

Pantheon Report

Generated at 2019-03-19 04:56:07 (UTC).

Data path: AWS California 2 on **ens5** (*local*) → Mexico on **em1** (*remote*).

Repeated the test of 21 congestion control schemes 5 times.

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

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

System info:

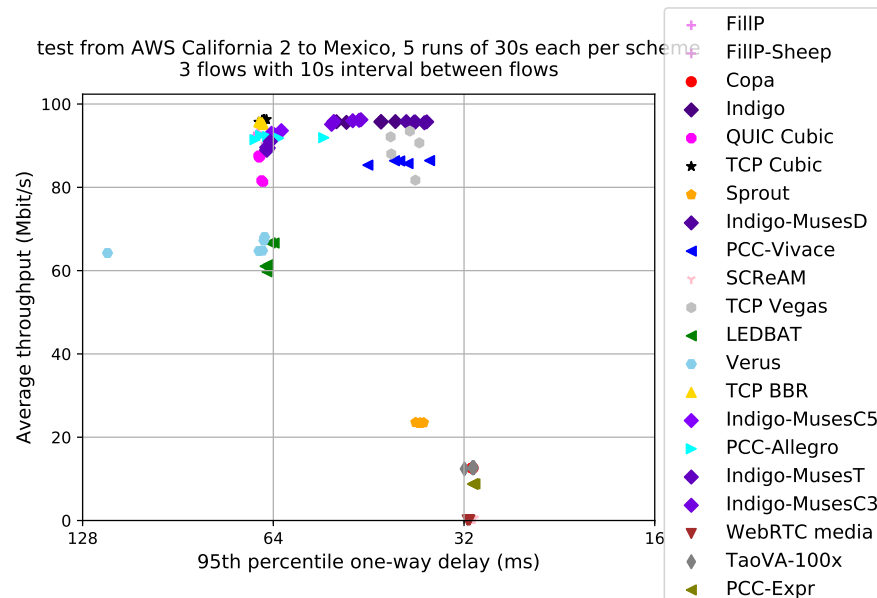
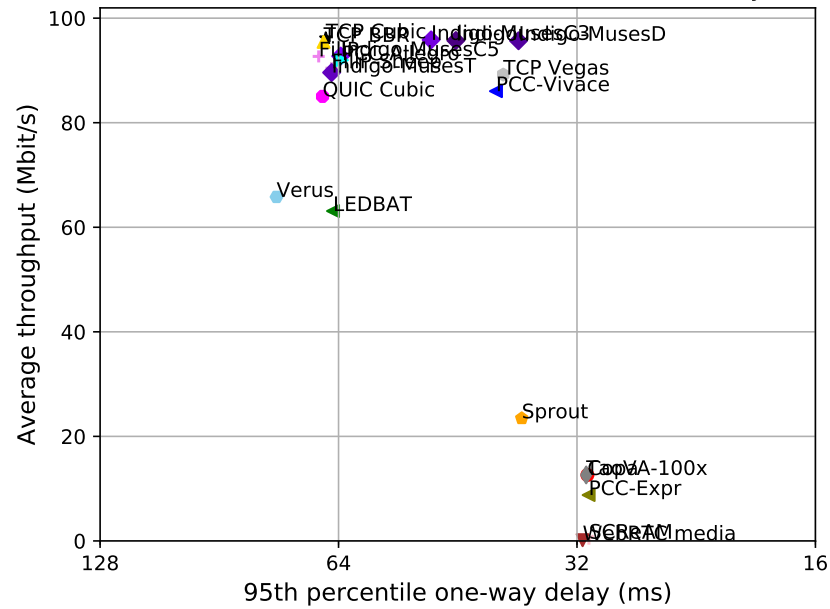
```
Linux 4.15.0-1033-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

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

test from AWS California 2 to Mexico, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



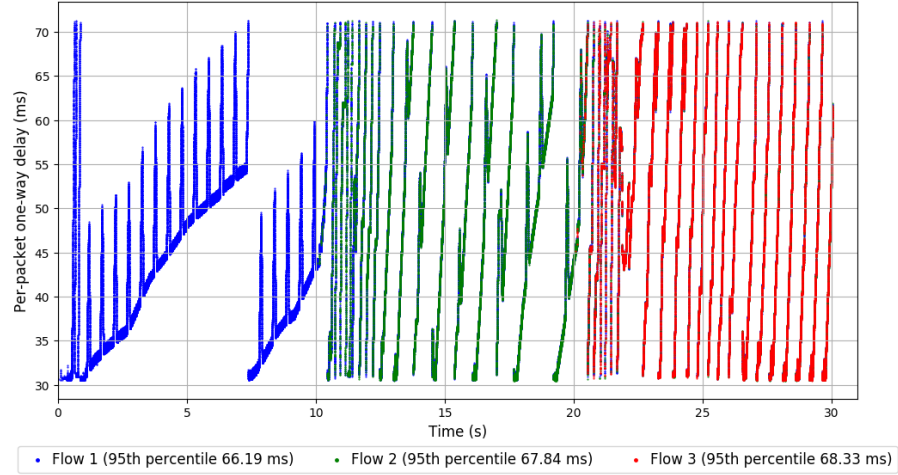
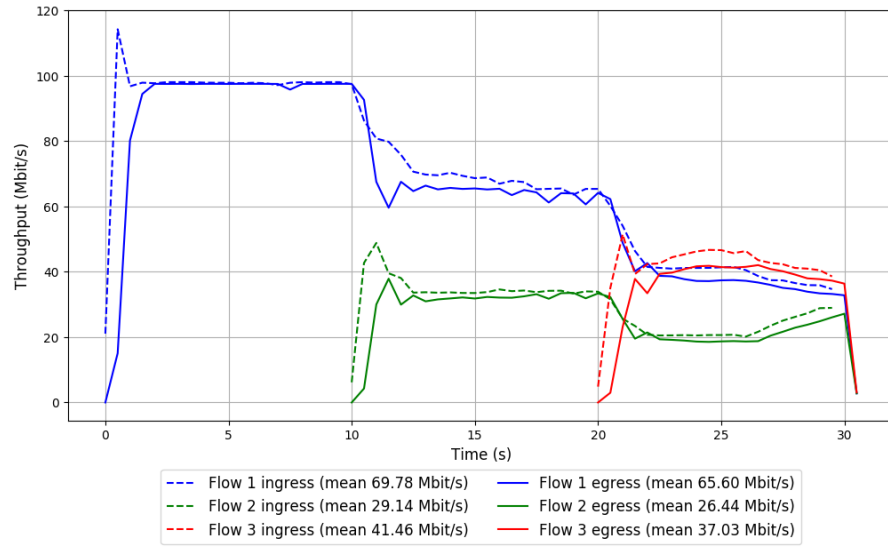
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	63.78	32.30	31.17	65.86	67.88	68.35	6.32	9.93	11.10
Copa	5	8.85	5.66	0.01	31.15	30.92	30.82	70.71	77.15	98.07
TCP Cubic	5	74.04	22.50	21.44	66.16	67.08	66.85	0.97	0.63	0.85
FillP	5	58.00	40.46	23.73	66.48	68.85	68.97	29.48	47.54	54.84
FillP-Sheep	5	55.68	41.66	21.33	63.42	67.02	65.37	9.07	16.47	16.34
Indigo	5	65.18	31.23	30.17	43.54	47.92	48.93	0.02	0.07	0.05
Indigo-MusesC3	5	53.54	48.64	35.87	45.09	48.41	56.90	0.34	0.48	2.06
Indigo-MusesC5	5	57.30	49.61	10.60	61.40	64.99	66.13	8.38	17.11	25.36
Indigo-MusesD	5	56.95	42.69	36.74	37.42	37.26	39.51	0.00	0.01	0.00
Indigo-MusesT	5	58.47	46.80	2.43	63.27	67.09	66.02	20.44	34.52	29.49
LEDBAT	5	39.86	25.94	18.06	64.44	65.98	58.26	0.17	0.16	0.40
PCC-Allegro	5	80.05	13.22	9.45	62.75	64.98	66.14	5.53	6.99	8.97
PCC-Expr	5	0.03	9.69	7.08	30.86	30.93	30.96	85.71	46.88	35.51
QUIC Cubic	5	62.49	26.35	15.41	66.91	67.30	67.64	2.22	1.09	1.10
SCReAM	5	0.21	0.21	0.22	30.88	30.92	30.91	0.00	0.00	0.00
Sprout	5	11.83	11.76	11.52	37.21	37.70	38.21	0.05	0.03	0.00
TaoVA-100x	5	7.66	5.54	5.55	31.55	30.96	30.94	83.30	62.13	58.15
TCP Vegas	5	62.94	23.96	30.98	40.21	37.54	34.70	0.77	0.18	0.32
Verus	5	39.91	30.21	19.16	66.44	80.93	68.94	30.35	46.51	36.50
PCC-Vivace	5	65.84	25.16	10.45	39.48	44.87	41.74	0.07	0.11	0.04
WebRTC media	5	0.05	0.05	0.05	31.40	31.44	31.55	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

Start at: 2019-03-19 02:38:28
End at: 2019-03-19 02:38:58
Local clock offset: 1.45 ms
Remote clock offset: -2.863 ms

Below is generated by plot.py at 2019-03-19 04:45:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.54 Mbit/s
95th percentile per-packet one-way delay: 67.126 ms
Loss rate: 7.13%
-- Flow 1:
Average throughput: 65.60 Mbit/s
95th percentile per-packet one-way delay: 66.186 ms
Loss rate: 5.88%
-- Flow 2:
Average throughput: 26.44 Mbit/s
95th percentile per-packet one-way delay: 67.838 ms
Loss rate: 9.19%
-- Flow 3:
Average throughput: 37.03 Mbit/s
95th percentile per-packet one-way delay: 68.330 ms
Loss rate: 10.54%

Run 1: Report of TCP BBR — Data Link

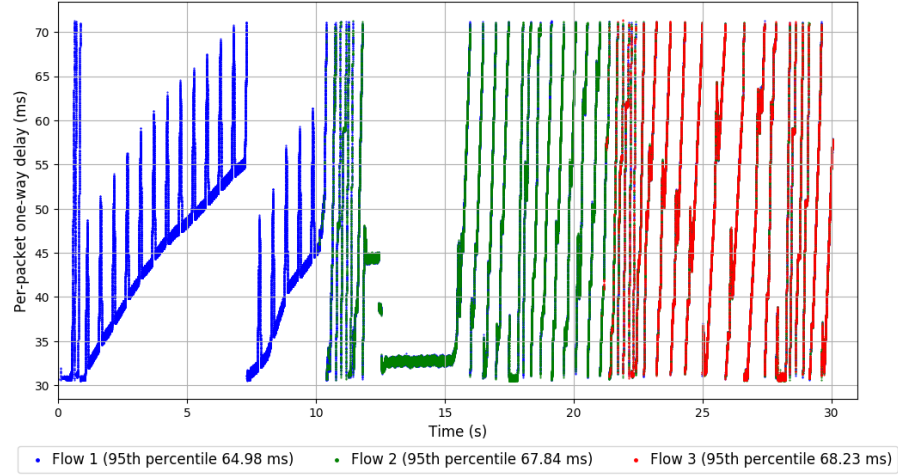
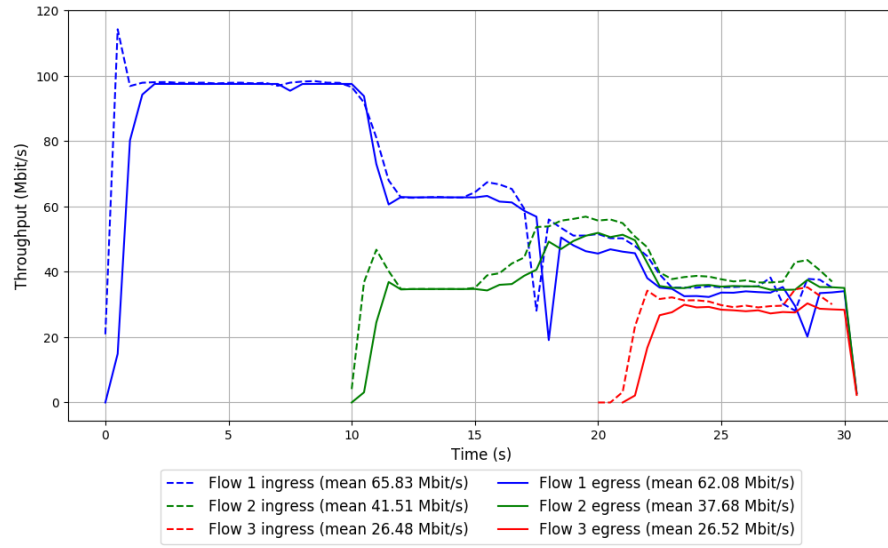


Run 2: Statistics of TCP BBR

Start at: 2019-03-19 03:04:39
End at: 2019-03-19 03:05:09
Local clock offset: 1.717 ms
Remote clock offset: -1.782 ms

Below is generated by plot.py at 2019-03-19 04:45:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.08 Mbit/s
95th percentile per-packet one-way delay: 66.343 ms
Loss rate: 6.95%
-- Flow 1:
Average throughput: 62.08 Mbit/s
95th percentile per-packet one-way delay: 64.982 ms
Loss rate: 5.61%
-- Flow 2:
Average throughput: 37.68 Mbit/s
95th percentile per-packet one-way delay: 67.837 ms
Loss rate: 9.19%
-- Flow 3:
Average throughput: 26.52 Mbit/s
95th percentile per-packet one-way delay: 68.229 ms
Loss rate: 9.96%

Run 2: Report of TCP BBR — Data Link

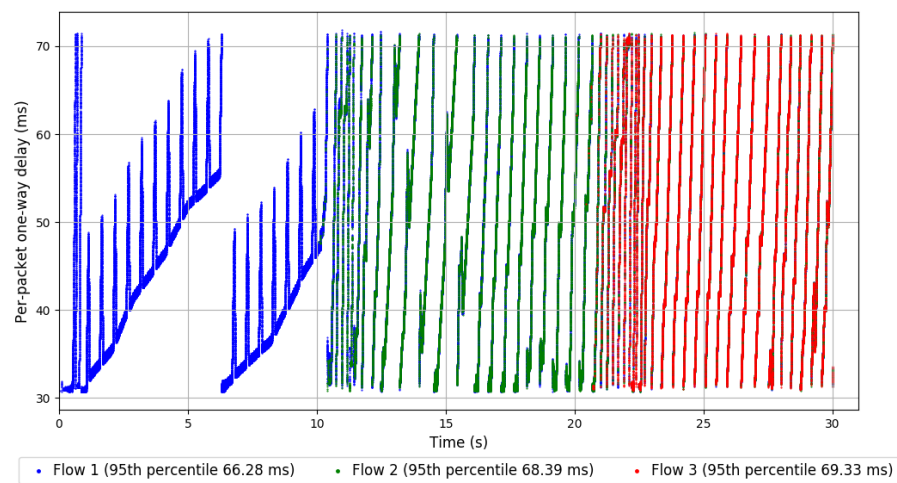
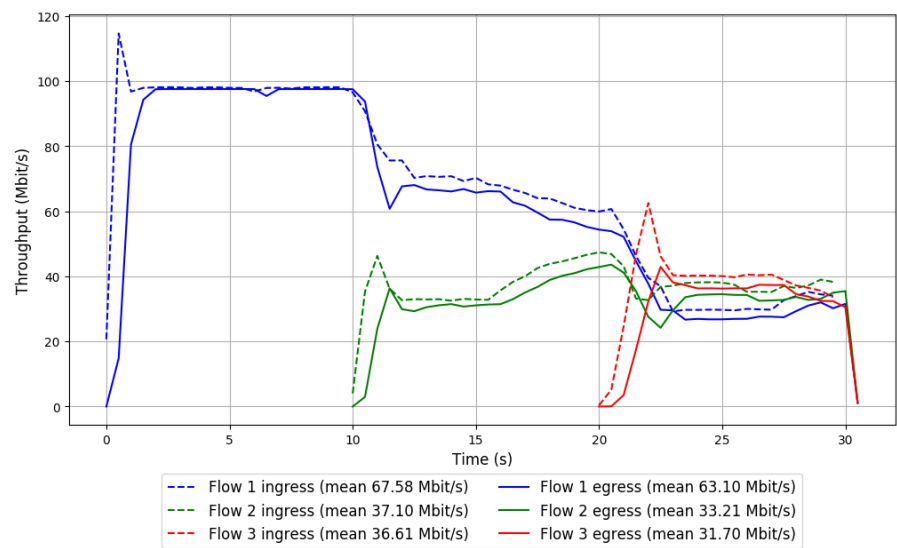


Run 3: Statistics of TCP BBR

Start at: 2019-03-19 03:31:26
End at: 2019-03-19 03:31:56
Local clock offset: 1.223 ms
Remote clock offset: -0.973 ms

Below is generated by plot.py at 2019-03-19 04:45:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 67.442 ms
Loss rate: 8.37%
-- Flow 1:
Average throughput: 63.10 Mbit/s
95th percentile per-packet one-way delay: 66.281 ms
Loss rate: 6.62%
-- Flow 2:
Average throughput: 33.21 Mbit/s
95th percentile per-packet one-way delay: 68.393 ms
Loss rate: 10.56%
-- Flow 3:
Average throughput: 31.70 Mbit/s
95th percentile per-packet one-way delay: 69.332 ms
Loss rate: 13.66%

Run 3: Report of TCP BBR — Data Link

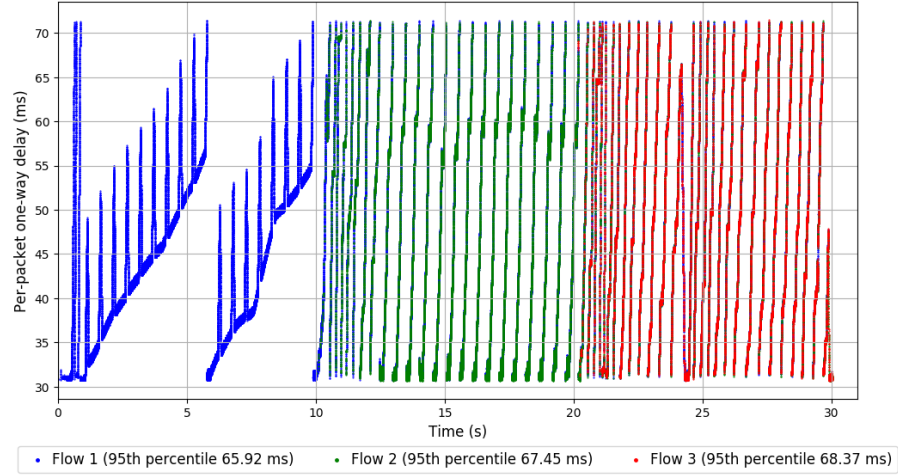
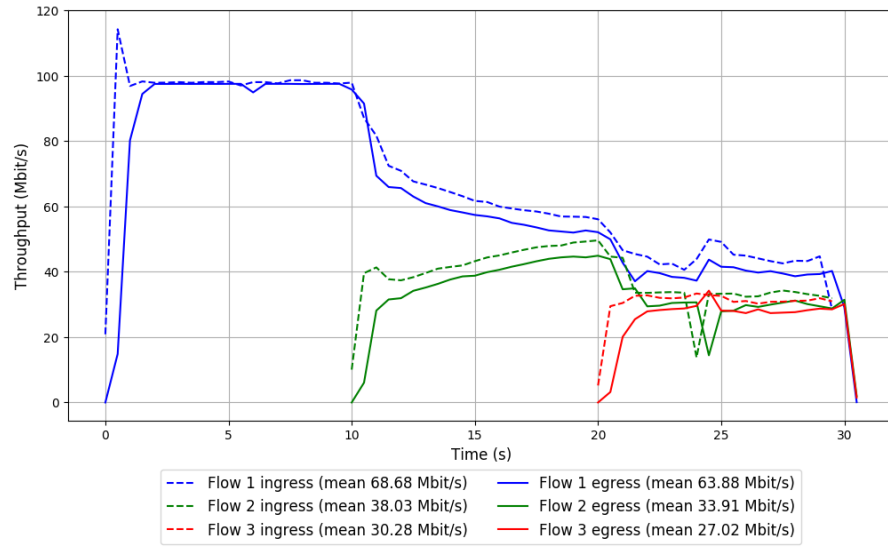


Run 4: Statistics of TCP BBR

Start at: 2019-03-19 03:57:45
End at: 2019-03-19 03:58:15
Local clock offset: 0.222 ms
Remote clock offset: -0.552 ms

Below is generated by plot.py at 2019-03-19 04:45:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.40 Mbit/s
95th percentile per-packet one-way delay: 66.630 ms
Loss rate: 8.32%
-- Flow 1:
Average throughput: 63.88 Mbit/s
95th percentile per-packet one-way delay: 65.925 ms
Loss rate: 6.99%
-- Flow 2:
Average throughput: 33.91 Mbit/s
95th percentile per-packet one-way delay: 67.451 ms
Loss rate: 10.83%
-- Flow 3:
Average throughput: 27.02 Mbit/s
95th percentile per-packet one-way delay: 68.368 ms
Loss rate: 11.03%

Run 4: Report of TCP BBR — Data Link

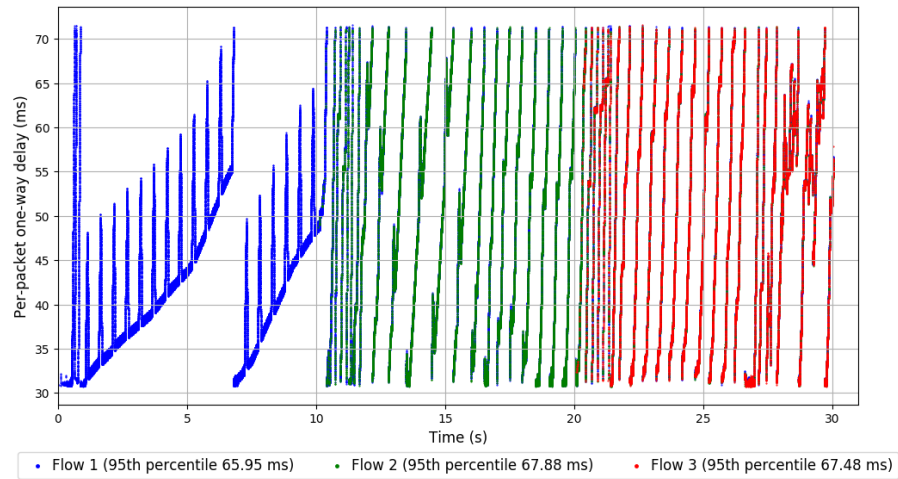
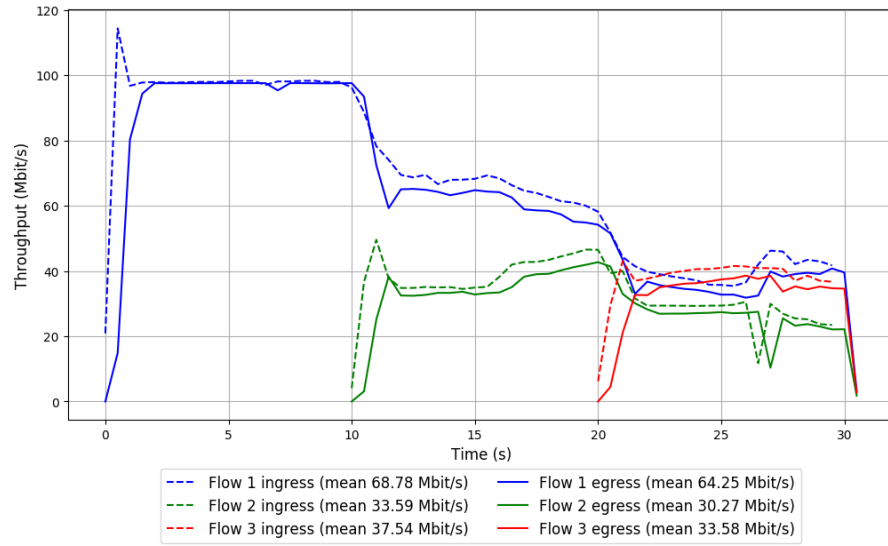


Run 5: Statistics of TCP BBR

Start at: 2019-03-19 04:23:52
End at: 2019-03-19 04:24:22
Local clock offset: 0.267 ms
Remote clock offset: -0.661 ms

Below is generated by plot.py at 2019-03-19 04:45:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.57 Mbit/s
95th percentile per-packet one-way delay: 66.697 ms
Loss rate: 7.69%
-- Flow 1:
Average throughput: 64.25 Mbit/s
95th percentile per-packet one-way delay: 65.946 ms
Loss rate: 6.51%
-- Flow 2:
Average throughput: 30.27 Mbit/s
95th percentile per-packet one-way delay: 67.876 ms
Loss rate: 9.88%
-- Flow 3:
Average throughput: 33.58 Mbit/s
95th percentile per-packet one-way delay: 67.479 ms
Loss rate: 10.31%

Run 5: Report of TCP BBR — Data Link

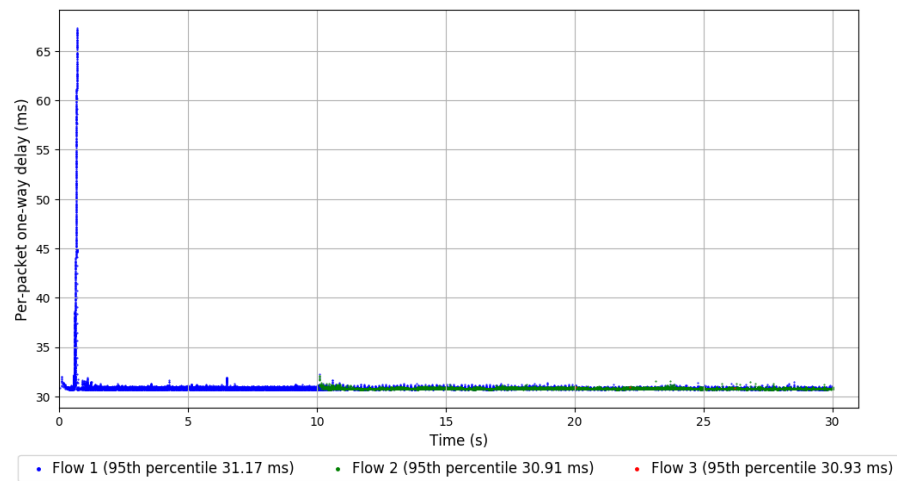
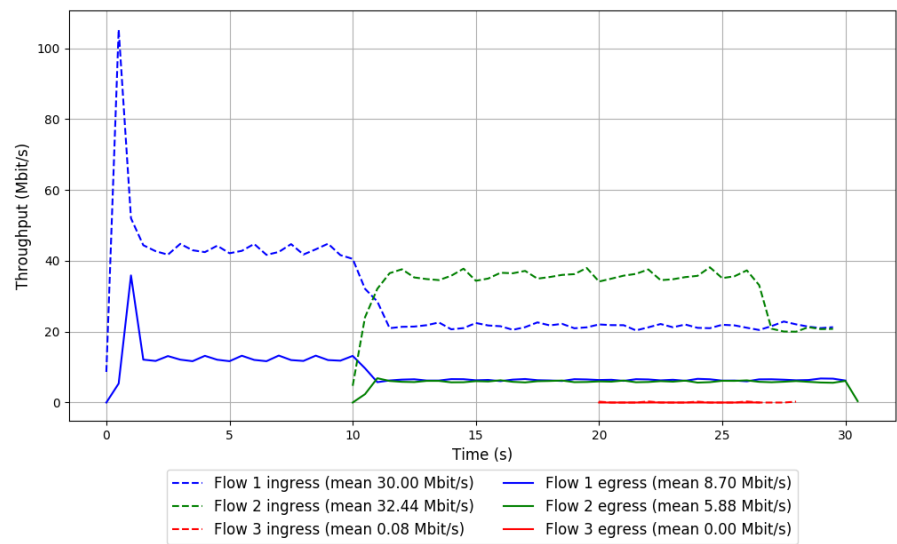


Run 1: Statistics of Copa

Start at: 2019-03-19 02:51:11
End at: 2019-03-19 02:51:41
Local clock offset: 1.588 ms
Remote clock offset: -2.037 ms

Below is generated by plot.py at 2019-03-19 04:45:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 31.042 ms
Loss rate: 75.56%
-- Flow 1:
Average throughput: 8.70 Mbit/s
95th percentile per-packet one-way delay: 31.171 ms
Loss rate: 70.99%
-- Flow 2:
Average throughput: 5.88 Mbit/s
95th percentile per-packet one-way delay: 30.906 ms
Loss rate: 81.87%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 30.935 ms
Loss rate: 96.14%

Run 1: Report of Copa — Data Link

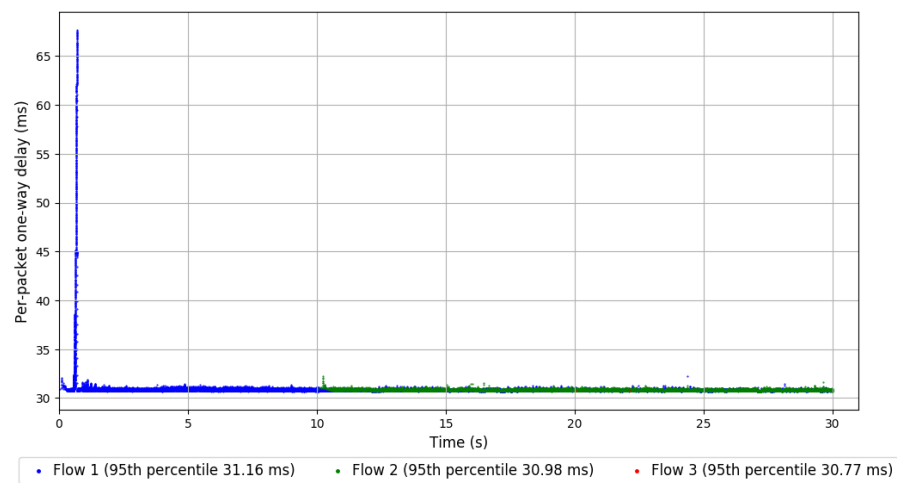
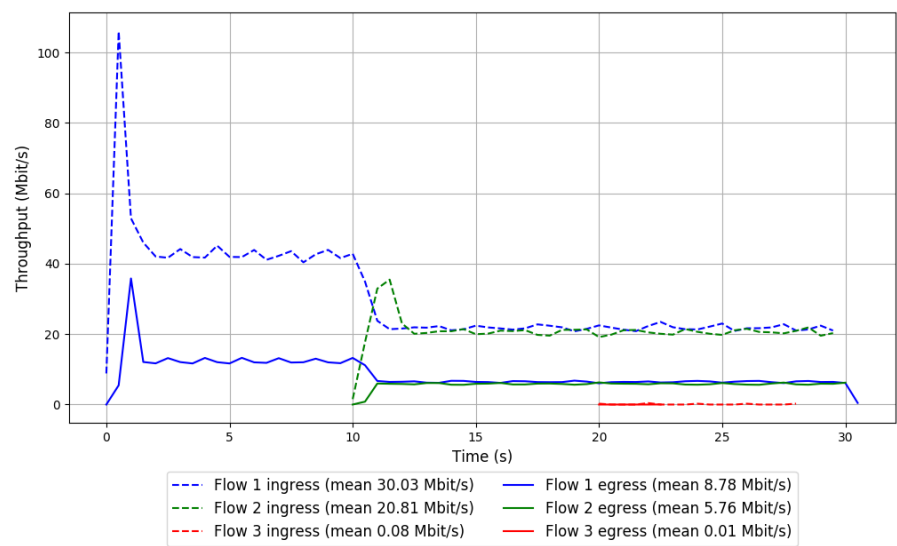


Run 2: Statistics of Copa

Start at: 2019-03-19 03:17:36
End at: 2019-03-19 03:18:06
Local clock offset: 1.714 ms
Remote clock offset: -1.117 ms

Below is generated by plot.py at 2019-03-19 04:45:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 31.071 ms
Loss rate: 71.27%
-- Flow 1:
Average throughput: 8.78 Mbit/s
95th percentile per-packet one-way delay: 31.160 ms
Loss rate: 70.78%
