

## Pantheon Report

Generated at 2018-01-10 07:52:47 (UTC).

Data path: Mexico Ethernet (*remote*) → AWS California 2 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).

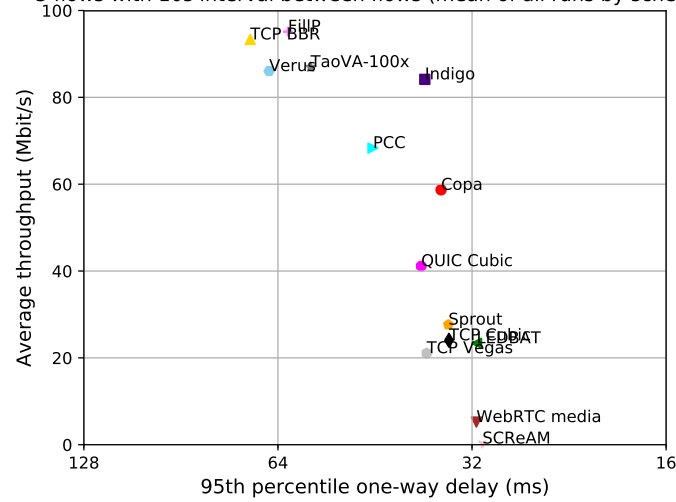
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo\_fast**).

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

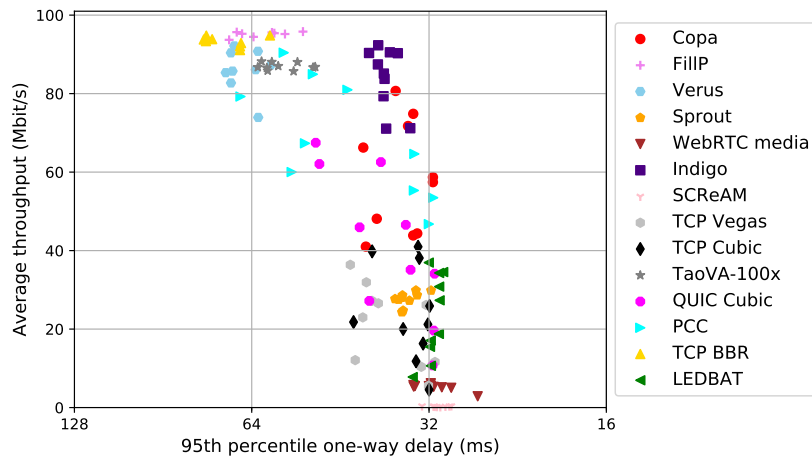
Git summary:

```
branch: master @ 56d1792c316a5efca3f2d21342905405fedffb48
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ 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 Mexico Ethernet to AWS California 2 Ethernet, 10 runs of 30s each per scheme  
3 flows with 10s interval between flows (mean of all runs by scheme)



test from Mexico Ethernet to AWS California 2 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      | 8      | 54.47                  | 41.67  | 30.31  | 70.14                     | 63.33  | 69.65  | 1.71               | 1.81   | 2.41   |
| TCP Cubic    | 10     | 9.96                   | 12.87  | 16.66  | 32.93                     | 35.58  | 36.59  | 0.97               | 0.92   | 1.14   |
| LEDBAT       | 10     | 12.83                  | 11.14  | 9.57   | 31.42                     | 31.58  | 31.58  | 0.83               | 1.06   | 1.47   |
| PCC          | 10     | 43.11                  | 30.62  | 14.65  | 42.41                     | 43.80  | 44.89  | 1.13               | 1.31   | 1.76   |
| QUIC Cubic   | 10     | 18.17                  | 23.17  | 23.09  | 32.37                     | 37.74  | 39.04  | 0.90               | 0.96   | 1.22   |
| SCReAM       | 9      | 20.57                  | 0.17   | 0.21   | 605.78                    | 30.40  | 30.42  | 0.93               | 0.90   | 0.69   |
| WebRTC media | 10     | 2.63                   | 1.89   | 0.71   | 31.38                     | 31.45  | 31.41  | 1.07               | 1.21   | 1.57   |
| Sprout       | 10     | 14.09                  | 13.74  | 13.39  | 34.43                     | 35.06  | 35.48  | 1.18               | 1.34   | 1.57   |
| TaoVA-100x   | 10     | 52.56                  | 38.91  | 33.16  | 55.35                     | 57.61  | 59.38  | 1.25               | 1.60   | 2.10   |
| TCP Vegas    | 10     | 10.47                  | 9.40   | 13.16  | 35.51                     | 35.99  | 38.25  | 0.88               | 0.92   | 1.06   |
| Verus        | 9      | 52.80                  | 35.11  | 30.07  | 60.11                     | 65.87  | 66.59  | 1.46               | 1.41   | 1.98   |
| Copa         | 10     | 52.48                  | 30.11  | 18.82  | 33.58                     | 36.00  | 36.19  | 5.81               | 1.06   | 1.53   |
| FillP        | 8      | 59.22                  | 42.86  | 26.94  | 57.86                     | 58.57  | 67.77  | 1.69               | 2.64   | 4.80   |
| Indigo       | 10     | 52.63                  | 32.93  | 30.19  | 37.91                     | 37.47  | 41.88  | 1.45               | 1.62   | 2.14   |

Run 1: Statistics of TCP BBR

Start at: 2018-01-09 23:46:11

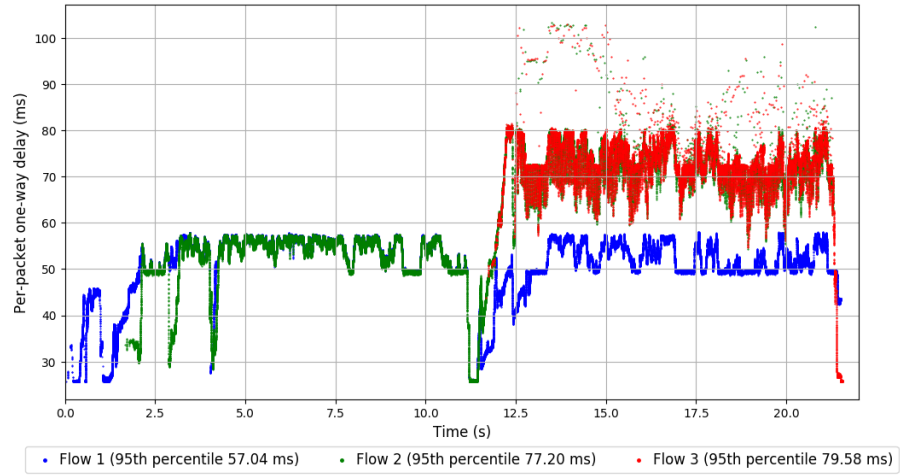
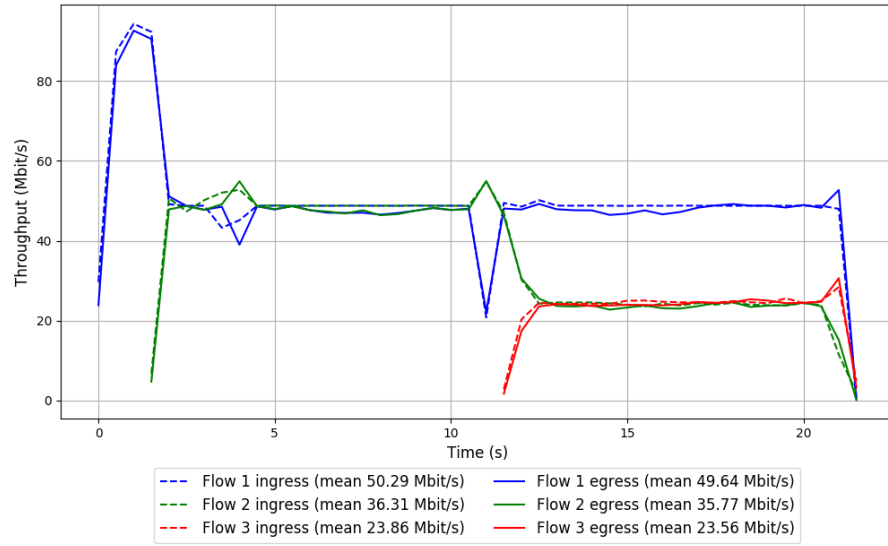
End at: 2018-01-09 23:46:41

Local clock offset: -0.049 ms

Remote clock offset: -3.19 ms



# Run 1: Report of TCP BBR — Data Link

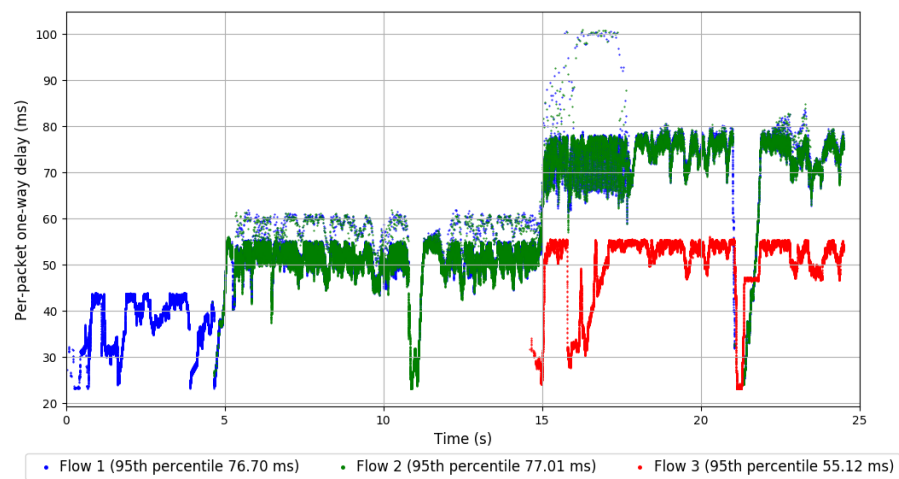
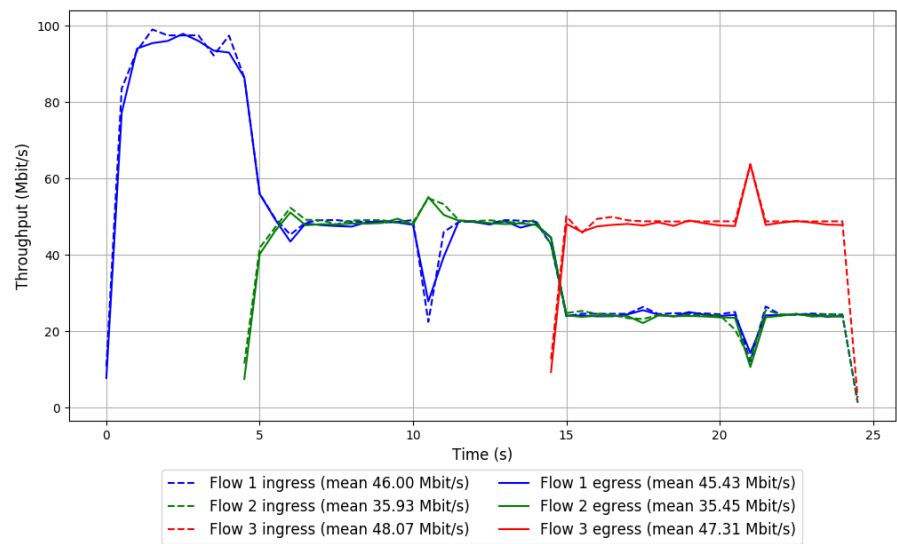


Run 2: Statistics of TCP BBR

Start at: 2018-01-10 00:07:53  
End at: 2018-01-10 00:08:23  
Local clock offset: 0.153 ms  
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-01-10 07:25:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 93.38 Mbit/s  
95th percentile per-packet one-way delay: 76.554 ms  
Loss rate: 1.73%  
-- Flow 1:  
Average throughput: 45.43 Mbit/s  
95th percentile per-packet one-way delay: 76.699 ms  
Loss rate: 1.56%  
-- Flow 2:  
Average throughput: 35.45 Mbit/s  
95th percentile per-packet one-way delay: 77.010 ms  
Loss rate: 1.70%  
-- Flow 3:  
Average throughput: 47.31 Mbit/s  
95th percentile per-packet one-way delay: 55.116 ms  
Loss rate: 2.19%

Run 2: Report of TCP BBR — Data Link

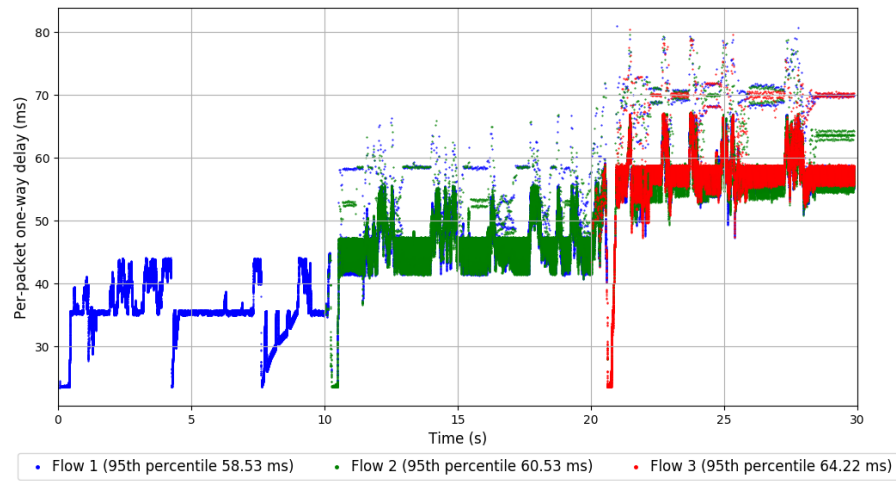
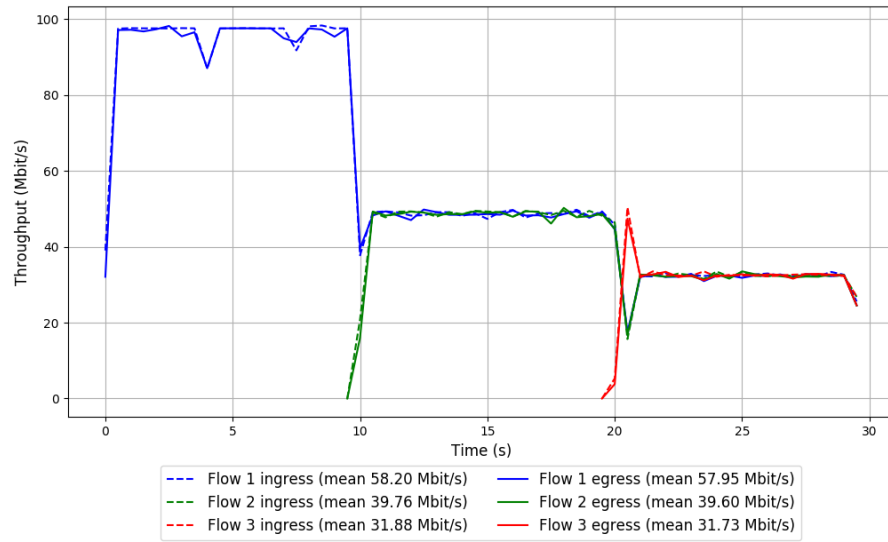


Run 3: Statistics of TCP BBR

Start at: 2018-01-10 00:29:06  
End at: 2018-01-10 00:29:36  
Local clock offset: 0.09 ms  
Remote clock offset: -0.999 ms

# Below is generated by plot.py at 2018-01-10 07:25:53  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.82 Mbit/s  
95th percentile per-packet one-way delay: 59.595 ms  
Loss rate: 0.79%  
-- Flow 1:  
Average throughput: 57.95 Mbit/s  
95th percentile per-packet one-way delay: 58.526 ms  
Loss rate: 0.67%  
-- Flow 2:  
Average throughput: 39.60 Mbit/s  
95th percentile per-packet one-way delay: 60.527 ms  
Loss rate: 0.84%  
-- Flow 3:  
Average throughput: 31.73 Mbit/s  
95th percentile per-packet one-way delay: 64.216 ms  
Loss rate: 1.33%

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



Run 4: Statistics of TCP BBR

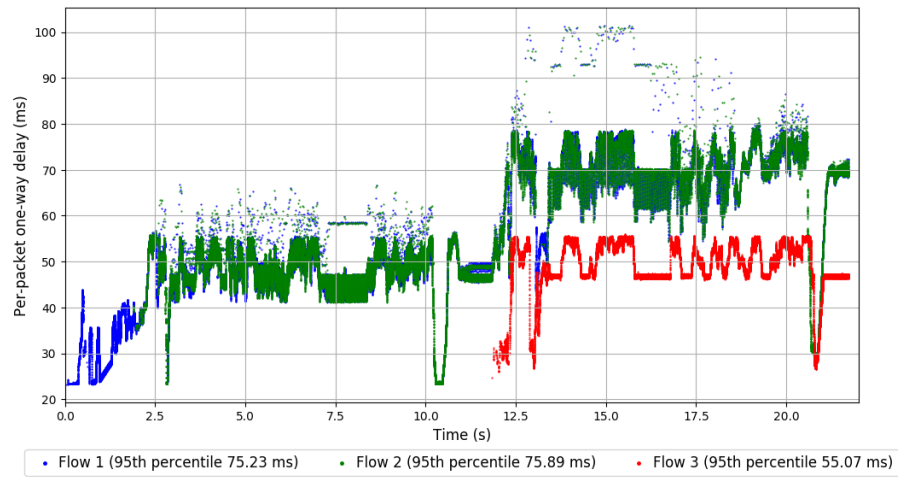
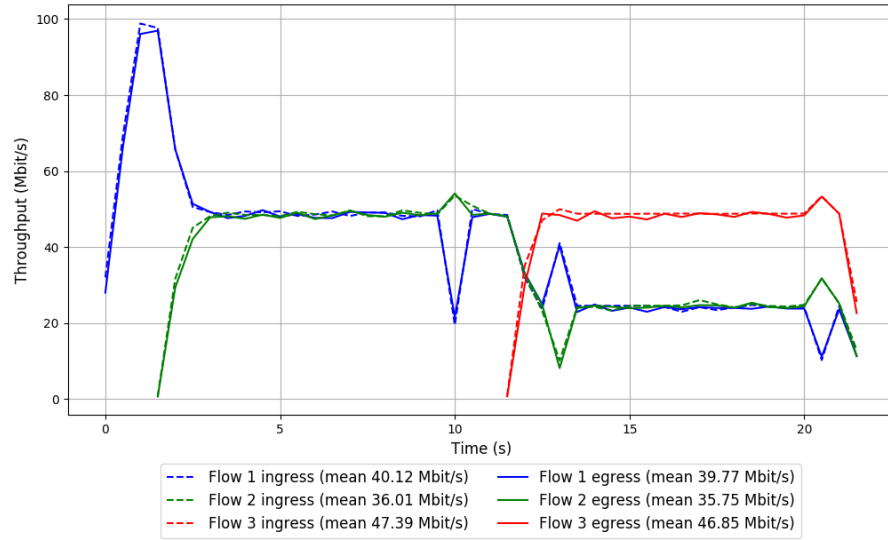
Start at: 2018-01-10 00:50:22

End at: 2018-01-10 00:50:52

Local clock offset: 0.127 ms

Remote clock offset: -0.636 ms

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



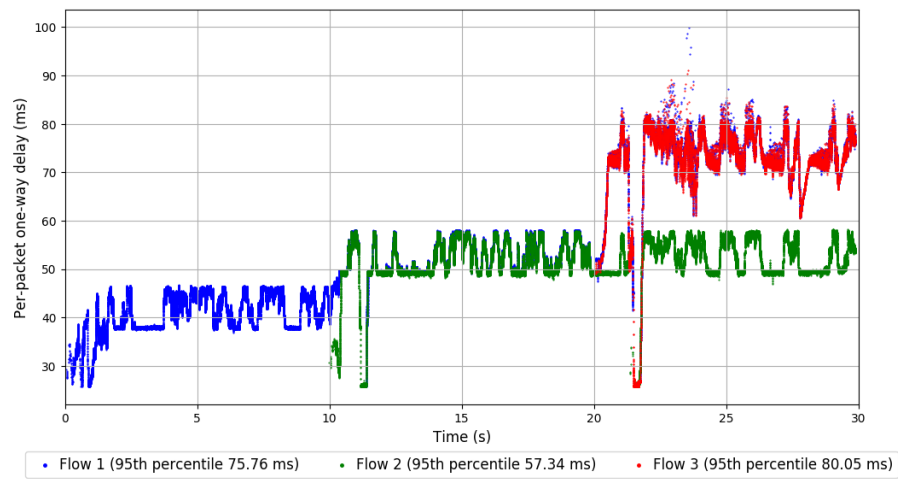
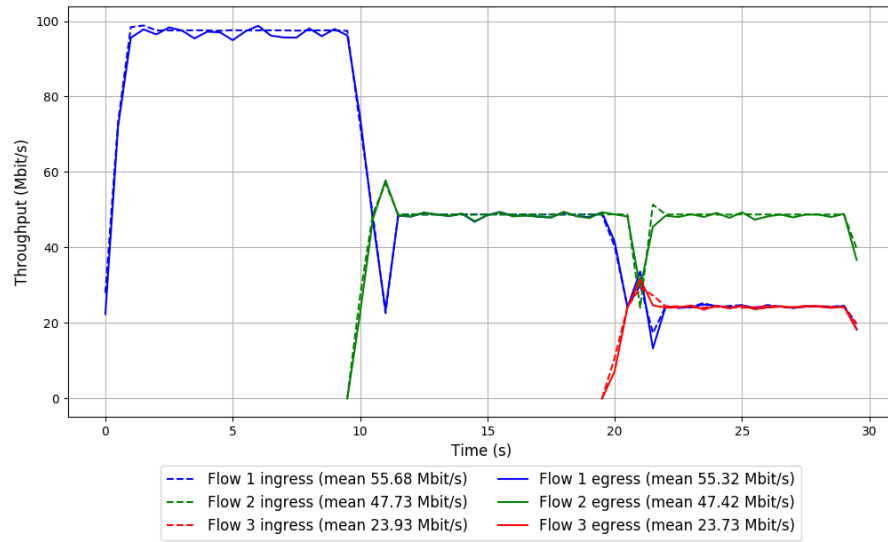
Run 5: Statistics of TCP BBR

Start at: 2018-01-10 01:11:37  
End at: 2018-01-10 01:12:07  
Local clock offset: -0.099 ms  
Remote clock offset: -1.873 ms

# Below is generated by plot.py at 2018-01-10 07:25:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.78 Mbit/s  
95th percentile per-packet one-way delay: 76.431 ms  
Loss rate: 0.94%  
-- Flow 1:  
Average throughput: 55.32 Mbit/s  
95th percentile per-packet one-way delay: 75.757 ms  
Loss rate: 0.84%  
-- Flow 2:  
Average throughput: 47.42 Mbit/s  
95th percentile per-packet one-way delay: 57.337 ms  
Loss rate: 0.96%  
-- Flow 3:  
Average throughput: 23.73 Mbit/s  
95th percentile per-packet one-way delay: 80.051 ms  
Loss rate: 1.56%



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



Run 6: Statistics of TCP BBR

Start at: 2018-01-10 01:33:38

End at: 2018-01-10 01:34:08

Local clock offset: 0.071 ms

Remote clock offset: 1.891 ms

# Below is generated by plot.py at 2018-01-10 07:25:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 92.04 Mbit/s

95th percentile per-packet one-way delay: 67.007 ms

Loss rate: 2.18%

-- Flow 1:

Average throughput: 55.61 Mbit/s

95th percentile per-packet one-way delay: 66.402 ms

Loss rate: 2.12%

-- Flow 2:

Average throughput: 39.12 Mbit/s

95th percentile per-packet one-way delay: 67.133 ms

Loss rate: 2.00%

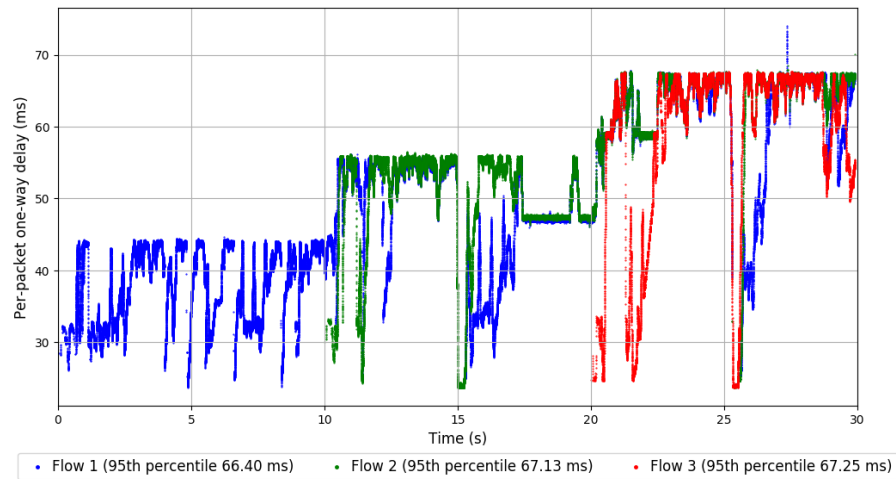
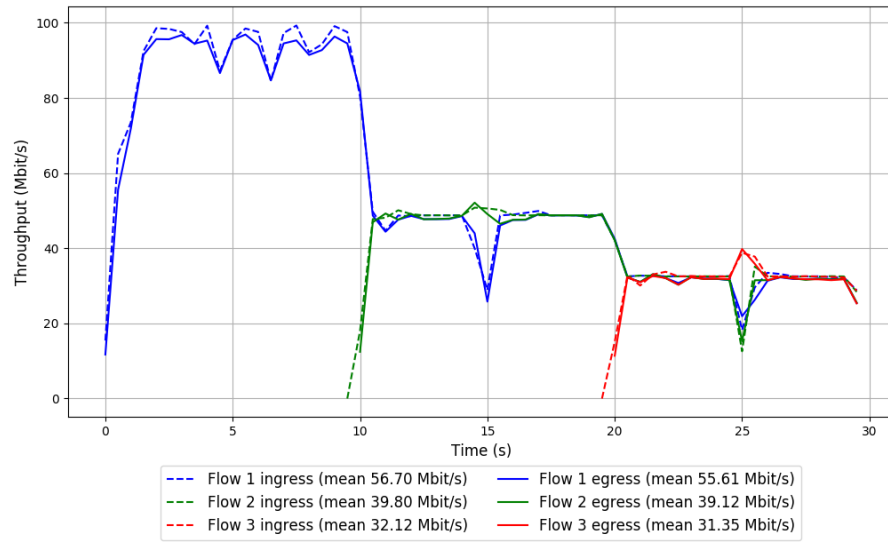
-- Flow 3:

Average throughput: 31.35 Mbit/s

95th percentile per-packet one-way delay: 67.248 ms

Loss rate: 2.95%

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



Run 7: Statistics of TCP BBR

Start at: 2018-01-10 01:55:08

End at: 2018-01-10 01:55:38

Local clock offset: -0.117 ms

Remote clock offset: 2.782 ms

# Below is generated by plot.py at 2018-01-10 07:25:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.87 Mbit/s

95th percentile per-packet one-way delay: 74.712 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 54.84 Mbit/s

95th percentile per-packet one-way delay: 74.244 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 47.23 Mbit/s

95th percentile per-packet one-way delay: 55.131 ms

Loss rate: 1.48%

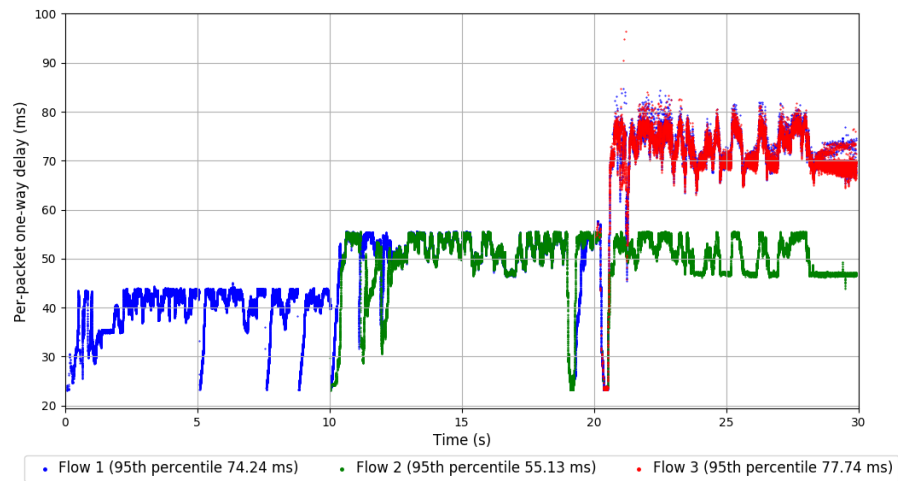
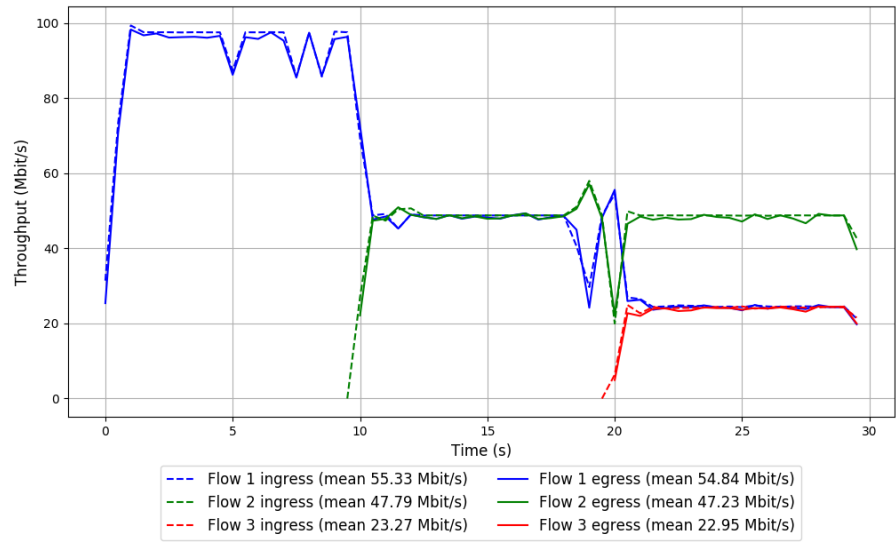
-- Flow 3:

Average throughput: 22.95 Mbit/s

95th percentile per-packet one-way delay: 77.739 ms

Loss rate: 2.24%

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



Run 8: Statistics of TCP BBR

Start at: 2018-01-10 02:17:09

End at: 2018-01-10 02:17:39

Local clock offset: -0.038 ms

Remote clock offset: 1.814 ms

# Below is generated by plot.py at 2018-01-10 07:25:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.79 Mbit/s

95th percentile per-packet one-way delay: 77.196 ms

Loss rate: 1.81%

-- Flow 1:

Average throughput: 55.08 Mbit/s

95th percentile per-packet one-way delay: 76.807 ms

Loss rate: 1.51%

-- Flow 2:

Average throughput: 46.35 Mbit/s

95th percentile per-packet one-way delay: 55.536 ms

Loss rate: 2.16%

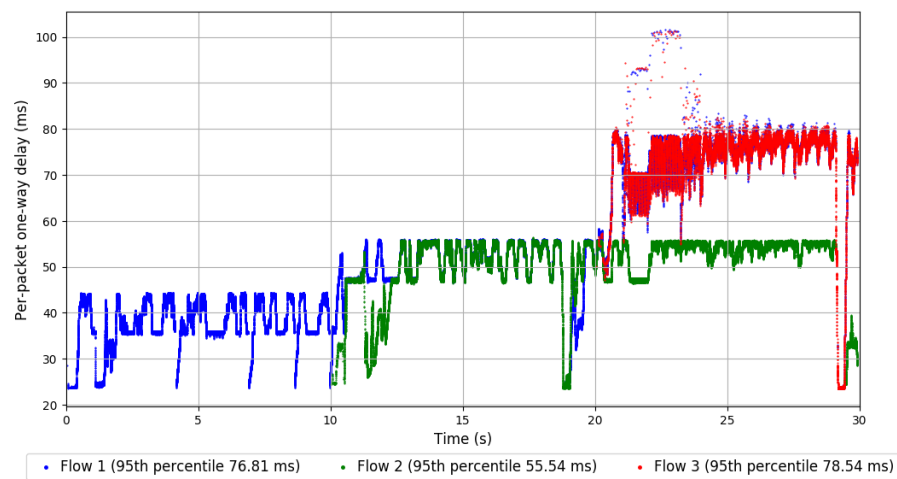
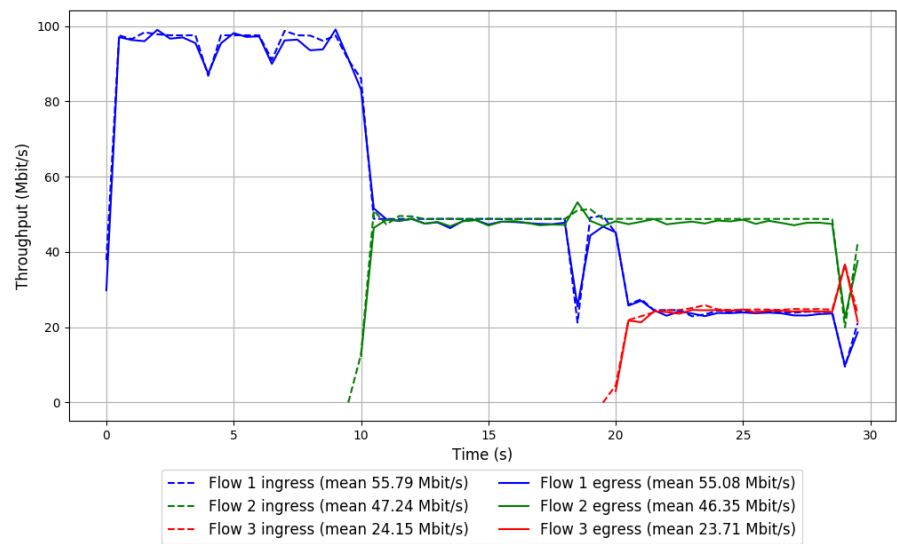
-- Flow 3:

Average throughput: 23.71 Mbit/s

95th percentile per-packet one-way delay: 78.540 ms

Loss rate: 2.59%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-10 02:39:46

End at: 2018-01-10 02:40:16

Local clock offset: -0.061 ms

Remote clock offset: 0.483 ms

# Below is generated by plot.py at 2018-01-10 07:27:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 92.88 Mbit/s

95th percentile per-packet one-way delay: 66.736 ms

Loss rate: 2.24%

-- Flow 1:

Average throughput: 56.25 Mbit/s

95th percentile per-packet one-way delay: 65.868 ms

Loss rate: 2.38%

-- Flow 2:

Average throughput: 39.30 Mbit/s

95th percentile per-packet one-way delay: 66.827 ms

Loss rate: 1.91%

-- Flow 3:

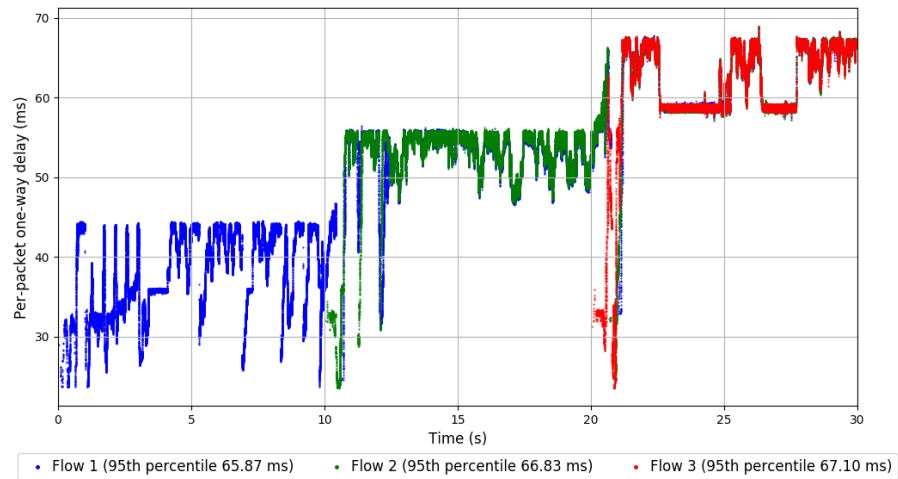
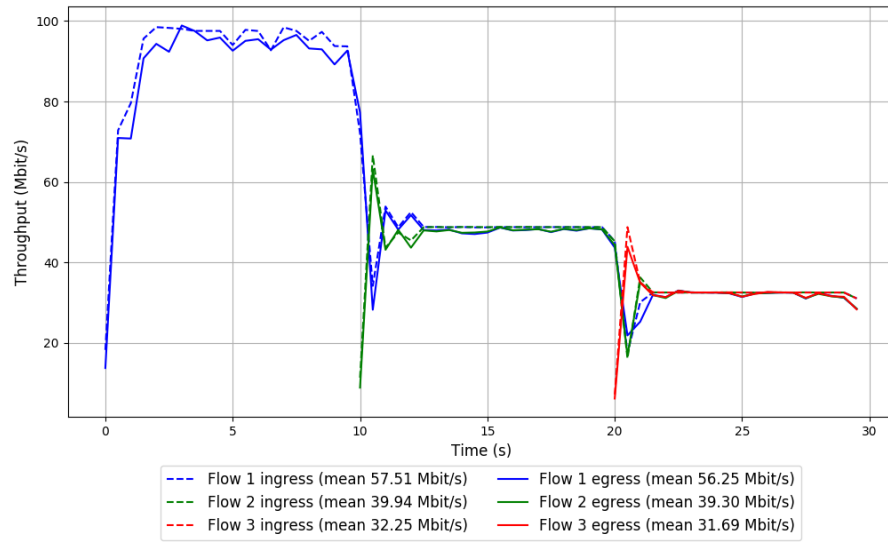
Average throughput: 31.69 Mbit/s

95th percentile per-packet one-way delay: 67.097 ms

Loss rate: 2.33%



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



Run 10: Statistics of TCP BBR

Start at: 2018-01-10 03:03:20

End at: 2018-01-10 03:03:50

Local clock offset: 0.009 ms

Remote clock offset: 0.522 ms

# Below is generated by plot.py at 2018-01-10 07:27:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 91.10 Mbit/s

95th percentile per-packet one-way delay: 67.003 ms

Loss rate: 3.52%

-- Flow 1:

Average throughput: 55.28 Mbit/s

95th percentile per-packet one-way delay: 66.805 ms

Loss rate: 3.45%

-- Flow 2:

Average throughput: 38.92 Mbit/s

95th percentile per-packet one-way delay: 67.107 ms

Loss rate: 3.45%

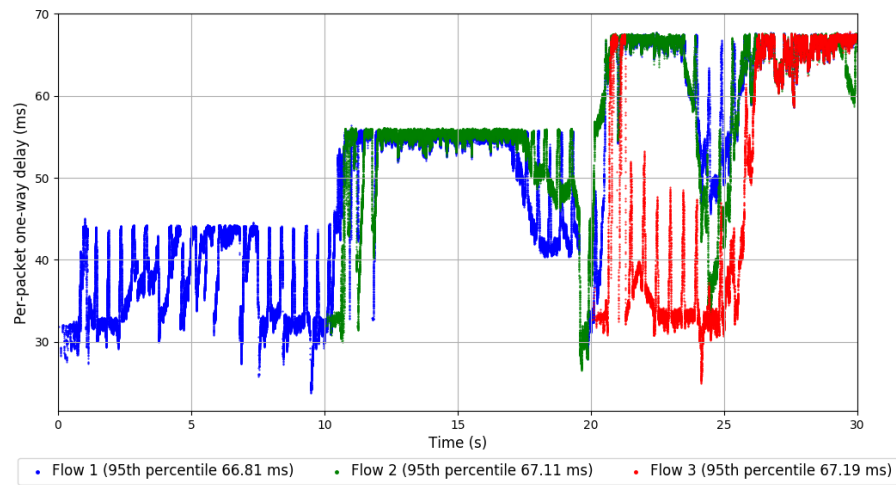
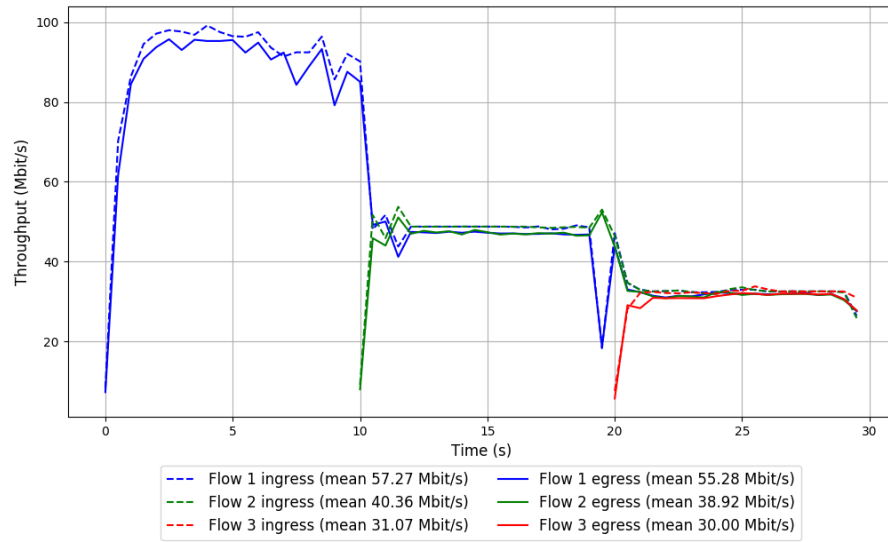
-- Flow 3:

Average throughput: 30.00 Mbit/s

95th percentile per-packet one-way delay: 67.193 ms

Loss rate: 4.06%

# Run 10: Report of TCP BBR — Data Link

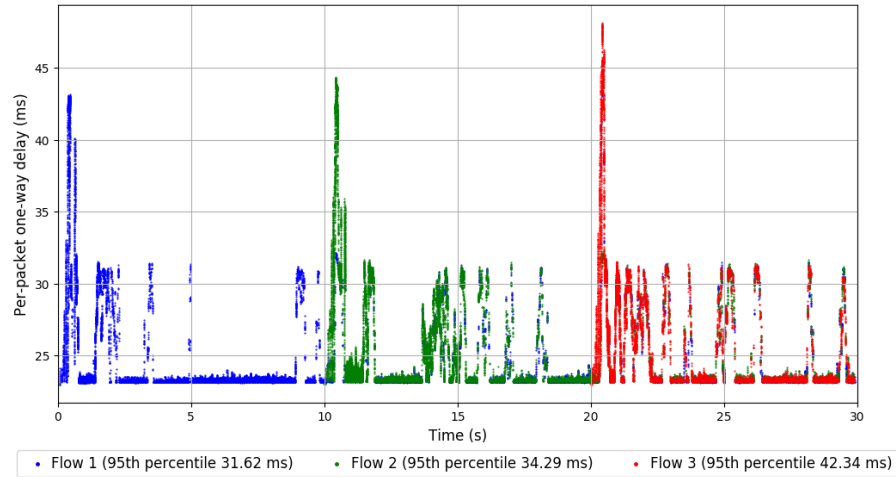
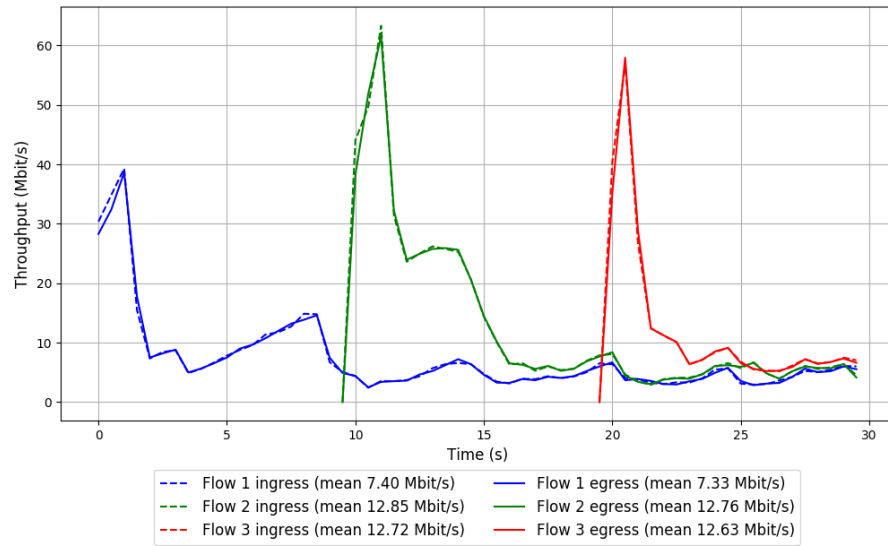


Run 1: Statistics of TCP Cubic

Start at: 2018-01-09 23:53:35  
End at: 2018-01-09 23:54:05  
Local clock offset: 0.081 ms  
Remote clock offset: -0.279 ms

# Below is generated by plot.py at 2018-01-10 07:27:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 20.02 Mbit/s  
95th percentile per-packet one-way delay: 35.406 ms  
Loss rate: 1.06%  
-- Flow 1:  
Average throughput: 7.33 Mbit/s  
95th percentile per-packet one-way delay: 31.622 ms  
Loss rate: 1.09%  
-- Flow 2:  
Average throughput: 12.76 Mbit/s  
95th percentile per-packet one-way delay: 34.292 ms  
Loss rate: 0.94%  
-- Flow 3:  
Average throughput: 12.63 Mbit/s  
95th percentile per-packet one-way delay: 42.340 ms  
Loss rate: 1.24%

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

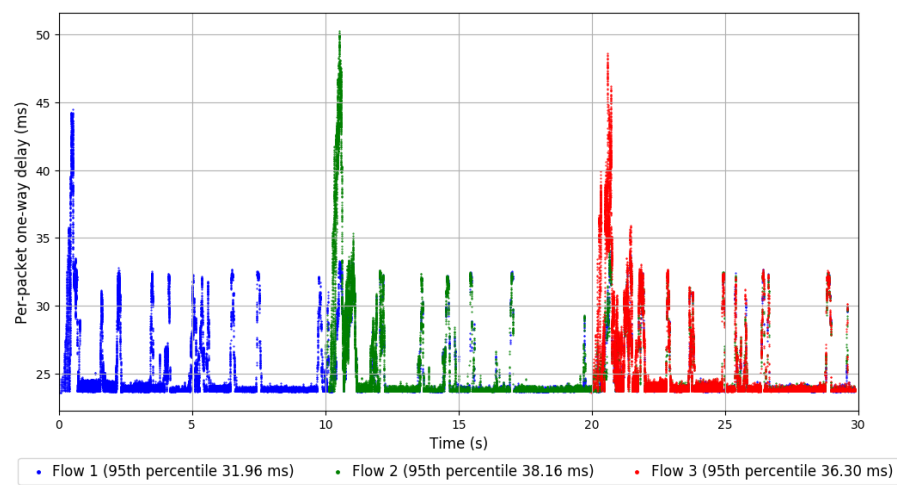
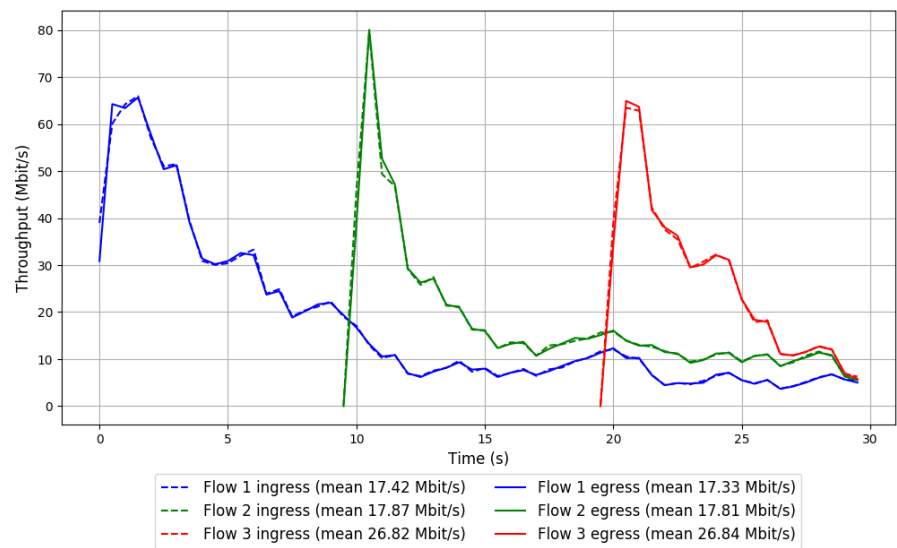


Run 2: Statistics of TCP Cubic

Start at: 2018-01-10 00:14:57  
End at: 2018-01-10 00:15:27  
Local clock offset: 0.143 ms  
Remote clock offset: -0.642 ms

# Below is generated by plot.py at 2018-01-10 07:27:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 38.11 Mbit/s  
95th percentile per-packet one-way delay: 33.238 ms  
Loss rate: 0.61%  
-- Flow 1:  
Average throughput: 17.33 Mbit/s  
95th percentile per-packet one-way delay: 31.965 ms  
Loss rate: 0.68%  
-- Flow 2:  
Average throughput: 17.81 Mbit/s  
95th percentile per-packet one-way delay: 38.159 ms  
Loss rate: 0.60%  
-- Flow 3:  
Average throughput: 26.84 Mbit/s  
95th percentile per-packet one-way delay: 36.301 ms  
Loss rate: 0.48%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-10 00:36:13

End at: 2018-01-10 00:36:43

Local clock offset: 0.085 ms

Remote clock offset: -0.65 ms

# Below is generated by plot.py at 2018-01-10 07:27:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 40.98 Mbit/s

95th percentile per-packet one-way delay: 33.396 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 18.54 Mbit/s

95th percentile per-packet one-way delay: 31.398 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 20.60 Mbit/s

95th percentile per-packet one-way delay: 37.526 ms

Loss rate: 0.59%

-- Flow 3:

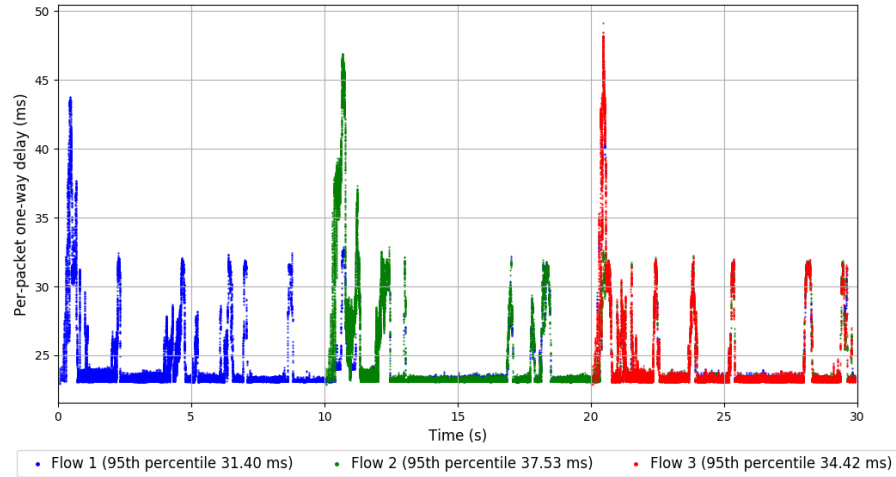
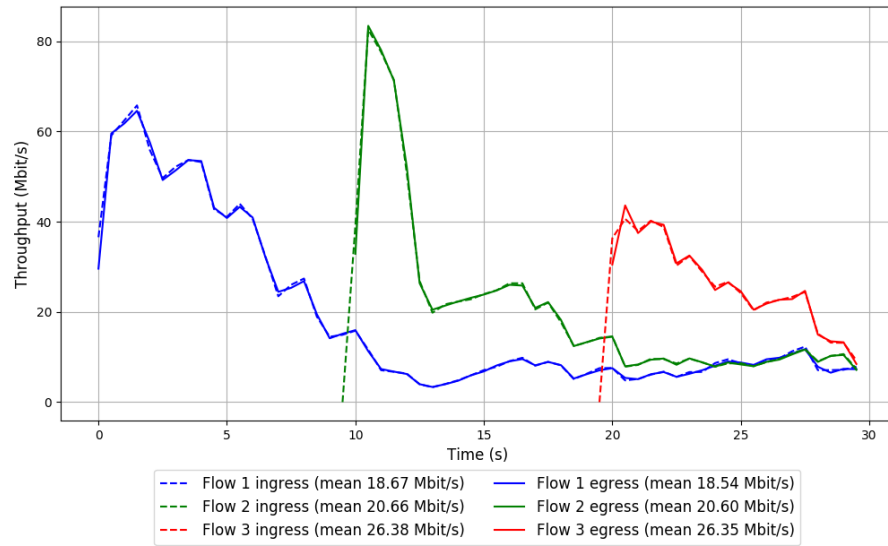
Average throughput: 26.35 Mbit/s

95th percentile per-packet one-way delay: 34.419 ms

Loss rate: 0.64%



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

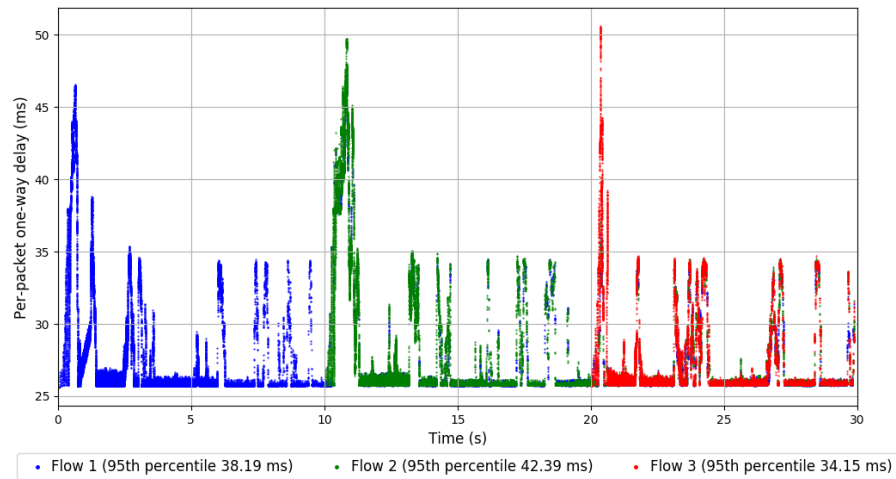
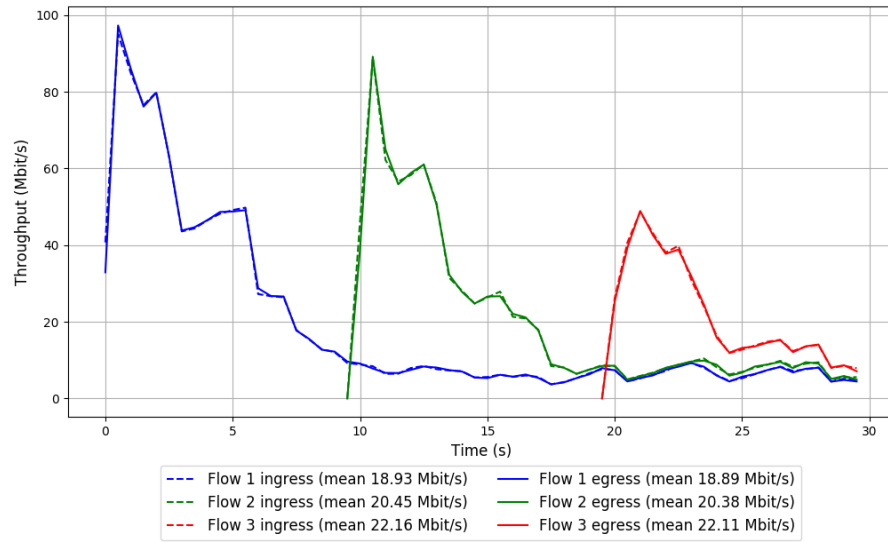


Run 4: Statistics of TCP Cubic

Start at: 2018-01-10 00:57:27  
End at: 2018-01-10 00:57:57  
Local clock offset: 0.001 ms  
Remote clock offset: -2.723 ms

# Below is generated by plot.py at 2018-01-10 07:27:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 39.80 Mbit/s  
95th percentile per-packet one-way delay: 39.969 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 18.89 Mbit/s  
95th percentile per-packet one-way delay: 38.187 ms  
Loss rate: 0.36%  
-- Flow 2:  
Average throughput: 20.38 Mbit/s  
95th percentile per-packet one-way delay: 42.388 ms  
Loss rate: 0.61%  
-- Flow 3:  
Average throughput: 22.11 Mbit/s  
95th percentile per-packet one-way delay: 34.149 ms  
Loss rate: 0.78%

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



Run 5: Statistics of TCP Cubic

Start at: 2018-01-10 01:18:53

End at: 2018-01-10 01:19:23

Local clock offset: 0.015 ms

Remote clock offset: 0.761 ms

# Below is generated by plot.py at 2018-01-10 07:27:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 25.88 Mbit/s

95th percentile per-packet one-way delay: 31.930 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 10.23 Mbit/s

95th percentile per-packet one-way delay: 31.897 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 17.90 Mbit/s

95th percentile per-packet one-way delay: 32.064 ms

Loss rate: 0.71%

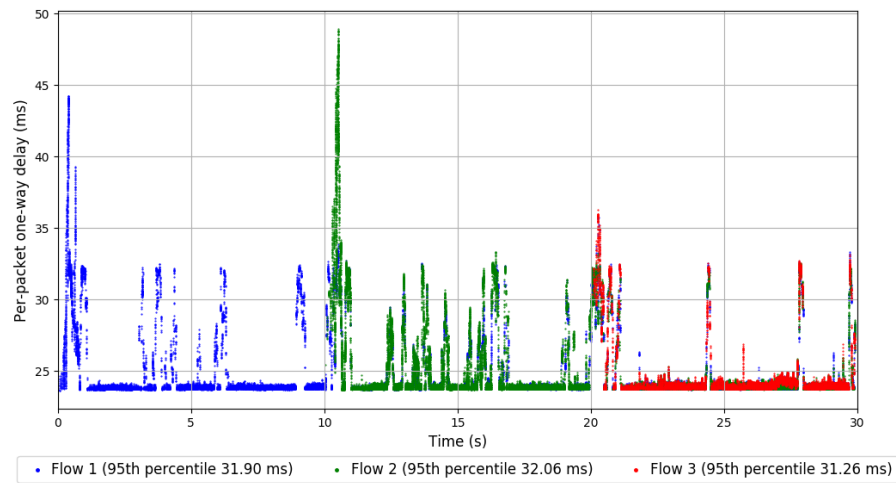
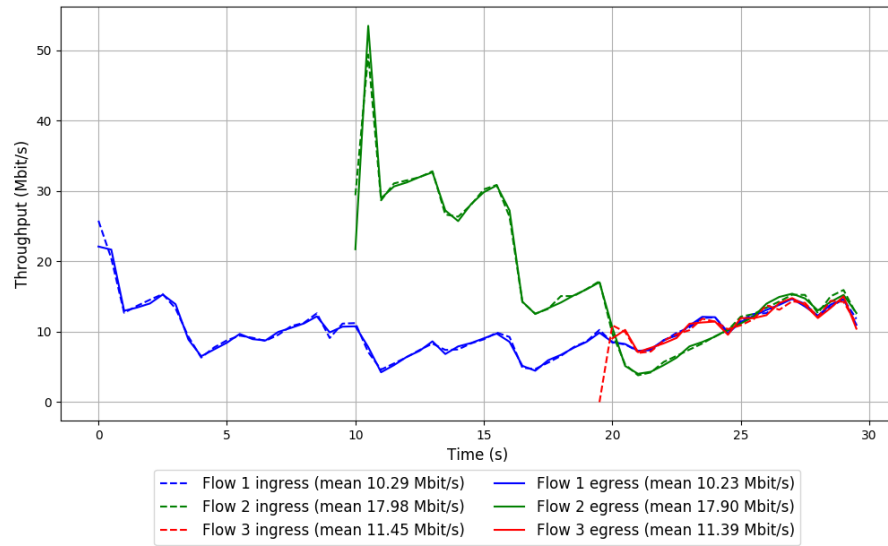
-- Flow 3:

Average throughput: 11.39 Mbit/s

95th percentile per-packet one-way delay: 31.257 ms

Loss rate: 1.10%

# Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-10 01:41:08

End at: 2018-01-10 01:41:38

Local clock offset: -0.074 ms

Remote clock offset: 2.011 ms

# Below is generated by plot.py at 2018-01-10 07:27:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 21.19 Mbit/s

95th percentile per-packet one-way delay: 32.140 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 10.21 Mbit/s

95th percentile per-packet one-way delay: 31.862 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 6.71 Mbit/s

95th percentile per-packet one-way delay: 31.856 ms

Loss rate: 1.32%

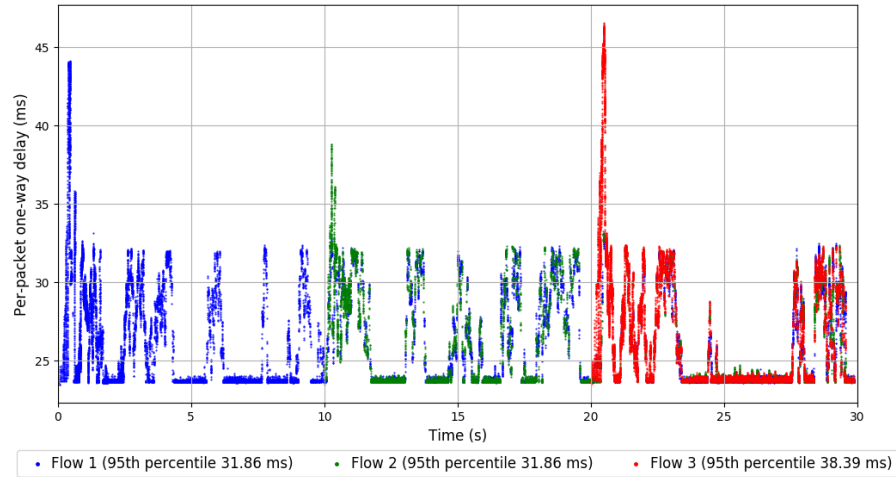
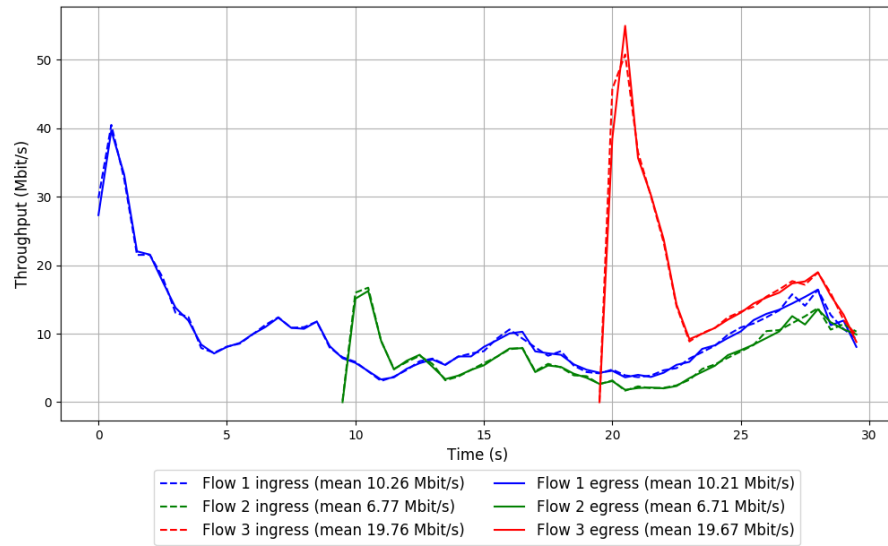
-- Flow 3:

Average throughput: 19.67 Mbit/s

95th percentile per-packet one-way delay: 38.392 ms

Loss rate: 0.97%

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



Run 7: Statistics of TCP Cubic

Start at: 2018-01-10 02:02:40

End at: 2018-01-10 02:03:10

Local clock offset: -0.239 ms

Remote clock offset: 2.395 ms

# Below is generated by plot.py at 2018-01-10 07:27:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 11.80 Mbit/s

95th percentile per-packet one-way delay: 33.665 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay: 34.587 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 32.072 ms

Loss rate: 1.08%

-- Flow 3:

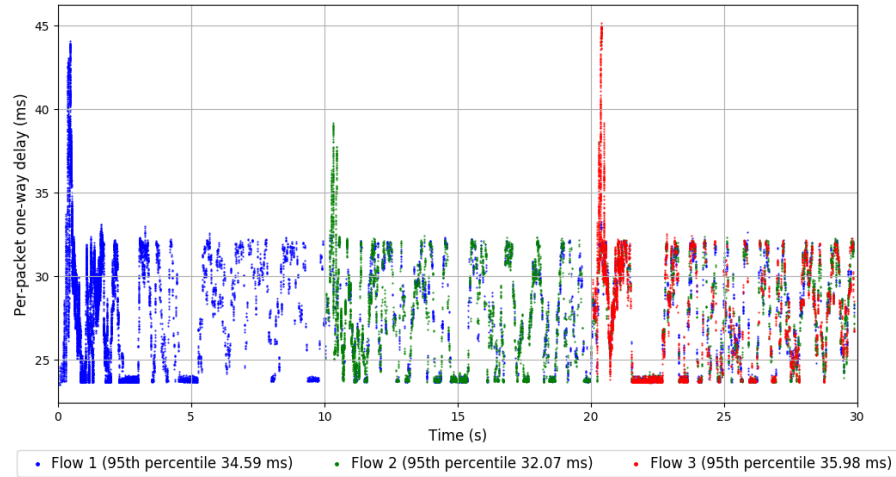
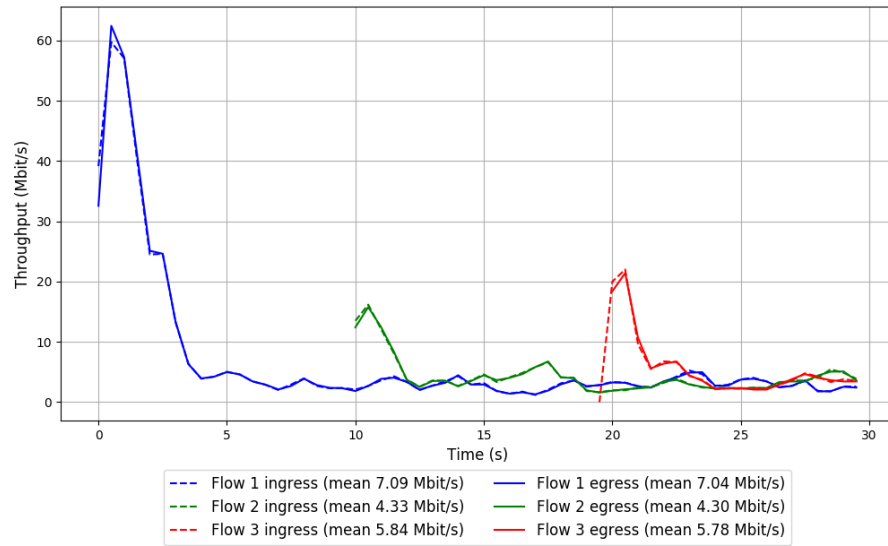
Average throughput: 5.78 Mbit/s

95th percentile per-packet one-way delay: 35.982 ms

Loss rate: 1.59%



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



Run 8: Statistics of TCP Cubic

Start at: 2018-01-10 02:24:35

End at: 2018-01-10 02:25:05

Local clock offset: 0.044 ms

Remote clock offset: 1.744 ms

# Below is generated by plot.py at 2018-01-10 07:27:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 16.31 Mbit/s

95th percentile per-packet one-way delay: 32.749 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 3.43 Mbit/s

95th percentile per-packet one-way delay: 31.591 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 5.94 Mbit/s

95th percentile per-packet one-way delay: 32.020 ms

Loss rate: 1.05%

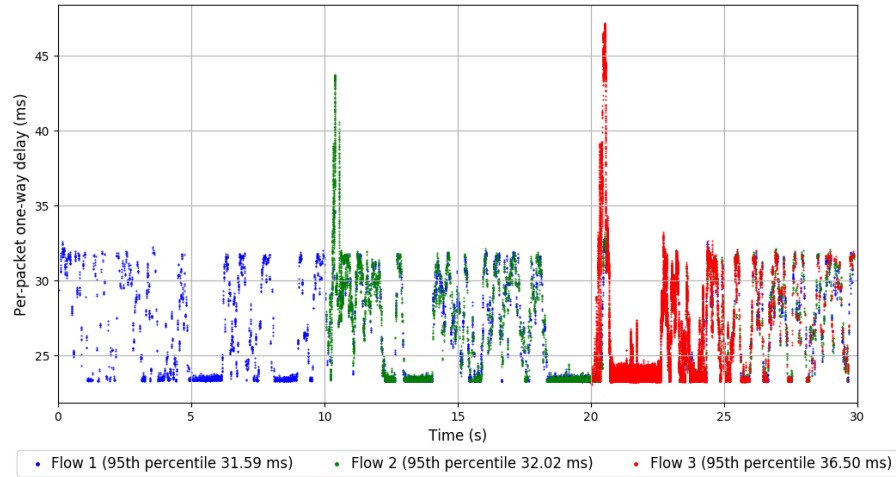
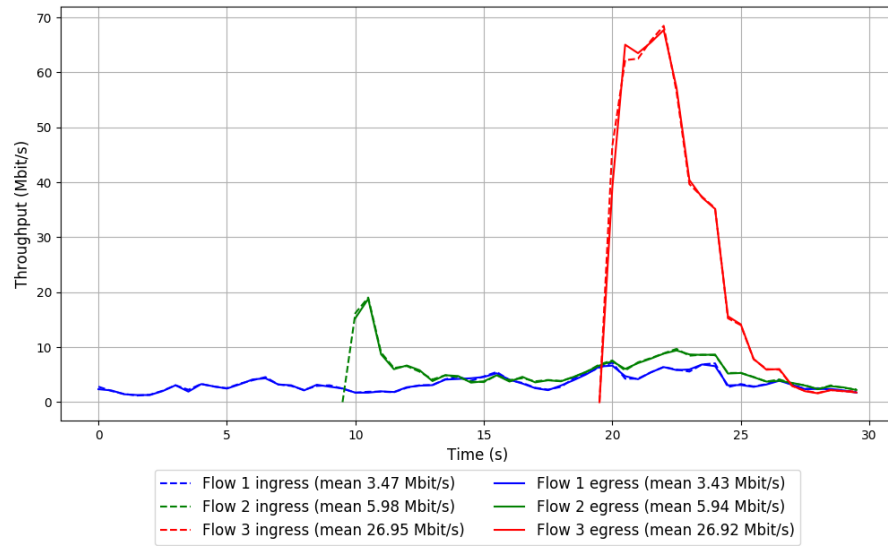
-- Flow 3:

Average throughput: 26.92 Mbit/s

95th percentile per-packet one-way delay: 36.496 ms

Loss rate: 0.64%

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

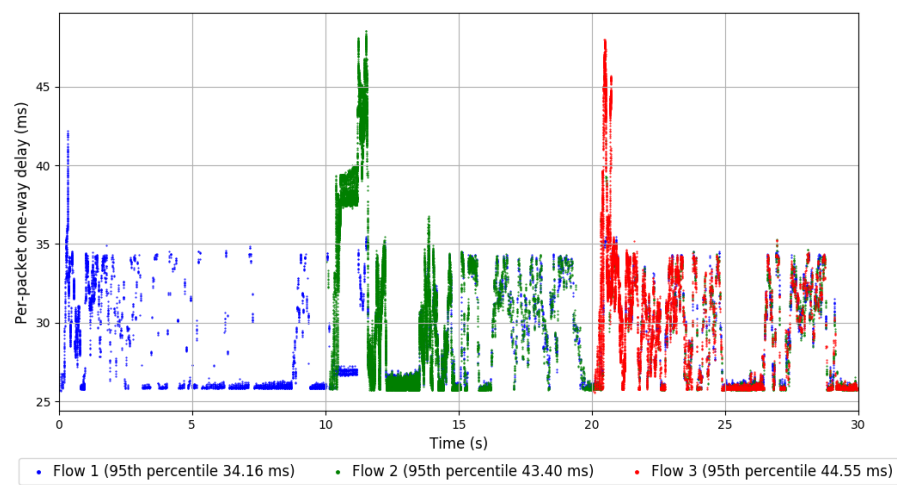
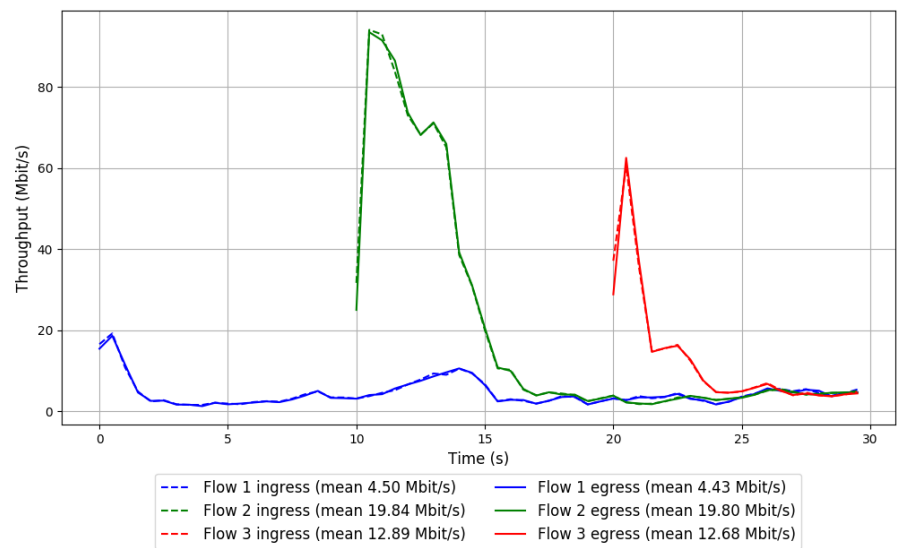


Run 9: Statistics of TCP Cubic

Start at: 2018-01-10 02:47:35  
End at: 2018-01-10 02:48:05  
Local clock offset: -0.031 ms  
Remote clock offset: -1.703 ms

# Below is generated by plot.py at 2018-01-10 07:27:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 21.79 Mbit/s  
95th percentile per-packet one-way delay: 42.985 ms  
Loss rate: 1.03%  
-- Flow 1:  
Average throughput: 4.43 Mbit/s  
95th percentile per-packet one-way delay: 34.164 ms  
Loss rate: 1.53%  
-- Flow 2:  
Average throughput: 19.80 Mbit/s  
95th percentile per-packet one-way delay: 43.399 ms  
Loss rate: 0.49%  
-- Flow 3:  
Average throughput: 12.68 Mbit/s  
95th percentile per-packet one-way delay: 44.549 ms  
Loss rate: 2.17%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-10 03:12:53

End at: 2018-01-10 03:13:23

Local clock offset: -0.029 ms

Remote clock offset: 0.918 ms

# Below is generated by plot.py at 2018-01-10 07:27:51

# Datalink statistics

-- Total of 3 flows:

Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 31.991 ms

Loss rate: 1.71%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 31.984 ms

Loss rate: 1.64%

-- Flow 2:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 31.992 ms

Loss rate: 1.77%

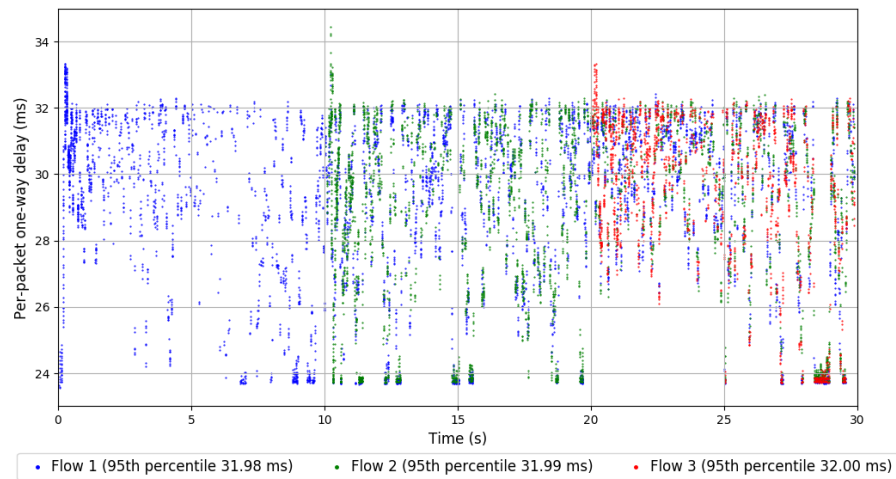
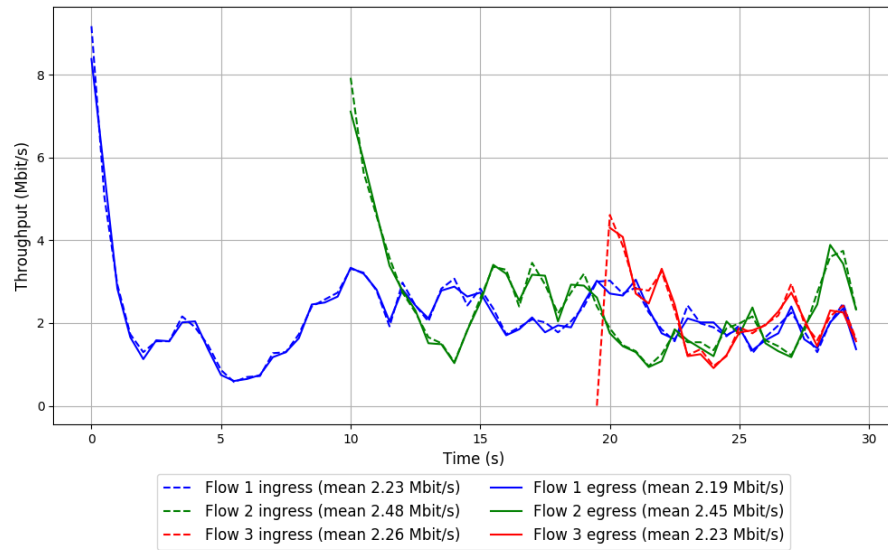
-- Flow 3:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 32.003 ms

Loss rate: 1.76%

# Run 10: Report of TCP Cubic — Data Link



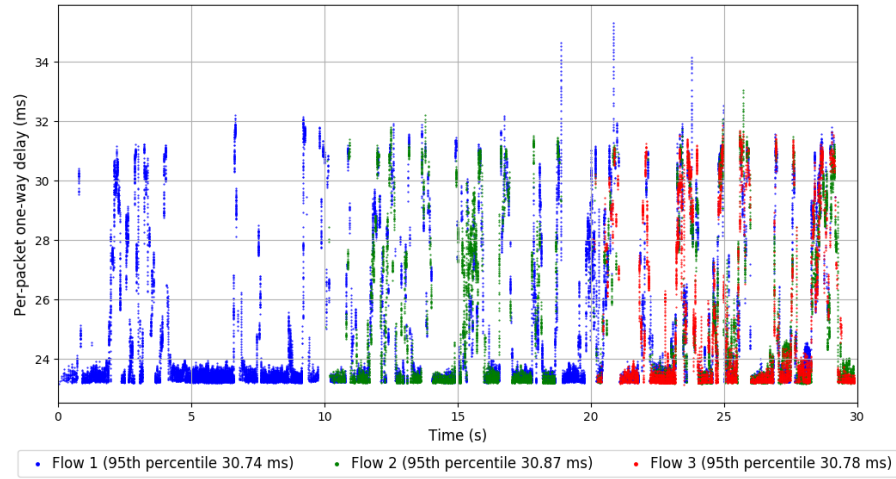
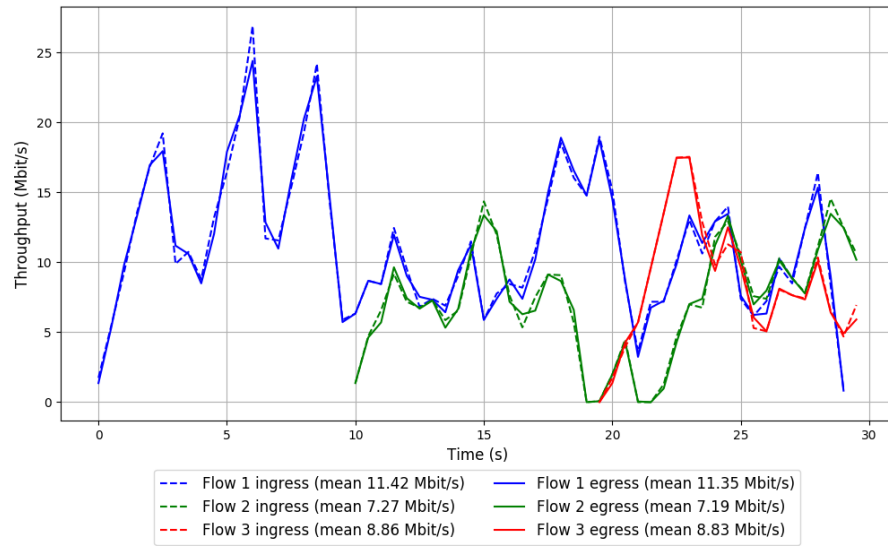
```
Run 1: Statistics of LEDBAT

