# Pantheon Report

Data path: AWS Brazil 2 on ens5 (local)  $\rightarrow$ Colombia on p4p1 (remote).

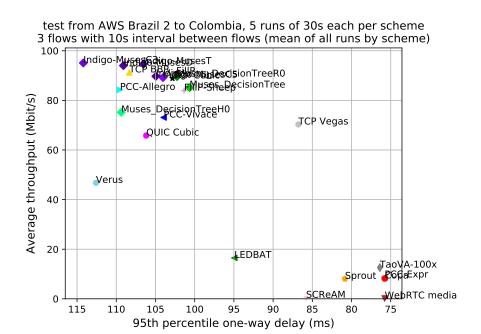
Each test lasted for 30 seconds running 3 flows with 10-second interval be-

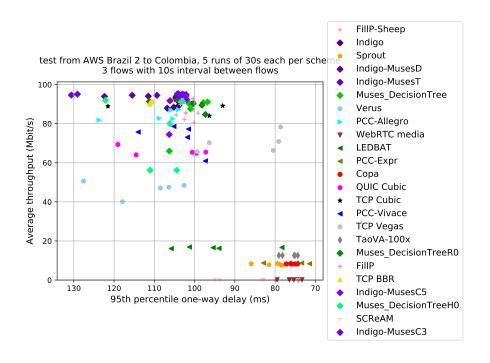
Repeated the test of 24 congestion control schemes 5 times.

Generated at 2019-10-03 01:23:05 (UTC).

tween two flows. NTP offsets were measured against gps.ntp.br and have been applied to correct the timestamps in logs. System info: Linux 4.15.0-1050-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 @ de42328552b3776a75a932a94dfafd722537b0ec third\_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519 third\_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9 third\_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4 third\_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d third\_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf third\_party/muses @ 5ce721187ad823da20955337730c746486ca4966 third\_party/muses\_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200 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-quic @ 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





|                         |        | mean avg tput (Mbit/s) |        |        | mean 95th-%ile delay (ms) |        |        | mean loss rate (%) |        |        |
|-------------------------|--------|------------------------|--------|--------|---------------------------|--------|--------|--------------------|--------|--------|
| $_{\mathrm{scheme}}$    | # runs | flow 1                 | flow 2 | flow 3 | flow 1                    | flow 2 | flow 3 | flow 1             | flow 2 | flow 3 |
| TCP BBR                 | 5      | 53.87                  | 40.04  | 32.25  | 107.83                    | 108.82 | 105.45 | 11.66              | 17.76  | 22.71  |
| Copa                    | 5      | 0.00                   | 10.31  | 4.08   | 75.12                     | 75.71  | 75.39  | 97.19              | 67.18  | 70.20  |
| TCP Cubic               | 5      | 61.95                  | 25.77  | 29.31  | 102.88                    | 97.27  | 98.29  | 0.93               | 0.32   | 0.53   |
| FillP                   | 5      | 50.93                  | 44.01  | 31.35  | 99.84                     | 102.45 | 105.31 | 13.75              | 25.85  | 22.44  |
| FillP-Sheep             | 5      | 27.12                  | 73.07  | 24.91  | 97.41                     | 101.54 | 101.65 | 5.57               | 5.11   | 14.18  |
| Indigo                  | 5      | 60.60                  | 30.90  | 27.03  | 104.69                    | 104.69 | 106.48 | 7.37               | 19.78  | 44.14  |
| Indigo-MusesC3          | 5      | 50.01                  | 47.89  | 47.93  | 103.92                    | 112.57 | 115.82 | 1.26               | 2.14   | 5.42   |
| Indigo-MusesC5          | 5      | 53.06                  | 52.41  | 7.36   | 102.87                    | 105.00 | 106.09 | 2.69               | 4.49   | 4.51   |
| Indigo-MusesD           | 5      | 68.12                  | 30.03  | 21.79  | 107.33                    | 104.59 | 104.29 | 0.82               | 1.76   | 1.86   |
| Indigo-MusesT           | 5      | 52.44                  | 57.51  | 17.02  | 104.05                    | 106.49 | 107.59 | 5.41               | 6.97   | 7.35   |
| LEDBAT                  | 5      | 9.84                   | 7.98   | 4.10   | 88.57                     | 80.84  | 81.73  | 0.02               | 0.06   | 0.03   |
| $Muses\_DecisionTree$   | 5      | 43.86                  | 43.90  | 37.85  | 97.74                     | 105.16 | 100.50 | 0.87               | 1.15   | 0.83   |
| $Muses\_DecisionTreeH0$ | 5      | 70.14                  | 7.37   | 0.66   | 105.45                    | 109.94 | 102.49 | 30.28              | 22.41  | 18.65  |
| $Muses\_DecisionTreeR0$ | 5      | 61.80                  | 32.01  | 20.49  | 98.12                     | 105.27 | 101.25 | 1.81               | 3.90   | 3.17   |
| PCC-Allegro             | 5      | 68.30                  | 20.03  | 7.92   | 107.39                    | 109.46 | 107.07 | 3.15               | 3.99   | 5.37   |
| PCC-Expr                | 5      | 0.01                   | 10.48  | 5.00   | 74.32                     | 75.92  | 74.73  | 85.71              | 60.75  | 39.47  |
| QUIC Cubic              | 5      | 44.13                  | 22.76  | 20.15  | 100.13                    | 107.97 | 99.42  | 1.11               | 0.68   | 0.71   |
| SCReAM                  | 5      | 0.22                   | 0.22   | 0.22   | 77.40                     | 84.38  | 83.27  | 0.02               | 0.08   | 0.00   |
| Sprout                  | 5      | 4.45                   | 3.56   | 3.75   | 81.51                     | 78.52  | 80.55  | 0.00               | 0.05   | 0.00   |
| TaoVA-100x              | 5      | 7.73                   | 5.44   | 3.76   | 81.31                     | 74.58  | 74.57  | 38.98              | 41.75  | 57.90  |
| TCP Vegas               | 5      | 36.77                  | 34.49  | 31.73  | 79.37                     | 93.96  | 82.46  | 1.19               | 1.28   | 0.98   |
| Verus                   | 5      | 23.79                  | 24.20  | 21.74  | 110.69                    | 110.41 | 110.20 | 34.56              | 52.93  | 46.55  |
| PCC-Vivace              | 5      | 60.67                  | 14.79  | 7.85   | 104.02                    | 98.30  | 99.39  | 0.35               | 0.66   | 1.07   |
| WebRTC media            | 5      | 0.05                   | 0.05   | 0.05   | 75.40                     | 75.08  | 74.78  | 0.00               | 0.33   | 0.01   |

### Run 1: Statistics of TCP BBR

Start at: 2019-10-02 22:57:09 End at: 2019-10-02 22:57:39 Local clock offset: -6.744 ms Remote clock offset: 40.104 ms

# Below is generated by plot.py at 2019-10-03 01:12:15

# Datalink statistics
-- Total of 3 flows:

Average throughput: 91.85 Mbit/s

95th percentile per-packet one-way delay: 105.506 ms

Loss rate: 13.70%

-- Flow 1:

Average throughput: 55.22 Mbit/s

95th percentile per-packet one-way delay: 105.562 ms

Loss rate: 11.29%

-- Flow 2:

Average throughput: 41.88 Mbit/s

95th percentile per-packet one-way delay: 104.123 ms

Loss rate: 16.74%

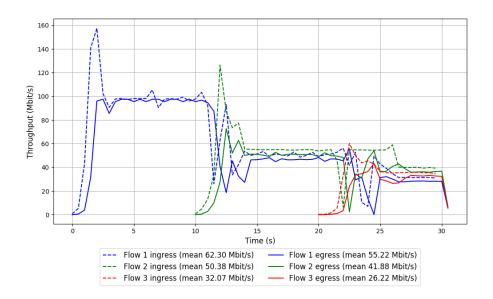
-- Flow 3:

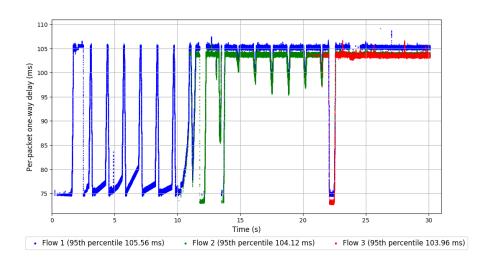
Average throughput: 26.22 Mbit/s

95th percentile per-packet one-way delay: 103.963 ms

Loss rate: 18.19%

Run 1: Report of TCP BBR — Data Link





### Run 2: Statistics of TCP BBR

Start at: 2019-10-02 23:27:31 End at: 2019-10-02 23:28:01 Local clock offset: -7.045 ms Remote clock offset: 41.873 ms

# Below is generated by plot.py at 2019-10-03 01:12:16

# Datalink statistics
-- Total of 3 flows:

Average throughput: 92.02 Mbit/s

95th percentile per-packet one-way delay: 103.415 ms

Loss rate: 14.70%

-- Flow 1:

Average throughput: 56.48 Mbit/s

95th percentile per-packet one-way delay: 102.080 ms

Loss rate: 11.08%

-- Flow 2:

Average throughput: 38.75 Mbit/s

95th percentile per-packet one-way delay: 103.652 ms

Loss rate: 17.88%

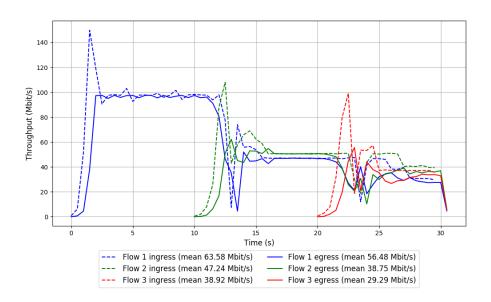
-- Flow 3:

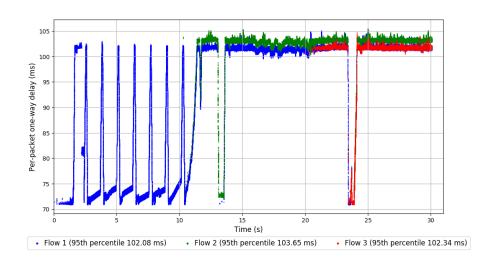
Average throughput: 29.29 Mbit/s

95th percentile per-packet one-way delay: 102.344 ms

Loss rate: 24.73%

Run 2: Report of TCP BBR — Data Link





### Run 3: Statistics of TCP BBR

Start at: 2019-10-02 23:57:51 End at: 2019-10-02 23:58:21 Local clock offset: -2.854 ms Remote clock offset: 45.088 ms

# Below is generated by plot.py at 2019-10-03 01:12:16

# Datalink statistics
-- Total of 3 flows:

Average throughput: 91.61 Mbit/s

95th percentile per-packet one-way delay: 110.586 ms

Loss rate: 16.22%

-- Flow 1:

Average throughput: 47.67 Mbit/s

95th percentile per-packet one-way delay: 109.624 ms

Loss rate: 11.64%

-- Flow 2:

Average throughput: 48.28 Mbit/s

95th percentile per-packet one-way delay: 110.450 ms

Loss rate: 19.41%

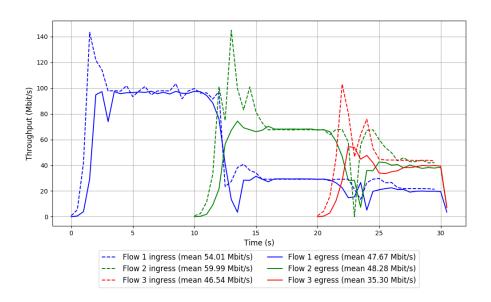
-- Flow 3:

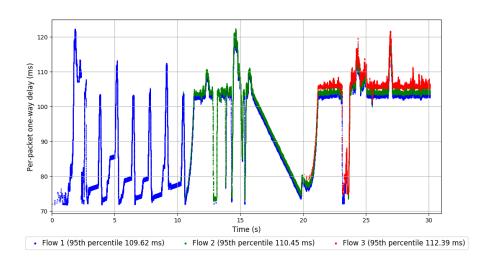
Average throughput: 35.30 Mbit/s

95th percentile per-packet one-way delay: 112.387 ms

Loss rate: 23.96%

Run 3: Report of TCP BBR — Data Link





### Run 4: Statistics of TCP BBR

Start at: 2019-10-03 00:28:09 End at: 2019-10-03 00:28:39 Local clock offset: 6.332 ms Remote clock offset: 48.235 ms

# Below is generated by plot.py at 2019-10-03 01:12:16

# Datalink statistics
-- Total of 3 flows:

Average throughput: 90.79 Mbit/s

95th percentile per-packet one-way delay: 111.024 ms

Loss rate: 16.70%

-- Flow 1:

Average throughput: 55.91 Mbit/s

95th percentile per-packet one-way delay: 110.278 ms

Loss rate: 14.11%

-- Flow 2:

Average throughput: 37.40 Mbit/s

95th percentile per-packet one-way delay: 113.476 ms

Loss rate: 19.65%

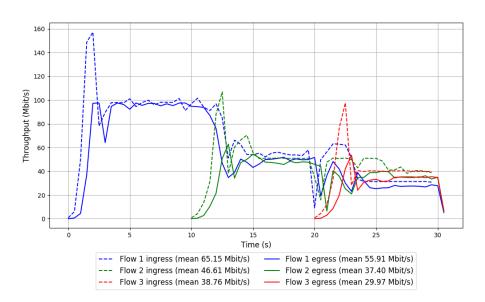
-- Flow 3:

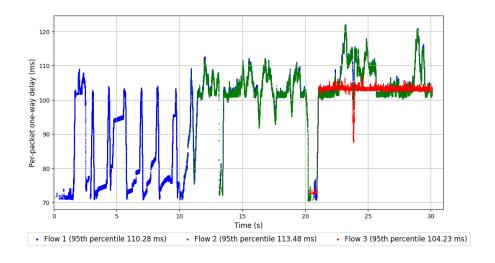
Average throughput: 29.97 Mbit/s

95th percentile per-packet one-way delay: 104.234 ms

Loss rate: 22.67%

Run 4: Report of TCP BBR — Data Link





### Run 5: Statistics of TCP BBR

Start at: 2019-10-03 00:58:28 End at: 2019-10-03 00:58:58 Local clock offset: 6.837 ms Remote clock offset: 51.369 ms

# Below is generated by plot.py at 2019-10-03 01:12:16

# Datalink statistics
-- Total of 3 flows:

Average throughput: 90.11 Mbit/s

95th percentile per-packet one-way delay: 111.168 ms

Loss rate: 13.80%

-- Flow 1:

Average throughput: 54.06 Mbit/s

95th percentile per-packet one-way delay: 111.595 ms

Loss rate: 10.20%

-- Flow 2:

Average throughput: 33.91 Mbit/s

95th percentile per-packet one-way delay: 112.398 ms

Loss rate: 15.14%

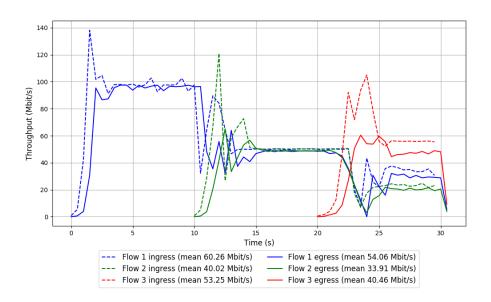
-- Flow 3:

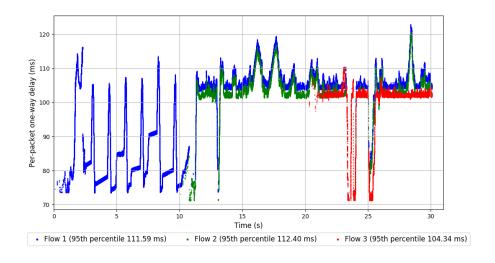
Average throughput: 40.46 Mbit/s

95th percentile per-packet one-way delay: 104.345 ms

Loss rate: 24.02%

Run 5: Report of TCP BBR — Data Link





## Run 1: Statistics of Copa

Start at: 2019-10-02 23:03:30 End at: 2019-10-02 23:04:00 Local clock offset: -6.832 ms Remote clock offset: 40.813 ms

# Below is generated by plot.py at 2019-10-03 01:12:16

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.22 Mbit/s

95th percentile per-packet one-way delay: 75.993 ms

Loss rate: 73.78%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 75.235 ms

Loss rate: 95.92%

-- Flow 2:

Average throughput: 10.18 Mbit/s

95th percentile per-packet one-way delay: 76.116 ms

Loss rate: 73.21%

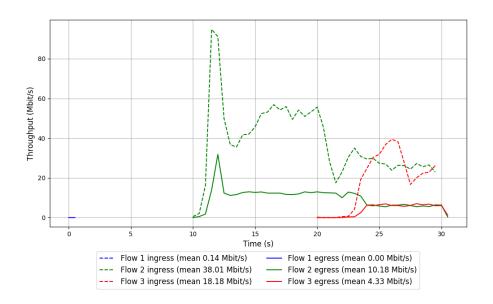
-- Flow 3:

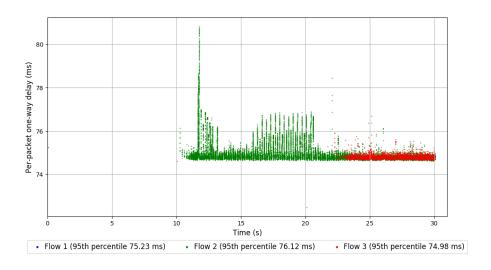
Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 74.985 ms

Loss rate: 76.19%

Run 1: Report of Copa — Data Link





### Run 2: Statistics of Copa

Start at: 2019-10-02 23:33:51 End at: 2019-10-02 23:34:21 Local clock offset: -6.502 ms Remote clock offset: 44.416 ms

# Below is generated by plot.py at 2019-10-03 01:12:16

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.21 Mbit/s

95th percentile per-packet one-way delay: 74.450 ms

Loss rate: 72.28%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 75.034 ms

Loss rate: 97.24%

-- Flow 2:

Average throughput: 9.99 Mbit/s

95th percentile per-packet one-way delay: 74.565 ms

Loss rate: 69.78%

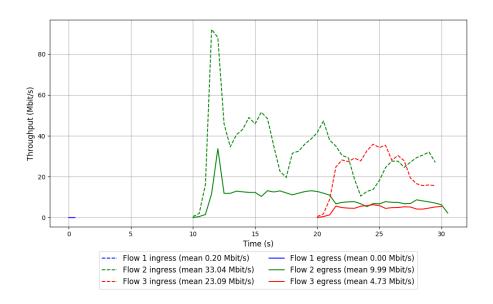
-- Flow 3:

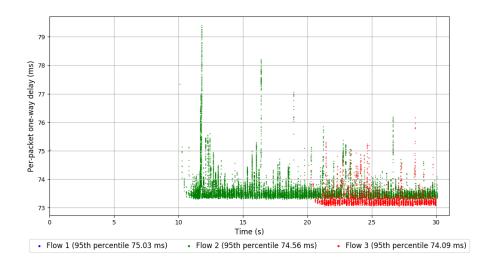
Average throughput: 4.73 Mbit/s

95th percentile per-packet one-way delay: 74.092 ms

Loss rate: 79.53%

Run 2: Report of Copa — Data Link





### Run 3: Statistics of Copa

Start at: 2019-10-03 00:04:12 End at: 2019-10-03 00:04:42 Local clock offset: 1.959 ms Remote clock offset: 45.661 ms

# Below is generated by plot.py at 2019-10-03 01:12:16

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.22 Mbit/s

95th percentile per-packet one-way delay: 76.009 ms

Loss rate: 61.55%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 71.454 ms

Loss rate: 97.24%

-- Flow 2:

Average throughput: 10.78 Mbit/s

95th percentile per-packet one-way delay: 76.136 ms

Loss rate: 60.44%

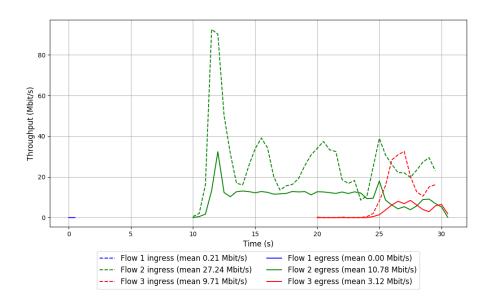
-- Flow 3:

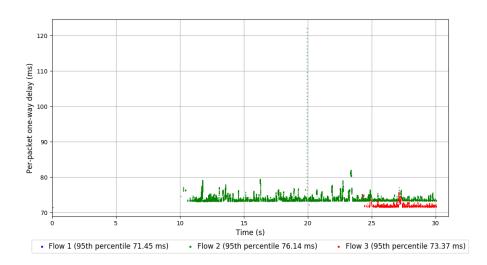
Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 73.372 ms

Loss rate: 67.83%

Run 3: Report of Copa — Data Link





### Run 4: Statistics of Copa

Start at: 2019-10-03 00:34:31 End at: 2019-10-03 00:35:01 Local clock offset: 4.619 ms Remote clock offset: 50.304 ms

# Below is generated by plot.py at 2019-10-03 01:12:16

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.21 Mbit/s

95th percentile per-packet one-way delay: 75.138 ms

Loss rate: 63.56%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 74.276 ms

Loss rate: 98.33%

-- Flow 2:

Average throughput: 10.88 Mbit/s

95th percentile per-packet one-way delay: 74.519 ms

Loss rate: 64.51%

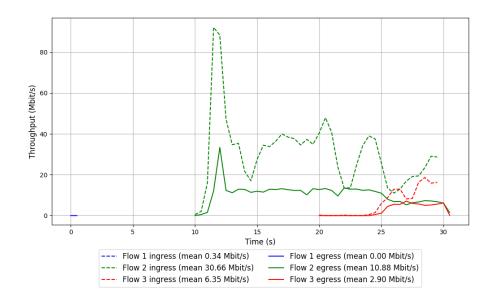
-- Flow 3:

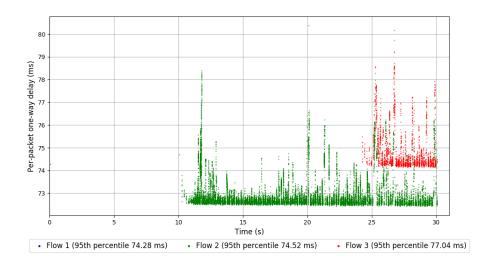
Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 77.036 ms

Loss rate: 54.30%

Run 4: Report of Copa — Data Link





### Run 5: Statistics of Copa

Start at: 2019-10-03 01:04:49 End at: 2019-10-03 01:05:19 Local clock offset: 10.167 ms Remote clock offset: 26.543 ms

# Below is generated by plot.py at 2019-10-03 01:12:16

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.22 Mbit/s

95th percentile per-packet one-way delay: 77.243 ms

Loss rate: 69.23%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 79.577 ms

Loss rate: 97.24%

-- Flow 2:

Average throughput: 9.70 Mbit/s

95th percentile per-packet one-way delay: 77.194 ms

Loss rate: 67.95%

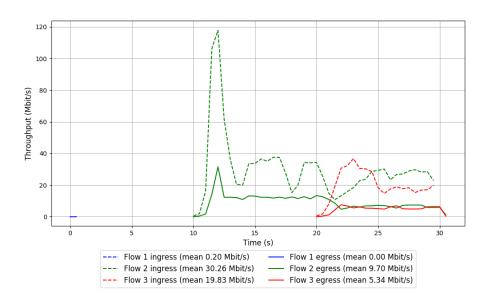
-- Flow 3:

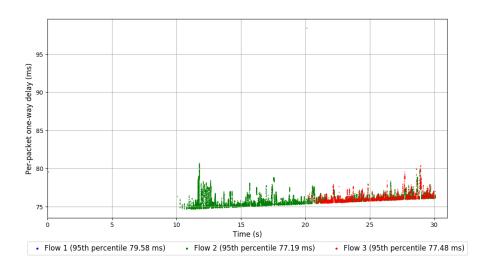
Average throughput: 5.34 Mbit/s

95th percentile per-packet one-way delay: 77.476 ms

Loss rate: 73.15%

Run 5: Report of Copa — Data Link





### Run 1: Statistics of TCP Cubic

Start at: 2019-10-02 22:44:31 End at: 2019-10-02 22:45:01 Local clock offset: -6.702 ms Remote clock offset: 36.877 ms

# Below is generated by plot.py at 2019-10-03 01:12:22

# Datalink statistics
-- Total of 3 flows:

Average throughput: 90.99 Mbit/s

95th percentile per-packet one-way delay: 100.344 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 73.93 Mbit/s

95th percentile per-packet one-way delay: 99.884 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 16.56 Mbit/s

95th percentile per-packet one-way delay: 100.821 ms

Loss rate: 0.16%

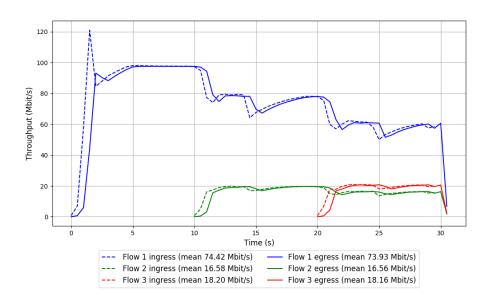
-- Flow 3:

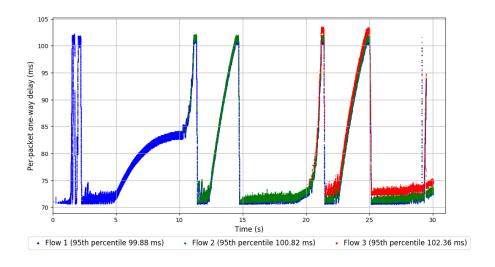
Average throughput: 18.16 Mbit/s

95th percentile per-packet one-way delay: 102.362 ms

Loss rate: 0.18%

Run 1: Report of TCP Cubic — Data Link





### Run 2: Statistics of TCP Cubic

Start at: 2019-10-02 23:14:55 End at: 2019-10-02 23:15:25 Local clock offset: -7.114 ms Remote clock offset: 42.192 ms

# Below is generated by plot.py at 2019-10-03 01:12:28

# Datalink statistics
-- Total of 3 flows:

Average throughput: 91.30 Mbit/s

95th percentile per-packet one-way delay: 102.902 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 53.02 Mbit/s

95th percentile per-packet one-way delay: 104.294 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 47.34 Mbit/s

95th percentile per-packet one-way delay: 102.642 ms

Loss rate: 0.49%

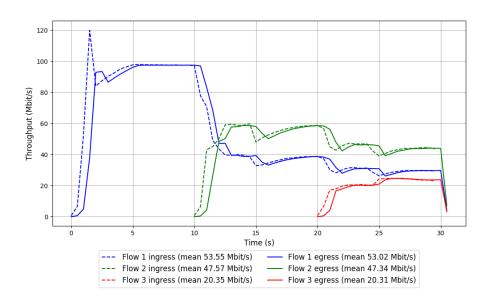
-- Flow 3:

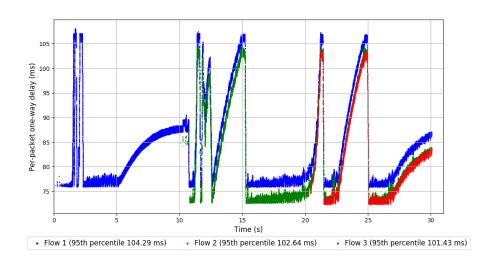
Average throughput: 20.31 Mbit/s

95th percentile per-packet one-way delay: 101.429 ms

Loss rate: 0.15%

Run 2: Report of TCP Cubic — Data Link





### Run 3: Statistics of TCP Cubic

Start at: 2019-10-02 23:45:17 End at: 2019-10-02 23:45:47 Local clock offset: -6.194 ms Remote clock offset: 45.418 ms

# Below is generated by plot.py at 2019-10-03 01:12:29

# Datalink statistics
-- Total of 3 flows:

Average throughput: 88.89 Mbit/s

95th percentile per-packet one-way delay: 121.534 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 72.41 Mbit/s

95th percentile per-packet one-way delay: 122.811 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 19.84 Mbit/s

95th percentile per-packet one-way delay: 95.364 ms

Loss rate: 0.19%

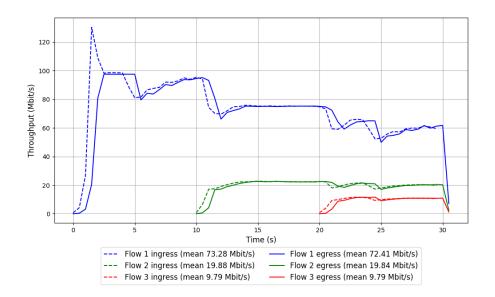
-- Flow 3:

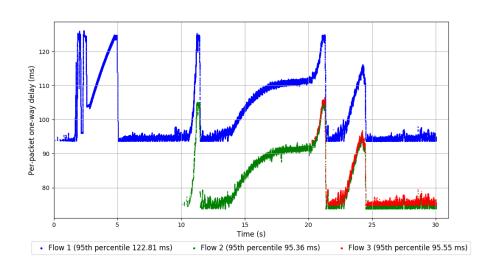
Average throughput: 9.79 Mbit/s

95th percentile per-packet one-way delay: 95.546 ms

Loss rate: 0.17%

Run 3: Report of TCP Cubic — Data Link





### Run 4: Statistics of TCP Cubic

Start at: 2019-10-03 00:15:35 End at: 2019-10-03 00:16:05 Local clock offset: 6.275 ms Remote clock offset: 48.789 ms

# Below is generated by plot.py at 2019-10-03 01:13:02

# Datalink statistics
-- Total of 3 flows:

Average throughput: 84.02 Mbit/s

95th percentile per-packet one-way delay: 96.337 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 54.73 Mbit/s

95th percentile per-packet one-way delay: 94.283 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 13.30 Mbit/s

95th percentile per-packet one-way delay: 96.216 ms

Loss rate: 0.41%

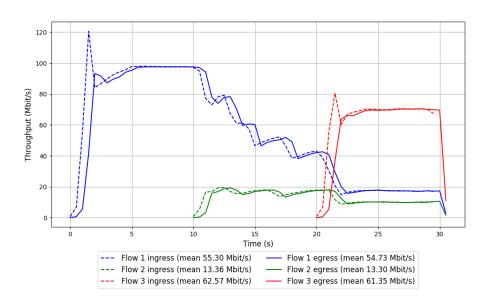
-- Flow 3:

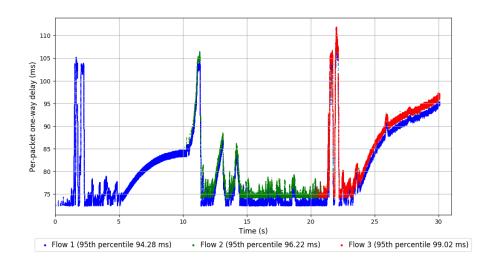
Average throughput: 61.35 Mbit/s

95th percentile per-packet one-way delay: 99.019 ms

Loss rate: 1.73%

Run 4: Report of TCP Cubic — Data Link





### Run 5: Statistics of TCP Cubic

Start at: 2019-10-03 00:45:54 End at: 2019-10-03 00:46:24 Local clock offset: 3.805 ms Remote clock offset: 51.595 ms

# Below is generated by plot.py at 2019-10-03 01:13:07

# Datalink statistics
-- Total of 3 flows:

Average throughput: 89.15 Mbit/s

95th percentile per-packet one-way delay: 93.039 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 55.65 Mbit/s

95th percentile per-packet one-way delay: 93.104 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 31.80 Mbit/s

95th percentile per-packet one-way delay: 91.287 ms

Loss rate: 0.34%

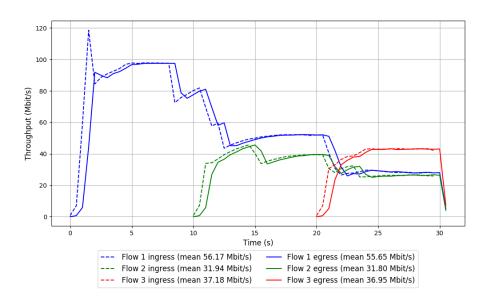
-- Flow 3:

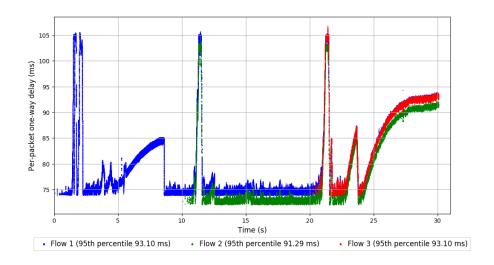
Average throughput: 36.95 Mbit/s

95th percentile per-packet one-way delay: 93.096 ms

Loss rate: 0.44%

Run 5: Report of TCP Cubic — Data Link





### Run 1: Statistics of FillP

Start at: 2019-10-02 22:45:48 End at: 2019-10-02 22:46:18 Local clock offset: -6.632 ms Remote clock offset: 38.568 ms

# Below is generated by plot.py at 2019-10-03 01:13:33

# Datalink statistics
-- Total of 3 flows:

Average throughput: 89.96 Mbit/s

95th percentile per-packet one-way delay: 103.500 ms

Loss rate: 20.76%

-- Flow 1:

Average throughput: 43.42 Mbit/s

95th percentile per-packet one-way delay: 100.472 ms

Loss rate: 19.59%

-- Flow 2:

Average throughput: 57.75 Mbit/s

95th percentile per-packet one-way delay: 103.789 ms

Loss rate: 21.20%

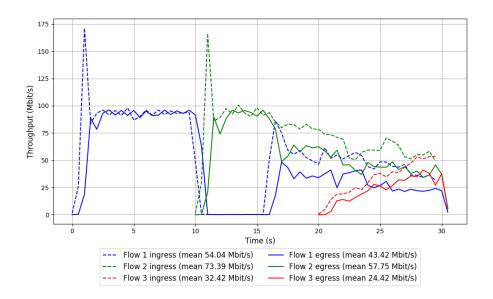
-- Flow 3:

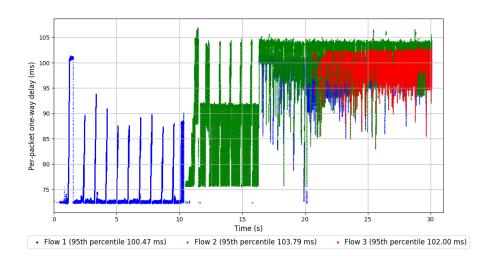
Average throughput: 24.42 Mbit/s

95th percentile per-packet one-way delay: 101.999 ms

Loss rate: 24.62%

Run 1: Report of FillP — Data Link





## Run 2: Statistics of FillP

Start at: 2019-10-02 23:16:13 End at: 2019-10-02 23:16:43 Local clock offset: -7.222 ms Remote clock offset: 40.495 ms

# Below is generated by plot.py at 2019-10-03 01:13:35

# Datalink statistics
-- Total of 3 flows:

Average throughput: 92.77 Mbit/s

95th percentile per-packet one-way delay: 100.344 ms

Loss rate: 19.88%

-- Flow 1:

Average throughput: 60.21 Mbit/s

95th percentile per-packet one-way delay: 100.254 ms

Loss rate: 14.50%

-- Flow 2:

Average throughput: 34.62 Mbit/s

95th percentile per-packet one-way delay: 100.501 ms

Loss rate: 28.84%

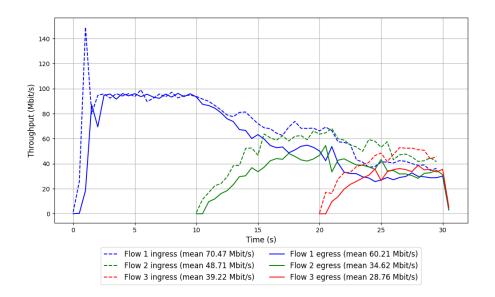
-- Flow 3:

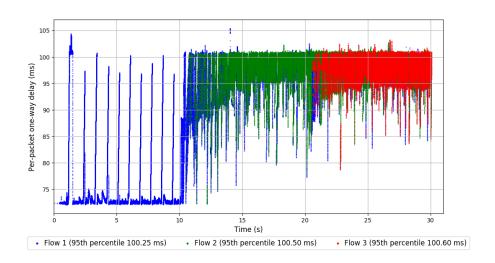
Average throughput: 28.76 Mbit/s

95th percentile per-packet one-way delay: 100.596 ms

Loss rate: 26.65%

Run 2: Report of FillP — Data Link





## Run 3: Statistics of FillP

Start at: 2019-10-02 23:46:34 End at: 2019-10-02 23:47:04 Local clock offset: -6.19 ms Remote clock offset: 45.726 ms

# Below is generated by plot.py at 2019-10-03 01:13:35

# Datalink statistics
-- Total of 3 flows:

Average throughput: 85.50 Mbit/s

95th percentile per-packet one-way delay: 102.219 ms

Loss rate: 12.43%

-- Flow 1:

Average throughput: 29.12 Mbit/s

95th percentile per-packet one-way delay: 94.569 ms

Loss rate: 4.97%

-- Flow 2:

Average throughput: 59.81 Mbit/s

95th percentile per-packet one-way delay: 101.956 ms

Loss rate: 15.43%

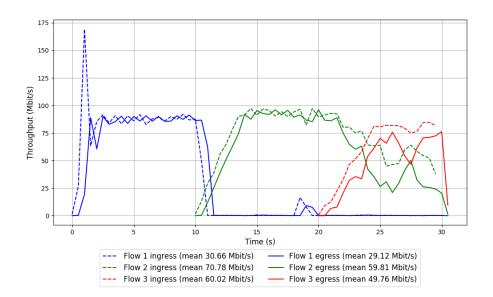
-- Flow 3:

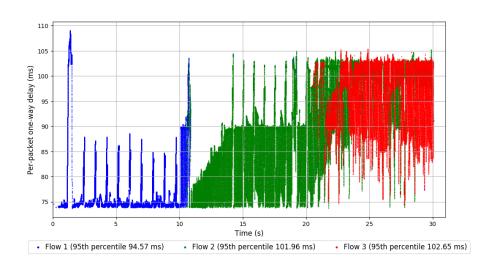
Average throughput: 49.76 Mbit/s

95th percentile per-packet one-way delay: 102.653 ms

Loss rate: 16.85%

Run 3: Report of FillP — Data Link





## Run 4: Statistics of FillP

Start at: 2019-10-03 00:16:52 End at: 2019-10-03 00:17:22 Local clock offset: 6.565 ms Remote clock offset: 48.868 ms

# Below is generated by plot.py at 2019-10-03 01:13:43

# Datalink statistics
-- Total of 3 flows:

Average throughput: 92.92 Mbit/s

95th percentile per-packet one-way delay: 102.924 ms

Loss rate: 20.54%

-- Flow 1:

Average throughput: 58.39 Mbit/s

95th percentile per-packet one-way delay: 101.348 ms

Loss rate: 15.61%

-- Flow 2:

Average throughput: 39.64 Mbit/s

95th percentile per-packet one-way delay: 103.094 ms

Loss rate: 28.48%

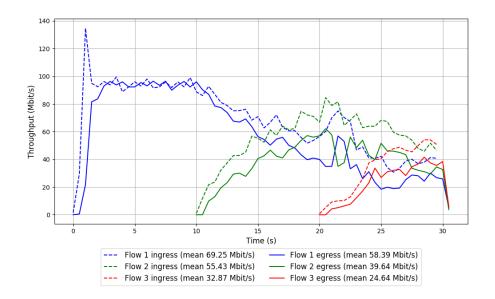
-- Flow 3:

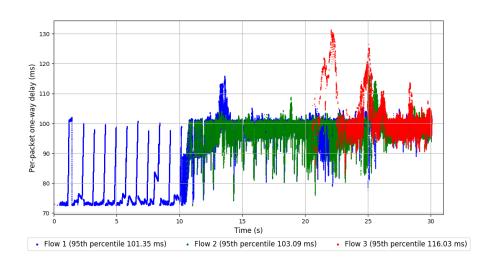
Average throughput: 24.64 Mbit/s

95th percentile per-packet one-way delay: 116.028 ms

Loss rate: 25.02%

Run 4: Report of FillP — Data Link





## Run 5: Statistics of FillP

Start at: 2019-10-03 00:47:11 End at: 2019-10-03 00:47:41 Local clock offset: 3.805 ms Remote clock offset: 51.923 ms

# Below is generated by plot.py at 2019-10-03 01:13:49

# Datalink statistics
-- Total of 3 flows:

Average throughput: 91.97 Mbit/s

95th percentile per-packet one-way delay: 102.816 ms

Loss rate: 19.95%

-- Flow 1:

Average throughput: 63.51 Mbit/s

95th percentile per-packet one-way delay: 102.533 ms

Loss rate: 14.07%

-- Flow 2:

Average throughput: 28.23 Mbit/s

95th percentile per-packet one-way delay: 102.893 ms

Loss rate: 35.29%

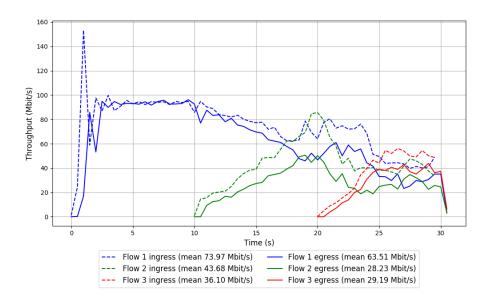
-- Flow 3:

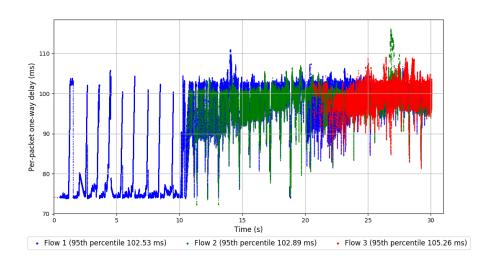
Average throughput: 29.19 Mbit/s

95th percentile per-packet one-way delay: 105.257 ms

Loss rate: 19.07%

Run 5: Report of FillP — Data Link





## Run 1: Statistics of FillP-Sheep

Start at: 2019-10-02 22:49:32 End at: 2019-10-02 22:50:02 Local clock offset: -6.717 ms Remote clock offset: 37.221 ms

# Below is generated by plot.py at 2019-10-03 01:13:49

# Datalink statistics
-- Total of 3 flows:

Average throughput: 80.61 Mbit/s

95th percentile per-packet one-way delay: 100.142 ms

Loss rate: 6.45%

-- Flow 1:

Average throughput: 25.17 Mbit/s

95th percentile per-packet one-way delay: 98.871 ms

Loss rate: 5.96%

-- Flow 2:

Average throughput: 69.25 Mbit/s

95th percentile per-packet one-way delay: 100.003 ms

Loss rate: 4.52%

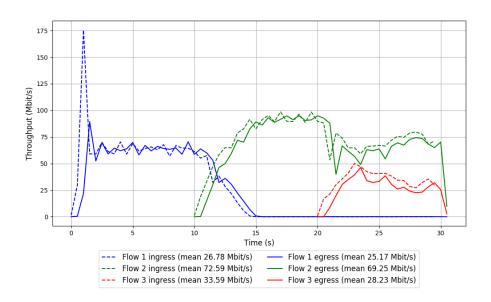
-- Flow 3:

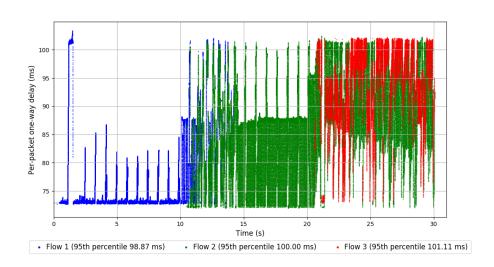
Average throughput: 28.23 Mbit/s

95th percentile per-packet one-way delay: 101.106 ms

Loss rate: 16.06%

Run 1: Report of FillP-Sheep — Data Link





## Run 2: Statistics of FillP-Sheep

Start at: 2019-10-02 23:19:57 End at: 2019-10-02 23:20:27 Local clock offset: -7.286 ms Remote clock offset: 41.008 ms

# Below is generated by plot.py at 2019-10-03 01:14:17

# Datalink statistics
-- Total of 3 flows:

Average throughput: 85.41 Mbit/s

95th percentile per-packet one-way delay: 99.163 ms

Loss rate: 8.78%

-- Flow 1:

Average throughput: 28.38 Mbit/s

95th percentile per-packet one-way delay: 94.749 ms

Loss rate: 4.34%

-- Flow 2:

Average throughput: 67.61 Mbit/s

95th percentile per-packet one-way delay: 98.942 ms

Loss rate: 6.75%

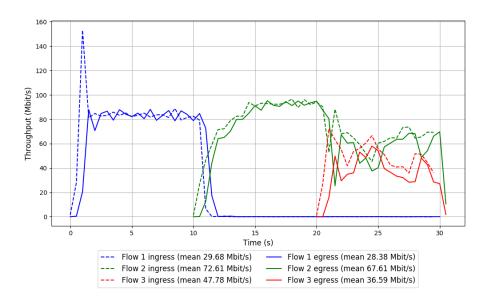
-- Flow 3:

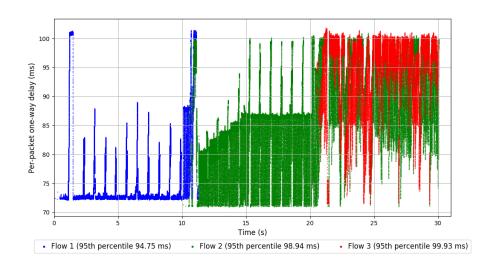
Average throughput: 36.59 Mbit/s

95th percentile per-packet one-way delay: 99.932 ms

Loss rate: 23.29%

Run 2: Report of FillP-Sheep — Data Link





## Run 3: Statistics of FillP-Sheep

Start at: 2019-10-02 23:50:18 End at: 2019-10-02 23:50:48 Local clock offset: -6.19 ms Remote clock offset: 46.275 ms

# Below is generated by plot.py at 2019-10-03 01:14:18

# Datalink statistics
-- Total of 3 flows:

Average throughput: 82.14 Mbit/s

95th percentile per-packet one-way delay: 102.554 ms

Loss rate: 7.00%

-- Flow 1:

Average throughput: 24.71 Mbit/s

95th percentile per-packet one-way delay: 100.842 ms

Loss rate: 7.48%

-- Flow 2:

Average throughput: 71.91 Mbit/s

95th percentile per-packet one-way delay: 102.981 ms

Loss rate: 6.47%

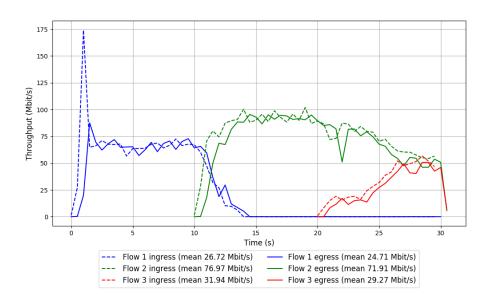
-- Flow 3:

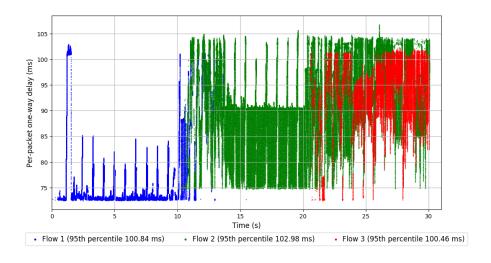
Average throughput: 29.27 Mbit/s

95th percentile per-packet one-way delay: 100.464 ms

Loss rate: 8.33%

Run 3: Report of FillP-Sheep — Data Link





## Run 4: Statistics of FillP-Sheep

Start at: 2019-10-03 00:20:36 End at: 2019-10-03 00:21:06 Local clock offset: 7.313 ms Remote clock offset: 47.522 ms

# Below is generated by plot.py at 2019-10-03 01:14:40

# Datalink statistics
-- Total of 3 flows:

Average throughput: 84.46 Mbit/s

95th percentile per-packet one-way delay: 104.558 ms

Loss rate: 5.46%

-- Flow 1:

Average throughput: 28.78 Mbit/s

95th percentile per-packet one-way delay: 99.481 ms

Loss rate: 5.97%

-- Flow 2:

Average throughput: 74.40 Mbit/s

95th percentile per-packet one-way delay: 105.285 ms

Loss rate: 3.86%

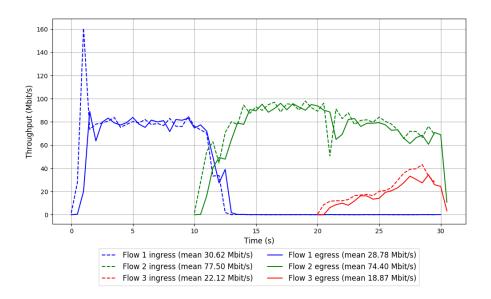
-- Flow 3:

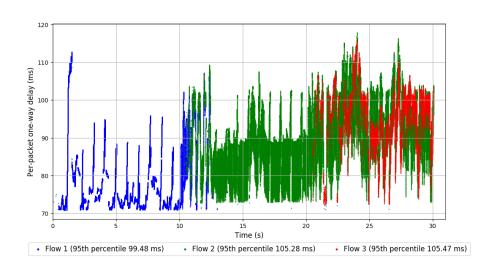
Average throughput: 18.87 Mbit/s

95th percentile per-packet one-way delay: 105.470 ms

Loss rate: 14.61%

Run 4: Report of FillP-Sheep — Data Link





## Run 5: Statistics of FillP-Sheep

Start at: 2019-10-03 00:50:55 End at: 2019-10-03 00:51:25 Local clock offset: 3.837 ms Remote clock offset: 52.272 ms

# Below is generated by plot.py at 2019-10-03 01:14:46

# Datalink statistics
-- Total of 3 flows:

Average throughput: 87.12 Mbit/s

95th percentile per-packet one-way delay: 100.389 ms

Loss rate: 4.20%

-- Flow 1:

Average throughput: 28.55 Mbit/s

95th percentile per-packet one-way delay: 93.114 ms

Loss rate: 4.08%

-- Flow 2:

Average throughput: 82.19 Mbit/s

95th percentile per-packet one-way delay: 100.477 ms

Loss rate: 3.94%

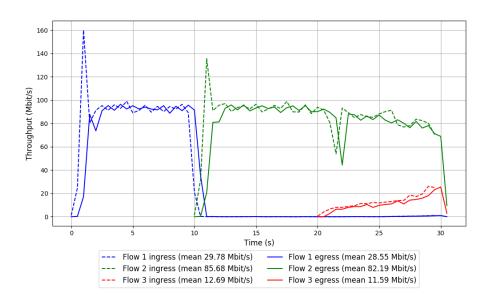
-- Flow 3:

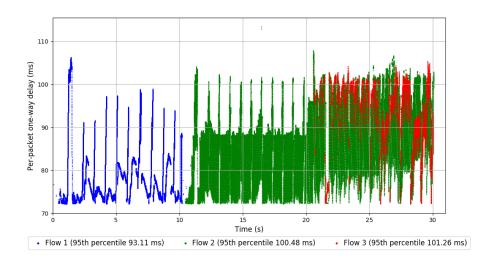
Average throughput: 11.59 Mbit/s

95th percentile per-packet one-way delay: 101.261 ms

Loss rate: 8.60%

Run 5: Report of FillP-Sheep — Data Link





# Run 1: Statistics of Indigo

Start at: 2019-10-02 22:50:48 End at: 2019-10-02 22:51:18 Local clock offset: -6.673 ms Remote clock offset: 39.325 ms

# Below is generated by plot.py at 2019-10-03 01:14:46

# Datalink statistics
-- Total of 3 flows:

Average throughput: 87.91 Mbit/s

95th percentile per-packet one-way delay: 106.777 ms

Loss rate: 22.88%

-- Flow 1:

Average throughput: 53.46 Mbit/s

95th percentile per-packet one-way delay: 106.820 ms

Loss rate: 12.11%

-- Flow 2:

Average throughput: 39.16 Mbit/s

95th percentile per-packet one-way delay: 105.040 ms

Loss rate: 22.14%

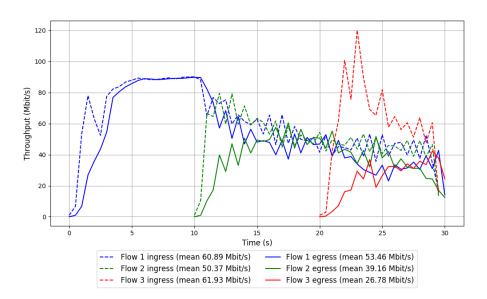
-- Flow 3:

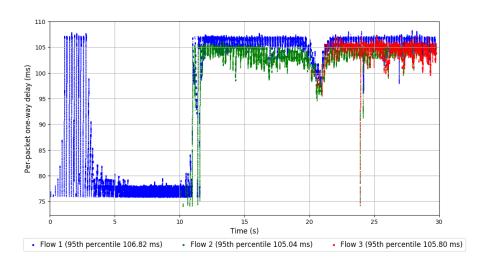
Average throughput: 26.78 Mbit/s

95th percentile per-packet one-way delay: 105.800 ms

Loss rate: 56.75%

Run 1: Report of Indigo — Data Link





# Run 2: Statistics of Indigo

Start at: 2019-10-02 23:21:13 End at: 2019-10-02 23:21:43 Local clock offset: -7.381 ms Remote clock offset: 42.851 ms

# Below is generated by plot.py at 2019-10-03 01:14:49

# Datalink statistics
-- Total of 3 flows:

Average throughput: 92.23 Mbit/s

95th percentile per-packet one-way delay: 105.116 ms

Loss rate: 30.90%

-- Flow 1:

Average throughput: 67.21 Mbit/s

95th percentile per-packet one-way delay: 105.025 ms

Loss rate: 8.88%

-- Flow 2:

Average throughput: 23.80 Mbit/s

95th percentile per-packet one-way delay: 104.719 ms

Loss rate: 34.90%

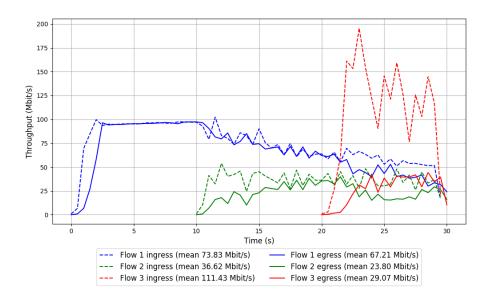
-- Flow 3:

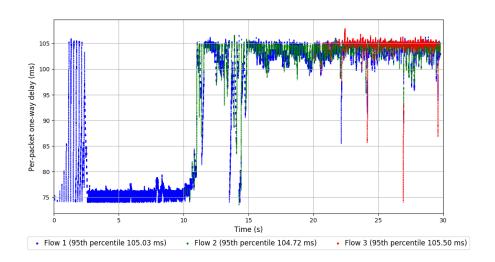
Average throughput: 29.07 Mbit/s

95th percentile per-packet one-way delay: 105.505 ms

Loss rate: 73.91%

Run 2: Report of Indigo — Data Link





# Run 3: Statistics of Indigo

Start at: 2019-10-02 23:51:34 End at: 2019-10-02 23:52:04 Local clock offset: -6.243 ms Remote clock offset: 44.61 ms

# Below is generated by plot.py at 2019-10-03 01:14:51

# Datalink statistics
-- Total of 3 flows:

Average throughput: 90.84 Mbit/s

95th percentile per-packet one-way delay: 103.776 ms

Loss rate: 22.50%

-- Flow 1:

Average throughput: 63.47 Mbit/s

95th percentile per-packet one-way delay: 103.777 ms

Loss rate: 7.01%

-- Flow 2:

Average throughput: 29.34 Mbit/s

95th percentile per-packet one-way delay: 103.311 ms

Loss rate: 19.59%

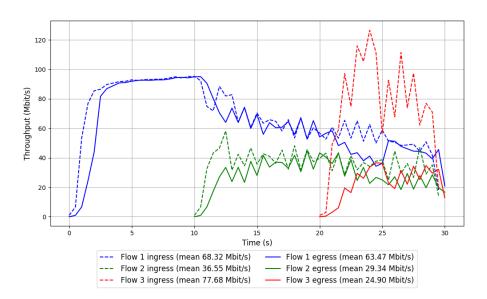
-- Flow 3:

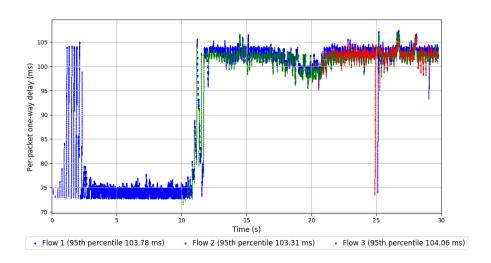
Average throughput: 24.90 Mbit/s

95th percentile per-packet one-way delay: 104.062 ms

Loss rate: 67.94%

Run 3: Report of Indigo — Data Link





# Run 4: Statistics of Indigo

Start at: 2019-10-03 00:21:52 End at: 2019-10-03 00:22:22 Local clock offset: 7.58 ms Remote clock offset: 49.469 ms

# Below is generated by plot.py at 2019-10-03 01:14:53

# Datalink statistics
-- Total of 3 flows:

Average throughput: 89.25 Mbit/s

95th percentile per-packet one-way delay: 103.923 ms

Loss rate: 4.61%

-- Flow 1:

Average throughput: 59.17 Mbit/s

95th percentile per-packet one-way delay: 103.444 ms

Loss rate: 3.72%

-- Flow 2:

Average throughput: 33.82 Mbit/s

95th percentile per-packet one-way delay: 105.183 ms

Loss rate: 7.11%

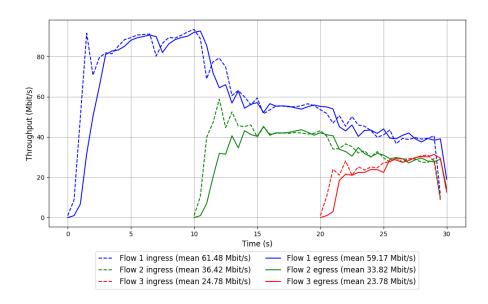
-- Flow 3:

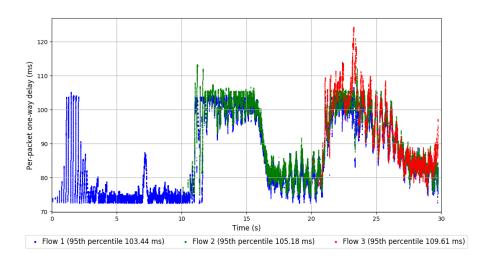
Average throughput: 23.78 Mbit/s

95th percentile per-packet one-way delay: 109.605 ms

Loss rate: 3.90%

Run 4: Report of Indigo — Data Link





# Run 5: Statistics of Indigo

Start at: 2019-10-03 00:52:11 End at: 2019-10-03 00:52:41 Local clock offset: 3.848 ms Remote clock offset: 52.402 ms

# Below is generated by plot.py at 2019-10-03 01:15:22

# Datalink statistics
-- Total of 3 flows:

Average throughput: 88.41 Mbit/s

95th percentile per-packet one-way delay: 105.162 ms

Loss rate: 9.06%

-- Flow 1:

Average throughput: 59.67 Mbit/s

95th percentile per-packet one-way delay: 104.397 ms

Loss rate: 5.14%

-- Flow 2:

Average throughput: 28.40 Mbit/s

95th percentile per-packet one-way delay: 105.213 ms

Loss rate: 15.15%

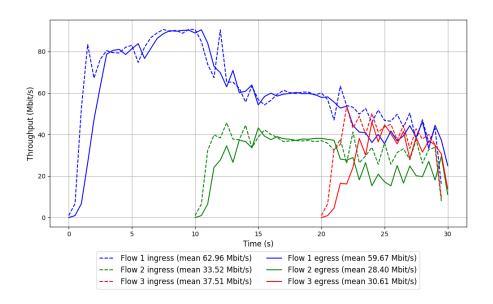
-- Flow 3:

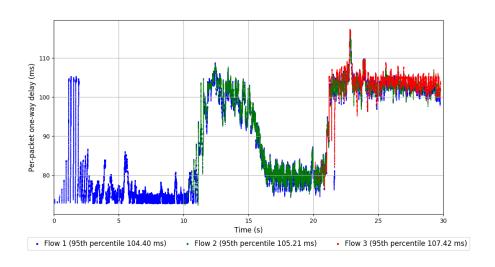
Average throughput: 30.61 Mbit/s

95th percentile per-packet one-way delay: 107.417 ms

Loss rate: 18.22%

Run 5: Report of Indigo — Data Link





## Run 1: Statistics of Indigo-MusesC3

Start at: 2019-10-02 22:53:19 End at: 2019-10-02 22:53:49 Local clock offset: -6.784 ms Remote clock offset: 39.497 ms

# Below is generated by plot.py at 2019-10-03 01:15:26

# Datalink statistics
-- Total of 3 flows:

Average throughput: 95.30 Mbit/s

95th percentile per-packet one-way delay: 104.042 ms

Loss rate: 4.16%

-- Flow 1:

Average throughput: 48.02 Mbit/s

95th percentile per-packet one-way delay: 102.907 ms

Loss rate: 1.30%

-- Flow 2:

Average throughput: 44.91 Mbit/s

95th percentile per-packet one-way delay: 104.038 ms

Loss rate: 3.03%

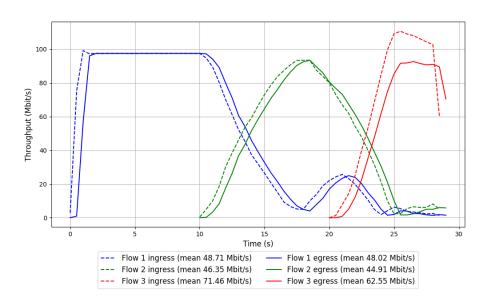
-- Flow 3:

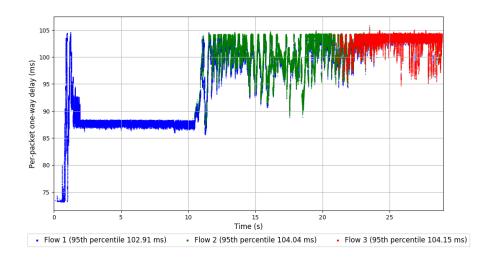
Average throughput: 62.55 Mbit/s

95th percentile per-packet one-way delay: 104.154 ms

Loss rate: 12.45%

Run 1: Report of Indigo-MusesC3 — Data Link





## Run 2: Statistics of Indigo-MusesC3

Start at: 2019-10-02 23:23:44 End at: 2019-10-02 23:24:14 Local clock offset: -7.405 ms Remote clock offset: 43.122 ms

# Below is generated by plot.py at 2019-10-03 01:15:44

# Datalink statistics
-- Total of 3 flows:

Average throughput: 95.20 Mbit/s

95th percentile per-packet one-way delay: 104.273 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 50.14 Mbit/s

95th percentile per-packet one-way delay: 103.916 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 48.57 Mbit/s

95th percentile per-packet one-way delay: 104.400 ms

Loss rate: 2.15%

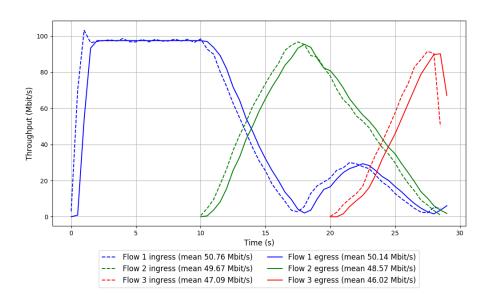
-- Flow 3:

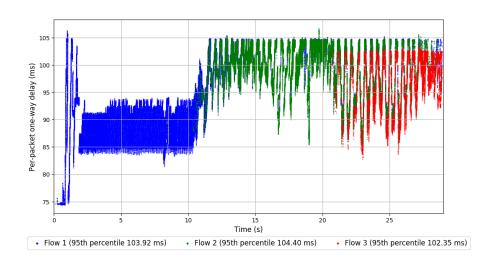
Average throughput: 46.02 Mbit/s

95th percentile per-packet one-way delay: 102.350 ms

Loss rate: 2.25%

Run 2: Report of Indigo-MusesC3 — Data Link





## Run 3: Statistics of Indigo-MusesC3

Start at: 2019-10-02 23:54:05 End at: 2019-10-02 23:54:35 Local clock offset: -6.201 ms Remote clock offset: 44.597 ms

# Below is generated by plot.py at 2019-10-03 01:15:46

# Datalink statistics
-- Total of 3 flows:

Average throughput: 95.19 Mbit/s

95th percentile per-packet one-way delay: 103.001 ms

Loss rate: 1.89%

-- Flow 1:

Average throughput: 50.35 Mbit/s

95th percentile per-packet one-way delay: 102.300 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 47.72 Mbit/s

95th percentile per-packet one-way delay: 103.973 ms

Loss rate: 1.72%

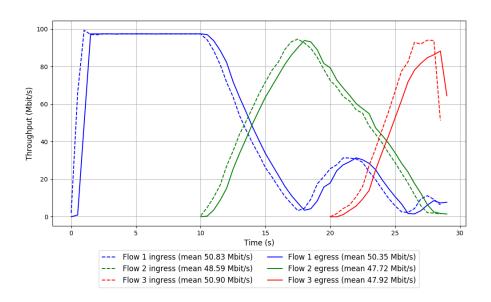
-- Flow 3:

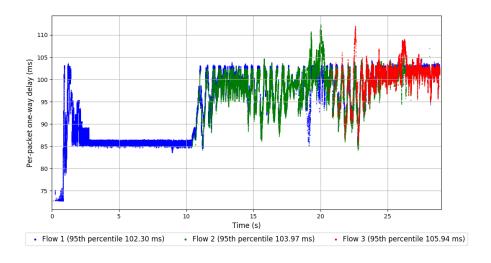
Average throughput: 47.92 Mbit/s

95th percentile per-packet one-way delay: 105.942 ms

Loss rate: 5.82%

Run 3: Report of Indigo-MusesC3 — Data Link





## Run 4: Statistics of Indigo-MusesC3

Start at: 2019-10-03 00:24:23 End at: 2019-10-03 00:24:53 Local clock offset: 8.057 ms Remote clock offset: 49.644 ms

# Below is generated by plot.py at 2019-10-03 01:15:52

# Datalink statistics
-- Total of 3 flows:

Average throughput: 94.64 Mbit/s

95th percentile per-packet one-way delay: 130.606 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 50.77 Mbit/s

95th percentile per-packet one-way delay: 106.872 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 43.88 Mbit/s

95th percentile per-packet one-way delay: 139.432 ms

Loss rate: 1.25%

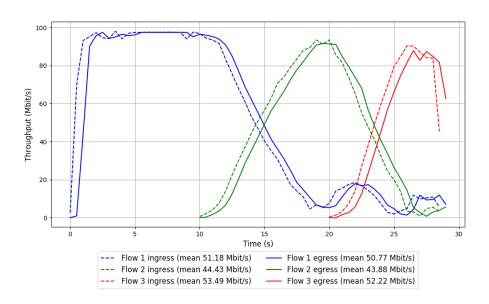
-- Flow 3:

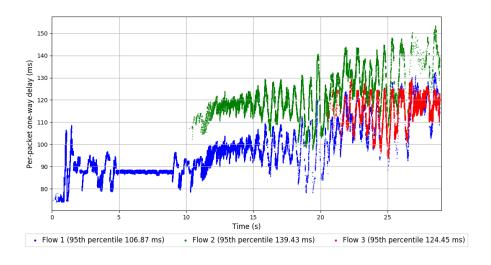
Average throughput: 52.22 Mbit/s

95th percentile per-packet one-way delay: 124.454 ms

Loss rate: 2.60%

Run 4: Report of Indigo-MusesC3 — Data Link





# Run 5: Statistics of Indigo-MusesC3

Start at: 2019-10-03 00:54:42 End at: 2019-10-03 00:55:12 Local clock offset: 3.938 ms Remote clock offset: 51.03 ms

# Below is generated by plot.py at 2019-10-03 01:15:55

# Datalink statistics
-- Total of 3 flows:

Average throughput: 95.09 Mbit/s

95th percentile per-packet one-way delay: 129.089 ms

Loss rate: 2.56%

-- Flow 1:

Average throughput: 50.77 Mbit/s

95th percentile per-packet one-way delay: 103.630 ms

Loss rate: 2.31%

-- Flow 2:

Average throughput: 54.39 Mbit/s

95th percentile per-packet one-way delay: 110.994 ms

Loss rate: 2.56%

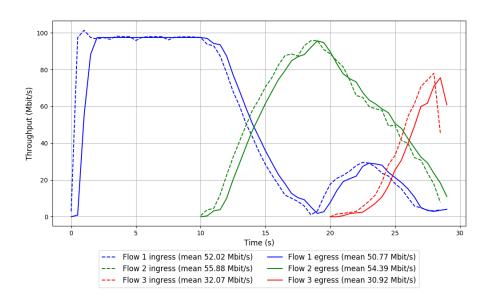
-- Flow 3:

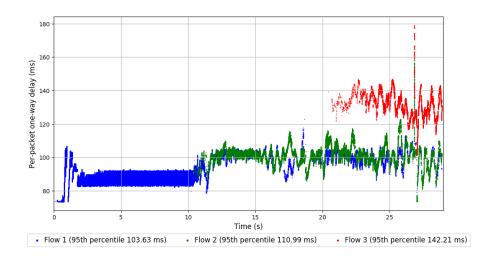
Average throughput: 30.92 Mbit/s

95th percentile per-packet one-way delay: 142.213 ms

Loss rate: 4.00%

Run 5: Report of Indigo-MusesC3 — Data Link





# Run 1: Statistics of Indigo-MusesC5

Start at: 2019-10-02 23:07:18 End at: 2019-10-02 23:07:48 Local clock offset: -6.921 ms Remote clock offset: 39.281 ms

# Below is generated by plot.py at 2019-10-03 01:15:56

# Datalink statistics
-- Total of 3 flows:

Average throughput: 94.13 Mbit/s

95th percentile per-packet one-way delay: 102.132 ms

Loss rate: 2.16%

-- Flow 1:

Average throughput: 53.96 Mbit/s

95th percentile per-packet one-way delay: 98.871 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 58.88 Mbit/s

95th percentile per-packet one-way delay: 102.473 ms

Loss rate: 3.27%

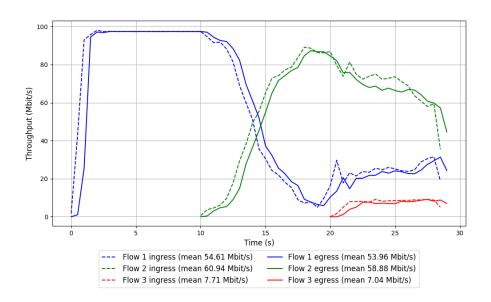
-- Flow 3:

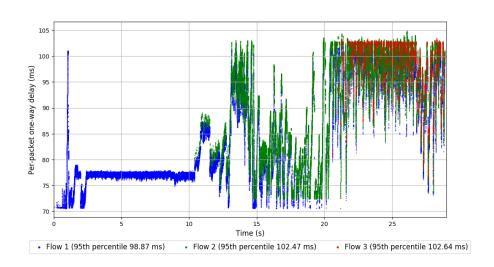
Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay: 102.644 ms

Loss rate: 8.63%

Run 1: Report of Indigo-MusesC5 — Data Link





# Run 2: Statistics of Indigo-MusesC5

Start at: 2019-10-02 23:37:40 End at: 2019-10-02 23:38:10 Local clock offset: -6.324 ms Remote clock offset: 44.864 ms

# Below is generated by plot.py at 2019-10-03 01:15:58

# Datalink statistics
-- Total of 3 flows:

Average throughput: 93.32 Mbit/s

95th percentile per-packet one-way delay: 103.635 ms

Loss rate: 2.49%

-- Flow 1:

Average throughput: 53.80 Mbit/s

95th percentile per-packet one-way delay: 103.649 ms

Loss rate: 1.56%

-- Flow 2:

Average throughput: 57.84 Mbit/s

95th percentile per-packet one-way delay: 103.562 ms

Loss rate: 3.71%

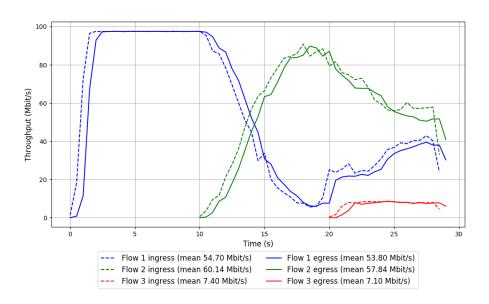
-- Flow 3:

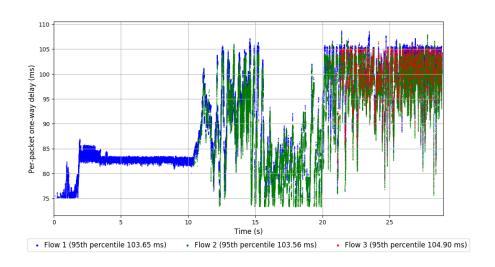
Average throughput: 7.10 Mbit/s

95th percentile per-packet one-way delay: 104.902 ms

Loss rate: 4.07%

Run 2: Report of Indigo-MusesC5 — Data Link





# Run 3: Statistics of Indigo-MusesC5

Start at: 2019-10-03 00:08:00 End at: 2019-10-03 00:08:30 Local clock offset: 3.829 ms Remote clock offset: 46.252 ms

# Below is generated by plot.py at 2019-10-03 01:16:16

# Datalink statistics
-- Total of 3 flows:

Average throughput: 74.46 Mbit/s

95th percentile per-packet one-way delay: 106.296 ms

Loss rate: 4.49%

-- Flow 1:

Average throughput: 31.48 Mbit/s

95th percentile per-packet one-way delay: 104.548 ms

Loss rate: 6.43%

-- Flow 2:

Average throughput: 62.77 Mbit/s

95th percentile per-packet one-way delay: 107.559 ms

Loss rate: 3.06%

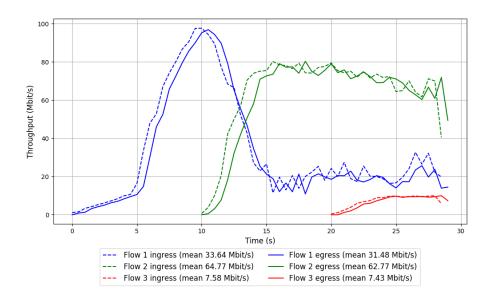
-- Flow 3:

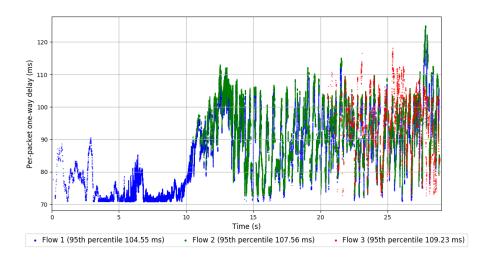
Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 109.227 ms

Loss rate: 2.01%

Run 3: Report of Indigo-MusesC5 — Data Link





# Run 4: Statistics of Indigo-MusesC5

Start at: 2019-10-03 00:38:18 End at: 2019-10-03 00:38:48 Local clock offset: 4.053 ms Remote clock offset: 49.35 ms

# Below is generated by plot.py at 2019-10-03 01:16:31

# Datalink statistics
-- Total of 3 flows:

Average throughput: 92.35 Mbit/s

95th percentile per-packet one-way delay: 101.986 ms

Loss rate: 3.83%

-- Flow 1:

Average throughput: 54.42 Mbit/s

95th percentile per-packet one-way delay: 101.353 ms

Loss rate: 2.19%

-- Flow 2:

Average throughput: 54.91 Mbit/s

95th percentile per-packet one-way delay: 103.068 ms

Loss rate: 6.14%

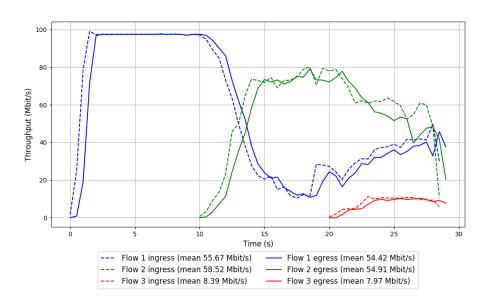
-- Flow 3:

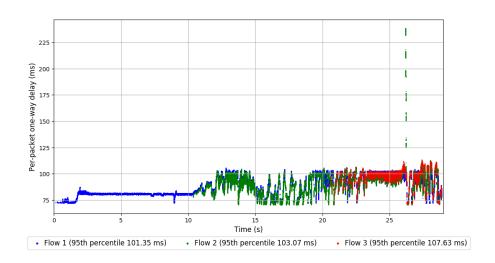
Average throughput: 7.97 Mbit/s

95th percentile per-packet one-way delay: 107.633 ms

Loss rate: 5.15%

Run 4: Report of Indigo-MusesC5 — Data Link





# Run 5: Statistics of Indigo-MusesC5

Start at: 2019-10-03 01:08:38 End at: 2019-10-03 01:09:08 Local clock offset: 11.516 ms Remote clock offset: 12.5 ms

# Below is generated by plot.py at 2019-10-03 01:16:49

# Datalink statistics -- Total of 3 flows:

Average throughput: 91.75 Mbit/s

95th percentile per-packet one-way delay: 106.131 ms

Loss rate: 3.02%

-- Flow 1:

Average throughput: 71.66 Mbit/s

95th percentile per-packet one-way delay: 105.950 ms

Loss rate: 2.19%

-- Flow 2:

Average throughput: 27.66 Mbit/s

95th percentile per-packet one-way delay: 108.347 ms

Loss rate: 6.26%

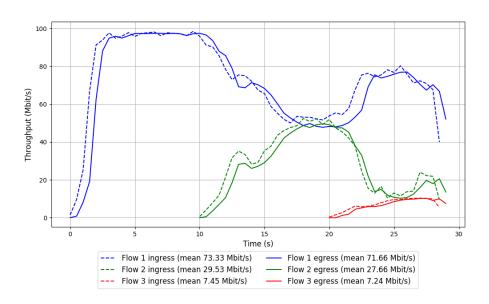
-- Flow 3:

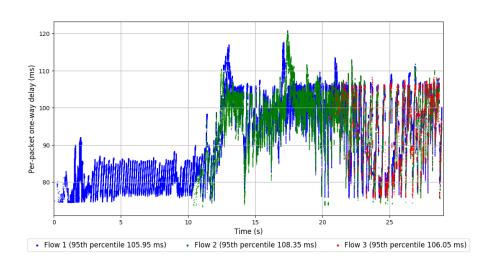
Average throughput: 7.24 Mbit/s

95th percentile per-packet one-way delay: 106.048 ms

Loss rate: 2.69%

Run 5: Report of Indigo-MusesC5 — Data Link





# Run 1: Statistics of Indigo-MusesD

Start at: 2019-10-02 23:02:12 End at: 2019-10-02 23:02:42 Local clock offset: -6.856 ms Remote clock offset: 40.667 ms

# Below is generated by plot.py at 2019-10-03 01:16:51

# Datalink statistics
-- Total of 3 flows:

Average throughput: 93.88 Mbit/s

95th percentile per-packet one-way delay: 104.529 ms

Loss rate: 3.45%

-- Flow 1:

Average throughput: 83.72 Mbit/s

95th percentile per-packet one-way delay: 103.183 ms

Loss rate: 3.07%

-- Flow 2:

Average throughput: 7.28 Mbit/s

95th percentile per-packet one-way delay: 124.172 ms

Loss rate: 4.61%

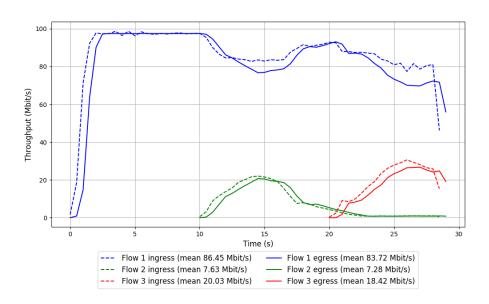
-- Flow 3:

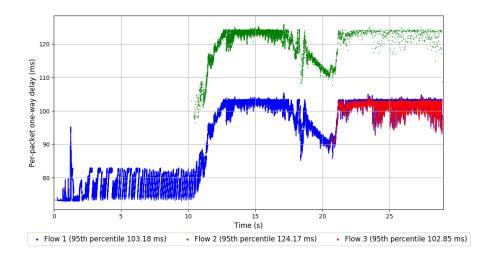
Average throughput: 18.42 Mbit/s

95th percentile per-packet one-way delay: 102.850 ms

Loss rate: 7.97%

Run 1: Report of Indigo-MusesD — Data Link





# Run 2: Statistics of Indigo-MusesD

Start at: 2019-10-02 23:32:34 End at: 2019-10-02 23:33:04 Local clock offset: -6.55 ms Remote clock offset: 44.169 ms

# Below is generated by plot.py at 2019-10-03 01:16:56

# Datalink statistics
-- Total of 3 flows:

Average throughput: 94.06 Mbit/s

95th percentile per-packet one-way delay: 111.485 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 54.77 Mbit/s

95th percentile per-packet one-way delay: 114.461 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 47.48 Mbit/s

95th percentile per-packet one-way delay: 92.876 ms

Loss rate: 0.01%

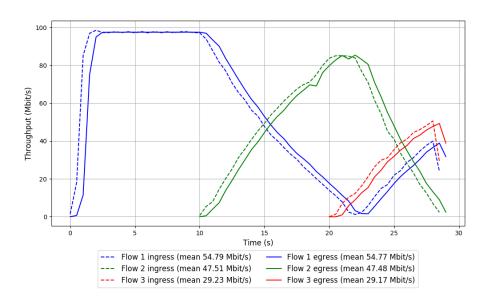
-- Flow 3:

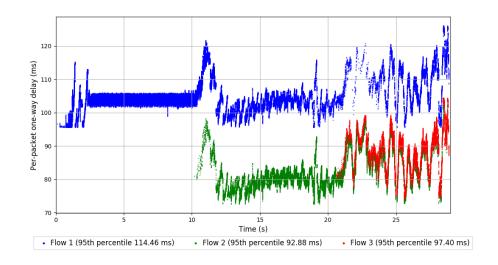
Average throughput: 29.17 Mbit/s

95th percentile per-packet one-way delay: 97.401 ms

Loss rate: 0.14%

Run 2: Report of Indigo-MusesD — Data Link





# Run 3: Statistics of Indigo-MusesD

Start at: 2019-10-03 00:02:55 End at: 2019-10-03 00:03:25 Local clock offset: 1.371 ms Remote clock offset: 45.842 ms

# Below is generated by plot.py at 2019-10-03 01:16:59

# Datalink statistics
-- Total of 3 flows:

Average throughput: 93.96 Mbit/s

95th percentile per-packet one-way delay: 104.544 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 89.52 Mbit/s

95th percentile per-packet one-way delay: 104.698 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 5.12 Mbit/s

95th percentile per-packet one-way delay: 102.933 ms

Loss rate: 3.69%

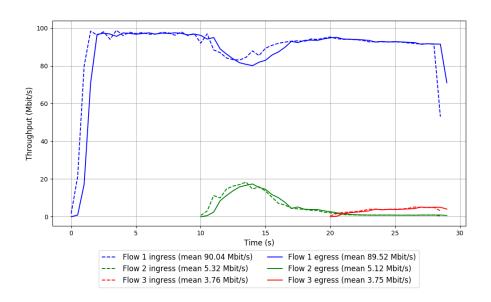
-- Flow 3:

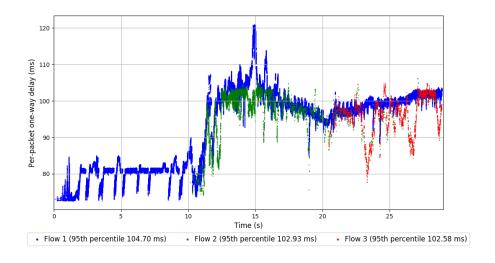
Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 102.584 ms

Loss rate: 0.04%

Run 3: Report of Indigo-MusesD — Data Link





# Run 4: Statistics of Indigo-MusesD

Start at: 2019-10-03 00:33:14 End at: 2019-10-03 00:33:44 Local clock offset: 4.773 ms Remote clock offset: 48.514 ms

# Below is generated by plot.py at 2019-10-03 01:17:00

# Datalink statistics
-- Total of 3 flows:

Average throughput: 94.31 Mbit/s

95th percentile per-packet one-way delay: 102.505 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 54.87 Mbit/s

95th percentile per-packet one-way delay: 90.565 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 46.40 Mbit/s

95th percentile per-packet one-way delay: 100.123 ms

Loss rate: 0.27%

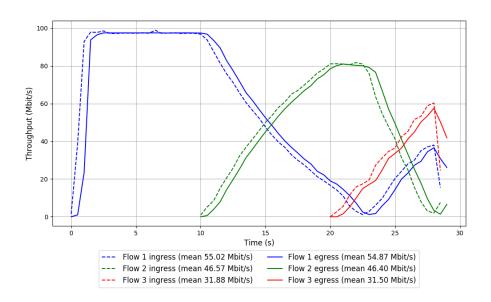
-- Flow 3:

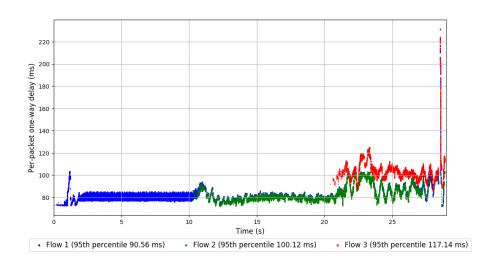
Average throughput: 31.50 Mbit/s

95th percentile per-packet one-way delay: 117.141 ms

Loss rate: 0.97%

Run 4: Report of Indigo-MusesD — Data Link





# Run 5: Statistics of Indigo-MusesD

Start at: 2019-10-03 01:03:32 End at: 2019-10-03 01:04:02 Local clock offset: 9.541 ms Remote clock offset: 30.7 ms

# Below is generated by plot.py at 2019-10-03 01:17:03

# Datalink statistics
-- Total of 3 flows:

Average throughput: 93.93 Mbit/s

95th percentile per-packet one-way delay: 122.377 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 57.70 Mbit/s

95th percentile per-packet one-way delay: 123.763 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 43.85 Mbit/s

95th percentile per-packet one-way delay: 102.833 ms

Loss rate: 0.21%

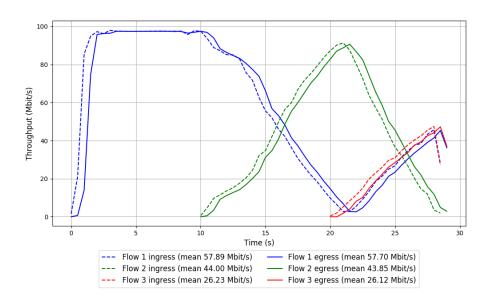
-- Flow 3:

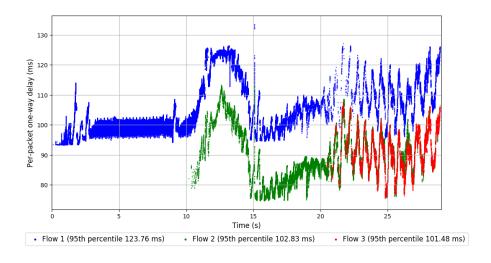
Average throughput: 26.12 Mbit/s

95th percentile per-packet one-way delay: 101.482 ms

Loss rate: 0.19%

Run 5: Report of Indigo-MusesD — Data Link





# Run 1: Statistics of Indigo-MusesT

Start at: 2019-10-02 22:58:27 End at: 2019-10-02 22:58:57 Local clock offset: -6.75 ms Remote clock offset: 38.624 ms

# Below is generated by plot.py at 2019-10-03 01:17:27

# Datalink statistics
-- Total of 3 flows:

Average throughput: 94.71 Mbit/s

95th percentile per-packet one-way delay: 102.516 ms

Loss rate: 5.01%

-- Flow 1:

Average throughput: 47.94 Mbit/s

95th percentile per-packet one-way delay: 102.420 ms

Loss rate: 4.94%

-- Flow 2:

Average throughput: 64.78 Mbit/s

95th percentile per-packet one-way delay: 102.563 ms

Loss rate: 5.12%

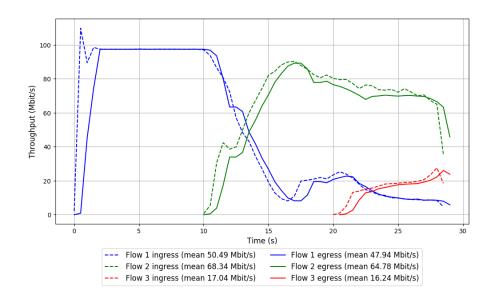
-- Flow 3:

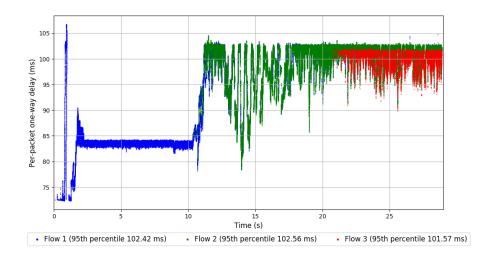
Average throughput: 16.24 Mbit/s

95th percentile per-packet one-way delay: 101.567 ms

Loss rate: 4.64%

Run 1: Report of Indigo-MusesT — Data Link





# Run 2: Statistics of Indigo-MusesT

Start at: 2019-10-02 23:28:49 End at: 2019-10-02 23:29:19 Local clock offset: -6.924 ms Remote clock offset: 42.016 ms

# Below is generated by plot.py at 2019-10-03 01:17:42

# Datalink statistics
-- Total of 3 flows:

Average throughput: 94.82 Mbit/s

95th percentile per-packet one-way delay: 102.116 ms

Loss rate: 7.69%

-- Flow 1:

Average throughput: 48.48 Mbit/s

95th percentile per-packet one-way delay: 101.500 ms

Loss rate: 5.95%

-- Flow 2:

Average throughput: 63.41 Mbit/s

95th percentile per-packet one-way delay: 101.801 ms

Loss rate: 9.78%

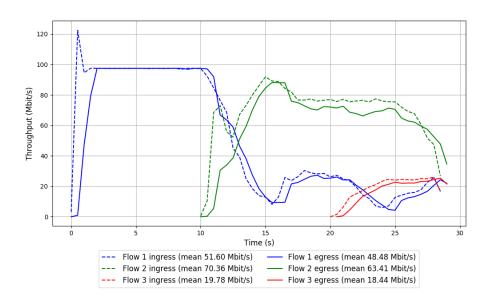
-- Flow 3:

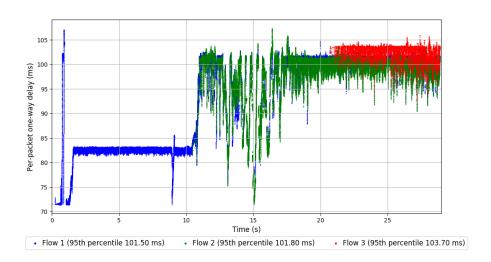
Average throughput: 18.44 Mbit/s

95th percentile per-packet one-way delay: 103.697 ms

Loss rate: 6.73%

Run 2: Report of Indigo-MusesT — Data Link





# Run 3: Statistics of Indigo-MusesT

Start at: 2019-10-02 23:59:09 End at: 2019-10-02 23:59:39 Local clock offset: -1.448 ms Remote clock offset: 45.425 ms

# Below is generated by plot.py at 2019-10-03 01:17:55

# Datalink statistics
-- Total of 3 flows:

Average throughput: 94.61 Mbit/s

95th percentile per-packet one-way delay: 103.170 ms

Loss rate: 3.96%

-- Flow 1:

Average throughput: 60.95 Mbit/s

95th percentile per-packet one-way delay: 103.235 ms

Loss rate: 4.20%

-- Flow 2:

Average throughput: 45.36 Mbit/s

95th percentile per-packet one-way delay: 102.997 ms

Loss rate: 3.64%

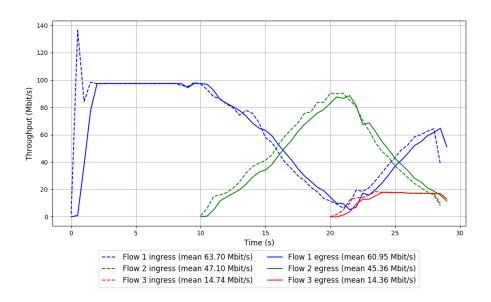
-- Flow 3:

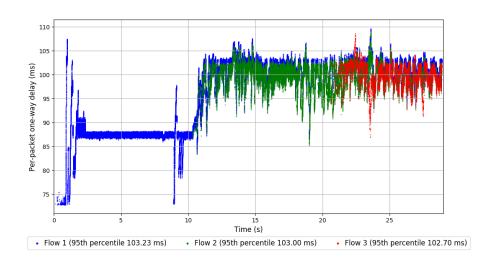
Average throughput: 14.36 Mbit/s

95th percentile per-packet one-way delay: 102.704 ms

Loss rate: 2.55%

Run 3: Report of Indigo-MusesT — Data Link





# Run 4: Statistics of Indigo-MusesT

Start at: 2019-10-03 00:29:28 End at: 2019-10-03 00:29:58 Local clock offset: 5.931 ms Remote clock offset: 49.891 ms

# Below is generated by plot.py at 2019-10-03 01:17:58

# Datalink statistics
-- Total of 3 flows:

Average throughput: 94.52 Mbit/s

95th percentile per-packet one-way delay: 115.495 ms

Loss rate: 8.93%

-- Flow 1:

Average throughput: 48.76 Mbit/s

95th percentile per-packet one-way delay: 105.074 ms

Loss rate: 6.66%

-- Flow 2:

Average throughput: 67.95 Mbit/s

95th percentile per-packet one-way delay: 119.296 ms

Loss rate: 11.19%

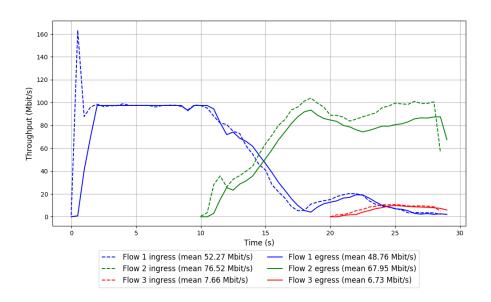
-- Flow 3:

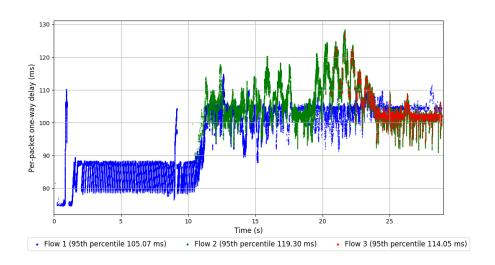
Average throughput: 6.73 Mbit/s

95th percentile per-packet one-way delay: 114.050 ms

Loss rate: 12.25%

Run 4: Report of Indigo-MusesT — Data Link





# Run 5: Statistics of Indigo-MusesT

Start at: 2019-10-03 00:59:47 End at: 2019-10-03 01:00:17 Local clock offset: 7.652 ms Remote clock offset: 51.456 ms

# Below is generated by plot.py at 2019-10-03 01:18:03

# Datalink statistics
-- Total of 3 flows:

Average throughput: 94.53 Mbit/s

95th percentile per-packet one-way delay: 109.358 ms

Loss rate: 5.73%

-- Flow 1:

Average throughput: 56.05 Mbit/s

95th percentile per-packet one-way delay: 108.045 ms

Loss rate: 5.28%

-- Flow 2:

Average throughput: 46.04 Mbit/s

95th percentile per-packet one-way delay: 105.773 ms

Loss rate: 5.11%

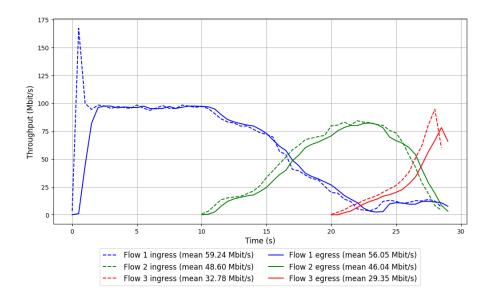
-- Flow 3:

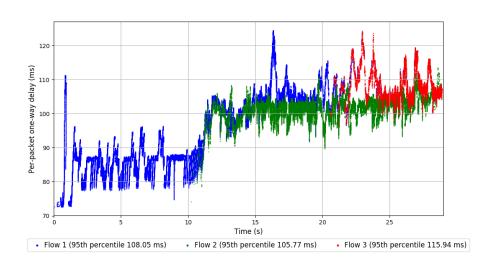
Average throughput: 29.35 Mbit/s

95th percentile per-packet one-way delay: 115.938 ms

Loss rate: 10.56%

Run 5: Report of Indigo-MusesT — Data Link





# Run 1: Statistics of LEDBAT

Start at: 2019-10-02 22:47:05 End at: 2019-10-02 22:47:35 Local clock offset: -6.625 ms Remote clock offset: 38.841 ms

# Below is generated by plot.py at 2019-10-03 01:18:03

# Datalink statistics
-- Total of 3 flows:

Average throughput: 16.22 Mbit/s

95th percentile per-packet one-way delay: 93.943 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 10.42 Mbit/s

95th percentile per-packet one-way delay: 76.208 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 6.99 Mbit/s

95th percentile per-packet one-way delay: 74.485 ms

Loss rate: 0.03%

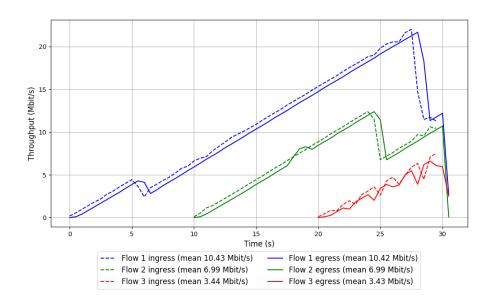
-- Flow 3:

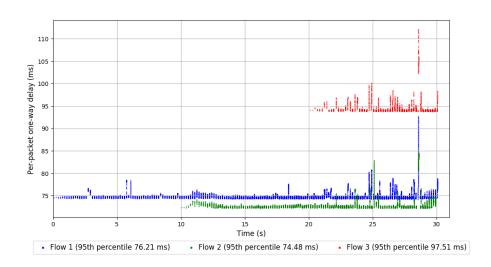
Average throughput: 3.43 Mbit/s

95th percentile per-packet one-way delay: 97.506 ms

Loss rate: 0.10%

Run 1: Report of LEDBAT — Data Link





# Run 2: Statistics of LEDBAT

Start at: 2019-10-02 23:17:30 End at: 2019-10-02 23:18:00 Local clock offset: -7.198 ms Remote clock offset: 42.456 ms

# Below is generated by plot.py at 2019-10-03 01:18:03

# Datalink statistics
-- Total of 3 flows:

Average throughput: 16.89 Mbit/s

95th percentile per-packet one-way delay: 101.296 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.79 Mbit/s

95th percentile per-packet one-way delay: 104.931 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.50 Mbit/s

95th percentile per-packet one-way delay: 77.342 ms

Loss rate: 0.00%

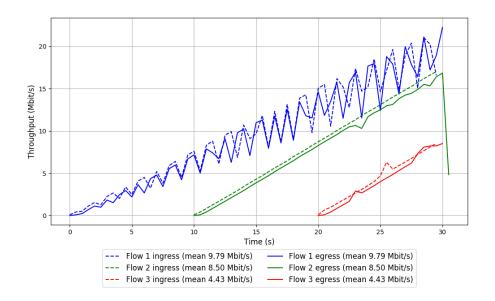
-- Flow 3:

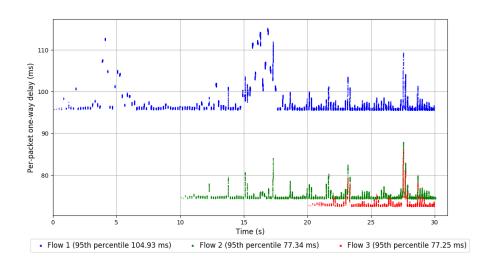
Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 77.245 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link





### Run 3: Statistics of LEDBAT

Start at: 2019-10-02 23:47:51 End at: 2019-10-02 23:48:21 Local clock offset: -6.179 ms Remote clock offset: 43.97 ms

# Below is generated by plot.py at 2019-10-03 01:18:03

# Datalink statistics
-- Total of 3 flows:

Average throughput: 16.10 Mbit/s

95th percentile per-packet one-way delay: 105.804 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.05 Mbit/s

95th percentile per-packet one-way delay: 109.329 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.51 Mbit/s

95th percentile per-packet one-way delay: 76.606 ms

Loss rate: 0.00%

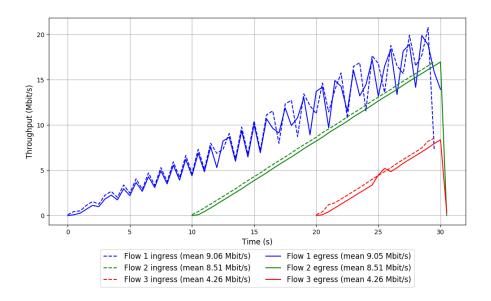
-- Flow 3:

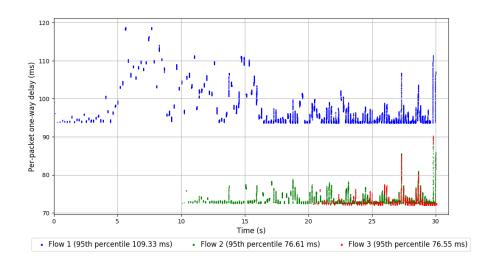
Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 76.550 ms

Loss rate: 0.03%

Run 3: Report of LEDBAT — Data Link





## Run 4: Statistics of LEDBAT

Start at: 2019-10-03 00:18:09 End at: 2019-10-03 00:18:39 Local clock offset: 6.804 ms Remote clock offset: 48.755 ms

# Below is generated by plot.py at 2019-10-03 01:18:03

# Datalink statistics
-- Total of 3 flows:

Average throughput: 16.56 Mbit/s

95th percentile per-packet one-way delay: 95.396 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 10.41 Mbit/s

95th percentile per-packet one-way delay: 75.124 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 7.09 Mbit/s

95th percentile per-packet one-way delay: 96.755 ms

Loss rate: 0.27%

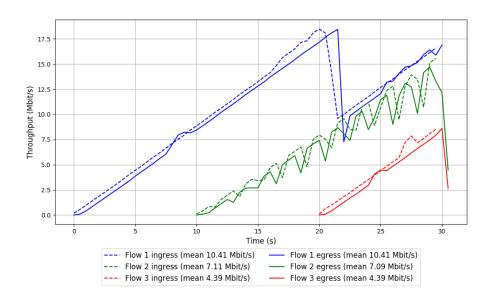
-- Flow 3:

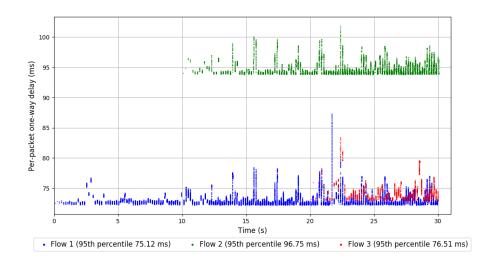
Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 76.509 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link





### Run 5: Statistics of LEDBAT

Start at: 2019-10-03 00:48:29 End at: 2019-10-03 00:48:59 Local clock offset: 3.828 ms Remote clock offset: 52.08 ms

# Below is generated by plot.py at 2019-10-03 01:18:03

# Datalink statistics
-- Total of 3 flows:

Average throughput: 16.68 Mbit/s

95th percentile per-packet one-way delay: 78.300 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 9.52 Mbit/s

95th percentile per-packet one-way delay: 77.264 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 8.79 Mbit/s

95th percentile per-packet one-way delay: 78.992 ms

Loss rate: 0.00%

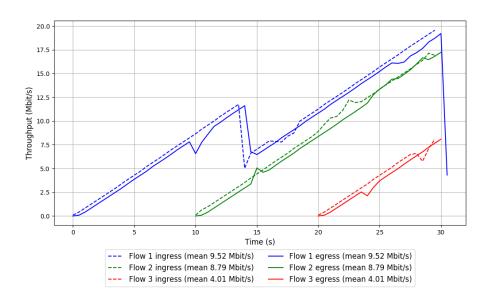
-- Flow 3:

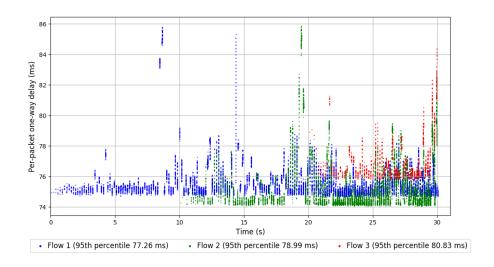
Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 80.834 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link





# Run 1: Statistics of Muses\\_DecisionTree

Start at: 2019-10-02 22:39:23 End at: 2019-10-02 22:39:53 Local clock offset: -6.784 ms Remote clock offset: 36.341 ms

# Below is generated by plot.py at 2019-10-03 01:18:21

# Datalink statistics
-- Total of 3 flows:

Average throughput: 90.76 Mbit/s

95th percentile per-packet one-way delay: 97.824 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 45.29 Mbit/s

95th percentile per-packet one-way delay: 96.934 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 55.25 Mbit/s

95th percentile per-packet one-way delay: 99.580 ms

Loss rate: 0.50%

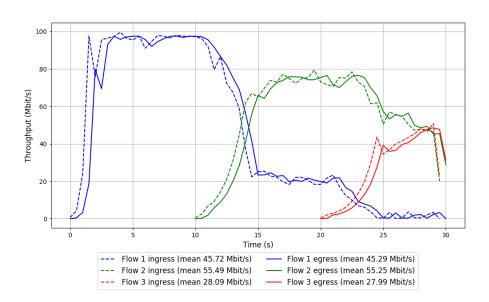
-- Flow 3:

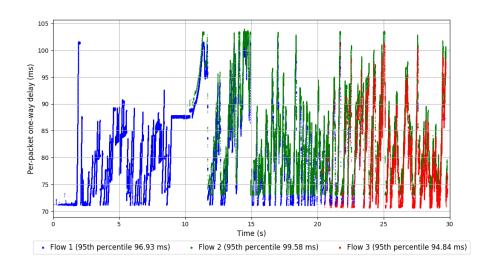
Average throughput: 27.99 Mbit/s

95th percentile per-packet one-way delay: 94.841 ms

Loss rate: 0.45%

Run 1: Report of Muses\_DecisionTree — Data Link





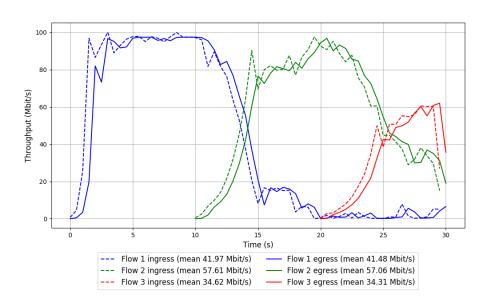
## Run 2: Statistics of Muses\\_DecisionTree

