

## Pantheon Report

Generated at 2018-03-15 06:26:08 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

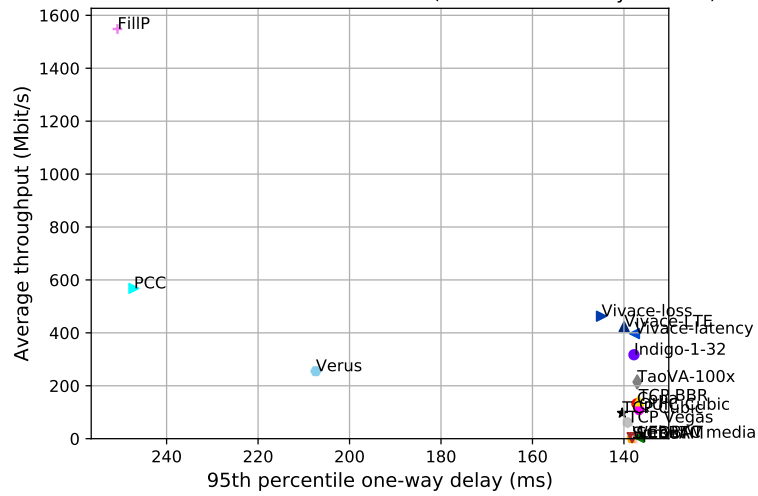
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

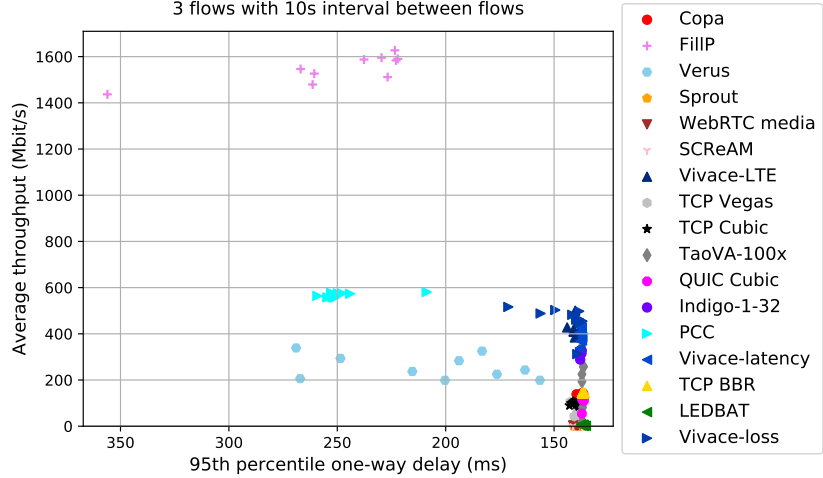
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5ce90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ 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/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE Sydney Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme  
3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE Sydney Ethernet to GCE London 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     | 74.29                  | 71.43  | 64.98  | 136.78                    | 136.79 | 136.51 | 0.00               | 0.00   | 0.00   |
| TCP Cubic      | 10     | 53.83                  | 45.64  | 38.72  | 139.94                    | 140.23 | 140.79 | 0.00               | 0.02   | 0.04   |
| LEDBAT         | 10     | 2.84                   | 2.01   | 1.14   | 136.71                    | 136.74 | 136.69 | 0.00               | 0.00   | 0.00   |
| PCC            | 10     | 482.97                 | 109.35 | 37.58  | 247.06                    | 247.66 | 243.24 | 2.42               | 2.74   | 2.87   |
| QUIC Cubic     | 10     | 54.62                  | 60.32  | 46.07  | 136.27                    | 136.31 | 136.35 | 0.00               | 0.00   | 0.00   |
| SCReAM         | 10     | 0.22                   | 0.22   | 0.22   | 137.02                    | 137.14 | 136.83 | 0.00               | 0.00   | 0.00   |
| WebRTC media   | 10     | 2.03                   | 1.24   | 0.42   | 137.51                    | 137.39 | 137.30 | 0.00               | 0.00   | 0.02   |
| Sprout         | 10     | 0.40                   | 0.41   | 0.47   | 137.51                    | 137.83 | 136.99 | 0.00               | 0.01   | 0.00   |
| TaoVA-100x     | 10     | 104.27                 | 108.46 | 117.18 | 137.29                    | 137.03 | 137.47 | 0.01               | 0.00   | 0.01   |
| TCP Vegas      | 10     | 30.89                  | 32.50  | 26.03  | 138.40                    | 139.14 | 140.98 | 0.00               | 0.00   | 0.00   |
| Verus          | 10     | 161.32                 | 119.42 | 45.78  | 197.10                    | 224.47 | 217.72 | 0.49               | 0.99   | 2.51   |
| Copa           | 10     | 65.38                  | 68.50  | 62.87  | 137.09                    | 136.68 | 136.80 | 0.00               | 0.00   | 0.00   |
| FillP          | 10     | 826.62                 | 751.58 | 670.35 | 237.67                    | 273.61 | 248.56 | 3.26               | 5.12   | 8.29   |
| Indigo-1-32    | 10     | 165.15                 | 160.27 | 144.04 | 137.35                    | 138.19 | 139.39 | 0.00               | 0.00   | 0.00   |
| Vivace-latency | 10     | 227.08                 | 189.86 | 133.14 | 137.30                    | 137.01 | 146.31 | 0.01               | 0.00   | 0.01   |
| Vivace-loss    | 10     | 265.16                 | 223.73 | 149.47 | 141.25                    | 144.08 | 185.29 | 0.03               | 0.11   | 0.09   |
| Vivace-LTE     | 10     | 245.57                 | 194.34 | 147.94 | 138.00                    | 138.11 | 168.73 | 0.00               | 0.01   | 0.01   |

Run 1: Statistics of TCP BBR

Start at: 2018-03-14 22:19:45

End at: 2018-03-14 22:20:15

# Below is generated by plot.py at 2018-03-15 03:58:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 142.92 Mbit/s

95th percentile per-packet one-way delay: 137.253 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.72 Mbit/s

95th percentile per-packet one-way delay: 137.266 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.86 Mbit/s

95th percentile per-packet one-way delay: 137.224 ms

Loss rate: 0.00%

-- Flow 3:

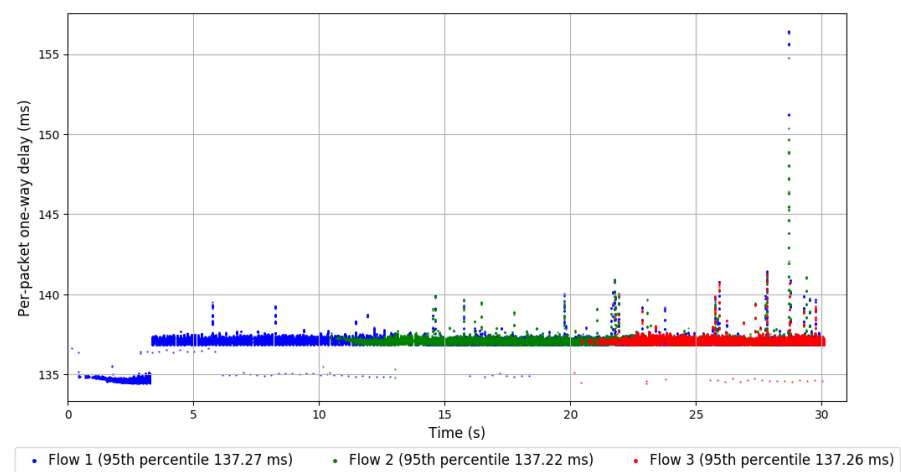
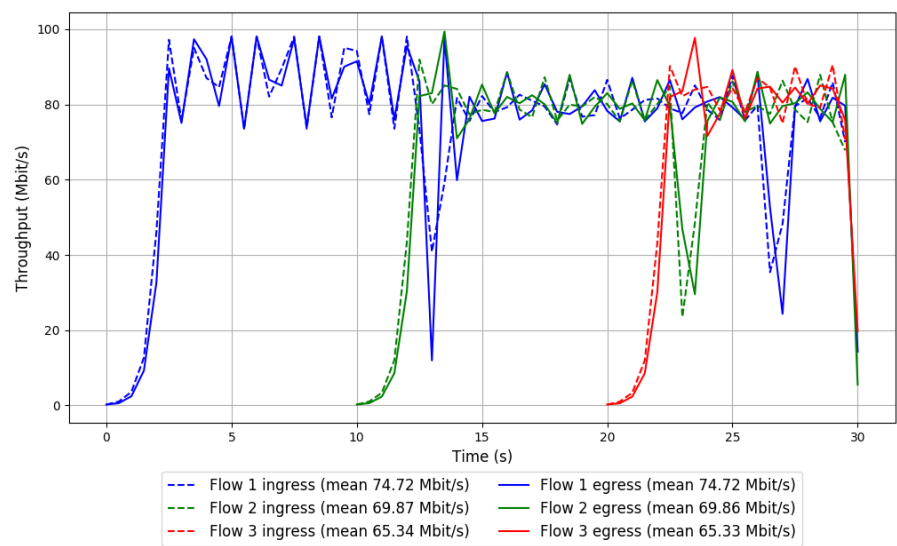
Average throughput: 65.33 Mbit/s

95th percentile per-packet one-way delay: 137.258 ms

Loss rate: 0.00%



Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-03-14 22:40:07

End at: 2018-03-14 22:40:37

# Below is generated by plot.py at 2018-03-15 03:58:04

# Datalink statistics

-- Total of 3 flows:

Average throughput: 141.99 Mbit/s

95th percentile per-packet one-way delay: 136.504 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.77 Mbit/s

95th percentile per-packet one-way delay: 136.468 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.35 Mbit/s

95th percentile per-packet one-way delay: 136.495 ms

Loss rate: 0.00%

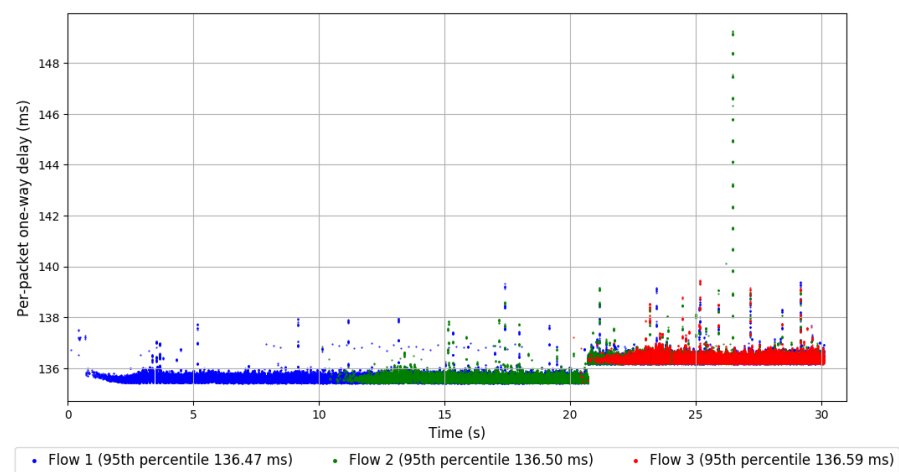
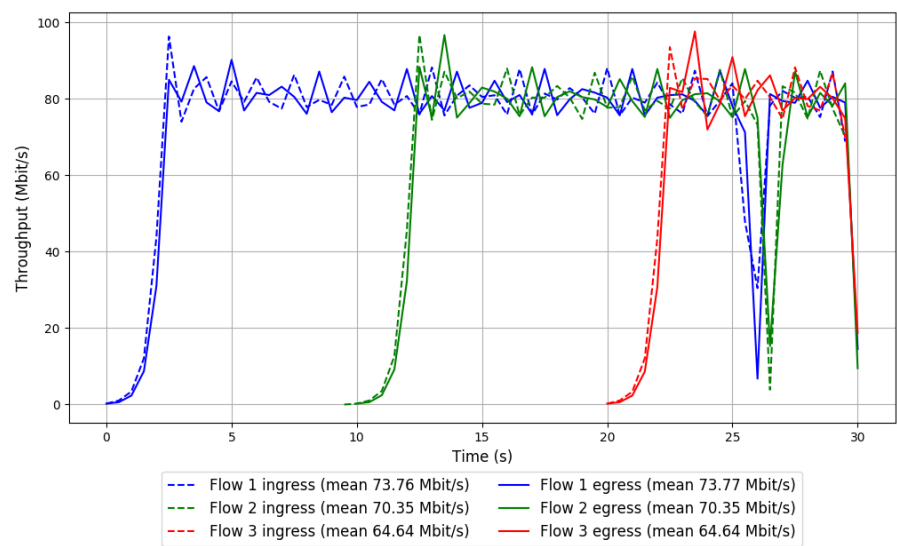
-- Flow 3:

Average throughput: 64.64 Mbit/s

95th percentile per-packet one-way delay: 136.587 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-03-14 23:00:47

End at: 2018-03-14 23:01:17

# Below is generated by plot.py at 2018-03-15 03:58:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 144.48 Mbit/s

95th percentile per-packet one-way delay: 137.136 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 76.12 Mbit/s

95th percentile per-packet one-way delay: 137.155 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.19 Mbit/s

95th percentile per-packet one-way delay: 137.143 ms

Loss rate: 0.00%

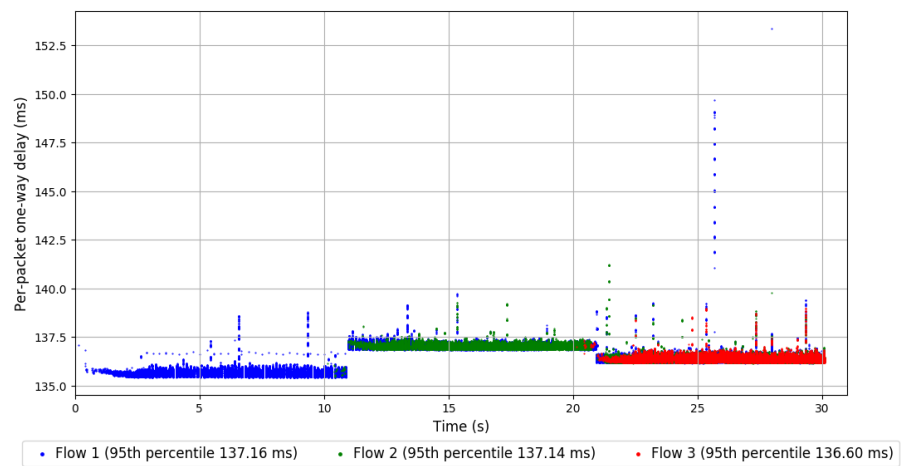
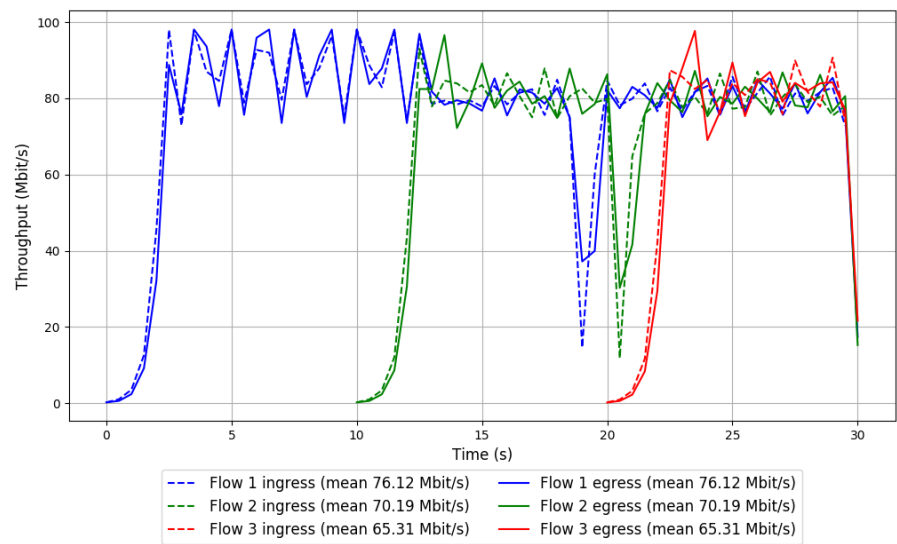
-- Flow 3:

Average throughput: 65.31 Mbit/s

95th percentile per-packet one-way delay: 136.601 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-03-14 23:21:22

End at: 2018-03-14 23:21:52

# Below is generated by plot.py at 2018-03-15 03:58:07

# Datalink statistics

-- Total of 3 flows:

Average throughput: 143.25 Mbit/s

95th percentile per-packet one-way delay: 137.134 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.30 Mbit/s

95th percentile per-packet one-way delay: 137.124 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 74.48 Mbit/s

95th percentile per-packet one-way delay: 137.183 ms

Loss rate: 0.00%

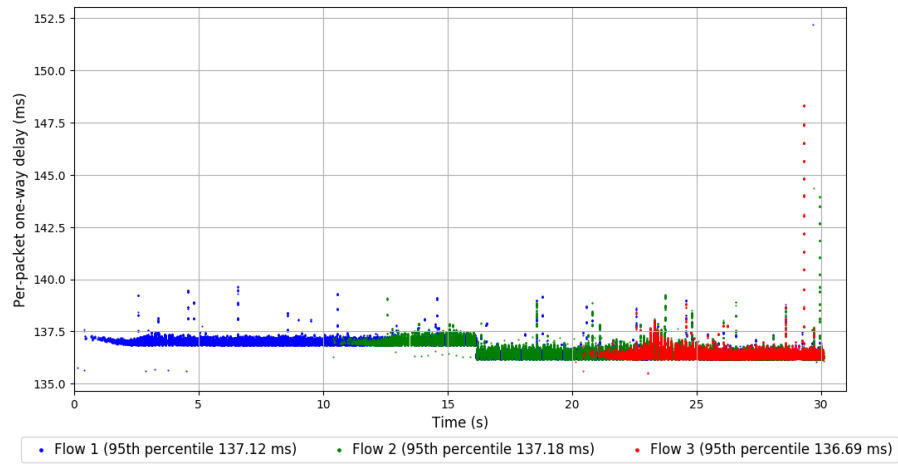
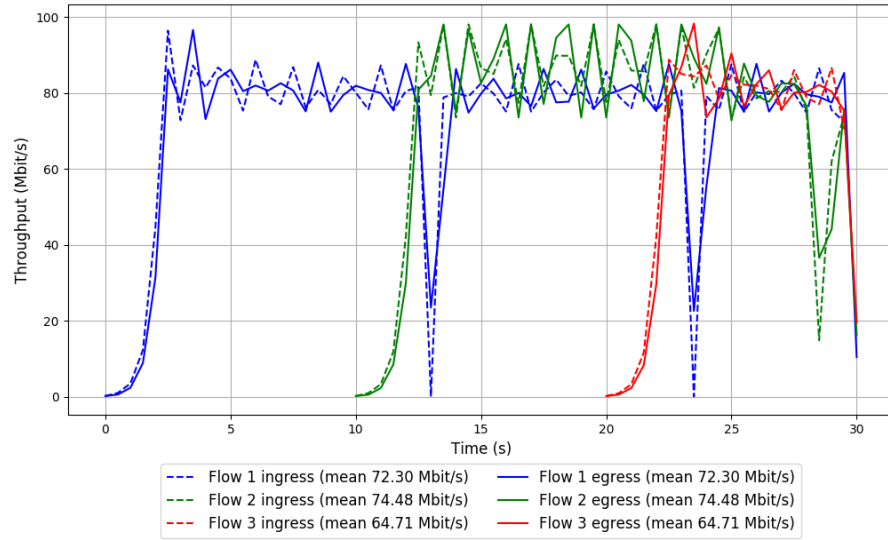
-- Flow 3:

Average throughput: 64.71 Mbit/s

95th percentile per-packet one-way delay: 136.695 ms

Loss rate: 0.00%

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



Run 5: Statistics of TCP BBR

Start at: 2018-03-14 23:41:54

End at: 2018-03-14 23:42:24

# Below is generated by plot.py at 2018-03-15 03:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 142.71 Mbit/s

95th percentile per-packet one-way delay: 137.054 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.46 Mbit/s

95th percentile per-packet one-way delay: 137.076 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 73.08 Mbit/s

95th percentile per-packet one-way delay: 137.026 ms

Loss rate: 0.00%

-- Flow 3:

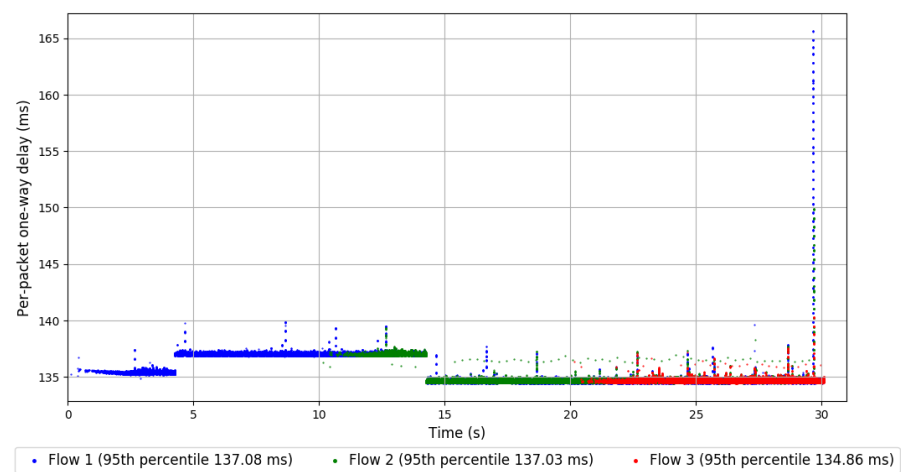
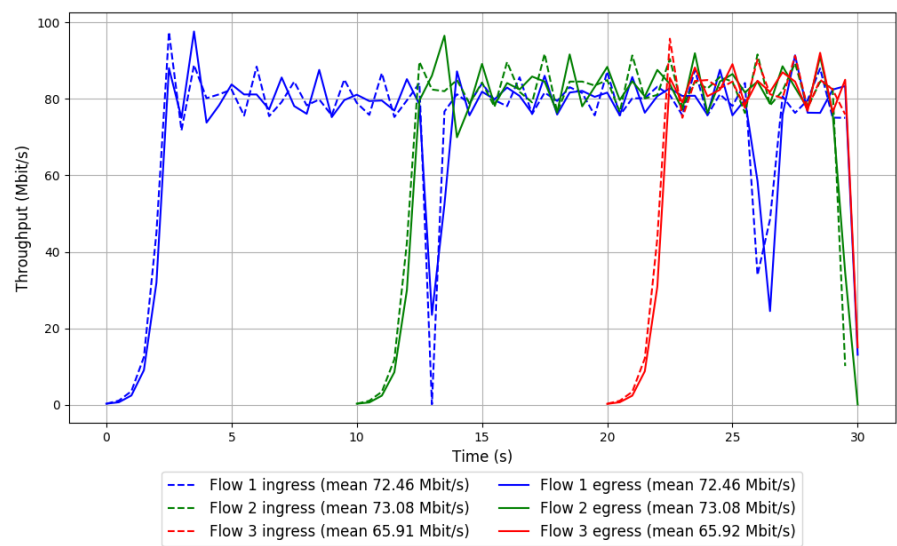
Average throughput: 65.92 Mbit/s

95th percentile per-packet one-way delay: 134.860 ms

Loss rate: 0.00%



Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-03-15 00:02:14

End at: 2018-03-15 00:02:44

# Below is generated by plot.py at 2018-03-15 03:58:08

# Datalink statistics

-- Total of 3 flows:

Average throughput: 142.08 Mbit/s

95th percentile per-packet one-way delay: 137.142 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.80 Mbit/s

95th percentile per-packet one-way delay: 137.137 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.28 Mbit/s

95th percentile per-packet one-way delay: 137.142 ms

Loss rate: 0.00%

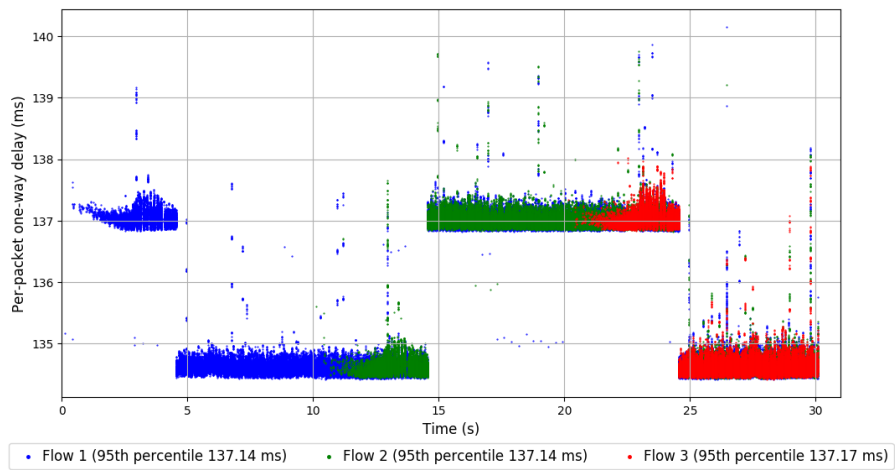
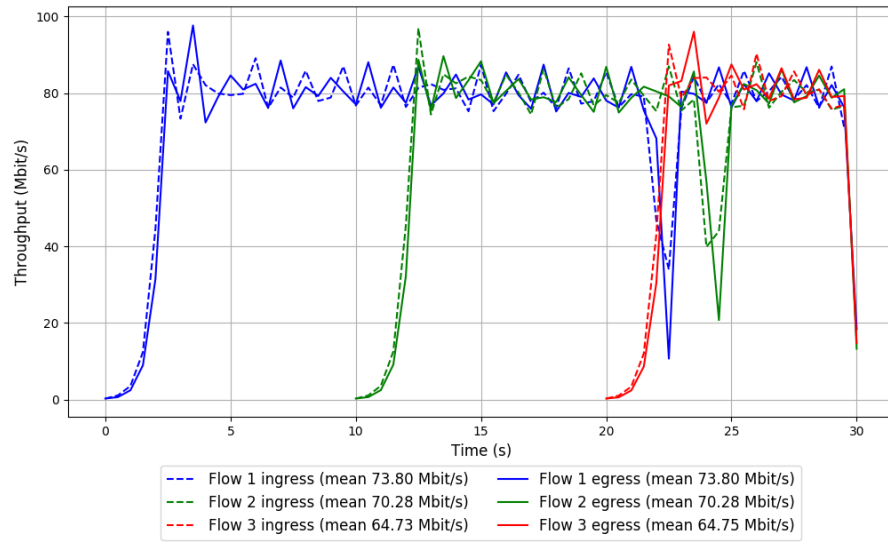
-- Flow 3:

Average throughput: 64.75 Mbit/s

95th percentile per-packet one-way delay: 137.174 ms

Loss rate: 0.00%

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



Run 7: Statistics of TCP BBR

Start at: 2018-03-15 00:22:24

End at: 2018-03-15 00:22:54

# Below is generated by plot.py at 2018-03-15 03:58:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 145.24 Mbit/s

95th percentile per-packet one-way delay: 136.482 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.17 Mbit/s

95th percentile per-packet one-way delay: 136.474 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 72.48 Mbit/s

95th percentile per-packet one-way delay: 136.459 ms

Loss rate: 0.00%

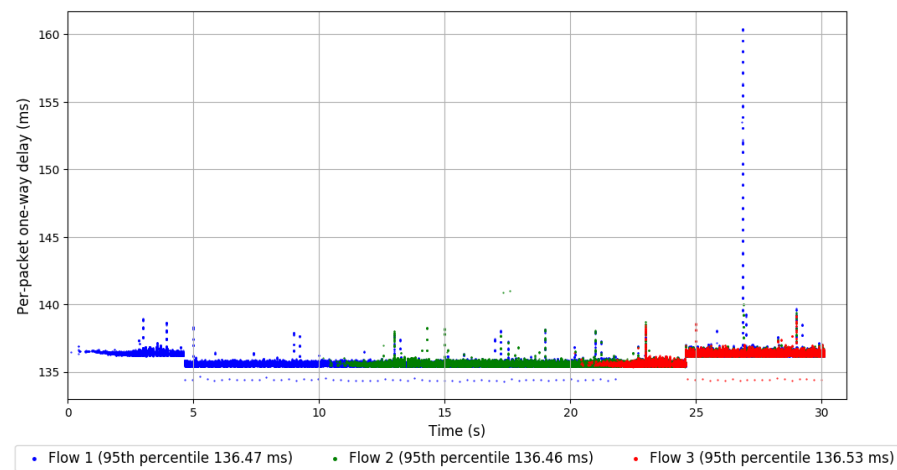
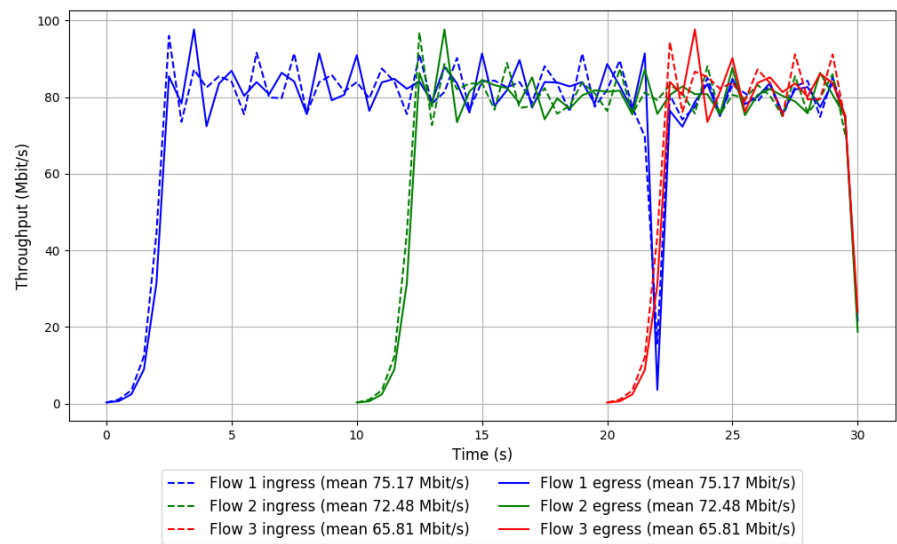
-- Flow 3:

Average throughput: 65.81 Mbit/s

95th percentile per-packet one-way delay: 136.530 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-03-15 00:42:48

End at: 2018-03-15 00:43:18

# Below is generated by plot.py at 2018-03-15 03:58:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 142.34 Mbit/s

95th percentile per-packet one-way delay: 136.497 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.20 Mbit/s

95th percentile per-packet one-way delay: 136.470 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 72.06 Mbit/s

95th percentile per-packet one-way delay: 136.509 ms

Loss rate: 0.00%

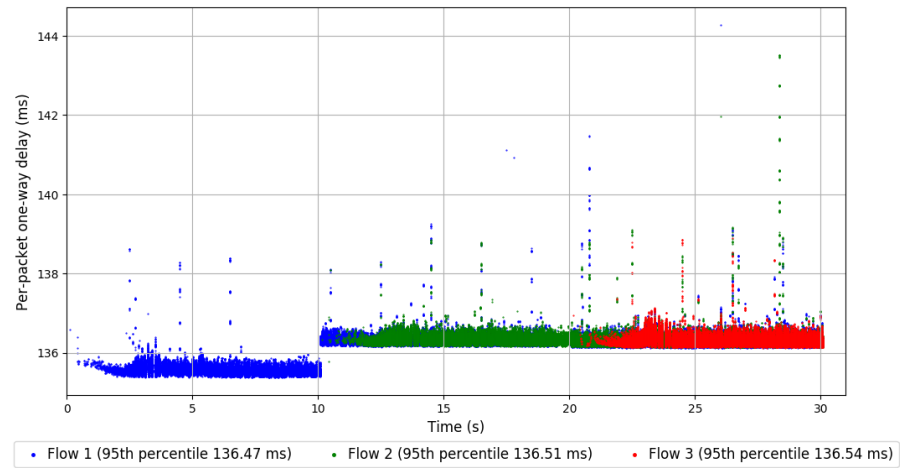
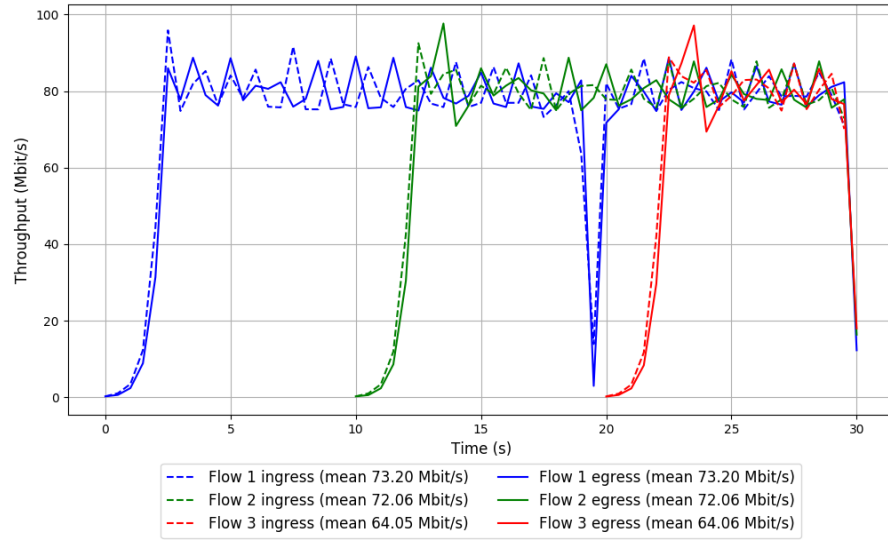
-- Flow 3:

Average throughput: 64.06 Mbit/s

95th percentile per-packet one-way delay: 136.543 ms

Loss rate: 0.00%

# Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-03-15 01:03:15

End at: 2018-03-15 01:03:45

# Below is generated by plot.py at 2018-03-15 04:01:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 143.29 Mbit/s

95th percentile per-packet one-way delay: 135.776 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.18 Mbit/s

95th percentile per-packet one-way delay: 135.760 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.30 Mbit/s

95th percentile per-packet one-way delay: 135.769 ms

Loss rate: 0.00%

-- Flow 3:

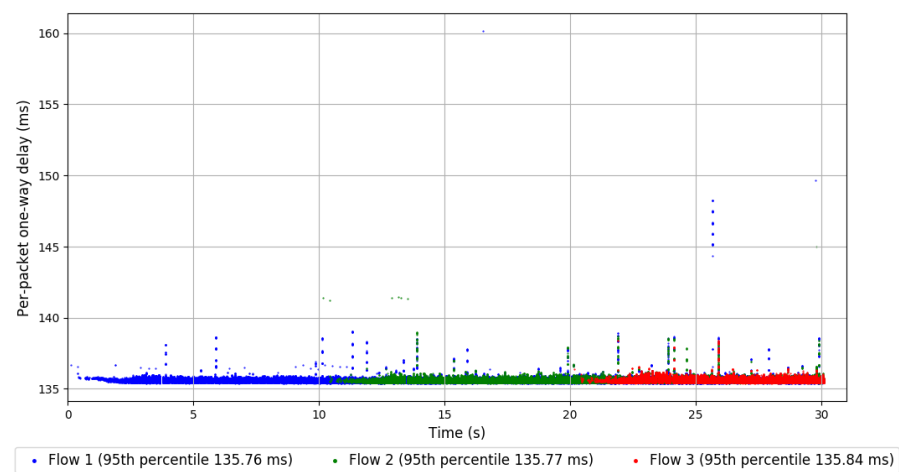
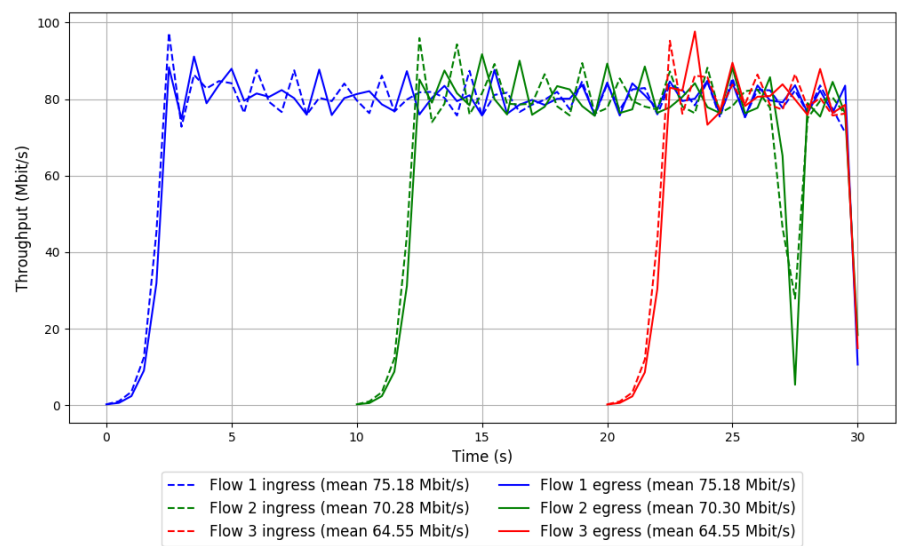
Average throughput: 64.55 Mbit/s

95th percentile per-packet one-way delay: 135.836 ms

Loss rate: 0.00%



Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-03-15 01:23:37

End at: 2018-03-15 01:24:07

# Below is generated by plot.py at 2018-03-15 04:01:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 144.38 Mbit/s

95th percentile per-packet one-way delay: 136.924 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 76.16 Mbit/s

95th percentile per-packet one-way delay: 136.879 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.18 Mbit/s

95th percentile per-packet one-way delay: 136.916 ms

Loss rate: 0.00%

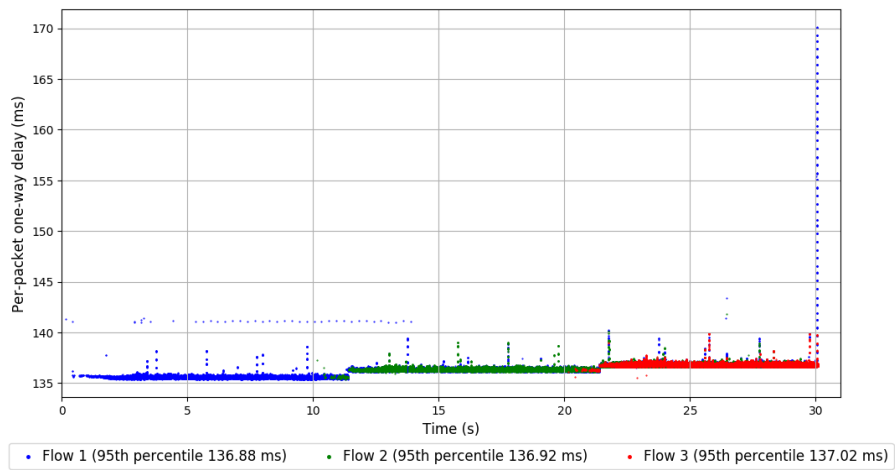
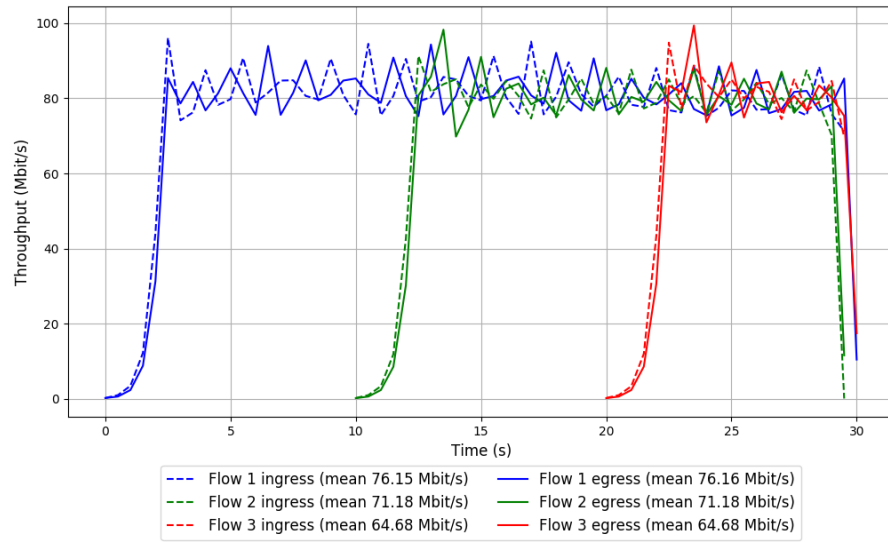
-- Flow 3:

Average throughput: 64.68 Mbit/s

95th percentile per-packet one-way delay: 137.019 ms

Loss rate: 0.02%

# Run 10: Report of TCP BBR — Data Link

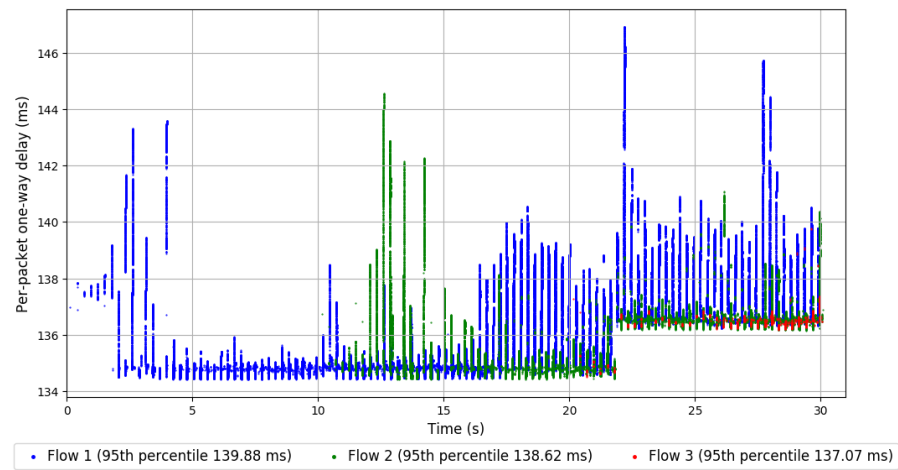
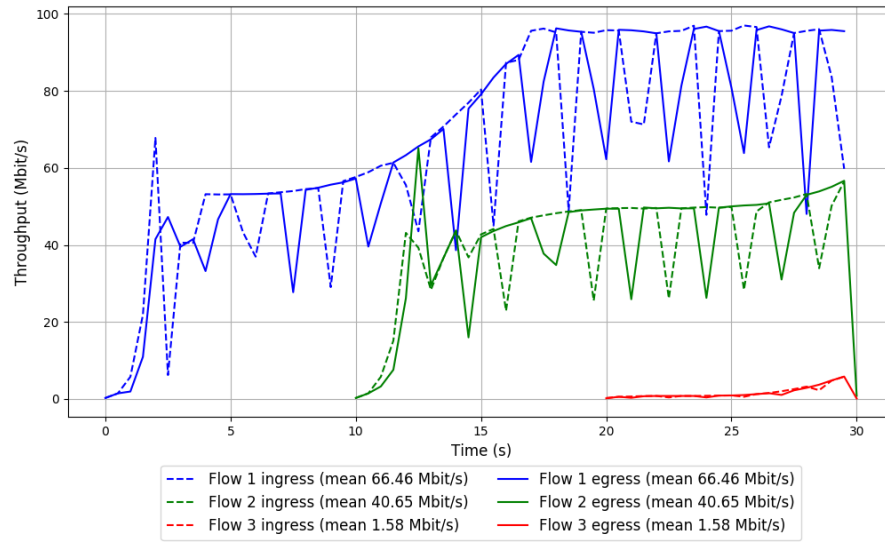


```
Run 1: Statistics of TCP Cubic

Start at: 2018-03-14 22:12:16
End at: 2018-03-14 22:12:46

# Below is generated by plot.py at 2018-03-15 04:01:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.68 Mbit/s
95th percentile per-packet one-way delay: 139.722 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.46 Mbit/s
95th percentile per-packet one-way delay: 139.879 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.65 Mbit/s
95th percentile per-packet one-way delay: 138.625 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 137.069 ms
Loss rate: 0.38%
```

# Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-03-14 22:32:41

End at: 2018-03-14 22:33:11

# Below is generated by plot.py at 2018-03-15 04:01:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 89.67 Mbit/s

95th percentile per-packet one-way delay: 142.896 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.14 Mbit/s

95th percentile per-packet one-way delay: 141.978 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.26 Mbit/s

95th percentile per-packet one-way delay: 144.248 ms

Loss rate: 0.00%

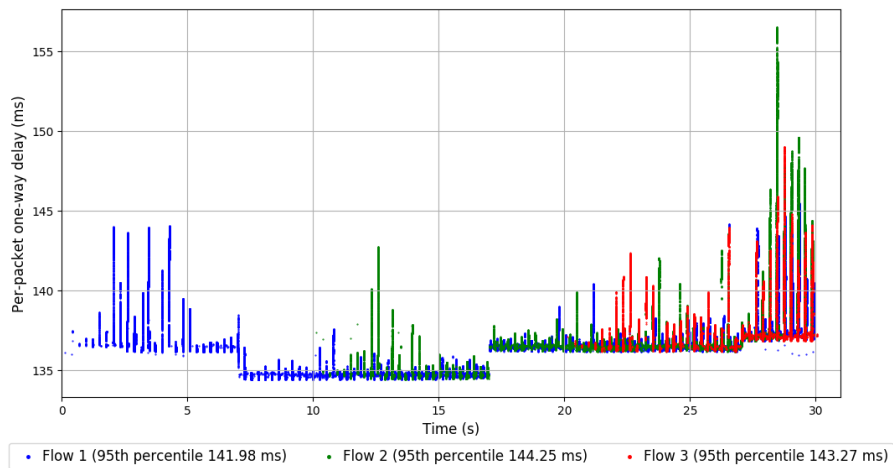
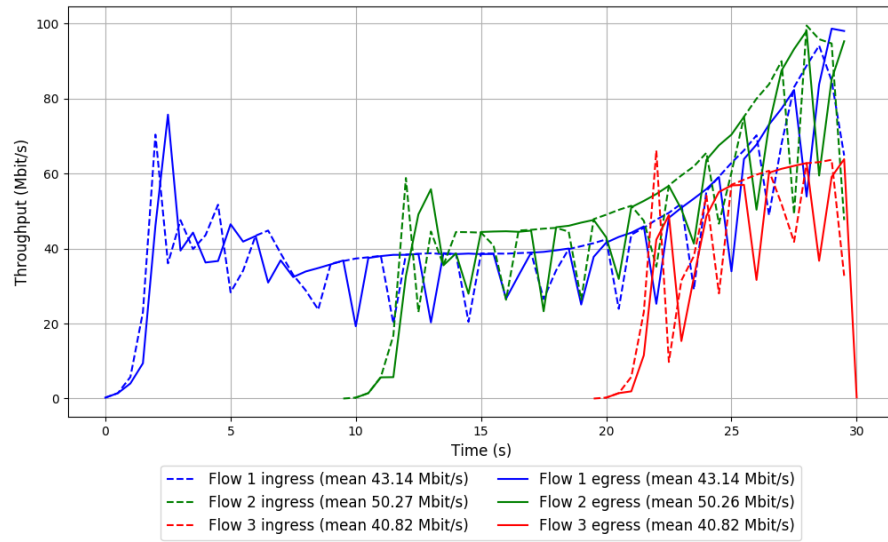
-- Flow 3:

Average throughput: 40.82 Mbit/s

95th percentile per-packet one-way delay: 143.273 ms

Loss rate: 0.00%

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



Run 3: Statistics of TCP Cubic

Start at: 2018-03-14 22:53:17

End at: 2018-03-14 22:53:47

# Below is generated by plot.py at 2018-03-15 04:01:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 99.37 Mbit/s

95th percentile per-packet one-way delay: 142.185 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 45.73 Mbit/s

95th percentile per-packet one-way delay: 139.773 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.67 Mbit/s

95th percentile per-packet one-way delay: 141.362 ms

Loss rate: 0.00%

-- Flow 3:

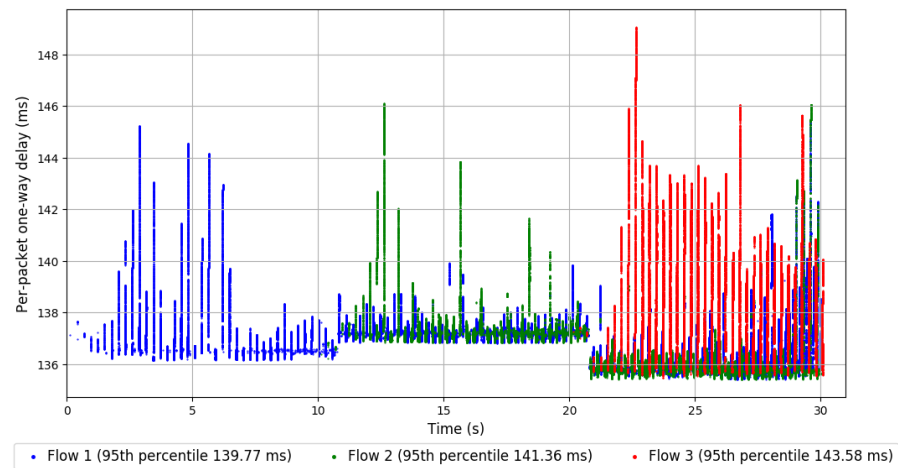
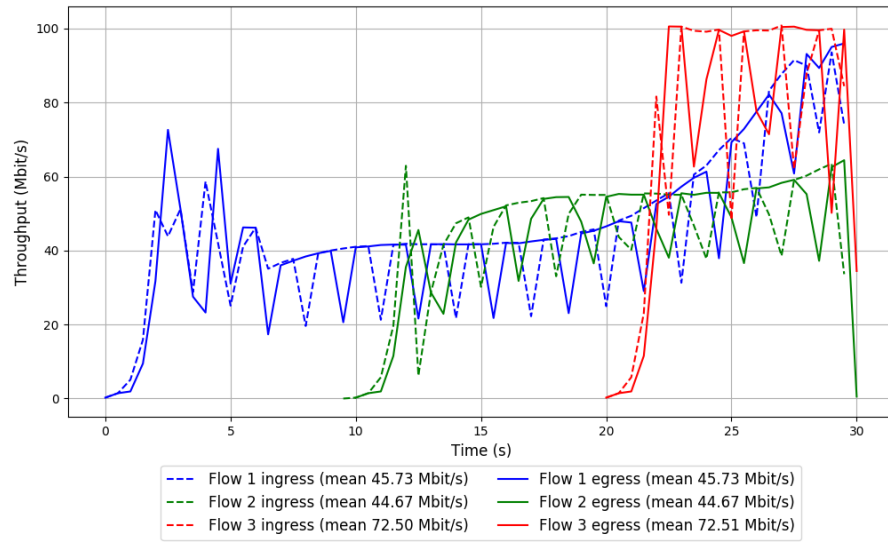
Average throughput: 72.51 Mbit/s

95th percentile per-packet one-way delay: 143.584 ms

Loss rate: 0.00%



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



Run 4: Statistics of TCP Cubic

Start at: 2018-03-14 23:13:50

End at: 2018-03-14 23:14:20

# Below is generated by plot.py at 2018-03-15 04:01:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 89.57 Mbit/s

95th percentile per-packet one-way delay: 138.796 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.09 Mbit/s

95th percentile per-packet one-way delay: 139.132 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.95 Mbit/s

95th percentile per-packet one-way delay: 137.631 ms

Loss rate: 0.00%

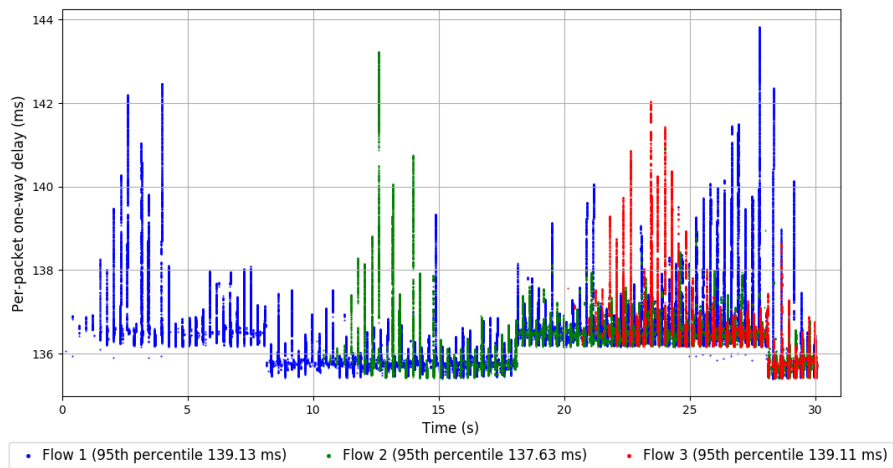
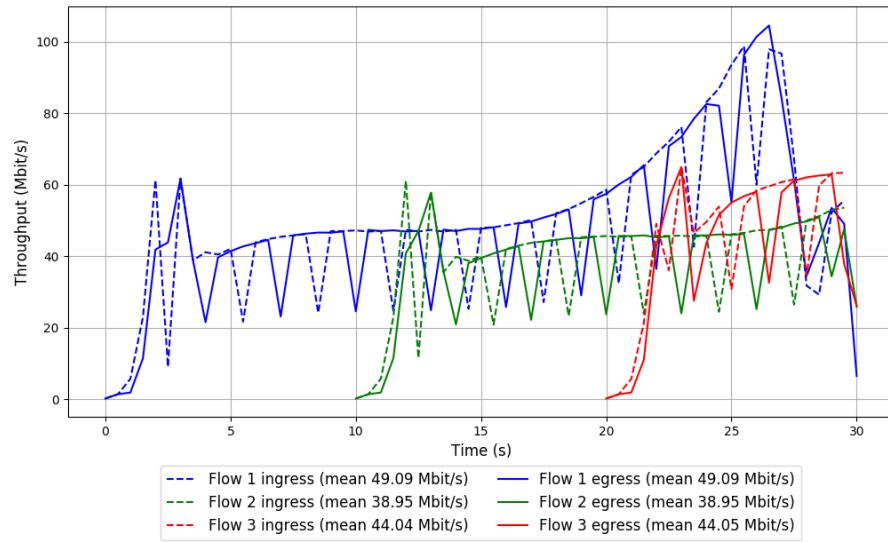
-- Flow 3:

Average throughput: 44.05 Mbit/s

95th percentile per-packet one-way delay: 139.108 ms

Loss rate: 0.00%

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



Run 5: Statistics of TCP Cubic

Start at: 2018-03-14 23:34:27

End at: 2018-03-14 23:34:57

# Below is generated by plot.py at 2018-03-15 04:01:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 106.57 Mbit/s

95th percentile per-packet one-way delay: 141.145 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.56 Mbit/s

95th percentile per-packet one-way delay: 141.025 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.88 Mbit/s

95th percentile per-packet one-way delay: 141.399 ms

Loss rate: 0.00%

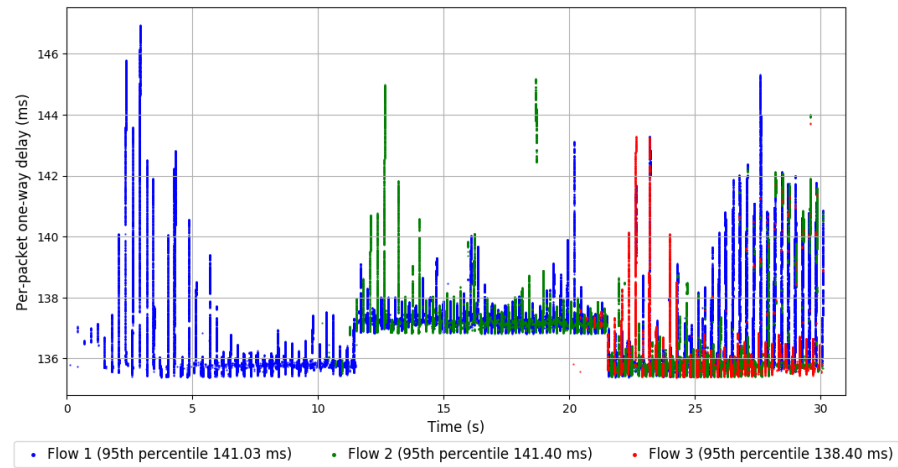
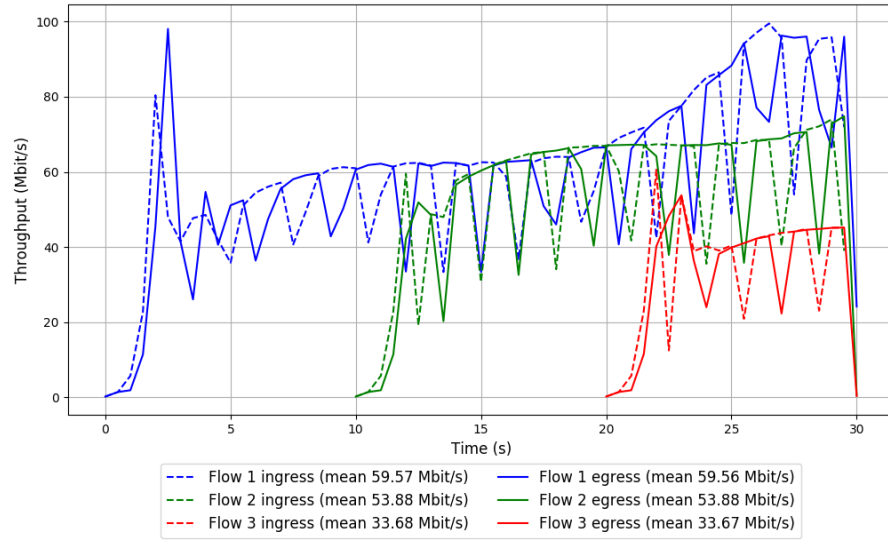
-- Flow 3:

Average throughput: 33.67 Mbit/s

95th percentile per-packet one-way delay: 138.397 ms

Loss rate: 0.00%

# Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-03-14 23:54:44

End at: 2018-03-14 23:55:14

# Below is generated by plot.py at 2018-03-15 04:01:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 95.57 Mbit/s

95th percentile per-packet one-way delay: 138.846 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.79 Mbit/s

95th percentile per-packet one-way delay: 137.991 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.12 Mbit/s

95th percentile per-packet one-way delay: 140.817 ms

Loss rate: 0.00%

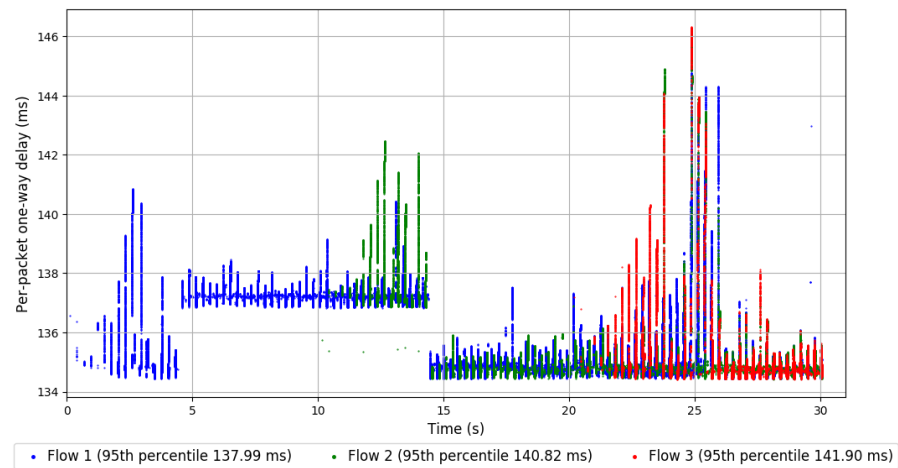
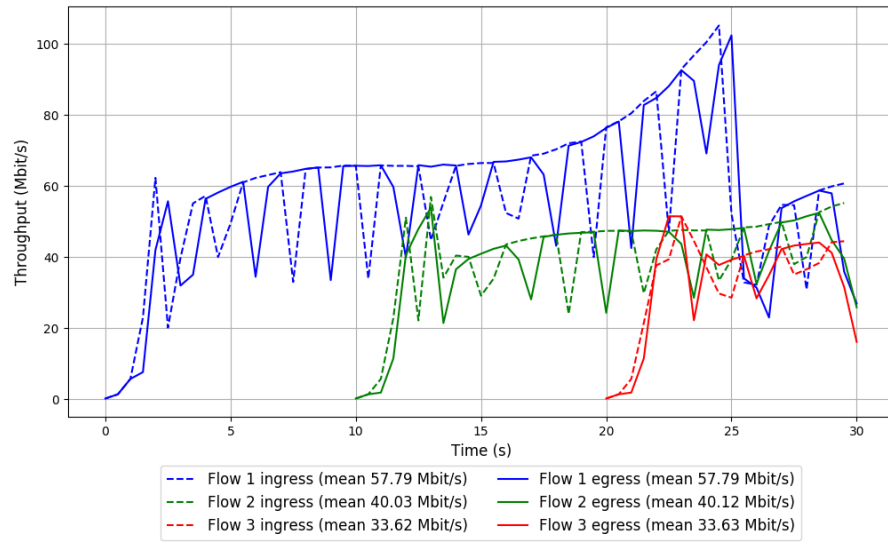
-- Flow 3:

Average throughput: 33.63 Mbit/s

95th percentile per-packet one-way delay: 141.899 ms

Loss rate: 0.00%

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



Run 7: Statistics of TCP Cubic

Start at: 2018-03-15 00:14:48

End at: 2018-03-15 00:15:18

# Below is generated by plot.py at 2018-03-15 04:02:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 103.18 Mbit/s

95th percentile per-packet one-way delay: 140.505 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 55.06 Mbit/s

95th percentile per-packet one-way delay: 139.341 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.80 Mbit/s

95th percentile per-packet one-way delay: 140.198 ms

Loss rate: 0.16%

-- Flow 3:

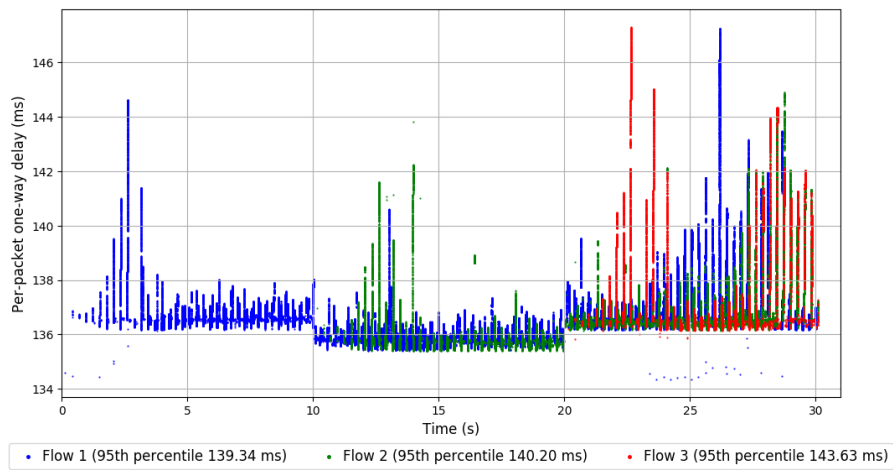
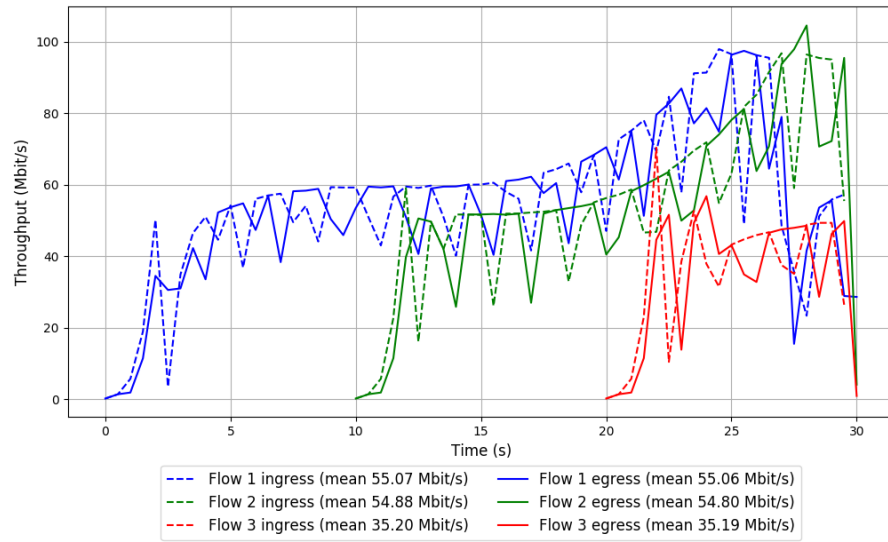
Average throughput: 35.19 Mbit/s

95th percentile per-packet one-way delay: 143.626 ms

Loss rate: 0.01%



# Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-03-15 00:35:32

End at: 2018-03-15 00:36:02

# Below is generated by plot.py at 2018-03-15 04:02:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 101.85 Mbit/s

95th percentile per-packet one-way delay: 141.613 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 52.05 Mbit/s

95th percentile per-packet one-way delay: 142.267 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 52.94 Mbit/s

95th percentile per-packet one-way delay: 141.085 ms

Loss rate: 0.00%

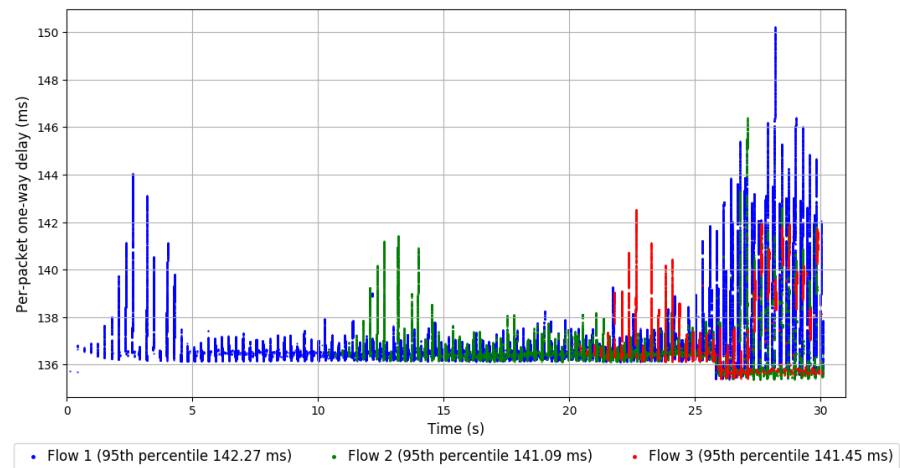
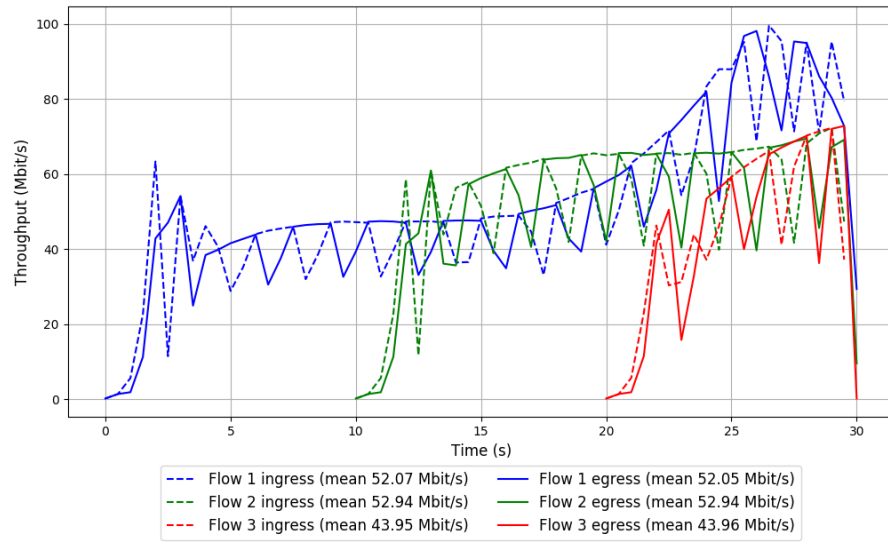
-- Flow 3:

Average throughput: 43.96 Mbit/s

95th percentile per-packet one-way delay: 141.450 ms

Loss rate: 0.00%

# Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-03-15 00:55:45

End at: 2018-03-15 00:56:15

# Below is generated by plot.py at 2018-03-15 04:02:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 103.99 Mbit/s

95th percentile per-packet one-way delay: 139.440 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.51 Mbit/s

95th percentile per-packet one-way delay: 139.397 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.87 Mbit/s

95th percentile per-packet one-way delay: 138.791 ms

Loss rate: 0.00%

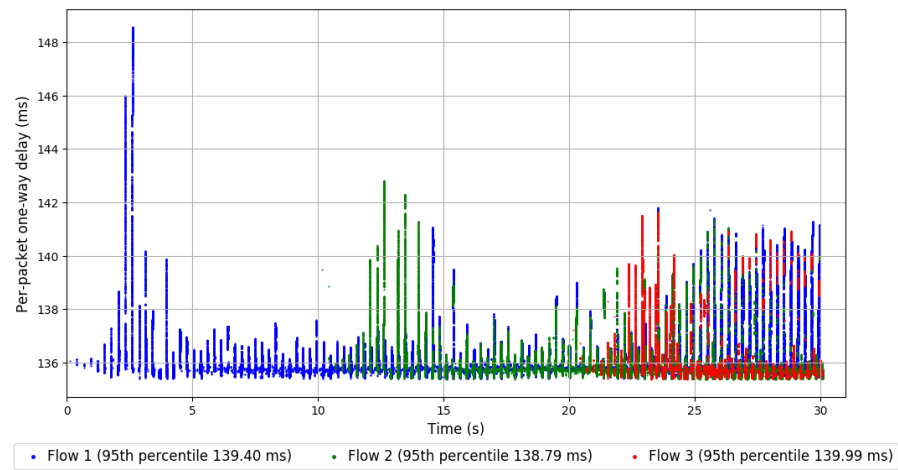
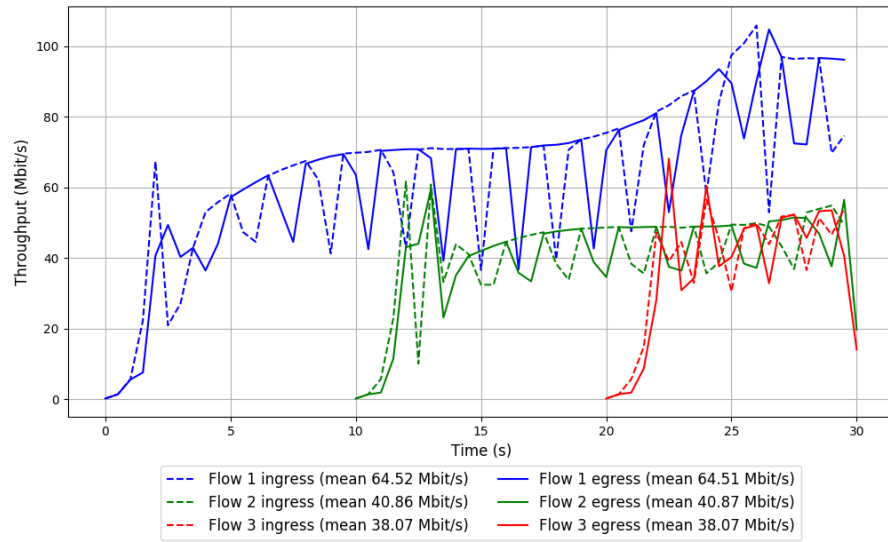
-- Flow 3:

Average throughput: 38.07 Mbit/s

95th percentile per-packet one-way delay: 139.989 ms

Loss rate: 0.00%

# Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-03-15 01:16:09

End at: 2018-03-15 01:16:39

# Below is generated by plot.py at 2018-03-15 04:02:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.44 Mbit/s

95th percentile per-packet one-way delay: 138.538 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 44.88 Mbit/s

95th percentile per-packet one-way delay: 138.574 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.31 Mbit/s

95th percentile per-packet one-way delay: 138.192 ms

Loss rate: 0.02%

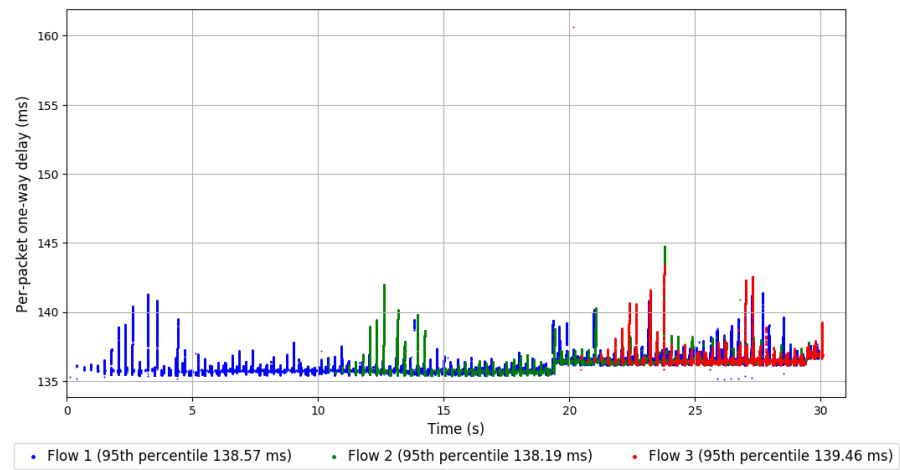
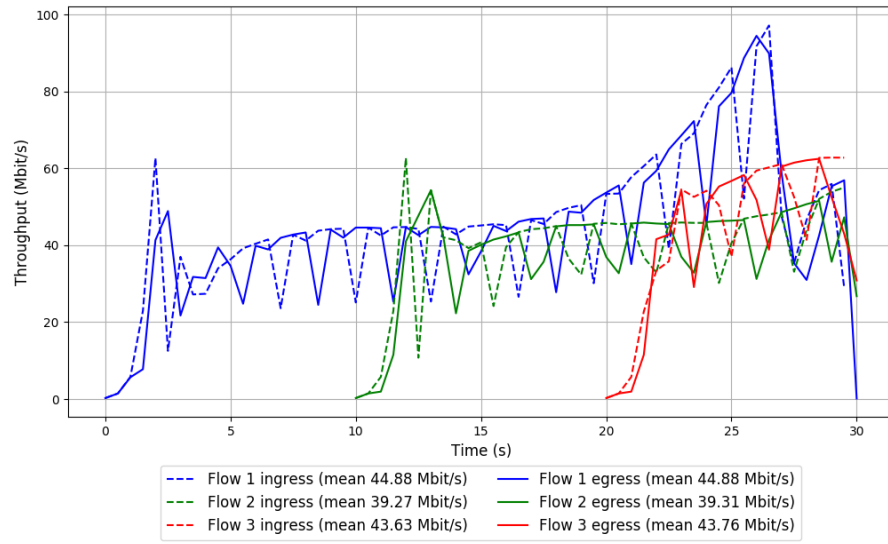
-- Flow 3:

Average throughput: 43.76 Mbit/s

95th percentile per-packet one-way delay: 139.456 ms

Loss rate: 0.00%

# Run 10: Report of TCP Cubic — Data Link



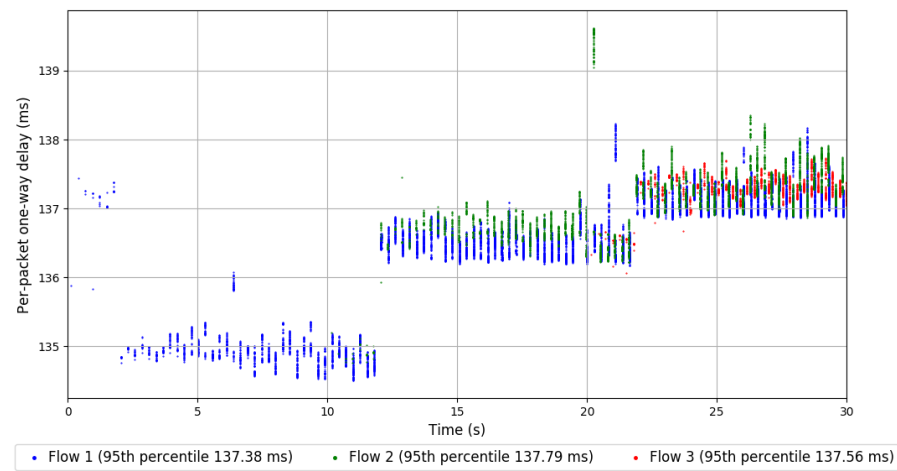
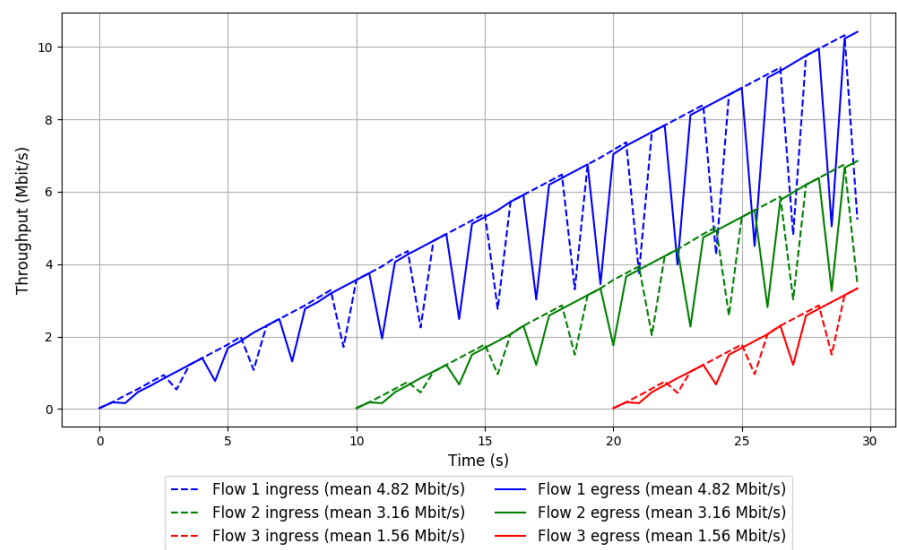
```
Run 1: Statistics of LEDBAT

Start at: 2018-03-14 22:17:16
End at: 2018-03-14 22:17:46

# Below is generated by plot.py at 2018-03-15 04:02:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.39 Mbit/s
95th percentile per-packet one-way delay: 137.591 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 137.380 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.16 Mbit/s
95th percentile per-packet one-way delay: 137.790 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 137.561 ms
Loss rate: 0.00%
```



Run 1: Report of LEDBAT — Data Link

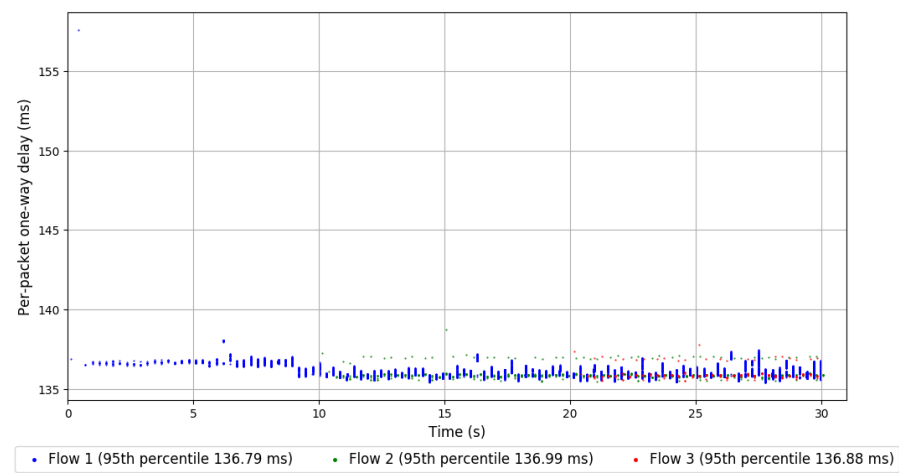
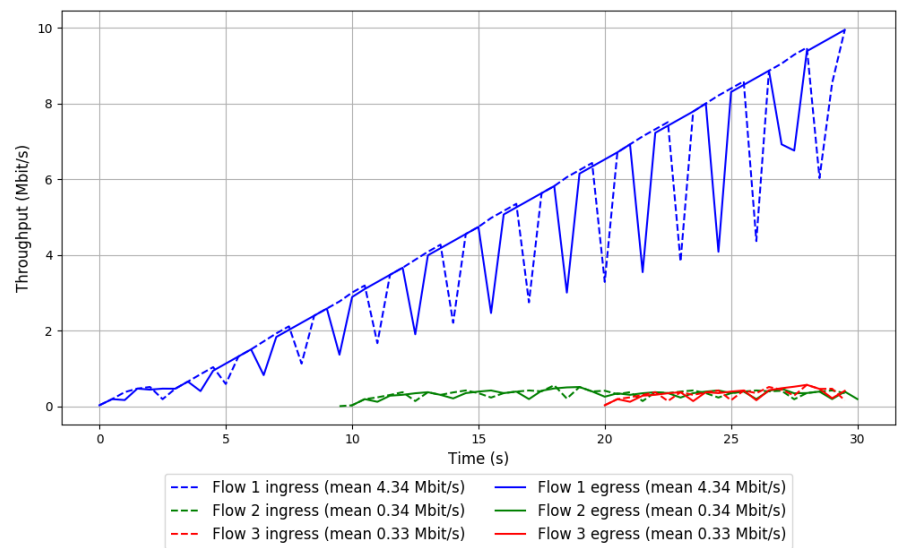


```
Run 2: Statistics of LEDBAT

Start at: 2018-03-14 22:37:39
End at: 2018-03-14 22:38:09

# Below is generated by plot.py at 2018-03-15 04:02:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 136.799 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 136.790 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 136.993 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 136.876 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-03-14 22:58:19

End at: 2018-03-14 22:58:49

# Below is generated by plot.py at 2018-03-15 04:02:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 136.702 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 136.922 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 136.706 ms

Loss rate: 0.00%

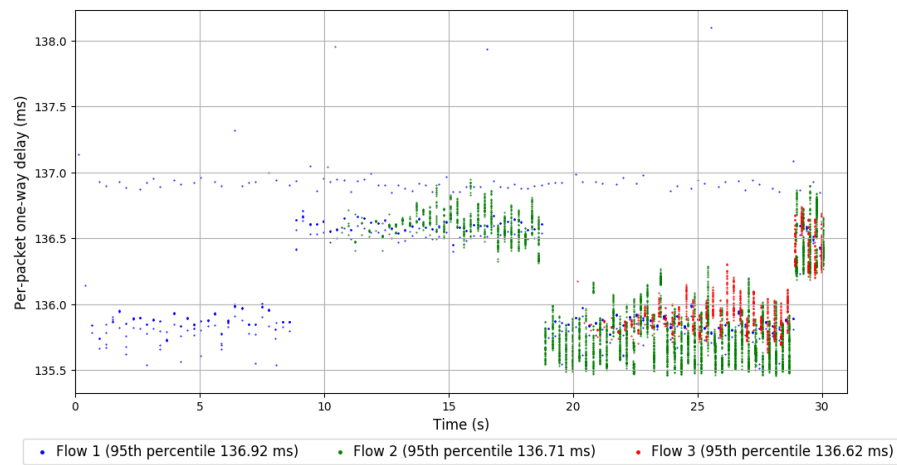
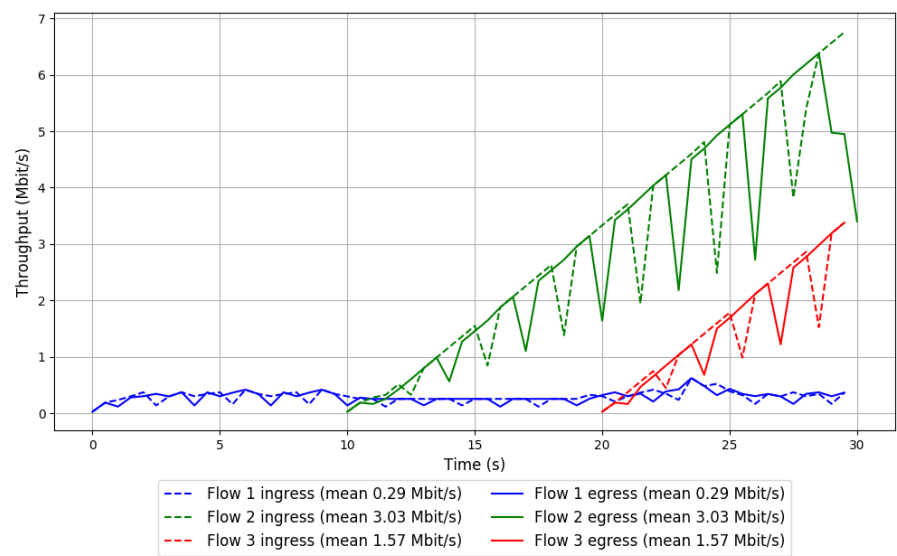
-- Flow 3:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 136.624 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-03-14 23:18:54

End at: 2018-03-14 23:19:24

# Below is generated by plot.py at 2018-03-15 04:02:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.37 Mbit/s

95th percentile per-packet one-way delay: 136.277 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.82 Mbit/s

95th percentile per-packet one-way delay: 136.256 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 136.938 ms

Loss rate: 0.00%

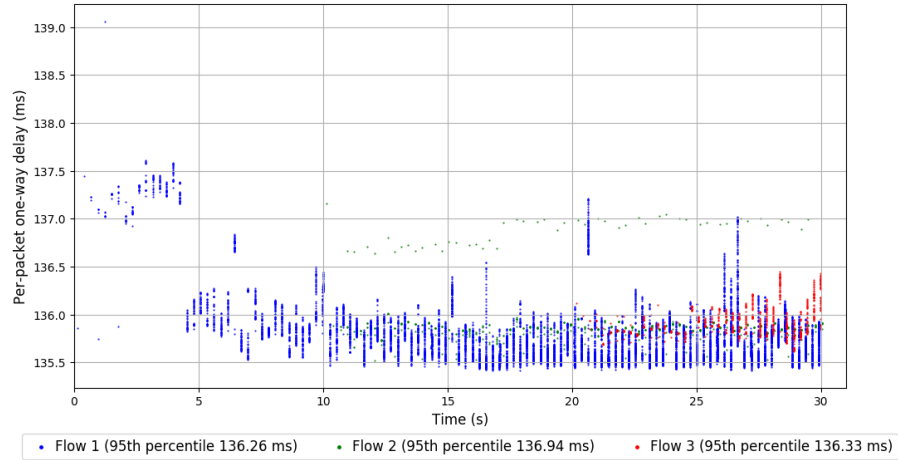
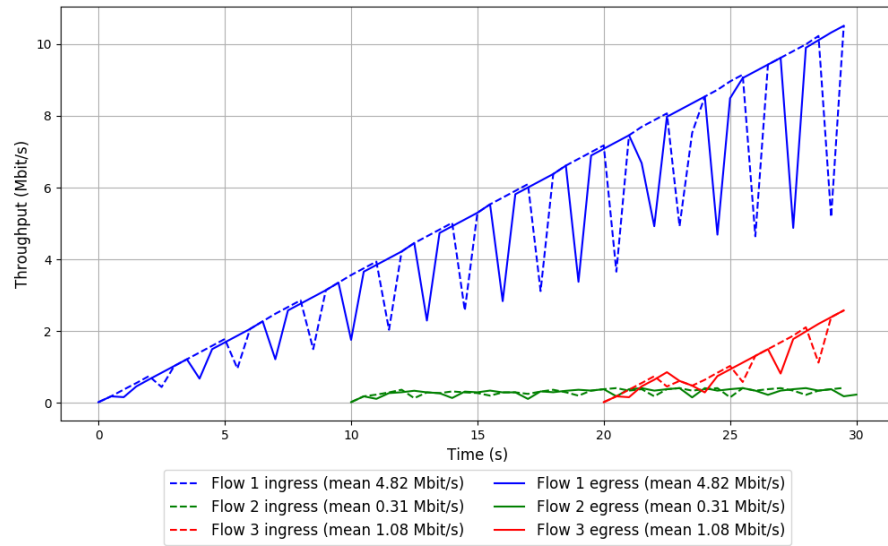
-- Flow 3:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 136.326 ms

Loss rate: 0.00%

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



Run 5: Statistics of LEDBAT

Start at: 2018-03-14 23:39:26

End at: 2018-03-14 23:39:56

# Below is generated by plot.py at 2018-03-15 04:02:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 135.317 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 135.427 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 135.225 ms

Loss rate: 0.00%

-- Flow 3:

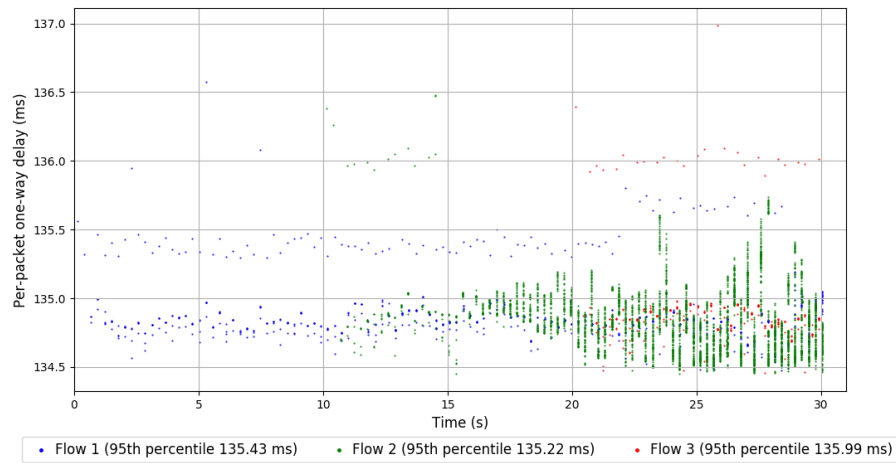
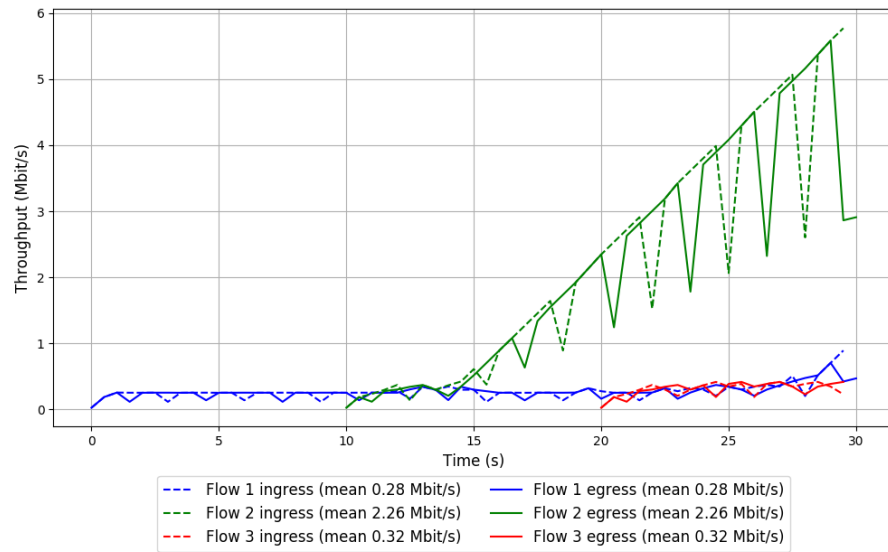
Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 135.990 ms

Loss rate: 0.00%



## Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-03-14 23:59:45

End at: 2018-03-15 00:00:15

# Below is generated by plot.py at 2018-03-15 04:02:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.12 Mbit/s

95th percentile per-packet one-way delay: 137.531 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.81 Mbit/s

95th percentile per-packet one-way delay: 137.559 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.72 Mbit/s

95th percentile per-packet one-way delay: 137.501 ms

Loss rate: 0.00%

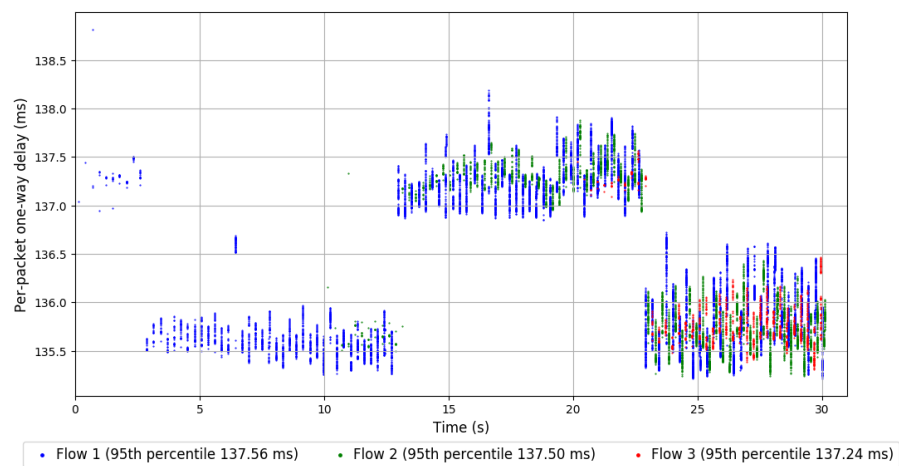
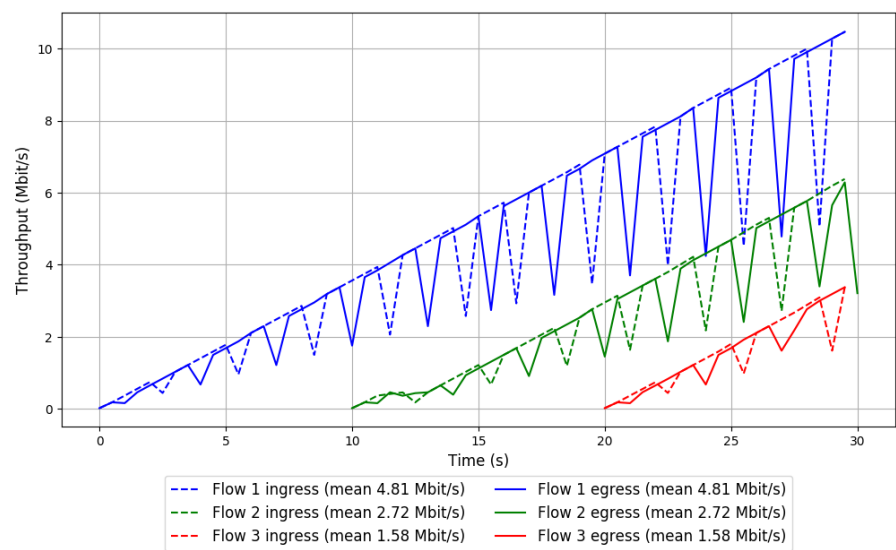
-- Flow 3:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 137.236 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-03-15 00:19:55

End at: 2018-03-15 00:20:25

# Below is generated by plot.py at 2018-03-15 04:02:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 7.02 Mbit/s

95th percentile per-packet one-way delay: 136.569 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.84 Mbit/s

95th percentile per-packet one-way delay: 136.606 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 136.040 ms

Loss rate: 0.00%

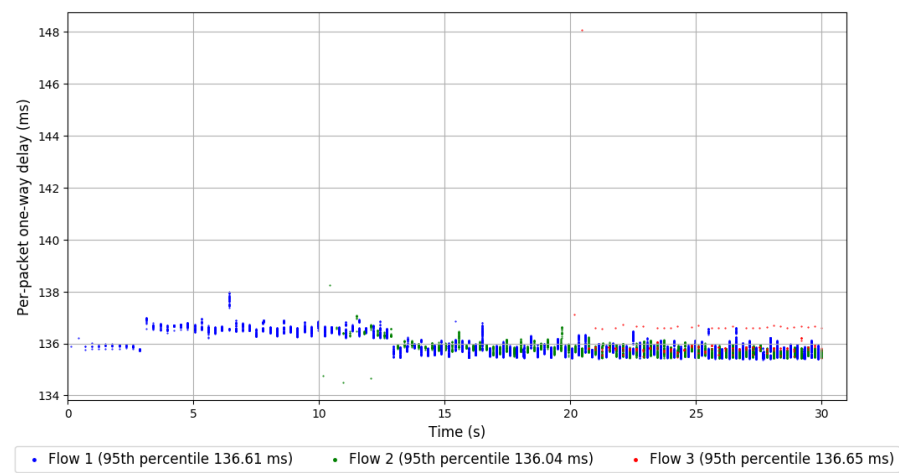
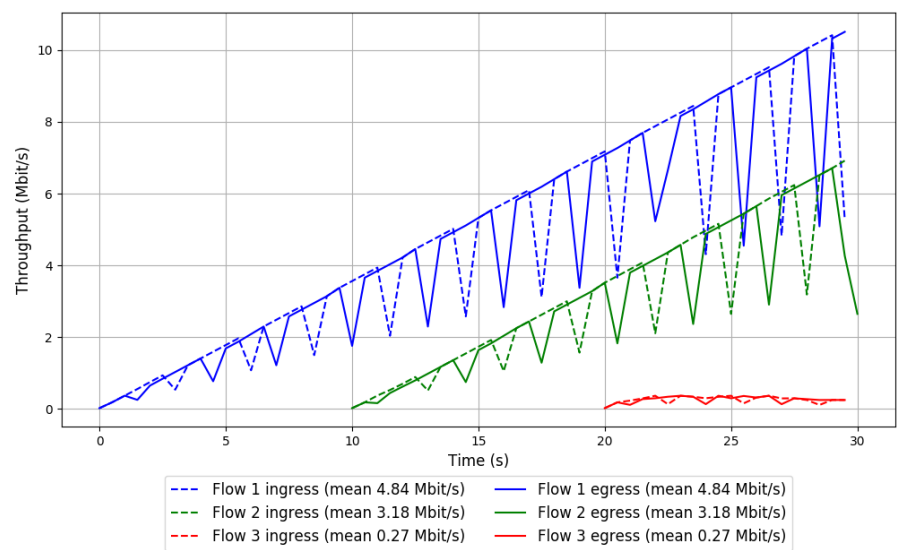
-- Flow 3:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 136.648 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-03-15 00:40:20

End at: 2018-03-15 00:40:50

# Below is generated by plot.py at 2018-03-15 04:02:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.65 Mbit/s

95th percentile per-packet one-way delay: 136.707 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 136.732 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.21 Mbit/s

95th percentile per-packet one-way delay: 136.697 ms

Loss rate: 0.00%

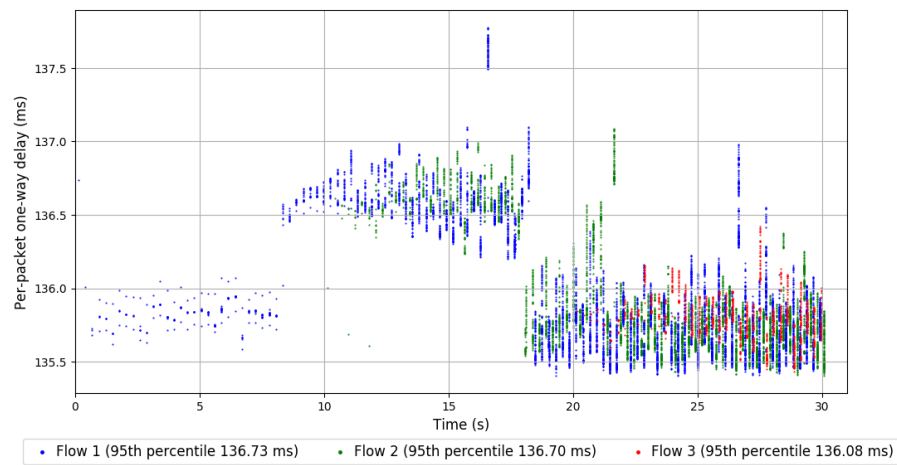
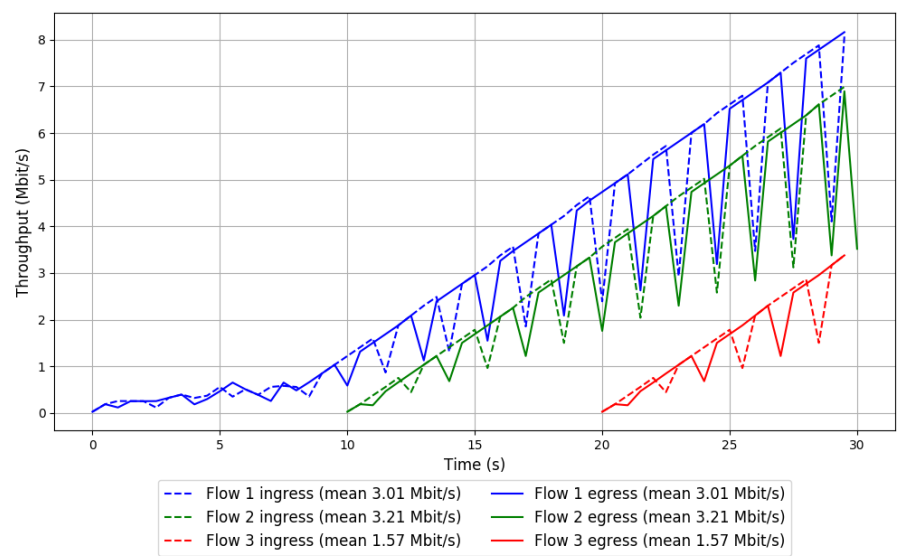
-- Flow 3:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 136.080 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-03-15 01:00:48

End at: 2018-03-15 01:01:18

# Below is generated by plot.py at 2018-03-15 04:02:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 136.184 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 136.039 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 136.267 ms

Loss rate: 0.00%

-- Flow 3:

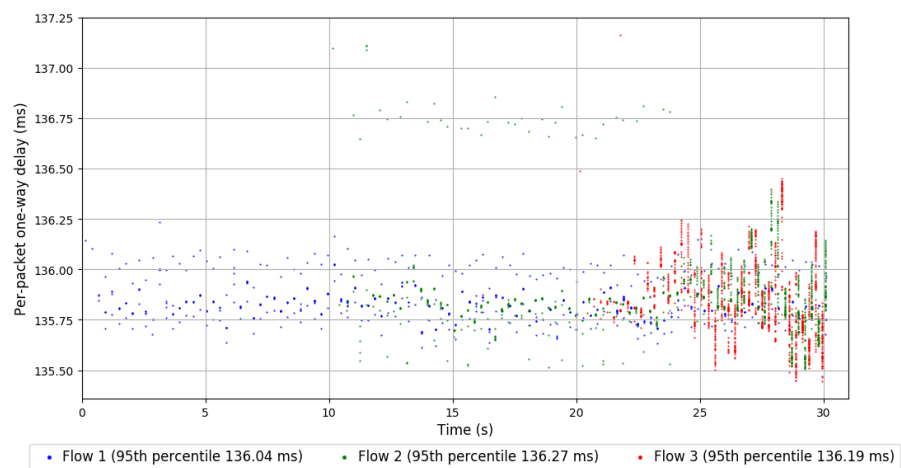
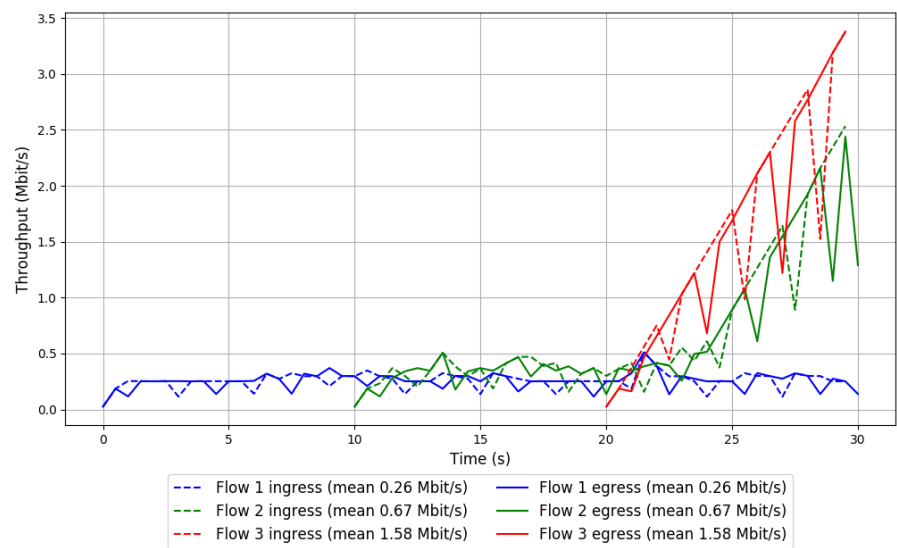
Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 136.189 ms

Loss rate: 0.00%



Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-03-15 01:21:09

End at: 2018-03-15 01:21:39

# Below is generated by plot.py at 2018-03-15 04:02:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 137.320 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 137.355 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 137.280 ms

Loss rate: 0.00%

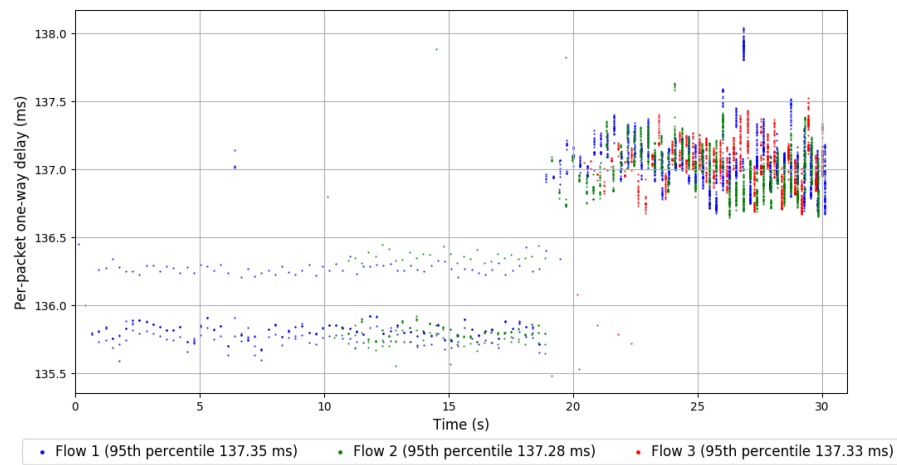
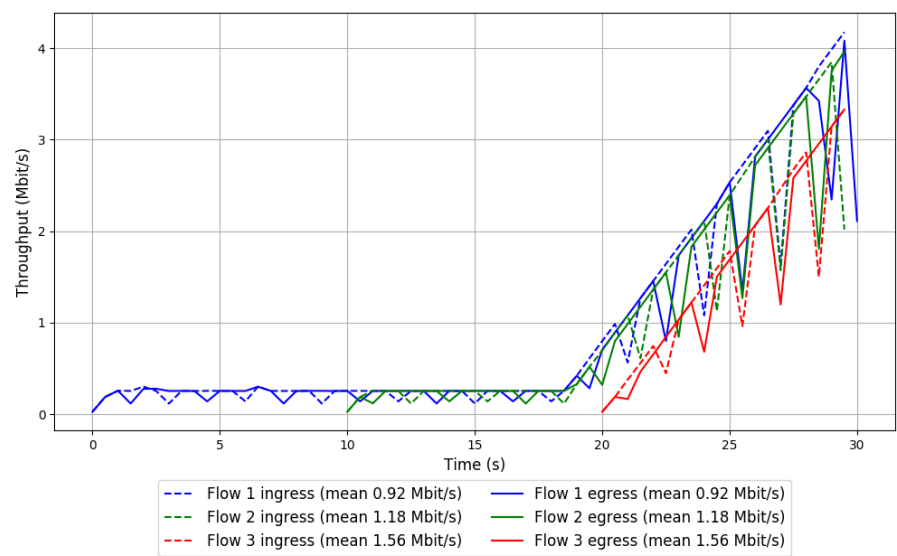
-- Flow 3:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 137.334 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

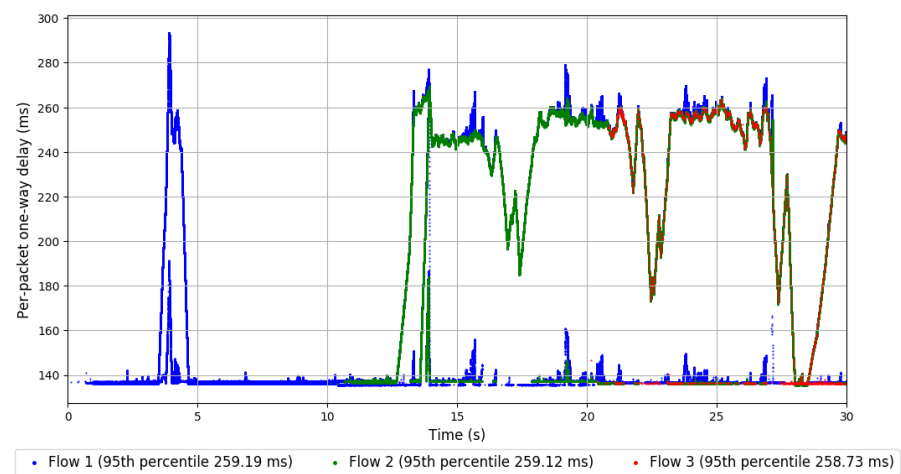
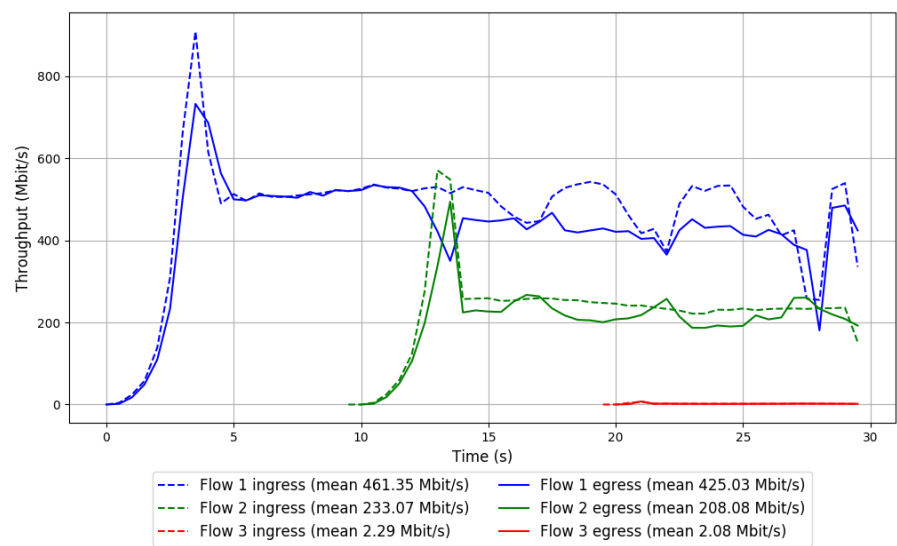


```
Run 1: Statistics of PCC

Start at: 2018-03-14 22:03:58
End at: 2018-03-14 22:04:28

# Below is generated by plot.py at 2018-03-15 04:14:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 564.19 Mbit/s
95th percentile per-packet one-way delay: 259.163 ms
Loss rate: 8.59%
-- Flow 1:
Average throughput: 425.03 Mbit/s
95th percentile per-packet one-way delay: 259.187 ms
Loss rate: 7.88%
-- Flow 2:
Average throughput: 208.08 Mbit/s
95th percentile per-packet one-way delay: 259.125 ms
Loss rate: 10.73%
-- Flow 3:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 258.734 ms
Loss rate: 8.97%
```

Run 1: Report of PCC — Data Link

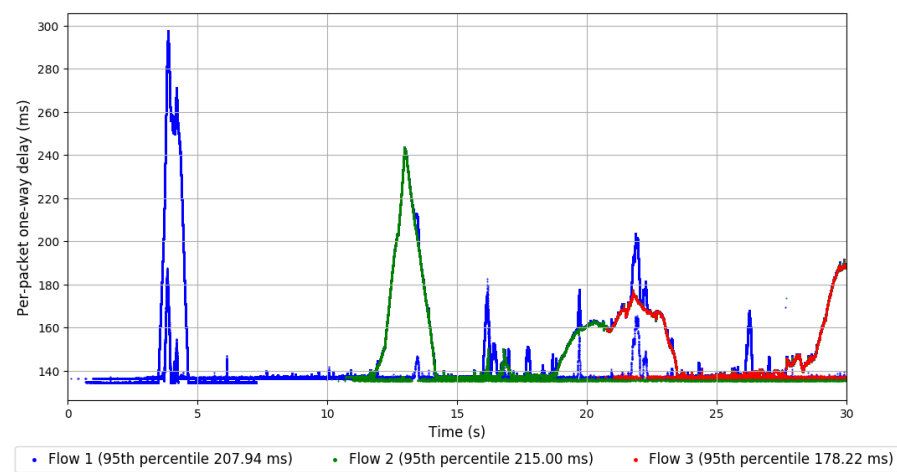
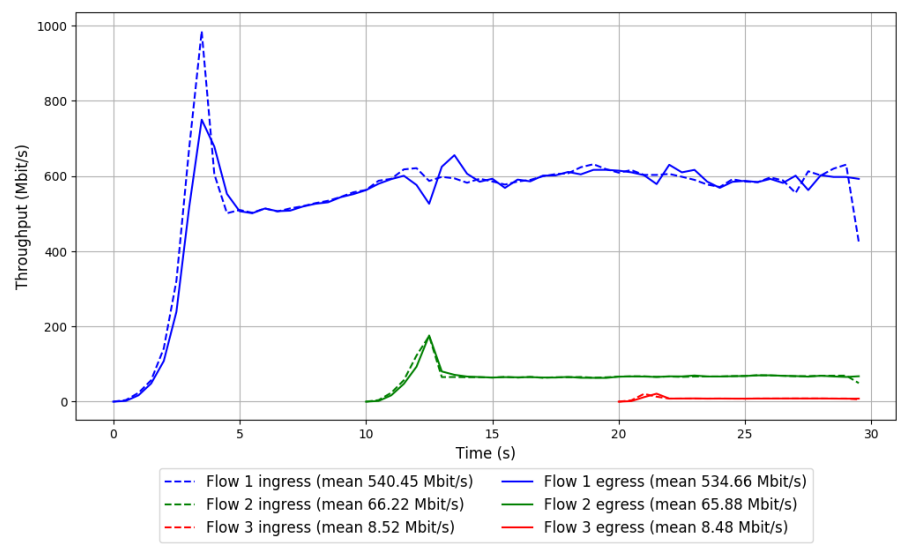


```
Run 2: Statistics of PCC

Start at: 2018-03-14 22:24:21
End at: 2018-03-14 22:24:51

# Below is generated by plot.py at 2018-03-15 04:14:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 581.22 Mbit/s
95th percentile per-packet one-way delay: 208.780 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 534.66 Mbit/s
95th percentile per-packet one-way delay: 207.938 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 65.88 Mbit/s
95th percentile per-packet one-way delay: 214.999 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 178.215 ms
Loss rate: 0.49%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-03-14 22:44:48

End at: 2018-03-14 22:45:18

# Below is generated by plot.py at 2018-03-15 04:14:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 575.24 Mbit/s

95th percentile per-packet one-way delay: 249.696 ms

Loss rate: 1.89%

-- Flow 1:

Average throughput: 477.98 Mbit/s

95th percentile per-packet one-way delay: 249.757 ms

Loss rate: 1.84%

-- Flow 2:

Average throughput: 114.99 Mbit/s

95th percentile per-packet one-way delay: 249.878 ms

Loss rate: 2.51%

-- Flow 3:

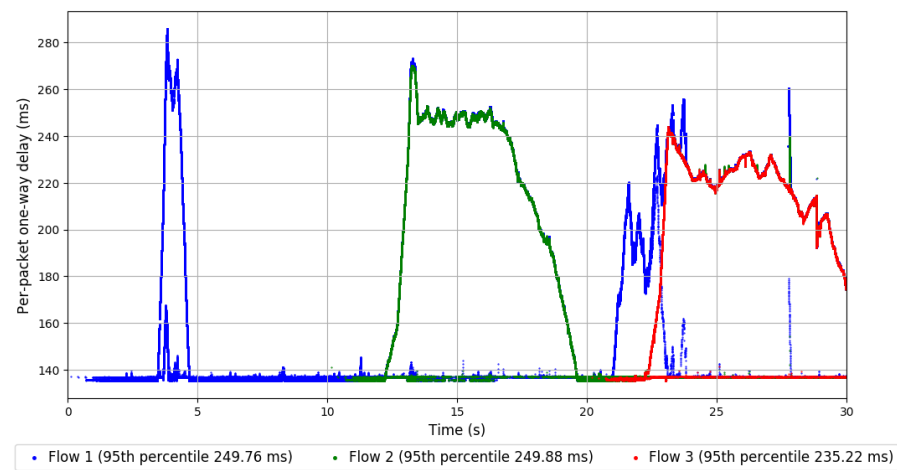
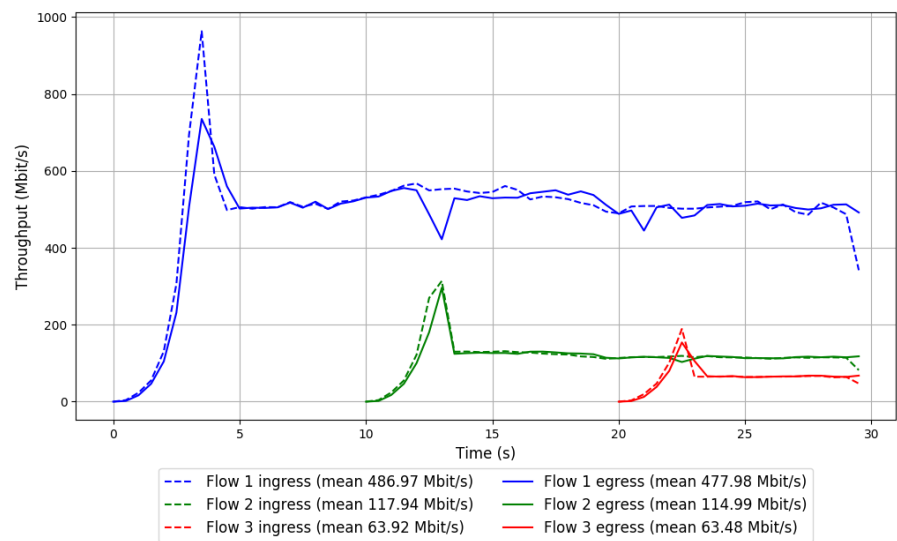
Average throughput: 63.48 Mbit/s

95th percentile per-packet one-way delay: 235.220 ms

Loss rate: 0.67%



Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-03-14 23:05:17

End at: 2018-03-14 23:05:47

# Below is generated by plot.py at 2018-03-15 04:14:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 573.31 Mbit/s

95th percentile per-packet one-way delay: 244.124 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 470.88 Mbit/s

95th percentile per-packet one-way delay: 243.910 ms

Loss rate: 1.53%

-- Flow 2:

Average throughput: 122.41 Mbit/s

95th percentile per-packet one-way delay: 244.506 ms

Loss rate: 1.93%

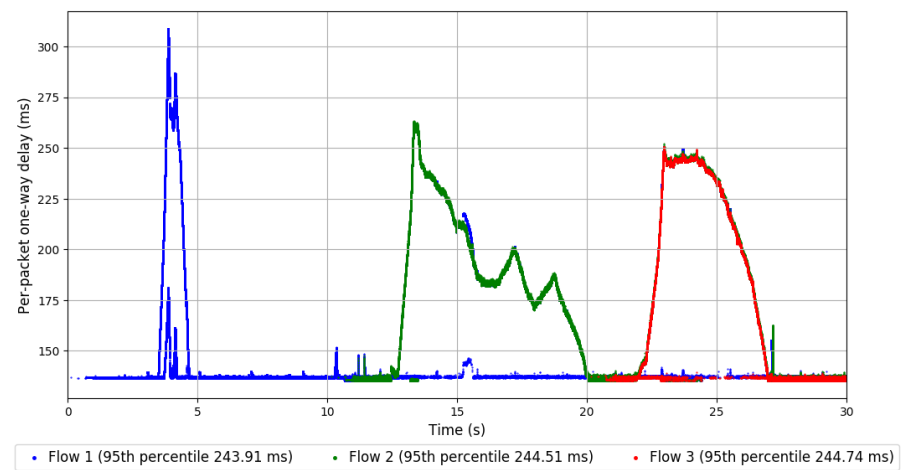
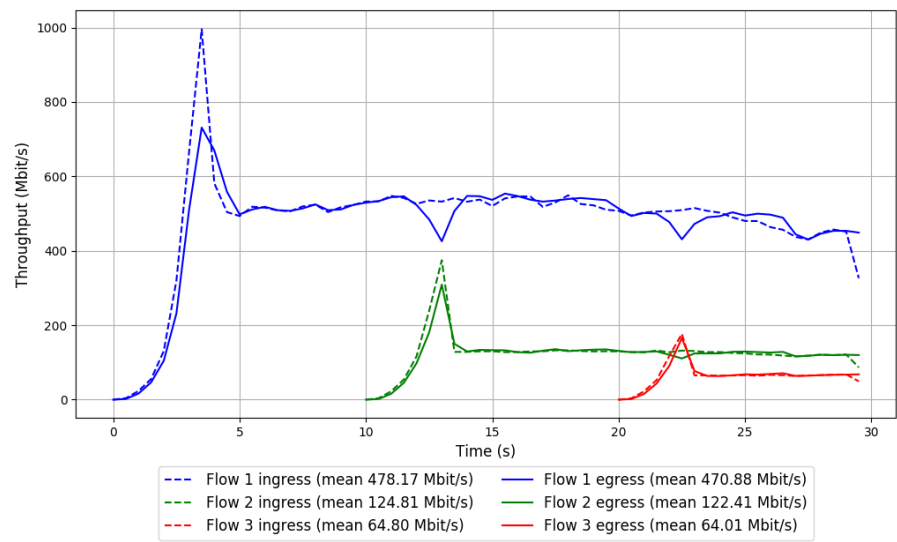
-- Flow 3:

Average throughput: 64.01 Mbit/s

95th percentile per-packet one-way delay: 244.744 ms

Loss rate: 1.23%

Run 4: Report of PCC — Data Link

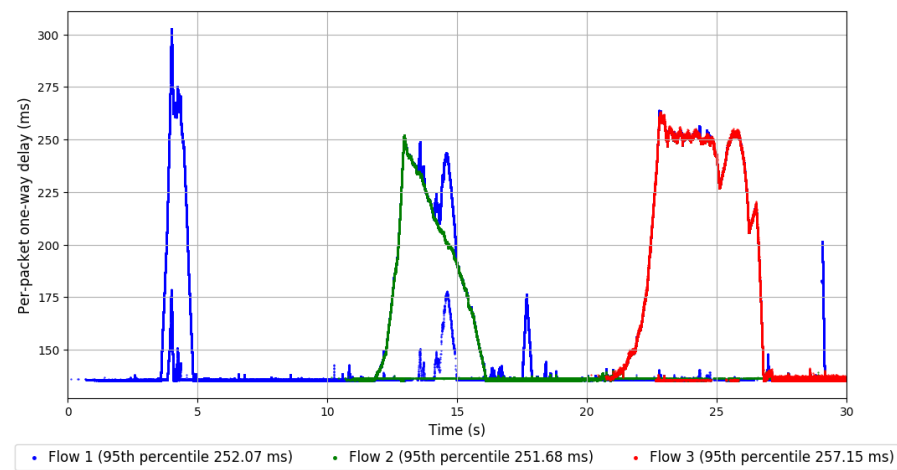
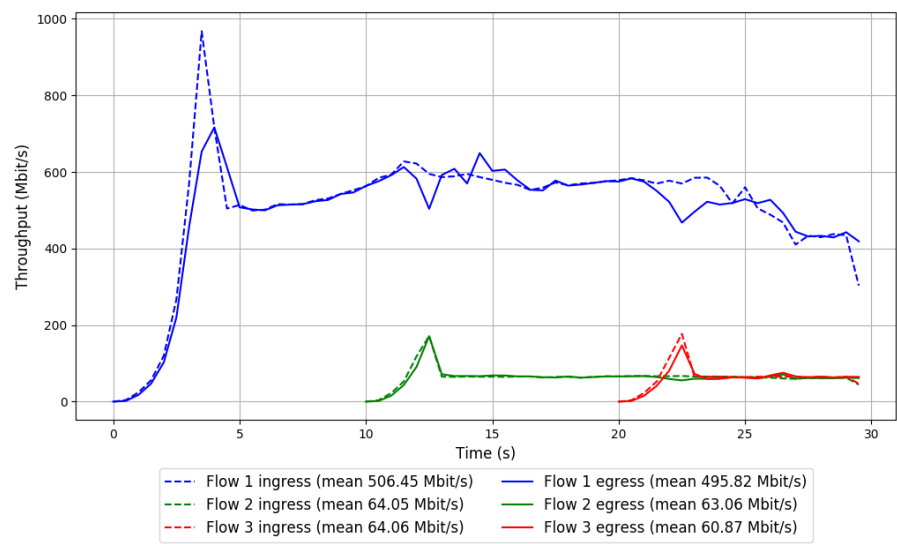


```
Run 5: Statistics of PCC

Start at: 2018-03-14 23:26:00
End at: 2018-03-14 23:26:30

# Below is generated by plot.py at 2018-03-15 04:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 557.73 Mbit/s
95th percentile per-packet one-way delay: 252.192 ms
Loss rate: 2.17%
-- Flow 1:
Average throughput: 495.82 Mbit/s
95th percentile per-packet one-way delay: 252.070 ms
Loss rate: 2.10%
-- Flow 2:
Average throughput: 63.06 Mbit/s
95th percentile per-packet one-way delay: 251.675 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 60.87 Mbit/s
95th percentile per-packet one-way delay: 257.146 ms
Loss rate: 5.00%
```

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-03-14 23:46:10

End at: 2018-03-14 23:46:40

# Below is generated by plot.py at 2018-03-15 04:15:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 557.82 Mbit/s

95th percentile per-packet one-way delay: 254.567 ms

Loss rate: 3.01%

-- Flow 1:

Average throughput: 455.66 Mbit/s

95th percentile per-packet one-way delay: 254.424 ms

Loss rate: 2.79%

-- Flow 2:

Average throughput: 123.97 Mbit/s

95th percentile per-packet one-way delay: 254.416 ms

Loss rate: 3.44%

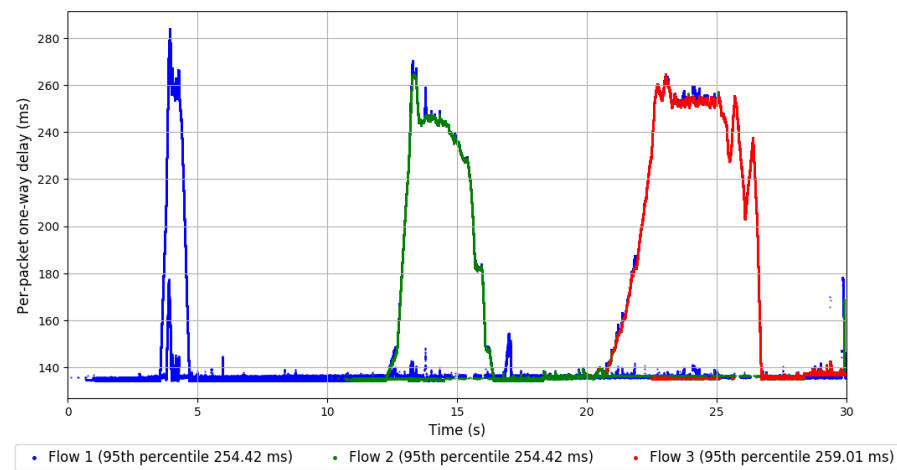
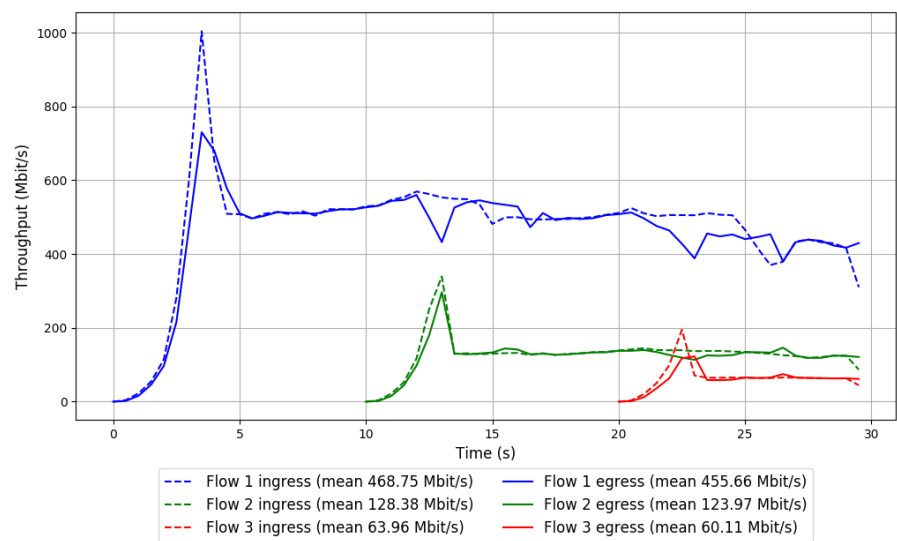
-- Flow 3:

Average throughput: 60.11 Mbit/s

95th percentile per-packet one-way delay: 259.015 ms

Loss rate: 6.03%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-03-15 00:06:21

End at: 2018-03-15 00:06:51

# Below is generated by plot.py at 2018-03-15 04:15:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 575.05 Mbit/s

95th percentile per-packet one-way delay: 247.775 ms

Loss rate: 1.46%

-- Flow 1:

Average throughput: 509.75 Mbit/s

95th percentile per-packet one-way delay: 248.164 ms

Loss rate: 1.49%

-- Flow 2:

Average throughput: 66.16 Mbit/s

95th percentile per-packet one-way delay: 247.103 ms

Loss rate: 1.25%

-- Flow 3:

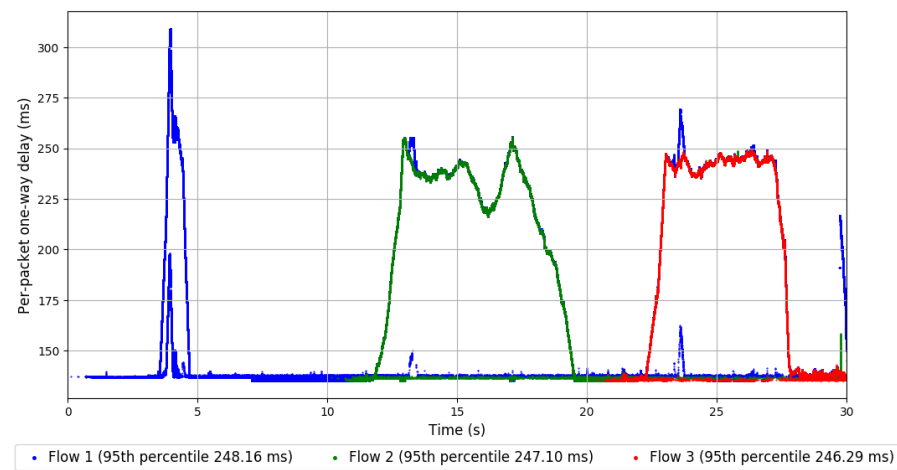
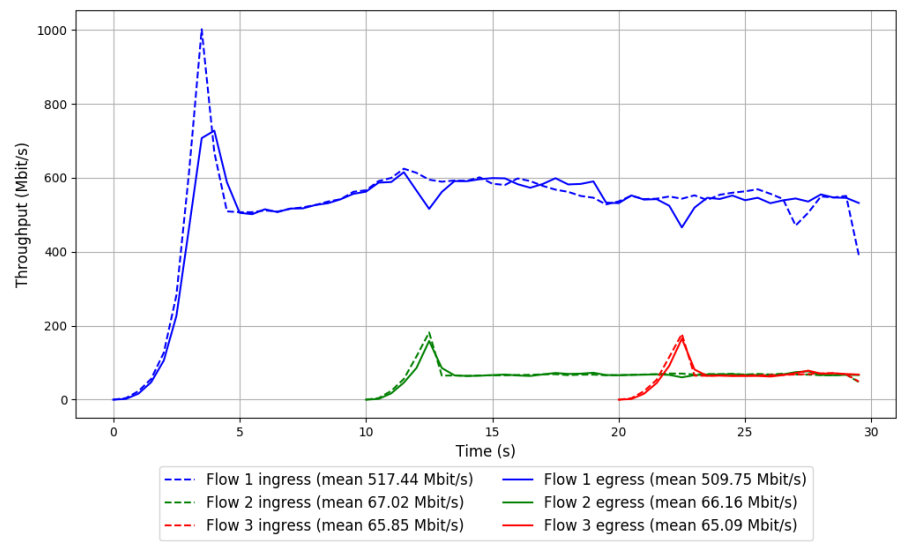
Average throughput: 65.09 Mbit/s

95th percentile per-packet one-way delay: 246.286 ms

Loss rate: 1.15%



Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-03-15 00:27:05

End at: 2018-03-15 00:27:35

# Below is generated by plot.py at 2018-03-15 04:15:45

# Datalink statistics

-- Total of 3 flows:

Average throughput: 556.82 Mbit/s

95th percentile per-packet one-way delay: 251.115 ms

Loss rate: 1.58%

-- Flow 1:

Average throughput: 462.16 Mbit/s

95th percentile per-packet one-way delay: 251.220 ms

Loss rate: 1.61%

-- Flow 2:

Average throughput: 125.99 Mbit/s

95th percentile per-packet one-way delay: 251.020 ms

Loss rate: 1.60%

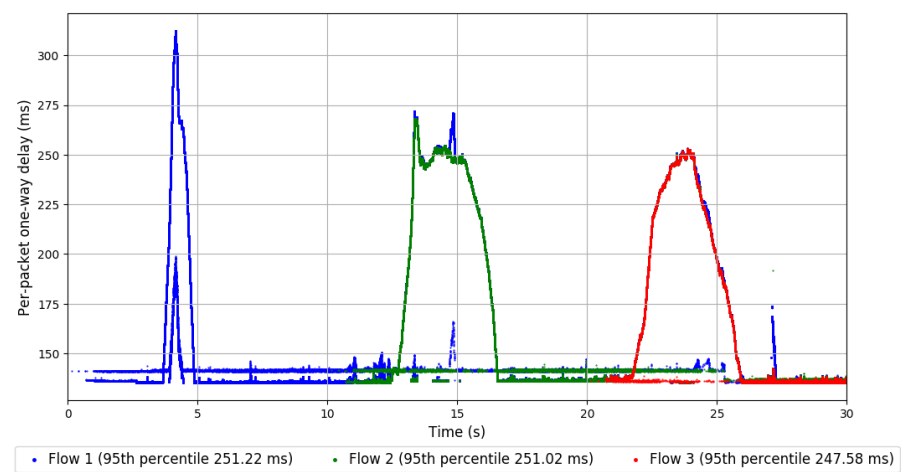
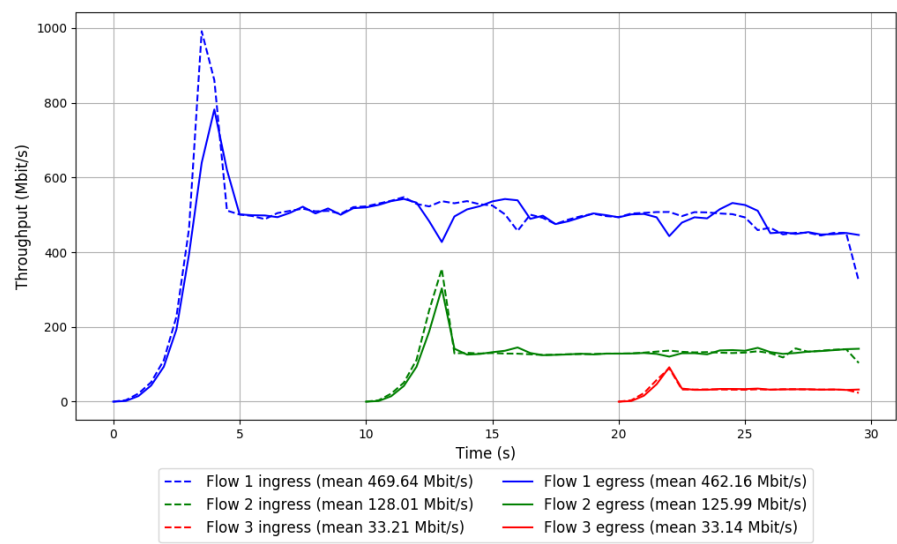
-- Flow 3:

Average throughput: 33.14 Mbit/s

95th percentile per-packet one-way delay: 247.581 ms

Loss rate: 0.19%

Run 8: Report of PCC — Data Link

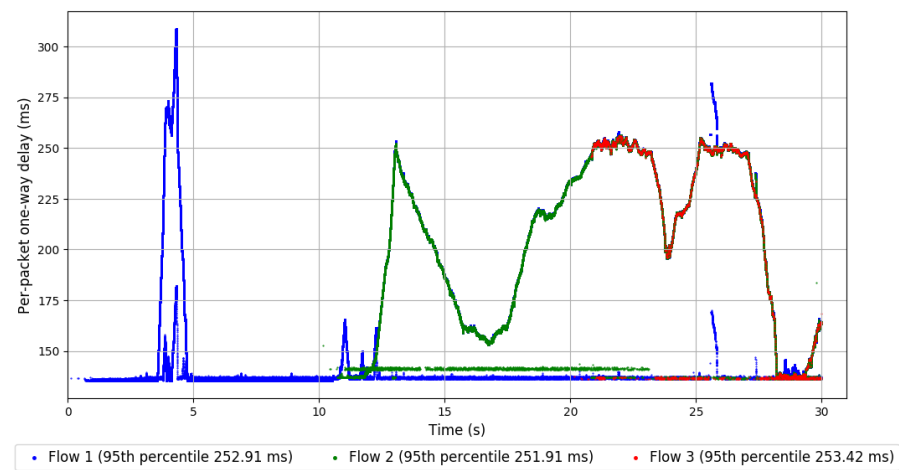
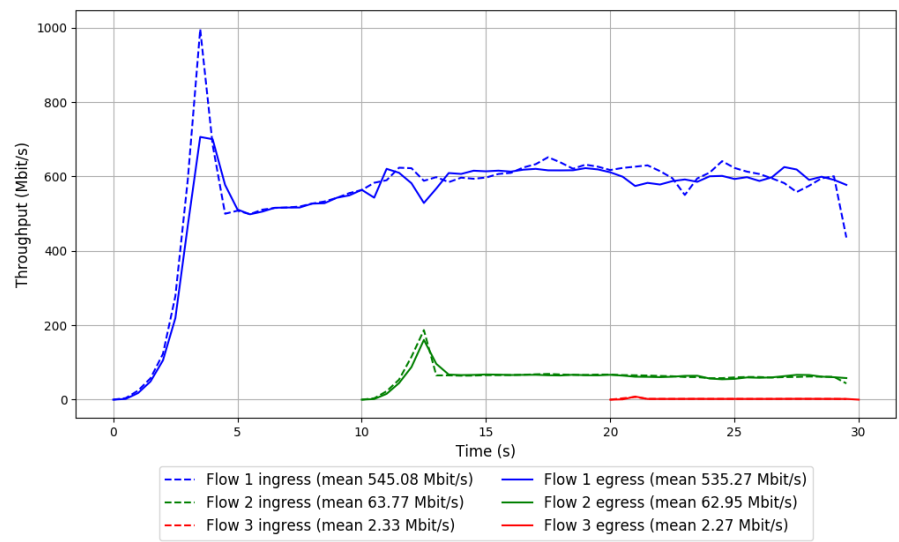


```
Run 9: Statistics of PCC

Start at: 2018-03-15 00:47:18
End at: 2018-03-15 00:47:48

# Below is generated by plot.py at 2018-03-15 04:27:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 577.72 Mbit/s
95th percentile per-packet one-way delay: 252.810 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 535.27 Mbit/s
95th percentile per-packet one-way delay: 252.910 ms
Loss rate: 1.80%
-- Flow 2:
Average throughput: 62.95 Mbit/s
95th percentile per-packet one-way delay: 251.911 ms
Loss rate: 1.37%
-- Flow 3:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 253.419 ms
Loss rate: 2.52%
```

Run 9: Report of PCC — Data Link

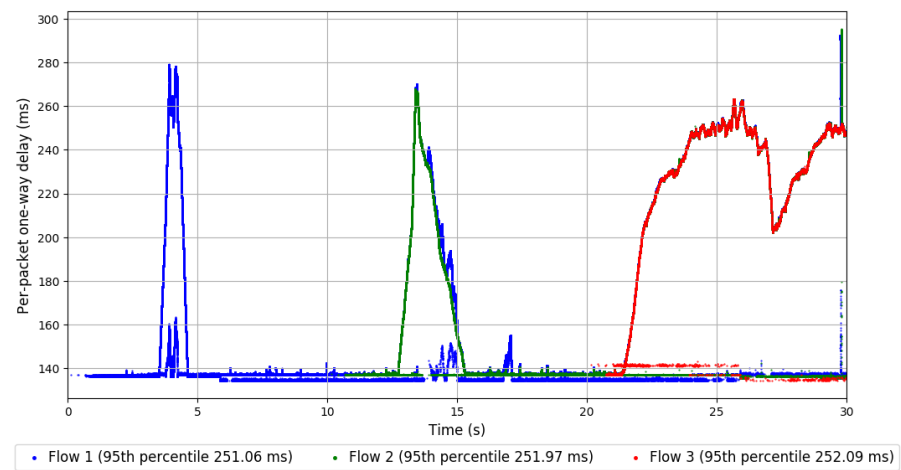
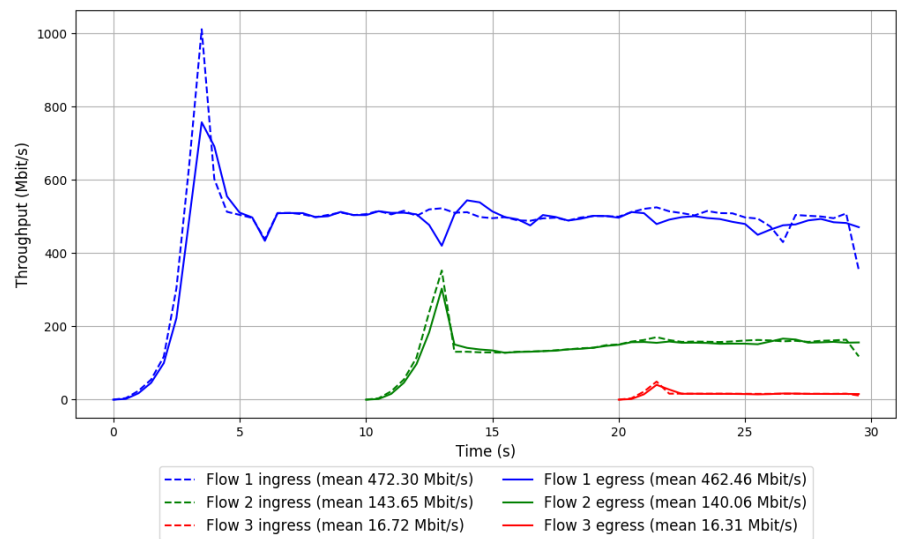


```
Run 10: Statistics of PCC

Start at: 2018-03-15 01:07:42
End at: 2018-03-15 01:08:12

# Below is generated by plot.py at 2018-03-15 04:27:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 560.89 Mbit/s
95th percentile per-packet one-way delay: 251.250 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 462.46 Mbit/s
95th percentile per-packet one-way delay: 251.056 ms
Loss rate: 2.08%
-- Flow 2:
Average throughput: 140.06 Mbit/s
95th percentile per-packet one-way delay: 251.967 ms
Loss rate: 2.49%
-- Flow 3:
Average throughput: 16.31 Mbit/s
95th percentile per-packet one-way delay: 252.086 ms
Loss rate: 2.46%
```

Run 10: Report of PCC — Data Link



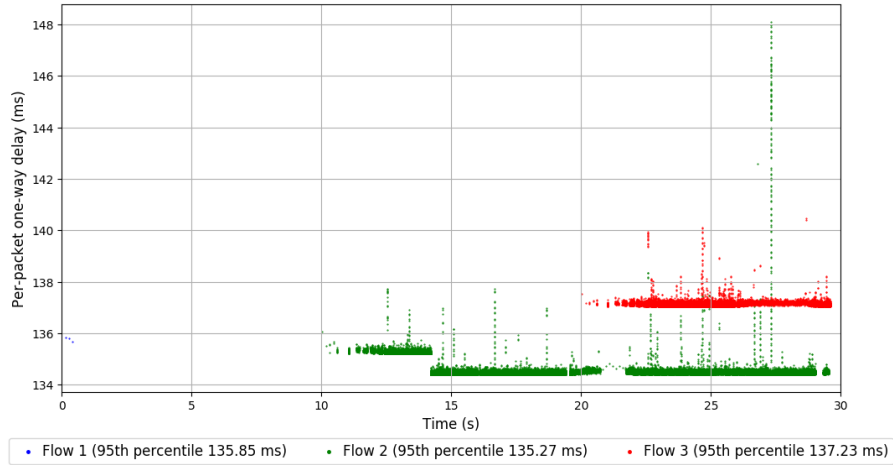
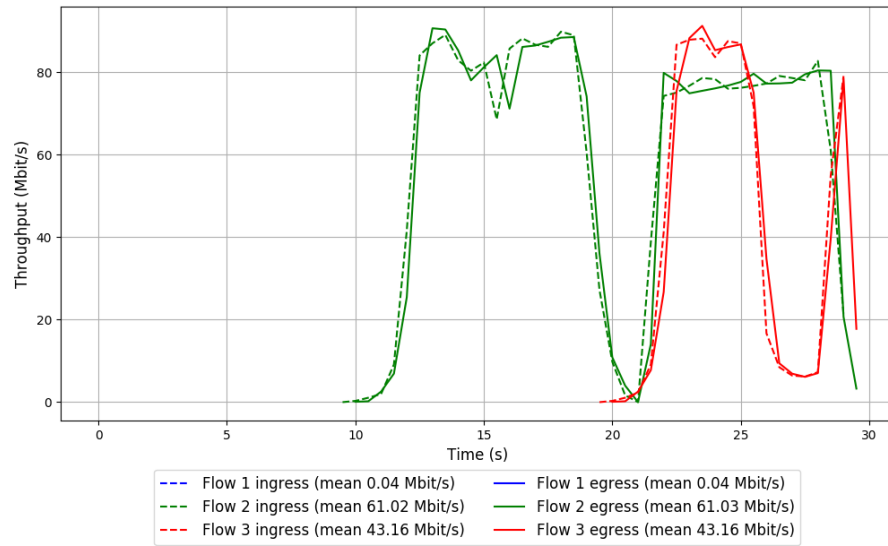
```
Run 1: Statistics of QUIC Cubic

Start at: 2018-03-14 22:11:23
End at: 2018-03-14 22:11:53

# Below is generated by plot.py at 2018-03-15 04:27:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.42 Mbit/s
95th percentile per-packet one-way delay: 137.169 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 135.846 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.03 Mbit/s
95th percentile per-packet one-way delay: 135.270 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 43.16 Mbit/s
95th percentile per-packet one-way delay: 137.232 ms
Loss rate: 0.00%
```