Start at: 2018-01-09 23:57:39
End at: 2018-01-09 23:58:09
Local clock offset: 0.017 ms
Remote clock offset: -0.318 ms

# Below is generated by plot.py at 2018-01-10 07:27:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.78 Mbit/s
95th percentile per-packet one-way delay: 30.795 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 11.35 Mbit/s
95th percentile per-packet one-way delay: 30.737 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 7.19 Mbit/s
95th percentile per-packet one-way delay: 30.870 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 8.83 Mbit/s
95th percentile per-packet one-way delay: 30.777 ms
Loss rate: 1.00%
```



# Run 1: Report of LEDBAT — Data Link

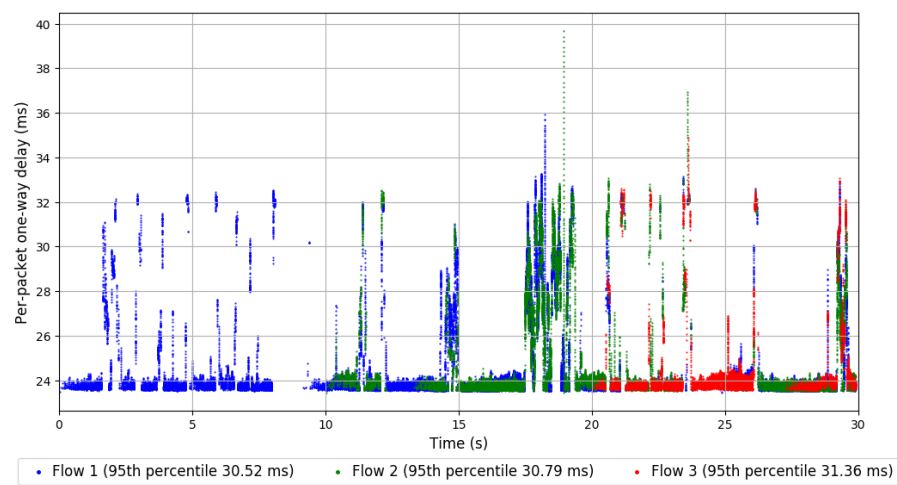
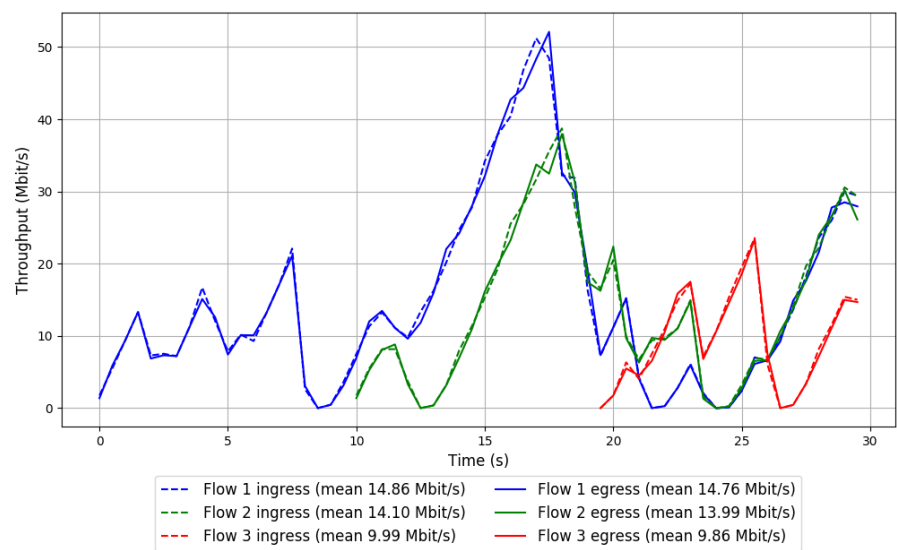


Run 2: Statistics of LEDBAT

Start at: 2018-01-10 00:19:03  
End at: 2018-01-10 00:19:33  
Local clock offset: 0.069 ms  
Remote clock offset: -0.681 ms

# Below is generated by plot.py at 2018-01-10 07:27:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 27.33 Mbit/s  
95th percentile per-packet one-way delay: 30.708 ms  
Loss rate: 1.01%  
-- Flow 1:  
Average throughput: 14.76 Mbit/s  
95th percentile per-packet one-way delay: 30.515 ms  
Loss rate: 0.80%  
-- Flow 2:  
Average throughput: 13.99 Mbit/s  
95th percentile per-packet one-way delay: 30.788 ms  
Loss rate: 1.05%  
-- Flow 3:  
Average throughput: 9.86 Mbit/s  
95th percentile per-packet one-way delay: 31.363 ms  
Loss rate: 1.83%

Run 2: Report of LEDBAT — Data Link

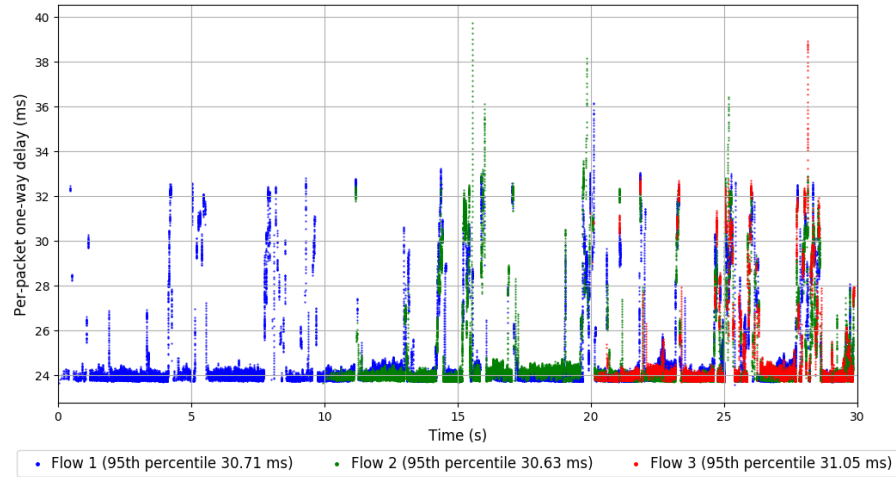
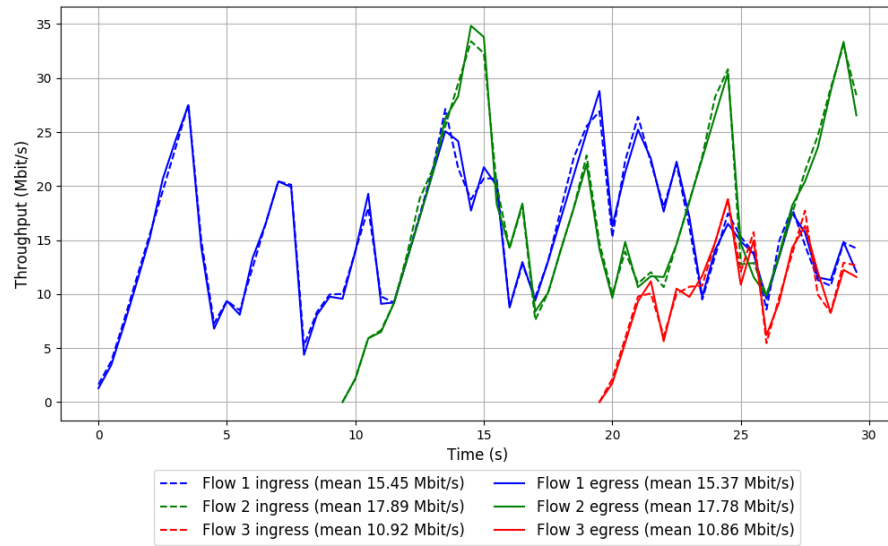


Run 3: Statistics of LEDBAT

Start at: 2018-01-10 00:40:17  
End at: 2018-01-10 00:40:47  
Local clock offset: 0.168 ms  
Remote clock offset: -1.244 ms

# Below is generated by plot.py at 2018-01-10 07:27:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 30.82 Mbit/s  
95th percentile per-packet one-way delay: 30.758 ms  
Loss rate: 0.80%  
-- Flow 1:  
Average throughput: 15.37 Mbit/s  
95th percentile per-packet one-way delay: 30.706 ms  
Loss rate: 0.67%  
-- Flow 2:  
Average throughput: 17.78 Mbit/s  
95th percentile per-packet one-way delay: 30.627 ms  
Loss rate: 0.88%  
-- Flow 3:  
Average throughput: 10.86 Mbit/s  
95th percentile per-packet one-way delay: 31.050 ms  
Loss rate: 1.11%

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



Run 4: Statistics of LEDBAT

Start at: 2018-01-10 01:01:34

End at: 2018-01-10 01:02:04

Local clock offset: 0.058 ms

Remote clock offset: -0.43 ms

# Below is generated by plot.py at 2018-01-10 07:28:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 34.30 Mbit/s

95th percentile per-packet one-way delay: 30.760 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 20.04 Mbit/s

95th percentile per-packet one-way delay: 30.584 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 15.23 Mbit/s

95th percentile per-packet one-way delay: 30.854 ms

Loss rate: 0.63%

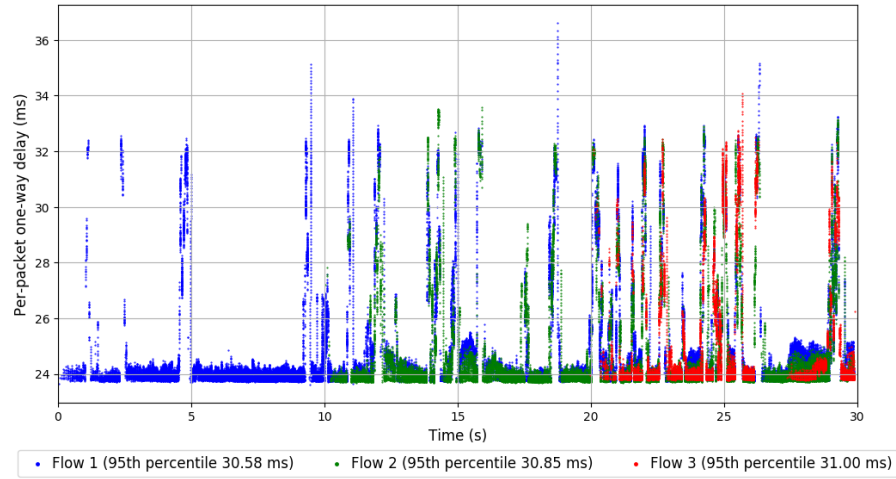
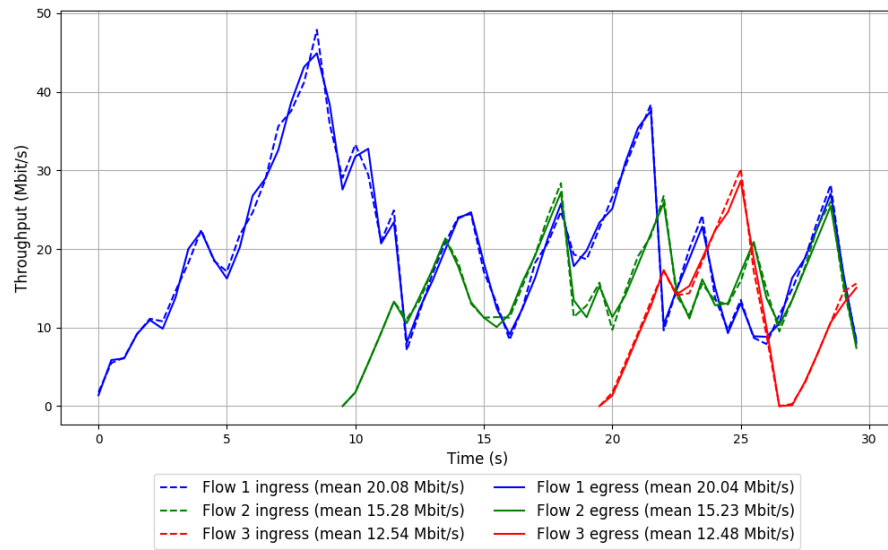
-- Flow 3:

Average throughput: 12.48 Mbit/s

95th percentile per-packet one-way delay: 30.999 ms

Loss rate: 1.01%

# Run 4: Report of LEDBAT — Data Link



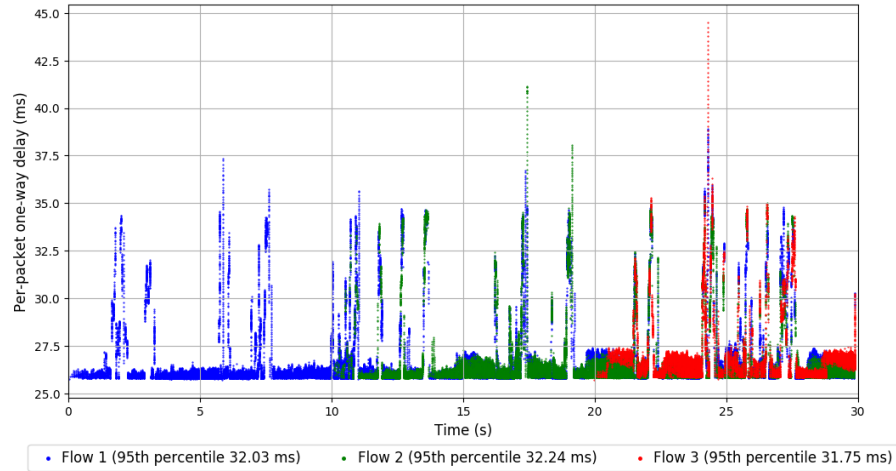
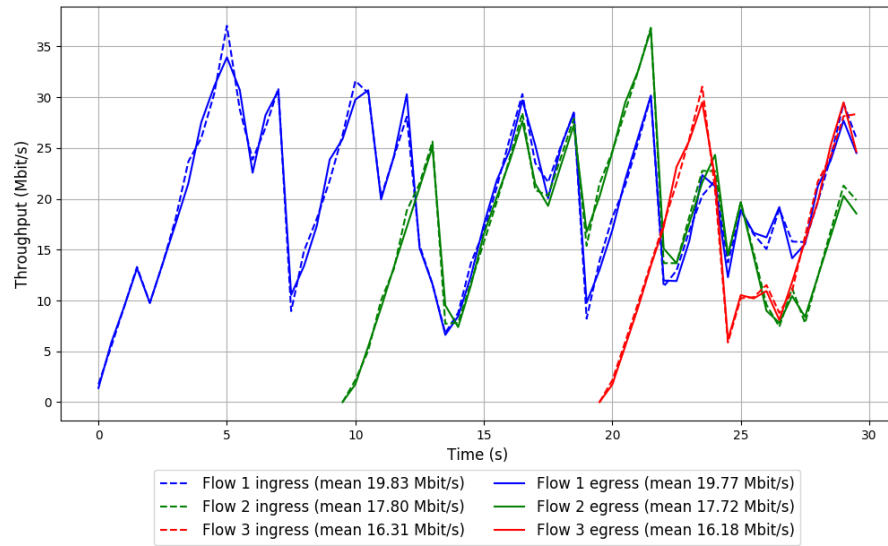
Run 5: Statistics of LEDBAT

Start at: 2018-01-10 01:23:00  
End at: 2018-01-10 01:23:30  
Local clock offset: 0.023 ms  
Remote clock offset: -1.017 ms

# Below is generated by plot.py at 2018-01-10 07:28:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 36.94 Mbit/s  
95th percentile per-packet one-way delay: 32.035 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 19.77 Mbit/s  
95th percentile per-packet one-way delay: 32.035 ms  
Loss rate: 0.49%  
-- Flow 2:  
Average throughput: 17.72 Mbit/s  
95th percentile per-packet one-way delay: 32.243 ms  
Loss rate: 0.73%  
-- Flow 3:  
Average throughput: 16.18 Mbit/s  
95th percentile per-packet one-way delay: 31.750 ms  
Loss rate: 1.34%



## Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-10 01:45:07

End at: 2018-01-10 01:45:37

Local clock offset: -0.019 ms

Remote clock offset: 2.082 ms

# Below is generated by plot.py at 2018-01-10 07:28:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 34.53 Mbit/s

95th percentile per-packet one-way delay: 30.279 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 19.58 Mbit/s

95th percentile per-packet one-way delay: 30.089 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 16.47 Mbit/s

95th percentile per-packet one-way delay: 30.890 ms

Loss rate: 0.40%

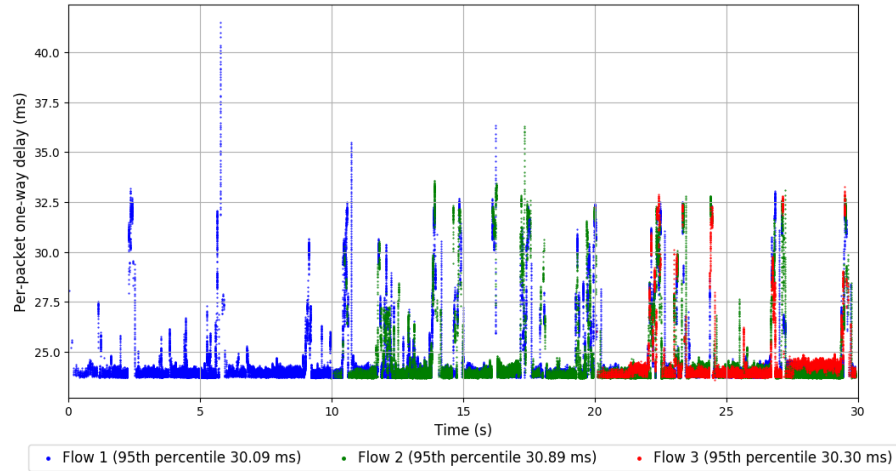
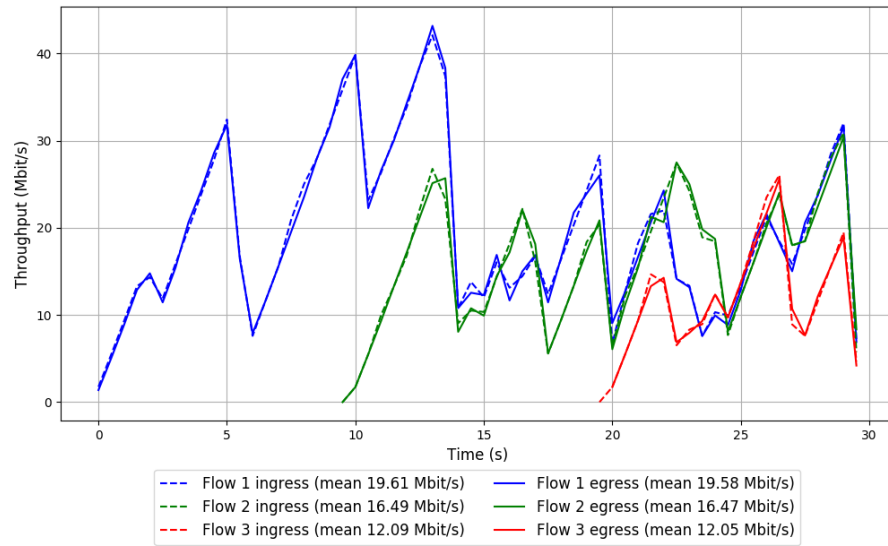
-- Flow 3:

Average throughput: 12.05 Mbit/s

95th percentile per-packet one-way delay: 30.304 ms

Loss rate: 0.99%

## Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-10 02:06:47

End at: 2018-01-10 02:07:17

Local clock offset: -0.256 ms

Remote clock offset: 2.481 ms

# Below is generated by plot.py at 2018-01-10 07:28:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 10.64 Mbit/s

95th percentile per-packet one-way delay: 31.769 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 6.07 Mbit/s

95th percentile per-packet one-way delay: 31.752 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 4.59 Mbit/s

95th percentile per-packet one-way delay: 31.754 ms

Loss rate: 1.34%

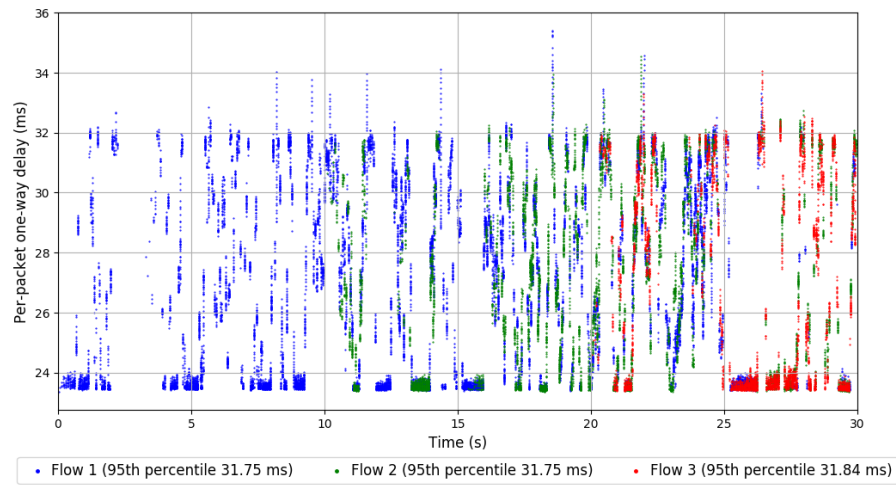
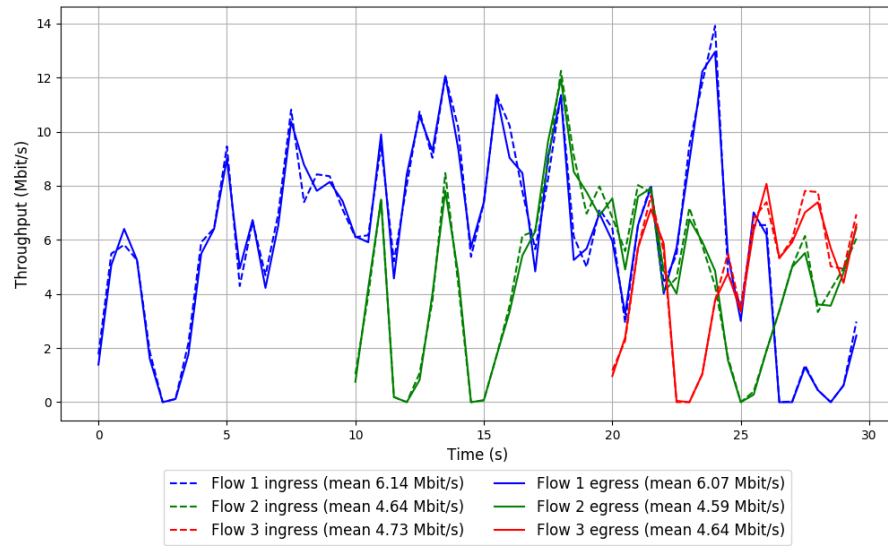
-- Flow 3:

Average throughput: 4.64 Mbit/s

95th percentile per-packet one-way delay: 31.840 ms

Loss rate: 2.47%

# Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-10 02:28:38

End at: 2018-01-10 02:29:08

Local clock offset: -0.086 ms

Remote clock offset: 0.992 ms

# Below is generated by plot.py at 2018-01-10 07:28:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 17.10 Mbit/s

95th percentile per-packet one-way delay: 31.791 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 8.86 Mbit/s

95th percentile per-packet one-way delay: 31.829 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 31.802 ms

Loss rate: 1.21%

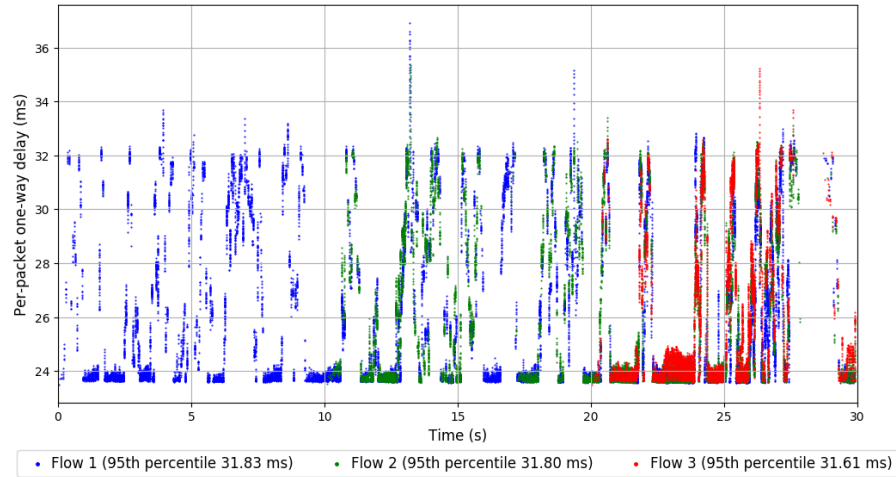
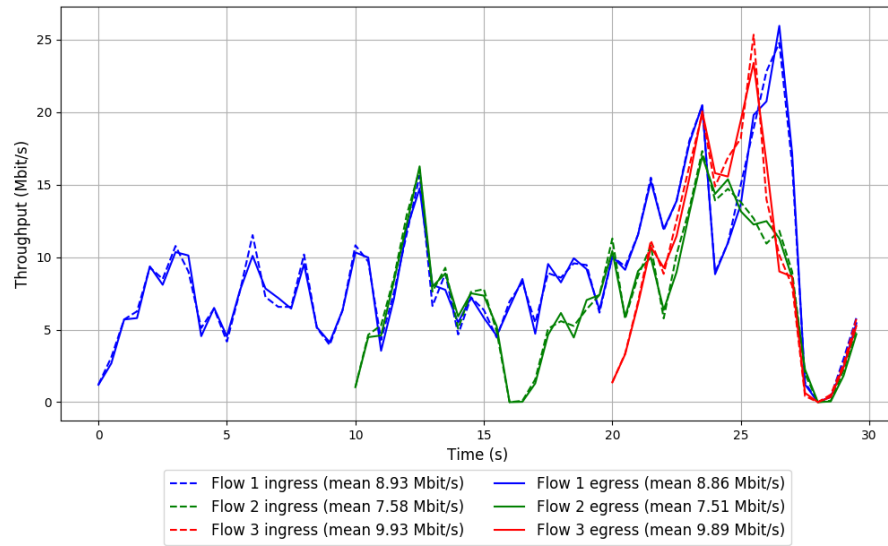
-- Flow 3:

Average throughput: 9.89 Mbit/s

95th percentile per-packet one-way delay: 31.609 ms

Loss rate: 0.87%

# Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-10 02:51:43

End at: 2018-01-10 02:52:13

Local clock offset: -0.06 ms

Remote clock offset: 0.277 ms

# Below is generated by plot.py at 2018-01-10 07:28:21

# Datalink statistics

-- Total of 3 flows:

Average throughput: 15.48 Mbit/s

95th percentile per-packet one-way delay: 31.883 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 8.31 Mbit/s

95th percentile per-packet one-way delay: 31.856 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 7.71 Mbit/s

95th percentile per-packet one-way delay: 31.837 ms

Loss rate: 0.69%

-- Flow 3:

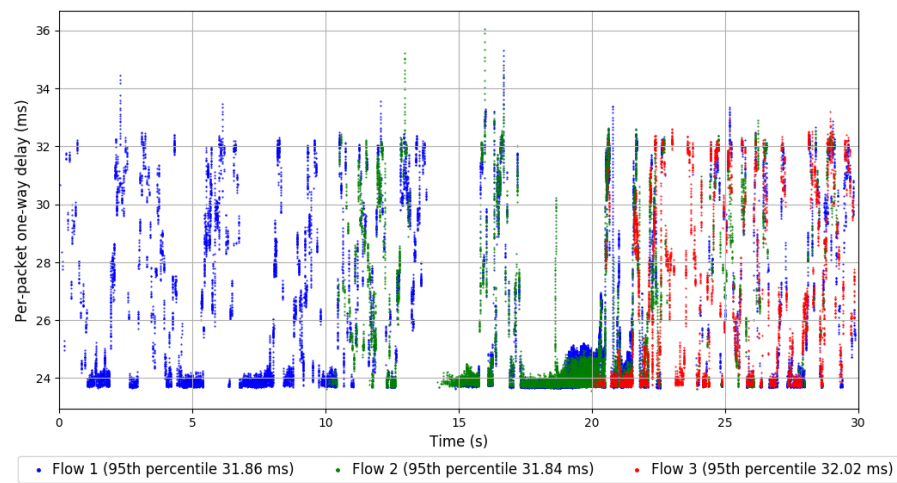
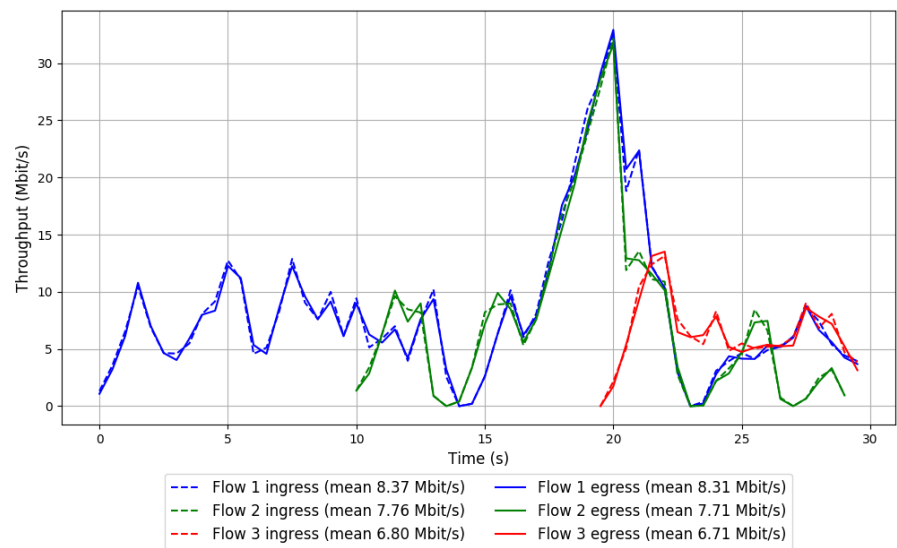
Average throughput: 6.71 Mbit/s

95th percentile per-packet one-way delay: 32.016 ms

Loss rate: 1.82%



Run 9: Report of LEDBAT — Data Link

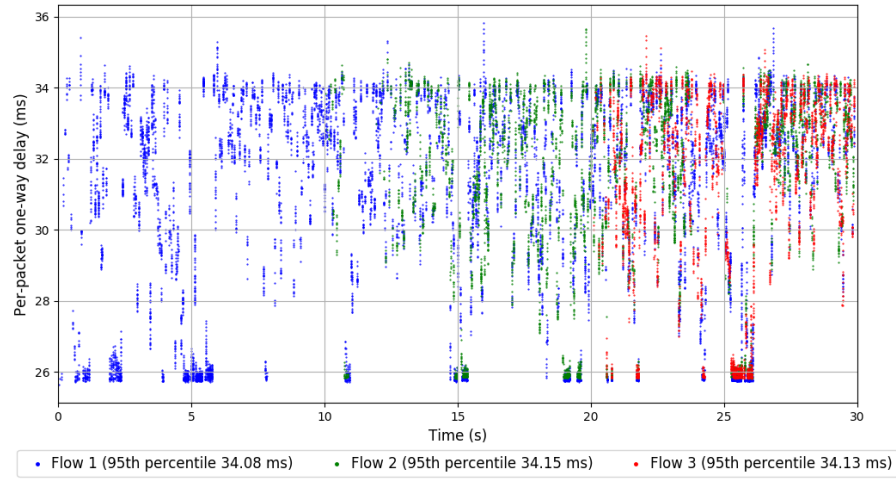
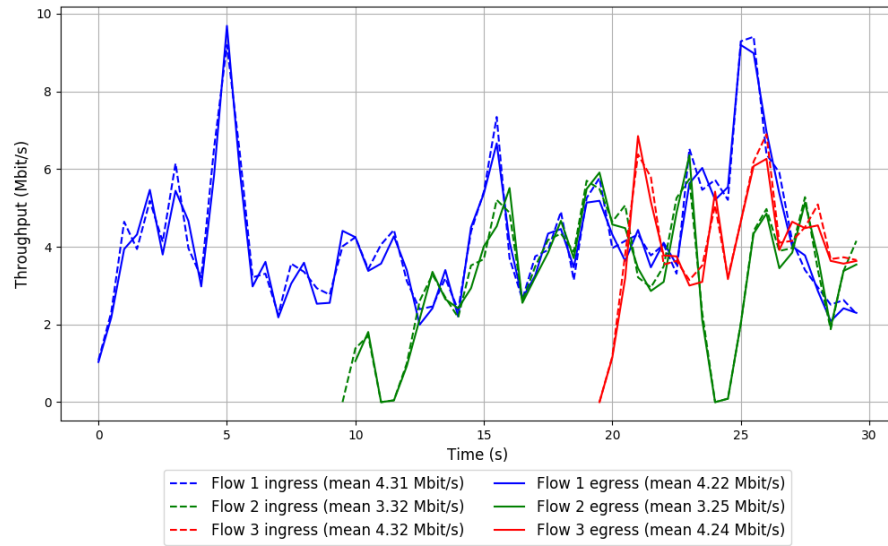


Run 10: Statistics of LEDBAT

Start at: 2018-01-10 03:16:54  
End at: 2018-01-10 03:17:24  
Local clock offset: -0.031 ms  
Remote clock offset: -1.025 ms

# Below is generated by plot.py at 2018-01-10 07:28:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 7.79 Mbit/s  
95th percentile per-packet one-way delay: 34.115 ms  
Loss rate: 2.19%  
-- Flow 1:  
Average throughput: 4.22 Mbit/s  
95th percentile per-packet one-way delay: 34.077 ms  
Loss rate: 2.09%  
-- Flow 2:  
Average throughput: 3.25 Mbit/s  
95th percentile per-packet one-way delay: 34.150 ms  
Loss rate: 2.33%  
-- Flow 3:  
Average throughput: 4.24 Mbit/s  
95th percentile per-packet one-way delay: 34.131 ms  
Loss rate: 2.27%

# Run 10: Report of LEDBAT — Data Link

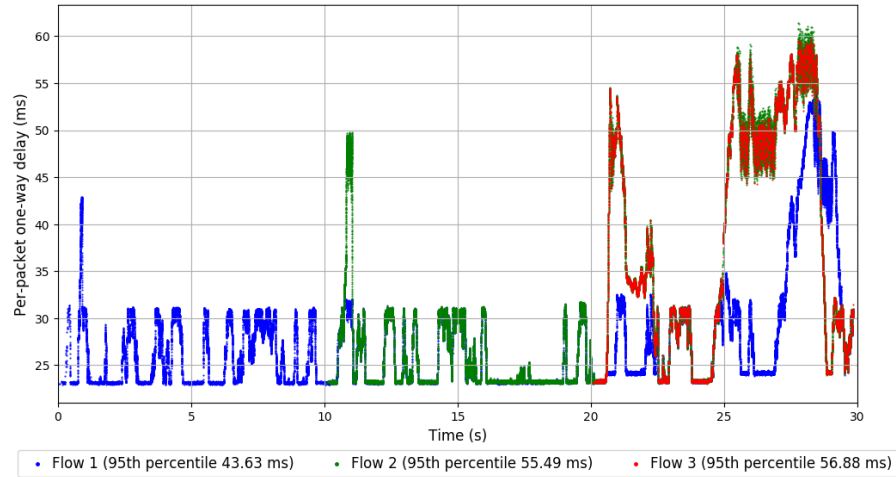
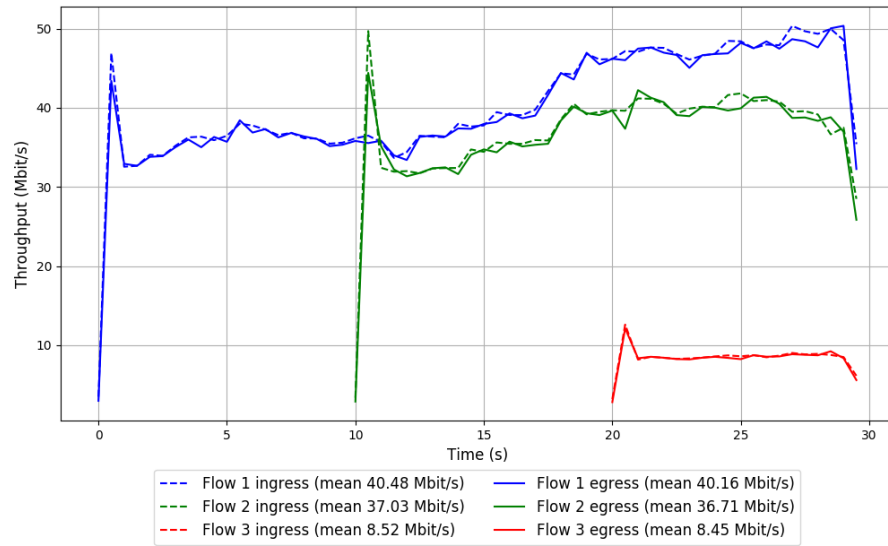


```
Run 1: Statistics of PCC

Start at: 2018-01-09 23:40:27
End at: 2018-01-09 23:40:57
Local clock offset: 0.04 ms
Remote clock offset: -0.972 ms

