

## Pantheon Report

Generated at 2017-12-01 02:14:32 (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.

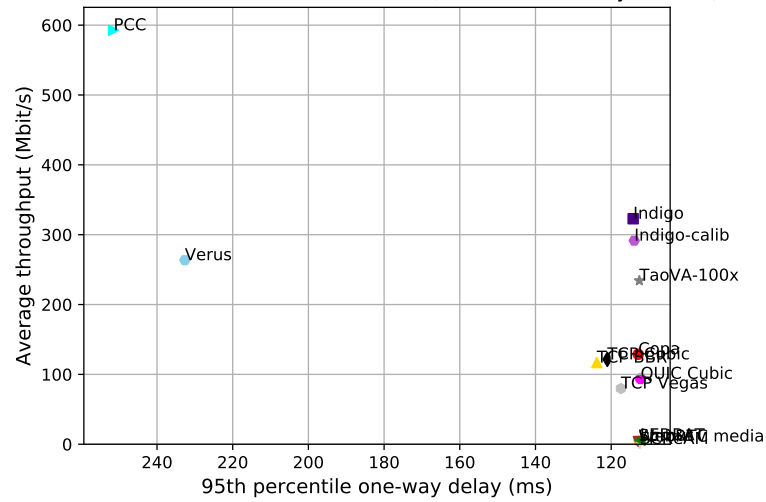
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

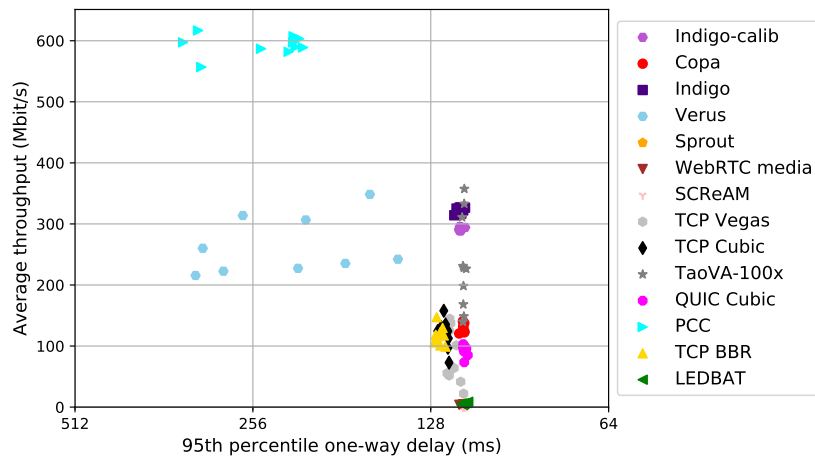
Git summary:

```
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 @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eae30b267cde681
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     | 58.13                  | 58.38  | 61.47  | 122.41                    | 123.69 | 126.74 | 0.12               | 0.11   | 0.01   |
| TCP Cubic    | 10     | 56.53                  | 60.69  | 74.89  | 120.70                    | 120.32 | 121.23 | 0.08               | 0.01   | 0.00   |
| LEDBAT       | 10     | 3.50                   | 2.62   | 1.45   | 112.42                    | 112.31 | 111.64 | 0.03               | 0.04   | 0.01   |
| PCC          | 10     | 519.22                 | 87.51  | 42.89  | 254.90                    | 218.86 | 212.34 | 3.17               | 2.23   | 3.01   |
| QUIC Cubic   | 9      | 53.51                  | 42.96  | 30.57  | 111.50                    | 111.58 | 111.51 | 0.00               | 0.00   | 0.00   |
| SCReAM       | 10     | 0.22                   | 0.21   | 0.21   | 111.90                    | 112.04 | 111.42 | 0.00               | 0.00   | 0.00   |
| WebRTC media | 10     | 2.11                   | 1.30   | 0.47   | 112.40                    | 111.95 | 112.25 | 0.00               | 0.00   | 0.01   |
| Sprout       | 10     | 2.56                   | 2.46   | 1.76   | 112.66                    | 112.74 | 112.43 | 0.34               | 0.01   | 0.04   |
| TaoVA-100x   | 10     | 133.31                 | 106.85 | 113.90 | 112.62                    | 112.62 | 112.37 | 0.01               | 0.00   | 0.00   |
| TCP Vegas    | 10     | 34.08                  | 42.29  | 53.18  | 115.13                    | 116.63 | 115.80 | 0.18               | 0.48   | 0.17   |
| Verus        | 9      | 161.74                 | 109.71 | 81.94  | 195.40                    | 245.89 | 183.60 | 0.73               | 3.48   | 1.03   |
| Copa         | 9      | 74.97                  | 62.38  | 48.69  | 112.31                    | 112.84 | 113.78 | 0.00               | 0.00   | 5.13   |
| Indigo       | 10     | 168.76                 | 163.70 | 142.03 | 113.45                    | 114.68 | 118.46 | 0.00               | 0.00   | 0.01   |
| Indigo-calib | 10     | 153.24                 | 146.96 | 127.78 | 113.43                    | 114.00 | 114.66 | 0.01               | 0.01   | 0.02   |

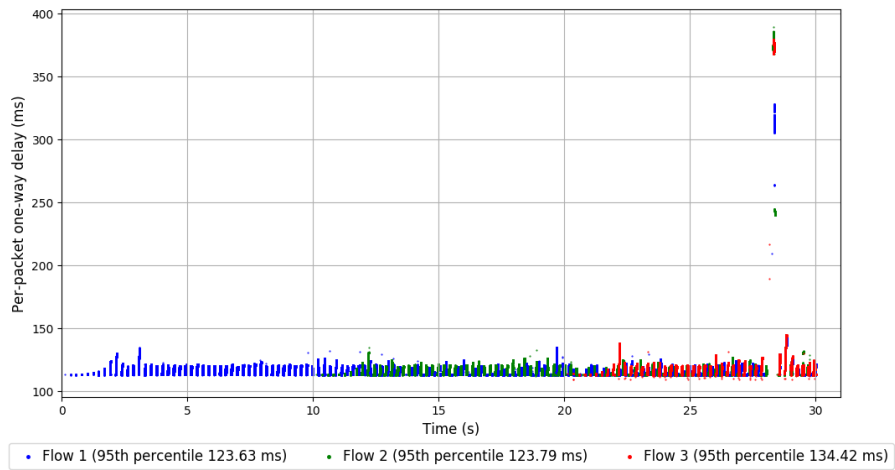
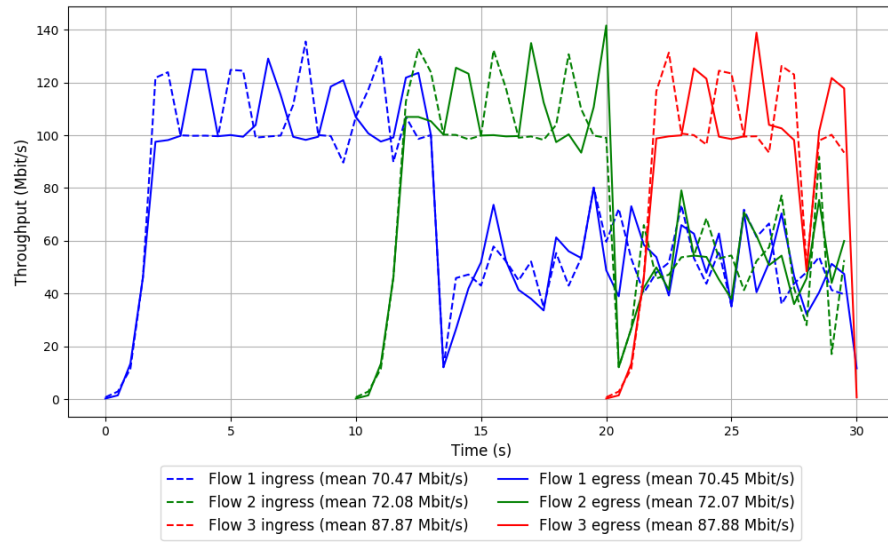
```
Run 1: Statistics of TCP BBR

Start at: 2017-11-30 22:29:21
End at: 2017-11-30 22:29:51

# Below is generated by plot.py at 2017-12-01 01:29:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 147.32 Mbit/s
95th percentile per-packet one-way delay: 125.066 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.45 Mbit/s
95th percentile per-packet one-way delay: 123.634 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 72.07 Mbit/s
95th percentile per-packet one-way delay: 123.788 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 87.88 Mbit/s
95th percentile per-packet one-way delay: 134.417 ms
Loss rate: 0.00%
```



# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-30 22:42:58

End at: 2017-11-30 22:43:28

# Below is generated by plot.py at 2017-12-01 01:29:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 110.97 Mbit/s

95th percentile per-packet one-way delay: 125.512 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.85 Mbit/s

95th percentile per-packet one-way delay: 125.029 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.81 Mbit/s

95th percentile per-packet one-way delay: 121.400 ms

Loss rate: 0.00%

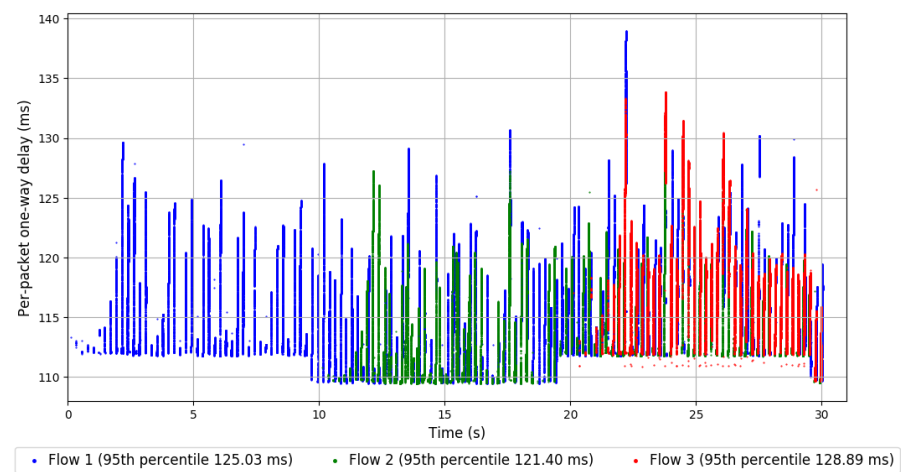
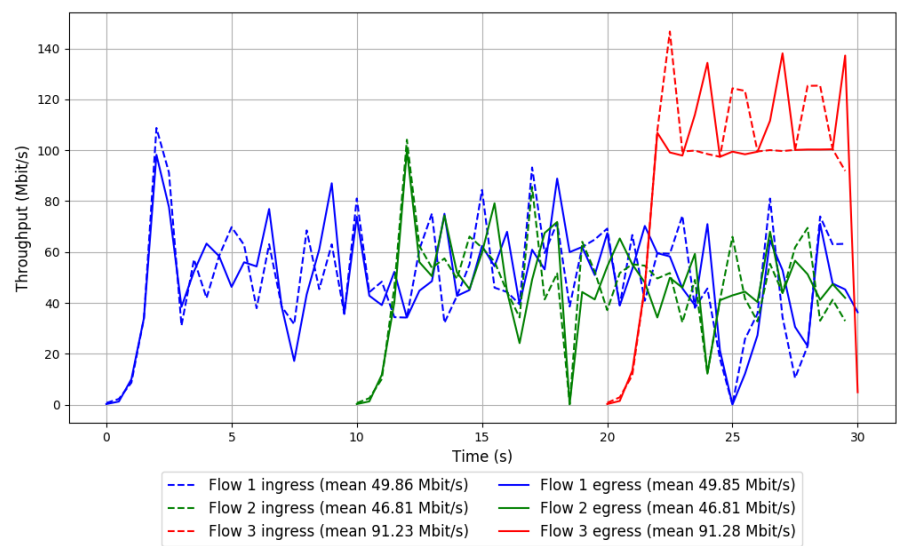
-- Flow 3:

Average throughput: 91.28 Mbit/s

95th percentile per-packet one-way delay: 128.893 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-30 22:56:17

End at: 2017-11-30 22:56:47

# Below is generated by plot.py at 2017-12-01 01:29:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 129.67 Mbit/s

95th percentile per-packet one-way delay: 122.231 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.02 Mbit/s

95th percentile per-packet one-way delay: 121.294 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 72.66 Mbit/s

95th percentile per-packet one-way delay: 121.697 ms

Loss rate: 0.01%

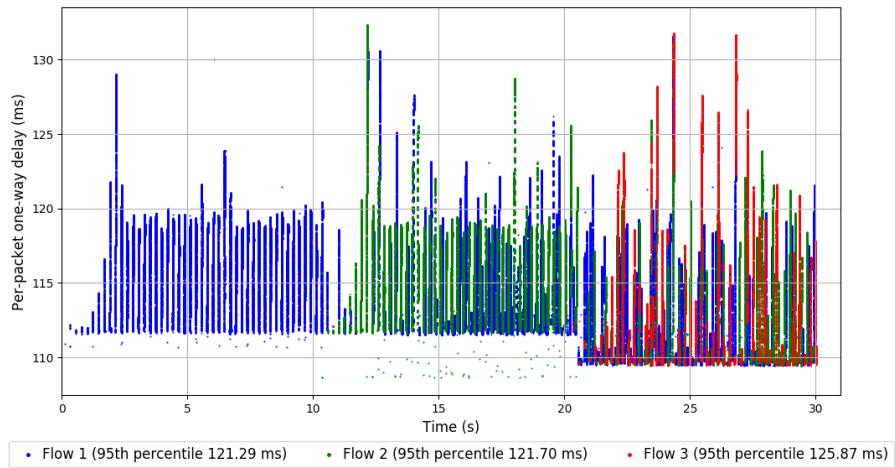
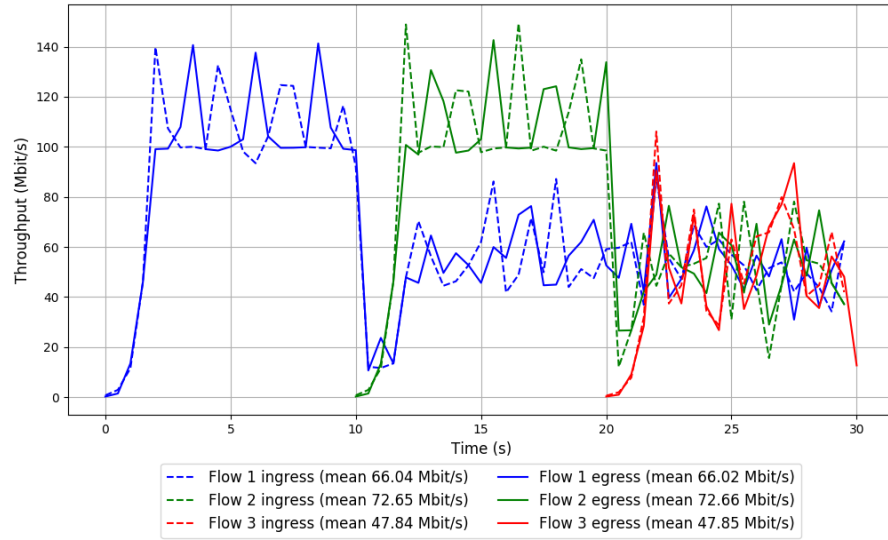
-- Flow 3:

Average throughput: 47.85 Mbit/s

95th percentile per-packet one-way delay: 125.869 ms

Loss rate: 0.00%

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



Run 4: Statistics of TCP BBR

Start at: 2017-11-30 23:09:41

End at: 2017-11-30 23:10:11

# Below is generated by plot.py at 2017-12-01 01:29:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 122.69 Mbit/s

95th percentile per-packet one-way delay: 123.345 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 65.04 Mbit/s

95th percentile per-packet one-way delay: 123.278 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 55.36 Mbit/s

95th percentile per-packet one-way delay: 124.588 ms

Loss rate: 0.70%

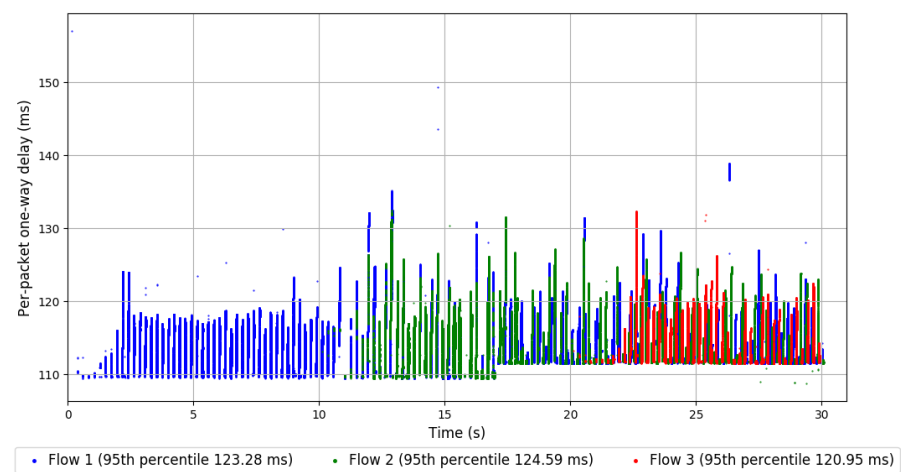
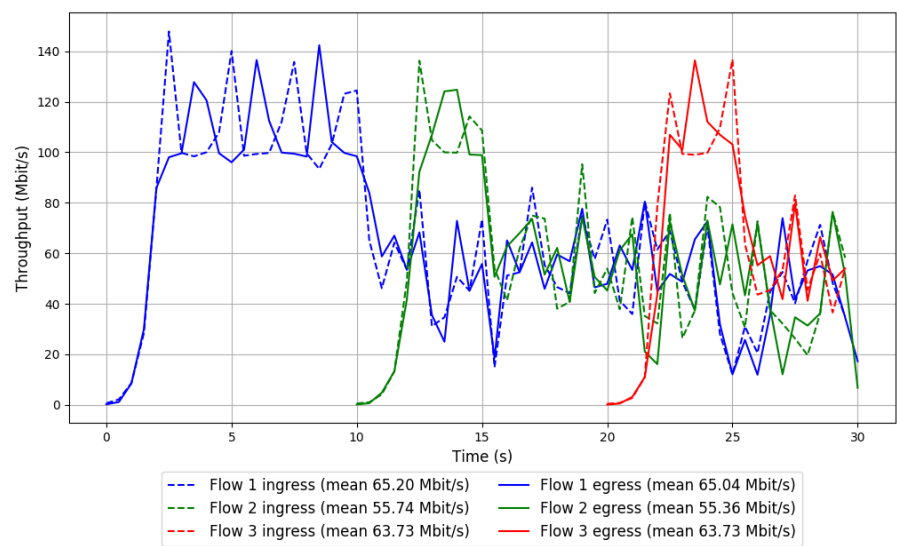
-- Flow 3:

Average throughput: 63.73 Mbit/s

95th percentile per-packet one-way delay: 120.953 ms

Loss rate: 0.01%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-30 23:23:13

End at: 2017-11-30 23:23:43

# Below is generated by plot.py at 2017-12-01 01:29:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 99.11 Mbit/s

95th percentile per-packet one-way delay: 120.912 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 48.85 Mbit/s

95th percentile per-packet one-way delay: 121.034 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.10 Mbit/s

95th percentile per-packet one-way delay: 120.846 ms

Loss rate: 0.00%

-- Flow 3:

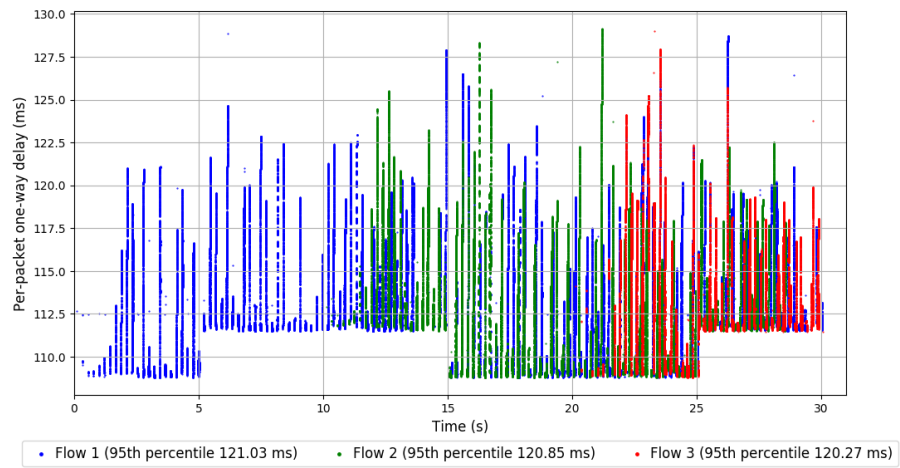
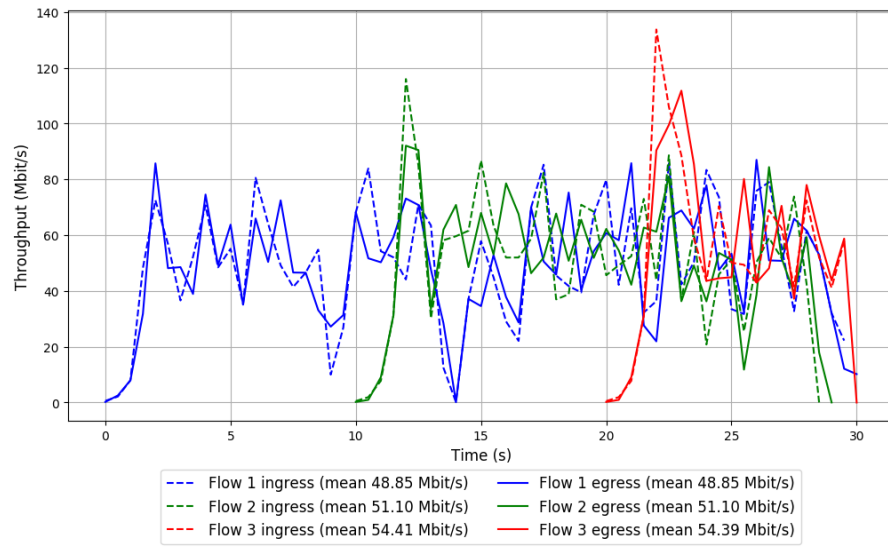
Average throughput: 54.39 Mbit/s

95th percentile per-packet one-way delay: 120.269 ms

Loss rate: 0.07%



# Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-30 23:36:27

End at: 2017-11-30 23:36:57

# Below is generated by plot.py at 2017-12-01 01:29:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 101.03 Mbit/s

95th percentile per-packet one-way delay: 123.299 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 53.75 Mbit/s

95th percentile per-packet one-way delay: 122.963 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 47.88 Mbit/s

95th percentile per-packet one-way delay: 123.147 ms

Loss rate: 0.02%

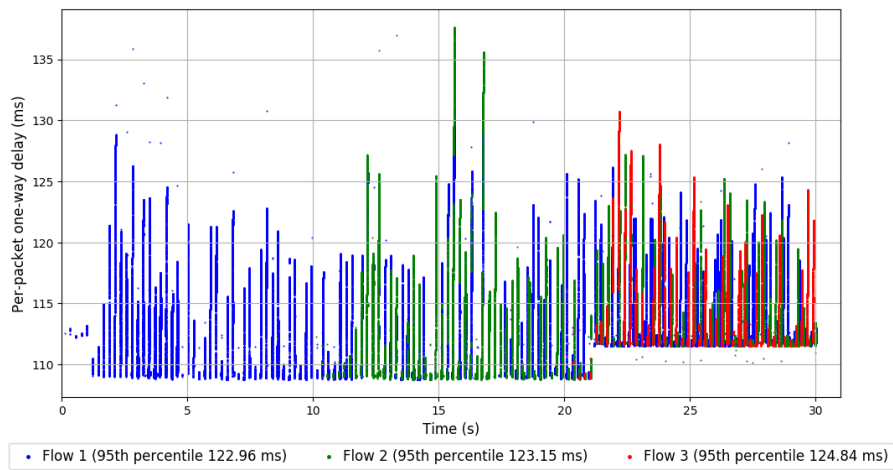
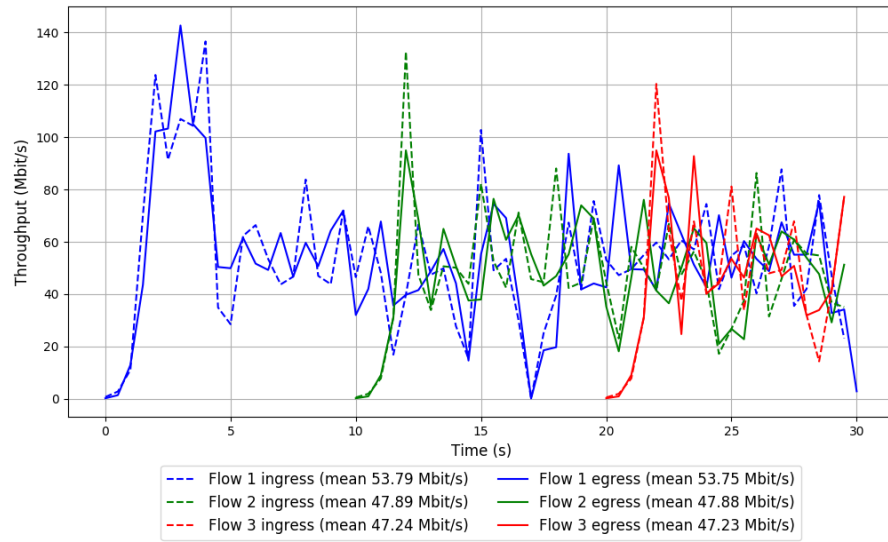
-- Flow 3:

Average throughput: 47.23 Mbit/s

95th percentile per-packet one-way delay: 124.843 ms

Loss rate: 0.02%

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



Run 7: Statistics of TCP BBR

Start at: 2017-11-30 23:50:01

End at: 2017-11-30 23:50:31

# Below is generated by plot.py at 2017-12-01 01:29:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 105.90 Mbit/s

95th percentile per-packet one-way delay: 126.238 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 46.45 Mbit/s

95th percentile per-packet one-way delay: 124.312 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 66.09 Mbit/s

95th percentile per-packet one-way delay: 123.949 ms

Loss rate: 0.00%

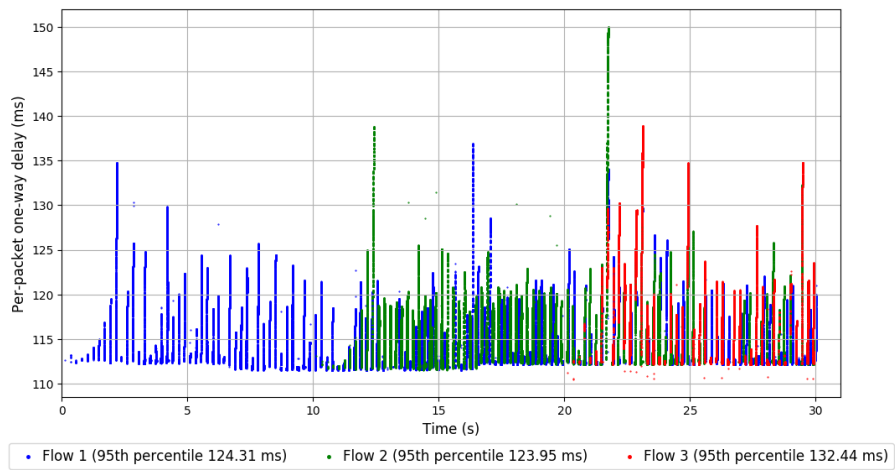
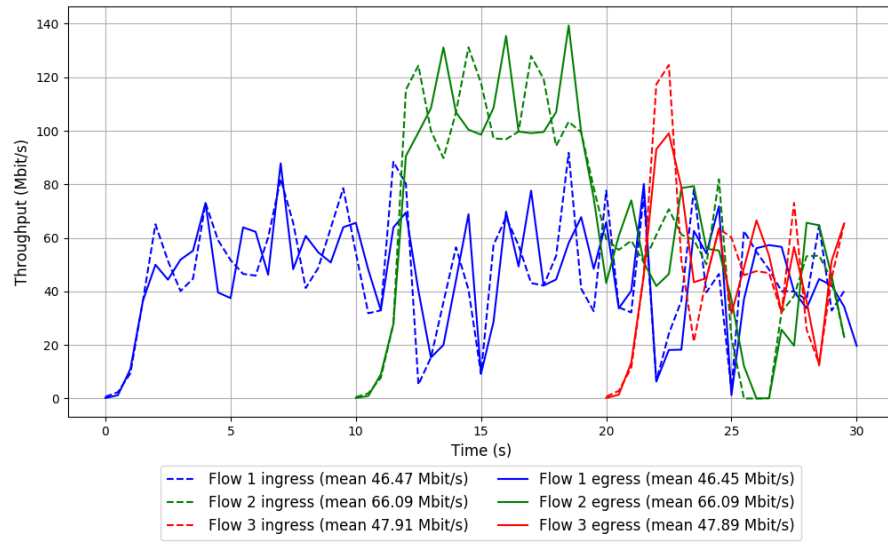
-- Flow 3:

Average throughput: 47.89 Mbit/s

95th percentile per-packet one-way delay: 132.444 ms

Loss rate: 0.02%

# Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-01 00:03:32

End at: 2017-12-01 00:04:02

# Below is generated by plot.py at 2017-12-01 01:29:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 118.39 Mbit/s

95th percentile per-packet one-way delay: 125.552 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 57.12 Mbit/s

95th percentile per-packet one-way delay: 121.647 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 58.35 Mbit/s

95th percentile per-packet one-way delay: 127.743 ms

Loss rate: 0.00%

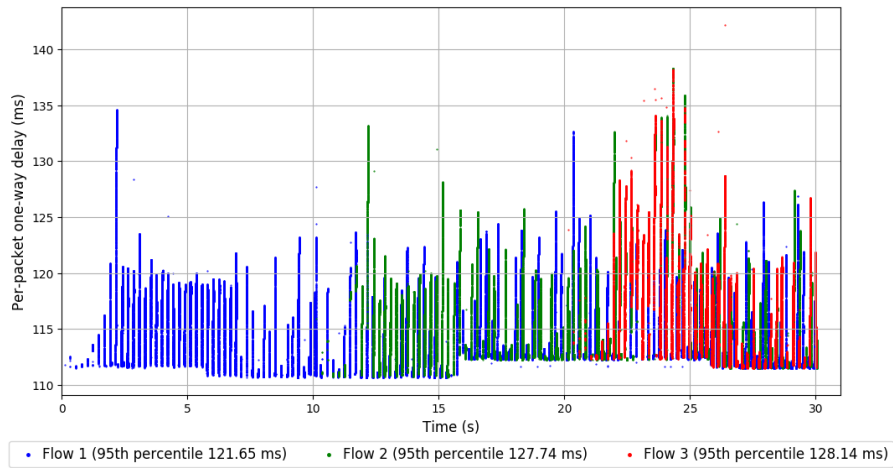
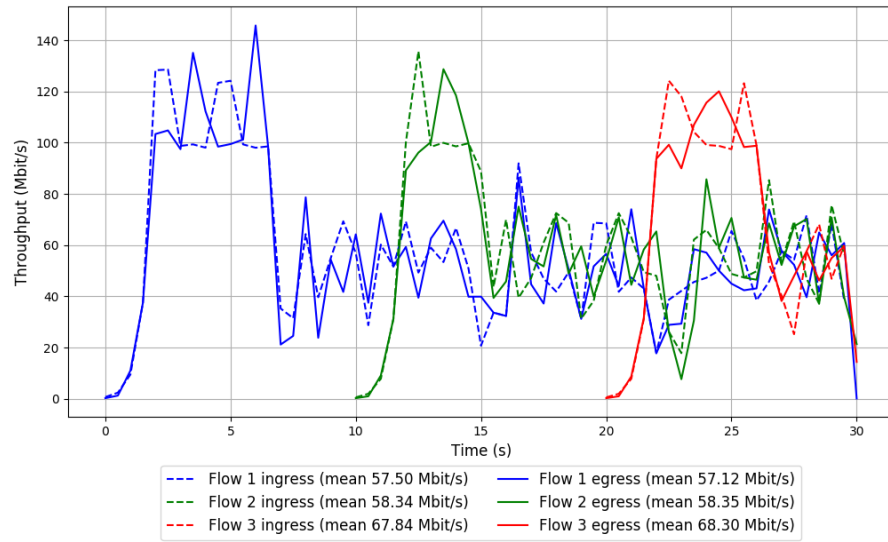
-- Flow 3:

Average throughput: 68.30 Mbit/s

95th percentile per-packet one-way delay: 128.142 ms

Loss rate: 0.00%

# Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-01 00:16:53

End at: 2017-12-01 00:17:23

# Below is generated by plot.py at 2017-12-01 01:30:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 116.38 Mbit/s

95th percentile per-packet one-way delay: 124.205 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 54.77 Mbit/s

95th percentile per-packet one-way delay: 122.159 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 66.22 Mbit/s

95th percentile per-packet one-way delay: 126.438 ms

Loss rate: 0.01%

-- Flow 3:

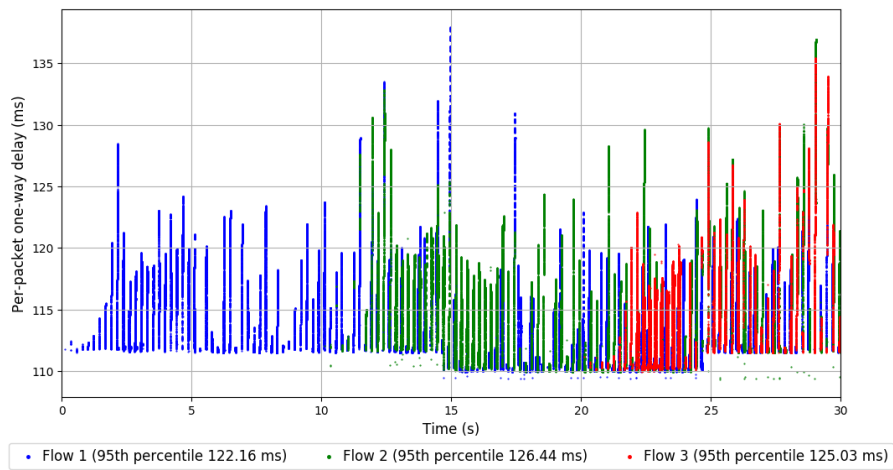
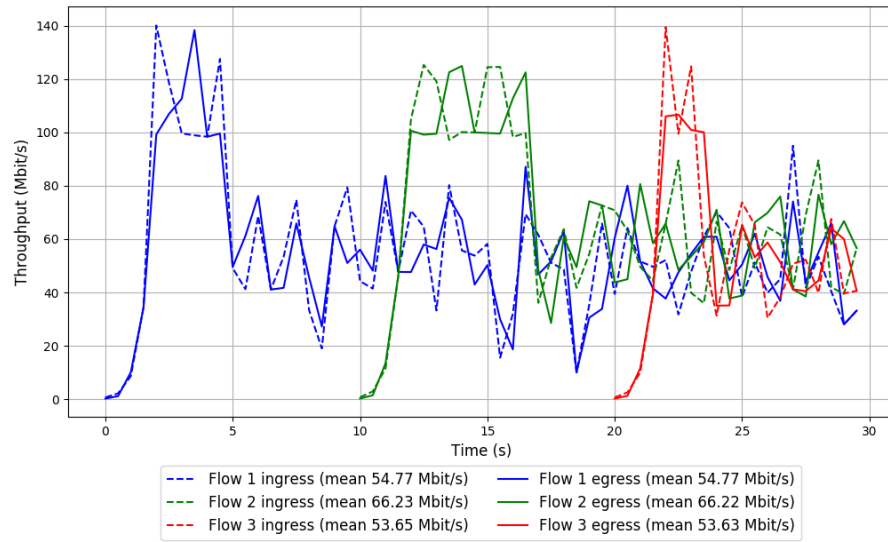
Average throughput: 53.63 Mbit/s

95th percentile per-packet one-way delay: 125.029 ms

Loss rate: 0.00%



# Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-01 00:30:40

End at: 2017-12-01 00:31:10

# Below is generated by plot.py at 2017-12-01 01:30:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 117.39 Mbit/s

95th percentile per-packet one-way delay: 121.679 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 68.96 Mbit/s

95th percentile per-packet one-way delay: 118.791 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 47.27 Mbit/s

95th percentile per-packet one-way delay: 123.273 ms

Loss rate: 0.38%

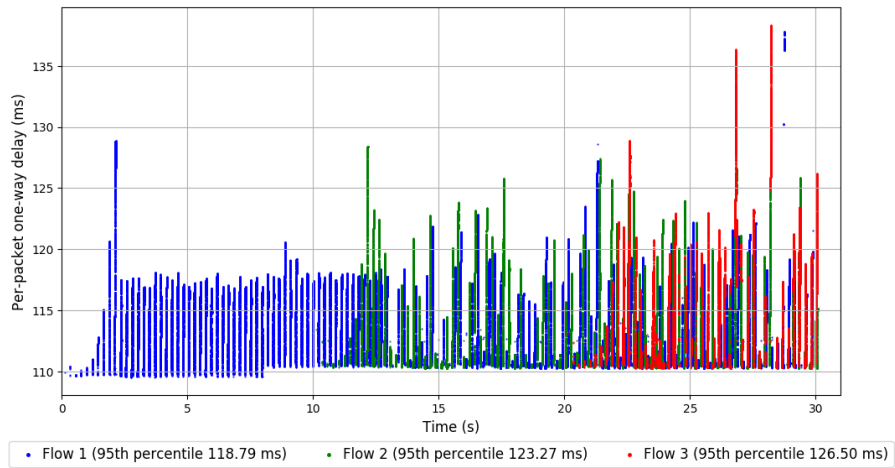
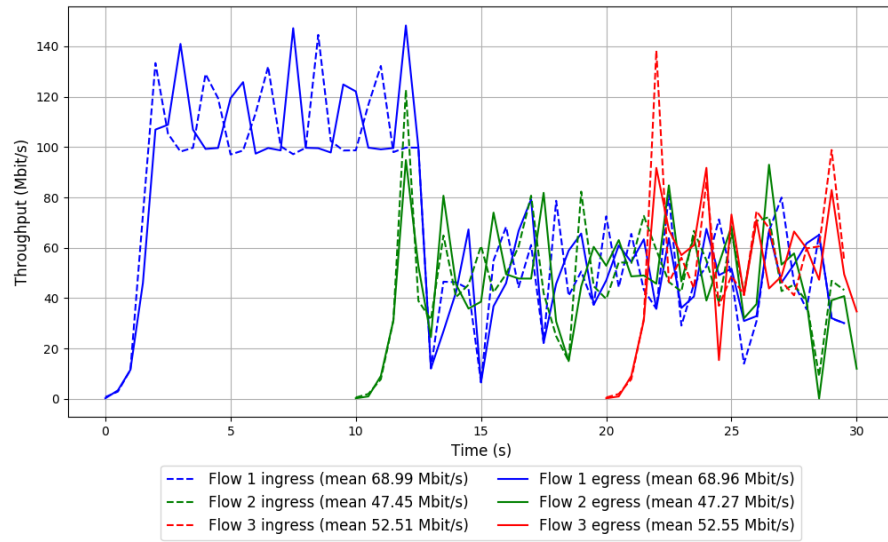
-- Flow 3:

Average throughput: 52.55 Mbit/s

95th percentile per-packet one-way delay: 126.495 ms

Loss rate: 0.00%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-30 22:24:04

End at: 2017-11-30 22:24:34

# Below is generated by plot.py at 2017-12-01 01:30:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 135.32 Mbit/s

95th percentile per-packet one-way delay: 120.814 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.72 Mbit/s

95th percentile per-packet one-way delay: 121.131 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.34 Mbit/s

95th percentile per-packet one-way delay: 120.581 ms

Loss rate: 0.00%

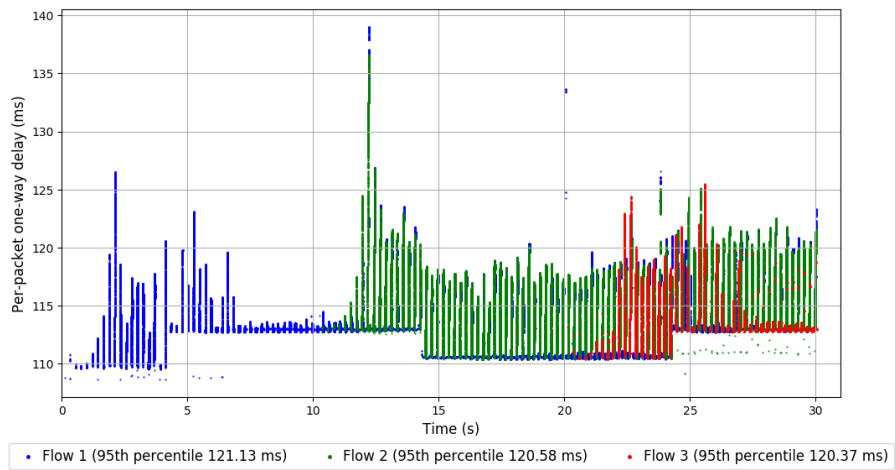
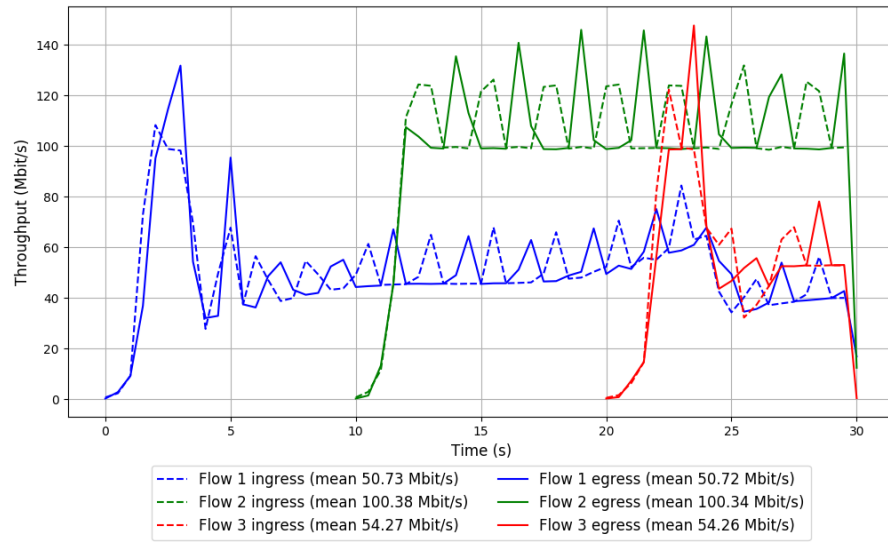
-- Flow 3:

Average throughput: 54.26 Mbit/s

95th percentile per-packet one-way delay: 120.369 ms

Loss rate: 0.02%

# Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-30 22:37:42

End at: 2017-11-30 22:38:12

# Below is generated by plot.py at 2017-12-01 01:30:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 124.39 Mbit/s

95th percentile per-packet one-way delay: 119.733 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.96 Mbit/s

95th percentile per-packet one-way delay: 119.752 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.48 Mbit/s

95th percentile per-packet one-way delay: 117.384 ms

Loss rate: 0.00%

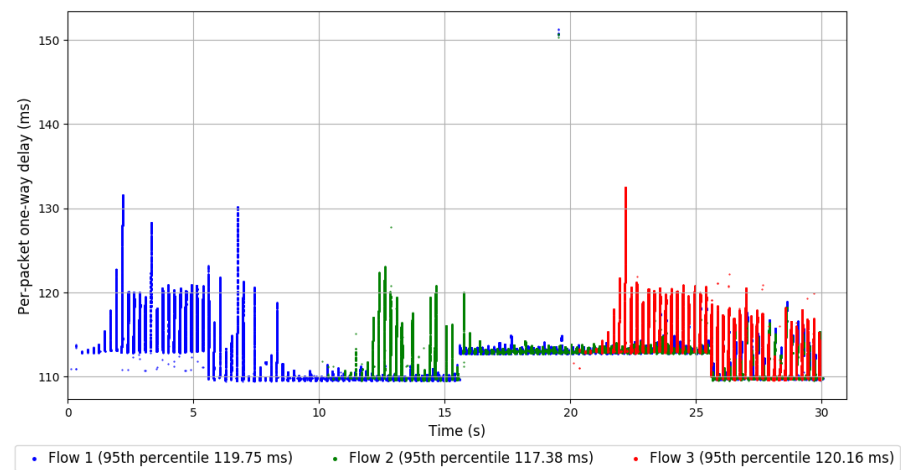
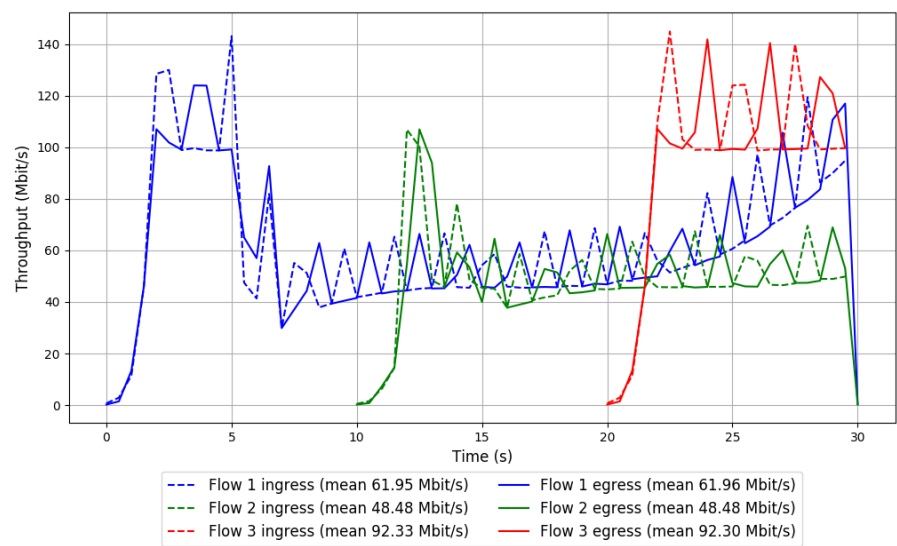
-- Flow 3:

Average throughput: 92.30 Mbit/s

95th percentile per-packet one-way delay: 120.158 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-30 22:51:04

End at: 2017-11-30 22:51:34

# Below is generated by plot.py at 2017-12-01 01:30:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 112.56 Mbit/s

95th percentile per-packet one-way delay: 119.501 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 63.82 Mbit/s

95th percentile per-packet one-way delay: 118.447 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 49.44 Mbit/s

95th percentile per-packet one-way delay: 119.793 ms

Loss rate: 0.00%

-- Flow 3:

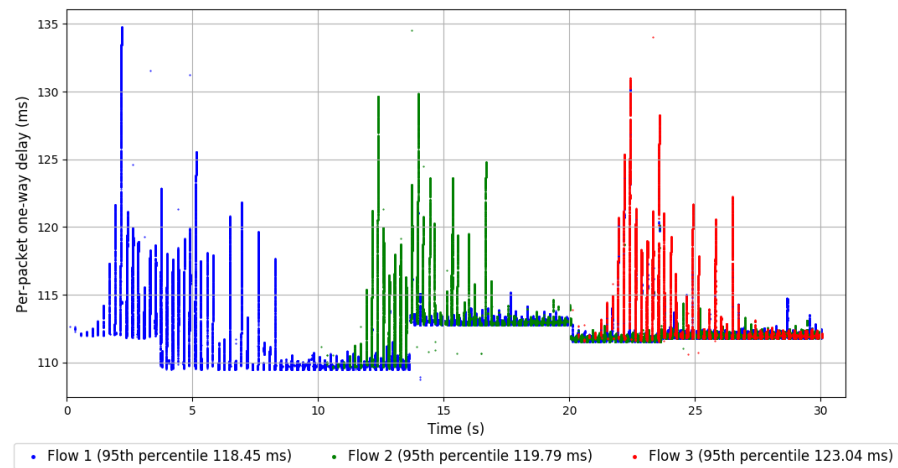
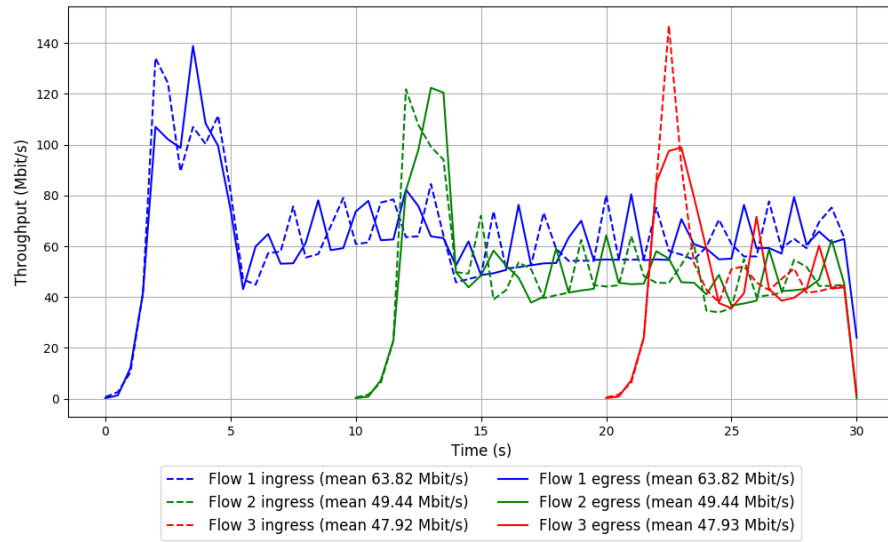
Average throughput: 47.93 Mbit/s

95th percentile per-packet one-way delay: 123.040 ms

Loss rate: 0.00%



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



Run 4: Statistics of TCP Cubic

Start at: 2017-11-30 23:04:24

End at: 2017-11-30 23:04:54

# Below is generated by plot.py at 2017-12-01 01:31:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 157.77 Mbit/s

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

Loss rate: 0.25%

-- Flow 1:

Average throughput: 64.84 Mbit/s

95th percentile per-packet one-way delay: 118.721 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 99.80 Mbit/s

95th percentile per-packet one-way delay: 122.786 ms

Loss rate: 0.00%

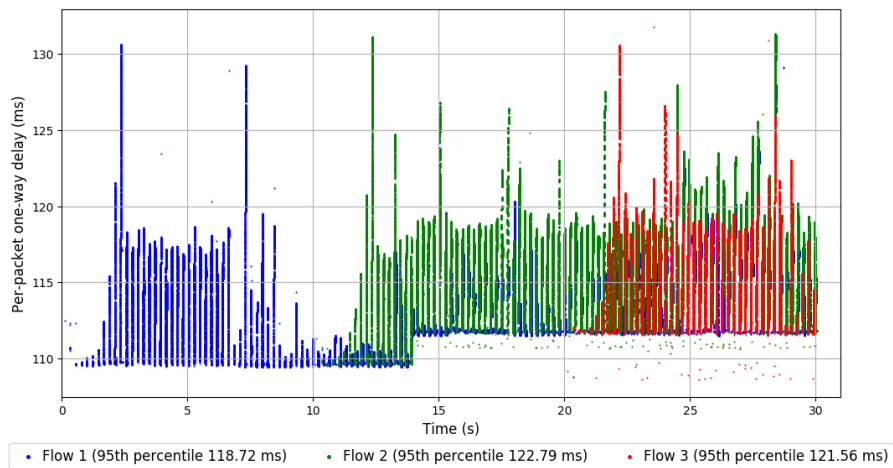
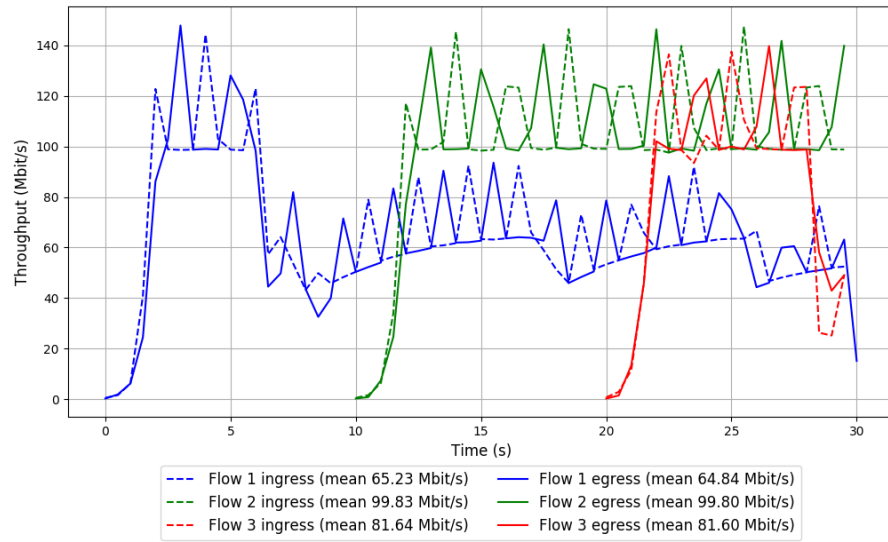
-- Flow 3:

Average throughput: 81.60 Mbit/s

95th percentile per-packet one-way delay: 121.556 ms

Loss rate: 0.00%

# Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-30 23:18:01

End at: 2017-11-30 23:18:31

# Below is generated by plot.py at 2017-12-01 01:31:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 72.81 Mbit/s

95th percentile per-packet one-way delay: 119.189 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 13.04 Mbit/s

95th percentile per-packet one-way delay: 118.681 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 54.51 Mbit/s

95th percentile per-packet one-way delay: 117.821 ms

Loss rate: 0.00%

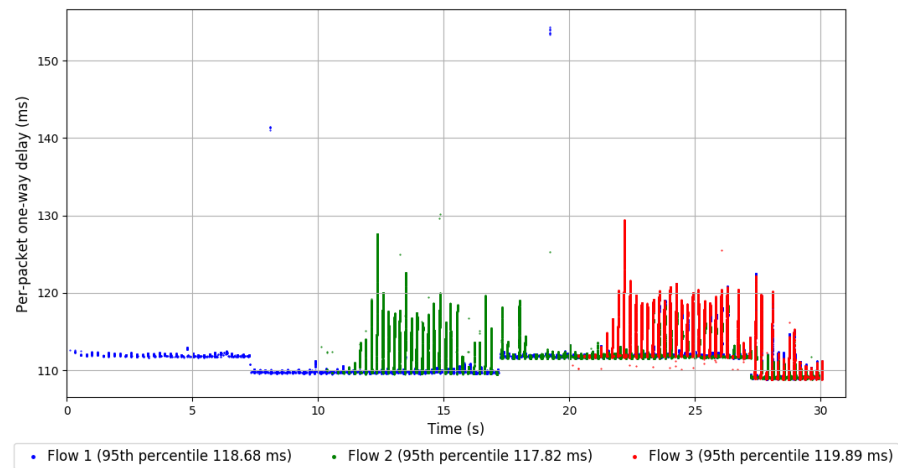
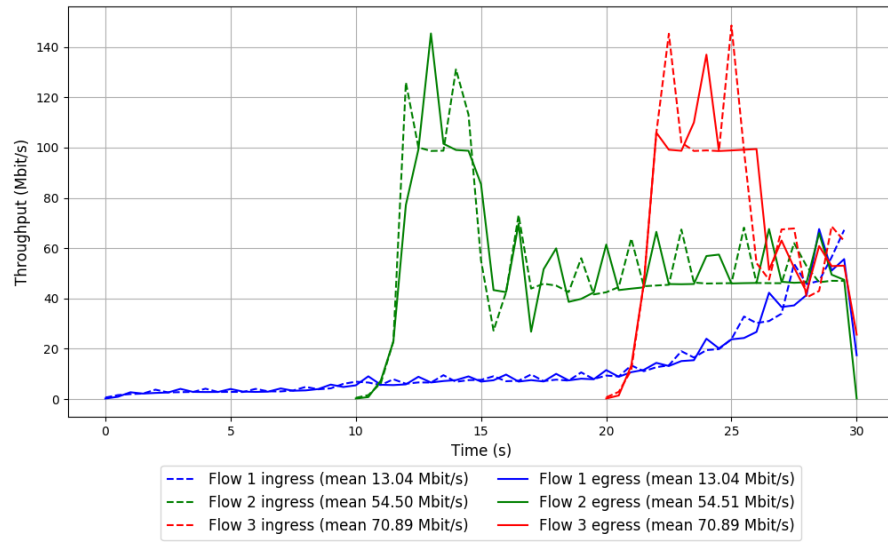
-- Flow 3:

Average throughput: 70.89 Mbit/s

95th percentile per-packet one-way delay: 119.895 ms

Loss rate: 0.01%

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



Run 6: Statistics of TCP Cubic

Start at: 2017-11-30 23:31:13

End at: 2017-11-30 23:31:43

# Below is generated by plot.py at 2017-12-01 01:31:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 97.09 Mbit/s

95th percentile per-packet one-way delay: 119.711 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 61.07 Mbit/s

95th percentile per-packet one-way delay: 119.769 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 8.90 Mbit/s

95th percentile per-packet one-way delay: 115.377 ms

Loss rate: 0.09%

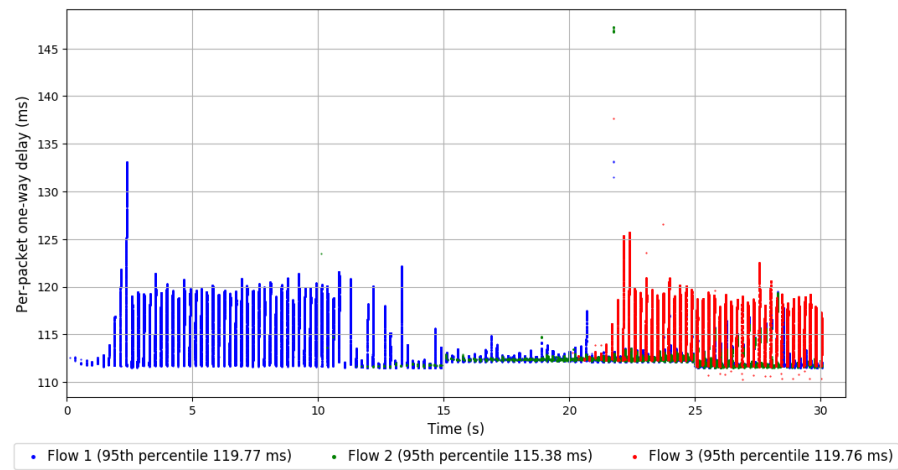
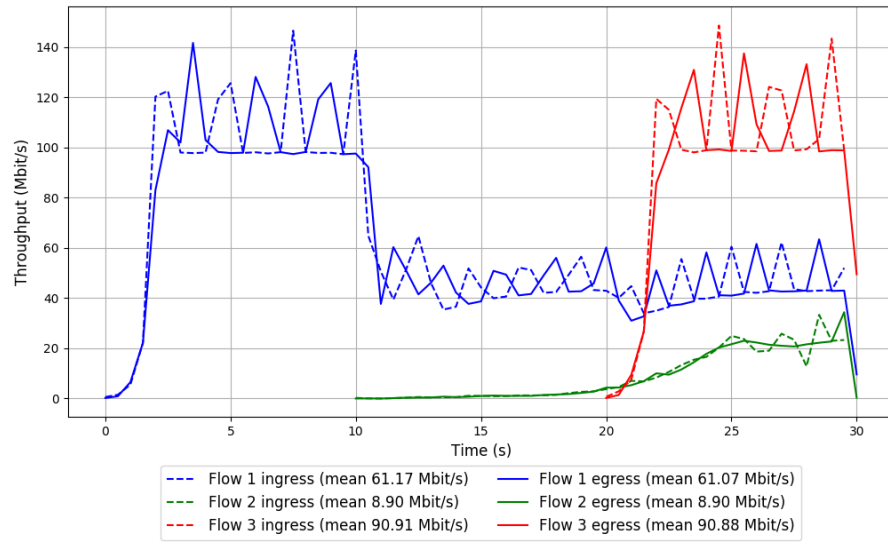
-- Flow 3:

Average throughput: 90.88 Mbit/s

95th percentile per-packet one-way delay: 119.762 ms

Loss rate: 0.00%

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



Run 7: Statistics of TCP Cubic

Start at: 2017-11-30 23:44:46

End at: 2017-11-30 23:45:16

# Below is generated by plot.py at 2017-12-01 01:31:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 124.57 Mbit/s

95th percentile per-packet one-way delay: 124.560 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.60 Mbit/s

95th percentile per-packet one-way delay: 124.806 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.67 Mbit/s

95th percentile per-packet one-way delay: 123.882 ms

Loss rate: 0.00%

-- Flow 3:

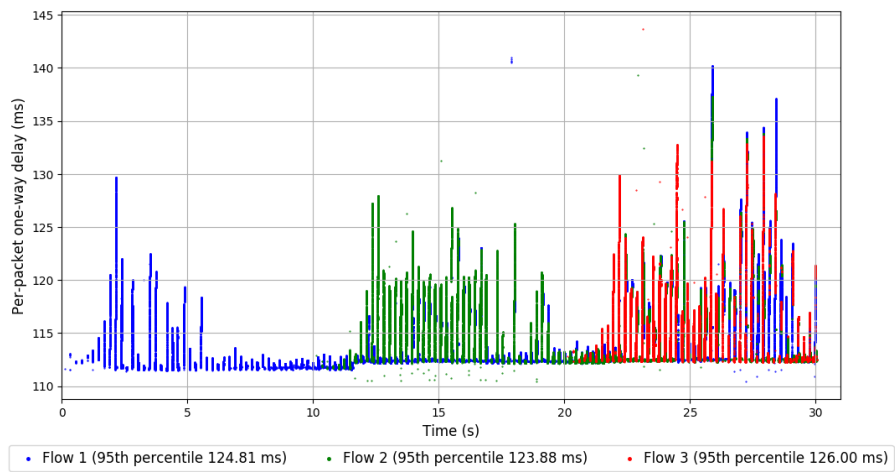
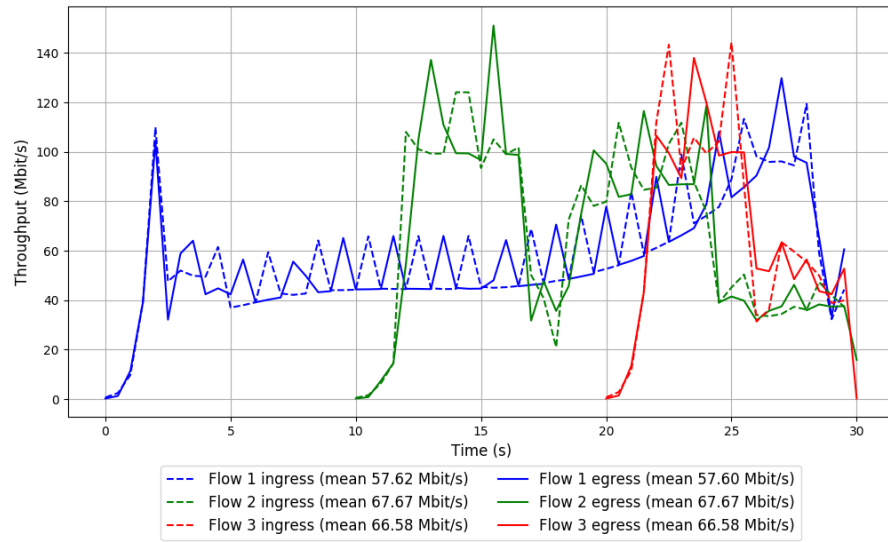
Average throughput: 66.58 Mbit/s

95th percentile per-packet one-way delay: 125.999 ms

Loss rate: 0.00%



# Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-30 23:58:16

End at: 2017-11-30 23:58:46

# Below is generated by plot.py at 2017-12-01 01:32:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 131.41 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.44 Mbit/s

95th percentile per-packet one-way delay: 121.285 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 59.06 Mbit/s

95th percentile per-packet one-way delay: 121.646 ms

Loss rate: 0.00%

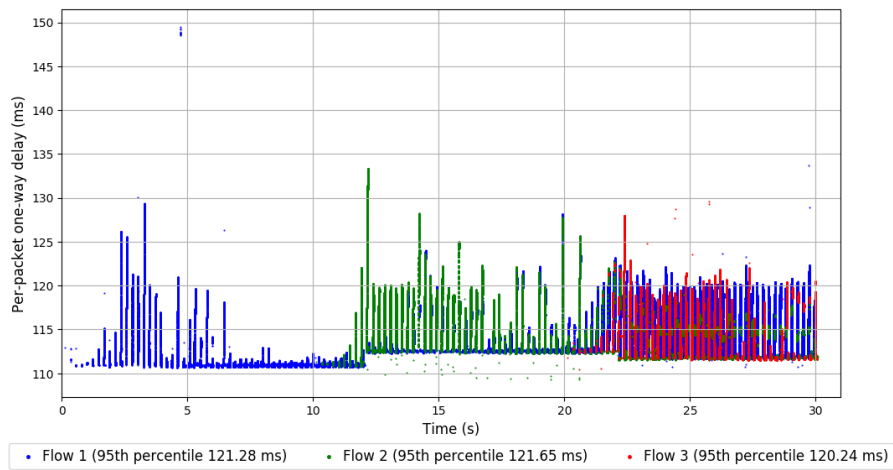
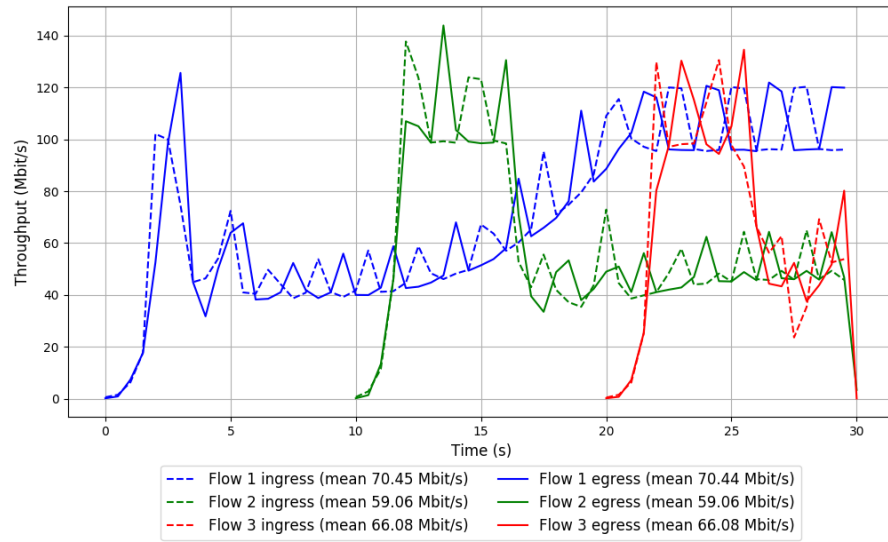
-- Flow 3:

Average throughput: 66.08 Mbit/s

95th percentile per-packet one-way delay: 120.238 ms

Loss rate: 0.00%

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



Run 9: Statistics of TCP Cubic

Start at: 2017-12-01 00:11:37

End at: 2017-12-01 00:12:07

# Below is generated by plot.py at 2017-12-01 01:32:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 128.11 Mbit/s

95th percentile per-packet one-way delay: 120.809 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.40 Mbit/s

95th percentile per-packet one-way delay: 121.152 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.94 Mbit/s

95th percentile per-packet one-way delay: 120.510 ms

Loss rate: 0.00%

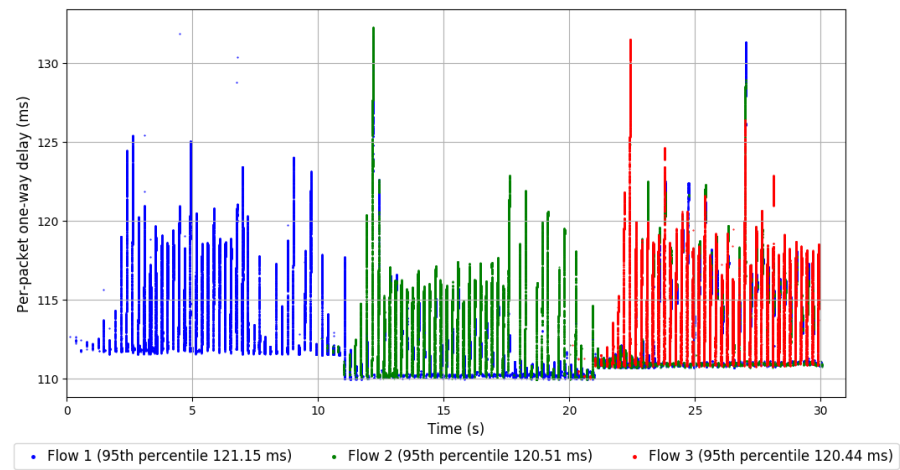
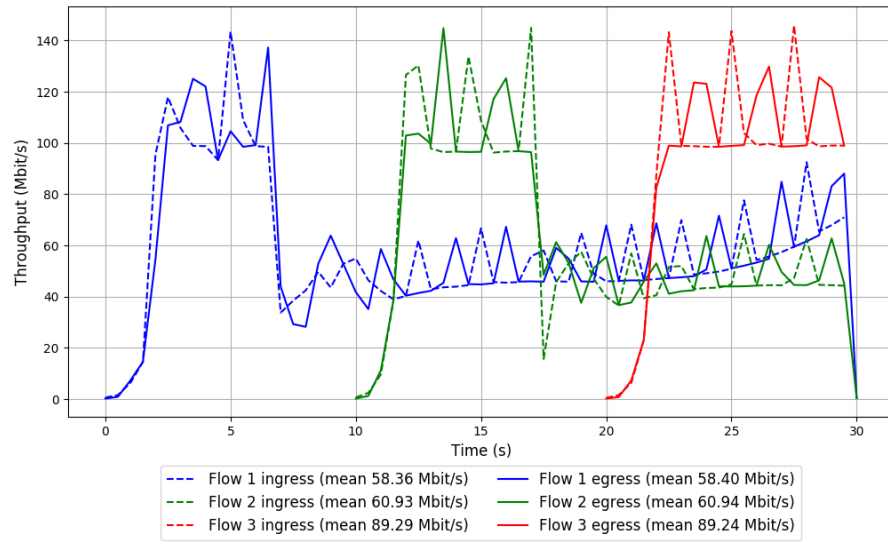
-- Flow 3:

Average throughput: 89.24 Mbit/s

95th percentile per-packet one-way delay: 120.445 ms

Loss rate: 0.00%

# Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-01 00:25:22

End at: 2017-12-01 00:25:52

# Below is generated by plot.py at 2017-12-01 01:32:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 131.07 Mbit/s

95th percentile per-packet one-way delay: 122.897 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 63.37 Mbit/s

95th percentile per-packet one-way delay: 123.211 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.74 Mbit/s

95th percentile per-packet one-way delay: 123.426 ms

Loss rate: 0.00%

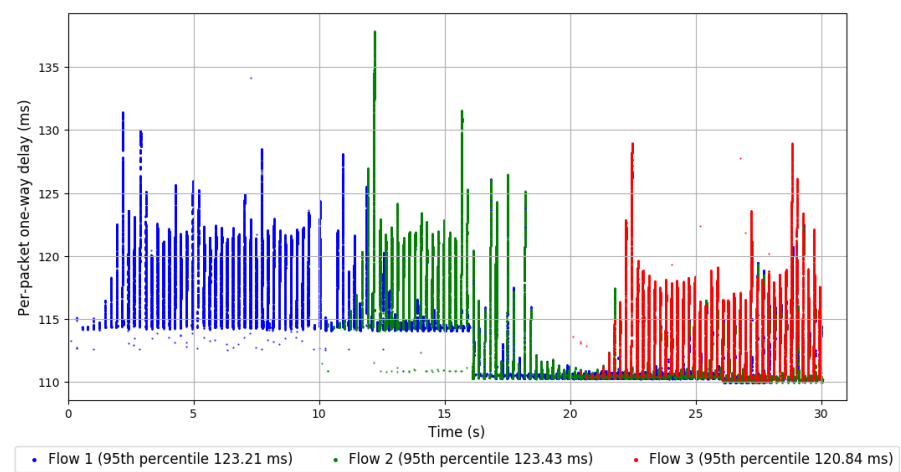
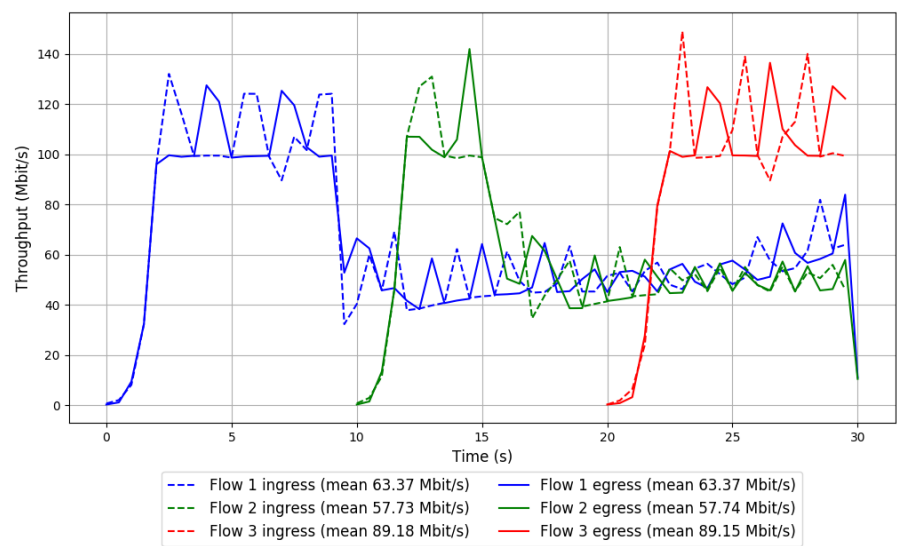
-- Flow 3:

Average throughput: 89.15 Mbit/s

95th percentile per-packet one-way delay: 120.843 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link



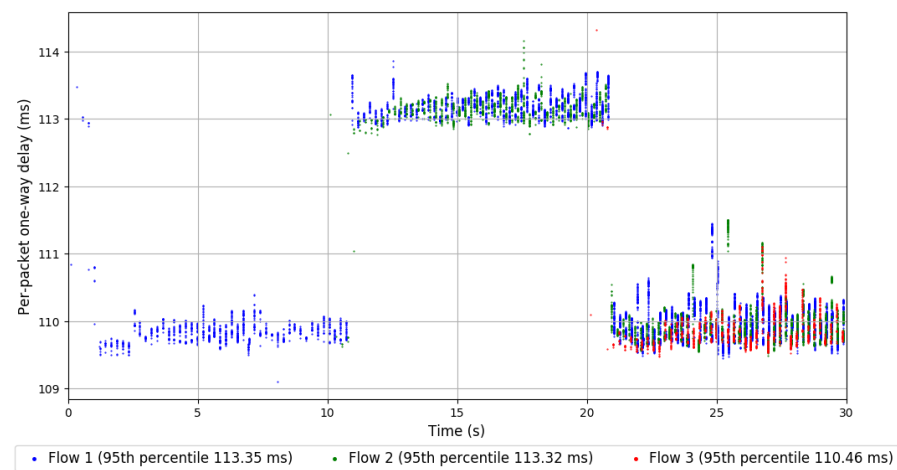
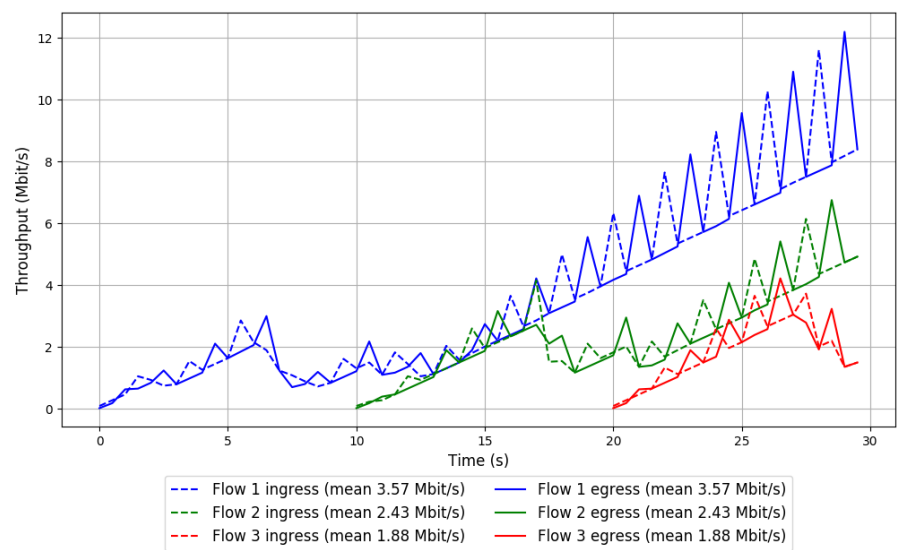
```
Run 1: Statistics of LEDBAT