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



Run 2: Statistics of QUIC Cubic

Start at: 2018-03-14 22:31:44

End at: 2018-03-14 22:32:14

# Below is generated by plot.py at 2018-03-15 04:27:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 116.92 Mbit/s

95th percentile per-packet one-way delay: 136.936 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.70 Mbit/s

95th percentile per-packet one-way delay: 136.959 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.97 Mbit/s

95th percentile per-packet one-way delay: 135.724 ms

Loss rate: 0.00%

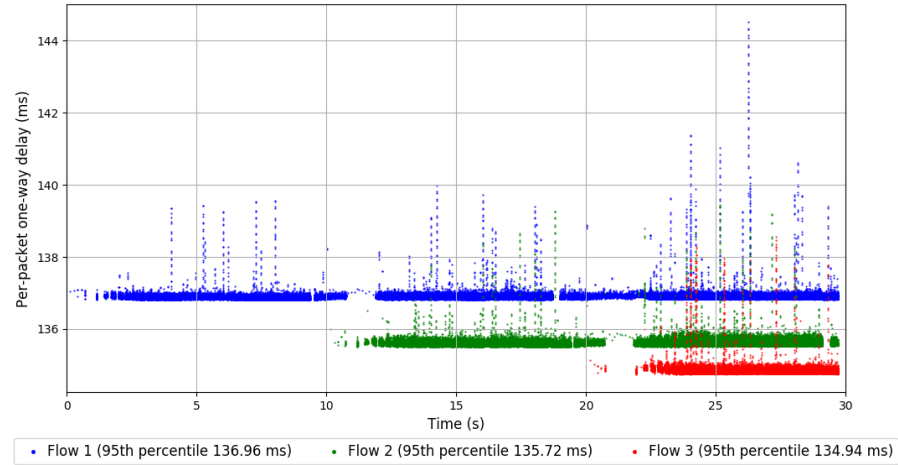
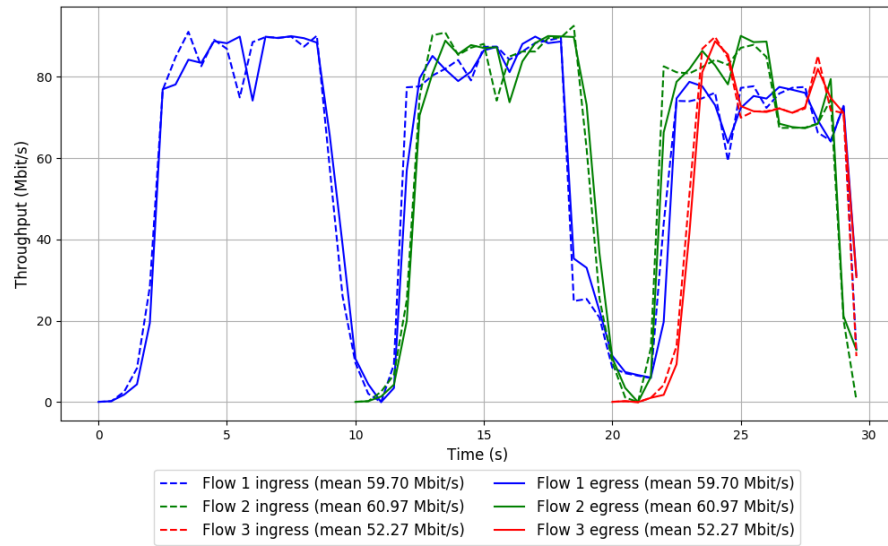
-- Flow 3:

Average throughput: 52.27 Mbit/s

95th percentile per-packet one-way delay: 134.945 ms

Loss rate: 0.00%

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



Run 3: Statistics of QUIC Cubic

Start at: 2018-03-14 22:52:20

End at: 2018-03-14 22:52:50

# Below is generated by plot.py at 2018-03-15 04:27:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 118.99 Mbit/s

95th percentile per-packet one-way delay: 136.844 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.08 Mbit/s

95th percentile per-packet one-way delay: 135.953 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.43 Mbit/s

95th percentile per-packet one-way delay: 136.842 ms

Loss rate: 0.00%

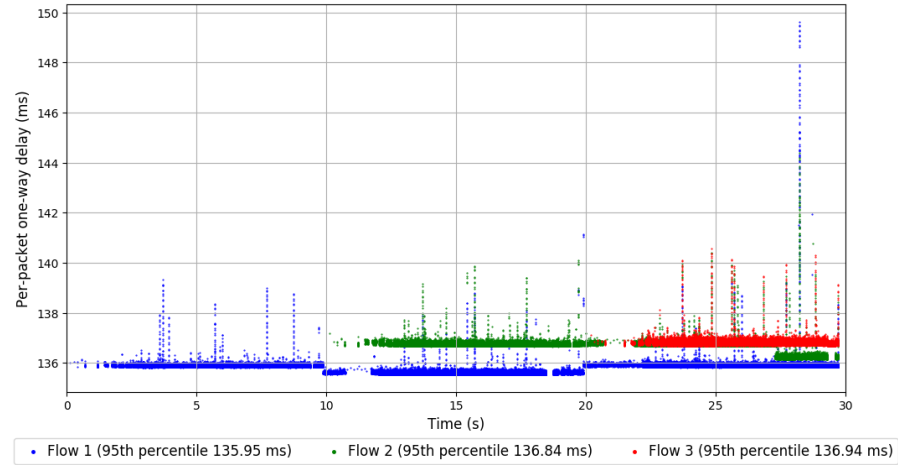
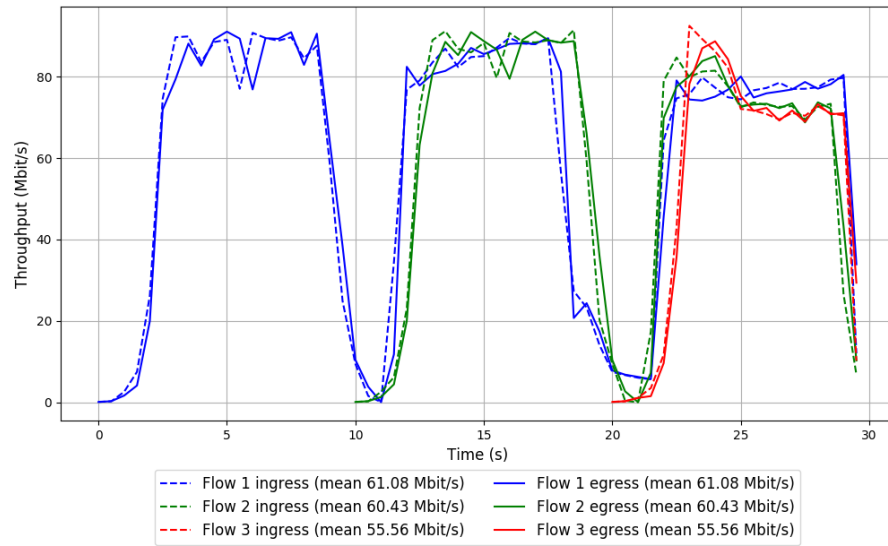
-- Flow 3:

Average throughput: 55.56 Mbit/s

95th percentile per-packet one-way delay: 136.935 ms

Loss rate: 0.00%

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



Run 4: Statistics of QUIC Cubic

Start at: 2018-03-14 23:12:53

End at: 2018-03-14 23:13:23

# Below is generated by plot.py at 2018-03-15 04:27:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 117.08 Mbit/s

95th percentile per-packet one-way delay: 136.877 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 60.52 Mbit/s

95th percentile per-packet one-way delay: 136.866 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.88 Mbit/s

95th percentile per-packet one-way delay: 136.897 ms

Loss rate: 0.00%

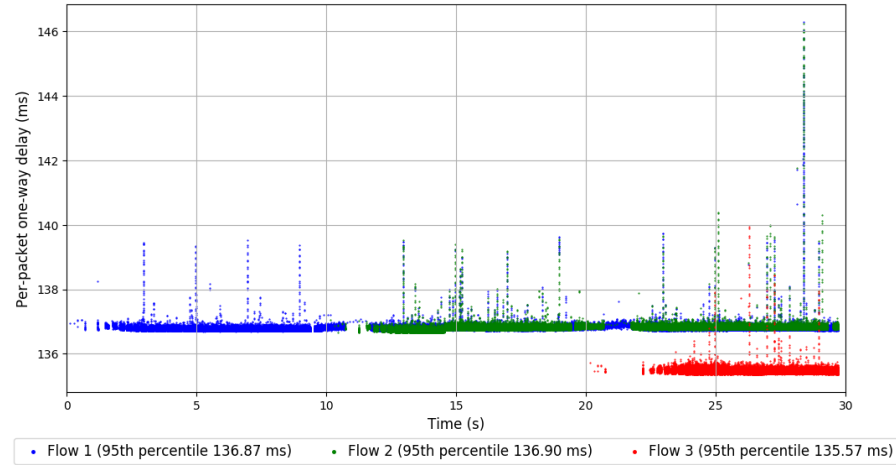
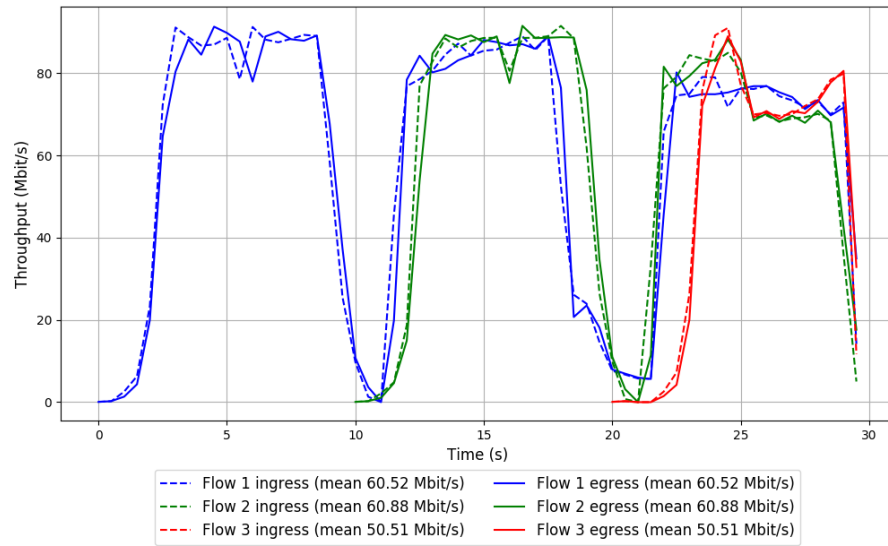
-- Flow 3:

Average throughput: 50.51 Mbit/s

95th percentile per-packet one-way delay: 135.573 ms

Loss rate: 0.00%

# Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-03-14 23:33:30

End at: 2018-03-14 23:34:00

# Below is generated by plot.py at 2018-03-15 04:27:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 116.37 Mbit/s

95th percentile per-packet one-way delay: 136.954 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.94 Mbit/s

95th percentile per-packet one-way delay: 136.983 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.60 Mbit/s

95th percentile per-packet one-way delay: 136.873 ms

Loss rate: 0.00%

-- Flow 3:

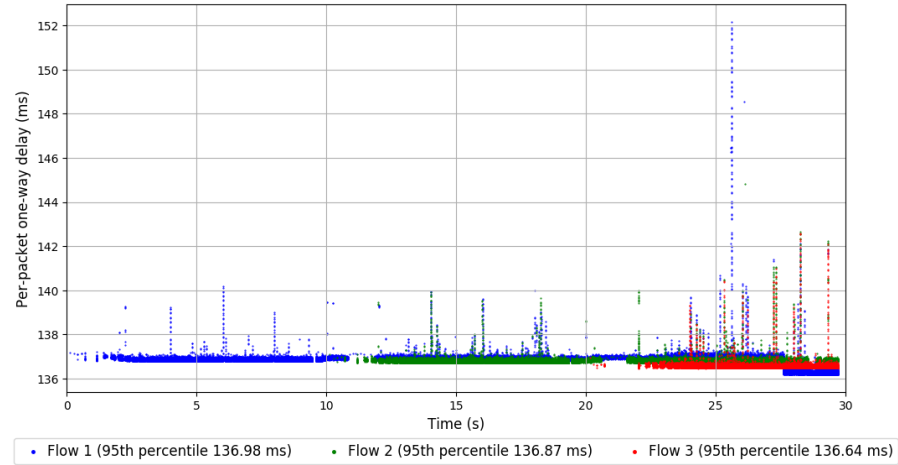
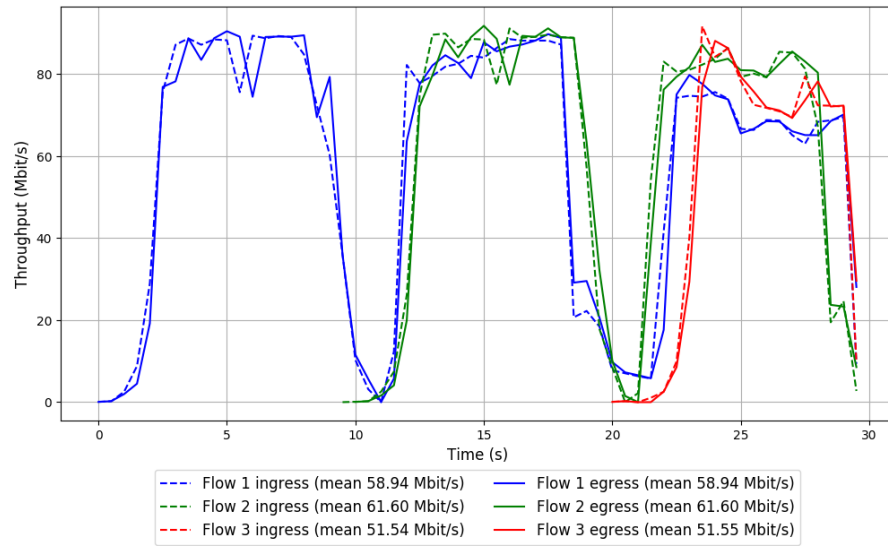
Average throughput: 51.55 Mbit/s

95th percentile per-packet one-way delay: 136.639 ms

Loss rate: 0.00%



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



Run 6: Statistics of QUIC Cubic

Start at: 2018-03-14 23:53:47

End at: 2018-03-14 23:54:17

# Below is generated by plot.py at 2018-03-15 04:27:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 113.03 Mbit/s

95th percentile per-packet one-way delay: 136.324 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.66 Mbit/s

95th percentile per-packet one-way delay: 135.392 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.54 Mbit/s

95th percentile per-packet one-way delay: 136.346 ms

Loss rate: 0.00%

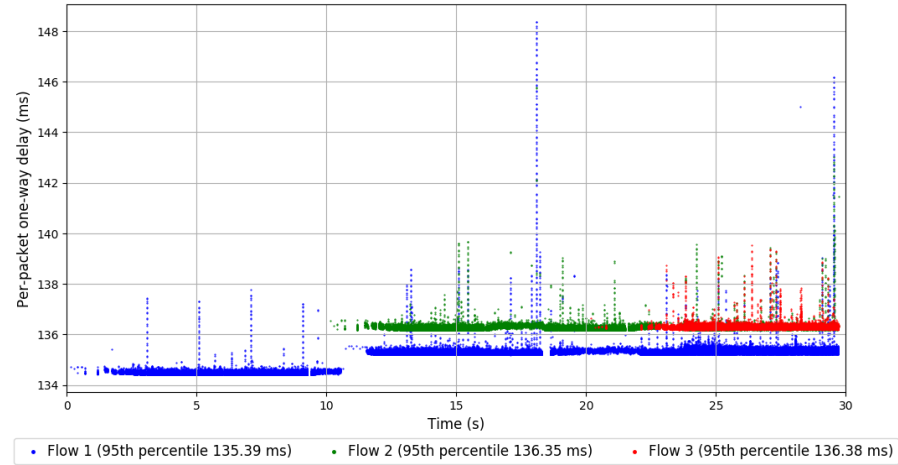
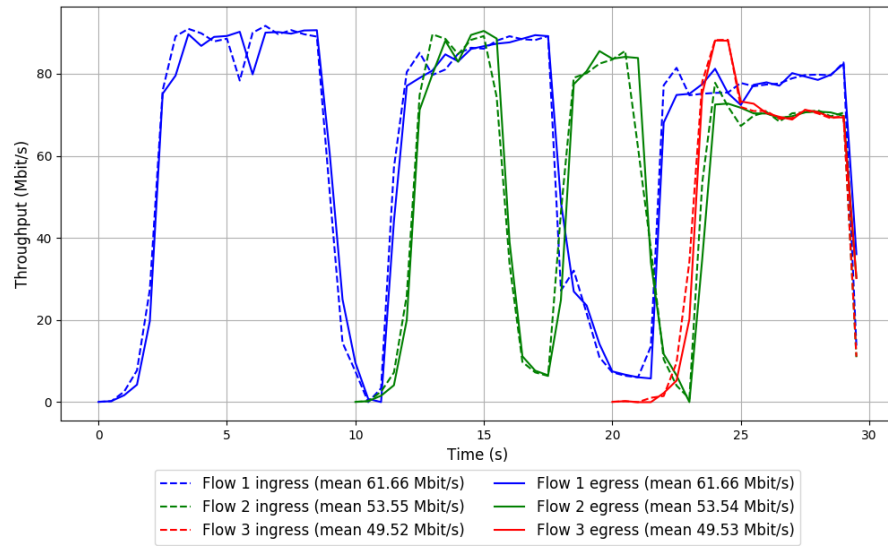
-- Flow 3:

Average throughput: 49.53 Mbit/s

95th percentile per-packet one-way delay: 136.379 ms

Loss rate: 0.00%

# Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-03-15 00:13:51

End at: 2018-03-15 00:14:21

# Below is generated by plot.py at 2018-03-15 04:27:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 113.10 Mbit/s

95th percentile per-packet one-way delay: 136.641 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 60.96 Mbit/s

95th percentile per-packet one-way delay: 135.913 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 61.45 Mbit/s

95th percentile per-packet one-way delay: 136.637 ms

Loss rate: 0.00%

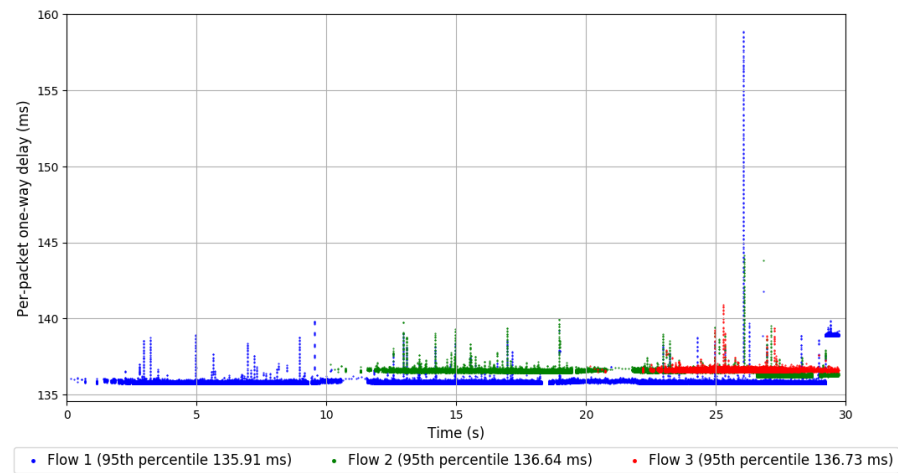
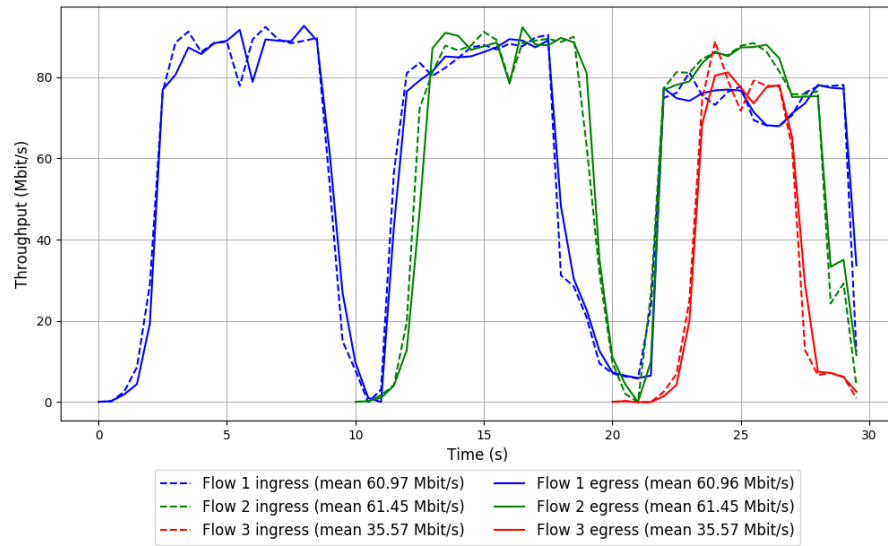
-- Flow 3:

Average throughput: 35.57 Mbit/s

95th percentile per-packet one-way delay: 136.734 ms

Loss rate: 0.00%

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



Run 8: Statistics of QUIC Cubic

Start at: 2018-03-15 00:34:36

End at: 2018-03-15 00:35:06

# Below is generated by plot.py at 2018-03-15 04:27:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 117.05 Mbit/s

95th percentile per-packet one-way delay: 136.288 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.51 Mbit/s

95th percentile per-packet one-way delay: 135.798 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.14 Mbit/s

95th percentile per-packet one-way delay: 135.505 ms

Loss rate: 0.00%

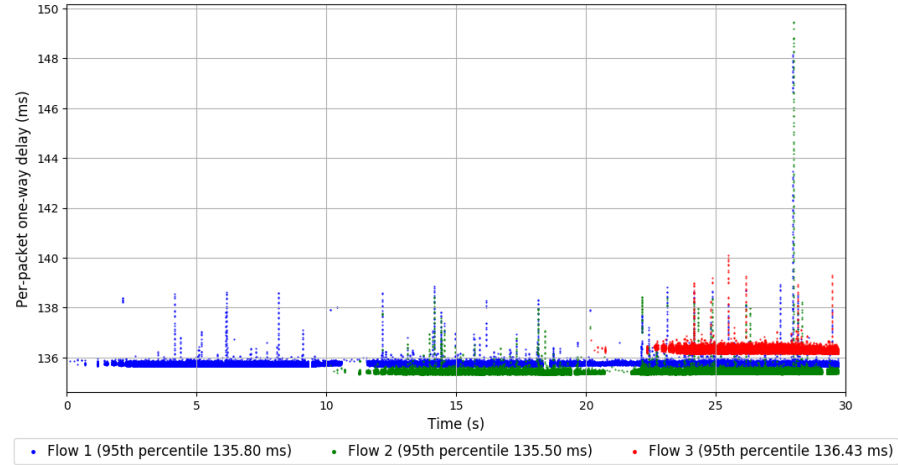
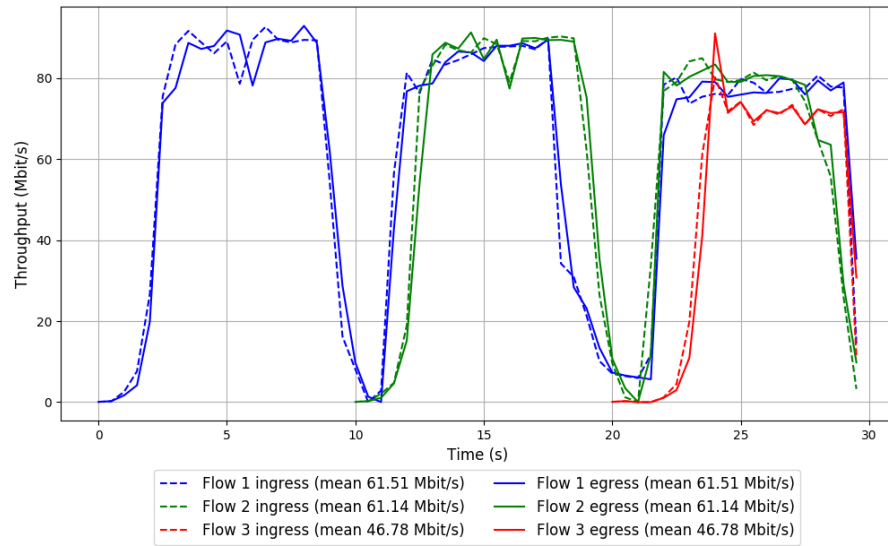
-- Flow 3:

Average throughput: 46.78 Mbit/s

95th percentile per-packet one-way delay: 136.426 ms

Loss rate: 0.00%

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



Run 9: Statistics of QUIC Cubic

Start at: 2018-03-15 00:54:49

End at: 2018-03-15 00:55:19

# Below is generated by plot.py at 2018-03-15 04:27:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 109.03 Mbit/s

95th percentile per-packet one-way delay: 136.370 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 60.05 Mbit/s

95th percentile per-packet one-way delay: 136.384 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.65 Mbit/s

95th percentile per-packet one-way delay: 136.337 ms

Loss rate: 0.00%

-- Flow 3:

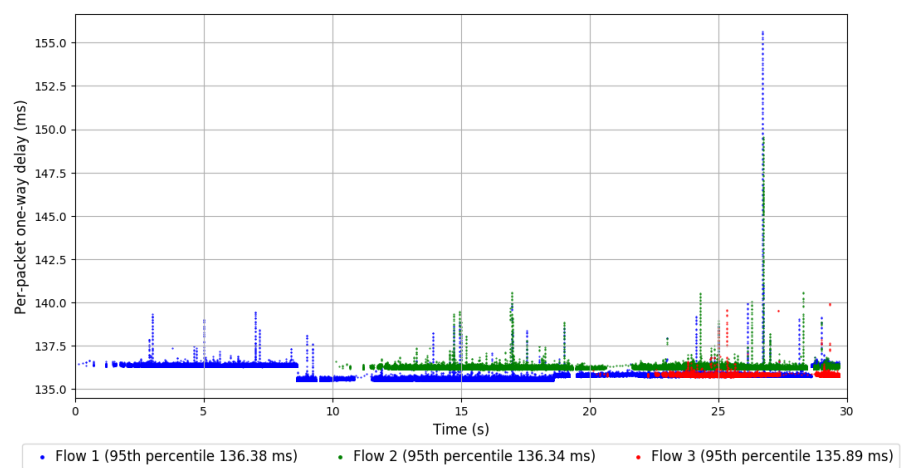
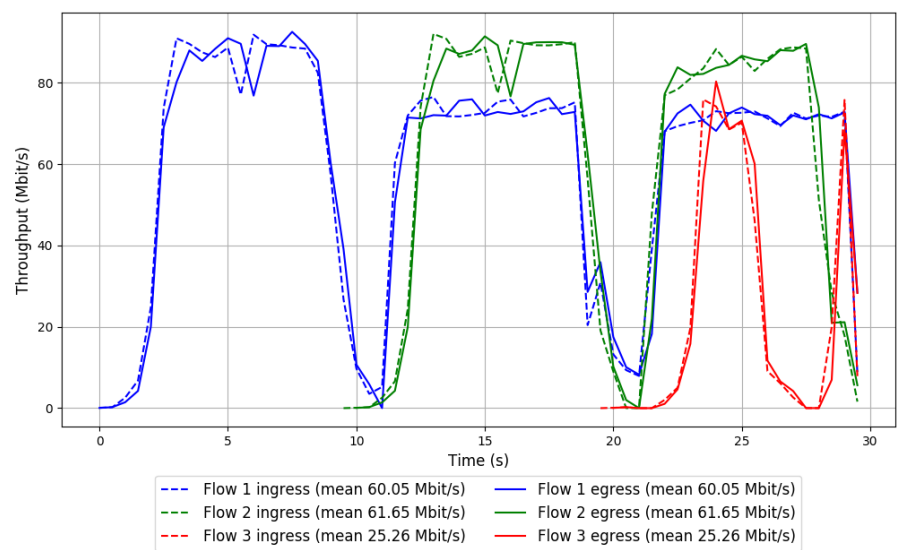
Average throughput: 25.26 Mbit/s

95th percentile per-packet one-way delay: 135.886 ms

Loss rate: 0.00%



Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-03-15 01:15:12

End at: 2018-03-15 01:15:42

# Below is generated by plot.py at 2018-03-15 04:27:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 118.09 Mbit/s

95th percentile per-packet one-way delay: 136.653 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.75 Mbit/s

95th percentile per-packet one-way delay: 136.638 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.48 Mbit/s

95th percentile per-packet one-way delay: 136.644 ms

Loss rate: 0.00%

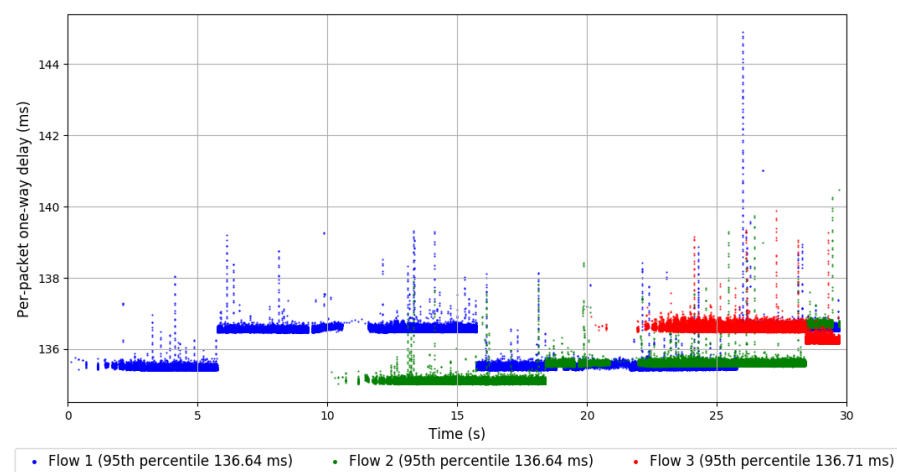
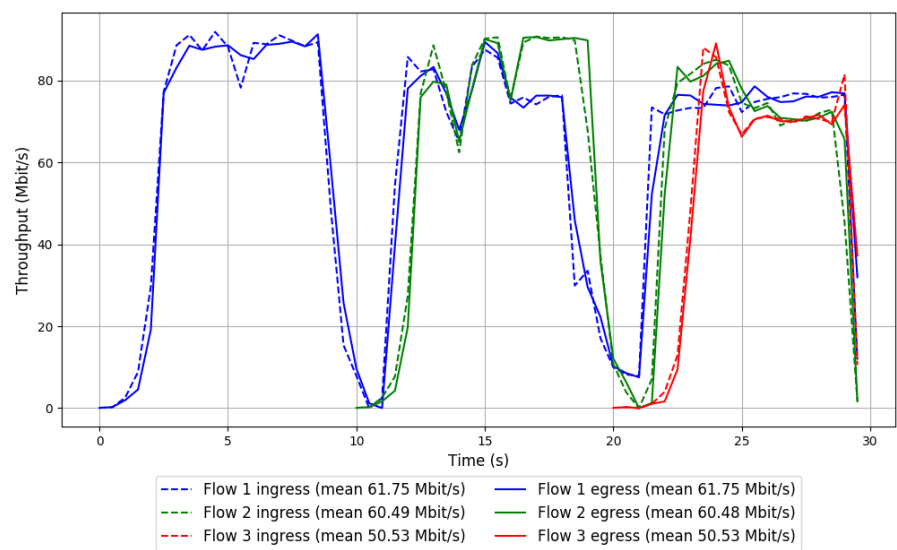
-- Flow 3:

Average throughput: 50.53 Mbit/s

95th percentile per-packet one-way delay: 136.710 ms

Loss rate: 0.01%

Run 10: Report of QUIC Cubic — Data Link

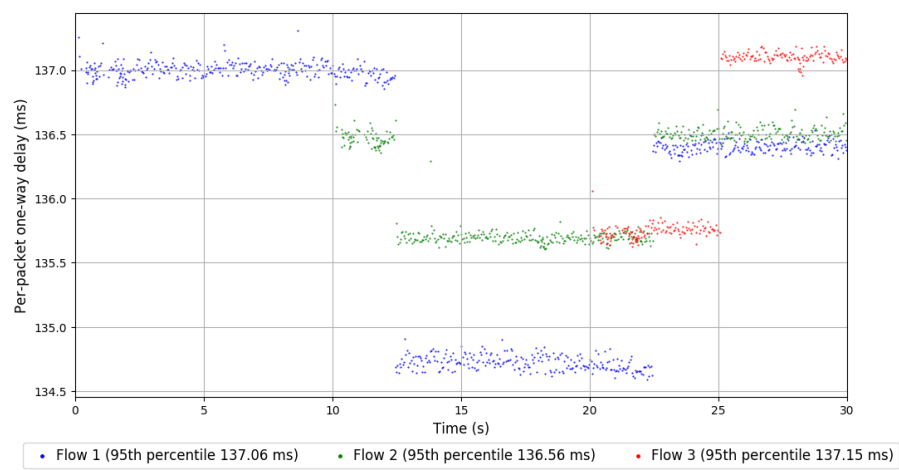
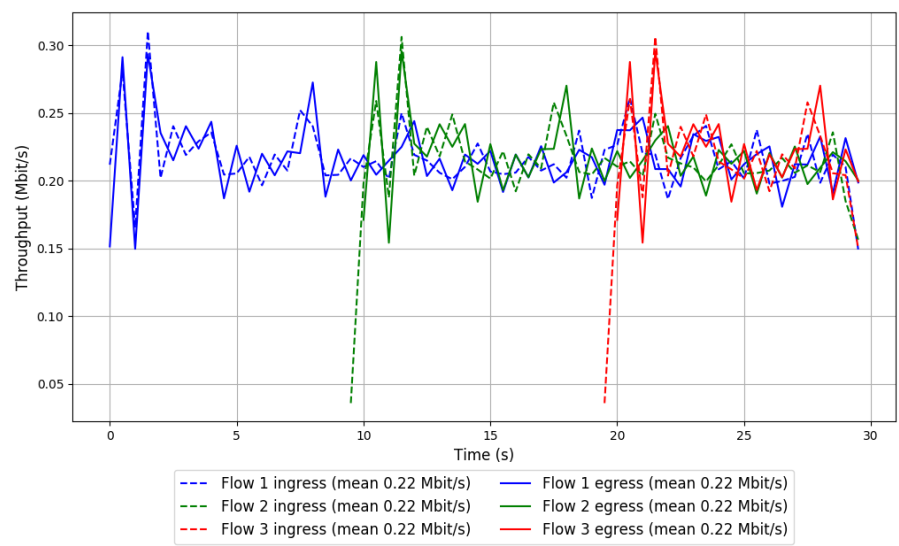


```
Run 1: Statistics of SReAM

Start at: 2018-03-14 22:18:56
End at: 2018-03-14 22:19:26

# Below is generated by plot.py at 2018-03-15 04:27:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 137.100 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.058 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.565 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.150 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

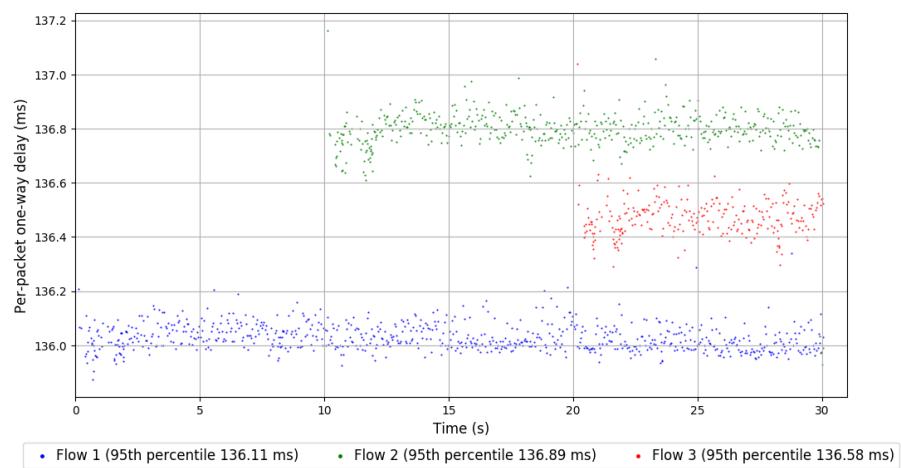
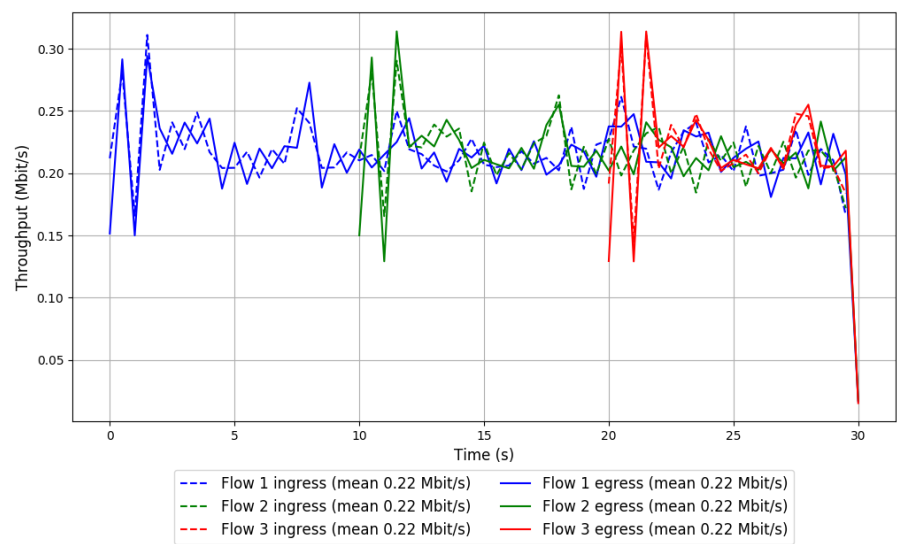


```
Run 2: Statistics of SReAM

Start at: 2018-03-14 22:39:18
End at: 2018-03-14 22:39:48

# Below is generated by plot.py at 2018-03-15 04:27:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.851 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.114 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.886 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.577 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



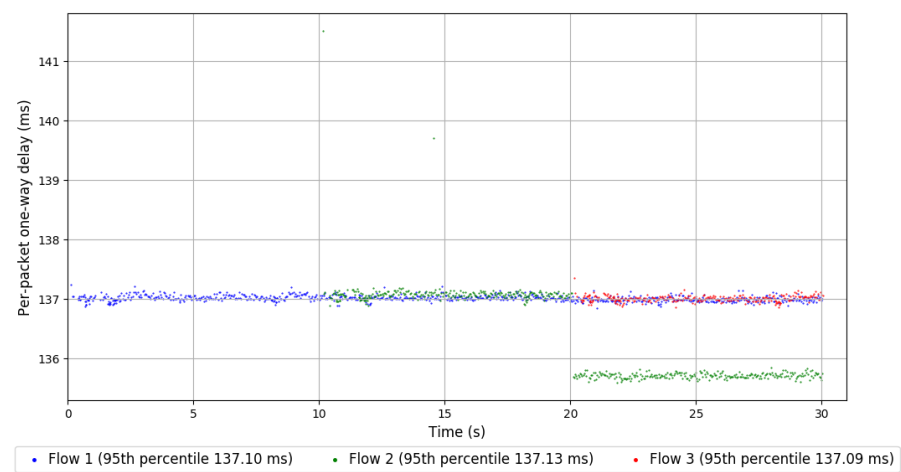
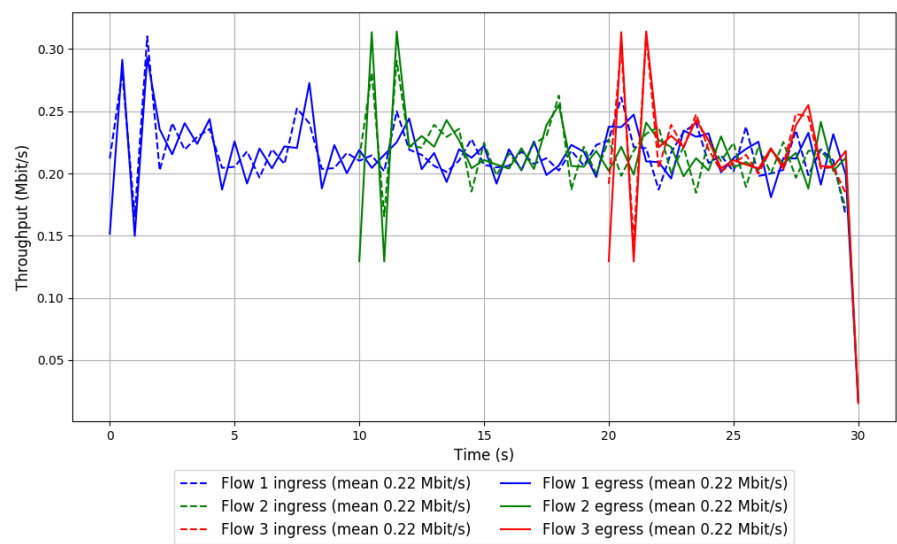
```
Run 3: Statistics of SCReAM

Start at: 2018-03-14 22:59:58
End at: 2018-03-14 23:00:28

# Below is generated by plot.py at 2018-03-15 04:27:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 137.110 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.102 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.129 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.088 ms
Loss rate: 0.00%
```



Run 3: Report of SReAM — Data Link

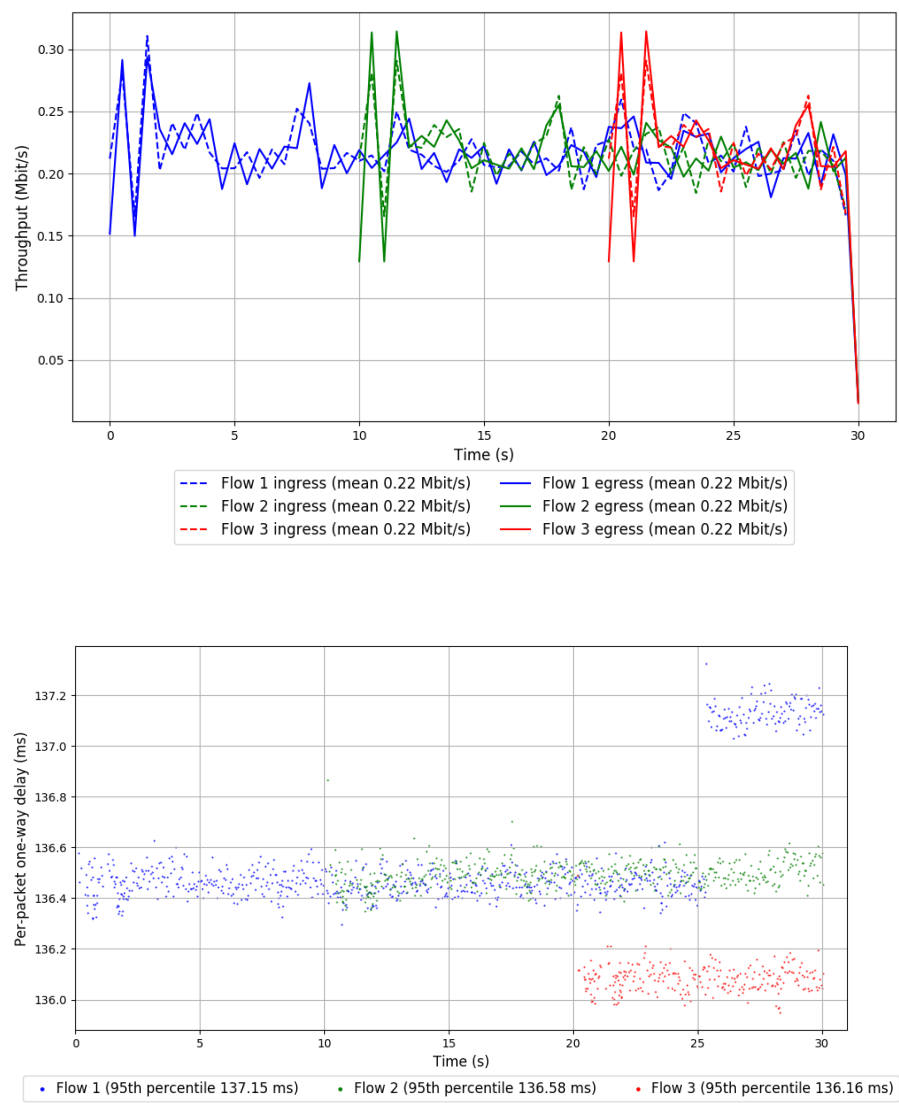


```
Run 4: Statistics of SReAM

Start at: 2018-03-14 23:20:33
End at: 2018-03-14 23:21:03

# Below is generated by plot.py at 2018-03-15 04:27:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 137.108 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.149 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.576 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.163 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link

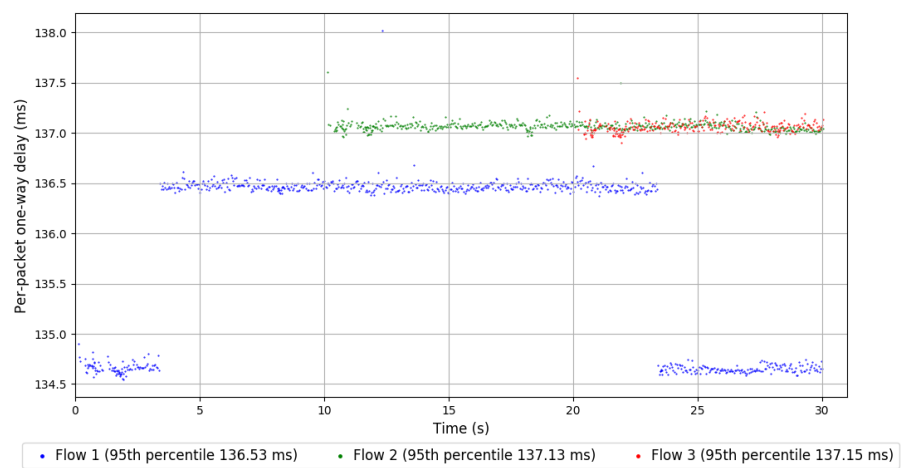
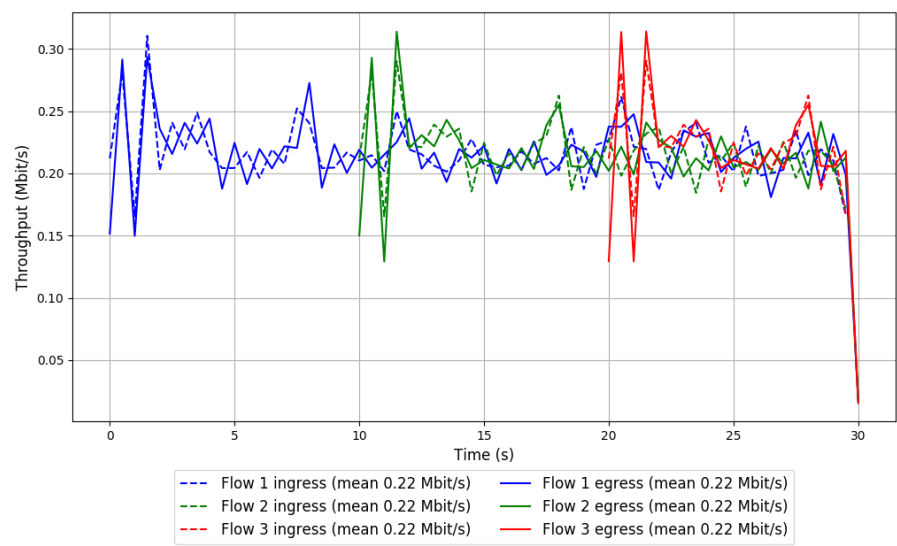


```
Run 5: Statistics of SCReAM

Start at: 2018-03-14 23:41:05
End at: 2018-03-14 23:41:35

# Below is generated by plot.py at 2018-03-15 04:27:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 137.116 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.533 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.128 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.146 ms
Loss rate: 0.00%
```

Run 5: Report of SReAM — Data Link

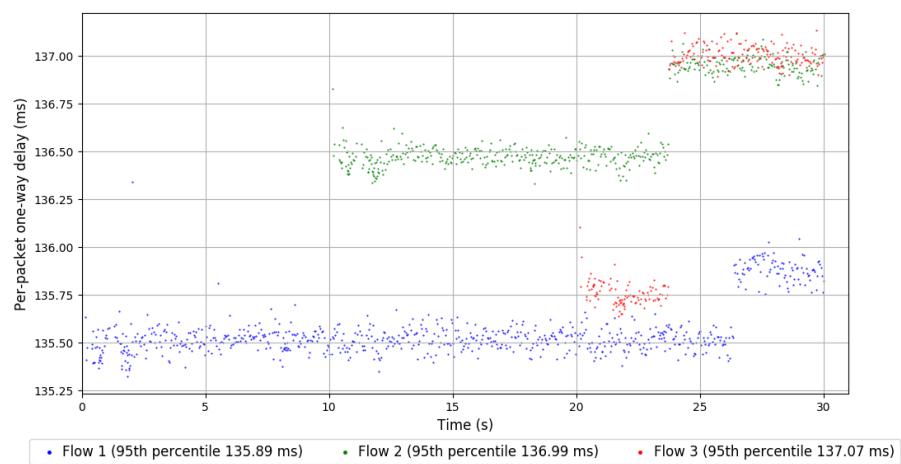
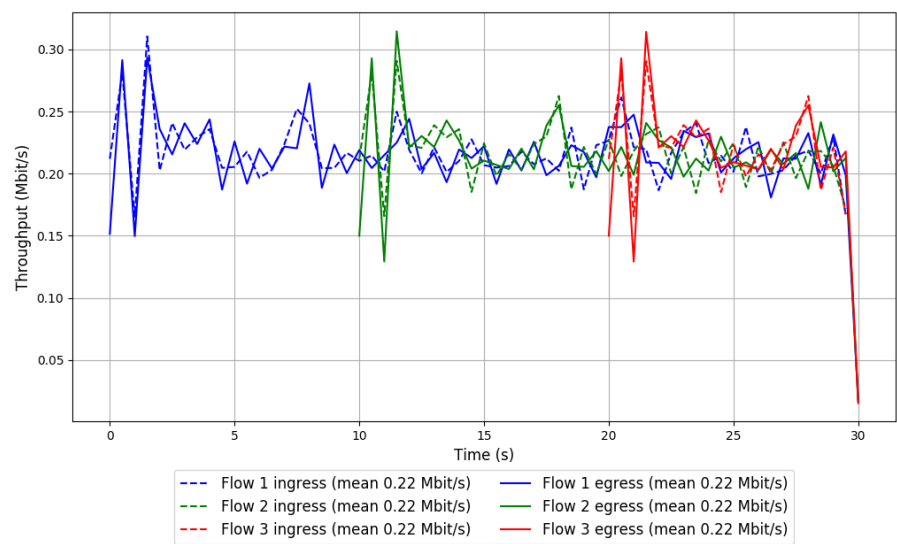


```
Run 6: Statistics of SCReAM

Start at: 2018-03-15 00:01:24
End at: 2018-03-15 00:01:54

# Below is generated by plot.py at 2018-03-15 04:27:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 137.013 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.890 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.994 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.074 ms
Loss rate: 0.00%
```

Run 6: Report of SReAM — Data Link



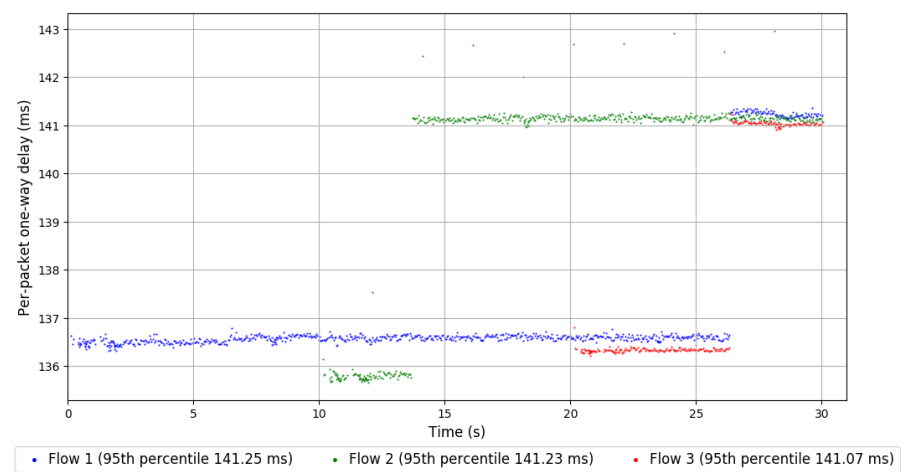
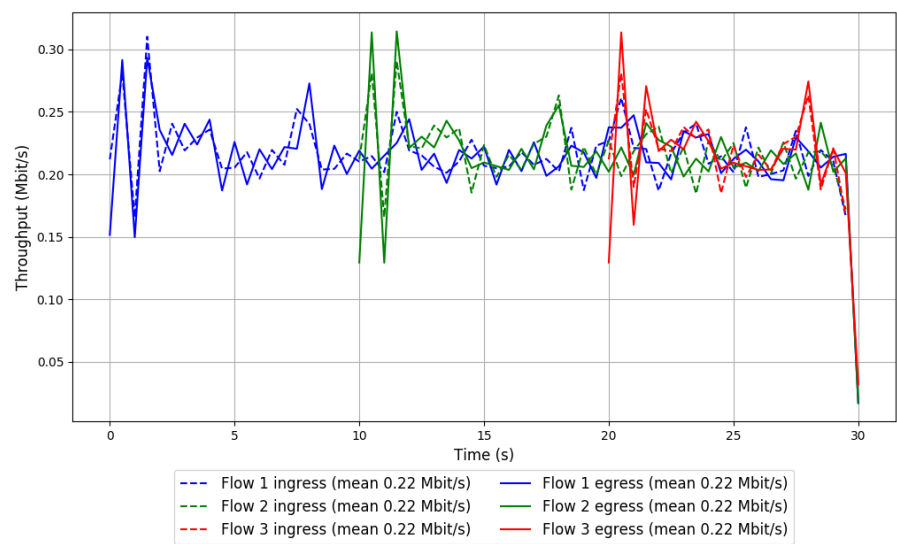
```
Run 7: Statistics of SReAM

Start at: 2018-03-15 00:21:34
End at: 2018-03-15 00:22:04

# Below is generated by plot.py at 2018-03-15 04:27:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 141.224 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 141.246 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 141.230 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 141.070 ms
Loss rate: 0.00%
```



Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-03-15 00:41:59

End at: 2018-03-15 00:42:29

# Below is generated by plot.py at 2018-03-15 04:27:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 136.551 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.833 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.597 ms

Loss rate: 0.00%

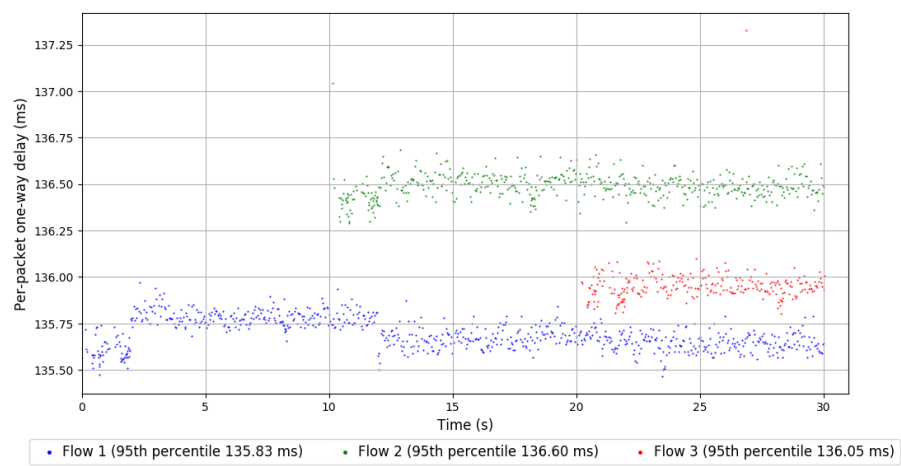
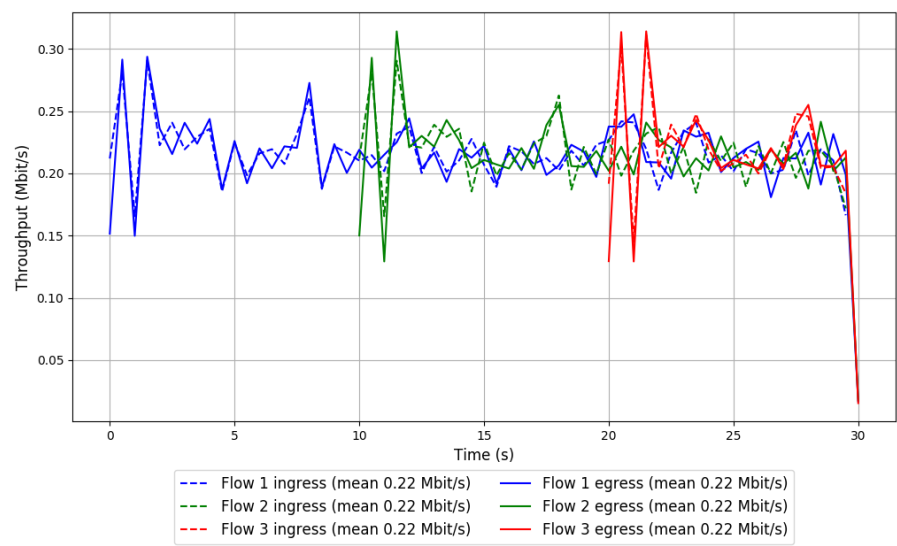
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.048 ms

Loss rate: 0.00%

Run 8: Report of SCReAM — Data Link

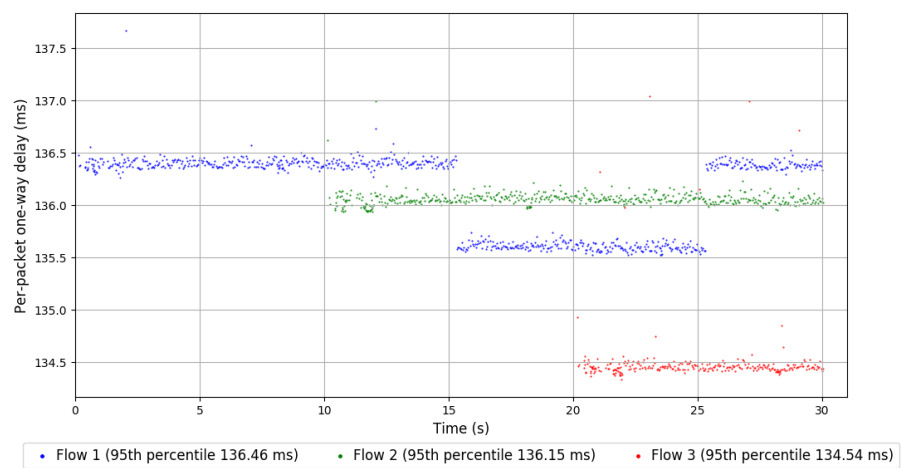
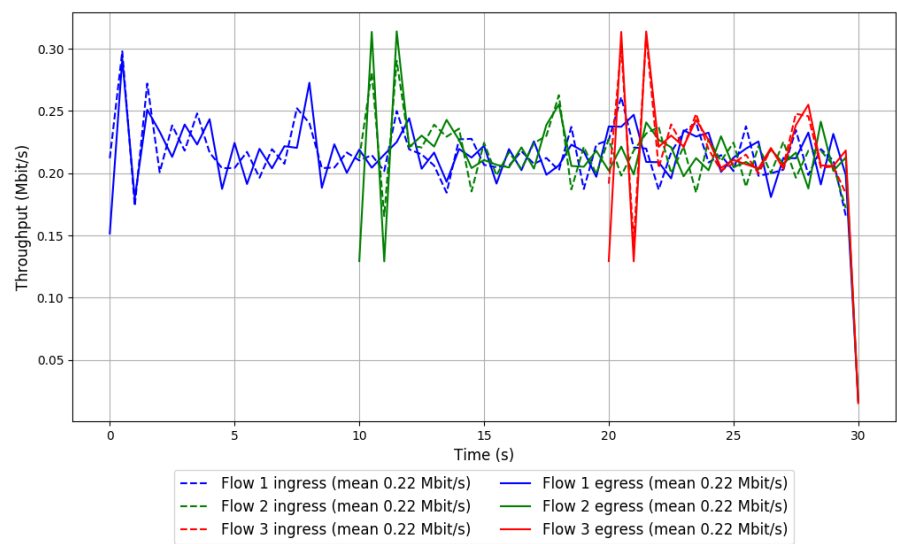


```
Run 9: Statistics of SCReAM

Start at: 2018-03-15 01:02:25
End at: 2018-03-15 01:02:55

# Below is generated by plot.py at 2018-03-15 04:27:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.439 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.456 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.145 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 134.542 ms
Loss rate: 0.00%
```

Run 9: Report of SCReAM — Data Link

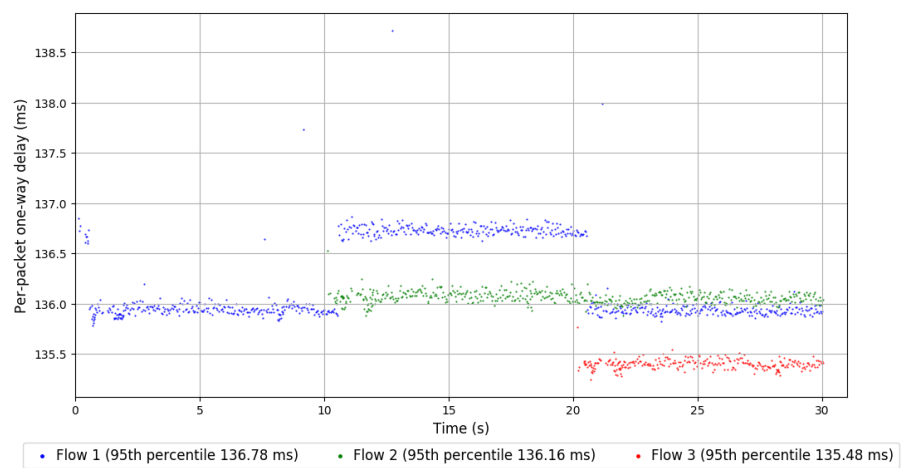
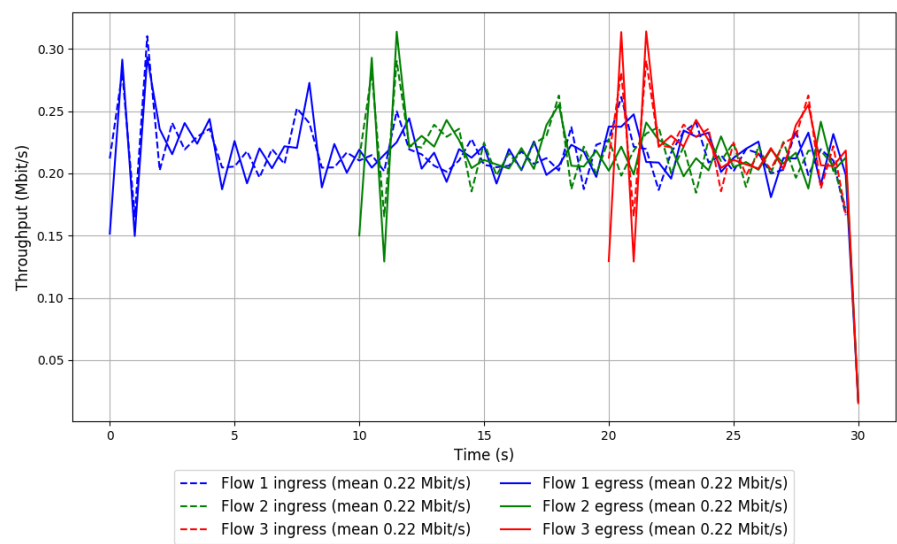


```
Run 10: Statistics of SCReAM

Start at: 2018-03-15 01:22:48
End at: 2018-03-15 01:23:18

# Below is generated by plot.py at 2018-03-15 04:27:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.755 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.781 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.162 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.477 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link



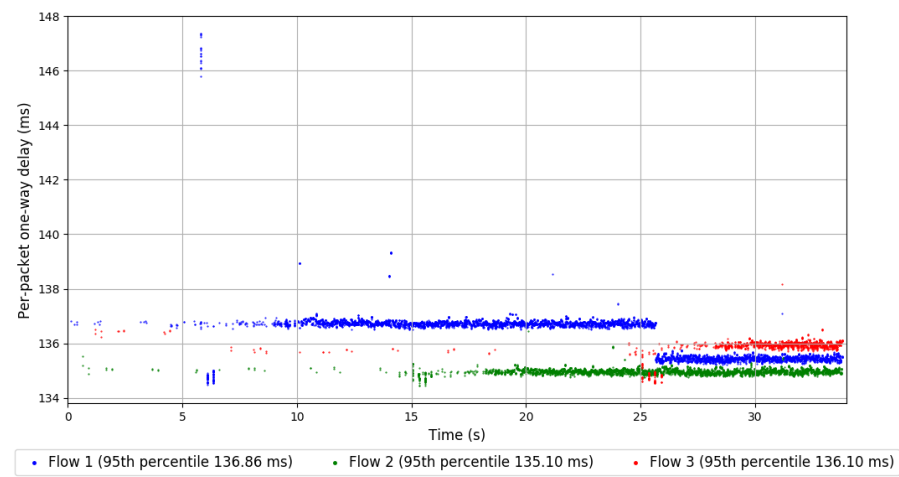
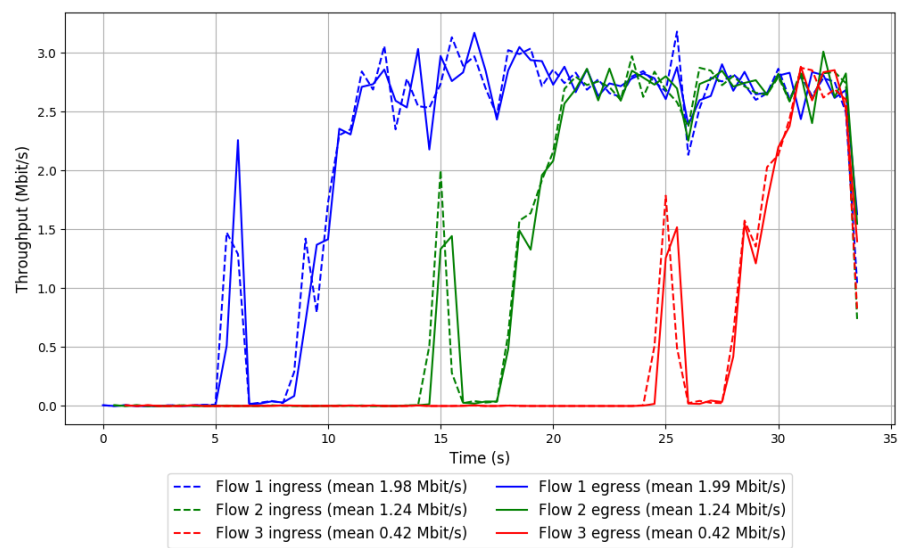
```
Run 1: Statistics of WebRTC media

Start at: 2018-03-14 22:18:06
End at: 2018-03-14 22:18:36

# Below is generated by plot.py at 2018-03-15 04:27:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.62 Mbit/s
95th percentile per-packet one-way delay: 136.827 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 136.859 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 135.102 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 136.101 ms
Loss rate: 0.07%
```



Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-03-14 22:38:29

End at: 2018-03-14 22:38:59

# Below is generated by plot.py at 2018-03-15 04:27:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 137.183 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 137.200 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 137.089 ms

Loss rate: 0.02%

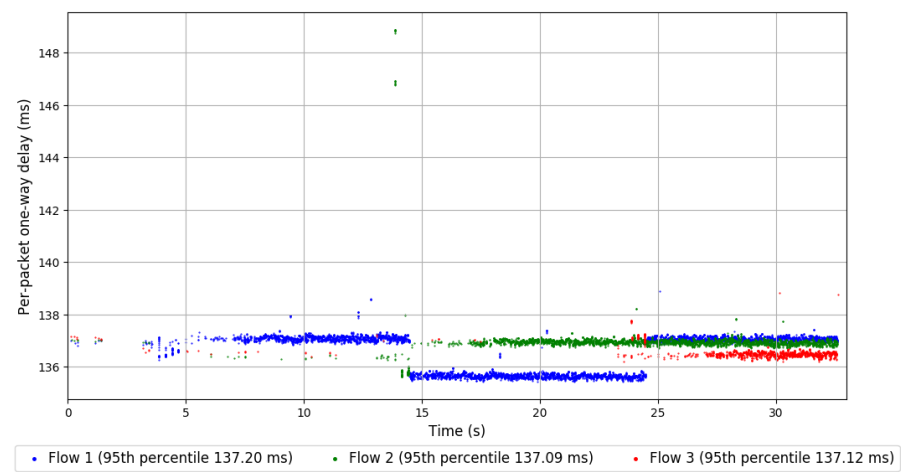
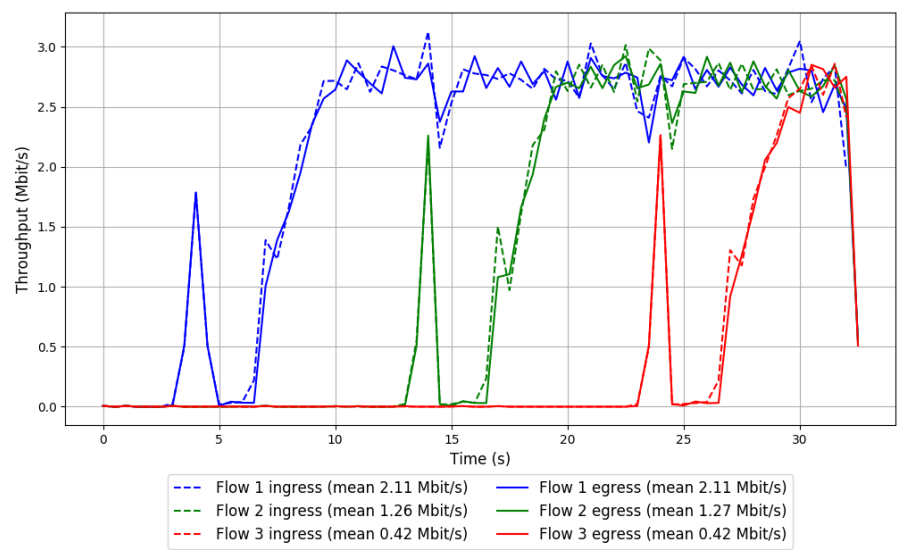
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 137.117 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-03-14 22:59:09

End at: 2018-03-14 22:59:39

# Below is generated by plot.py at 2018-03-15 04:27:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 137.215 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 137.241 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 136.825 ms

Loss rate: 0.00%

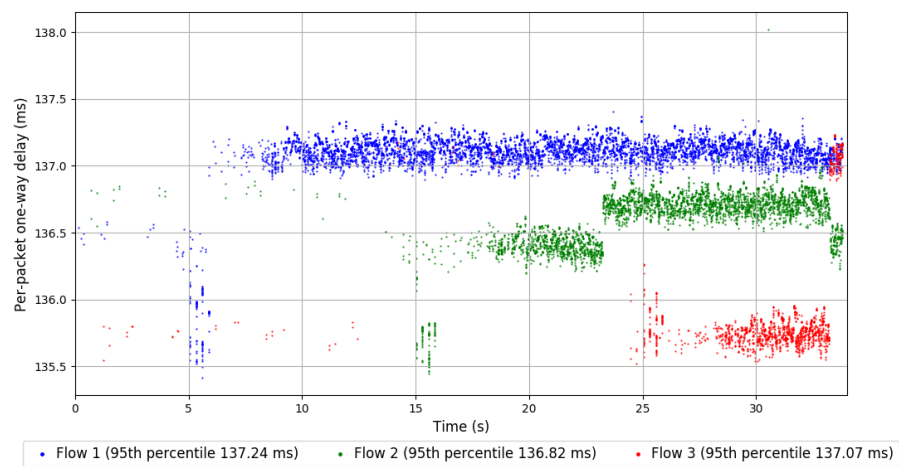
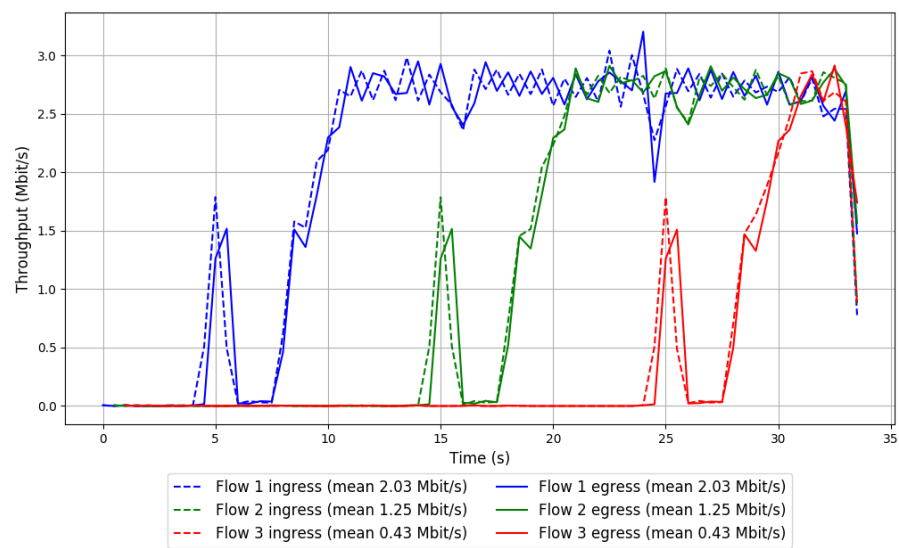
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 137.071 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-03-14 23:19:43

