

Pantheon Report

Generated at 2017-12-06 15:21:35 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

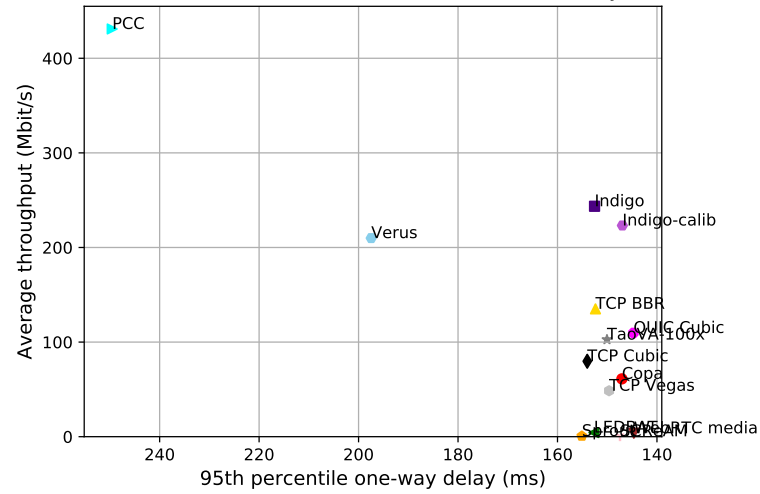
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

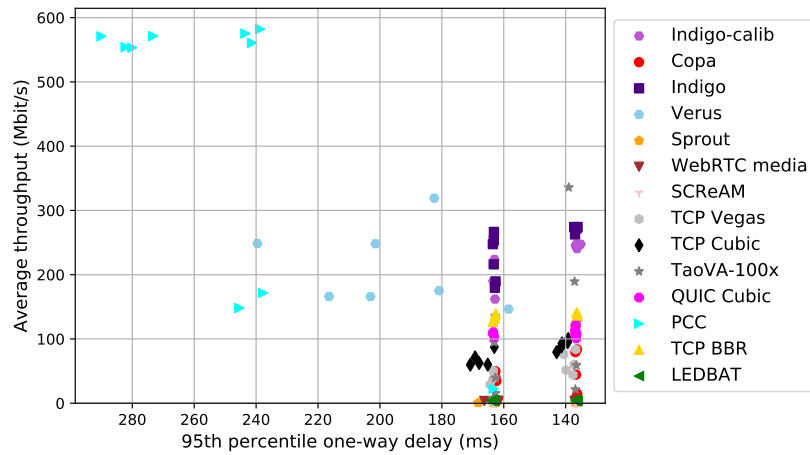
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from GCE London Ethernet to GCE Sydney 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 | 70.46 | 67.92 | 60.58 | 152.37 | 149.74 | 146.98 | 1.03 | 1.62 | 3.66 |
| TCP Cubic | 10 | 43.15 | 43.23 | 24.71 | 153.79 | 153.77 | 150.65 | 1.16 | 1.89 | 5.84 |
| LEDBAT | 10 | 2.59 | 2.17 | 1.02 | 152.74 | 152.55 | 149.70 | 1.90 | 2.94 | 5.96 |
| PCC | 10 | 346.01 | 78.41 | 102.55 | 240.71 | 221.04 | 226.69 | 3.66 | 2.75 | 4.67 |
| QUIC Cubic | 10 | 55.67 | 60.67 | 42.69 | 142.02 | 141.47 | 139.17 | 1.10 | 0.57 | 4.70 |
| SCReAM | 10 | 0.22 | 0.22 | 0.21 | 144.70 | 136.52 | 144.59 | 0.83 | 1.42 | 2.59 |
| WebRTC media | 10 | 2.00 | 1.22 | 0.39 | 139.49 | 139.09 | 149.72 | 1.10 | 1.79 | 5.58 |
| Sprout | 6 | 0.34 | 0.34 | 0.39 | 154.72 | 155.21 | 149.41 | 0.83 | 0.70 | 2.49 |
| TaoVA-100x | 10 | 53.40 | 59.42 | 53.20 | 147.39 | 149.93 | 148.42 | 0.89 | 1.80 | 2.84 |
| TCP Vegas | 9 | 27.07 | 24.65 | 20.27 | 627.90 | 149.11 | 149.99 | 0.77 | 1.61 | 3.14 |
| Verus | 7 | 138.89 | 84.97 | 50.28 | 189.11 | 183.64 | 270.13 | 1.15 | 2.06 | 2.98 |
| Copa | 10 | 33.76 | 33.17 | 22.98 | 149.54 | 144.49 | 146.94 | 0.45 | 0.81 | 7.34 |
| Indigo | 10 | 127.86 | 123.84 | 105.53 | 149.88 | 152.64 | 153.31 | 0.84 | 1.42 | 3.69 |
| Indigo-calib | 10 | 117.59 | 111.64 | 99.32 | 146.87 | 147.02 | 147.10 | 0.97 | 1.48 | 3.96 |

Run 1: Statistics of TCP BBR

Start at: 2017-12-06 10:13:05

End at: 2017-12-06 10:13:35

Below is generated by plot.py at 2017-12-06 14:45:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.96 Mbit/s

95th percentile per-packet one-way delay: 136.515 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 73.68 Mbit/s

95th percentile per-packet one-way delay: 136.479 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 70.72 Mbit/s

95th percentile per-packet one-way delay: 136.527 ms

Loss rate: 1.52%

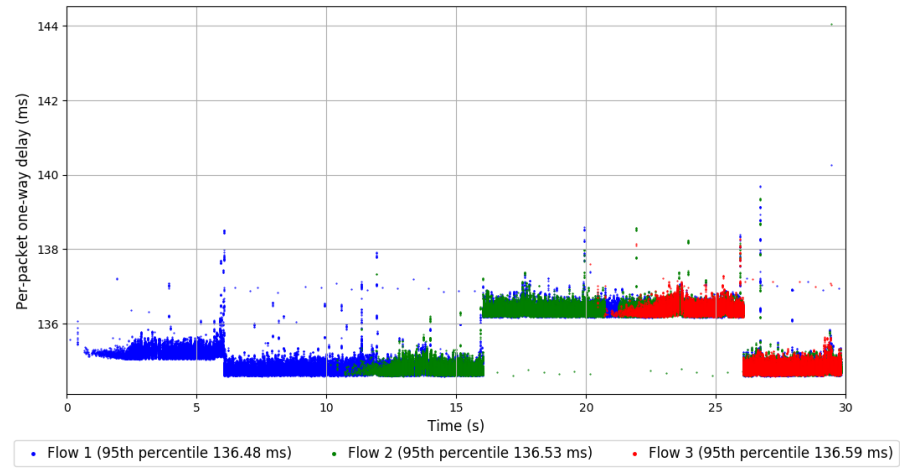
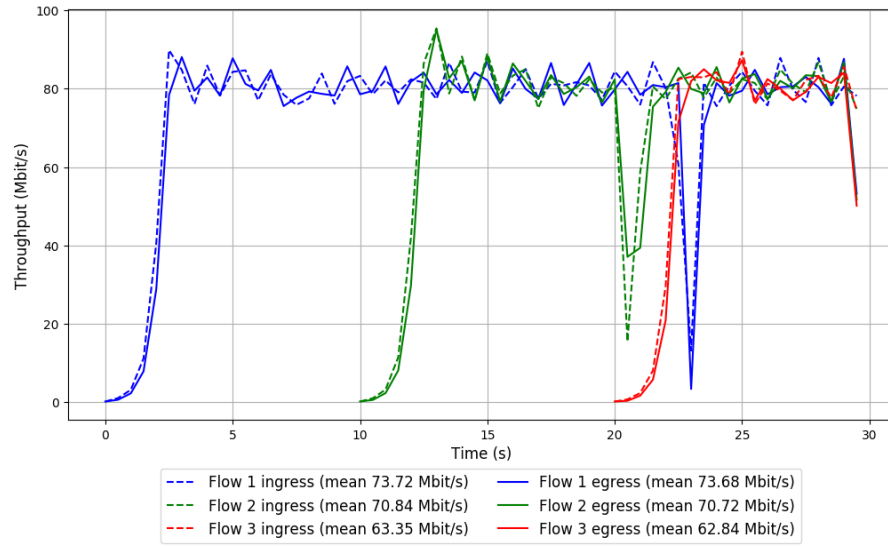
-- Flow 3:

Average throughput: 62.84 Mbit/s

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

Loss rate: 3.66%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-06 10:26:49

End at: 2017-12-06 10:27:19

Below is generated by plot.py at 2017-12-06 14:45:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.51 Mbit/s

95th percentile per-packet one-way delay: 136.242 ms

Loss rate: 1.64%

-- Flow 1:

Average throughput: 73.37 Mbit/s

95th percentile per-packet one-way delay: 136.247 ms

Loss rate: 1.08%

-- Flow 2:

Average throughput: 69.55 Mbit/s

95th percentile per-packet one-way delay: 136.269 ms

Loss rate: 1.52%

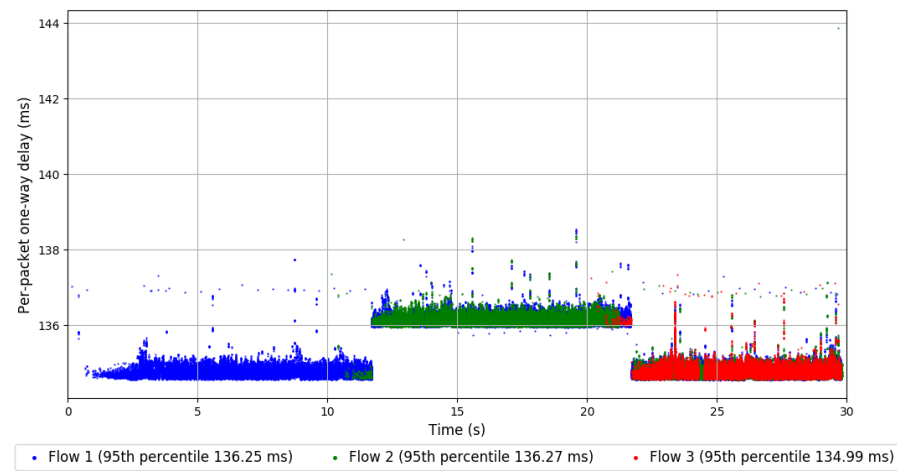
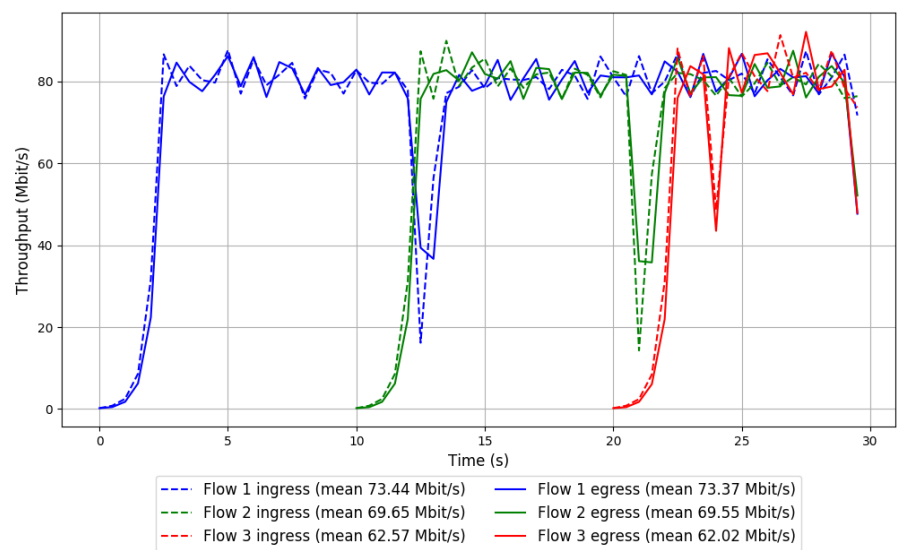
-- Flow 3:

Average throughput: 62.02 Mbit/s

95th percentile per-packet one-way delay: 134.991 ms

Loss rate: 3.86%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-06 10:40:31

End at: 2017-12-06 10:41:01

Below is generated by plot.py at 2017-12-06 14:45:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.59 Mbit/s

95th percentile per-packet one-way delay: 136.304 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 72.05 Mbit/s

95th percentile per-packet one-way delay: 136.294 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 72.34 Mbit/s

95th percentile per-packet one-way delay: 136.311 ms

Loss rate: 1.51%

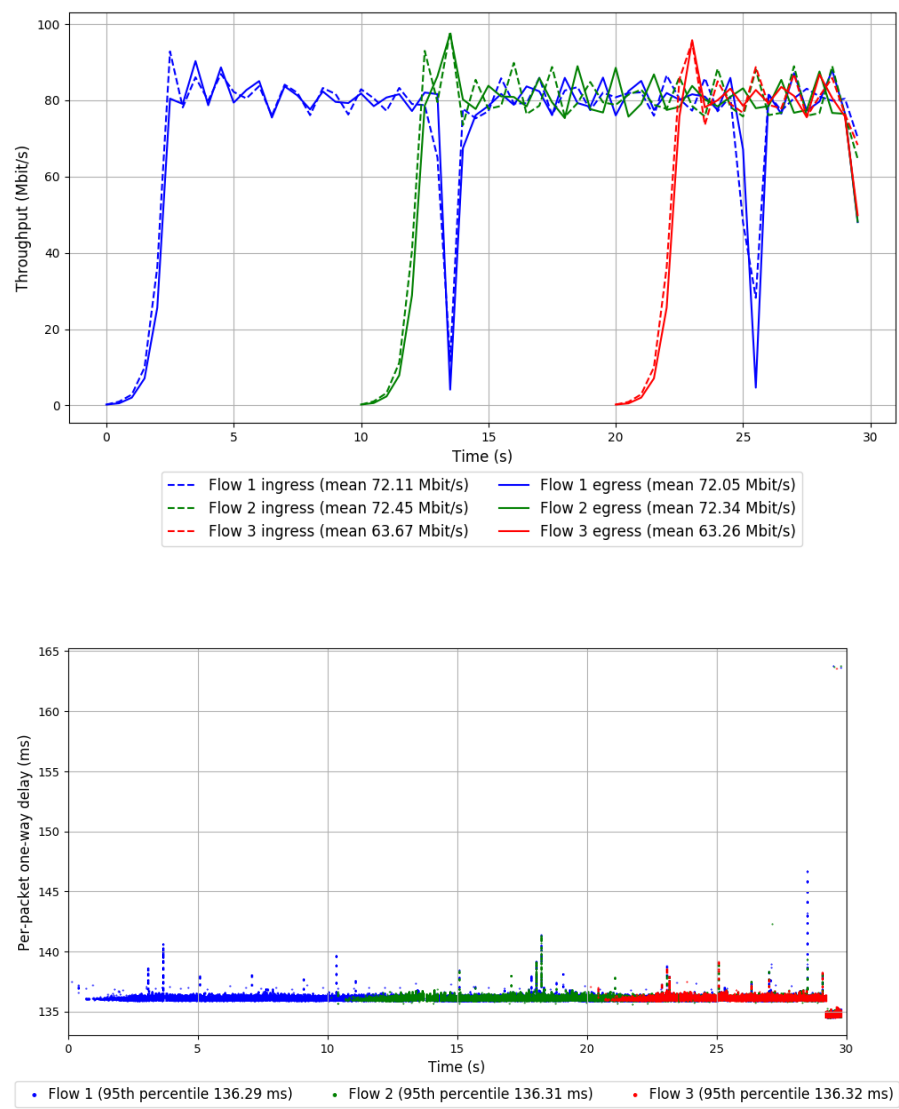
-- Flow 3:

Average throughput: 63.26 Mbit/s

95th percentile per-packet one-way delay: 136.322 ms

Loss rate: 3.39%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-06 10:54:18

End at: 2017-12-06 10:54:48

Below is generated by plot.py at 2017-12-06 14:45:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.49 Mbit/s

95th percentile per-packet one-way delay: 162.621 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 72.26 Mbit/s

95th percentile per-packet one-way delay: 162.686 ms

Loss rate: 1.08%

-- Flow 2:

Average throughput: 70.26 Mbit/s

95th percentile per-packet one-way delay: 136.283 ms

Loss rate: 1.52%

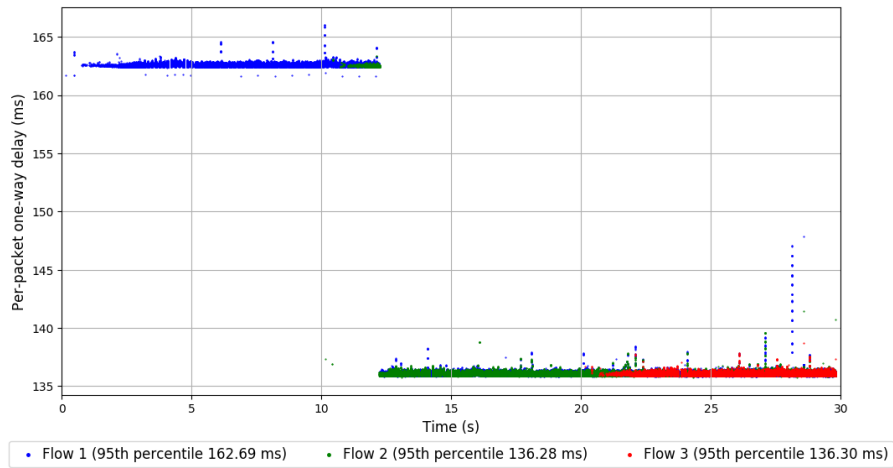
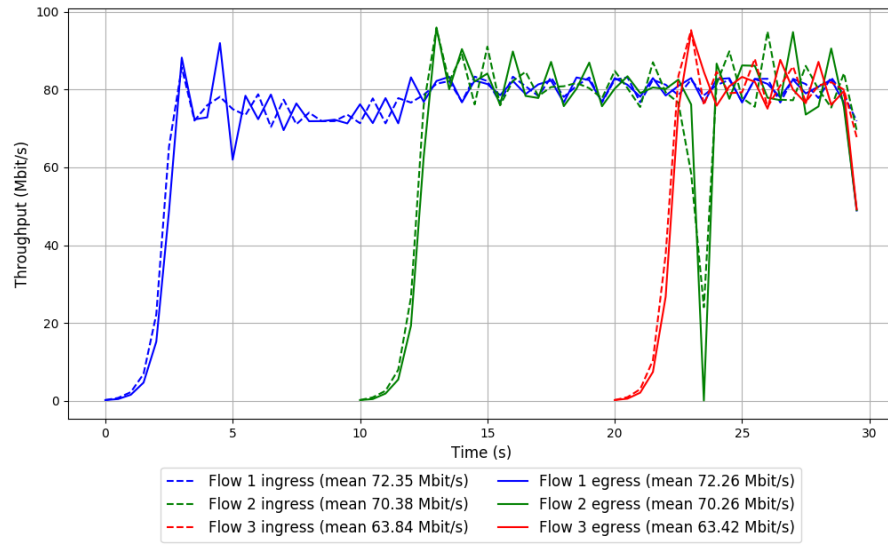
-- Flow 3:

Average throughput: 63.42 Mbit/s

95th percentile per-packet one-way delay: 136.296 ms

Loss rate: 3.39%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-06 11:08:12

End at: 2017-12-06 11:08:42

Below is generated by plot.py at 2017-12-06 14:45:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.56 Mbit/s

95th percentile per-packet one-way delay: 136.246 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 72.22 Mbit/s

95th percentile per-packet one-way delay: 136.249 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 65.89 Mbit/s

95th percentile per-packet one-way delay: 136.233 ms

Loss rate: 1.64%

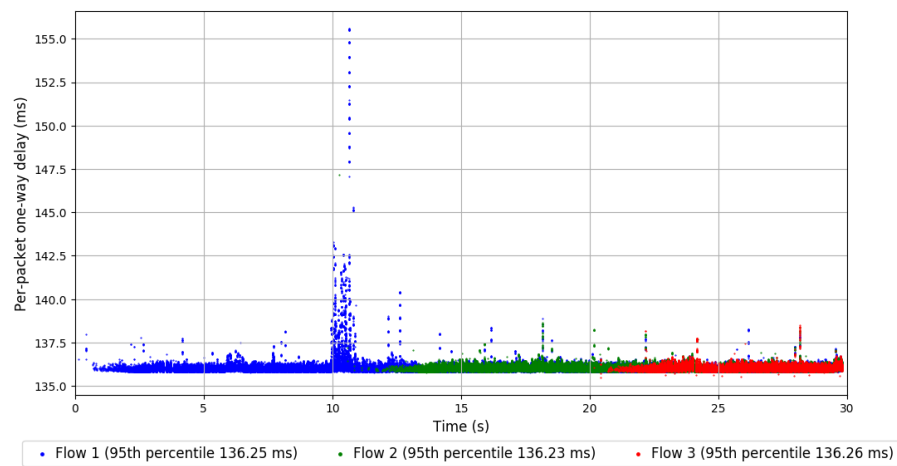
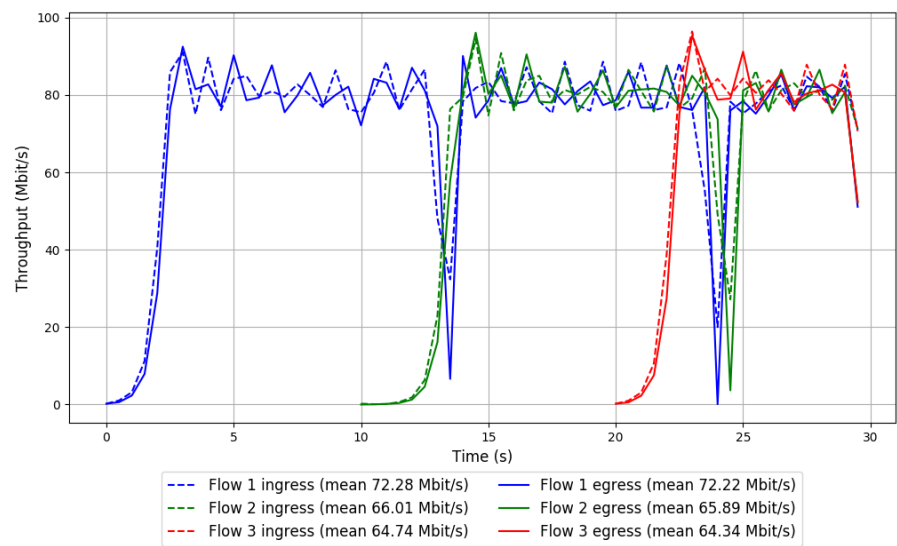
-- Flow 3:

Average throughput: 64.34 Mbit/s

95th percentile per-packet one-way delay: 136.262 ms

Loss rate: 3.36%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-06 11:21:38

End at: 2017-12-06 11:22:08

Below is generated by plot.py at 2017-12-06 14:45:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.75 Mbit/s

95th percentile per-packet one-way delay: 163.482 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 66.21 Mbit/s

95th percentile per-packet one-way delay: 163.498 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 65.20 Mbit/s

95th percentile per-packet one-way delay: 163.492 ms

Loss rate: 1.63%

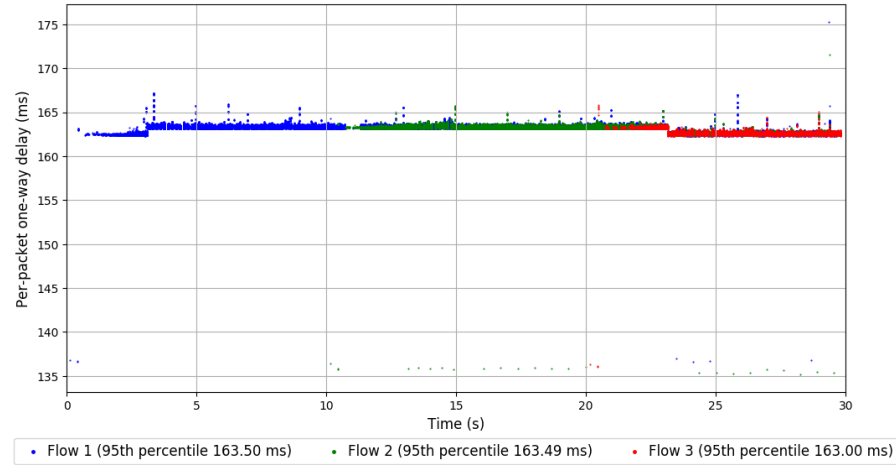
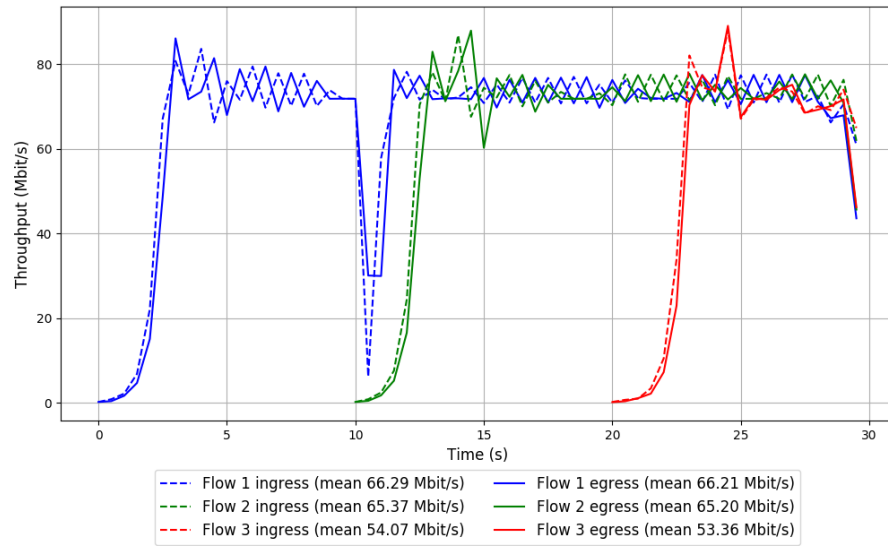
-- Flow 3:

Average throughput: 53.36 Mbit/s

95th percentile per-packet one-way delay: 162.998 ms

Loss rate: 4.02%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-06 11:34:59

End at: 2017-12-06 11:35:29

Below is generated by plot.py at 2017-12-06 14:45:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.10 Mbit/s

95th percentile per-packet one-way delay: 163.490 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 66.92 Mbit/s

95th percentile per-packet one-way delay: 163.485 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 63.22 Mbit/s

95th percentile per-packet one-way delay: 163.495 ms

Loss rate: 1.74%

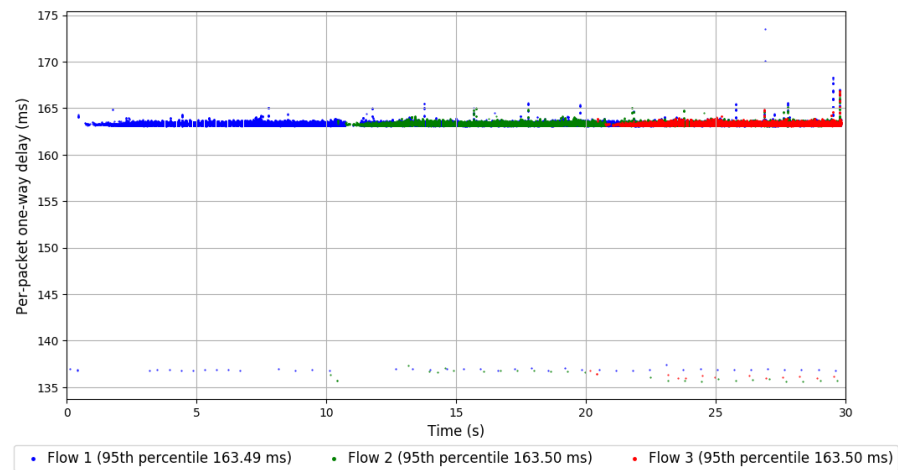
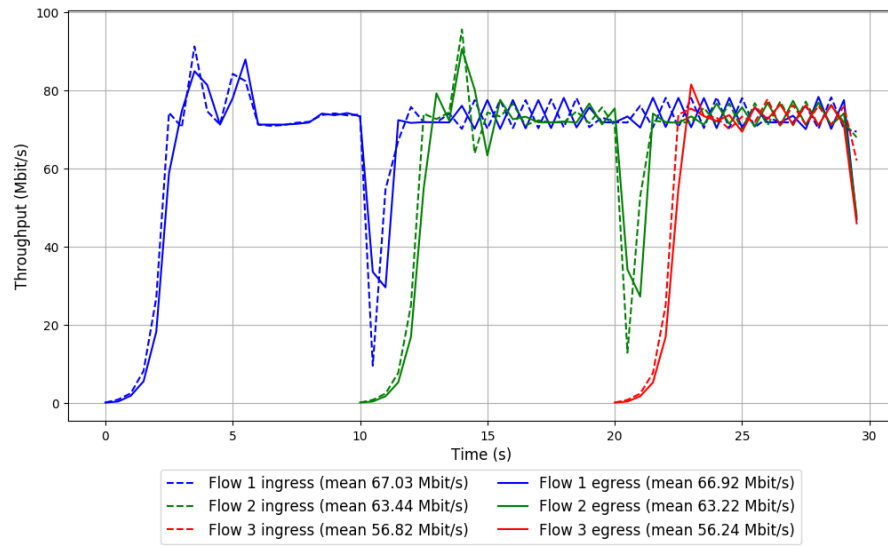
-- Flow 3:

Average throughput: 56.24 Mbit/s

95th percentile per-packet one-way delay: 163.497 ms

Loss rate: 3.74%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-06 11:48:33

End at: 2017-12-06 11:49:03

Below is generated by plot.py at 2017-12-06 14:45:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.32 Mbit/s

95th percentile per-packet one-way delay: 162.971 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 69.25 Mbit/s

95th percentile per-packet one-way delay: 162.928 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 65.73 Mbit/s

95th percentile per-packet one-way delay: 162.966 ms

Loss rate: 1.65%

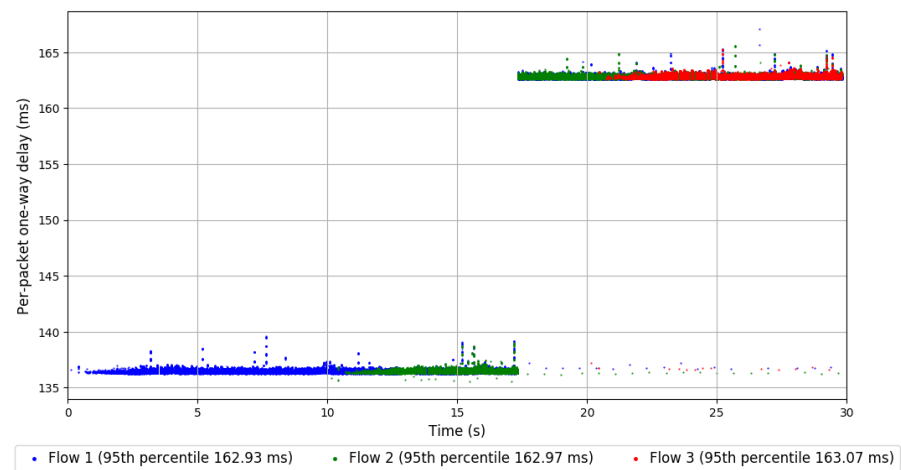
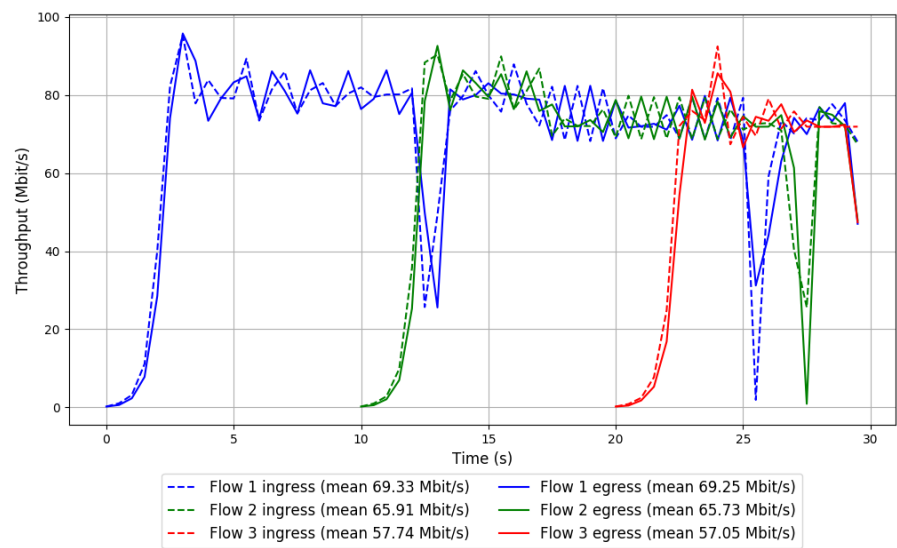
-- Flow 3:

Average throughput: 57.05 Mbit/s

95th percentile per-packet one-way delay: 163.066 ms

Loss rate: 4.18%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

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

End at: 2017-12-06 12:02:17

Below is generated by plot.py at 2017-12-06 14:48:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.91 Mbit/s

95th percentile per-packet one-way delay: 162.931 ms

Loss rate: 1.67%

-- Flow 1:

Average throughput: 68.30 Mbit/s

95th percentile per-packet one-way delay: 162.946 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 67.56 Mbit/s

95th percentile per-packet one-way delay: 162.935 ms

Loss rate: 1.77%

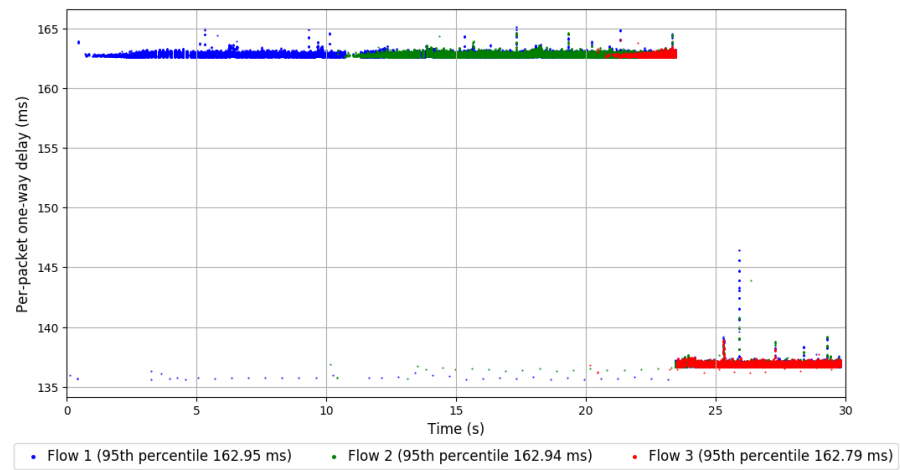
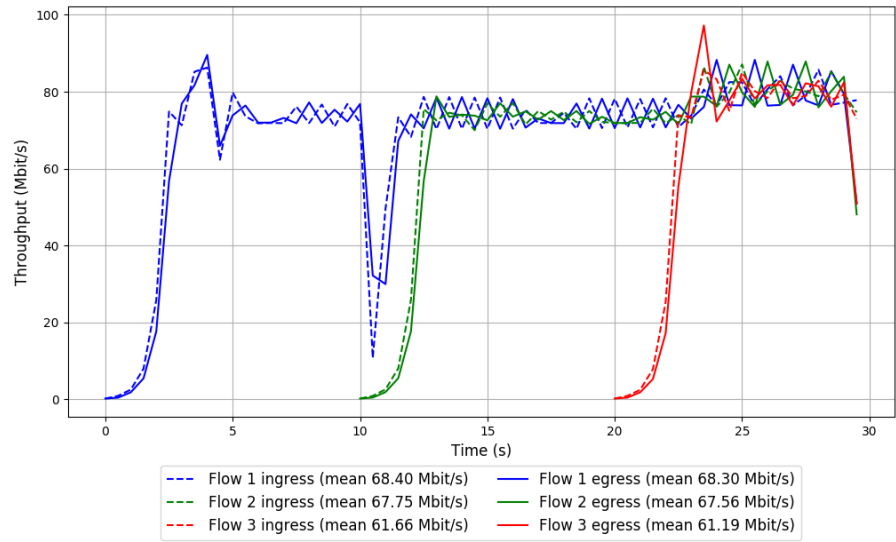
-- Flow 3:

Average throughput: 61.19 Mbit/s

95th percentile per-packet one-way delay: 162.793 ms

Loss rate: 3.50%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

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

End at: 2017-12-06 12:15:45

Below is generated by plot.py at 2017-12-06 14:48:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.12 Mbit/s

95th percentile per-packet one-way delay: 162.836 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 70.36 Mbit/s

95th percentile per-packet one-way delay: 162.844 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 68.73 Mbit/s

95th percentile per-packet one-way delay: 162.877 ms

Loss rate: 1.74%

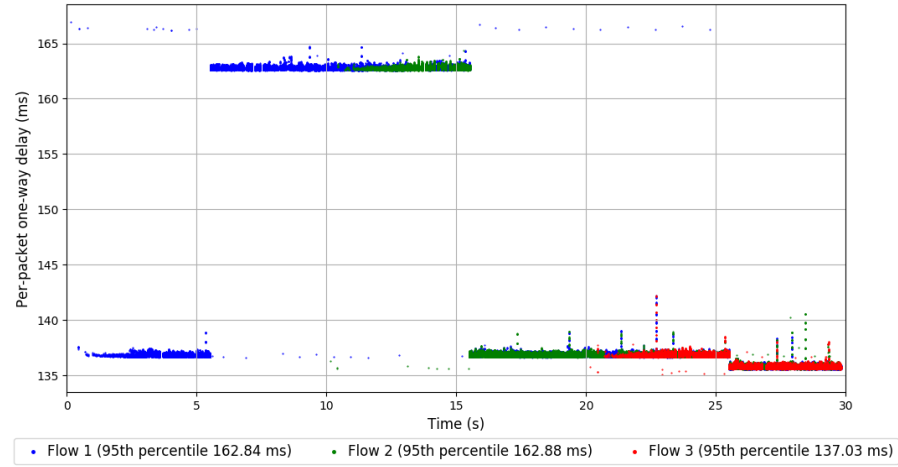
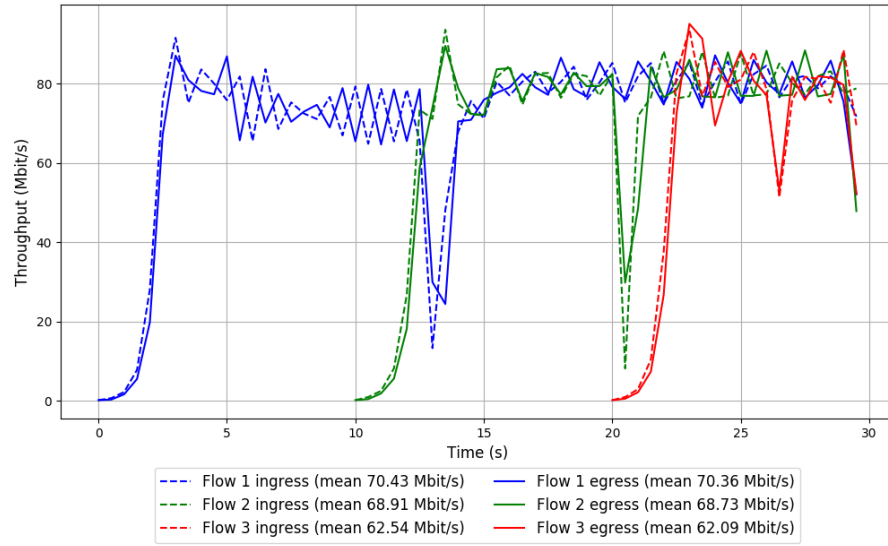
-- Flow 3:

Average throughput: 62.09 Mbit/s

95th percentile per-packet one-way delay: 137.035 ms

Loss rate: 3.45%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-06 10:02:52

End at: 2017-12-06 10:03:22

Below is generated by plot.py at 2017-12-06 14:48:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.03 Mbit/s

95th percentile per-packet one-way delay: 139.346 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 51.56 Mbit/s

95th percentile per-packet one-way delay: 139.731 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 46.85 Mbit/s

95th percentile per-packet one-way delay: 138.996 ms

Loss rate: 1.71%

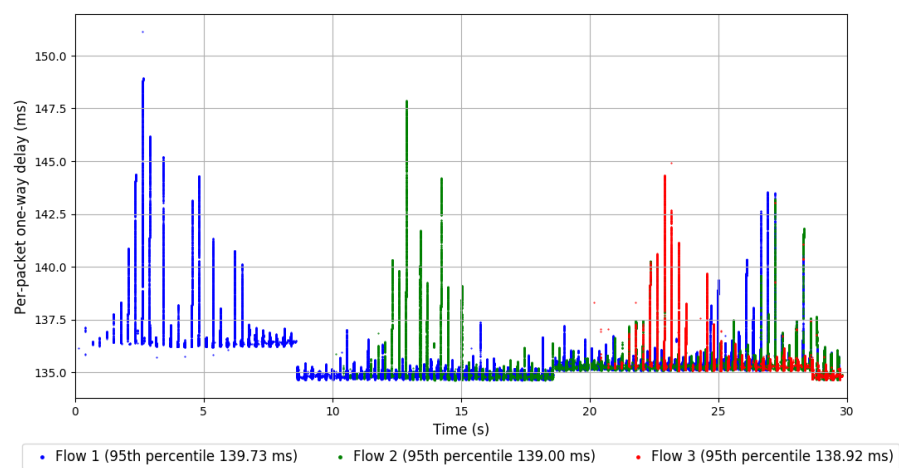
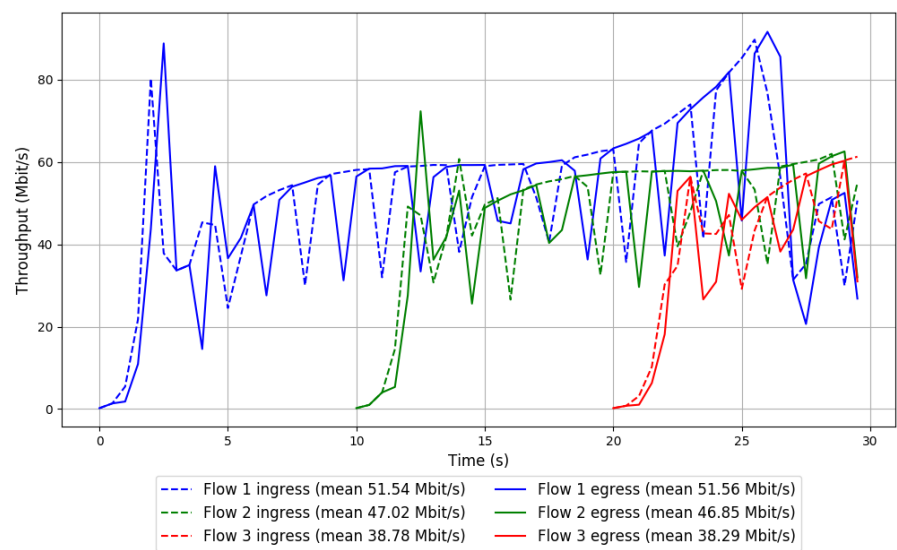
-- Flow 3:

Average throughput: 38.29 Mbit/s

95th percentile per-packet one-way delay: 138.918 ms

Loss rate: 4.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-06 10:16:39

End at: 2017-12-06 10:17:09

Below is generated by plot.py at 2017-12-06 14:48:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.52 Mbit/s

95th percentile per-packet one-way delay: 141.349 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 49.99 Mbit/s

95th percentile per-packet one-way delay: 141.221 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 39.90 Mbit/s

95th percentile per-packet one-way delay: 139.196 ms

Loss rate: 1.78%

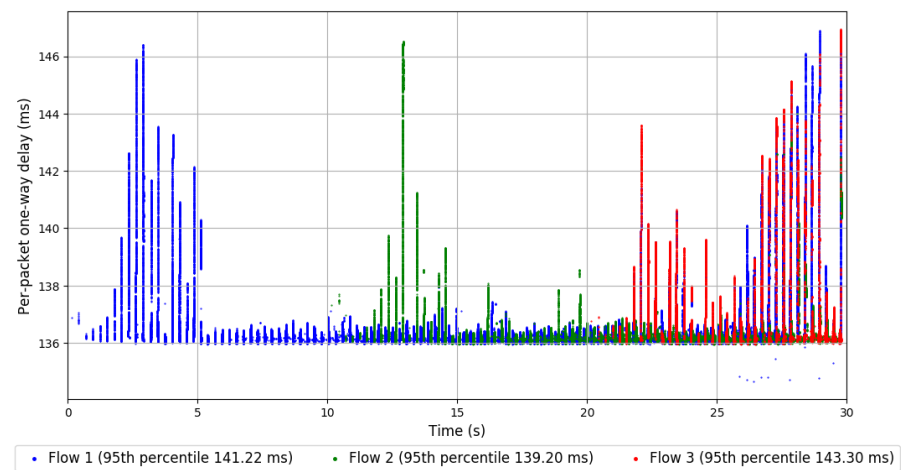
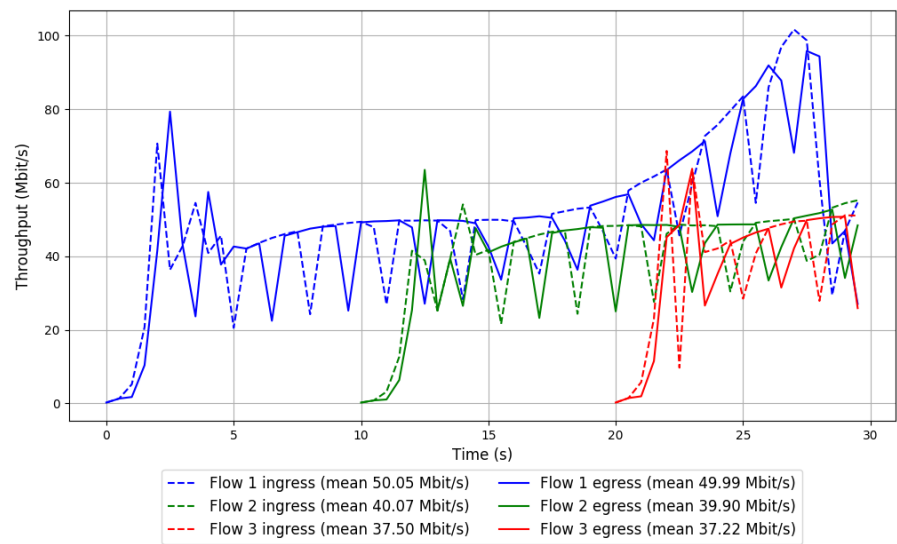
-- Flow 3:

Average throughput: 37.22 Mbit/s

95th percentile per-packet one-way delay: 143.303 ms

Loss rate: 3.46%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-06 10:30:23

End at: 2017-12-06 10:30:53

Below is generated by plot.py at 2017-12-06 14:48:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.01 Mbit/s

95th percentile per-packet one-way delay: 139.157 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 55.83 Mbit/s

95th percentile per-packet one-way delay: 139.573 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 47.57 Mbit/s

95th percentile per-packet one-way delay: 137.810 ms

Loss rate: 1.79%

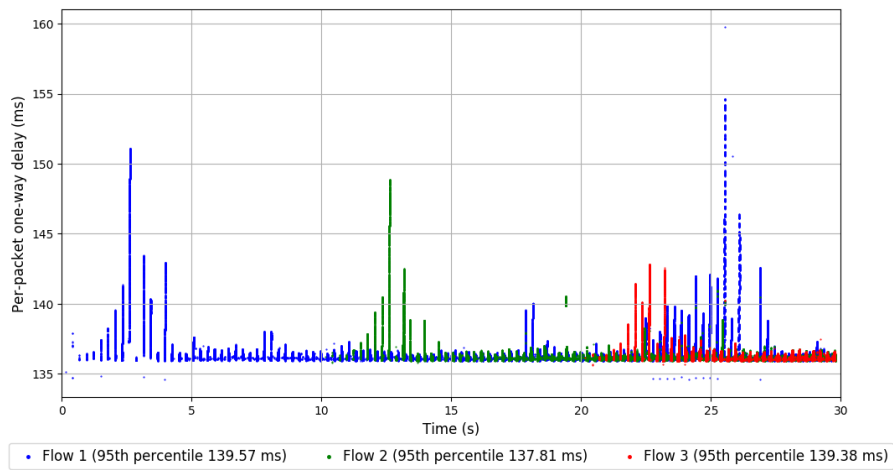
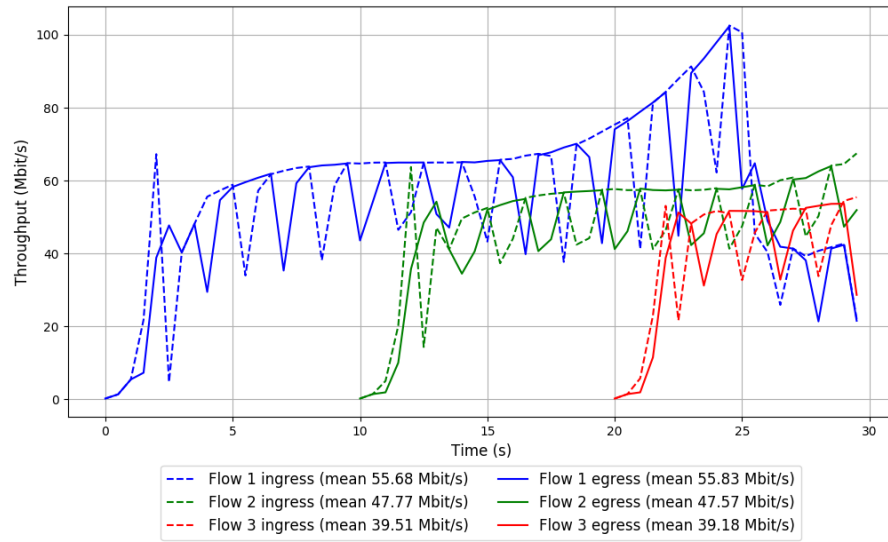
-- Flow 3:

Average throughput: 39.18 Mbit/s

95th percentile per-packet one-way delay: 139.384 ms

Loss rate: 3.57%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-06 10:44:05

End at: 2017-12-06 10:44:35

Below is generated by plot.py at 2017-12-06 14:48:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.04 Mbit/s

95th percentile per-packet one-way delay: 141.191 ms

Loss rate: 1.60%

-- Flow 1:

Average throughput: 52.64 Mbit/s

95th percentile per-packet one-way delay: 139.507 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 40.72 Mbit/s

95th percentile per-packet one-way delay: 141.563 ms

Loss rate: 2.56%

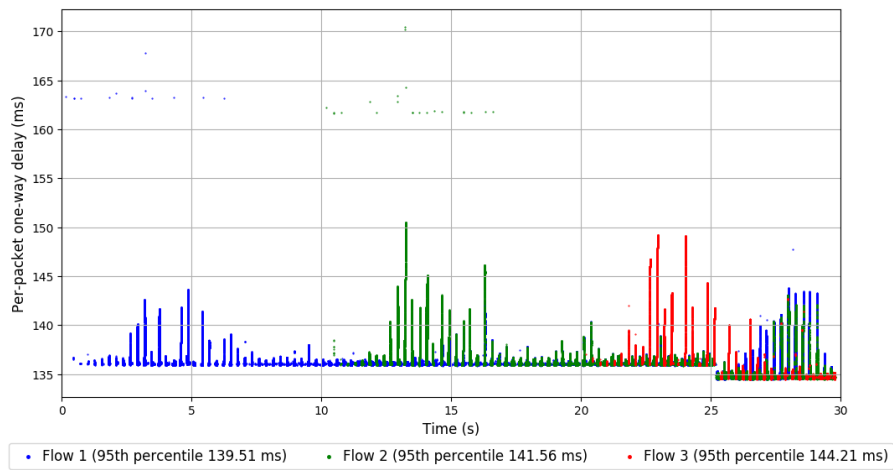
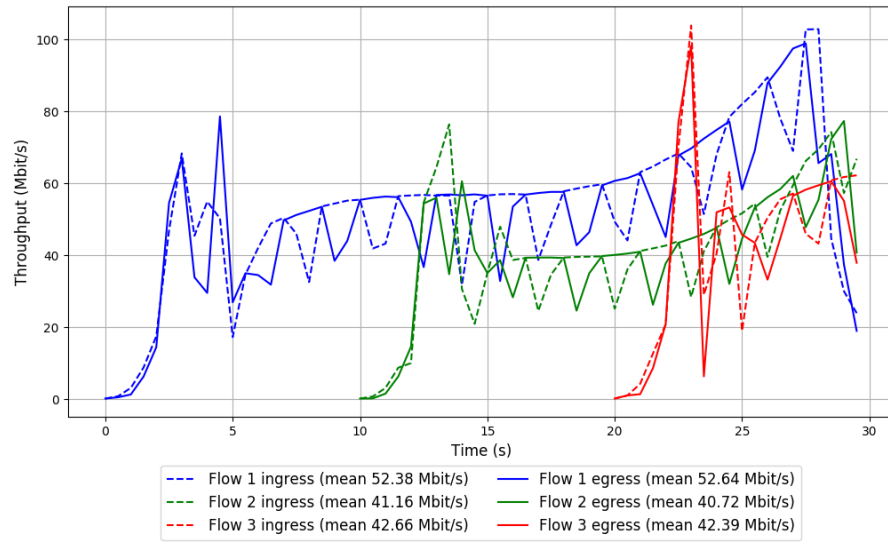
-- Flow 3:

Average throughput: 42.39 Mbit/s

95th percentile per-packet one-way delay: 144.212 ms

Loss rate: 3.72%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-06 10:57:52

End at: 2017-12-06 10:58:22

Below is generated by plot.py at 2017-12-06 14:48:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.49 Mbit/s

95th percentile per-packet one-way delay: 163.050 ms

Loss rate: 1.81%

-- Flow 1:

Average throughput: 43.97 Mbit/s

95th percentile per-packet one-way delay: 163.077 ms

Loss rate: 1.35%

-- Flow 2:

Average throughput: 48.60 Mbit/s

95th percentile per-packet one-way delay: 163.492 ms

Loss rate: 1.83%

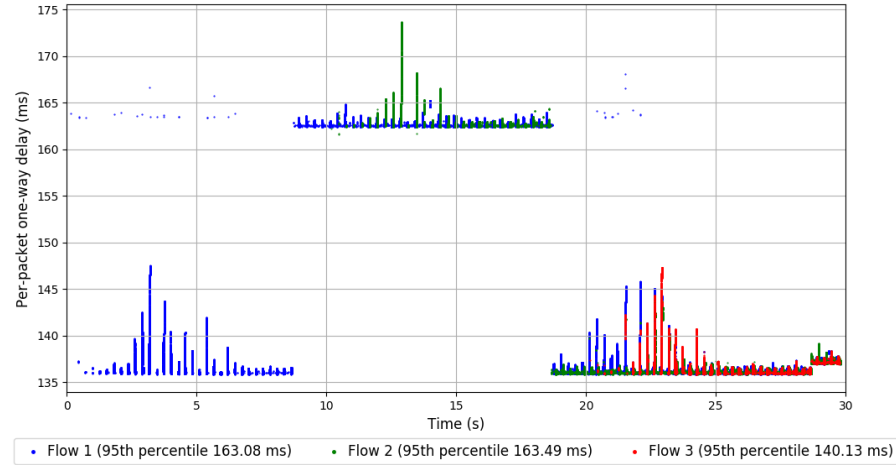
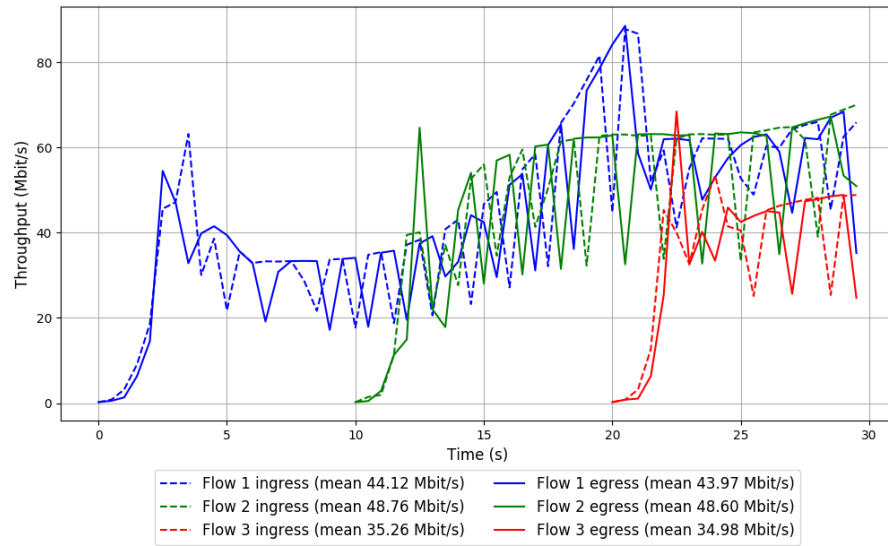
-- Flow 3:

Average throughput: 34.98 Mbit/s

95th percentile per-packet one-way delay: 140.132 ms

Loss rate: 3.53%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-06 11:11:45

End at: 2017-12-06 11:12:15

Below is generated by plot.py at 2017-12-06 14:48:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.43 Mbit/s

95th percentile per-packet one-way delay: 142.911 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 41.73 Mbit/s

95th percentile per-packet one-way delay: 141.753 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 39.47 Mbit/s

95th percentile per-packet one-way delay: 146.343 ms

Loss rate: 1.50%

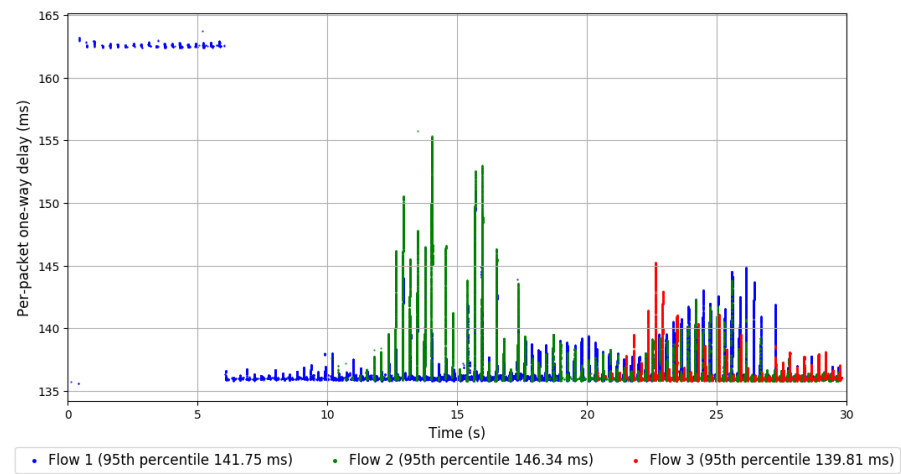
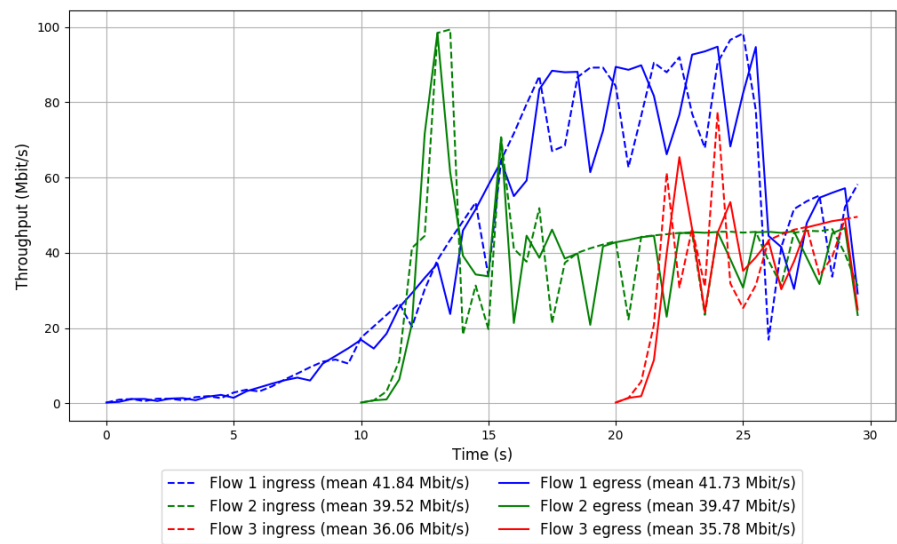
-- Flow 3:

Average throughput: 35.78 Mbit/s

95th percentile per-packet one-way delay: 139.813 ms

Loss rate: 3.47%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-06 11:25:11

End at: 2017-12-06 11:25:41

Below is generated by plot.py at 2017-12-06 14:48:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.94 Mbit/s

95th percentile per-packet one-way delay: 170.798 ms

Loss rate: 1.74%

-- Flow 1:

Average throughput: 28.85 Mbit/s

95th percentile per-packet one-way delay: 169.036 ms

Loss rate: 1.60%

-- Flow 2:

Average throughput: 45.07 Mbit/s

95th percentile per-packet one-way delay: 171.984 ms

Loss rate: 1.51%

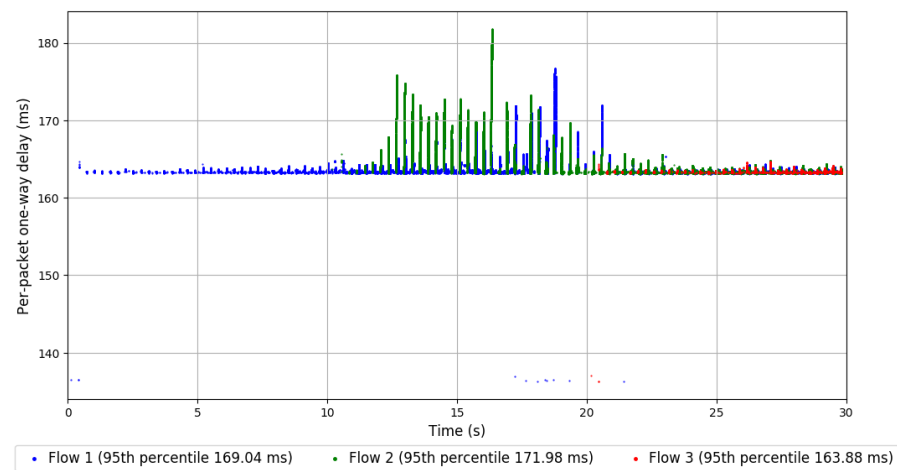
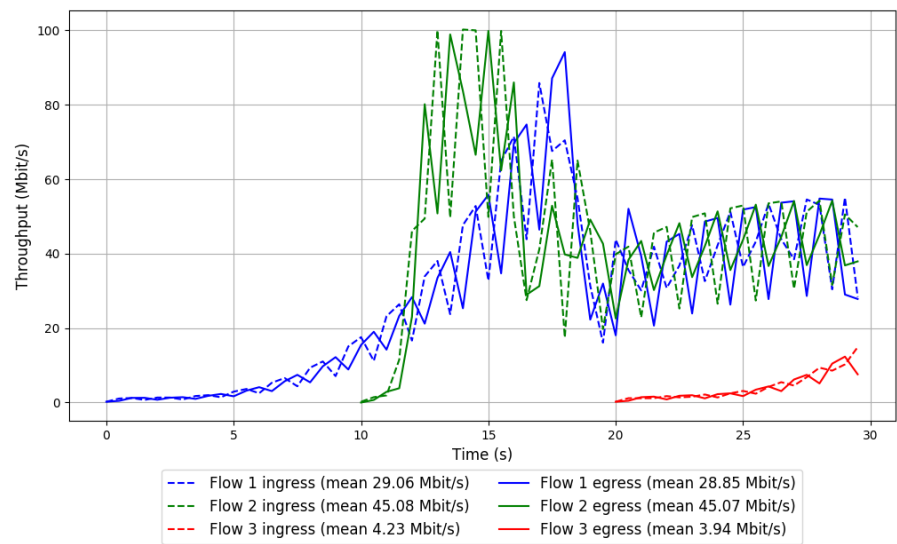
-- Flow 3:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 163.880 ms

Loss rate: 9.60%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-06 11:38:36

End at: 2017-12-06 11:39:06

Below is generated by plot.py at 2017-12-06 14:48:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.50 Mbit/s

95th percentile per-packet one-way delay: 167.958 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 36.17 Mbit/s

95th percentile per-packet one-way delay: 168.715 ms

Loss rate: 1.44%

-- Flow 2:

Average throughput: 39.23 Mbit/s

95th percentile per-packet one-way delay: 164.946 ms

Loss rate: 1.81%

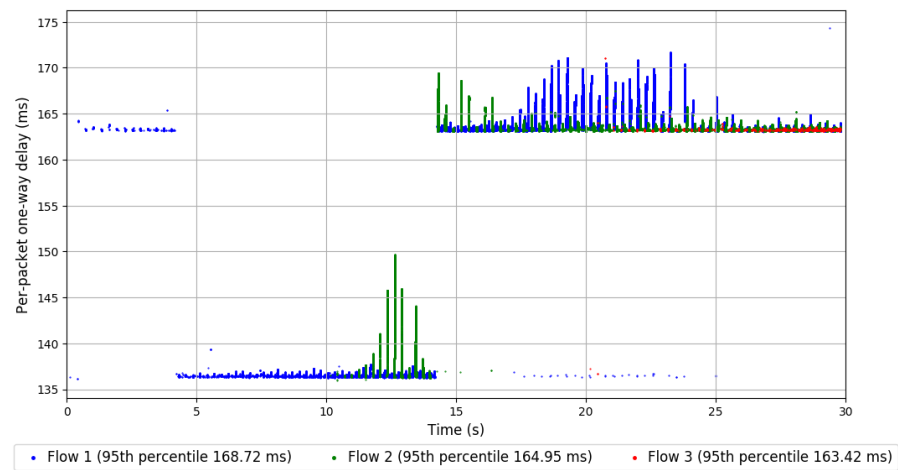
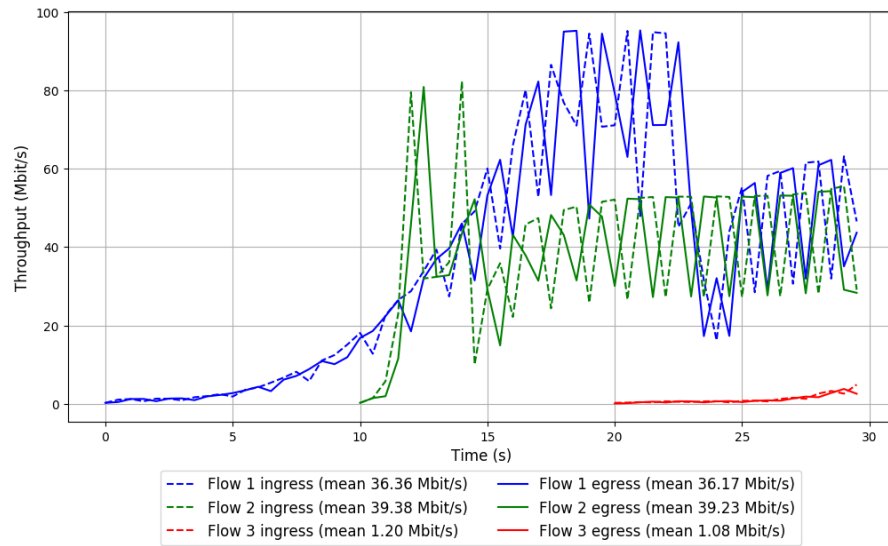
-- Flow 3:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 163.418 ms

Loss rate: 12.28%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-06 11:52:09

End at: 2017-12-06 11:52:39

Below is generated by plot.py at 2017-12-06 14:48:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.26 Mbit/s

95th percentile per-packet one-way delay: 169.237 ms

Loss rate: 2.29%

-- Flow 1:

Average throughput: 44.95 Mbit/s

95th percentile per-packet one-way delay: 169.406 ms

Loss rate: 1.75%

-- Flow 2:

Average throughput: 34.71 Mbit/s

95th percentile per-packet one-way delay: 169.074 ms

Loss rate: 2.91%

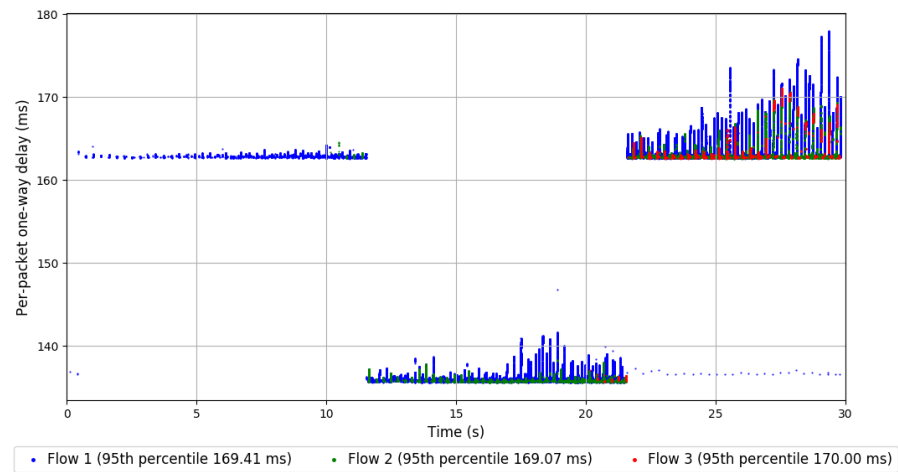
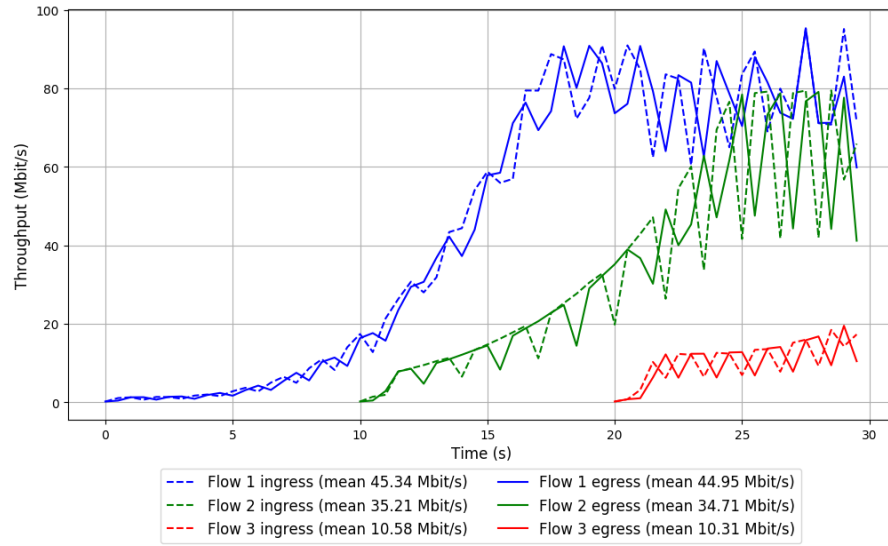
-- Flow 3:

Average throughput: 10.31 Mbit/s

95th percentile per-packet one-way delay: 169.996 ms

Loss rate: 5.24%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-06 12:05:23

End at: 2017-12-06 12:05:53

Below is generated by plot.py at 2017-12-06 14:48:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.15 Mbit/s

95th percentile per-packet one-way delay: 165.171 ms

Loss rate: 1.61%

-- Flow 1:

Average throughput: 25.77 Mbit/s

95th percentile per-packet one-way delay: 165.834 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 50.18 Mbit/s

95th percentile per-packet one-way delay: 164.319 ms

Loss rate: 1.54%

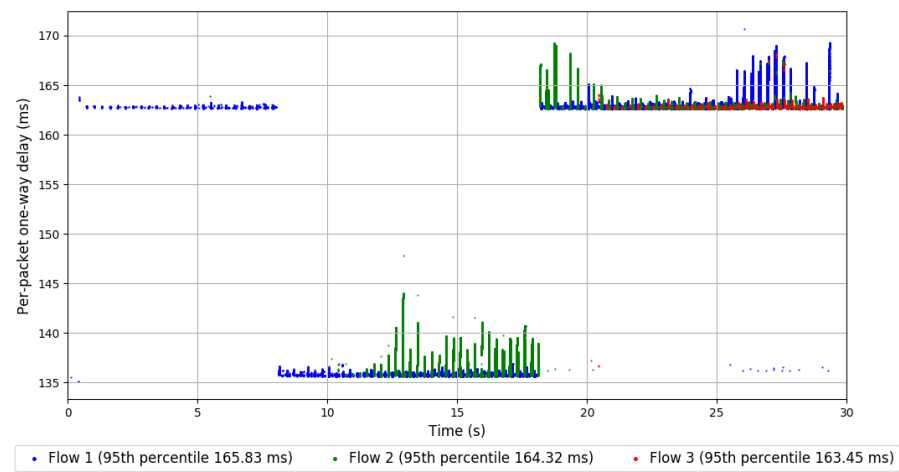
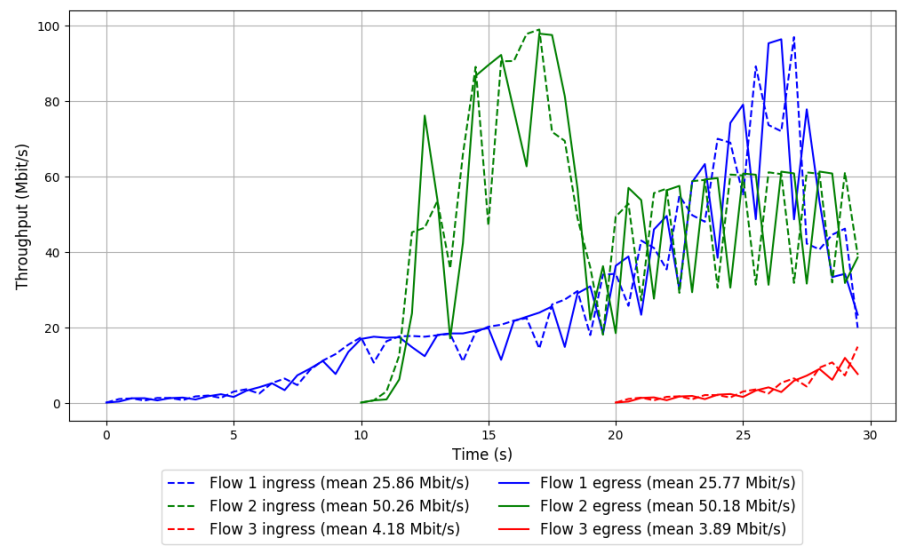
-- Flow 3:

Average throughput: 3.89 Mbit/s

95th percentile per-packet one-way delay: 163.452 ms

Loss rate: 9.53%

Run 10: Report of TCP Cubic — Data Link

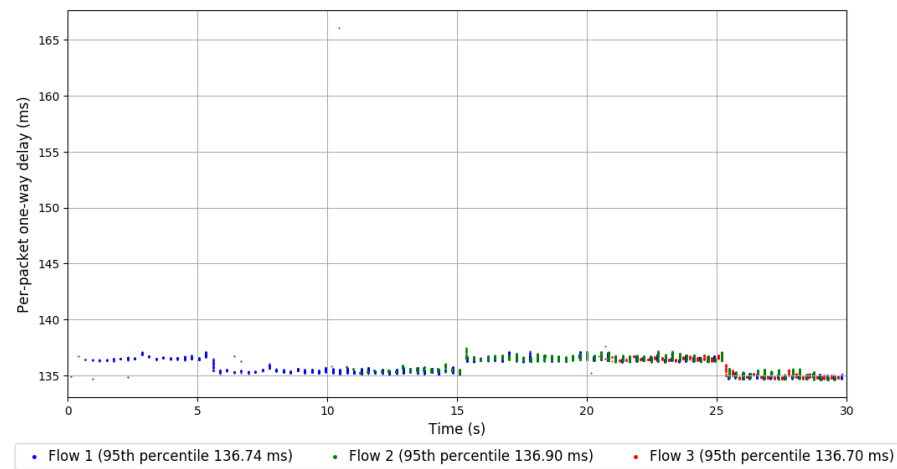
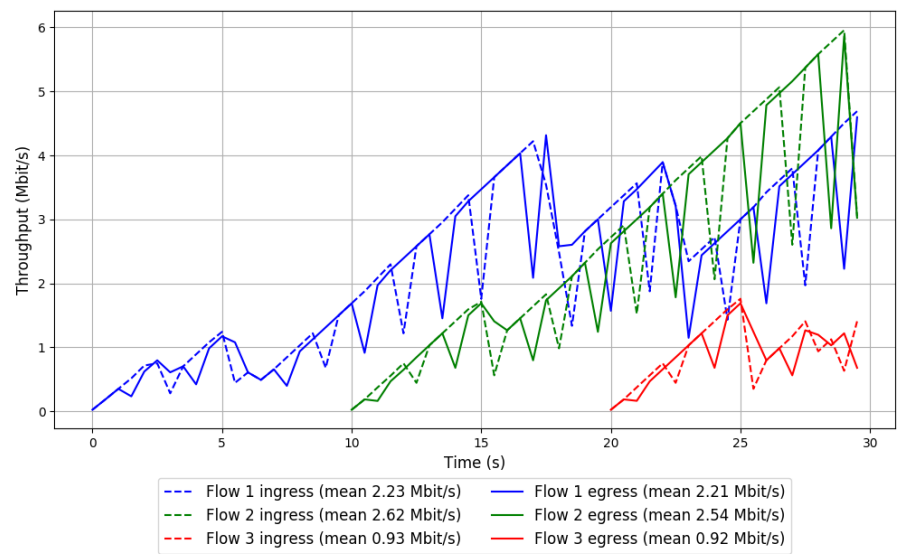


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-06 10:10:05
End at: 2017-12-06 10:10:35

# Below is generated by plot.py at 2017-12-06 14:48:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.19 Mbit/s
95th percentile per-packet one-way delay: 136.806 ms
Loss rate: 2.40%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 136.738 ms
Loss rate: 1.77%
-- Flow 2:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 136.902 ms
Loss rate: 2.94%
-- Flow 3:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 136.703 ms
Loss rate: 4.00%
```


Run 1: Report of LEDBAT — Data Link

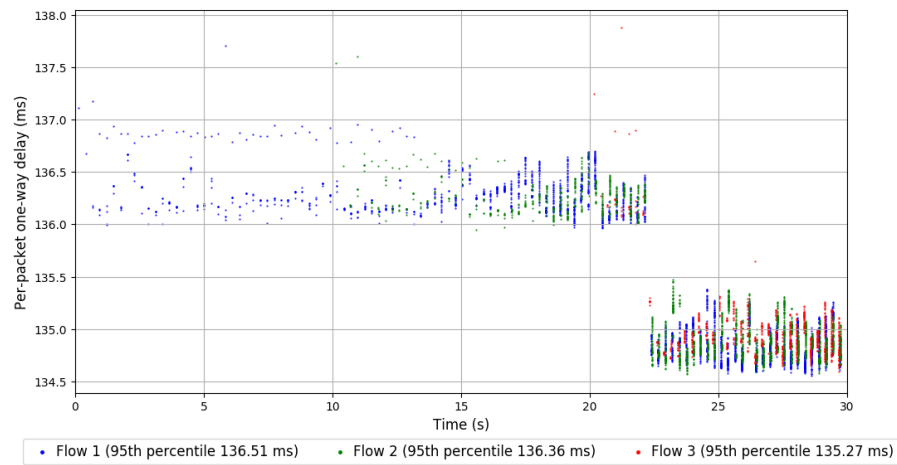
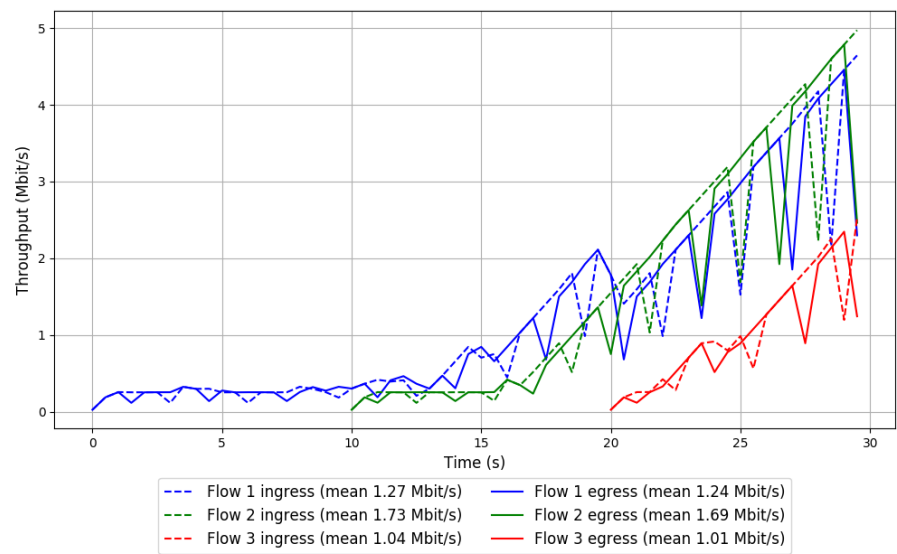


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-06 10:23:58
End at: 2017-12-06 10:24:28

# Below is generated by plot.py at 2017-12-06 14:48:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.68 Mbit/s
95th percentile per-packet one-way delay: 136.424 ms
Loss rate: 3.72%
-- Flow 1:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 136.511 ms
Loss rate: 3.09%
-- Flow 2:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 136.360 ms
Loss rate: 3.65%
-- Flow 3:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 135.271 ms
Loss rate: 6.30%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-06 10:37:44

End at: 2017-12-06 10:38:14

Below is generated by plot.py at 2017-12-06 14:48:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.21 Mbit/s

95th percentile per-packet one-way delay: 136.854 ms

Loss rate: 2.16%

-- Flow 1:

Average throughput: 3.69 Mbit/s

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

Loss rate: 1.50%

-- Flow 2:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 137.029 ms

Loss rate: 3.33%

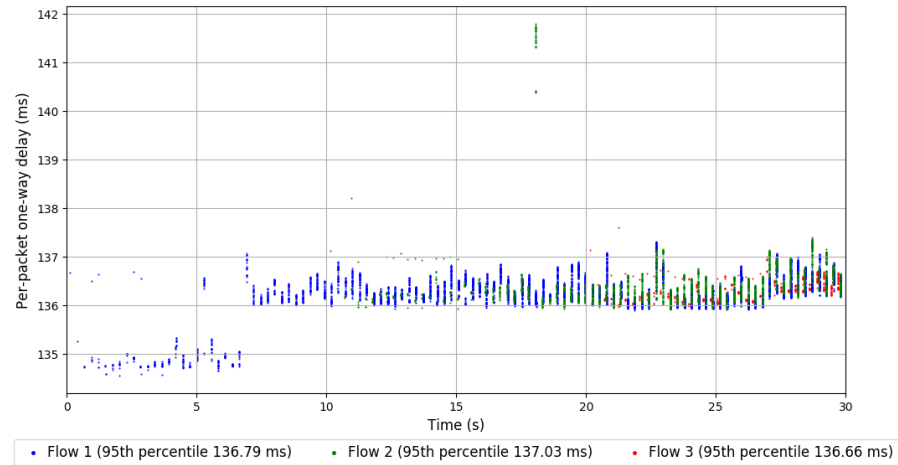
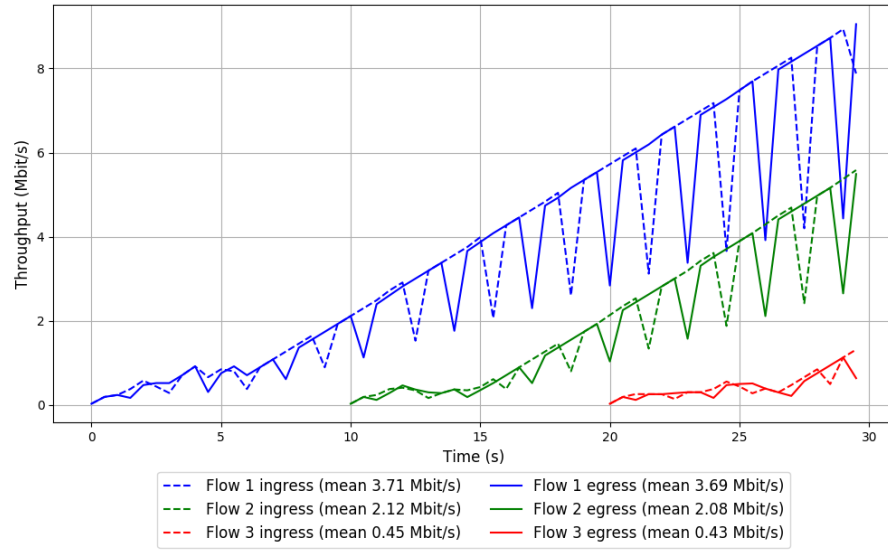
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 136.655 ms

Loss rate: 7.62%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-06 10:51:14

End at: 2017-12-06 10:51:44

Below is generated by plot.py at 2017-12-06 14:48:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 136.042 ms

Loss rate: 2.38%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 136.293 ms

Loss rate: 2.17%

-- Flow 2:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 135.303 ms

Loss rate: 1.58%

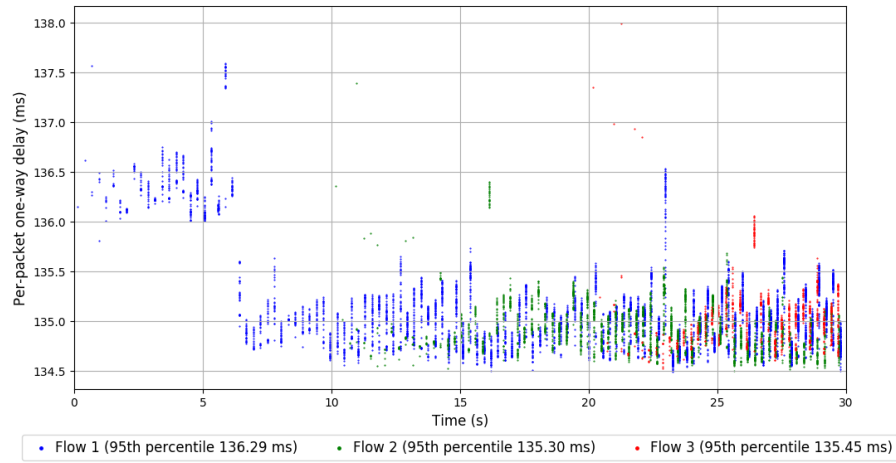
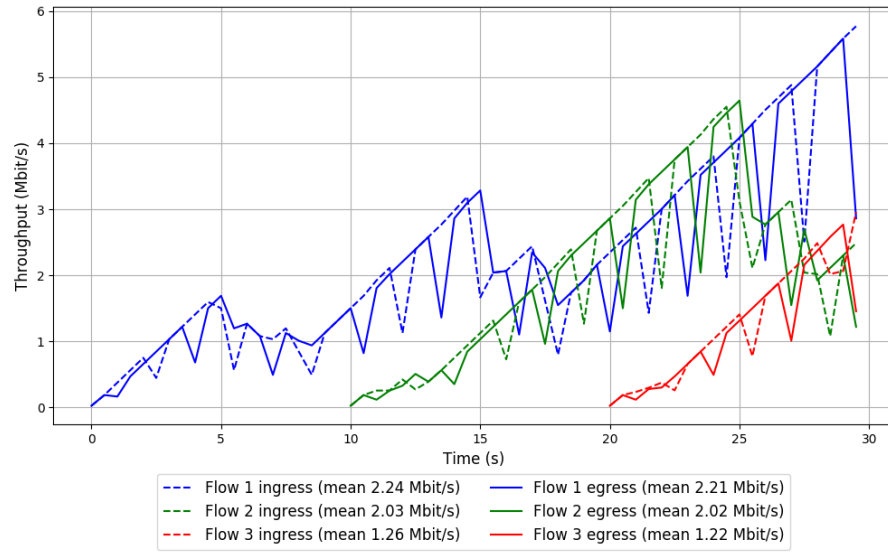
-- Flow 3:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 135.446 ms

Loss rate: 6.07%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-06 11:04:53

End at: 2017-12-06 11:05:23

Below is generated by plot.py at 2017-12-06 14:48:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.86 Mbit/s

95th percentile per-packet one-way delay: 162.873 ms

Loss rate: 2.27%

-- Flow 1:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 162.903 ms

Loss rate: 1.50%

-- Flow 2:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 162.832 ms

Loss rate: 2.90%

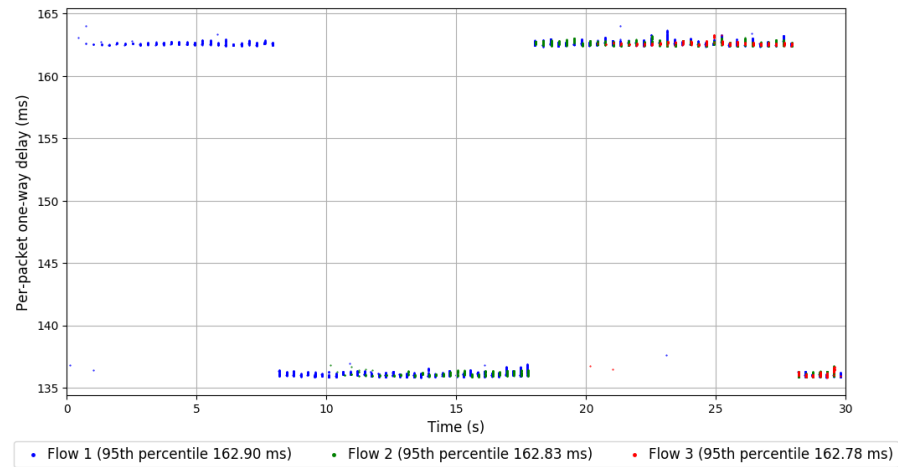
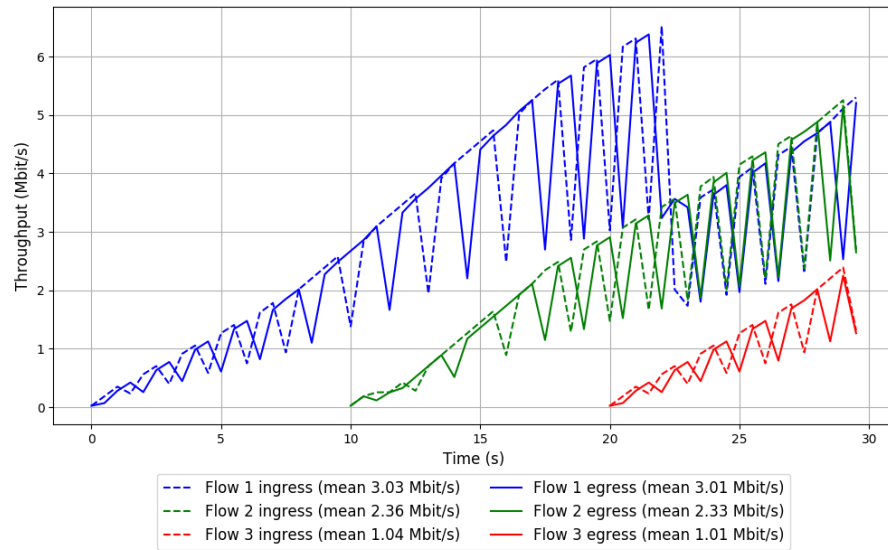
-- Flow 3:

Average throughput: 1.01 Mbit/s

95th percentile per-packet one-way delay: 162.784 ms

Loss rate: 6.12%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-06 11:18:44

End at: 2017-12-06 11:19:14

Below is generated by plot.py at 2017-12-06 14:48:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.58 Mbit/s

95th percentile per-packet one-way delay: 163.782 ms

Loss rate: 2.56%

-- Flow 1:

Average throughput: 2.97 Mbit/s

95th percentile per-packet one-way delay: 163.834 ms

Loss rate: 2.00%

-- Flow 2:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 163.668 ms

Loss rate: 3.00%

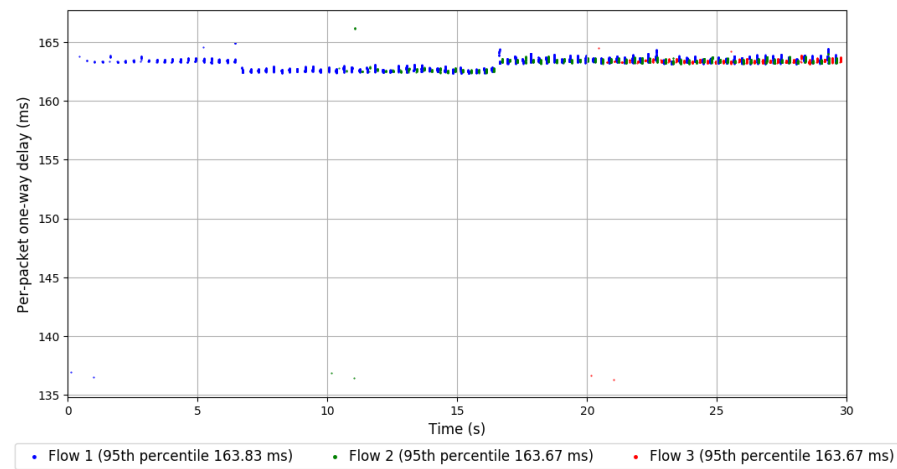
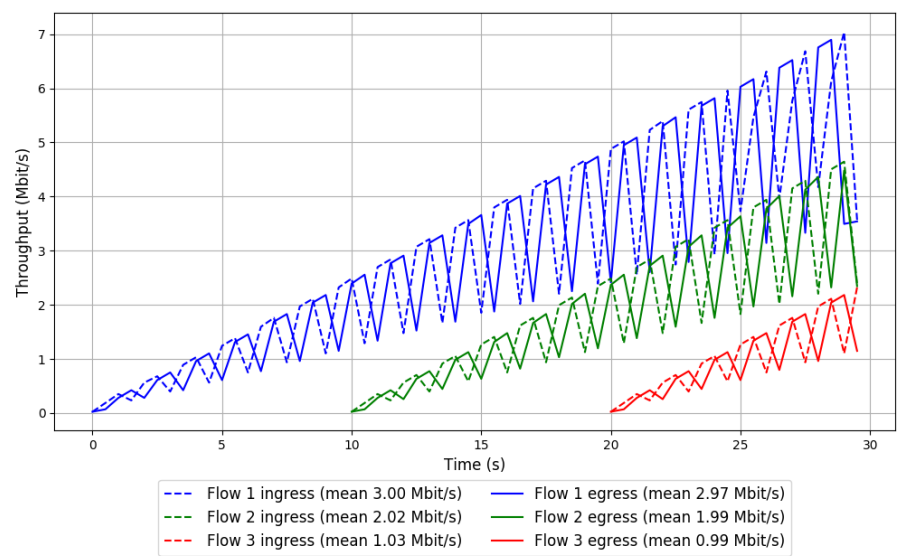
-- Flow 3:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 163.672 ms

Loss rate: 5.79%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-06 11:31:55

End at: 2017-12-06 11:32:25

Below is generated by plot.py at 2017-12-06 14:48:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.46 Mbit/s

95th percentile per-packet one-way delay: 163.913 ms

Loss rate: 2.88%

-- Flow 1:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 163.898 ms

Loss rate: 2.36%

-- Flow 2:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 163.975 ms

Loss rate: 2.88%

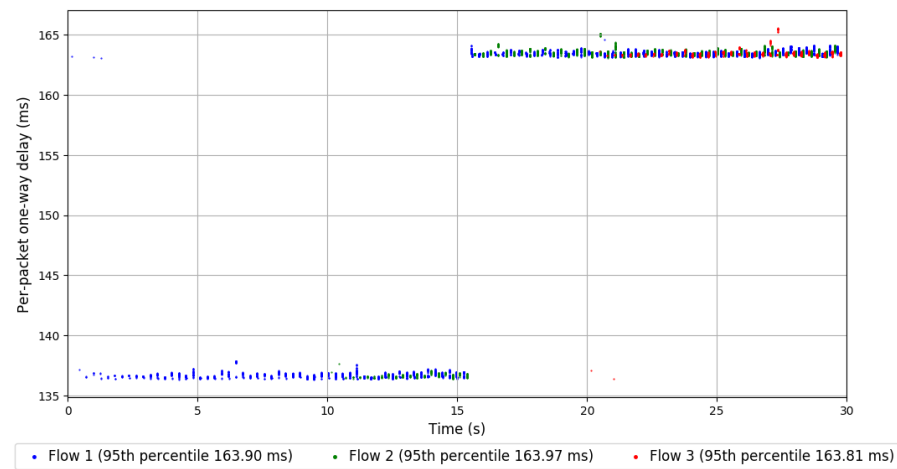
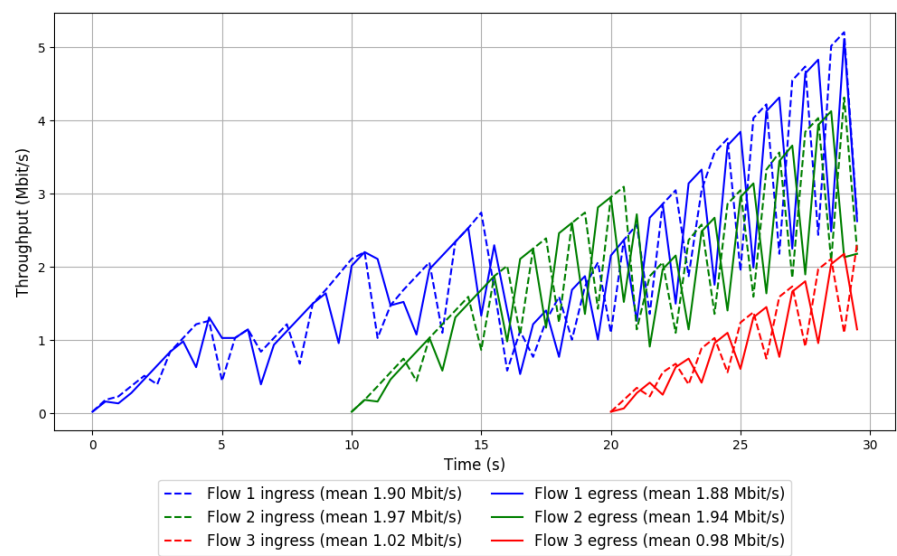
-- Flow 3:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 163.812 ms

Loss rate: 5.85%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-06 11:45:44

End at: 2017-12-06 11:46:14

Below is generated by plot.py at 2017-12-06 14:48:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.42 Mbit/s

95th percentile per-packet one-way delay: 163.435 ms

Loss rate: 2.21%

-- Flow 1:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 163.486 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 163.236 ms

Loss rate: 3.00%

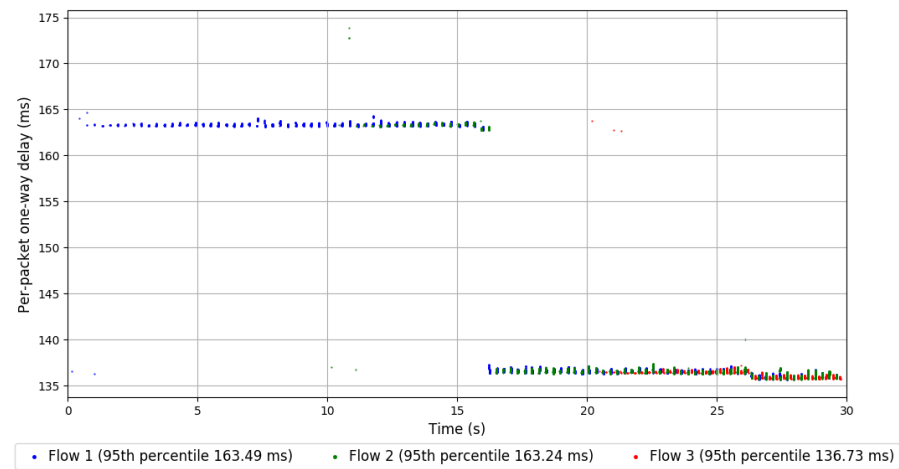
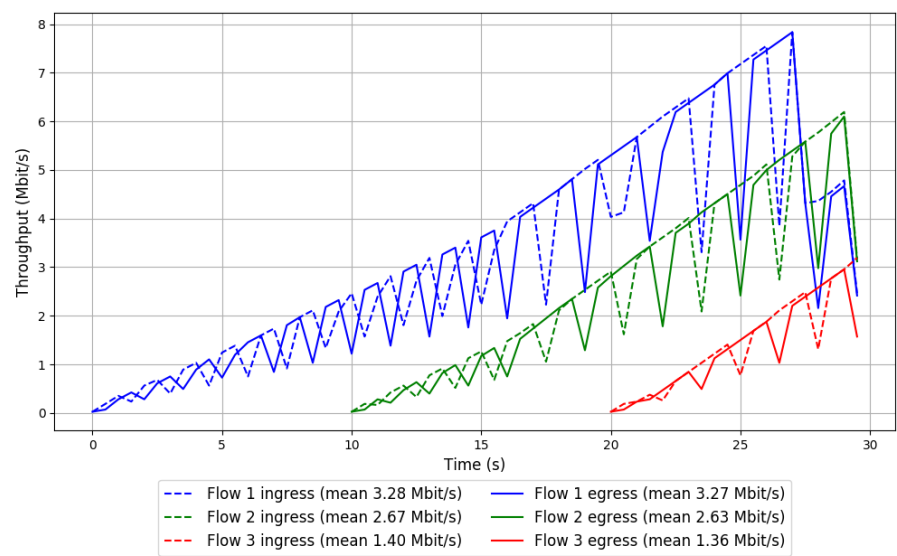
-- Flow 3:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 136.728 ms

Loss rate: 5.84%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-06 11:58:53

End at: 2017-12-06 11:59:23

Below is generated by plot.py at 2017-12-06 14:48:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.73 Mbit/s

95th percentile per-packet one-way delay: 163.232 ms

Loss rate: 3.04%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 163.271 ms

Loss rate: 2.47%

-- Flow 2:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 163.175 ms

Loss rate: 3.05%

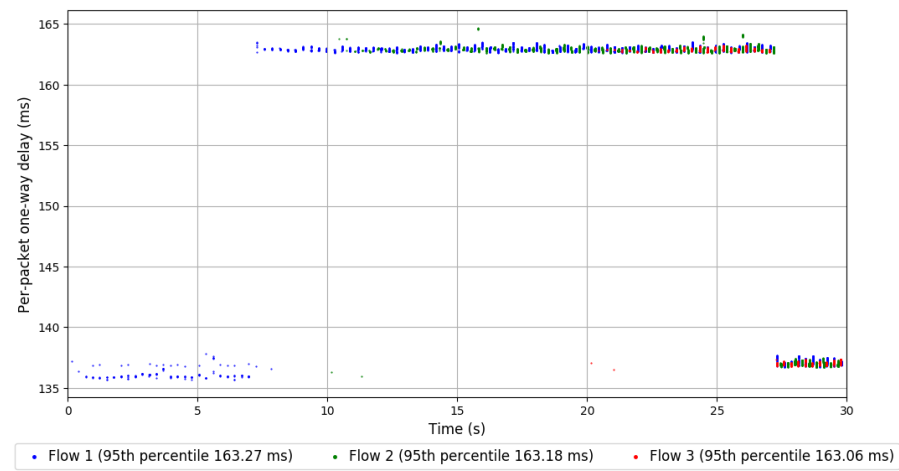
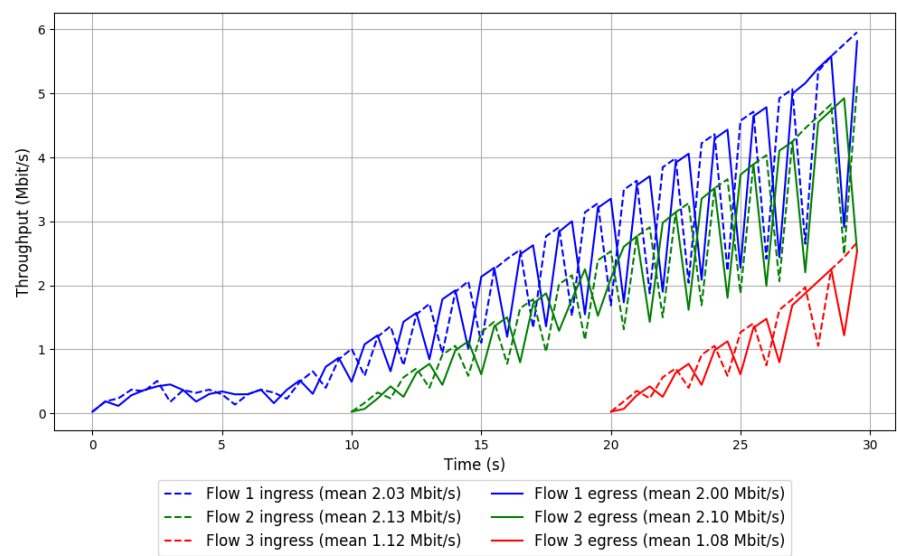
-- Flow 3:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 163.065 ms

Loss rate: 6.12%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

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

End at: 2017-12-06 12:12:56

Below is generated by plot.py at 2017-12-06 14:48:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.37 Mbit/s

95th percentile per-packet one-way delay: 163.581 ms

Loss rate: 1.88%

-- Flow 1:

Average throughput: 3.45 Mbit/s

95th percentile per-packet one-way delay: 163.657 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 162.998 ms

Loss rate: 3.03%

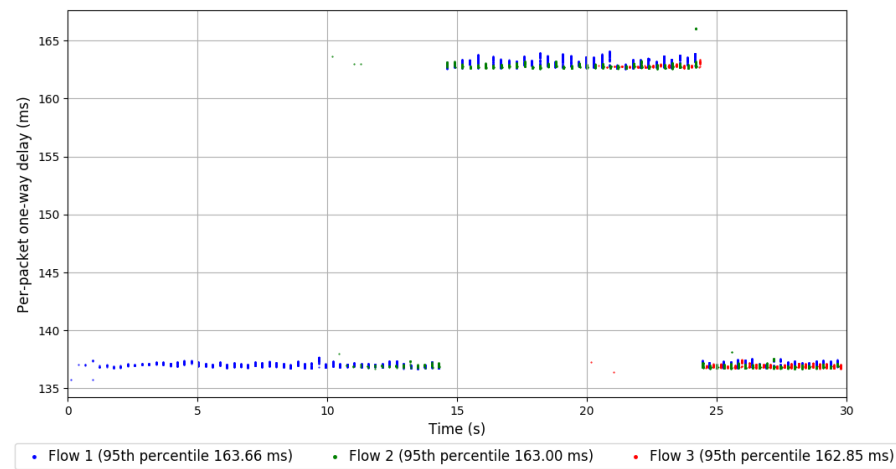
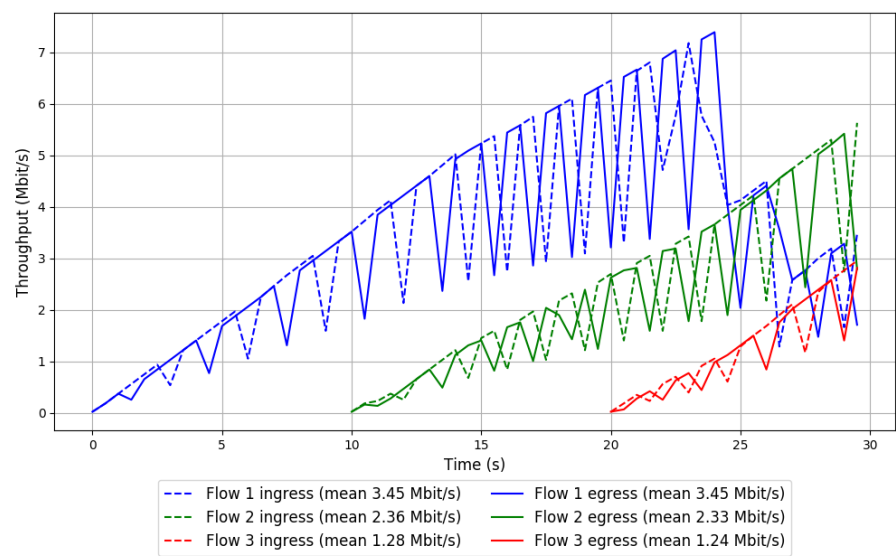
-- Flow 3:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 162.851 ms

Loss rate: 5.92%

Run 10: Report of LEDBAT — Data Link

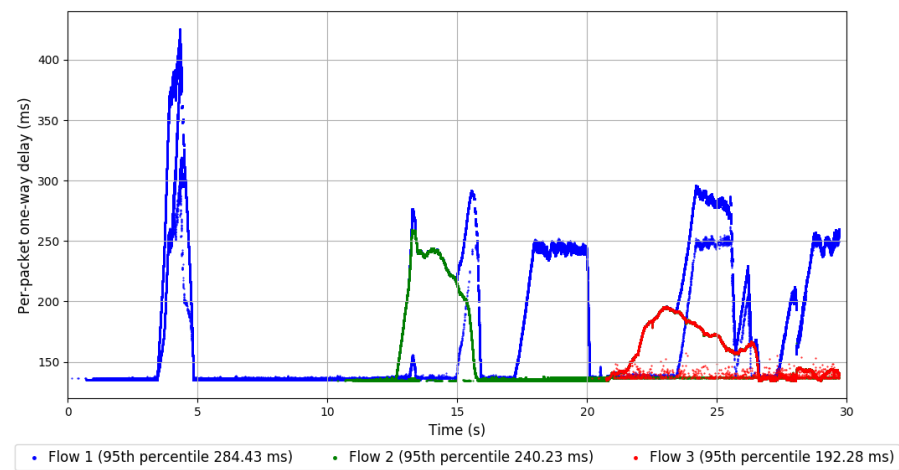
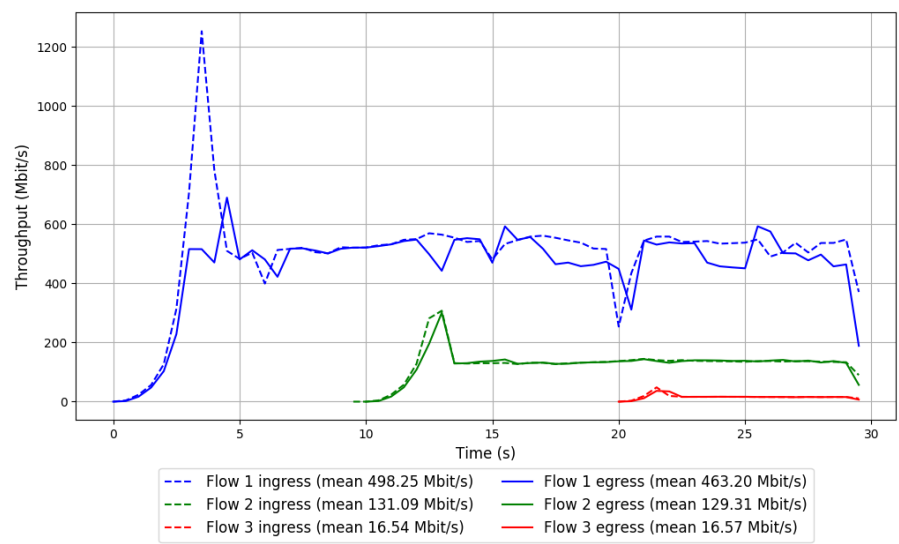


```
Run 1: Statistics of PCC

Start at: 2017-12-06 10:04:42
End at: 2017-12-06 10:05:12

# Below is generated by plot.py at 2017-12-06 14:57:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 554.13 Mbit/s
95th percentile per-packet one-way delay: 282.143 ms
Loss rate: 7.08%
-- Flow 1:
Average throughput: 463.20 Mbit/s
95th percentile per-packet one-way delay: 284.429 ms
Loss rate: 7.89%
-- Flow 2:
Average throughput: 129.31 Mbit/s
95th percentile per-packet one-way delay: 240.228 ms
Loss rate: 2.71%
-- Flow 3:
Average throughput: 16.57 Mbit/s
95th percentile per-packet one-way delay: 192.281 ms
Loss rate: 2.67%
```

Run 1: Report of PCC — Data Link

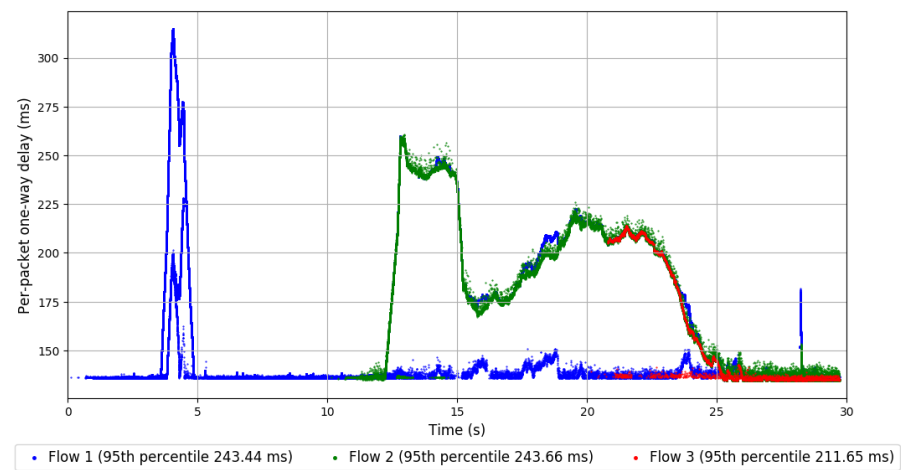
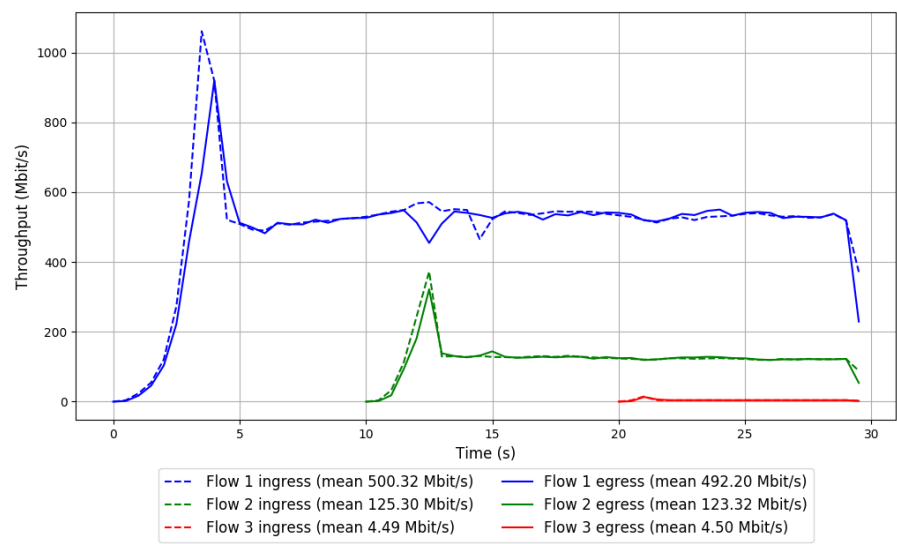


```
Run 2: Statistics of PCC

Start at: 2017-12-06 10:18:36
End at: 2017-12-06 10:19:06

# Below is generated by plot.py at 2017-12-06 14:57:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 575.25 Mbit/s
95th percentile per-packet one-way delay: 243.468 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 492.20 Mbit/s
95th percentile per-packet one-way delay: 243.443 ms
Loss rate: 2.52%
-- Flow 2:
Average throughput: 123.32 Mbit/s
95th percentile per-packet one-way delay: 243.656 ms
Loss rate: 2.93%
-- Flow 3:
Average throughput: 4.50 Mbit/s
95th percentile per-packet one-way delay: 211.650 ms
Loss rate: 2.61%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-06 10:32:22

End at: 2017-12-06 10:32:52

Below is generated by plot.py at 2017-12-06 14:57:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 570.96 Mbit/s

95th percentile per-packet one-way delay: 289.957 ms

Loss rate: 4.09%

-- Flow 1:

Average throughput: 511.45 Mbit/s

95th percentile per-packet one-way delay: 303.925 ms

Loss rate: 4.08%

-- Flow 2:

Average throughput: 61.15 Mbit/s

95th percentile per-packet one-way delay: 246.071 ms

Loss rate: 2.57%

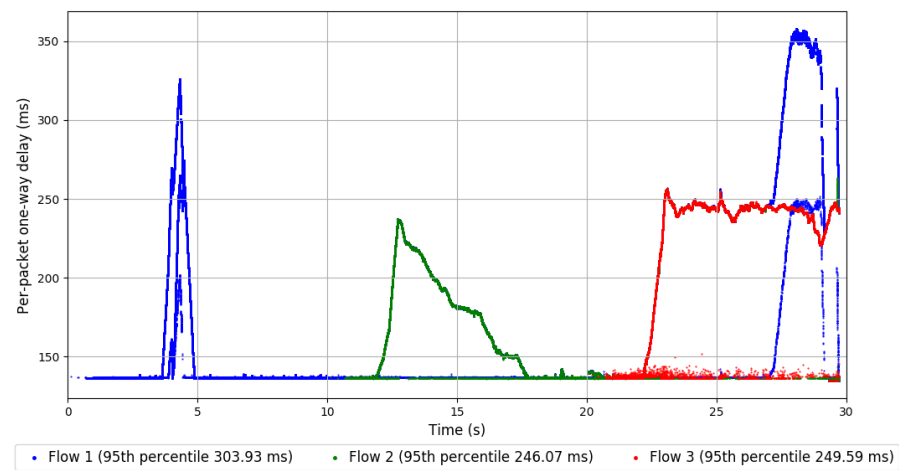
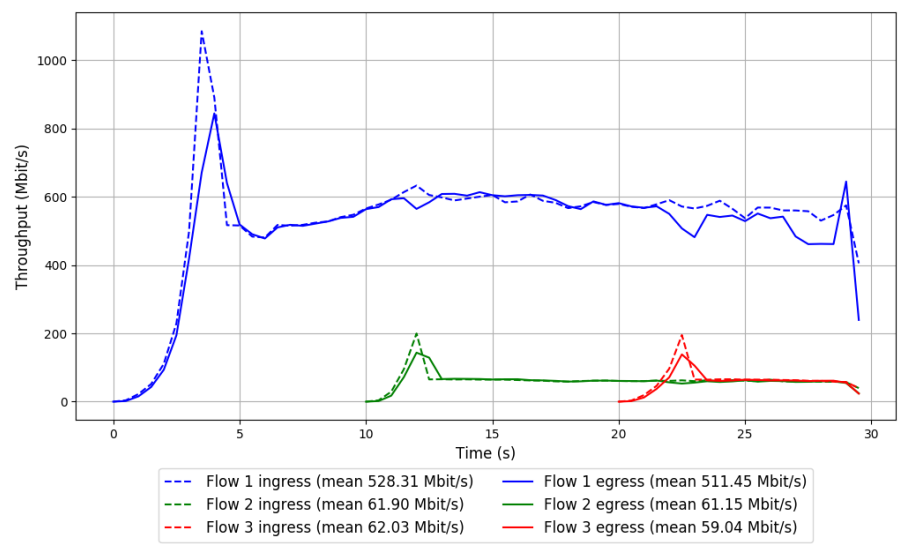
-- Flow 3:

Average throughput: 59.04 Mbit/s

95th percentile per-packet one-way delay: 249.589 ms

Loss rate: 7.48%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-06 10:45:52

End at: 2017-12-06 10:46:22

Below is generated by plot.py at 2017-12-06 14:57:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 560.76 Mbit/s

95th percentile per-packet one-way delay: 241.315 ms

Loss rate: 4.19%

-- Flow 1:

Average throughput: 458.81 Mbit/s

95th percentile per-packet one-way delay: 241.517 ms

Loss rate: 4.31%

-- Flow 2:

Average throughput: 123.92 Mbit/s

95th percentile per-packet one-way delay: 240.851 ms

Loss rate: 3.41%

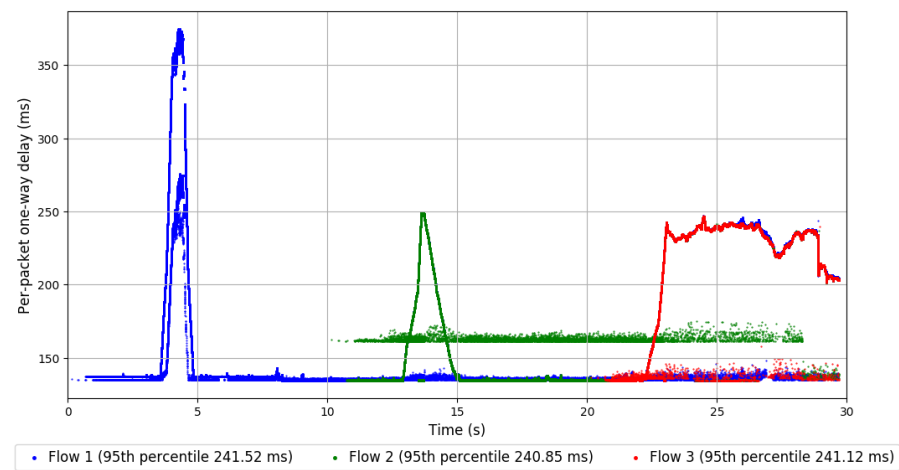
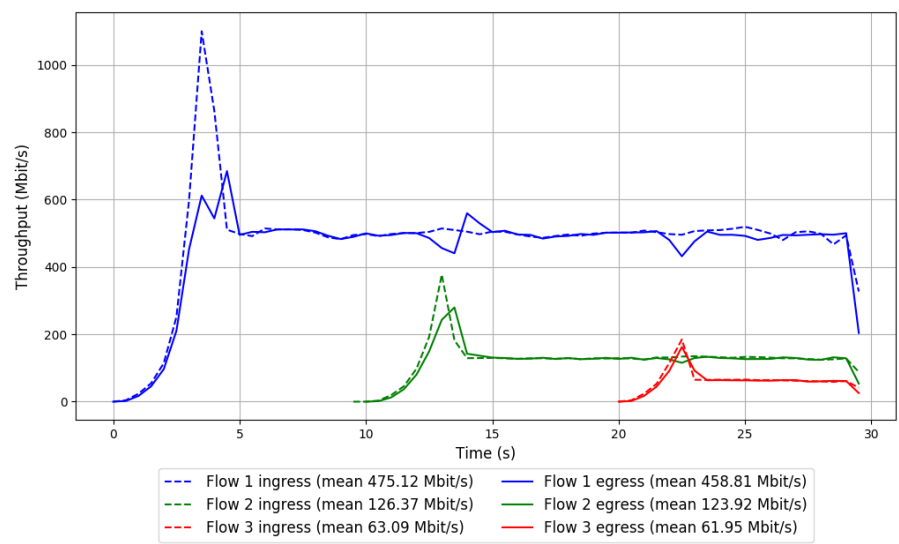
-- Flow 3:

Average throughput: 61.95 Mbit/s

95th percentile per-packet one-way delay: 241.121 ms

Loss rate: 4.52%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-06 10:59:40

End at: 2017-12-06 11:00:10

Below is generated by plot.py at 2017-12-06 14:58:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 582.12 Mbit/s

95th percentile per-packet one-way delay: 238.716 ms

Loss rate: 3.11%

-- Flow 1:

Average throughput: 487.55 Mbit/s

95th percentile per-packet one-way delay: 240.328 ms

Loss rate: 3.13%

-- Flow 2:

Average throughput: 127.03 Mbit/s

95th percentile per-packet one-way delay: 231.626 ms

Loss rate: 3.00%

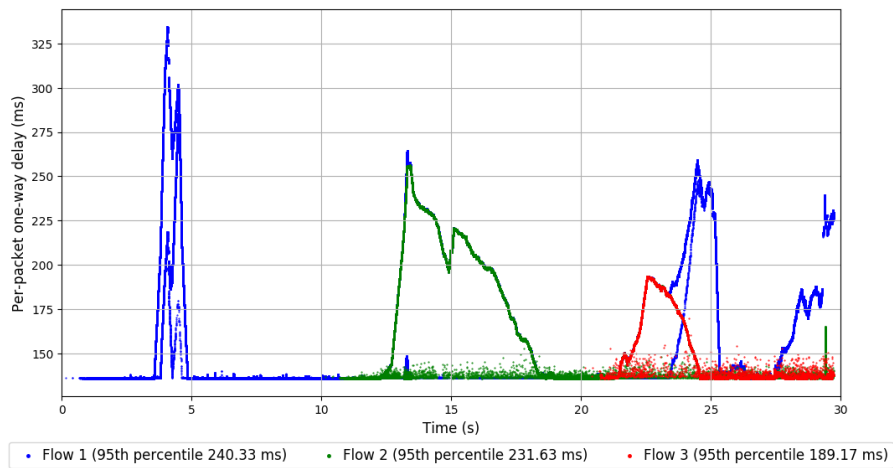
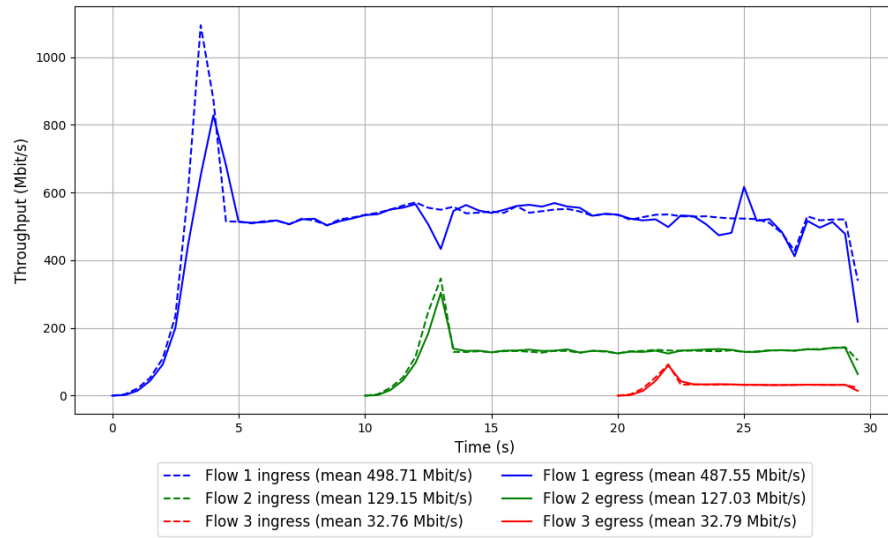
-- Flow 3:

Average throughput: 32.79 Mbit/s

95th percentile per-packet one-way delay: 189.174 ms

Loss rate: 2.75%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-06 11:13:39

End at: 2017-12-06 11:14:09

Below is generated by plot.py at 2017-12-06 14:58:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 171.59 Mbit/s

95th percentile per-packet one-way delay: 237.763 ms

Loss rate: 5.53%

-- Flow 1:

Average throughput: 47.05 Mbit/s

95th percentile per-packet one-way delay: 166.123 ms

Loss rate: 2.06%

-- Flow 2:

Average throughput: 5.35 Mbit/s

95th percentile per-packet one-way delay: 162.699 ms

Loss rate: 2.43%

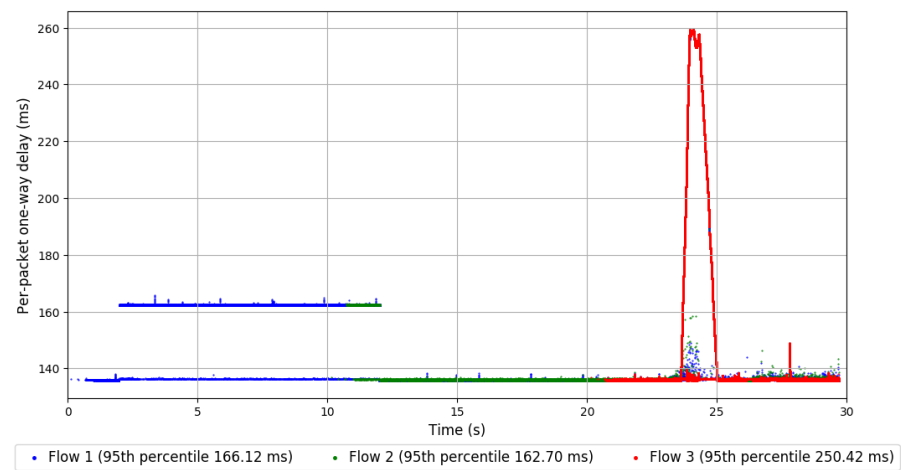
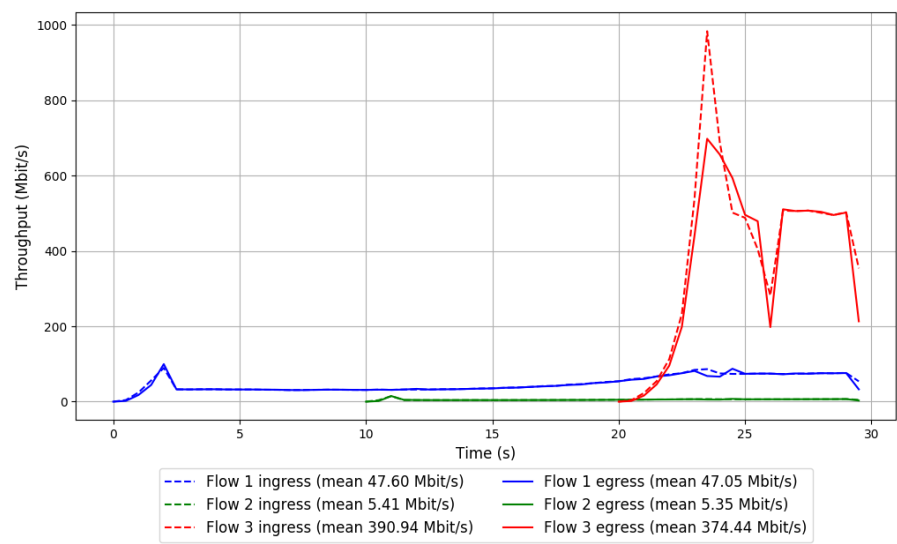
-- Flow 3:

Average throughput: 374.44 Mbit/s

95th percentile per-packet one-way delay: 250.418 ms

Loss rate: 6.90%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-06 11:27:04

End at: 2017-12-06 11:27:34

Below is generated by plot.py at 2017-12-06 14:58:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 22.36 Mbit/s

95th percentile per-packet one-way delay: 163.264 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 9.22 Mbit/s

95th percentile per-packet one-way delay: 163.270 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 17.59 Mbit/s

95th percentile per-packet one-way delay: 163.257 ms

Loss rate: 1.81%

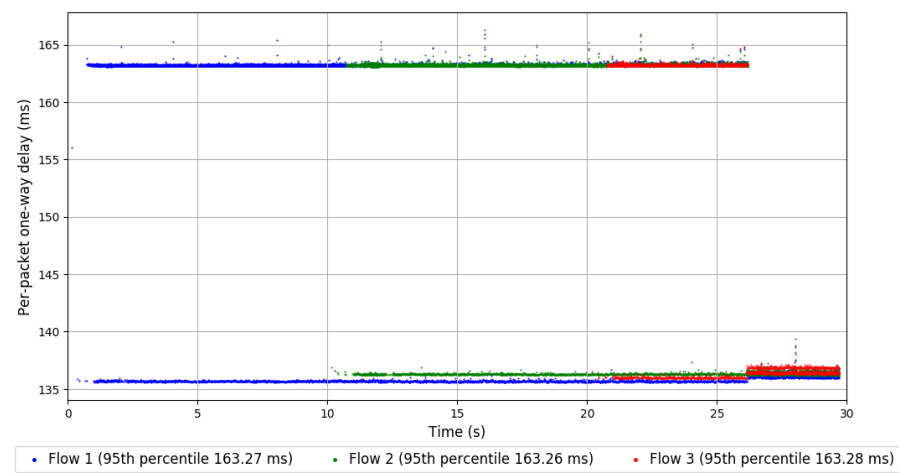
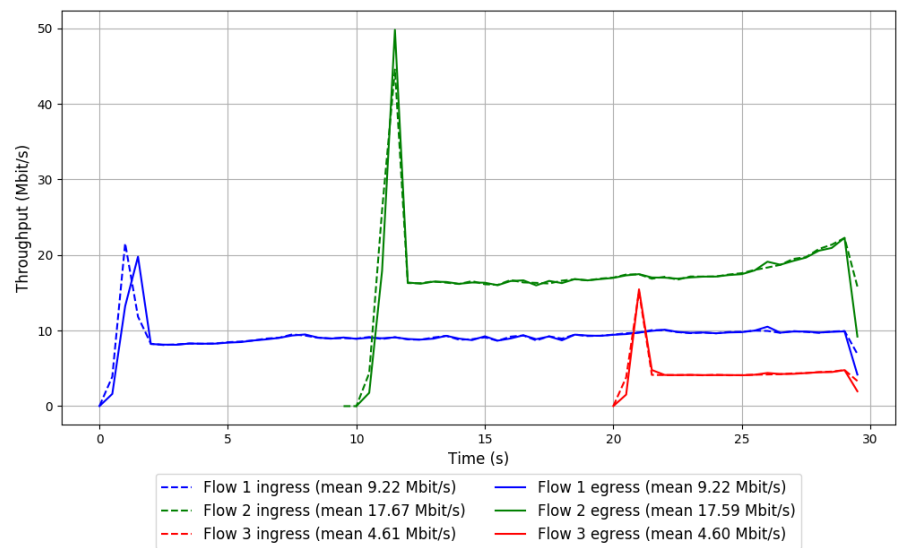
-- Flow 3:

Average throughput: 4.60 Mbit/s

95th percentile per-packet one-way delay: 163.276 ms

Loss rate: 2.95%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-06 11:40:25

End at: 2017-12-06 11:40:55

Below is generated by plot.py at 2017-12-06 14:58:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 553.21 Mbit/s

95th percentile per-packet one-way delay: 280.032 ms

Loss rate: 3.11%

-- Flow 1:

Average throughput: 488.94 Mbit/s

95th percentile per-packet one-way delay: 284.890 ms

Loss rate: 3.04%

-- Flow 2:

Average throughput: 67.73 Mbit/s

95th percentile per-packet one-way delay: 246.356 ms

Loss rate: 2.76%

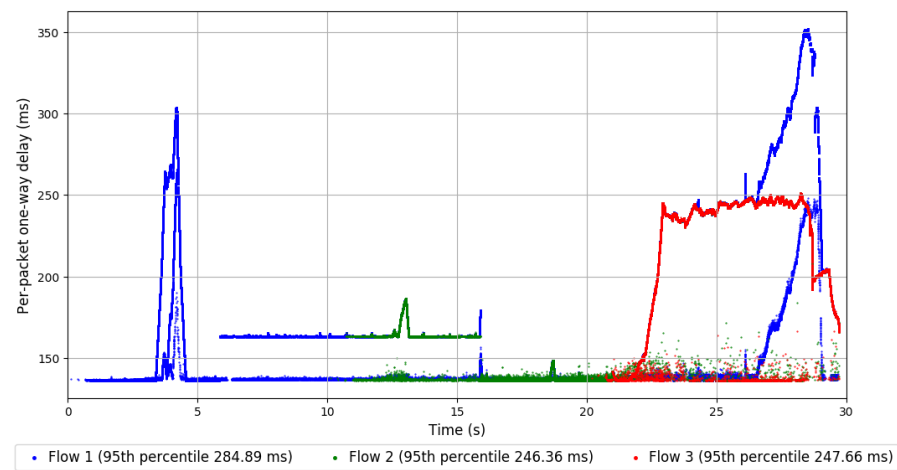
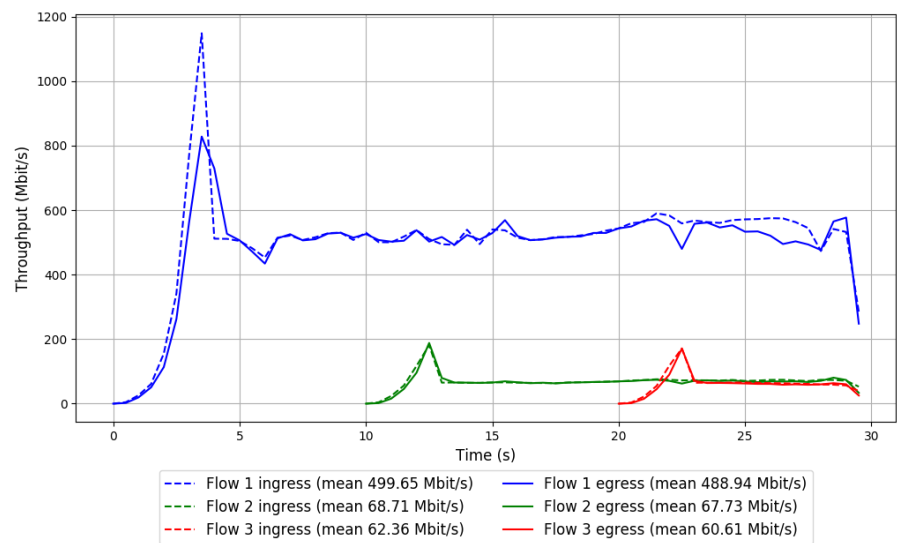
-- Flow 3:

Average throughput: 60.61 Mbit/s

95th percentile per-packet one-way delay: 247.655 ms

Loss rate: 5.50%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-06 11:54:00

End at: 2017-12-06 11:54:30

Below is generated by plot.py at 2017-12-06 14:58:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.08 Mbit/s

95th percentile per-packet one-way delay: 245.433 ms

Loss rate: 5.70%

-- Flow 1:

Average throughput: 14.81 Mbit/s

95th percentile per-packet one-way delay: 205.886 ms

Loss rate: 2.88%

-- Flow 2:

Average throughput: 4.99 Mbit/s

95th percentile per-packet one-way delay: 162.851 ms

Loss rate: 1.94%

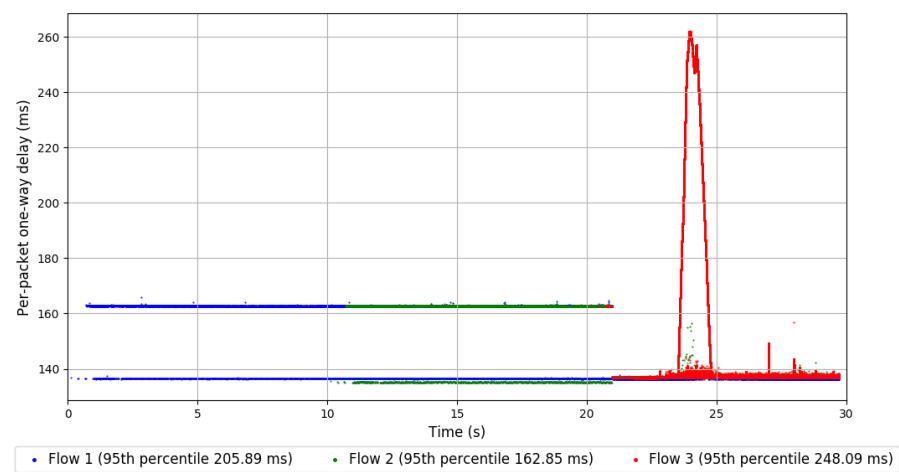
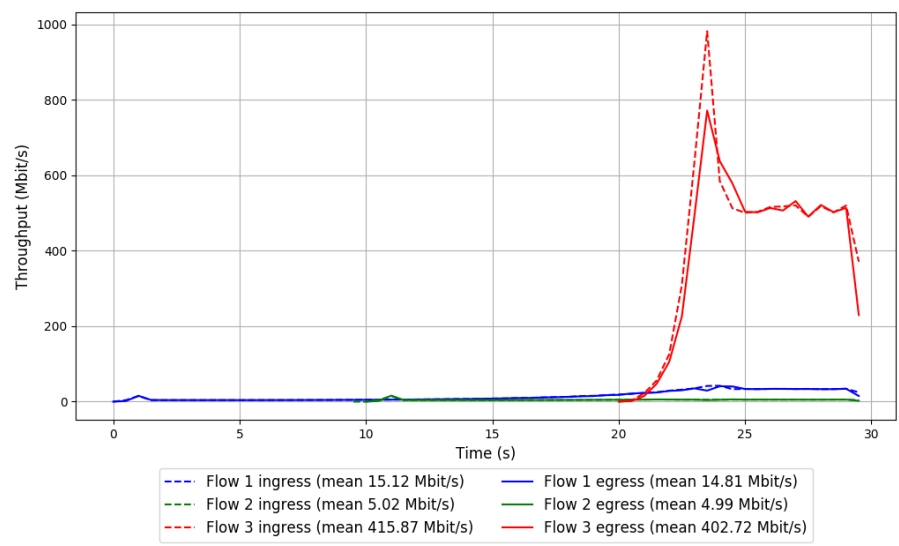
-- Flow 3:

Average throughput: 402.72 Mbit/s

95th percentile per-packet one-way delay: 248.092 ms

Loss rate: 6.10%

Run 9: Report of PCC — Data Link

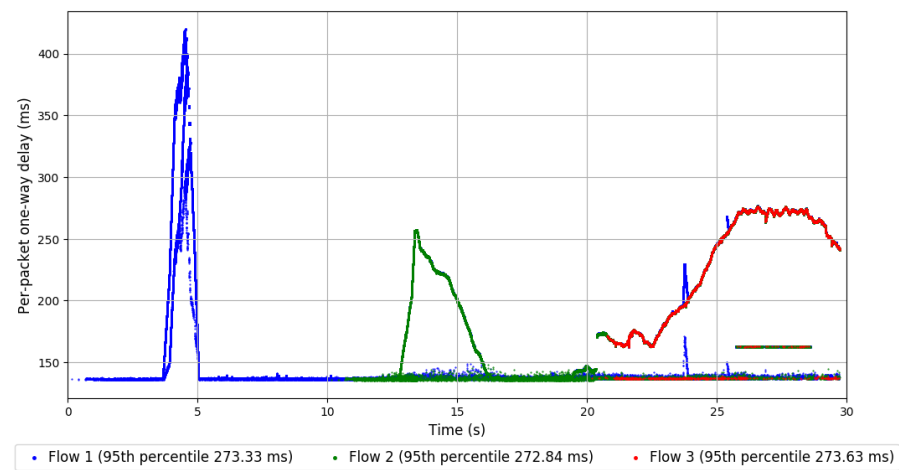
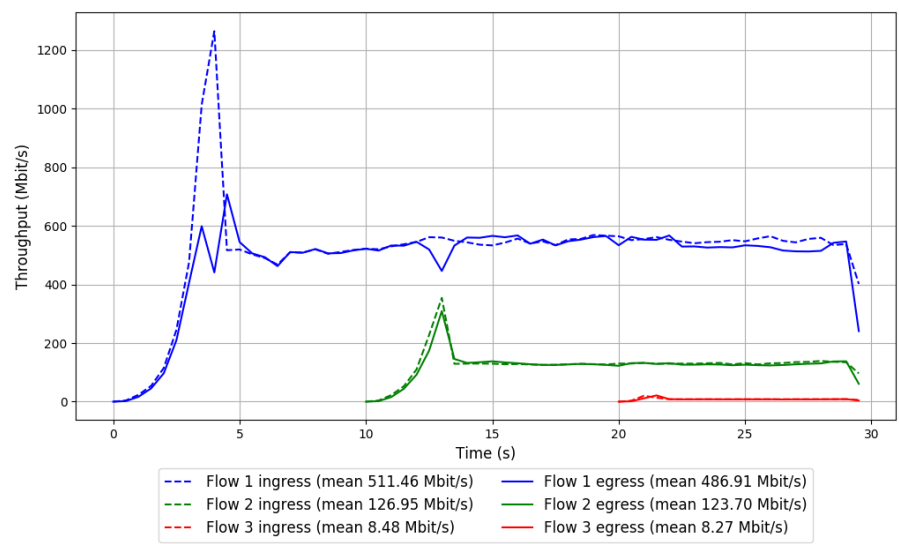


```
Run 10: Statistics of PCC

Start at: 2017-12-06 12:07:10
End at: 2017-12-06 12:07:40

# Below is generated by plot.py at 2017-12-06 15:02:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 571.33 Mbit/s
95th percentile per-packet one-way delay: 273.246 ms
Loss rate: 5.42%
-- Flow 1:
Average throughput: 486.91 Mbit/s
95th percentile per-packet one-way delay: 273.334 ms
Loss rate: 5.67%
-- Flow 2:
Average throughput: 123.70 Mbit/s
95th percentile per-packet one-way delay: 272.841 ms
Loss rate: 3.89%
-- Flow 3:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 273.627 ms
Loss rate: 5.21%
```

Run 10: Report of PCC — Data Link

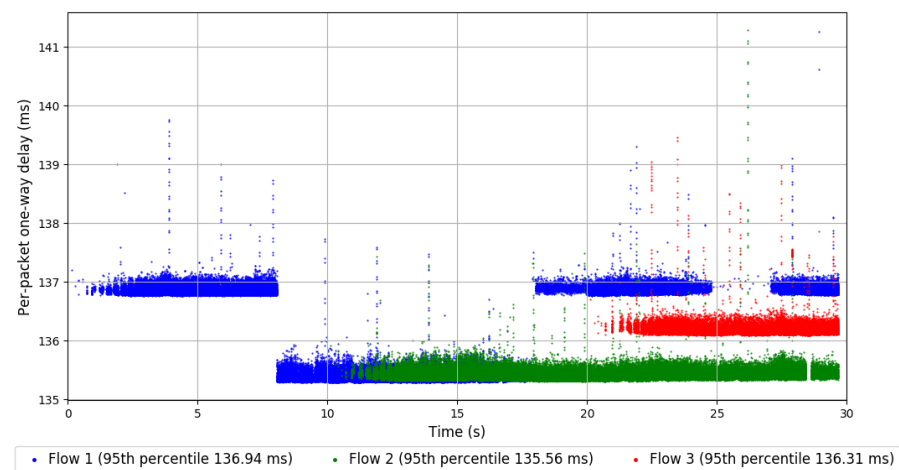
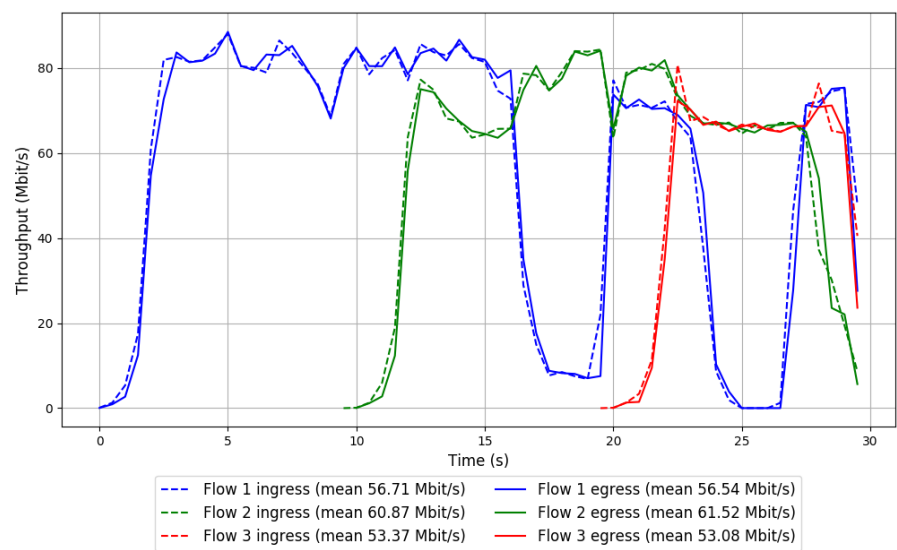


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-06 10:14:52
End at: 2017-12-06 10:15:22

# Below is generated by plot.py at 2017-12-06 15:02:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 114.45 Mbit/s
95th percentile per-packet one-way delay: 136.897 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 56.54 Mbit/s
95th percentile per-packet one-way delay: 136.940 ms
Loss rate: 1.21%
-- Flow 2:
Average throughput: 61.52 Mbit/s
95th percentile per-packet one-way delay: 135.555 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 53.08 Mbit/s
95th percentile per-packet one-way delay: 136.310 ms
Loss rate: 3.29%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-06 10:28:37

End at: 2017-12-06 10:29:07

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.53 Mbit/s

95th percentile per-packet one-way delay: 136.484 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 52.13 Mbit/s

95th percentile per-packet one-way delay: 136.539 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 56.79 Mbit/s

95th percentile per-packet one-way delay: 135.450 ms

Loss rate: 1.52%

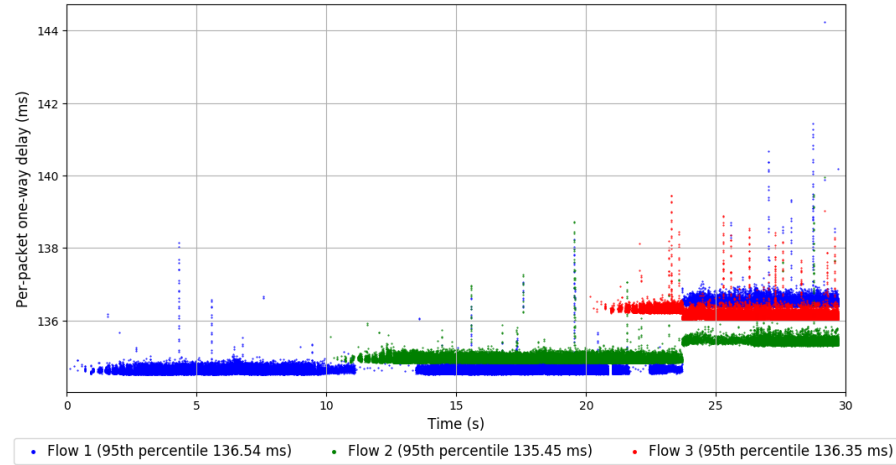
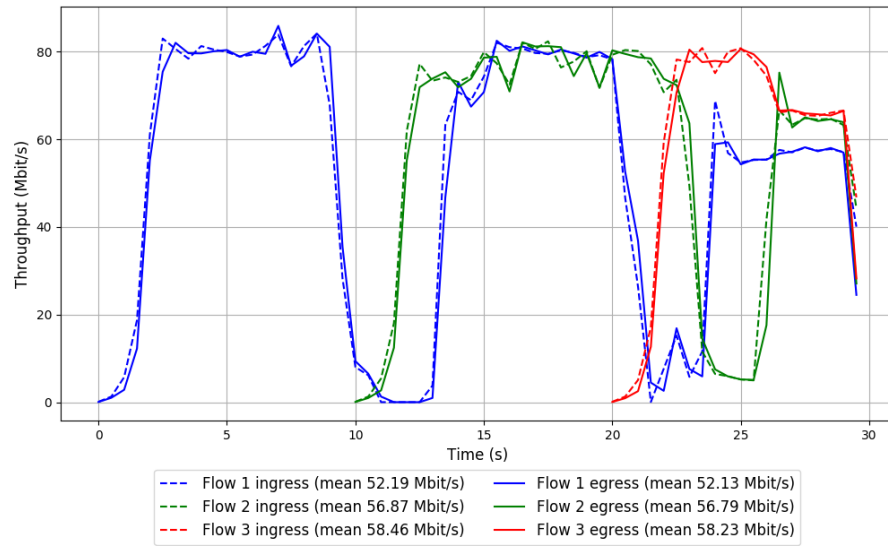
-- Flow 3:

Average throughput: 58.23 Mbit/s

95th percentile per-packet one-way delay: 136.355 ms

Loss rate: 3.19%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-06 10:42:19

End at: 2017-12-06 10:42:49

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.72 Mbit/s

95th percentile per-packet one-way delay: 136.896 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 64.29 Mbit/s

95th percentile per-packet one-way delay: 136.783 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 61.95 Mbit/s

95th percentile per-packet one-way delay: 136.955 ms

Loss rate: 0.15%

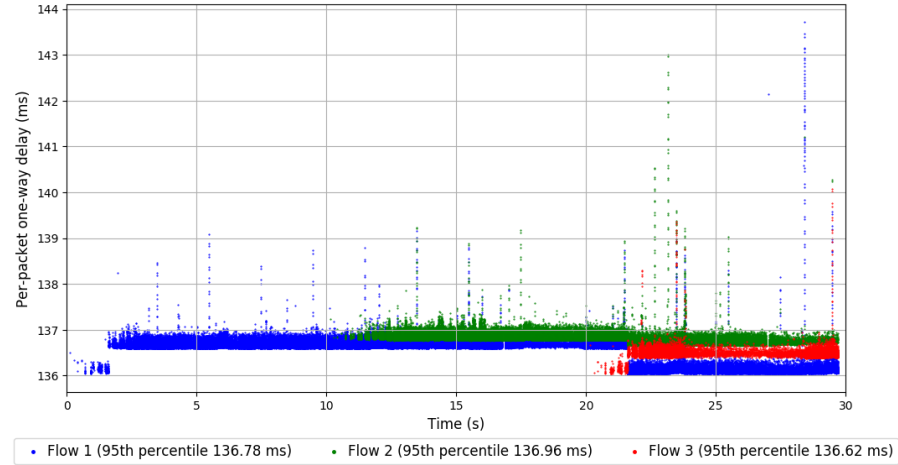
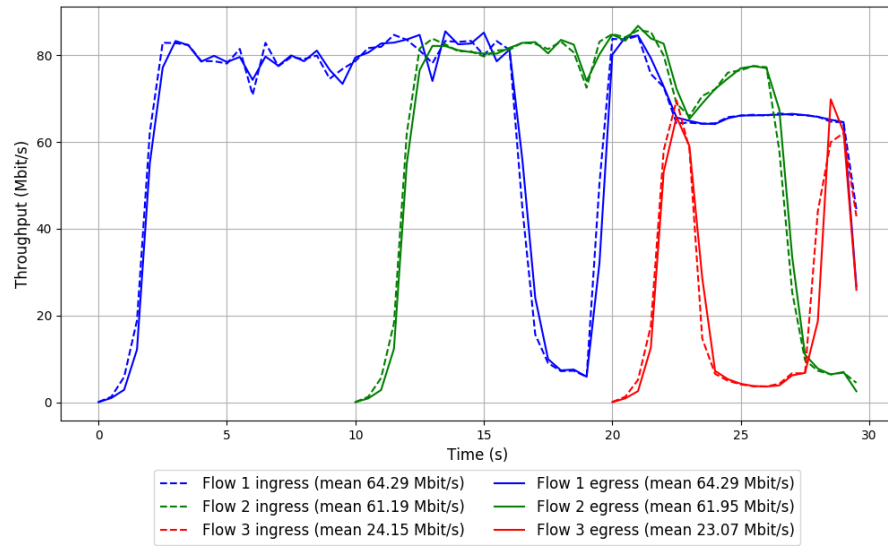
-- Flow 3:

Average throughput: 23.07 Mbit/s

95th percentile per-packet one-way delay: 136.623 ms

Loss rate: 7.13%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

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

End at: 2017-12-06 10:56:36

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.53 Mbit/s

95th percentile per-packet one-way delay: 163.483 ms

Loss rate: 1.51%

-- Flow 1:

Average throughput: 49.35 Mbit/s

95th percentile per-packet one-way delay: 163.528 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 61.82 Mbit/s

95th percentile per-packet one-way delay: 160.545 ms

Loss rate: 1.24%

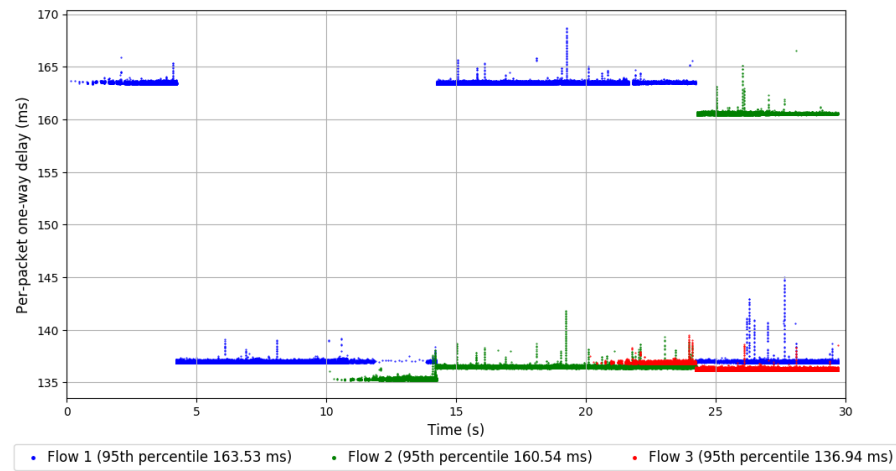
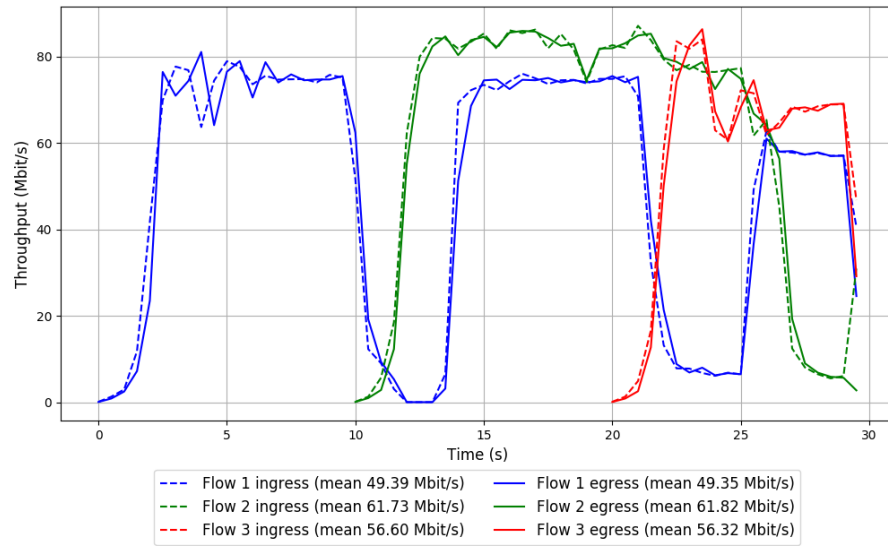
-- Flow 3:

Average throughput: 56.32 Mbit/s

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

Loss rate: 3.26%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-06 11:10:00

End at: 2017-12-06 11:10:30

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.74 Mbit/s

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

Loss rate: 1.24%

-- Flow 1:

Average throughput: 49.51 Mbit/s

95th percentile per-packet one-way delay: 136.511 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 61.59 Mbit/s

95th percentile per-packet one-way delay: 136.591 ms

Loss rate: 0.08%

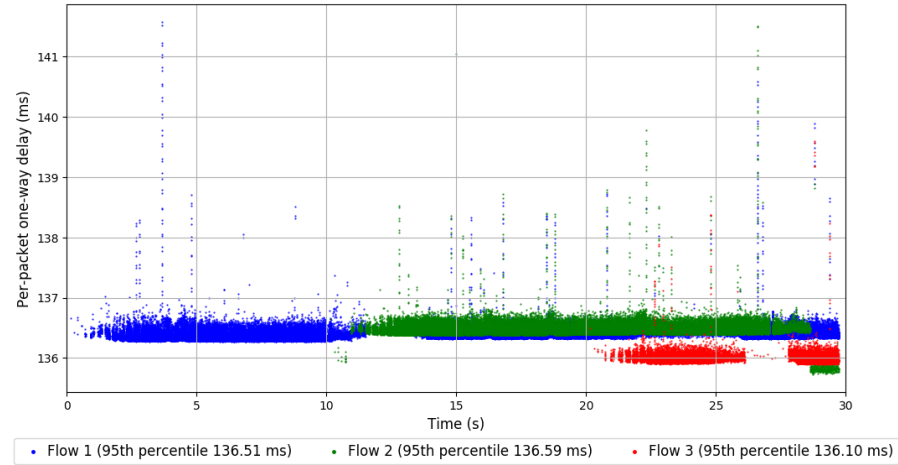
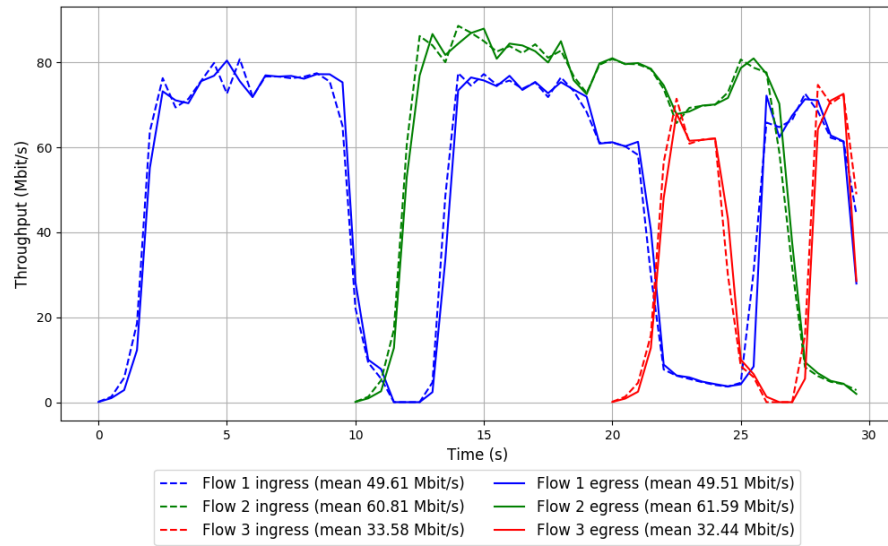
-- Flow 3:

Average throughput: 32.44 Mbit/s

95th percentile per-packet one-way delay: 136.100 ms

Loss rate: 6.07%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-06 11:23:25

End at: 2017-12-06 11:23:55

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 110.69 Mbit/s

95th percentile per-packet one-way delay: 163.347 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 51.32 Mbit/s

95th percentile per-packet one-way delay: 163.388 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 61.90 Mbit/s

95th percentile per-packet one-way delay: 136.788 ms

Loss rate: 0.15%

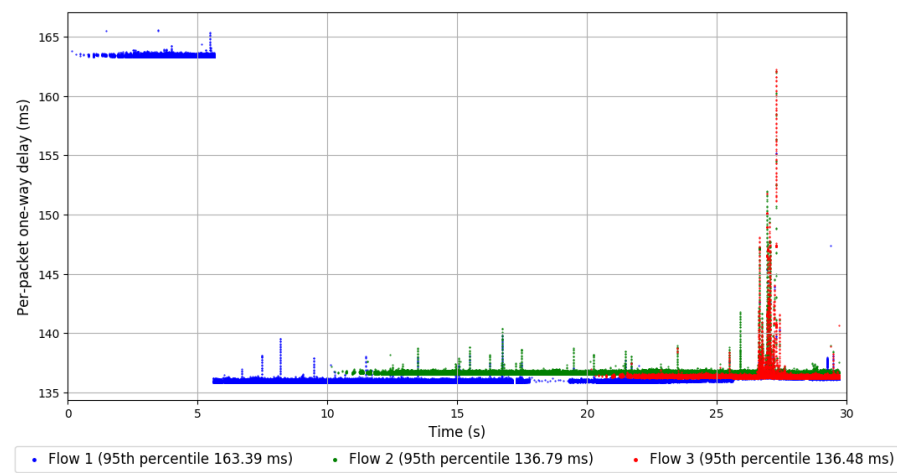
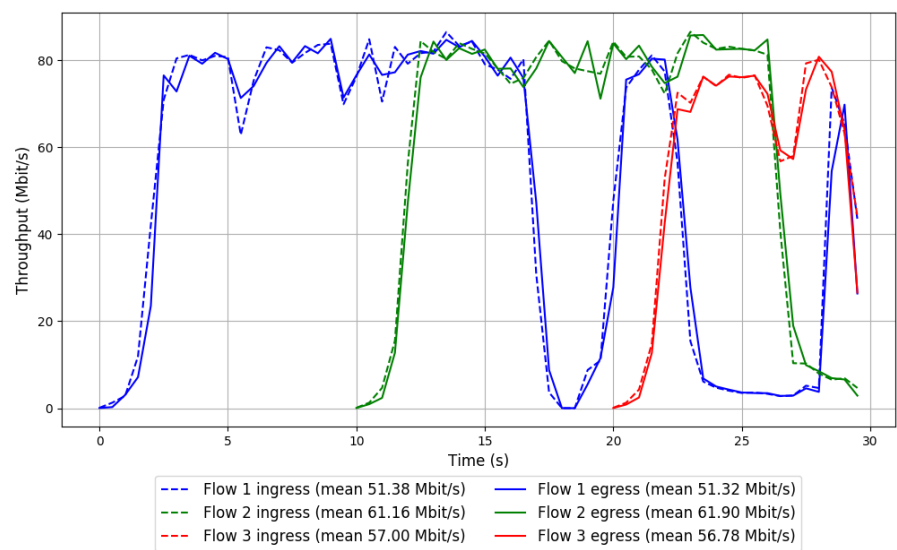
-- Flow 3:

Average throughput: 56.78 Mbit/s

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

Loss rate: 3.10%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-06 11:36:47

End at: 2017-12-06 11:37:17

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.20 Mbit/s

95th percentile per-packet one-way delay: 163.078 ms

Loss rate: 1.74%

-- Flow 1:

Average throughput: 57.30 Mbit/s

95th percentile per-packet one-way delay: 136.849 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 56.10 Mbit/s

95th percentile per-packet one-way delay: 163.115 ms

Loss rate: 1.59%

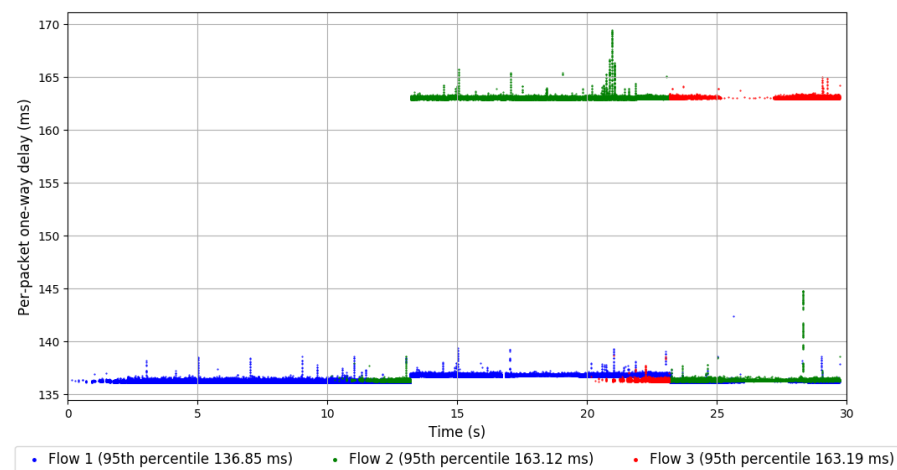
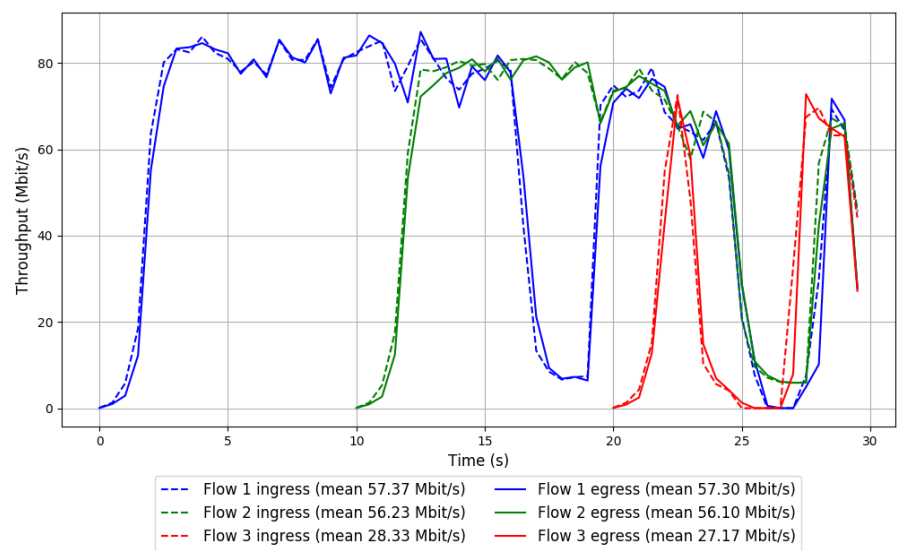
-- Flow 3:

Average throughput: 27.17 Mbit/s

95th percentile per-packet one-way delay: 163.190 ms

Loss rate: 6.74%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-06 11:50:21

End at: 2017-12-06 11:50:51

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.50 Mbit/s

95th percentile per-packet one-way delay: 136.900 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 53.74 Mbit/s

95th percentile per-packet one-way delay: 136.625 ms

Loss rate: 1.36%

-- Flow 2:

Average throughput: 61.92 Mbit/s

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

Loss rate: 0.14%

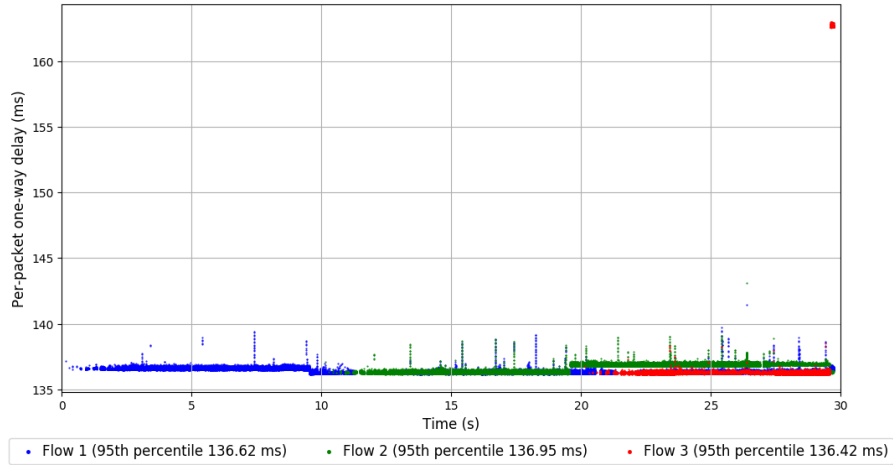
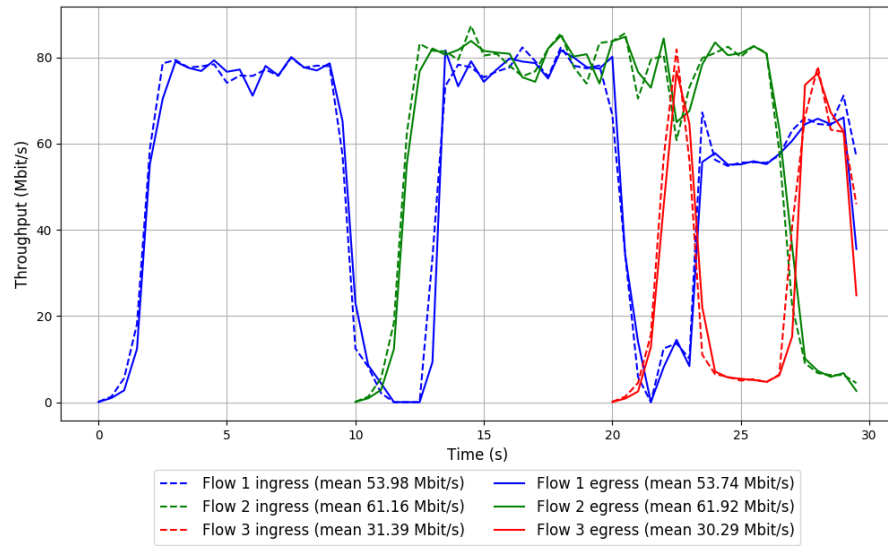
-- Flow 3:

Average throughput: 30.29 Mbit/s

95th percentile per-packet one-way delay: 136.421 ms

Loss rate: 6.19%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-06 12:03:36

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

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.12 Mbit/s

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

Loss rate: 1.20%

-- Flow 1:

Average throughput: 58.82 Mbit/s

95th percentile per-packet one-way delay: 136.568 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 61.75 Mbit/s

95th percentile per-packet one-way delay: 136.992 ms

Loss rate: 0.16%

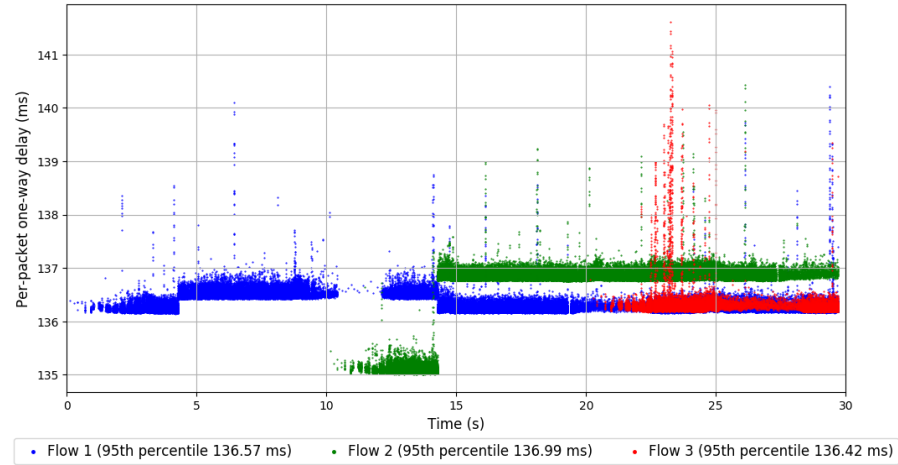
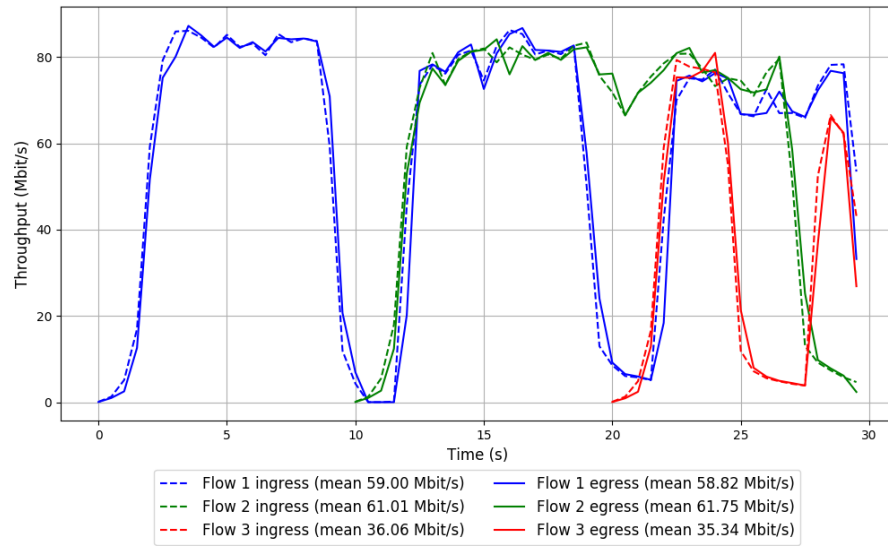
-- Flow 3:

Average throughput: 35.34 Mbit/s

95th percentile per-packet one-way delay: 136.421 ms

Loss rate: 4.70%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-06 12:17:04

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

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.86 Mbit/s

95th percentile per-packet one-way delay: 136.756 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 63.74 Mbit/s

95th percentile per-packet one-way delay: 136.514 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 61.39 Mbit/s

95th percentile per-packet one-way delay: 135.793 ms

Loss rate: 0.35%

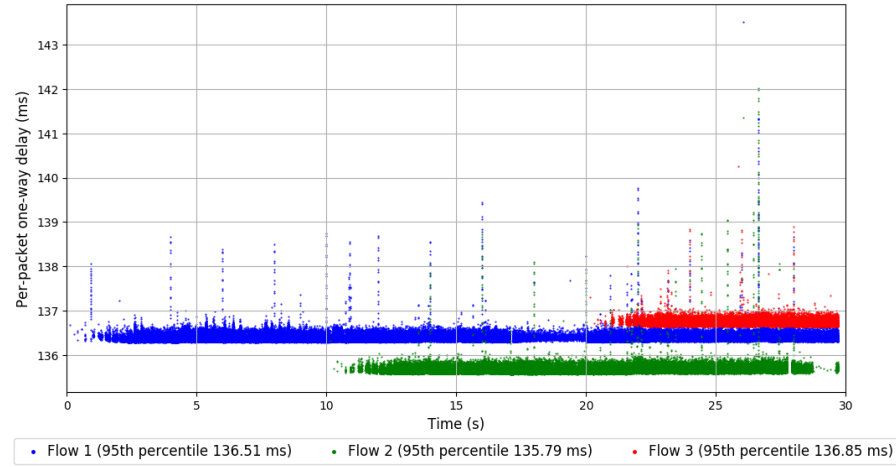
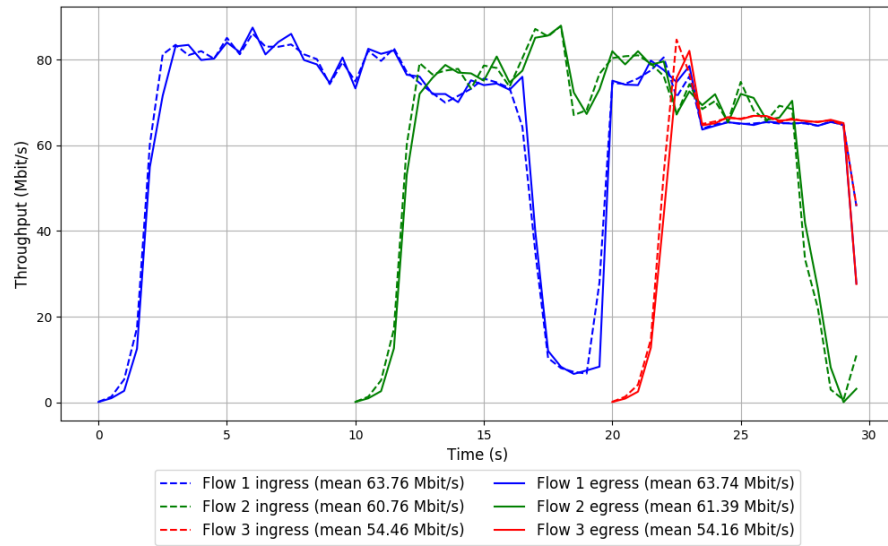
-- Flow 3:

Average throughput: 54.16 Mbit/s

95th percentile per-packet one-way delay: 136.851 ms

Loss rate: 3.34%

Run 10: Report of QUIC Cubic — Data Link

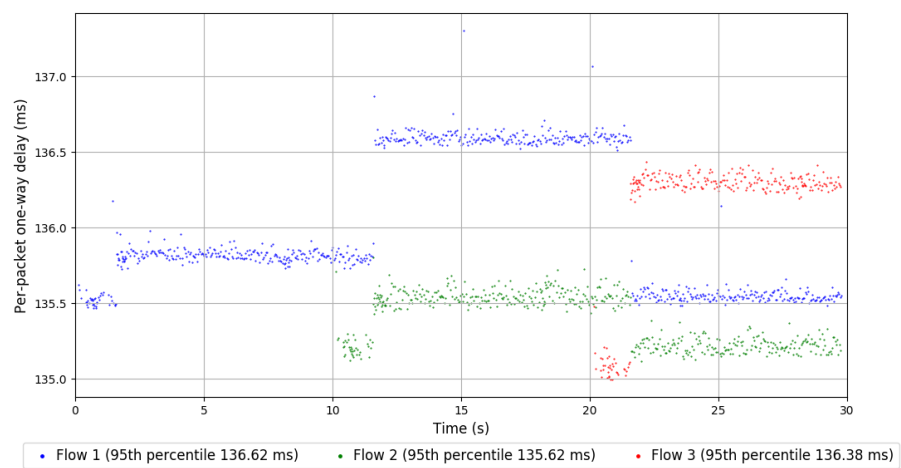
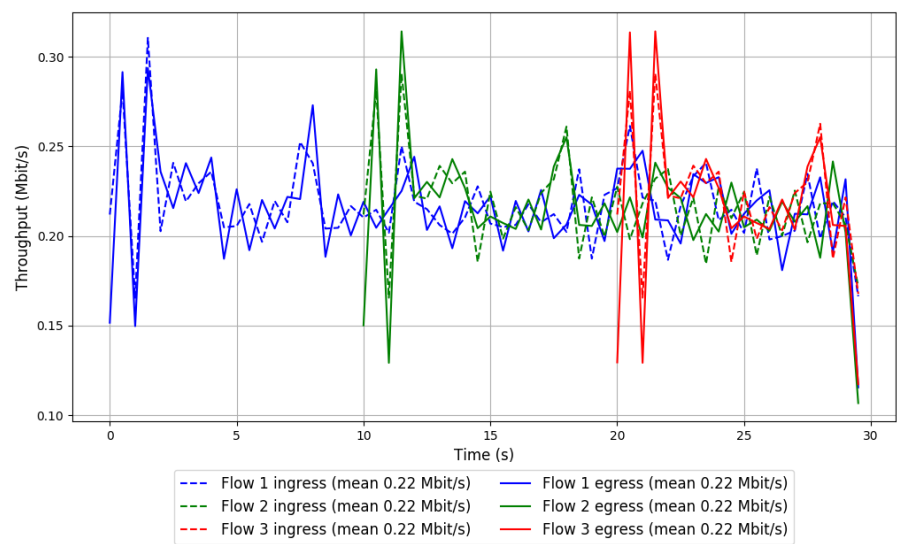


```
Run 1: Statistics of SCReAM

Start at: 2017-12-06 10:07:09
End at: 2017-12-06 10:07:39

# Below is generated by plot.py at 2017-12-06 15:02:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 136.607 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.625 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.620 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.380 ms
Loss rate: 2.63%
```

Run 1: Report of SReAM — Data Link

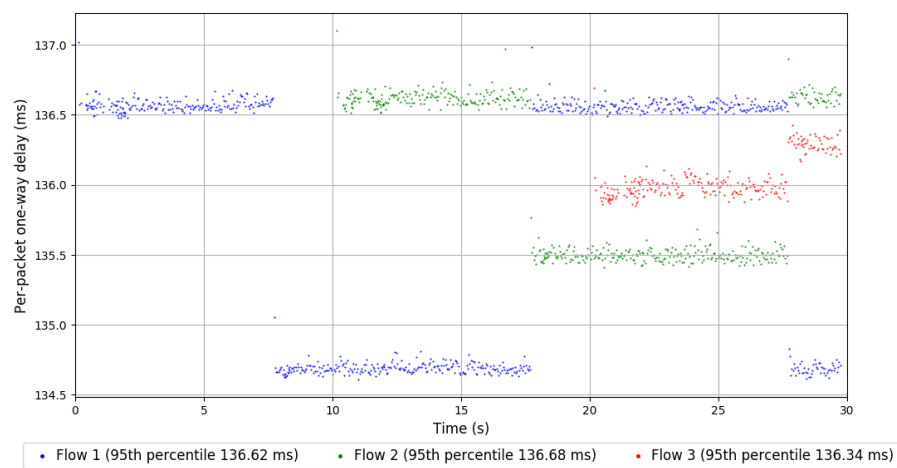
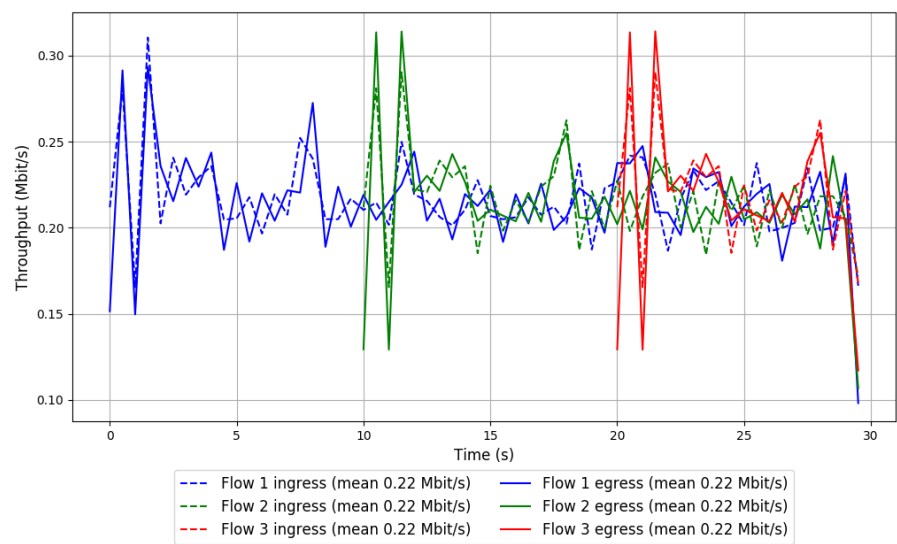


```
Run 2: Statistics of SReAM

Start at: 2017-12-06 10:21:03
End at: 2017-12-06 10:21:33

# Below is generated by plot.py at 2017-12-06 15:02:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 136.650 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.620 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.679 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.337 ms
Loss rate: 2.63%
```

Run 2: Report of SReAM — Data Link

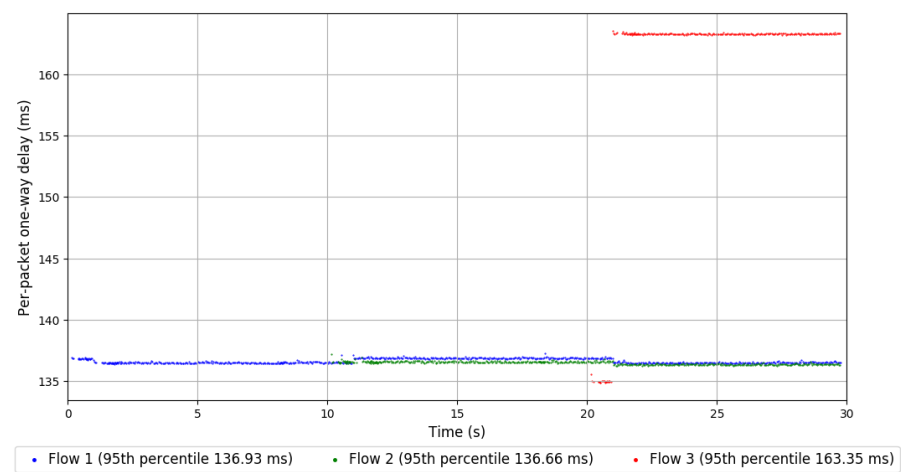
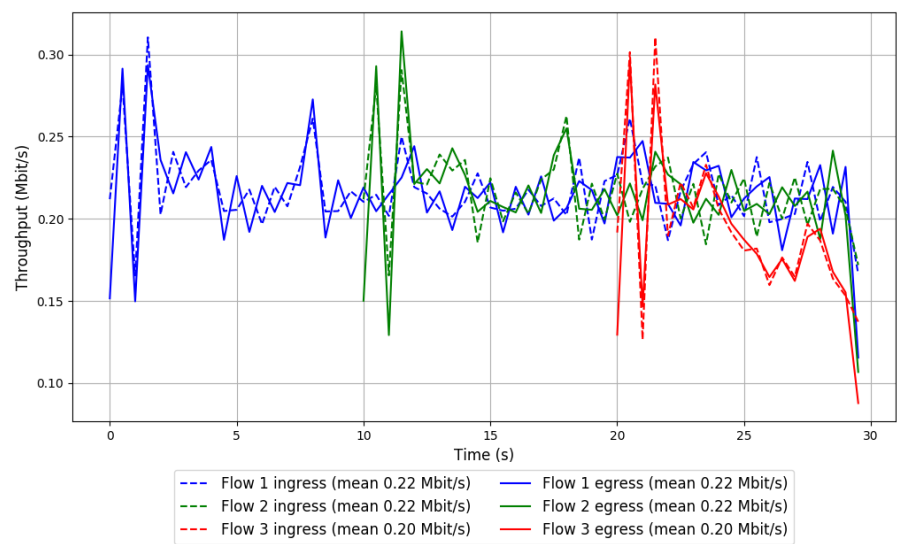


```
Run 3: Statistics of SReAM

Start at: 2017-12-06 10:34:50
End at: 2017-12-06 10:35:20

# Below is generated by plot.py at 2017-12-06 15:02:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 163.297 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.931 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.658 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 163.349 ms
Loss rate: 2.57%
```


Run 3: Report of SCRaM — Data Link

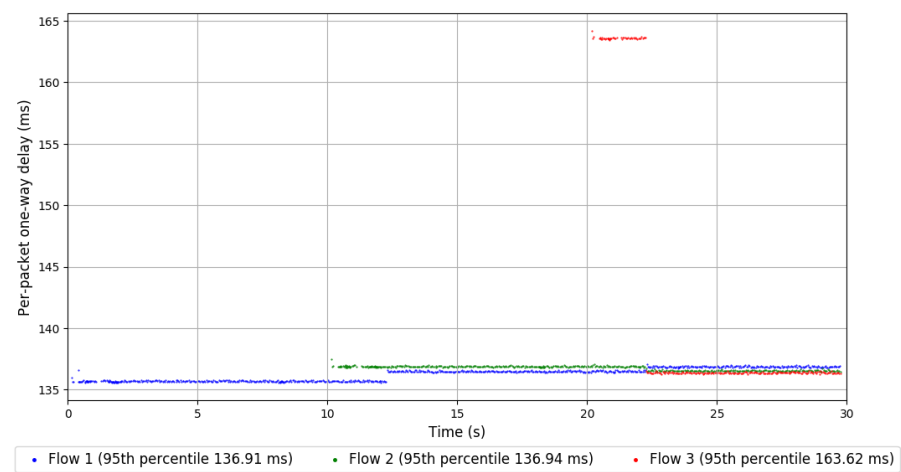
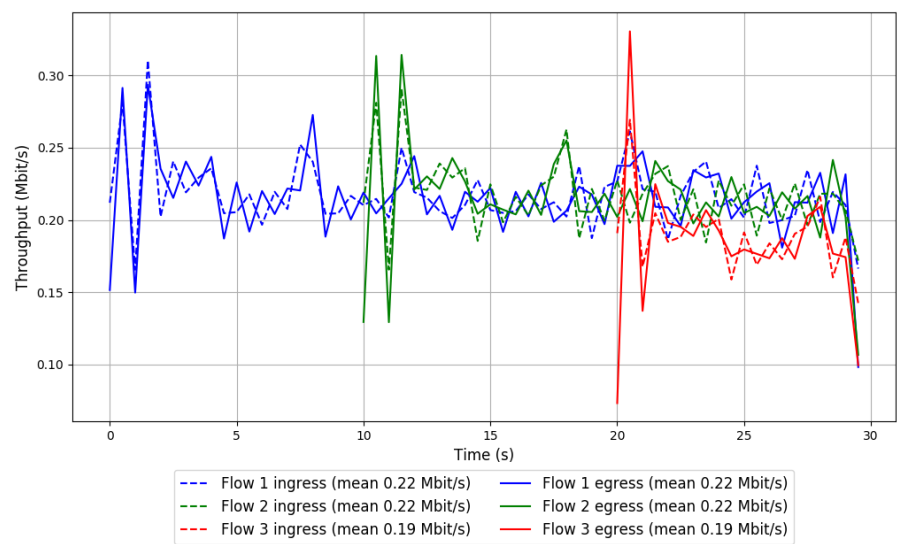


```
Run 4: Statistics of SReAM

Start at: 2017-12-06 10:48:18
End at: 2017-12-06 10:48:48

# Below is generated by plot.py at 2017-12-06 15:02:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 136.955 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.907 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.941 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 163.623 ms
Loss rate: 2.62%
```

Run 4: Report of SReAM — Data Link

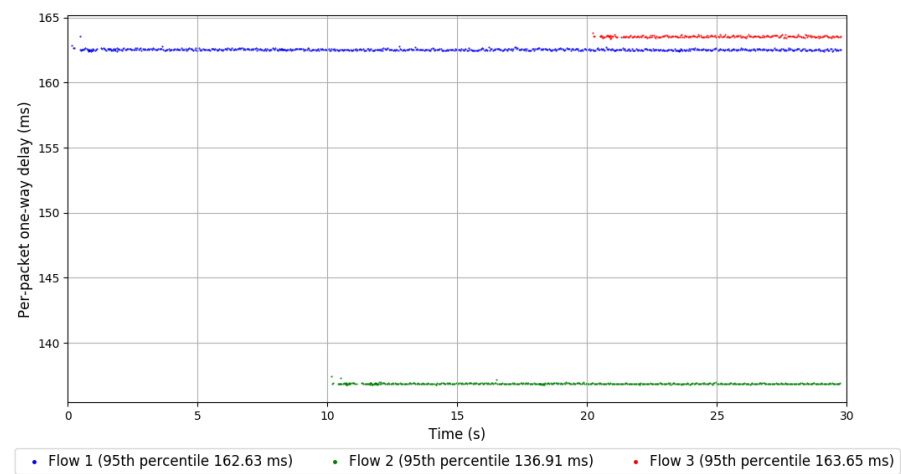
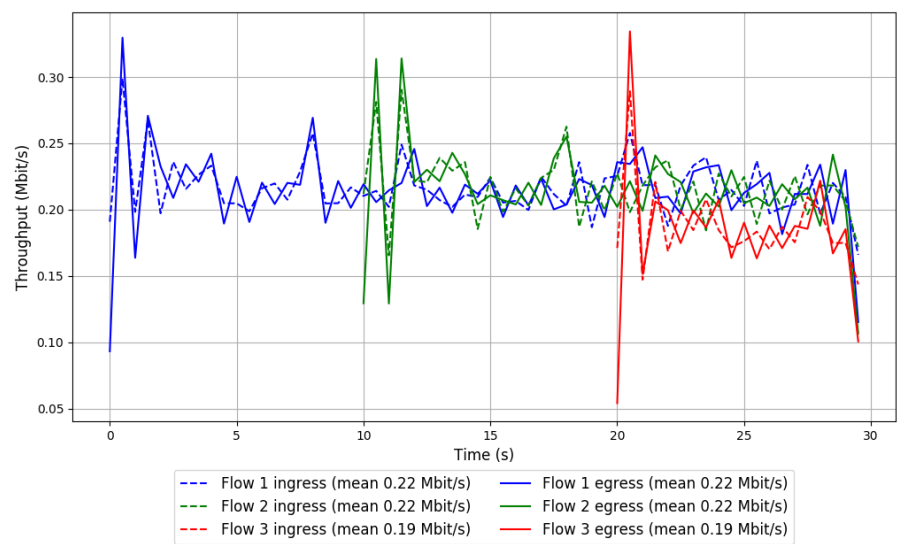


```
Run 5: Statistics of SCReAM

Start at: 2017-12-06 11:02:07
End at: 2017-12-06 11:02:37

# Below is generated by plot.py at 2017-12-06 15:02:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 163.569 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 162.632 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.915 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 163.649 ms
Loss rate: 2.69%
```

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2017-12-06 11:15:42

End at: 2017-12-06 11:16:12

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 137.060 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.962 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.083 ms

Loss rate: 1.42%

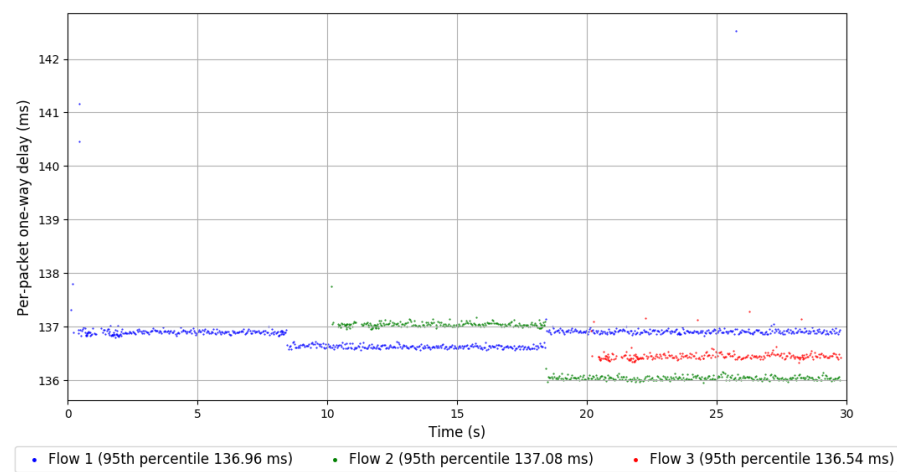
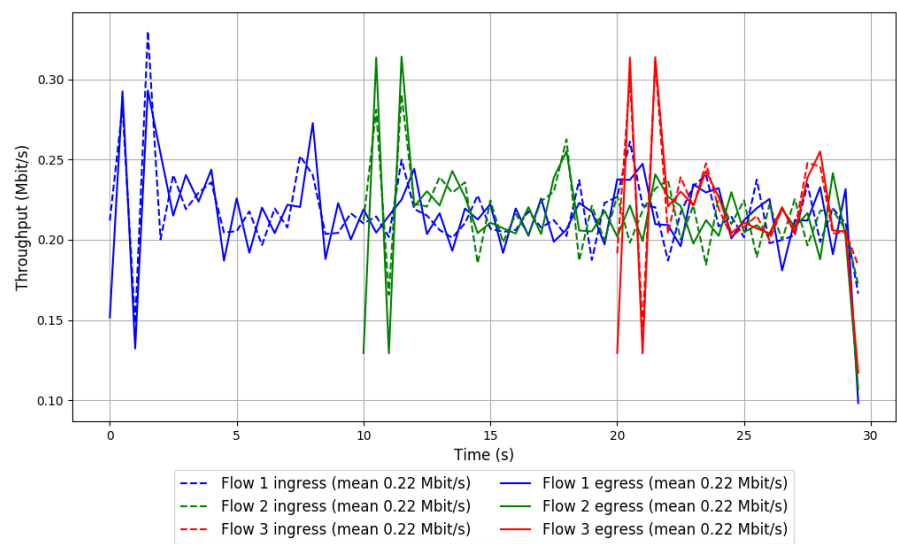
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.539 ms

Loss rate: 2.63%

Run 6: Report of SReAM — Data Link

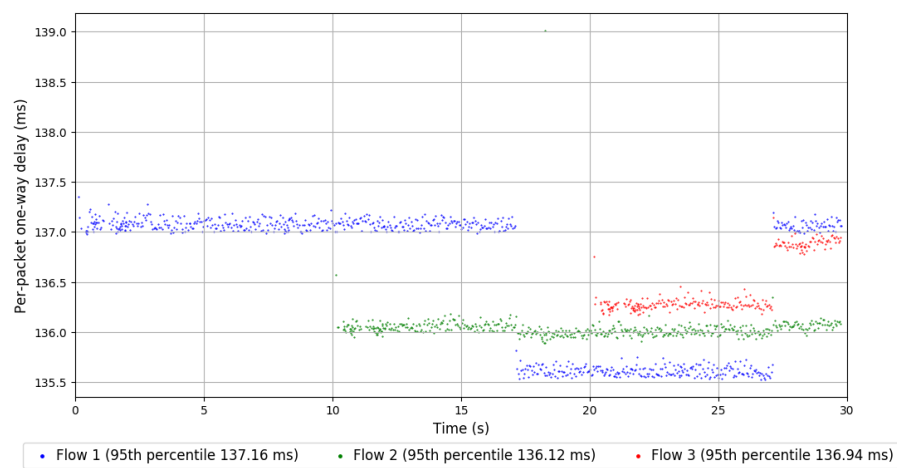
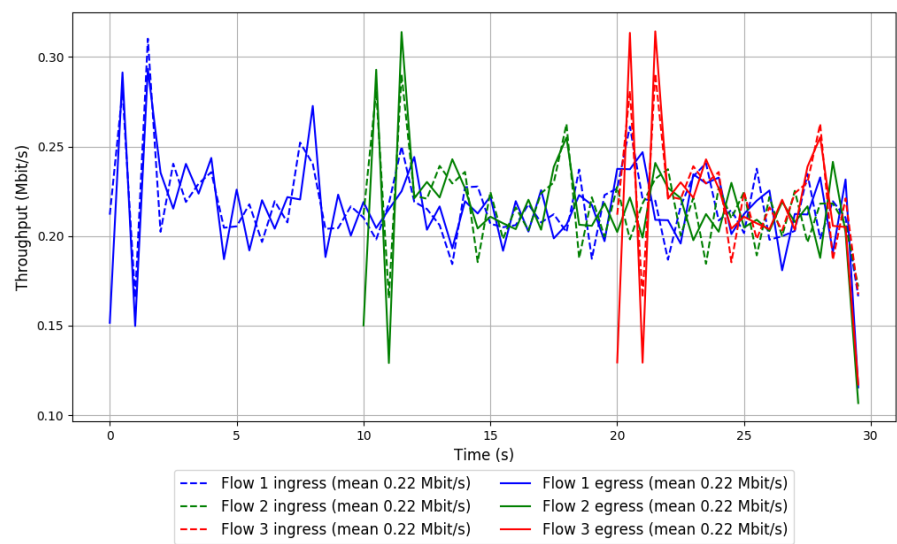


```
Run 7: Statistics of SReAM

Start at: 2017-12-06 11:29:03
End at: 2017-12-06 11:29:34

# Below is generated by plot.py at 2017-12-06 15:02:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 137.137 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.159 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.118 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.937 ms
Loss rate: 2.63%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-12-06 11:42:53

End at: 2017-12-06 11:43:23

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 136.902 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.77%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 136.466 ms

Loss rate: 1.41%

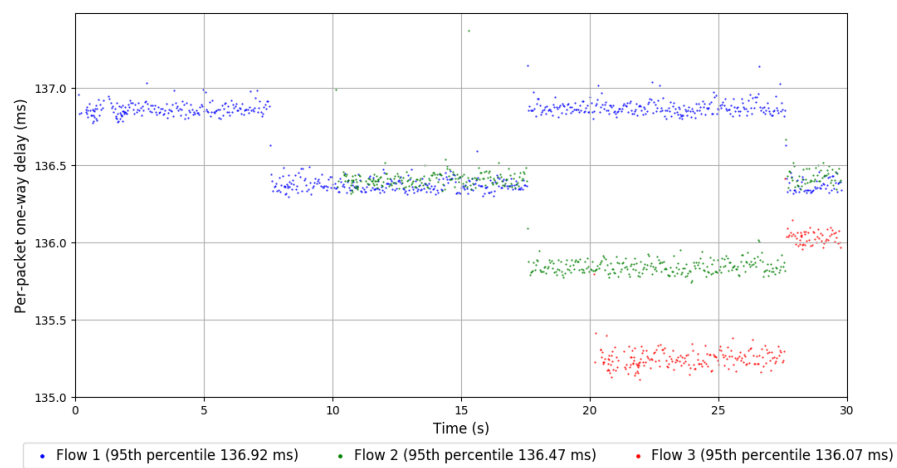
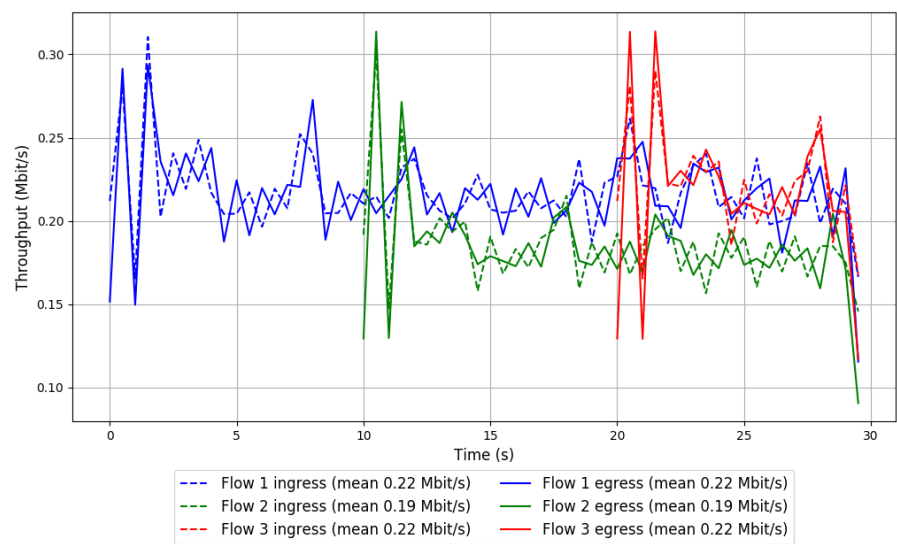
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.067 ms

Loss rate: 2.63%

Run 8: Report of SReAM — Data Link

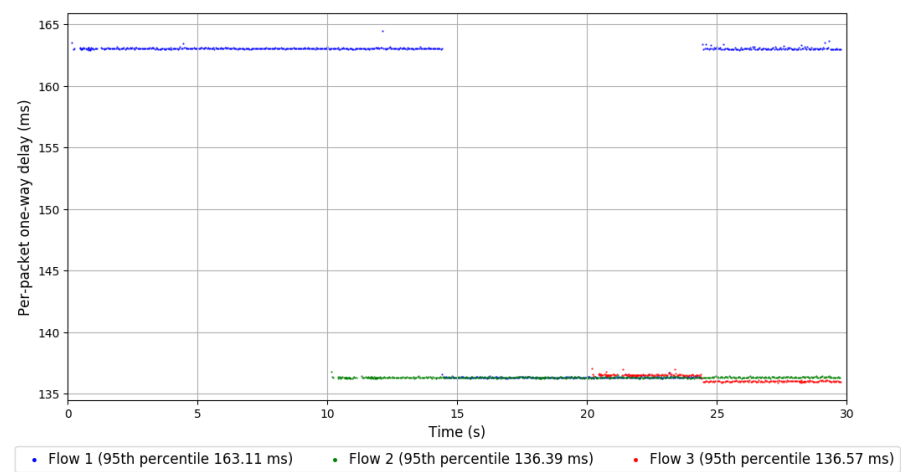
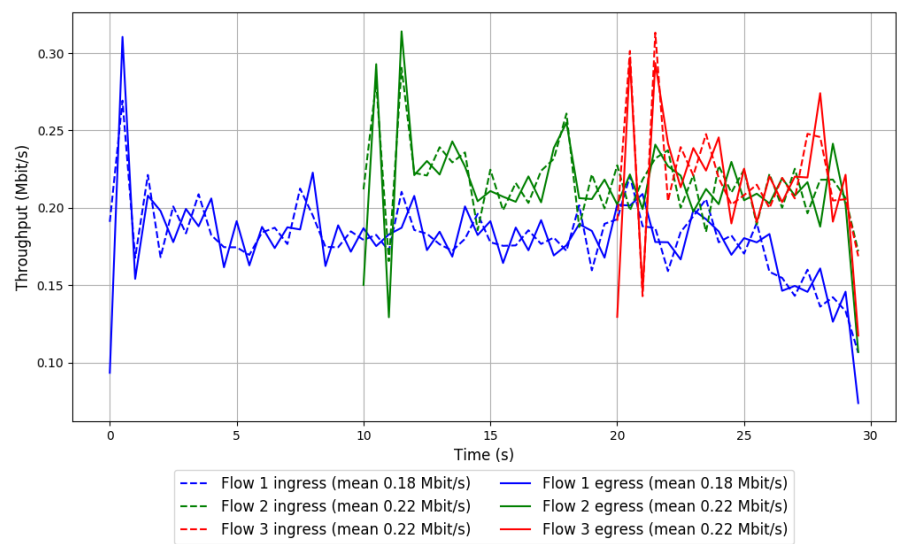


```
Run 9: Statistics of SReAM

Start at: 2017-12-06 11:56:06
End at: 2017-12-06 11:56:36

# Below is generated by plot.py at 2017-12-06 15:02:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 163.082 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 163.107 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.388 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.571 ms
Loss rate: 2.29%
```

Run 9: Report of SReAM — Data Link

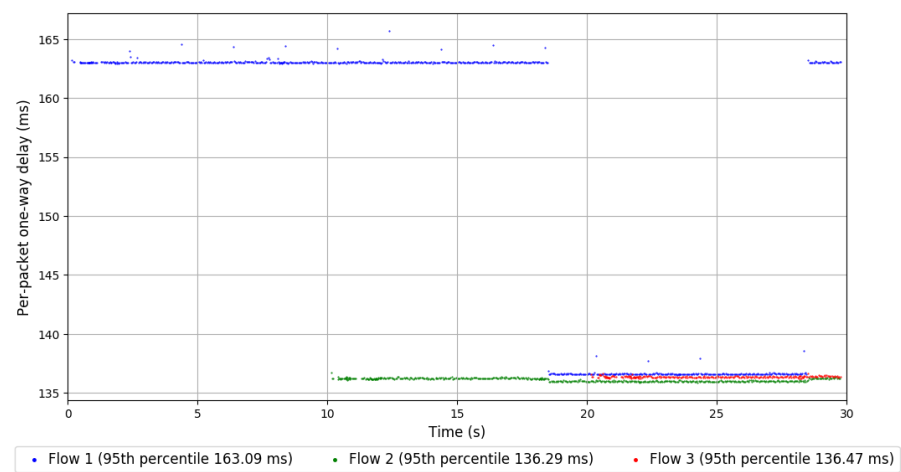
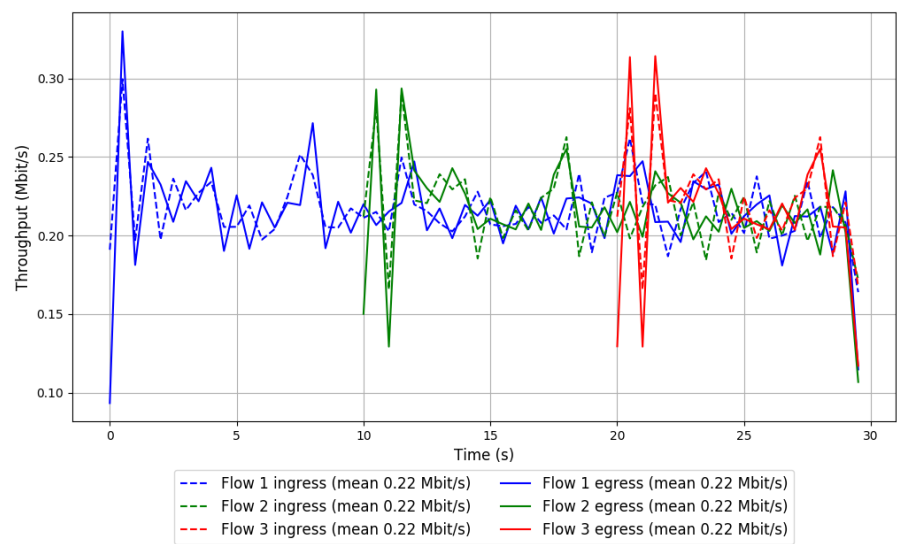