-- Flow 2:
Average throughput: 5.76 Mbit/s
95th percentile per-packet one-way delay: 30.979 ms
Loss rate: 72.31%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 30.774 ms
Loss rate: 98.10%

Run 2: Report of Copa — Data Link

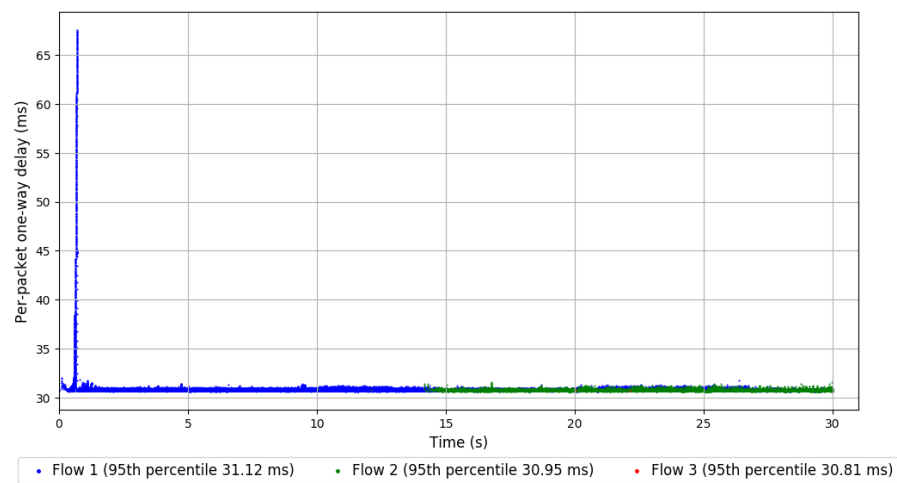
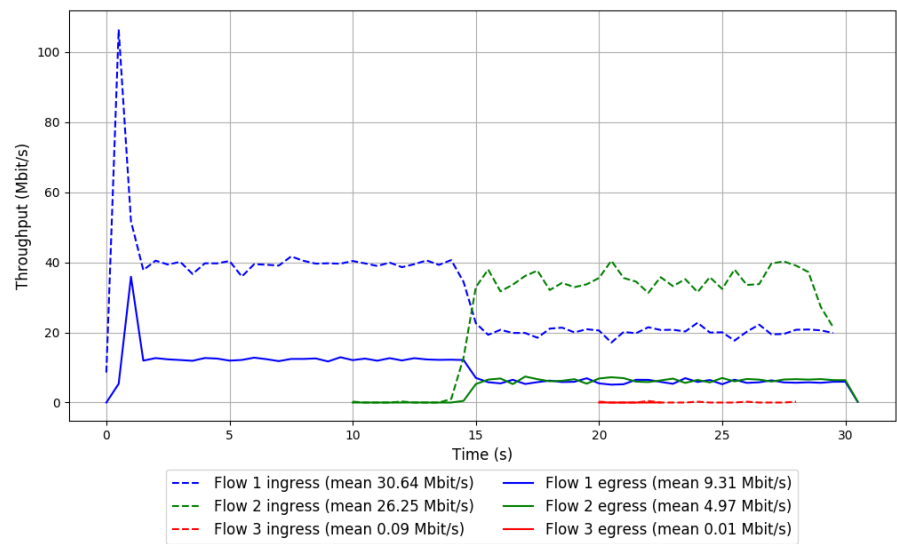


Run 3: Statistics of Copa

Start at: 2019-03-19 03:44:07
End at: 2019-03-19 03:44:37
Local clock offset: 1.144 ms
Remote clock offset: -0.792 ms

Below is generated by plot.py at 2019-03-19 04:45:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 31.063 ms
Loss rate: 73.80%
-- Flow 1:
Average throughput: 9.31 Mbit/s
95th percentile per-packet one-way delay: 31.120 ms
Loss rate: 69.63%
-- Flow 2:
Average throughput: 4.97 Mbit/s
95th percentile per-packet one-way delay: 30.949 ms
Loss rate: 81.08%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 30.806 ms
Loss rate: 98.13%

Run 3: Report of Copa — Data Link

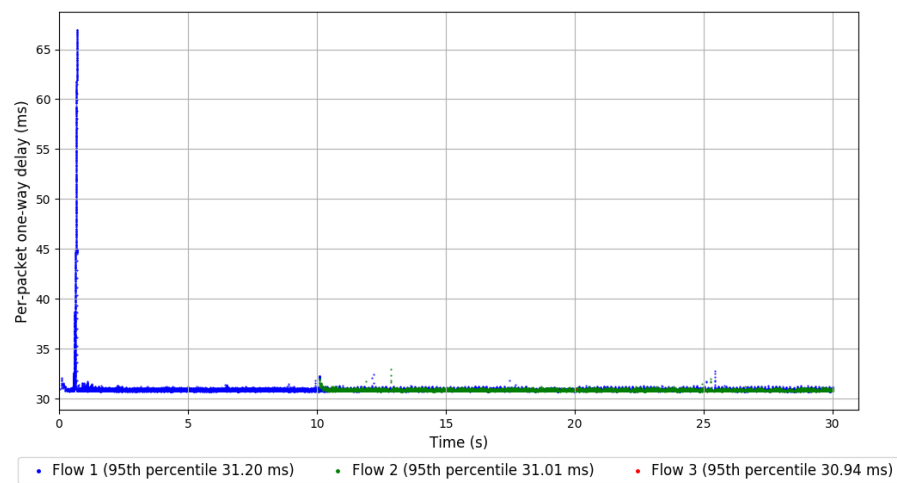
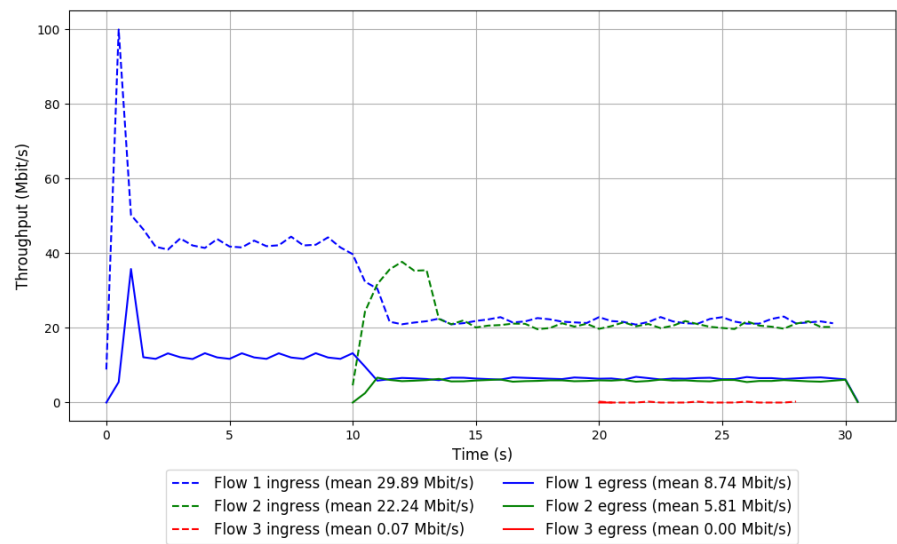


Run 4: Statistics of Copa

Start at: 2019-03-19 04:10:20
End at: 2019-03-19 04:10:50
Local clock offset: -0.197 ms
Remote clock offset: -0.656 ms

Below is generated by plot.py at 2019-03-19 04:45:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 31.099 ms
Loss rate: 71.80%
-- Flow 1:
Average throughput: 8.74 Mbit/s
95th percentile per-packet one-way delay: 31.203 ms
Loss rate: 70.75%
-- Flow 2:
Average throughput: 5.81 Mbit/s
95th percentile per-packet one-way delay: 31.008 ms
Loss rate: 73.87%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 30.944 ms
Loss rate: 99.83%

Run 4: Report of Copa — Data Link

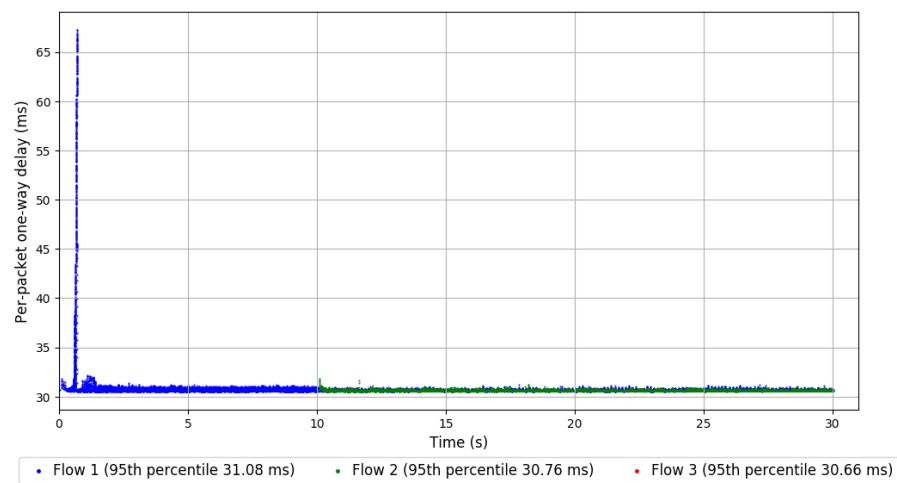
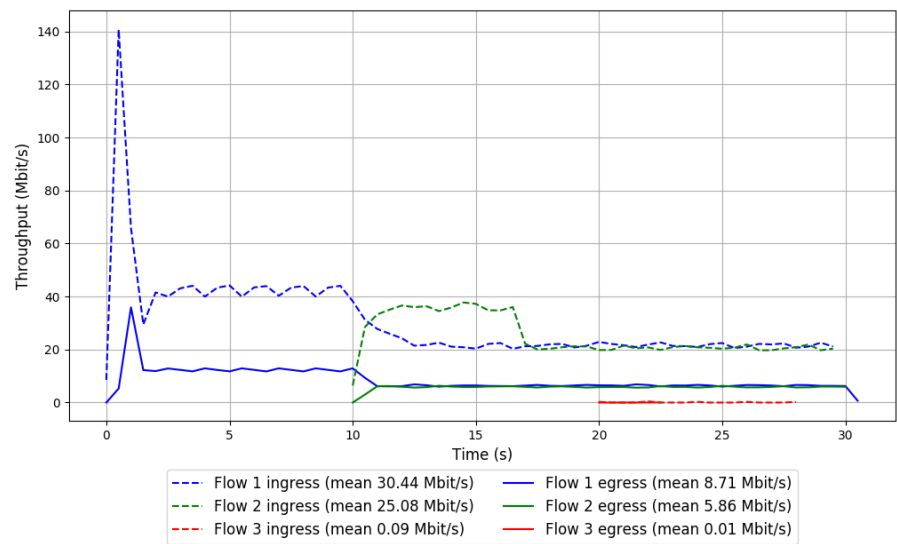


Run 5: Statistics of Copa

Start at: 2019-03-19 04:36:39
End at: 2019-03-19 04:37:09
Local clock offset: 0.564 ms
Remote clock offset: -1.054 ms

Below is generated by plot.py at 2019-03-19 04:45:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 30.962 ms
Loss rate: 73.25%
-- Flow 1:
Average throughput: 8.71 Mbit/s
95th percentile per-packet one-way delay: 31.084 ms
Loss rate: 71.39%
-- Flow 2:
Average throughput: 5.86 Mbit/s
95th percentile per-packet one-way delay: 30.764 ms
Loss rate: 76.62%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 30.664 ms
Loss rate: 98.13%

Run 5: Report of Copa — Data Link

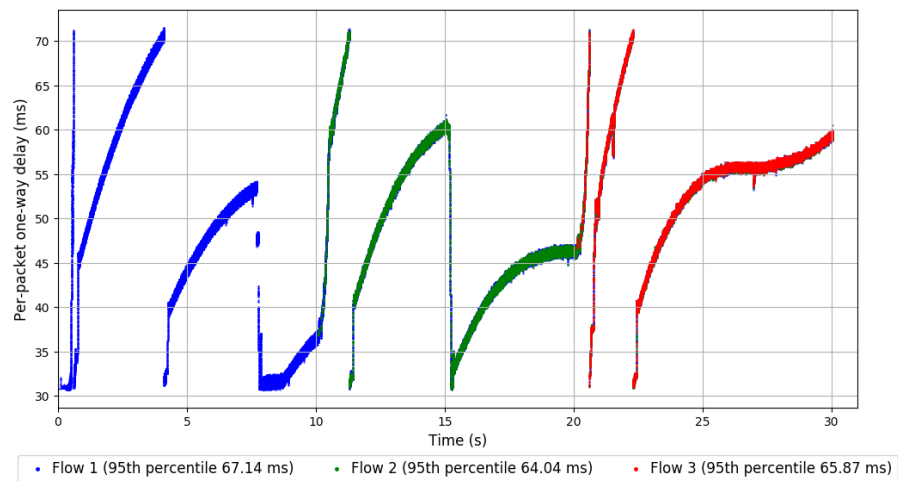
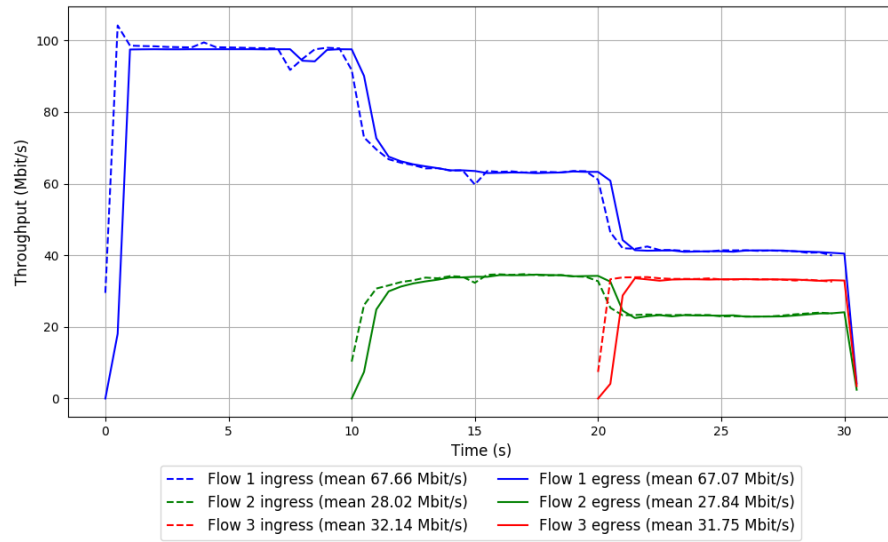


Run 1: Statistics of TCP Cubic

Start at: 2019-03-19 02:49:51
End at: 2019-03-19 02:50:21
Local clock offset: 1.574 ms
Remote clock offset: -2.062 ms

Below is generated by plot.py at 2019-03-19 04:45:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 96.18 Mbit/s
95th percentile per-packet one-way delay: 66.645 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 67.07 Mbit/s
95th percentile per-packet one-way delay: 67.141 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 27.84 Mbit/s
95th percentile per-packet one-way delay: 64.038 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 31.75 Mbit/s
95th percentile per-packet one-way delay: 65.867 ms
Loss rate: 1.09%

Run 1: Report of TCP Cubic — Data Link

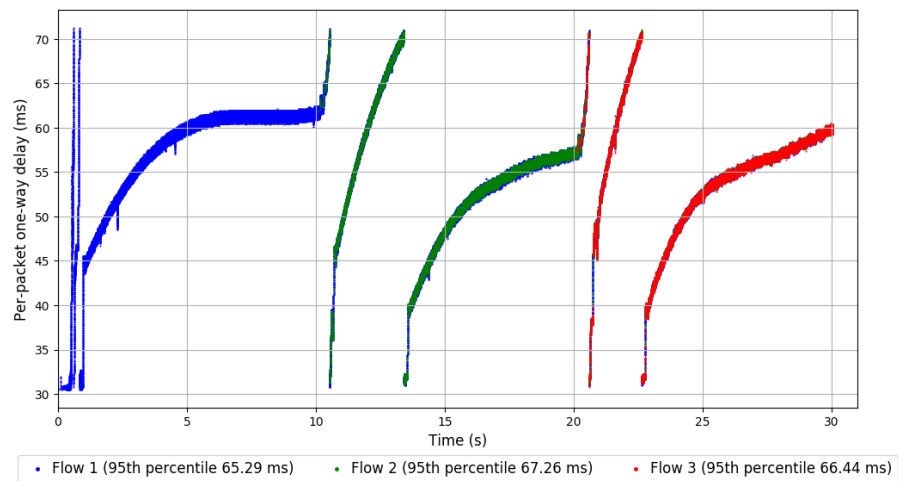
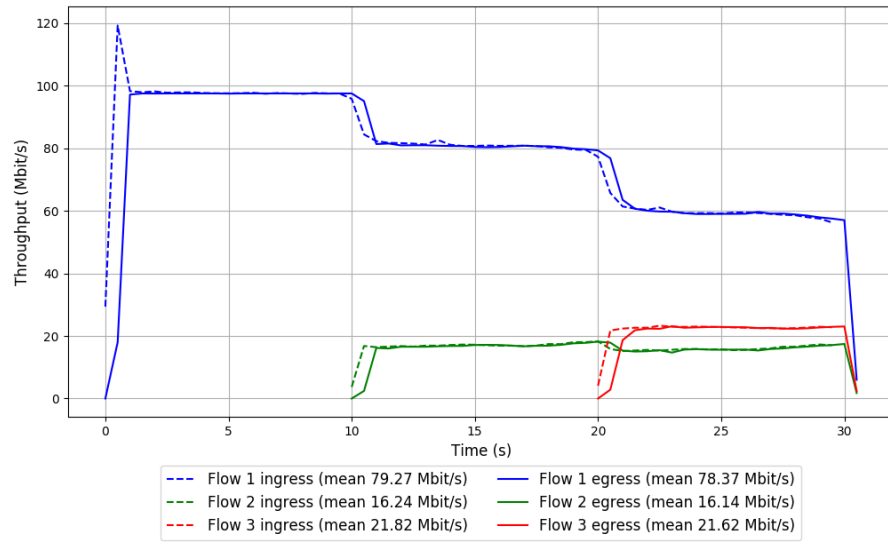


Run 2: Statistics of TCP Cubic

Start at: 2019-03-19 03:16:14
End at: 2019-03-19 03:16:44
Local clock offset: 1.827 ms
Remote clock offset: -1.386 ms

Below is generated by plot.py at 2019-03-19 04:45:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 65.612 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 78.37 Mbit/s
95th percentile per-packet one-way delay: 65.292 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 16.14 Mbit/s
95th percentile per-packet one-way delay: 67.259 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 21.62 Mbit/s
95th percentile per-packet one-way delay: 66.442 ms
Loss rate: 0.89%

Run 2: Report of TCP Cubic — Data Link

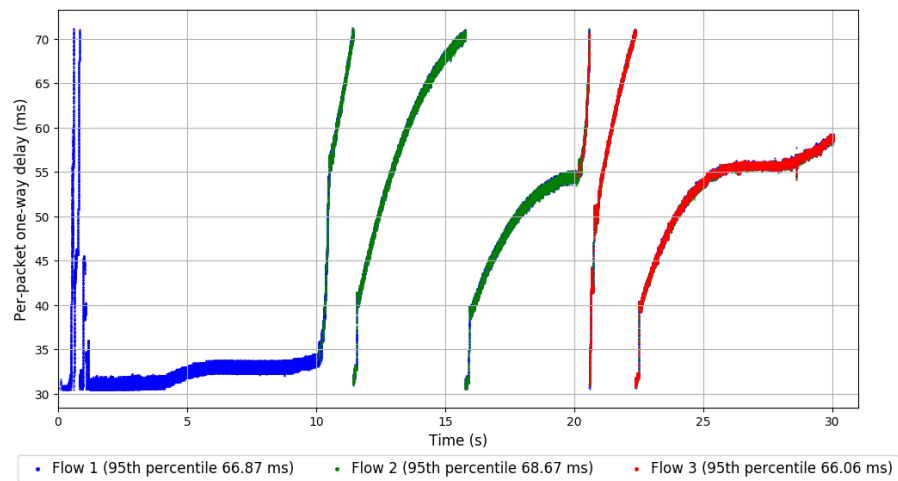
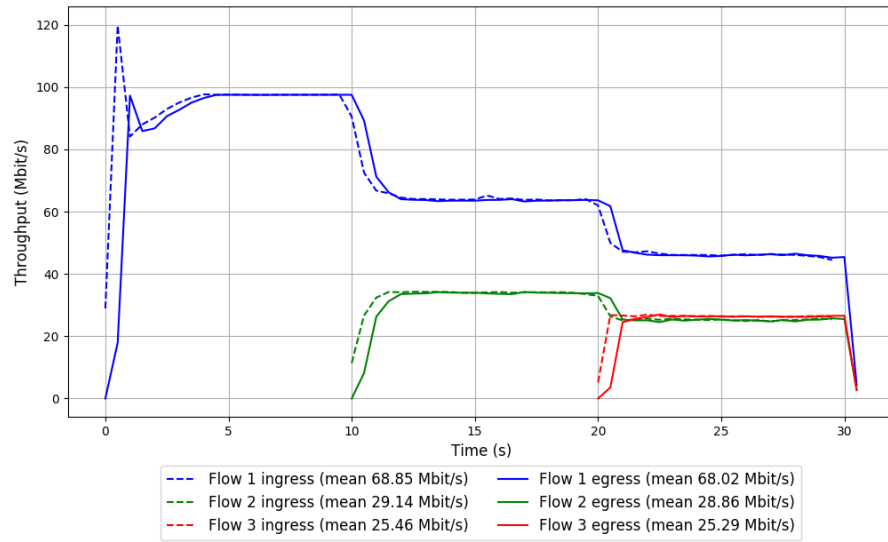


Run 3: Statistics of TCP Cubic

Start at: 2019-03-19 03:42:50
End at: 2019-03-19 03:43:20
Local clock offset: 1.144 ms
Remote clock offset: -0.998 ms

Below is generated by plot.py at 2019-03-19 04:45:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.67 Mbit/s
95th percentile per-packet one-way delay: 67.450 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 68.02 Mbit/s
95th percentile per-packet one-way delay: 66.867 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 28.86 Mbit/s
95th percentile per-packet one-way delay: 68.668 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 25.29 Mbit/s
95th percentile per-packet one-way delay: 66.055 ms
Loss rate: 0.63%

Run 3: Report of TCP Cubic — Data Link

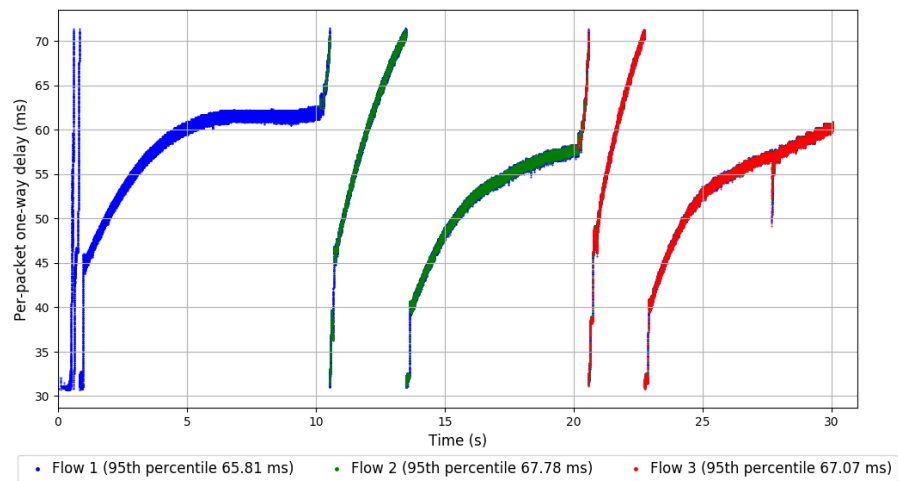
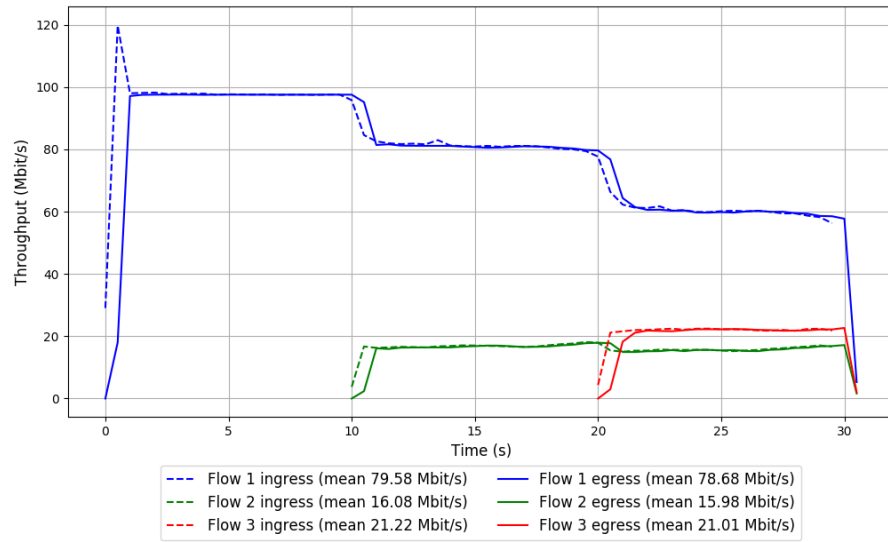


Run 4: Statistics of TCP Cubic

Start at: 2019-03-19 04:08:59
End at: 2019-03-19 04:09:29
Local clock offset: -0.154 ms
Remote clock offset: -0.686 ms

Below is generated by plot.py at 2019-03-19 04:46:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 96.29 Mbit/s
95th percentile per-packet one-way delay: 66.244 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 78.68 Mbit/s
95th percentile per-packet one-way delay: 65.815 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 15.98 Mbit/s
95th percentile per-packet one-way delay: 67.777 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 21.01 Mbit/s
95th percentile per-packet one-way delay: 67.067 ms
Loss rate: 0.99%

Run 4: Report of TCP Cubic — Data Link

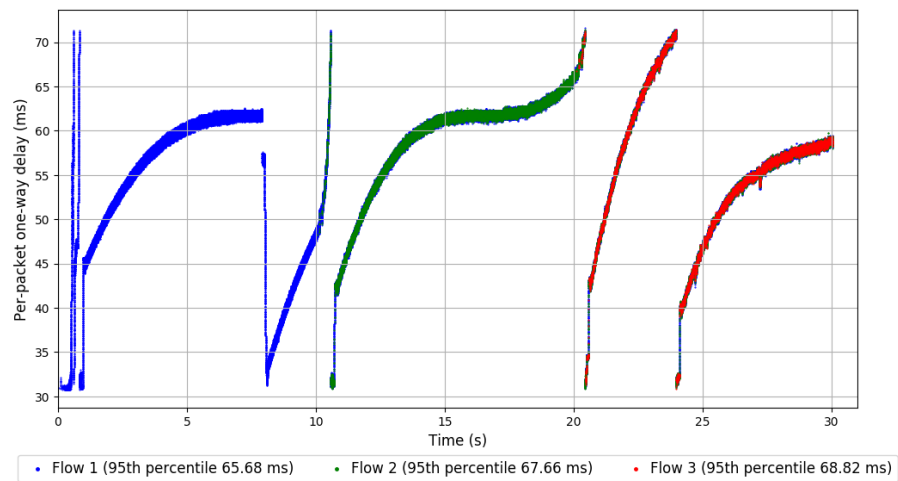
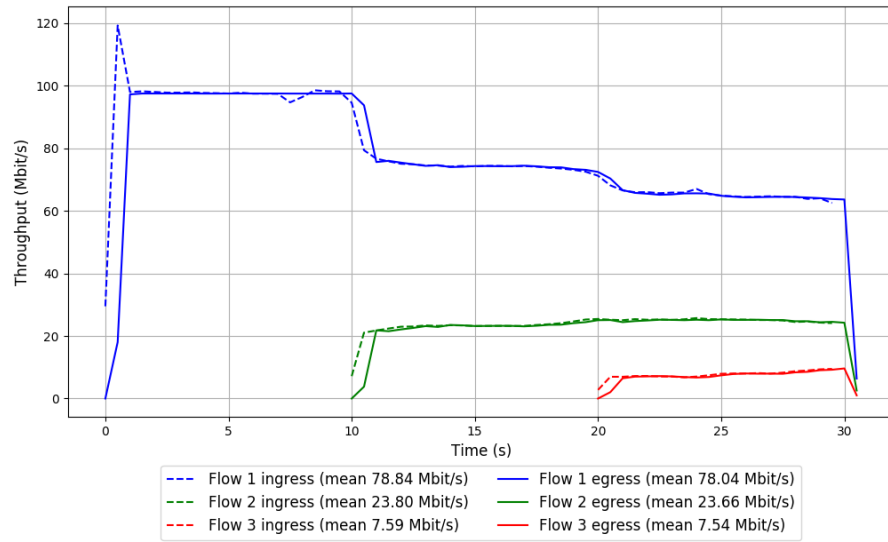


Run 5: Statistics of TCP Cubic

Start at: 2019-03-19 04:35:14
End at: 2019-03-19 04:35:44
Local clock offset: 0.548 ms
Remote clock offset: -0.821 ms

Below is generated by plot.py at 2019-03-19 04:46:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 66.138 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 78.04 Mbit/s
95th percentile per-packet one-way delay: 65.679 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 23.66 Mbit/s
95th percentile per-packet one-way delay: 67.657 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 7.54 Mbit/s
95th percentile per-packet one-way delay: 68.822 ms
Loss rate: 0.67%

Run 5: Report of TCP Cubic — Data Link

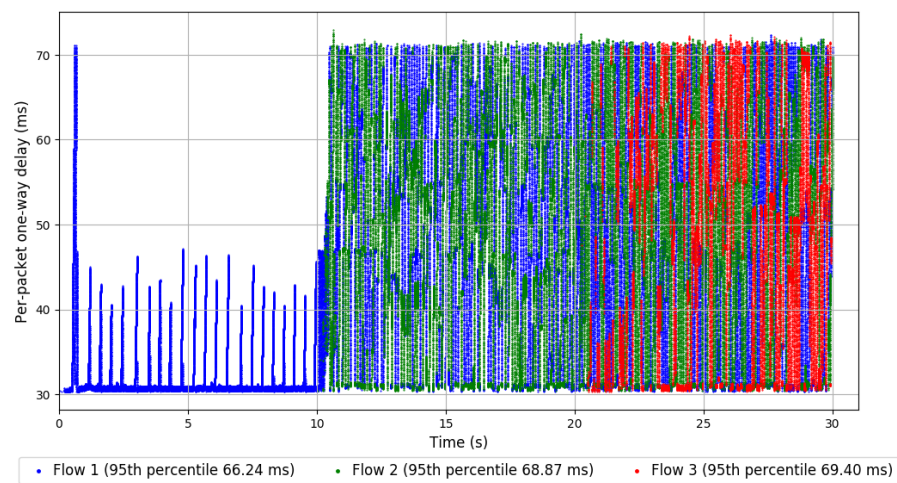
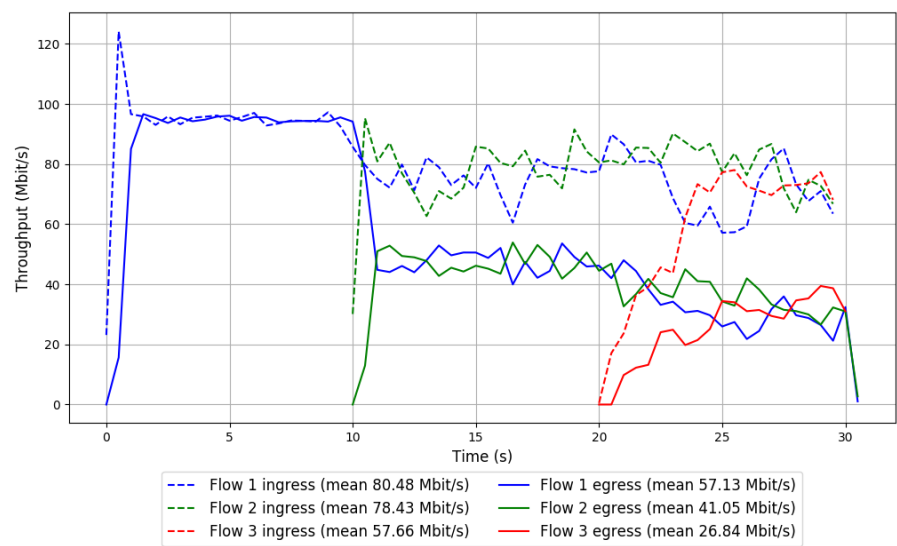


Run 1: Statistics of FillP

Start at: 2019-03-19 02:43:37
End at: 2019-03-19 02:44:07
Local clock offset: 1.503 ms
Remote clock offset: -2.575 ms

Below is generated by plot.py at 2019-03-19 04:46:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.11 Mbit/s
95th percentile per-packet one-way delay: 67.717 ms
Loss rate: 38.63%
-- Flow 1:
Average throughput: 57.13 Mbit/s
95th percentile per-packet one-way delay: 66.240 ms
Loss rate: 28.95%
-- Flow 2:
Average throughput: 41.05 Mbit/s
95th percentile per-packet one-way delay: 68.869 ms
Loss rate: 47.64%
-- Flow 3:
Average throughput: 26.84 Mbit/s
95th percentile per-packet one-way delay: 69.396 ms
Loss rate: 54.73%

Run 1: Report of FillP — Data Link

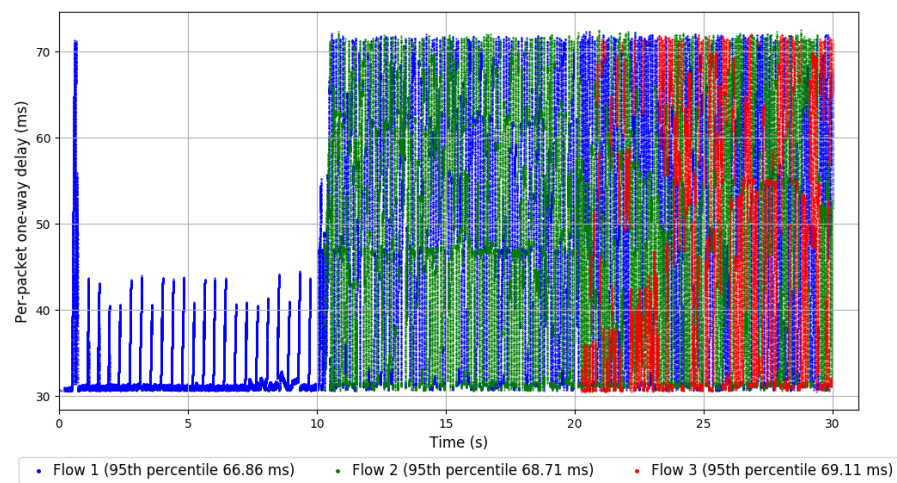
