

Pantheon Report

Generated at 2019-02-20 03:37:12 (UTC).

Data path: AWS Korea on `ens5` (*local*) → China on `eno1` (*remote*).

Repeated the test of 21 congestion control schemes 5 times.

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

NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

System info:

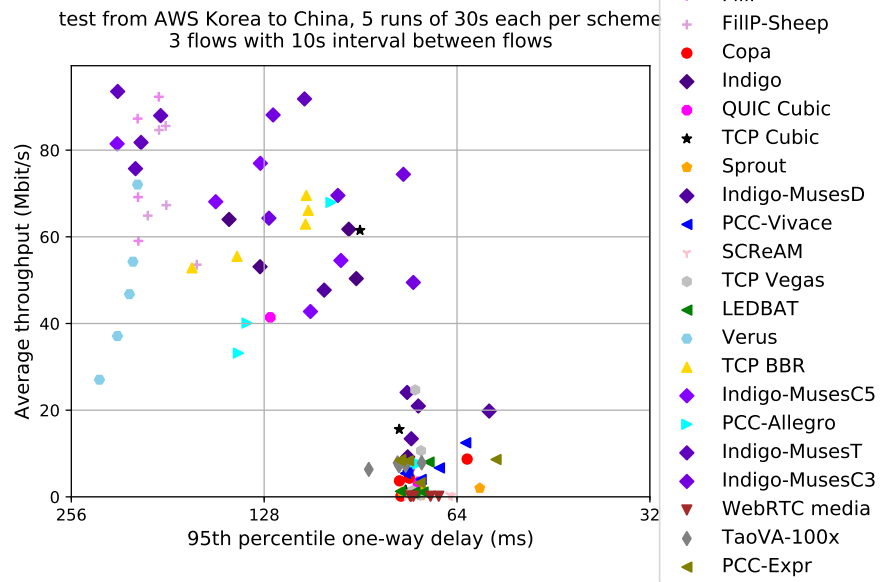
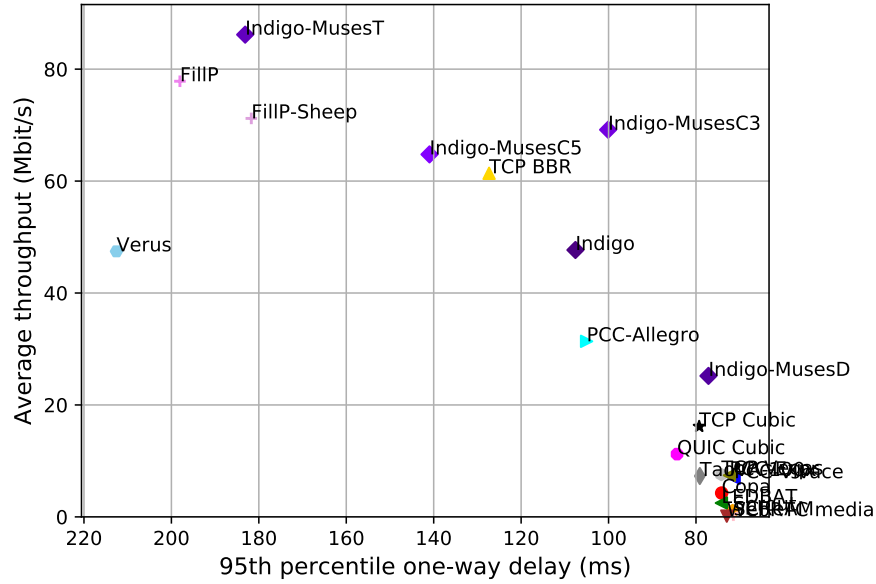
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
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/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from AWS Korea to China, 5 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



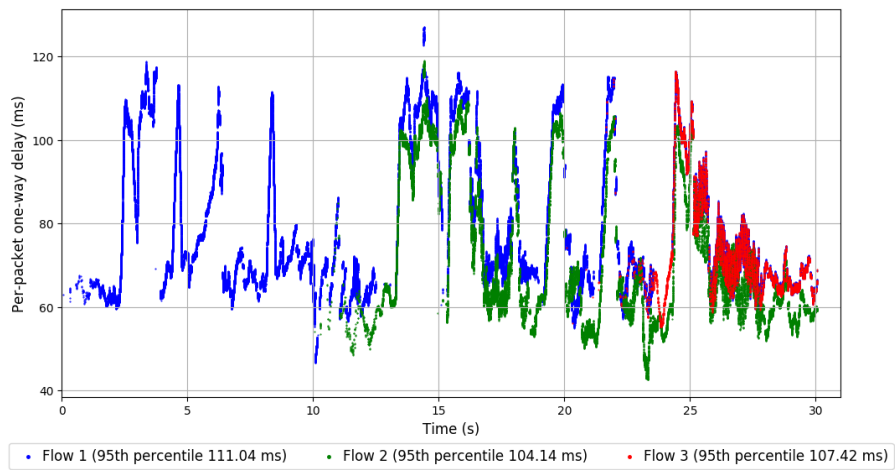
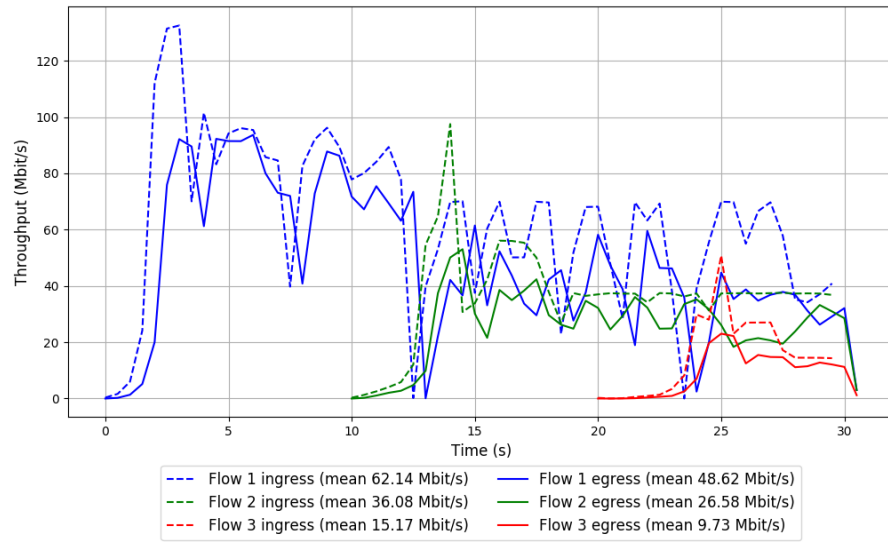
| scheme | # runs | mean avg tput (Mbit/s) | | | mean 95th-%ile delay (ms) | | | mean loss rate (%) | | |
|----------------|--------|------------------------|--------|--------|---------------------------|--------|--------|--------------------|--------|--------|
| | | flow 1 | flow 2 | flow 3 | flow 1 | flow 2 | flow 3 | flow 1 | flow 2 | flow 3 |
| TCP BBR | 5 | 42.36 | 24.08 | 9.00 | 125.40 | 132.01 | 119.32 | 17.90 | 24.67 | 26.36 |
| Copa | 5 | 1.97 | 2.21 | 2.49 | 73.94 | 74.09 | 74.32 | 8.85 | 8.14 | 6.09 |
| TCP Cubic | 5 | 11.68 | 2.17 | 9.12 | 77.82 | 75.76 | 77.11 | 1.30 | 1.24 | 1.71 |
| FillP | 5 | 48.45 | 37.36 | 13.80 | 195.58 | 197.11 | 195.25 | 12.22 | 17.00 | 20.61 |
| FillP-Sheep | 5 | 32.53 | 45.55 | 25.15 | 180.13 | 180.55 | 188.99 | 3.98 | 2.38 | 3.31 |
| Indigo | 5 | 32.61 | 13.27 | 19.99 | 104.83 | 107.75 | 109.17 | 6.48 | 6.01 | 13.14 |
| Indigo-MusesC3 | 5 | 35.36 | 33.22 | 40.22 | 84.99 | 103.93 | 112.02 | 2.28 | 2.14 | 1.93 |
| Indigo-MusesC5 | 5 | 43.23 | 25.95 | 15.11 | 135.02 | 139.37 | 148.95 | 2.08 | 2.50 | 3.53 |
| Indigo-MusesD | 5 | 13.21 | 11.45 | 14.76 | 72.64 | 78.58 | 65.61 | 2.08 | 1.90 | 2.14 |
| Indigo-MusesT | 5 | 63.26 | 29.35 | 12.54 | 175.06 | 184.44 | 188.45 | 4.12 | 4.94 | 4.29 |
| LEDBAT | 5 | 1.32 | 1.29 | 0.94 | 70.83 | 69.94 | 71.42 | 1.55 | 1.99 | 1.41 |
| PCC-Allegro | 5 | 29.82 | 9.97 | 4.43 | 103.08 | 104.36 | 97.56 | 19.78 | 32.59 | 30.97 |
| PCC-Expr | 5 | 0.01 | 9.19 | 3.99 | 69.99 | 72.37 | 72.21 | 79.14 | 34.22 | 48.82 |
| QUIC Cubic | 5 | 2.56 | 8.84 | 8.65 | 79.87 | 80.01 | 88.20 | 1.95 | 1.79 | 1.75 |
| SCReAM | 5 | 0.14 | 0.15 | 0.15 | 70.03 | 68.80 | 70.79 | 1.64 | 1.57 | 2.15 |
| Sprout | 5 | 0.61 | 0.51 | 0.56 | 68.91 | 71.88 | 70.21 | 2.15 | 2.46 | 1.33 |
| TaoVA-100x | 5 | 0.01 | 7.84 | 6.37 | 68.41 | 80.19 | 79.17 | 91.46 | 9.94 | 21.18 |
| TCP Vegas | 5 | 0.94 | 4.28 | 11.35 | 64.52 | 68.01 | 72.86 | 1.81 | 2.63 | 3.26 |
| Verus | 5 | 28.21 | 24.49 | 9.56 | 198.20 | 201.30 | 203.29 | 19.15 | 12.69 | 23.75 |
| PCC-Vivace | 5 | 3.13 | 2.32 | 6.79 | 67.55 | 71.18 | 70.37 | 1.16 | 1.00 | 0.89 |
| WebRTC media | 5 | 0.04 | 0.05 | 0.05 | 67.39 | 68.37 | 71.74 | 2.29 | 1.18 | 0.58 |

Run 1: Statistics of TCP BBR

Start at: 2019-02-20 00:54:40
End at: 2019-02-20 00:55:10
Local clock offset: 8.022 ms
Remote clock offset: -8.261 ms

Below is generated by plot.py at 2019-02-20 03:32:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 69.57 Mbit/s
95th percentile per-packet one-way delay: 110.029 ms
Loss rate: 23.74%
-- Flow 1:
Average throughput: 48.62 Mbit/s
95th percentile per-packet one-way delay: 111.038 ms
Loss rate: 21.75%
-- Flow 2:
Average throughput: 26.58 Mbit/s
95th percentile per-packet one-way delay: 104.136 ms
Loss rate: 26.32%
-- Flow 3:
Average throughput: 9.73 Mbit/s
95th percentile per-packet one-way delay: 107.417 ms
Loss rate: 35.91%

Run 1: Report of TCP BBR — Data Link

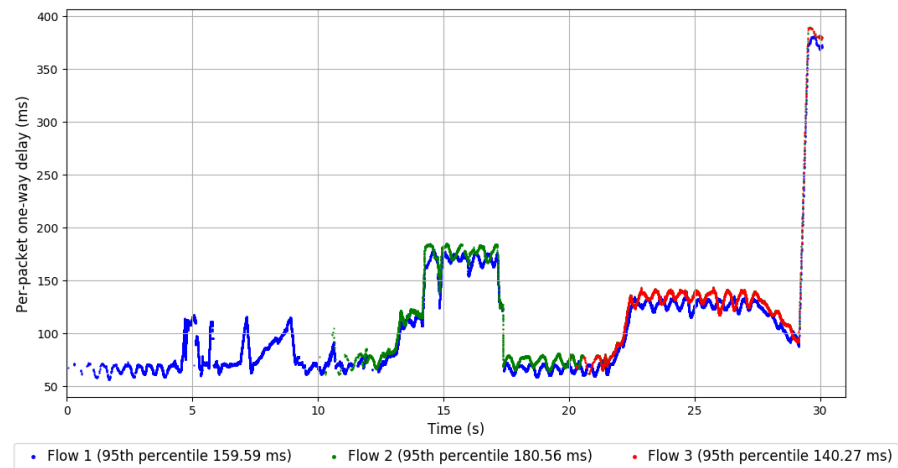
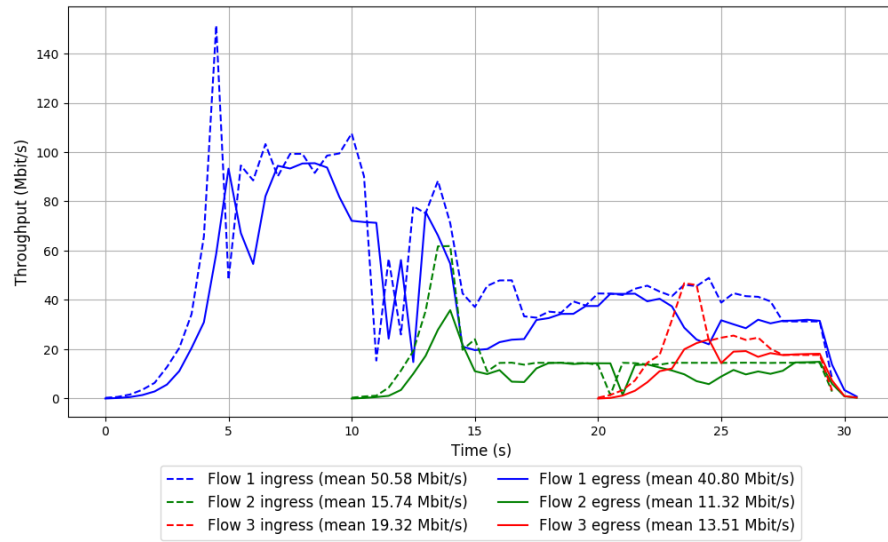


Run 2: Statistics of TCP BBR

Start at: 2019-02-20 01:34:57
End at: 2019-02-20 01:35:27
Local clock offset: 0.989 ms
Remote clock offset: -5.521 ms

Below is generated by plot.py at 2019-02-20 03:32:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 52.84 Mbit/s
95th percentile per-packet one-way delay: 165.944 ms
Loss rate: 21.72%
-- Flow 1:
Average throughput: 40.80 Mbit/s
95th percentile per-packet one-way delay: 159.588 ms
Loss rate: 19.32%
-- Flow 2:
Average throughput: 11.32 Mbit/s
95th percentile per-packet one-way delay: 180.562 ms
Loss rate: 28.10%
-- Flow 3:
Average throughput: 13.51 Mbit/s
95th percentile per-packet one-way delay: 140.273 ms
Loss rate: 30.17%

Run 2: Report of TCP BBR — Data Link

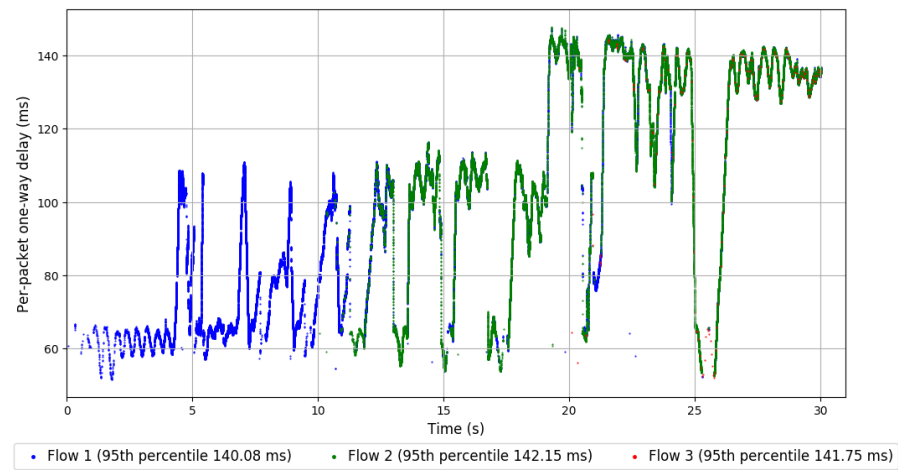
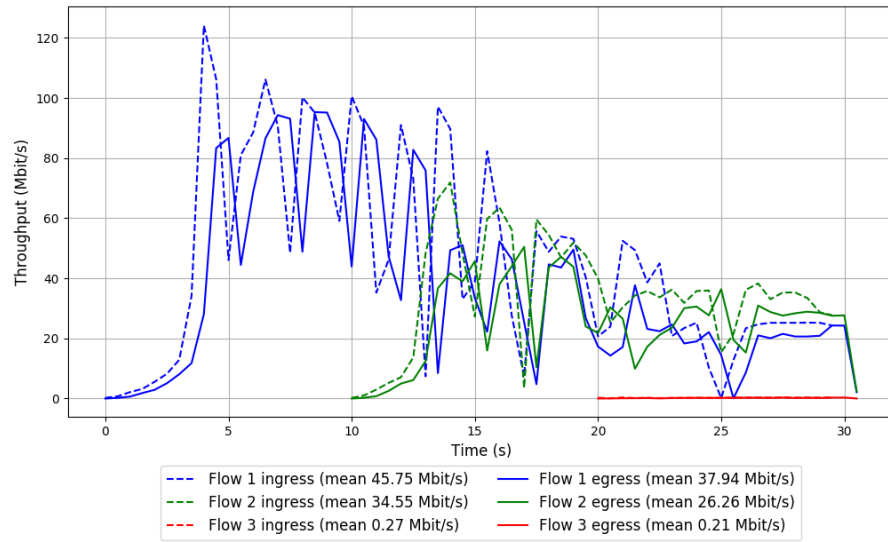


Run 3: Statistics of TCP BBR

Start at: 2019-02-20 02:13:16
End at: 2019-02-20 02:13:46
Local clock offset: 6.393 ms
Remote clock offset: -14.989 ms

Below is generated by plot.py at 2019-02-20 03:32:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 55.50 Mbit/s
95th percentile per-packet one-way delay: 141.098 ms
Loss rate: 19.39%
-- Flow 1:
Average throughput: 37.94 Mbit/s
95th percentile per-packet one-way delay: 140.083 ms
Loss rate: 17.06%
-- Flow 2:
Average throughput: 26.26 Mbit/s
95th percentile per-packet one-way delay: 142.147 ms
Loss rate: 24.02%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 141.755 ms
Loss rate: 22.61%

Run 3: Report of TCP BBR — Data Link

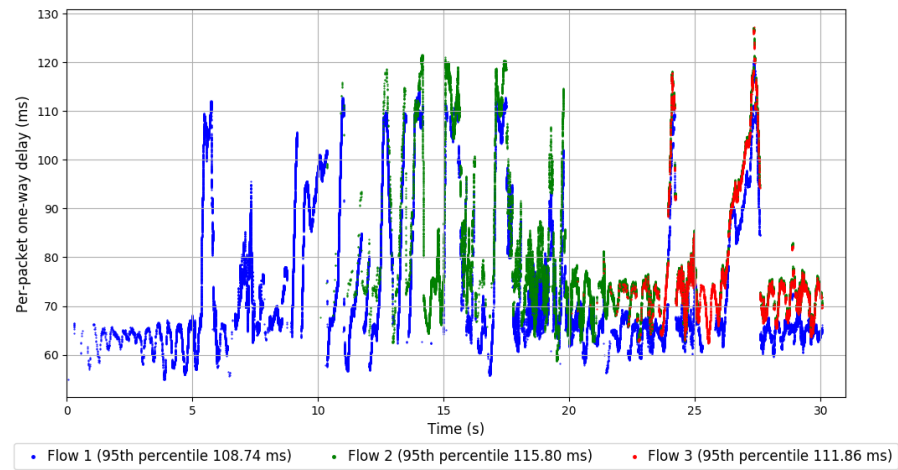
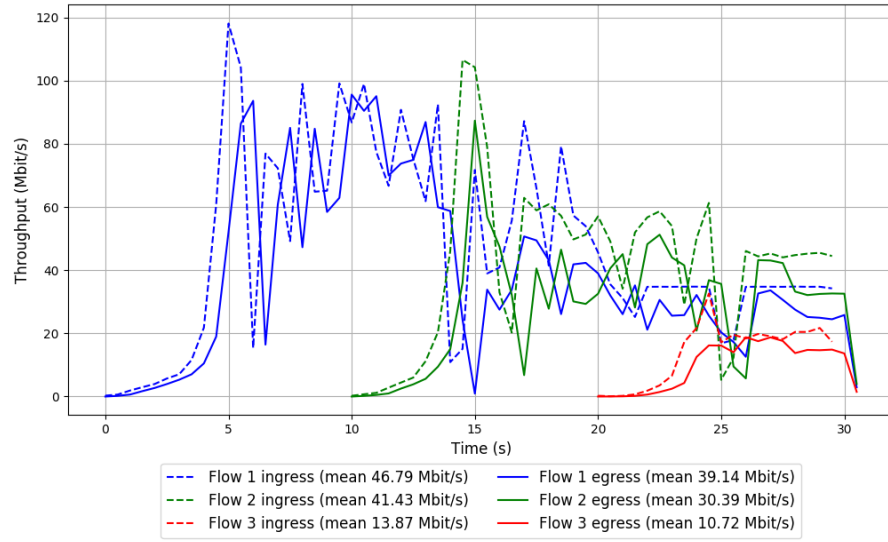


Run 4: Statistics of TCP BBR

Start at: 2019-02-20 02:53:27
End at: 2019-02-20 02:53:57
Local clock offset: 5.948 ms
Remote clock offset: -15.234 ms

Below is generated by plot.py at 2019-02-20 03:32:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 62.94 Mbit/s
95th percentile per-packet one-way delay: 110.322 ms
Loss rate: 20.32%
-- Flow 1:
Average throughput: 39.14 Mbit/s
95th percentile per-packet one-way delay: 108.738 ms
Loss rate: 16.33%
-- Flow 2:
Average throughput: 30.39 Mbit/s
95th percentile per-packet one-way delay: 115.795 ms
Loss rate: 26.66%
-- Flow 3:
Average throughput: 10.72 Mbit/s
95th percentile per-packet one-way delay: 111.858 ms
Loss rate: 22.76%

Run 4: Report of TCP BBR — Data Link

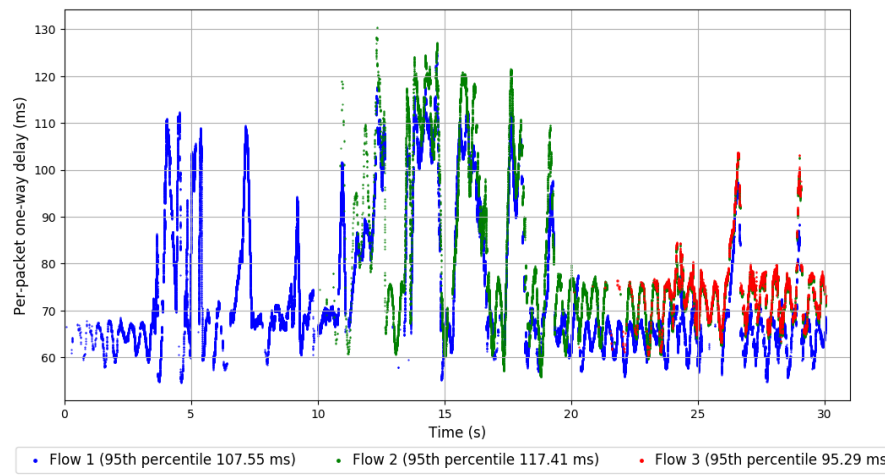
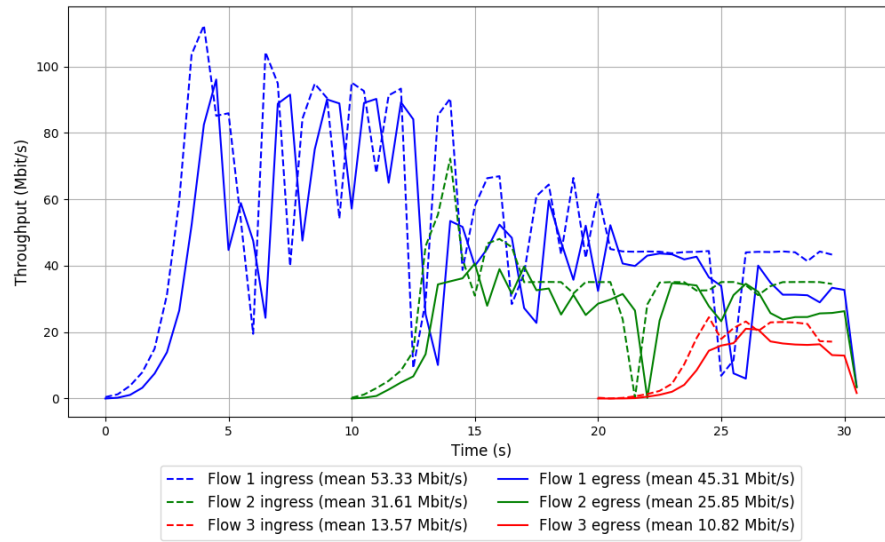


Run 5: Statistics of TCP BBR

Start at: 2019-02-20 03:29:22
End at: 2019-02-20 03:29:52
Local clock offset: 3.454 ms
Remote clock offset: -14.07 ms

Below is generated by plot.py at 2019-02-20 03:32:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 66.11 Mbit/s
95th percentile per-packet one-way delay: 109.250 ms
Loss rate: 16.20%
-- Flow 1:
Average throughput: 45.31 Mbit/s
95th percentile per-packet one-way delay: 107.551 ms
Loss rate: 15.04%
-- Flow 2:
Average throughput: 25.85 Mbit/s
95th percentile per-packet one-way delay: 117.409 ms
Loss rate: 18.24%
-- Flow 3:
Average throughput: 10.82 Mbit/s
95th percentile per-packet one-way delay: 95.286 ms
Loss rate: 20.34%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-02-20 00:30:59

End at: 2019-02-20 00:31:29

Local clock offset: -0.71 ms

Remote clock offset: 1.066 ms

Below is generated by plot.py at 2019-02-20 03:32:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.72 Mbit/s

95th percentile per-packet one-way delay: 61.716 ms

Loss rate: 8.95%

-- Flow 1:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 61.449 ms

Loss rate: 1.97%

-- Flow 2:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 61.783 ms

Loss rate: 13.28%

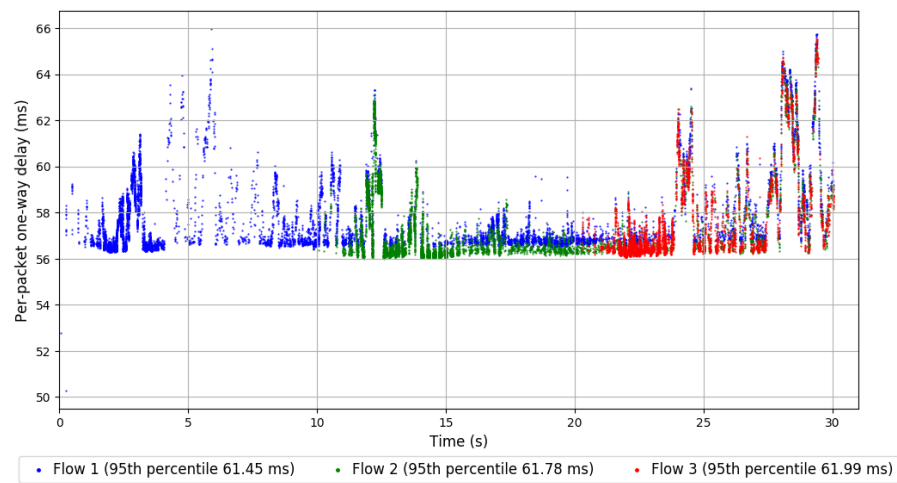
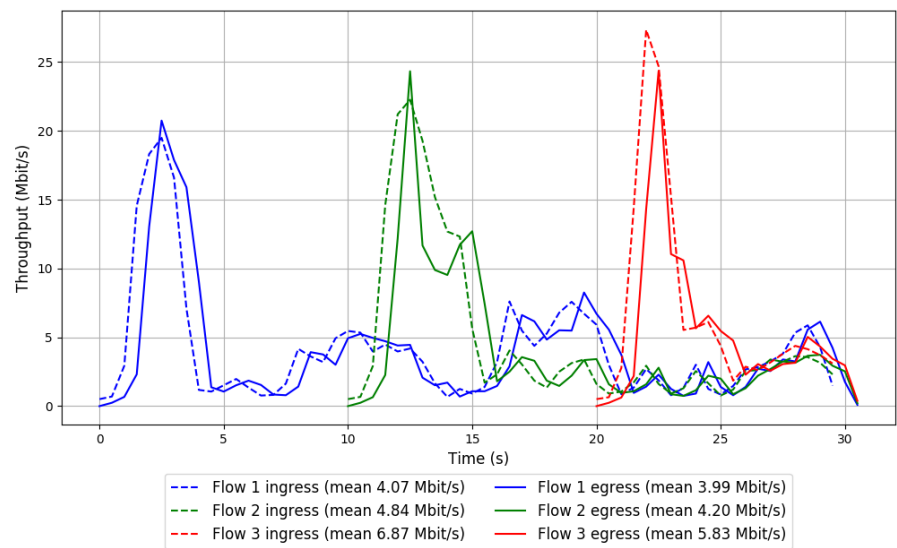
-- Flow 3:

Average throughput: 5.83 Mbit/s

95th percentile per-packet one-way delay: 61.986 ms

Loss rate: 15.25%

Run 1: Report of Copa — Data Link

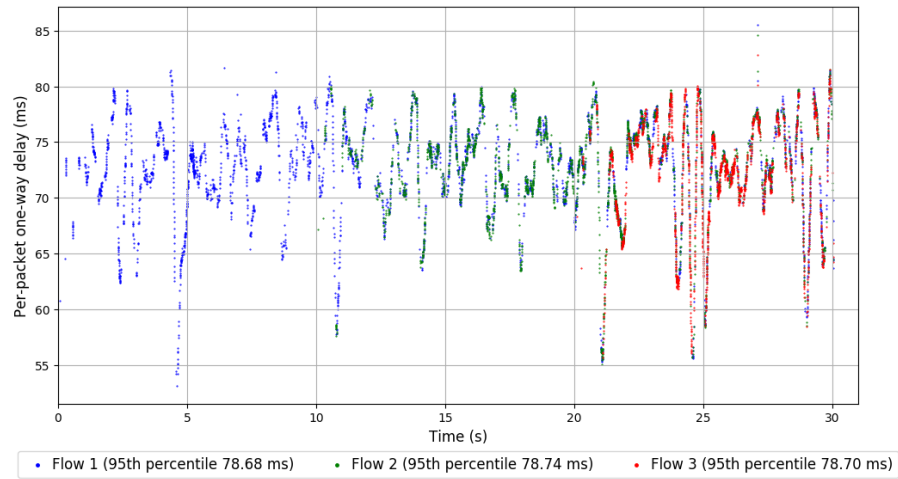
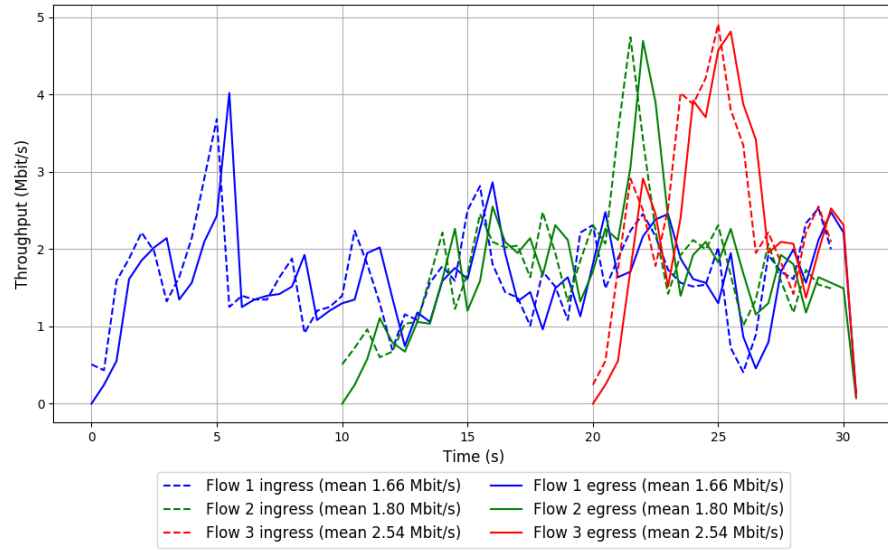


Run 2: Statistics of Copa

Start at: 2019-02-20 01:07:32
End at: 2019-02-20 01:08:02
Local clock offset: 5.88 ms
Remote clock offset: -1.718 ms

Below is generated by plot.py at 2019-02-20 03:32:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.69 Mbit/s
95th percentile per-packet one-way delay: 78.699 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 78.676 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 78.743 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 78.703 ms
Loss rate: 0.33%

Run 2: Report of Copa — Data Link

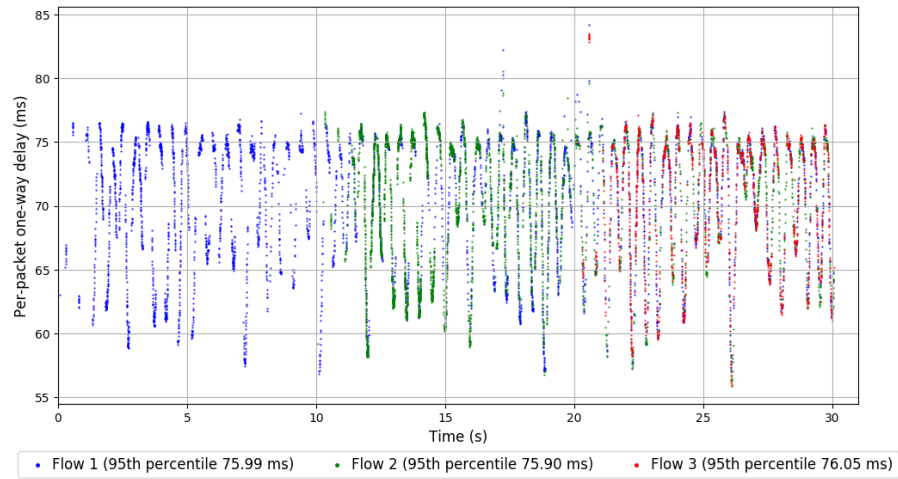
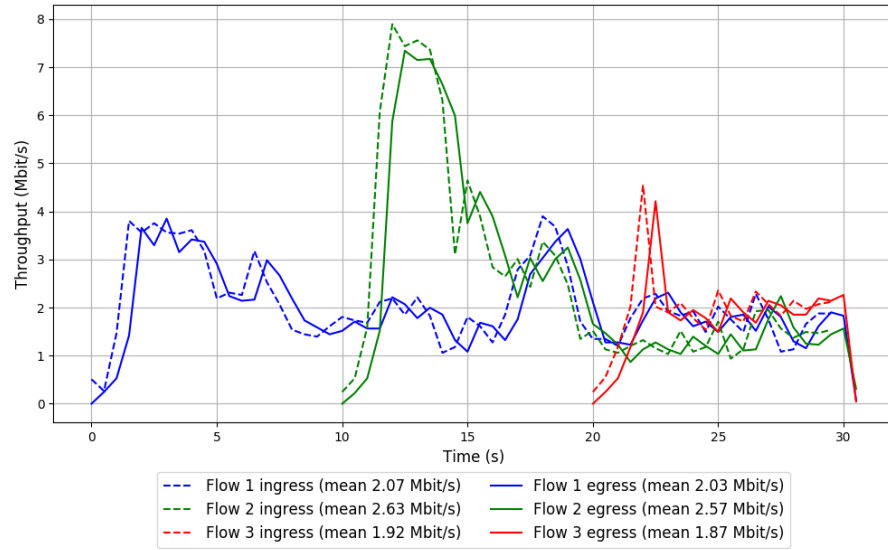


Run 3: Statistics of Copa

Start at: 2019-02-20 01:48:03
End at: 2019-02-20 01:48:33
Local clock offset: -3.245 ms
Remote clock offset: -13.23 ms

Below is generated by plot.py at 2019-02-20 03:32:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 75.974 ms
Loss rate: 2.35%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 75.986 ms
Loss rate: 2.23%
-- Flow 2:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 75.904 ms
Loss rate: 2.31%
-- Flow 3:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 76.050 ms
Loss rate: 2.83%

Run 3: Report of Copa — Data Link

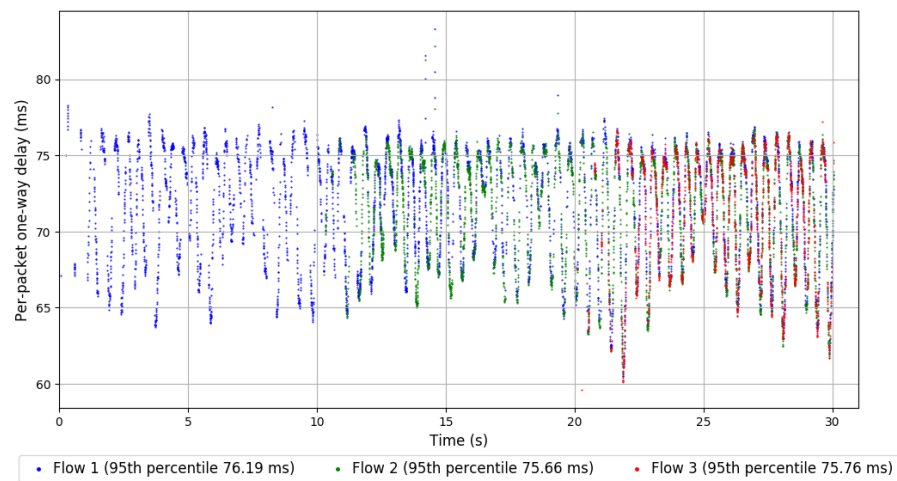
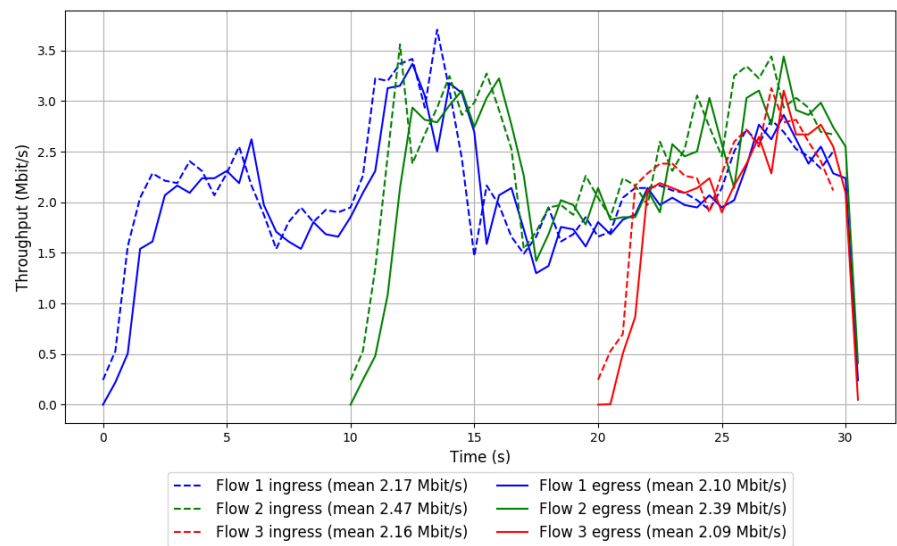


Run 4: Statistics of Copa

Start at: 2019-02-20 02:27:06
End at: 2019-02-20 02:27:36
Local clock offset: 10.077 ms
Remote clock offset: -10.955 ms

Below is generated by plot.py at 2019-02-20 03:32:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.38 Mbit/s
95th percentile per-packet one-way delay: 75.963 ms
Loss rate: 3.44%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 76.186 ms
Loss rate: 3.35%
-- Flow 2:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 75.664 ms
Loss rate: 3.53%
-- Flow 3:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 75.757 ms
Loss rate: 3.52%

Run 4: Report of Copa — Data Link

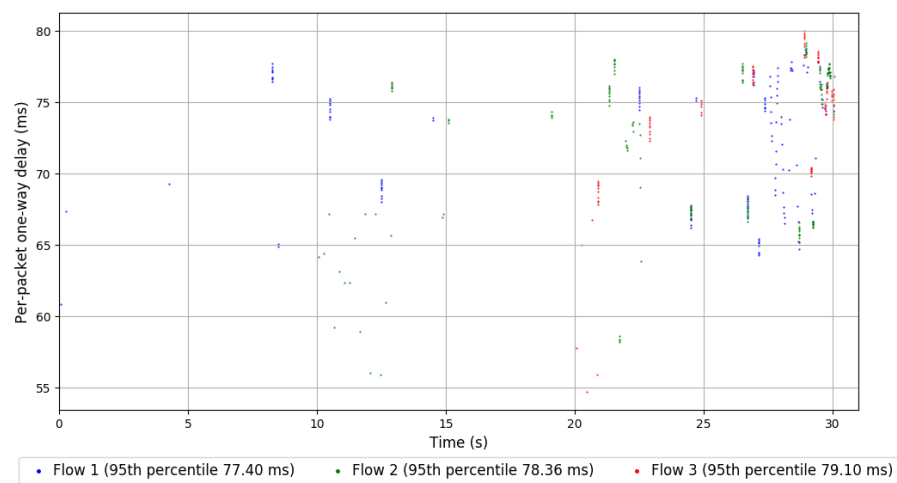
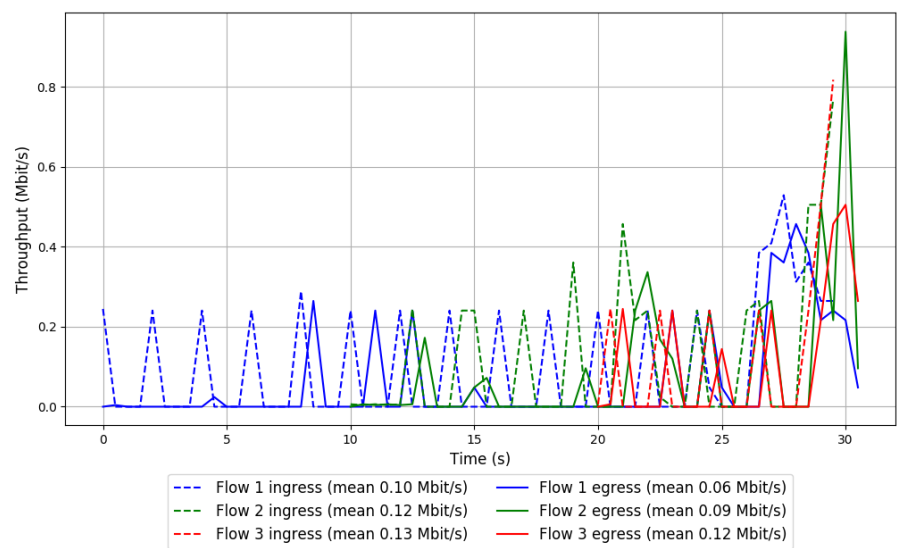


Run 5: Statistics of Copa

Start at: 2019-02-20 03:06:22
End at: 2019-02-20 03:06:52
Local clock offset: 4.712 ms
Remote clock offset: -12.382 ms

Below is generated by plot.py at 2019-02-20 03:32:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 78.299 ms
Loss rate: 25.51%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 77.401 ms
Loss rate: 36.38%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 78.363 ms
Loss rate: 21.47%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 79.103 ms
Loss rate: 8.54%

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-02-20 00:35:43

End at: 2019-02-20 00:36:13

Local clock offset: 2.747 ms

Remote clock offset: 0.498 ms

Below is generated by plot.py at 2019-02-20 03:32:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.51 Mbit/s

95th percentile per-packet one-way delay: 90.706 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 48.13 Mbit/s

95th percentile per-packet one-way delay: 91.025 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 5.29 Mbit/s

95th percentile per-packet one-way delay: 80.404 ms

Loss rate: 0.79%

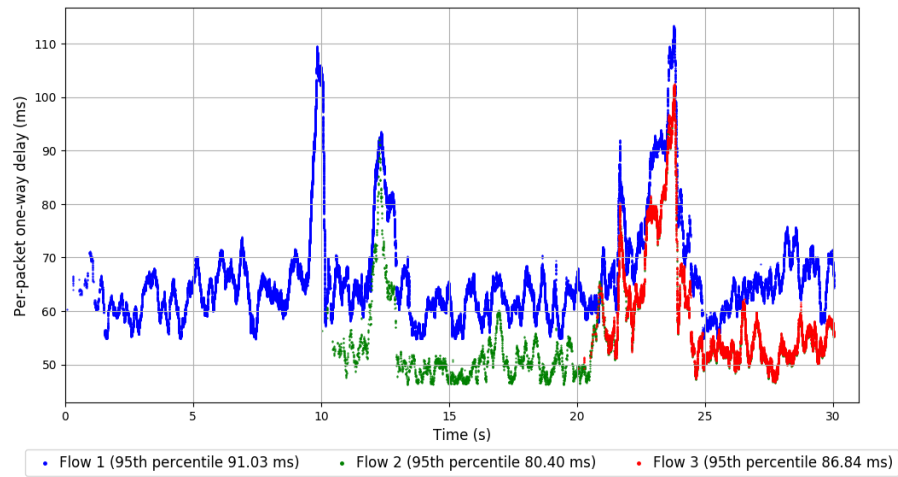
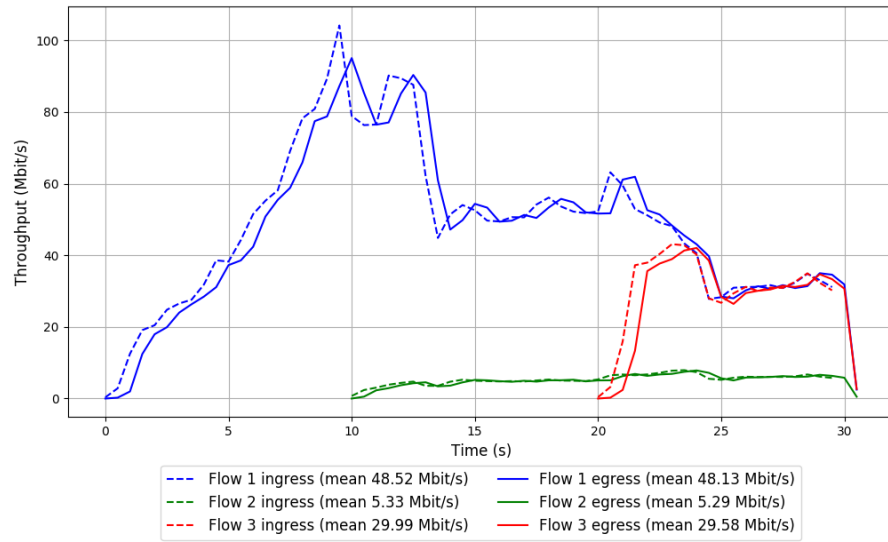
-- Flow 3:

Average throughput: 29.58 Mbit/s

95th percentile per-packet one-way delay: 86.844 ms

Loss rate: 1.30%

Run 1: Report of TCP Cubic — Data Link

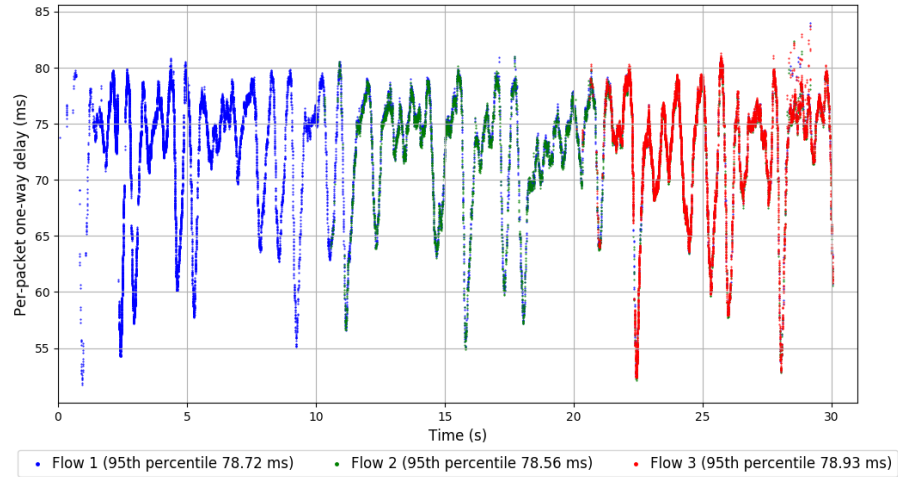
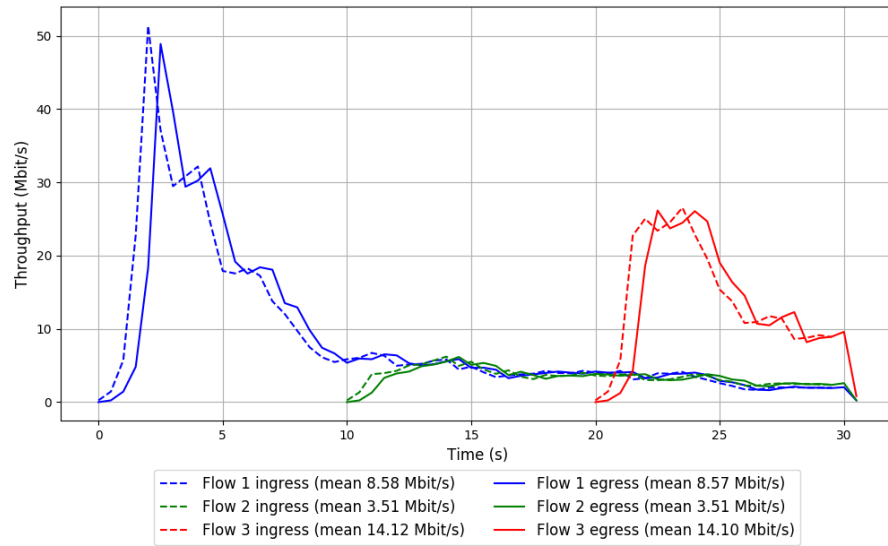


Run 2: Statistics of TCP Cubic

Start at: 2019-02-20 01:13:17
End at: 2019-02-20 01:13:47
Local clock offset: 4.984 ms
Remote clock offset: -1.964 ms

Below is generated by plot.py at 2019-02-20 03:32:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 15.59 Mbit/s
95th percentile per-packet one-way delay: 78.763 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 8.57 Mbit/s
95th percentile per-packet one-way delay: 78.715 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 78.558 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 14.10 Mbit/s
95th percentile per-packet one-way delay: 78.931 ms
Loss rate: 0.26%

Run 2: Report of TCP Cubic — Data Link

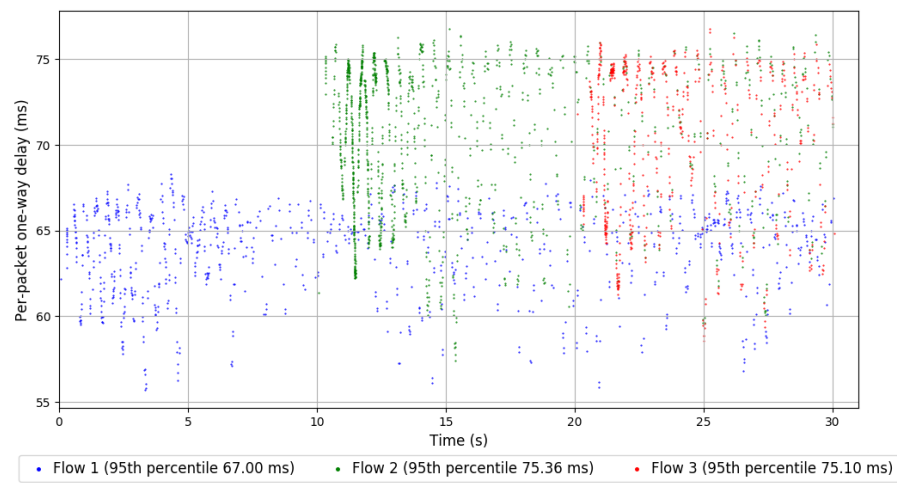
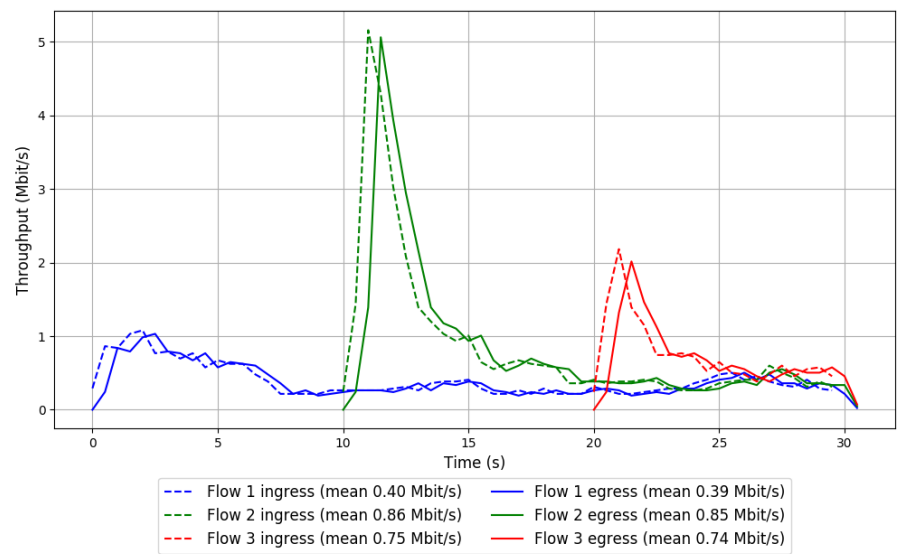


Run 3: Statistics of TCP Cubic

Start at: 2019-02-20 01:52:55
End at: 2019-02-20 01:53:25
Local clock offset: -3.934 ms
Remote clock offset: -15.151 ms

Below is generated by plot.py at 2019-02-20 03:32:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 75.048 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 67.003 ms
Loss rate: 2.41%
-- Flow 2:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 75.365 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 75.103 ms
Loss rate: 1.91%

Run 3: Report of TCP Cubic — Data Link

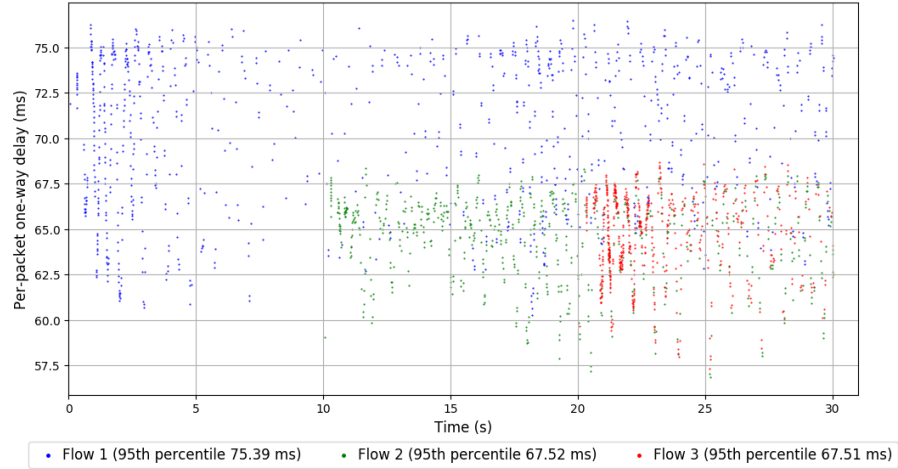
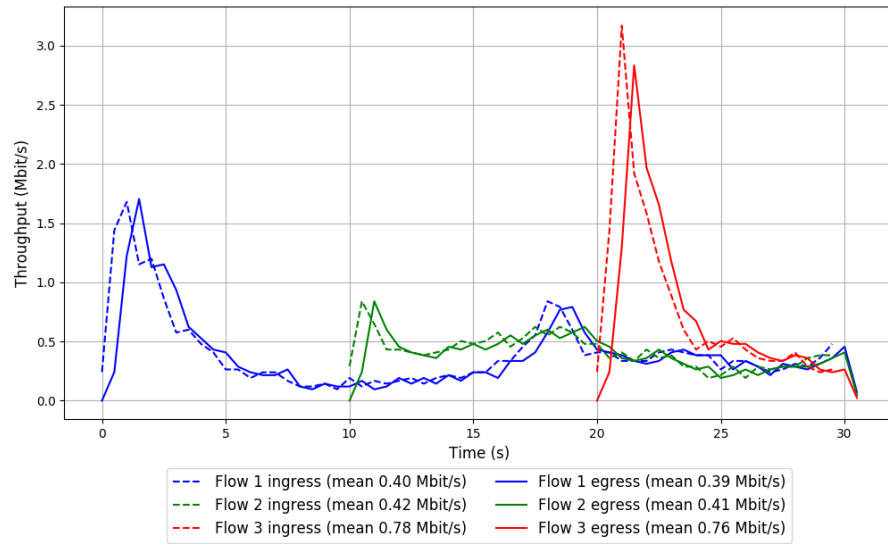


Run 4: Statistics of TCP Cubic

Start at: 2019-02-20 02:32:21
End at: 2019-02-20 02:32:51
Local clock offset: 9.426 ms
Remote clock offset: -10.93 ms

Below is generated by plot.py at 2019-02-20 03:32:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 74.865 ms
Loss rate: 2.39%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 75.392 ms
Loss rate: 2.20%
-- Flow 2:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 67.523 ms
Loss rate: 2.16%
-- Flow 3:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 67.512 ms
Loss rate: 2.92%

Run 4: Report of TCP Cubic — Data Link

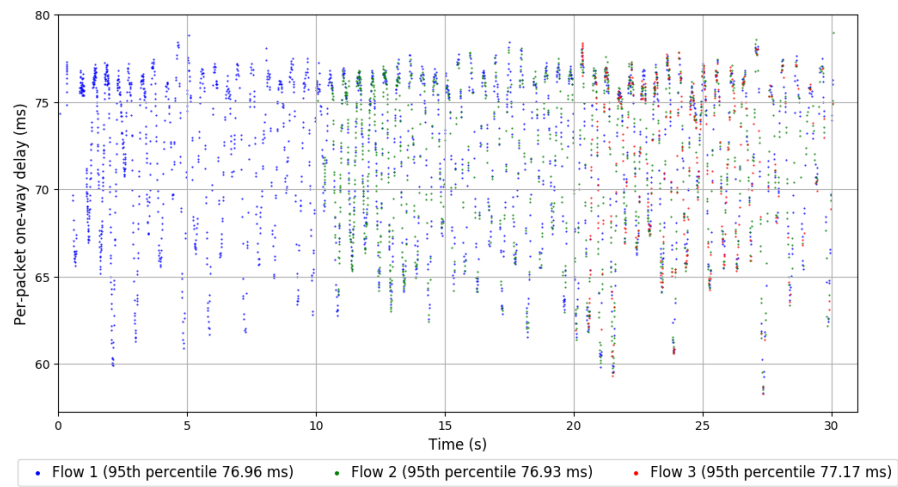
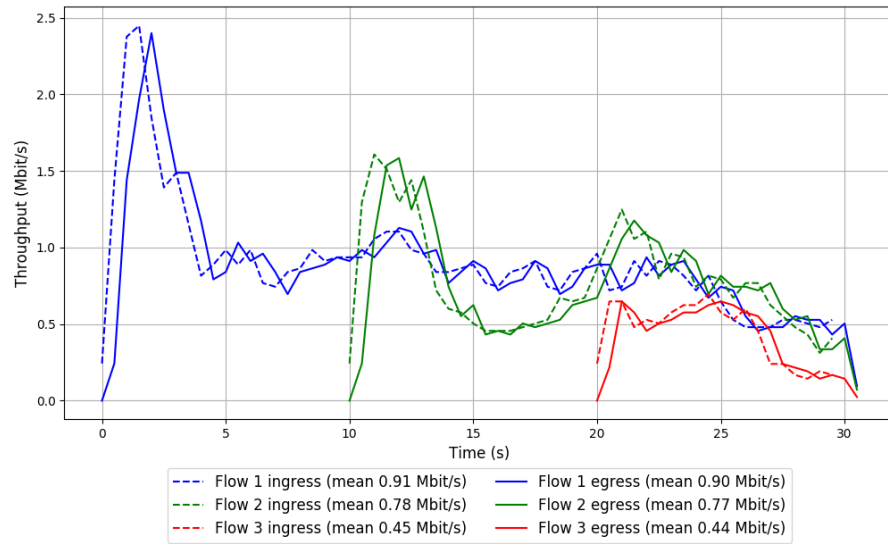


Run 5: Statistics of TCP Cubic

Start at: 2019-02-20 03:12:21
End at: 2019-02-20 03:12:51
Local clock offset: 4.128 ms
Remote clock offset: -12.772 ms

Below is generated by plot.py at 2019-02-20 03:32:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 76.988 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 0.90 Mbit/s
95th percentile per-packet one-way delay: 76.958 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 76.927 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 77.175 ms
Loss rate: 2.16%

Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-02-20 00:28:56

End at: 2019-02-20 00:29:26

Local clock offset: -1.5 ms

Remote clock offset: 0.592 ms

Below is generated by plot.py at 2019-02-20 03:32:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.31 Mbit/s

95th percentile per-packet one-way delay: 186.910 ms

Loss rate: 16.60%

-- Flow 1:

Average throughput: 50.46 Mbit/s

95th percentile per-packet one-way delay: 178.119 ms

Loss rate: 15.01%

-- Flow 2:

Average throughput: 46.19 Mbit/s

95th percentile per-packet one-way delay: 189.398 ms

Loss rate: 17.69%

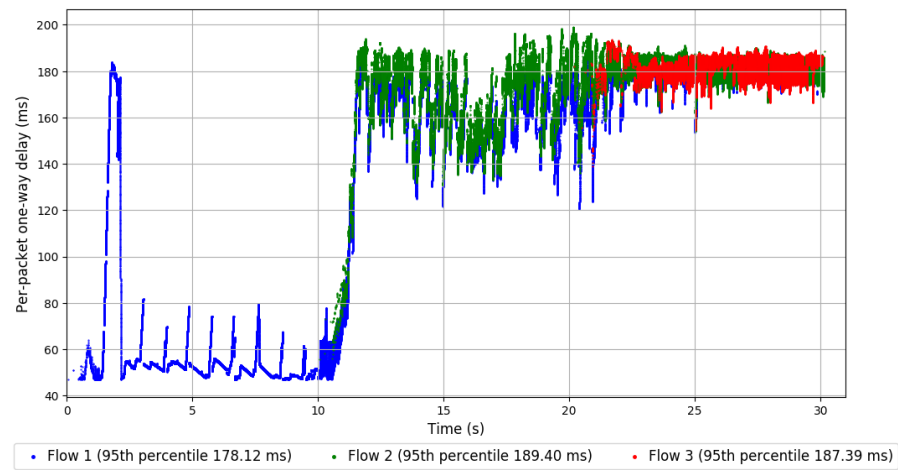
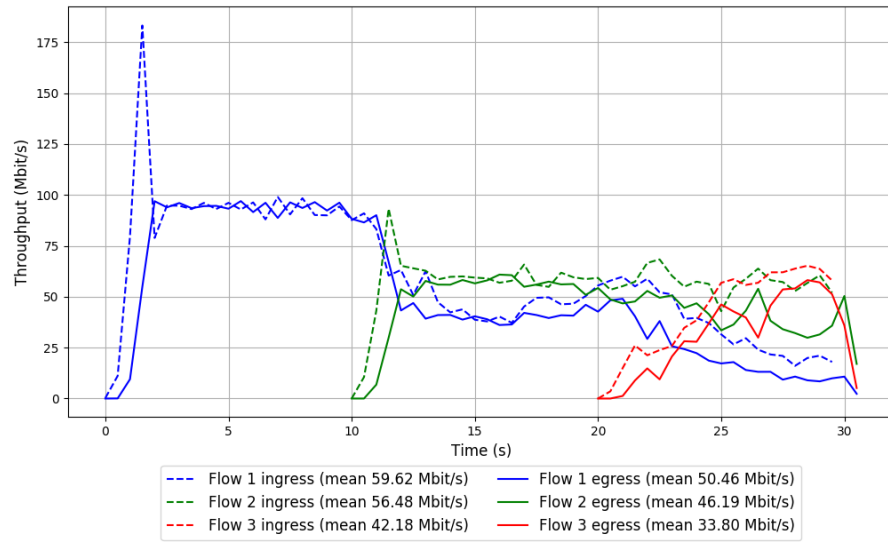
-- Flow 3:

Average throughput: 33.80 Mbit/s

95th percentile per-packet one-way delay: 187.394 ms

Loss rate: 20.42%

Run 1: Report of FillP — Data Link

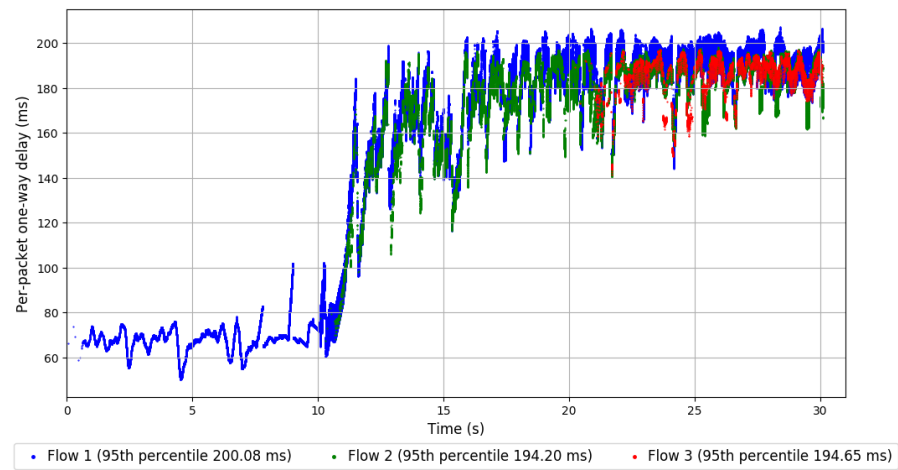
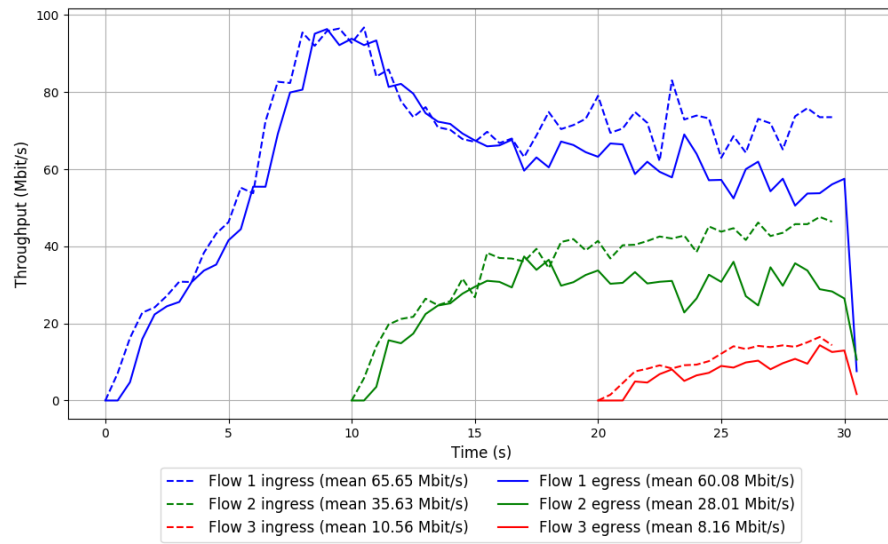


Run 2: Statistics of FillP

Start at: 2019-02-20 01:05:03
End at: 2019-02-20 01:05:33
Local clock offset: 6.631 ms
Remote clock offset: -6.179 ms

Below is generated by plot.py at 2019-02-20 03:32:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 81.39 Mbit/s
95th percentile per-packet one-way delay: 199.098 ms
Loss rate: 12.13%
-- Flow 1:
Average throughput: 60.08 Mbit/s
95th percentile per-packet one-way delay: 200.077 ms
Loss rate: 8.30%
-- Flow 2:
Average throughput: 28.01 Mbit/s
95th percentile per-packet one-way delay: 194.197 ms
Loss rate: 21.09%
-- Flow 3:
Average throughput: 8.16 Mbit/s
95th percentile per-packet one-way delay: 194.649 ms
Loss rate: 23.35%

Run 2: Report of FillP — Data Link

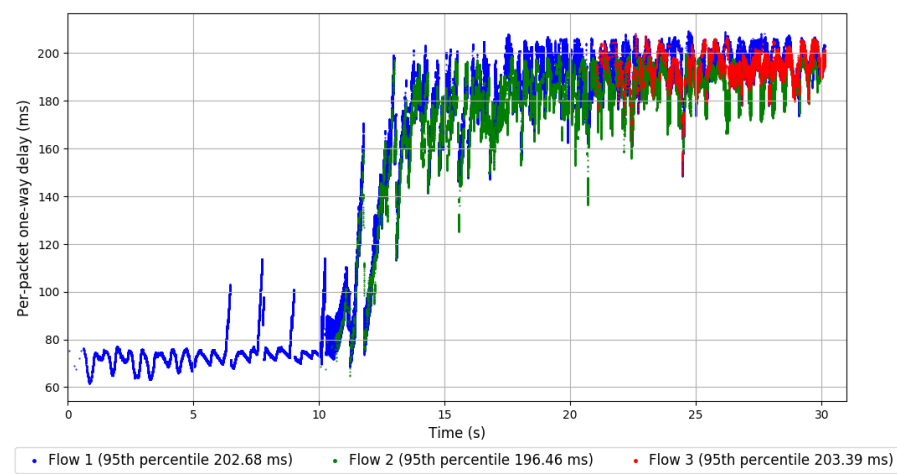
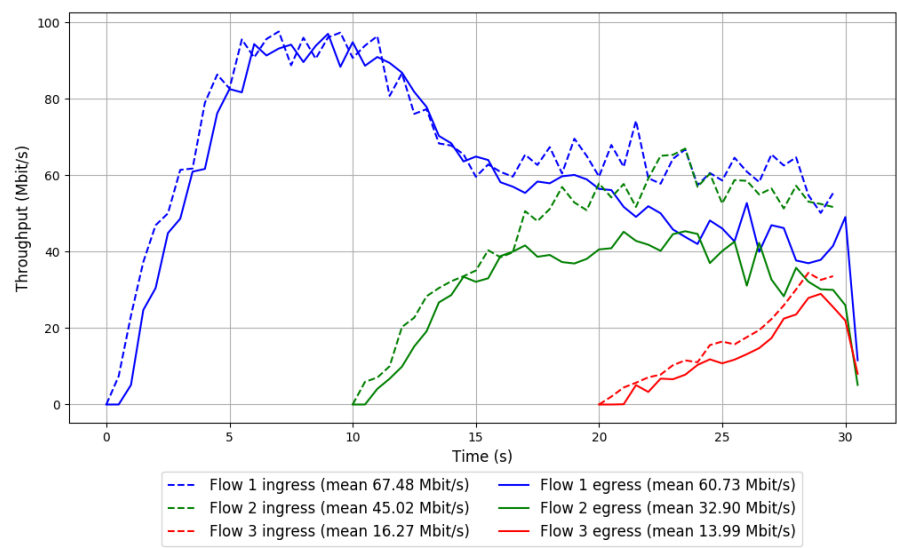


Run 3: Statistics of FillP

Start at: 2019-02-20 01:45:32
End at: 2019-02-20 01:46:02
Local clock offset: -2.776 ms
Remote clock offset: -12.887 ms

Below is generated by plot.py at 2019-02-20 03:33:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.27 Mbit/s
95th percentile per-packet one-way delay: 201.701 ms
Loss rate: 14.92%
-- Flow 1:
Average throughput: 60.73 Mbit/s
95th percentile per-packet one-way delay: 202.680 ms
Loss rate: 9.80%
-- Flow 2:
Average throughput: 32.90 Mbit/s
95th percentile per-packet one-way delay: 196.455 ms
Loss rate: 26.60%
-- Flow 3:
Average throughput: 13.99 Mbit/s
95th percentile per-packet one-way delay: 203.392 ms
Loss rate: 14.17%

Run 3: Report of FillP — Data Link

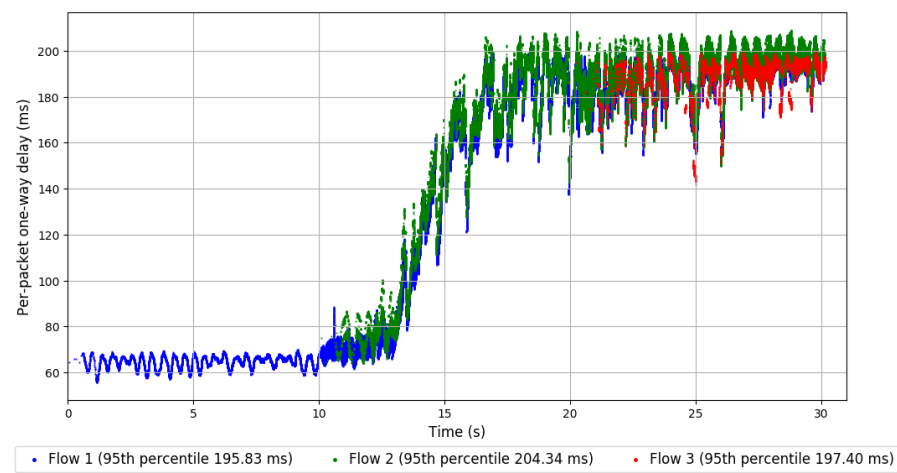
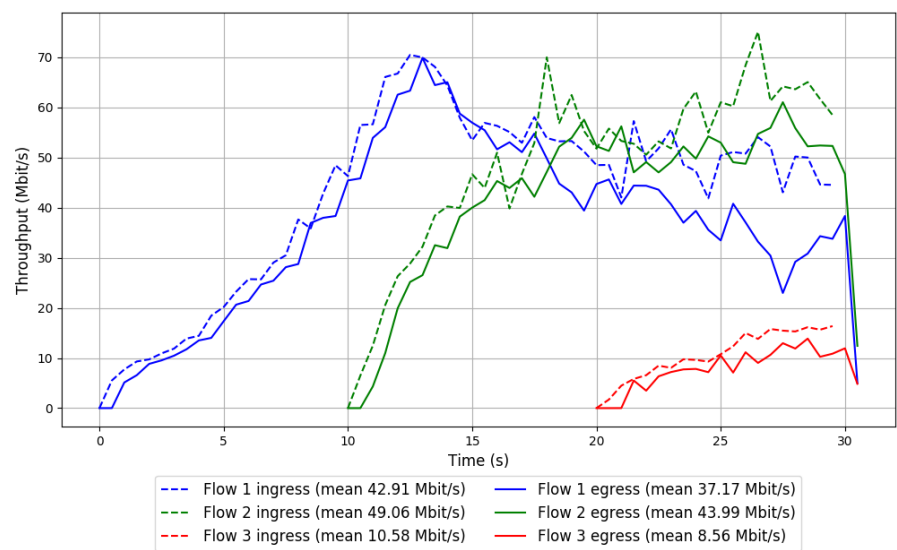


Run 4: Statistics of FillP

Start at: 2019-02-20 02:24:27
End at: 2019-02-20 02:24:57
Local clock offset: 9.681 ms
Remote clock offset: -10.32 ms

Below is generated by plot.py at 2019-02-20 03:33:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 69.15 Mbit/s
95th percentile per-packet one-way delay: 201.399 ms
Loss rate: 12.15%
-- Flow 1:
Average throughput: 37.17 Mbit/s
95th percentile per-packet one-way delay: 195.828 ms
Loss rate: 13.23%
-- Flow 2:
Average throughput: 43.99 Mbit/s
95th percentile per-packet one-way delay: 204.344 ms
Loss rate: 9.99%
-- Flow 3:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 197.398 ms
Loss rate: 19.05%

Run 4: Report of FillP — Data Link

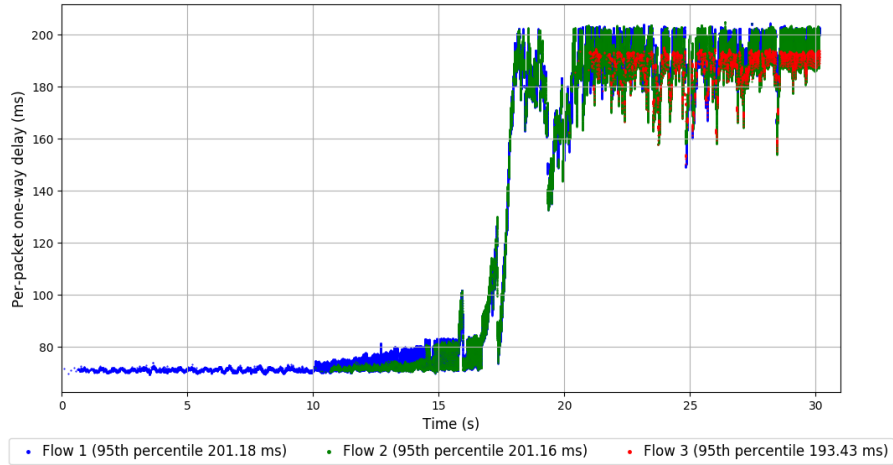
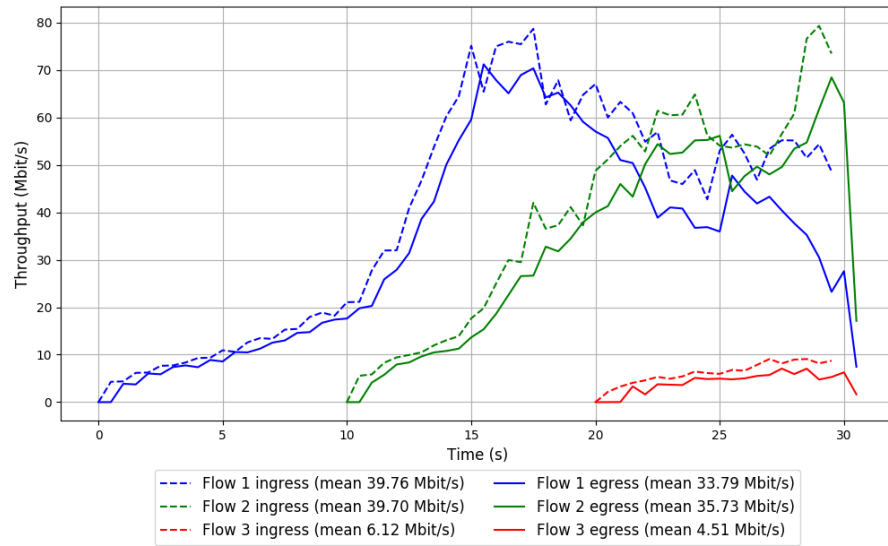


Run 5: Statistics of FillP

Start at: 2019-02-20 03:04:31
End at: 2019-02-20 03:05:01
Local clock offset: 5.028 ms
Remote clock offset: -17.535 ms

Below is generated by plot.py at 2019-02-20 03:33:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 59.06 Mbit/s
95th percentile per-packet one-way delay: 201.147 ms
Loss rate: 13.10%
-- Flow 1:
Average throughput: 33.79 Mbit/s
95th percentile per-packet one-way delay: 201.178 ms
Loss rate: 14.75%
-- Flow 2:
Average throughput: 35.73 Mbit/s
95th percentile per-packet one-way delay: 201.158 ms
Loss rate: 9.62%
-- Flow 3:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 193.434 ms
Loss rate: 26.08%

Run 5: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2019-02-20 00:37:24

End at: 2019-02-20 00:37:54

Local clock offset: 3.55 ms

Remote clock offset: 0.399 ms

Below is generated by plot.py at 2019-02-20 03:33:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.58 Mbit/s

95th percentile per-packet one-way delay: 182.339 ms

Loss rate: 4.22%

-- Flow 1:

Average throughput: 29.60 Mbit/s

95th percentile per-packet one-way delay: 187.184 ms

Loss rate: 6.04%

-- Flow 2:

Average throughput: 61.66 Mbit/s

95th percentile per-packet one-way delay: 173.712 ms

Loss rate: 2.35%

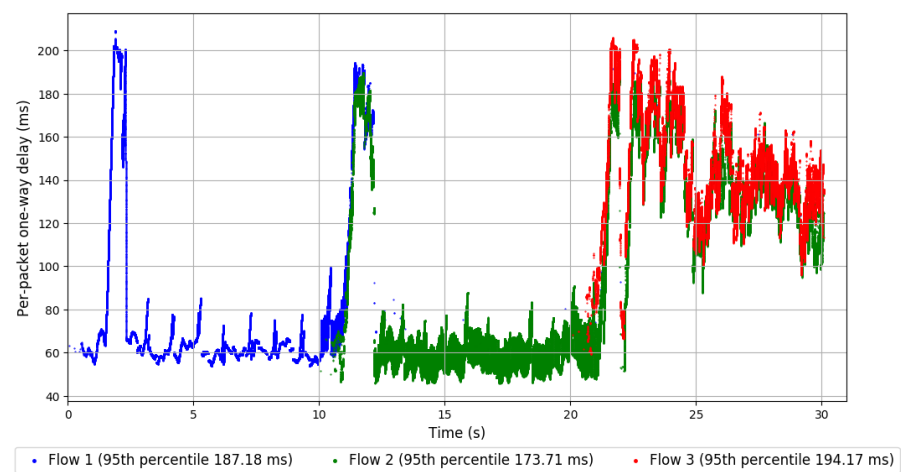
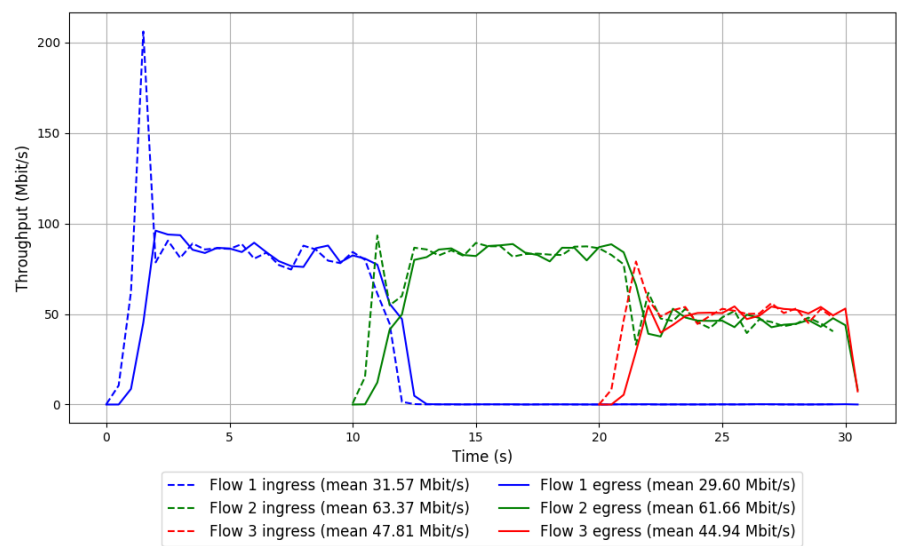
-- Flow 3:

Average throughput: 44.94 Mbit/s

95th percentile per-packet one-way delay: 194.174 ms

Loss rate: 5.59%

Run 1: Report of FillP-Sheep — Data Link

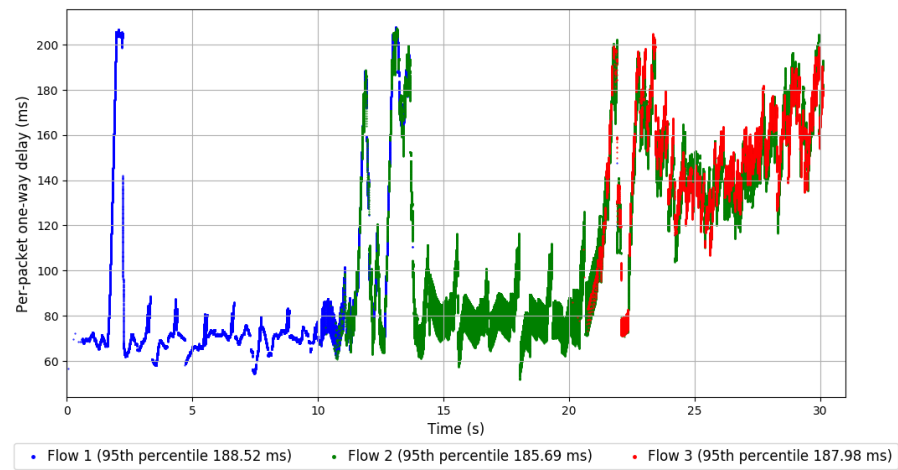
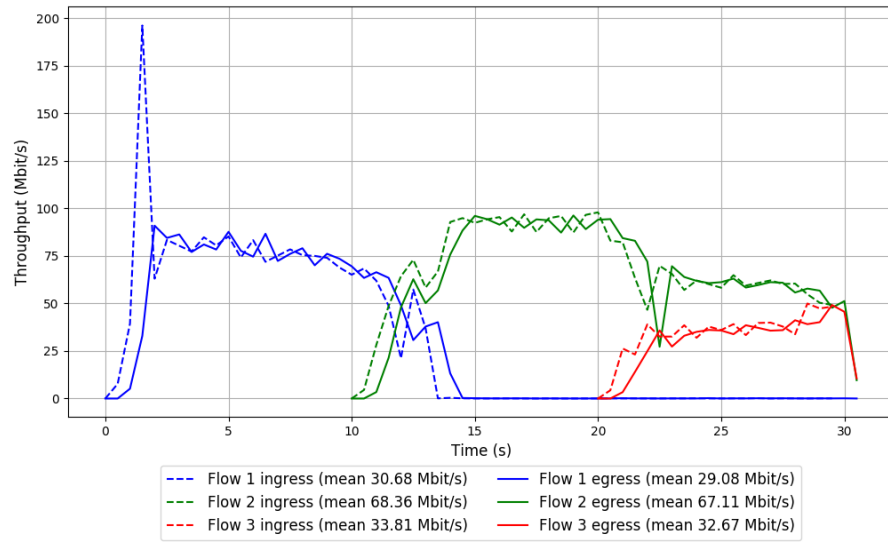


Run 2: Statistics of FillP-Sheep

Start at: 2019-02-20 01:15:01
End at: 2019-02-20 01:15:31
Local clock offset: 4.797 ms
Remote clock offset: -5.477 ms

Below is generated by plot.py at 2019-02-20 03:33:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 84.65 Mbit/s
95th percentile per-packet one-way delay: 186.775 ms
Loss rate: 2.87%
-- Flow 1:
Average throughput: 29.08 Mbit/s
95th percentile per-packet one-way delay: 188.518 ms
Loss rate: 4.91%
-- Flow 2:
Average throughput: 67.11 Mbit/s
95th percentile per-packet one-way delay: 185.685 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 32.67 Mbit/s
95th percentile per-packet one-way delay: 187.984 ms
Loss rate: 2.89%

Run 2: Report of FillP-Sheep — Data Link

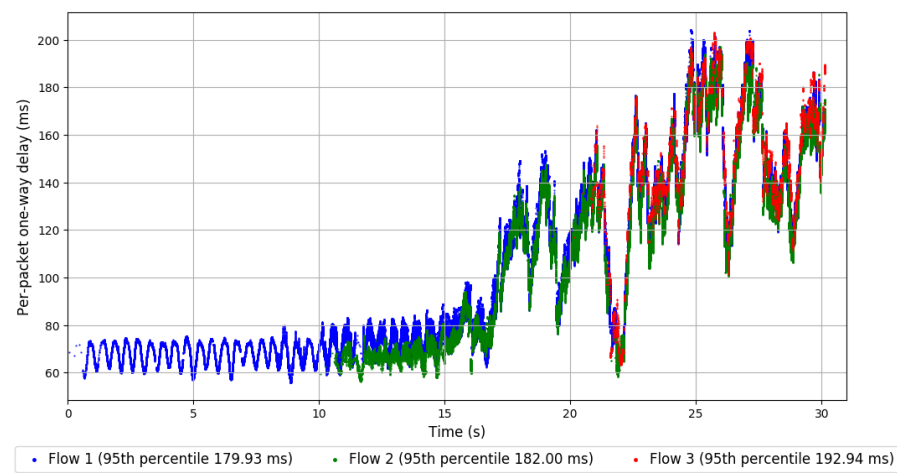
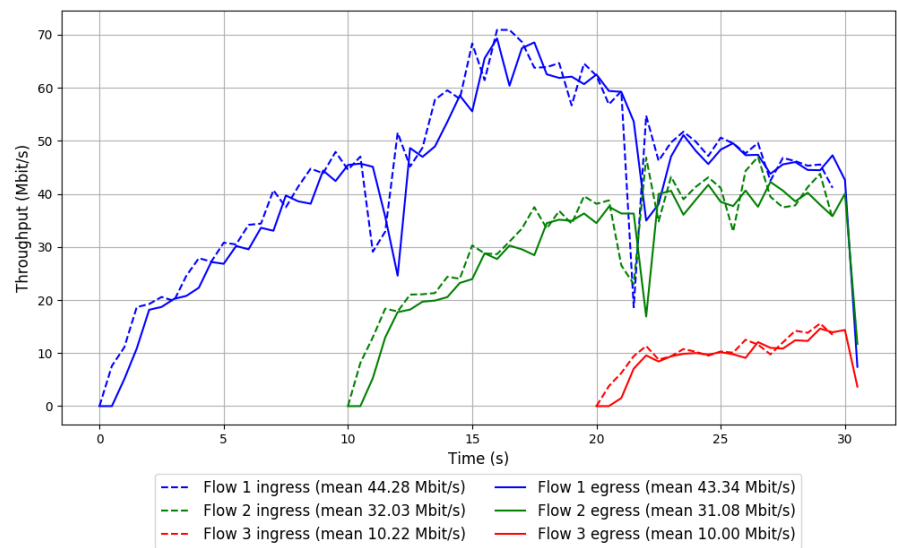


Run 3: Statistics of FillP-Sheep

Start at: 2019-02-20 01:54:21
End at: 2019-02-20 01:54:51
Local clock offset: -4.122 ms
Remote clock offset: -16.068 ms

Below is generated by plot.py at 2019-02-20 03:33:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 67.31 Mbit/s
95th percentile per-packet one-way delay: 181.952 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 43.34 Mbit/s
95th percentile per-packet one-way delay: 179.929 ms
Loss rate: 1.92%
-- Flow 2:
Average throughput: 31.08 Mbit/s
95th percentile per-packet one-way delay: 181.995 ms
Loss rate: 2.41%
-- Flow 3:
Average throughput: 10.00 Mbit/s
95th percentile per-packet one-way delay: 192.944 ms
Loss rate: 1.52%

Run 3: Report of FillP-Sheep — Data Link

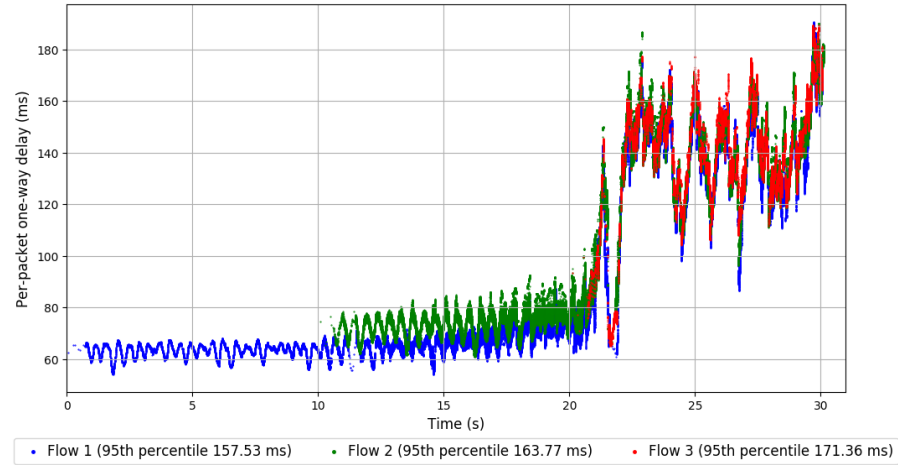
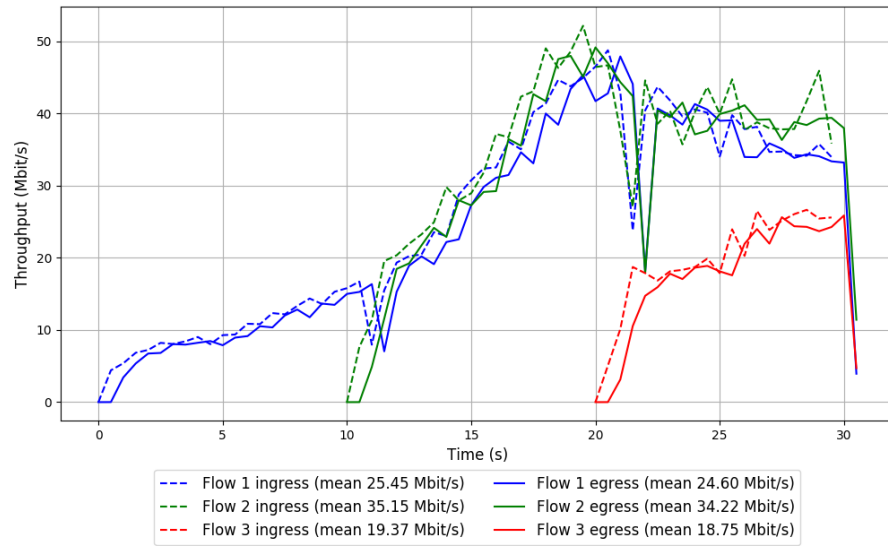


Run 4: Statistics of FillP-Sheep

Start at: 2019-02-20 02:33:42
End at: 2019-02-20 02:34:12
Local clock offset: 8.801 ms
Remote clock offset: -10.834 ms

Below is generated by plot.py at 2019-02-20 03:33:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 53.57 Mbit/s
95th percentile per-packet one-way delay: 163.061 ms
Loss rate: 2.73%
-- Flow 1:
Average throughput: 24.60 Mbit/s
95th percentile per-packet one-way delay: 157.527 ms
Loss rate: 3.18%
-- Flow 2:
Average throughput: 34.22 Mbit/s
95th percentile per-packet one-way delay: 163.768 ms
Loss rate: 2.15%
-- Flow 3:
Average throughput: 18.75 Mbit/s
95th percentile per-packet one-way delay: 171.361 ms
Loss rate: 3.09%