Start at: 2017-11-30 22:27:47
End at: 2017-11-30 22:28:17

# Below is generated by plot.py at 2017-12-01 01:32:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.79 Mbit/s
95th percentile per-packet one-way delay: 113.323 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 3.57 Mbit/s
95th percentile per-packet one-way delay: 113.352 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 113.322 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 110.456 ms
Loss rate: 0.00%
```



Run 1: Report of LEDBAT — Data Link

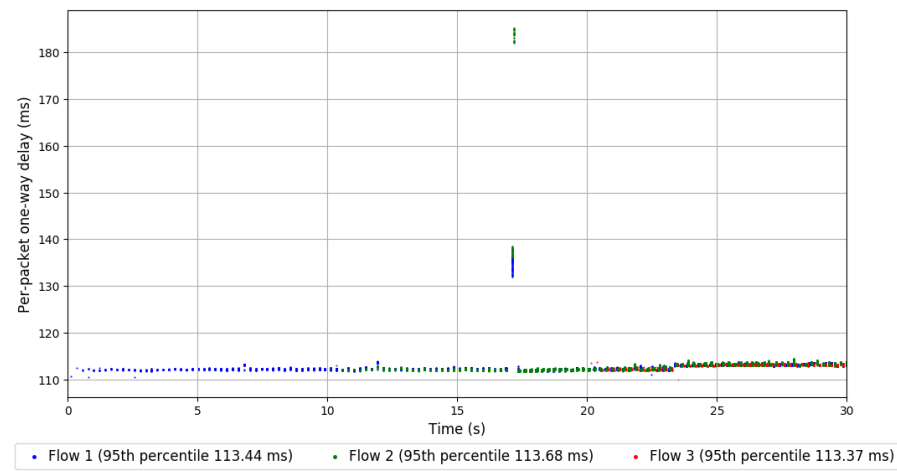
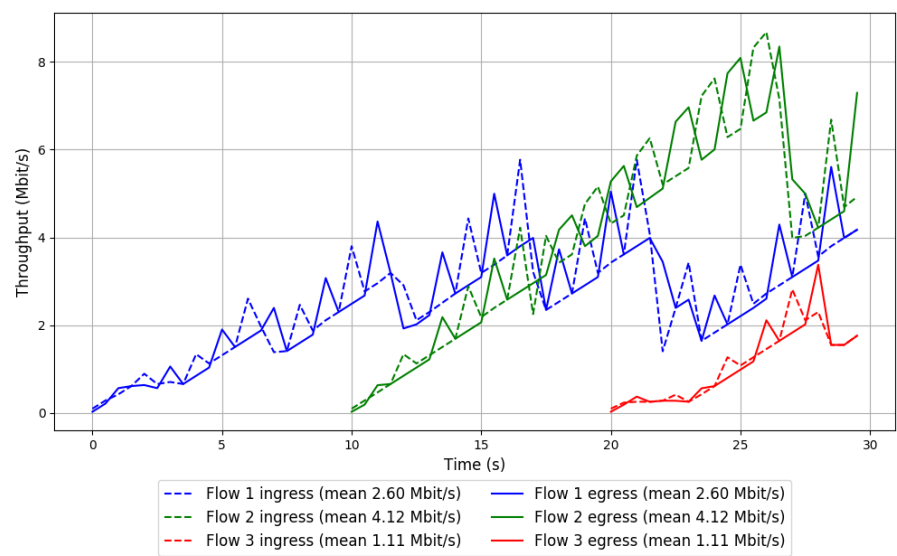


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-30 22:41:25
End at: 2017-11-30 22:41:55

# Below is generated by plot.py at 2017-12-01 01:32:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.68 Mbit/s
95th percentile per-packet one-way delay: 113.612 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.60 Mbit/s
95th percentile per-packet one-way delay: 113.443 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 113.682 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 113.371 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-30 22:54:43

End at: 2017-11-30 22:55:13

# Below is generated by plot.py at 2017-12-01 01:32:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 8.75 Mbit/s

95th percentile per-packet one-way delay: 110.598 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 110.636 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 110.804 ms

Loss rate: 0.02%

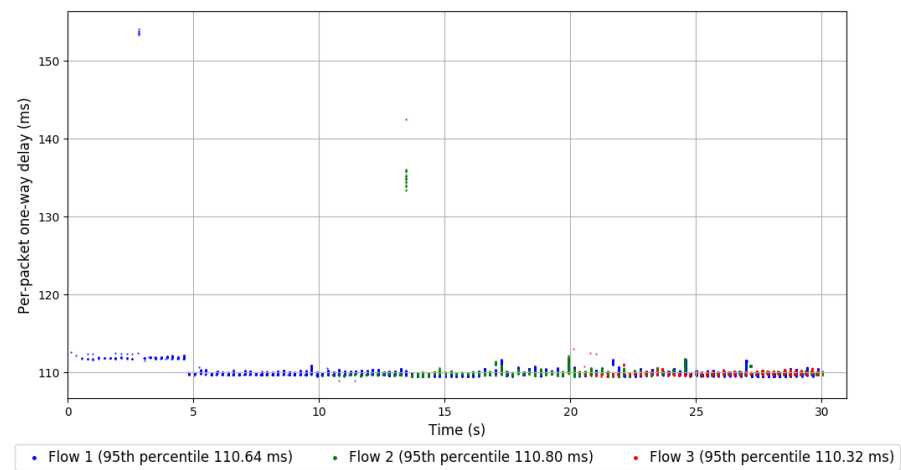
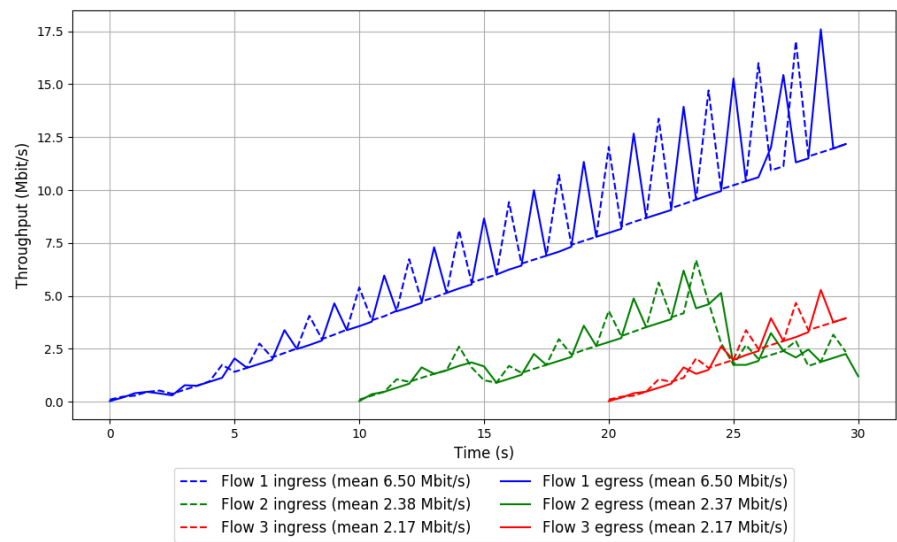
-- Flow 3:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 110.319 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-30 23:08:07

End at: 2017-11-30 23:08:37

# Below is generated by plot.py at 2017-12-01 01:32:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.47 Mbit/s

95th percentile per-packet one-way delay: 112.213 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 3.38 Mbit/s

95th percentile per-packet one-way delay: 112.285 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 112.100 ms

Loss rate: 0.18%

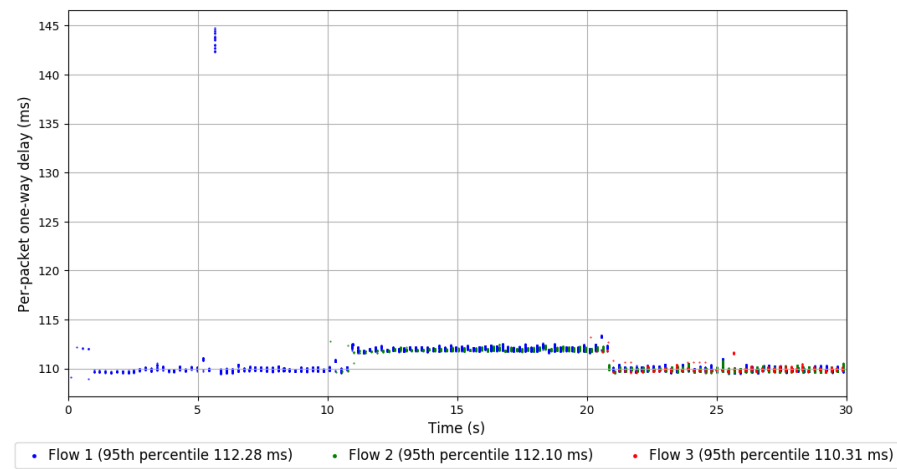
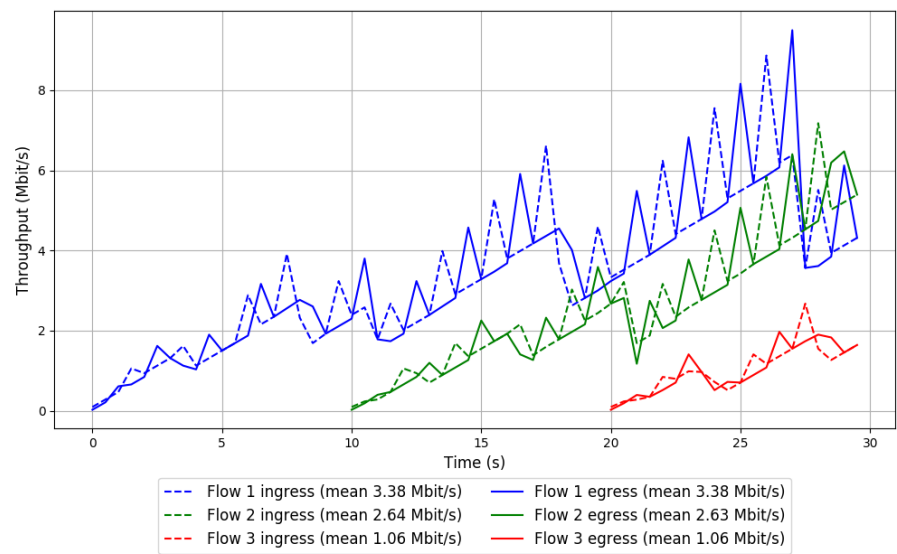
-- Flow 3:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 110.315 ms

Loss rate: 0.11%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-30 23:21:39

End at: 2017-11-30 23:22:09

# Below is generated by plot.py at 2017-12-01 01:32:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 112.296 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 112.315 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.72 Mbit/s

95th percentile per-packet one-way delay: 112.192 ms

Loss rate: 0.00%

-- Flow 3:

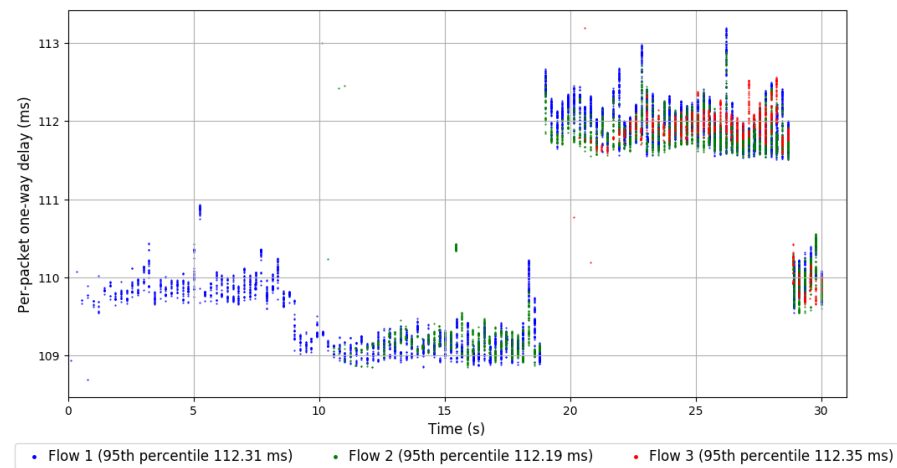
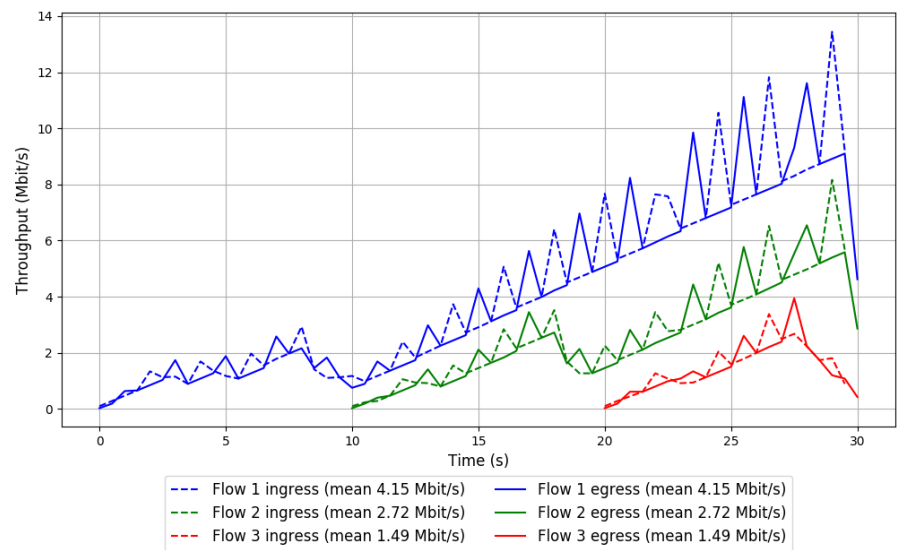
Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 112.346 ms

Loss rate: 0.00%



Run 5: Report of LEDBAT — Data Link

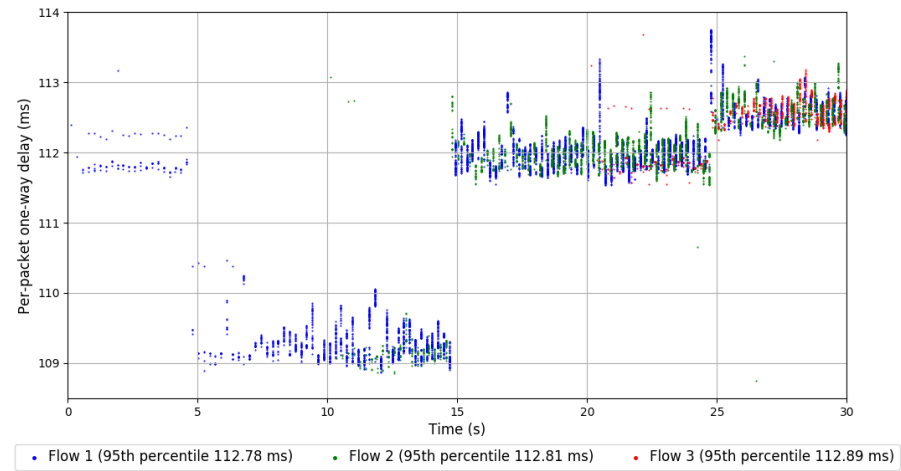
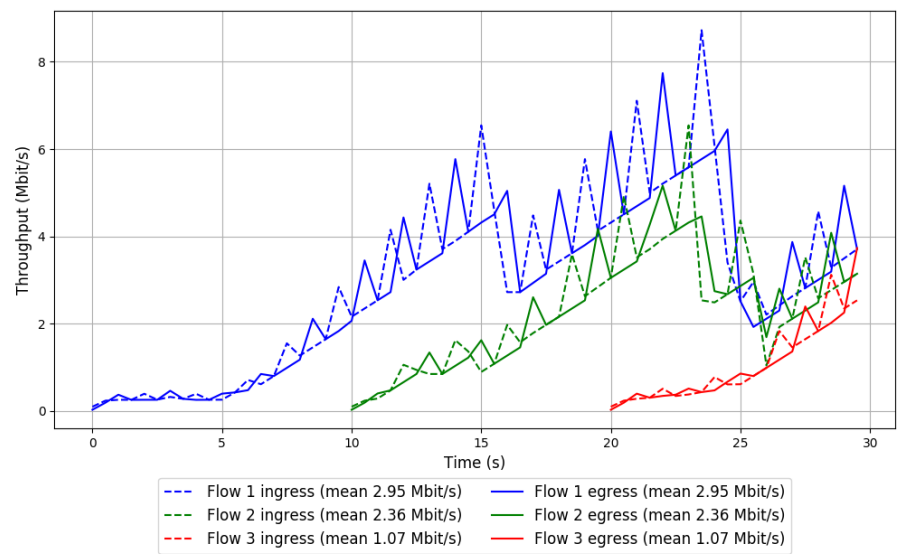


```
Run 6: Statistics of LEDBAT

Start at: 2017-11-30 23:34:53
End at: 2017-11-30 23:35:23

# Below is generated by plot.py at 2017-12-01 01:32:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.85 Mbit/s
95th percentile per-packet one-way delay: 112.812 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 2.95 Mbit/s
95th percentile per-packet one-way delay: 112.777 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 112.815 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 112.885 ms
Loss rate: 0.00%
```

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-30 23:48:28

End at: 2017-11-30 23:48:58

# Below is generated by plot.py at 2017-12-01 01:32:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 113.000 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 113.055 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 112.646 ms

Loss rate: 0.00%

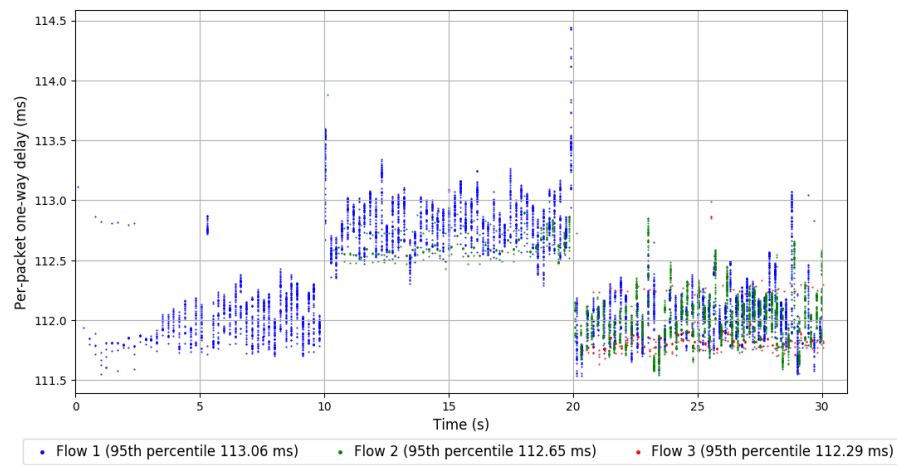
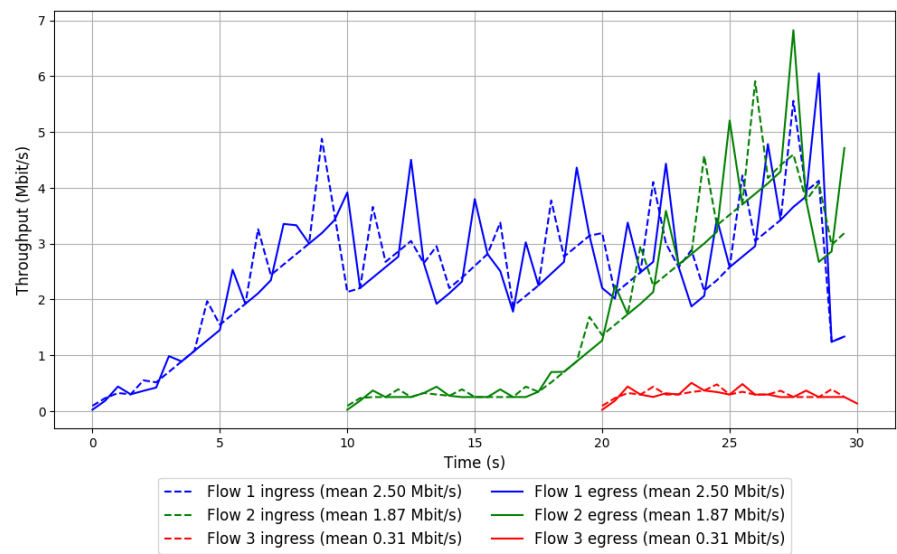
-- Flow 3:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 112.289 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-01 00:01:59

End at: 2017-12-01 00:02:29

# Below is generated by plot.py at 2017-12-01 01:32:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 112.684 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 112.786 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 112.166 ms

Loss rate: 0.02%

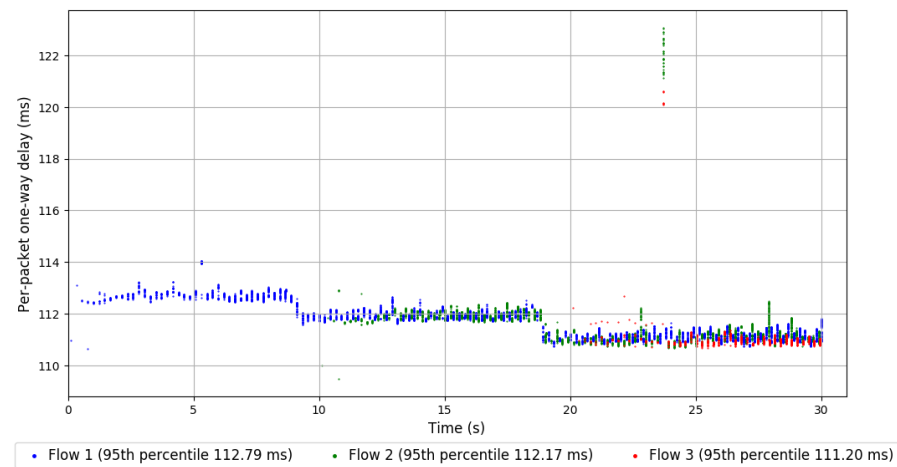
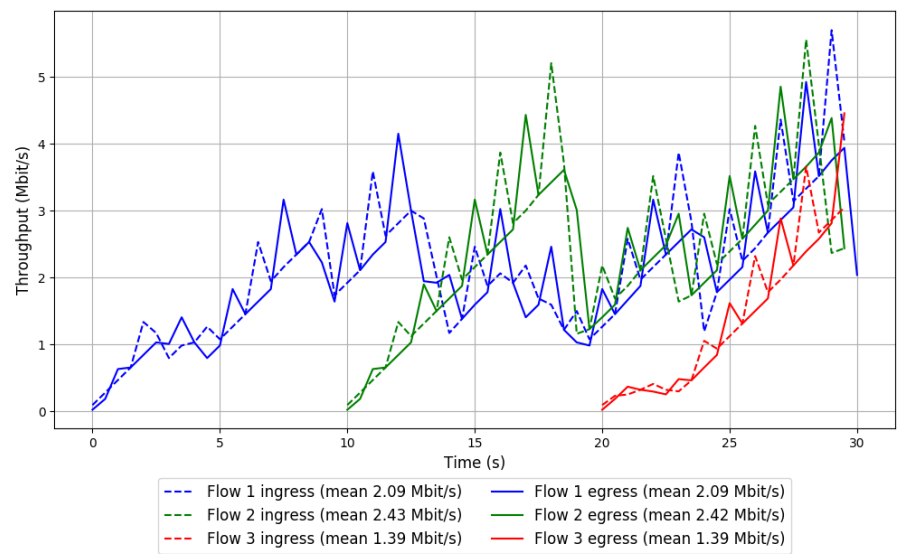
-- Flow 3:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 111.201 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-01 00:15:20

End at: 2017-12-01 00:15:50

# Below is generated by plot.py at 2017-12-01 01:32:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.54 Mbit/s

95th percentile per-packet one-way delay: 112.425 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 3.49 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 112.382 ms

Loss rate: 0.00%

-- Flow 3:

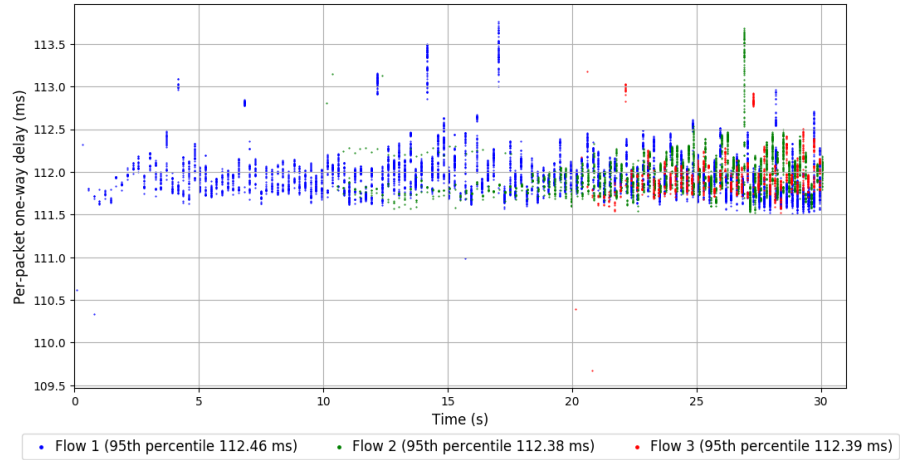
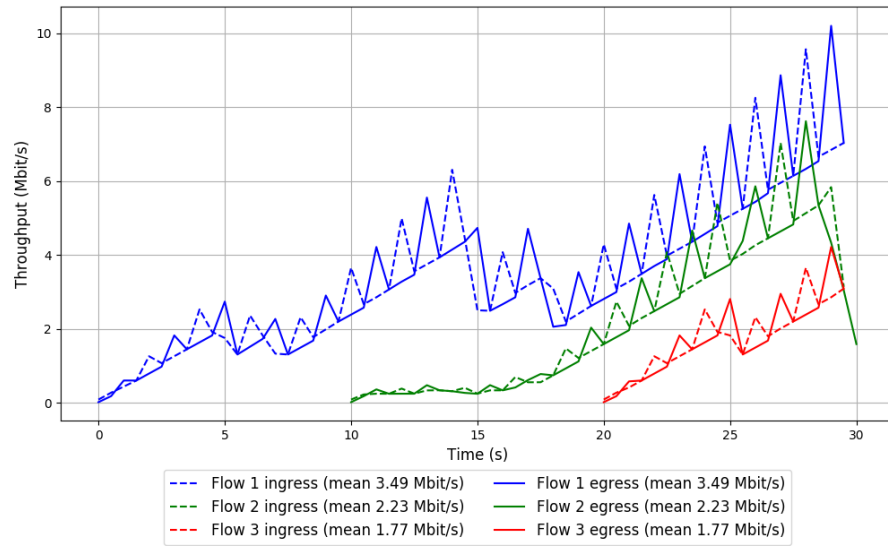
Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 112.385 ms

Loss rate: 0.00%



# Run 9: Report of LEDBAT — Data Link

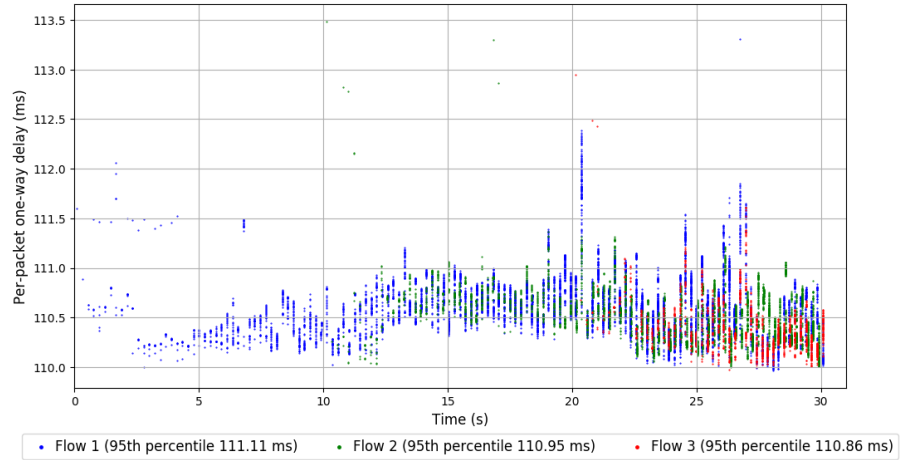
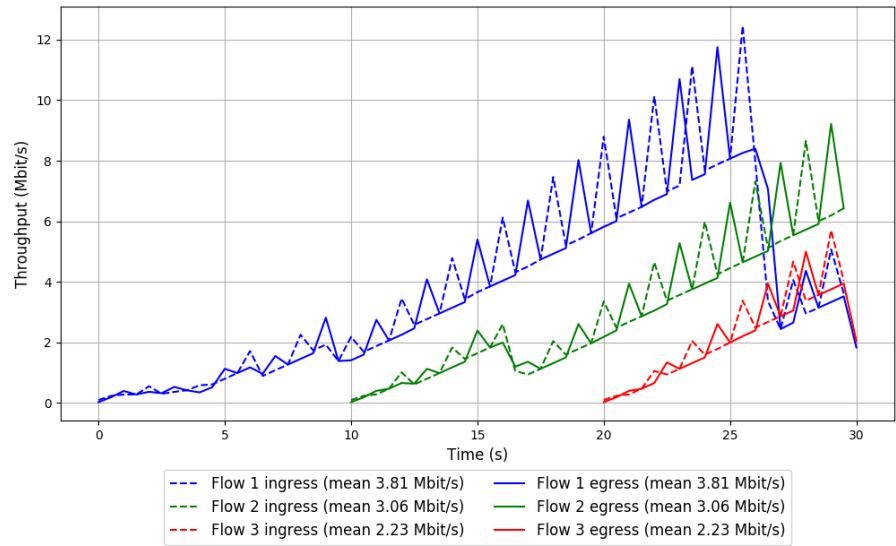


```
Run 10: Statistics of LEDBAT

Start at: 2017-12-01 00:29:06
End at: 2017-12-01 00:29:36

# Below is generated by plot.py at 2017-12-01 01:32:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.57 Mbit/s
95th percentile per-packet one-way delay: 111.029 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 111.115 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 110.947 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 110.865 ms
Loss rate: 0.00%
```

# Run 10: Report of LEDBAT — Data Link

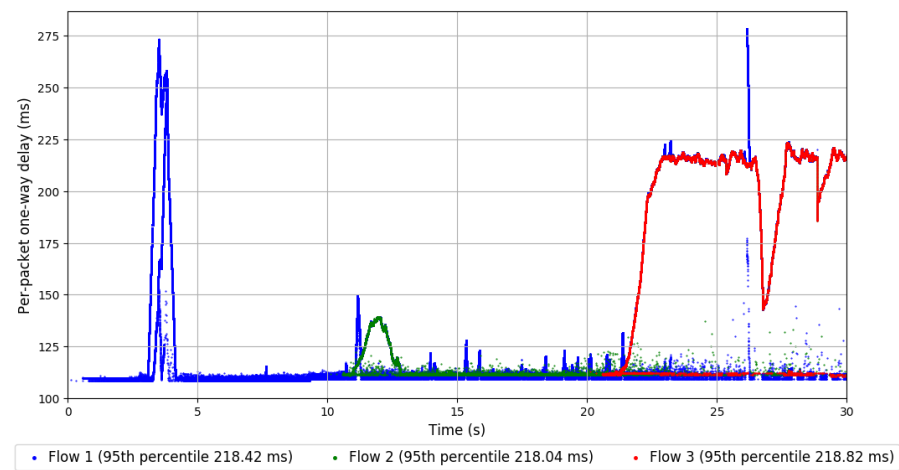
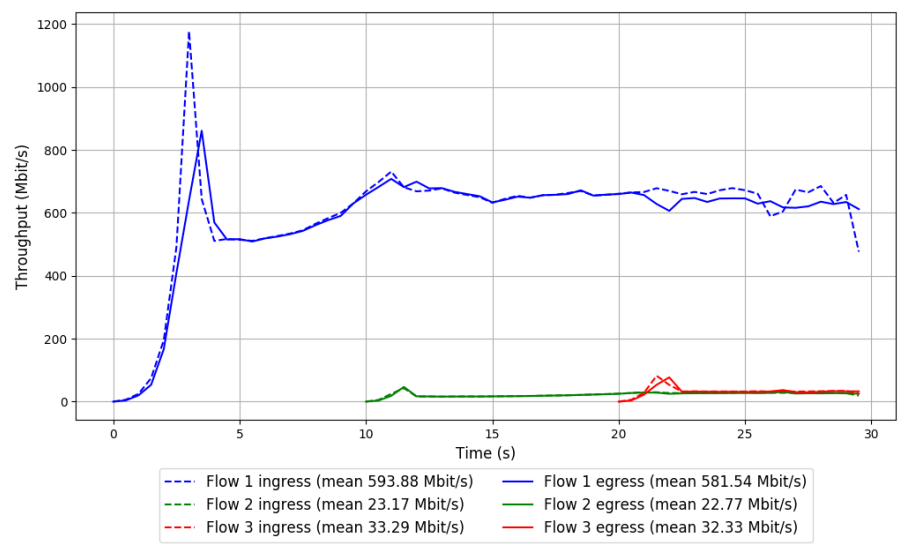


```
Run 1: Statistics of PCC

Start at: 2017-11-30 22:18:48
End at: 2017-11-30 22:19:18

# Below is generated by plot.py at 2017-12-01 01:39:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 607.32 Mbit/s
95th percentile per-packet one-way delay: 218.425 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 581.54 Mbit/s
95th percentile per-packet one-way delay: 218.423 ms
Loss rate: 2.03%
-- Flow 2:
Average throughput: 22.77 Mbit/s
95th percentile per-packet one-way delay: 218.045 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 32.33 Mbit/s
95th percentile per-packet one-way delay: 218.824 ms
Loss rate: 2.78%
```

Run 1: Report of PCC — Data Link

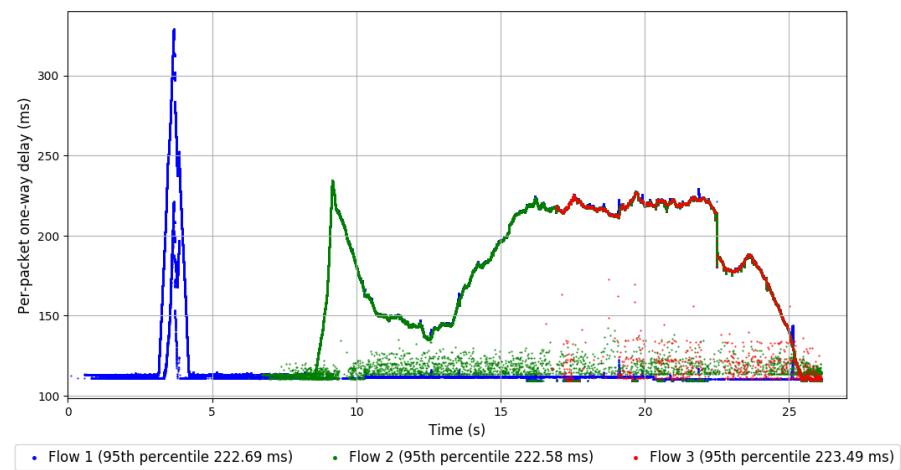
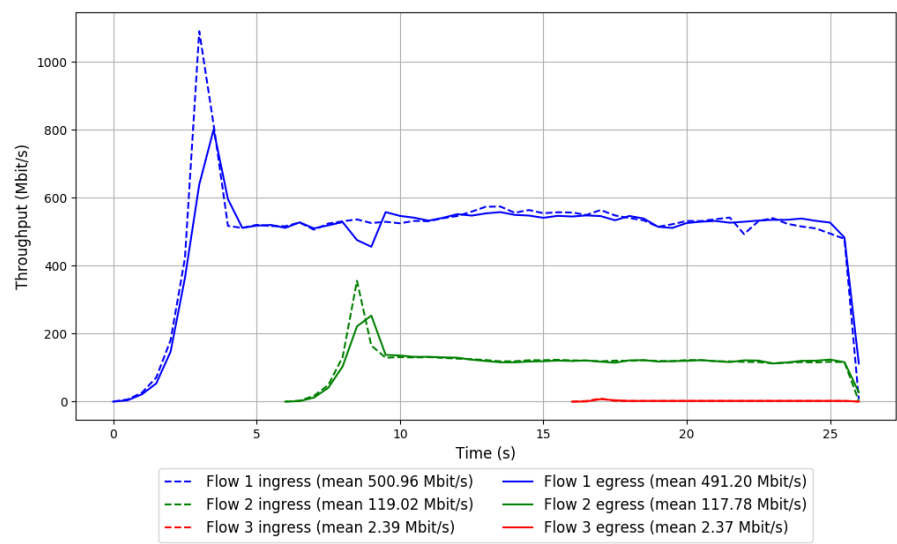


```
Run 2: Statistics of PCC

Start at: 2017-11-30 22:32:14
End at: 2017-11-30 22:32:44

# Below is generated by plot.py at 2017-12-01 01:39:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 581.96 Mbit/s
95th percentile per-packet one-way delay: 222.676 ms
Loss rate: 1.82%
-- Flow 1:
Average throughput: 491.20 Mbit/s
95th percentile per-packet one-way delay: 222.689 ms
Loss rate: 1.96%
-- Flow 2:
Average throughput: 117.78 Mbit/s
95th percentile per-packet one-way delay: 222.584 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 223.493 ms
Loss rate: 1.12%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-30 22:45:41

End at: 2017-11-30 22:46:11

# Below is generated by plot.py at 2017-12-01 01:39:57

# Datalink statistics

-- Total of 3 flows:

Average throughput: 603.27 Mbit/s

95th percentile per-packet one-way delay: 213.783 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 556.72 Mbit/s

95th percentile per-packet one-way delay: 213.780 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 67.88 Mbit/s

95th percentile per-packet one-way delay: 213.910 ms

Loss rate: 0.57%

-- Flow 3:

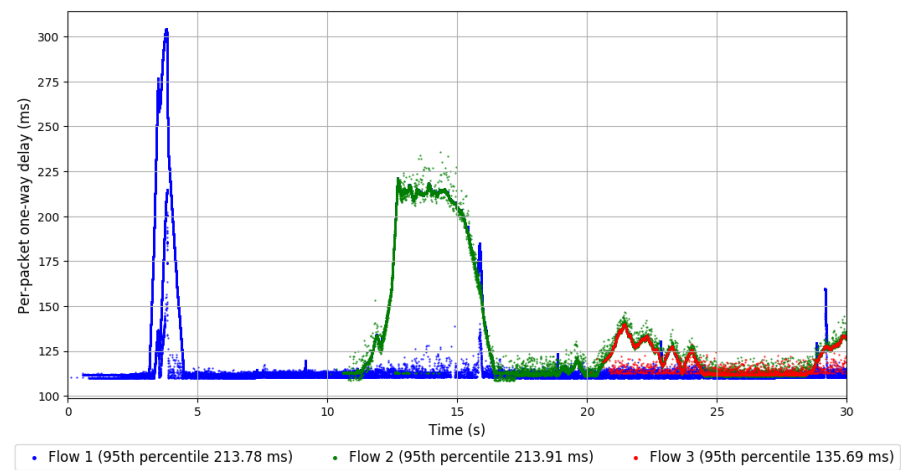
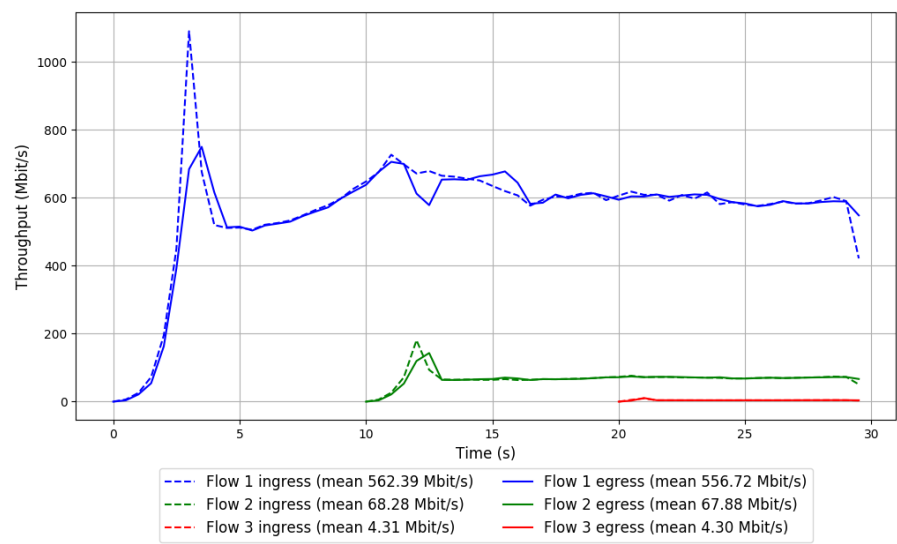
Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 135.690 ms

Loss rate: 0.20%



Run 3: Report of PCC — Data Link

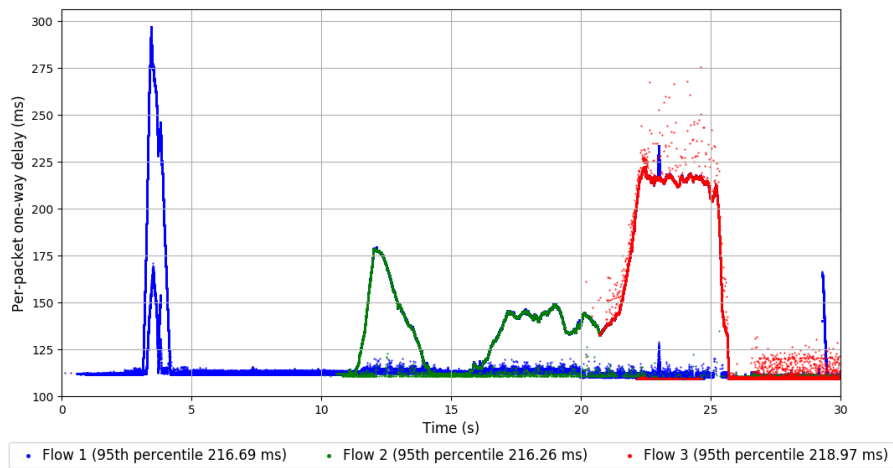
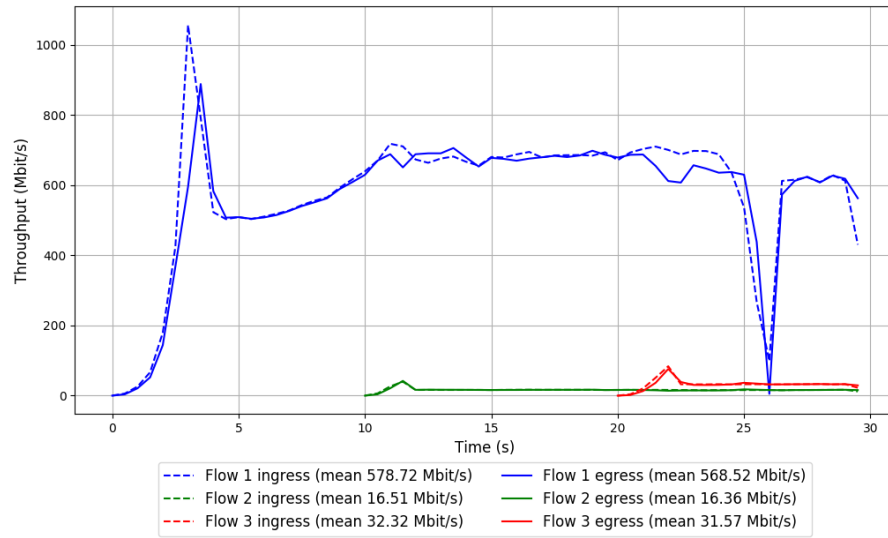


```
Run 4: Statistics of PCC

Start at: 2017-11-30 22:59:18
End at: 2017-11-30 22:59:48

# Below is generated by plot.py at 2017-12-01 01:40:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 589.72 Mbit/s
95th percentile per-packet one-way delay: 216.741 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 568.52 Mbit/s
95th percentile per-packet one-way delay: 216.688 ms
Loss rate: 1.77%
-- Flow 2:
Average throughput: 16.36 Mbit/s
95th percentile per-packet one-way delay: 216.264 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 31.57 Mbit/s
95th percentile per-packet one-way delay: 218.965 ms
Loss rate: 2.82%
```