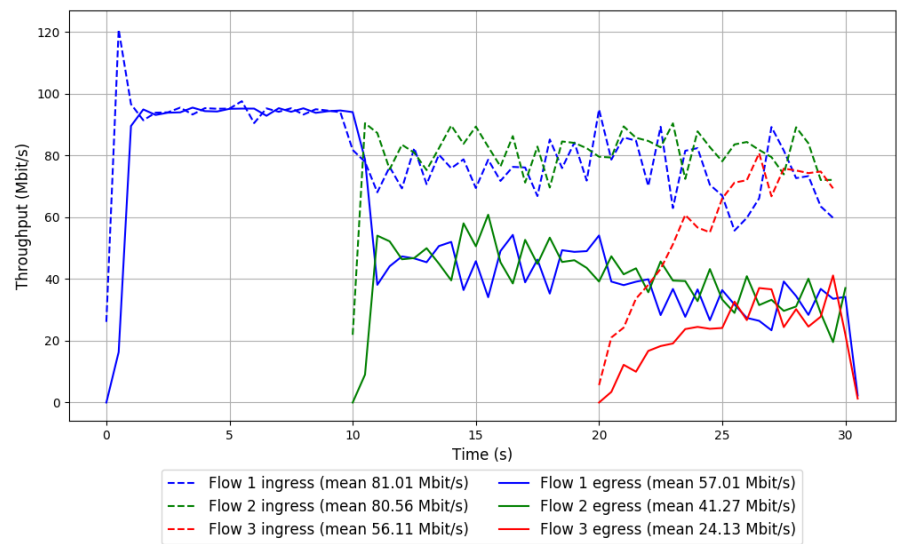


Run 2: Statistics of FillP

Start at: 2019-03-19 03:09:58
End at: 2019-03-19 03:10:28
Local clock offset: 1.749 ms
Remote clock offset: -1.384 ms

Below is generated by plot.py at 2019-03-19 04:46:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.45 Mbit/s
95th percentile per-packet one-way delay: 67.989 ms
Loss rate: 39.65%
-- Flow 1:
Average throughput: 57.01 Mbit/s
95th percentile per-packet one-way delay: 66.855 ms
Loss rate: 29.61%
-- Flow 2:
Average throughput: 41.27 Mbit/s
95th percentile per-packet one-way delay: 68.710 ms
Loss rate: 48.81%
-- Flow 3:
Average throughput: 24.13 Mbit/s
95th percentile per-packet one-way delay: 69.109 ms
Loss rate: 56.93%

Run 2: Report of FillP — Data Link

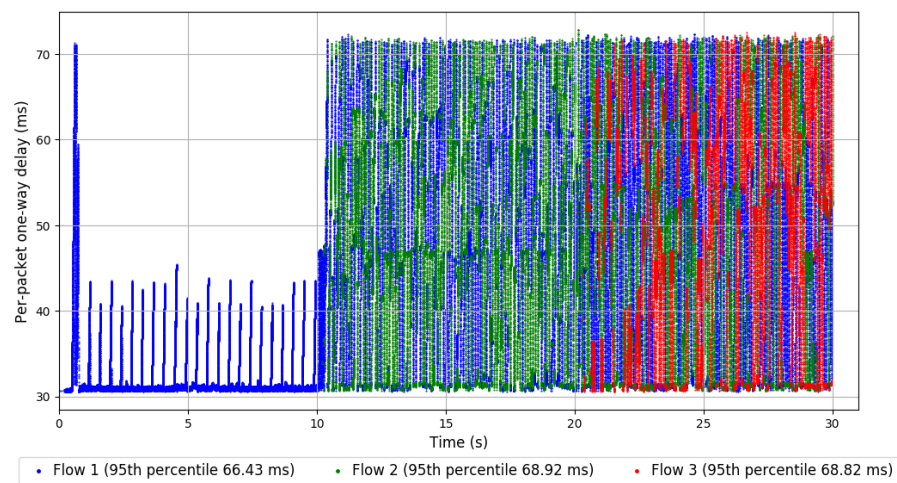
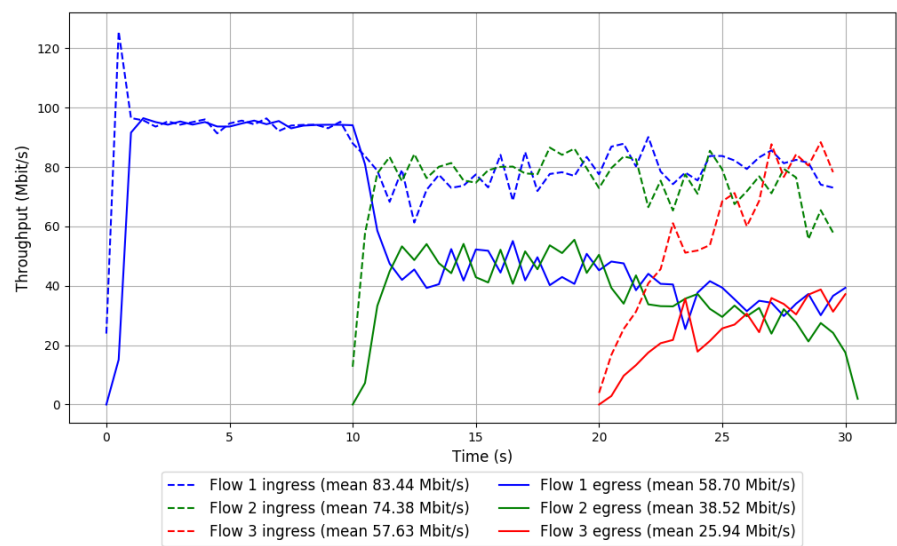


Run 3: Statistics of FillP

Start at: 2019-03-19 03:36:30
End at: 2019-03-19 03:37:00
Local clock offset: 1.163 ms
Remote clock offset: -0.893 ms

Below is generated by plot.py at 2019-03-19 04:46:38
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.87 Mbit/s
95th percentile per-packet one-way delay: 67.715 ms
Loss rate: 38.93%
-- Flow 1:
Average throughput: 58.70 Mbit/s
95th percentile per-packet one-way delay: 66.428 ms
Loss rate: 29.67%
-- Flow 2:
Average throughput: 38.52 Mbit/s
95th percentile per-packet one-way delay: 68.923 ms
Loss rate: 48.21%
-- Flow 3:
Average throughput: 25.94 Mbit/s
95th percentile per-packet one-way delay: 68.821 ms
Loss rate: 55.26%

Run 3: Report of FillP — Data Link

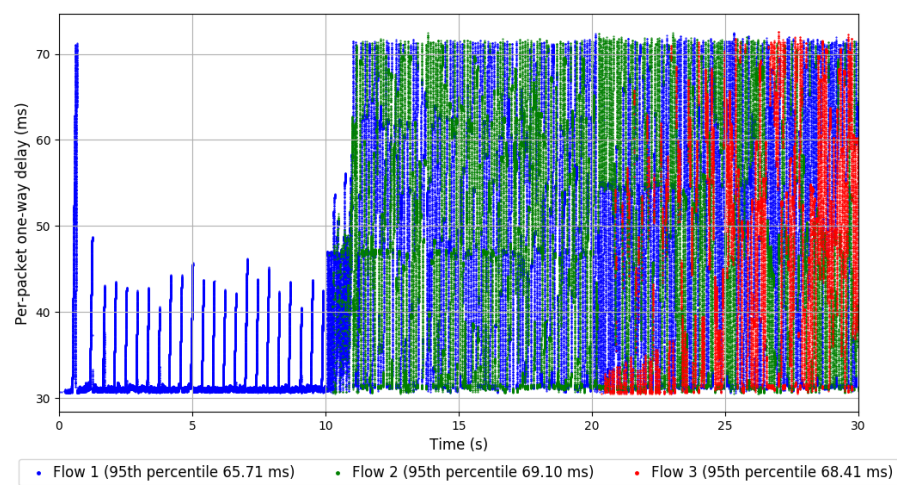
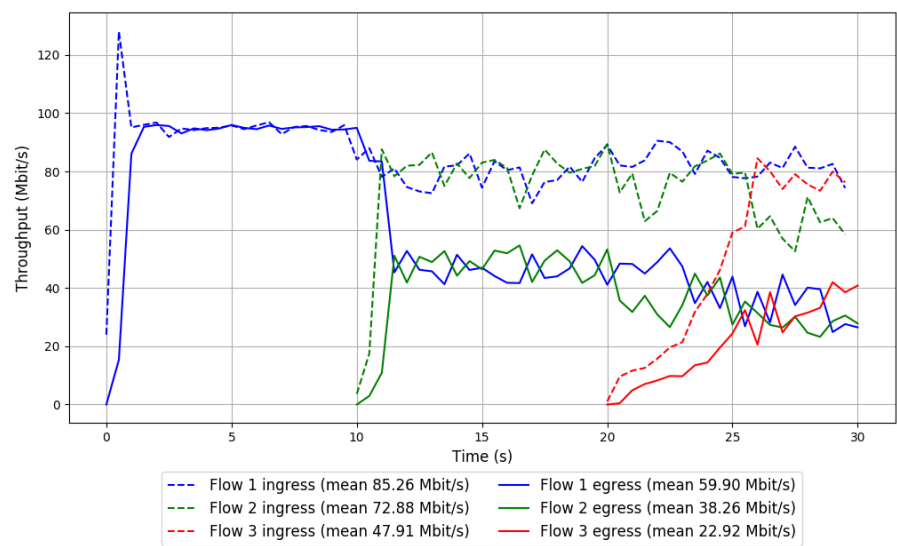


Run 4: Statistics of FillP

Start at: 2019-03-19 04:02:47
End at: 2019-03-19 04:03:17
Local clock offset: 0.016 ms
Remote clock offset: -0.547 ms

Below is generated by plot.py at 2019-03-19 04:46:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.77 Mbit/s
95th percentile per-packet one-way delay: 67.599 ms
Loss rate: 38.00%
-- Flow 1:
Average throughput: 59.90 Mbit/s
95th percentile per-packet one-way delay: 65.707 ms
Loss rate: 29.75%
-- Flow 2:
Average throughput: 38.26 Mbit/s
95th percentile per-packet one-way delay: 69.096 ms
Loss rate: 47.51%
-- Flow 3:
Average throughput: 22.92 Mbit/s
95th percentile per-packet one-way delay: 68.408 ms
Loss rate: 53.22%

Run 4: Report of FillP — Data Link

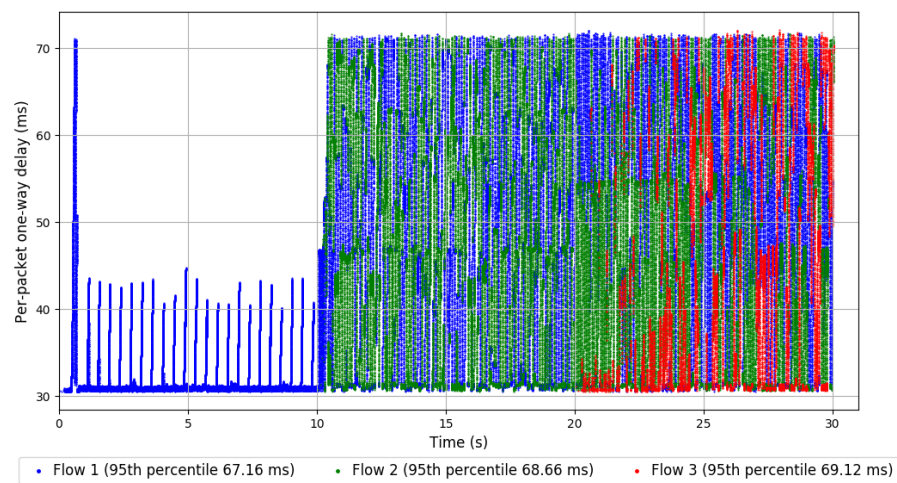
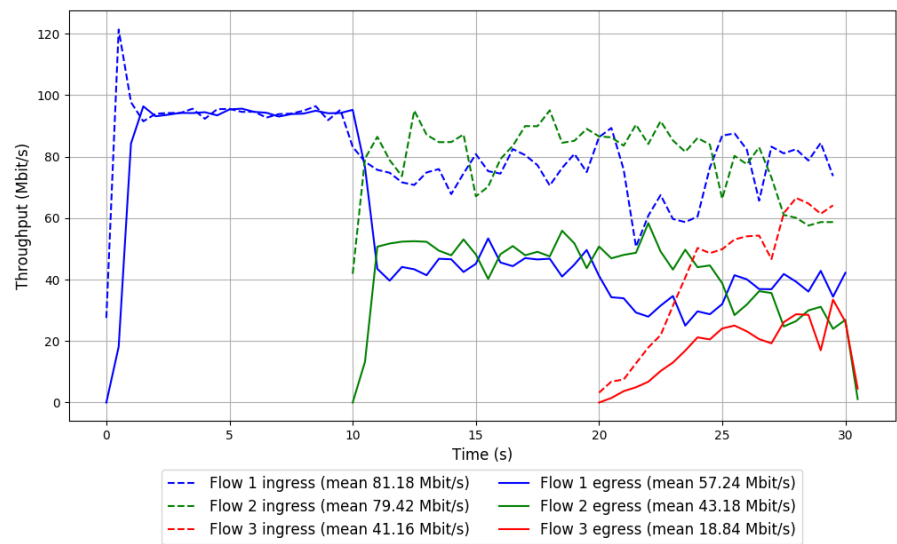


Run 5: Statistics of FillP

Start at: 2019-03-19 04:29:02
End at: 2019-03-19 04:29:32
Local clock offset: 0.455 ms
Remote clock offset: -0.855 ms

Below is generated by plot.py at 2019-03-19 04:47:12
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.21 Mbit/s
95th percentile per-packet one-way delay: 67.978 ms
Loss rate: 37.47%
-- Flow 1:
Average throughput: 57.24 Mbit/s
95th percentile per-packet one-way delay: 67.158 ms
Loss rate: 29.43%
-- Flow 2:
Average throughput: 43.18 Mbit/s
95th percentile per-packet one-way delay: 68.657 ms
Loss rate: 45.54%
-- Flow 3:
Average throughput: 18.84 Mbit/s
95th percentile per-packet one-way delay: 69.125 ms
Loss rate: 54.05%

Run 5: Report of FillP — Data Link

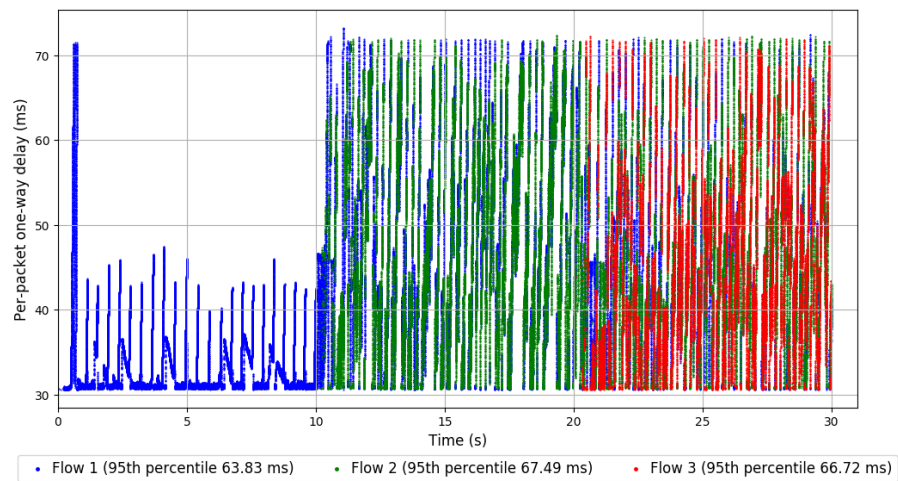
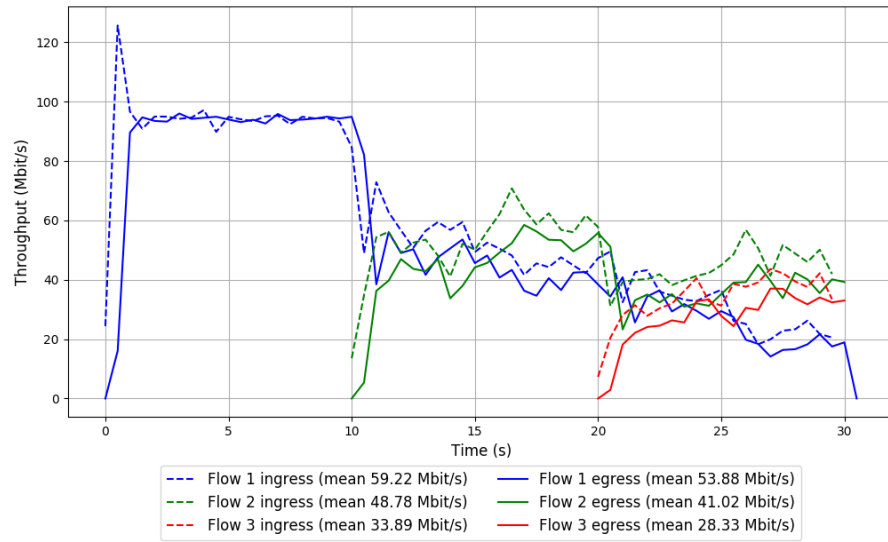


Run 1: Statistics of FillP-Sheep

Start at: 2019-03-19 02:33:09
End at: 2019-03-19 02:33:39
Local clock offset: 1.354 ms
Remote clock offset: -2.803 ms

Below is generated by plot.py at 2019-03-19 04:47:12
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.57 Mbit/s
95th percentile per-packet one-way delay: 65.841 ms
Loss rate: 11.99%
-- Flow 1:
Average throughput: 53.88 Mbit/s
95th percentile per-packet one-way delay: 63.827 ms
Loss rate: 9.01%
-- Flow 2:
Average throughput: 41.02 Mbit/s
95th percentile per-packet one-way delay: 67.489 ms
Loss rate: 15.88%
-- Flow 3:
Average throughput: 28.33 Mbit/s
95th percentile per-packet one-way delay: 66.725 ms
Loss rate: 16.45%

Run 1: Report of FillP-Sheep — Data Link

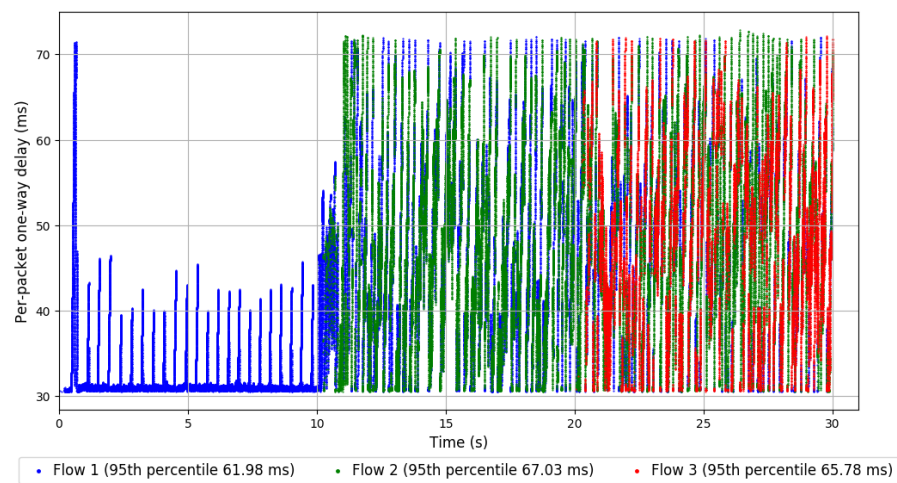
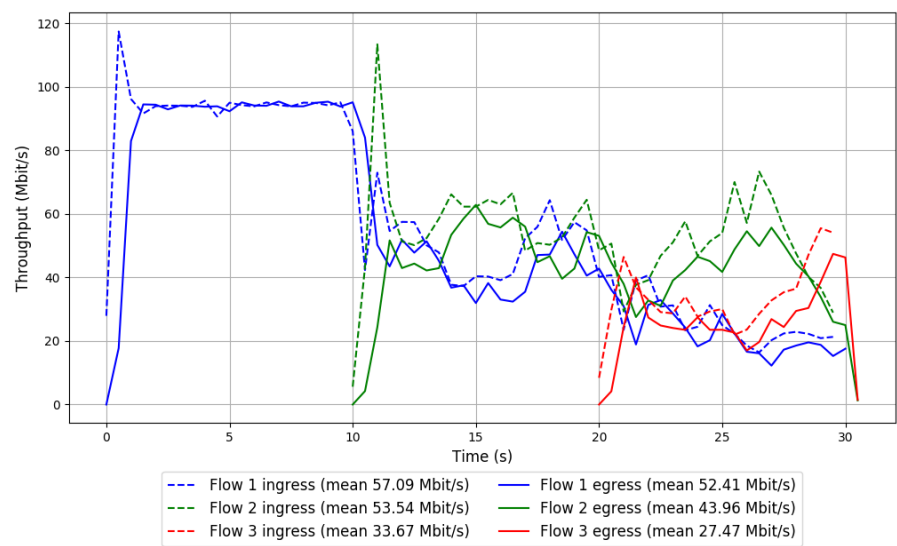


Run 2: Statistics of FillP-Sheep

Start at: 2019-03-19 02:59:32
End at: 2019-03-19 03:00:02
Local clock offset: 1.677 ms
Remote clock offset: -1.884 ms

Below is generated by plot.py at 2019-03-19 04:47:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.76 Mbit/s
95th percentile per-packet one-way delay: 64.981 ms
Loss rate: 12.58%
-- Flow 1:
Average throughput: 52.41 Mbit/s
95th percentile per-packet one-way delay: 61.982 ms
Loss rate: 8.19%
-- Flow 2:
Average throughput: 43.96 Mbit/s
95th percentile per-packet one-way delay: 67.028 ms
Loss rate: 17.87%
-- Flow 3:
Average throughput: 27.47 Mbit/s
95th percentile per-packet one-way delay: 65.784 ms
Loss rate: 18.17%

Run 2: Report of FillP-Sheep — Data Link

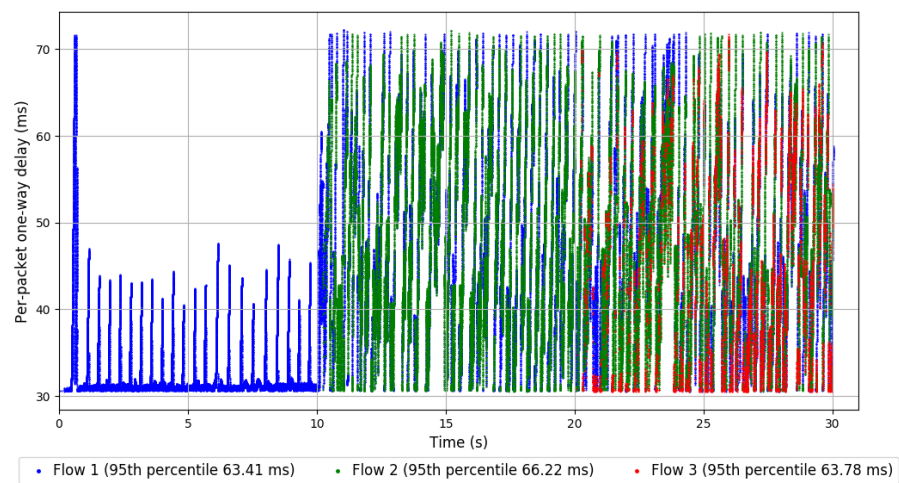
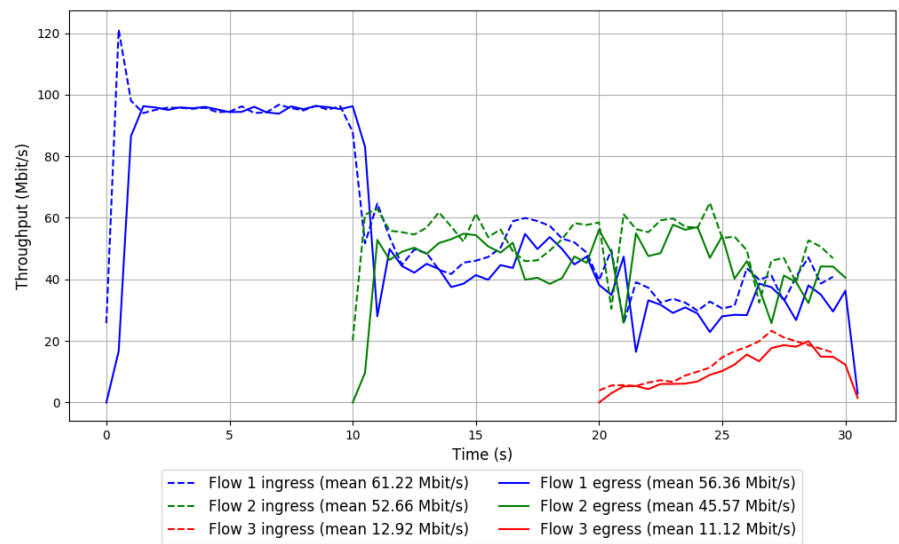


Run 3: Statistics of FillP-Sheep

Start at: 2019-03-19 03:26:09
End at: 2019-03-19 03:26:39
Local clock offset: 1.323 ms
Remote clock offset: -0.998 ms

Below is generated by plot.py at 2019-03-19 04:47:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.37 Mbit/s
95th percentile per-packet one-way delay: 64.789 ms
Loss rate: 10.04%
-- Flow 1:
Average throughput: 56.36 Mbit/s
95th percentile per-packet one-way delay: 63.408 ms
Loss rate: 7.86%
-- Flow 2:
Average throughput: 45.57 Mbit/s
95th percentile per-packet one-way delay: 66.219 ms
Loss rate: 13.40%
-- Flow 3:
Average throughput: 11.12 Mbit/s
95th percentile per-packet one-way delay: 63.778 ms
Loss rate: 13.82%

Run 3: Report of FillP-Sheep — Data Link

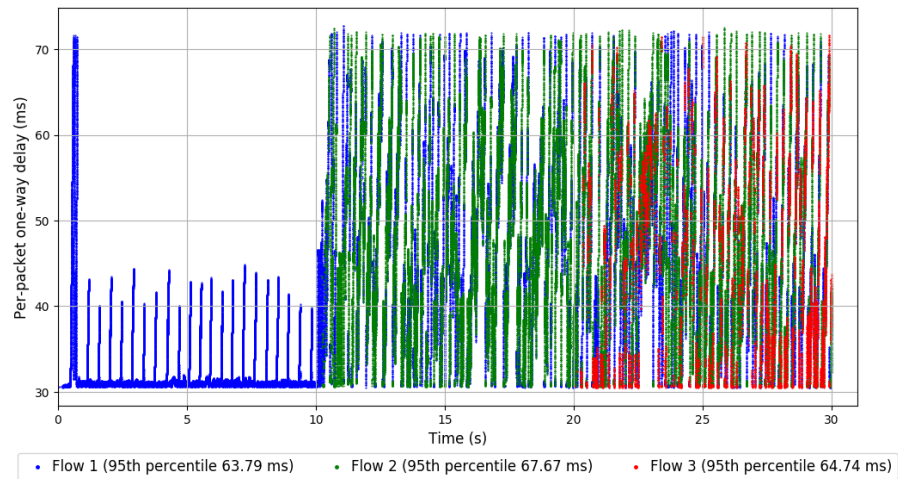
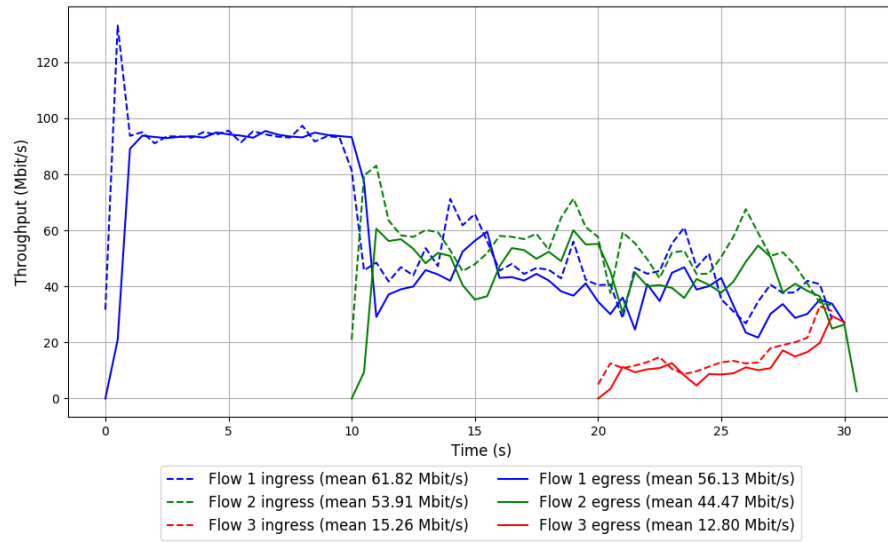


Run 4: Statistics of FillP-Sheep

Start at: 2019-03-19 03:52:34
End at: 2019-03-19 03:53:04
Local clock offset: 0.535 ms
Remote clock offset: -0.621 ms

Below is generated by plot.py at 2019-03-19 04:48:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.97 Mbit/s
95th percentile per-packet one-way delay: 65.729 ms
Loss rate: 12.43%
-- Flow 1:
Average throughput: 56.13 Mbit/s
95th percentile per-packet one-way delay: 63.791 ms
Loss rate: 9.21%
-- Flow 2:
Average throughput: 44.47 Mbit/s
95th percentile per-packet one-way delay: 67.670 ms
Loss rate: 17.47%
-- Flow 3:
Average throughput: 12.80 Mbit/s
95th percentile per-packet one-way delay: 64.737 ms
Loss rate: 16.05%

Run 4: Report of FillP-Sheep — Data Link

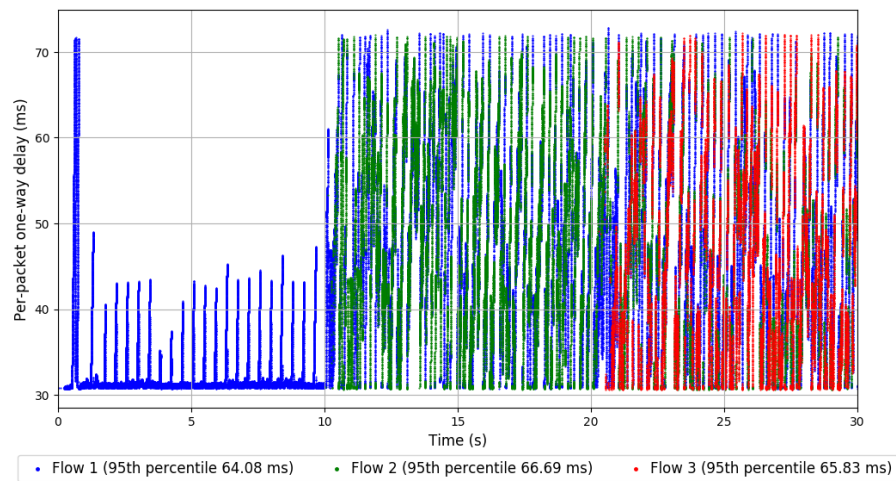
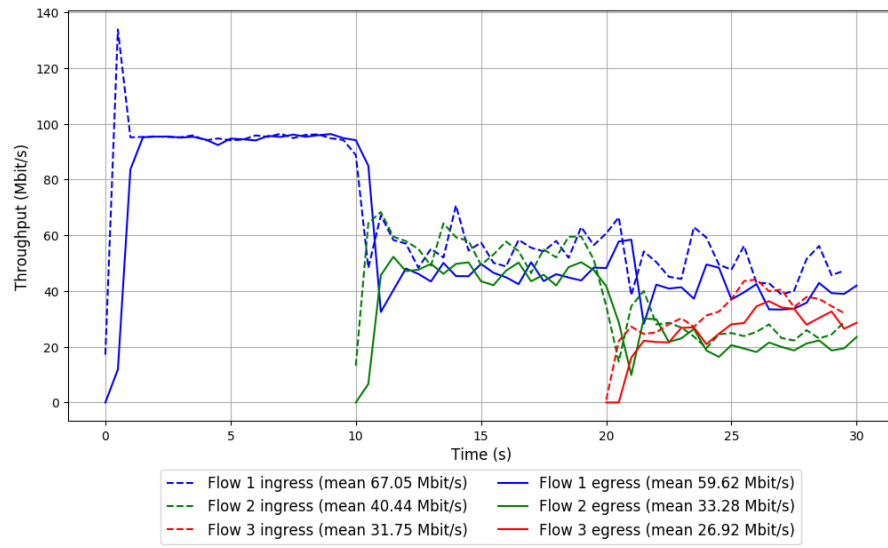


Run 5: Statistics of FillP-Sheep

Start at: 2019-03-19 04:18:46
End at: 2019-03-19 04:19:16
Local clock offset: -0.058 ms
Remote clock offset: -0.685 ms

Below is generated by plot.py at 2019-03-19 04:48:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.46 Mbit/s
95th percentile per-packet one-way delay: 65.297 ms
Loss rate: 13.42%
-- Flow 1:
Average throughput: 59.62 Mbit/s
95th percentile per-packet one-way delay: 64.076 ms
Loss rate: 11.09%
-- Flow 2:
Average throughput: 33.28 Mbit/s
95th percentile per-packet one-way delay: 66.694 ms
Loss rate: 17.74%
-- Flow 3:
Average throughput: 26.92 Mbit/s
95th percentile per-packet one-way delay: 65.834 ms
Loss rate: 17.20%

