

Pantheon Report

Generated at 2018-08-09 08:08:40 (UTC).

Data path: AWS India 1 Ethernet (*local*) → India ppp0 ppp0 (*remote*).

Repeated the test of 17 congestion control schemes 3 times.

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

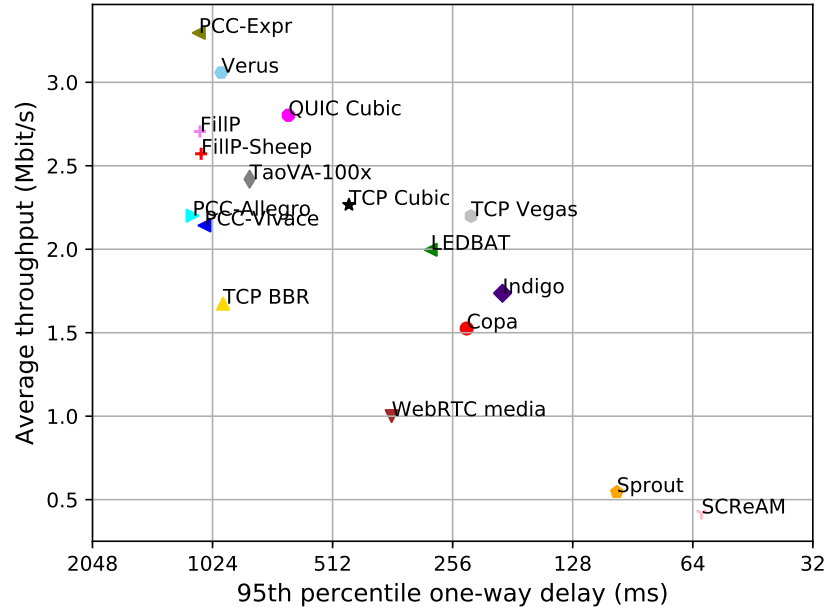
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

NTP offsets were measured against `nets.org.sg` and have been applied to correct the timestamps in logs.