```
Run 10: Statistics of SReAM

Start at: 2017-12-06 12:09:32
End at: 2017-12-06 12:10:02

# Below is generated by plot.py at 2017-12-06 15:02:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 163.062 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 163.085 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.294 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.466 ms
Loss rate: 2.63%
```

Run 10: Report of SReAM — Data Link

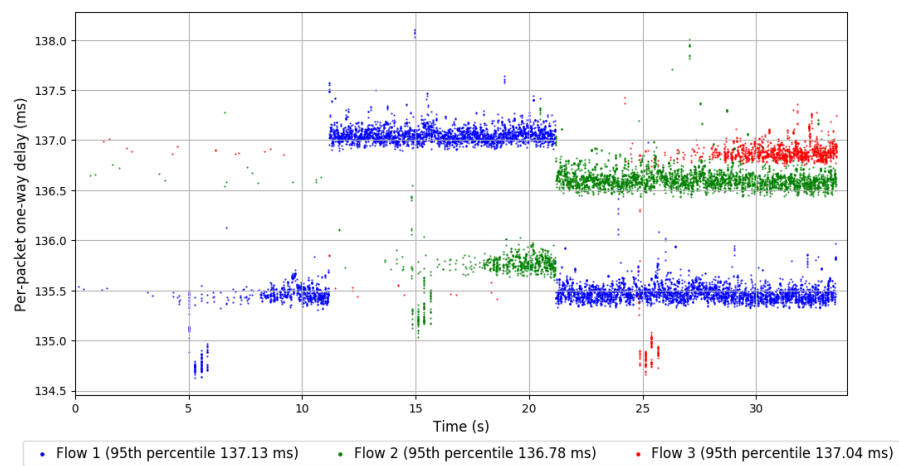
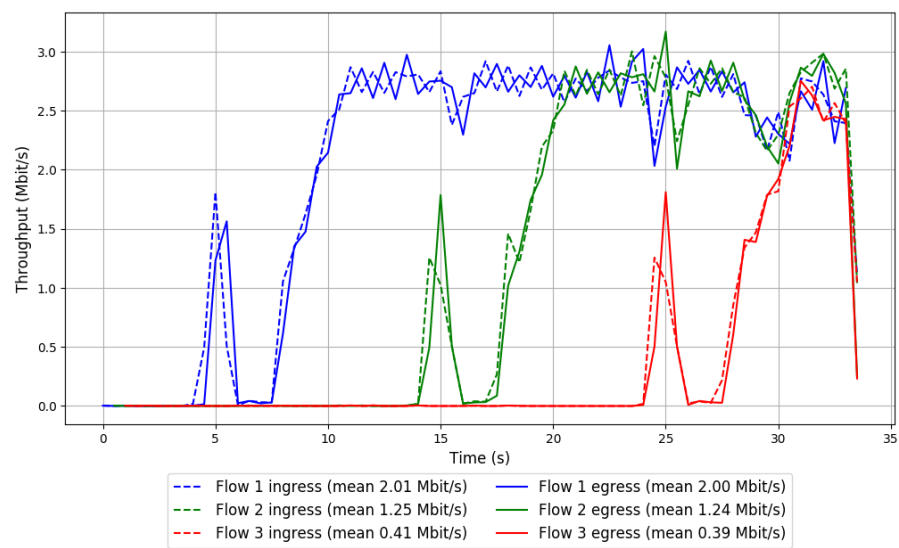


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-06 10:14:03
End at: 2017-12-06 10:14:33

# Below is generated by plot.py at 2017-12-06 15:02:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 137.105 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 137.135 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 136.781 ms
Loss rate: 2.21%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 137.037 ms
Loss rate: 5.65%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-06 10:27:47

End at: 2017-12-06 10:28:17

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.60 Mbit/s

95th percentile per-packet one-way delay: 136.683 ms

Loss rate: 2.02%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 135.659 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 136.725 ms

Loss rate: 1.97%

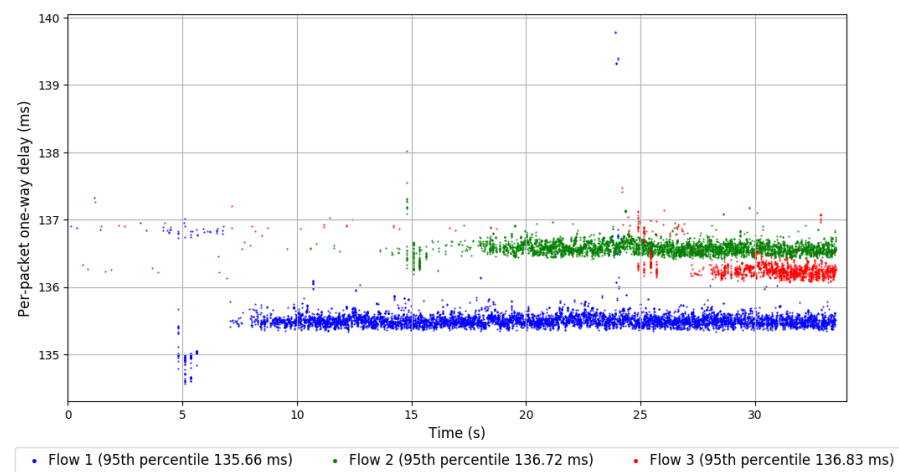
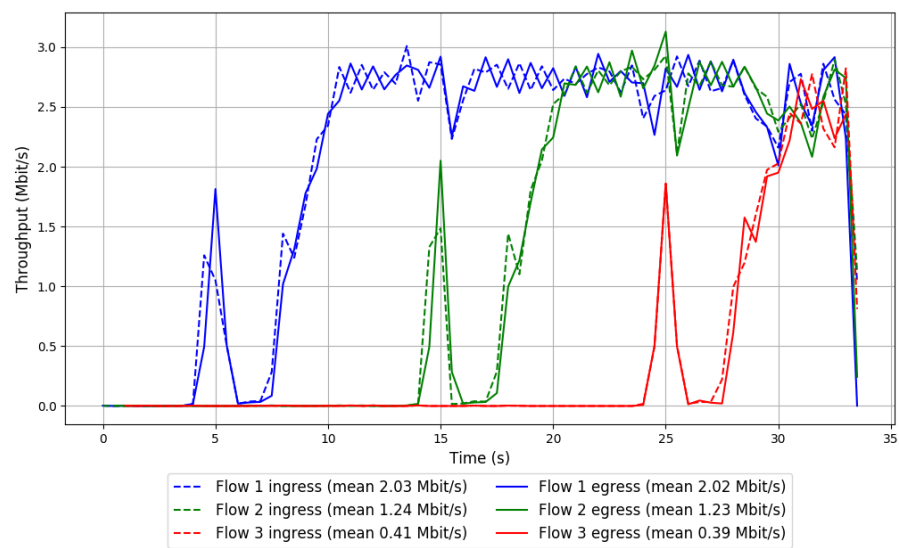
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 136.830 ms

Loss rate: 6.01%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-06 10:41:30

End at: 2017-12-06 10:42:00

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 161.700 ms

Loss rate: 1.70%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 136.646 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 136.635 ms

Loss rate: 1.69%

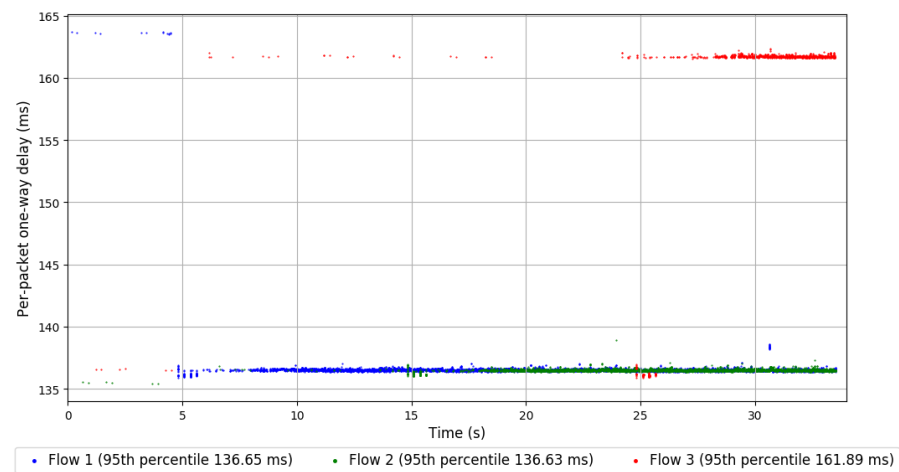
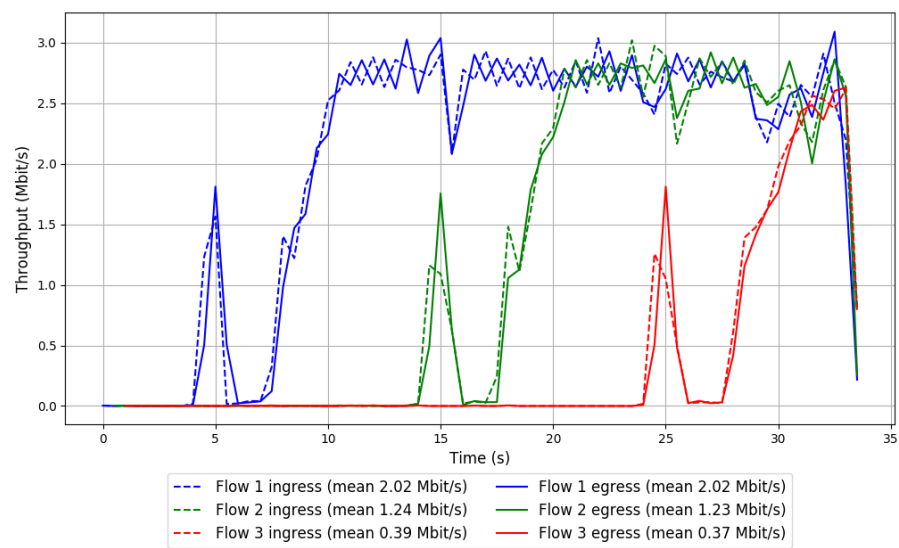
-- Flow 3:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 161.886 ms

Loss rate: 5.93%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-06 10:55:17

End at: 2017-12-06 10:55:47

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 161.479 ms

Loss rate: 1.87%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 137.056 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 161.554 ms

Loss rate: 1.88%

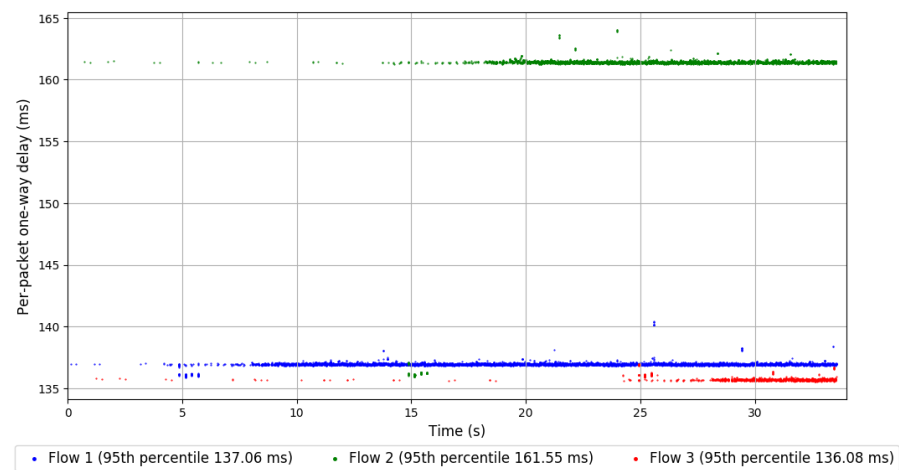
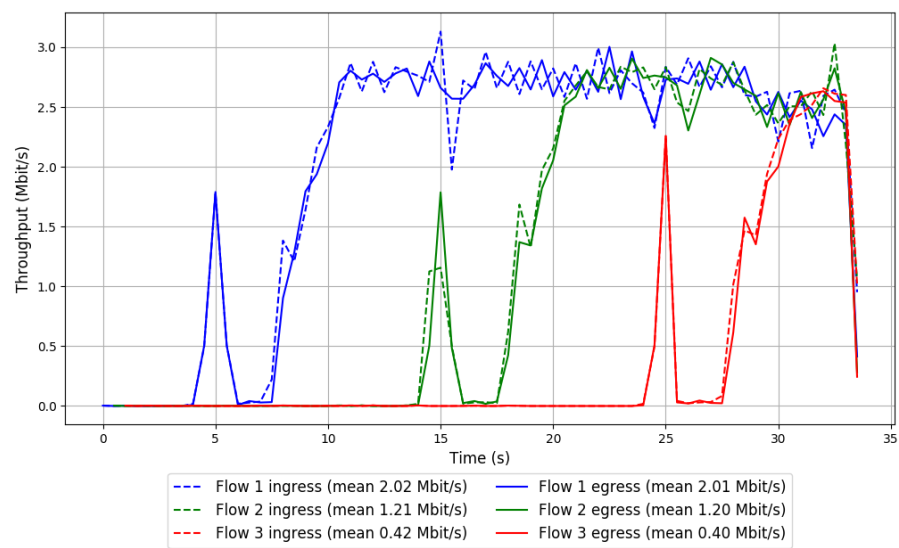
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.084 ms

Loss rate: 5.30%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-06 11:09:10

End at: 2017-12-06 11:09:40

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 136.629 ms

Loss rate: 1.75%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 136.523 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 136.692 ms

Loss rate: 1.60%

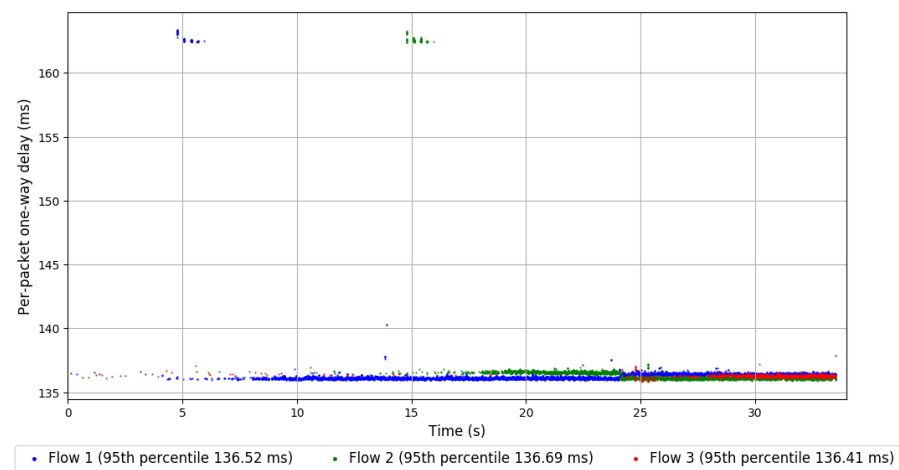
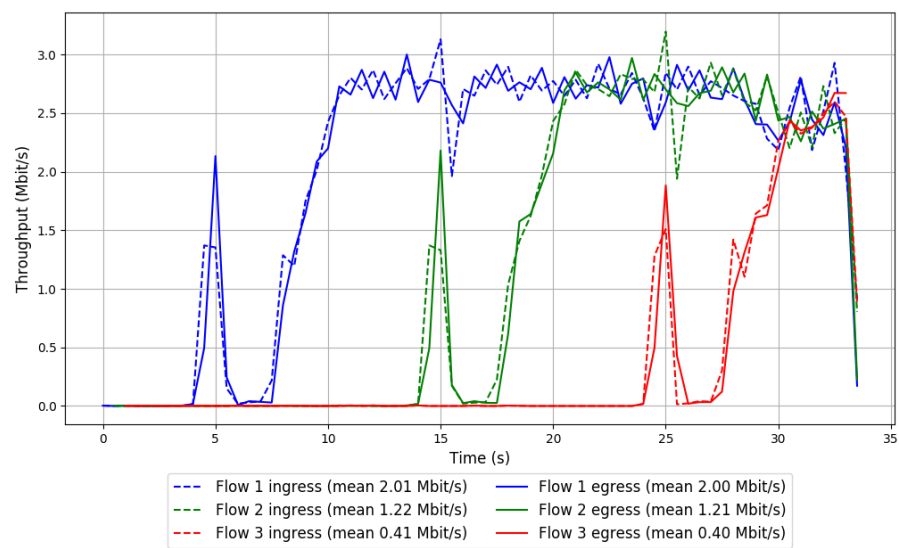
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.413 ms

Loss rate: 5.08%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-06 11:22:35

End at: 2017-12-06 11:23:05

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 136.806 ms

Loss rate: 1.79%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 136.466 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 136.748 ms

Loss rate: 1.69%

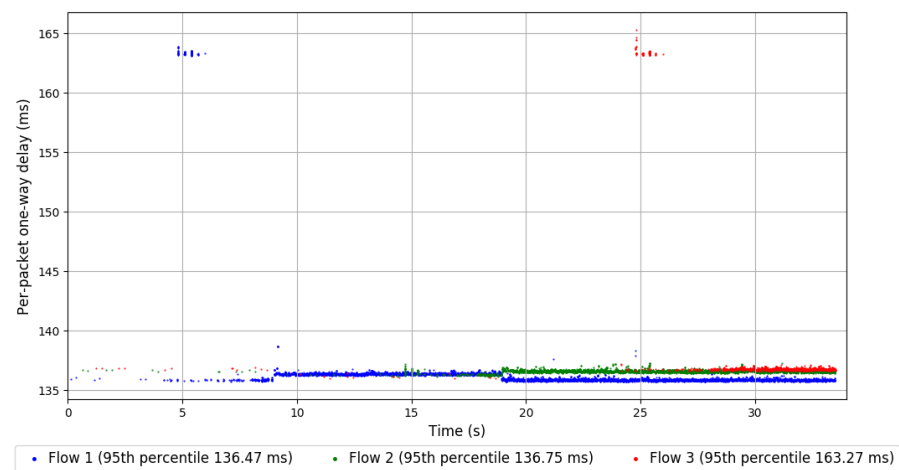
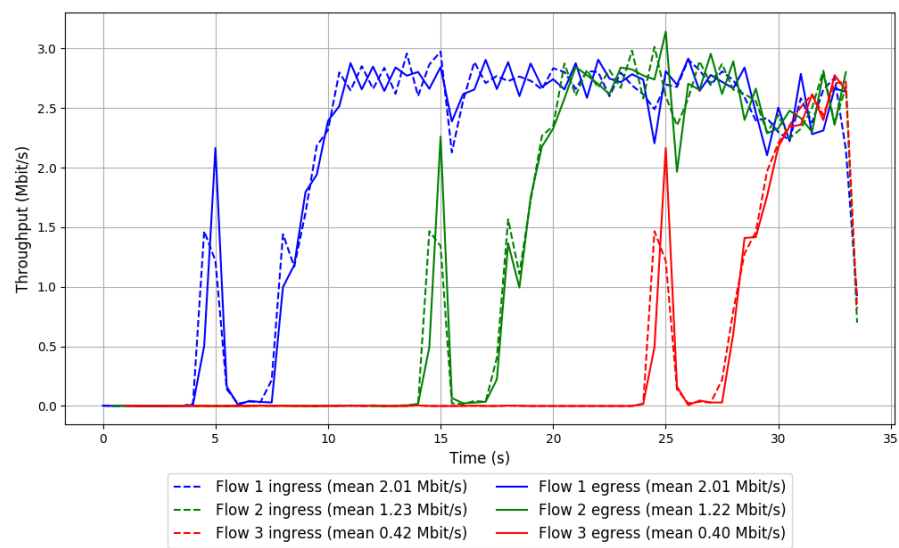
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 163.273 ms

Loss rate: 5.77%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-06 11:35:57

End at: 2017-12-06 11:36:27

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 136.827 ms

Loss rate: 1.88%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 136.358 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 136.854 ms

Loss rate: 1.99%

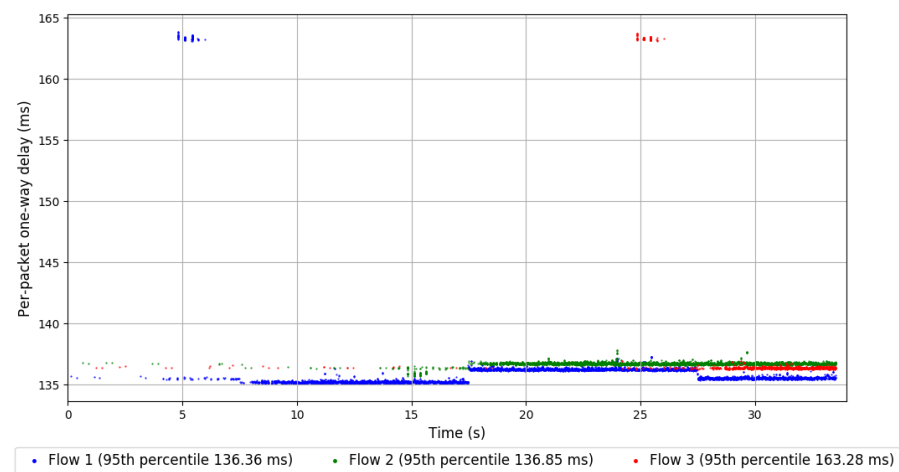
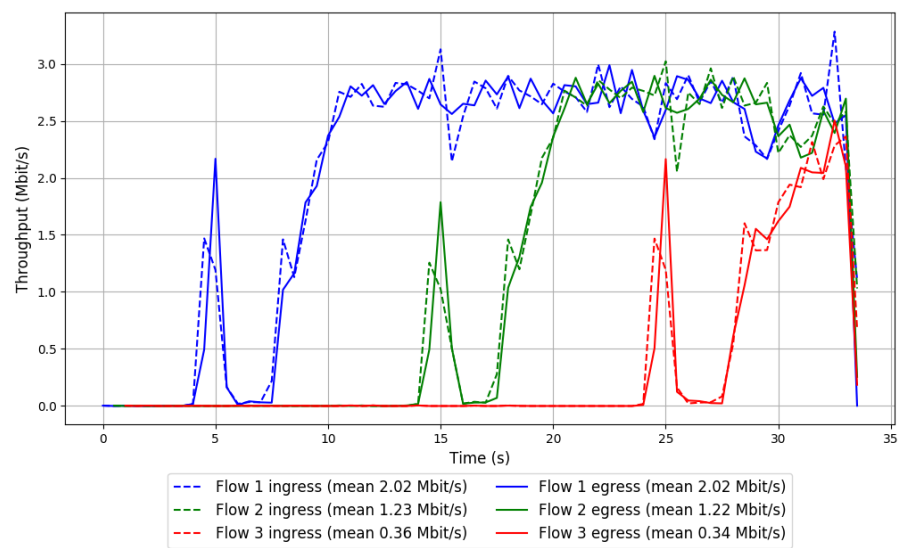
-- Flow 3:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 163.277 ms

Loss rate: 5.16%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-06 11:49:32

End at: 2017-12-06 11:50:02

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.59 Mbit/s

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

Loss rate: 1.76%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 135.817 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 135.382 ms

Loss rate: 1.79%

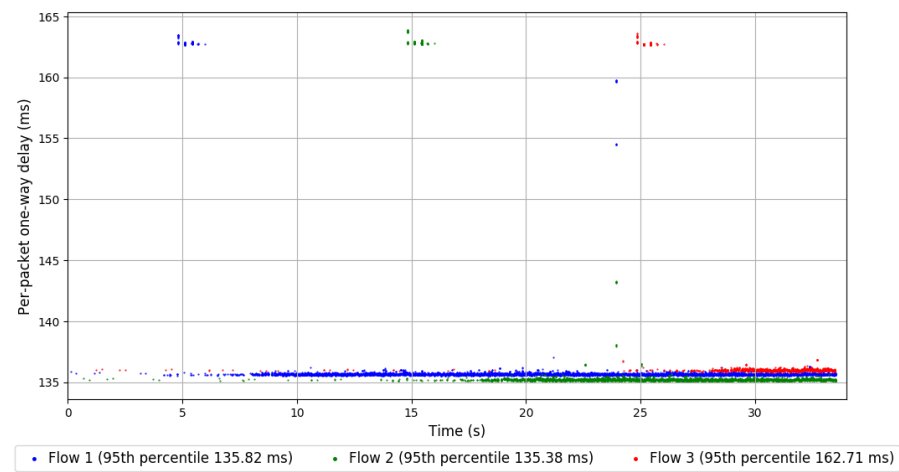
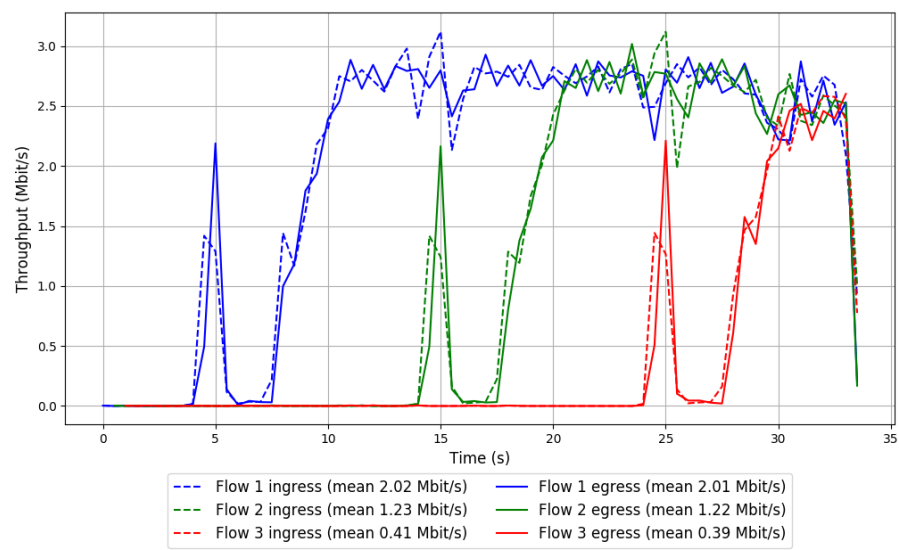
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 162.706 ms

Loss rate: 5.58%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-06 12:02:46

End at: 2017-12-06 12:03:16

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.60 Mbit/s

95th percentile per-packet one-way delay: 136.871 ms

Loss rate: 1.75%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 136.901 ms

Loss rate: 1.08%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 136.705 ms

Loss rate: 1.58%

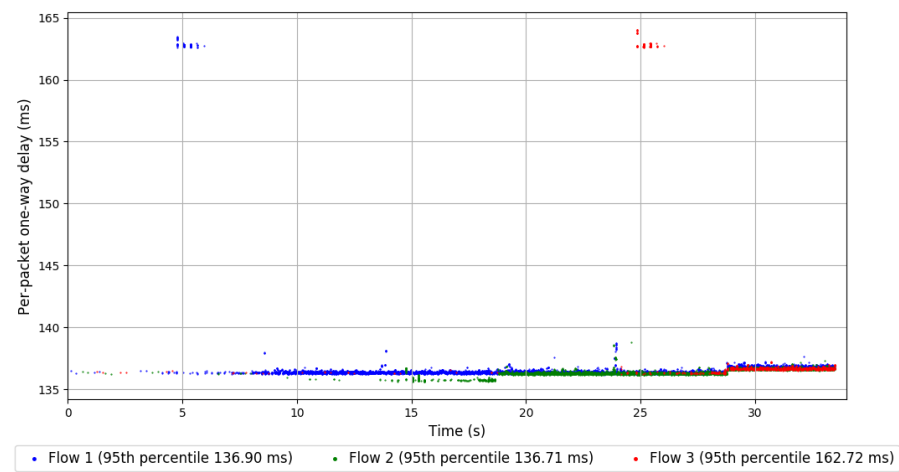
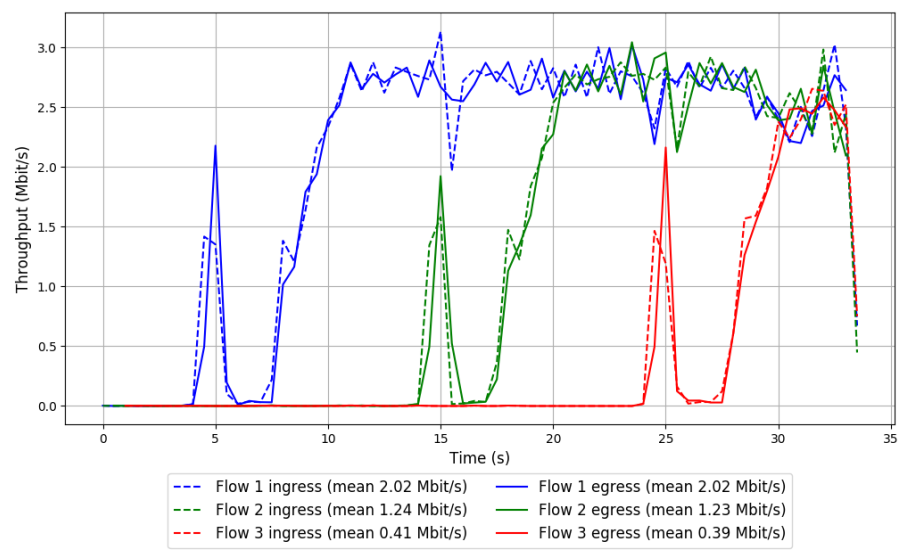
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 162.724 ms

Loss rate: 5.71%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-06 12:16:15

End at: 2017-12-06 12:16:45

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 166.312 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 166.348 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 1.23 Mbit/s

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

Loss rate: 1.51%

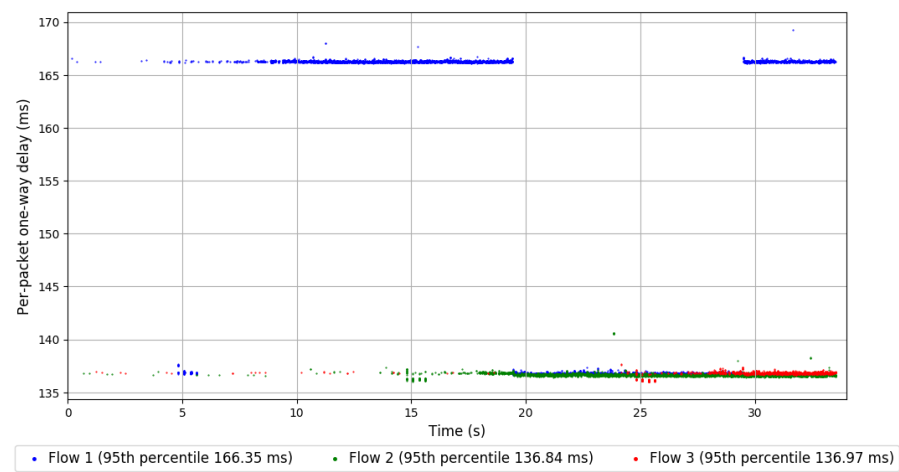
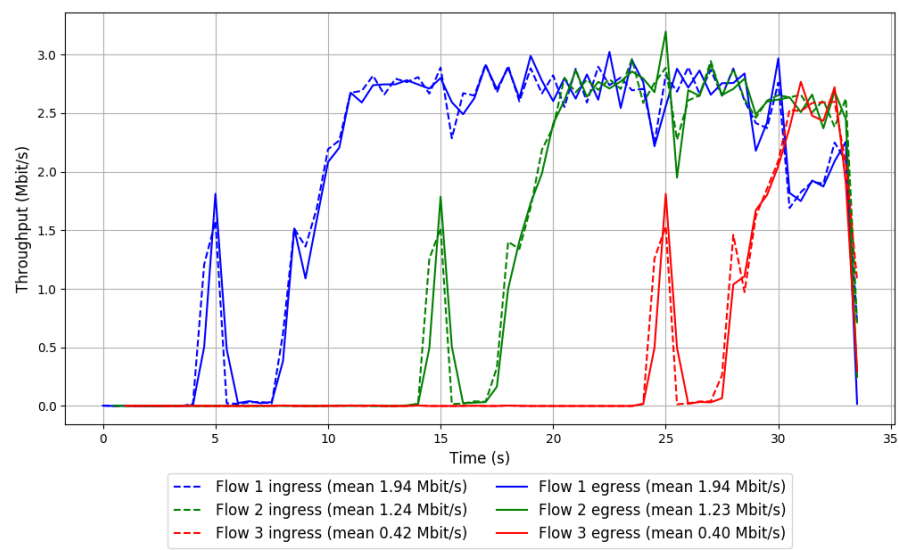
-- Flow 3:

Average throughput: 0.40 Mbit/s

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

Loss rate: 5.62%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-06 10:15:49

End at: 2017-12-06 10:16:19

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 136.925 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 136.666 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 136.961 ms

Loss rate: 1.05%

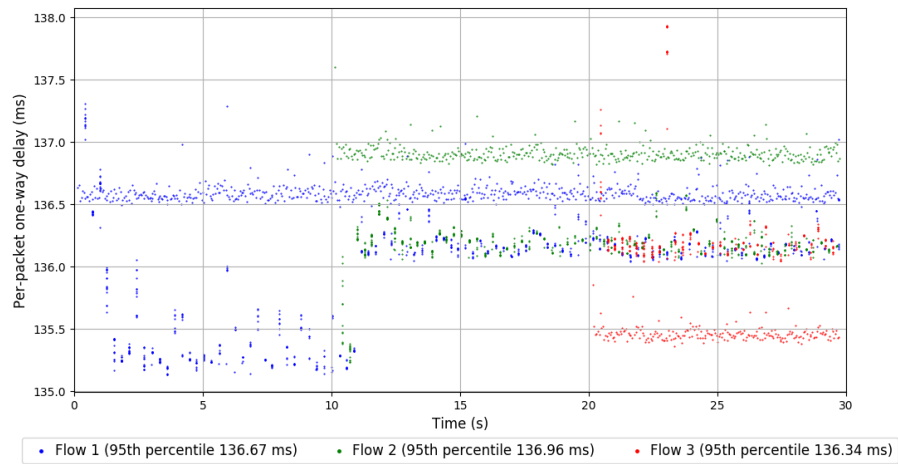
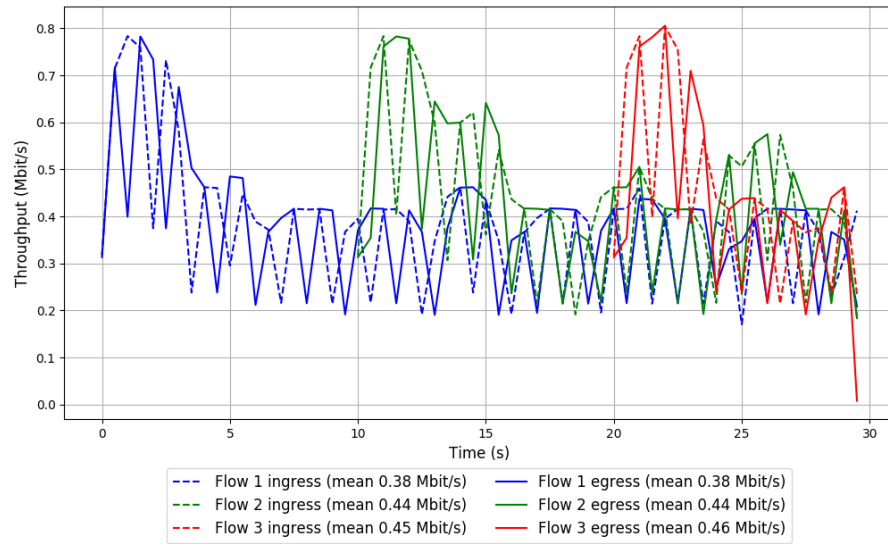
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 136.341 ms

Loss rate: 2.59%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-06 10:29:33

End at: 2017-12-06 10:30:03

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.79 Mbit/s

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

Loss rate: 1.31%

-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 136.381 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 136.964 ms

Loss rate: 1.35%

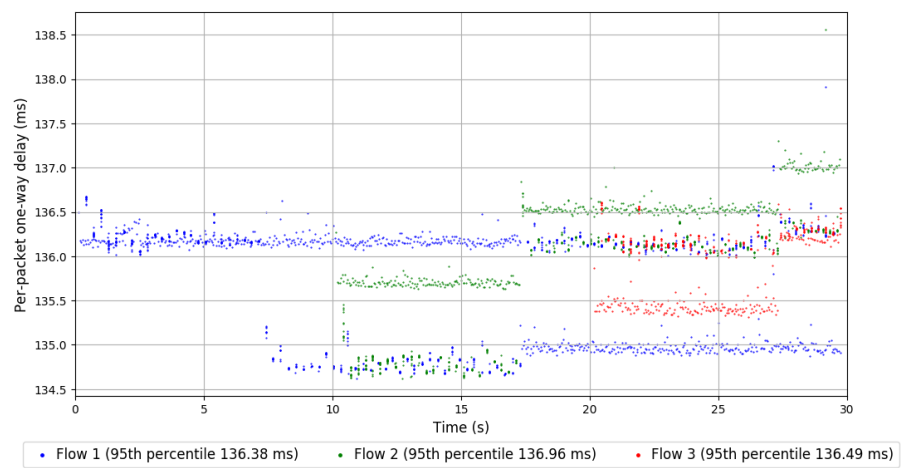
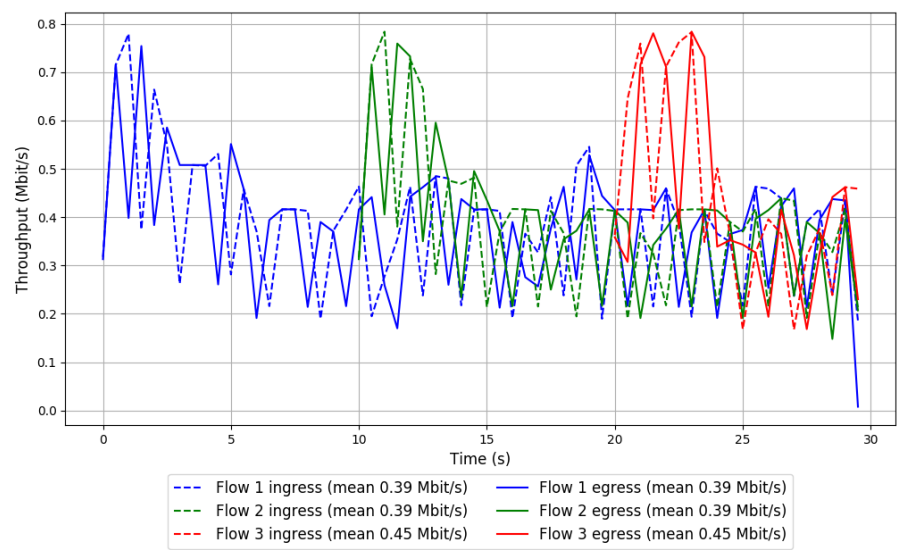
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 136.490 ms

Loss rate: 2.60%

Run 2: Report of Sprout — Data Link

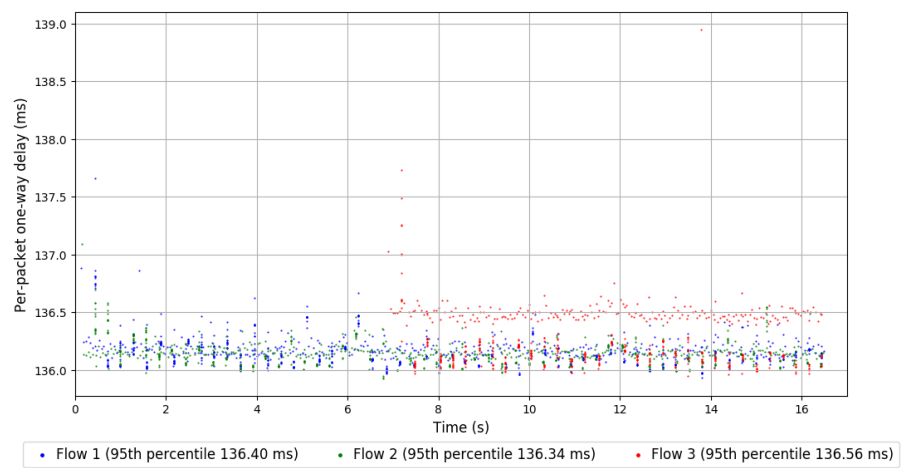
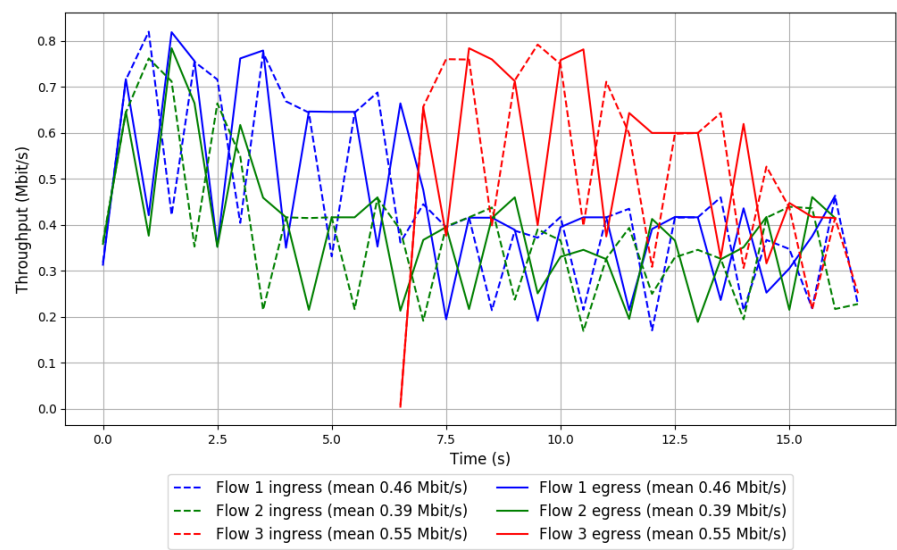


Run 3: Statistics of Sprout

Start at: 2017-12-06 10:43:16

End at: 2017-12-06 10:43:46

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-06 10:57:02

End at: 2017-12-06 10:57:32

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 162.557 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 162.683 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 162.499 ms

Loss rate: 0.60%

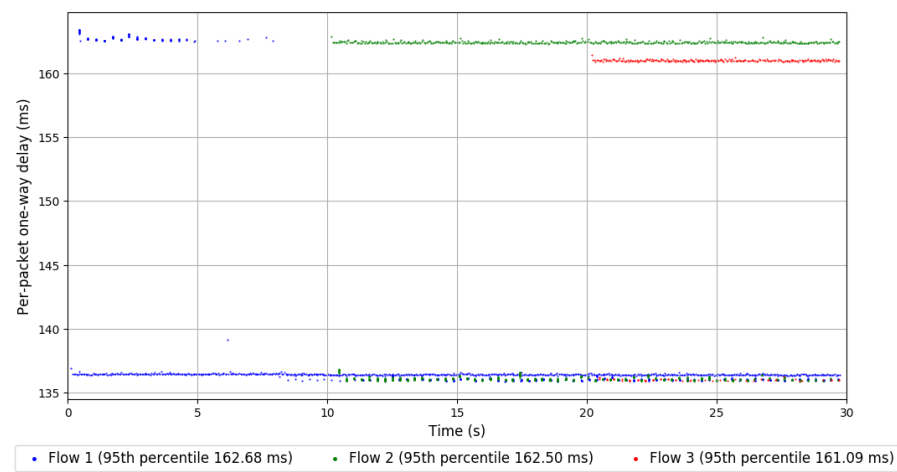
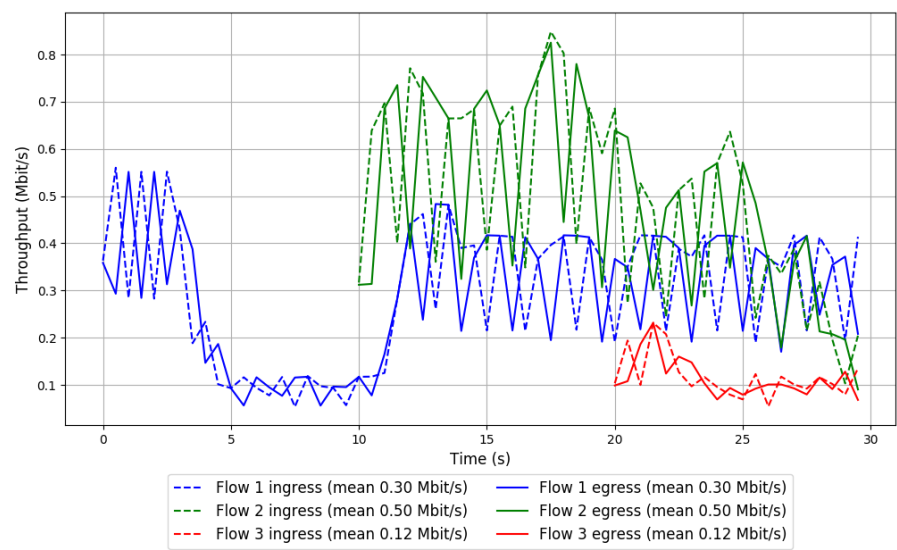
-- Flow 3:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 161.088 ms

Loss rate: 3.05%

Run 4: Report of Sprout — Data Link

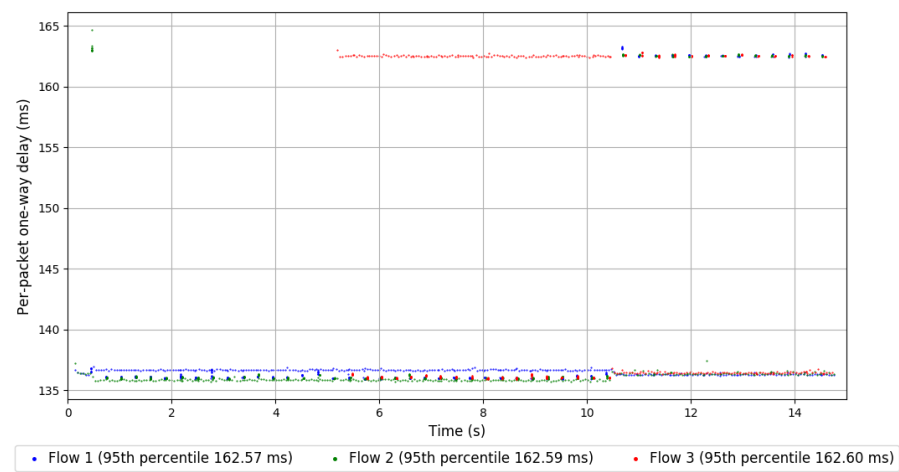
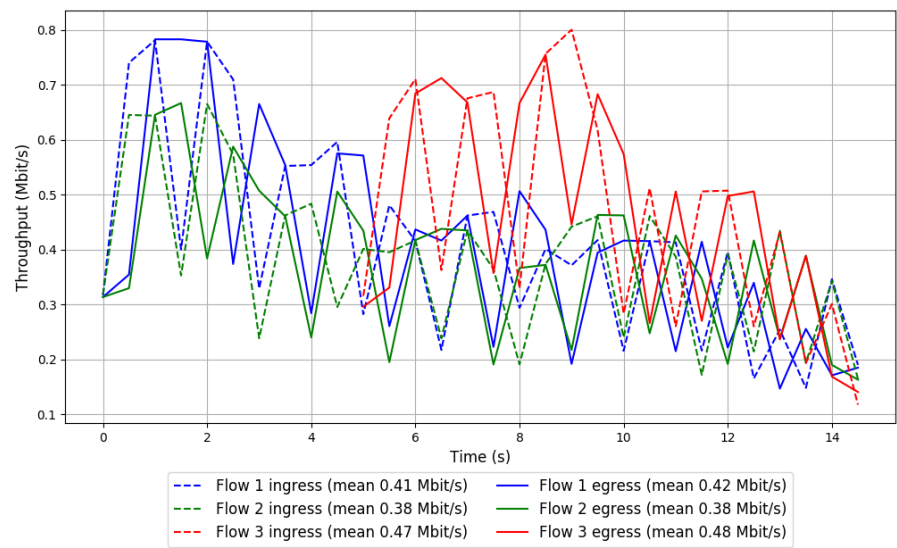


Run 5: Statistics of Sprout

Start at: 2017-12-06 11:10:55

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

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-06 11:24:22

End at: 2017-12-06 11:24:52

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 163.436 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 163.426 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 163.471 ms

Loss rate: 0.13%

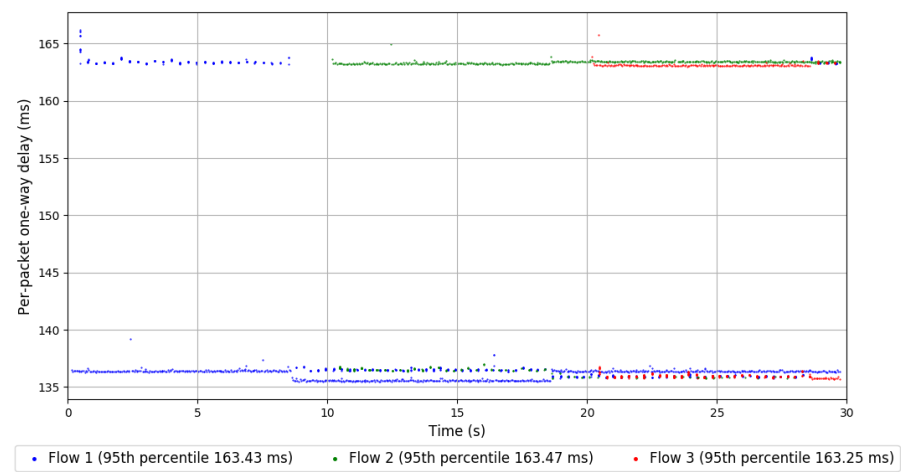
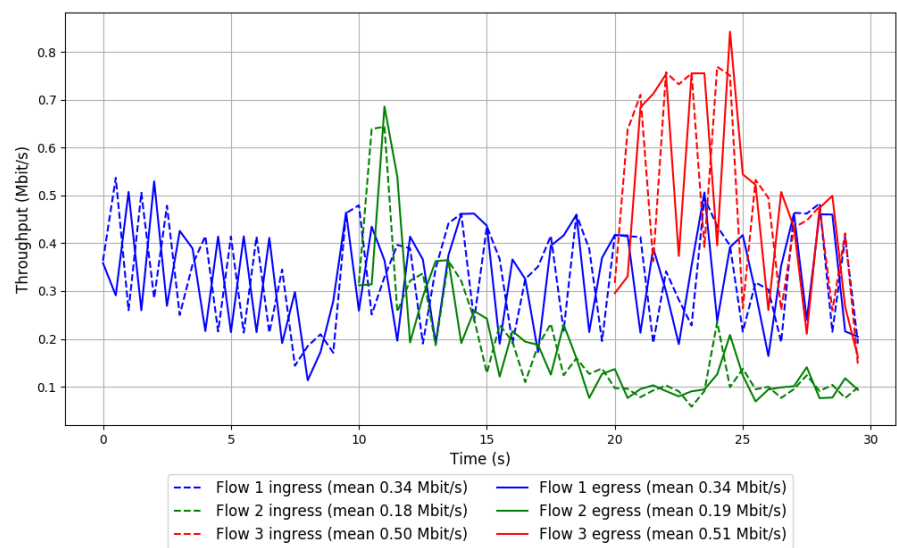
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 163.247 ms

Loss rate: 1.43%

Run 6: Report of Sprout — Data Link

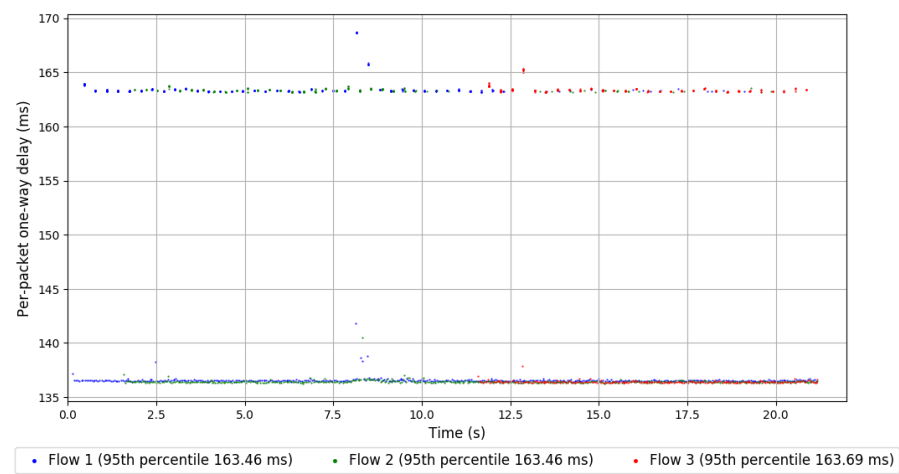
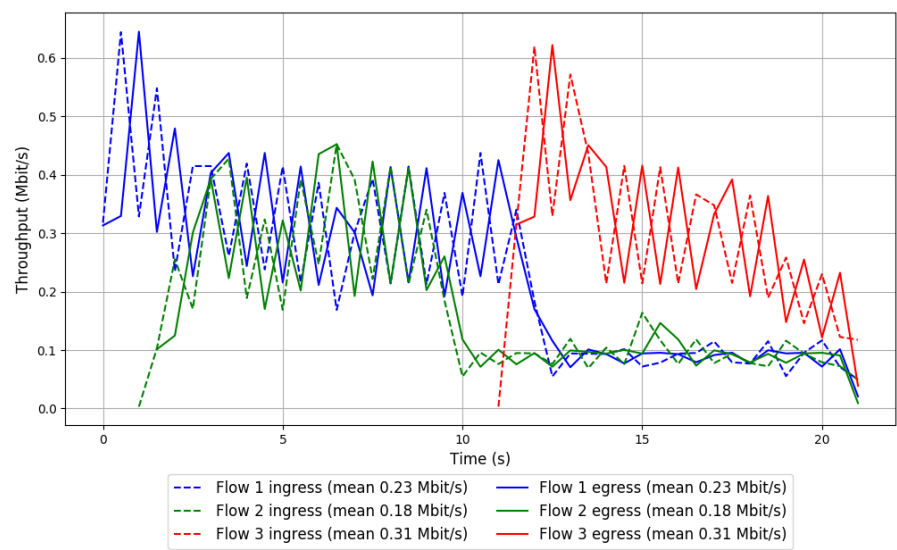


Run 7: Statistics of Sprout

Start at: 2017-12-06 11:37:45

End at: 2017-12-06 11:38:15

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-06 11:51:19

End at: 2017-12-06 11:51:49

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 162.906 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 162.885 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 163.034 ms

Loss rate: 0.72%

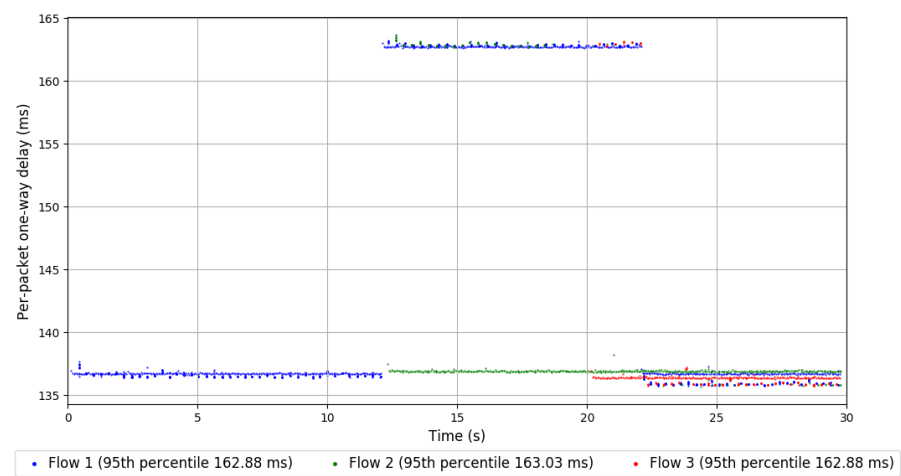
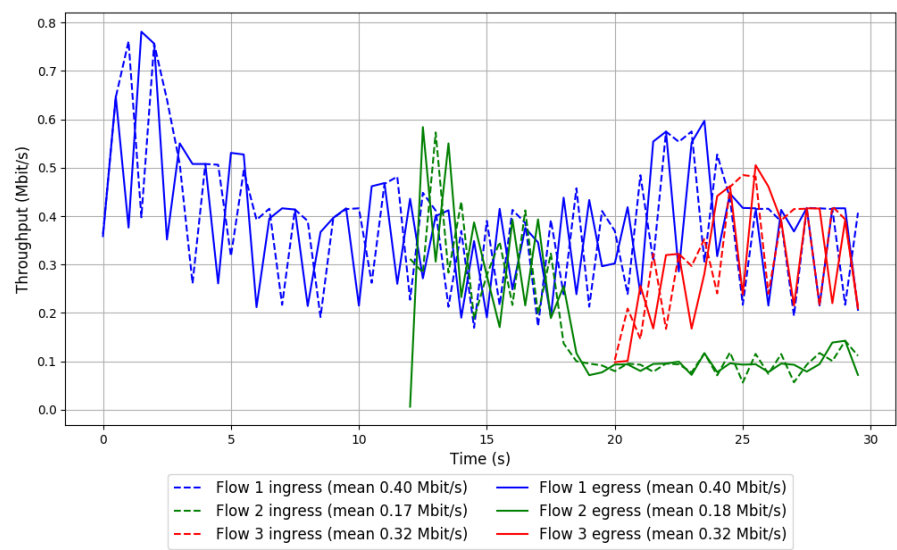
-- Flow 3:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 162.880 ms

Loss rate: 3.32%

Run 8: Report of Sprout — Data Link

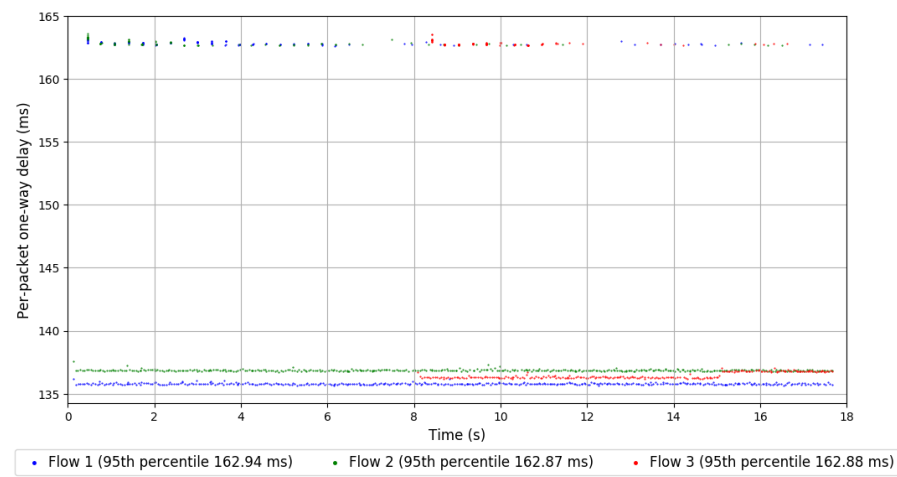
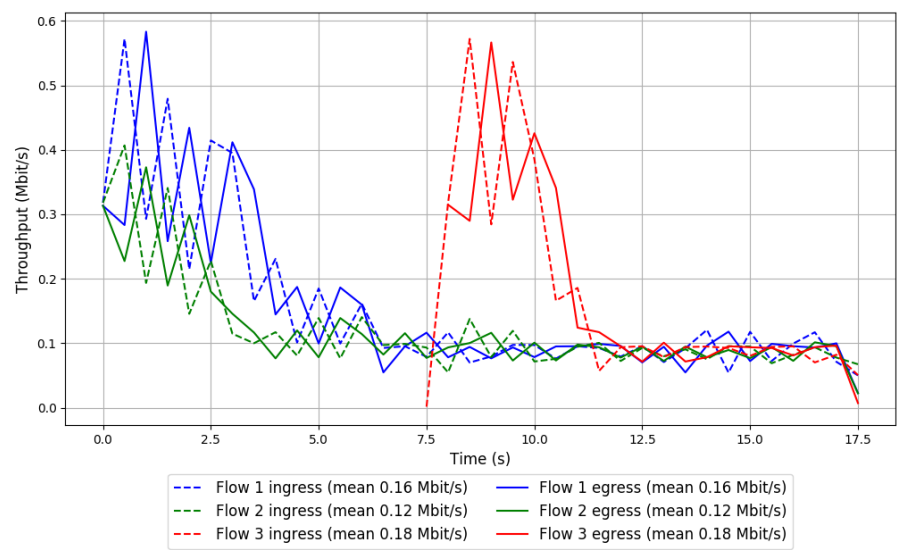


Run 9: Statistics of Sprout

Start at: 2017-12-06 12:04:33

End at: 2017-12-06 12:05:03

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-06 12:18:03

End at: 2017-12-06 12:18:33

Below is generated by plot.py at 2017-12-06 15:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 168.255 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 166.278 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 168.332 ms

Loss rate: 0.37%

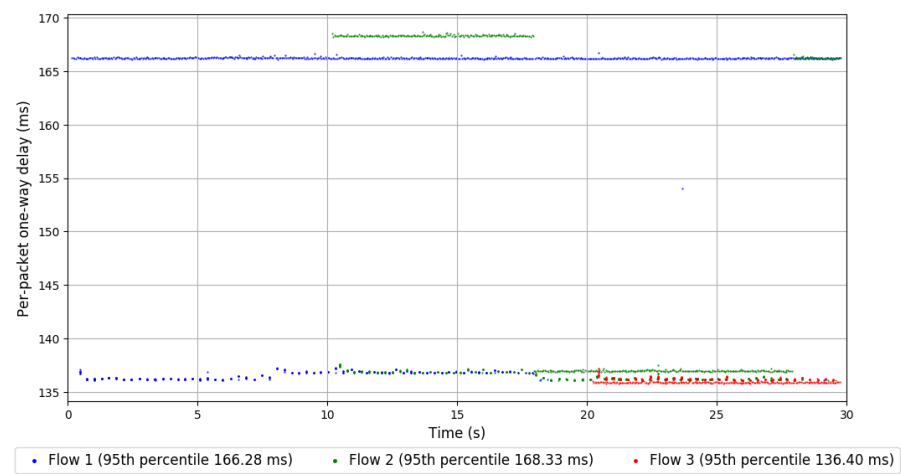
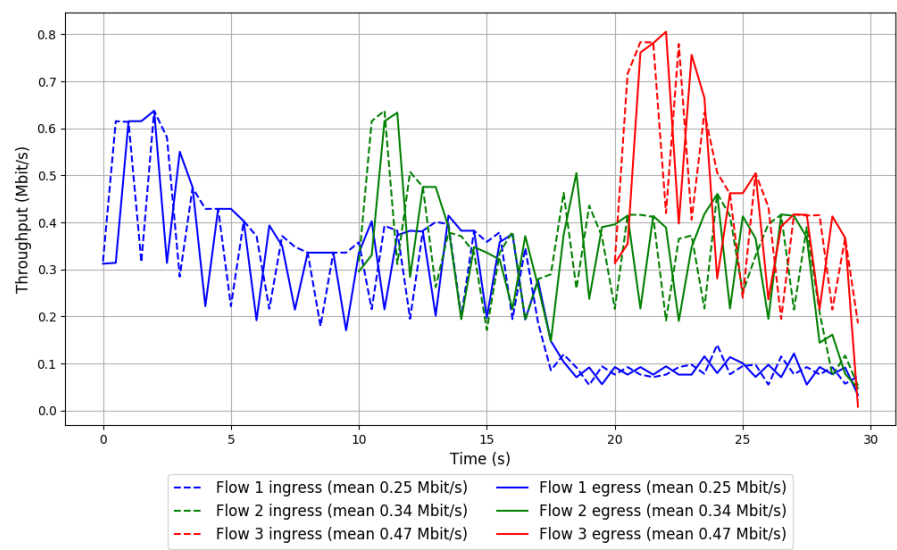
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 136.400 ms

Loss rate: 1.98%

Run 10: Report of Sprout — Data Link

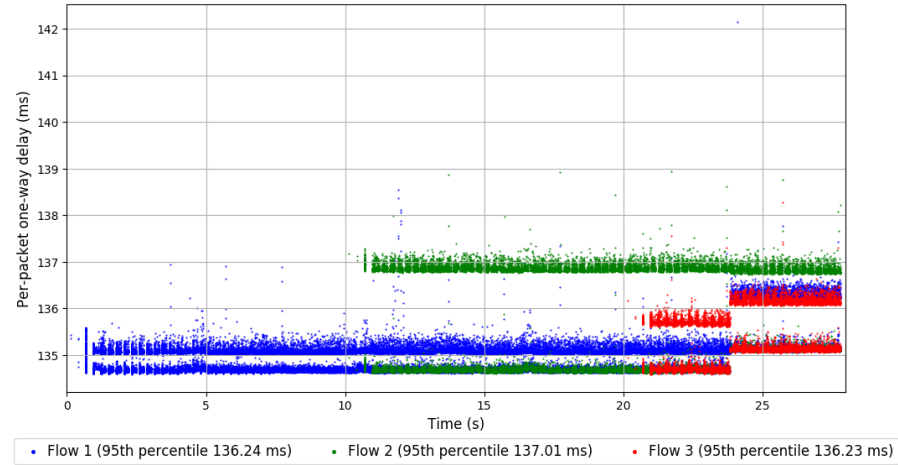
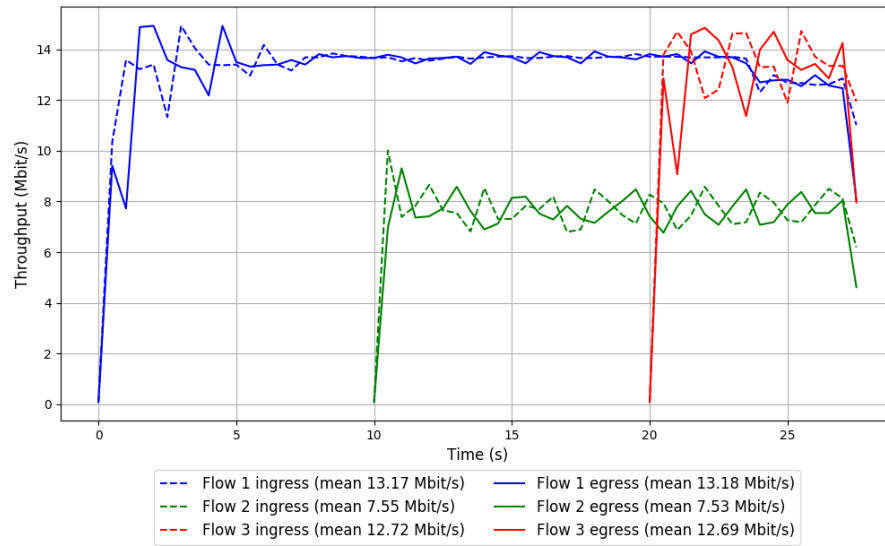


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-06 10:10:55
End at: 2017-12-06 10:11:25

# Below is generated by plot.py at 2017-12-06 15:02:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.50 Mbit/s
95th percentile per-packet one-way delay: 136.863 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 13.18 Mbit/s
95th percentile per-packet one-way delay: 136.235 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 7.53 Mbit/s
95th percentile per-packet one-way delay: 137.007 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 12.69 Mbit/s
95th percentile per-packet one-way delay: 136.227 ms
Loss rate: 3.67%
```


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

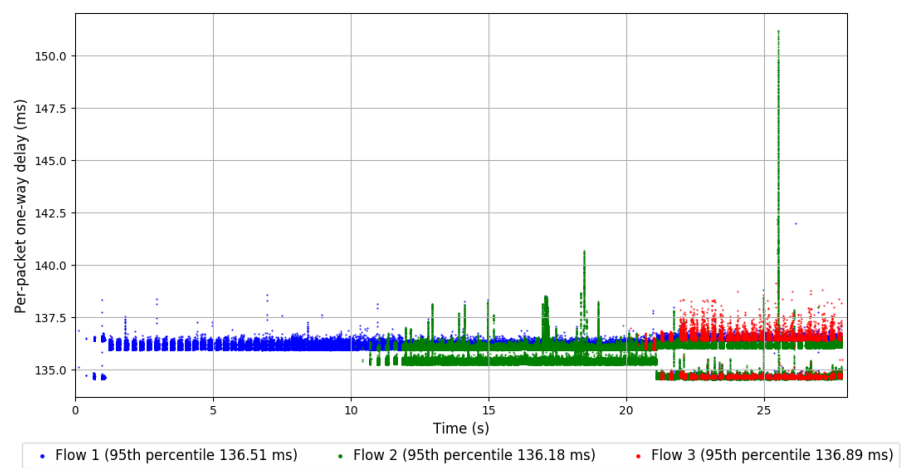
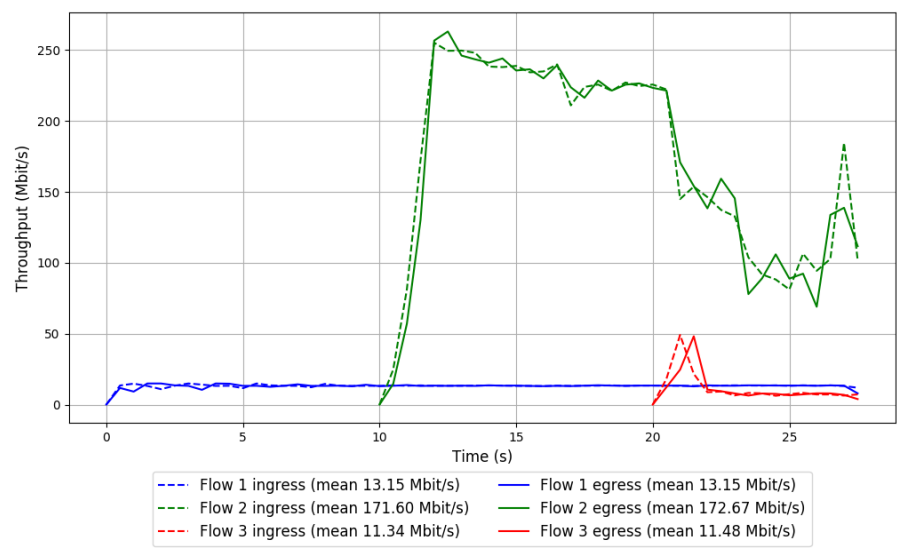


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-06 10:24:48
End at: 2017-12-06 10:25:18

# Below is generated by plot.py at 2017-12-06 15:04:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.53 Mbit/s
95th percentile per-packet one-way delay: 136.275 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 13.15 Mbit/s
95th percentile per-packet one-way delay: 136.507 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 172.67 Mbit/s
95th percentile per-packet one-way delay: 136.183 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 11.48 Mbit/s
95th percentile per-packet one-way delay: 136.889 ms
Loss rate: 2.32%
```

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

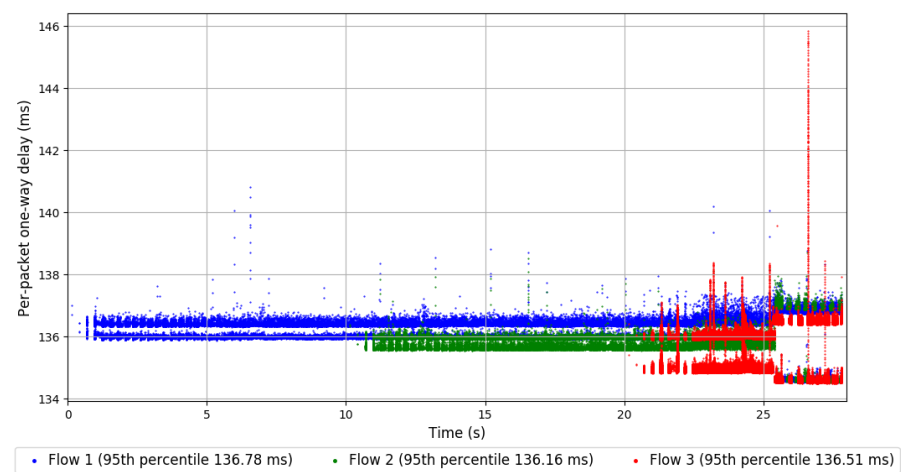
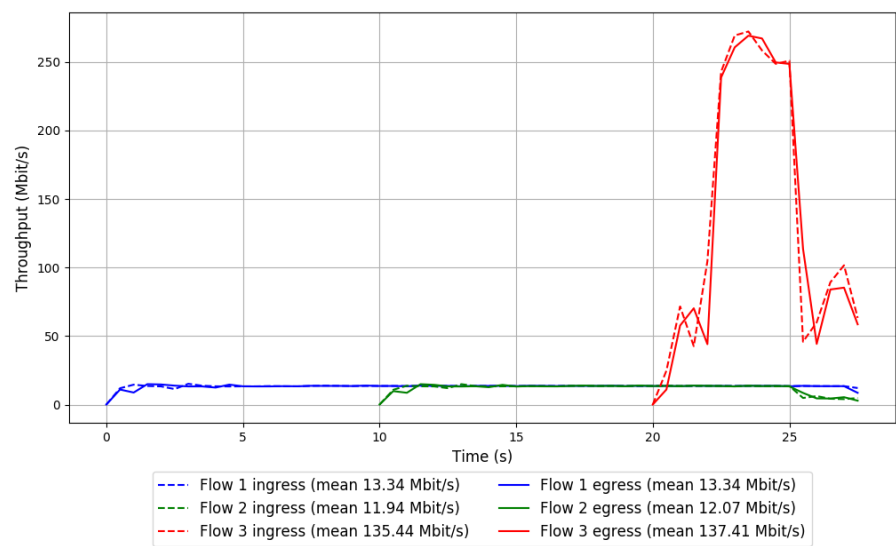


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-06 10:38:33
End at: 2017-12-06 10:39:03

# Below is generated by plot.py at 2017-12-06 15:04:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.03 Mbit/s
95th percentile per-packet one-way delay: 136.546 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 13.34 Mbit/s
95th percentile per-packet one-way delay: 136.780 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 12.07 Mbit/s
95th percentile per-packet one-way delay: 136.165 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 137.41 Mbit/s
95th percentile per-packet one-way delay: 136.512 ms
Loss rate: 2.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-06 10:52:04

End at: 2017-12-06 10:52:34

Below is generated by plot.py at 2017-12-06 15:05:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.40 Mbit/s

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

Loss rate: 2.01%

-- Flow 1:

Average throughput: 14.82 Mbit/s

95th percentile per-packet one-way delay: 137.497 ms

Loss rate: 3.34%

-- Flow 2:

Average throughput: 200.67 Mbit/s

95th percentile per-packet one-way delay: 136.890 ms

Loss rate: 1.38%

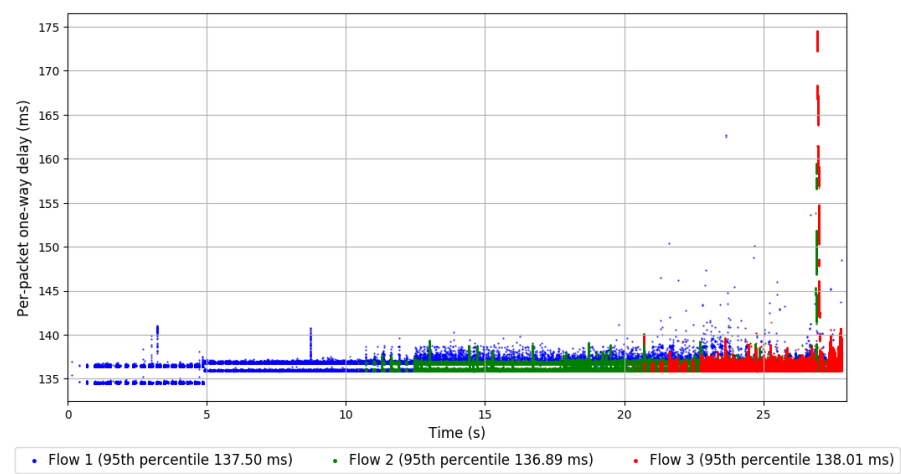
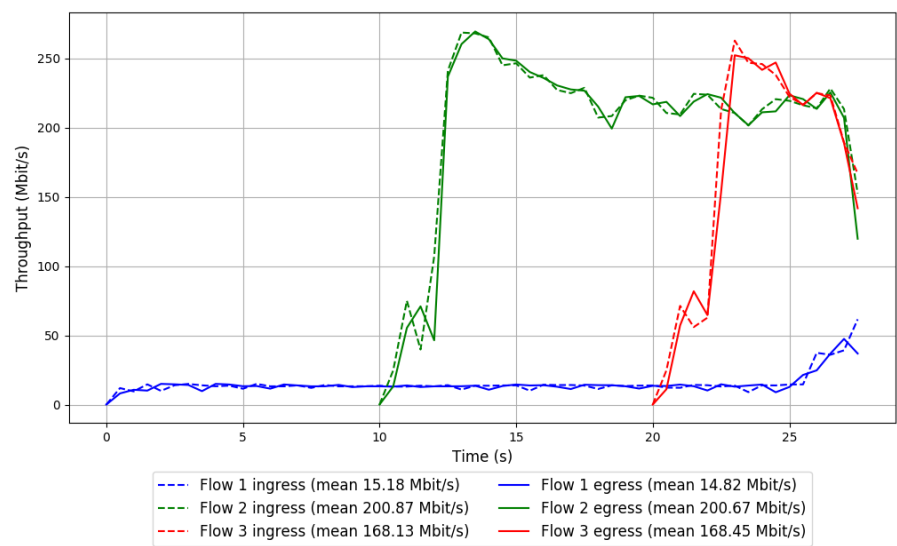
-- Flow 3:

Average throughput: 168.45 Mbit/s

95th percentile per-packet one-way delay: 138.014 ms

Loss rate: 3.27%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-06 11:05:42

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

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.81 Mbit/s

95th percentile per-packet one-way delay: 139.019 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 192.47 Mbit/s

95th percentile per-packet one-way delay: 138.868 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 165.95 Mbit/s

95th percentile per-packet one-way delay: 138.013 ms

Loss rate: 2.35%

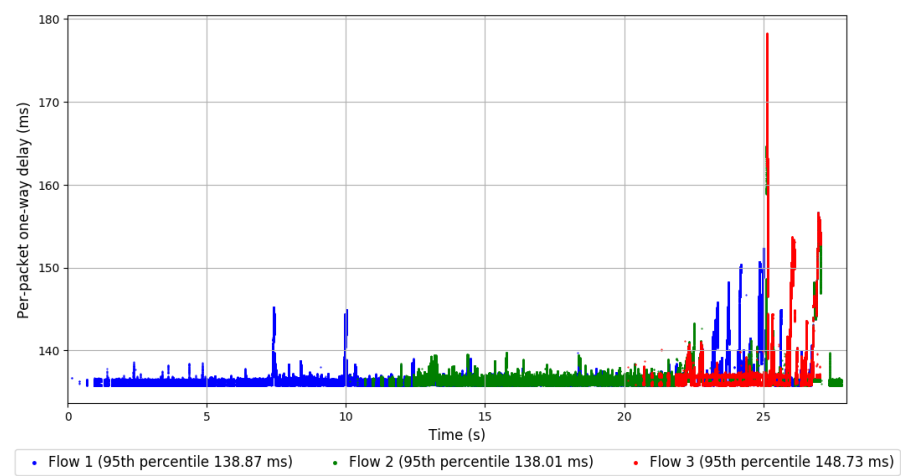
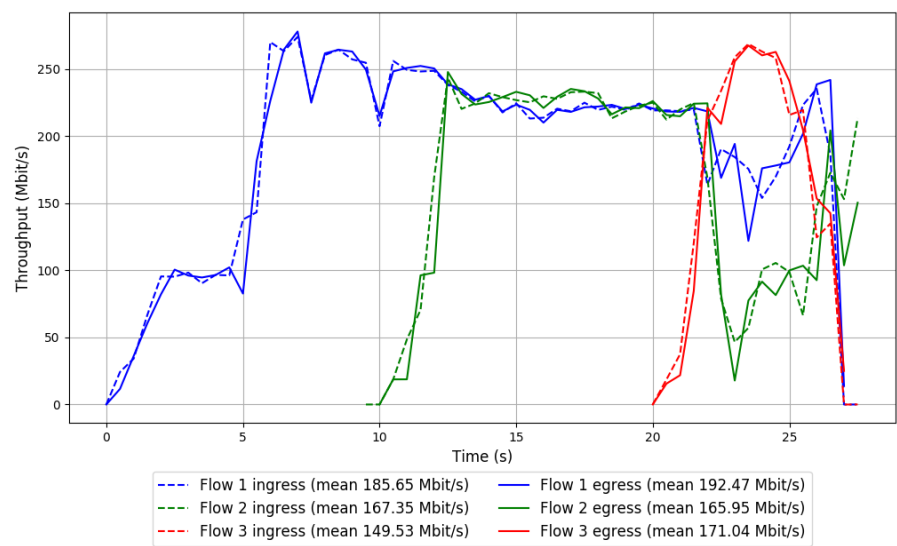
-- Flow 3:

Average throughput: 171.04 Mbit/s

95th percentile per-packet one-way delay: 148.727 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-06 11:19:34

End at: 2017-12-06 11:20:04

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.43 Mbit/s

95th percentile per-packet one-way delay: 163.390 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 163.293 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.05 Mbit/s

95th percentile per-packet one-way delay: 163.441 ms

Loss rate: 1.44%

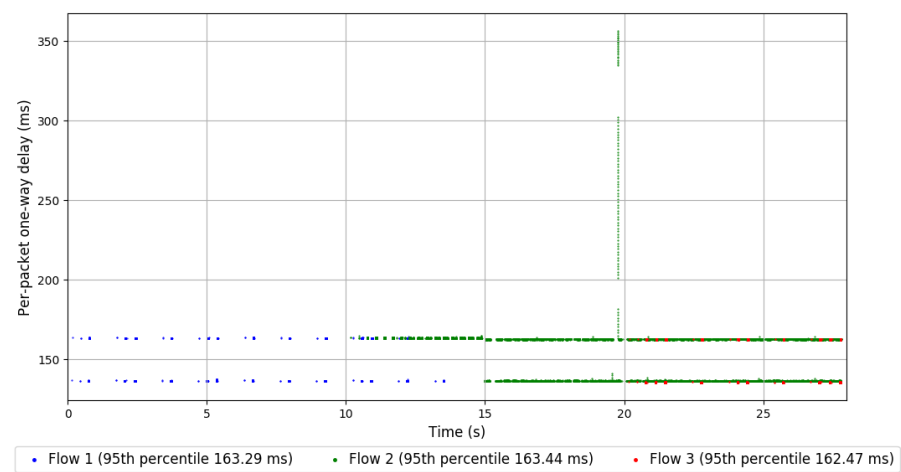
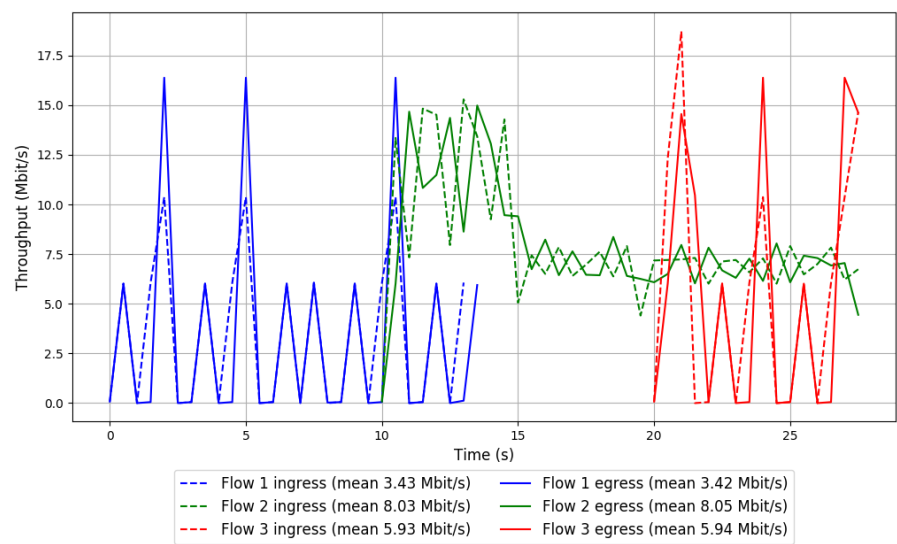
-- Flow 3:

Average throughput: 5.94 Mbit/s

95th percentile per-packet one-way delay: 162.470 ms

Loss rate: 0.03%

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

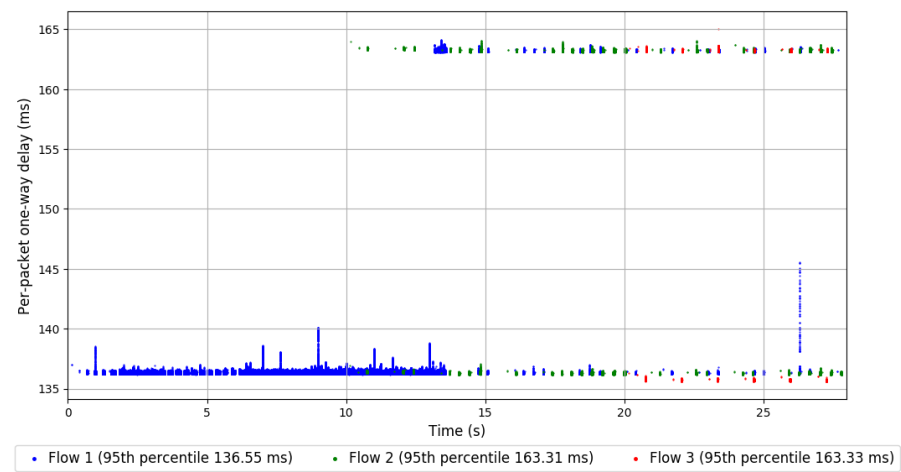
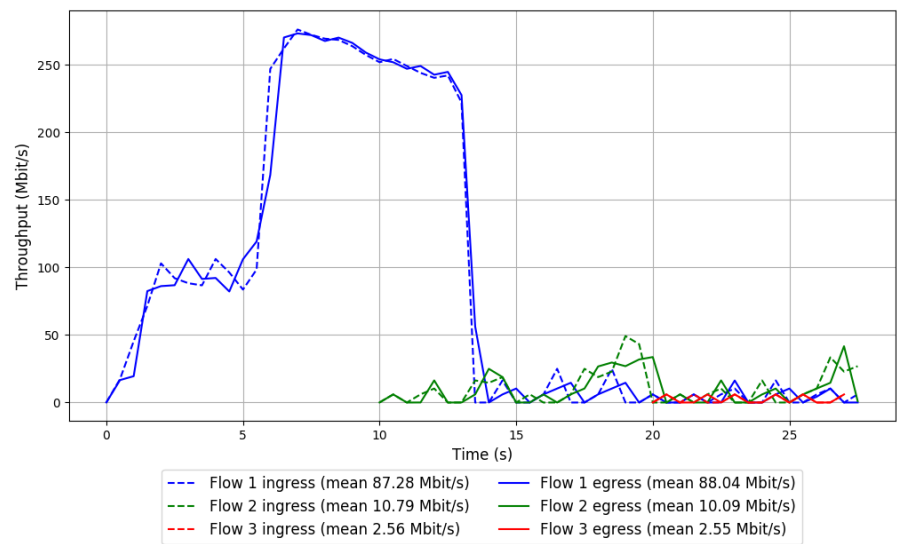


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-12-06 11:32:45
End at: 2017-12-06 11:33:15

# Below is generated by plot.py at 2017-12-06 15:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.74 Mbit/s
95th percentile per-packet one-way delay: 163.166 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 88.04 Mbit/s
95th percentile per-packet one-way delay: 136.553 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 10.09 Mbit/s
95th percentile per-packet one-way delay: 163.315 ms
Loss rate: 6.77%
-- Flow 3:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 163.328 ms
Loss rate: 0.00%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-06 11:46:35

End at: 2017-12-06 11:47:05

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 39.53 Mbit/s

95th percentile per-packet one-way delay: 162.734 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 52.15 Mbit/s

95th percentile per-packet one-way delay: 162.711 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 162.799 ms

Loss rate: 1.60%

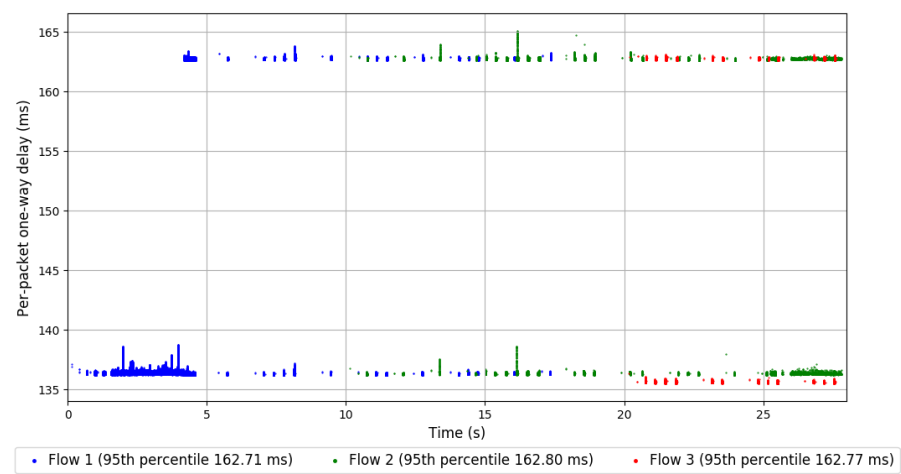
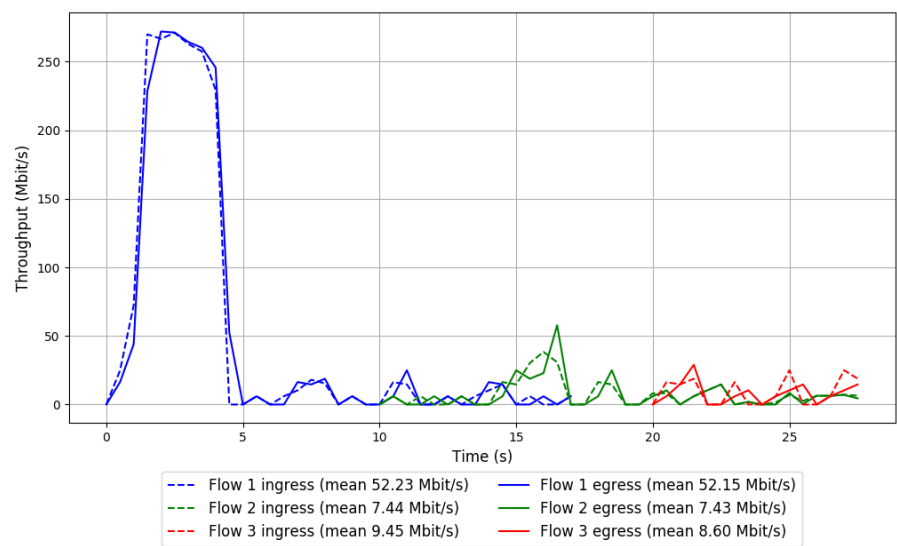
-- Flow 3:

Average throughput: 8.60 Mbit/s

95th percentile per-packet one-way delay: 162.773 ms

Loss rate: 12.77%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-06 11:59:44

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

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.00 Mbit/s

95th percentile per-packet one-way delay: 162.745 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 135.45 Mbit/s

95th percentile per-packet one-way delay: 162.745 ms

Loss rate: 1.48%

-- Flow 2:

Average throughput: 2.81 Mbit/s

95th percentile per-packet one-way delay: 162.752 ms

Loss rate: 0.00%

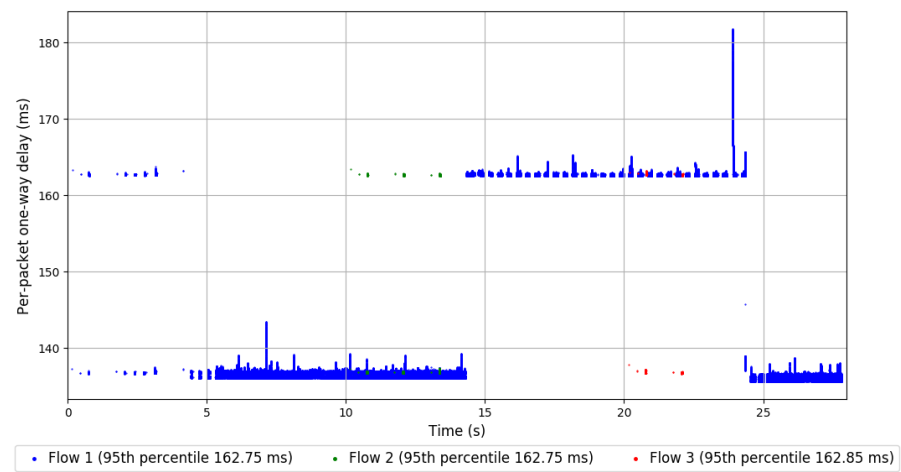
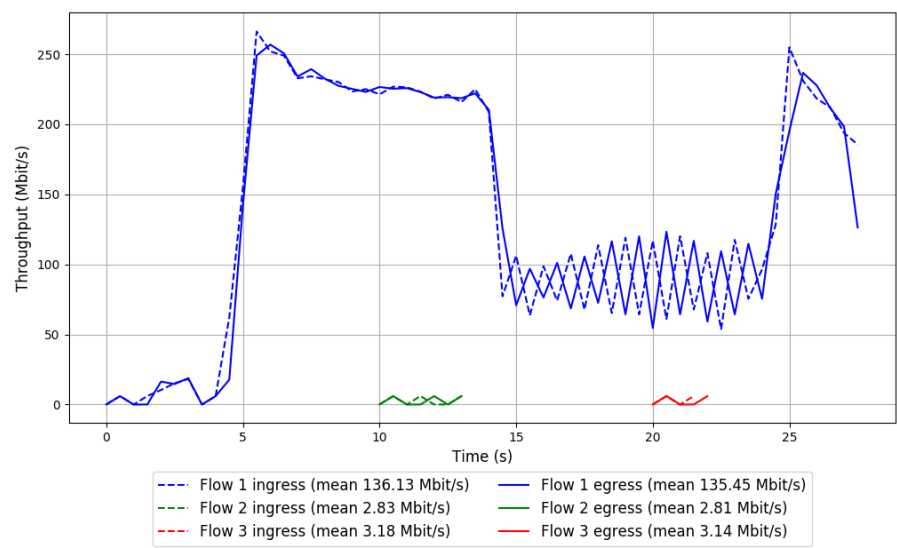
-- Flow 3:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 162.852 ms

Loss rate: 0.00%

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

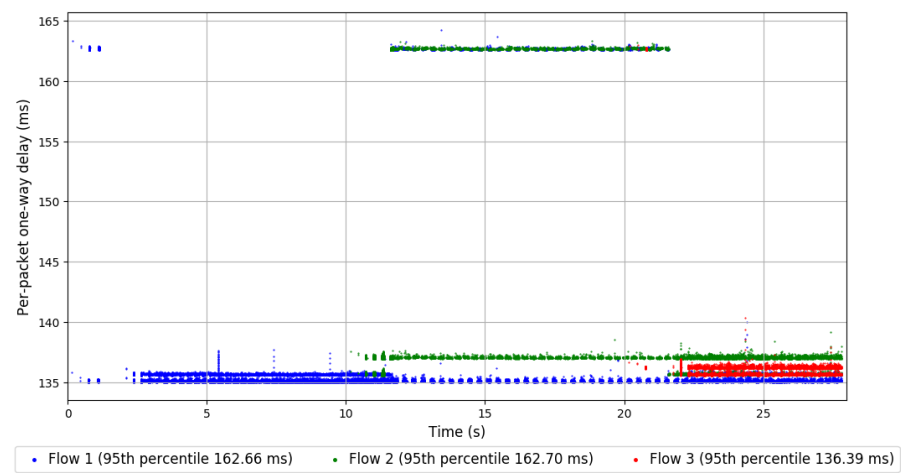
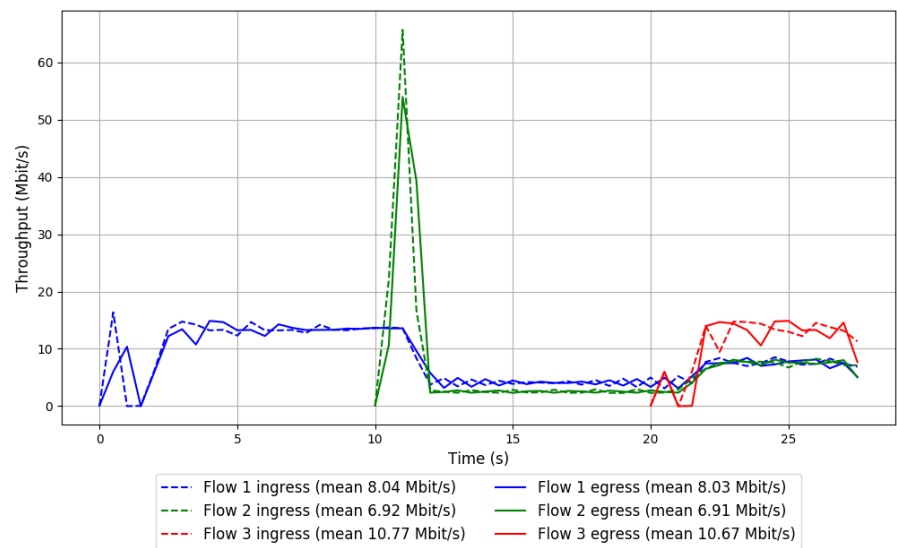


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-06 12:13:17
End at: 2017-12-06 12:13:47

# Below is generated by plot.py at 2017-12-06 15:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.39 Mbit/s
95th percentile per-packet one-way delay: 162.667 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 8.03 Mbit/s
95th percentile per-packet one-way delay: 162.662 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 6.91 Mbit/s
95th percentile per-packet one-way delay: 162.700 ms
Loss rate: 1.56%
-- Flow 3:
Average throughput: 10.67 Mbit/s
95th percentile per-packet one-way delay: 136.392 ms
Loss rate: 4.37%
```