Run 5: Report of FillP-Sheep — Data Link

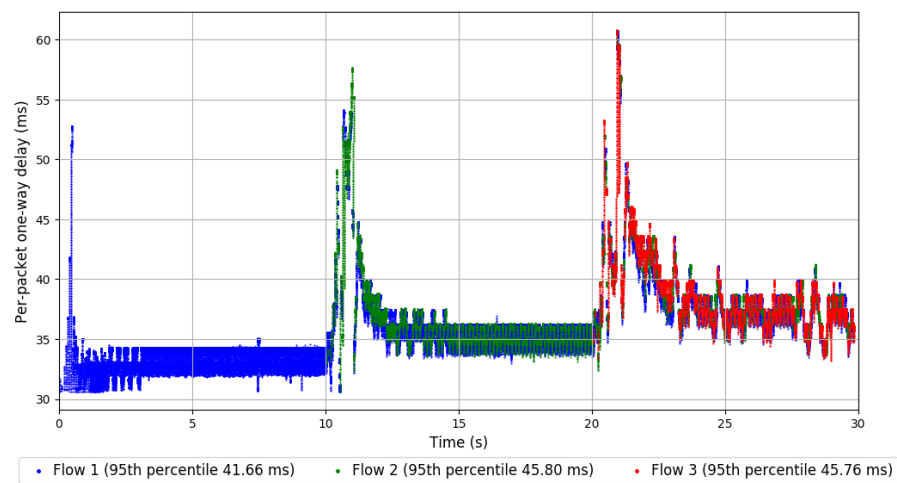
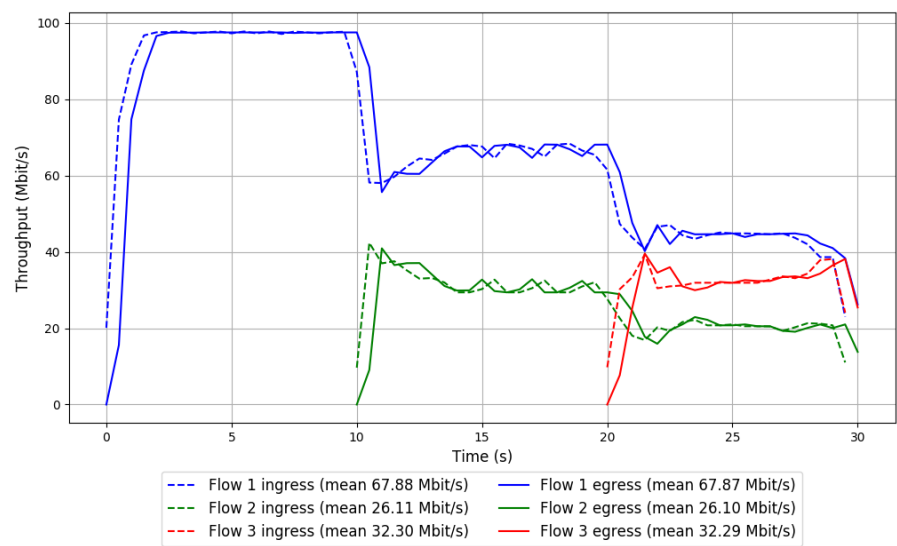


Run 1: Statistics of Indigo

Start at: 2019-03-19 02:37:09
End at: 2019-03-19 02:37:39
Local clock offset: 1.409 ms
Remote clock offset: -2.887 ms

Below is generated by plot.py at 2019-03-19 04:48:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.67 Mbit/s
95th percentile per-packet one-way delay: 43.269 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.87 Mbit/s
95th percentile per-packet one-way delay: 41.665 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 26.10 Mbit/s
95th percentile per-packet one-way delay: 45.802 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.29 Mbit/s
95th percentile per-packet one-way delay: 45.763 ms
Loss rate: 0.00%

Run 1: Report of Indigo — Data Link

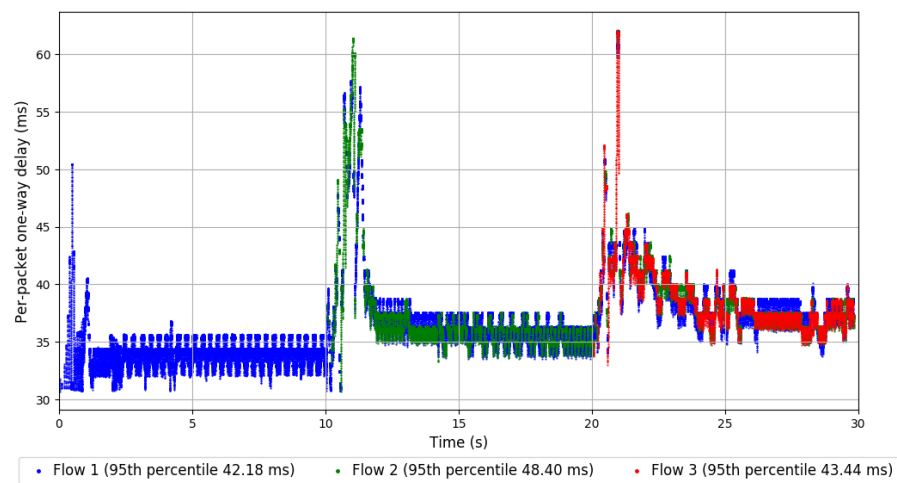
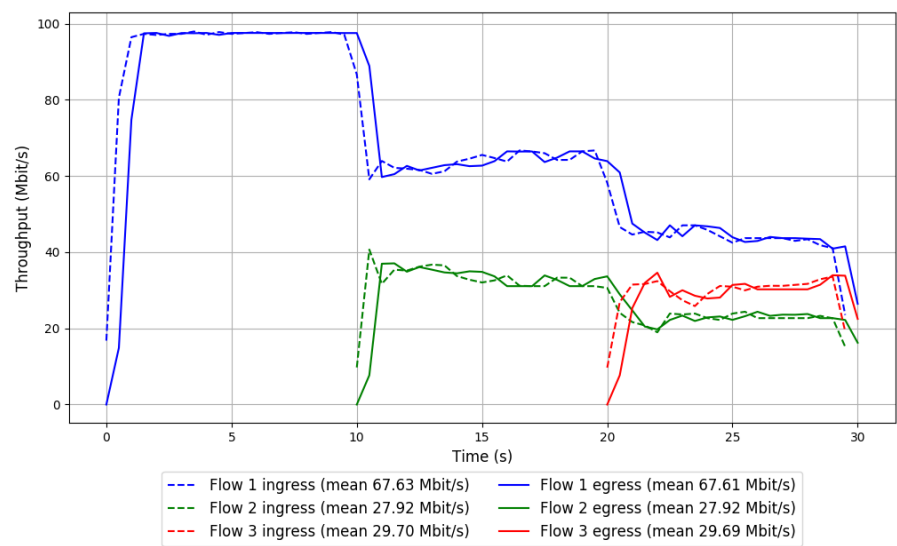


Run 2: Statistics of Indigo

Start at: 2019-03-19 03:03:19
End at: 2019-03-19 03:03:49
Local clock offset: 1.697 ms
Remote clock offset: -1.705 ms

Below is generated by plot.py at 2019-03-19 04:48:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 43.263 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.61 Mbit/s
95th percentile per-packet one-way delay: 42.180 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.92 Mbit/s
95th percentile per-packet one-way delay: 48.401 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.69 Mbit/s
95th percentile per-packet one-way delay: 43.442 ms
Loss rate: 0.00%

Run 2: Report of Indigo — Data Link

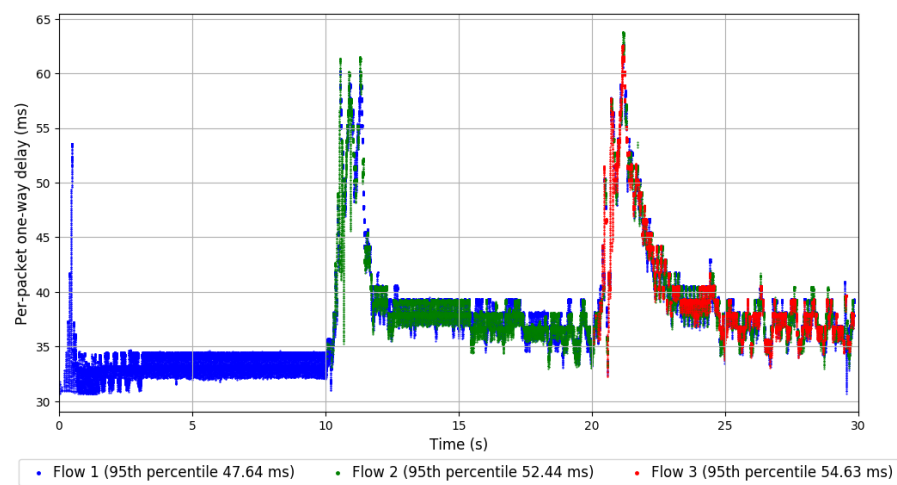
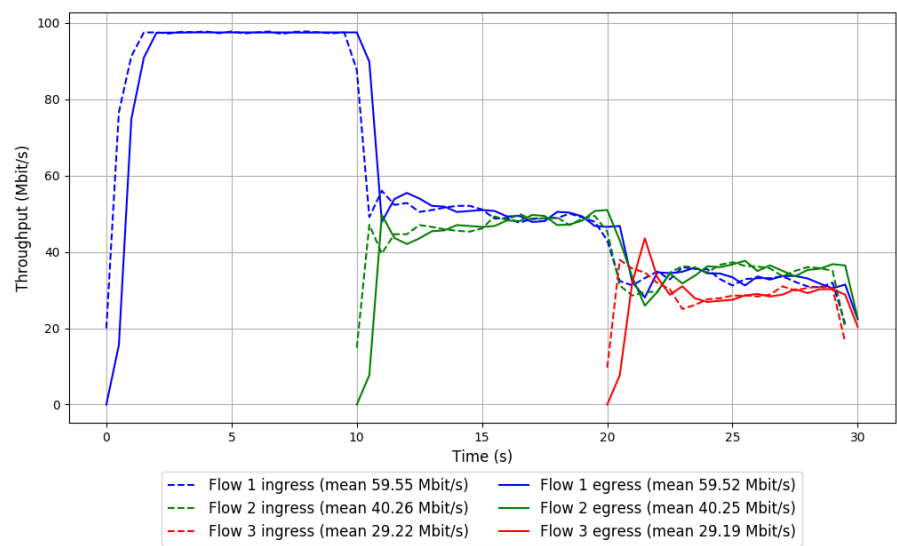


Run 3: Statistics of Indigo

Start at: 2019-03-19 03:30:06
End at: 2019-03-19 03:30:36
Local clock offset: 1.238 ms
Remote clock offset: -0.991 ms

Below is generated by plot.py at 2019-03-19 04:48:12
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 50.869 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 59.52 Mbit/s
95th percentile per-packet one-way delay: 47.643 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 40.25 Mbit/s
95th percentile per-packet one-way delay: 52.443 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.19 Mbit/s
95th percentile per-packet one-way delay: 54.627 ms
Loss rate: 0.07%

Run 3: Report of Indigo — Data Link

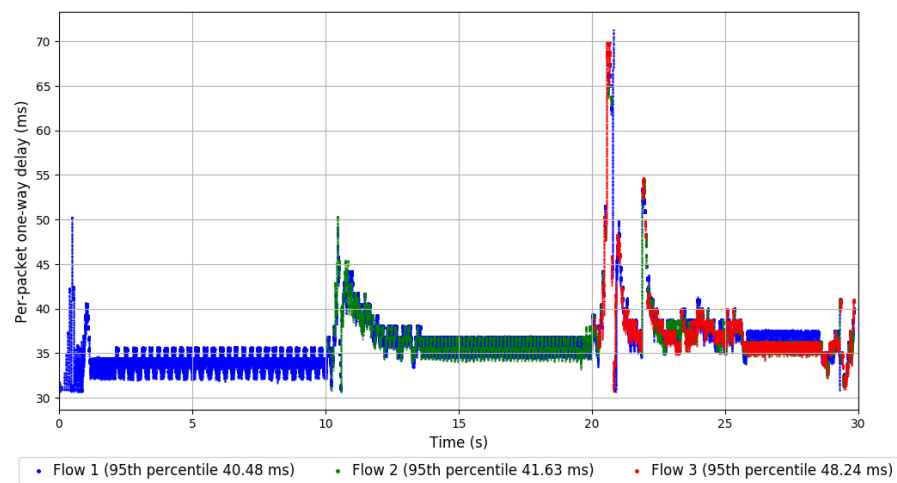
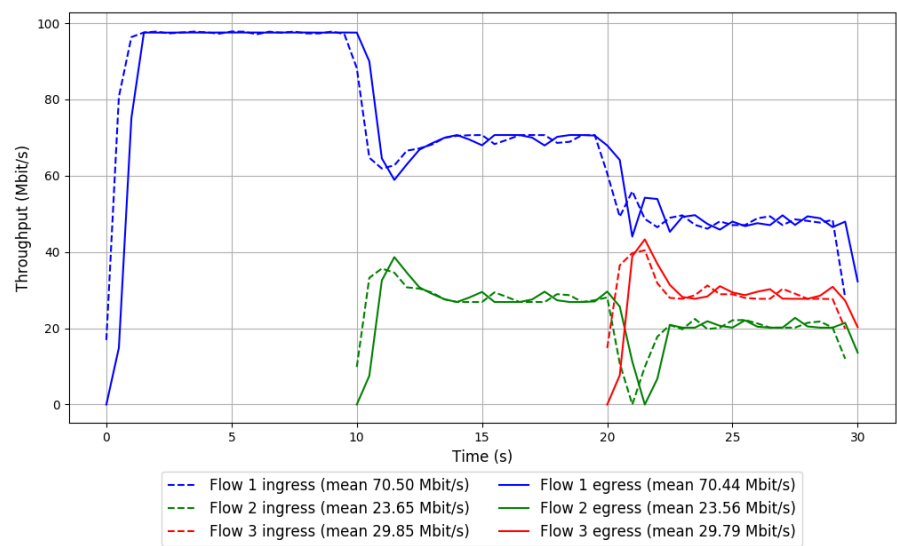


Run 4: Statistics of Indigo

Start at: 2019-03-19 03:56:28
End at: 2019-03-19 03:56:58
Local clock offset: 0.294 ms
Remote clock offset: -0.559 ms

Below is generated by plot.py at 2019-03-19 04:48:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.79 Mbit/s
95th percentile per-packet one-way delay: 41.066 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 70.44 Mbit/s
95th percentile per-packet one-way delay: 40.479 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 23.56 Mbit/s
95th percentile per-packet one-way delay: 41.634 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 29.79 Mbit/s
95th percentile per-packet one-way delay: 48.240 ms
Loss rate: 0.16%

Run 4: Report of Indigo — Data Link

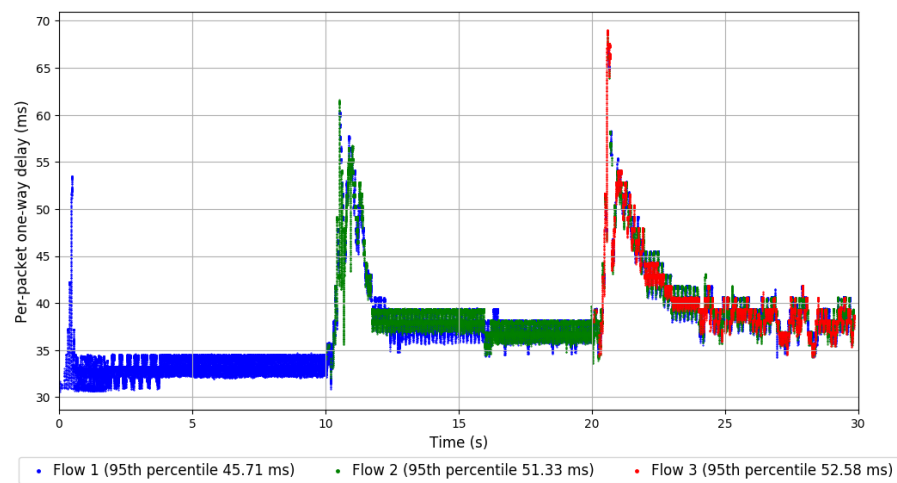
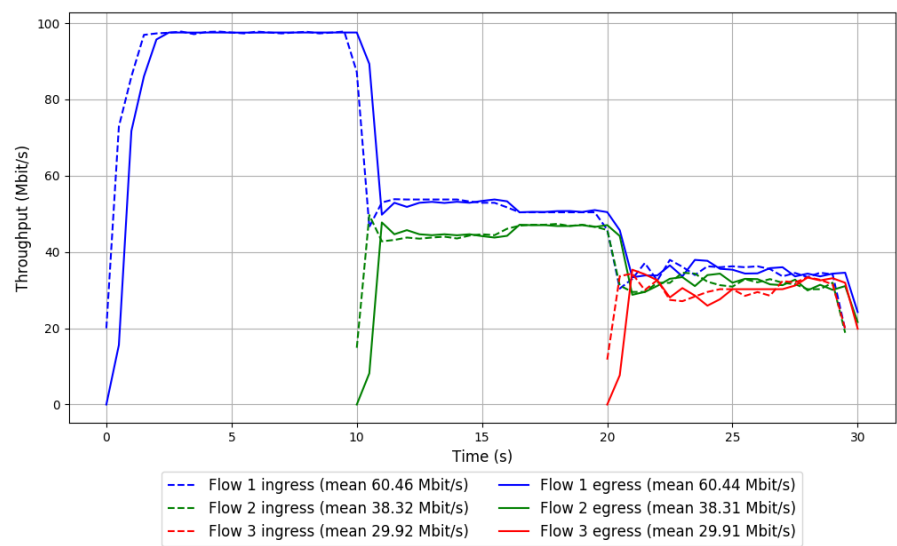


Run 5: Statistics of Indigo

Start at: 2019-03-19 04:22:34
End at: 2019-03-19 04:23:04
Local clock offset: 0.204 ms
Remote clock offset: -0.694 ms

Below is generated by plot.py at 2019-03-19 04:48:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 49.065 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.44 Mbit/s
95th percentile per-packet one-way delay: 45.712 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.31 Mbit/s
95th percentile per-packet one-way delay: 51.330 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.91 Mbit/s
95th percentile per-packet one-way delay: 52.575 ms
Loss rate: 0.00%

Run 5: Report of Indigo — Data Link

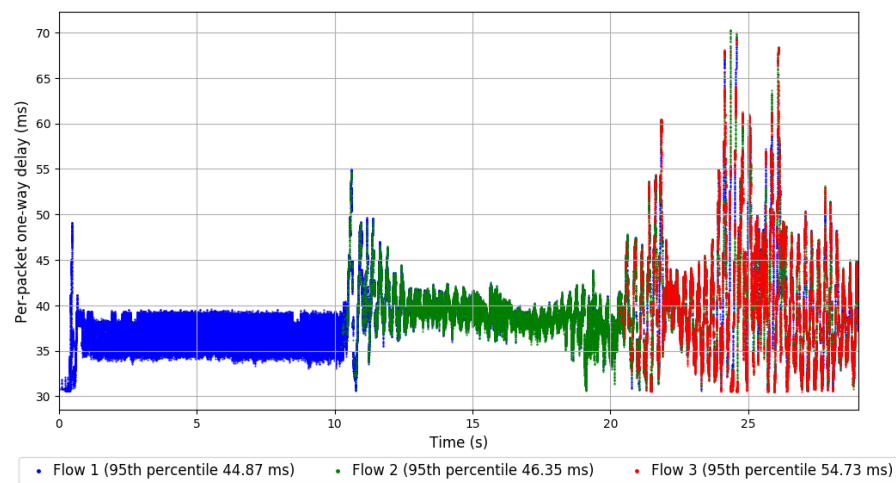
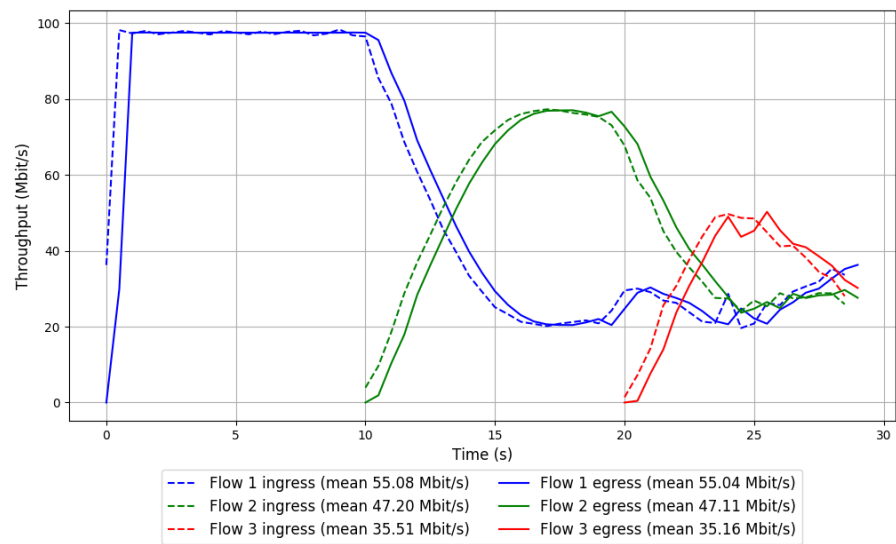


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-03-19 02:55:53
End at: 2019-03-19 02:56:23
Local clock offset: 1.614 ms
Remote clock offset: -2.148 ms

Below is generated by plot.py at 2019-03-19 04:48:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 96.10 Mbit/s
95th percentile per-packet one-way delay: 46.860 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 55.04 Mbit/s
95th percentile per-packet one-way delay: 44.865 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 47.11 Mbit/s
95th percentile per-packet one-way delay: 46.350 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 35.16 Mbit/s
95th percentile per-packet one-way delay: 54.730 ms
Loss rate: 0.98%

Run 1: Report of Indigo-MusesC3 — Data Link

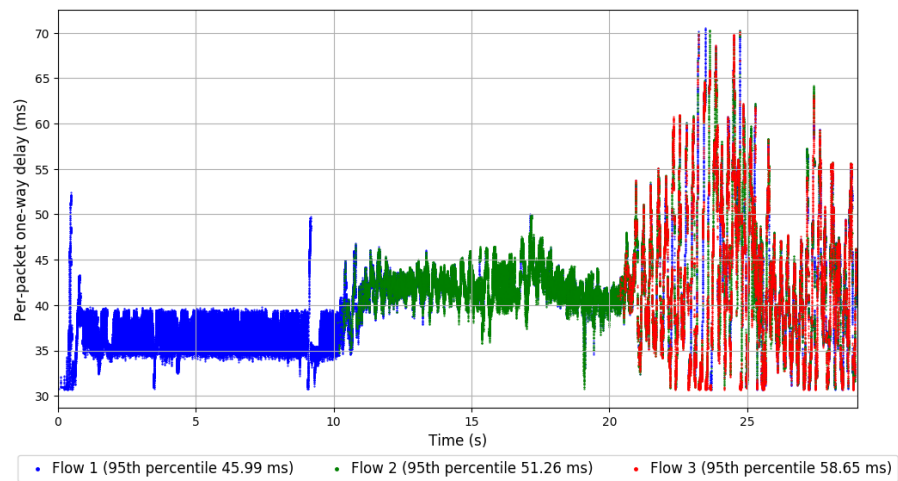
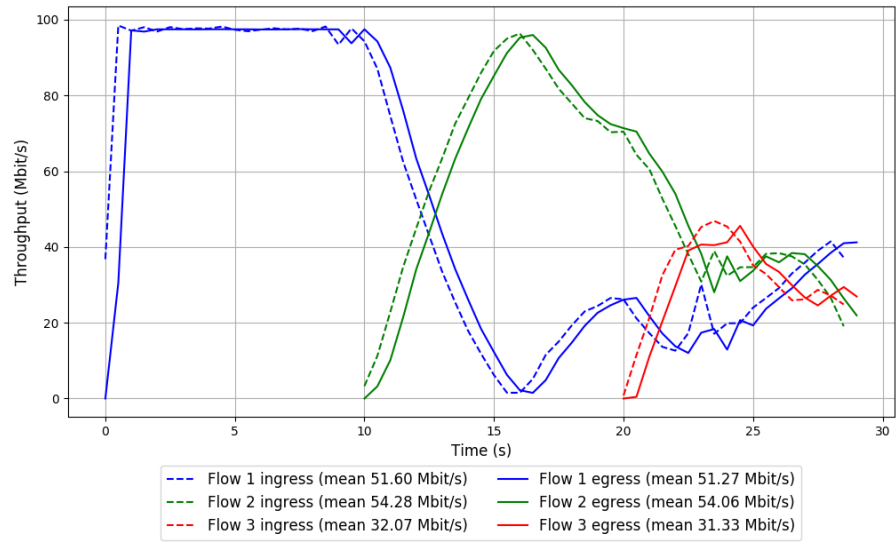


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-03-19 03:22:23
End at: 2019-03-19 03:22:53
Local clock offset: 1.44 ms
Remote clock offset: -1.038 ms

Below is generated by plot.py at 2019-03-19 04:49:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.80 Mbit/s
95th percentile per-packet one-way delay: 51.365 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 51.27 Mbit/s
95th percentile per-packet one-way delay: 45.987 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 54.06 Mbit/s
95th percentile per-packet one-way delay: 51.256 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 31.33 Mbit/s
95th percentile per-packet one-way delay: 58.649 ms
Loss rate: 2.27%

Run 2: Report of Indigo-MusesC3 — Data Link

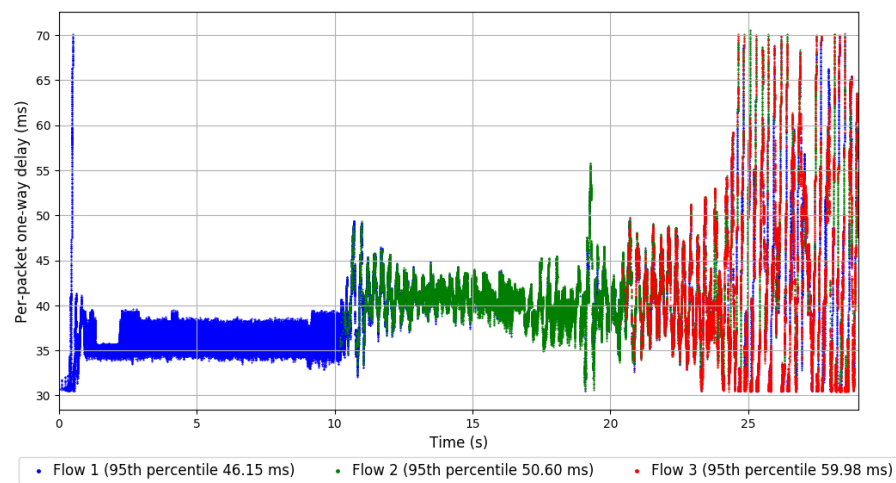
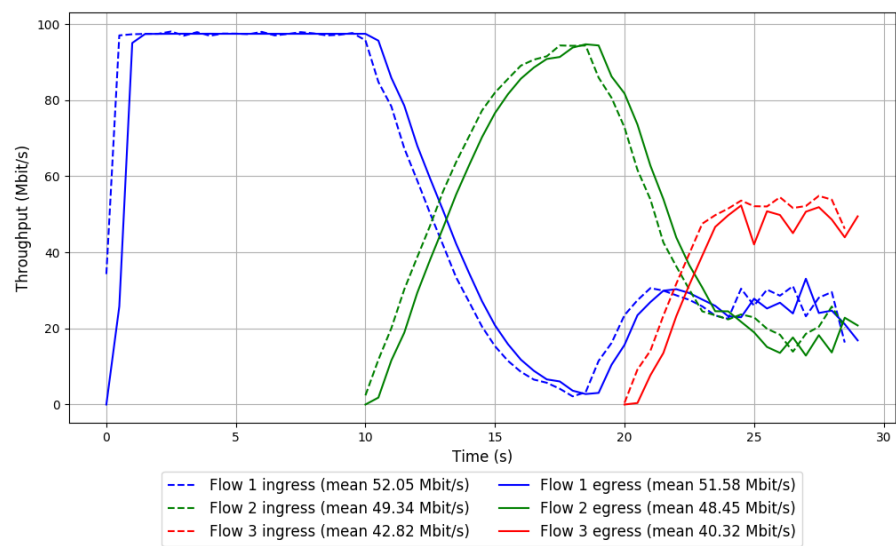


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-03-19 03:48:54
End at: 2019-03-19 03:49:24
Local clock offset: 0.819 ms
Remote clock offset: -0.812 ms

Below is generated by plot.py at 2019-03-19 04:49:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.12 Mbit/s
95th percentile per-packet one-way delay: 51.783 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 51.58 Mbit/s
95th percentile per-packet one-way delay: 46.151 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 48.45 Mbit/s
95th percentile per-packet one-way delay: 50.601 ms
Loss rate: 1.71%
-- Flow 3:
Average throughput: 40.32 Mbit/s
95th percentile per-packet one-way delay: 59.982 ms
Loss rate: 5.67%

Run 3: Report of Indigo-MusesC3 — Data Link

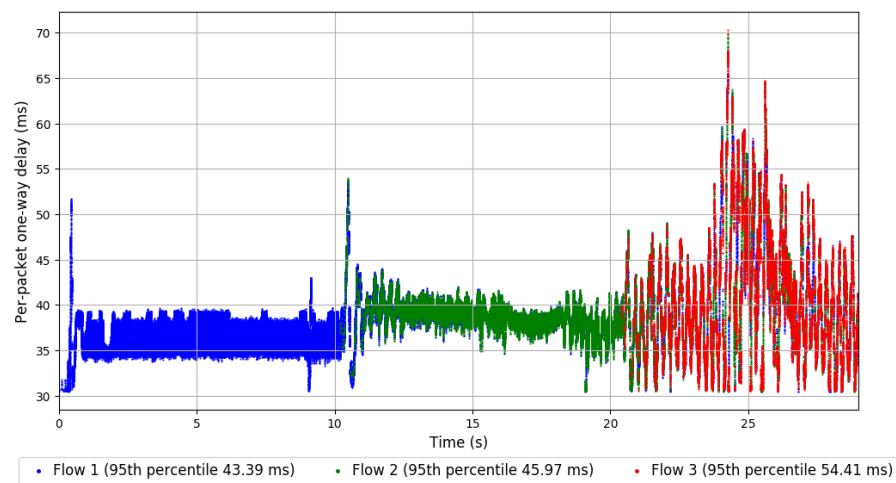
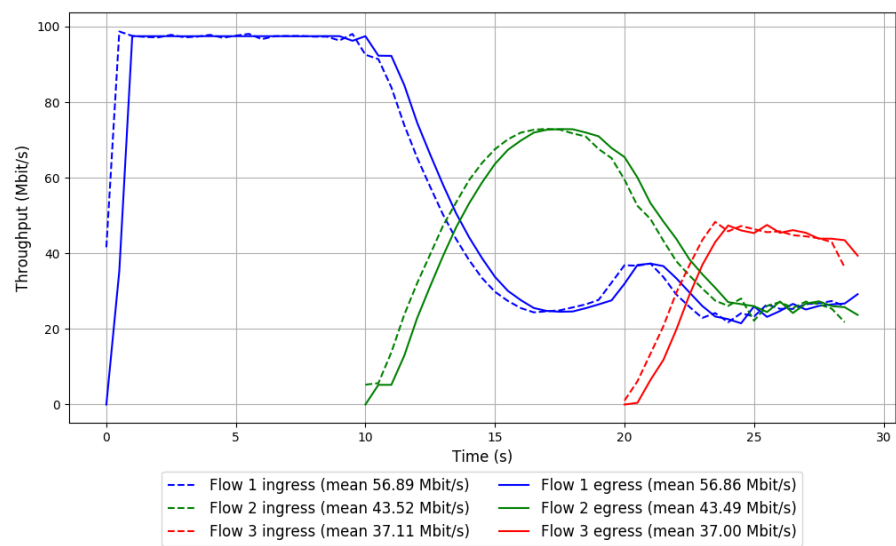


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-03-19 04:15:05
End at: 2019-03-19 04:15:35
Local clock offset: -0.269 ms
Remote clock offset: -0.906 ms

Below is generated by plot.py at 2019-03-19 04:49:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 96.23 Mbit/s
95th percentile per-packet one-way delay: 46.551 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 56.86 Mbit/s
95th percentile per-packet one-way delay: 43.387 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 43.49 Mbit/s
95th percentile per-packet one-way delay: 45.972 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 37.00 Mbit/s
95th percentile per-packet one-way delay: 54.414 ms
Loss rate: 0.26%