#### Run 4: Report of PCC — Data Link

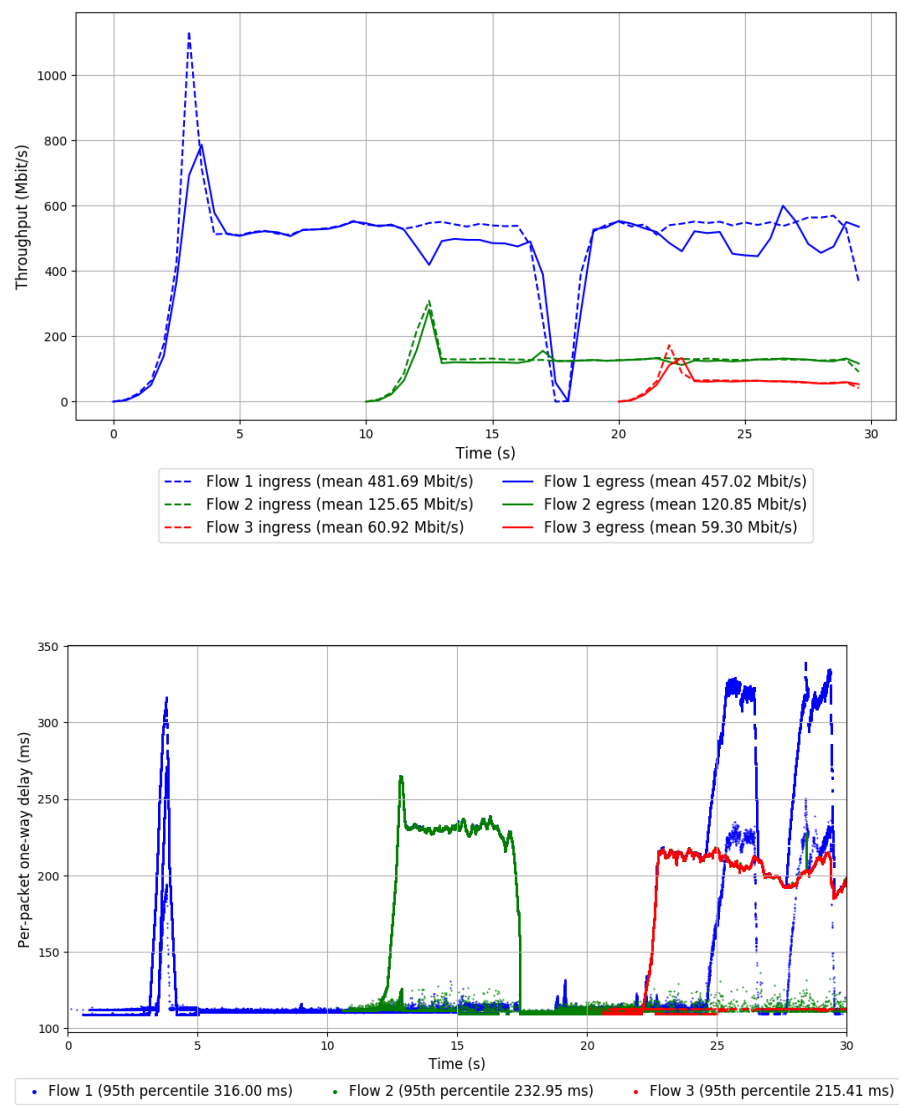


```
Run 5: Statistics of PCC

Start at: 2017-11-30 23:12:33
End at: 2017-11-30 23:13:03

# Below is generated by plot.py at 2017-12-01 01:40:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 556.87 Mbit/s
95th percentile per-packet one-way delay: 312.966 ms
Loss rate: 4.85%
-- Flow 1:
Average throughput: 457.02 Mbit/s
95th percentile per-packet one-way delay: 316.002 ms
Loss rate: 5.12%
-- Flow 2:
Average throughput: 120.85 Mbit/s
95th percentile per-packet one-way delay: 232.948 ms
Loss rate: 3.82%
-- Flow 3:
Average throughput: 59.30 Mbit/s
95th percentile per-packet one-way delay: 215.413 ms
Loss rate: 2.64%
```

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-30 23:25:57

End at: 2017-11-30 23:26:27

# Below is generated by plot.py at 2017-12-01 01:40:57

# Datalink statistics

-- Total of 3 flows:

Average throughput: 586.91 Mbit/s

95th percentile per-packet one-way delay: 247.956 ms

Loss rate: 3.53%

-- Flow 1:

Average throughput: 474.26 Mbit/s

95th percentile per-packet one-way delay: 260.201 ms

Loss rate: 3.40%

-- Flow 2:

Average throughput: 113.04 Mbit/s

95th percentile per-packet one-way delay: 217.521 ms

Loss rate: 3.02%

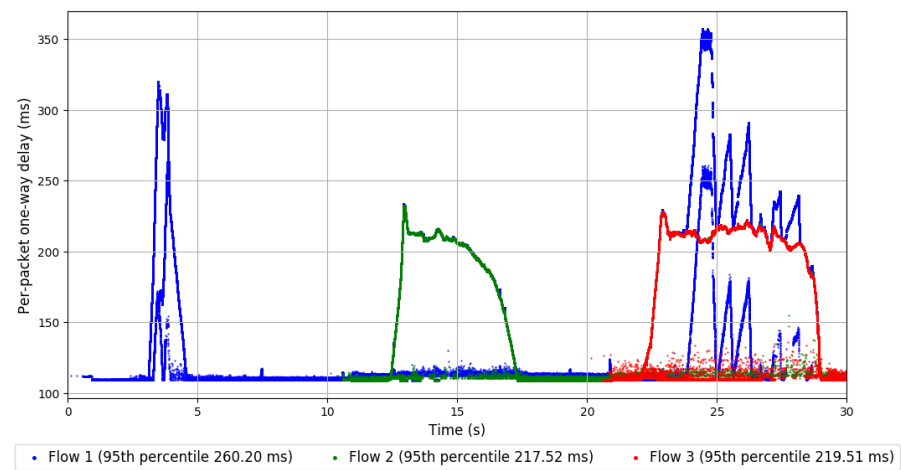
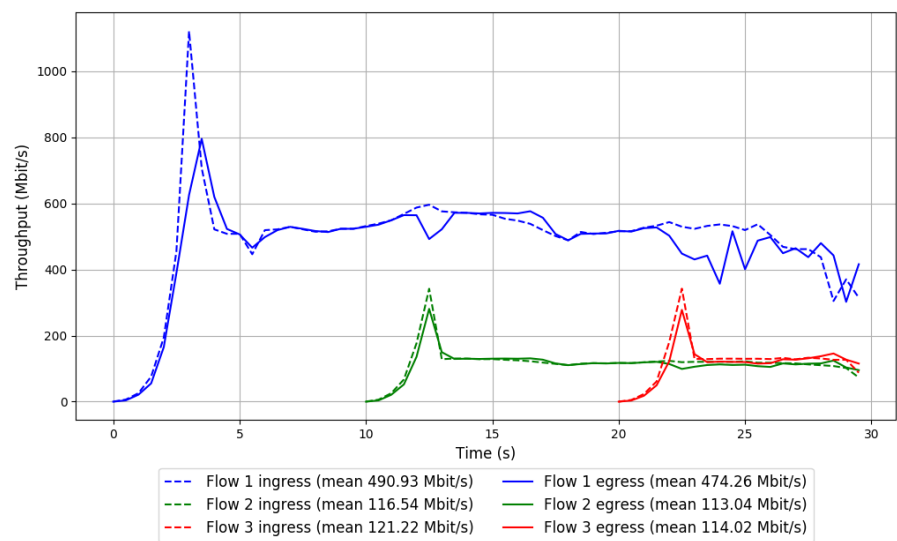
-- Flow 3:

Average throughput: 114.02 Mbit/s

95th percentile per-packet one-way delay: 219.509 ms

Loss rate: 6.08%

Run 6: Report of PCC — Data Link



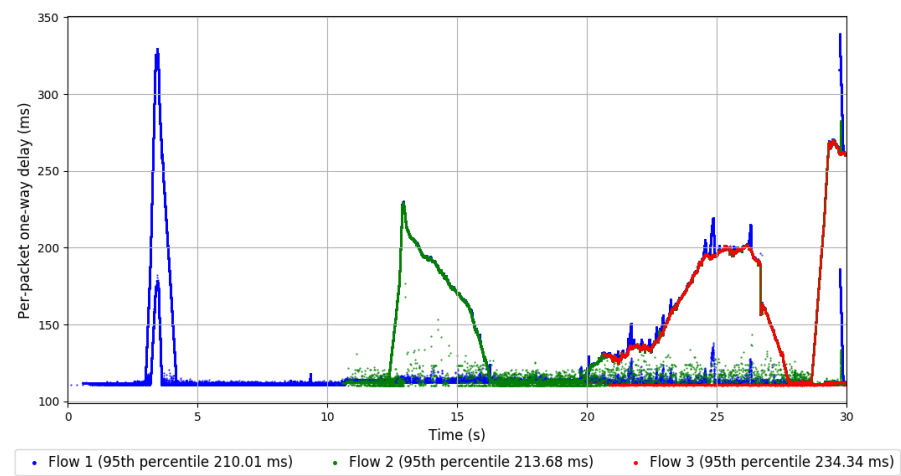
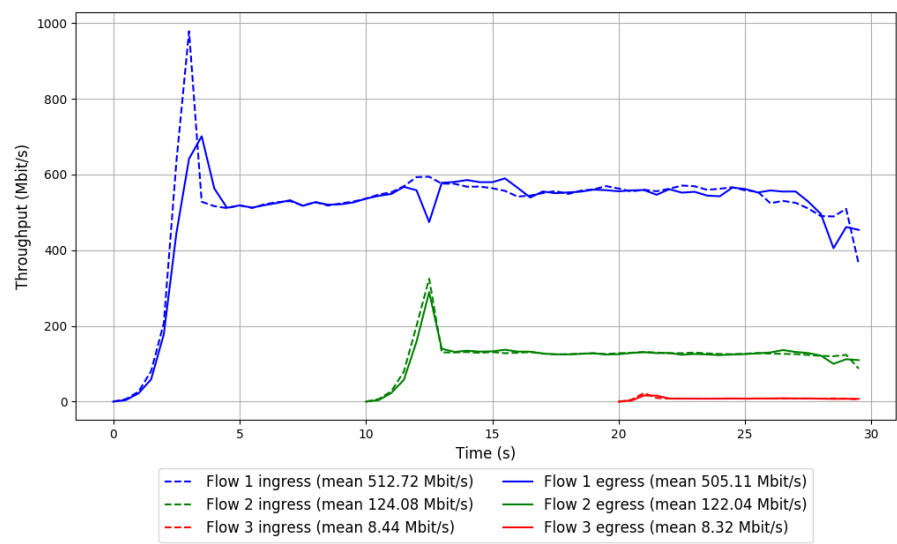
```
Run 7: Statistics of PCC

Start at: 2017-11-30 23:39:27
End at: 2017-11-30 23:39:57

# Below is generated by plot.py at 2017-12-01 01:40:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 588.94 Mbit/s
95th percentile per-packet one-way delay: 210.524 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 505.11 Mbit/s
95th percentile per-packet one-way delay: 210.007 ms
Loss rate: 1.48%
-- Flow 2:
Average throughput: 122.04 Mbit/s
95th percentile per-packet one-way delay: 213.675 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 8.32 Mbit/s
95th percentile per-packet one-way delay: 234.337 ms
Loss rate: 1.51%
```



Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-30 23:52:49

End at: 2017-11-30 23:53:19

# Below is generated by plot.py at 2017-12-01 01:42:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 616.82 Mbit/s

95th percentile per-packet one-way delay: 316.921 ms

Loss rate: 4.62%

-- Flow 1:

Average throughput: 503.97 Mbit/s

95th percentile per-packet one-way delay: 333.776 ms

Loss rate: 4.83%

-- Flow 2:

Average throughput: 113.43 Mbit/s

95th percentile per-packet one-way delay: 216.287 ms

Loss rate: 2.72%

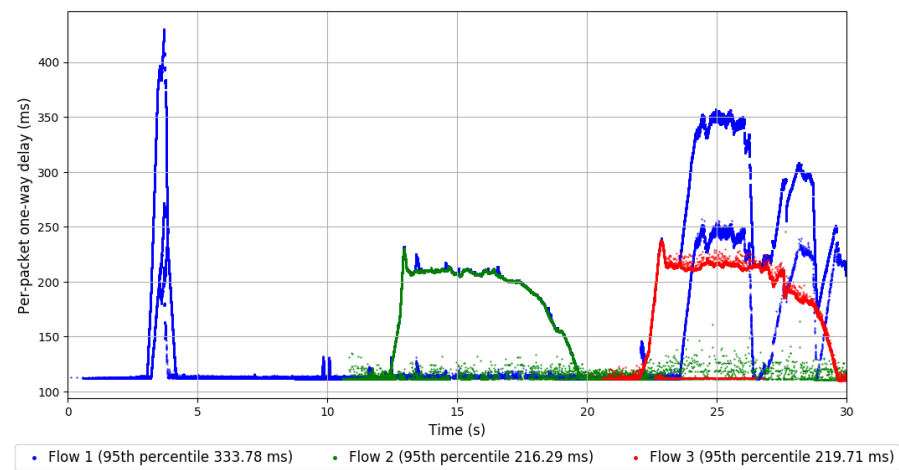
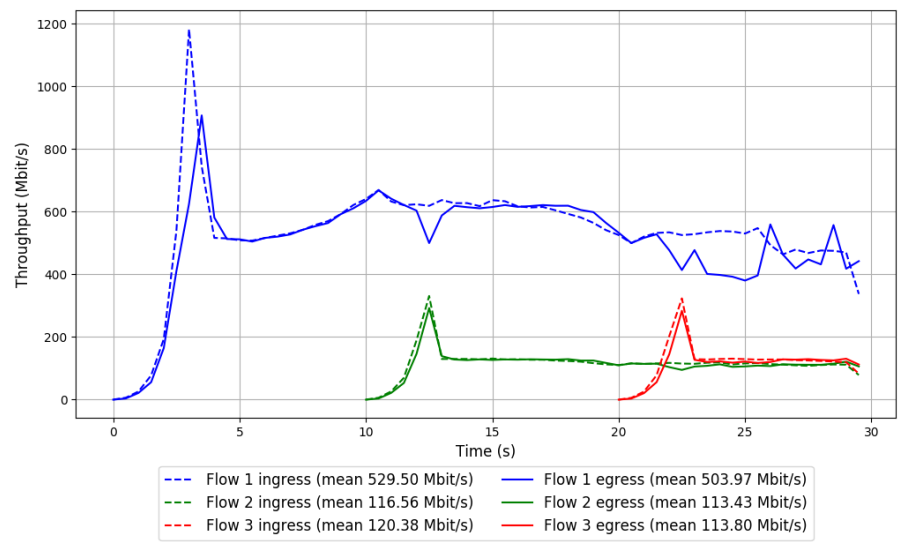
-- Flow 3:

Average throughput: 113.80 Mbit/s

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

Loss rate: 5.53%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-01 00:06:15

End at: 2017-12-01 00:06:45

# Below is generated by plot.py at 2017-12-01 01:48:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 597.42 Mbit/s

95th percentile per-packet one-way delay: 335.978 ms

Loss rate: 6.26%

-- Flow 1:

Average throughput: 497.82 Mbit/s

95th percentile per-packet one-way delay: 338.644 ms

Loss rate: 6.60%

-- Flow 2:

Average throughput: 120.01 Mbit/s

95th percentile per-packet one-way delay: 218.461 ms

Loss rate: 4.30%

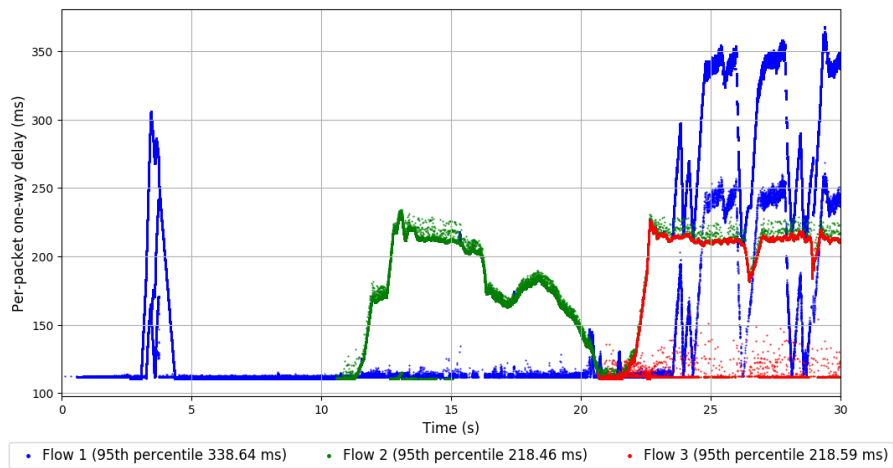
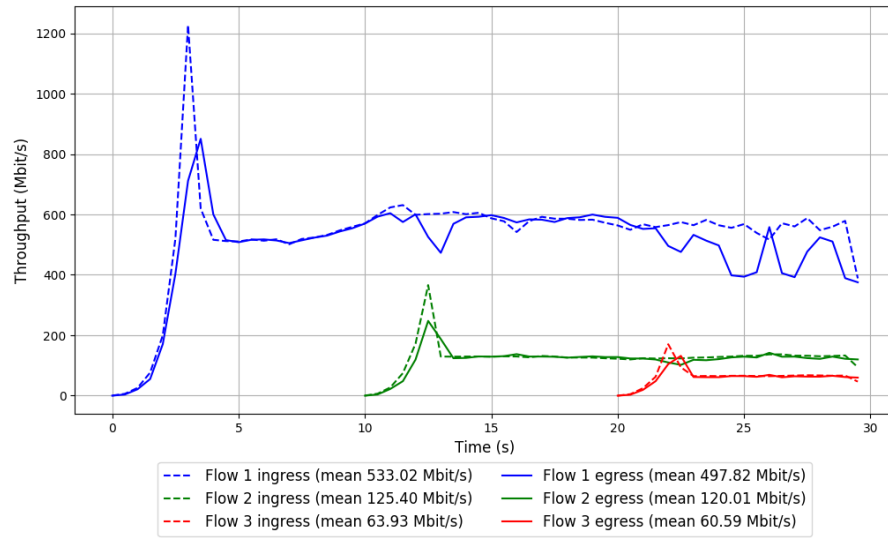
-- Flow 3:

Average throughput: 60.59 Mbit/s

95th percentile per-packet one-way delay: 218.587 ms

Loss rate: 5.43%

## Run 9: Report of PCC — Data Link

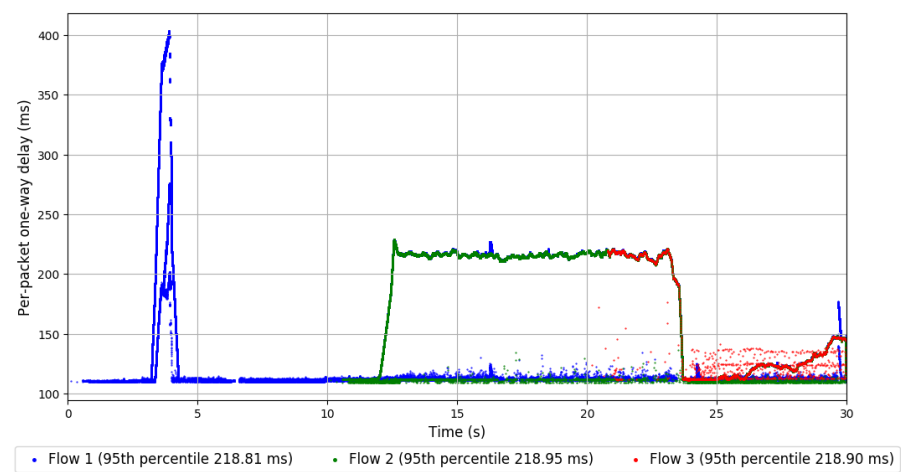
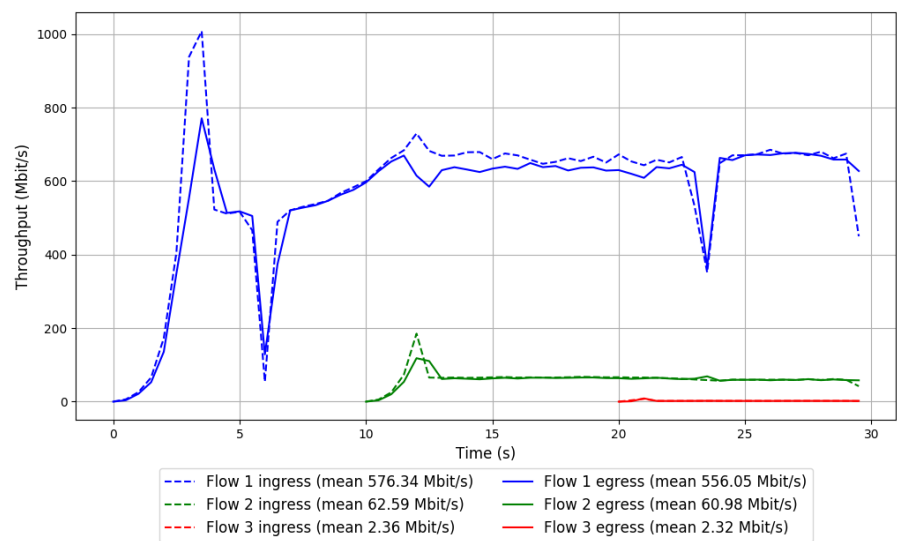


```
Run 10: Statistics of PCC

Start at: 2017-12-01 00:19:58
End at: 2017-12-01 00:20:28

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 597.33 Mbit/s
95th percentile per-packet one-way delay: 218.823 ms
Loss rate: 3.46%
-- Flow 1:
Average throughput: 556.05 Mbit/s
95th percentile per-packet one-way delay: 218.811 ms
Loss rate: 3.52%
-- Flow 2:
Average throughput: 60.98 Mbit/s
95th percentile per-packet one-way delay: 218.947 ms
Loss rate: 2.60%
-- Flow 3:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 218.896 ms
Loss rate: 1.97%
```

Run 10: Report of PCC — Data Link



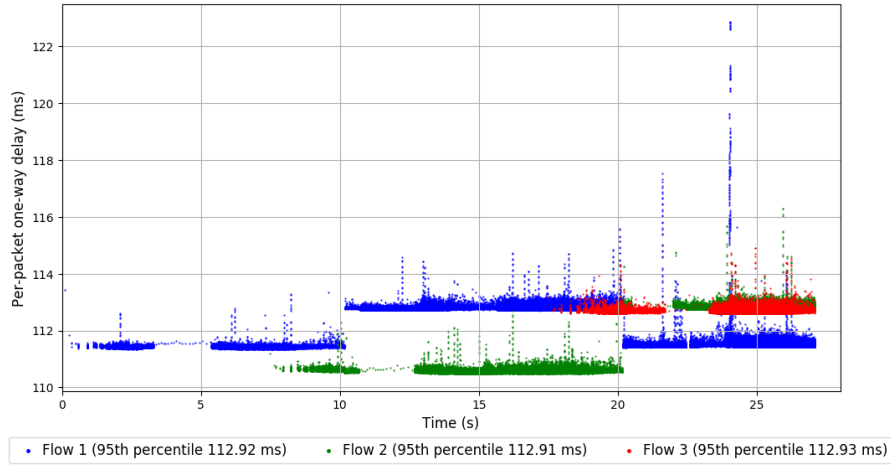
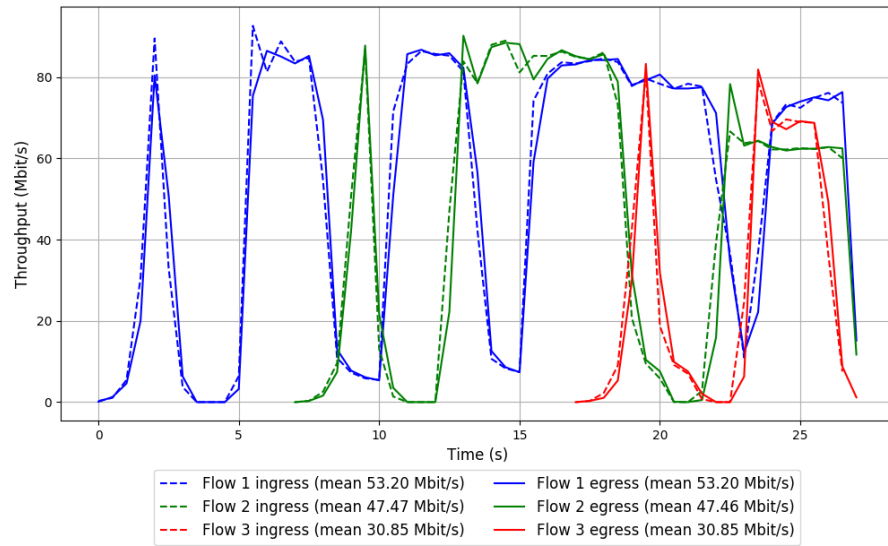
```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-30 22:26:55
End at: 2017-11-30 22:27:25

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 98.70 Mbit/s
95th percentile per-packet one-way delay: 112.916 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.20 Mbit/s
95th percentile per-packet one-way delay: 112.919 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.46 Mbit/s
95th percentile per-packet one-way delay: 112.908 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.85 Mbit/s
95th percentile per-packet one-way delay: 112.933 ms
Loss rate: 0.00%
```



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

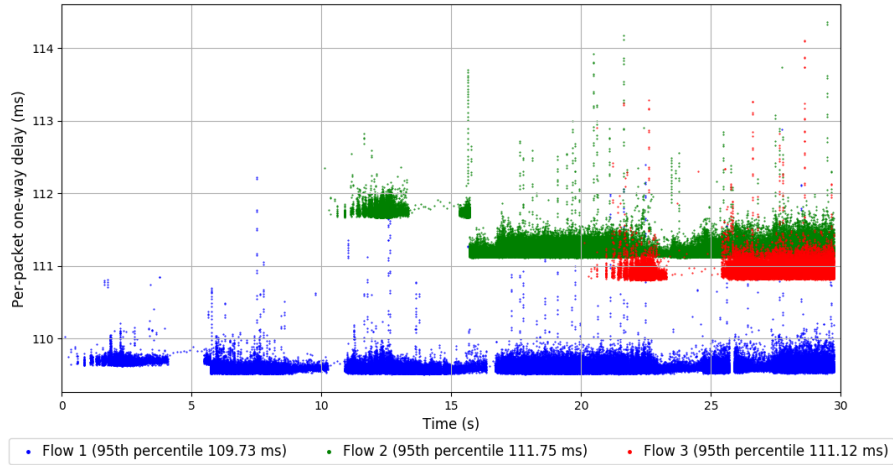
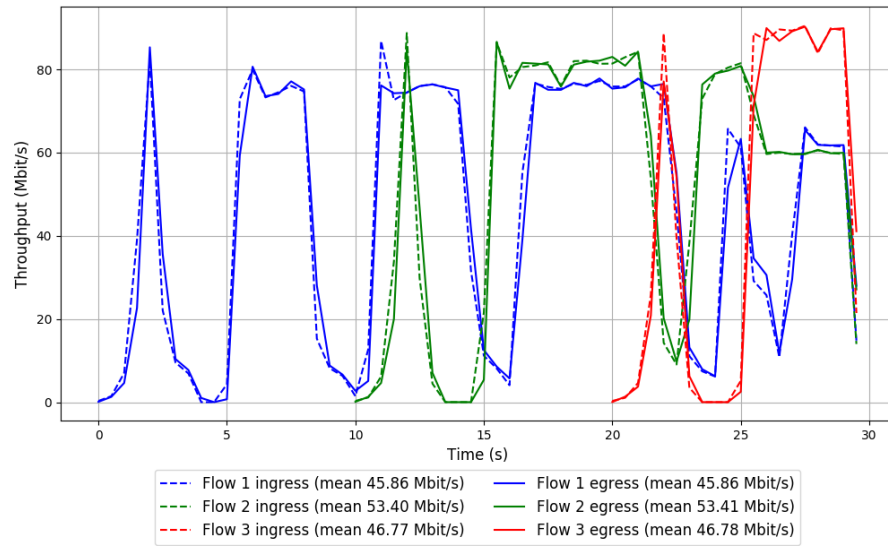


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-11-30 22:40:32
End at: 2017-11-30 22:41:02

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.38 Mbit/s
95th percentile per-packet one-way delay: 111.411 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.86 Mbit/s
95th percentile per-packet one-way delay: 109.730 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 53.41 Mbit/s
95th percentile per-packet one-way delay: 111.748 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 46.78 Mbit/s
95th percentile per-packet one-way delay: 111.118 ms
Loss rate: 0.00%
```

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

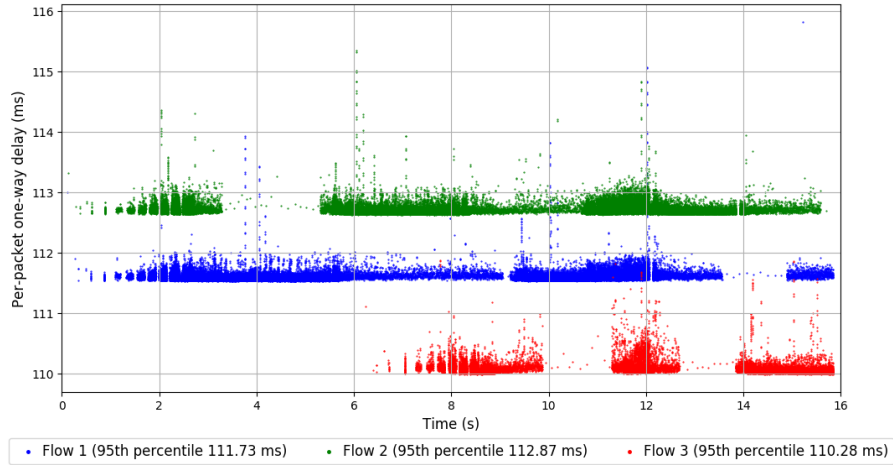
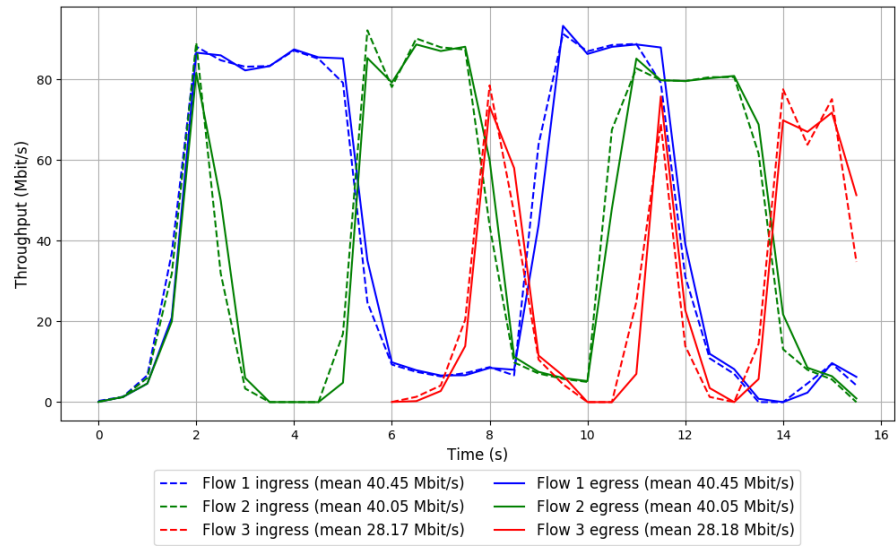


Run 3: Statistics of QUIC Cubic

Start at: 2017-11-30 22:53:54

End at: 2017-11-30 22:54:24

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



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-30 23:07:16

End at: 2017-11-30 23:07:46

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 73.42 Mbit/s

95th percentile per-packet one-way delay: 112.355 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.14 Mbit/s

95th percentile per-packet one-way delay: 110.419 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 10.93 Mbit/s

95th percentile per-packet one-way delay: 109.160 ms

Loss rate: 0.00%

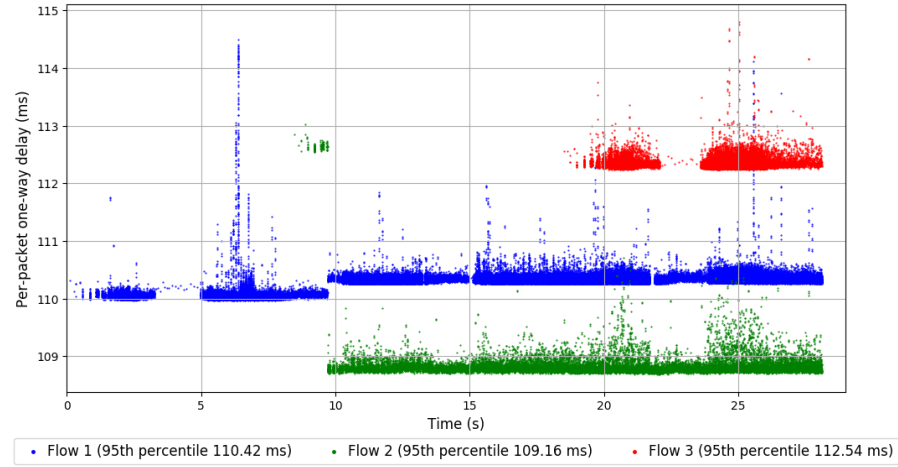
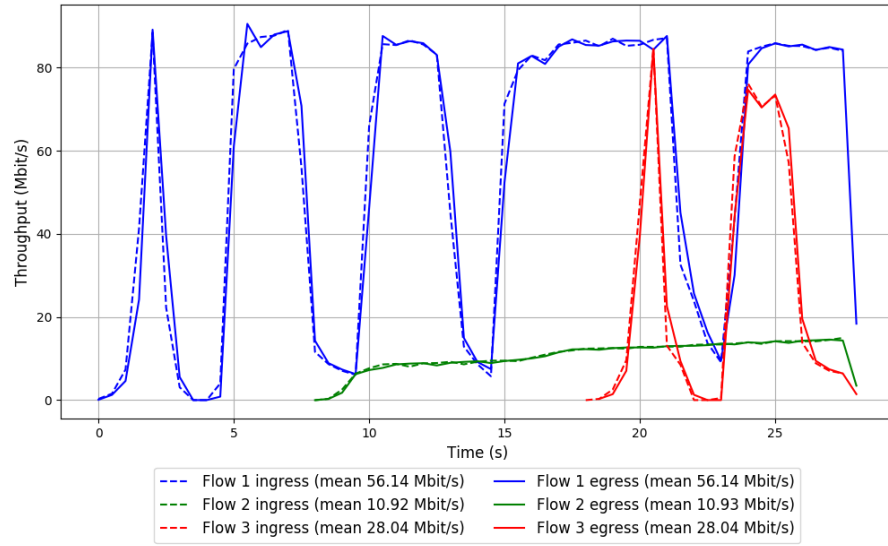
-- Flow 3:

Average throughput: 28.04 Mbit/s

95th percentile per-packet one-way delay: 112.541 ms

Loss rate: 0.00%

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



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-30 23:20:47

End at: 2017-11-30 23:21:17

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 91.04 Mbit/s

95th percentile per-packet one-way delay: 112.426 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.70 Mbit/s

95th percentile per-packet one-way delay: 111.662 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.59 Mbit/s

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

Loss rate: 0.00%

-- Flow 3:

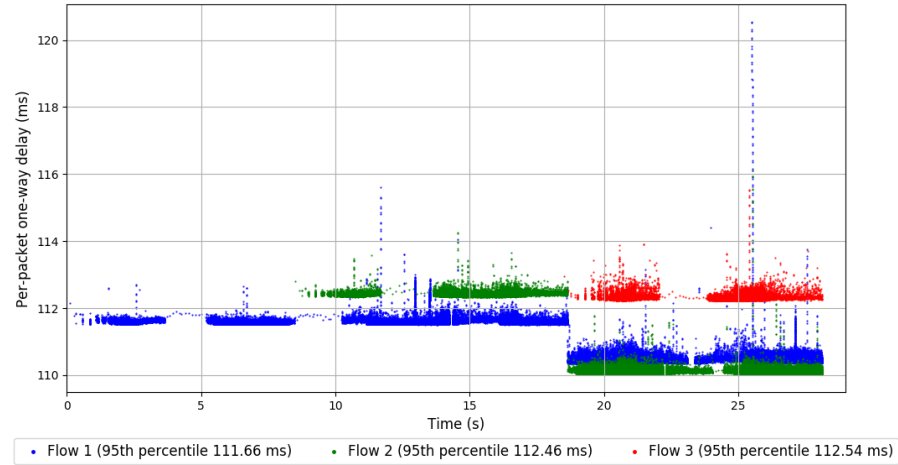
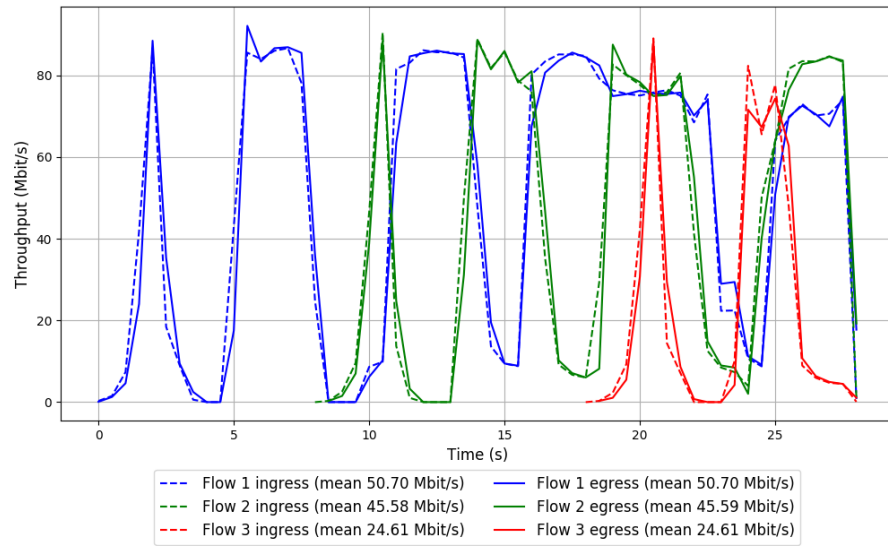
Average throughput: 24.61 Mbit/s

95th percentile per-packet one-way delay: 112.543 ms

Loss rate: 0.00%



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



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-30 23:34:01

End at: 2017-11-30 23:34:31

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 100.45 Mbit/s

95th percentile per-packet one-way delay: 112.461 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 55.43 Mbit/s

95th percentile per-packet one-way delay: 112.619 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.40 Mbit/s

95th percentile per-packet one-way delay: 110.696 ms

Loss rate: 0.00%

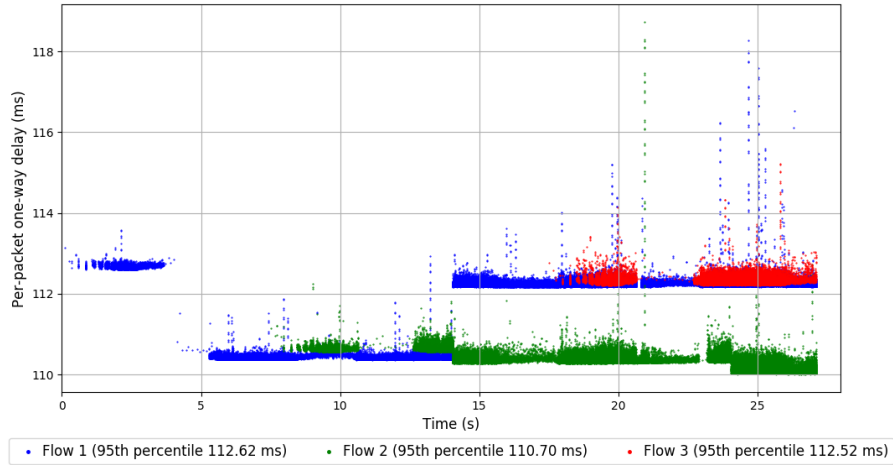
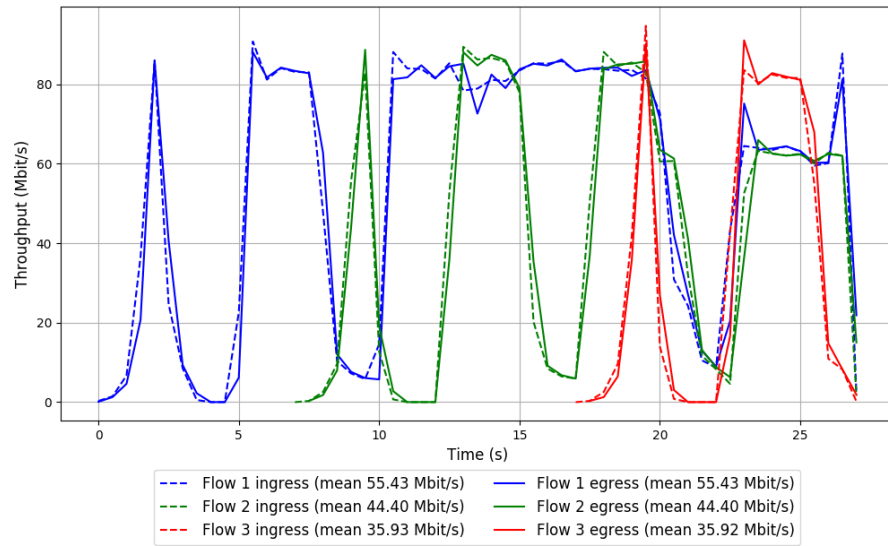
-- Flow 3:

Average throughput: 35.92 Mbit/s

95th percentile per-packet one-way delay: 112.518 ms

Loss rate: 0.00%

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



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-30 23:47:37

End at: 2017-11-30 23:48:07

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.11 Mbit/s

95th percentile per-packet one-way delay: 110.784 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.11 Mbit/s

95th percentile per-packet one-way delay: 110.475 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.92 Mbit/s

95th percentile per-packet one-way delay: 110.894 ms

Loss rate: 0.00%

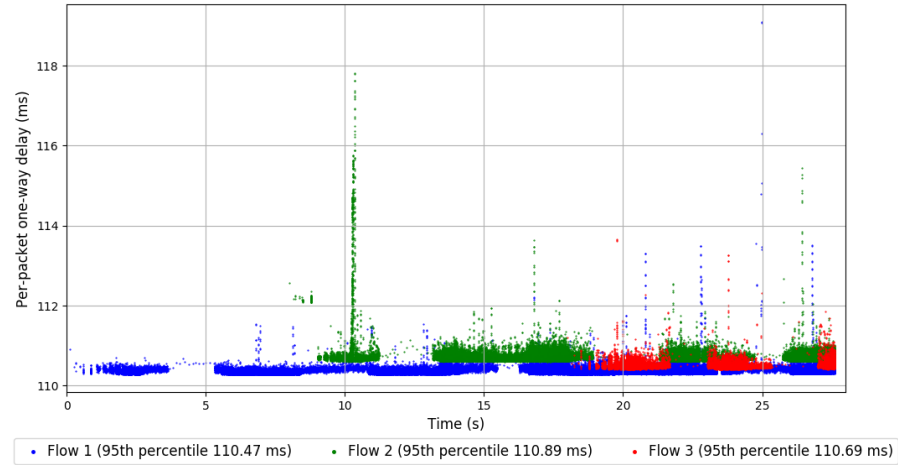
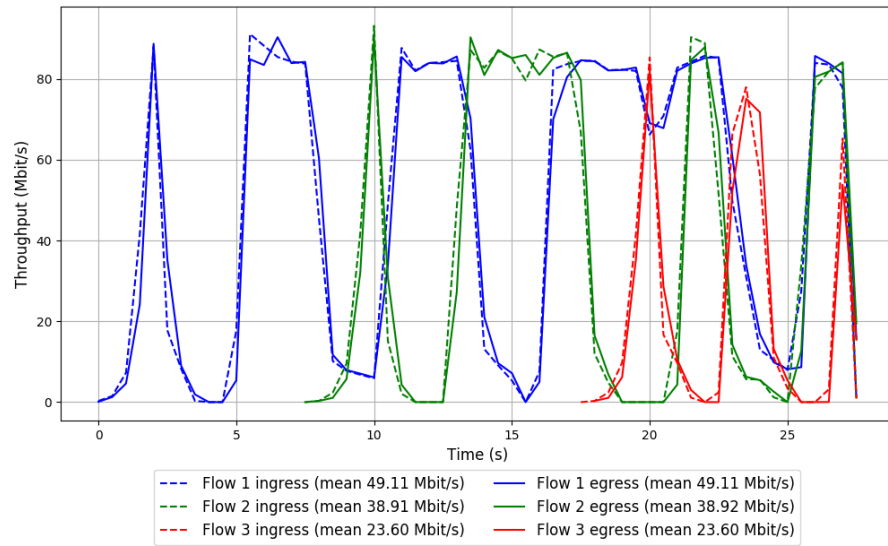
-- Flow 3:

Average throughput: 23.60 Mbit/s

95th percentile per-packet one-way delay: 110.692 ms

Loss rate: 0.00%

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



Run 8: Statistics of QUIC Cubic

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

End at: 2017-12-01 00:01:36

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 103.21 Mbit/s

95th percentile per-packet one-way delay: 112.763 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 58.53 Mbit/s

95th percentile per-packet one-way delay: 112.667 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.09 Mbit/s

95th percentile per-packet one-way delay: 112.841 ms

Loss rate: 0.02%

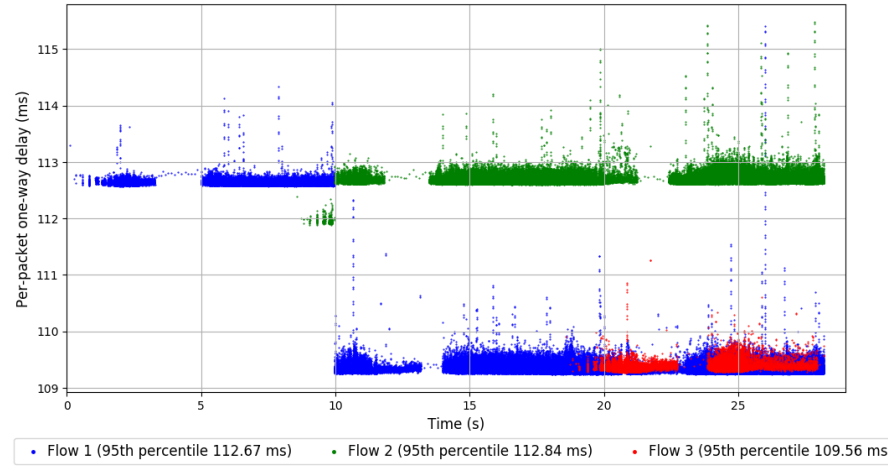
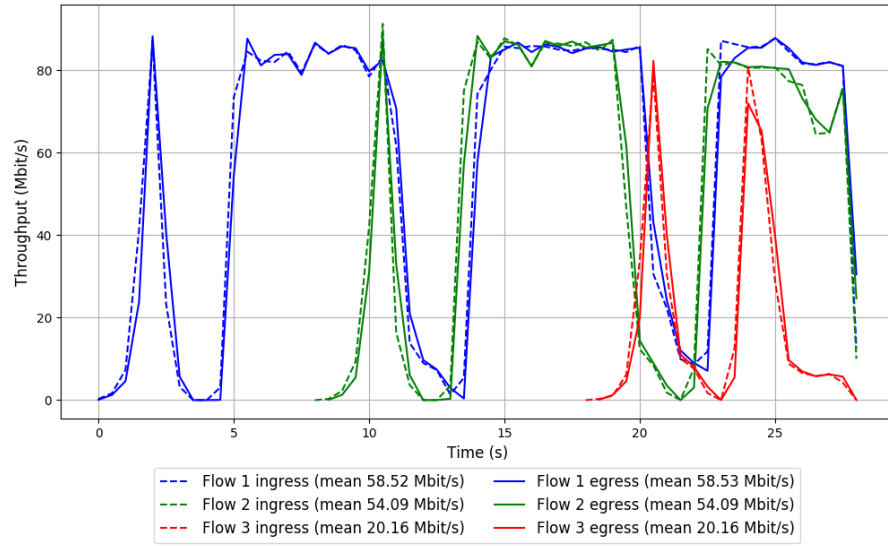
-- Flow 3:

Average throughput: 20.16 Mbit/s

95th percentile per-packet one-way delay: 109.561 ms

Loss rate: 0.00%

# Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-01 00:14:27

End at: 2017-12-01 00:14:57

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 99.65 Mbit/s

95th percentile per-packet one-way delay: 112.304 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 59.06 Mbit/s

95th percentile per-packet one-way delay: 112.211 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 40.54 Mbit/s

95th percentile per-packet one-way delay: 112.402 ms

Loss rate: 0.02%

-- Flow 3:

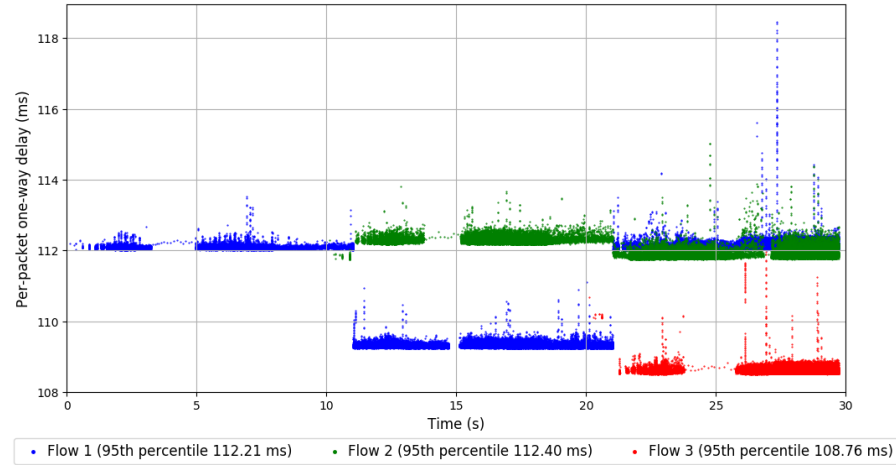
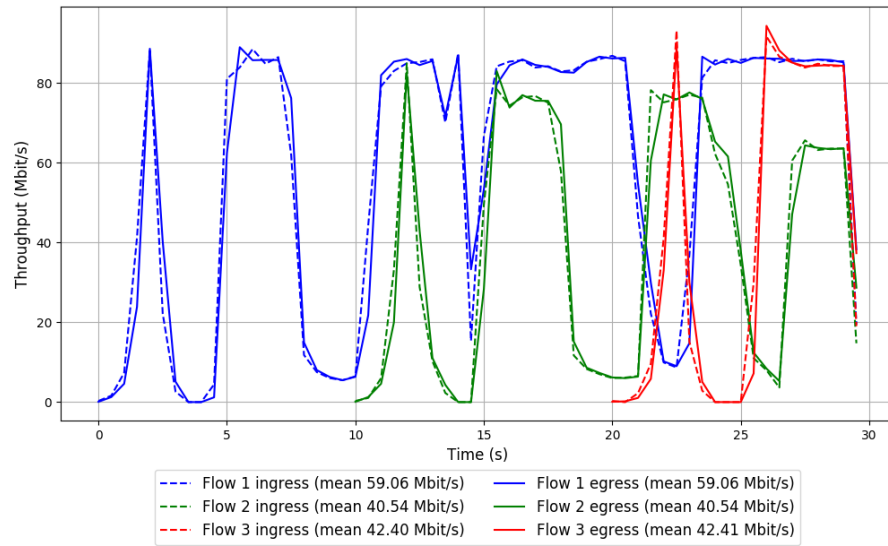
Average throughput: 42.41 Mbit/s

95th percentile per-packet one-way delay: 108.759 ms

Loss rate: 0.00%



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



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-01 00:28:13

End at: 2017-12-01 00:28:43

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 94.89 Mbit/s

95th percentile per-packet one-way delay: 112.666 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 53.54 Mbit/s

95th percentile per-packet one-way delay: 110.776 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.33 Mbit/s

95th percentile per-packet one-way delay: 111.071 ms

Loss rate: 0.00%

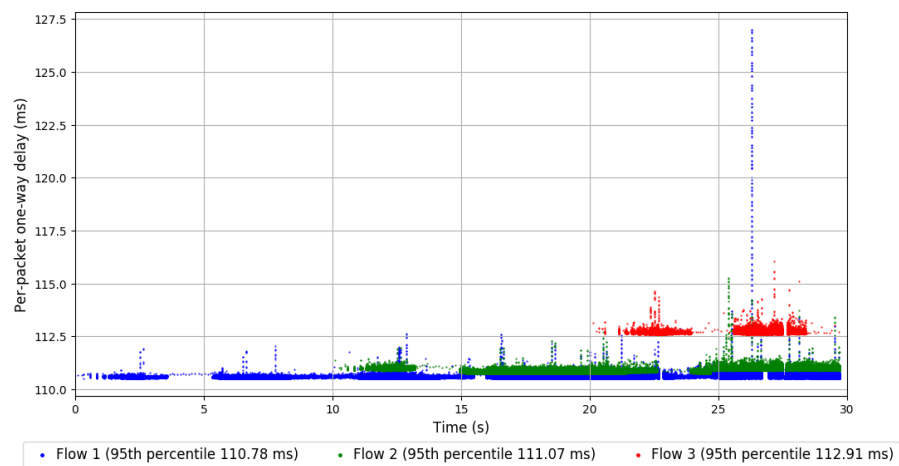
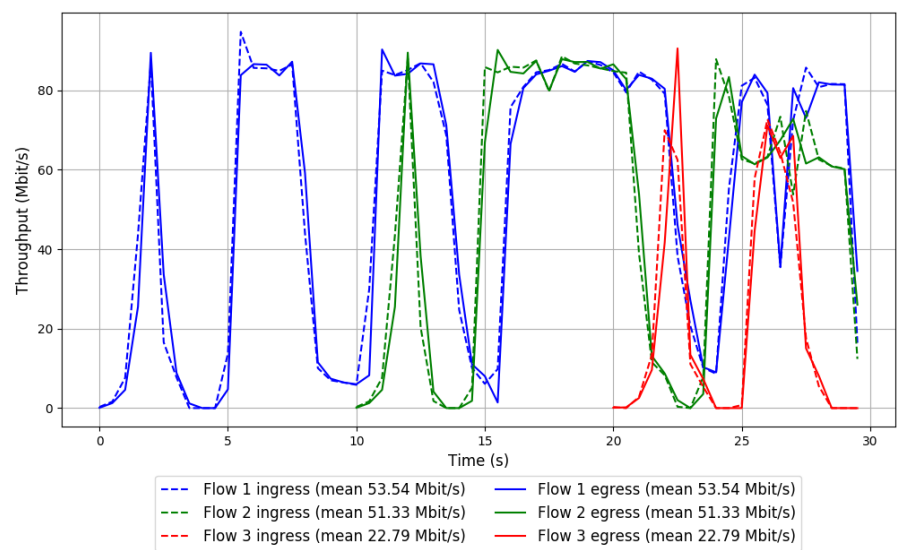
-- Flow 3:

Average throughput: 22.79 Mbit/s

95th percentile per-packet one-way delay: 112.905 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

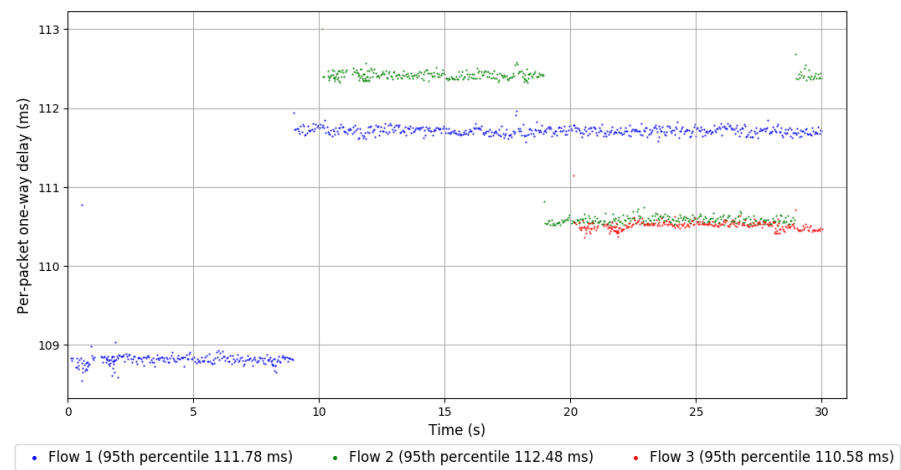
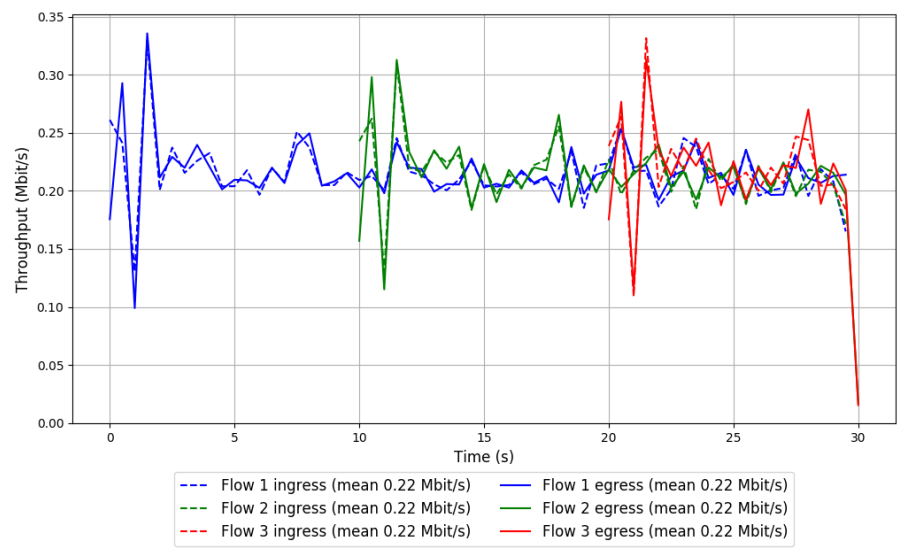