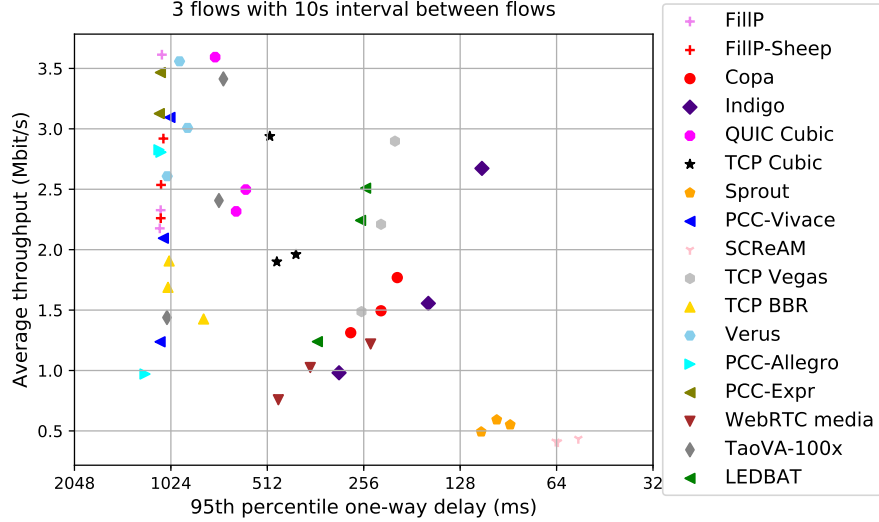
Git summary:

```
branch: master @ 7772df3413f4b07ba0096dfdd8e9d4c6dca623e3
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ daed0c84f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf90c077e64d
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
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
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from AWS India 1 to India ppp0, 3 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from AWS India 1 to India ppp0, 3 runs of 30s each per scheme
 3 flows with 10s interval between flows



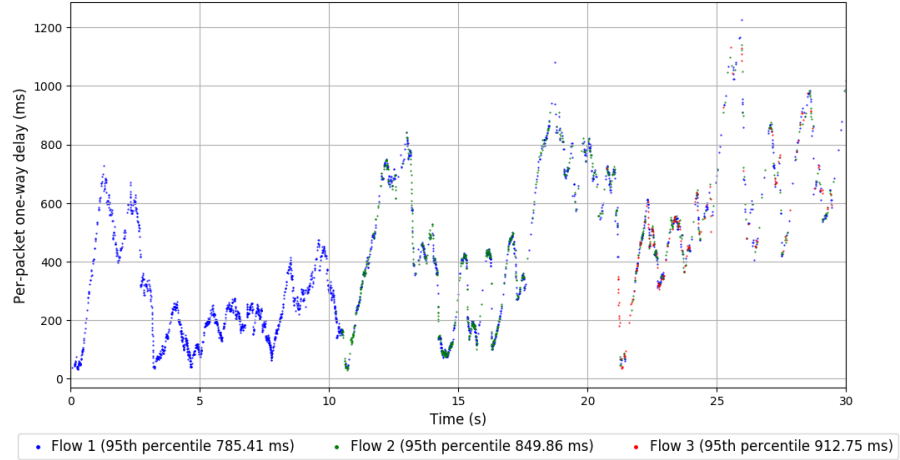
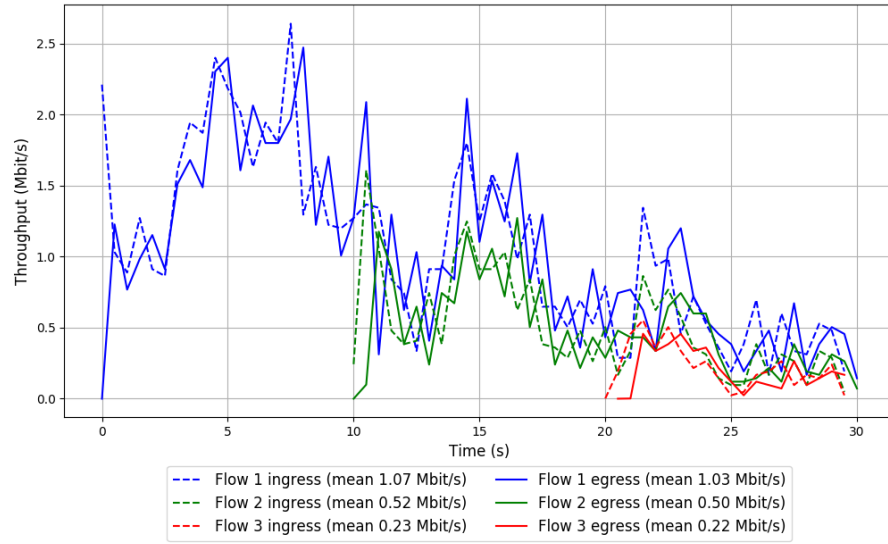
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	3	1.10	0.69	0.38	935.84	986.44	1012.84	4.45	10.45	18.33
Copa	3	0.87	0.68	0.62	202.98	255.84	296.94	0.21	0.38	1.26
TCP Cubic	3	1.24	0.94	1.22	368.98	572.22	413.88	1.16	2.02	2.15
FillP	3	2.08	0.74	0.51	1100.74	1097.01	1108.13	70.97	51.73	73.77
FillP-Sheep	3	1.66	1.07	0.67	1078.29	1097.91	1120.79	29.48	52.72	78.12
Indigo	3	0.79	0.83	1.18	165.27	218.49	230.17	0.24	0.24	0.62
LEDBAT	3	1.39	0.69	0.53	280.71	287.71	337.29	0.50	1.00	2.24
PCC-Allegro	3	1.45	0.87	0.62	1117.64	1124.20	1192.60	52.99	61.55	91.70
PCC-Expr	2	2.30	1.23	0.76	1102.54	1116.61	1117.92	59.50	80.36	79.68
QUIC Cubic	3	1.82	1.08	0.83	606.57	691.64	784.11	1.49	2.67	7.69
SCReAM	3	0.21	0.21	0.20	58.18	59.43	70.97	0.03	0.17	0.29
Sprout	3	0.28	0.25	0.30	91.99	103.78	114.90	0.01	0.14	0.11
TaoVA-100x	3	1.55	0.97	0.72	736.93	846.36	939.86	2.75	12.36	20.17
TCP Vegas	3	1.23	0.99	0.93	175.62	278.71	318.61	0.18	0.53	1.44
Verus	3	2.04	1.43	0.32	919.98	1019.30	981.30	5.64	18.14	12.66
PCC-Vivace	3	1.21	0.99	0.89	1054.06	1074.05	1100.26	23.83	36.10	53.58
WebRTC media	3	0.48	0.37	0.16	340.88	336.26	435.20	0.49	0.30	1.12

Run 1: Statistics of TCP BBR

Start at: 2018-08-09 07:21:17
End at: 2018-08-09 07:21:47
Local clock offset: 2.984 ms
Remote clock offset: -8.898 ms

Below is generated by plot.py at 2018-08-09 08:07:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 809.471 ms
Loss rate: 3.47%
-- Flow 1:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 785.415 ms
Loss rate: 2.75%
-- Flow 2:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 849.861 ms
Loss rate: 3.76%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 912.747 ms
Loss rate: 12.56%

Run 1: Report of TCP BBR — Data Link

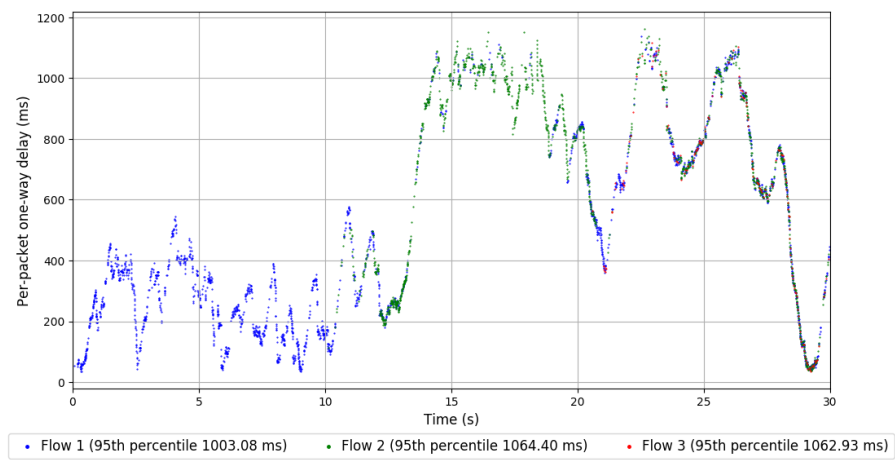
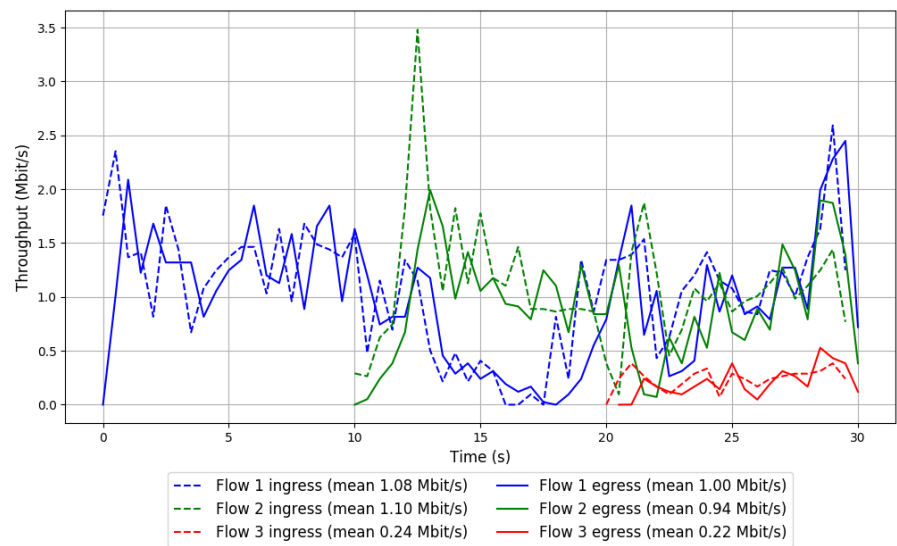


Run 2: Statistics of TCP BBR

Start at: 2018-08-09 07:39:52
End at: 2018-08-09 07:40:22
Local clock offset: -2.828 ms
Remote clock offset: -10.665 ms

Below is generated by plot.py at 2018-08-09 08:07:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 1045.419 ms
Loss rate: 10.63%
-- Flow 1:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 1003.081 ms
Loss rate: 7.27%
-- Flow 2:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 1064.399 ms
Loss rate: 15.35%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1062.933 ms
Loss rate: 12.62%

Run 2: Report of TCP BBR — Data Link

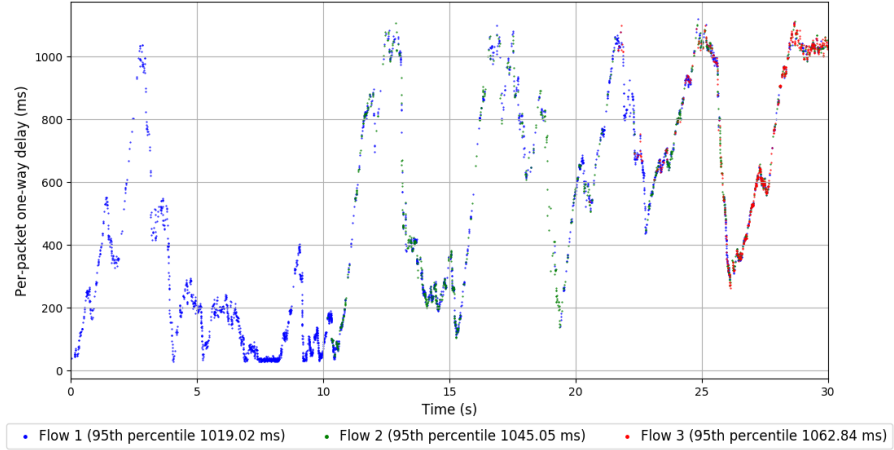
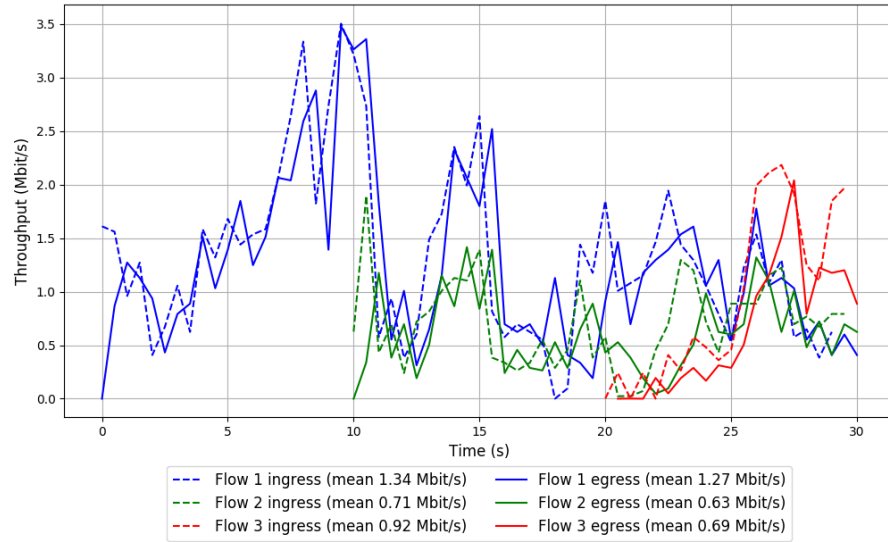


Run 3: Statistics of TCP BBR

Start at: 2018-08-09 07:58:30
End at: 2018-08-09 07:59:00
Local clock offset: 2.718 ms
Remote clock offset: -13.375 ms

Below is generated by plot.py at 2018-08-09 08:07:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.91 Mbit/s
95th percentile per-packet one-way delay: 1036.708 ms
Loss rate: 9.23%
-- Flow 1:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 1019.017 ms
Loss rate: 3.34%
-- Flow 2:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 1045.049 ms
Loss rate: 12.25%
-- Flow 3:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 1062.841 ms
Loss rate: 29.81%

Run 3: Report of TCP BBR — Data Link

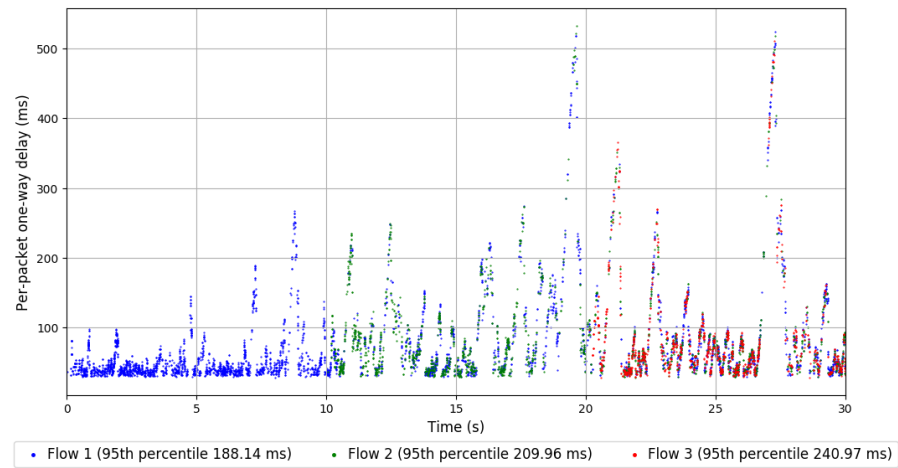
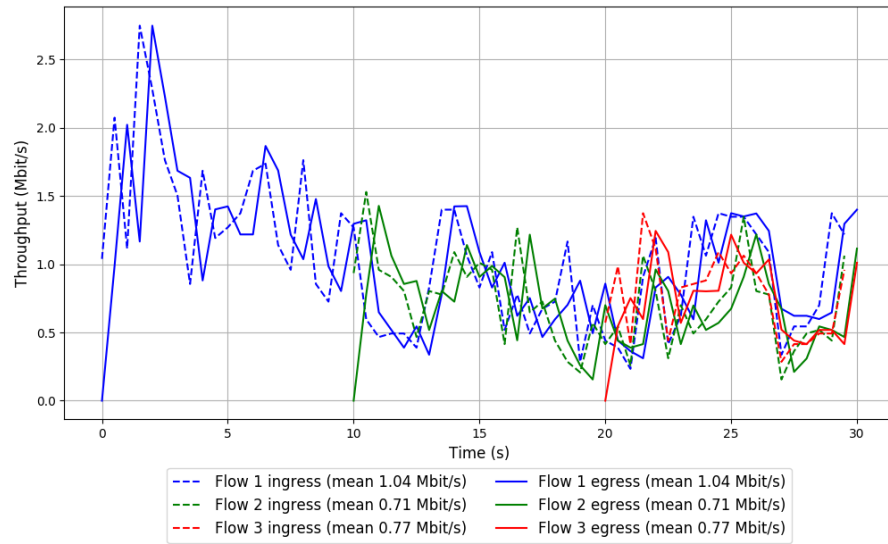


Run 1: Statistics of Copa

Start at: 2018-08-09 07:14:44
End at: 2018-08-09 07:15:14
Local clock offset: 1.509 ms
Remote clock offset: -10.38 ms

Below is generated by plot.py at 2018-08-09 08:07:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 201.158 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 1.04 Mbit/s
95th percentile per-packet one-way delay: 188.137 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 209.961 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 240.971 ms
Loss rate: 0.49%

Run 1: Report of Copa — Data Link

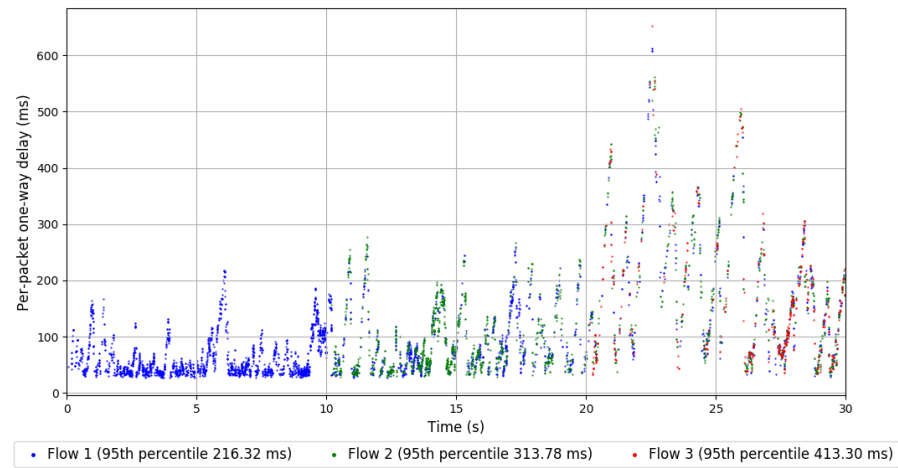
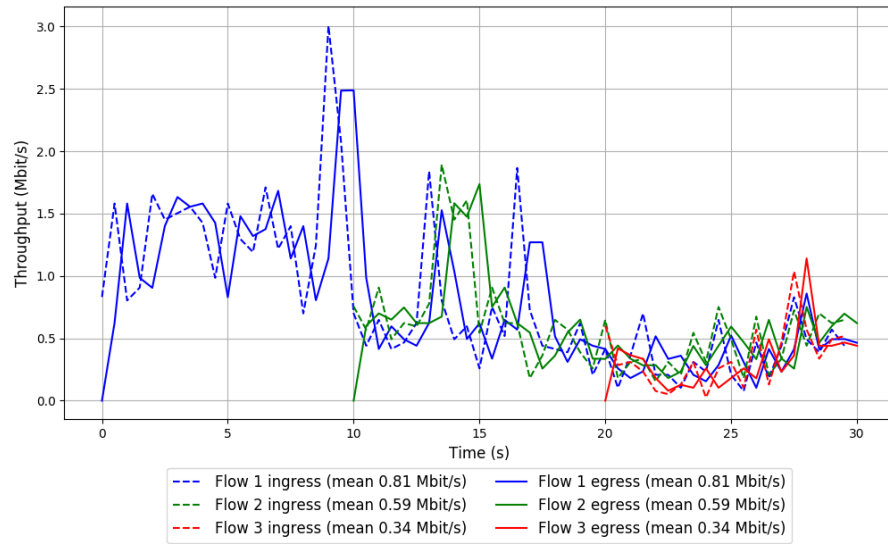


Run 2: Statistics of Copa

Start at: 2018-08-09 07:33:19
End at: 2018-08-09 07:33:49
Local clock offset: 3.161 ms
Remote clock offset: -8.724 ms

Below is generated by plot.py at 2018-08-09 08:07:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 281.103 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 0.81 Mbit/s
95th percentile per-packet one-way delay: 216.319 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 313.779 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 413.298 ms
Loss rate: 3.10%

Run 2: Report of Copa — Data Link

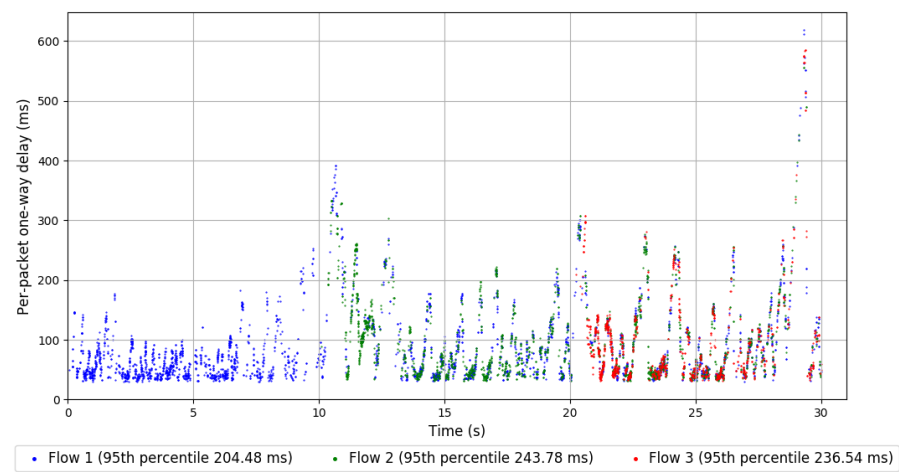
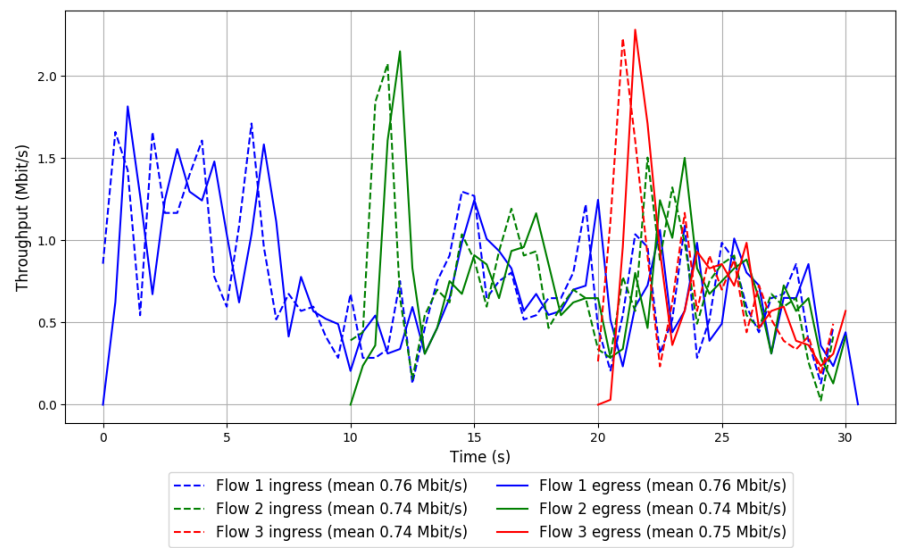


Run 3: Statistics of Copa

Start at: 2018-08-09 07:51:56
End at: 2018-08-09 07:52:26
Local clock offset: -0.614 ms
Remote clock offset: -13.534 ms

Below is generated by plot.py at 2018-08-09 08:07:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 226.089 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 204.484 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 243.780 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 236.538 ms
Loss rate: 0.19%

Run 3: Report of Copa — Data Link

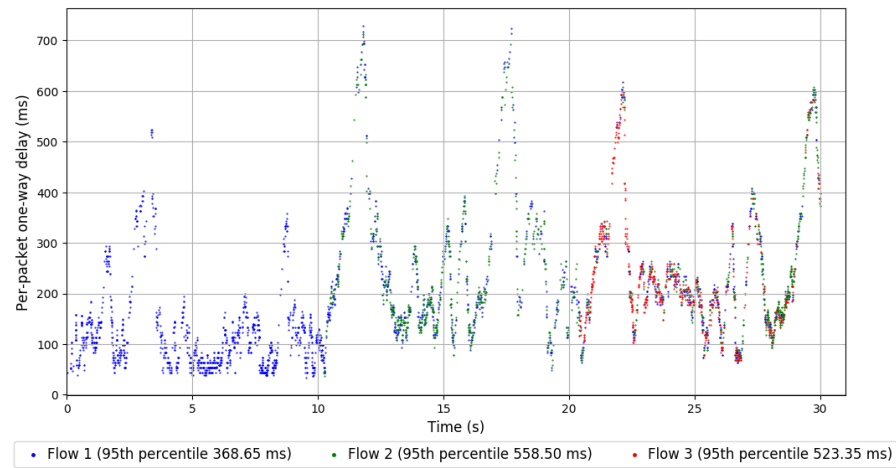
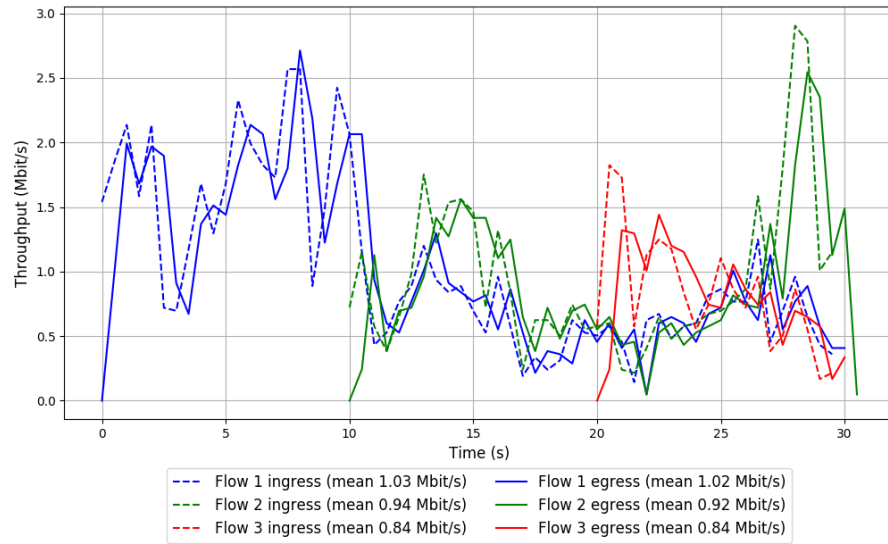


Run 1: Statistics of TCP Cubic

Start at: 2018-08-09 07:16:55
End at: 2018-08-09 07:17:25
Local clock offset: -0.378 ms
Remote clock offset: -8.121 ms

Below is generated by plot.py at 2018-08-09 08:07:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 478.094 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 368.652 ms
Loss rate: 1.17%
-- Flow 2:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 558.505 ms
Loss rate: 3.00%
-- Flow 3:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 523.346 ms
Loss rate: 1.72%

Run 1: Report of TCP Cubic — Data Link

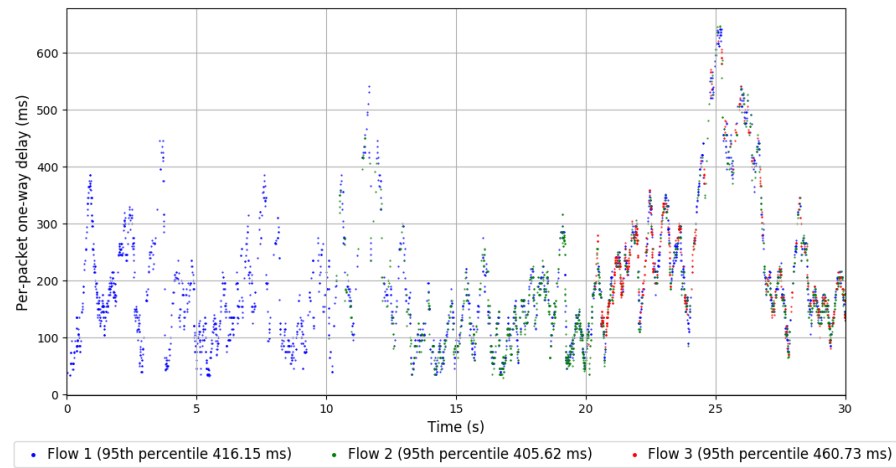
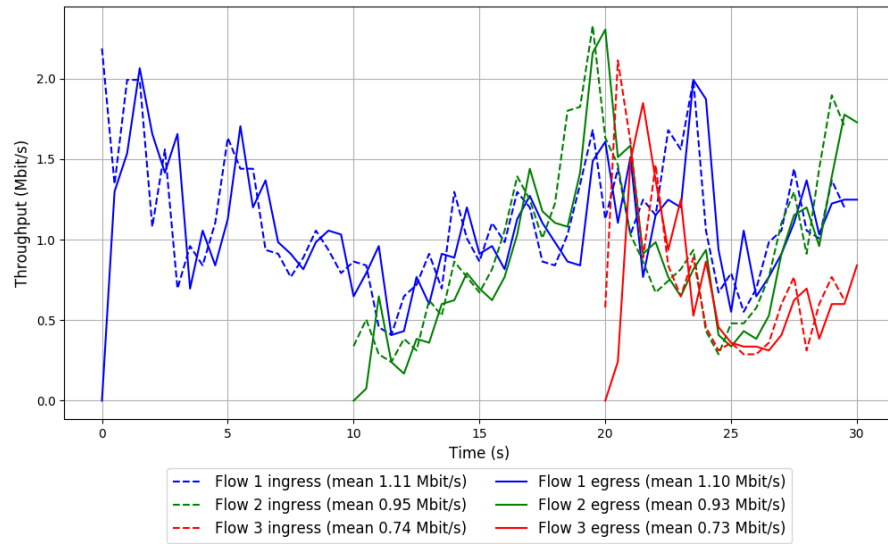


Run 2: Statistics of TCP Cubic

Start at: 2018-08-09 07:35:30
End at: 2018-08-09 07:36:00
Local clock offset: 2.142 ms
Remote clock offset: -8.749 ms

Below is generated by plot.py at 2018-08-09 08:07:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 416.701 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 1.10 Mbit/s
95th percentile per-packet one-way delay: 416.155 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 405.625 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 460.732 ms
Loss rate: 1.95%

Run 2: Report of TCP Cubic — Data Link

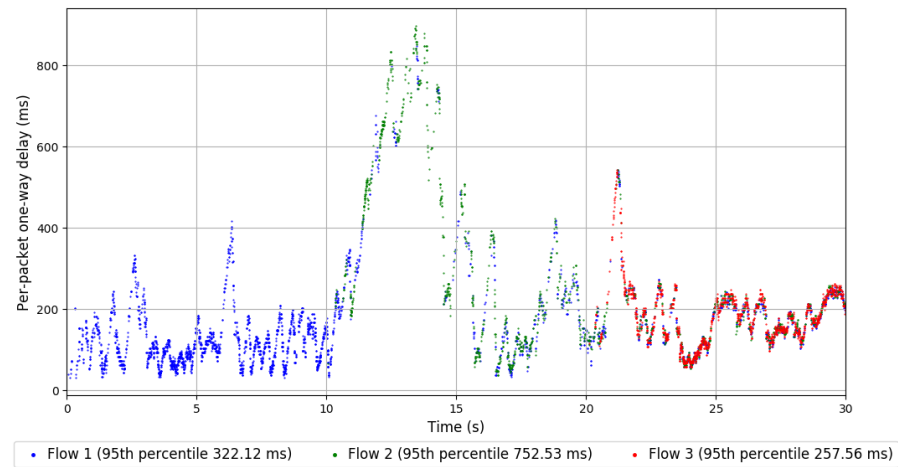
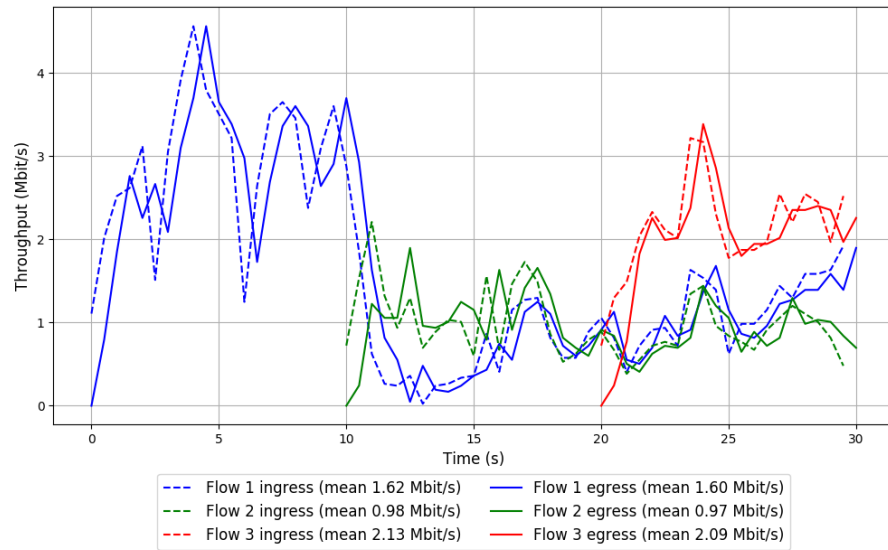


Run 3: Statistics of TCP Cubic

Start at: 2018-08-09 07:54:07
End at: 2018-08-09 07:54:37
Local clock offset: 0.83 ms
Remote clock offset: -13.744 ms

Below is generated by plot.py at 2018-08-09 08:08:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 502.975 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 322.121 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 752.535 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 257.558 ms
Loss rate: 2.77%

Run 3: Report of TCP Cubic — Data Link

