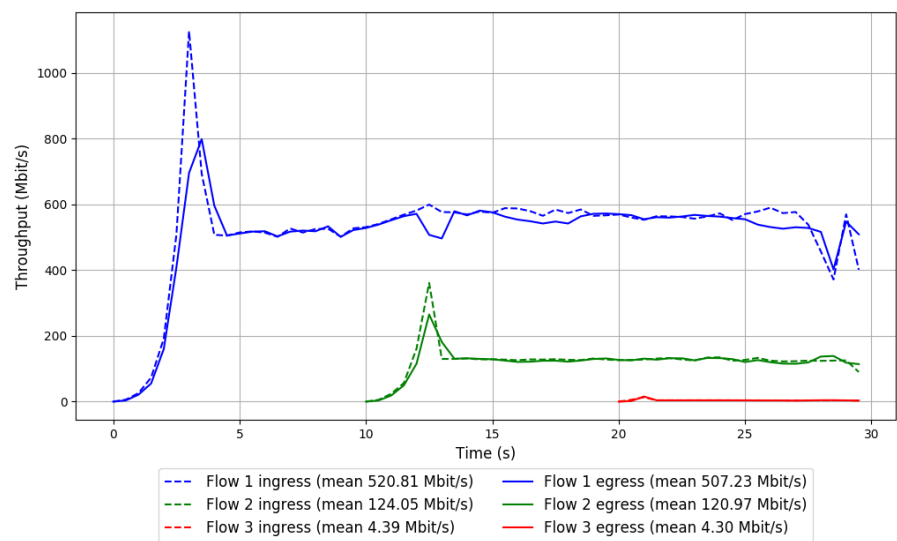
-- Flow 3:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 225.184 ms

Loss rate: 1.92%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-06 00:35:49

End at: 2017-12-06 00:36:19

# Below is generated by plot.py at 2017-12-06 02:51:03

# Datalink statistics

-- Total of 3 flows:

Average throughput: 578.12 Mbit/s

95th percentile per-packet one-way delay: 223.907 ms

Loss rate: 1.76%

-- Flow 1:

Average throughput: 523.52 Mbit/s

95th percentile per-packet one-way delay: 223.908 ms

Loss rate: 1.83%

-- Flow 2:

Average throughput: 66.40 Mbit/s

95th percentile per-packet one-way delay: 223.711 ms

Loss rate: 0.93%

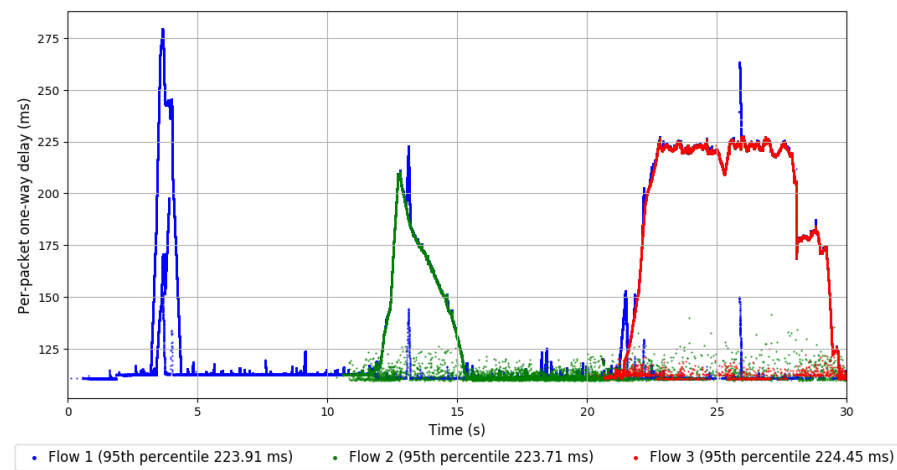
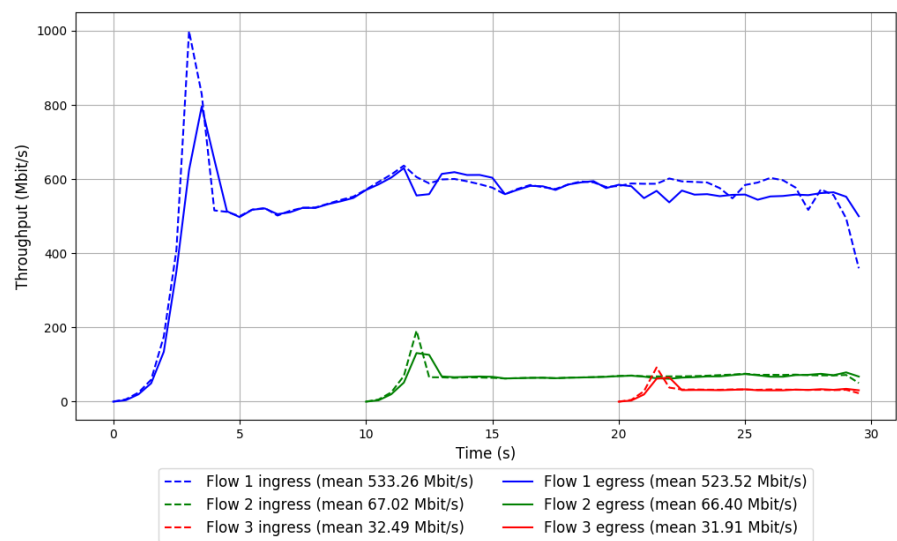
-- Flow 3:

Average throughput: 31.91 Mbit/s

95th percentile per-packet one-way delay: 224.453 ms

Loss rate: 1.79%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-06 00:49:03

End at: 2017-12-06 00:49:33

# Below is generated by plot.py at 2017-12-06 02:51:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 584.51 Mbit/s

95th percentile per-packet one-way delay: 224.982 ms

Loss rate: 3.27%

-- Flow 1:

Average throughput: 466.31 Mbit/s

95th percentile per-packet one-way delay: 226.443 ms

Loss rate: 3.18%

-- Flow 2:

Average throughput: 120.72 Mbit/s

95th percentile per-packet one-way delay: 223.162 ms

Loss rate: 3.17%

-- Flow 3:

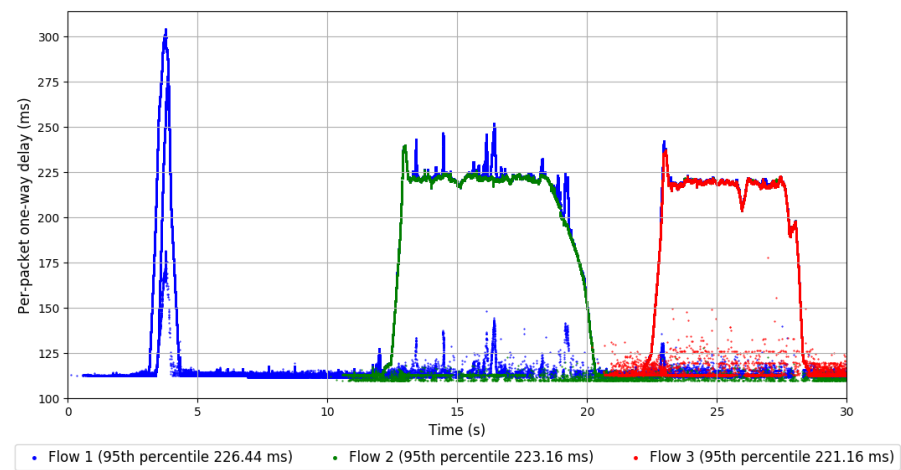
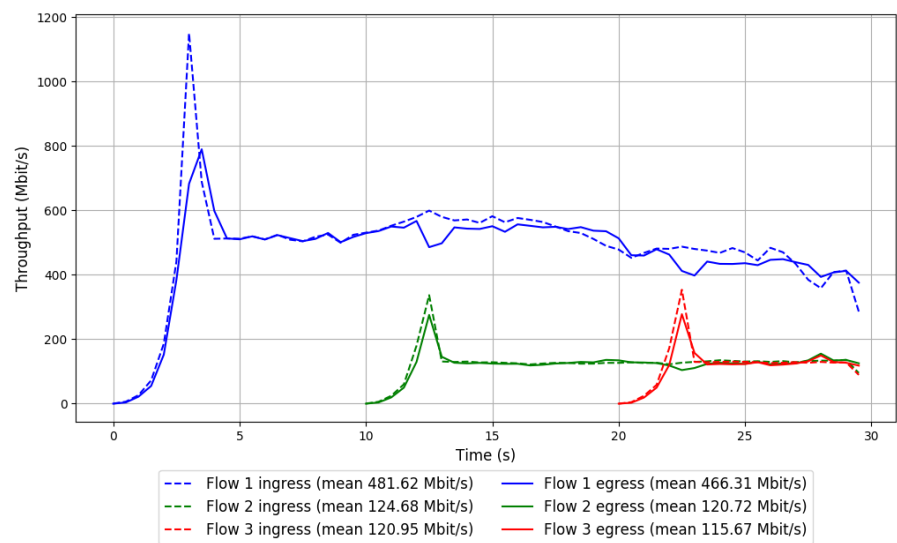
Average throughput: 115.67 Mbit/s

95th percentile per-packet one-way delay: 221.163 ms

Loss rate: 4.53%



Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-06 01:02:21

End at: 2017-12-06 01:02:51

# Below is generated by plot.py at 2017-12-06 02:51:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 563.01 Mbit/s

95th percentile per-packet one-way delay: 293.336 ms

Loss rate: 2.79%

-- Flow 1:

Average throughput: 485.15 Mbit/s

95th percentile per-packet one-way delay: 301.954 ms

Loss rate: 3.13%

-- Flow 2:

Average throughput: 110.42 Mbit/s

95th percentile per-packet one-way delay: 219.707 ms

Loss rate: 0.94%

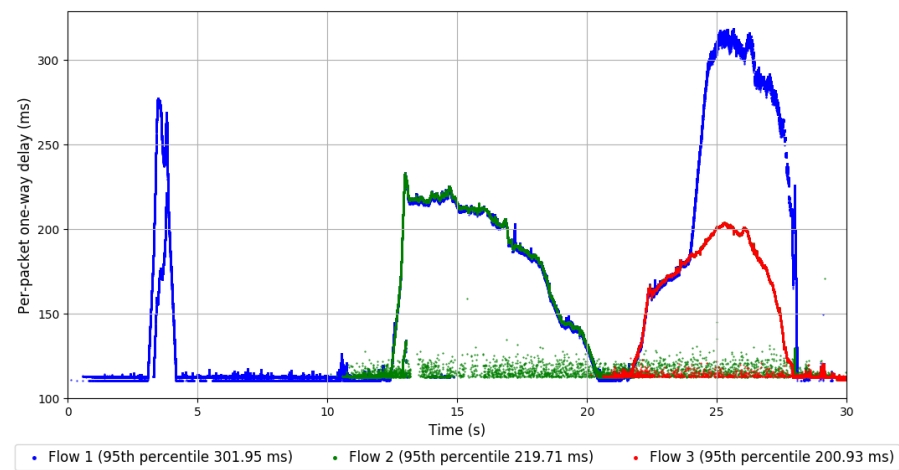
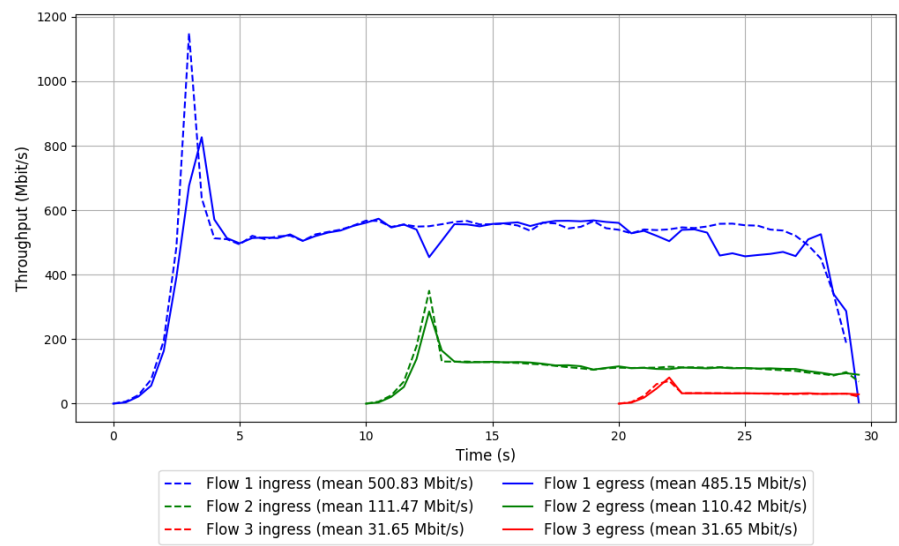
-- Flow 3:

Average throughput: 31.65 Mbit/s

95th percentile per-packet one-way delay: 200.931 ms

Loss rate: 0.00%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-06 01:15:30

End at: 2017-12-06 01:16:00

# Below is generated by plot.py at 2017-12-06 03:00:38

# Datalink statistics

-- Total of 3 flows:

Average throughput: 573.44 Mbit/s

95th percentile per-packet one-way delay: 251.170 ms

Loss rate: 2.01%

-- Flow 1:

Average throughput: 482.70 Mbit/s

95th percentile per-packet one-way delay: 260.394 ms

Loss rate: 2.07%

-- Flow 2:

Average throughput: 120.02 Mbit/s

95th percentile per-packet one-way delay: 223.814 ms

Loss rate: 1.74%

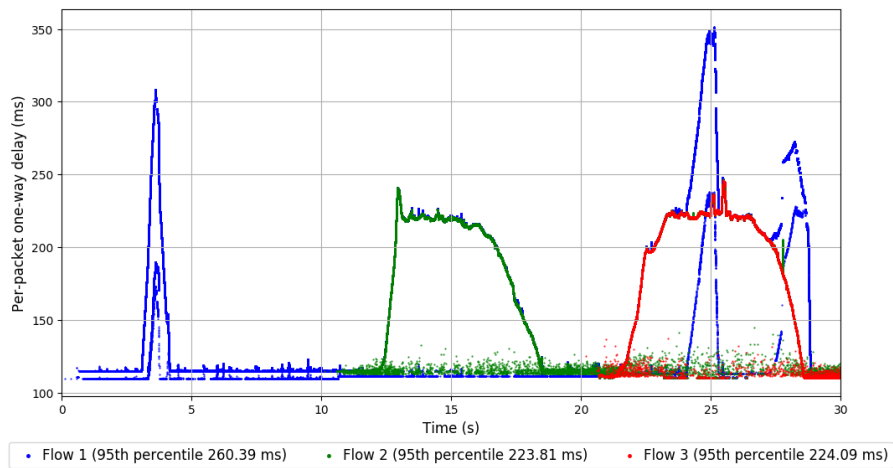
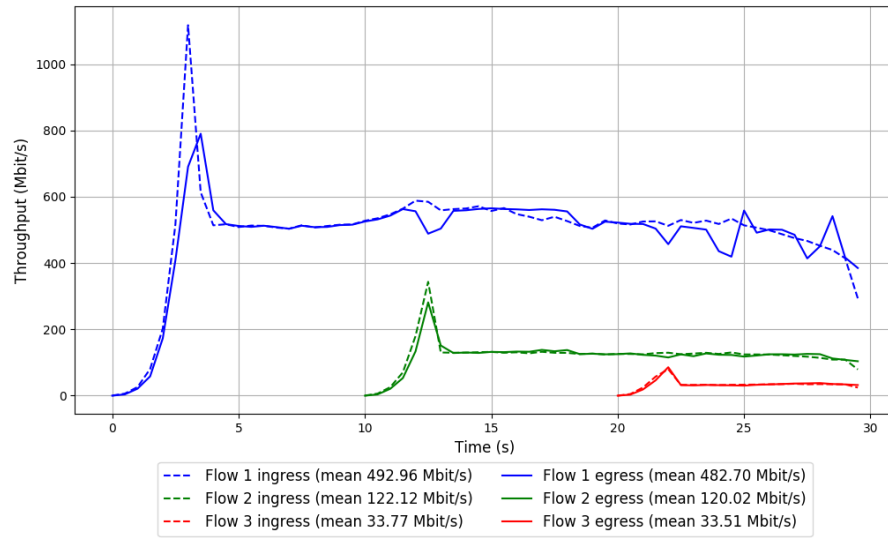
-- Flow 3:

Average throughput: 33.51 Mbit/s

95th percentile per-packet one-way delay: 224.095 ms

Loss rate: 1.00%

# Run 9: Report of PCC — Data Link

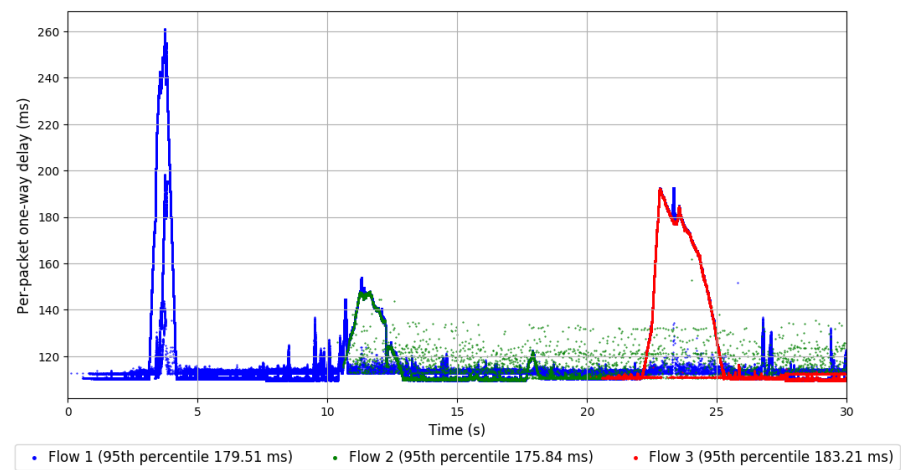
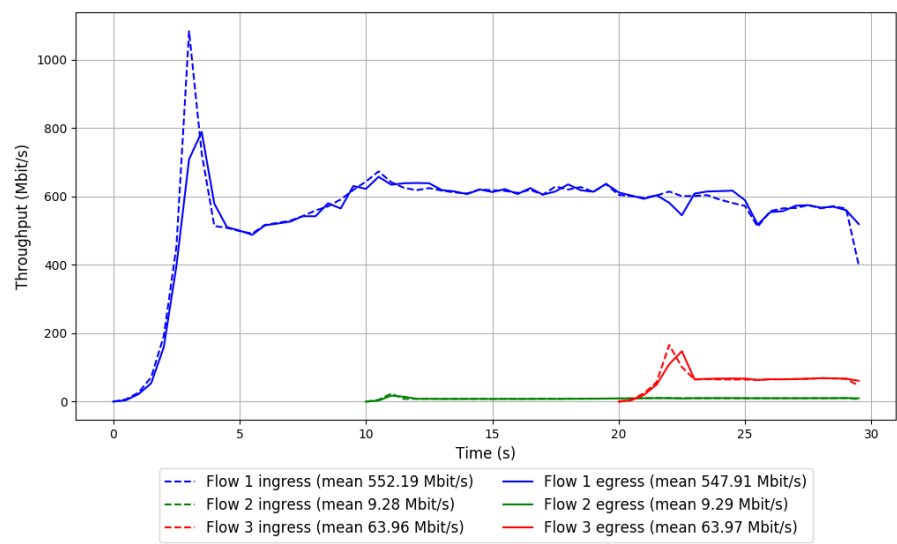


```
Run 10: Statistics of PCC

Start at: 2017-12-06 01:28:53
End at: 2017-12-06 01:29:23

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 575.15 Mbit/s
95th percentile per-packet one-way delay: 179.711 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 547.91 Mbit/s
95th percentile per-packet one-way delay: 179.512 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 9.29 Mbit/s
95th percentile per-packet one-way delay: 175.836 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 63.97 Mbit/s
95th percentile per-packet one-way delay: 183.205 ms
Loss rate: 0.00%
```

Run 10: Report of PCC — Data Link



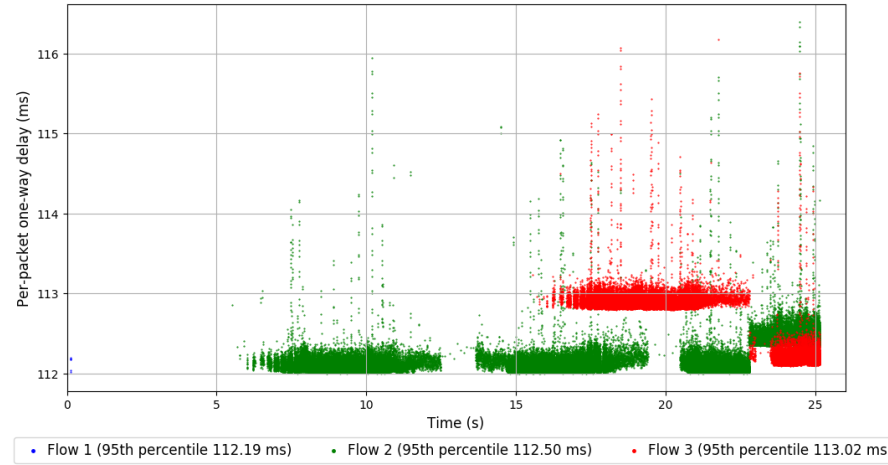
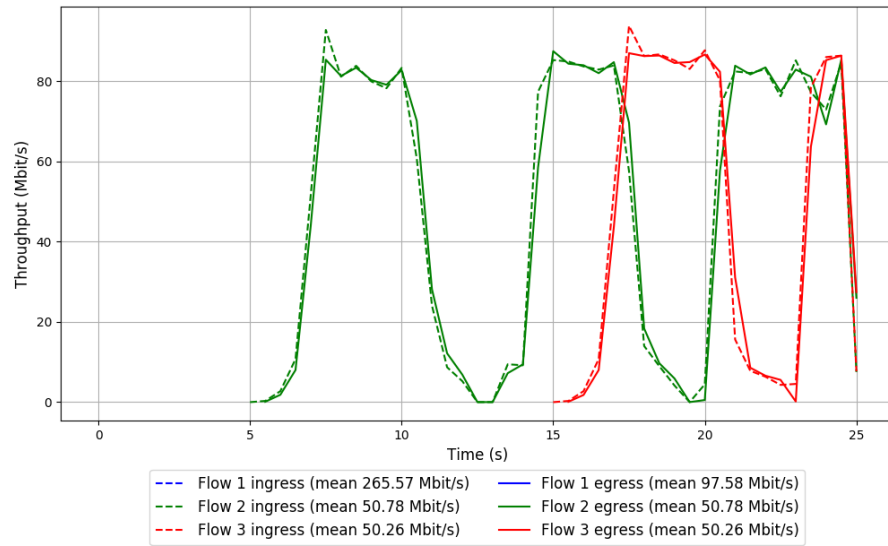
```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-05 23:30:13
End at: 2017-12-05 23:30:43

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.07 Mbit/s
95th percentile per-packet one-way delay: 112.938 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 97.58 Mbit/s
95th percentile per-packet one-way delay: 112.195 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.78 Mbit/s
95th percentile per-packet one-way delay: 112.501 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 50.26 Mbit/s
95th percentile per-packet one-way delay: 113.016 ms
Loss rate: 0.02%
```



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

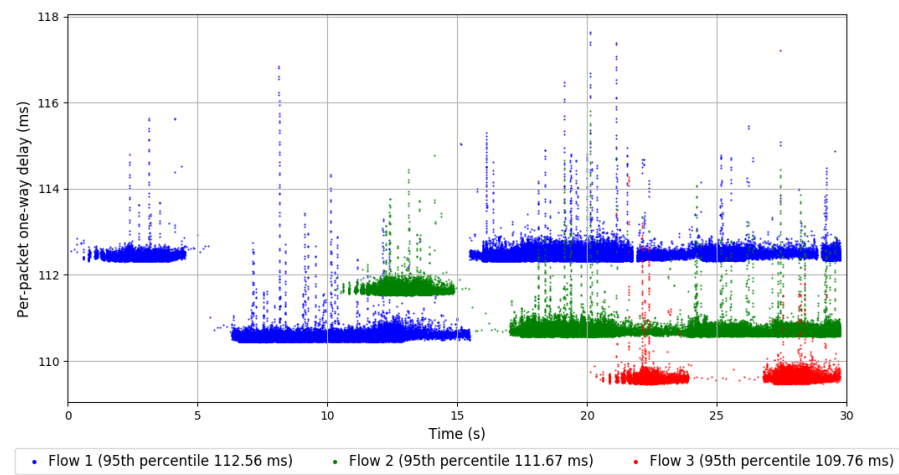
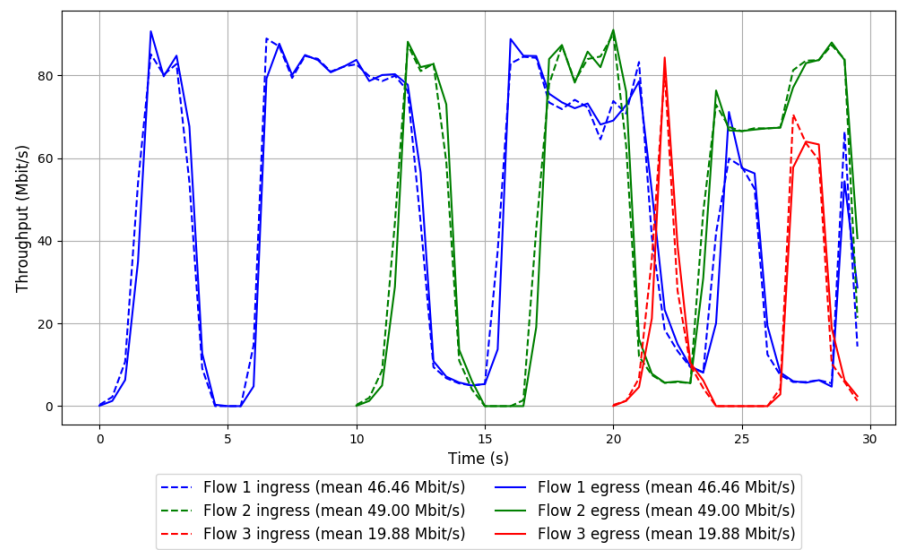


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-12-05 23:43:35
End at: 2017-12-05 23:44:05

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.37 Mbit/s
95th percentile per-packet one-way delay: 112.509 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.46 Mbit/s
95th percentile per-packet one-way delay: 112.564 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.00 Mbit/s
95th percentile per-packet one-way delay: 111.666 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.88 Mbit/s
95th percentile per-packet one-way delay: 109.760 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-05 23:56:45

End at: 2017-12-05 23:57:15

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 116.95 Mbit/s

95th percentile per-packet one-way delay: 112.489 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.44 Mbit/s

95th percentile per-packet one-way delay: 112.500 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 59.00 Mbit/s

95th percentile per-packet one-way delay: 112.479 ms

Loss rate: 0.00%

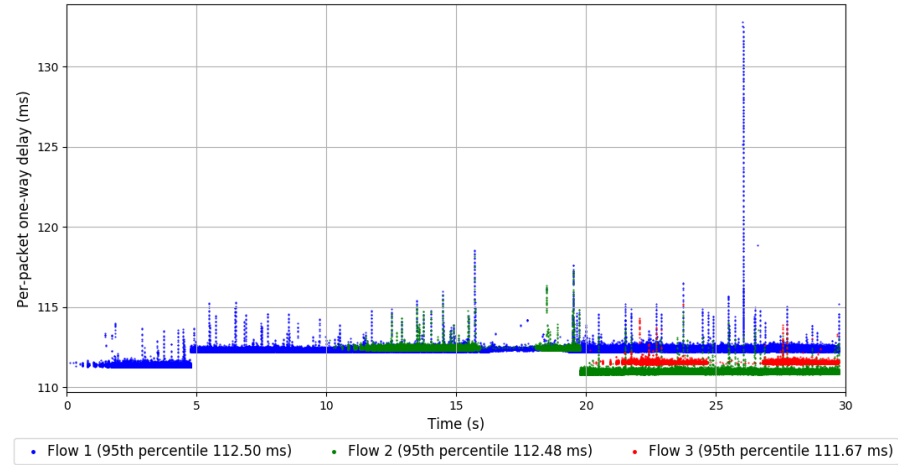
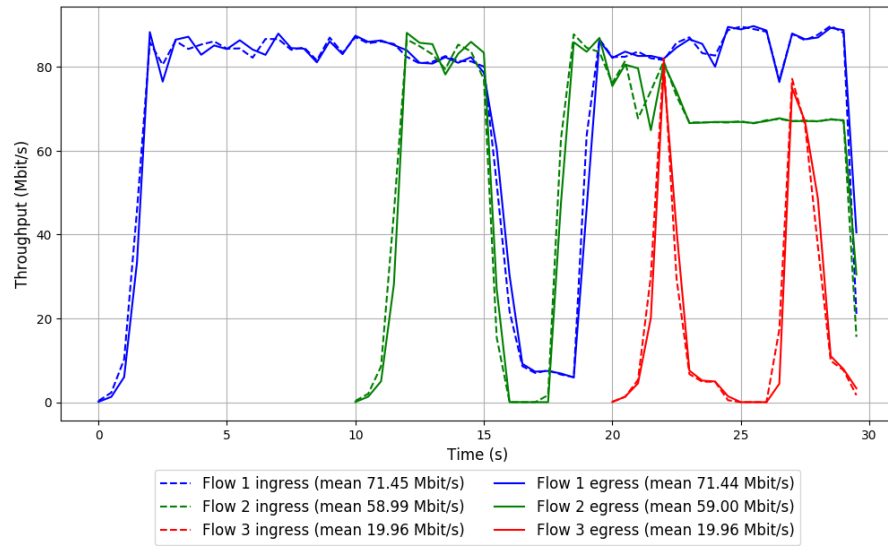
-- Flow 3:

Average throughput: 19.96 Mbit/s

95th percentile per-packet one-way delay: 111.667 ms

Loss rate: 0.00%

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



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-06 00:10:04

End at: 2017-12-06 00:10:34

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 62.76 Mbit/s

95th percentile per-packet one-way delay: 111.990 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 110.192 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.64 Mbit/s

95th percentile per-packet one-way delay: 110.492 ms

Loss rate: 0.00%

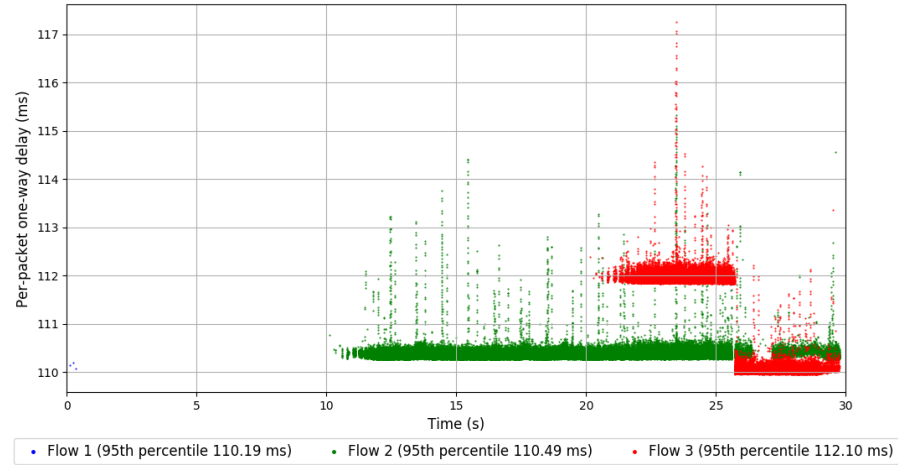
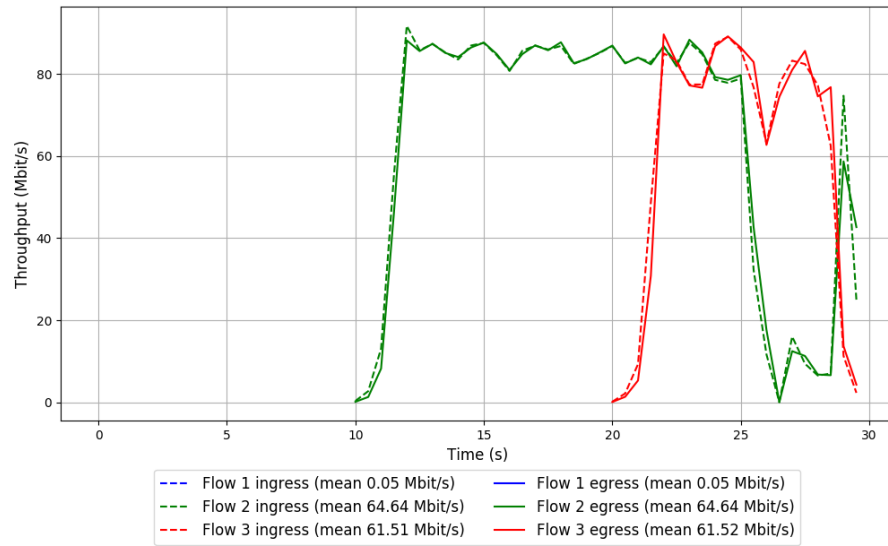
-- Flow 3:

Average throughput: 61.52 Mbit/s

95th percentile per-packet one-way delay: 112.097 ms

Loss rate: 0.00%

# Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-06 00:23:27

End at: 2017-12-06 00:23:57

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 89.69 Mbit/s

95th percentile per-packet one-way delay: 112.229 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.61 Mbit/s

95th percentile per-packet one-way delay: 110.733 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.59 Mbit/s

95th percentile per-packet one-way delay: 110.839 ms

Loss rate: 0.00%

-- Flow 3:

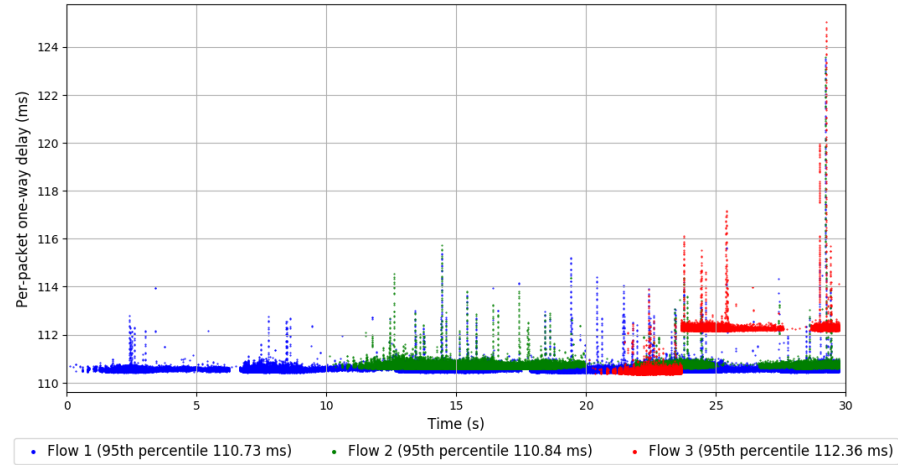
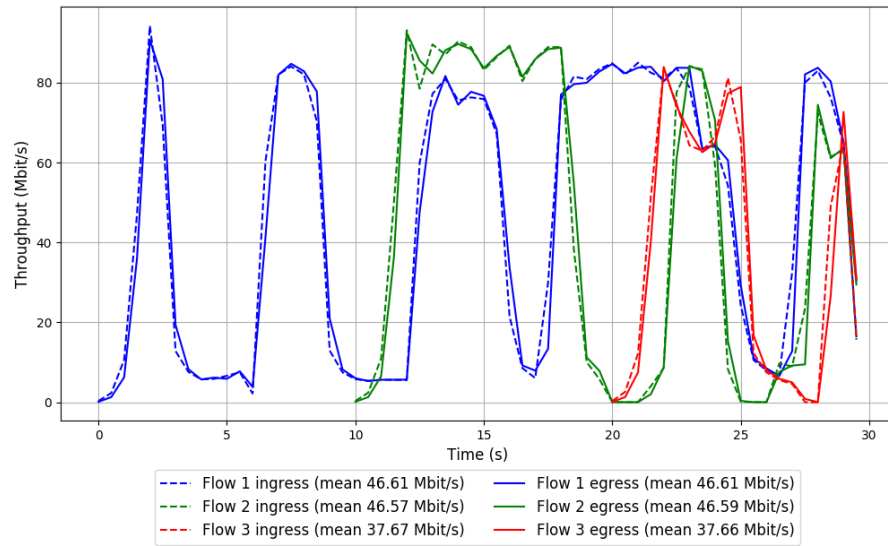
Average throughput: 37.66 Mbit/s

95th percentile per-packet one-way delay: 112.363 ms

Loss rate: 0.00%



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



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-06 00:37:02

End at: 2017-12-06 00:37:32

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 104.75 Mbit/s

95th percentile per-packet one-way delay: 112.820 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.05 Mbit/s

95th percentile per-packet one-way delay: 112.845 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.75 Mbit/s

95th percentile per-packet one-way delay: 112.768 ms

Loss rate: 0.00%

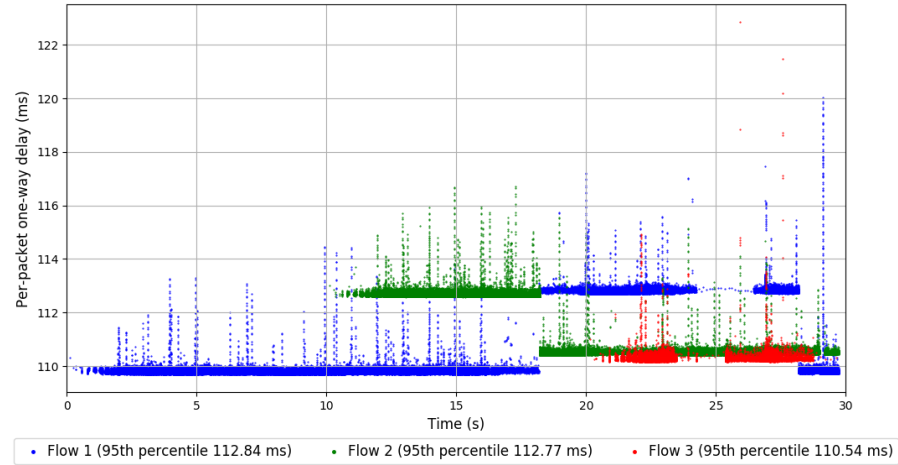
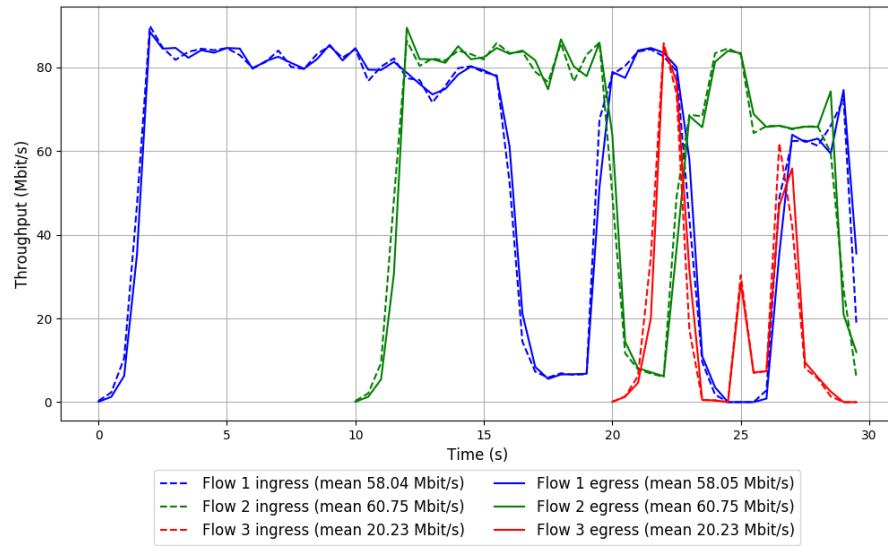
-- Flow 3:

Average throughput: 20.23 Mbit/s

95th percentile per-packet one-way delay: 110.541 ms

Loss rate: 0.00%

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



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-06 00:50:18

End at: 2017-12-06 00:50:48

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 97.79 Mbit/s

95th percentile per-packet one-way delay: 112.877 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.27 Mbit/s

95th percentile per-packet one-way delay: 112.931 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.74 Mbit/s

95th percentile per-packet one-way delay: 112.501 ms

Loss rate: 0.00%

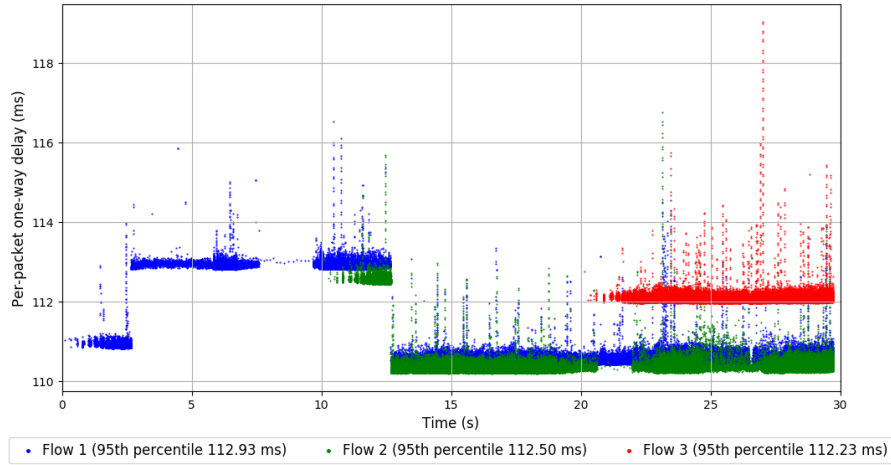
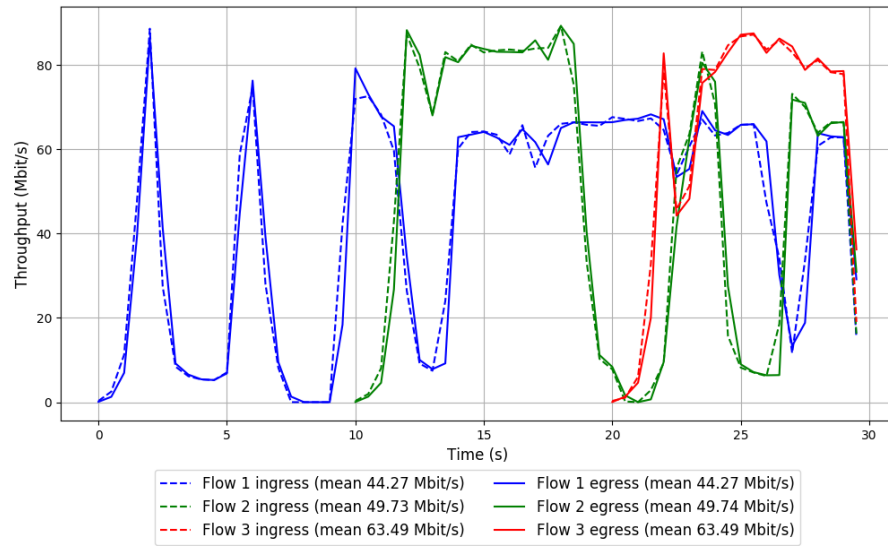
-- Flow 3:

Average throughput: 63.49 Mbit/s

95th percentile per-packet one-way delay: 112.231 ms

Loss rate: 0.00%

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



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-06 01:03:33

End at: 2017-12-06 01:04:03

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 108.96 Mbit/s

95th percentile per-packet one-way delay: 112.660 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.75 Mbit/s

95th percentile per-packet one-way delay: 112.405 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.28 Mbit/s