```
Run 1: Statistics of SCReAM

Start at: 2017-11-30 22:24:59
End at: 2017-11-30 22:25:29

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.440 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.778 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.478 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.579 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

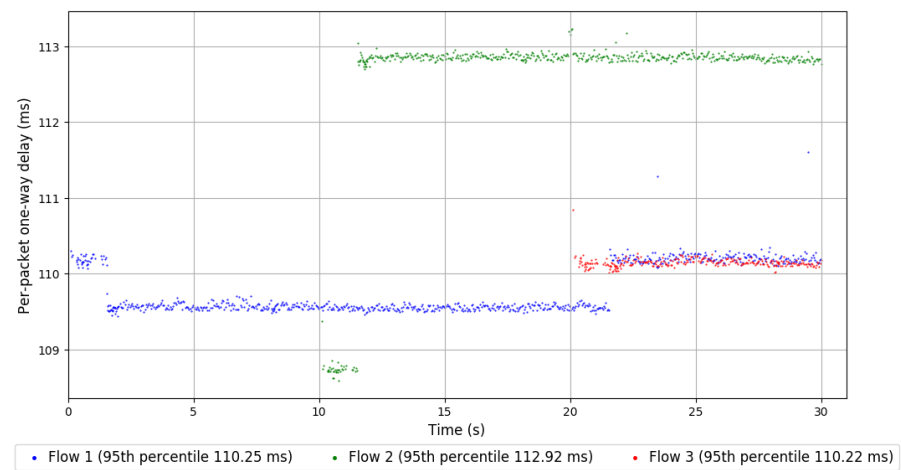
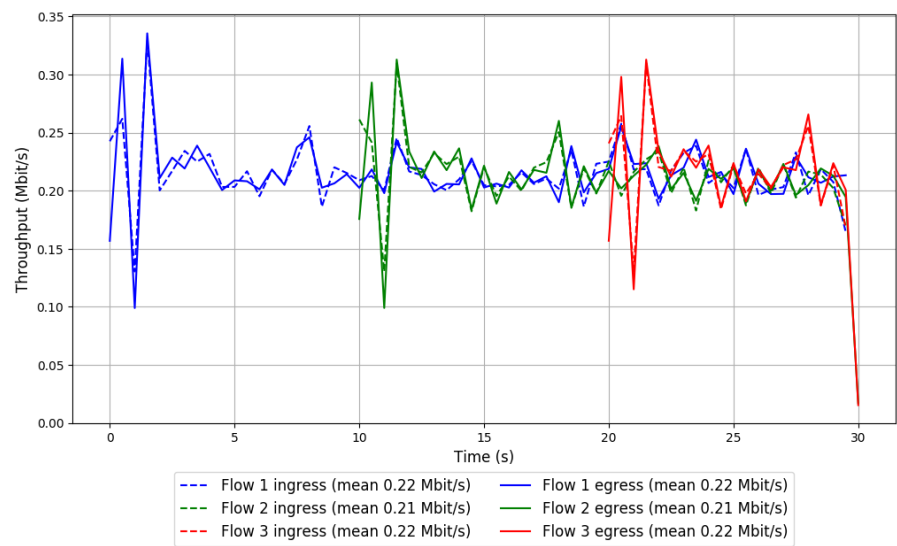


```
Run 2: Statistics of SCReAM

Start at: 2017-11-30 22:38:36
End at: 2017-11-30 22:39:06

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.895 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.253 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.923 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.223 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



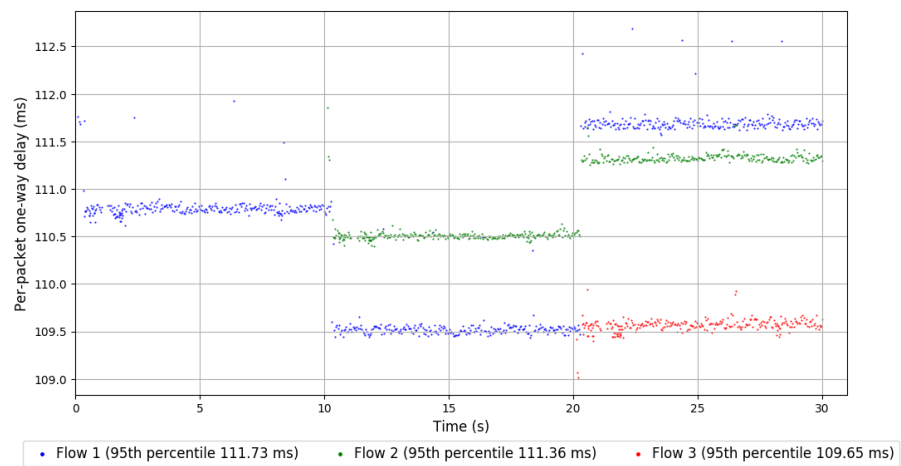
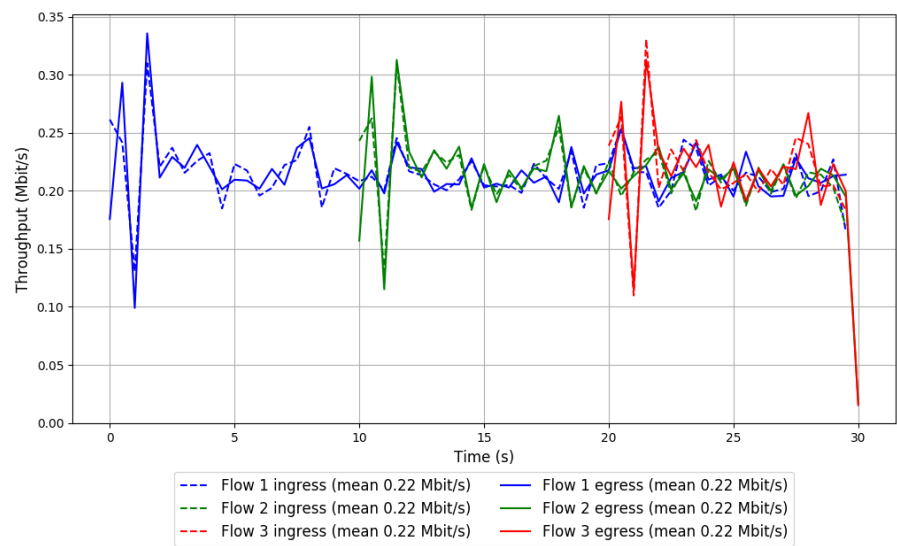
```
Run 3: Statistics of SCReAM

Start at: 2017-11-30 22:51:58
End at: 2017-11-30 22:52:28

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 111.710 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.730 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.365 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.651 ms
Loss rate: 0.00%
```



Run 3: Report of SReAM — Data Link

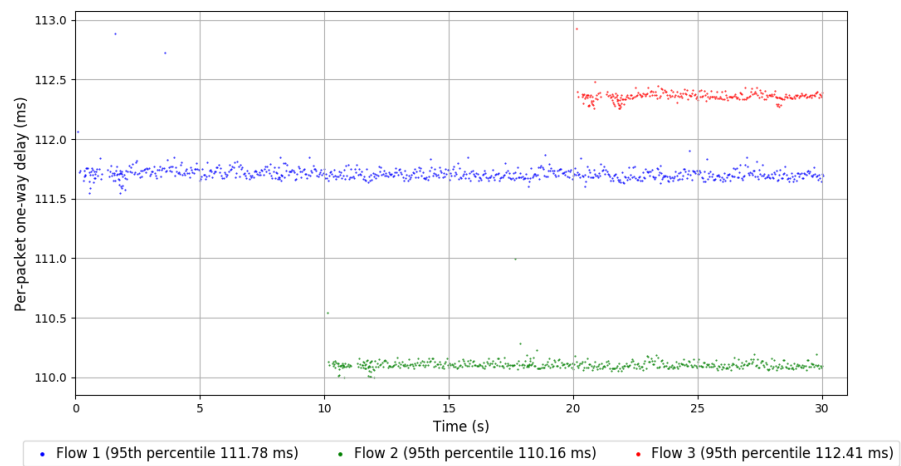
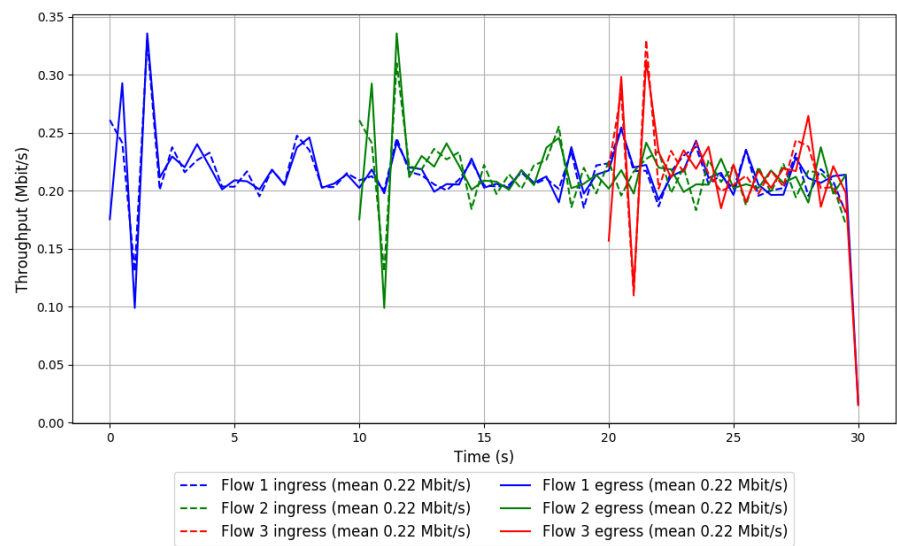


```
Run 4: Statistics of SCReAM

Start at: 2017-11-30 23:05:20
End at: 2017-11-30 23:05:50

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.373 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.780 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.155 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.409 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link

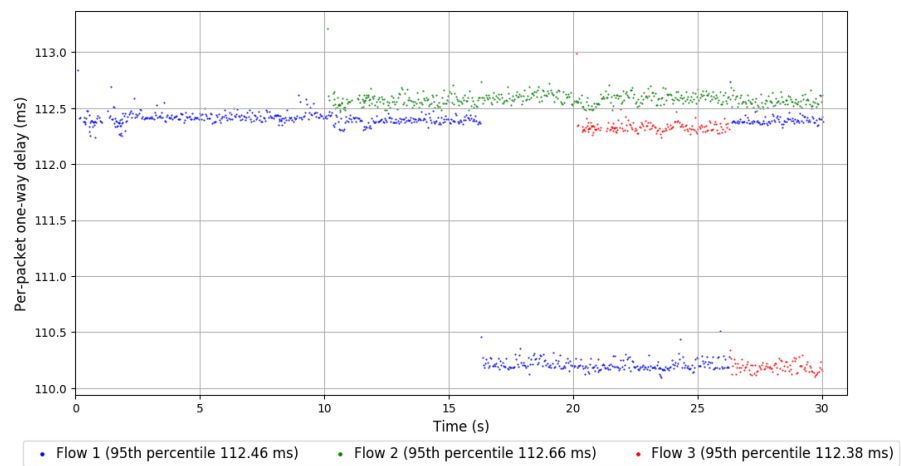
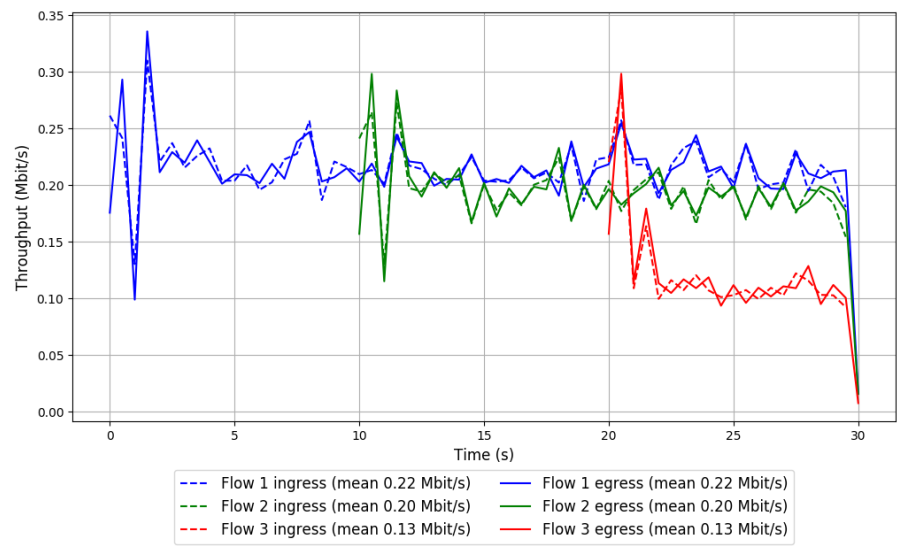


```
Run 5: Statistics of SCReAM

Start at: 2017-11-30 23:18:52
End at: 2017-11-30 23:19:22

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 112.629 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.463 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 112.661 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 112.380 ms
Loss rate: 0.00%
```

Run 5: Report of SCRaM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-30 23:32:05

End at: 2017-11-30 23:32:35

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.987 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.090 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.538 ms

Loss rate: 0.00%

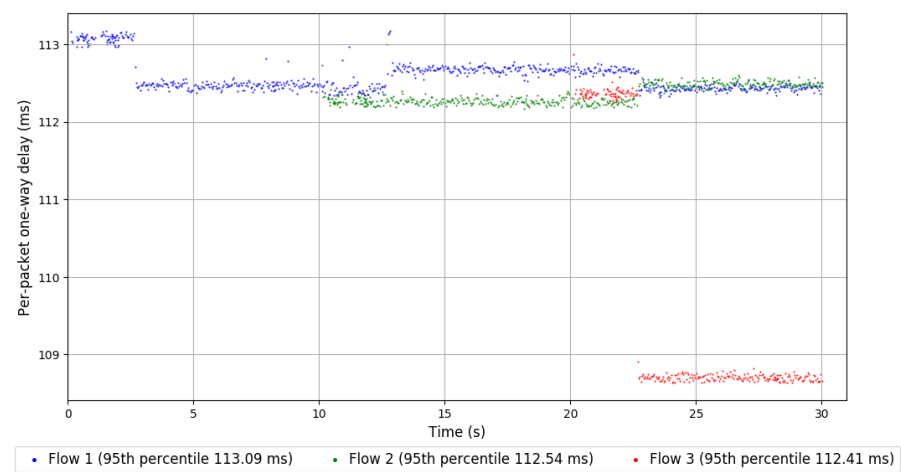
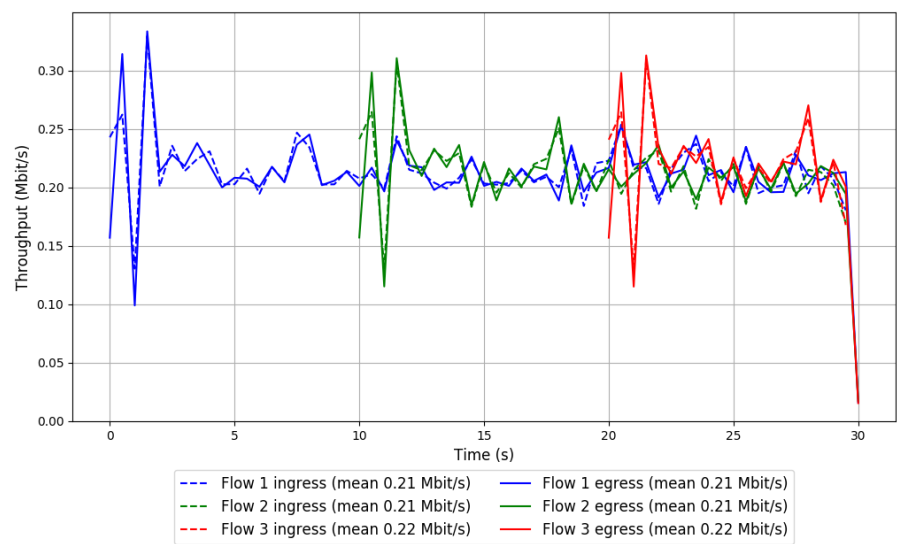
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.411 ms

Loss rate: 0.00%

Run 6: Report of SCReAM — Data Link



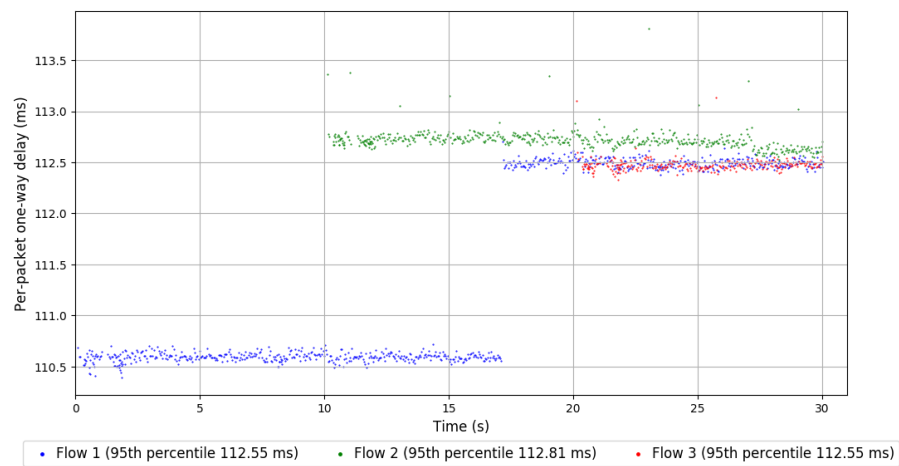
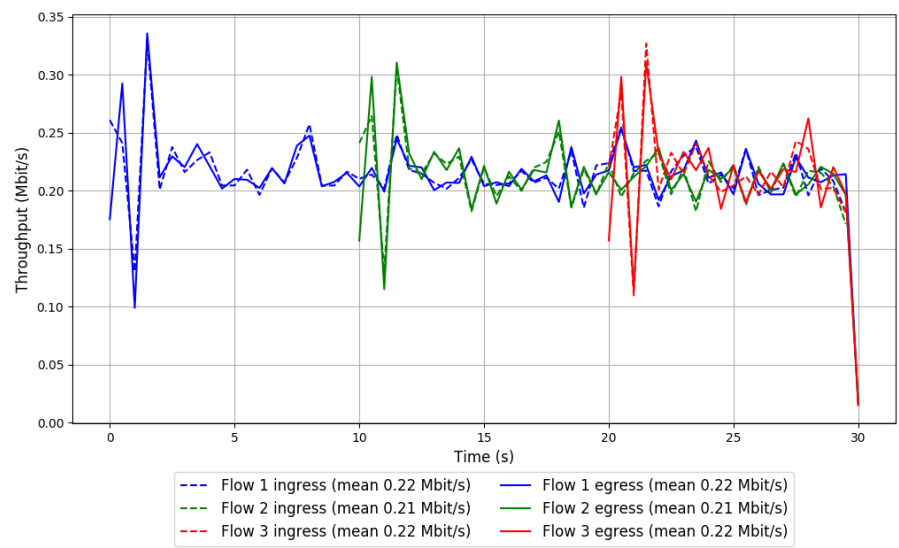
```
Run 7: Statistics of SCReAM

Start at: 2017-11-30 23:45:41
End at: 2017-11-30 23:46:11

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.772 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.546 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.806 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.545 ms
Loss rate: 0.00%
```



Run 7: Report of SCReAM — Data Link

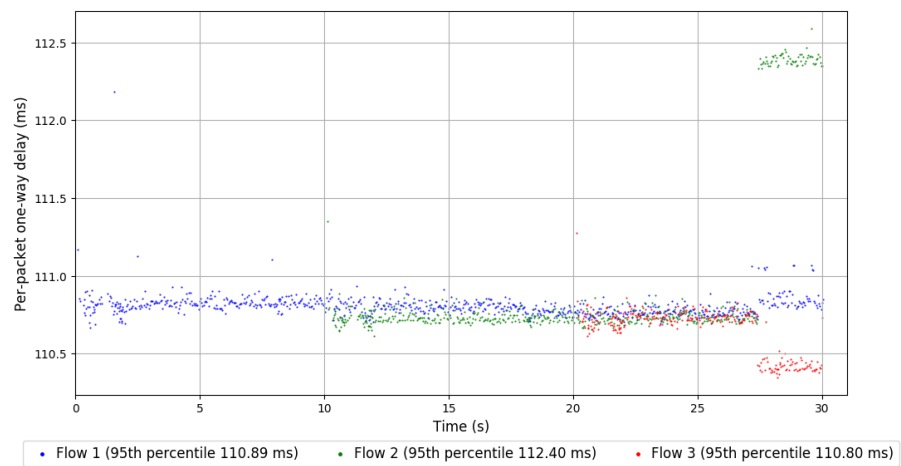
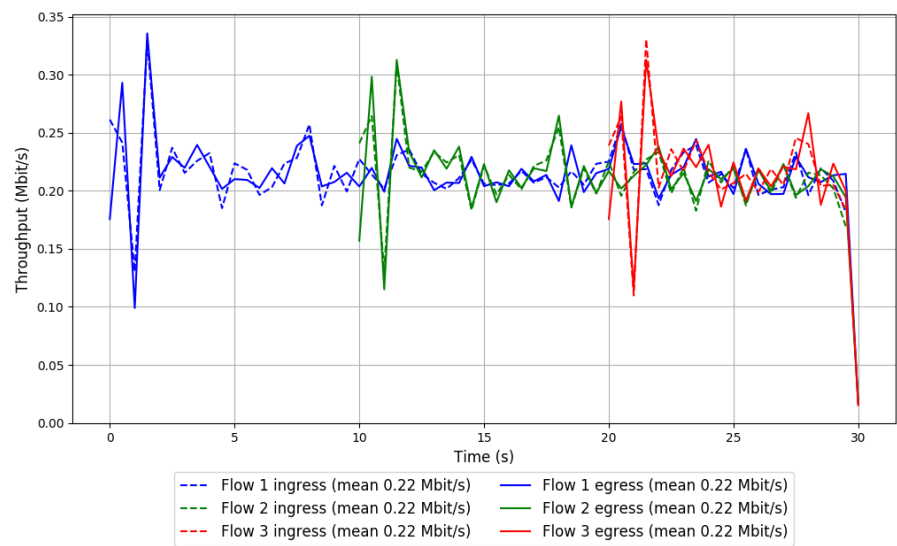


```
Run 8: Statistics of SCReAM

Start at: 2017-11-30 23:59:10
End at: 2017-11-30 23:59:40

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 111.043 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.888 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.399 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.801 ms
Loss rate: 0.00%
```

Run 8: Report of SReAM — Data Link

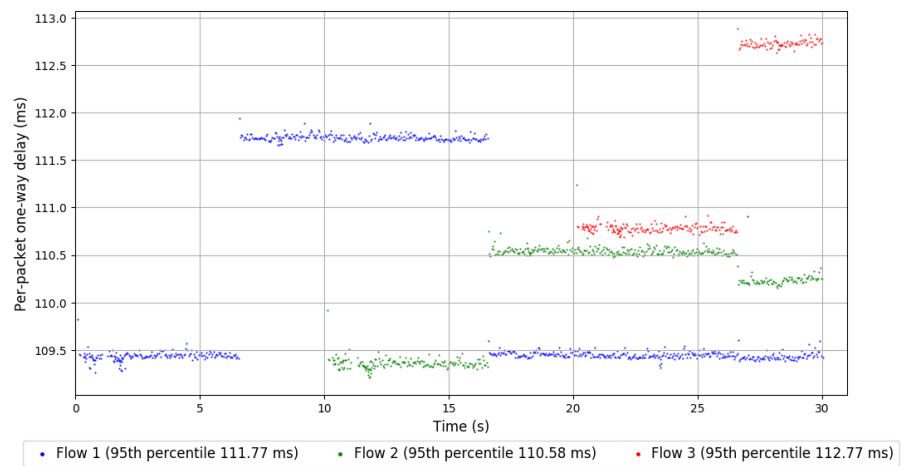
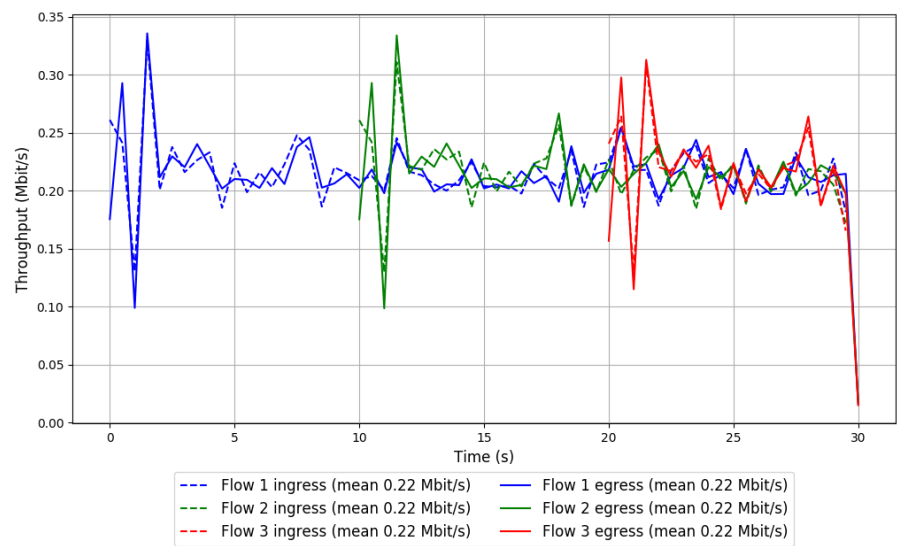


```
Run 9: Statistics of SReAM

Start at: 2017-12-01 00:12:31
End at: 2017-12-01 00:13:01

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.693 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.767 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.582 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.769 ms
Loss rate: 0.00%
```

Run 9: Report of SReAM — Data Link

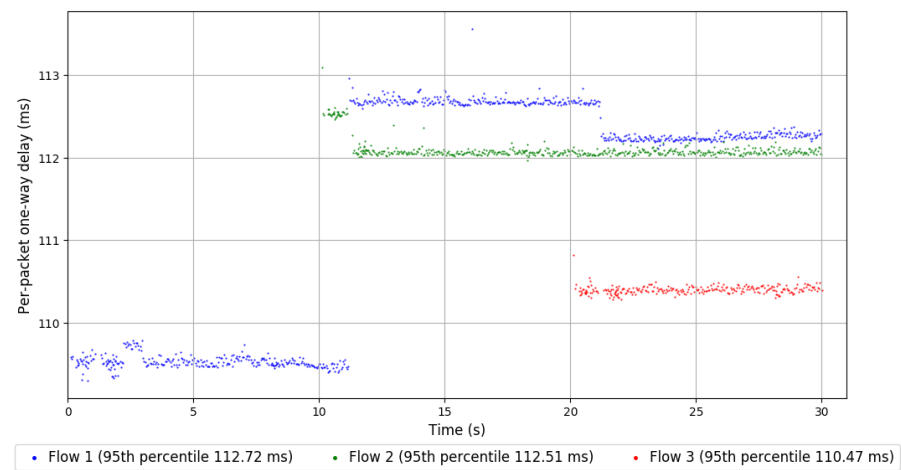
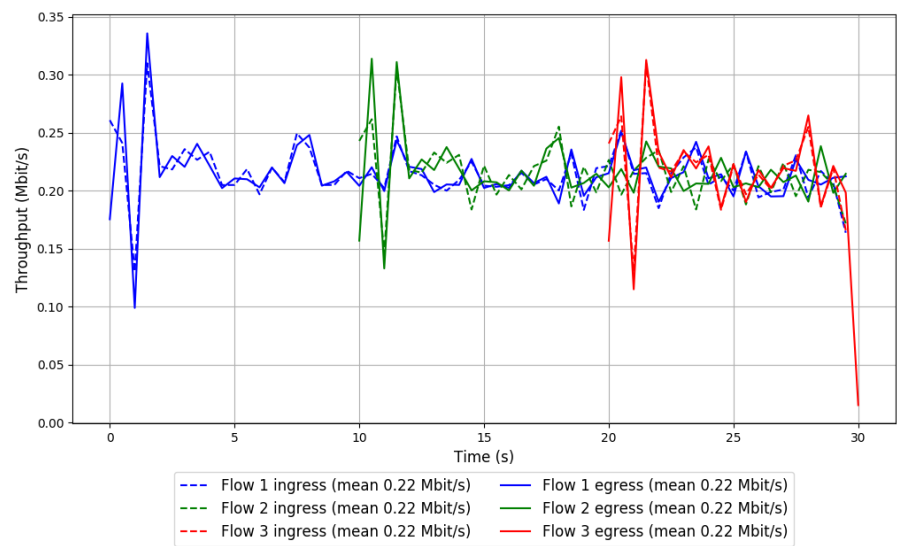


```
Run 10: Statistics of SCReAM

Start at: 2017-12-01 00:26:17
End at: 2017-12-01 00:26:47

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.694 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.721 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.514 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.465 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link



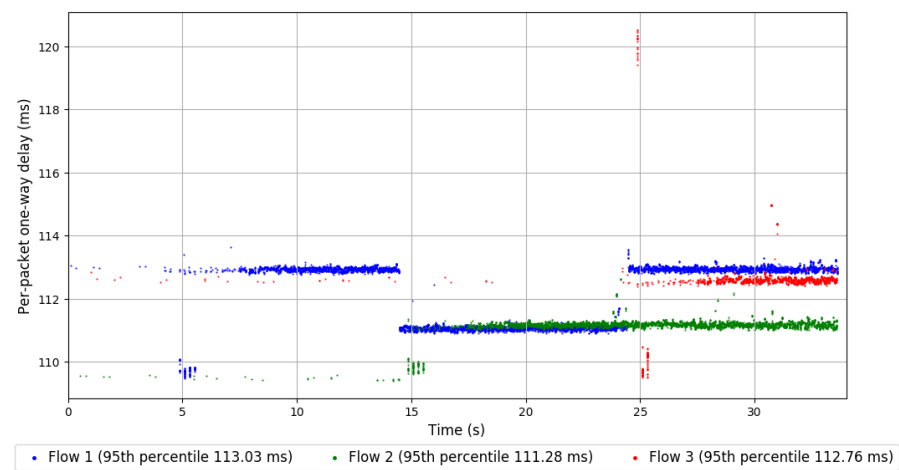
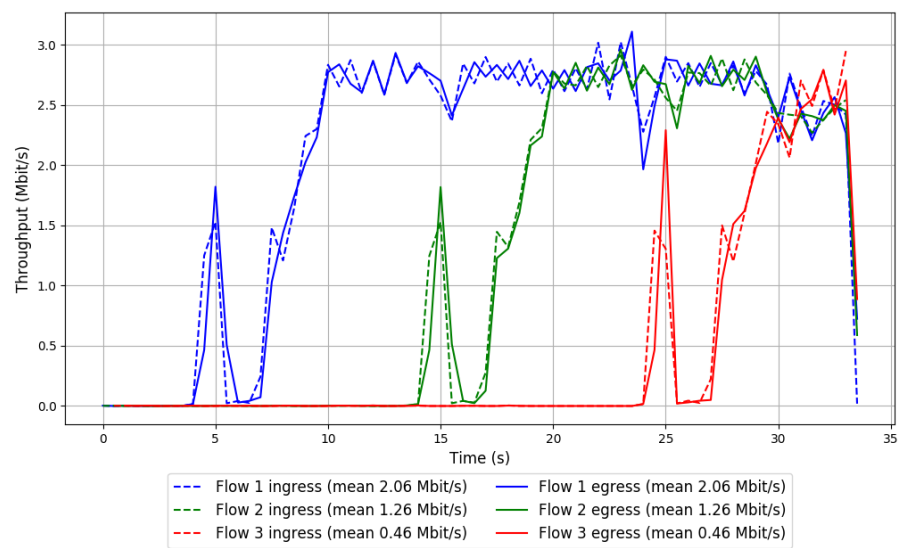
```
Run 1: Statistics of WebRTC media

Start at: 2017-11-30 22:30:17
End at: 2017-11-30 22:30:47

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.75 Mbit/s
95th percentile per-packet one-way delay: 113.002 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 113.026 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 111.282 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 112.756 ms
Loss rate: 0.00%
```



Run 1: Report of WebRTC media — Data Link

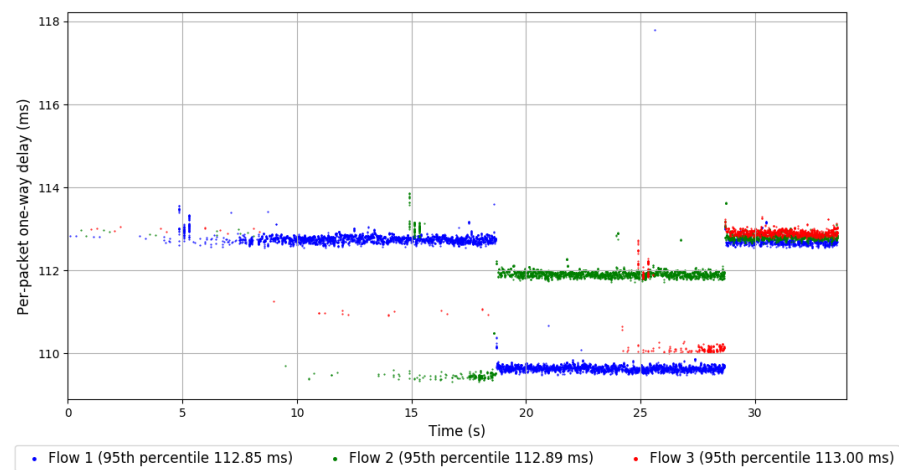
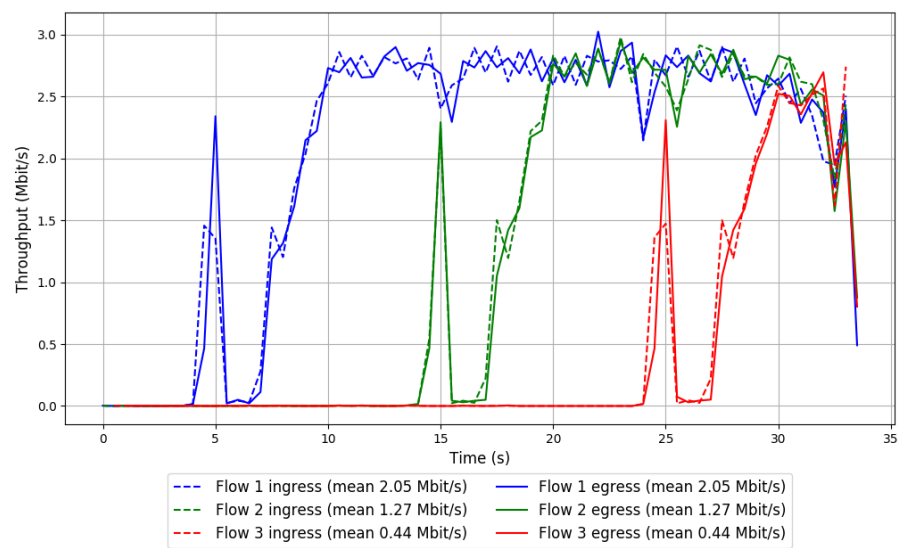


```
Run 2: Statistics of WebRTC media

Start at: 2017-11-30 22:43:53
End at: 2017-11-30 22:44:23

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 112.935 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 112.852 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 112.888 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 113.005 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-30 22:57:13

End at: 2017-11-30 22:57:43

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.79 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 112.564 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.29 Mbit/s

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

Loss rate: 0.00%

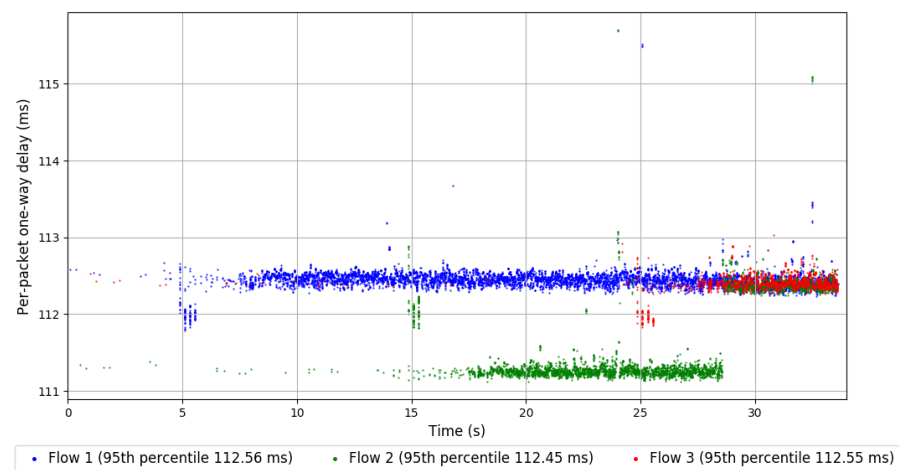
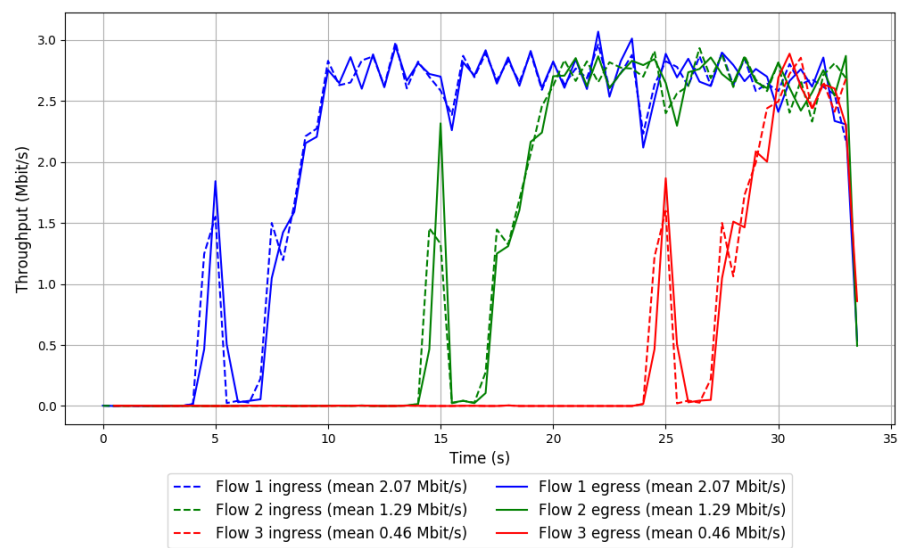
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 112.554 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-30 23:10:36

End at: 2017-11-30 23:11:06

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 114.507 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

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

Loss rate: 0.00%

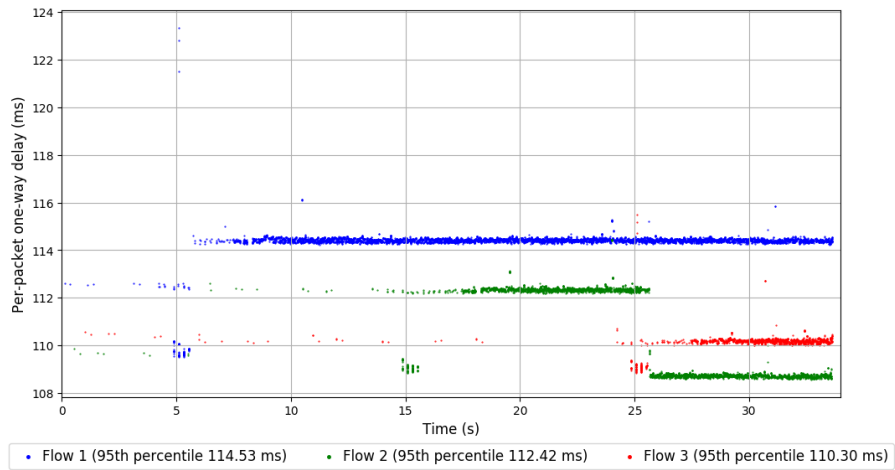
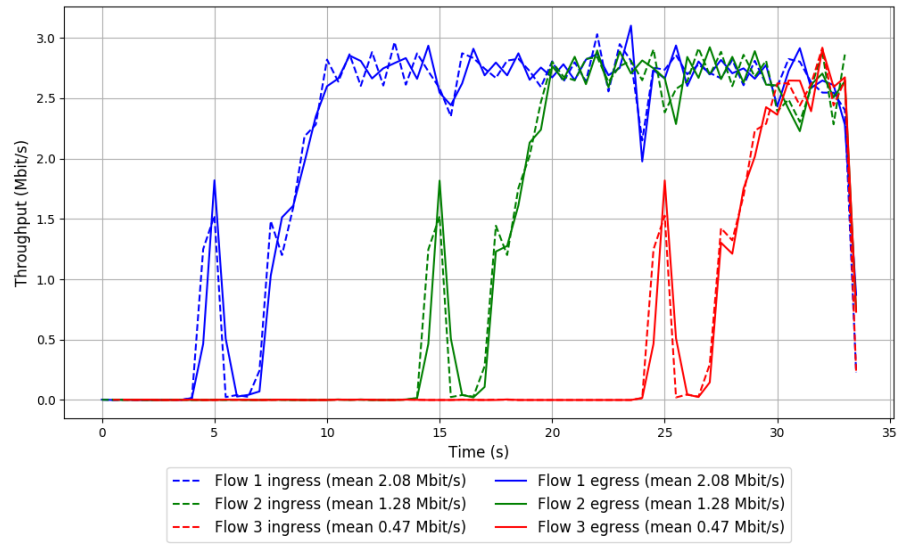
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 110.304 ms

Loss rate: 0.00%

# Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-30 23:24:06

End at: 2017-11-30 23:24:36

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 112.808 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.537 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 112.346 ms

Loss rate: 0.00%

-- Flow 3:

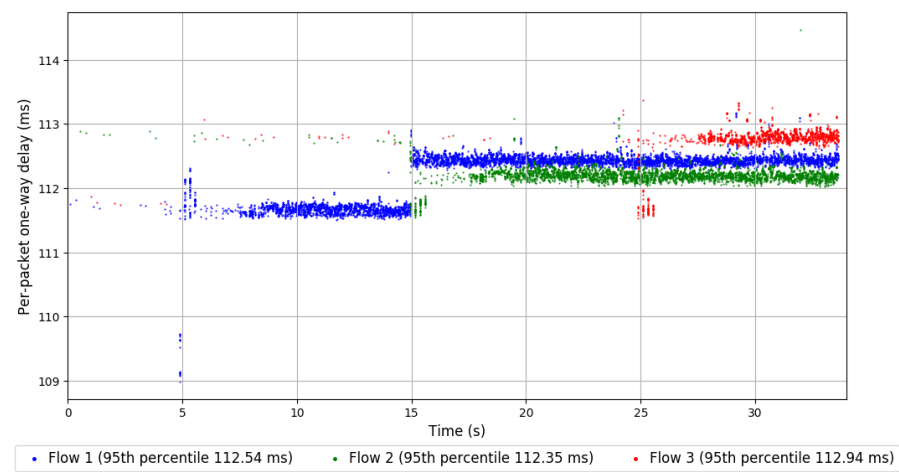
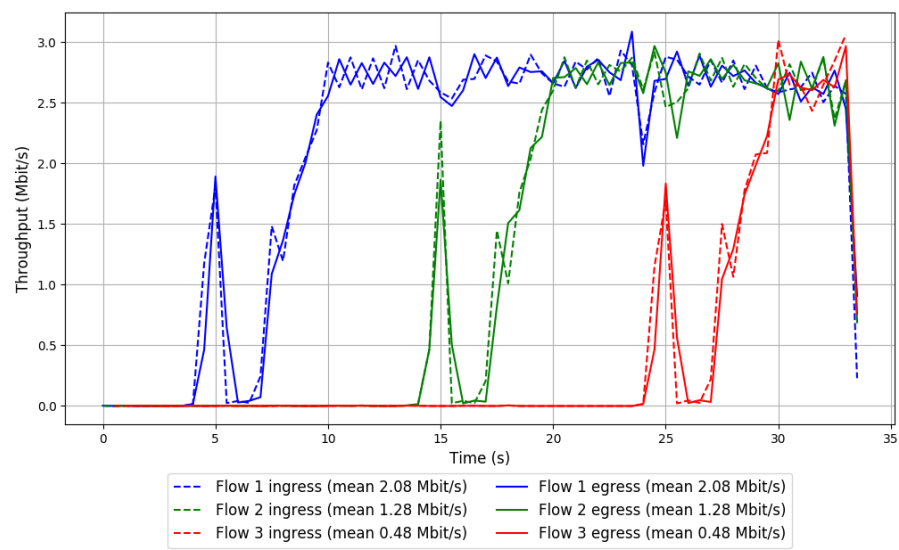
Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 112.936 ms

Loss rate: 0.00%



Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-30 23:37:20

End at: 2017-11-30 23:37:51

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.80 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.596 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 108.877 ms

Loss rate: 0.00%

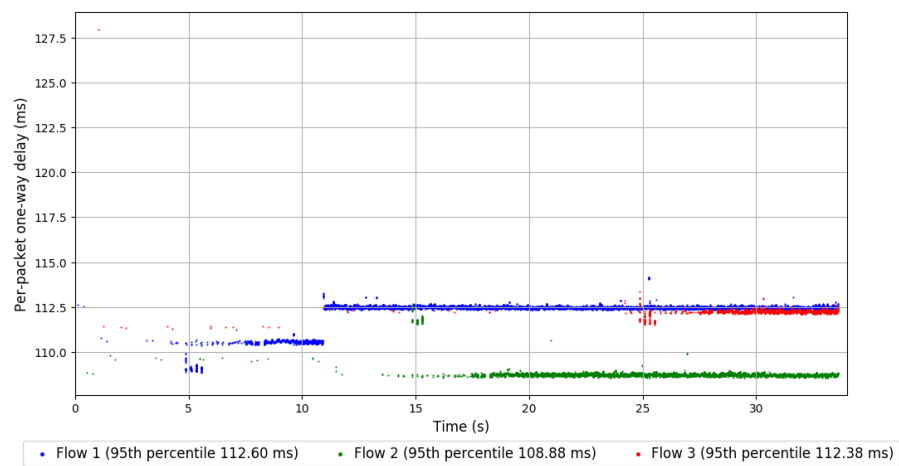
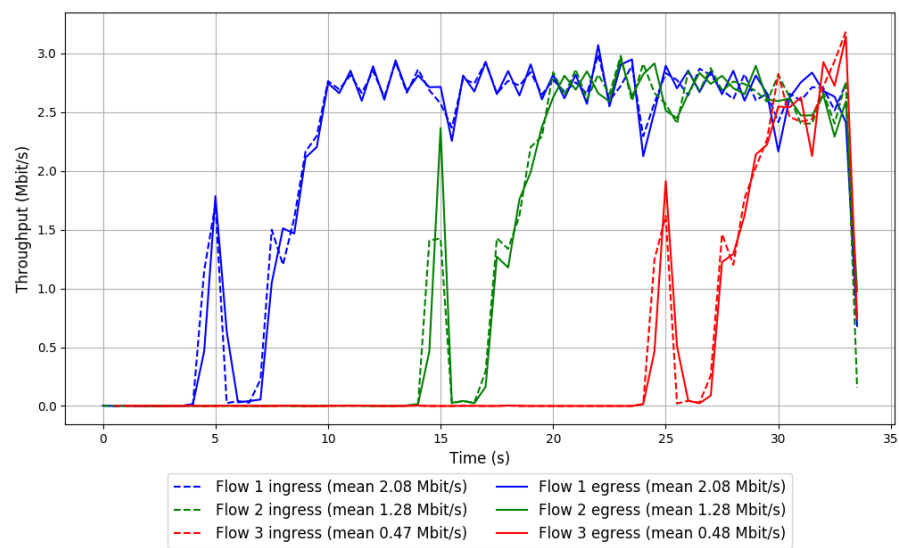
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 112.383 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-30 23:50:55

End at: 2017-11-30 23:51:25

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 112.538 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 112.476 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 111.798 ms

Loss rate: 0.00%

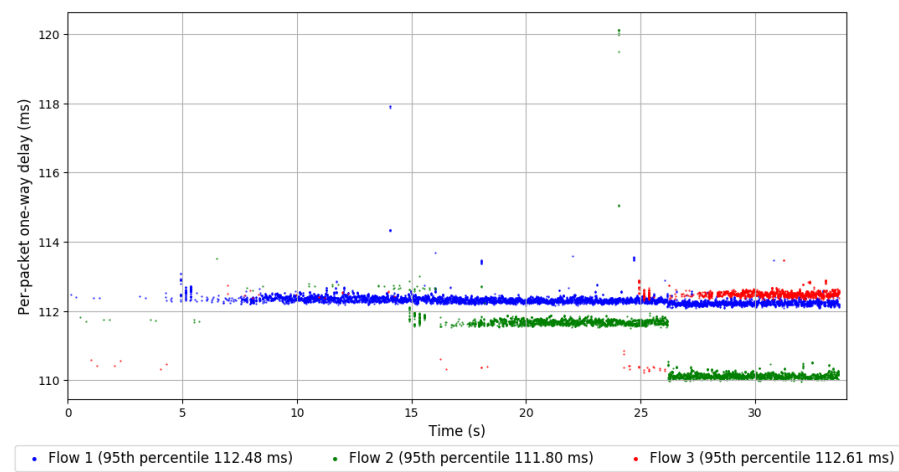
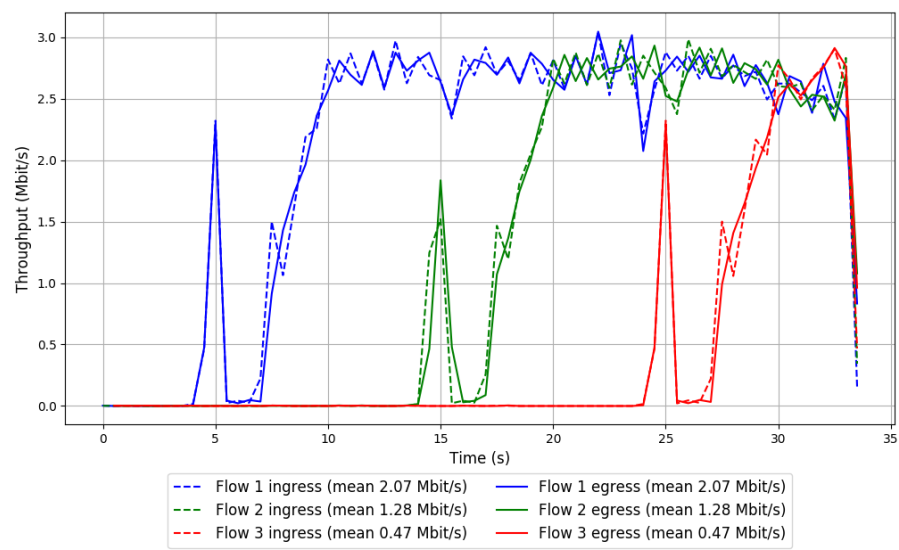
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 112.613 ms

Loss rate: 0.06%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-01 00:04:27

End at: 2017-12-01 00:04:57

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 112.682 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 111.758 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 112.738 ms

Loss rate: 0.00%

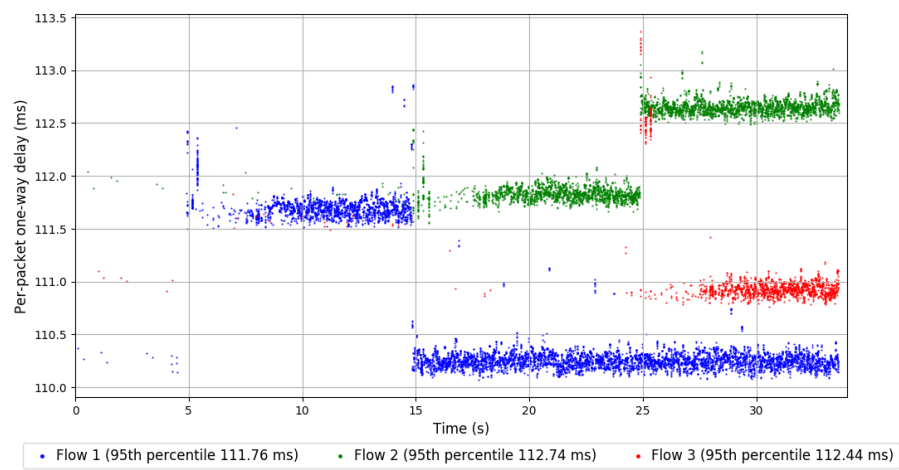
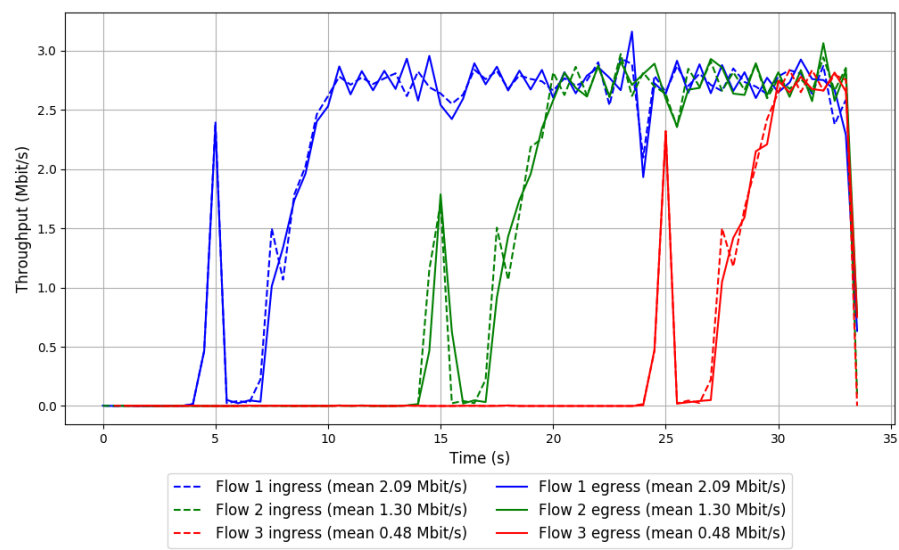
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 112.443 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-01 00:17:48

End at: 2017-12-01 00:18:18

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 112.292 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 111.773 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 112.348 ms

Loss rate: 0.00%

-- Flow 3:

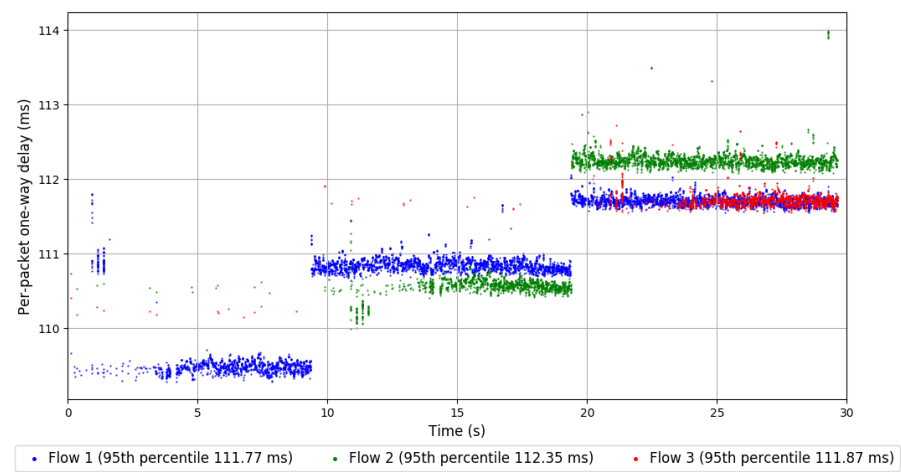
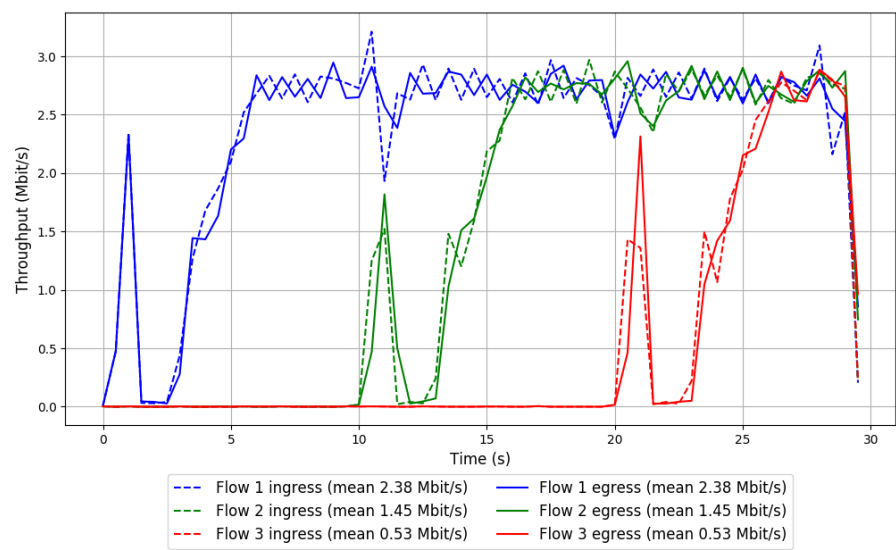
Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 111.872 ms

Loss rate: 0.00%



Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-01 00:31:35

End at: 2017-12-01 00:32:05

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 112.318 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 109.924 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 112.380 ms

Loss rate: 0.00%

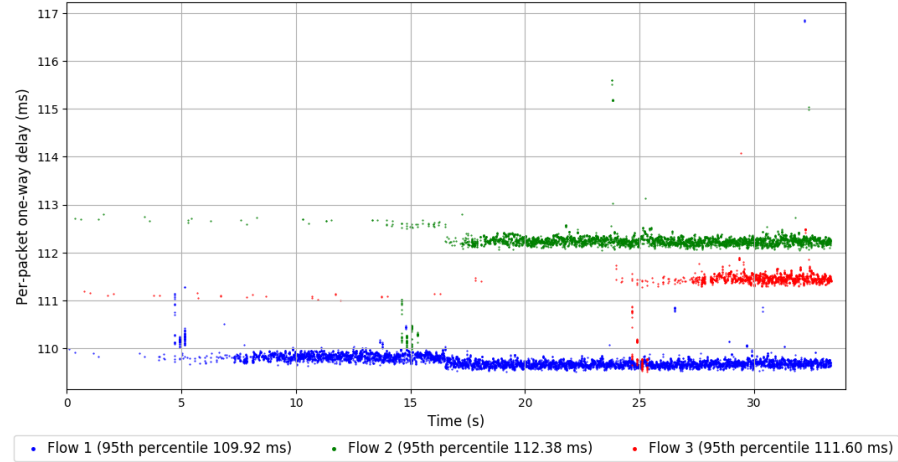
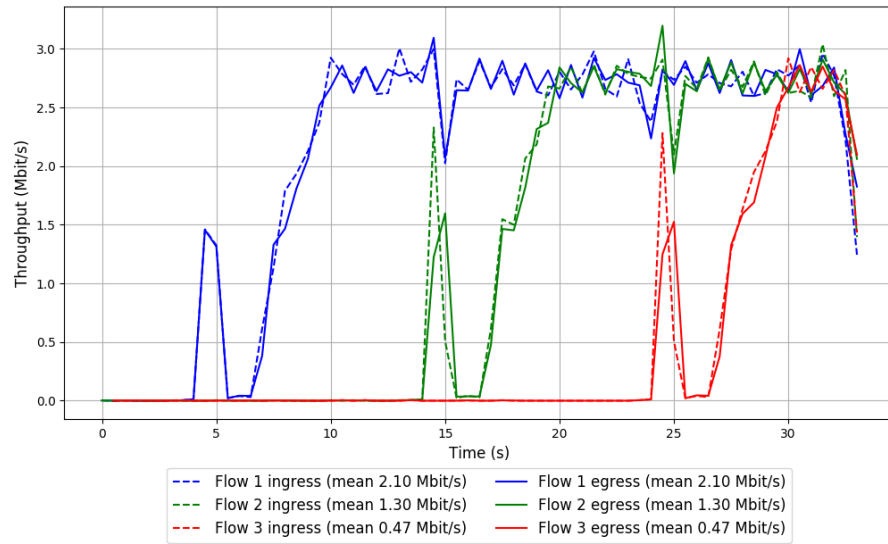
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 111.601 ms