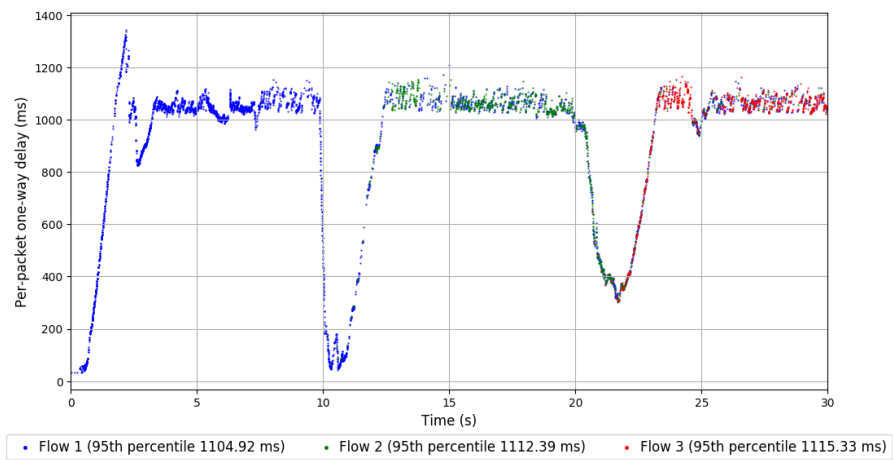
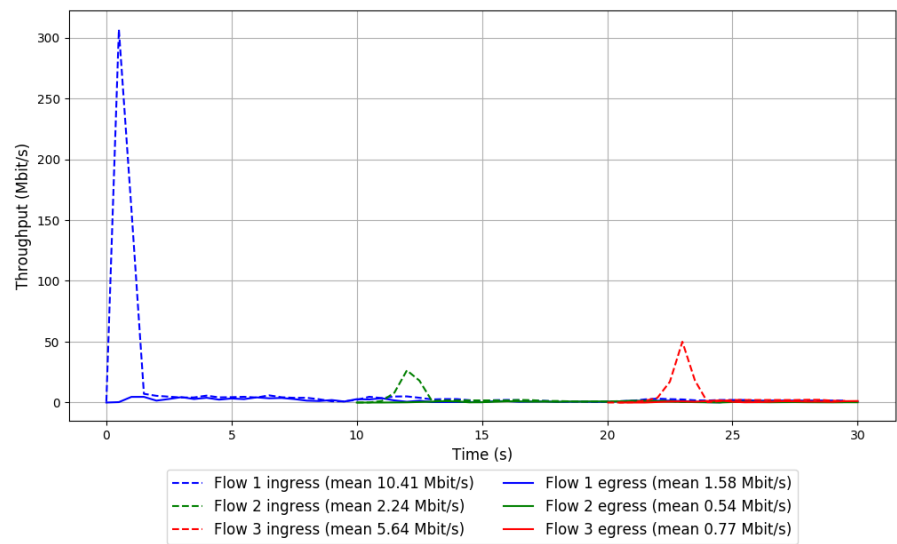


Run 1: Statistics of FillP

Start at: 2018-08-09 07:18:00
End at: 2018-08-09 07:18:30
Local clock offset: -0.435 ms
Remote clock offset: -9.276 ms

Below is generated by plot.py at 2018-08-09 08:08:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 1108.985 ms
Loss rate: 84.20%
-- Flow 1:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 1104.921 ms
Loss rate: 84.83%
-- Flow 2:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 1112.389 ms
Loss rate: 75.97%
-- Flow 3:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 1115.331 ms
Loss rate: 87.28%

Run 1: Report of FillP — Data Link

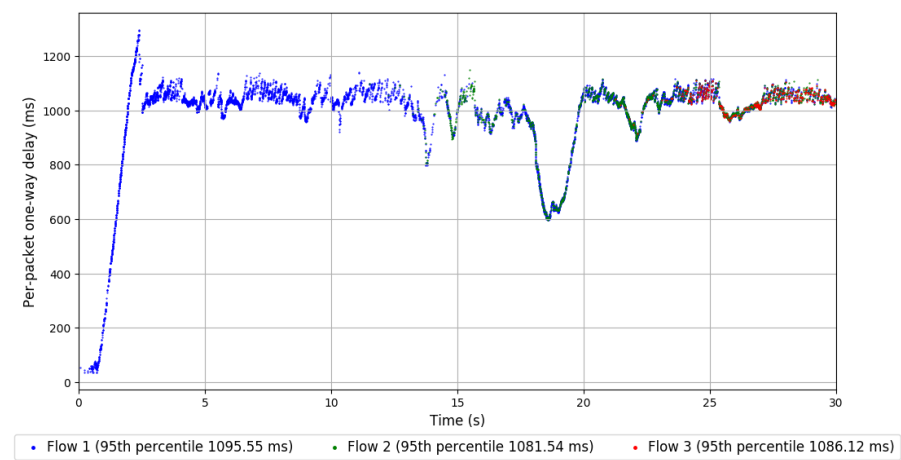
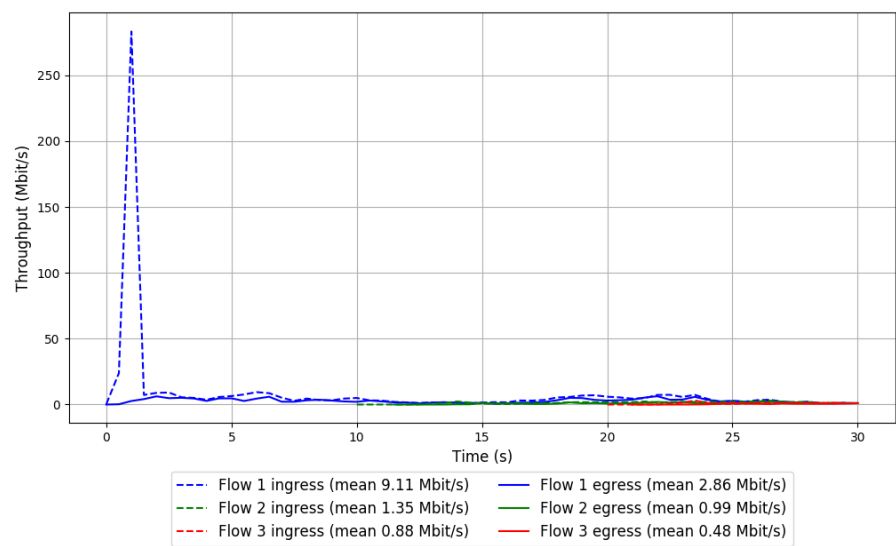


Run 2: Statistics of FillP

Start at: 2018-08-09 07:36:35
End at: 2018-08-09 07:37:05
Local clock offset: 0.534 ms
Remote clock offset: -9.319 ms

Below is generated by plot.py at 2018-08-09 08:08:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.61 Mbit/s
95th percentile per-packet one-way delay: 1092.302 ms
Loss rate: 64.95%
-- Flow 1:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: 1095.551 ms
Loss rate: 68.61%
-- Flow 2:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 1081.538 ms
Loss rate: 31.93%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 1086.119 ms
Loss rate: 52.26%

Run 2: Report of FillP — Data Link

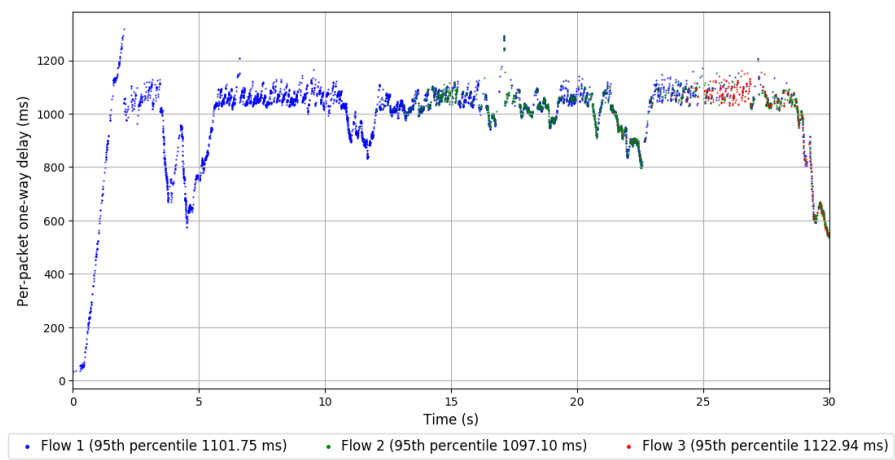
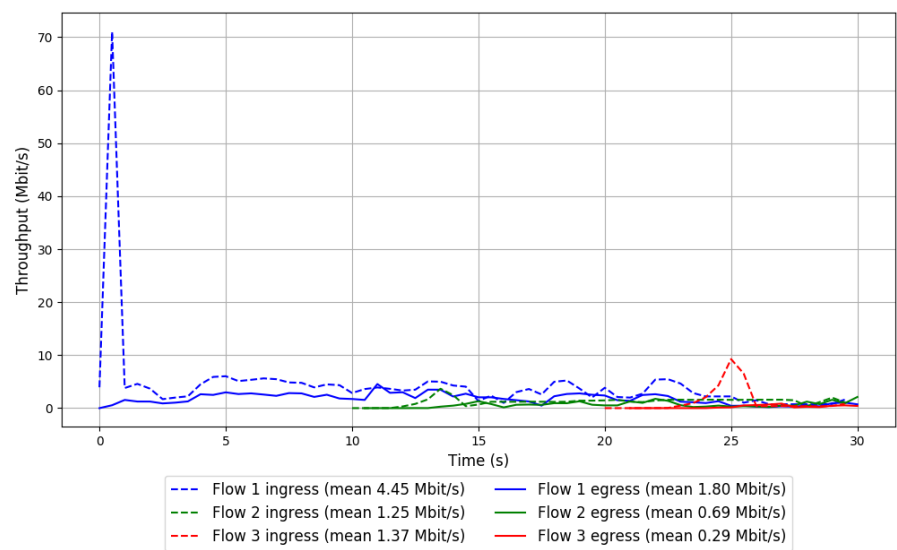


Run 3: Statistics of FillP

Start at: 2018-08-09 07:55:13
End at: 2018-08-09 07:55:43
Local clock offset: -0.924 ms
Remote clock offset: -13.435 ms

Below is generated by plot.py at 2018-08-09 08:08:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 1101.971 ms
Loss rate: 59.46%
-- Flow 1:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 1101.748 ms
Loss rate: 59.47%
-- Flow 2:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 1097.104 ms
Loss rate: 47.30%
-- Flow 3:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 1122.943 ms
Loss rate: 81.76%

Run 3: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2018-08-09 07:26:44

End at: 2018-08-09 07:27:14

Local clock offset: 1.591 ms

Remote clock offset: -9.16 ms

Below is generated by plot.py at 2018-08-09 08:08:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 1080.658 ms

Loss rate: 33.63%

-- Flow 1:

Average throughput: 1.92 Mbit/s

95th percentile per-packet one-way delay: 1076.308 ms

Loss rate: 25.94%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 1078.350 ms

Loss rate: 32.25%

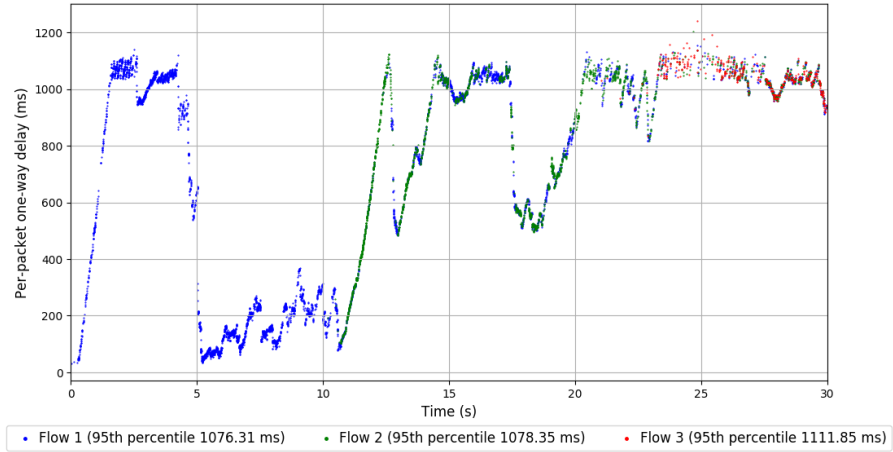
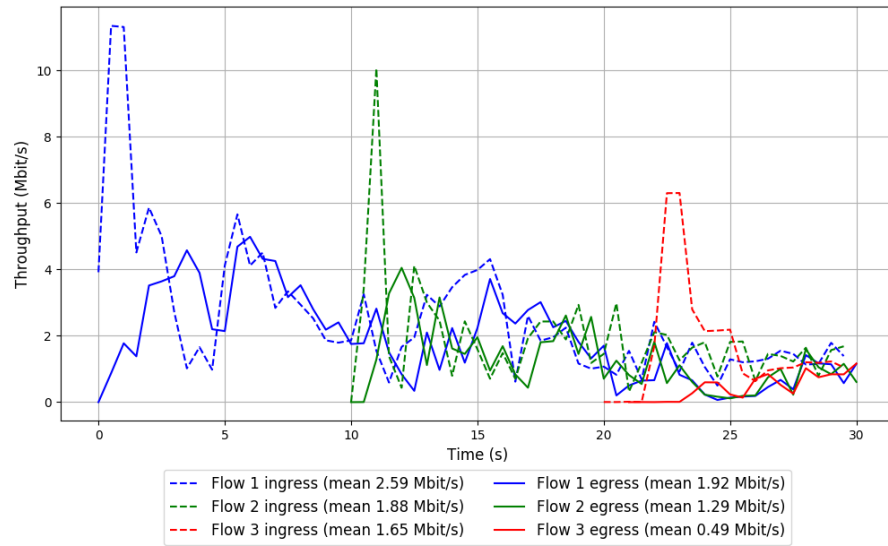
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 1111.849 ms

Loss rate: 73.18%

Run 1: Report of FillP-Sheep — Data Link

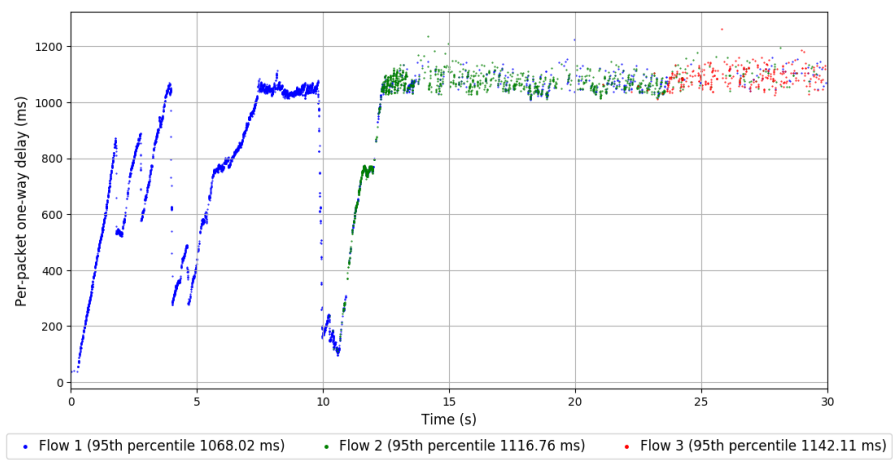
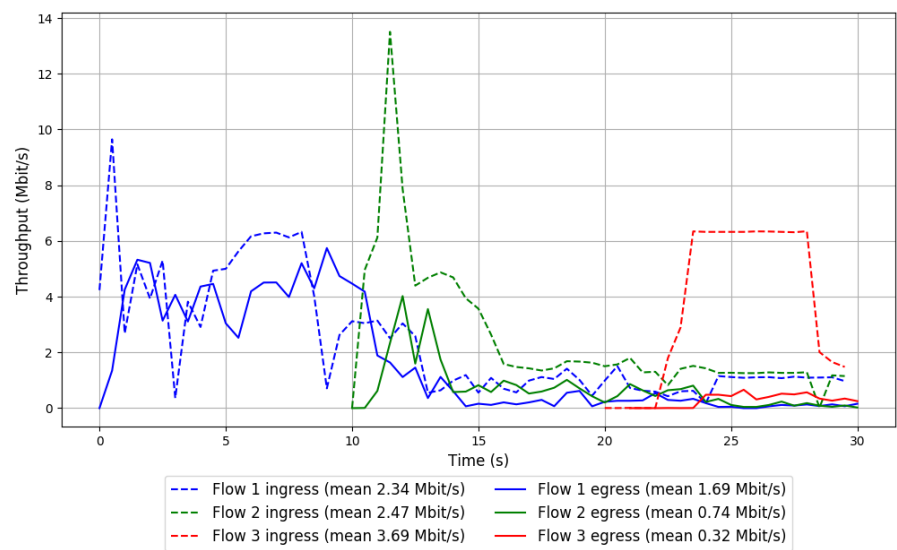


Run 2: Statistics of FillP-Sheep

Start at: 2018-08-09 07:45:22
End at: 2018-08-09 07:45:52
Local clock offset: -0.429 ms
Remote clock offset: -12.193 ms

Below is generated by plot.py at 2018-08-09 08:08:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 1101.346 ms
Loss rate: 56.69%
-- Flow 1:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 1068.016 ms
Loss rate: 28.00%
-- Flow 2:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 1116.759 ms
Loss rate: 71.00%
-- Flow 3:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 1142.106 ms
Loss rate: 92.38%

Run 2: Report of FillP-Sheep — Data Link

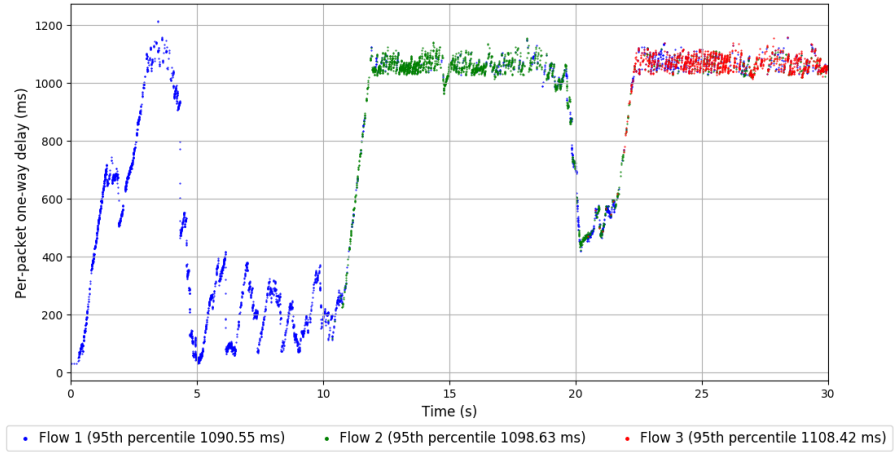
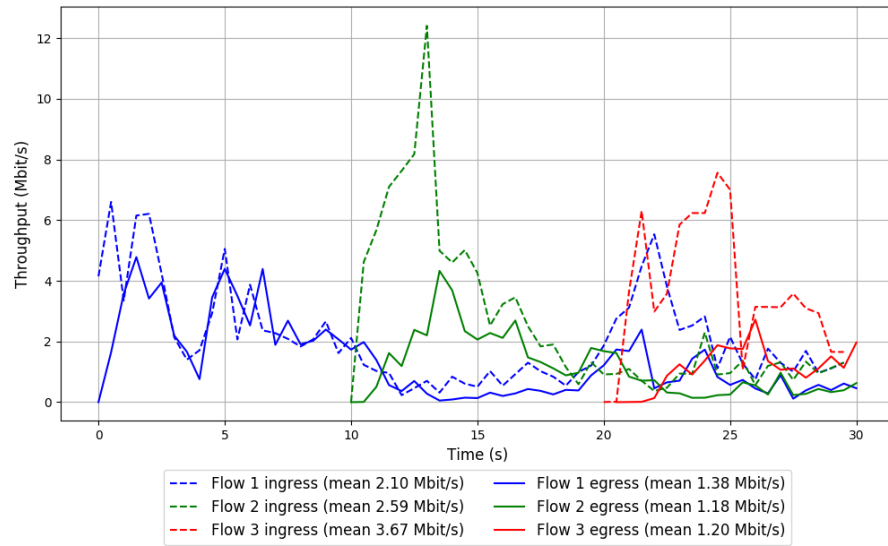


Run 3: Statistics of FillP-Sheep

Start at: 2018-08-09 08:03:59
End at: 2018-08-09 08:04:29
Local clock offset: 3.391 ms
Remote clock offset: -13.582 ms

Below is generated by plot.py at 2018-08-09 08:08:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 1099.070 ms
Loss rate: 49.74%
-- Flow 1:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 1090.546 ms
Loss rate: 34.50%
-- Flow 2:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 1098.630 ms
Loss rate: 54.90%
-- Flow 3:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 1108.416 ms
Loss rate: 68.79%

Run 3: Report of FillP-Sheep — Data Link

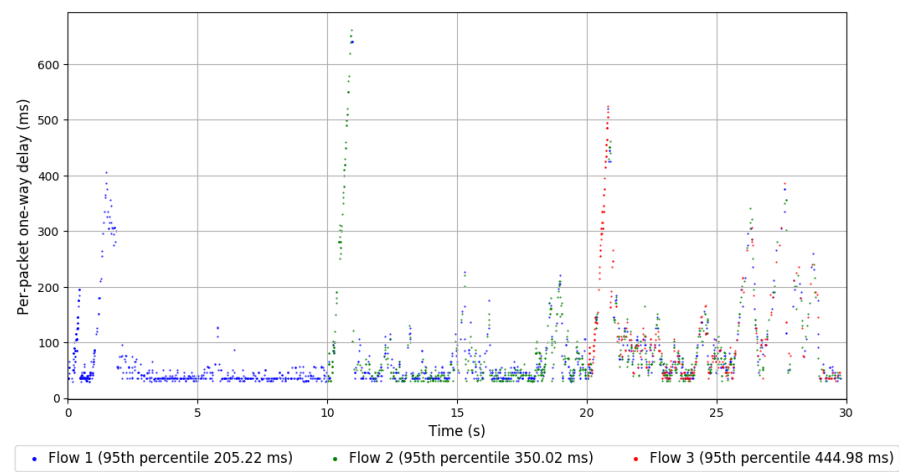
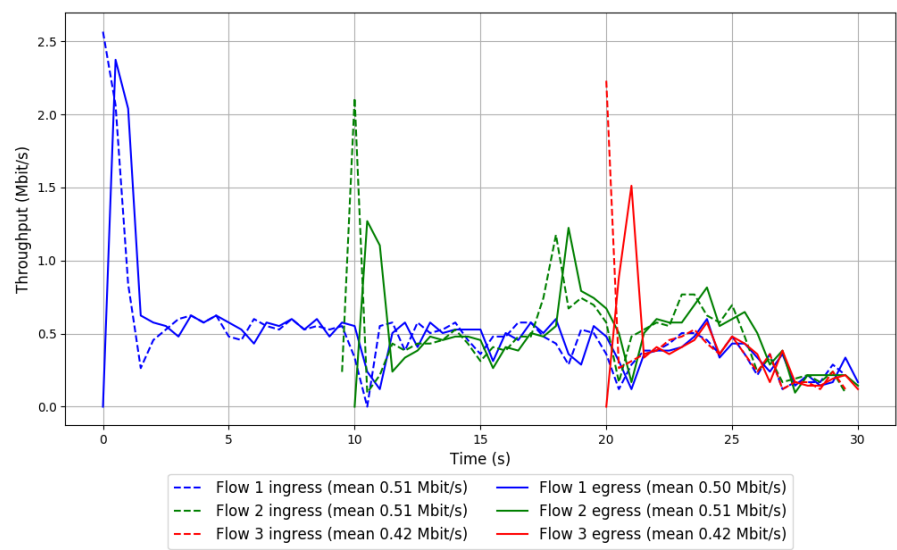


Run 1: Statistics of Indigo

Start at: 2018-08-09 07:30:02
End at: 2018-08-09 07:30:32
Local clock offset: 3.619 ms
Remote clock offset: -9.139 ms

Below is generated by plot.py at 2018-08-09 08:08:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 305.715 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 205.217 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 350.020 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 444.983 ms
Loss rate: 0.88%

Run 1: Report of Indigo — Data Link

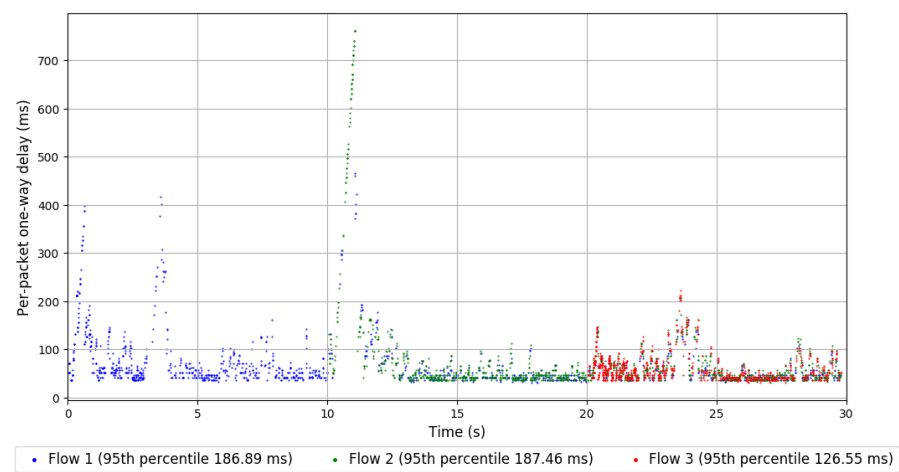
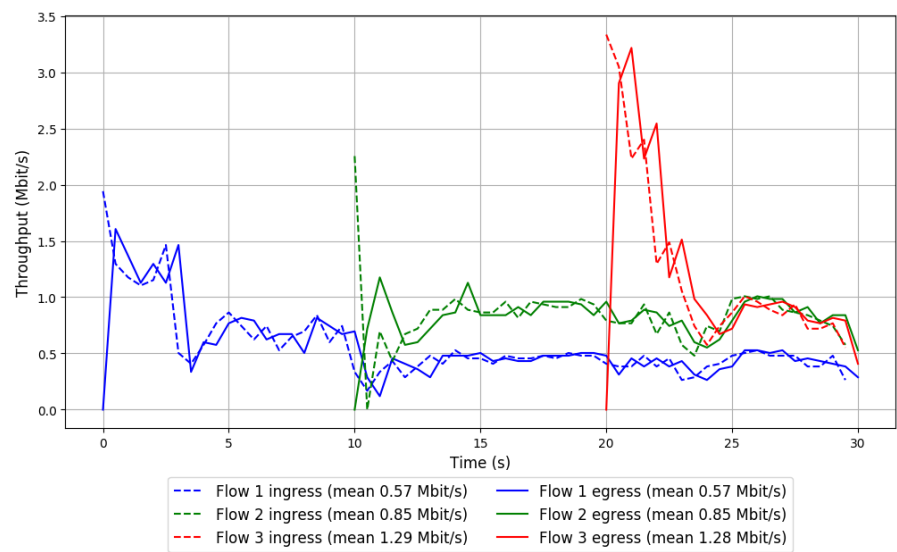


Run 2: Statistics of Indigo

Start at: 2018-08-09 07:48:39
End at: 2018-08-09 07:49:09
Local clock offset: -0.574 ms
Remote clock offset: -12.306 ms

Below is generated by plot.py at 2018-08-09 08:08:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 160.906 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 186.891 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 187.463 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 126.551 ms
Loss rate: 0.57%

Run 2: Report of Indigo — Data Link

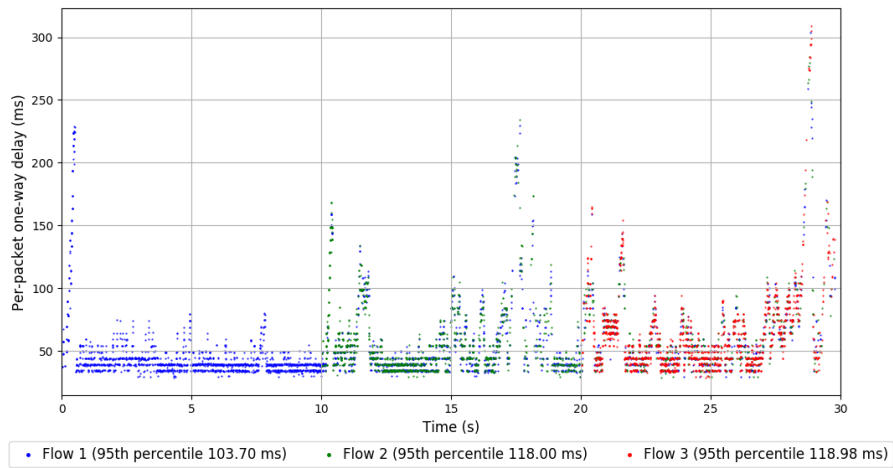
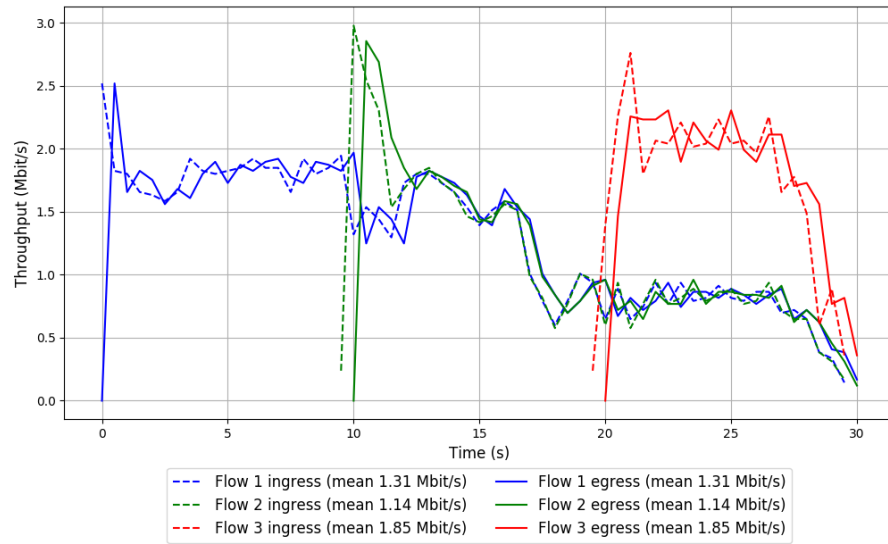


Run 3: Statistics of Indigo

Start at: 2018-08-09 08:07:15
End at: 2018-08-09 08:07:45
Local clock offset: 3.333 ms
Remote clock offset: -14.139 ms

Below is generated by plot.py at 2018-08-09 08:08:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.67 Mbit/s
95th percentile per-packet one-way delay: 109.444 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 103.704 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 118.001 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 1.85 Mbit/s
95th percentile per-packet one-way delay: 118.983 ms
Loss rate: 0.40%

Run 3: Report of Indigo — Data Link

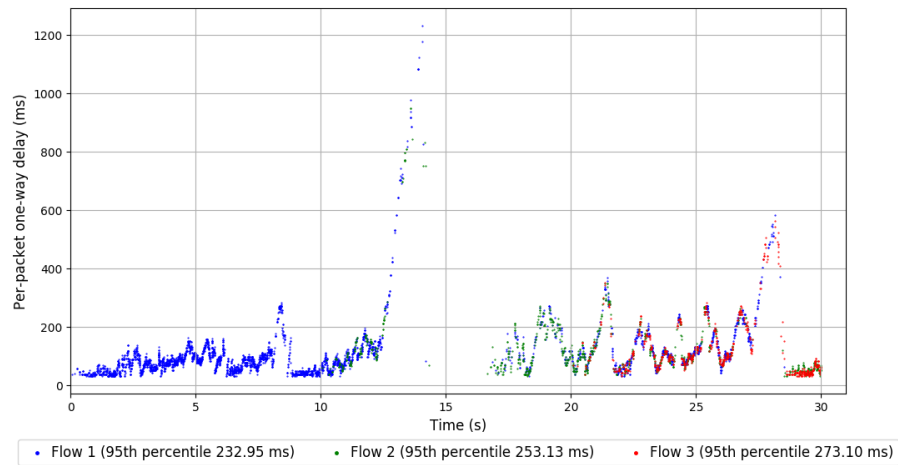
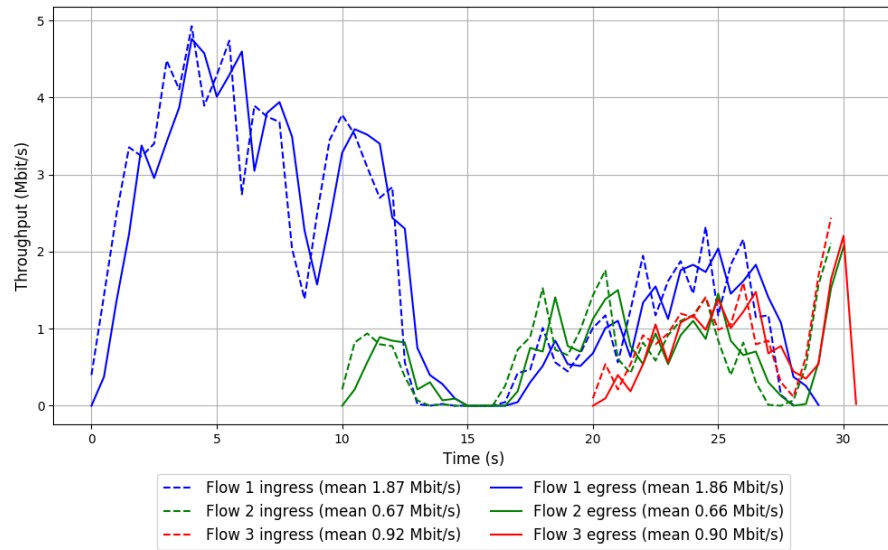


Run 1: Statistics of LEDBAT

Start at: 2018-08-09 07:27:50
End at: 2018-08-09 07:28:20
Local clock offset: 2.681 ms
Remote clock offset: -7.979 ms

Below is generated by plot.py at 2018-08-09 08:08:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.51 Mbit/s
95th percentile per-packet one-way delay: 252.593 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 1.86 Mbit/s
95th percentile per-packet one-way delay: 232.949 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 253.126 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.90 Mbit/s
95th percentile per-packet one-way delay: 273.102 ms
Loss rate: 2.31%

Run 1: Report of LEDBAT — Data Link

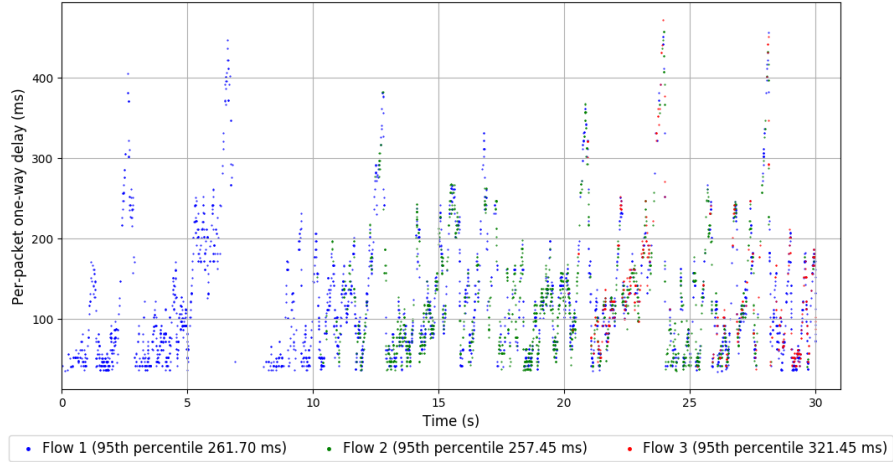
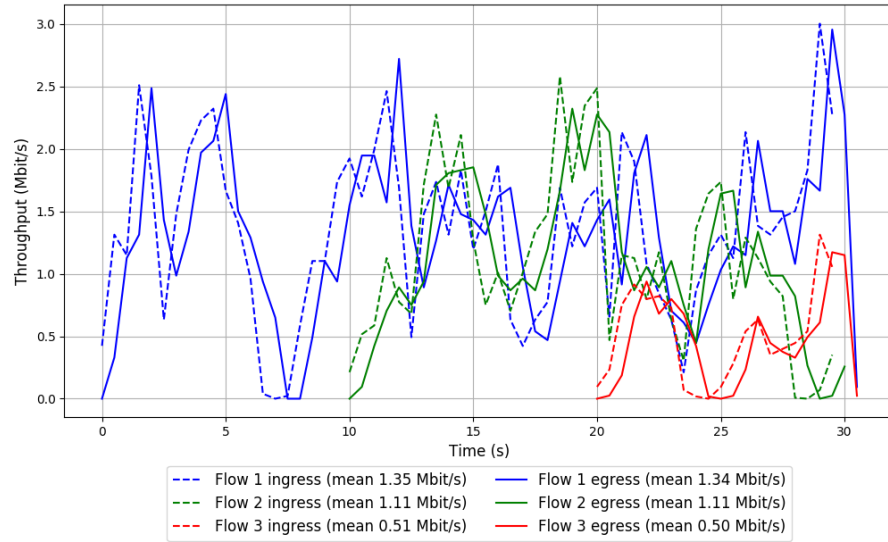


Run 2: Statistics of LEDBAT

Start at: 2018-08-09 07:46:27
End at: 2018-08-09 07:46:57
Local clock offset: -2.836 ms
Remote clock offset: -13.744 ms

Below is generated by plot.py at 2018-08-09 08:08:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 261.899 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 261.704 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 257.448 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 321.454 ms
Loss rate: 1.63%

Run 2: Report of LEDBAT — Data Link

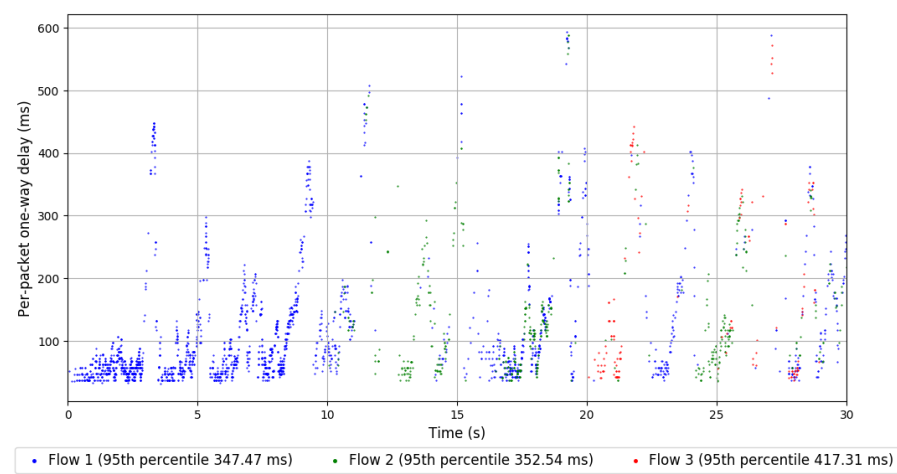
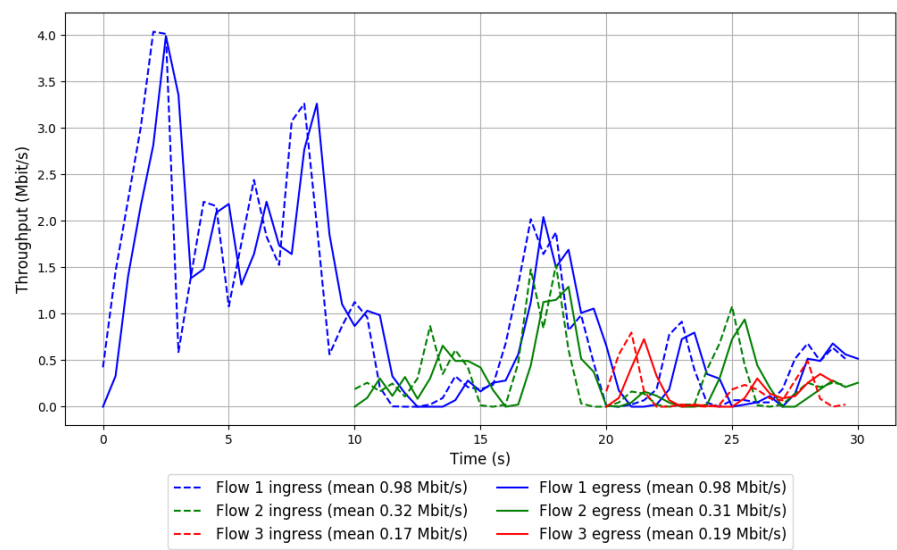


Run 3: Statistics of LEDBAT

Start at: 2018-08-09 08:05:04
End at: 2018-08-09 08:05:34
Local clock offset: -0.214 ms
Remote clock offset: -14.06 ms