# Below is generated by plot.py at 2018-01-10 07:29:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.33 Mbit/s
95th percentile per-packet one-way delay: 51.970 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 40.16 Mbit/s
95th percentile per-packet one-way delay: 43.627 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 36.71 Mbit/s
95th percentile per-packet one-way delay: 55.488 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 8.45 Mbit/s
95th percentile per-packet one-way delay: 56.879 ms
Loss rate: 1.32%
```

# Run 1: Report of PCC — Data Link

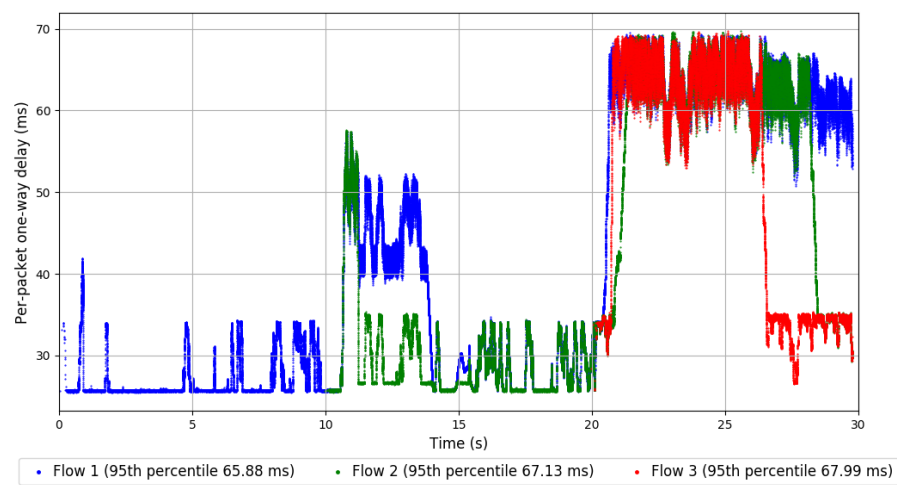
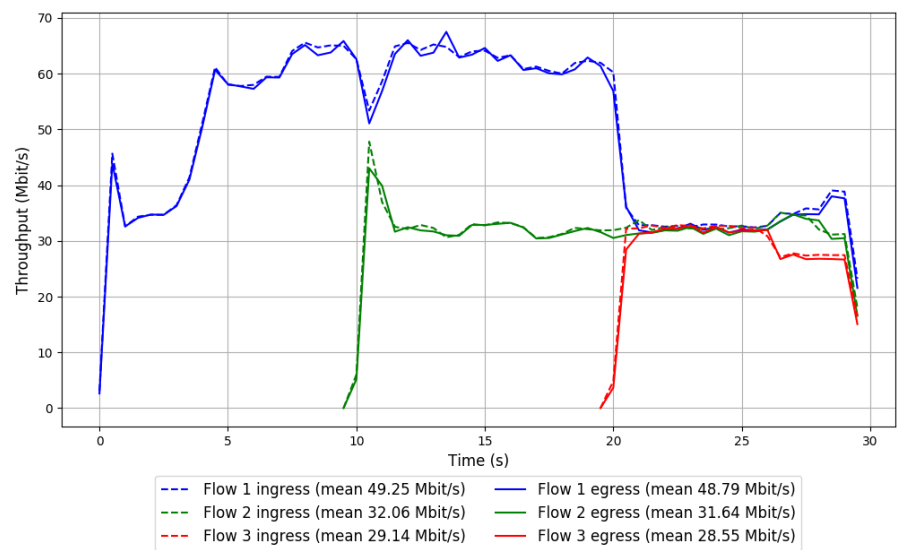


Run 2: Statistics of PCC

Start at: 2018-01-10 00:02:08  
End at: 2018-01-10 00:02:38  
Local clock offset: 0.013 ms  
Remote clock offset: -2.782 ms

# Below is generated by plot.py at 2018-01-10 07:30:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 79.26 Mbit/s  
95th percentile per-packet one-way delay: 66.869 ms  
Loss rate: 1.42%  
-- Flow 1:  
Average throughput: 48.79 Mbit/s  
95th percentile per-packet one-way delay: 65.884 ms  
Loss rate: 1.13%  
-- Flow 2:  
Average throughput: 31.64 Mbit/s  
95th percentile per-packet one-way delay: 67.129 ms  
Loss rate: 1.59%  
-- Flow 3:  
Average throughput: 28.55 Mbit/s  
95th percentile per-packet one-way delay: 67.991 ms  
Loss rate: 2.57%

Run 2: Report of PCC — Data Link



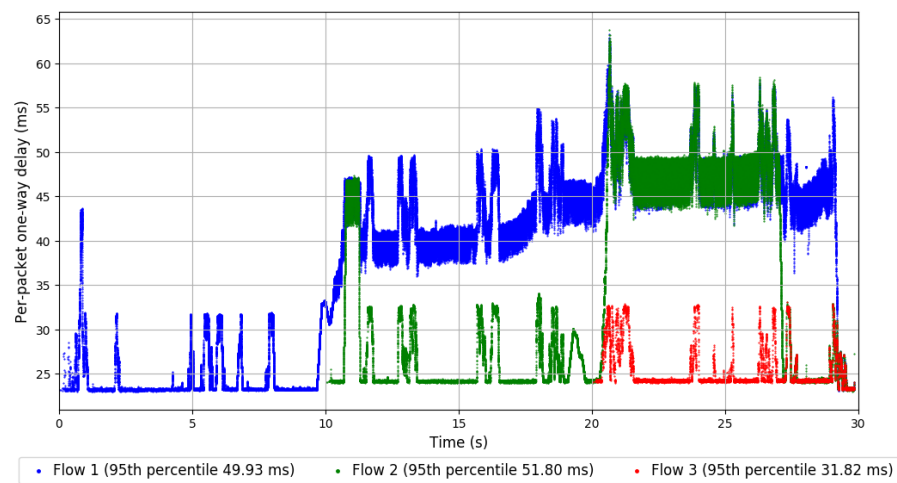
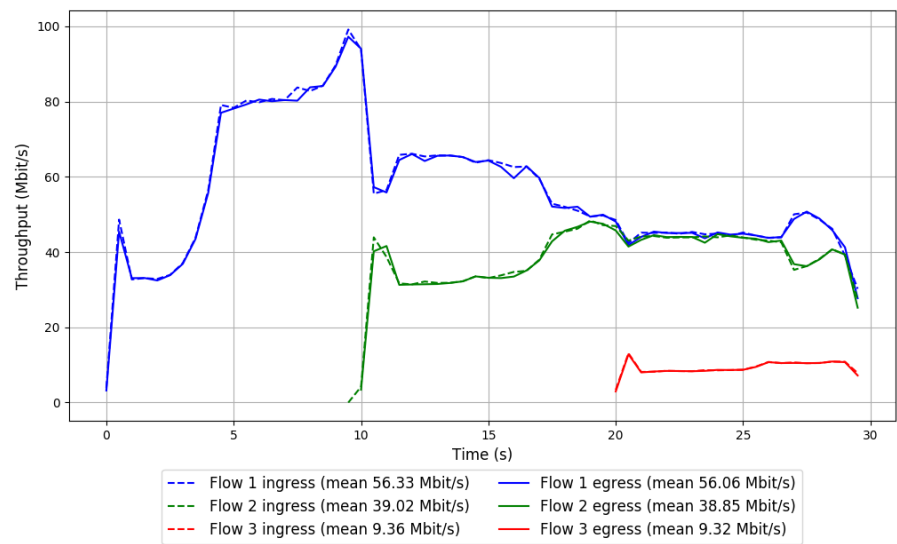
Run 3: Statistics of PCC

Start at: 2018-01-10 00:23:28  
End at: 2018-01-10 00:23:58  
Local clock offset: 0.178 ms  
Remote clock offset: -0.446 ms

# Below is generated by plot.py at 2018-01-10 07:30:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 84.94 Mbit/s  
95th percentile per-packet one-way delay: 50.393 ms  
Loss rate: 0.68%  
-- Flow 1:  
Average throughput: 56.06 Mbit/s  
95th percentile per-packet one-way delay: 49.926 ms  
Loss rate: 0.66%  
-- Flow 2:  
Average throughput: 38.85 Mbit/s  
95th percentile per-packet one-way delay: 51.795 ms  
Loss rate: 0.70%  
-- Flow 3:  
Average throughput: 9.32 Mbit/s  
95th percentile per-packet one-way delay: 31.820 ms  
Loss rate: 1.01%



Run 3: Report of PCC — Data Link

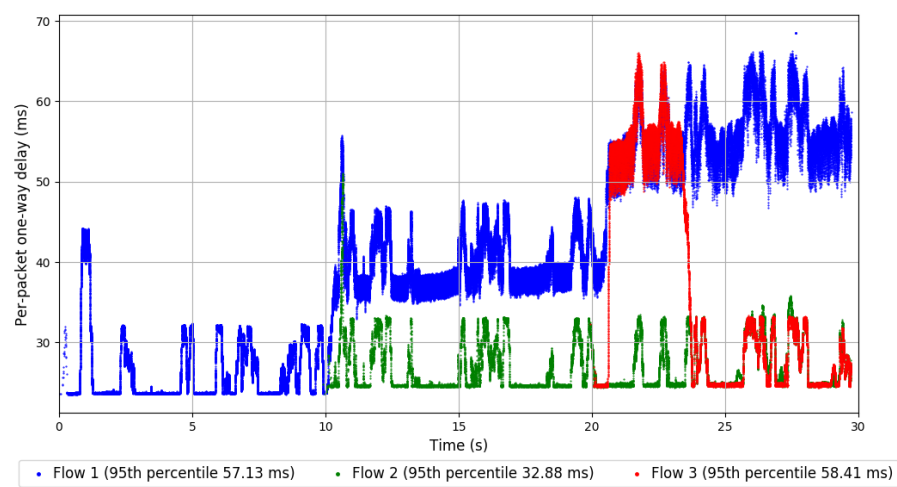
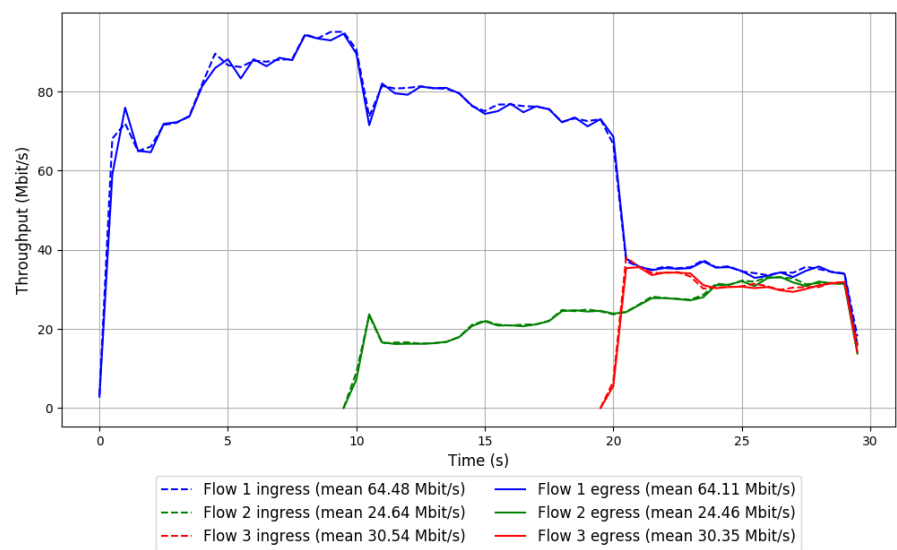


Run 4: Statistics of PCC

Start at: 2018-01-10 00:44:38  
End at: 2018-01-10 00:45:08  
Local clock offset: 0.153 ms  
Remote clock offset: -1.144 ms

# Below is generated by plot.py at 2018-01-10 07:30:50  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 90.43 Mbit/s  
95th percentile per-packet one-way delay: 56.476 ms  
Loss rate: 0.87%  
-- Flow 1:  
Average throughput: 64.11 Mbit/s  
95th percentile per-packet one-way delay: 57.130 ms  
Loss rate: 0.77%  
-- Flow 2:  
Average throughput: 24.46 Mbit/s  
95th percentile per-packet one-way delay: 32.877 ms  
Loss rate: 1.00%  
-- Flow 3:  
Average throughput: 30.35 Mbit/s  
95th percentile per-packet one-way delay: 58.414 ms  
Loss rate: 1.26%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-10 01:06:04

End at: 2018-01-10 01:06:34

Local clock offset: 0.049 ms

Remote clock offset: -0.18 ms

# Below is generated by plot.py at 2018-01-10 07:30:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 46.76 Mbit/s

95th percentile per-packet one-way delay: 32.022 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 26.11 Mbit/s

95th percentile per-packet one-way delay: 31.977 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 23.05 Mbit/s

95th percentile per-packet one-way delay: 32.019 ms

Loss rate: 1.09%

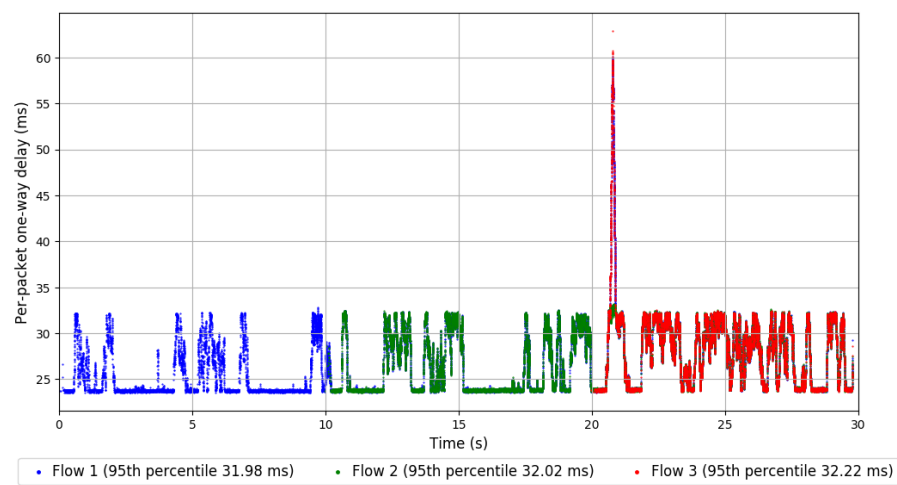
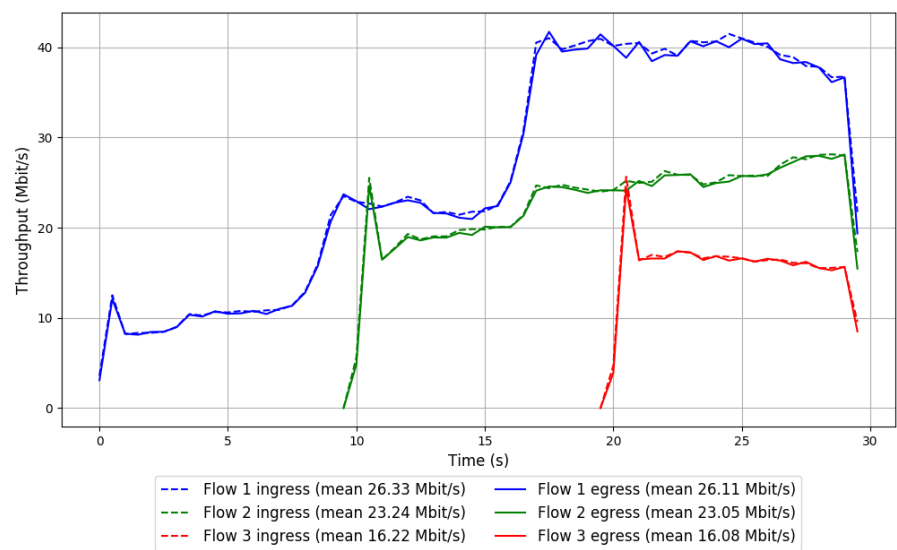
-- Flow 3:

Average throughput: 16.08 Mbit/s

95th percentile per-packet one-way delay: 32.223 ms

Loss rate: 1.40%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-10 01:27:42

End at: 2018-01-10 01:28:12

Local clock offset: 0.064 ms

Remote clock offset: 1.988 ms

# Below is generated by plot.py at 2018-01-10 07:30:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 53.48 Mbit/s

95th percentile per-packet one-way delay: 31.480 ms

Loss rate: 1.72%

-- Flow 1:

Average throughput: 31.45 Mbit/s

95th percentile per-packet one-way delay: 31.457 ms

Loss rate: 1.64%

-- Flow 2:

Average throughput: 30.91 Mbit/s

95th percentile per-packet one-way delay: 31.521 ms

Loss rate: 1.81%

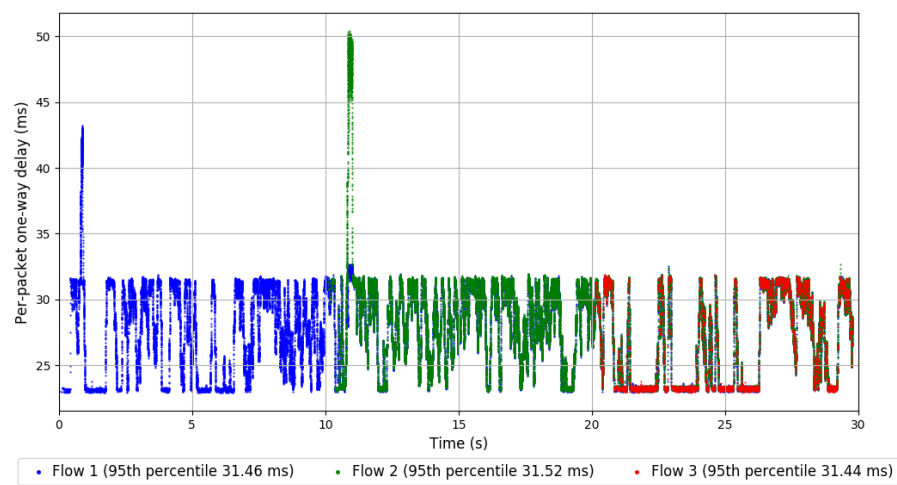
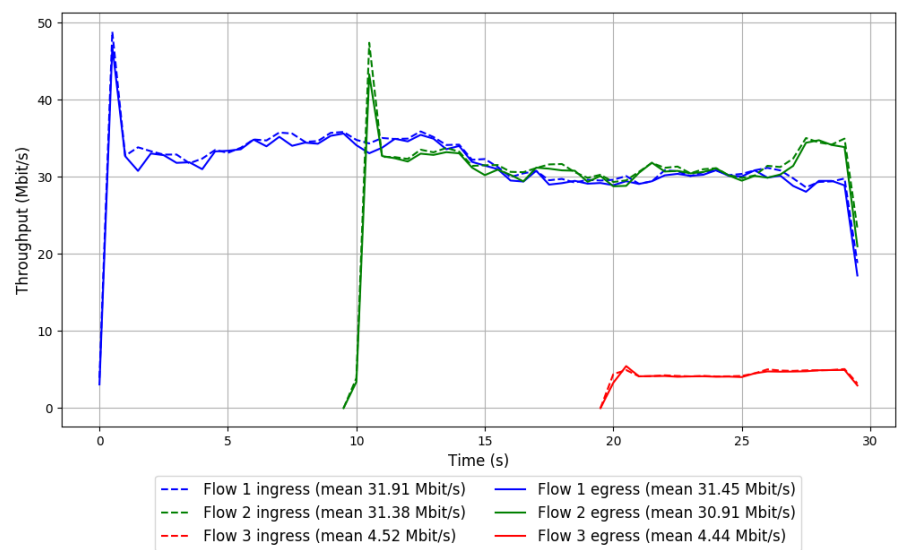
-- Flow 3:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 31.441 ms

Loss rate: 2.31%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-10 01:49:28

End at: 2018-01-10 01:49:58

Local clock offset: -0.082 ms

Remote clock offset: 2.252 ms

# Below is generated by plot.py at 2018-01-10 07:30:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 80.97 Mbit/s

95th percentile per-packet one-way delay: 44.018 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 69.66 Mbit/s

95th percentile per-packet one-way delay: 43.896 ms

Loss rate: 1.23%

-- Flow 2:

Average throughput: 15.91 Mbit/s

95th percentile per-packet one-way delay: 44.529 ms

Loss rate: 1.40%

-- Flow 3:

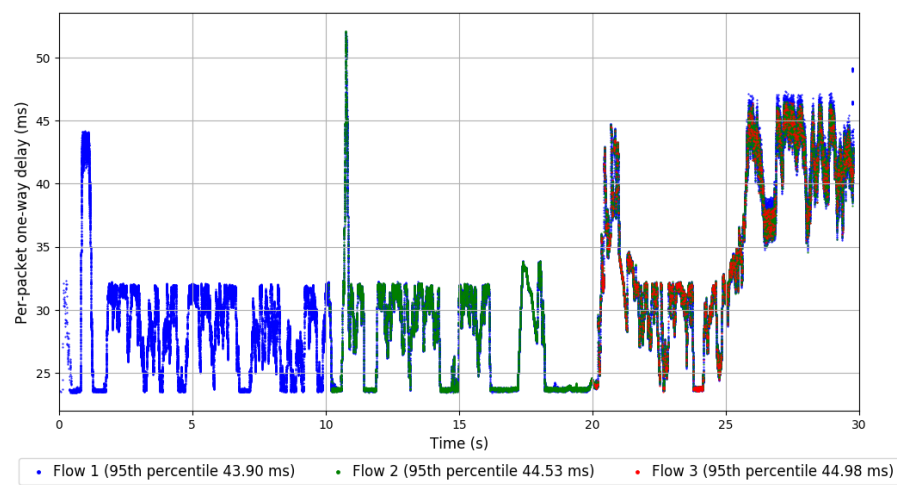
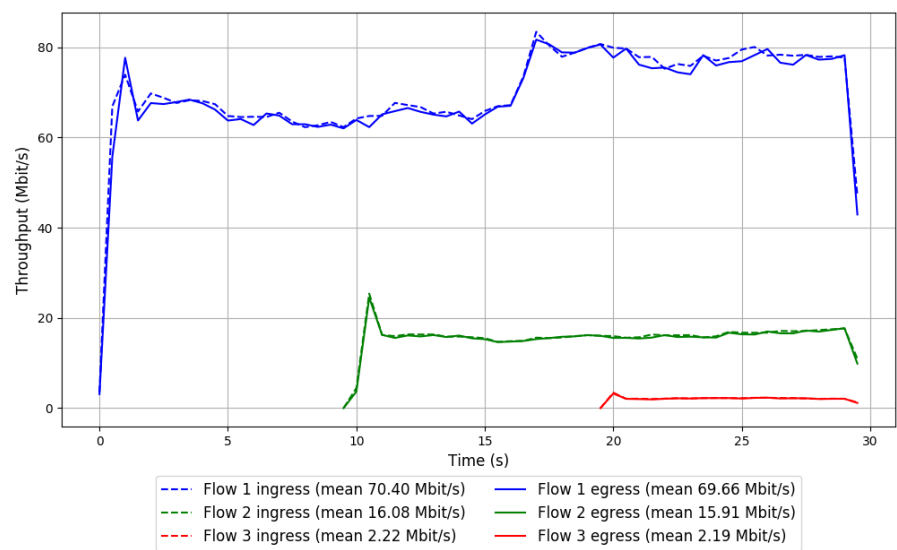
Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 44.982 ms

Loss rate: 2.01%



Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-10 02:11:31

End at: 2018-01-10 02:12:01

Local clock offset: -0.114 ms

Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2018-01-10 07:30:50

# Datalink statistics

-- Total of 3 flows:

Average throughput: 64.63 Mbit/s

95th percentile per-packet one-way delay: 33.885 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 54.58 Mbit/s

95th percentile per-packet one-way delay: 33.900 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 10.67 Mbit/s

95th percentile per-packet one-way delay: 33.793 ms

Loss rate: 0.81%

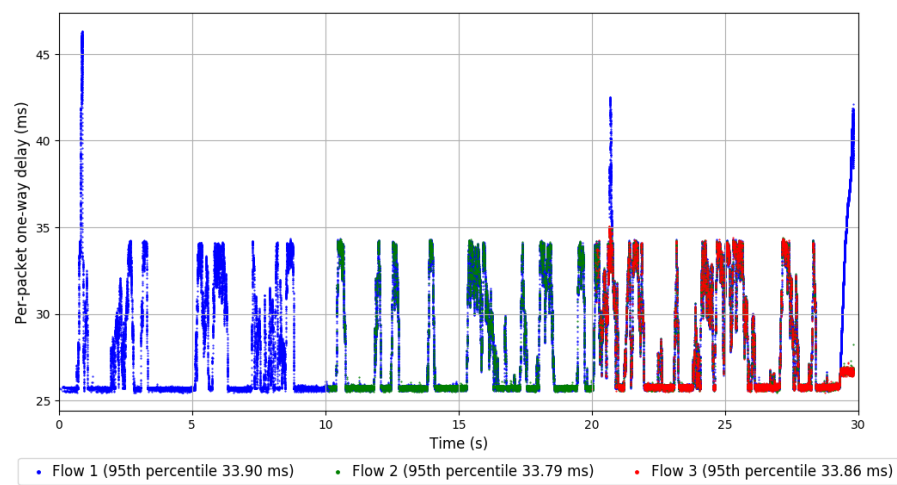
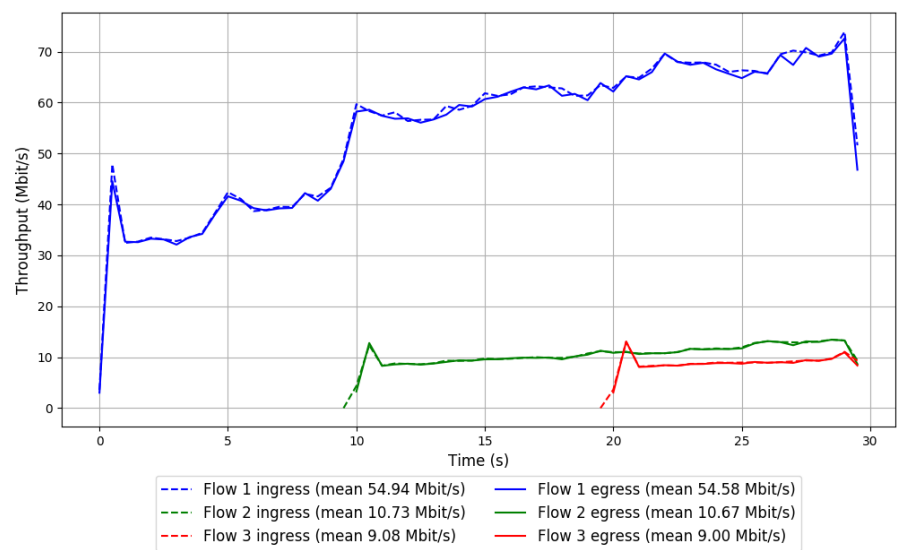
-- Flow 3:

Average throughput: 9.00 Mbit/s

95th percentile per-packet one-way delay: 33.860 ms

Loss rate: 1.36%

Run 8: Report of PCC — Data Link

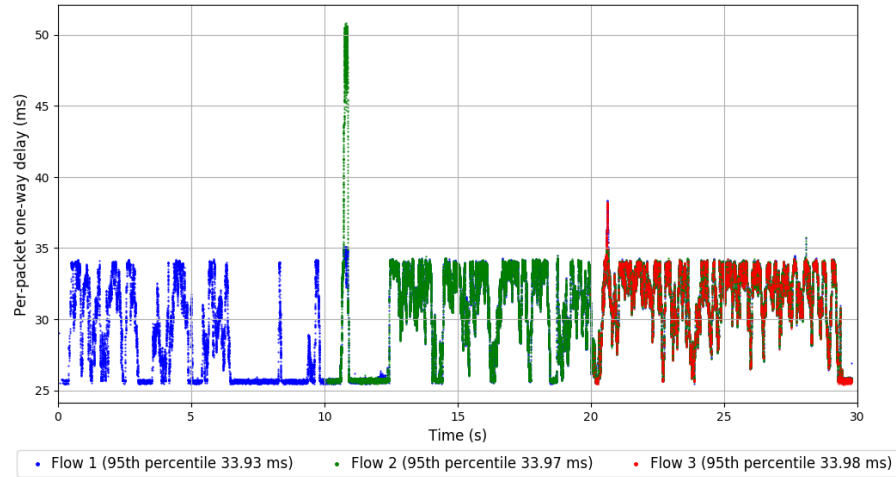
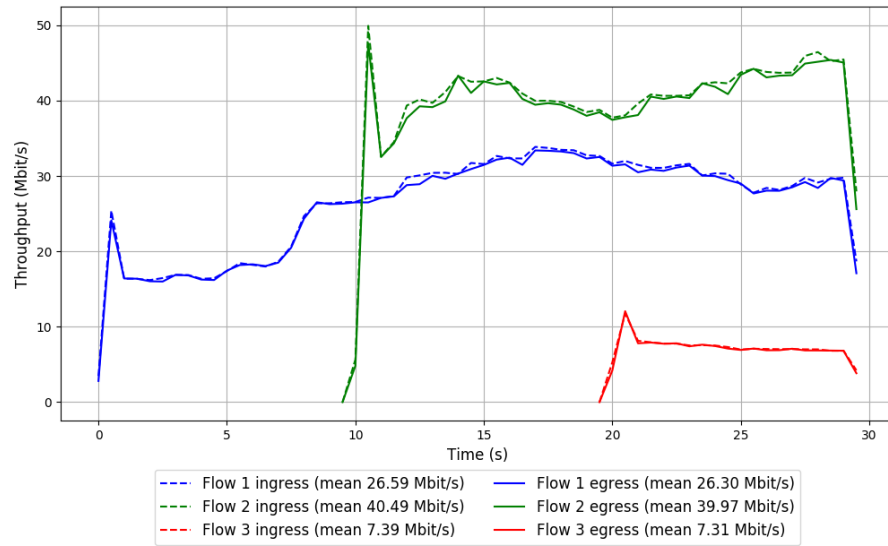


Run 9: Statistics of PCC

Start at: 2018-01-10 02:33:34  
End at: 2018-01-10 02:34:04  
Local clock offset: -0.027 ms  
Remote clock offset: -1.286 ms

# Below is generated by plot.py at 2018-01-10 07:31:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 55.32 Mbit/s  
95th percentile per-packet one-way delay: 33.951 ms  
Loss rate: 1.41%  
-- Flow 1:  
Average throughput: 26.30 Mbit/s  
95th percentile per-packet one-way delay: 33.926 ms  
Loss rate: 1.25%  
-- Flow 2:  
Average throughput: 39.97 Mbit/s  
95th percentile per-packet one-way delay: 33.968 ms  
Loss rate: 1.56%  
-- Flow 3:  
Average throughput: 7.31 Mbit/s  
95th percentile per-packet one-way delay: 33.982 ms  
Loss rate: 1.63%

# Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-10 02:56:32

End at: 2018-01-10 02:57:02

Local clock offset: 0.004 ms

Remote clock offset: 0.822 ms

# Below is generated by plot.py at 2018-01-10 07:31:44

# Datalink statistics

-- Total of 3 flows:

Average throughput: 60.01 Mbit/s

95th percentile per-packet one-way delay: 54.746 ms

Loss rate: 2.09%

-- Flow 1:

Average throughput: 13.85 Mbit/s

95th percentile per-packet one-way delay: 32.376 ms

Loss rate: 1.84%

-- Flow 2:

Average throughput: 54.06 Mbit/s

95th percentile per-packet one-way delay: 54.890 ms

Loss rate: 2.00%

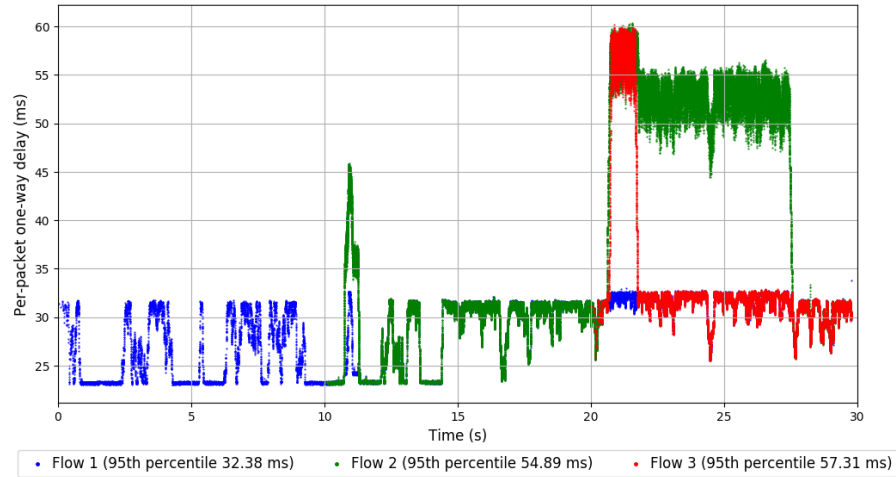
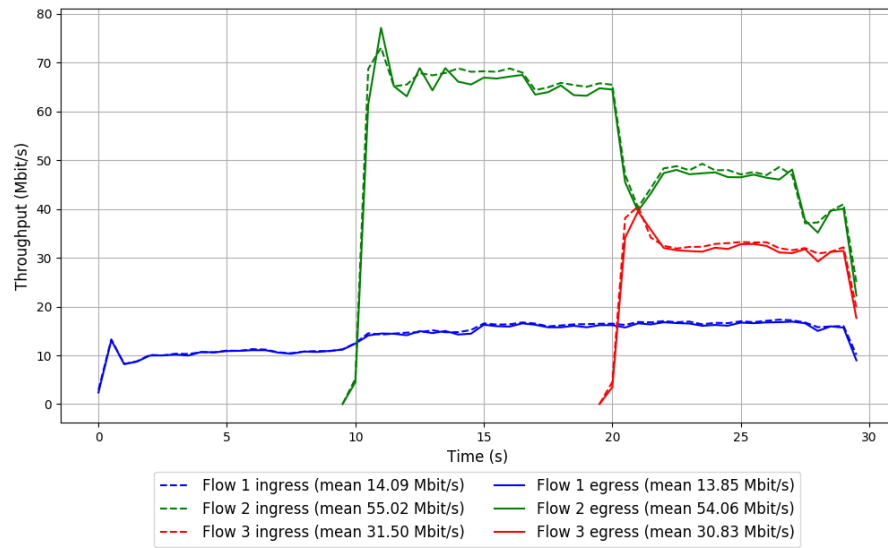
-- Flow 3:

Average throughput: 30.83 Mbit/s

95th percentile per-packet one-way delay: 57.308 ms

Loss rate: 2.72%

# Run 10: Report of PCC — Data Link



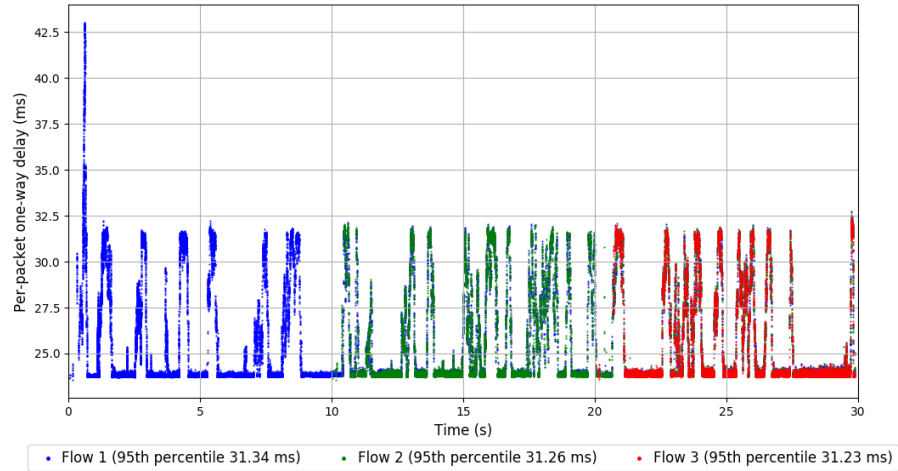
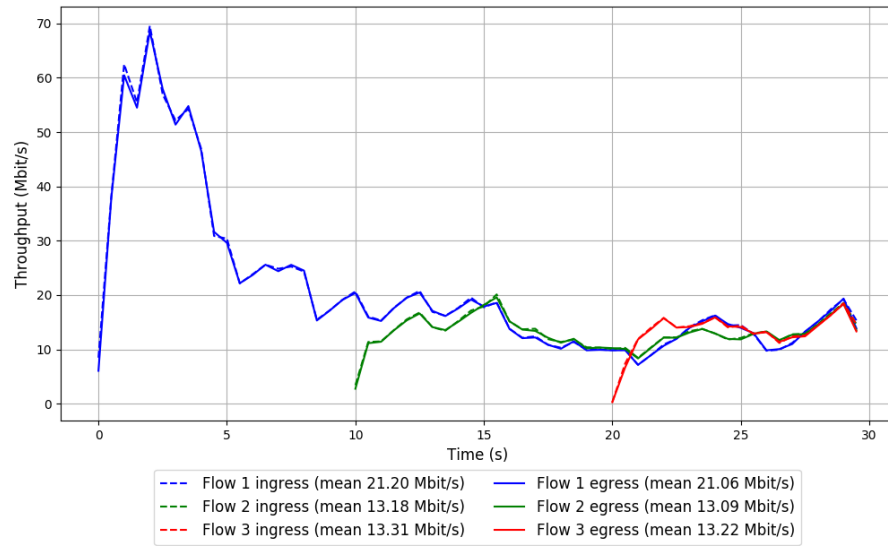
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-09 23:54:56  
End at: 2018-01-09 23:55:26  
Local clock offset: 0.086 ms  
Remote clock offset: -0.828 ms

# Below is generated by plot.py at 2018-01-10 07:31:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 34.11 Mbit/s  
95th percentile per-packet one-way delay: 31.314 ms  
Loss rate: 0.91%  
-- Flow 1:  
Average throughput: 21.06 Mbit/s  
95th percentile per-packet one-way delay: 31.345 ms  
Loss rate: 0.84%  
-- Flow 2:  
Average throughput: 13.09 Mbit/s  
95th percentile per-packet one-way delay: 31.262 ms  
Loss rate: 0.91%  
-- Flow 3:  
Average throughput: 13.22 Mbit/s  
95th percentile per-packet one-way delay: 31.228 ms  
Loss rate: 1.20%



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

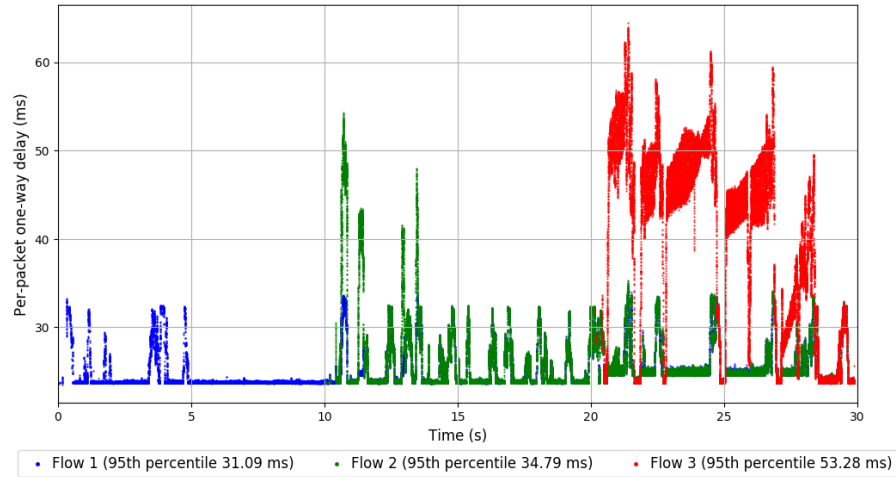
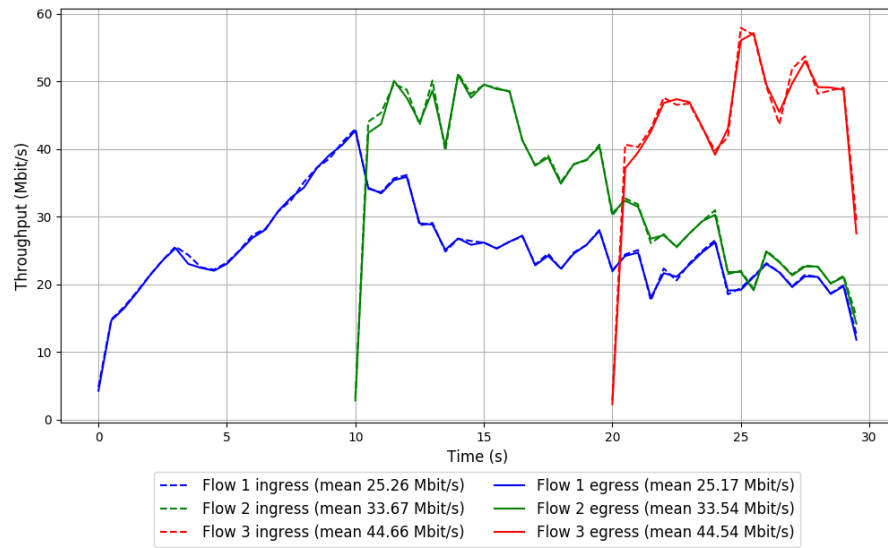


Run 2: Statistics of QUIC Cubic

Start at: 2018-01-10 00:16:18  
End at: 2018-01-10 00:16:48  
Local clock offset: 0.17 ms  
Remote clock offset: -0.622 ms

# Below is generated by plot.py at 2018-01-10 07:32:19  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 62.07 Mbit/s  
95th percentile per-packet one-way delay: 49.123 ms  
Loss rate: 0.64%  
-- Flow 1:  
Average throughput: 25.17 Mbit/s  
95th percentile per-packet one-way delay: 31.094 ms  
Loss rate: 0.52%  
-- Flow 2:  
Average throughput: 33.54 Mbit/s  
95th percentile per-packet one-way delay: 34.790 ms  
Loss rate: 0.64%  
-- Flow 3:  
Average throughput: 44.54 Mbit/s  
95th percentile per-packet one-way delay: 53.277 ms  
Loss rate: 0.85%

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

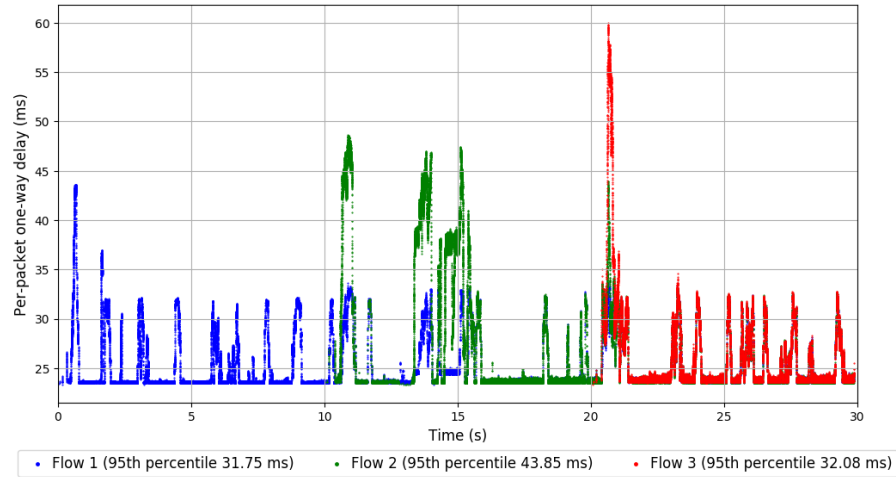
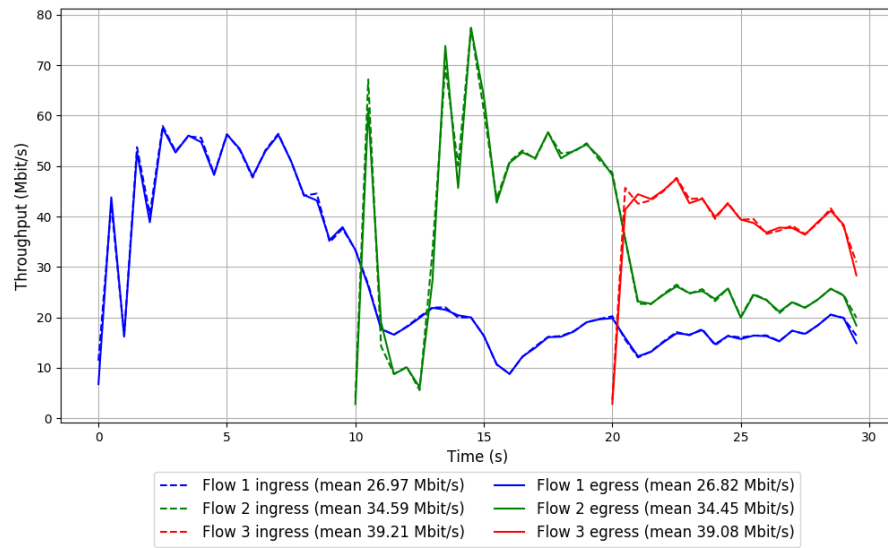


Run 3: Statistics of QUIC Cubic

Start at: 2018-01-10 00:37:35  
End at: 2018-01-10 00:38:05  
Local clock offset: 0.074 ms  
Remote clock offset: -1.137 ms

# Below is generated by plot.py at 2018-01-10 07:32:24  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 62.56 Mbit/s  
95th percentile per-packet one-way delay: 38.627 ms  
Loss rate: 0.74%  
-- Flow 1:  
Average throughput: 26.82 Mbit/s  
95th percentile per-packet one-way delay: 31.748 ms  
Loss rate: 0.74%  
-- Flow 2:  
Average throughput: 34.45 Mbit/s  
95th percentile per-packet one-way delay: 43.850 ms  
Loss rate: 0.67%  
-- Flow 3:  
Average throughput: 39.08 Mbit/s  
95th percentile per-packet one-way delay: 32.078 ms  
Loss rate: 0.87%

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

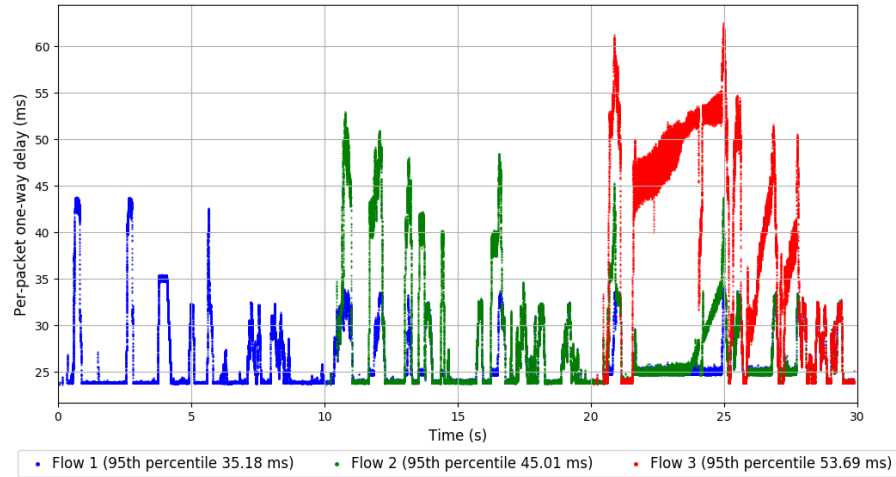
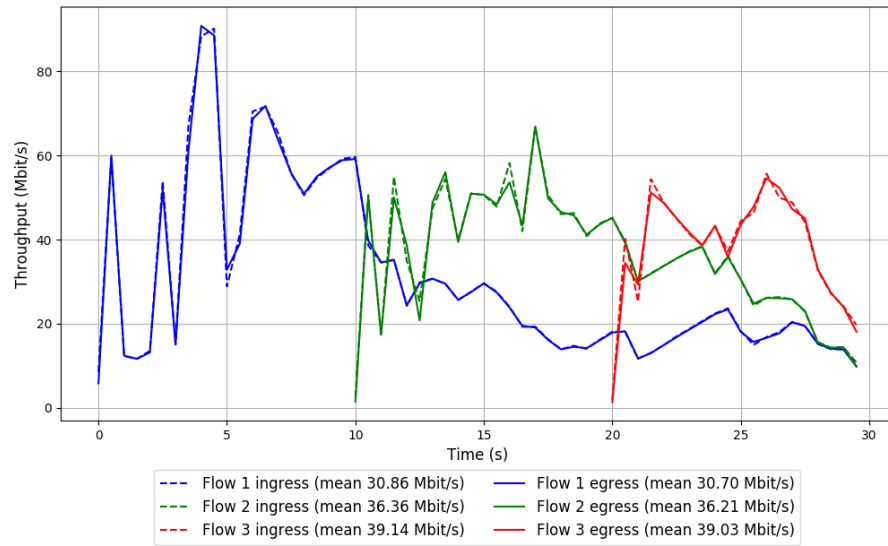


Run 4: Statistics of QUIC Cubic

Start at: 2018-01-10 00:58:49  
End at: 2018-01-10 00:59:19  
Local clock offset: 0.102 ms  
Remote clock offset: -0.555 ms

# Below is generated by plot.py at 2018-01-10 07:32:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 67.48 Mbit/s  
95th percentile per-packet one-way delay: 49.832 ms  
Loss rate: 0.71%  
-- Flow 1:  
Average throughput: 30.70 Mbit/s  
95th percentile per-packet one-way delay: 35.177 ms  
Loss rate: 0.70%  
-- Flow 2:  
Average throughput: 36.21 Mbit/s  
95th percentile per-packet one-way delay: 45.012 ms  
Loss rate: 0.67%  
-- Flow 3:  
Average throughput: 39.03 Mbit/s  
95th percentile per-packet one-way delay: 53.694 ms  
Loss rate: 0.81%

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



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-10 01:20:16

End at: 2018-01-10 01:20:46

Local clock offset: -0.07 ms

Remote clock offset: 0.929 ms

# Below is generated by plot.py at 2018-01-10 07:32:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 46.56 Mbit/s

95th percentile per-packet one-way delay: 35.042 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 16.98 Mbit/s

95th percentile per-packet one-way delay: 31.748 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 28.79 Mbit/s

95th percentile per-packet one-way delay: 35.804 ms

Loss rate: 1.01%

-- Flow 3:

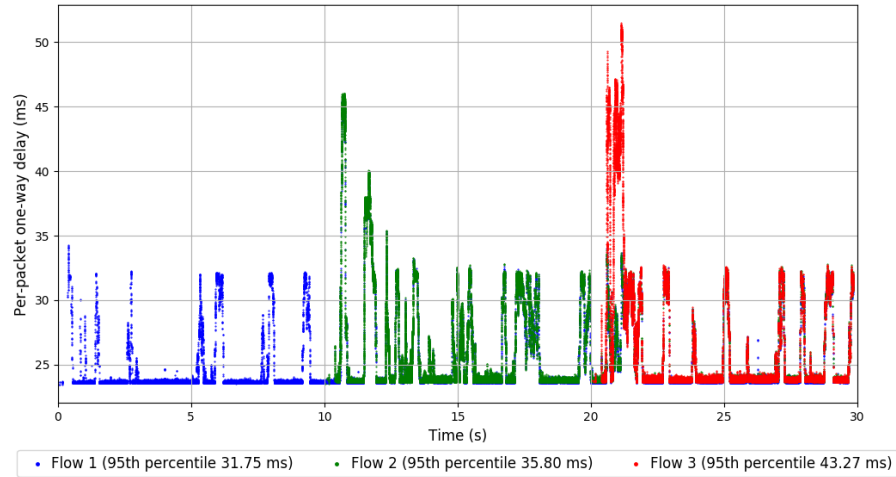
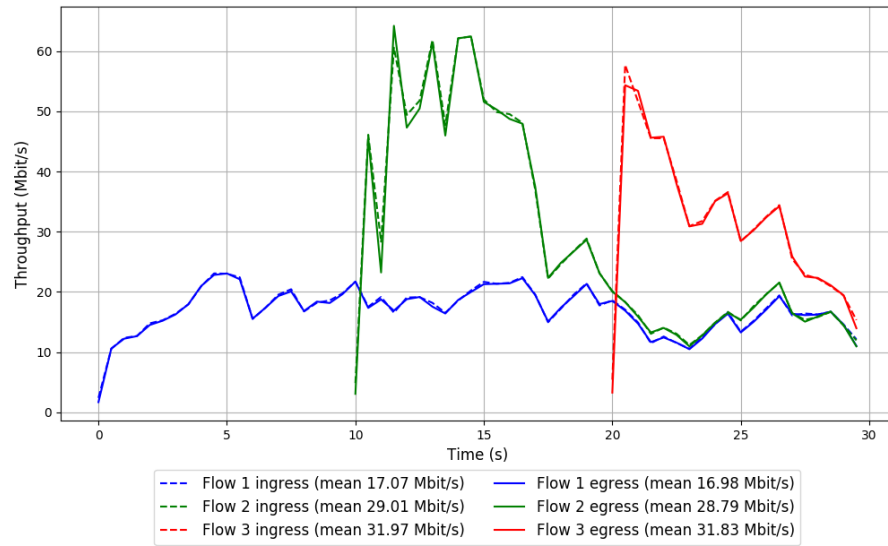
Average throughput: 31.83 Mbit/s

95th percentile per-packet one-way delay: 43.266 ms

Loss rate: 0.95%



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

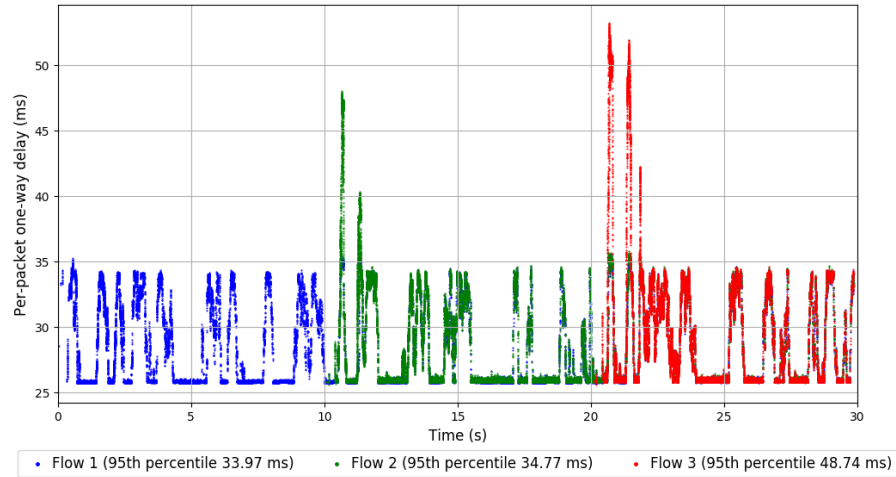
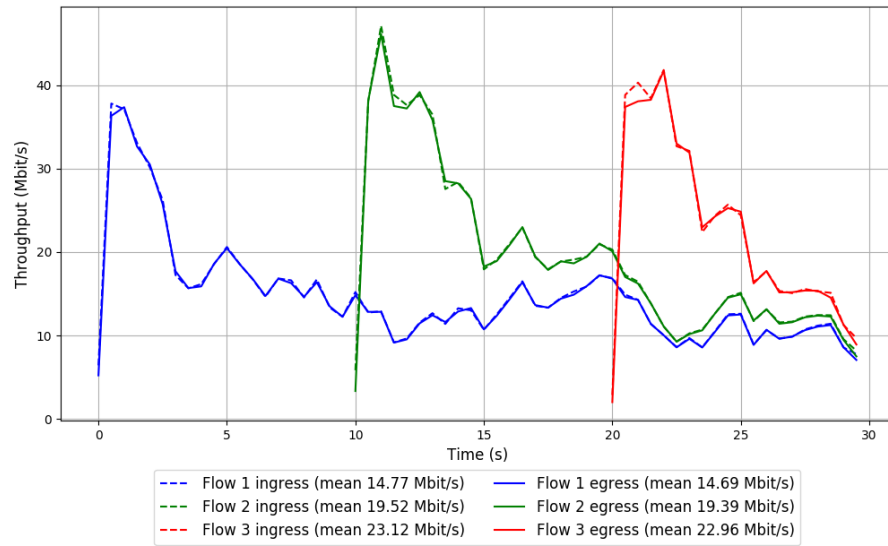


Run 6: Statistics of QUIC Cubic

Start at: 2018-01-10 01:42:27  
End at: 2018-01-10 01:42:57  
Local clock offset: 0.009 ms  
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-01-10 07:32:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 35.11 Mbit/s  
95th percentile per-packet one-way delay: 34.396 ms  
Loss rate: 0.93%  
-- Flow 1:  
Average throughput: 14.69 Mbit/s  
95th percentile per-packet one-way delay: 33.970 ms  
Loss rate: 0.74%  
-- Flow 2:  
Average throughput: 19.39 Mbit/s  
95th percentile per-packet one-way delay: 34.773 ms  
Loss rate: 0.94%  
-- Flow 3:  
Average throughput: 22.96 Mbit/s  
95th percentile per-packet one-way delay: 48.743 ms  
Loss rate: 1.27%

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



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-10 02:04:01

End at: 2018-01-10 02:04:31

Local clock offset: -0.167 ms

Remote clock offset: 2.818 ms

# Below is generated by plot.py at 2018-01-10 07:32:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 19.63 Mbit/s

95th percentile per-packet one-way delay: 31.413 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 9.84 Mbit/s

95th percentile per-packet one-way delay: 31.400 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 9.82 Mbit/s

95th percentile per-packet one-way delay: 31.425 ms

Loss rate: 1.02%

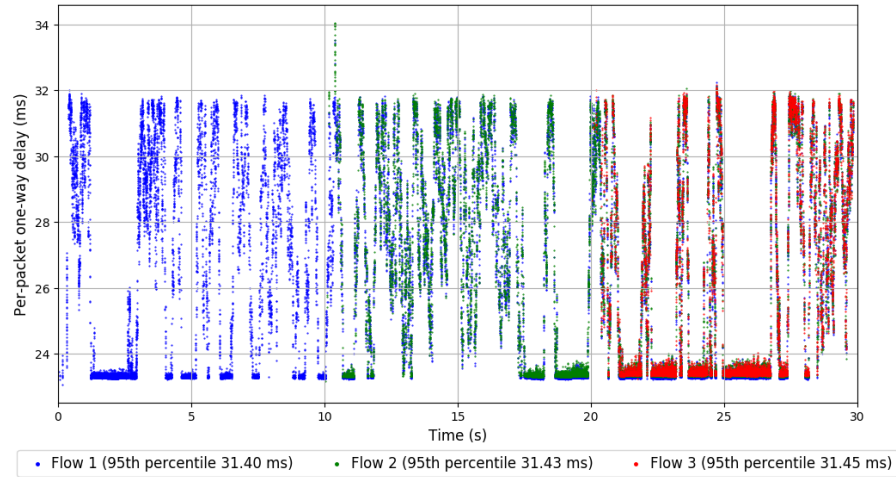
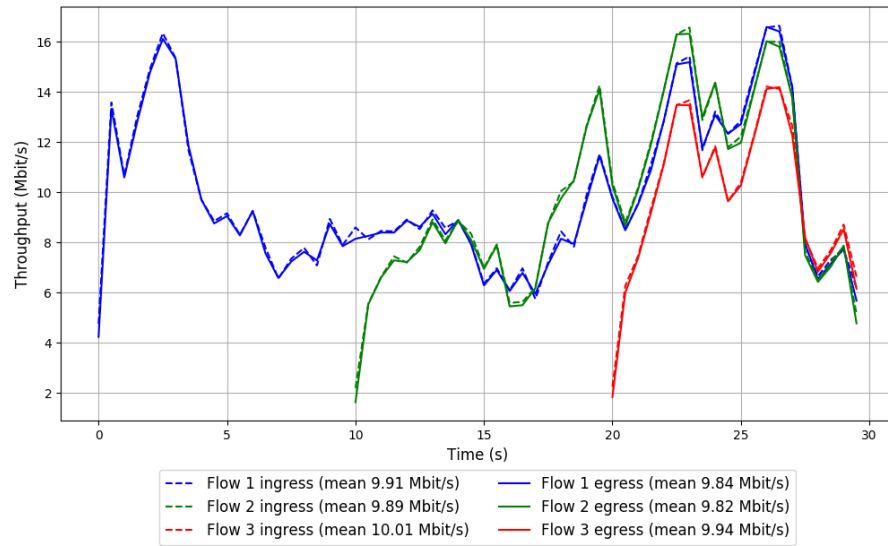
-- Flow 3:

Average throughput: 9.94 Mbit/s

95th percentile per-packet one-way delay: 31.450 ms

Loss rate: 1.33%

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



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-10 02:25:55

End at: 2018-01-10 02:26:25

Local clock offset: -0.069 ms

Remote clock offset: 1.764 ms

# Below is generated by plot.py at 2018-01-10 07:32:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 27.18 Mbit/s

95th percentile per-packet one-way delay: 40.419 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 13.46 Mbit/s

95th percentile per-packet one-way delay: 31.485 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 16.74 Mbit/s

95th percentile per-packet one-way delay: 43.860 ms

Loss rate: 1.40%

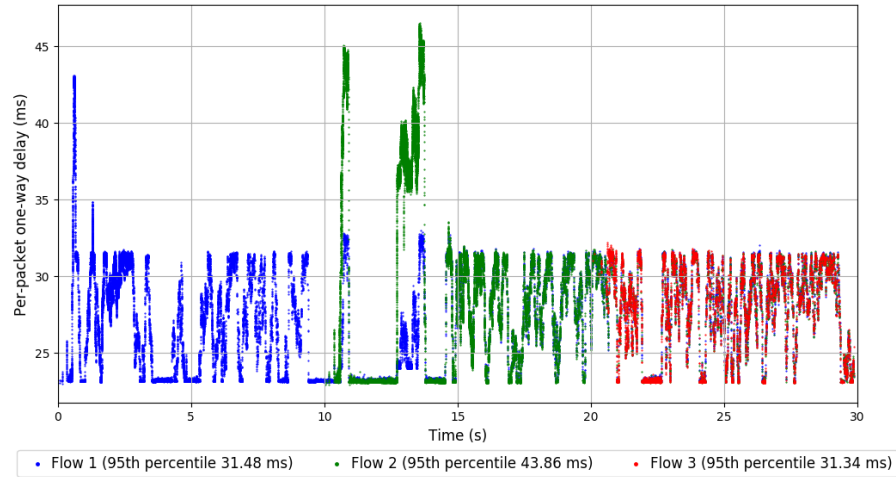
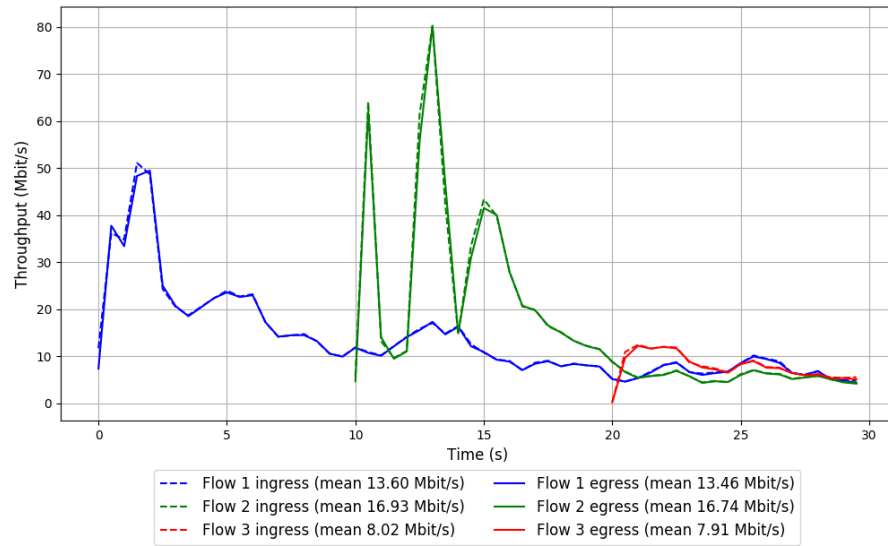
-- Flow 3:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 31.344 ms

Loss rate: 1.93%

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



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-10 02:48:58

End at: 2018-01-10 02:49:28

Local clock offset: -0.035 ms

Remote clock offset: -1.72 ms

# Below is generated by plot.py at 2018-01-10 07:33:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 45.93 Mbit/s

95th percentile per-packet one-way delay: 41.977 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 17.64 Mbit/s

95th percentile per-packet one-way delay: 34.153 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 34.34 Mbit/s

95th percentile per-packet one-way delay: 45.087 ms

Loss rate: 0.90%

-- Flow 3:

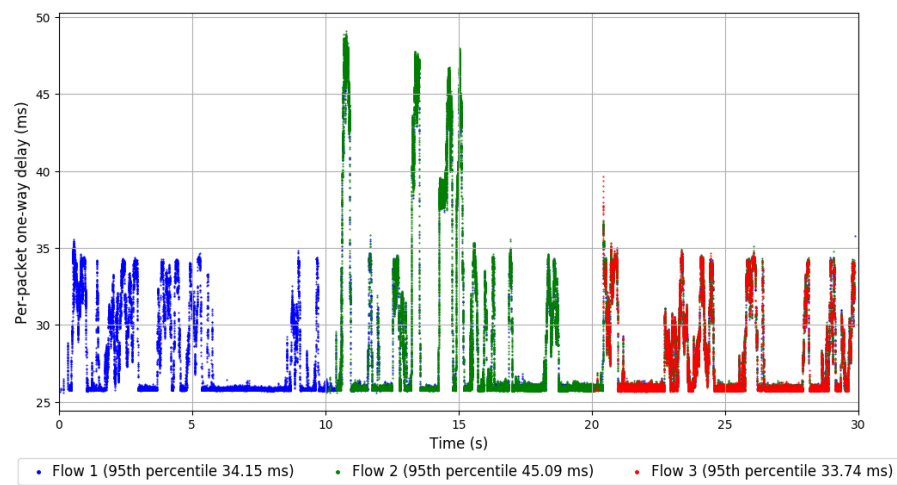
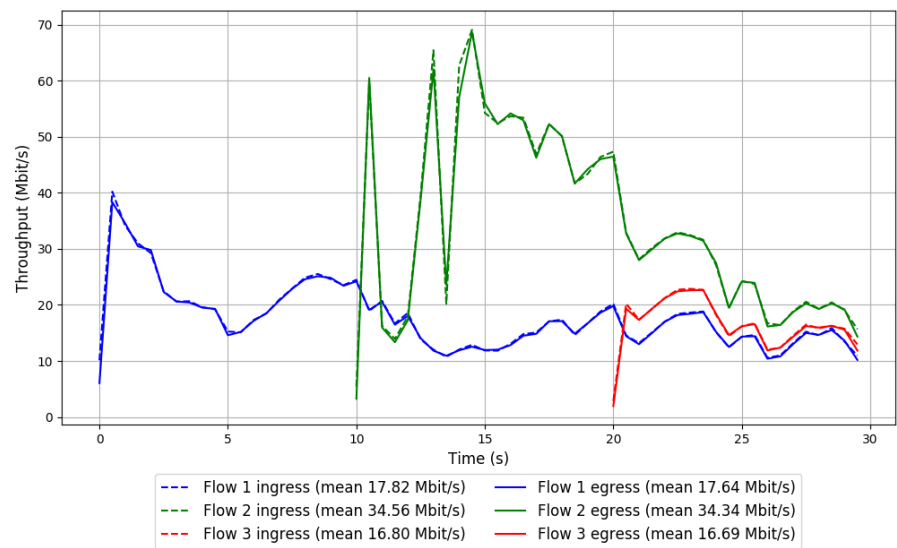
Average throughput: 16.69 Mbit/s

95th percentile per-packet one-way delay: 33.741 ms

Loss rate: 1.20%



Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-01-10 03:14:12

End at: 2018-01-10 03:14:42

Local clock offset: 0.057 ms

Remote clock offset: 1.401 ms

# Below is generated by plot.py at 2018-01-10 07:33:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 10.74 Mbit/s

95th percentile per-packet one-way delay: 31.565 ms

Loss rate: 1.50%

-- Flow 1:

Average throughput: 5.30 Mbit/s

95th percentile per-packet one-way delay: 31.561 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 5.36 Mbit/s

95th percentile per-packet one-way delay: 31.558 ms

Loss rate: 1.42%

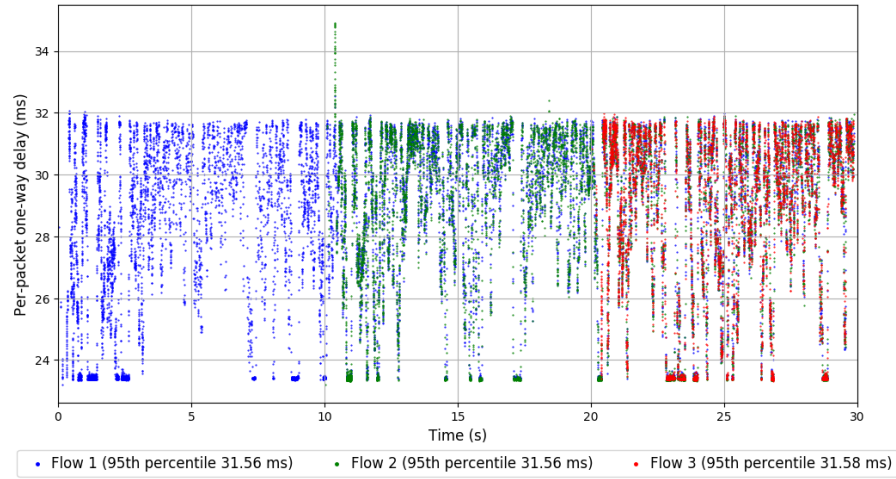
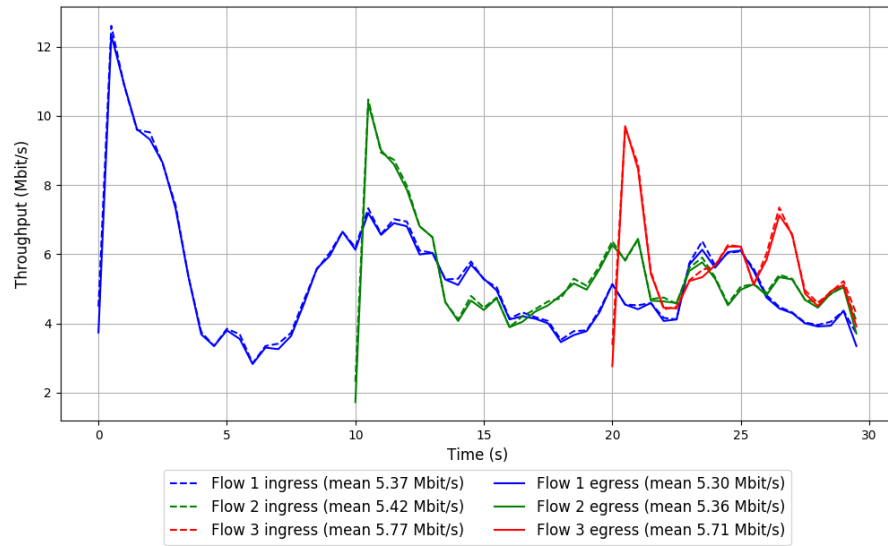
-- Flow 3:

Average throughput: 5.71 Mbit/s

95th percentile per-packet one-way delay: 31.581 ms

Loss rate: 1.77%

# Run 10: Report of QUIC Cubic — Data Link

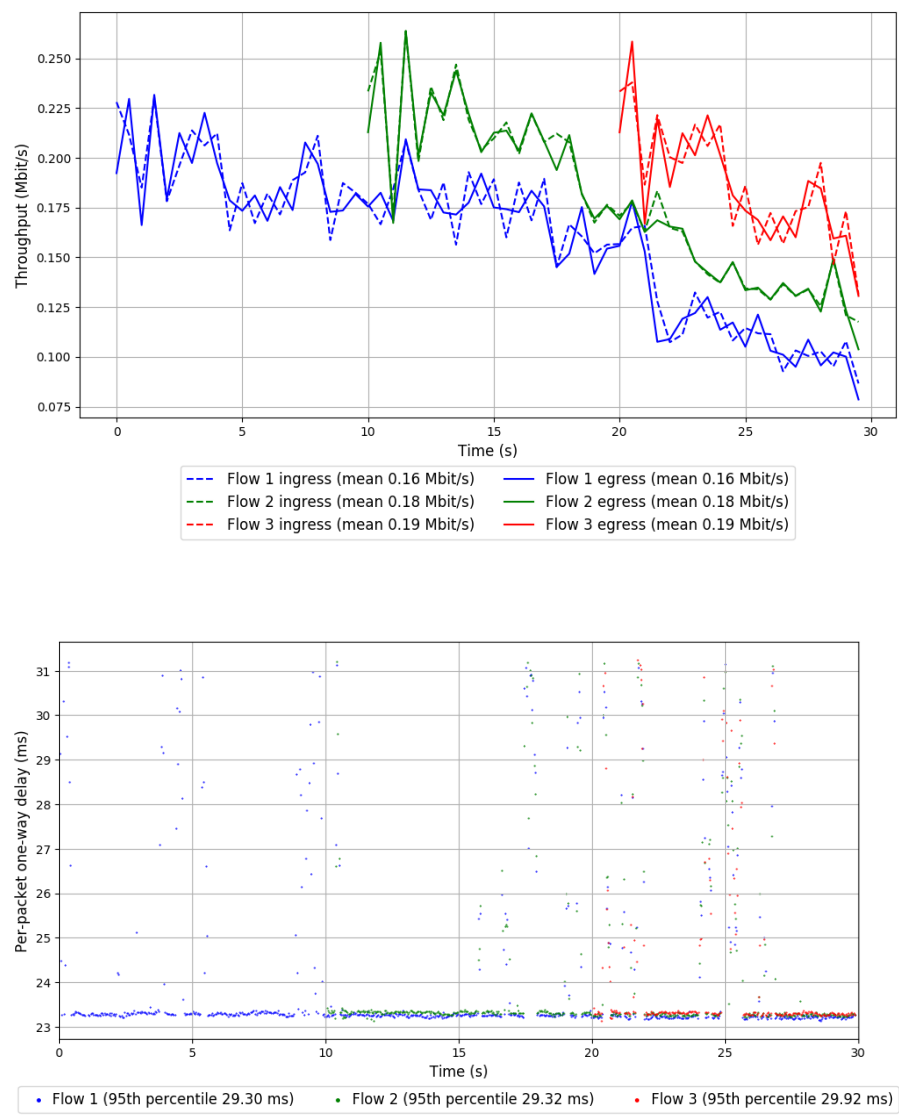


```
Run 1: Statistics of SCReAM

Start at: 2018-01-09 23:49:20
End at: 2018-01-09 23:49:50
Local clock offset: 0.05 ms
Remote clock offset: -0.511 ms