End at: 2018-03-14 23:20:13

# Below is generated by plot.py at 2018-03-15 04:27:26

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 137.211 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 137.234 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 136.586 ms

Loss rate: 0.00%

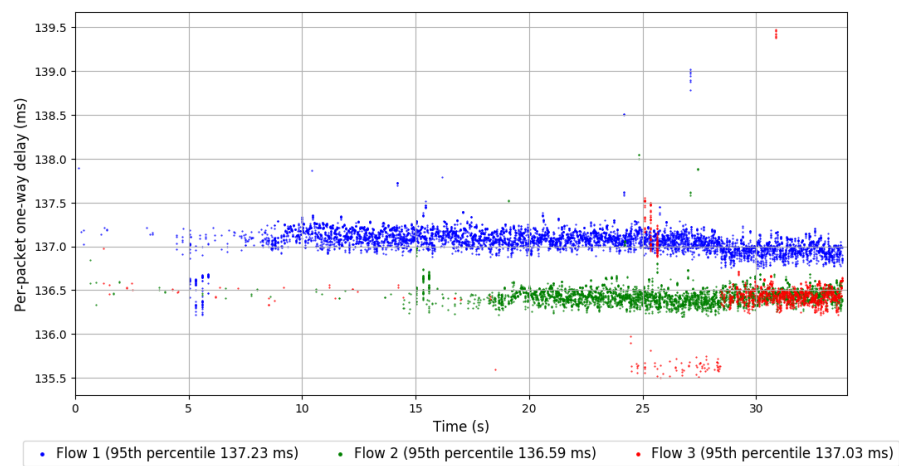
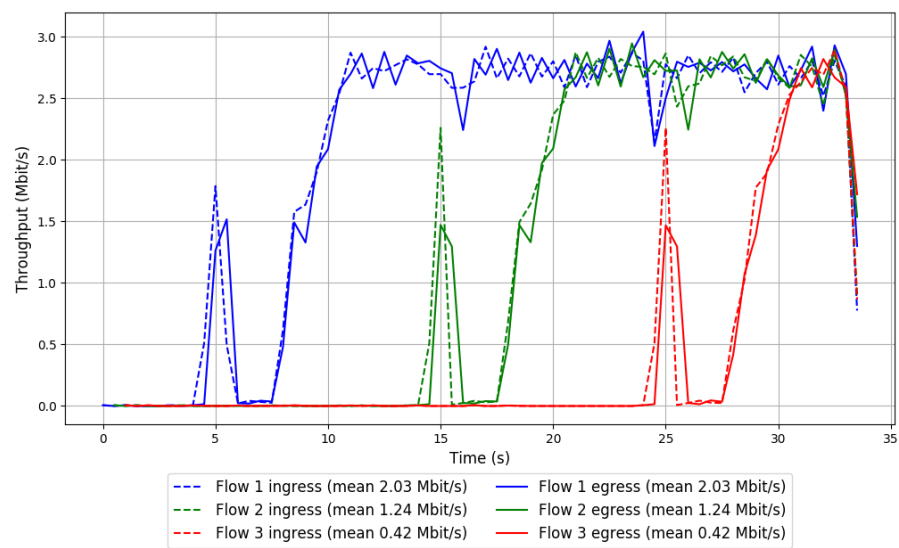
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 137.032 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-03-14 23:40:15

End at: 2018-03-14 23:40:45

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 137.272 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 137.260 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 137.315 ms

Loss rate: 0.00%

-- Flow 3:

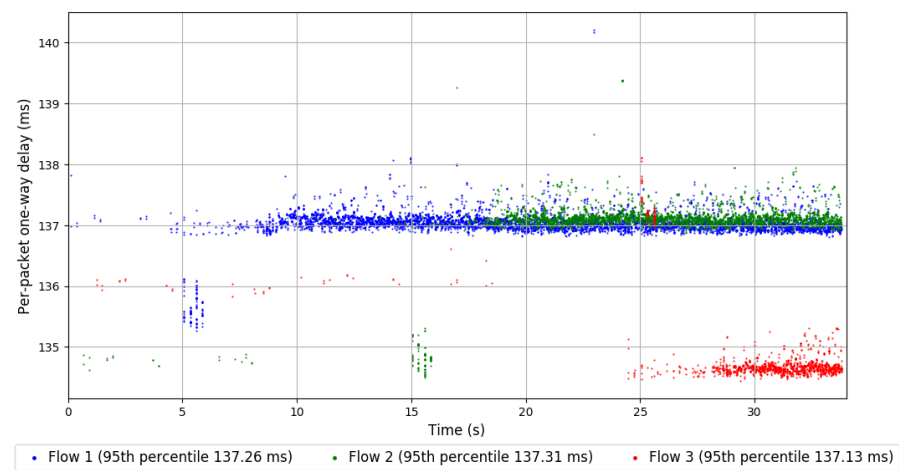
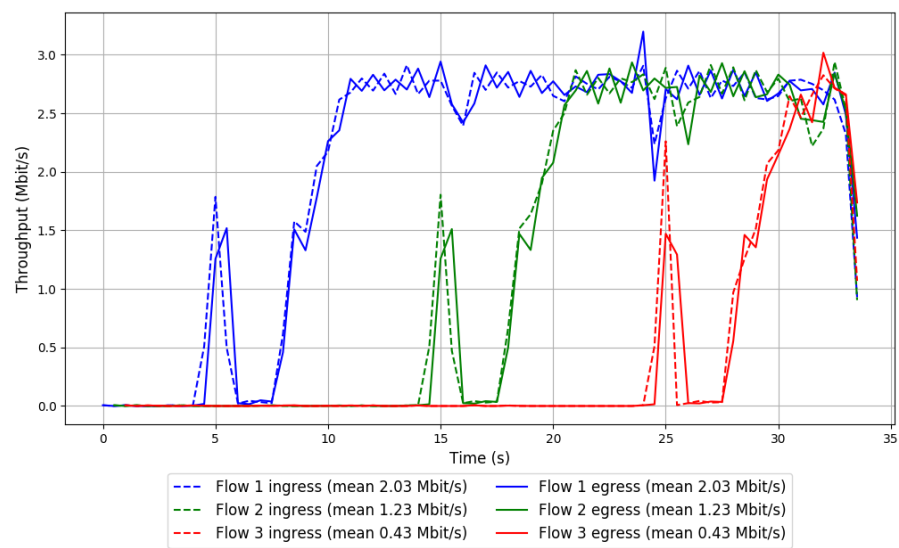
Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 137.129 ms

Loss rate: 0.00%



Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-03-15 00:00:35

End at: 2018-03-15 00:01:05

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 137.215 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 137.154 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 137.255 ms

Loss rate: 0.00%

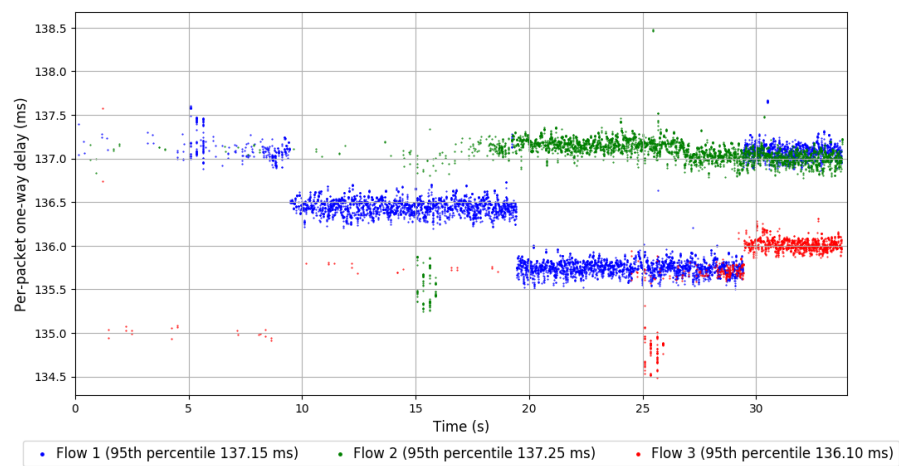
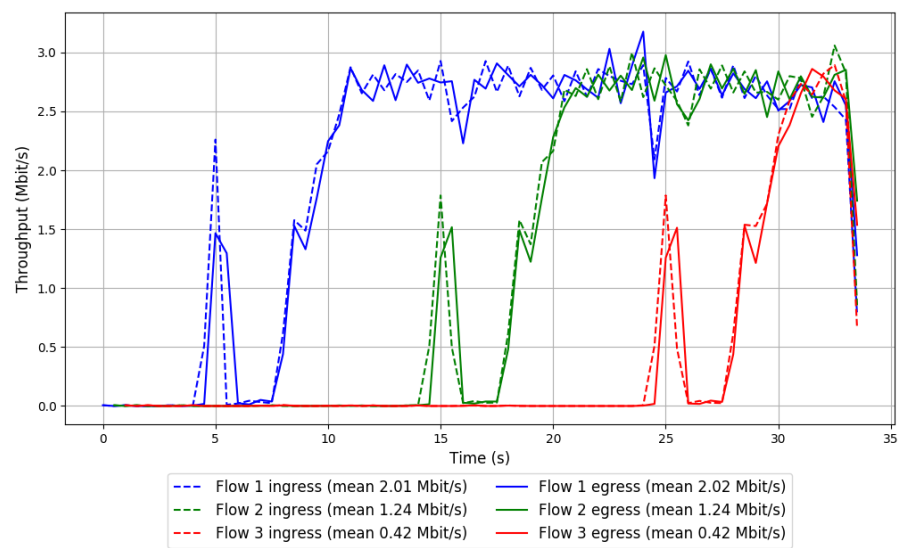
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 136.104 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-03-15 00:20:45

End at: 2018-03-15 00:21:15

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 139.083 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 136.990 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 139.140 ms

Loss rate: 0.00%

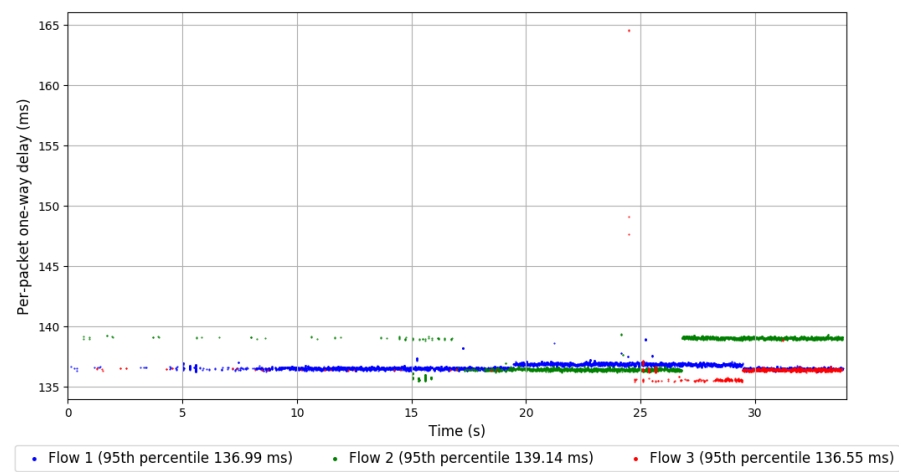
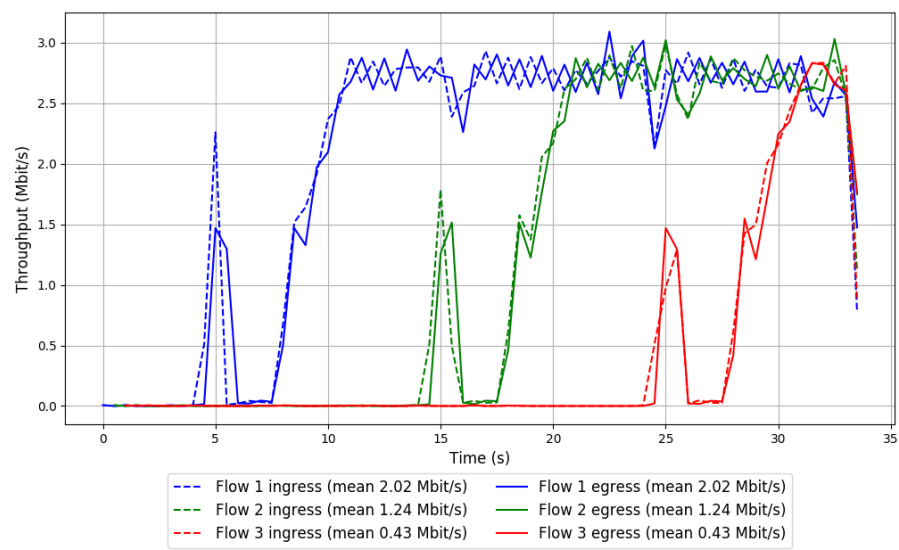
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 136.549 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-03-15 00:41:10

End at: 2018-03-15 00:41:40

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 141.209 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 141.240 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 141.129 ms

Loss rate: 0.00%

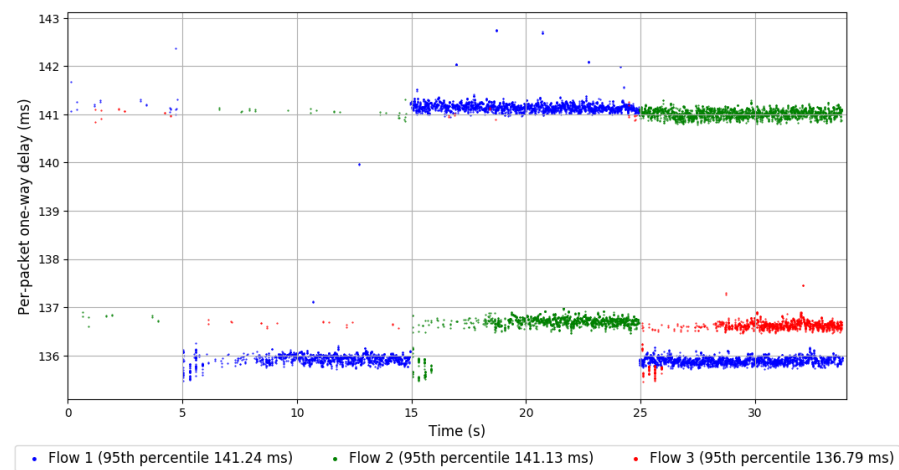
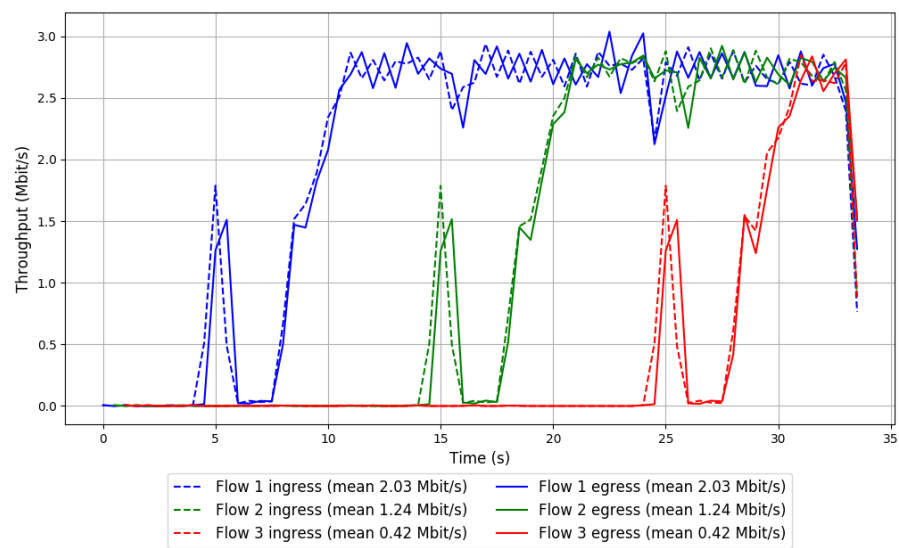
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 136.792 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-03-15 01:01:36

End at: 2018-03-15 01:02:06

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 139.135 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 136.920 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 136.944 ms

Loss rate: 0.00%

-- Flow 3:

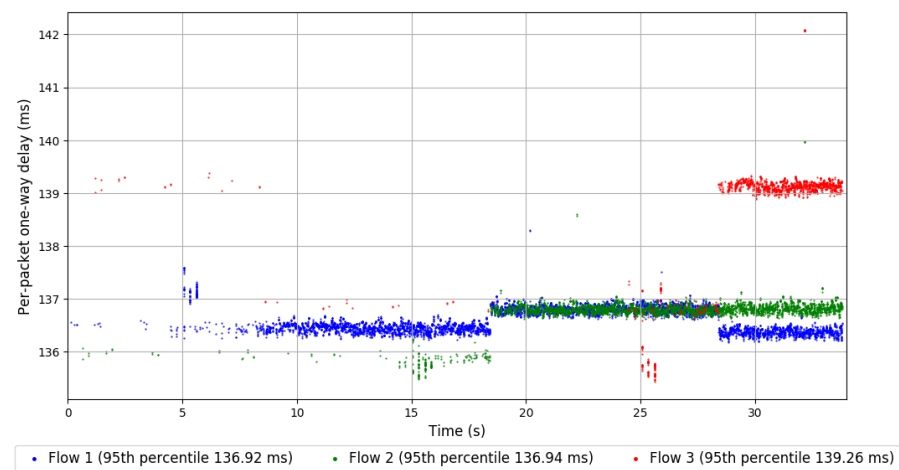
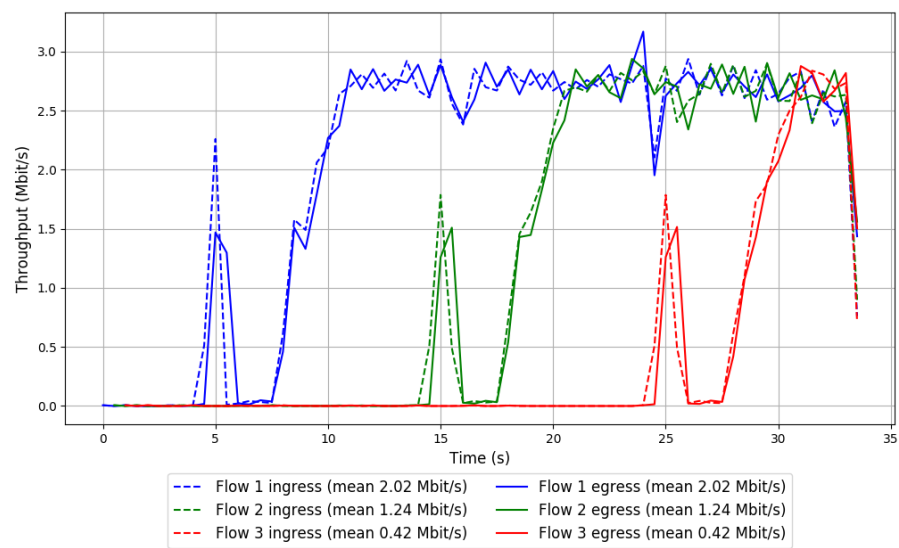
Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 139.262 ms

Loss rate: 0.07%



Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-03-15 01:21:58

End at: 2018-03-15 01:22:28

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 3.65 Mbit/s

95th percentile per-packet one-way delay: 139.771 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 136.980 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 136.558 ms

Loss rate: 0.00%

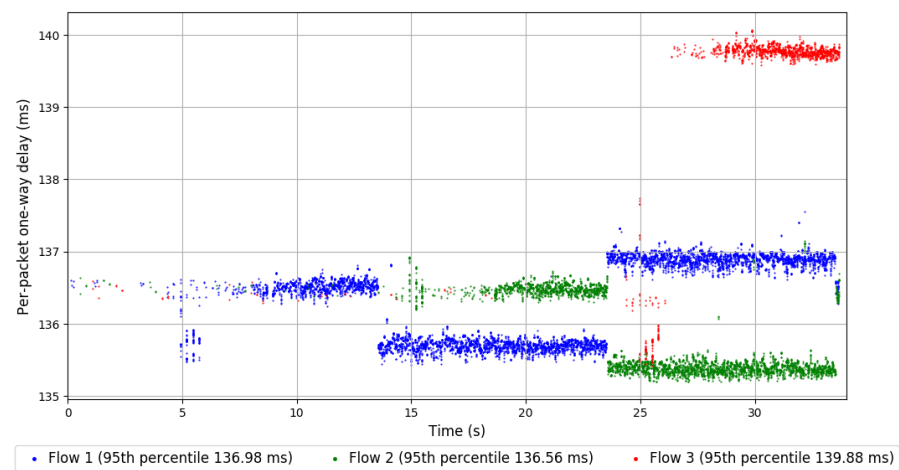
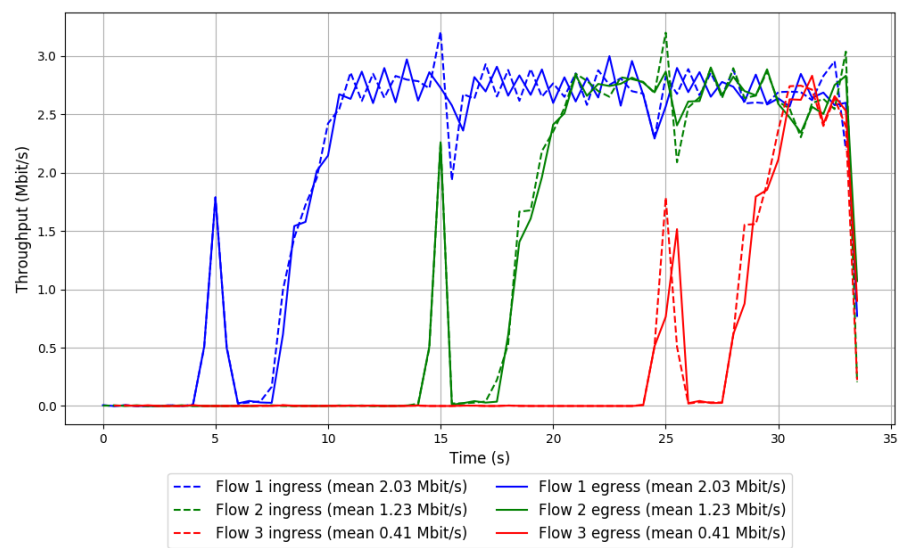
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 139.881 ms

Loss rate: 0.07%

Run 10: Report of WebRTC media — Data Link

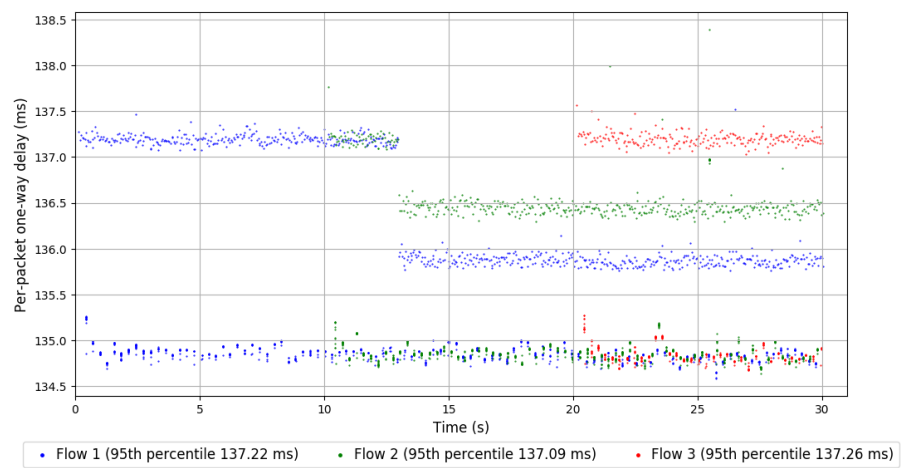
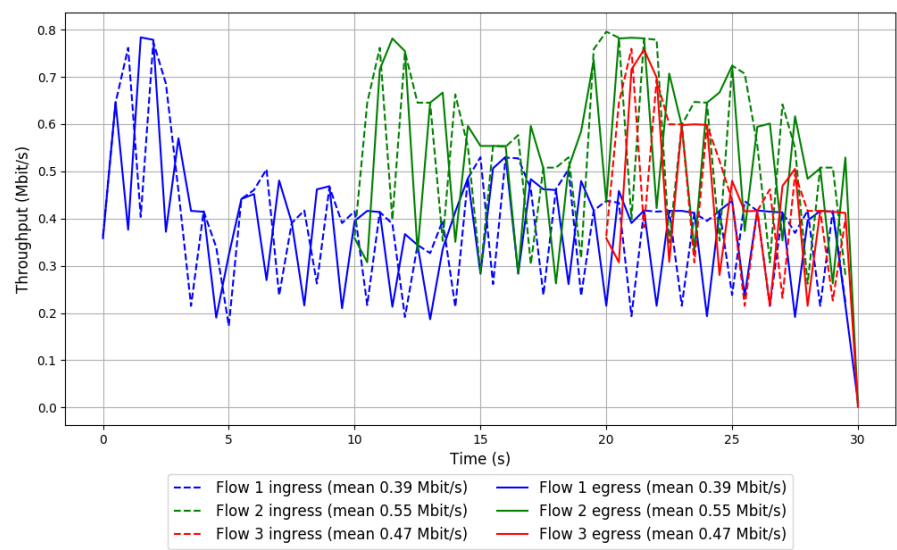


```
Run 1: Statistics of Sprout

Start at: 2018-03-14 22:08:15
End at: 2018-03-14 22:08:45

# Below is generated by plot.py at 2018-03-15 04:27:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 137.220 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 137.219 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 137.091 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 137.263 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-03-14 22:28:36

End at: 2018-03-14 22:29:06

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.85 Mbit/s

95th percentile per-packet one-way delay: 137.237 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 137.211 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 137.260 ms

Loss rate: 0.00%

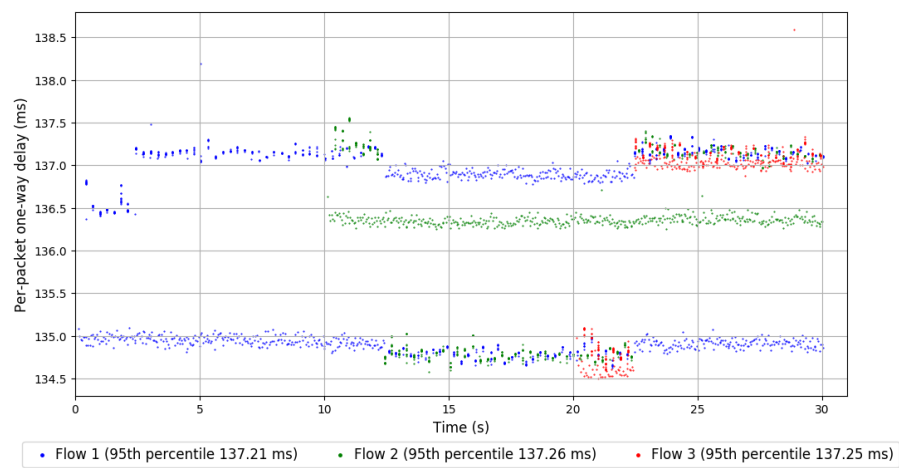
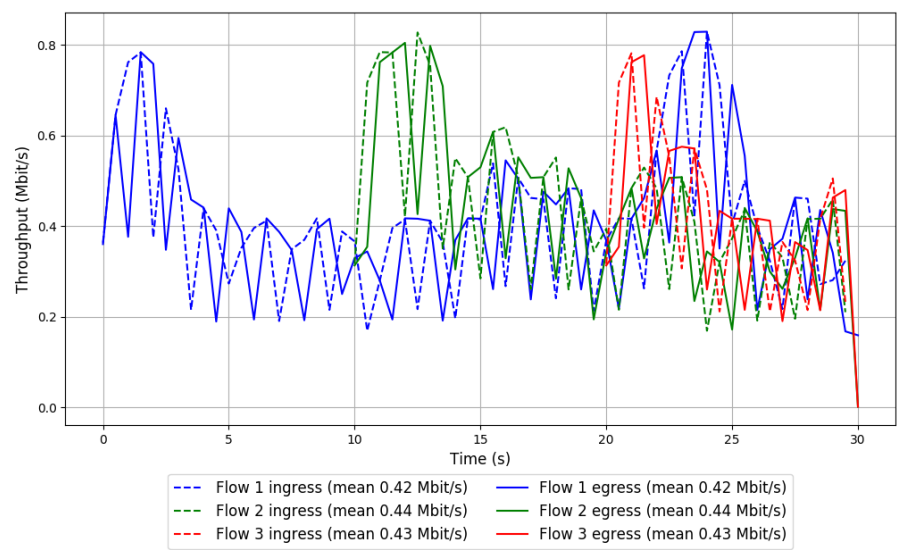
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 137.250 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-03-14 22:49:11

End at: 2018-03-14 22:49:41

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.90 Mbit/s

95th percentile per-packet one-way delay: 137.243 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 137.242 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.243 ms

Loss rate: 0.00%

-- Flow 3:

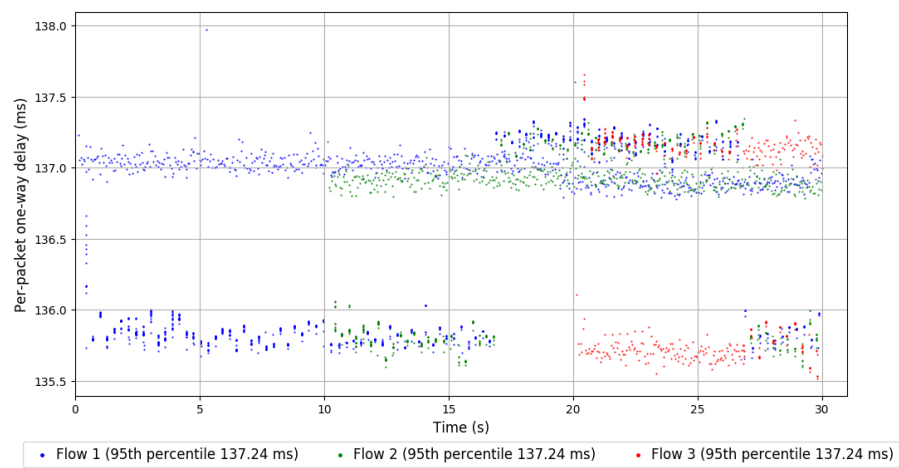
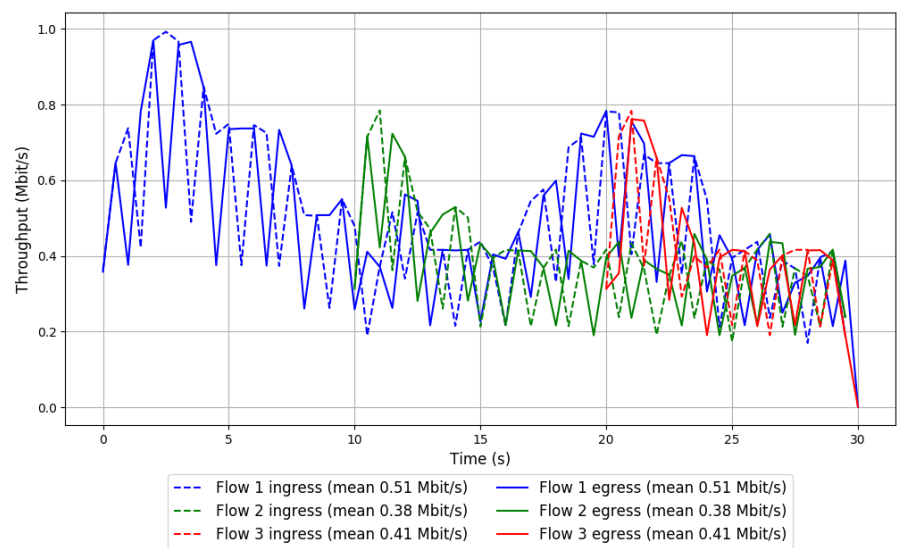
Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 137.242 ms

Loss rate: 0.00%



Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-03-14 23:09:47

End at: 2018-03-14 23:10:17

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.81 Mbit/s

95th percentile per-packet one-way delay: 137.160 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 137.188 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.046 ms

Loss rate: 0.00%

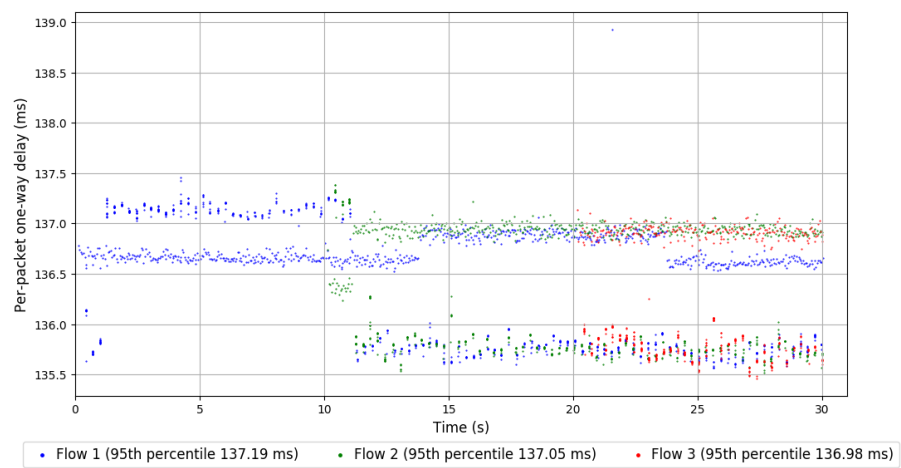
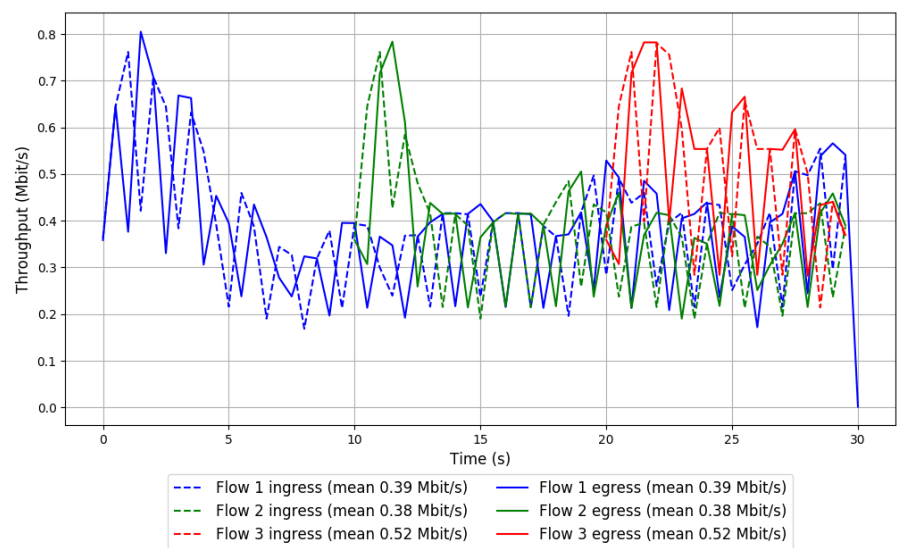
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 136.978 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-03-14 23:30:20

End at: 2018-03-14 23:30:50

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.85 Mbit/s

95th percentile per-packet one-way delay: 137.199 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.263 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 137.030 ms

Loss rate: 0.00%

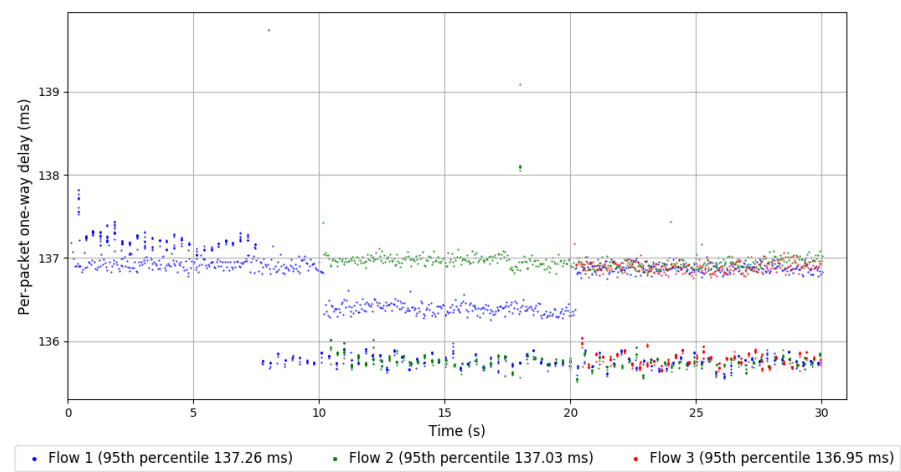
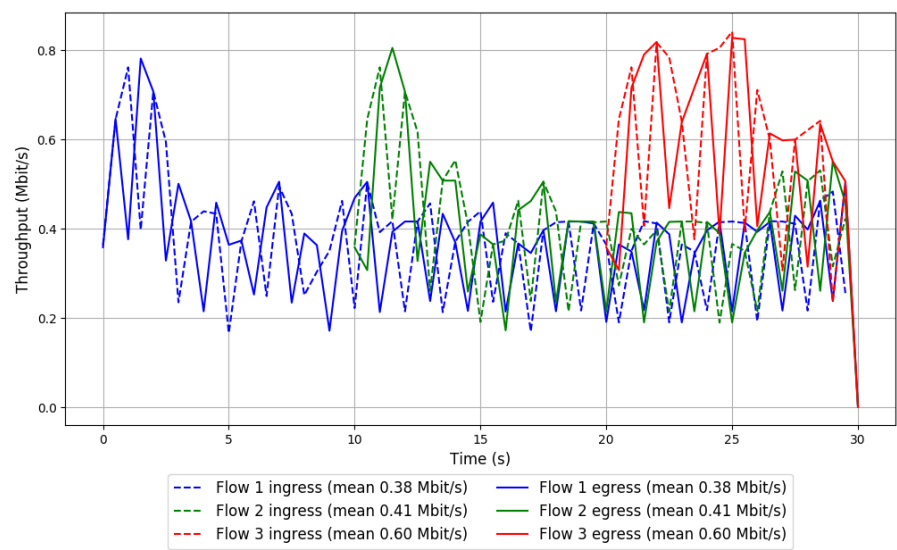
-- Flow 3:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 136.951 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-03-14 23:50:39

End at: 2018-03-14 23:51:09

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 137.284 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.246 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.272 ms

Loss rate: 0.00%

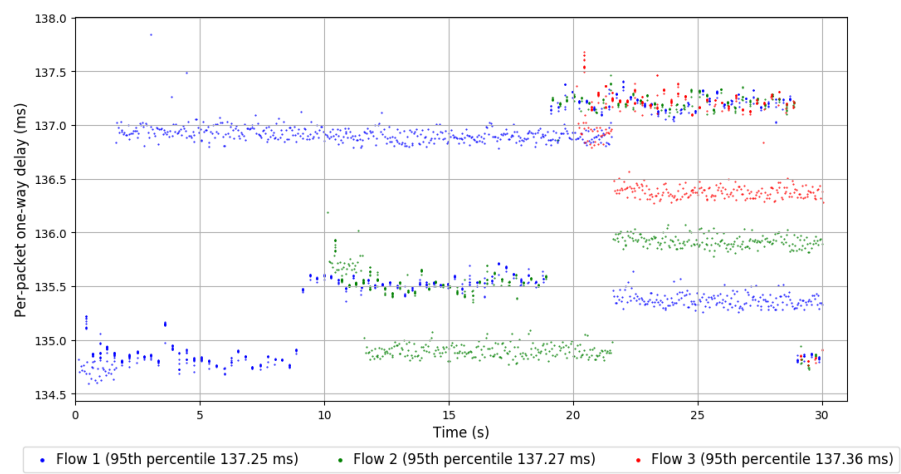
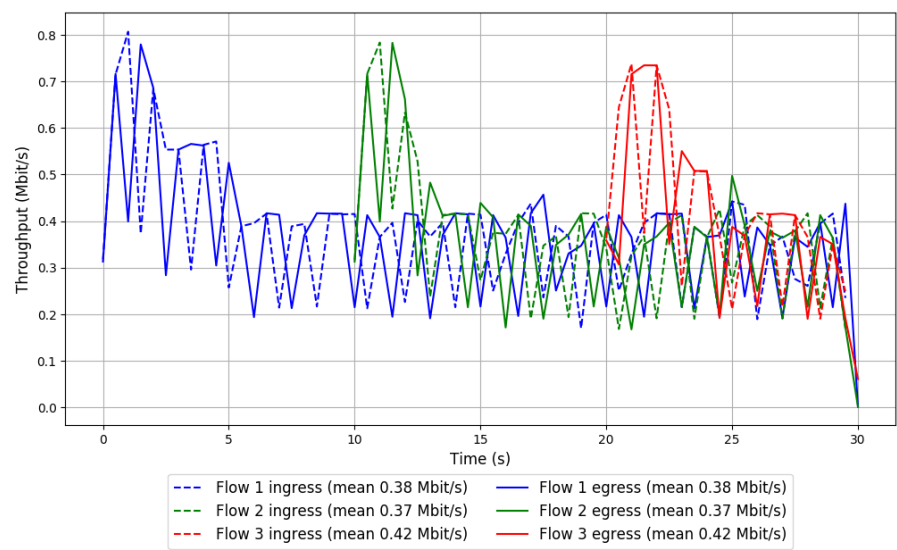
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 137.361 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-03-15 00:10:43

End at: 2018-03-15 00:11:13

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.80 Mbit/s

95th percentile per-packet one-way delay: 137.249 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.227 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 137.223 ms

Loss rate: 0.00%

-- Flow 3:

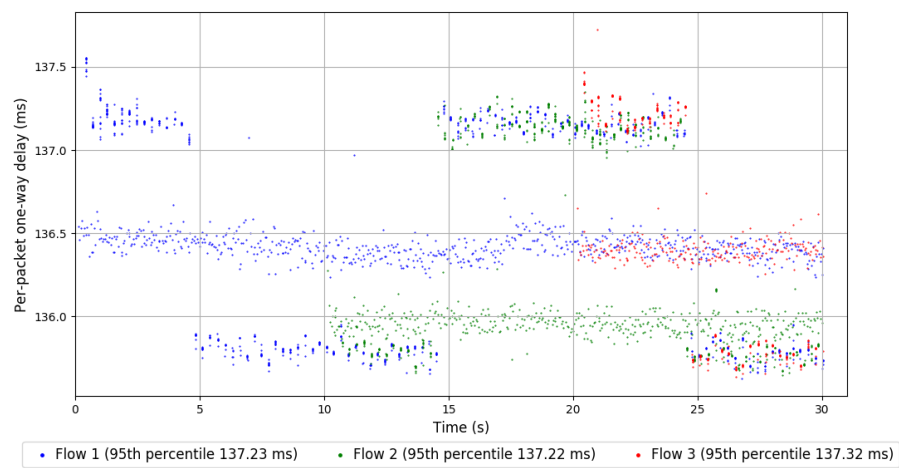
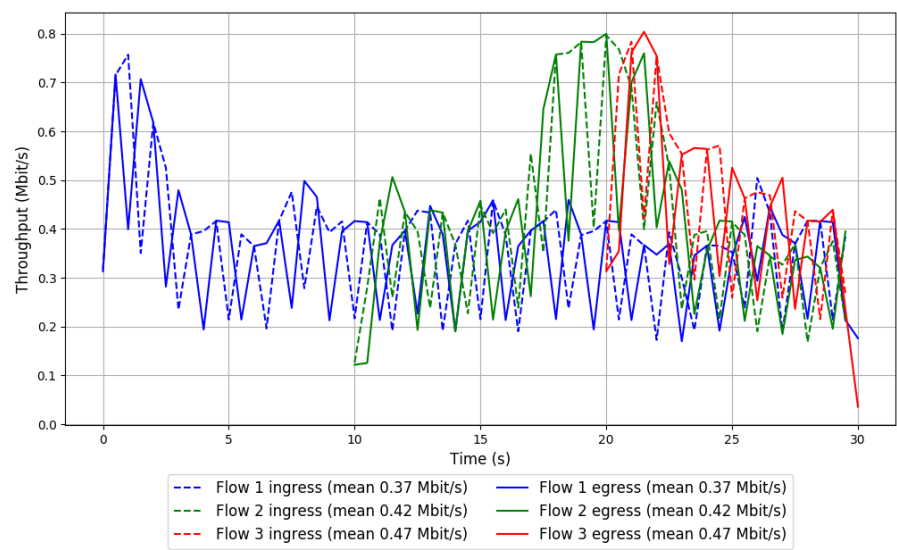
Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 137.321 ms

Loss rate: 0.00%



Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-03-15 00:31:28

End at: 2018-03-15 00:31:58

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.83 Mbit/s

95th percentile per-packet one-way delay: 140.899 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 140.942 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 136.075 ms

Loss rate: 0.00%

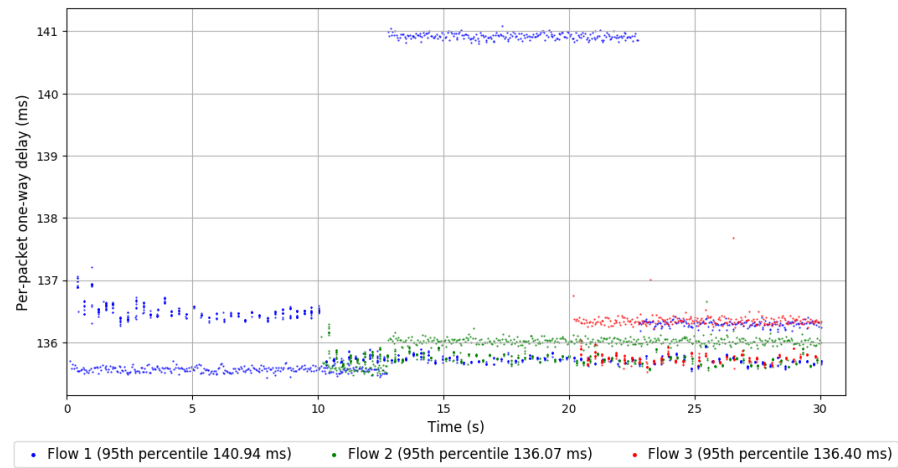
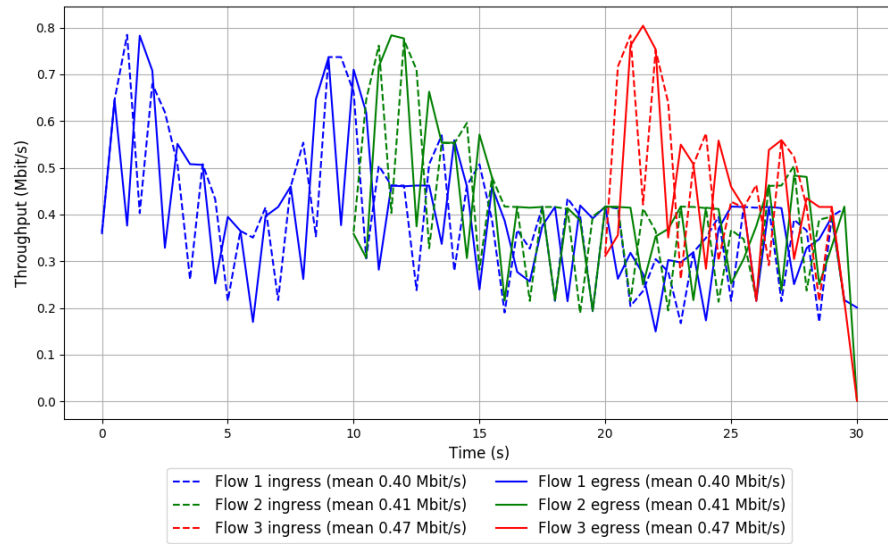
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 136.403 ms

Loss rate: 0.00%

## Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-03-15 00:51:39

End at: 2018-03-15 00:52:09

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.80 Mbit/s

95th percentile per-packet one-way delay: 140.965 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 136.394 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 141.030 ms

Loss rate: 0.00%

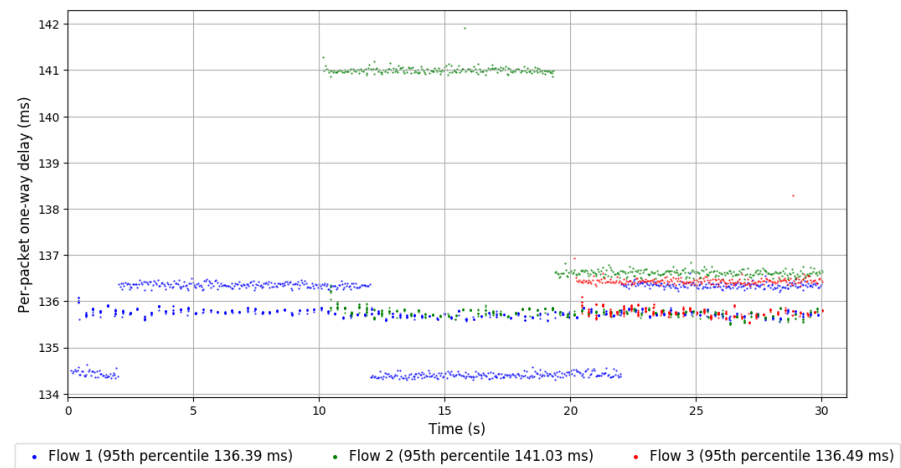
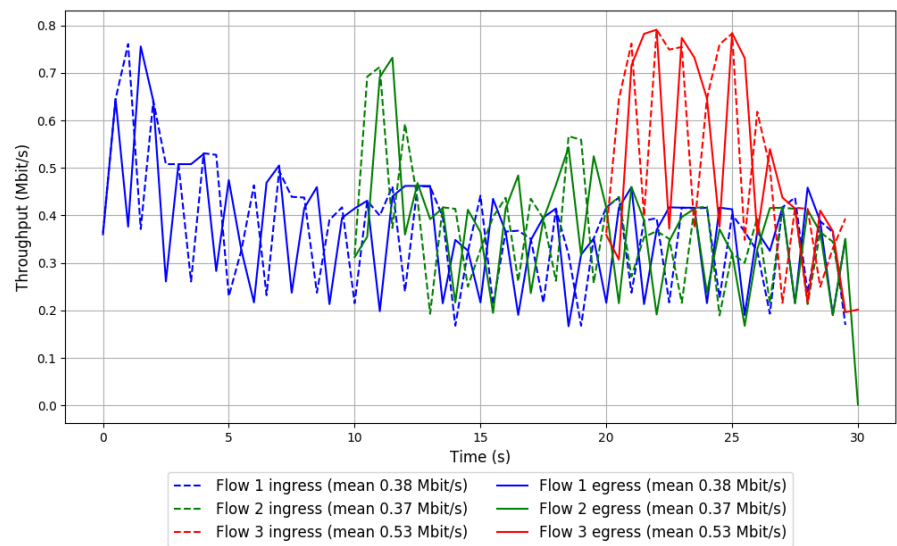
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 136.485 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-03-15 01:12:03

End at: 2018-03-15 01:12:33

# Below is generated by plot.py at 2018-03-15 04:27:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 139.804 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.160 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 141.015 ms

Loss rate: 0.06%

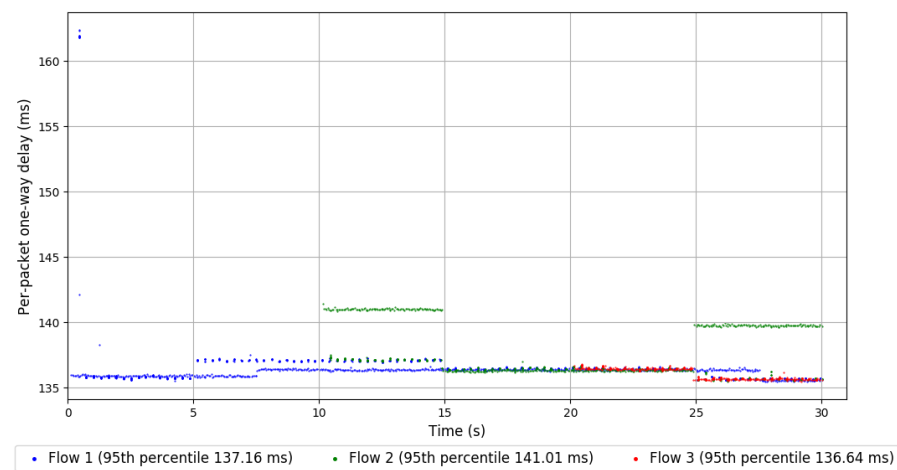
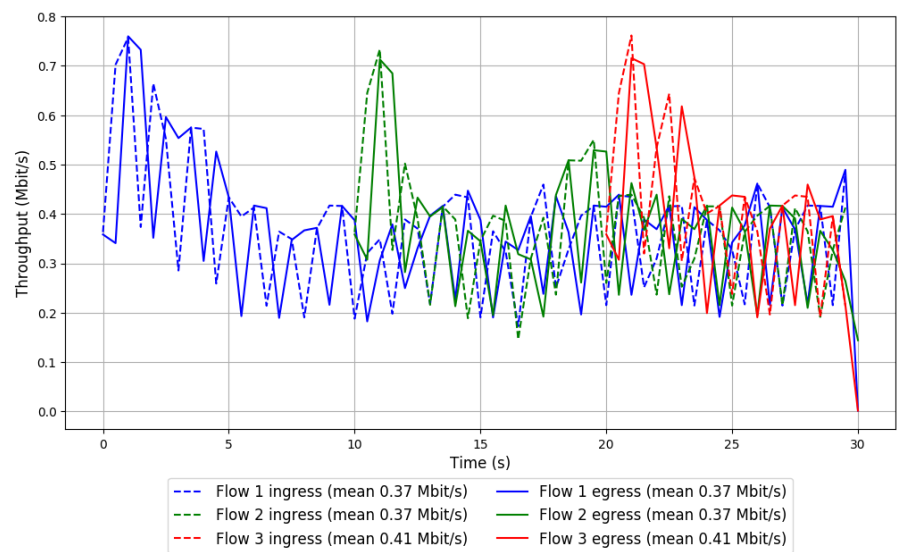
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 136.638 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link



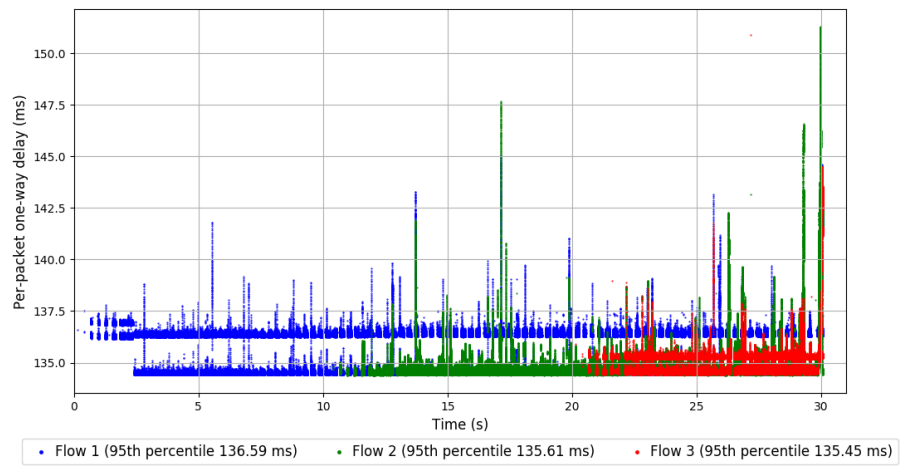
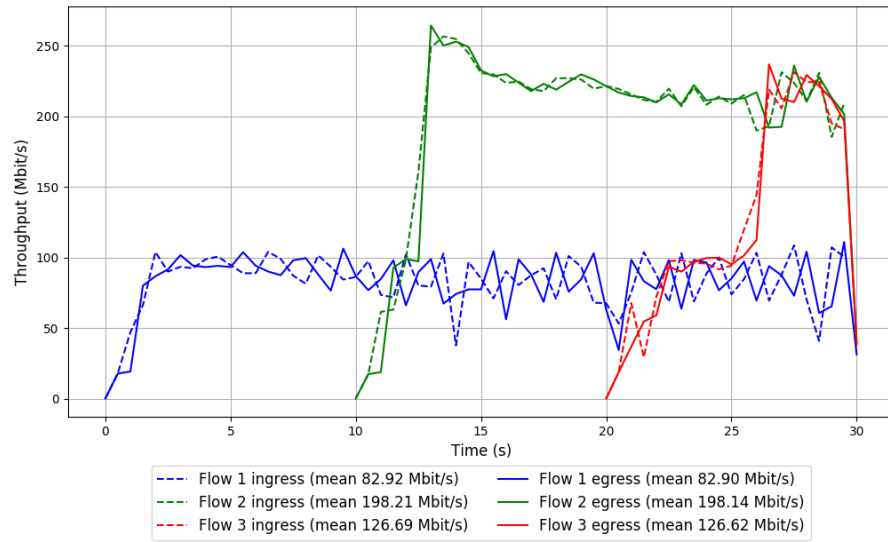
```
Run 1: Statistics of TaoVA-100x