```
# Below is generated by plot.py at 2018-08-09 08:08:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 357.302 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 347.466 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 352.544 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 417.309 ms
Loss rate: 2.77%
```

Run 3: Report of LEDBAT — Data Link

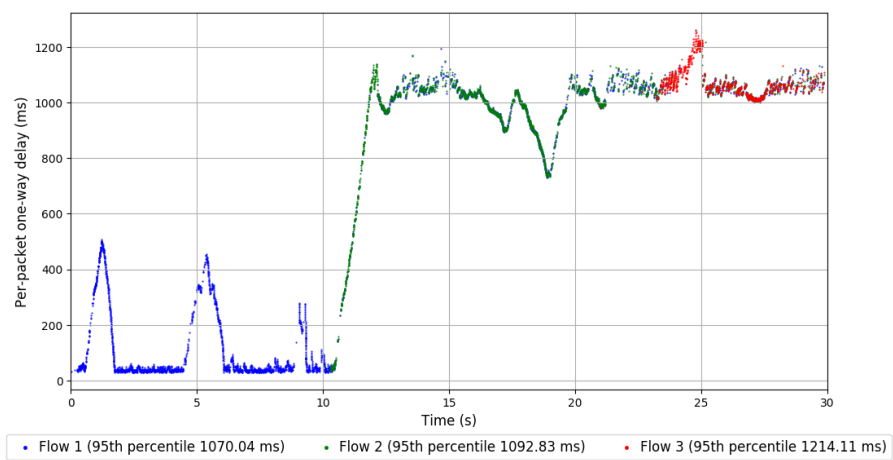
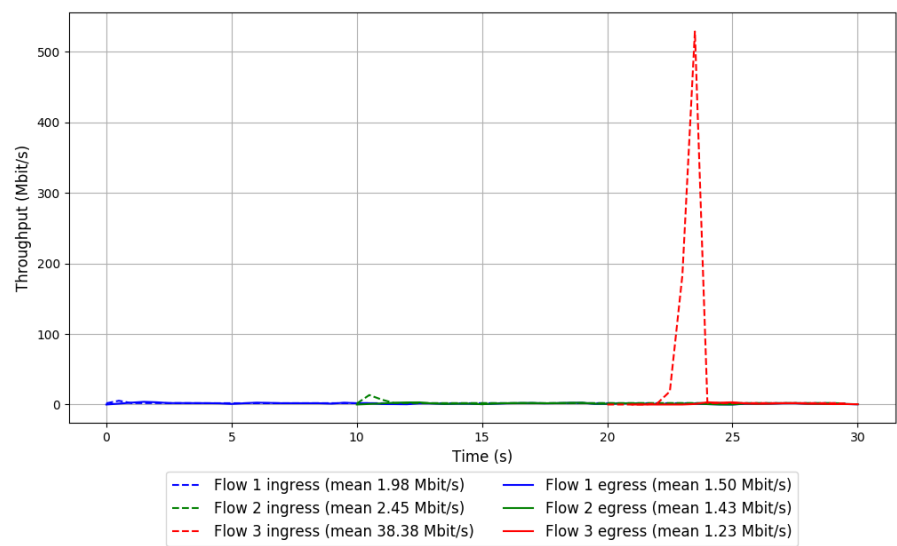


Run 1: Statistics of PCC-Allegro

Start at: 2018-08-09 07:28:56
End at: 2018-08-09 07:29:26
Local clock offset: 1.7 ms
Remote clock offset: -8.562 ms

Below is generated by plot.py at 2018-08-09 08:08:17
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.81 Mbit/s
95th percentile per-packet one-way delay: 1099.677 ms
Loss rate: 82.76%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 1070.041 ms
Loss rate: 24.44%
-- Flow 2:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 1092.833 ms
Loss rate: 42.07%
-- Flow 3:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 1214.106 ms
Loss rate: 97.11%

Run 1: Report of PCC-Allegro — Data Link

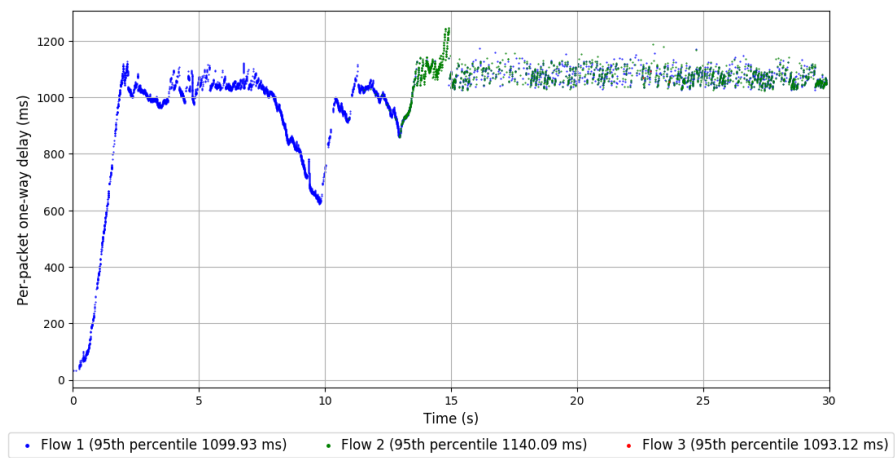
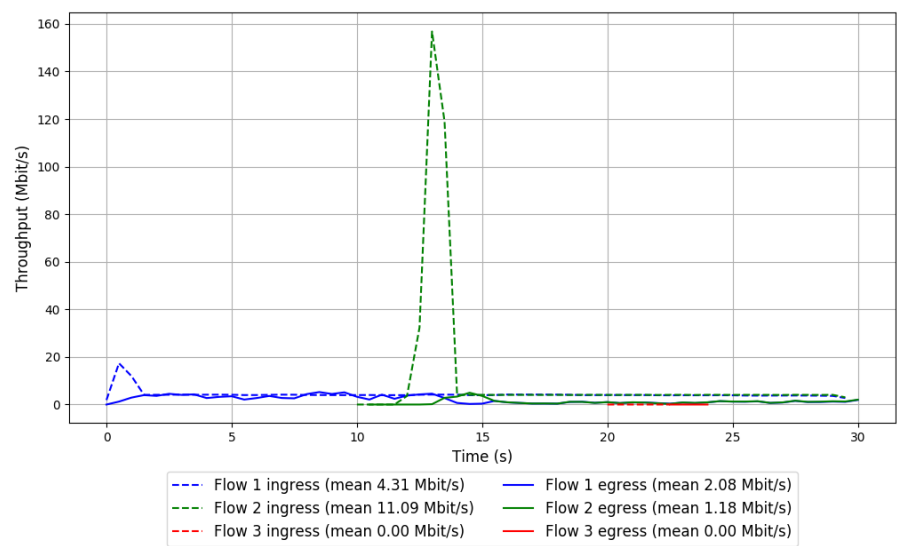


Run 2: Statistics of PCC-Allegro

Start at: 2018-08-09 07:47:33
End at: 2018-08-09 07:48:03
Local clock offset: 1.761 ms
Remote clock offset: -12.224 ms

Below is generated by plot.py at 2018-08-09 08:08:17
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 1115.487 ms
Loss rate: 75.83%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 1099.927 ms
Loss rate: 51.81%
-- Flow 2:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 1140.091 ms
Loss rate: 89.88%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1093.118 ms
Loss rate: 78.57%

Run 2: Report of PCC-Allegro — Data Link

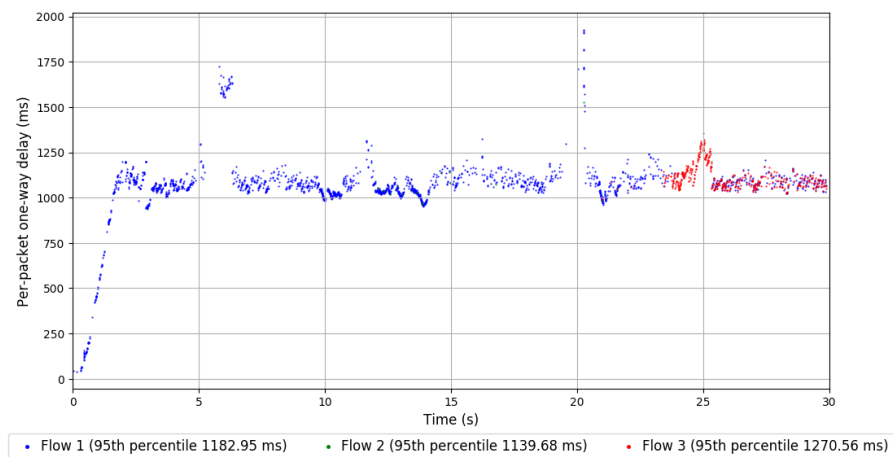
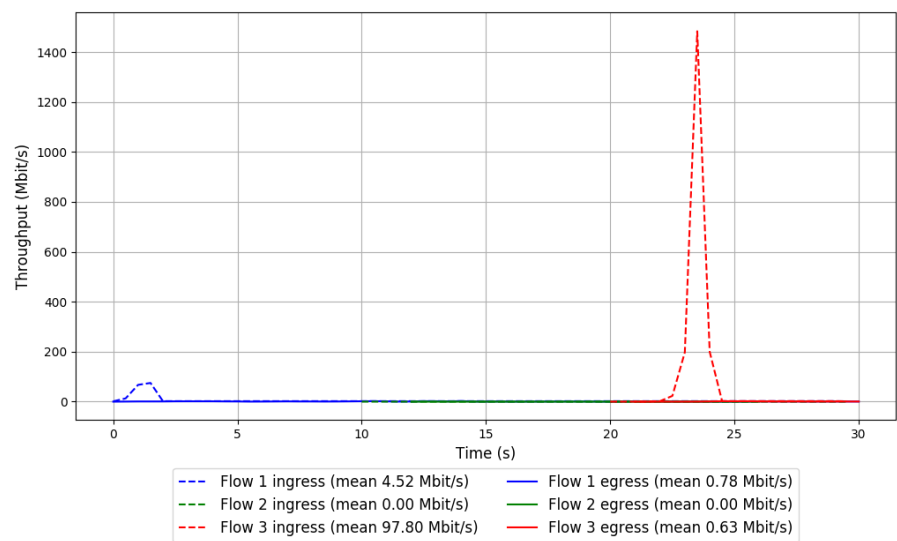


Run 3: Statistics of PCC-Allegro

Start at: 2018-08-09 08:06:09
End at: 2018-08-09 08:06:39
Local clock offset: 3.257 ms
Remote clock offset: -13.56 ms

Below is generated by plot.py at 2018-08-09 08:08:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 1233.217 ms
Loss rate: 97.36%
-- Flow 1:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 1182.947 ms
Loss rate: 82.72%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1139.681 ms
Loss rate: 52.71%
-- Flow 3:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 1270.563 ms
Loss rate: 99.42%

Run 3: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

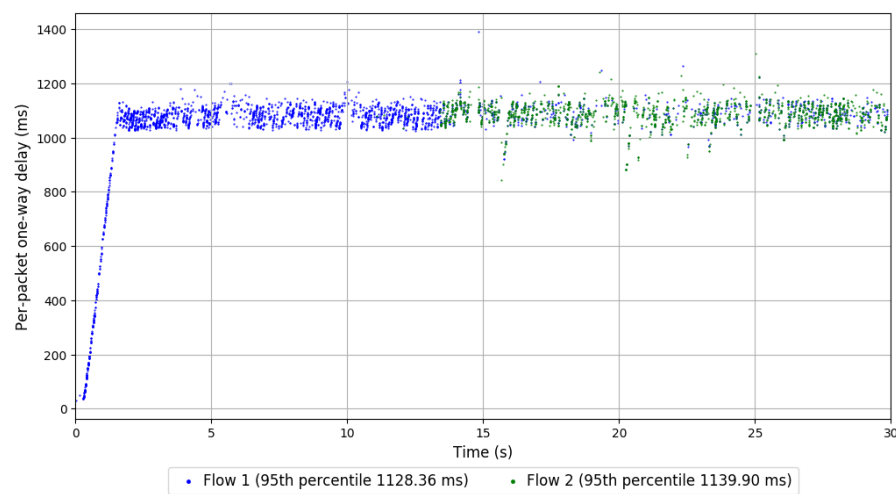
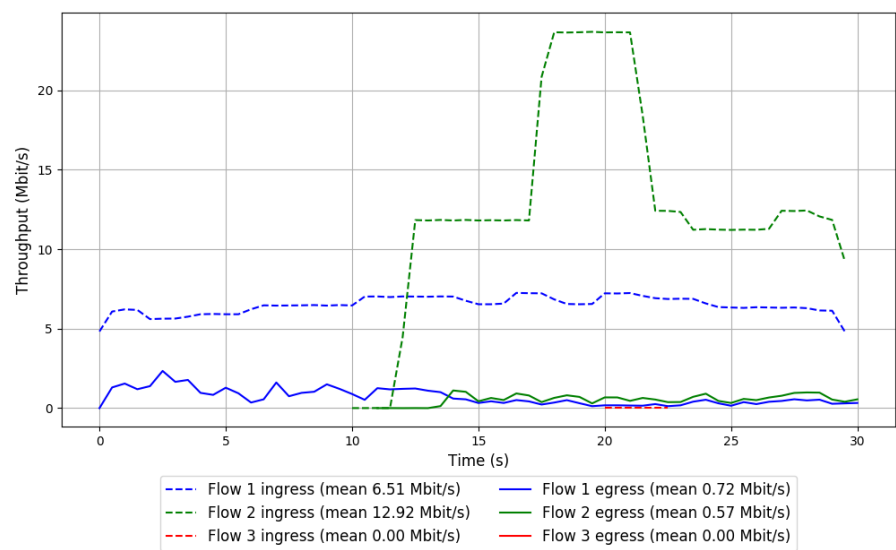
Start at: 2018-08-09 07:24:33

End at: 2018-08-09 07:25:03

Local clock offset: 3.085 ms

Remote clock offset: -7.335 ms

Run 1: Report of PCC-Expr — Data Link

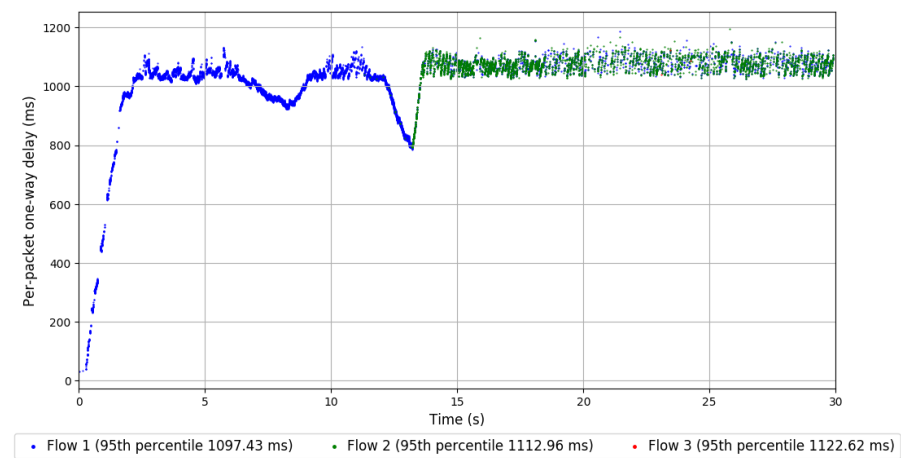
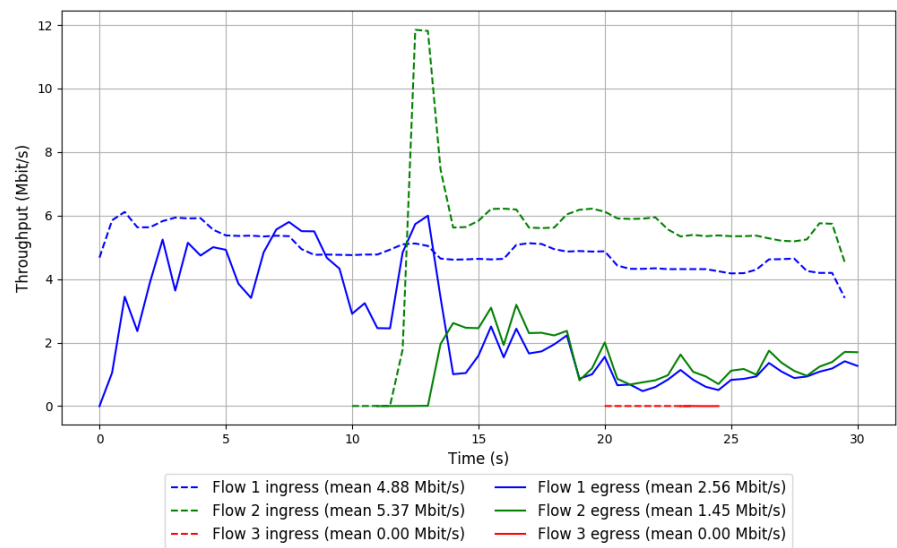


Run 2: Statistics of PCC-Expr

Start at: 2018-08-09 07:43:10
End at: 2018-08-09 07:43:40
Local clock offset: 0.04 ms
Remote clock offset: -12.346 ms

Below is generated by plot.py at 2018-08-09 08:08:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 1104.357 ms
Loss rate: 59.05%
-- Flow 1:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 1097.432 ms
Loss rate: 47.52%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 1112.956 ms
Loss rate: 74.80%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 1122.623 ms
Loss rate: 77.71%

Run 2: Report of PCC-Expr — Data Link

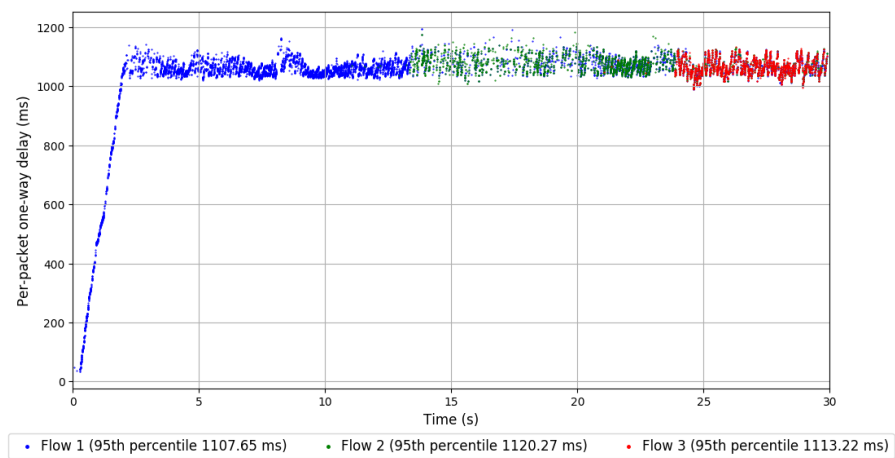
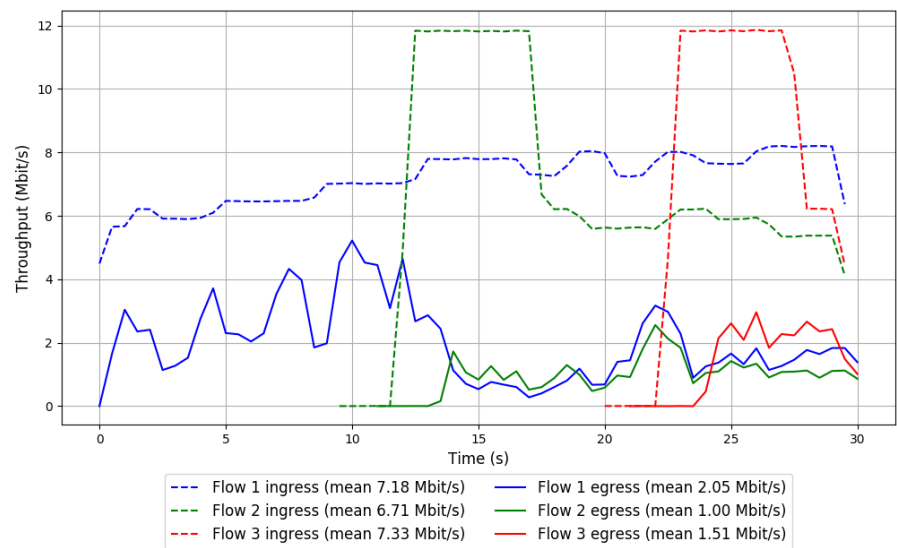


Run 3: Statistics of PCC-Expr

Start at: 2018-08-09 08:01:47
End at: 2018-08-09 08:02:17
Local clock offset: 2.353 ms
Remote clock offset: -14.623 ms

Below is generated by plot.py at 2018-08-09 08:08:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.13 Mbit/s
95th percentile per-packet one-way delay: 1112.883 ms
Loss rate: 77.81%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 1107.647 ms
Loss rate: 71.49%
-- Flow 2:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 1120.271 ms
Loss rate: 85.92%
-- Flow 3:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 1113.220 ms
Loss rate: 81.65%

Run 3: Report of PCC-Expr — Data Link

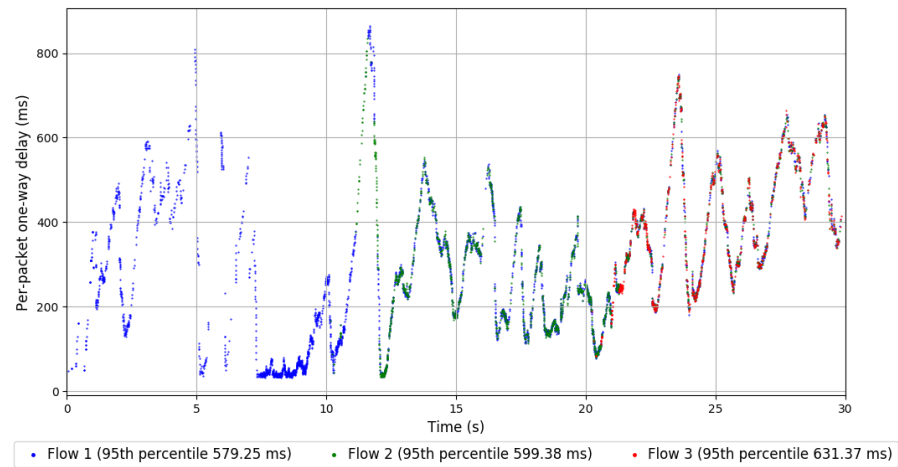
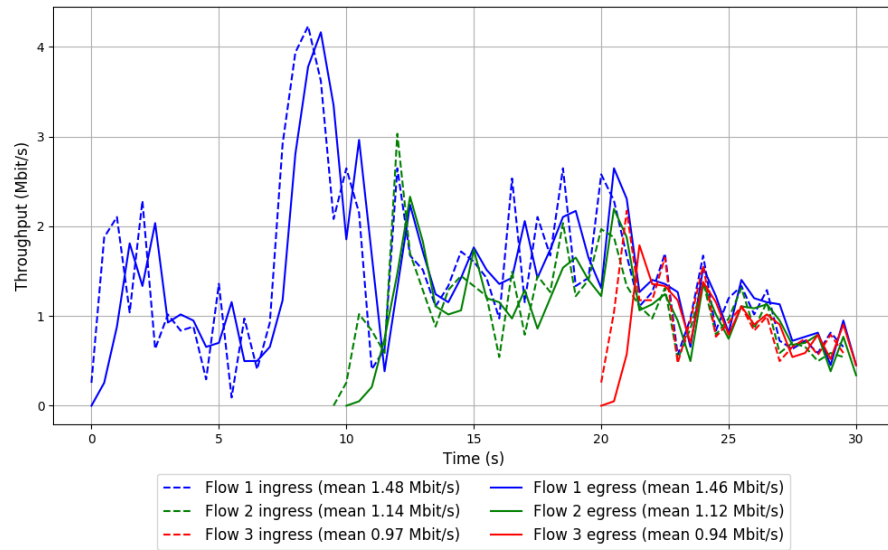


Run 1: Statistics of QUIC Cubic

Start at: 2018-08-09 07:25:39
End at: 2018-08-09 07:26:09
Local clock offset: 1.43 ms
Remote clock offset: -7.125 ms

Below is generated by plot.py at 2018-08-09 08:08:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 597.621 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 579.251 ms
Loss rate: 1.64%
-- Flow 2:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 599.375 ms
Loss rate: 2.26%
-- Flow 3:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 631.371 ms
Loss rate: 4.78%

Run 1: Report of QUIC Cubic — Data Link

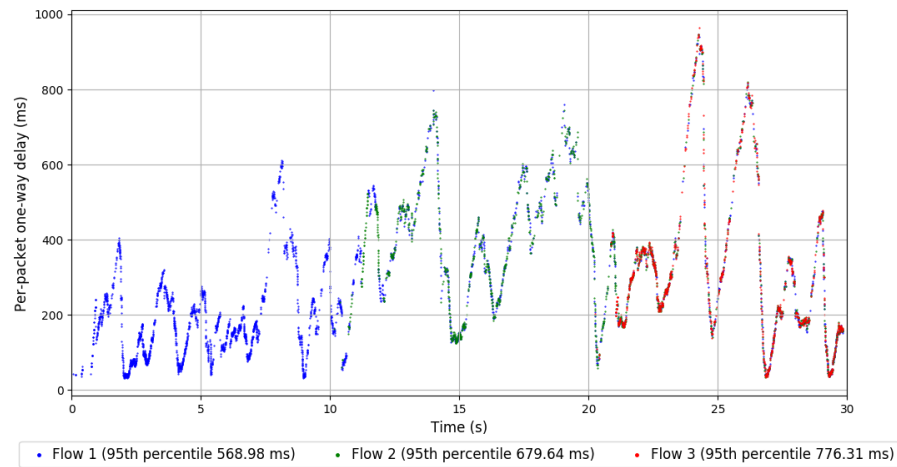
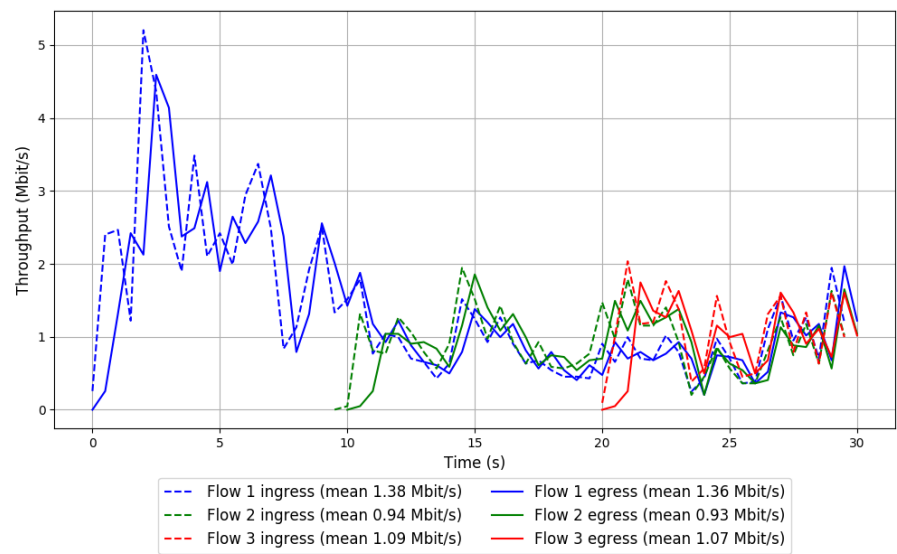


Run 2: Statistics of QUIC Cubic

Start at: 2018-08-09 07:44:16
End at: 2018-08-09 07:44:46
Local clock offset: -0.625 ms
Remote clock offset: -12.78 ms

Below is generated by plot.py at 2018-08-09 08:08:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 640.568 ms
Loss rate: 1.90%
-- Flow 1:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 568.975 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 679.640 ms
Loss rate: 2.30%
-- Flow 3:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 776.314 ms
Loss rate: 3.40%

Run 2: Report of QUIC Cubic — Data Link

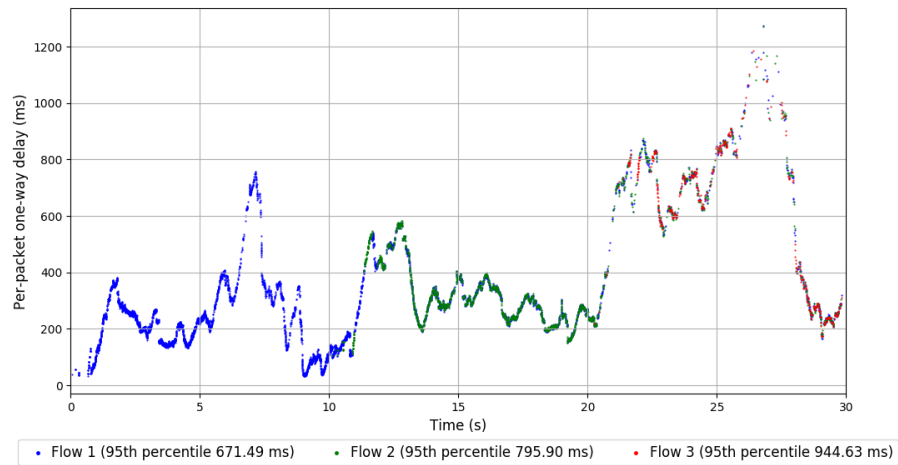
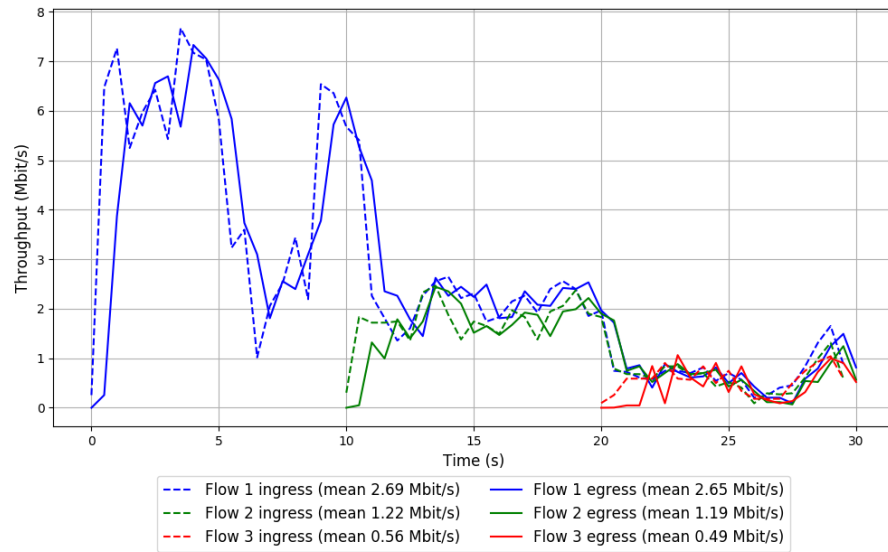


Run 3: Statistics of QUIC Cubic

Start at: 2018-08-09 08:02:53
End at: 2018-08-09 08:03:23
Local clock offset: -0.185 ms
Remote clock offset: -14.675 ms

Below is generated by plot.py at 2018-08-09 08:08:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 744.968 ms
Loss rate: 2.59%
-- Flow 1:
Average throughput: 2.65 Mbit/s
95th percentile per-packet one-way delay: 671.493 ms
Loss rate: 1.50%
-- Flow 2:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 795.896 ms
Loss rate: 3.45%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 944.635 ms
Loss rate: 14.89%

Run 3: Report of QUIC Cubic — Data Link

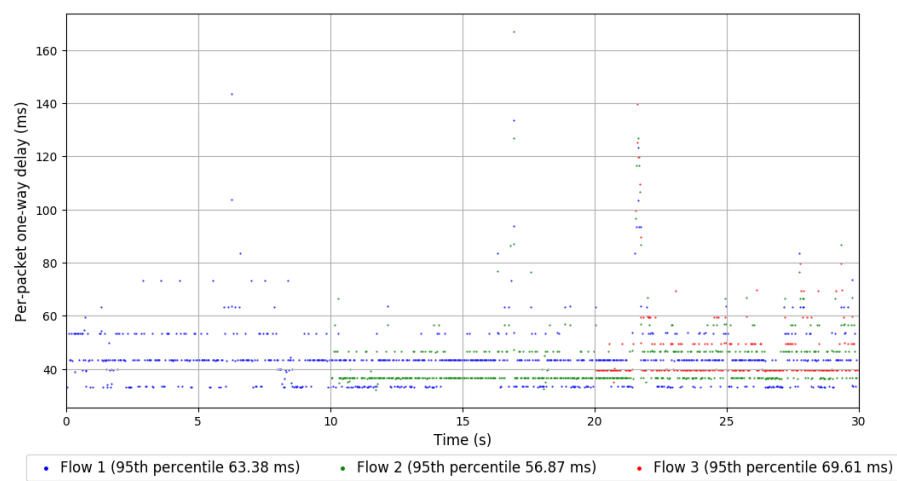
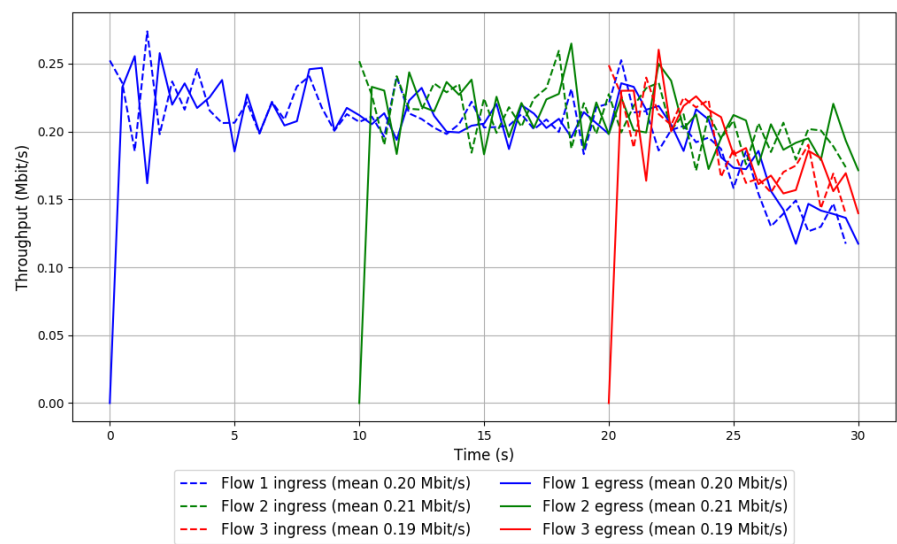


Run 1: Statistics of SCReAM

Start at: 2018-08-09 07:22:22
End at: 2018-08-09 07:22:52
Local clock offset: -0.964 ms
Remote clock offset: -8.115 ms

Below is generated by plot.py at 2018-08-09 08:08:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 63.402 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 63.383 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 56.870 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 69.609 ms
Loss rate: 0.31%

Run 1: Report of SReAM — Data Link

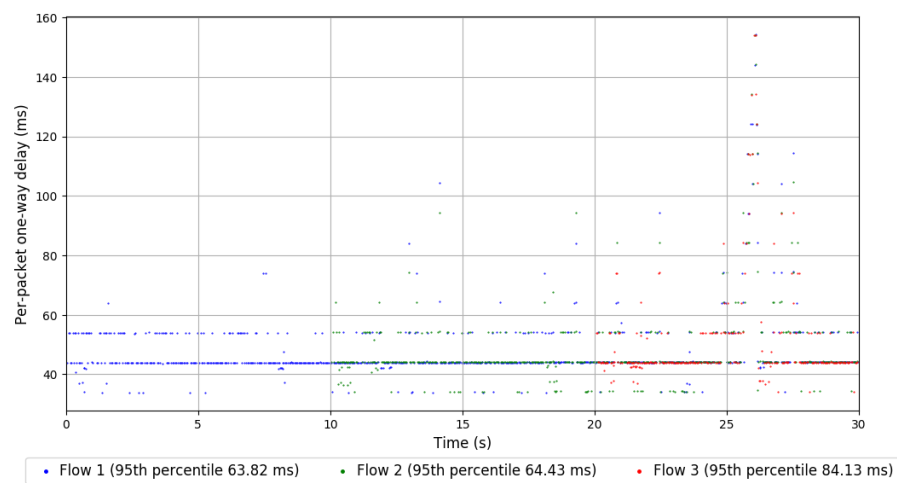
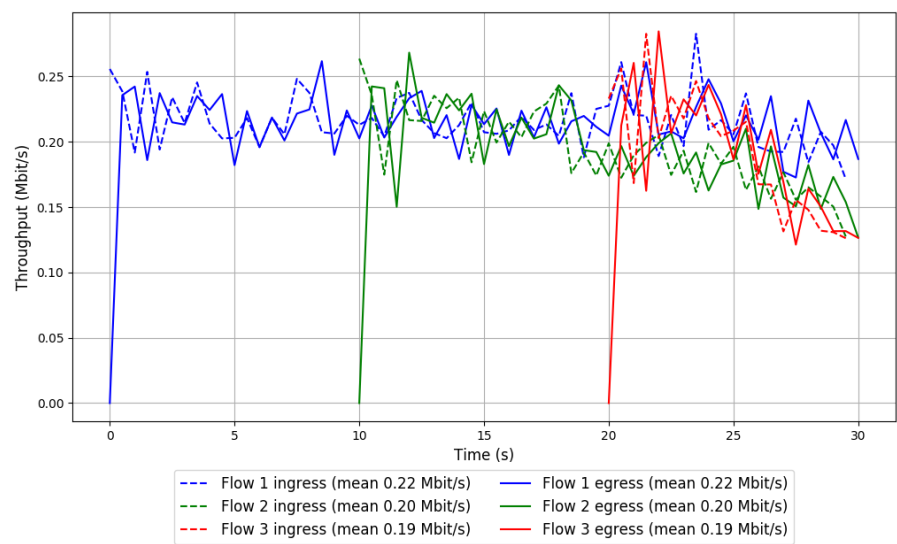


Run 2: Statistics of SReAM

Start at: 2018-08-09 07:40:59
End at: 2018-08-09 07:41:29
Local clock offset: -3.35 ms
Remote clock offset: -10.892 ms

Below is generated by plot.py at 2018-08-09 08:08:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 64.430 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.819 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 64.429 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 84.131 ms
Loss rate: 0.26%

Run 2: Report of SReAM — Data Link

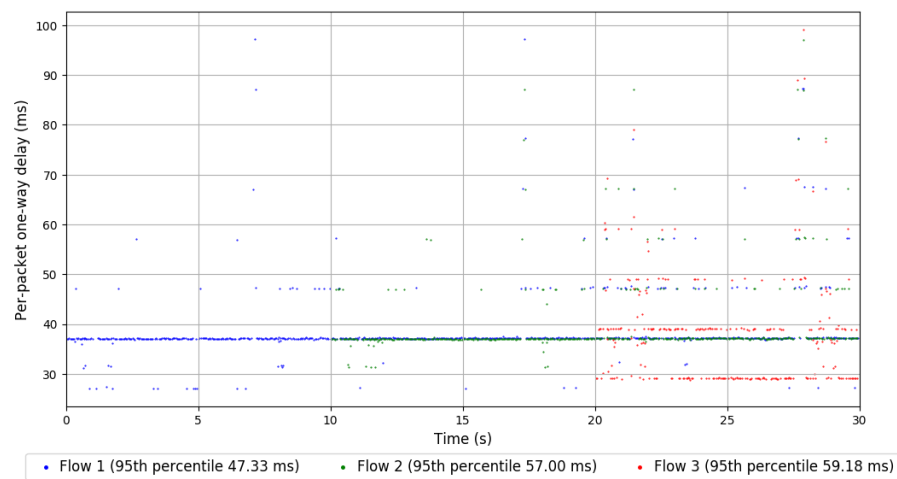
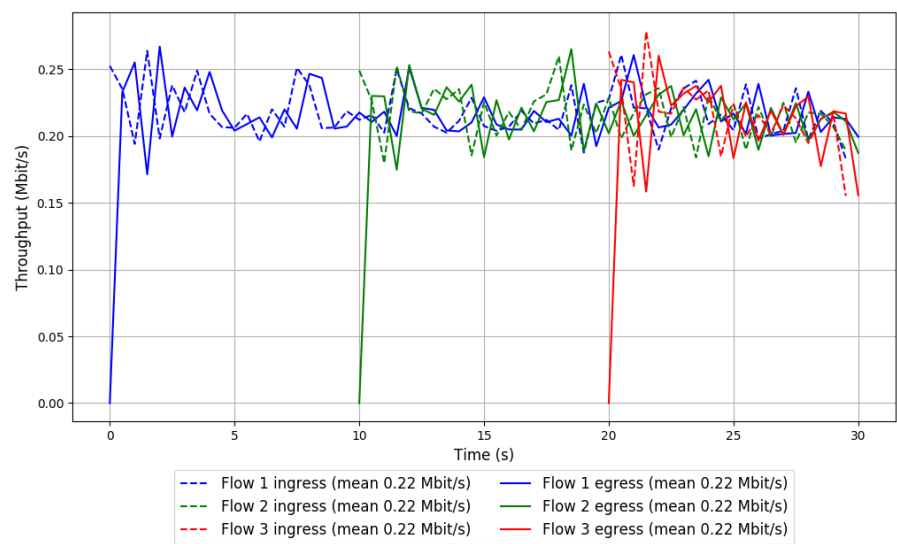


Run 3: Statistics of SReAM

Start at: 2018-08-09 07:59:36
End at: 2018-08-09 08:00:06
Local clock offset: 3.202 ms
Remote clock offset: -14.044 ms

Below is generated by plot.py at 2018-08-09 08:08:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 54.741 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.332 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.001 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.184 ms
Loss rate: 0.31%

Run 3: Report of SReAM — Data Link

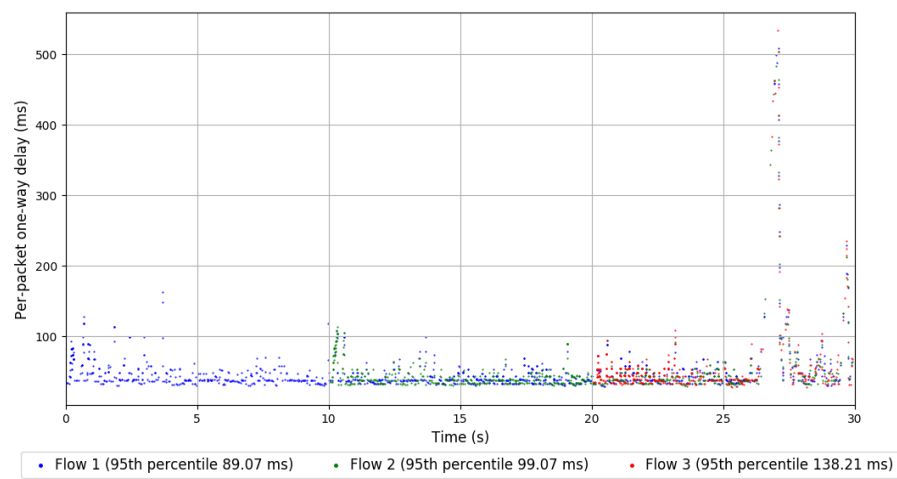
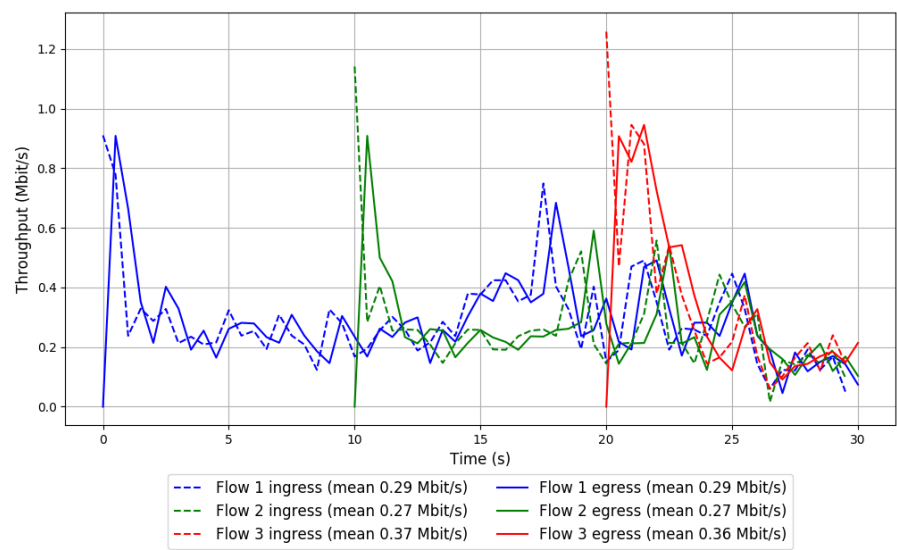


Run 1: Statistics of Sprout

Start at: 2018-08-09 07:15:50
End at: 2018-08-09 07:16:20
Local clock offset: 0.956 ms
Remote clock offset: -10.154 ms

Below is generated by plot.py at 2018-08-09 08:08:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 98.405 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 89.071 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 99.074 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 138.211 ms
Loss rate: 0.33%

Run 1: Report of Sprout — Data Link

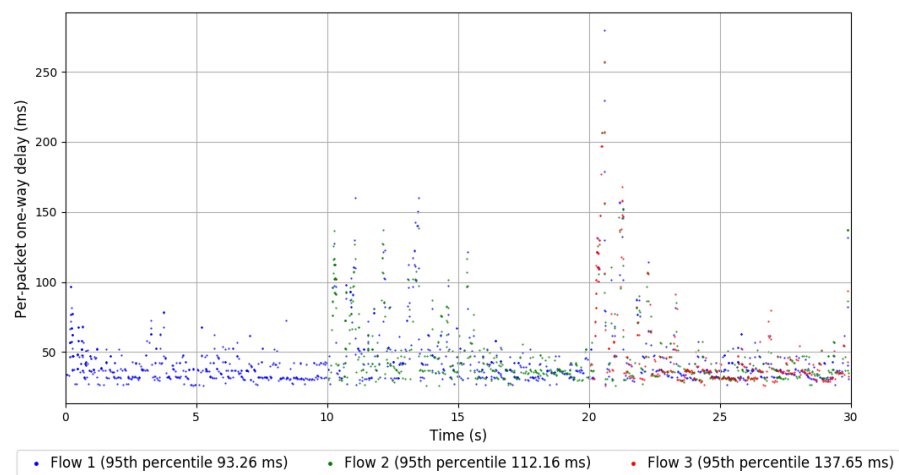
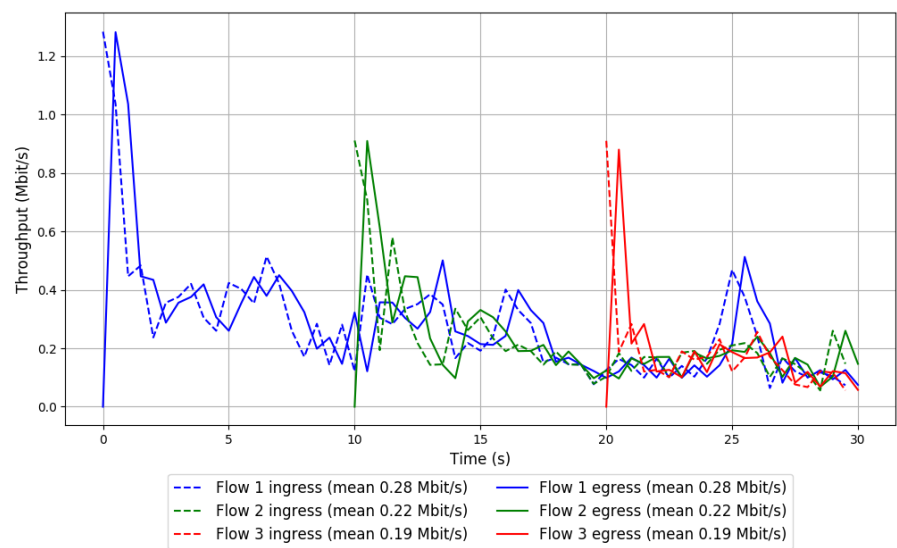


Run 2: Statistics of Sprout

Start at: 2018-08-09 07:34:24
End at: 2018-08-09 07:34:54
Local clock offset: 3.379 ms
Remote clock offset: -9.069 ms