Run 4: Report of Indigo-MusesC3 — Data Link

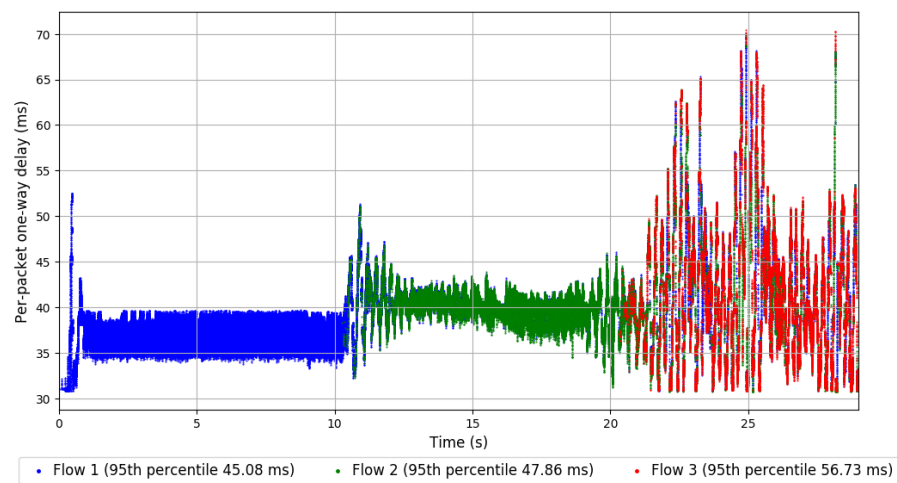
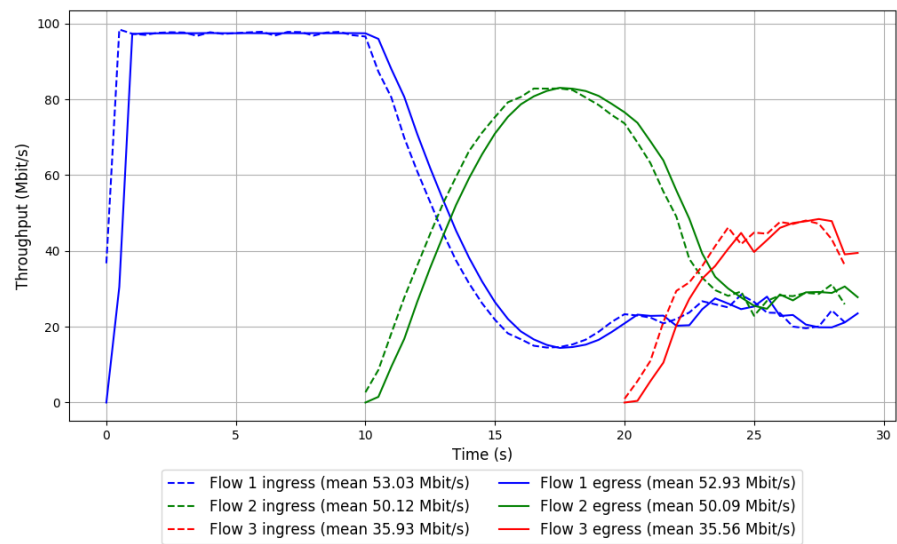


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-03-19 04:41:28
End at: 2019-03-19 04:41:58
Local clock offset: 0.61 ms
Remote clock offset: -1.077 ms

Below is generated by plot.py at 2019-03-19 04:49:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.99 Mbit/s
95th percentile per-packet one-way delay: 47.953 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 52.93 Mbit/s
95th percentile per-packet one-way delay: 45.083 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 50.09 Mbit/s
95th percentile per-packet one-way delay: 47.862 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 35.56 Mbit/s
95th percentile per-packet one-way delay: 56.728 ms
Loss rate: 1.10%

Run 5: Report of Indigo-MusesC3 — Data Link

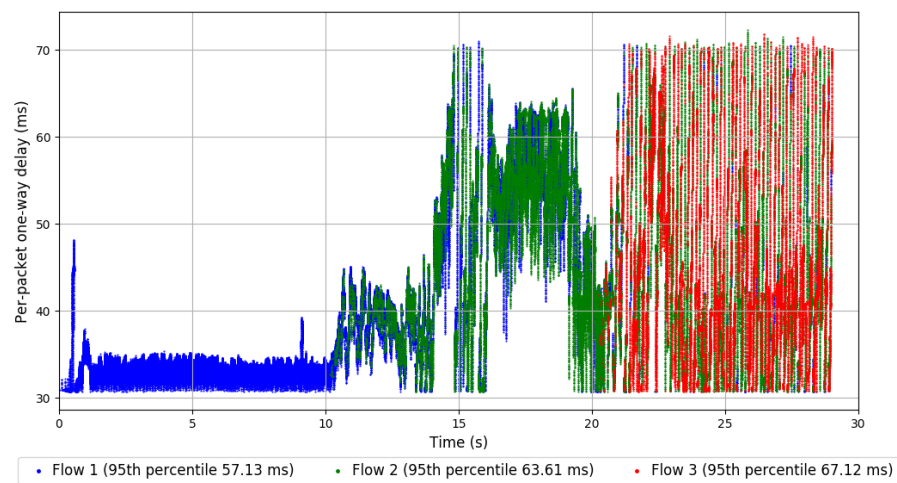
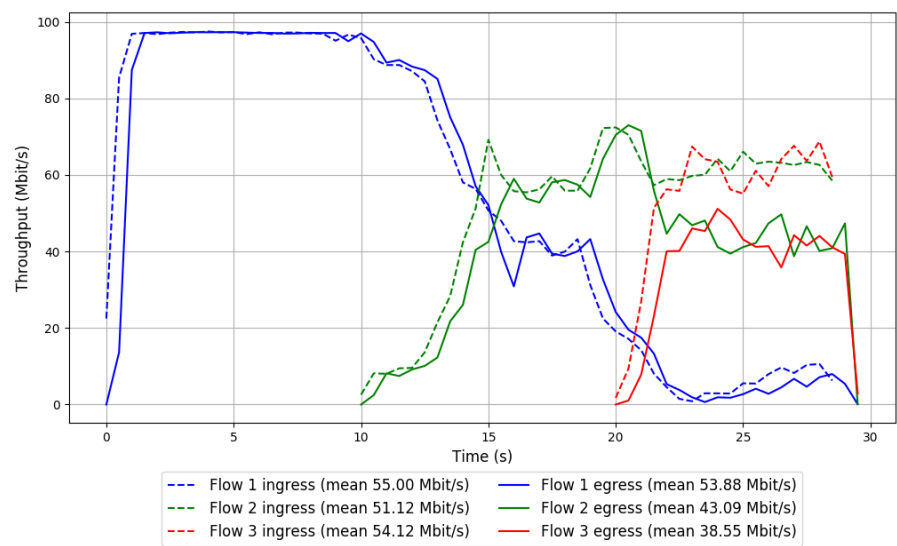


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-03-19 02:54:39
End at: 2019-03-19 02:55:09
Local clock offset: 1.616 ms
Remote clock offset: -1.985 ms

Below is generated by plot.py at 2019-03-19 04:49:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.60 Mbit/s
95th percentile per-packet one-way delay: 62.158 ms
Loss rate: 10.44%
-- Flow 1:
Average throughput: 53.88 Mbit/s
95th percentile per-packet one-way delay: 57.135 ms
Loss rate: 1.90%
-- Flow 2:
Average throughput: 43.09 Mbit/s
95th percentile per-packet one-way delay: 63.609 ms
Loss rate: 15.58%
-- Flow 3:
Average throughput: 38.55 Mbit/s
95th percentile per-packet one-way delay: 67.120 ms
Loss rate: 28.62%

Run 1: Report of Indigo-MusesC5 — Data Link



Run 2: Statistics of Indigo-MusesC5

Start at: 2019-03-19 03:21:04

End at: 2019-03-19 03:21:34

Local clock offset: 1.521 ms

Remote clock offset: -1.07 ms

Below is generated by plot.py at 2019-03-19 04:49:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.49 Mbit/s

95th percentile per-packet one-way delay: 63.341 ms

Loss rate: 13.80%

-- Flow 1:

Average throughput: 58.77 Mbit/s

95th percentile per-packet one-way delay: 61.241 ms

Loss rate: 10.94%

-- Flow 2:

Average throughput: 50.60 Mbit/s

95th percentile per-packet one-way delay: 65.039 ms

Loss rate: 18.15%

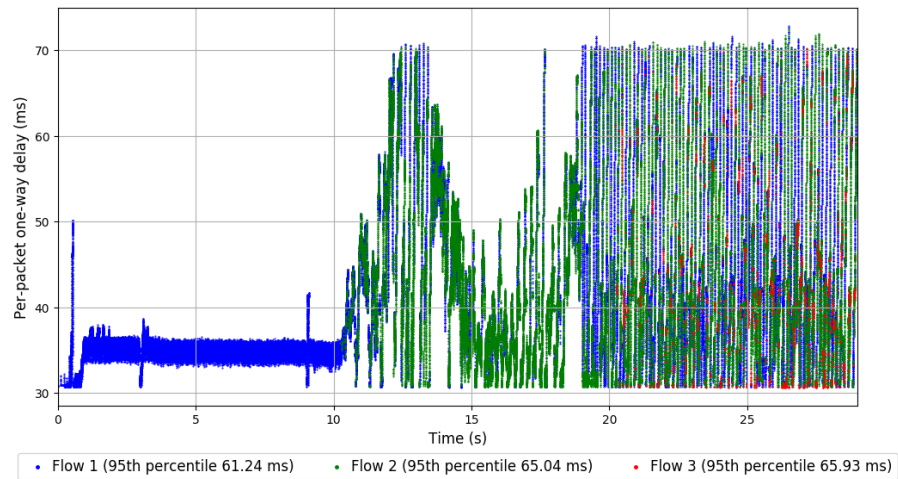
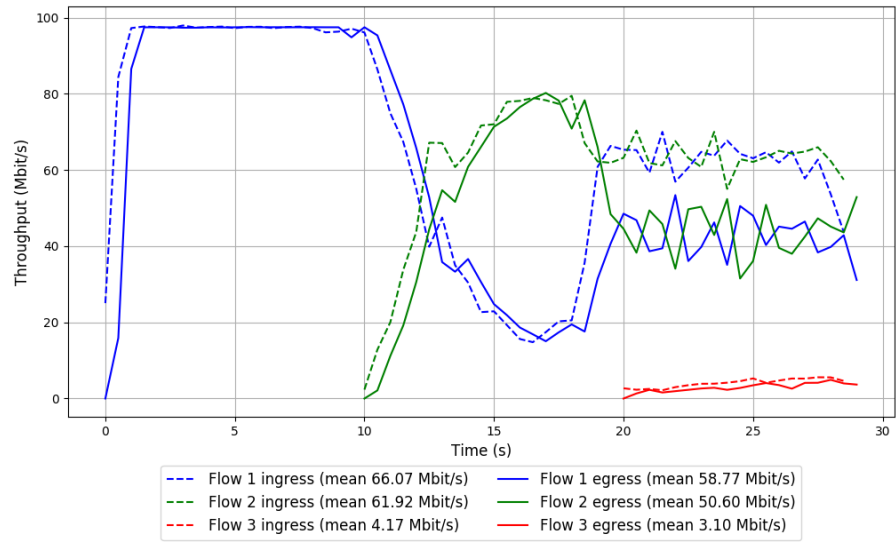
-- Flow 3:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 65.932 ms

Loss rate: 25.51%

Run 2: Report of Indigo-MusesC5 — Data Link

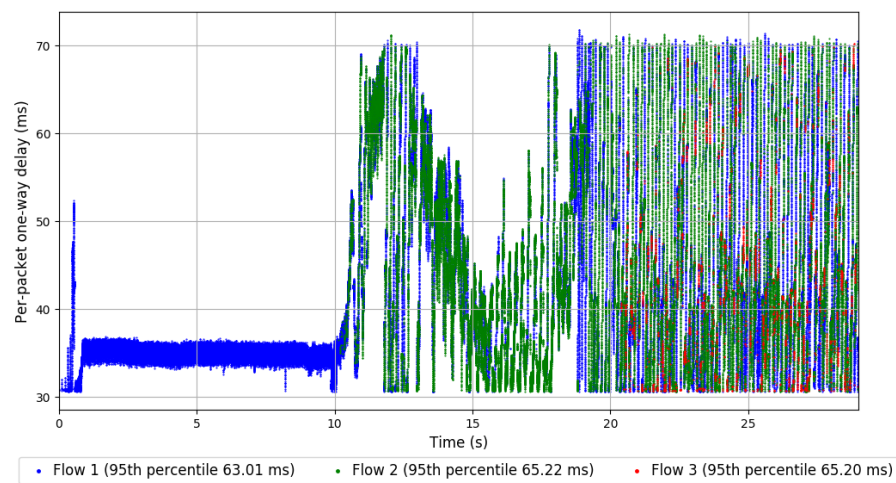
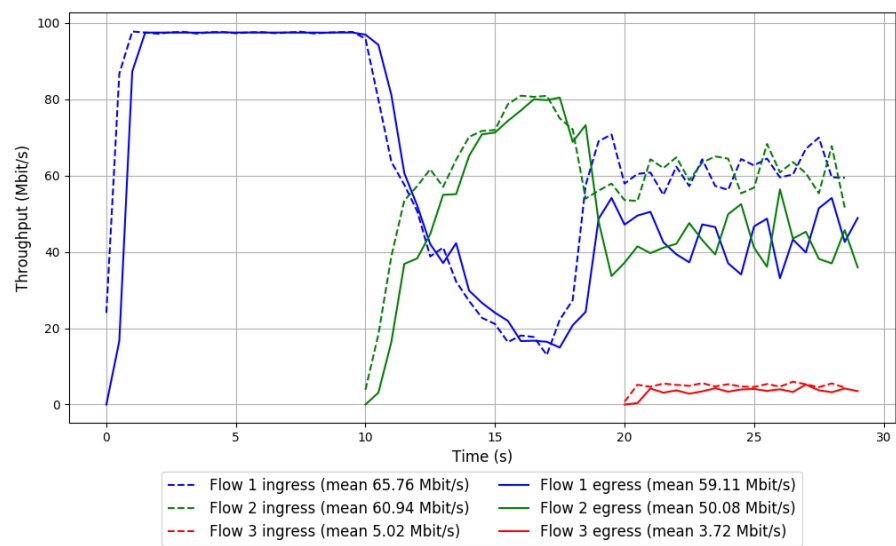


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-03-19 03:47:38
End at: 2019-03-19 03:48:08
Local clock offset: 0.994 ms
Remote clock offset: -0.688 ms

Below is generated by plot.py at 2019-03-19 04:49:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.77 Mbit/s
95th percentile per-packet one-way delay: 63.958 ms
Loss rate: 13.20%
-- Flow 1:
Average throughput: 59.11 Mbit/s
95th percentile per-packet one-way delay: 63.010 ms
Loss rate: 10.10%
-- Flow 2:
Average throughput: 50.08 Mbit/s
95th percentile per-packet one-way delay: 65.217 ms
Loss rate: 17.84%
-- Flow 3:
Average throughput: 3.72 Mbit/s
95th percentile per-packet one-way delay: 65.202 ms
Loss rate: 26.26%

Run 3: Report of Indigo-MusesC5 — Data Link

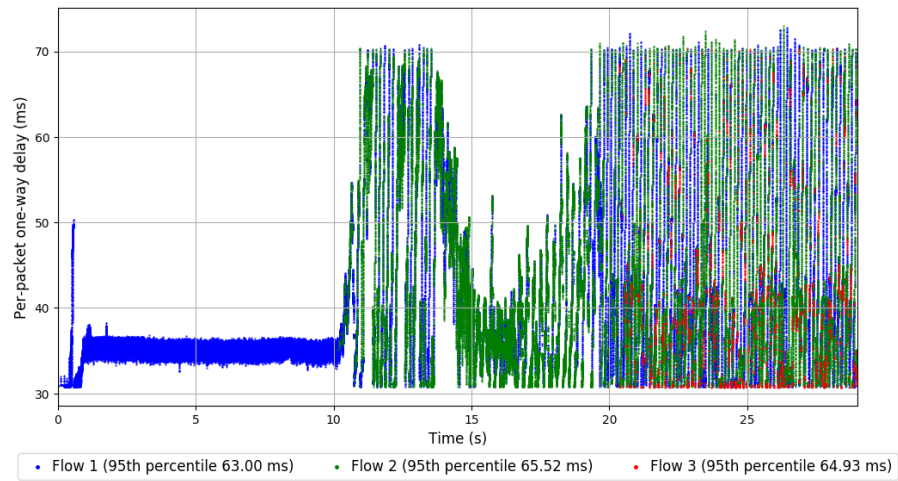
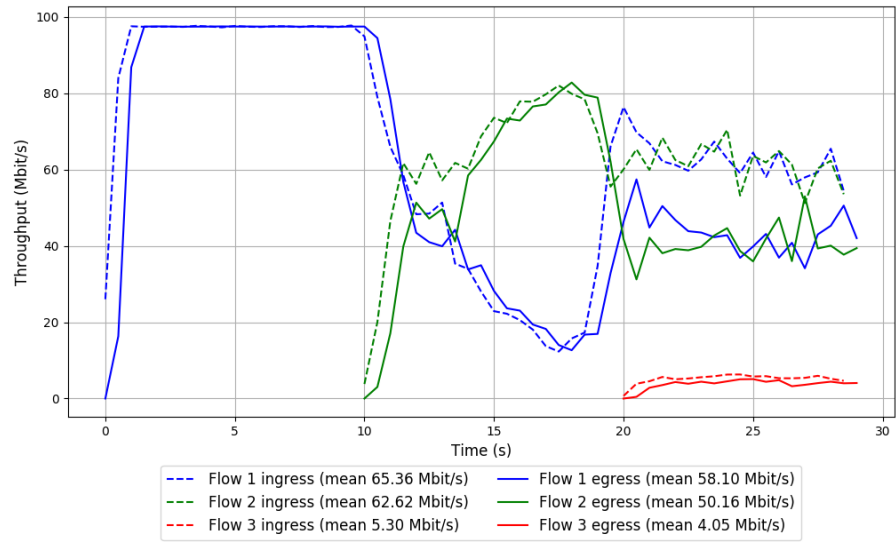


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-03-19 04:13:48
End at: 2019-03-19 04:14:18
Local clock offset: -0.236 ms
Remote clock offset: -0.698 ms

Below is generated by plot.py at 2019-03-19 04:49:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.91 Mbit/s
95th percentile per-packet one-way delay: 64.136 ms
Loss rate: 14.62%
-- Flow 1:
Average throughput: 58.10 Mbit/s
95th percentile per-packet one-way delay: 62.996 ms
Loss rate: 11.09%
-- Flow 2:
Average throughput: 50.16 Mbit/s
95th percentile per-packet one-way delay: 65.517 ms
Loss rate: 19.90%
-- Flow 3:
Average throughput: 4.05 Mbit/s
95th percentile per-packet one-way delay: 64.934 ms
Loss rate: 23.73%

Run 4: Report of Indigo-MusesC5 — Data Link

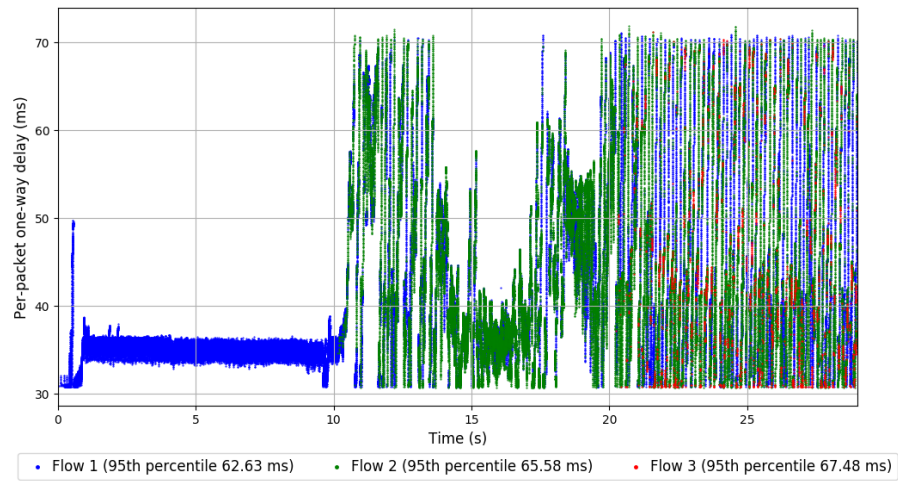
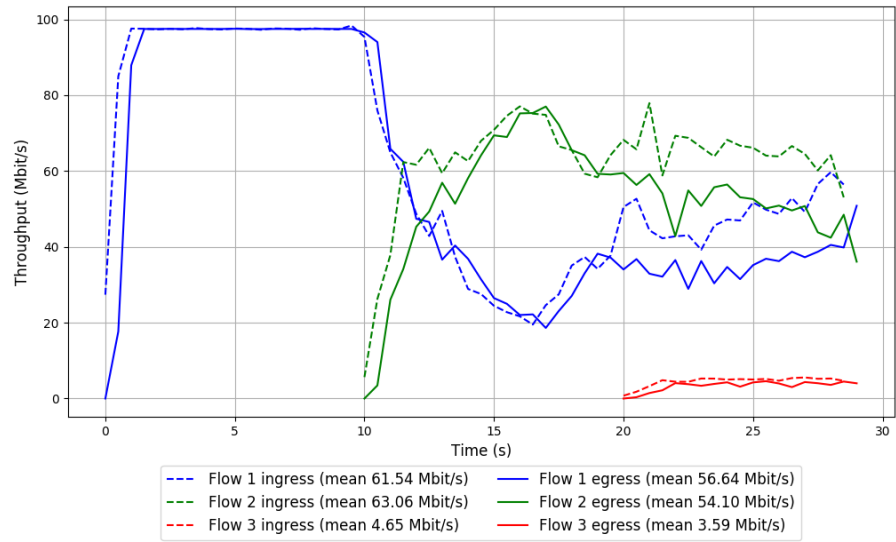


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-03-19 04:40:08
End at: 2019-03-19 04:40:38
Local clock offset: 0.605 ms
Remote clock offset: -1.019 ms

Below is generated by plot.py at 2019-03-19 04:50:17
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.97 Mbit/s
95th percentile per-packet one-way delay: 64.432 ms
Loss rate: 10.51%
-- Flow 1:
Average throughput: 56.64 Mbit/s
95th percentile per-packet one-way delay: 62.630 ms
Loss rate: 7.85%
-- Flow 2:
Average throughput: 54.10 Mbit/s
95th percentile per-packet one-way delay: 65.583 ms
Loss rate: 14.08%
-- Flow 3:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 67.480 ms
Loss rate: 22.68%

Run 5: Report of Indigo-MusesC5 — Data Link

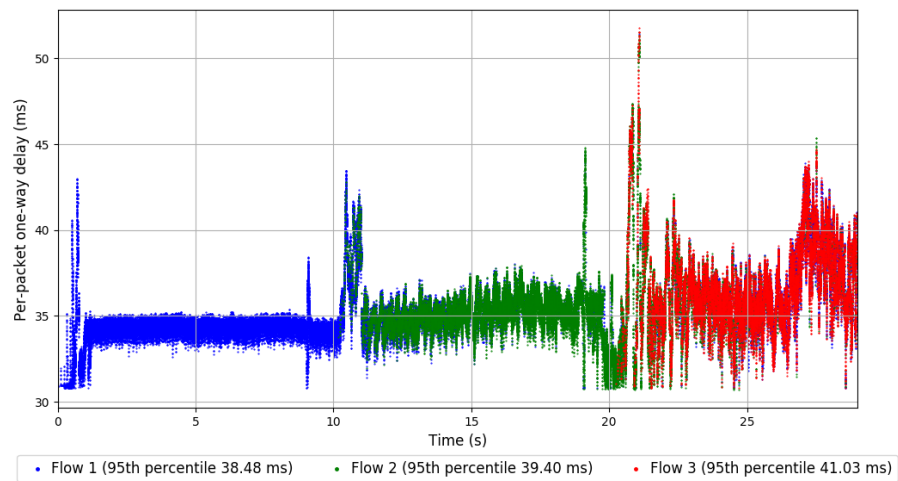
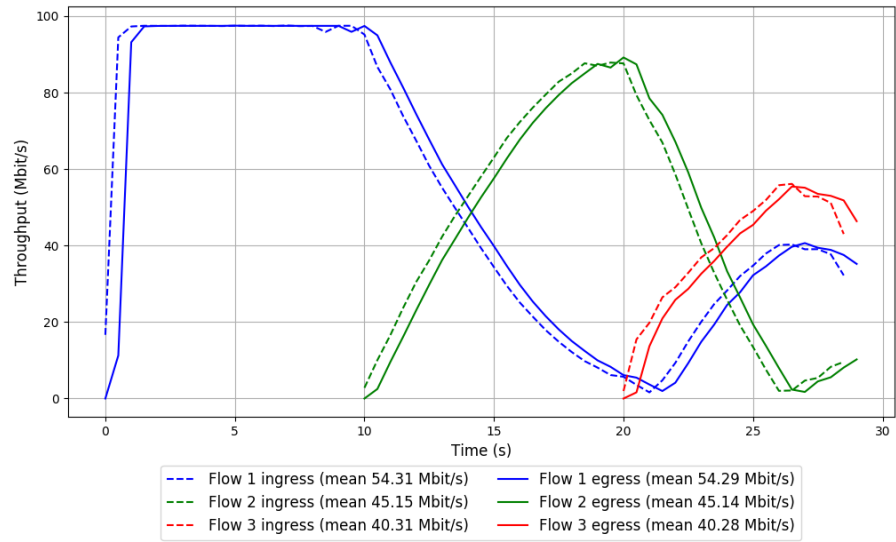


Run 1: Statistics of Indigo-MusesD

Start at: 2019-03-19 02:42:21
End at: 2019-03-19 02:42:51
Local clock offset: 1.485 ms
Remote clock offset: -2.425 ms

Below is generated by plot.py at 2019-03-19 04:50:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.78 Mbit/s
95th percentile per-packet one-way delay: 39.472 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.29 Mbit/s
95th percentile per-packet one-way delay: 38.478 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.14 Mbit/s
95th percentile per-packet one-way delay: 39.397 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 40.28 Mbit/s
95th percentile per-packet one-way delay: 41.031 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesD — Data Link

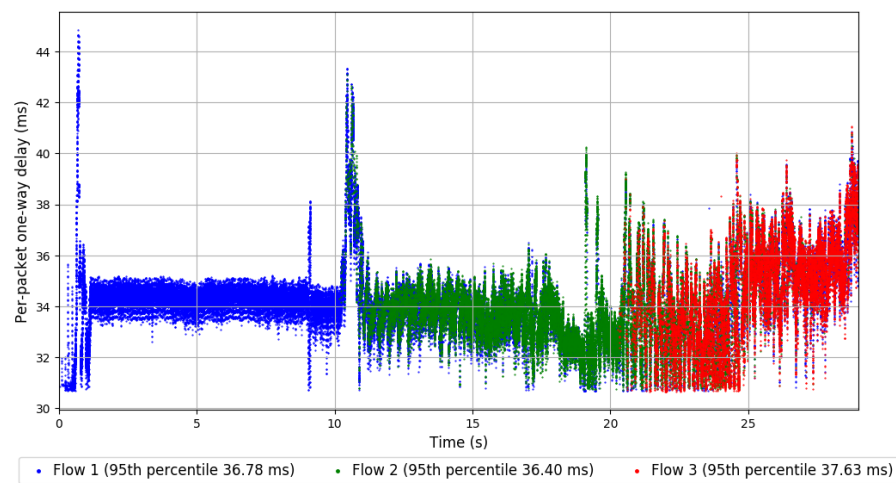
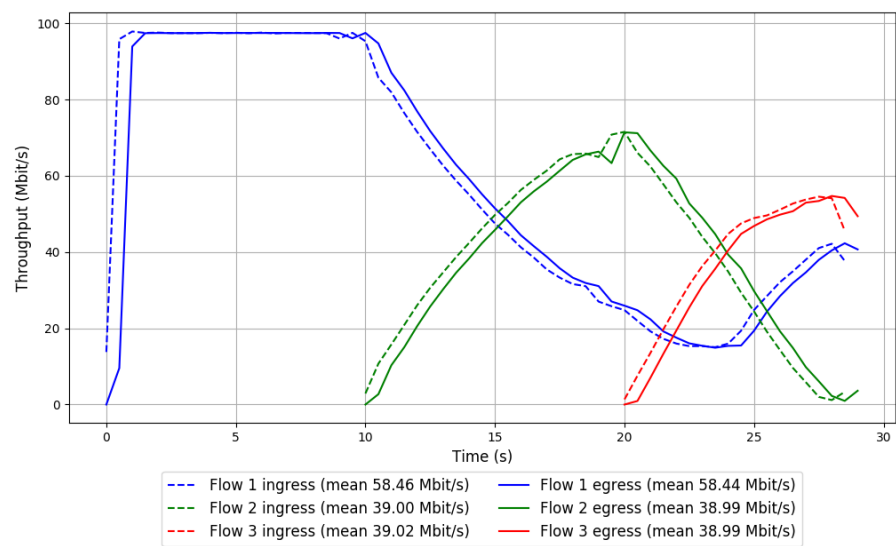


Run 2: Statistics of Indigo-MusesD

Start at: 2019-03-19 03:08:40
End at: 2019-03-19 03:09:10
Local clock offset: 1.754 ms
Remote clock offset: -1.454 ms

Below is generated by plot.py at 2019-03-19 04:50:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.50 Mbit/s
95th percentile per-packet one-way delay: 36.960 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.44 Mbit/s
95th percentile per-packet one-way delay: 36.785 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.99 Mbit/s
95th percentile per-packet one-way delay: 36.400 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 38.99 Mbit/s
95th percentile per-packet one-way delay: 37.629 ms
Loss rate: 0.00%

Run 2: Report of Indigo-MusesD — Data Link

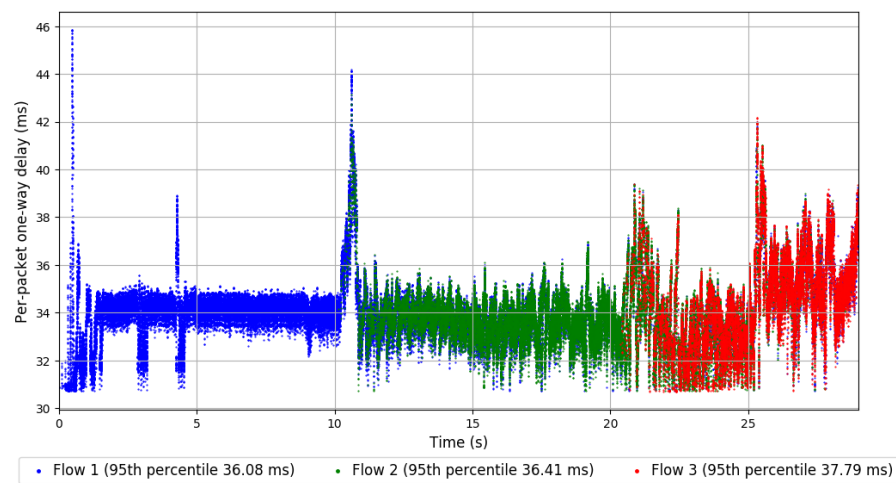
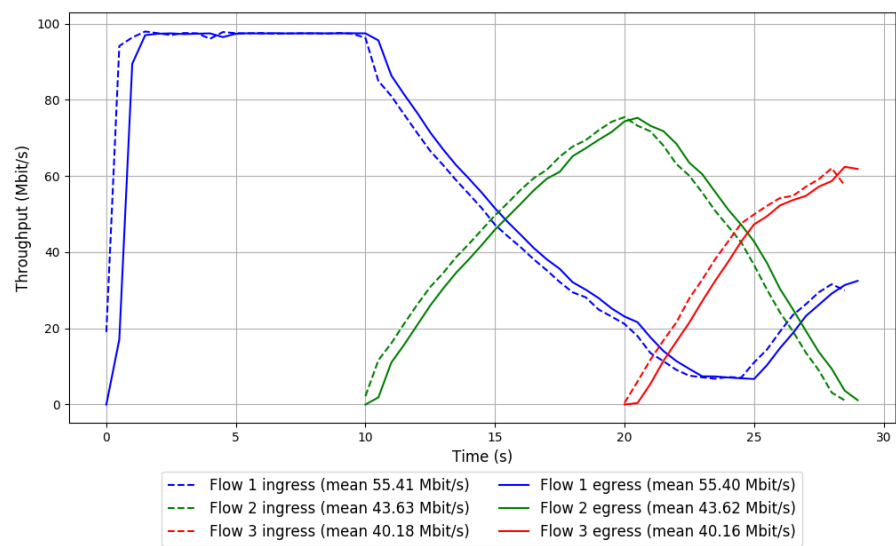


Run 3: Statistics of Indigo-MusesD

Start at: 2019-03-19 03:35:13
End at: 2019-03-19 03:35:43
Local clock offset: 1.176 ms
Remote clock offset: -0.913 ms

Below is generated by plot.py at 2019-03-19 04:50:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.72 Mbit/s
95th percentile per-packet one-way delay: 36.650 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.40 Mbit/s
95th percentile per-packet one-way delay: 36.081 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.62 Mbit/s