Run 4: Report of FillP-Sheep — Data Link

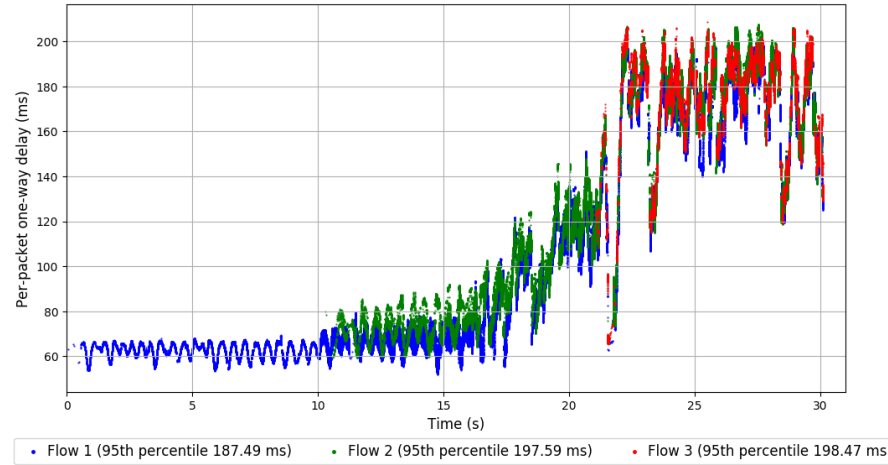
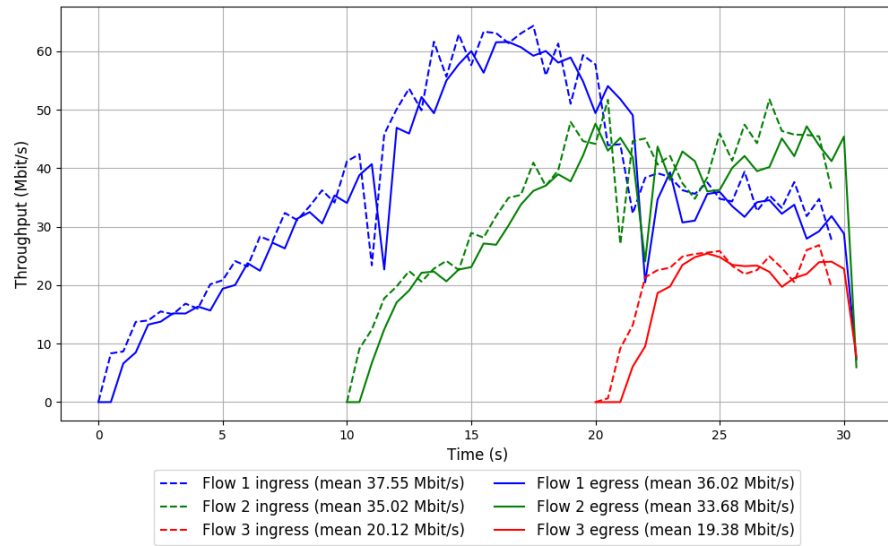


Run 5: Statistics of FillP-Sheep

Start at: 2019-02-20 03:13:43
End at: 2019-02-20 03:14:13
Local clock offset: 4.0 ms
Remote clock offset: -14.63 ms

Below is generated by plot.py at 2019-02-20 03:33:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 64.89 Mbit/s
95th percentile per-packet one-way delay: 194.468 ms
Loss rate: 3.68%
-- Flow 1:
Average throughput: 36.02 Mbit/s
95th percentile per-packet one-way delay: 187.487 ms
Loss rate: 3.84%
-- Flow 2:
Average throughput: 33.68 Mbit/s
95th percentile per-packet one-way delay: 197.589 ms
Loss rate: 3.48%
-- Flow 3:
Average throughput: 19.38 Mbit/s
95th percentile per-packet one-way delay: 198.466 ms
Loss rate: 3.48%

Run 5: Report of FillP-Sheep — Data Link

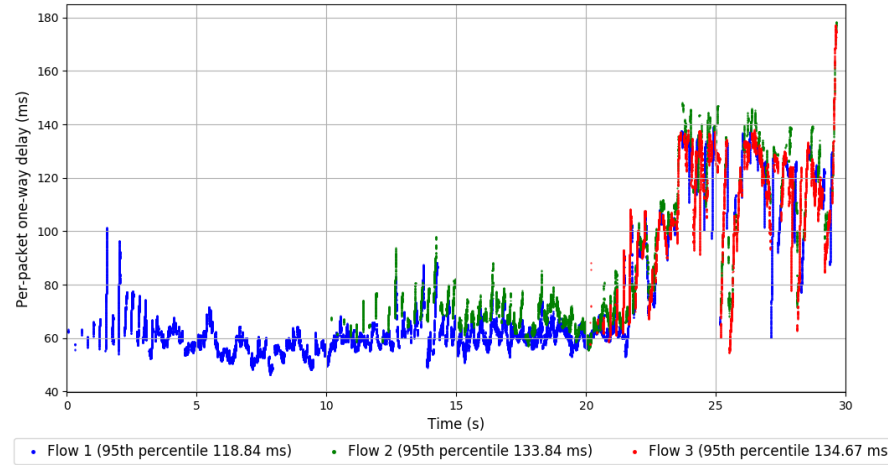
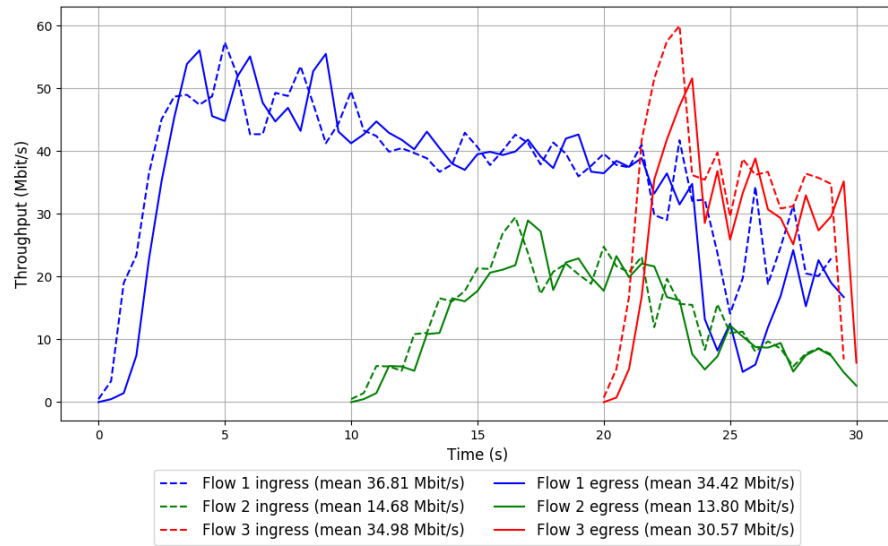


Run 1: Statistics of Indigo

Start at: 2019-02-20 00:47:44
End at: 2019-02-20 00:48:14
Local clock offset: 6.828 ms
Remote clock offset: -1.991 ms

Below is generated by plot.py at 2019-02-20 03:33:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 53.10 Mbit/s
95th percentile per-packet one-way delay: 129.906 ms
Loss rate: 7.38%
-- Flow 1:
Average throughput: 34.42 Mbit/s
95th percentile per-packet one-way delay: 118.840 ms
Loss rate: 6.28%
-- Flow 2:
Average throughput: 13.80 Mbit/s
95th percentile per-packet one-way delay: 133.842 ms
Loss rate: 5.56%
-- Flow 3:
Average throughput: 30.57 Mbit/s
95th percentile per-packet one-way delay: 134.669 ms
Loss rate: 12.56%

Run 1: Report of Indigo — Data Link

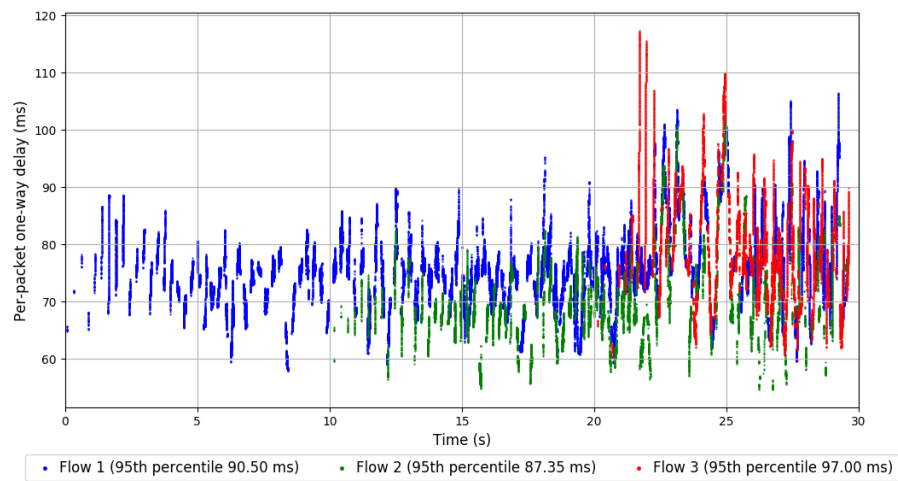
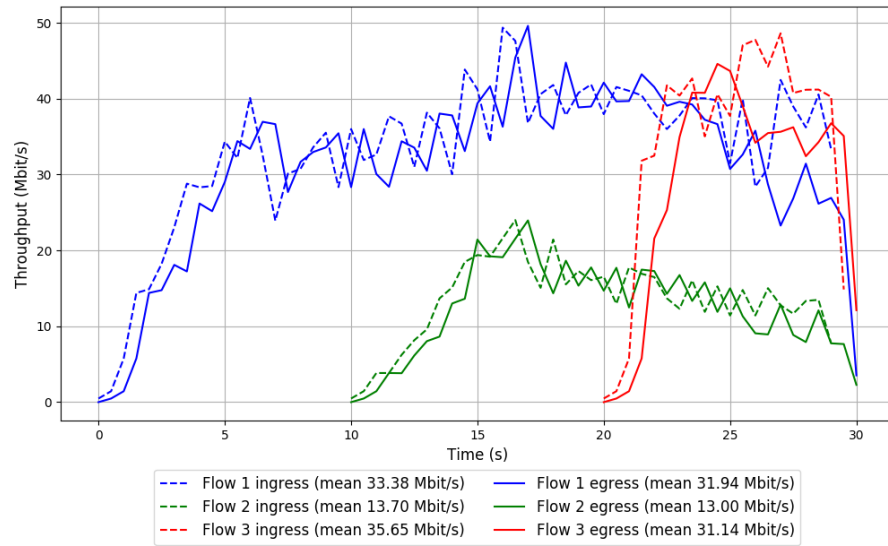


Run 2: Statistics of Indigo

Start at: 2019-02-20 01:27:45
End at: 2019-02-20 01:28:15
Local clock offset: 4.197 ms
Remote clock offset: -3.896 ms

Below is generated by plot.py at 2019-02-20 03:33:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 50.36 Mbit/s
95th percentile per-packet one-way delay: 91.924 ms
Loss rate: 6.19%
-- Flow 1:
Average throughput: 31.94 Mbit/s
95th percentile per-packet one-way delay: 90.504 ms
Loss rate: 4.29%
-- Flow 2:
Average throughput: 13.00 Mbit/s
95th percentile per-packet one-way delay: 87.354 ms
Loss rate: 4.98%
-- Flow 3:
Average throughput: 31.14 Mbit/s
95th percentile per-packet one-way delay: 97.004 ms
Loss rate: 12.65%

Run 2: Report of Indigo — Data Link

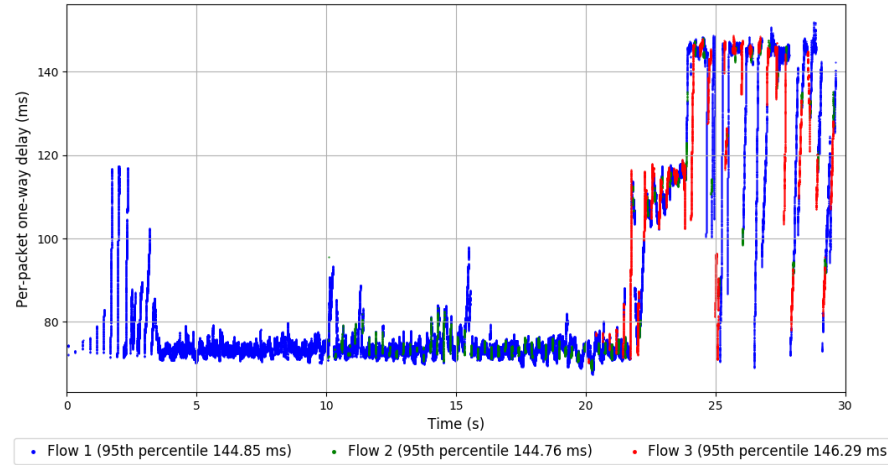
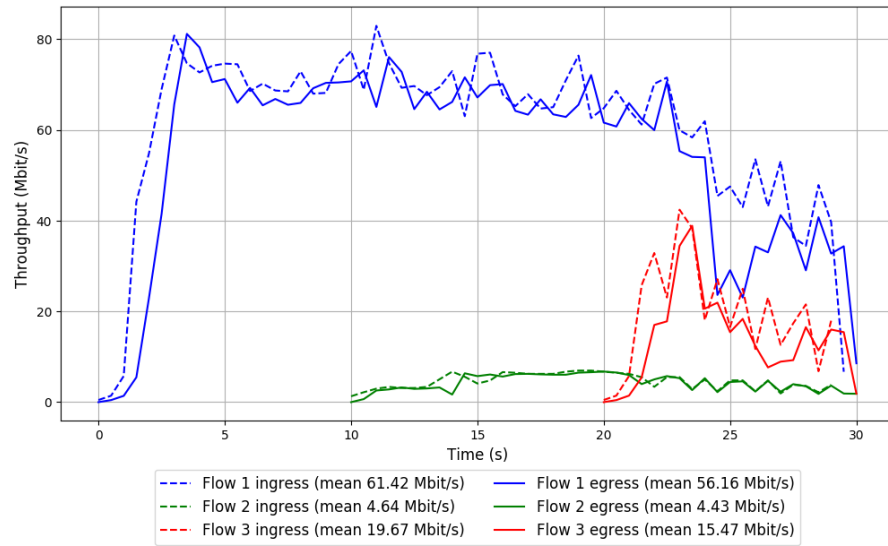


Run 3: Statistics of Indigo

Start at: 2019-02-20 02:06:13
End at: 2019-02-20 02:06:43
Local clock offset: 2.311 ms
Remote clock offset: -17.417 ms

Below is generated by plot.py at 2019-02-20 03:33:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 64.01 Mbit/s
95th percentile per-packet one-way delay: 145.211 ms
Loss rate: 9.47%
-- Flow 1:
Average throughput: 56.16 Mbit/s
95th percentile per-packet one-way delay: 144.849 ms
Loss rate: 8.57%
-- Flow 2:
Average throughput: 4.43 Mbit/s
95th percentile per-packet one-way delay: 144.756 ms
Loss rate: 4.28%
-- Flow 3:
Average throughput: 15.47 Mbit/s
95th percentile per-packet one-way delay: 146.288 ms
Loss rate: 20.85%

Run 3: Report of Indigo — Data Link

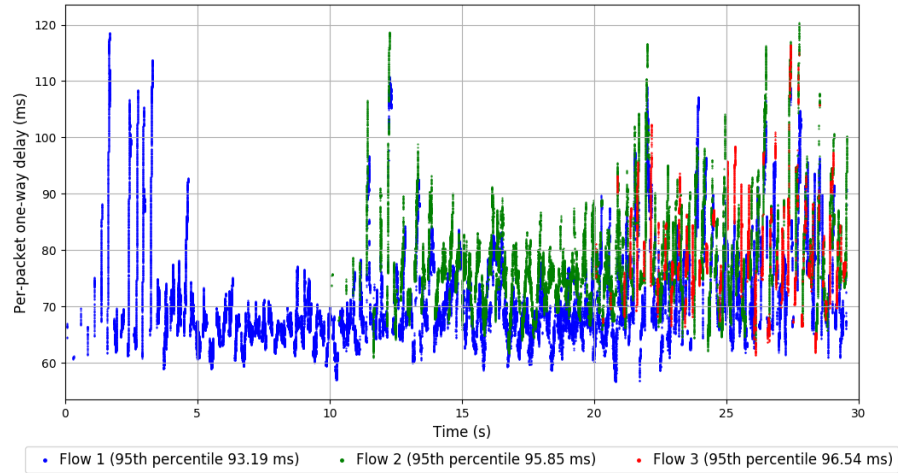
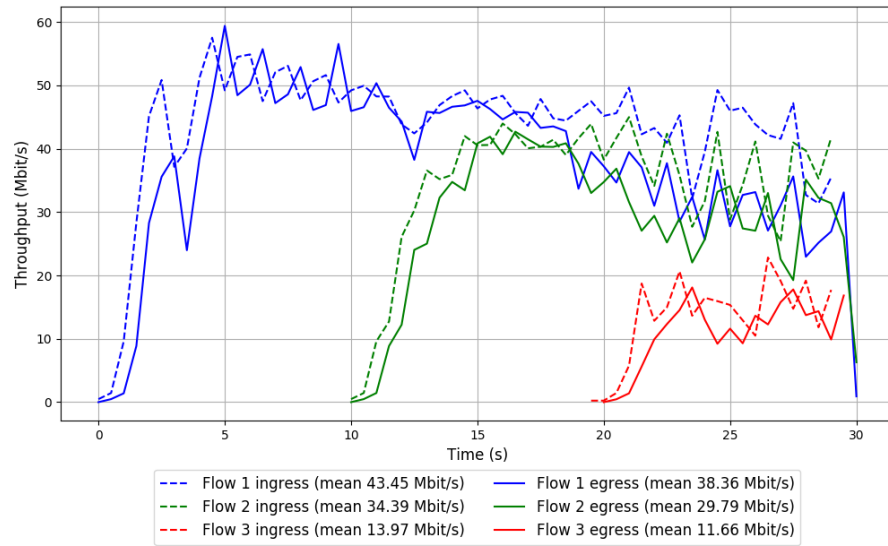


Run 4: Statistics of Indigo

Start at: 2019-02-20 02:46:19
End at: 2019-02-20 02:46:49
Local clock offset: 6.361 ms
Remote clock offset: -13.351 ms

Below is generated by plot.py at 2019-02-20 03:34:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 61.74 Mbit/s
95th percentile per-packet one-way delay: 94.430 ms
Loss rate: 12.60%
-- Flow 1:
Average throughput: 38.36 Mbit/s
95th percentile per-packet one-way delay: 93.190 ms
Loss rate: 11.73%
-- Flow 2:
Average throughput: 29.79 Mbit/s
95th percentile per-packet one-way delay: 95.853 ms
Loss rate: 13.36%
-- Flow 3:
Average throughput: 11.66 Mbit/s
95th percentile per-packet one-way delay: 96.538 ms
Loss rate: 17.11%

Run 4: Report of Indigo — Data Link

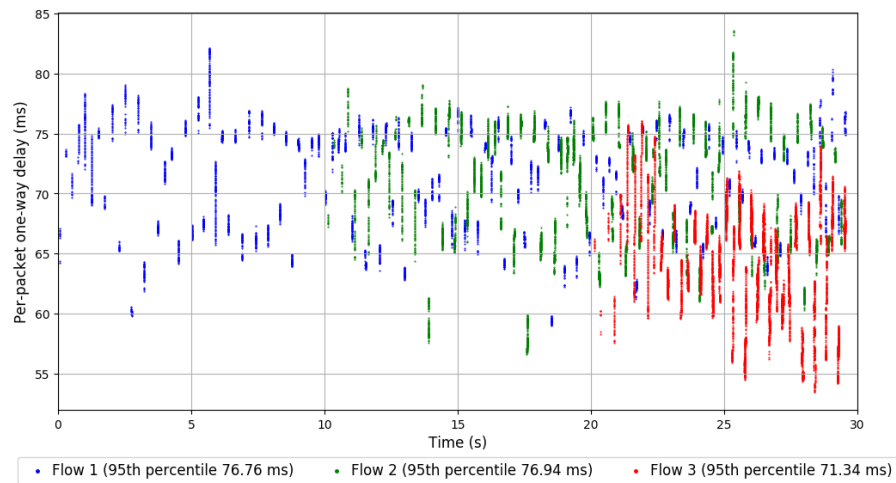
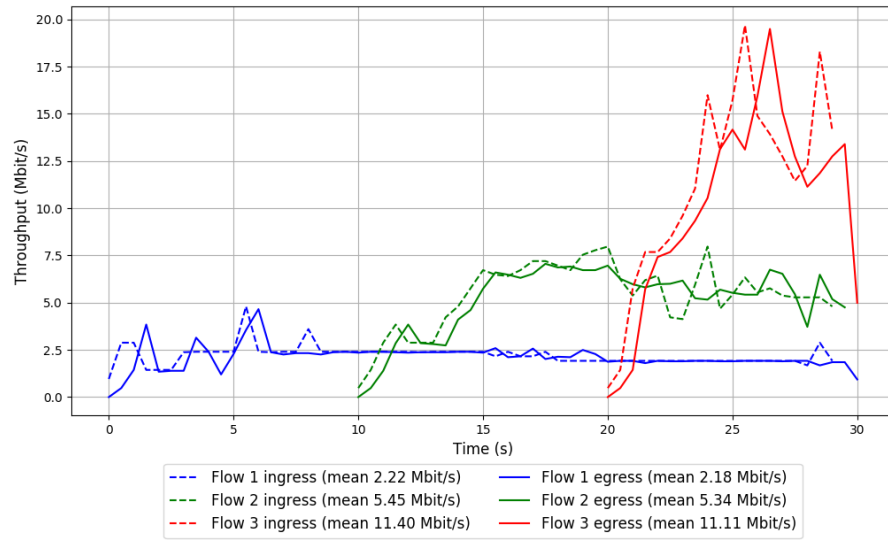


Run 5: Statistics of Indigo

Start at: 2019-02-20 03:23:47
End at: 2019-02-20 03:24:17
Local clock offset: 3.564 ms
Remote clock offset: -15.056 ms

Below is generated by plot.py at 2019-02-20 03:34:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 9.22 Mbit/s
95th percentile per-packet one-way delay: 76.428 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 76.764 ms
Loss rate: 1.52%
-- Flow 2:
Average throughput: 5.34 Mbit/s
95th percentile per-packet one-way delay: 76.939 ms
Loss rate: 1.89%
-- Flow 3:
Average throughput: 11.11 Mbit/s
95th percentile per-packet one-way delay: 71.338 ms
Loss rate: 2.51%

Run 5: Report of Indigo — Data Link

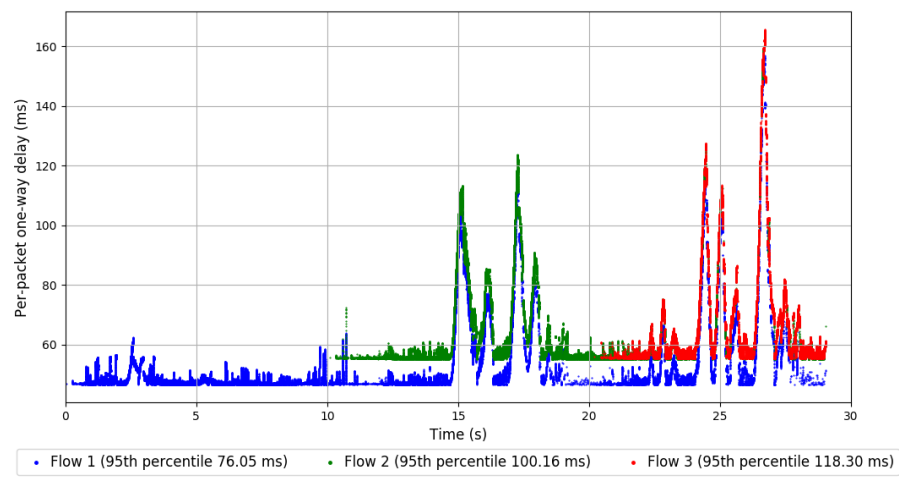
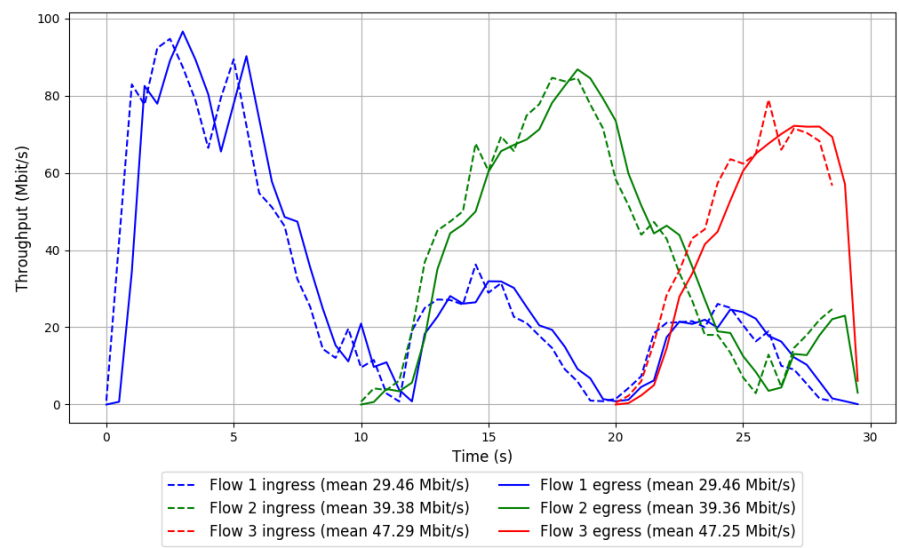


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-02-20 00:22:52
End at: 2019-02-20 00:23:22
Local clock offset: -1.269 ms
Remote clock offset: -0.785 ms

Below is generated by plot.py at 2019-02-20 03:34:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 69.55 Mbit/s
95th percentile per-packet one-way delay: 98.214 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 29.46 Mbit/s
95th percentile per-packet one-way delay: 76.049 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.36 Mbit/s
95th percentile per-packet one-way delay: 100.164 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 47.25 Mbit/s
95th percentile per-packet one-way delay: 118.298 ms
Loss rate: 0.13%

Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

Start at: 2019-02-20 00:58:23

End at: 2019-02-20 00:58:53

Local clock offset: 8.447 ms

Remote clock offset: 1.273 ms

Below is generated by plot.py at 2019-02-20 03:34:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.12 Mbit/s

95th percentile per-packet one-way delay: 123.950 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 41.67 Mbit/s

95th percentile per-packet one-way delay: 110.380 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 48.24 Mbit/s

95th percentile per-packet one-way delay: 131.008 ms

Loss rate: 0.11%

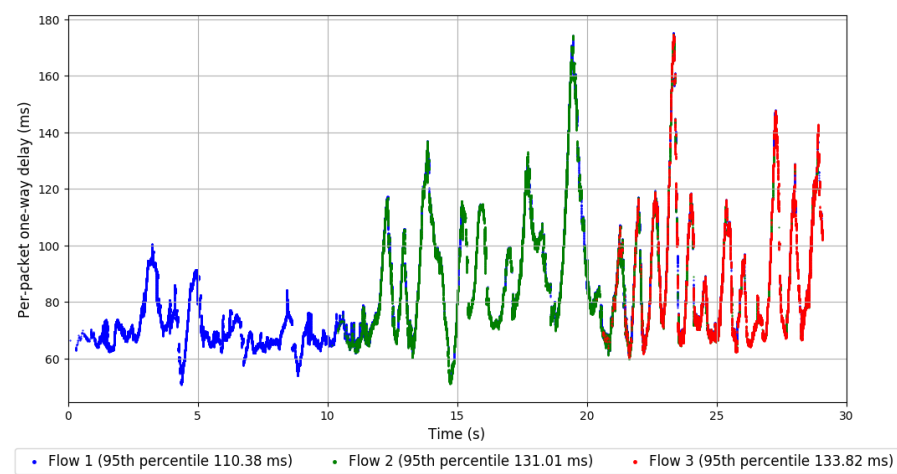
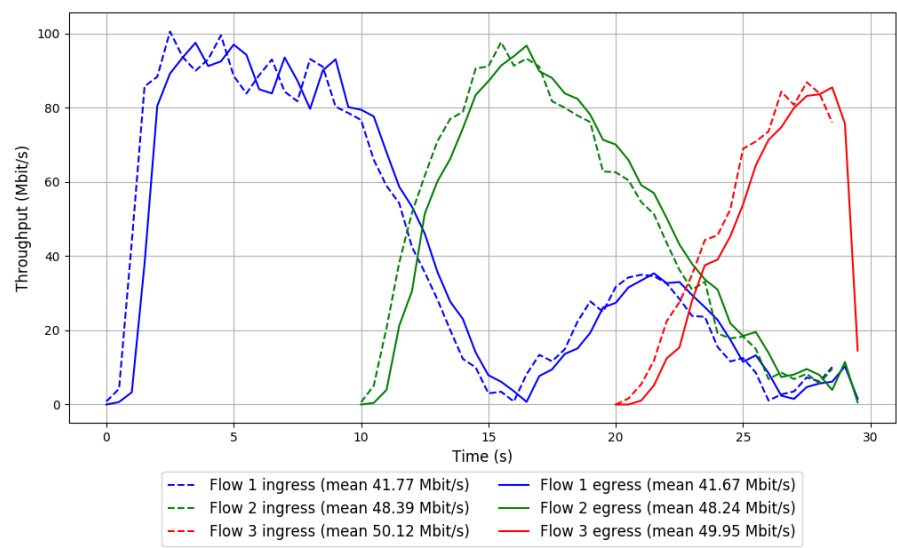
-- Flow 3:

Average throughput: 49.95 Mbit/s

95th percentile per-packet one-way delay: 133.819 ms

Loss rate: 0.09%

Run 2: Report of Indigo-MusesC3 — Data Link

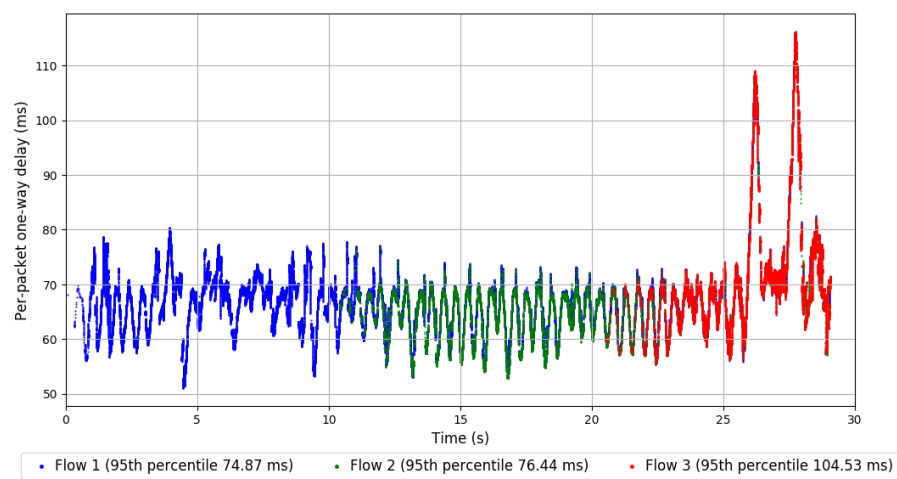
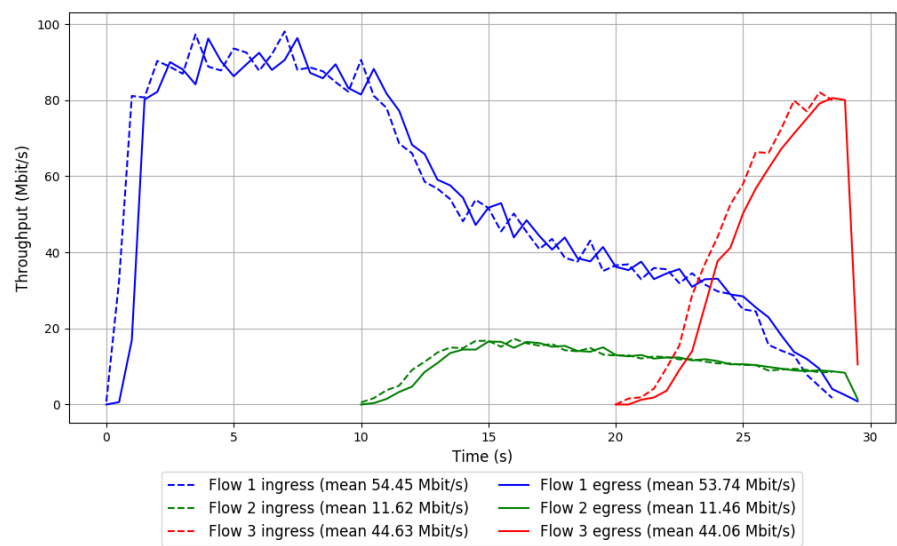


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-02-20 01:38:42
End at: 2019-02-20 01:39:12
Local clock offset: -0.711 ms
Remote clock offset: -8.581 ms

Below is generated by plot.py at 2019-02-20 03:34:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 74.42 Mbit/s
95th percentile per-packet one-way delay: 77.610 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 53.74 Mbit/s
95th percentile per-packet one-way delay: 74.868 ms
Loss rate: 1.29%
-- Flow 2:
Average throughput: 11.46 Mbit/s
95th percentile per-packet one-way delay: 76.437 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 44.06 Mbit/s
95th percentile per-packet one-way delay: 104.526 ms
Loss rate: 1.23%

Run 3: Report of Indigo-MusesC3 — Data Link

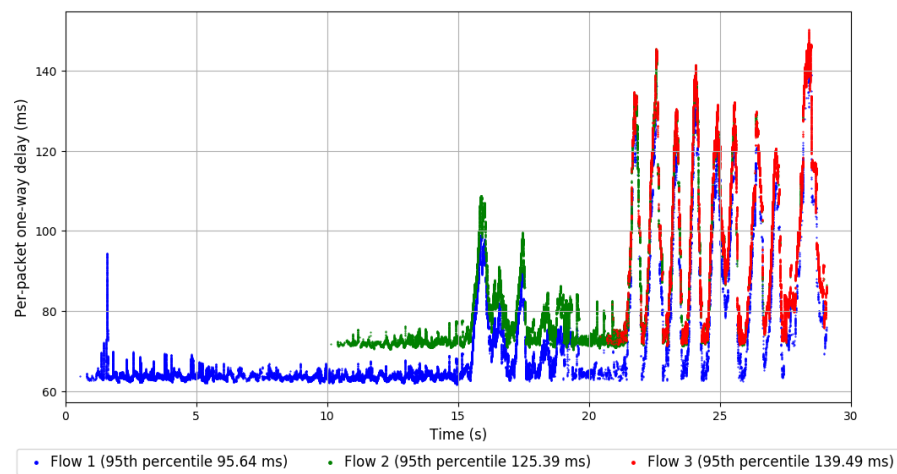
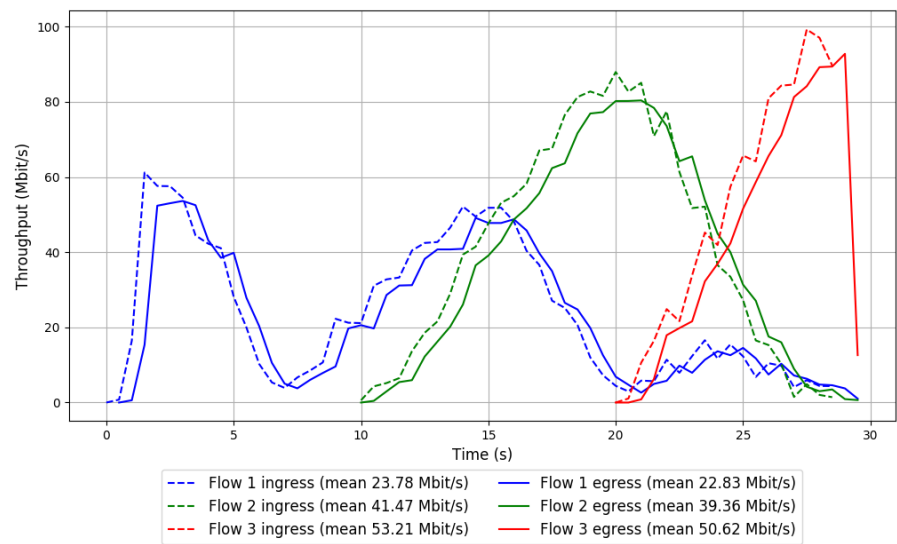


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-02-20 02:17:11
End at: 2019-02-20 02:17:41
Local clock offset: 7.824 ms
Remote clock offset: -14.811 ms

Below is generated by plot.py at 2019-02-20 03:34:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 64.30 Mbit/s
95th percentile per-packet one-way delay: 125.839 ms
Loss rate: 5.18%
-- Flow 1:
Average throughput: 22.83 Mbit/s
95th percentile per-packet one-way delay: 95.643 ms
Loss rate: 5.59%
-- Flow 2:
Average throughput: 39.36 Mbit/s
95th percentile per-packet one-way delay: 125.390 ms
Loss rate: 5.03%
-- Flow 3:
Average throughput: 50.62 Mbit/s
95th percentile per-packet one-way delay: 139.490 ms
Loss rate: 4.83%

Run 4: Report of Indigo-MusesC3 — Data Link

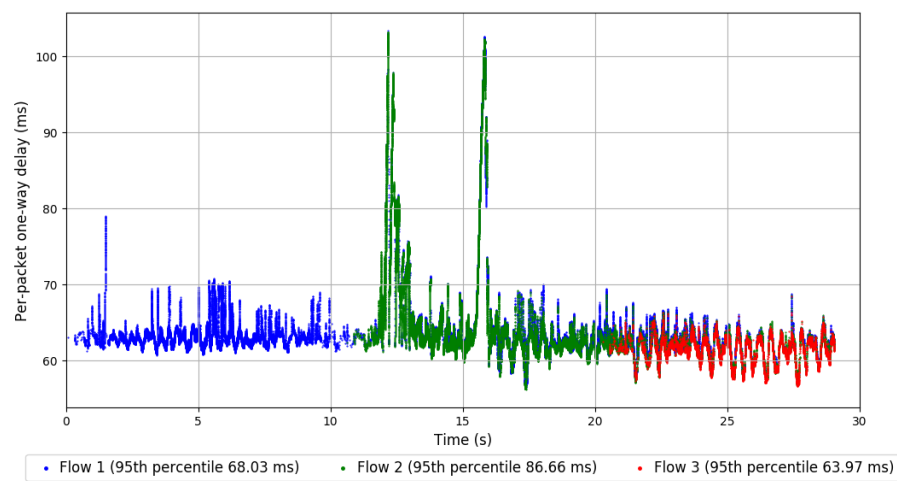
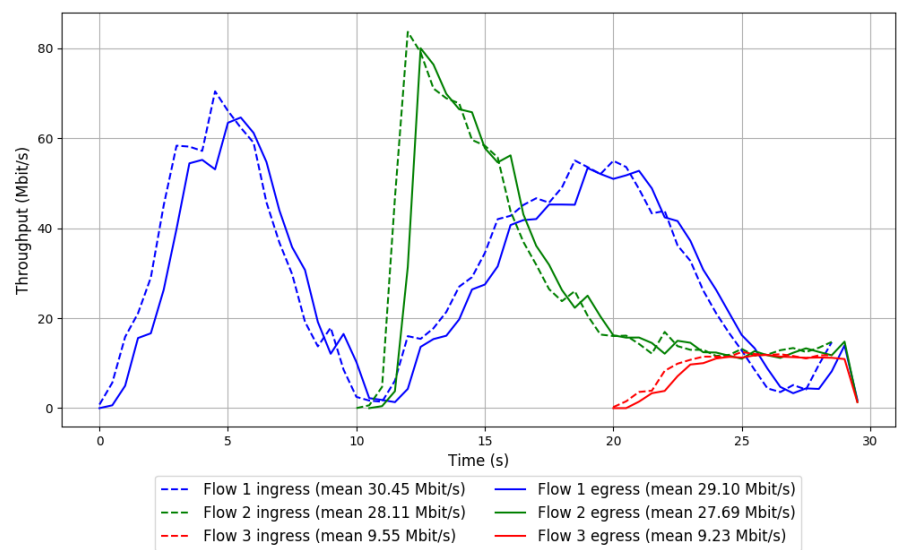


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-02-20 02:57:20
End at: 2019-02-20 02:57:50
Local clock offset: 6.099 ms
Remote clock offset: -17.375 ms

Below is generated by plot.py at 2019-02-20 03:34:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 49.47 Mbit/s
95th percentile per-packet one-way delay: 74.890 ms
Loss rate: 4.26%
-- Flow 1:
Average throughput: 29.10 Mbit/s
95th percentile per-packet one-way delay: 68.027 ms
Loss rate: 4.43%
-- Flow 2:
Average throughput: 27.69 Mbit/s
95th percentile per-packet one-way delay: 86.659 ms
Loss rate: 4.12%
-- Flow 3:
Average throughput: 9.23 Mbit/s
95th percentile per-packet one-way delay: 63.972 ms
Loss rate: 3.39%

Run 5: Report of Indigo-MusesC3 — Data Link

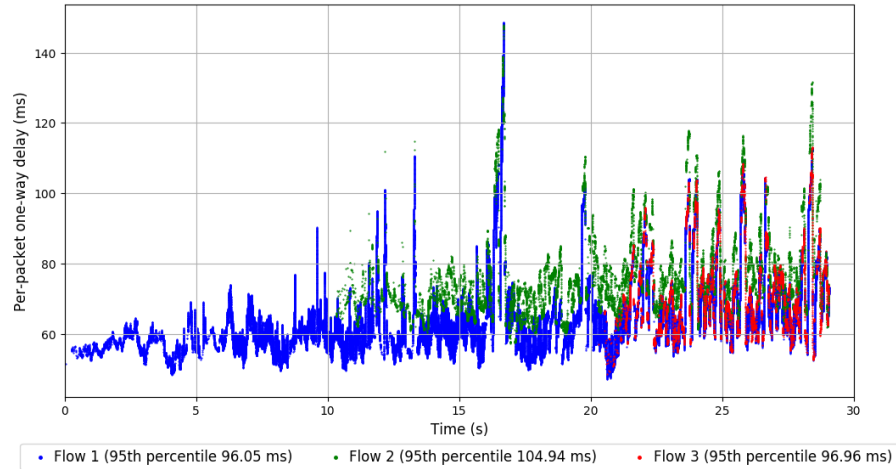
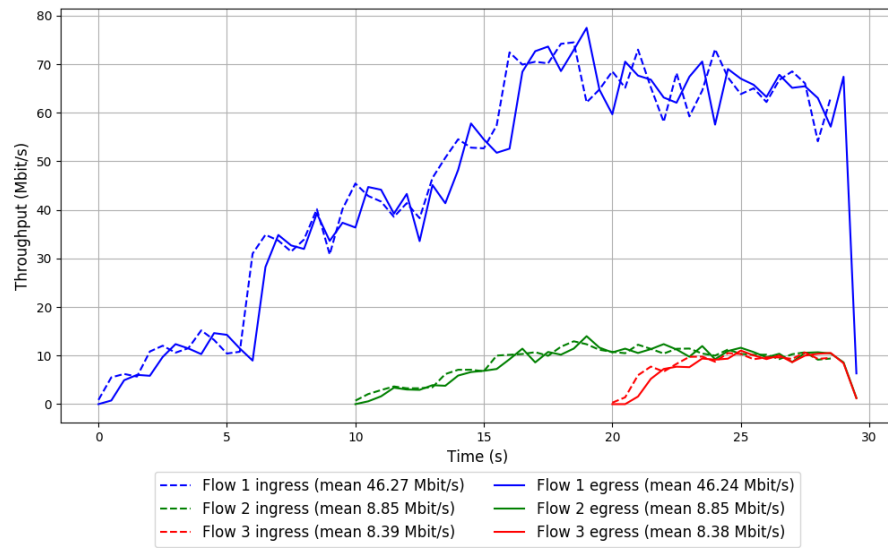


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-02-20 00:45:48
End at: 2019-02-20 00:46:18
Local clock offset: 6.418 ms
Remote clock offset: -1.807 ms

Below is generated by plot.py at 2019-02-20 03:34:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 54.54 Mbit/s
95th percentile per-packet one-way delay: 97.157 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.24 Mbit/s
95th percentile per-packet one-way delay: 96.052 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.85 Mbit/s
95th percentile per-packet one-way delay: 104.935 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.38 Mbit/s
95th percentile per-packet one-way delay: 96.956 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesC5 — Data Link

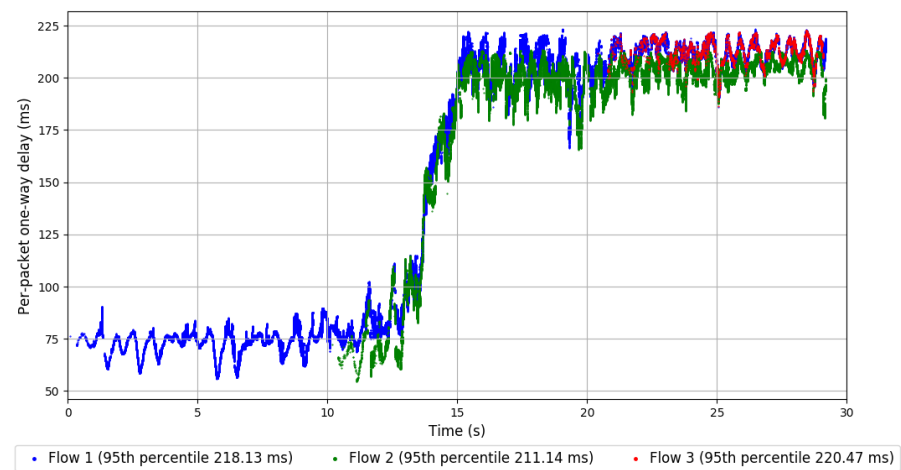
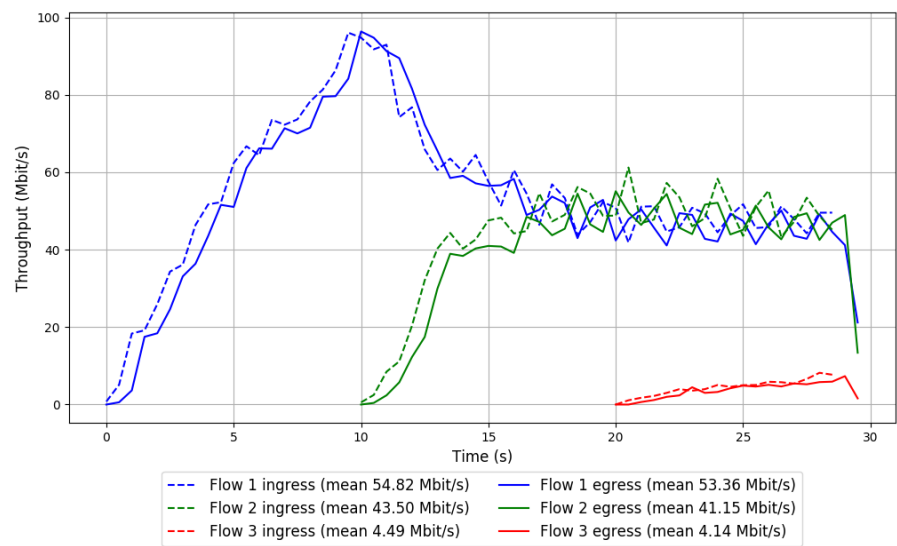


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-02-20 01:24:54
End at: 2019-02-20 01:25:24
Local clock offset: 4.234 ms
Remote clock offset: -2.349 ms

Below is generated by plot.py at 2019-02-20 03:34:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 81.47 Mbit/s
95th percentile per-packet one-way delay: 217.142 ms
Loss rate: 3.21%
-- Flow 1:
Average throughput: 53.36 Mbit/s
95th percentile per-packet one-way delay: 218.129 ms
Loss rate: 2.25%
-- Flow 2:
Average throughput: 41.15 Mbit/s
95th percentile per-packet one-way delay: 211.139 ms
Loss rate: 4.78%
-- Flow 3:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 220.469 ms
Loss rate: 9.07%