```
# Below is generated by plot.py at 2018-08-09 08:08:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 110.022 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 93.257 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.156 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 137.652 ms
Loss rate: 0.00%
```


Run 2: Report of Sprout — Data Link

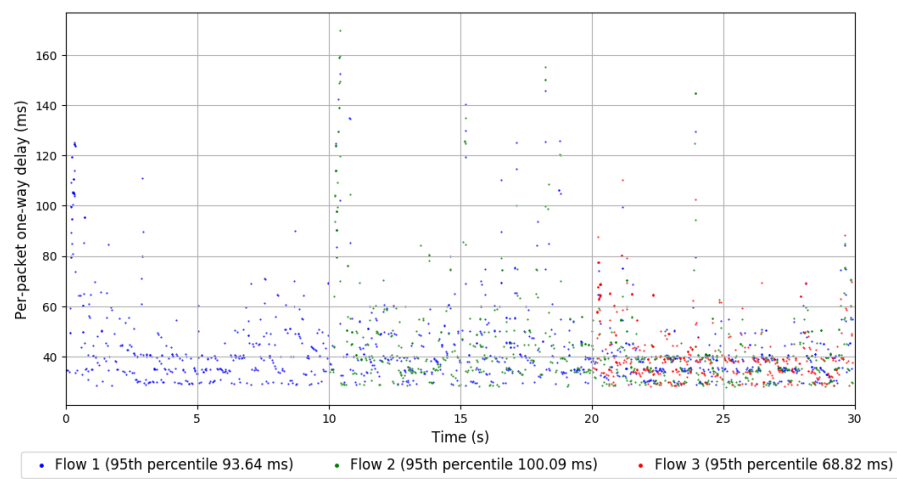
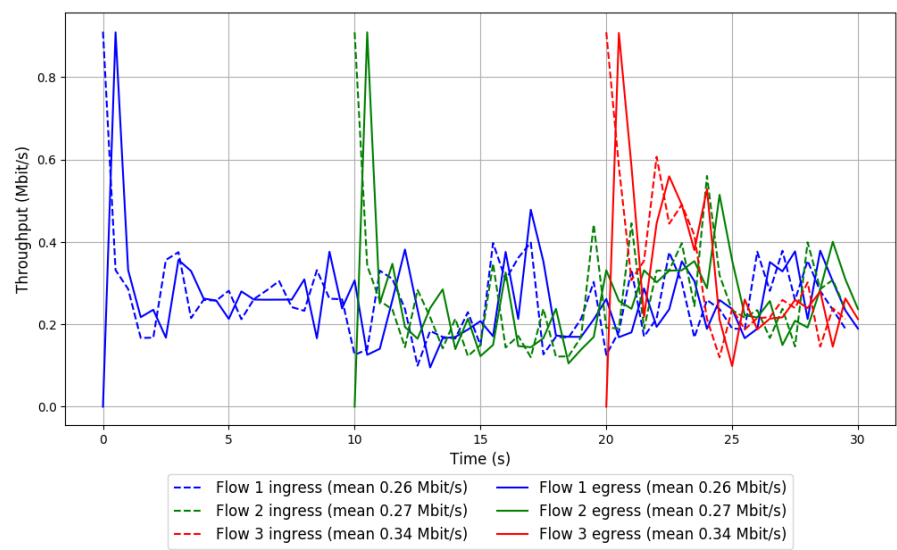


Run 3: Statistics of Sprout

Start at: 2018-08-09 07:53:02
End at: 2018-08-09 07:53:32
Local clock offset: 2.586 ms
Remote clock offset: -12.663 ms