95th percentile per-packet one-way delay: 36.412 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 40.16 Mbit/s
95th percentile per-packet one-way delay: 37.786 ms
Loss rate: 0.00%

Run 3: Report of Indigo-MusesD — Data Link

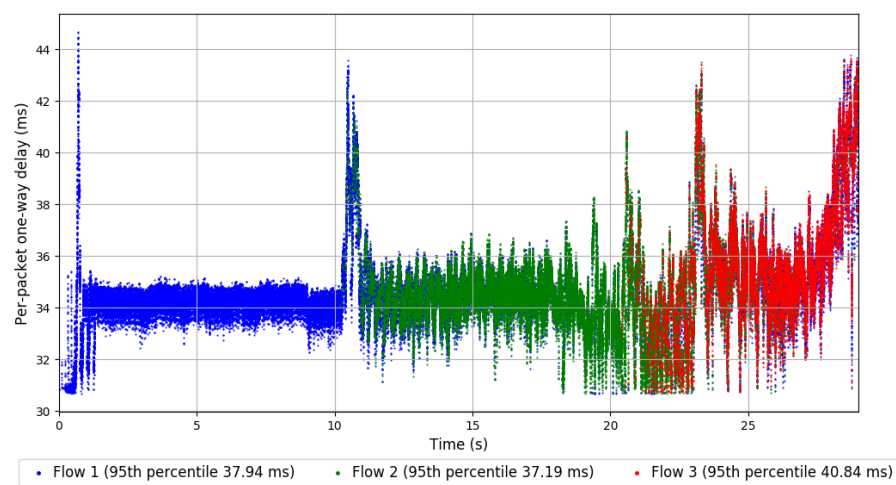
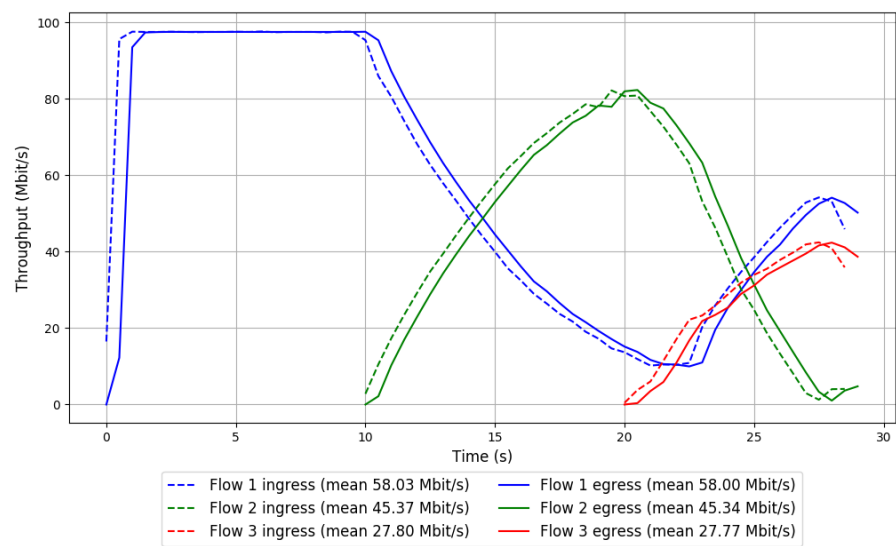


Run 4: Statistics of Indigo-MusesD

Start at: 2019-03-19 04:01:31
End at: 2019-03-19 04:02:01
Local clock offset: 0.042 ms
Remote clock offset: -0.555 ms

Below is generated by plot.py at 2019-03-19 04:50:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.69 Mbit/s
95th percentile per-packet one-way delay: 38.195 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 58.00 Mbit/s
95th percentile per-packet one-way delay: 37.943 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 45.34 Mbit/s
95th percentile per-packet one-way delay: 37.187 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 27.77 Mbit/s
95th percentile per-packet one-way delay: 40.836 ms
Loss rate: 0.01%

Run 4: Report of Indigo-MusesD — Data Link

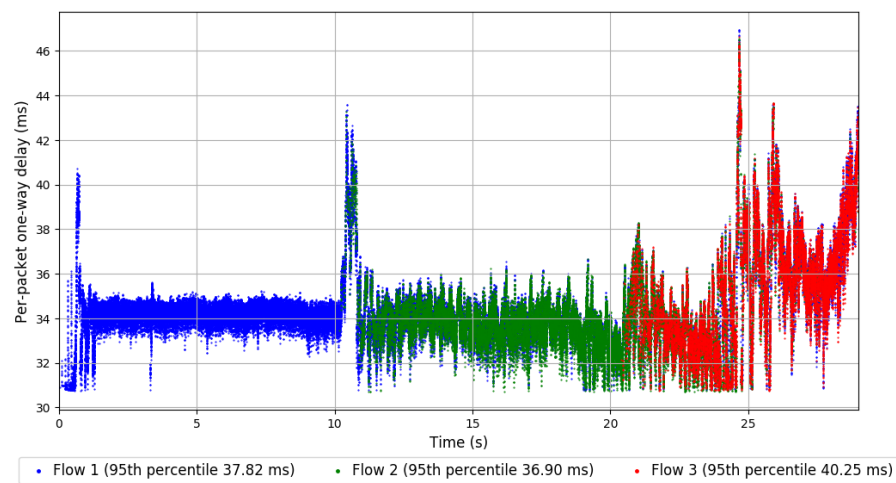
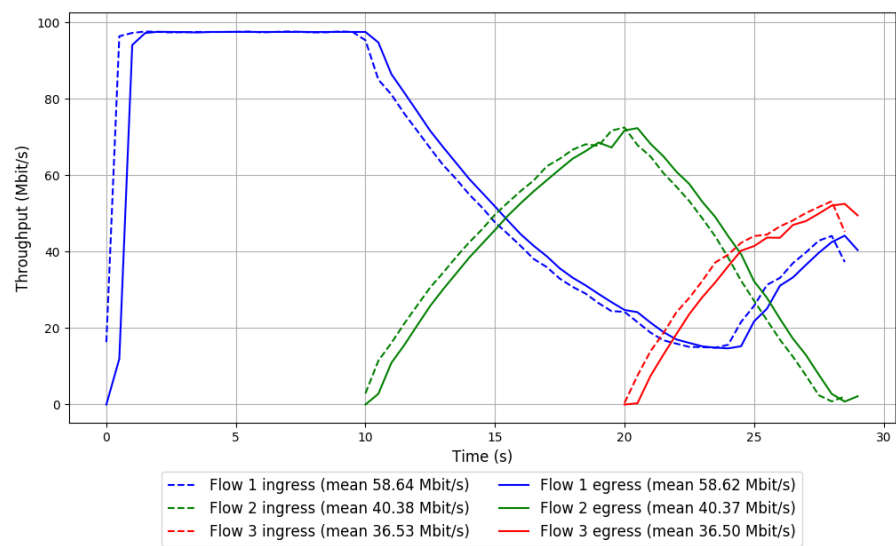


Run 5: Statistics of Indigo-MusesD

Start at: 2019-03-19 04:27:44
End at: 2019-03-19 04:28:14
Local clock offset: 0.401 ms
Remote clock offset: -0.712 ms

Below is generated by plot.py at 2019-03-19 04:50:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.68 Mbit/s
95th percentile per-packet one-way delay: 38.362 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.62 Mbit/s
95th percentile per-packet one-way delay: 37.824 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.37 Mbit/s
95th percentile per-packet one-way delay: 36.904 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.50 Mbit/s
95th percentile per-packet one-way delay: 40.253 ms
Loss rate: 0.00%

Run 5: Report of Indigo-MusesD — Data Link

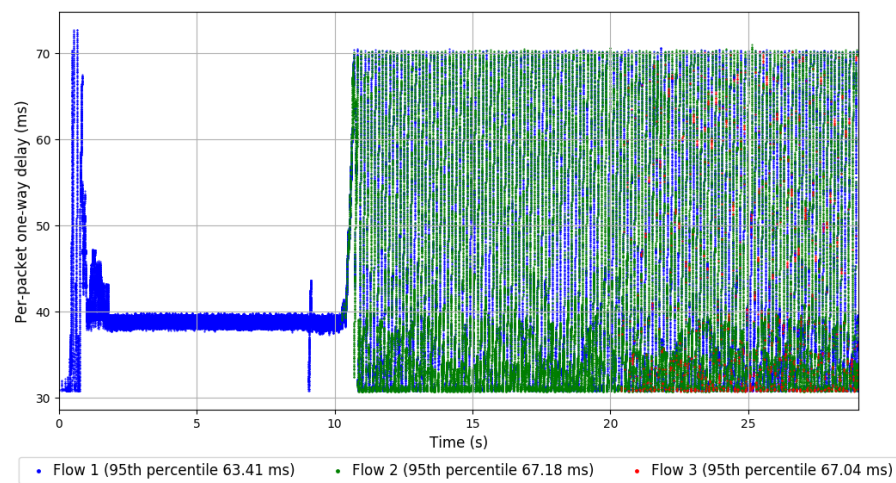
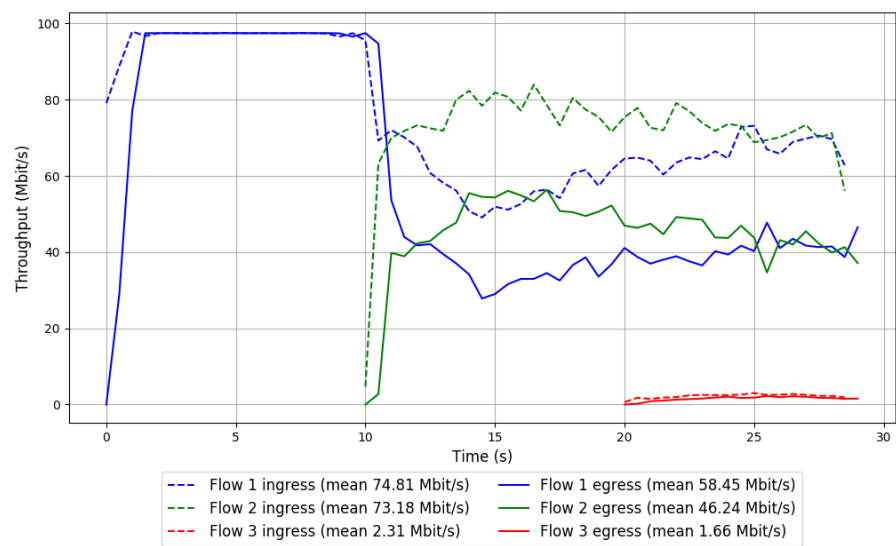


Run 1: Statistics of Indigo-MusesT

Start at: 2019-03-19 02:34:28
End at: 2019-03-19 02:34:58
Local clock offset: 1.381 ms
Remote clock offset: -2.825 ms

Below is generated by plot.py at 2019-03-19 04:51:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.91 Mbit/s
95th percentile per-packet one-way delay: 65.515 ms
Loss rate: 27.67%
-- Flow 1:
Average throughput: 58.45 Mbit/s
95th percentile per-packet one-way delay: 63.407 ms
Loss rate: 21.87%
-- Flow 2:
Average throughput: 46.24 Mbit/s
95th percentile per-packet one-way delay: 67.176 ms
Loss rate: 36.81%
-- Flow 3:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 67.044 ms
Loss rate: 28.15%

Run 1: Report of Indigo-MusesT — Data Link

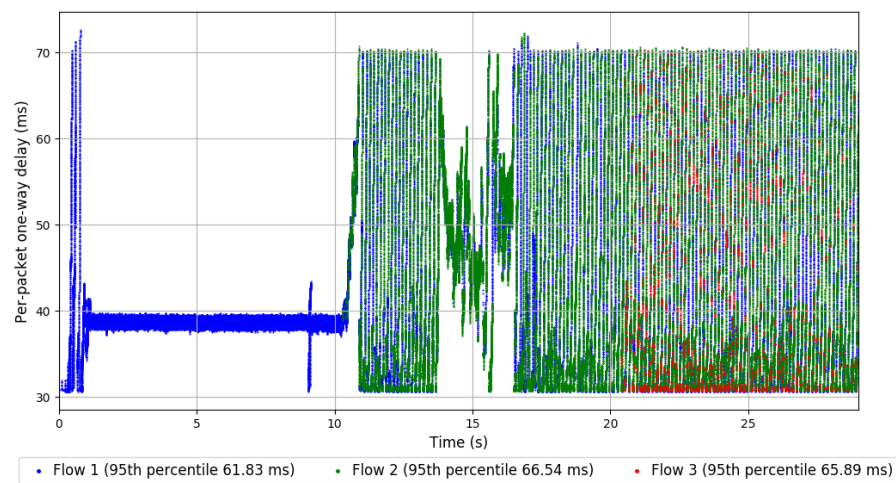
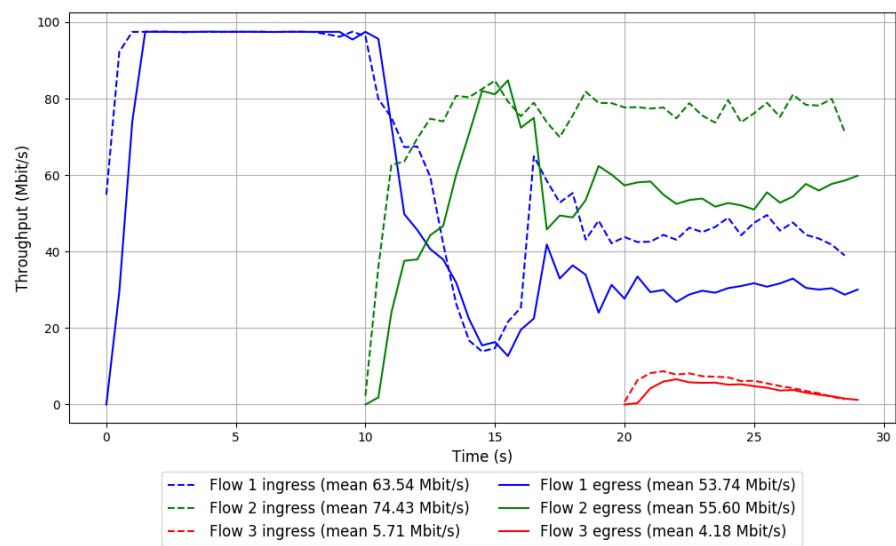


Run 2: Statistics of Indigo-MusesT

Start at: 2019-03-19 03:00:46
End at: 2019-03-19 03:01:16
Local clock offset: 1.671 ms
Remote clock offset: -1.865 ms

Below is generated by plot.py at 2019-03-19 04:51:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.01 Mbit/s
95th percentile per-packet one-way delay: 64.703 ms
Loss rate: 19.69%
-- Flow 1:
Average throughput: 53.74 Mbit/s
95th percentile per-packet one-way delay: 61.825 ms
Loss rate: 15.33%
-- Flow 2:
Average throughput: 55.60 Mbit/s
95th percentile per-packet one-way delay: 66.537 ms
Loss rate: 25.19%
-- Flow 3:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 65.891 ms
Loss rate: 26.75%

Run 2: Report of Indigo-MusesT — Data Link

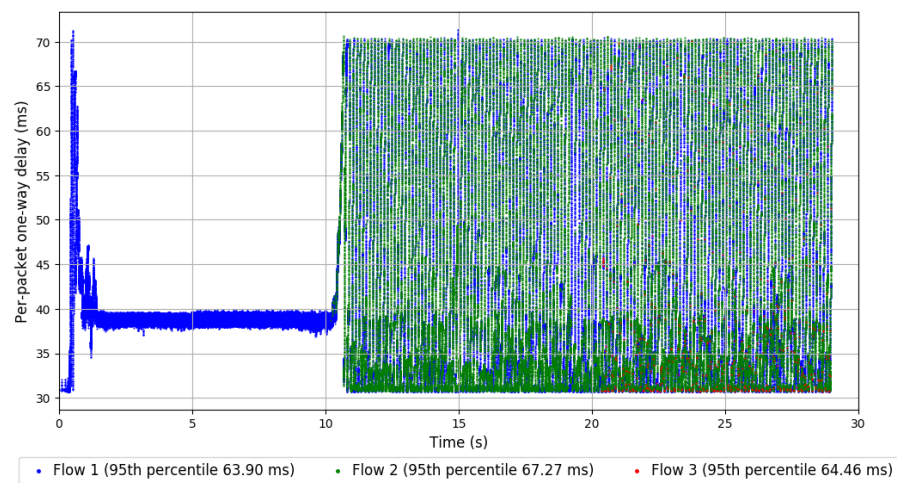
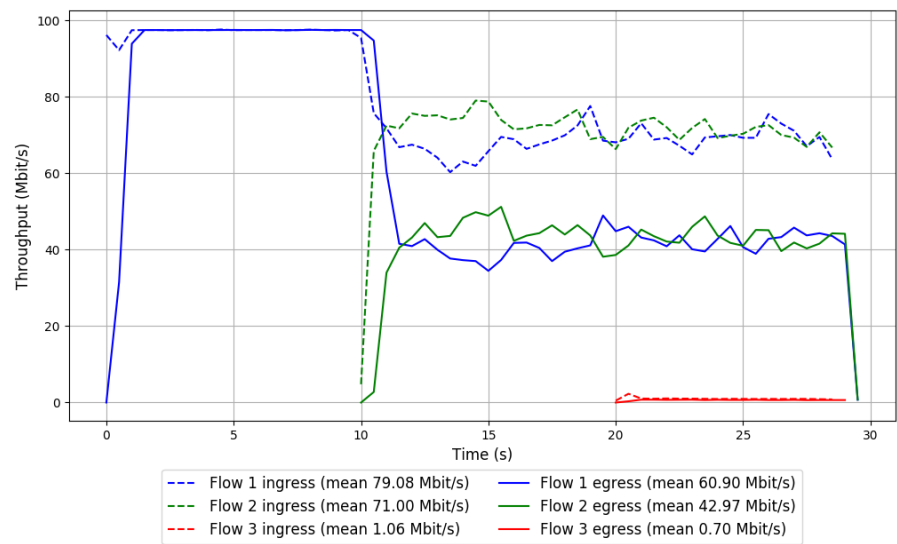


Run 3: Statistics of Indigo-MusesT

Start at: 2019-03-19 03:27:28
End at: 2019-03-19 03:27:58
Local clock offset: 1.292 ms
Remote clock offset: -0.994 ms

Below is generated by plot.py at 2019-03-19 04:51:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.02 Mbit/s
95th percentile per-packet one-way delay: 65.549 ms
Loss rate: 28.99%
-- Flow 1:
Average throughput: 60.90 Mbit/s
95th percentile per-packet one-way delay: 63.903 ms
Loss rate: 22.90%
-- Flow 2:
Average throughput: 42.97 Mbit/s
95th percentile per-packet one-way delay: 67.266 ms
Loss rate: 39.40%
-- Flow 3:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 64.457 ms
Loss rate: 34.01%

Run 3: Report of Indigo-MusesT — Data Link



Run 4: Statistics of Indigo-MusesT

Start at: 2019-03-19 03:53:51

End at: 2019-03-19 03:54:21

Local clock offset: 0.411 ms

Remote clock offset: -0.59 ms

Below is generated by plot.py at 2019-03-19 04:51:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.45 Mbit/s

95th percentile per-packet one-way delay: 65.177 ms

Loss rate: 26.97%

-- Flow 1:

Average throughput: 61.81 Mbit/s

95th percentile per-packet one-way delay: 63.640 ms

Loss rate: 21.49%

-- Flow 2:

Average throughput: 41.30 Mbit/s

95th percentile per-packet one-way delay: 67.122 ms

Loss rate: 37.05%

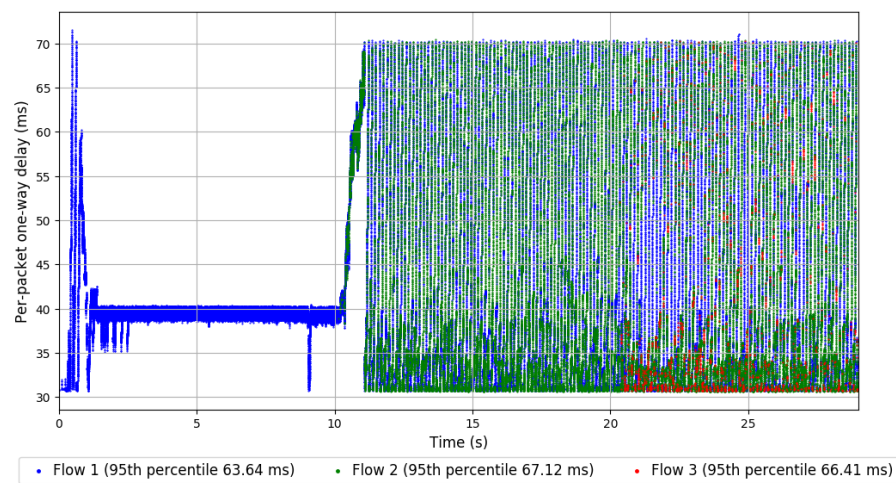
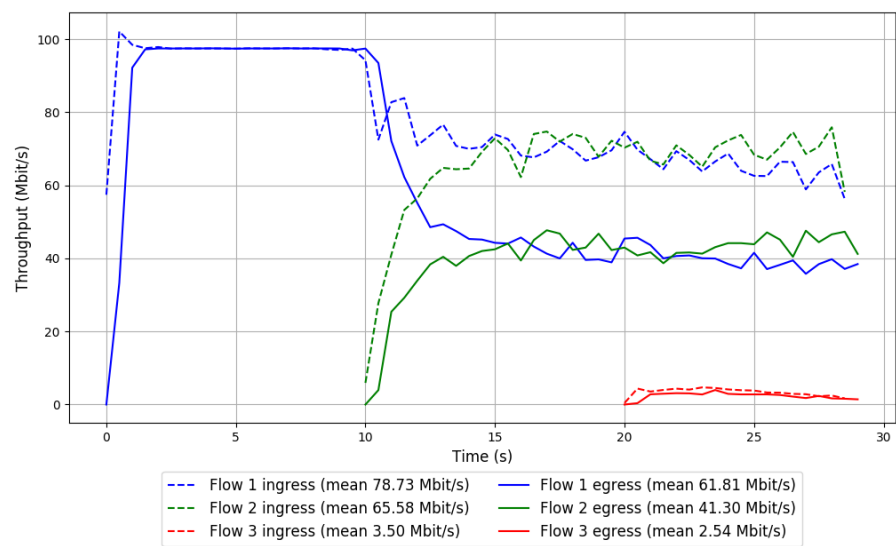
-- Flow 3:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 66.413 ms

Loss rate: 27.52%

Run 4: Report of Indigo-MusesT — Data Link

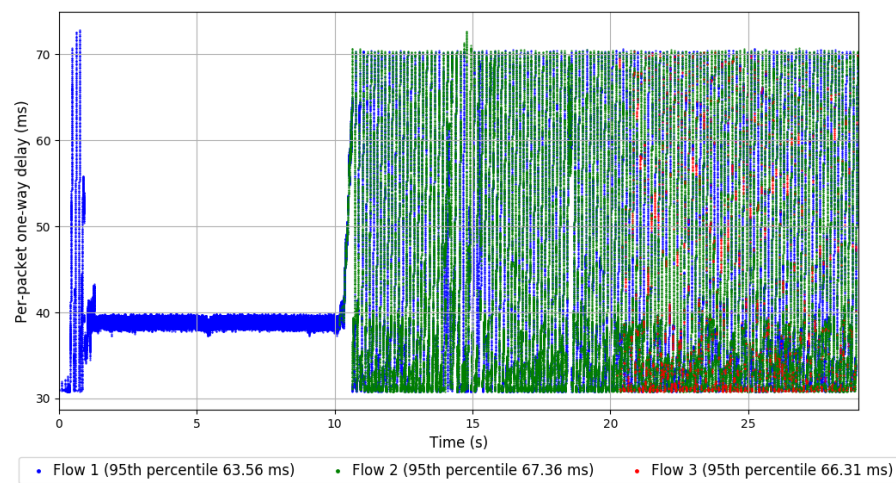
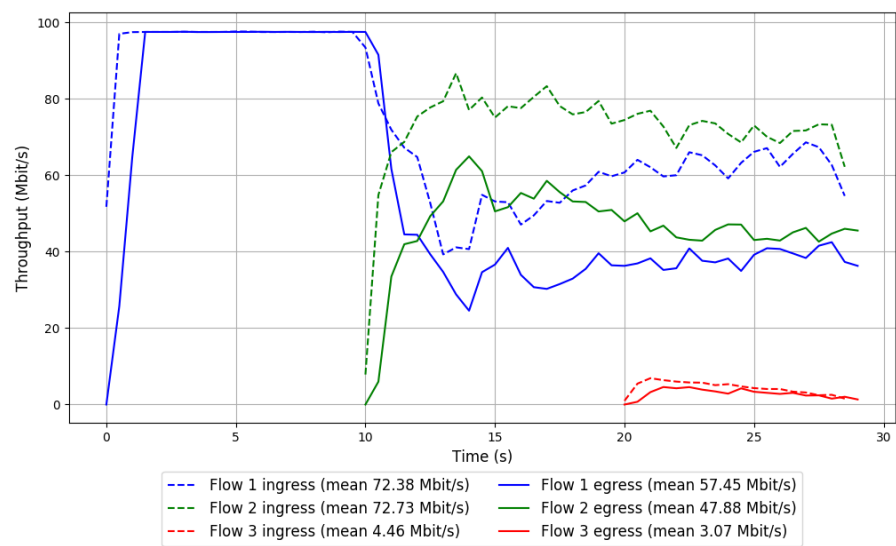


Run 5: Statistics of Indigo-MusesT

Start at: 2019-03-19 04:20:00
End at: 2019-03-19 04:20:30
Local clock offset: 0.056 ms
Remote clock offset: -0.689 ms

Below is generated by plot.py at 2019-03-19 04:51:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.58 Mbit/s
95th percentile per-packet one-way delay: 65.566 ms
Loss rate: 26.02%
-- Flow 1:
Average throughput: 57.45 Mbit/s
95th percentile per-packet one-way delay: 63.558 ms
Loss rate: 20.60%
-- Flow 2:
Average throughput: 47.88 Mbit/s
95th percentile per-packet one-way delay: 67.355 ms
Loss rate: 34.15%
-- Flow 3:
Average throughput: 3.07 Mbit/s
95th percentile per-packet one-way delay: 66.313 ms
Loss rate: 31.01%

Run 5: Report of Indigo-MusesT — Data Link

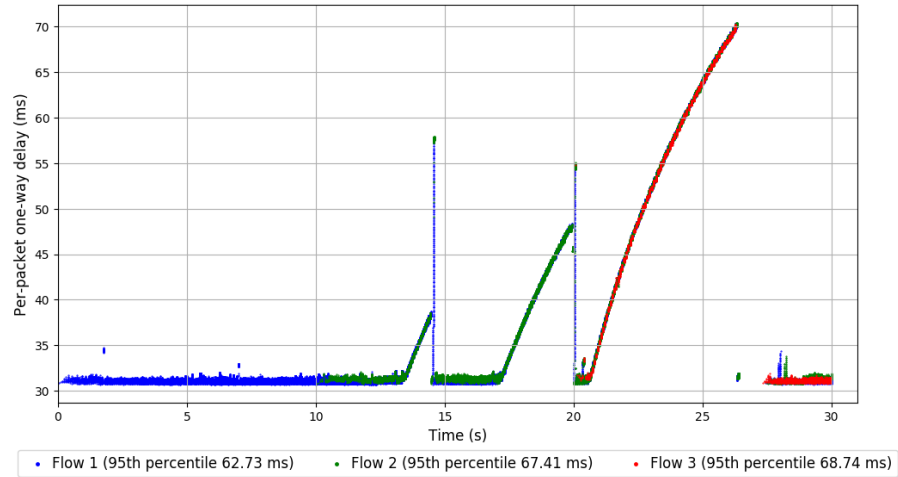
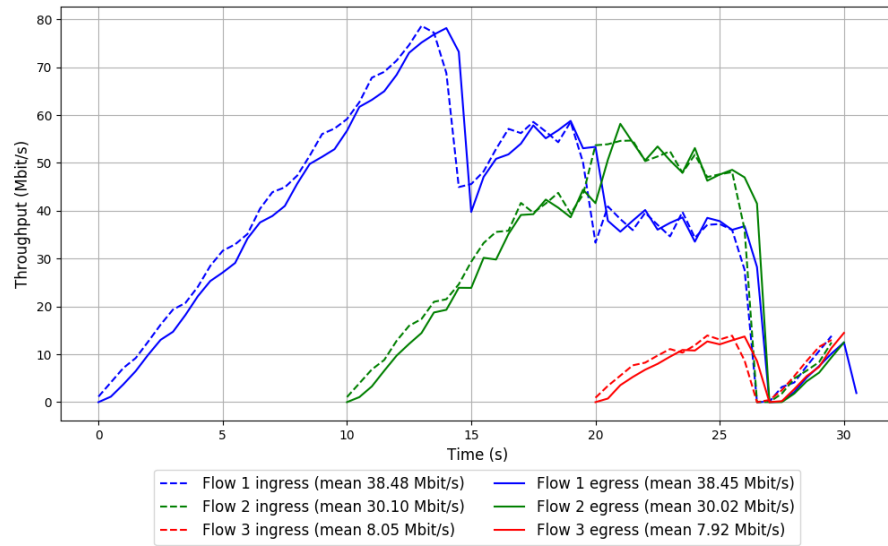


```
Run 1: Statistics of LEDBAT

Start at: 2019-03-19 02:44:55
End at: 2019-03-19 02:45:25
Local clock offset: 1.501 ms
Remote clock offset: -2.294 ms

# Below is generated by plot.py at 2019-03-19 04:51:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.04 Mbit/s
95th percentile per-packet one-way delay: 65.942 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 38.45 Mbit/s
95th percentile per-packet one-way delay: 62.729 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 30.02 Mbit/s
95th percentile per-packet one-way delay: 67.406 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 7.92 Mbit/s
95th percentile per-packet one-way delay: 68.743 ms
Loss rate: 1.83%
```

Run 1: Report of LEDBAT — Data Link

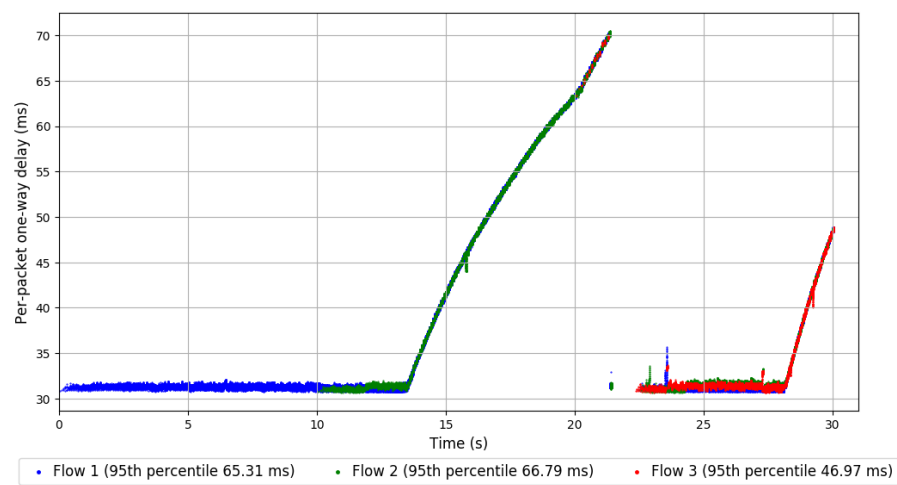
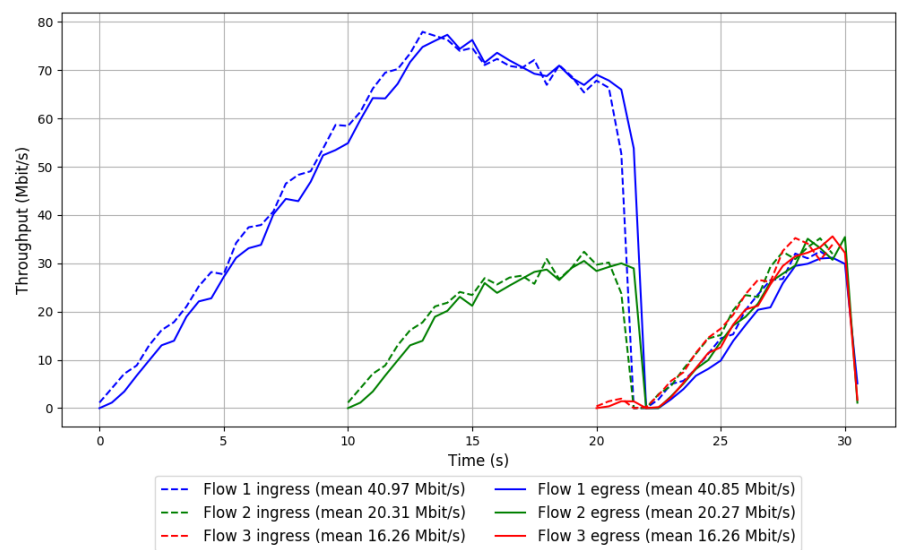


Run 2: Statistics of LEDBAT

Start at: 2019-03-19 03:11:17
End at: 2019-03-19 03:11:47
Local clock offset: 1.785 ms
Remote clock offset: -1.348 ms

Below is generated by plot.py at 2019-03-19 04:51:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 59.72 Mbit/s
95th percentile per-packet one-way delay: 65.492 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 40.85 Mbit/s