95th percentile per-packet one-way delay: 112.791 ms

Loss rate: 0.00%

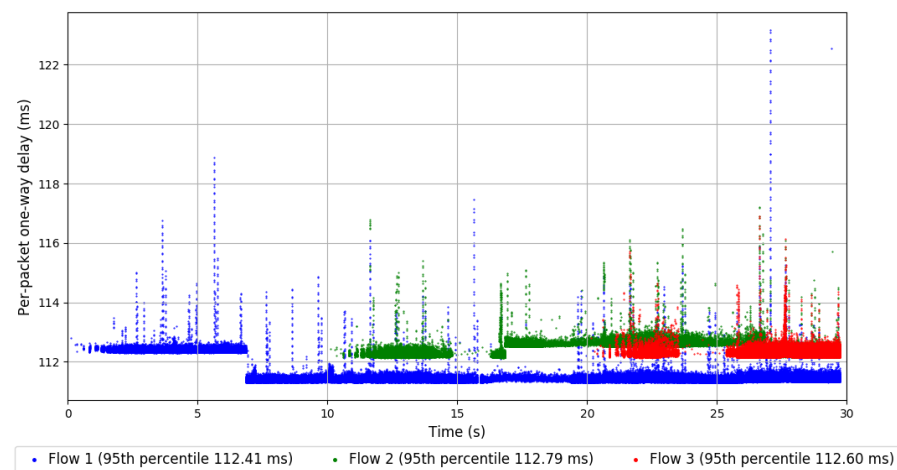
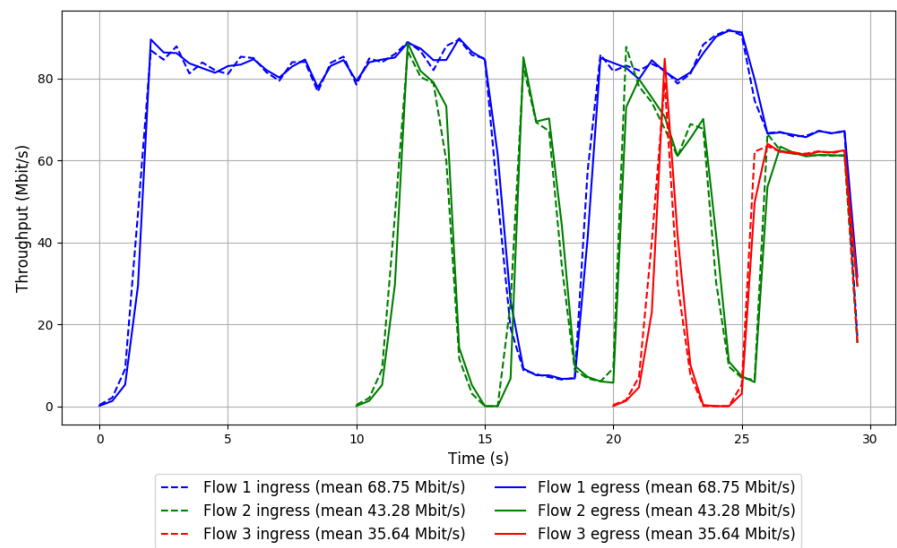
-- Flow 3:

Average throughput: 35.64 Mbit/s

95th percentile per-packet one-way delay: 112.601 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-06 01:16:44

End at: 2017-12-06 01:17:14

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 100.36 Mbit/s

95th percentile per-packet one-way delay: 113.699 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 53.14 Mbit/s

95th percentile per-packet one-way delay: 113.748 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 61.54 Mbit/s

95th percentile per-packet one-way delay: 111.807 ms

Loss rate: 0.00%

-- Flow 3:

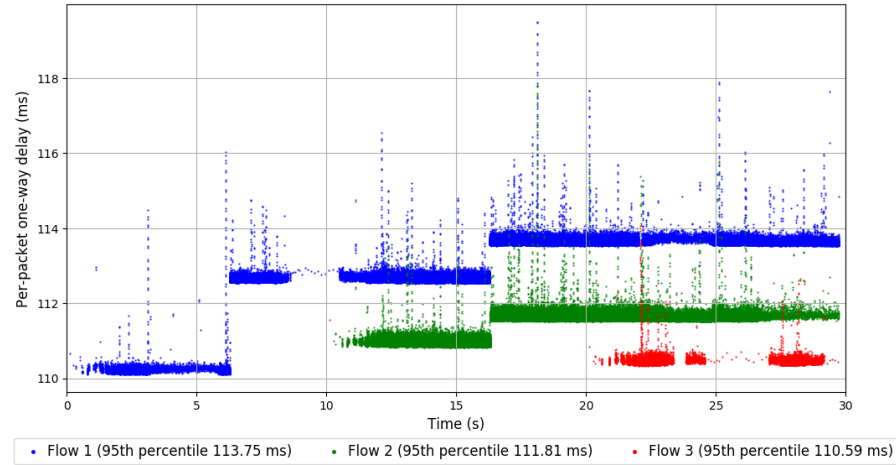
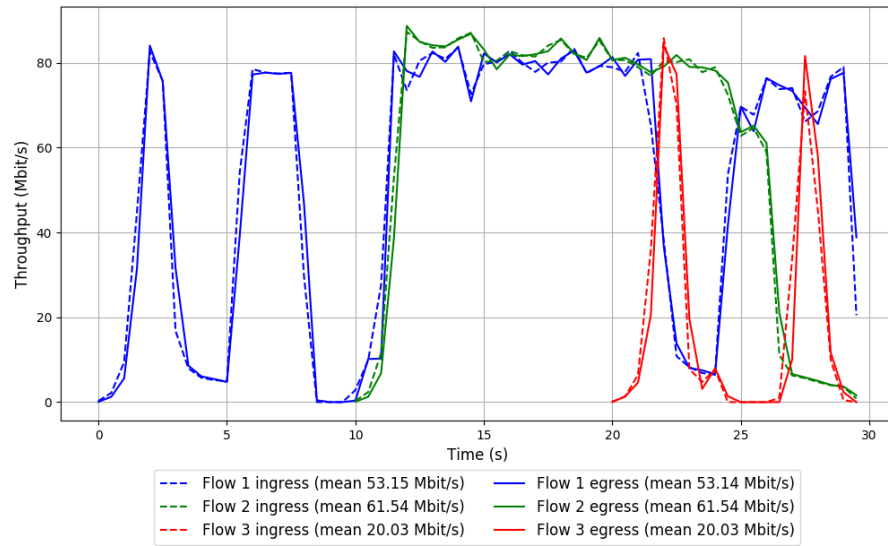
Average throughput: 20.03 Mbit/s

95th percentile per-packet one-way delay: 110.590 ms

Loss rate: 0.00%



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

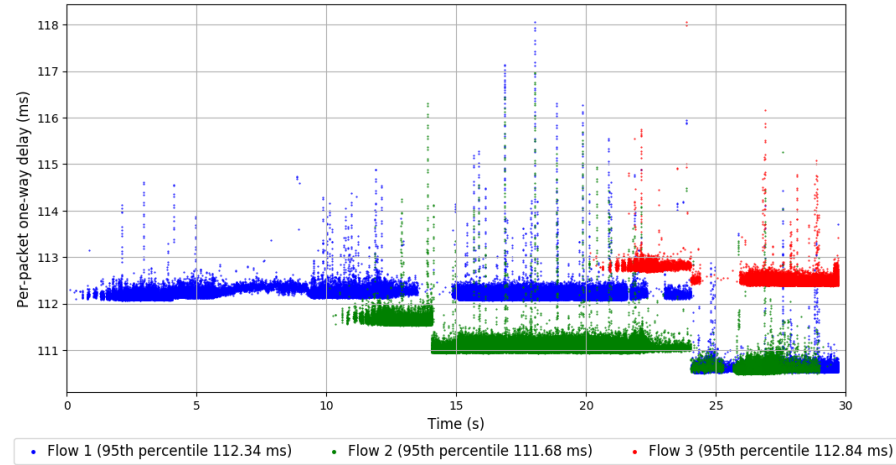
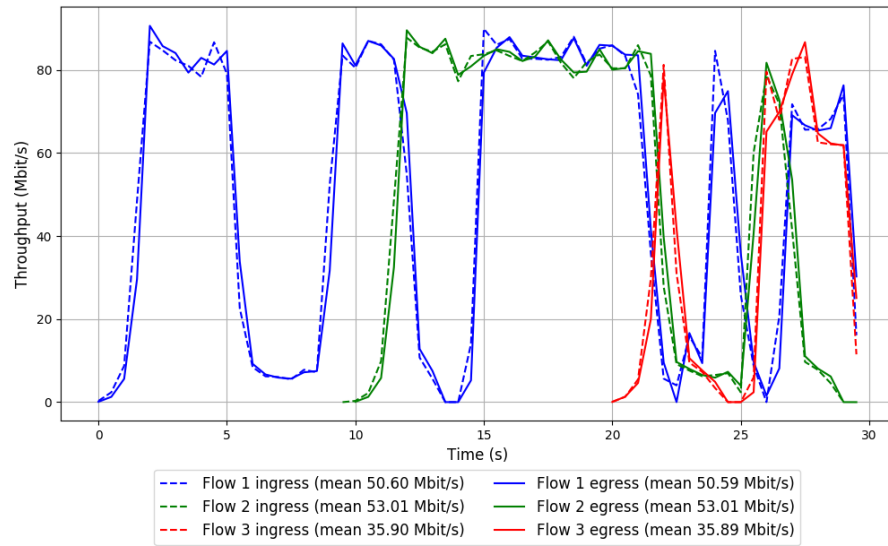


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-06 01:30:06
End at: 2017-12-06 01:30:36

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.04 Mbit/s
95th percentile per-packet one-way delay: 112.540 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 50.59 Mbit/s
95th percentile per-packet one-way delay: 112.339 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 53.01 Mbit/s
95th percentile per-packet one-way delay: 111.676 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.89 Mbit/s
95th percentile per-packet one-way delay: 112.843 ms
Loss rate: 0.06%
```

# Run 10: Report of QUIC Cubic — Data Link

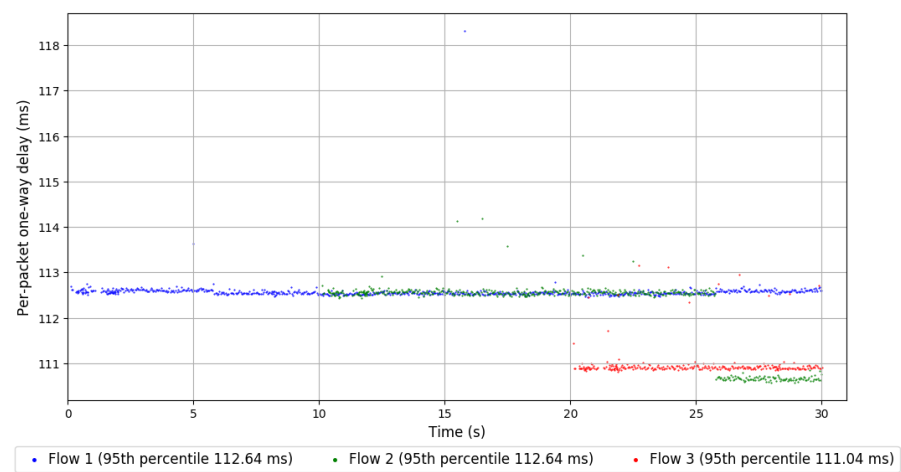
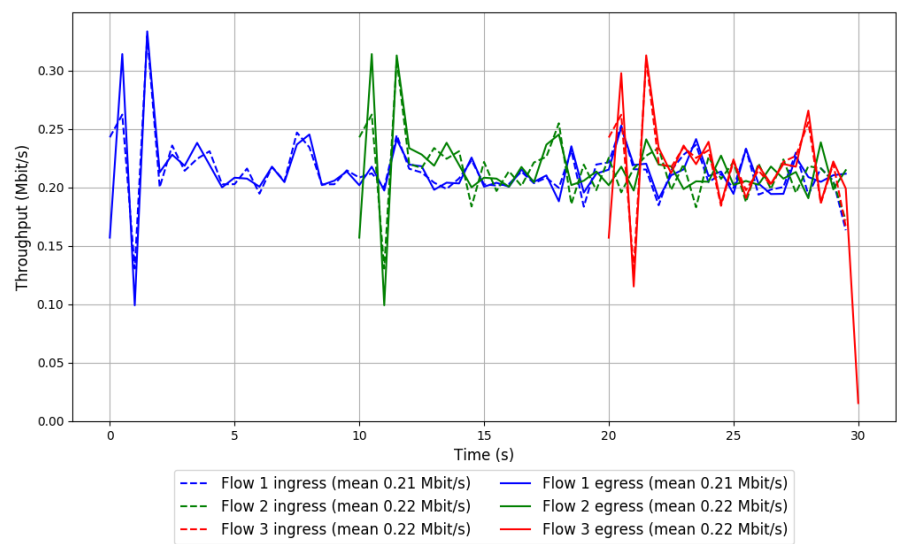


```
Run 1: Statistics of SCReAM

Start at: 2017-12-05 23:36:05
End at: 2017-12-05 23:36:35

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.637 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.643 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.637 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.037 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

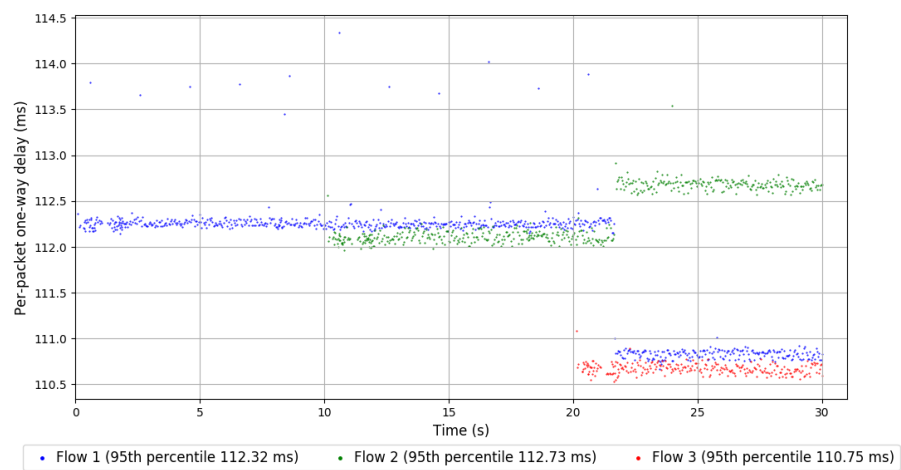
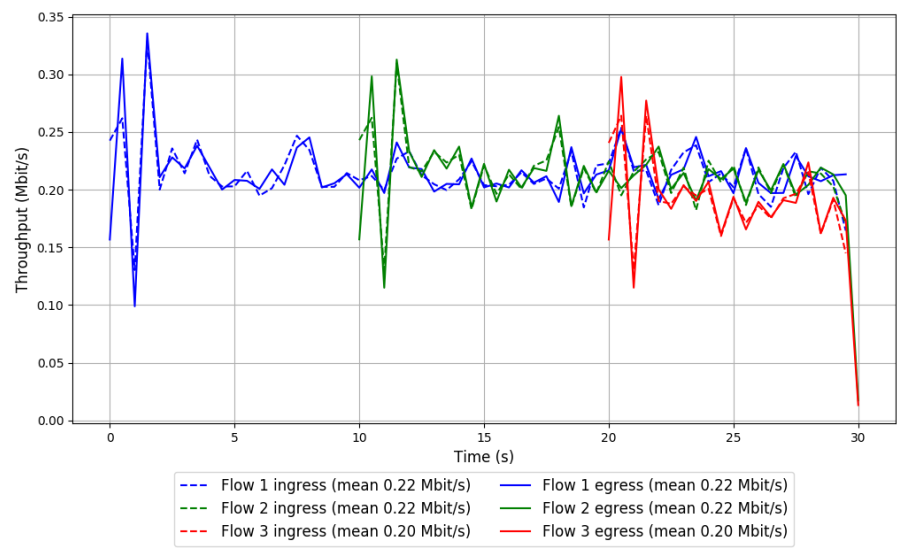


```
Run 2: Statistics of SReAM

Start at: 2017-12-05 23:49:29
End at: 2017-12-05 23:49:59

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 112.706 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.316 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.732 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 110.752 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



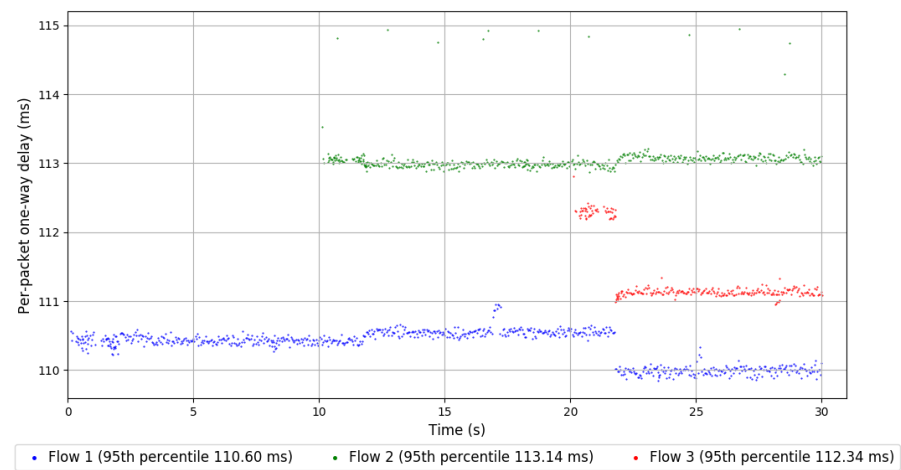
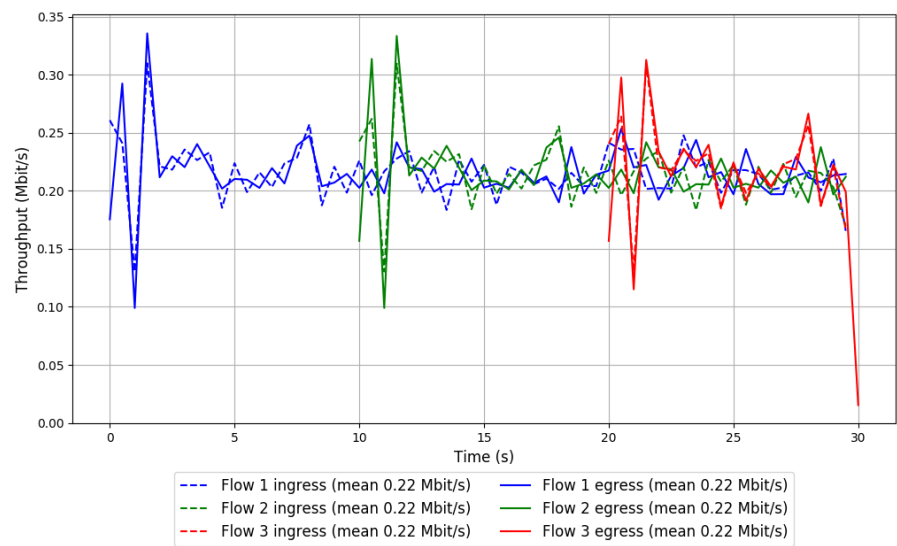
```
Run 3: Statistics of SCReAM

Start at: 2017-12-06 00:02:39
End at: 2017-12-06 00:03:09

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.098 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.597 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.137 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.337 ms
Loss rate: 0.00%
```



Run 3: Report of SReAM — Data Link

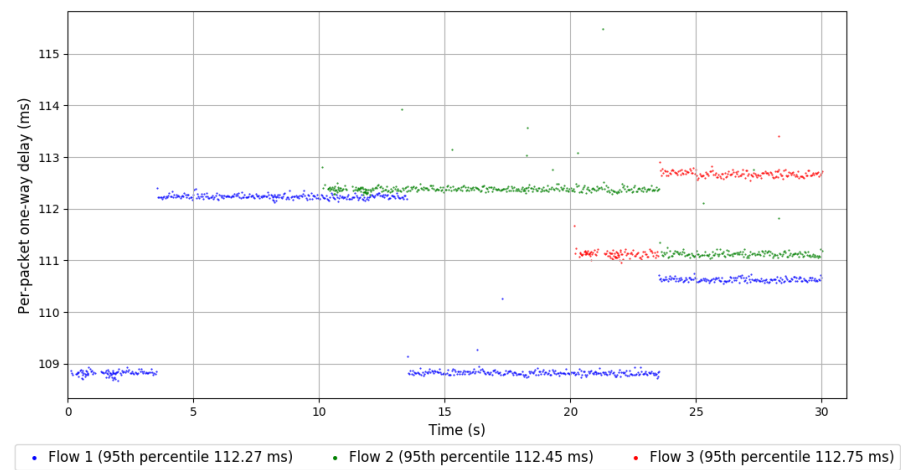
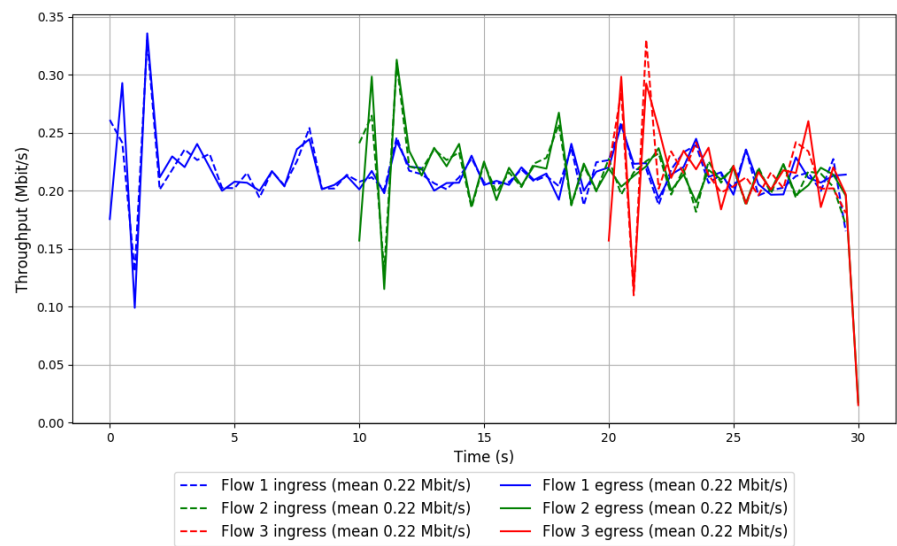


```
Run 4: Statistics of SReAM

Start at: 2017-12-06 00:15:57
End at: 2017-12-06 00:16:27

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.683 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.269 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.447 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.746 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-06 00:29:22

End at: 2017-12-06 00:29:52

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 113.043 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.067 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.799 ms

Loss rate: 0.00%

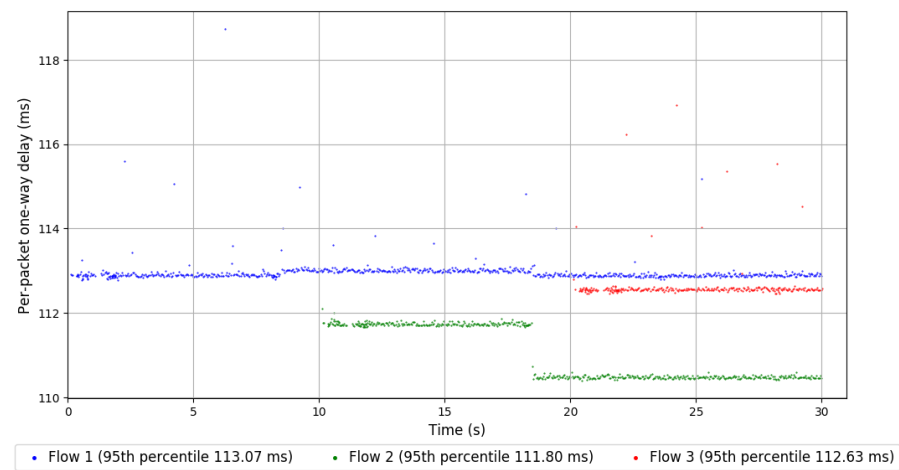
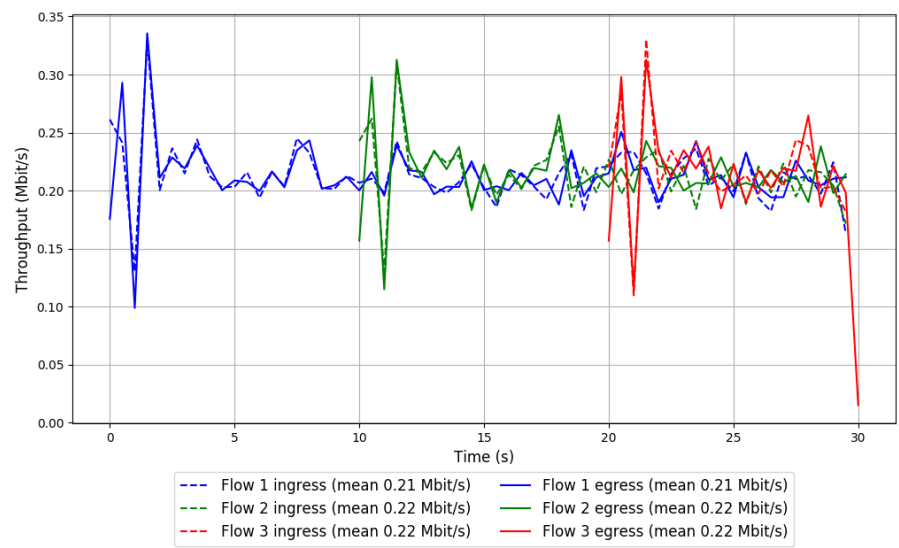
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.627 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-06 00:42:57

End at: 2017-12-06 00:43:27

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 114.536 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.712 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.627 ms

Loss rate: 0.00%

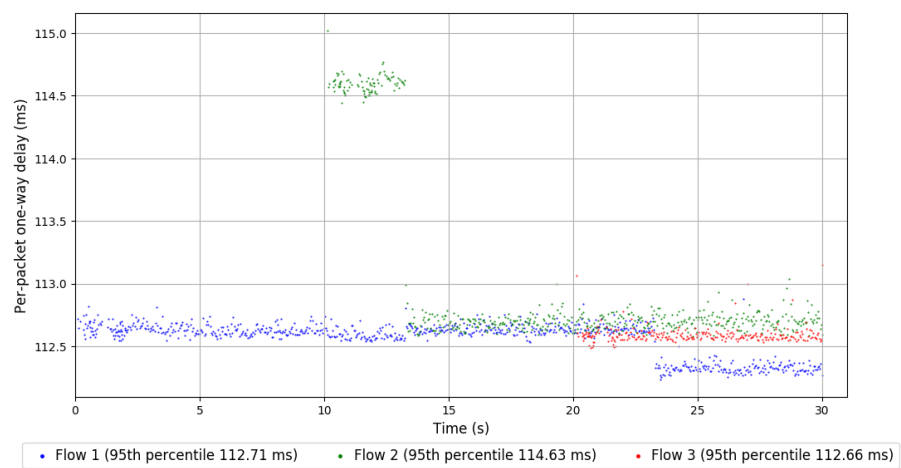
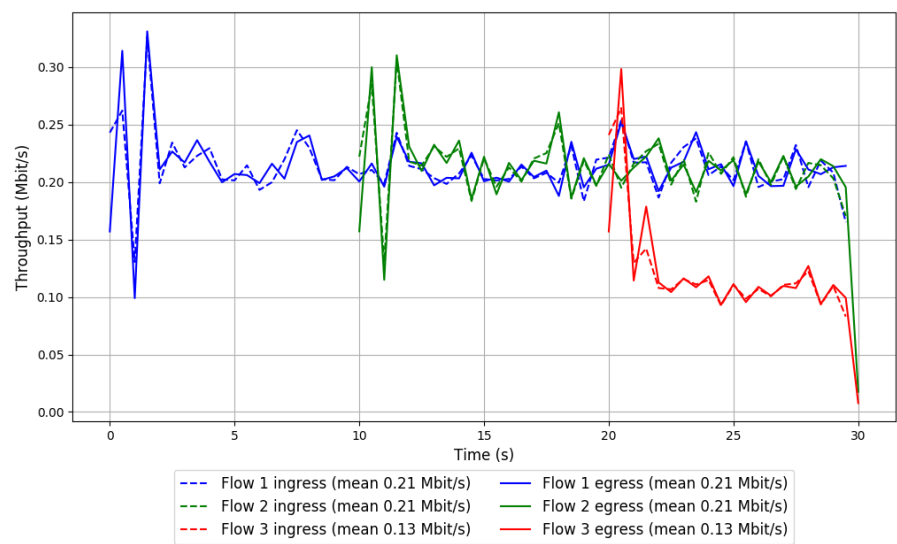
-- Flow 3:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 112.655 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



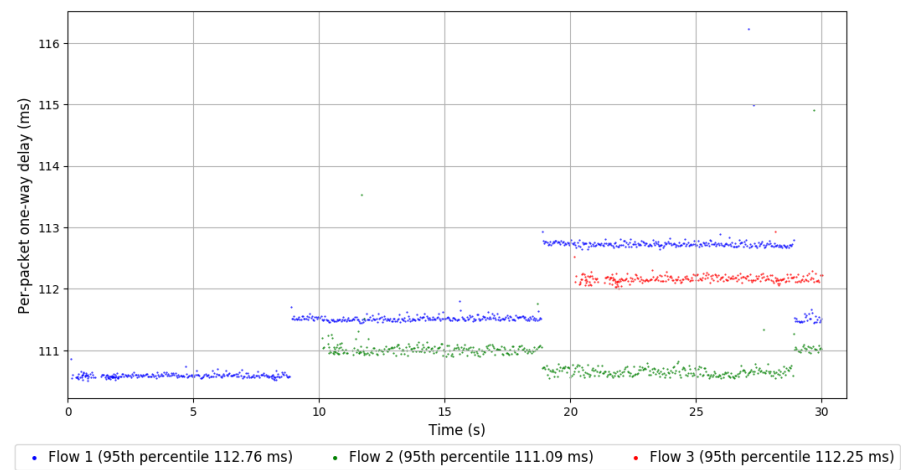
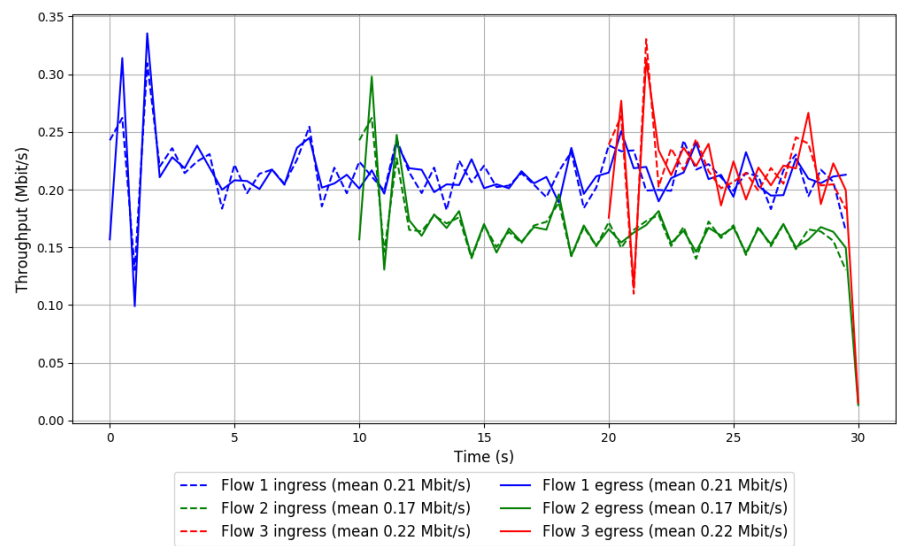
```
Run 7: Statistics of SCReAM

Start at: 2017-12-06 00:56:12
End at: 2017-12-06 00:56:42

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 112.745 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.764 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 111.092 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.245 ms
Loss rate: 0.00%
```



Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-06 01:09:23

End at: 2017-12-06 01:09:53

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 114.385 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.839 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.421 ms

Loss rate: 0.00%

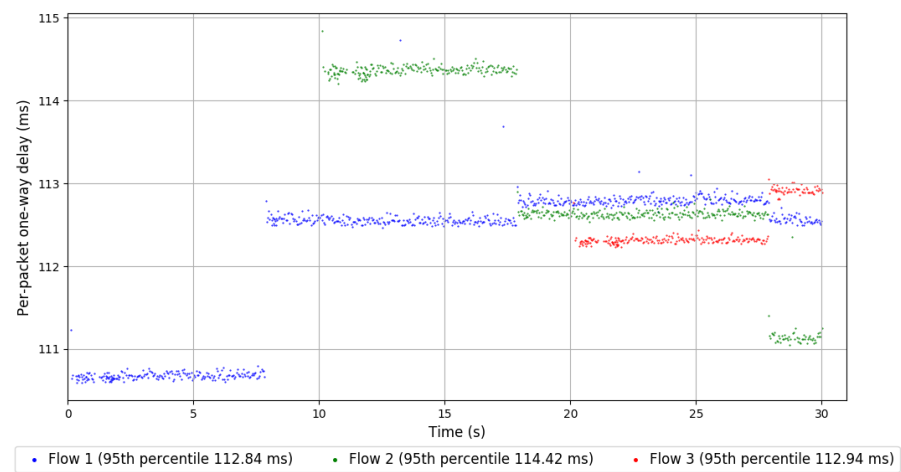
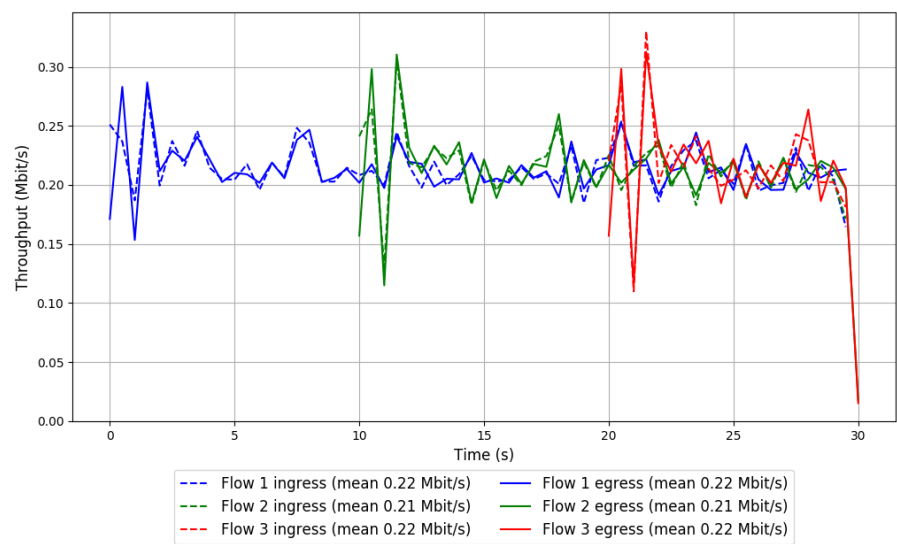
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.937 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link

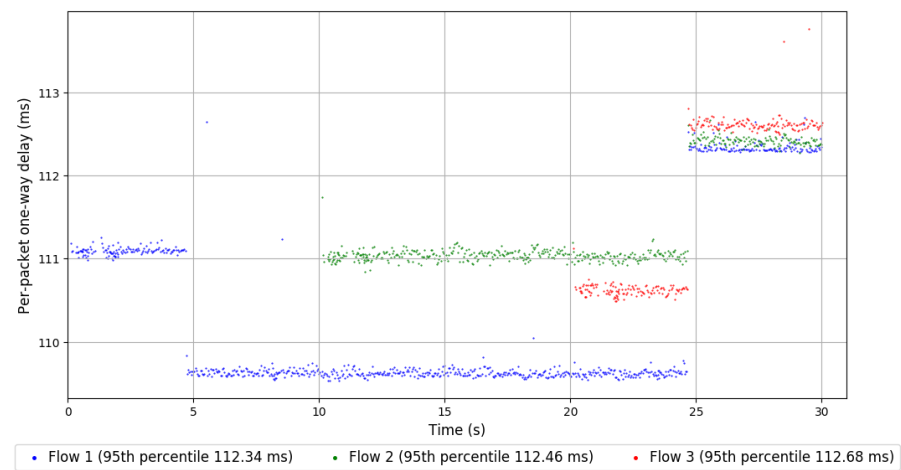
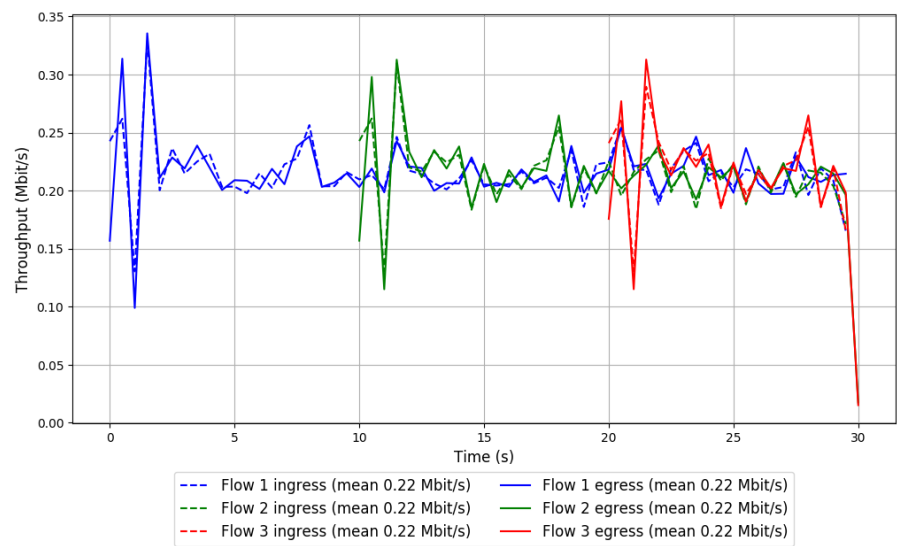


```
Run 9: Statistics of SCReAM

Start at: 2017-12-06 01:22:46
End at: 2017-12-06 01:23:16

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.607 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.343 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.457 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.683 ms
Loss rate: 0.00%
```

Run 9: Report of SReAM — Data Link

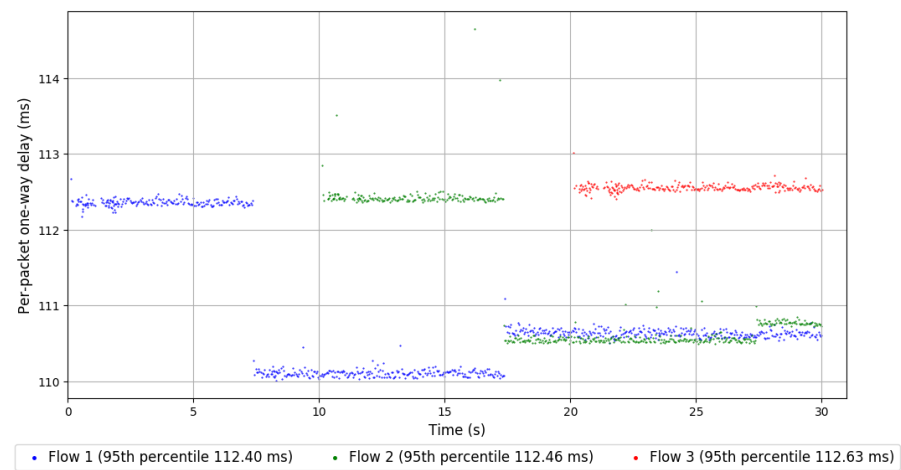
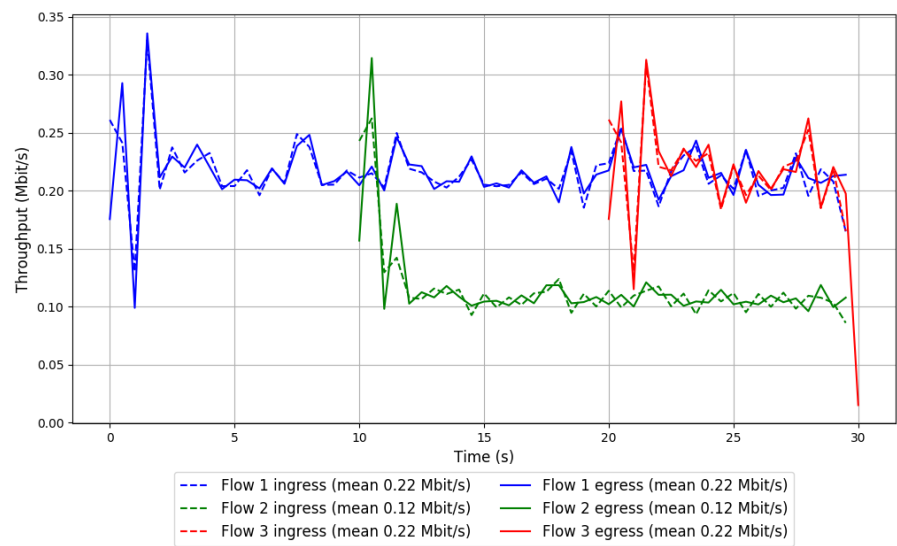


```
Run 10: Statistics of SCReAM

Start at: 2017-12-06 01:36:03
End at: 2017-12-06 01:36:33

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 112.580 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.396 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 112.461 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.627 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link



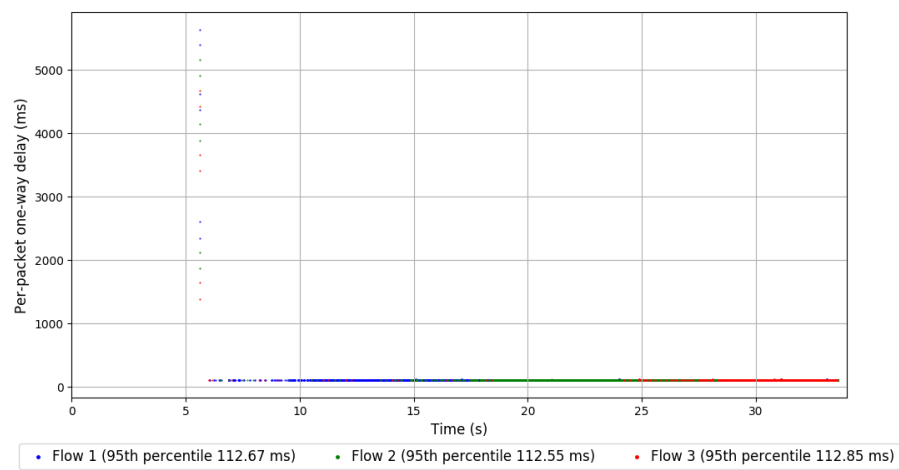
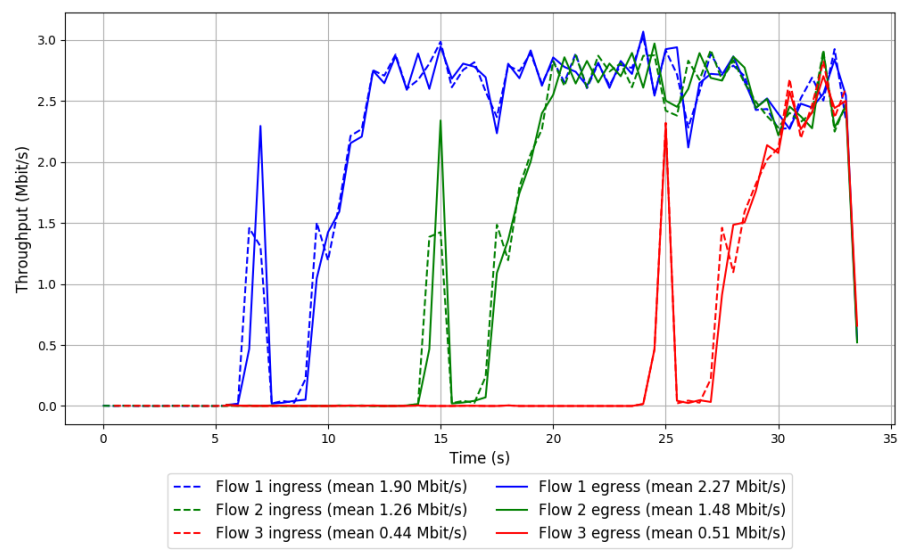
```
Run 1: Statistics of WebRTC media