```
# Below is generated by plot.py at 2018-08-09 08:08:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 89.329 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 93.644 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 100.095 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 68.823 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

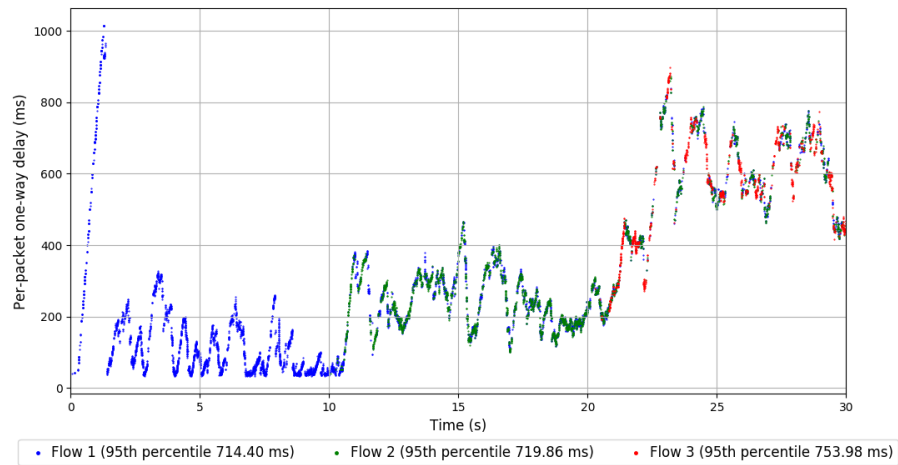
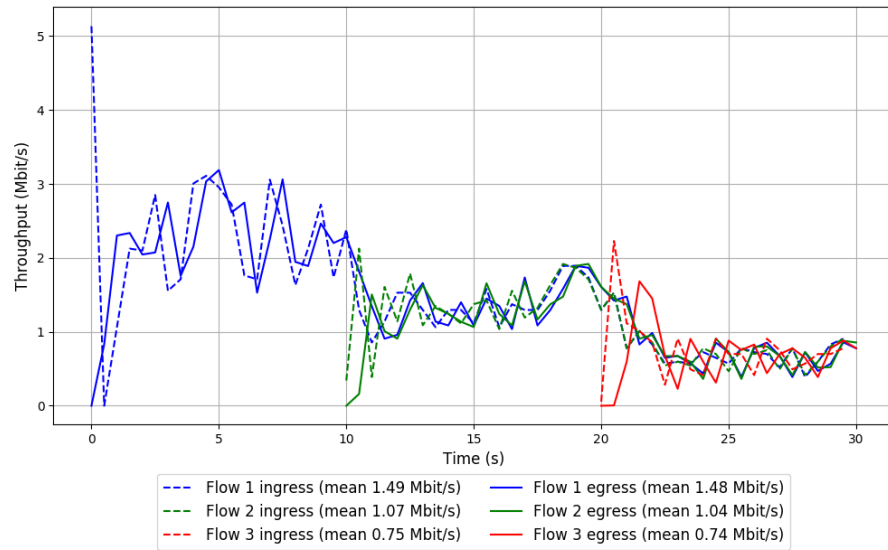


Run 1: Statistics of TaoVA-100x

Start at: 2018-08-09 07:12:33
End at: 2018-08-09 07:13:03
Local clock offset: -0.013 ms
Remote clock offset: -7.625 ms

Below is generated by plot.py at 2018-08-09 08:08:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 724.930 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 714.400 ms
Loss rate: 1.18%
-- Flow 2:
Average throughput: 1.04 Mbit/s
95th percentile per-packet one-way delay: 719.863 ms
Loss rate: 2.29%
-- Flow 3:
Average throughput: 0.74 Mbit/s
95th percentile per-packet one-way delay: 753.981 ms
Loss rate: 4.54%