95th percentile per-packet one-way delay: 65.315 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 20.27 Mbit/s
95th percentile per-packet one-way delay: 66.791 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 16.26 Mbit/s
95th percentile per-packet one-way delay: 46.966 ms
Loss rate: 0.17%

Run 2: Report of LEDBAT — Data Link

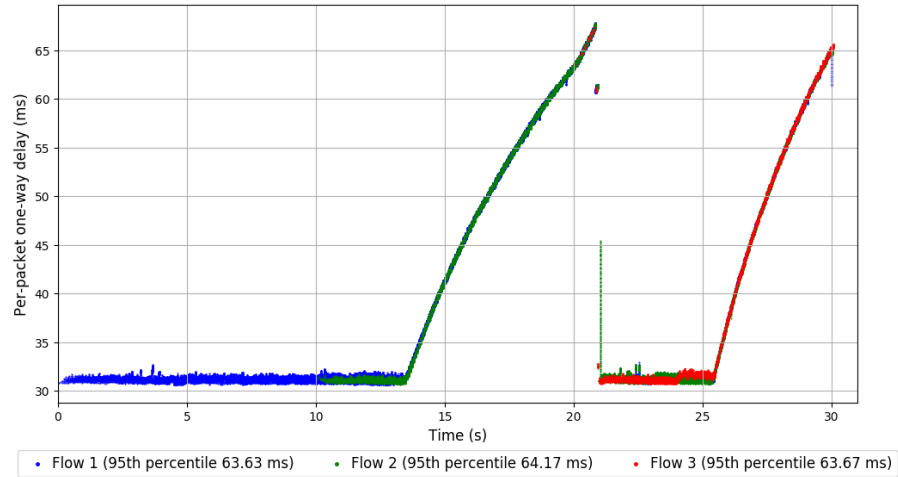
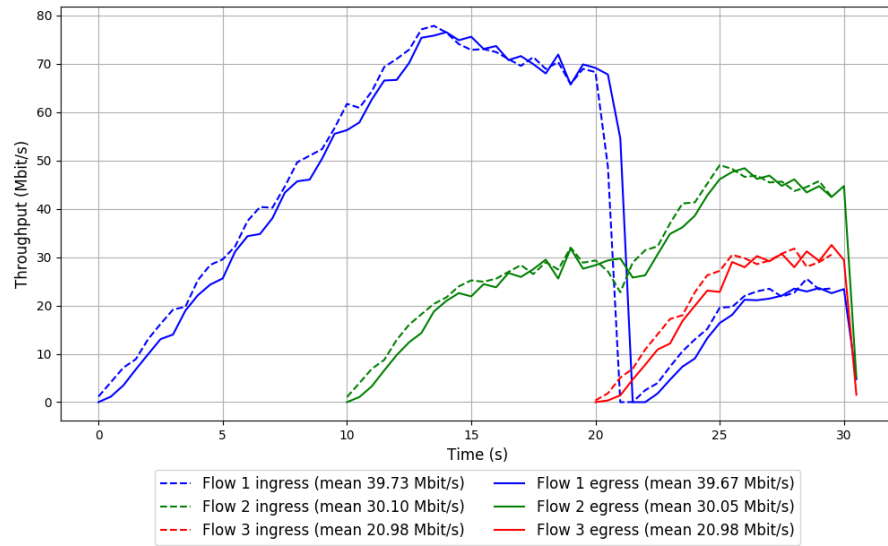


Run 3: Statistics of LEDBAT

Start at: 2019-03-19 03:37:46
End at: 2019-03-19 03:38:16
Local clock offset: 1.179 ms
Remote clock offset: -0.914 ms

Below is generated by plot.py at 2019-03-19 04:51:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 66.62 Mbit/s
95th percentile per-packet one-way delay: 63.821 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 39.67 Mbit/s
95th percentile per-packet one-way delay: 63.628 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 30.05 Mbit/s
95th percentile per-packet one-way delay: 64.166 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 20.98 Mbit/s
95th percentile per-packet one-way delay: 63.669 ms
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

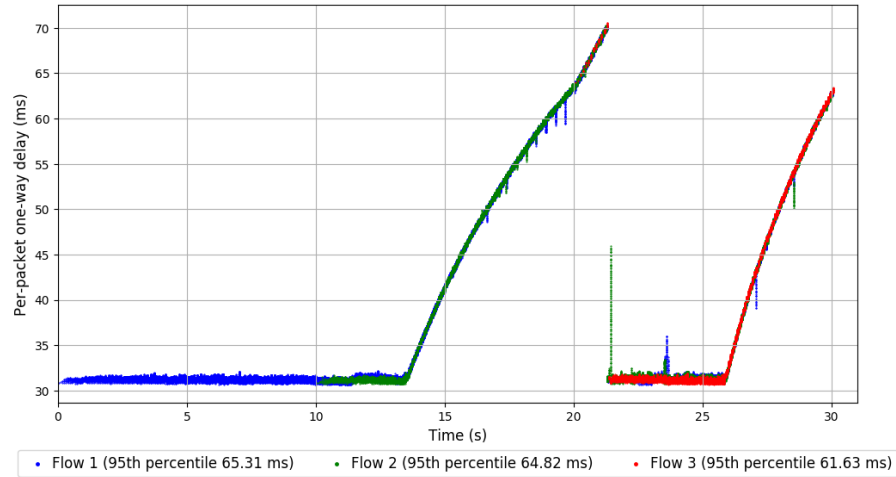
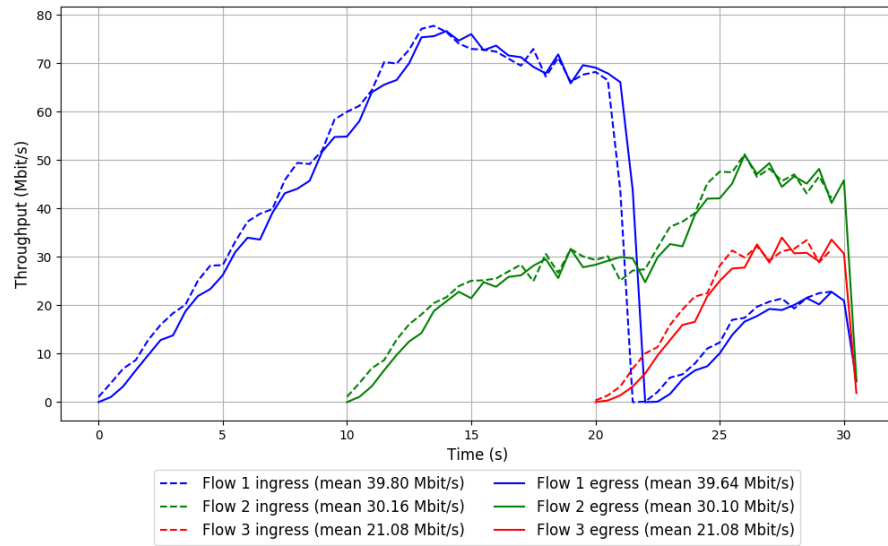


Run 4: Statistics of LEDBAT

Start at: 2019-03-19 04:04:02
End at: 2019-03-19 04:04:32
Local clock offset: -0.02 ms
Remote clock offset: -0.584 ms

Below is generated by plot.py at 2019-03-19 04:52:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 66.66 Mbit/s
95th percentile per-packet one-way delay: 64.745 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 39.64 Mbit/s
95th percentile per-packet one-way delay: 65.305 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 30.10 Mbit/s
95th percentile per-packet one-way delay: 64.819 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 21.08 Mbit/s
95th percentile per-packet one-way delay: 61.635 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

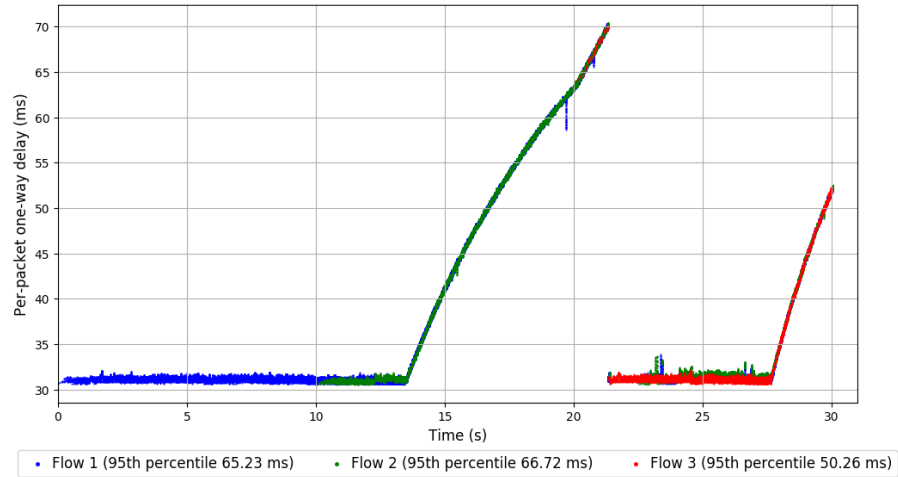
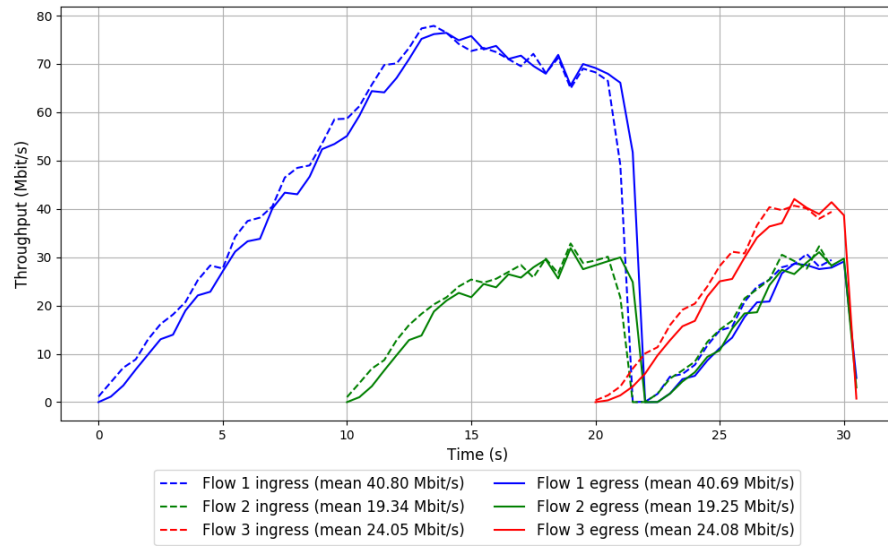


Run 5: Statistics of LEDBAT

Start at: 2019-03-19 04:30:18
End at: 2019-03-19 04:30:48
Local clock offset: 0.465 ms
Remote clock offset: -0.899 ms

Below is generated by plot.py at 2019-03-19 04:52:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 61.47 Mbit/s
95th percentile per-packet one-way delay: 65.169 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 40.69 Mbit/s
95th percentile per-packet one-way delay: 65.232 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 19.25 Mbit/s
95th percentile per-packet one-way delay: 66.721 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 24.08 Mbit/s
95th percentile per-packet one-way delay: 50.263 ms
Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link

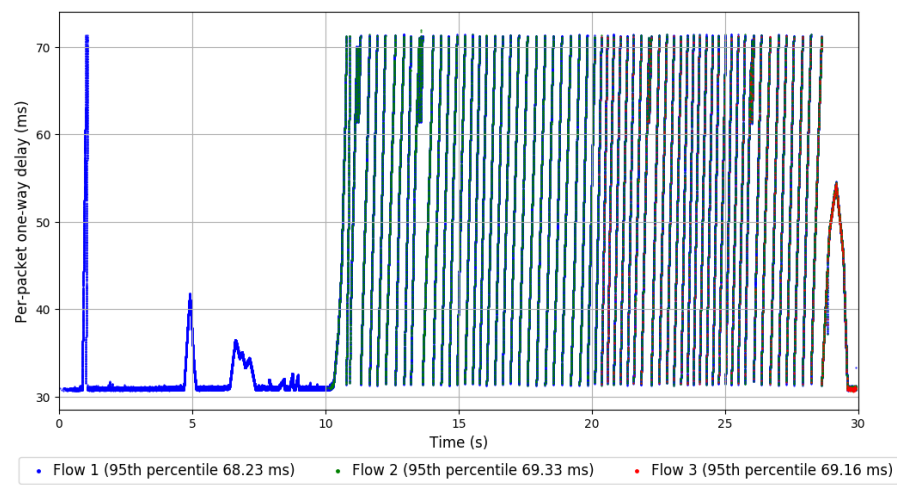
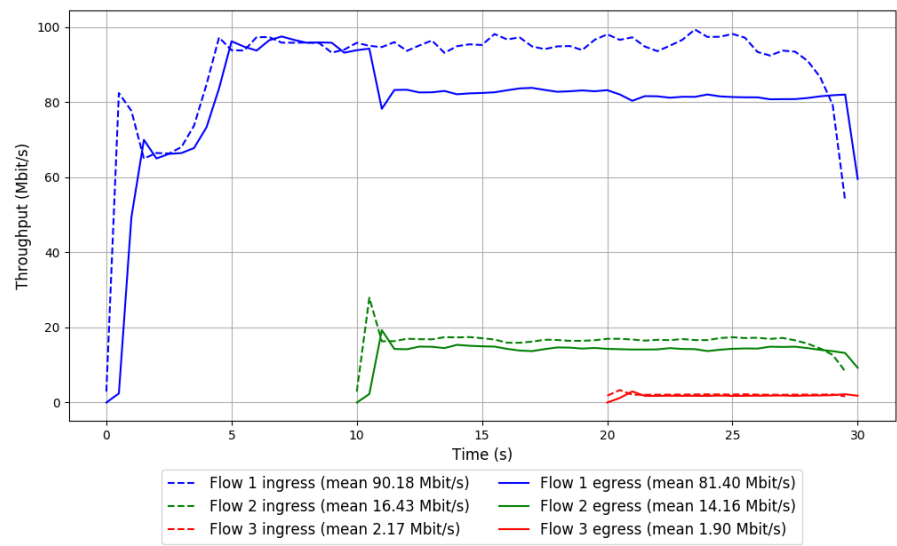


Run 1: Statistics of PCC-Allegro

Start at: 2019-03-19 02:41:02
End at: 2019-03-19 02:41:32
Local clock offset: 1.464 ms
Remote clock offset: -2.509 ms

Below is generated by plot.py at 2019-03-19 04:52:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.44 Mbit/s
95th percentile per-packet one-way delay: 68.406 ms
Loss rate: 10.18%
-- Flow 1:
Average throughput: 81.40 Mbit/s
95th percentile per-packet one-way delay: 68.226 ms
Loss rate: 9.72%
-- Flow 2:
Average throughput: 14.16 Mbit/s
95th percentile per-packet one-way delay: 69.329 ms
Loss rate: 13.79%
-- Flow 3:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 69.160 ms
Loss rate: 12.89%

Run 1: Report of PCC-Allegro — Data Link

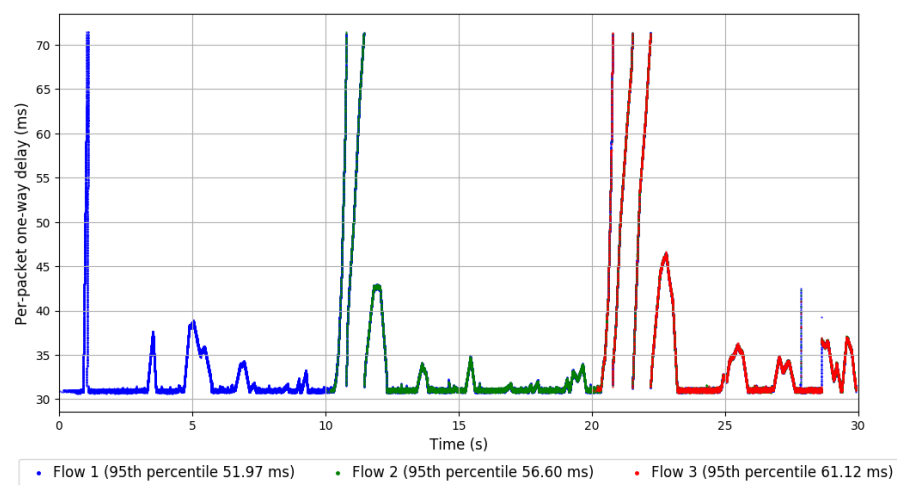
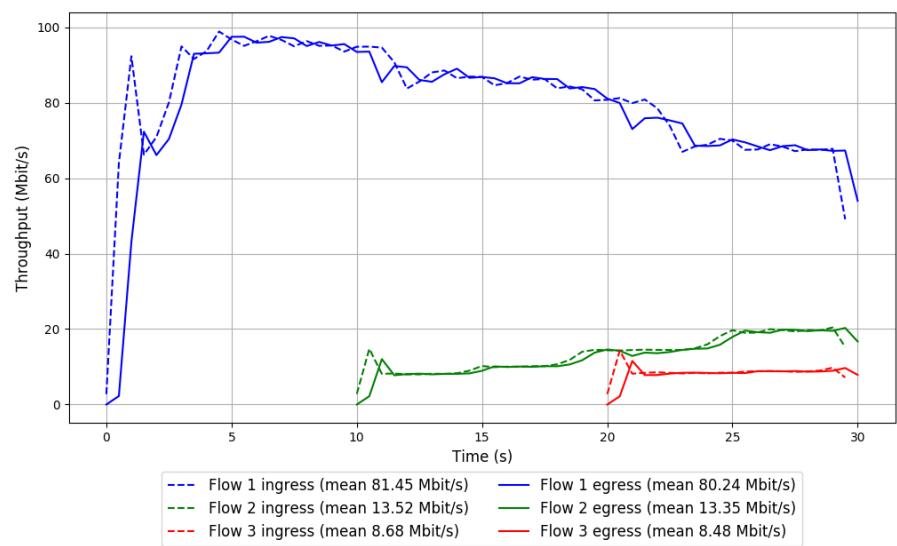


Run 2: Statistics of PCC-Allegro

Start at: 2019-03-19 03:07:24
End at: 2019-03-19 03:07:54
Local clock offset: 1.705 ms
Remote clock offset: -1.456 ms

Below is generated by plot.py at 2019-03-19 04:52:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.91 Mbit/s
95th percentile per-packet one-way delay: 53.277 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 80.24 Mbit/s
95th percentile per-packet one-way delay: 51.968 ms
Loss rate: 1.48%
-- Flow 2:
Average throughput: 13.35 Mbit/s
95th percentile per-packet one-way delay: 56.605 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 61.117 ms
Loss rate: 2.29%

Run 2: Report of PCC-Allegro — Data Link

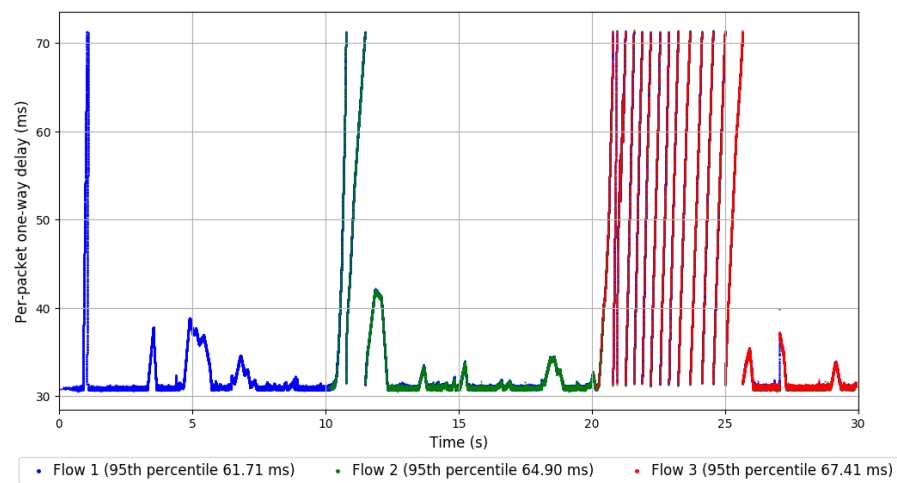
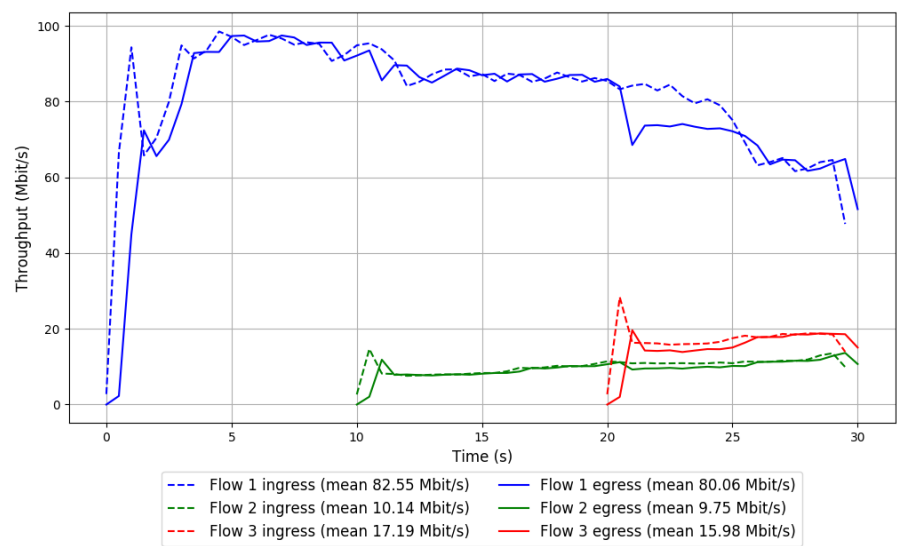


Run 3: Statistics of PCC-Allegro

Start at: 2019-03-19 03:33:59
End at: 2019-03-19 03:34:29
Local clock offset: 1.202 ms
Remote clock offset: -0.915 ms

Below is generated by plot.py at 2019-03-19 04:52:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.81 Mbit/s
95th percentile per-packet one-way delay: 62.776 ms
Loss rate: 3.32%
-- Flow 1:
Average throughput: 80.06 Mbit/s
95th percentile per-packet one-way delay: 61.711 ms
Loss rate: 3.02%
-- Flow 2:
Average throughput: 9.75 Mbit/s
95th percentile per-packet one-way delay: 64.898 ms
Loss rate: 3.89%
-- Flow 3:
Average throughput: 15.98 Mbit/s
95th percentile per-packet one-way delay: 67.410 ms
Loss rate: 7.02%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-03-19 04:00:16

End at: 2019-03-19 04:00:46

Local clock offset: 0.087 ms

Remote clock offset: -0.56 ms

Below is generated by plot.py at 2019-03-19 04:52:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.44 Mbit/s

95th percentile per-packet one-way delay: 67.027 ms

Loss rate: 8.92%

-- Flow 1:

Average throughput: 82.73 Mbit/s

95th percentile per-packet one-way delay: 66.661 ms

Loss rate: 8.12%

-- Flow 2:

Average throughput: 8.31 Mbit/s

95th percentile per-packet one-way delay: 68.017 ms

Loss rate: 11.04%

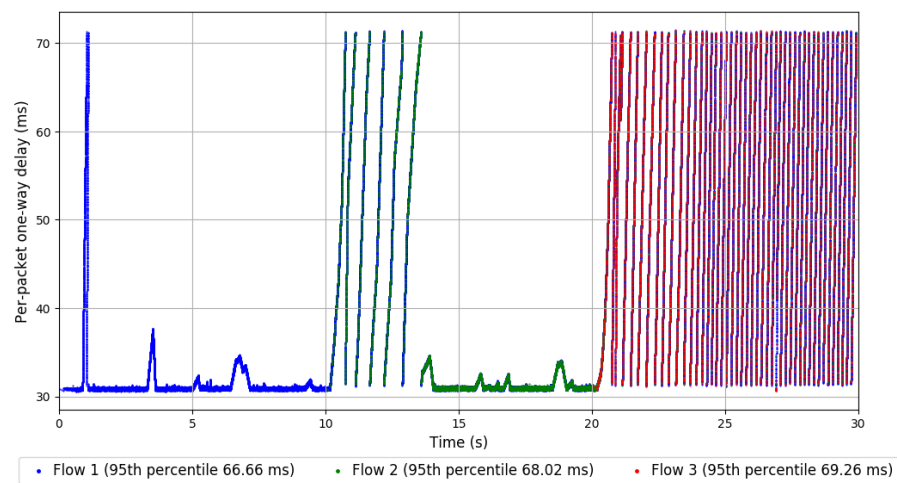
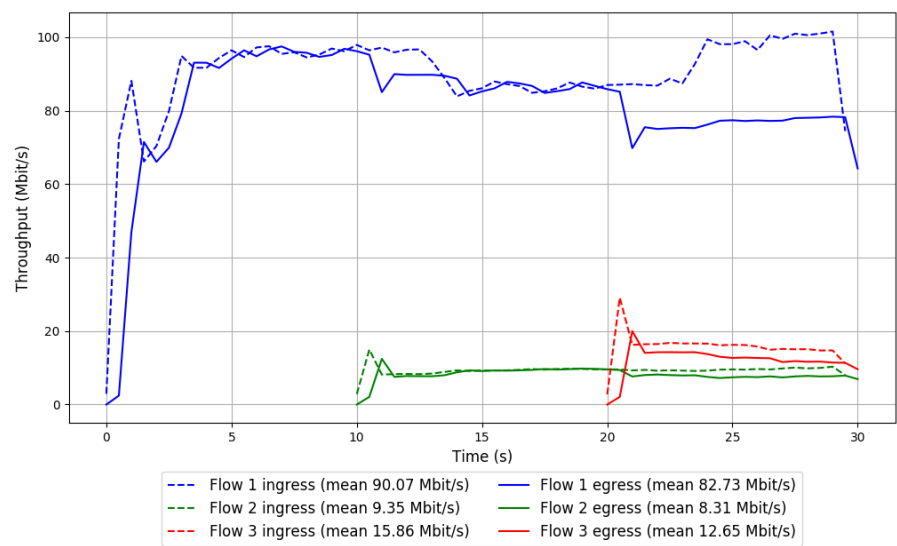
-- Flow 3:

Average throughput: 12.65 Mbit/s

95th percentile per-packet one-way delay: 69.258 ms

Loss rate: 20.17%

Run 4: Report of PCC-Allegro — Data Link

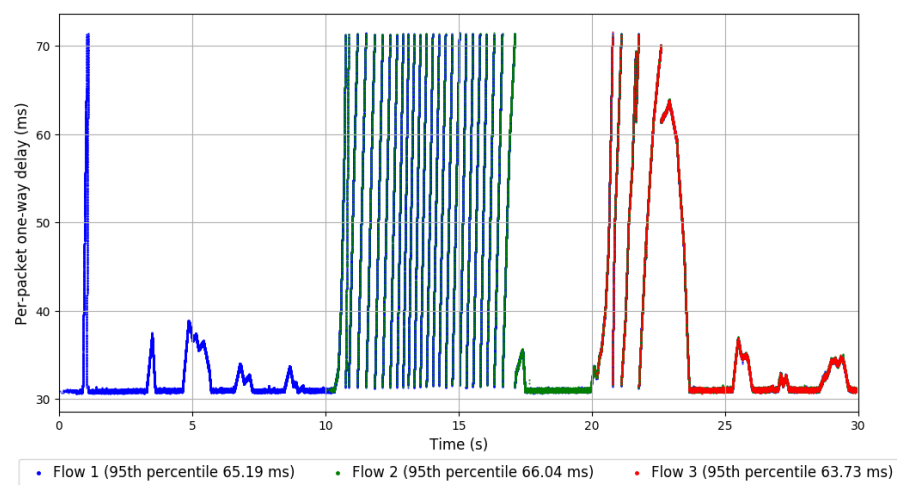
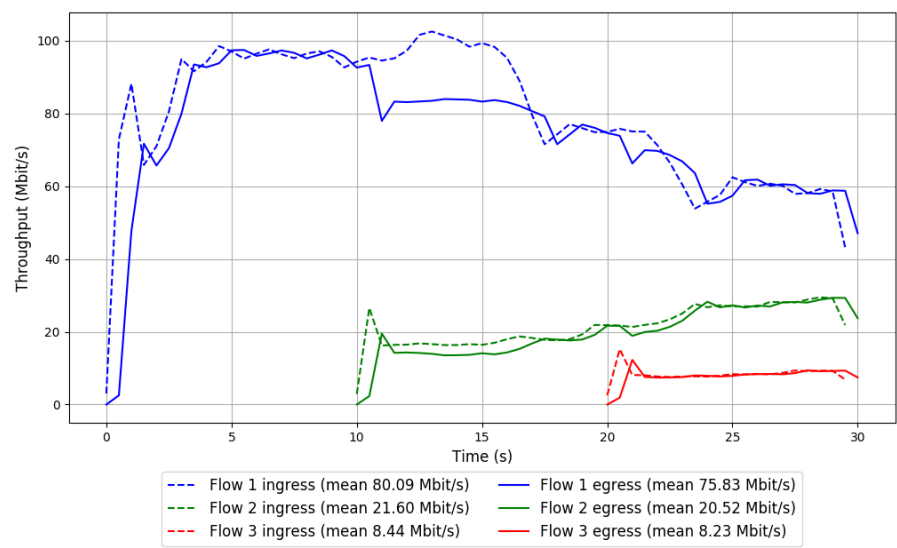


Run 5: Statistics of PCC-Allegro

Start at: 2019-03-19 04:26:25
End at: 2019-03-19 04:26:55
Local clock offset: 0.37 ms
Remote clock offset: -0.662 ms

Below is generated by plot.py at 2019-03-19 04:53:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.20 Mbit/s
95th percentile per-packet one-way delay: 65.306 ms
Loss rate: 5.18%
-- Flow 1:
Average throughput: 75.83 Mbit/s
95th percentile per-packet one-way delay: 65.193 ms
Loss rate: 5.31%
-- Flow 2:
Average throughput: 20.52 Mbit/s
95th percentile per-packet one-way delay: 66.043 ms
Loss rate: 4.98%
-- Flow 3:
Average throughput: 8.23 Mbit/s
95th percentile per-packet one-way delay: 63.732 ms
Loss rate: 2.49%

Run 5: Report of PCC-Allegro — Data Link

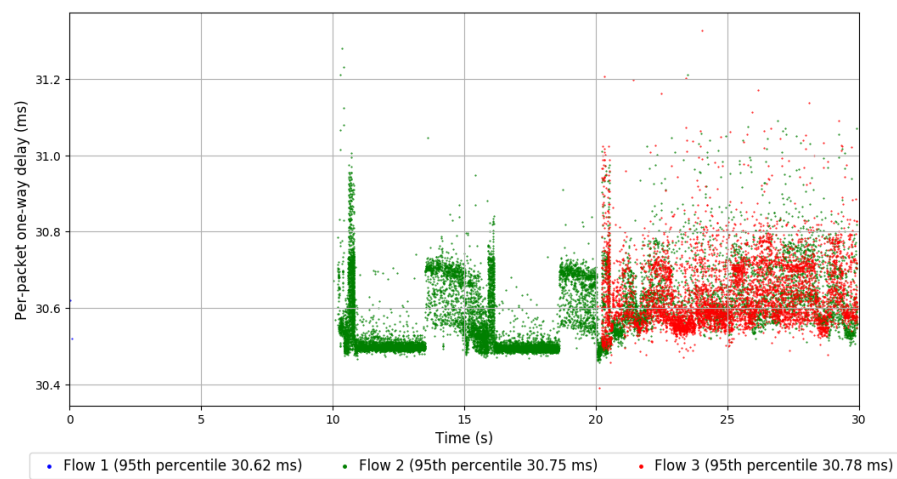
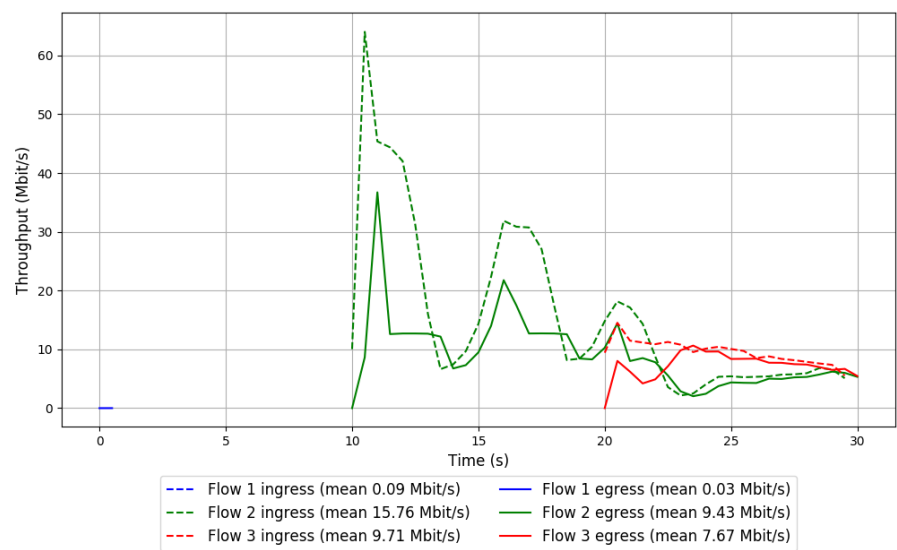


Run 1: Statistics of PCC-Expr

Start at: 2019-03-19 02:47:27
End at: 2019-03-19 02:47:57
Local clock offset: 1.549 ms
Remote clock offset: -2.396 ms

Below is generated by plot.py at 2019-03-19 04:53:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 30.762 ms
Loss rate: 35.69%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 30.621 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.43 Mbit/s