Start at: 2017-12-05 23:36:51
End at: 2017-12-05 23:37:21

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 112.666 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 112.670 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 112.546 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 112.848 ms
Loss rate: 0.00%
```



Run 1: Report of WebRTC media — Data Link

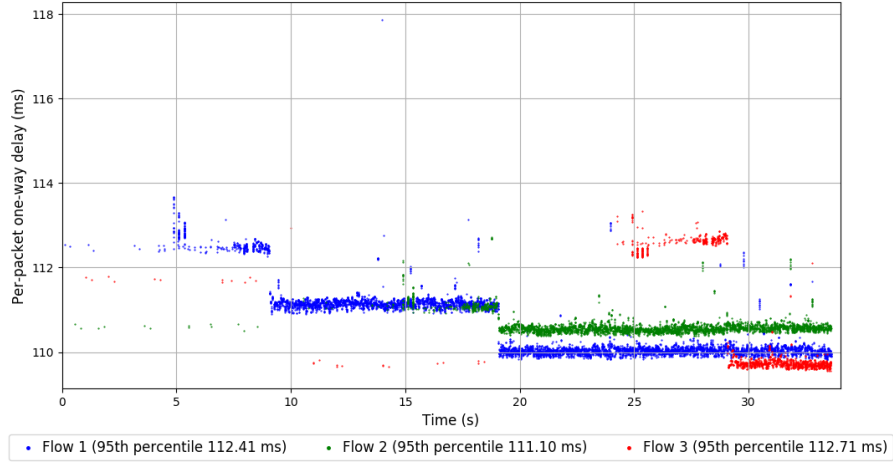
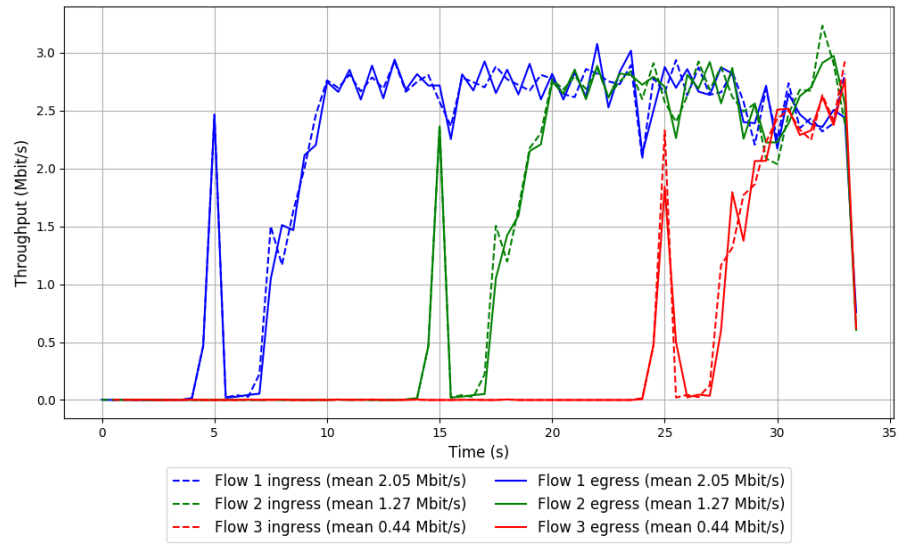


```
Run 2: Statistics of WebRTC media

Start at: 2017-12-05 23:50:15
End at: 2017-12-05 23:50:45

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 112.415 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 112.414 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 111.098 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 112.706 ms
Loss rate: 0.00%
```

## Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-06 00:03:25

End at: 2017-12-06 00:03:55

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 112.332 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 112.282 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 111.561 ms

Loss rate: 0.00%

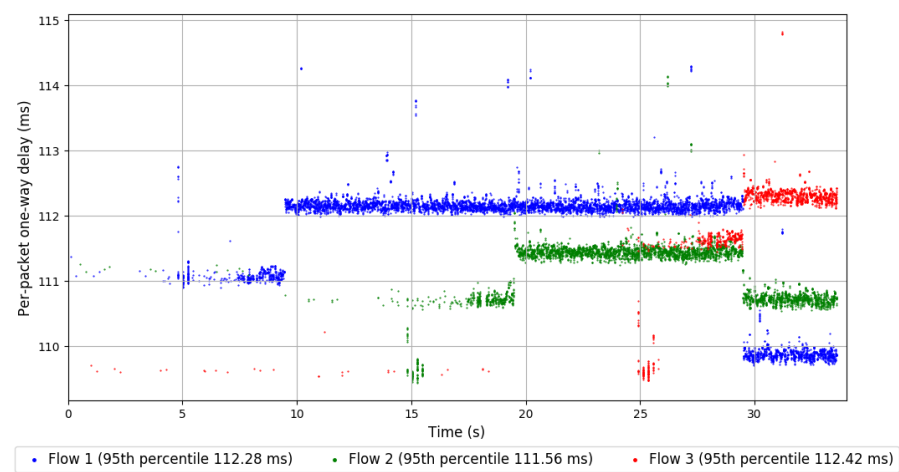
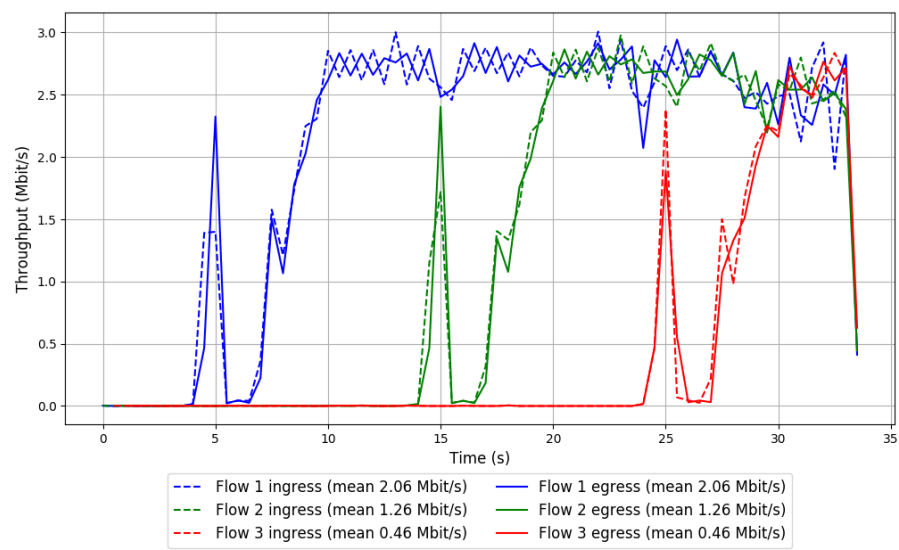
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 112.420 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-06 00:16:43

End at: 2017-12-06 00:17:13

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.73 Mbit/s

95th percentile per-packet one-way delay: 112.825 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 112.449 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 112.463 ms

Loss rate: 0.02%

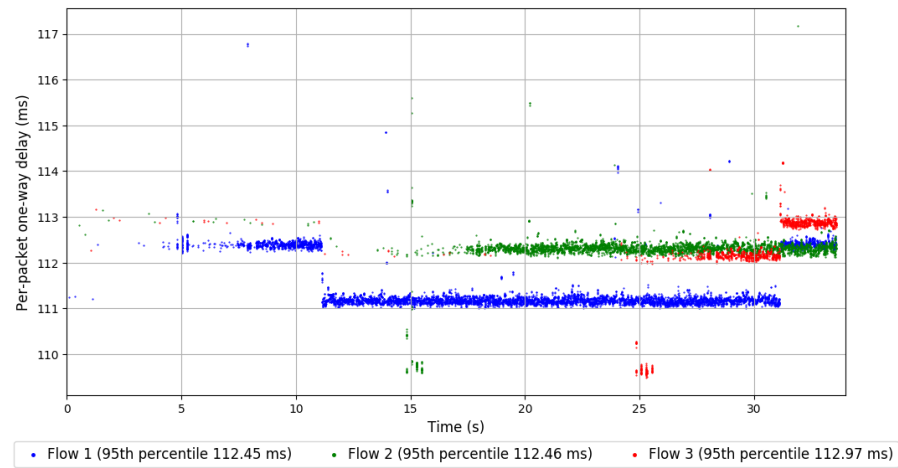
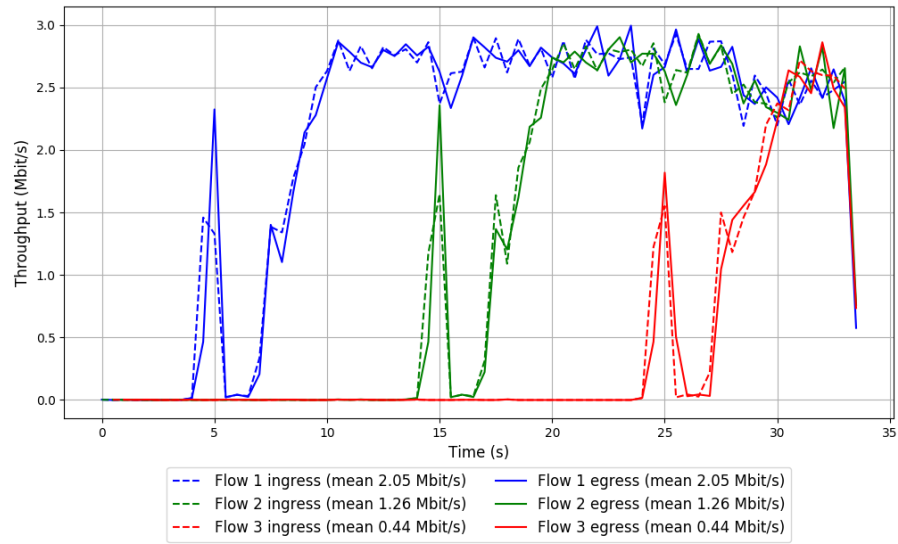
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 112.973 ms

Loss rate: 0.00%

# Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-06 00:30:08

End at: 2017-12-06 00:30:38

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 112.957 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 111.325 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 113.041 ms

Loss rate: 0.00%

-- Flow 3:

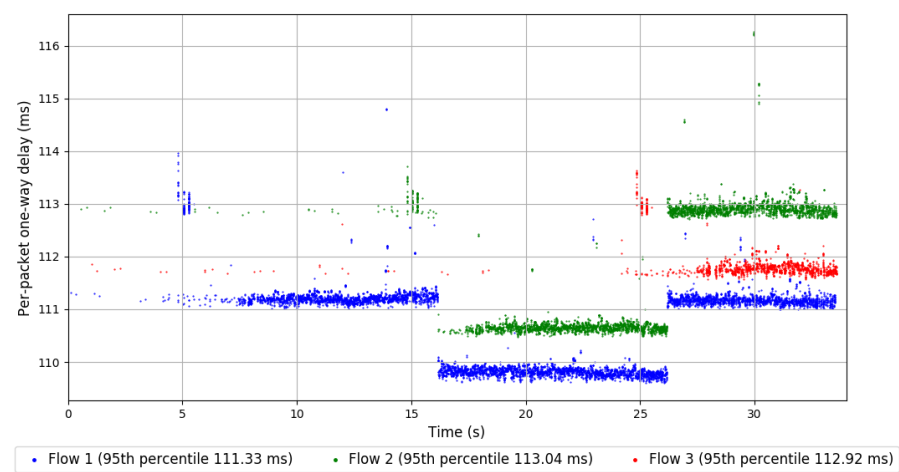
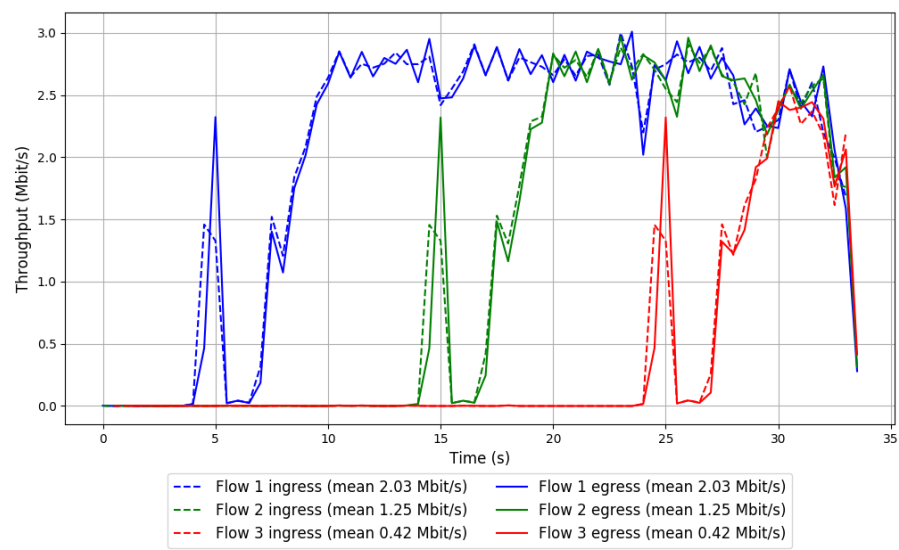
Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 112.925 ms

Loss rate: 0.00%



Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-06 00:43:43

End at: 2017-12-06 00:44:13

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.71 Mbit/s

95th percentile per-packet one-way delay: 112.860 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 112.789 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 112.917 ms

Loss rate: 0.00%

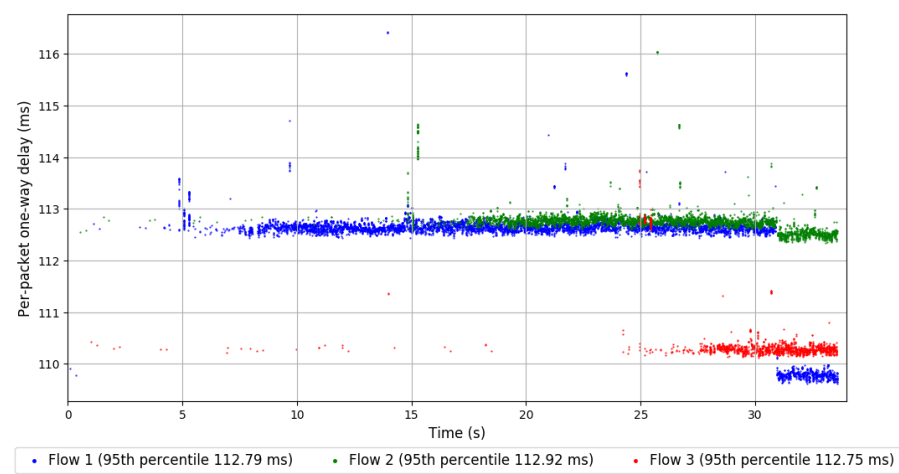
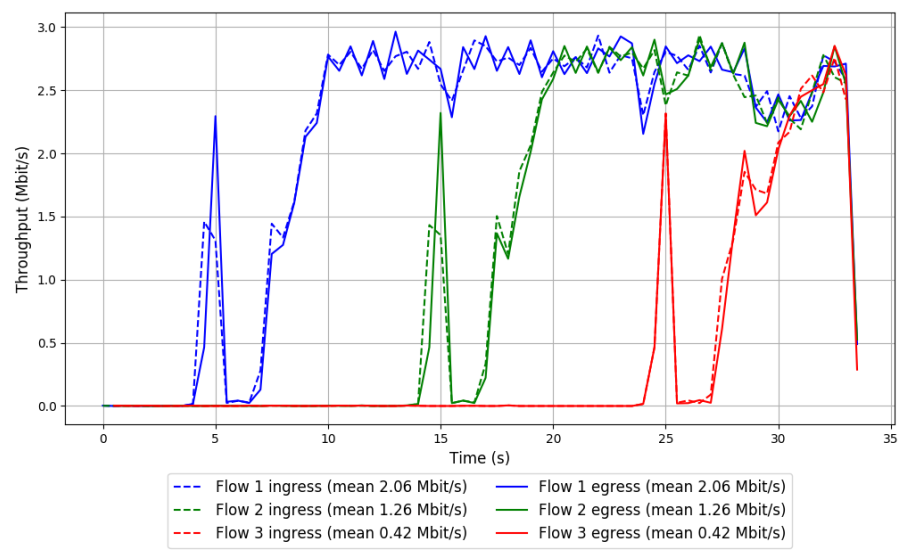
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 112.746 ms

Loss rate: 0.01%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-06 00:56:58

End at: 2017-12-06 00:57:28

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 112.827 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 112.442 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 112.881 ms

Loss rate: 0.00%

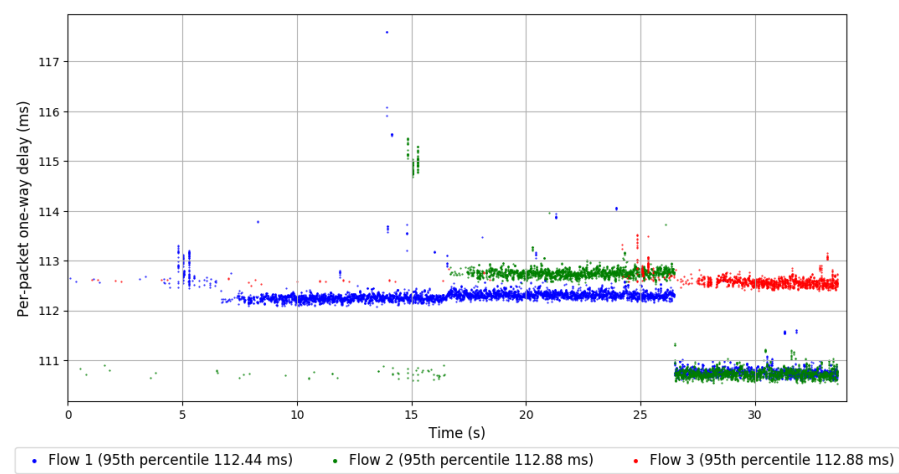
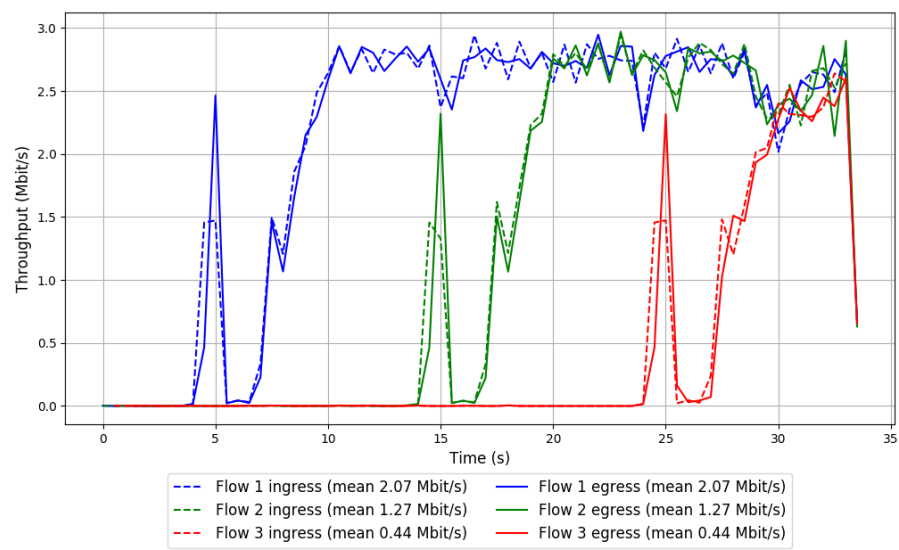
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 112.881 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-06 01:10:08

End at: 2017-12-06 01:10:39

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 112.855 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 112.893 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 112.451 ms

Loss rate: 0.00%

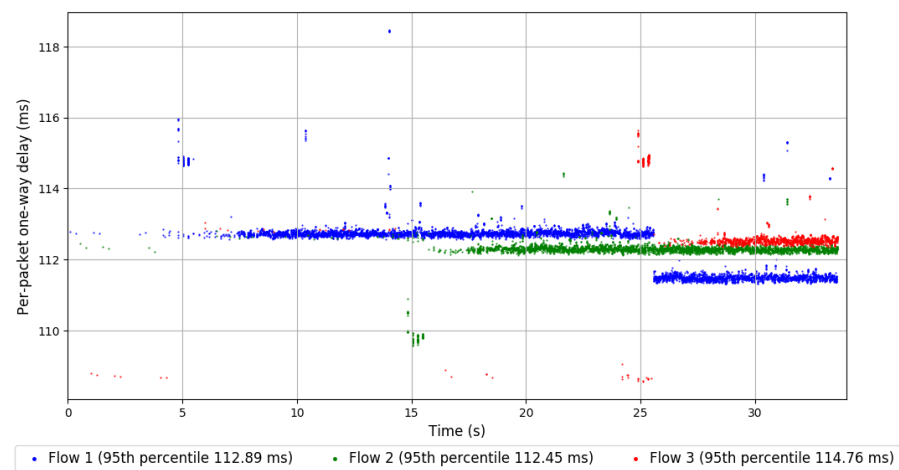
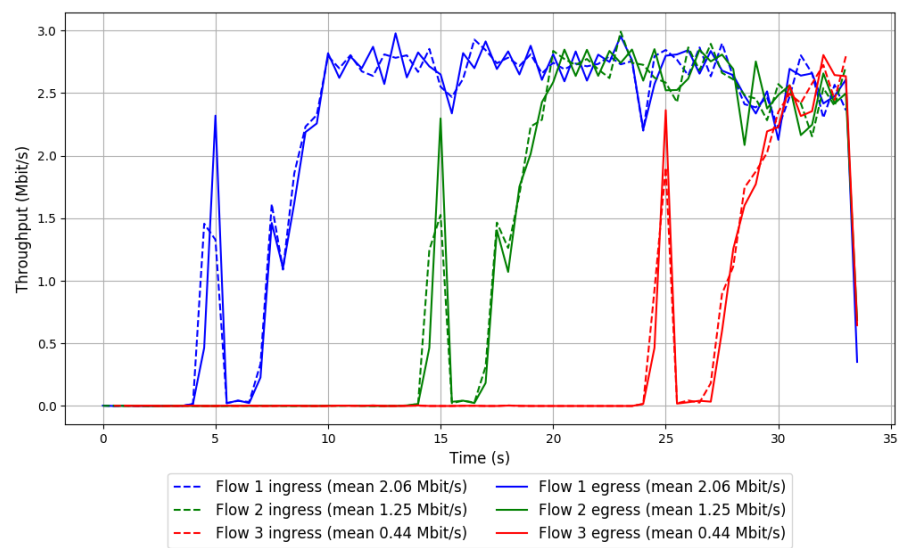
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.763 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-06 01:23:32

End at: 2017-12-06 01:24:02

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.71 Mbit/s

95th percentile per-packet one-way delay: 112.950 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 112.995 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 112.582 ms

Loss rate: 0.02%

-- Flow 3:

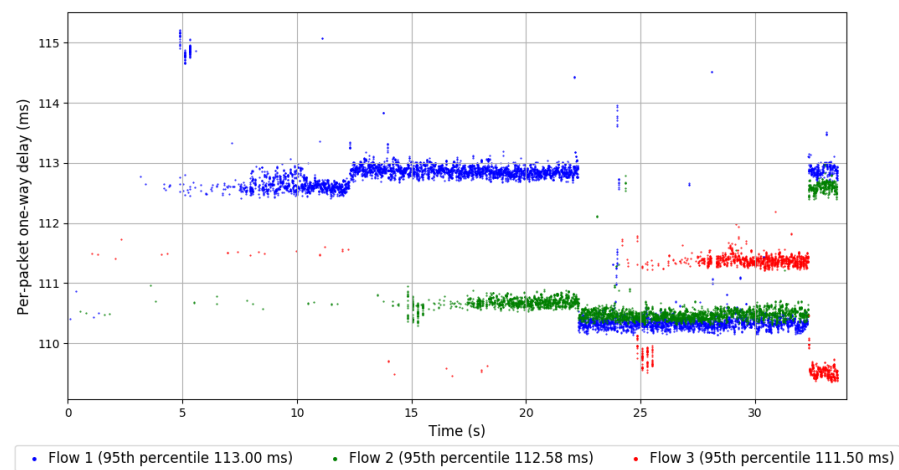
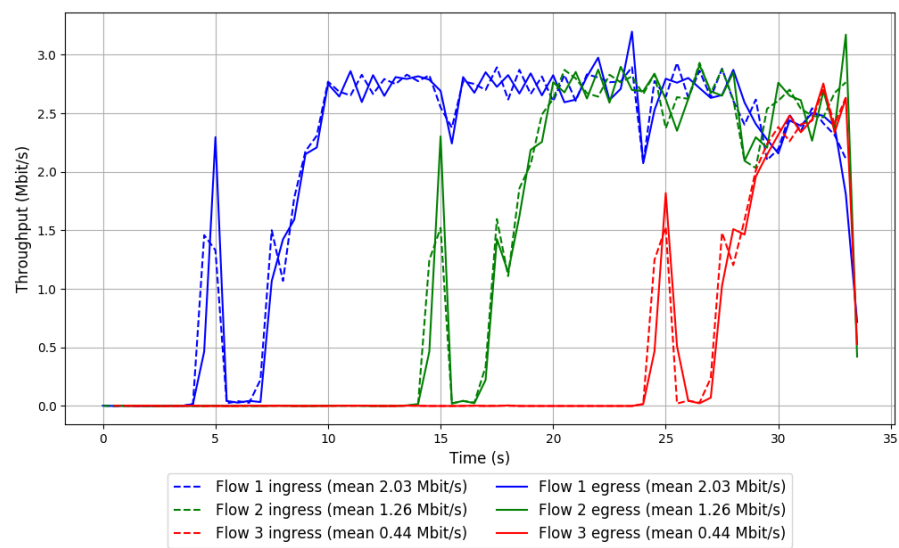
Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 111.501 ms

Loss rate: 0.00%



Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-06 01:36:49

End at: 2017-12-06 01:37:19

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.71 Mbit/s

95th percentile per-packet one-way delay: 114.532 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 111.929 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 114.604 ms

Loss rate: 0.00%

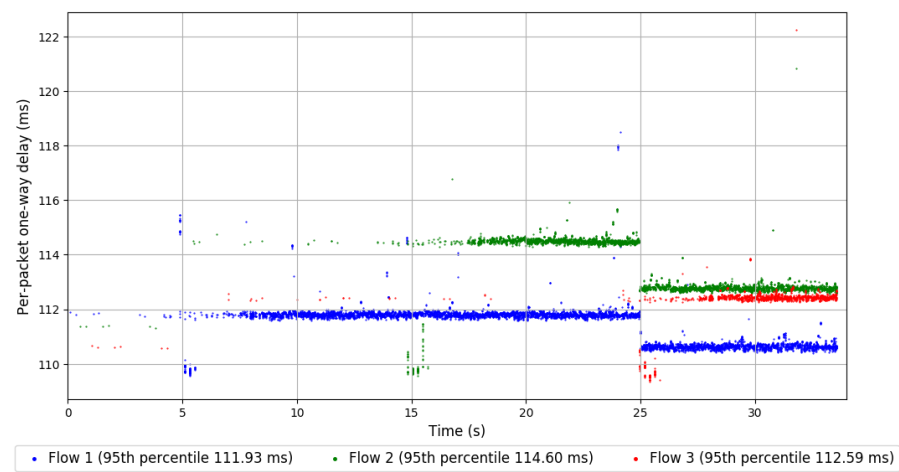
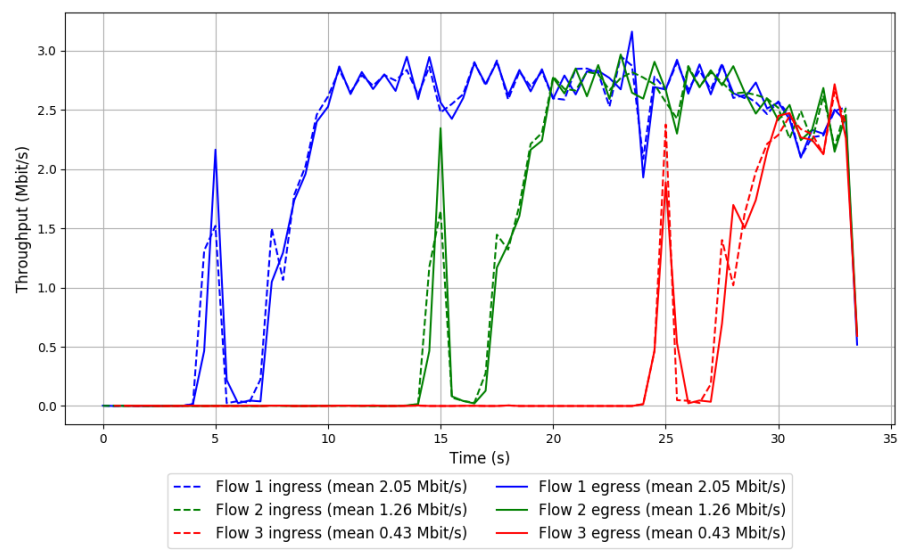
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.588 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

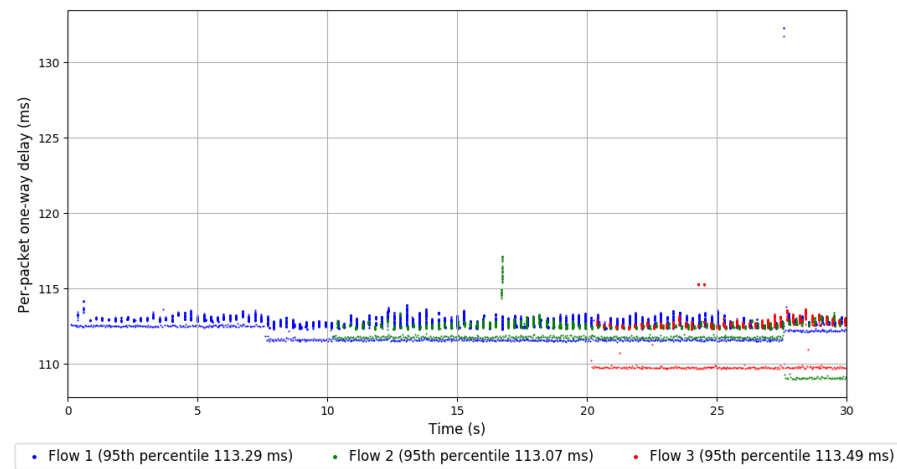
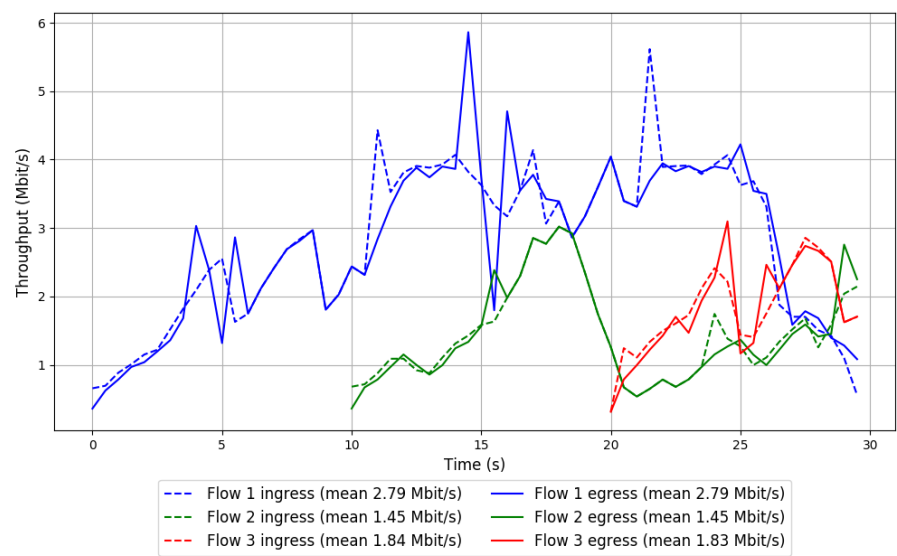


```
Run 1: Statistics of Sprout

Start at: 2017-12-05 23:25:33
End at: 2017-12-05 23:26:03

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 113.283 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 2.79 Mbit/s
95th percentile per-packet one-way delay: 113.293 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 113.070 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 113.492 ms
Loss rate: 0.46%
```

Run 1: Report of Sprout — Data Link

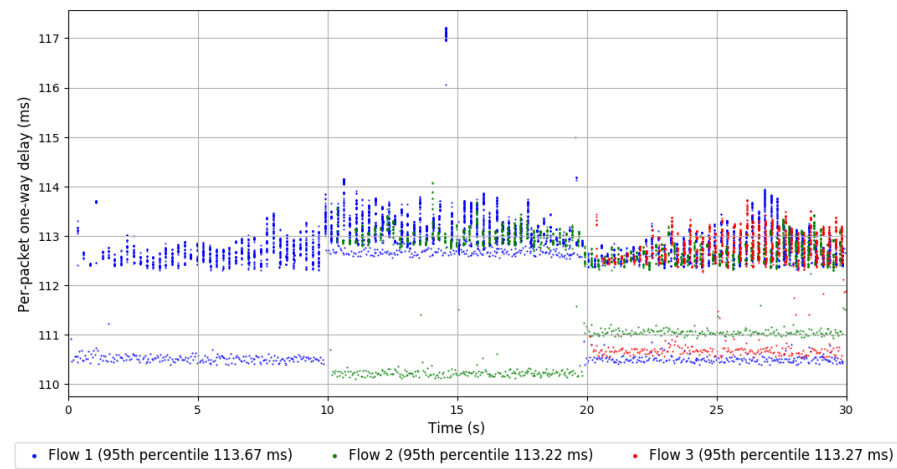
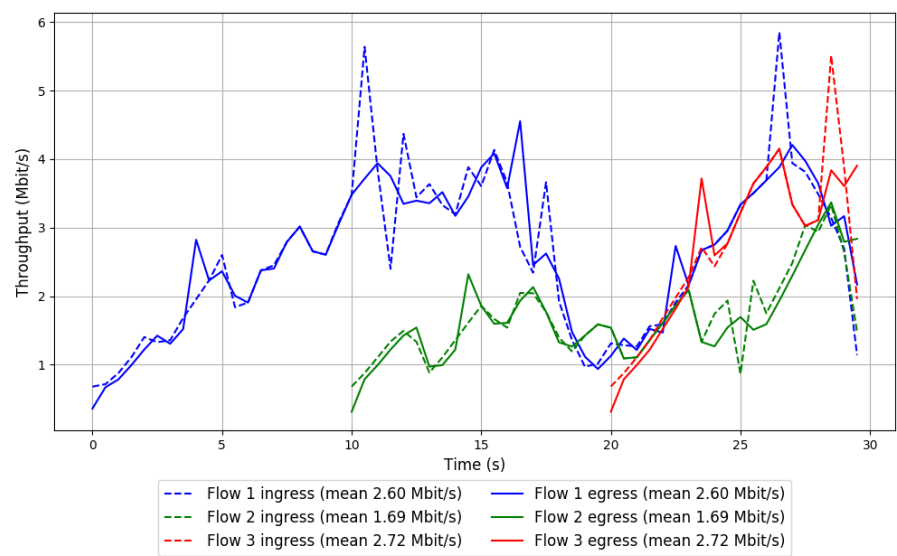


```
Run 2: Statistics of Sprout

Start at: 2017-12-05 23:38:51
End at: 2017-12-05 23:39:21

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.62 Mbit/s
95th percentile per-packet one-way delay: 113.528 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 2.60 Mbit/s
95th percentile per-packet one-way delay: 113.667 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 113.215 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 2.72 Mbit/s
95th percentile per-packet one-way delay: 113.273 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-05 23:52:15

End at: 2017-12-05 23:52:45

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 112.846 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.92 Mbit/s

95th percentile per-packet one-way delay: 114.329 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 112.569 ms

Loss rate: 0.00%

-- Flow 3:

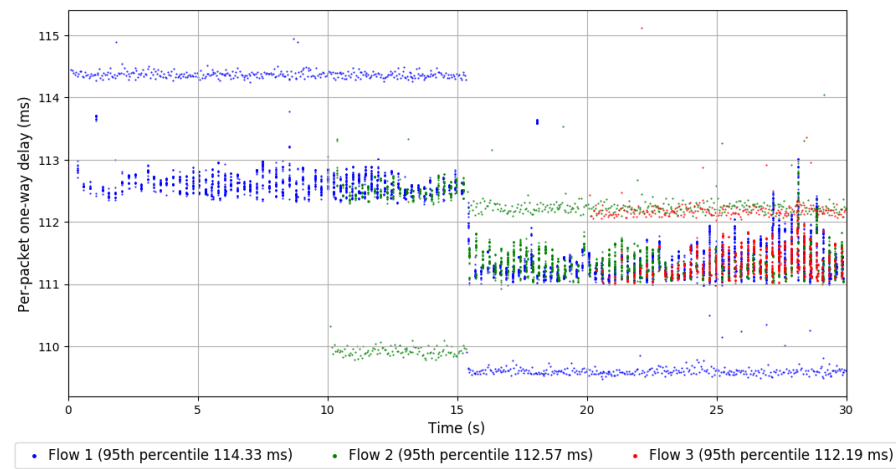
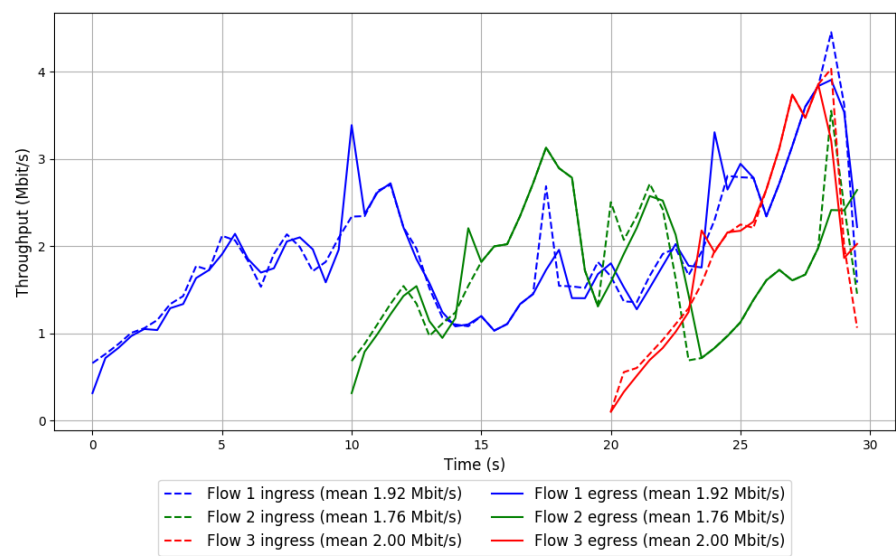
Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 112.188 ms

Loss rate: 0.00%



Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-06 00:05:24

End at: 2017-12-06 00:05:54

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.79 Mbit/s

95th percentile per-packet one-way delay: 113.082 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 2.76 Mbit/s

95th percentile per-packet one-way delay: 112.985 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.29 Mbit/s

95th percentile per-packet one-way delay: 113.101 ms

Loss rate: 0.11%

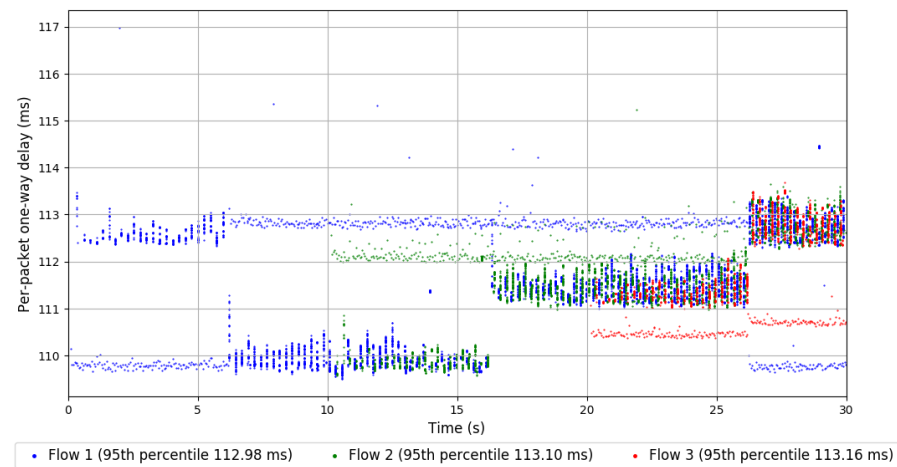
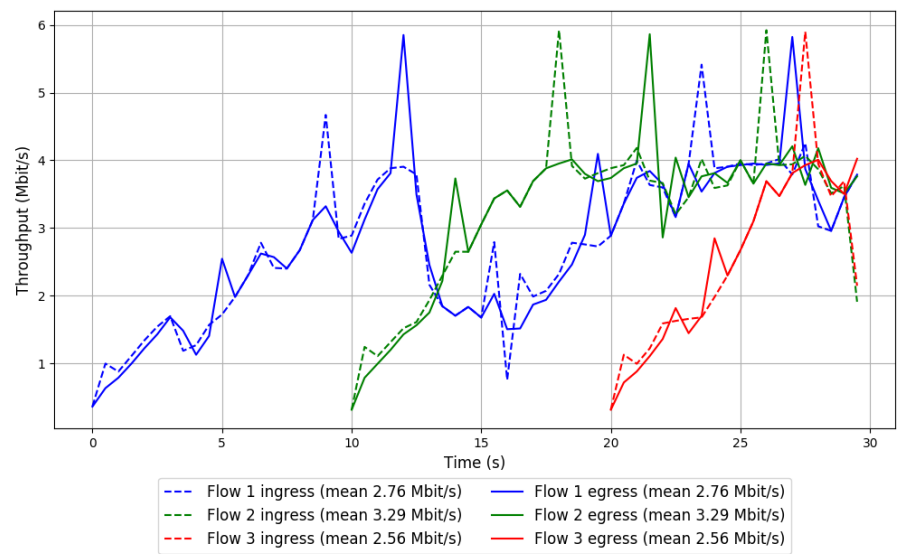
-- Flow 3:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 113.164 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-06 00:18:42

End at: 2017-12-06 00:19:12

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 112.958 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 112.926 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 113.074 ms

Loss rate: 0.30%

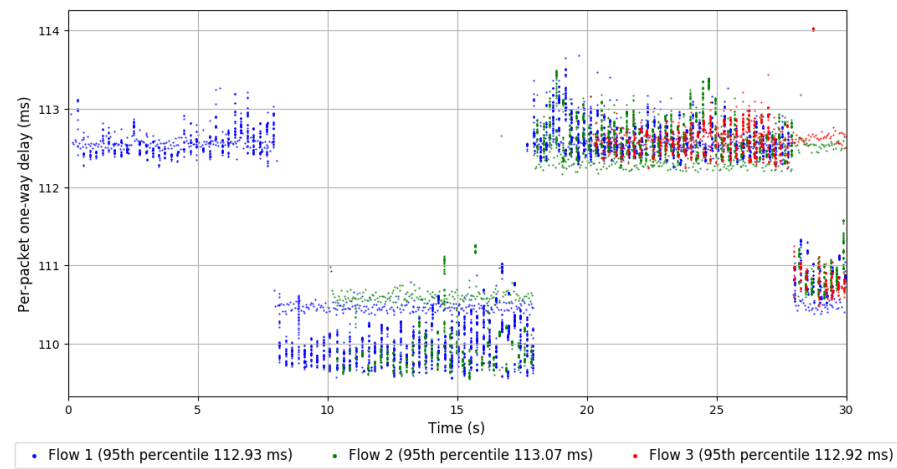
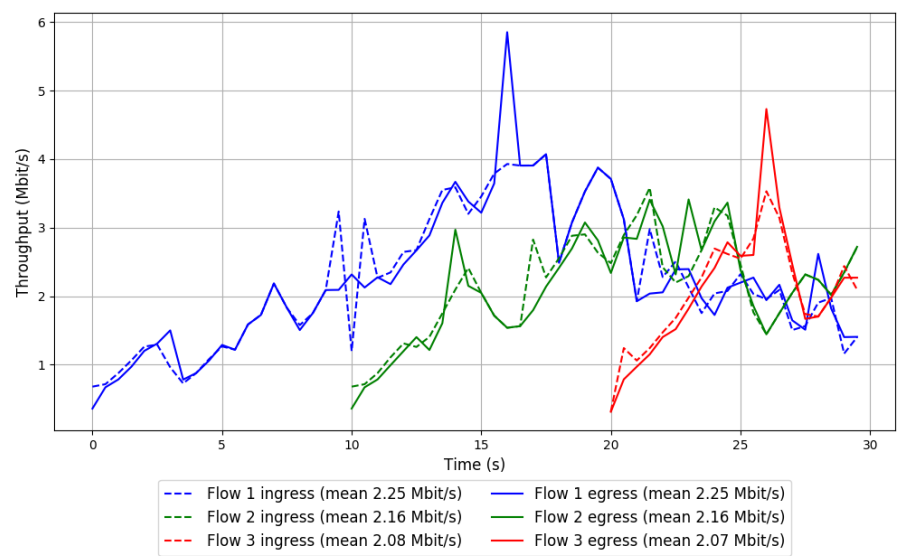
-- Flow 3:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 112.920 ms