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

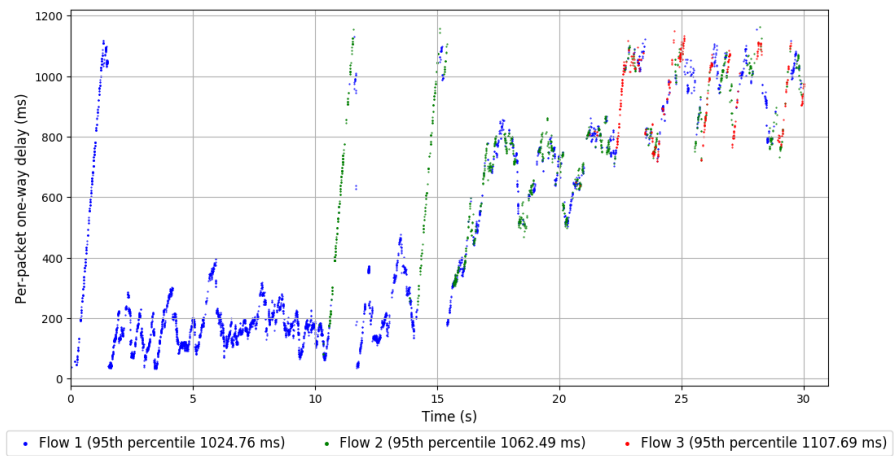
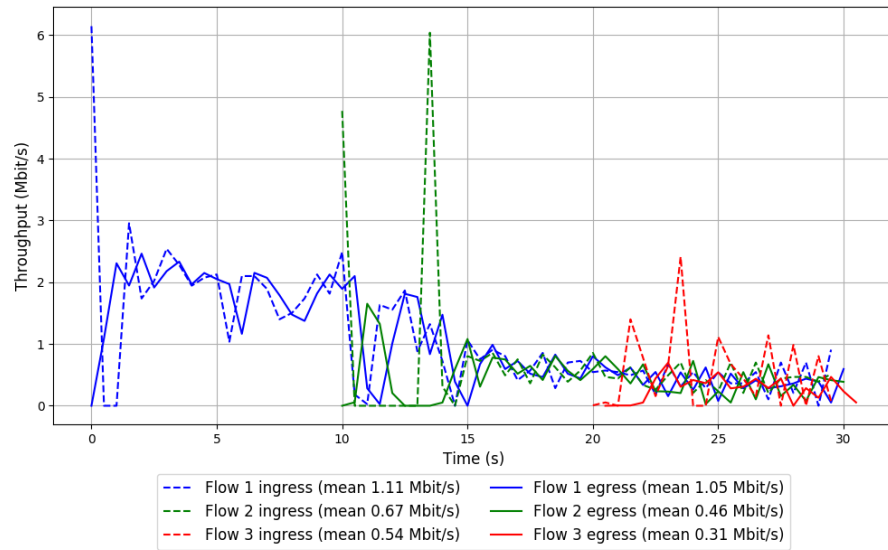


Run 2: Statistics of TaoVA-100x

Start at: 2018-08-09 07:31:07
End at: 2018-08-09 07:31:37
Local clock offset: -0.976 ms
Remote clock offset: -8.161 ms

Below is generated by plot.py at 2018-08-09 08:08:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 1053.208 ms
Loss rate: 17.06%
-- Flow 1:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 1024.762 ms
Loss rate: 6.09%
-- Flow 2:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 1062.492 ms
Loss rate: 32.25%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 1107.694 ms
Loss rate: 46.96%

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

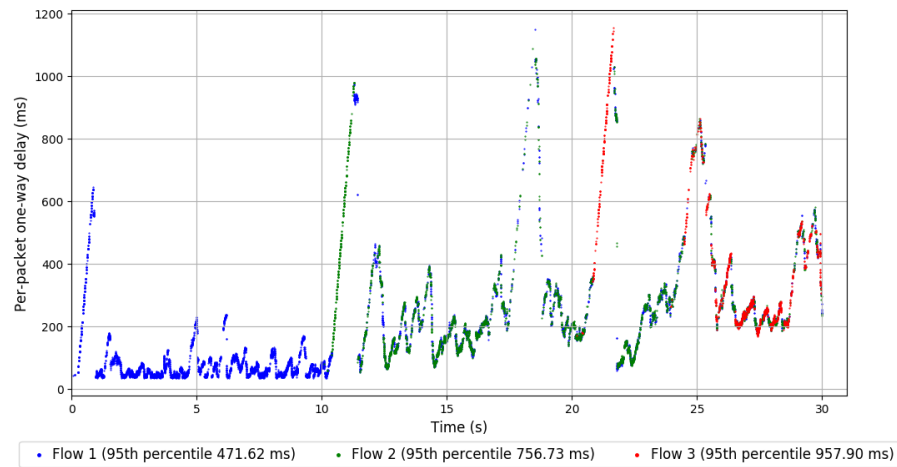
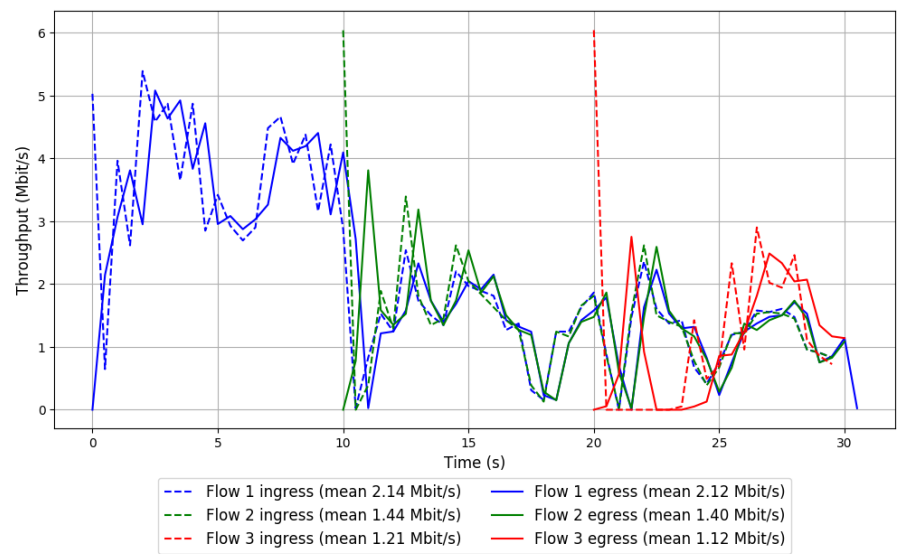


Run 3: Statistics of TaoVA-100x

Start at: 2018-08-09 07:49:44
End at: 2018-08-09 07:50:14
Local clock offset: -2.505 ms
Remote clock offset: -12.544 ms

Below is generated by plot.py at 2018-08-09 08:08:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.41 Mbit/s
95th percentile per-packet one-way delay: 702.087 ms
Loss rate: 2.34%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 471.617 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 756.733 ms
Loss rate: 2.55%
-- Flow 3:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 957.896 ms
Loss rate: 9.01%

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

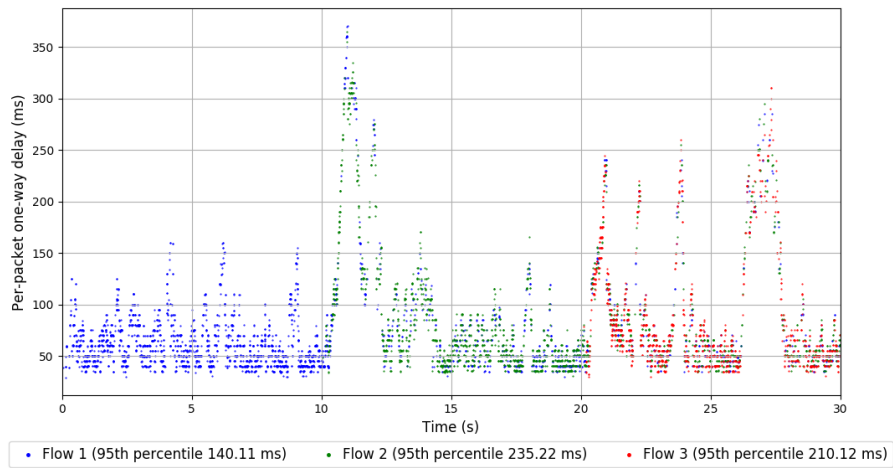
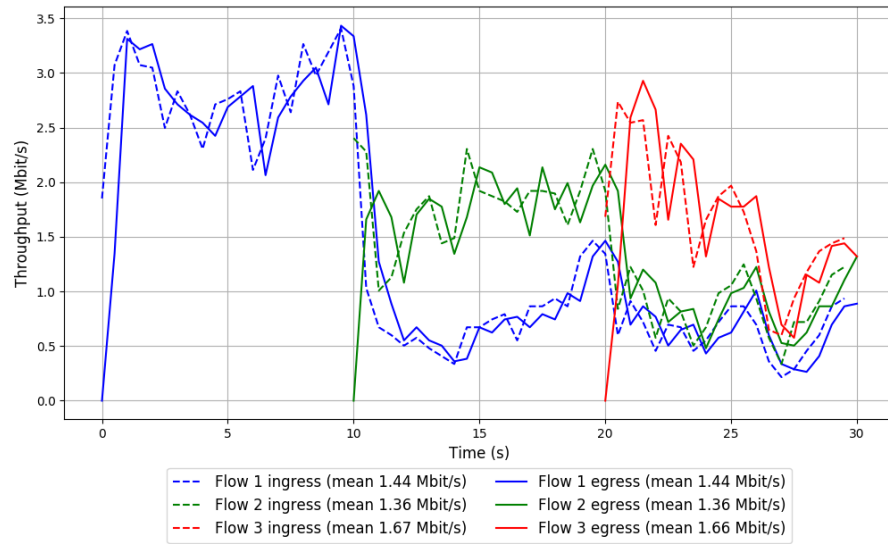


Run 1: Statistics of TCP Vegas

Start at: 2018-08-09 07:19:06
End at: 2018-08-09 07:19:36
Local clock offset: 3.711 ms
Remote clock offset: -7.866 ms

Below is generated by plot.py at 2018-08-09 08:08:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 204.519 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 140.113 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 235.216 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 210.117 ms
Loss rate: 0.79%

Run 1: Report of TCP Vegas — Data Link

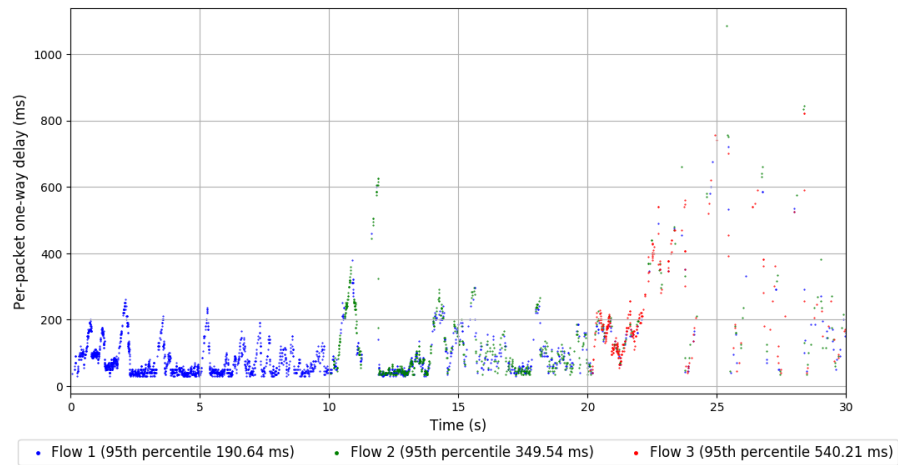
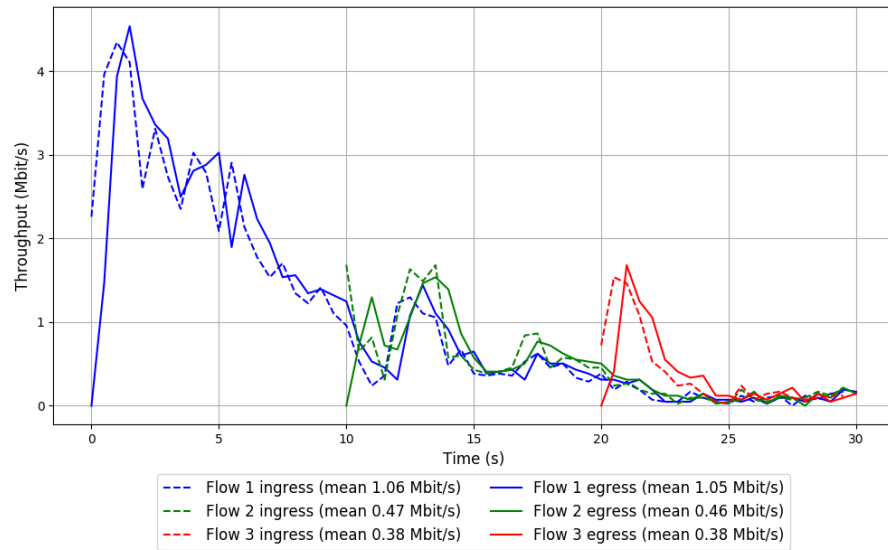


Run 2: Statistics of TCP Vegas

Start at: 2018-08-09 07:37:41
End at: 2018-08-09 07:38:11
Local clock offset: 2.966 ms
Remote clock offset: -9.786 ms

Below is generated by plot.py at 2018-08-09 08:08:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 260.180 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 190.644 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 349.536 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 540.210 ms
Loss rate: 2.21%

Run 2: Report of TCP Vegas — Data Link

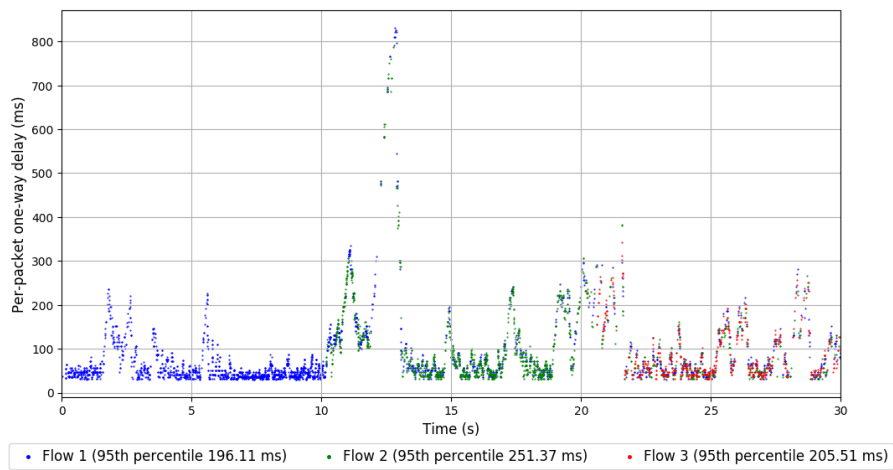
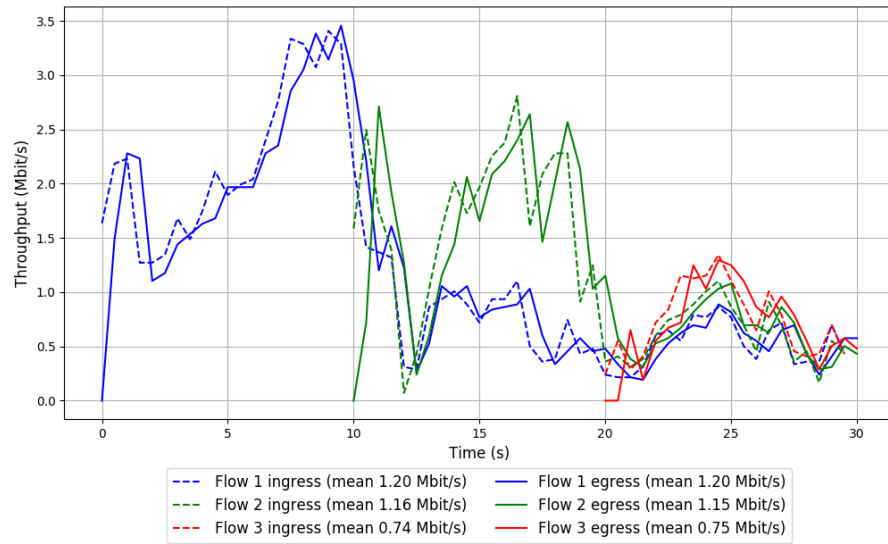


Run 3: Statistics of TCP Vegas

Start at: 2018-08-09 07:56:19
End at: 2018-08-09 07:56:49
Local clock offset: 3.2 ms
Remote clock offset: -13.095 ms

Below is generated by plot.py at 2018-08-09 08:08:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 226.035 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 196.110 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 251.368 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 205.510 ms
Loss rate: 1.31%

Run 3: Report of TCP Vegas — Data Link

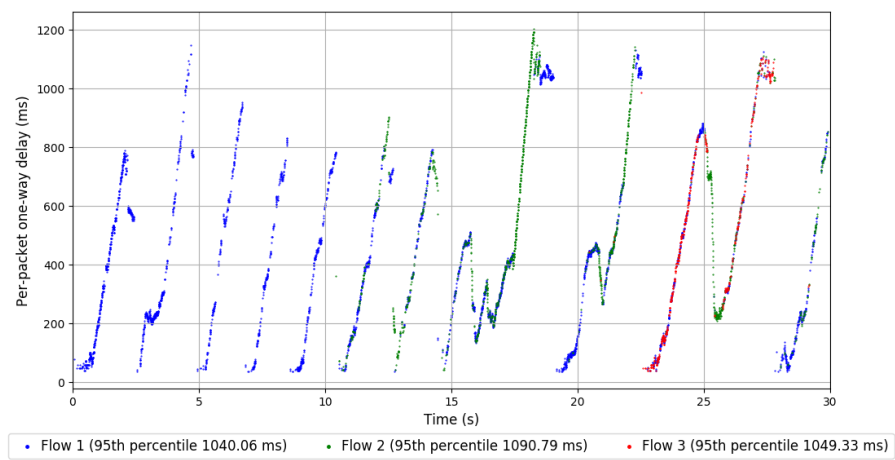
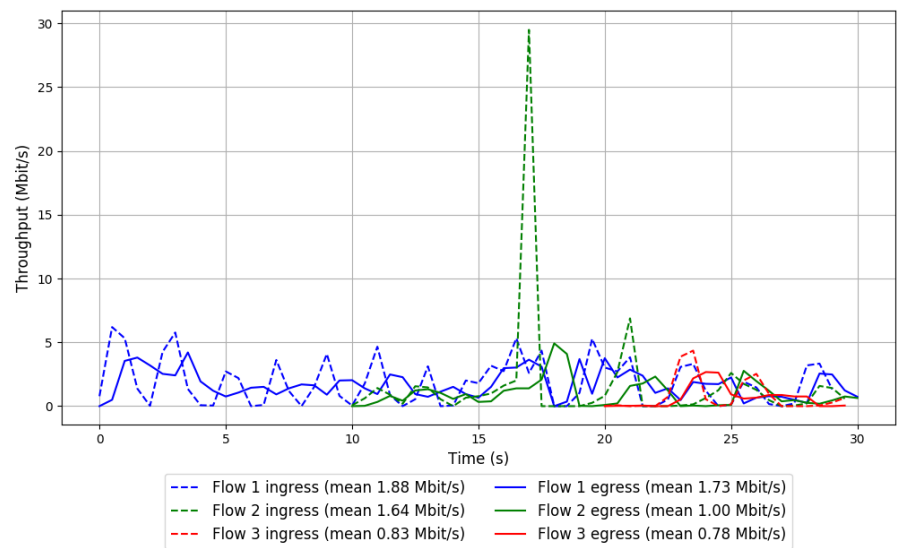


Run 1: Statistics of Verus

Start at: 2018-08-09 07:13:38
End at: 2018-08-09 07:14:08
Local clock offset: -2.545 ms
Remote clock offset: -8.989 ms

Below is generated by plot.py at 2018-08-09 08:08:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 1051.285 ms
Loss rate: 18.74%
-- Flow 1:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 1040.056 ms
Loss rate: 6.59%
-- Flow 2:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 1090.790 ms
Loss rate: 39.93%
-- Flow 3:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 1049.326 ms
Loss rate: 16.45%

Run 1: Report of Verus — Data Link

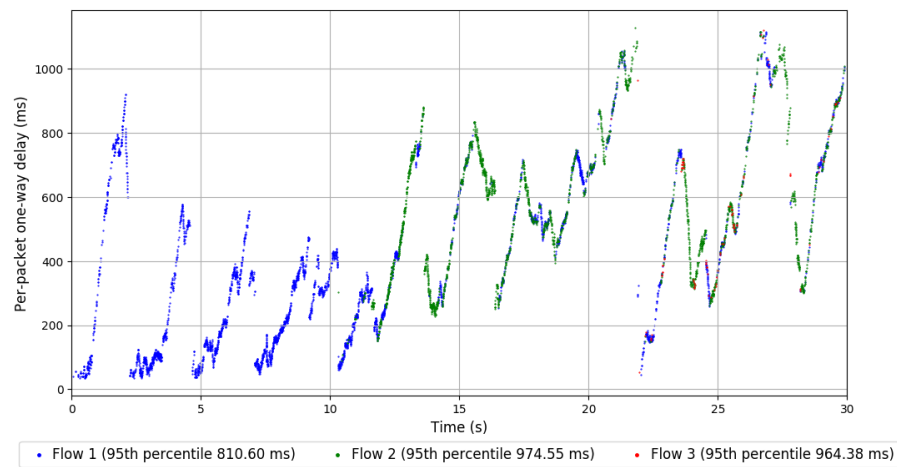
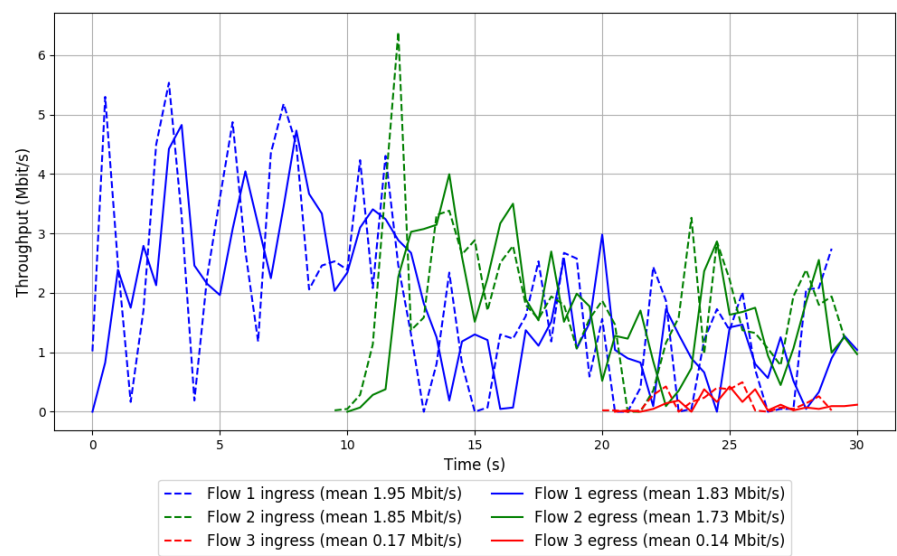