Run 2: Report of Indigo-MusesC5 — Data Link

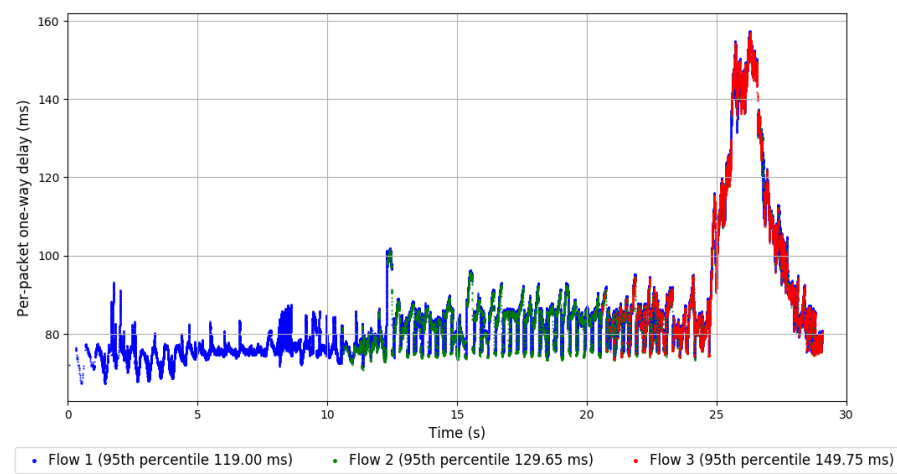
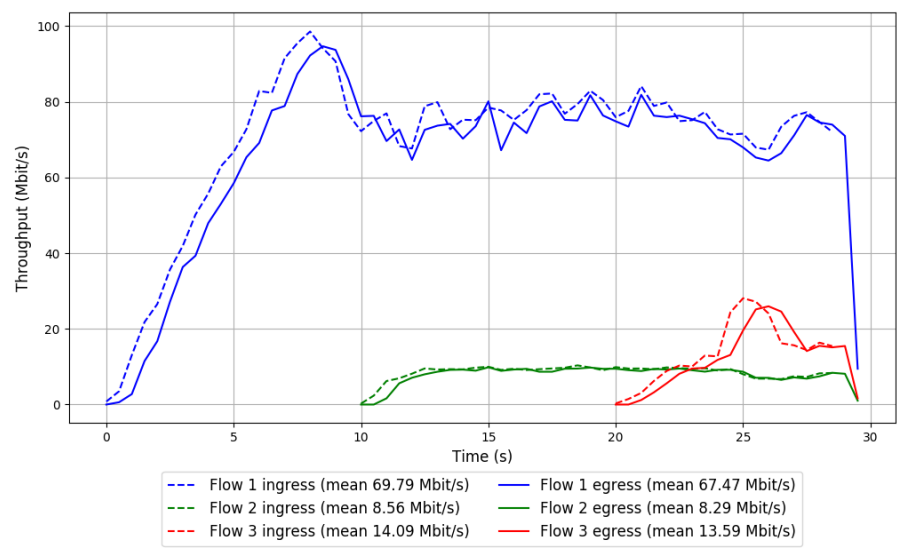


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-02-20 02:03:10
End at: 2019-02-20 02:03:40
Local clock offset: -0.718 ms
Remote clock offset: -15.43 ms

Below is generated by plot.py at 2019-02-20 03:35:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 76.96 Mbit/s
95th percentile per-packet one-way delay: 129.766 ms
Loss rate: 3.33%
-- Flow 1:
Average throughput: 67.47 Mbit/s
95th percentile per-packet one-way delay: 118.996 ms
Loss rate: 3.32%
-- Flow 2:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 129.648 ms
Loss rate: 3.17%
-- Flow 3:
Average throughput: 13.59 Mbit/s
95th percentile per-packet one-way delay: 149.747 ms
Loss rate: 3.67%

Run 3: Report of Indigo-MusesC5 — Data Link

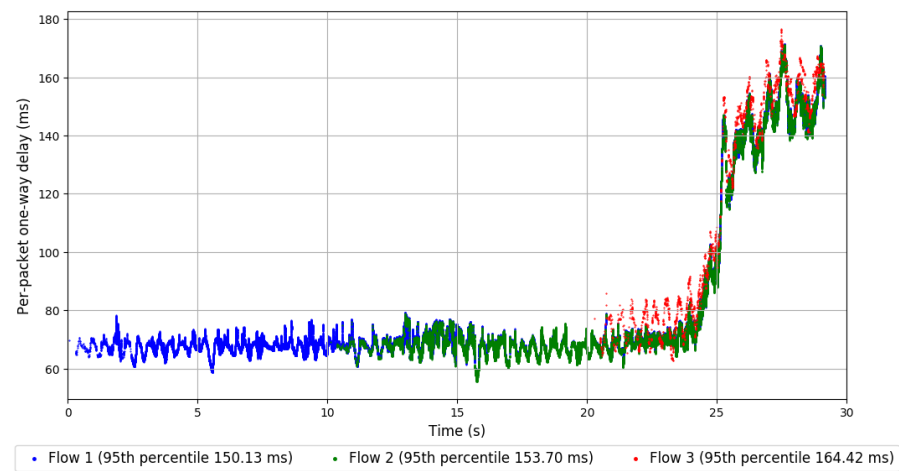
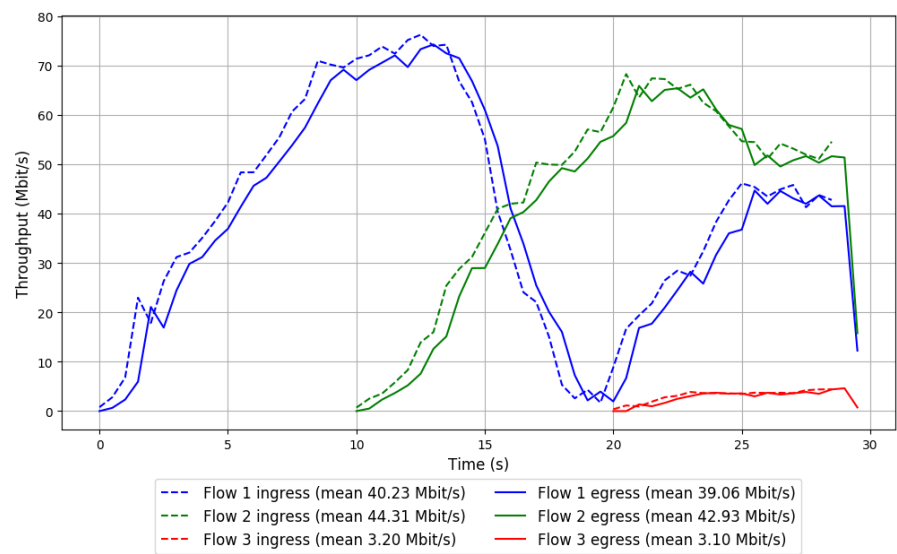


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-02-20 02:43:55
End at: 2019-02-20 02:44:25
Local clock offset: 6.463 ms
Remote clock offset: -10.246 ms

Below is generated by plot.py at 2019-02-20 03:35:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 68.10 Mbit/s
95th percentile per-packet one-way delay: 152.347 ms
Loss rate: 2.62%
-- Flow 1:
Average throughput: 39.06 Mbit/s
95th percentile per-packet one-way delay: 150.135 ms
Loss rate: 2.61%
-- Flow 2:
Average throughput: 42.93 Mbit/s
95th percentile per-packet one-way delay: 153.701 ms
Loss rate: 2.64%
-- Flow 3:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 164.416 ms
Loss rate: 2.70%

Run 4: Report of Indigo-MusesC5 — Data Link

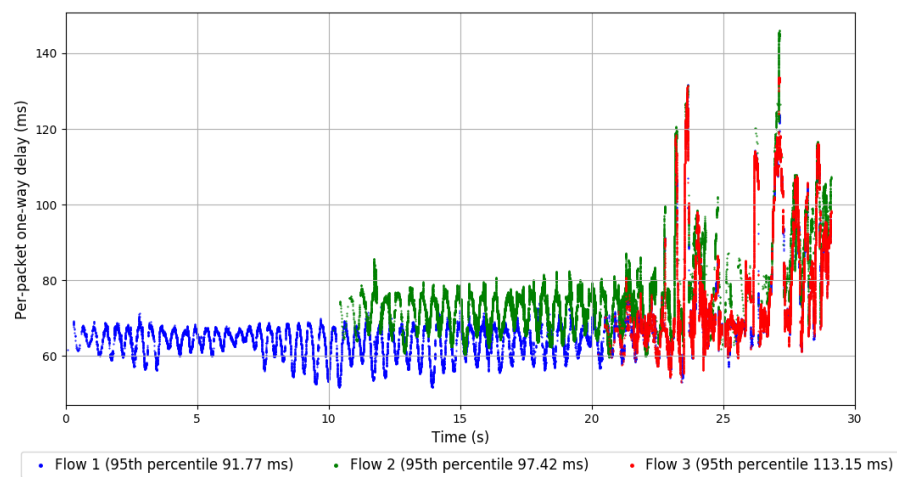
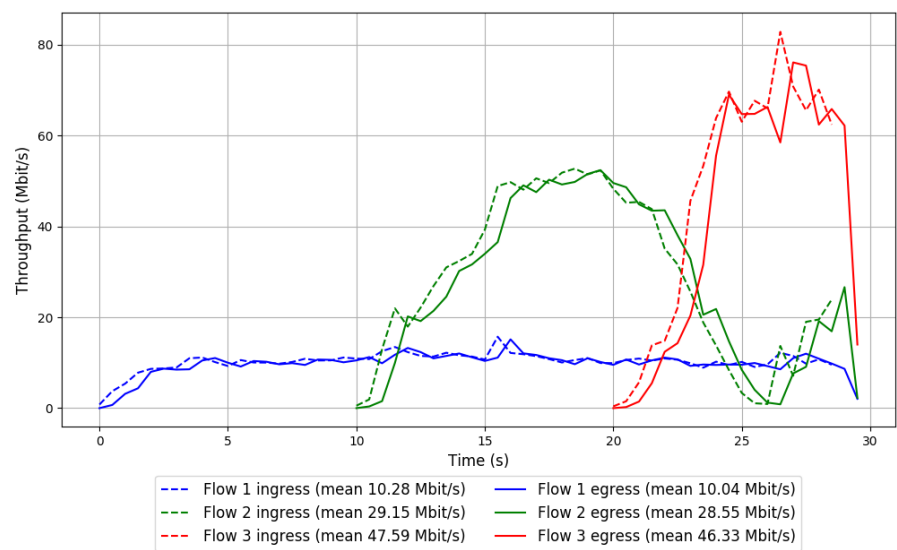


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-02-20 03:22:17
End at: 2019-02-20 03:22:47
Local clock offset: 3.685 ms
Remote clock offset: -13.62 ms

Below is generated by plot.py at 2019-02-20 03:35:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 42.76 Mbit/s
95th percentile per-packet one-way delay: 108.384 ms
Loss rate: 2.08%
-- Flow 1:
Average throughput: 10.04 Mbit/s
95th percentile per-packet one-way delay: 91.765 ms
Loss rate: 2.21%
-- Flow 2:
Average throughput: 28.55 Mbit/s
95th percentile per-packet one-way delay: 97.422 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 46.33 Mbit/s
95th percentile per-packet one-way delay: 113.148 ms
Loss rate: 2.22%

Run 5: Report of Indigo-MusesC5 — Data Link

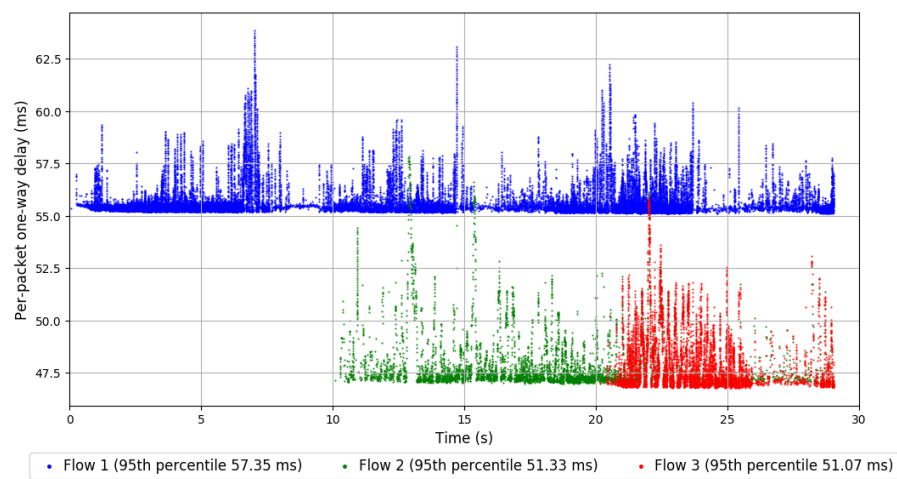
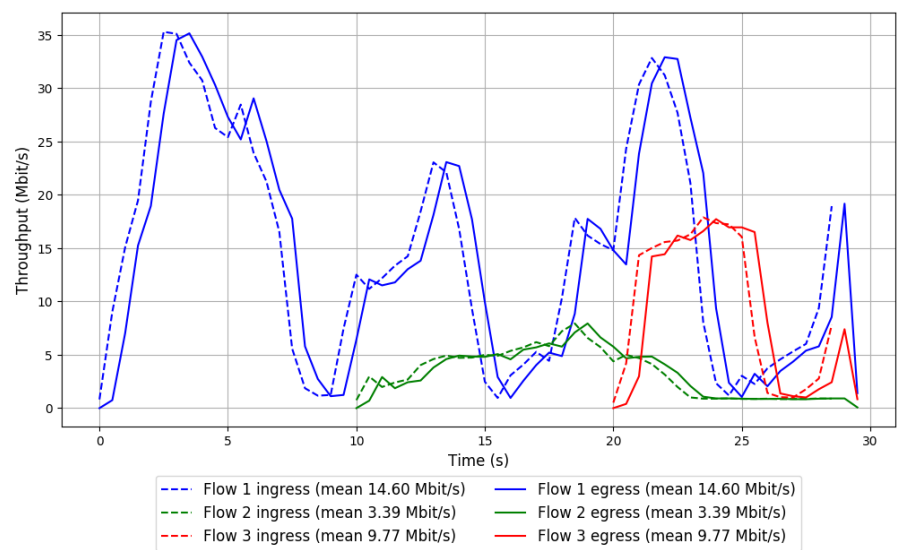


Run 1: Statistics of Indigo-MusesD

Start at: 2019-02-20 00:25:49
End at: 2019-02-20 00:26:19
Local clock offset: -1.419 ms
Remote clock offset: -0.151 ms

Below is generated by plot.py at 2019-02-20 03:35:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.80 Mbit/s
95th percentile per-packet one-way delay: 57.019 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 14.60 Mbit/s
95th percentile per-packet one-way delay: 57.352 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 3.39 Mbit/s
95th percentile per-packet one-way delay: 51.328 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.77 Mbit/s
95th percentile per-packet one-way delay: 51.066 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesD — Data Link

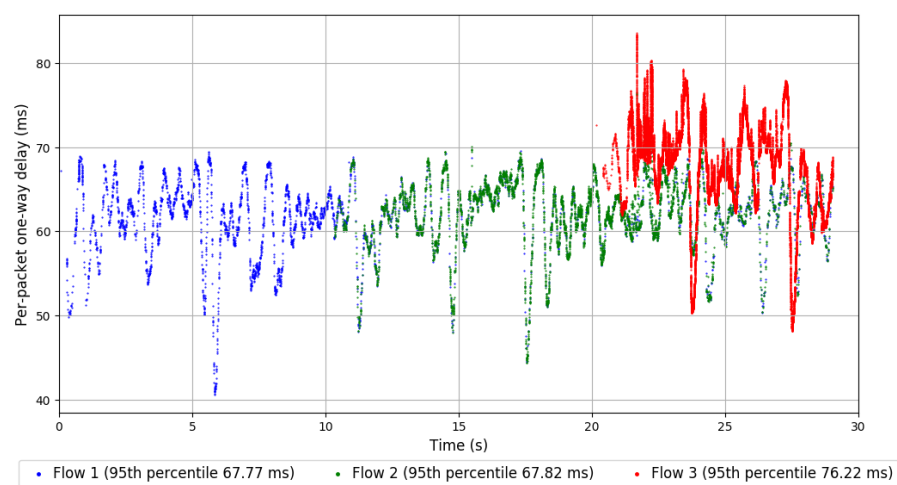
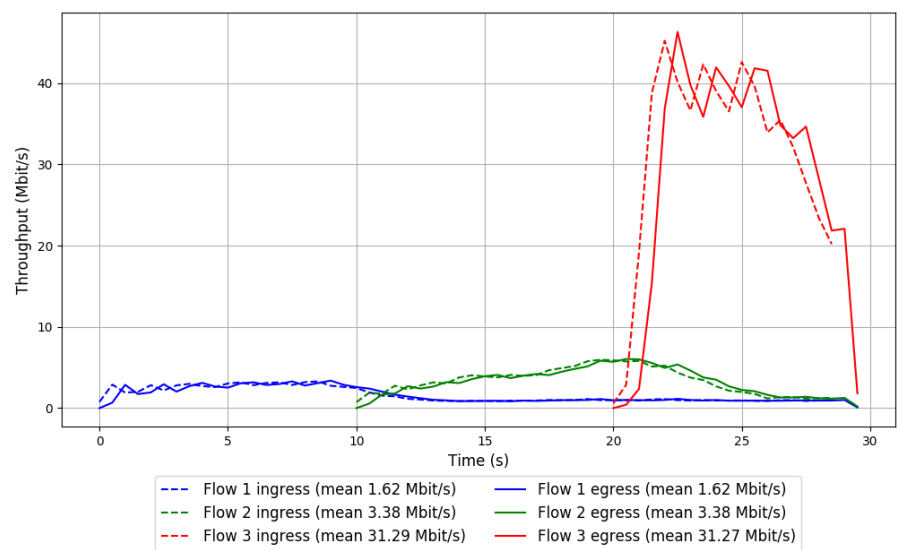


Run 2: Statistics of Indigo-MusesD

Start at: 2019-02-20 01:02:10
End at: 2019-02-20 01:02:40
Local clock offset: 7.934 ms
Remote clock offset: -4.137 ms

Below is generated by plot.py at 2019-02-20 03:35:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 13.41 Mbit/s
95th percentile per-packet one-way delay: 75.439 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 67.768 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 3.38 Mbit/s
95th percentile per-packet one-way delay: 67.823 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 31.27 Mbit/s
95th percentile per-packet one-way delay: 76.220 ms
Loss rate: 0.13%

Run 2: Report of Indigo-MusesD — Data Link

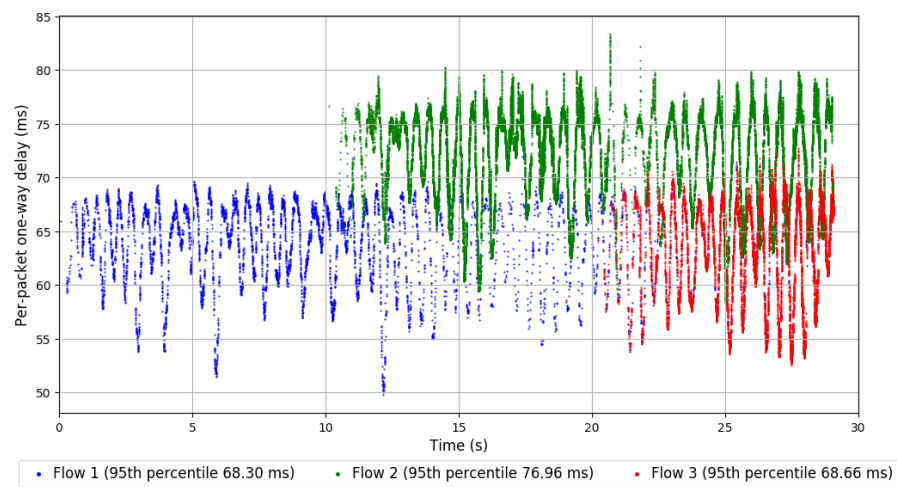
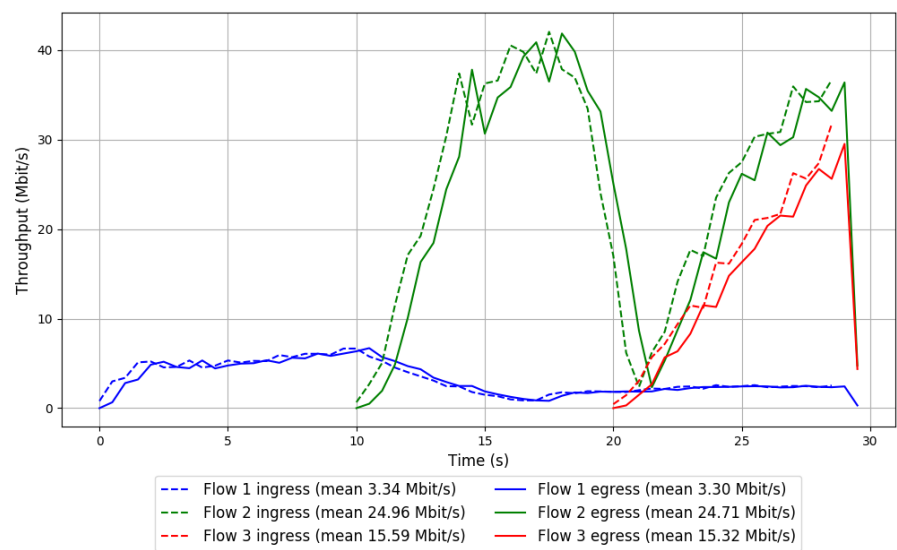


Run 3: Statistics of Indigo-MusesD

Start at: 2019-02-20 01:42:37
End at: 2019-02-20 01:43:07
Local clock offset: -1.861 ms
Remote clock offset: -10.838 ms

Below is generated by plot.py at 2019-02-20 03:35:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 24.09 Mbit/s
95th percentile per-packet one-way delay: 76.570 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 3.30 Mbit/s
95th percentile per-packet one-way delay: 68.298 ms
Loss rate: 1.42%
-- Flow 2:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 76.960 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 15.32 Mbit/s
95th percentile per-packet one-way delay: 68.662 ms
Loss rate: 1.73%

Run 3: Report of Indigo-MusesD — Data Link

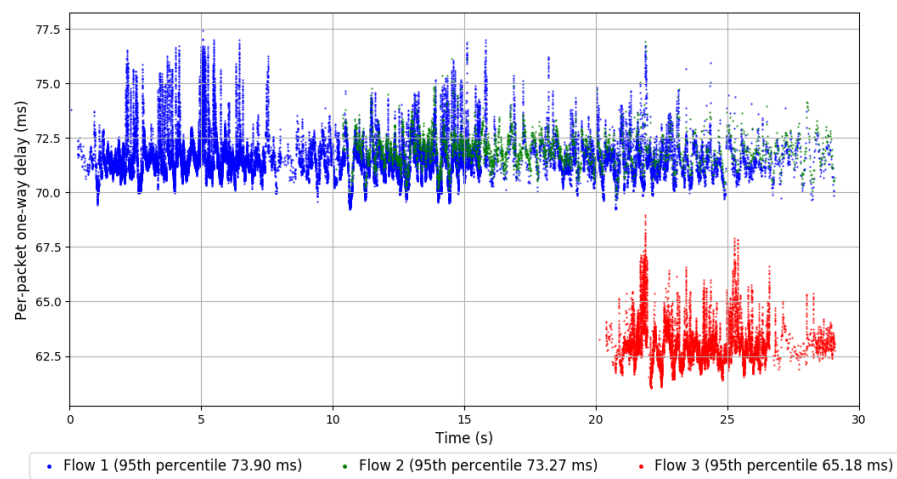
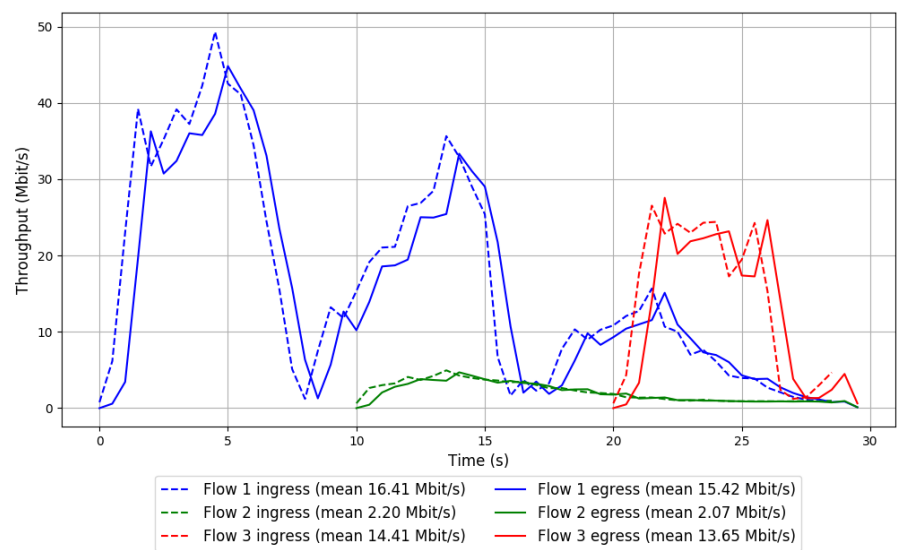


Run 4: Statistics of Indigo-MusesD

Start at: 2019-02-20 02:21:05
End at: 2019-02-20 02:21:35
Local clock offset: 8.846 ms
Remote clock offset: -15.438 ms

Below is generated by plot.py at 2019-02-20 03:35:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 20.96 Mbit/s
95th percentile per-packet one-way delay: 73.554 ms
Loss rate: 5.95%
-- Flow 1:
Average throughput: 15.42 Mbit/s
95th percentile per-packet one-way delay: 73.900 ms
Loss rate: 6.13%
-- Flow 2:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 73.268 ms
Loss rate: 5.79%
-- Flow 3:
Average throughput: 13.65 Mbit/s
95th percentile per-packet one-way delay: 65.179 ms
Loss rate: 5.31%

Run 4: Report of Indigo-MusesD — Data Link



Run 5: Statistics of Indigo-MusesD

Start at: 2019-02-20 03:00:51

End at: 2019-02-20 03:01:21

Local clock offset: 5.69 ms

Remote clock offset: -15.712 ms

Below is generated by plot.py at 2019-02-20 03:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 47.70 Mbit/s

95th percentile per-packet one-way delay: 103.161 ms

Loss rate: 2.56%

-- Flow 1:

Average throughput: 31.10 Mbit/s

95th percentile per-packet one-way delay: 95.906 ms

Loss rate: 2.53%

-- Flow 2:

Average throughput: 23.72 Mbit/s

95th percentile per-packet one-way delay: 123.526 ms

Loss rate: 2.56%

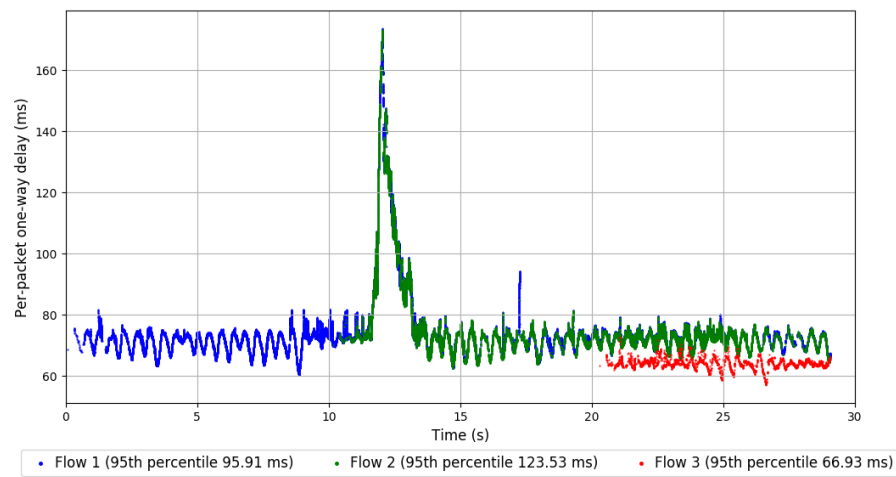
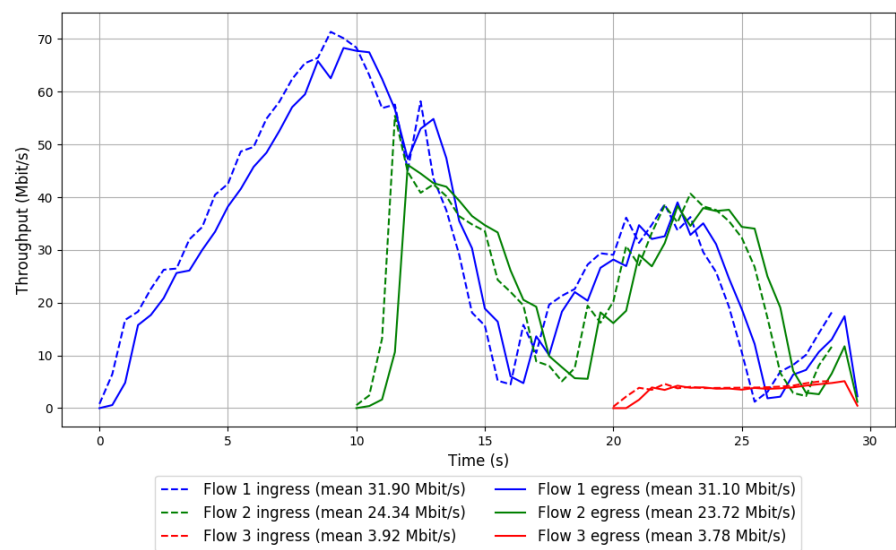
-- Flow 3:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 66.934 ms

Loss rate: 3.54%

Run 5: Report of Indigo-MusesD — Data Link

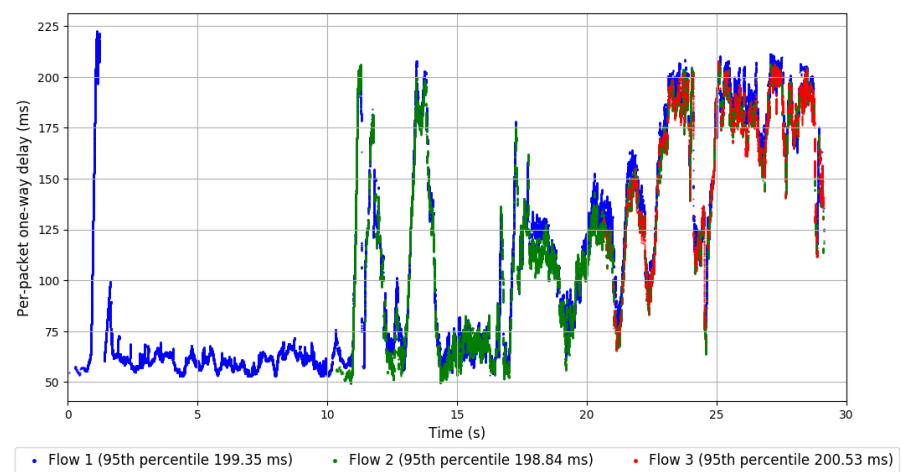
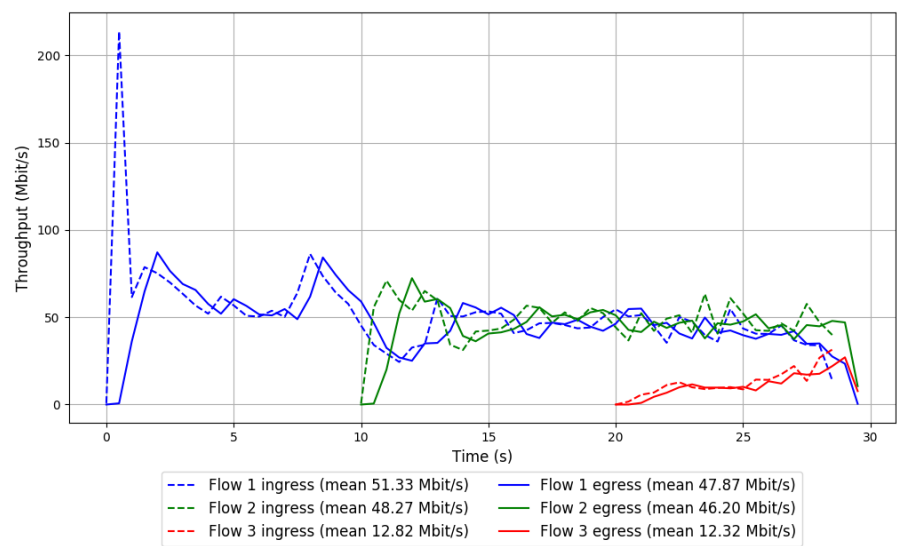


Run 1: Statistics of Indigo-MusesT

Start at: 2019-02-20 00:39:27
End at: 2019-02-20 00:39:57
Local clock offset: 4.576 ms
Remote clock offset: -0.455 ms

Below is generated by plot.py at 2019-02-20 03:35:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 81.77 Mbit/s
95th percentile per-packet one-way delay: 199.248 ms
Loss rate: 5.47%
-- Flow 1:
Average throughput: 47.87 Mbit/s
95th percentile per-packet one-way delay: 199.353 ms
Loss rate: 6.51%
-- Flow 2:
Average throughput: 46.20 Mbit/s
95th percentile per-packet one-way delay: 198.837 ms
Loss rate: 3.94%
-- Flow 3:
Average throughput: 12.32 Mbit/s
95th percentile per-packet one-way delay: 200.529 ms
Loss rate: 4.14%

Run 1: Report of Indigo-MusesT — Data Link

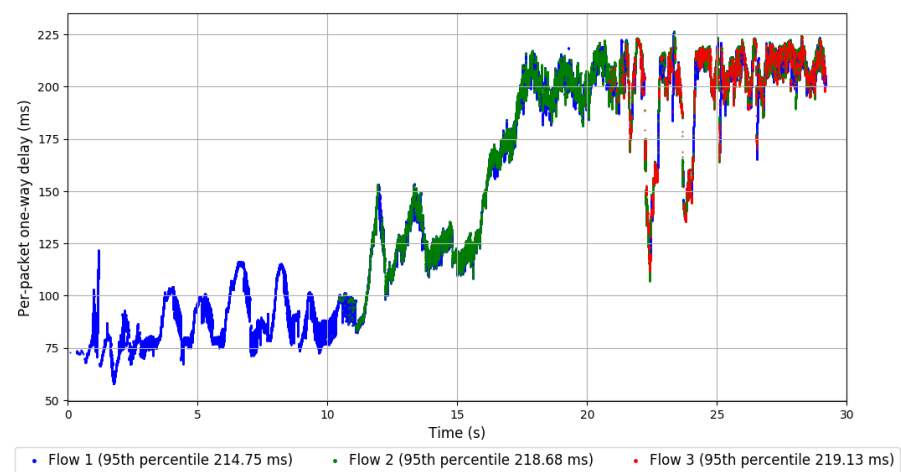
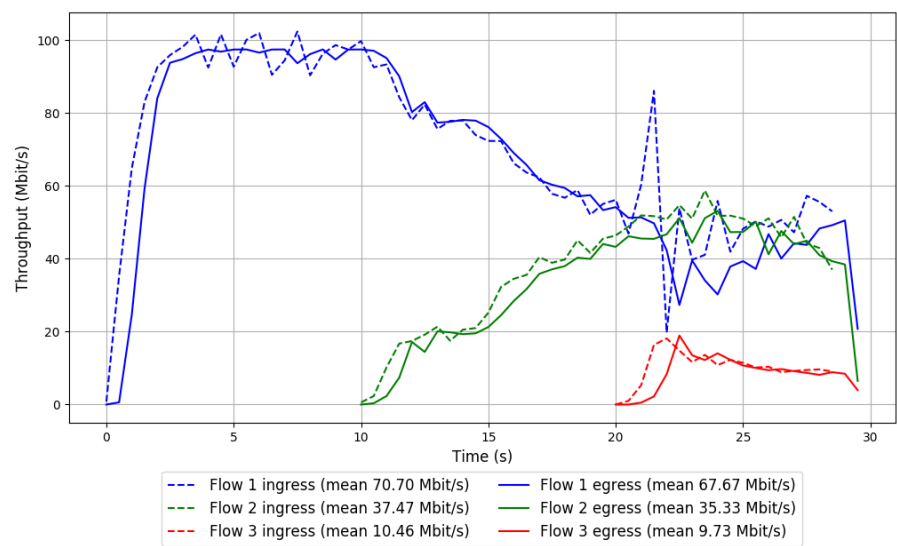


Run 2: Statistics of Indigo-MusesT

Start at: 2019-02-20 01:17:47
End at: 2019-02-20 01:18:17
Local clock offset: 4.597 ms
Remote clock offset: -1.799 ms

Below is generated by plot.py at 2019-02-20 03:36:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.54 Mbit/s
95th percentile per-packet one-way delay: 216.689 ms
Loss rate: 4.41%
-- Flow 1:
Average throughput: 67.67 Mbit/s
95th percentile per-packet one-way delay: 214.753 ms
Loss rate: 3.86%
-- Flow 2:
Average throughput: 35.33 Mbit/s
95th percentile per-packet one-way delay: 218.683 ms
Loss rate: 5.62%
-- Flow 3:
Average throughput: 9.73 Mbit/s
95th percentile per-packet one-way delay: 219.126 ms
Loss rate: 7.14%

Run 2: Report of Indigo-MusesT — Data Link

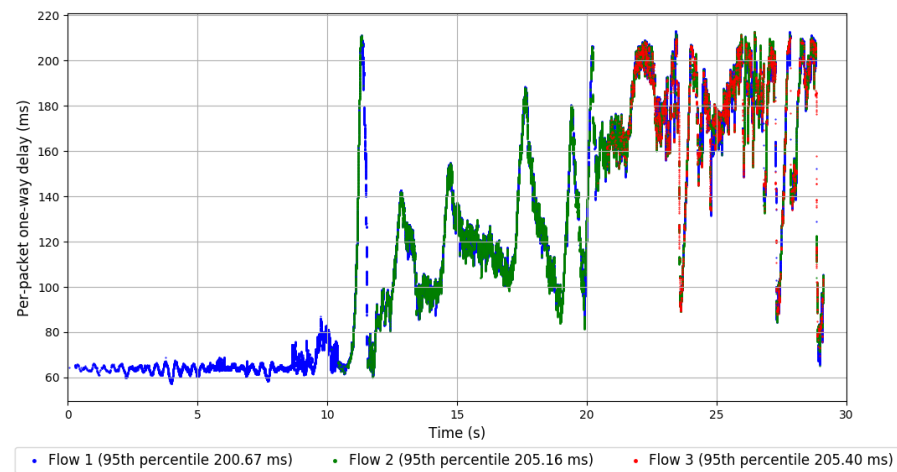
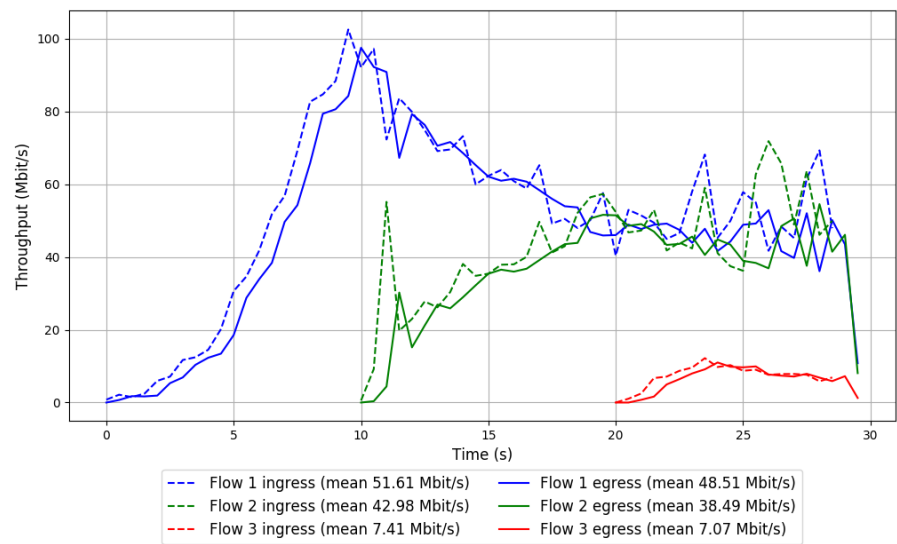


Run 3: Statistics of Indigo-MusesT

Start at: 2019-02-20 01:56:22
End at: 2019-02-20 01:56:52
Local clock offset: -4.361 ms
Remote clock offset: -16.658 ms

Below is generated by plot.py at 2019-02-20 03:36:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 75.73 Mbit/s
95th percentile per-packet one-way delay: 203.270 ms
Loss rate: 7.38%
-- Flow 1:
Average throughput: 48.51 Mbit/s
95th percentile per-packet one-way delay: 200.671 ms
Loss rate: 5.89%
-- Flow 2:
Average throughput: 38.49 Mbit/s
95th percentile per-packet one-way delay: 205.155 ms
Loss rate: 10.30%
-- Flow 3:
Average throughput: 7.07 Mbit/s
95th percentile per-packet one-way delay: 205.398 ms
Loss rate: 5.13%

Run 3: Report of Indigo-MusesT — Data Link

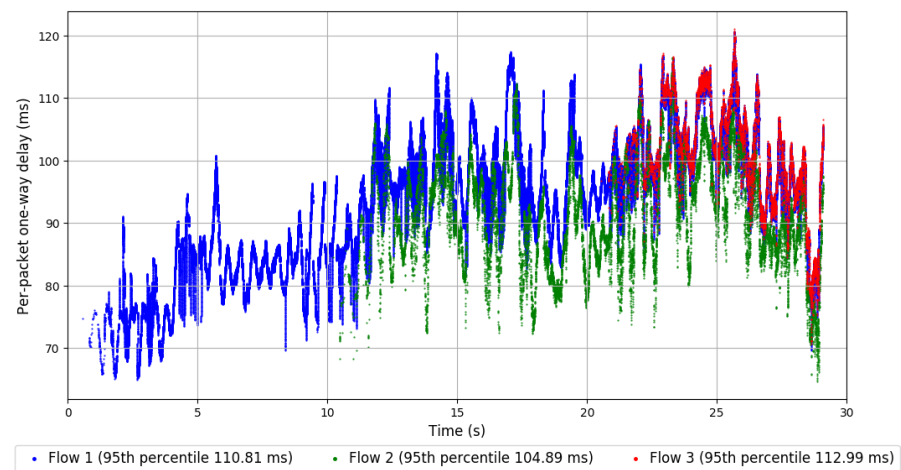
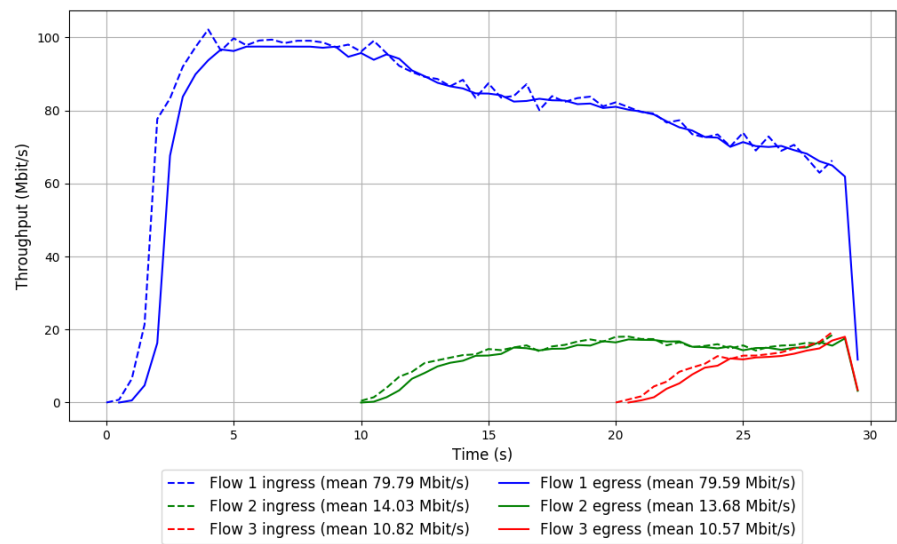


Run 4: Statistics of Indigo-MusesT

Start at: 2019-02-20 02:35:30
End at: 2019-02-20 02:36:00
Local clock offset: 8.135 ms
Remote clock offset: -9.743 ms

Below is generated by plot.py at 2019-02-20 03:36:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.81 Mbit/s
95th percentile per-packet one-way delay: 110.727 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 79.59 Mbit/s
95th percentile per-packet one-way delay: 110.809 ms
Loss rate: 1.89%
-- Flow 2:
Average throughput: 13.68 Mbit/s
95th percentile per-packet one-way delay: 104.888 ms
Loss rate: 2.51%
-- Flow 3:
Average throughput: 10.57 Mbit/s
95th percentile per-packet one-way delay: 112.994 ms
Loss rate: 2.19%

Run 4: Report of Indigo-MusesT — Data Link

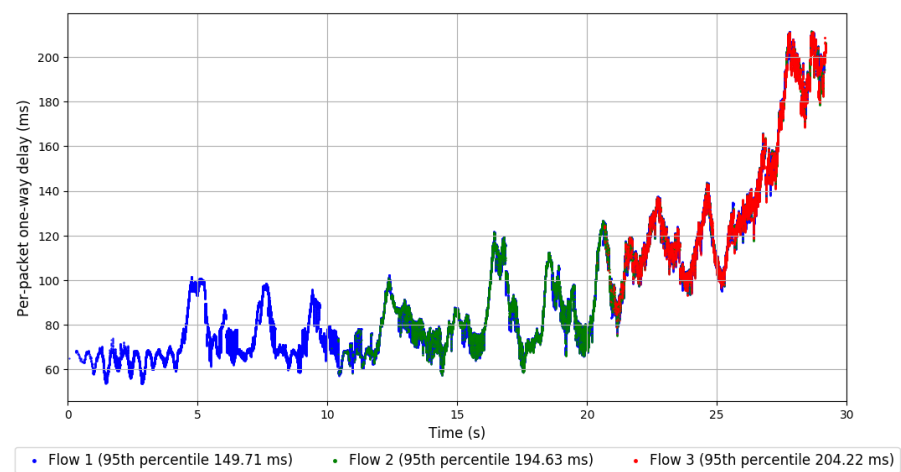
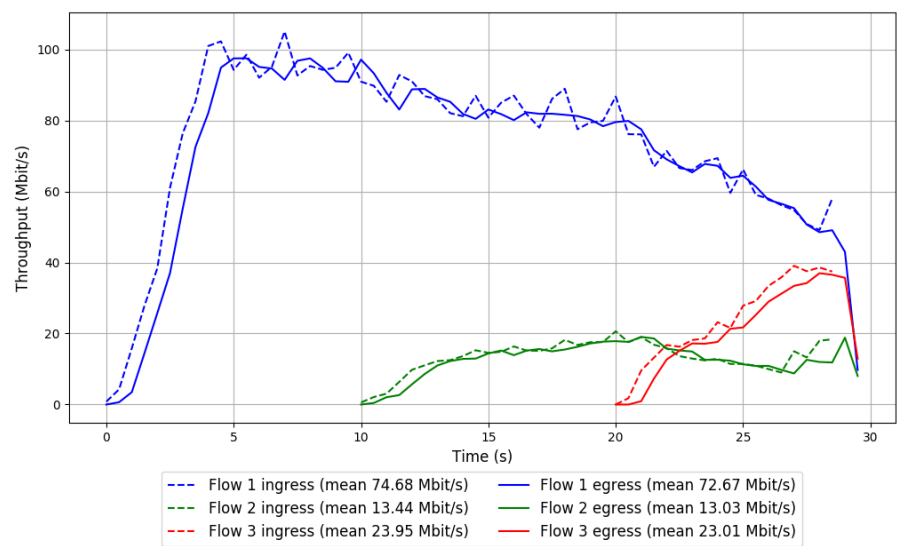