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



Run 1: Statistics of TCP Vegas

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

End at: 2017-12-06 10:09:42

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.12 Mbit/s

95th percentile per-packet one-way delay: 137.275 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 24.53 Mbit/s

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

Loss rate: 0.92%

-- Flow 2:

Average throughput: 39.45 Mbit/s

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

Loss rate: 1.51%

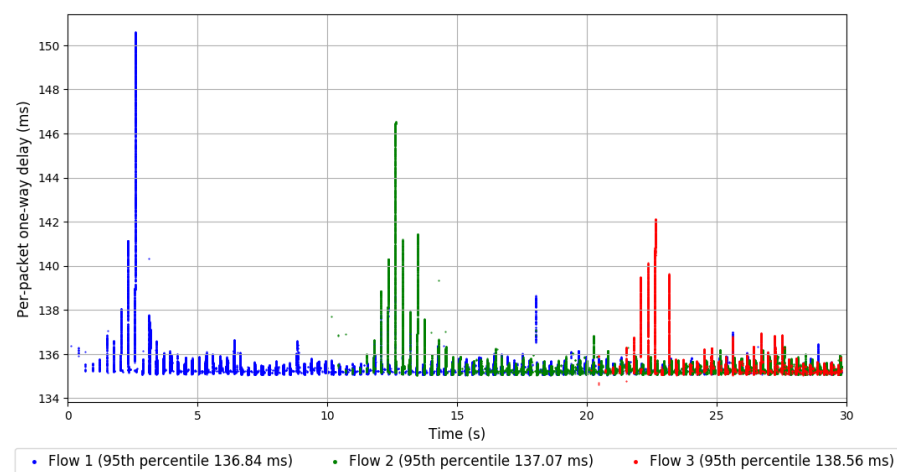
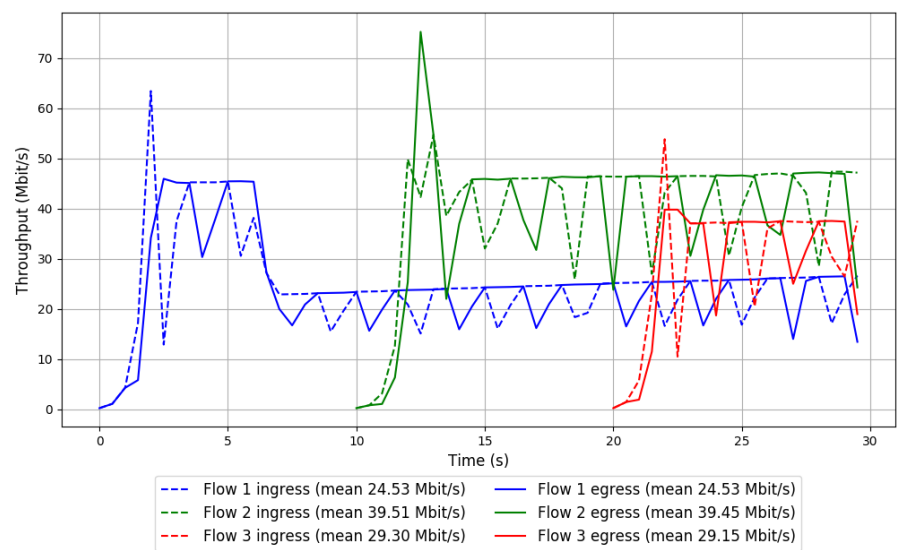
-- Flow 3:

Average throughput: 29.15 Mbit/s

95th percentile per-packet one-way delay: 138.561 ms

Loss rate: 3.25%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-06 10:23:04

End at: 2017-12-06 10:23:34

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.74 Mbit/s

95th percentile per-packet one-way delay: 136.766 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 44.10 Mbit/s

95th percentile per-packet one-way delay: 136.524 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 46.50 Mbit/s

95th percentile per-packet one-way delay: 136.996 ms

Loss rate: 1.51%

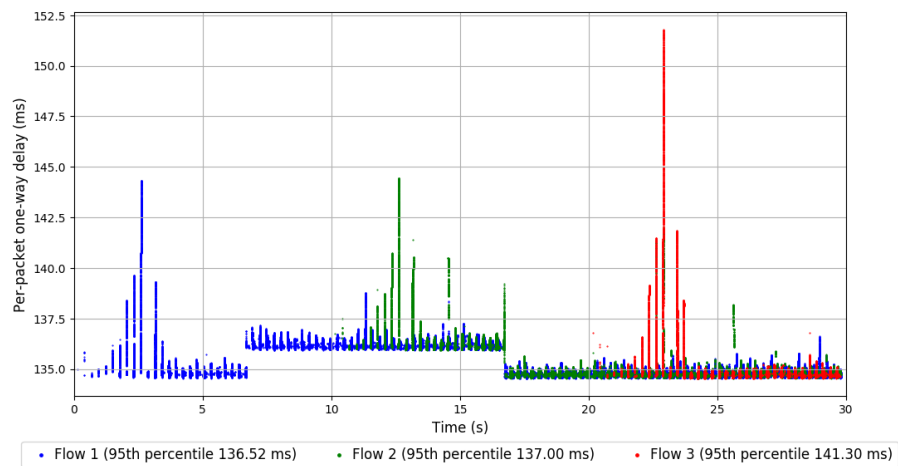
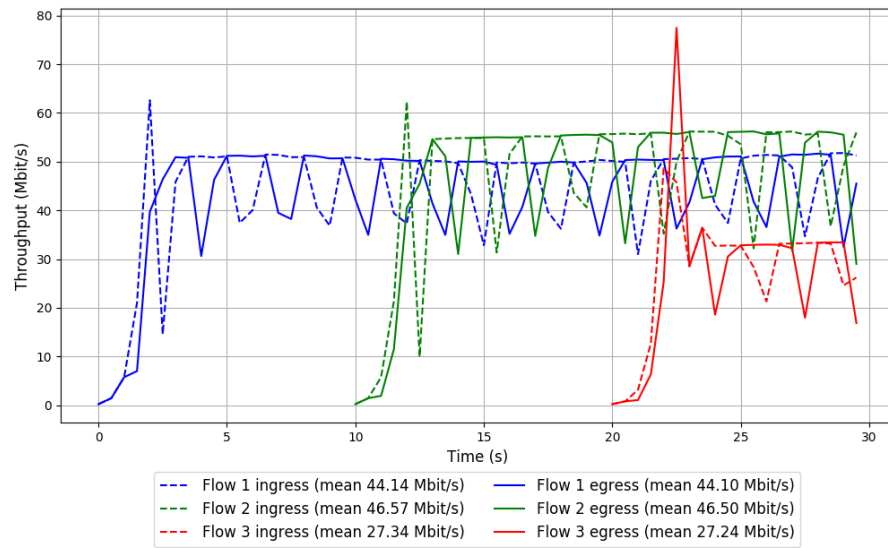
-- Flow 3:

Average throughput: 27.24 Mbit/s

95th percentile per-packet one-way delay: 141.296 ms

Loss rate: 3.11%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-06 10:36:51

End at: 2017-12-06 10:37:21

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.55 Mbit/s

95th percentile per-packet one-way delay: 139.863 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 24.83 Mbit/s

95th percentile per-packet one-way delay: 140.330 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 30.78 Mbit/s

95th percentile per-packet one-way delay: 139.594 ms

Loss rate: 1.17%

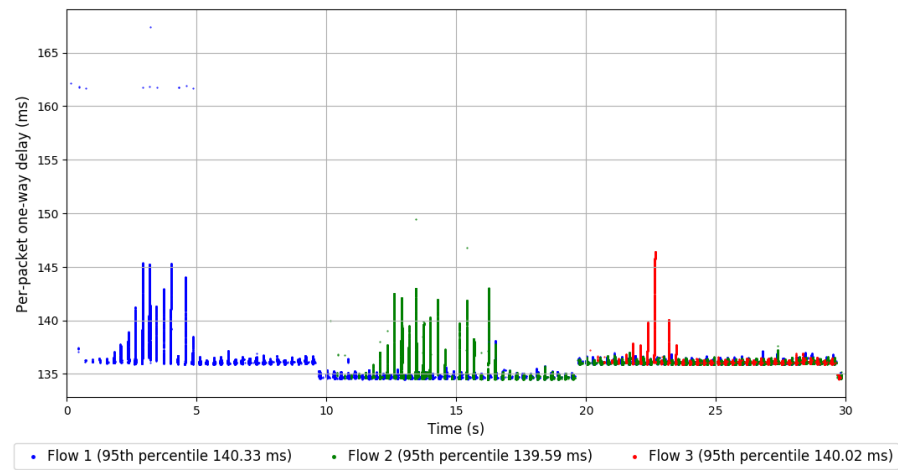
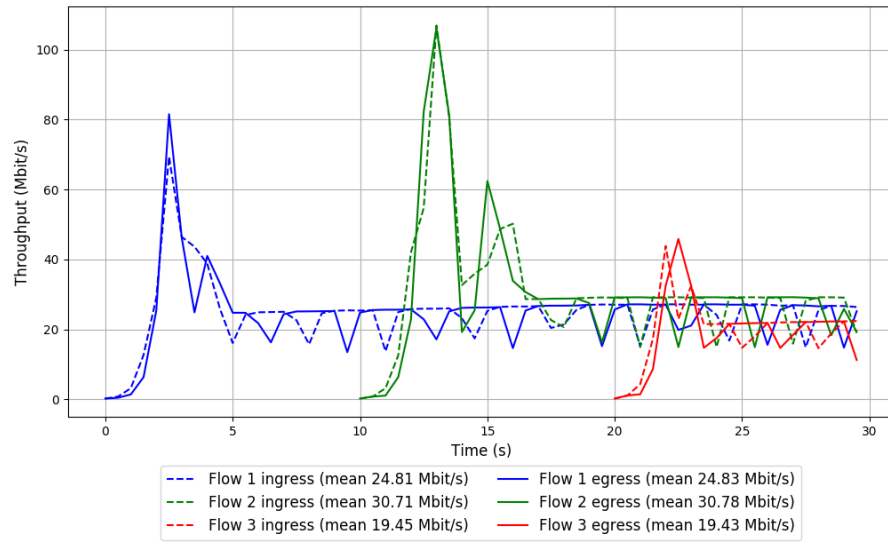
-- Flow 3:

Average throughput: 19.43 Mbit/s

95th percentile per-packet one-way delay: 140.021 ms

Loss rate: 2.91%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-06 10:50:20

End at: 2017-12-06 10:50:50

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.25 Mbit/s

95th percentile per-packet one-way delay: 140.677 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 46.71 Mbit/s

95th percentile per-packet one-way delay: 141.641 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 31.58 Mbit/s

95th percentile per-packet one-way delay: 138.258 ms

Loss rate: 1.40%

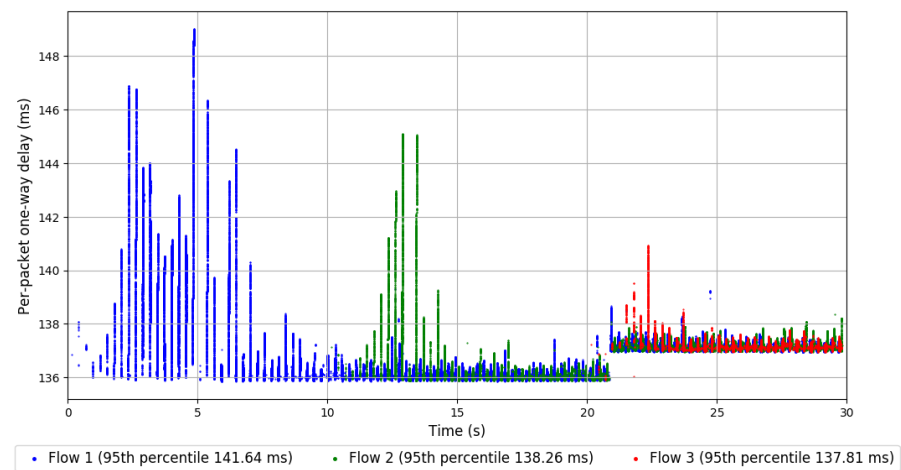
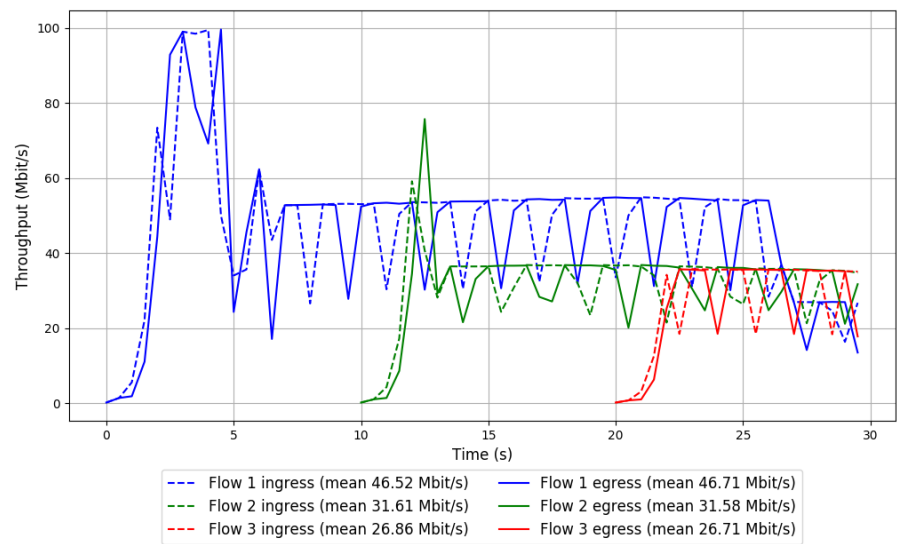
-- Flow 3:

Average throughput: 26.71 Mbit/s

95th percentile per-packet one-way delay: 137.806 ms

Loss rate: 3.31%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-06 11:04:01

End at: 2017-12-06 11:04:31

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.30 Mbit/s

95th percentile per-packet one-way delay: 137.637 ms

Loss rate: 1.84%

-- Flow 1:

Average throughput: 19.20 Mbit/s

95th percentile per-packet one-way delay: 4440.502 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.67 Mbit/s

95th percentile per-packet one-way delay: 136.849 ms

Loss rate: 1.54%

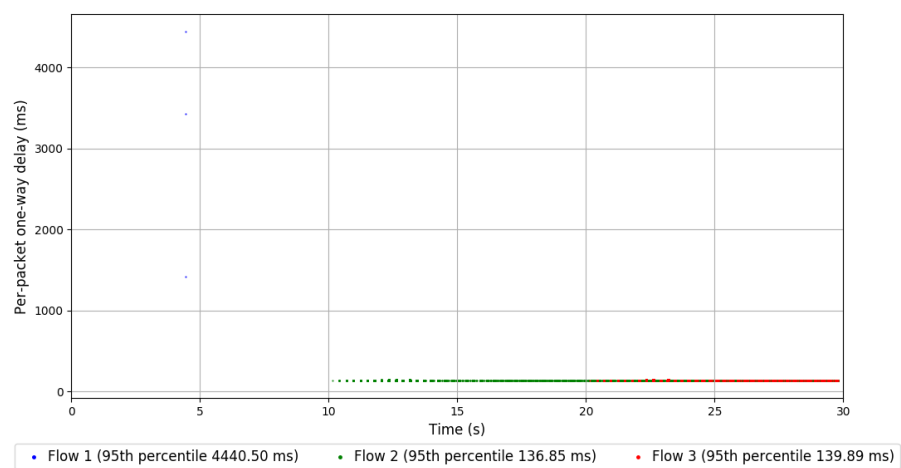
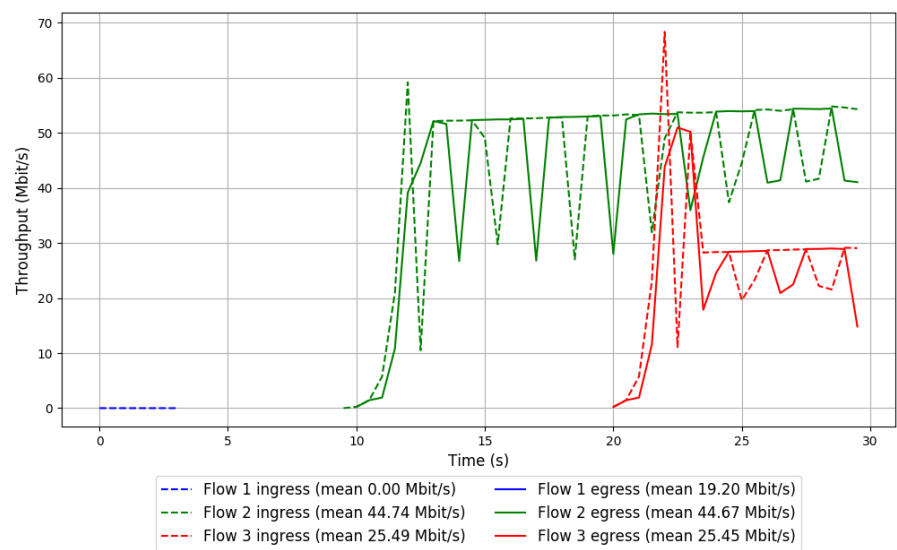
-- Flow 3:

Average throughput: 25.45 Mbit/s

95th percentile per-packet one-way delay: 139.889 ms

Loss rate: 2.89%

Run 5: Report of TCP Vegas — Data Link

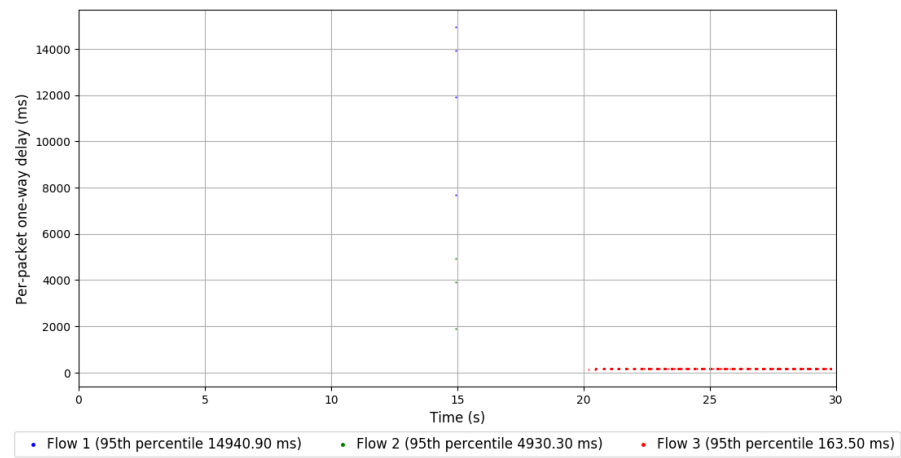
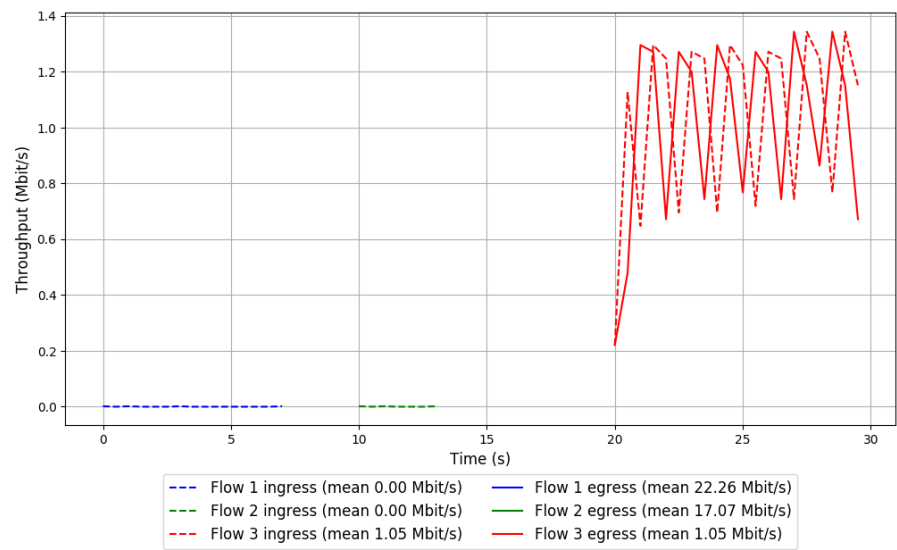


Run 6: Statistics of TCP Vegas

Start at: 2017-12-06 11:17:54

End at: 2017-12-06 11:18:24

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-06 11:31:05

End at: 2017-12-06 11:31:35

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 163.528 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 163.492 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 0.83 Mbit/s

95th percentile per-packet one-way delay: 163.571 ms

Loss rate: 1.54%

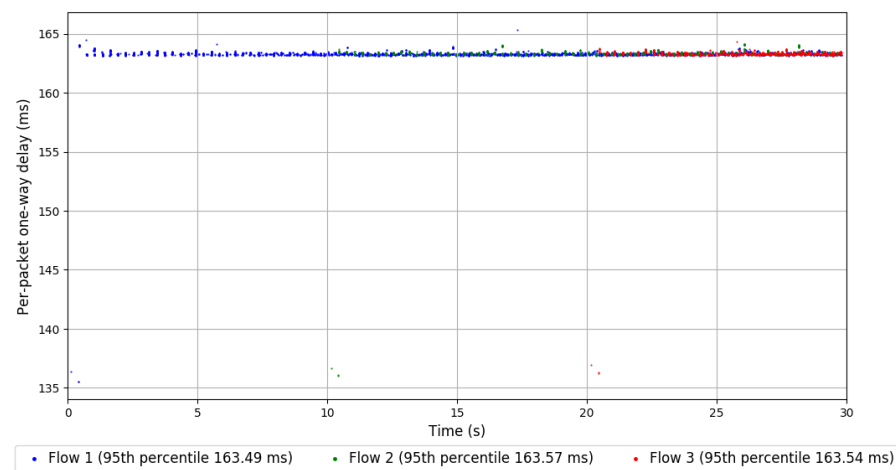
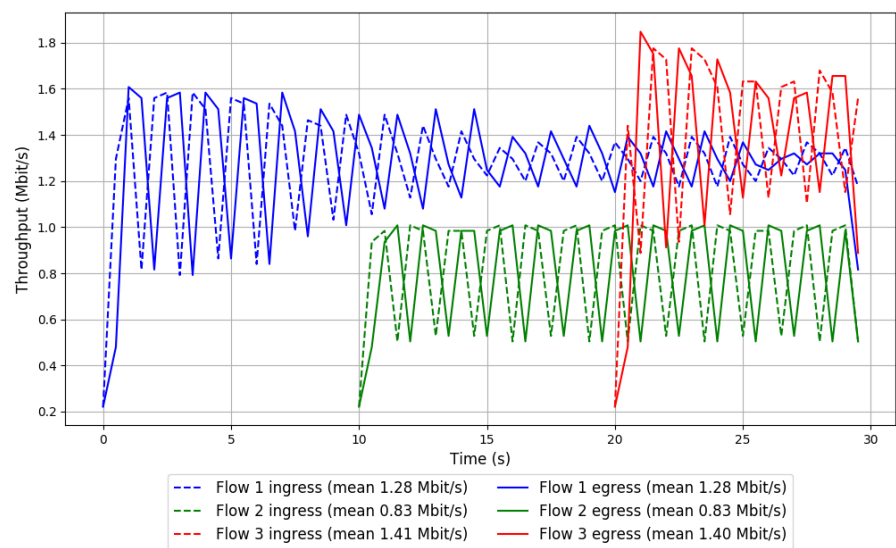
-- Flow 3:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 163.544 ms

Loss rate: 3.10%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-06 11:44:52

End at: 2017-12-06 11:45:22

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 50.59 Mbit/s

95th percentile per-packet one-way delay: 163.390 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 41.86 Mbit/s

95th percentile per-packet one-way delay: 163.410 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 163.411 ms

Loss rate: 2.14%

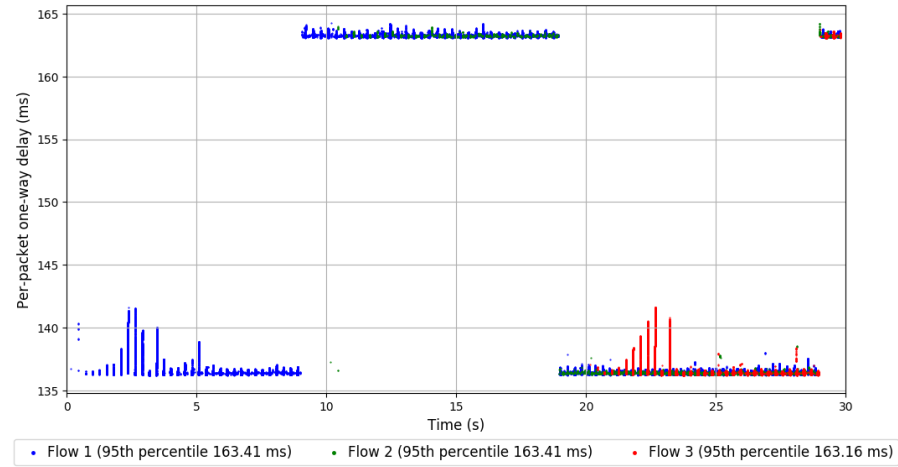
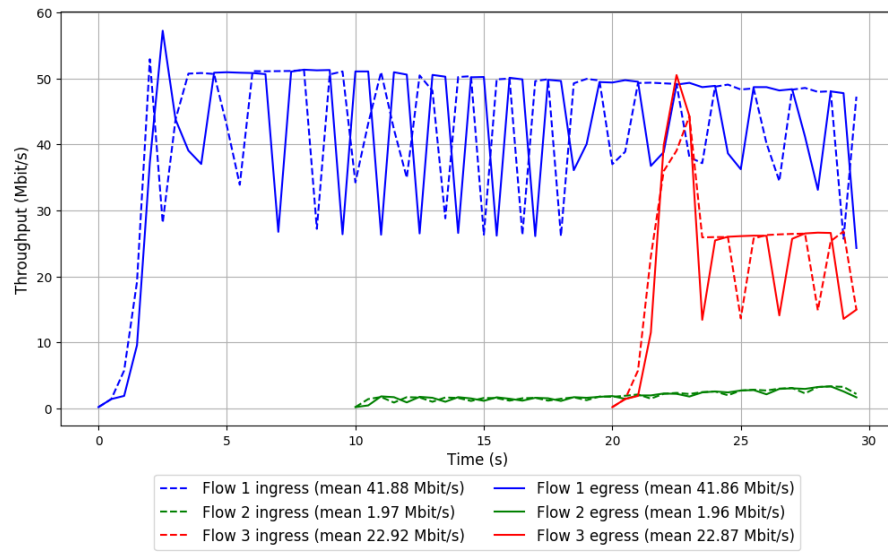
-- Flow 3:

Average throughput: 22.87 Mbit/s

95th percentile per-packet one-way delay: 163.155 ms

Loss rate: 2.95%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-06 11:58:02

End at: 2017-12-06 11:58:32

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 28.85 Mbit/s

95th percentile per-packet one-way delay: 164.411 ms

Loss rate: 1.42%

-- Flow 1:

Average throughput: 18.13 Mbit/s

95th percentile per-packet one-way delay: 165.356 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 163.003 ms

Loss rate: 2.17%

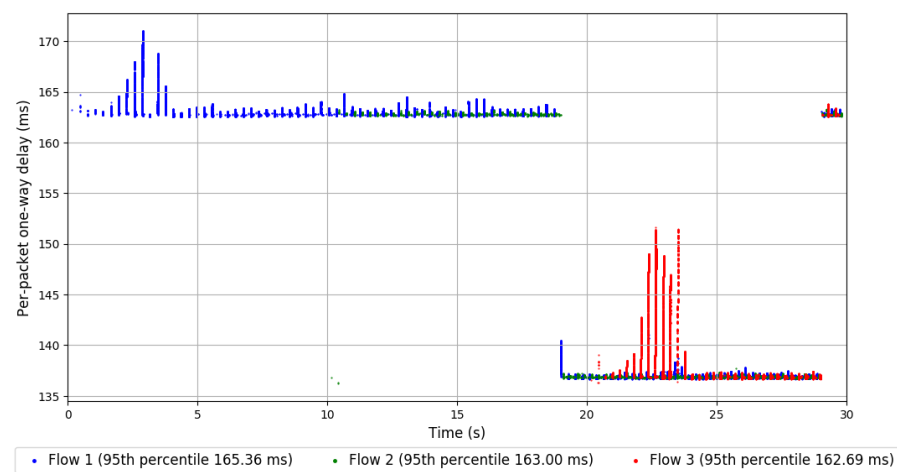
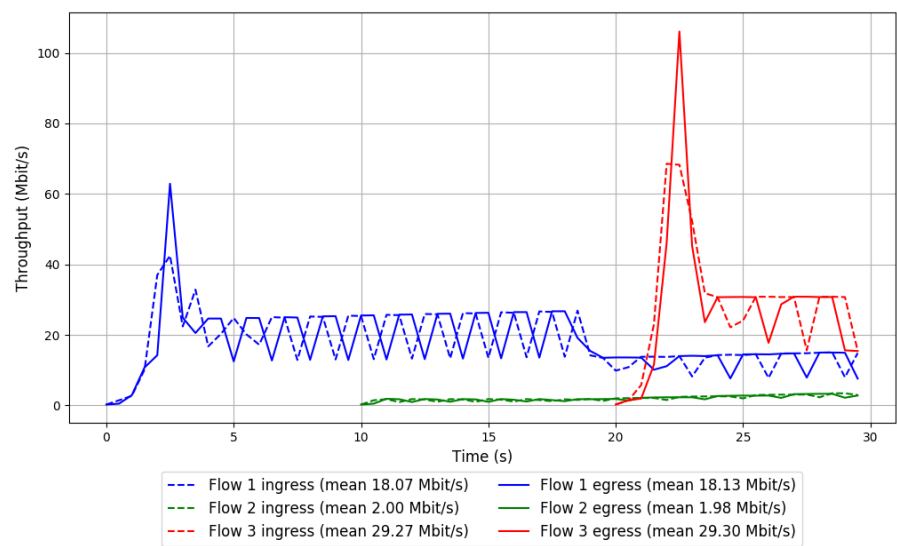
-- Flow 3:

Average throughput: 29.30 Mbit/s

95th percentile per-packet one-way delay: 162.692 ms

Loss rate: 2.68%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-06 12:11:33

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

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 39.30 Mbit/s

95th percentile per-packet one-way delay: 163.132 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 23.02 Mbit/s

95th percentile per-packet one-way delay: 163.039 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 24.14 Mbit/s

95th percentile per-packet one-way delay: 163.250 ms

Loss rate: 1.54%

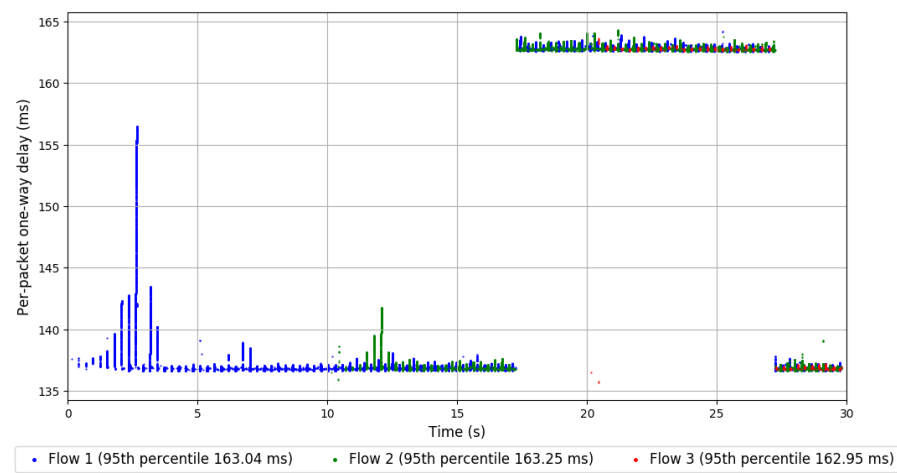
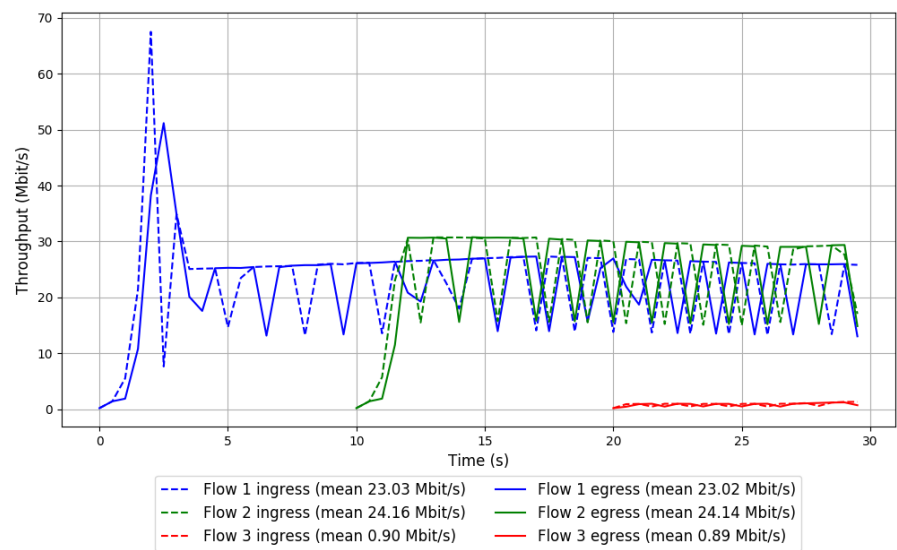
-- Flow 3:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 162.953 ms

Loss rate: 4.04%

Run 10: Report of TCP Vegas — Data Link

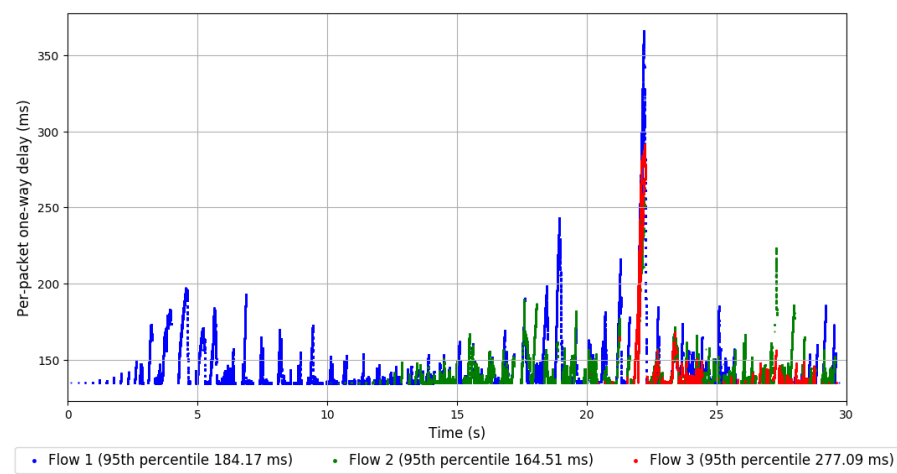
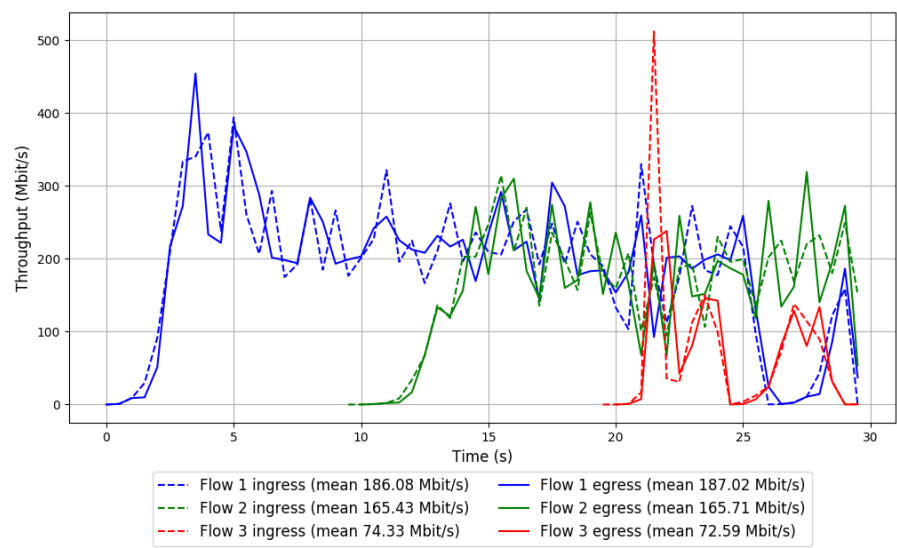


```
Run 1: Statistics of Verus

Start at: 2017-12-06 10:11:47
End at: 2017-12-06 10:12:17

# Below is generated by plot.py at 2017-12-06 15:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 319.07 Mbit/s
95th percentile per-packet one-way delay: 182.424 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 187.02 Mbit/s
95th percentile per-packet one-way delay: 184.171 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 165.71 Mbit/s
95th percentile per-packet one-way delay: 164.514 ms
Loss rate: 2.44%
-- Flow 3:
Average throughput: 72.59 Mbit/s
95th percentile per-packet one-way delay: 277.086 ms
Loss rate: 5.12%
```


Run 1: Report of Verus — Data Link

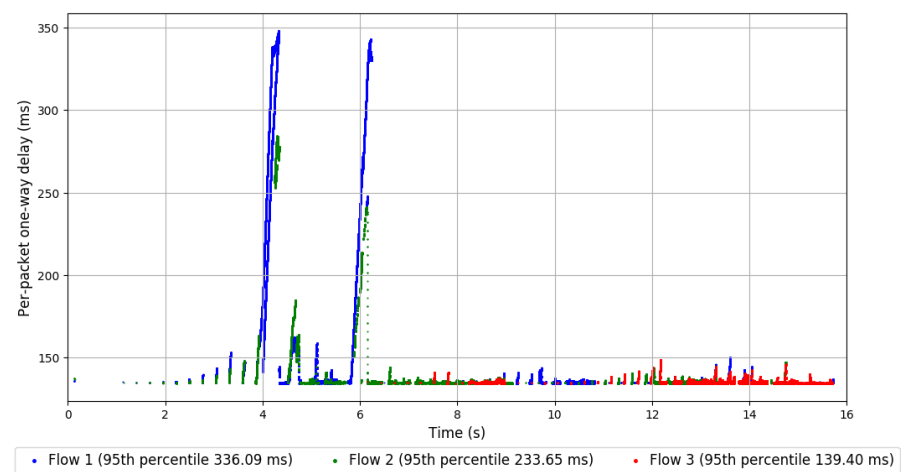
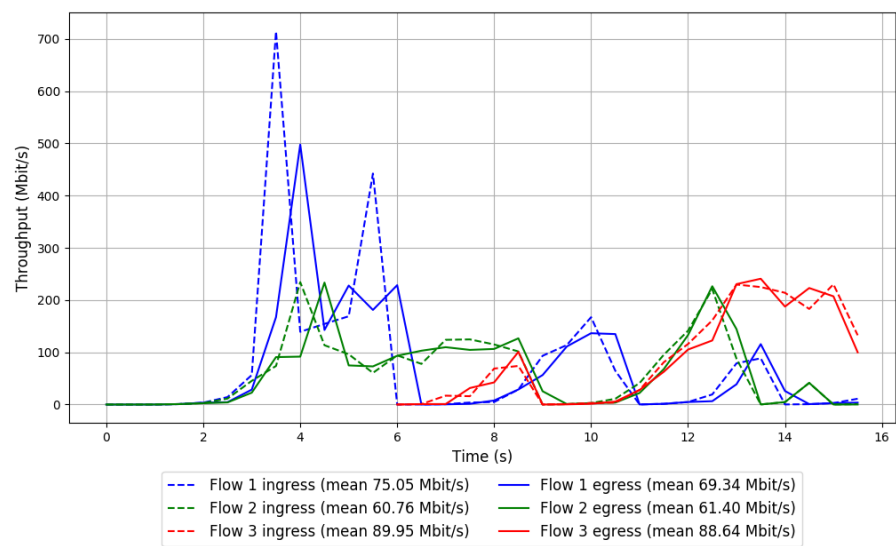


Run 2: Statistics of Verus

Start at: 2017-12-06 10:25:51

End at: 2017-12-06 10:26:21

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-06 10:39:29

End at: 2017-12-06 10:39:59

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.45 Mbit/s

95th percentile per-packet one-way delay: 158.429 ms

Loss rate: 5.64%

-- Flow 1:

Average throughput: 72.06 Mbit/s

95th percentile per-packet one-way delay: 151.440 ms

Loss rate: 4.74%

-- Flow 2:

Average throughput: 100.49 Mbit/s

95th percentile per-packet one-way delay: 171.365 ms

Loss rate: 7.19%

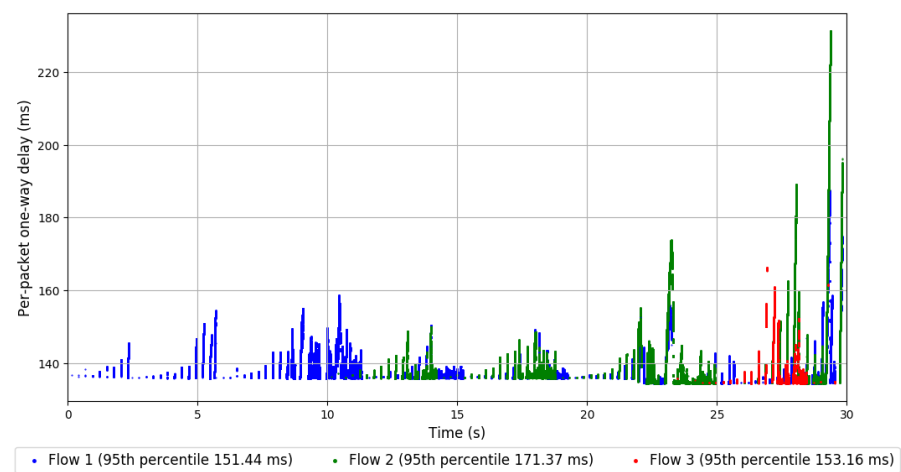
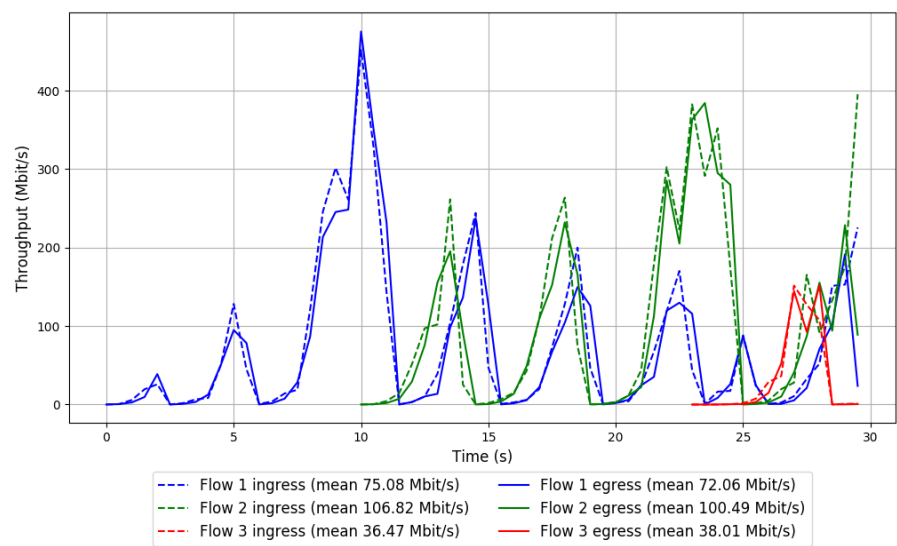
-- Flow 3:

Average throughput: 38.01 Mbit/s

95th percentile per-packet one-way delay: 153.163 ms

Loss rate: 0.23%

Run 3: Report of Verus — Data Link

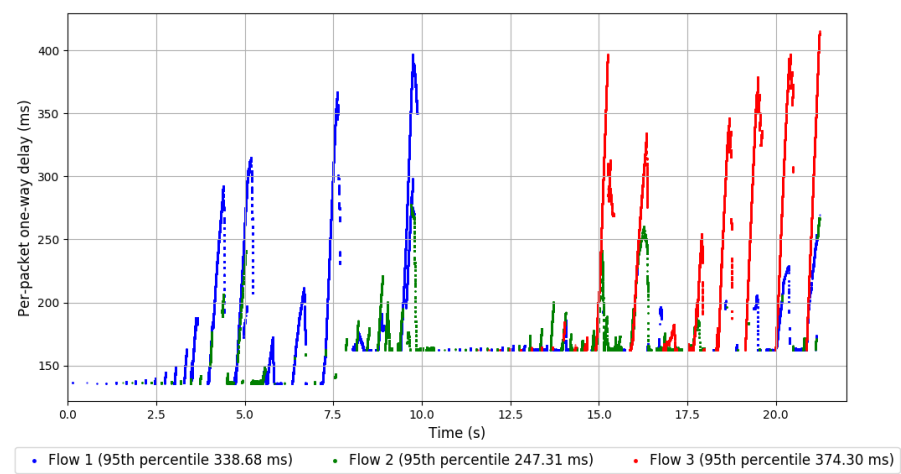
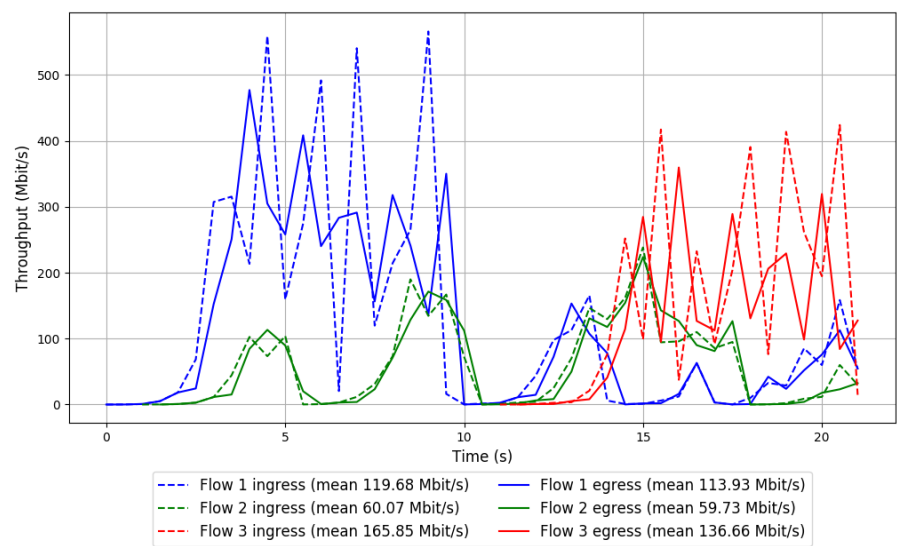


Run 4: Statistics of Verus

Start at: 2017-12-06 10:53:14

End at: 2017-12-06 10:53:44

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-06 11:07:07

End at: 2017-12-06 11:07:37

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 175.08 Mbit/s

95th percentile per-packet one-way delay: 180.892 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 107.90 Mbit/s

95th percentile per-packet one-way delay: 186.005 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 56.78 Mbit/s

95th percentile per-packet one-way delay: 168.529 ms

Loss rate: 0.49%

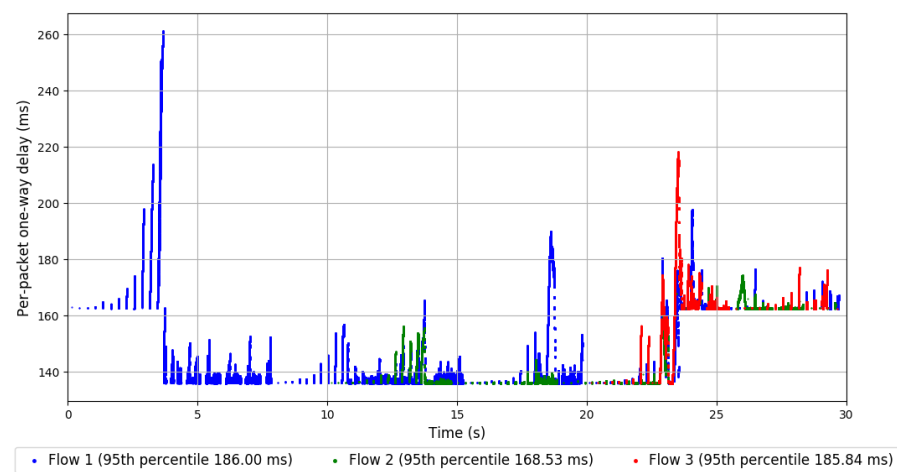
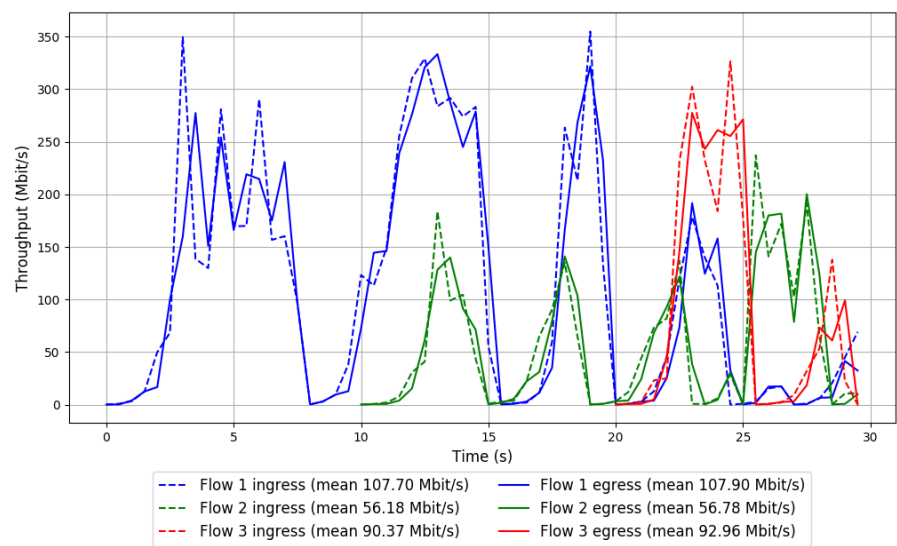
-- Flow 3:

Average throughput: 92.96 Mbit/s

95th percentile per-packet one-way delay: 185.835 ms

Loss rate: 0.01%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-06 11:20:25

End at: 2017-12-06 11:20:55

Below is generated by plot.py at 2017-12-06 15:10:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 248.16 Mbit/s

95th percentile per-packet one-way delay: 201.420 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 210.54 Mbit/s