# Below is generated by plot.py at 2018-01-10 07:33:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 29.560 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 29.297 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 29.323 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 29.921 ms
Loss rate: 0.92%
```

Run 1: Report of SReAM — Data Link

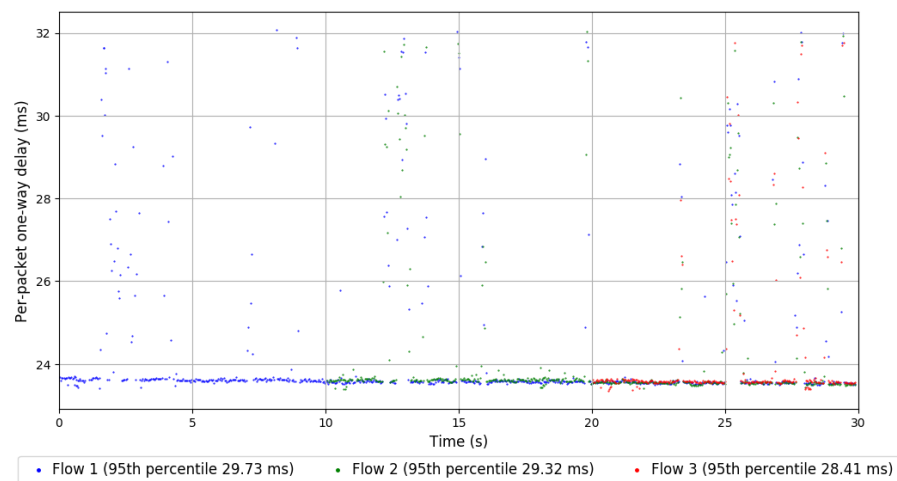
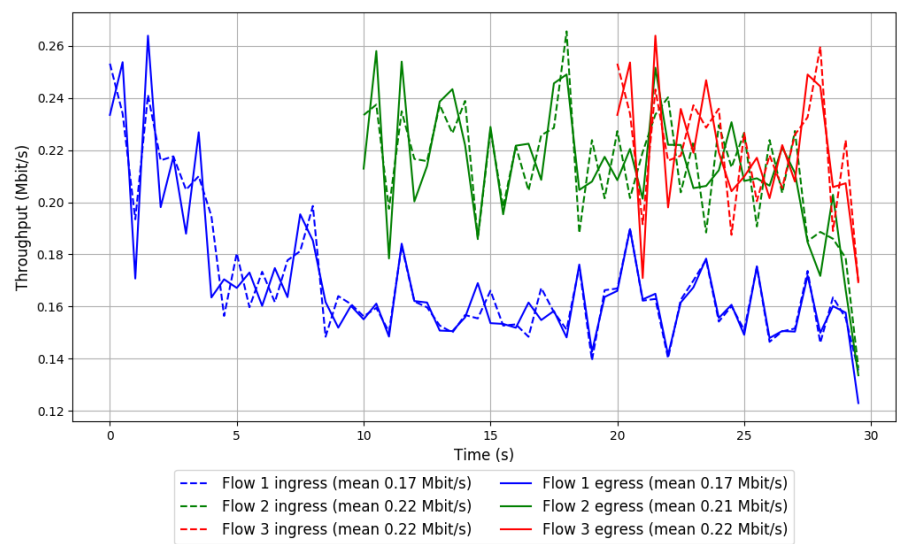


Run 2: Statistics of SReAM

Start at: 2018-01-10 00:10:55  
End at: 2018-01-10 00:11:25  
Local clock offset: 0.154 ms  
Remote clock offset: -0.478 ms

# Below is generated by plot.py at 2018-01-10 07:33:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.39 Mbit/s  
95th percentile per-packet one-way delay: 29.324 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 0.17 Mbit/s  
95th percentile per-packet one-way delay: 29.732 ms  
Loss rate: 0.59%  
-- Flow 2:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 29.316 ms  
Loss rate: 0.37%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 28.411 ms  
Loss rate: 0.35%

Run 2: Report of SReAM — Data Link



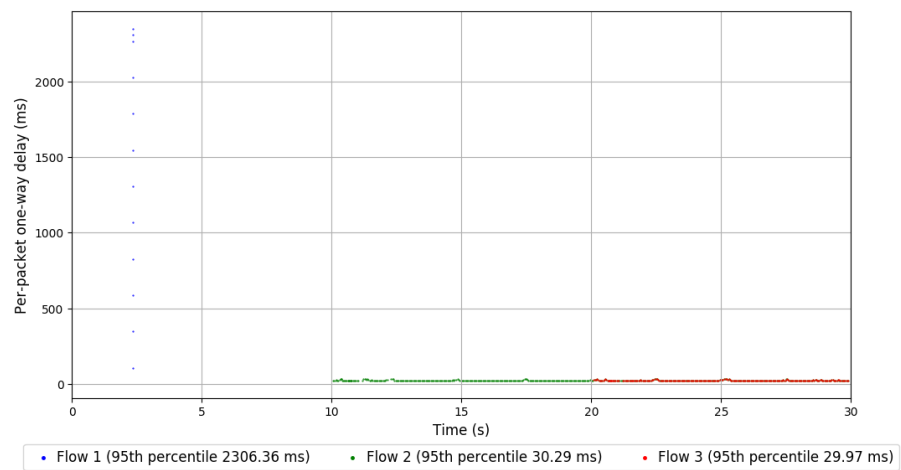
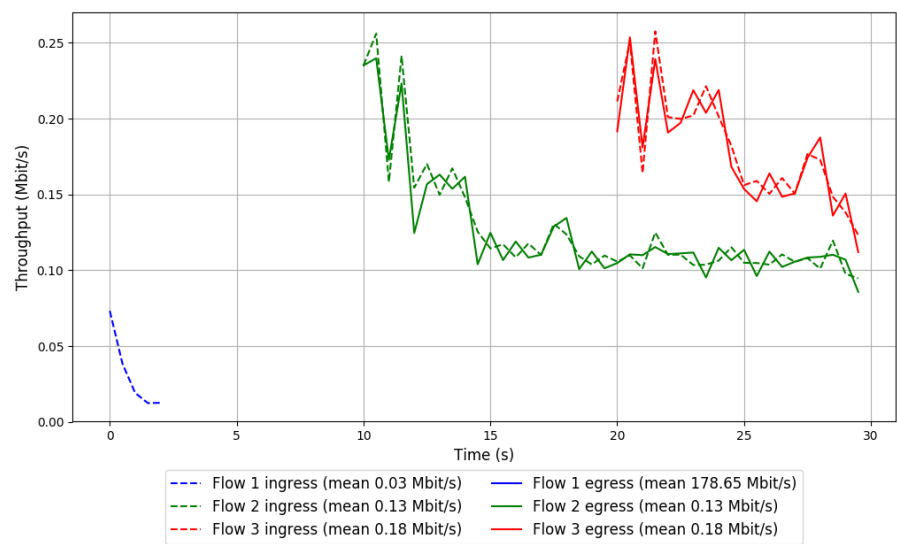
Run 3: Statistics of SCReAM

Start at: 2018-01-10 00:32:05  
End at: 2018-01-10 00:32:35  
Local clock offset: 0.098 ms  
Remote clock offset: -0.601 ms

# Below is generated by plot.py at 2018-01-10 07:33:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.16 Mbit/s  
95th percentile per-packet one-way delay: 30.621 ms  
Loss rate: 1.26%  
-- Flow 1:  
Average throughput: 178.65 Mbit/s  
95th percentile per-packet one-way delay: 2306.360 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.13 Mbit/s  
95th percentile per-packet one-way delay: 30.294 ms  
Loss rate: 1.37%  
-- Flow 3:  
Average throughput: 0.18 Mbit/s  
95th percentile per-packet one-way delay: 29.974 ms  
Loss rate: 1.16%



Run 3: Report of SCRaM — Data Link

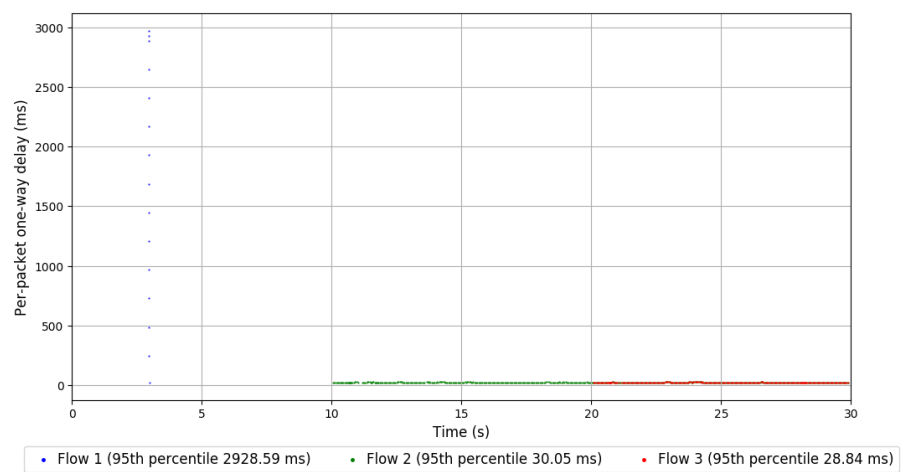
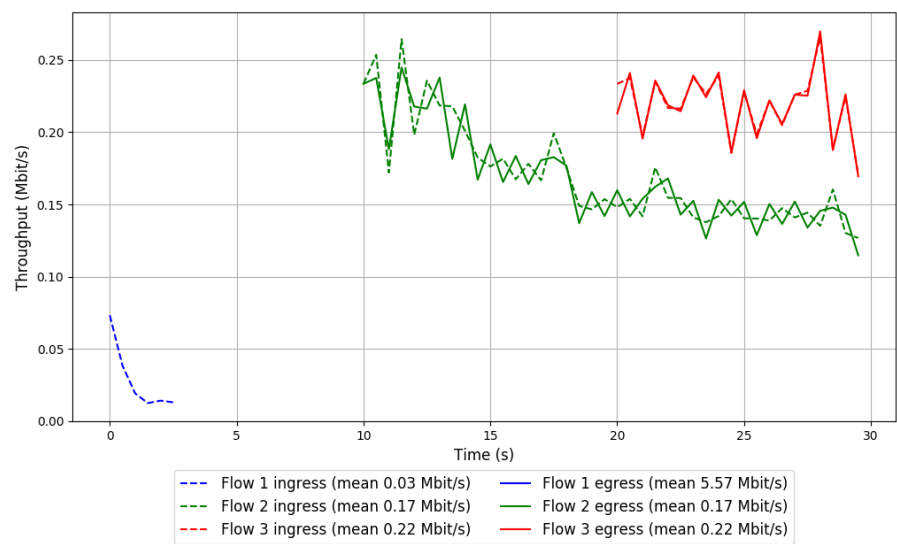


Run 4: Statistics of SReAM

Start at: 2018-01-10 00:53:22  
End at: 2018-01-10 00:53:52  
Local clock offset: 0.135 ms  
Remote clock offset: -0.911 ms

# Below is generated by plot.py at 2018-01-10 07:33:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 31.022 ms  
Loss rate: 0.55%  
-- Flow 1:  
Average throughput: 5.57 Mbit/s  
95th percentile per-packet one-way delay: 2928.586 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.17 Mbit/s  
95th percentile per-packet one-way delay: 30.050 ms  
Loss rate: 0.66%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 28.841 ms  
Loss rate: 0.39%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-01-10 01:14:34

End at: 2018-01-10 01:15:04

Local clock offset: -0.032 ms

Remote clock offset: -1.52 ms

# Below is generated by plot.py at 2018-01-10 07:33:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 32.889 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 32.927 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 32.344 ms

Loss rate: 0.80%

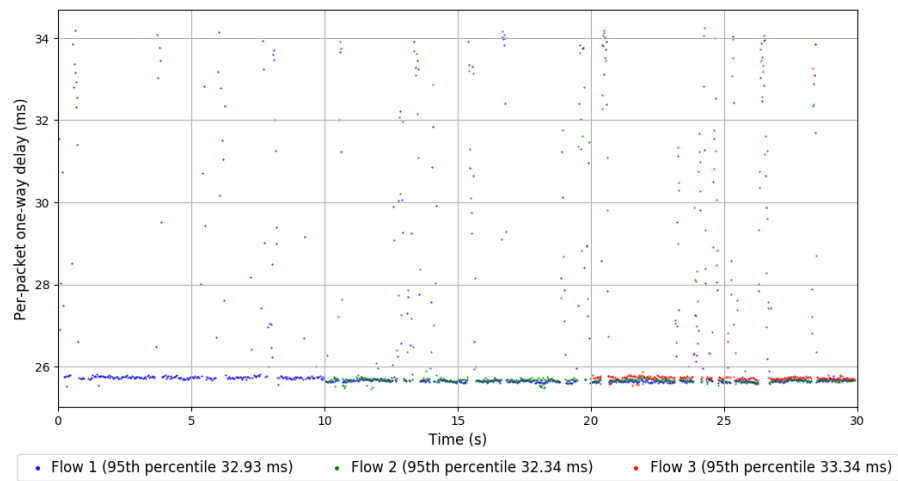
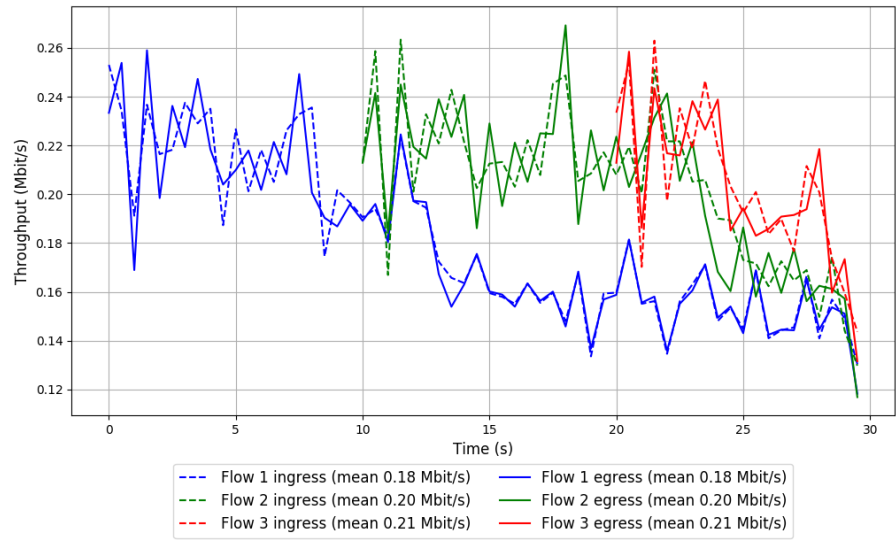
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 33.336 ms

Loss rate: 0.70%

## Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

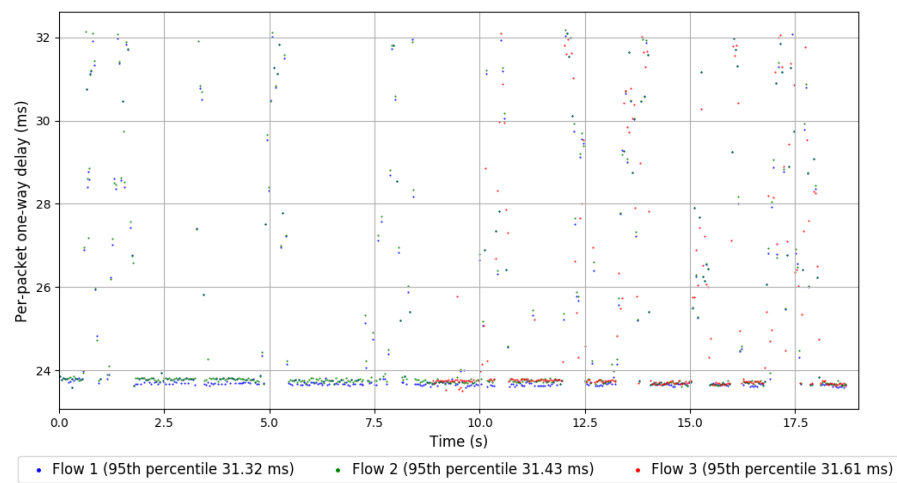
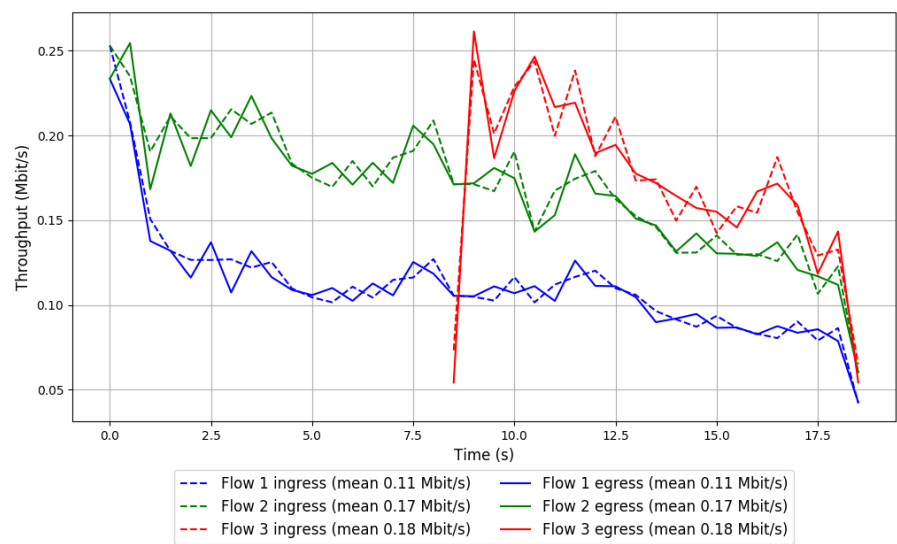
Start at: 2018-01-10 01:36:54

End at: 2018-01-10 01:37:24

Local clock offset: 0.058 ms

Remote clock offset: 1.986 ms

Run 6: Report of SReAM — Data Link



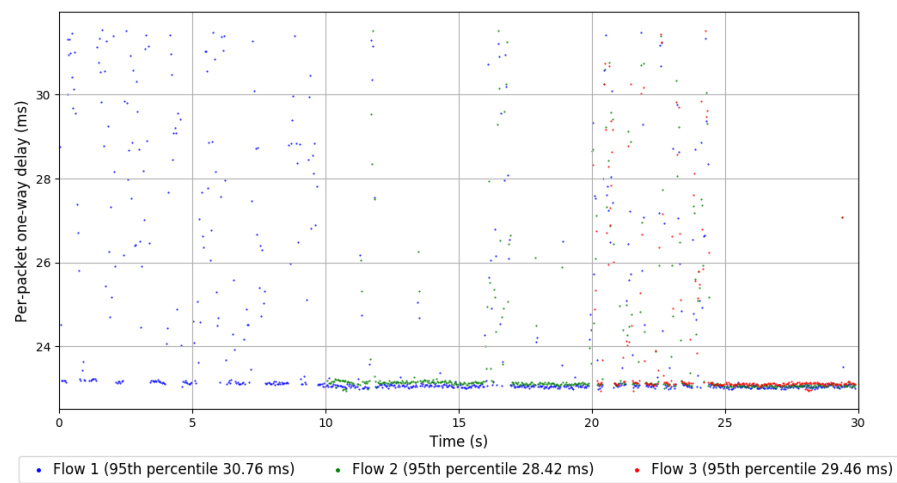
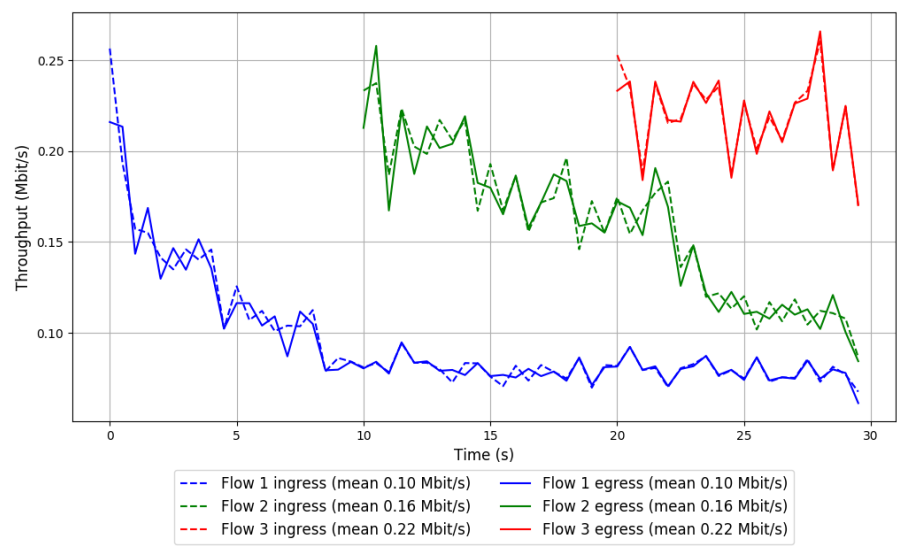
Run 7: Statistics of SReAM

Start at: 2018-01-10 01:58:22  
End at: 2018-01-10 01:58:52  
Local clock offset: -0.126 ms  
Remote clock offset: 2.962 ms

# Below is generated by plot.py at 2018-01-10 07:33:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.28 Mbit/s  
95th percentile per-packet one-way delay: 30.014 ms  
Loss rate: 0.78%  
-- Flow 1:  
Average throughput: 0.10 Mbit/s  
95th percentile per-packet one-way delay: 30.760 ms  
Loss rate: 1.02%  
-- Flow 2:  
Average throughput: 0.16 Mbit/s  
95th percentile per-packet one-way delay: 28.421 ms  
Loss rate: 0.84%  
-- Flow 3:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 29.460 ms  
Loss rate: 0.36%



Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-01-10 02:20:25

End at: 2018-01-10 02:20:55

Local clock offset: -0.114 ms

Remote clock offset: 1.527 ms

# Below is generated by plot.py at 2018-01-10 07:33:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 31.439 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 31.660 ms

Loss rate: 1.88%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 31.221 ms

Loss rate: 1.34%

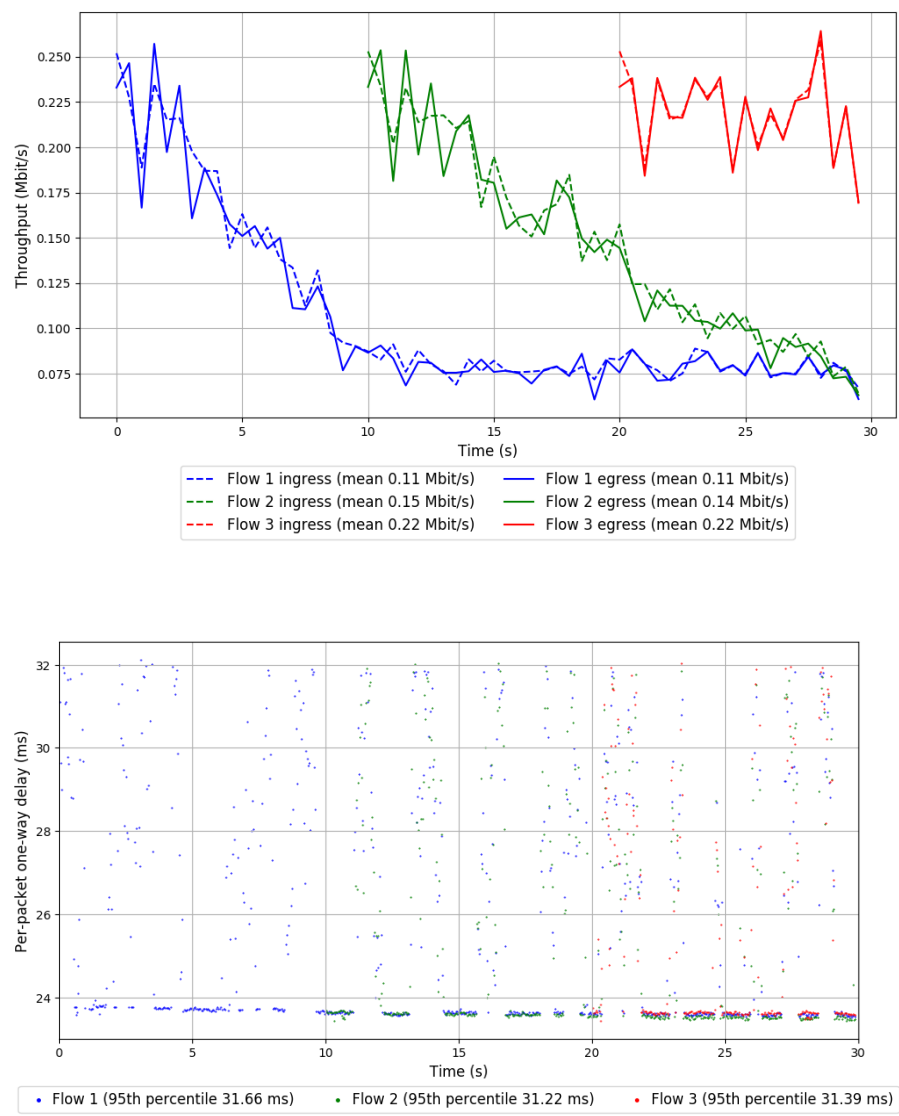
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 31.394 ms

Loss rate: 0.35%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-10 02:43:18

End at: 2018-01-10 02:43:48

Local clock offset: -0.058 ms

Remote clock offset: 0.398 ms

# Below is generated by plot.py at 2018-01-10 07:33:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 31.392 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 31.443 ms

Loss rate: 1.25%

-- Flow 2:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 31.331 ms

Loss rate: 1.34%

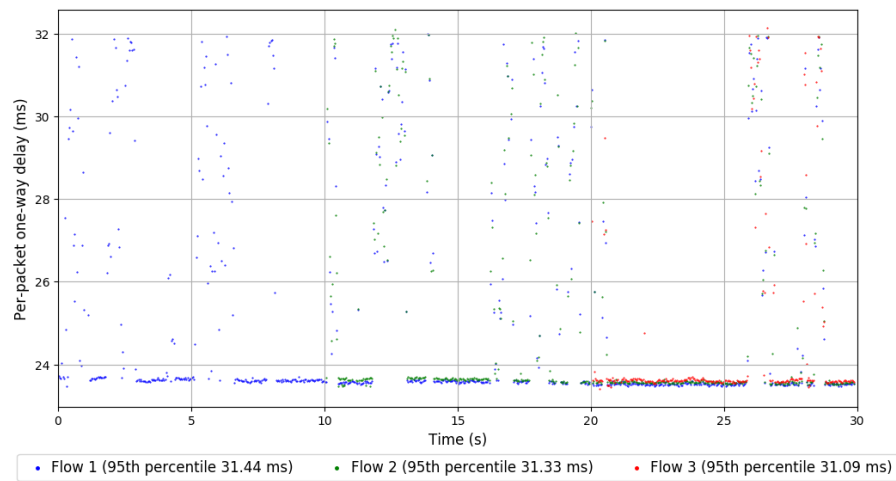
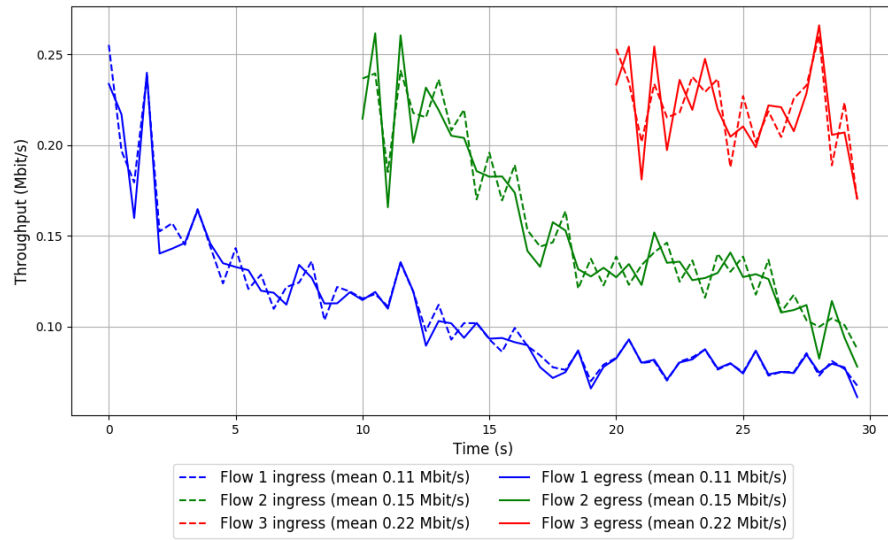
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 31.092 ms

Loss rate: 0.35%

# Run 9: Report of SReAM — Data Link



Run 10: Statistics of SCReAM

Start at: 2018-01-10 03:08:02

End at: 2018-01-10 03:08:32

Local clock offset: -0.065 ms

Remote clock offset: 1.257 ms

# Below is generated by plot.py at 2018-01-10 07:33:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 31.290 ms

Loss rate: 1.50%

-- Flow 1:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 31.253 ms

Loss rate: 2.33%

-- Flow 2:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 31.266 ms

Loss rate: 0.65%

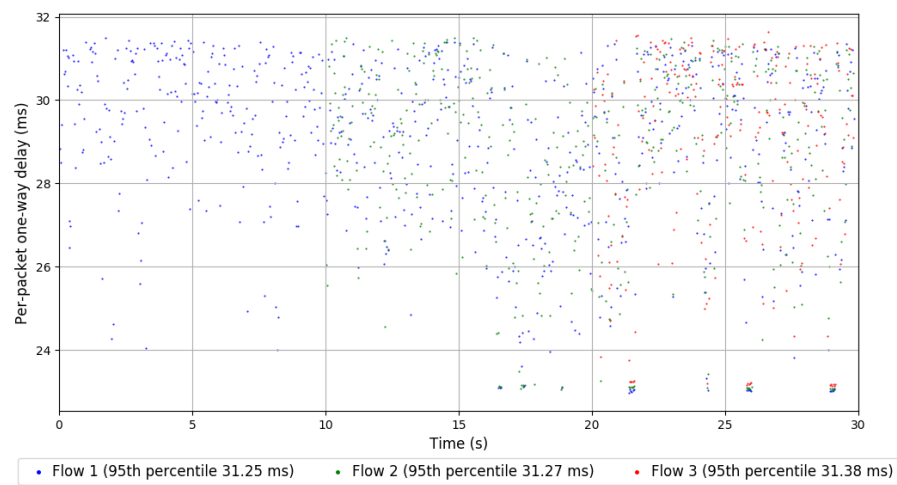
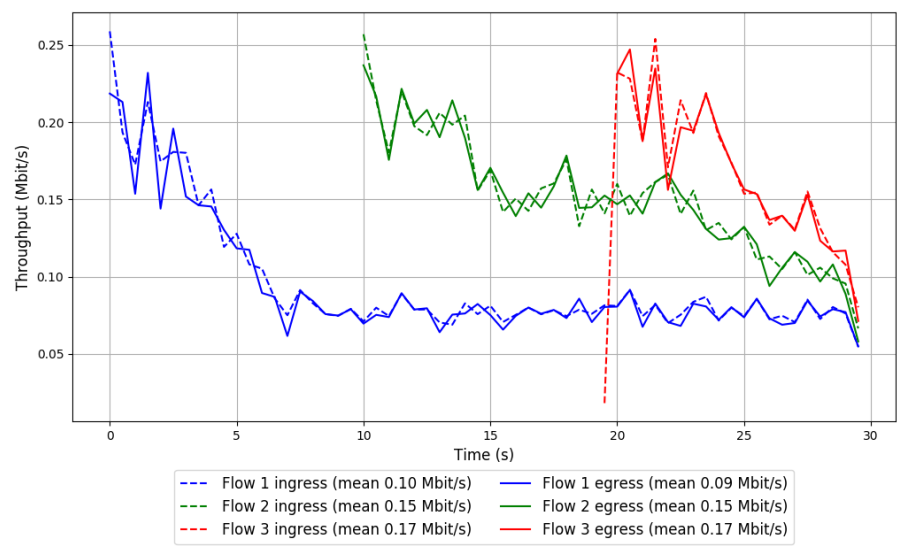
-- Flow 3:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 31.379 ms

Loss rate: 1.60%

Run 10: Report of SReAM — Data Link



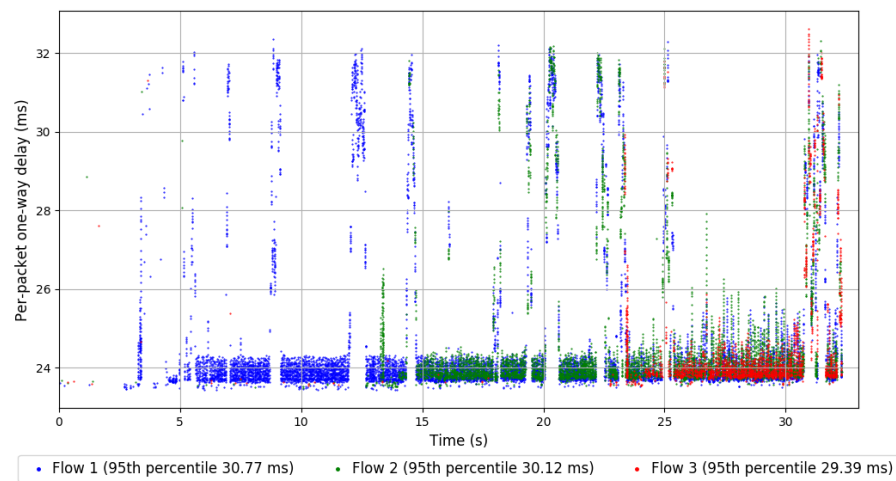
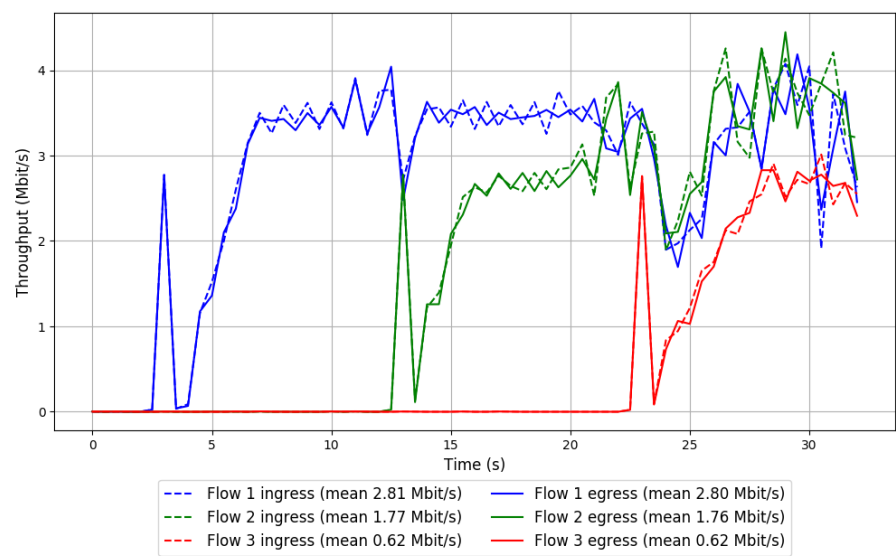
Run 1: Statistics of WebRTC media

Start at: 2018-01-09 23:43:18  
End at: 2018-01-09 23:43:48  
Local clock offset: 0.052 ms  
Remote clock offset: -1.275 ms

# Below is generated by plot.py at 2018-01-10 07:33:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 5.16 Mbit/s  
95th percentile per-packet one-way delay: 30.445 ms  
Loss rate: 0.72%  
-- Flow 1:  
Average throughput: 2.80 Mbit/s  
95th percentile per-packet one-way delay: 30.771 ms  
Loss rate: 0.63%  
-- Flow 2:  
Average throughput: 1.76 Mbit/s  
95th percentile per-packet one-way delay: 30.119 ms  
Loss rate: 0.87%  
-- Flow 3:  
Average throughput: 0.62 Mbit/s  
95th percentile per-packet one-way delay: 29.389 ms  
Loss rate: 0.69%



Run 1: Report of WebRTC media — Data Link

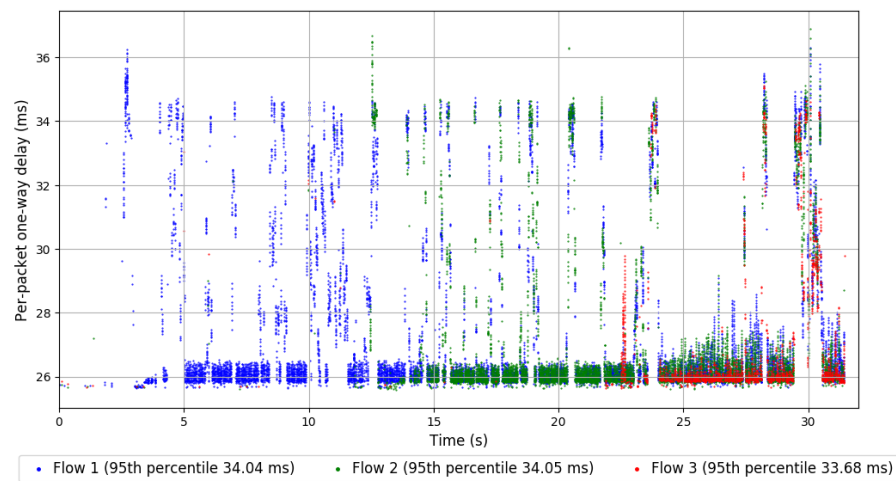
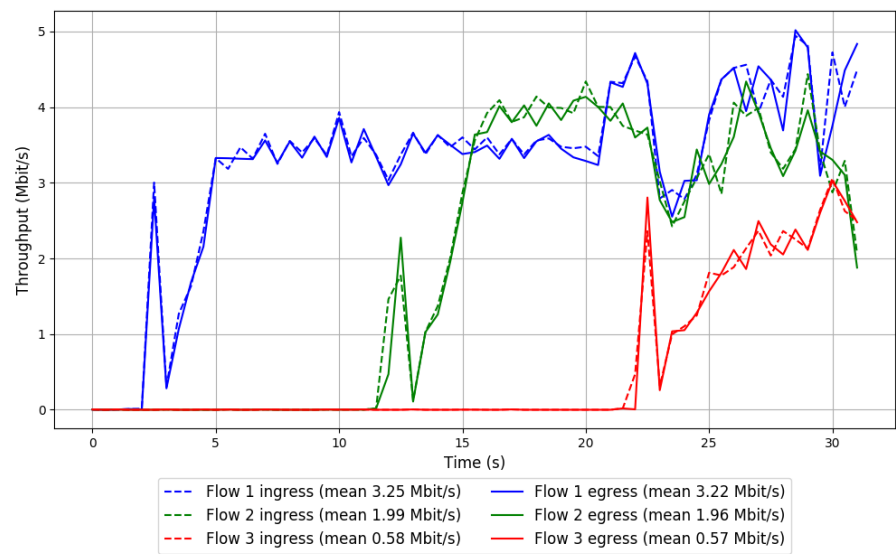


Run 2: Statistics of WebRTC media

Start at: 2018-01-10 00:04:56  
End at: 2018-01-10 00:05:26  
Local clock offset: 0.131 ms  
Remote clock offset: -2.767 ms

# Below is generated by plot.py at 2018-01-10 07:33:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 5.75 Mbit/s  
95th percentile per-packet one-way delay: 34.014 ms  
Loss rate: 1.19%  
-- Flow 1:  
Average throughput: 3.22 Mbit/s  
95th percentile per-packet one-way delay: 34.037 ms  
Loss rate: 1.11%  
-- Flow 2:  
Average throughput: 1.96 Mbit/s  
95th percentile per-packet one-way delay: 34.055 ms  
Loss rate: 1.49%  
-- Flow 3:  
Average throughput: 0.57 Mbit/s  
95th percentile per-packet one-way delay: 33.683 ms  
Loss rate: 0.54%

Run 2: Report of WebRTC media — Data Link

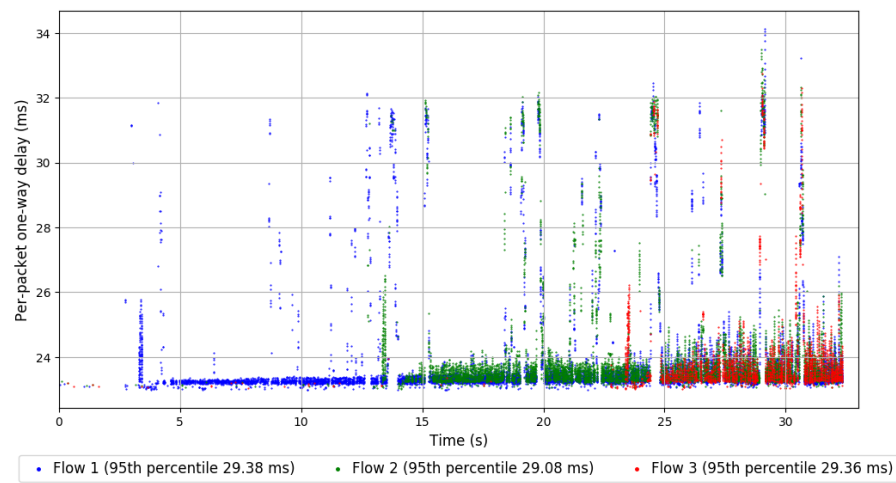
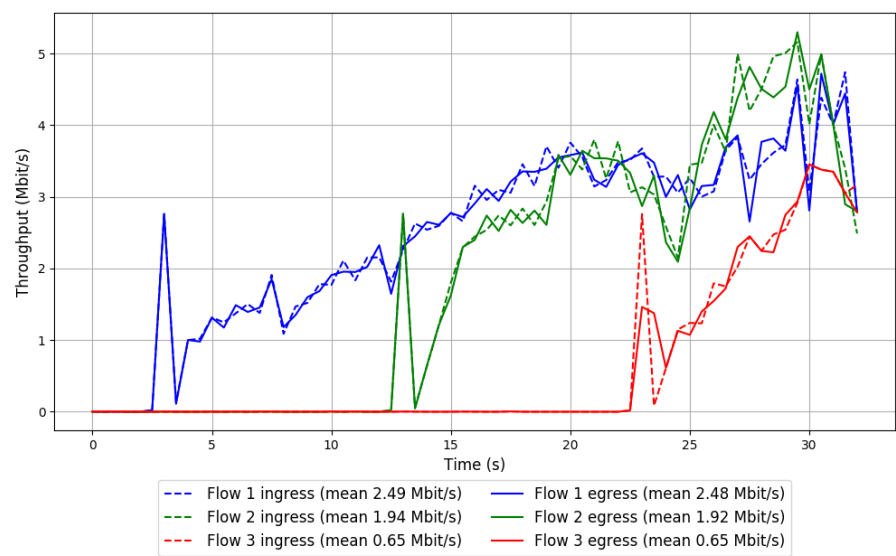


Run 3: Statistics of WebRTC media

Start at: 2018-01-10 00:26:13  
End at: 2018-01-10 00:26:43  
Local clock offset: 0.168 ms  
Remote clock offset: -0.527 ms

# Below is generated by plot.py at 2018-01-10 07:33:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 5.04 Mbit/s  
95th percentile per-packet one-way delay: 29.340 ms  
Loss rate: 0.76%  
-- Flow 1:  
Average throughput: 2.48 Mbit/s  
95th percentile per-packet one-way delay: 29.384 ms  
Loss rate: 0.56%  
-- Flow 2:  
Average throughput: 1.92 Mbit/s  
95th percentile per-packet one-way delay: 29.083 ms  
Loss rate: 0.93%  
-- Flow 3:  
Average throughput: 0.65 Mbit/s  
95th percentile per-packet one-way delay: 29.362 ms  
Loss rate: 1.02%

Run 3: Report of WebRTC media — Data Link

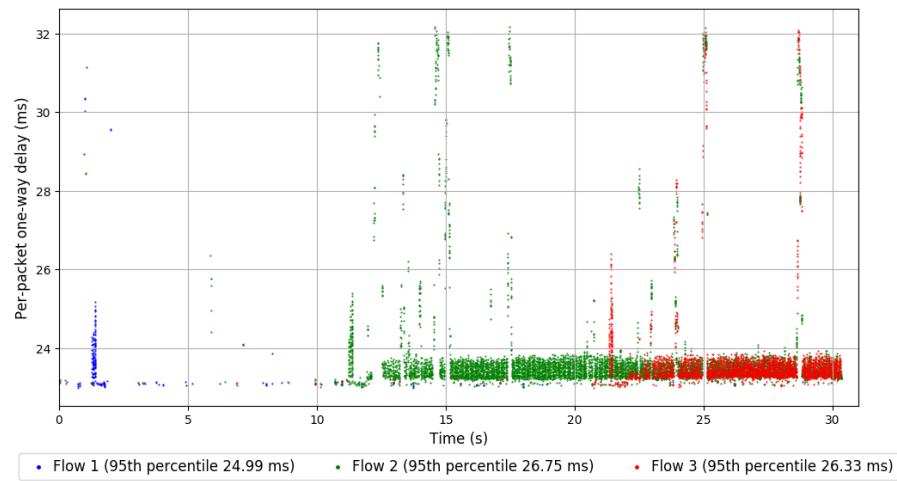
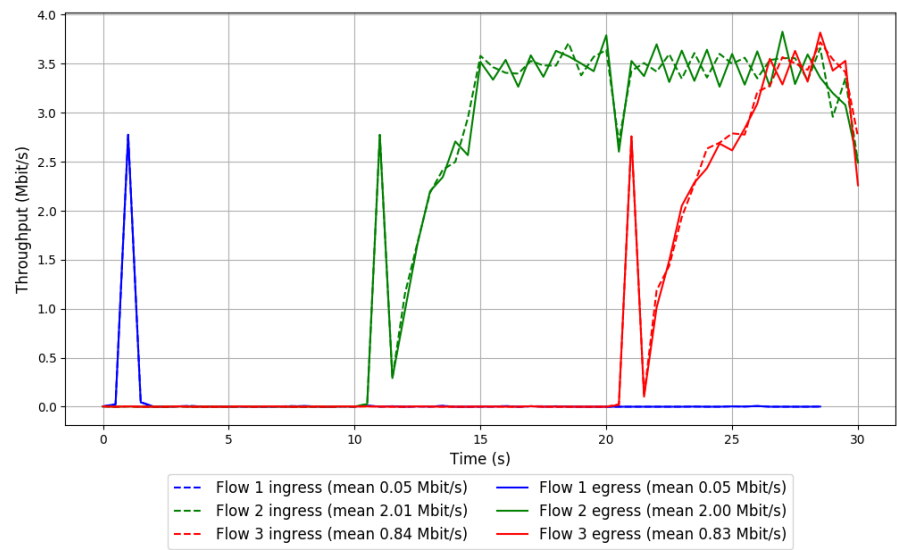


Run 4: Statistics of WebRTC media

Start at: 2018-01-10 00:47:28  
End at: 2018-01-10 00:47:58  
Local clock offset: 0.061 ms  
Remote clock offset: -0.707 ms

# Below is generated by plot.py at 2018-01-10 07:33:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 2.88 Mbit/s  
95th percentile per-packet one-way delay: 26.457 ms  
Loss rate: 1.02%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 24.991 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 2.00 Mbit/s  
95th percentile per-packet one-way delay: 26.754 ms  
Loss rate: 0.78%  
-- Flow 3:  
Average throughput: 0.83 Mbit/s  
95th percentile per-packet one-way delay: 26.329 ms  
Loss rate: 1.63%

Run 4: Report of WebRTC media — Data Link



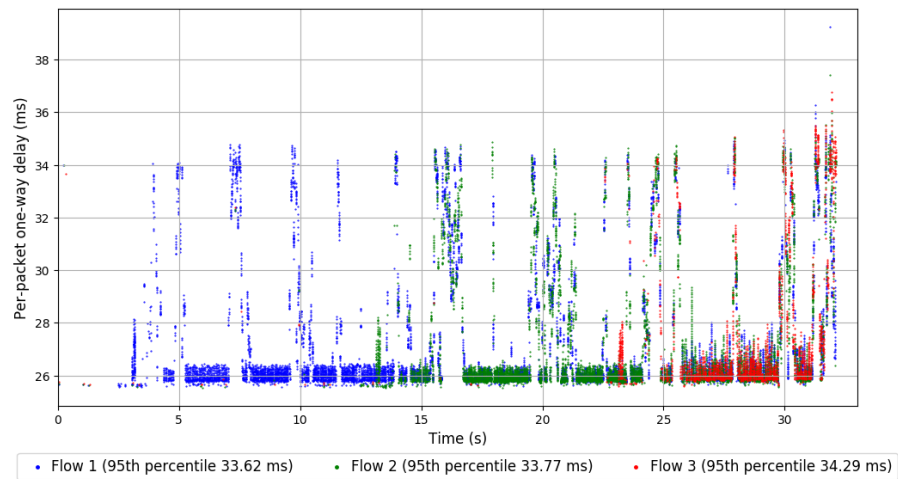
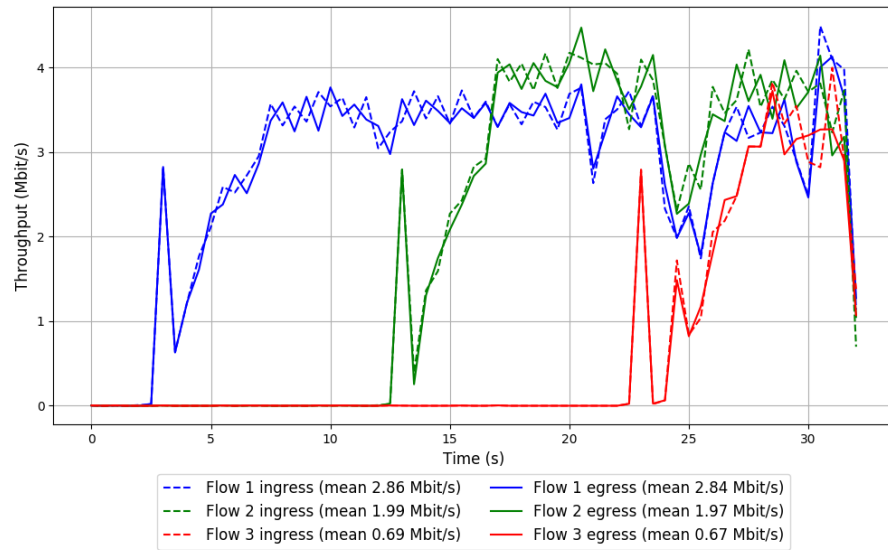
Run 5: Statistics of WebRTC media

Start at: 2018-01-10 01:08:51  
End at: 2018-01-10 01:09:21  
Local clock offset: -0.002 ms  
Remote clock offset: -1.996 ms

# Below is generated by plot.py at 2018-01-10 07:33:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 5.47 Mbit/s  
95th percentile per-packet one-way delay: 33.816 ms  
Loss rate: 1.20%  
-- Flow 1:  
Average throughput: 2.84 Mbit/s  
95th percentile per-packet one-way delay: 33.621 ms  
Loss rate: 0.87%  
-- Flow 2:  
Average throughput: 1.97 Mbit/s  
95th percentile per-packet one-way delay: 33.771 ms  
Loss rate: 1.09%  
-- Flow 3:  
Average throughput: 0.67 Mbit/s  
95th percentile per-packet one-way delay: 34.292 ms  
Loss rate: 2.89%



## Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-10 01:30:30

End at: 2018-01-10 01:31:00

Local clock offset: 0.063 ms

Remote clock offset: 2.162 ms

# Below is generated by plot.py at 2018-01-10 07:33:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 6.20 Mbit/s

95th percentile per-packet one-way delay: 31.778 ms

Loss rate: 2.10%

-- Flow 1:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 31.741 ms

Loss rate: 2.14%

-- Flow 2:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 31.775 ms

Loss rate: 1.76%

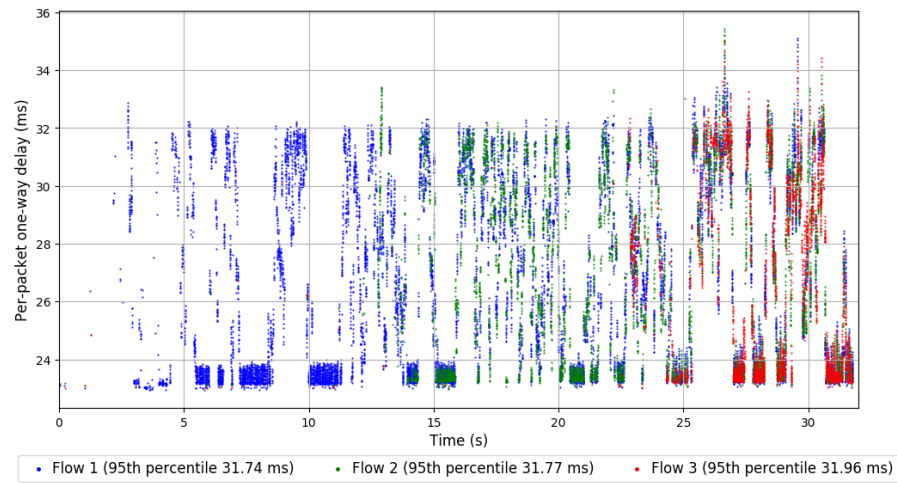
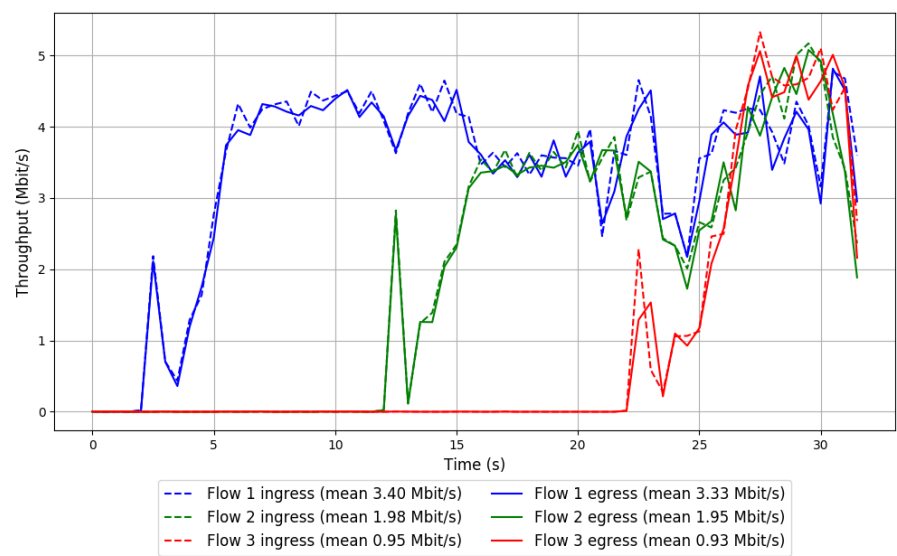
-- Flow 3:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 31.958 ms

Loss rate: 2.67%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-10 01:52:23

End at: 2018-01-10 01:52:53

Local clock offset: -0.103 ms

Remote clock offset: 2.252 ms

# Below is generated by plot.py at 2018-01-10 07:33:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.29 Mbit/s

95th percentile per-packet one-way delay: 31.434 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 31.443 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 31.422 ms

Loss rate: 0.97%

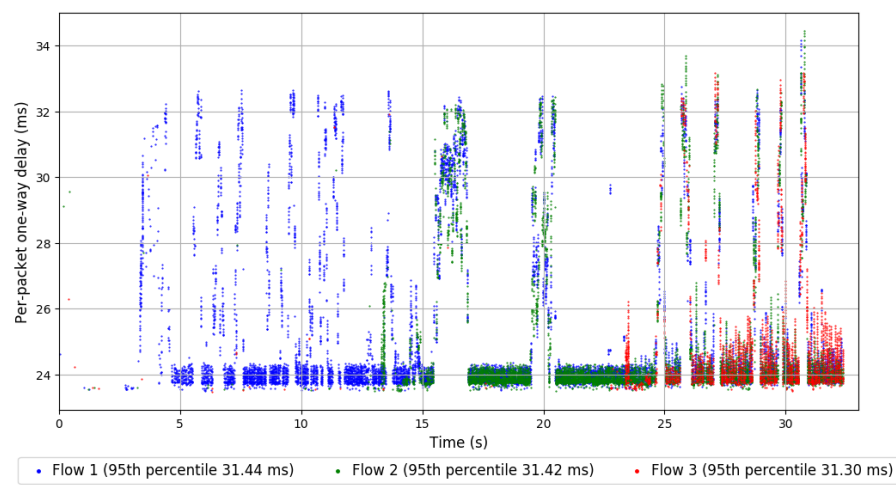
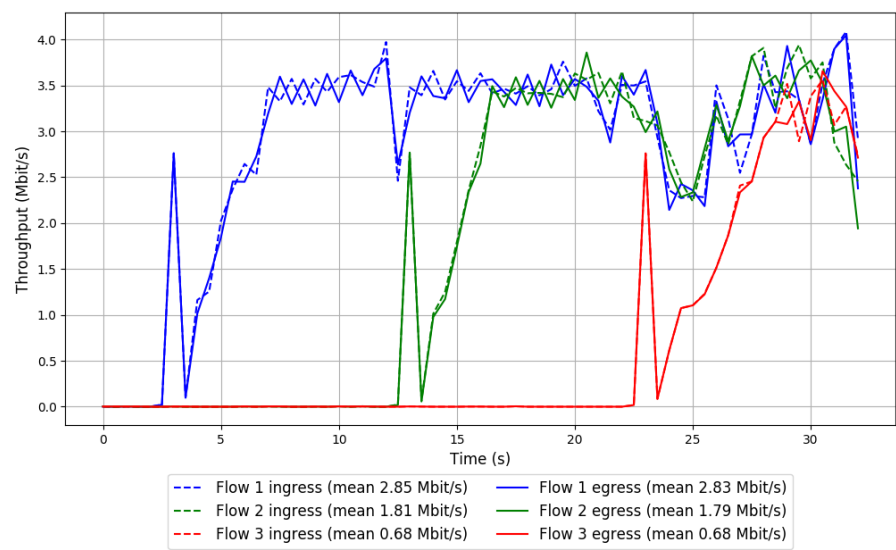
-- Flow 3:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 31.302 ms

Loss rate: 0.27%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-10 02:14:18

End at: 2018-01-10 02:14:48

Local clock offset: -0.169 ms

Remote clock offset: 1.908 ms

# Below is generated by plot.py at 2018-01-10 07:33:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.47 Mbit/s

95th percentile per-packet one-way delay: 32.018 ms

Loss rate: 1.93%

-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 31.981 ms

Loss rate: 1.87%

-- Flow 2:

Average throughput: 1.90 Mbit/s

95th percentile per-packet one-way delay: 32.046 ms

Loss rate: 1.88%

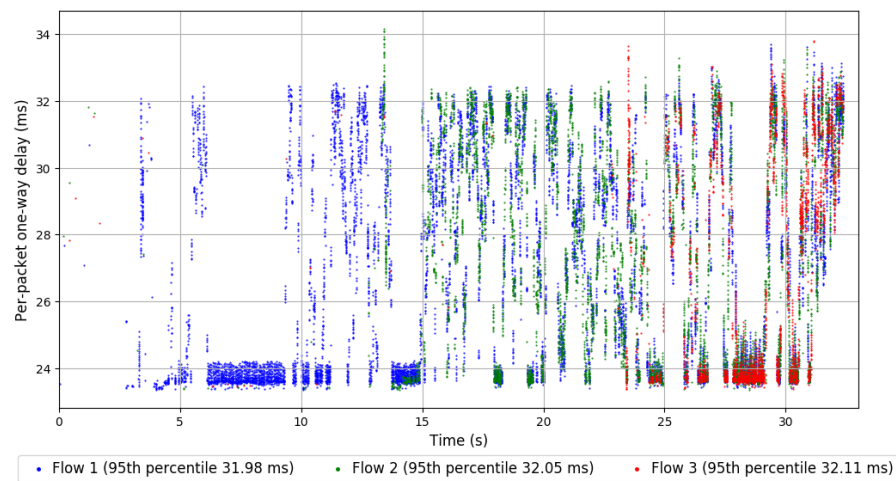
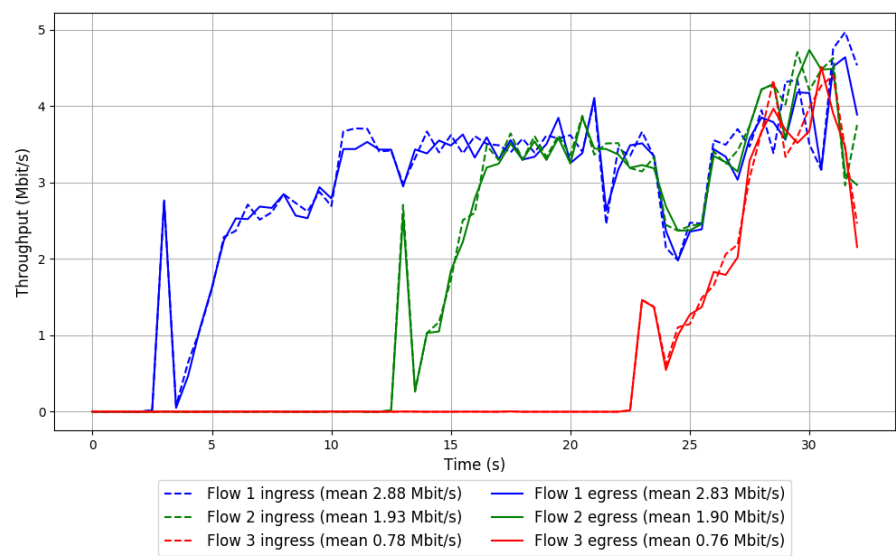
-- Flow 3:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 32.108 ms

Loss rate: 2.31%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-10 02:36:41

End at: 2018-01-10 02:37:11

Local clock offset: -0.108 ms

Remote clock offset: 0.675 ms

# Below is generated by plot.py at 2018-01-10 07:33:16

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.56 Mbit/s

95th percentile per-packet one-way delay: 31.775 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 31.833 ms

Loss rate: 1.37%

-- Flow 2:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 31.631 ms

Loss rate: 1.40%

-- Flow 3:

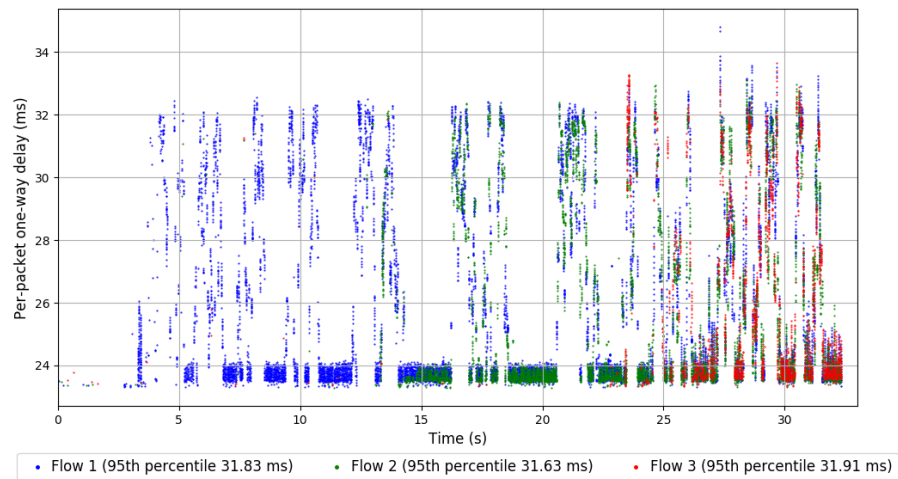
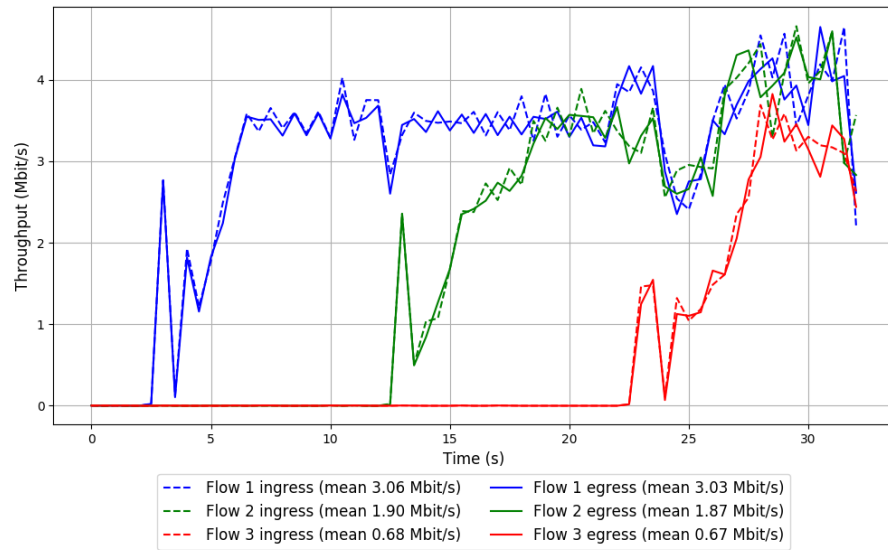
Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 31.906 ms

Loss rate: 1.48%



## Run 9: Report of WebRTC media — Data Link

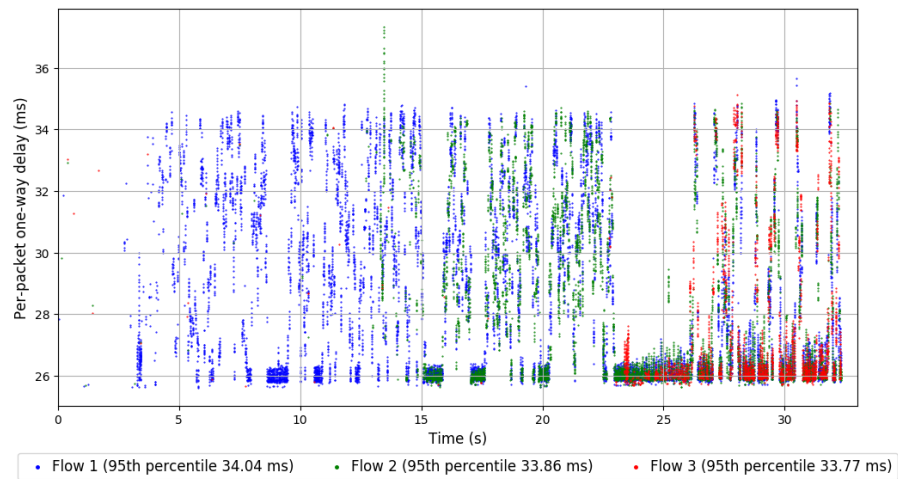
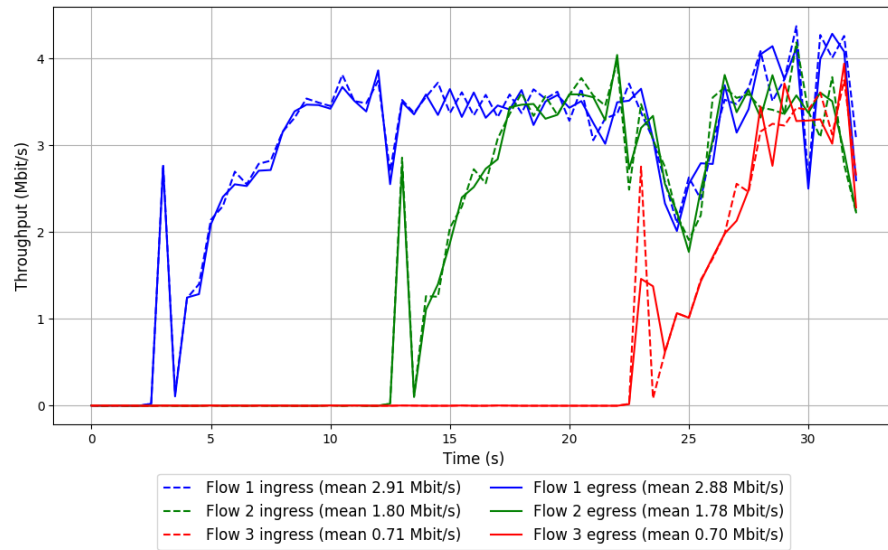


Run 10: Statistics of WebRTC media

Start at: 2018-01-10 02:59:51  
End at: 2018-01-10 03:00:21  
Local clock offset: -0.02 ms  
Remote clock offset: -1.693 ms

# Below is generated by plot.py at 2018-01-10 07:33:16  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 5.34 Mbit/s  
95th percentile per-packet one-way delay: 33.975 ms  
Loss rate: 1.28%  
-- Flow 1:  
Average throughput: 2.88 Mbit/s  
95th percentile per-packet one-way delay: 34.040 ms  
Loss rate: 1.26%  
-- Flow 2:  
Average throughput: 1.78 Mbit/s  
95th percentile per-packet one-way delay: 33.861 ms  
Loss rate: 0.96%  
-- Flow 3:  
Average throughput: 0.70 Mbit/s  
95th percentile per-packet one-way delay: 33.765 ms  
Loss rate: 2.17%

# Run 10: Report of WebRTC media — Data Link

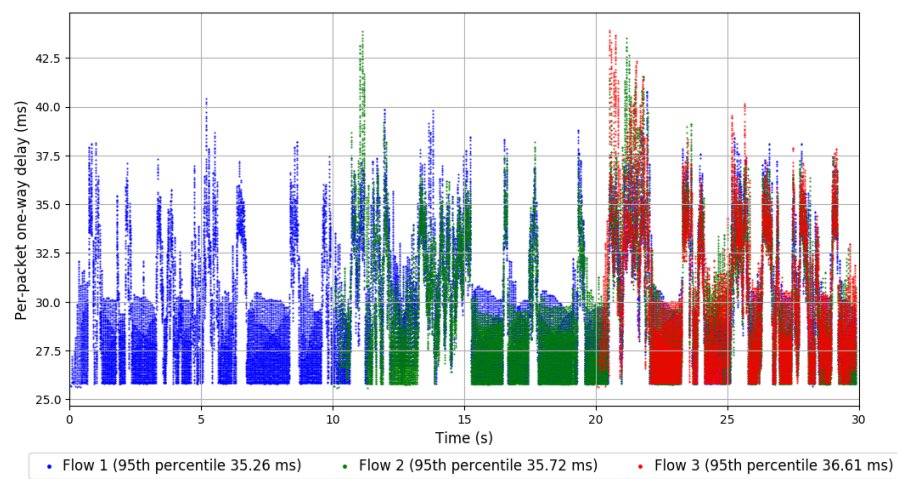
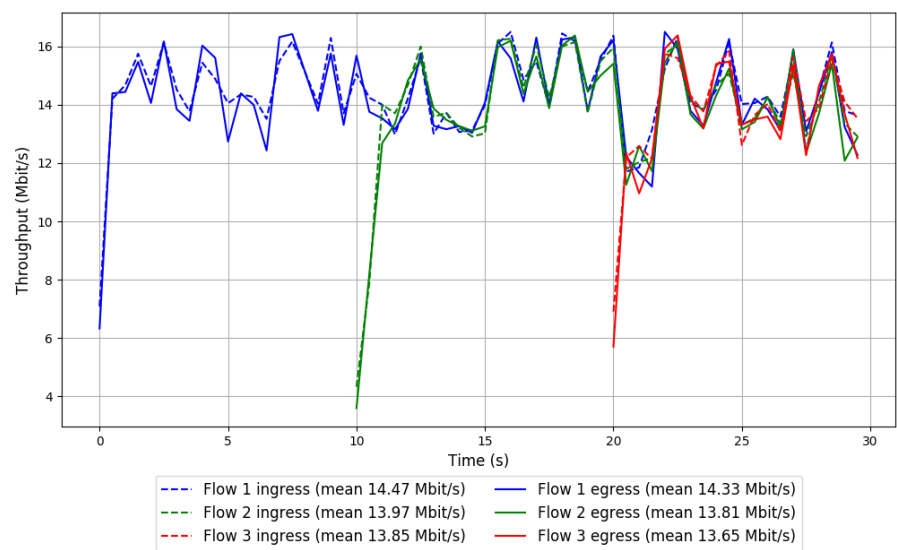


Run 1: Statistics of Sprout

Start at: 2018-01-09 23:52:13  
End at: 2018-01-09 23:52:43  
Local clock offset: 0.056 ms  
Remote clock offset: -2.949 ms

# Below is generated by plot.py at 2018-01-10 07:33:41  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 28.01 Mbit/s  
95th percentile per-packet one-way delay: 35.616 ms  
Loss rate: 1.32%  
-- Flow 1:  
Average throughput: 14.33 Mbit/s  
95th percentile per-packet one-way delay: 35.258 ms  
Loss rate: 1.16%  
-- Flow 2:  
Average throughput: 13.81 Mbit/s  
95th percentile per-packet one-way delay: 35.719 ms  
Loss rate: 1.31%  
-- Flow 3:  
Average throughput: 13.65 Mbit/s  
95th percentile per-packet one-way delay: 36.612 ms  
Loss rate: 1.85%

Run 1: Report of Sprout — Data Link

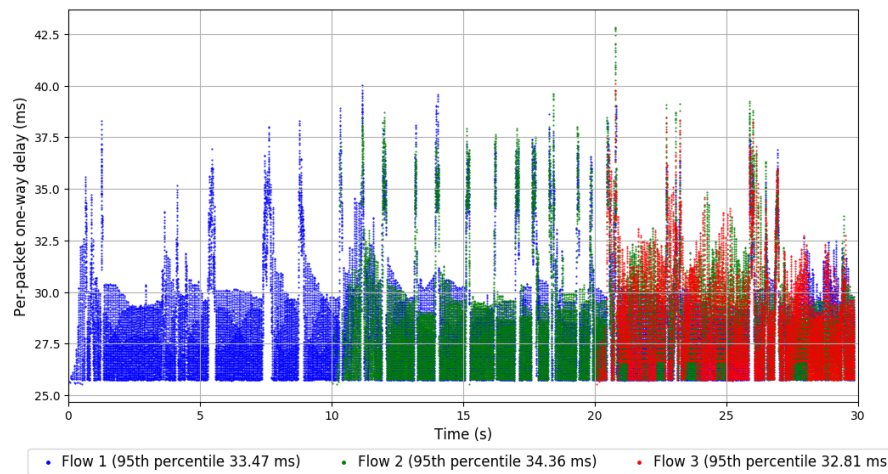
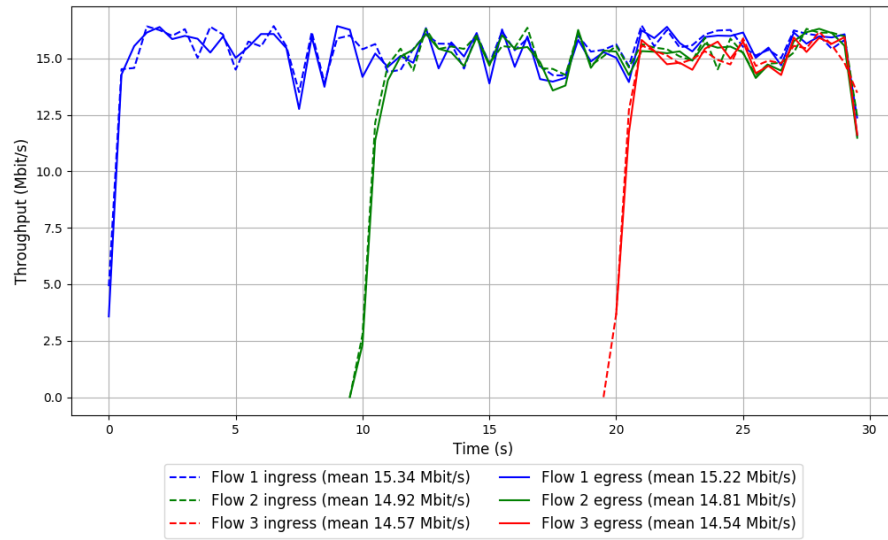


## Run 2: Statistics of Sprout

Start at: 2018-01-10 00:13:38  
End at: 2018-01-10 00:14:08  
Local clock offset: 0.063 ms  
Remote clock offset: -2.767 ms