Loss rate: 0.17%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-06 00:32:08

End at: 2017-12-06 00:32:38

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.70 Mbit/s

95th percentile per-packet one-way delay: 113.714 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 113.788 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 113.651 ms

Loss rate: 0.05%

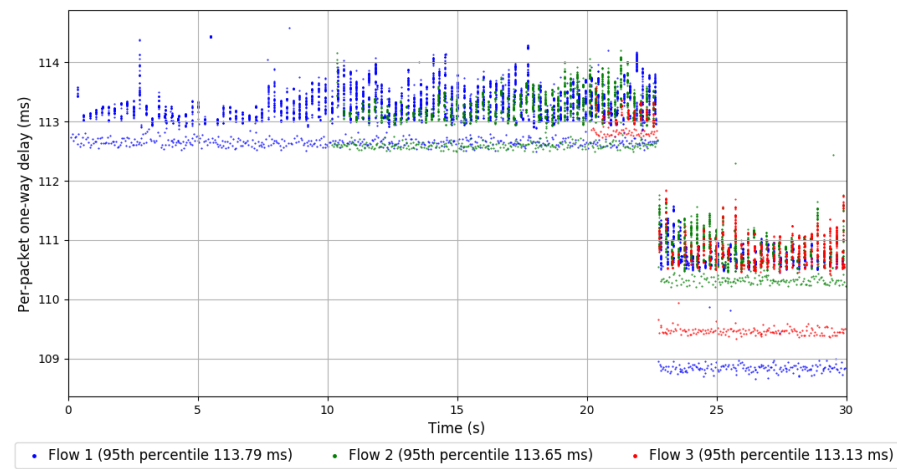
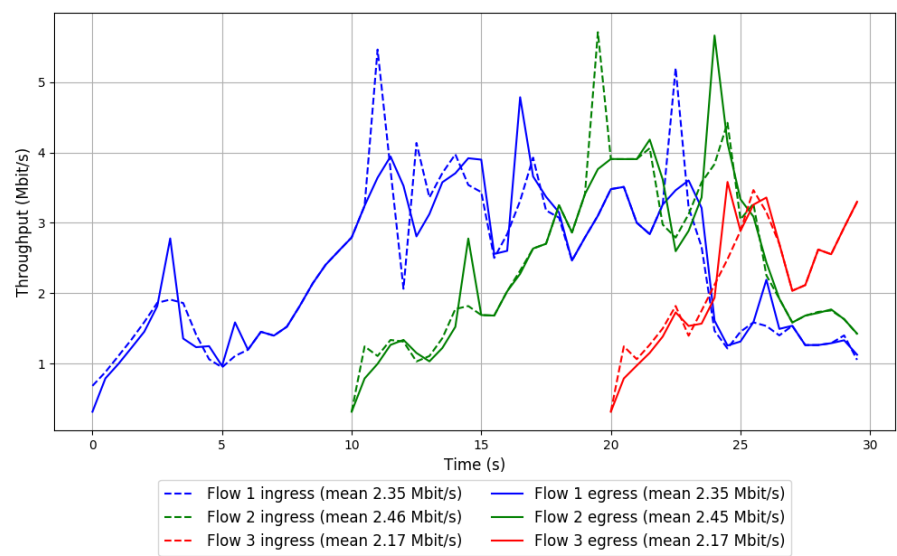
-- Flow 3:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 113.128 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-06 00:45:43

End at: 2017-12-06 00:46:13

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 113.631 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 113.512 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.70 Mbit/s

95th percentile per-packet one-way delay: 113.742 ms

Loss rate: 0.00%

-- Flow 3:

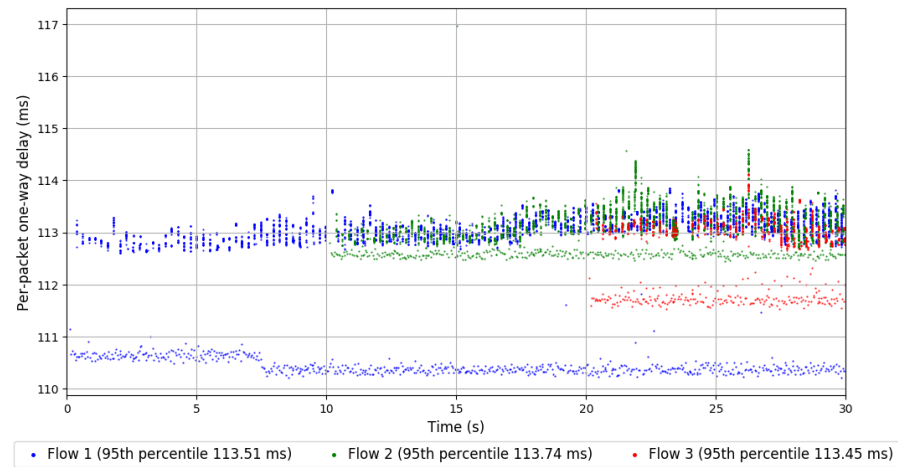
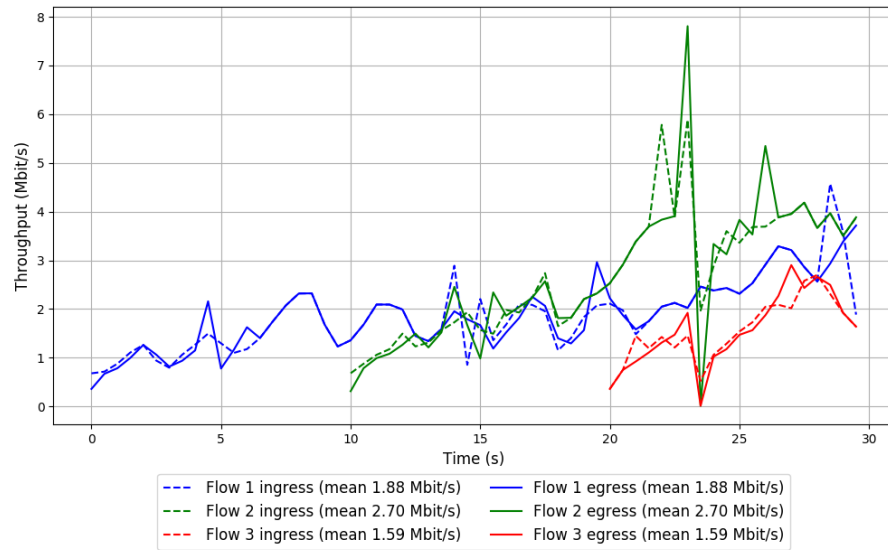
Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 113.451 ms

Loss rate: 0.00%



## Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-06 00:58:58

End at: 2017-12-06 00:59:28

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 113.378 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 113.360 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 113.452 ms

Loss rate: 0.34%

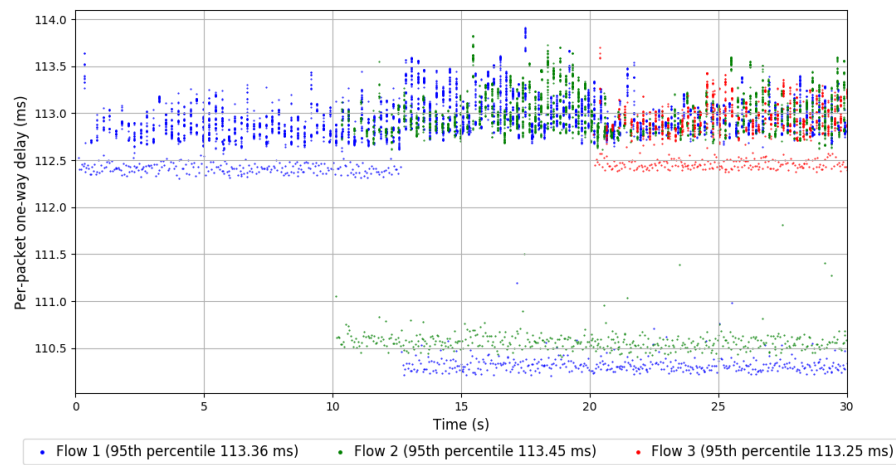
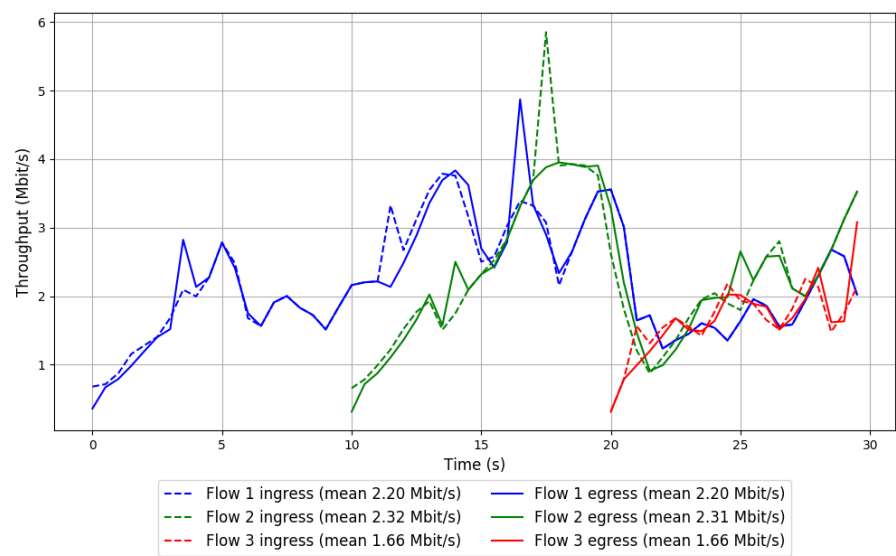
-- Flow 3:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 113.253 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-06 01:12:07

End at: 2017-12-06 01:12:37

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 115.467 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 115.384 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 2.65 Mbit/s

95th percentile per-packet one-way delay: 115.550 ms

Loss rate: 0.00%

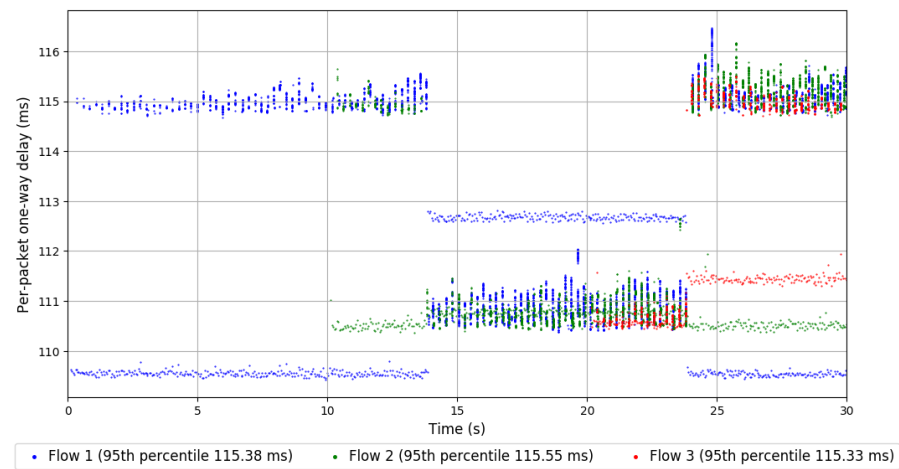
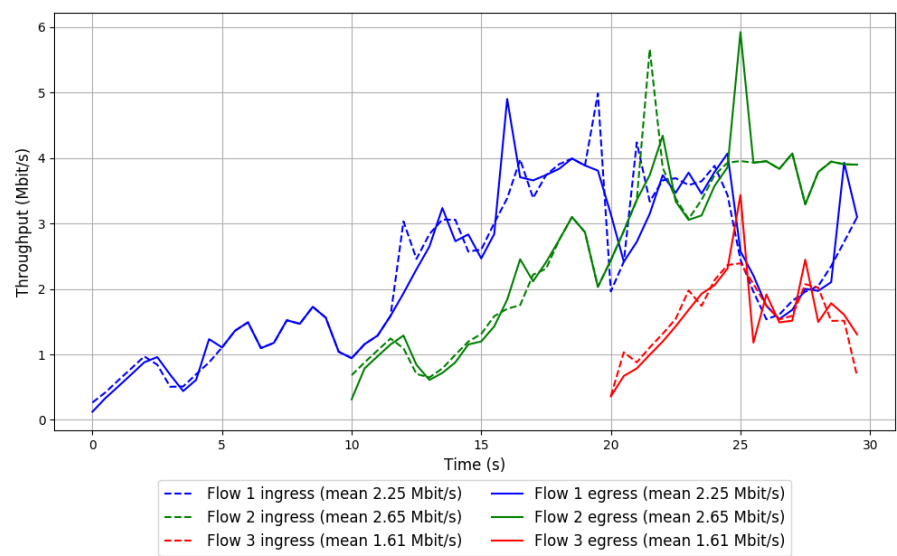
-- Flow 3:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 115.325 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-06 01:25:32

End at: 2017-12-06 01:26:02

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.50 Mbit/s

95th percentile per-packet one-way delay: 114.916 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 115.068 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 112.277 ms

Loss rate: 0.00%

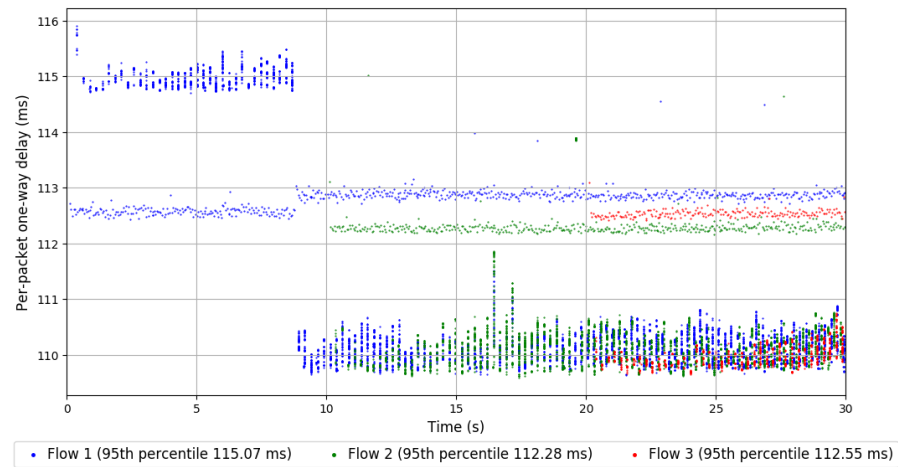
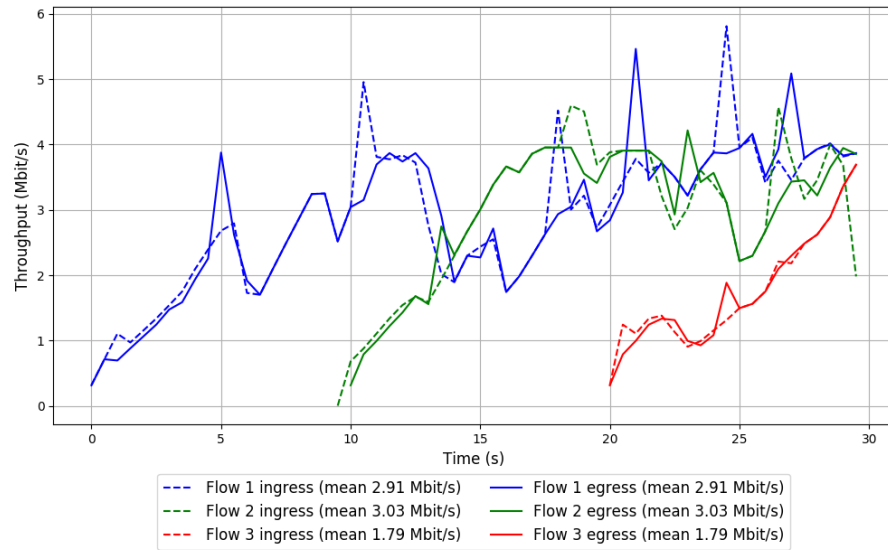
-- Flow 3:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 112.551 ms

Loss rate: 0.00%

# Run 10: Report of Sprout — Data Link



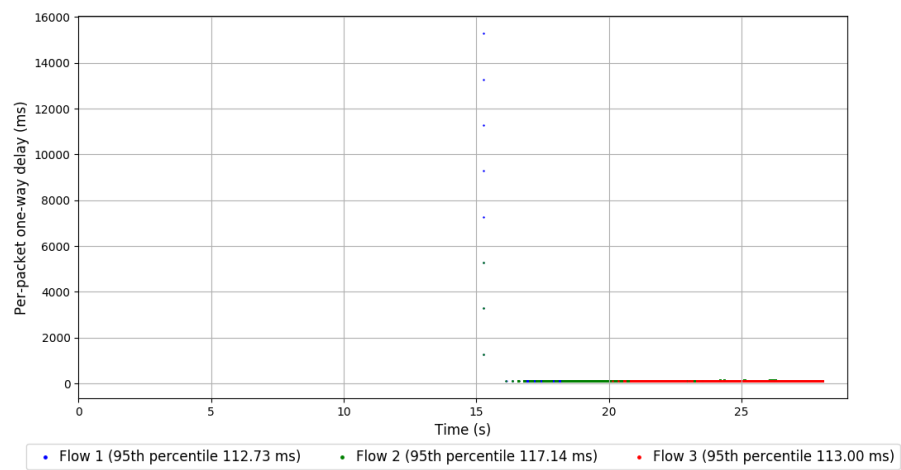
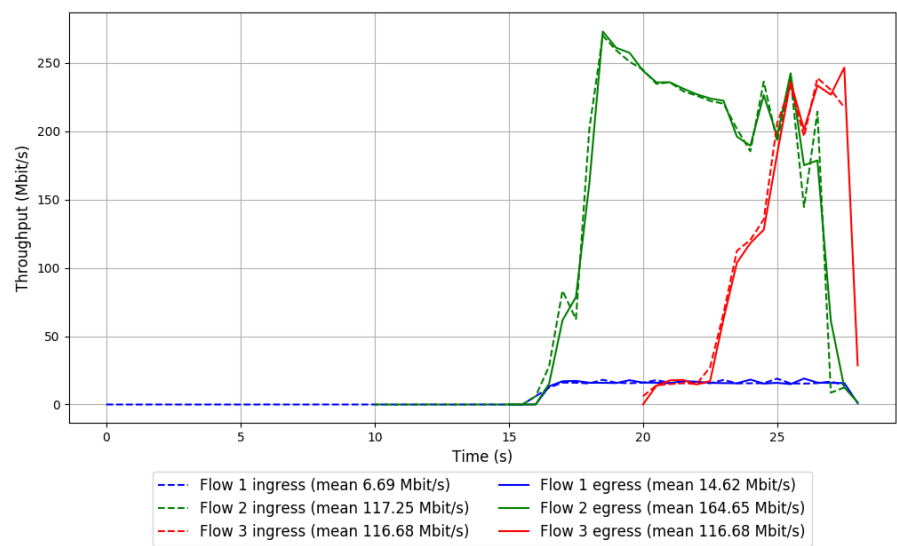
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-05 23:28:02

End at: 2017-12-05 23:28:32



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

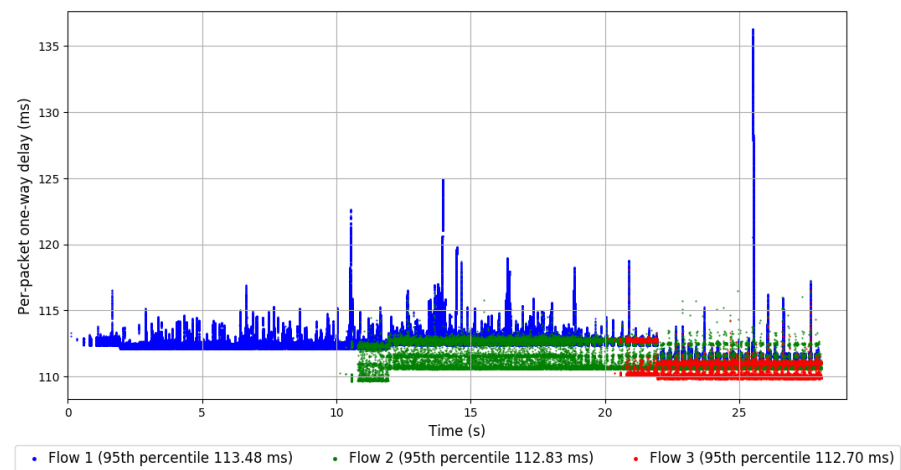
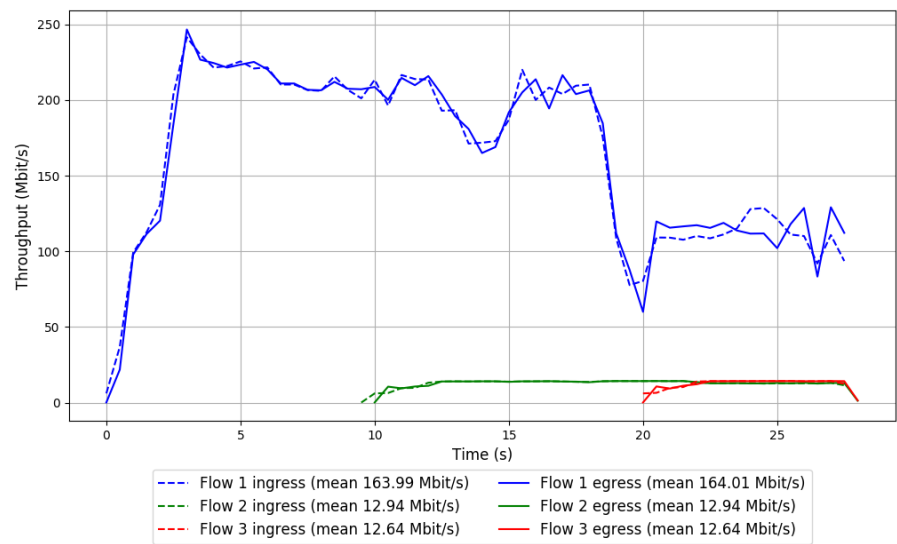


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-05 23:41:17
End at: 2017-12-05 23:41:47

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 175.37 Mbit/s
95th percentile per-packet one-way delay: 113.410 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 164.01 Mbit/s
95th percentile per-packet one-way delay: 113.477 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 12.94 Mbit/s
95th percentile per-packet one-way delay: 112.829 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 12.64 Mbit/s
95th percentile per-packet one-way delay: 112.698 ms
Loss rate: 0.01%
```

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

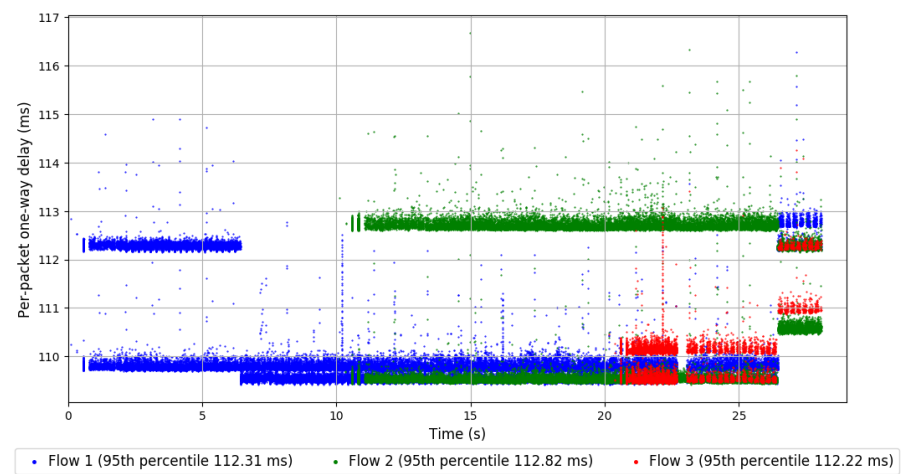
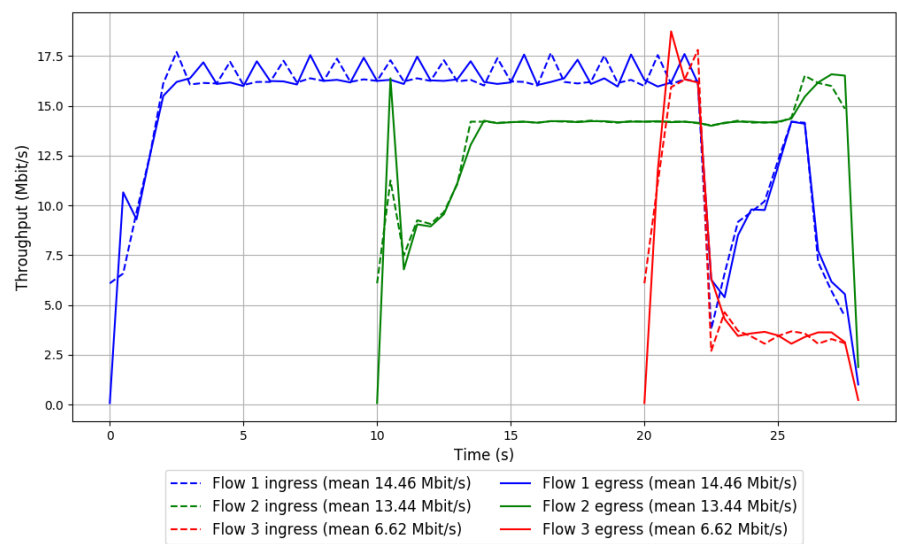


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-05 23:54:42
End at: 2017-12-05 23:55:12

# Below is generated by plot.py at 2017-12-06 03:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 24.96 Mbit/s
95th percentile per-packet one-way delay: 112.737 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 14.46 Mbit/s
95th percentile per-packet one-way delay: 112.315 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 13.44 Mbit/s
95th percentile per-packet one-way delay: 112.823 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 112.220 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-06 00:07:49

End at: 2017-12-06 00:08:19

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 131.86 Mbit/s

95th percentile per-packet one-way delay: 112.923 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 12.99 Mbit/s

95th percentile per-packet one-way delay: 112.847 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 101.26 Mbit/s

95th percentile per-packet one-way delay: 112.864 ms

Loss rate: 0.00%

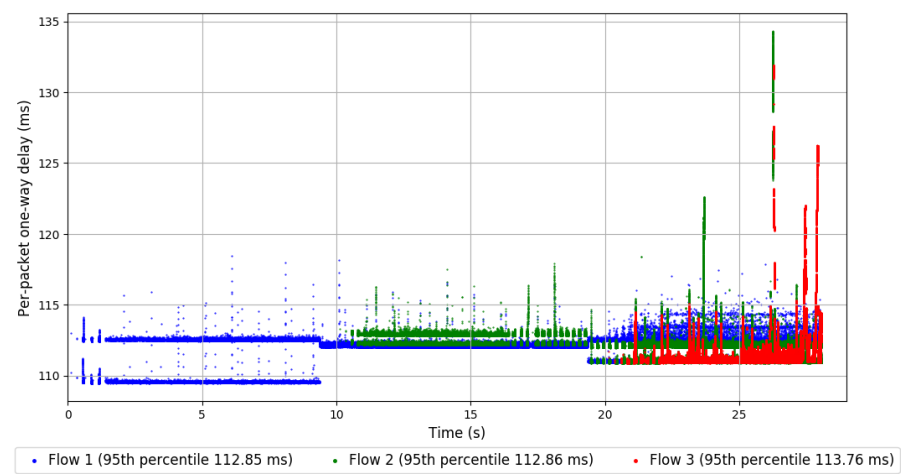
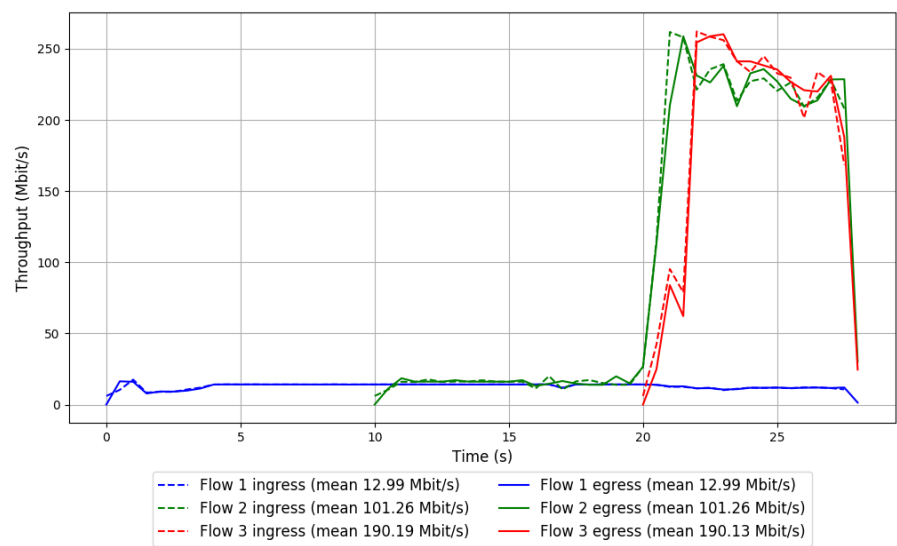
-- Flow 3:

Average throughput: 190.13 Mbit/s

95th percentile per-packet one-way delay: 113.759 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-06 00:21:09

End at: 2017-12-06 00:21:39

# Below is generated by plot.py at 2017-12-06 03:01:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 160.63 Mbit/s

95th percentile per-packet one-way delay: 113.112 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 25.97 Mbit/s

95th percentile per-packet one-way delay: 113.028 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 141.83 Mbit/s

95th percentile per-packet one-way delay: 113.037 ms

Loss rate: 0.00%

-- Flow 3:

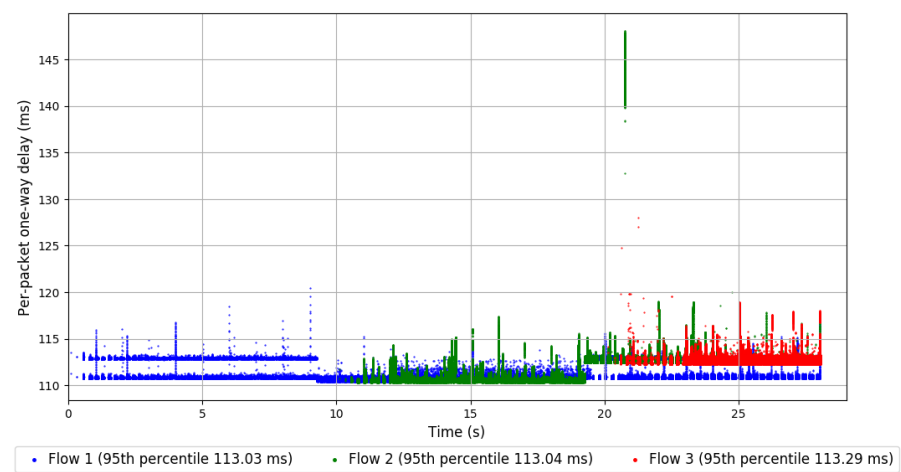
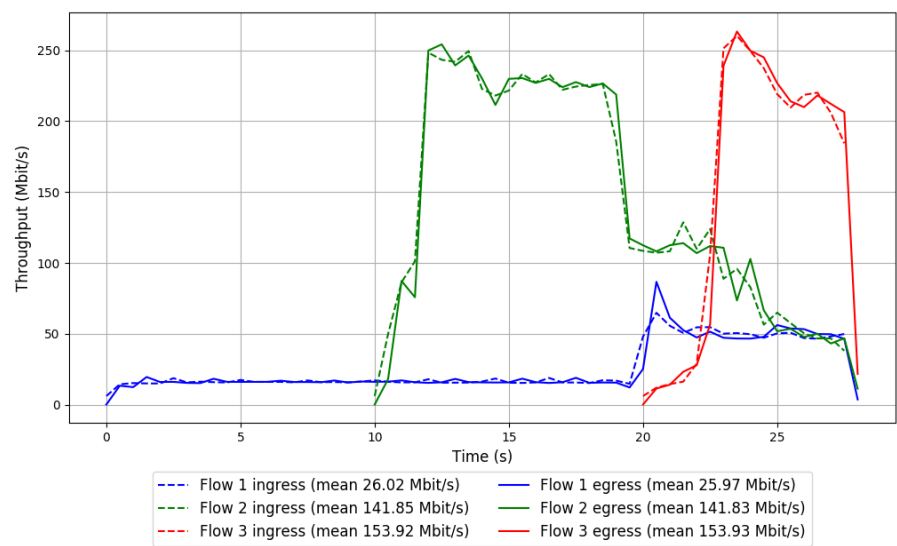
Average throughput: 153.93 Mbit/s

95th percentile per-packet one-way delay: 113.286 ms

Loss rate: 0.01%



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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-06 00:34:34

End at: 2017-12-06 00:35:04

# Below is generated by plot.py at 2017-12-06 03:03:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 264.09 Mbit/s

95th percentile per-packet one-way delay: 113.278 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 183.15 Mbit/s

95th percentile per-packet one-way delay: 113.391 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.95 Mbit/s

95th percentile per-packet one-way delay: 112.993 ms

Loss rate: 0.00%

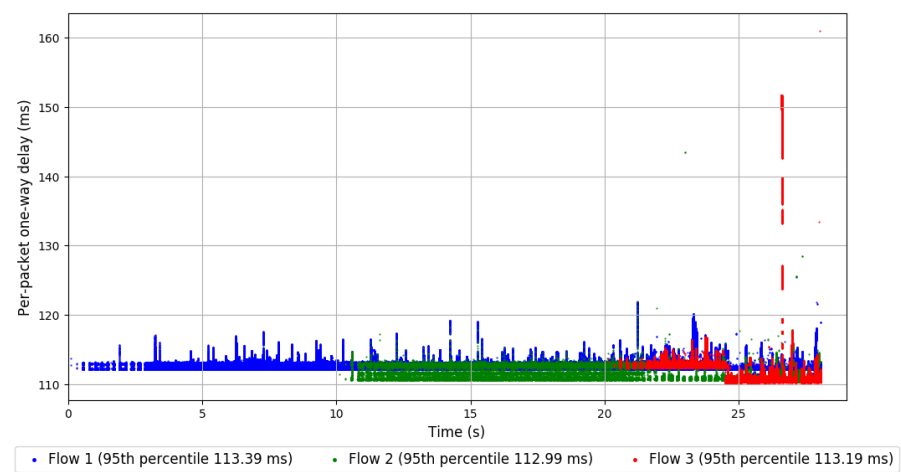
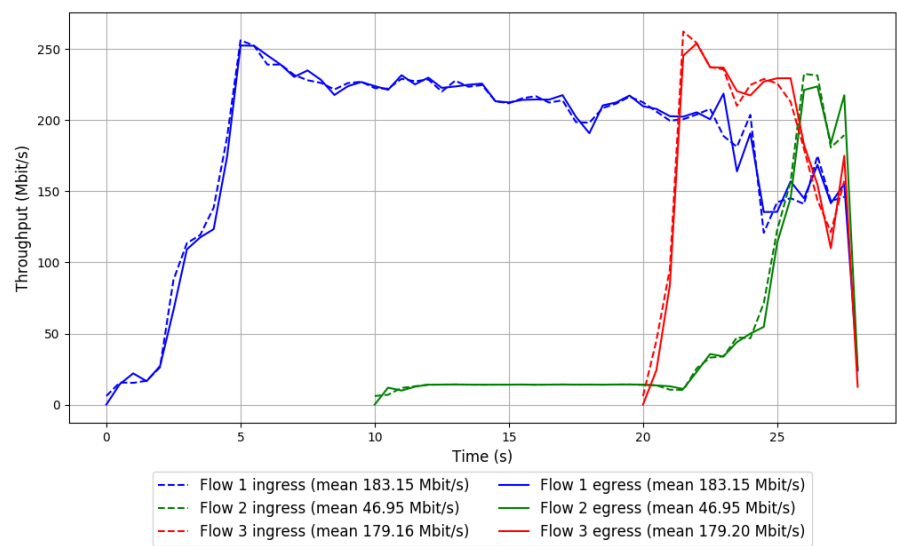
-- Flow 3:

Average throughput: 179.20 Mbit/s

95th percentile per-packet one-way delay: 113.185 ms

Loss rate: 0.01%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-06 00:48:09

End at: 2017-12-06 00:48:39

# Below is generated by plot.py at 2017-12-06 03:03:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 78.66 Mbit/s

95th percentile per-packet one-way delay: 113.034 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 15.92 Mbit/s

95th percentile per-packet one-way delay: 112.941 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 15.71 Mbit/s

95th percentile per-packet one-way delay: 112.972 ms

Loss rate: 0.02%

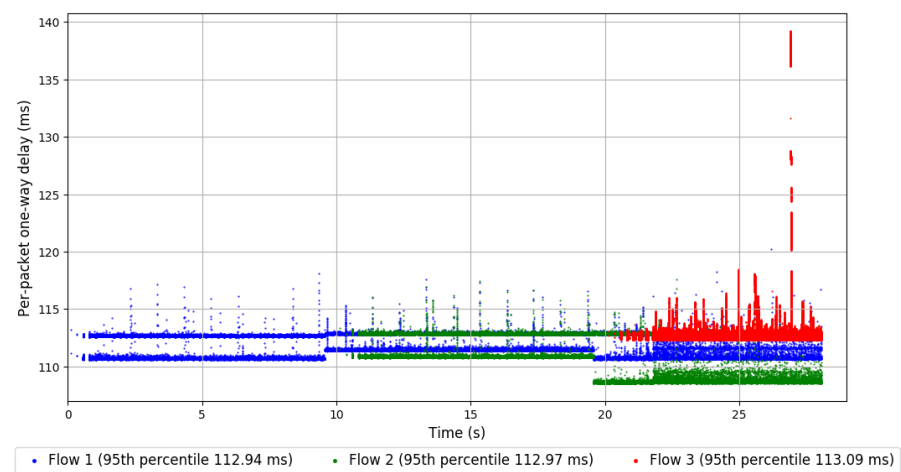
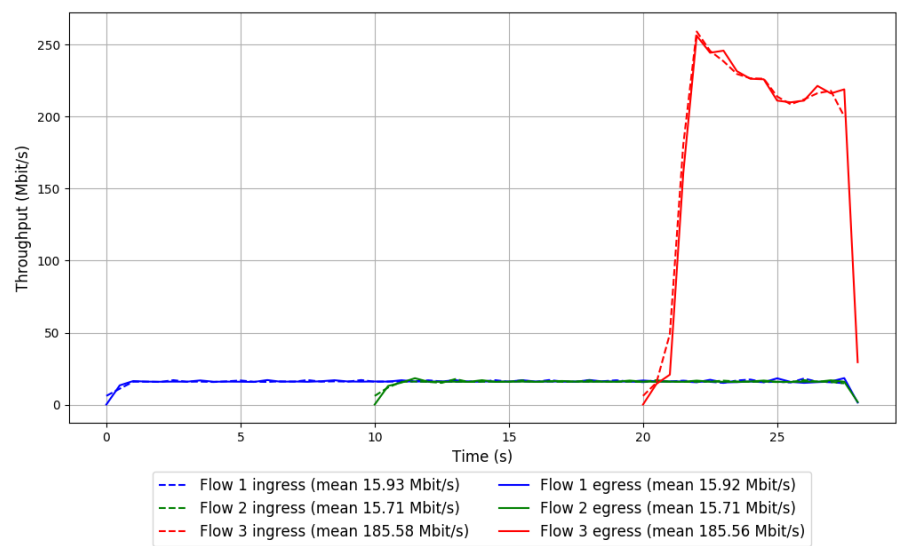
-- Flow 3:

Average throughput: 185.56 Mbit/s

95th percentile per-packet one-way delay: 113.095 ms

Loss rate: 0.04%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-06 01:01:24

End at: 2017-12-06 01:01:54

# Below is generated by plot.py at 2017-12-06 03:03:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.89 Mbit/s

95th percentile per-packet one-way delay: 114.897 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 41.64 Mbit/s

95th percentile per-packet one-way delay: 114.827 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 57.02 Mbit/s

95th percentile per-packet one-way delay: 114.864 ms

Loss rate: 0.00%

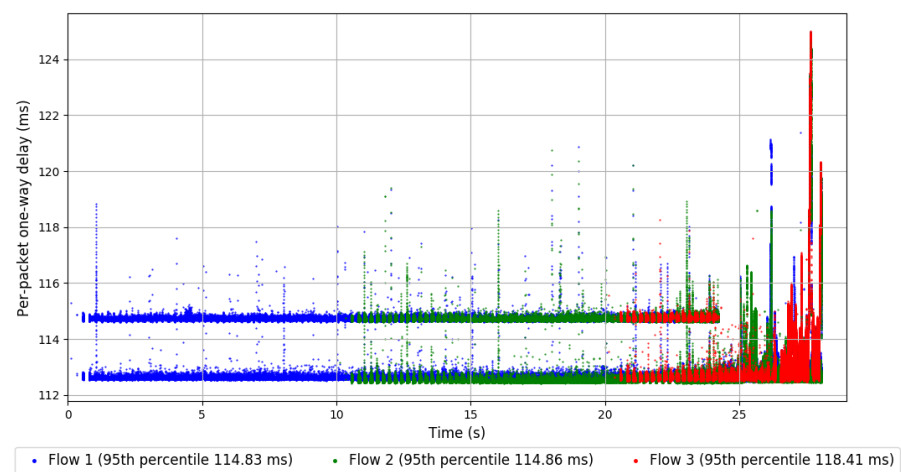
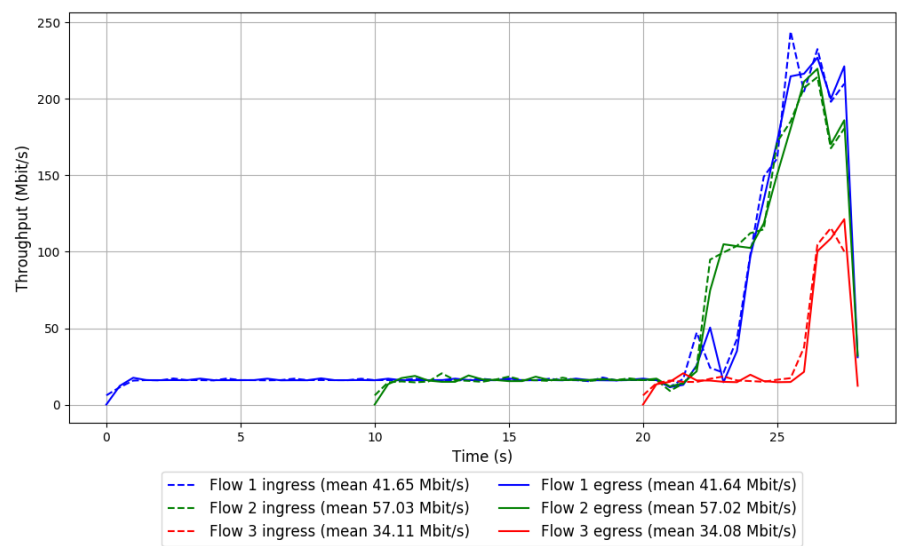
-- Flow 3:

Average throughput: 34.08 Mbit/s

95th percentile per-packet one-way delay: 118.407 ms

Loss rate: 0.00%

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



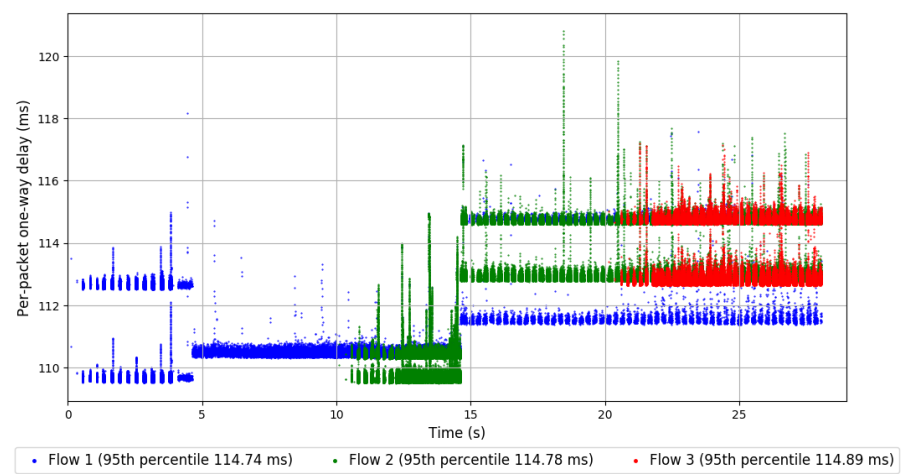
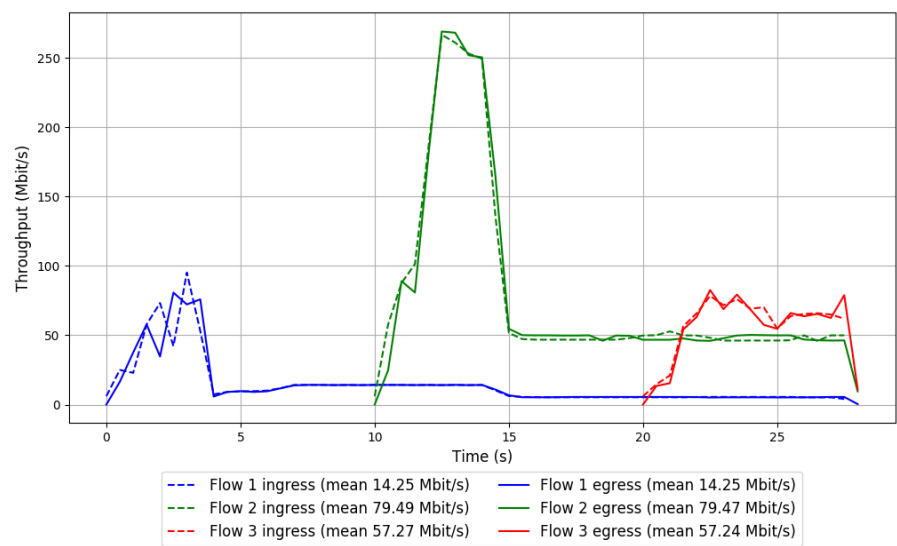
```
Run 9: Statistics of TaoVA-100x