Run 5: Statistics of Indigo-MusesT

Start at: 2019-02-20 03:15:55
End at: 2019-02-20 03:16:25
Local clock offset: 3.868 ms
Remote clock offset: -13.232 ms

Below is generated by plot.py at 2019-02-20 03:36:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.96 Mbit/s
95th percentile per-packet one-way delay: 185.685 ms
Loss rate: 2.49%
-- Flow 1:
Average throughput: 72.67 Mbit/s
95th percentile per-packet one-way delay: 149.706 ms
Loss rate: 2.47%
-- Flow 2:
Average throughput: 13.03 Mbit/s
95th percentile per-packet one-way delay: 194.634 ms
Loss rate: 2.35%
-- Flow 3:
Average throughput: 23.01 Mbit/s
95th percentile per-packet one-way delay: 204.220 ms
Loss rate: 2.84%

Run 5: Report of Indigo-MusesT — Data Link

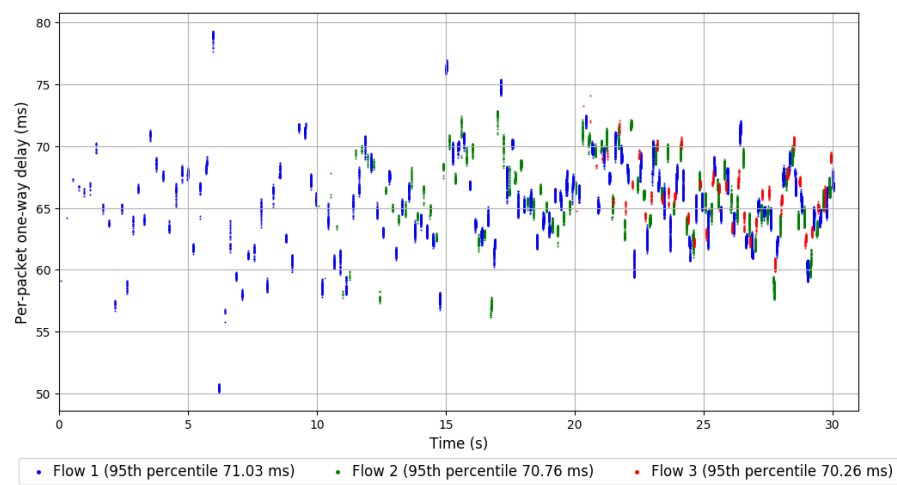
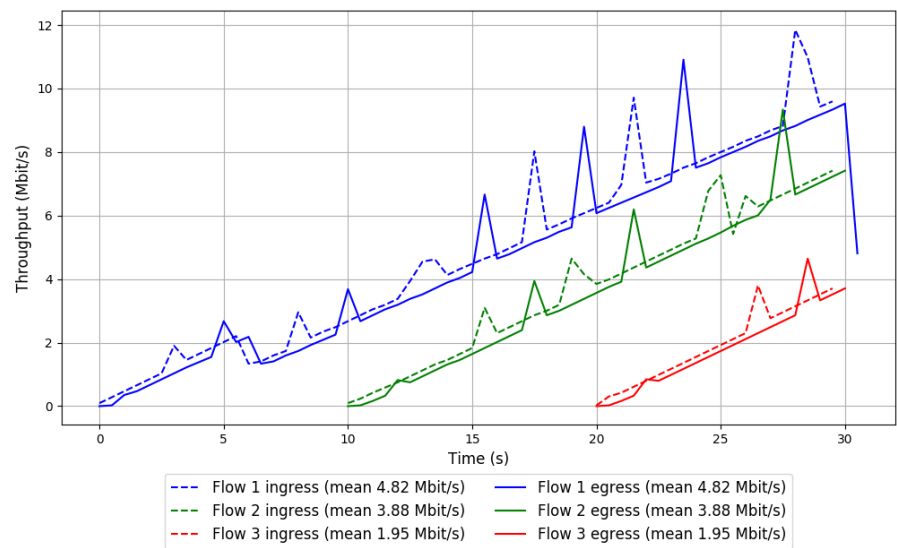


```
Run 1: Statistics of LEDBAT

Start at: 2019-02-20 00:51:42
End at: 2019-02-20 00:52:12
Local clock offset: 7.514 ms
Remote clock offset: -5.15 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.02 Mbit/s
95th percentile per-packet one-way delay: 70.785 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 71.028 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 70.758 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 70.263 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

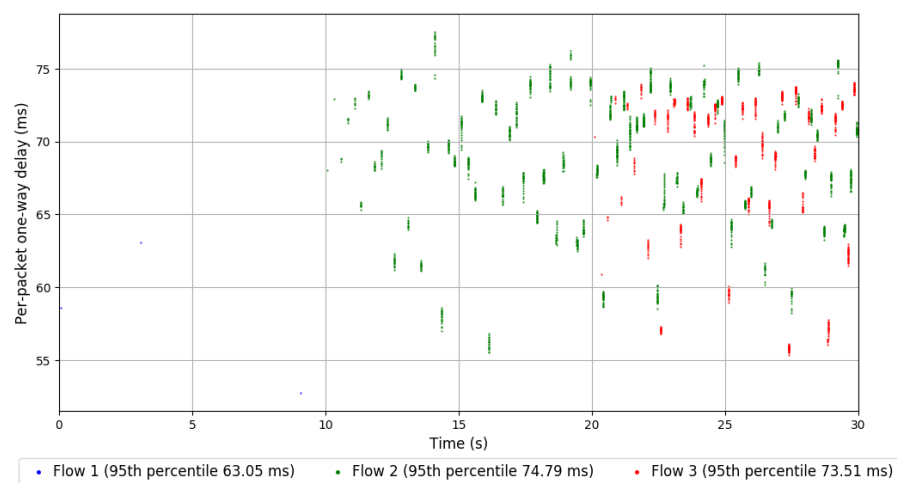
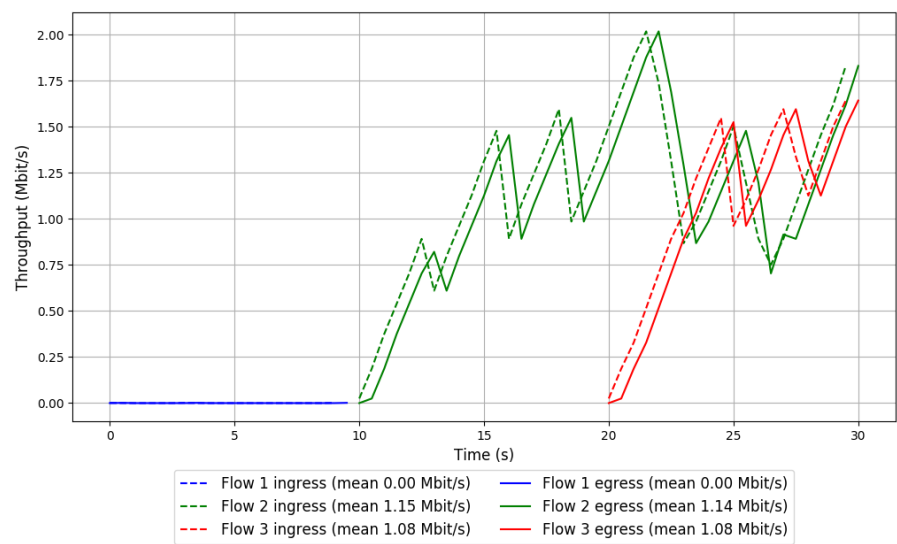


Run 2: Statistics of LEDBAT

Start at: 2019-02-20 01:31:29
End at: 2019-02-20 01:31:59
Local clock offset: 3.338 ms
Remote clock offset: -7.842 ms

Below is generated by plot.py at 2019-02-20 03:36:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 74.461 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 63.052 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 74.790 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 73.513 ms
Loss rate: 0.22%

Run 2: Report of LEDBAT — Data Link

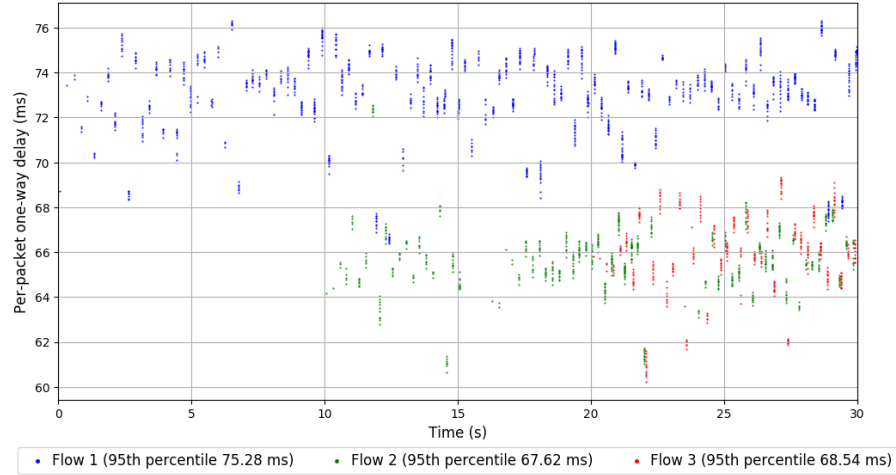
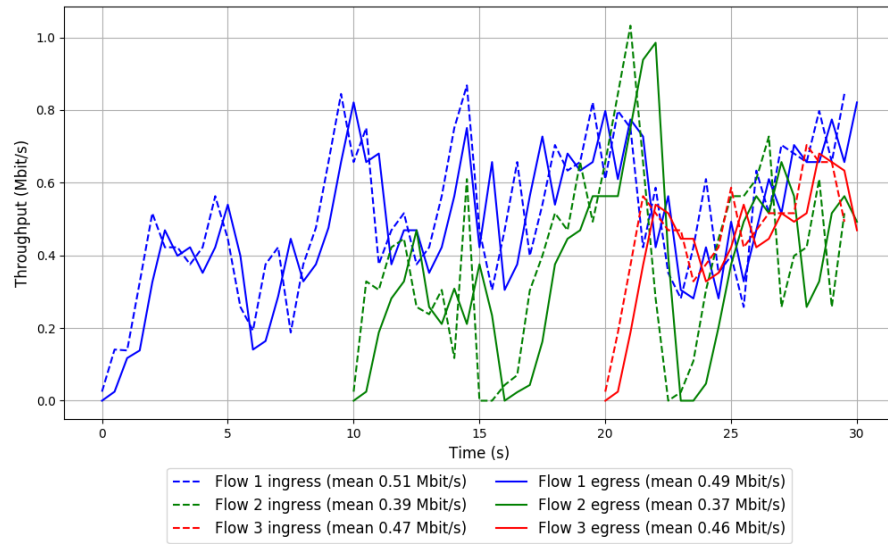


Run 3: Statistics of LEDBAT

Start at: 2019-02-20 02:10:24
End at: 2019-02-20 02:10:54
Local clock offset: 5.054 ms
Remote clock offset: -14.336 ms

Below is generated by plot.py at 2019-02-20 03:36:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 74.984 ms
Loss rate: 2.99%
-- Flow 1:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 75.281 ms
Loss rate: 2.79%
-- Flow 2:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 67.621 ms
Loss rate: 3.53%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 68.541 ms
Loss rate: 2.79%

Run 3: Report of LEDBAT — Data Link

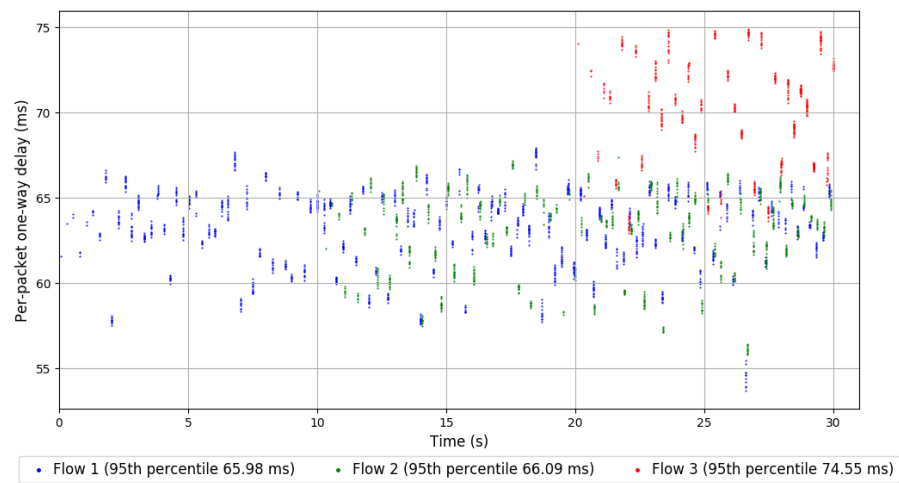
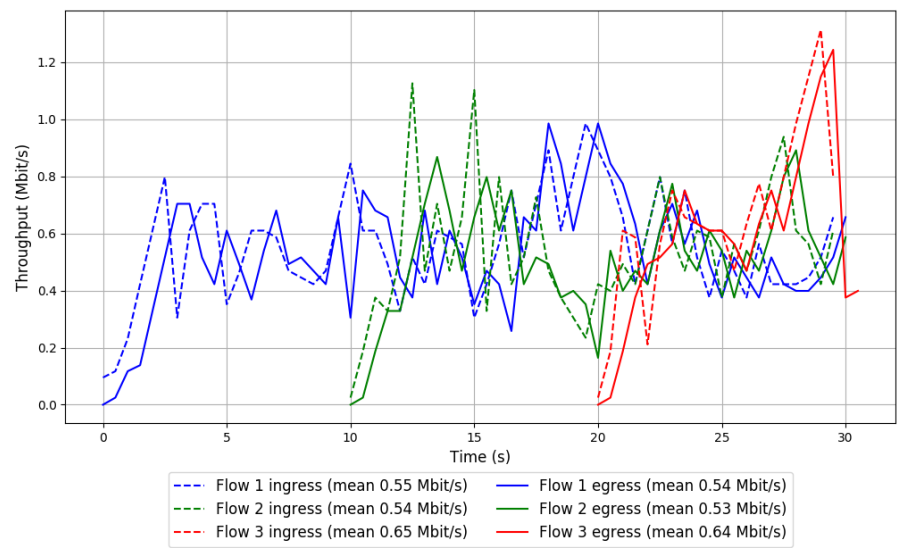


Run 4: Statistics of LEDBAT

Start at: 2019-02-20 02:50:39
End at: 2019-02-20 02:51:09
Local clock offset: 6.226 ms
Remote clock offset: -14.965 ms

Below is generated by plot.py at 2019-02-20 03:36:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 72.315 ms
Loss rate: 2.92%
-- Flow 1:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 65.984 ms
Loss rate: 3.27%
-- Flow 2:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 66.086 ms
Loss rate: 3.06%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 74.549 ms
Loss rate: 1.81%

Run 4: Report of LEDBAT — Data Link

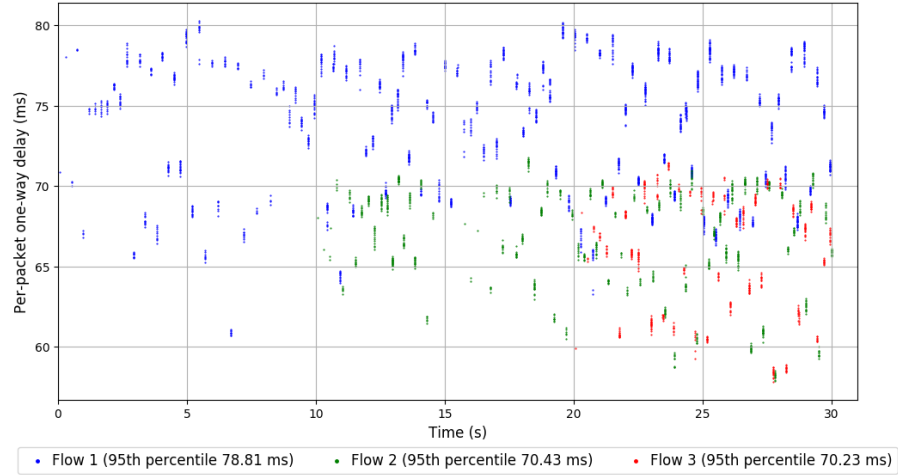
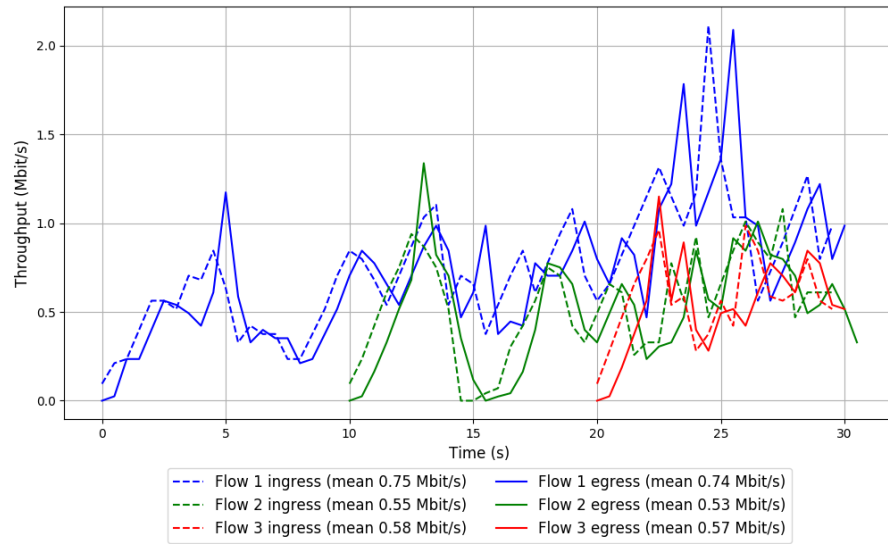


Run 5: Statistics of LEDBAT

Start at: 2019-02-20 03:26:33
End at: 2019-02-20 03:27:03
Local clock offset: 3.39 ms
Remote clock offset: -11.914 ms

Below is generated by plot.py at 2019-02-20 03:36:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 78.420 ms
Loss rate: 2.08%
-- Flow 1:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 78.809 ms
Loss rate: 1.68%
-- Flow 2:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 70.431 ms
Loss rate: 2.80%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 70.232 ms
Loss rate: 2.24%

Run 5: Report of LEDBAT — Data Link

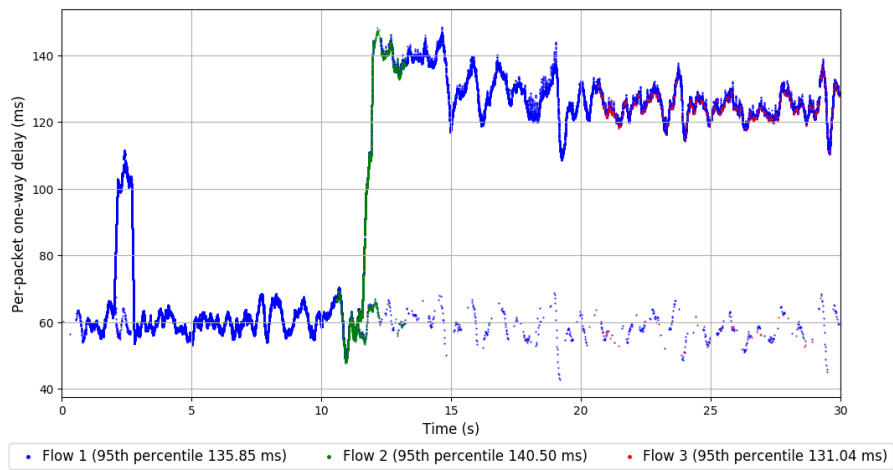
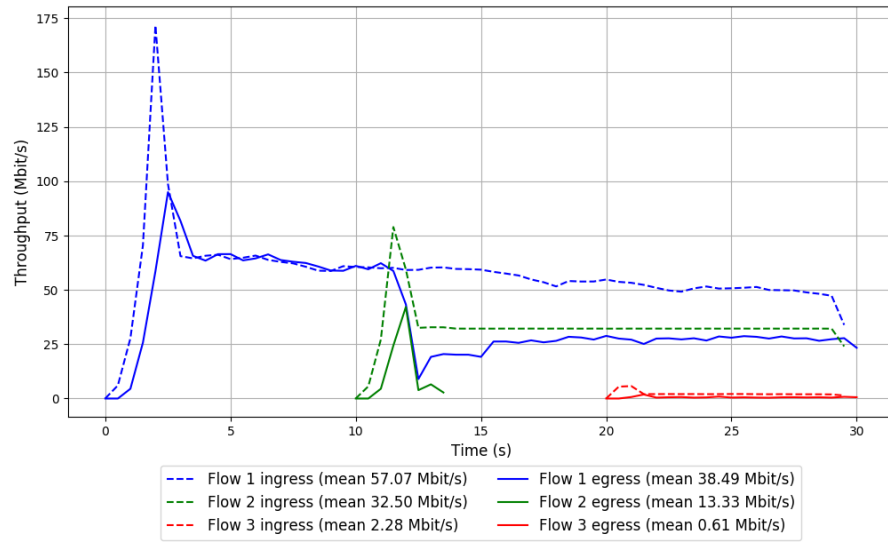


```
Run 1: Statistics of PCC-Allegro

Start at: 2019-02-20 00:53:05
End at: 2019-02-20 00:53:35
Local clock offset: 7.789 ms
Remote clock offset: -5.238 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.10 Mbit/s
95th percentile per-packet one-way delay: 136.113 ms
Loss rate: 49.52%
-- Flow 1:
Average throughput: 38.49 Mbit/s
95th percentile per-packet one-way delay: 135.850 ms
Loss rate: 32.57%
-- Flow 2:
Average throughput: 13.33 Mbit/s
95th percentile per-packet one-way delay: 140.499 ms
Loss rate: 93.48%
-- Flow 3:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 131.037 ms
Loss rate: 73.16%
```

Run 1: Report of PCC-Allegro — Data Link

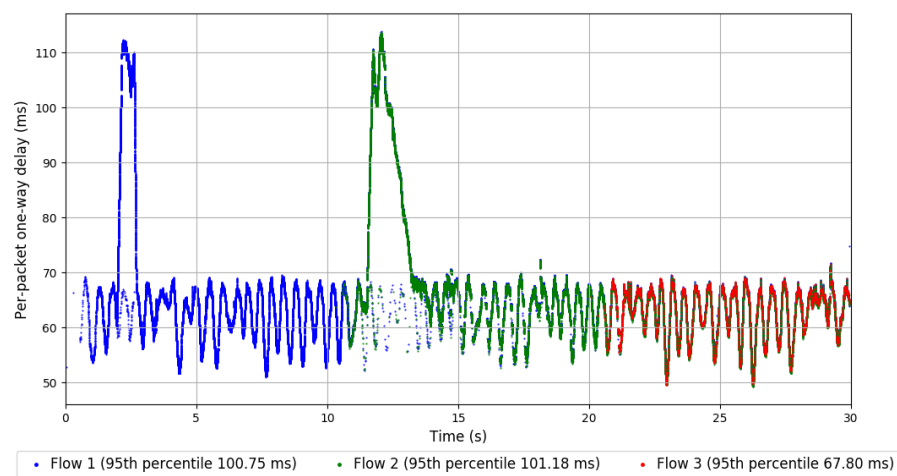
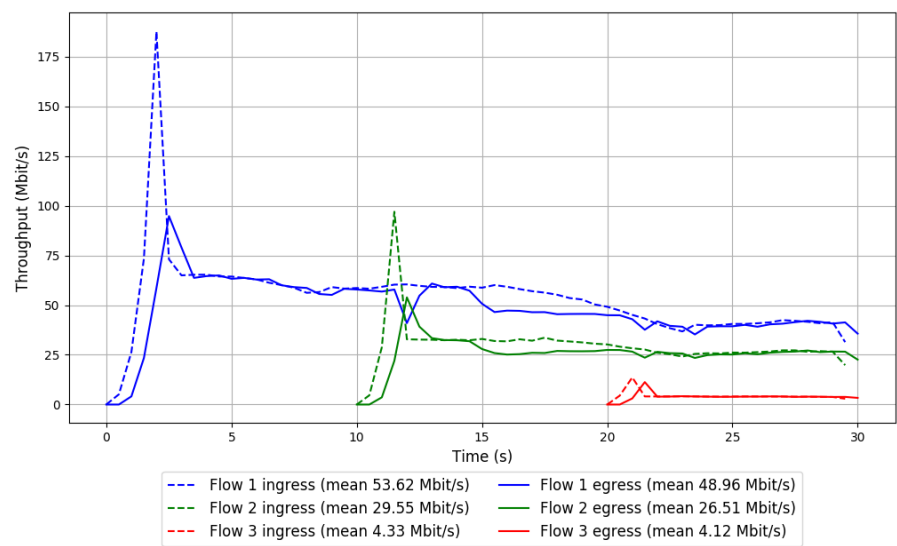


Run 2: Statistics of PCC-Allegro

Start at: 2019-02-20 01:32:52
End at: 2019-02-20 01:33:22
Local clock offset: 2.195 ms
Remote clock offset: -7.297 ms

Below is generated by plot.py at 2019-02-20 03:36:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 67.94 Mbit/s
95th percentile per-packet one-way delay: 100.676 ms
Loss rate: 8.97%
-- Flow 1:
Average throughput: 48.96 Mbit/s
95th percentile per-packet one-way delay: 100.750 ms
Loss rate: 8.62%
-- Flow 2:
Average throughput: 26.51 Mbit/s
95th percentile per-packet one-way delay: 101.178 ms
Loss rate: 10.25%
-- Flow 3:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 67.798 ms
Loss rate: 4.80%

Run 2: Report of PCC-Allegro — Data Link

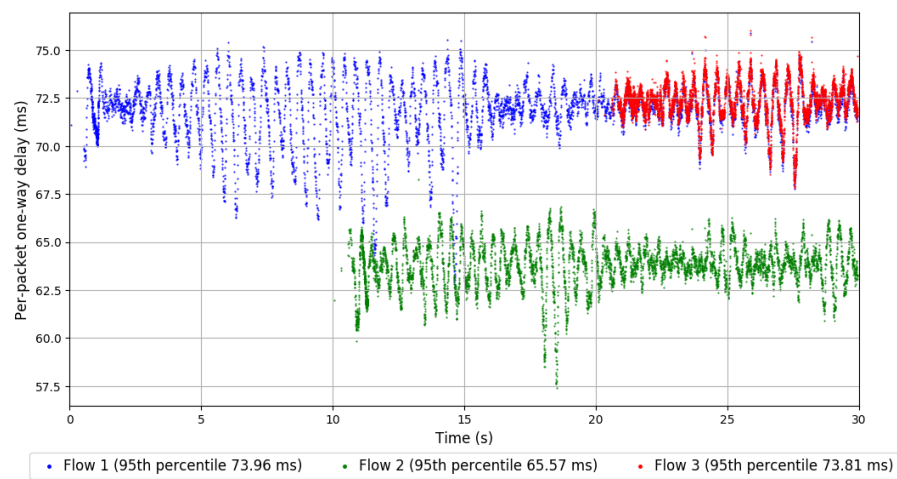
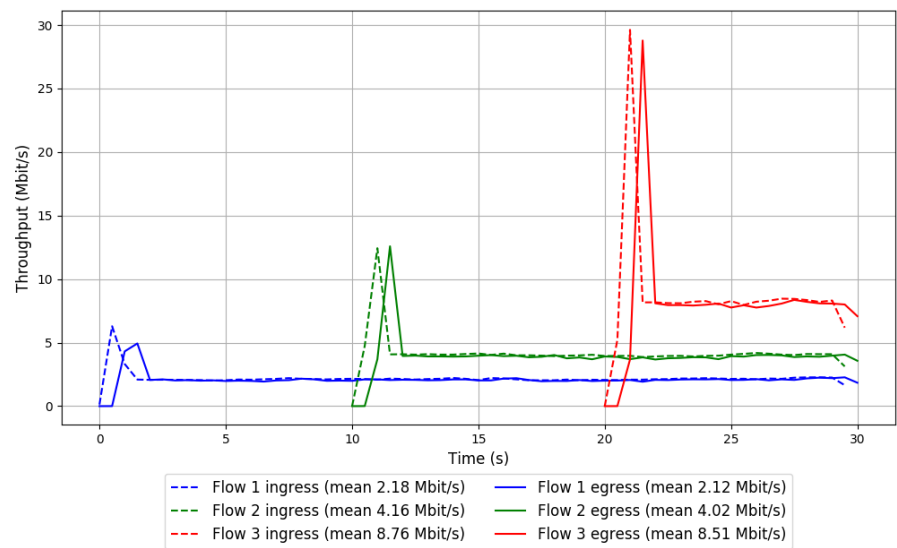


Run 3: Statistics of PCC-Allegro

Start at: 2019-02-20 02:11:46
End at: 2019-02-20 02:12:16
Local clock offset: 5.542 ms
Remote clock offset: -15.418 ms

Below is generated by plot.py at 2019-02-20 03:36:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.60 Mbit/s
95th percentile per-packet one-way delay: 73.668 ms
Loss rate: 3.02%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 73.956 ms
Loss rate: 2.87%
-- Flow 2:
Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 65.566 ms
Loss rate: 3.31%
-- Flow 3:
Average throughput: 8.51 Mbit/s
95th percentile per-packet one-way delay: 73.811 ms
Loss rate: 2.85%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-02-20 02:51:59

End at: 2019-02-20 02:52:29

Local clock offset: 6.049 ms

Remote clock offset: -14.195 ms

Below is generated by plot.py at 2019-02-20 03:36:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.03 Mbit/s

95th percentile per-packet one-way delay: 74.251 ms

Loss rate: 2.41%

-- Flow 1:

Average throughput: 3.91 Mbit/s

95th percentile per-packet one-way delay: 66.485 ms

Loss rate: 2.46%

-- Flow 2:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 66.600 ms

Loss rate: 2.76%

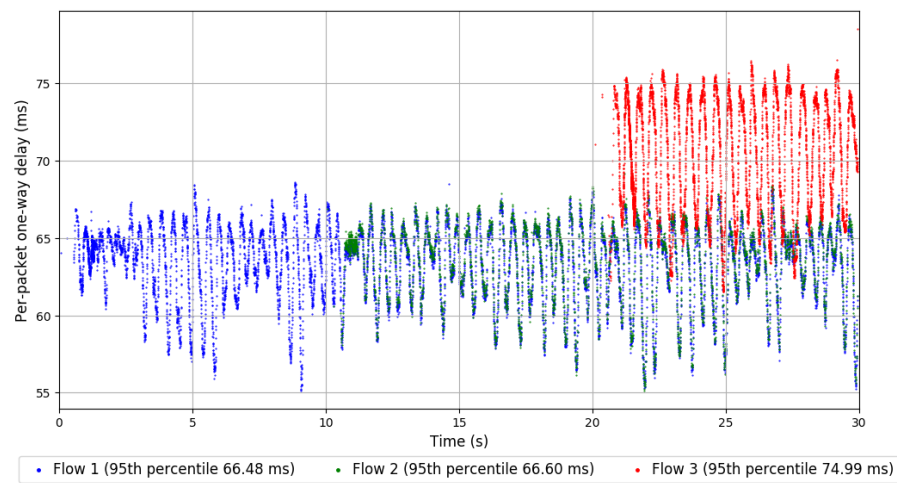
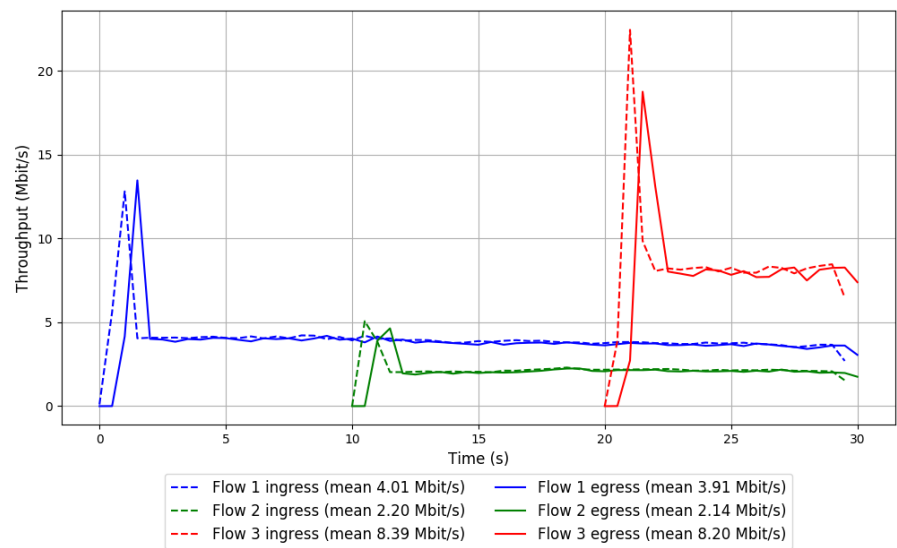
-- Flow 3:

Average throughput: 8.20 Mbit/s

95th percentile per-packet one-way delay: 74.991 ms

Loss rate: 2.15%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-02-20 03:27:54

End at: 2019-02-20 03:28:24

Local clock offset: 3.486 ms

Remote clock offset: -13.401 ms

Below is generated by plot.py at 2019-02-20 03:36:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 33.17 Mbit/s

95th percentile per-packet one-way delay: 140.391 ms

Loss rate: 52.68%

-- Flow 1:

Average throughput: 55.62 Mbit/s

95th percentile per-packet one-way delay: 138.335 ms

Loss rate: 52.39%

-- Flow 2:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 147.938 ms

Loss rate: 53.14%

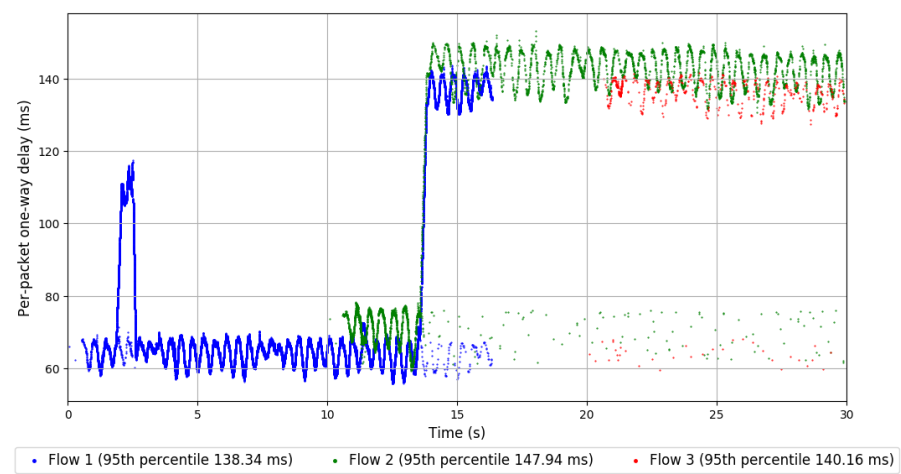
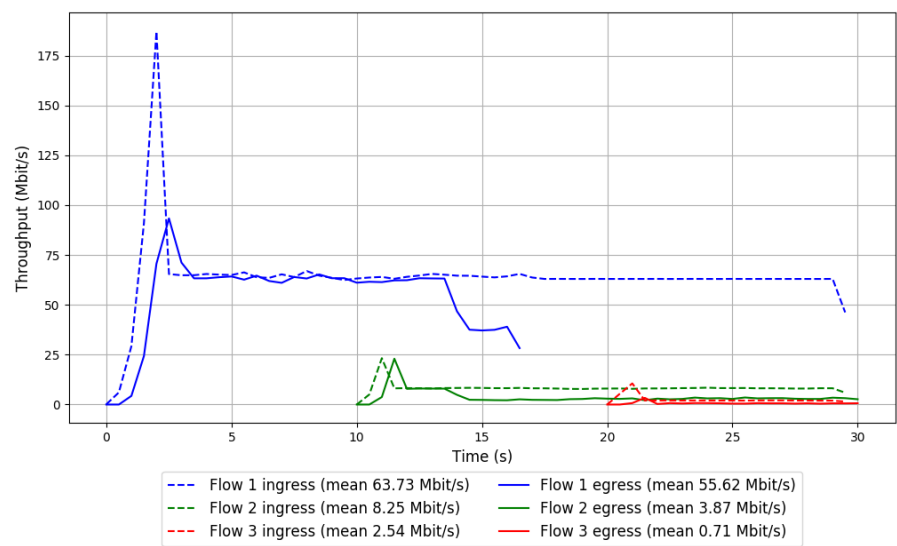
-- Flow 3:

Average throughput: 0.71 Mbit/s

95th percentile per-packet one-way delay: 140.159 ms

Loss rate: 71.90%

Run 5: Report of PCC-Allegro — Data Link

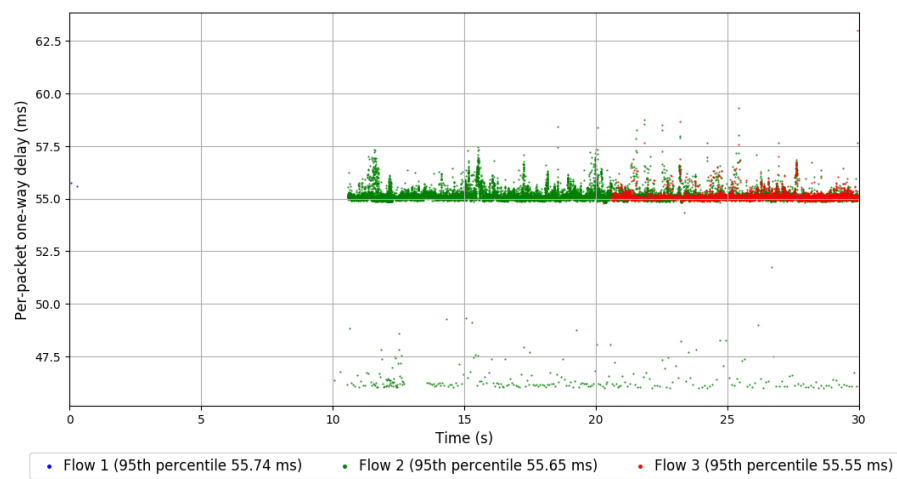
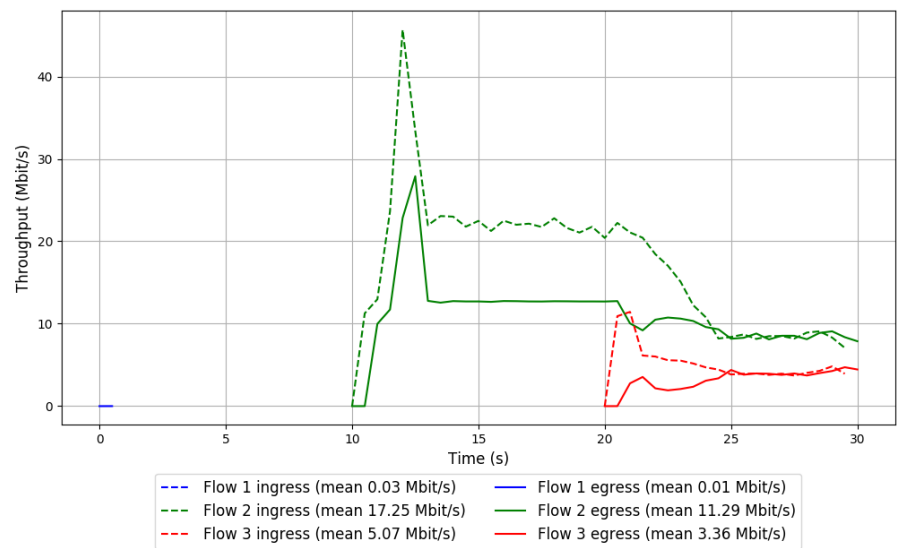