Loss rate: 0.00%

# Run 10: Report of WebRTC media — Data Link

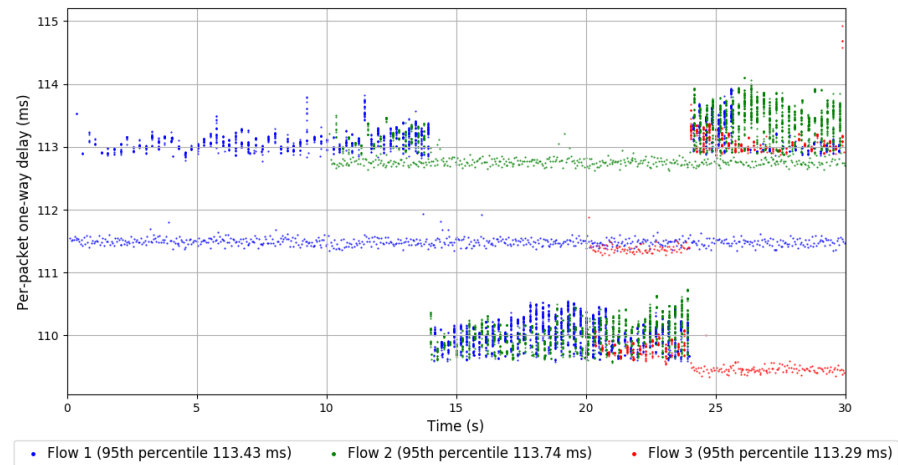
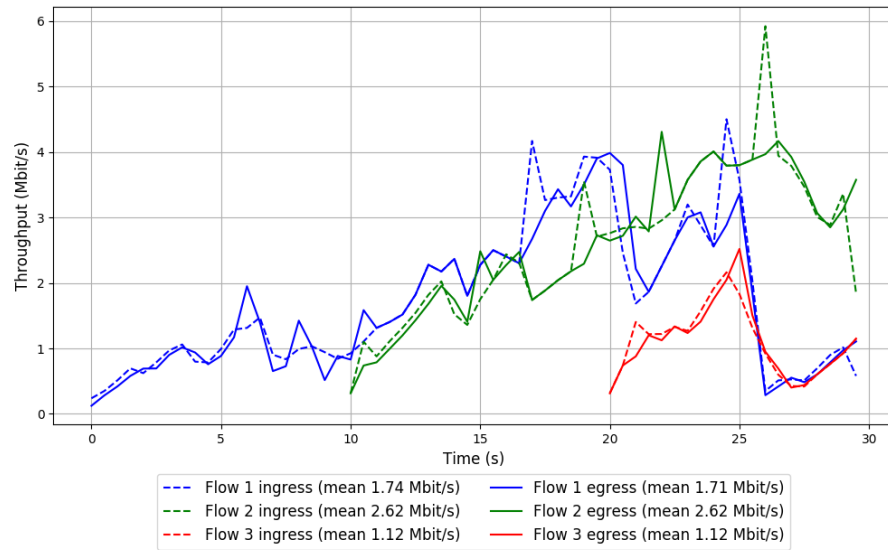


```
Run 1: Statistics of Sprout

Start at: 2017-11-30 22:28:34
End at: 2017-11-30 22:29:04

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 113.639 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 113.432 ms
Loss rate: 1.82%
-- Flow 2:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 113.737 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 113.290 ms
Loss rate: 0.43%
```

## Run 1: Report of Sprout — Data Link

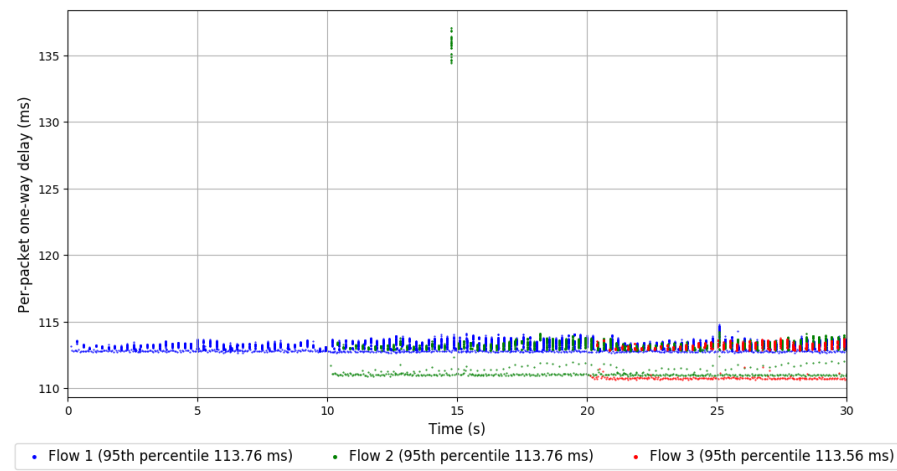
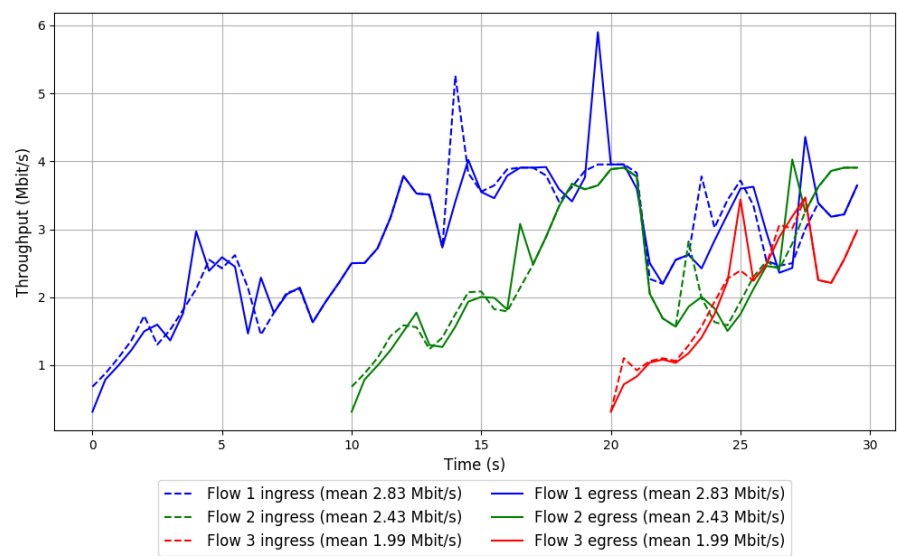


```
Run 2: Statistics of Sprout

Start at: 2017-11-30 22:42:11
End at: 2017-11-30 22:42:41

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.10 Mbit/s
95th percentile per-packet one-way delay: 113.742 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 113.763 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 113.756 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 113.558 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-30 22:55:30

End at: 2017-11-30 22:56:00

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.24 Mbit/s

95th percentile per-packet one-way delay: 112.375 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 112.086 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 112.469 ms

Loss rate: 0.12%

-- Flow 3:

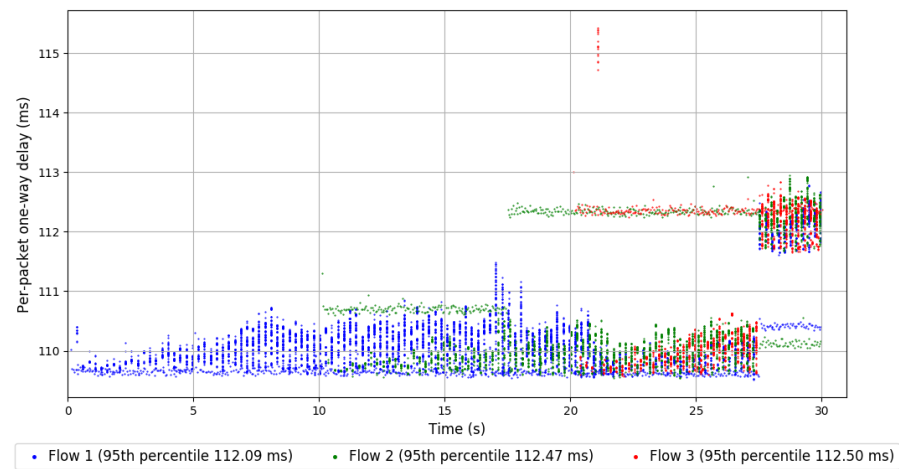
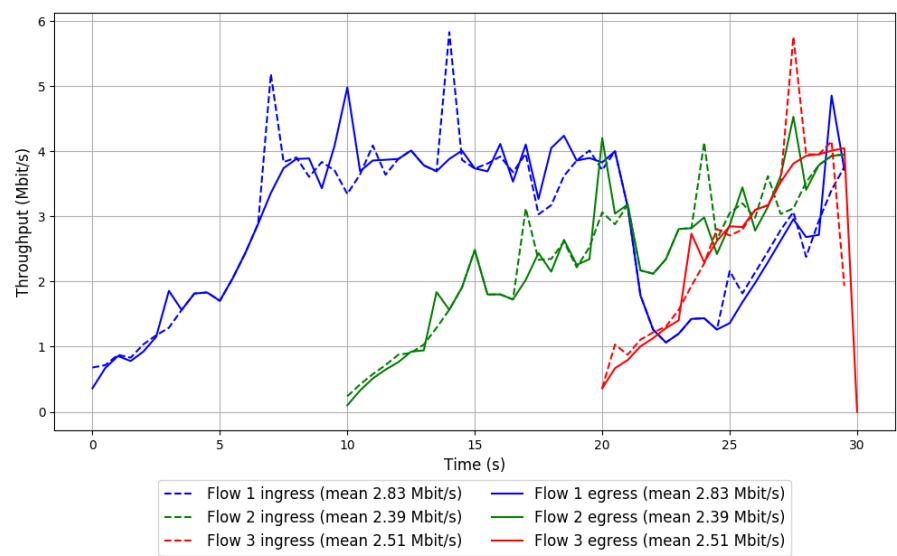
Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 112.505 ms

Loss rate: 0.00%



Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-30 23:08:54

End at: 2017-11-30 23:09:24

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 112.160 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 2.85 Mbit/s

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

Loss rate: 0.08%

-- Flow 2:

Average throughput: 2.61 Mbit/s

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

Loss rate: 0.02%

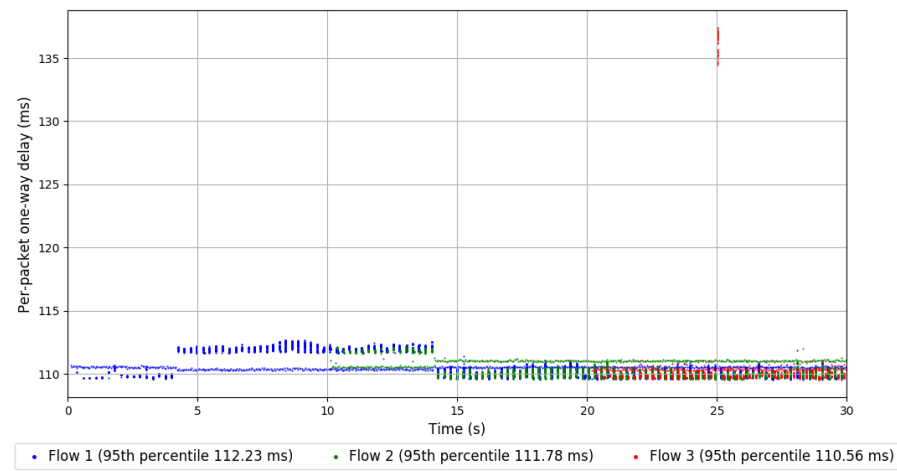
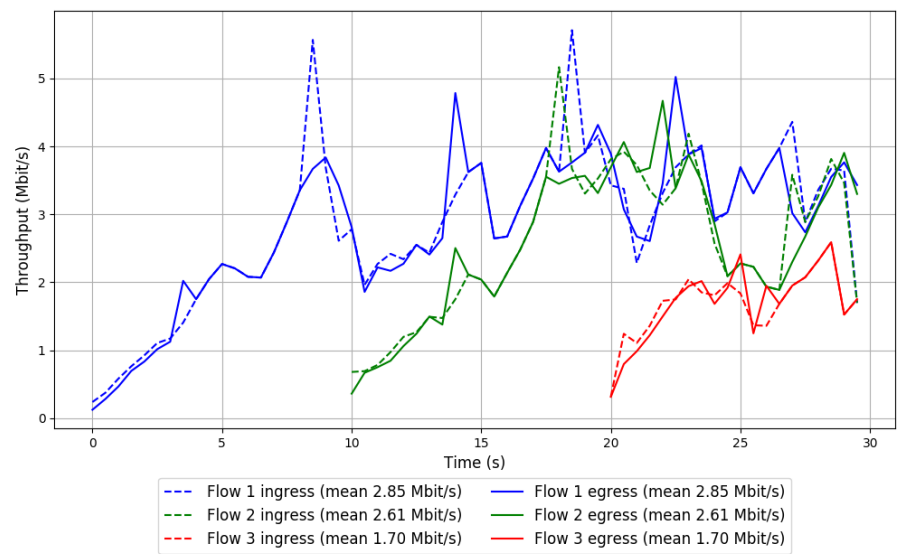
-- Flow 3:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 110.557 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-30 23:22:26

End at: 2017-11-30 23:22:56

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.81 Mbit/s

95th percentile per-packet one-way delay: 112.471 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 112.359 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 2.99 Mbit/s

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

Loss rate: 0.00%

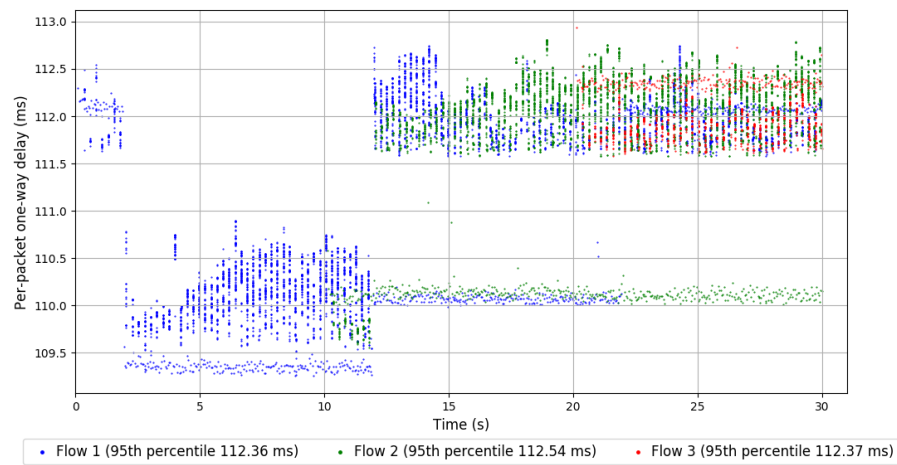
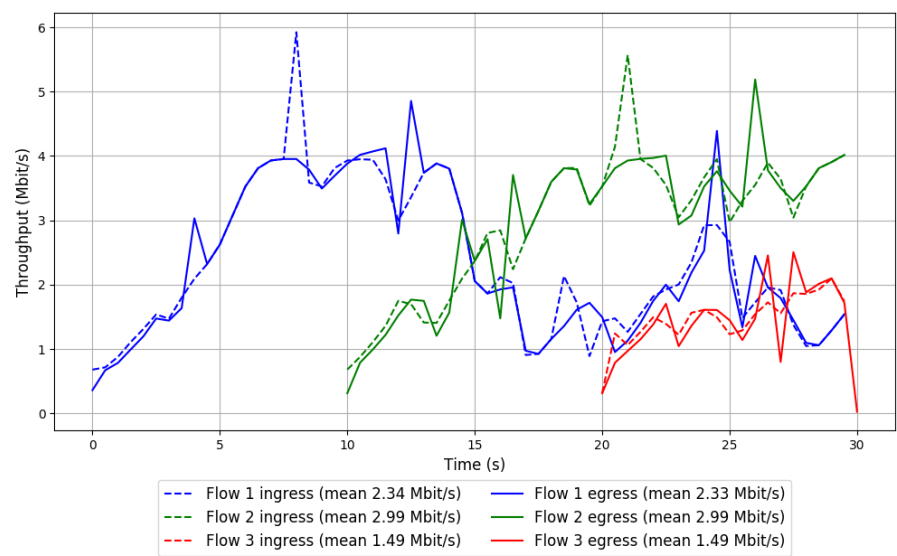
-- Flow 3:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 112.372 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-30 23:35:40

End at: 2017-11-30 23:36:10

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.93 Mbit/s

95th percentile per-packet one-way delay: 112.679 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 112.636 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 112.722 ms

Loss rate: 0.00%

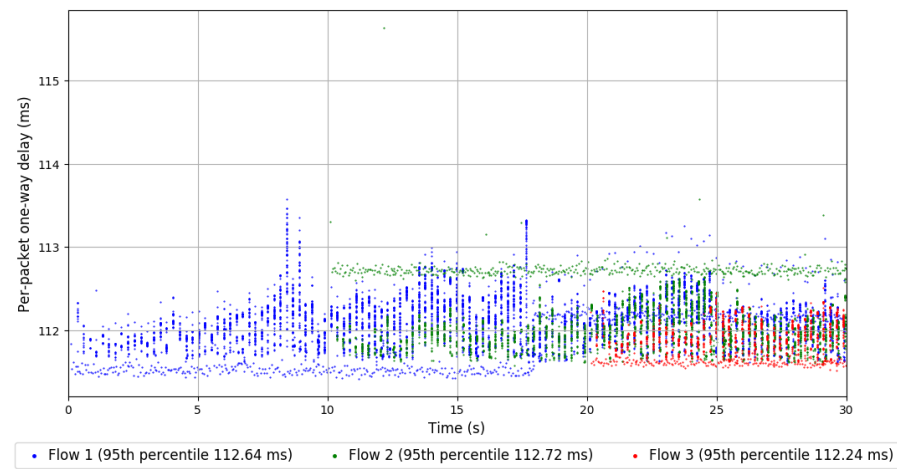
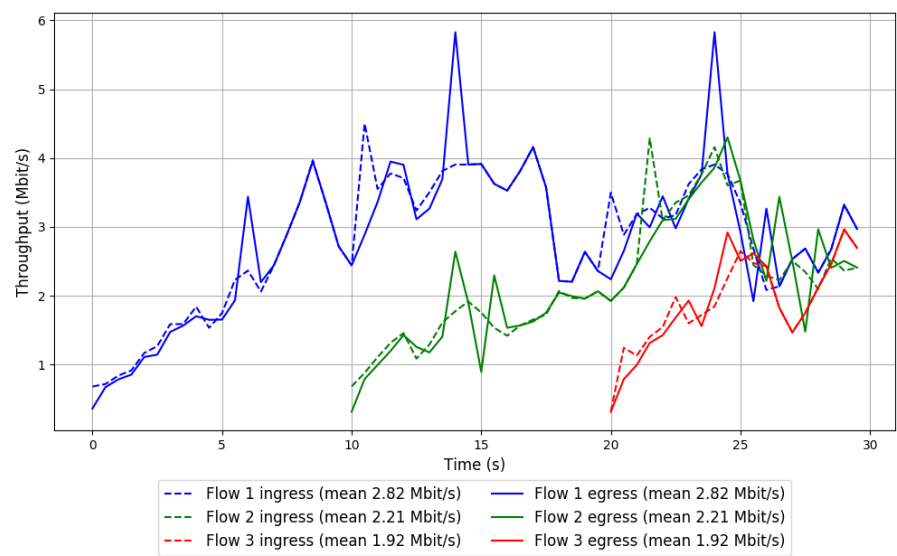
-- Flow 3:

Average throughput: 1.92 Mbit/s

95th percentile per-packet one-way delay: 112.239 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-30 23:49:14

End at: 2017-11-30 23:49:44

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.66 Mbit/s

95th percentile per-packet one-way delay: 113.022 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.86 Mbit/s

95th percentile per-packet one-way delay: 113.059 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 112.754 ms

Loss rate: 0.00%

-- Flow 3:

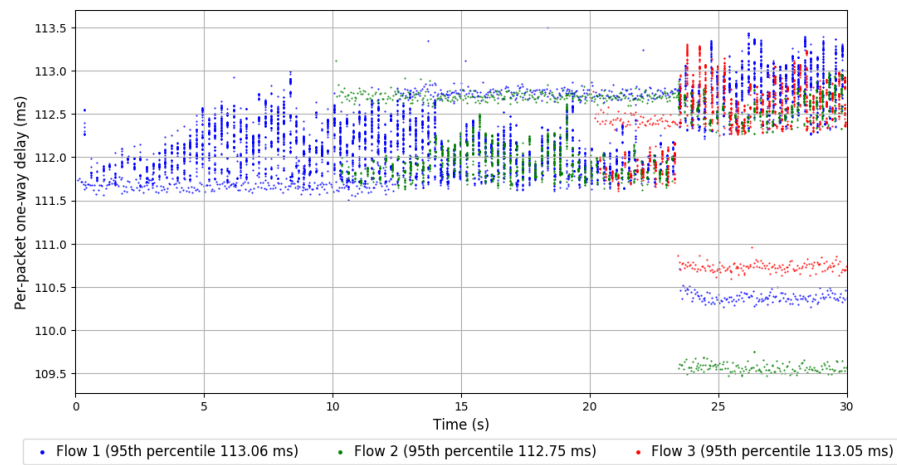
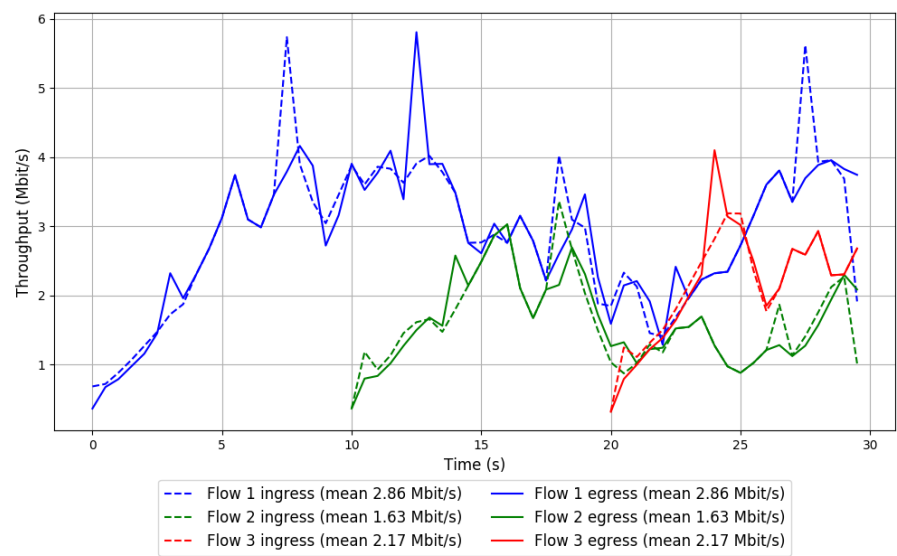
Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 113.049 ms

Loss rate: 0.00%



Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-01 00:02:45

End at: 2017-12-01 00:03:15

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 112.949 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 112.951 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 112.990 ms

Loss rate: 0.00%

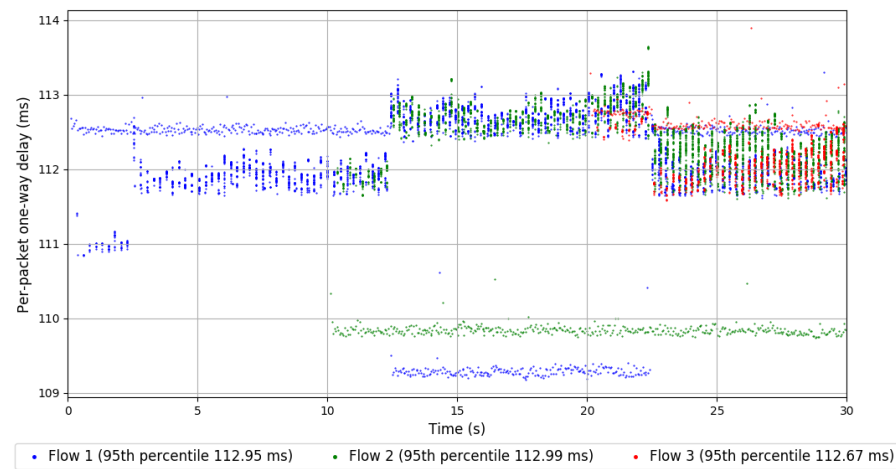
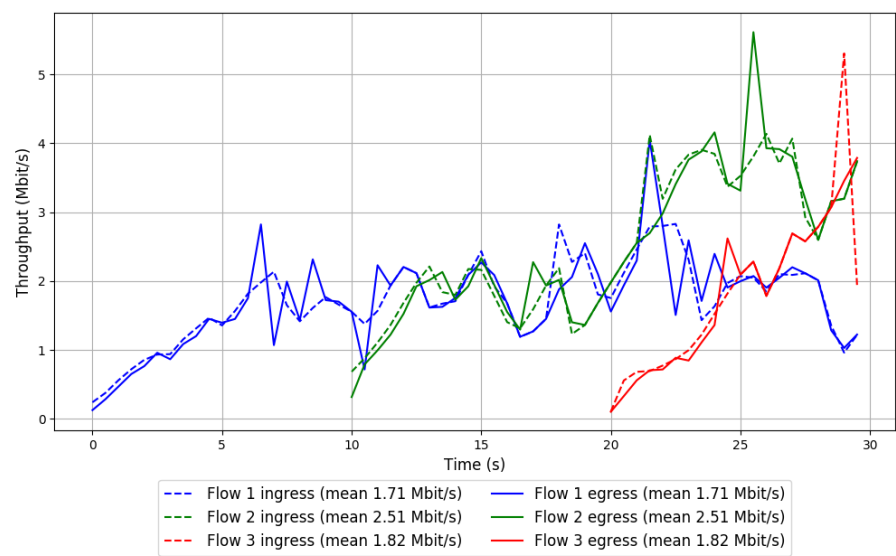
-- Flow 3:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 112.667 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

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

End at: 2017-12-01 00:16:36

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.44 Mbit/s

95th percentile per-packet one-way delay: 112.381 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 3.07 Mbit/s

95th percentile per-packet one-way delay: 112.402 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 112.377 ms

Loss rate: 0.00%

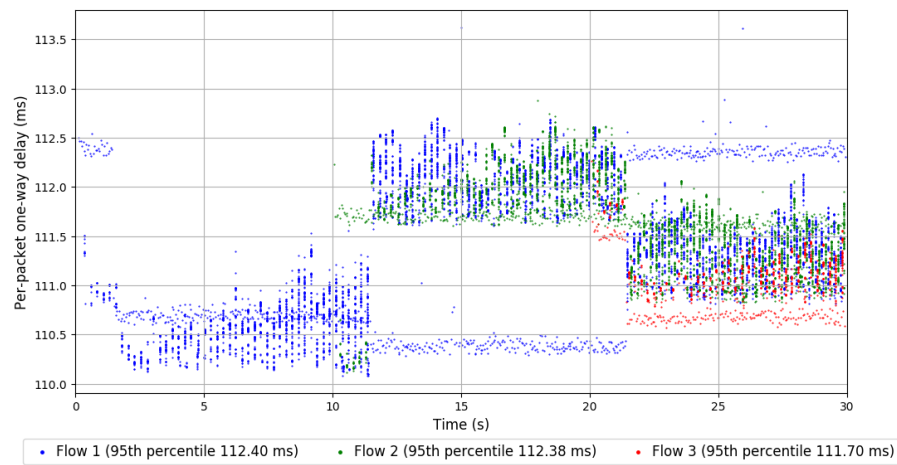
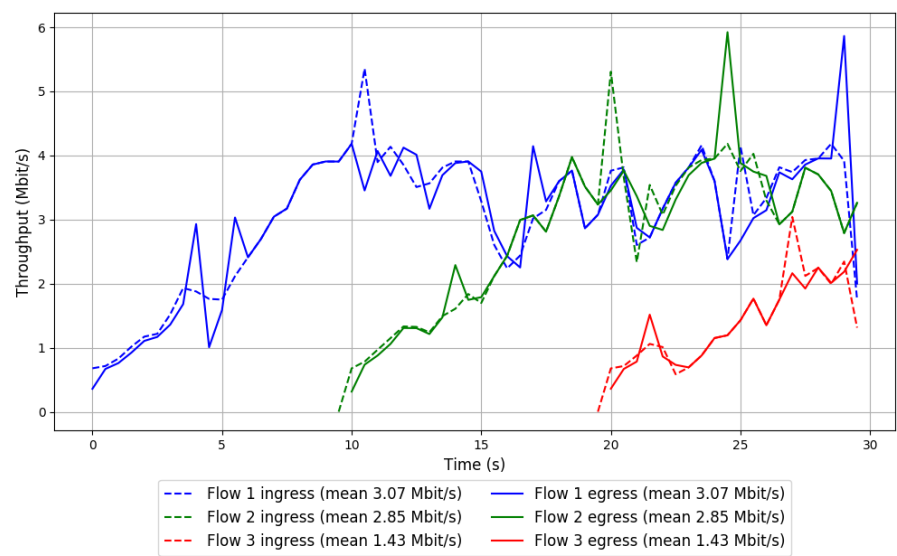
-- Flow 3:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 111.705 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-01 00:29:53

End at: 2017-12-01 00:30:23

# Below is generated by plot.py at 2017-12-01 01:49:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.66 Mbit/s

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

Loss rate: 0.74%

-- Flow 1:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 111.684 ms

Loss rate: 1.29%

-- Flow 2:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 112.238 ms

Loss rate: 0.00%

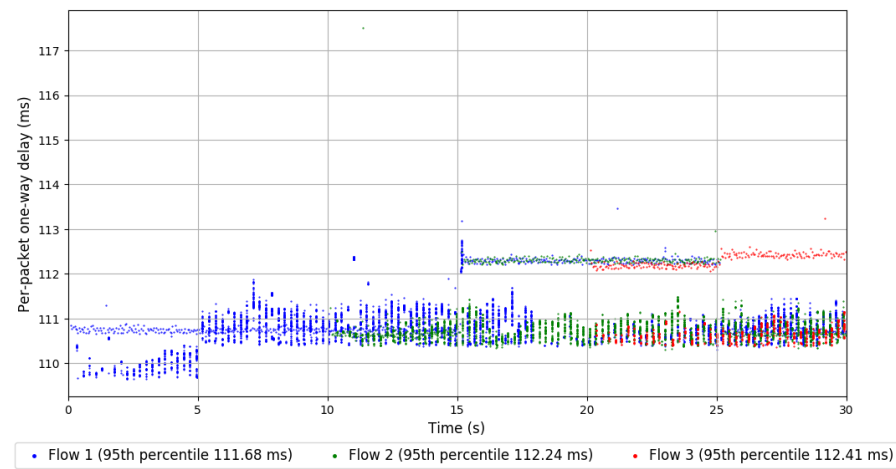
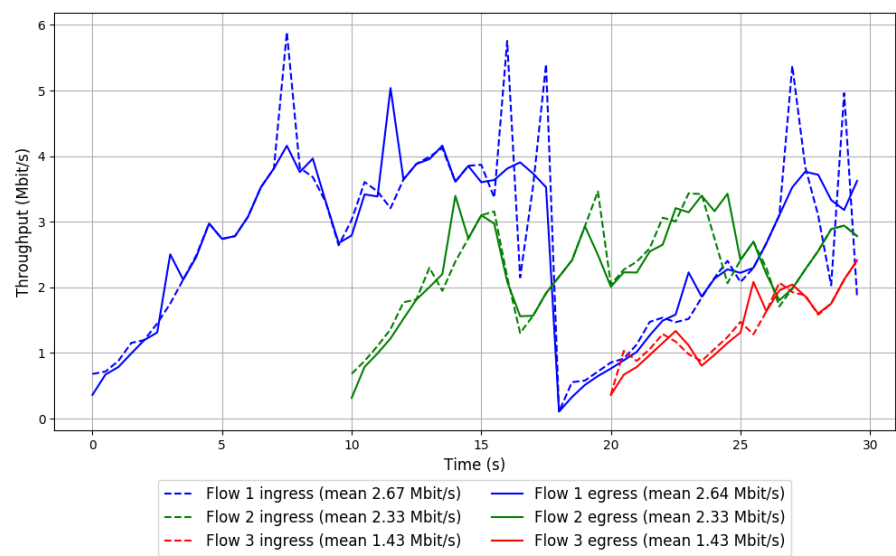
-- Flow 3:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 112.406 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link



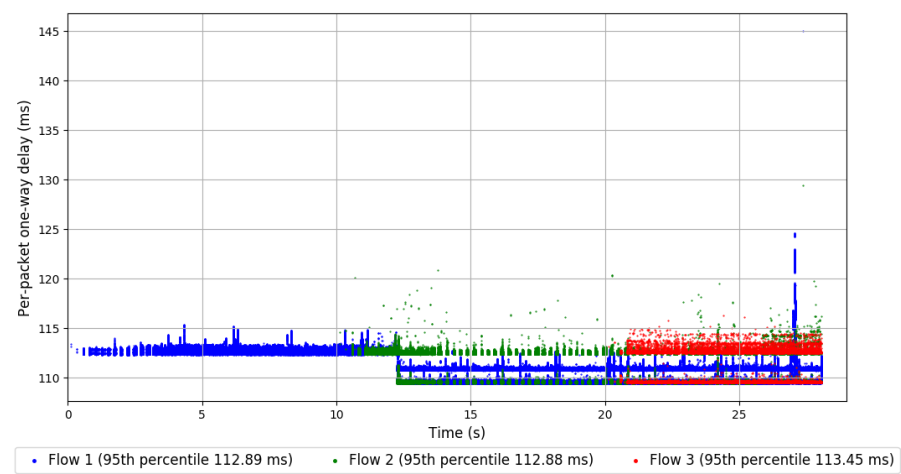
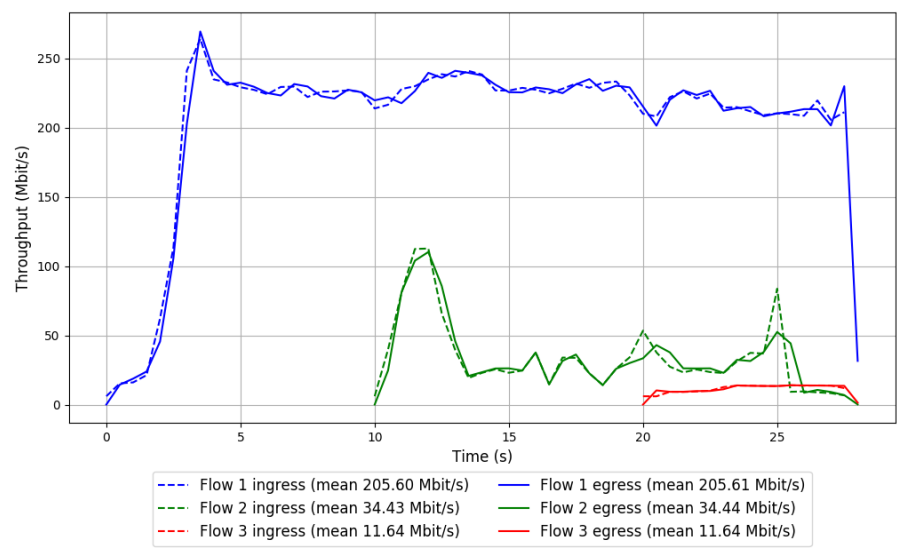
```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-30 22:31:04
End at: 2017-11-30 22:31:34

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 231.02 Mbit/s
95th percentile per-packet one-way delay: 112.890 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 205.61 Mbit/s
95th percentile per-packet one-way delay: 112.889 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 34.44 Mbit/s
95th percentile per-packet one-way delay: 112.876 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.64 Mbit/s
95th percentile per-packet one-way delay: 113.448 ms
Loss rate: 0.00%
```



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

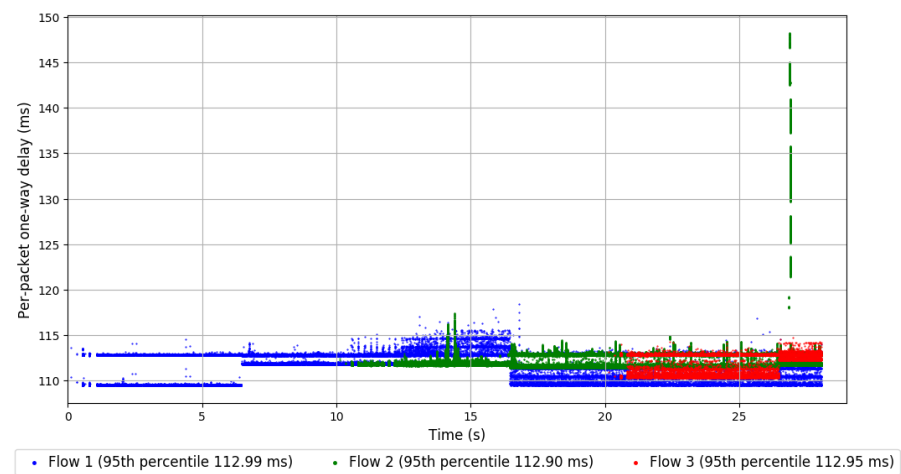
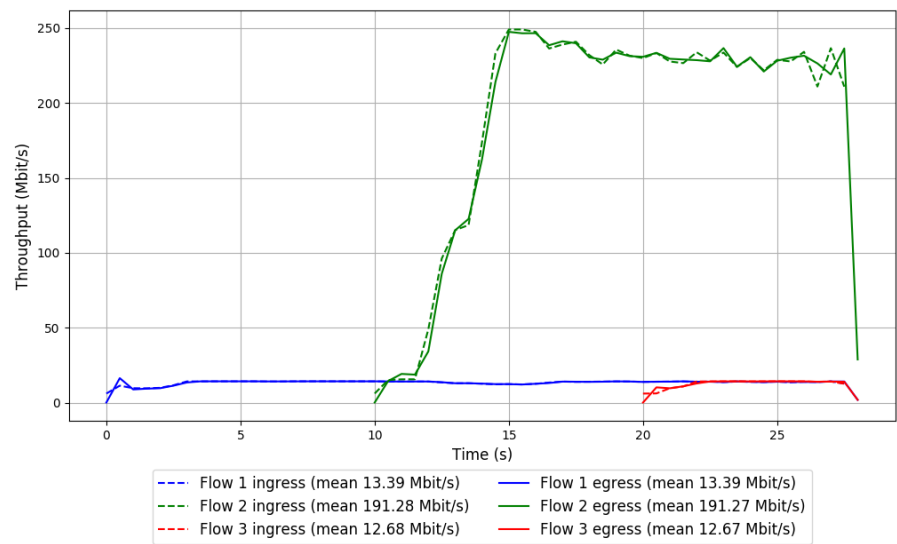


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-30 22:44:39
End at: 2017-11-30 22:45:09

# Below is generated by plot.py at 2017-12-01 01:49:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 139.76 Mbit/s
95th percentile per-packet one-way delay: 112.906 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.39 Mbit/s
95th percentile per-packet one-way delay: 112.986 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 191.27 Mbit/s
95th percentile per-packet one-way delay: 112.902 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.67 Mbit/s
95th percentile per-packet one-way delay: 112.948 ms
Loss rate: 0.00%
```

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

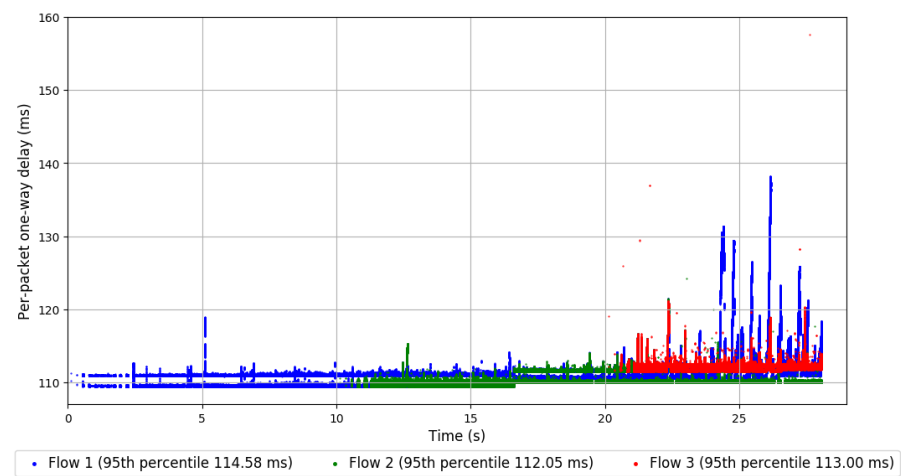
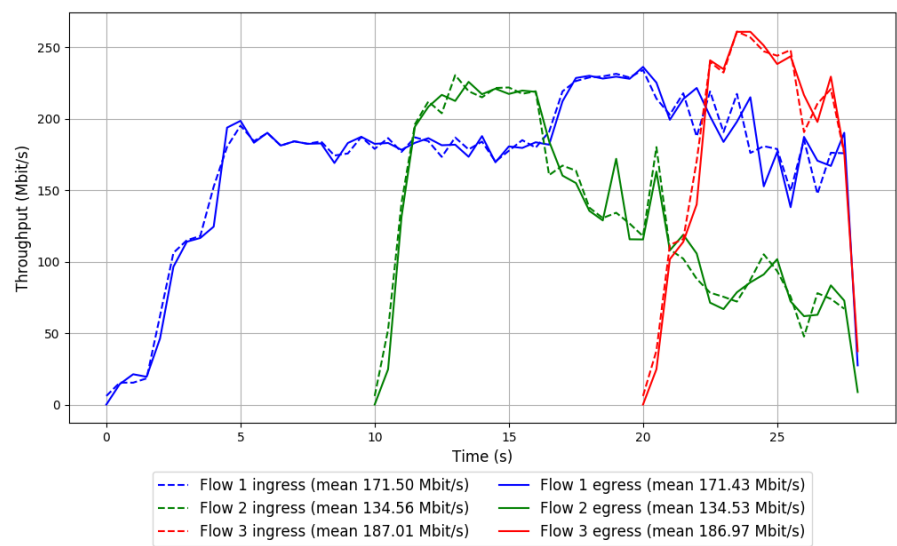


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-11-30 22:57:59
End at: 2017-11-30 22:58:29

# Below is generated by plot.py at 2017-12-01 01:51:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 310.89 Mbit/s
95th percentile per-packet one-way delay: 113.246 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 171.43 Mbit/s
95th percentile per-packet one-way delay: 114.581 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 134.53 Mbit/s
95th percentile per-packet one-way delay: 112.049 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 186.97 Mbit/s
95th percentile per-packet one-way delay: 113.001 ms
Loss rate: 0.01%
```

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

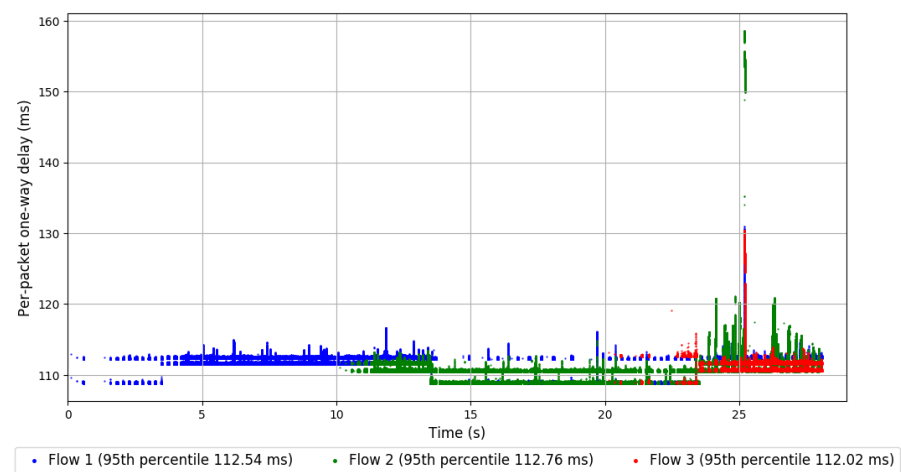
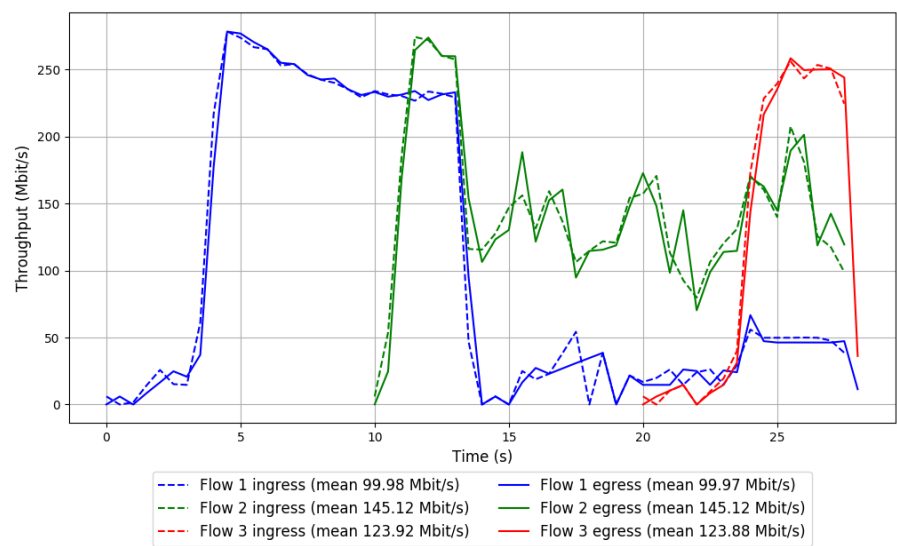


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-11-30 23:11:22
End at: 2017-11-30 23:11:52

# Below is generated by plot.py at 2017-12-01 01:51:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 227.91 Mbit/s
95th percentile per-packet one-way delay: 112.538 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 99.97 Mbit/s
95th percentile per-packet one-way delay: 112.538 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 145.12 Mbit/s
95th percentile per-packet one-way delay: 112.764 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 123.88 Mbit/s
95th percentile per-packet one-way delay: 112.024 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-30 23:24:53

End at: 2017-11-30 23:25:23

# Below is generated by plot.py at 2017-12-01 01:51:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 168.22 Mbit/s

95th percentile per-packet one-way delay: 112.731 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 132.02 Mbit/s

95th percentile per-packet one-way delay: 112.738 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 10.57 Mbit/s

95th percentile per-packet one-way delay: 112.910 ms

Loss rate: 0.00%

-- Flow 3:

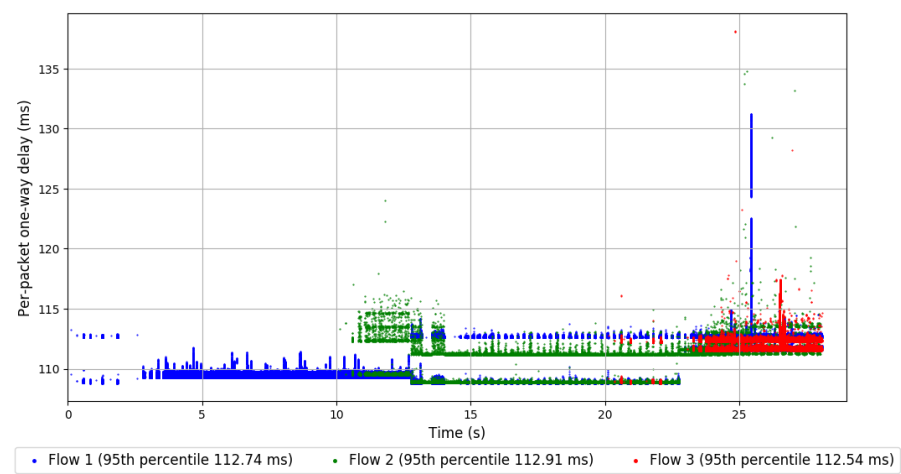
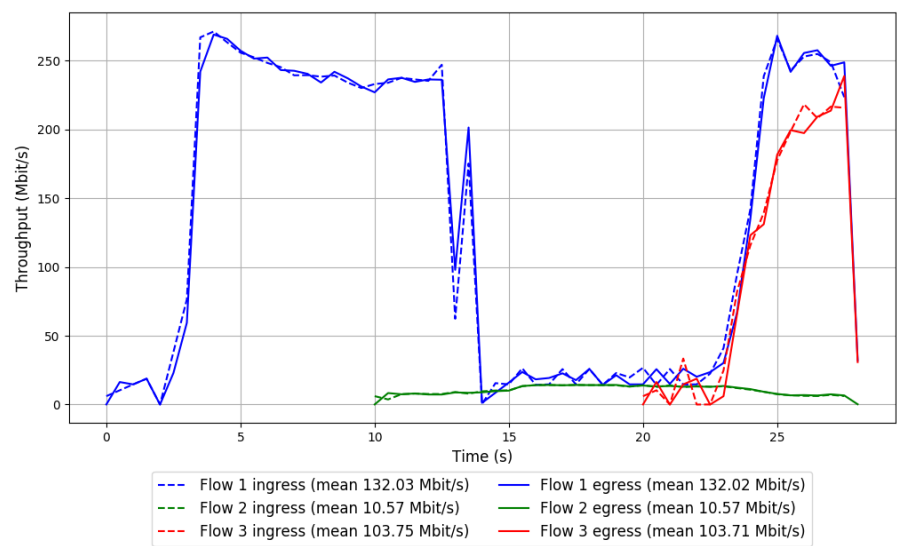
Average throughput: 103.71 Mbit/s

95th percentile per-packet one-way delay: 112.539 ms

Loss rate: 0.00%



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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-30 23:38:07

End at: 2017-11-30 23:38:37

# Below is generated by plot.py at 2017-12-01 01:52:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 333.09 Mbit/s

95th percentile per-packet one-way delay: 112.351 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 209.15 Mbit/s

95th percentile per-packet one-way delay: 112.366 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 187.48 Mbit/s

95th percentile per-packet one-way delay: 112.255 ms

Loss rate: 0.00%

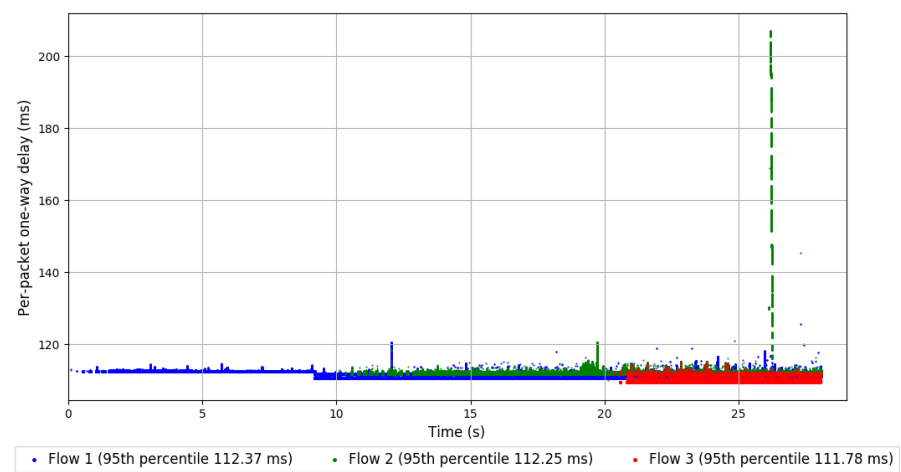
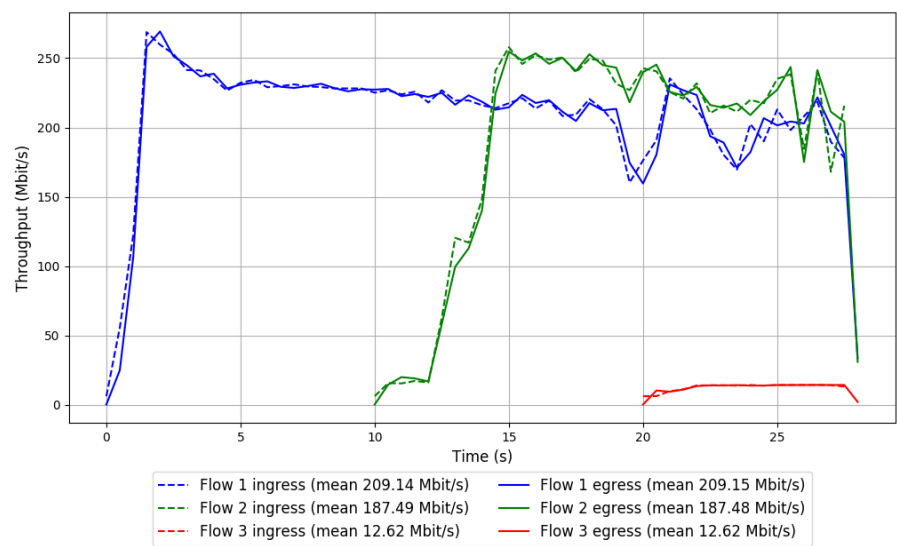
-- Flow 3:

Average throughput: 12.62 Mbit/s

95th percentile per-packet one-way delay: 111.785 ms

Loss rate: 0.00%

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

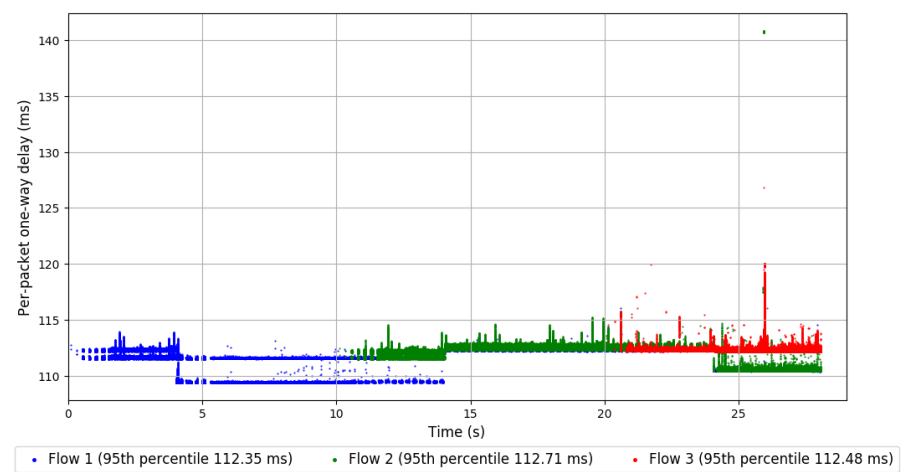
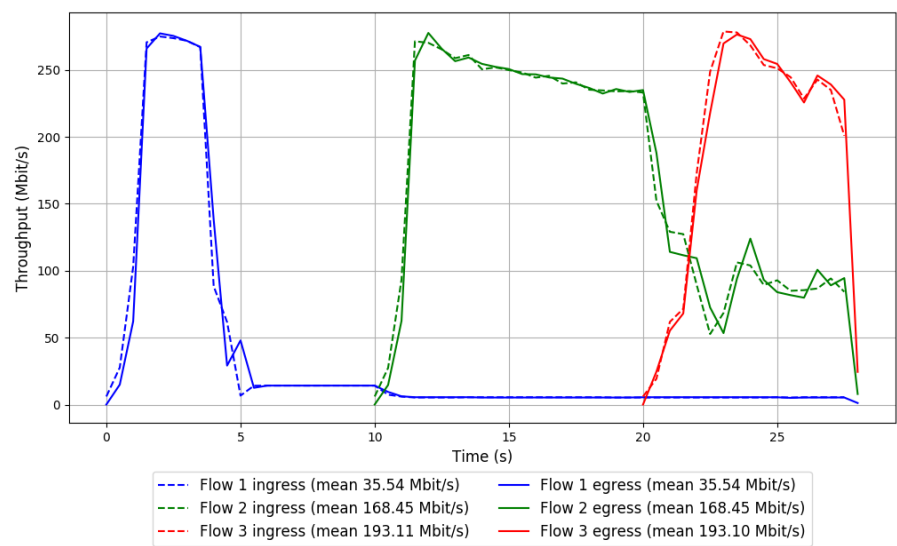


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-11-30 23:51:42
End at: 2017-11-30 23:52:12

# Below is generated by plot.py at 2017-12-01 01:52:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 198.42 Mbit/s
95th percentile per-packet one-way delay: 112.683 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 35.54 Mbit/s
95th percentile per-packet one-way delay: 112.354 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 168.45 Mbit/s
95th percentile per-packet one-way delay: 112.713 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 193.10 Mbit/s
95th percentile per-packet one-way delay: 112.477 ms
Loss rate: 0.02%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-01 00:05:13

End at: 2017-12-01 00:05:43

# Below is generated by plot.py at 2017-12-01 01:52:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 148.63 Mbit/s

95th percentile per-packet one-way delay: 112.508 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 95.91 Mbit/s

95th percentile per-packet one-way delay: 112.540 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 15.87 Mbit/s

95th percentile per-packet one-way delay: 112.636 ms

Loss rate: 0.00%

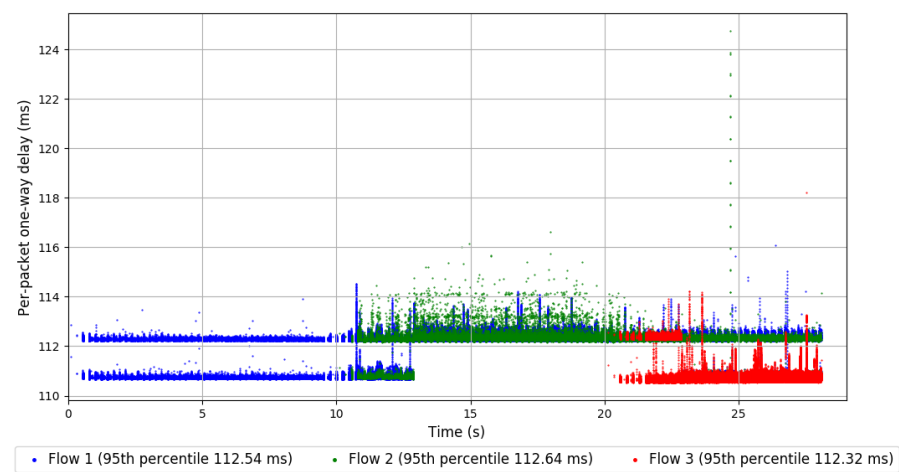
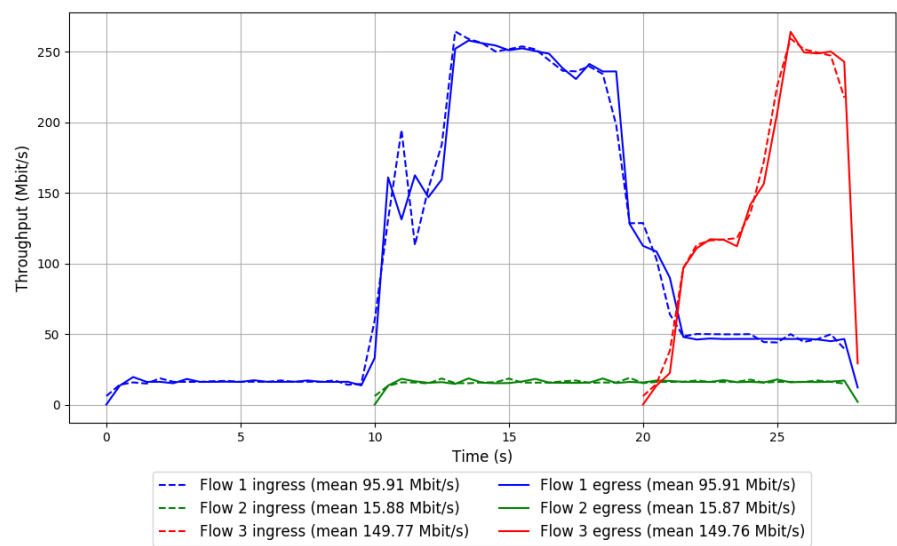
-- Flow 3:

Average throughput: 149.76 Mbit/s

95th percentile per-packet one-way delay: 112.323 ms

Loss rate: 0.00%

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



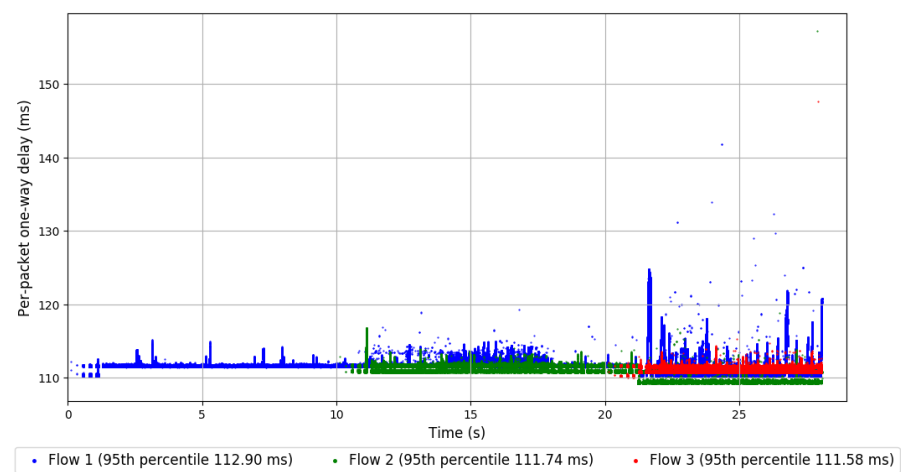
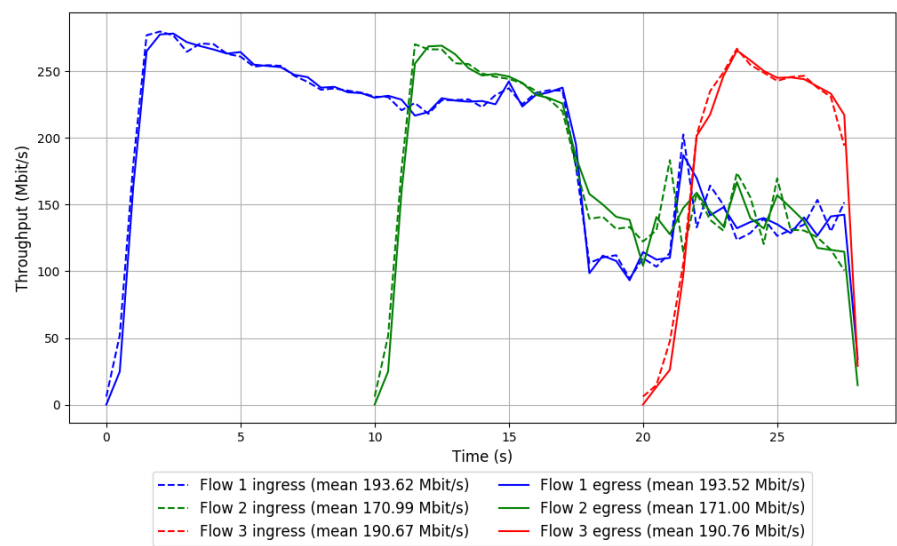
```
Run 9: Statistics of TaoVA-100x