Start at: 2018-03-14 22:21:36
End at: 2018-03-14 22:22:06

# Below is generated by plot.py at 2018-03-15 04:30:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 256.84 Mbit/s
95th percentile per-packet one-way delay: 136.504 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.90 Mbit/s
95th percentile per-packet one-way delay: 136.592 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 198.14 Mbit/s
95th percentile per-packet one-way delay: 135.607 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 126.62 Mbit/s
95th percentile per-packet one-way delay: 135.448 ms
Loss rate: 0.00%
```



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

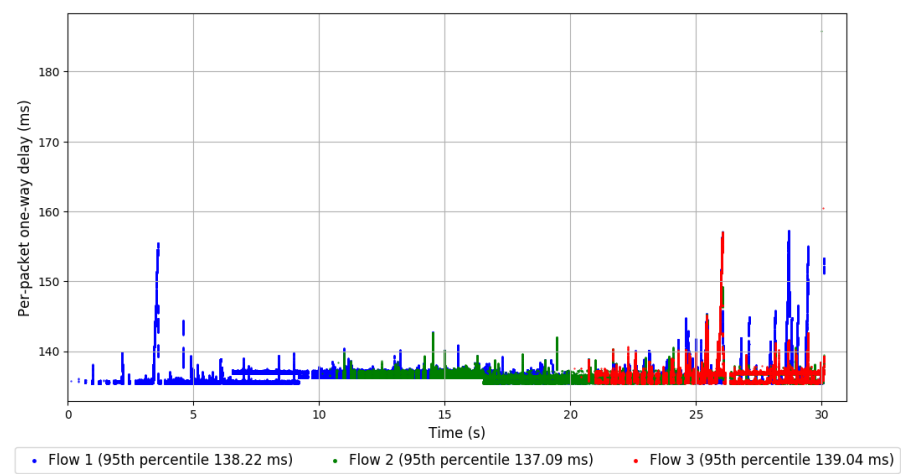
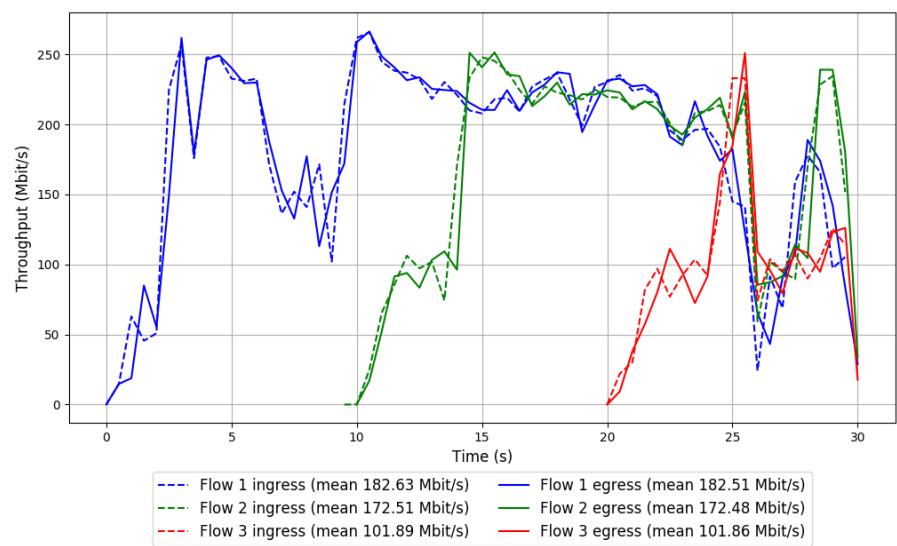


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-03-14 22:42:02
End at: 2018-03-14 22:42:32

# Below is generated by plot.py at 2018-03-15 04:33:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 331.12 Mbit/s
95th percentile per-packet one-way delay: 137.787 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 182.51 Mbit/s
95th percentile per-packet one-way delay: 138.223 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 172.48 Mbit/s
95th percentile per-packet one-way delay: 137.092 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 101.86 Mbit/s
95th percentile per-packet one-way delay: 139.040 ms
Loss rate: 0.03%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-03-14 23:02:39

End at: 2018-03-14 23:03:09

# Below is generated by plot.py at 2018-03-15 04:33:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 193.35 Mbit/s

95th percentile per-packet one-way delay: 137.144 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 10.67 Mbit/s

95th percentile per-packet one-way delay: 137.200 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 187.82 Mbit/s

95th percentile per-packet one-way delay: 137.113 ms

Loss rate: 0.00%

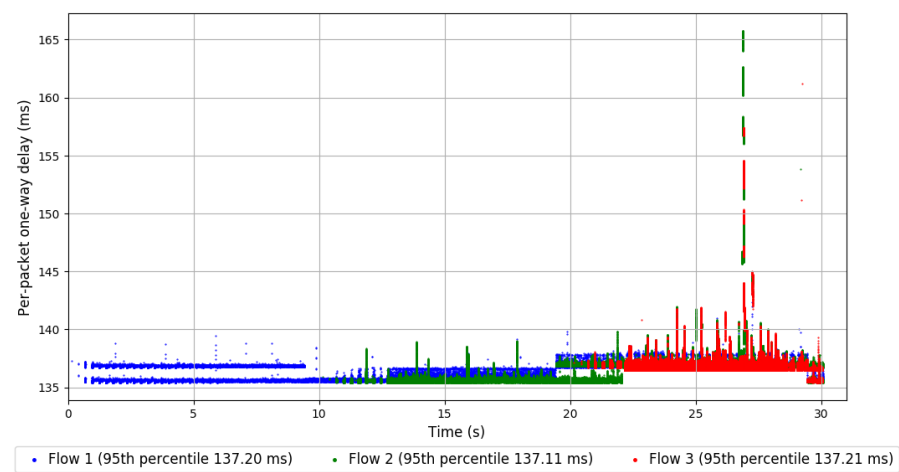
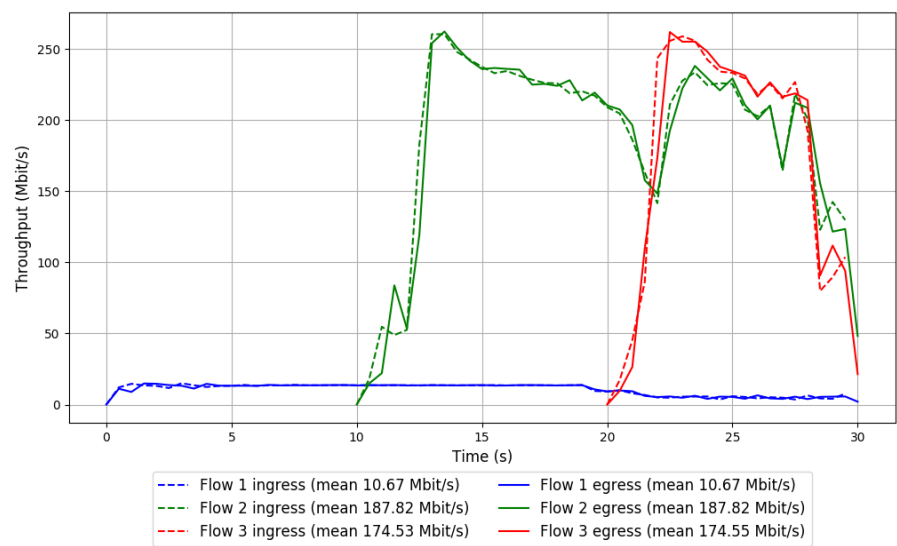
-- Flow 3:

Average throughput: 174.55 Mbit/s

95th percentile per-packet one-way delay: 137.211 ms

Loss rate: 0.00%

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

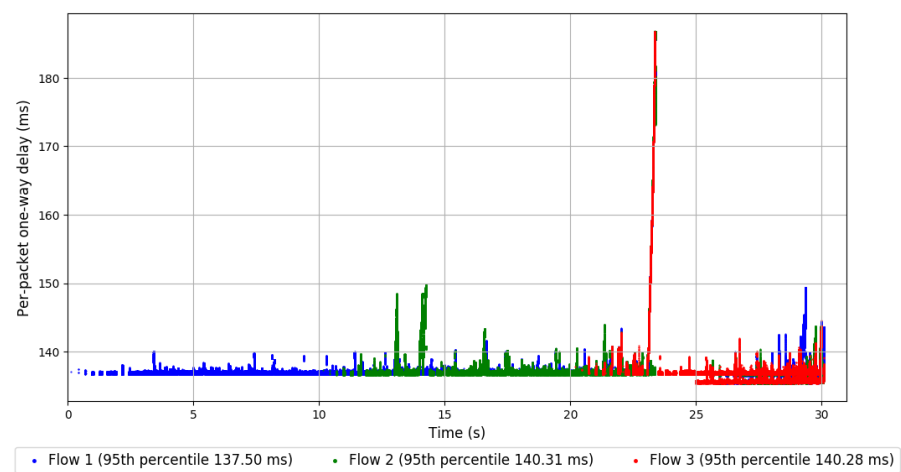
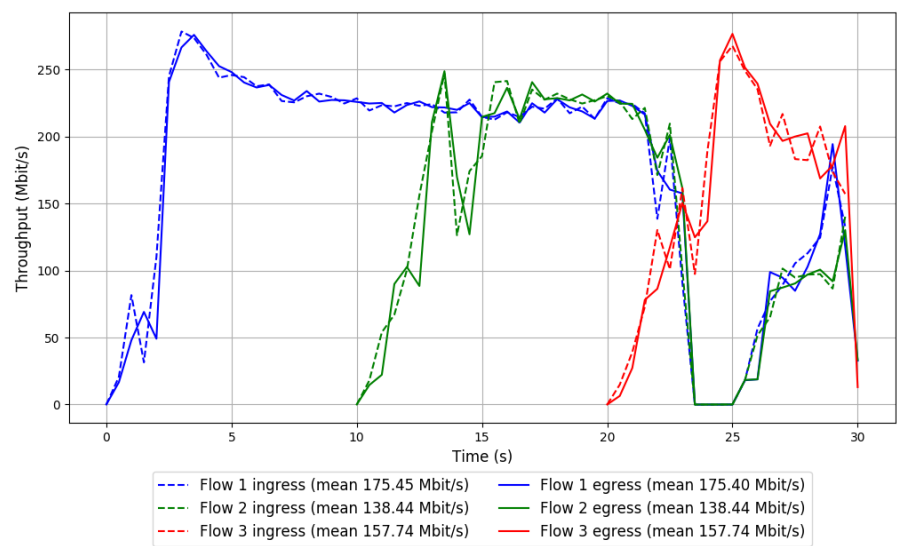


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-03-14 23:23:13
End at: 2018-03-14 23:23:43

# Below is generated by plot.py at 2018-03-15 04:34:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 319.79 Mbit/s
95th percentile per-packet one-way delay: 138.550 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 175.40 Mbit/s
95th percentile per-packet one-way delay: 137.504 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 138.44 Mbit/s
95th percentile per-packet one-way delay: 140.315 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 157.74 Mbit/s
95th percentile per-packet one-way delay: 140.284 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-03-14 23:43:44

End at: 2018-03-14 23:44:14

# Below is generated by plot.py at 2018-03-15 04:34:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 114.51 Mbit/s

95th percentile per-packet one-way delay: 136.332 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 13.39 Mbit/s

95th percentile per-packet one-way delay: 136.349 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 148.24 Mbit/s

95th percentile per-packet one-way delay: 136.316 ms

Loss rate: 0.00%

-- Flow 3:

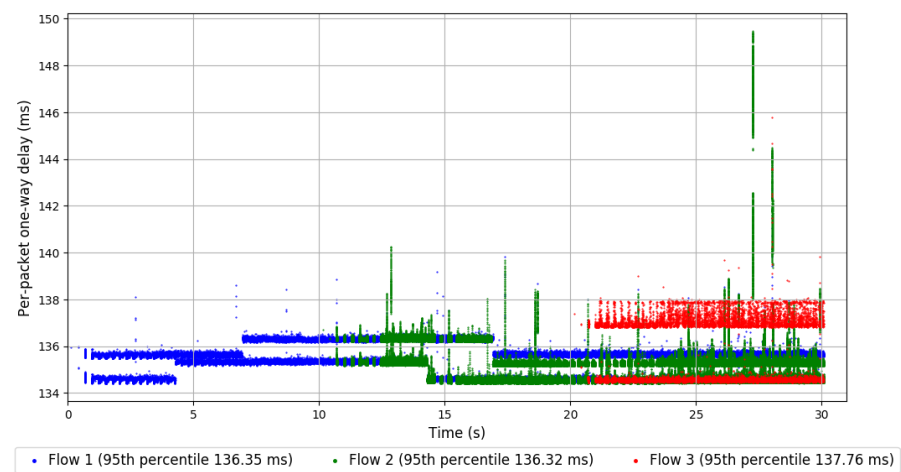
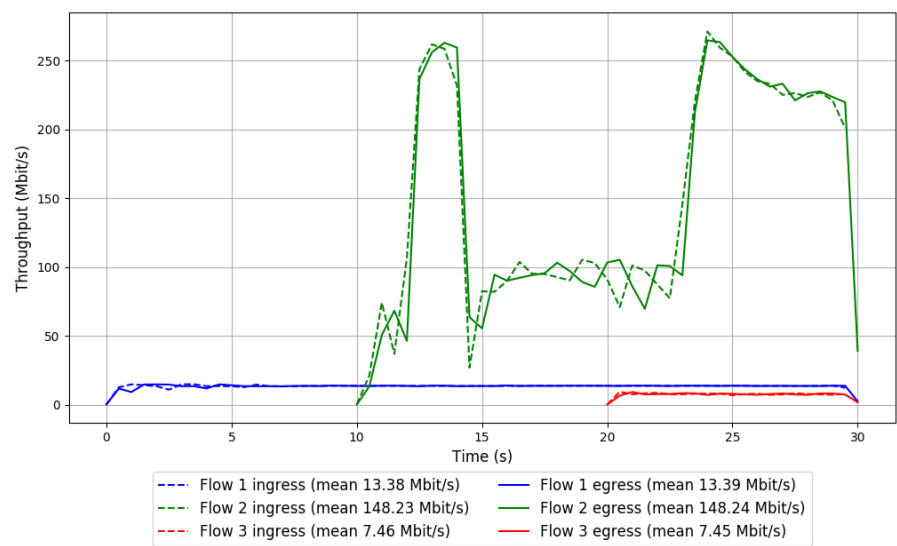
Average throughput: 7.45 Mbit/s

95th percentile per-packet one-way delay: 137.765 ms

Loss rate: 0.00%



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



Run 6: Statistics of TaoVA-100x

Start at: 2018-03-15 00:04:05

End at: 2018-03-15 00:04:35

# Below is generated by plot.py at 2018-03-15 04:34:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 22.48 Mbit/s

95th percentile per-packet one-way delay: 136.957 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 13.25 Mbit/s

95th percentile per-packet one-way delay: 136.928 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.54 Mbit/s

95th percentile per-packet one-way delay: 136.972 ms

Loss rate: 0.00%

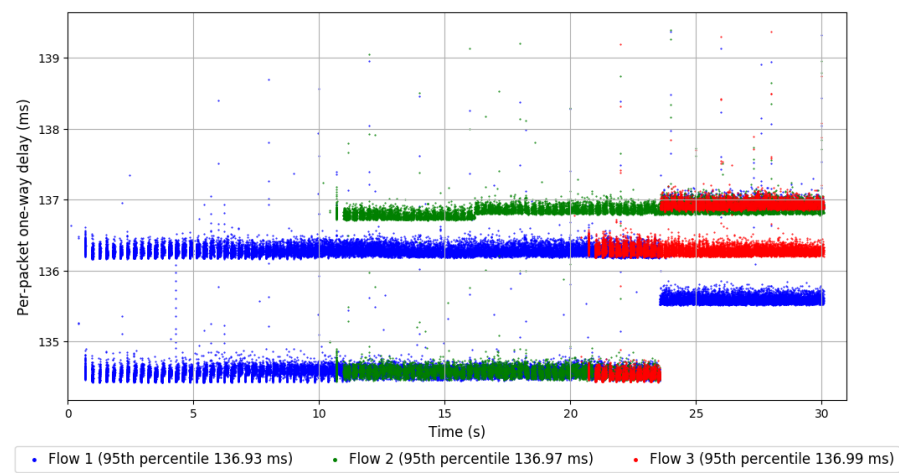
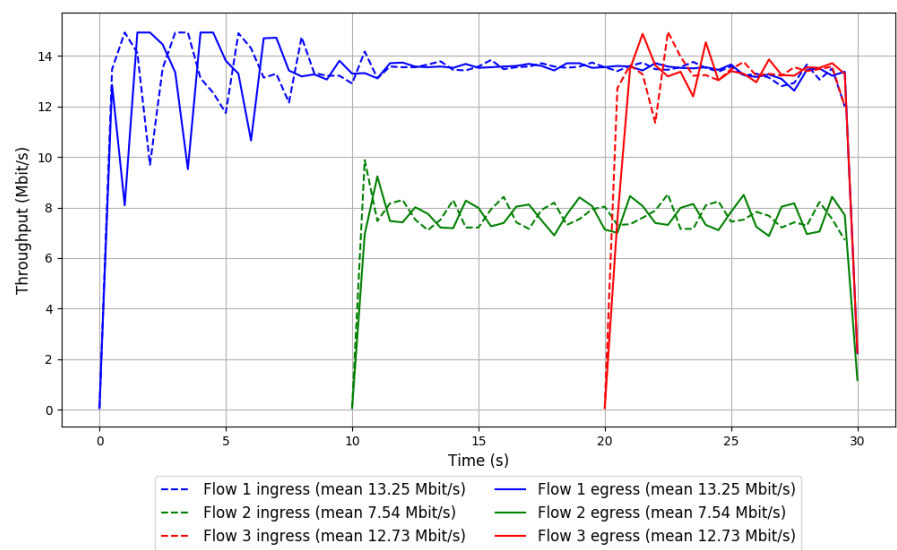
-- Flow 3:

Average throughput: 12.73 Mbit/s

95th percentile per-packet one-way delay: 136.985 ms

Loss rate: 0.01%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-03-15 00:24:15

End at: 2018-03-15 00:24:45

# Below is generated by plot.py at 2018-03-15 04:36:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 341.57 Mbit/s

95th percentile per-packet one-way delay: 137.292 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 209.22 Mbit/s

95th percentile per-packet one-way delay: 137.091 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 192.49 Mbit/s

95th percentile per-packet one-way delay: 137.576 ms

Loss rate: 0.02%

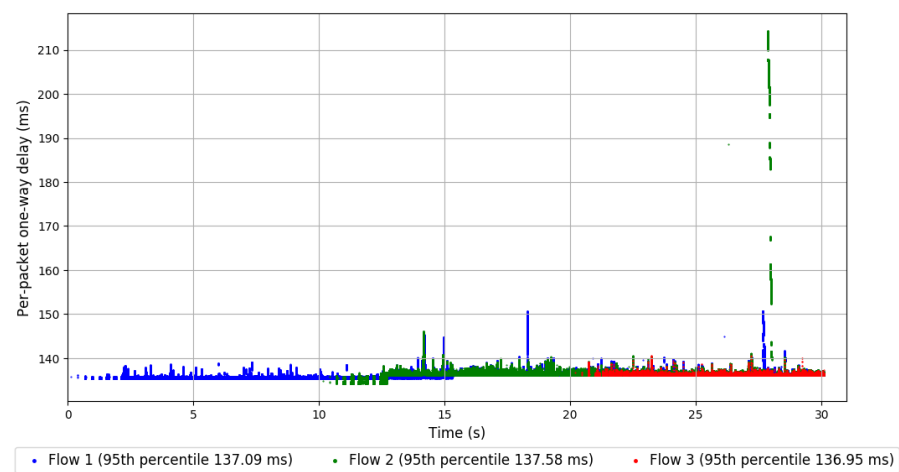
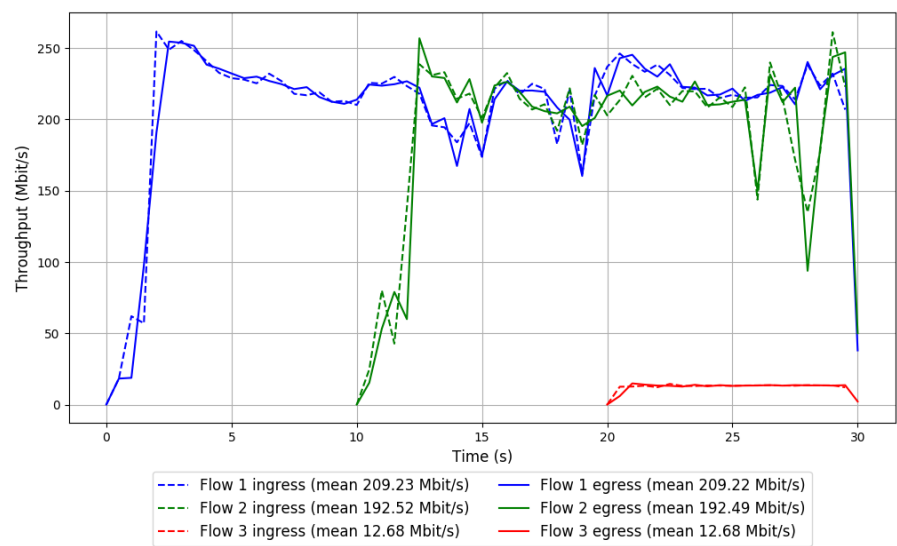
-- Flow 3:

Average throughput: 12.68 Mbit/s

95th percentile per-packet one-way delay: 136.948 ms

Loss rate: 0.02%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-03-15 00:44:40

End at: 2018-03-15 00:45:10

# Below is generated by plot.py at 2018-03-15 04:36:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 224.86 Mbit/s

95th percentile per-packet one-way delay: 137.127 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 161.51 Mbit/s

95th percentile per-packet one-way delay: 136.997 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.14 Mbit/s

95th percentile per-packet one-way delay: 137.069 ms

Loss rate: 0.00%

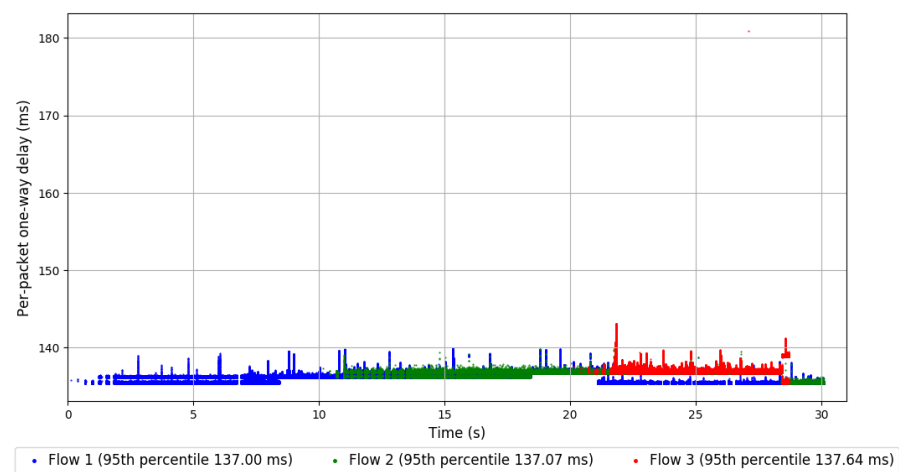
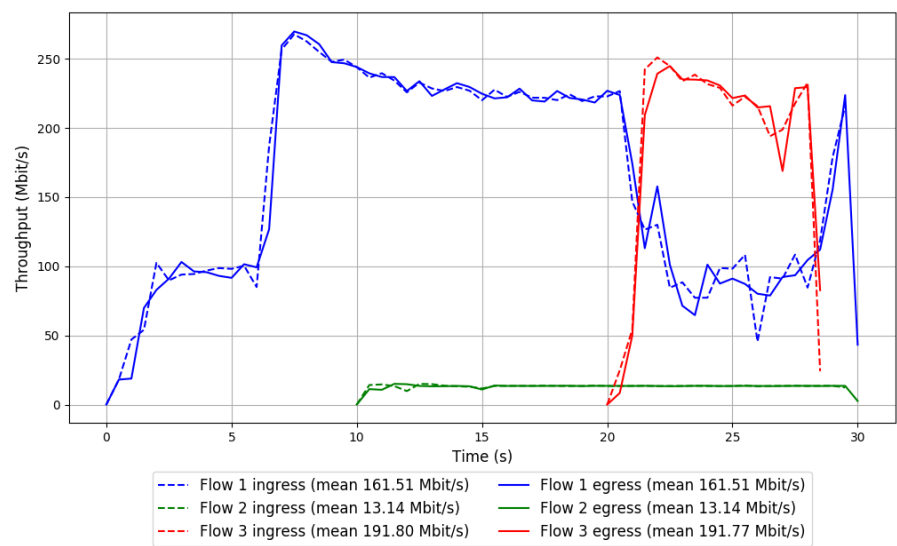
-- Flow 3:

Average throughput: 191.77 Mbit/s

95th percentile per-packet one-way delay: 137.638 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-03-15 01:05:05

End at: 2018-03-15 01:05:35

# Below is generated by plot.py at 2018-03-15 04:38:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 258.20 Mbit/s

95th percentile per-packet one-way delay: 136.441 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 184.83 Mbit/s

95th percentile per-packet one-way delay: 136.391 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.07 Mbit/s

95th percentile per-packet one-way delay: 136.557 ms

Loss rate: 0.00%

-- Flow 3:

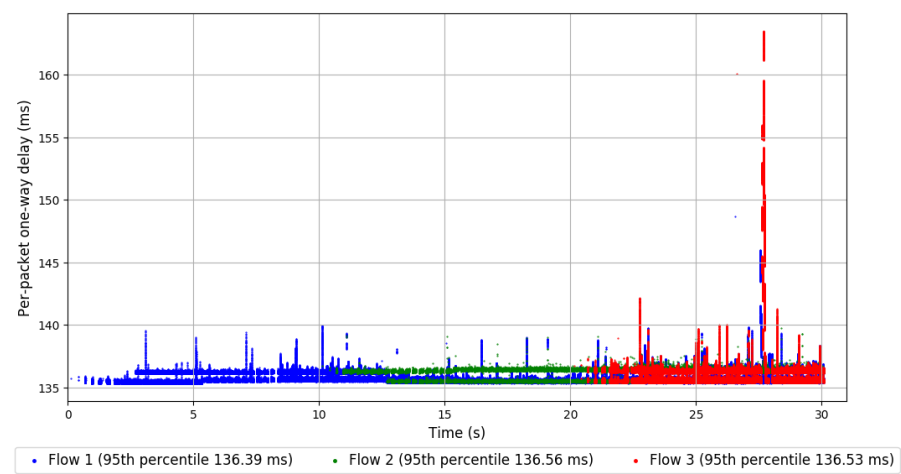
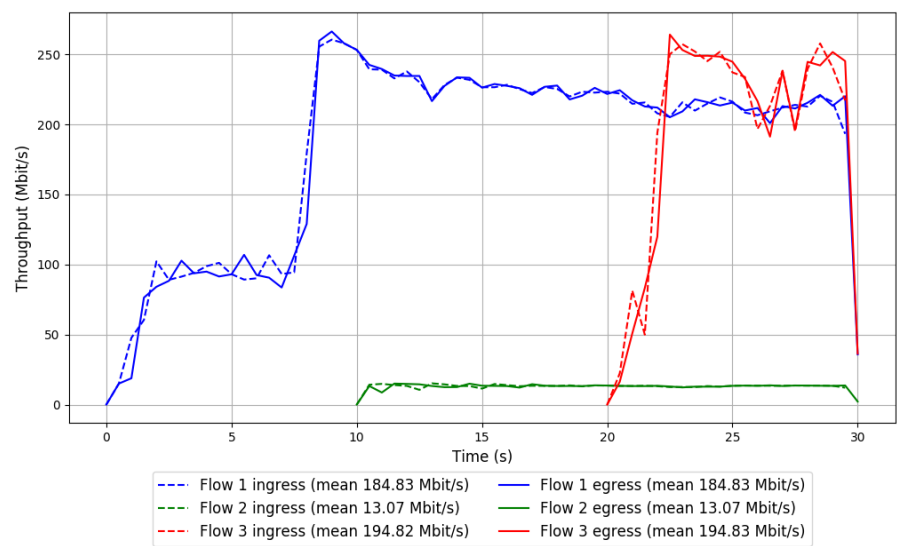
Average throughput: 194.83 Mbit/s

95th percentile per-packet one-way delay: 136.526 ms

Loss rate: 0.00%



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

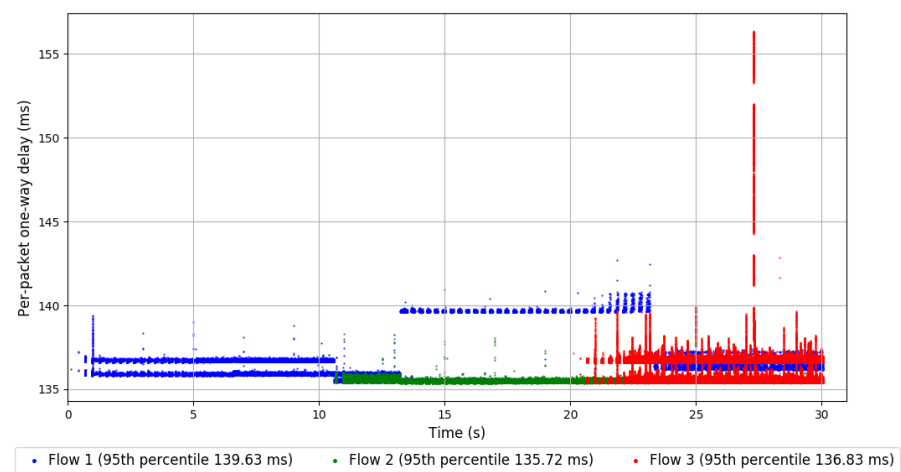
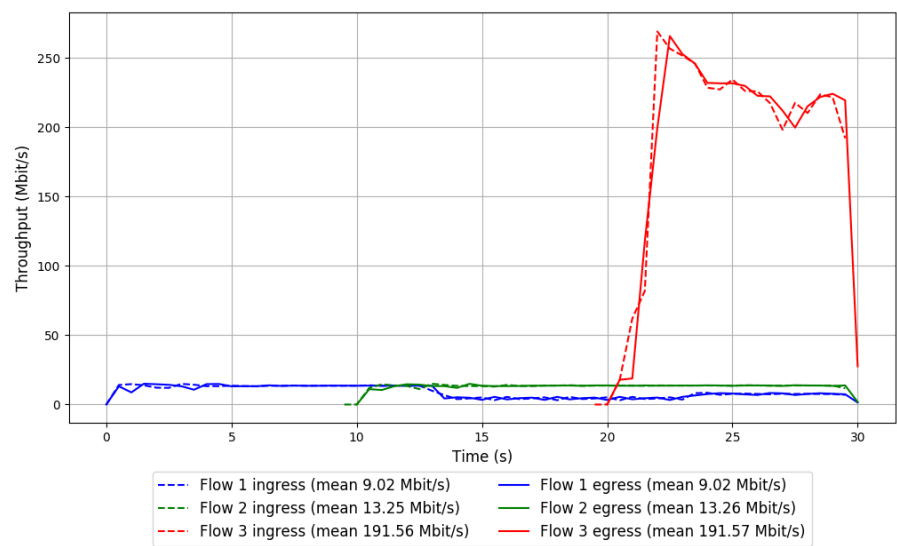


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-03-15 01:25:28
End at: 2018-03-15 01:25:58

# Below is generated by plot.py at 2018-03-15 04:38:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.49 Mbit/s
95th percentile per-packet one-way delay: 136.834 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.02 Mbit/s
95th percentile per-packet one-way delay: 139.629 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 13.26 Mbit/s
95th percentile per-packet one-way delay: 135.719 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 191.57 Mbit/s
95th percentile per-packet one-way delay: 136.831 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-03-14 22:20:43

End at: 2018-03-14 22:21:13

# Below is generated by plot.py at 2018-03-15 04:38:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 51.77 Mbit/s

95th percentile per-packet one-way delay: 139.684 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 26.43 Mbit/s

95th percentile per-packet one-way delay: 137.361 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 25.62 Mbit/s

95th percentile per-packet one-way delay: 142.032 ms

Loss rate: 0.00%

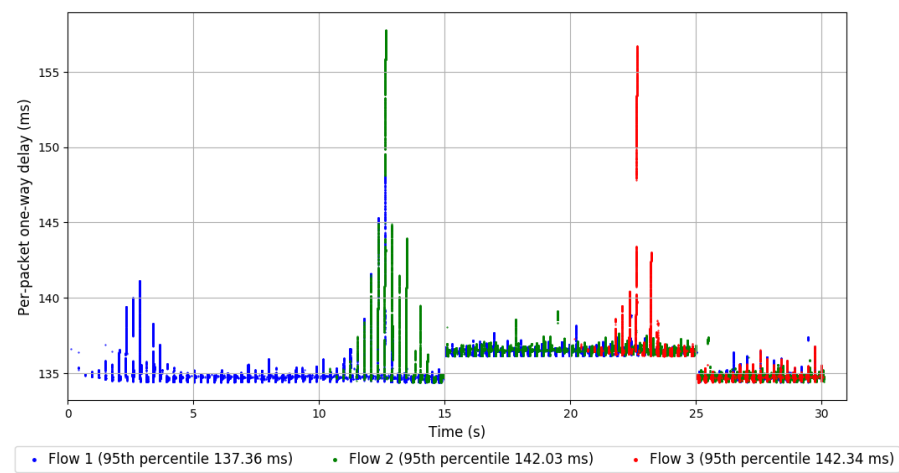
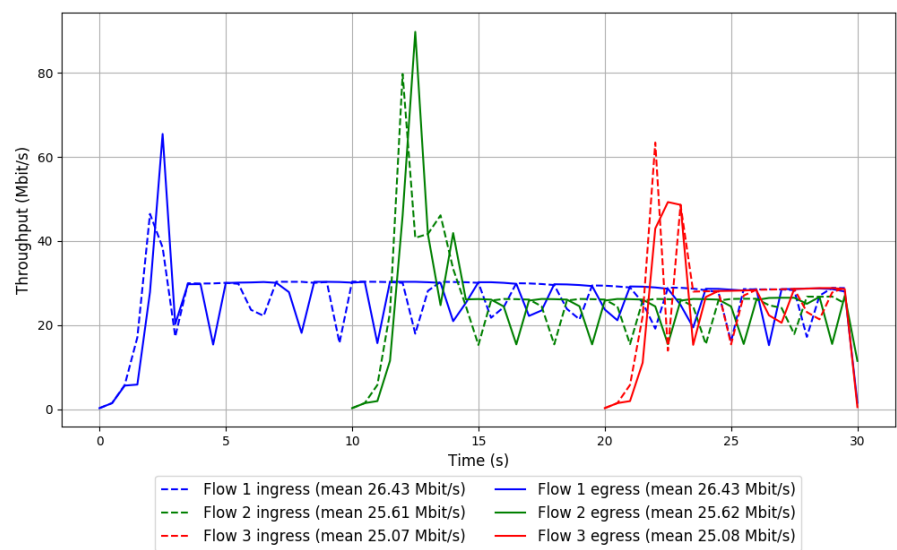
-- Flow 3:

Average throughput: 25.08 Mbit/s

95th percentile per-packet one-way delay: 142.336 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-03-14 22:41:06

End at: 2018-03-14 22:41:36

# Below is generated by plot.py at 2018-03-15 04:38:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 104.61 Mbit/s

95th percentile per-packet one-way delay: 142.620 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 43.16 Mbit/s

95th percentile per-packet one-way delay: 140.438 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 80.74 Mbit/s

95th percentile per-packet one-way delay: 143.587 ms

Loss rate: 0.00%

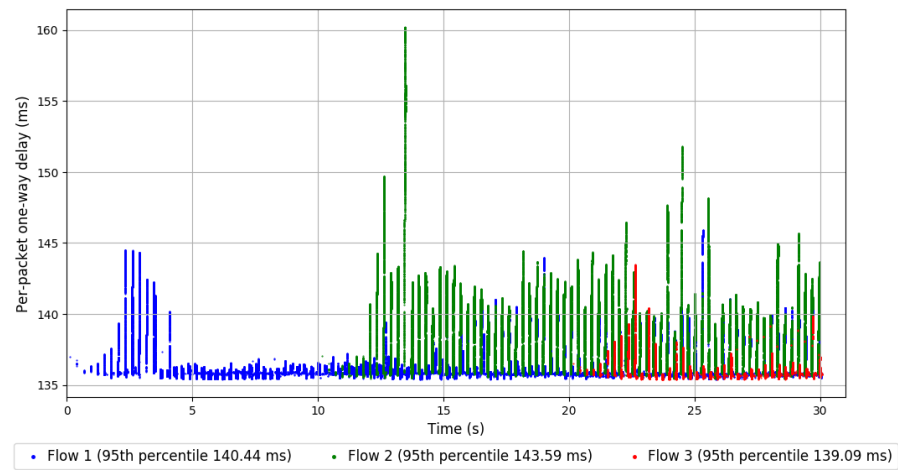
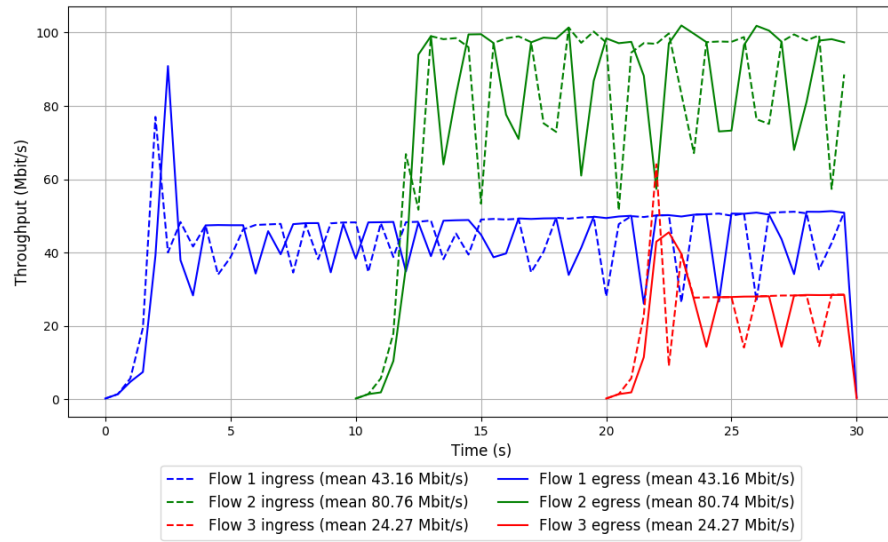
-- Flow 3:

Average throughput: 24.27 Mbit/s

95th percentile per-packet one-way delay: 139.092 ms

Loss rate: 0.00%

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



Run 3: Statistics of TCP Vegas

Start at: 2018-03-14 23:01:45

End at: 2018-03-14 23:02:16

# Below is generated by plot.py at 2018-03-15 04:38:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 62.59 Mbit/s

95th percentile per-packet one-way delay: 138.411 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 33.05 Mbit/s

95th percentile per-packet one-way delay: 137.991 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.95 Mbit/s

95th percentile per-packet one-way delay: 137.833 ms

Loss rate: 0.00%

-- Flow 3:

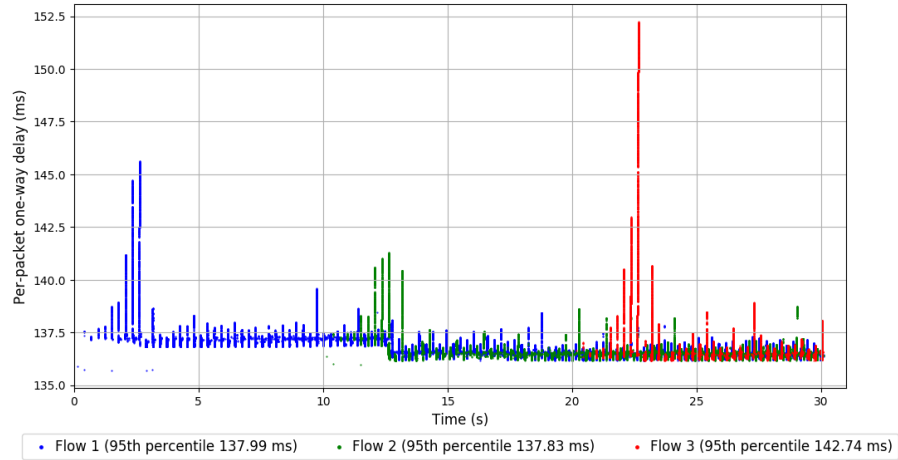
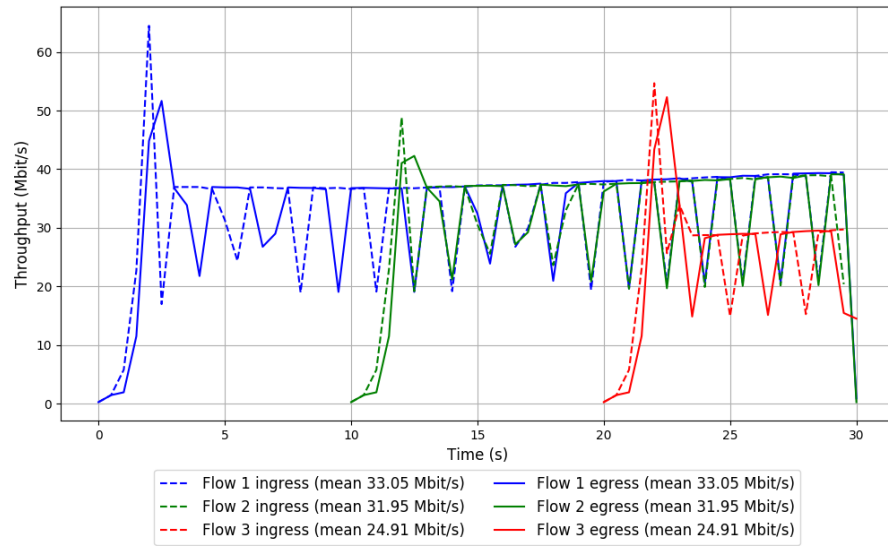
Average throughput: 24.91 Mbit/s

95th percentile per-packet one-way delay: 142.742 ms

Loss rate: 0.00%



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



Run 4: Statistics of TCP Vegas

Start at: 2018-03-14 23:22:20

End at: 2018-03-14 23:22:50

# Below is generated by plot.py at 2018-03-15 04:38:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 65.79 Mbit/s

95th percentile per-packet one-way delay: 139.267 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 26.84 Mbit/s

95th percentile per-packet one-way delay: 138.821 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.30 Mbit/s

95th percentile per-packet one-way delay: 138.662 ms

Loss rate: 0.00%

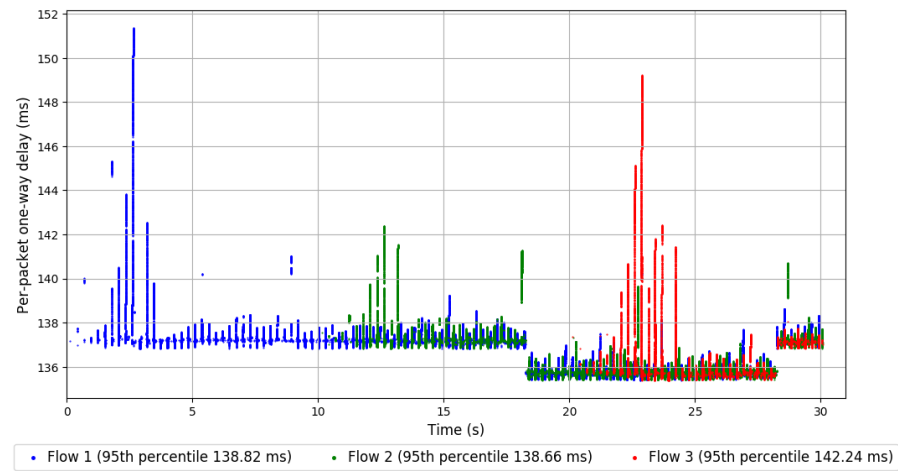
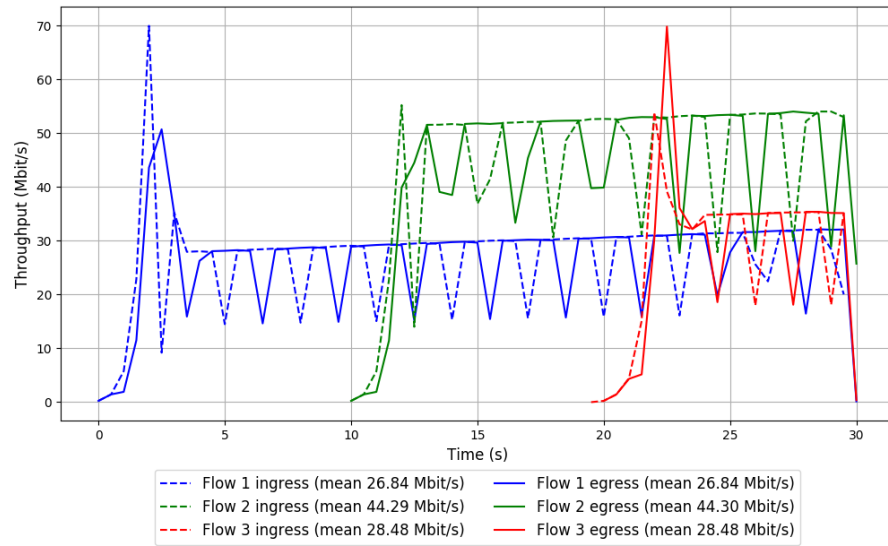
-- Flow 3:

Average throughput: 28.48 Mbit/s

95th percentile per-packet one-way delay: 142.237 ms

Loss rate: 0.00%

# Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-03-14 23:42:52

End at: 2018-03-14 23:43:22

# Below is generated by plot.py at 2018-03-15 04:38:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 42.35 Mbit/s

95th percentile per-packet one-way delay: 140.733 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.19 Mbit/s

95th percentile per-packet one-way delay: 140.938 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.90 Mbit/s

95th percentile per-packet one-way delay: 139.350 ms

Loss rate: 0.00%

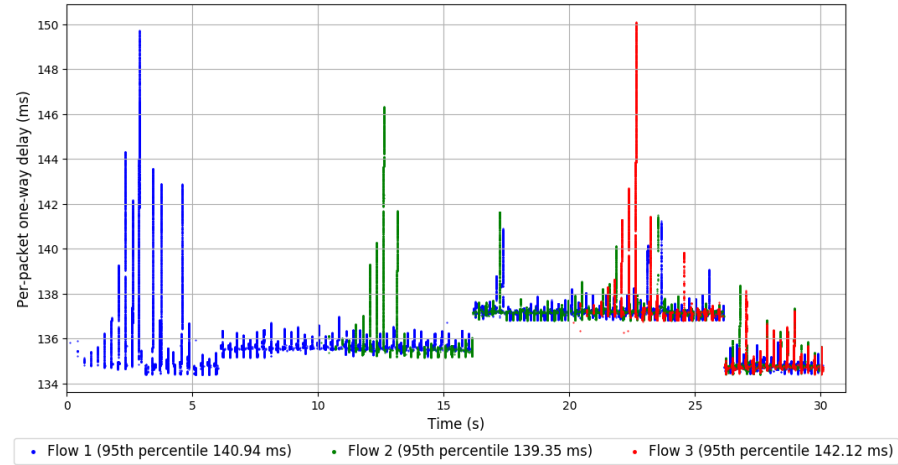
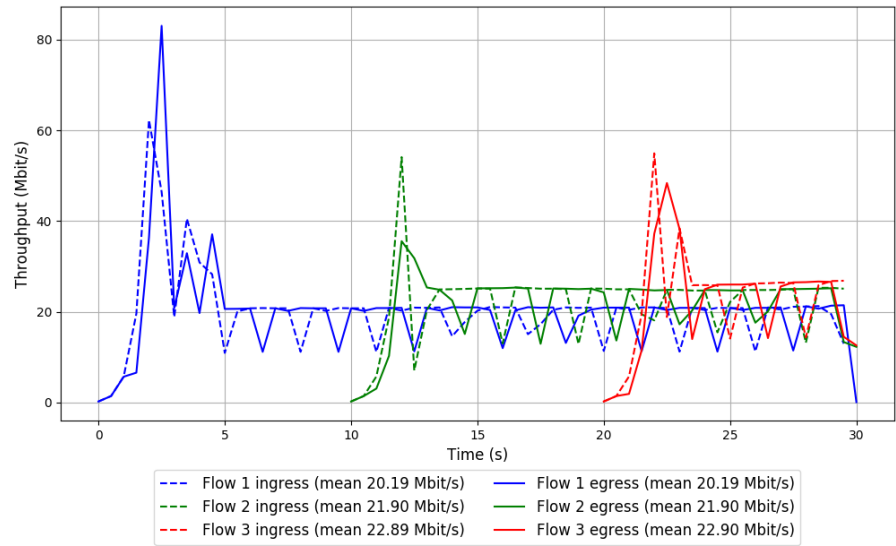
-- Flow 3:

Average throughput: 22.90 Mbit/s

95th percentile per-packet one-way delay: 142.118 ms

Loss rate: 0.00%

# Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-03-15 00:03:12

End at: 2018-03-15 00:03:42

# Below is generated by plot.py at 2018-03-15 04:38:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 49.75 Mbit/s

95th percentile per-packet one-way delay: 138.145 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 24.85 Mbit/s

95th percentile per-packet one-way delay: 137.596 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 25.39 Mbit/s

95th percentile per-packet one-way delay: 137.841 ms

Loss rate: 0.00%

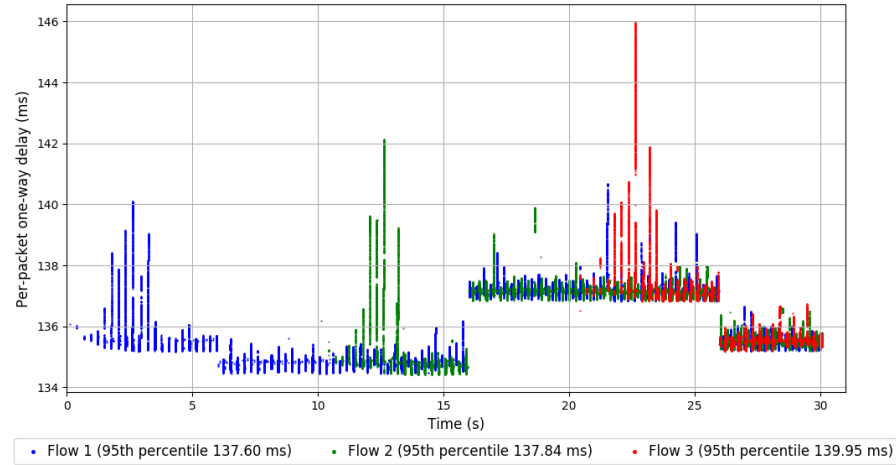
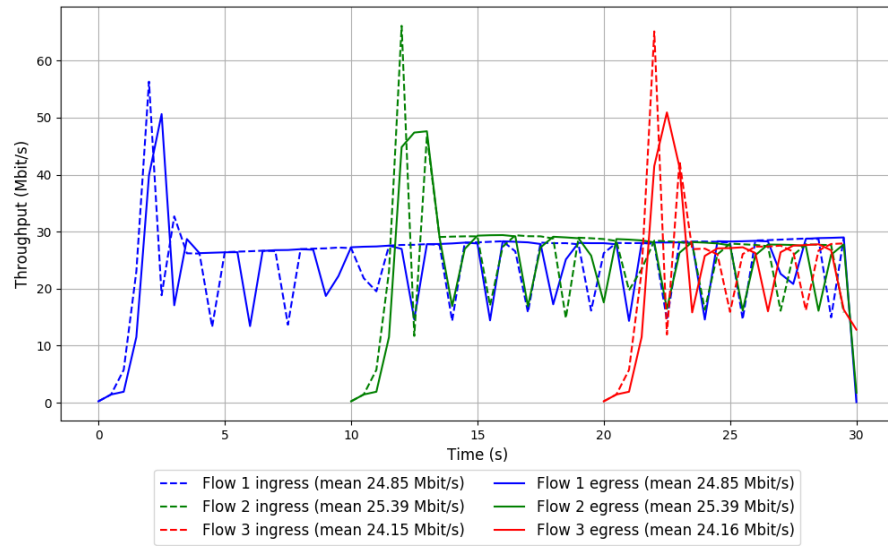
-- Flow 3:

Average throughput: 24.16 Mbit/s

95th percentile per-packet one-way delay: 139.946 ms

Loss rate: 0.00%

# Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-03-15 00:23:22

End at: 2018-03-15 00:23:52

# Below is generated by plot.py at 2018-03-15 04:38:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 61.24 Mbit/s

95th percentile per-packet one-way delay: 138.994 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 35.25 Mbit/s

95th percentile per-packet one-way delay: 137.677 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 23.41 Mbit/s

95th percentile per-packet one-way delay: 139.122 ms

Loss rate: 0.00%

-- Flow 3:

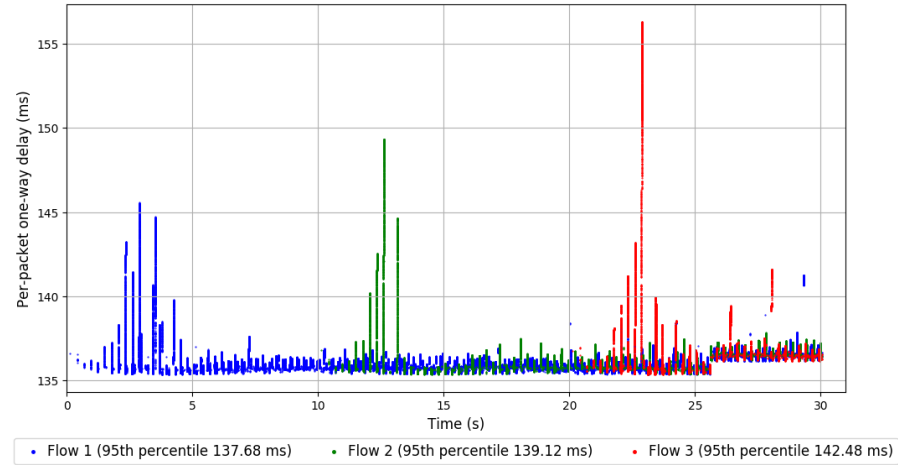
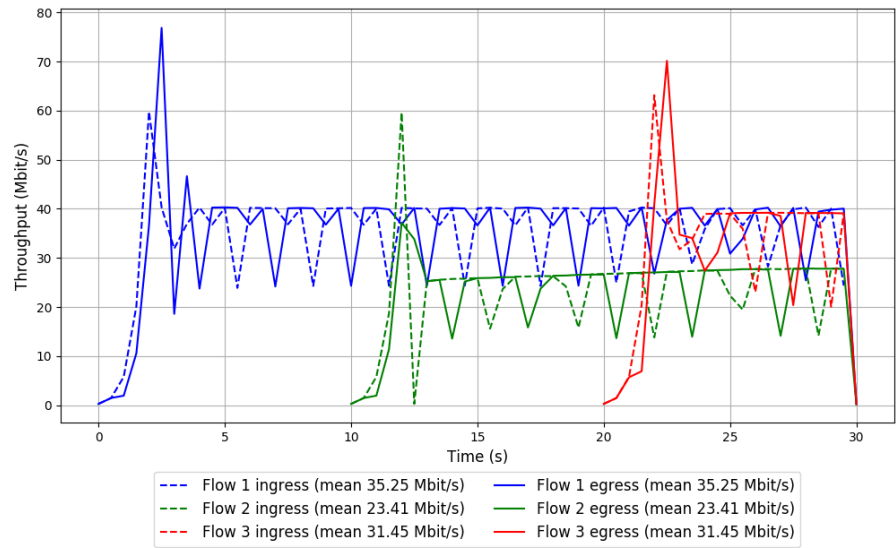
Average throughput: 31.45 Mbit/s

95th percentile per-packet one-way delay: 142.484 ms

Loss rate: 0.00%



# Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-03-15 00:43:46

End at: 2018-03-15 00:44:16

# Below is generated by plot.py at 2018-03-15 04:38:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 71.84 Mbit/s

95th percentile per-packet one-way delay: 137.547 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.10 Mbit/s

95th percentile per-packet one-way delay: 136.606 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 25.02 Mbit/s

95th percentile per-packet one-way delay: 137.528 ms

Loss rate: 0.00%

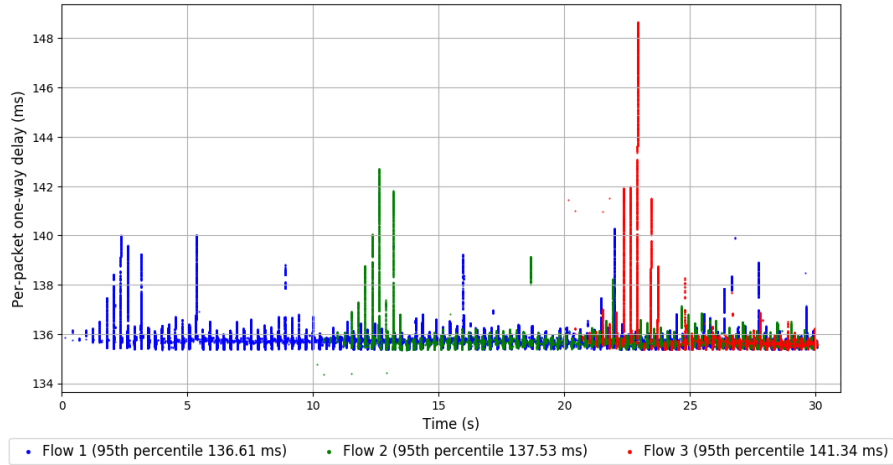
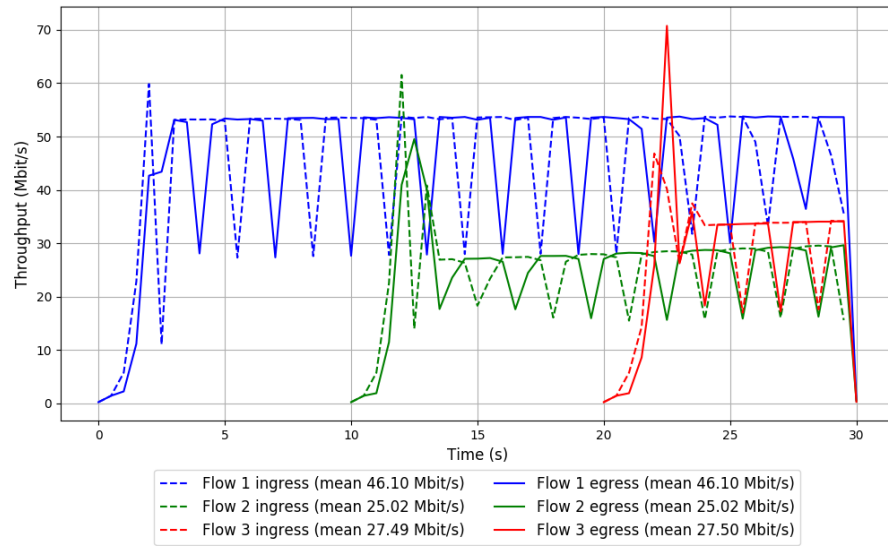
-- Flow 3:

Average throughput: 27.50 Mbit/s

95th percentile per-packet one-way delay: 141.341 ms

Loss rate: 0.00%

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



Run 9: Statistics of TCP Vegas

Start at: 2018-03-15 01:04:13

End at: 2018-03-15 01:04:43

# Below is generated by plot.py at 2018-03-15 04:38:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 47.64 Mbit/s

95th percentile per-packet one-way delay: 138.630 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 25.89 Mbit/s

95th percentile per-packet one-way delay: 138.941 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.48 Mbit/s

95th percentile per-packet one-way delay: 137.571 ms

Loss rate: 0.00%

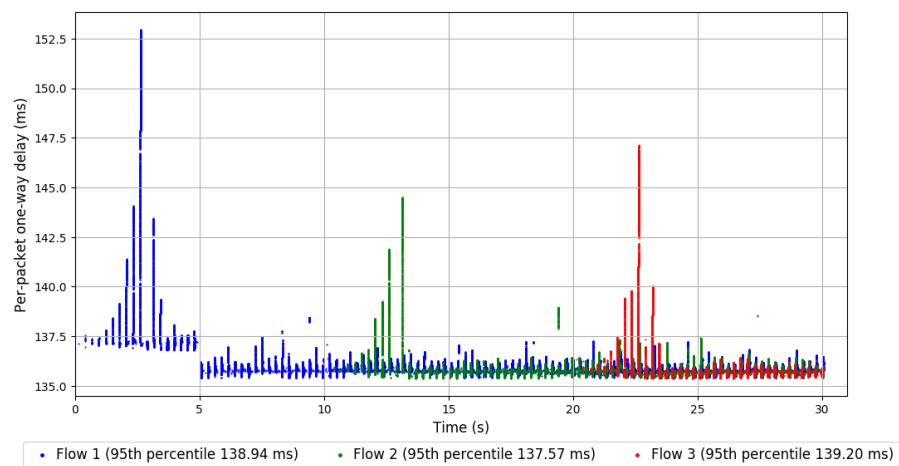
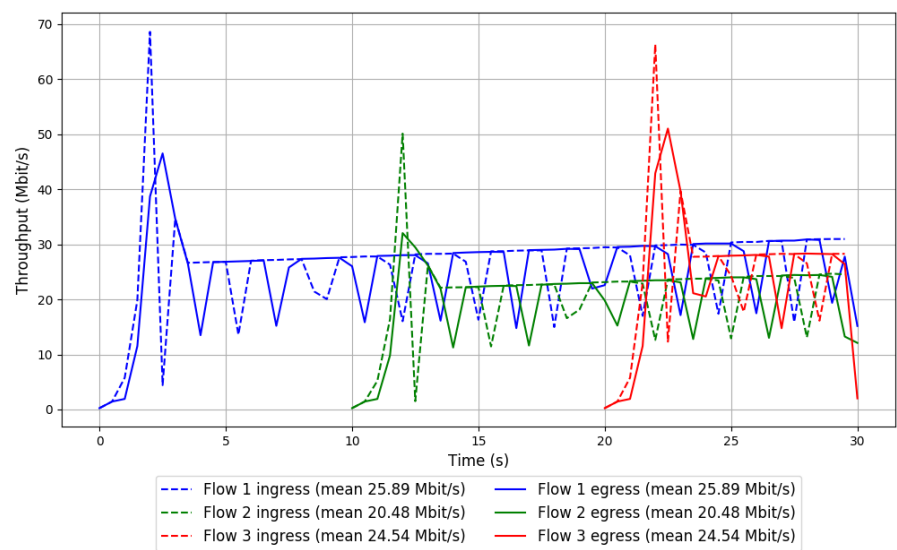
-- Flow 3:

Average throughput: 24.54 Mbit/s

95th percentile per-packet one-way delay: 139.199 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-03-15 01:24:35

End at: 2018-03-15 01:25:05

# Below is generated by plot.py at 2018-03-15 04:38:36

# Datalink statistics

-- Total of 3 flows:

Average throughput: 53.57 Mbit/s

95th percentile per-packet one-way delay: 137.826 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 27.18 Mbit/s

95th percentile per-packet one-way delay: 137.650 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 26.22 Mbit/s

95th percentile per-packet one-way delay: 137.893 ms

Loss rate: 0.00%

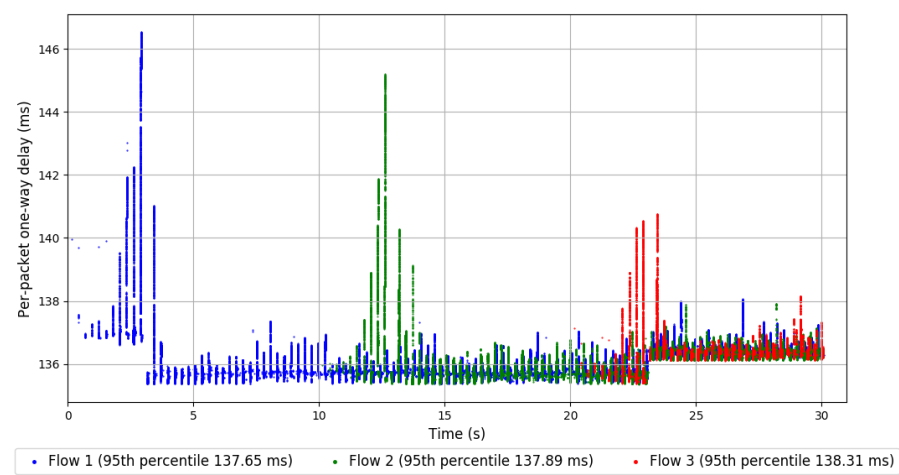
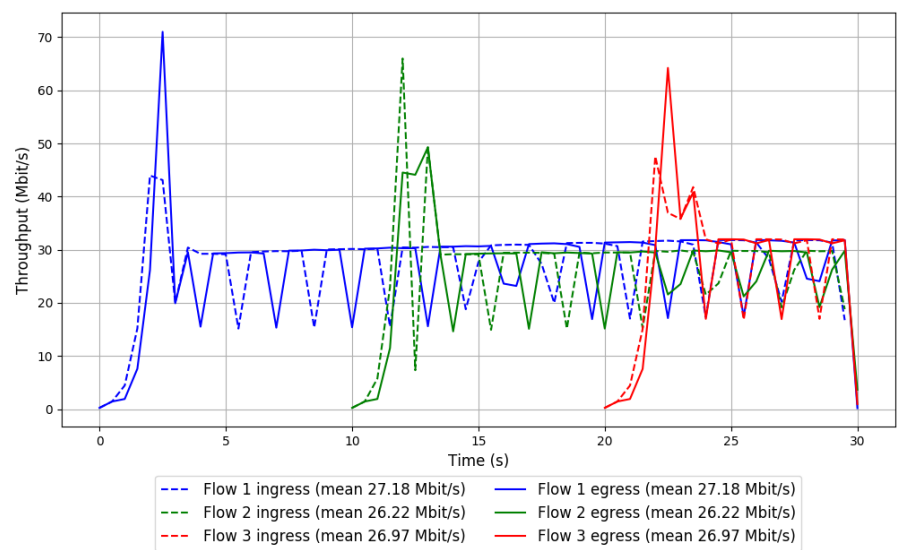
-- Flow 3:

Average throughput: 26.97 Mbit/s

95th percentile per-packet one-way delay: 138.306 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



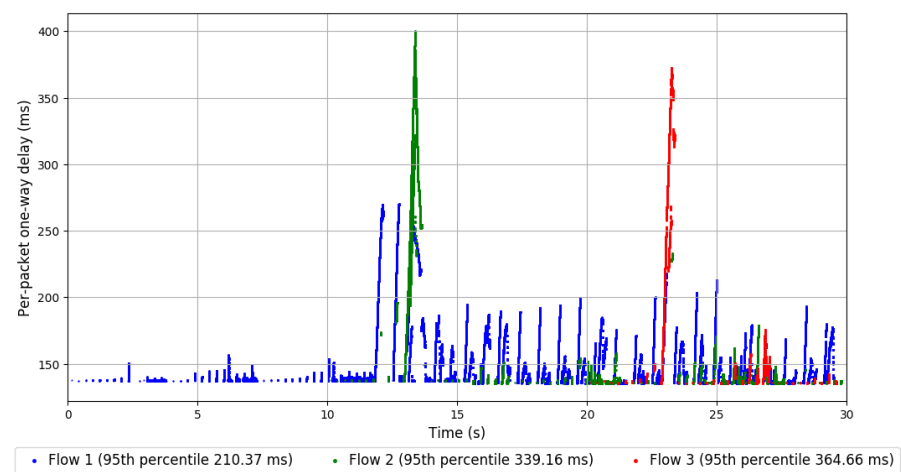
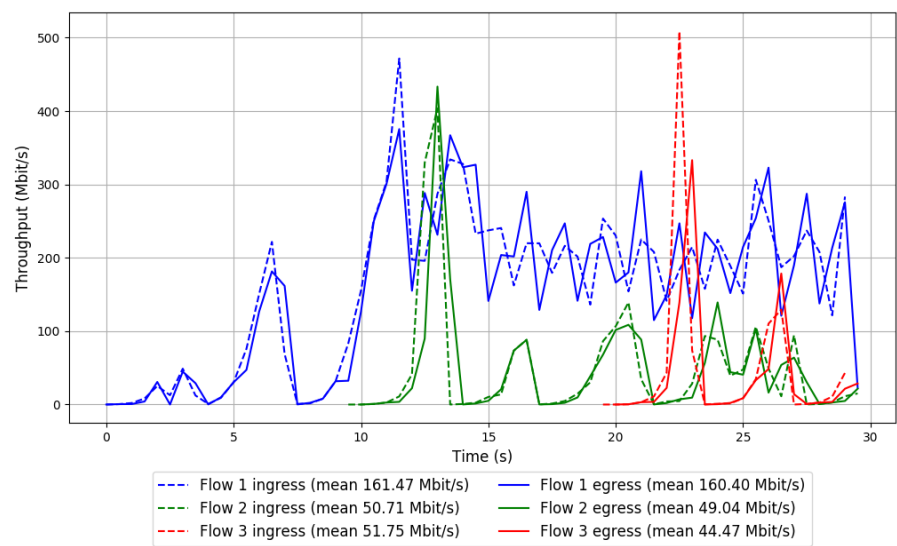
```
Run 1: Statistics of Verus