95th percentile per-packet one-way delay: 200.133 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 34.39 Mbit/s

95th percentile per-packet one-way delay: 193.040 ms

Loss rate: 0.21%

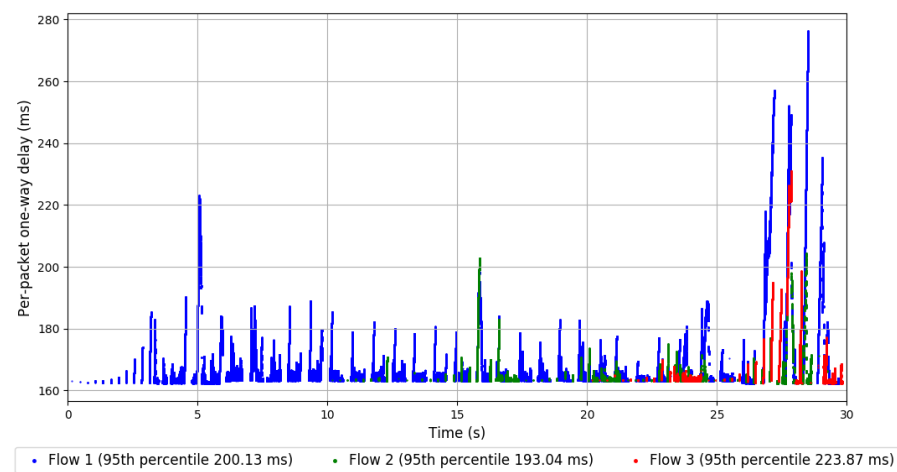
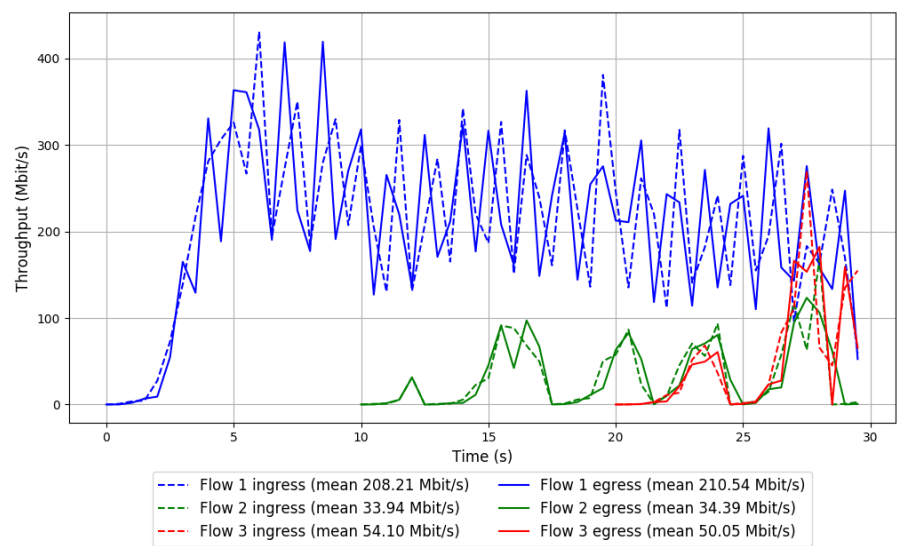
-- Flow 3:

Average throughput: 50.05 Mbit/s

95th percentile per-packet one-way delay: 223.867 ms

Loss rate: 10.26%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-06 11:33:47

End at: 2017-12-06 11:34:17

Below is generated by plot.py at 2017-12-06 15:10:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 248.64 Mbit/s

95th percentile per-packet one-way delay: 239.578 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 197.77 Mbit/s

95th percentile per-packet one-way delay: 243.519 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 65.16 Mbit/s

95th percentile per-packet one-way delay: 190.358 ms

Loss rate: 2.31%

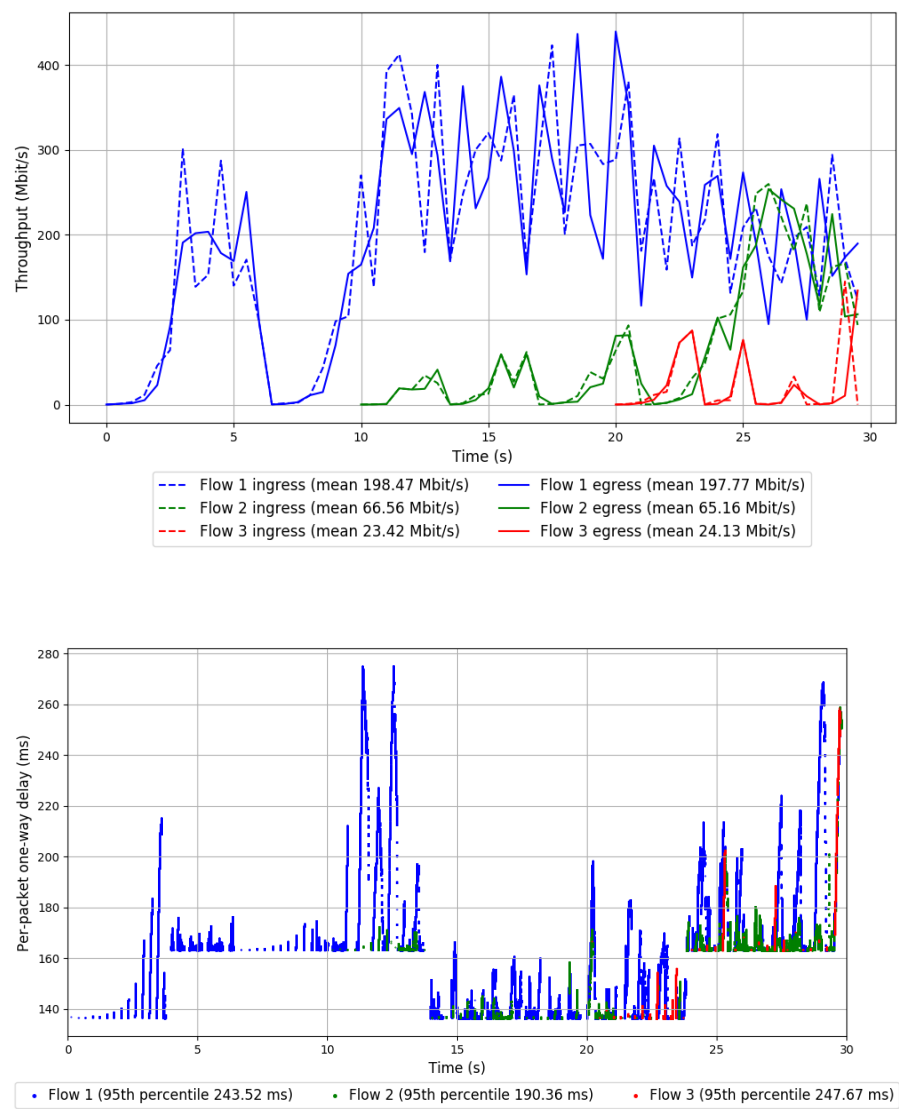
-- Flow 3:

Average throughput: 24.13 Mbit/s

95th percentile per-packet one-way delay: 247.669 ms

Loss rate: 0.01%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-06 11:47:28

End at: 2017-12-06 11:47:58

Below is generated by plot.py at 2017-12-06 15:10:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 165.85 Mbit/s

95th percentile per-packet one-way delay: 203.054 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 131.96 Mbit/s

95th percentile per-packet one-way delay: 186.534 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 35.03 Mbit/s

95th percentile per-packet one-way delay: 188.281 ms

Loss rate: 0.05%

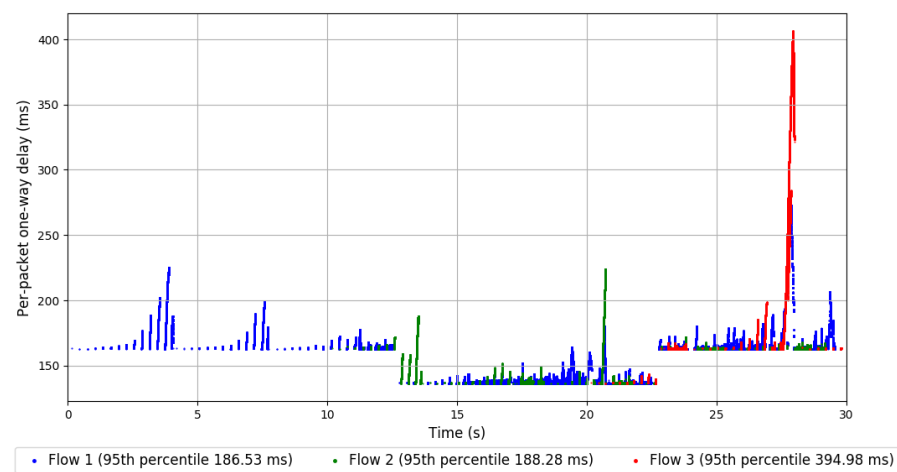
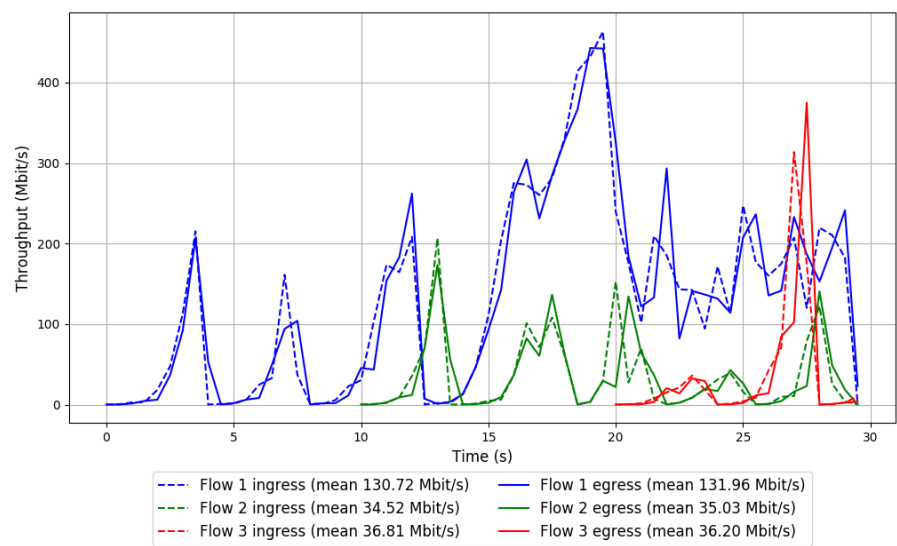
-- Flow 3:

Average throughput: 36.20 Mbit/s

95th percentile per-packet one-way delay: 394.981 ms

Loss rate: 4.37%

Run 8: Report of Verus — Data Link

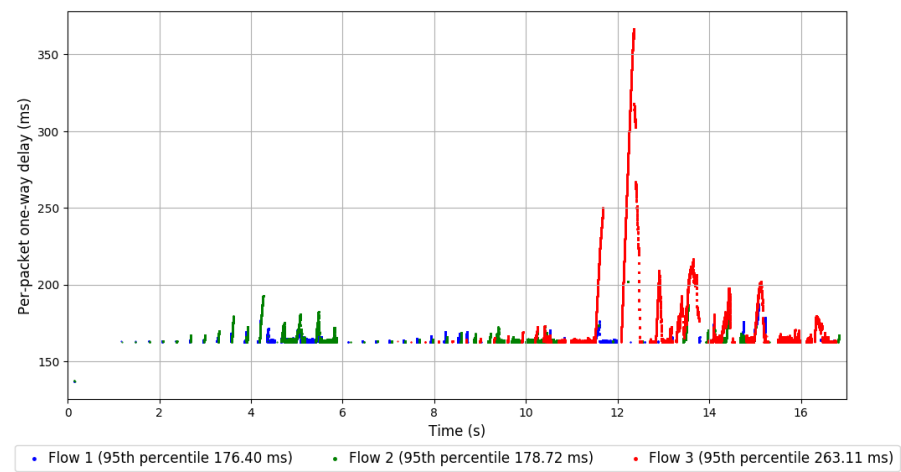
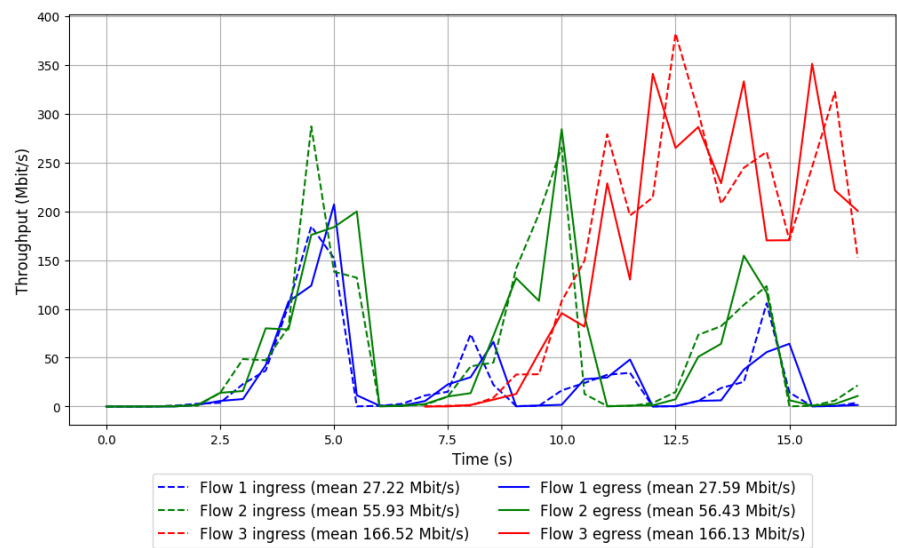


Run 9: Statistics of Verus

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

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

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-06 12:14:09

End at: 2017-12-06 12:14:39

Below is generated by plot.py at 2017-12-06 15:10:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 166.17 Mbit/s

95th percentile per-packet one-way delay: 216.445 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 64.98 Mbit/s

95th percentile per-packet one-way delay: 171.939 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 137.21 Mbit/s

95th percentile per-packet one-way delay: 209.411 ms

Loss rate: 1.74%

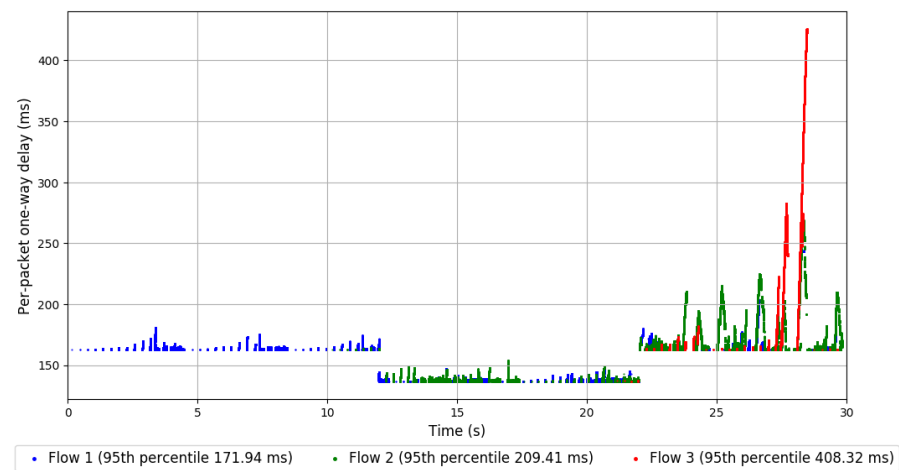
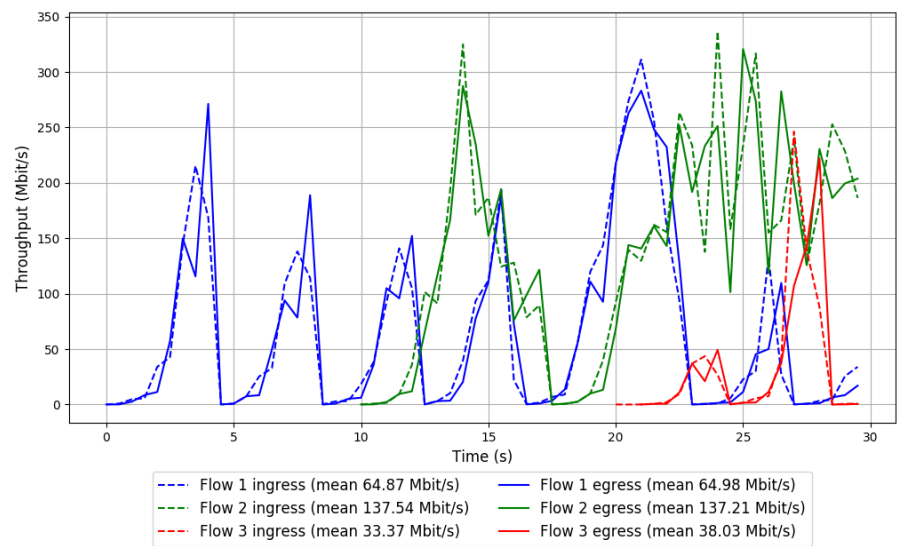
-- Flow 3:

Average throughput: 38.03 Mbit/s

95th percentile per-packet one-way delay: 408.316 ms

Loss rate: 0.89%

Run 10: Report of Verus — Data Link

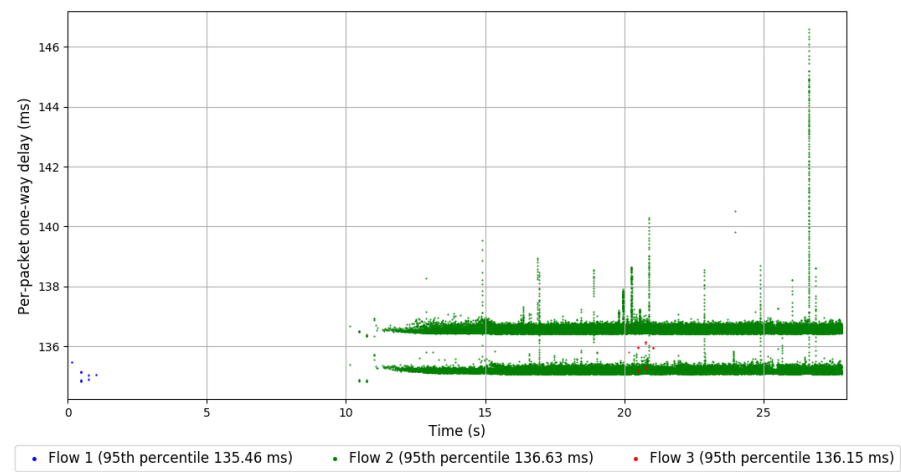
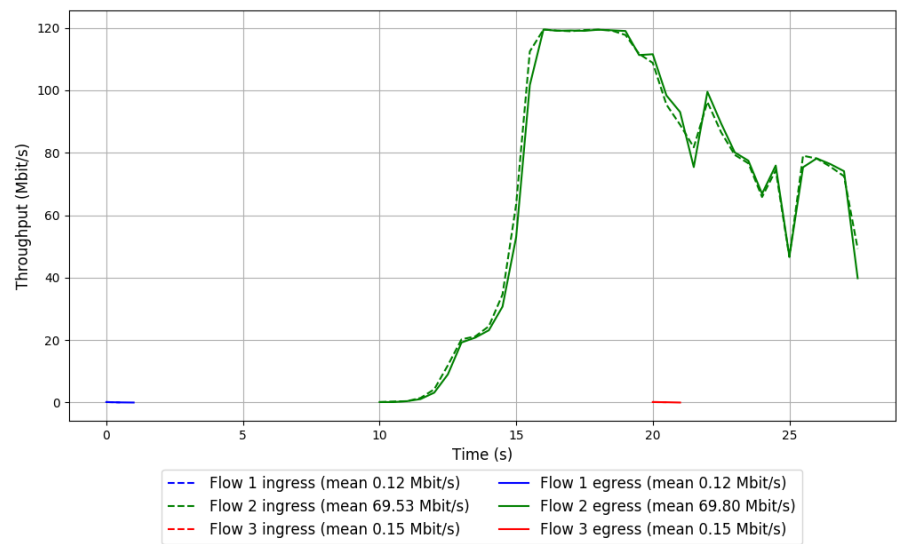


```
Run 1: Statistics of Copa

Start at: 2017-12-06 10:03:48
End at: 2017-12-06 10:04:18

# Below is generated by plot.py at 2017-12-06 15:10:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.56 Mbit/s
95th percentile per-packet one-way delay: 136.635 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 135.464 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 69.80 Mbit/s
95th percentile per-packet one-way delay: 136.635 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 136.149 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-06 10:17:34

End at: 2017-12-06 10:18:04

Below is generated by plot.py at 2017-12-06 15:12:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.61 Mbit/s

95th percentile per-packet one-way delay: 136.658 ms

Loss rate: 1.71%

-- Flow 1:

Average throughput: 60.73 Mbit/s

95th percentile per-packet one-way delay: 136.571 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 64.11 Mbit/s

95th percentile per-packet one-way delay: 136.737 ms

Loss rate: 1.34%

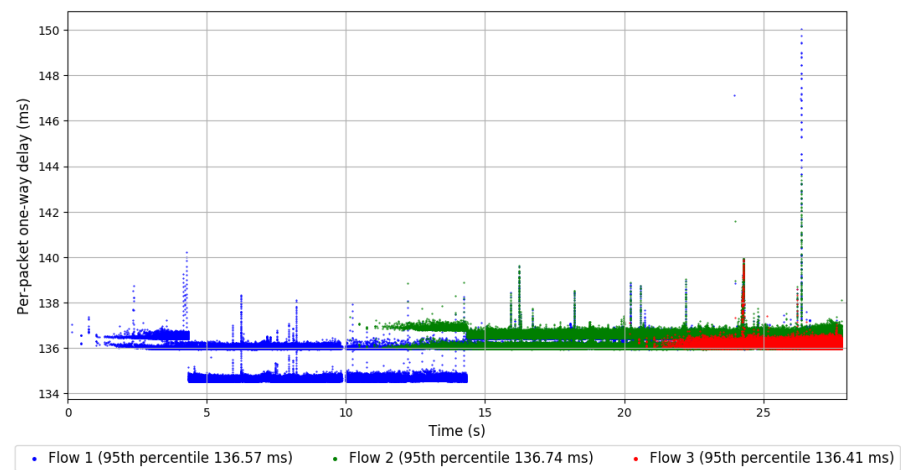
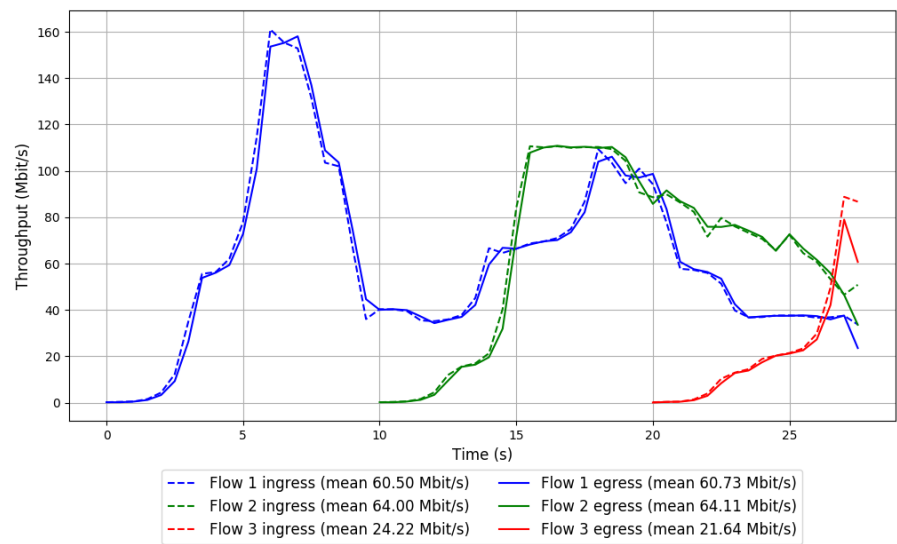
-- Flow 3:

Average throughput: 21.64 Mbit/s

95th percentile per-packet one-way delay: 136.405 ms

Loss rate: 13.75%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-06 10:31:18

End at: 2017-12-06 10:31:49

Below is generated by plot.py at 2017-12-06 15:12:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.97 Mbit/s

95th percentile per-packet one-way delay: 136.755 ms

Loss rate: 1.68%

-- Flow 1:

Average throughput: 61.53 Mbit/s

95th percentile per-packet one-way delay: 136.254 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 70.30 Mbit/s

95th percentile per-packet one-way delay: 136.537 ms

Loss rate: 1.48%

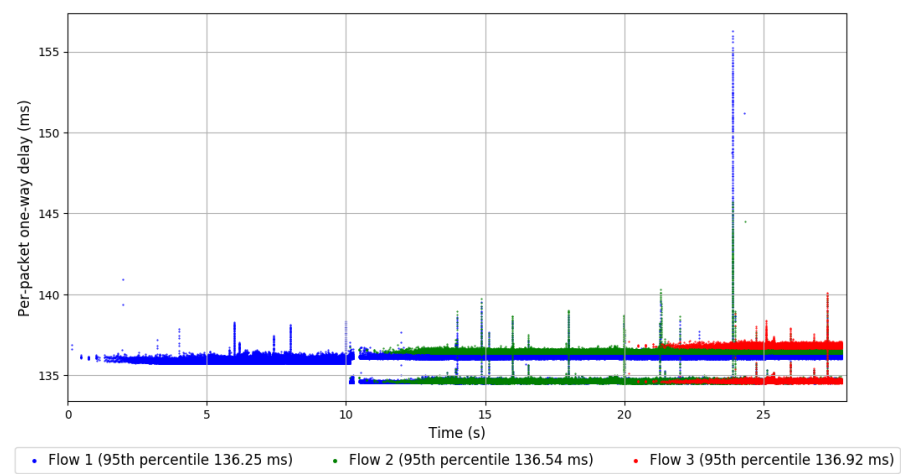
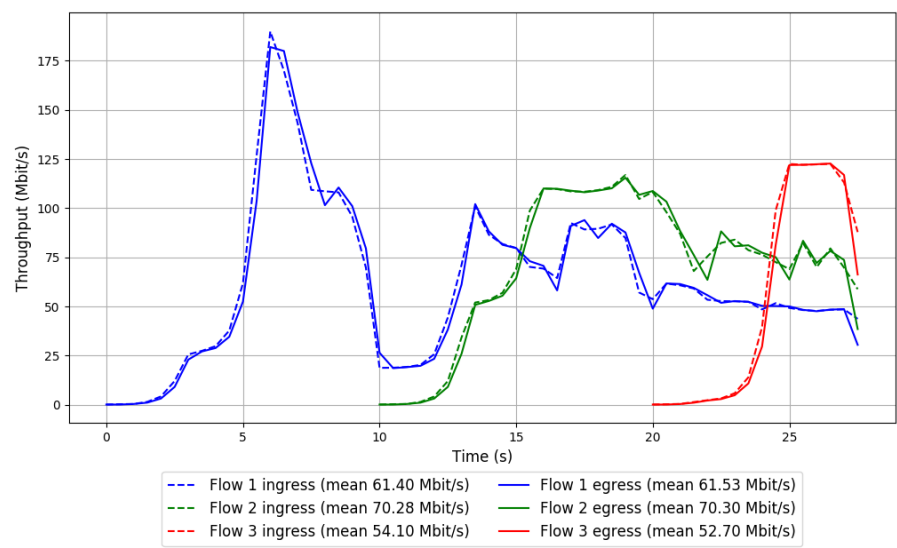
-- Flow 3:

Average throughput: 52.70 Mbit/s

95th percentile per-packet one-way delay: 136.917 ms

Loss rate: 5.91%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-06 10:45:01

End at: 2017-12-06 10:45:31

Below is generated by plot.py at 2017-12-06 15:12:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.68 Mbit/s

95th percentile per-packet one-way delay: 136.260 ms

Loss rate: 8.45%

-- Flow 1:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 161.573 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 136.156 ms

Loss rate: 0.00%

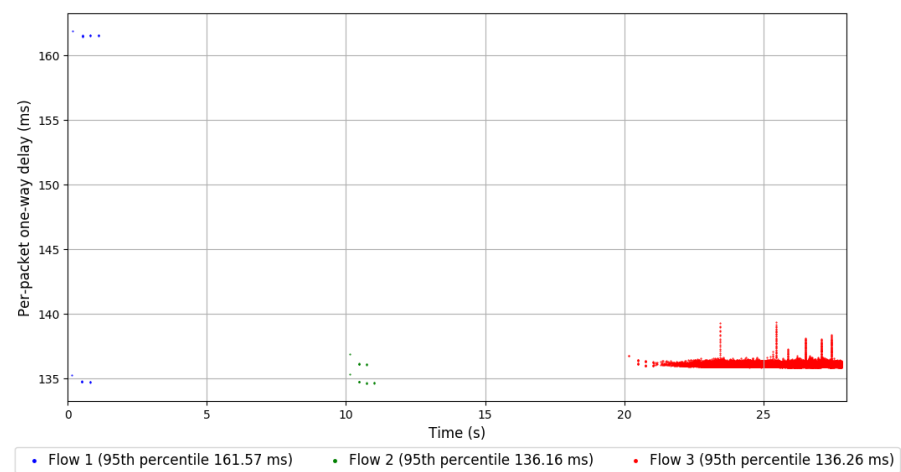
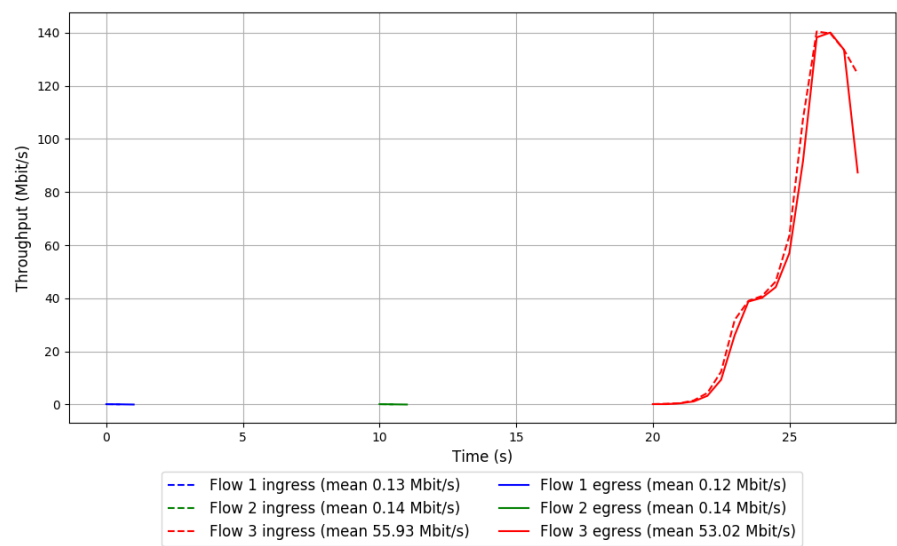
-- Flow 3:

Average throughput: 53.02 Mbit/s

95th percentile per-packet one-way delay: 136.260 ms

Loss rate: 8.46%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-06 10:58:47

End at: 2017-12-06 10:59:17

Below is generated by plot.py at 2017-12-06 15:12:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 34.45 Mbit/s

95th percentile per-packet one-way delay: 162.429 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 163.509 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.89 Mbit/s

95th percentile per-packet one-way delay: 136.649 ms

Loss rate: 0.23%

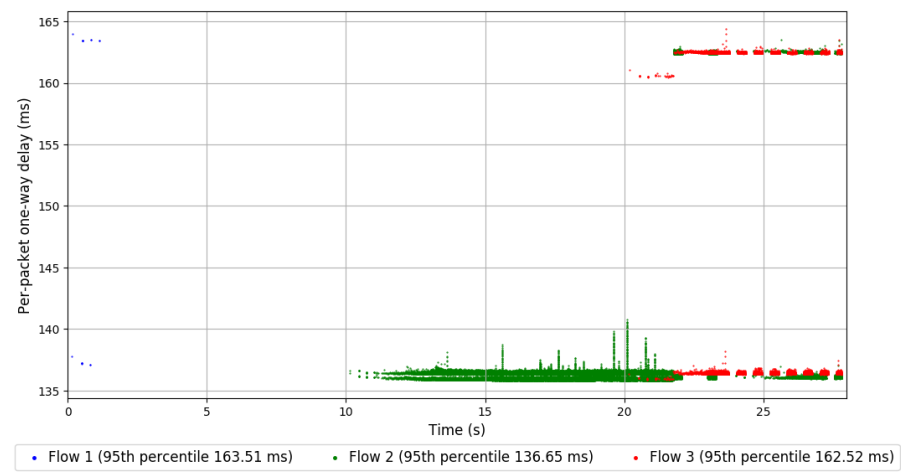
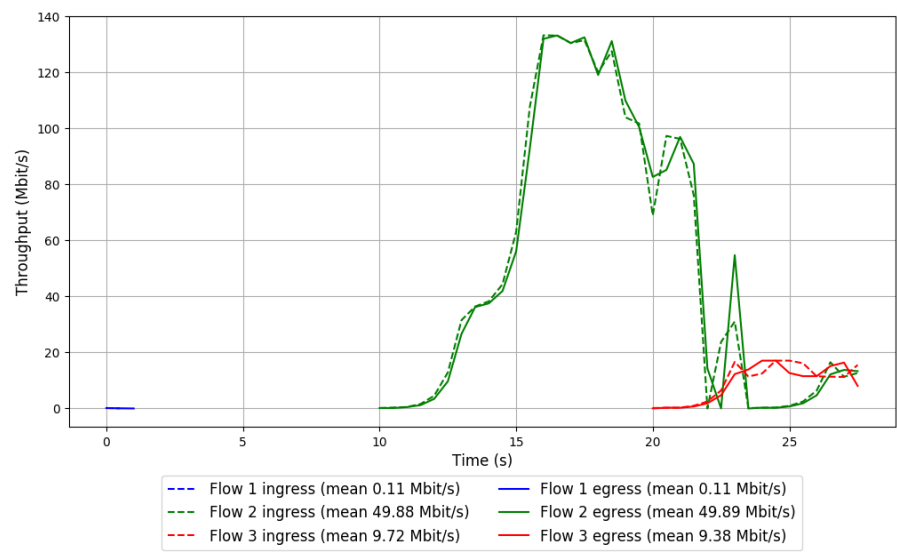
-- Flow 3:

Average throughput: 9.38 Mbit/s

95th percentile per-packet one-way delay: 162.520 ms

Loss rate: 5.01%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-06 11:12:39

End at: 2017-12-06 11:13:09

Below is generated by plot.py at 2017-12-06 15:12:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.81 Mbit/s

95th percentile per-packet one-way delay: 136.338 ms

Loss rate: 1.82%

-- Flow 1:

Average throughput: 71.77 Mbit/s

95th percentile per-packet one-way delay: 136.350 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 136.548 ms

Loss rate: 0.00%

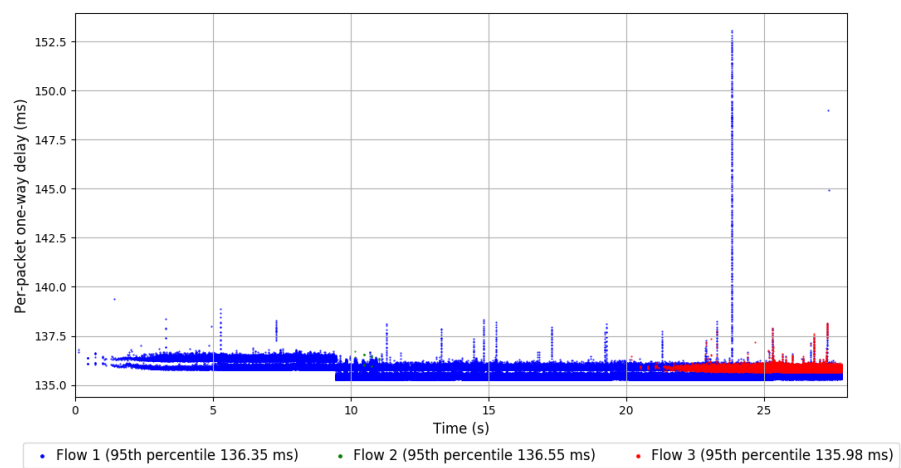
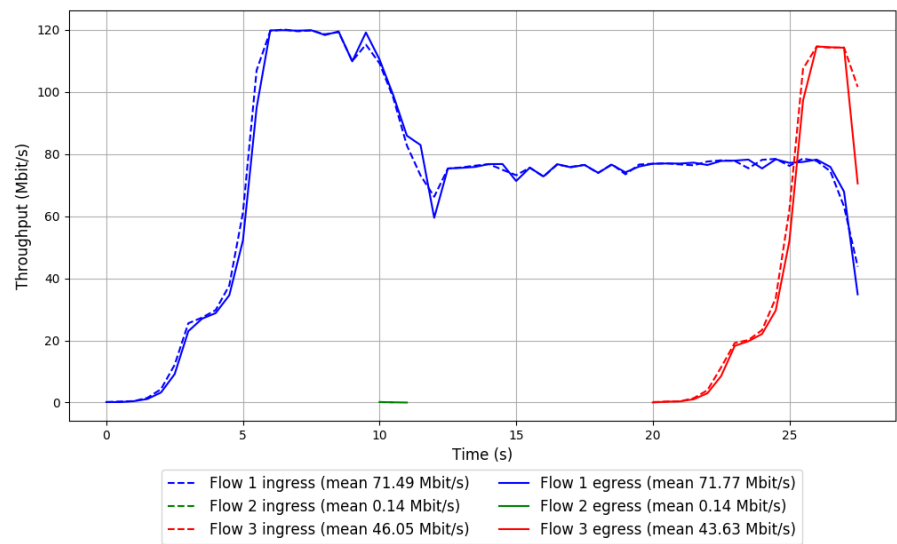
-- Flow 3:

Average throughput: 43.63 Mbit/s

95th percentile per-packet one-way delay: 135.978 ms

Loss rate: 8.53%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-06 11:26:05

End at: 2017-12-06 11:26:35

Below is generated by plot.py at 2017-12-06 15:12:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.48 Mbit/s

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

Loss rate: 1.91%

-- Flow 1:

Average throughput: 42.09 Mbit/s

95th percentile per-packet one-way delay: 137.190 ms

Loss rate: 1.93%

-- Flow 2:

Average throughput: 48.51 Mbit/s

95th percentile per-packet one-way delay: 136.883 ms

Loss rate: 0.83%

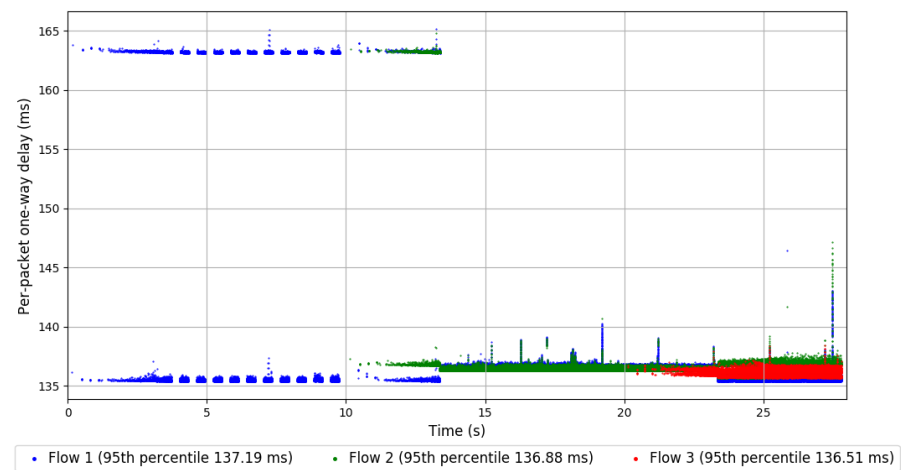
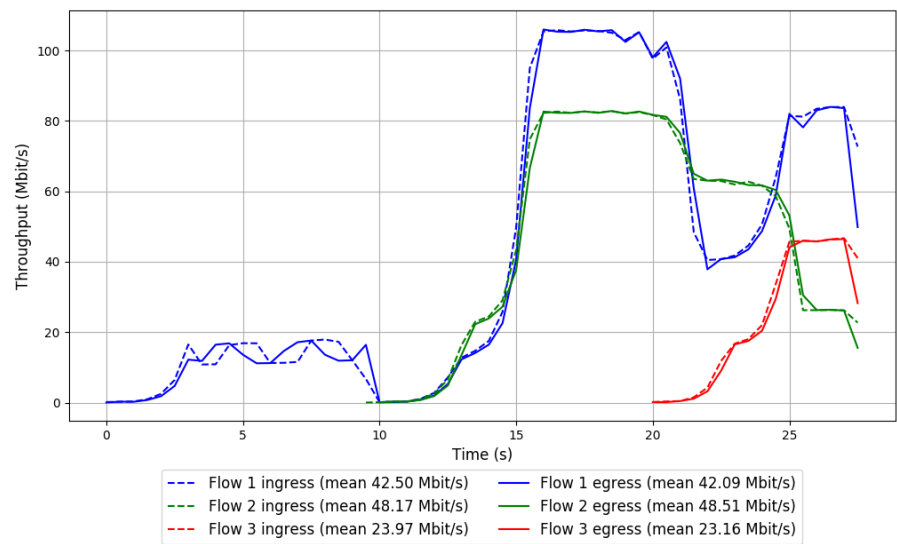
-- Flow 3:

Average throughput: 23.16 Mbit/s

95th percentile per-packet one-way delay: 136.510 ms

Loss rate: 6.71%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-06 11:39:31

End at: 2017-12-06 11:40:01

Below is generated by plot.py at 2017-12-06 15:12:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 35.71 Mbit/s

95th percentile per-packet one-way delay: 163.198 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 27.17 Mbit/s

95th percentile per-packet one-way delay: 163.189 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 9.27 Mbit/s

95th percentile per-packet one-way delay: 163.228 ms

Loss rate: 2.07%

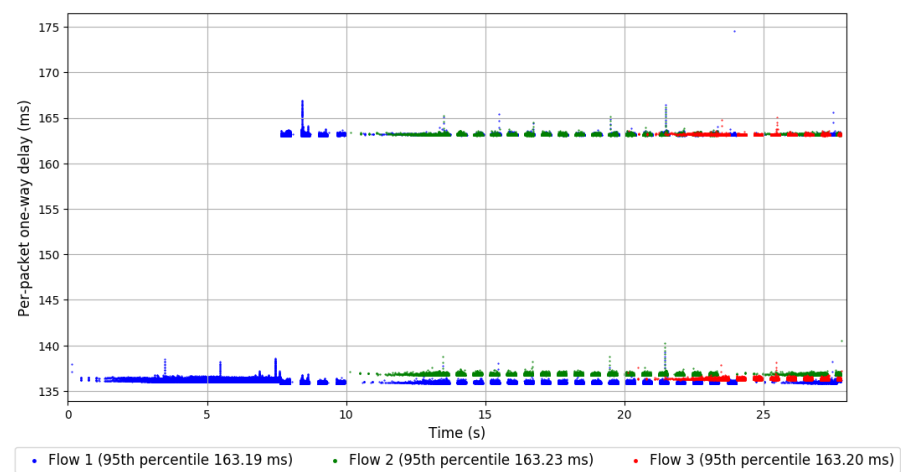
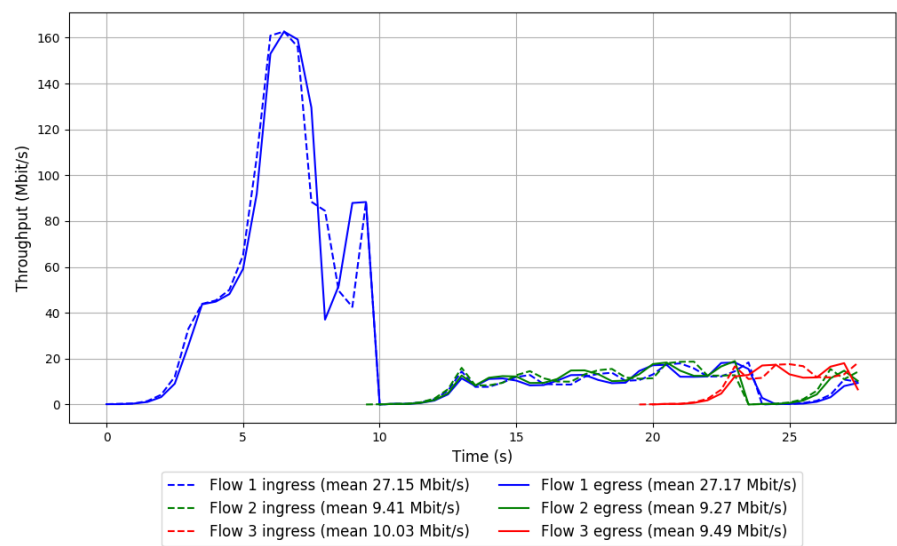
-- Flow 3:

Average throughput: 9.49 Mbit/s

95th percentile per-packet one-way delay: 163.202 ms

Loss rate: 7.37%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-06 11:53:04

End at: 2017-12-06 11:53:34

Below is generated by plot.py at 2017-12-06 15:12:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 49.85 Mbit/s

95th percentile per-packet one-way delay: 162.697 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 40.68 Mbit/s

95th percentile per-packet one-way delay: 162.633 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 12.27 Mbit/s

95th percentile per-packet one-way delay: 162.775 ms

Loss rate: 0.14%

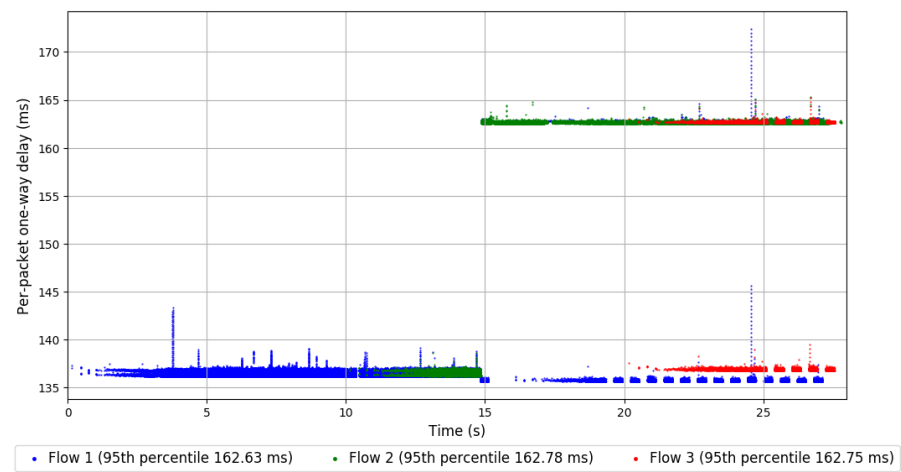
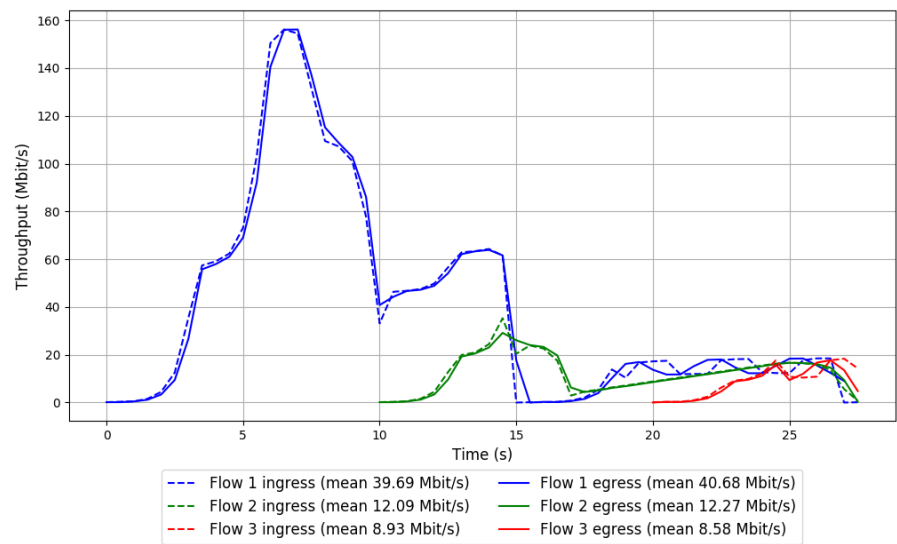
-- Flow 3:

Average throughput: 8.58 Mbit/s

95th percentile per-packet one-way delay: 162.751 ms

Loss rate: 10.08%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

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

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

Below is generated by plot.py at 2017-12-06 15:12:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.13 Mbit/s

95th percentile per-packet one-way delay: 162.677 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 33.24 Mbit/s

95th percentile per-packet one-way delay: 162.628 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 7.31 Mbit/s

95th percentile per-packet one-way delay: 162.749 ms

Loss rate: 0.87%

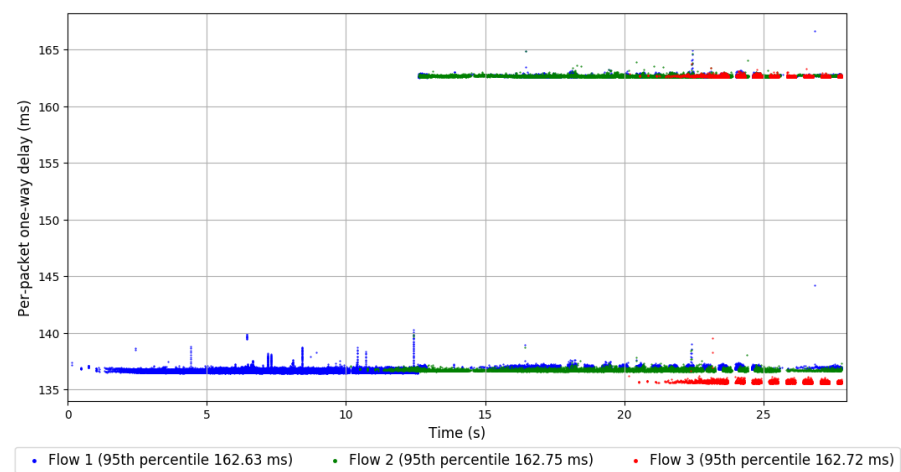
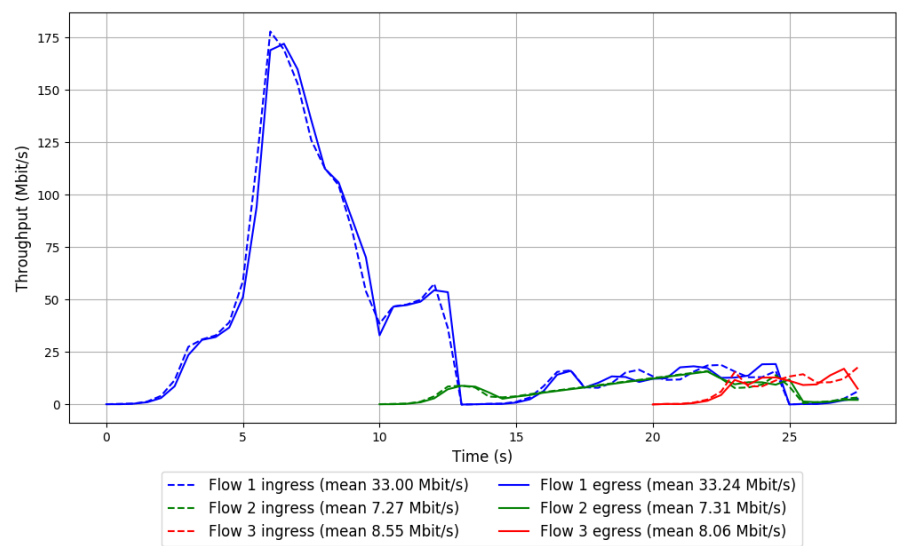
-- Flow 3:

Average throughput: 8.06 Mbit/s

95th percentile per-packet one-way delay: 162.724 ms

Loss rate: 7.58%

Run 10: Report of Copa — Data Link

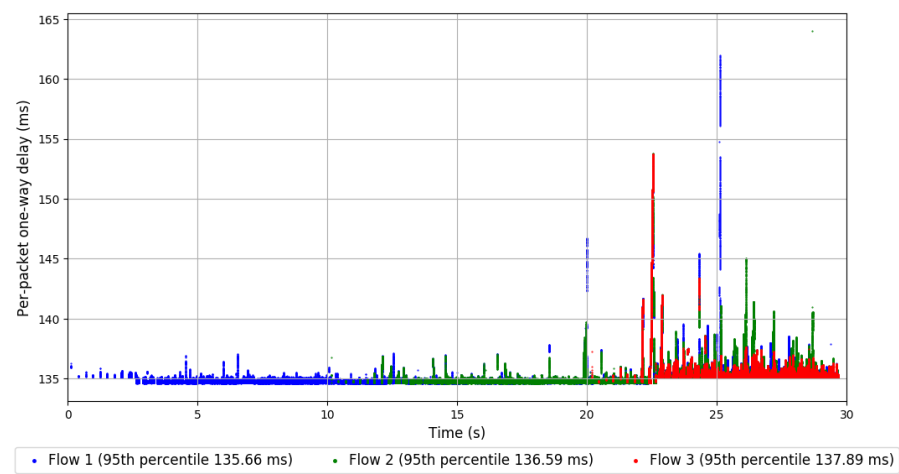
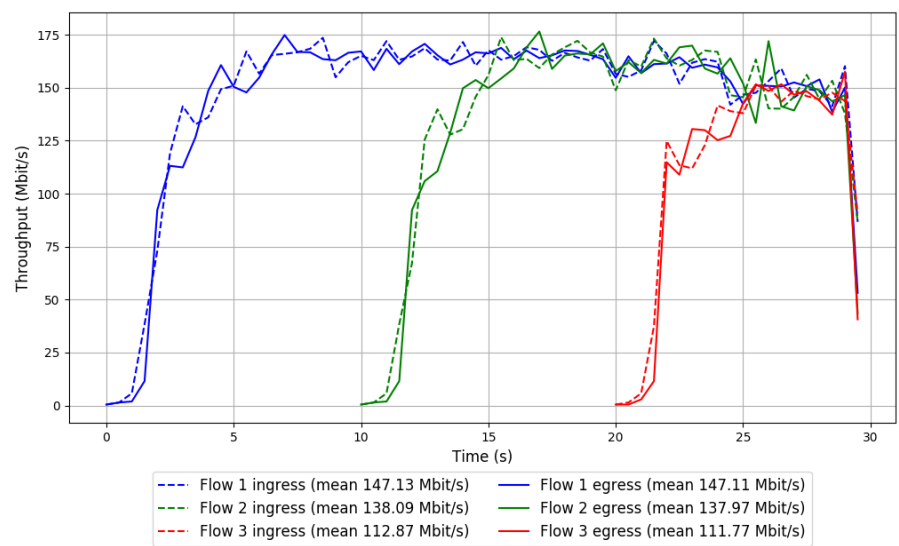


```
Run 1: Statistics of Indigo

Start at: 2017-12-06 10:07:58
End at: 2017-12-06 10:08:28

# Below is generated by plot.py at 2017-12-06 15:15:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 274.18 Mbit/s
95th percentile per-packet one-way delay: 136.147 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 147.11 Mbit/s
95th percentile per-packet one-way delay: 135.664 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 137.97 Mbit/s
95th percentile per-packet one-way delay: 136.585 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 111.77 Mbit/s
95th percentile per-packet one-way delay: 137.890 ms
Loss rate: 3.74%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-06 10:21:52

End at: 2017-12-06 10:22:22

Below is generated by plot.py at 2017-12-06 15:15:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 262.64 Mbit/s

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

Loss rate: 1.48%

-- Flow 1:

Average throughput: 143.86 Mbit/s

95th percentile per-packet one-way delay: 136.626 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 126.10 Mbit/s

95th percentile per-packet one-way delay: 137.180 ms

Loss rate: 1.62%

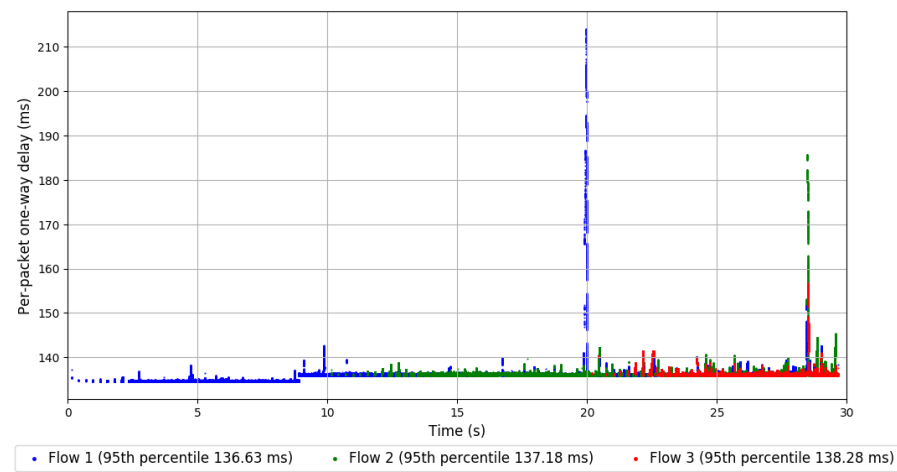
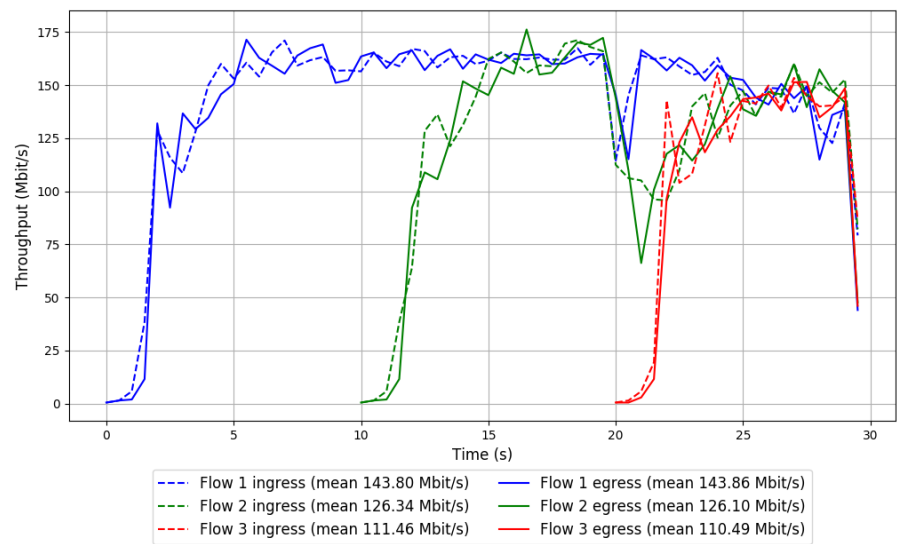
-- Flow 3:

Average throughput: 110.49 Mbit/s

95th percentile per-packet one-way delay: 138.282 ms

Loss rate: 3.62%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-06 10:35:38

End at: 2017-12-06 10:36:08

Below is generated by plot.py at 2017-12-06 15:16:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 271.97 Mbit/s

95th percentile per-packet one-way delay: 136.445 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 151.44 Mbit/s

95th percentile per-packet one-way delay: 136.293 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 132.06 Mbit/s