Start at: 2017-12-06 01:14:34
End at: 2017-12-06 01:15:04

# Below is generated by plot.py at 2017-12-06 03:03:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.47 Mbit/s
95th percentile per-packet one-way delay: 114.801 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 14.25 Mbit/s
95th percentile per-packet one-way delay: 114.736 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 79.47 Mbit/s
95th percentile per-packet one-way delay: 114.778 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 57.24 Mbit/s
95th percentile per-packet one-way delay: 114.890 ms
Loss rate: 0.09%
```



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

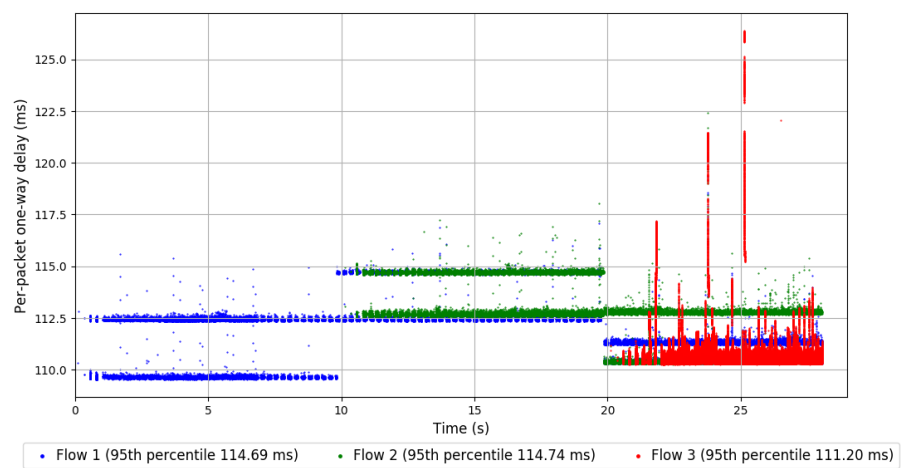
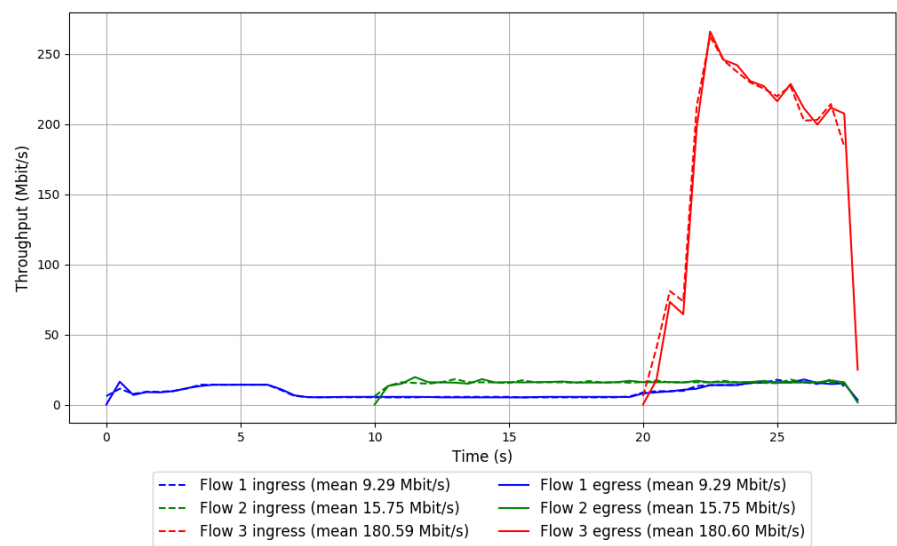


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-06 01:27:59
End at: 2017-12-06 01:28:29

# Below is generated by plot.py at 2017-12-06 03:03:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.65 Mbit/s
95th percentile per-packet one-way delay: 114.636 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.29 Mbit/s
95th percentile per-packet one-way delay: 114.686 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.75 Mbit/s
95th percentile per-packet one-way delay: 114.743 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 180.60 Mbit/s
95th percentile per-packet one-way delay: 111.199 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-05 23:31:58

End at: 2017-12-05 23:32:28

# Below is generated by plot.py at 2017-12-06 03:03:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 44.41 Mbit/s

95th percentile per-packet one-way delay: 113.378 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 30.53 Mbit/s

95th percentile per-packet one-way delay: 113.457 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 16.93 Mbit/s

95th percentile per-packet one-way delay: 113.206 ms

Loss rate: 0.00%

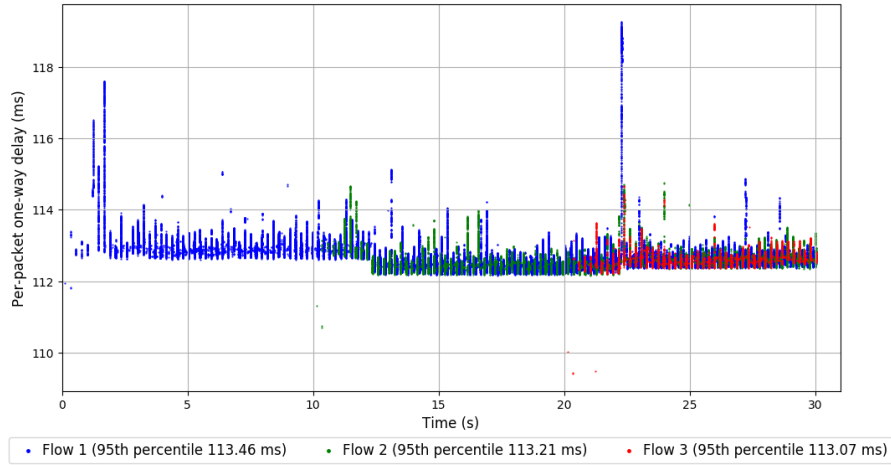
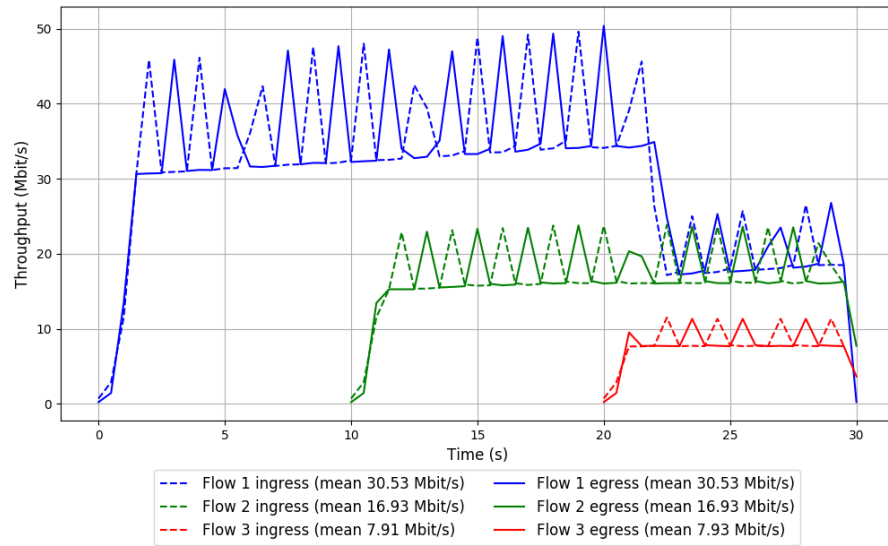
-- Flow 3:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 113.072 ms

Loss rate: 0.02%

# Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-05 23:45:21

End at: 2017-12-05 23:45:51

# Below is generated by plot.py at 2017-12-06 03:03:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 39.44 Mbit/s

95th percentile per-packet one-way delay: 118.279 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 17.31 Mbit/s

95th percentile per-packet one-way delay: 115.385 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 21.90 Mbit/s

95th percentile per-packet one-way delay: 115.861 ms

Loss rate: 0.17%

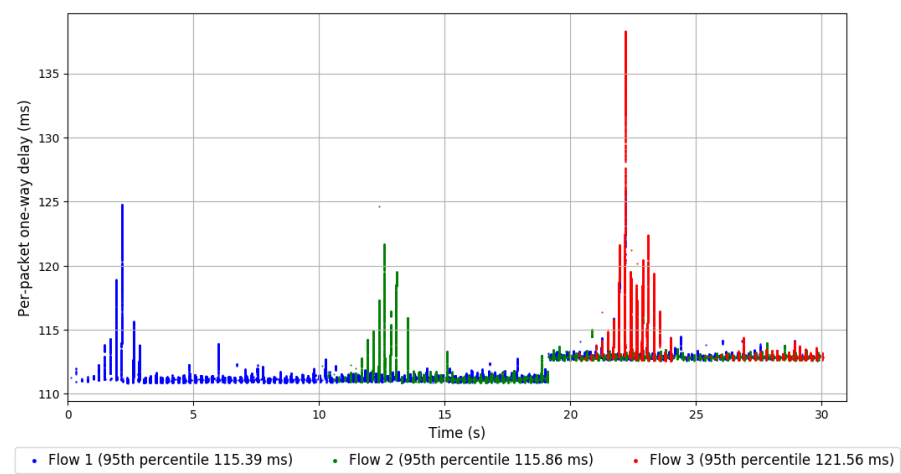
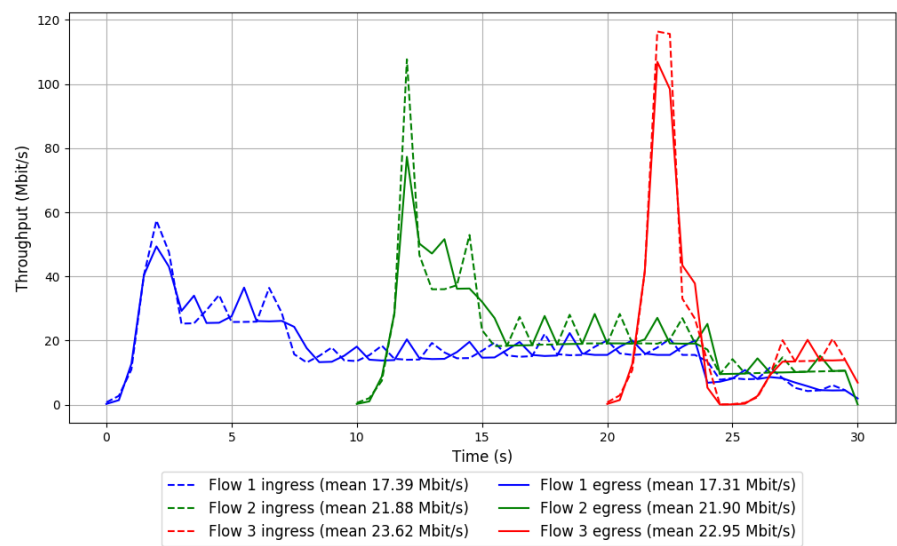
-- Flow 3:

Average throughput: 22.95 Mbit/s

95th percentile per-packet one-way delay: 121.557 ms

Loss rate: 2.86%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-05 23:58:34

End at: 2017-12-05 23:59:04

# Below is generated by plot.py at 2017-12-06 03:03:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 42.09 Mbit/s

95th percentile per-packet one-way delay: 113.054 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 5.29 Mbit/s

95th percentile per-packet one-way delay: 112.885 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 31.35 Mbit/s

95th percentile per-packet one-way delay: 112.697 ms

Loss rate: 0.01%

-- Flow 3:

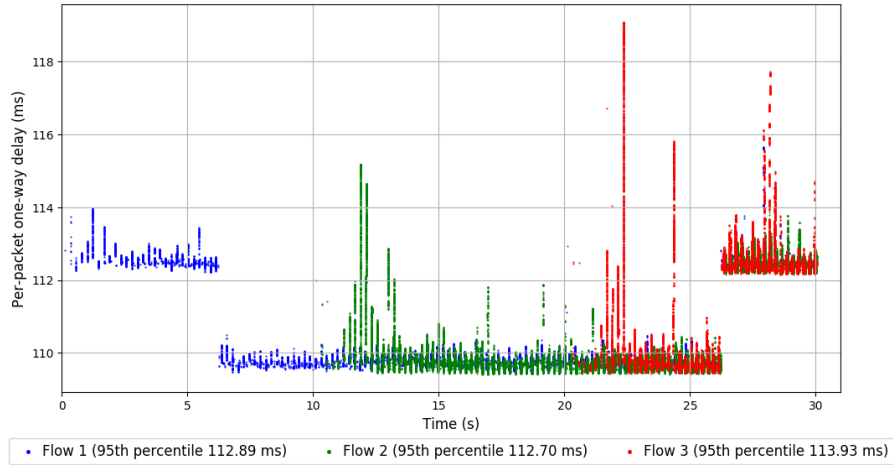
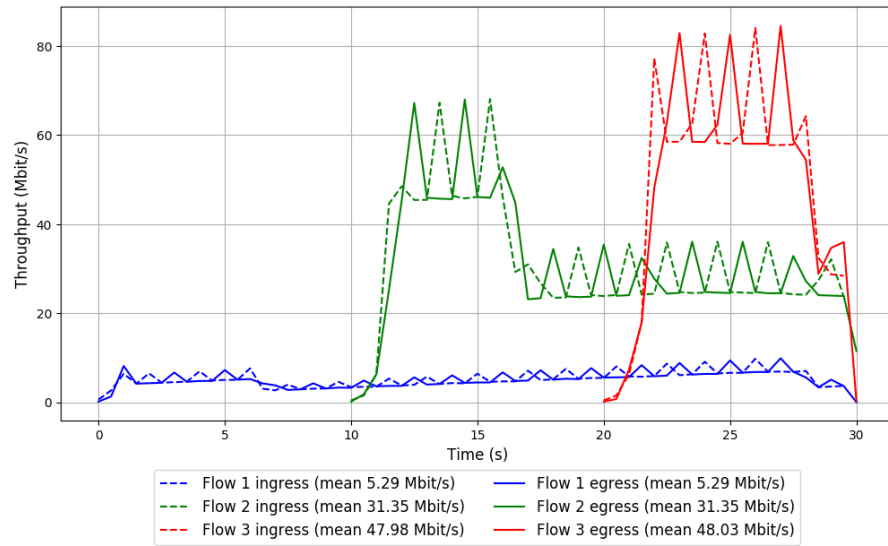
Average throughput: 48.03 Mbit/s

95th percentile per-packet one-way delay: 113.927 ms

Loss rate: 0.01%



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



Run 4: Statistics of TCP Vegas

Start at: 2017-12-06 00:11:50

End at: 2017-12-06 00:12:20

# Below is generated by plot.py at 2017-12-06 03:03:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 109.04 Mbit/s

95th percentile per-packet one-way delay: 117.781 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 21.86 Mbit/s

95th percentile per-packet one-way delay: 111.956 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.67 Mbit/s

95th percentile per-packet one-way delay: 118.542 ms

Loss rate: 0.00%

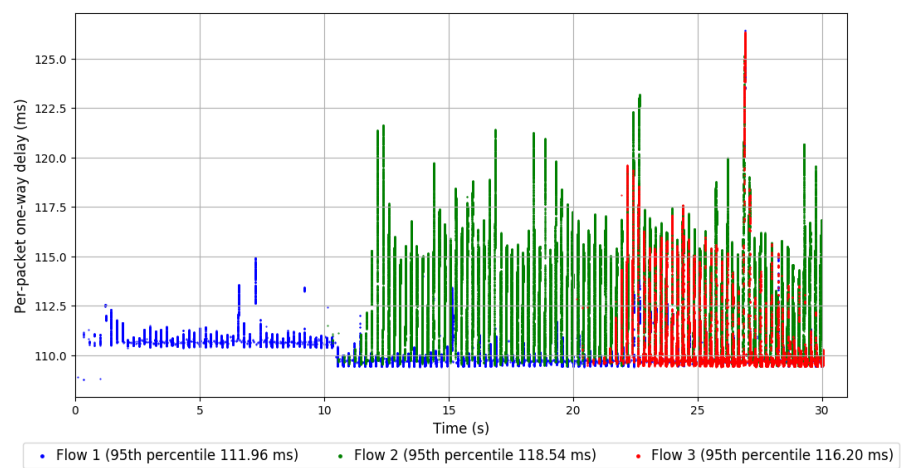
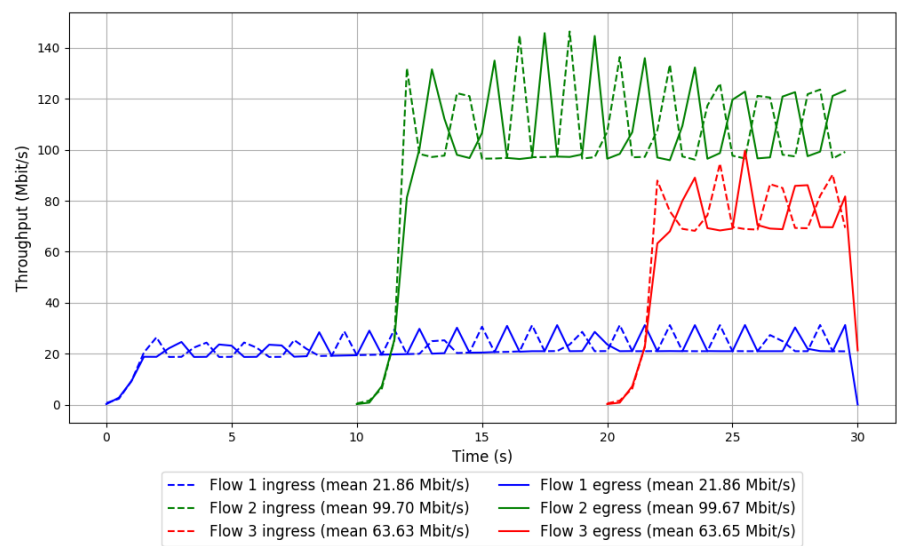
-- Flow 3:

Average throughput: 63.65 Mbit/s

95th percentile per-packet one-way delay: 116.201 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-06 00:25:13

End at: 2017-12-06 00:25:43

# Below is generated by plot.py at 2017-12-06 03:03:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 37.88 Mbit/s

95th percentile per-packet one-way delay: 114.086 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 10.95 Mbit/s

95th percentile per-packet one-way delay: 115.263 ms

Loss rate: 1.37%

-- Flow 2:

Average throughput: 32.63 Mbit/s

95th percentile per-packet one-way delay: 113.555 ms

Loss rate: 0.38%

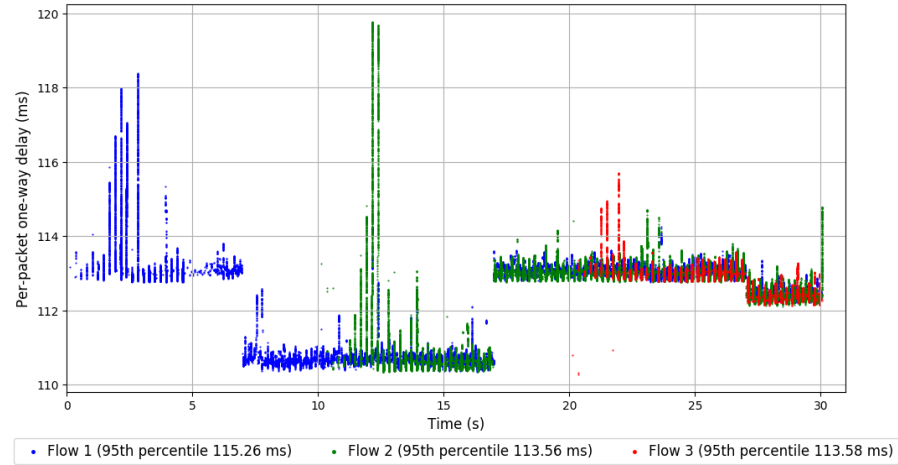
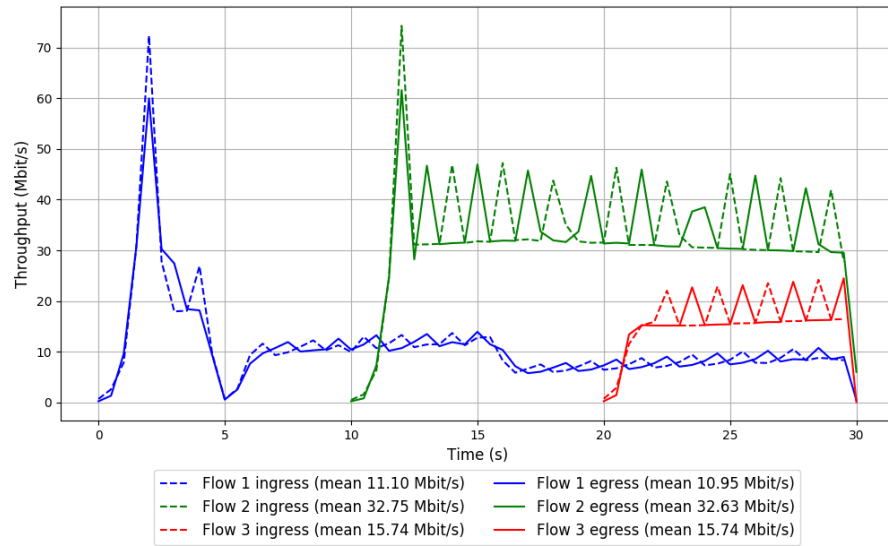
-- Flow 3:

Average throughput: 15.74 Mbit/s

95th percentile per-packet one-way delay: 113.576 ms

Loss rate: 0.00%

# Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-06 00:38:51

End at: 2017-12-06 00:39:21

# Below is generated by plot.py at 2017-12-06 03:03:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 41.09 Mbit/s

95th percentile per-packet one-way delay: 114.229 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 10.94 Mbit/s

95th percentile per-packet one-way delay: 113.627 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 29.73 Mbit/s

95th percentile per-packet one-way delay: 114.398 ms

Loss rate: 0.00%

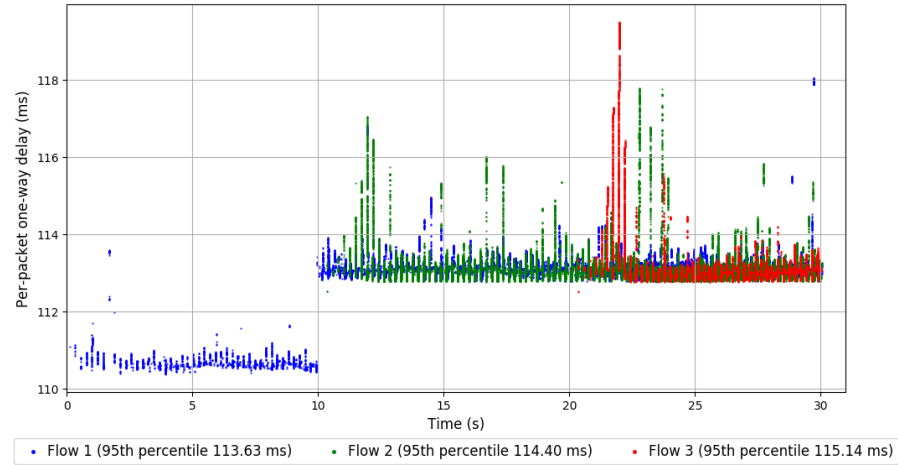
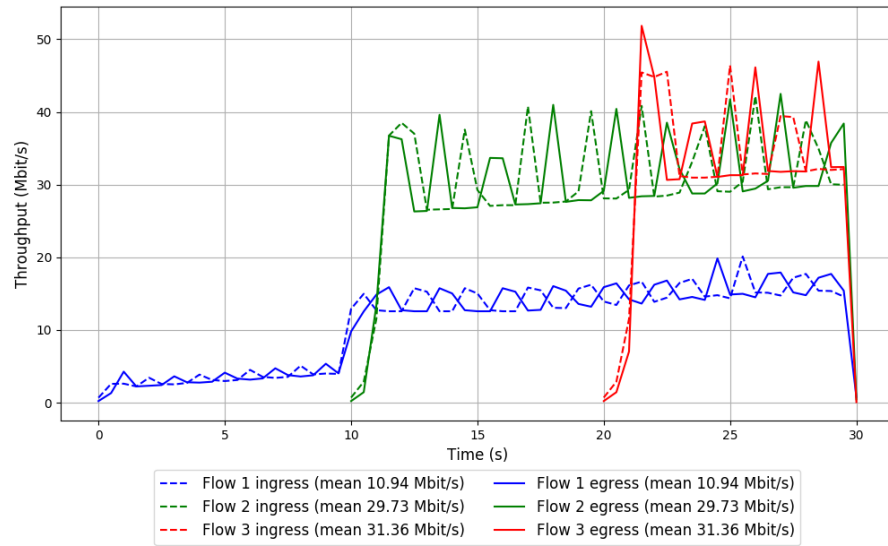
-- Flow 3:

Average throughput: 31.36 Mbit/s

95th percentile per-packet one-way delay: 115.137 ms

Loss rate: 0.00%

# Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-06 00:52:05

End at: 2017-12-06 00:52:35

# Below is generated by plot.py at 2017-12-06 03:03:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 37.77 Mbit/s

95th percentile per-packet one-way delay: 115.380 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 18.52 Mbit/s

95th percentile per-packet one-way delay: 115.435 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 10.60 Mbit/s

95th percentile per-packet one-way delay: 115.493 ms

Loss rate: 0.68%

-- Flow 3:

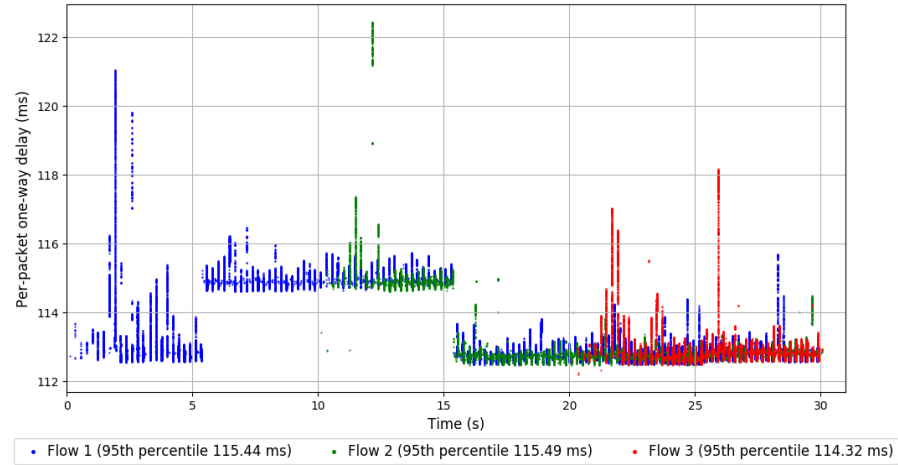
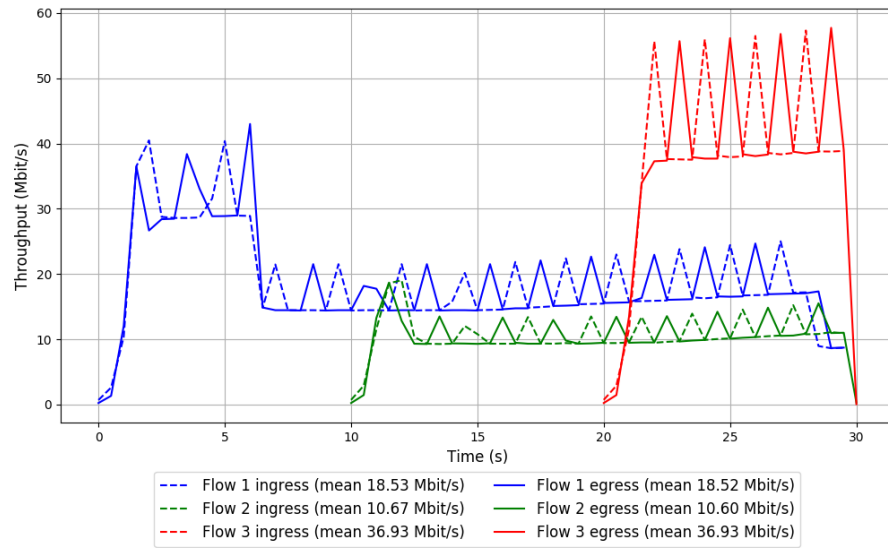
Average throughput: 36.93 Mbit/s

95th percentile per-packet one-way delay: 114.319 ms

Loss rate: 0.00%



# Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-06 01:05:22

End at: 2017-12-06 01:05:52

# Below is generated by plot.py at 2017-12-06 03:03:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 45.96 Mbit/s

95th percentile per-packet one-way delay: 115.631 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 19.59 Mbit/s

95th percentile per-packet one-way delay: 115.490 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 30.39 Mbit/s

95th percentile per-packet one-way delay: 117.025 ms

Loss rate: 0.00%

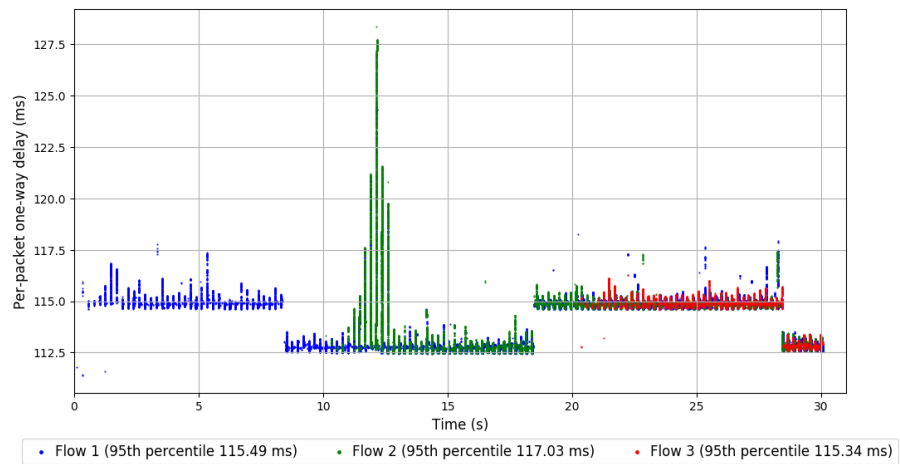
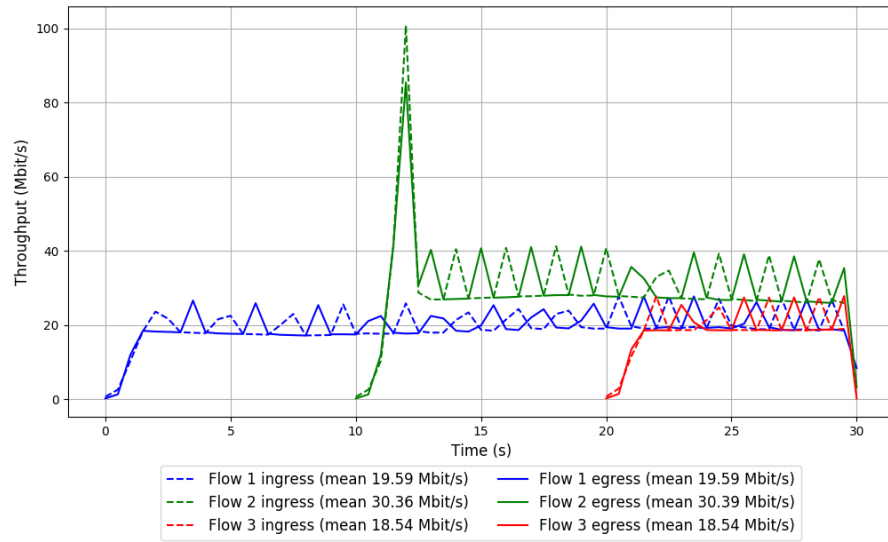
-- Flow 3:

Average throughput: 18.54 Mbit/s

95th percentile per-packet one-way delay: 115.343 ms

Loss rate: 0.00%

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



Run 9: Statistics of TCP Vegas

Start at: 2017-12-06 01:18:31

End at: 2017-12-06 01:19:01

# Below is generated by plot.py at 2017-12-06 03:03:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 86.07 Mbit/s

95th percentile per-packet one-way delay: 121.281 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.25 Mbit/s

95th percentile per-packet one-way delay: 121.659 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.71 Mbit/s

95th percentile per-packet one-way delay: 115.340 ms

Loss rate: 0.02%

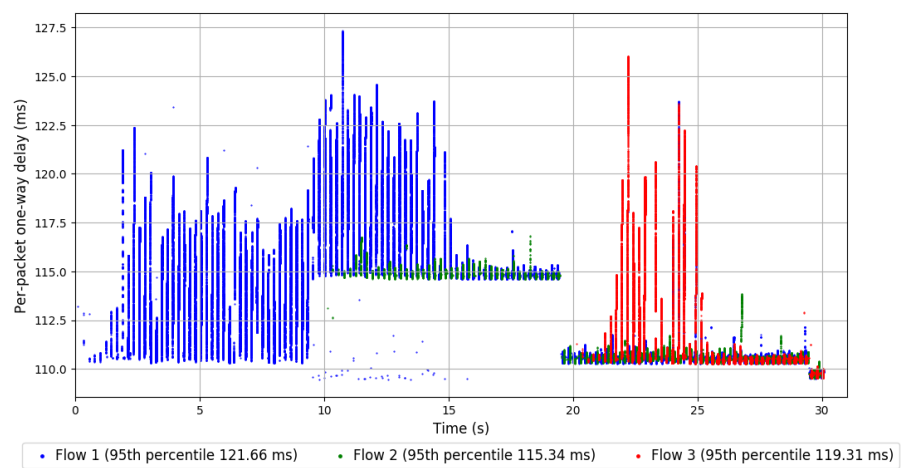
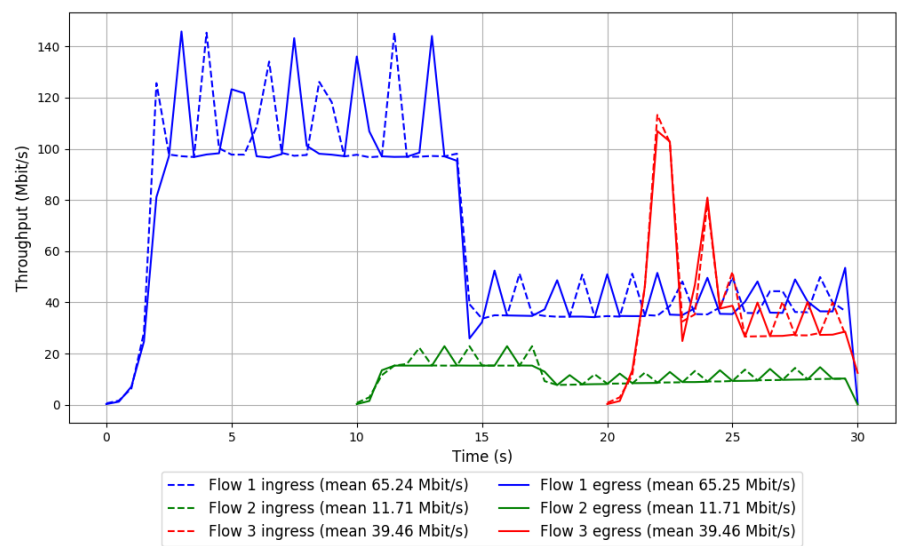
-- Flow 3:

Average throughput: 39.46 Mbit/s

95th percentile per-packet one-way delay: 119.315 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-06 01:31:54

End at: 2017-12-06 01:32:24

# Below is generated by plot.py at 2017-12-06 03:03:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 29.93 Mbit/s

95th percentile per-packet one-way delay: 115.342 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 115.275 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 31.13 Mbit/s

95th percentile per-packet one-way delay: 115.367 ms

Loss rate: 0.00%

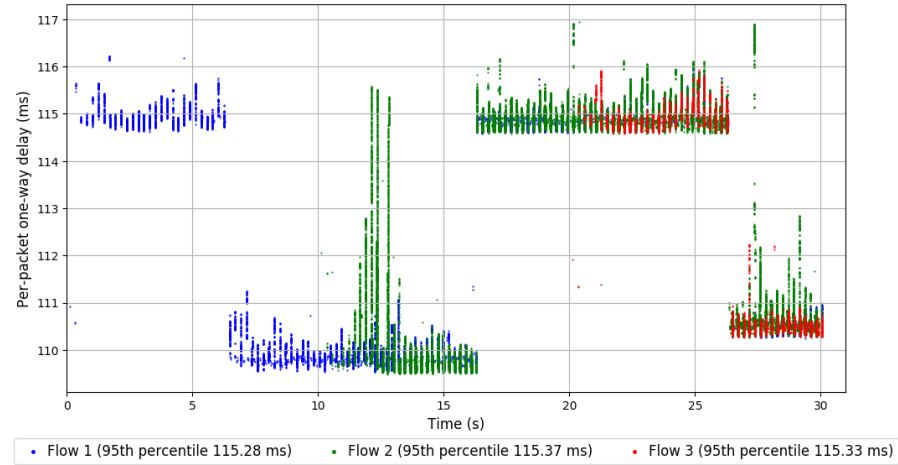
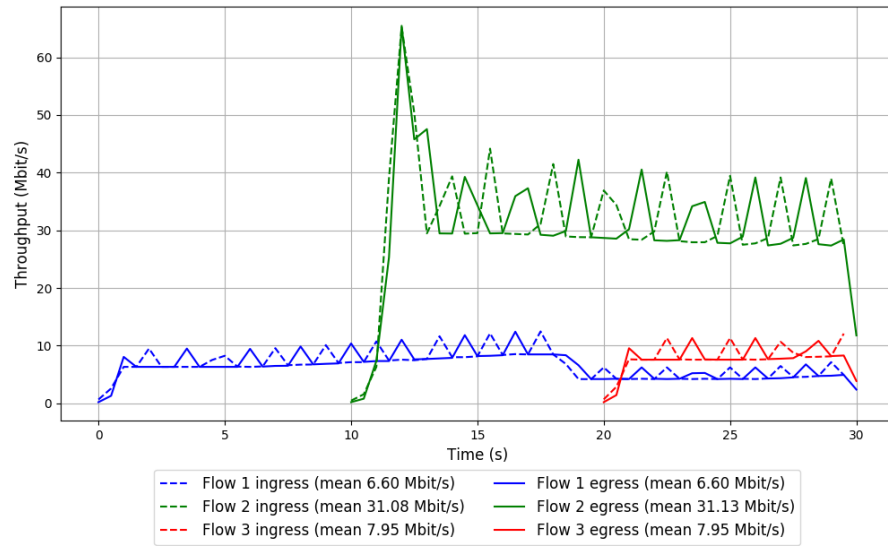
-- Flow 3:

Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 115.325 ms

Loss rate: 0.00%

# Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-05 23:32:48

End at: 2017-12-05 23:33:18

# Below is generated by plot.py at 2017-12-06 03:05:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 265.62 Mbit/s

95th percentile per-packet one-way delay: 174.172 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 163.00 Mbit/s

95th percentile per-packet one-way delay: 174.600 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 146.78 Mbit/s

95th percentile per-packet one-way delay: 175.686 ms

Loss rate: 0.15%

-- Flow 3:

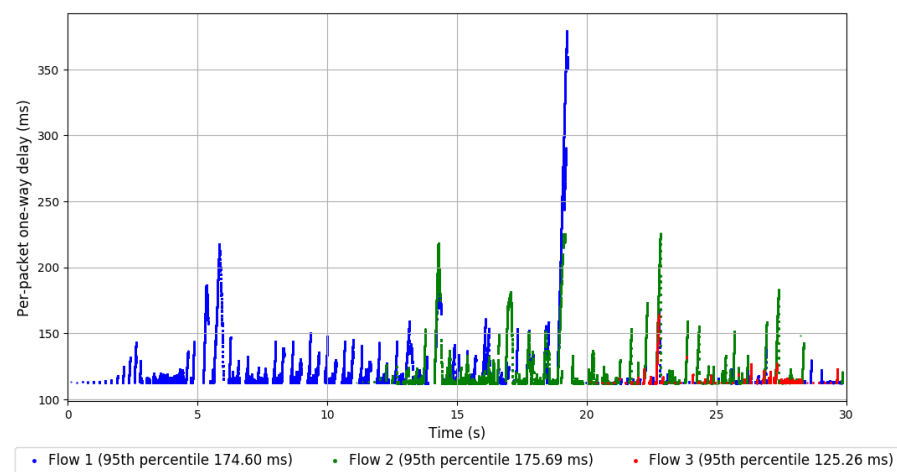
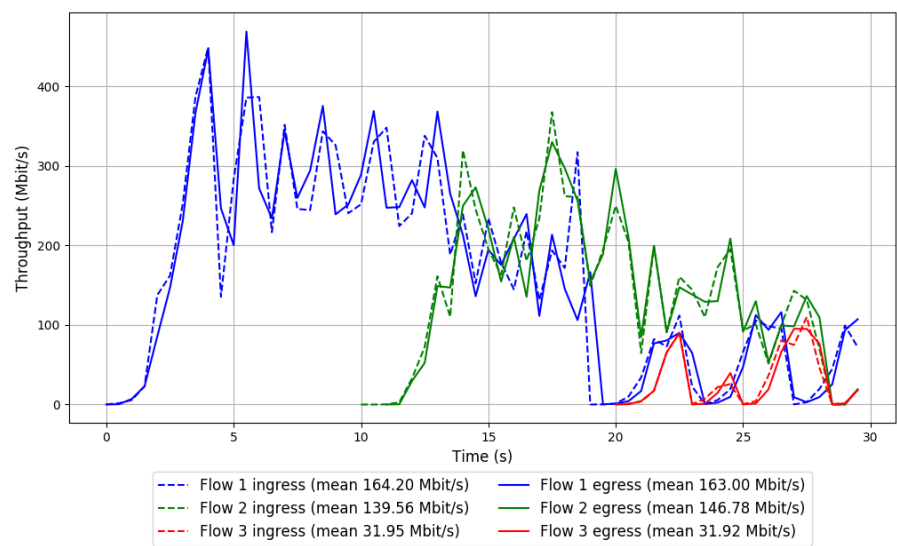
Average throughput: 31.92 Mbit/s

95th percentile per-packet one-way delay: 125.262 ms

Loss rate: 0.00%



Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-05 23:46:11

End at: 2017-12-05 23:46:41

# Below is generated by plot.py at 2017-12-06 03:05:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 251.73 Mbit/s

95th percentile per-packet one-way delay: 268.068 ms

Loss rate: 4.01%

-- Flow 1:

Average throughput: 143.04 Mbit/s

95th percentile per-packet one-way delay: 248.187 ms

Loss rate: 3.81%

-- Flow 2:

Average throughput: 130.87 Mbit/s

95th percentile per-packet one-way delay: 282.052 ms

Loss rate: 4.91%

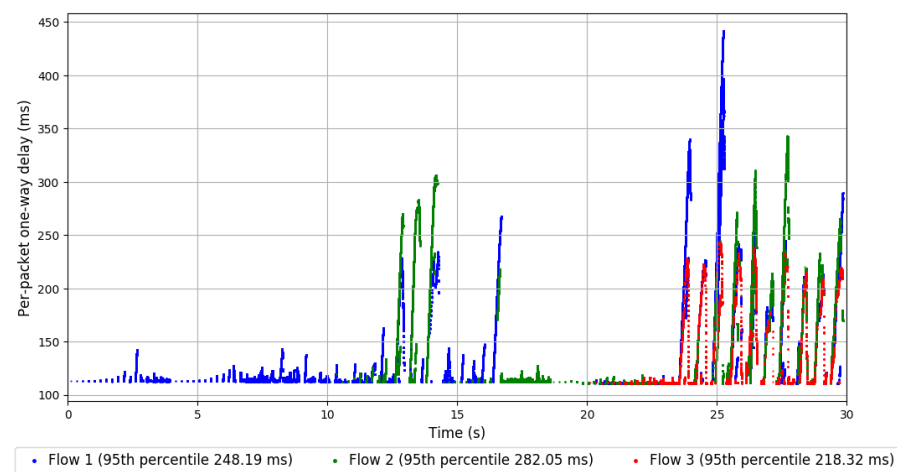
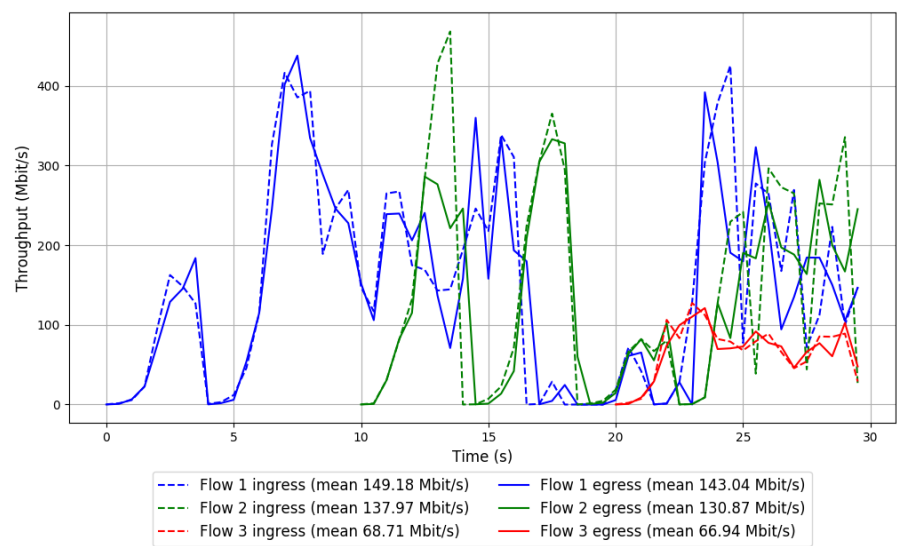
-- Flow 3:

Average throughput: 66.94 Mbit/s

95th percentile per-packet one-way delay: 218.319 ms

Loss rate: 1.58%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-05 23:59:24

End at: 2017-12-05 23:59:54

# Below is generated by plot.py at 2017-12-06 03:05:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 243.76 Mbit/s

95th percentile per-packet one-way delay: 174.019 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 167.31 Mbit/s

95th percentile per-packet one-way delay: 173.576 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 66.45 Mbit/s

95th percentile per-packet one-way delay: 189.932 ms

Loss rate: 2.06%

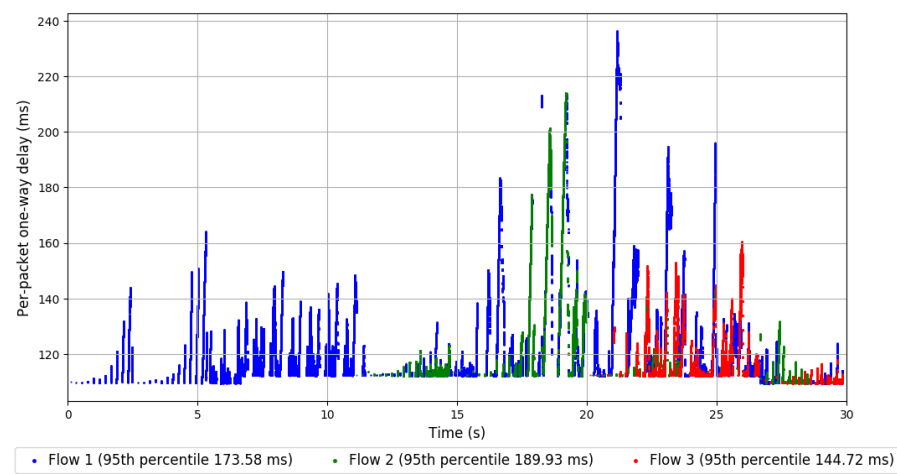
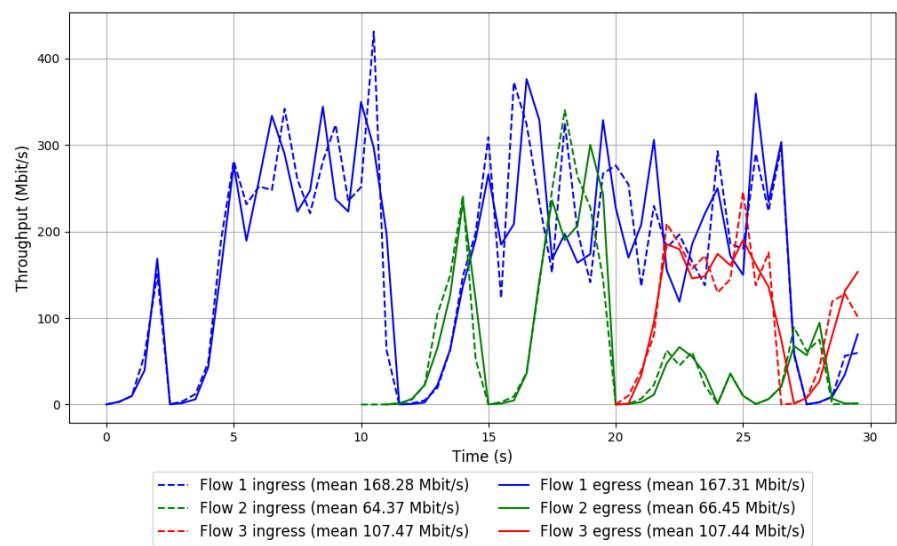
-- Flow 3:

Average throughput: 107.44 Mbit/s

95th percentile per-packet one-way delay: 144.718 ms

Loss rate: 0.03%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-06 00:12:44

End at: 2017-12-06 00:13:14

# Below is generated by plot.py at 2017-12-06 03:05:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 203.52 Mbit/s

95th percentile per-packet one-way delay: 140.408 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 91.88 Mbit/s

95th percentile per-packet one-way delay: 179.048 ms

Loss rate: 1.86%

-- Flow 2:

Average throughput: 118.10 Mbit/s

95th percentile per-packet one-way delay: 119.672 ms

Loss rate: 0.08%

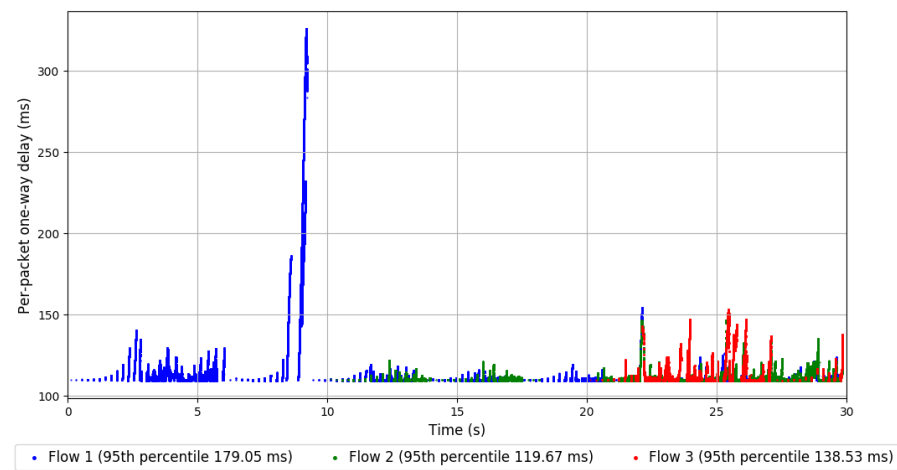
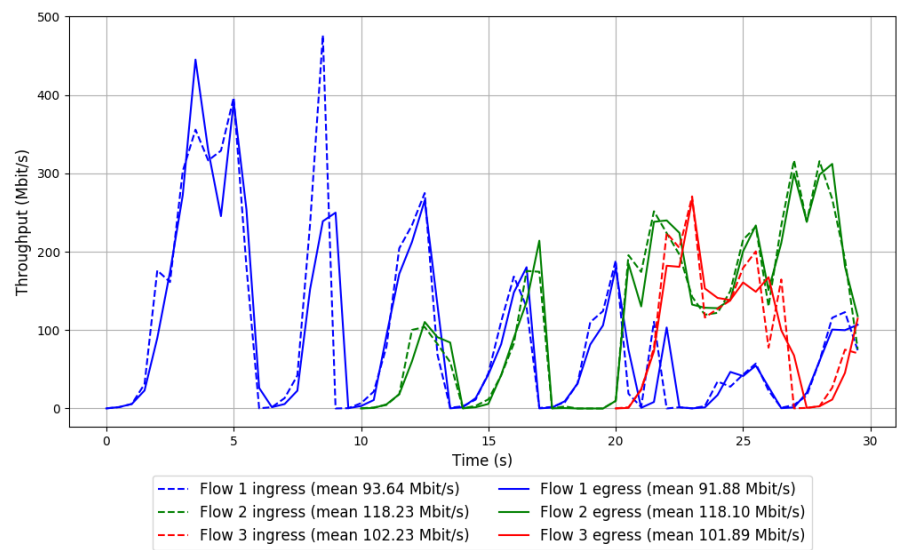
-- Flow 3:

Average throughput: 101.89 Mbit/s

95th percentile per-packet one-way delay: 138.527 ms

Loss rate: 0.05%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-06 00:26:02

End at: 2017-12-06 00:26:32