Start at: 2017-12-01 00:18:35
End at: 2017-12-01 00:19:05

# Below is generated by plot.py at 2017-12-01 01:58:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.45 Mbit/s
95th percentile per-packet one-way delay: 112.283 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 193.52 Mbit/s
95th percentile per-packet one-way delay: 112.900 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 171.00 Mbit/s
95th percentile per-packet one-way delay: 111.737 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 190.76 Mbit/s
95th percentile per-packet one-way delay: 111.579 ms
Loss rate: 0.00%
```



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

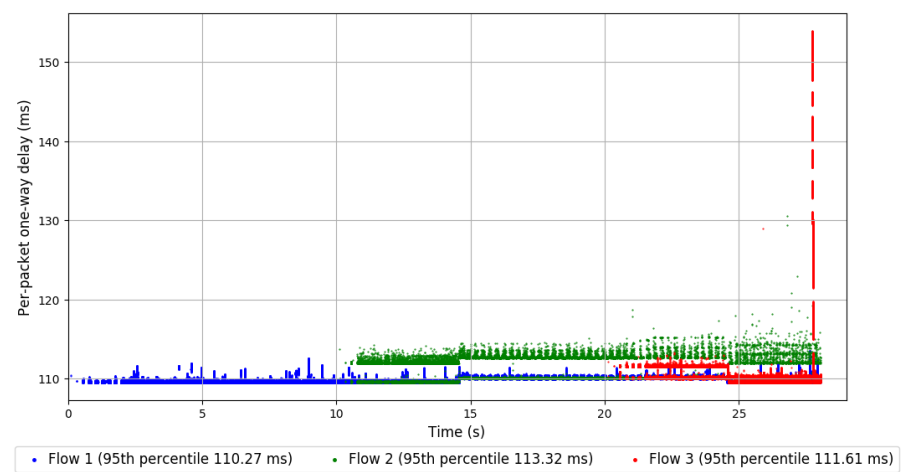
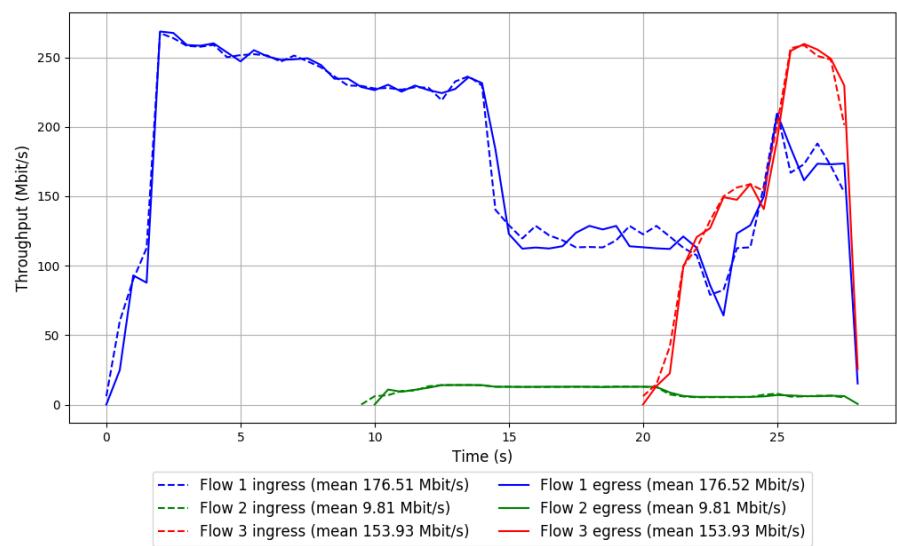


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-01 00:32:21
End at: 2017-12-01 00:32:51

# Below is generated by plot.py at 2017-12-01 01:58:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 226.53 Mbit/s
95th percentile per-packet one-way delay: 111.476 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 176.52 Mbit/s
95th percentile per-packet one-way delay: 110.271 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 9.81 Mbit/s
95th percentile per-packet one-way delay: 113.319 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 153.93 Mbit/s
95th percentile per-packet one-way delay: 111.610 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-30 22:23:14

End at: 2017-11-30 22:23:44

# Below is generated by plot.py at 2017-12-01 01:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 41.51 Mbit/s

95th percentile per-packet one-way delay: 113.906 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 12.87 Mbit/s

95th percentile per-packet one-way delay: 113.780 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.45 Mbit/s

95th percentile per-packet one-way delay: 113.694 ms

Loss rate: 0.00%

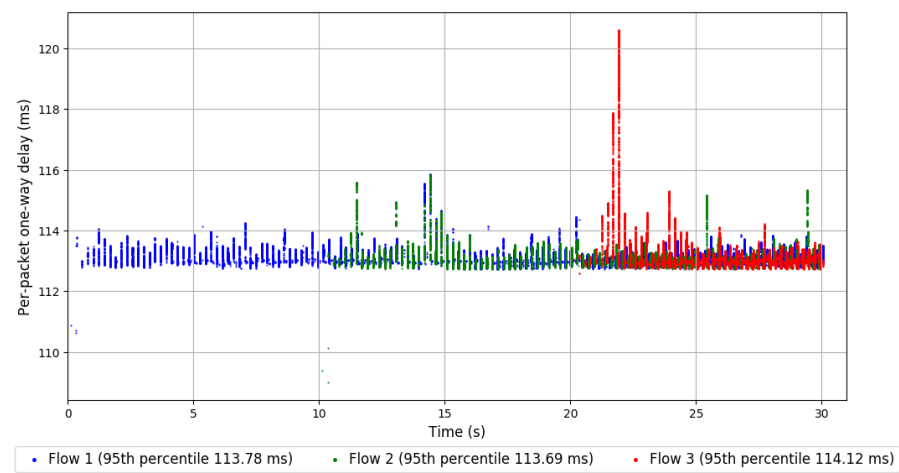
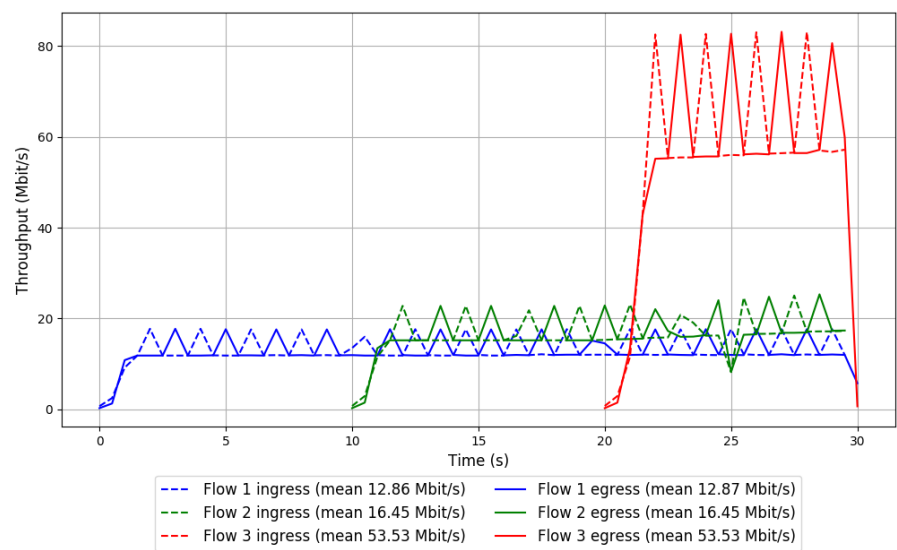
-- Flow 3:

Average throughput: 53.53 Mbit/s

95th percentile per-packet one-way delay: 114.123 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-30 22:36:47

End at: 2017-11-30 22:37:17

# Below is generated by plot.py at 2017-12-01 01:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 137.48 Mbit/s

95th percentile per-packet one-way delay: 118.410 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.97 Mbit/s

95th percentile per-packet one-way delay: 110.830 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.85 Mbit/s

95th percentile per-packet one-way delay: 119.556 ms

Loss rate: 0.01%

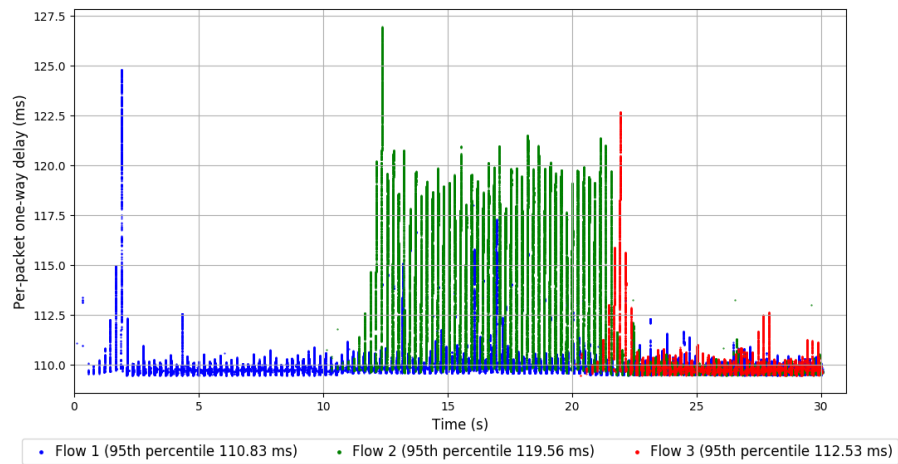
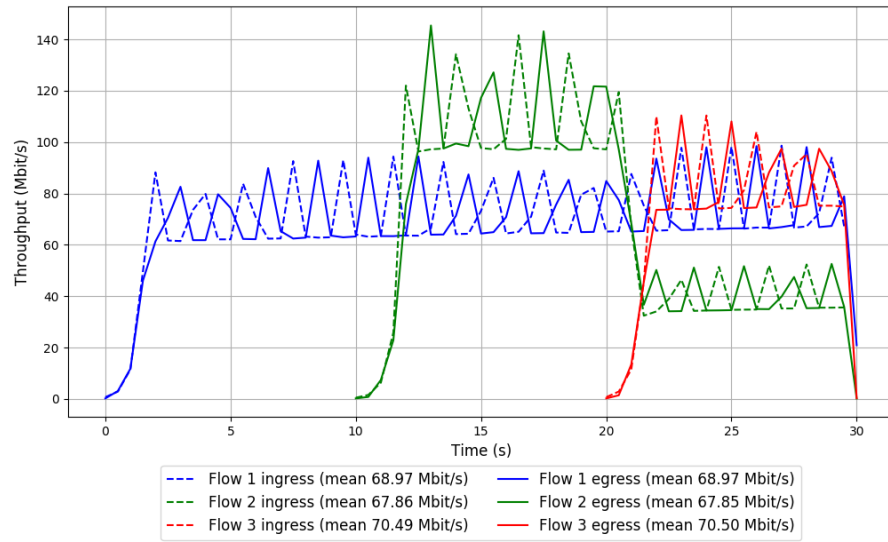
-- Flow 3:

Average throughput: 70.50 Mbit/s

95th percentile per-packet one-way delay: 112.525 ms

Loss rate: 0.00%

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



Run 3: Statistics of TCP Vegas

Start at: 2017-11-30 22:50:14

End at: 2017-11-30 22:50:44

# Below is generated by plot.py at 2017-12-01 01:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 55.50 Mbit/s

95th percentile per-packet one-way delay: 120.086 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 11.66 Mbit/s

95th percentile per-packet one-way delay: 113.216 ms

Loss rate: 1.59%

-- Flow 2:

Average throughput: 48.42 Mbit/s

95th percentile per-packet one-way delay: 120.423 ms

Loss rate: 0.28%

-- Flow 3:

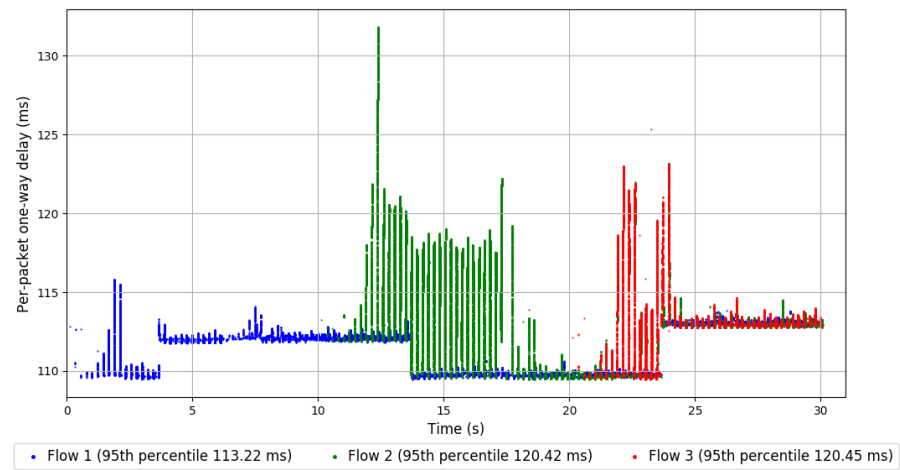
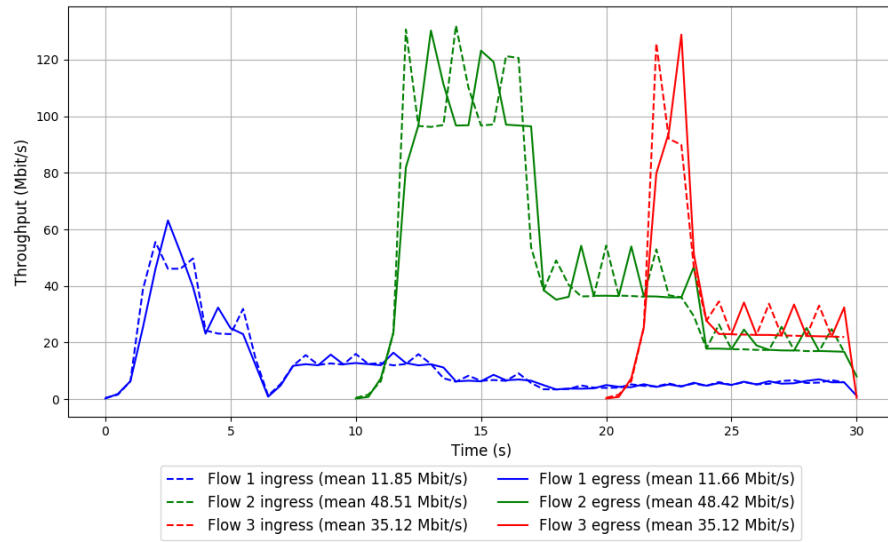
Average throughput: 35.12 Mbit/s

95th percentile per-packet one-way delay: 120.455 ms

Loss rate: 0.00%



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



Run 4: Statistics of TCP Vegas

Start at: 2017-11-30 23:03:36

End at: 2017-11-30 23:04:06

# Below is generated by plot.py at 2017-12-01 01:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 22.02 Mbit/s

95th percentile per-packet one-way delay: 112.617 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 5.56 Mbit/s

95th percentile per-packet one-way delay: 112.630 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 16.69 Mbit/s

95th percentile per-packet one-way delay: 112.685 ms

Loss rate: 0.00%

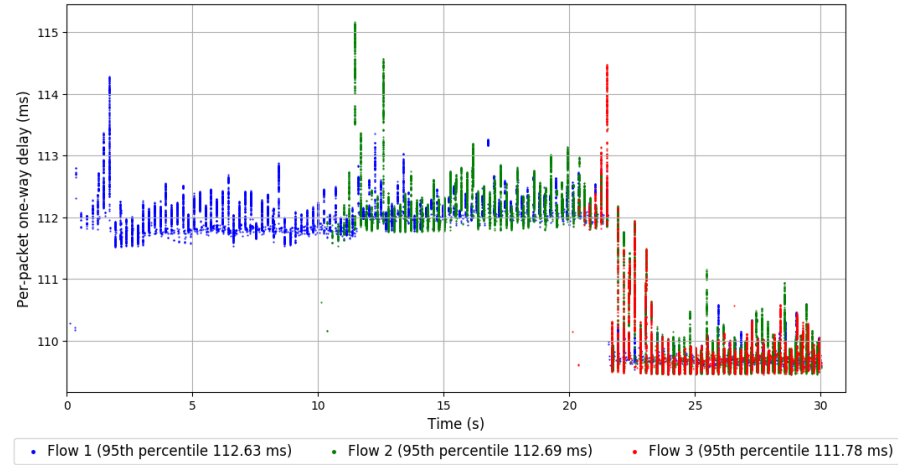
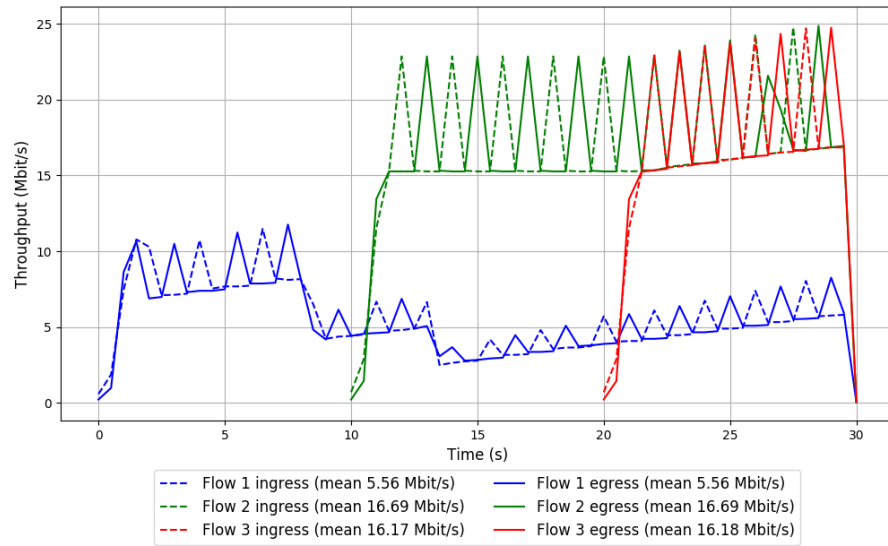
-- Flow 3:

Average throughput: 16.18 Mbit/s

95th percentile per-packet one-way delay: 111.780 ms

Loss rate: 0.00%

# Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-30 23:17:10

End at: 2017-11-30 23:17:40

# Below is generated by plot.py at 2017-12-01 01:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 64.00 Mbit/s

95th percentile per-packet one-way delay: 116.906 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 7.39 Mbit/s

95th percentile per-packet one-way delay: 114.107 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 43.02 Mbit/s

95th percentile per-packet one-way delay: 117.698 ms

Loss rate: 1.56%

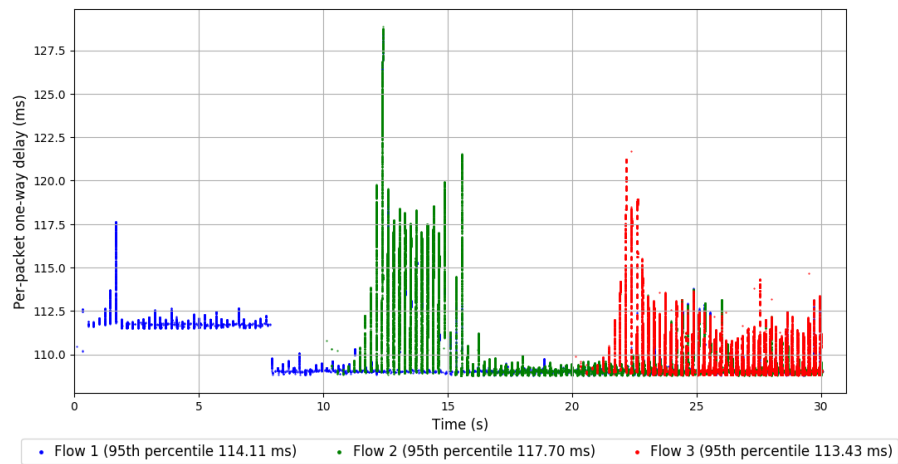
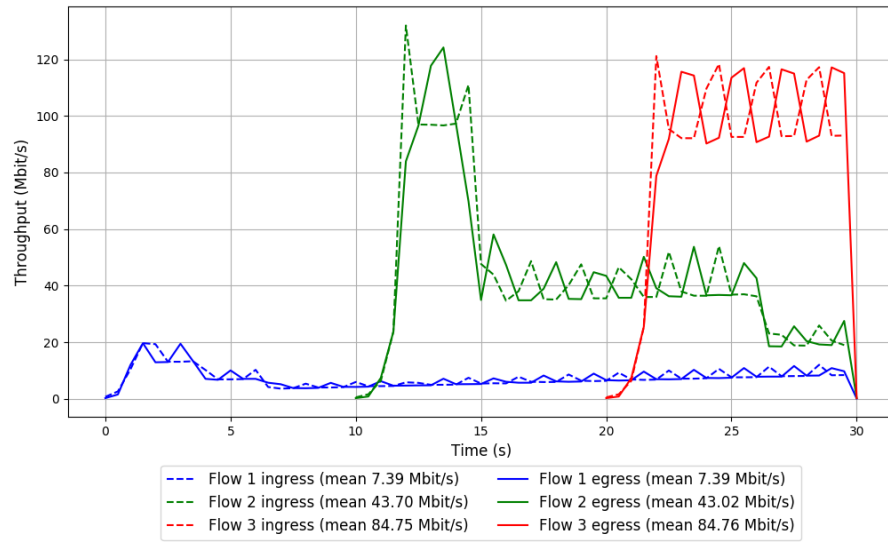
-- Flow 3:

Average throughput: 84.76 Mbit/s

95th percentile per-packet one-way delay: 113.433 ms

Loss rate: 0.00%

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



Run 6: Statistics of TCP Vegas

Start at: 2017-11-30 23:30:23

End at: 2017-11-30 23:30:53

# Below is generated by plot.py at 2017-12-01 01:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 54.44 Mbit/s

95th percentile per-packet one-way delay: 119.355 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 10.27 Mbit/s

95th percentile per-packet one-way delay: 116.466 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 58.74 Mbit/s

95th percentile per-packet one-way delay: 119.976 ms

Loss rate: 0.01%

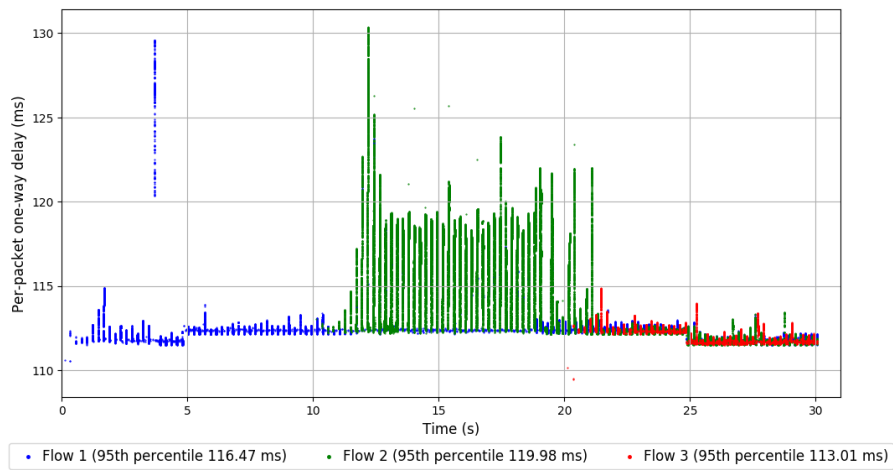
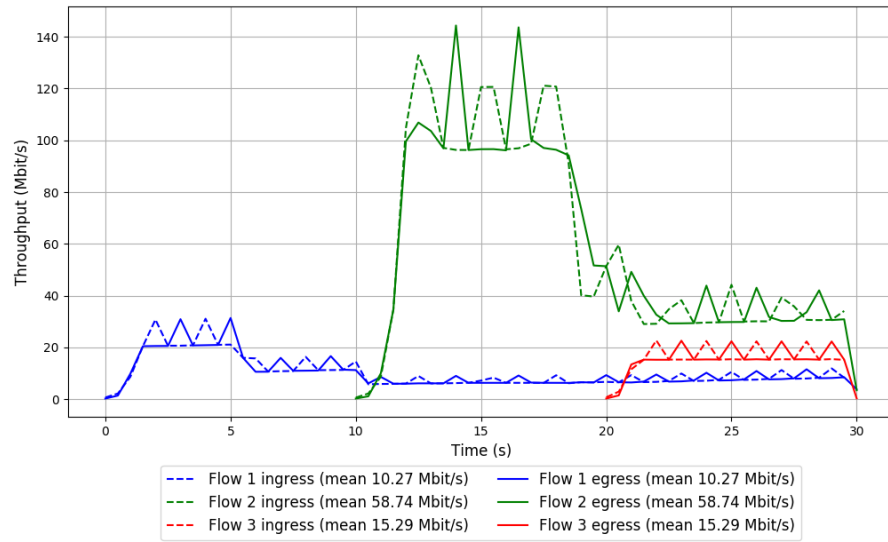
-- Flow 3:

Average throughput: 15.29 Mbit/s

95th percentile per-packet one-way delay: 113.008 ms

Loss rate: 0.00%

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



Run 7: Statistics of TCP Vegas

Start at: 2017-11-30 23:43:57

End at: 2017-11-30 23:44:27

# Below is generated by plot.py at 2017-12-01 01:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 51.76 Mbit/s

95th percentile per-packet one-way delay: 119.165 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 12.76 Mbit/s

95th percentile per-packet one-way delay: 114.064 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 13.49 Mbit/s

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

Loss rate: 2.94%

-- Flow 3:

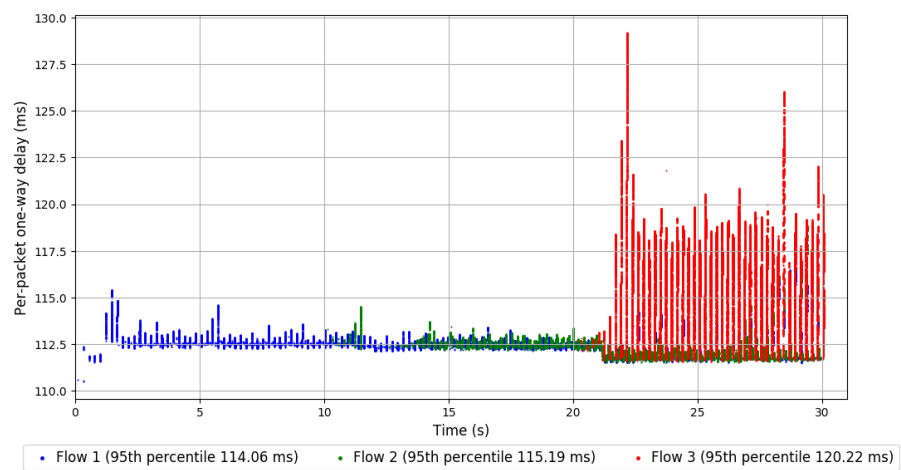
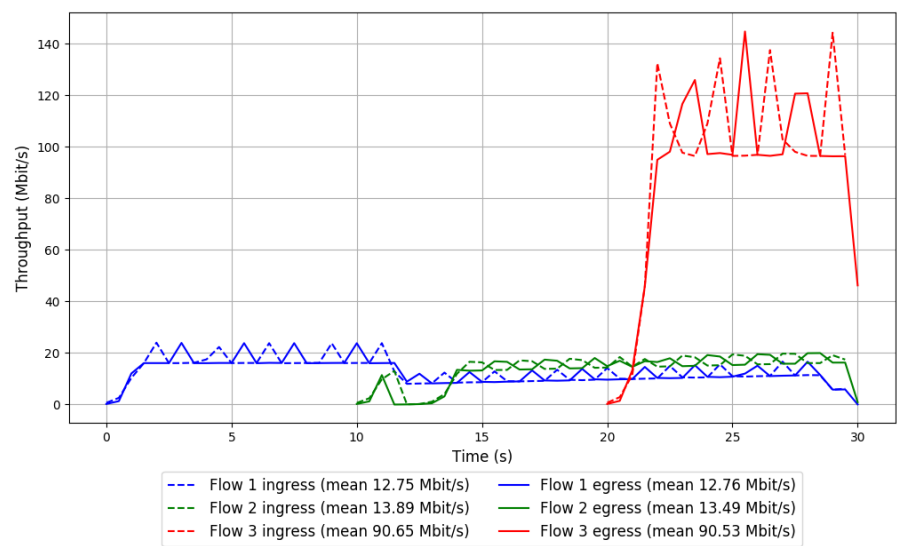
Average throughput: 90.53 Mbit/s

95th percentile per-packet one-way delay: 120.216 ms

Loss rate: 0.12%



Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-30 23:57:23

End at: 2017-11-30 23:57:53

# Below is generated by plot.py at 2017-12-01 01:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 101.11 Mbit/s

95th percentile per-packet one-way delay: 115.869 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 79.21 Mbit/s

95th percentile per-packet one-way delay: 115.704 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 17.28 Mbit/s

95th percentile per-packet one-way delay: 113.369 ms

Loss rate: 0.01%

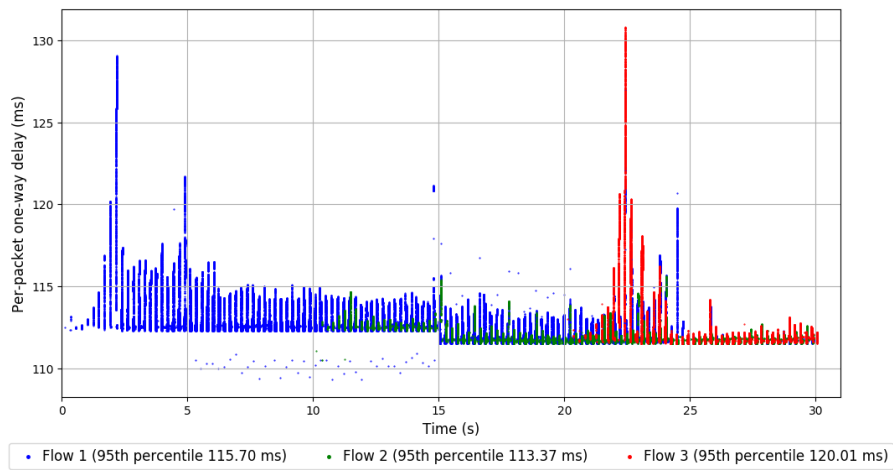
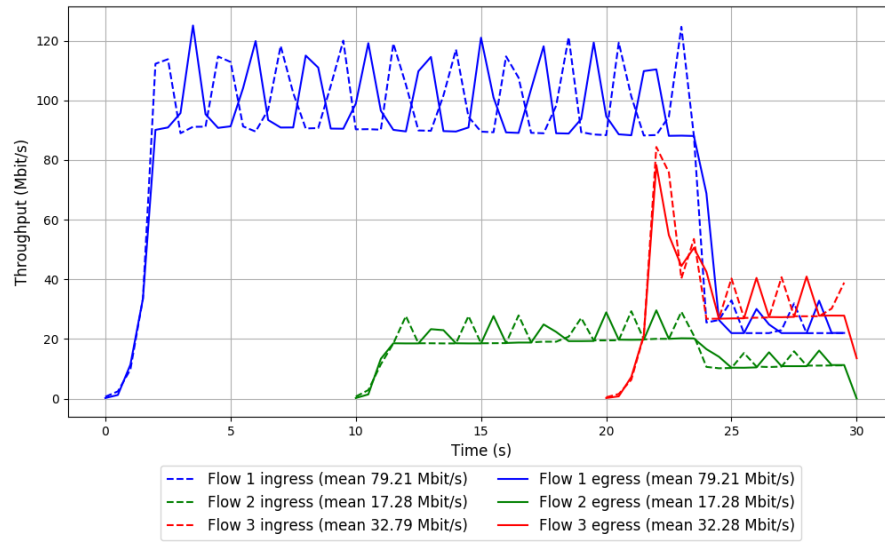
-- Flow 3:

Average throughput: 32.28 Mbit/s

95th percentile per-packet one-way delay: 120.006 ms

Loss rate: 1.56%

# Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-01 00:10:42

End at: 2017-12-01 00:11:12

# Below is generated by plot.py at 2017-12-01 01:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 125.08 Mbit/s

95th percentile per-packet one-way delay: 119.131 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 63.66 Mbit/s

95th percentile per-packet one-way delay: 119.817 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.91 Mbit/s

95th percentile per-packet one-way delay: 118.777 ms

Loss rate: 0.00%

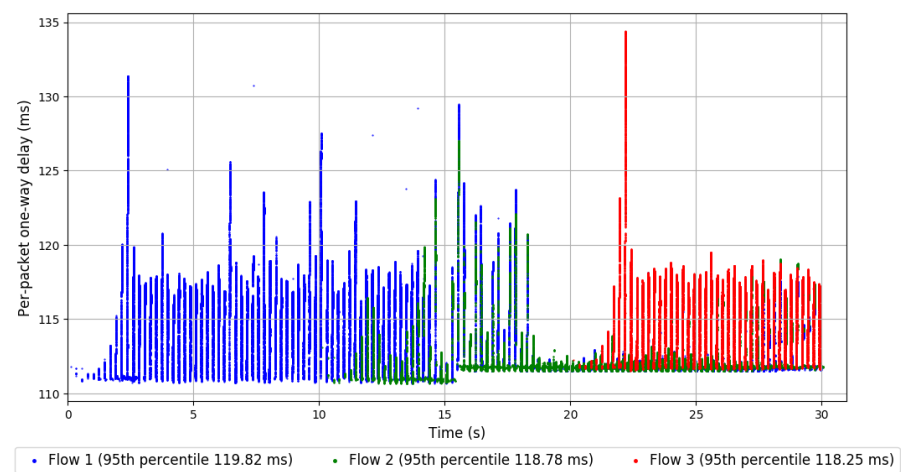
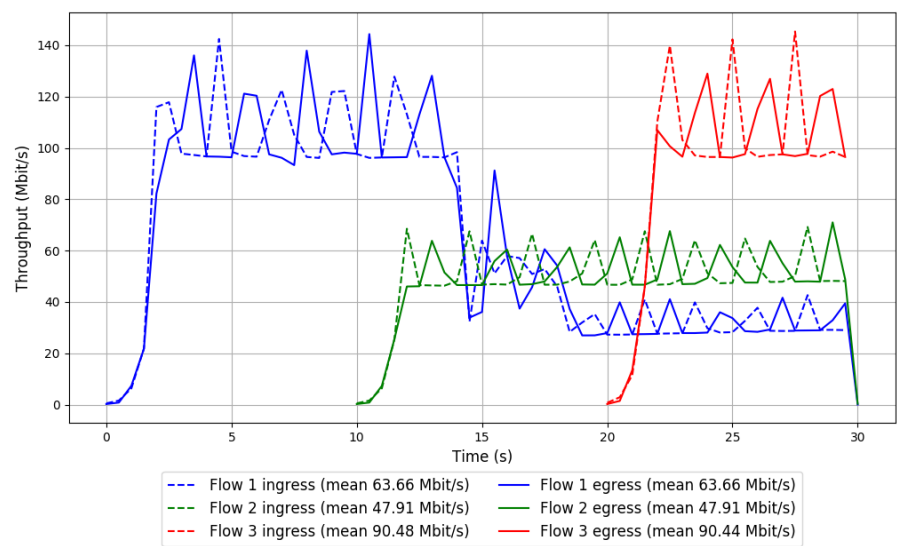
-- Flow 3:

Average throughput: 90.44 Mbit/s

95th percentile per-packet one-way delay: 118.245 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-01 00:24:26

End at: 2017-12-01 00:24:56

# Below is generated by plot.py at 2017-12-01 01:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 144.69 Mbit/s

95th percentile per-packet one-way delay: 118.880 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.43 Mbit/s

95th percentile per-packet one-way delay: 120.653 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.09 Mbit/s

95th percentile per-packet one-way delay: 114.959 ms

Loss rate: 0.00%

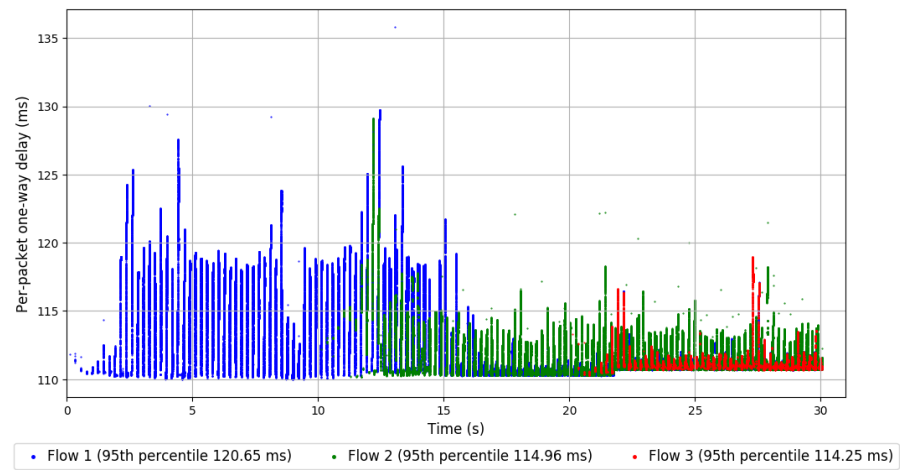
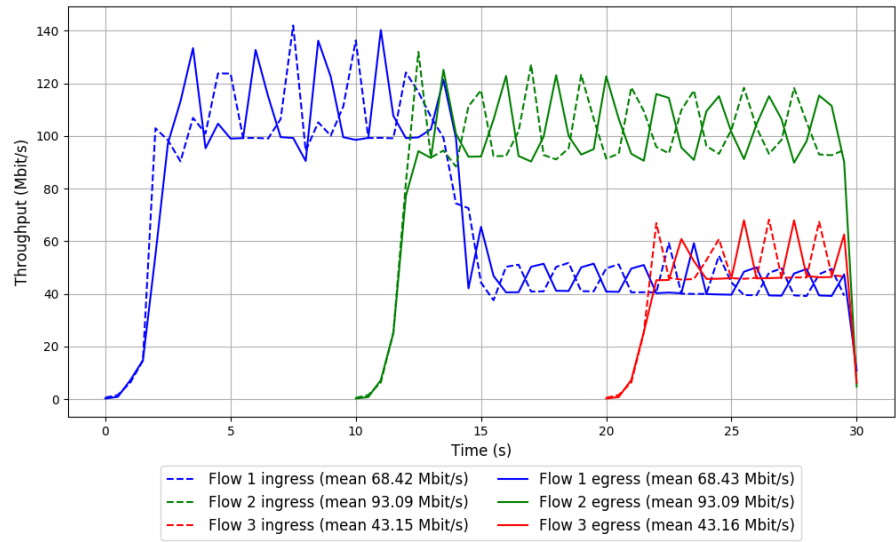
-- Flow 3:

Average throughput: 43.16 Mbit/s

95th percentile per-packet one-way delay: 114.254 ms

Loss rate: 0.00%

# Run 10: Report of TCP Vegas — Data Link



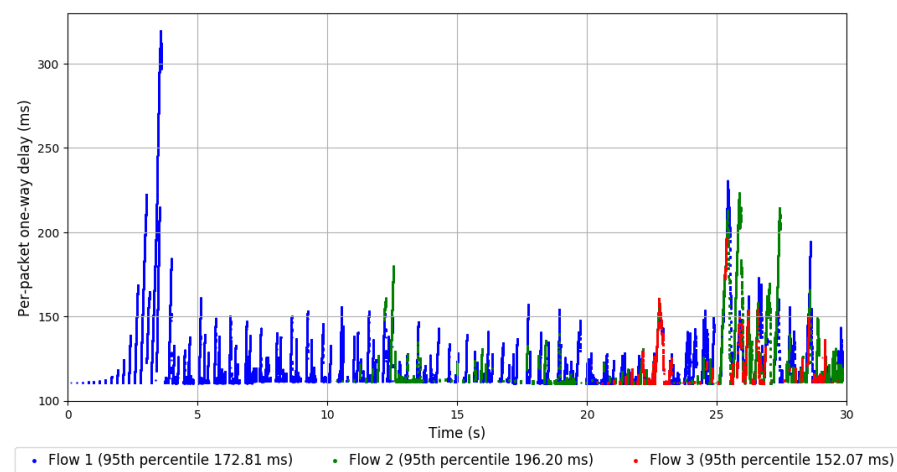
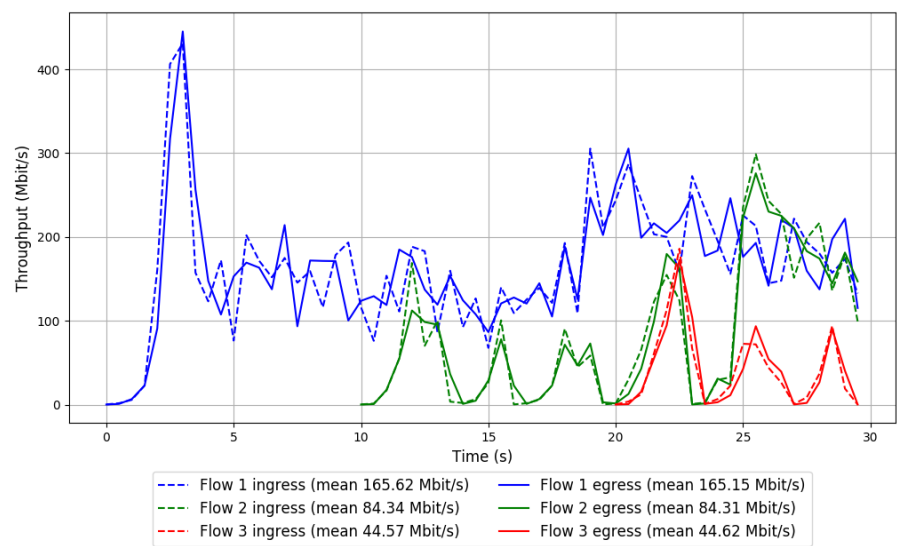
```
Run 1: Statistics of Verus