```
# Below is generated by plot.py at 2018-01-10 07:33:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.87 Mbit/s
95th percentile per-packet one-way delay: 33.682 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 15.22 Mbit/s
95th percentile per-packet one-way delay: 33.466 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 14.81 Mbit/s
95th percentile per-packet one-way delay: 34.360 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 14.54 Mbit/s
95th percentile per-packet one-way delay: 32.809 ms
Loss rate: 0.81%
```

## Run 2: Report of Sprout — Data Link



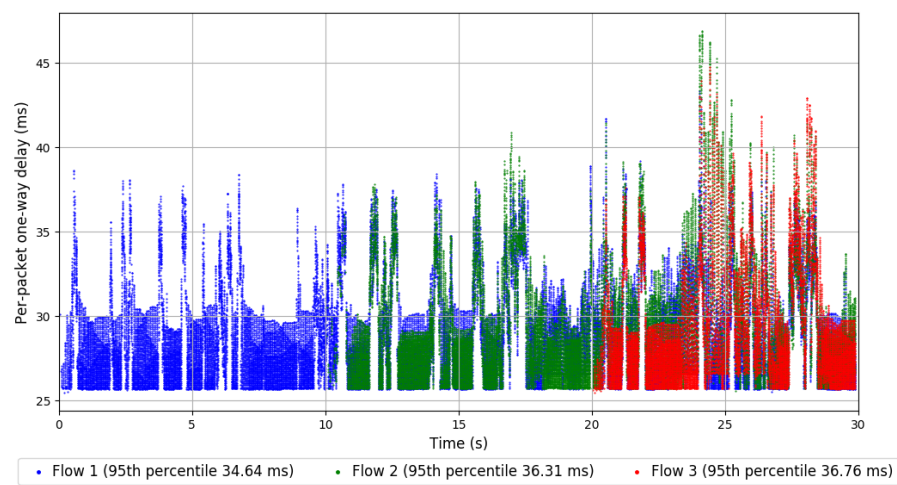
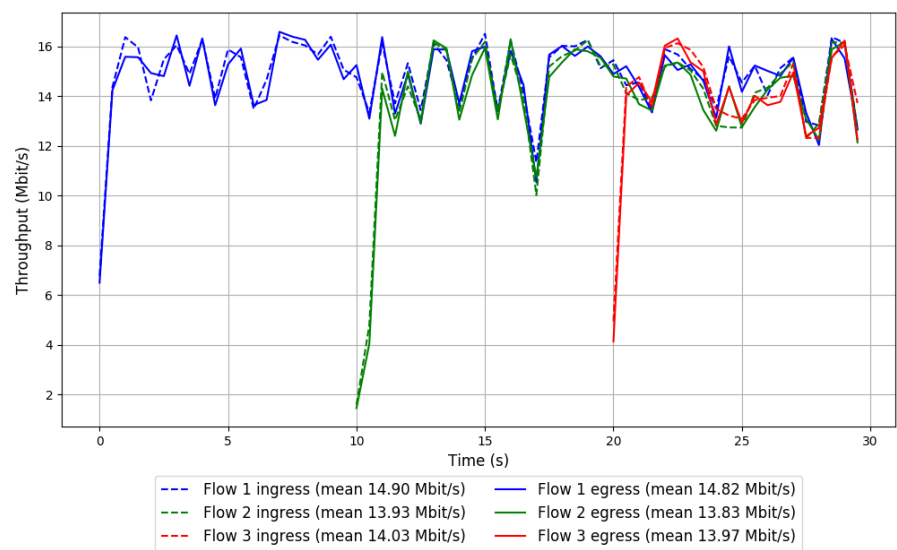
### Run 3: Statistics of Sprout

Start at: 2018-01-10 00:34:53  
End at: 2018-01-10 00:35:23  
Local clock offset: 0.082 ms  
Remote clock offset: -3.26 ms

```
# Below is generated by plot.py at 2018-01-10 07:33:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 28.62 Mbit/s
95th percentile per-packet one-way delay: 35.504 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 14.82 Mbit/s
95th percentile per-packet one-way delay: 34.644 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 13.83 Mbit/s
95th percentile per-packet one-way delay: 36.315 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 13.97 Mbit/s
95th percentile per-packet one-way delay: 36.758 ms
Loss rate: 1.01%
```



Run 3: Report of Sprout — Data Link

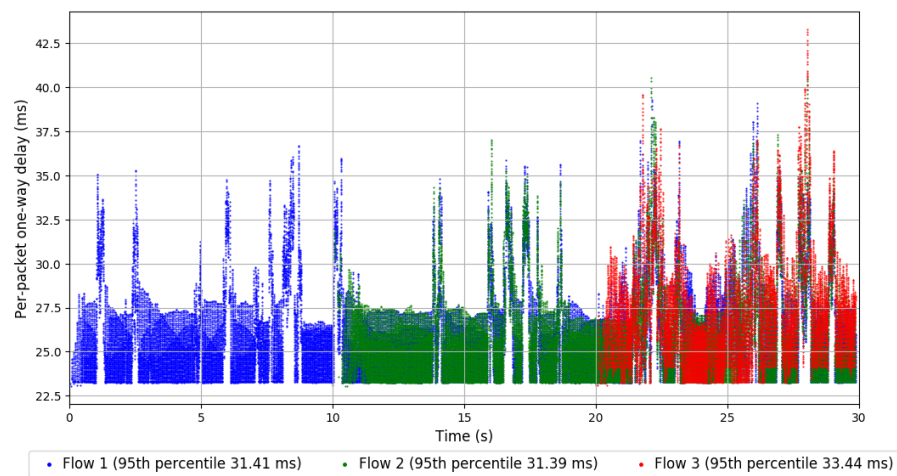
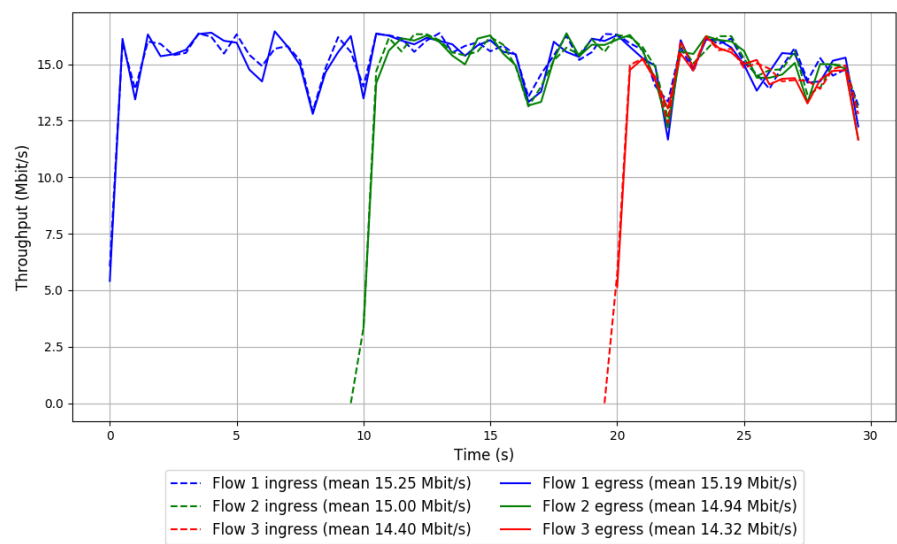


#### Run 4: Statistics of Sprout

Start at: 2018-01-10 00:56:08  
End at: 2018-01-10 00:56:38  
Local clock offset: 0.121 ms  
Remote clock offset: -0.204 ms

```
# Below is generated by plot.py at 2018-01-10 07:33:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.85 Mbit/s
95th percentile per-packet one-way delay: 31.750 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 15.19 Mbit/s
95th percentile per-packet one-way delay: 31.413 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 14.94 Mbit/s
95th percentile per-packet one-way delay: 31.392 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 14.32 Mbit/s
95th percentile per-packet one-way delay: 33.440 ms
Loss rate: 1.15%
```

Run 4: Report of Sprout — Data Link

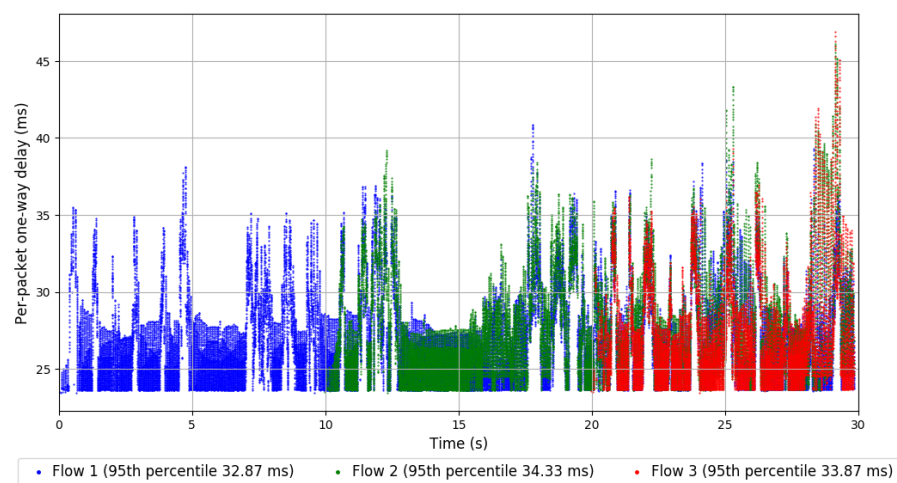
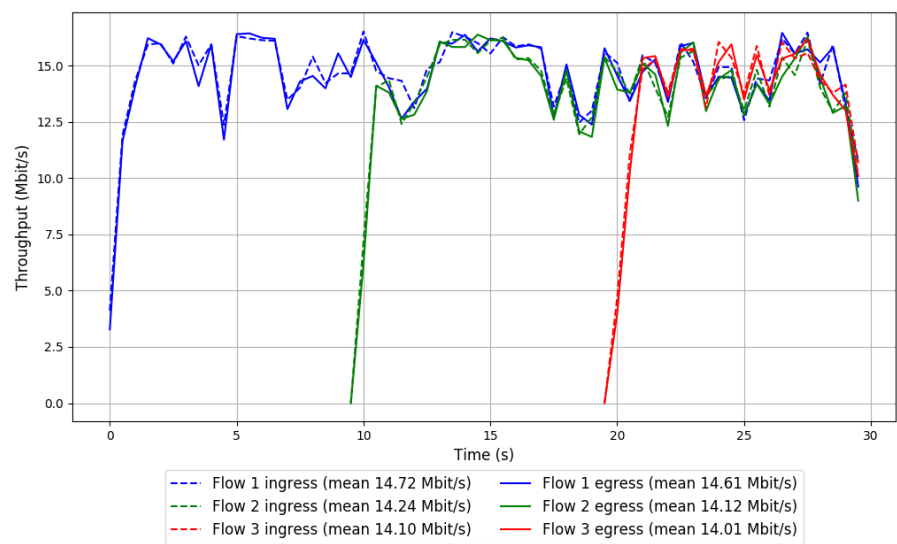


Run 5: Statistics of Sprout

Start at: 2018-01-10 01:17:33  
End at: 2018-01-10 01:18:03  
Local clock offset: -0.097 ms  
Remote clock offset: 0.673 ms

# Below is generated by plot.py at 2018-01-10 07:33:55  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 28.64 Mbit/s  
95th percentile per-packet one-way delay: 33.523 ms  
Loss rate: 0.96%  
-- Flow 1:  
Average throughput: 14.61 Mbit/s  
95th percentile per-packet one-way delay: 32.874 ms  
Loss rate: 0.92%  
-- Flow 2:  
Average throughput: 14.12 Mbit/s  
95th percentile per-packet one-way delay: 34.333 ms  
Loss rate: 0.99%  
-- Flow 3:  
Average throughput: 14.01 Mbit/s  
95th percentile per-packet one-way delay: 33.872 ms  
Loss rate: 1.02%

Run 5: Report of Sprout — Data Link

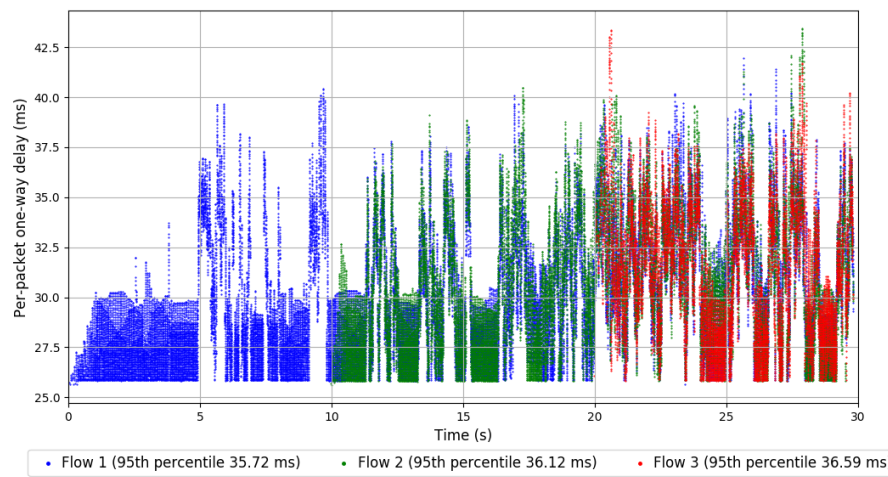
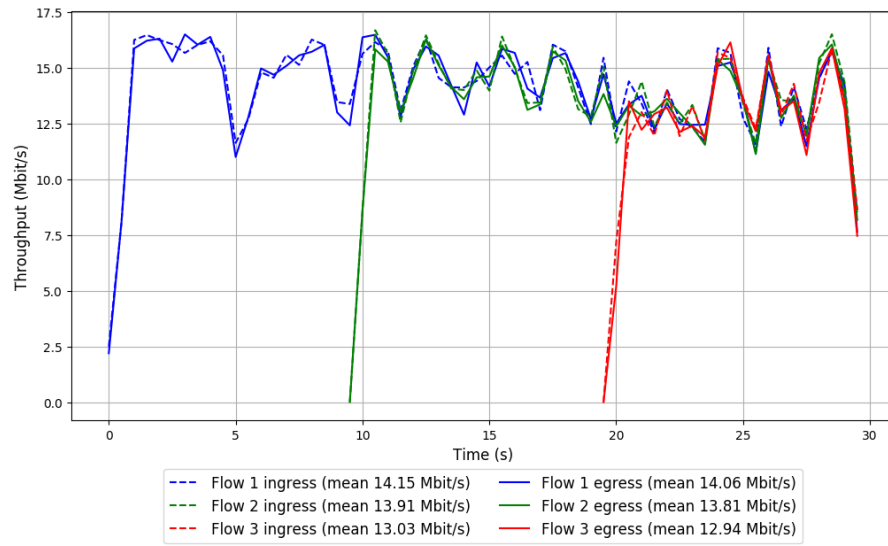


Run 6: Statistics of Sprout

Start at: 2018-01-10 01:39:47  
End at: 2018-01-10 01:40:17  
Local clock offset: 0.014 ms  
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2018-01-10 07:33:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 27.53 Mbit/s  
95th percentile per-packet one-way delay: 36.037 ms  
Loss rate: 0.95%  
-- Flow 1:  
Average throughput: 14.06 Mbit/s  
95th percentile per-packet one-way delay: 35.724 ms  
Loss rate: 0.82%  
-- Flow 2:  
Average throughput: 13.81 Mbit/s  
95th percentile per-packet one-way delay: 36.116 ms  
Loss rate: 1.03%  
-- Flow 3:  
Average throughput: 12.94 Mbit/s  
95th percentile per-packet one-way delay: 36.589 ms  
Loss rate: 1.23%

## Run 6: Report of Sprout — Data Link



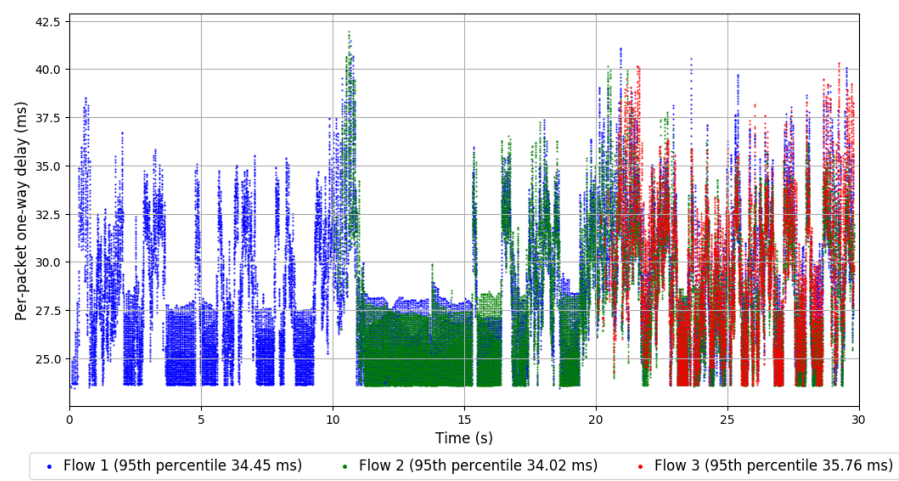
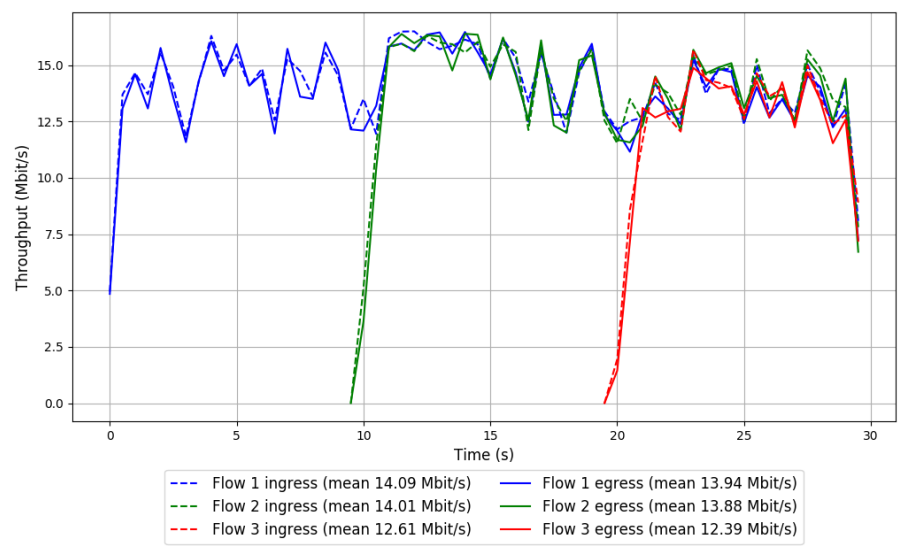
Run 7: Statistics of Sprout

Start at: 2018-01-10 02:01:16  
End at: 2018-01-10 02:01:46  
Local clock offset: -0.256 ms  
Remote clock offset: 2.45 ms

```
# Below is generated by plot.py at 2018-01-10 07:33:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.27 Mbit/s
95th percentile per-packet one-way delay: 34.551 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 13.94 Mbit/s
95th percentile per-packet one-way delay: 34.452 ms
Loss rate: 1.27%
-- Flow 2:
Average throughput: 13.88 Mbit/s
95th percentile per-packet one-way delay: 34.021 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 12.39 Mbit/s
95th percentile per-packet one-way delay: 35.755 ms
Loss rate: 2.41%
```



Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-10 02:23:15

End at: 2018-01-10 02:23:45

Local clock offset: 0.003 ms

Remote clock offset: 1.794 ms

# Below is generated by plot.py at 2018-01-10 07:34:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 24.72 Mbit/s

95th percentile per-packet one-way delay: 35.415 ms

Loss rate: 2.27%

-- Flow 1:

Average throughput: 12.51 Mbit/s

95th percentile per-packet one-way delay: 35.153 ms

Loss rate: 2.12%

-- Flow 2:

Average throughput: 12.25 Mbit/s

95th percentile per-packet one-way delay: 35.385 ms

Loss rate: 2.42%

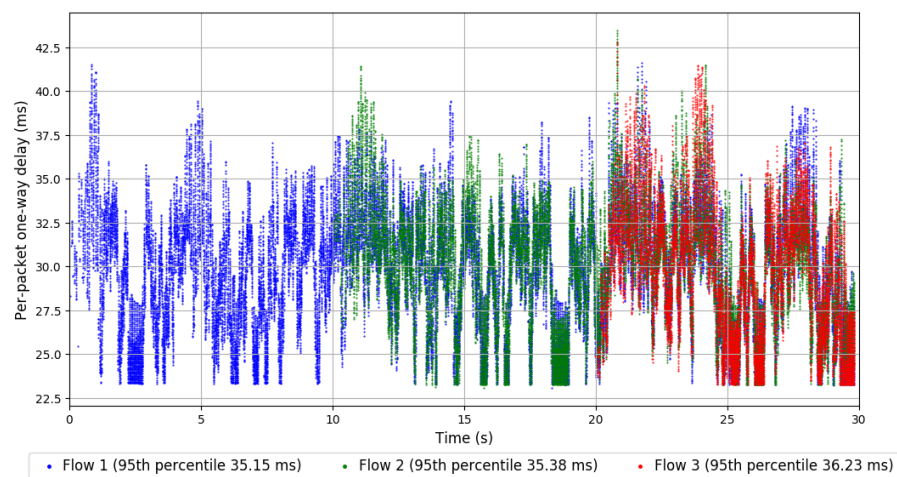
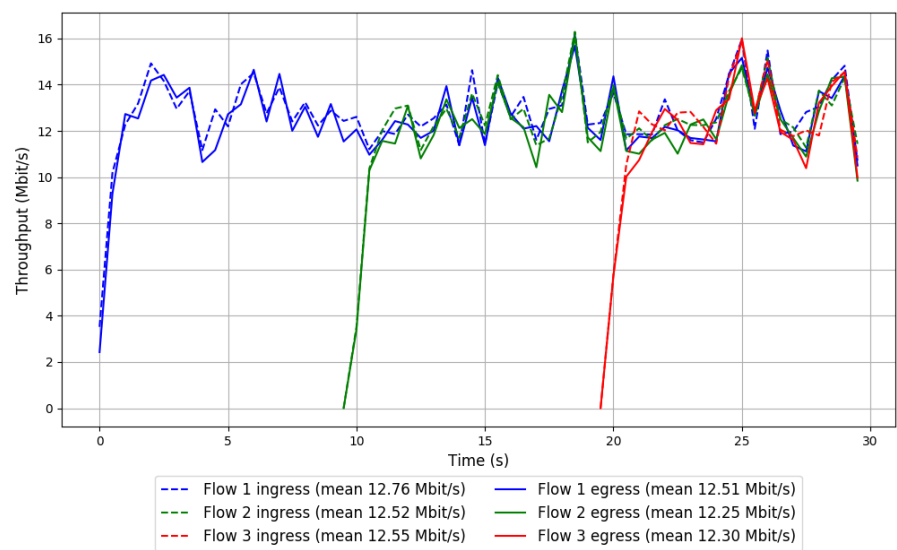
-- Flow 3:

Average throughput: 12.30 Mbit/s

95th percentile per-packet one-way delay: 36.234 ms

Loss rate: 2.44%

Run 8: Report of Sprout — Data Link

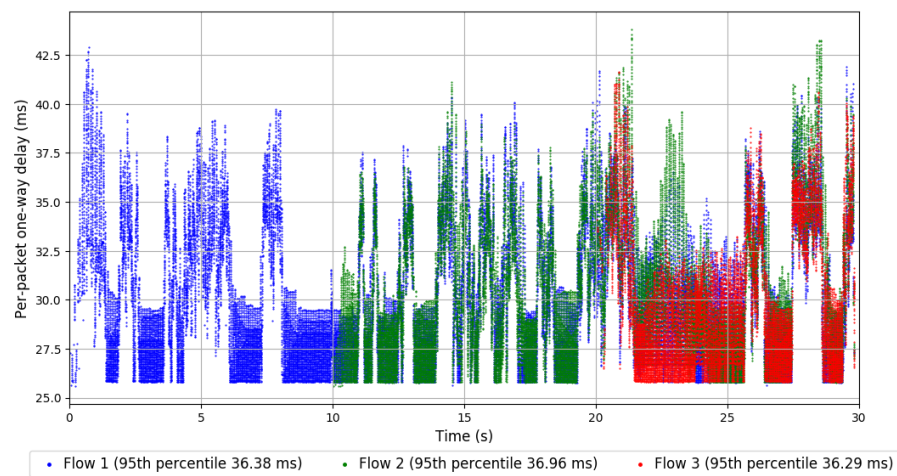
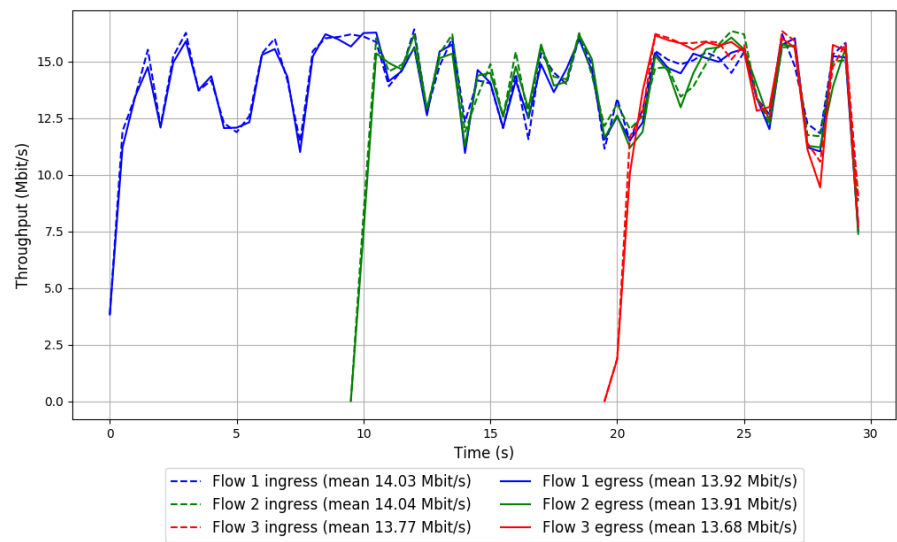


Run 9: Statistics of Sprout

Start at: 2018-01-10 02:46:12  
End at: 2018-01-10 02:46:42  
Local clock offset: -0.075 ms  
Remote clock offset: -1.757 ms

# Below is generated by plot.py at 2018-01-10 07:34:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 27.68 Mbit/s  
95th percentile per-packet one-way delay: 36.546 ms  
Loss rate: 1.13%  
-- Flow 1:  
Average throughput: 13.92 Mbit/s  
95th percentile per-packet one-way delay: 36.379 ms  
Loss rate: 1.03%  
-- Flow 2:  
Average throughput: 13.91 Mbit/s  
95th percentile per-packet one-way delay: 36.957 ms  
Loss rate: 1.18%  
-- Flow 3:  
Average throughput: 13.68 Mbit/s  
95th percentile per-packet one-way delay: 36.291 ms  
Loss rate: 1.31%

Run 9: Report of Sprout — Data Link

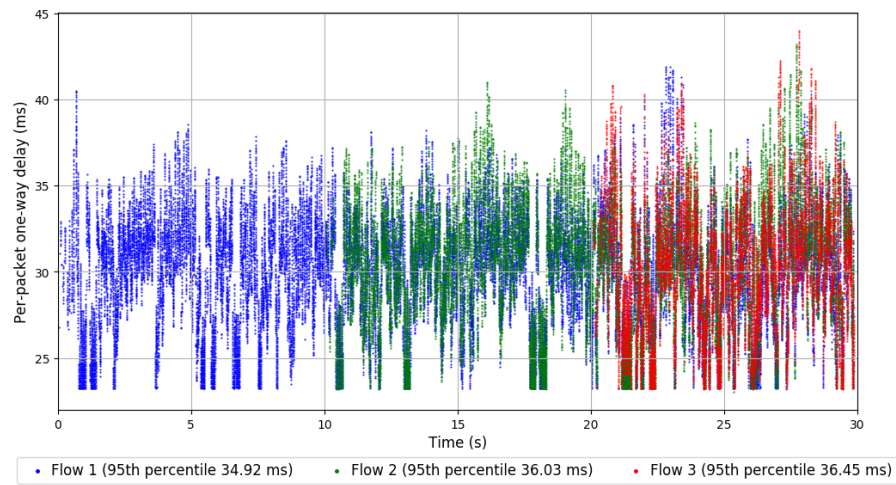
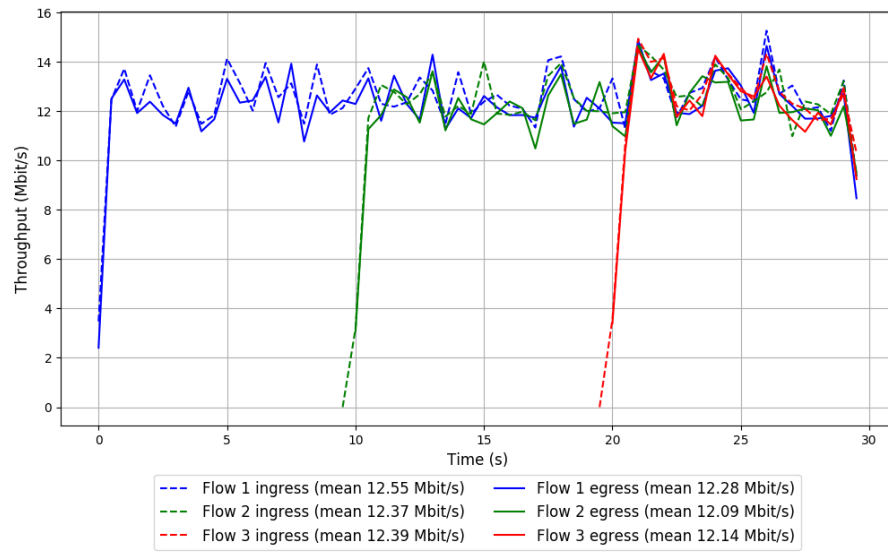


Run 10: Statistics of Sprout

Start at: 2018-01-10 03:11:28  
End at: 2018-01-10 03:11:58  
Local clock offset: 0.033 ms  
Remote clock offset: 1.408 ms

# Below is generated by plot.py at 2018-01-10 07:34:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 24.32 Mbit/s  
95th percentile per-packet one-way delay: 35.573 ms  
Loss rate: 2.48%  
-- Flow 1:  
Average throughput: 12.28 Mbit/s  
95th percentile per-packet one-way delay: 34.920 ms  
Loss rate: 2.39%  
-- Flow 2:  
Average throughput: 12.09 Mbit/s  
95th percentile per-packet one-way delay: 36.034 ms  
Loss rate: 2.62%  
-- Flow 3:  
Average throughput: 12.14 Mbit/s  
95th percentile per-packet one-way delay: 36.449 ms  
Loss rate: 2.49%

# Run 10: Report of Sprout — Data Link



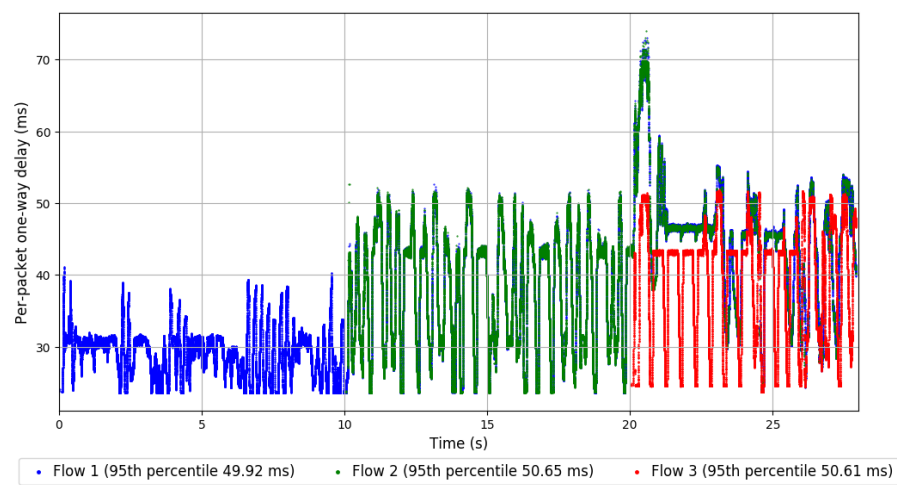
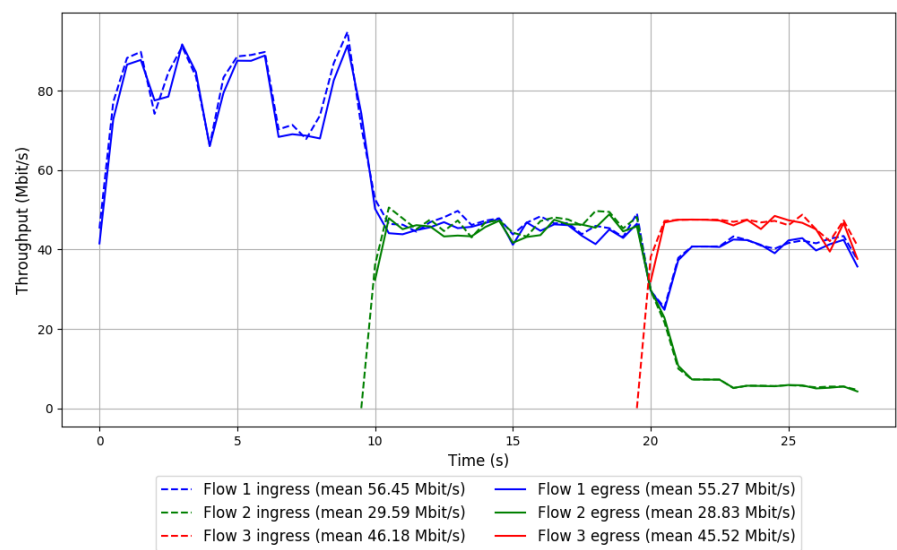
```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-09 23:37:26
End at: 2018-01-09 23:37:56
Local clock offset: 0.066 ms
Remote clock offset: -1.526 ms