# Below is generated by plot.py at 2017-12-06 03:06:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 264.43 Mbit/s

95th percentile per-packet one-way delay: 221.469 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 190.93 Mbit/s

95th percentile per-packet one-way delay: 205.993 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 92.97 Mbit/s

95th percentile per-packet one-way delay: 264.612 ms

Loss rate: 2.97%

-- Flow 3:

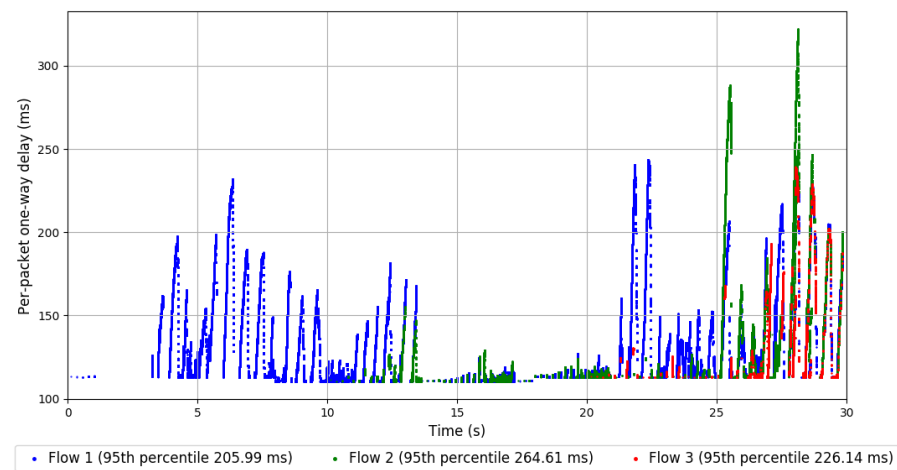
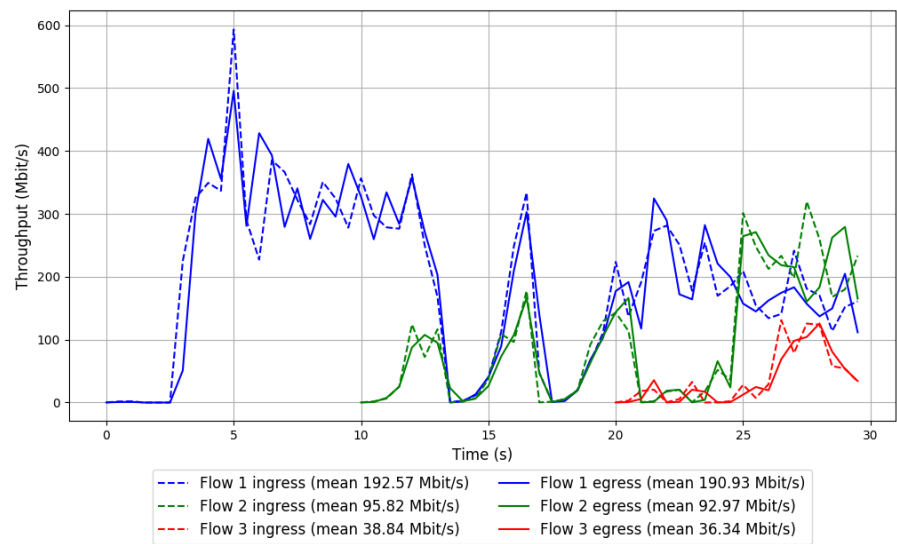
Average throughput: 36.34 Mbit/s

95th percentile per-packet one-way delay: 226.144 ms

Loss rate: 6.47%



Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-06 00:39:40

End at: 2017-12-06 00:40:10

# Below is generated by plot.py at 2017-12-06 03:06:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 278.92 Mbit/s

95th percentile per-packet one-way delay: 213.983 ms

Loss rate: 2.16%

-- Flow 1:

Average throughput: 156.08 Mbit/s

95th percentile per-packet one-way delay: 191.603 ms

Loss rate: 2.41%

-- Flow 2:

Average throughput: 137.95 Mbit/s

95th percentile per-packet one-way delay: 244.169 ms

Loss rate: 1.81%

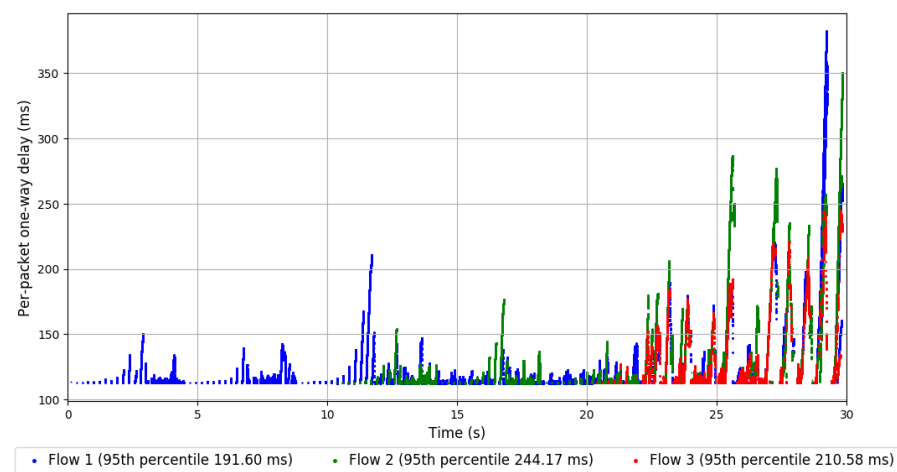
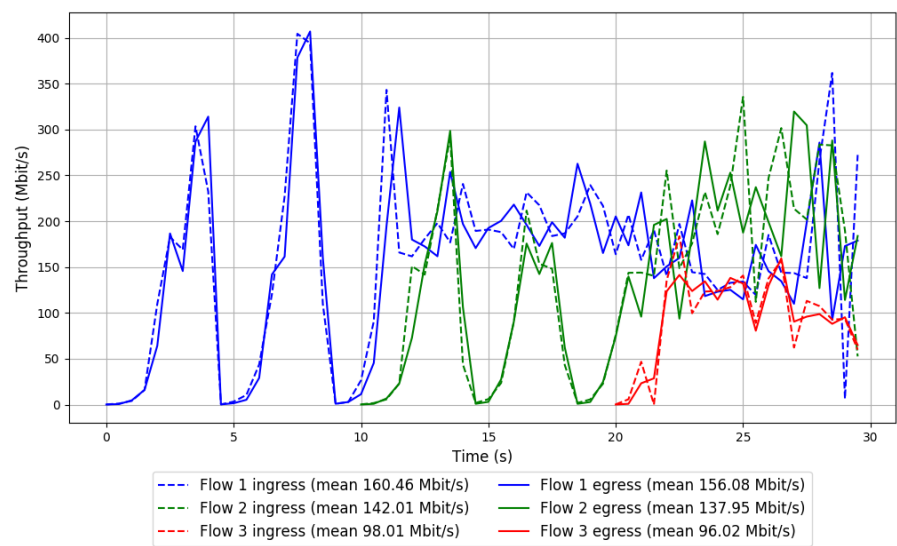
-- Flow 3:

Average throughput: 96.02 Mbit/s

95th percentile per-packet one-way delay: 210.577 ms

Loss rate: 1.93%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-06 00:52:54

End at: 2017-12-06 00:53:24

# Below is generated by plot.py at 2017-12-06 03:06:56

# Datalink statistics

-- Total of 3 flows:

Average throughput: 250.51 Mbit/s

95th percentile per-packet one-way delay: 181.947 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 109.12 Mbit/s

95th percentile per-packet one-way delay: 153.291 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 153.21 Mbit/s

95th percentile per-packet one-way delay: 226.425 ms

Loss rate: 0.12%

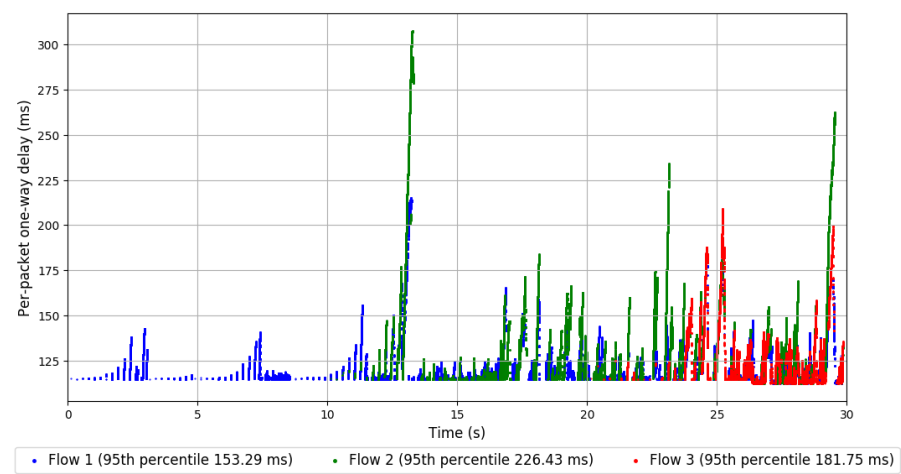
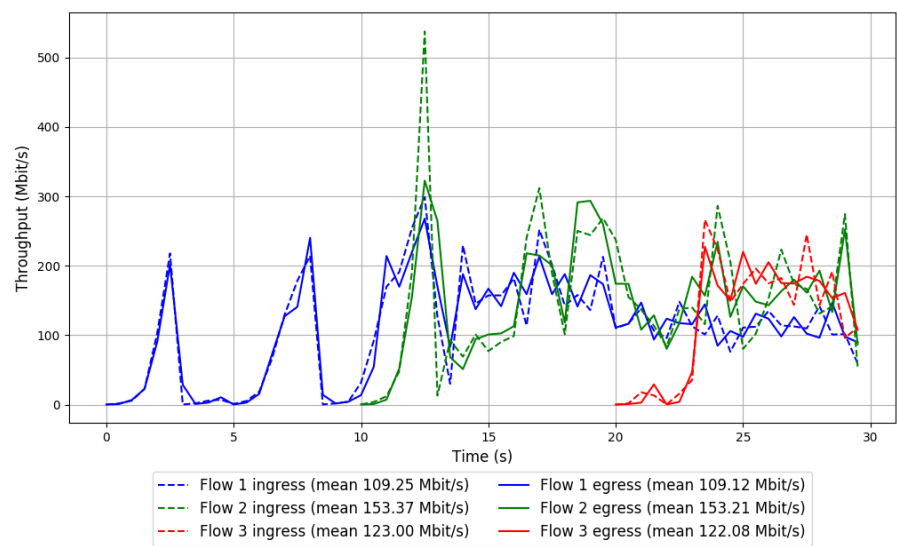
-- Flow 3:

Average throughput: 122.08 Mbit/s

95th percentile per-packet one-way delay: 181.752 ms

Loss rate: 0.55%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-06 01:06:12

End at: 2017-12-06 01:06:42

# Below is generated by plot.py at 2017-12-06 03:07:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 210.22 Mbit/s

95th percentile per-packet one-way delay: 178.749 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 100.10 Mbit/s

95th percentile per-packet one-way delay: 139.725 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 110.46 Mbit/s

95th percentile per-packet one-way delay: 269.879 ms

Loss rate: 1.78%

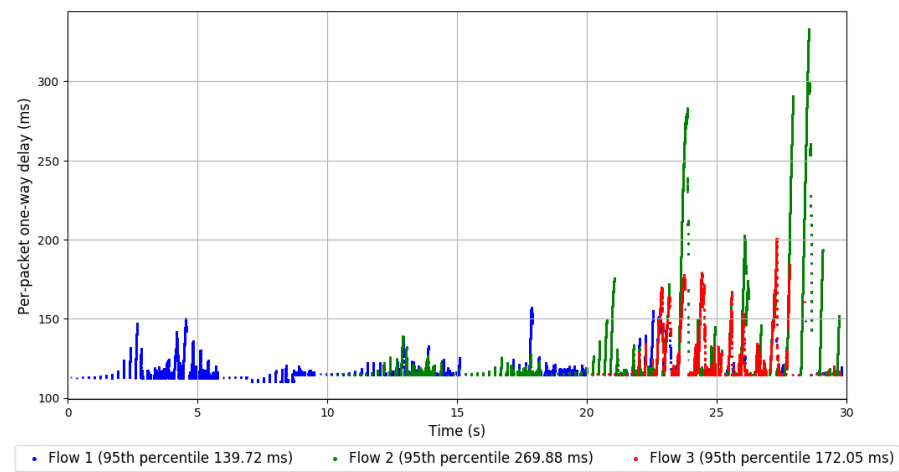
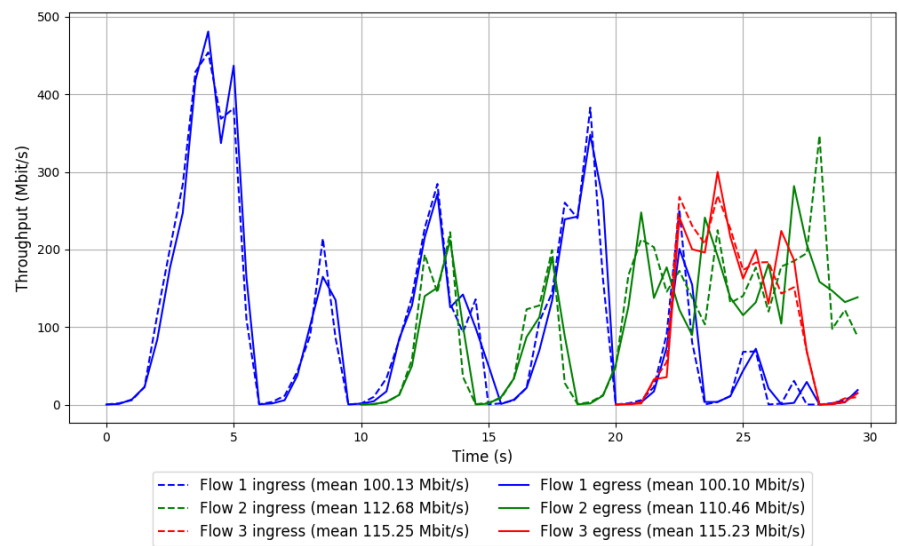
-- Flow 3:

Average throughput: 115.23 Mbit/s

95th percentile per-packet one-way delay: 172.048 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-06 01:19:24

End at: 2017-12-06 01:19:54

# Below is generated by plot.py at 2017-12-06 03:10:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 297.86 Mbit/s

95th percentile per-packet one-way delay: 250.434 ms

Loss rate: 2.82%

-- Flow 1:

Average throughput: 168.09 Mbit/s

95th percentile per-packet one-way delay: 260.932 ms

Loss rate: 3.63%

-- Flow 2:

Average throughput: 165.78 Mbit/s

95th percentile per-packet one-way delay: 244.904 ms

Loss rate: 1.55%

-- Flow 3:

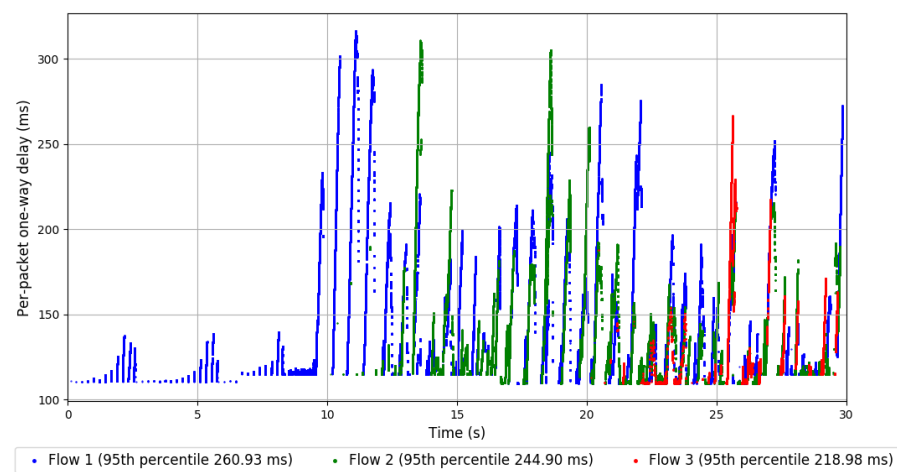
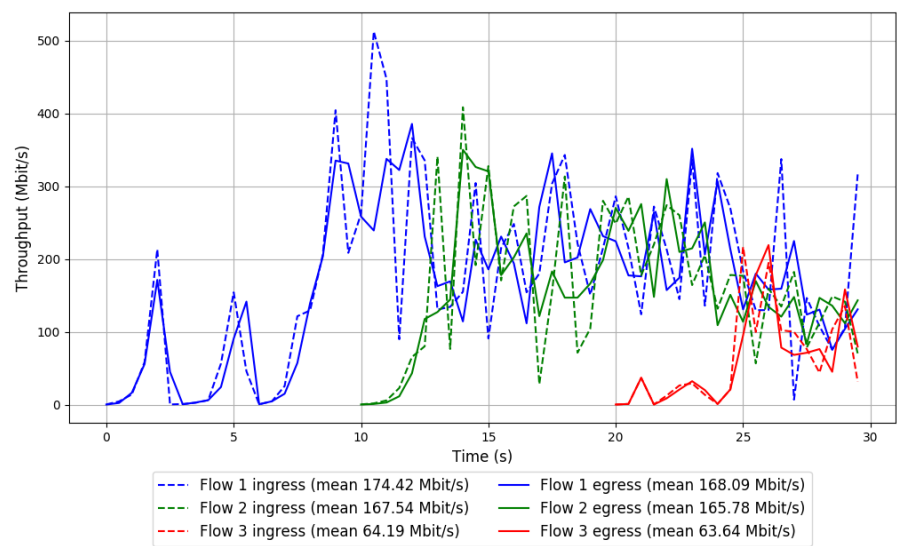
Average throughput: 63.64 Mbit/s

95th percentile per-packet one-way delay: 218.979 ms

Loss rate: 2.80%



Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-06 01:32:43

End at: 2017-12-06 01:33:13

# Below is generated by plot.py at 2017-12-06 03:10:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 259.09 Mbit/s

95th percentile per-packet one-way delay: 198.348 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 125.93 Mbit/s

95th percentile per-packet one-way delay: 199.020 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 185.98 Mbit/s

95th percentile per-packet one-way delay: 198.839 ms

Loss rate: 1.21%

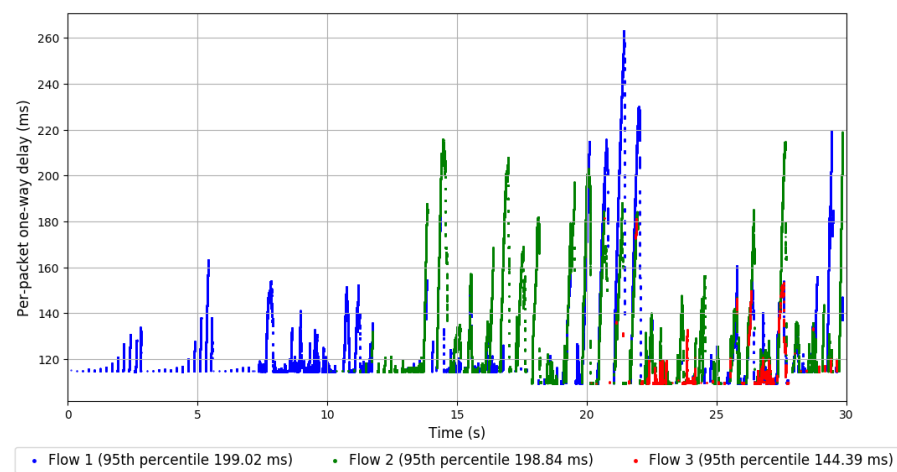
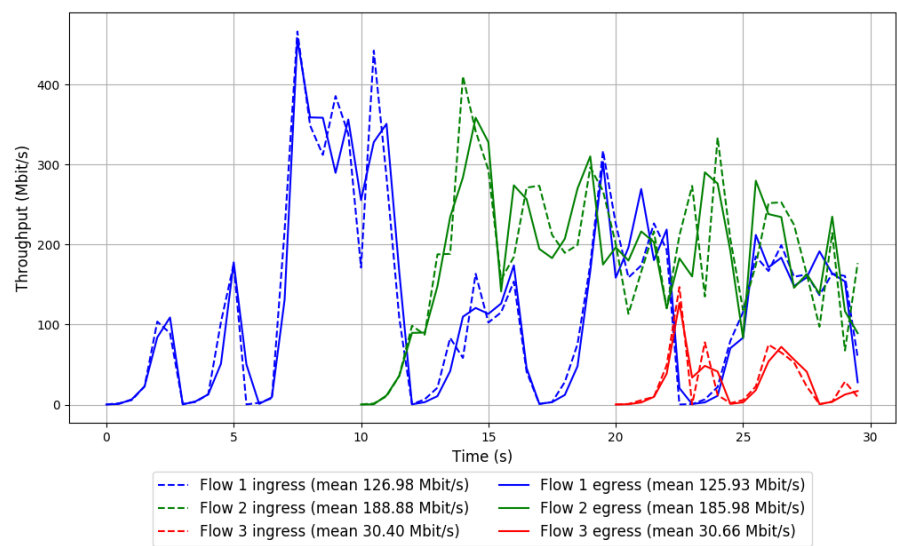
-- Flow 3:

Average throughput: 30.66 Mbit/s

95th percentile per-packet one-way delay: 144.393 ms

Loss rate: 1.47%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-05 23:33:57

End at: 2017-12-05 23:34:27

# Below is generated by plot.py at 2017-12-06 03:10:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 130.14 Mbit/s

95th percentile per-packet one-way delay: 112.819 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 71.33 Mbit/s

95th percentile per-packet one-way delay: 112.718 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.29 Mbit/s

95th percentile per-packet one-way delay: 112.929 ms

Loss rate: 0.02%

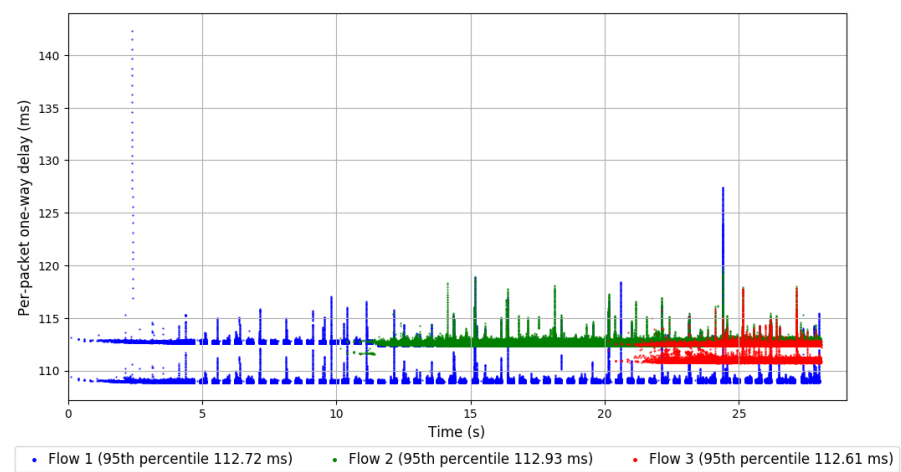
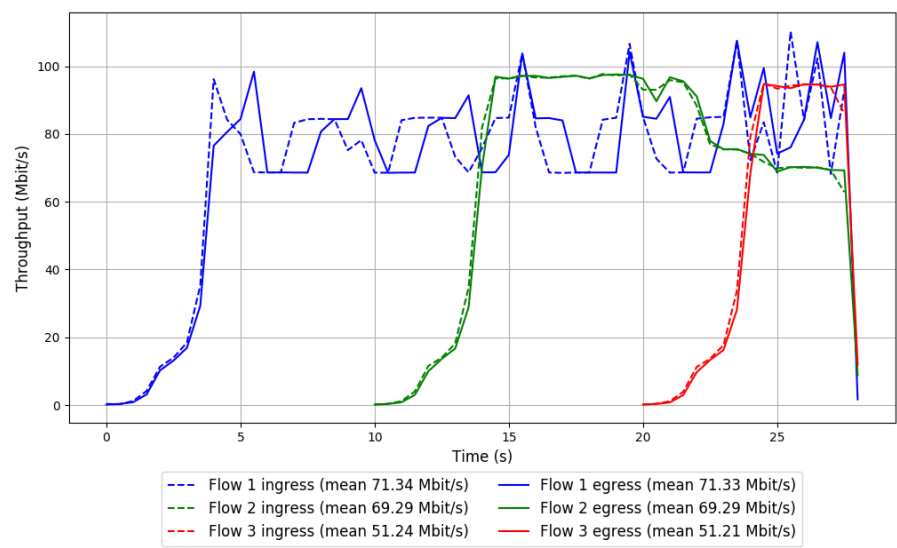
-- Flow 3:

Average throughput: 51.21 Mbit/s

95th percentile per-packet one-way delay: 112.609 ms

Loss rate: 0.09%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-05 23:47:19

End at: 2017-12-05 23:47:49

# Below is generated by plot.py at 2017-12-06 03:10:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 115.33 Mbit/s

95th percentile per-packet one-way delay: 112.805 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 69.27 Mbit/s

95th percentile per-packet one-way delay: 112.787 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.59 Mbit/s

95th percentile per-packet one-way delay: 112.811 ms

Loss rate: 0.02%

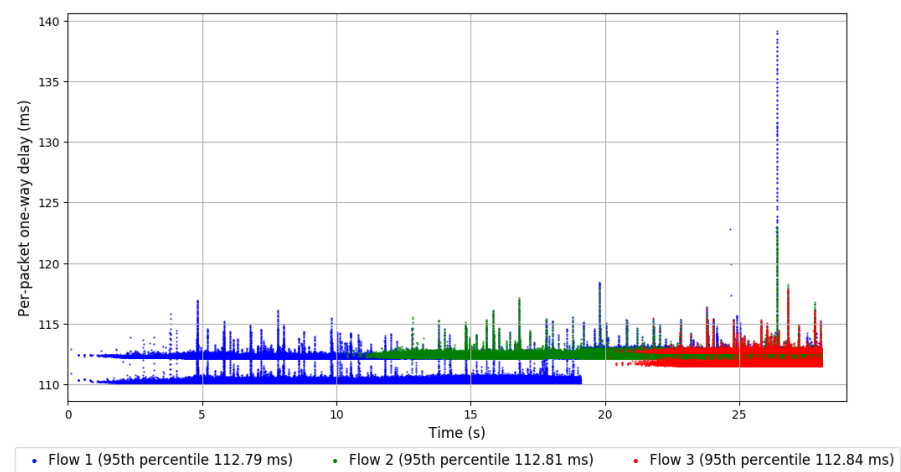
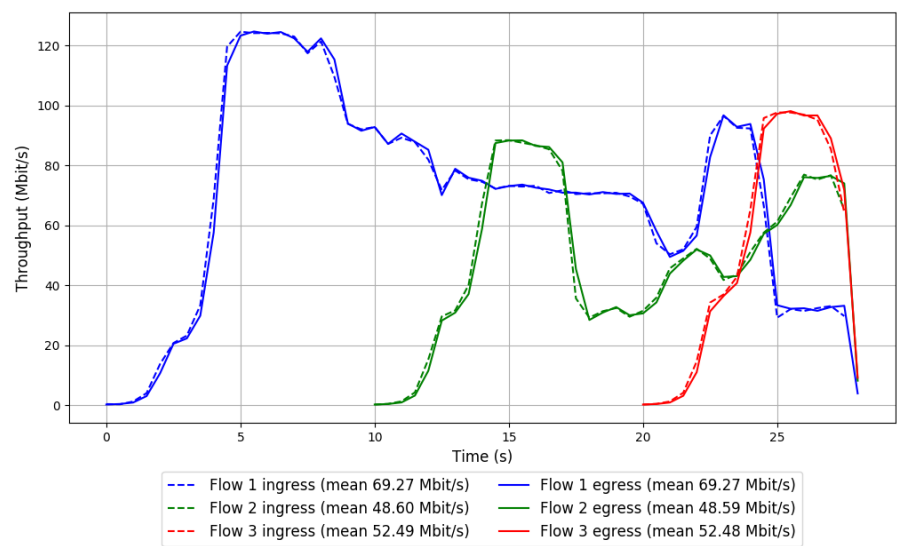
-- Flow 3:

Average throughput: 52.48 Mbit/s

95th percentile per-packet one-way delay: 112.842 ms

Loss rate: 0.04%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-06 00:00:31

End at: 2017-12-06 00:01:01

# Below is generated by plot.py at 2017-12-06 03:10:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 114.88 Mbit/s

95th percentile per-packet one-way delay: 112.414 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 73.79 Mbit/s

95th percentile per-packet one-way delay: 112.283 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.31 Mbit/s

95th percentile per-packet one-way delay: 112.365 ms

Loss rate: 0.01%

-- Flow 3:

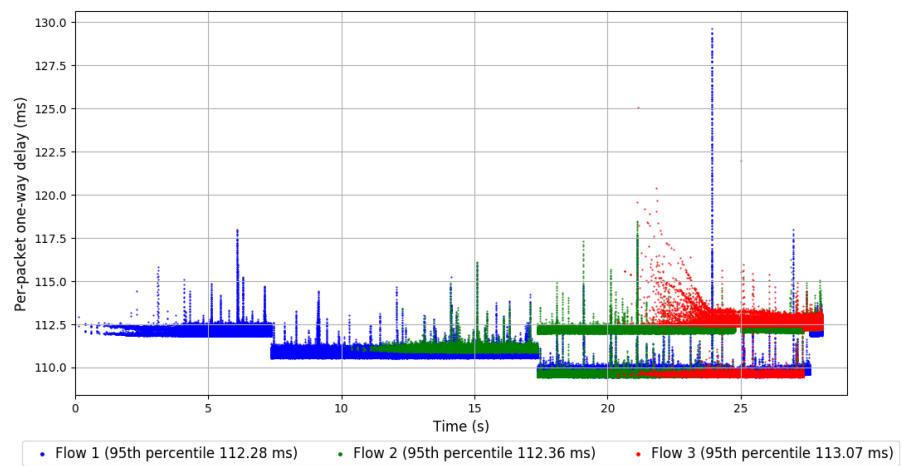
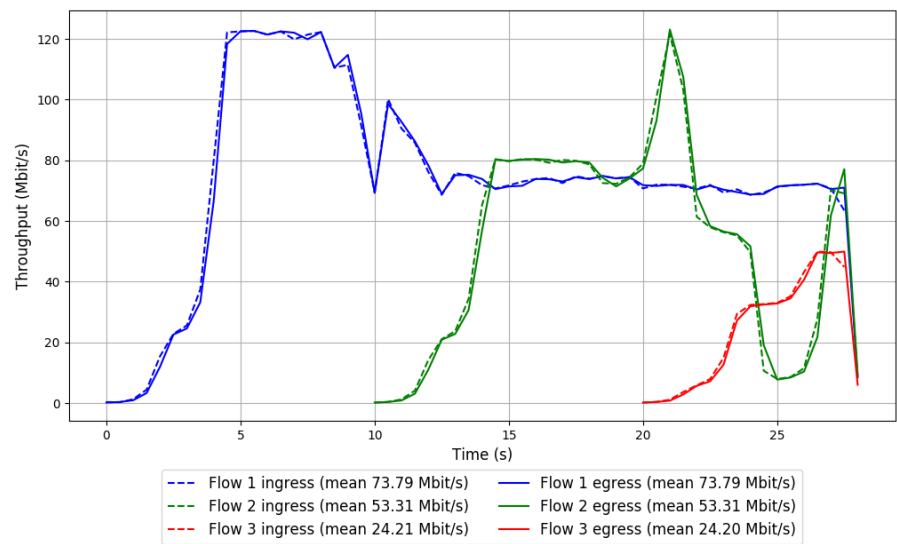
Average throughput: 24.20 Mbit/s

95th percentile per-packet one-way delay: 113.069 ms

Loss rate: 0.03%



Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-06 00:13:49

End at: 2017-12-06 00:14:19

# Below is generated by plot.py at 2017-12-06 03:10:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 111.81 Mbit/s

95th percentile per-packet one-way delay: 114.370 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.67 Mbit/s

95th percentile per-packet one-way delay: 112.648 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.90 Mbit/s

95th percentile per-packet one-way delay: 114.573 ms

Loss rate: 0.00%

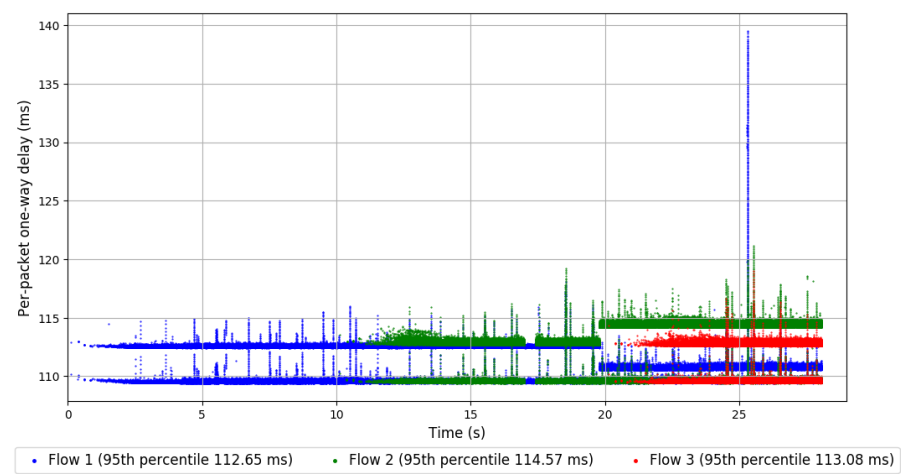
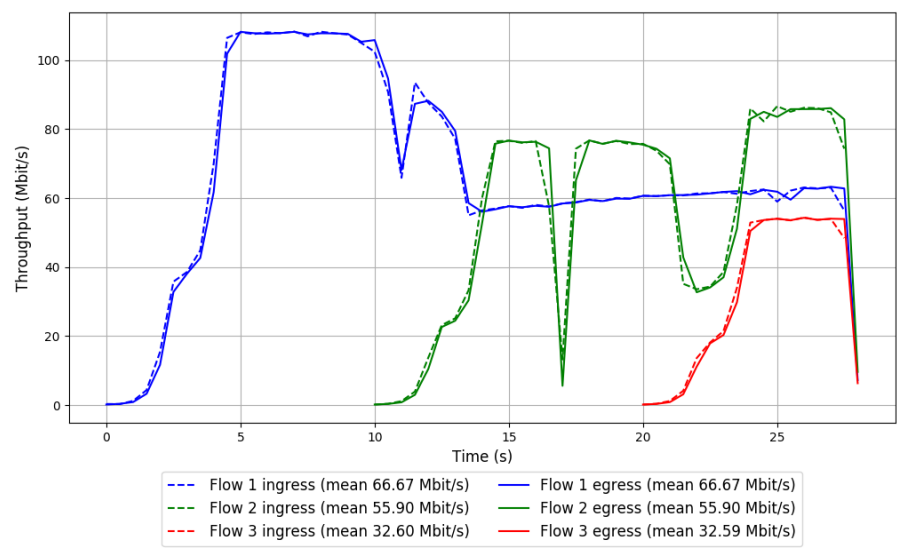
-- Flow 3:

Average throughput: 32.59 Mbit/s

95th percentile per-packet one-way delay: 113.081 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-06 00:27:12

End at: 2017-12-06 00:27:42

# Below is generated by plot.py at 2017-12-06 03:10:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 110.23 Mbit/s

95th percentile per-packet one-way delay: 112.865 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 62.98 Mbit/s

95th percentile per-packet one-way delay: 112.661 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.94 Mbit/s

95th percentile per-packet one-way delay: 112.921 ms

Loss rate: 0.00%

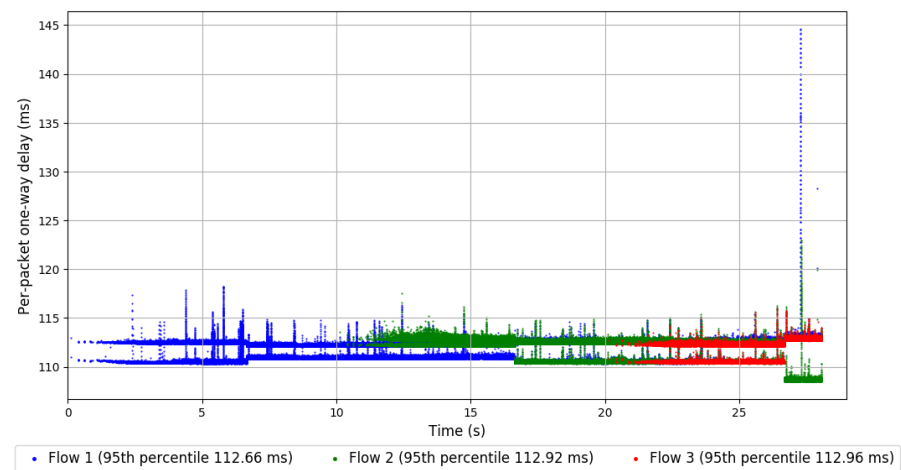
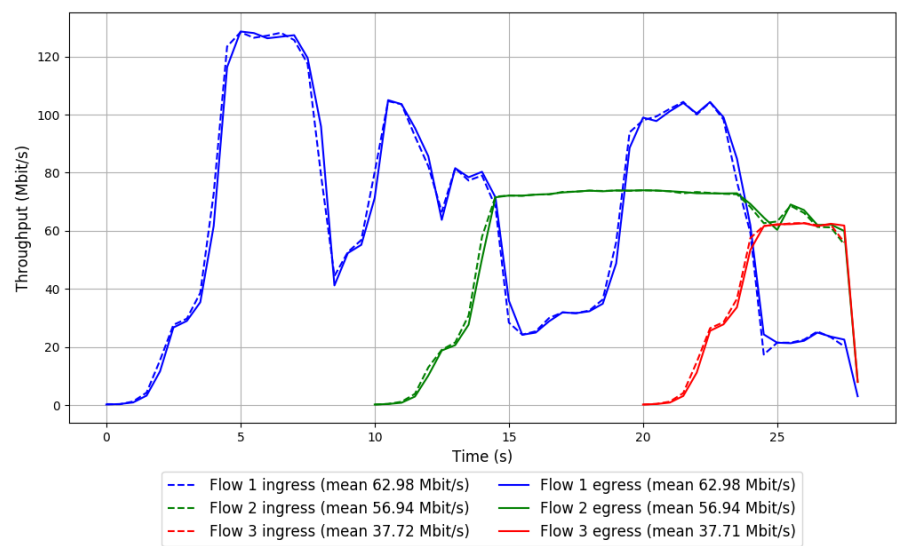
-- Flow 3:

Average throughput: 37.71 Mbit/s

95th percentile per-packet one-way delay: 112.956 ms

Loss rate: 0.01%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-06 00:40:51

End at: 2017-12-06 00:41:21

# Below is generated by plot.py at 2017-12-06 03:10:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 110.76 Mbit/s

95th percentile per-packet one-way delay: 112.969 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 66.84 Mbit/s

95th percentile per-packet one-way delay: 112.959 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 48.36 Mbit/s

95th percentile per-packet one-way delay: 112.980 ms

Loss rate: 0.01%

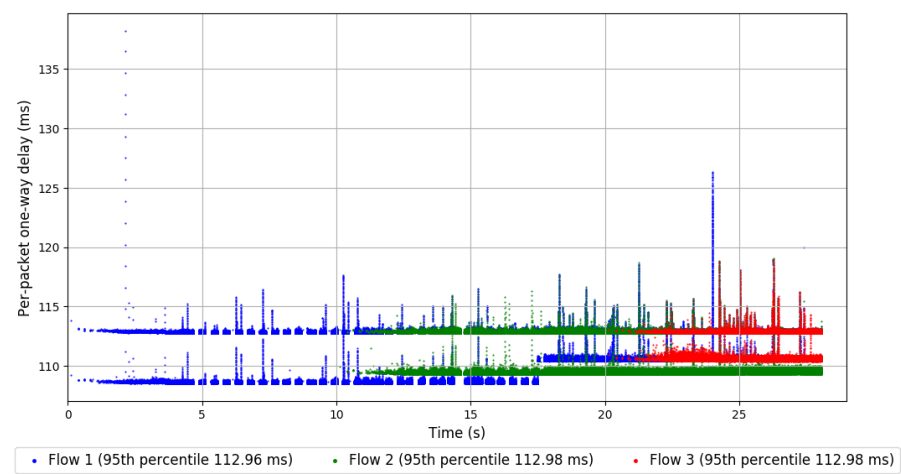
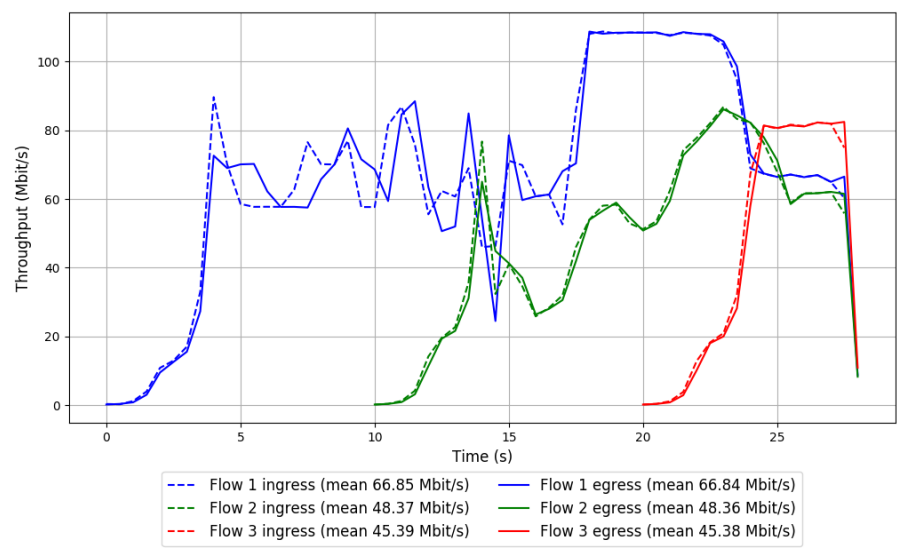
-- Flow 3:

Average throughput: 45.38 Mbit/s

95th percentile per-packet one-way delay: 112.981 ms

Loss rate: 0.04%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-06 00:54:03

End at: 2017-12-06 00:54:33

# Below is generated by plot.py at 2017-12-06 03:12:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 119.70 Mbit/s

95th percentile per-packet one-way delay: 114.749 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 72.29 Mbit/s

95th percentile per-packet one-way delay: 114.650 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.01 Mbit/s

95th percentile per-packet one-way delay: 114.904 ms

Loss rate: 0.01%

-- Flow 3:

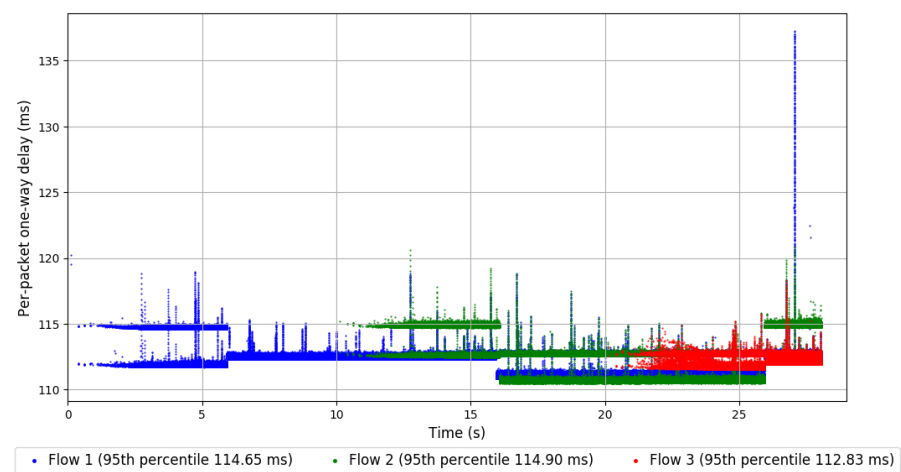
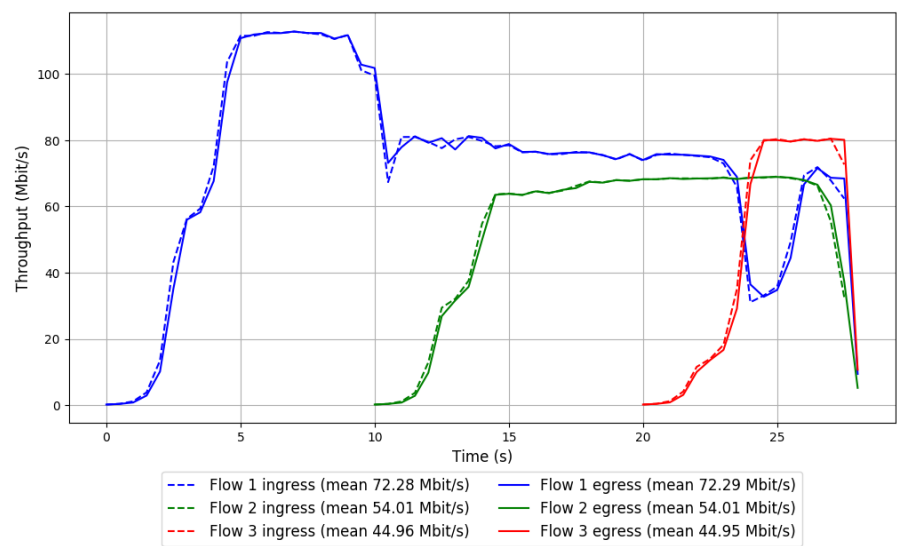
Average throughput: 44.95 Mbit/s

95th percentile per-packet one-way delay: 112.828 ms

Loss rate: 0.03%



Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-06 01:07:18

End at: 2017-12-06 01:07:48

# Below is generated by plot.py at 2017-12-06 03:12:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 102.58 Mbit/s

95th percentile per-packet one-way delay: 114.660 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 56.70 Mbit/s

95th percentile per-packet one-way delay: 114.709 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.00 Mbit/s

95th percentile per-packet one-way delay: 112.821 ms

Loss rate: 0.00%

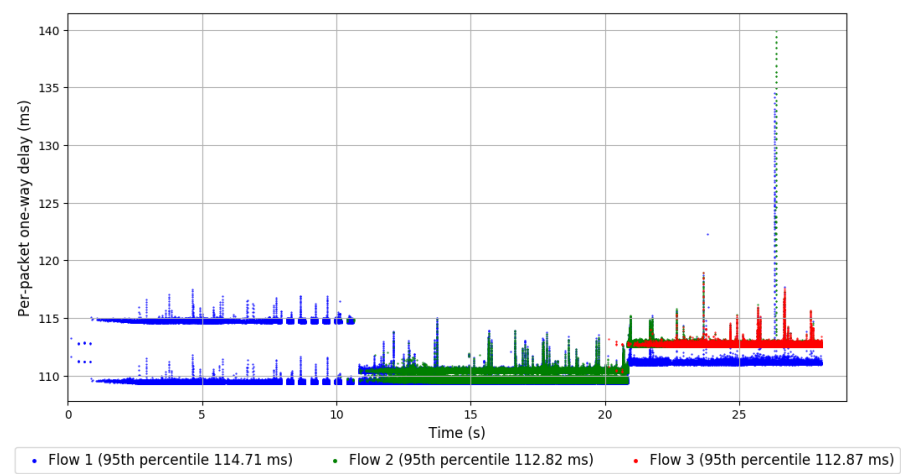
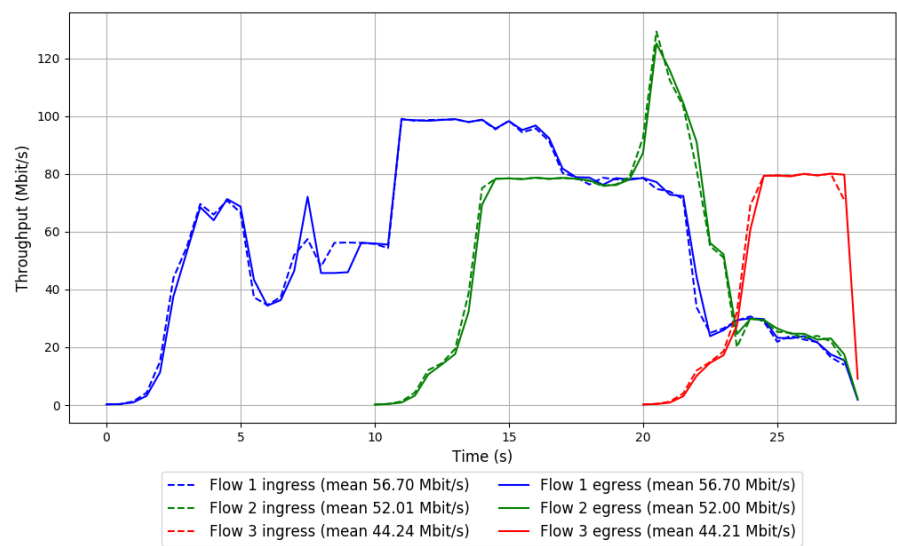
-- Flow 3:

Average throughput: 44.21 Mbit/s

95th percentile per-packet one-way delay: 112.866 ms

Loss rate: 0.04%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-06 01:20:36

End at: 2017-12-06 01:21:06

# Below is generated by plot.py at 2017-12-06 03:12:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 96.44 Mbit/s

95th percentile per-packet one-way delay: 114.780 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.80 Mbit/s

95th percentile per-packet one-way delay: 114.749 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.72 Mbit/s

95th percentile per-packet one-way delay: 114.840 ms

Loss rate: 0.00%

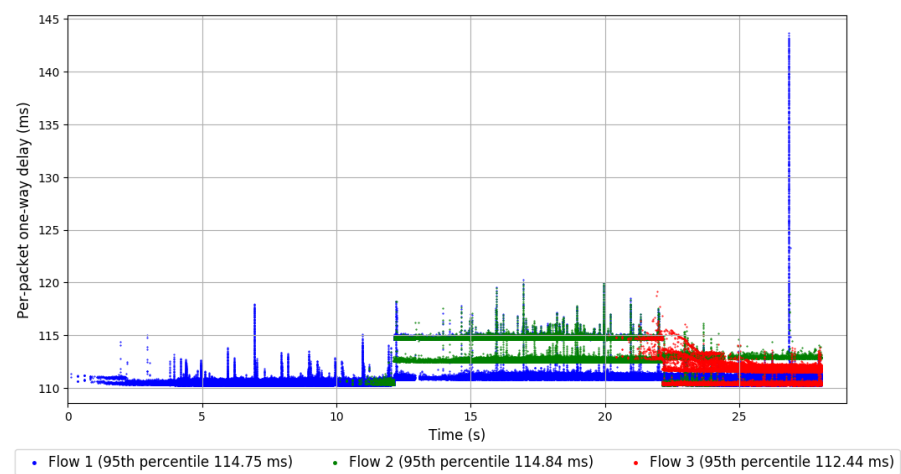
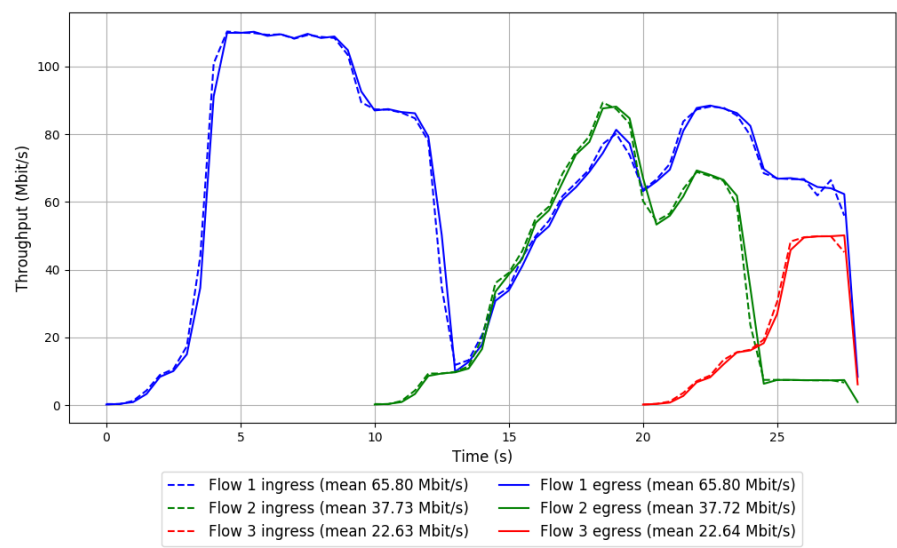
-- Flow 3:

Average throughput: 22.64 Mbit/s

95th percentile per-packet one-way delay: 112.437 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-06 01:33:52

End at: 2017-12-06 01:34:22

# Below is generated by plot.py at 2017-12-06 03:13:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 114.99 Mbit/s

95th percentile per-packet one-way delay: 114.330 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.31 Mbit/s

95th percentile per-packet one-way delay: 114.628 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.09 Mbit/s

95th percentile per-packet one-way delay: 112.710 ms

Loss rate: 0.00%

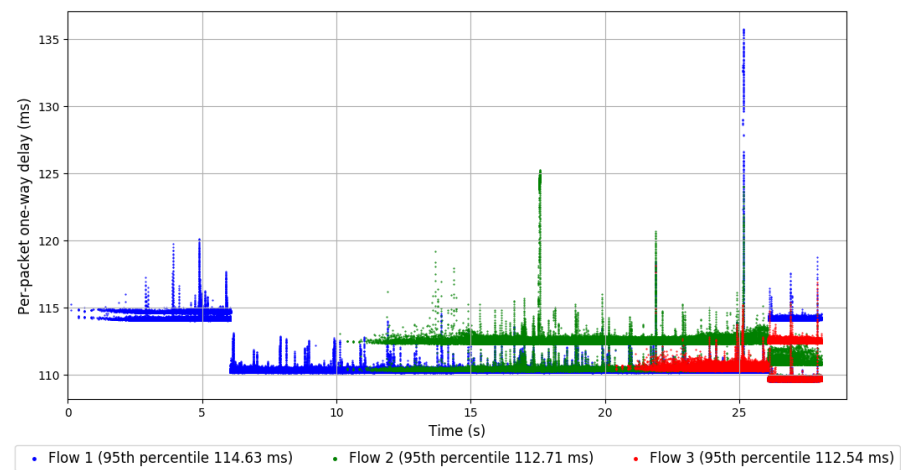
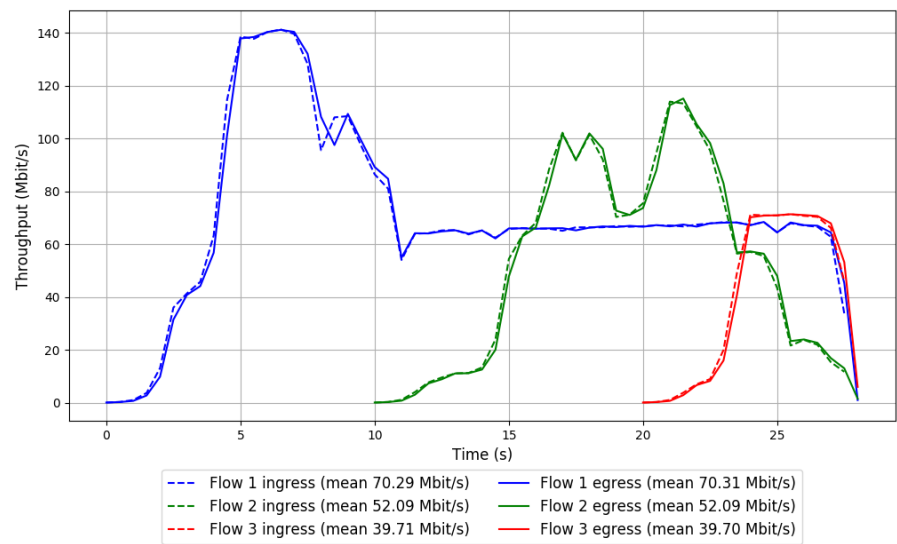
-- Flow 3:

Average throughput: 39.70 Mbit/s

95th percentile per-packet one-way delay: 112.542 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link



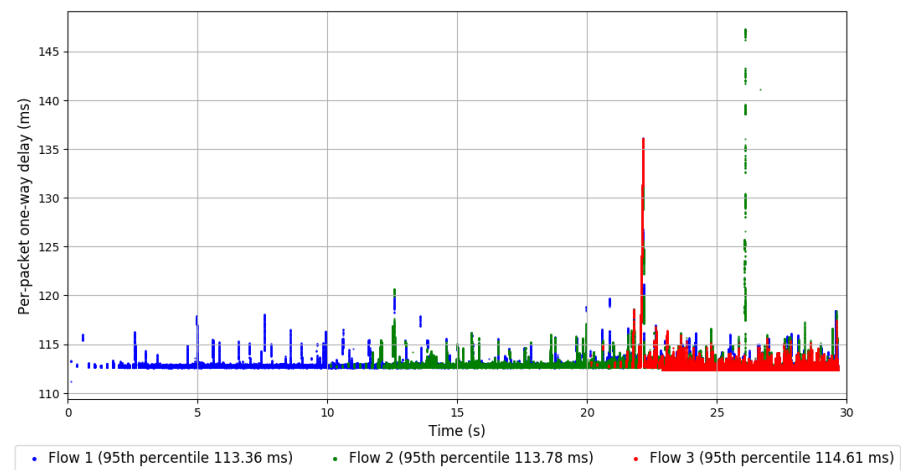
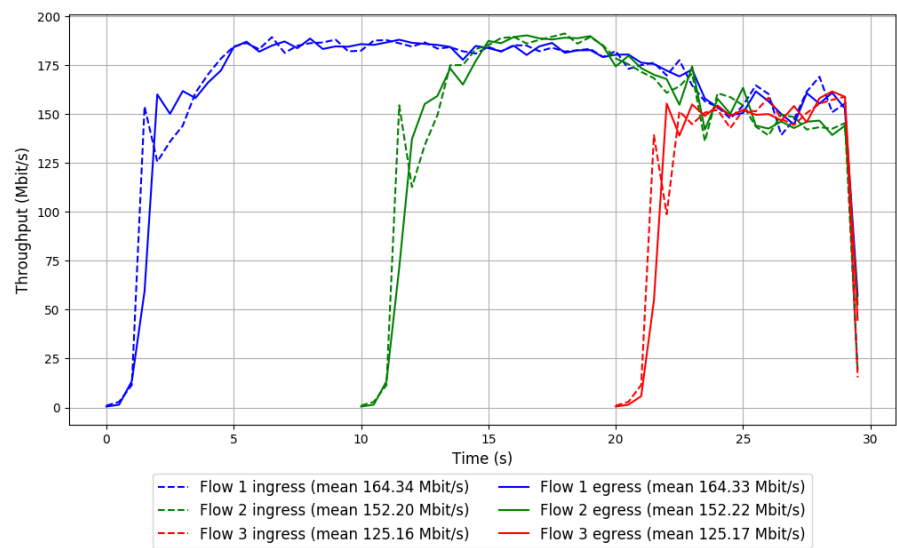
```
Run 1: Statistics of Indigo