Start at: 2017-11-30 22:20:01
End at: 2017-11-30 22:20:31

# Below is generated by plot.py at 2017-12-01 01:58:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 235.28 Mbit/s
95th percentile per-packet one-way delay: 178.518 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 165.15 Mbit/s
95th percentile per-packet one-way delay: 172.808 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 84.31 Mbit/s
95th percentile per-packet one-way delay: 196.198 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 44.62 Mbit/s
95th percentile per-packet one-way delay: 152.072 ms
Loss rate: 0.00%
```



Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-30 22:33:21

End at: 2017-11-30 22:33:51

# Below is generated by plot.py at 2017-12-01 01:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 313.77 Mbit/s

95th percentile per-packet one-way delay: 266.242 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 205.03 Mbit/s

95th percentile per-packet one-way delay: 205.038 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 149.03 Mbit/s

95th percentile per-packet one-way delay: 321.745 ms

Loss rate: 3.57%

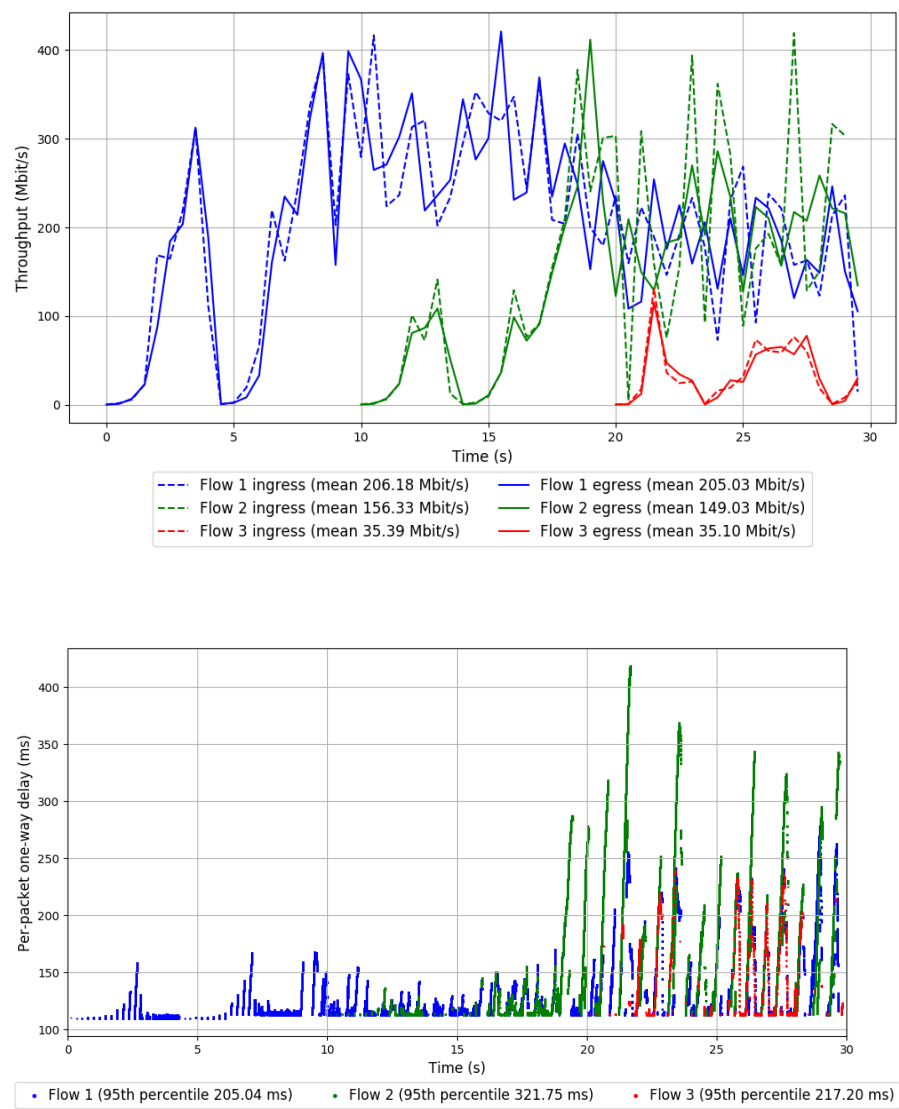
-- Flow 3:

Average throughput: 35.10 Mbit/s

95th percentile per-packet one-way delay: 217.204 ms

Loss rate: 0.73%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-30 22:46:52

End at: 2017-11-30 22:47:22

# Below is generated by plot.py at 2017-12-01 01:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 306.53 Mbit/s

95th percentile per-packet one-way delay: 208.312 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 234.45 Mbit/s

95th percentile per-packet one-way delay: 212.732 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 80.36 Mbit/s

95th percentile per-packet one-way delay: 190.352 ms

Loss rate: 1.19%

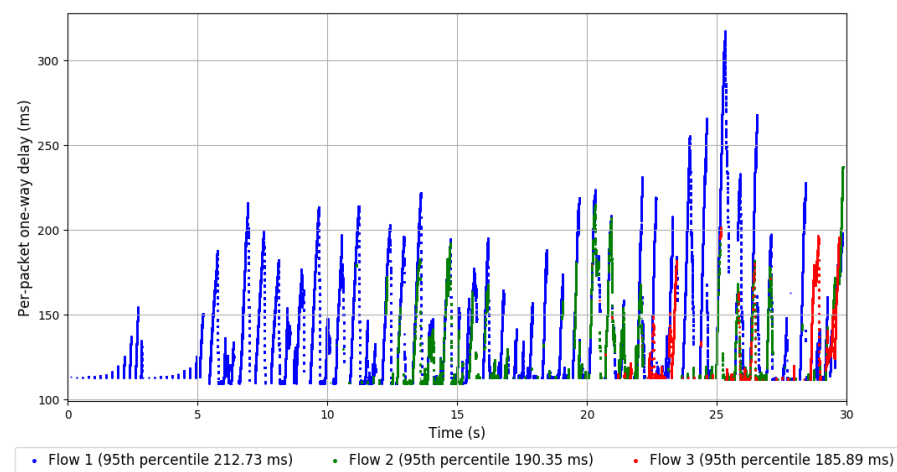
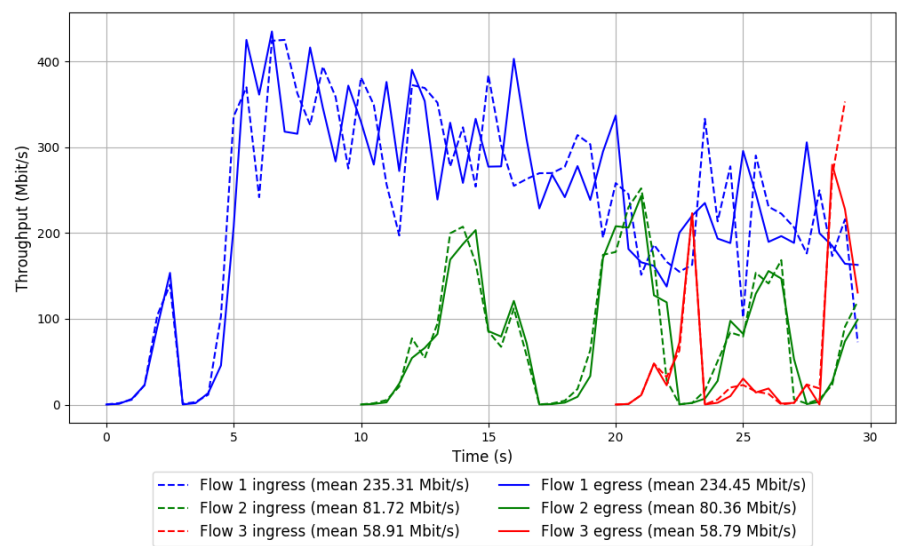
-- Flow 3:

Average throughput: 58.79 Mbit/s

95th percentile per-packet one-way delay: 185.887 ms

Loss rate: 0.03%

Run 3: Report of Verus — Data Link

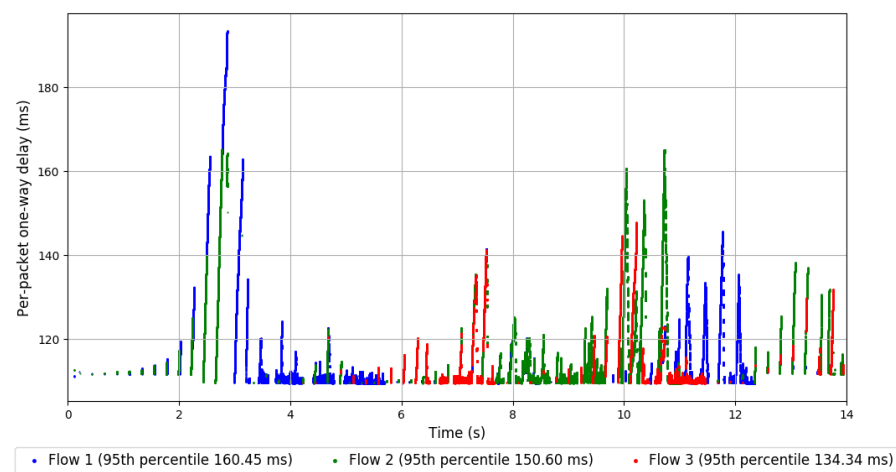
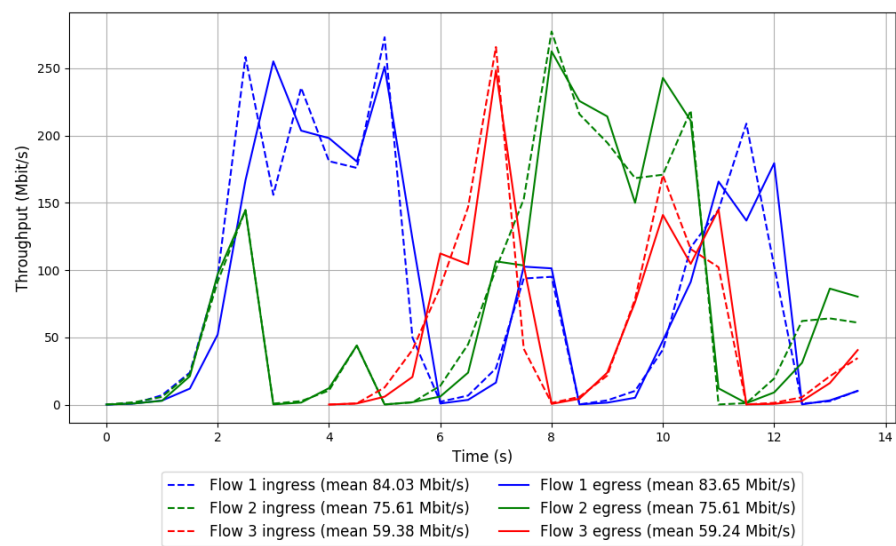


Run 4: Statistics of Verus

Start at: 2017-11-30 23:00:29

End at: 2017-11-30 23:00:59

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-30 23:13:44

End at: 2017-11-30 23:14:14

# Below is generated by plot.py at 2017-12-01 01:59:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 348.36 Mbit/s

95th percentile per-packet one-way delay: 162.243 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 235.60 Mbit/s

95th percentile per-packet one-way delay: 166.804 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 79.86 Mbit/s

95th percentile per-packet one-way delay: 151.995 ms

Loss rate: 0.12%

-- Flow 3:

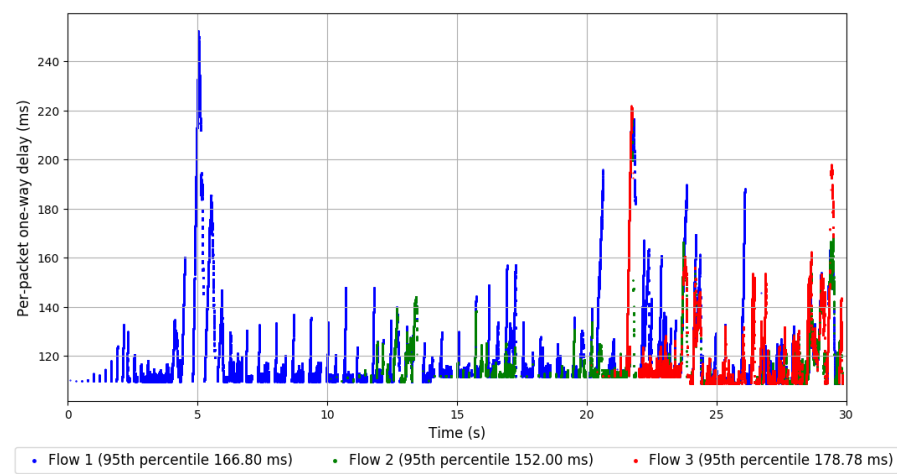
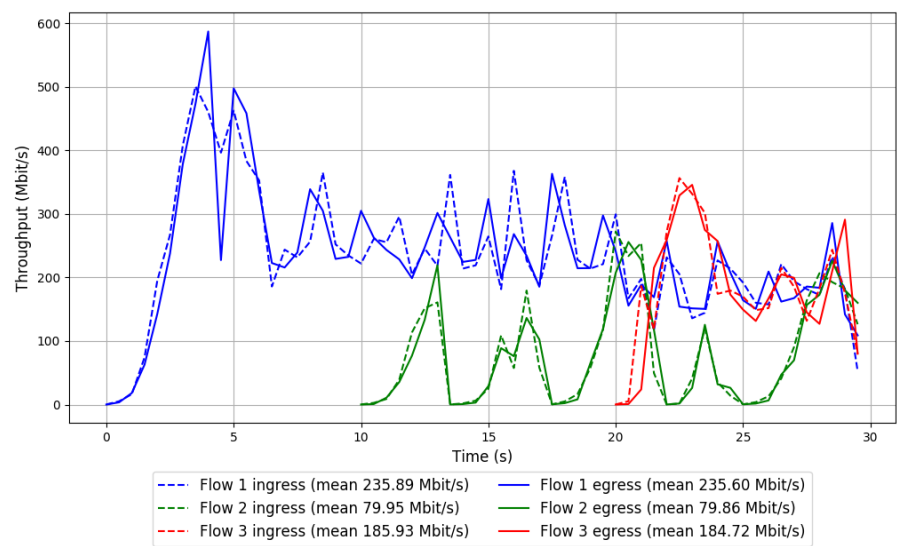
Average throughput: 184.72 Mbit/s

95th percentile per-packet one-way delay: 178.777 ms

Loss rate: 0.69%



Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-30 23:27:09

End at: 2017-11-30 23:27:39

# Below is generated by plot.py at 2017-12-01 01:59:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 222.55 Mbit/s

95th percentile per-packet one-way delay: 287.111 ms

Loss rate: 4.58%

-- Flow 1:

Average throughput: 87.21 Mbit/s

95th percentile per-packet one-way delay: 148.271 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 111.15 Mbit/s

95th percentile per-packet one-way delay: 304.035 ms

Loss rate: 10.21%

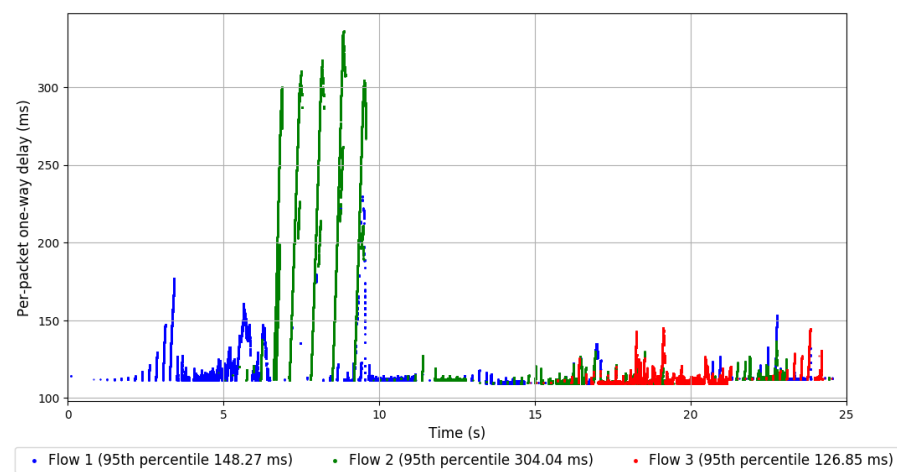
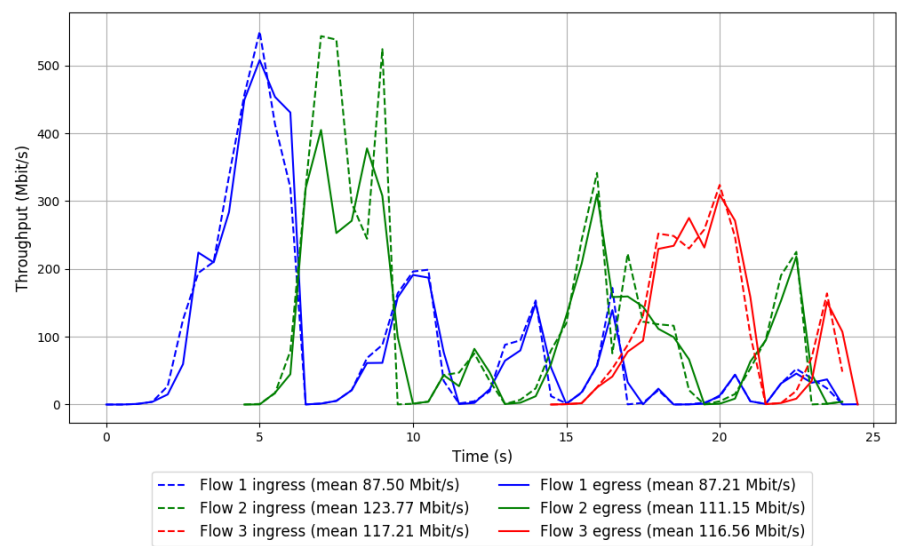
-- Flow 3:

Average throughput: 116.56 Mbit/s

95th percentile per-packet one-way delay: 126.850 ms

Loss rate: 0.52%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-30 23:40:39

End at: 2017-11-30 23:41:09

# Below is generated by plot.py at 2017-12-01 01:59:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 242.18 Mbit/s

95th percentile per-packet one-way delay: 145.478 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 192.33 Mbit/s

95th percentile per-packet one-way delay: 147.618 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 68.74 Mbit/s

95th percentile per-packet one-way delay: 140.849 ms

Loss rate: 0.00%

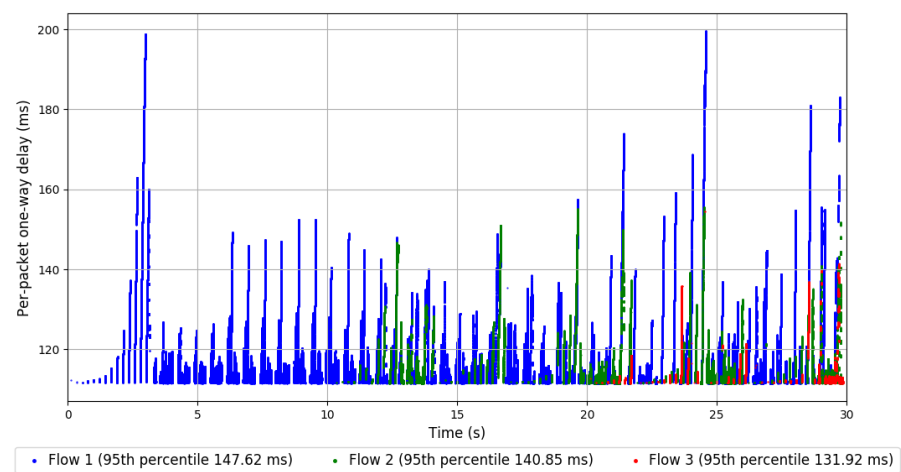
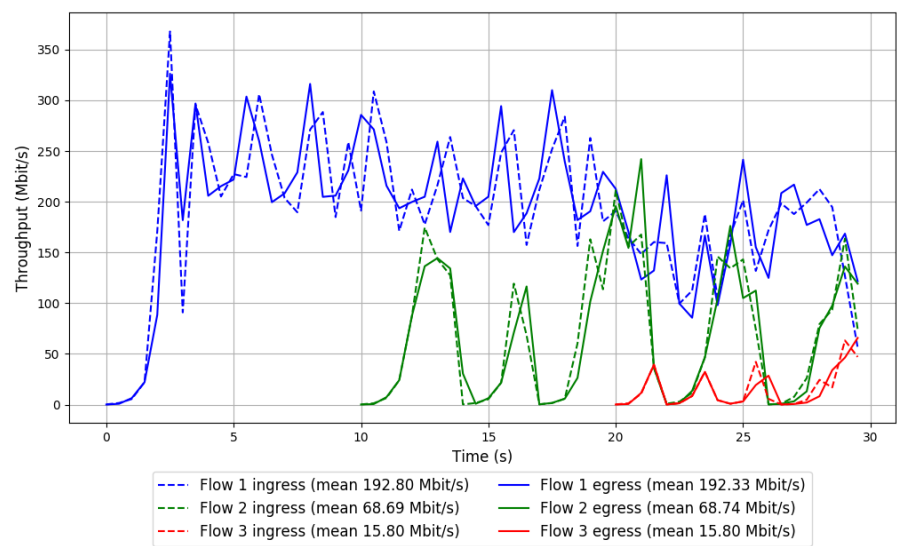
-- Flow 3:

Average throughput: 15.80 Mbit/s

95th percentile per-packet one-way delay: 131.923 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-30 23:54:02

End at: 2017-11-30 23:54:32

# Below is generated by plot.py at 2017-12-01 01:59:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 260.08 Mbit/s

95th percentile per-packet one-way delay: 311.178 ms

Loss rate: 6.18%

-- Flow 1:

Average throughput: 63.82 Mbit/s

95th percentile per-packet one-way delay: 297.102 ms

Loss rate: 4.12%

-- Flow 2:

Average throughput: 202.13 Mbit/s

95th percentile per-packet one-way delay: 321.863 ms

Loss rate: 6.98%

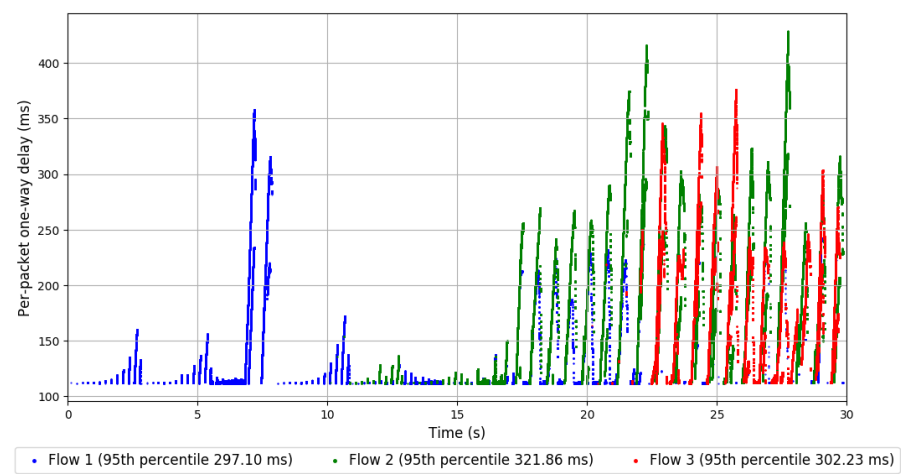
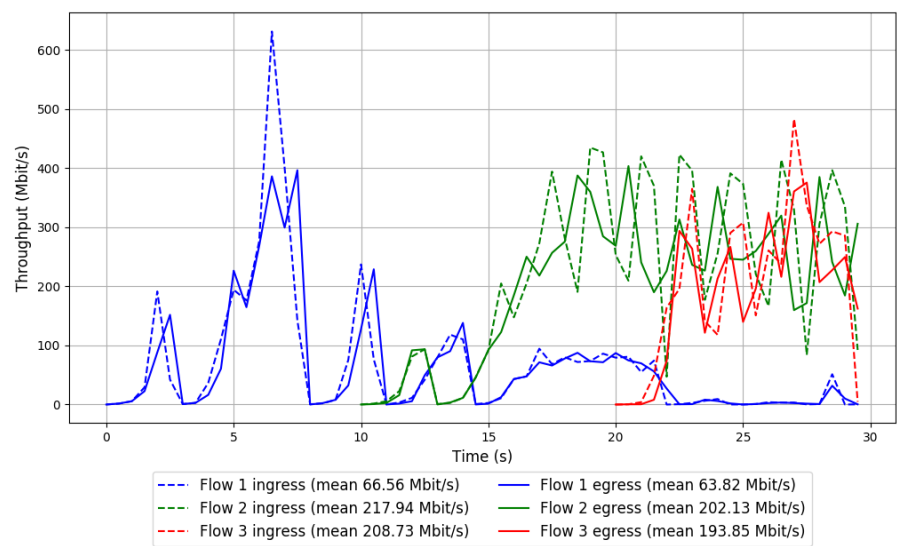
-- Flow 3:

Average throughput: 193.85 Mbit/s

95th percentile per-packet one-way delay: 302.229 ms

Loss rate: 6.53%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-01 00:07:28

End at: 2017-12-01 00:07:58

# Below is generated by plot.py at 2017-12-01 01:59:24

# Datalink statistics

-- Total of 3 flows:

Average throughput: 215.56 Mbit/s

95th percentile per-packet one-way delay: 320.060 ms

Loss rate: 4.52%

-- Flow 1:

Average throughput: 118.90 Mbit/s

95th percentile per-packet one-way delay: 206.528 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 134.70 Mbit/s

95th percentile per-packet one-way delay: 361.013 ms

Loss rate: 9.18%

-- Flow 3:

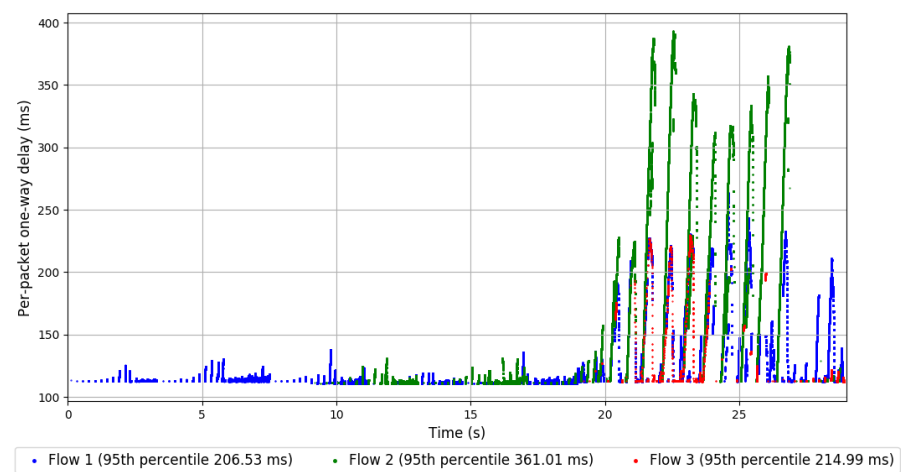
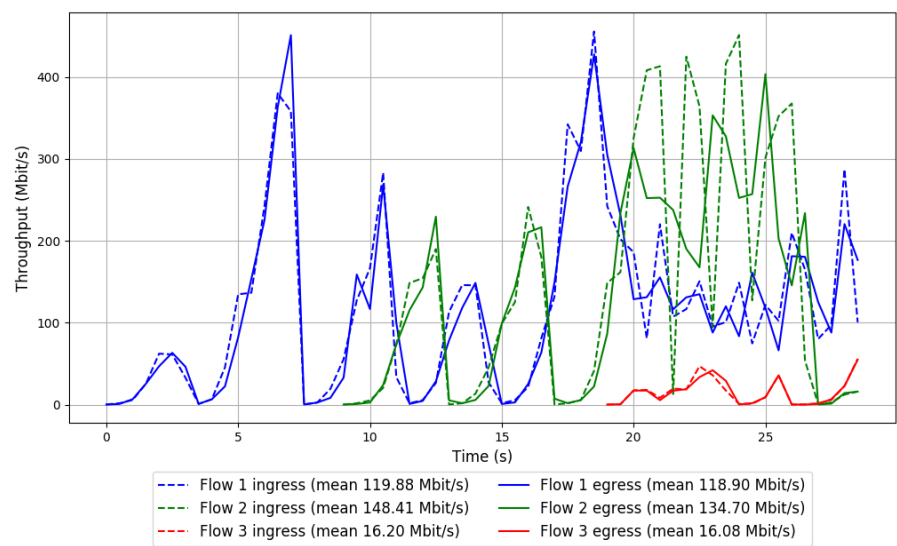
Average throughput: 16.08 Mbit/s

95th percentile per-packet one-way delay: 214.992 ms

Loss rate: 0.74%



Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-01 00:21:10

End at: 2017-12-01 00:21:40

# Below is generated by plot.py at 2017-12-01 02:00:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 227.30 Mbit/s

95th percentile per-packet one-way delay: 214.706 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 153.19 Mbit/s

95th percentile per-packet one-way delay: 201.718 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 77.12 Mbit/s

95th percentile per-packet one-way delay: 224.944 ms

Loss rate: 0.09%

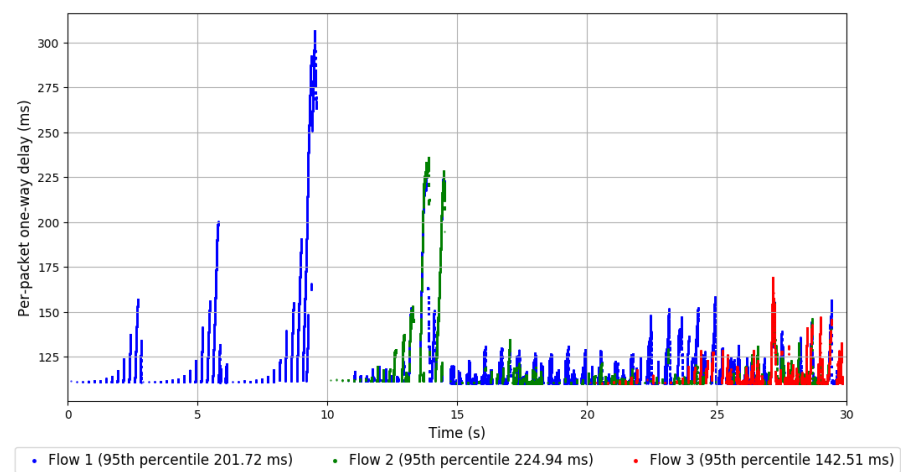
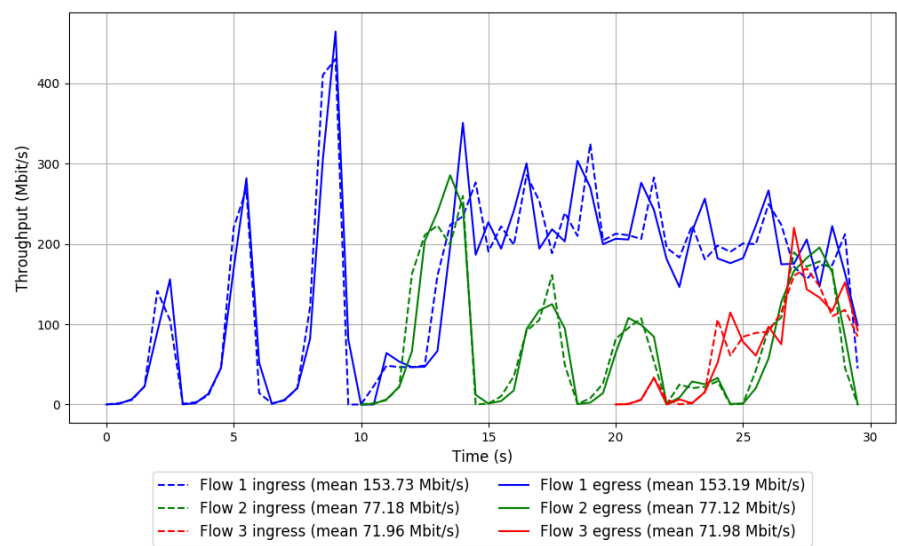
-- Flow 3:

Average throughput: 71.98 Mbit/s

95th percentile per-packet one-way delay: 142.510 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link

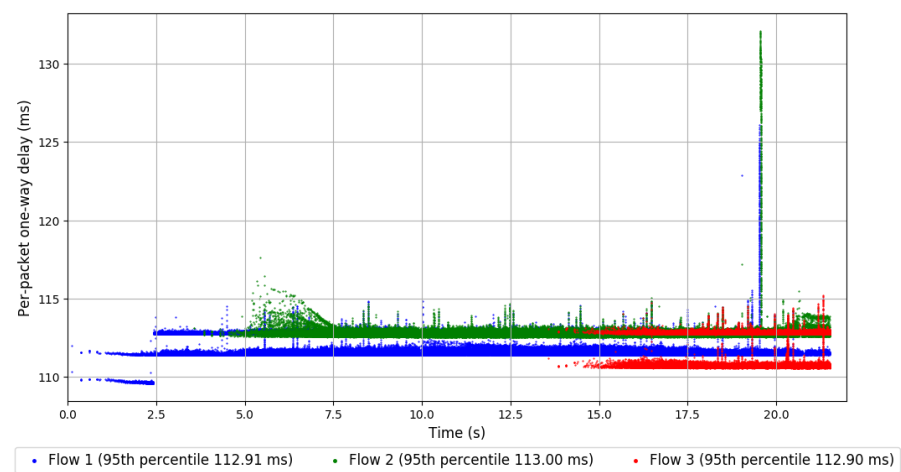
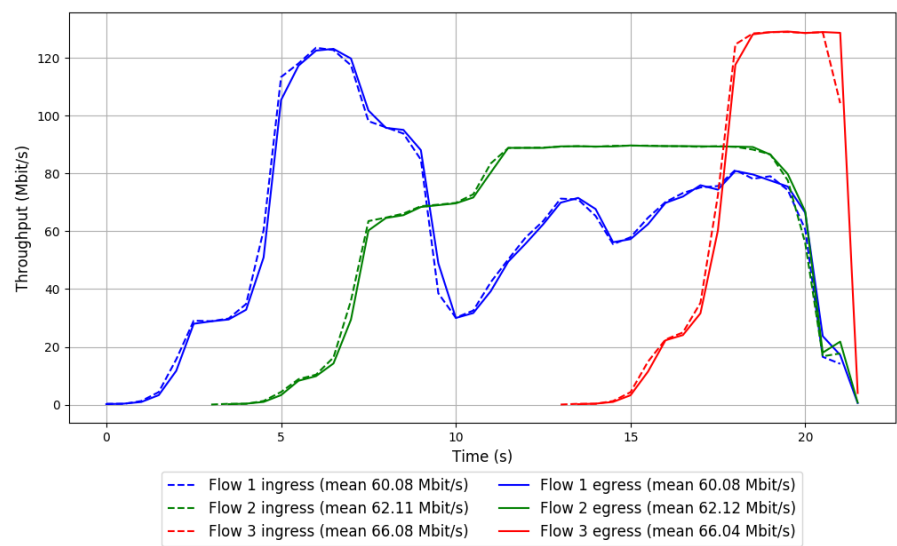


Run 1: Statistics of Copa

Start at: 2017-11-30 22:22:17

End at: 2017-11-30 22:22:47

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-30 22:35:46

End at: 2017-11-30 22:36:16

# Below is generated by plot.py at 2017-12-01 02:01:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 140.73 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.94 Mbit/s

95th percentile per-packet one-way delay: 112.944 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 79.18 Mbit/s

95th percentile per-packet one-way delay: 112.896 ms

Loss rate: 0.00%

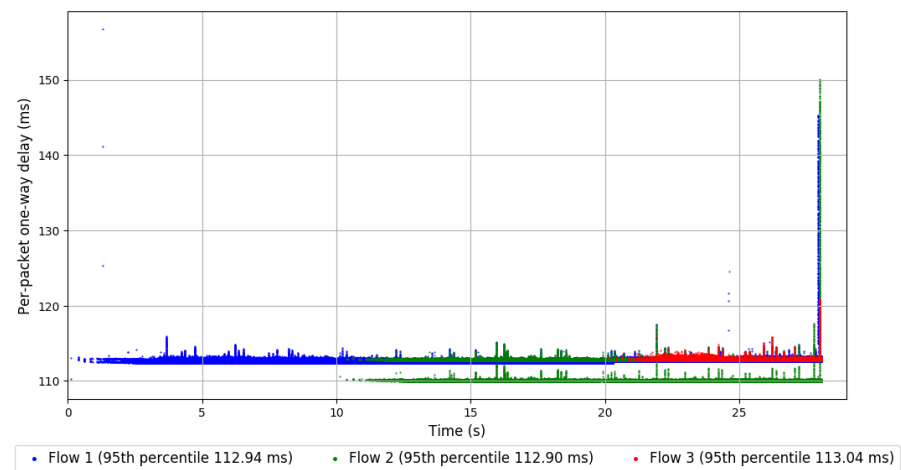
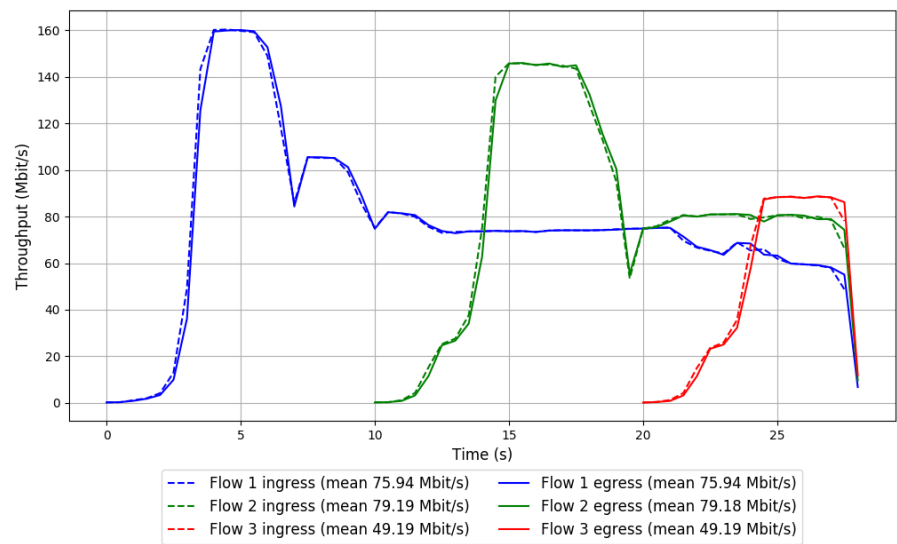
-- Flow 3:

Average throughput: 49.19 Mbit/s

95th percentile per-packet one-way delay: 113.039 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-30 22:49:15

End at: 2017-11-30 22:49:45

# Below is generated by plot.py at 2017-12-01 02:01:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 123.01 Mbit/s

95th percentile per-packet one-way delay: 112.902 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.11 Mbit/s

95th percentile per-packet one-way delay: 112.894 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.69 Mbit/s

95th percentile per-packet one-way delay: 112.887 ms

Loss rate: 0.00%

-- Flow 3:

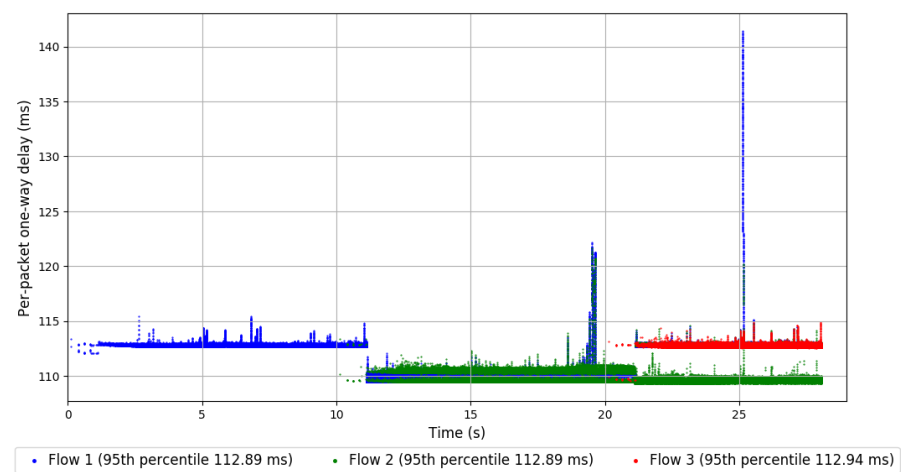
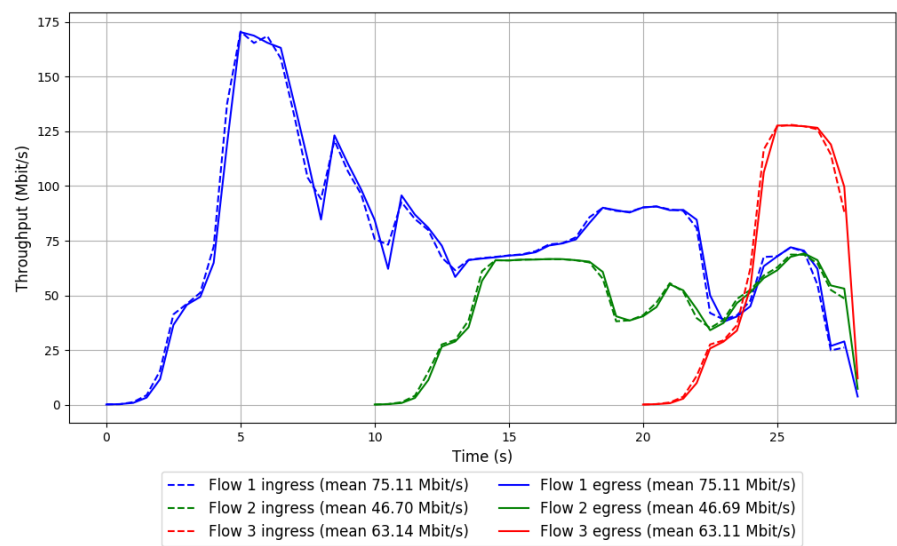
Average throughput: 63.11 Mbit/s

95th percentile per-packet one-way delay: 112.938 ms

Loss rate: 0.00%



Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-30 23:02:36

End at: 2017-11-30 23:03:06

# Below is generated by plot.py at 2017-12-01 02:02:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 130.37 Mbit/s

95th percentile per-packet one-way delay: 112.760 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.23 Mbit/s

95th percentile per-packet one-way delay: 112.772 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.57 Mbit/s

95th percentile per-packet one-way delay: 112.343 ms

Loss rate: 0.00%

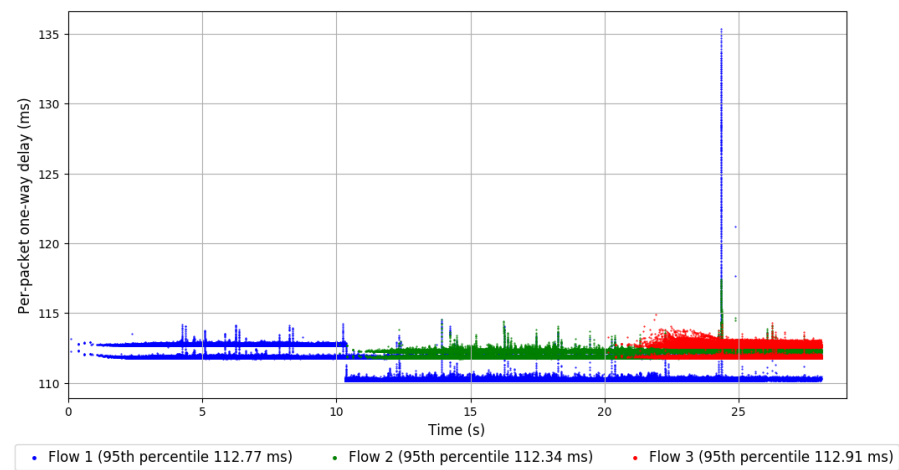
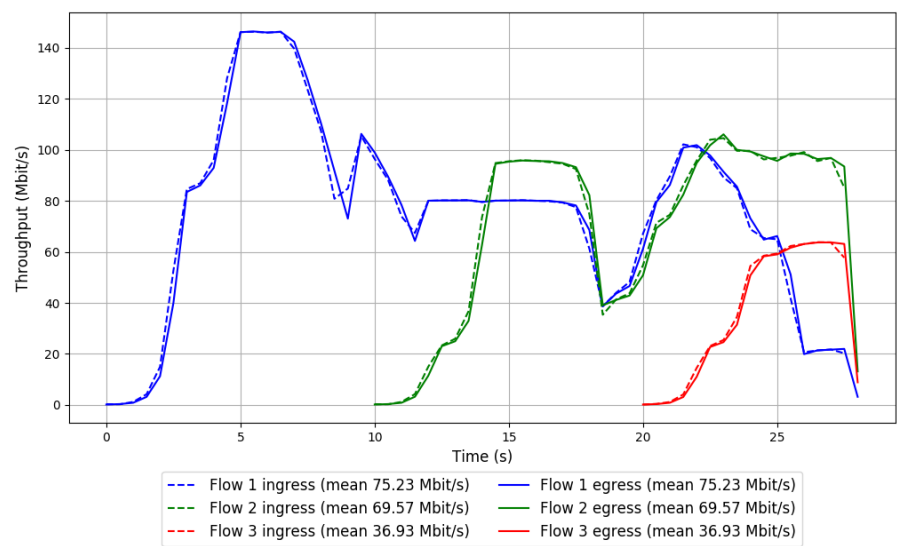
-- Flow 3:

Average throughput: 36.93 Mbit/s

95th percentile per-packet one-way delay: 112.914 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-30 23:16:09

End at: 2017-11-30 23:16:39

# Below is generated by plot.py at 2017-12-01 02:02:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 132.78 Mbit/s

95th percentile per-packet one-way delay: 112.814 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.35 Mbit/s

95th percentile per-packet one-way delay: 112.794 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.77 Mbit/s

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

Loss rate: 0.00%

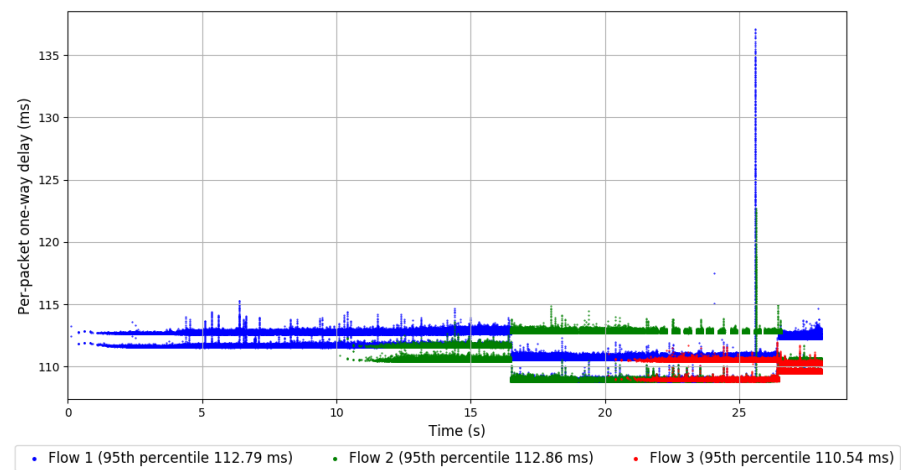
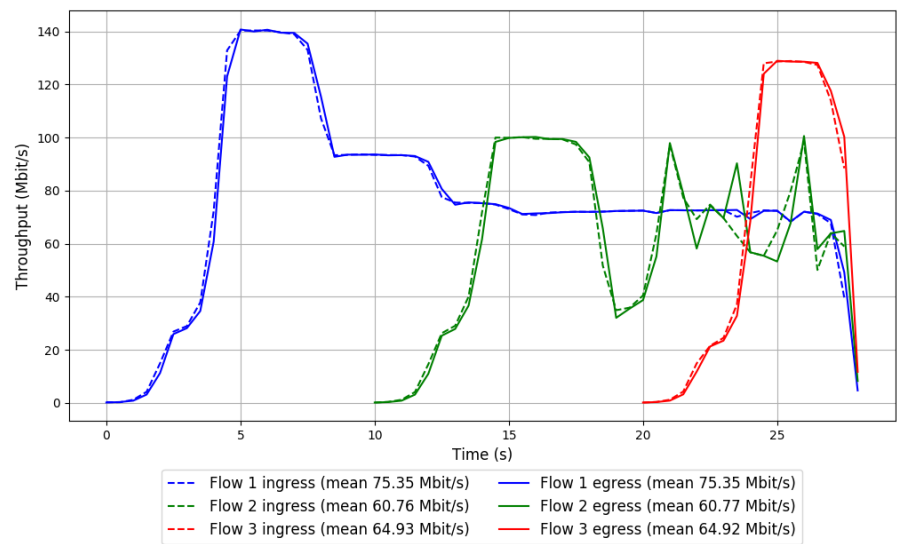
-- Flow 3:

Average throughput: 64.92 Mbit/s

95th percentile per-packet one-way delay: 110.544 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-30 23:29:24

End at: 2017-11-30 23:29:54

# Below is generated by plot.py at 2017-12-01 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 122.44 Mbit/s

95th percentile per-packet one-way delay: 112.261 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 76.87 Mbit/s

95th percentile per-packet one-way delay: 112.222 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.70 Mbit/s

95th percentile per-packet one-way delay: 112.269 ms

Loss rate: 0.00%

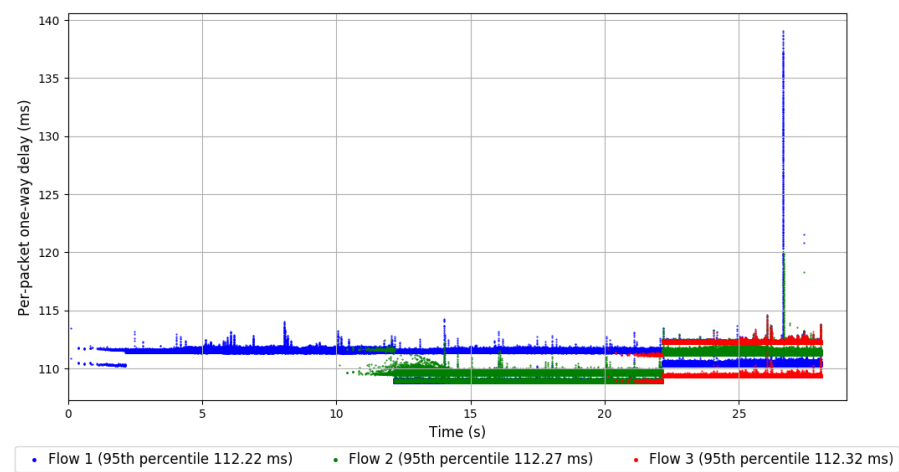
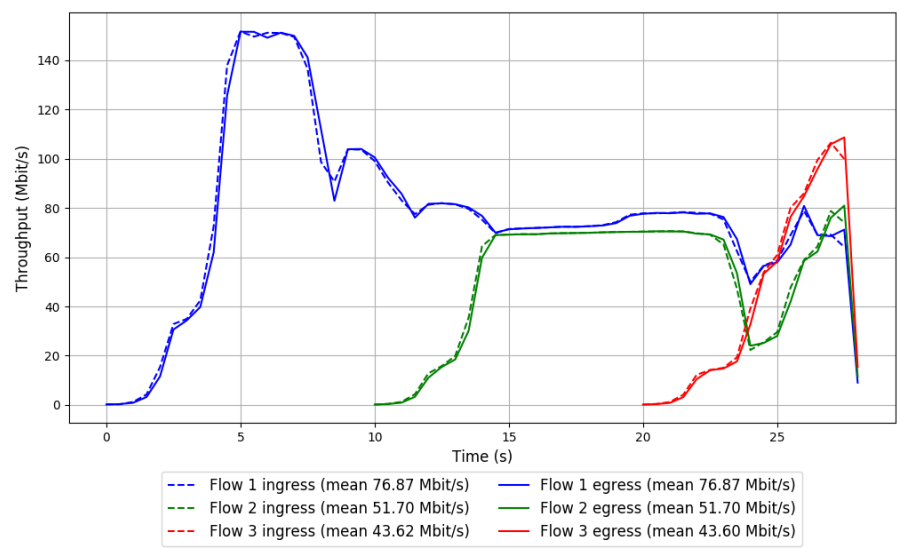
-- Flow 3:

Average throughput: 43.60 Mbit/s

95th percentile per-packet one-way delay: 112.323 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-30 23:42:56

End at: 2017-11-30 23:43:26

# Below is generated by plot.py at 2017-12-01 02:02:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 128.31 Mbit/s

95th percentile per-packet one-way delay: 112.829 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 75.42 Mbit/s

95th percentile per-packet one-way delay: 112.351 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.65 Mbit/s

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

Loss rate: 0.01%

-- Flow 3:

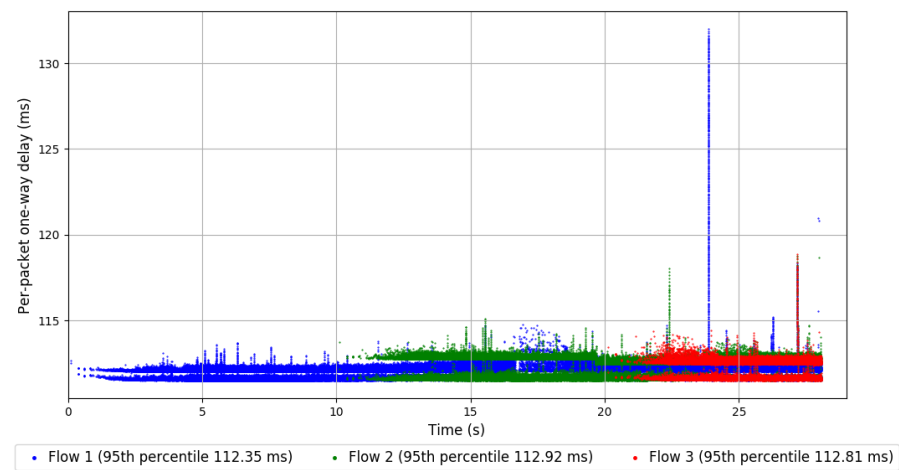
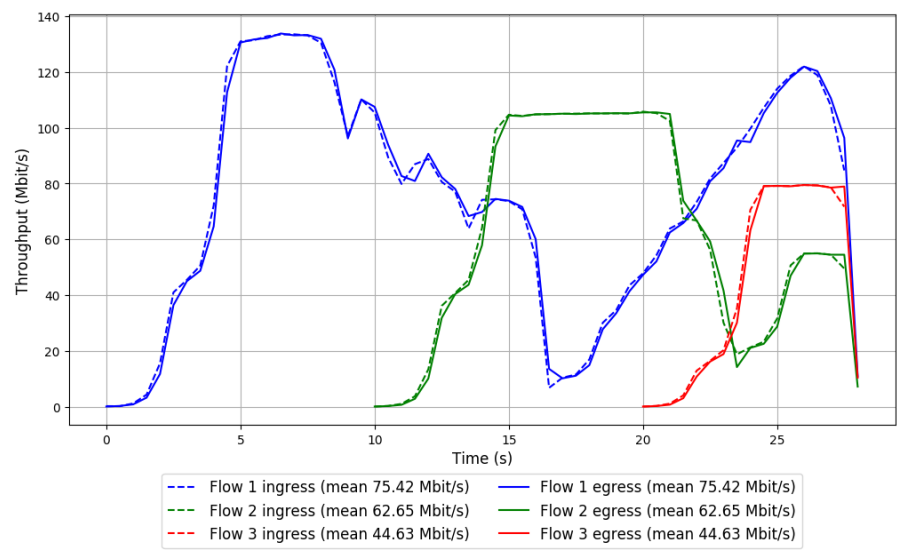
Average throughput: 44.63 Mbit/s

95th percentile per-packet one-way delay: 112.807 ms

Loss rate: 0.02%



Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-30 23:56:22

End at: 2017-11-30 23:56:52

# Below is generated by plot.py at 2017-12-01 02:03:49

# Datalink statistics

-- Total of 3 flows:

Average throughput: 137.64 Mbit/s

95th percentile per-packet one-way delay: 112.316 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.76 Mbit/s

95th percentile per-packet one-way delay: 112.313 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.63 Mbit/s

95th percentile per-packet one-way delay: 112.314 ms

Loss rate: 0.00%

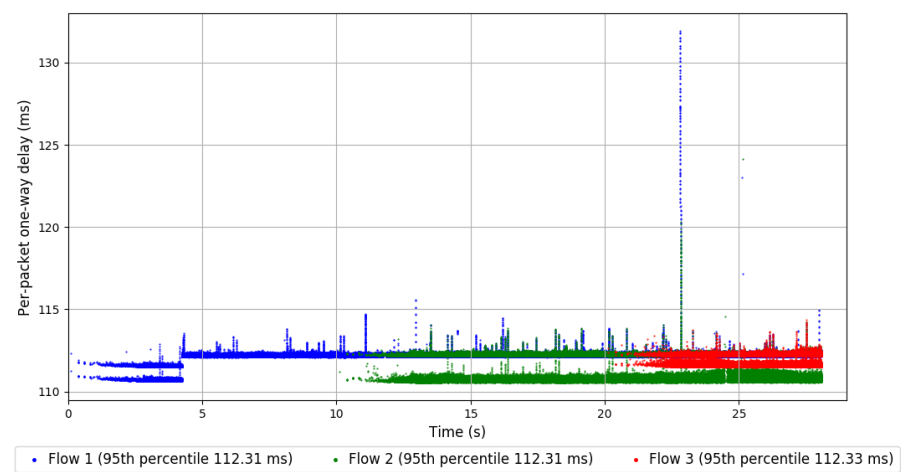
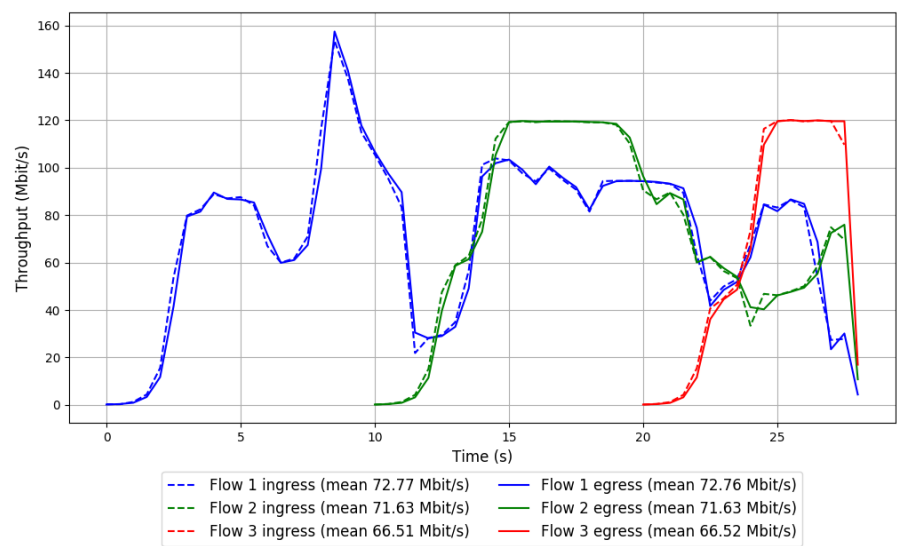
-- Flow 3:

Average throughput: 66.52 Mbit/s

95th percentile per-packet one-way delay: 112.331 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-01 00:09:43

End at: 2017-12-01 00:10:13

# Below is generated by plot.py at 2017-12-01 02:03:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 120.55 Mbit/s

95th percentile per-packet one-way delay: 114.563 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.18 Mbit/s

95th percentile per-packet one-way delay: 111.677 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.68 Mbit/s

95th percentile per-packet one-way delay: 114.711 ms

Loss rate: 0.00%

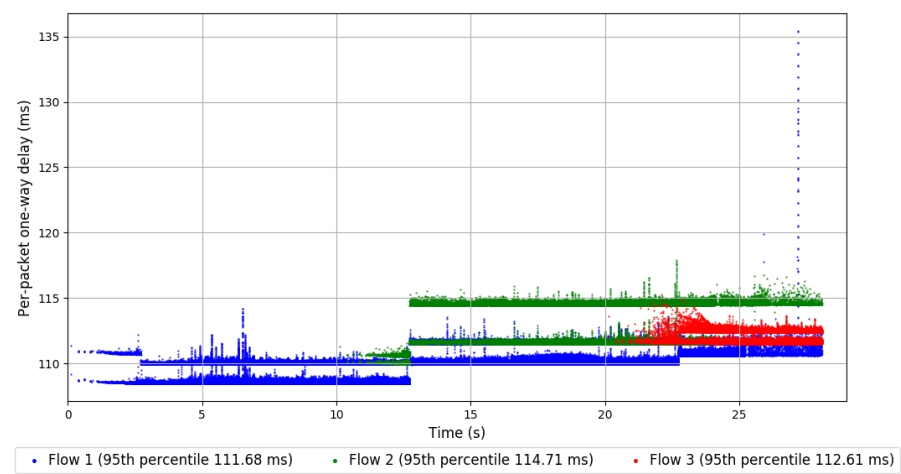
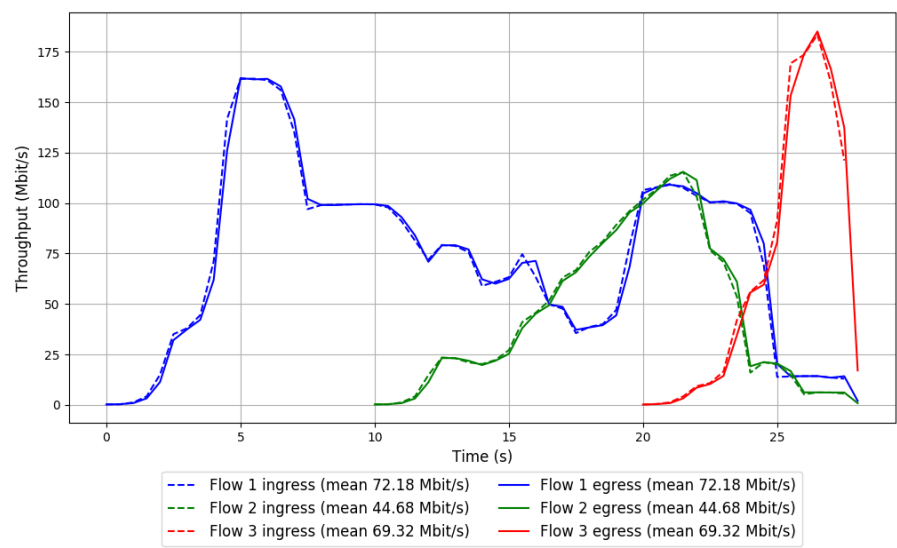
-- Flow 3:

Average throughput: 69.32 Mbit/s

95th percentile per-packet one-way delay: 112.612 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-01 00:23:26

End at: 2017-12-01 00:23:57

# Below is generated by plot.py at 2017-12-01 02:04:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 123.72 Mbit/s

95th percentile per-packet one-way delay: 112.276 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.84 Mbit/s

95th percentile per-packet one-way delay: 110.847 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 74.59 Mbit/s

95th percentile per-packet one-way delay: 112.339 ms

Loss rate: 0.00%

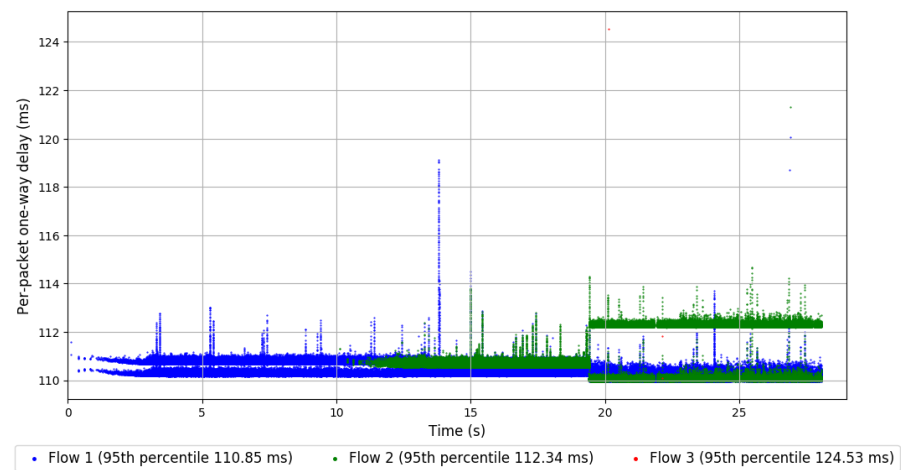
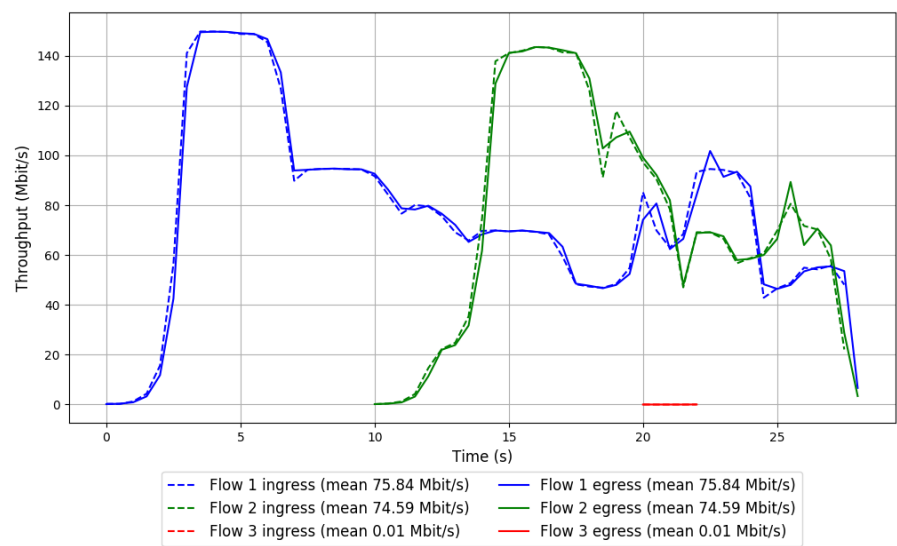
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 124.525 ms

Loss rate: 46.17%

Run 10: Report of Copa — Data Link



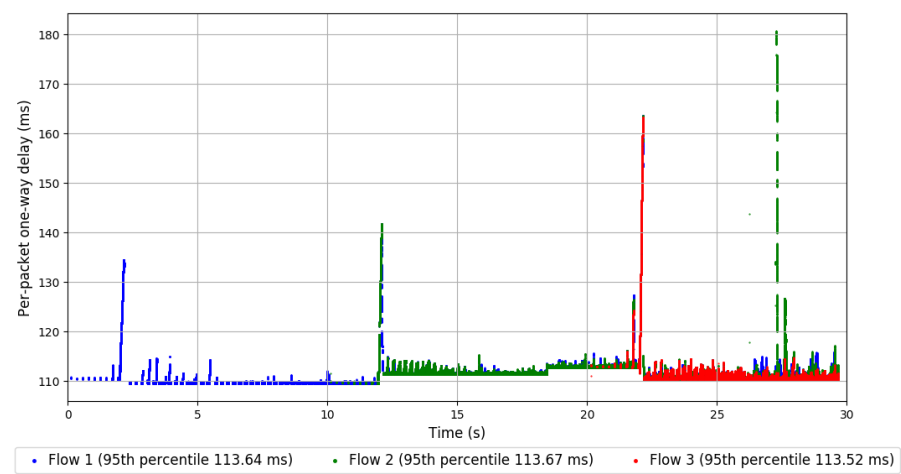
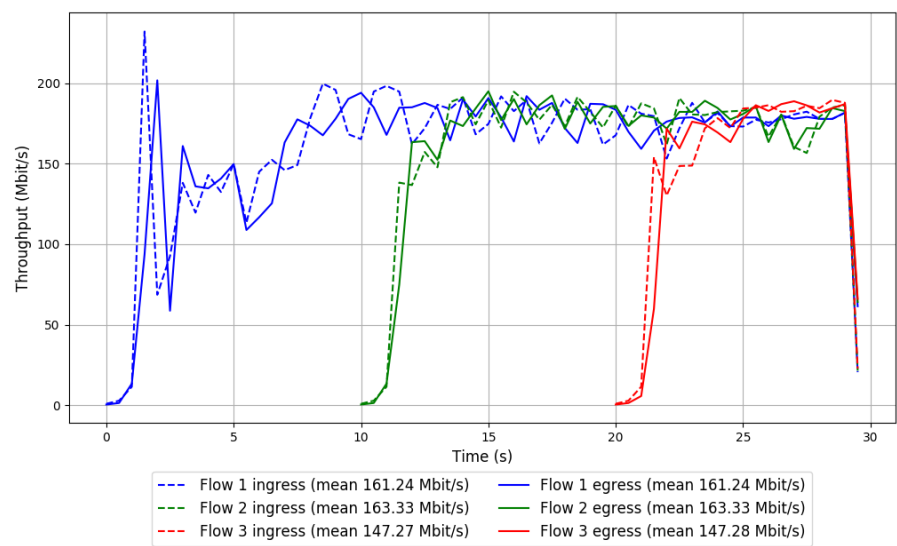
```
Run 1: Statistics of Indigo

Start at: 2017-11-30 22:21:05
End at: 2017-11-30 22:21:35

# Below is generated by plot.py at 2017-12-01 02:06:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 316.82 Mbit/s
95th percentile per-packet one-way delay: 113.636 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 161.24 Mbit/s
95th percentile per-packet one-way delay: 113.636 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 163.33 Mbit/s
95th percentile per-packet one-way delay: 113.672 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 147.28 Mbit/s
95th percentile per-packet one-way delay: 113.516 ms
Loss rate: 0.00%
```



Run 1: Report of Indigo — Data Link

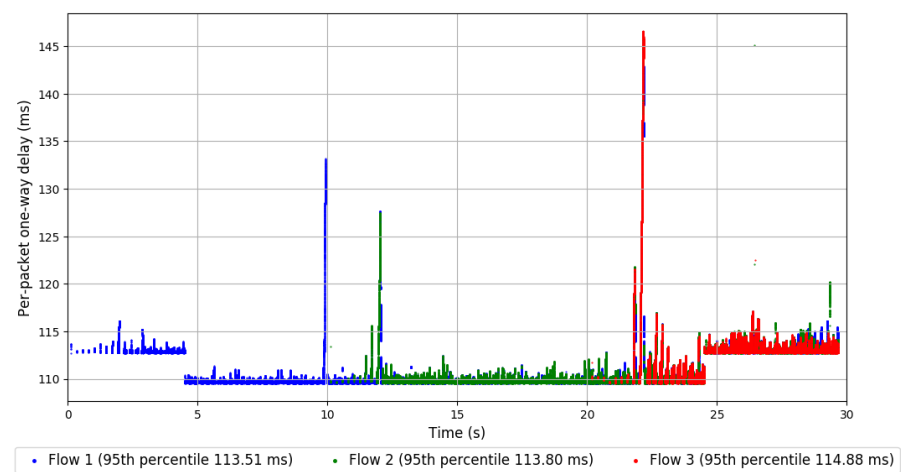
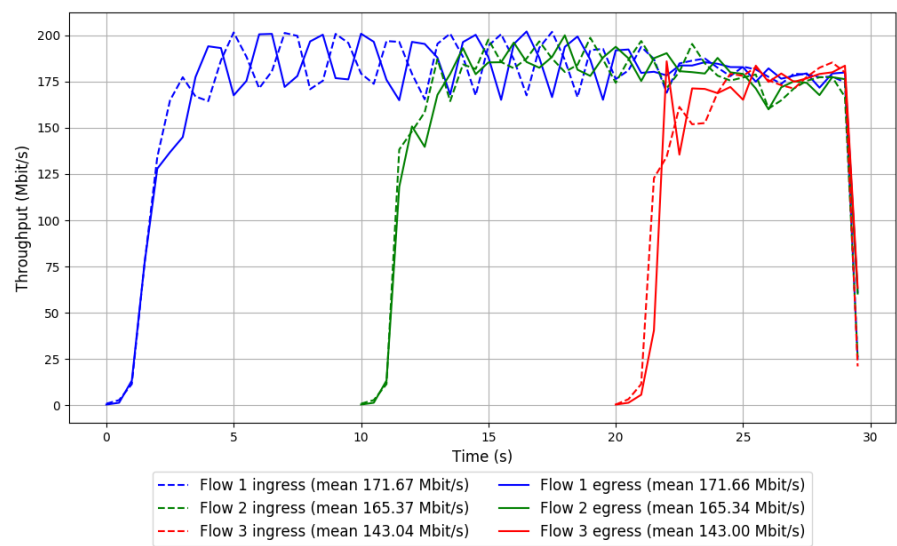


```
Run 2: Statistics of Indigo

Start at: 2017-11-30 22:34:33
End at: 2017-11-30 22:35:03

# Below is generated by plot.py at 2017-12-01 02:06:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.93 Mbit/s
95th percentile per-packet one-way delay: 113.829 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 171.66 Mbit/s
95th percentile per-packet one-way delay: 113.512 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 165.34 Mbit/s
95th percentile per-packet one-way delay: 113.804 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 143.00 Mbit/s
95th percentile per-packet one-way delay: 114.876 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-30 22:48:03

End at: 2017-11-30 22:48:33

# Below is generated by plot.py at 2017-12-01 02:07:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 324.24 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 170.50 Mbit/s

95th percentile per-packet one-way delay: 114.230 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 163.62 Mbit/s