95th percentile per-packet one-way delay: 136.514 ms

Loss rate: 1.55%

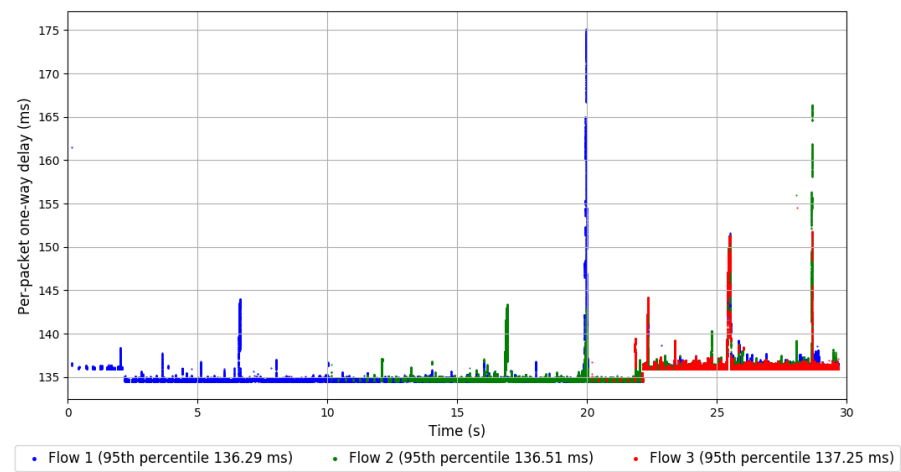
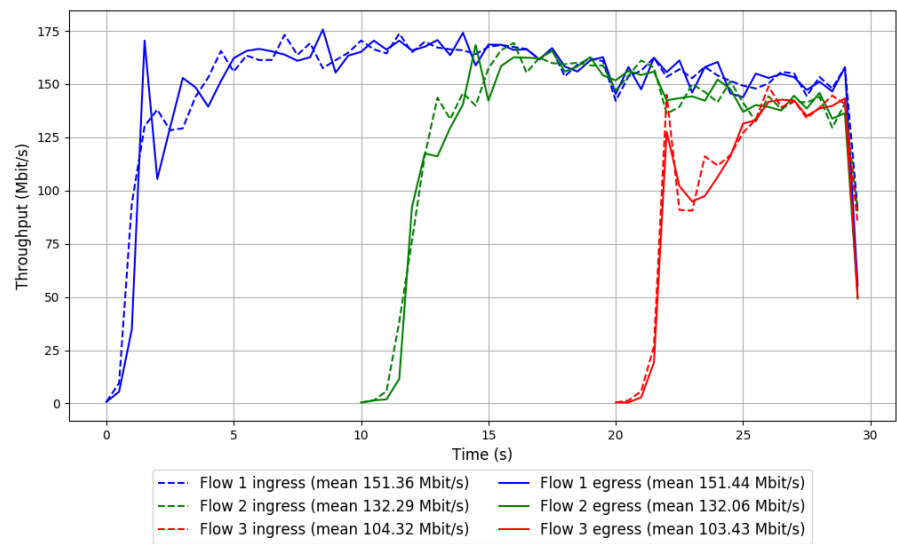
-- Flow 3:

Average throughput: 103.43 Mbit/s

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

Loss rate: 3.59%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-06 10:49:07

End at: 2017-12-06 10:49:37

Below is generated by plot.py at 2017-12-06 15:16:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 274.16 Mbit/s

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

Loss rate: 1.44%

-- Flow 1:

Average throughput: 151.07 Mbit/s

95th percentile per-packet one-way delay: 137.171 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 134.16 Mbit/s

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

Loss rate: 1.52%

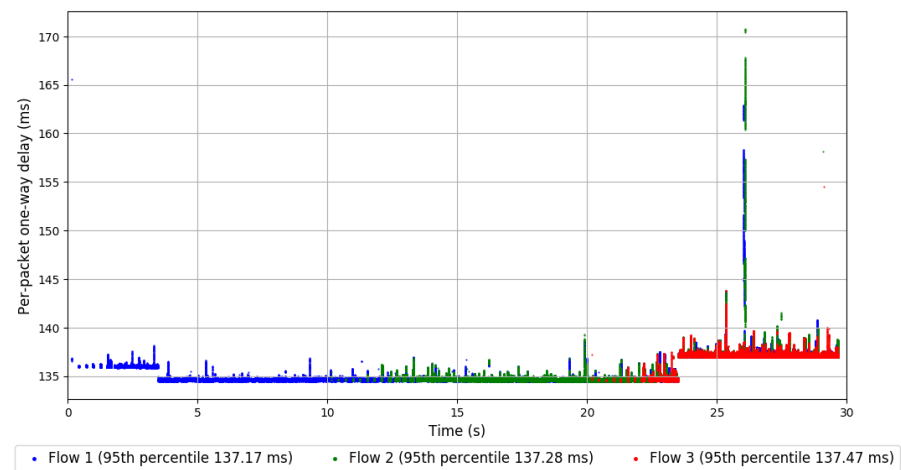
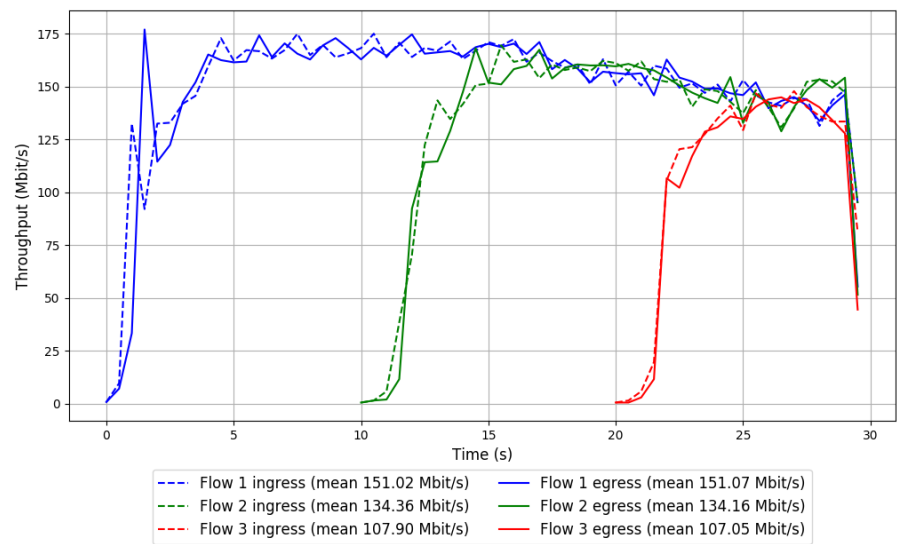
-- Flow 3:

Average throughput: 107.05 Mbit/s

95th percentile per-packet one-way delay: 137.466 ms

Loss rate: 3.55%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-06 11:02:56

End at: 2017-12-06 11:03:26

Below is generated by plot.py at 2017-12-06 15:16:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.51 Mbit/s

95th percentile per-packet one-way delay: 162.647 ms

Loss rate: 1.74%

-- Flow 1:

Average throughput: 68.91 Mbit/s

95th percentile per-packet one-way delay: 162.637 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 131.80 Mbit/s

95th percentile per-packet one-way delay: 162.665 ms

Loss rate: 1.55%

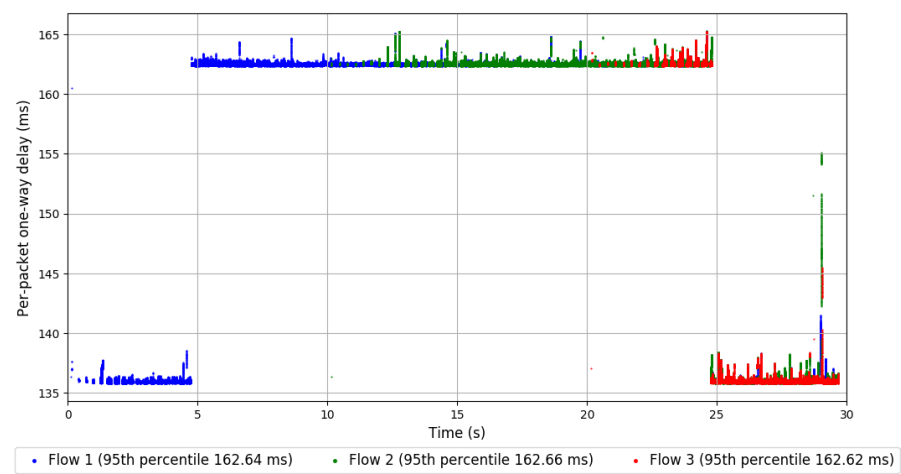
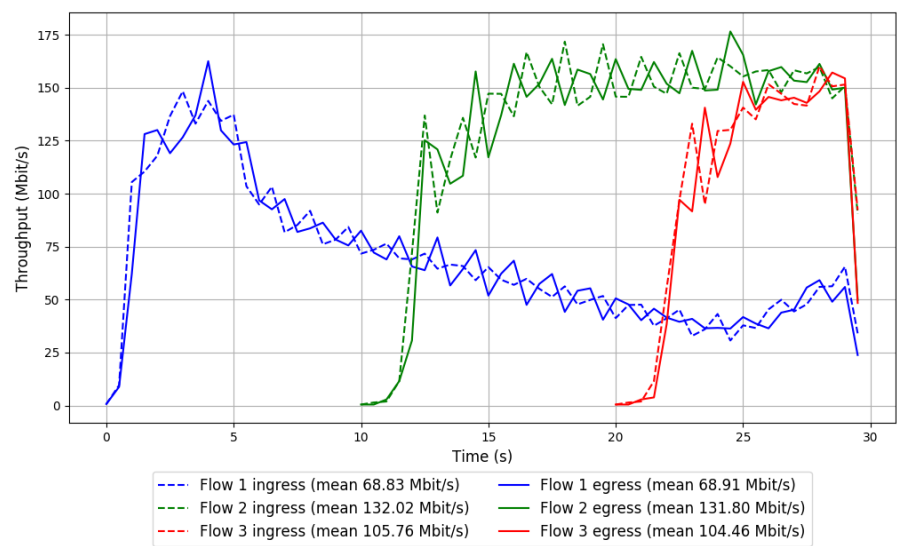
-- Flow 3:

Average throughput: 104.46 Mbit/s

95th percentile per-packet one-way delay: 162.625 ms

Loss rate: 4.01%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-06 11:16:32

End at: 2017-12-06 11:17:02

Below is generated by plot.py at 2017-12-06 15:16:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 247.57 Mbit/s

95th percentile per-packet one-way delay: 163.518 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 136.84 Mbit/s

95th percentile per-packet one-way delay: 163.415 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 122.28 Mbit/s

95th percentile per-packet one-way delay: 163.518 ms

Loss rate: 1.67%

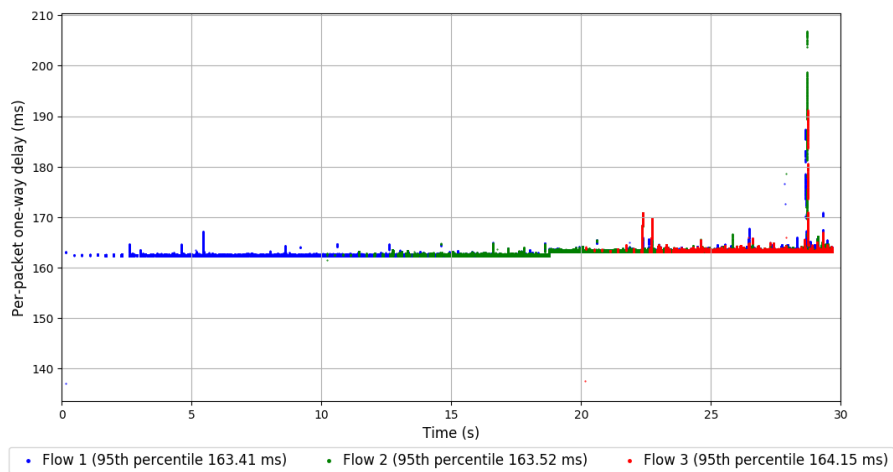
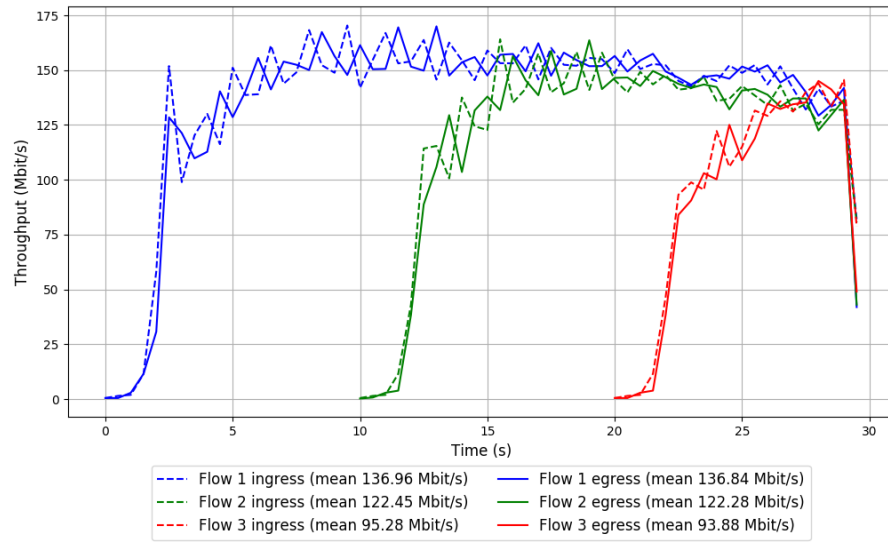
-- Flow 3:

Average throughput: 93.88 Mbit/s

95th percentile per-packet one-way delay: 164.150 ms

Loss rate: 4.22%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-06 11:29:52

End at: 2017-12-06 11:30:22

Below is generated by plot.py at 2017-12-06 15:16:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.58 Mbit/s

95th percentile per-packet one-way delay: 163.167 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 142.14 Mbit/s

95th percentile per-packet one-way delay: 137.830 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 135.39 Mbit/s

95th percentile per-packet one-way delay: 163.172 ms

Loss rate: 1.10%

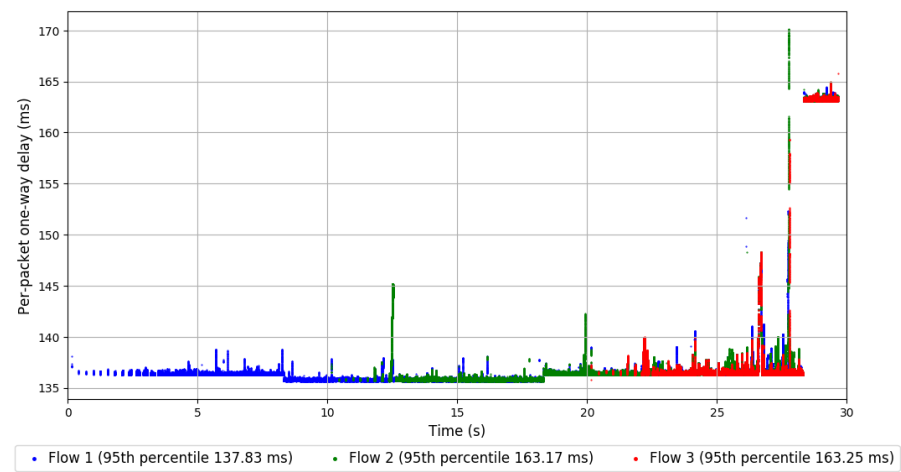
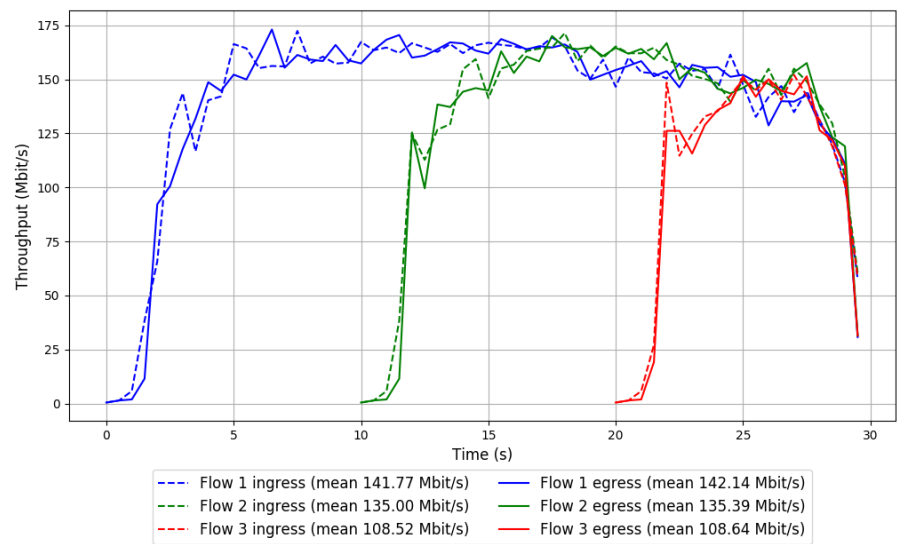
-- Flow 3:

Average throughput: 108.64 Mbit/s

95th percentile per-packet one-way delay: 163.252 ms

Loss rate: 2.65%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-06 11:43:42

End at: 2017-12-06 11:44:12

Below is generated by plot.py at 2017-12-06 15:16:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 216.16 Mbit/s

95th percentile per-packet one-way delay: 163.244 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 95.63 Mbit/s

95th percentile per-packet one-way delay: 163.239 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 127.01 Mbit/s

95th percentile per-packet one-way delay: 163.276 ms

Loss rate: 0.96%

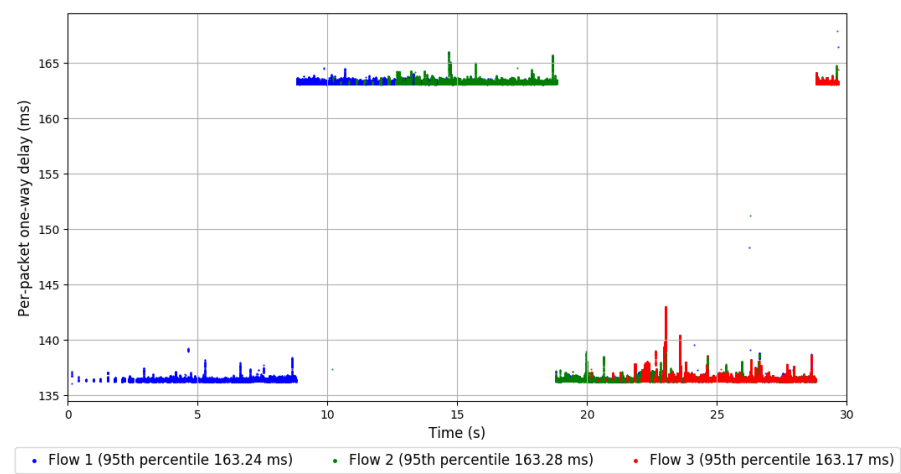
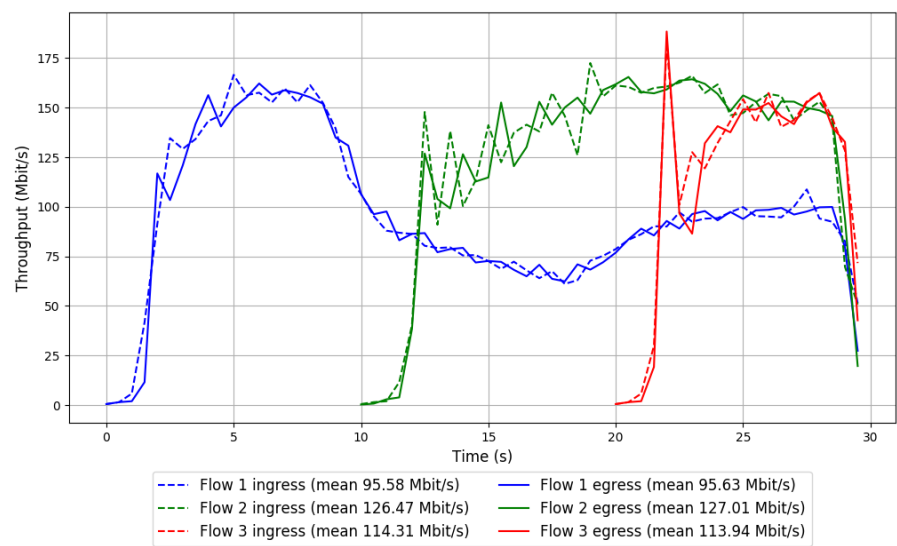
-- Flow 3:

Average throughput: 113.94 Mbit/s

95th percentile per-packet one-way delay: 163.173 ms

Loss rate: 3.10%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-06 11:56:56

End at: 2017-12-06 11:57:26

Below is generated by plot.py at 2017-12-06 15:18:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.70 Mbit/s

95th percentile per-packet one-way delay: 162.870 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 101.43 Mbit/s

95th percentile per-packet one-way delay: 162.802 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 68.14 Mbit/s

95th percentile per-packet one-way delay: 162.924 ms

Loss rate: 0.89%

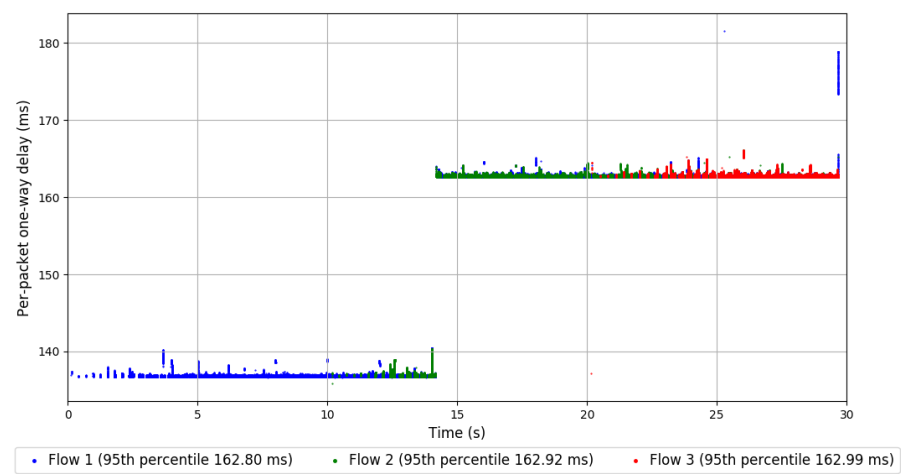
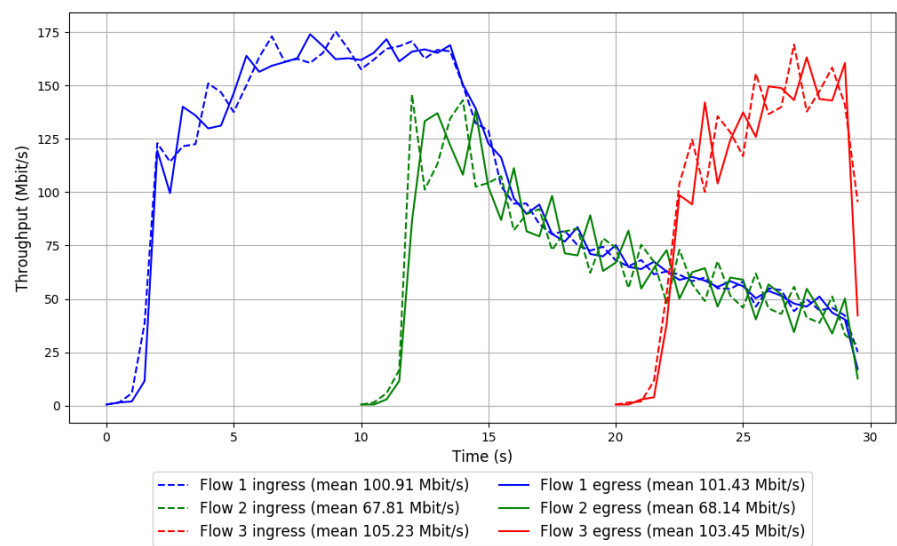
-- Flow 3:

Average throughput: 103.45 Mbit/s

95th percentile per-packet one-way delay: 162.987 ms

Loss rate: 4.44%

Run 9: Report of Indigo — Data Link

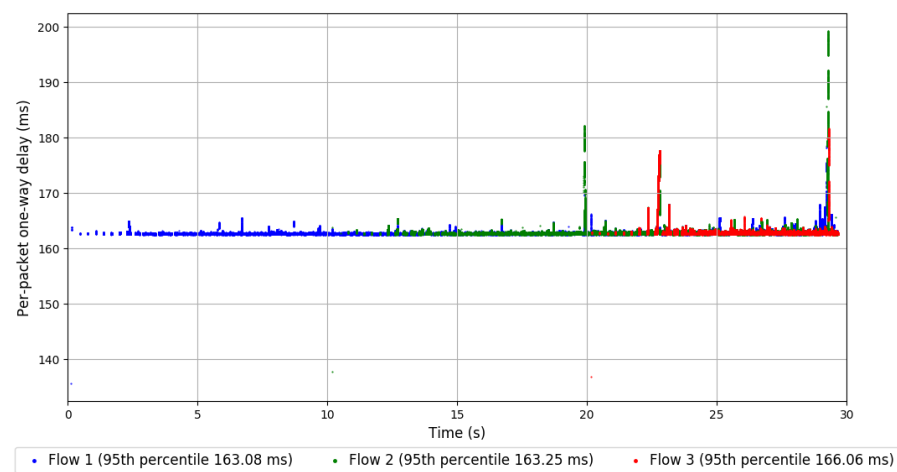
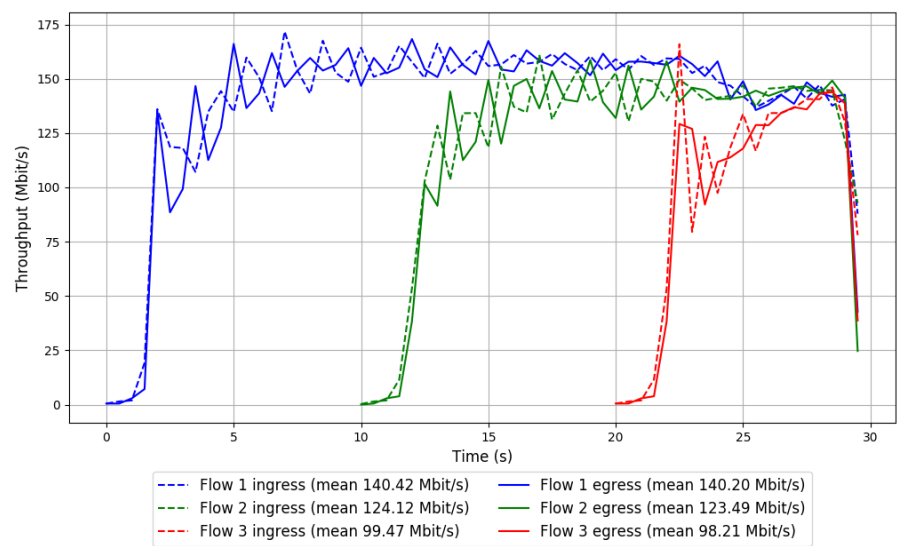


```
Run 10: Statistics of Indigo

Start at: 2017-12-06 12:10:22
End at: 2017-12-06 12:10:52

# Below is generated by plot.py at 2017-12-06 15:19:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 253.24 Mbit/s
95th percentile per-packet one-way delay: 163.224 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 140.20 Mbit/s
95th percentile per-packet one-way delay: 163.077 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 123.49 Mbit/s
95th percentile per-packet one-way delay: 163.250 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 98.21 Mbit/s
95th percentile per-packet one-way delay: 166.064 ms
Loss rate: 4.01%
```

Run 10: Report of Indigo — Data Link

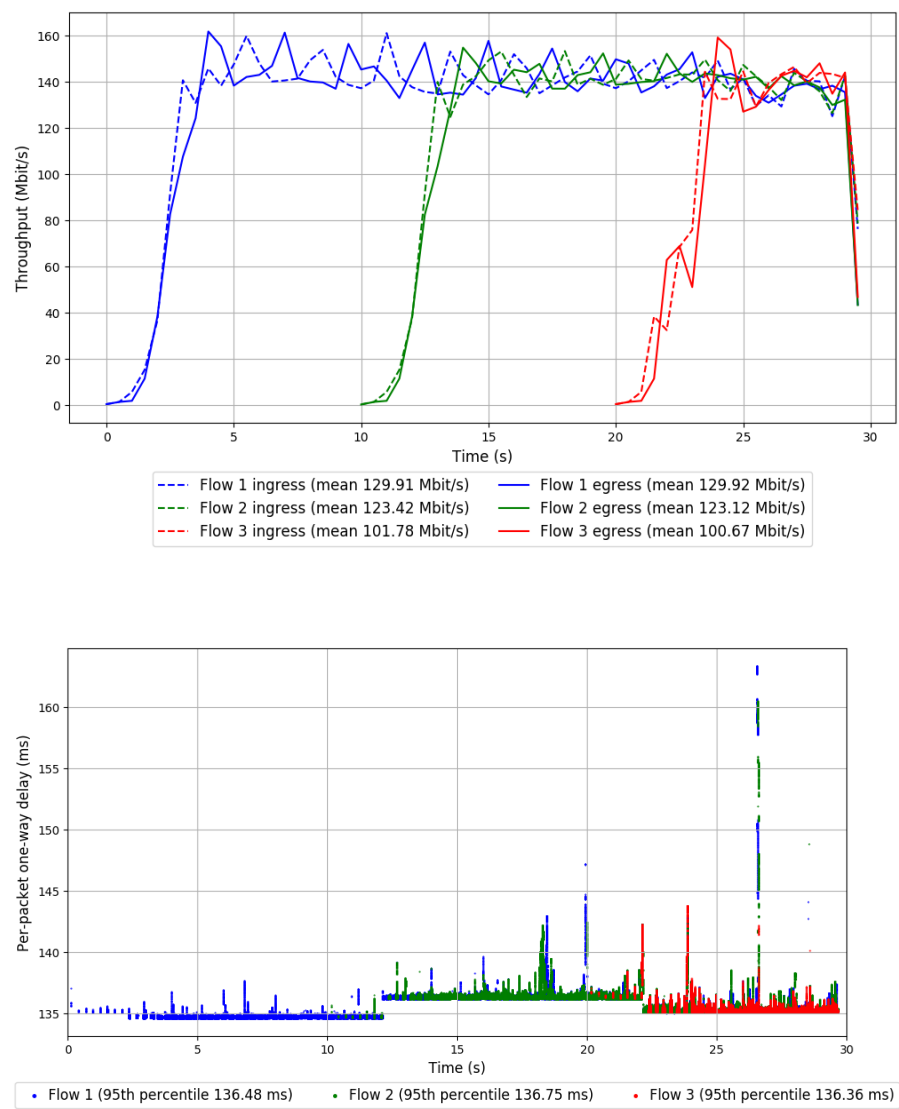


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-06 10:05:58
End at: 2017-12-06 10:06:28

# Below is generated by plot.py at 2017-12-06 15:19:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 243.69 Mbit/s
95th percentile per-packet one-way delay: 136.550 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 129.92 Mbit/s
95th percentile per-packet one-way delay: 136.482 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 123.12 Mbit/s
95th percentile per-packet one-way delay: 136.748 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 100.67 Mbit/s
95th percentile per-packet one-way delay: 136.364 ms
Loss rate: 3.86%
```

Run 1: Report of Indigo-calib — Data Link

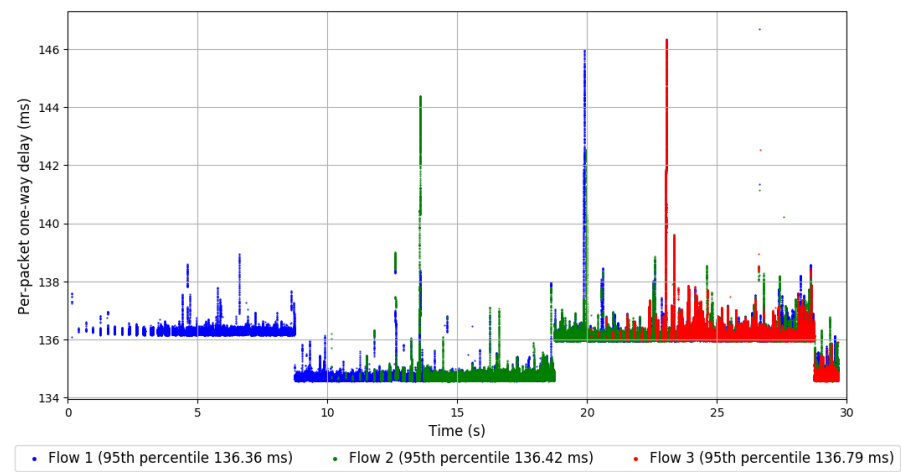
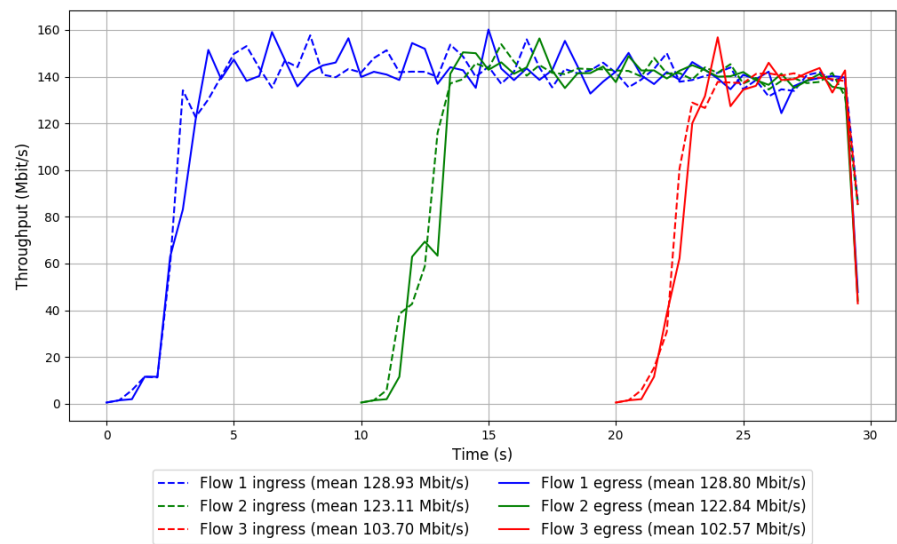


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-06 10:19:52
End at: 2017-12-06 10:20:22

# Below is generated by plot.py at 2017-12-06 15:20:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 243.03 Mbit/s
95th percentile per-packet one-way delay: 136.433 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 128.80 Mbit/s
95th percentile per-packet one-way delay: 136.356 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 122.84 Mbit/s
95th percentile per-packet one-way delay: 136.422 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 102.57 Mbit/s
95th percentile per-packet one-way delay: 136.791 ms
Loss rate: 3.85%
```

Run 2: Report of Indigo-calib — Data Link

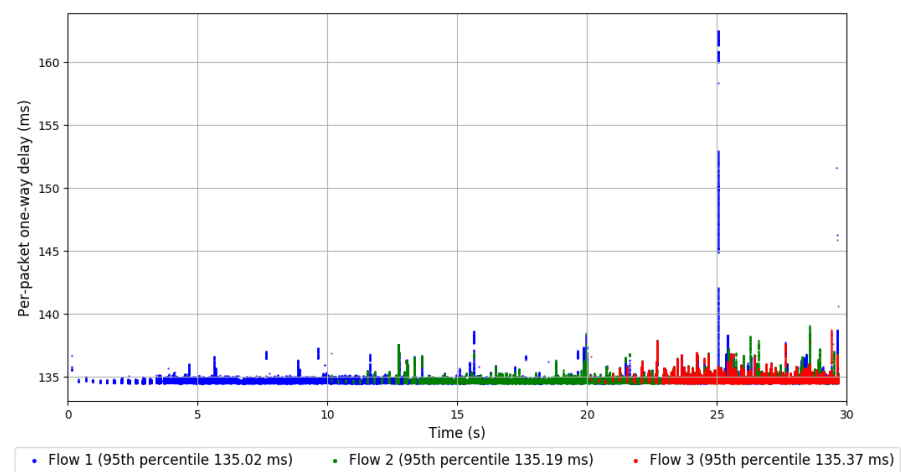
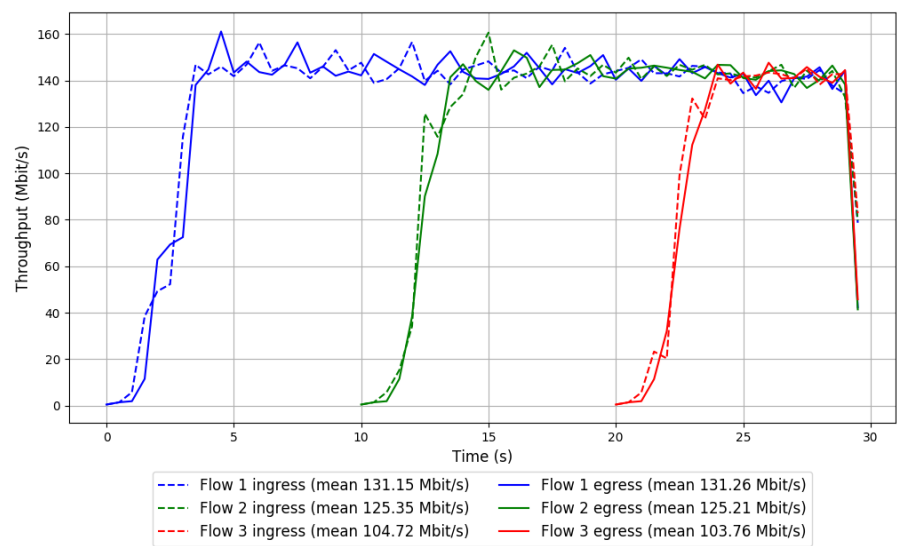


```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-06 10:33:39
End at: 2017-12-06 10:34:09

# Below is generated by plot.py at 2017-12-06 15:20:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 247.42 Mbit/s
95th percentile per-packet one-way delay: 135.145 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 131.26 Mbit/s
95th percentile per-packet one-way delay: 135.019 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 125.21 Mbit/s
95th percentile per-packet one-way delay: 135.194 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 103.76 Mbit/s
95th percentile per-packet one-way delay: 135.372 ms
Loss rate: 3.67%
```


Run 3: Report of Indigo-calib — Data Link

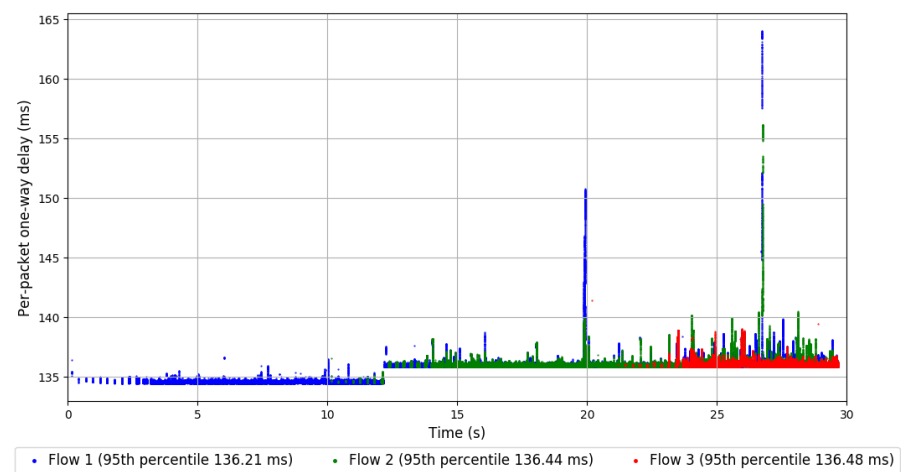
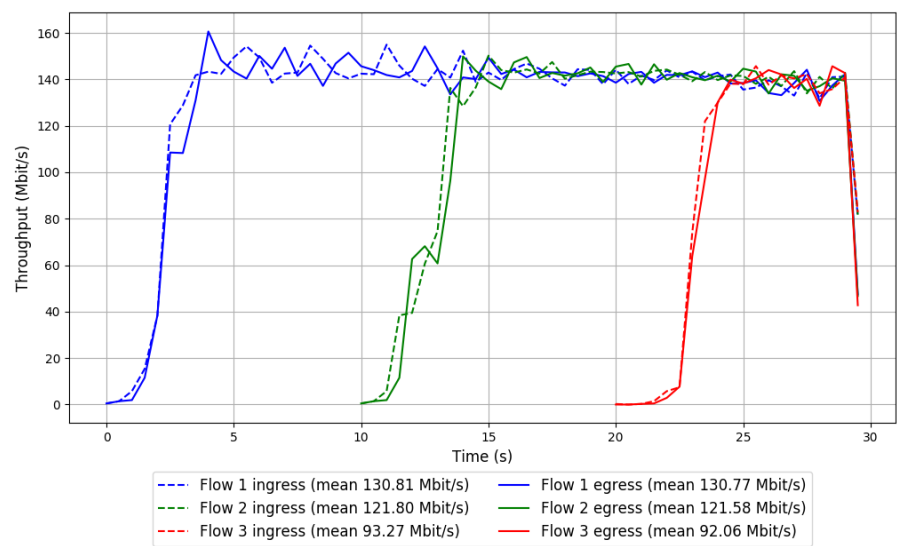


```
Run 4: Statistics of Indigo-calib

Start at: 2017-12-06 10:47:08
End at: 2017-12-06 10:47:38

# Below is generated by plot.py at 2017-12-06 15:20:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 240.62 Mbit/s
95th percentile per-packet one-way delay: 136.324 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 130.77 Mbit/s
95th percentile per-packet one-way delay: 136.206 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 121.58 Mbit/s
95th percentile per-packet one-way delay: 136.436 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 92.06 Mbit/s
95th percentile per-packet one-way delay: 136.476 ms
Loss rate: 4.12%
```

Run 4: Report of Indigo-calib — Data Link

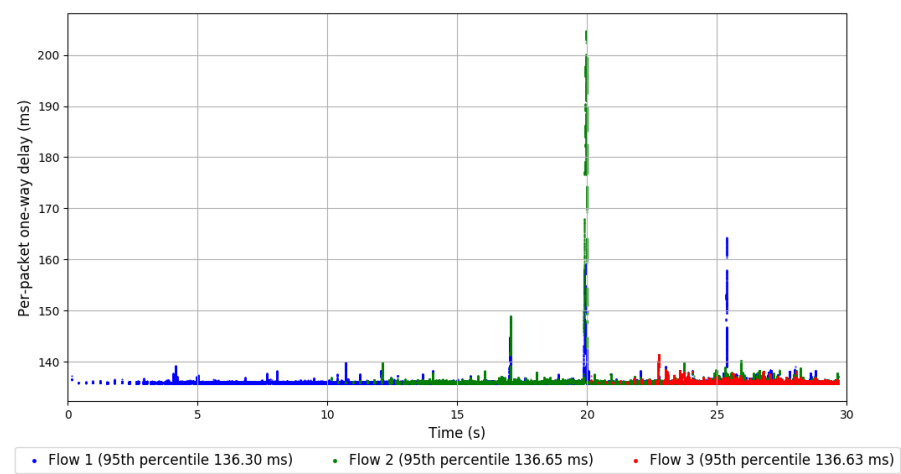
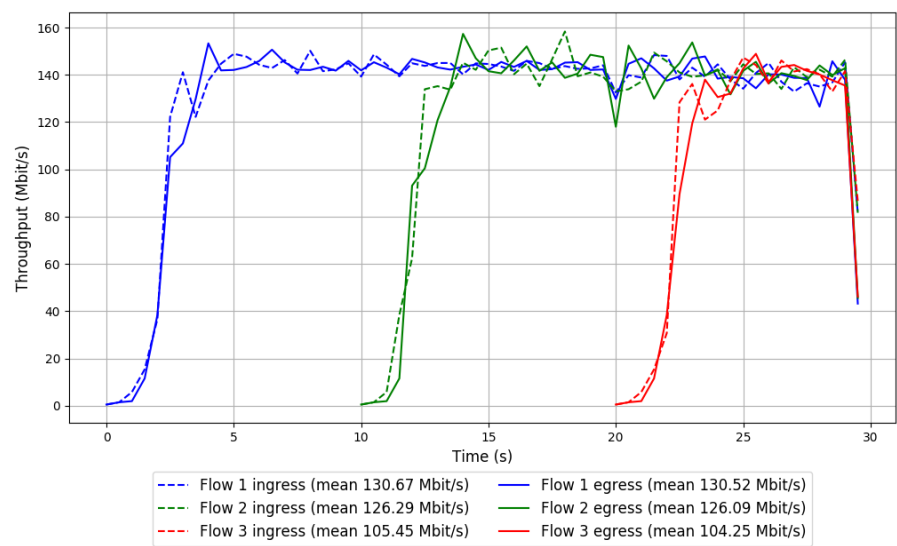


```
Run 5: Statistics of Indigo-calib

Start at: 2017-12-06 11:00:56
End at: 2017-12-06 11:01:26

# Below is generated by plot.py at 2017-12-06 15:20:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 247.39 Mbit/s
95th percentile per-packet one-way delay: 136.465 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 130.52 Mbit/s
95th percentile per-packet one-way delay: 136.301 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 126.09 Mbit/s
95th percentile per-packet one-way delay: 136.651 ms
Loss rate: 1.52%
-- Flow 3:
Average throughput: 104.25 Mbit/s
95th percentile per-packet one-way delay: 136.632 ms
Loss rate: 3.89%
```

Run 5: Report of Indigo-calib — Data Link

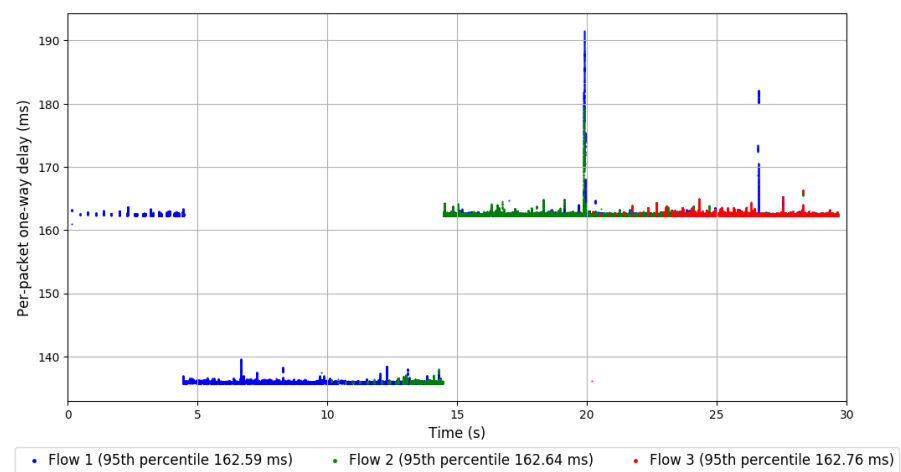
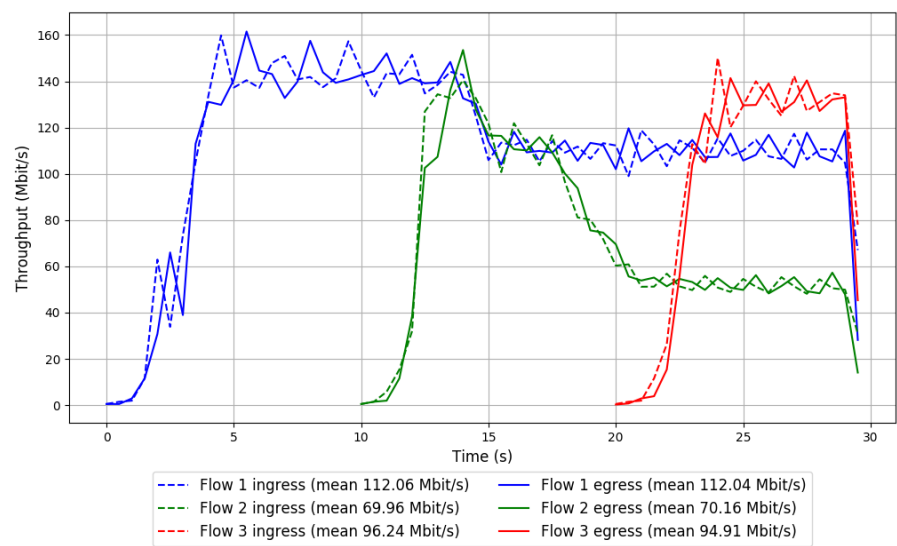


```
Run 6: Statistics of Indigo-calib

Start at: 2017-12-06 11:14:36
End at: 2017-12-06 11:15:06

# Below is generated by plot.py at 2017-12-06 15:20:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 188.82 Mbit/s
95th percentile per-packet one-way delay: 162.629 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 112.04 Mbit/s
95th percentile per-packet one-way delay: 162.591 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 70.16 Mbit/s
95th percentile per-packet one-way delay: 162.643 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 94.91 Mbit/s
95th percentile per-packet one-way delay: 162.756 ms
Loss rate: 4.14%
```

Run 6: Report of Indigo-calib — Data Link

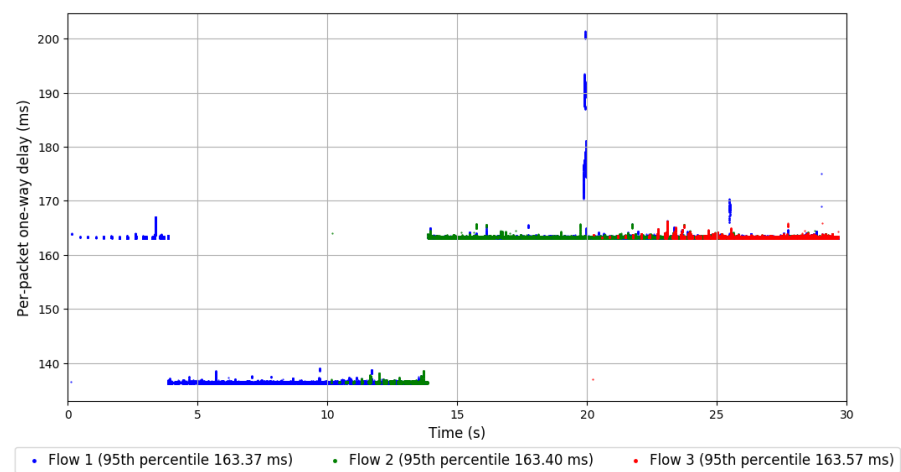
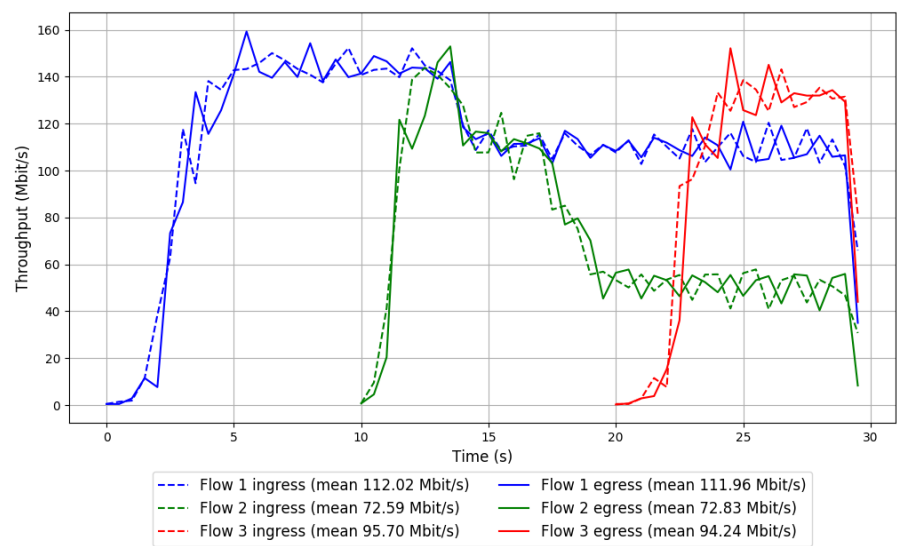


```
Run 7: Statistics of Indigo-calib

Start at: 2017-12-06 11:27:57
End at: 2017-12-06 11:28:27

# Below is generated by plot.py at 2017-12-06 15:21:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 190.05 Mbit/s
95th percentile per-packet one-way delay: 163.400 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 111.96 Mbit/s
95th percentile per-packet one-way delay: 163.370 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 72.83 Mbit/s
95th percentile per-packet one-way delay: 163.401 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 94.24 Mbit/s
95th percentile per-packet one-way delay: 163.575 ms
Loss rate: 4.30%
```


Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-06 11:41:42

End at: 2017-12-06 11:42:12

Below is generated by plot.py at 2017-12-06 15:21:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 245.60 Mbit/s

95th percentile per-packet one-way delay: 136.763 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 130.31 Mbit/s

95th percentile per-packet one-way delay: 136.670 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 123.65 Mbit/s

95th percentile per-packet one-way delay: 136.796 ms

Loss rate: 1.55%

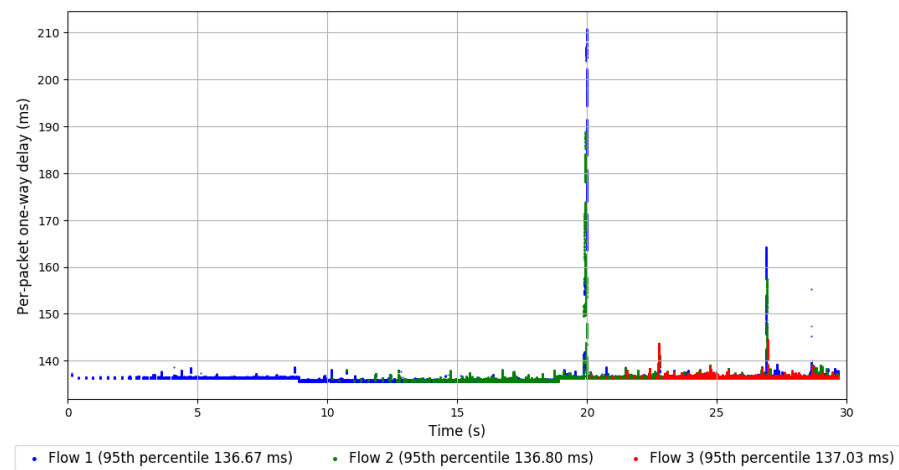
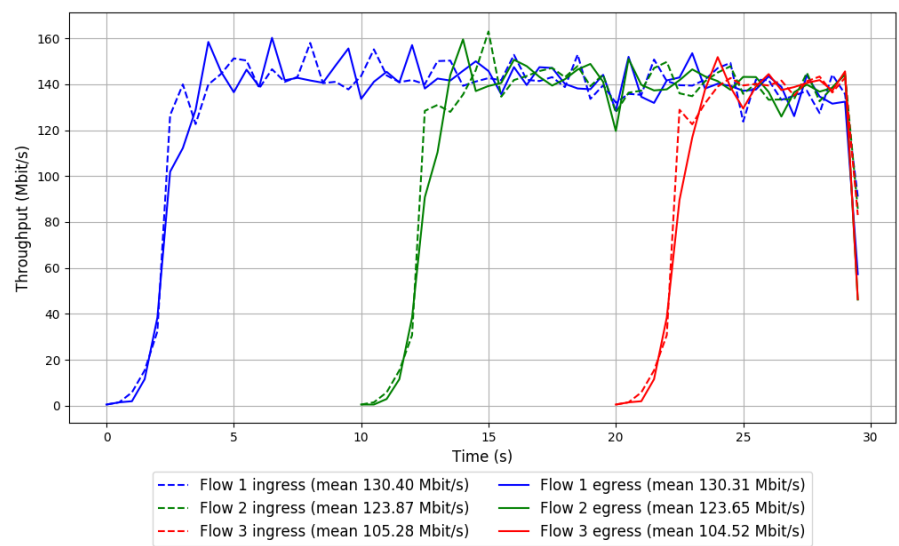
-- Flow 3:

Average throughput: 104.52 Mbit/s

95th percentile per-packet one-way delay: 137.028 ms

Loss rate: 3.50%

Run 8: Report of Indigo-calib — Data Link

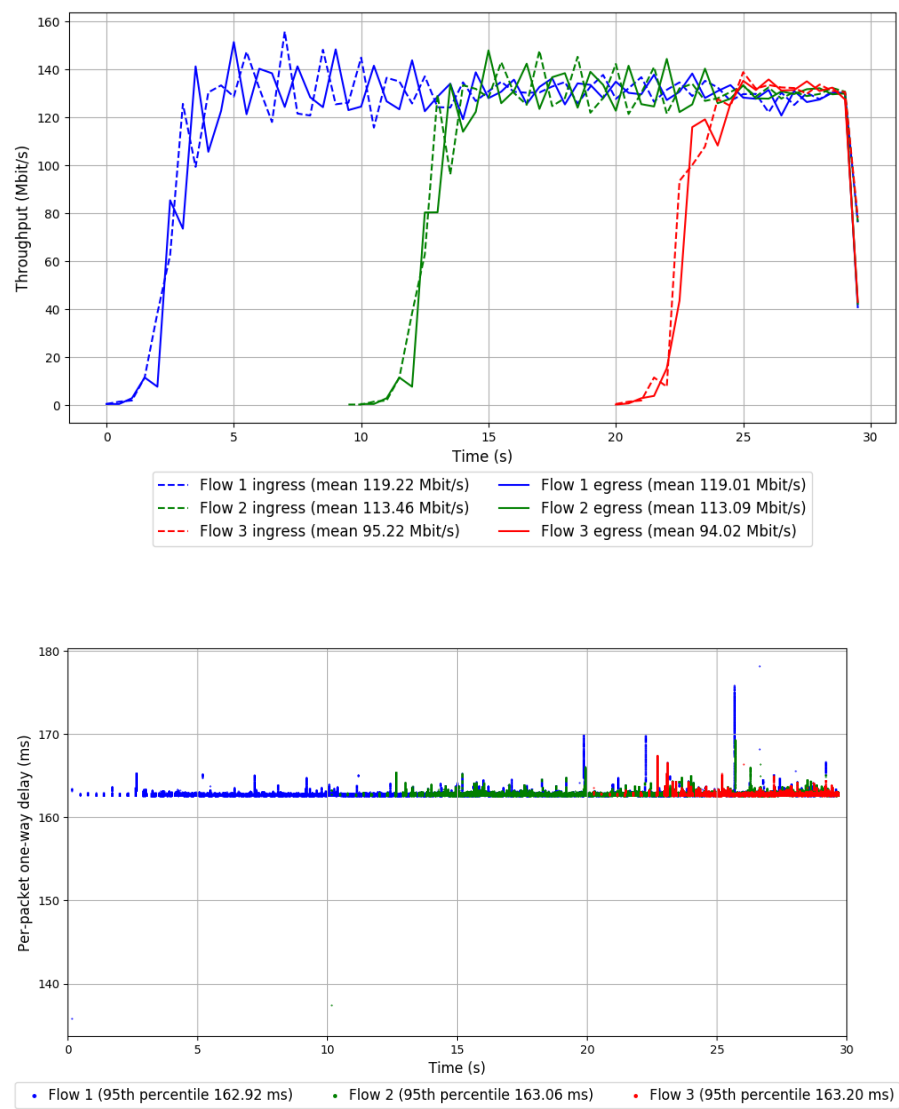


```
Run 9: Statistics of Indigo-calib

Start at: 2017-12-06 11:54:57
End at: 2017-12-06 11:55:27

# Below is generated by plot.py at 2017-12-06 15:21:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 223.78 Mbit/s
95th percentile per-packet one-way delay: 163.000 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 119.01 Mbit/s
95th percentile per-packet one-way delay: 162.921 ms
Loss rate: 1.09%
-- Flow 2:
Average throughput: 113.09 Mbit/s
95th percentile per-packet one-way delay: 163.063 ms
Loss rate: 1.71%
-- Flow 3:
Average throughput: 94.02 Mbit/s
95th percentile per-packet one-way delay: 163.200 ms
Loss rate: 4.30%
```

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-06 12:08:27

End at: 2017-12-06 12:08:57

Below is generated by plot.py at 2017-12-06 15:21:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 162.04 Mbit/s

95th percentile per-packet one-way delay: 162.816 ms

Loss rate: 1.92%

-- Flow 1:

Average throughput: 51.27 Mbit/s

95th percentile per-packet one-way delay: 162.812 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 117.82 Mbit/s

95th percentile per-packet one-way delay: 162.831 ms

Loss rate: 1.65%

-- Flow 3:

Average throughput: 102.21 Mbit/s

95th percentile per-packet one-way delay: 162.767 ms

Loss rate: 4.01%

Run 10: Report of Indigo-calib — Data Link