Start at: 2017-12-05 23:37:37
End at: 2017-12-05 23:38:07

# Below is generated by plot.py at 2017-12-06 03:15:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.41 Mbit/s
95th percentile per-packet one-way delay: 113.646 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 164.33 Mbit/s
95th percentile per-packet one-way delay: 113.357 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 152.22 Mbit/s
95th percentile per-packet one-way delay: 113.784 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 125.17 Mbit/s
95th percentile per-packet one-way delay: 114.613 ms
Loss rate: 0.03%
```



Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-05 23:51:01

End at: 2017-12-05 23:51:31

# Below is generated by plot.py at 2017-12-06 03:15:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 312.67 Mbit/s

95th percentile per-packet one-way delay: 112.462 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 165.81 Mbit/s

95th percentile per-packet one-way delay: 112.428 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 157.10 Mbit/s

95th percentile per-packet one-way delay: 112.585 ms

Loss rate: 0.01%

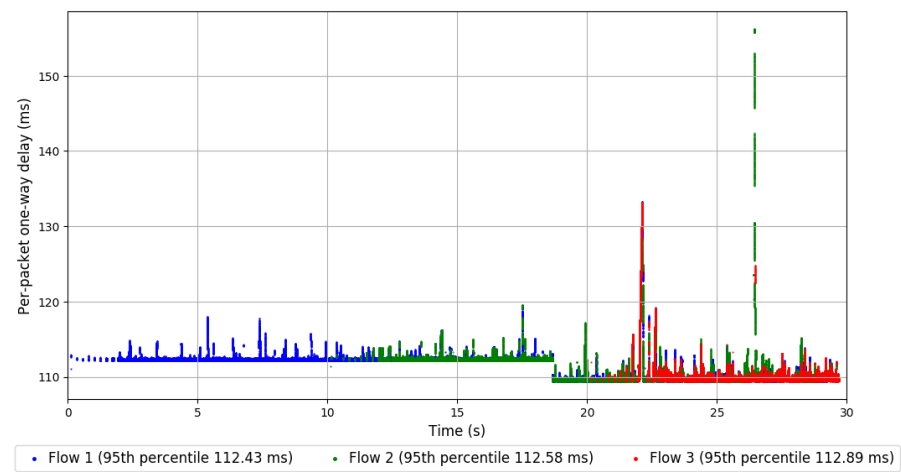
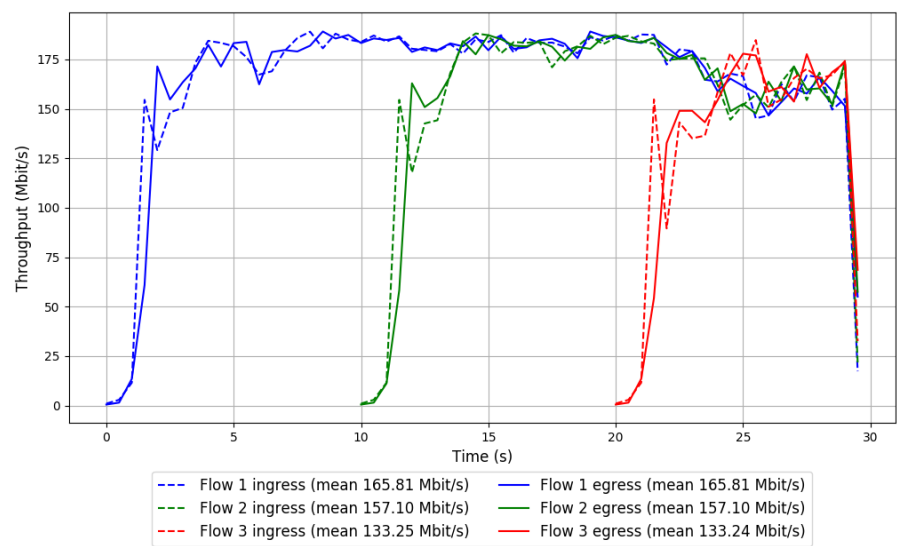
-- Flow 3:

Average throughput: 133.24 Mbit/s

95th percentile per-packet one-way delay: 112.885 ms

Loss rate: 0.03%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-06 00:04:11

End at: 2017-12-06 00:04:41

# Below is generated by plot.py at 2017-12-06 03:15:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 308.13 Mbit/s

95th percentile per-packet one-way delay: 111.300 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 158.95 Mbit/s

95th percentile per-packet one-way delay: 110.394 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 158.53 Mbit/s

95th percentile per-packet one-way delay: 112.092 ms

Loss rate: 0.00%

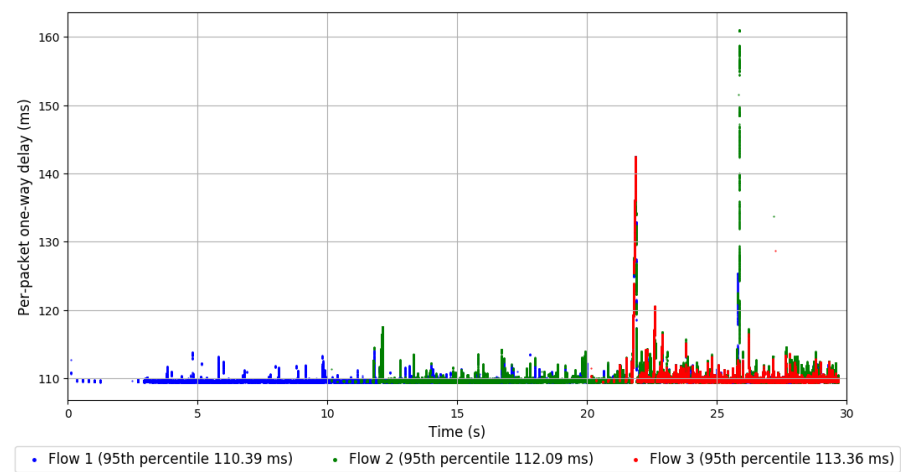
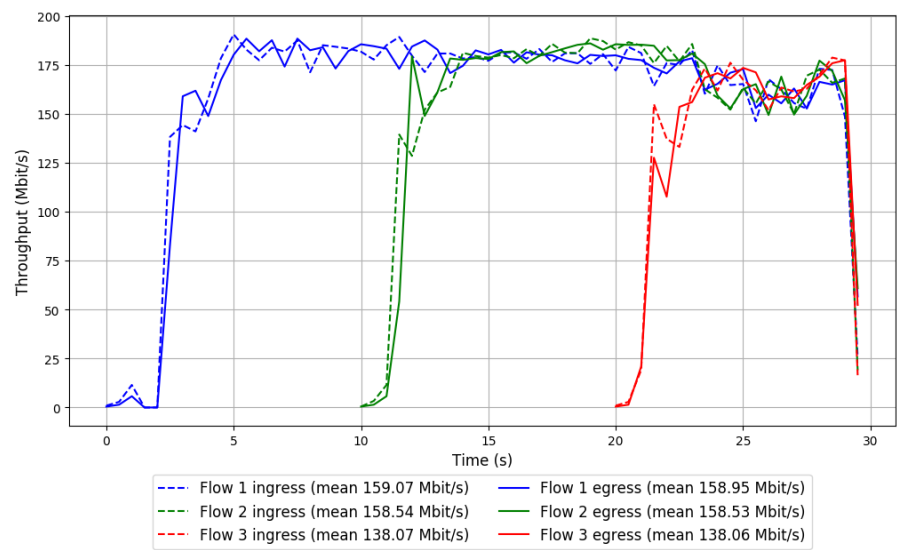
-- Flow 3:

Average throughput: 138.06 Mbit/s

95th percentile per-packet one-way delay: 113.362 ms

Loss rate: 0.01%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-06 00:17:29

End at: 2017-12-06 00:17:59

# Below is generated by plot.py at 2017-12-06 03:15:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 307.08 Mbit/s

95th percentile per-packet one-way delay: 110.678 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 164.54 Mbit/s

95th percentile per-packet one-way delay: 110.613 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 154.32 Mbit/s

95th percentile per-packet one-way delay: 110.681 ms

Loss rate: 0.00%

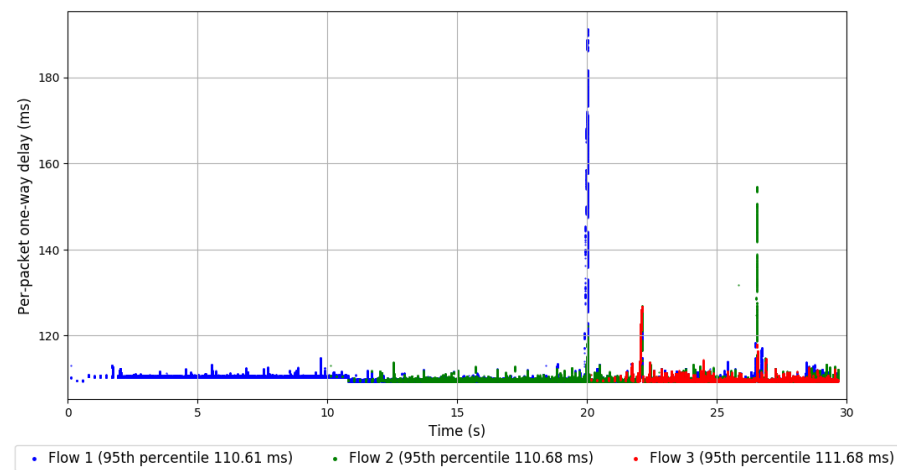
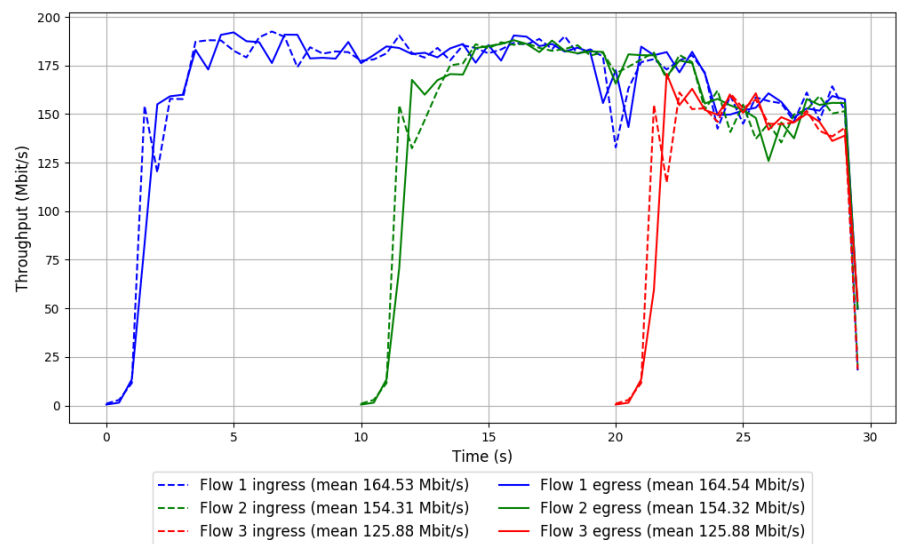
-- Flow 3:

Average throughput: 125.88 Mbit/s

95th percentile per-packet one-way delay: 111.683 ms

Loss rate: 0.01%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-06 00:30:54

End at: 2017-12-06 00:31:24

# Below is generated by plot.py at 2017-12-06 03:17:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 305.88 Mbit/s

95th percentile per-packet one-way delay: 113.418 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 165.13 Mbit/s

95th percentile per-packet one-way delay: 113.189 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 149.64 Mbit/s

95th percentile per-packet one-way delay: 113.859 ms

Loss rate: 0.00%

-- Flow 3:

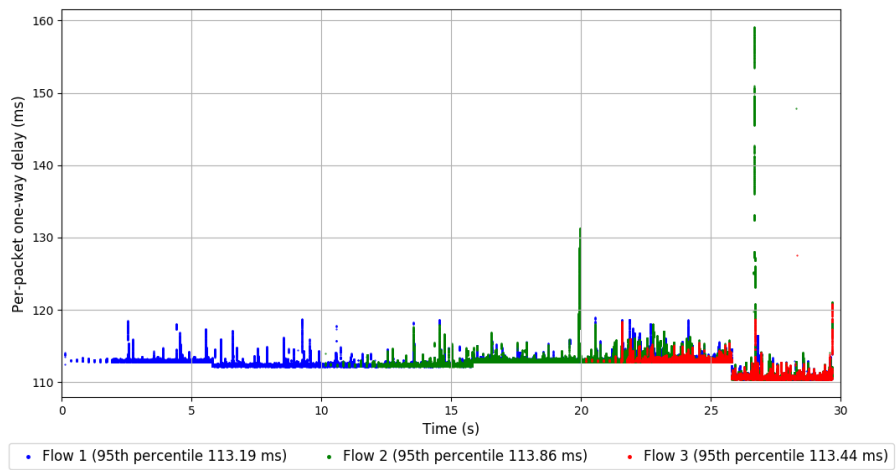
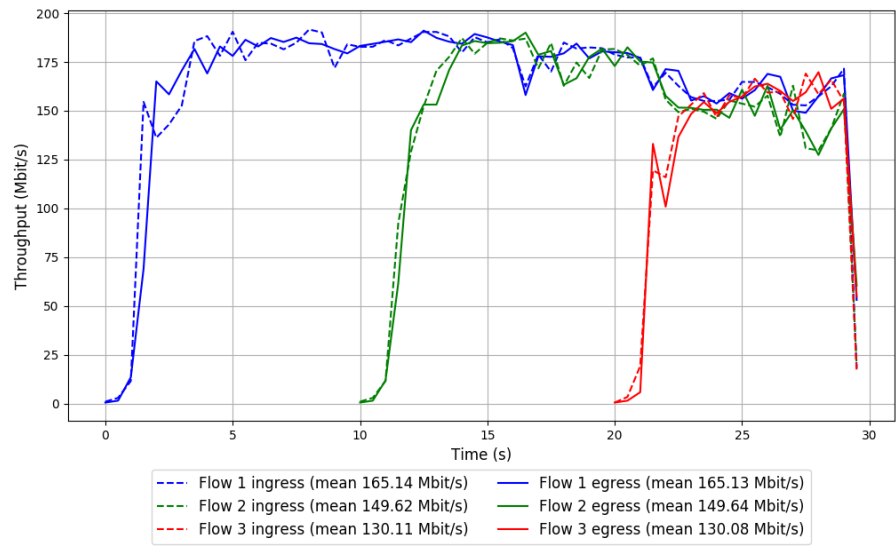
Average throughput: 130.08 Mbit/s

95th percentile per-packet one-way delay: 113.440 ms

Loss rate: 0.01%



## Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-06 00:44:30

End at: 2017-12-06 00:45:00

# Below is generated by plot.py at 2017-12-06 03:17:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 311.53 Mbit/s

95th percentile per-packet one-way delay: 114.222 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 166.62 Mbit/s

95th percentile per-packet one-way delay: 113.538 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 157.87 Mbit/s

95th percentile per-packet one-way delay: 115.028 ms

Loss rate: 0.00%

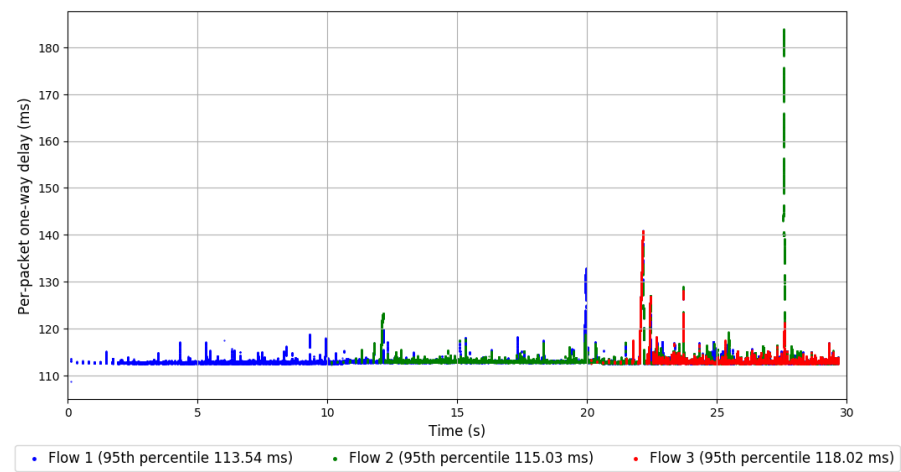
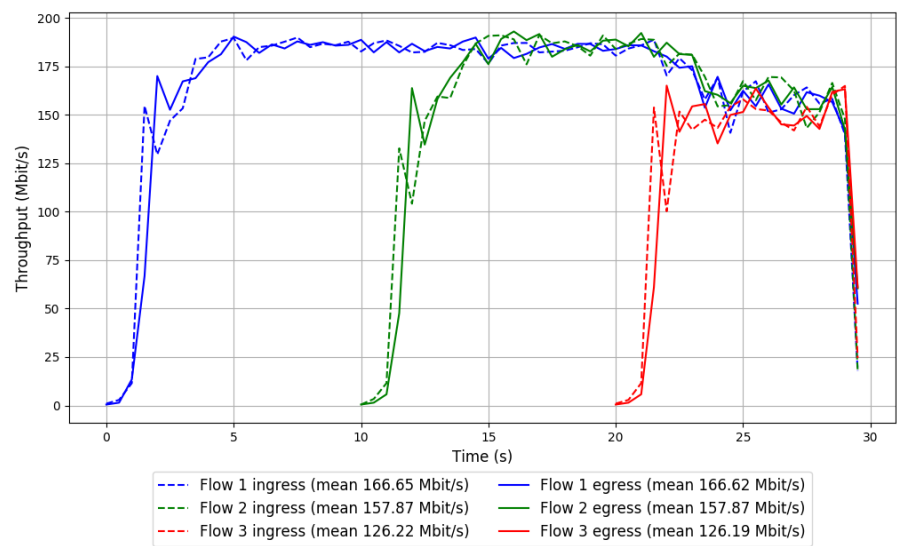
-- Flow 3:

Average throughput: 126.19 Mbit/s

95th percentile per-packet one-way delay: 118.023 ms

Loss rate: 0.03%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-06 00:57:44

End at: 2017-12-06 00:58:14

# Below is generated by plot.py at 2017-12-06 03:17:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 308.76 Mbit/s

95th percentile per-packet one-way delay: 115.388 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 164.22 Mbit/s

95th percentile per-packet one-way delay: 115.089 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 155.87 Mbit/s

95th percentile per-packet one-way delay: 115.498 ms

Loss rate: 0.08%

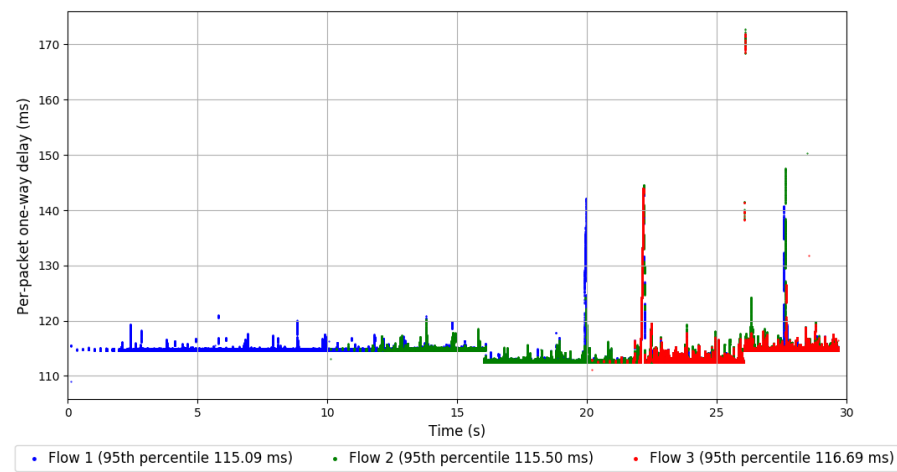
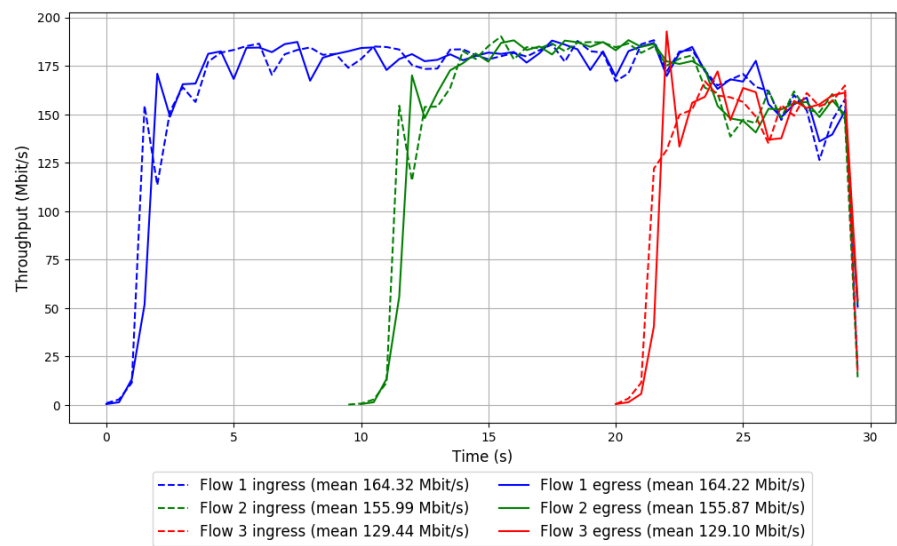
-- Flow 3:

Average throughput: 129.10 Mbit/s

95th percentile per-packet one-way delay: 116.693 ms

Loss rate: 0.23%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-06 01:10:55

End at: 2017-12-06 01:11:25

# Below is generated by plot.py at 2017-12-06 03:18:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 309.94 Mbit/s

95th percentile per-packet one-way delay: 115.186 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 156.44 Mbit/s

95th percentile per-packet one-way delay: 115.157 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 148.01 Mbit/s

95th percentile per-packet one-way delay: 115.245 ms

Loss rate: 0.00%

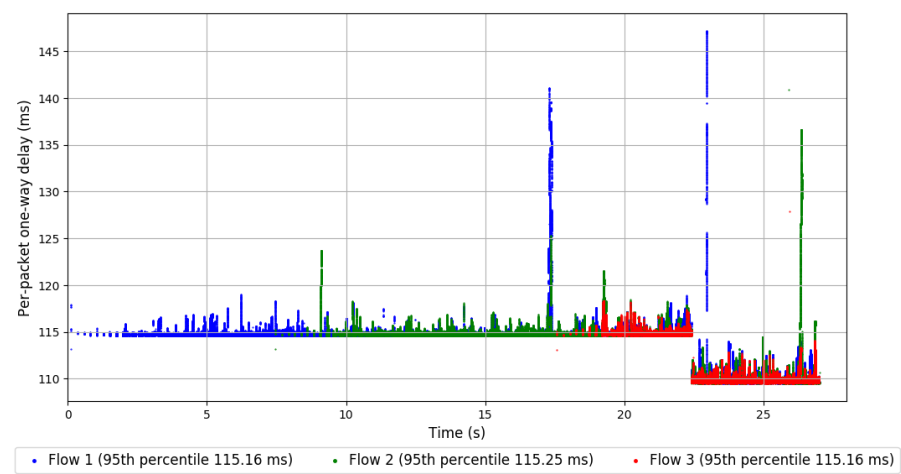
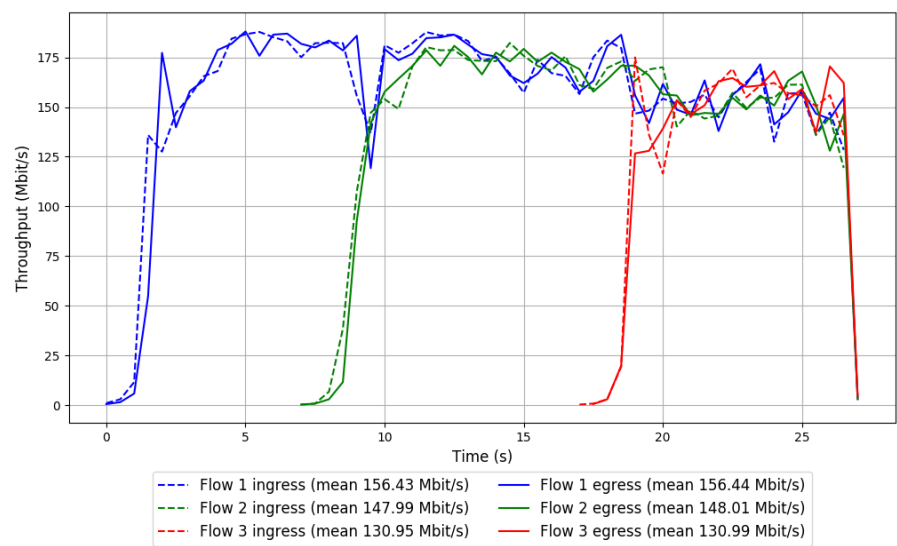
-- Flow 3:

Average throughput: 130.99 Mbit/s

95th percentile per-packet one-way delay: 115.158 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-06 01:24:18

End at: 2017-12-06 01:24:48

# Below is generated by plot.py at 2017-12-06 03:20:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 304.06 Mbit/s

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

Loss rate: 0.09%

-- Flow 1:

Average throughput: 161.42 Mbit/s

95th percentile per-packet one-way delay: 114.872 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 153.20 Mbit/s

95th percentile per-packet one-way delay: 115.335 ms

Loss rate: 0.01%

-- Flow 3:

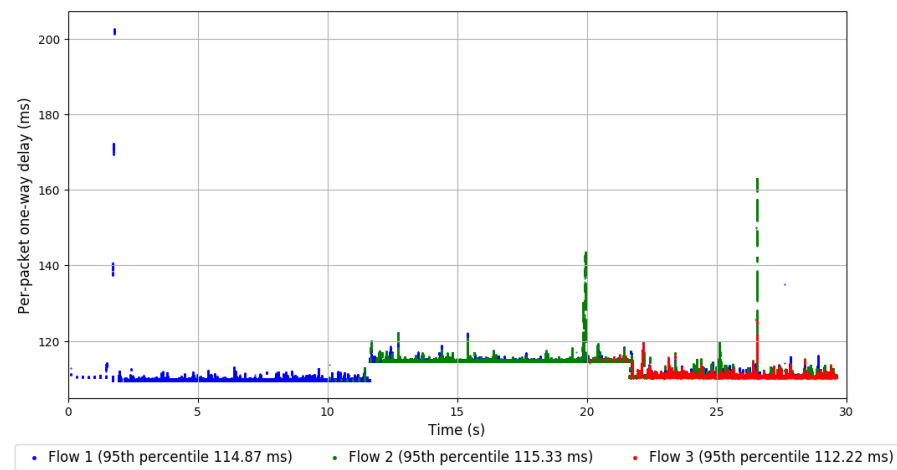
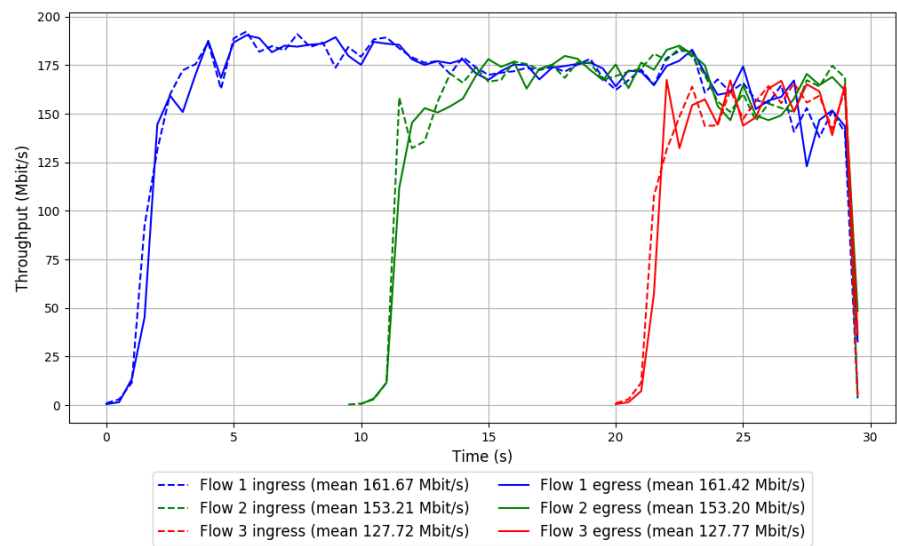
Average throughput: 127.77 Mbit/s

95th percentile per-packet one-way delay: 112.223 ms

Loss rate: 0.00%



Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-06 01:37:36

End at: 2017-12-06 01:38:06

# Below is generated by plot.py at 2017-12-06 03:20:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 303.51 Mbit/s

95th percentile per-packet one-way delay: 115.509 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 160.38 Mbit/s

95th percentile per-packet one-way delay: 115.189 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 154.86 Mbit/s

95th percentile per-packet one-way delay: 115.791 ms

Loss rate: 0.00%

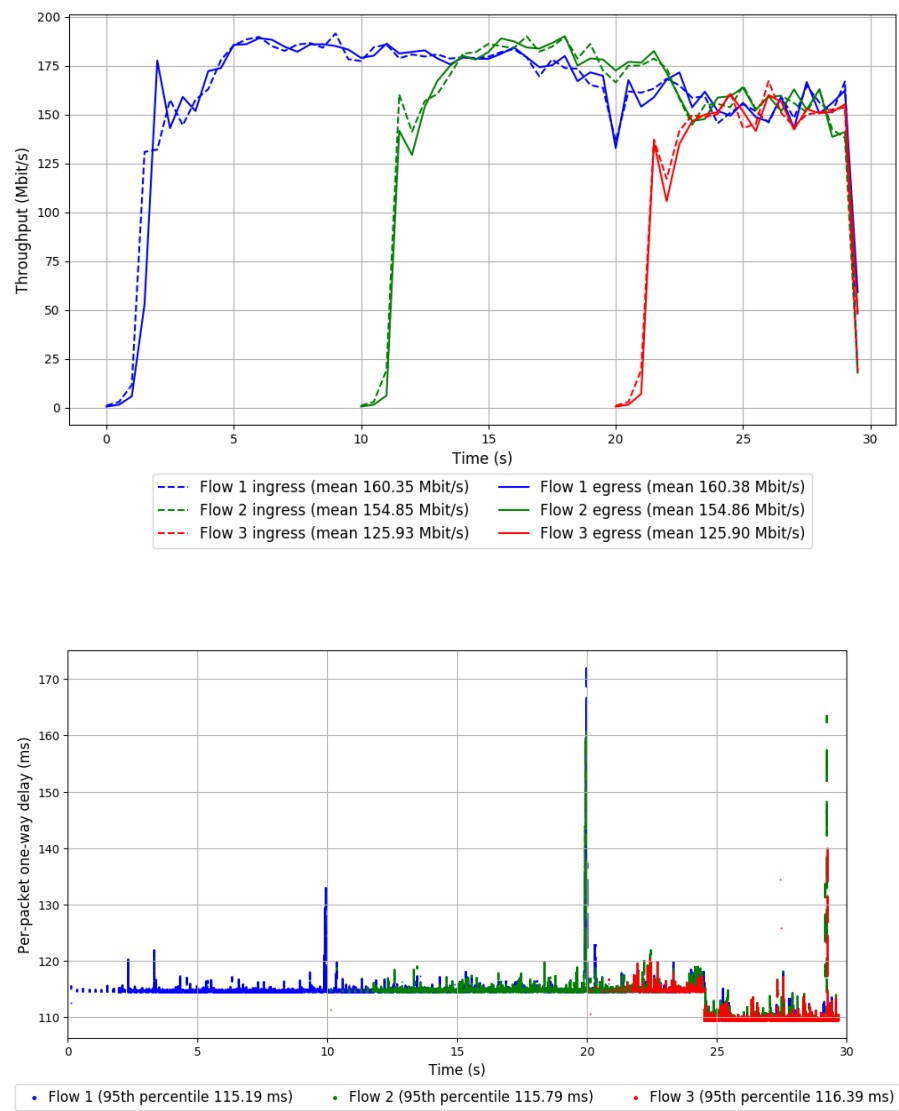
-- Flow 3:

Average throughput: 125.90 Mbit/s

95th percentile per-packet one-way delay: 116.386 ms

Loss rate: 0.04%

Run 10: Report of Indigo — Data Link

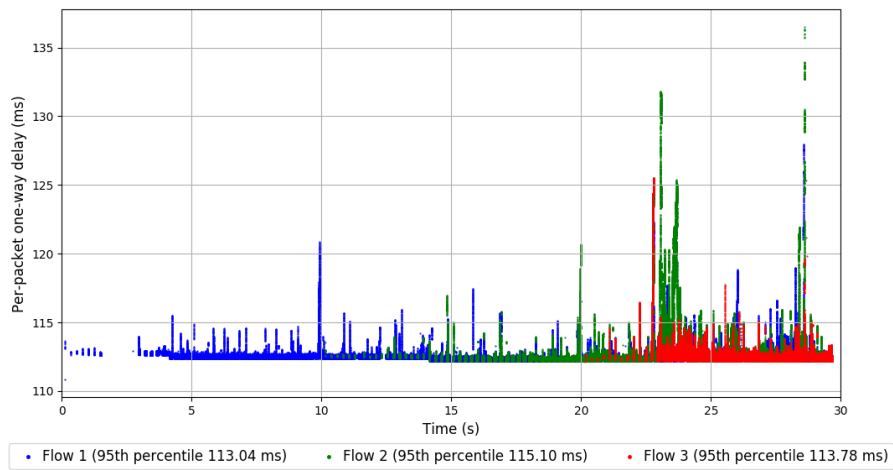
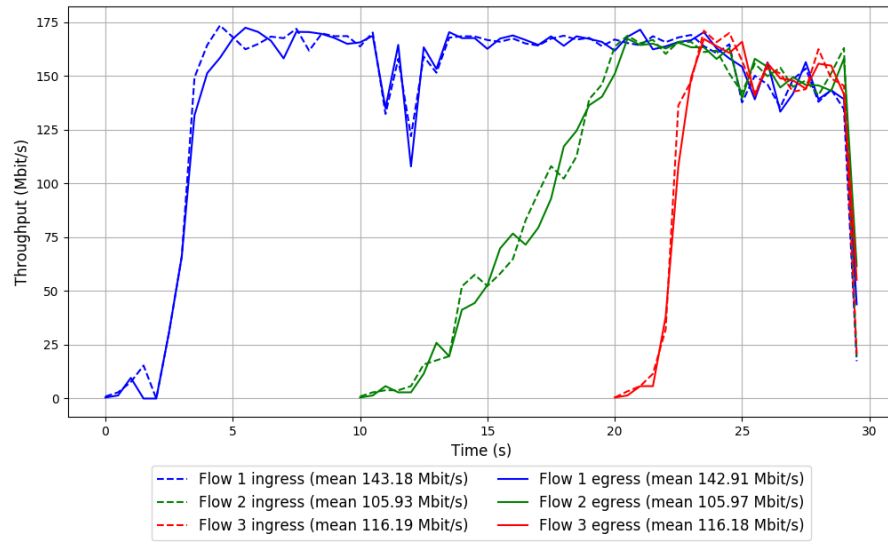


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-05 23:34:56
End at: 2017-12-05 23:35:26

# Below is generated by plot.py at 2017-12-06 03:20:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 250.31 Mbit/s
95th percentile per-packet one-way delay: 113.614 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 142.91 Mbit/s
95th percentile per-packet one-way delay: 113.043 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 105.97 Mbit/s
95th percentile per-packet one-way delay: 115.098 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 116.18 Mbit/s
95th percentile per-packet one-way delay: 113.782 ms
Loss rate: 0.01%
```