Run 2: Statistics of Verus

Start at: 2018-08-09 07:32:13
End at: 2018-08-09 07:32:43
Local clock offset: 0.333 ms
Remote clock offset: -9.028 ms

Below is generated by plot.py at 2018-08-09 08:08:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.01 Mbit/s
95th percentile per-packet one-way delay: 908.153 ms
Loss rate: 5.87%
-- Flow 1:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 810.601 ms
Loss rate: 4.64%
-- Flow 2:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 974.549 ms
Loss rate: 7.34%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 964.384 ms
Loss rate: 17.19%

Run 2: Report of Verus — Data Link

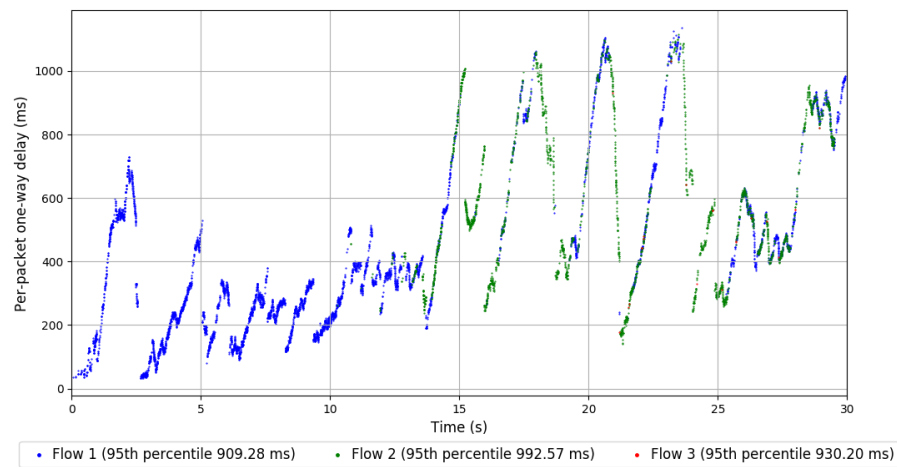
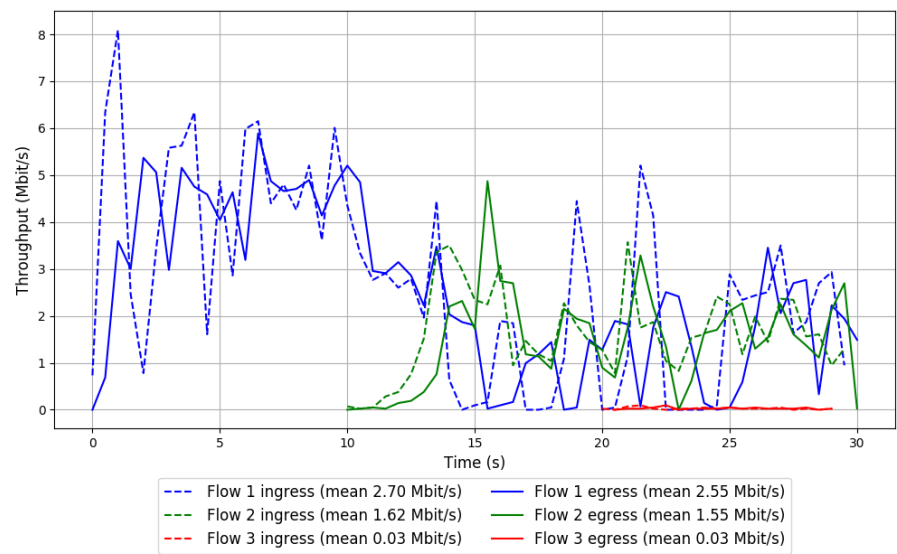


Run 3: Statistics of Verus

Start at: 2018-08-09 07:50:50
End at: 2018-08-09 07:51:20
Local clock offset: 0.874 ms
Remote clock offset: -11.898 ms

Below is generated by plot.py at 2018-08-09 08:08:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.56 Mbit/s
95th percentile per-packet one-way delay: 962.302 ms
Loss rate: 6.10%
-- Flow 1:
Average throughput: 2.55 Mbit/s
95th percentile per-packet one-way delay: 909.280 ms
Loss rate: 5.68%
-- Flow 2:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 992.568 ms
Loss rate: 7.16%
-- Flow 3:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 930.200 ms
Loss rate: 4.35%

Run 3: Report of Verus — Data Link

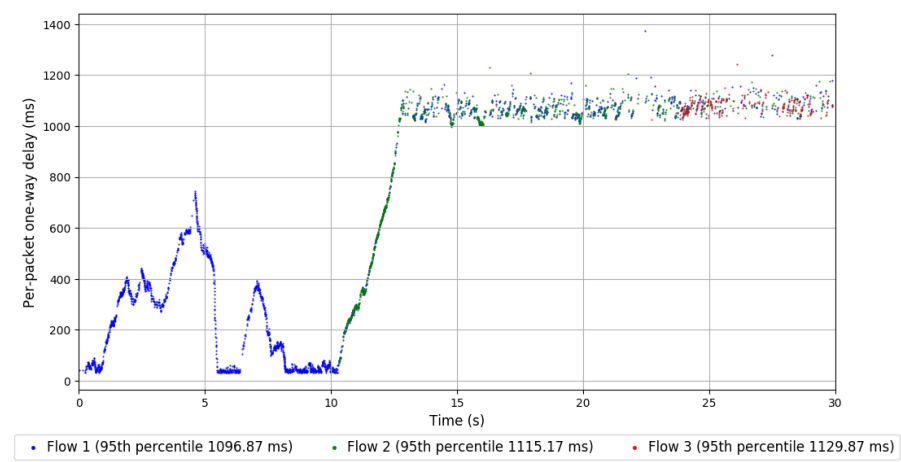
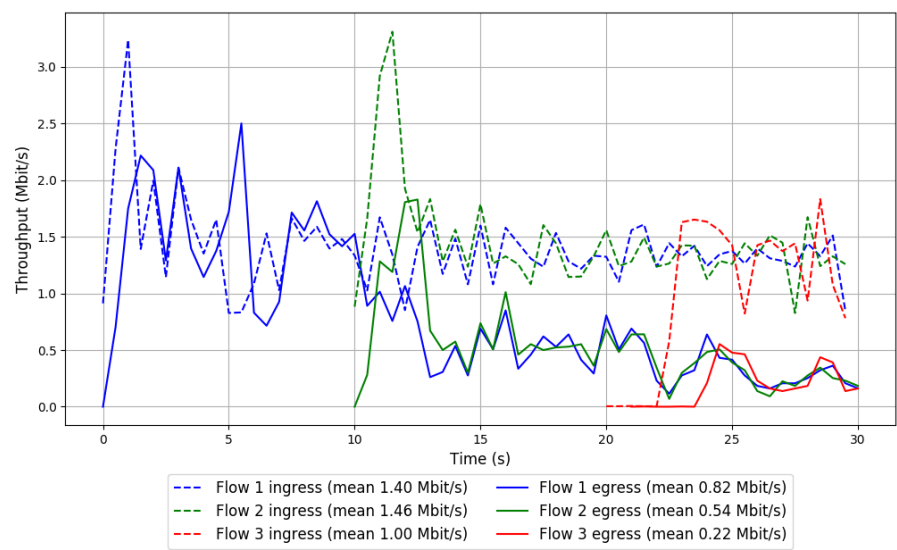


Run 1: Statistics of PCC-Vivace

Start at: 2018-08-09 07:23:27
End at: 2018-08-09 07:23:57
Local clock offset: -0.55 ms
Remote clock offset: -9.744 ms

Below is generated by plot.py at 2018-08-09 08:08:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 1106.848 ms
Loss rate: 54.32%
-- Flow 1:
Average throughput: 0.82 Mbit/s
95th percentile per-packet one-way delay: 1096.874 ms
Loss rate: 41.76%
-- Flow 2:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 1115.174 ms
Loss rate: 63.34%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1129.868 ms
Loss rate: 81.15%

Run 1: Report of PCC-Vivace — Data Link

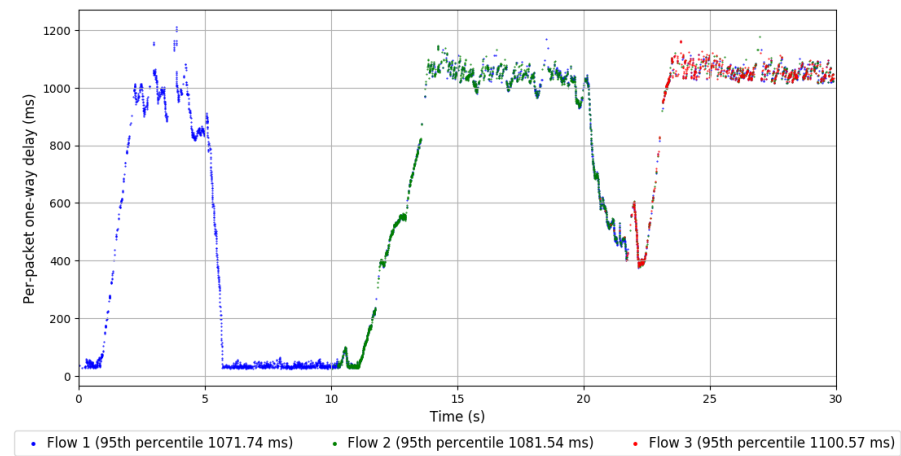
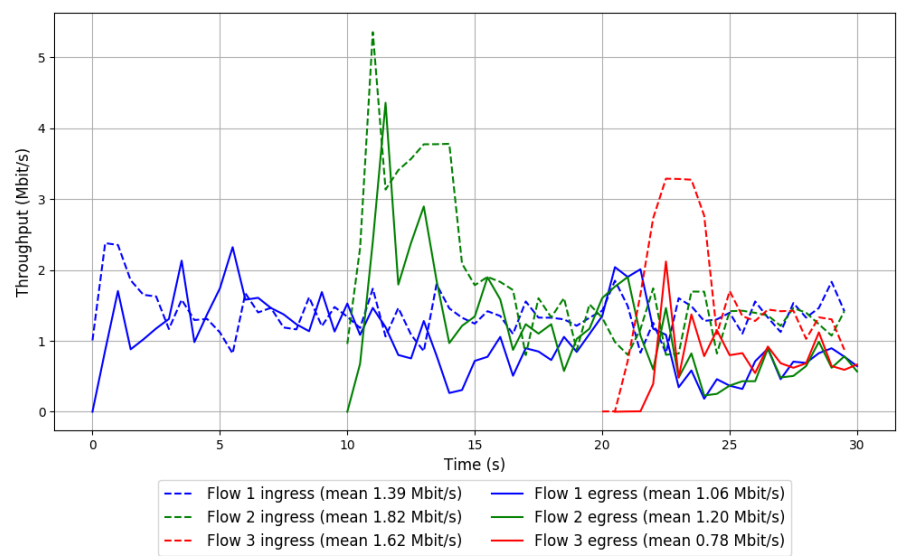


Run 2: Statistics of PCC-Vivace

Start at: 2018-08-09 07:42:04
End at: 2018-08-09 07:42:34
Local clock offset: 3.113 ms
Remote clock offset: -13.24 ms

Below is generated by plot.py at 2018-08-09 08:08:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 1080.927 ms
Loss rate: 33.34%
-- Flow 1:
Average throughput: 1.06 Mbit/s
95th percentile per-packet one-way delay: 1071.741 ms
Loss rate: 24.17%
-- Flow 2:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 1081.537 ms
Loss rate: 34.36%
-- Flow 3:
Average throughput: 0.78 Mbit/s
95th percentile per-packet one-way delay: 1100.574 ms
Loss rate: 54.92%

Run 2: Report of PCC-Vivace — Data Link

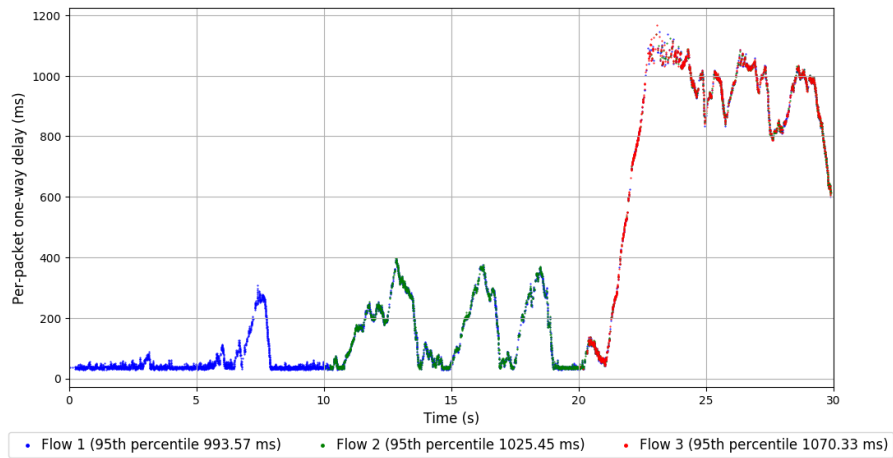
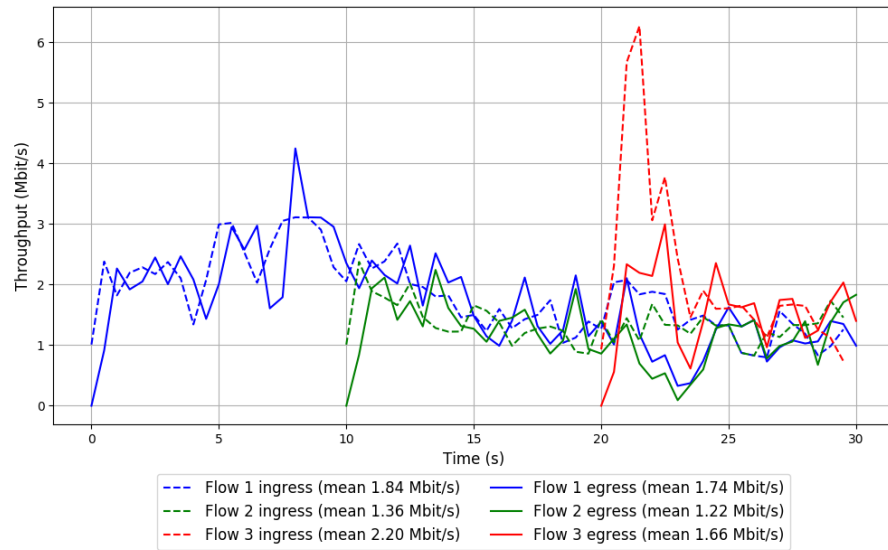


Run 3: Statistics of PCC-Vivace

Start at: 2018-08-09 08:00:41
End at: 2018-08-09 08:01:11
Local clock offset: 2.125 ms
Remote clock offset: -14.171 ms

Below is generated by plot.py at 2018-08-09 08:08:38
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 1030.966 ms
Loss rate: 10.86%
-- Flow 1:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 993.569 ms
Loss rate: 5.55%
-- Flow 2:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 1025.450 ms
Loss rate: 10.59%
-- Flow 3:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 1070.326 ms
Loss rate: 24.68%

Run 3: Report of PCC-Vivace — Data Link

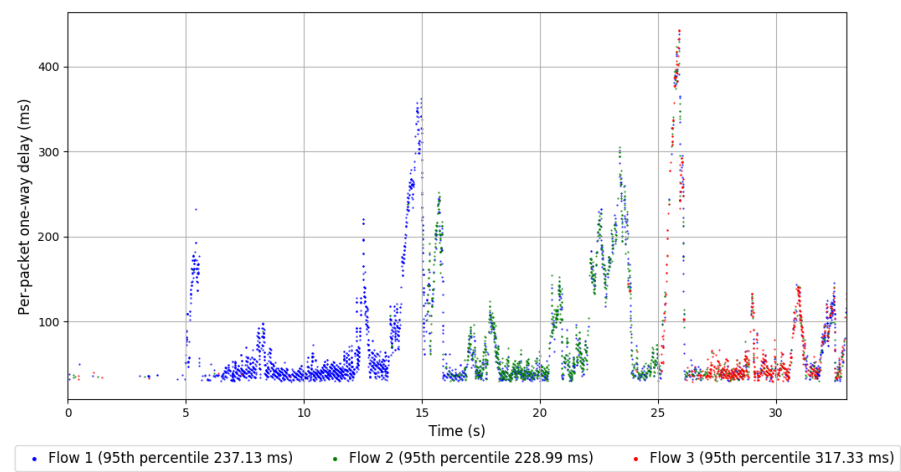
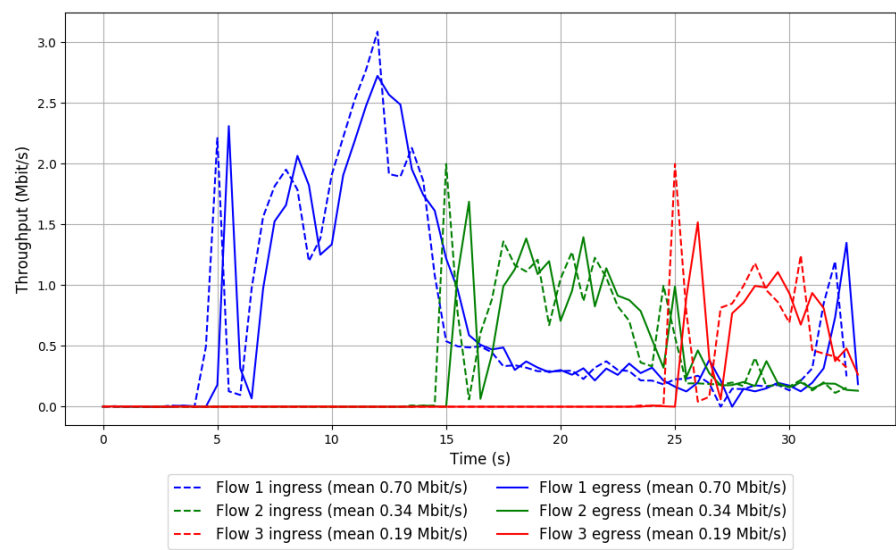


Run 1: Statistics of WebRTC media

Start at: 2018-08-09 07:20:11
End at: 2018-08-09 07:20:41
Local clock offset: 1.981 ms
Remote clock offset: -7.424 ms

Below is generated by plot.py at 2018-08-09 08:08:38
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 243.642 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 237.132 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 228.991 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 317.326 ms
Loss rate: 0.67%

Run 1: Report of WebRTC media — Data Link

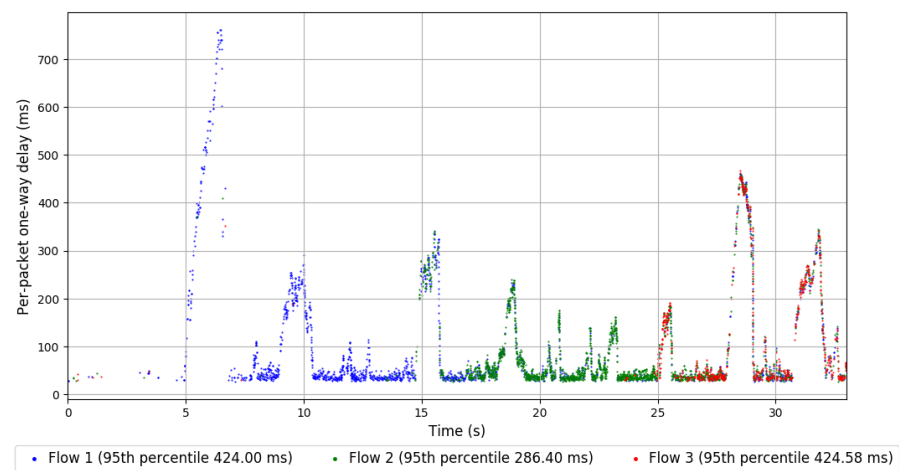
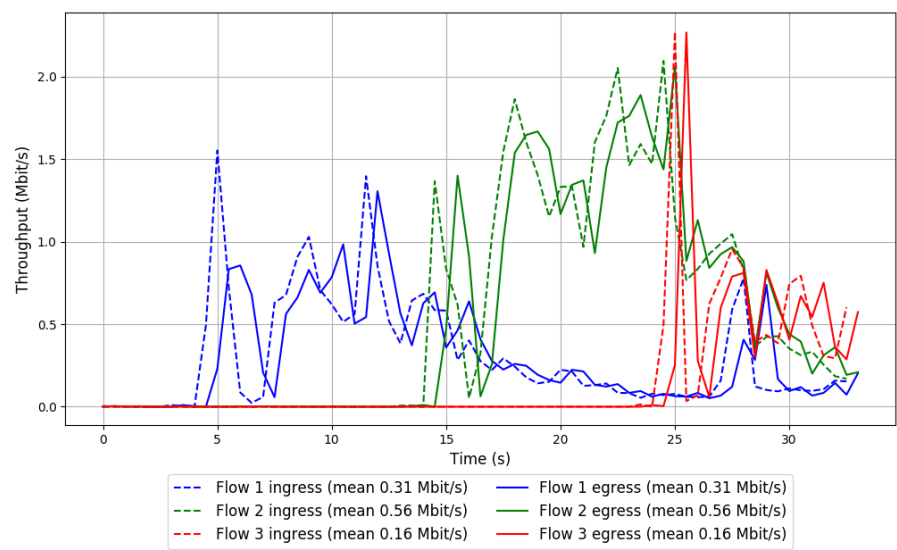


Run 2: Statistics of WebRTC media

Start at: 2018-08-09 07:38:47
End at: 2018-08-09 07:39:17
Local clock offset: 2.573 ms
Remote clock offset: -10.182 ms

Below is generated by plot.py at 2018-08-09 08:08:38
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 375.935 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 424.005 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 286.403 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 424.585 ms
Loss rate: 0.99%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-08-09 07:57:25
End at: 2018-08-09 07:57:55
Local clock offset: -3.355 ms
Remote clock offset: -14.24 ms

Below is generated by plot.py at 2018-08-09 08:08:38
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 472.847 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 361.498 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 493.395 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 563.696 ms
Loss rate: 1.71%

Run 3: Report of WebRTC media — Data Link