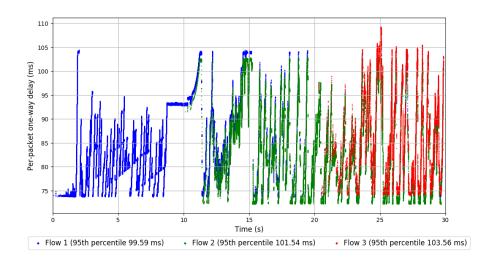
Start at: 2019-10-02 23:09:49

Loss rate: 0.77%

End at: 2019-10-02 23:10:19 Local clock offset: -6.974 ms Remote clock offset: 41.276 ms # Below is generated by plot.py at 2019-10-03 01:18:30 # Datalink statistics -- Total of 3 flows: Average throughput: 90.46 Mbit/s 95th percentile per-packet one-way delay: 101.425 ms Loss rate: 0.97% -- Flow 1: Average throughput: 41.48 Mbit/s 95th percentile per-packet one-way delay: 99.588 ms Loss rate: 1.09% -- Flow 2: Average throughput: 57.06 Mbit/s 95th percentile per-packet one-way delay: 101.537 ms Loss rate: 0.91% -- Flow 3: Average throughput: 34.31 Mbit/s 95th percentile per-packet one-way delay: 103.562 ms

Run 2: Report of Muses\_DecisionTree — Data Link



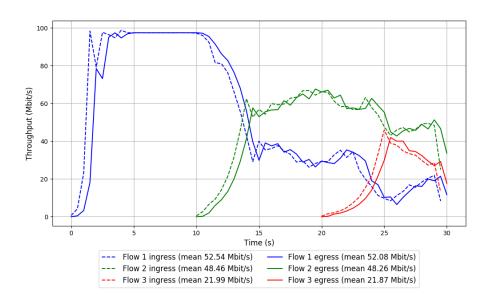


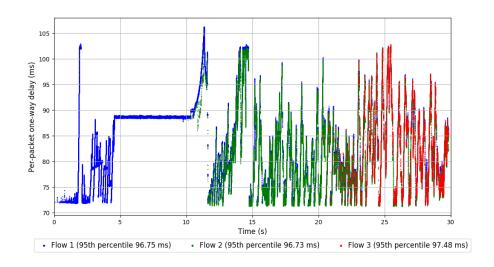
## Run 3: Statistics of Muses\\_DecisionTree

Loss rate: 0.47%

Start at: 2019-10-02 23:40:10 End at: 2019-10-02 23:40:40 Local clock offset: -6.268 ms Remote clock offset: 43.4 ms # Below is generated by plot.py at 2019-10-03 01:18:31 # Datalink statistics -- Total of 3 flows: Average throughput: 91.06 Mbit/s 95th percentile per-packet one-way delay: 96.788 ms Loss rate: 0.66% -- Flow 1: Average throughput: 52.08 Mbit/s 95th percentile per-packet one-way delay: 96.750 ms Loss rate: 0.83% -- Flow 2: Average throughput: 48.26 Mbit/s 95th percentile per-packet one-way delay: 96.726 ms Loss rate: 0.43% -- Flow 3: Average throughput: 21.87 Mbit/s 95th percentile per-packet one-way delay: 97.477 ms

Run 3: Report of Muses\_DecisionTree — Data Link





## Run 4: Statistics of Muses\\_DecisionTree

Start at: 2019-10-03 00:10:29 End at: 2019-10-03 00:10:59 Local clock offset: 4.735 ms Remote clock offset: 46.506 ms

# Below is generated by plot.py at 2019-10-03 01:18:31

# Datalink statistics -- Total of 3 flows:

Average throughput: 65.98 Mbit/s

95th percentile per-packet one-way delay: 106.273 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 31.70 Mbit/s

95th percentile per-packet one-way delay: 95.723 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 14.63 Mbit/s

95th percentile per-packet one-way delay: 126.009 ms

Loss rate: 3.36%

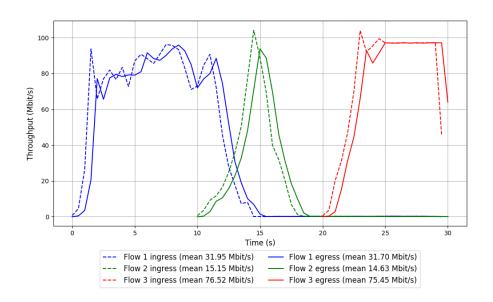
-- Flow 3:

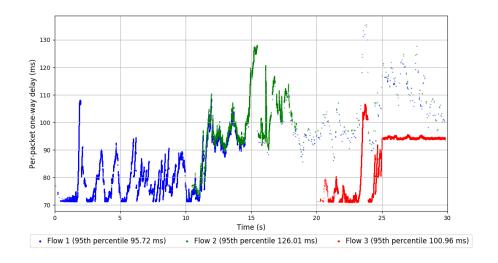
Average throughput: 75.45 Mbit/s

95th percentile per-packet one-way delay: 100.960 ms

Loss rate: 1.17%

Run 4: Report of Muses\_DecisionTree — Data Link





## Run 5: Statistics of Muses\\_DecisionTree

Start at: 2019-10-03 00:40:48

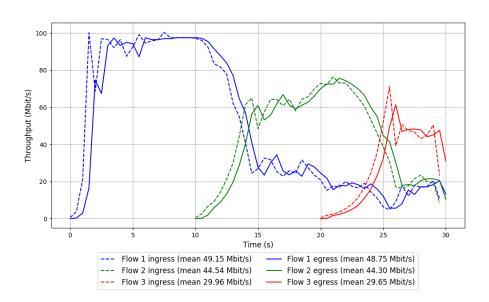
Average throughput: 29.65 Mbit/s

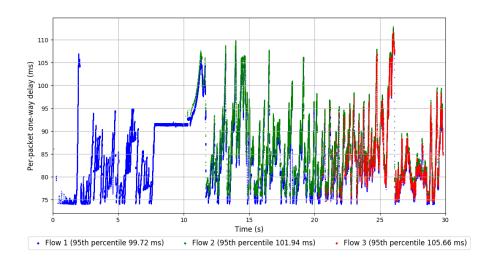
Loss rate: 1.29%

End at: 2019-10-03 00:41:18 Local clock offset: 3.866 ms Remote clock offset: 51.285 ms # Below is generated by plot.py at 2019-10-03 01:18:41 # Datalink statistics -- Total of 3 flows: Average throughput: 87.61 Mbit/s 95th percentile per-packet one-way delay: 101.023 ms Loss rate: 0.77% -- Flow 1: Average throughput: 48.75 Mbit/s 95th percentile per-packet one-way delay: 99.715 ms Loss rate: 0.81% -- Flow 2: Average throughput: 44.30 Mbit/s 95th percentile per-packet one-way delay: 101.941 ms Loss rate: 0.54% -- Flow 3:

95th percentile per-packet one-way delay: 105.655 ms

Run 5: Report of Muses\_DecisionTree — Data Link





## Run 1: Statistics of Muses\\_DecisionTreeHO

Start at: 2019-10-02 22:40:40 End at: 2019-10-02 22:41:10 Local clock offset: -6.712 ms Remote clock offset: 36.155 ms

# Below is generated by plot.py at 2019-10-03 01:19:06

# Datalink statistics
-- Total of 3 flows:

Average throughput: 56.18 Mbit/s

95th percentile per-packet one-way delay: 104.414 ms

Loss rate: 70.45%

-- Flow 1:

Average throughput: 48.76 Mbit/s

95th percentile per-packet one-way delay: 104.410 ms

Loss rate: 71.38%

-- Flow 2:

Average throughput: 10.44 Mbit/s

95th percentile per-packet one-way delay: 104.499 ms

Loss rate: 64.21%

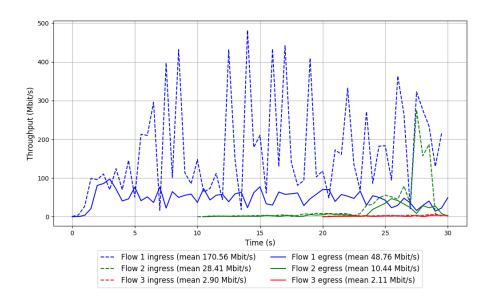
-- Flow 3:

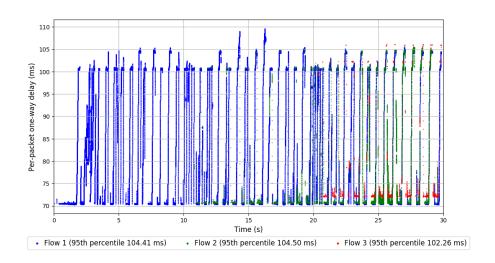
Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 102.256 ms

Loss rate: 27.06%

Run 1: Report of Muses\_DecisionTreeH0 — Data Link





# Run 2: Statistics of Muses\\_DecisionTreeHO

Start at: 2019-10-02 23:11:06
End at: 2019-10-02 23:11:36
Local clock offset: -7.058 ms
Remote clock offset: 39.955 ms
# Below is generated by plot.p:

# Below is generated by plot.py at 2019-10-03 01:19:07

# Datalink statistics
-- Total of 3 flows:

Average throughput: 91.98 Mbit/s

95th percentile per-packet one-way delay: 122.125 ms

Loss rate: 4.36%

-- Flow 1:

Average throughput: 84.97 Mbit/s

95th percentile per-packet one-way delay: 103.573 ms

Loss rate: 3.84%

-- Flow 2:

Average throughput: 10.49 Mbit/s

95th percentile per-packet one-way delay: 122.821 ms

Loss rate: 10.18%

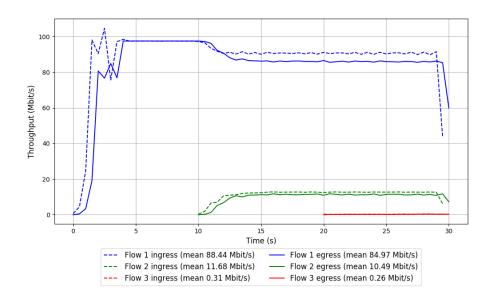
-- Flow 3:

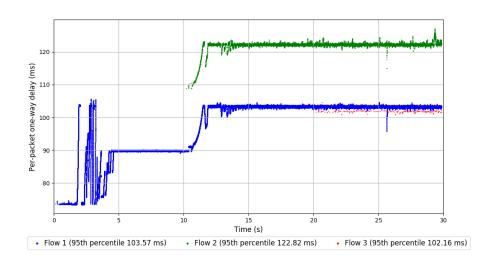
Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 102.164 ms

Loss rate: 16.21%

Run 2: Report of Muses\_DecisionTreeH0 — Data Link





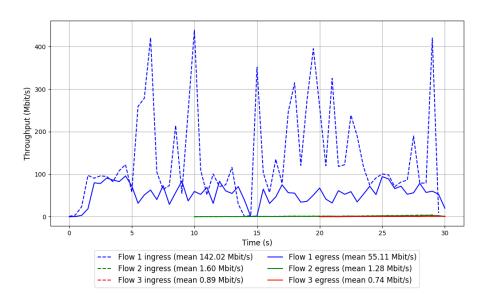
## Run 3: Statistics of Muses\\_DecisionTreeHO

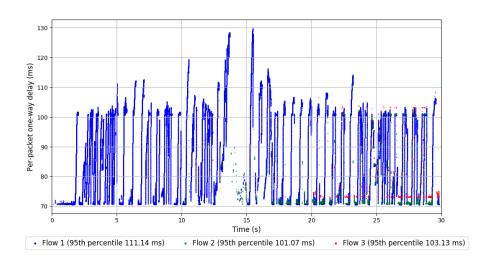
Start at: 2019-10-02 23:41:27

End at: 2019-10-02 23:41:57 Local clock offset: -6.239 ms Remote clock offset: 43.437 ms # Below is generated by plot.py at 2019-10-03 01:19:07 # Datalink statistics -- Total of 3 flows: Average throughput: 56.19 Mbit/s 95th percentile per-packet one-way delay: 111.039 ms Loss rate: 60.80% -- Flow 1: Average throughput: 55.11 Mbit/s 95th percentile per-packet one-way delay: 111.145 ms Loss rate: 61.20% -- Flow 2: Average throughput: 1.28 Mbit/s 95th percentile per-packet one-way delay: 101.074 ms Loss rate: 19.74% -- Flow 3: Average throughput: 0.74 Mbit/s

95th percentile per-packet one-way delay: 103.128 ms

Run 3: Report of Muses\_DecisionTreeH0 — Data Link





## Run 4: Statistics of Muses\\_DecisionTreeHO

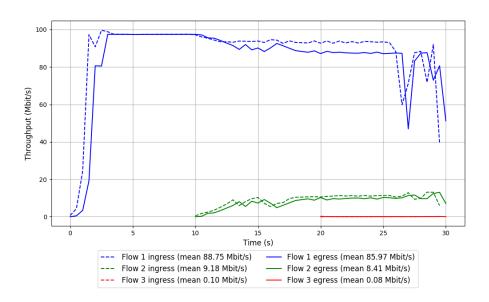
Start at: 2019-10-03 00:11:45

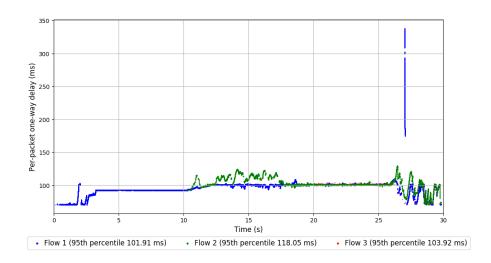
Loss rate: 14.81%

End at: 2019-10-03 00:12:15 Local clock offset: 5.137 ms Remote clock offset: 46.601 ms # Below is generated by plot.py at 2019-10-03 01:19:21 # Datalink statistics -- Total of 3 flows: Average throughput: 91.57 Mbit/s 95th percentile per-packet one-way delay: 103.111 ms Loss rate: 3.48% -- Flow 1: Average throughput: 85.97 Mbit/s 95th percentile per-packet one-way delay: 101.912 ms Loss rate: 3.13% -- Flow 2: Average throughput: 8.41 Mbit/s 95th percentile per-packet one-way delay: 118.054 ms Loss rate: 8.47% -- Flow 3: Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 103.922 ms

Run 4: Report of Muses\_DecisionTreeH0 — Data Link





## Run 5: Statistics of Muses\\_DecisionTreeHO

Start at: 2019-10-03 00:42:05 End at: 2019-10-03 00:42:35 Local clock offset: 3.873 ms Remote clock offset: 49.597 ms

# Below is generated by plot.py at 2019-10-03 01:19:22

# Datalink statistics
-- Total of 3 flows:

Average throughput: 80.02 Mbit/s

95th percentile per-packet one-way delay: 106.145 ms

Loss rate: 11.71%

-- Flow 1:

Average throughput: 75.87 Mbit/s

95th percentile per-packet one-way delay: 106.224 ms

Loss rate: 11.83%

-- Flow 2:

Average throughput: 6.21 Mbit/s

95th percentile per-packet one-way delay: 103.246 ms

Loss rate: 9.43%

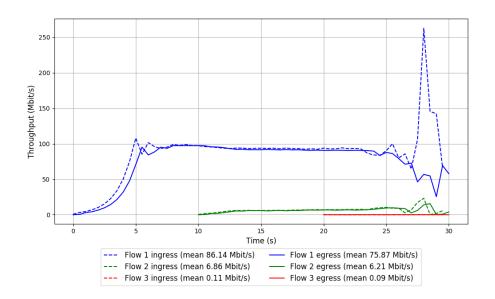
-- Flow 3:

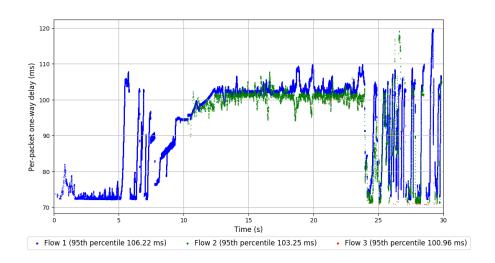
Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 100.956 ms

Loss rate: 18.08%

Run 5: Report of Muses\_DecisionTreeH0 — Data Link





## Run 1: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-10-02 23:04:43 End at: 2019-10-02 23:05:13 Local clock offset: -6.842 ms Remote clock offset: 40.918 ms

# Below is generated by plot.py at 2019-10-03 01:19:36

# Datalink statistics
-- Total of 3 flows:

Average throughput: 92.26 Mbit/s

95th percentile per-packet one-way delay: 104.194 ms

Loss rate: 7.07%

-- Flow 1:

Average throughput: 84.82 Mbit/s

95th percentile per-packet one-way delay: 104.188 ms

Loss rate: 6.18%

-- Flow 2:

Average throughput: 6.76 Mbit/s

95th percentile per-packet one-way delay: 110.566 ms

Loss rate: 17.79%

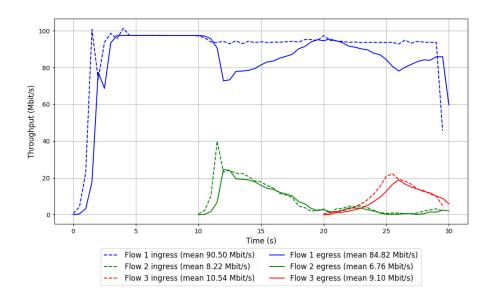
-- Flow 3:

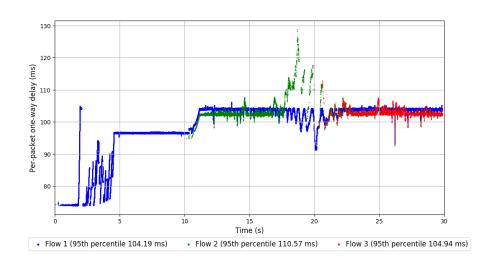
Average throughput: 9.10 Mbit/s

95th percentile per-packet one-way delay: 104.944 ms

Loss rate: 13.56%

Run 1: Report of Muses\_DecisionTreeR0 — Data Link





## Run 2: Statistics of Muses\\_DecisionTreeR0

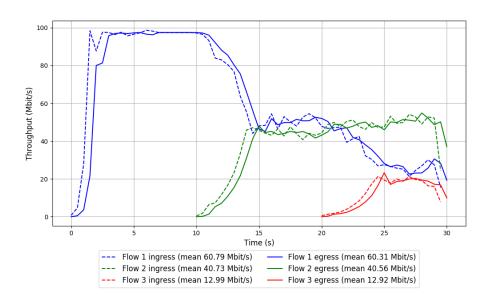
Start at: 2019-10-02 23:35:05

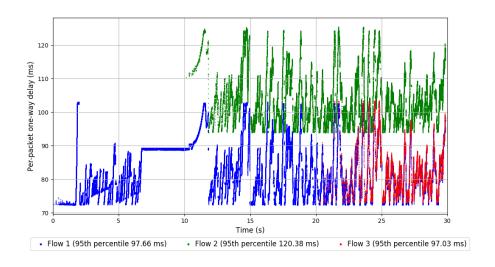
Loss rate: 0.37%

End at: 2019-10-02 23:35:35 Local clock offset: -6.42 ms Remote clock offset: 44.508 ms # Below is generated by plot.py at 2019-10-03 01:19:36 # Datalink statistics -- Total of 3 flows: Average throughput: 91.36 Mbit/s 95th percentile per-packet one-way delay: 111.246 ms Loss rate: 0.61% -- Flow 1: Average throughput: 60.31 Mbit/s 95th percentile per-packet one-way delay: 97.656 ms Loss rate: 0.71% -- Flow 2: Average throughput: 40.56 Mbit/s 95th percentile per-packet one-way delay: 120.376 ms Loss rate: 0.44% -- Flow 3: Average throughput: 12.92 Mbit/s

95th percentile per-packet one-way delay: 97.034 ms

Run 2: Report of Muses\_DecisionTreeR0 — Data Link





## Run 3: Statistics of Muses\\_DecisionTreeR0

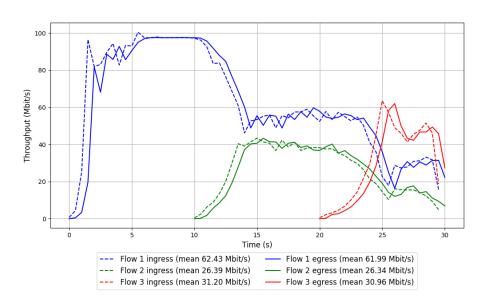
Start at: 2019-10-03 00:05:25

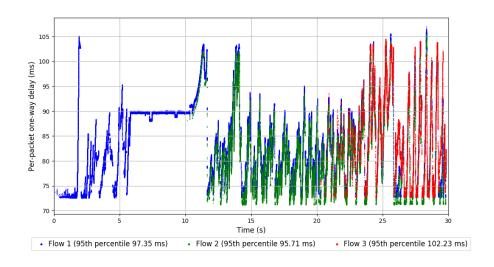
Loss rate: 0.70%

End at: 2019-10-03 00:05:55 Local clock offset: 2.651 ms Remote clock offset: 46.008 ms # Below is generated by plot.py at 2019-10-03 01:19:45 # Datalink statistics -- Total of 3 flows: Average throughput: 89.51 Mbit/s 95th percentile per-packet one-way delay: 98.163 ms Loss rate: 0.60% -- Flow 1: Average throughput: 61.99 Mbit/s 95th percentile per-packet one-way delay: 97.349 ms Loss rate: 0.68% -- Flow 2: Average throughput: 26.34 Mbit/s 95th percentile per-packet one-way delay: 95.707 ms Loss rate: 0.25% -- Flow 3: Average throughput: 30.96 Mbit/s

95th percentile per-packet one-way delay: 102.230 ms

Run 3: Report of Muses\_DecisionTreeR0 — Data Link





## Run 4: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-10-03 00:35:45

End at: 2019-10-03 00:36:15

Local clock offset: 4.435 ms

Remote clock offset: 49.121 ms

# Below is generated by plot.py at 2019-10-03 01:20:01

# Datalink statistics
-- Total of 3 flows:

Average throughput: 84.70 Mbit/s

95th percentile per-packet one-way delay: 97.306 ms

Loss rate: 0.57%
-- Flow 1:

Average throughput: 51.70 Mbit/s

95th percentile per-packet one-way delay: 95.902 ms

Loss rate: 0.63% -- Flow 2: Average throughput: 36.06 Mbit/s

95th percentile per-packet one-way delay: 97.611 ms

Loss rate: 0.51%

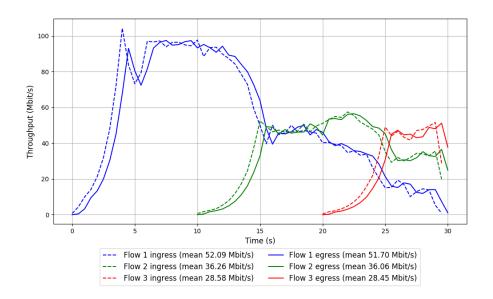
-- Flow 3:

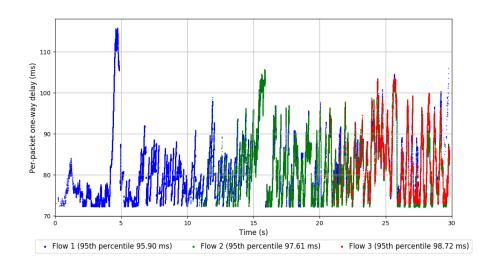
Average throughput: 28.45 Mbit/s

95th percentile per-packet one-way delay: 98.724 ms

Loss rate: 0.34%

Run 4: Report of Muses\_DecisionTreeR0 — Data Link





## Run 5: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-10-03 01:06:03

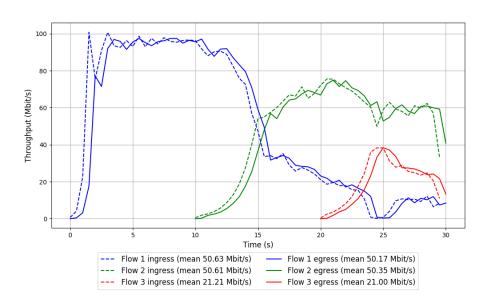
End at: 2019-10-03 01:06:33 Local clock offset: 10.56 ms Remote clock offset: 21.261 ms # Below is generated by plot.py at 2019-10-03 01:20:13 # Datalink statistics -- Total of 3 flows: Average throughput: 90.21 Mbit/s 95th percentile per-packet one-way delay: 100.361 ms Loss rate: 0.71% -- Flow 1: Average throughput: 50.17 Mbit/s 95th percentile per-packet one-way delay: 95.529 ms Loss rate: 0.84% -- Flow 2: Average throughput: 50.35 Mbit/s 95th percentile per-packet one-way delay: 102.102 ms Loss rate: 0.49%

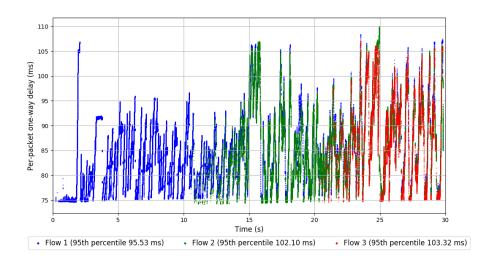
95th percentile per-packet one-way delay: 103.316 ms

Loss rate: 0.86%

-- Flow 3:

Run 5: Report of Muses\_DecisionTreeR0 — Data Link





# Run 1: Statistics of PCC-Allegro

Start at: 2019-10-02 22:55:53 End at: 2019-10-02 22:56:23 Local clock offset: -6.739 ms Remote clock offset: 38.162 ms

# Below is generated by plot.py at 2019-10-03 01:20:13

# Datalink statistics
-- Total of 3 flows:

Average throughput: 87.19 Mbit/s

95th percentile per-packet one-way delay: 103.970 ms

Loss rate: 2.77%

-- Flow 1:

Average throughput: 78.50 Mbit/s

95th percentile per-packet one-way delay: 103.979 ms

Loss rate: 2.63%

-- Flow 2:

Average throughput: 9.23 Mbit/s

95th percentile per-packet one-way delay: 102.538 ms

Loss rate: 3.75%

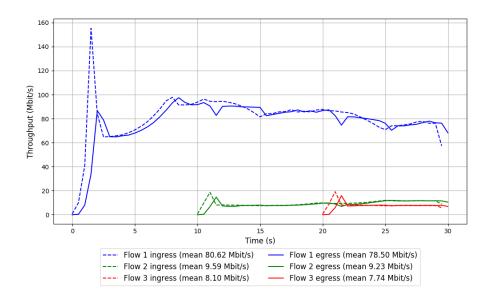
-- Flow 3:

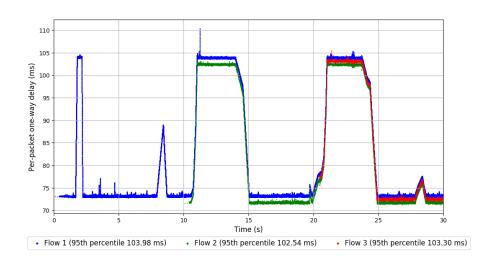
Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 103.299 ms

Loss rate: 4.52%

Run 1: Report of PCC-Allegro — Data Link





# Run 2: Statistics of PCC-Allegro

Start at: 2019-10-02 23:26:15 End at: 2019-10-02 23:26:45 Local clock offset: -7.23 ms Remote clock offset: 43.495 ms

# Below is generated by plot.py at 2019-10-03 01:20:29

# Datalink statistics
-- Total of 3 flows:

Average throughput: 86.92 Mbit/s

95th percentile per-packet one-way delay: 105.867 ms

Loss rate: 3.41%

-- Flow 1:

Average throughput: 78.94 Mbit/s

95th percentile per-packet one-way delay: 105.762 ms

Loss rate: 3.18%

-- Flow 2:

Average throughput: 8.06 Mbit/s

95th percentile per-packet one-way delay: 106.302 ms

Loss rate: 5.74%

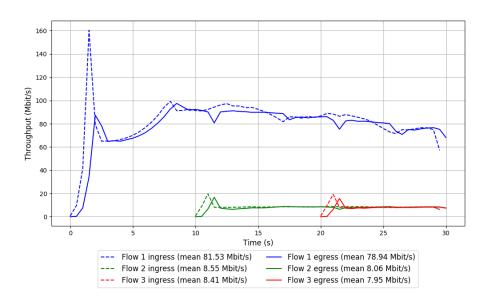
-- Flow 3:

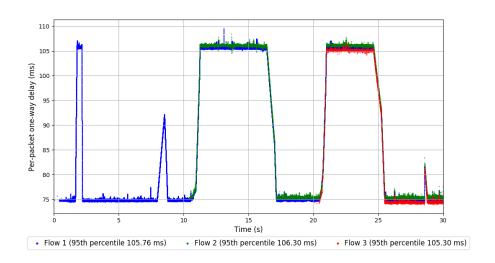
Average throughput: 7.95 Mbit/s

95th percentile per-packet one-way delay: 105.298 ms

Loss rate: 5.40%

Run 2: Report of PCC-Allegro — Data Link





# Run 3: Statistics of PCC-Allegro

Start at: 2019-10-02 23:56:35 End at: 2019-10-02 23:57:05 Local clock offset: -4.187 ms Remote clock offset: 46.98 ms

# Below is generated by plot.py at 2019-10-03 01:20:29

# Datalink statistics
-- Total of 3 flows:

Average throughput: 82.73 Mbit/s

95th percentile per-packet one-way delay: 108.747 ms

Loss rate: 3.56%

-- Flow 1:

Average throughput: 59.05 Mbit/s

95th percentile per-packet one-way delay: 114.374 ms

Loss rate: 3.49%

-- Flow 2:

Average throughput: 31.56 Mbit/s

95th percentile per-packet one-way delay: 107.232 ms

Loss rate: 3.76%

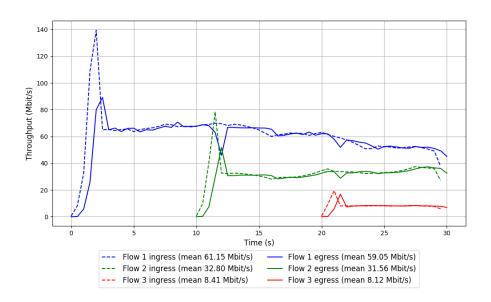
-- Flow 3:

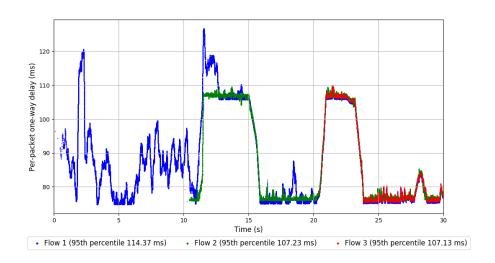
Average throughput: 8.12 Mbit/s

95th percentile per-packet one-way delay: 107.128 ms

Loss rate: 3.44%

Run 3: Report of PCC-Allegro — Data Link





# Run 4: Statistics of PCC-Allegro

Start at: 2019-10-03 00:26:53 End at: 2019-10-03 00:27:23 Local clock offset: 6.969 ms Remote clock offset: 48.149 ms

# Below is generated by plot.py at 2019-10-03 01:20:43

# Datalink statistics
-- Total of 3 flows:

Average throughput: 82.51 Mbit/s

95th percentile per-packet one-way delay: 105.358 ms

Loss rate: 3.26%

-- Flow 1:

Average throughput: 60.44 Mbit/s

95th percentile per-packet one-way delay: 104.577 ms

Loss rate: 3.14%

-- Flow 2:

Average throughput: 29.35 Mbit/s

95th percentile per-packet one-way delay: 106.263 ms

Loss rate: 3.38%

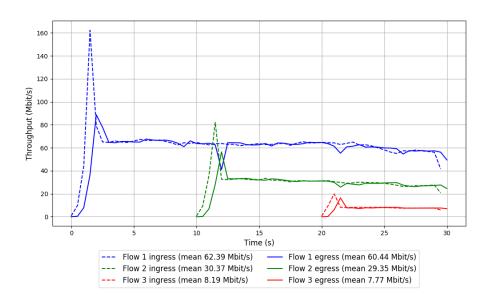
-- Flow 3:

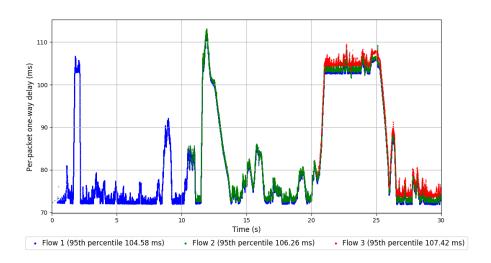
Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 107.415 ms

Loss rate: 5.10%

Run 4: Report of PCC-Allegro — Data Link





# Run 5: Statistics of PCC-Allegro

Start at: 2019-10-03 00:57:13 End at: 2019-10-03 00:57:43 Local clock offset: 5.925 ms Remote clock offset: 50.996 ms

# Below is generated by plot.py at 2019-10-03 01:20:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 81.78 Mbit/s

95th percentile per-packet one-way delay: 123.691 ms

Loss rate: 3.48%

-- Flow 1:

Average throughput: 64.56 Mbit/s

95th percentile per-packet one-way delay: 108.250 ms

Loss rate: 3.30%

-- Flow 2:

Average throughput: 21.94 Mbit/s

95th percentile per-packet one-way delay: 124.982 ms

Loss rate: 3.33%

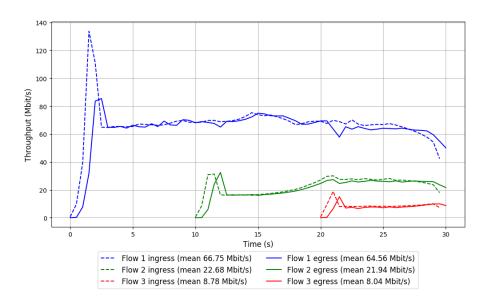
-- Flow 3:

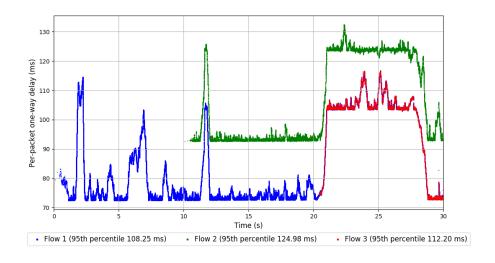
Average throughput: 8.04 Mbit/s

95th percentile per-packet one-way delay: 112.202 ms

Loss rate: 8.41%

Run 5: Report of PCC-Allegro — Data Link





# Run 1: Statistics of PCC-Expr

Start at: 2019-10-02 22:48:19 End at: 2019-10-02 22:48:49 Local clock offset: -6.627 ms Remote clock offset: 37.078 ms

# Below is generated by plot.py at 2019-10-03 01:20:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.35 Mbit/s

95th percentile per-packet one-way delay: 71.462 ms

Loss rate: 53.05%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 70.599 ms

Loss rate: 85.71%

-- Flow 2:

Average throughput: 8.66 Mbit/s

95th percentile per-packet one-way delay: 71.304 ms

Loss rate: 56.86%

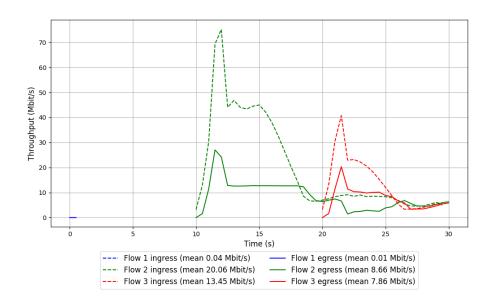
-- Flow 3:

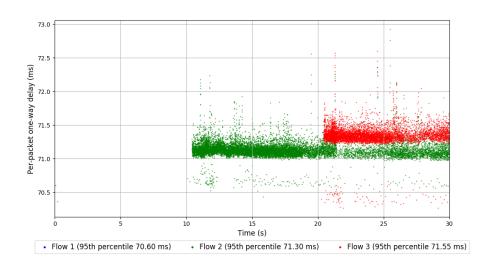
Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 71.548 ms

Loss rate: 41.60%

Run 1: Report of PCC-Expr — Data Link





## Run 2: Statistics of PCC-Expr

Start at: 2019-10-02 23:18:44 End at: 2019-10-02 23:19:14 Local clock offset: -7.24 ms Remote clock offset: 42.624 ms

# Below is generated by plot.py at 2019-10-03 01:20:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.70 Mbit/s

95th percentile per-packet one-way delay: 73.427 ms

Loss rate: 67.23%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 74.688 ms

Loss rate: 85.71%

-- Flow 2:

Average throughput: 12.73 Mbit/s

95th percentile per-packet one-way delay: 73.406 ms

Loss rate: 66.55%

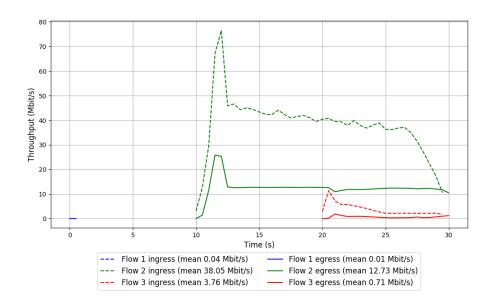
-- Flow 3:

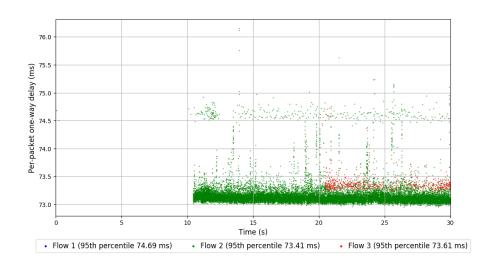
Average throughput: 0.71 Mbit/s

95th percentile per-packet one-way delay: 73.614 ms

Loss rate: 81.10%

Run 2: Report of PCC-Expr — Data Link





# Run 3: Statistics of PCC-Expr

Start at: 2019-10-02 23:49:05 End at: 2019-10-02 23:49:35 Local clock offset: -6.182 ms Remote clock offset: 46.042 ms

# Below is generated by plot.py at 2019-10-03 01:20:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.70 Mbit/s

95th percentile per-packet one-way delay: 76.512 ms

Loss rate: 57.40%

-- Flow 1:

Average throughput: 0.01 Mbit/s

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

Loss rate: 85.71%

-- Flow 2:

Average throughput: 10.77 Mbit/s

95th percentile per-packet one-way delay: 76.509 ms

Loss rate: 60.73%

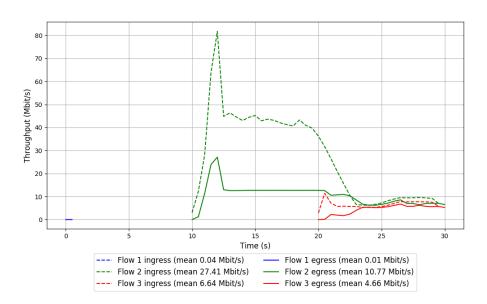
-- Flow 3:

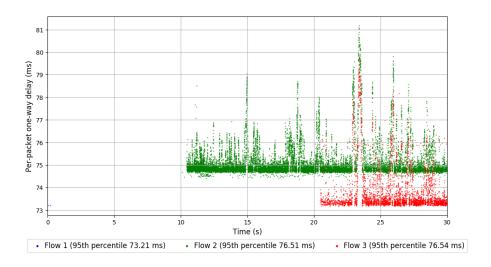
Average throughput: 4.66 Mbit/s

95th percentile per-packet one-way delay: 76.539 ms

Loss rate: 29.74%

Run 3: Report of PCC-Expr — Data Link





## Run 4: Statistics of PCC-Expr

Start at: 2019-10-03 00:19:23 End at: 2019-10-03 00:19:53 Local clock offset: 7.089 ms Remote clock offset: 49.003 ms

# Below is generated by plot.py at 2019-10-03 01:20:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.71 Mbit/s

95th percentile per-packet one-way delay: 82.887 ms

Loss rate: 57.93%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 78.294 ms

Loss rate: 85.71%

-- Flow 2:

Average throughput: 9.49 Mbit/s

95th percentile per-packet one-way delay: 83.782 ms

Loss rate: 63.67%

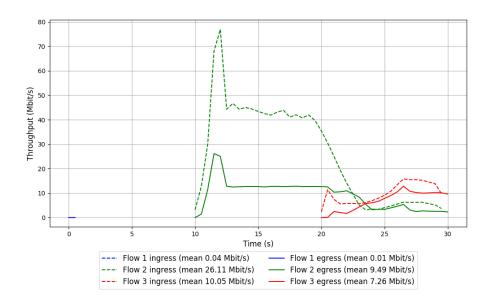
-- Flow 3:

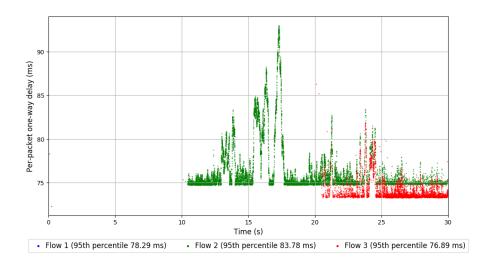
Average throughput: 7.26 Mbit/s

95th percentile per-packet one-way delay: 76.895 ms

Loss rate: 27.87%

Run 4: Report of PCC-Expr — Data Link





# Run 5: Statistics of PCC-Expr

Start at: 2019-10-03 00:49:42 End at: 2019-10-03 00:50:12 Local clock offset: 3.76 ms Remote clock offset: 52.158 ms

# Below is generated by plot.py at 2019-10-03 01:20:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.64 Mbit/s

95th percentile per-packet one-way delay: 74.680 ms

Loss rate: 52.08%

-- Flow 1:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 74.820 ms

Loss rate: 85.71%

-- Flow 2:

Average throughput: 10.75 Mbit/s

95th percentile per-packet one-way delay: 74.601 ms

Loss rate: 55.94%

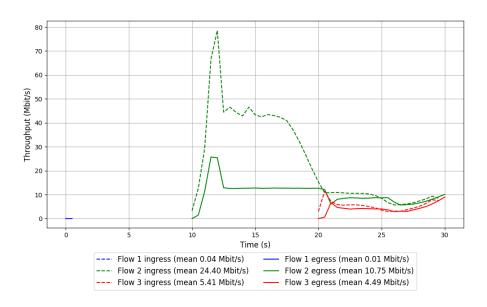
-- Flow 3:

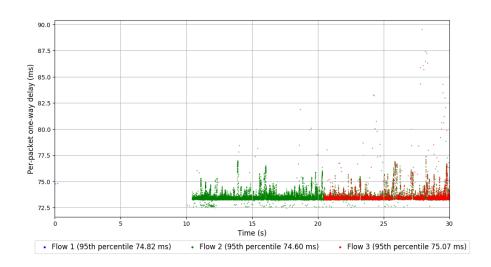
Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 75.070 ms

Loss rate: 17.04%

Run 5: Report of PCC-Expr — Data Link





## Run 1: Statistics of QUIC Cubic

Start at: 2019-10-02 22:59:44 End at: 2019-10-02 23:00:14 Local clock offset: -6.835 ms Remote clock offset: 40.199 ms

# Below is generated by plot.py at 2019-10-03 01:21:12

# Datalink statistics
-- Total of 3 flows:

Average throughput: 65.44 Mbit/s

95th percentile per-packet one-way delay: 97.204 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 51.60 Mbit/s

95th percentile per-packet one-way delay: 97.456 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 12.45 Mbit/s

95th percentile per-packet one-way delay: 92.839 ms

Loss rate: 0.46%

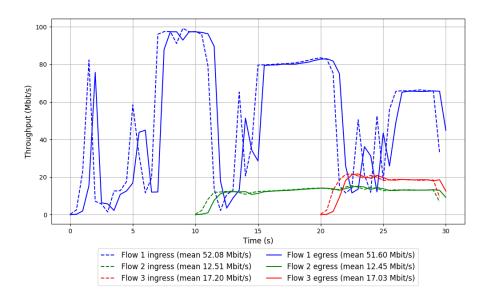
-- Flow 3:

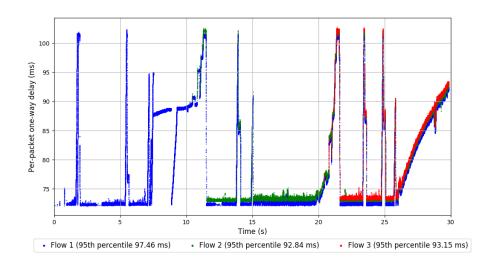
Average throughput: 17.03 Mbit/s

95th percentile per-packet one-way delay: 93.154 ms

Loss rate: 0.79%

Run 1: Report of QUIC Cubic — Data Link





## Run 2: Statistics of QUIC Cubic

Start at: 2019-10-02 23:30:06 End at: 2019-10-02 23:30:36 Local clock offset: -6.753 ms Remote clock offset: 44.019 ms

# Below is generated by plot.py at 2019-10-03 01:21:13

# Datalink statistics
-- Total of 3 flows:

Average throughput: 64.08 Mbit/s

95th percentile per-packet one-way delay: 114.515 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 39.07 Mbit/s

95th percentile per-packet one-way delay: 102.611 ms

Loss rate: 1.71%

-- Flow 2:

Average throughput: 28.48 Mbit/s

95th percentile per-packet one-way delay: 123.023 ms

Loss rate: 0.97%

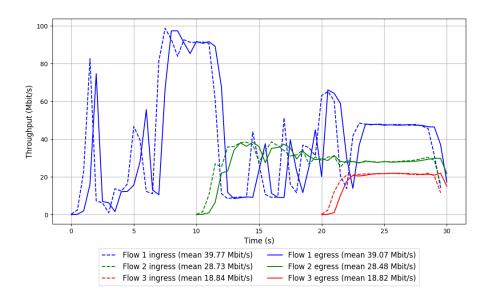
-- Flow 3:

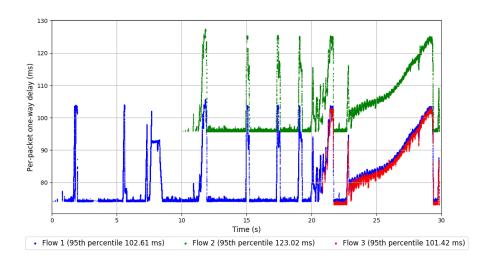
Average throughput: 18.82 Mbit/s

95th percentile per-packet one-way delay: 101.418 ms

Loss rate: 0.26%

Run 2: Report of QUIC Cubic — Data Link





## Run 3: Statistics of QUIC Cubic

Start at: 2019-10-03 00:00:27 End at: 2019-10-03 00:00:57 Local clock offset: -0.537 ms Remote clock offset: 47.234 ms

# Below is generated by plot.py at 2019-10-03 01:21:19

# Datalink statistics
-- Total of 3 flows:

Average throughput: 69.35 Mbit/s

95th percentile per-packet one-way delay: 119.053 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 45.11 Mbit/s

95th percentile per-packet one-way delay: 103.018 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 28.28 Mbit/s

95th percentile per-packet one-way delay: 124.471 ms

Loss rate: 0.58%

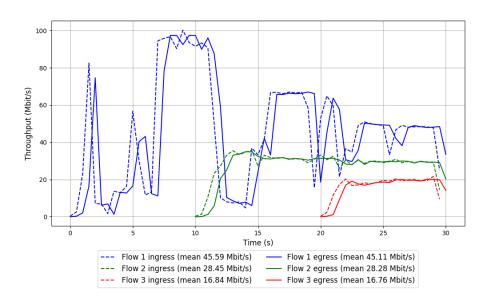
-- Flow 3:

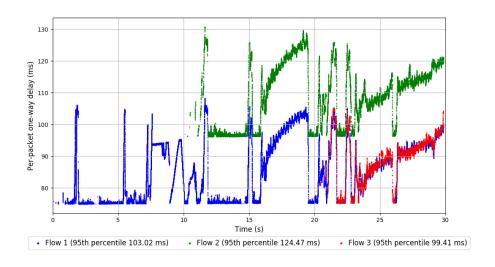
Average throughput: 16.76 Mbit/s

95th percentile per-packet one-way delay: 99.407 ms

Loss rate: 0.41%

Run 3: Report of QUIC Cubic — Data Link





## Run 4: Statistics of QUIC Cubic

Start at: 2019-10-03 00:30:46 End at: 2019-10-03 00:31:16 Local clock offset: 5.47 ms Remote clock offset: 50.282 ms

# Below is generated by plot.py at 2019-10-03 01:21:20

# Datalink statistics
-- Total of 3 flows:

Average throughput: 64.86 Mbit/s

95th percentile per-packet one-way delay: 99.566 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 34.01 Mbit/s

95th percentile per-packet one-way delay: 96.959 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 31.49 Mbit/s

95th percentile per-packet one-way delay: 98.859 ms

Loss rate: 0.92%

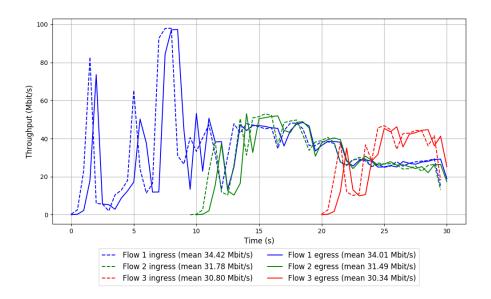
-- Flow 3:

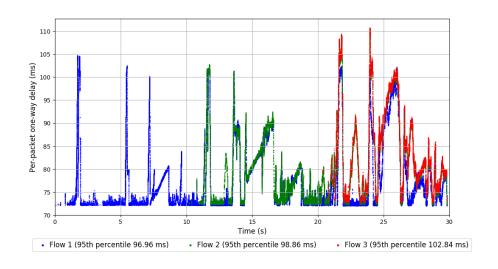
Average throughput: 30.34 Mbit/s

95th percentile per-packet one-way delay: 102.838 ms

Loss rate: 1.51%

Run 4: Report of QUIC Cubic — Data Link





## Run 5: Statistics of QUIC Cubic

Start at: 2019-10-03 01:01:04 End at: 2019-10-03 01:01:34 Local clock offset: 8.356 ms Remote clock offset: 45.438 ms

# Below is generated by plot.py at 2019-10-03 01:21:25

# Datalink statistics
-- Total of 3 flows:

Average throughput: 65.39 Mbit/s

95th percentile per-packet one-way delay: 100.569 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 50.88 Mbit/s

95th percentile per-packet one-way delay: 100.612 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 13.08 Mbit/s

95th percentile per-packet one-way delay: 100.635 ms

Loss rate: 0.49%

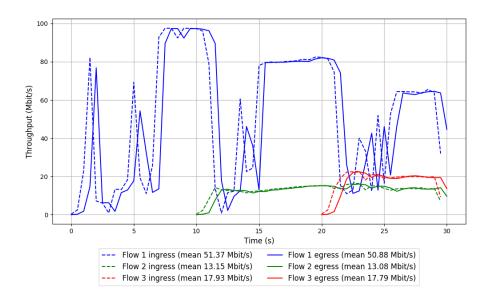
-- Flow 3:

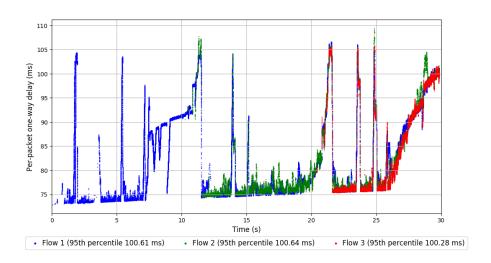
Average throughput: 17.79 Mbit/s

95th percentile per-packet one-way delay: 100.284 ms

Loss rate: 0.58%

Run 5: Report of QUIC Cubic — Data Link





## Run 1: Statistics of SCReAM

Start at: 2019-10-02 23:01:00 End at: 2019-10-02 23:01:30 Local clock offset: -6.803 ms Remote clock offset: 38.513 ms

# Below is generated by plot.py at 2019-10-03 01:21:25

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 93.778 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 72.319 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 93.877 ms

Loss rate: 0.19%

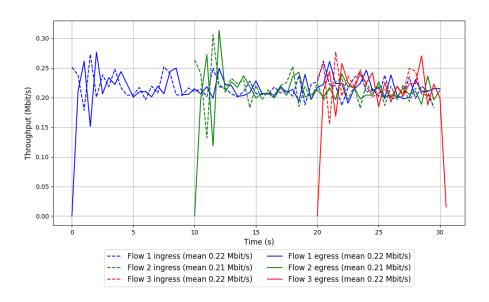
-- Flow 3:

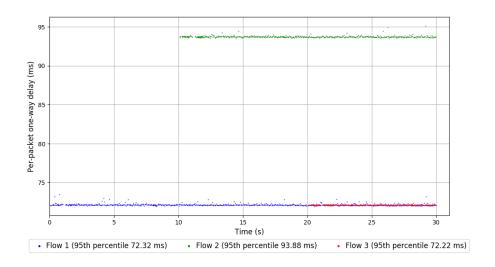
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 72.225 ms

Loss rate: 0.00%

Run 1: Report of SCReAM — Data Link





## Run 2: Statistics of SCReAM

Start at: 2019-10-02 23:31:22 End at: 2019-10-02 23:31:52 Local clock offset: -6.711 ms Remote clock offset: 43.901 ms