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

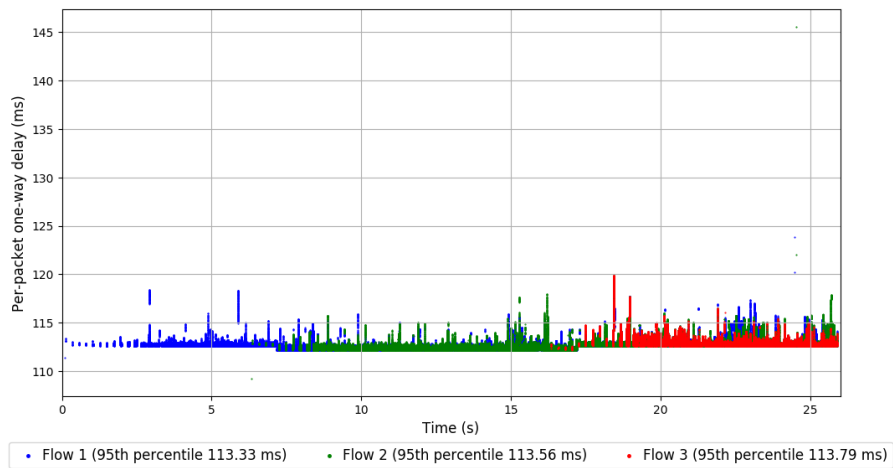
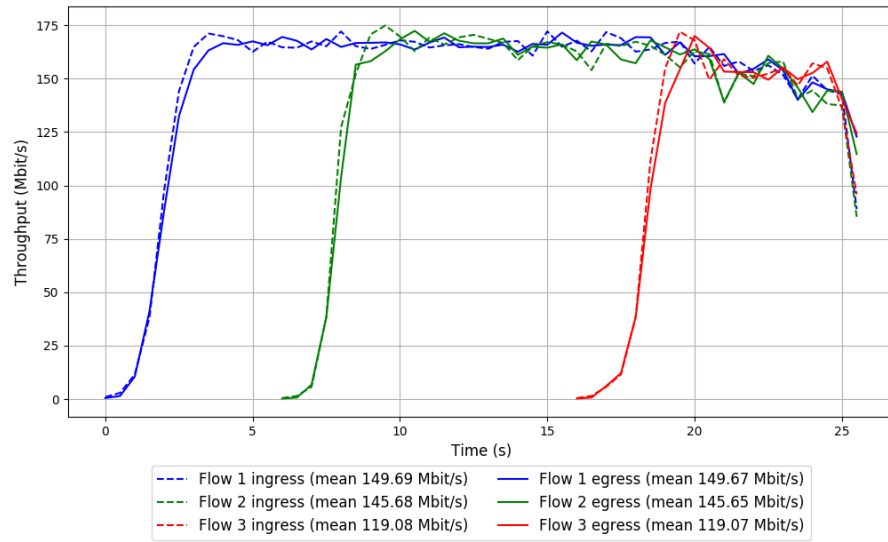


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-05 23:48:19
End at: 2017-12-05 23:48:49

# Below is generated by plot.py at 2017-12-06 03:20:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 304.19 Mbit/s
95th percentile per-packet one-way delay: 113.498 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 149.67 Mbit/s
95th percentile per-packet one-way delay: 113.327 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 145.65 Mbit/s
95th percentile per-packet one-way delay: 113.565 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 119.07 Mbit/s
95th percentile per-packet one-way delay: 113.794 ms
Loss rate: 0.00%
```

## Run 2: Report of Indigo-calib — Data Link



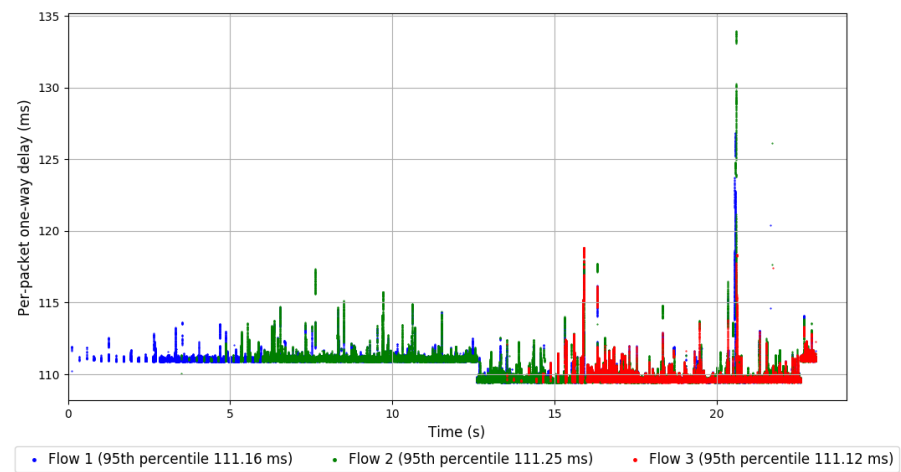
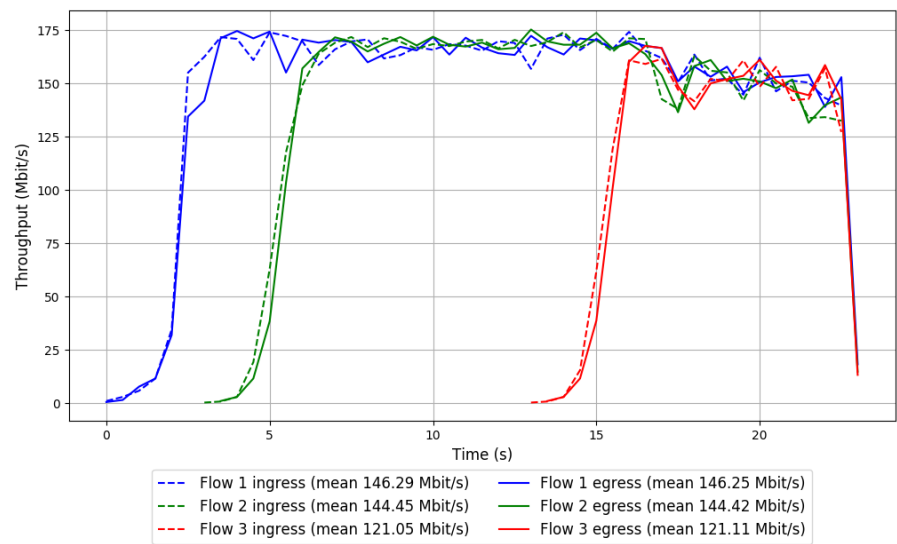
Run 3: Statistics of Indigo-calib

Start at: 2017-12-06 00:01:31

End at: 2017-12-06 00:02:01



Run 3: Report of Indigo-calib — Data Link

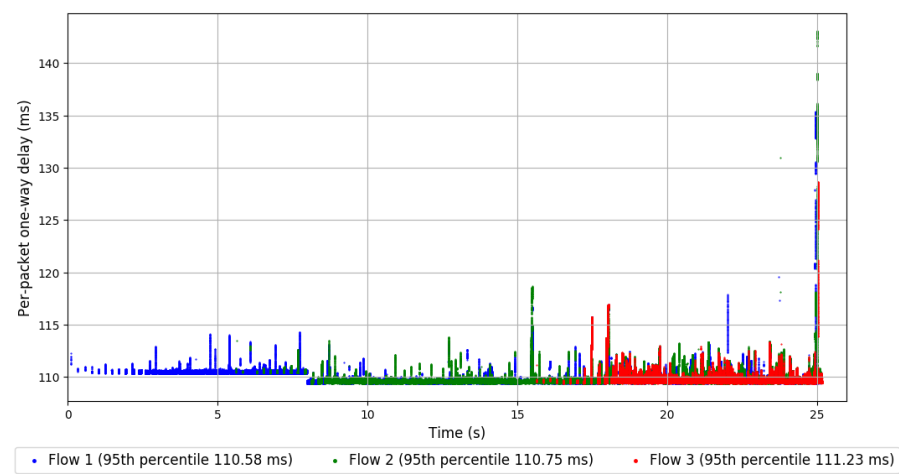
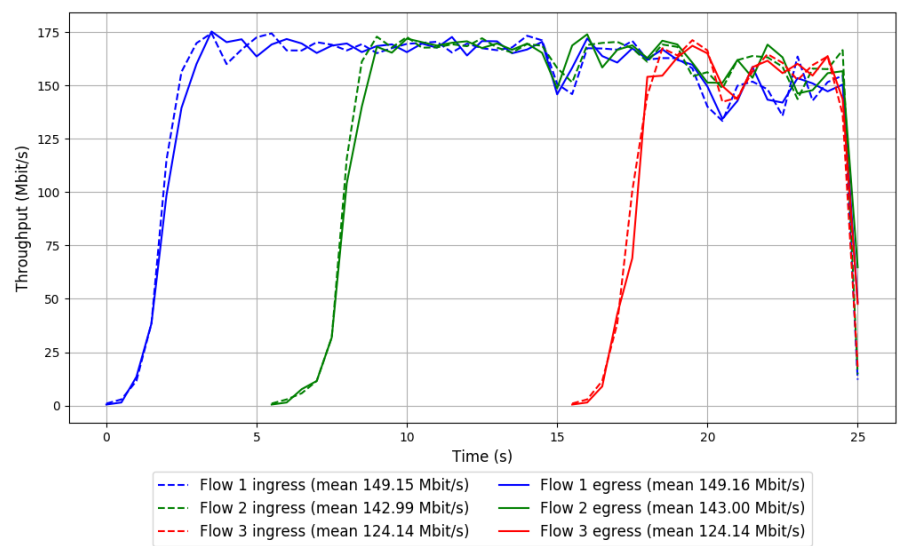


```
Run 4: Statistics of Indigo-calib

Start at: 2017-12-06 00:14:48
End at: 2017-12-06 00:15:18

# Below is generated by plot.py at 2017-12-06 03:22:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.87 Mbit/s
95th percentile per-packet one-way delay: 110.666 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 149.16 Mbit/s
95th percentile per-packet one-way delay: 110.582 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 143.00 Mbit/s
95th percentile per-packet one-way delay: 110.754 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 124.14 Mbit/s
95th percentile per-packet one-way delay: 111.226 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-calib — Data Link

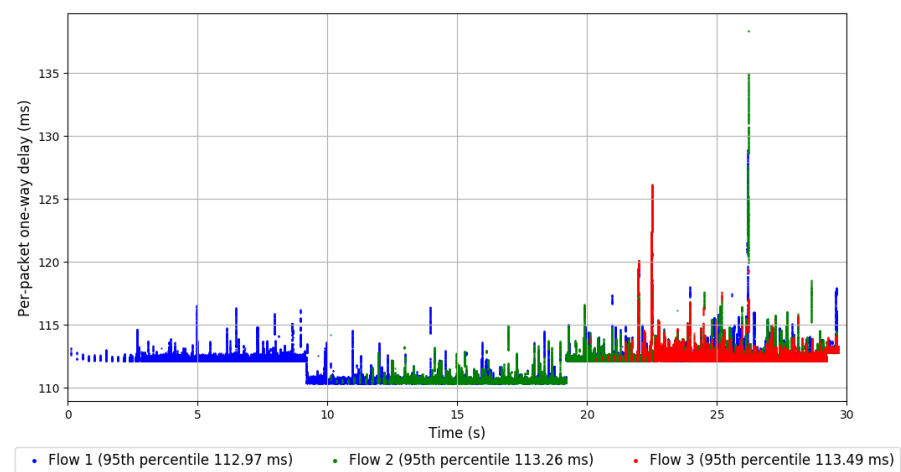
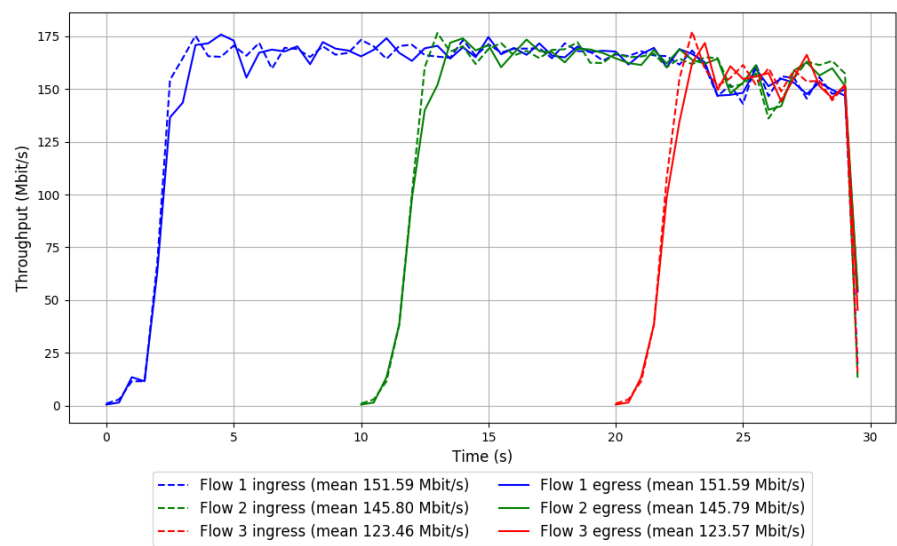


```
Run 5: Statistics of Indigo-calib

Start at: 2017-12-06 00:28:11
End at: 2017-12-06 00:28:41

# Below is generated by plot.py at 2017-12-06 03:22:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 287.91 Mbit/s
95th percentile per-packet one-way delay: 113.146 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 151.59 Mbit/s
95th percentile per-packet one-way delay: 112.971 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 145.79 Mbit/s
95th percentile per-packet one-way delay: 113.258 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 123.57 Mbit/s
95th percentile per-packet one-way delay: 113.493 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-calib — Data Link

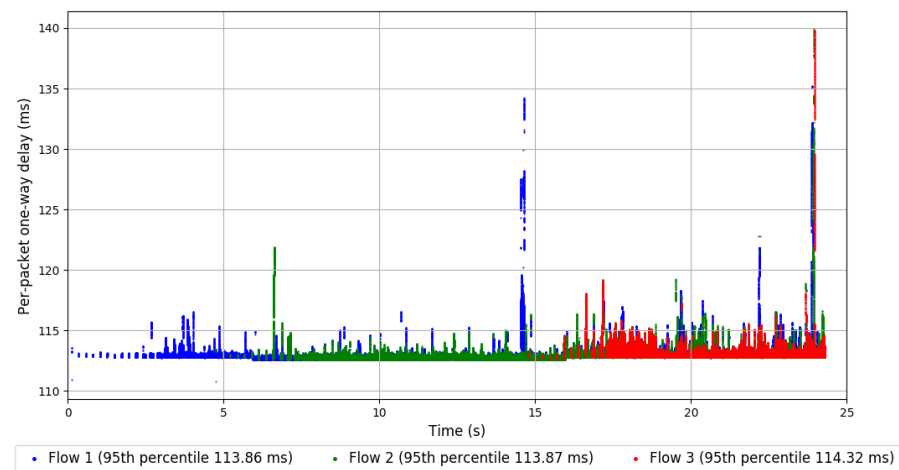
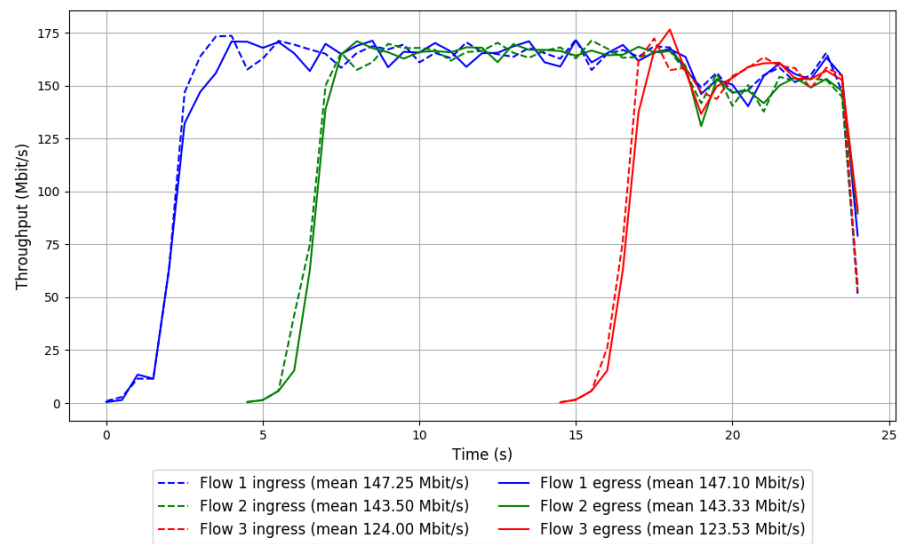


```
Run 6: Statistics of Indigo-calib

Start at: 2017-12-06 00:41:49
End at: 2017-12-06 00:42:19

# Below is generated by plot.py at 2017-12-06 03:22:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.58 Mbit/s
95th percentile per-packet one-way delay: 113.965 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 147.10 Mbit/s
95th percentile per-packet one-way delay: 113.864 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 143.33 Mbit/s
95th percentile per-packet one-way delay: 113.874 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 123.53 Mbit/s
95th percentile per-packet one-way delay: 114.317 ms
Loss rate: 0.38%
```

Run 6: Report of Indigo-calib — Data Link



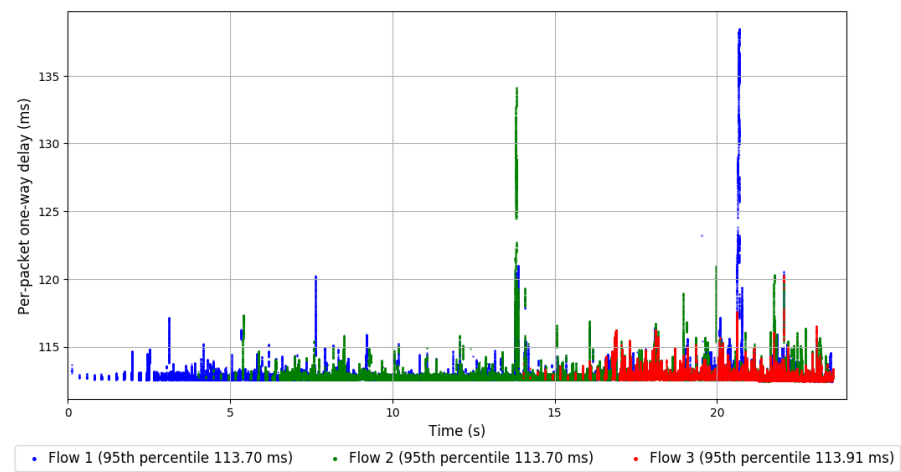
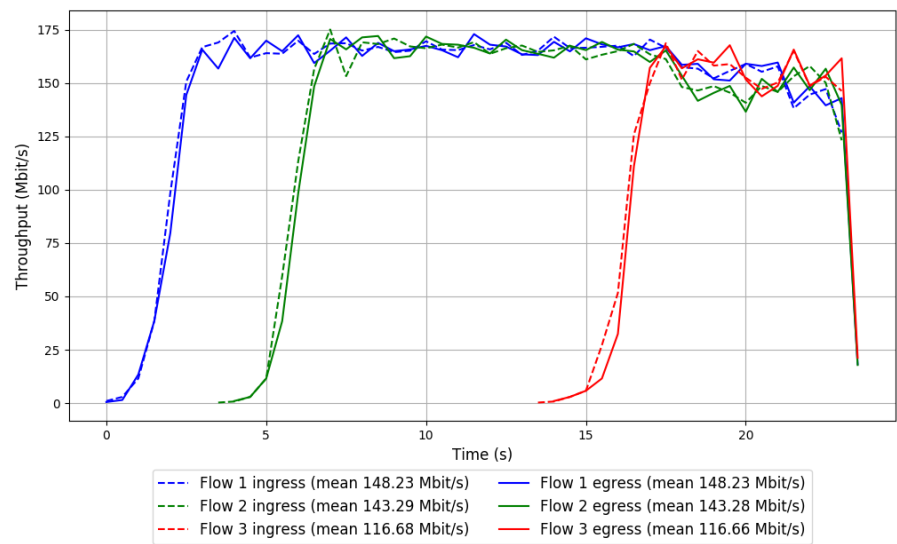
Run 7: Statistics of Indigo-calib

Start at: 2017-12-06 00:55:03

End at: 2017-12-06 00:55:33



Run 7: Report of Indigo-calib — Data Link

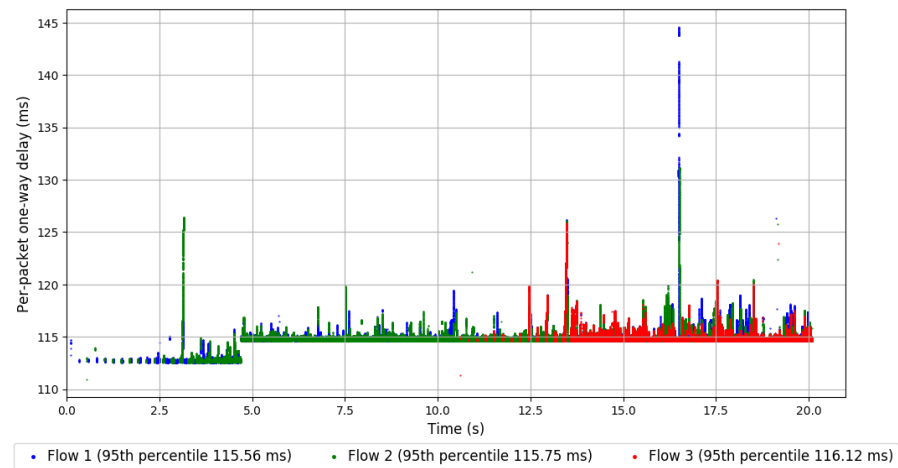
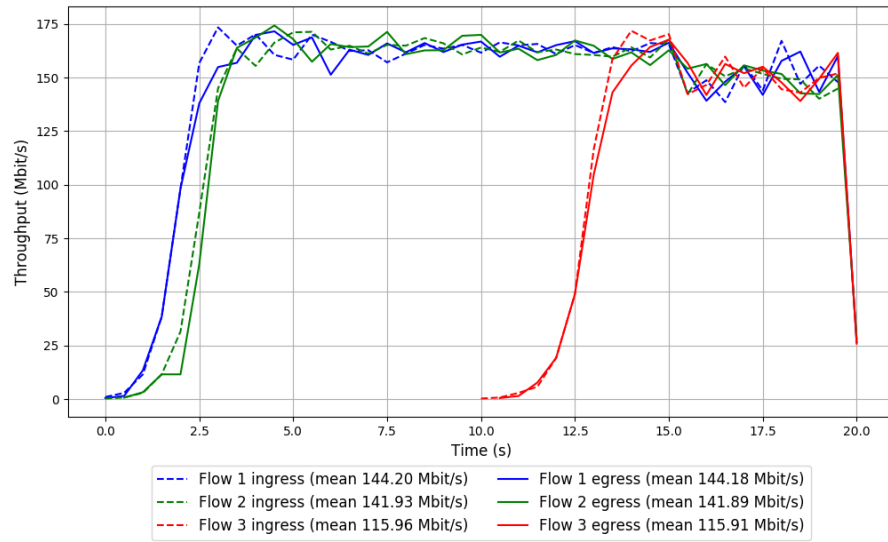


Run 8: Statistics of Indigo-calib

Start at: 2017-12-06 01:08:16

End at: 2017-12-06 01:08:46

## Run 8: Report of Indigo-calib — Data Link

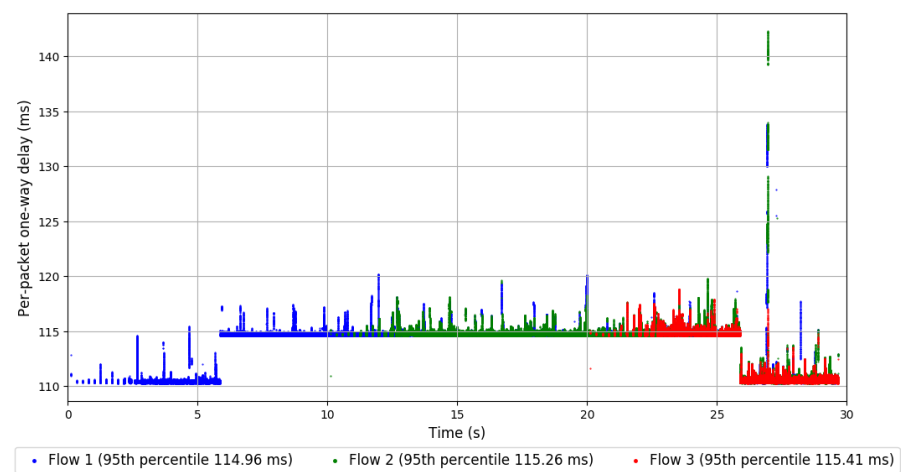
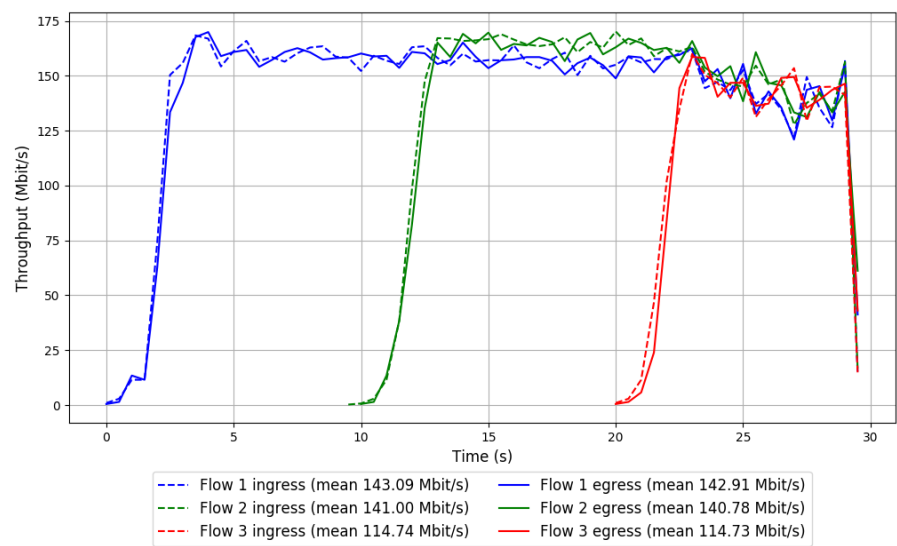


```
Run 9: Statistics of Indigo-calib

Start at: 2017-12-06 01:21:34
End at: 2017-12-06 01:22:04

# Below is generated by plot.py at 2017-12-06 03:23:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 273.14 Mbit/s
95th percentile per-packet one-way delay: 115.124 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 142.91 Mbit/s
95th percentile per-packet one-way delay: 114.962 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 140.78 Mbit/s
95th percentile per-packet one-way delay: 115.264 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 114.73 Mbit/s
95th percentile per-packet one-way delay: 115.409 ms
Loss rate: 0.00%
```

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-06 01:34:52

End at: 2017-12-06 01:35:22

# Below is generated by plot.py at 2017-12-06 03:23:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 280.96 Mbit/s

95th percentile per-packet one-way delay: 115.285 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 150.15 Mbit/s

95th percentile per-packet one-way delay: 115.063 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 138.65 Mbit/s

95th percentile per-packet one-way delay: 115.413 ms

Loss rate: 0.02%

-- Flow 3:

Average throughput: 121.41 Mbit/s

95th percentile per-packet one-way delay: 115.833 ms

Loss rate: 0.00%

Run 10: Report of Indigo-calib — Data Link