Start at: 2018-03-14 22:05:12
End at: 2018-03-14 22:05:42

# Below is generated by plot.py at 2018-03-15 04:38:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 205.86 Mbit/s
95th percentile per-packet one-way delay: 267.135 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 160.40 Mbit/s
95th percentile per-packet one-way delay: 210.367 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 49.04 Mbit/s
95th percentile per-packet one-way delay: 339.160 ms
Loss rate: 3.30%
-- Flow 3:
Average throughput: 44.47 Mbit/s
95th percentile per-packet one-way delay: 364.662 ms
Loss rate: 14.06%
```



Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-03-14 22:25:35

End at: 2018-03-14 22:26:05

# Below is generated by plot.py at 2018-03-15 04:38:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 198.81 Mbit/s

95th percentile per-packet one-way delay: 200.308 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 142.45 Mbit/s

95th percentile per-packet one-way delay: 234.580 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 66.92 Mbit/s

95th percentile per-packet one-way delay: 168.964 ms

Loss rate: 0.00%

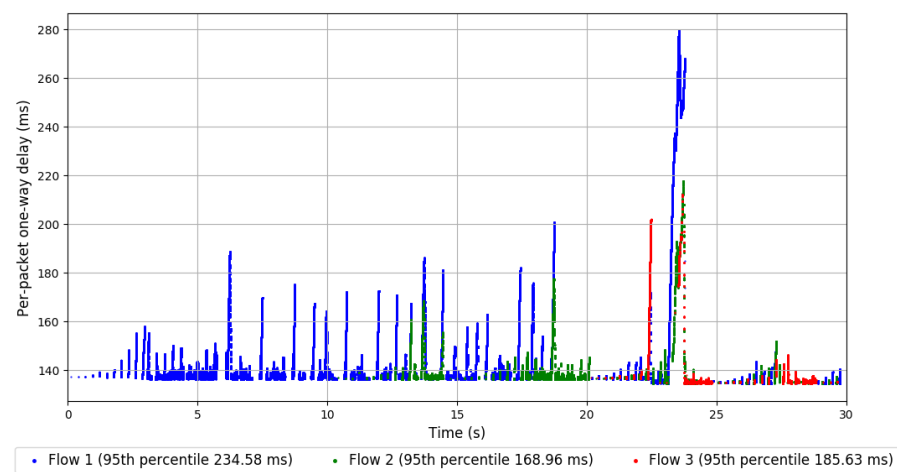
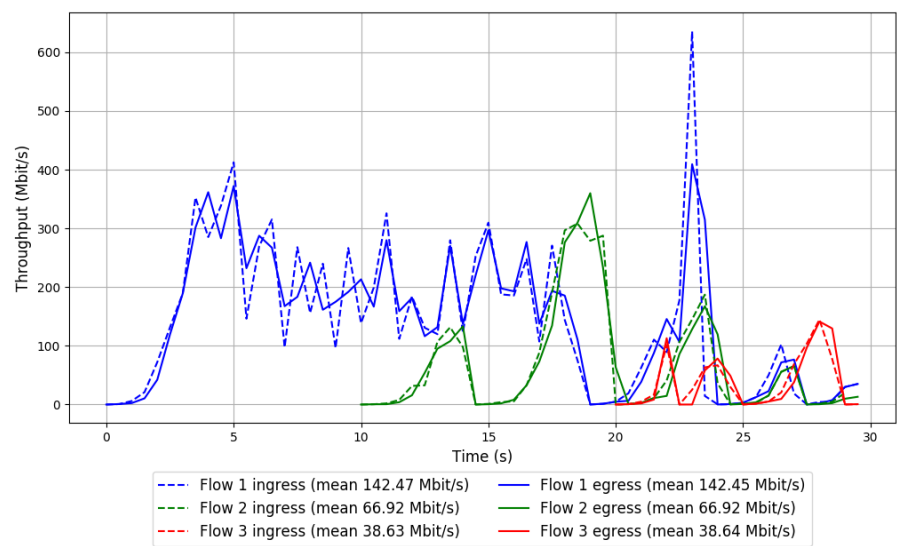
-- Flow 3:

Average throughput: 38.64 Mbit/s

95th percentile per-packet one-way delay: 185.635 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-03-14 22:46:03

End at: 2018-03-14 22:46:33

# Below is generated by plot.py at 2018-03-15 04:39:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 243.40 Mbit/s

95th percentile per-packet one-way delay: 163.428 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 187.62 Mbit/s

95th percentile per-packet one-way delay: 160.993 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 62.89 Mbit/s

95th percentile per-packet one-way delay: 247.548 ms

Loss rate: 0.00%

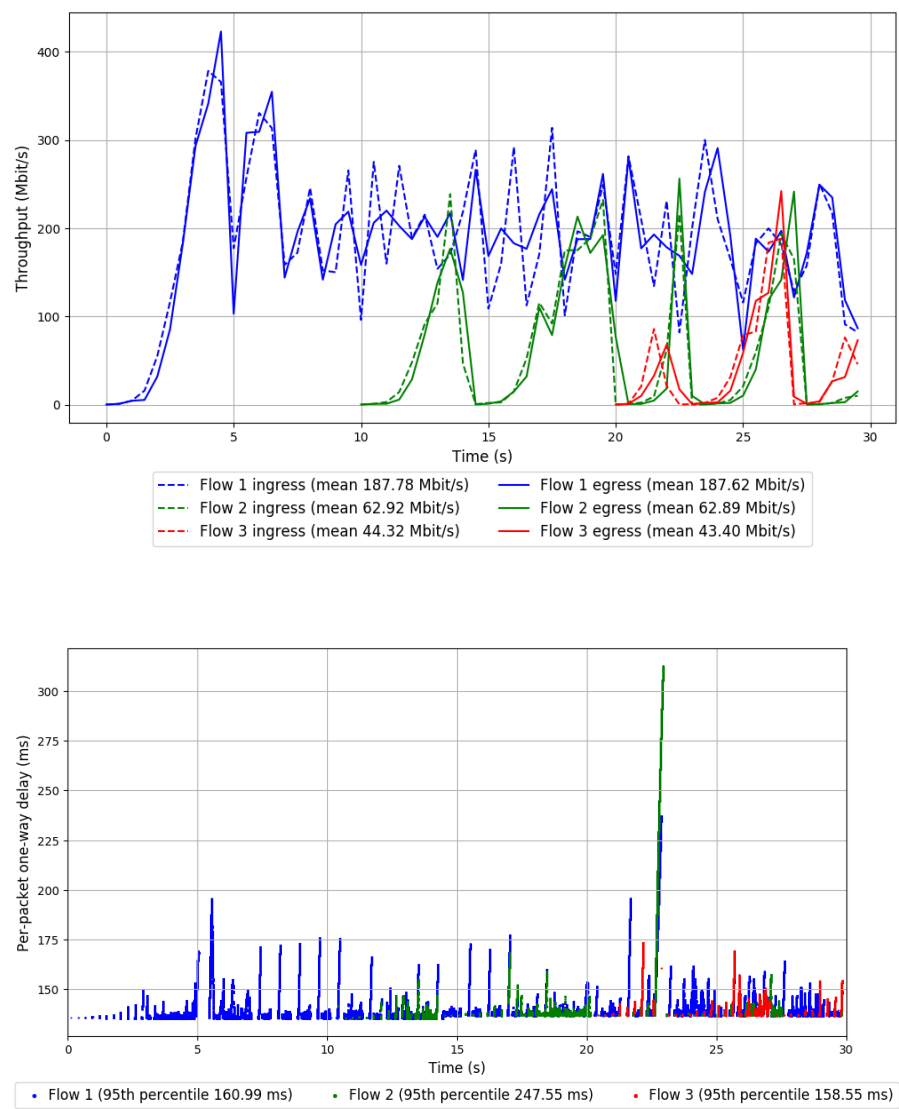
-- Flow 3:

Average throughput: 43.40 Mbit/s

95th percentile per-packet one-way delay: 158.550 ms

Loss rate: 2.07%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-03-14 23:06:32

End at: 2018-03-14 23:07:02

# Below is generated by plot.py at 2018-03-15 04:42:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 325.12 Mbit/s

95th percentile per-packet one-way delay: 183.191 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 185.63 Mbit/s

95th percentile per-packet one-way delay: 176.344 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 204.54 Mbit/s

95th percentile per-packet one-way delay: 187.679 ms

Loss rate: 0.01%

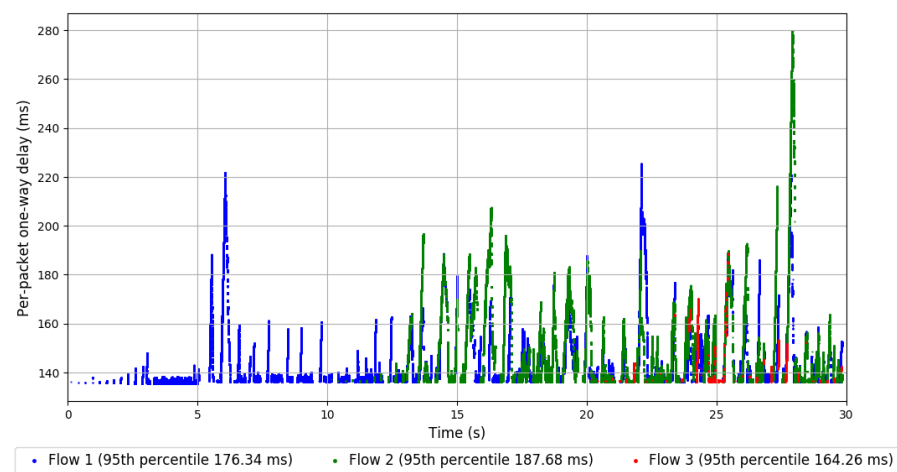
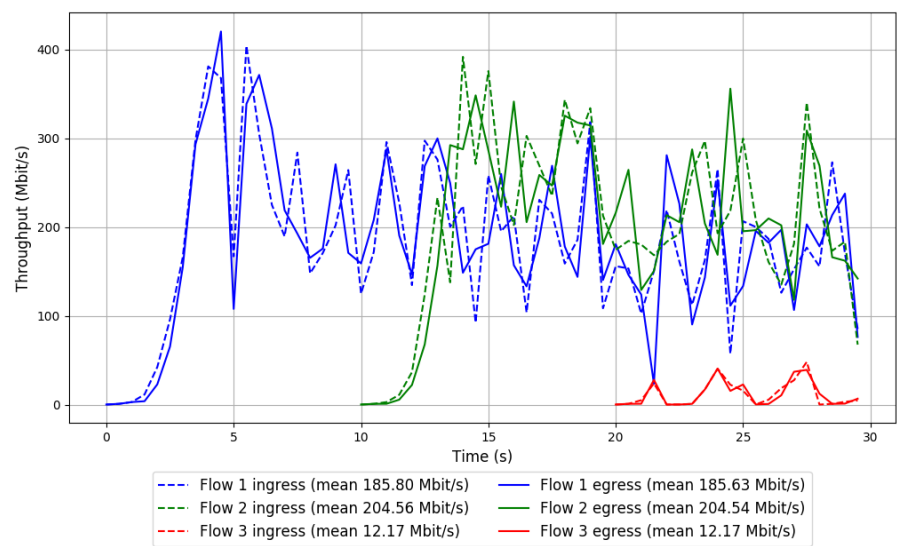
-- Flow 3:

Average throughput: 12.17 Mbit/s

95th percentile per-packet one-way delay: 164.260 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-03-14 23:27:14

End at: 2018-03-14 23:27:44

# Below is generated by plot.py at 2018-03-15 04:42:01

# Datalink statistics

-- Total of 3 flows:

Average throughput: 225.04 Mbit/s

95th percentile per-packet one-way delay: 176.335 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 79.86 Mbit/s

95th percentile per-packet one-way delay: 148.372 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 200.98 Mbit/s

95th percentile per-packet one-way delay: 186.758 ms

Loss rate: 0.26%

-- Flow 3:

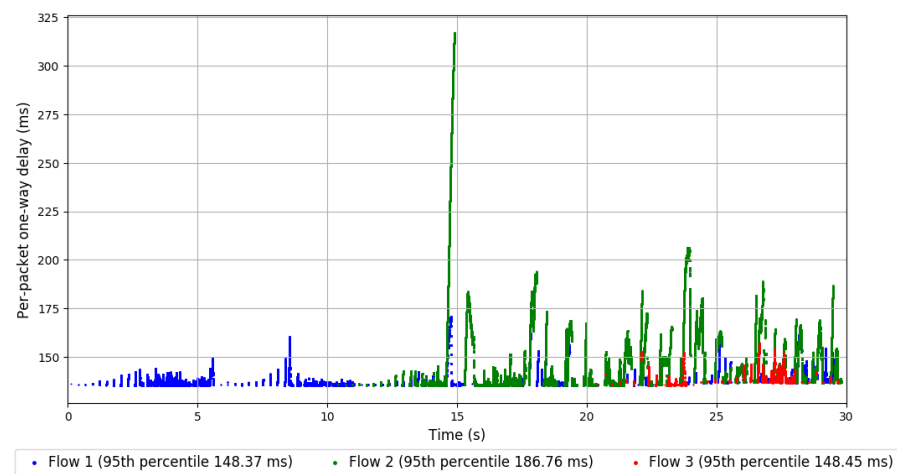
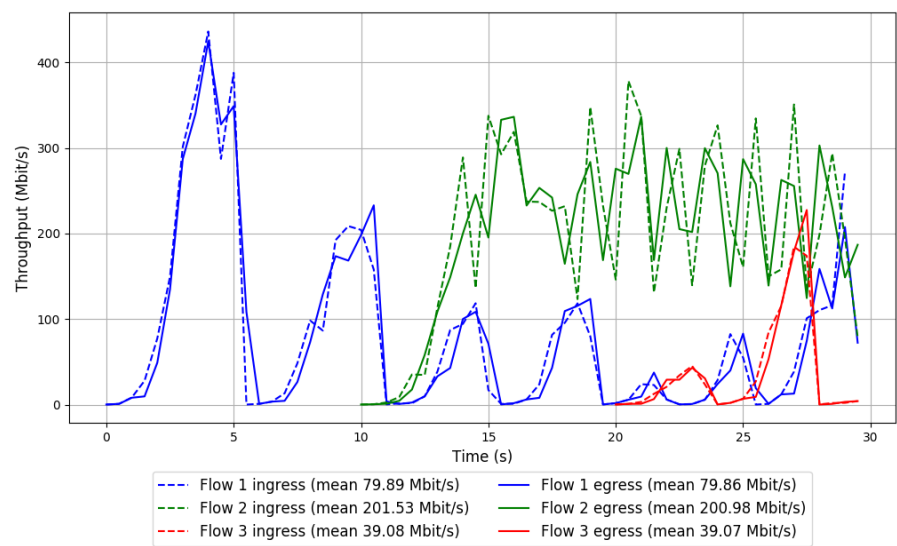
Average throughput: 39.07 Mbit/s

95th percentile per-packet one-way delay: 148.448 ms

Loss rate: 0.00%



Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-03-14 23:47:24

End at: 2018-03-14 23:47:54

# Below is generated by plot.py at 2018-03-15 04:42:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 338.89 Mbit/s

95th percentile per-packet one-way delay: 268.990 ms

Loss rate: 2.52%

-- Flow 1:

Average throughput: 174.27 Mbit/s

95th percentile per-packet one-way delay: 240.035 ms

Loss rate: 1.72%

-- Flow 2:

Average throughput: 240.15 Mbit/s

95th percentile per-packet one-way delay: 319.623 ms

Loss rate: 3.42%

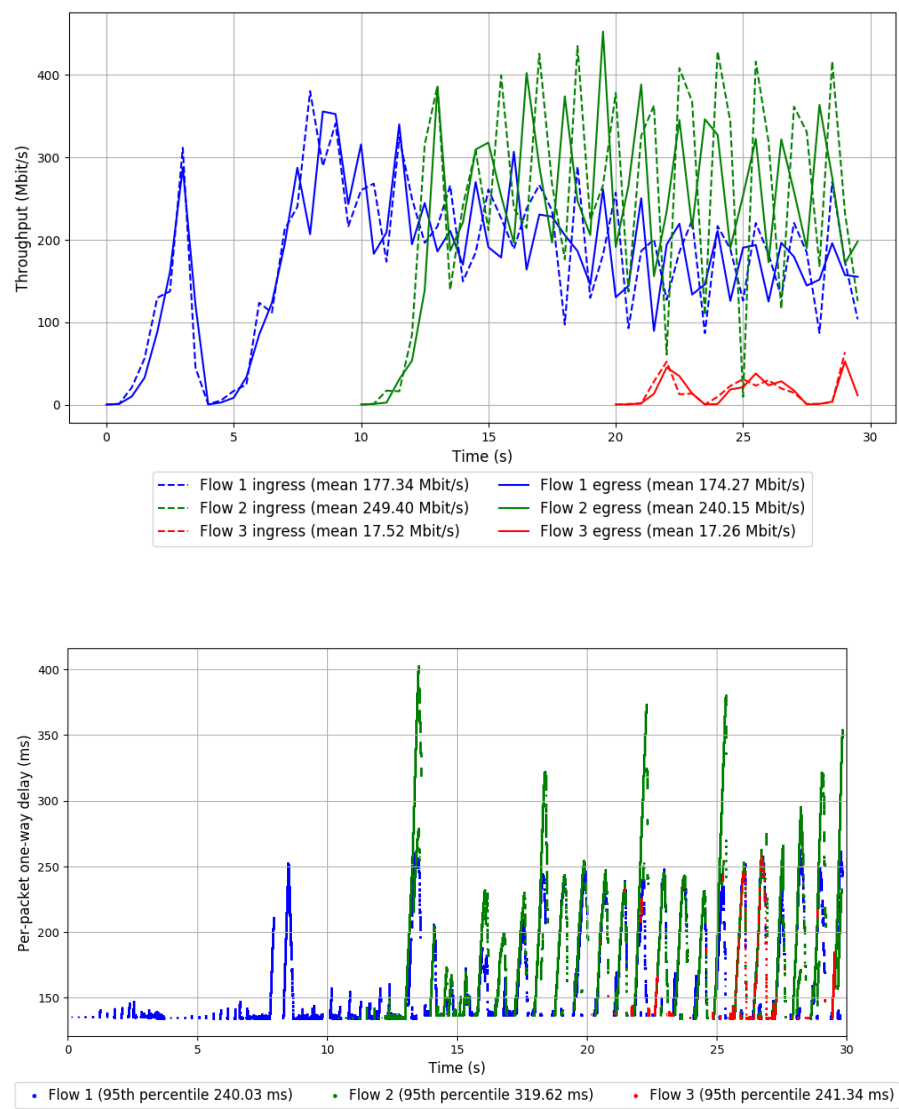
-- Flow 3:

Average throughput: 17.26 Mbit/s

95th percentile per-packet one-way delay: 241.340 ms

Loss rate: 0.96%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-03-15 00:07:35

End at: 2018-03-15 00:08:05

# Below is generated by plot.py at 2018-03-15 04:44:02

# Datalink statistics

-- Total of 3 flows:

Average throughput: 283.44 Mbit/s

95th percentile per-packet one-way delay: 193.858 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 208.08 Mbit/s

95th percentile per-packet one-way delay: 197.973 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 89.41 Mbit/s

95th percentile per-packet one-way delay: 183.338 ms

Loss rate: 0.00%

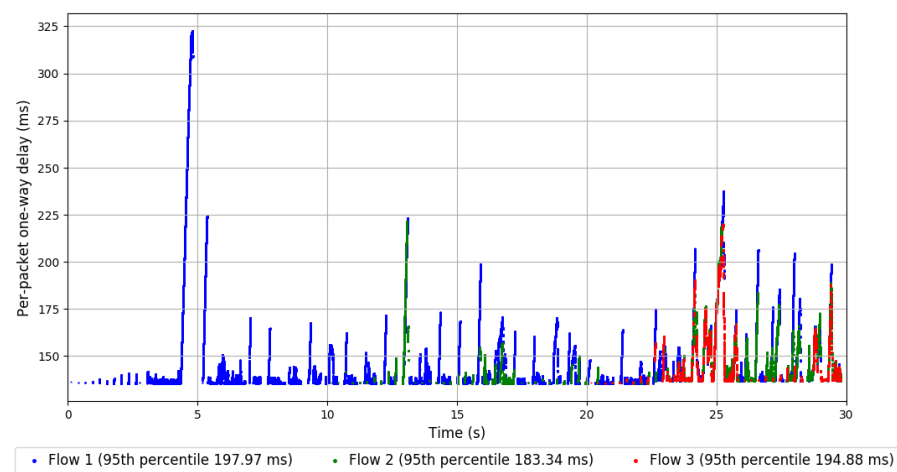
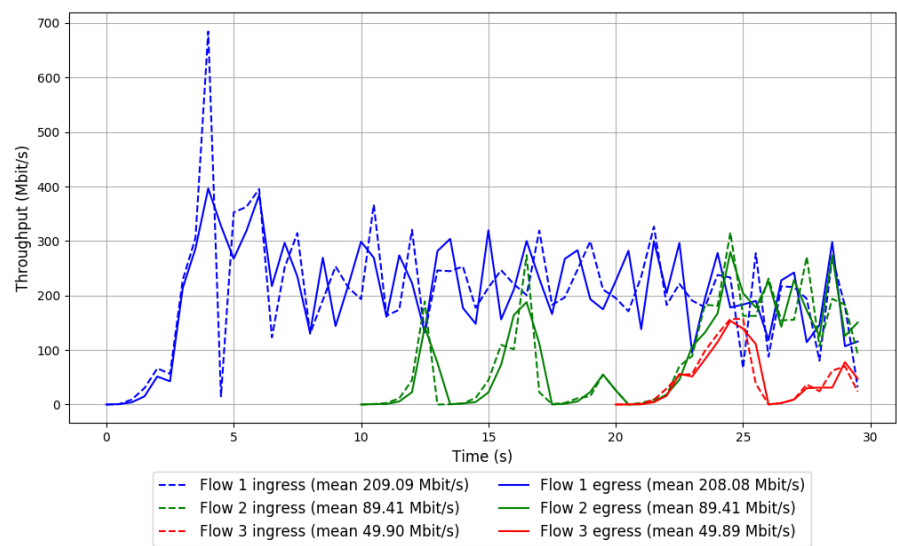
-- Flow 3:

Average throughput: 49.89 Mbit/s

95th percentile per-packet one-way delay: 194.881 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-03-15 00:28:19

End at: 2018-03-15 00:28:49

# Below is generated by plot.py at 2018-03-15 04:45:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 293.67 Mbit/s

95th percentile per-packet one-way delay: 248.531 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 196.53 Mbit/s

95th percentile per-packet one-way delay: 245.511 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 94.14 Mbit/s

95th percentile per-packet one-way delay: 236.522 ms

Loss rate: 1.31%

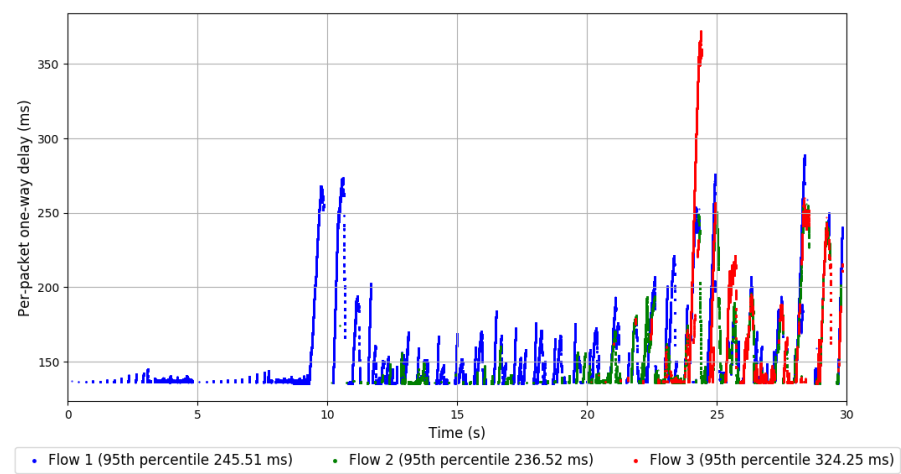
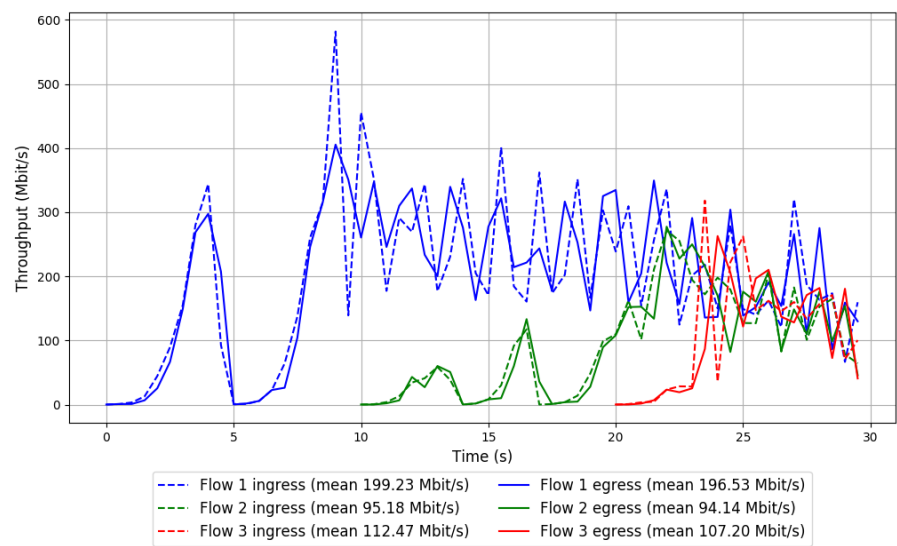
-- Flow 3:

Average throughput: 107.20 Mbit/s

95th percentile per-packet one-way delay: 324.252 ms

Loss rate: 4.67%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-03-15 00:48:32

End at: 2018-03-15 00:49:02

# Below is generated by plot.py at 2018-03-15 04:45:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 237.00 Mbit/s

95th percentile per-packet one-way delay: 215.387 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 174.06 Mbit/s

95th percentile per-packet one-way delay: 196.016 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 76.46 Mbit/s

95th percentile per-packet one-way delay: 224.113 ms

Loss rate: 1.63%

-- Flow 3:

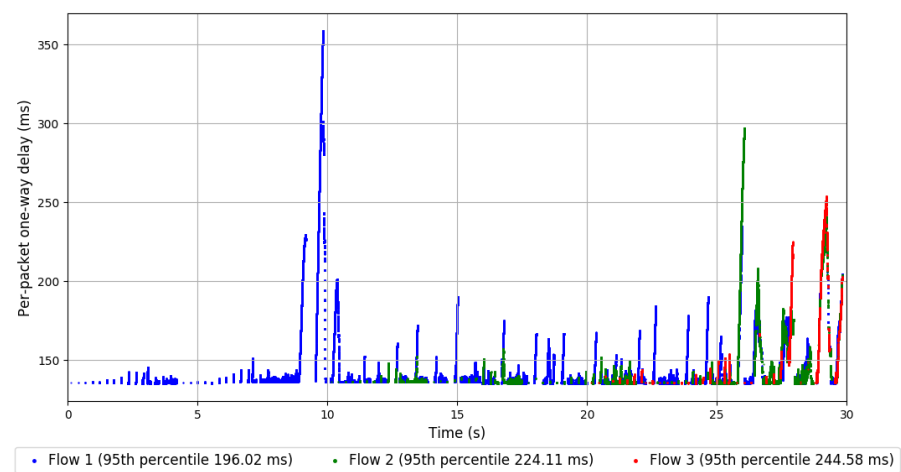
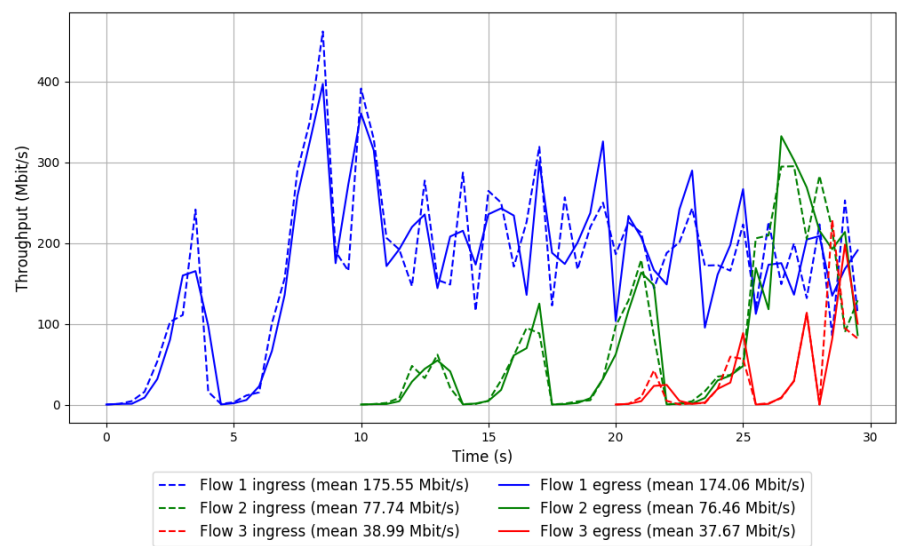
Average throughput: 37.67 Mbit/s

95th percentile per-packet one-way delay: 244.581 ms

Loss rate: 3.36%



Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-03-15 01:08:57

End at: 2018-03-15 01:09:27

# Below is generated by plot.py at 2018-03-15 04:45:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 199.04 Mbit/s

95th percentile per-packet one-way delay: 156.533 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 104.31 Mbit/s

95th percentile per-packet one-way delay: 160.771 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 109.67 Mbit/s

95th percentile per-packet one-way delay: 150.945 ms

Loss rate: 0.00%

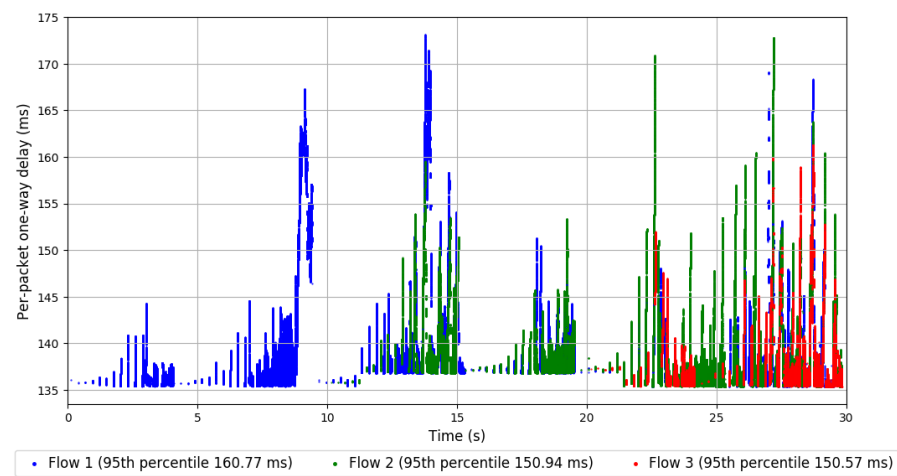
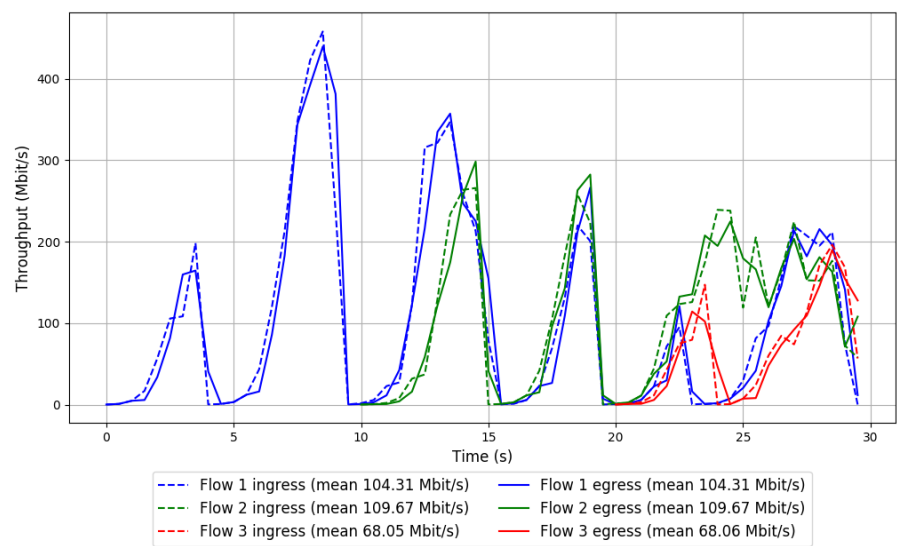
-- Flow 3:

Average throughput: 68.06 Mbit/s

95th percentile per-packet one-way delay: 150.569 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-03-14 22:09:04

End at: 2018-03-14 22:09:34

# Below is generated by plot.py at 2018-03-15 04:45:23

# Datalink statistics

-- Total of 3 flows:

Average throughput: 122.53 Mbit/s

95th percentile per-packet one-way delay: 137.252 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.57 Mbit/s

95th percentile per-packet one-way delay: 137.258 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.30 Mbit/s

95th percentile per-packet one-way delay: 137.242 ms

Loss rate: 0.00%

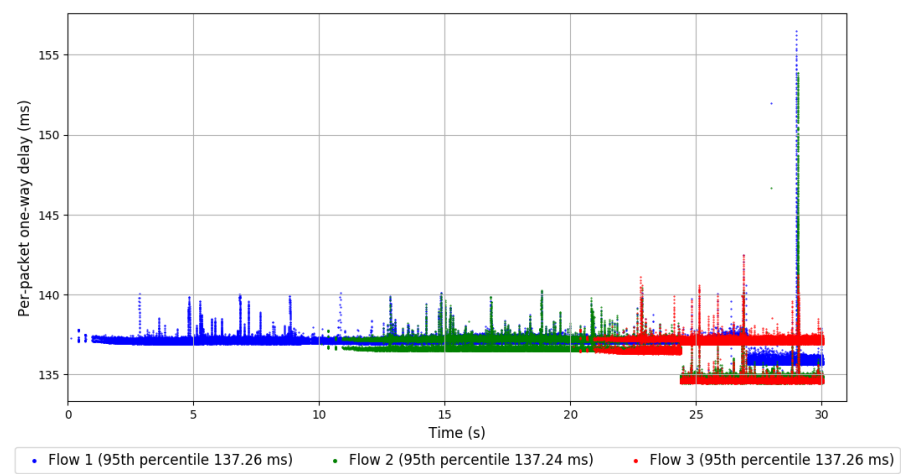
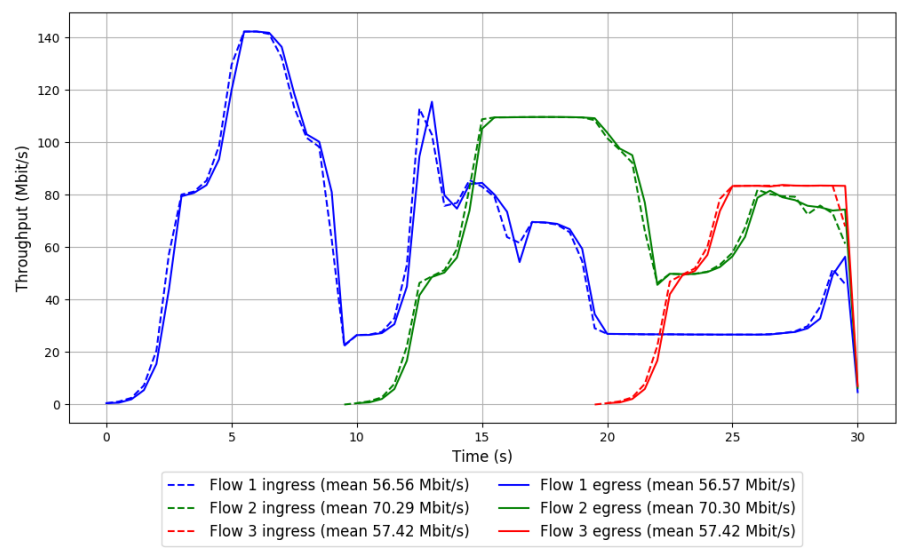
-- Flow 3:

Average throughput: 57.42 Mbit/s

95th percentile per-packet one-way delay: 137.257 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-03-14 22:29:24

End at: 2018-03-14 22:29:54

# Below is generated by plot.py at 2018-03-15 04:45:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 130.65 Mbit/s

95th percentile per-packet one-way delay: 136.884 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.38 Mbit/s

95th percentile per-packet one-way delay: 136.904 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 72.55 Mbit/s

95th percentile per-packet one-way delay: 136.807 ms

Loss rate: 0.00%

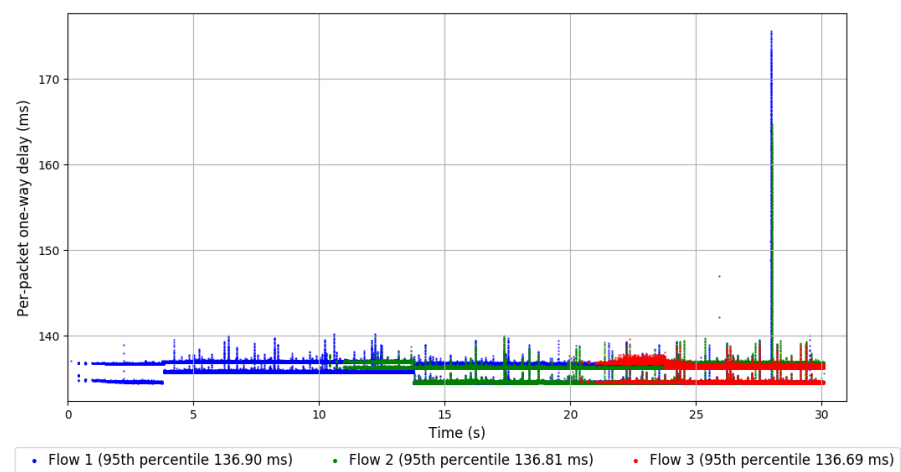
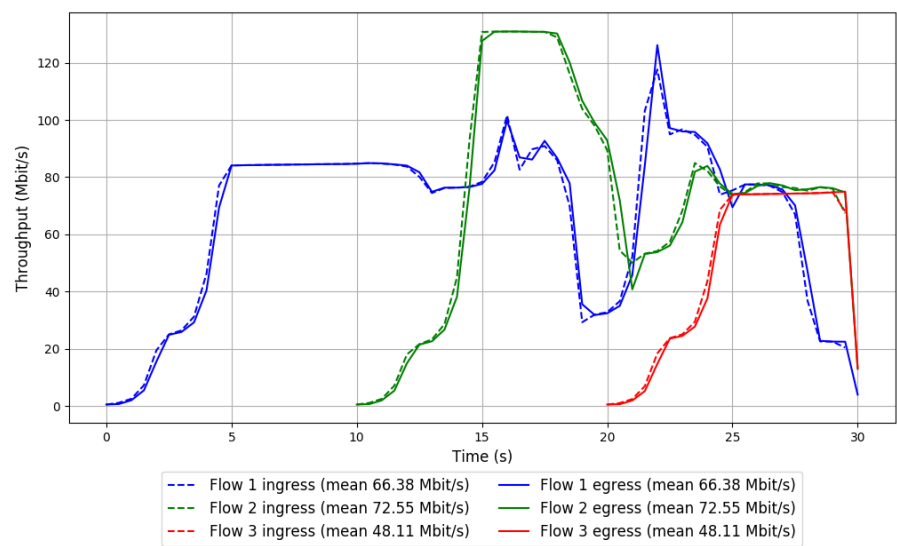
-- Flow 3:

Average throughput: 48.11 Mbit/s

95th percentile per-packet one-way delay: 136.695 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-03-14 22:50:00

End at: 2018-03-14 22:50:30

# Below is generated by plot.py at 2018-03-15 04:47:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 137.66 Mbit/s

95th percentile per-packet one-way delay: 136.981 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.19 Mbit/s

95th percentile per-packet one-way delay: 136.946 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.97 Mbit/s

95th percentile per-packet one-way delay: 136.908 ms

Loss rate: 0.00%

-- Flow 3:

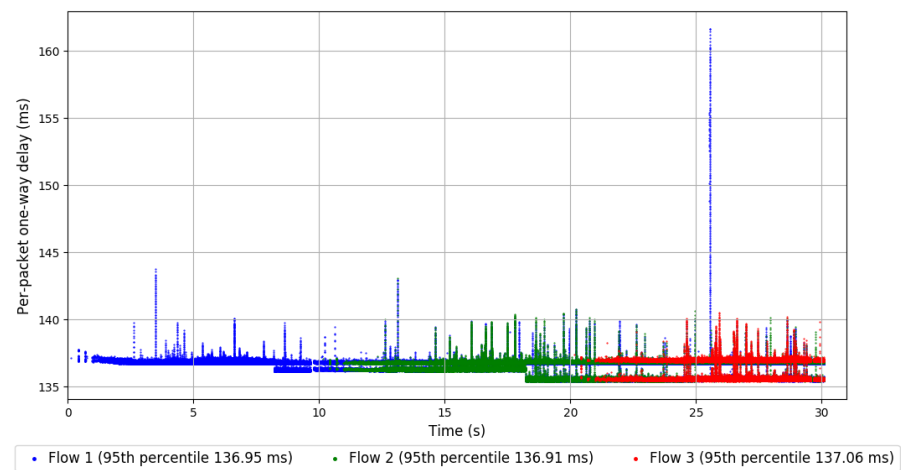
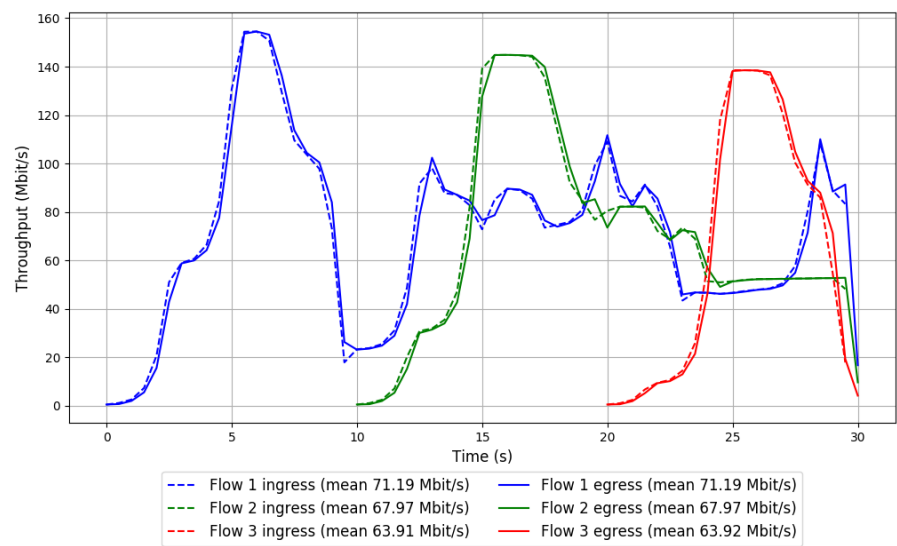
Average throughput: 63.92 Mbit/s

95th percentile per-packet one-way delay: 137.061 ms

Loss rate: 0.00%



Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-03-14 23:10:36

End at: 2018-03-14 23:11:06

# Below is generated by plot.py at 2018-03-15 04:47:55

# Datalink statistics

-- Total of 3 flows:

Average throughput: 103.76 Mbit/s

95th percentile per-packet one-way delay: 136.994 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.34 Mbit/s

95th percentile per-packet one-way delay: 136.948 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.31 Mbit/s

95th percentile per-packet one-way delay: 136.847 ms

Loss rate: 0.00%

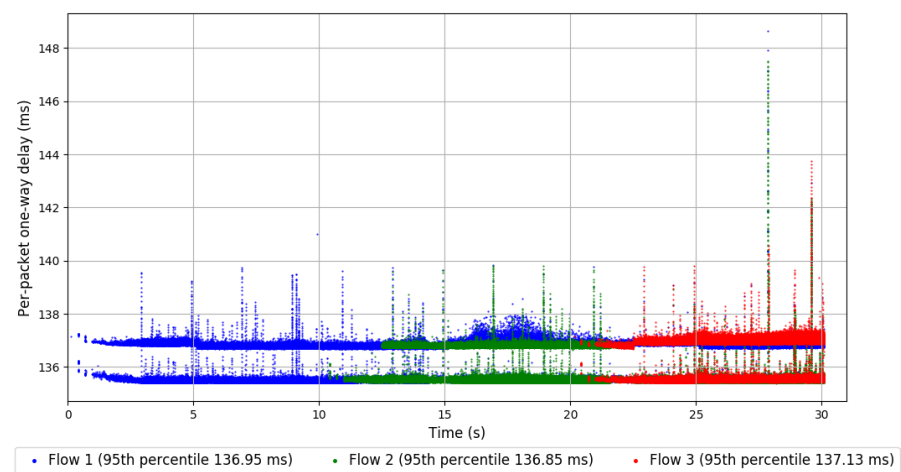
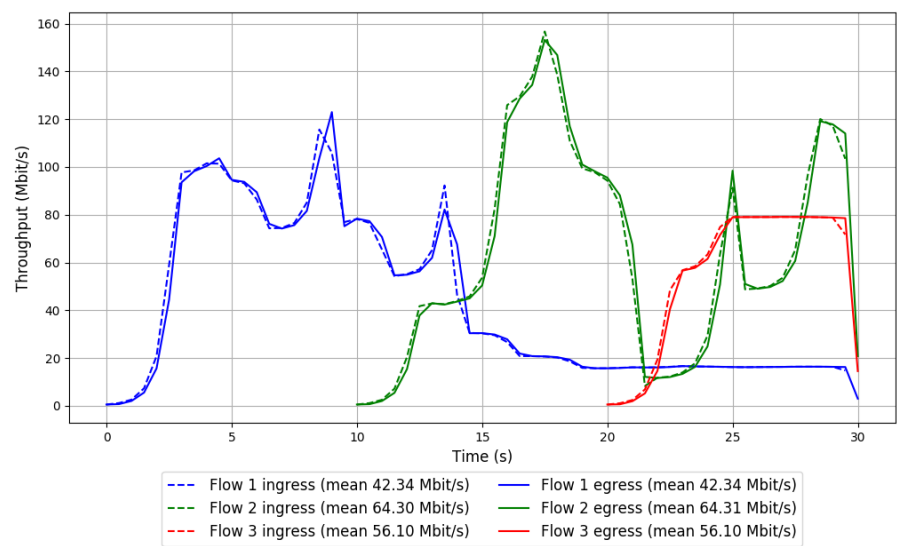
-- Flow 3:

Average throughput: 56.10 Mbit/s

95th percentile per-packet one-way delay: 137.134 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-03-14 23:31:09

End at: 2018-03-14 23:31:39

# Below is generated by plot.py at 2018-03-15 04:49:35

# Datalink statistics

-- Total of 3 flows:

Average throughput: 142.00 Mbit/s

95th percentile per-packet one-way delay: 136.947 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.79 Mbit/s

95th percentile per-packet one-way delay: 136.929 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.86 Mbit/s

95th percentile per-packet one-way delay: 136.975 ms

Loss rate: 0.00%

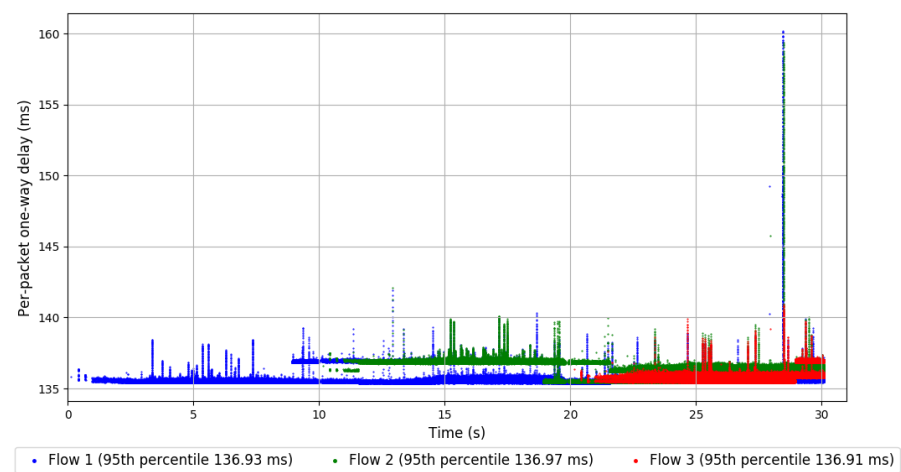
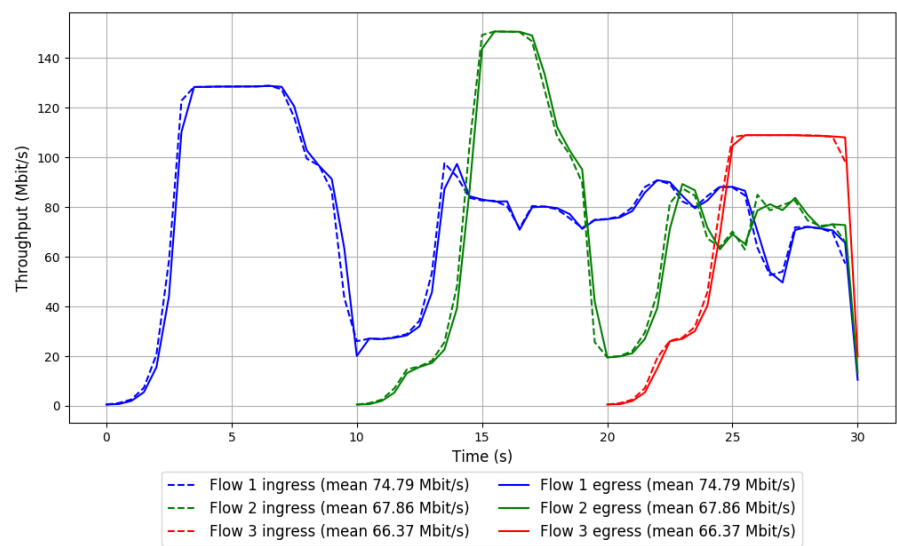
-- Flow 3:

Average throughput: 66.37 Mbit/s

95th percentile per-packet one-way delay: 136.913 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-03-14 23:51:28

End at: 2018-03-14 23:51:58

# Below is generated by plot.py at 2018-03-15 04:50:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 144.19 Mbit/s

95th percentile per-packet one-way delay: 136.923 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.67 Mbit/s

95th percentile per-packet one-way delay: 136.895 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 72.14 Mbit/s

95th percentile per-packet one-way delay: 135.828 ms

Loss rate: 0.00%

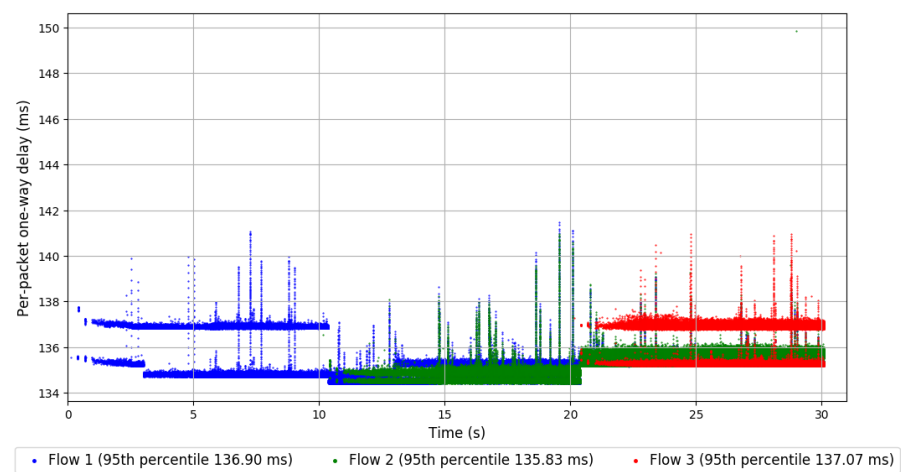
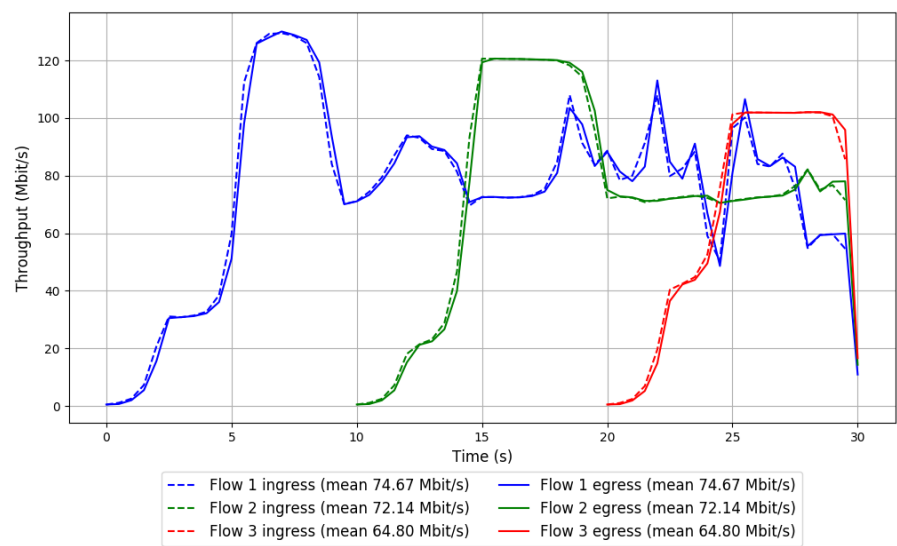
-- Flow 3:

Average throughput: 64.80 Mbit/s

95th percentile per-packet one-way delay: 137.072 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-03-15 00:11:32

End at: 2018-03-15 00:12:02

# Below is generated by plot.py at 2018-03-15 04:50:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 128.15 Mbit/s

95th percentile per-packet one-way delay: 136.939 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.42 Mbit/s

95th percentile per-packet one-way delay: 136.971 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.32 Mbit/s

95th percentile per-packet one-way delay: 136.924 ms

Loss rate: 0.00%

-- Flow 3:

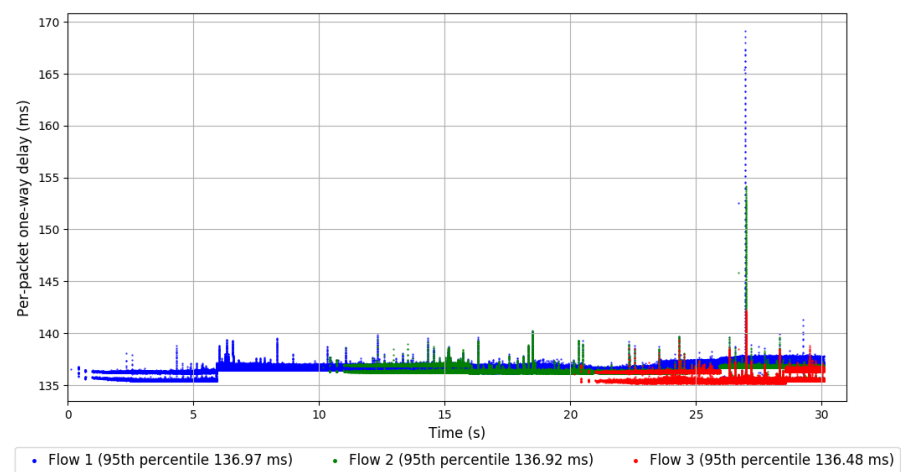
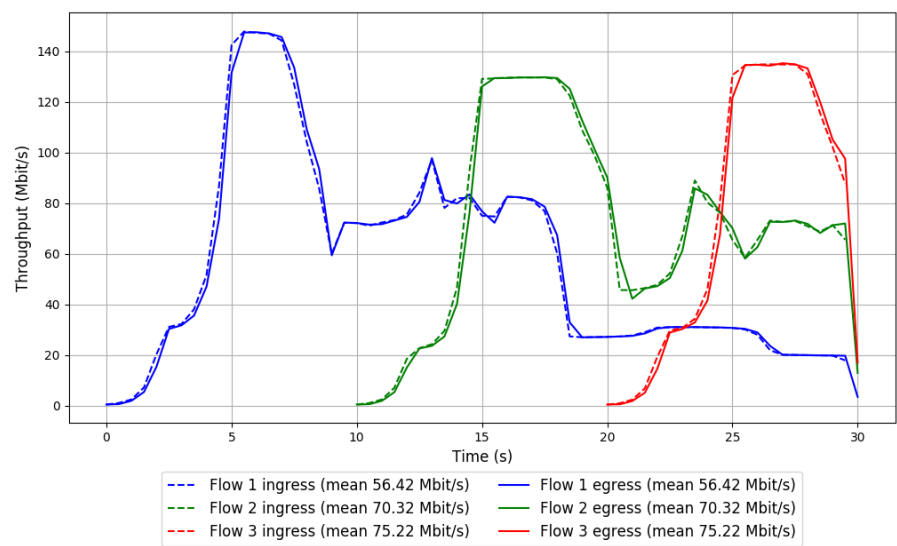
Average throughput: 75.22 Mbit/s

95th percentile per-packet one-way delay: 136.476 ms

Loss rate: 0.00%



Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-03-15 00:32:17

End at: 2018-03-15 00:32:47

# Below is generated by plot.py at 2018-03-15 04:50:37

# Datalink statistics

-- Total of 3 flows:

Average throughput: 130.61 Mbit/s

95th percentile per-packet one-way delay: 136.467 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.88 Mbit/s

95th percentile per-packet one-way delay: 136.493 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.44 Mbit/s

95th percentile per-packet one-way delay: 136.478 ms

Loss rate: 0.01%

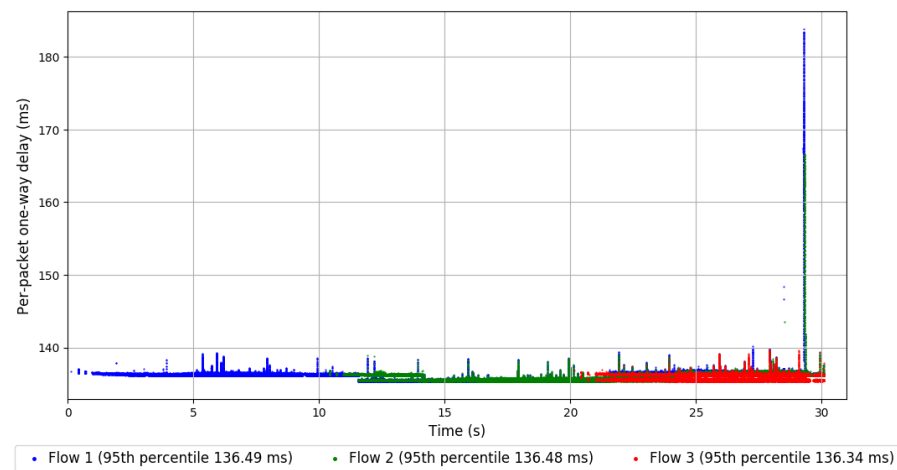
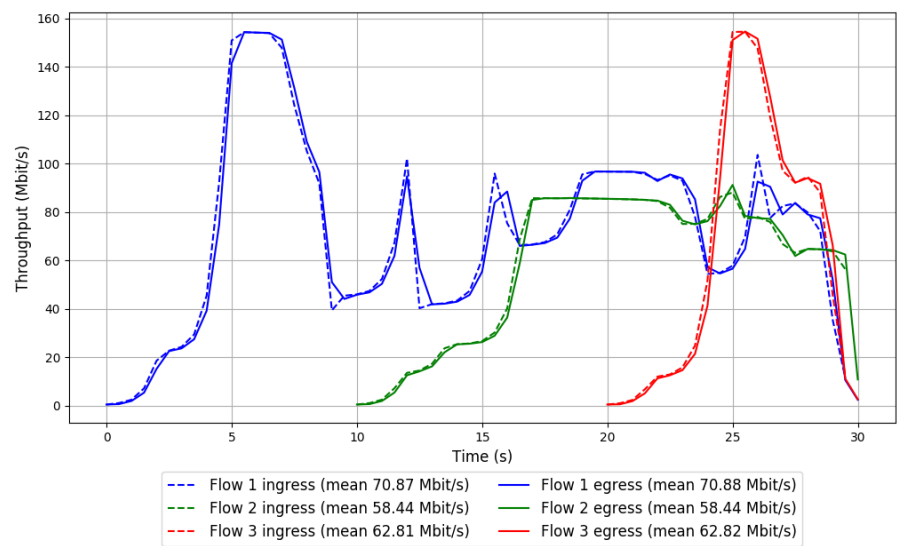
-- Flow 3:

Average throughput: 62.82 Mbit/s

95th percentile per-packet one-way delay: 136.337 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-03-15 00:52:27

End at: 2018-03-15 00:52:57

# Below is generated by plot.py at 2018-03-15 04:51:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 140.58 Mbit/s

95th percentile per-packet one-way delay: 136.552 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.08 Mbit/s

95th percentile per-packet one-way delay: 135.837 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.67 Mbit/s

95th percentile per-packet one-way delay: 136.593 ms

Loss rate: 0.00%

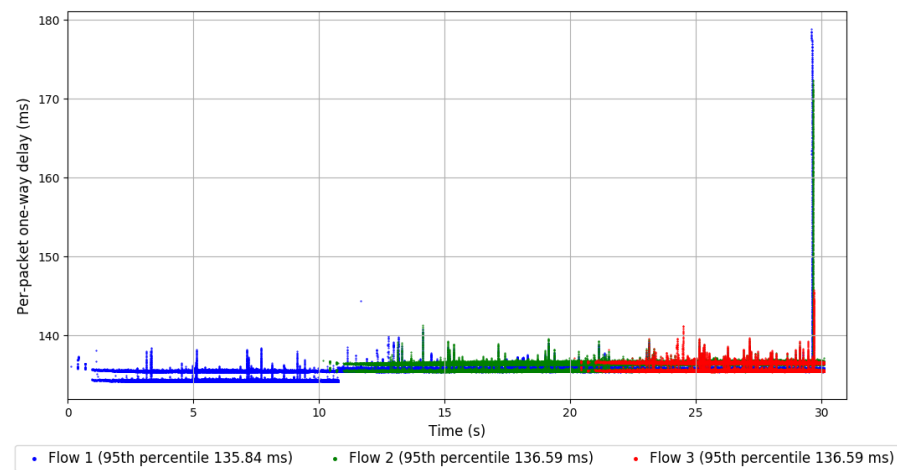
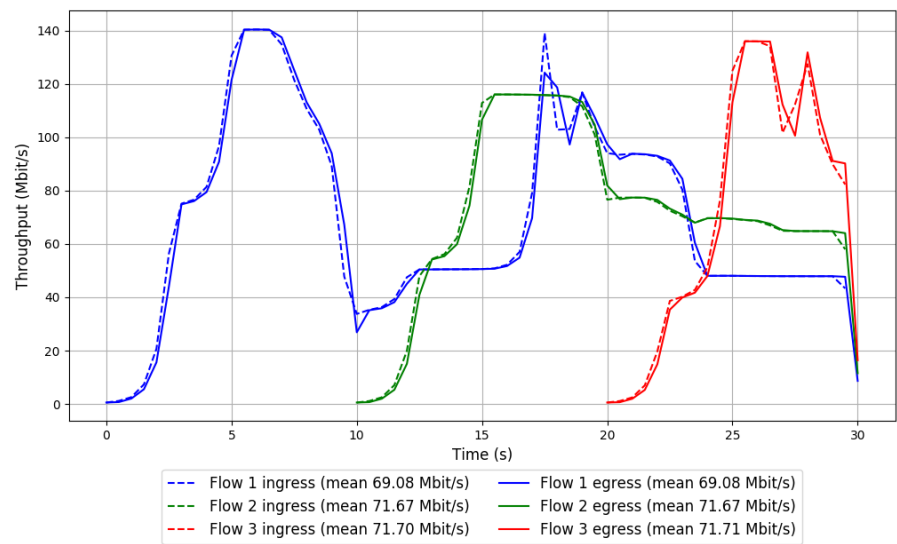
-- Flow 3:

Average throughput: 71.71 Mbit/s

95th percentile per-packet one-way delay: 136.592 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-03-15 01:12:52

End at: 2018-03-15 01:13:22

# Below is generated by plot.py at 2018-03-15 04:51:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 138.43 Mbit/s

95th percentile per-packet one-way delay: 139.638 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.51 Mbit/s

95th percentile per-packet one-way delay: 139.692 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.47 Mbit/s

95th percentile per-packet one-way delay: 136.244 ms

Loss rate: 0.00%

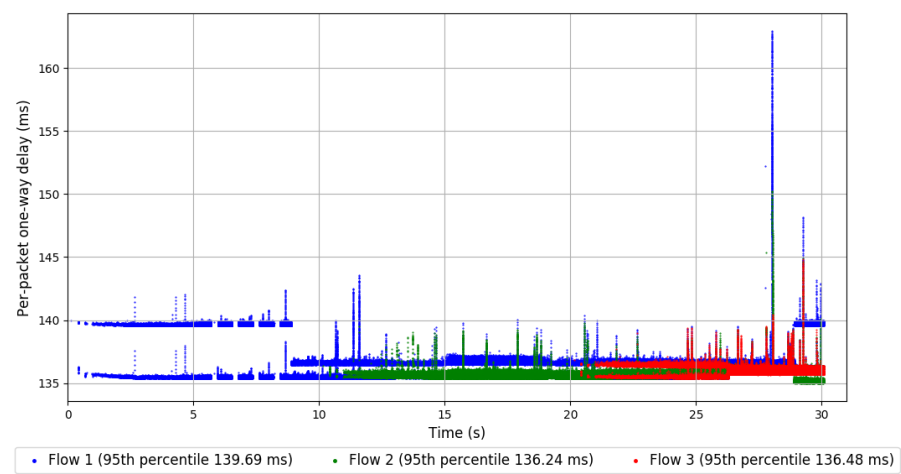
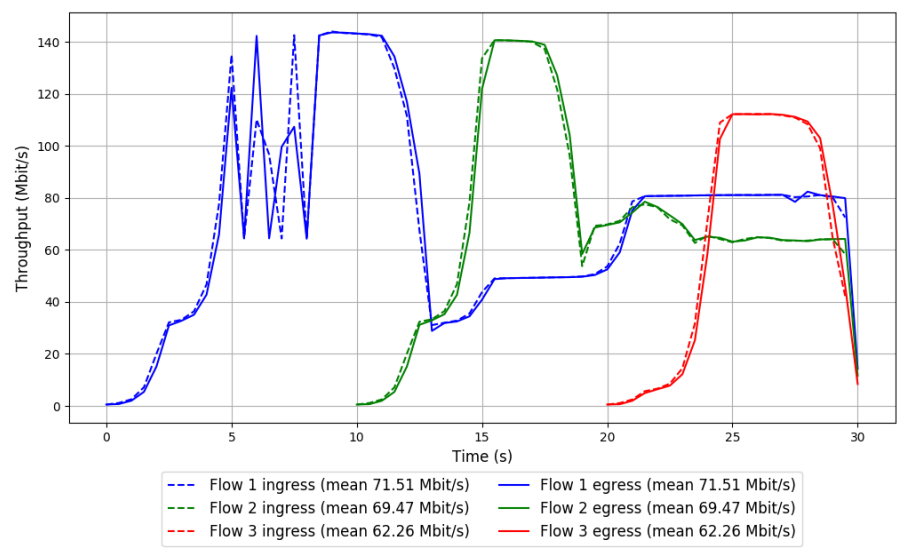
-- Flow 3:

Average throughput: 62.26 Mbit/s

95th percentile per-packet one-way delay: 136.481 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link



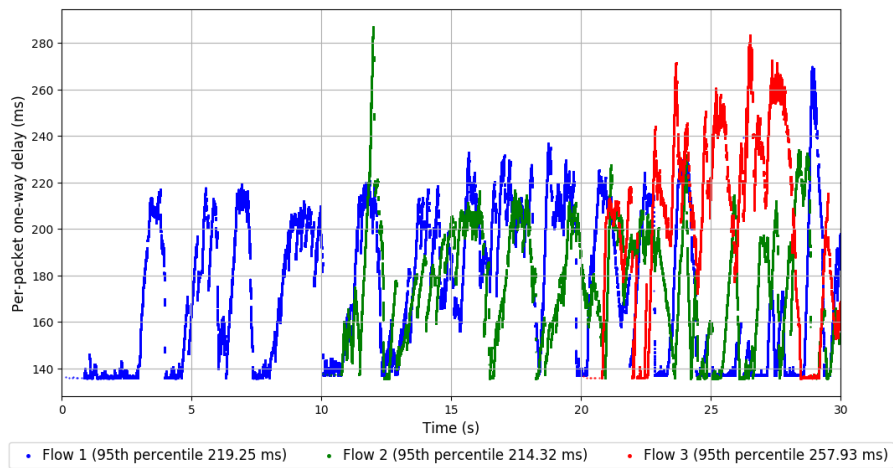
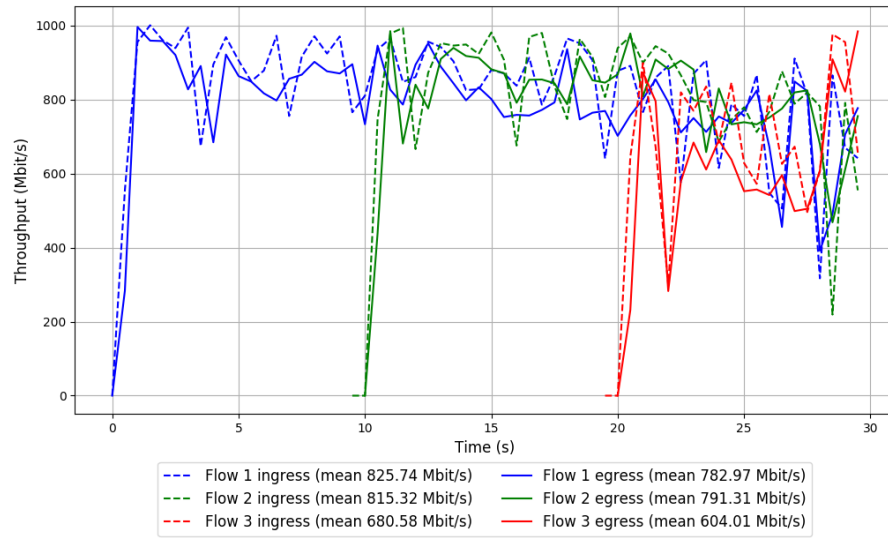
```
Run 1: Statistics of FillP

Start at: 2018-03-14 22:06:18
End at: 2018-03-14 22:06:48

# Below is generated by plot.py at 2018-03-15 05:25:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1511.41 Mbit/s
95th percentile per-packet one-way delay: 226.777 ms
Loss rate: 5.27%
-- Flow 1:
Average throughput: 782.97 Mbit/s
95th percentile per-packet one-way delay: 219.245 ms
Loss rate: 5.18%
-- Flow 2:
Average throughput: 791.31 Mbit/s
95th percentile per-packet one-way delay: 214.324 ms
Loss rate: 2.95%
-- Flow 3:
Average throughput: 604.01 Mbit/s
95th percentile per-packet one-way delay: 257.934 ms
Loss rate: 11.25%
```



## Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-03-14 22:26:41

End at: 2018-03-14 22:27:11

# Below is generated by plot.py at 2018-03-15 05:25:28

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1479.18 Mbit/s

95th percentile per-packet one-way delay: 261.377 ms

Loss rate: 5.84%

-- Flow 1:

Average throughput: 812.59 Mbit/s

95th percentile per-packet one-way delay: 221.277 ms

Loss rate: 2.68%

-- Flow 2:

Average throughput: 676.88 Mbit/s

95th percentile per-packet one-way delay: 364.796 ms

Loss rate: 8.44%

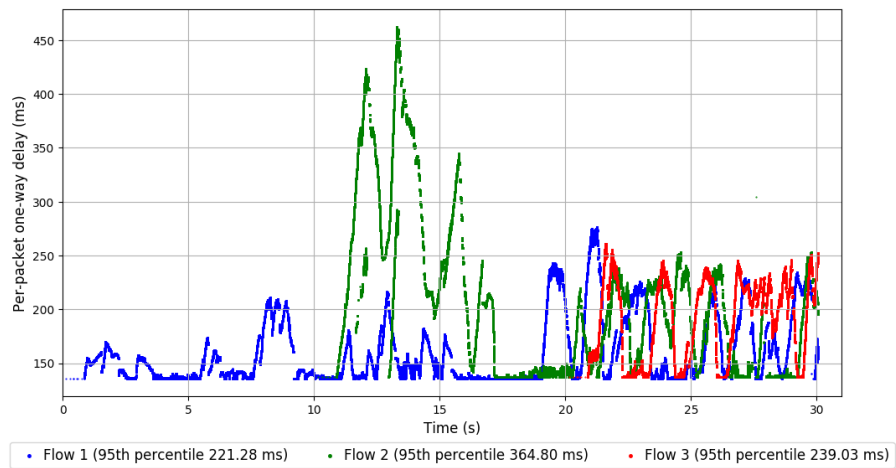
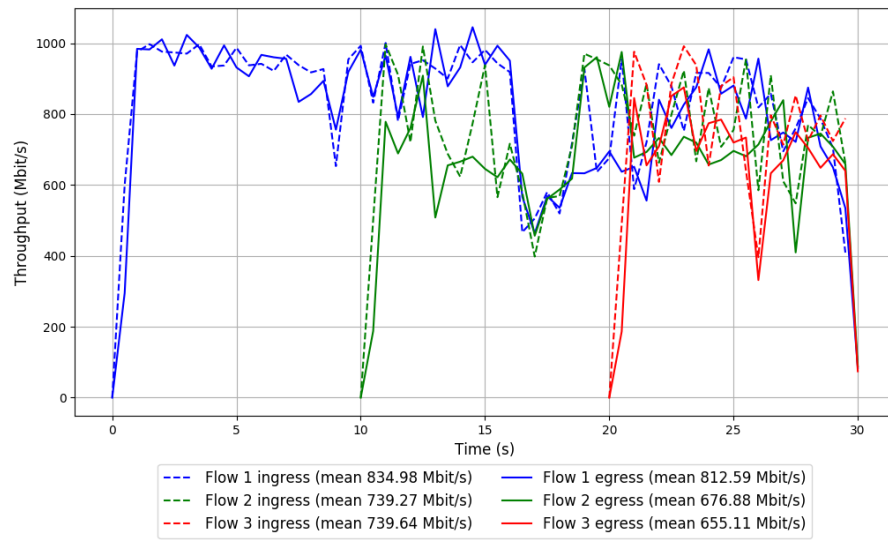
-- Flow 3:

Average throughput: 655.11 Mbit/s

95th percentile per-packet one-way delay: 239.030 ms

Loss rate: 11.43%

## Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-03-14 22:47:12

End at: 2018-03-14 22:47:42

# Below is generated by plot.py at 2018-03-15 05:29:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1583.42 Mbit/s

95th percentile per-packet one-way delay: 222.896 ms

Loss rate: 4.44%

-- Flow 1:

Average throughput: 833.24 Mbit/s

95th percentile per-packet one-way delay: 217.359 ms

Loss rate: 4.06%

-- Flow 2:

Average throughput: 810.32 Mbit/s

95th percentile per-packet one-way delay: 215.176 ms

Loss rate: 2.91%

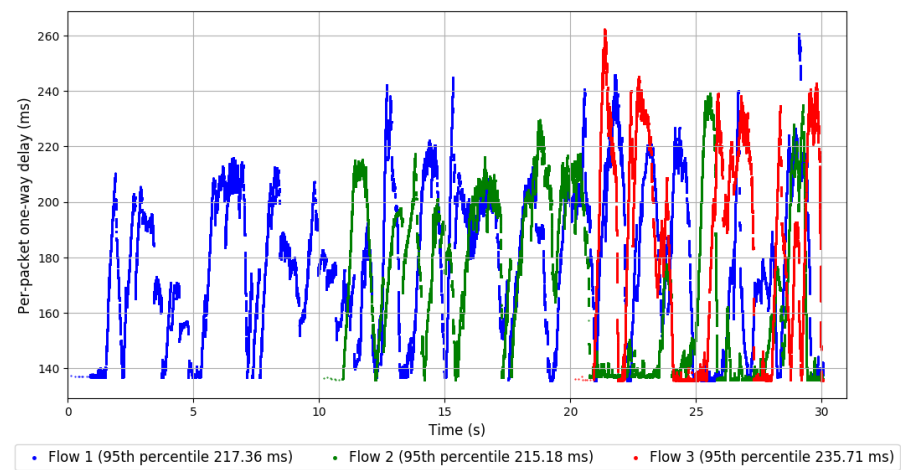
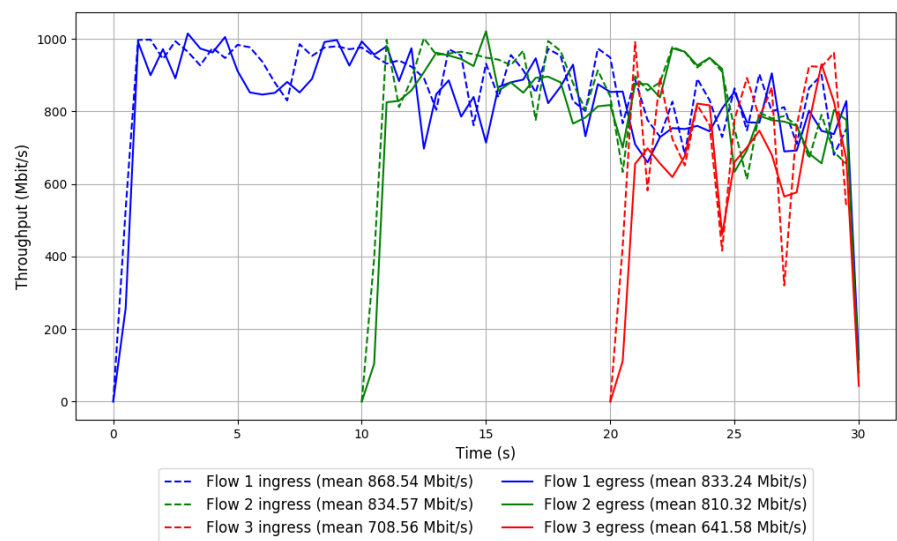
-- Flow 3:

Average throughput: 641.58 Mbit/s

95th percentile per-packet one-way delay: 235.710 ms

Loss rate: 9.46%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-03-14 23:07:48

End at: 2018-03-14 23:08:18

# Below is generated by plot.py at 2018-03-15 05:29:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1595.62 Mbit/s

95th percentile per-packet one-way delay: 229.571 ms

Loss rate: 4.07%

-- Flow 1:

Average throughput: 868.84 Mbit/s

95th percentile per-packet one-way delay: 203.869 ms

Loss rate: 1.64%

-- Flow 2:

Average throughput: 757.52 Mbit/s

95th percentile per-packet one-way delay: 243.745 ms

Loss rate: 6.85%

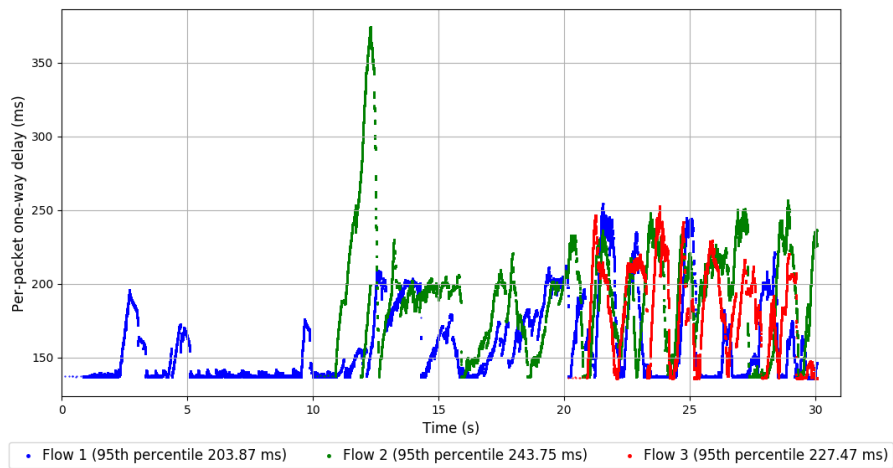
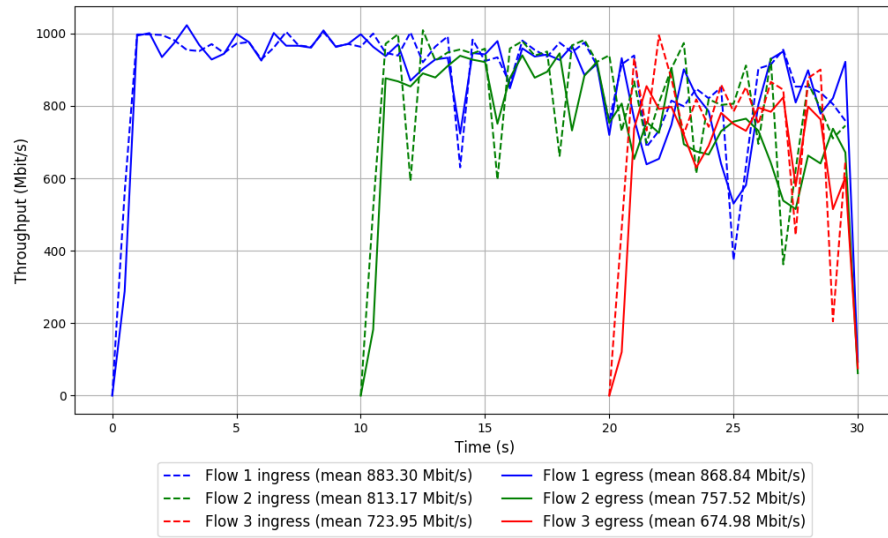
-- Flow 3:

Average throughput: 674.98 Mbit/s

95th percentile per-packet one-way delay: 227.468 ms

Loss rate: 6.77%

# Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-03-14 23:28:22

End at: 2018-03-14 23:28:52

# Below is generated by plot.py at 2018-03-15 05:29:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1590.24 Mbit/s

95th percentile per-packet one-way delay: 222.119 ms

Loss rate: 4.36%

-- Flow 1:

Average throughput: 839.68 Mbit/s

95th percentile per-packet one-way delay: 218.224 ms

Loss rate: 2.76%

-- Flow 2:

Average throughput: 796.83 Mbit/s

95th percentile per-packet one-way delay: 217.832 ms

Loss rate: 5.36%

-- Flow 3:

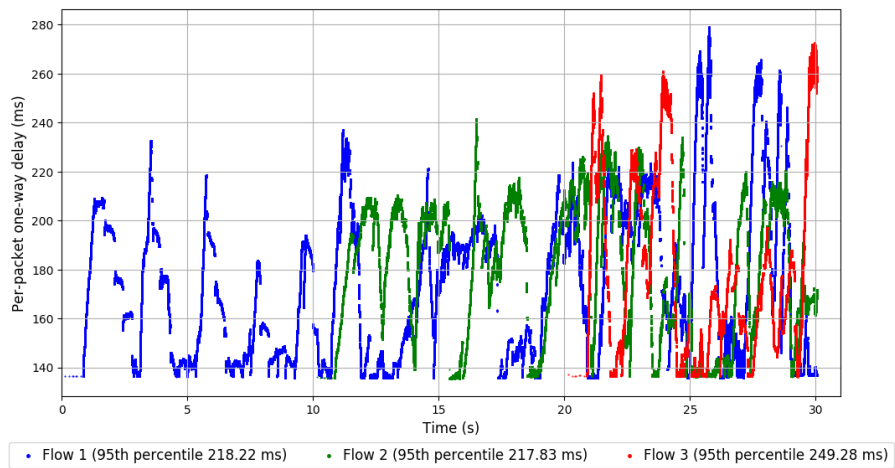
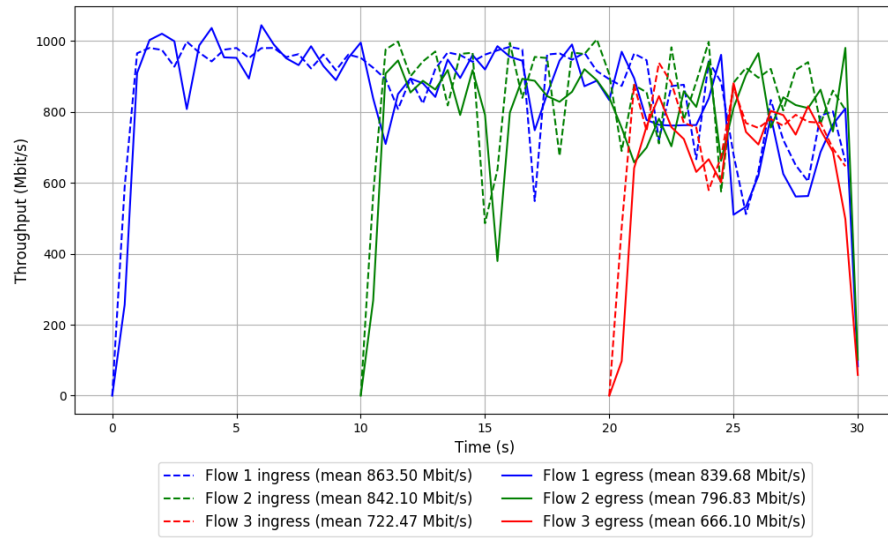
Average throughput: 666.10 Mbit/s

95th percentile per-packet one-way delay: 249.279 ms

Loss rate: 7.78%



# Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-03-14 23:48:41

End at: 2018-03-14 23:49:11

# Below is generated by plot.py at 2018-03-15 05:29:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1587.54 Mbit/s

95th percentile per-packet one-way delay: 237.684 ms

Loss rate: 3.05%

-- Flow 1:

Average throughput: 846.53 Mbit/s

95th percentile per-packet one-way delay: 216.360 ms

Loss rate: 2.77%

-- Flow 2:

Average throughput: 781.50 Mbit/s

95th percentile per-packet one-way delay: 283.969 ms

Loss rate: 2.84%

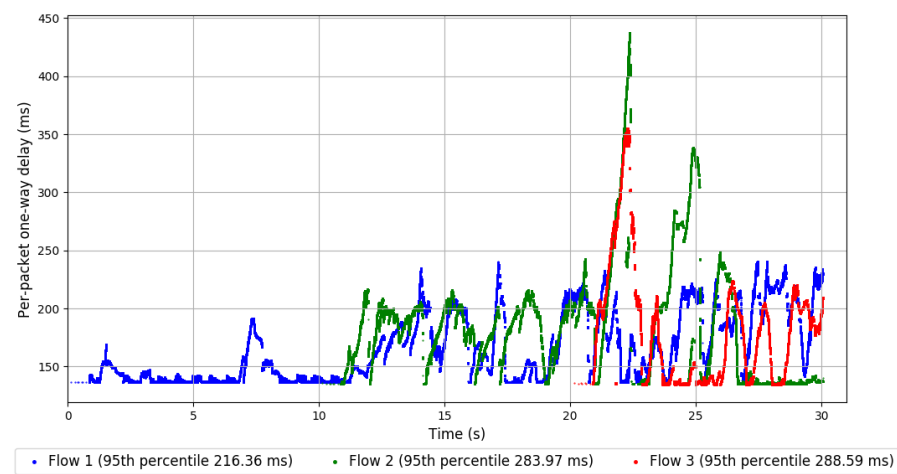
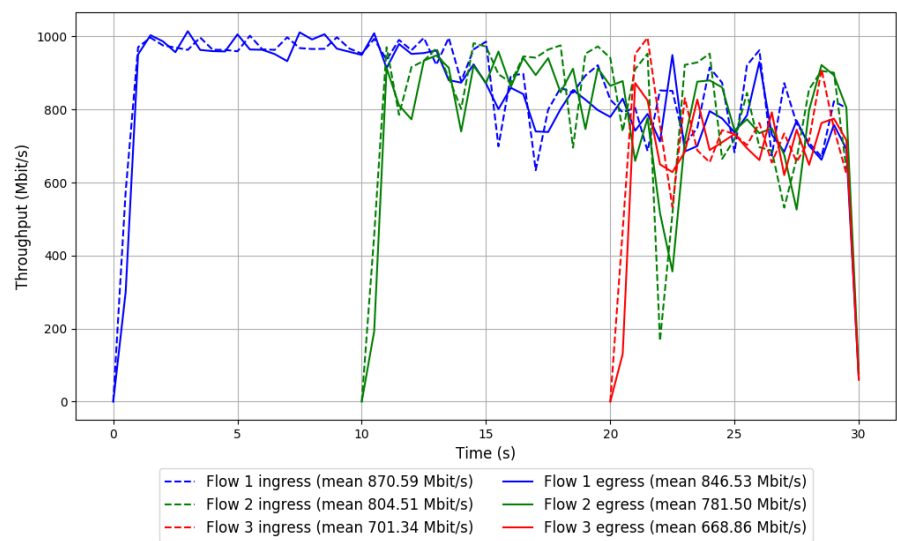
-- Flow 3:

Average throughput: 668.86 Mbit/s

95th percentile per-packet one-way delay: 288.588 ms

Loss rate: 4.63%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-03-15 00:08:47

End at: 2018-03-15 00:09:17

# Below is generated by plot.py at 2018-03-15 05:29:46

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1436.67 Mbit/s

95th percentile per-packet one-way delay: 356.053 ms

Loss rate: 4.44%

-- Flow 1:

Average throughput: 758.30 Mbit/s

95th percentile per-packet one-way delay: 356.466 ms

Loss rate: 3.11%

-- Flow 2:

Average throughput: 681.50 Mbit/s

95th percentile per-packet one-way delay: 365.318 ms

Loss rate: 3.57%

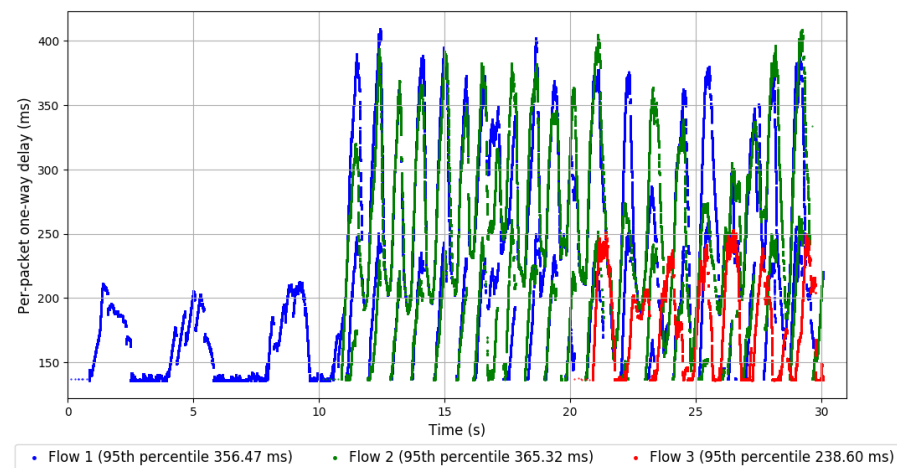
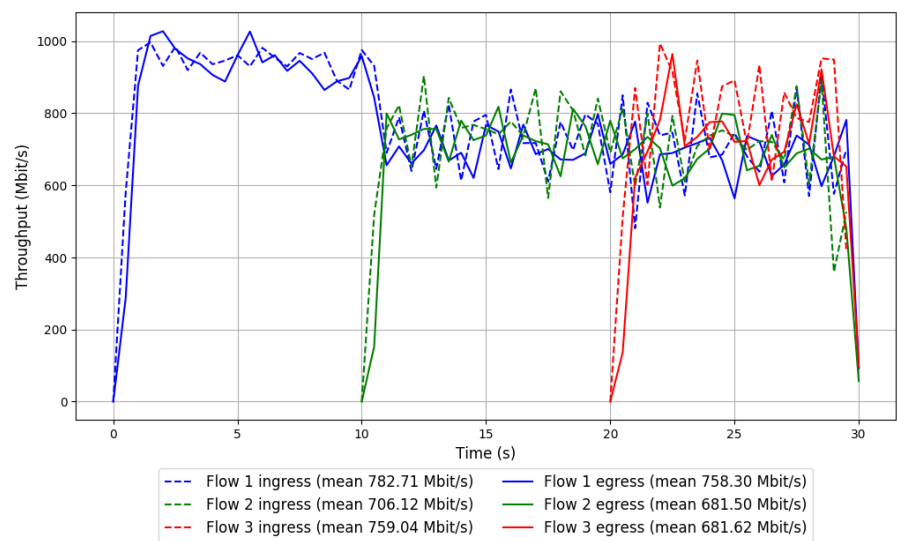
-- Flow 3:

Average throughput: 681.62 Mbit/s

95th percentile per-packet one-way delay: 238.599 ms

Loss rate: 10.18%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-03-15 00:29:31

End at: 2018-03-15 00:30:01

# Below is generated by plot.py at 2018-03-15 05:30:09

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1526.59 Mbit/s

95th percentile per-packet one-way delay: 260.621 ms

Loss rate: 4.47%

-- Flow 1:

Average throughput: 851.58 Mbit/s

95th percentile per-packet one-way delay: 216.965 ms

Loss rate: 2.95%

-- Flow 2:

Average throughput: 651.19 Mbit/s

95th percentile per-packet one-way delay: 389.612 ms

Loss rate: 7.63%

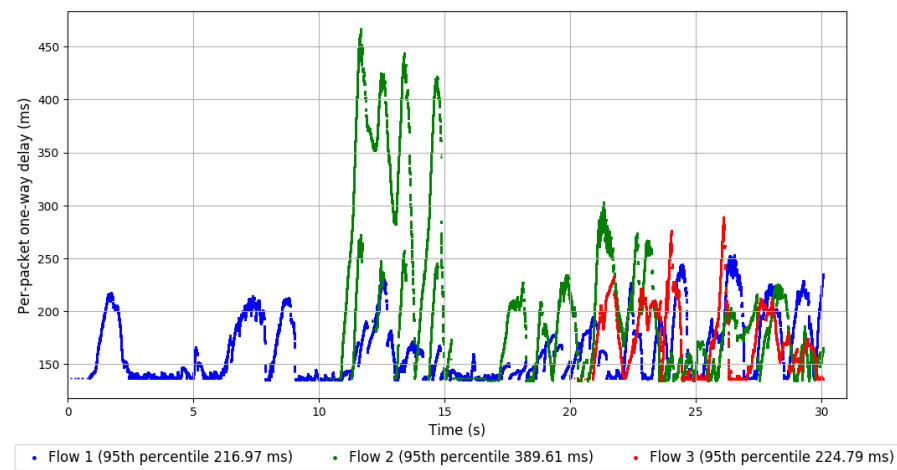
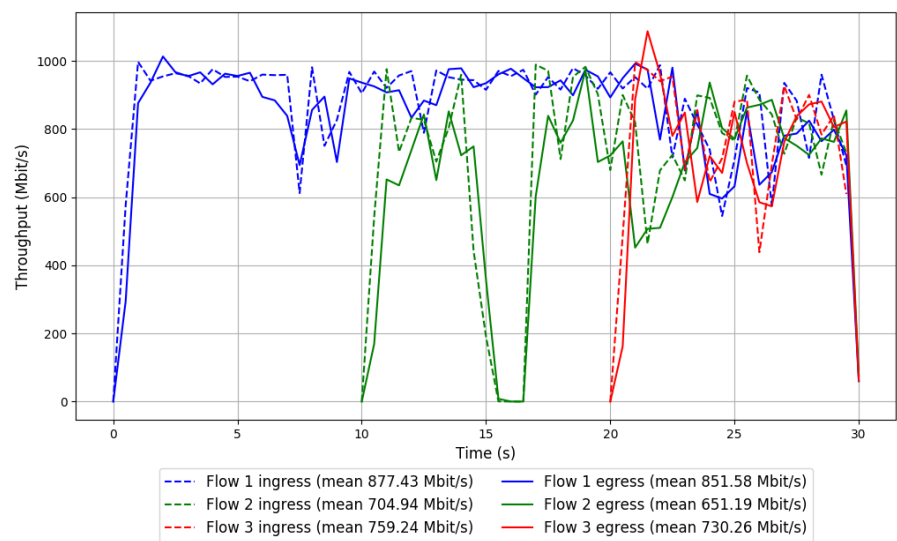
-- Flow 3:

Average throughput: 730.26 Mbit/s

95th percentile per-packet one-way delay: 224.789 ms

Loss rate: 3.83%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-03-15 00:49:40

End at: 2018-03-15 00:50:10

# Below is generated by plot.py at 2018-03-15 06:04:17

# Datalink statistics

-- Total of 3 flows:

Average throughput: 1546.46 Mbit/s

95th percentile per-packet one-way delay: 266.913 ms

Loss rate: 5.67%

-- Flow 1:

Average throughput: 806.21 Mbit/s

95th percentile per-packet one-way delay: 288.514 ms

Loss rate: 4.97%

-- Flow 2:

Average throughput: 769.68 Mbit/s

95th percentile per-packet one-way delay: 223.126 ms

Loss rate: 5.18%

-- Flow 3:

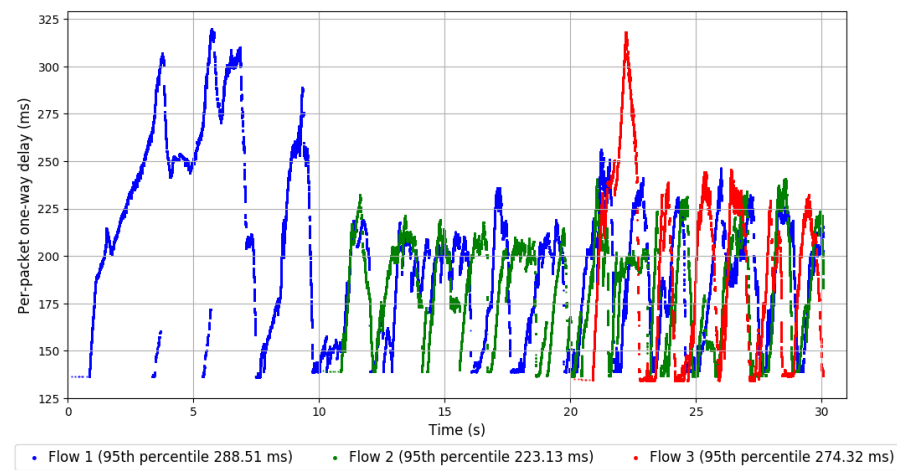
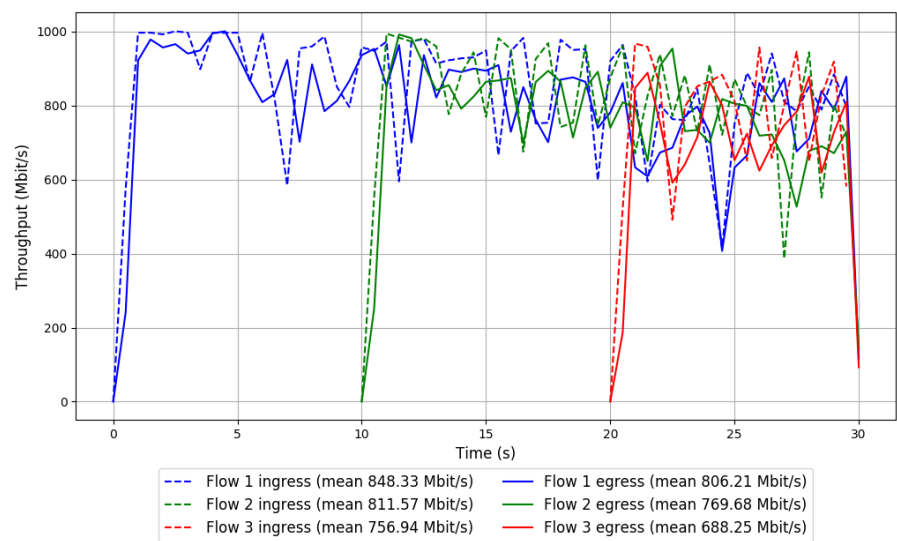
Average throughput: 688.25 Mbit/s

95th percentile per-packet one-way delay: 274.324 ms

Loss rate: 9.07%



Run 9: Report of FillP — Data Link

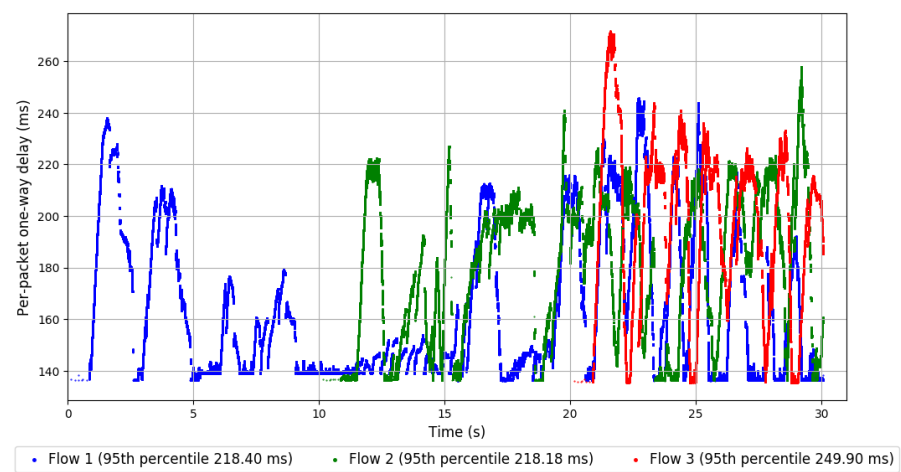
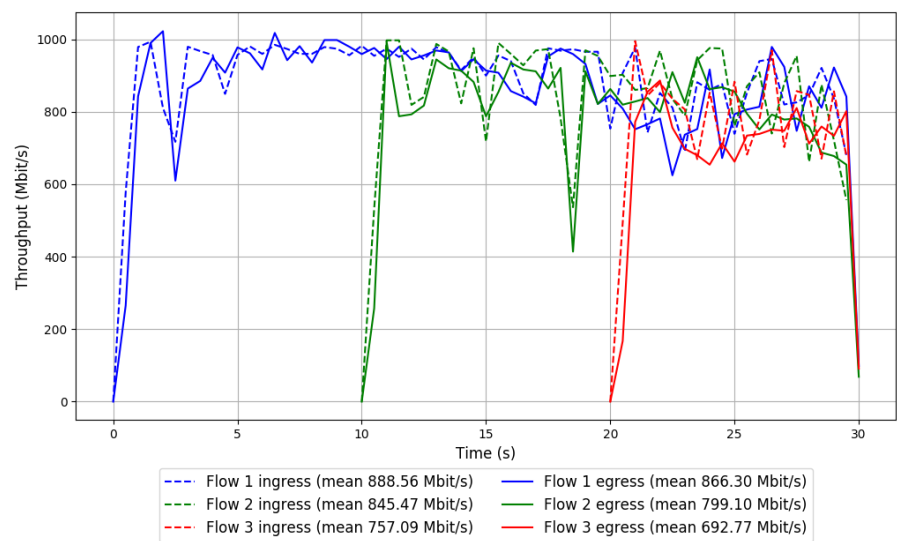