# Below is generated by plot.py at 2019-10-03 01:21:25

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 94.981 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 73.189 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 98.398 ms

Loss rate: 0.00%

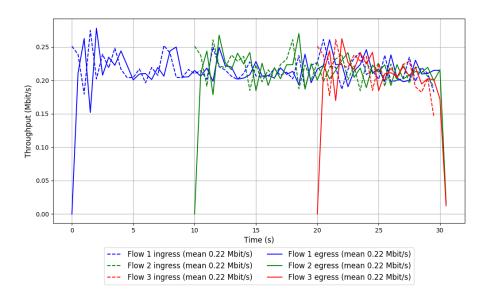
-- Flow 3:

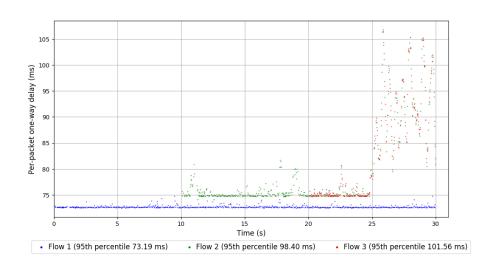
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 101.560 ms

Loss rate: 0.00%

Run 2: Report of SCReAM — Data Link





## Run 3: Statistics of SCReAM

Start at: 2019-10-03 00:01:43 End at: 2019-10-03 00:02:13 Local clock offset: 0.534 ms Remote clock offset: 47.335 ms

# Below is generated by plot.py at 2019-10-03 01:21:25

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 82.762 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.164 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 78.581 ms

Loss rate: 0.00%

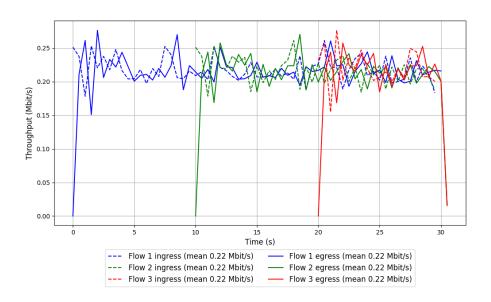
-- Flow 3:

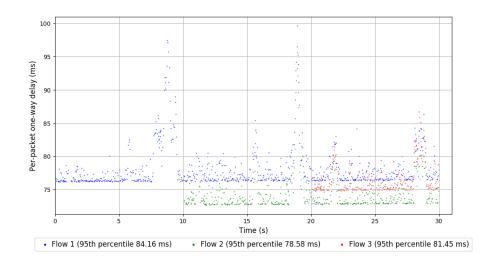
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 81.455 ms

Loss rate: 0.00%

Run 3: Report of SCReAM — Data Link





## Run 4: Statistics of SCReAM

Start at: 2019-10-03 00:32:02 End at: 2019-10-03 00:32:32 Local clock offset: 5.118 ms Remote clock offset: 50.383 ms

# Below is generated by plot.py at 2019-10-03 01:21:25

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 74.177 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 73.357 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 72.863 ms

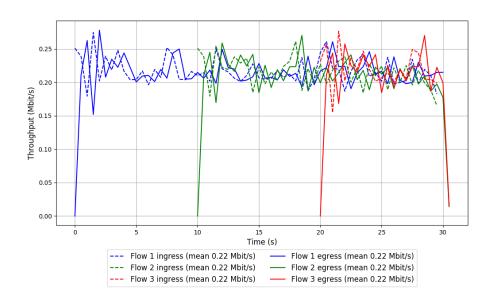
Loss rate: 0.20%

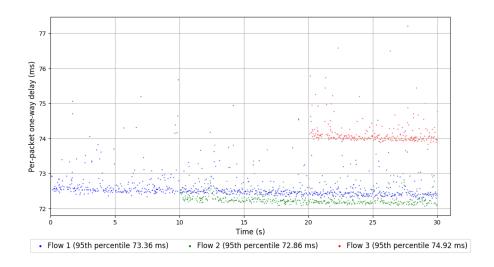
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 74.925 ms

Run 4: Report of SCReAM — Data Link





## Run 5: Statistics of SCReAM

Start at: 2019-10-03 01:02:20 End at: 2019-10-03 01:02:50 Local clock offset: 9.078 ms Remote clock offset: 38.085 ms

# Below is generated by plot.py at 2019-10-03 01:21:25

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 83.301 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 83.975 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 78.173 ms

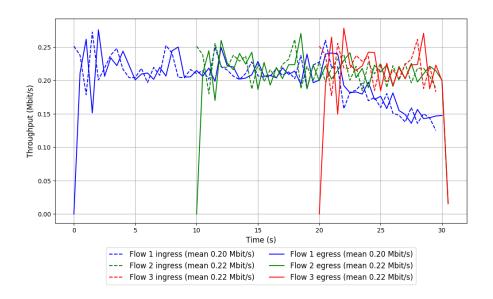
Loss rate: 0.00%

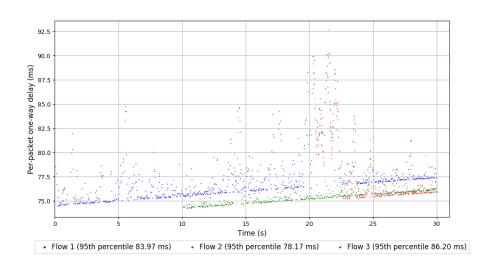
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.205 ms

Run 5: Report of SCReAM — Data Link





# Run 1: Statistics of Sprout

Start at: 2019-10-02 22:38:10 End at: 2019-10-02 22:38:40 Local clock offset: -6.863 ms Remote clock offset: 36.101 ms

# Below is generated by plot.py at 2019-10-03 01:21:25

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.49 Mbit/s

95th percentile per-packet one-way delay: 79.423 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 80.081 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.04 Mbit/s

95th percentile per-packet one-way delay: 77.742 ms

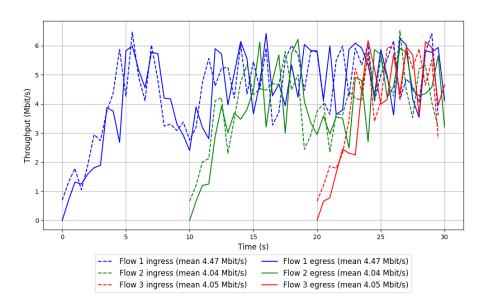
Loss rate: 0.00%

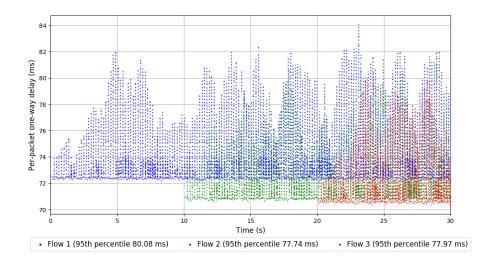
-- Flow 3:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 77.968 ms

Run 1: Report of Sprout — Data Link





## Run 2: Statistics of Sprout

Start at: 2019-10-02 23:08:36 End at: 2019-10-02 23:09:06 Local clock offset: -6.946 ms Remote clock offset: 39.716 ms

# Below is generated by plot.py at 2019-10-03 01:21:25

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.21 Mbit/s

95th percentile per-packet one-way delay: 78.979 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 79.142 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 77.406 ms

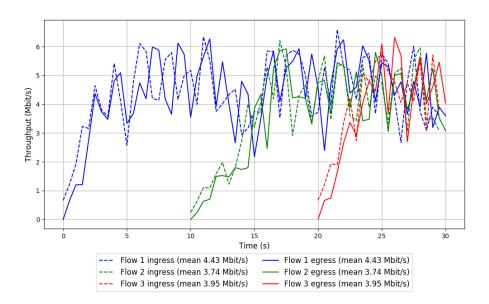
Loss rate: 0.00%

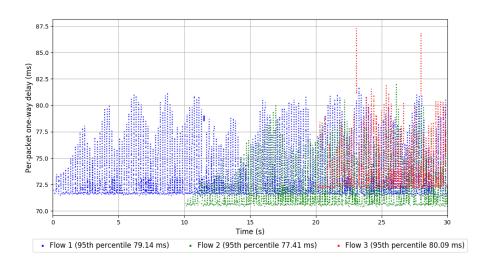
-- Flow 3:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 80.095 ms

Run 2: Report of Sprout — Data Link





# Run 3: Statistics of Sprout

Start at: 2019-10-02 23:38:57 End at: 2019-10-02 23:39:27 Local clock offset: -6.29 ms Remote clock offset: 43.238 ms

# Below is generated by plot.py at 2019-10-03 01:21:25

# Datalink statistics
-- Total of 3 flows:

Average throughput: 7.42 Mbit/s

95th percentile per-packet one-way delay: 78.343 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.73 Mbit/s

95th percentile per-packet one-way delay: 78.090 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 77.818 ms

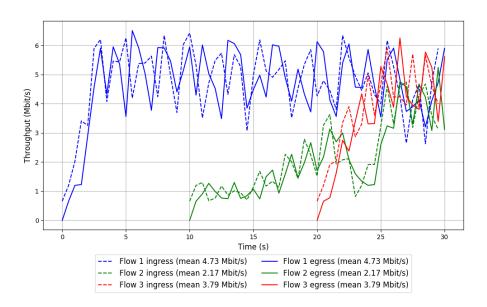
Loss rate: 0.00%

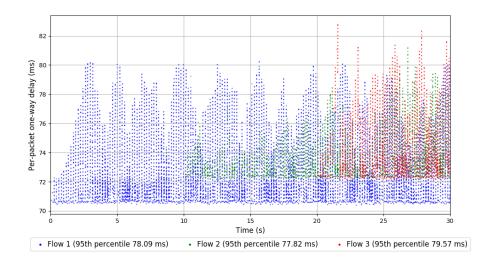
-- Flow 3:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 79.573 ms

Run 3: Report of Sprout — Data Link





## Run 4: Statistics of Sprout

Start at: 2019-10-03 00:09:16 End at: 2019-10-03 00:09:46 Local clock offset: 4.334 ms Remote clock offset: 46.465 ms

# Below is generated by plot.py at 2019-10-03 01:21:25

# Datalink statistics
-- Total of 3 flows:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 81.509 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 81.371 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.85 Mbit/s

95th percentile per-packet one-way delay: 80.070 ms

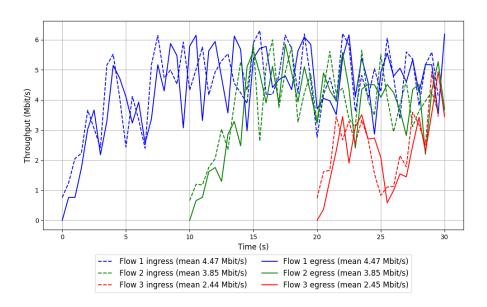
Loss rate: 0.00%

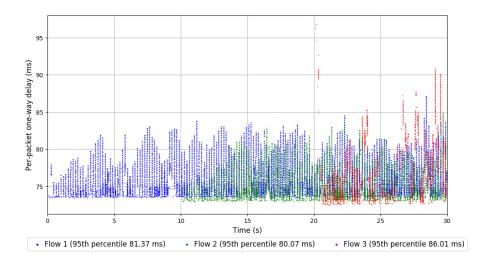
-- Flow 3:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 86.013 ms

Run 4: Report of Sprout — Data Link





## Run 5: Statistics of Sprout

Start at: 2019-10-03 00:39:36 End at: 2019-10-03 00:40:06 Local clock offset: 4.006 ms Remote clock offset: 49.385 ms

# Below is generated by plot.py at 2019-10-03 01:21:25

# Datalink statistics
-- Total of 3 flows:

Average throughput: 8.31 Mbit/s

95th percentile per-packet one-way delay: 85.922 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 88.868 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 79.549 ms

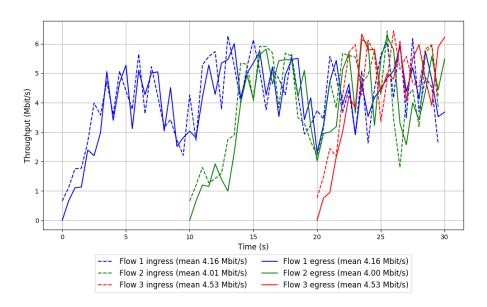
Loss rate: 0.24%

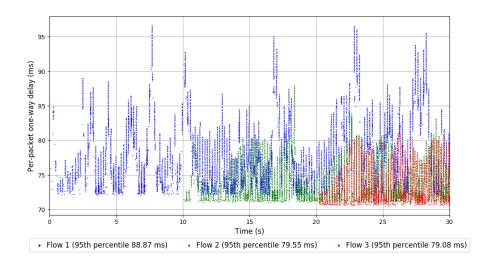
-- Flow 3:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 79.084 ms

Run 5: Report of Sprout — Data Link





## Run 1: Statistics of TaoVA-100x

Start at: 2019-10-02 22:54:37 End at: 2019-10-02 22:55:07 Local clock offset: -6.741 ms Remote clock offset: 39.638 ms

# Below is generated by plot.py at 2019-10-03 01:21:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 12.60 Mbit/s

95th percentile per-packet one-way delay: 75.093 ms

Loss rate: 94.15%

-- Flow 1:

Average throughput: 6.39 Mbit/s

95th percentile per-packet one-way delay: 82.942 ms

Loss rate: 57.43%

-- Flow 2:

Average throughput: 6.71 Mbit/s

95th percentile per-packet one-way delay: 74.926 ms

Loss rate: 96.74%

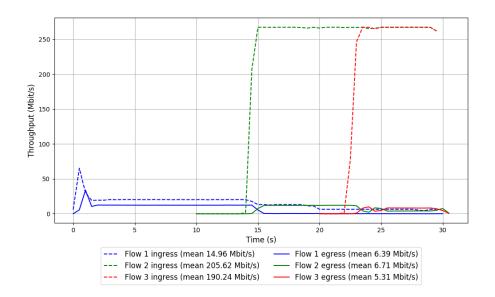
-- Flow 3:

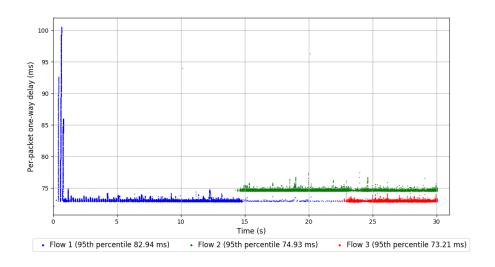
Average throughput: 5.31 Mbit/s

95th percentile per-packet one-way delay: 73.206 ms

Loss rate: 97.21%

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





## Run 2: Statistics of TaoVA-100x

Start at: 2019-10-02 23:25:02 End at: 2019-10-02 23:25:32 Local clock offset: -7.482 ms Remote clock offset: 41.624 ms

# Below is generated by plot.py at 2019-10-03 01:21:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 12.60 Mbit/s

95th percentile per-packet one-way delay: 74.371 ms

Loss rate: 35.14%

-- Flow 1:

Average throughput: 8.30 Mbit/s

95th percentile per-packet one-way delay: 79.495 ms

Loss rate: 36.55%

-- Flow 2:

Average throughput: 4.74 Mbit/s

95th percentile per-packet one-way delay: 71.919 ms

Loss rate: 25.87%

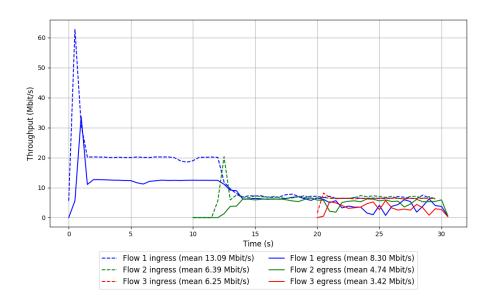
-- Flow 3:

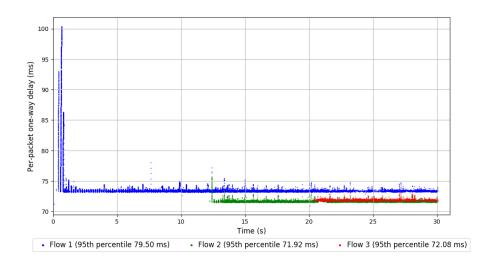
Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 72.076 ms

Loss rate: 45.31%

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





## Run 3: Statistics of TaoVA-100x

Start at: 2019-10-02 23:55:22 End at: 2019-10-02 23:55:52 Local clock offset: -5.462 ms Remote clock offset: 46.873 ms

# Below is generated by plot.py at 2019-10-03 01:21:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 12.60 Mbit/s

95th percentile per-packet one-way delay: 79.059 ms

Loss rate: 35.91%

-- Flow 1:

Average throughput: 8.27 Mbit/s

95th percentile per-packet one-way delay: 82.065 ms

Loss rate: 31.51%

-- Flow 2:

Average throughput: 5.51 Mbit/s

95th percentile per-packet one-way delay: 75.536 ms

Loss rate: 23.09%

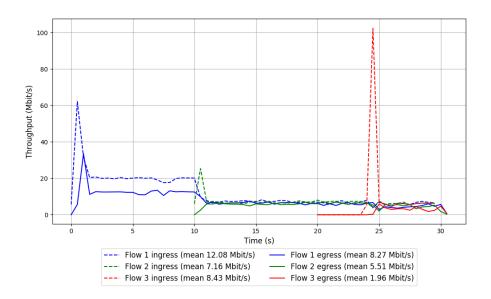
-- Flow 3:

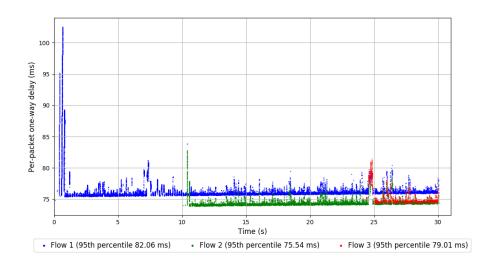
Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 79.012 ms

Loss rate: 76.72%

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





## Run 4: Statistics of TaoVA-100x

Start at: 2019-10-03 00:25:40 End at: 2019-10-03 00:26:10 Local clock offset: 7.623 ms Remote clock offset: 49.793 ms

# Below is generated by plot.py at 2019-10-03 01:21:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 12.58 Mbit/s

95th percentile per-packet one-way delay: 75.255 ms

Loss rate: 32.81%

-- Flow 1:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 80.669 ms

Loss rate: 35.43%

-- Flow 2:

Average throughput: 5.29 Mbit/s

95th percentile per-packet one-way delay: 74.115 ms

Loss rate: 23.12%

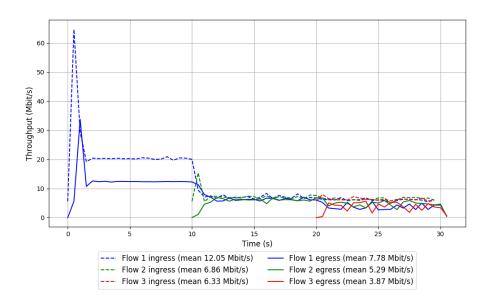
-- Flow 3:

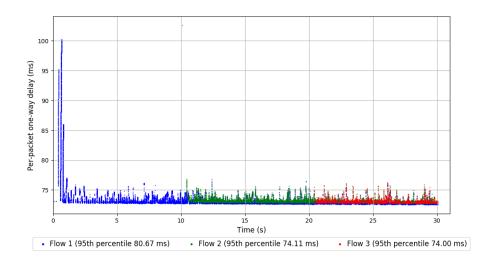
Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 73.997 ms

Loss rate: 38.82%

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





## Run 5: Statistics of TaoVA-100x

Start at: 2019-10-03 00:55:59 End at: 2019-10-03 00:56:29 Local clock offset: 4.941 ms Remote clock offset: 51.139 ms

# Below is generated by plot.py at 2019-10-03 01:21:45

# Datalink statistics
-- Total of 3 flows:

Average throughput: 12.60 Mbit/s

95th percentile per-packet one-way delay: 78.173 ms

Loss rate: 35.37%

-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 81.361 ms

Loss rate: 33.96%

-- Flow 2:

Average throughput: 4.95 Mbit/s

95th percentile per-packet one-way delay: 76.405 ms

Loss rate: 39.91%

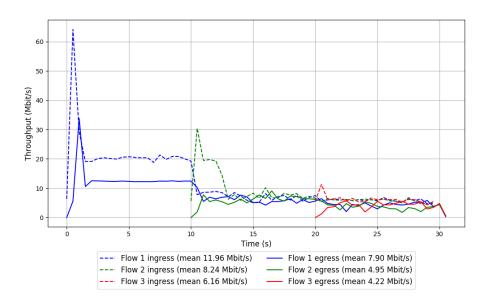
-- Flow 3:

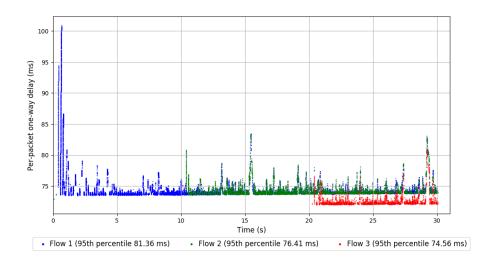
Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 74.560 ms

Loss rate: 31.45%

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





# Run 1: Statistics of TCP Vegas

Start at: 2019-10-02 22:43:15 End at: 2019-10-02 22:43:45 Local clock offset: -6.647 ms Remote clock offset: 36.846 ms

# Below is generated by plot.py at 2019-10-03 01:22:01

# Datalink statistics
-- Total of 3 flows:

Average throughput: 70.27 Mbit/s

95th percentile per-packet one-way delay: 96.340 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 33.79 Mbit/s

95th percentile per-packet one-way delay: 79.601 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 45.18 Mbit/s

95th percentile per-packet one-way delay: 104.974 ms

Loss rate: 1.13%

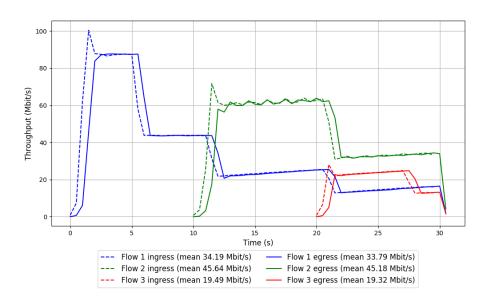
-- Flow 3:

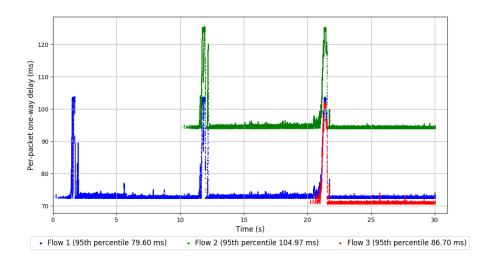
Average throughput: 19.32 Mbit/s

95th percentile per-packet one-way delay: 86.697 ms

Loss rate: 0.85%

Run 1: Report of TCP Vegas — Data Link





# Run 2: Statistics of TCP Vegas

Start at: 2019-10-02 23:13:39 End at: 2019-10-02 23:14:09 Local clock offset: -7.083 ms Remote clock offset: 40.289 ms

# Below is generated by plot.py at 2019-10-03 01:22:08

# Datalink statistics
-- Total of 3 flows:

Average throughput: 78.31 Mbit/s

95th percentile per-packet one-way delay: 78.636 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 48.83 Mbit/s

95th percentile per-packet one-way delay: 77.545 ms

Loss rate: 0.95%

-- Flow 2:

Average throughput: 26.79 Mbit/s

95th percentile per-packet one-way delay: 80.400 ms

Loss rate: 0.70%

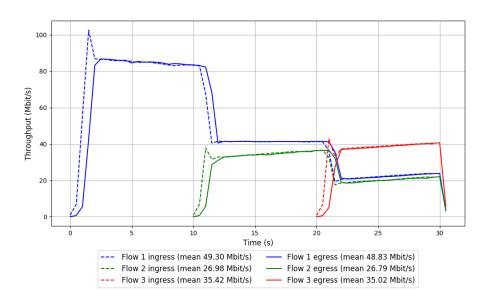
-- Flow 3:

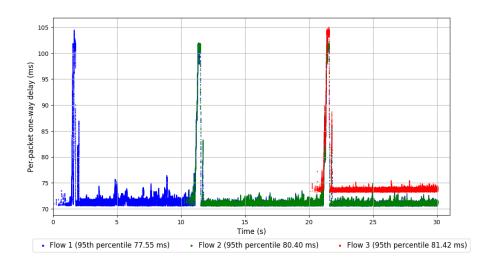
Average throughput: 35.02 Mbit/s

95th percentile per-packet one-way delay: 81.416 ms

Loss rate: 1.15%

Run 2: Report of TCP Vegas — Data Link





# Run 3: Statistics of TCP Vegas

Start at: 2019-10-02 23:44:01 End at: 2019-10-02 23:44:31 Local clock offset: -6.19 ms Remote clock offset: 43.778 ms

# Below is generated by plot.py at 2019-10-03 01:22:09

# Datalink statistics
-- Total of 3 flows:

Average throughput: 70.89 Mbit/s

95th percentile per-packet one-way delay: 79.106 ms

Loss rate: 1.33%

-- Flow 1:

Average throughput: 38.92 Mbit/s

95th percentile per-packet one-way delay: 75.667 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 28.29 Mbit/s

95th percentile per-packet one-way delay: 88.347 ms

Loss rate: 1.79%

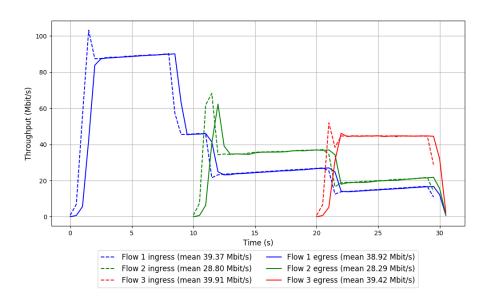
-- Flow 3:

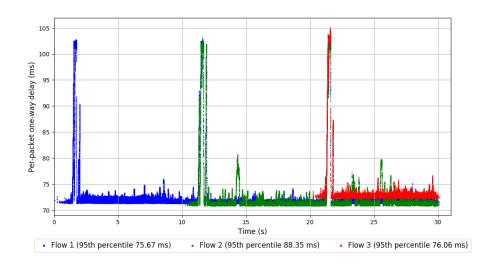
Average throughput: 39.42 Mbit/s

95th percentile per-packet one-way delay: 76.065 ms

Loss rate: 1.23%

Run 3: Report of TCP Vegas — Data Link





# Run 4: Statistics of TCP Vegas

Start at: 2019-10-03 00:14:19 End at: 2019-10-03 00:14:49 Local clock offset: 5.869 ms Remote clock offset: 46.748 ms

# Below is generated by plot.py at 2019-10-03 01:22:09

# Datalink statistics
-- Total of 3 flows:

Average throughput: 66.30 Mbit/s

95th percentile per-packet one-way delay: 80.442 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 33.66 Mbit/s