```
Run 1: Statistics of PCC-Expr

Start at: 2019-02-20 00:27:19
End at: 2019-02-20 00:27:49
Local clock offset: -1.291 ms
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2019-02-20 03:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 55.638 ms
Loss rate: 34.46%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 55.741 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 11.29 Mbit/s
95th percentile per-packet one-way delay: 55.649 ms
Loss rate: 34.55%
-- Flow 3:
Average throughput: 3.36 Mbit/s
95th percentile per-packet one-way delay: 55.550 ms
Loss rate: 33.82%
```

Run 1: Report of PCC-Expr — Data Link

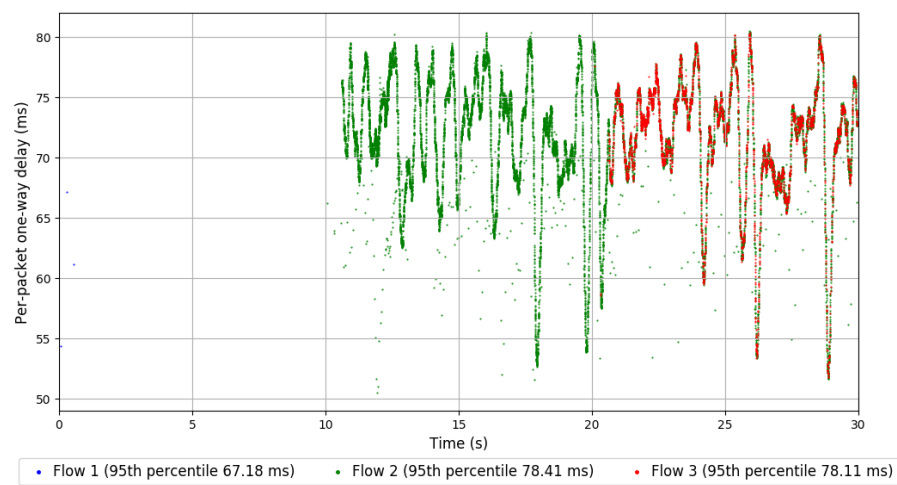
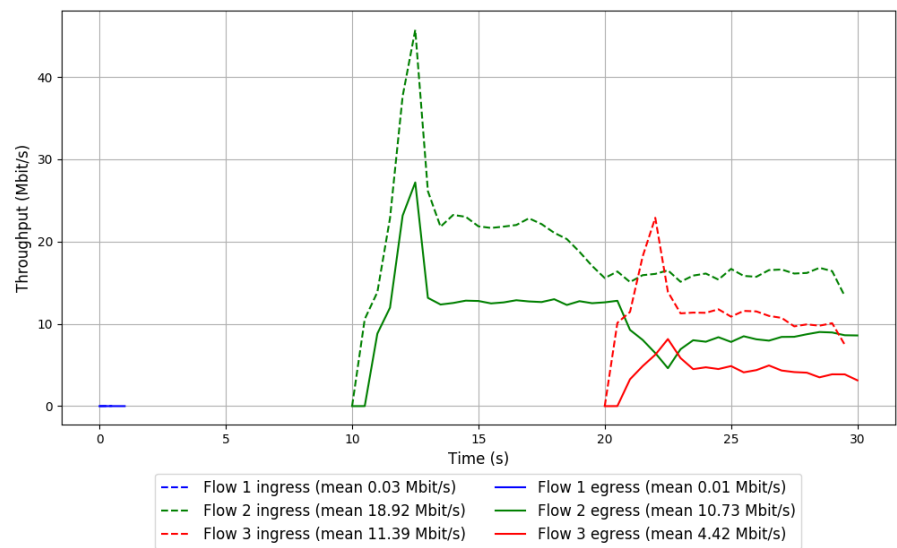


Run 2: Statistics of PCC-Expr

Start at: 2019-02-20 01:03:37
End at: 2019-02-20 01:04:07
Local clock offset: 6.957 ms
Remote clock offset: -2.418 ms

Below is generated by plot.py at 2019-02-20 03:36:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 78.355 ms
Loss rate: 47.41%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 67.179 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 10.73 Mbit/s
95th percentile per-packet one-way delay: 78.406 ms
Loss rate: 43.29%
-- Flow 3:
Average throughput: 4.42 Mbit/s
95th percentile per-packet one-way delay: 78.108 ms
Loss rate: 61.18%

Run 2: Report of PCC-Expr — Data Link

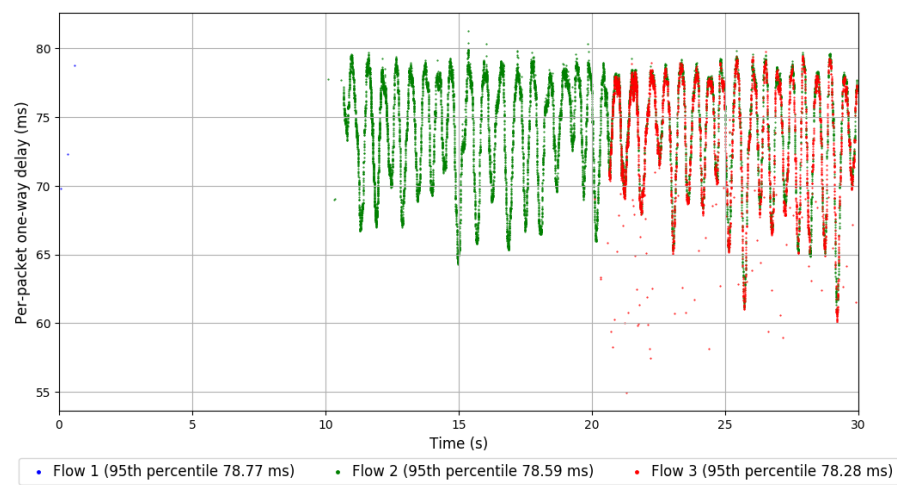
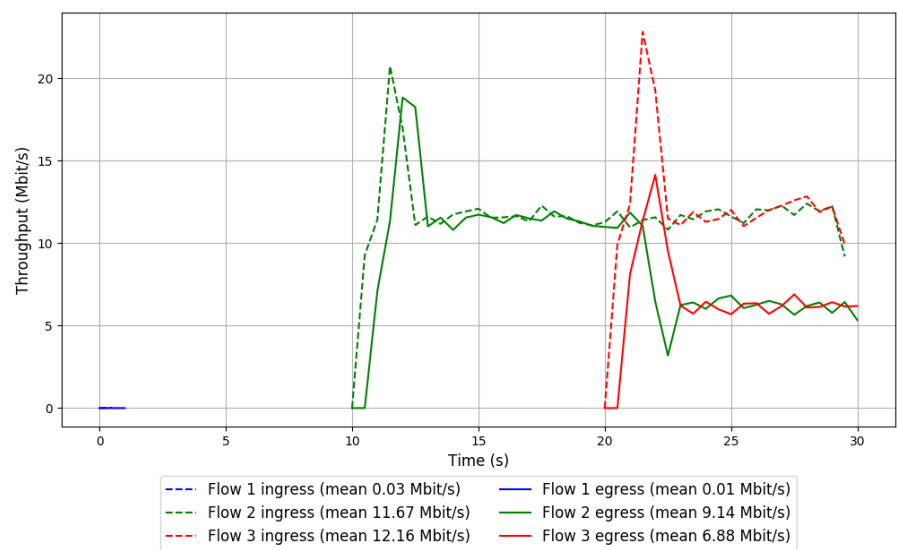


Run 3: Statistics of PCC-Expr

Start at: 2019-02-20 01:44:09
End at: 2019-02-20 01:44:39
Local clock offset: -2.364 ms
Remote clock offset: -9.201 ms

Below is generated by plot.py at 2019-02-20 03:36:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.35 Mbit/s
95th percentile per-packet one-way delay: 78.538 ms
Loss rate: 29.14%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 78.768 ms
Loss rate: 80.00%
-- Flow 2:
Average throughput: 9.14 Mbit/s
95th percentile per-packet one-way delay: 78.595 ms
Loss rate: 21.74%
-- Flow 3:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 78.278 ms
Loss rate: 43.43%

Run 3: Report of PCC-Expr — Data Link

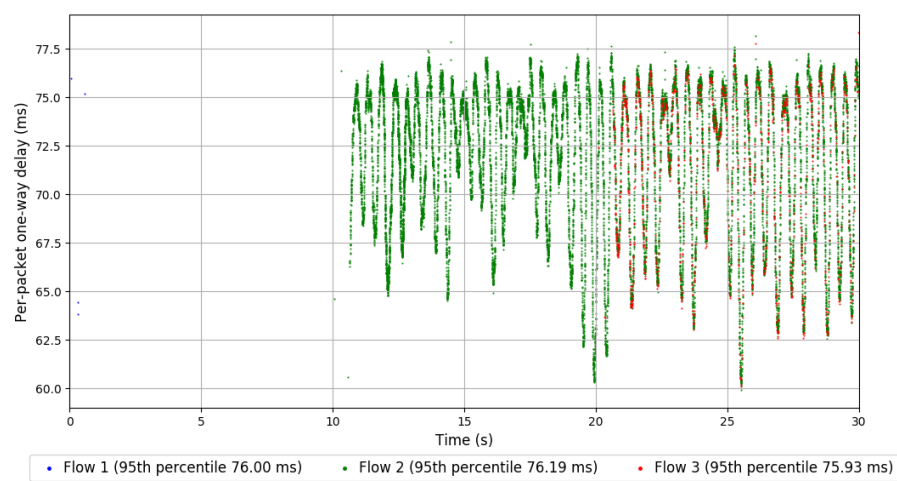
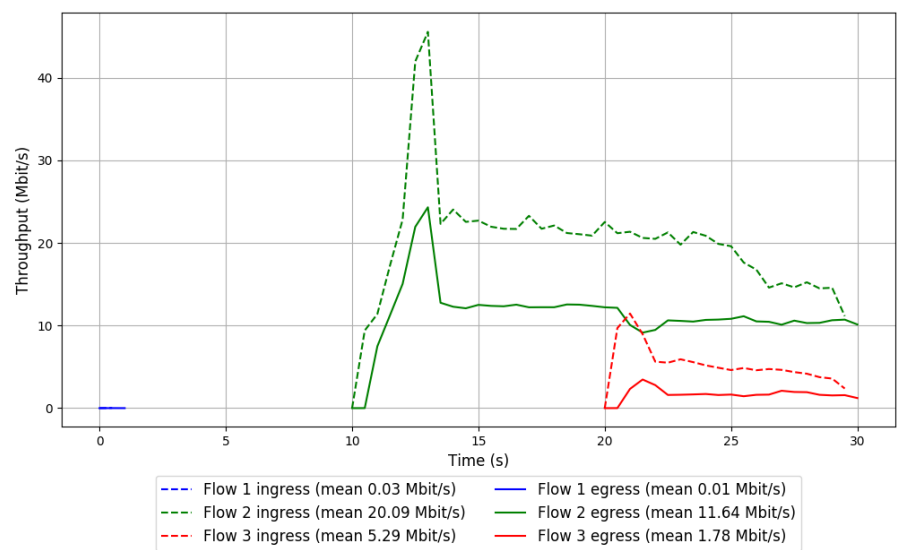


Run 4: Statistics of PCC-Expr

Start at: 2019-02-20 02:22:57
End at: 2019-02-20 02:23:27
Local clock offset: 9.378 ms
Remote clock offset: -10.766 ms

Below is generated by plot.py at 2019-02-20 03:36:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 76.176 ms
Loss rate: 44.87%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 75.995 ms
Loss rate: 75.00%
-- Flow 2:
Average throughput: 11.64 Mbit/s
95th percentile per-packet one-way delay: 76.192 ms
Loss rate: 42.05%
-- Flow 3:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 75.930 ms
Loss rate: 66.44%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2019-02-20 03:03:05

End at: 2019-02-20 03:03:35

Local clock offset: 5.285 ms

Remote clock offset: -16.6 ms

Below is generated by plot.py at 2019-02-20 03:36:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.24 Mbit/s

95th percentile per-packet one-way delay: 73.088 ms

Loss rate: 33.31%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 72.277 ms

Loss rate: 75.00%

-- Flow 2:

Average throughput: 3.13 Mbit/s

95th percentile per-packet one-way delay: 72.998 ms

Loss rate: 29.47%

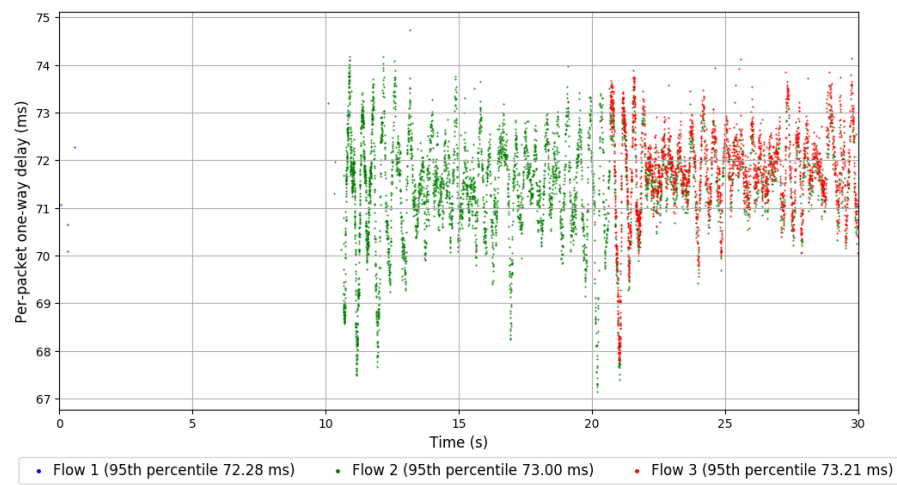
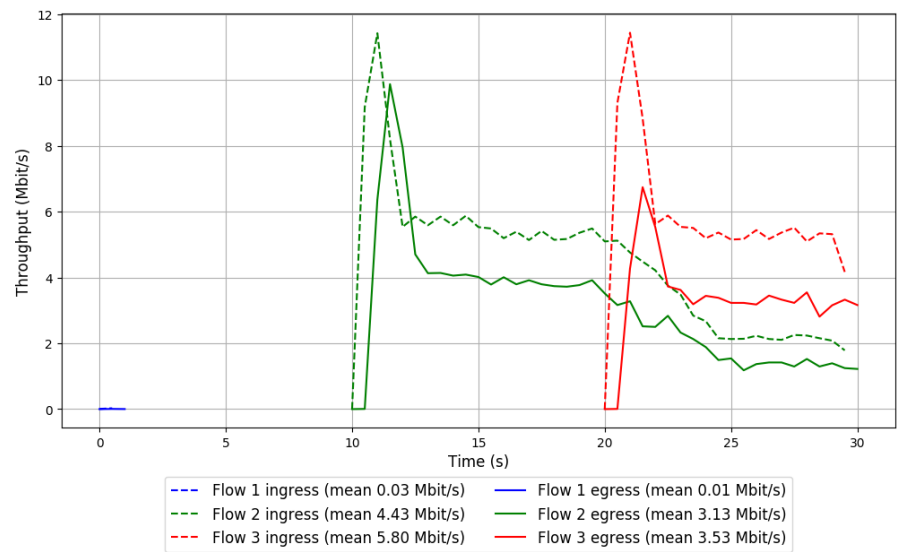
-- Flow 3:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 73.208 ms

Loss rate: 39.21%

Run 5: Report of PCC-Expr — Data Link

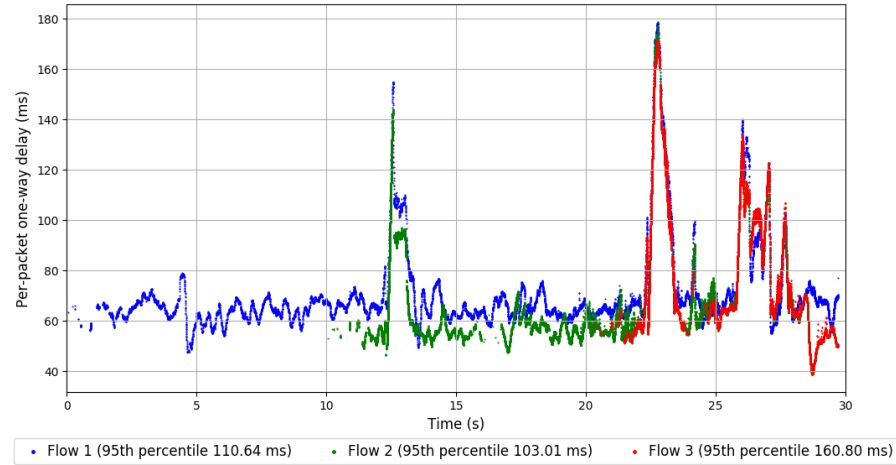
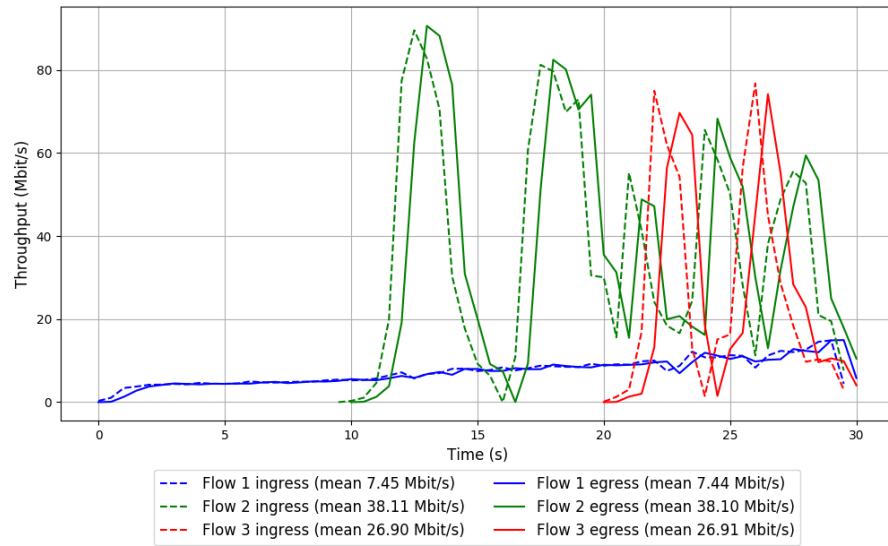


Run 1: Statistics of QUIC Cubic

Start at: 2019-02-20 00:49:54
End at: 2019-02-20 00:50:24
Local clock offset: 7.391 ms
Remote clock offset: -4.707 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 41.41 Mbit/s
95th percentile per-packet one-way delay: 125.215 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: 110.639 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 38.10 Mbit/s
95th percentile per-packet one-way delay: 103.014 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 26.91 Mbit/s
95th percentile per-packet one-way delay: 160.799 ms
Loss rate: 0.02%

Run 1: Report of QUIC Cubic — Data Link

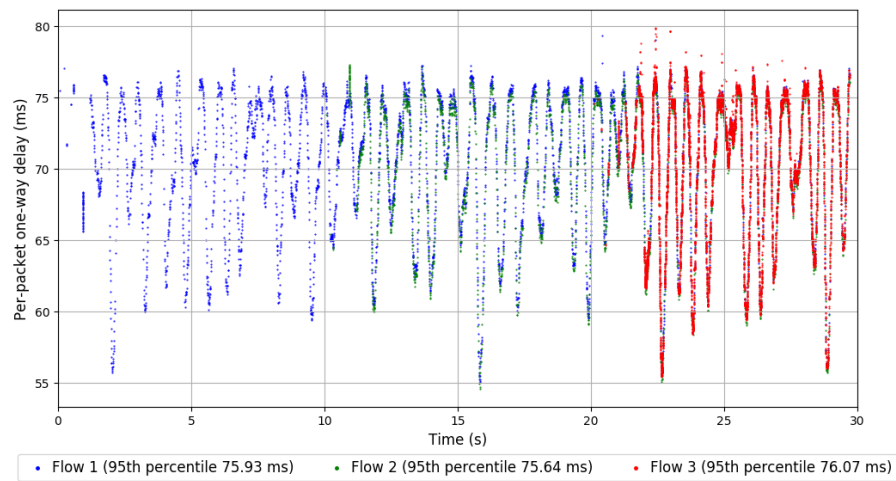
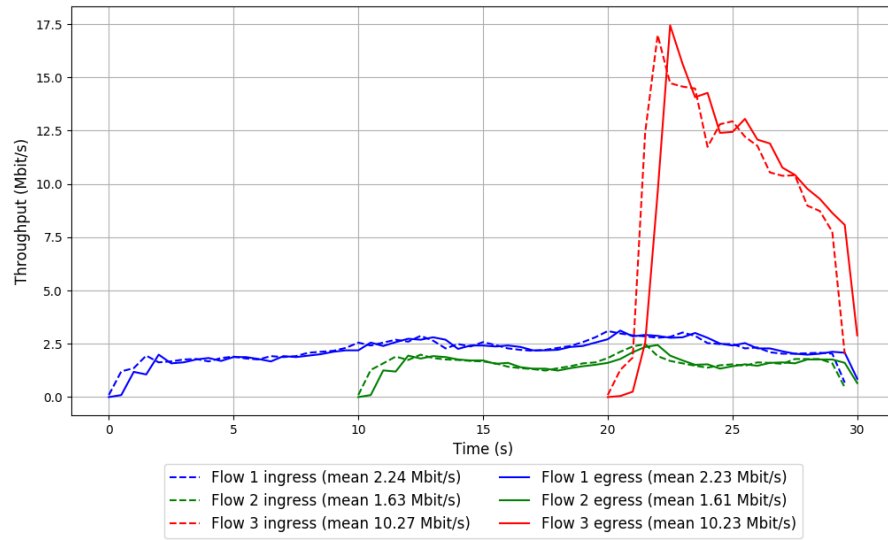


Run 2: Statistics of QUIC Cubic

Start at: 2019-02-20 01:30:03
End at: 2019-02-20 01:30:33
Local clock offset: 4.181 ms
Remote clock offset: -4.566 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 6.60 Mbit/s
95th percentile per-packet one-way delay: 75.948 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 75.929 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 75.639 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 10.23 Mbit/s
95th percentile per-packet one-way delay: 76.070 ms
Loss rate: 0.55%

Run 2: Report of QUIC Cubic — Data Link

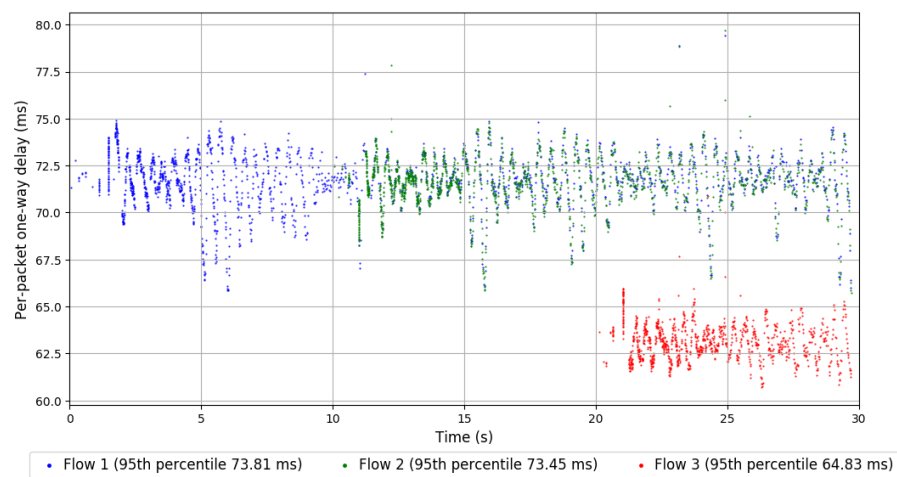
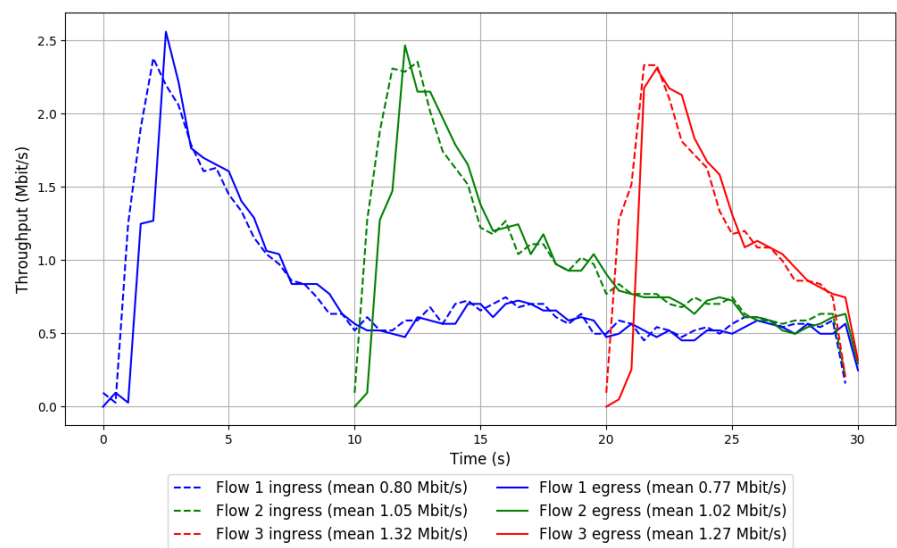


Run 3: Statistics of QUIC Cubic

Start at: 2019-02-20 02:09:00
End at: 2019-02-20 02:09:30
Local clock offset: 4.228 ms
Remote clock offset: -16.234 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.85 Mbit/s
95th percentile per-packet one-way delay: 73.481 ms
Loss rate: 3.69%
-- Flow 1:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 73.805 ms
Loss rate: 4.27%
-- Flow 2:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 73.452 ms
Loss rate: 3.08%
-- Flow 3:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 64.832 ms
Loss rate: 3.59%

Run 3: Report of QUIC Cubic — Data Link

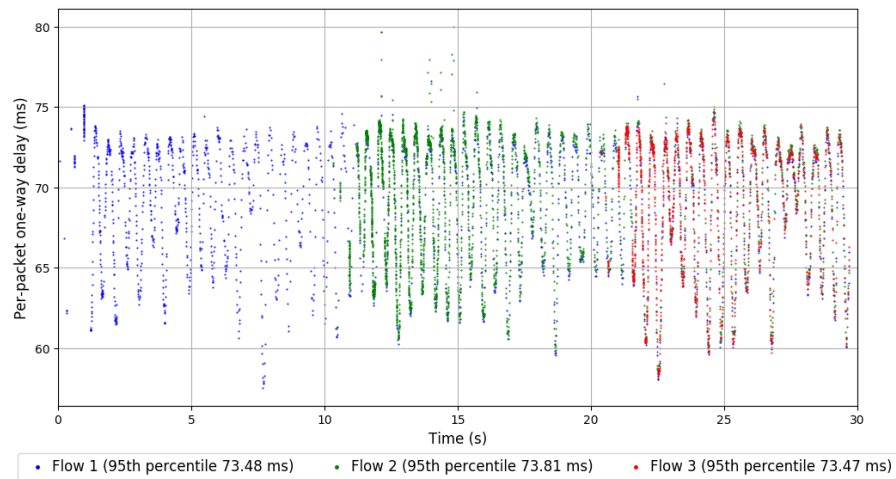
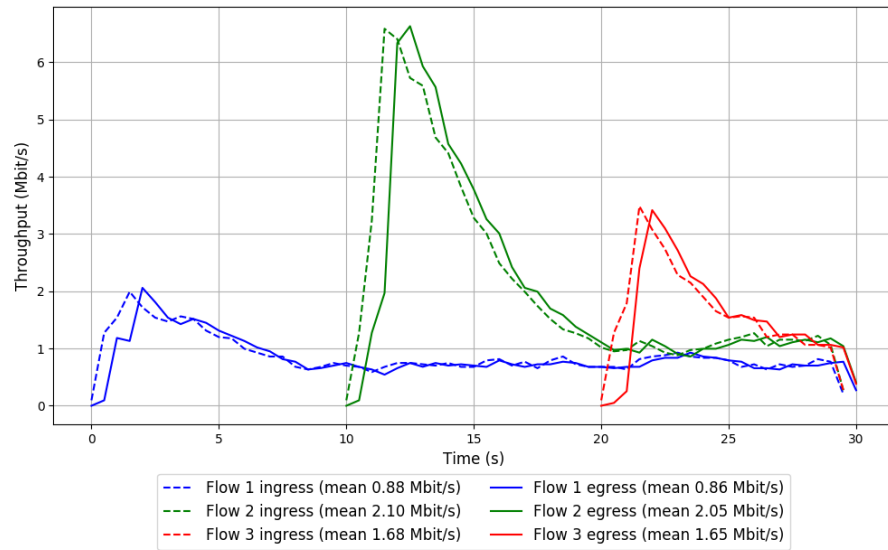


Run 4: Statistics of QUIC Cubic

Start at: 2019-02-20 02:49:15
End at: 2019-02-20 02:49:45
Local clock offset: 6.266 ms
Remote clock offset: -15.133 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.75 Mbit/s
95th percentile per-packet one-way delay: 73.641 ms
Loss rate: 2.32%
-- Flow 1:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 73.477 ms
Loss rate: 2.44%
-- Flow 2:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 73.807 ms
Loss rate: 2.33%
-- Flow 3:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 73.471 ms
Loss rate: 2.11%

Run 4: Report of QUIC Cubic — Data Link

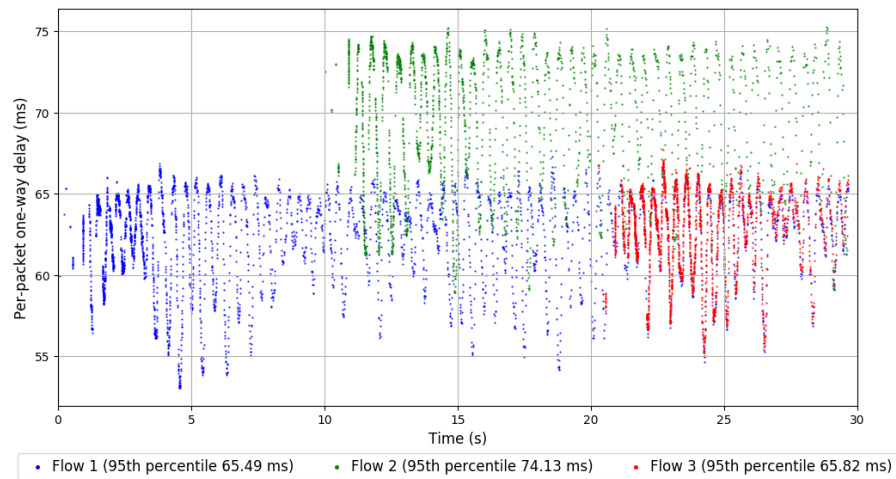
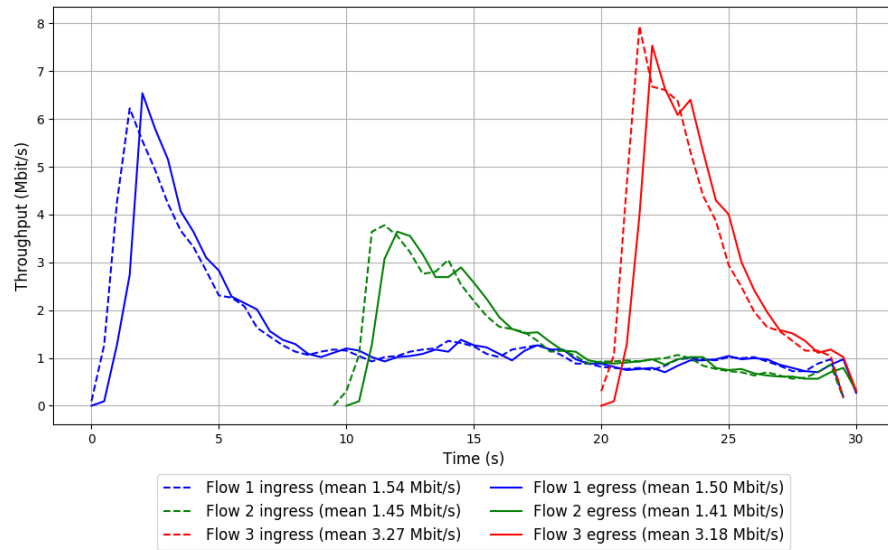


Run 5: Statistics of QUIC Cubic

Start at: 2019-02-20 03:25:12
End at: 2019-02-20 03:25:42
Local clock offset: 3.341 ms
Remote clock offset: -15.874 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 73.380 ms
Loss rate: 2.49%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 65.492 ms
Loss rate: 2.36%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 74.126 ms
Loss rate: 2.71%
-- Flow 3:
Average throughput: 3.18 Mbit/s
95th percentile per-packet one-way delay: 65.819 ms
Loss rate: 2.49%

Run 5: Report of QUIC Cubic — Data Link

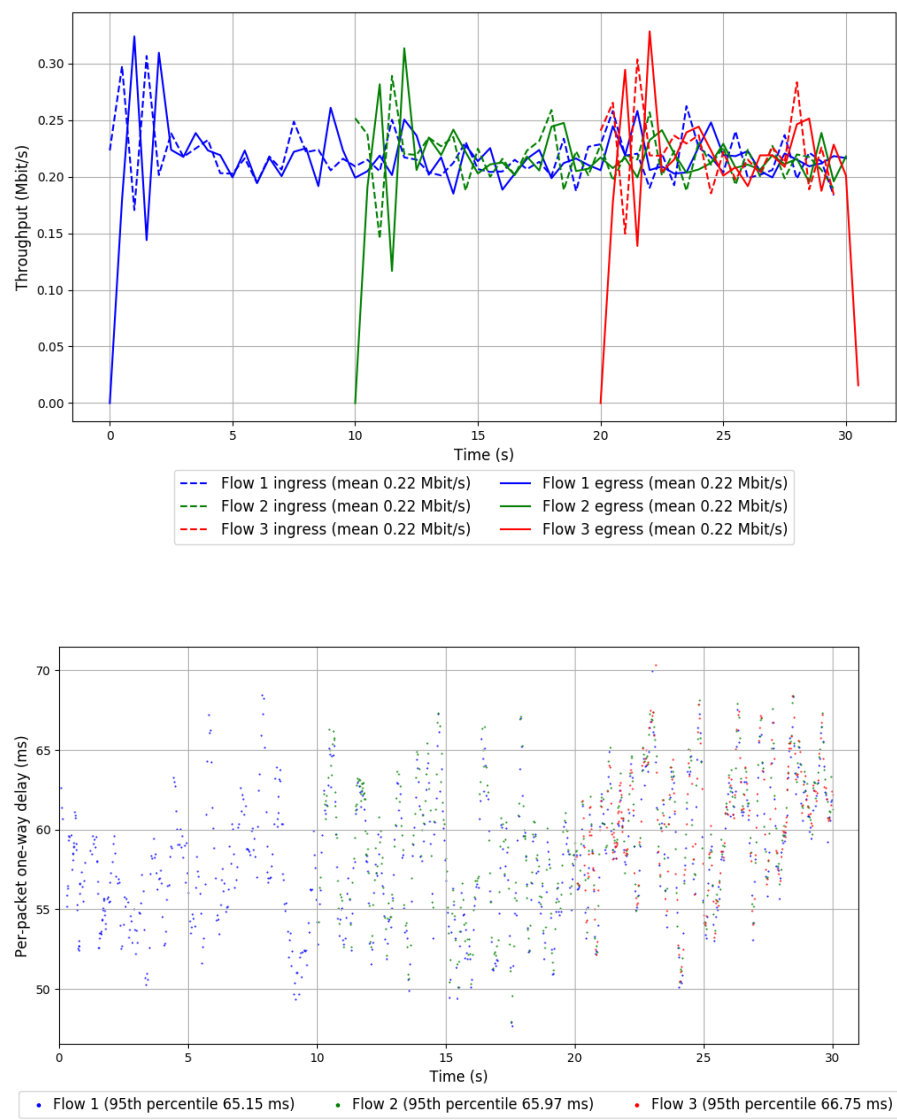


```
Run 1: Statistics of SReAM

Start at: 2019-02-20 00:42:49
End at: 2019-02-20 00:43:19
Local clock offset: 5.923 ms
Remote clock offset: -0.397 ms

# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 65.753 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.149 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.974 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.751 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

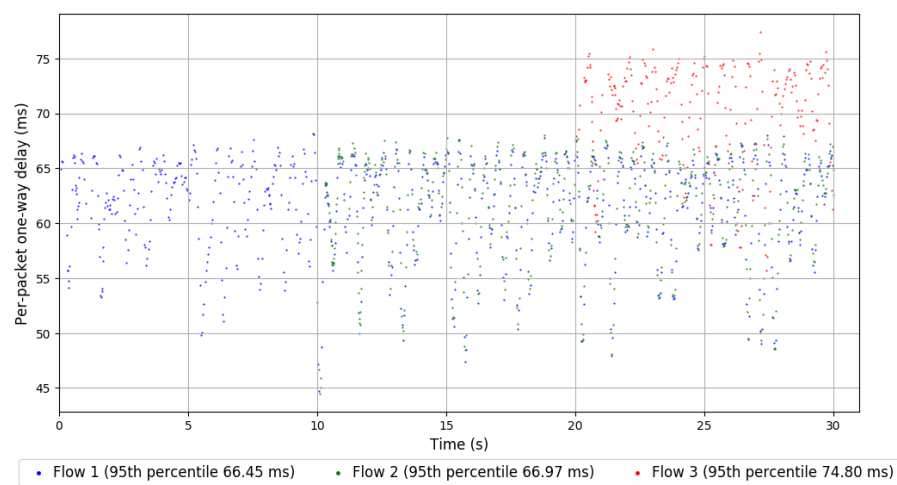
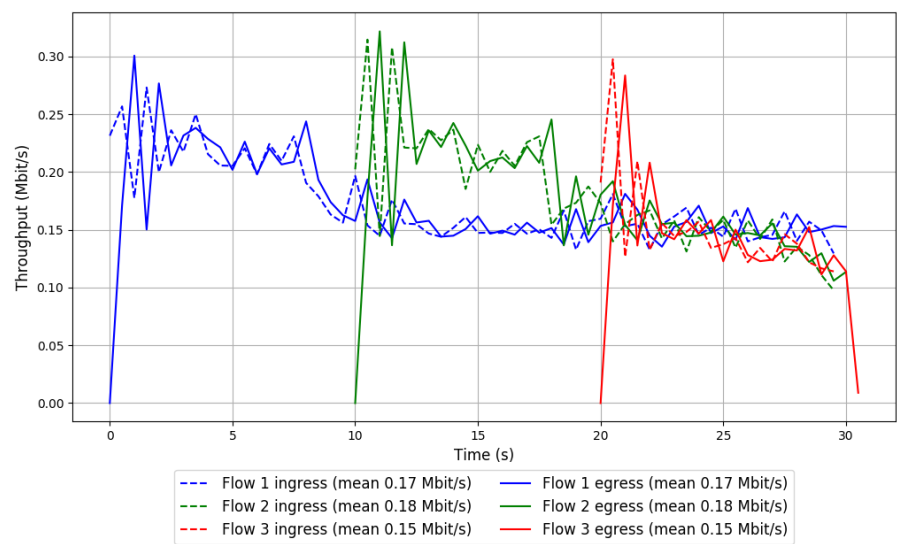


Run 2: Statistics of SCReAM

Start at: 2019-02-20 01:22:06
End at: 2019-02-20 01:22:36
Local clock offset: 4.247 ms
Remote clock offset: -4.855 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 73.179 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 66.450 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 66.975 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 74.799 ms
Loss rate: 0.44%

Run 2: Report of SReAM — Data Link

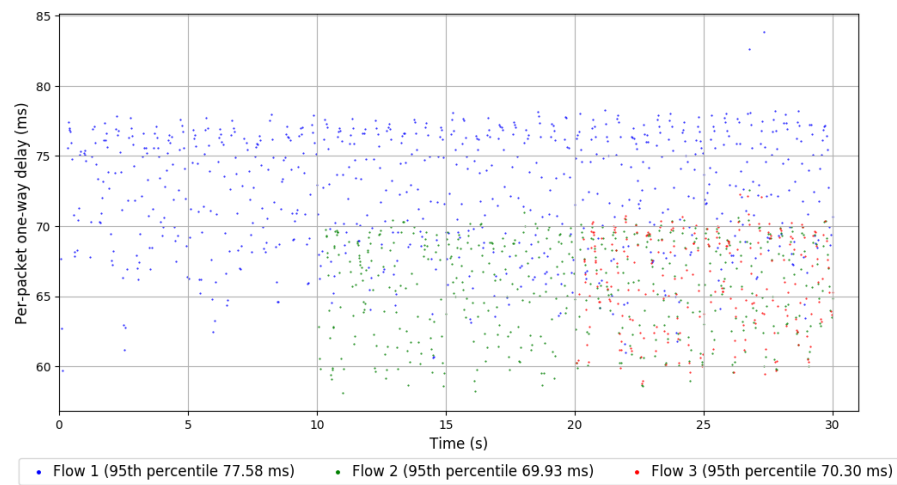
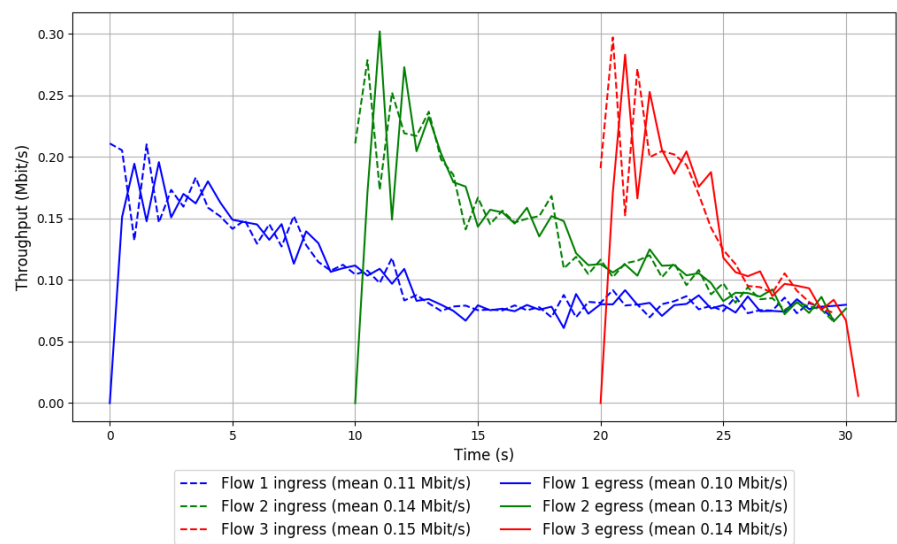


Run 3: Statistics of SCReAM

Start at: 2019-02-20 02:00:10
End at: 2019-02-20 02:00:40
Local clock offset: -4.721 ms
Remote clock offset: -13.745 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 77.123 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 77.576 ms
Loss rate: 1.78%
-- Flow 2:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 69.927 ms
Loss rate: 2.22%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 70.303 ms
Loss rate: 3.24%

Run 3: Report of SReAM — Data Link

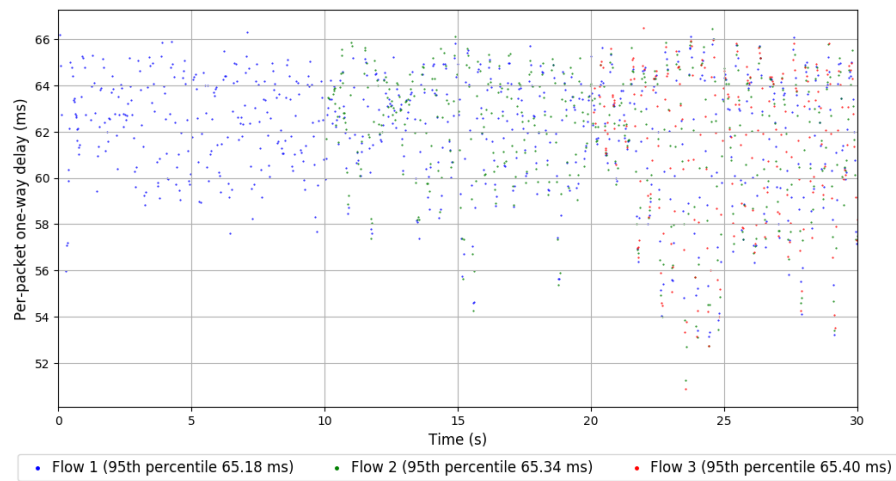
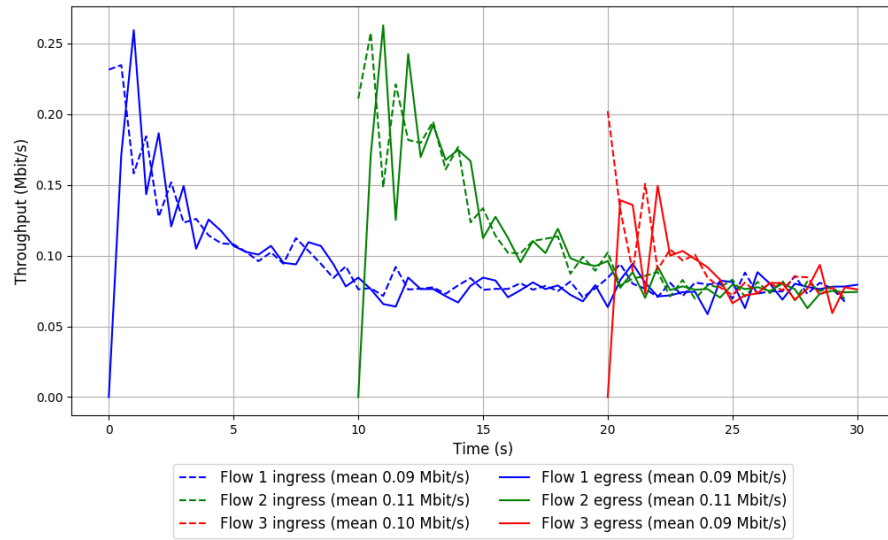


Run 4: Statistics of SCReAM

Start at: 2019-02-20 02:40:51
End at: 2019-02-20 02:41:21
Local clock offset: 7.056 ms
Remote clock offset: -13.515 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 65.235 ms
Loss rate: 3.42%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 65.183 ms
Loss rate: 3.04%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 65.341 ms
Loss rate: 3.07%
-- Flow 3:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 65.404 ms
Loss rate: 5.40%

Run 4: Report of SReAM — Data Link

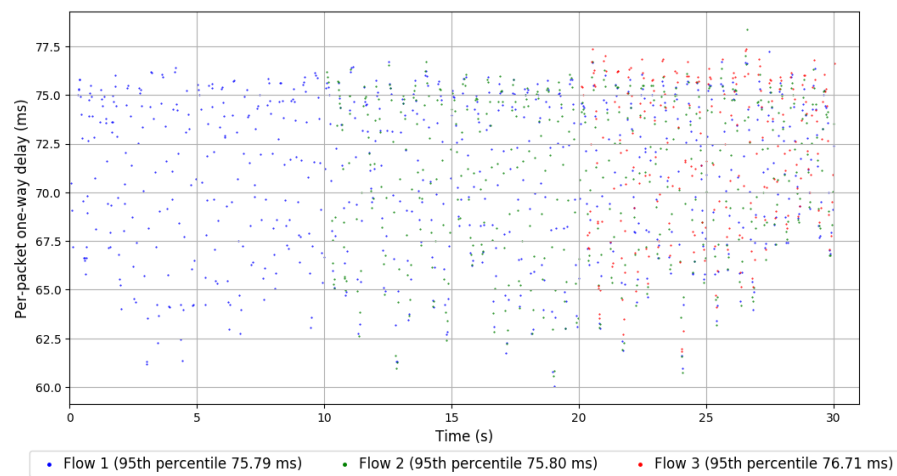
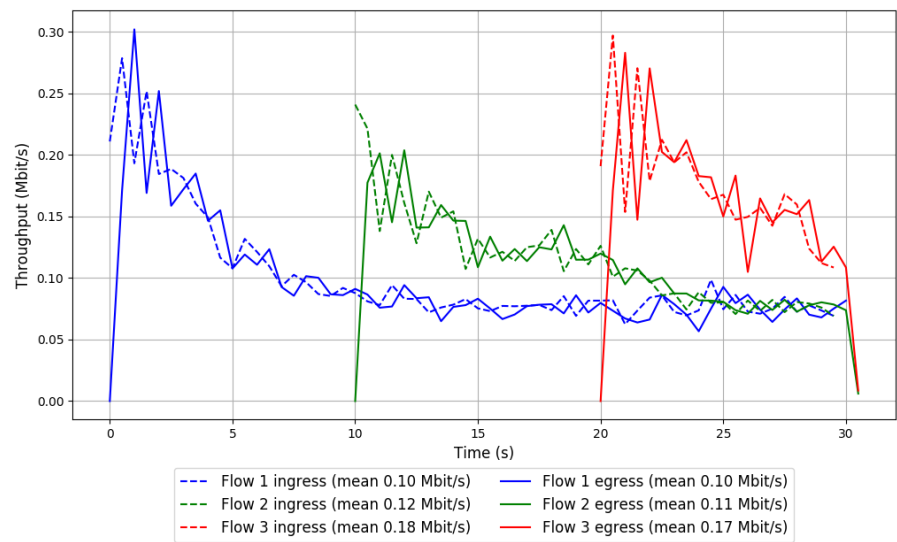


Run 5: Statistics of SCReAM

Start at: 2019-02-20 03:19:29
End at: 2019-02-20 03:19:59
Local clock offset: 3.867 ms
Remote clock offset: -13.356 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 75.970 ms
Loss rate: 2.59%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 75.792 ms
Loss rate: 3.37%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 75.795 ms
Loss rate: 2.25%
-- Flow 3:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 76.710 ms
Loss rate: 1.68%

Run 5: Report of SReAM — Data Link

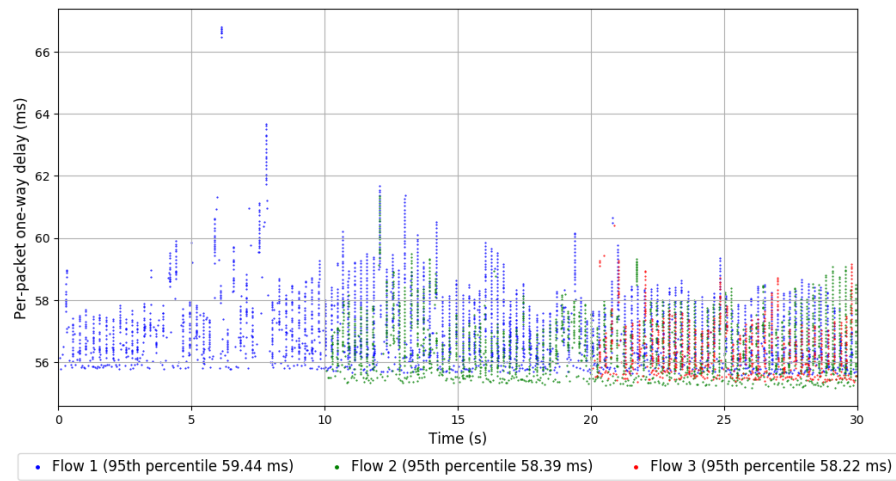
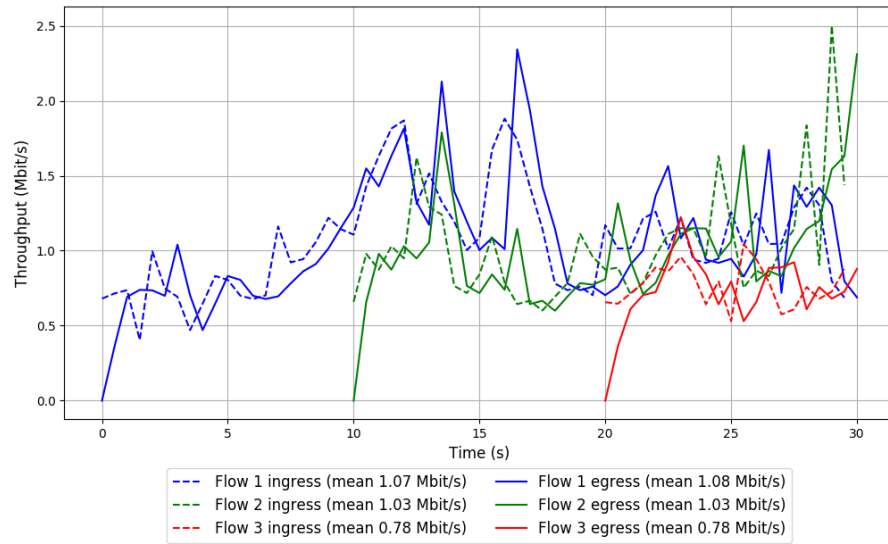


Run 1: Statistics of Sprout

Start at: 2019-02-20 00:24:31
End at: 2019-02-20 00:25:01
Local clock offset: -1.478 ms
Remote clock offset: -0.497 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 58.969 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 59.436 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 58.391 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 58.220 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

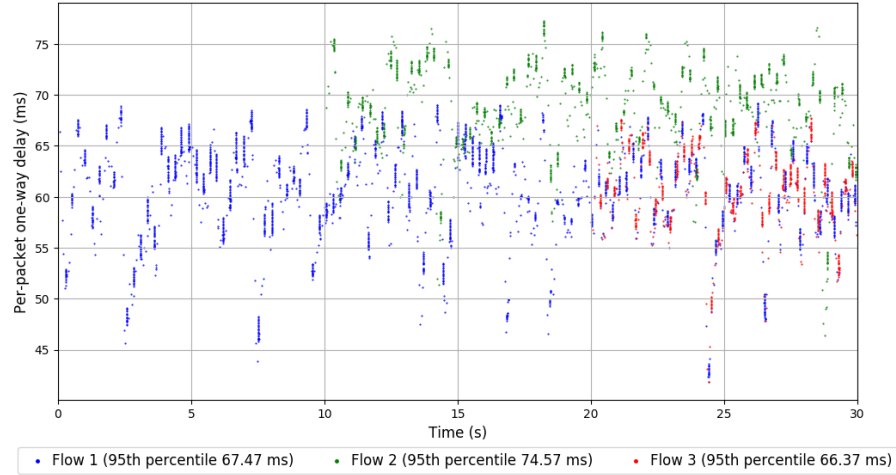
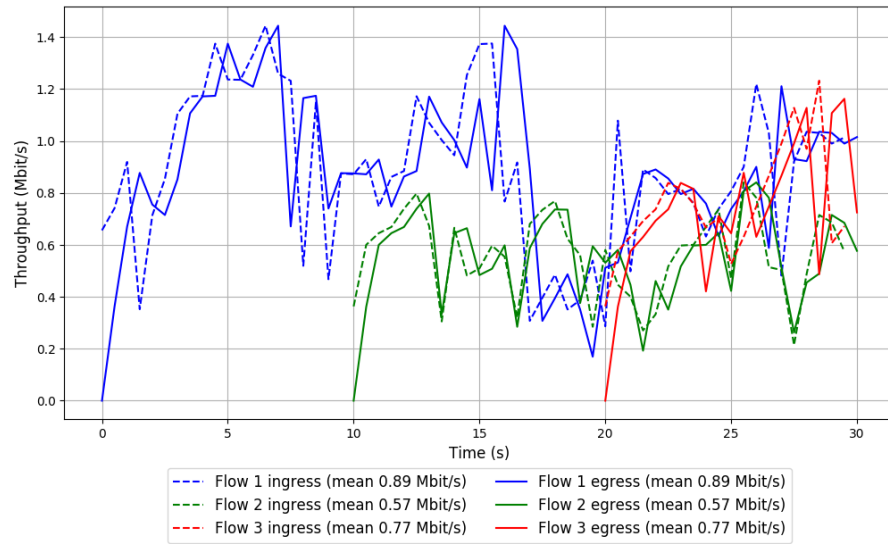


Run 2: Statistics of Sprout

Start at: 2019-02-20 01:00:45
End at: 2019-02-20 01:01:15
Local clock offset: 8.555 ms
Remote clock offset: -5.088 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 72.576 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 67.471 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 74.567 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 66.374 ms
Loss rate: 0.01%