```
Run 10: Statistics of FillP

Start at: 2018-03-15 01:10:03
End at: 2018-03-15 01:10:33

# Below is generated by plot.py at 2018-03-15 06:06:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1627.17 Mbit/s
95th percentile per-packet one-way delay: 223.434 ms
Loss rate: 4.38%
-- Flow 1:
Average throughput: 866.30 Mbit/s
95th percentile per-packet one-way delay: 218.397 ms
Loss rate: 2.50%
-- Flow 2:
Average throughput: 799.10 Mbit/s
95th percentile per-packet one-way delay: 218.179 ms
Loss rate: 5.49%
-- Flow 3:
Average throughput: 692.77 Mbit/s
95th percentile per-packet one-way delay: 249.896 ms
Loss rate: 8.51%
```

Run 10: Report of FillP — Data Link

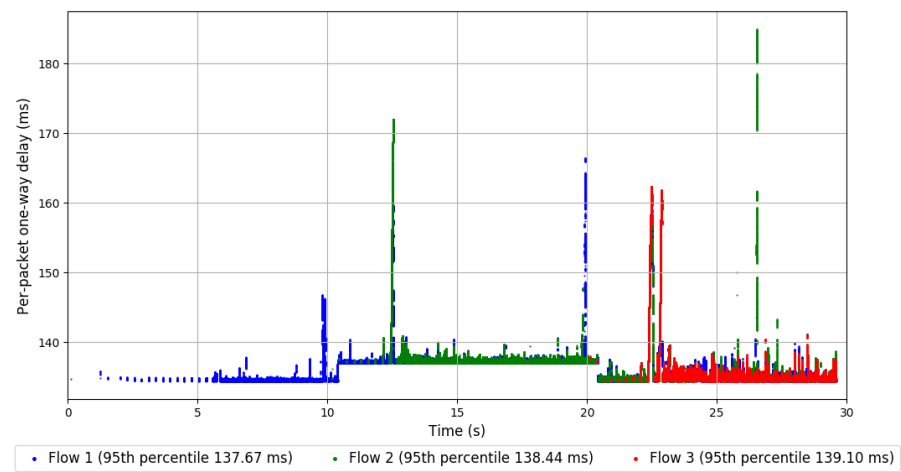
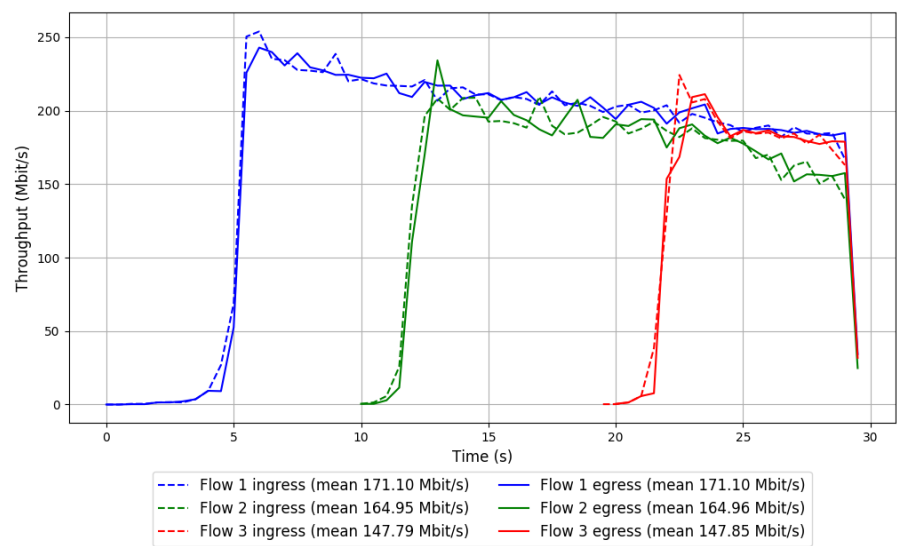


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-03-14 22:10:07
End at: 2018-03-14 22:10:37

# Below is generated by plot.py at 2018-03-15 06:06:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.45 Mbit/s
95th percentile per-packet one-way delay: 137.918 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 171.10 Mbit/s
95th percentile per-packet one-way delay: 137.669 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 164.96 Mbit/s
95th percentile per-packet one-way delay: 138.439 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 147.85 Mbit/s
95th percentile per-packet one-way delay: 139.097 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-1-32 — Data Link

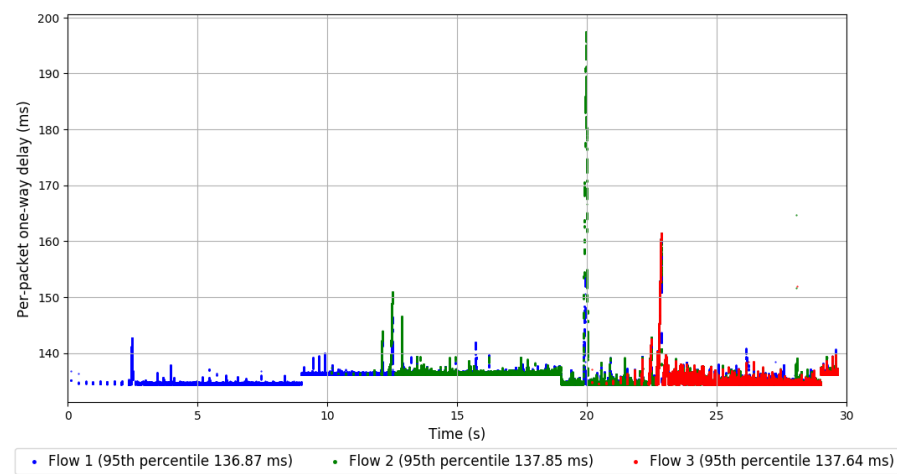
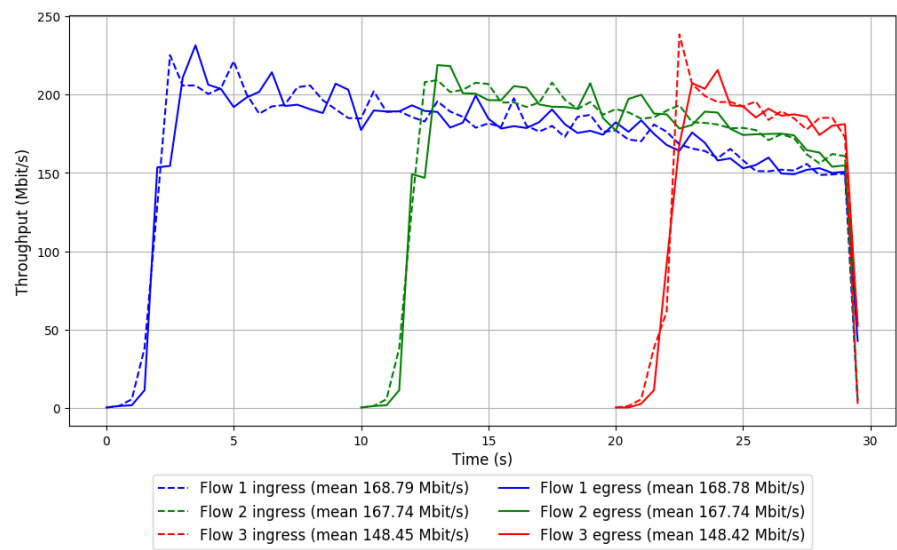


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-03-14 22:30:29
End at: 2018-03-14 22:30:59

# Below is generated by plot.py at 2018-03-15 06:06:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.22 Mbit/s
95th percentile per-packet one-way delay: 137.269 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 168.78 Mbit/s
95th percentile per-packet one-way delay: 136.870 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 167.74 Mbit/s
95th percentile per-packet one-way delay: 137.855 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 148.42 Mbit/s
95th percentile per-packet one-way delay: 137.644 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-03-14 22:51:06

End at: 2018-03-14 22:51:36

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 314.42 Mbit/s

95th percentile per-packet one-way delay: 138.240 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 164.13 Mbit/s

95th percentile per-packet one-way delay: 137.715 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 155.63 Mbit/s

95th percentile per-packet one-way delay: 138.955 ms

Loss rate: 0.00%

-- Flow 3:

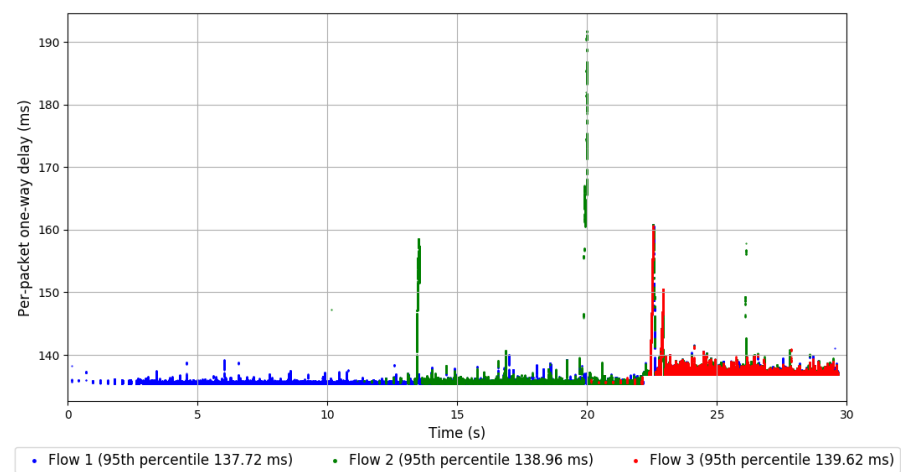
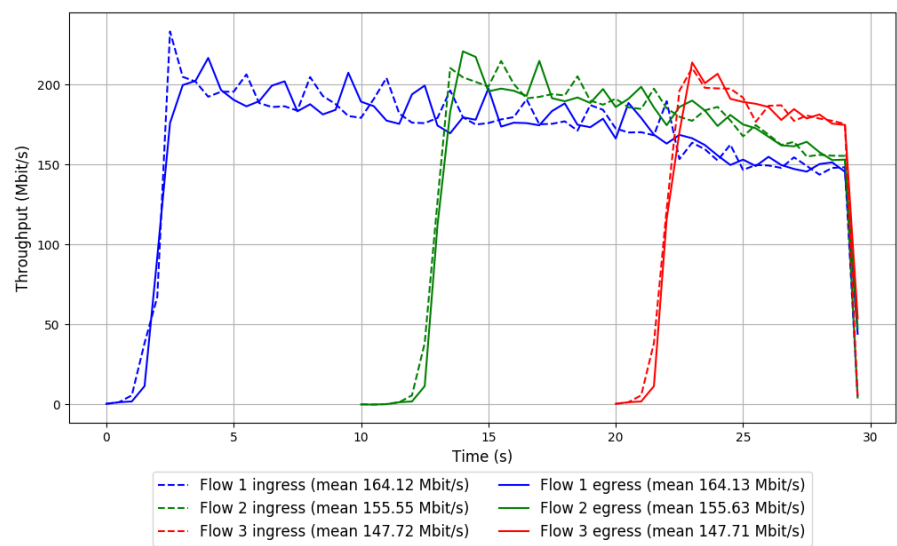
Average throughput: 147.71 Mbit/s

95th percentile per-packet one-way delay: 139.619 ms

Loss rate: 0.00%



Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-03-14 23:11:37

End at: 2018-03-14 23:12:07

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 328.19 Mbit/s

95th percentile per-packet one-way delay: 137.474 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 171.81 Mbit/s

95th percentile per-packet one-way delay: 136.969 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 163.47 Mbit/s

95th percentile per-packet one-way delay: 137.900 ms

Loss rate: 0.00%

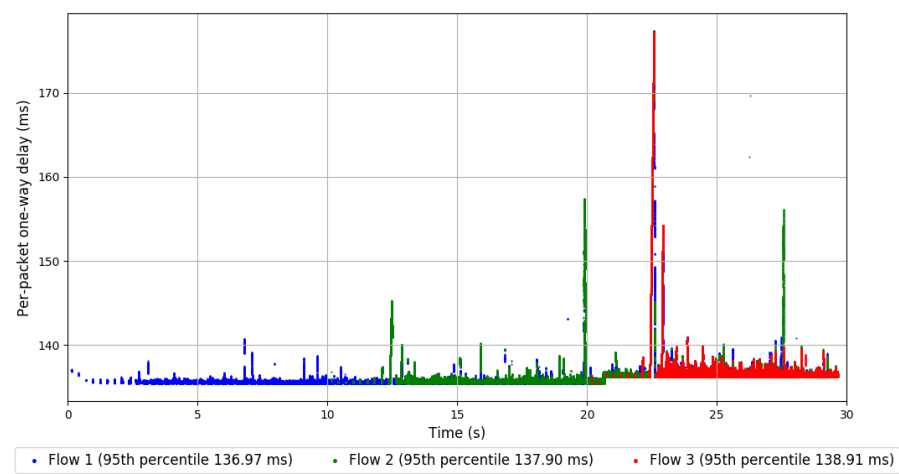
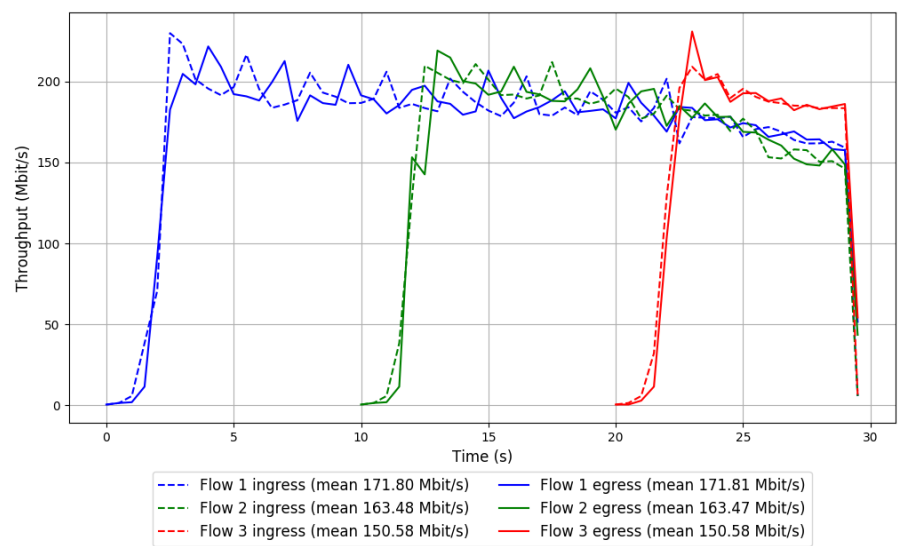
-- Flow 3:

Average throughput: 150.58 Mbit/s

95th percentile per-packet one-way delay: 138.912 ms

Loss rate: 0.00%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-03-14 23:32:15

End at: 2018-03-14 23:32:45

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 317.66 Mbit/s

95th percentile per-packet one-way delay: 138.408 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 159.46 Mbit/s

95th percentile per-packet one-way delay: 137.901 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 168.38 Mbit/s

95th percentile per-packet one-way delay: 138.545 ms

Loss rate: 0.00%

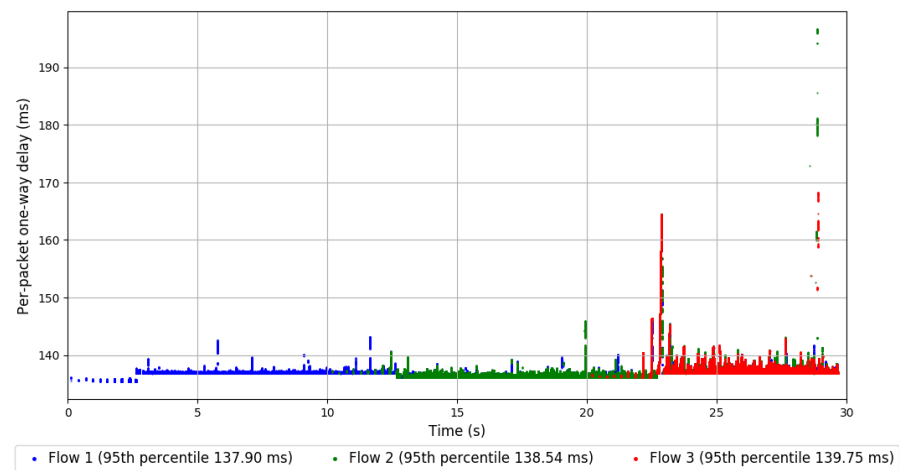
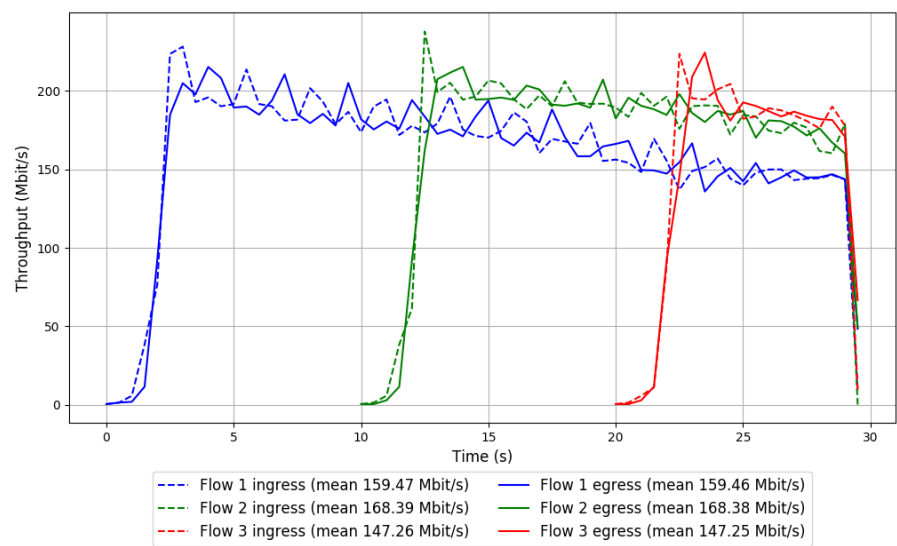
-- Flow 3:

Average throughput: 147.25 Mbit/s

95th percentile per-packet one-way delay: 139.752 ms

Loss rate: 0.00%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-03-14 23:52:34

End at: 2018-03-14 23:53:04

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 288.57 Mbit/s

95th percentile per-packet one-way delay: 137.965 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 147.62 Mbit/s

95th percentile per-packet one-way delay: 137.351 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 144.14 Mbit/s

95th percentile per-packet one-way delay: 138.489 ms

Loss rate: 0.00%

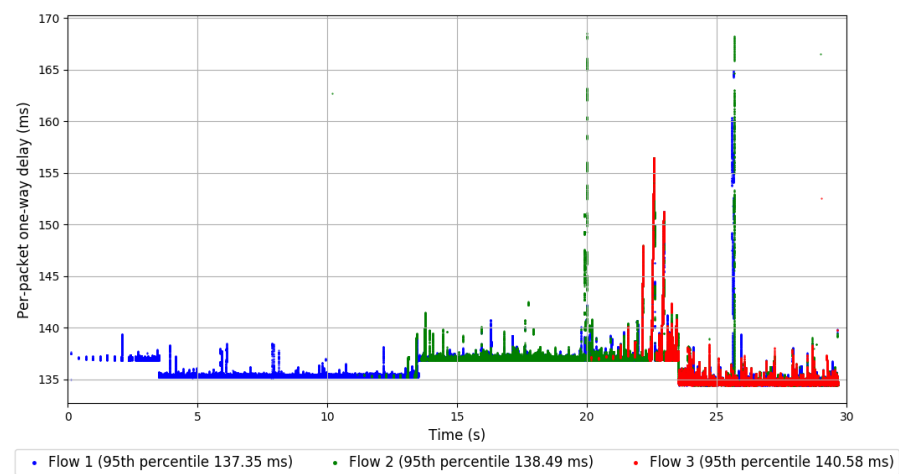
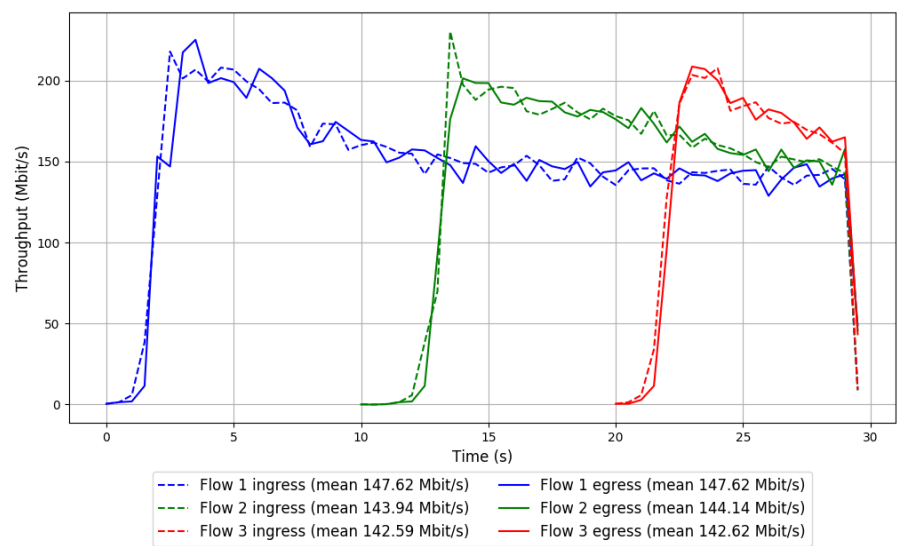
-- Flow 3:

Average throughput: 142.62 Mbit/s

95th percentile per-packet one-way delay: 140.577 ms

Loss rate: 0.00%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-03-15 00:12:37

End at: 2018-03-15 00:13:07

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 315.50 Mbit/s

95th percentile per-packet one-way delay: 137.527 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 165.68 Mbit/s

95th percentile per-packet one-way delay: 136.974 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 155.29 Mbit/s

95th percentile per-packet one-way delay: 137.947 ms

Loss rate: 0.00%

-- Flow 3:

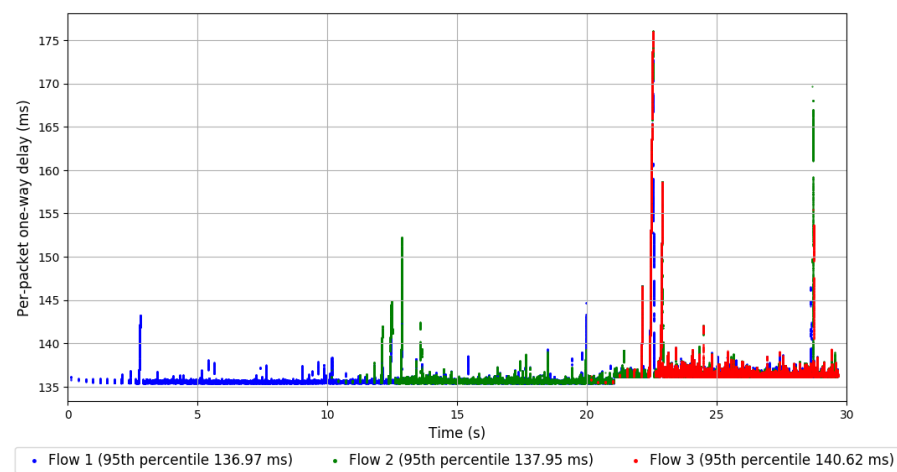
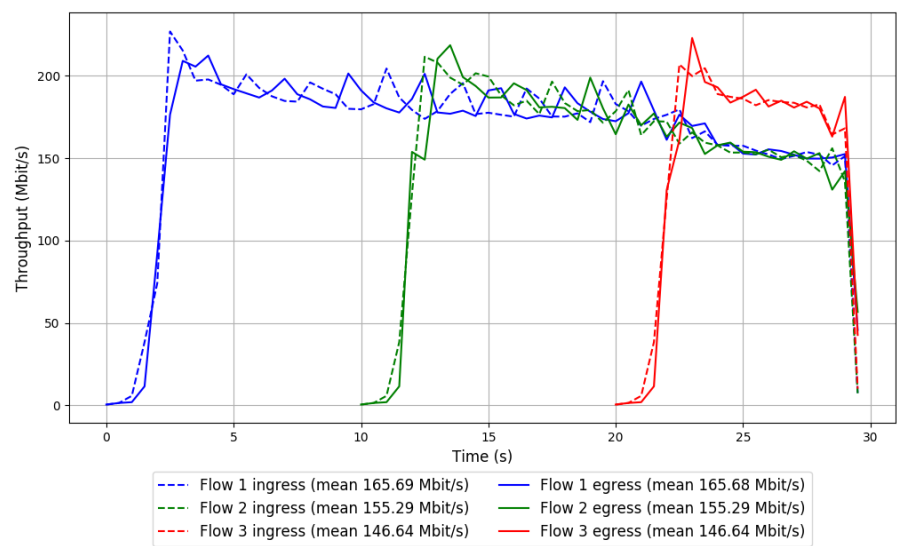
Average throughput: 146.64 Mbit/s

95th percentile per-packet one-way delay: 140.617 ms

Loss rate: 0.00%



Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-03-15 00:33:21

End at: 2018-03-15 00:33:51

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 316.60 Mbit/s

95th percentile per-packet one-way delay: 137.878 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 172.34 Mbit/s

95th percentile per-packet one-way delay: 137.294 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 164.57 Mbit/s

95th percentile per-packet one-way delay: 138.262 ms

Loss rate: 0.00%

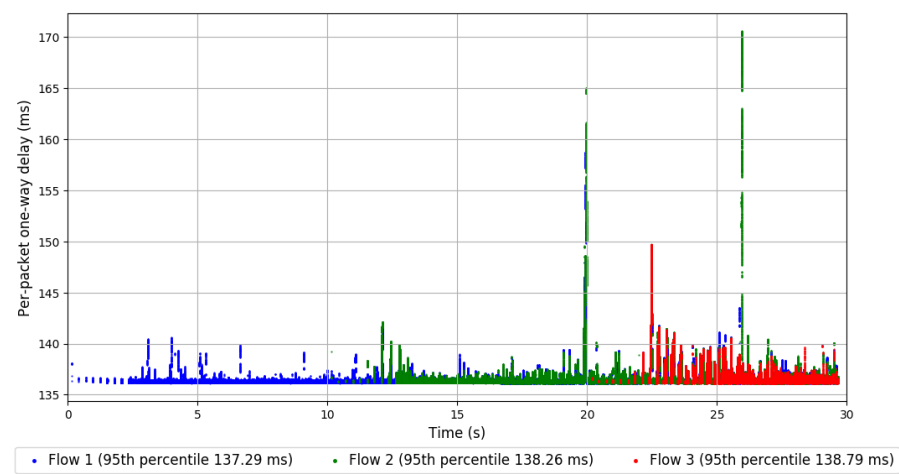
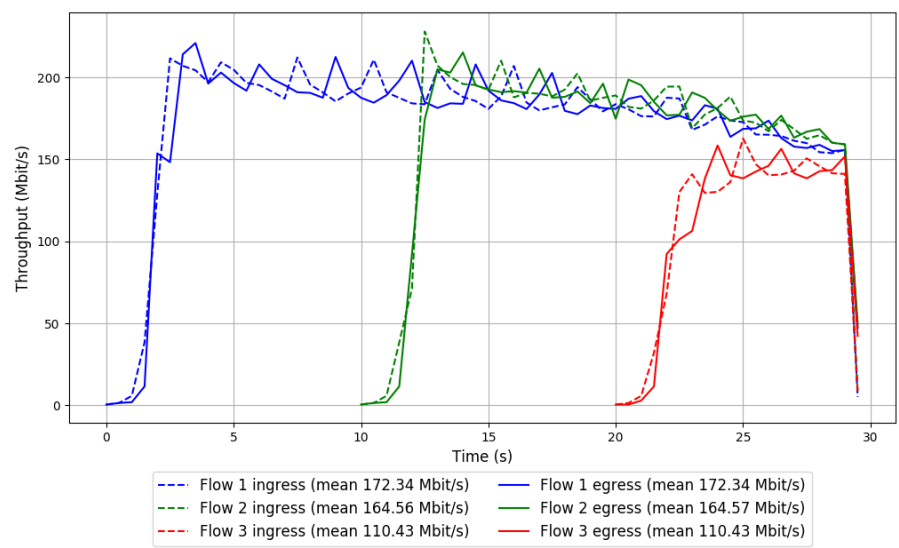
-- Flow 3:

Average throughput: 110.43 Mbit/s

95th percentile per-packet one-way delay: 138.791 ms

Loss rate: 0.00%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-03-15 00:53:34

End at: 2018-03-15 00:54:04

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 322.02 Mbit/s

95th percentile per-packet one-way delay: 138.013 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 167.98 Mbit/s

95th percentile per-packet one-way delay: 137.466 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 161.31 Mbit/s

95th percentile per-packet one-way delay: 138.011 ms

Loss rate: 0.01%

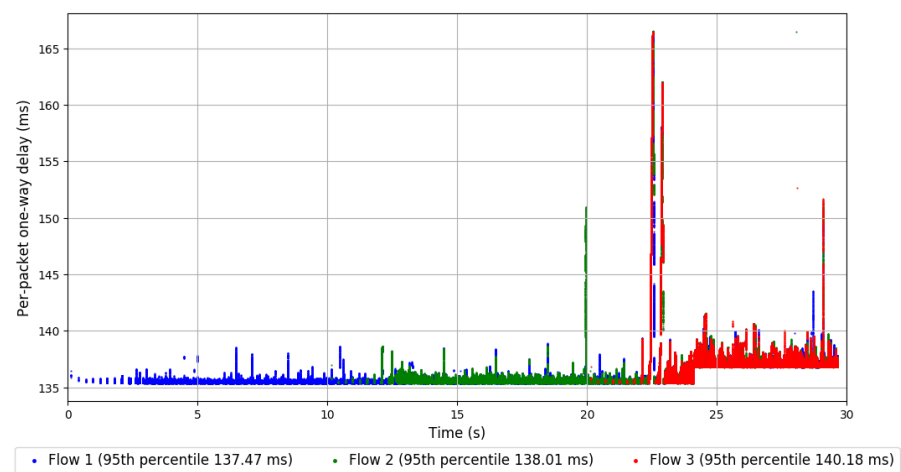
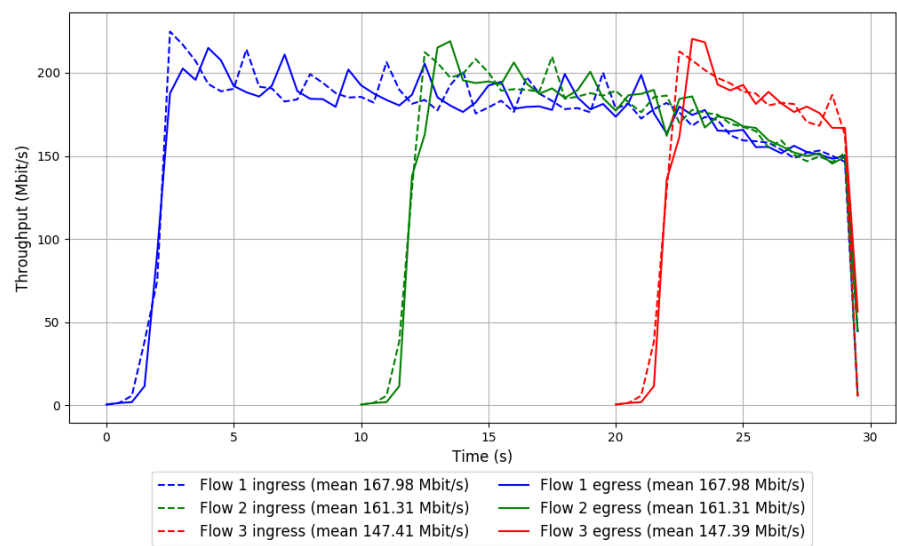
-- Flow 3:

Average throughput: 147.39 Mbit/s

95th percentile per-packet one-way delay: 140.181 ms

Loss rate: 0.04%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-03-15 01:13:57

End at: 2018-03-15 01:14:27

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 314.76 Mbit/s

95th percentile per-packet one-way delay: 137.420 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 162.57 Mbit/s

95th percentile per-packet one-way delay: 137.298 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 157.17 Mbit/s

95th percentile per-packet one-way delay: 137.513 ms

Loss rate: 0.00%

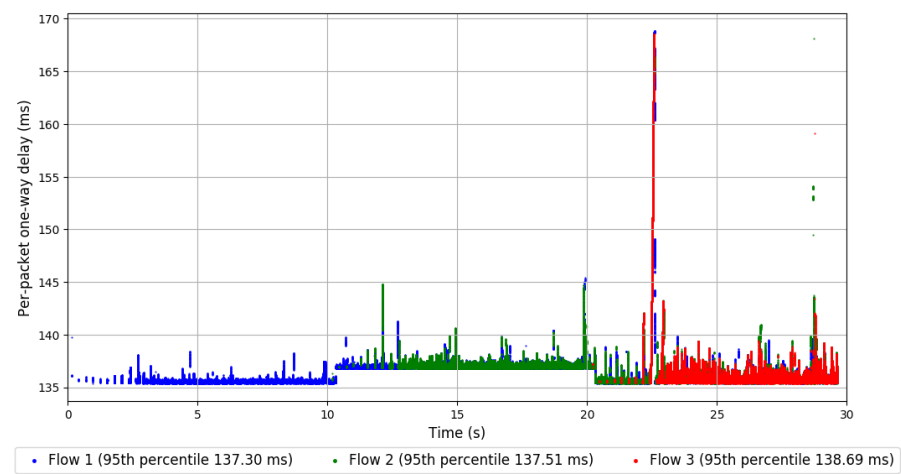
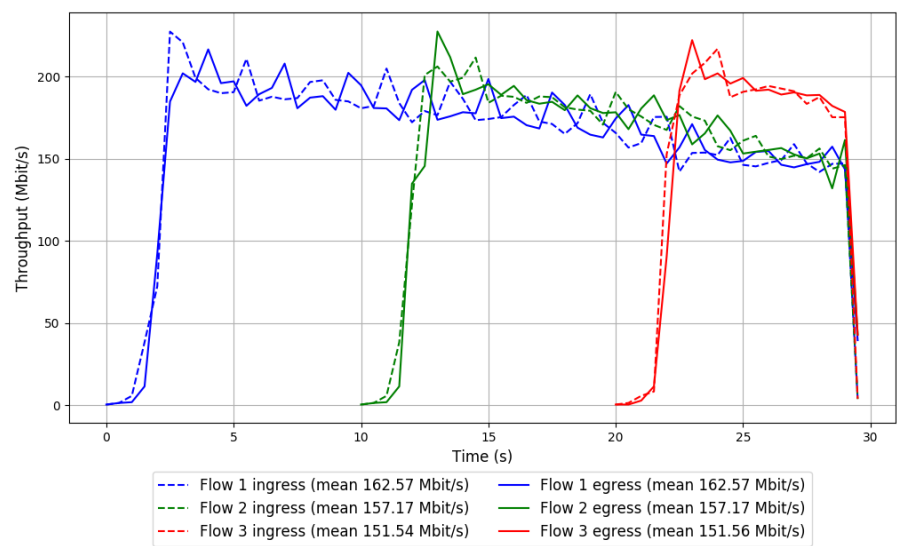
-- Flow 3:

Average throughput: 151.56 Mbit/s

95th percentile per-packet one-way delay: 138.691 ms

Loss rate: 0.00%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-03-14 22:02:33

End at: 2018-03-14 22:03:03

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 425.48 Mbit/s

95th percentile per-packet one-way delay: 137.221 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 260.73 Mbit/s

95th percentile per-packet one-way delay: 137.236 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 186.62 Mbit/s

95th percentile per-packet one-way delay: 137.326 ms

Loss rate: 0.00%

-- Flow 3:

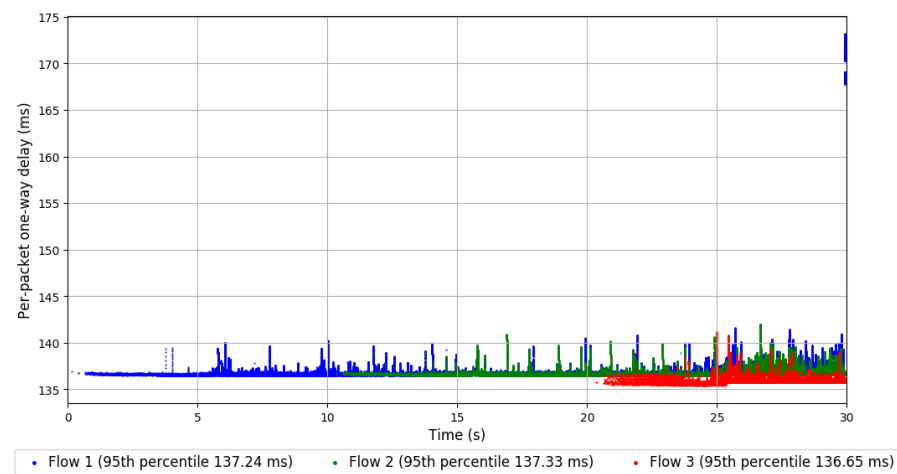
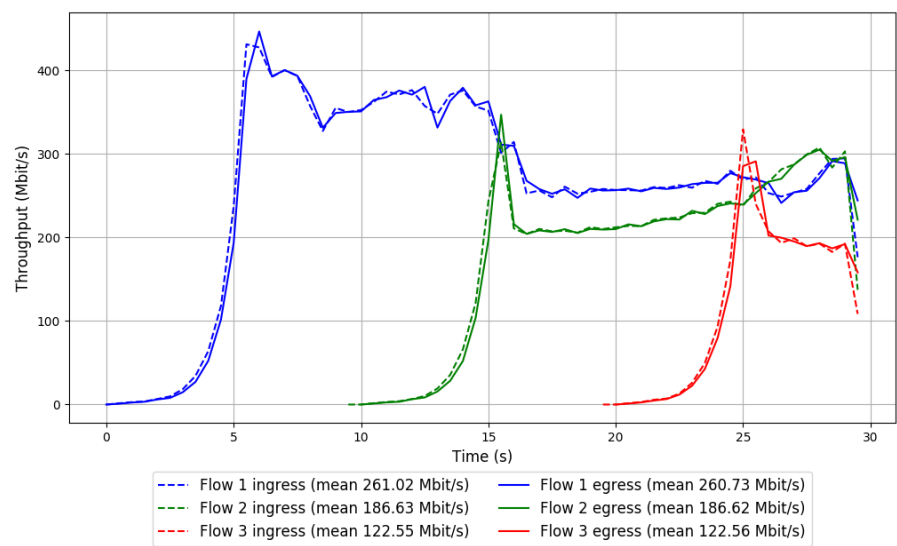
Average throughput: 122.56 Mbit/s

95th percentile per-packet one-way delay: 136.650 ms

Loss rate: 0.00%



Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-03-14 22:22:55

End at: 2018-03-14 22:23:25

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 430.75 Mbit/s

95th percentile per-packet one-way delay: 137.430 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 226.70 Mbit/s

95th percentile per-packet one-way delay: 136.746 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 244.58 Mbit/s

95th percentile per-packet one-way delay: 137.737 ms

Loss rate: 0.00%

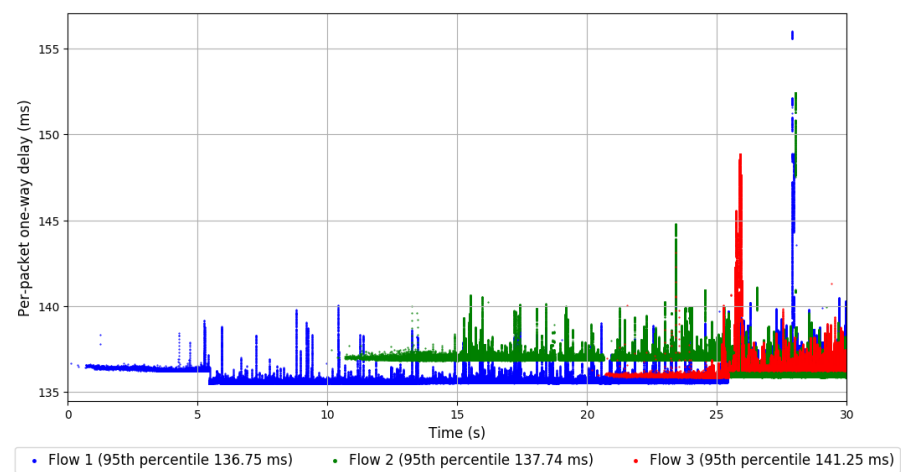
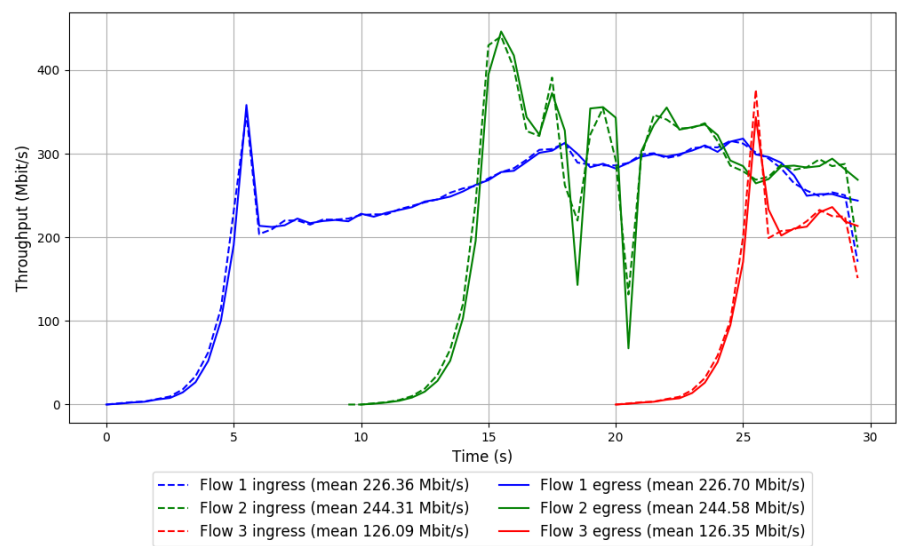
-- Flow 3:

Average throughput: 126.35 Mbit/s

95th percentile per-packet one-way delay: 141.254 ms

Loss rate: 0.01%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-03-14 22:43:27

End at: 2018-03-14 22:43:57

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 368.48 Mbit/s

95th percentile per-packet one-way delay: 137.828 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 229.15 Mbit/s

95th percentile per-packet one-way delay: 138.343 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 175.84 Mbit/s

95th percentile per-packet one-way delay: 136.997 ms

Loss rate: 0.00%

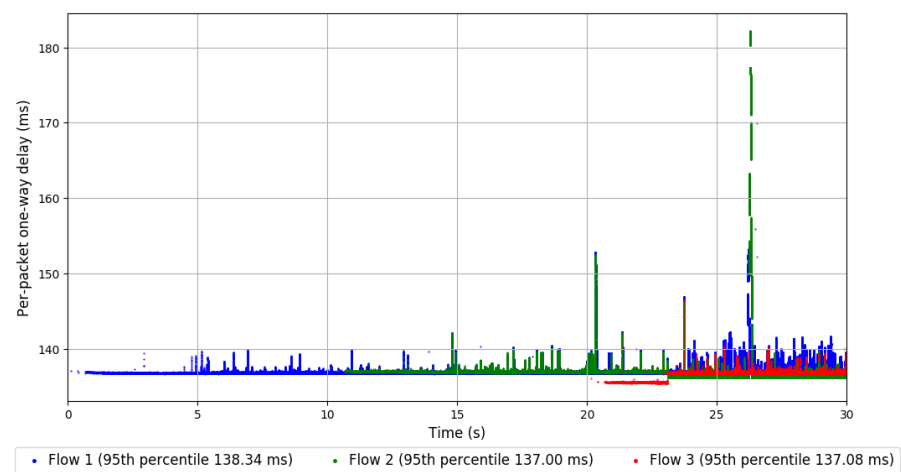
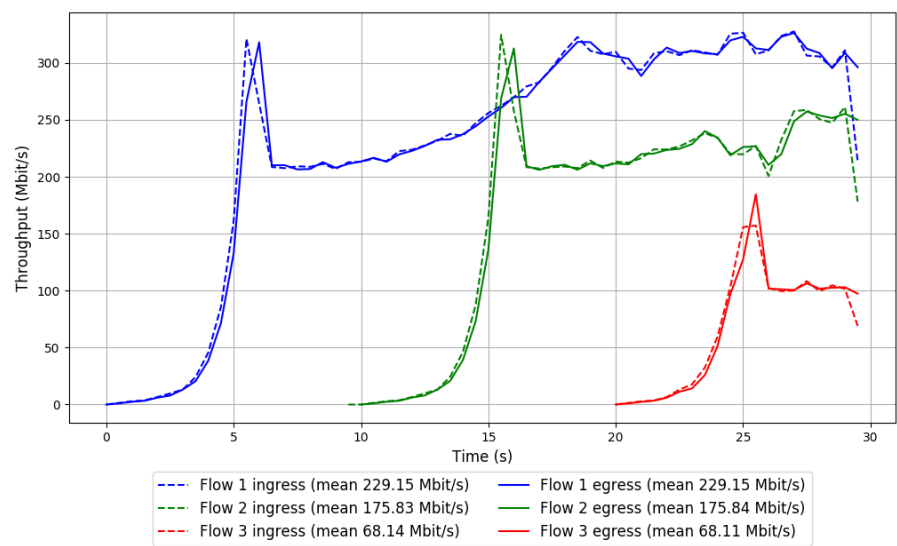
-- Flow 3:

Average throughput: 68.11 Mbit/s

95th percentile per-packet one-way delay: 137.076 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-03-14 23:03:50

End at: 2018-03-14 23:04:20

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 445.20 Mbit/s

95th percentile per-packet one-way delay: 139.292 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 262.29 Mbit/s

95th percentile per-packet one-way delay: 138.633 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 186.09 Mbit/s

95th percentile per-packet one-way delay: 137.464 ms

Loss rate: 0.00%

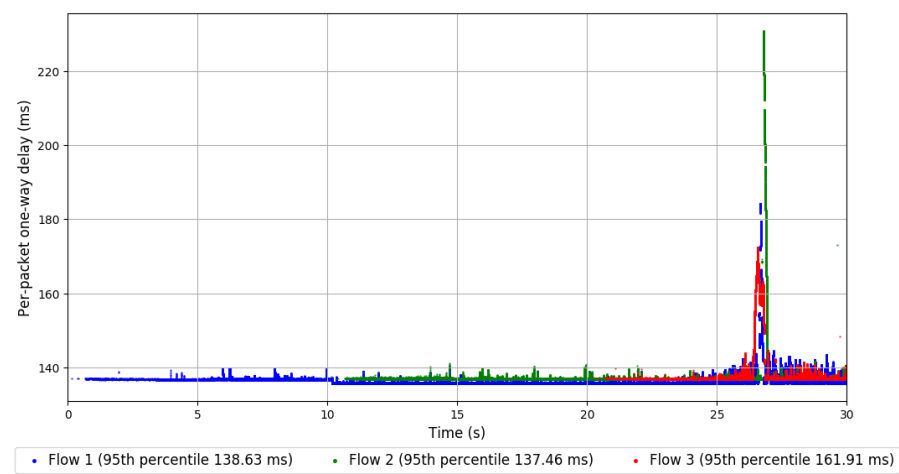
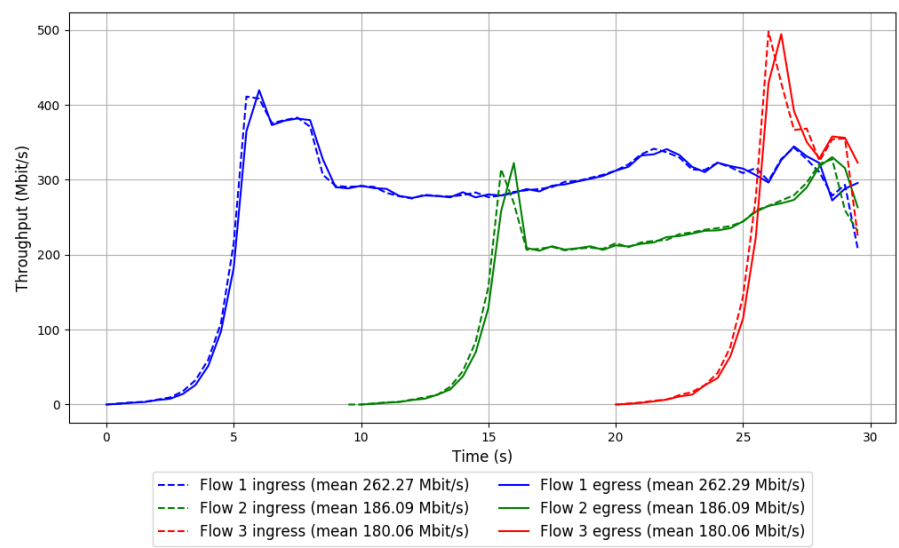
-- Flow 3:

Average throughput: 180.06 Mbit/s

95th percentile per-packet one-way delay: 161.913 ms

Loss rate: 0.01%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-03-14 23:24:39

End at: 2018-03-14 23:25:09

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 370.85 Mbit/s

95th percentile per-packet one-way delay: 137.152 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 213.48 Mbit/s

95th percentile per-packet one-way delay: 136.632 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 175.61 Mbit/s

95th percentile per-packet one-way delay: 136.832 ms

Loss rate: 0.00%

-- Flow 3:

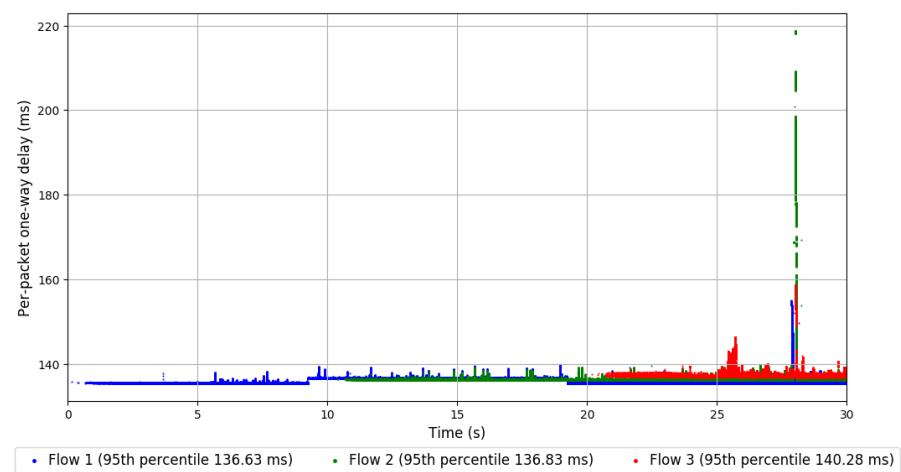
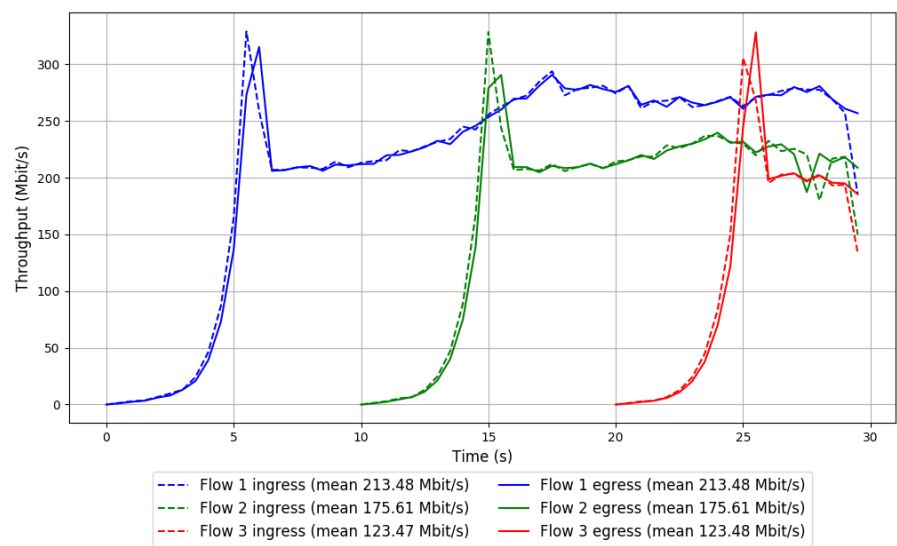
Average throughput: 123.48 Mbit/s

95th percentile per-packet one-way delay: 140.283 ms

Loss rate: 0.00%



Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-03-14 23:44:47

End at: 2018-03-14 23:45:17

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 399.00 Mbit/s

95th percentile per-packet one-way delay: 137.307 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 229.48 Mbit/s

95th percentile per-packet one-way delay: 136.740 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 190.93 Mbit/s

95th percentile per-packet one-way delay: 137.712 ms

Loss rate: 0.00%

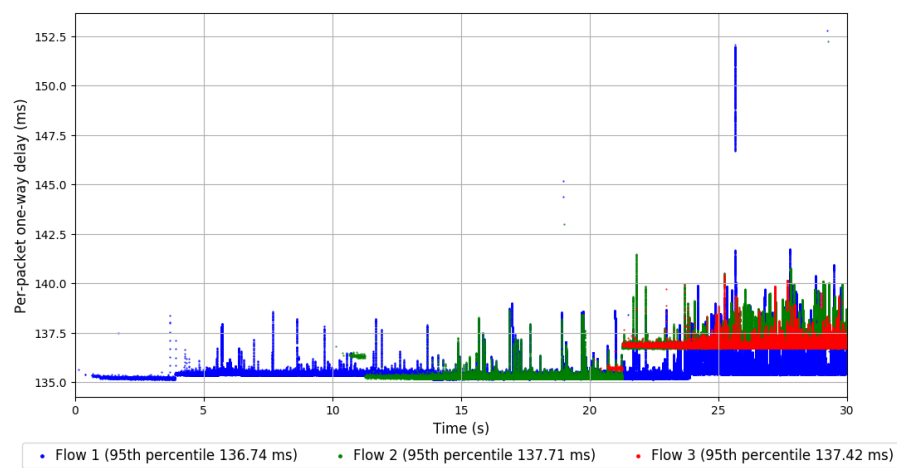
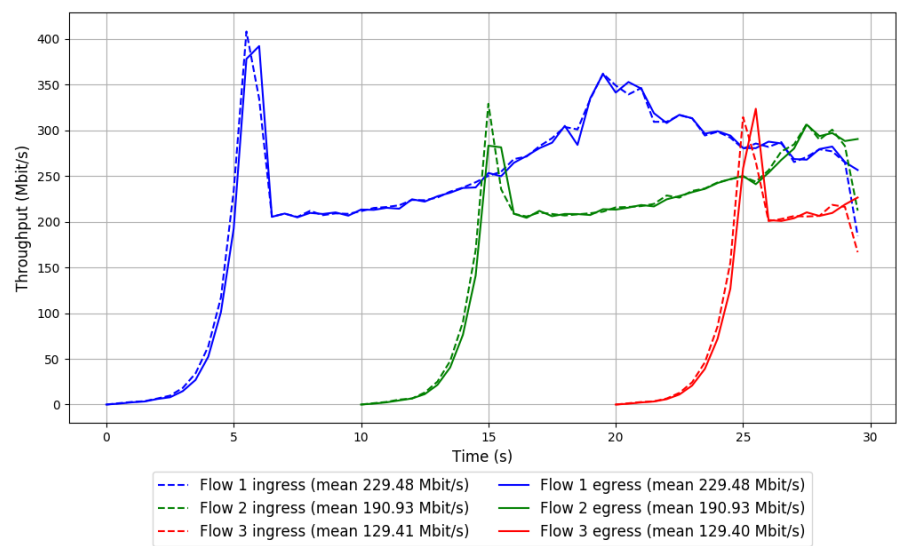
-- Flow 3:

Average throughput: 129.40 Mbit/s

95th percentile per-packet one-way delay: 137.419 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-03-15 00:04:57

End at: 2018-03-15 00:05:27

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 405.73 Mbit/s

95th percentile per-packet one-way delay: 138.198 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 234.08 Mbit/s

95th percentile per-packet one-way delay: 138.076 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 193.66 Mbit/s

95th percentile per-packet one-way delay: 136.868 ms

Loss rate: 0.00%

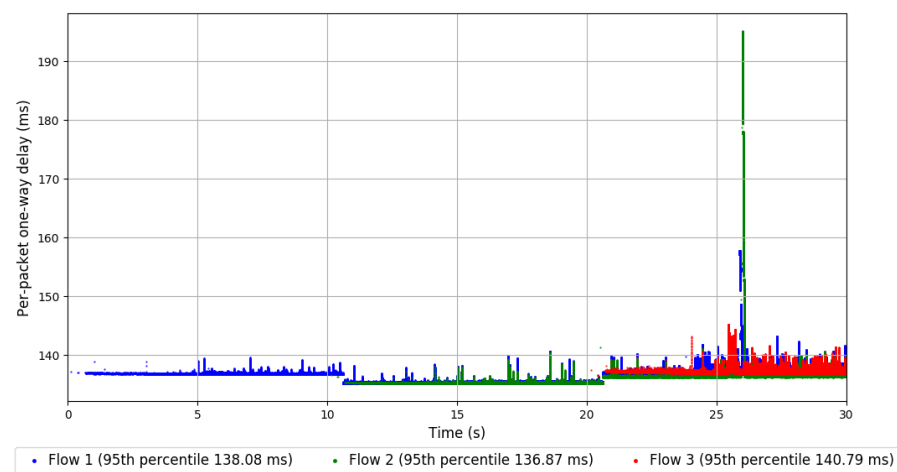
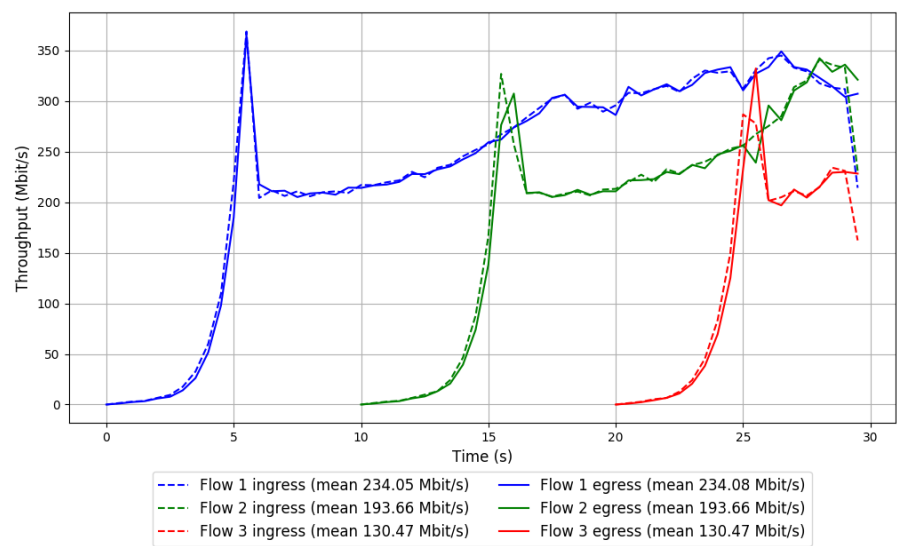
-- Flow 3:

Average throughput: 130.47 Mbit/s

95th percentile per-packet one-way delay: 140.792 ms

Loss rate: 0.01%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-03-15 00:25:42

End at: 2018-03-15 00:26:12

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 401.82 Mbit/s

95th percentile per-packet one-way delay: 137.433 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 236.58 Mbit/s

95th percentile per-packet one-way delay: 137.067 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 190.85 Mbit/s

95th percentile per-packet one-way delay: 135.749 ms

Loss rate: 0.00%

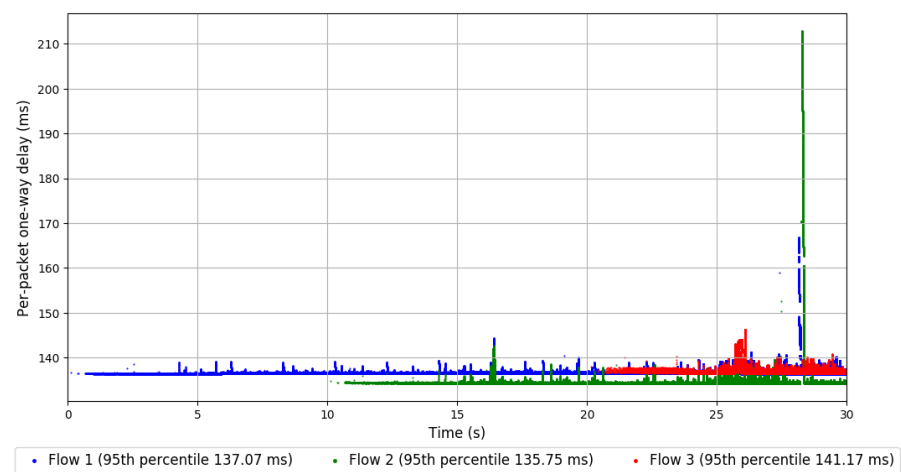
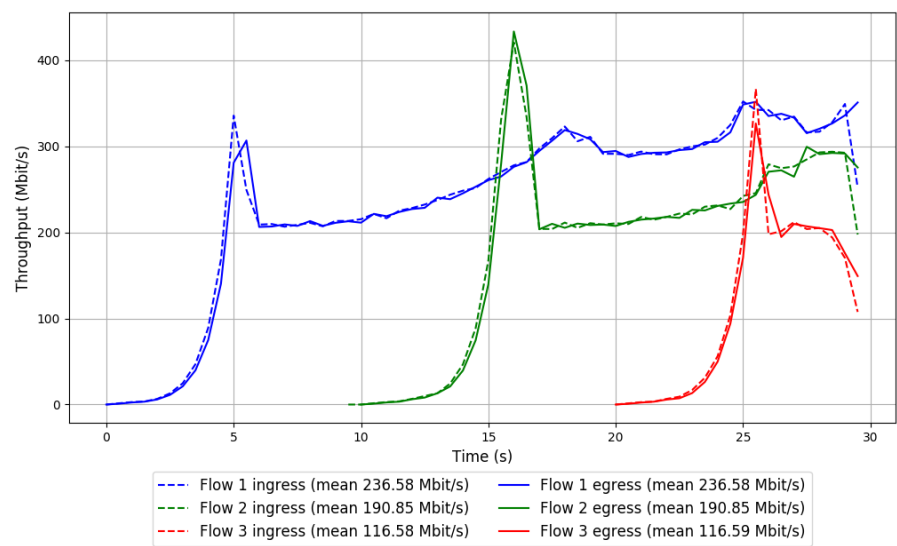
-- Flow 3:

Average throughput: 116.59 Mbit/s

95th percentile per-packet one-way delay: 141.167 ms

Loss rate: 0.02%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-03-15 00:45:56

End at: 2018-03-15 00:46:26

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 386.09 Mbit/s

95th percentile per-packet one-way delay: 136.945 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 227.16 Mbit/s

95th percentile per-packet one-way delay: 136.467 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 172.61 Mbit/s

95th percentile per-packet one-way delay: 136.948 ms

Loss rate: 0.00%

-- Flow 3:

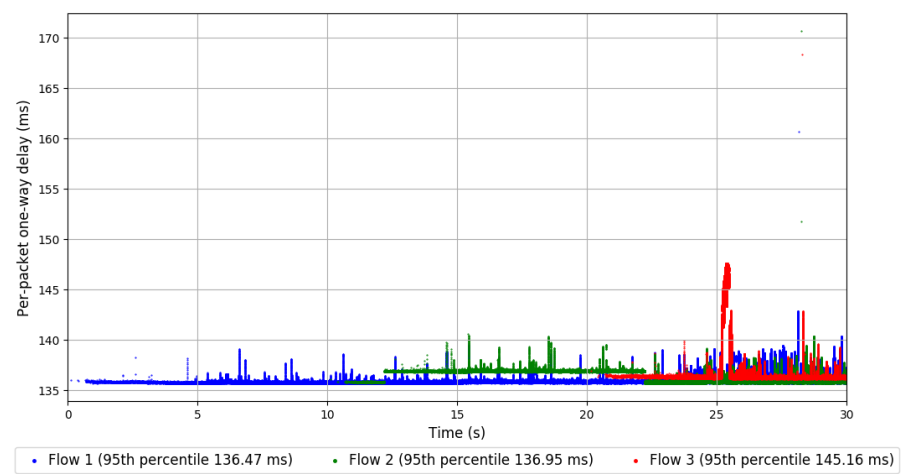
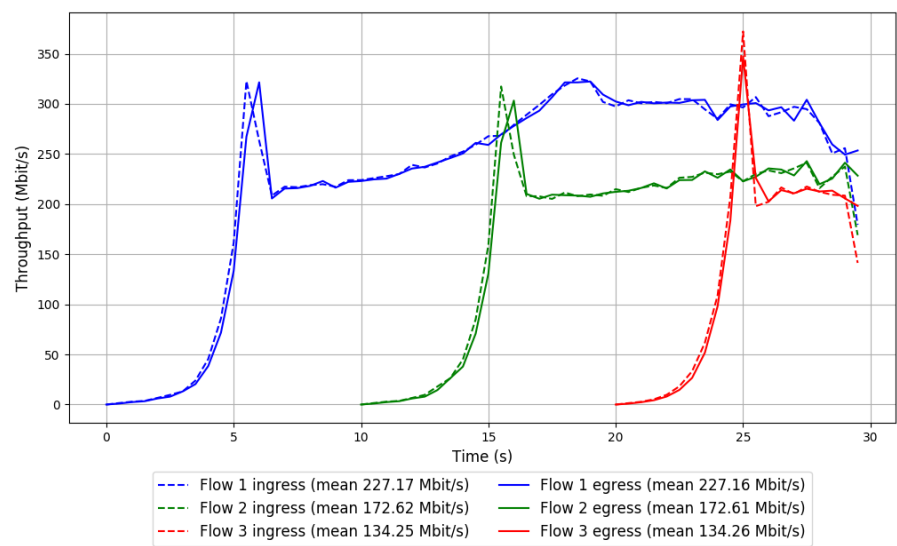
Average throughput: 134.26 Mbit/s

95th percentile per-packet one-way delay: 145.155 ms

Loss rate: 0.00%



Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-03-15 01:06:24

End at: 2018-03-15 01:06:54

# Below is generated by plot.py at 2018-03-15 06:06:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 337.85 Mbit/s

95th percentile per-packet one-way delay: 138.145 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 151.16 Mbit/s

95th percentile per-packet one-way delay: 137.080 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 181.82 Mbit/s

95th percentile per-packet one-way delay: 136.487 ms

Loss rate: 0.00%

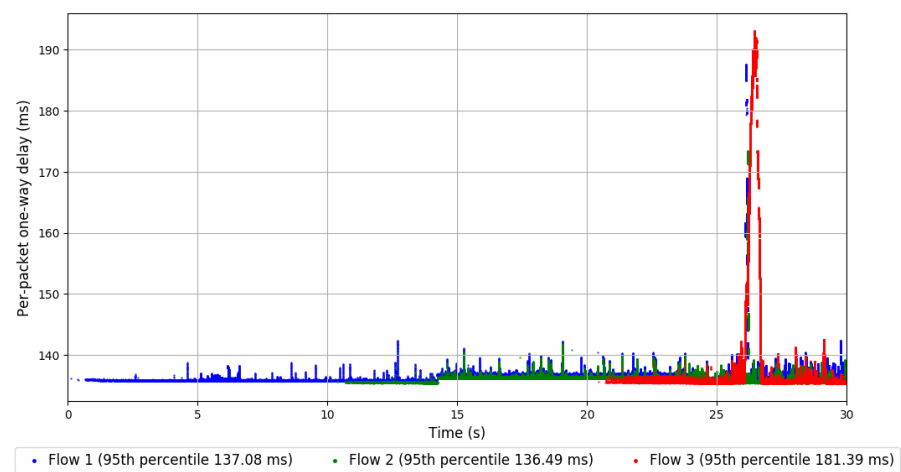
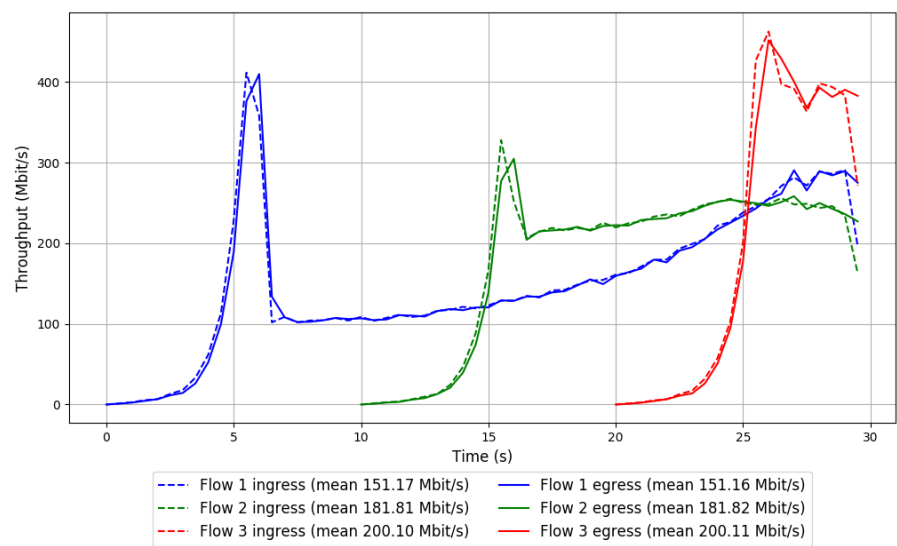
-- Flow 3:

Average throughput: 200.11 Mbit/s

95th percentile per-packet one-way delay: 181.386 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

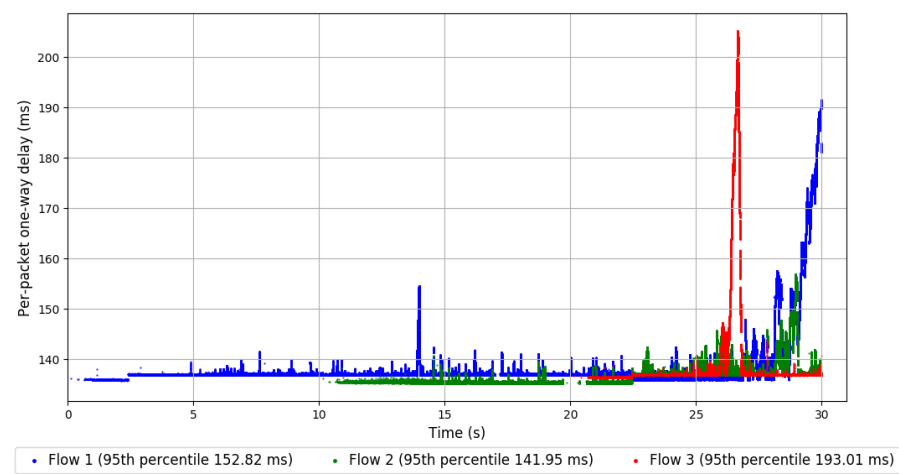
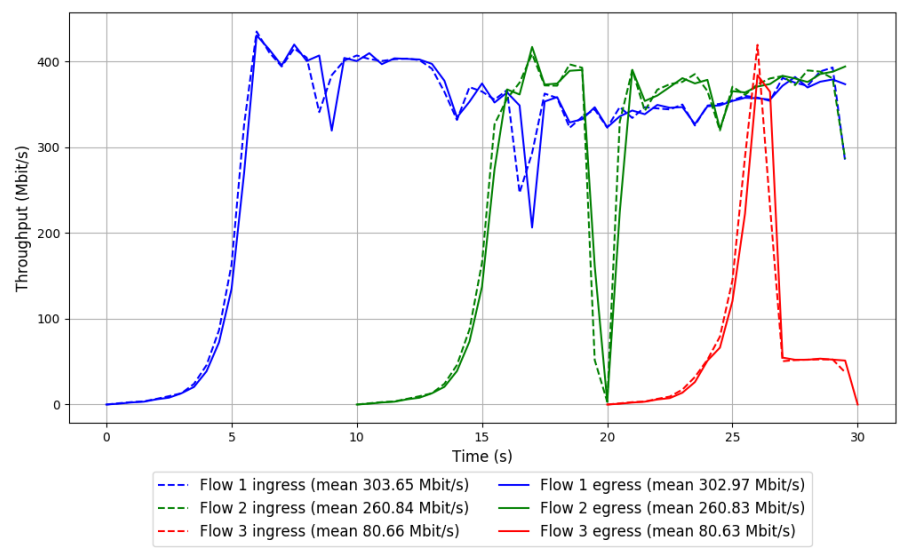