# Below is generated by plot.py at 2018-01-10 07:38:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.67 Mbit/s
95th percentile per-packet one-way delay: 50.350 ms
Loss rate: 2.38%
-- Flow 1:
Average throughput: 55.27 Mbit/s
95th percentile per-packet one-way delay: 49.919 ms
Loss rate: 2.27%
-- Flow 2:
Average throughput: 28.83 Mbit/s
95th percentile per-packet one-way delay: 50.647 ms
Loss rate: 2.89%
-- Flow 3:
Average throughput: 45.52 Mbit/s
95th percentile per-packet one-way delay: 50.606 ms
Loss rate: 2.11%
```



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

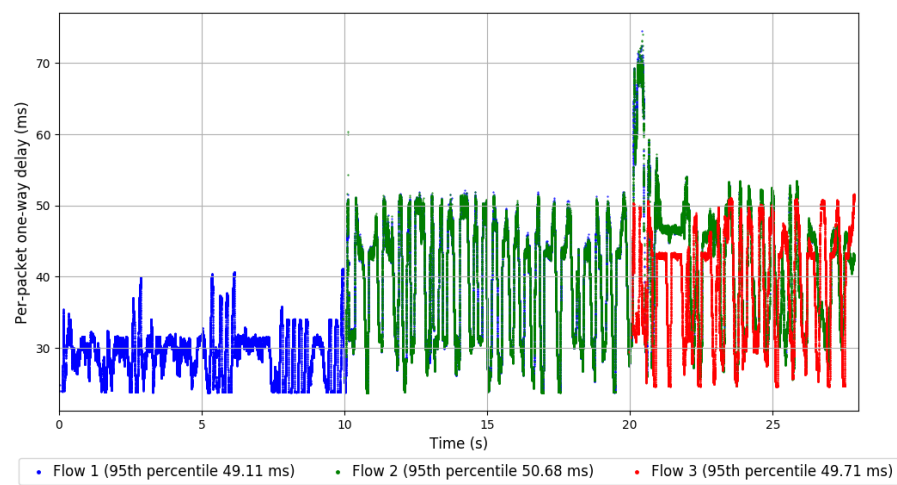
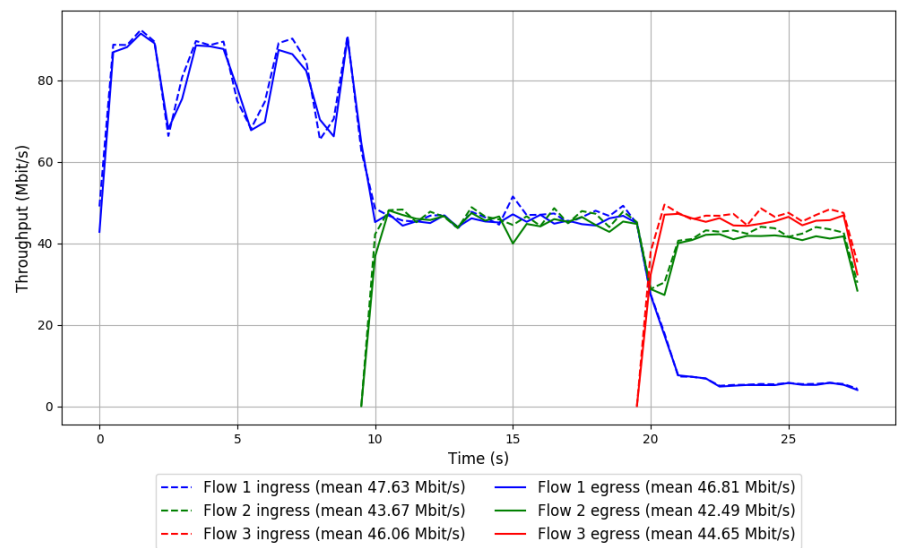


Run 2: Statistics of TaoVA-100x

Start at: 2018-01-09 23:59:00  
End at: 2018-01-09 23:59:30  
Local clock offset: 0.104 ms  
Remote clock offset: -0.751 ms

# Below is generated by plot.py at 2018-01-10 07:38:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.80 Mbit/s  
95th percentile per-packet one-way delay: 49.936 ms  
Loss rate: 2.56%  
-- Flow 1:  
Average throughput: 46.81 Mbit/s  
95th percentile per-packet one-way delay: 49.107 ms  
Loss rate: 1.92%  
-- Flow 2:  
Average throughput: 42.49 Mbit/s  
95th percentile per-packet one-way delay: 50.679 ms  
Loss rate: 3.06%  
-- Flow 3:  
Average throughput: 44.65 Mbit/s  
95th percentile per-packet one-way delay: 49.710 ms  
Loss rate: 3.78%

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

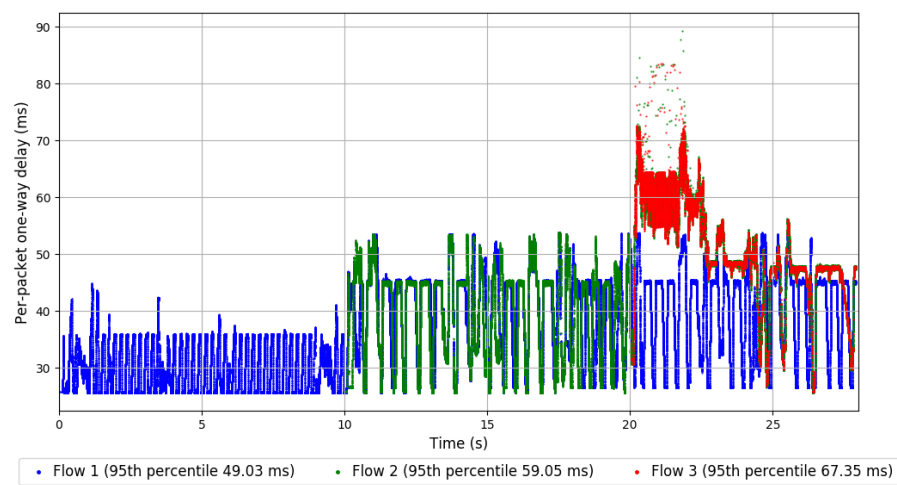
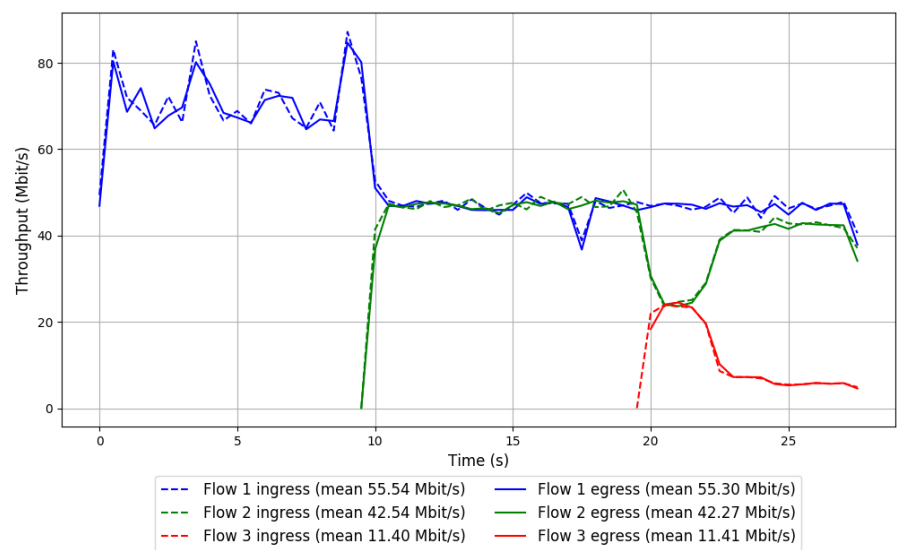


Run 3: Statistics of TaoVA-100x

Start at: 2018-01-10 00:20:27  
End at: 2018-01-10 00:20:57  
Local clock offset: 0.08 ms  
Remote clock offset: -2.801 ms

# Below is generated by plot.py at 2018-01-10 07:38:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.69 Mbit/s  
95th percentile per-packet one-way delay: 54.338 ms  
Loss rate: 0.74%  
-- Flow 1:  
Average throughput: 55.30 Mbit/s  
95th percentile per-packet one-way delay: 49.031 ms  
Loss rate: 0.63%  
-- Flow 2:  
Average throughput: 42.27 Mbit/s  
95th percentile per-packet one-way delay: 59.046 ms  
Loss rate: 0.98%  
-- Flow 3:  
Average throughput: 11.41 Mbit/s  
95th percentile per-packet one-way delay: 67.353 ms  
Loss rate: 0.73%

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

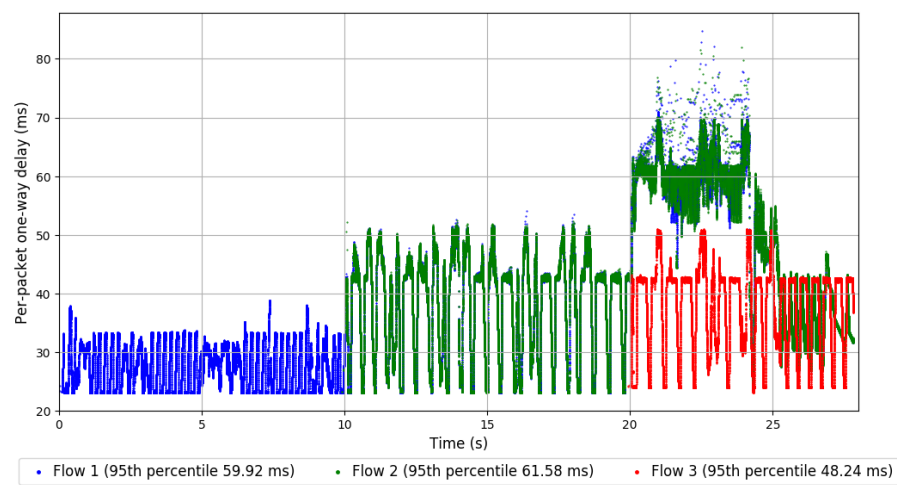
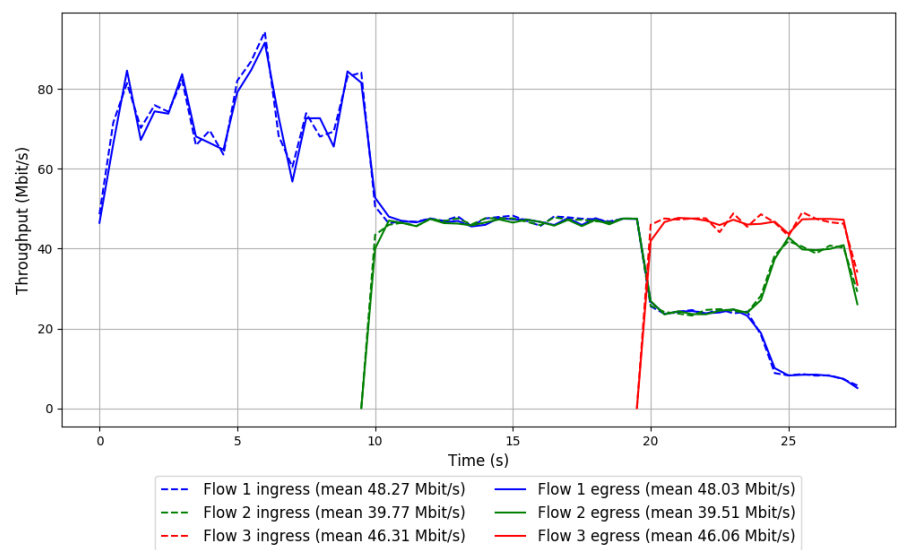


Run 4: Statistics of TaoVA-100x

Start at: 2018-01-10 00:41:38  
End at: 2018-01-10 00:42:08  
Local clock offset: 0.155 ms  
Remote clock offset: -0.725 ms

# Below is generated by plot.py at 2018-01-10 07:38:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.55 Mbit/s  
95th percentile per-packet one-way delay: 60.320 ms  
Loss rate: 0.84%  
-- Flow 1:  
Average throughput: 48.03 Mbit/s  
95th percentile per-packet one-way delay: 59.925 ms  
Loss rate: 0.68%  
-- Flow 2:  
Average throughput: 39.51 Mbit/s  
95th percentile per-packet one-way delay: 61.578 ms  
Loss rate: 0.93%  
-- Flow 3:  
Average throughput: 46.06 Mbit/s  
95th percentile per-packet one-way delay: 48.242 ms  
Loss rate: 1.23%

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



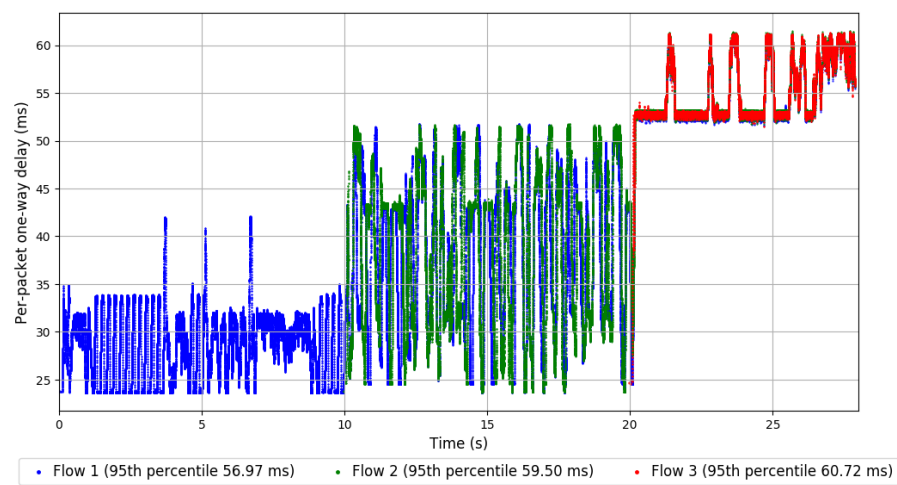
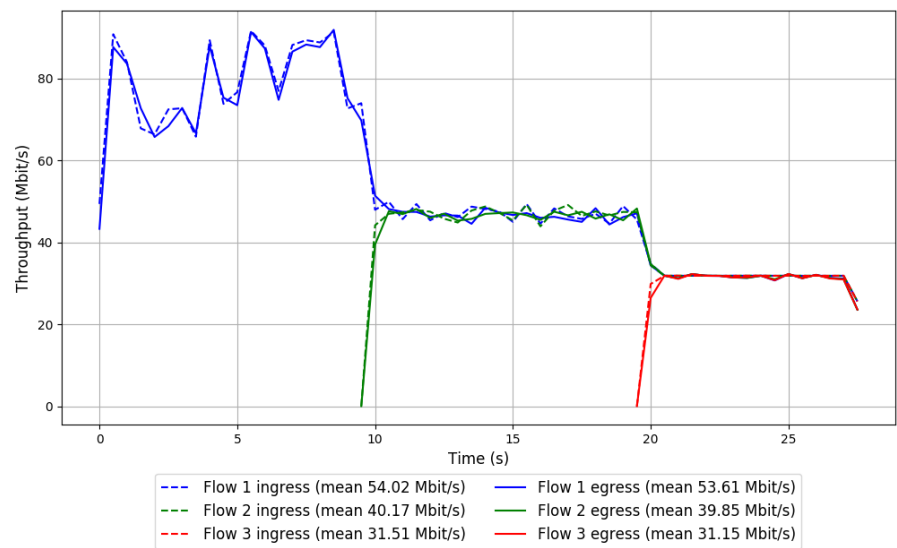
Run 5: Statistics of TaoVA-100x

Start at: 2018-01-10 01:02:56  
End at: 2018-01-10 01:03:26  
Local clock offset: 0.045 ms  
Remote clock offset: -0.285 ms

# Below is generated by plot.py at 2018-01-10 07:38:15  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 88.07 Mbit/s  
95th percentile per-packet one-way delay: 59.166 ms  
Loss rate: 1.13%  
-- Flow 1:  
Average throughput: 53.61 Mbit/s  
95th percentile per-packet one-way delay: 56.970 ms  
Loss rate: 1.00%  
-- Flow 2:  
Average throughput: 39.85 Mbit/s  
95th percentile per-packet one-way delay: 59.497 ms  
Loss rate: 1.15%  
-- Flow 3:  
Average throughput: 31.15 Mbit/s  
95th percentile per-packet one-way delay: 60.716 ms  
Loss rate: 1.82%



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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-10 01:24:26

End at: 2018-01-10 01:24:56

Local clock offset: -0.049 ms

Remote clock offset: 1.719 ms

# Below is generated by plot.py at 2018-01-10 07:38:20

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.02 Mbit/s

95th percentile per-packet one-way delay: 57.697 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 52.34 Mbit/s

95th percentile per-packet one-way delay: 55.348 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 40.18 Mbit/s

95th percentile per-packet one-way delay: 58.148 ms

Loss rate: 0.84%

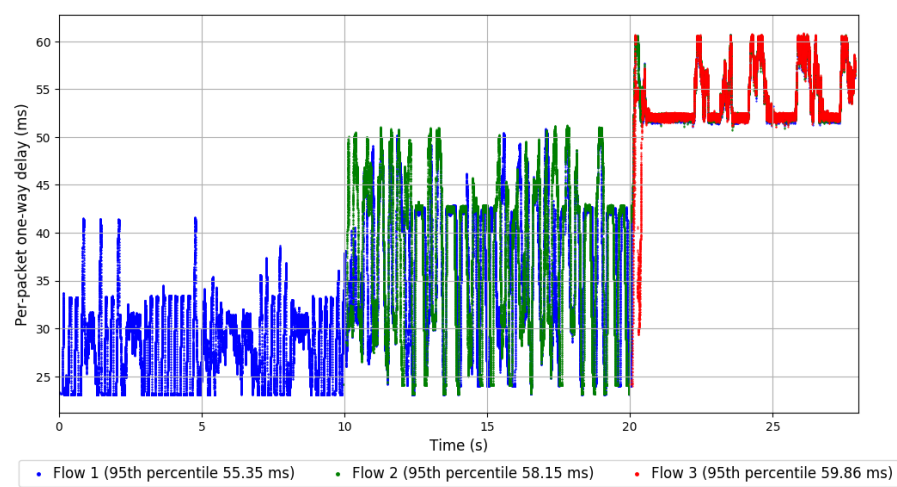
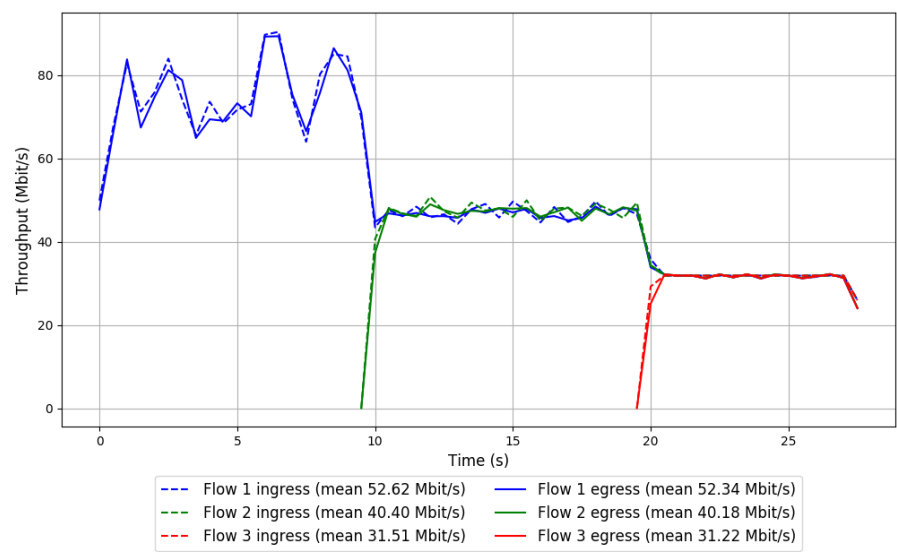
-- Flow 3:

Average throughput: 31.22 Mbit/s

95th percentile per-packet one-way delay: 59.863 ms

Loss rate: 1.57%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-10 01:46:29

End at: 2018-01-10 01:46:59

Local clock offset: -0.031 ms

Remote clock offset: 2.613 ms

# Below is generated by plot.py at 2018-01-10 07:38:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 88.20 Mbit/s

95th percentile per-packet one-way delay: 61.594 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 51.69 Mbit/s

95th percentile per-packet one-way delay: 61.319 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 46.41 Mbit/s

95th percentile per-packet one-way delay: 48.793 ms

Loss rate: 0.92%

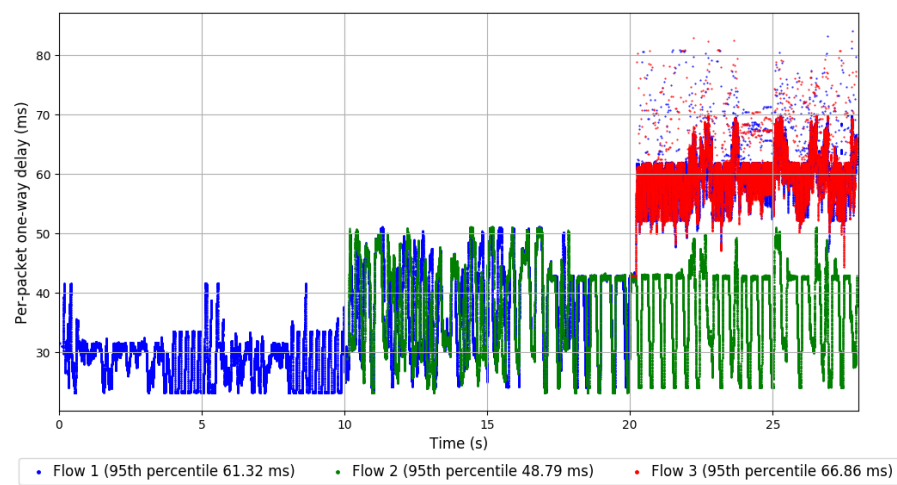
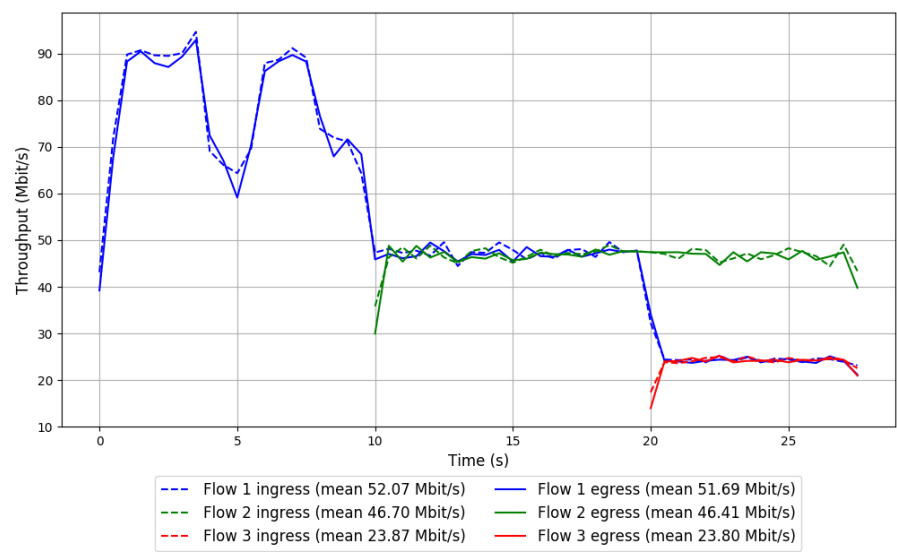
-- Flow 3:

Average throughput: 23.80 Mbit/s

95th percentile per-packet one-way delay: 66.859 ms

Loss rate: 1.53%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-10 02:08:07

End at: 2018-01-10 02:08:38

Local clock offset: -0.178 ms

Remote clock offset: 2.337 ms

# Below is generated by plot.py at 2018-01-10 07:38:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.85 Mbit/s

95th percentile per-packet one-way delay: 60.129 ms

Loss rate: 1.58%

-- Flow 1:

Average throughput: 52.12 Mbit/s

95th percentile per-packet one-way delay: 59.181 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 39.30 Mbit/s

95th percentile per-packet one-way delay: 60.164 ms

Loss rate: 1.71%

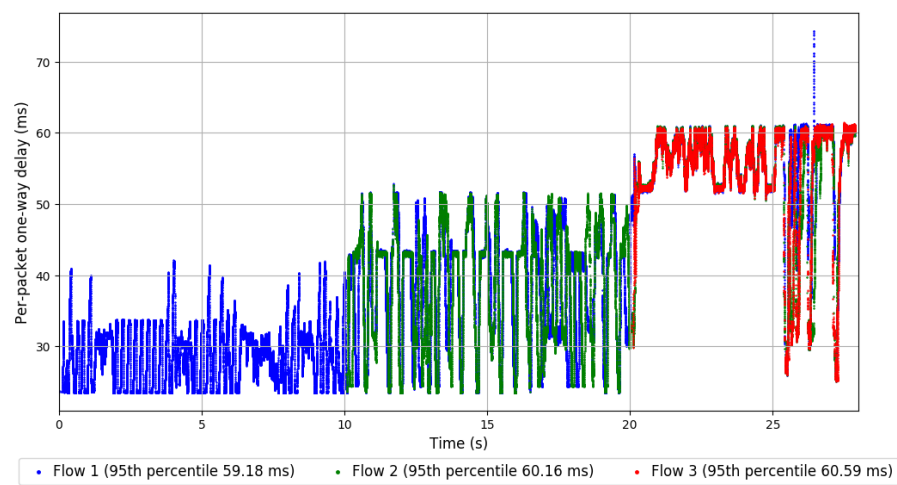
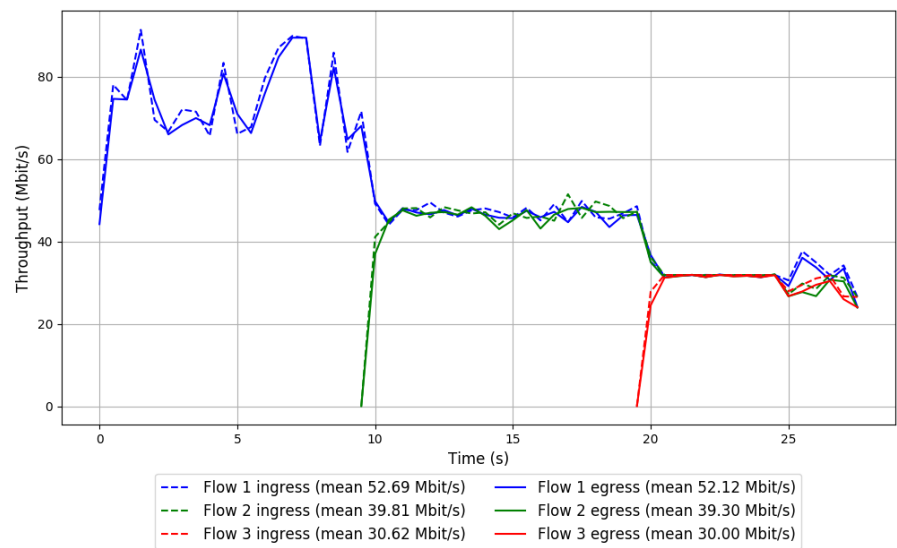
-- Flow 3:

Average throughput: 30.00 Mbit/s

95th percentile per-packet one-way delay: 60.591 ms

Loss rate: 2.99%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-10 02:30:01

End at: 2018-01-10 02:30:31

Local clock offset: 0.01 ms

Remote clock offset: 0.931 ms

# Below is generated by plot.py at 2018-01-10 07:42:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 88.04 Mbit/s

95th percentile per-packet one-way delay: 53.521 ms

Loss rate: 1.75%

-- Flow 1:

Average throughput: 57.84 Mbit/s

95th percentile per-packet one-way delay: 50.539 ms

Loss rate: 1.60%

-- Flow 2:

Average throughput: 30.71 Mbit/s

95th percentile per-packet one-way delay: 64.969 ms

Loss rate: 1.72%

-- Flow 3:

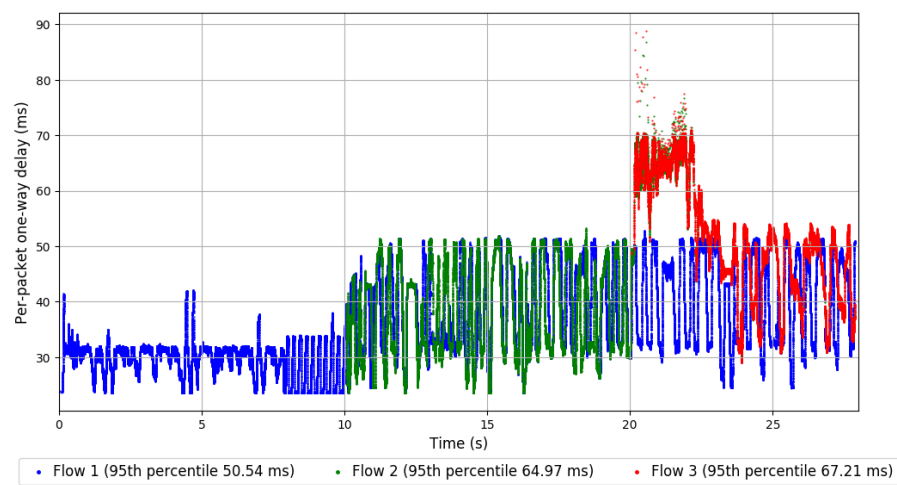
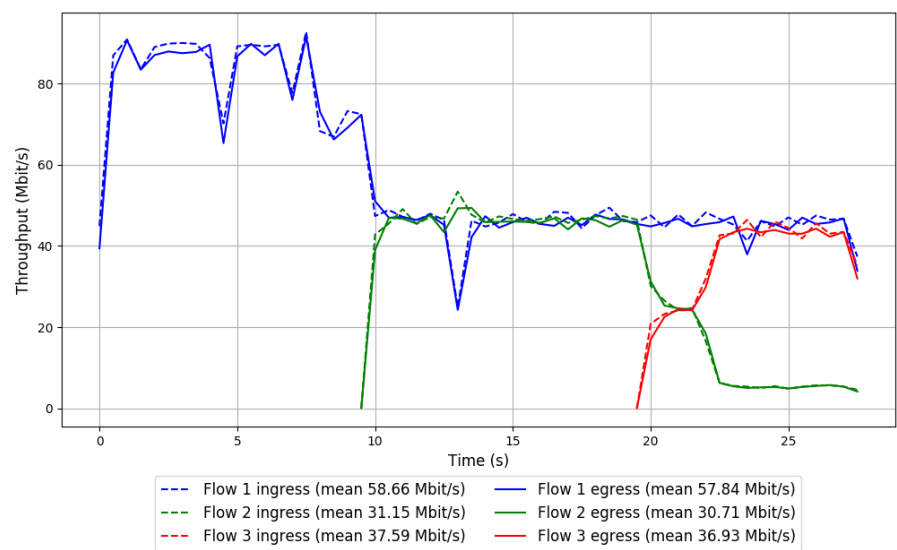
Average throughput: 36.93 Mbit/s

95th percentile per-packet one-way delay: 67.206 ms

Loss rate: 2.63%



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

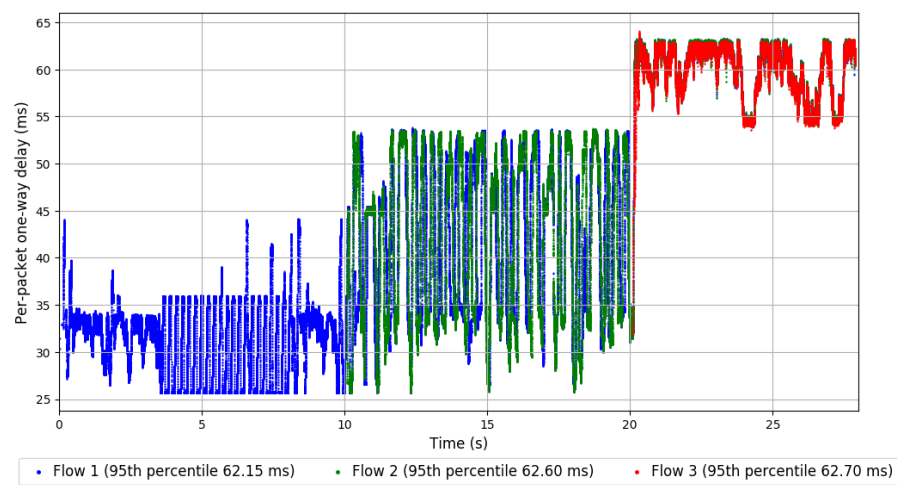
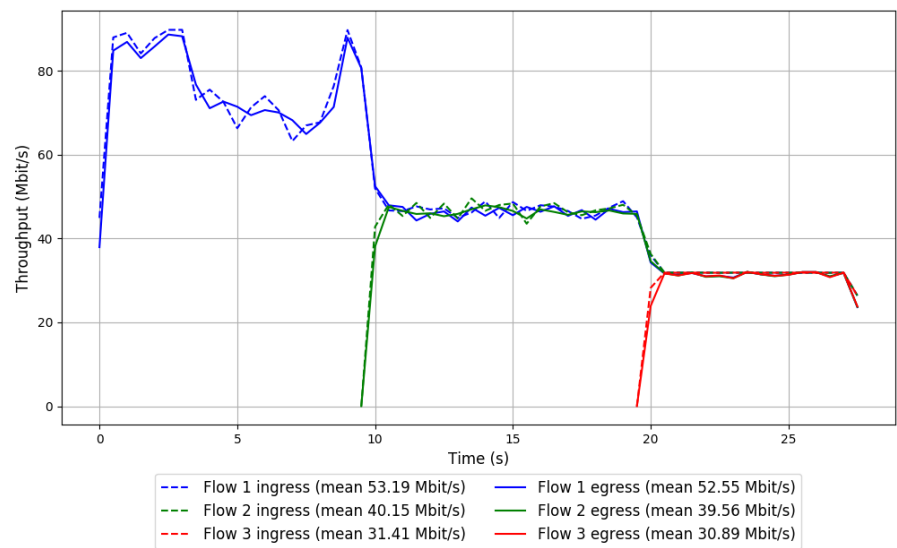


Run 10: Statistics of TaoVA-100x

Start at: 2018-01-10 02:53:05  
End at: 2018-01-10 02:53:35  
Local clock offset: -0.036 ms  
Remote clock offset: -1.703 ms

# Below is generated by plot.py at 2018-01-10 07:42:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.73 Mbit/s  
95th percentile per-packet one-way delay: 62.503 ms  
Loss rate: 1.63%  
-- Flow 1:  
Average throughput: 52.55 Mbit/s  
95th percentile per-packet one-way delay: 62.153 ms  
Loss rate: 1.41%  
-- Flow 2:  
Average throughput: 39.56 Mbit/s  
95th percentile per-packet one-way delay: 62.603 ms  
Loss rate: 1.77%  
-- Flow 3:  
Average throughput: 30.89 Mbit/s  
95th percentile per-packet one-way delay: 62.703 ms  
Loss rate: 2.58%

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

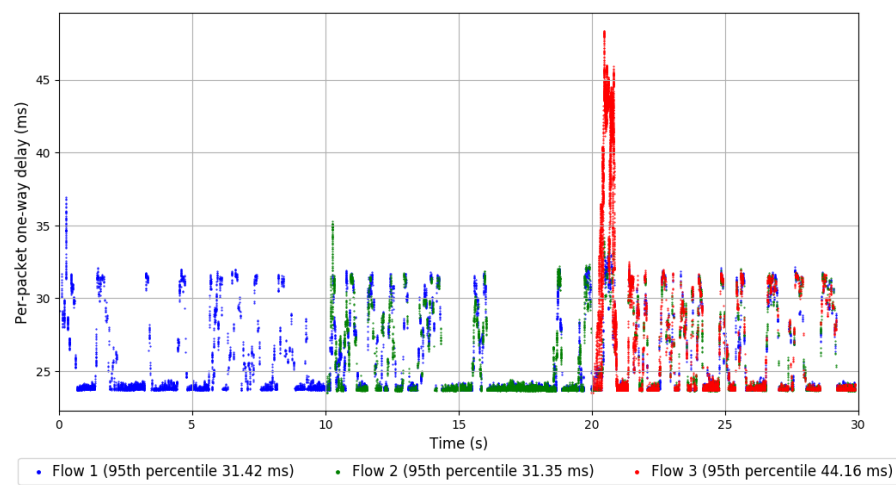
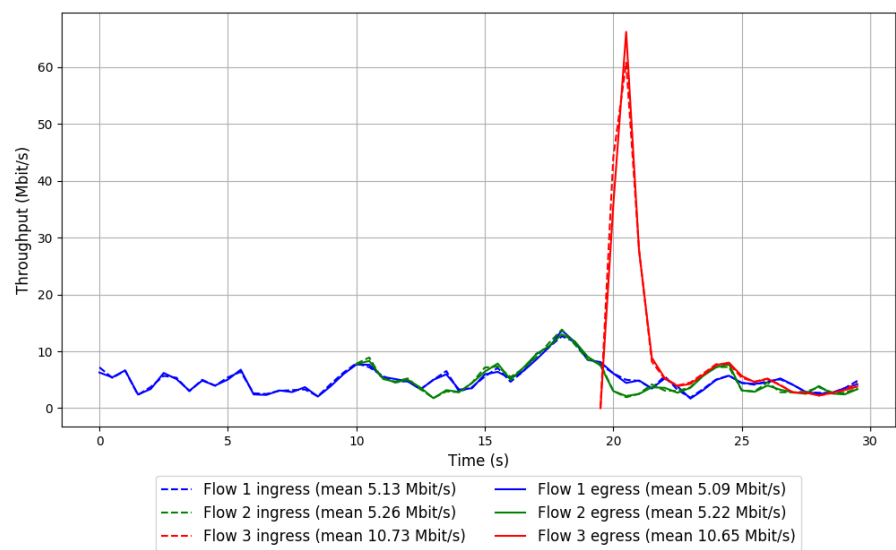


Run 1: Statistics of TCP Vegas

Start at: 2018-01-09 23:56:18  
End at: 2018-01-09 23:56:48  
Local clock offset: 0.005 ms  
Remote clock offset: -0.821 ms

# Below is generated by plot.py at 2018-01-10 07:42:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 12.09 Mbit/s  
95th percentile per-packet one-way delay: 42.703 ms  
Loss rate: 1.11%  
-- Flow 1:  
Average throughput: 5.09 Mbit/s  
95th percentile per-packet one-way delay: 31.422 ms  
Loss rate: 0.92%  
-- Flow 2:  
Average throughput: 5.22 Mbit/s  
95th percentile per-packet one-way delay: 31.347 ms  
Loss rate: 0.93%  
-- Flow 3:  
Average throughput: 10.65 Mbit/s  
95th percentile per-packet one-way delay: 44.162 ms  
Loss rate: 1.56%

Run 1: Report of TCP Vegas — Data Link

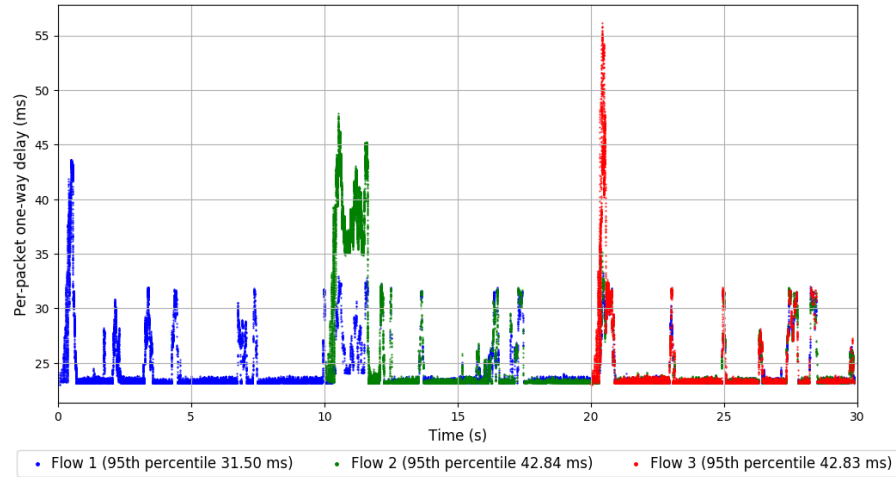
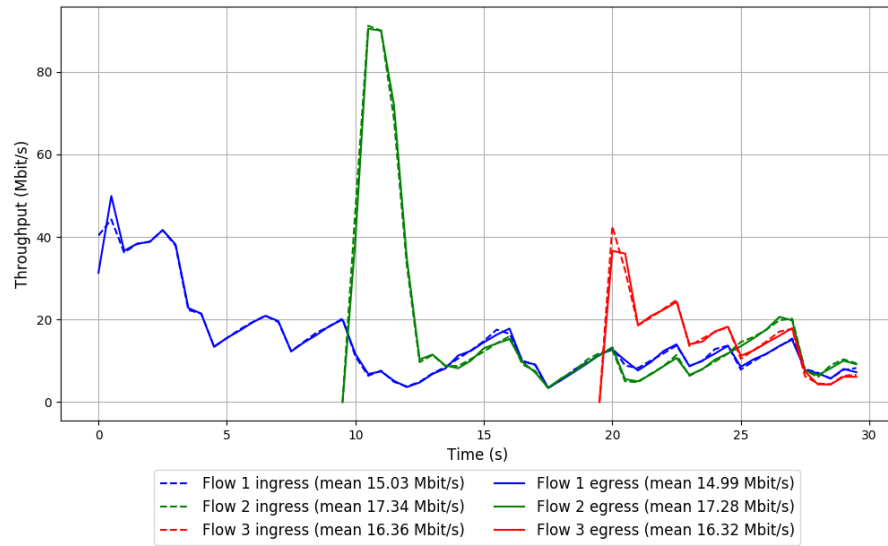


Run 2: Statistics of TCP Vegas

Start at: 2018-01-10 00:17:39  
End at: 2018-01-10 00:18:09  
Local clock offset: 0.158 ms  
Remote clock offset: -0.178 ms

# Below is generated by plot.py at 2018-01-10 07:42:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 31.92 Mbit/s  
95th percentile per-packet one-way delay: 40.886 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 14.99 Mbit/s  
95th percentile per-packet one-way delay: 31.498 ms  
Loss rate: 0.46%  
-- Flow 2:  
Average throughput: 17.28 Mbit/s  
95th percentile per-packet one-way delay: 42.836 ms  
Loss rate: 0.61%  
-- Flow 3:  
Average throughput: 16.32 Mbit/s  
95th percentile per-packet one-way delay: 42.825 ms  
Loss rate: 0.78%

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



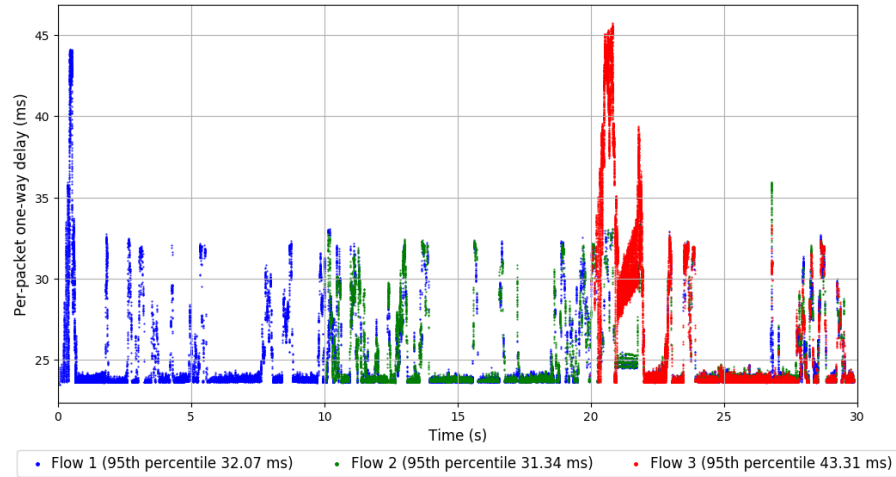
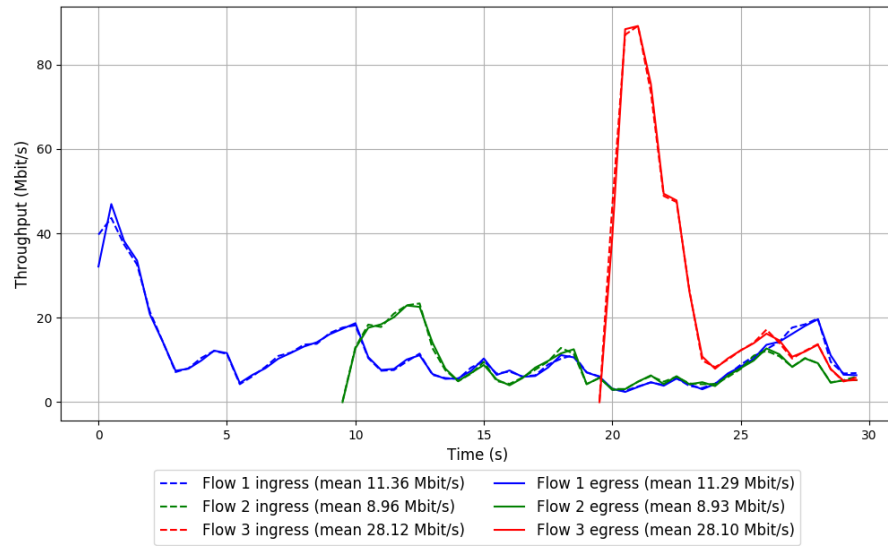
Run 3: Statistics of TCP Vegas

Start at: 2018-01-10 00:38:57  
End at: 2018-01-10 00:39:27  
Local clock offset: 0.187 ms  
Remote clock offset: -1.136 ms

# Below is generated by plot.py at 2018-01-10 07:42:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 26.57 Mbit/s  
95th percentile per-packet one-way delay: 39.012 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 11.29 Mbit/s  
95th percentile per-packet one-way delay: 32.068 ms  
Loss rate: 0.77%  
-- Flow 2:  
Average throughput: 8.93 Mbit/s  
95th percentile per-packet one-way delay: 31.338 ms  
Loss rate: 0.58%  
-- Flow 3:  
Average throughput: 28.10 Mbit/s  
95th percentile per-packet one-way delay: 43.309 ms  
Loss rate: 0.64%



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



Run 4: Statistics of TCP Vegas

Start at: 2018-01-10 01:00:13

End at: 2018-01-10 01:00:43

Local clock offset: -0.029 ms

Remote clock offset: -2.51 ms

# Below is generated by plot.py at 2018-01-10 07:42:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 36.38 Mbit/s

95th percentile per-packet one-way delay: 43.531 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 18.25 Mbit/s

95th percentile per-packet one-way delay: 43.247 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 16.50 Mbit/s

95th percentile per-packet one-way delay: 40.268 ms

Loss rate: 1.01%

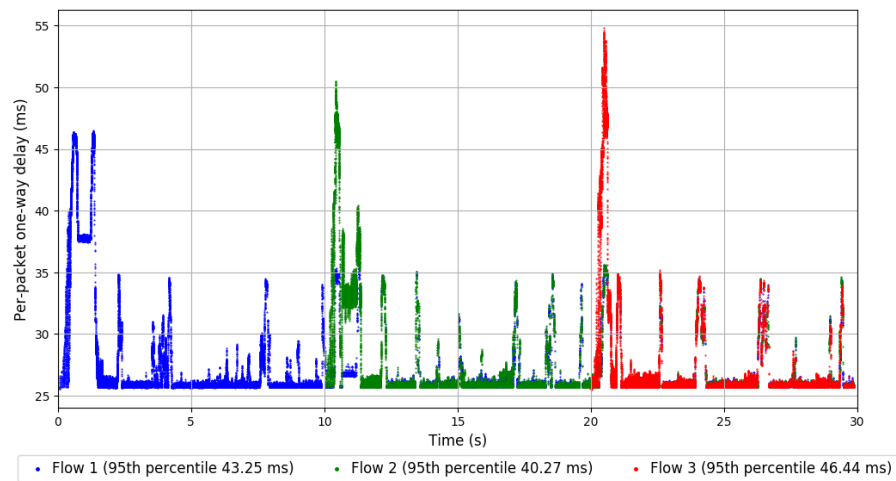
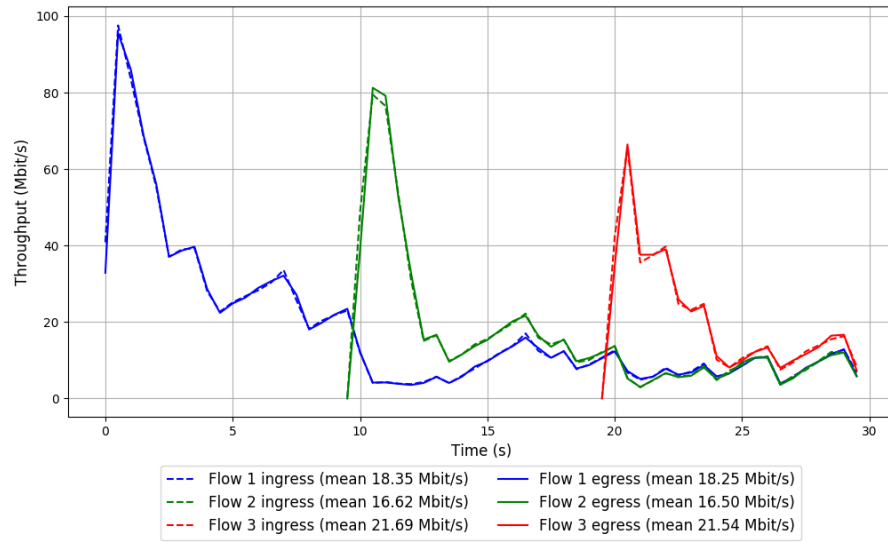
-- Flow 3:

Average throughput: 21.54 Mbit/s

95th percentile per-packet one-way delay: 46.440 ms

Loss rate: 1.21%

# Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-10 01:21:40

End at: 2018-01-10 01:22:10

Local clock offset: -0.063 ms

Remote clock offset: 1.431 ms

# Below is generated by plot.py at 2018-01-10 07:42:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 26.15 Mbit/s

95th percentile per-packet one-way delay: 32.356 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 16.60 Mbit/s

95th percentile per-packet one-way delay: 41.704 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 9.29 Mbit/s

95th percentile per-packet one-way delay: 30.439 ms

Loss rate: 0.52%

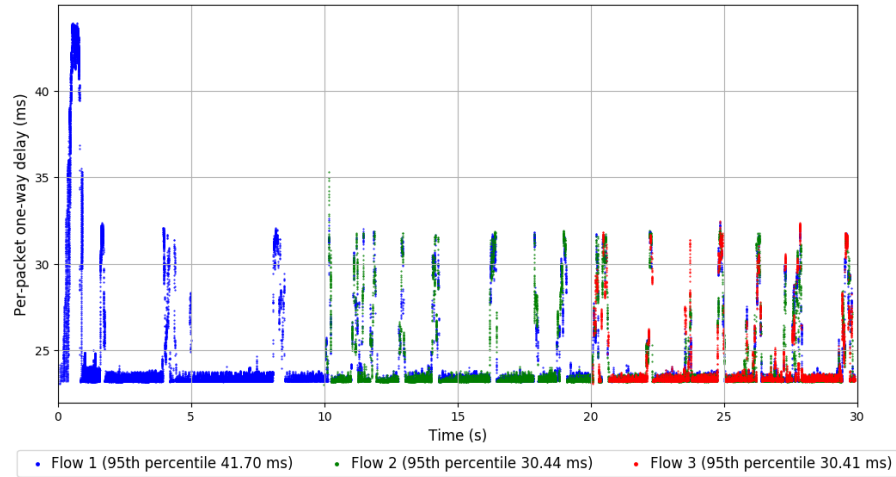
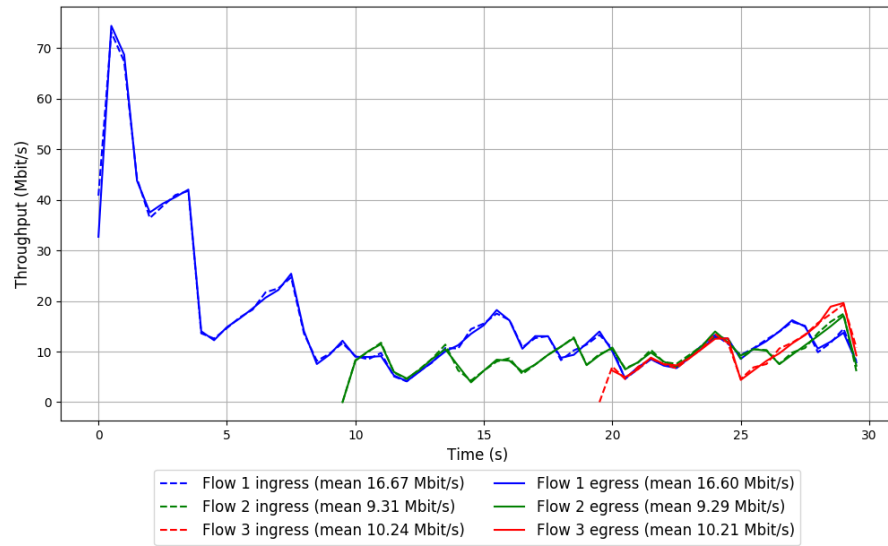
-- Flow 3:

Average throughput: 10.21 Mbit/s

95th percentile per-packet one-way delay: 30.410 ms

Loss rate: 0.85%

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



Run 6: Statistics of TCP Vegas

Start at: 2018-01-10 01:43:48

End at: 2018-01-10 01:44:18

Local clock offset: -0.038 ms

Remote clock offset: 2.561 ms

# Below is generated by plot.py at 2018-01-10 07:42:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 11.62 Mbit/s

95th percentile per-packet one-way delay: 31.259 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 6.71 Mbit/s

95th percentile per-packet one-way delay: 31.224 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 4.84 Mbit/s

95th percentile per-packet one-way delay: 31.280 ms

Loss rate: 0.93%

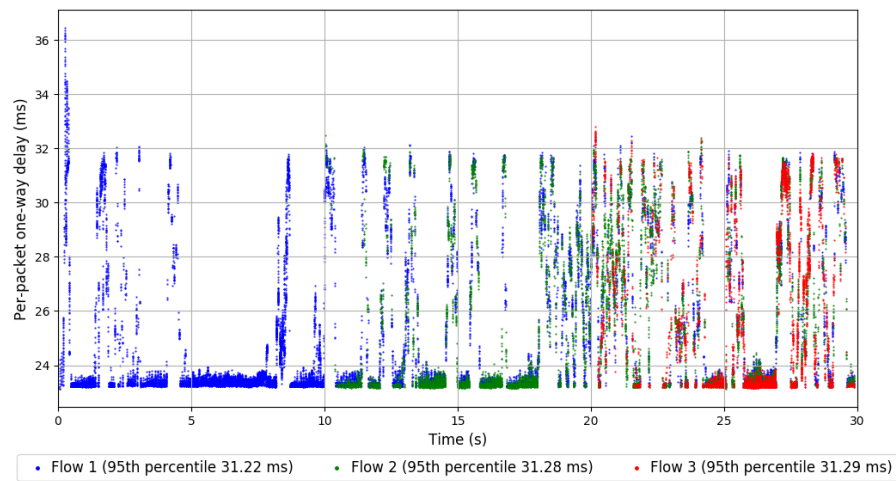
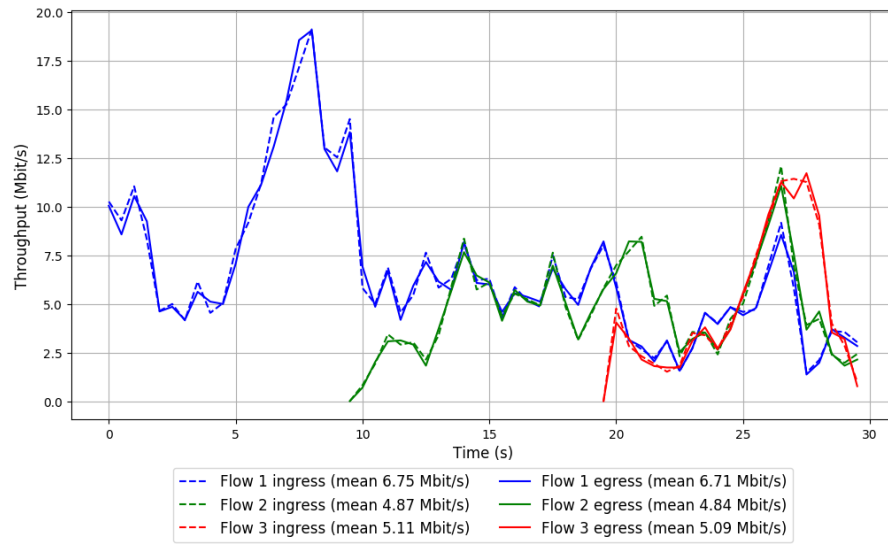
-- Flow 3:

Average throughput: 5.09 Mbit/s

95th percentile per-packet one-way delay: 31.294 ms

Loss rate: 0.92%

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



Run 7: Statistics of TCP Vegas

Start at: 2018-01-10 02:05:24

End at: 2018-01-10 02:05:54

Local clock offset: -0.157 ms

Remote clock offset: 0.399 ms

# Below is generated by plot.py at 2018-01-10 07:42:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 22.97 Mbit/s

95th percentile per-packet one-way delay: 41.459 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 8.14 Mbit/s

95th percentile per-packet one-way delay: 37.444 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 14.15 Mbit/s

95th percentile per-packet one-way delay: 43.016 ms

Loss rate: 0.49%

-- Flow 3:

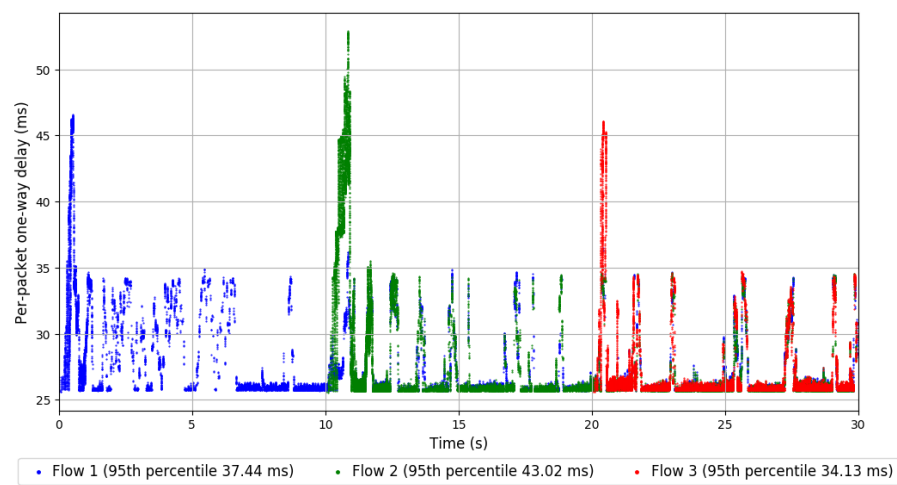
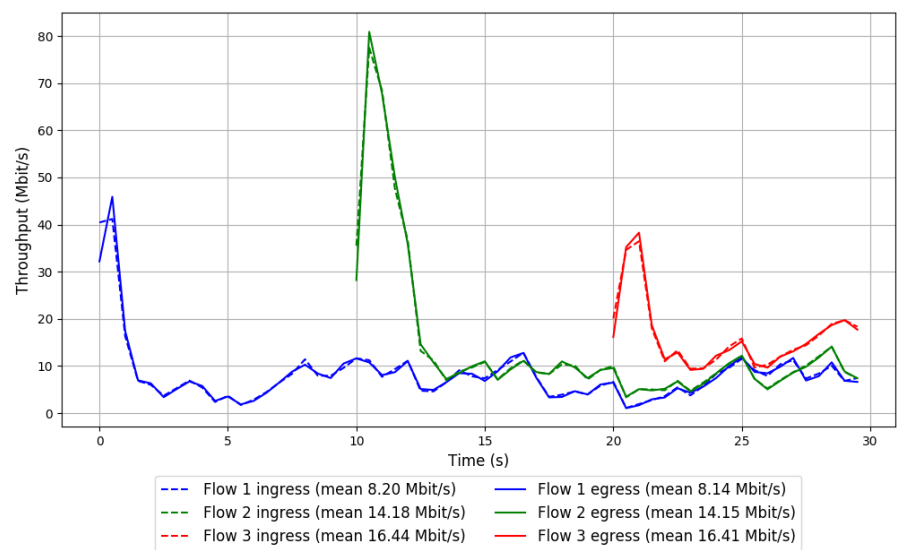
Average throughput: 16.41 Mbit/s

95th percentile per-packet one-way delay: 34.135 ms

Loss rate: 0.68%



Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-10 02:27:19

End at: 2018-01-10 02:27:49

Local clock offset: 0.015 ms

Remote clock offset: 1.106 ms

# Below is generated by plot.py at 2018-01-10 07:42:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 10.39 Mbit/s

95th percentile per-packet one-way delay: 32.983 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 32.063 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 31.950 ms

Loss rate: 1.27%

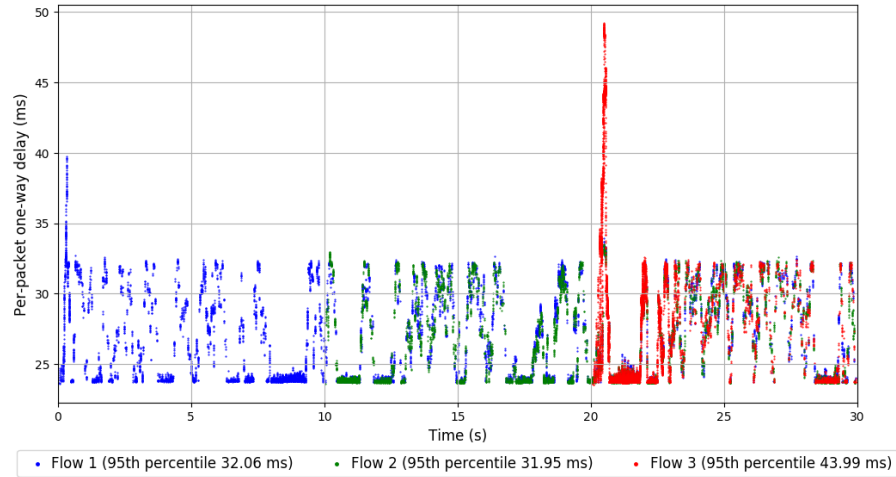
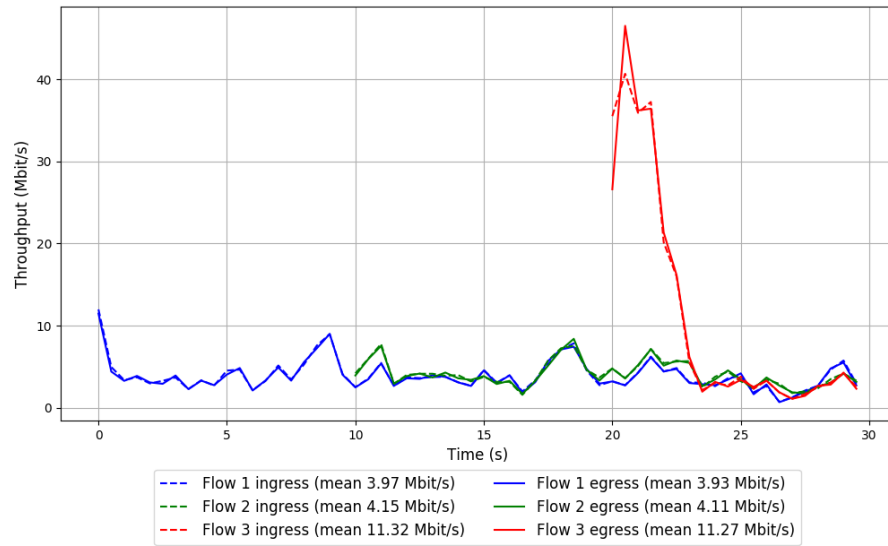
-- Flow 3:

Average throughput: 11.27 Mbit/s

95th percentile per-packet one-way delay: 43.994 ms

Loss rate: 1.03%

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

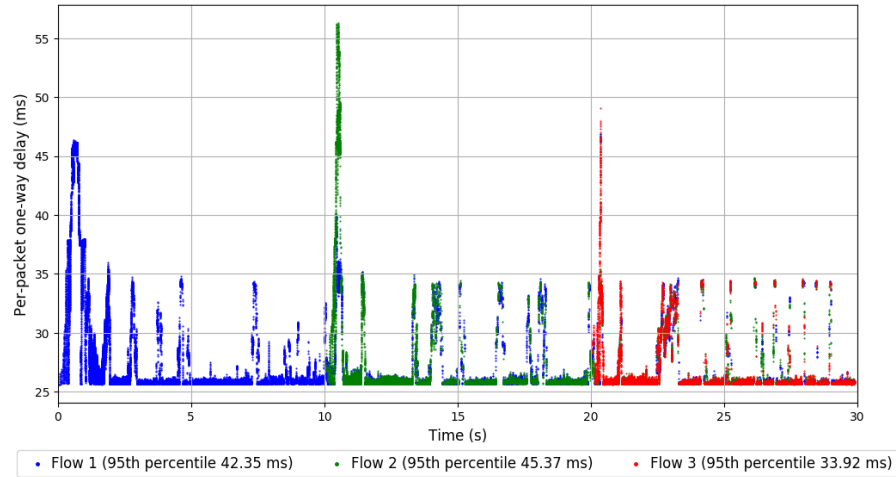
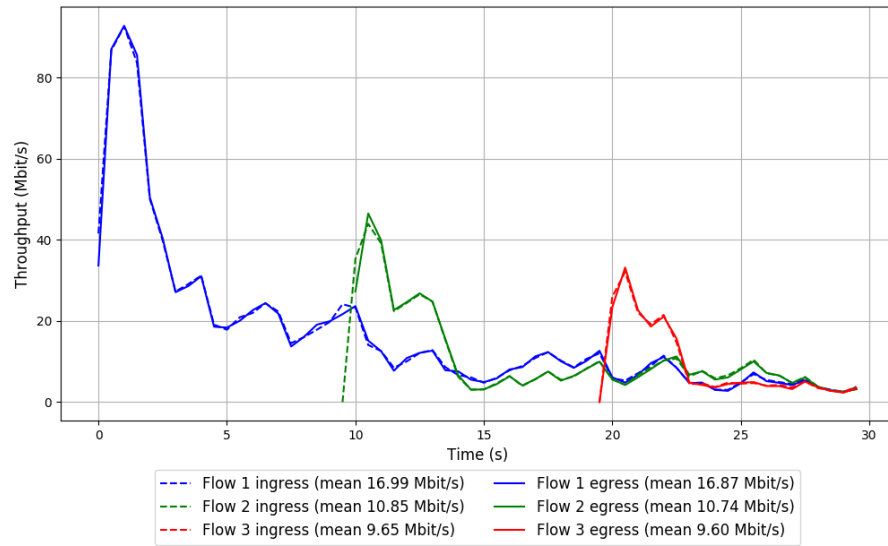


Run 9: Statistics of TCP Vegas

Start at: 2018-01-10 02:50:22  
End at: 2018-01-10 02:50:52  
Local clock offset: -0.124 ms  
Remote clock offset: -1.742 ms

# Below is generated by plot.py at 2018-01-10 07:42:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 27.19 Mbit/s  
95th percentile per-packet one-way delay: 39.983 ms  
Loss rate: 0.99%  
-- Flow 1:  
Average throughput: 16.87 Mbit/s  
95th percentile per-packet one-way delay: 42.355 ms  
Loss rate: 0.84%  
-- Flow 2:  
Average throughput: 10.74 Mbit/s  
95th percentile per-packet one-way delay: 45.365 ms  
Loss rate: 1.33%  
-- Flow 3:  
Average throughput: 9.60 Mbit/s  
95th percentile per-packet one-way delay: 33.921 ms  
Loss rate: 1.05%

# Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-10 03:15:33

End at: 2018-01-10 03:16:03

Local clock offset: 0.076 ms

Remote clock offset: 1.113 ms

# Below is generated by plot.py at 2018-01-10 07:42:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 5.57 Mbit/s

95th percentile per-packet one-way delay: 32.067 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 32.074 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 32.081 ms

Loss rate: 1.51%

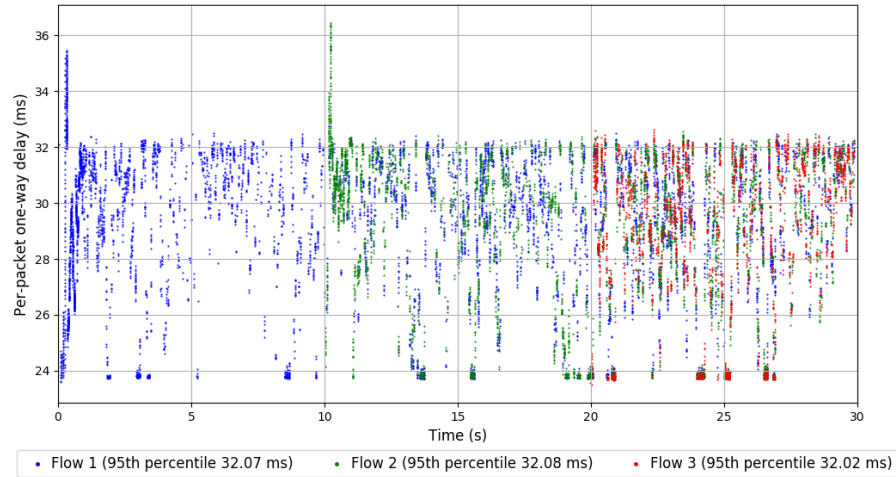
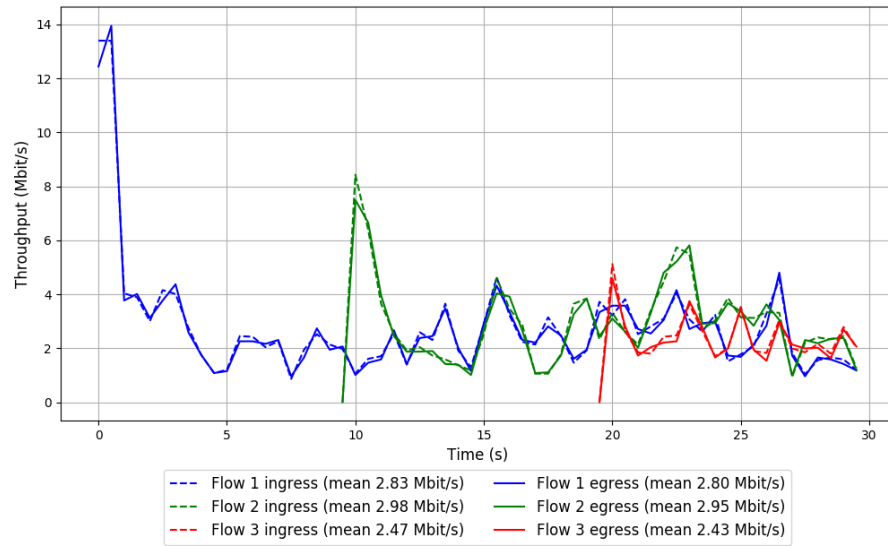
-- Flow 3:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 32.020 ms

Loss rate: 1.86%

# Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-09 23:47:43

End at: 2018-01-09 23:48:13

Local clock offset: 0.049 ms

Remote clock offset: -1.0 ms

# Below is generated by plot.py at 2018-01-10 07:42:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 87.27 Mbit/s

95th percentile per-packet one-way delay: 59.406 ms

Loss rate: 1.98%

-- Flow 1:

Average throughput: 56.86 Mbit/s

95th percentile per-packet one-way delay: 55.032 ms

Loss rate: 1.57%

-- Flow 2:

Average throughput: 29.51 Mbit/s

95th percentile per-packet one-way delay: 69.517 ms

Loss rate: 2.51%

-- Flow 3:

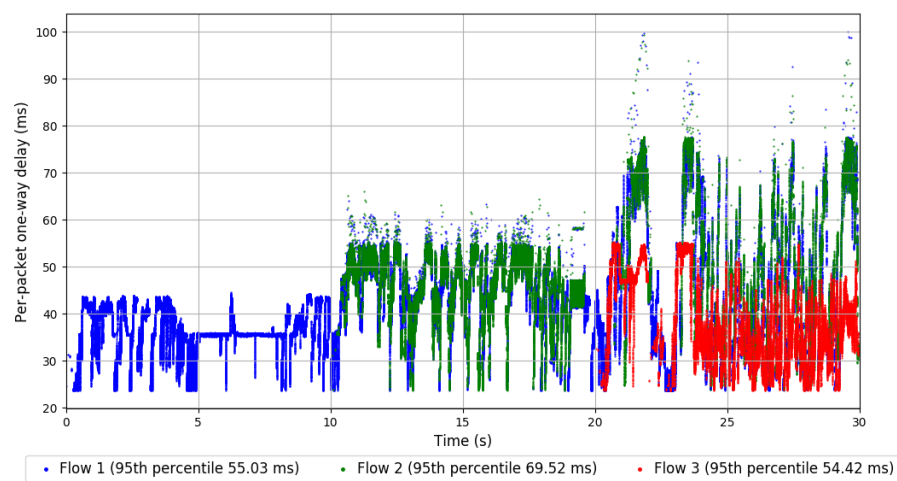
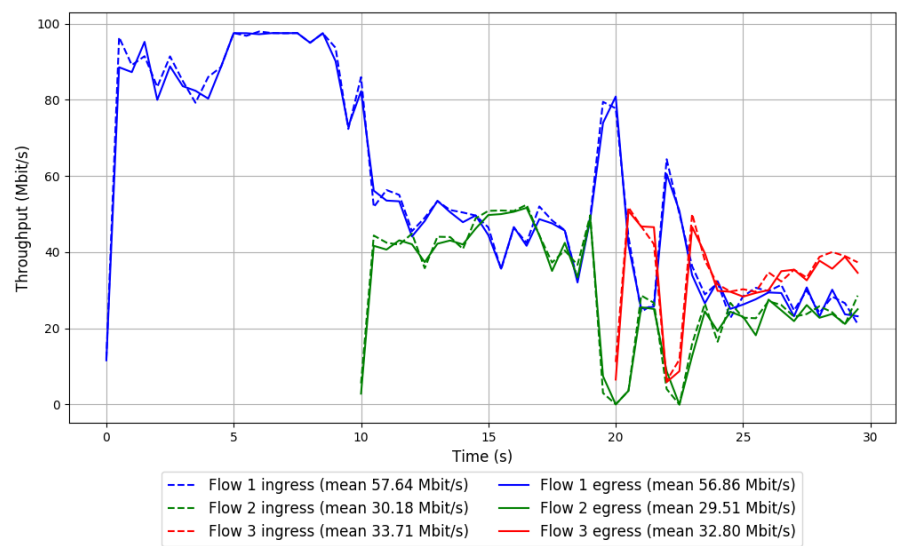
Average throughput: 32.80 Mbit/s

95th percentile per-packet one-way delay: 54.419 ms

Loss rate: 3.15%



Run 1: Report of Verus — Data Link

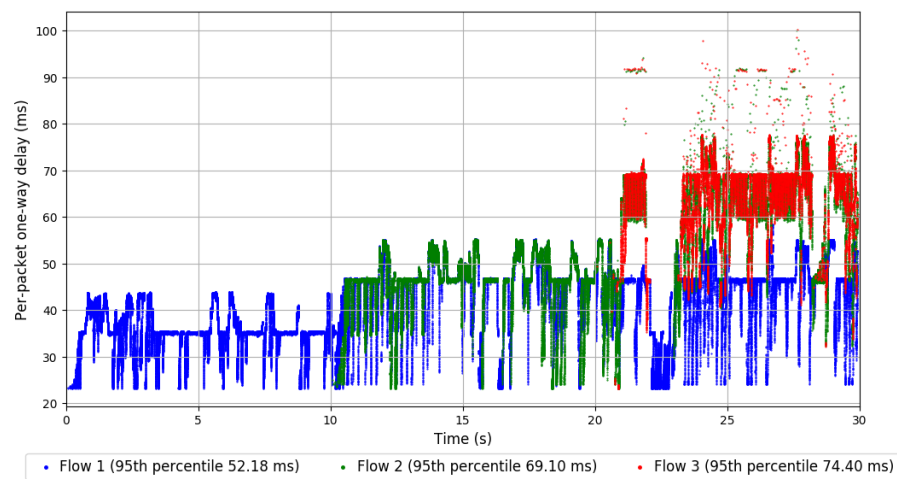
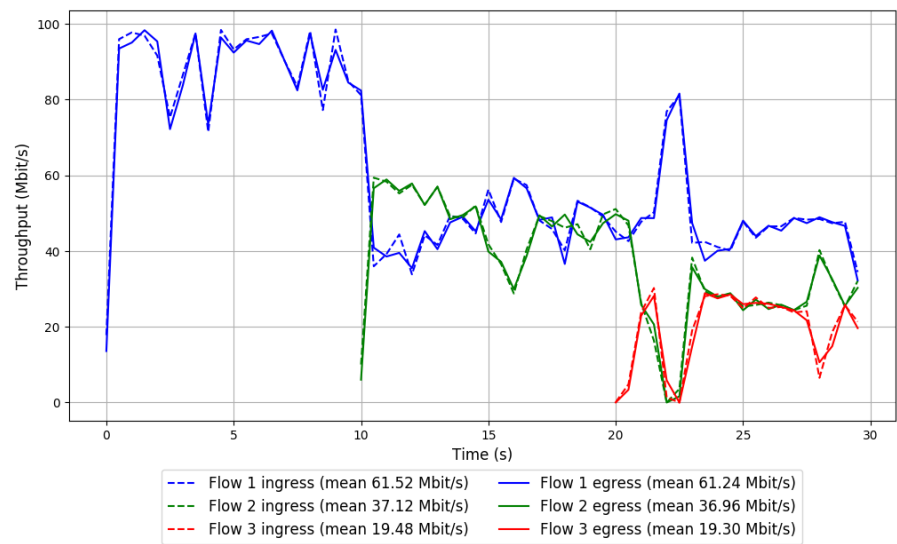


Run 2: Statistics of Verus

Start at: 2018-01-10 00:09:25  
End at: 2018-01-10 00:09:55  
Local clock offset: 0.145 ms  
Remote clock offset: -0.129 ms

# Below is generated by plot.py at 2018-01-10 07:42:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 92.15 Mbit/s  
95th percentile per-packet one-way delay: 68.509 ms  
Loss rate: 0.73%  
-- Flow 1:  
Average throughput: 61.24 Mbit/s  
95th percentile per-packet one-way delay: 52.184 ms  
Loss rate: 0.62%  
-- Flow 2:  
Average throughput: 36.96 Mbit/s  
95th percentile per-packet one-way delay: 69.097 ms  
Loss rate: 0.75%  
-- Flow 3:  
Average throughput: 19.30 Mbit/s  
95th percentile per-packet one-way delay: 74.402 ms  
Loss rate: 1.68%

Run 2: Report of Verus — Data Link

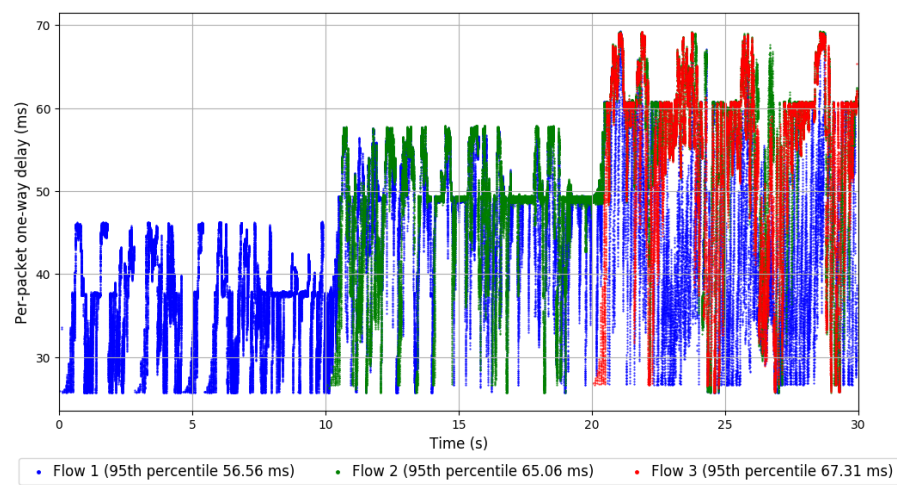
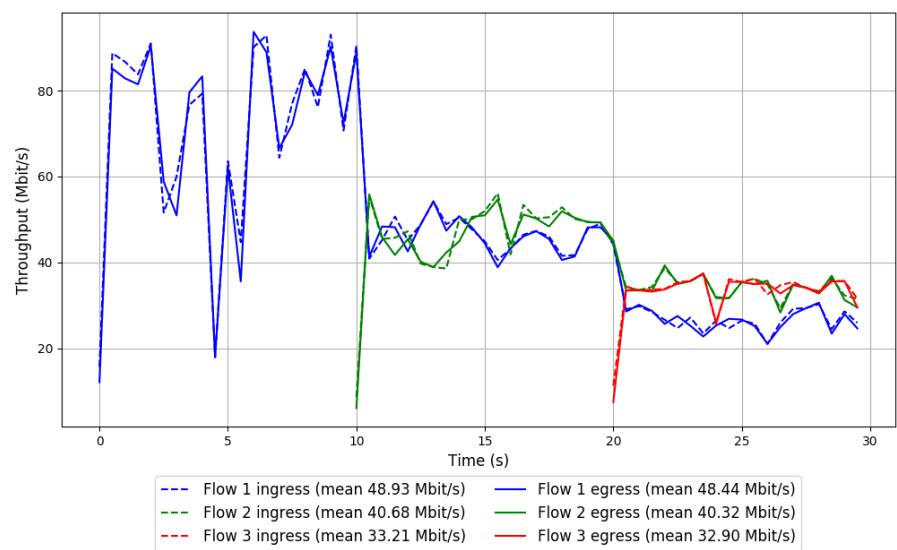


Run 3: Statistics of Verus

Start at: 2018-01-10 00:30:34  
End at: 2018-01-10 00:31:04  
Local clock offset: 0.067 ms  
Remote clock offset: -3.268 ms

# Below is generated by plot.py at 2018-01-10 07:42:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.10 Mbit/s  
95th percentile per-packet one-way delay: 63.024 ms  
Loss rate: 1.20%  
-- Flow 1:  
Average throughput: 48.44 Mbit/s  
95th percentile per-packet one-way delay: 56.565 ms  
Loss rate: 1.16%  
-- Flow 2:  
Average throughput: 40.32 Mbit/s  
95th percentile per-packet one-way delay: 65.057 ms  
Loss rate: 1.16%  
-- Flow 3:  
Average throughput: 32.90 Mbit/s  
95th percentile per-packet one-way delay: 67.307 ms  
Loss rate: 1.49%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-10 00:51:49

End at: 2018-01-10 00:52:19

Local clock offset: 0.126 ms

Remote clock offset: -0.97 ms

# Below is generated by plot.py at 2018-01-10 07:42:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 90.79 Mbit/s

95th percentile per-packet one-way delay: 62.465 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 56.46 Mbit/s

95th percentile per-packet one-way delay: 58.172 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 29.00 Mbit/s

95th percentile per-packet one-way delay: 69.804 ms

Loss rate: 0.90%

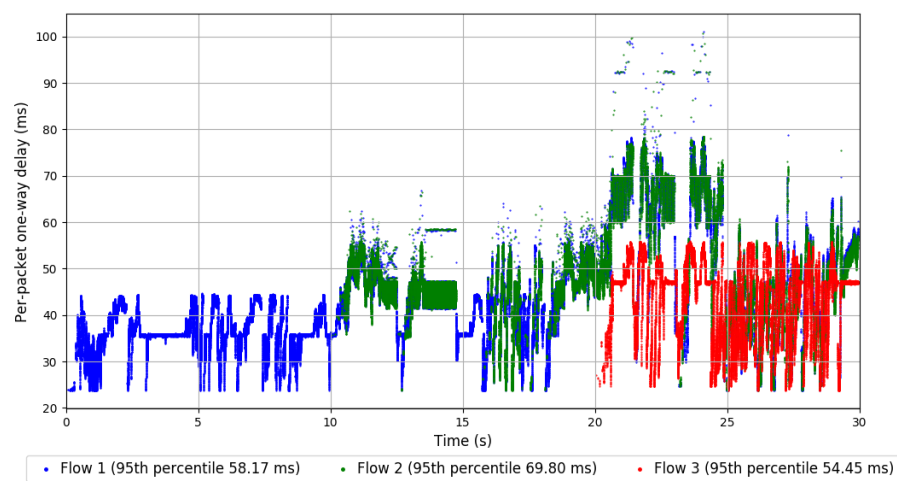
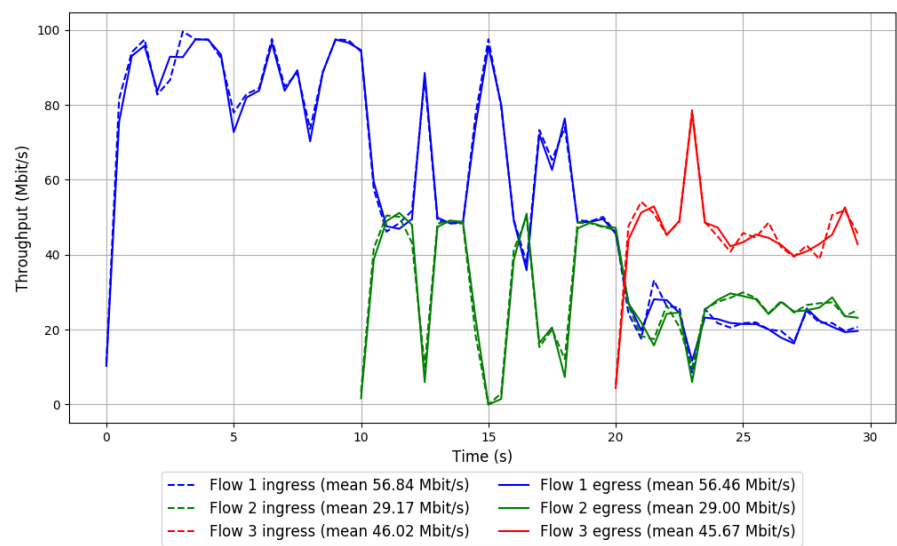
-- Flow 3:

Average throughput: 45.67 Mbit/s

95th percentile per-packet one-way delay: 54.451 ms

Loss rate: 1.33%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-10 01:13:06

End at: 2018-01-10 01:13:36