95th percentile per-packet one-way delay: 117.033 ms

Loss rate: 0.00%

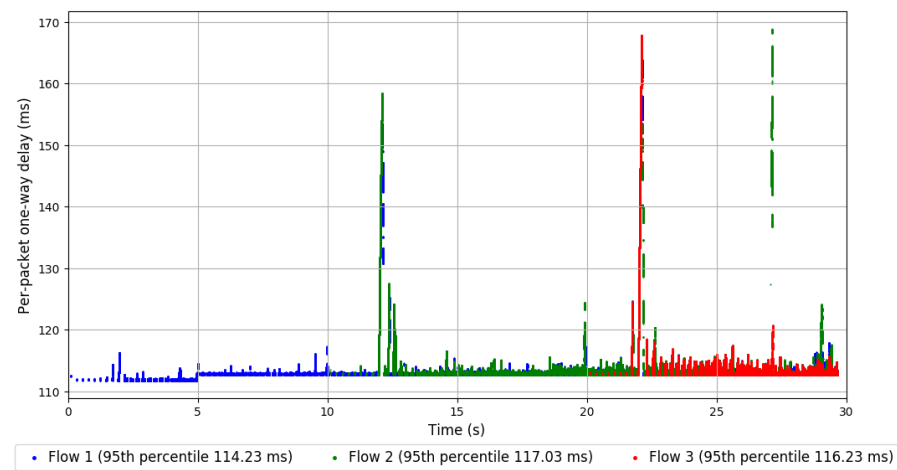
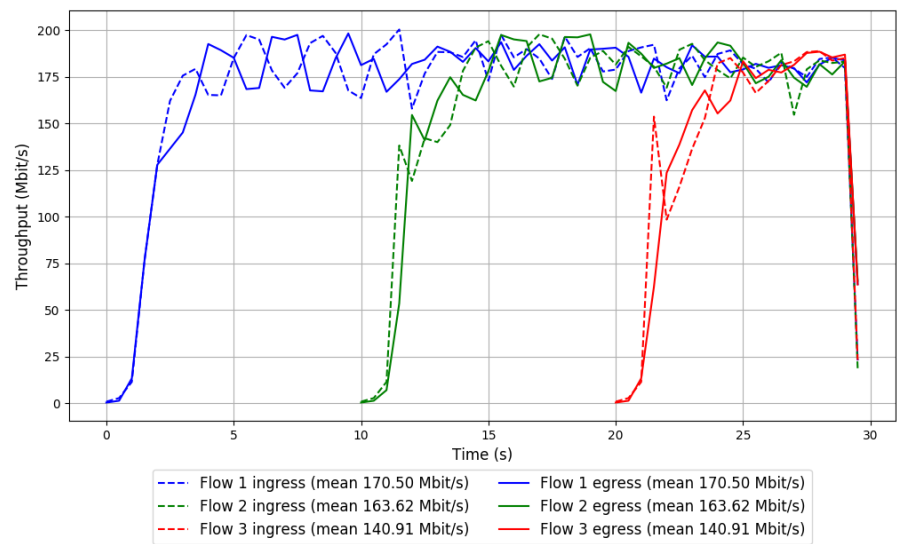
-- Flow 3:

Average throughput: 140.91 Mbit/s

95th percentile per-packet one-way delay: 116.234 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-30 23:01:24

End at: 2017-11-30 23:01:54

# Below is generated by plot.py at 2017-12-01 02:07:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 314.19 Mbit/s

95th percentile per-packet one-way delay: 116.779 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 167.38 Mbit/s

95th percentile per-packet one-way delay: 114.069 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 163.85 Mbit/s

95th percentile per-packet one-way delay: 116.320 ms

Loss rate: 0.00%

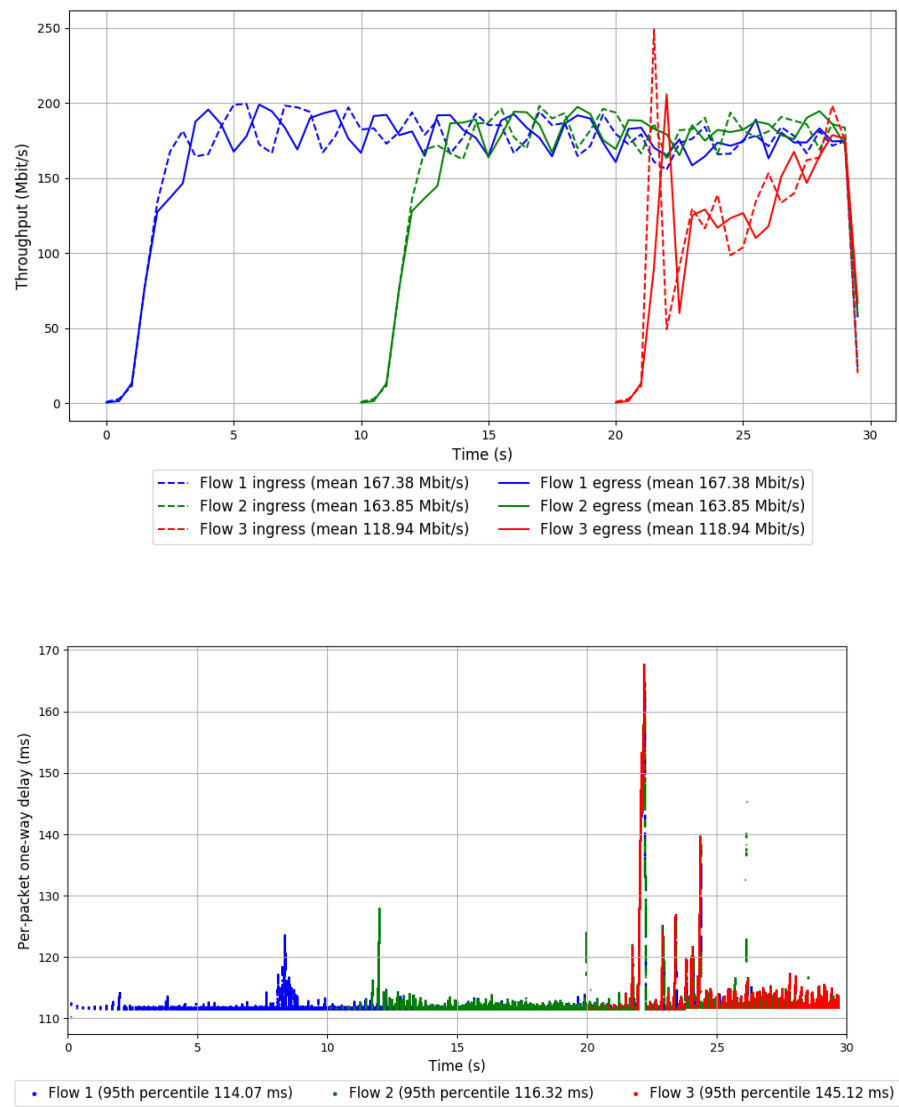
-- Flow 3:

Average throughput: 118.94 Mbit/s

95th percentile per-packet one-way delay: 145.119 ms

Loss rate: 0.00%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-30 23:14:57

End at: 2017-11-30 23:15:27

# Below is generated by plot.py at 2017-12-01 02:07:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 322.82 Mbit/s

95th percentile per-packet one-way delay: 113.684 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 169.44 Mbit/s

95th percentile per-packet one-way delay: 113.188 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 160.98 Mbit/s

95th percentile per-packet one-way delay: 114.257 ms

Loss rate: 0.00%

-- Flow 3:

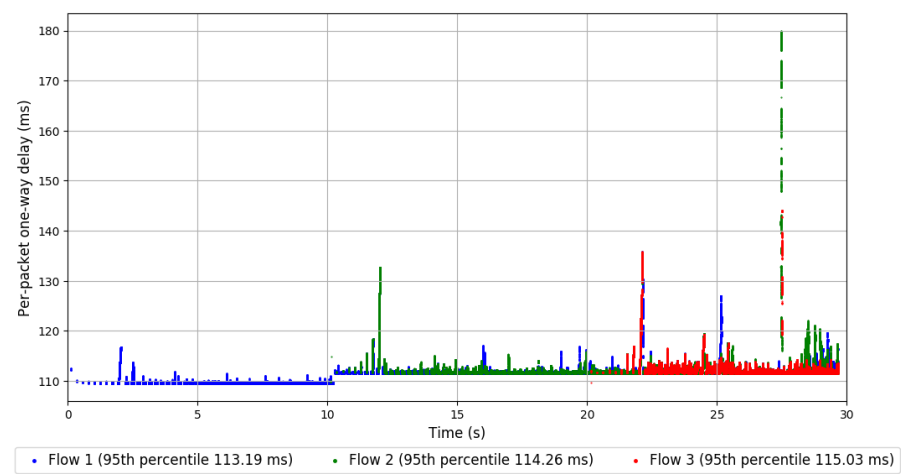
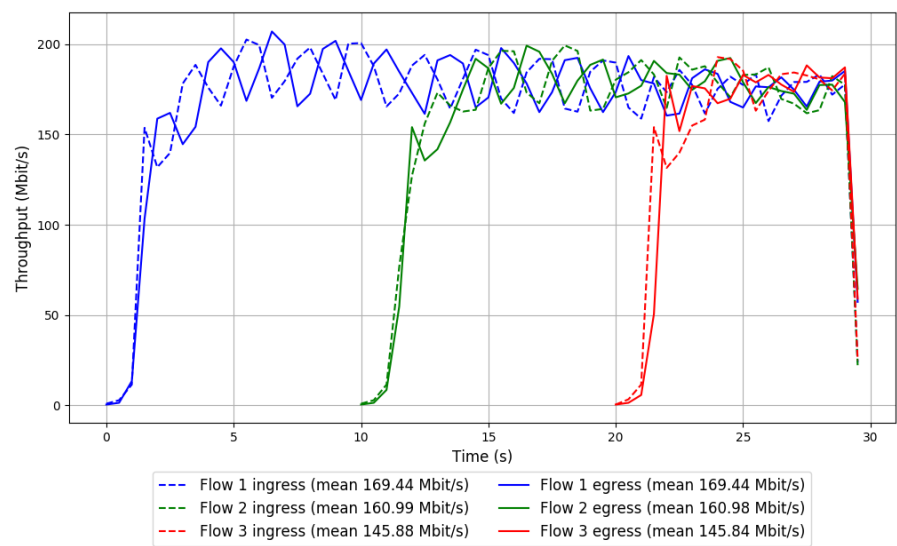
Average throughput: 145.84 Mbit/s

95th percentile per-packet one-way delay: 115.033 ms

Loss rate: 0.00%



Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-30 23:28:12

End at: 2017-11-30 23:28:42

# Below is generated by plot.py at 2017-12-01 02:08:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 322.11 Mbit/s

95th percentile per-packet one-way delay: 112.809 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 166.81 Mbit/s

95th percentile per-packet one-way delay: 112.422 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 164.69 Mbit/s

95th percentile per-packet one-way delay: 112.871 ms

Loss rate: 0.00%

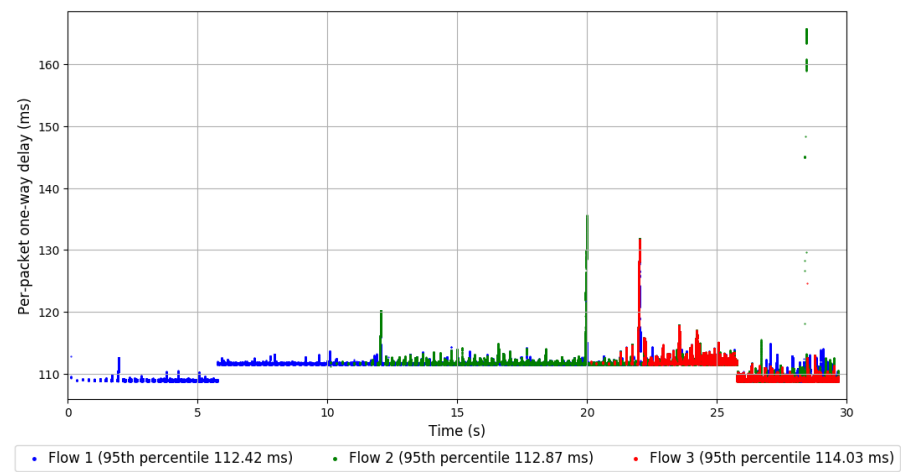
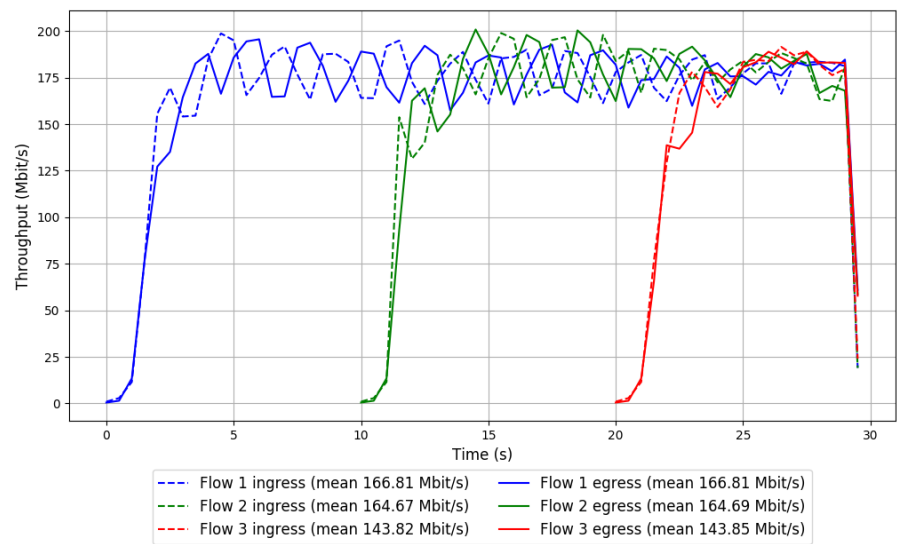
-- Flow 3:

Average throughput: 143.85 Mbit/s

95th percentile per-packet one-way delay: 114.030 ms

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-30 23:41:44

End at: 2017-11-30 23:42:14

# Below is generated by plot.py at 2017-12-01 02:08:43

# Datalink statistics

-- Total of 3 flows:

Average throughput: 325.23 Mbit/s

95th percentile per-packet one-way delay: 115.769 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 169.85 Mbit/s

95th percentile per-packet one-way delay: 115.143 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 163.11 Mbit/s

95th percentile per-packet one-way delay: 116.339 ms

Loss rate: 0.00%

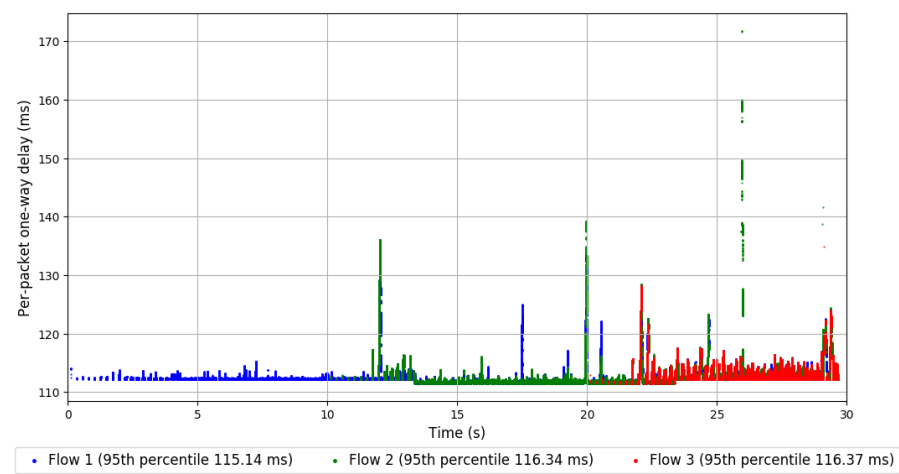
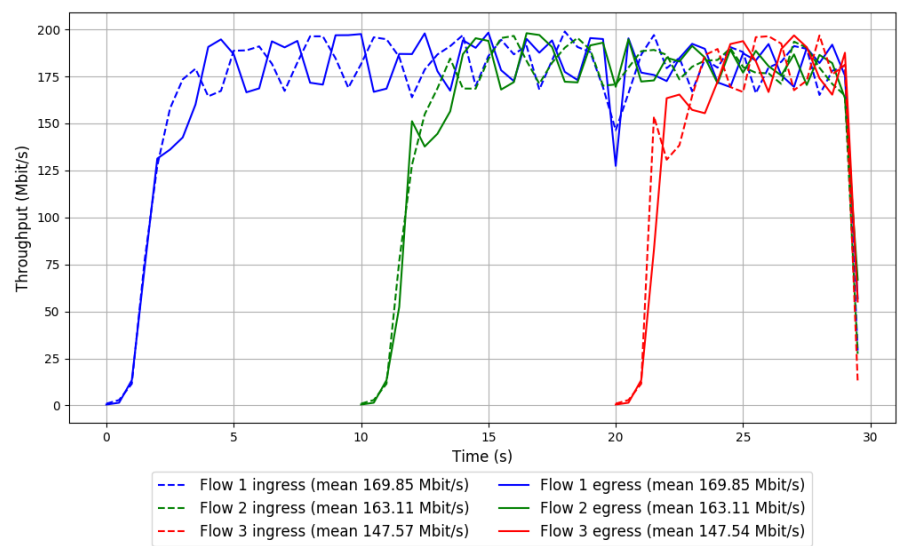
-- Flow 3:

Average throughput: 147.54 Mbit/s

95th percentile per-packet one-way delay: 116.369 ms

Loss rate: 0.01%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-30 23:55:09

End at: 2017-11-30 23:55:39

# Below is generated by plot.py at 2017-12-01 02:09:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 326.94 Mbit/s

95th percentile per-packet one-way delay: 114.354 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 172.04 Mbit/s

95th percentile per-packet one-way delay: 113.448 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 164.93 Mbit/s

95th percentile per-packet one-way delay: 115.018 ms

Loss rate: 0.02%

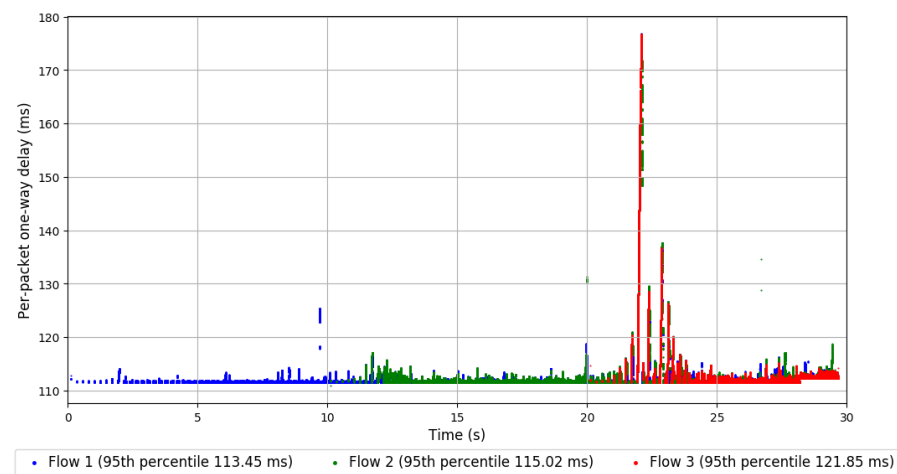
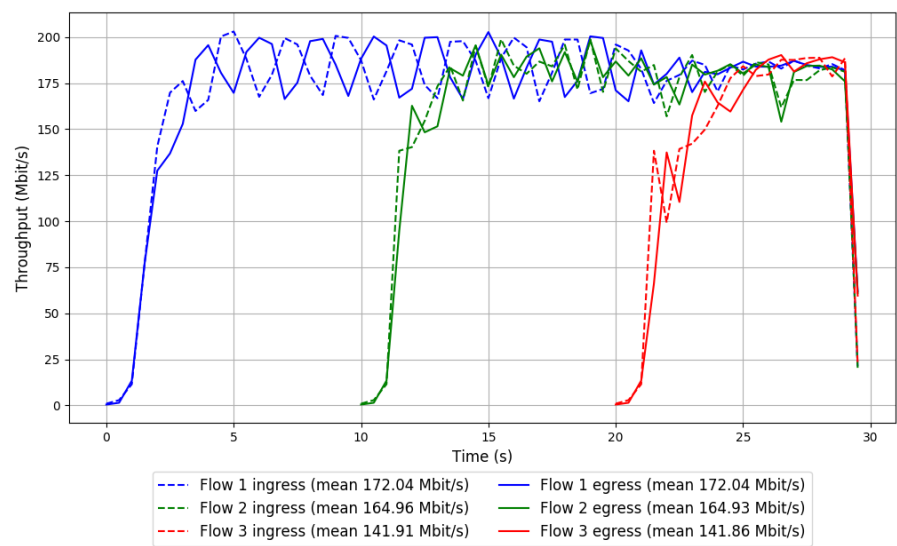
-- Flow 3:

Average throughput: 141.86 Mbit/s

95th percentile per-packet one-way delay: 121.846 ms

Loss rate: 0.04%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-01 00:08:32

End at: 2017-12-01 00:09:02

# Below is generated by plot.py at 2017-12-01 02:11:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 322.43 Mbit/s

95th percentile per-packet one-way delay: 114.059 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 168.26 Mbit/s

95th percentile per-packet one-way delay: 113.433 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 163.05 Mbit/s

95th percentile per-packet one-way delay: 114.616 ms

Loss rate: 0.00%

-- Flow 3:

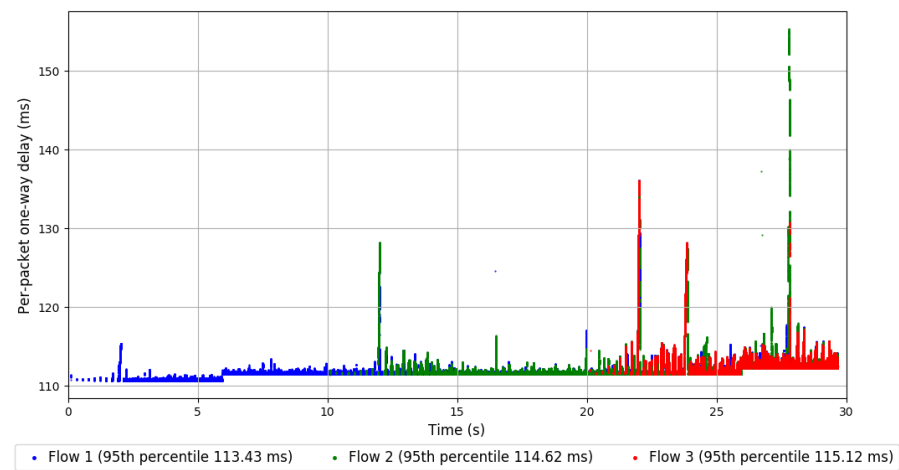
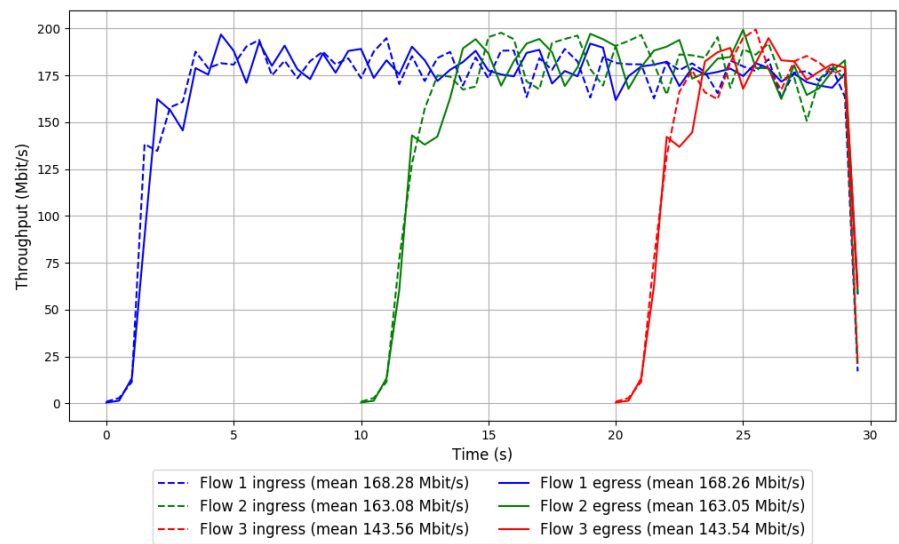
Average throughput: 143.54 Mbit/s

95th percentile per-packet one-way delay: 115.120 ms

Loss rate: 0.01%



Run 9: Report of Indigo — Data Link

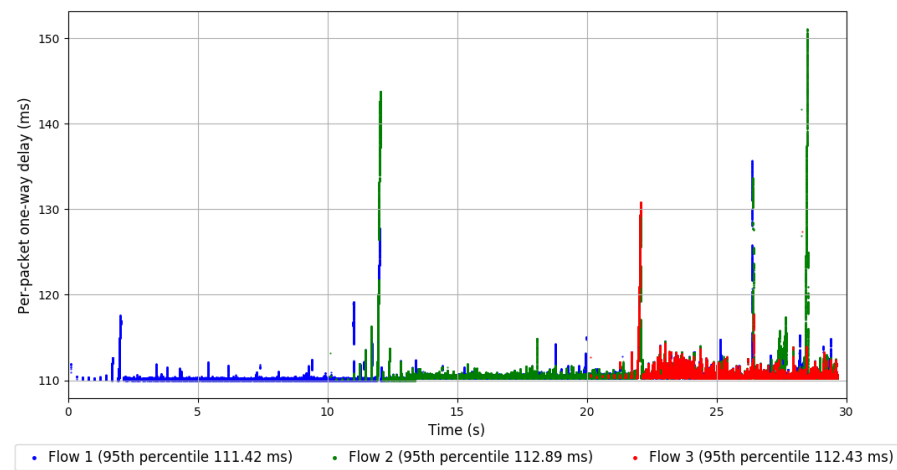
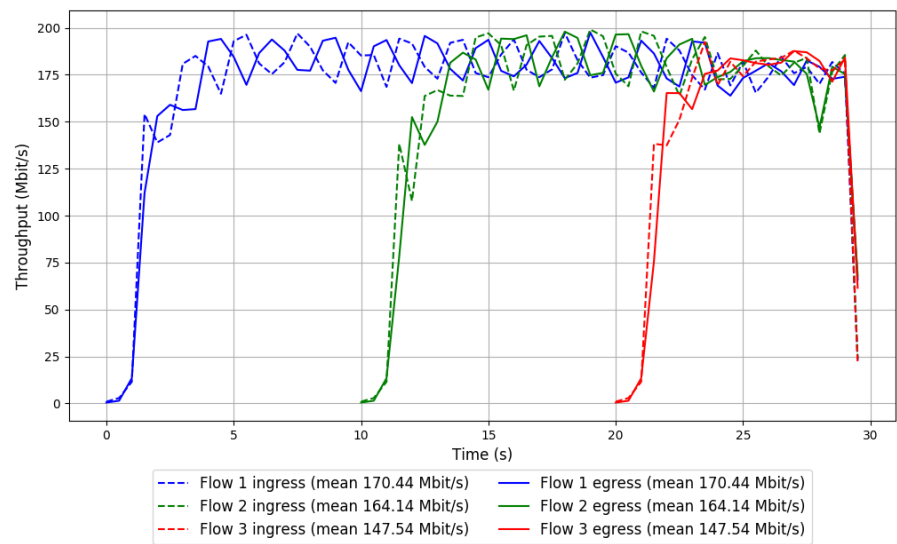


```
Run 10: Statistics of Indigo

Start at: 2017-12-01 00:22:14
End at: 2017-12-01 00:22:44

# Below is generated by plot.py at 2017-12-01 02:11:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.62 Mbit/s
95th percentile per-packet one-way delay: 111.994 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 170.44 Mbit/s
95th percentile per-packet one-way delay: 111.423 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 164.14 Mbit/s
95th percentile per-packet one-way delay: 112.891 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 147.54 Mbit/s
95th percentile per-packet one-way delay: 112.431 ms
Loss rate: 0.00%
```

Run 10: Report of Indigo — Data Link

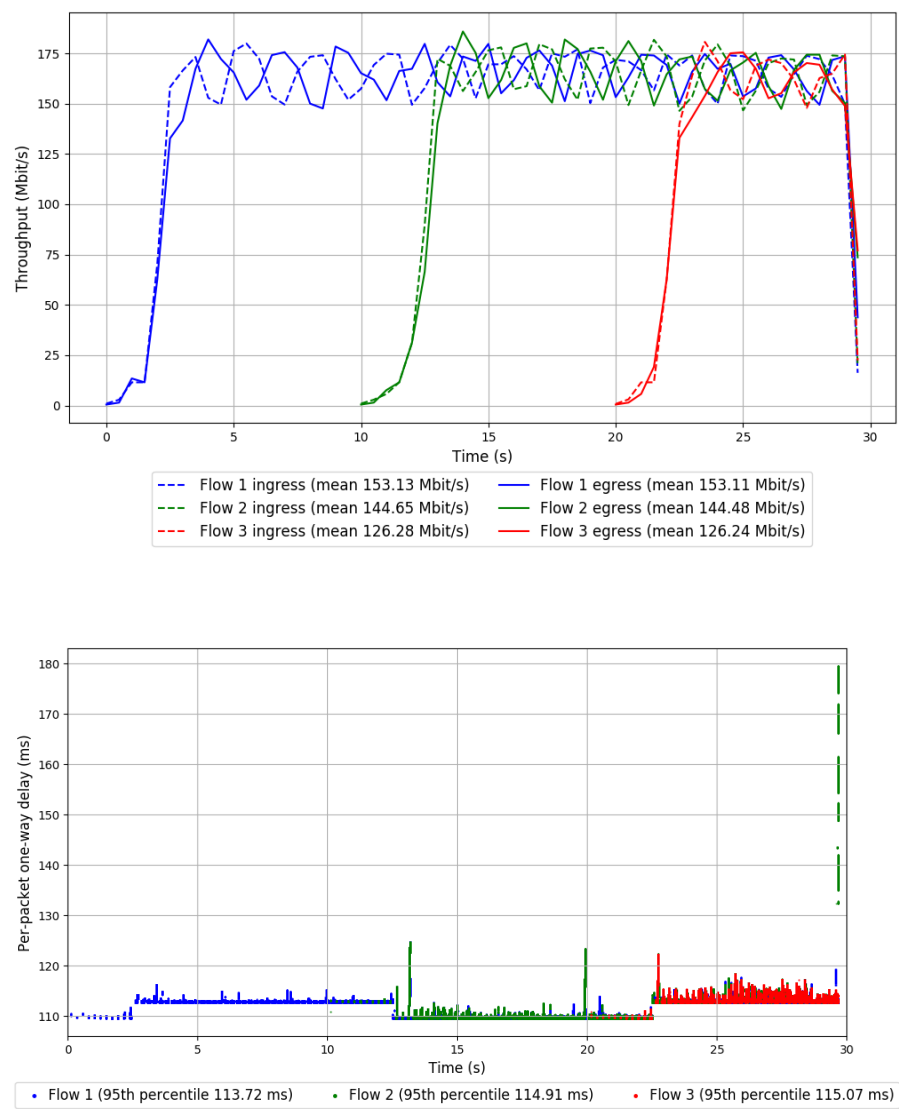


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-30 22:25:45
End at: 2017-11-30 22:26:15

# Below is generated by plot.py at 2017-12-01 02:11:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 289.27 Mbit/s
95th percentile per-packet one-way delay: 114.494 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 153.11 Mbit/s
95th percentile per-packet one-way delay: 113.716 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 144.48 Mbit/s
95th percentile per-packet one-way delay: 114.907 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 126.24 Mbit/s
95th percentile per-packet one-way delay: 115.073 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-calib — Data Link

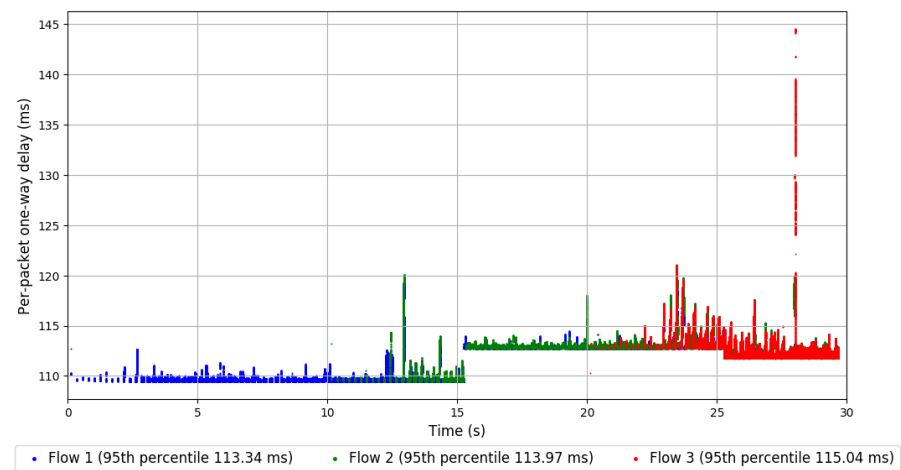
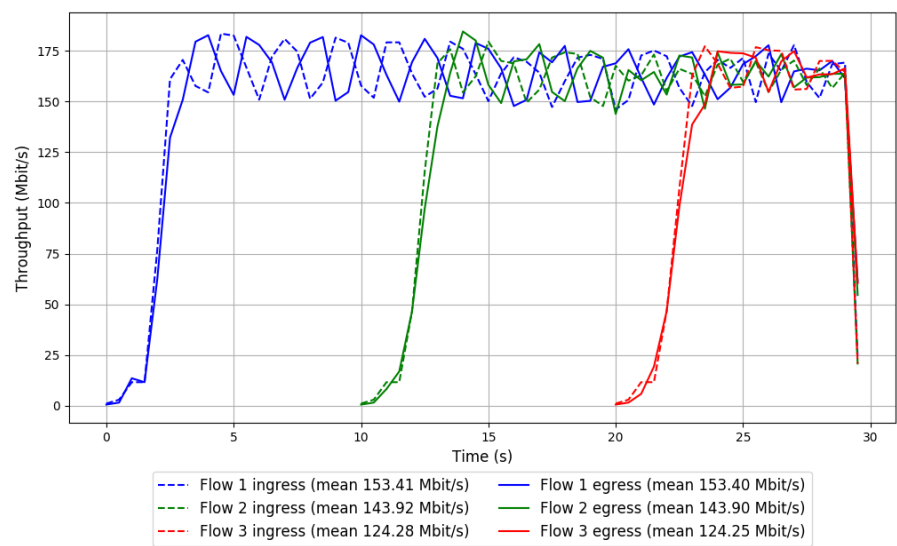


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-30 22:39:22
End at: 2017-11-30 22:39:52

# Below is generated by plot.py at 2017-12-01 02:11:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.55 Mbit/s
95th percentile per-packet one-way delay: 113.886 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 153.40 Mbit/s
95th percentile per-packet one-way delay: 113.341 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 143.90 Mbit/s
95th percentile per-packet one-way delay: 113.969 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 124.25 Mbit/s
95th percentile per-packet one-way delay: 115.042 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-calib — Data Link



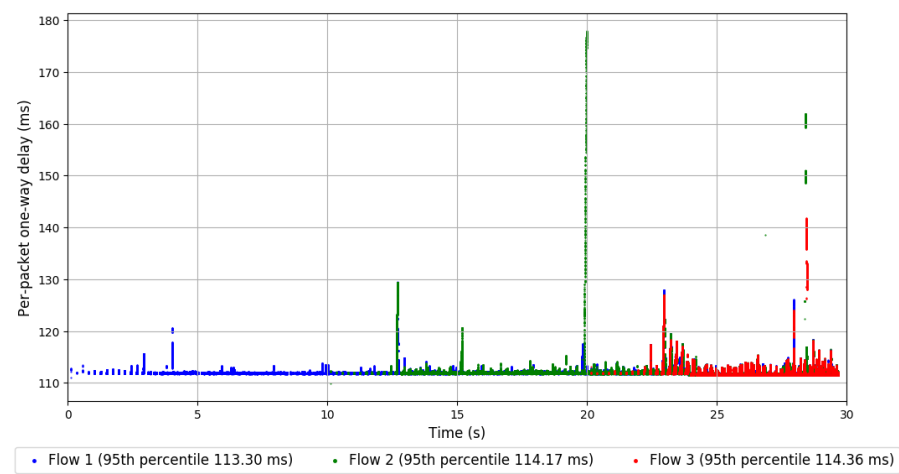
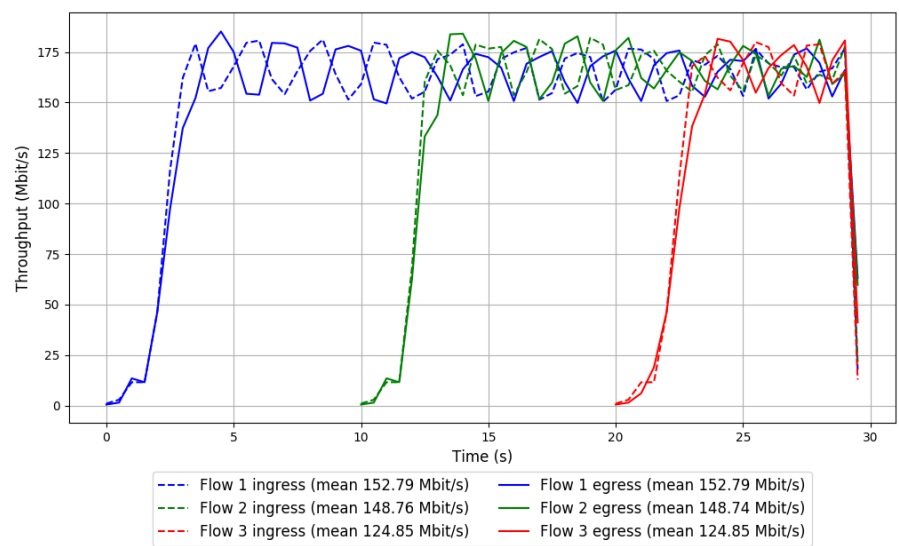
```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-30 22:52:44
End at: 2017-11-30 22:53:14

# Below is generated by plot.py at 2017-12-01 02:12:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 291.26 Mbit/s
95th percentile per-packet one-way delay: 113.778 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 152.79 Mbit/s
95th percentile per-packet one-way delay: 113.296 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 148.74 Mbit/s
95th percentile per-packet one-way delay: 114.166 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 124.85 Mbit/s
95th percentile per-packet one-way delay: 114.359 ms
Loss rate: 0.00%
```



Run 3: Report of Indigo-calib — Data Link

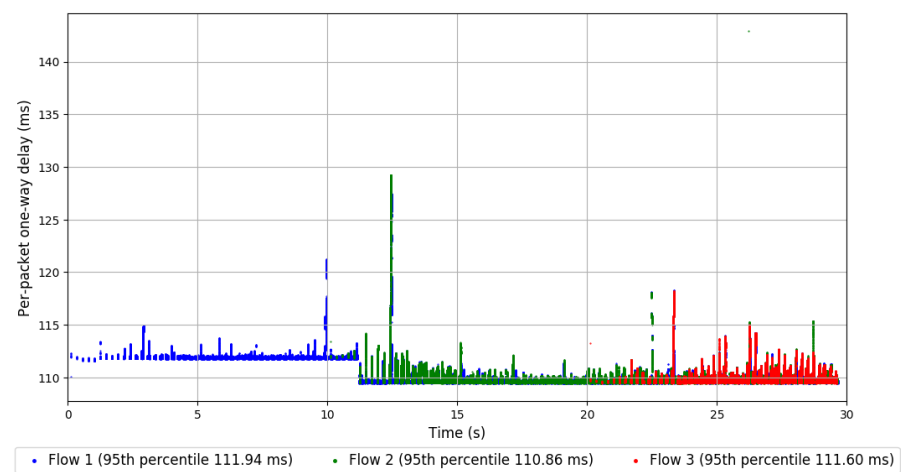
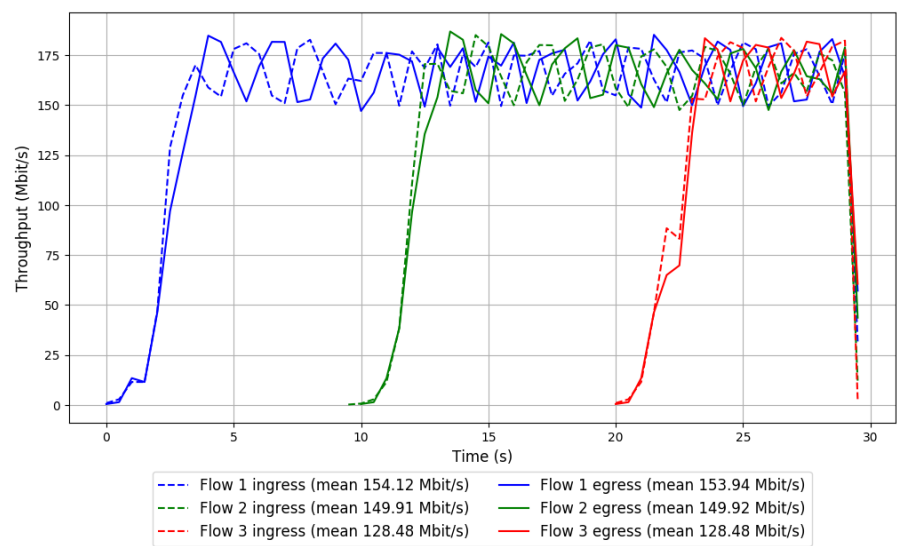


```
Run 4: Statistics of Indigo-calib

Start at: 2017-11-30 23:06:06
End at: 2017-11-30 23:06:36

# Below is generated by plot.py at 2017-12-01 02:13:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 294.30 Mbit/s
95th percentile per-packet one-way delay: 111.915 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 153.94 Mbit/s
95th percentile per-packet one-way delay: 111.942 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 149.92 Mbit/s
95th percentile per-packet one-way delay: 110.861 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 128.48 Mbit/s
95th percentile per-packet one-way delay: 111.604 ms
Loss rate: 0.00%
```

Run 4: Report of Indigo-calib — Data Link

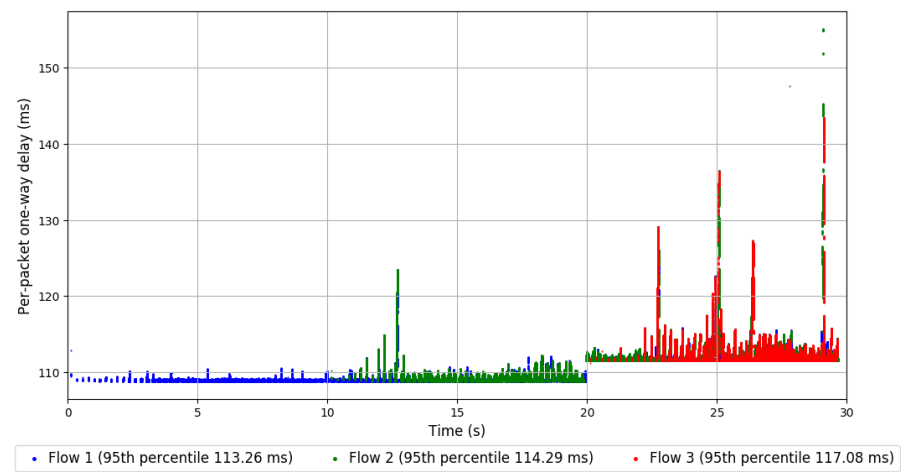
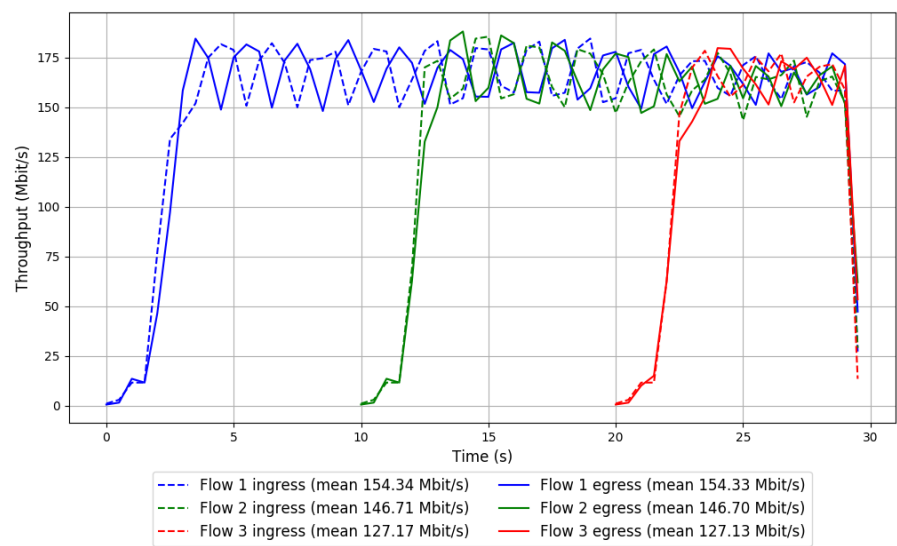


```
Run 5: Statistics of Indigo-calib

Start at: 2017-11-30 23:19:38
End at: 2017-11-30 23:20:08

# Below is generated by plot.py at 2017-12-01 02:13:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 292.12 Mbit/s
95th percentile per-packet one-way delay: 114.064 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 154.33 Mbit/s
95th percentile per-packet one-way delay: 113.264 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 146.70 Mbit/s
95th percentile per-packet one-way delay: 114.289 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 127.13 Mbit/s
95th percentile per-packet one-way delay: 117.083 ms
Loss rate: 0.00%
```

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-11-30 23:32:51

End at: 2017-11-30 23:33:21

# Below is generated by plot.py at 2017-12-01 02:13:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 288.90 Mbit/s

95th percentile per-packet one-way delay: 114.293 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 151.54 Mbit/s

95th percentile per-packet one-way delay: 113.722 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 147.16 Mbit/s

95th percentile per-packet one-way delay: 114.623 ms

Loss rate: 0.02%

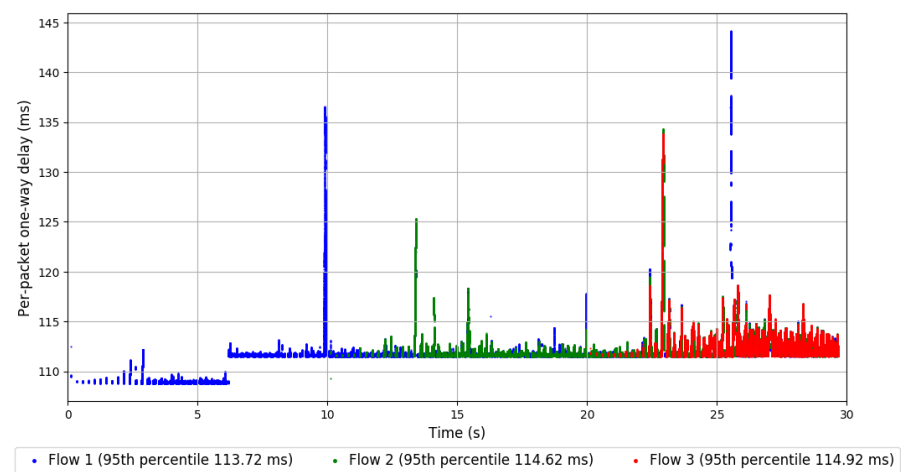
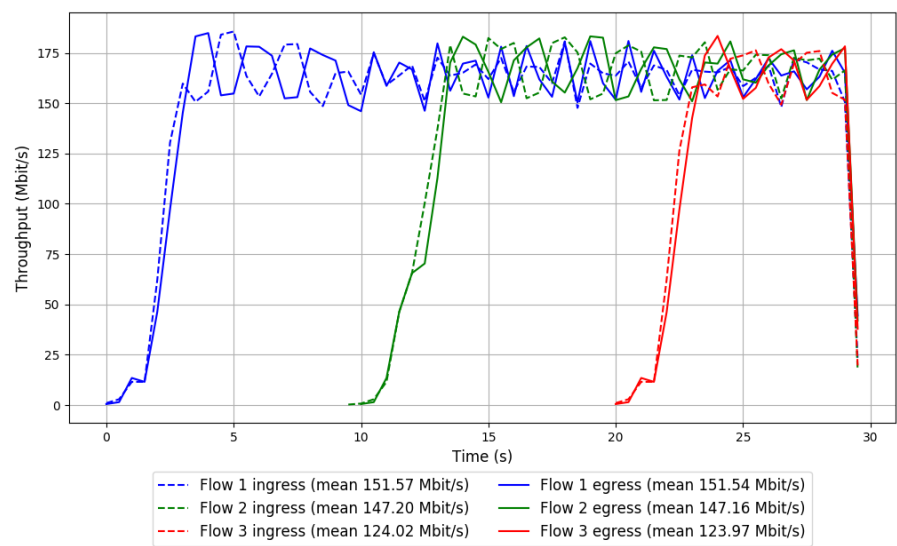
-- Flow 3:

Average throughput: 123.97 Mbit/s

95th percentile per-packet one-way delay: 114.924 ms

Loss rate: 0.05%

Run 6: Report of Indigo-calib — Data Link



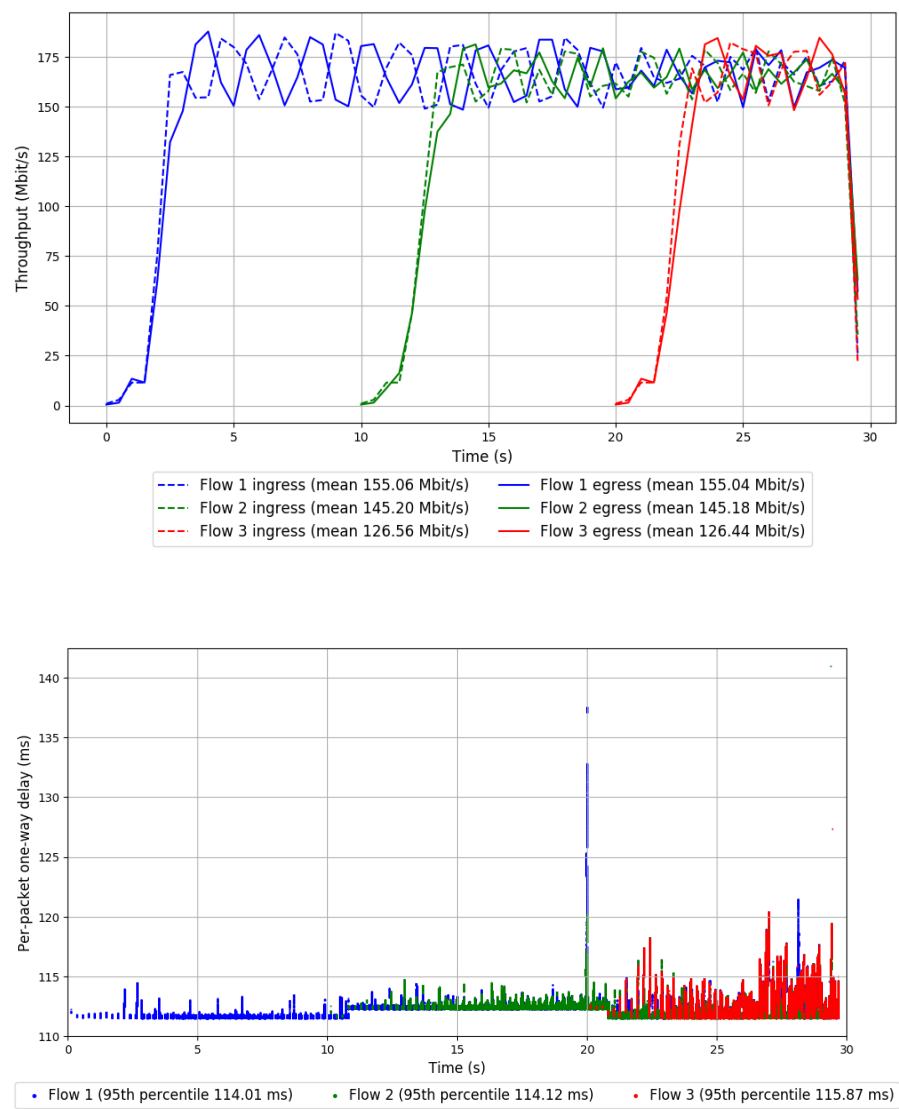
```
Run 7: Statistics of Indigo-calib

Start at: 2017-11-30 23:46:27
End at: 2017-11-30 23:46:57

# Below is generated by plot.py at 2017-12-01 02:14:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 291.89 Mbit/s
95th percentile per-packet one-way delay: 114.491 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 155.04 Mbit/s
95th percentile per-packet one-way delay: 114.011 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 145.18 Mbit/s
95th percentile per-packet one-way delay: 114.119 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 126.44 Mbit/s
95th percentile per-packet one-way delay: 115.869 ms
Loss rate: 0.10%
```



Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-30 23:59:56

End at: 2017-12-01 00:00:26

# Below is generated by plot.py at 2017-12-01 02:14:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 292.01 Mbit/s

95th percentile per-packet one-way delay: 114.478 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 153.75 Mbit/s

95th percentile per-packet one-way delay: 114.040 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 146.95 Mbit/s

95th percentile per-packet one-way delay: 115.294 ms

Loss rate: 0.02%

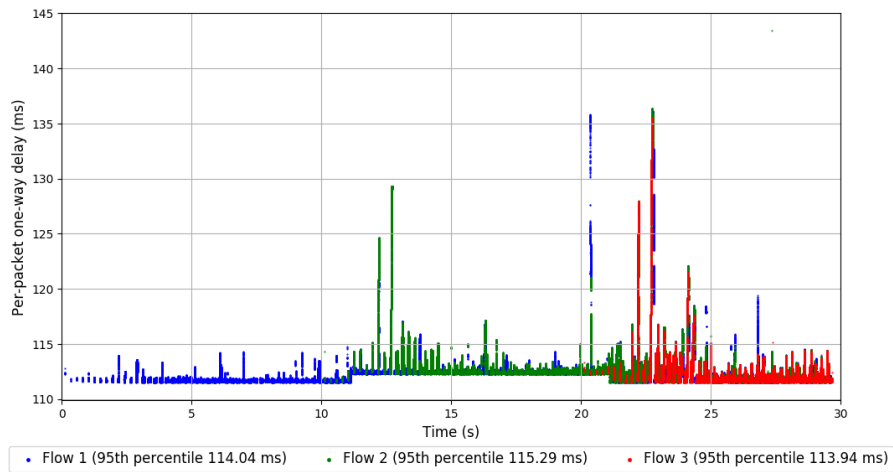
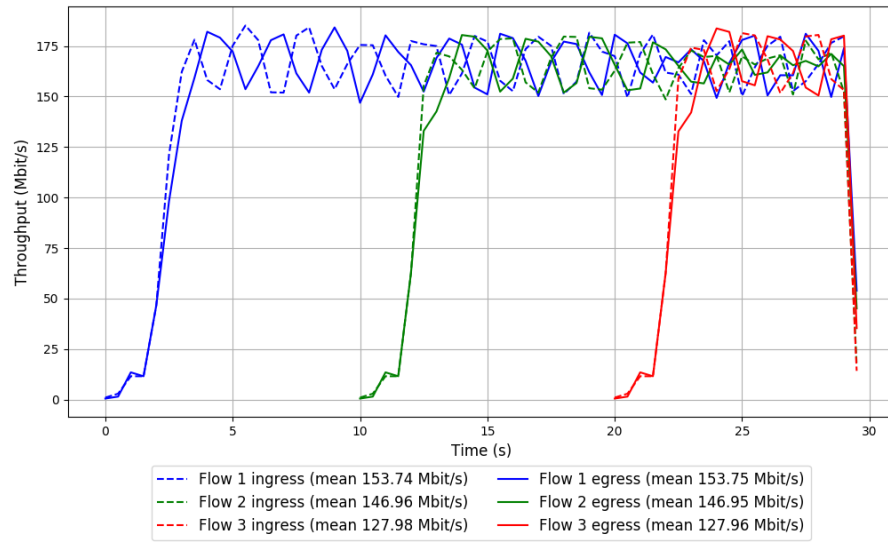
-- Flow 3:

Average throughput: 127.96 Mbit/s

95th percentile per-packet one-way delay: 113.943 ms

Loss rate: 0.01%

## Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-01 00:13:17

End at: 2017-12-01 00:13:47

# Below is generated by plot.py at 2017-12-01 02:14:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 291.07 Mbit/s

95th percentile per-packet one-way delay: 113.459 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 150.04 Mbit/s

95th percentile per-packet one-way delay: 112.725 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 146.22 Mbit/s

95th percentile per-packet one-way delay: 113.570 ms

Loss rate: 0.00%

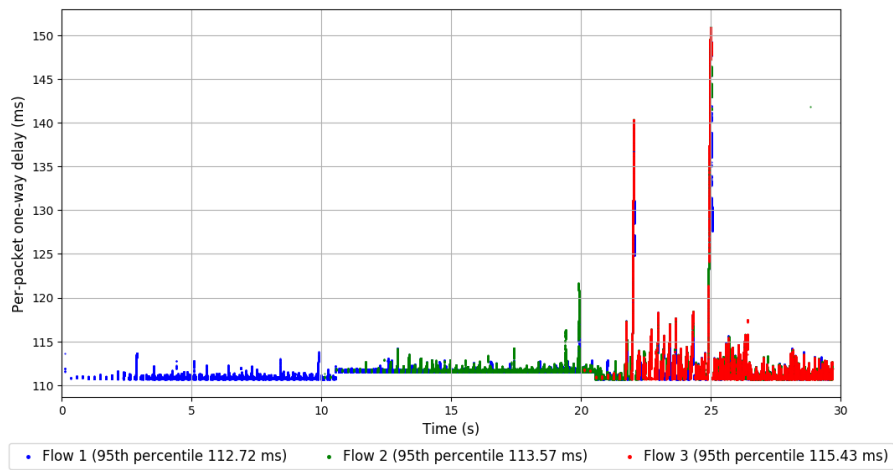
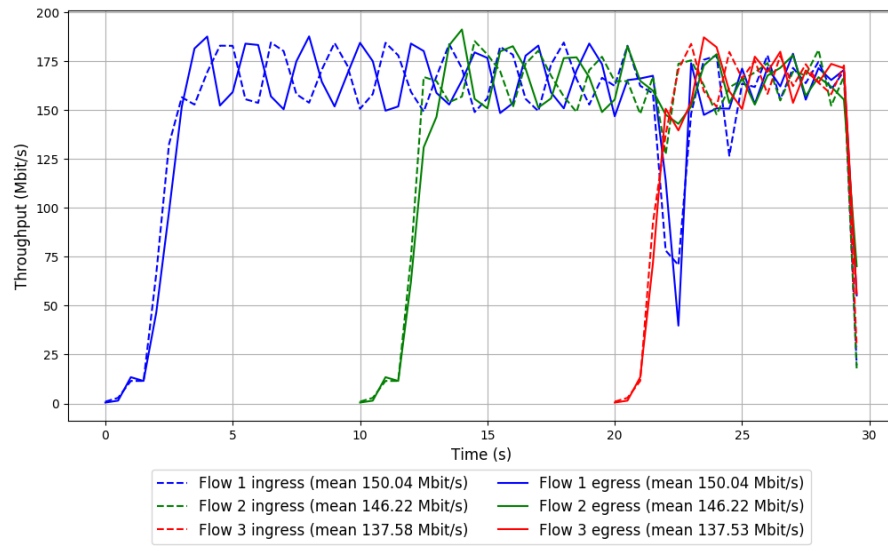
-- Flow 3:

Average throughput: 137.53 Mbit/s

95th percentile per-packet one-way delay: 115.433 ms

Loss rate: 0.05%

## Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-01 00:27:03

End at: 2017-12-01 00:27:33

# Below is generated by plot.py at 2017-12-01 02:14:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 295.76 Mbit/s

95th percentile per-packet one-way delay: 114.249 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 154.42 Mbit/s

95th percentile per-packet one-way delay: 114.258 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 150.34 Mbit/s

95th percentile per-packet one-way delay: 114.241 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 130.99 Mbit/s

95th percentile per-packet one-way delay: 113.221 ms

Loss rate: 0.00%

# Run 10: Report of Indigo-calib — Data Link