```
Run 1: Statistics of Vivace-loss

Start at: 2018-03-14 22:15:46
End at: 2018-03-14 22:16:16

# Below is generated by plot.py at 2018-03-15 06:06:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 502.82 Mbit/s
95th percentile per-packet one-way delay: 149.431 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 302.97 Mbit/s
95th percentile per-packet one-way delay: 152.825 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 260.83 Mbit/s
95th percentile per-packet one-way delay: 141.951 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 80.63 Mbit/s
95th percentile per-packet one-way delay: 193.008 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-loss — Data Link

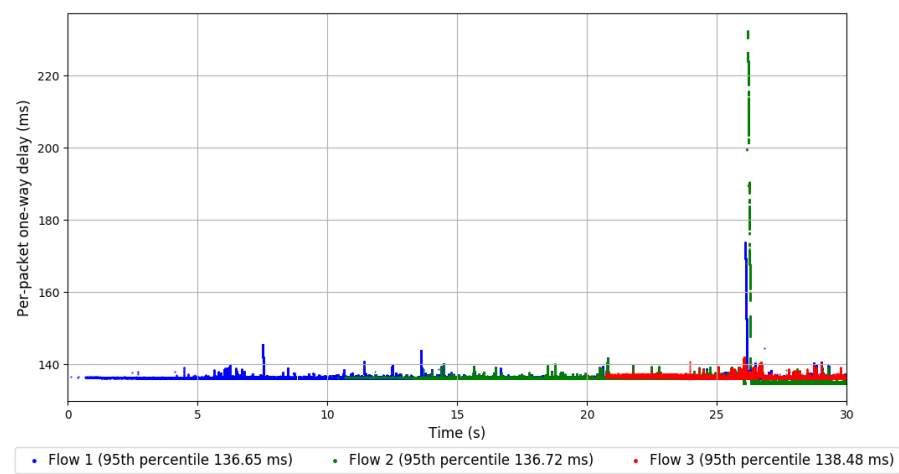
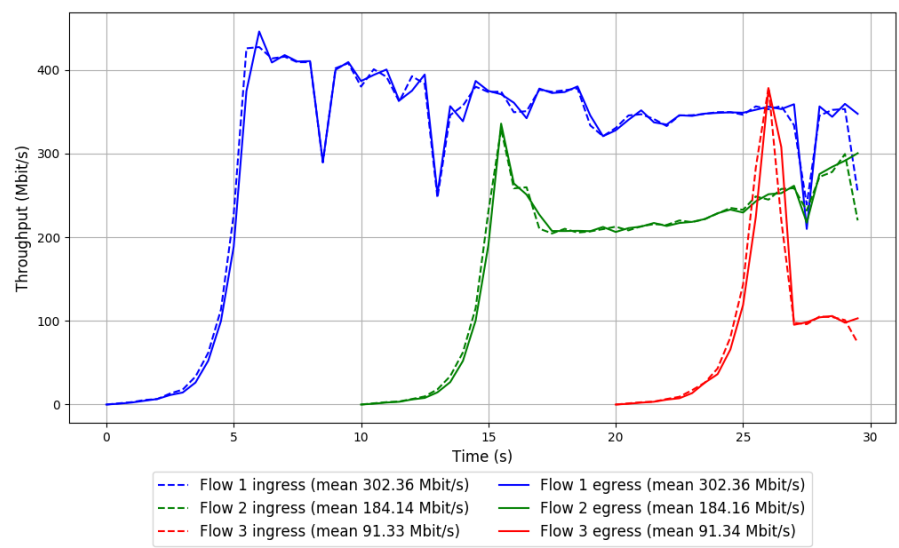


```
Run 2: Statistics of Vivace-loss

Start at: 2018-03-14 22:36:12
End at: 2018-03-14 22:36:42

# Below is generated by plot.py at 2018-03-15 06:06:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 454.85 Mbit/s
95th percentile per-packet one-way delay: 136.916 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 302.36 Mbit/s
95th percentile per-packet one-way delay: 136.652 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 184.16 Mbit/s
95th percentile per-packet one-way delay: 136.725 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 91.34 Mbit/s
95th percentile per-packet one-way delay: 138.476 ms
Loss rate: 0.00%
```

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-03-14 22:56:49

End at: 2018-03-14 22:57:19

# Below is generated by plot.py at 2018-03-15 06:08:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 488.11 Mbit/s

95th percentile per-packet one-way delay: 156.218 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 313.35 Mbit/s

95th percentile per-packet one-way delay: 153.969 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 182.53 Mbit/s

95th percentile per-packet one-way delay: 137.751 ms

Loss rate: 0.00%

-- Flow 3:

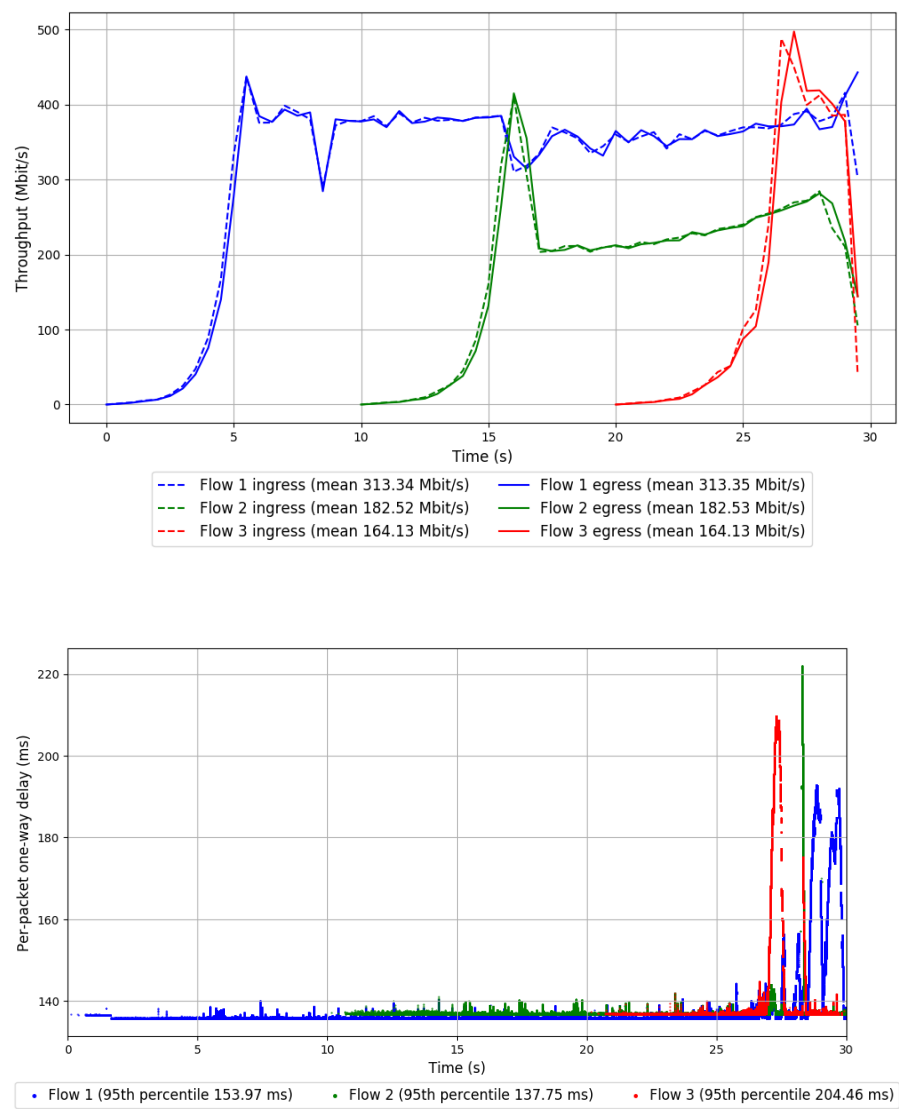
Average throughput: 164.13 Mbit/s

95th percentile per-packet one-way delay: 204.458 ms

Loss rate: 0.00%



Run 3: Report of Vivace-loss — Data Link

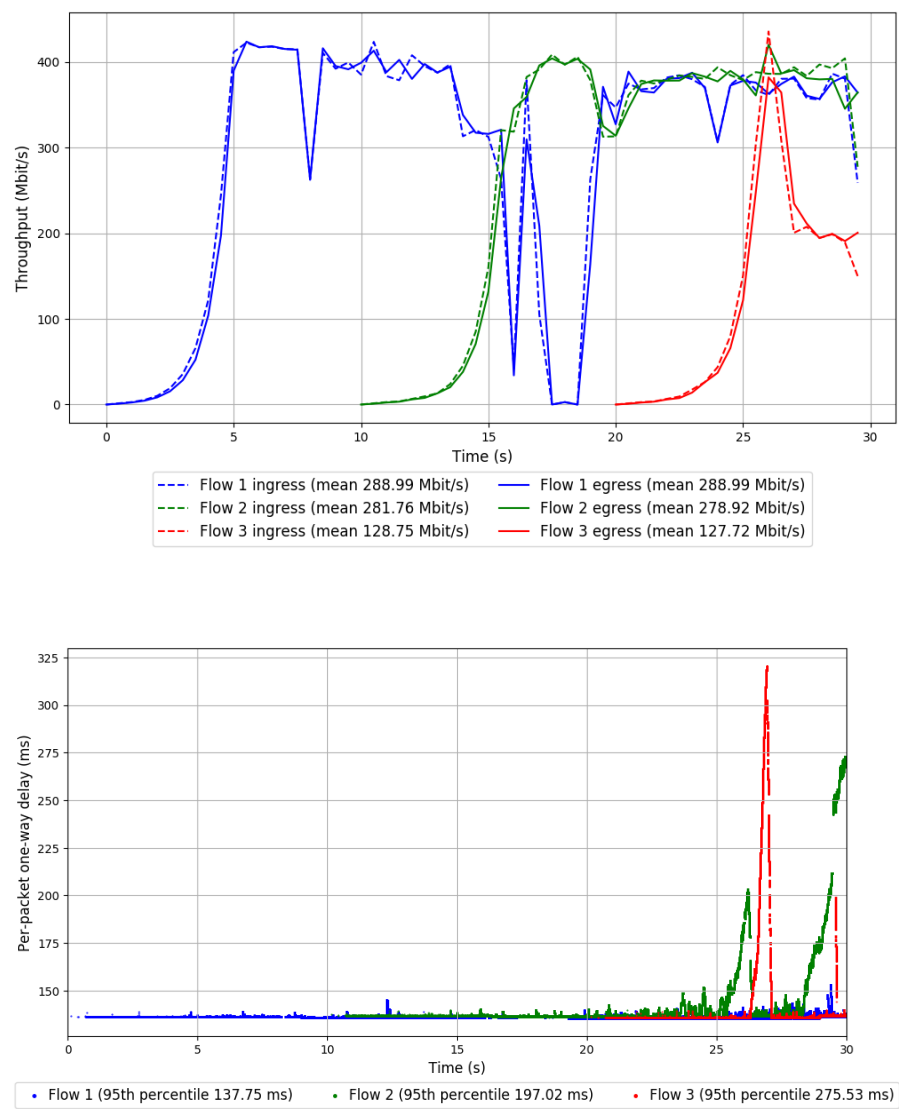


```
Run 4: Statistics of Vivace-loss

Start at: 2018-03-14 23:17:22
End at: 2018-03-14 23:17:52

# Below is generated by plot.py at 2018-03-15 06:09:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 516.40 Mbit/s
95th percentile per-packet one-way delay: 171.089 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 288.99 Mbit/s
95th percentile per-packet one-way delay: 137.754 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 278.92 Mbit/s
95th percentile per-packet one-way delay: 197.019 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 127.72 Mbit/s
95th percentile per-packet one-way delay: 275.533 ms
Loss rate: 0.79%
```

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-03-14 23:37:57

End at: 2018-03-14 23:38:27

# Below is generated by plot.py at 2018-03-15 06:11:22

# Datalink statistics

-- Total of 3 flows:

Average throughput: 461.28 Mbit/s

95th percentile per-packet one-way delay: 139.793 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 294.22 Mbit/s

95th percentile per-packet one-way delay: 139.397 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 186.32 Mbit/s

95th percentile per-packet one-way delay: 136.785 ms

Loss rate: 0.00%

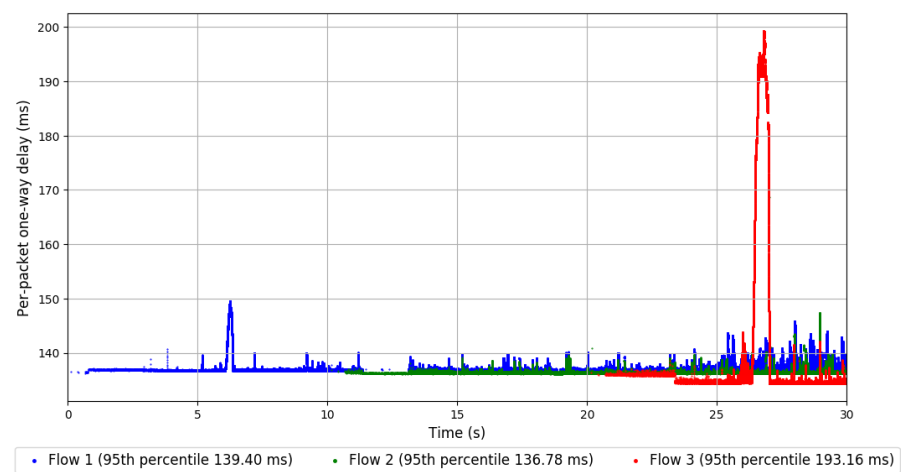
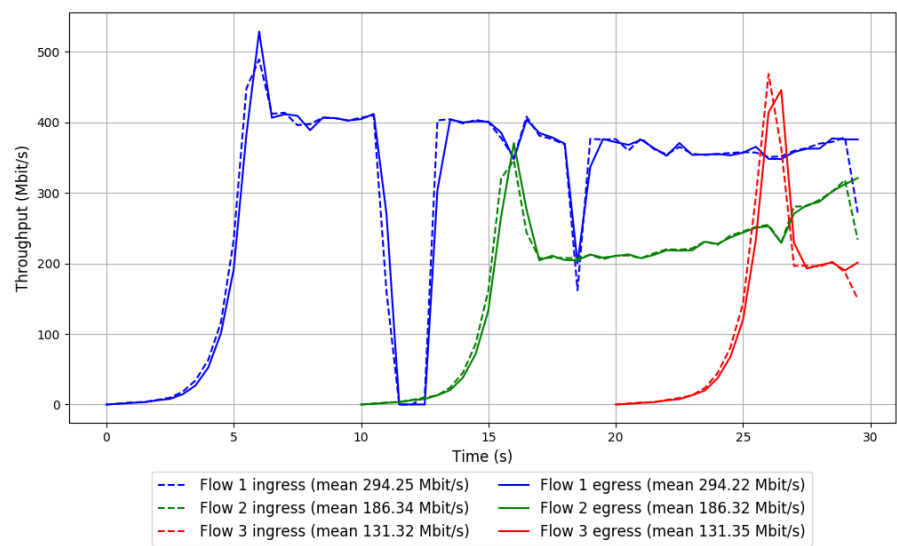
-- Flow 3:

Average throughput: 131.35 Mbit/s

95th percentile per-packet one-way delay: 193.159 ms

Loss rate: 0.00%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-03-14 23:58:18

End at: 2018-03-14 23:58:48

# Below is generated by plot.py at 2018-03-15 06:11:30

# Datalink statistics

-- Total of 3 flows:

Average throughput: 449.64 Mbit/s

95th percentile per-packet one-way delay: 137.981 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 264.48 Mbit/s

95th percentile per-packet one-way delay: 136.671 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 184.14 Mbit/s

95th percentile per-packet one-way delay: 137.202 ms

Loss rate: 0.05%

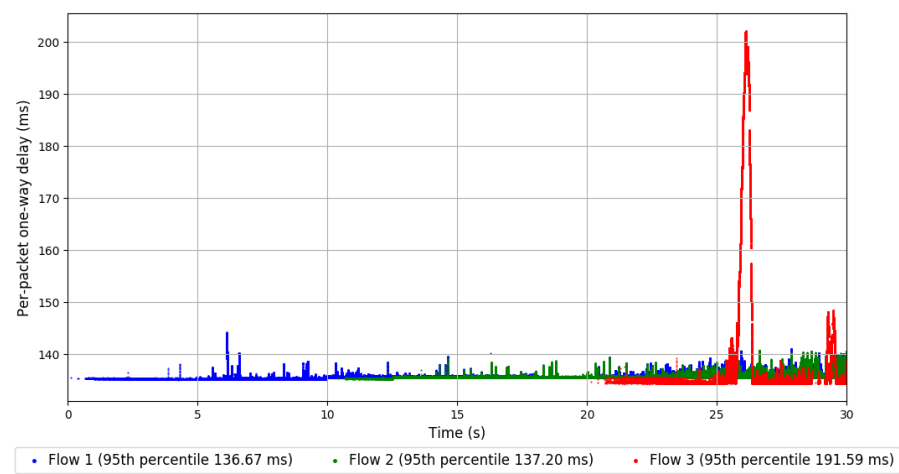
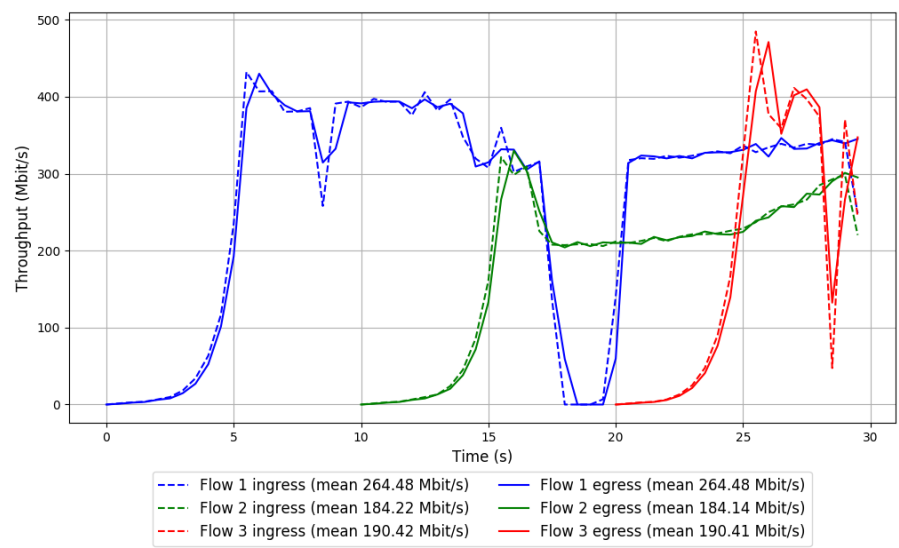
-- Flow 3:

Average throughput: 190.41 Mbit/s

95th percentile per-packet one-way delay: 191.590 ms

Loss rate: 0.01%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-03-15 00:18:26

End at: 2018-03-15 00:18:56

# Below is generated by plot.py at 2018-03-15 06:16:19

# Datalink statistics

-- Total of 3 flows:

Average throughput: 482.36 Mbit/s

95th percentile per-packet one-way delay: 141.603 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 239.55 Mbit/s

95th percentile per-packet one-way delay: 142.854 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 272.87 Mbit/s

95th percentile per-packet one-way delay: 137.556 ms

Loss rate: 0.00%

-- Flow 3:

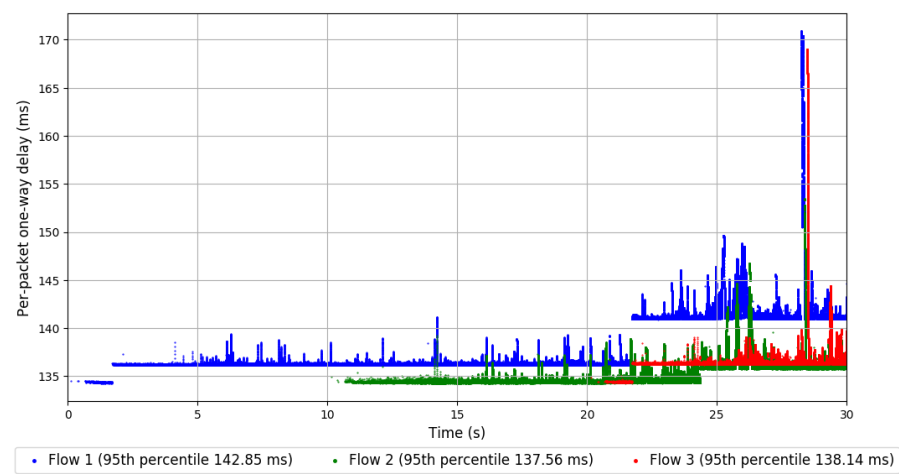
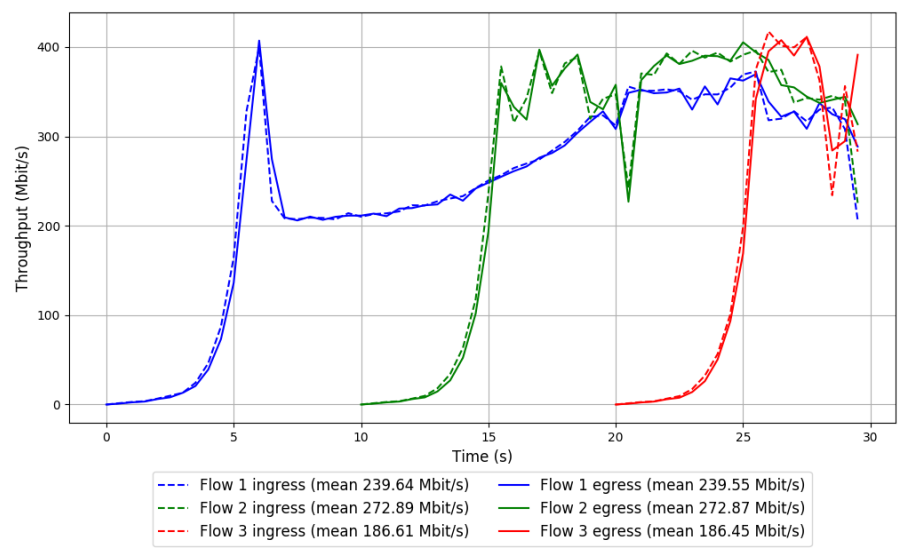
Average throughput: 186.45 Mbit/s

95th percentile per-packet one-way delay: 138.138 ms

Loss rate: 0.06%



Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-03-15 00:39:04

End at: 2018-03-15 00:39:34

# Below is generated by plot.py at 2018-03-15 06:16:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 312.16 Mbit/s

95th percentile per-packet one-way delay: 139.286 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 125.76 Mbit/s

95th percentile per-packet one-way delay: 137.798 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 190.16 Mbit/s

95th percentile per-packet one-way delay: 139.177 ms

Loss rate: 0.03%

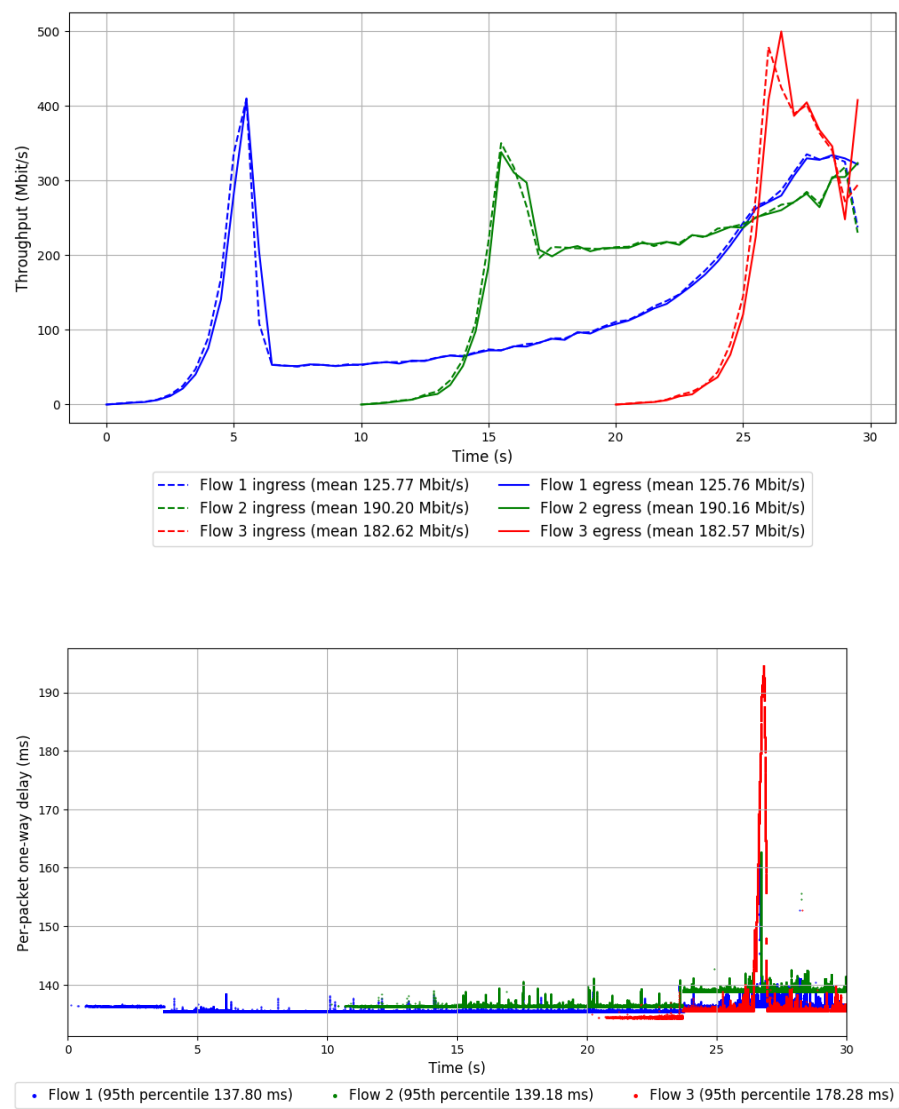
-- Flow 3:

Average throughput: 182.57 Mbit/s

95th percentile per-packet one-way delay: 178.284 ms

Loss rate: 0.03%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-03-15 00:59:17

End at: 2018-03-15 00:59:47

# Below is generated by plot.py at 2018-03-15 06:17:34

# Datalink statistics

-- Total of 3 flows:

Average throughput: 497.70 Mbit/s

95th percentile per-packet one-way delay: 138.424 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 276.30 Mbit/s

95th percentile per-packet one-way delay: 137.101 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 246.05 Mbit/s

95th percentile per-packet one-way delay: 137.570 ms

Loss rate: 0.00%

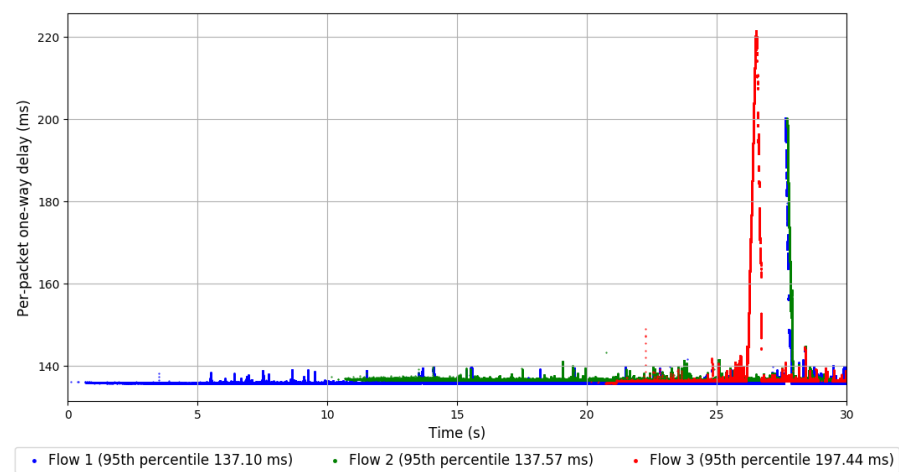
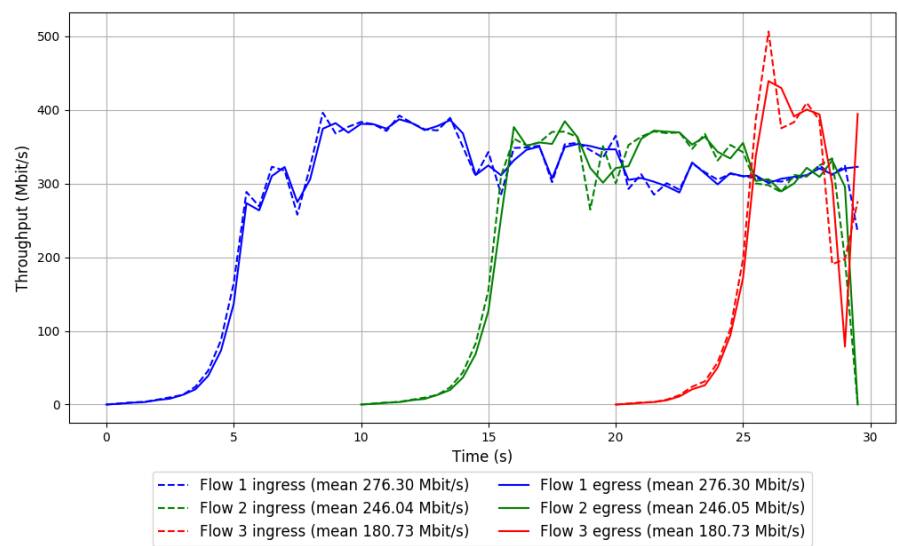
-- Flow 3:

Average throughput: 180.73 Mbit/s

95th percentile per-packet one-way delay: 197.440 ms

Loss rate: 0.00%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-03-15 01:19:41

End at: 2018-03-15 01:20:11

# Below is generated by plot.py at 2018-03-15 06:18:29

# Datalink statistics

-- Total of 3 flows:

Average throughput: 463.11 Mbit/s

95th percentile per-packet one-way delay: 138.396 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 243.63 Mbit/s

95th percentile per-packet one-way delay: 137.491 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 251.35 Mbit/s

95th percentile per-packet one-way delay: 139.065 ms

Loss rate: 0.00%

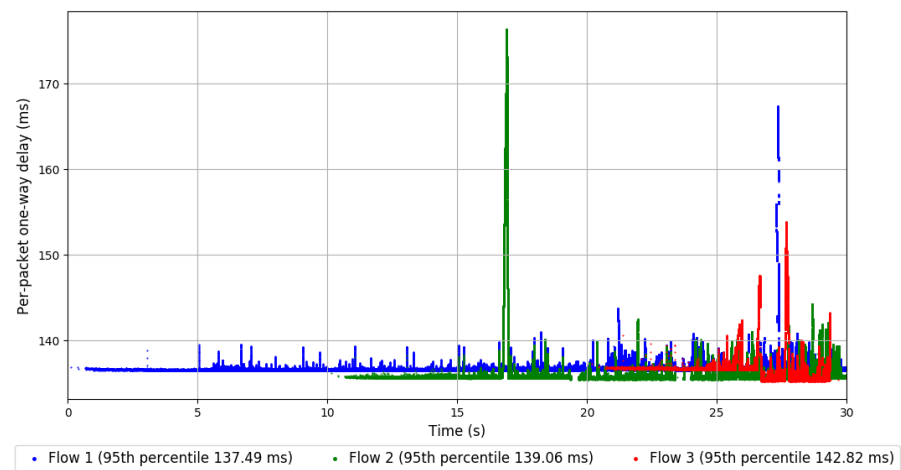
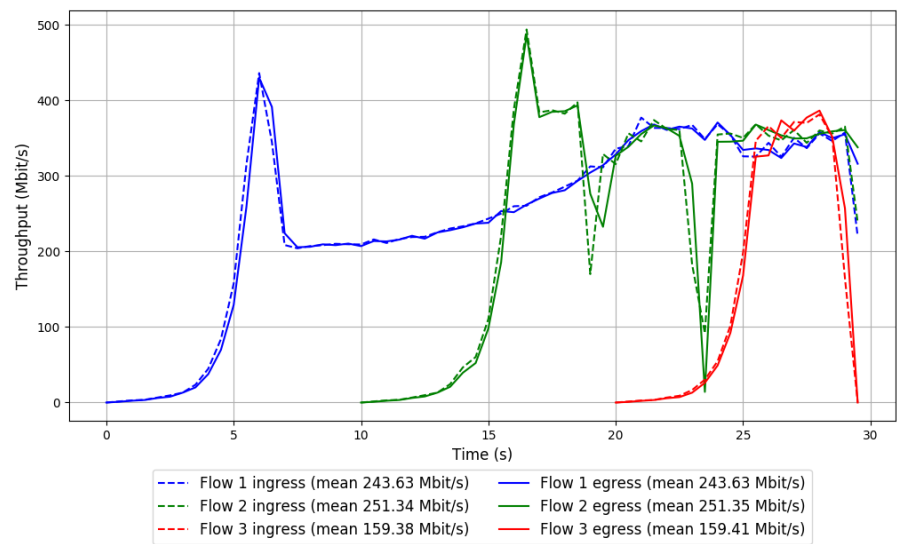
-- Flow 3:

Average throughput: 159.41 Mbit/s

95th percentile per-packet one-way delay: 142.818 ms

Loss rate: 0.00%

Run 10: Report of Vivace-loss — Data Link



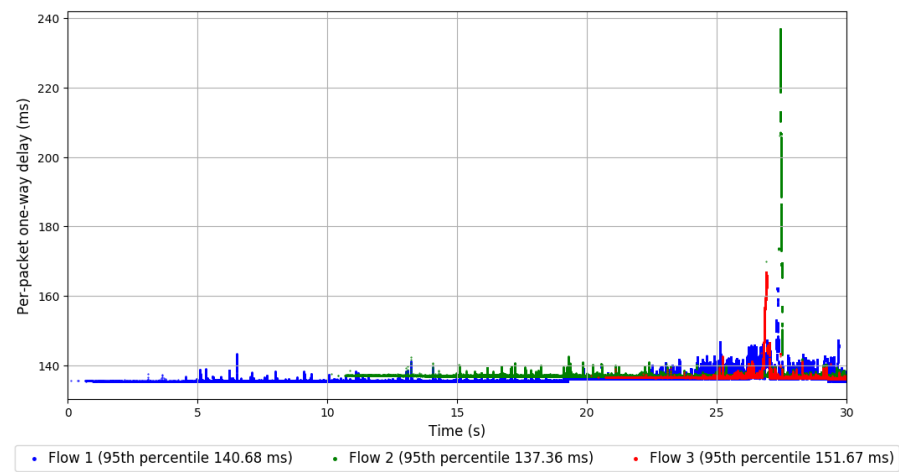
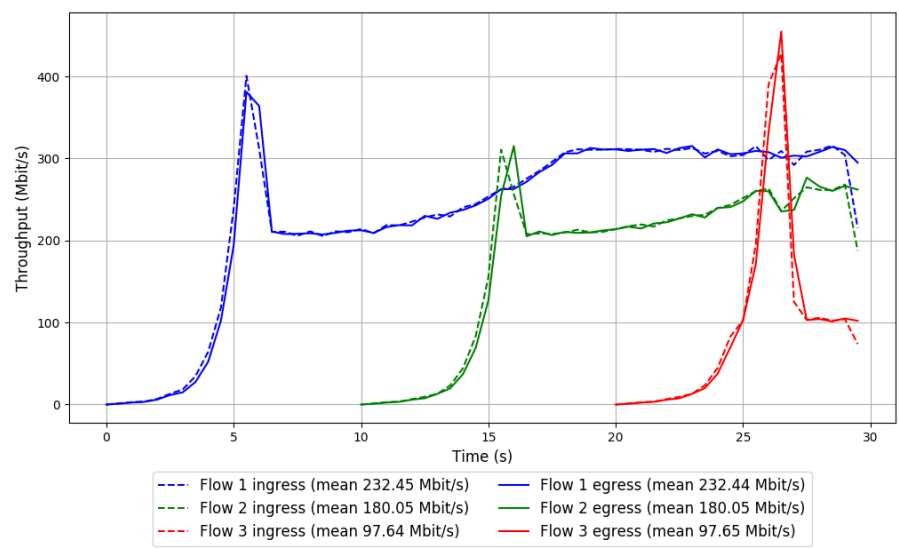
```
Run 1: Statistics of Vivace-LTE

Start at: 2018-03-14 22:13:11
End at: 2018-03-14 22:13:41

# Below is generated by plot.py at 2018-03-15 06:18:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 384.25 Mbit/s
95th percentile per-packet one-way delay: 140.432 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 232.44 Mbit/s
95th percentile per-packet one-way delay: 140.676 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 180.05 Mbit/s
95th percentile per-packet one-way delay: 137.360 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 97.65 Mbit/s
95th percentile per-packet one-way delay: 151.672 ms
Loss rate: 0.00%
```



Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-03-14 22:33:36

End at: 2018-03-14 22:34:06

# Below is generated by plot.py at 2018-03-15 06:19:39

# Datalink statistics

-- Total of 3 flows:

Average throughput: 408.90 Mbit/s

95th percentile per-packet one-way delay: 137.314 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 252.17 Mbit/s

95th percentile per-packet one-way delay: 136.560 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 179.02 Mbit/s

95th percentile per-packet one-way delay: 137.281 ms

Loss rate: 0.00%

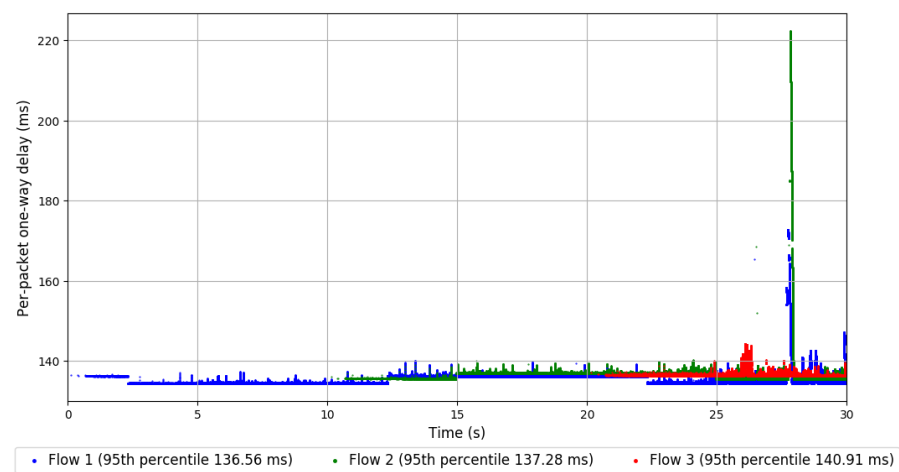
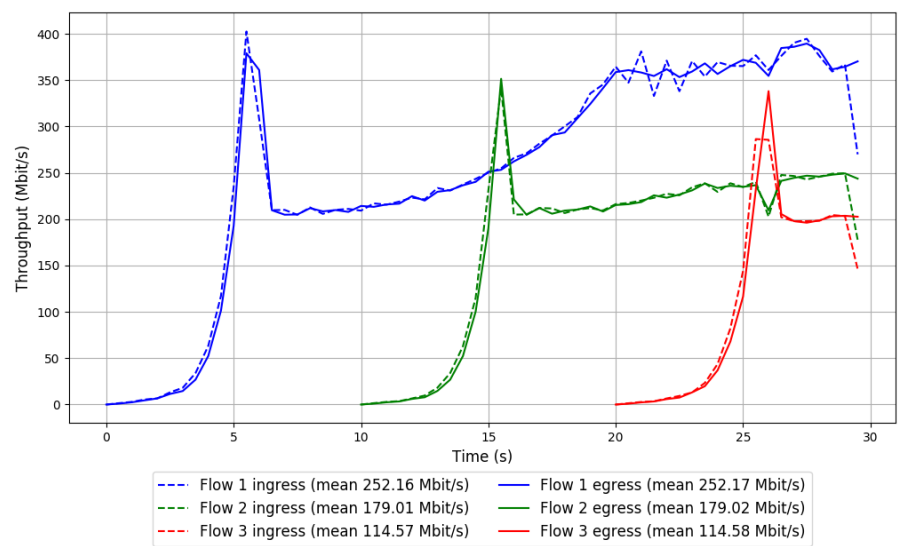
-- Flow 3:

Average throughput: 114.58 Mbit/s

95th percentile per-packet one-way delay: 140.911 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-03-14 22:54:13

End at: 2018-03-14 22:54:43

# Below is generated by plot.py at 2018-03-15 06:21:27

# Datalink statistics

-- Total of 3 flows:

Average throughput: 408.90 Mbit/s

95th percentile per-packet one-way delay: 140.903 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 231.03 Mbit/s

95th percentile per-packet one-way delay: 137.785 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 180.06 Mbit/s

95th percentile per-packet one-way delay: 138.199 ms

Loss rate: 0.00%

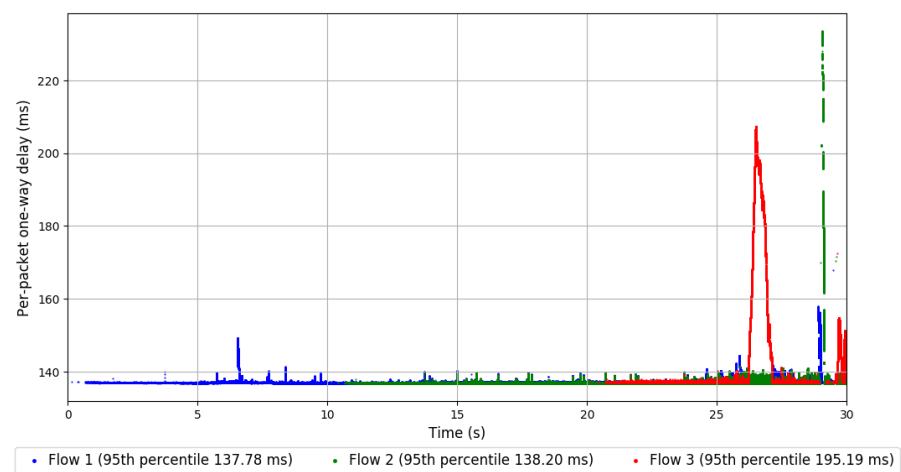
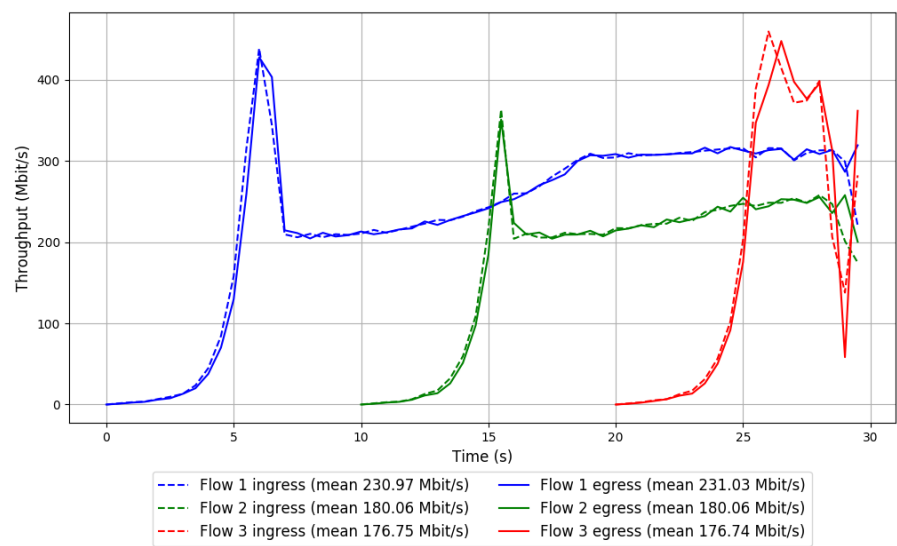
-- Flow 3:

Average throughput: 176.74 Mbit/s

95th percentile per-packet one-way delay: 195.195 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-03-14 23:14:45

End at: 2018-03-14 23:15:15

# Below is generated by plot.py at 2018-03-15 06:21:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 423.26 Mbit/s

95th percentile per-packet one-way delay: 137.776 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 269.75 Mbit/s

95th percentile per-packet one-way delay: 137.734 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 175.99 Mbit/s

95th percentile per-packet one-way delay: 137.247 ms

Loss rate: 0.00%

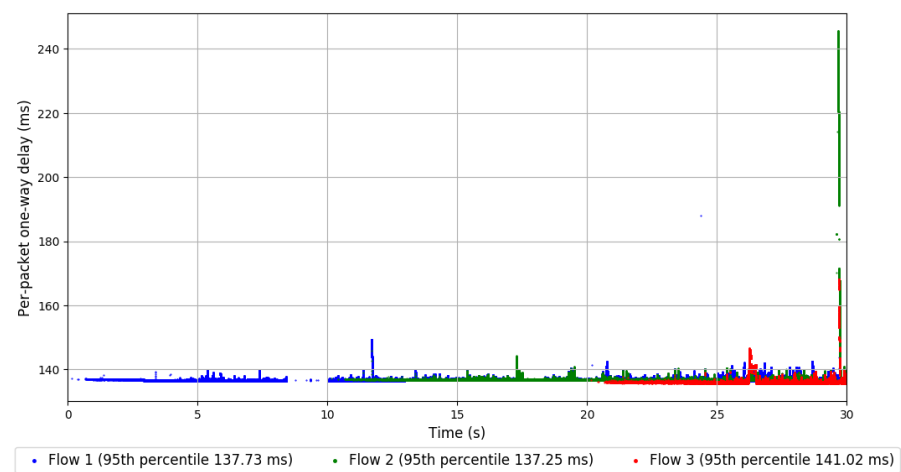
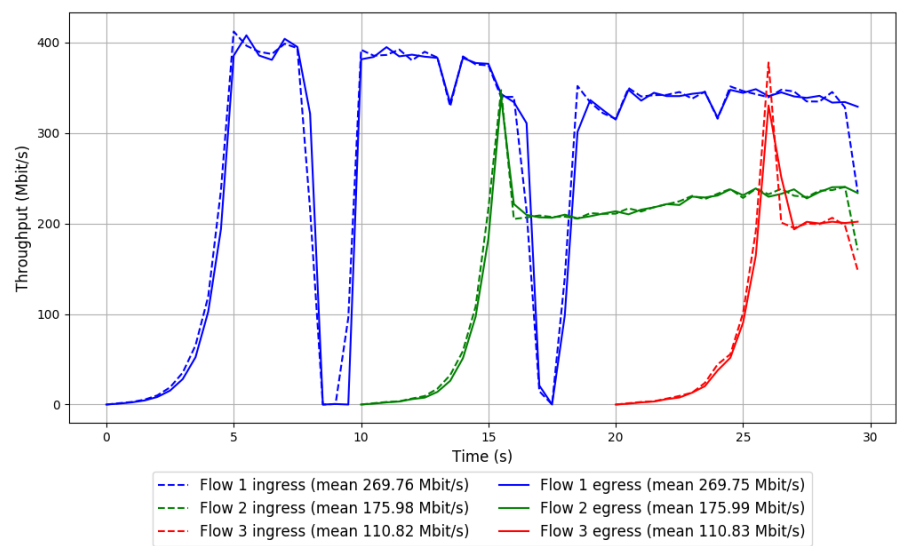
-- Flow 3:

Average throughput: 110.83 Mbit/s

95th percentile per-packet one-way delay: 141.018 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-03-14 23:35:22

End at: 2018-03-14 23:35:52

# Below is generated by plot.py at 2018-03-15 06:21:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 400.93 Mbit/s

95th percentile per-packet one-way delay: 138.623 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 235.72 Mbit/s

95th percentile per-packet one-way delay: 137.189 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 179.53 Mbit/s

95th percentile per-packet one-way delay: 137.385 ms

Loss rate: 0.00%

-- Flow 3:

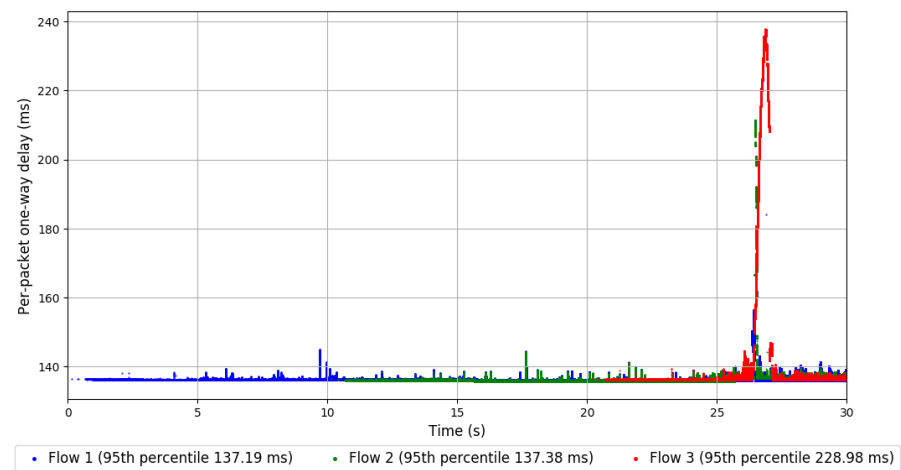
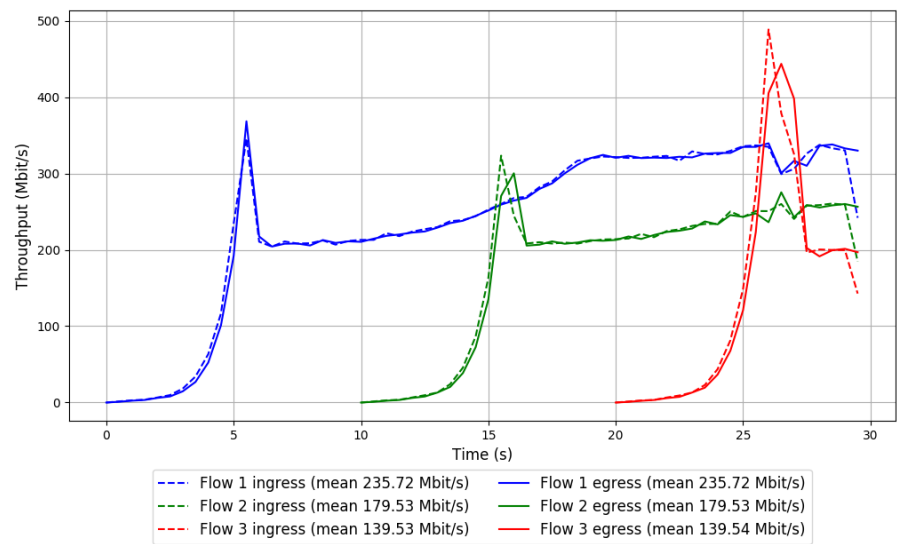
Average throughput: 139.54 Mbit/s

95th percentile per-packet one-way delay: 228.976 ms

Loss rate: 0.00%



Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-03-14 23:55:39

End at: 2018-03-14 23:56:09

# Below is generated by plot.py at 2018-03-15 06:25:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 448.32 Mbit/s

95th percentile per-packet one-way delay: 138.418 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 269.93 Mbit/s

95th percentile per-packet one-way delay: 138.652 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 204.83 Mbit/s

95th percentile per-packet one-way delay: 137.466 ms

Loss rate: 0.10%

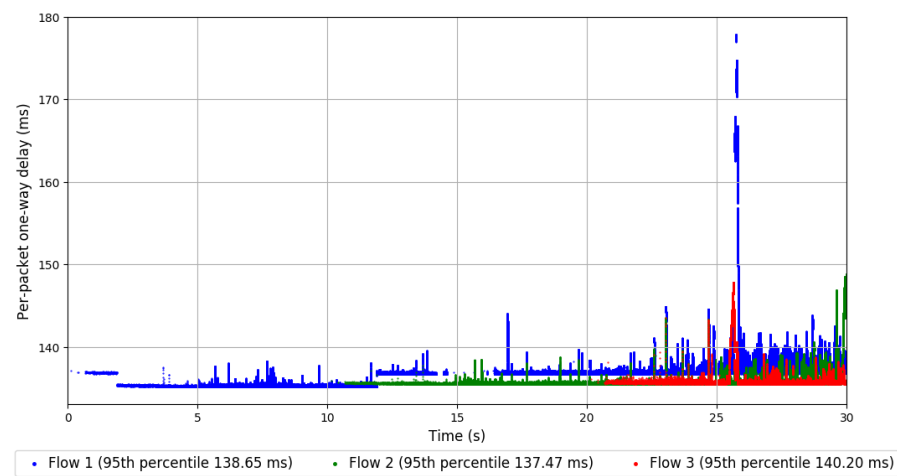
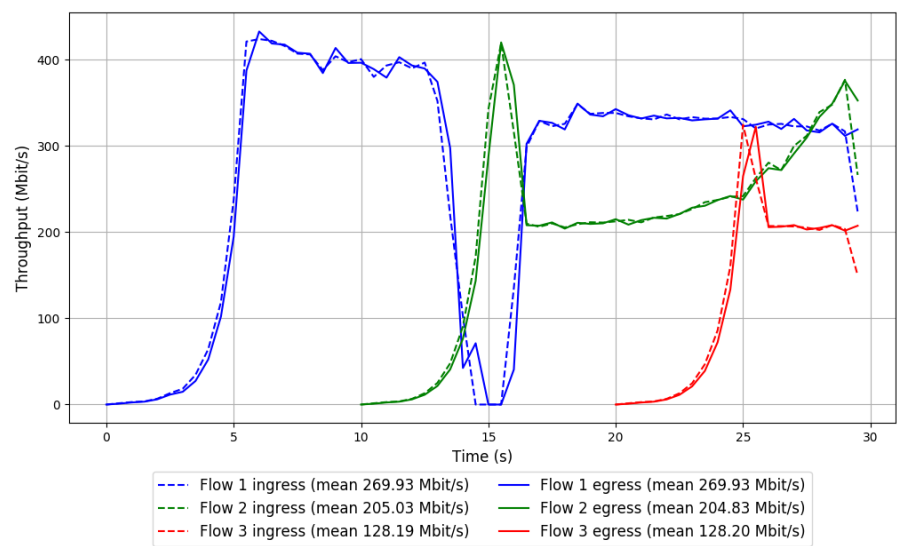
-- Flow 3:

Average throughput: 128.20 Mbit/s

95th percentile per-packet one-way delay: 140.197 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-03-15 00:15:44

End at: 2018-03-15 00:16:14

# Below is generated by plot.py at 2018-03-15 06:26:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 500.29 Mbit/s

95th percentile per-packet one-way delay: 140.246 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 260.80 Mbit/s

95th percentile per-packet one-way delay: 136.373 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 281.42 Mbit/s

95th percentile per-packet one-way delay: 138.142 ms

Loss rate: 0.02%

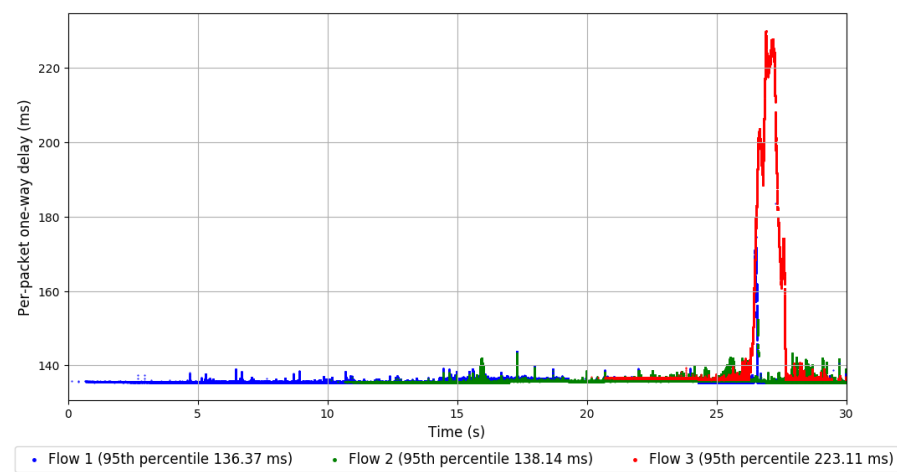
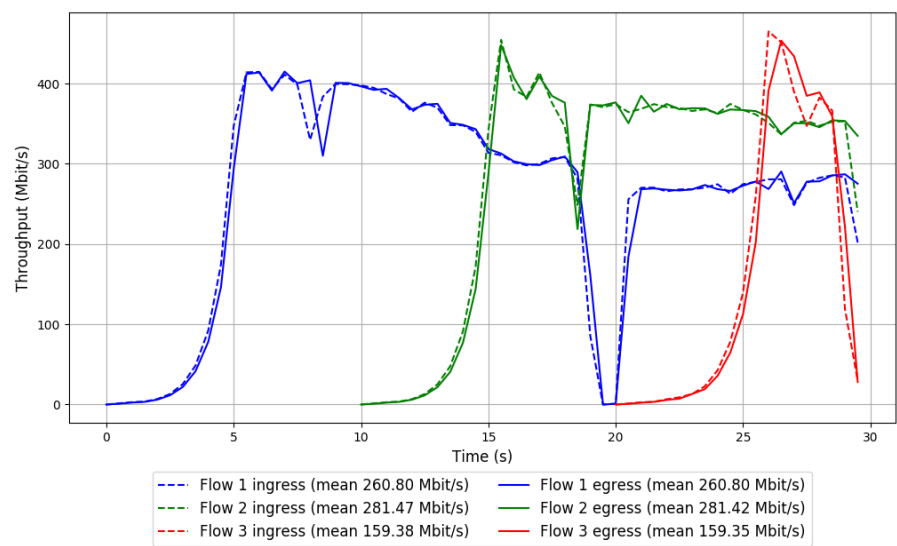
-- Flow 3:

Average throughput: 159.35 Mbit/s

95th percentile per-packet one-way delay: 223.107 ms

Loss rate: 0.05%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-03-15 00:36:28

End at: 2018-03-15 00:36:58

# Below is generated by plot.py at 2018-03-15 06:26:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 421.17 Mbit/s

95th percentile per-packet one-way delay: 140.906 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 235.88 Mbit/s

95th percentile per-packet one-way delay: 137.569 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 187.64 Mbit/s

95th percentile per-packet one-way delay: 140.944 ms

Loss rate: 0.00%

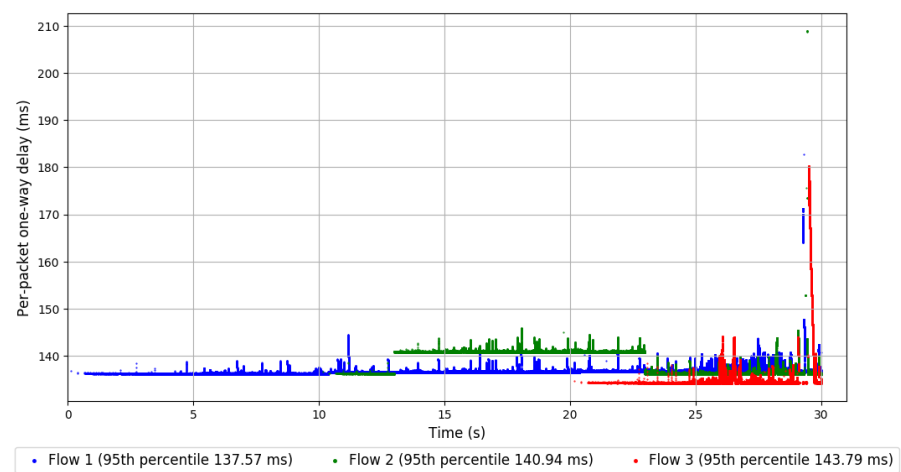
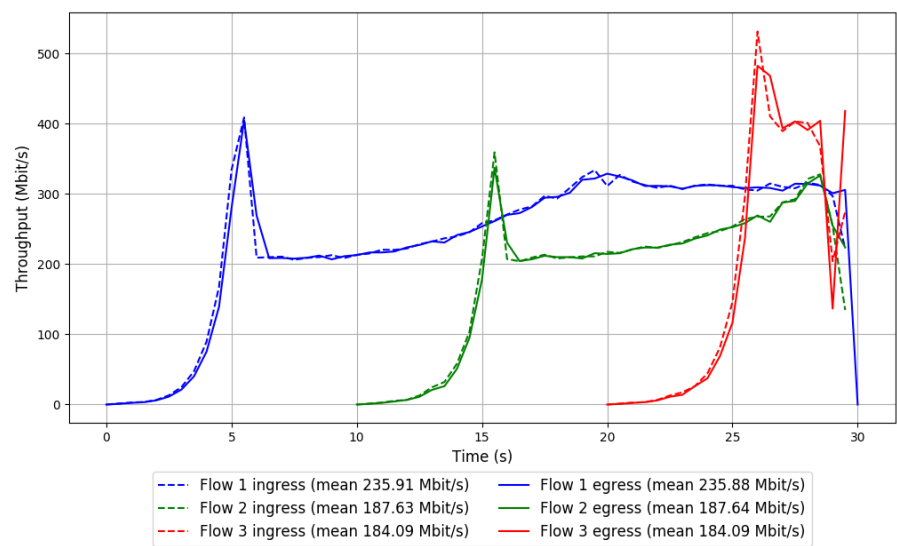
-- Flow 3:

Average throughput: 184.09 Mbit/s

95th percentile per-packet one-way delay: 143.789 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-03-15 00:56:41

End at: 2018-03-15 00:57:11

# Below is generated by plot.py at 2018-03-15 06:26:06

# Datalink statistics

-- Total of 3 flows:

Average throughput: 410.86 Mbit/s

95th percentile per-packet one-way delay: 141.006 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 225.11 Mbit/s

95th percentile per-packet one-way delay: 137.229 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 181.72 Mbit/s

95th percentile per-packet one-way delay: 141.070 ms

Loss rate: 0.00%

-- Flow 3:

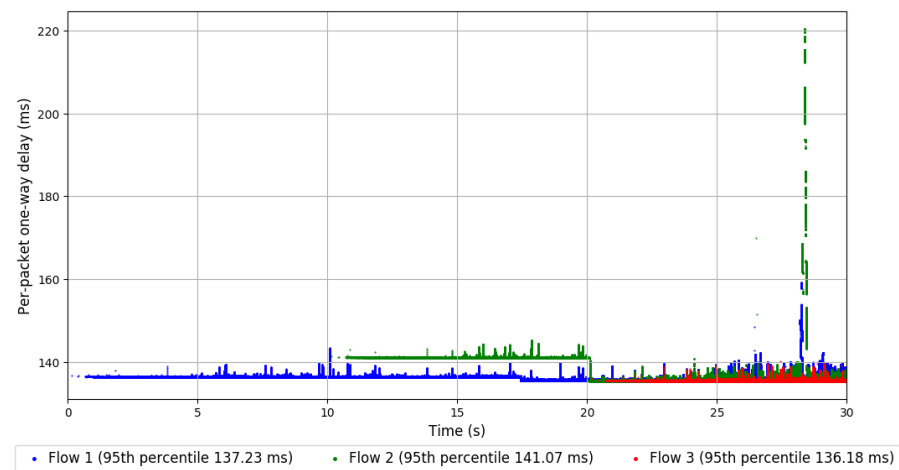
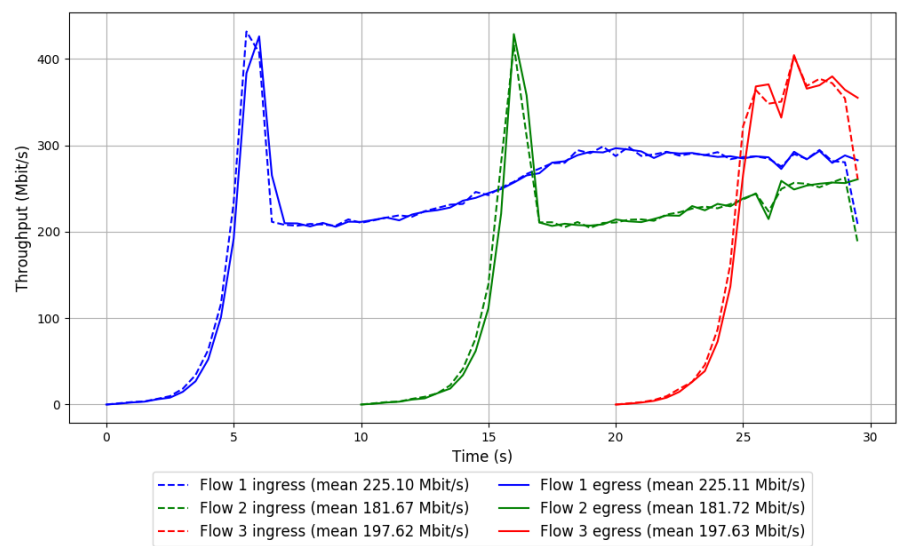
Average throughput: 197.63 Mbit/s

95th percentile per-packet one-way delay: 136.182 ms

Loss rate: 0.00%



Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-03-15 01:17:03
End at: 2018-03-15 01:17:33

# Below is generated by plot.py at 2018-03-15 06:26:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 427.55 Mbit/s
95th percentile per-packet one-way delay: 143.960 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 242.83 Mbit/s
95th percentile per-packet one-way delay: 140.198 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 193.13 Mbit/s
95th percentile per-packet one-way delay: 136.015 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 170.76 Mbit/s
95th percentile per-packet one-way delay: 186.267 ms
Loss rate: 0.03%
```

Run 10: Report of Vivace-LTE — Data Link