Local clock offset: -0.015 ms

Remote clock offset: 0.42 ms

# Below is generated by plot.py at 2018-01-10 07:42:31

# Datalink statistics

-- Total of 3 flows:

Average throughput: 90.39 Mbit/s

95th percentile per-packet one-way delay: 69.430 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 53.35 Mbit/s

95th percentile per-packet one-way delay: 68.330 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 43.77 Mbit/s

95th percentile per-packet one-way delay: 54.231 ms

Loss rate: 0.96%

-- Flow 3:

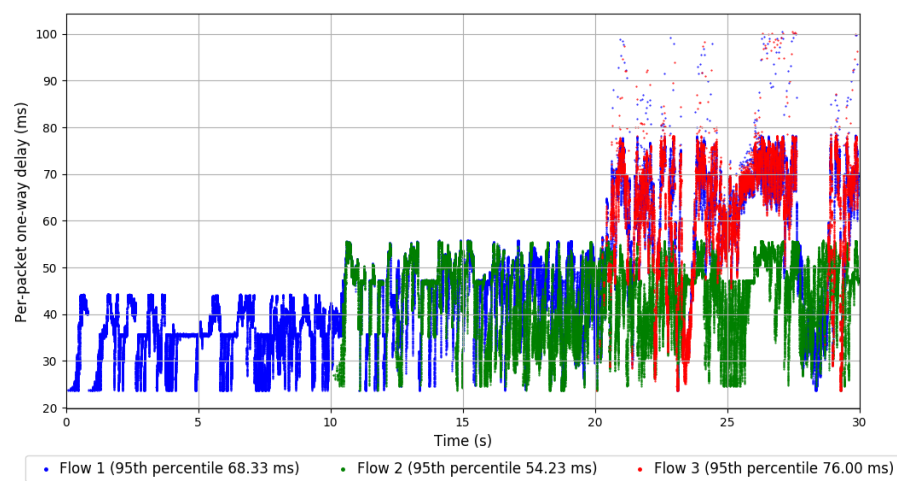
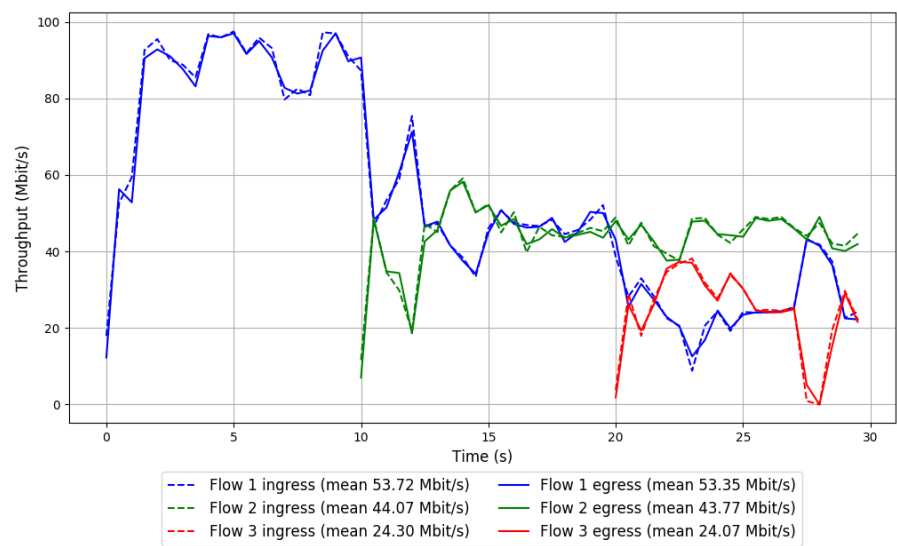
Average throughput: 24.07 Mbit/s

95th percentile per-packet one-way delay: 75.997 ms

Loss rate: 1.71%



Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

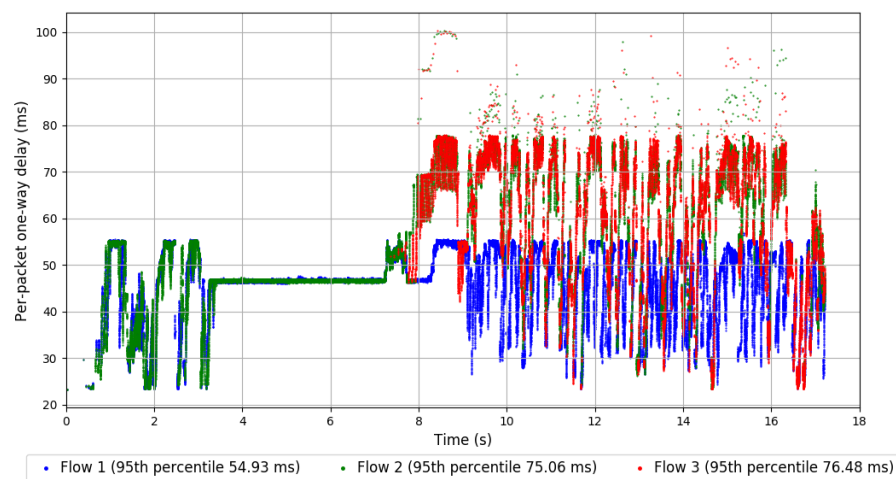
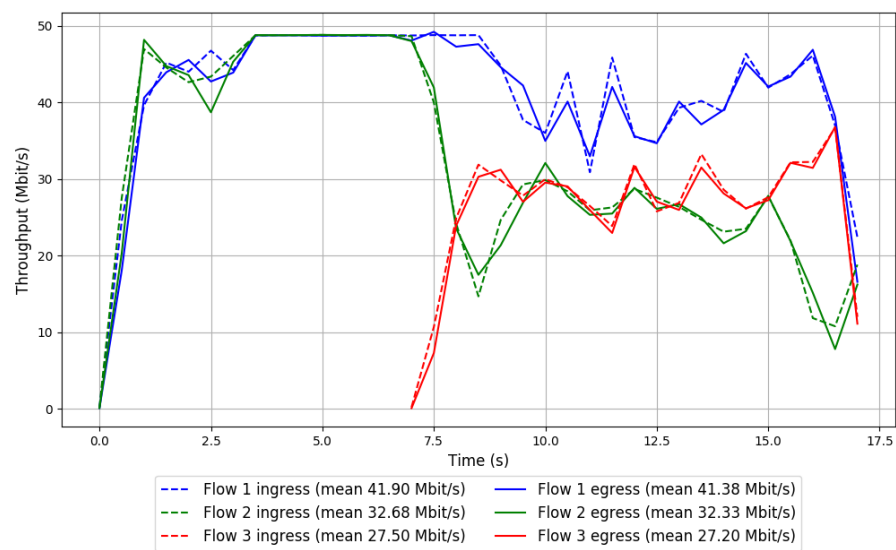
Start at: 2018-01-10 01:35:25

End at: 2018-01-10 01:35:55

Local clock offset: 0.076 ms

Remote clock offset: 2.299 ms

Run 6: Report of Verus — Data Link

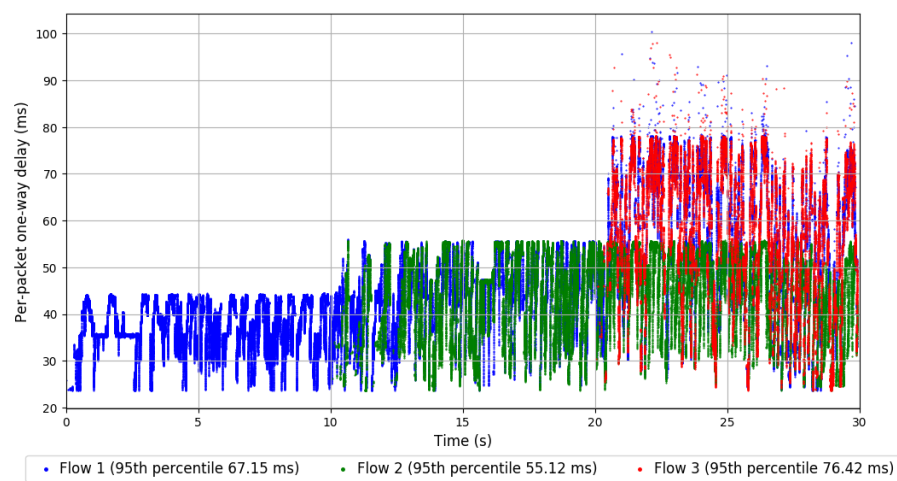
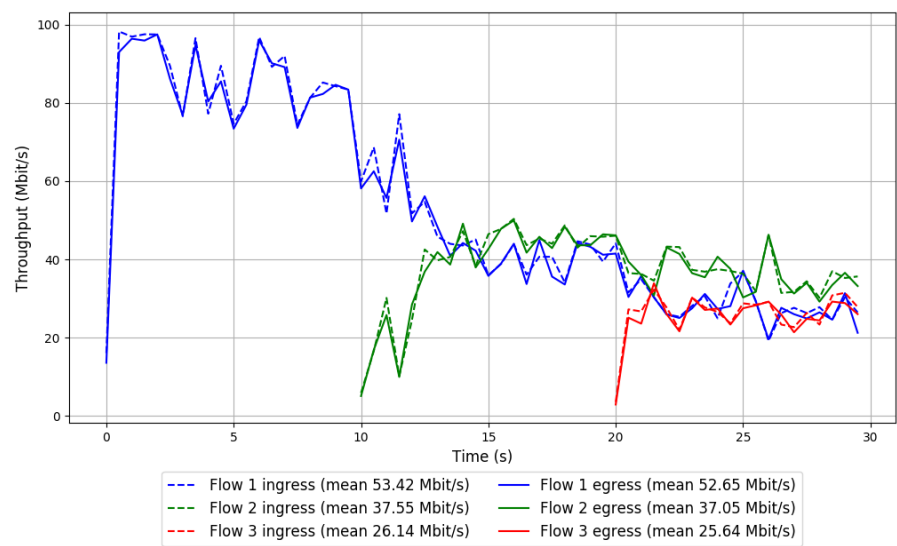


Run 7: Statistics of Verus

Start at: 2018-01-10 01:56:49  
End at: 2018-01-10 01:57:19  
Local clock offset: -0.107 ms  
Remote clock offset: 2.411 ms

# Below is generated by plot.py at 2018-01-10 07:43:56  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.73 Mbit/s  
95th percentile per-packet one-way delay: 68.983 ms  
Loss rate: 1.74%  
-- Flow 1:  
Average throughput: 52.65 Mbit/s  
95th percentile per-packet one-way delay: 67.154 ms  
Loss rate: 1.68%  
-- Flow 2:  
Average throughput: 37.05 Mbit/s  
95th percentile per-packet one-way delay: 55.122 ms  
Loss rate: 1.60%  
-- Flow 3:  
Average throughput: 25.64 Mbit/s  
95th percentile per-packet one-way delay: 76.418 ms  
Loss rate: 2.51%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-10 02:18:48

End at: 2018-01-10 02:19:18

Local clock offset: -0.045 ms

Remote clock offset: 1.73 ms

# Below is generated by plot.py at 2018-01-10 07:44:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 85.34 Mbit/s

95th percentile per-packet one-way delay: 70.847 ms

Loss rate: 1.50%

-- Flow 1:

Average throughput: 53.29 Mbit/s

95th percentile per-packet one-way delay: 54.486 ms

Loss rate: 1.71%

-- Flow 2:

Average throughput: 36.60 Mbit/s

95th percentile per-packet one-way delay: 73.561 ms

Loss rate: 0.83%

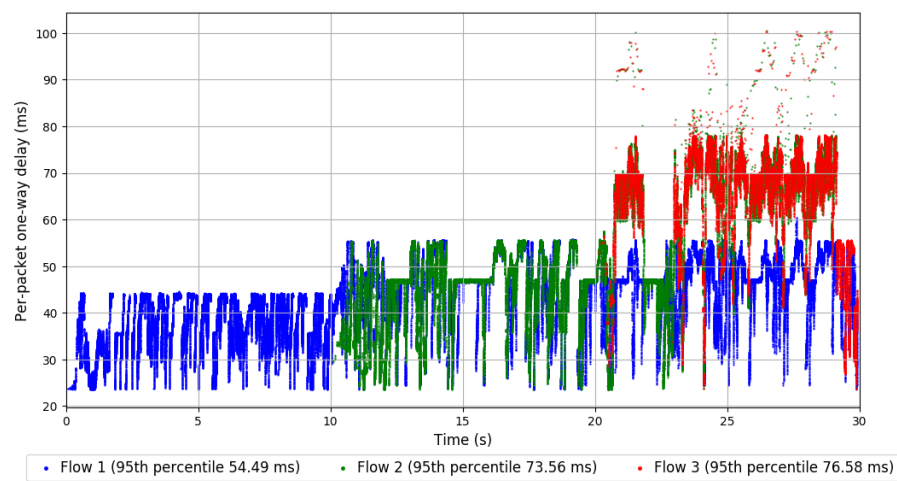
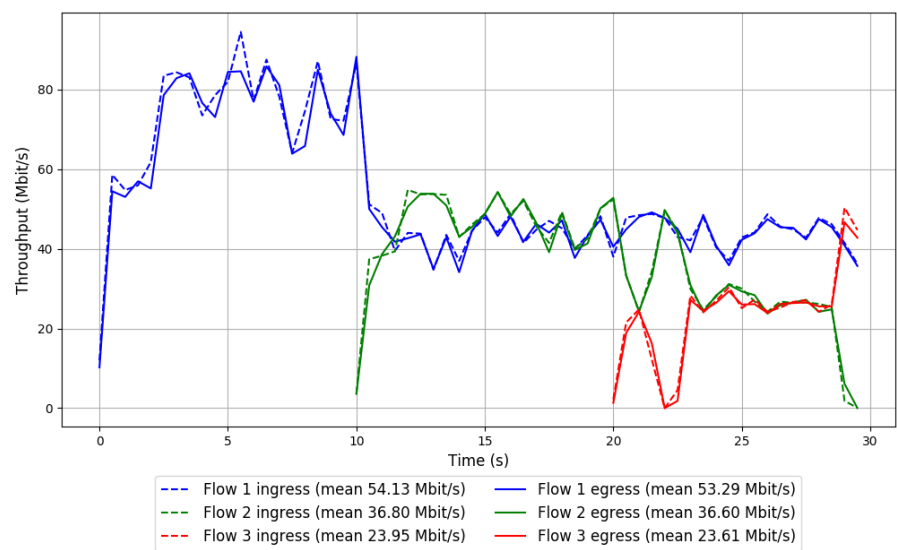
-- Flow 3:

Average throughput: 23.61 Mbit/s

95th percentile per-packet one-way delay: 76.578 ms

Loss rate: 2.14%

Run 8: Report of Verus — Data Link



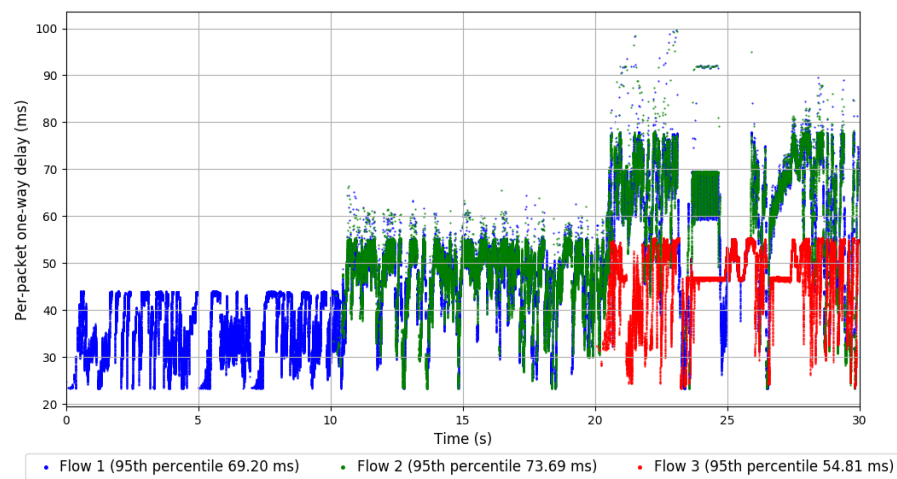
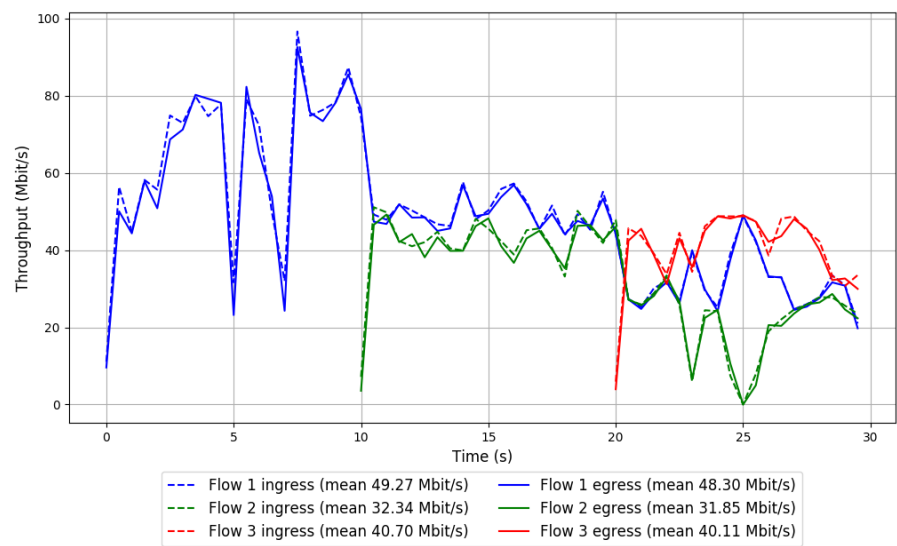
Run 9: Statistics of Verus

Start at: 2018-01-10 02:41:30  
End at: 2018-01-10 02:42:00  
Local clock offset: -0.047 ms  
Remote clock offset: 0.791 ms

# Below is generated by plot.py at 2018-01-10 07:44:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 82.72 Mbit/s  
95th percentile per-packet one-way delay: 69.406 ms  
Loss rate: 1.98%  
-- Flow 1:  
Average throughput: 48.30 Mbit/s  
95th percentile per-packet one-way delay: 69.200 ms  
Loss rate: 2.07%  
-- Flow 2:  
Average throughput: 31.85 Mbit/s  
95th percentile per-packet one-way delay: 73.695 ms  
Loss rate: 1.91%  
-- Flow 3:  
Average throughput: 40.11 Mbit/s  
95th percentile per-packet one-way delay: 54.807 ms  
Loss rate: 1.77%



Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-10 03:05:40

End at: 2018-01-10 03:06:10

Local clock offset: 0.02 ms

Remote clock offset: 0.651 ms

# Below is generated by plot.py at 2018-01-10 07:44:25

# Datalink statistics

-- Total of 3 flows:

Average throughput: 73.93 Mbit/s

95th percentile per-packet one-way delay: 62.397 ms

Loss rate: 2.38%

-- Flow 1:

Average throughput: 44.59 Mbit/s

95th percentile per-packet one-way delay: 59.894 ms

Loss rate: 2.60%

-- Flow 2:

Average throughput: 30.93 Mbit/s

95th percentile per-packet one-way delay: 62.704 ms

Loss rate: 2.04%

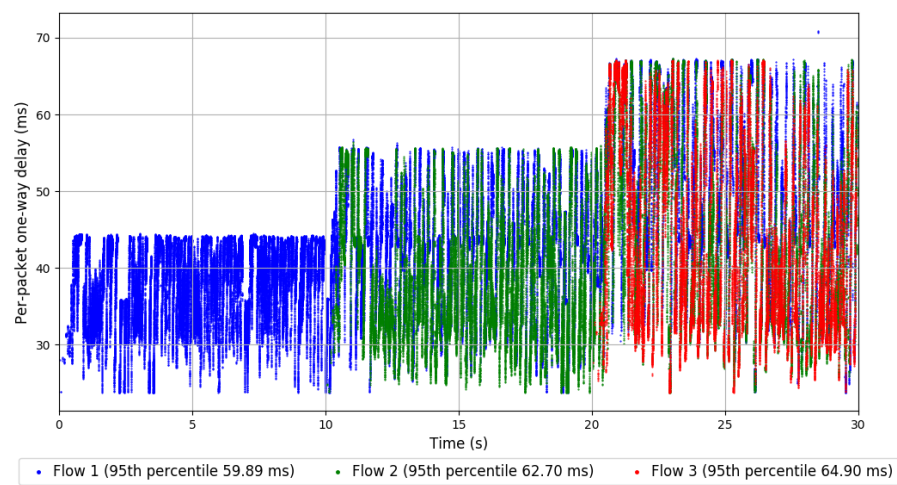
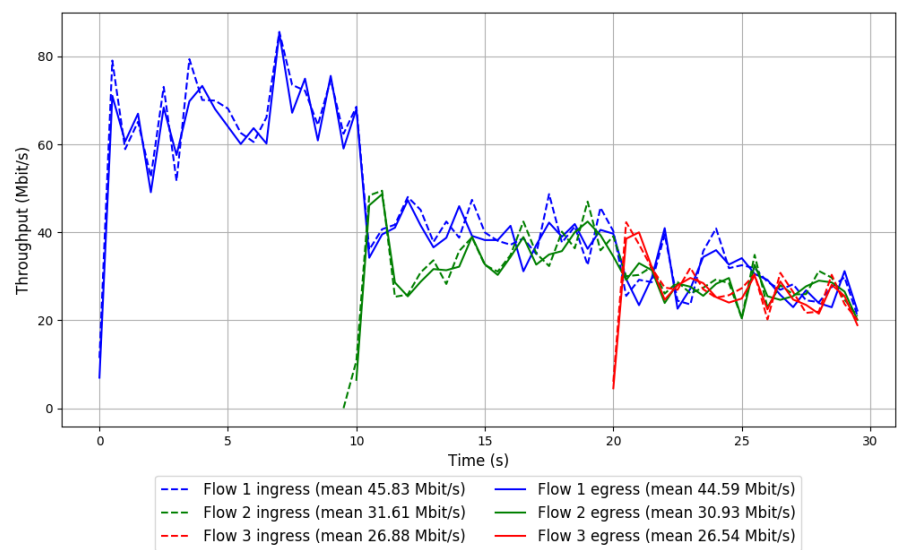
-- Flow 3:

Average throughput: 26.54 Mbit/s

95th percentile per-packet one-way delay: 64.899 ms

Loss rate: 2.03%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-01-09 23:38:53

End at: 2018-01-09 23:39:23

Local clock offset: -0.033 ms

Remote clock offset: -1.63 ms

# Below is generated by plot.py at 2018-01-10 07:44:58

# Datalink statistics

-- Total of 3 flows:

Average throughput: 57.44 Mbit/s

95th percentile per-packet one-way delay: 31.519 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 35.66 Mbit/s

95th percentile per-packet one-way delay: 31.447 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 25.49 Mbit/s

95th percentile per-packet one-way delay: 31.560 ms

Loss rate: 1.36%

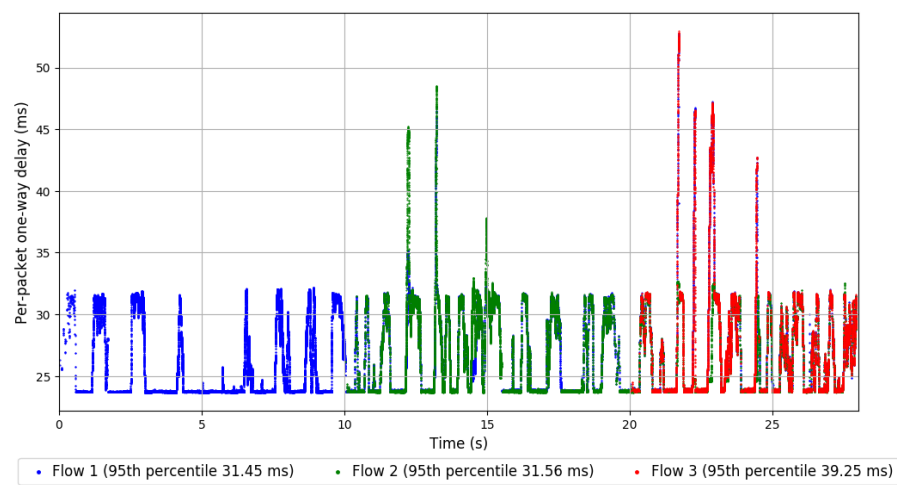
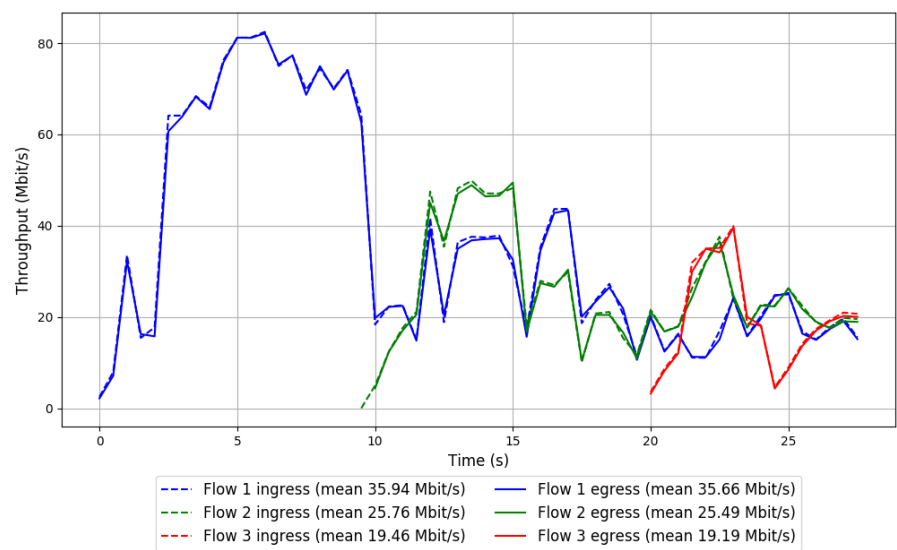
-- Flow 3:

Average throughput: 19.19 Mbit/s

95th percentile per-packet one-way delay: 39.246 ms

Loss rate: 2.07%

Run 1: Report of Copa — Data Link

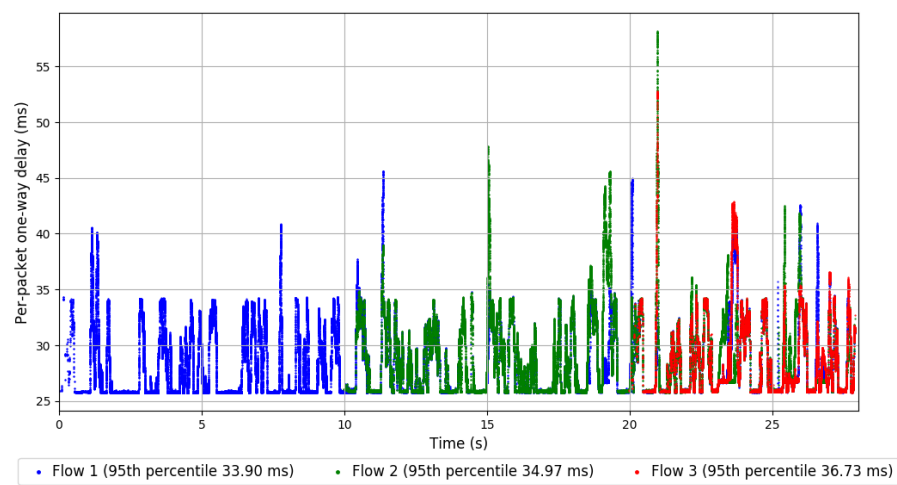
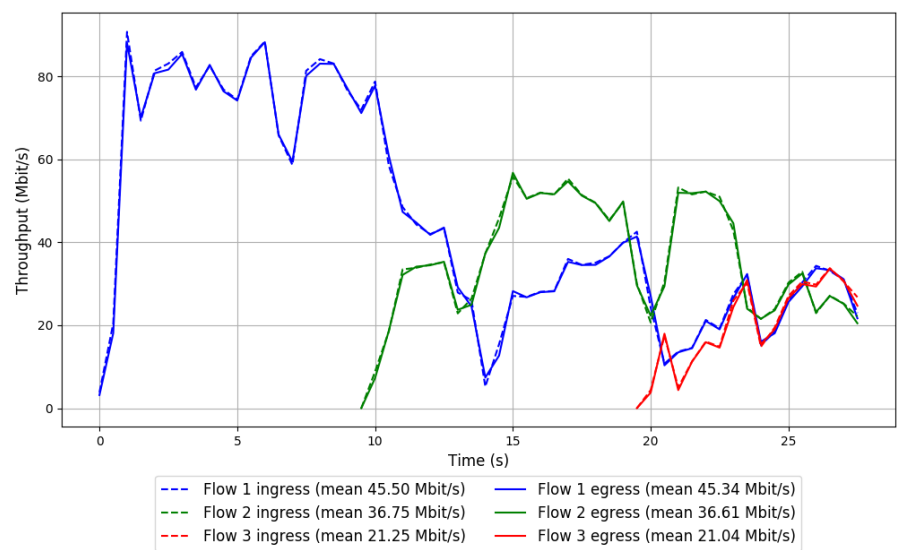


Run 2: Statistics of Copa

Start at: 2018-01-10 00:00:36  
End at: 2018-01-10 00:01:06  
Local clock offset: 0.121 ms  
Remote clock offset: -2.797 ms

# Below is generated by plot.py at 2018-01-10 07:45:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 74.85 Mbit/s  
95th percentile per-packet one-way delay: 34.038 ms  
Loss rate: 0.67%  
-- Flow 1:  
Average throughput: 45.34 Mbit/s  
95th percentile per-packet one-way delay: 33.897 ms  
Loss rate: 0.55%  
-- Flow 2:  
Average throughput: 36.61 Mbit/s  
95th percentile per-packet one-way delay: 34.972 ms  
Loss rate: 0.66%  
-- Flow 3:  
Average throughput: 21.04 Mbit/s  
95th percentile per-packet one-way delay: 36.732 ms  
Loss rate: 1.62%

Run 2: Report of Copa — Data Link



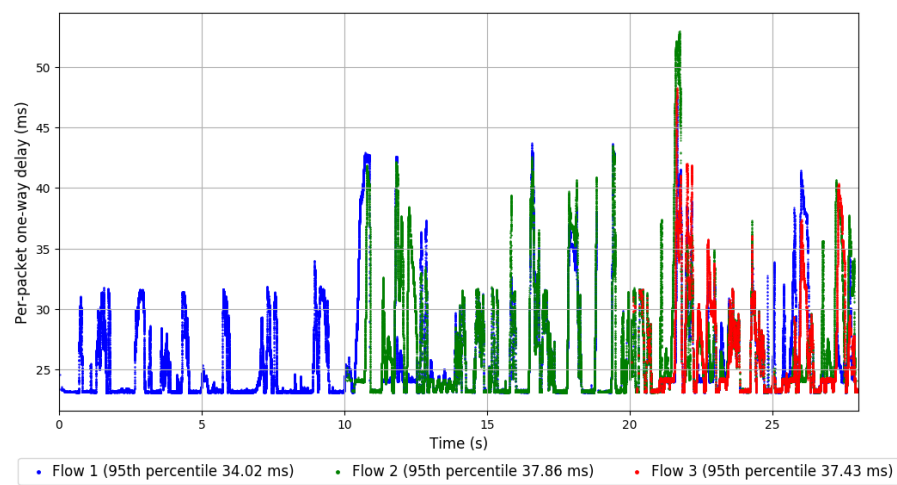
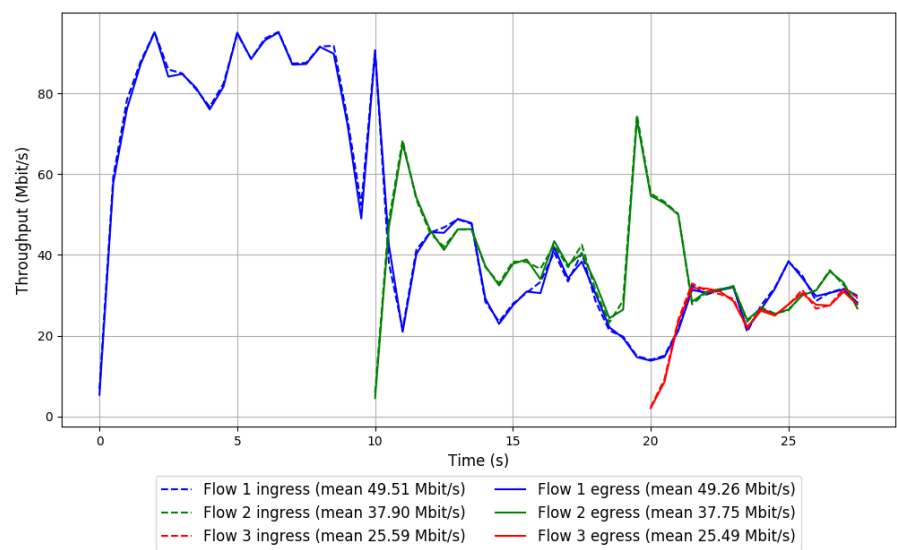
Run 3: Statistics of Copa

Start at: 2018-01-10 00:21:57  
End at: 2018-01-10 00:22:27  
Local clock offset: 0.164 ms  
Remote clock offset: -0.306 ms

# Below is generated by plot.py at 2018-01-10 07:46:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 80.68 Mbit/s  
95th percentile per-packet one-way delay: 36.462 ms  
Loss rate: 0.74%  
-- Flow 1:  
Average throughput: 49.26 Mbit/s  
95th percentile per-packet one-way delay: 34.019 ms  
Loss rate: 0.71%  
-- Flow 2:  
Average throughput: 37.75 Mbit/s  
95th percentile per-packet one-way delay: 37.862 ms  
Loss rate: 0.69%  
-- Flow 3:  
Average throughput: 25.49 Mbit/s  
95th percentile per-packet one-way delay: 37.430 ms  
Loss rate: 1.11%



Run 3: Report of Copa — Data Link

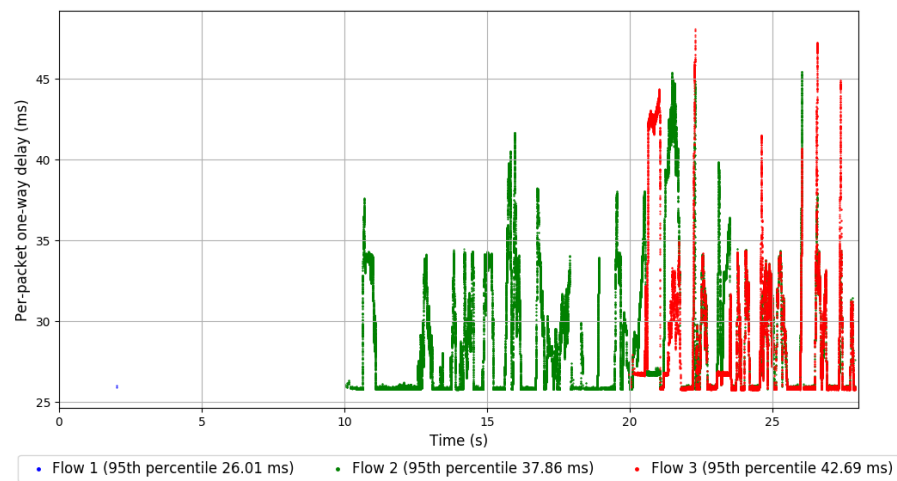
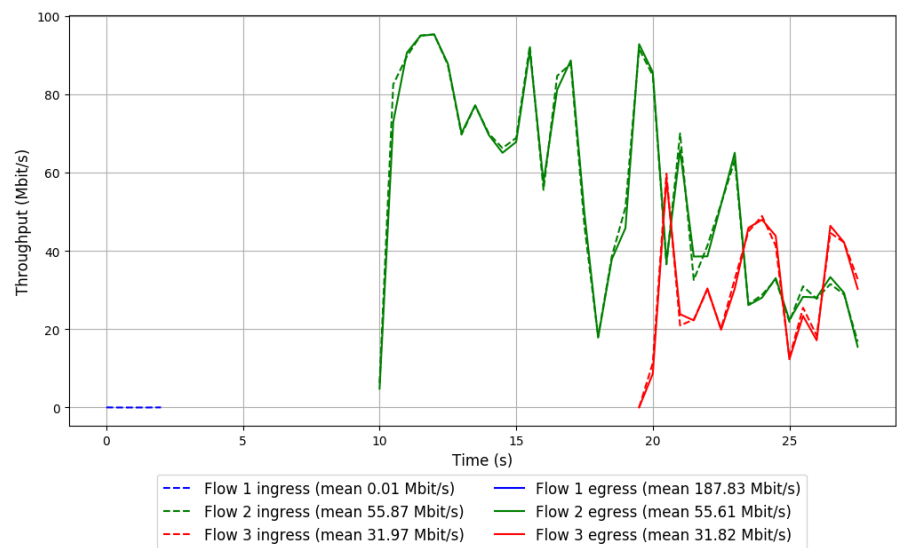


Run 4: Statistics of Copa

Start at: 2018-01-10 00:43:08  
End at: 2018-01-10 00:43:38  
Local clock offset: 0.156 ms  
Remote clock offset: -3.335 ms

# Below is generated by plot.py at 2018-01-10 07:46:22  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 48.11 Mbit/s  
95th percentile per-packet one-way delay: 39.253 ms  
Loss rate: 0.82%  
-- Flow 1:  
Average throughput: 187.83 Mbit/s  
95th percentile per-packet one-way delay: 26.006 ms  
Loss rate: 50.00%  
-- Flow 2:  
Average throughput: 55.61 Mbit/s  
95th percentile per-packet one-way delay: 37.861 ms  
Loss rate: 0.74%  
-- Flow 3:  
Average throughput: 31.82 Mbit/s  
95th percentile per-packet one-way delay: 42.687 ms  
Loss rate: 1.13%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-10 01:04:30

End at: 2018-01-10 01:05:00

Local clock offset: 0.042 ms

Remote clock offset: 0.307 ms

# Below is generated by plot.py at 2018-01-10 07:47:12

# Datalink statistics

-- Total of 3 flows:

Average throughput: 66.25 Mbit/s

95th percentile per-packet one-way delay: 41.378 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 43.70 Mbit/s

95th percentile per-packet one-way delay: 35.162 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 28.82 Mbit/s

95th percentile per-packet one-way delay: 42.718 ms

Loss rate: 0.96%

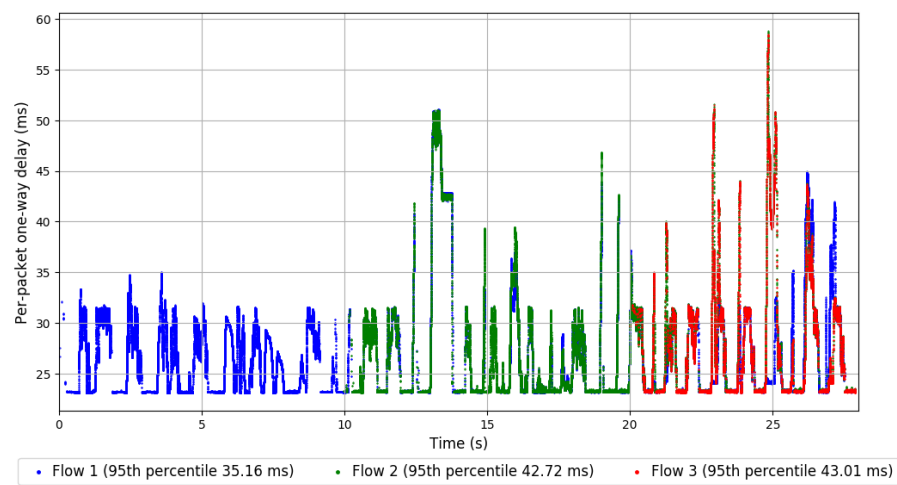
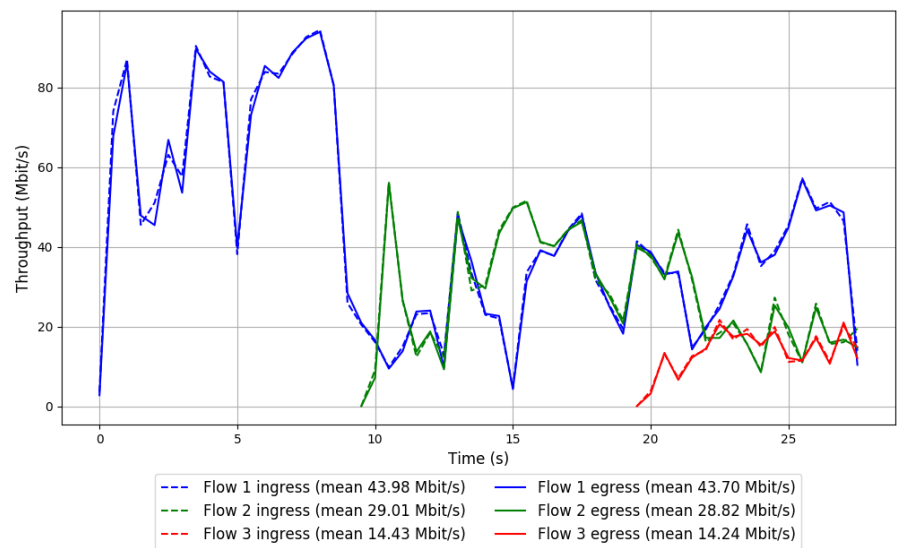
-- Flow 3:

Average throughput: 14.24 Mbit/s

95th percentile per-packet one-way delay: 43.006 ms

Loss rate: 2.00%

Run 5: Report of Copa — Data Link

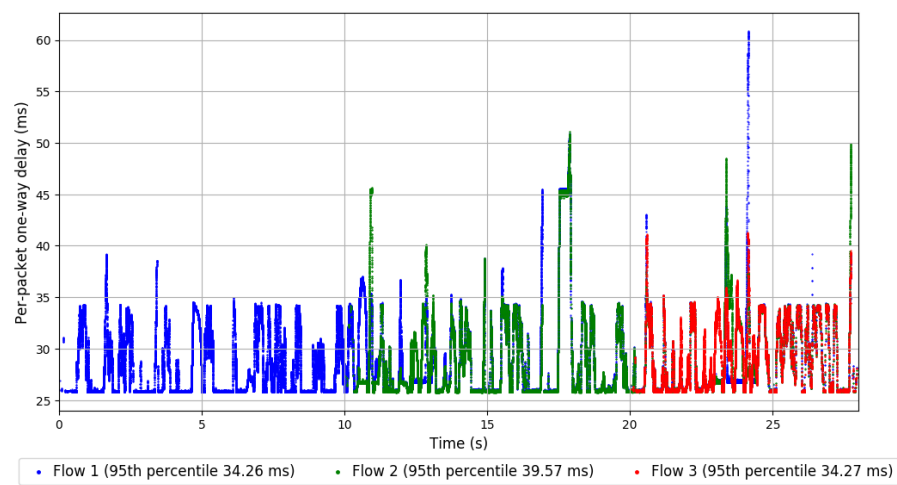
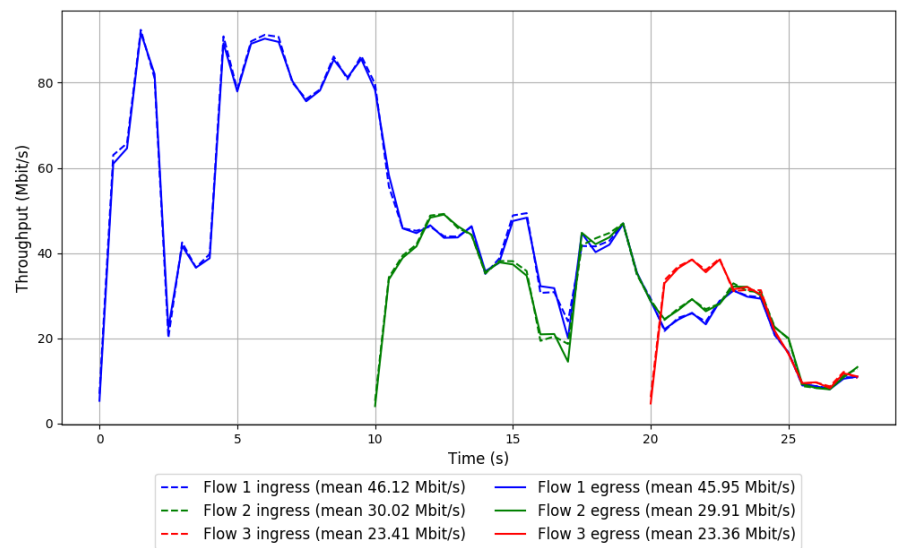


Run 6: Statistics of Copa

Start at: 2018-01-10 01:25:56  
End at: 2018-01-10 01:26:26  
Local clock offset: 0.059 ms  
Remote clock offset: -0.747 ms

# Below is generated by plot.py at 2018-01-10 07:47:47  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 71.74 Mbit/s  
95th percentile per-packet one-way delay: 34.735 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 45.95 Mbit/s  
95th percentile per-packet one-way delay: 34.260 ms  
Loss rate: 0.57%  
-- Flow 2:  
Average throughput: 29.91 Mbit/s  
95th percentile per-packet one-way delay: 39.570 ms  
Loss rate: 0.69%  
-- Flow 3:  
Average throughput: 23.36 Mbit/s  
95th percentile per-packet one-way delay: 34.268 ms  
Loss rate: 0.87%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-10 01:47:56

End at: 2018-01-10 01:48:26

Local clock offset: -0.052 ms

Remote clock offset: 0.045 ms

# Below is generated by plot.py at 2018-01-10 07:47:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 43.87 Mbit/s

95th percentile per-packet one-way delay: 34.040 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 28.99 Mbit/s

95th percentile per-packet one-way delay: 33.995 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 17.17 Mbit/s

95th percentile per-packet one-way delay: 34.134 ms

Loss rate: 1.63%

-- Flow 3:

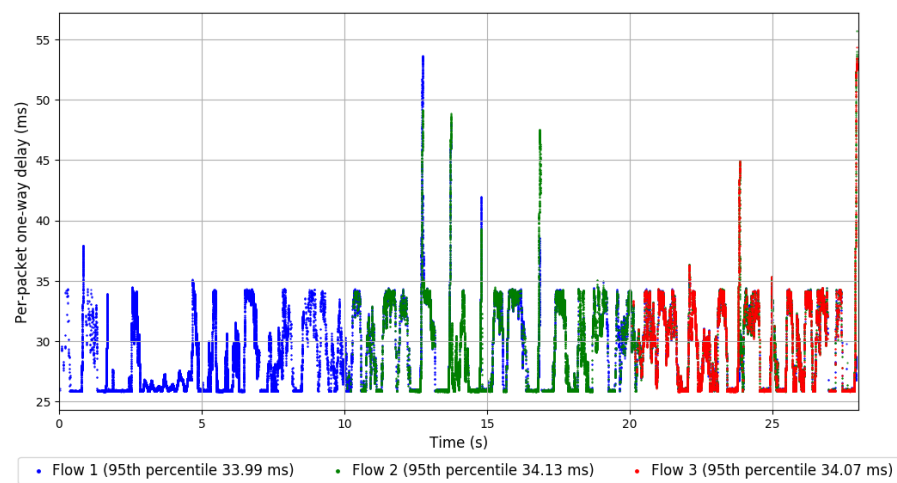
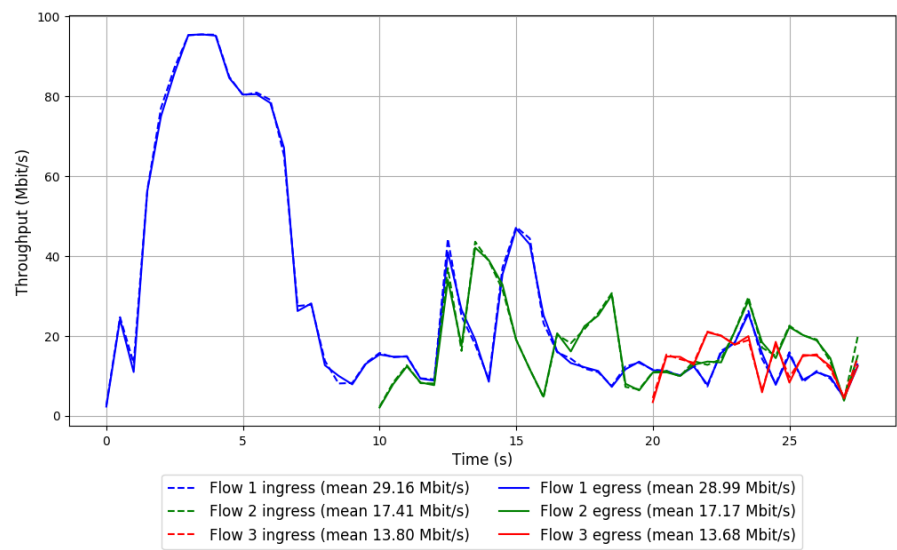
Average throughput: 13.68 Mbit/s

95th percentile per-packet one-way delay: 34.070 ms

Loss rate: 1.58%



Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-10 02:09:57

End at: 2018-01-10 02:10:27

Local clock offset: -0.142 ms

Remote clock offset: 2.686 ms

# Below is generated by plot.py at 2018-01-10 07:47:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 41.01 Mbit/s

95th percentile per-packet one-way delay: 40.965 ms

Loss rate: 1.42%

-- Flow 1:

Average throughput: 23.34 Mbit/s

95th percentile per-packet one-way delay: 41.148 ms

Loss rate: 1.53%

-- Flow 2:

Average throughput: 21.48 Mbit/s

95th percentile per-packet one-way delay: 37.859 ms

Loss rate: 1.11%

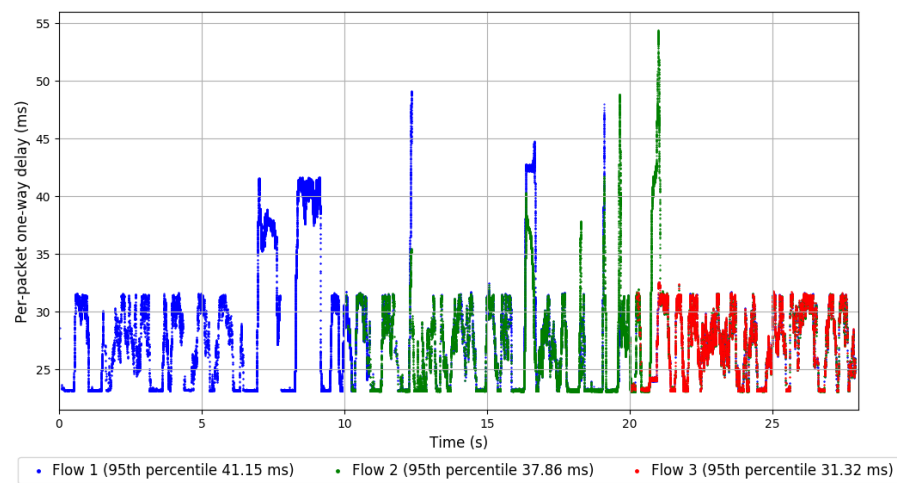
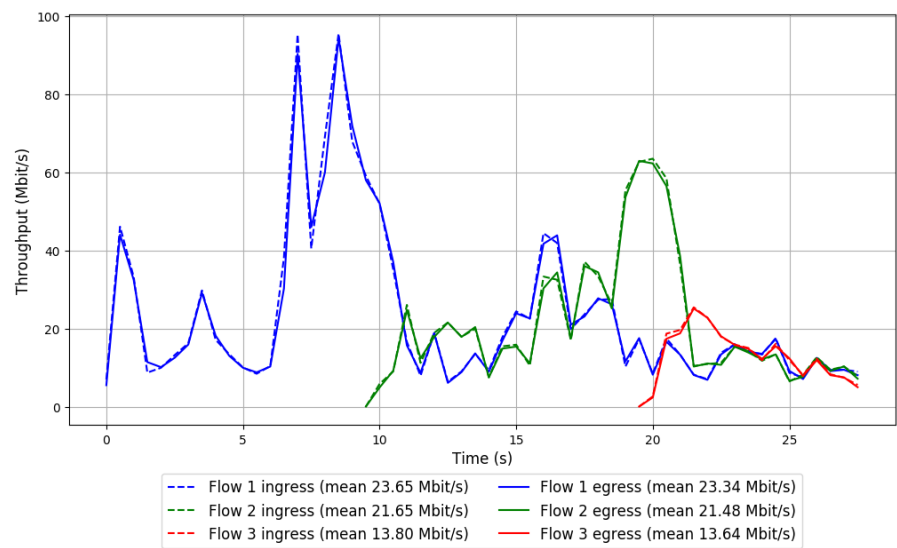
-- Flow 3:

Average throughput: 13.64 Mbit/s

95th percentile per-packet one-way delay: 31.318 ms

Loss rate: 1.88%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-10 02:31:53

End at: 2018-01-10 02:32:23

Local clock offset: 0.007 ms

Remote clock offset: 1.224 ms

# Below is generated by plot.py at 2018-01-10 07:47:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 58.70 Mbit/s

95th percentile per-packet one-way delay: 31.517 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 33.85 Mbit/s

95th percentile per-packet one-way delay: 31.539 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 32.05 Mbit/s

95th percentile per-packet one-way delay: 31.466 ms

Loss rate: 0.59%

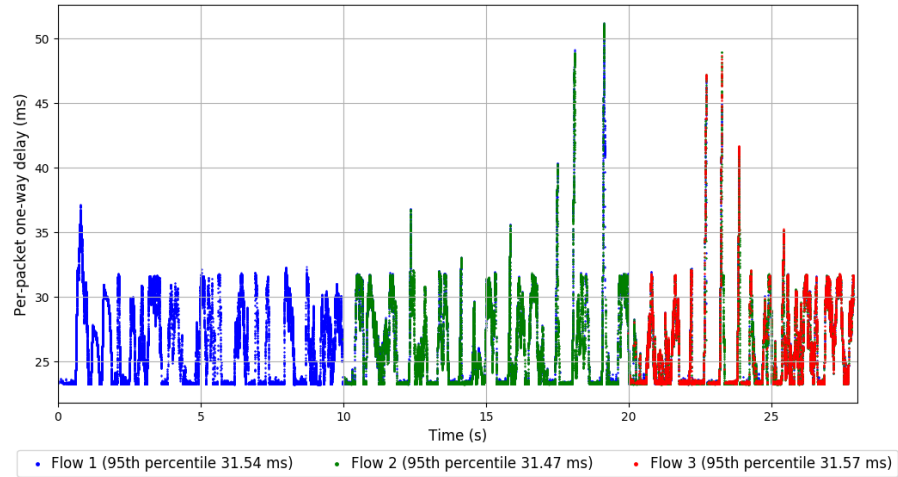
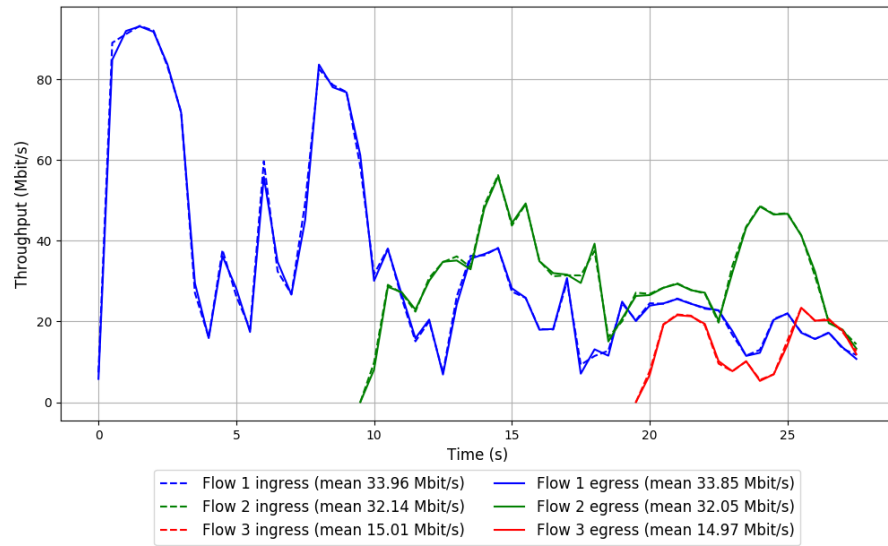
-- Flow 3:

Average throughput: 14.97 Mbit/s

95th percentile per-packet one-way delay: 31.567 ms

Loss rate: 0.97%

## Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-10 02:54:53

End at: 2018-01-10 02:55:23

Local clock offset: -0.023 ms

Remote clock offset: 0.767 ms

# Below is generated by plot.py at 2018-01-10 07:47:47

# Datalink statistics

-- Total of 3 flows:

Average throughput: 44.37 Mbit/s

95th percentile per-packet one-way delay: 33.510 ms

Loss rate: 1.77%

-- Flow 1:

Average throughput: 30.88 Mbit/s

95th percentile per-packet one-way delay: 34.341 ms

Loss rate: 1.60%

-- Flow 2:

Average throughput: 16.24 Mbit/s

95th percentile per-packet one-way delay: 31.967 ms

Loss rate: 2.17%

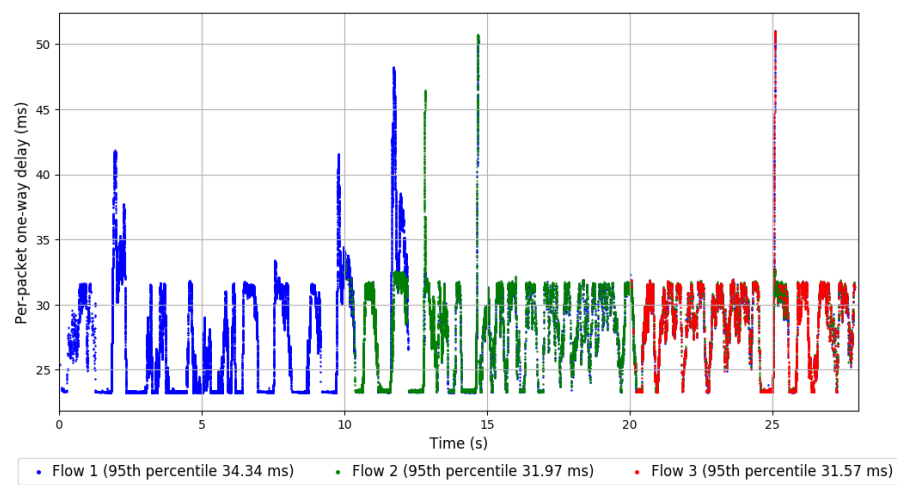
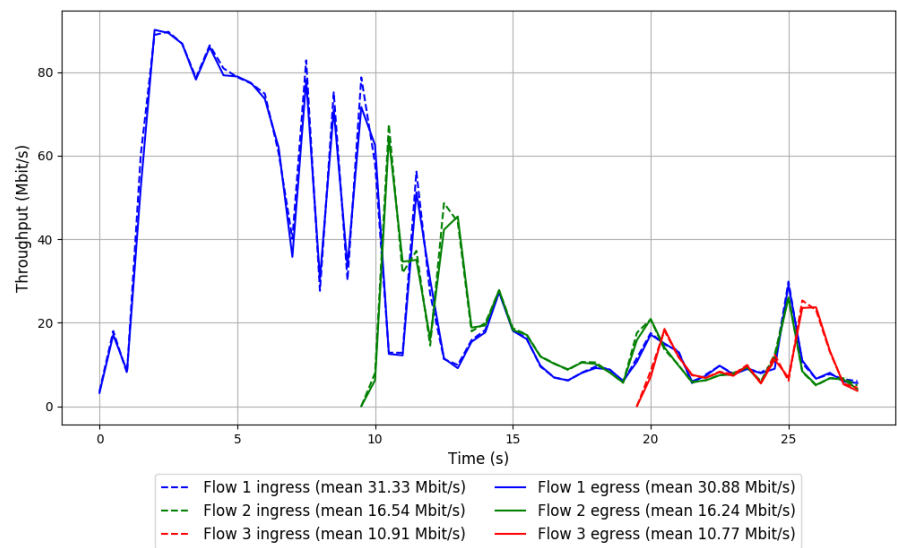
-- Flow 3:

Average throughput: 10.77 Mbit/s

95th percentile per-packet one-way delay: 31.572 ms

Loss rate: 2.11%

Run 10: Report of Copa — Data Link



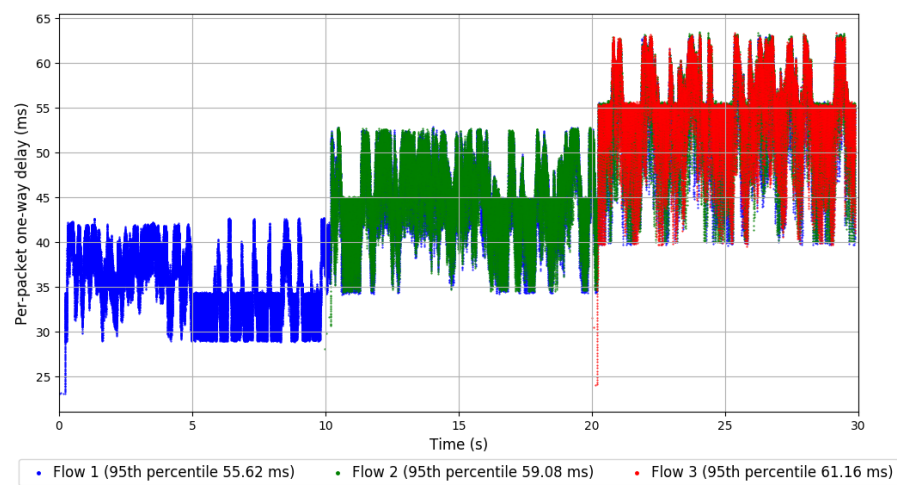
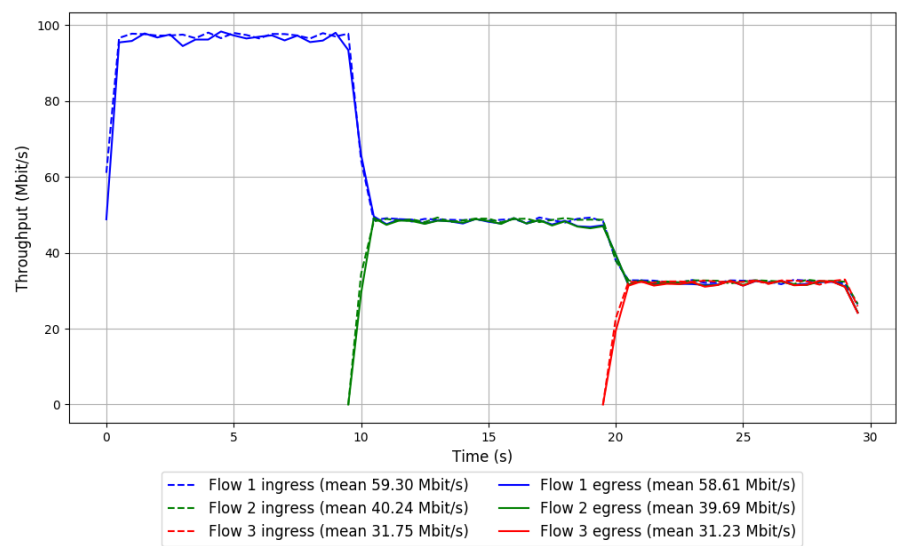
Run 1: Statistics of FillP

Start at: 2018-01-09 23:41:50  
End at: 2018-01-09 23:42:21  
Local clock offset: 0.053 ms  
Remote clock offset: -0.886 ms

# Below is generated by plot.py at 2018-01-10 07:48:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.40 Mbit/s  
95th percentile per-packet one-way delay: 58.585 ms  
Loss rate: 1.54%  
-- Flow 1:  
Average throughput: 58.61 Mbit/s  
95th percentile per-packet one-way delay: 55.615 ms  
Loss rate: 1.33%  
-- Flow 2:  
Average throughput: 39.69 Mbit/s  
95th percentile per-packet one-way delay: 59.079 ms  
Loss rate: 1.71%  
-- Flow 3:  
Average throughput: 31.23 Mbit/s  
95th percentile per-packet one-way delay: 61.160 ms  
Loss rate: 2.28%



Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-10 00:03:33

End at: 2018-01-10 00:04:03

Local clock offset: 0.132 ms

Remote clock offset: -0.625 ms

Run 2: Report of FillP — Data Link

Figure is missing

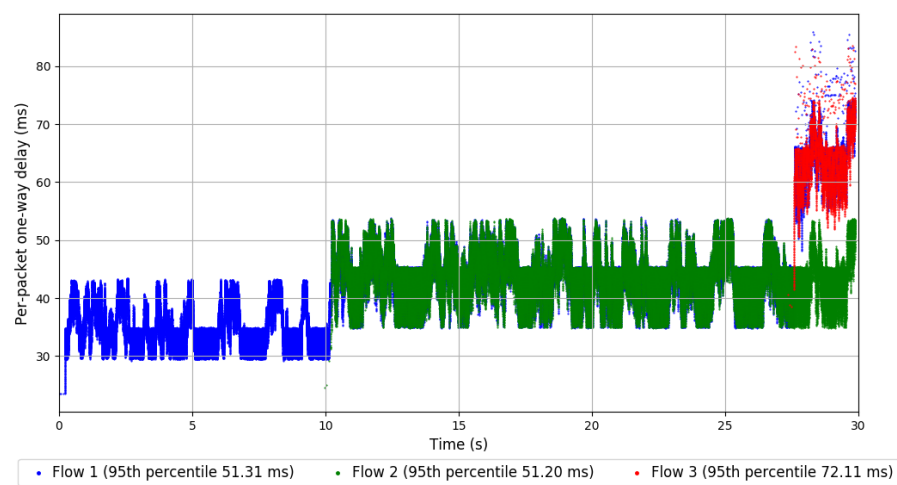
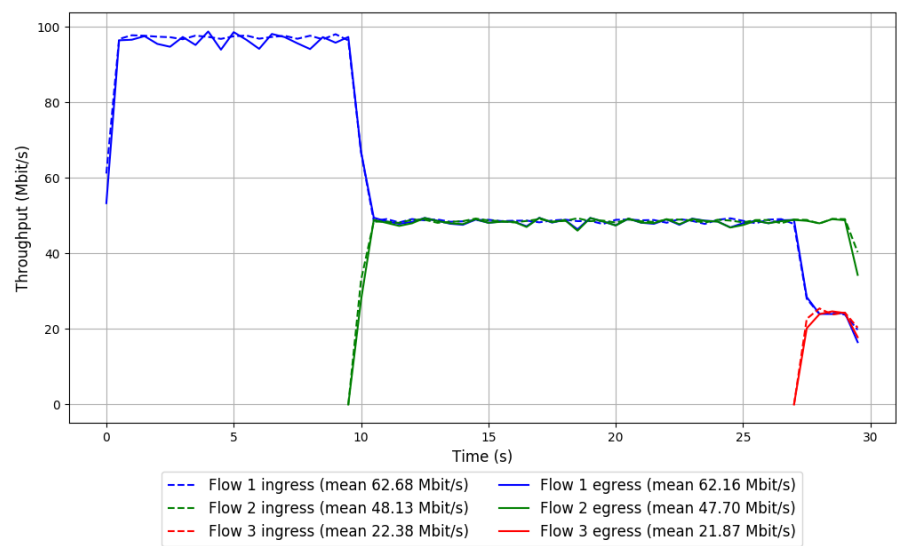
Figure is missing

Run 3: Statistics of FillP

Start at: 2018-01-10 00:24:50  
End at: 2018-01-10 00:25:20  
Local clock offset: 0.165 ms  
Remote clock offset: -0.876 ms

# Below is generated by plot.py at 2018-01-10 07:49:26  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.80 Mbit/s  
95th percentile per-packet one-way delay: 52.382 ms  
Loss rate: 1.15%  
-- Flow 1:  
Average throughput: 62.16 Mbit/s  
95th percentile per-packet one-way delay: 51.310 ms  
Loss rate: 0.99%  
-- Flow 2:  
Average throughput: 47.70 Mbit/s  
95th percentile per-packet one-way delay: 51.202 ms  
Loss rate: 1.21%  
-- Flow 3:  
Average throughput: 21.87 Mbit/s  
95th percentile per-packet one-way delay: 72.105 ms  
Loss rate: 4.97%

Run 3: Report of FillP — Data Link

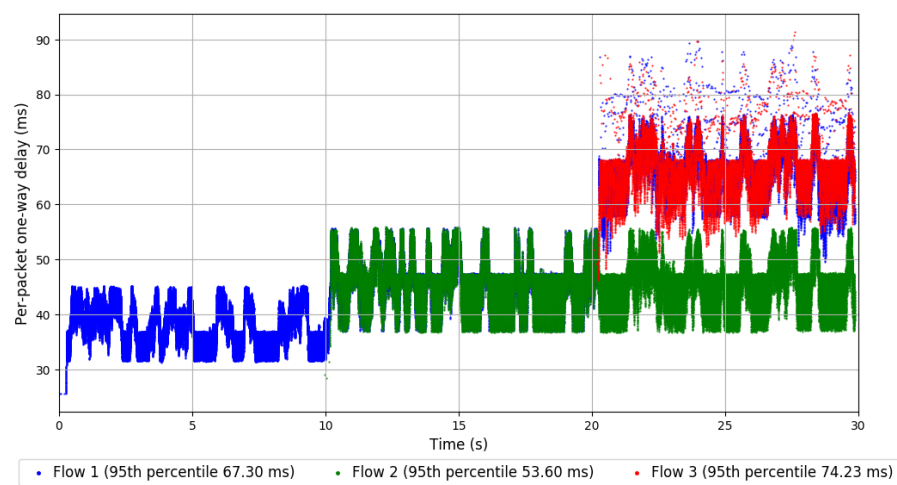
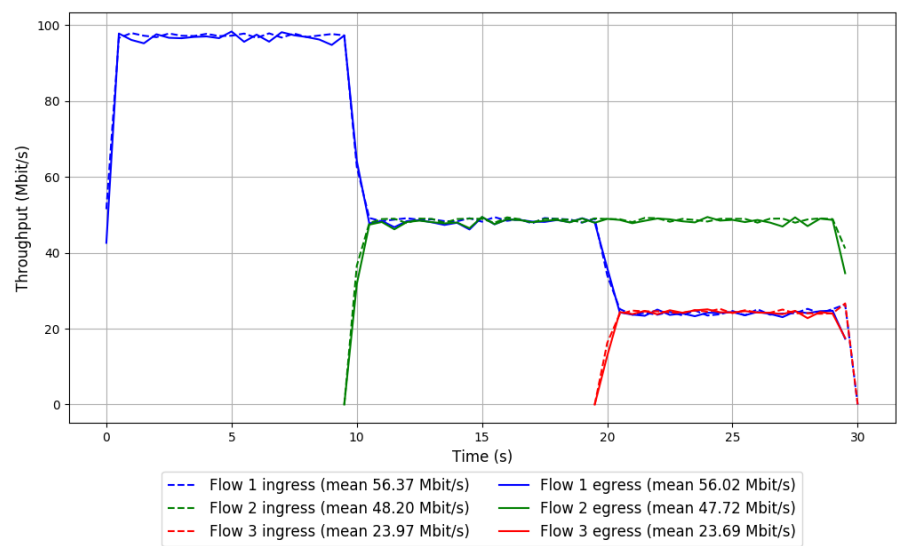


Run 4: Statistics of FillP

Start at: 2018-01-10 00:46:03  
End at: 2018-01-10 00:46:33  
Local clock offset: 0.062 ms  
Remote clock offset: -3.224 ms

# Below is generated by plot.py at 2018-01-10 07:49:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.66 Mbit/s  
95th percentile per-packet one-way delay: 67.862 ms  
Loss rate: 1.41%  
-- Flow 1:  
Average throughput: 56.02 Mbit/s  
95th percentile per-packet one-way delay: 67.296 ms  
Loss rate: 1.17%  
-- Flow 2:  
Average throughput: 47.72 Mbit/s  
95th percentile per-packet one-way delay: 53.605 ms  
Loss rate: 1.43%  
-- Flow 3:  
Average throughput: 23.69 Mbit/s  
95th percentile per-packet one-way delay: 74.234 ms  
Loss rate: 3.08%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-10 01:07:26

End at: 2018-01-10 01:07:56

Local clock offset: -0.072 ms

Remote clock offset: 0.462 ms

# Below is generated by plot.py at 2018-01-10 07:49:38

# Datalink statistics

-- Total of 3 flows:

Average throughput: 95.59 Mbit/s

95th percentile per-packet one-way delay: 59.127 ms

Loss rate: 4.85%

-- Flow 1:

Average throughput: 58.57 Mbit/s

95th percentile per-packet one-way delay: 56.665 ms

Loss rate: 1.23%

-- Flow 2:

Average throughput: 39.88 Mbit/s

95th percentile per-packet one-way delay: 59.741 ms

Loss rate: 8.35%

-- Flow 3:

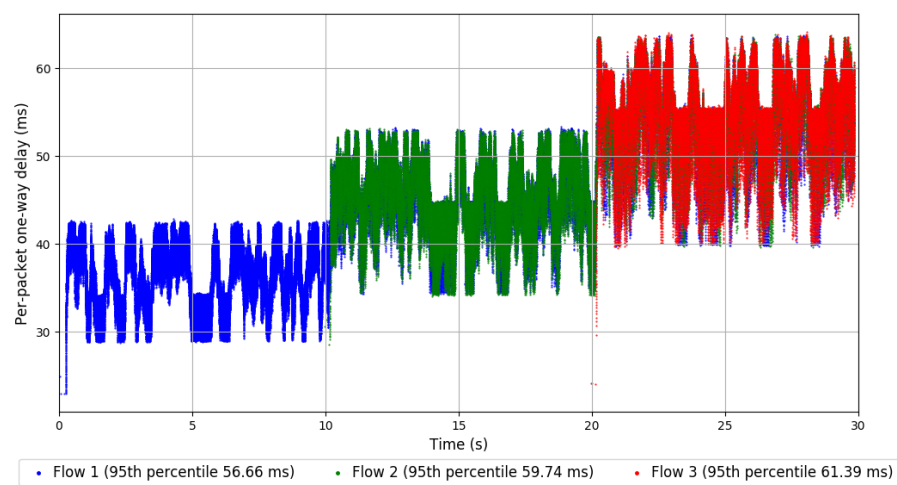
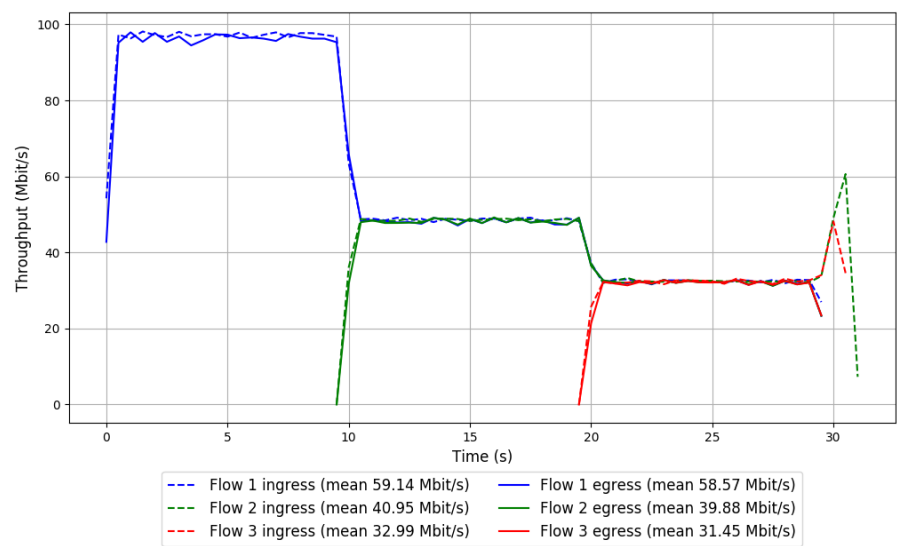
Average throughput: 31.45 Mbit/s

95th percentile per-packet one-way delay: 61.391 ms

Loss rate: 14.15%



Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-10 01:29:08

End at: 2018-01-10 01:29:38

Local clock offset: -0.036 ms

Remote clock offset: -0.494 ms

Run 6: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 7: Statistics of FillP

Start at: 2018-01-10 01:50:59

End at: 2018-01-10 01:51:29

Local clock offset: -0.106 ms

Remote clock offset: 2.622 ms

# Below is generated by plot.py at 2018-01-10 07:50:11

# Datalink statistics

-- Total of 3 flows:

Average throughput: 95.19 Mbit/s

95th percentile per-packet one-way delay: 56.200 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 62.26 Mbit/s

95th percentile per-packet one-way delay: 52.288 ms

Loss rate: 1.45%

-- Flow 2:

Average throughput: 45.40 Mbit/s

95th percentile per-packet one-way delay: 56.988 ms

Loss rate: 1.67%

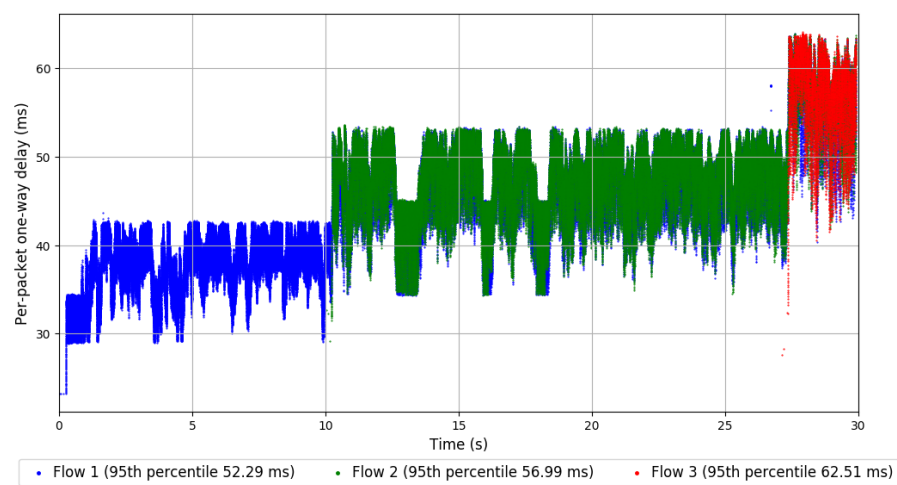
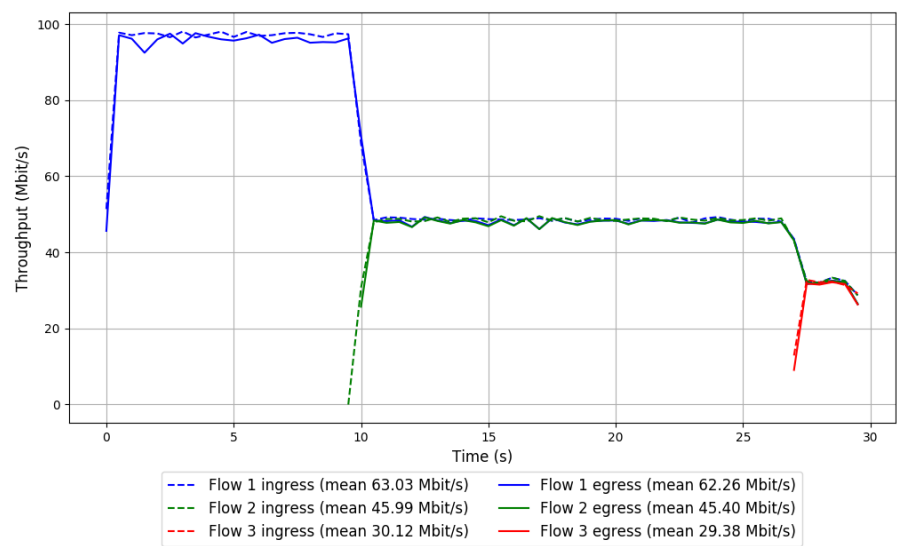
-- Flow 3:

Average throughput: 29.38 Mbit/s

95th percentile per-packet one-way delay: 62.513 ms

Loss rate: 4.78%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-10 02:12:55

End at: 2018-01-10 02:13:25

Local clock offset: -0.111 ms

Remote clock offset: 2.031 ms

# Below is generated by plot.py at 2018-01-10 07:50:14

# Datalink statistics

-- Total of 3 flows:

Average throughput: 95.25 Mbit/s

95th percentile per-packet one-way delay: 66.462 ms

Loss rate: 2.05%

-- Flow 1:

Average throughput: 55.73 Mbit/s

95th percentile per-packet one-way delay: 65.615 ms

Loss rate: 2.08%

-- Flow 2:

Average throughput: 47.56 Mbit/s

95th percentile per-packet one-way delay: 52.348 ms

Loss rate: 1.65%

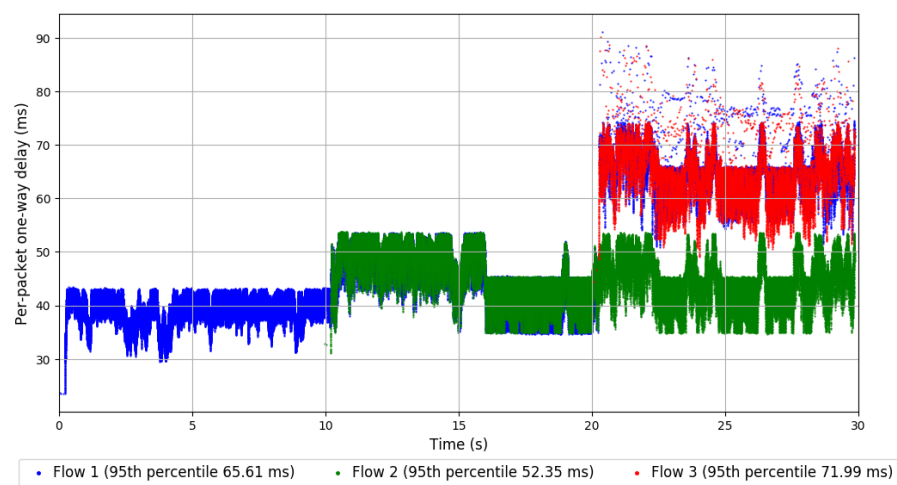
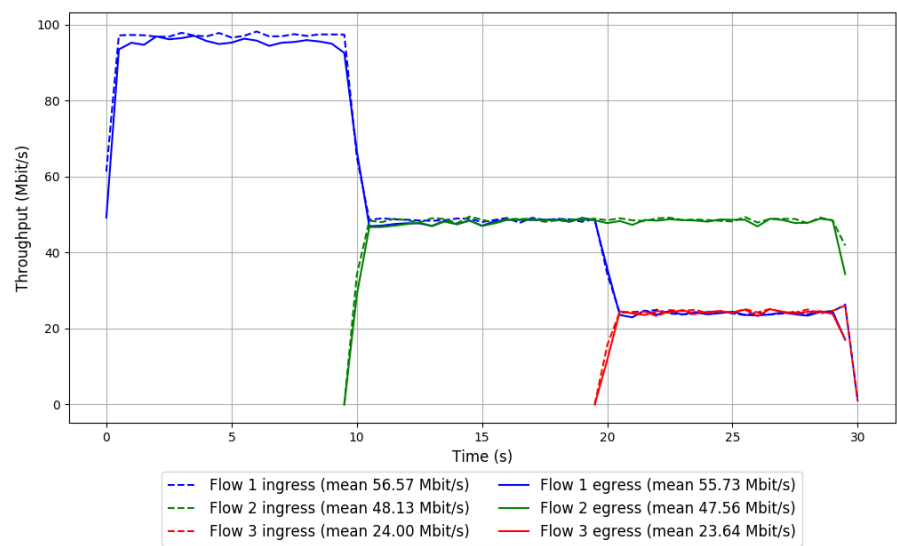
-- Flow 3:

Average throughput: 23.64 Mbit/s

95th percentile per-packet one-way delay: 71.988 ms

Loss rate: 3.46%

Run 8: Report of FillP — Data Link



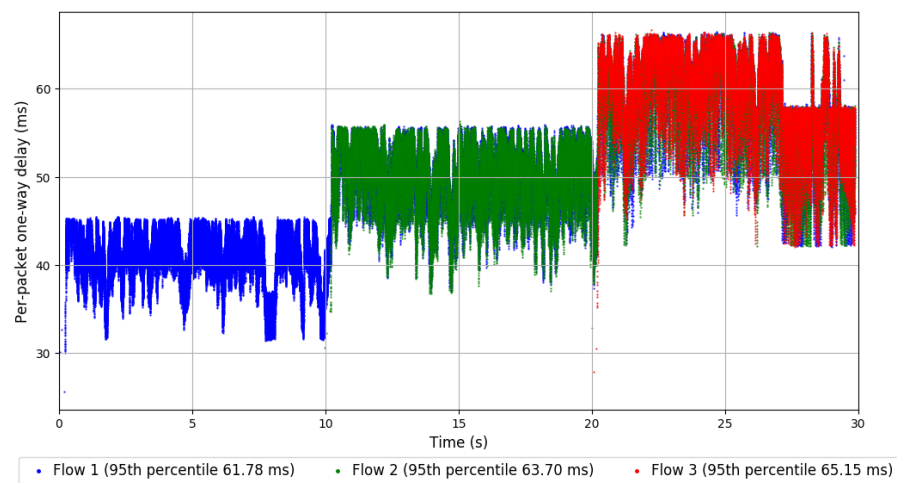
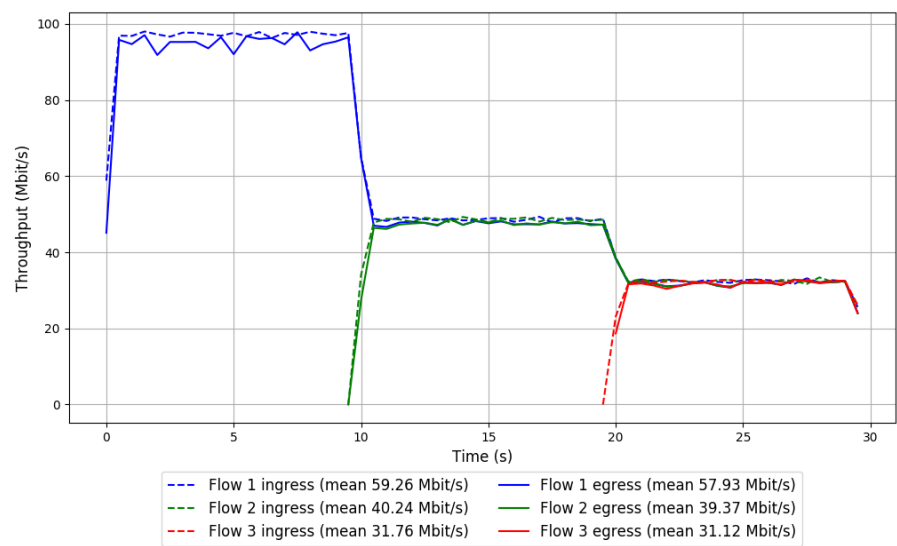
Run 9: Statistics of FillP

Start at: 2018-01-10 02:35:00  
End at: 2018-01-10 02:35:30  
Local clock offset: -0.026 ms  
Remote clock offset: -1.427 ms

# Below is generated by plot.py at 2018-01-10 07:50:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.46 Mbit/s  
95th percentile per-packet one-way delay: 63.562 ms  
Loss rate: 2.49%  
-- Flow 1:  
Average throughput: 57.93 Mbit/s  
95th percentile per-packet one-way delay: 61.785 ms  
Loss rate: 2.46%  
-- Flow 2:  
Average throughput: 39.37 Mbit/s  
95th percentile per-packet one-way delay: 63.700 ms  
Loss rate: 2.46%  
-- Flow 3:  
Average throughput: 31.12 Mbit/s  
95th percentile per-packet one-way delay: 65.148 ms  
Loss rate: 2.75%



Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-10 02:58:04

End at: 2018-01-10 02:58:34

Local clock offset: -0.015 ms

Remote clock offset: 0.369 ms

# Below is generated by plot.py at 2018-01-10 07:50:42

# Datalink statistics

-- Total of 3 flows:

Average throughput: 93.71 Mbit/s

95th percentile per-packet one-way delay: 69.910 ms

Loss rate: 2.79%

-- Flow 1:

Average throughput: 62.45 Mbit/s

95th percentile per-packet one-way delay: 52.336 ms

Loss rate: 2.84%

-- Flow 2:

Average throughput: 35.52 Mbit/s

95th percentile per-packet one-way delay: 71.886 ms

Loss rate: 2.62%

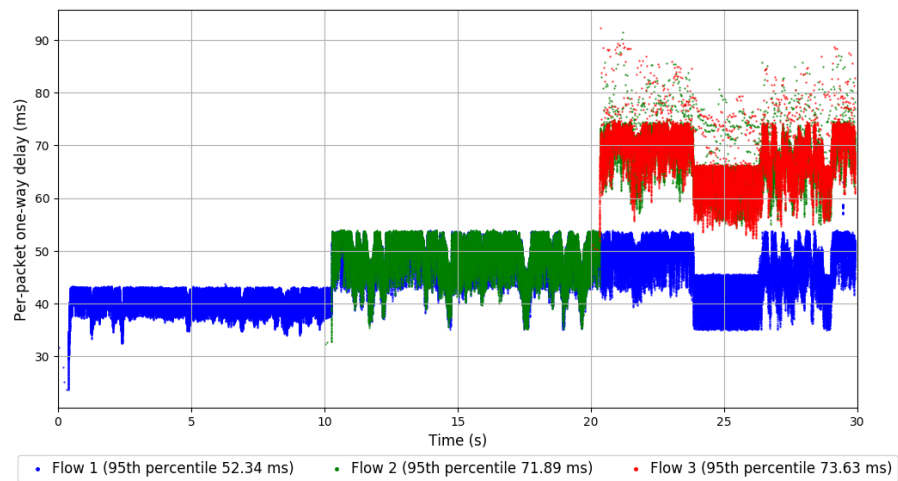
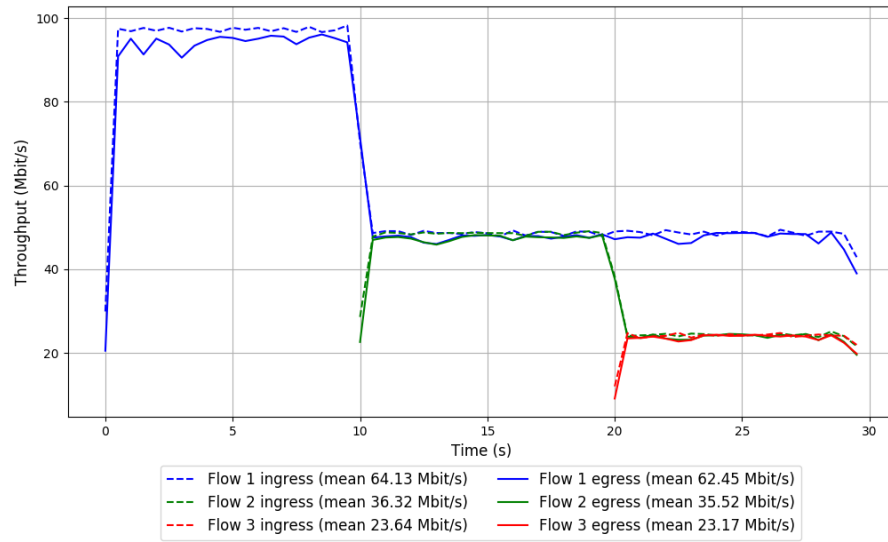
-- Flow 3:

Average throughput: 23.17 Mbit/s

95th percentile per-packet one-way delay: 73.631 ms

Loss rate: 2.93%

## Run 10: Report of FillP — Data Link

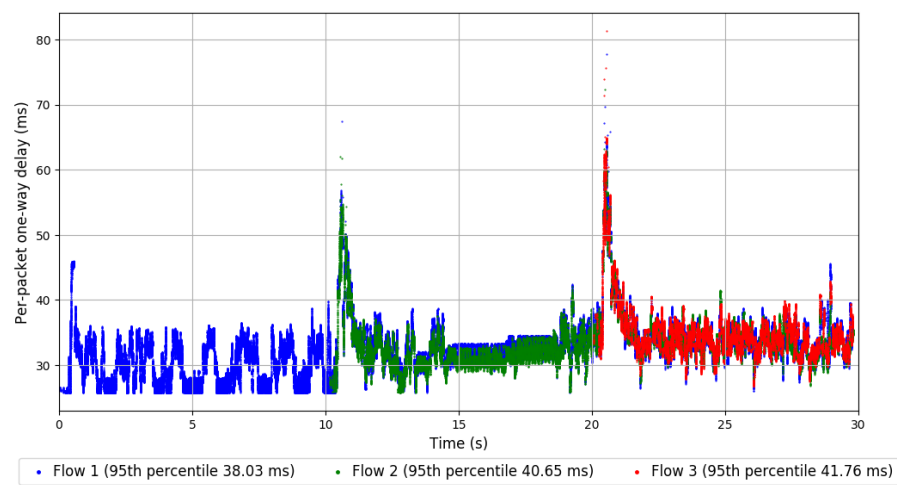
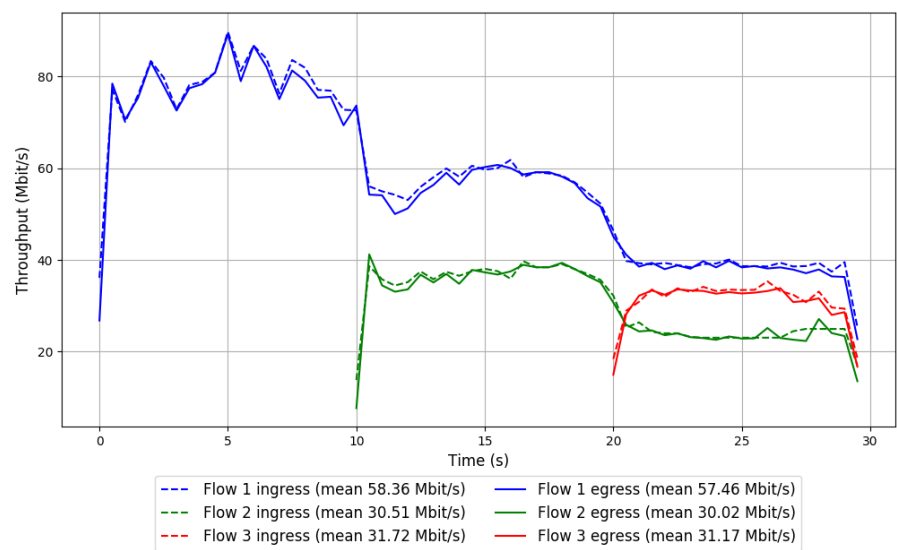