Run 2: Report of Sprout — Data Link

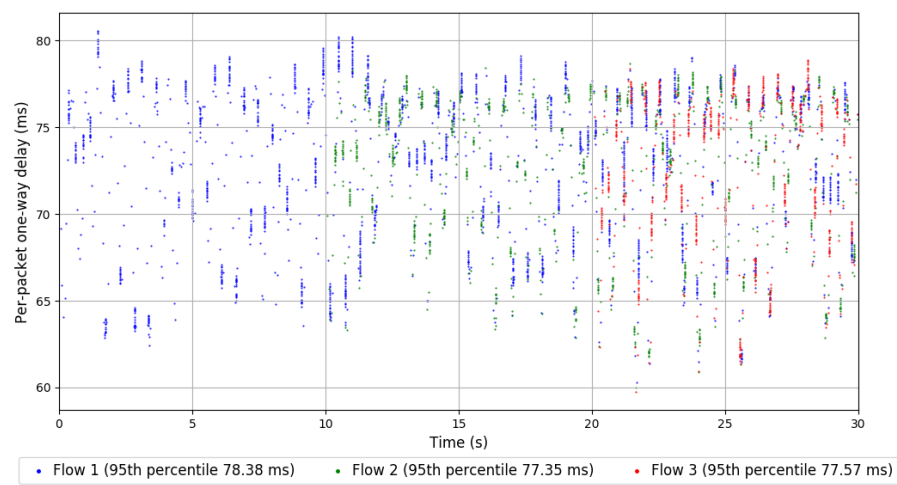
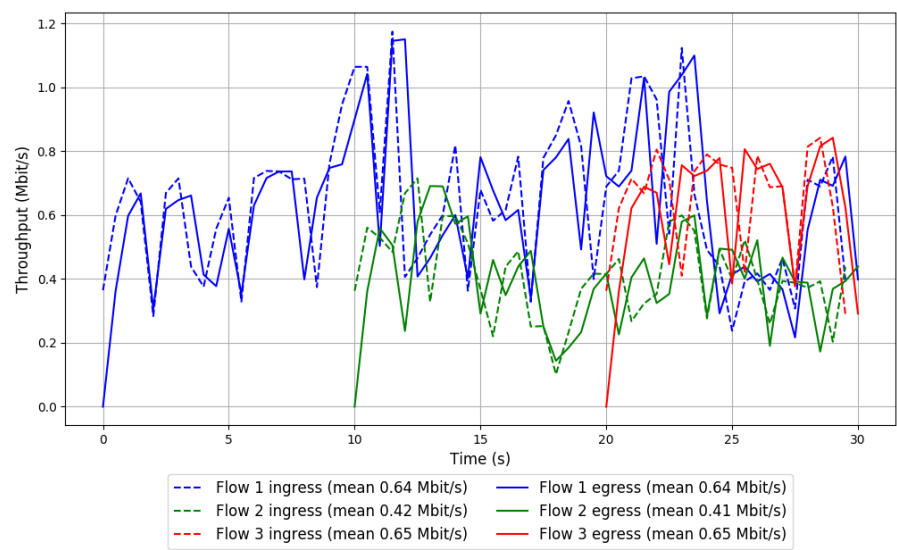


Run 3: Statistics of Sprout

Start at: 2019-02-20 01:41:17
End at: 2019-02-20 01:41:47
Local clock offset: -1.405 ms
Remote clock offset: -9.478 ms

```
# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 77.967 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 78.378 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 77.346 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 77.570 ms
Loss rate: 0.38%
```

Run 3: Report of Sprout — Data Link

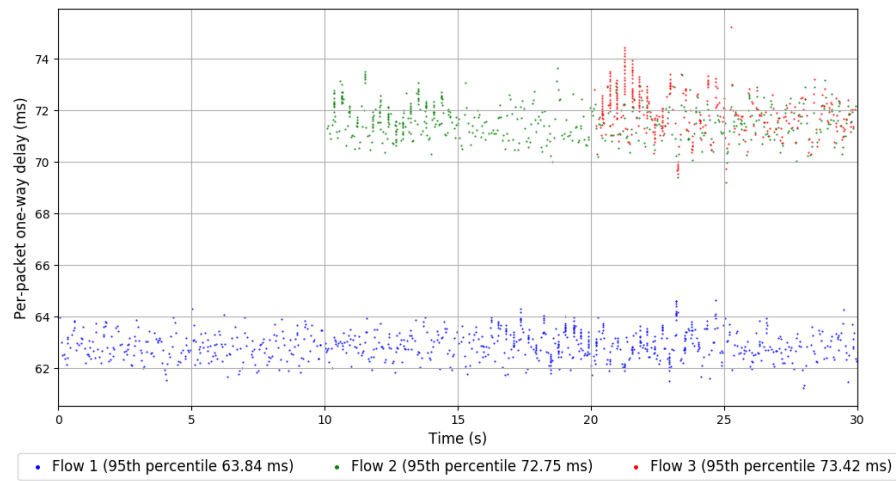
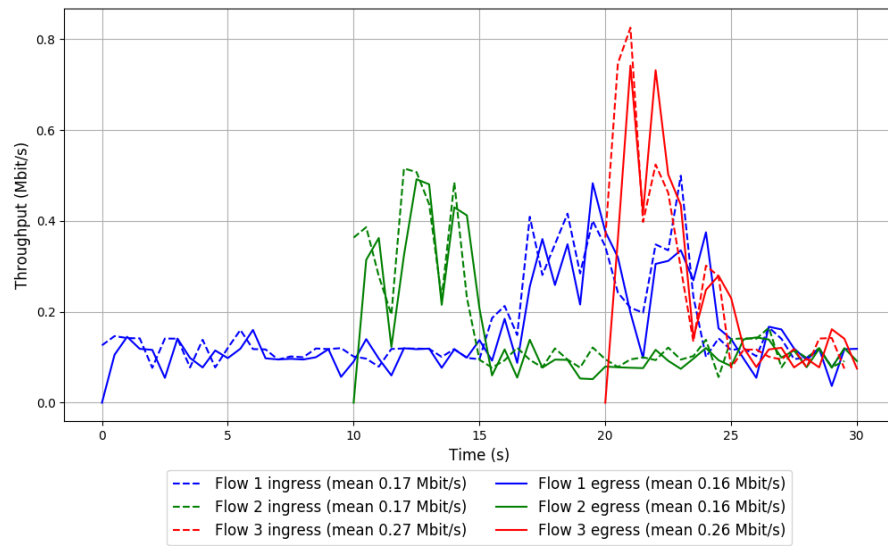


Run 4: Statistics of Sprout

Start at: 2019-02-20 02:19:44
End at: 2019-02-20 02:20:14
Local clock offset: 8.508 ms
Remote clock offset: -15.253 ms

```
# Below is generated by plot.py at 2019-02-20 03:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 72.840 ms
Loss rate: 6.14%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 63.838 ms
Loss rate: 5.87%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 72.745 ms
Loss rate: 7.95%
-- Flow 3:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 73.417 ms
Loss rate: 4.37%
```

Run 4: Report of Sprout — Data Link

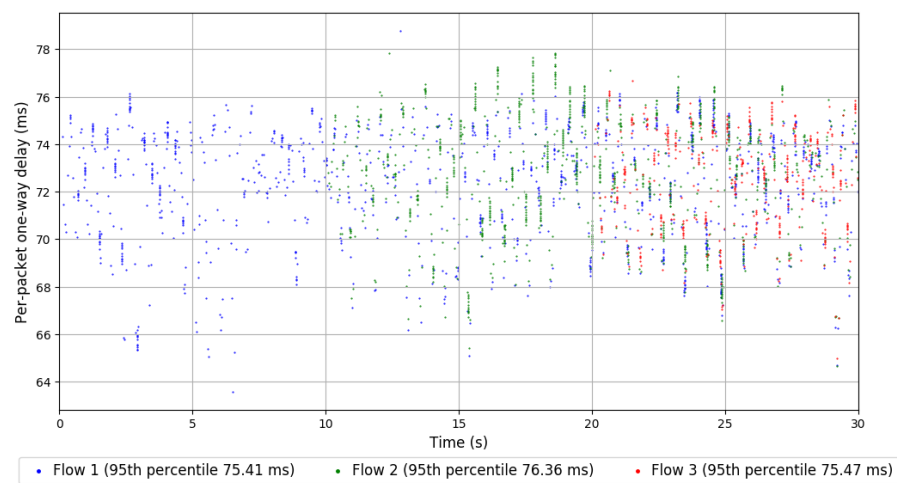
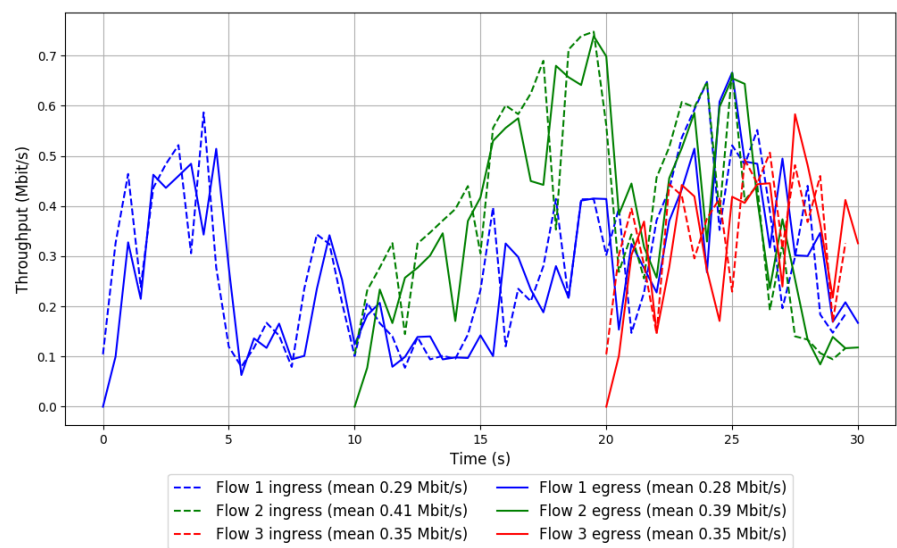


Run 5: Statistics of Sprout

Start at: 2019-02-20 02:59:28
End at: 2019-02-20 02:59:58
Local clock offset: 5.883 ms
Remote clock offset: -14.495 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 75.816 ms
Loss rate: 3.14%
-- Flow 1:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 75.414 ms
Loss rate: 3.65%
-- Flow 2:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 76.364 ms
Loss rate: 3.13%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 75.475 ms
Loss rate: 1.91%

Run 5: Report of Sprout — Data Link

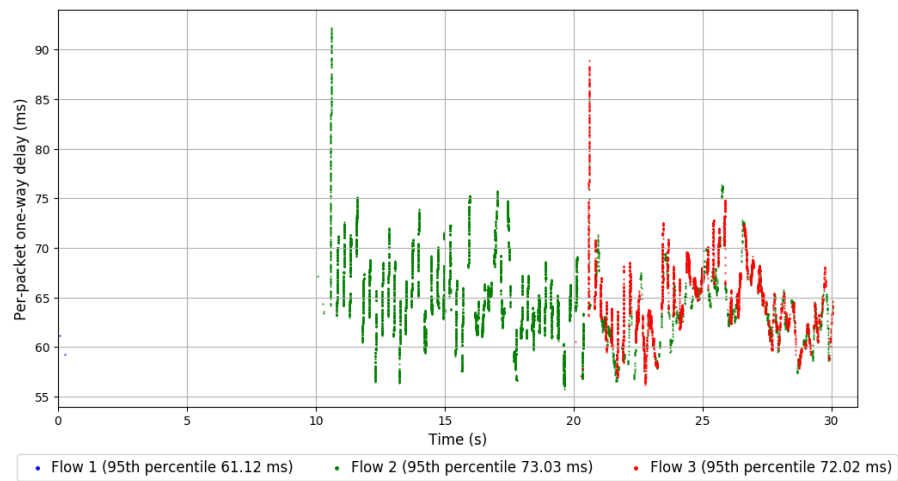
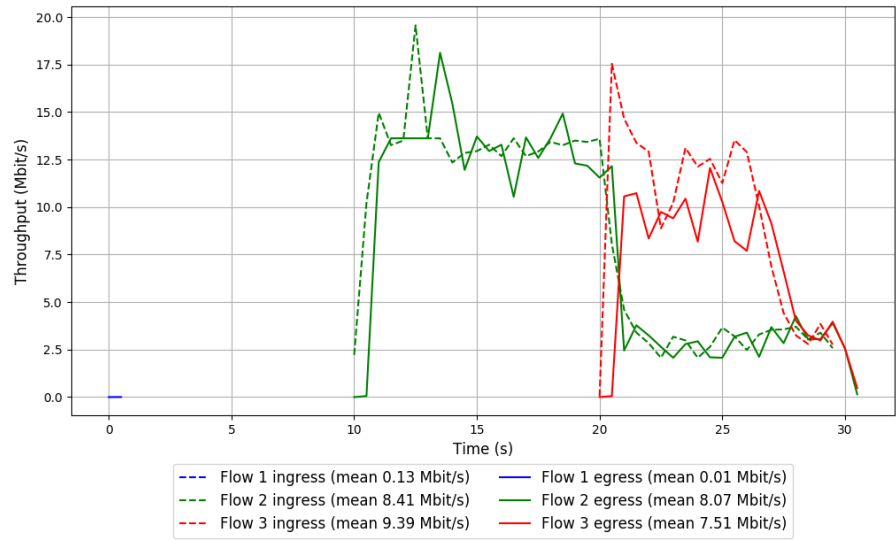


Run 1: Statistics of TaoVA-100x

Start at: 2019-02-20 00:44:13
End at: 2019-02-20 00:44:43
Local clock offset: 6.095 ms
Remote clock offset: -3.207 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 72.668 ms
Loss rate: 9.80%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 61.122 ms
Loss rate: 92.16%
-- Flow 2:
Average throughput: 8.07 Mbit/s
95th percentile per-packet one-way delay: 73.029 ms
Loss rate: 4.06%
-- Flow 3:
Average throughput: 7.51 Mbit/s
95th percentile per-packet one-way delay: 72.015 ms
Loss rate: 20.07%

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

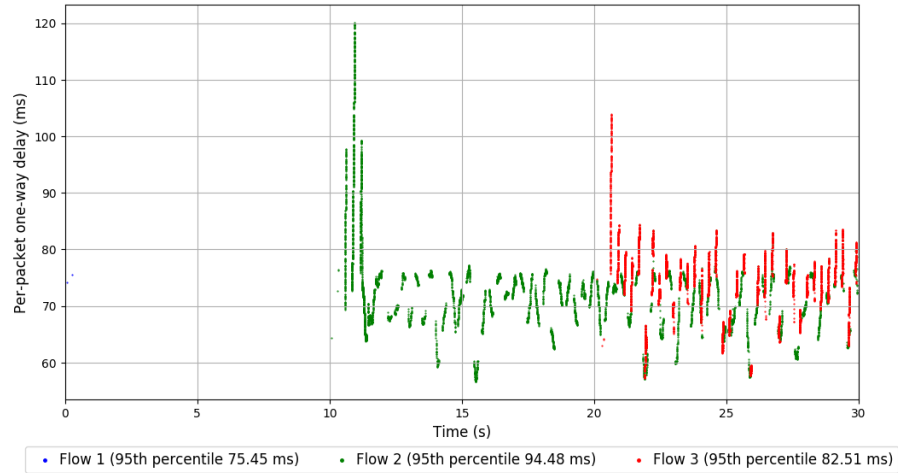
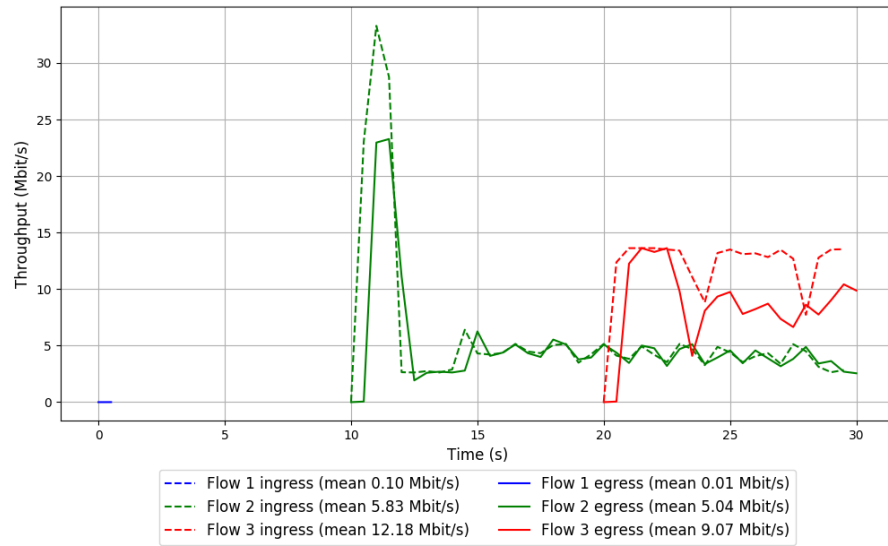


Run 2: Statistics of TaoVA-100x

Start at: 2019-02-20 01:23:26
End at: 2019-02-20 01:23:56
Local clock offset: 4.383 ms
Remote clock offset: -3.983 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 6.34 Mbit/s
95th percentile per-packet one-way delay: 87.889 ms
Loss rate: 19.65%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 75.453 ms
Loss rate: 92.16%
-- Flow 2:
Average throughput: 5.04 Mbit/s
95th percentile per-packet one-way delay: 94.481 ms
Loss rate: 13.51%
-- Flow 3:
Average throughput: 9.07 Mbit/s
95th percentile per-packet one-way delay: 82.510 ms
Loss rate: 25.56%

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

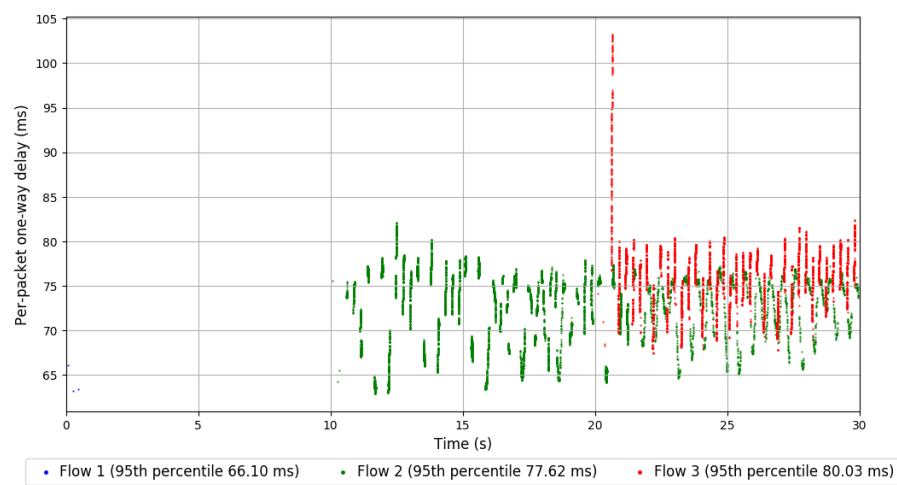
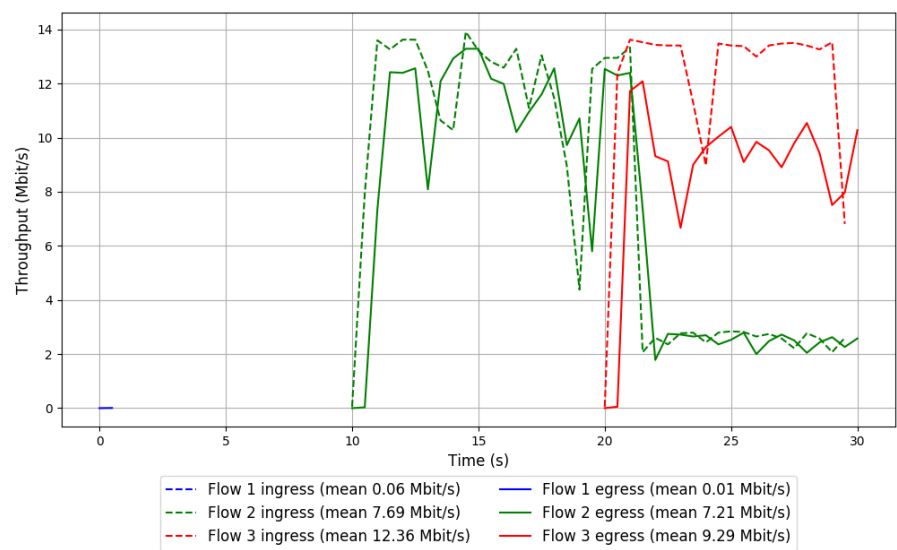


Run 3: Statistics of TaoVA-100x

Start at: 2019-02-20 02:01:35
End at: 2019-02-20 02:02:05
Local clock offset: -2.828 ms
Remote clock offset: -16.443 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 79.250 ms
Loss rate: 14.42%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 66.098 ms
Loss rate: 88.68%
-- Flow 2:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 77.620 ms
Loss rate: 6.21%
-- Flow 3:
Average throughput: 9.29 Mbit/s
95th percentile per-packet one-way delay: 80.025 ms
Loss rate: 24.83%

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

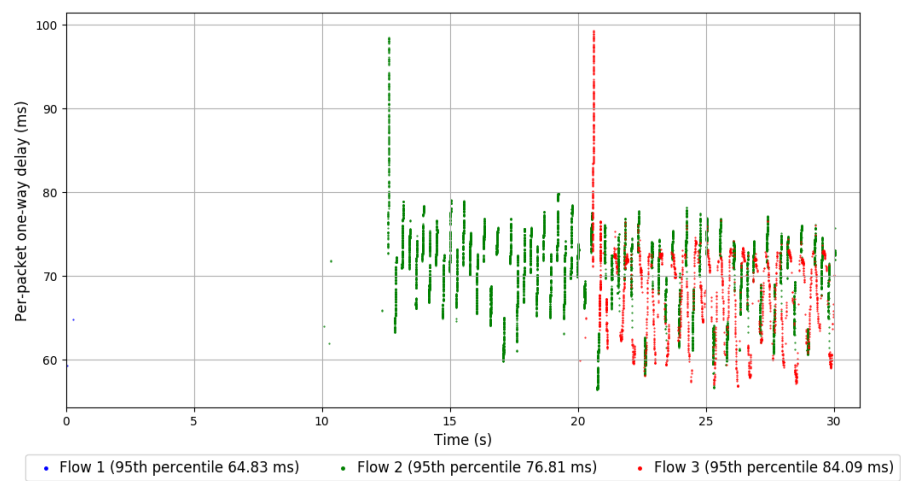
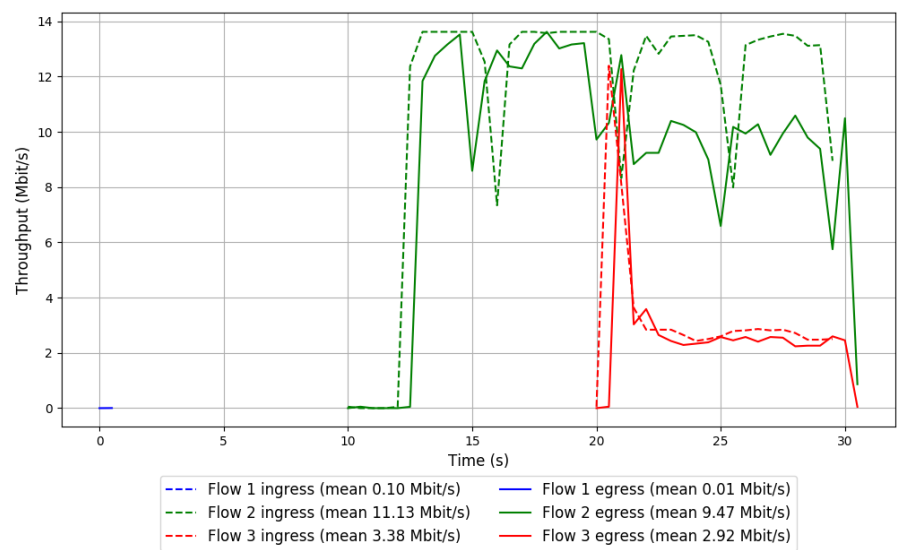


Run 4: Statistics of TaoVA-100x

Start at: 2019-02-20 02:42:16
End at: 2019-02-20 02:42:46
Local clock offset: 6.537 ms
Remote clock offset: -15.021 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.27 Mbit/s
95th percentile per-packet one-way delay: 76.976 ms
Loss rate: 14.75%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 64.826 ms
Loss rate: 92.16%
-- Flow 2:
Average throughput: 9.47 Mbit/s
95th percentile per-packet one-way delay: 76.814 ms
Loss rate: 14.90%
-- Flow 3:
Average throughput: 2.92 Mbit/s
95th percentile per-packet one-way delay: 84.087 ms
Loss rate: 13.65%

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

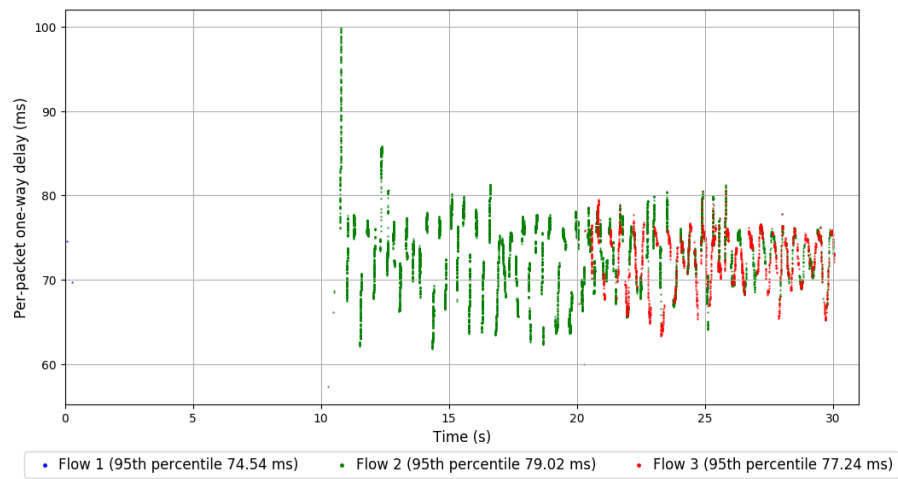
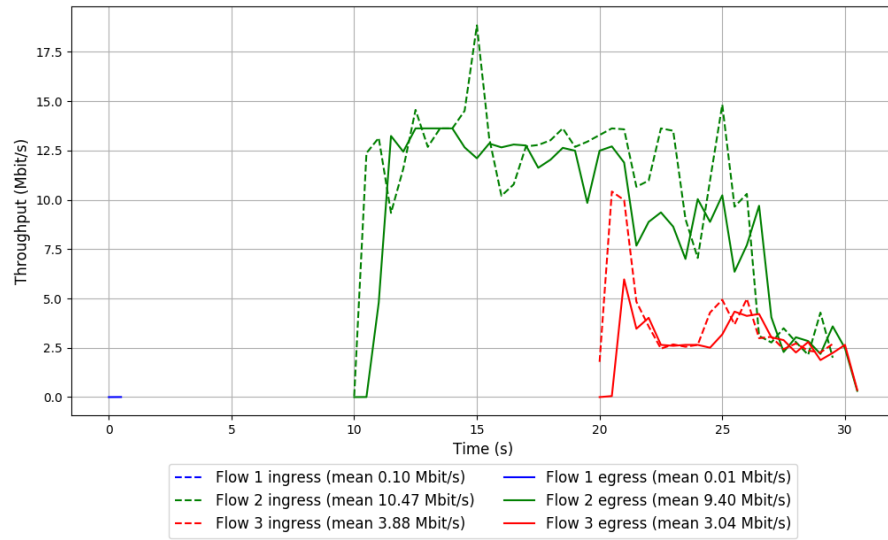


Run 5: Statistics of TaoVA-100x

Start at: 2019-02-20 03:20:49
End at: 2019-02-20 03:21:19
Local clock offset: 3.653 ms
Remote clock offset: -13.883 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 78.854 ms
Loss rate: 12.72%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 74.539 ms
Loss rate: 92.16%
-- Flow 2:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 79.020 ms
Loss rate: 11.04%
-- Flow 3:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 77.238 ms
Loss rate: 21.79%

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

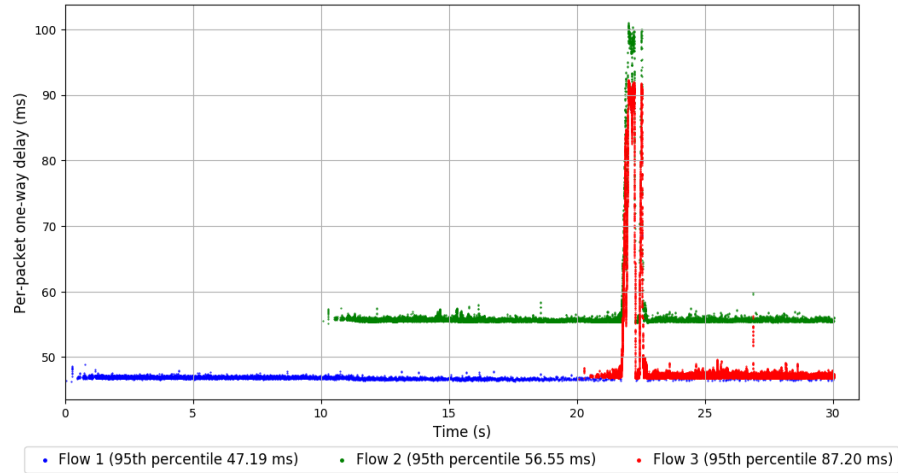
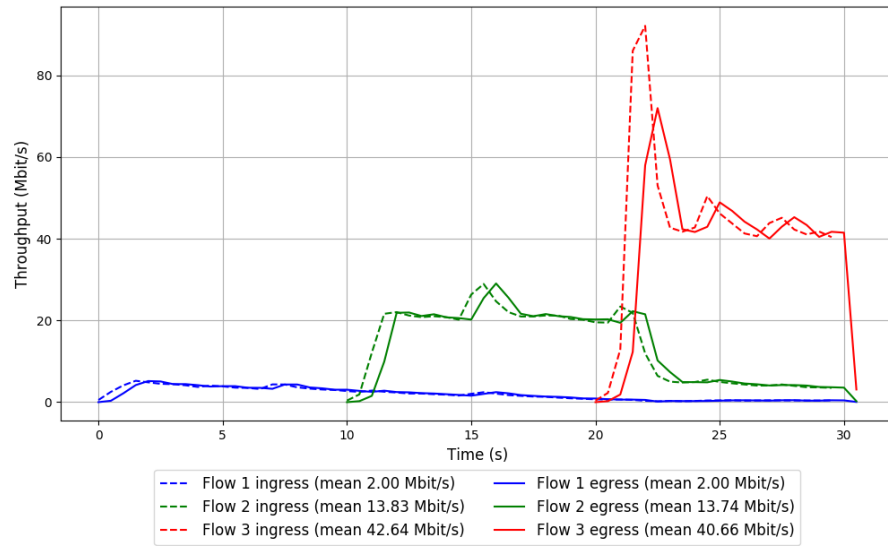


Run 1: Statistics of TCP Vegas

Start at: 2019-02-20 00:21:19
End at: 2019-02-20 00:21:49
Local clock offset: -1.17 ms
Remote clock offset: -1.708 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: 74.375 ms
Loss rate: 2.84%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 47.188 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 13.74 Mbit/s
95th percentile per-packet one-way delay: 56.547 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 40.66 Mbit/s
95th percentile per-packet one-way delay: 87.203 ms
Loss rate: 4.64%

Run 1: Report of TCP Vegas — Data Link

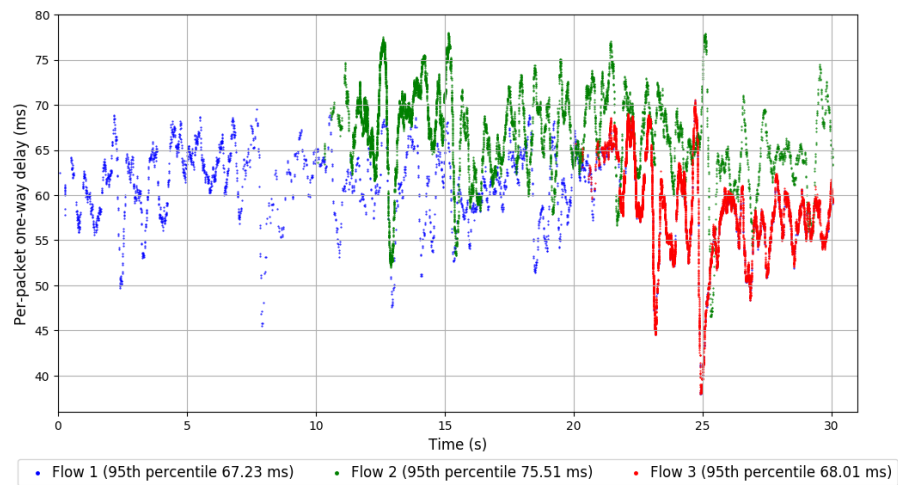
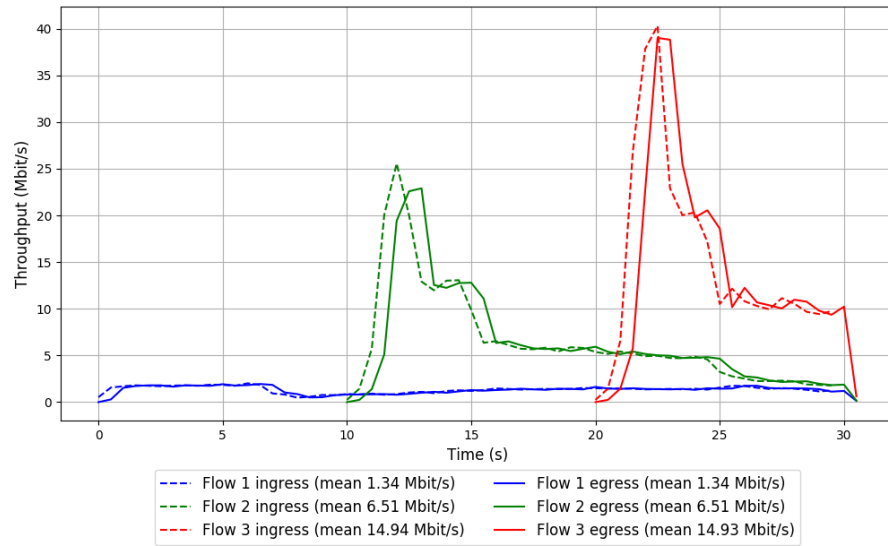


Run 2: Statistics of TCP Vegas

Start at: 2019-02-20 00:56:56
End at: 2019-02-20 00:57:26
Local clock offset: 8.399 ms
Remote clock offset: -5.343 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 10.64 Mbit/s
95th percentile per-packet one-way delay: 72.841 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 67.229 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 6.51 Mbit/s
95th percentile per-packet one-way delay: 75.508 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 14.93 Mbit/s
95th percentile per-packet one-way delay: 68.009 ms
Loss rate: 0.09%

Run 2: Report of TCP Vegas — Data Link

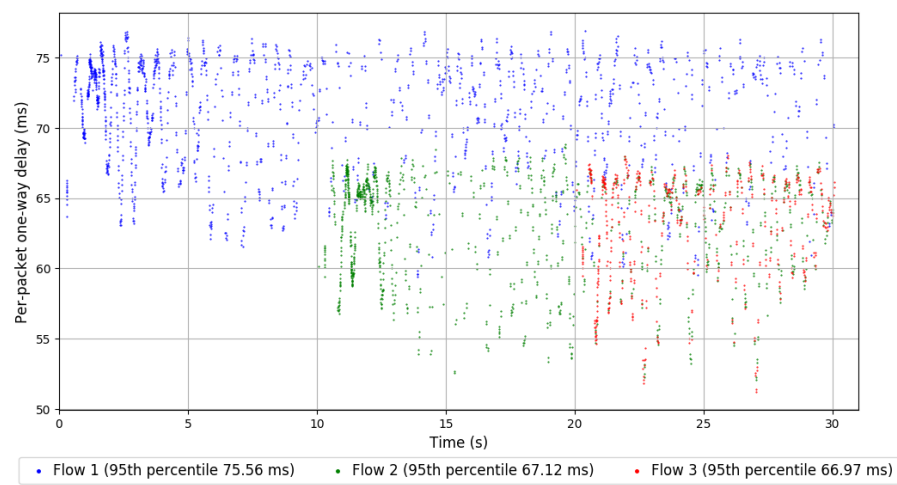
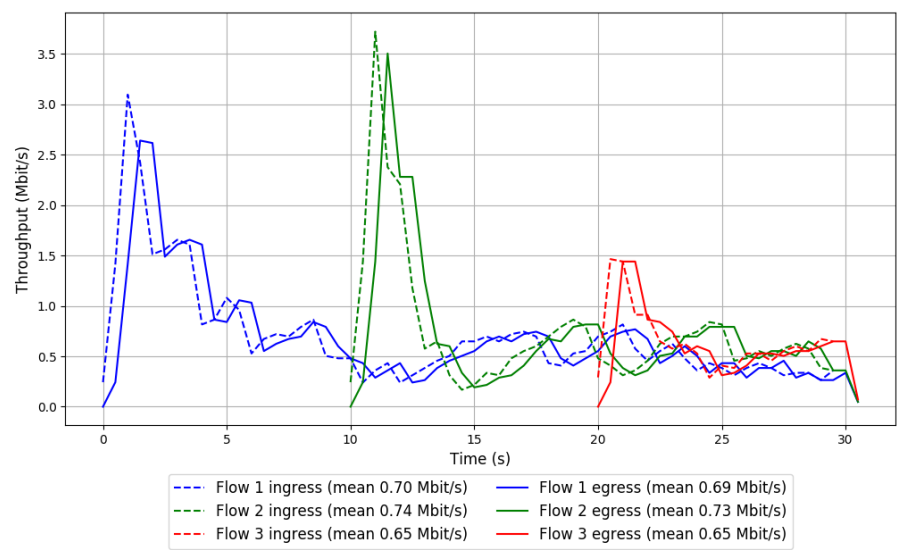


Run 3: Statistics of TCP Vegas

Start at: 2019-02-20 01:37:22
End at: 2019-02-20 01:37:52
Local clock offset: -0.199 ms
Remote clock offset: -10.381 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 75.156 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 75.565 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 67.121 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 66.965 ms
Loss rate: 0.55%

Run 3: Report of TCP Vegas — Data Link

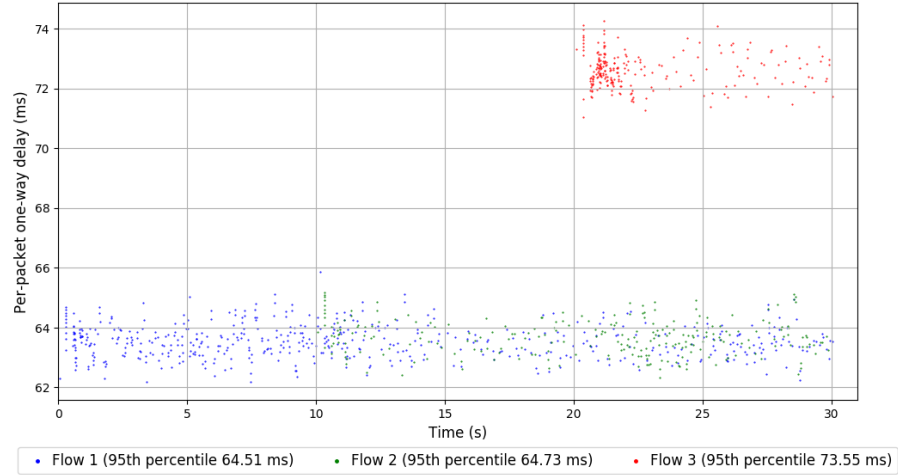
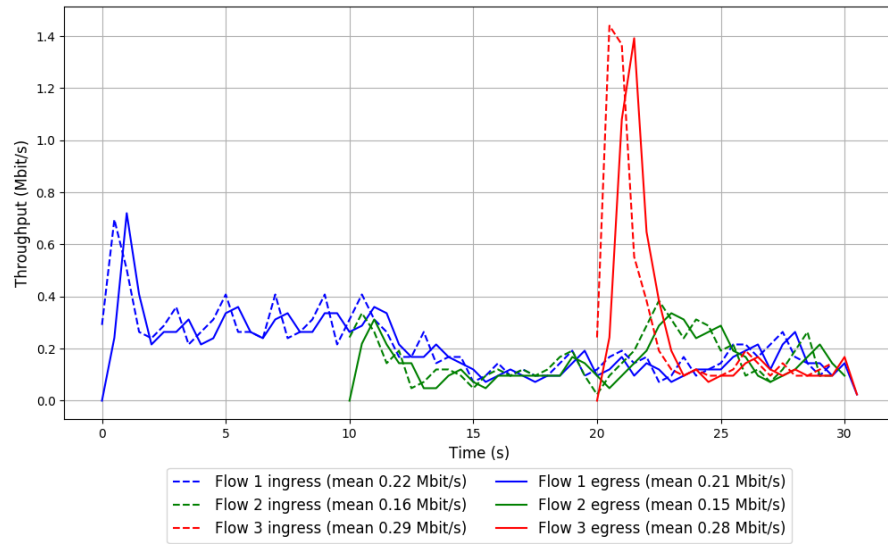


Run 4: Statistics of TCP Vegas

Start at: 2019-02-20 02:15:49
End at: 2019-02-20 02:16:19
Local clock offset: 7.216 ms
Remote clock offset: -15.56 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 73.035 ms
Loss rate: 6.12%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 64.510 ms
Loss rate: 5.69%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 64.730 ms
Loss rate: 7.72%
-- Flow 3:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 73.548 ms
Loss rate: 5.33%

Run 4: Report of TCP Vegas — Data Link

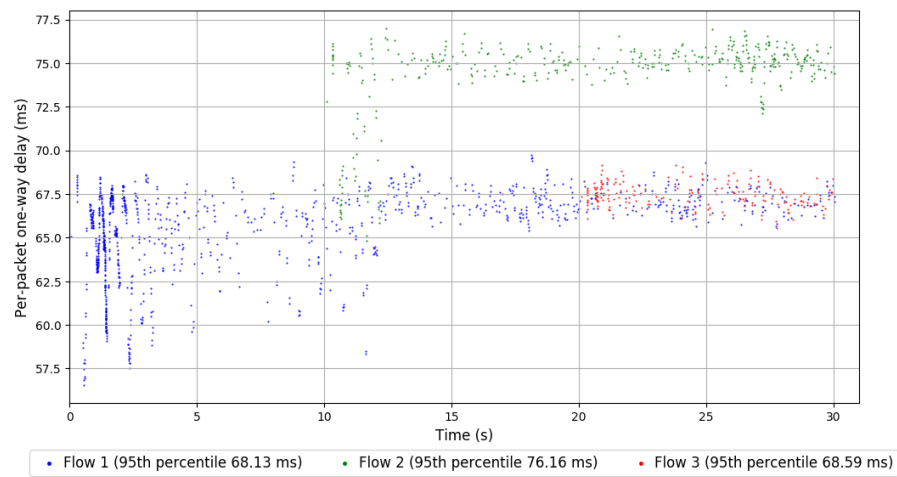
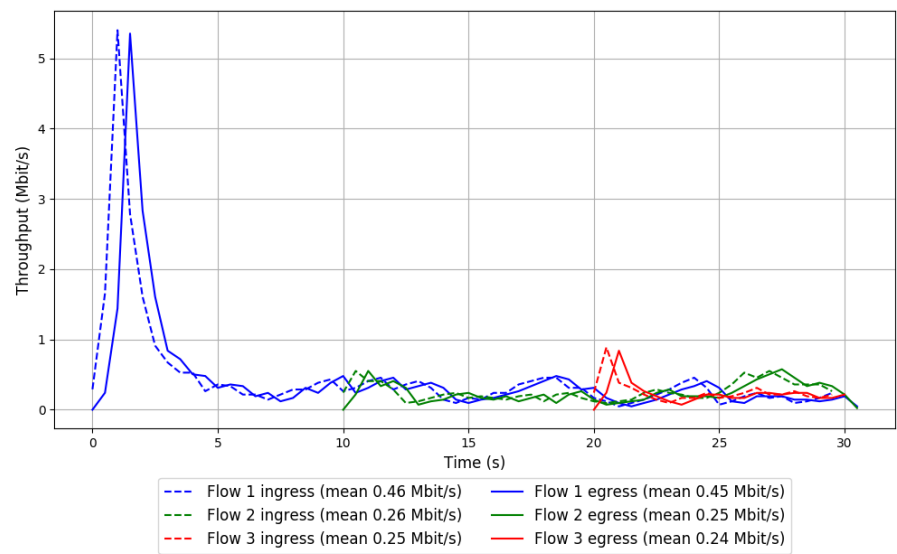


Run 5: Statistics of TCP Vegas

Start at: 2019-02-20 02:55:53
End at: 2019-02-20 02:56:23
Local clock offset: 5.979 ms
Remote clock offset: -13.444 ms

Below is generated by plot.py at 2019-02-20 03:36:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 75.605 ms
Loss rate: 3.08%
-- Flow 1:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 68.130 ms
Loss rate: 2.27%
-- Flow 2:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 76.158 ms
Loss rate: 3.96%
-- Flow 3:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 68.590 ms
Loss rate: 5.71%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-02-20 00:32:25

End at: 2019-02-20 00:32:55

Local clock offset: 0.641 ms

Remote clock offset: -2.5 ms

Below is generated by plot.py at 2019-02-20 03:37:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.05 Mbit/s

95th percentile per-packet one-way delay: 201.740 ms

Loss rate: 4.92%

-- Flow 1:

Average throughput: 39.04 Mbit/s

95th percentile per-packet one-way delay: 202.024 ms

Loss rate: 4.05%

-- Flow 2:

Average throughput: 43.54 Mbit/s

95th percentile per-packet one-way delay: 201.574 ms

Loss rate: 4.78%

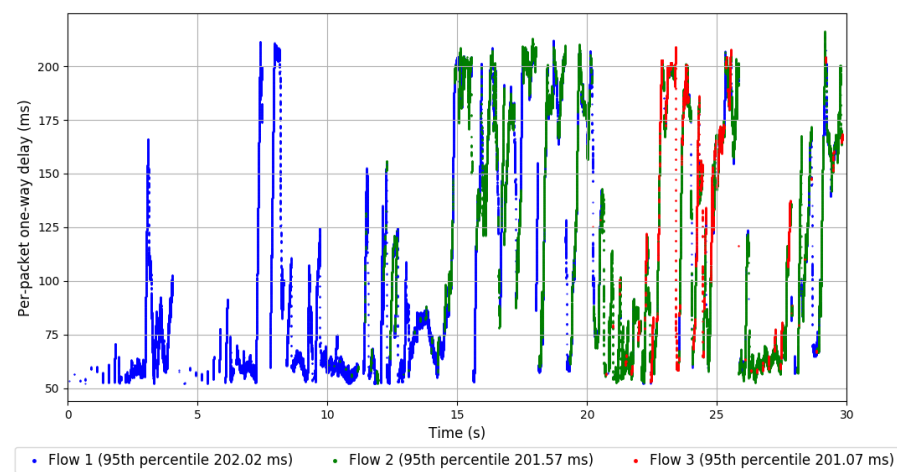
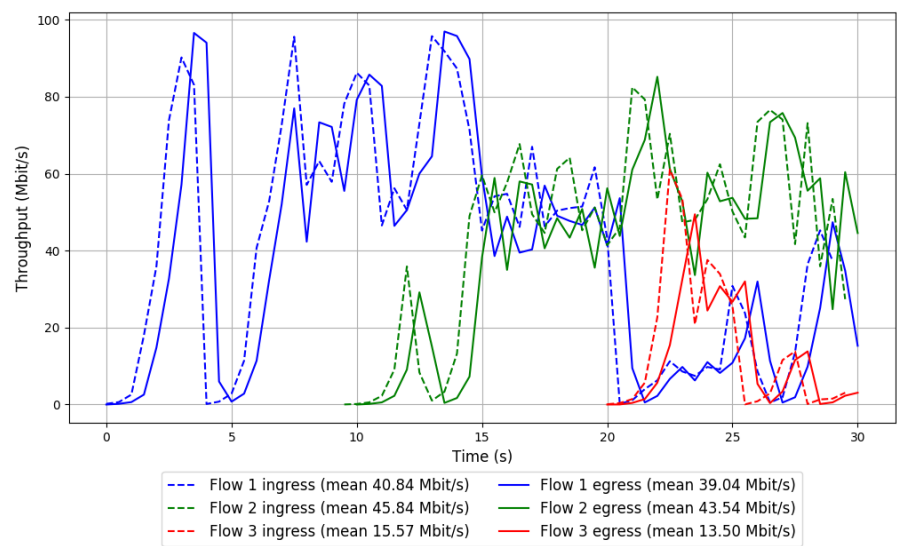
-- Flow 3:

Average throughput: 13.50 Mbit/s

95th percentile per-packet one-way delay: 201.066 ms

Loss rate: 12.87%

Run 1: Report of Verus — Data Link

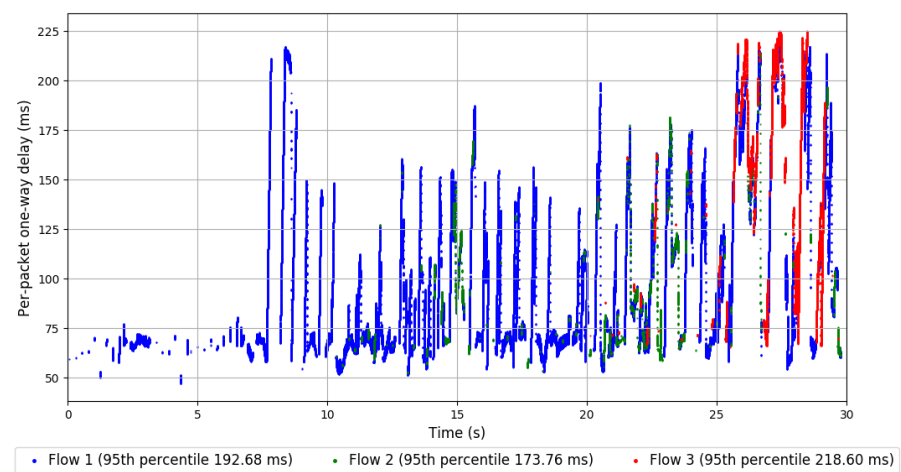
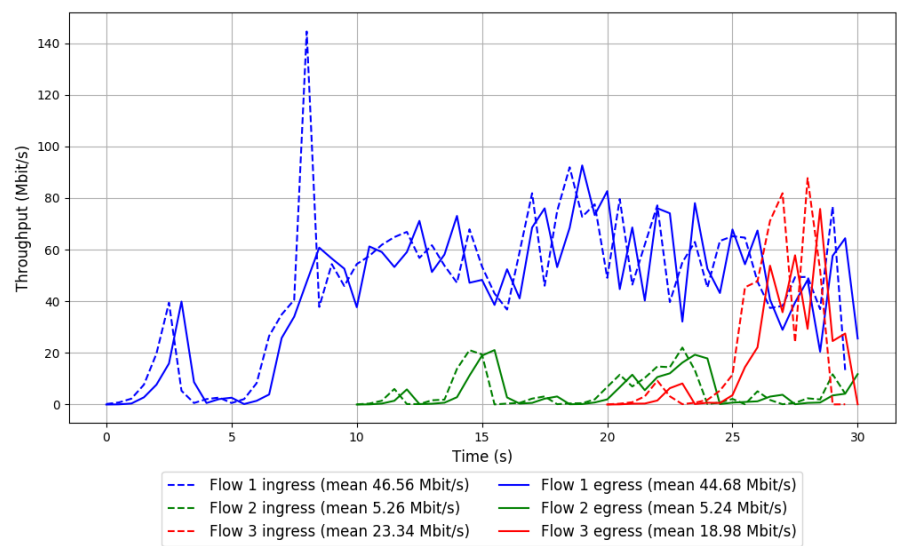


Run 2: Statistics of Verus

Start at: 2019-02-20 01:08:56
End at: 2019-02-20 01:09:26
Local clock offset: 5.619 ms
Remote clock offset: -2.924 ms

Below is generated by plot.py at 2019-02-20 03:37:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 54.26 Mbit/s
95th percentile per-packet one-way delay: 205.131 ms
Loss rate: 5.73%
-- Flow 1:
Average throughput: 44.68 Mbit/s
95th percentile per-packet one-way delay: 192.681 ms
Loss rate: 4.03%
-- Flow 2:
Average throughput: 5.24 Mbit/s
95th percentile per-packet one-way delay: 173.762 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 18.98 Mbit/s
95th percentile per-packet one-way delay: 218.600 ms
Loss rate: 18.67%

Run 2: Report of Verus — Data Link

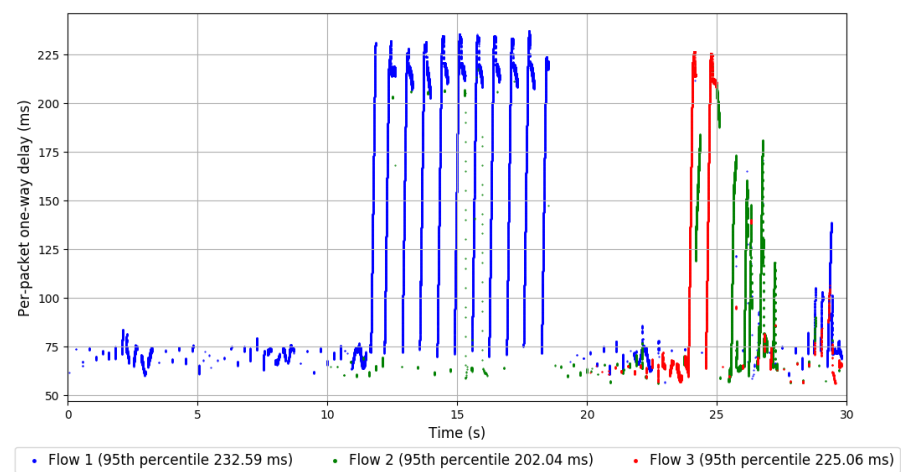
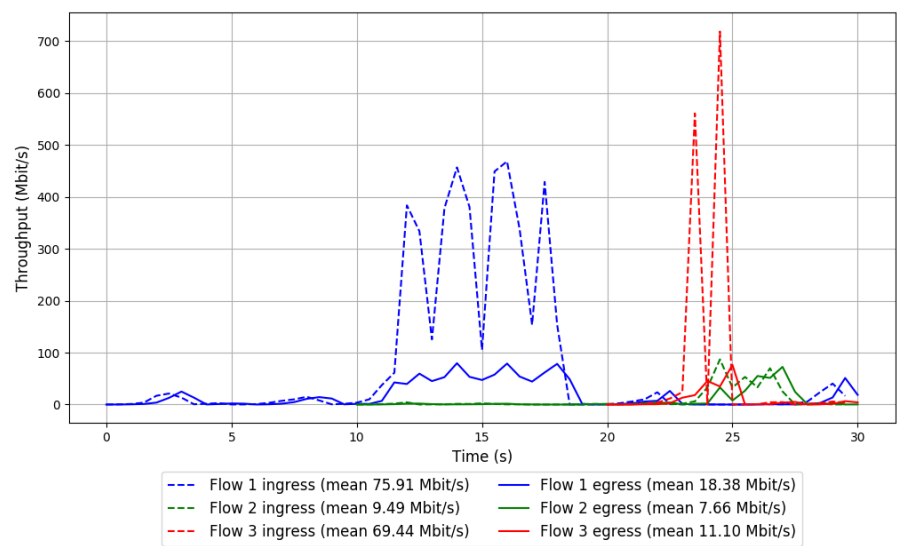


Run 3: Statistics of Verus

Start at: 2019-02-20 01:49:27
End at: 2019-02-20 01:49:57
Local clock offset: -3.407 ms
Remote clock offset: -15.091 ms

Below is generated by plot.py at 2019-02-20 03:37:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 27.03 Mbit/s
95th percentile per-packet one-way delay: 231.376 ms
Loss rate: 74.19%
-- Flow 1:
Average throughput: 18.38 Mbit/s
95th percentile per-packet one-way delay: 232.585 ms
Loss rate: 75.78%
-- Flow 2:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 202.043 ms
Loss rate: 19.31%
-- Flow 3:
Average throughput: 11.10 Mbit/s
95th percentile per-packet one-way delay: 225.062 ms
Loss rate: 84.02%

Run 3: Report of Verus — Data Link

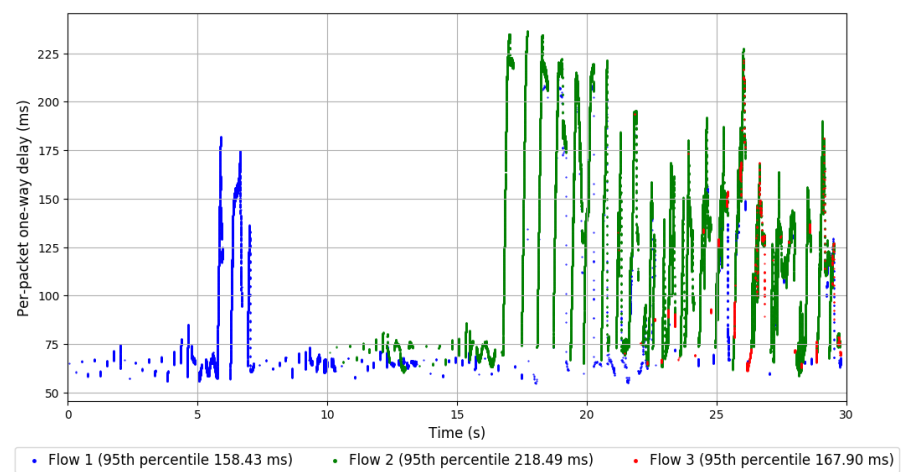
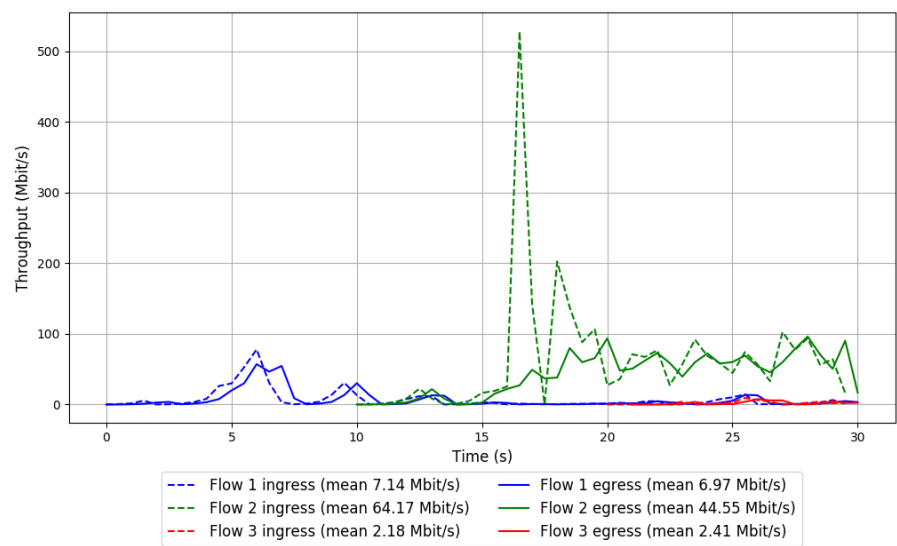


Run 4: Statistics of Verus

Start at: 2019-02-20 02:28:32
End at: 2019-02-20 02:29:03
Local clock offset: 10.255 ms
Remote clock offset: -11.386 ms

Below is generated by plot.py at 2019-02-20 03:37:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 37.11 Mbit/s
95th percentile per-packet one-way delay: 216.850 ms
Loss rate: 26.13%
-- Flow 1:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 158.428 ms
Loss rate: 2.26%
-- Flow 2:
Average throughput: 44.55 Mbit/s
95th percentile per-packet one-way delay: 218.486 ms
Loss rate: 30.55%
-- Flow 3:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 167.898 ms
Loss rate: 1.63%

Run 4: Report of Verus — Data Link

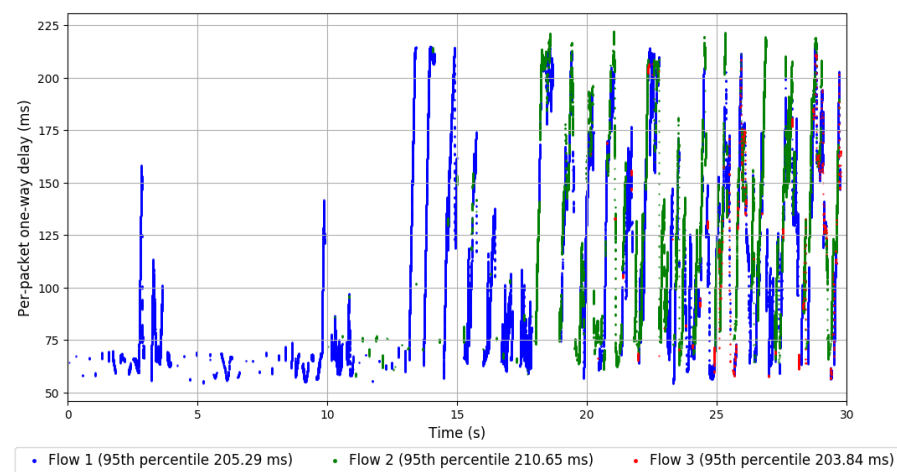
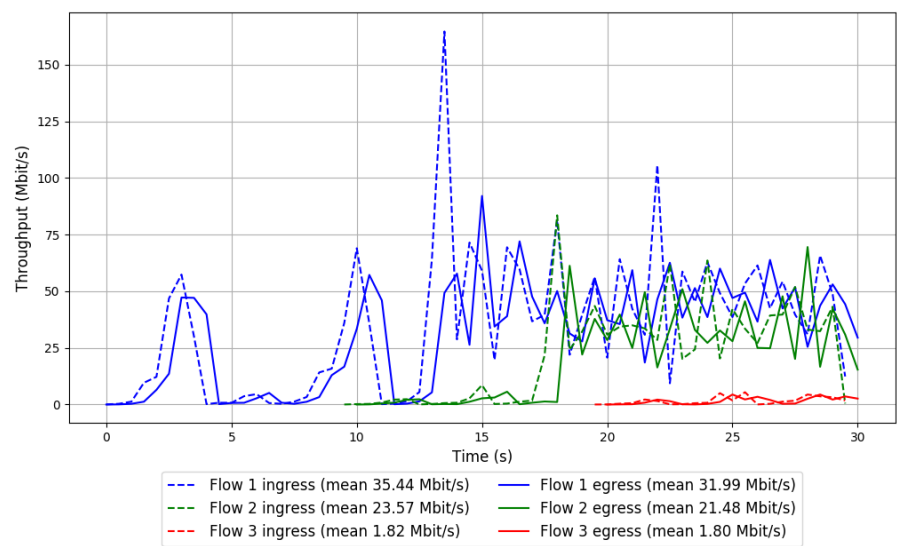


Run 5: Statistics of Verus

Start at: 2019-02-20 03:08:07
End at: 2019-02-20 03:08:37
Local clock offset: 4.417 ms
Remote clock offset: -14.205 ms

Below is generated by plot.py at 2019-02-20 03:37:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 46.77 Mbit/s
95th percentile per-packet one-way delay: 207.750 ms
Loss rate: 9.14%
-- Flow 1:
Average throughput: 31.99 Mbit/s
95th percentile per-packet one-way delay: 205.288 ms
Loss rate: 9.61%
-- Flow 2:
Average throughput: 21.48 Mbit/s
95th percentile per-packet one-way delay: 210.647 ms
Loss rate: 8.36%
-- Flow 3:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 203.836 ms
Loss rate: 1.55%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-02-20 00:34:14

End at: 2019-02-20 00:34:44

Local clock offset: 2.14 ms

Remote clock offset: 0.657 ms

Below is generated by plot.py at 2019-02-20 03:37:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.47 Mbit/s

95th percentile per-packet one-way delay: 62.036 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 55.574 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 65.813 ms

Loss rate: 0.09%

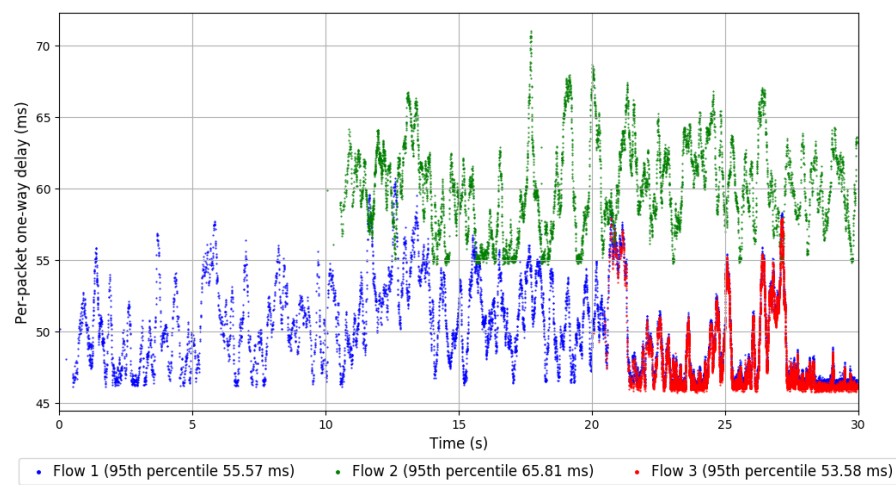
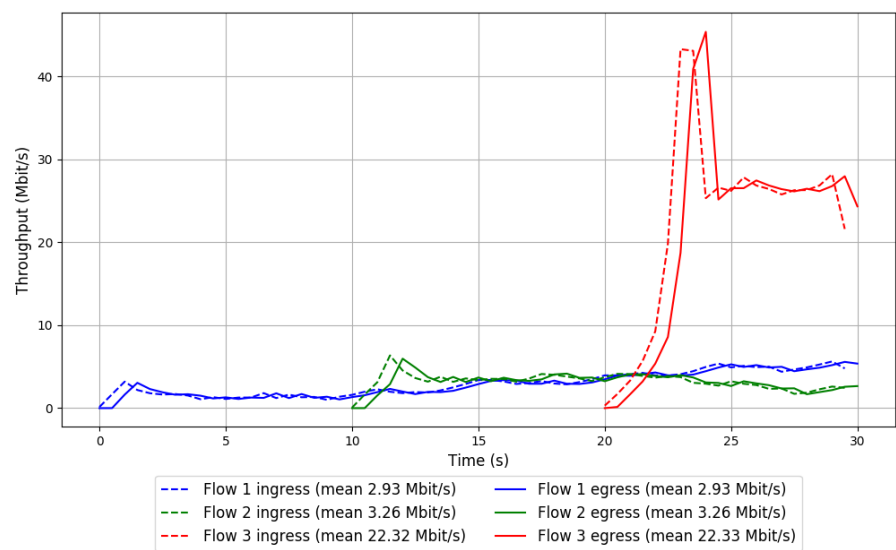
-- Flow 3:

Average throughput: 22.33 Mbit/s

95th percentile per-packet one-way delay: 53.578 ms

Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2019-02-20 01:11:47

End at: 2019-02-20 01:12:17

Local clock offset: 5.119 ms

Remote clock offset: -3.92 ms

Below is generated by plot.py at 2019-02-20 03:37:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.02 Mbit/s

95th percentile per-packet one-way delay: 72.819 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 68.225 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 68.206 ms

Loss rate: 0.31%

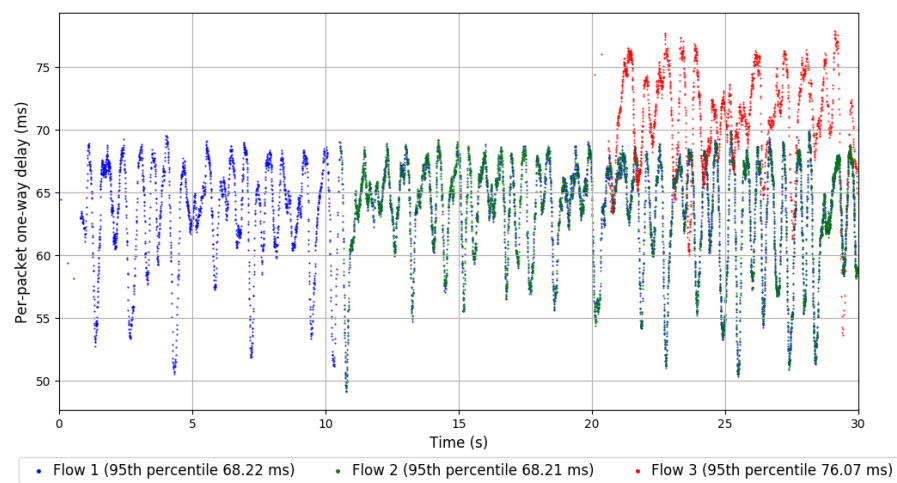
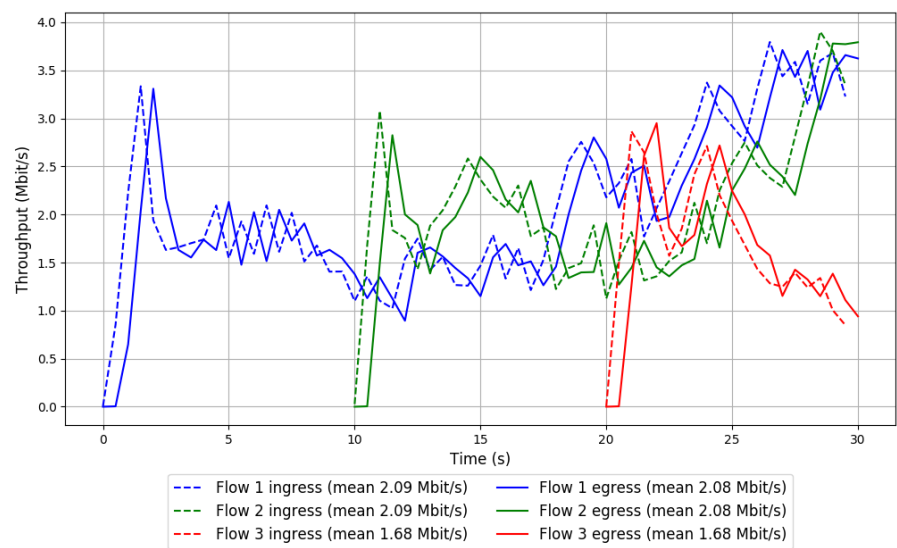
-- Flow 3:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 76.069 ms

Loss rate: 0.06%

Run 2: Report of PCC-Vivace — Data Link

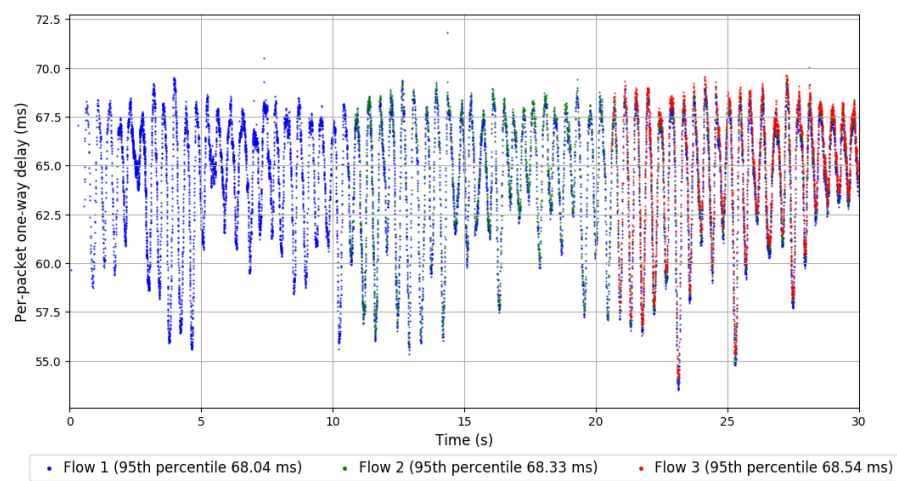
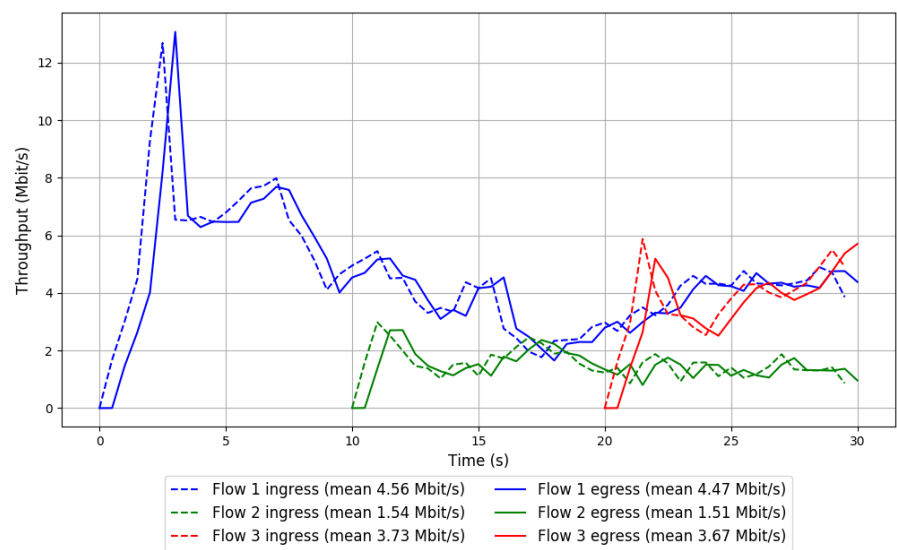


Run 3: Statistics of PCC-Vivace

Start at: 2019-02-20 01:51:20
End at: 2019-02-20 01:51:50
Local clock offset: -3.616 ms
Remote clock offset: -12.78 ms

Below is generated by plot.py at 2019-02-20 03:37:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 68.186 ms
Loss rate: 1.98%
-- Flow 1:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 68.038 ms
Loss rate: 1.99%
-- Flow 2:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 68.335 ms
Loss rate: 2.32%
-- Flow 3:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 68.543 ms
Loss rate: 1.68%

Run 3: Report of PCC-Vivace — Data Link

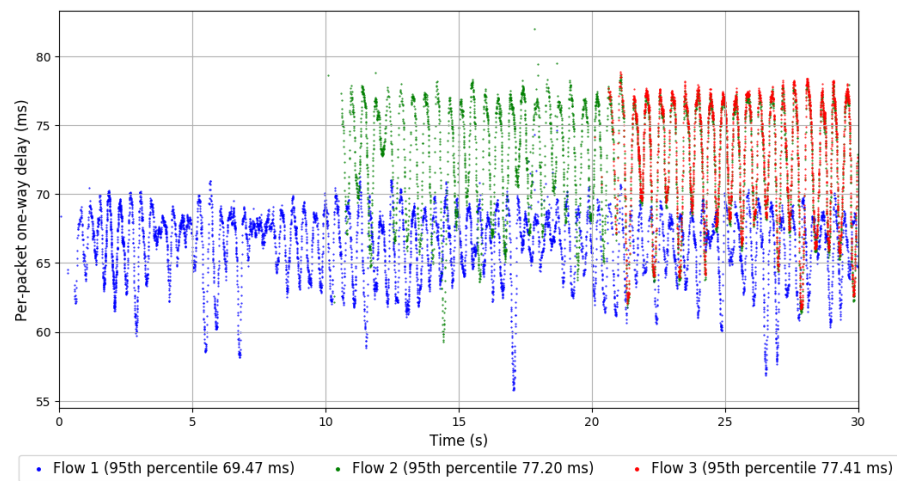
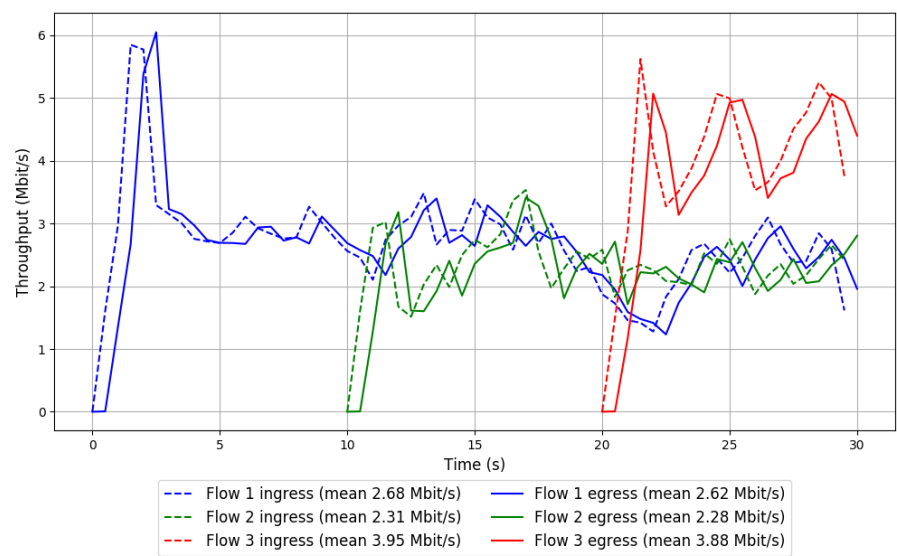


Run 4: Statistics of PCC-Vivace

Start at: 2019-02-20 02:30:51
End at: 2019-02-20 02:31:21
Local clock offset: 10.07 ms
Remote clock offset: -8.326 ms

Below is generated by plot.py at 2019-02-20 03:37:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 5.41 Mbit/s
95th percentile per-packet one-way delay: 77.009 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 69.468 ms
Loss rate: 2.37%
-- Flow 2:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 77.199 ms
Loss rate: 1.67%
-- Flow 3:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 77.414 ms
Loss rate: 1.82%

Run 4: Report of PCC-Vivace — Data Link

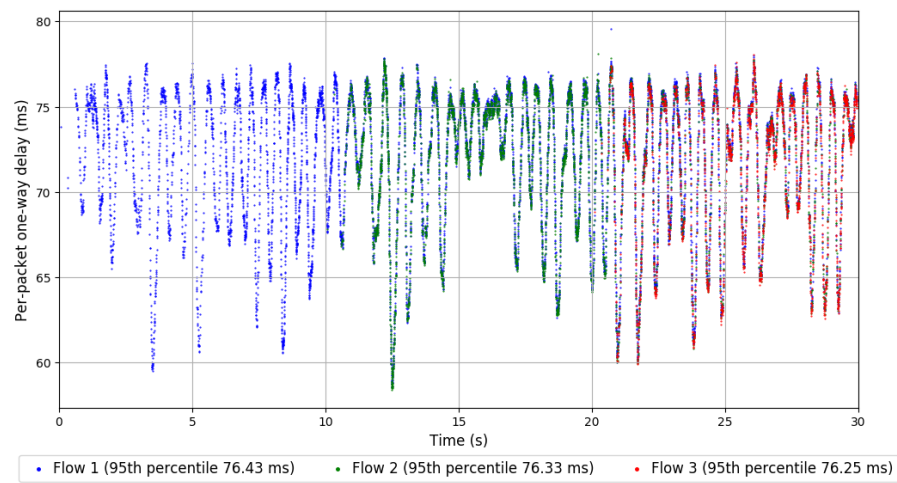
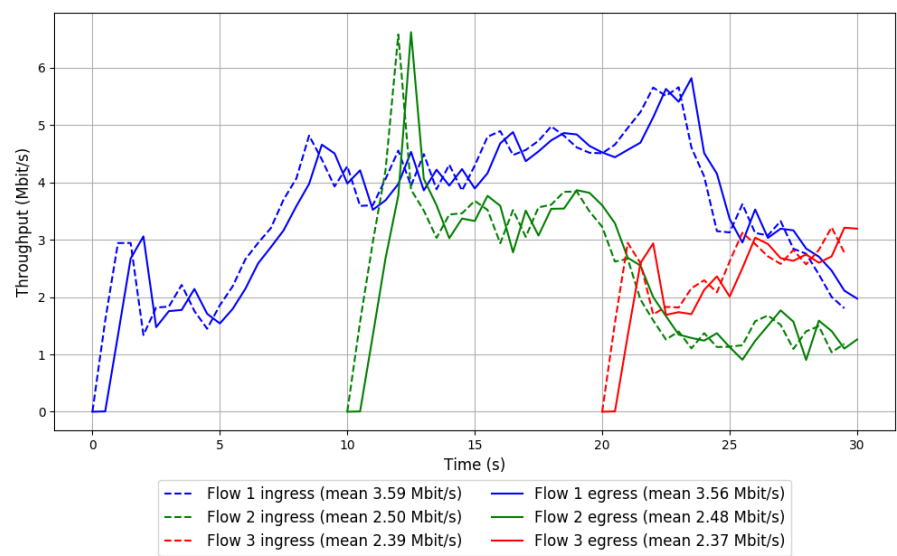


Run 5: Statistics of PCC-Vivace

Start at: 2019-02-20 03:10:51
End at: 2019-02-20 03:11:21
Local clock offset: 4.022 ms
Remote clock offset: -12.682 ms

Below is generated by plot.py at 2019-02-20 03:37:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 5.99 Mbit/s
95th percentile per-packet one-way delay: 76.378 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 3.56 Mbit/s
95th percentile per-packet one-way delay: 76.434 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 2.48 Mbit/s
95th percentile per-packet one-way delay: 76.326 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 76.245 ms
Loss rate: 0.90%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-02-20 00:41:26

End at: 2019-02-20 00:41:57

Local clock offset: 5.33 ms

Remote clock offset: 1.33 ms

Below is generated by plot.py at 2019-02-20 03:37:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 68.347 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 69.536 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 56.211 ms

Loss rate: 0.00%

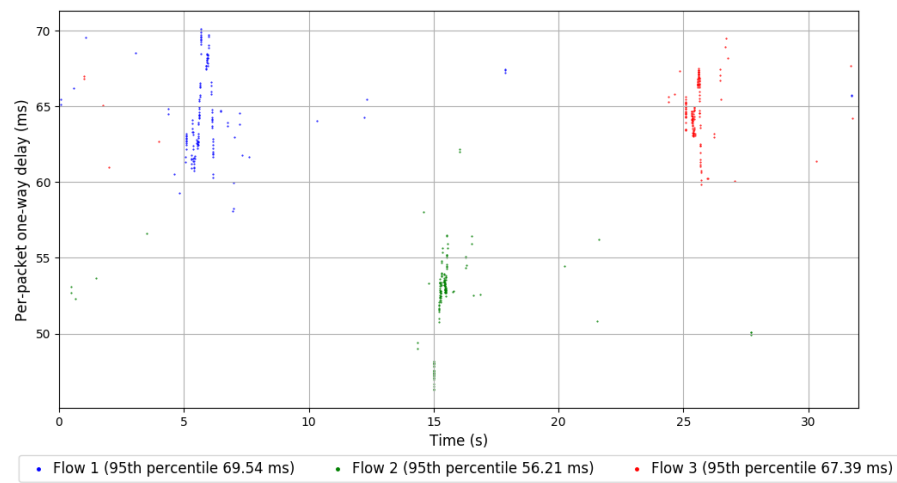
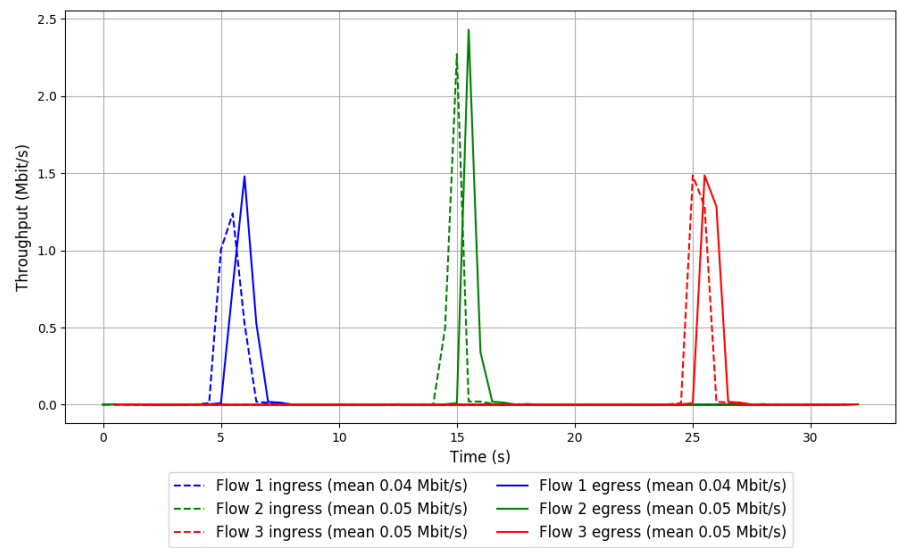
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 67.387 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

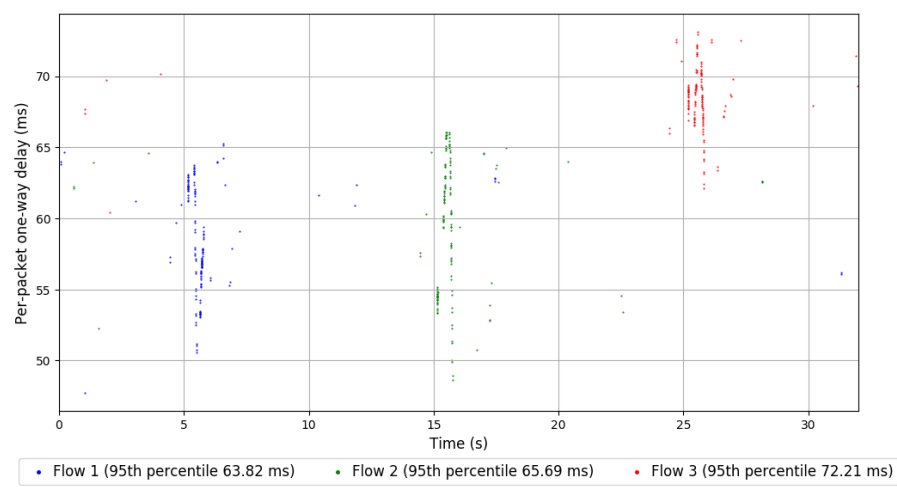
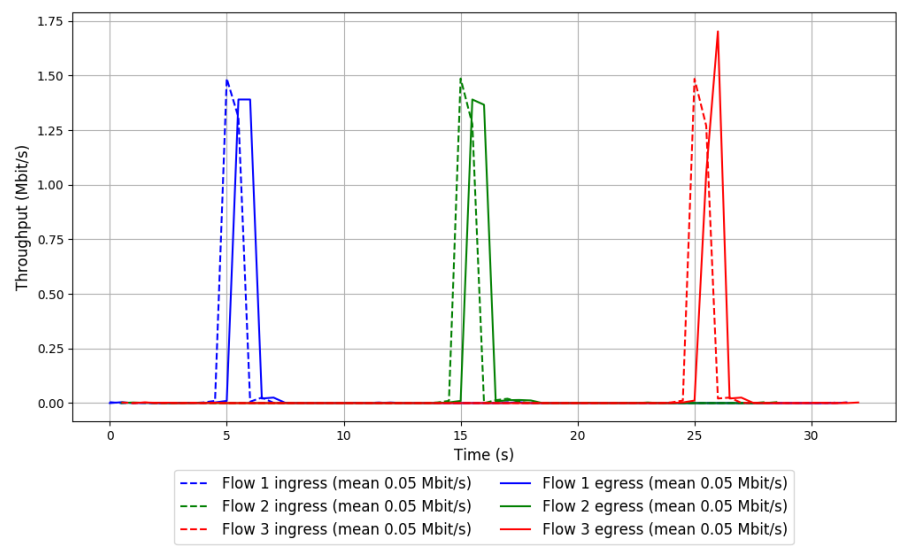


Run 2: Statistics of WebRTC media

Start at: 2019-02-20 01:20:47
End at: 2019-02-20 01:21:17
Local clock offset: 4.243 ms
Remote clock offset: -6.644 ms

Below is generated by plot.py at 2019-02-20 03:37:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 70.400 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.822 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 65.693 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 72.207 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

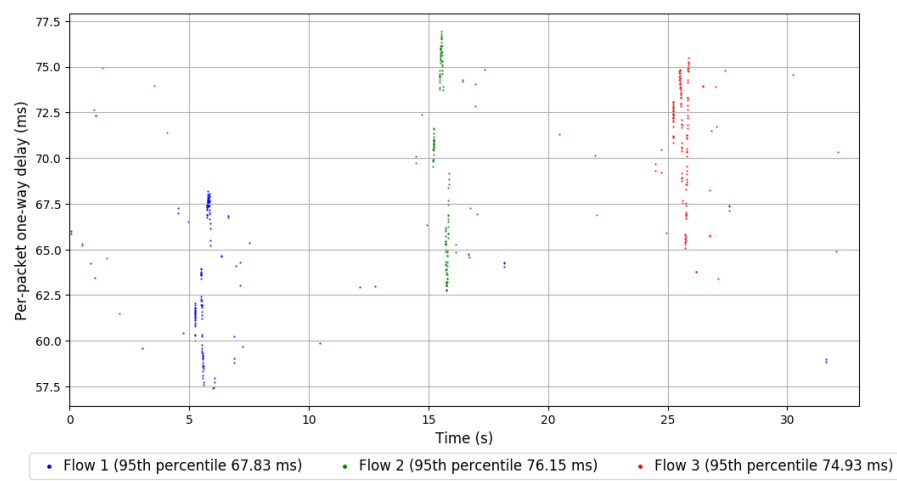
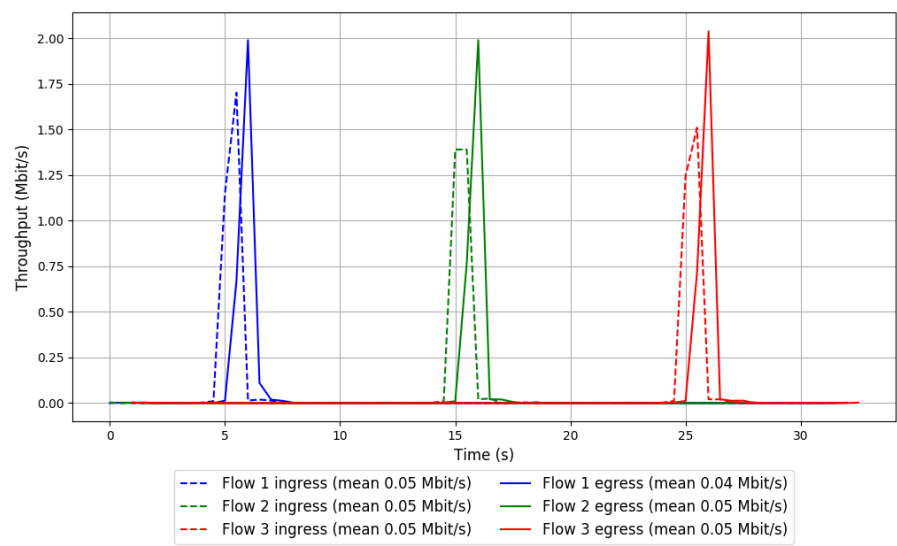


Run 3: Statistics of WebRTC media

Start at: 2019-02-20 01:58:45
End at: 2019-02-20 01:59:15
Local clock offset: -4.576 ms
Remote clock offset: -14.873 ms

Below is generated by plot.py at 2019-02-20 03:37:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 75.498 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 67.835 ms
Loss rate: 3.32%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 76.148 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 74.932 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

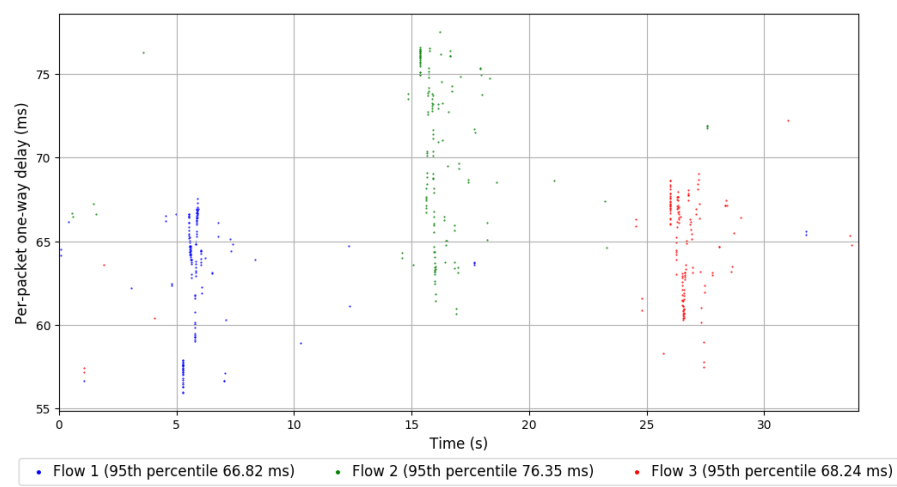
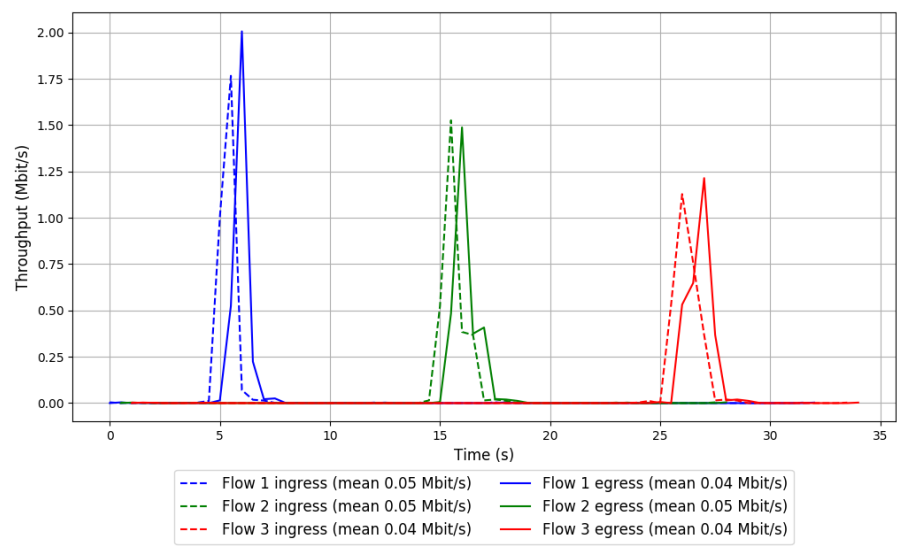


Run 4: Statistics of WebRTC media

Start at: 2019-02-20 02:39:27
End at: 2019-02-20 02:39:57
Local clock offset: 7.068 ms
Remote clock offset: -11.758 ms

Below is generated by plot.py at 2019-02-20 03:37:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 75.688 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 66.818 ms
Loss rate: 2.52%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 76.353 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 68.243 ms
Loss rate: 1.25%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-02-20 03:18:11
End at: 2019-02-20 03:18:41
Local clock offset: 3.712 ms
Remote clock offset: -14.003 ms

Below is generated by plot.py at 2019-02-20 03:37:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 74.868 ms
Loss rate: 3.54%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 68.931 ms
Loss rate: 5.59%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 67.433 ms
Loss rate: 3.28%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 75.951 ms
Loss rate: 1.67%

Run 5: Report of WebRTC media — Data Link