95th percentile per-packet one-way delay: 79.396 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 27.70 Mbit/s

95th percentile per-packet one-way delay: 89.116 ms

Loss rate: 1.67%

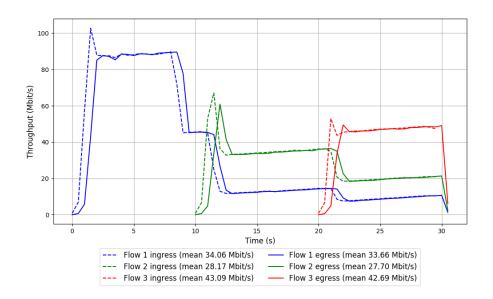
-- Flow 3:

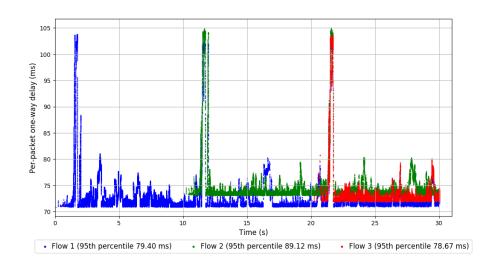
Average throughput: 42.69 Mbit/s

95th percentile per-packet one-way delay: 78.665 ms

Loss rate: 0.92%

Run 4: Report of TCP Vegas — Data Link





# Run 5: Statistics of TCP Vegas

Start at: 2019-10-03 00:44:38 End at: 2019-10-03 00:45:08 Local clock offset: 3.819 ms Remote clock offset: 51.774 ms

# Below is generated by plot.py at 2019-10-03 01:22:09

# Datalink statistics
-- Total of 3 flows:

Average throughput: 65.65 Mbit/s

95th percentile per-packet one-way delay: 99.348 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 28.67 Mbit/s

95th percentile per-packet one-way delay: 84.650 ms

Loss rate: 1.52%

-- Flow 2:

Average throughput: 44.49 Mbit/s

95th percentile per-packet one-way delay: 106.942 ms

Loss rate: 1.10%

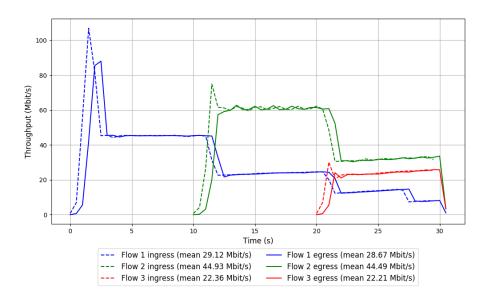
-- Flow 3:

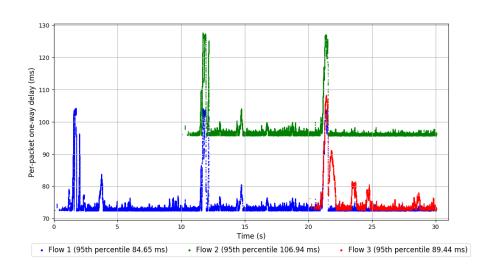
Average throughput: 22.21 Mbit/s

95th percentile per-packet one-way delay: 89.440 ms

Loss rate: 0.73%

Run 5: Report of TCP Vegas — Data Link





### Run 1: Statistics of Verus

Start at: 2019-10-02 22:41:58 End at: 2019-10-02 22:42:28 Local clock offset: -6.674 ms Remote clock offset: 38.307 ms

# Below is generated by plot.py at 2019-10-03 01:22:22

# Datalink statistics
-- Total of 3 flows:

Average throughput: 47.08 Mbit/s

95th percentile per-packet one-way delay: 108.483 ms

Loss rate: 72.73%

-- Flow 1:

Average throughput: 28.30 Mbit/s

95th percentile per-packet one-way delay: 107.433 ms

Loss rate: 58.43%

-- Flow 2:

Average throughput: 13.67 Mbit/s

95th percentile per-packet one-way delay: 108.496 ms

Loss rate: 66.68%

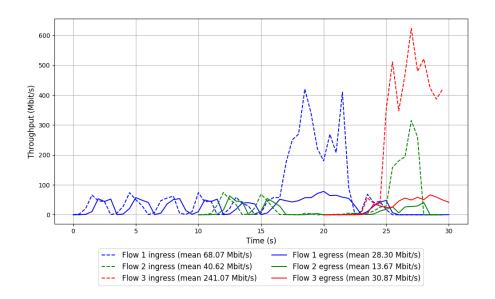
-- Flow 3:

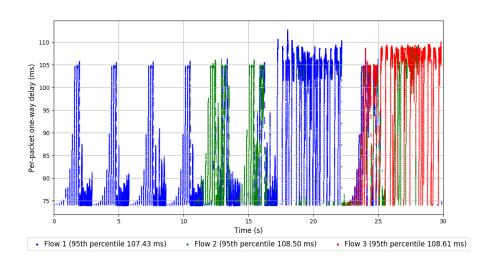
Average throughput: 30.87 Mbit/s

95th percentile per-packet one-way delay: 108.613 ms

Loss rate: 87.19%

Run 1: Report of Verus — Data Link





# Run 2: Statistics of Verus

Start at: 2019-10-02 23:12:23 End at: 2019-10-02 23:12:53 Local clock offset: -7.043 ms Remote clock offset: 39.907 ms

# Below is generated by plot.py at 2019-10-03 01:22:22

# Datalink statistics
-- Total of 3 flows:

Average throughput: 48.41 Mbit/s

95th percentile per-packet one-way delay: 102.585 ms

Loss rate: 17.37%

-- Flow 1:

Average throughput: 24.65 Mbit/s

95th percentile per-packet one-way delay: 102.600 ms

Loss rate: 18.01%

-- Flow 2:

Average throughput: 28.21 Mbit/s

95th percentile per-packet one-way delay: 101.520 ms

Loss rate: 18.11%

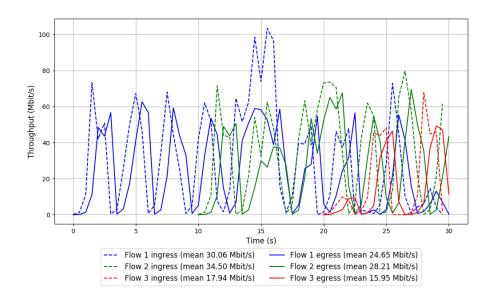
-- Flow 3:

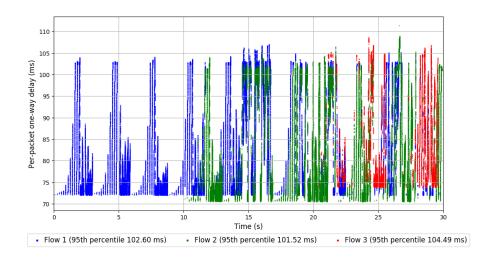
Average throughput: 15.95 Mbit/s

95th percentile per-packet one-way delay: 104.488 ms

Loss rate: 11.16%

Run 2: Report of Verus — Data Link





## Run 3: Statistics of Verus

Start at: 2019-10-02 23:42:43 End at: 2019-10-02 23:43:13 Local clock offset: -6.23 ms Remote clock offset: 45.18 ms

# Below is generated by plot.py at 2019-10-03 01:23:01

# Datalink statistics
-- Total of 3 flows:

Average throughput: 50.65 Mbit/s

95th percentile per-packet one-way delay: 127.566 ms

Loss rate: 77.62%

-- Flow 1:

Average throughput: 19.29 Mbit/s

95th percentile per-packet one-way delay: 131.608 ms

Loss rate: 54.25%

-- Flow 2:

Average throughput: 34.38 Mbit/s

95th percentile per-packet one-way delay: 117.290 ms

Loss rate: 80.17%

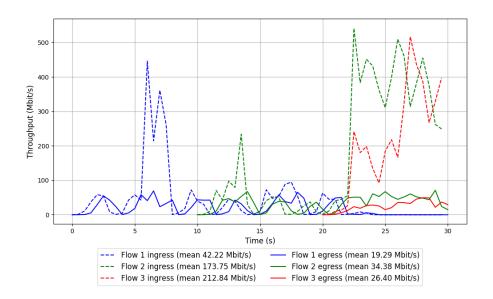
-- Flow 3:

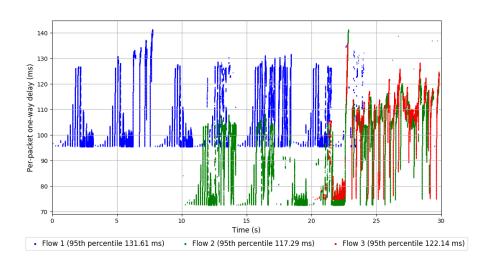
Average throughput: 26.40 Mbit/s

95th percentile per-packet one-way delay: 122.139 ms

Loss rate: 87.54%

Run 3: Report of Verus — Data Link





## Run 4: Statistics of Verus

Start at: 2019-10-03 00:13:02 End at: 2019-10-03 00:13:32 Local clock offset: 5.51 ms Remote clock offset: 48.526 ms

# Below is generated by plot.py at 2019-10-03 01:23:01

# Datalink statistics
-- Total of 3 flows:

Average throughput: 40.12 Mbit/s

95th percentile per-packet one-way delay: 117.932 ms

Loss rate: 72.95%

-- Flow 1:

Average throughput: 20.20 Mbit/s

95th percentile per-packet one-way delay: 104.204 ms

Loss rate: 18.42%

-- Flow 2:

Average throughput: 27.83 Mbit/s

95th percentile per-packet one-way delay: 120.585 ms

Loss rate: 84.82%

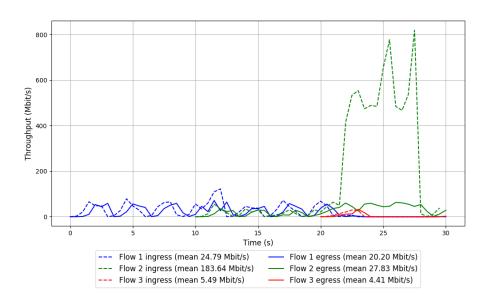
-- Flow 3:

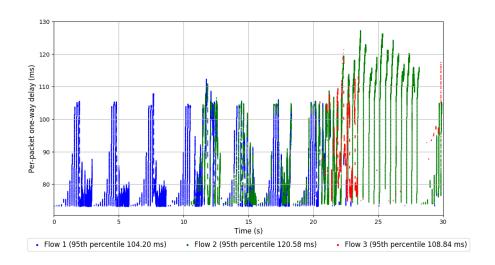
Average throughput: 4.41 Mbit/s

95th percentile per-packet one-way delay: 108.841 ms

Loss rate: 19.45%

Run 4: Report of Verus — Data Link





## Run 5: Statistics of Verus

Start at: 2019-10-03 00:43:22 End at: 2019-10-03 00:43:52 Local clock offset: 3.816 ms Remote clock offset: 49.701 ms

# Below is generated by plot.py at 2019-10-03 01:23:01

# Datalink statistics
-- Total of 3 flows:

Average throughput: 47.49 Mbit/s

95th percentile per-packet one-way delay: 106.394 ms

Loss rate: 22.71%

-- Flow 1:

Average throughput: 26.52 Mbit/s

95th percentile per-packet one-way delay: 107.619 ms

Loss rate: 23.71%

-- Flow 2:

Average throughput: 16.90 Mbit/s

95th percentile per-packet one-way delay: 104.146 ms

Loss rate: 14.87%

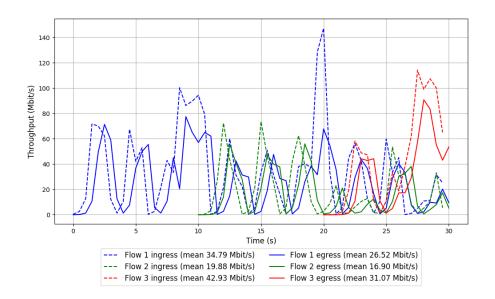
-- Flow 3:

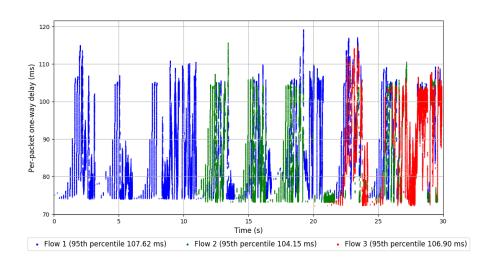
Average throughput: 31.07 Mbit/s

95th percentile per-packet one-way delay: 106.903 ms

Loss rate: 27.39%

Run 5: Report of Verus — Data Link





# Run 1: Statistics of PCC-Vivace

Start at: 2019-10-02 23:06:00 End at: 2019-10-02 23:06:30 Local clock offset: -6.89 ms Remote clock offset: 41.127 ms

# Below is generated by plot.py at 2019-10-03 01:23:02

# Datalink statistics
-- Total of 3 flows:

Average throughput: 78.61 Mbit/s

95th percentile per-packet one-way delay: 105.161 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 64.73 Mbit/s

95th percentile per-packet one-way delay: 105.329 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 18.21 Mbit/s

95th percentile per-packet one-way delay: 103.635 ms

Loss rate: 0.33%

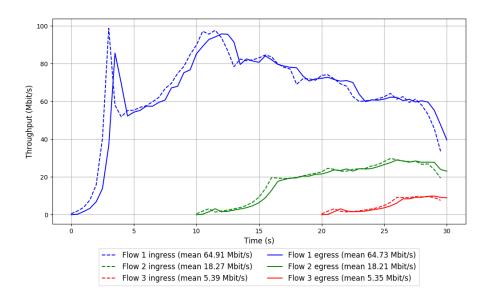
-- Flow 3:

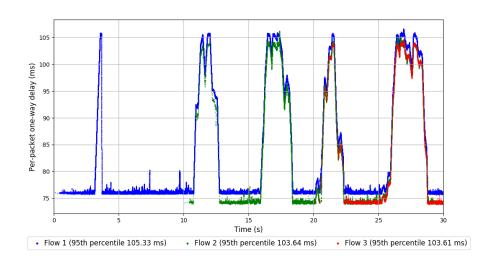
Average throughput: 5.35 Mbit/s

95th percentile per-packet one-way delay: 103.612 ms

Loss rate: 0.77%

Run 1: Report of PCC-Vivace — Data Link





# Run 2: Statistics of PCC-Vivace

Start at: 2019-10-02 23:36:22 End at: 2019-10-02 23:36:52 Local clock offset: -6.383 ms Remote clock offset: 42.688 ms

# Below is generated by plot.py at 2019-10-03 01:23:02

# Datalink statistics
-- Total of 3 flows:

Average throughput: 77.23 Mbit/s

95th percentile per-packet one-way delay: 101.517 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 62.60 Mbit/s

95th percentile per-packet one-way delay: 100.317 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 18.14 Mbit/s

95th percentile per-packet one-way delay: 102.370 ms

Loss rate: 1.59%

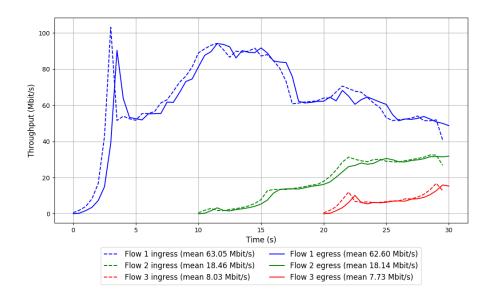
-- Flow 3:

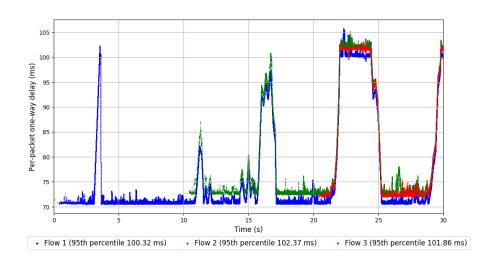
Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 101.856 ms

Loss rate: 3.42%

Run 2: Report of PCC-Vivace — Data Link





# Run 3: Statistics of PCC-Vivace

Start at: 2019-10-03 00:06:42 End at: 2019-10-03 00:07:12 Local clock offset: 3.197 ms Remote clock offset: 45.709 ms

# Below is generated by plot.py at 2019-10-03 01:23:02

# Datalink statistics
-- Total of 3 flows:

Average throughput: 73.05 Mbit/s

95th percentile per-packet one-way delay: 101.796 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 61.66 Mbit/s

95th percentile per-packet one-way delay: 101.859 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 11.13 Mbit/s

95th percentile per-packet one-way delay: 101.062 ms

Loss rate: 0.79%

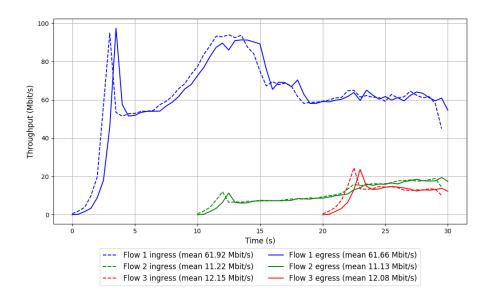
-- Flow 3:

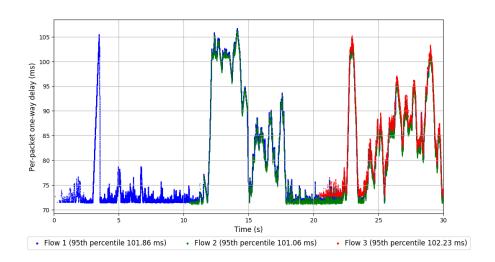
Average throughput: 12.08 Mbit/s

95th percentile per-packet one-way delay: 102.231 ms

Loss rate: 0.56%

Run 3: Report of PCC-Vivace — Data Link





# Run 4: Statistics of PCC-Vivace

Start at: 2019-10-03 00:37:02 End at: 2019-10-03 00:37:32 Local clock offset: 4.242 ms Remote clock offset: 49.138 ms

# Below is generated by plot.py at 2019-10-03 01:23:02

# Datalink statistics
-- Total of 3 flows:

Average throughput: 60.92 Mbit/s

95th percentile per-packet one-way delay: 97.330 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 52.44 Mbit/s

95th percentile per-packet one-way delay: 95.780 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 8.86 Mbit/s

95th percentile per-packet one-way delay: 99.082 ms

Loss rate: 0.27%

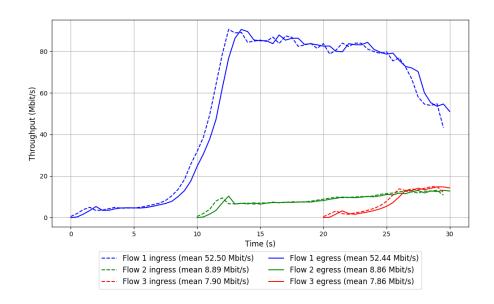
-- Flow 3:

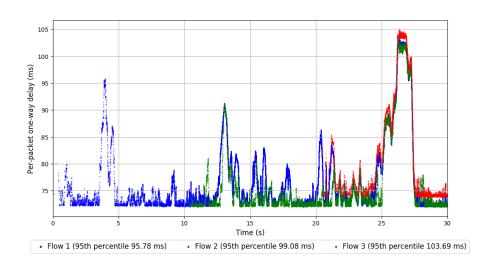
Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 103.690 ms

Loss rate: 0.57%

Run 4: Report of PCC-Vivace — Data Link





# Run 5: Statistics of PCC-Vivace

Start at: 2019-10-03 01:07:20 End at: 2019-10-03 01:07:50 Local clock offset: 11.103 ms Remote clock offset: 15.476 ms

# Below is generated by plot.py at 2019-10-03 01:23:04

# Datalink statistics
-- Total of 3 flows:

Average throughput: 75.71 Mbit/s

95th percentile per-packet one-way delay: 114.021 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 61.93 Mbit/s

95th percentile per-packet one-way delay: 116.832 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 17.61 Mbit/s

95th percentile per-packet one-way delay: 85.336 ms

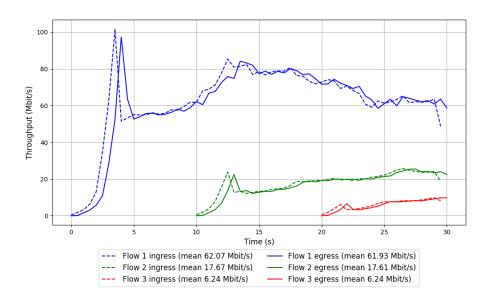
Loss rate: 0.32%

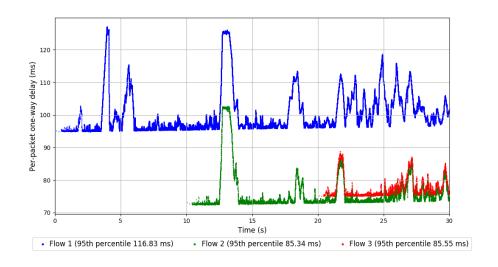
-- Flow 3:

Average throughput: 6.24 Mbit/s

95th percentile per-packet one-way delay: 85.554 ms

Run 5: Report of PCC-Vivace — Data Link





# Run 1: Statistics of WebRTC media

Start at: 2019-10-02 22:52:07 End at: 2019-10-02 22:52:37 Local clock offset: -6.679 ms Remote clock offset: 37.787 ms

# Below is generated by plot.py at 2019-10-03 01:23:04

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 73.332 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 71.436 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 72.252 ms

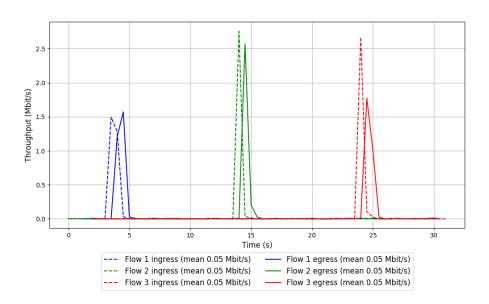
Loss rate: 0.00%

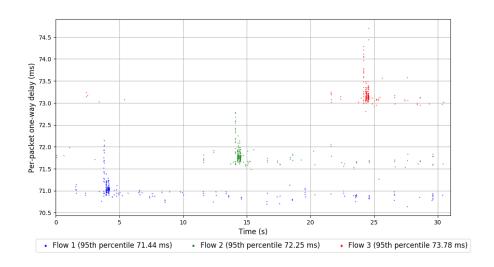
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 73.782 ms

Run 1: Report of WebRTC media — Data Link





# Run 2: Statistics of WebRTC media

Start at: 2019-10-02 23:22:32
End at: 2019-10-02 23:23:02
Local clock offset: -7.416 ms
Remote clock offset: 42.795 ms

# Below is generated by plot.py at 2019-10-03 01:23:04

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 75.363 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 75.024 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 74.275 ms

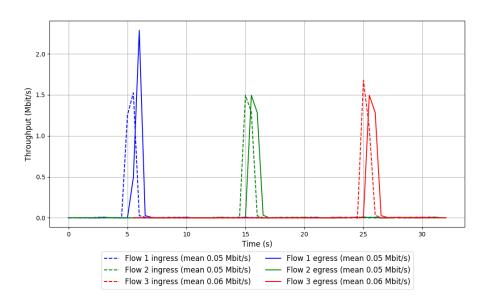
Loss rate: 0.00%

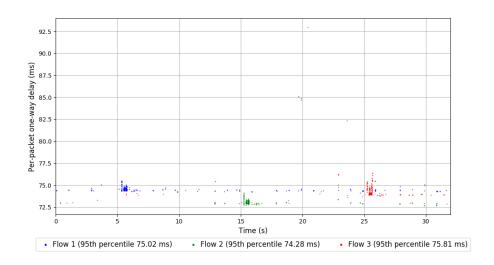
-- Flow 3:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 75.809 ms

Run 2: Report of WebRTC media — Data Link





# Run 3: Statistics of WebRTC media

Start at: 2019-10-02 23:52:53 End at: 2019-10-02 23:53:23 Local clock offset: -6.195 ms Remote clock offset: 44.797 ms

# Below is generated by plot.py at 2019-10-03 01:23:04

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 74.179 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 72.091 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 74.677 ms

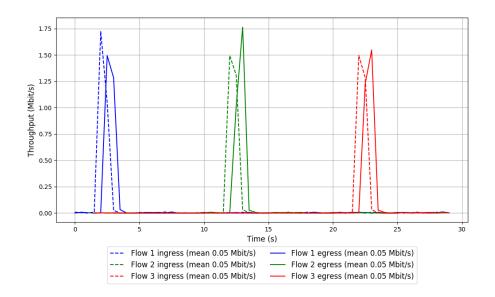
Loss rate: 0.82%

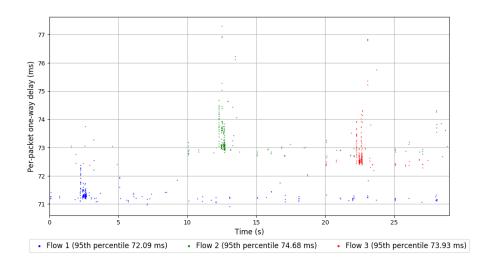
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 73.933 ms

Run 3: Report of WebRTC media — Data Link





# Run 4: Statistics of WebRTC media

Start at: 2019-10-03 00:23:11 End at: 2019-10-03 00:23:41 Local clock offset: 7.795 ms Remote clock offset: 49.502 ms

# Below is generated by plot.py at 2019-10-03 01:23:04

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 79.519 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 80.679 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 77.038 ms

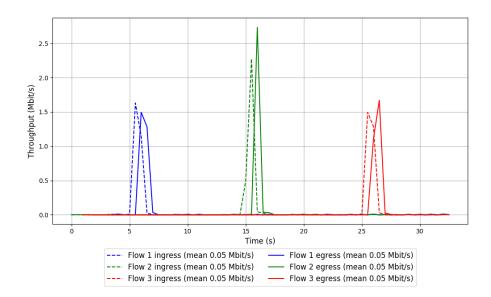
Loss rate: 0.82%

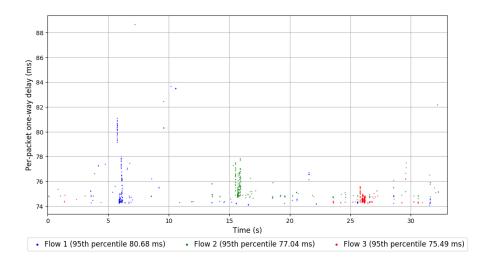
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 75.492 ms

Run 4: Report of WebRTC media — Data Link





# Run 5: Statistics of WebRTC media

Start at: 2019-10-03 00:53:30 End at: 2019-10-03 00:54:00 Local clock offset: 3.914 ms Remote clock offset: 50.577 ms

# Below is generated by plot.py at 2019-10-03 01:23:04

# Datalink statistics
-- Total of 3 flows:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 76.456 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 77.753 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 77.172 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 74.894 ms

Run 5: Report of WebRTC media — Data Link