```
Run 1: Statistics of Indigo

Start at: 2018-01-09 23:44:36
End at: 2018-01-09 23:45:06
Local clock offset: 0.05 ms
Remote clock offset: -3.319 ms

# Below is generated by plot.py at 2018-01-10 07:51:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.44 Mbit/s
95th percentile per-packet one-way delay: 39.081 ms
Loss rate: 1.82%
-- Flow 1:
Average throughput: 57.46 Mbit/s
95th percentile per-packet one-way delay: 38.030 ms
Loss rate: 1.72%
-- Flow 2:
Average throughput: 30.02 Mbit/s
95th percentile per-packet one-way delay: 40.648 ms
Loss rate: 1.86%
-- Flow 3:
Average throughput: 31.17 Mbit/s
95th percentile per-packet one-way delay: 41.755 ms
Loss rate: 2.33%
```

Run 1: Report of Indigo — Data Link

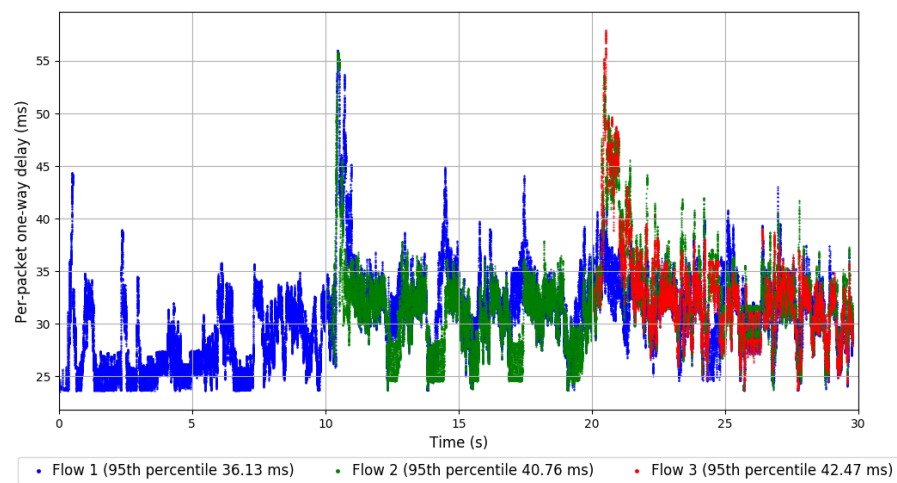
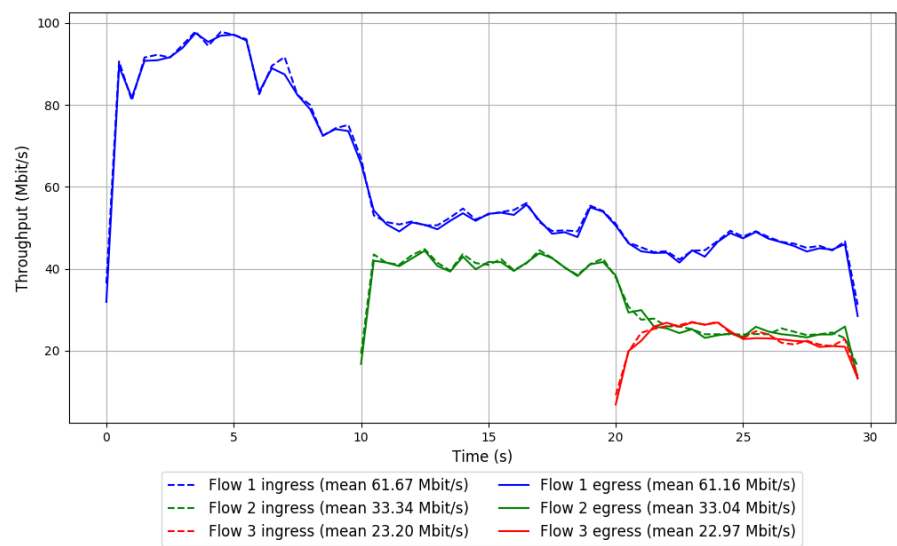


Run 2: Statistics of Indigo

Start at: 2018-01-10 00:06:14  
End at: 2018-01-10 00:06:44  
Local clock offset: 0.137 ms  
Remote clock offset: -0.632 ms

# Below is generated by plot.py at 2018-01-10 07:52:03  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 90.52 Mbit/s  
95th percentile per-packet one-way delay: 37.292 ms  
Loss rate: 1.10%  
-- Flow 1:  
Average throughput: 61.16 Mbit/s  
95th percentile per-packet one-way delay: 36.129 ms  
Loss rate: 1.00%  
-- Flow 2:  
Average throughput: 33.04 Mbit/s  
95th percentile per-packet one-way delay: 40.764 ms  
Loss rate: 1.20%  
-- Flow 3:  
Average throughput: 22.97 Mbit/s  
95th percentile per-packet one-way delay: 42.472 ms  
Loss rate: 1.62%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-10 00:27:32

End at: 2018-01-10 00:28:02

Local clock offset: 0.158 ms

Remote clock offset: -0.62 ms

# Below is generated by plot.py at 2018-01-10 07:52:05

# Datalink statistics

-- Total of 3 flows:

Average throughput: 90.30 Mbit/s

95th percentile per-packet one-way delay: 36.155 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 55.00 Mbit/s

95th percentile per-packet one-way delay: 36.205 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 38.71 Mbit/s

95th percentile per-packet one-way delay: 35.784 ms

Loss rate: 1.09%

-- Flow 3:

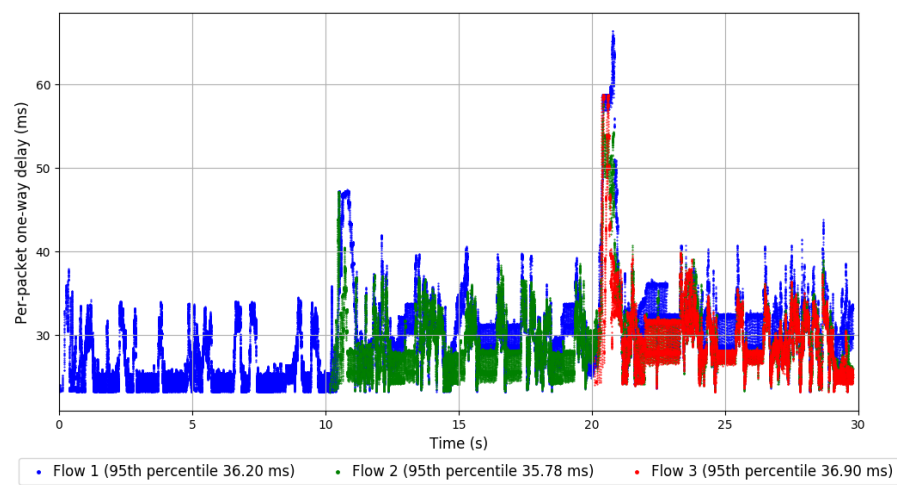
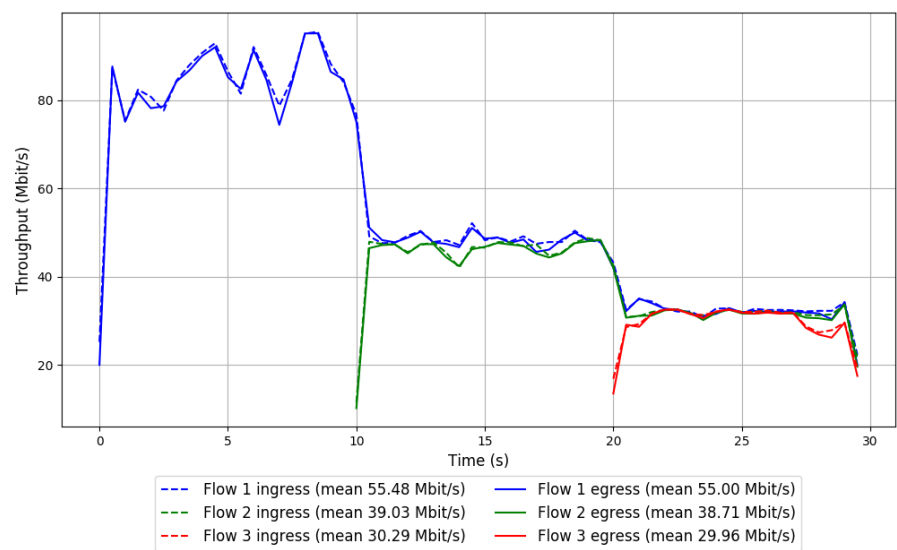
Average throughput: 29.96 Mbit/s

95th percentile per-packet one-way delay: 36.899 ms

Loss rate: 1.64%



Run 3: Report of Indigo — Data Link

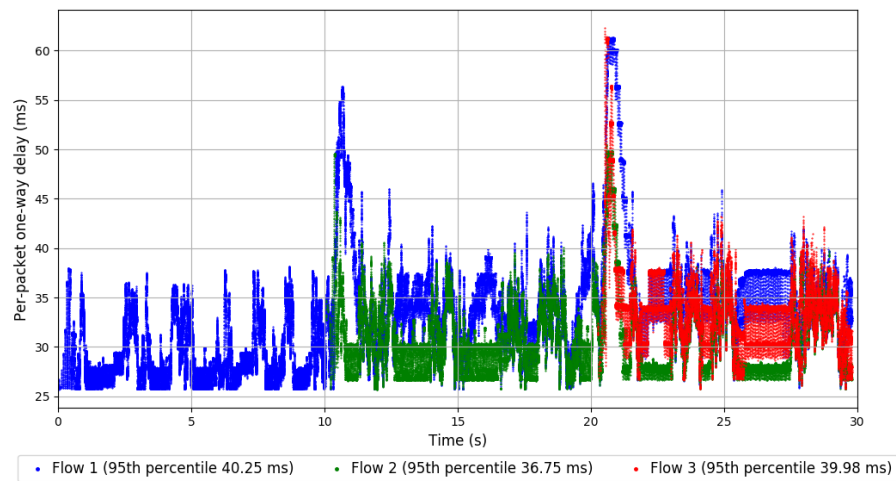
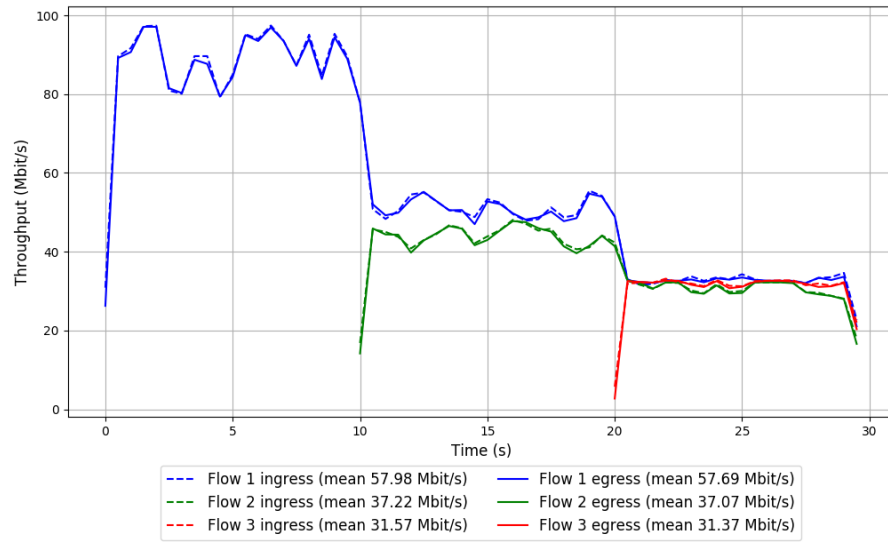


Run 4: Statistics of Indigo

Start at: 2018-01-10 00:48:46  
End at: 2018-01-10 00:49:16  
Local clock offset: 0.034 ms  
Remote clock offset: -3.208 ms

# Below is generated by plot.py at 2018-01-10 07:52:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 92.32 Mbit/s  
95th percentile per-packet one-way delay: 39.034 ms  
Loss rate: 0.74%  
-- Flow 1:  
Average throughput: 57.69 Mbit/s  
95th percentile per-packet one-way delay: 40.249 ms  
Loss rate: 0.68%  
-- Flow 2:  
Average throughput: 37.07 Mbit/s  
95th percentile per-packet one-way delay: 36.752 ms  
Loss rate: 0.71%  
-- Flow 3:  
Average throughput: 31.37 Mbit/s  
95th percentile per-packet one-way delay: 39.976 ms  
Loss rate: 1.17%

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

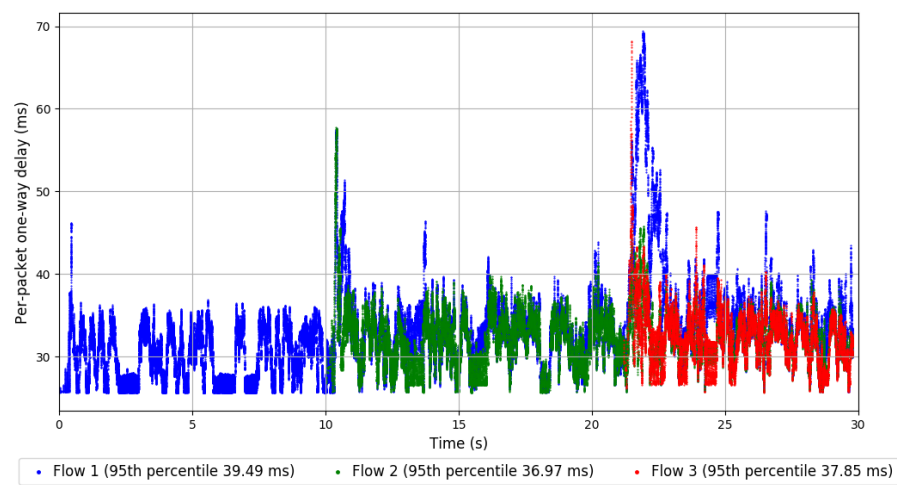
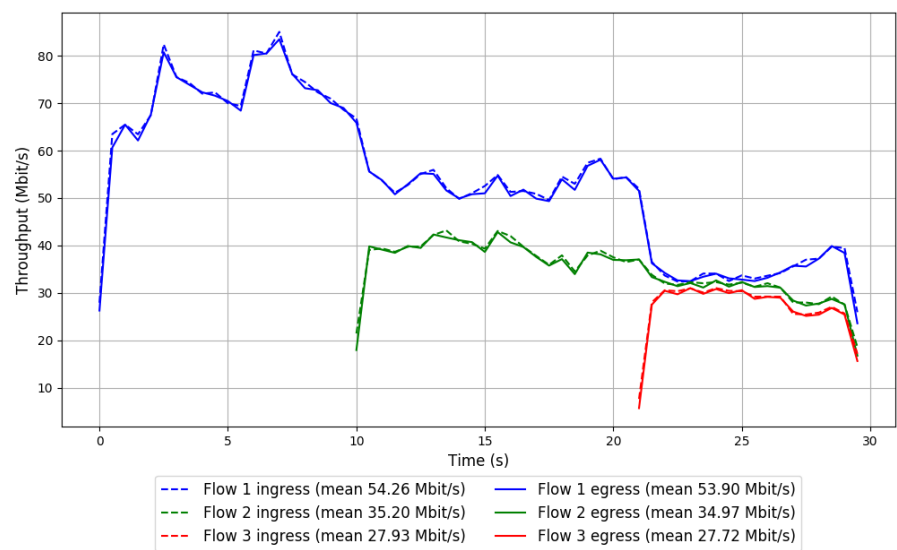


Run 5: Statistics of Indigo

Start at: 2018-01-10 01:10:09  
End at: 2018-01-10 01:10:39  
Local clock offset: -0.096 ms  
Remote clock offset: -1.909 ms

# Below is generated by plot.py at 2018-01-10 07:52:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 85.11 Mbit/s  
95th percentile per-packet one-way delay: 38.183 ms  
Loss rate: 0.92%  
-- Flow 1:  
Average throughput: 53.90 Mbit/s  
95th percentile per-packet one-way delay: 39.487 ms  
Loss rate: 0.84%  
-- Flow 2:  
Average throughput: 34.97 Mbit/s  
95th percentile per-packet one-way delay: 36.968 ms  
Loss rate: 0.93%  
-- Flow 3:  
Average throughput: 27.72 Mbit/s  
95th percentile per-packet one-way delay: 37.848 ms  
Loss rate: 1.41%

Run 5: Report of Indigo — Data Link

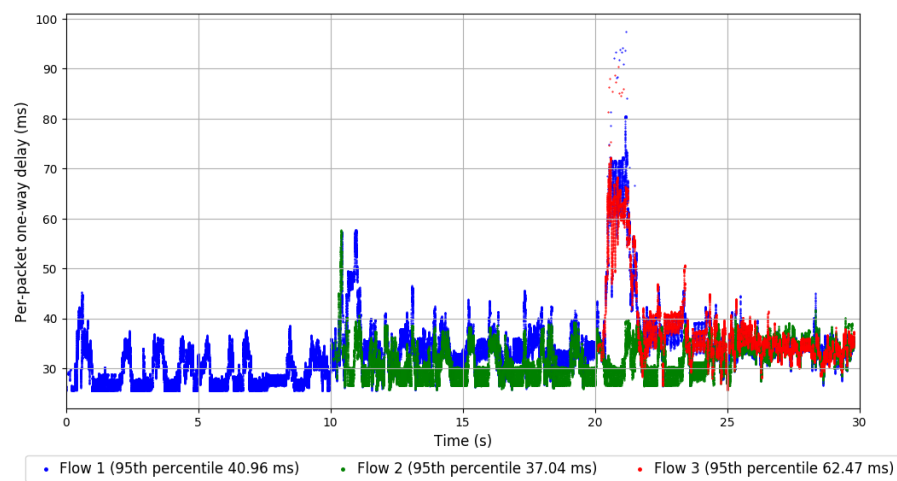
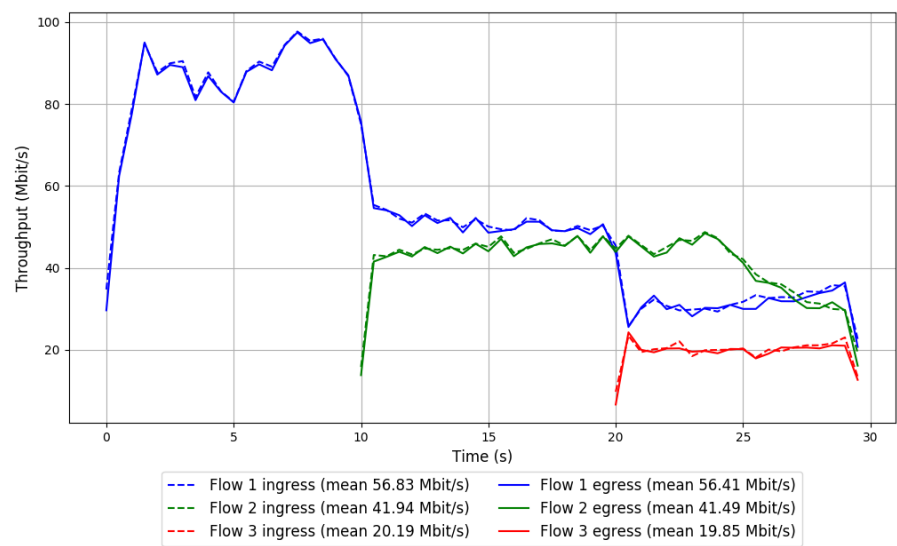


Run 6: Statistics of Indigo

Start at: 2018-01-10 01:31:49  
End at: 2018-01-10 01:32:19  
Local clock offset: -0.023 ms  
Remote clock offset: -0.256 ms

# Below is generated by plot.py at 2018-01-10 07:52:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 90.35 Mbit/s  
95th percentile per-packet one-way delay: 40.459 ms  
Loss rate: 1.17%  
-- Flow 1:  
Average throughput: 56.41 Mbit/s  
95th percentile per-packet one-way delay: 40.956 ms  
Loss rate: 0.93%  
-- Flow 2:  
Average throughput: 41.49 Mbit/s  
95th percentile per-packet one-way delay: 37.038 ms  
Loss rate: 1.38%  
-- Flow 3:  
Average throughput: 19.85 Mbit/s  
95th percentile per-packet one-way delay: 62.468 ms  
Loss rate: 2.30%

Run 6: Report of Indigo — Data Link



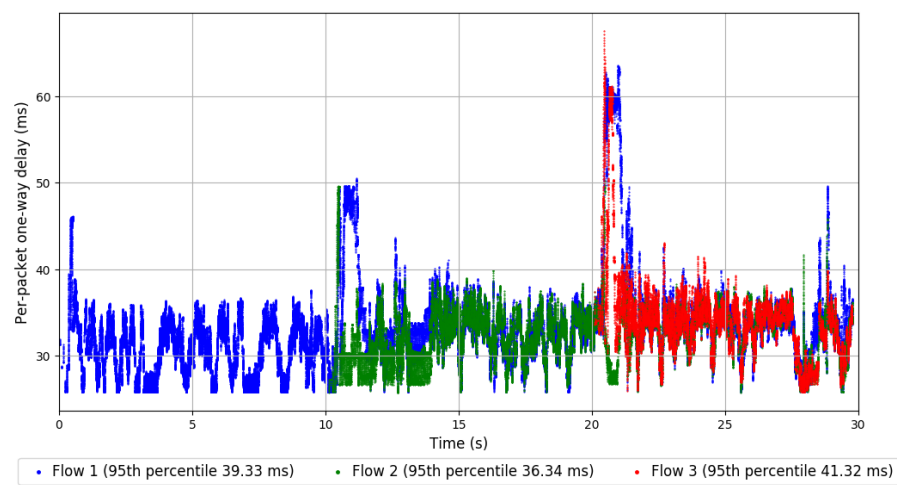
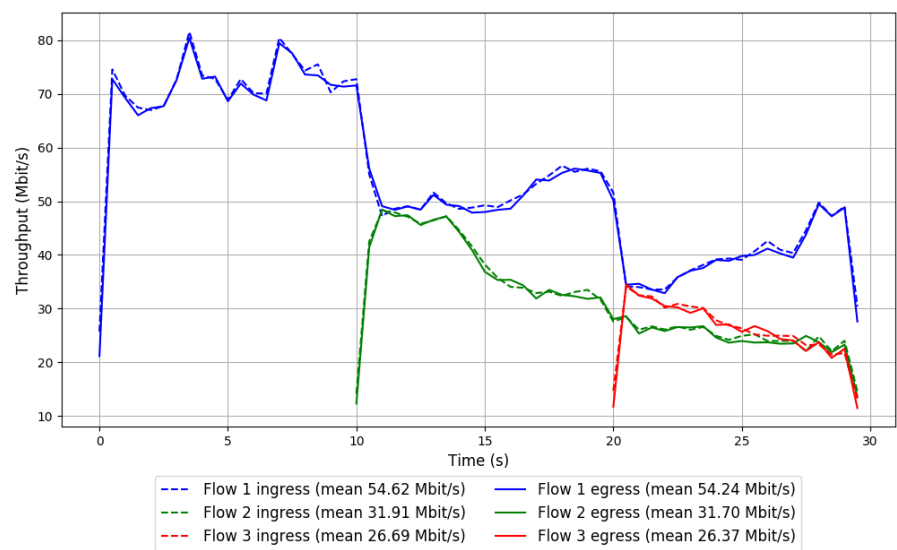
Run 7: Statistics of Indigo

Start at: 2018-01-10 01:53:41  
End at: 2018-01-10 01:54:11  
Local clock offset: -0.113 ms  
Remote clock offset: 0.216 ms

# Below is generated by plot.py at 2018-01-10 07:52:40  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 83.77 Mbit/s  
95th percentile per-packet one-way delay: 38.075 ms  
Loss rate: 0.96%  
-- Flow 1:  
Average throughput: 54.24 Mbit/s  
95th percentile per-packet one-way delay: 39.334 ms  
Loss rate: 0.90%  
-- Flow 2:  
Average throughput: 31.70 Mbit/s  
95th percentile per-packet one-way delay: 36.345 ms  
Loss rate: 0.93%  
-- Flow 3:  
Average throughput: 26.37 Mbit/s  
95th percentile per-packet one-way delay: 41.322 ms  
Loss rate: 1.39%



Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-10 02:15:35

End at: 2018-01-10 02:16:05

Local clock offset: -0.064 ms

Remote clock offset: 2.243 ms

# Below is generated by plot.py at 2018-01-10 07:52:40

# Datalink statistics

-- Total of 3 flows:

Average throughput: 71.18 Mbit/s

95th percentile per-packet one-way delay: 34.436 ms

Loss rate: 2.19%

-- Flow 1:

Average throughput: 42.84 Mbit/s

95th percentile per-packet one-way delay: 34.361 ms

Loss rate: 2.00%

-- Flow 2:

Average throughput: 23.78 Mbit/s

95th percentile per-packet one-way delay: 33.840 ms

Loss rate: 1.87%

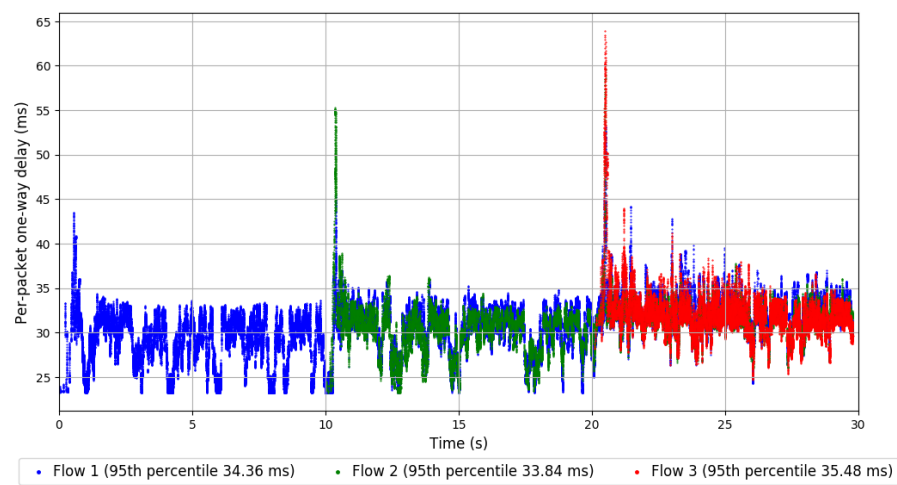
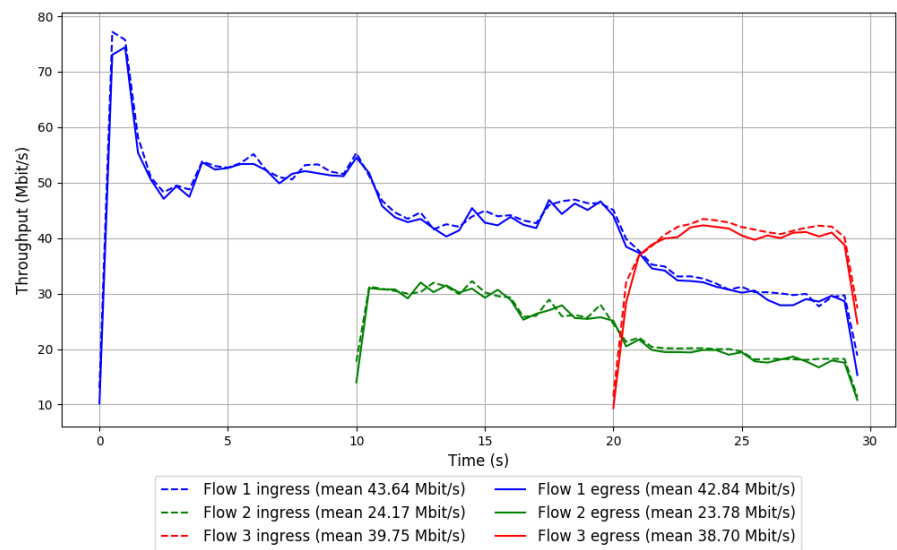
-- Flow 3:

Average throughput: 38.70 Mbit/s

95th percentile per-packet one-way delay: 35.478 ms

Loss rate: 3.23%

Run 8: Report of Indigo — Data Link

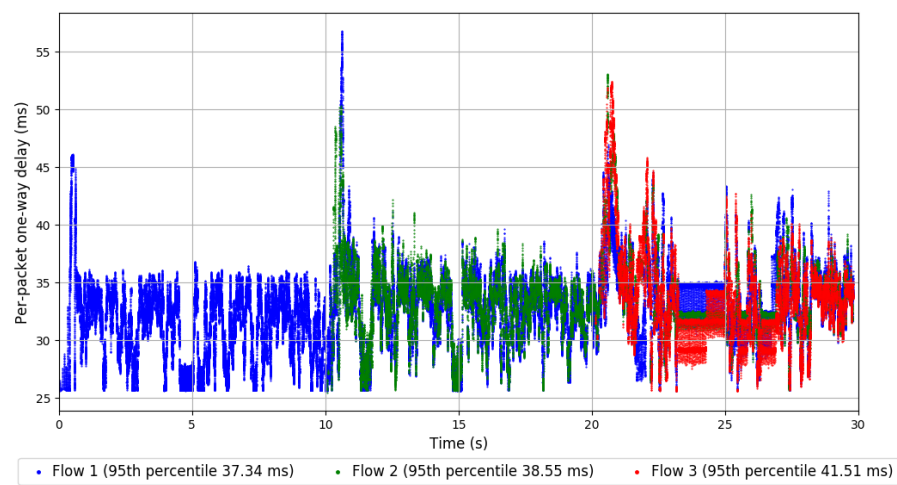
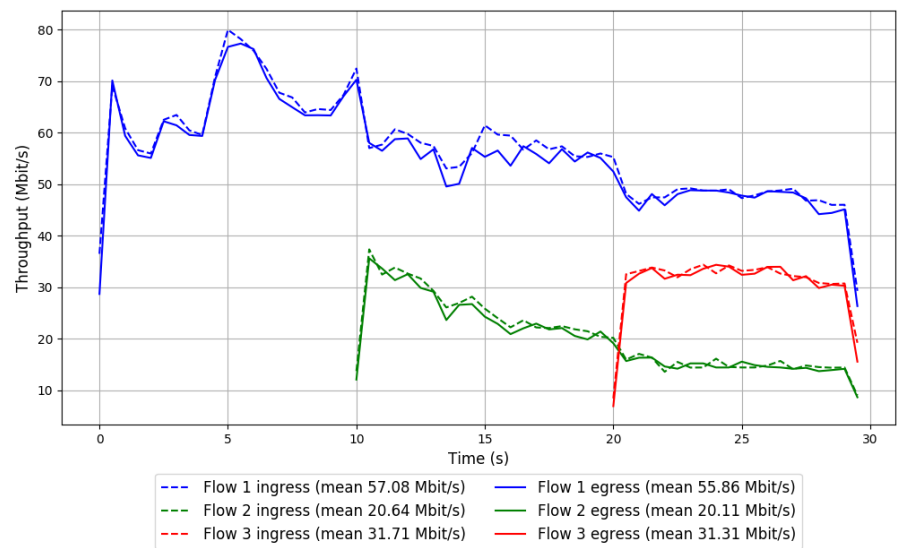


Run 9: Statistics of Indigo

Start at: 2018-01-10 02:37:59  
End at: 2018-01-10 02:38:29  
Local clock offset: -0.044 ms  
Remote clock offset: -1.454 ms

# Below is generated by plot.py at 2018-01-10 07:52:44  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 79.33 Mbit/s  
95th percentile per-packet one-way delay: 38.230 ms  
Loss rate: 2.33%  
-- Flow 1:  
Average throughput: 55.86 Mbit/s  
95th percentile per-packet one-way delay: 37.338 ms  
Loss rate: 2.29%  
-- Flow 2:  
Average throughput: 20.11 Mbit/s  
95th percentile per-packet one-way delay: 38.553 ms  
Loss rate: 2.83%  
-- Flow 3:  
Average throughput: 31.31 Mbit/s  
95th percentile per-packet one-way delay: 41.514 ms  
Loss rate: 1.87%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-10 03:01:10  
End at: 2018-01-10 03:01:40  
Local clock offset: -0.107 ms  
Remote clock offset: -1.534 ms

# Below is generated by plot.py at 2018-01-10 07:52:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 71.08 Mbit/s  
95th percentile per-packet one-way delay: 37.838 ms  
Loss rate: 3.48%  
-- Flow 1:  
Average throughput: 31.73 Mbit/s  
95th percentile per-packet one-way delay: 36.983 ms  
Loss rate: 3.15%  
-- Flow 2:  
Average throughput: 38.46 Mbit/s  
95th percentile per-packet one-way delay: 37.965 ms  
Loss rate: 3.41%  
-- Flow 3:  
Average throughput: 42.49 Mbit/s  
95th percentile per-packet one-way delay: 39.078 ms  
Loss rate: 4.39%

Run 10: Report of Indigo — Data Link