95th percentile per-packet one-way delay: 30.745 ms
Loss rate: 40.17%
-- Flow 3:
Average throughput: 7.67 Mbit/s
95th percentile per-packet one-way delay: 30.784 ms
Loss rate: 21.03%

Run 1: Report of PCC-Expr — Data Link

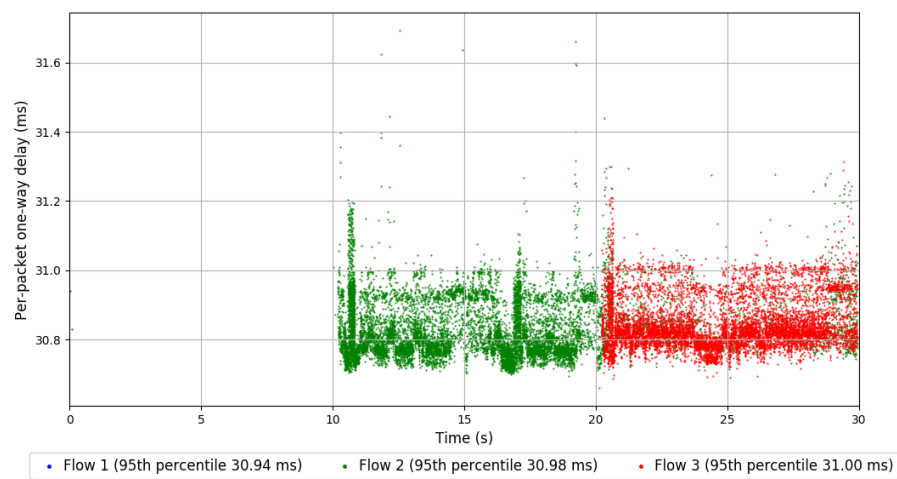
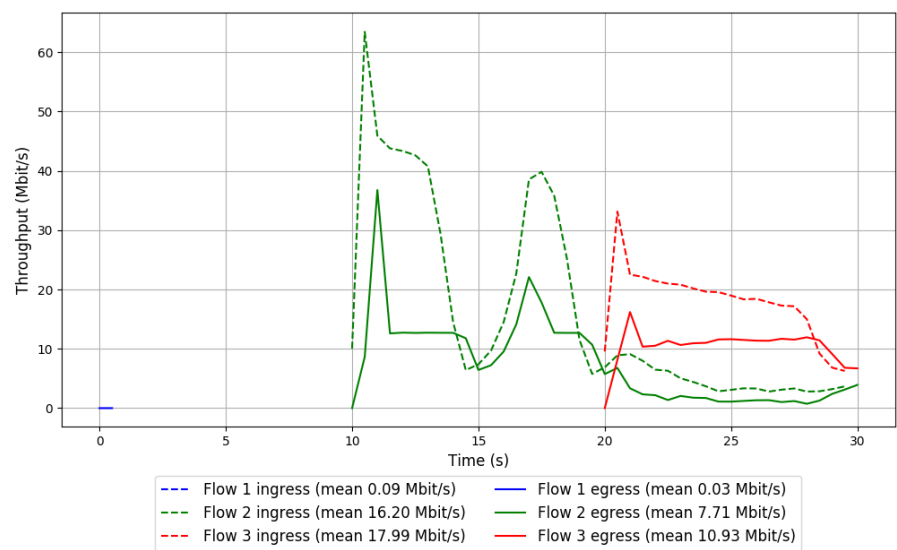


Run 2: Statistics of PCC-Expr

Start at: 2019-03-19 03:13:52
End at: 2019-03-19 03:14:22
Local clock offset: 1.775 ms
Remote clock offset: -1.239 ms

Below is generated by plot.py at 2019-03-19 04:53:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.74 Mbit/s
95th percentile per-packet one-way delay: 30.992 ms
Loss rate: 47.76%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 30.940 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 30.984 ms
Loss rate: 52.45%
-- Flow 3:
Average throughput: 10.93 Mbit/s
95th percentile per-packet one-way delay: 30.999 ms
Loss rate: 39.24%

Run 2: Report of PCC-Expr — Data Link

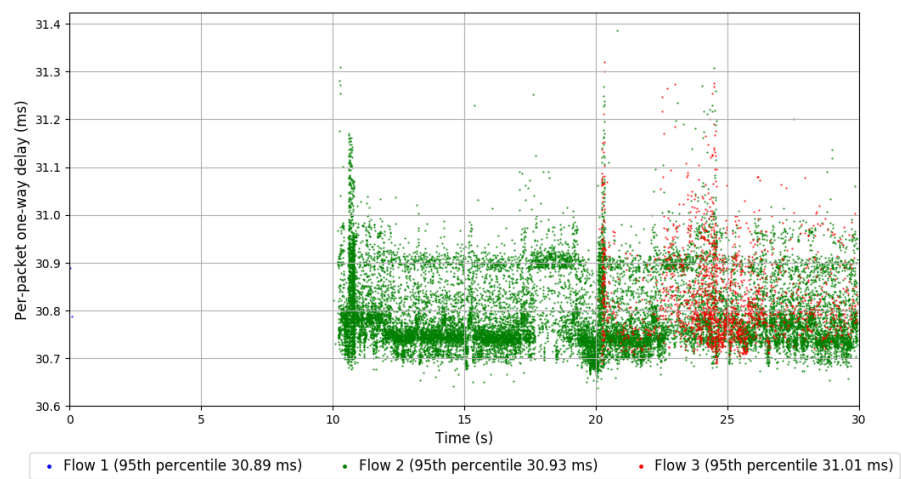
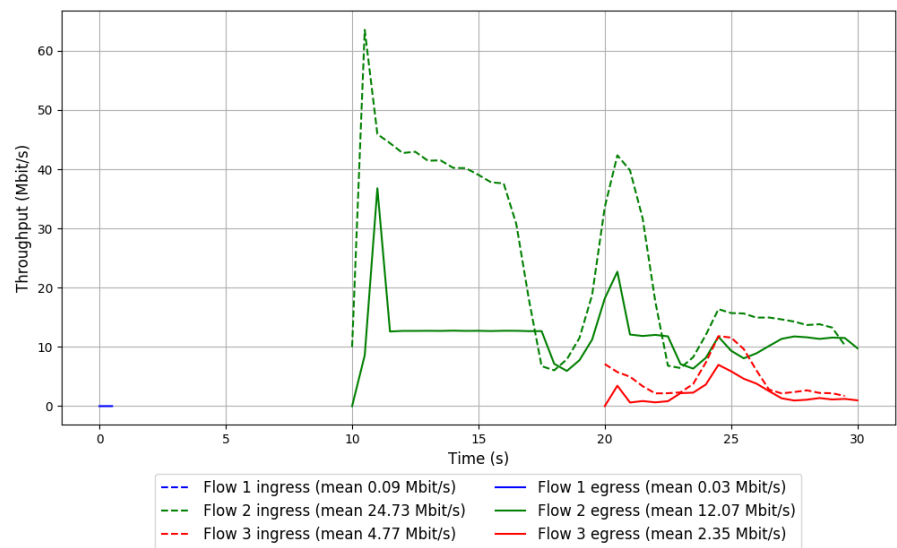


Run 3: Statistics of PCC-Expr

Start at: 2019-03-19 03:40:25
End at: 2019-03-19 03:40:55
Local clock offset: 1.126 ms
Remote clock offset: -0.906 ms

Below is generated by plot.py at 2019-03-19 04:53:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 30.941 ms
Loss rate: 51.15%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 30.888 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 12.07 Mbit/s
95th percentile per-packet one-way delay: 30.932 ms
Loss rate: 51.19%
-- Flow 3:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 31.009 ms
Loss rate: 50.72%

Run 3: Report of PCC-Expr — Data Link

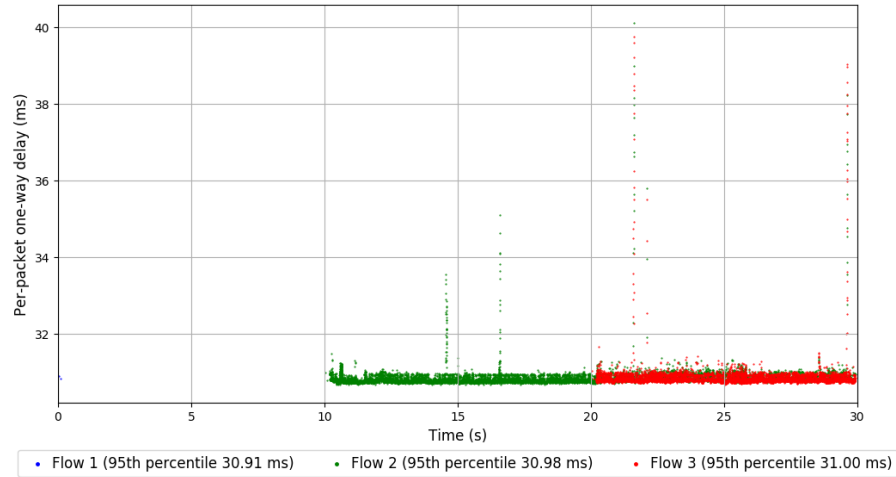
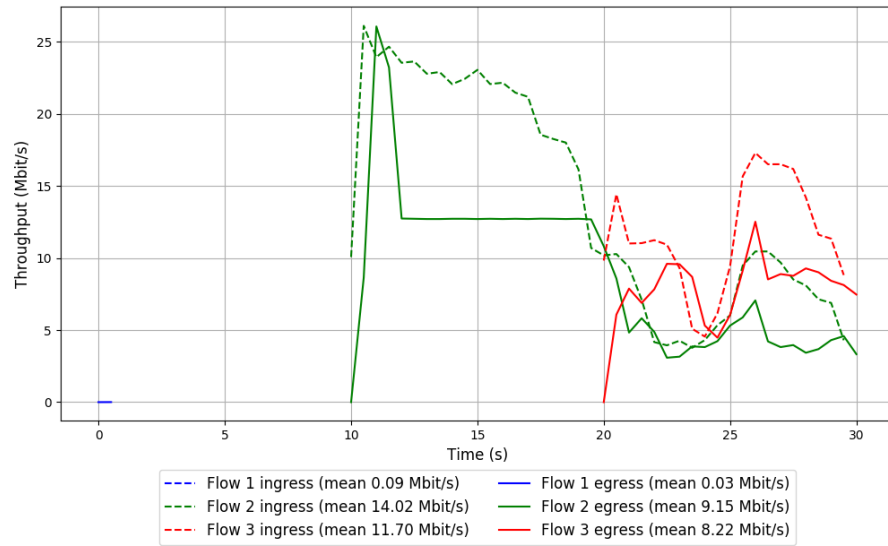


Run 4: Statistics of PCC-Expr

Start at: 2019-03-19 04:06:33
End at: 2019-03-19 04:07:03
Local clock offset: -0.096 ms
Remote clock offset: -0.567 ms

Below is generated by plot.py at 2019-03-19 04:53:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 30.988 ms
Loss rate: 33.24%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 30.912 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 9.15 Mbit/s
95th percentile per-packet one-way delay: 30.975 ms
Loss rate: 34.70%
-- Flow 3:
Average throughput: 8.22 Mbit/s
95th percentile per-packet one-way delay: 30.997 ms
Loss rate: 29.71%

Run 4: Report of PCC-Expr — Data Link

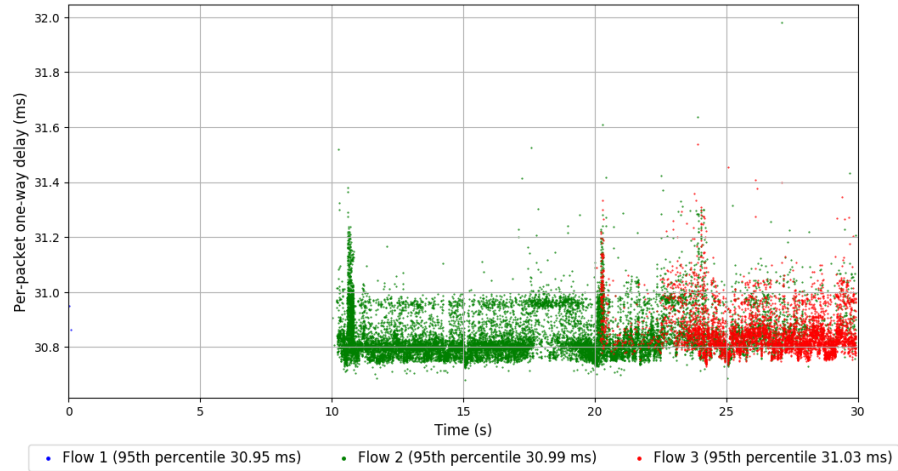
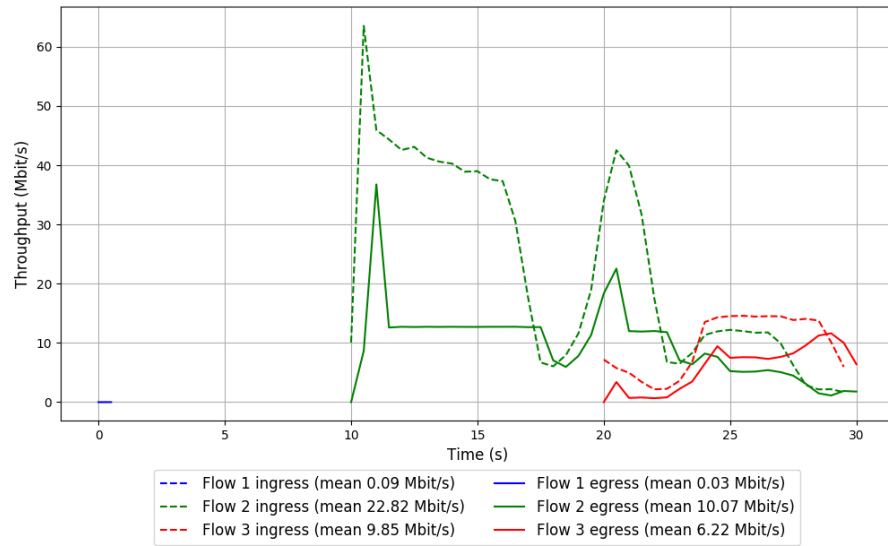


Run 5: Statistics of PCC-Expr

Start at: 2019-03-19 04:32:50
End at: 2019-03-19 04:33:20
Local clock offset: 0.52 ms
Remote clock offset: -0.748 ms

Below is generated by plot.py at 2019-03-19 04:53:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.75 Mbit/s
95th percentile per-packet one-way delay: 30.998 ms
Loss rate: 52.53%
-- Flow 1:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 30.950 ms
Loss rate: 85.71%
-- Flow 2:
Average throughput: 10.07 Mbit/s
95th percentile per-packet one-way delay: 30.992 ms
Loss rate: 55.88%
-- Flow 3:
Average throughput: 6.22 Mbit/s
95th percentile per-packet one-way delay: 31.026 ms
Loss rate: 36.85%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-03-19 02:31:52

End at: 2019-03-19 02:32:22

Local clock offset: 1.317 ms

Remote clock offset: -3.05 ms

Below is generated by plot.py at 2019-03-19 04:53:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.58 Mbit/s

95th percentile per-packet one-way delay: 67.518 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 64.17 Mbit/s

95th percentile per-packet one-way delay: 67.309 ms

Loss rate: 1.71%

-- Flow 2:

Average throughput: 29.12 Mbit/s

95th percentile per-packet one-way delay: 67.887 ms

Loss rate: 1.03%

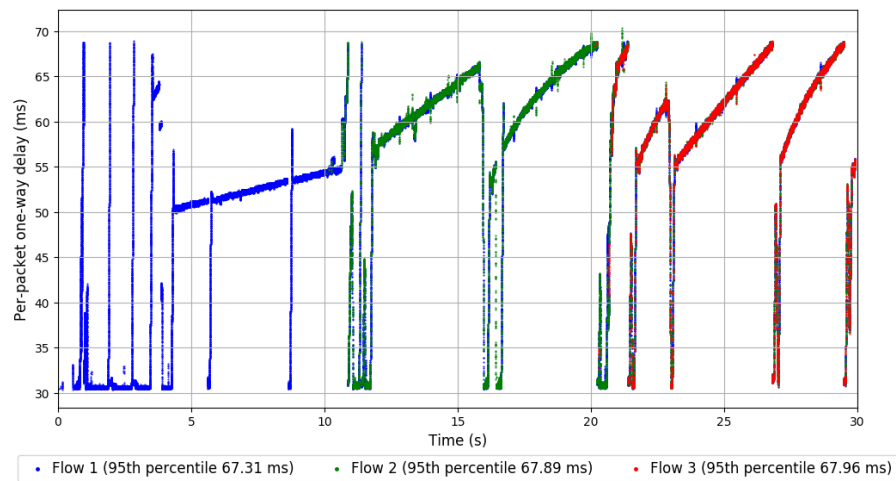
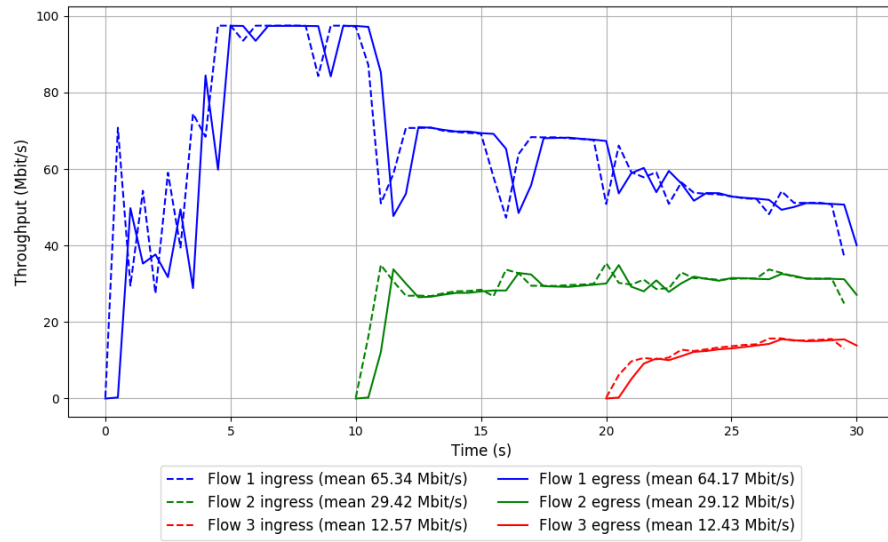
-- Flow 3:

Average throughput: 12.43 Mbit/s

95th percentile per-packet one-way delay: 67.960 ms

Loss rate: 1.21%

Run 1: Report of QUIC Cubic — Data Link

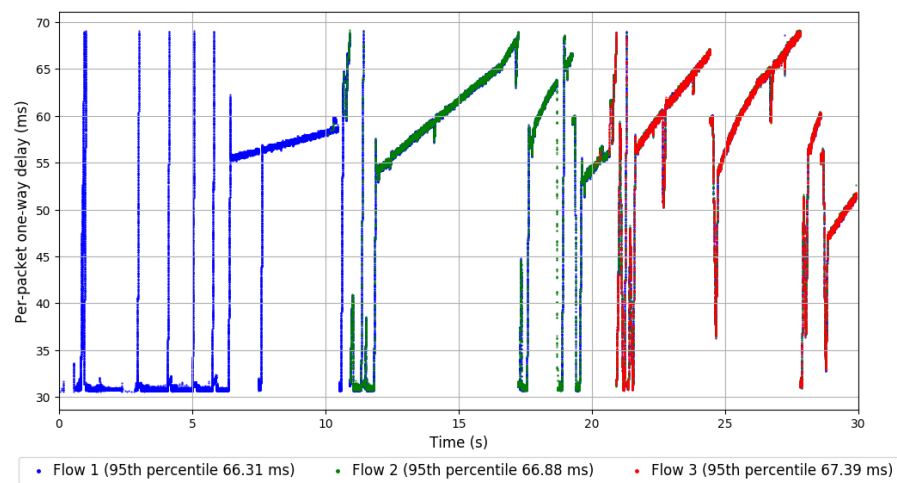
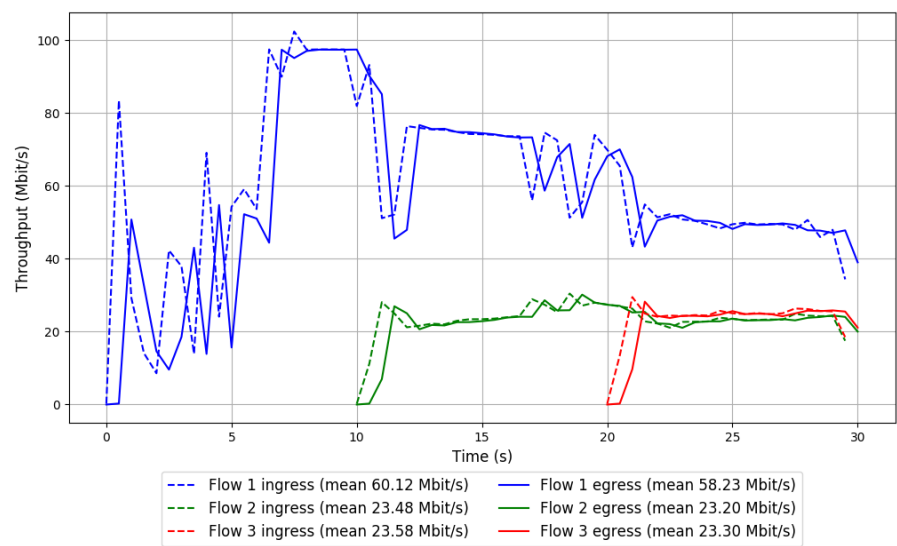


Run 2: Statistics of QUIC Cubic

Start at: 2019-03-19 02:58:18
End at: 2019-03-19 02:58:48
Local clock offset: 1.662 ms
Remote clock offset: -1.923 ms

Below is generated by plot.py at 2019-03-19 04:53:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 81.27 Mbit/s
95th percentile per-packet one-way delay: 66.448 ms
Loss rate: 2.56%
-- Flow 1:
Average throughput: 58.23 Mbit/s
95th percentile per-packet one-way delay: 66.315 ms
Loss rate: 3.07%
-- Flow 2:
Average throughput: 23.20 Mbit/s
95th percentile per-packet one-way delay: 66.879 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 23.30 Mbit/s
95th percentile per-packet one-way delay: 67.388 ms
Loss rate: 1.21%

Run 2: Report of QUIC Cubic — Data Link

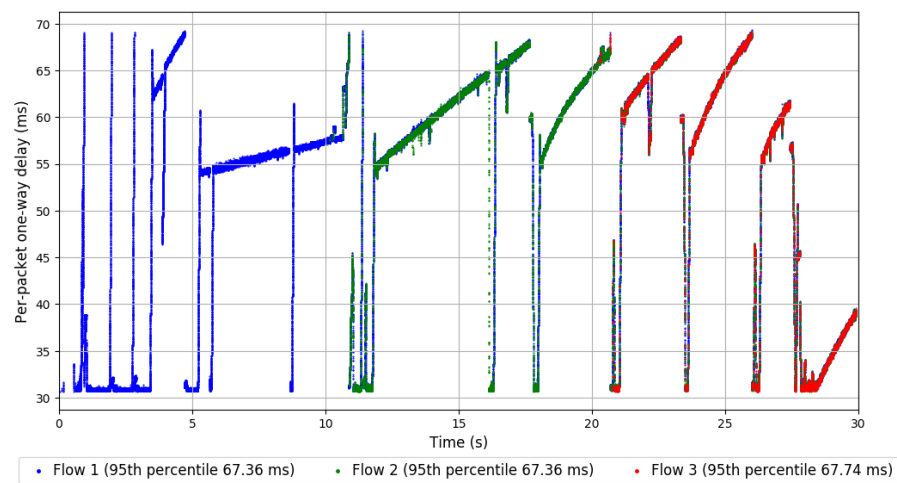
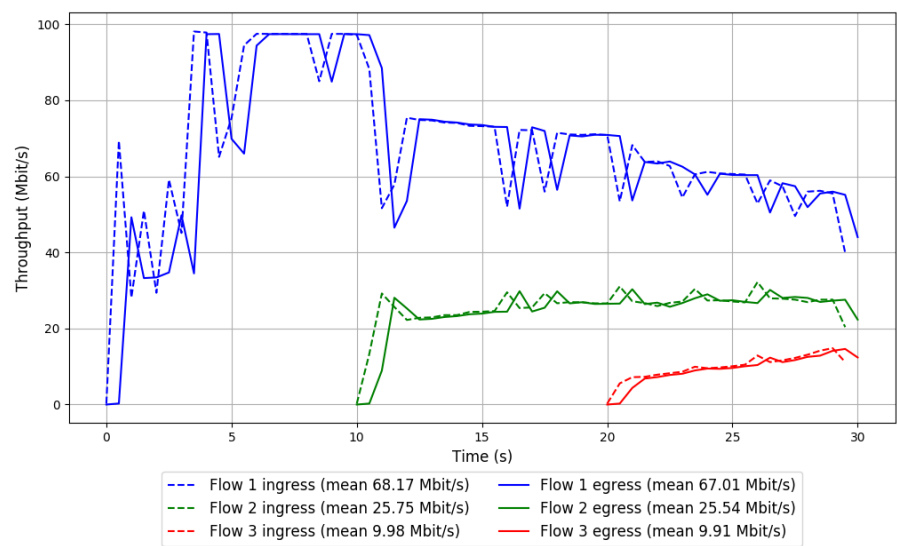


Run 3: Statistics of QUIC Cubic

Start at: 2019-03-19 03:24:51
End at: 2019-03-19 03:25:21
Local clock offset: 1.351 ms
Remote clock offset: -1.036 ms

Below is generated by plot.py at 2019-03-19 04:53:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.20 Mbit/s
95th percentile per-packet one-way delay: 67.372 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 67.01 Mbit/s
95th percentile per-packet one-way delay: 67.363 ms
Loss rate: 1.67%
-- Flow 2:
Average throughput: 25.54 Mbit/s
95th percentile per-packet one-way delay: 67.362 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 9.91 Mbit/s
95th percentile per-packet one-way delay: 67.740 ms
Loss rate: 0.95%

Run 3: Report of QUIC Cubic — Data Link

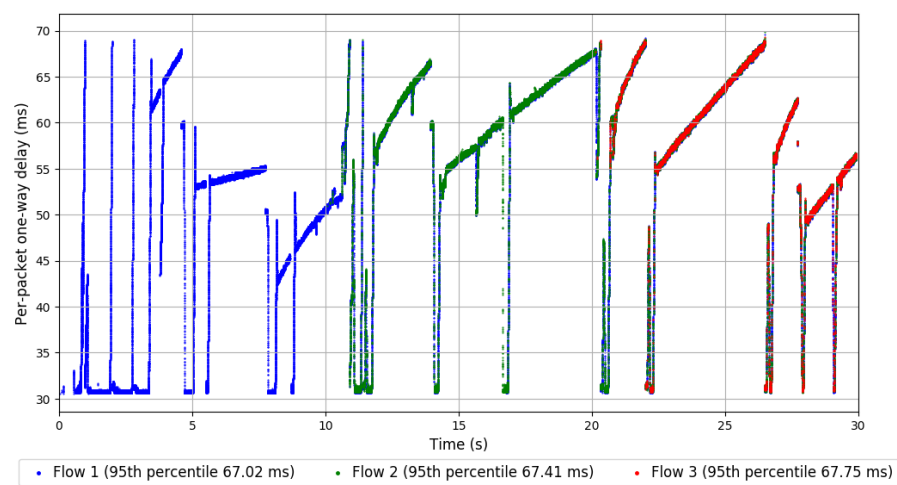
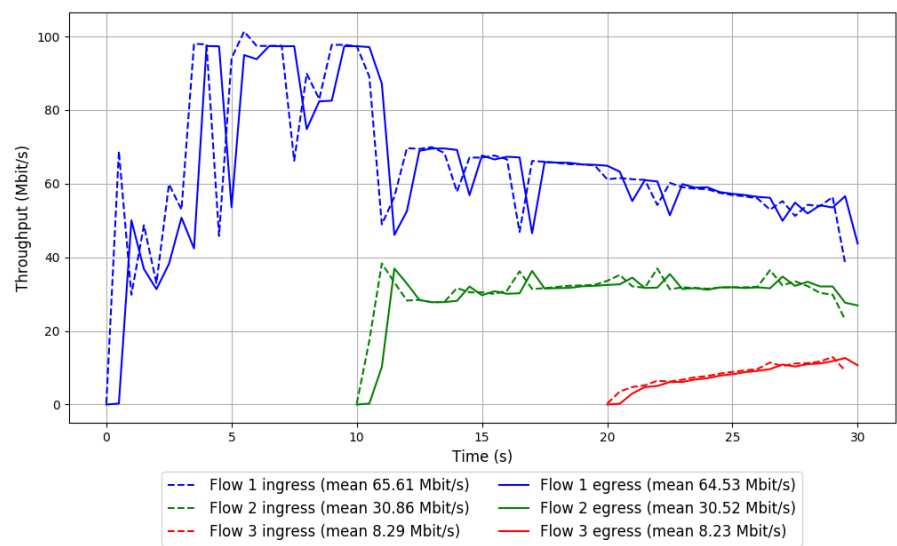


Run 4: Statistics of QUIC Cubic

Start at: 2019-03-19 03:51:19
End at: 2019-03-19 03:51:49
Local clock offset: 0.615 ms
Remote clock offset: -0.629 ms

Below is generated by plot.py at 2019-03-19 04:53:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.49 Mbit/s
95th percentile per-packet one-way delay: 67.117 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 64.53 Mbit/s
95th percentile per-packet one-way delay: 67.021 ms
Loss rate: 1.56%
-- Flow 2:
Average throughput: 30.52 Mbit/s
95th percentile per-packet one-way delay: 67.407 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 8.23 Mbit/s
95th percentile per-packet one-way delay: 67.752 ms
Loss rate: 0.85%

Run 4: Report of QUIC Cubic — Data Link

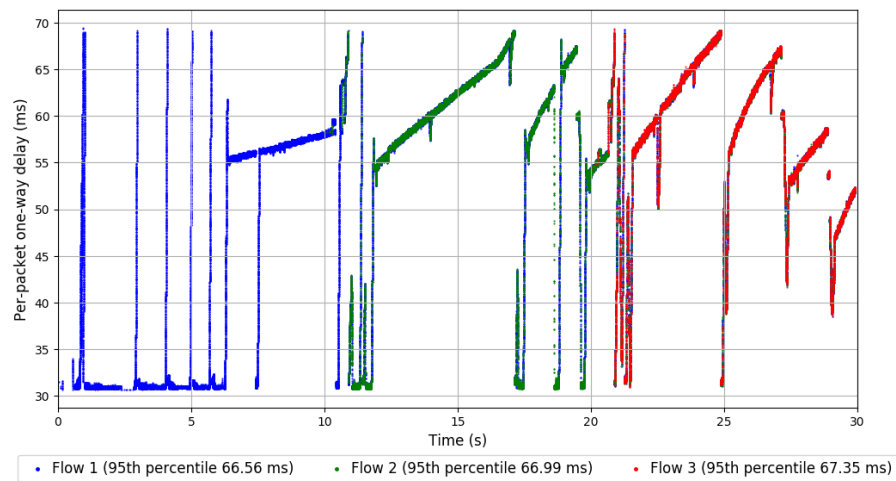
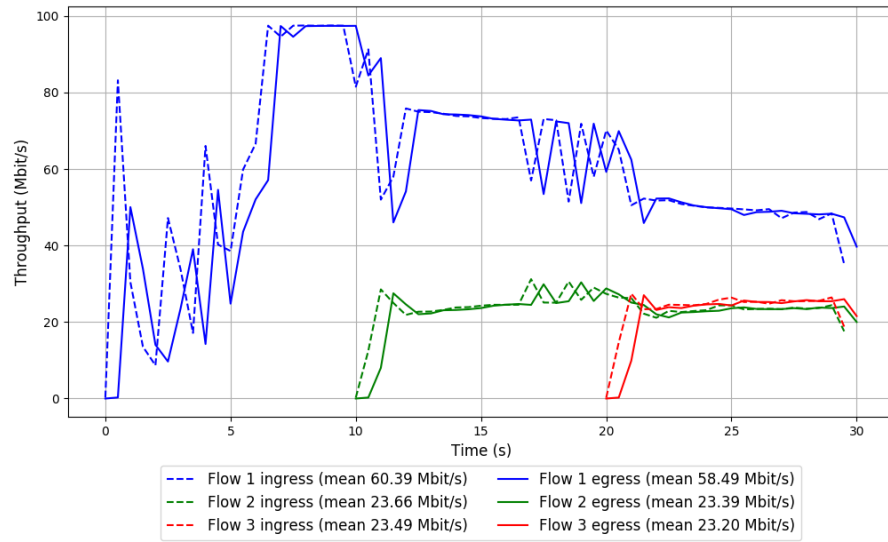


Run 5: Statistics of QUIC Cubic

Start at: 2019-03-19 04:17:31
End at: 2019-03-19 04:18:01
Local clock offset: -0.153 ms
Remote clock offset: -0.654 ms

Below is generated by plot.py at 2019-03-19 04:53:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 81.64 Mbit/s
95th percentile per-packet one-way delay: 66.785 ms
Loss rate: 2.56%
-- Flow 1:
Average throughput: 58.49 Mbit/s
95th percentile per-packet one-way delay: 66.556 ms
Loss rate: 3.09%
-- Flow 2:
Average throughput: 23.39 Mbit/s
95th percentile per-packet one-way delay: 66.989 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 23.20 Mbit/s
95th percentile per-packet one-way delay: 67.349 ms
Loss rate: 1.26%

Run 5: Report of QUIC Cubic — Data Link

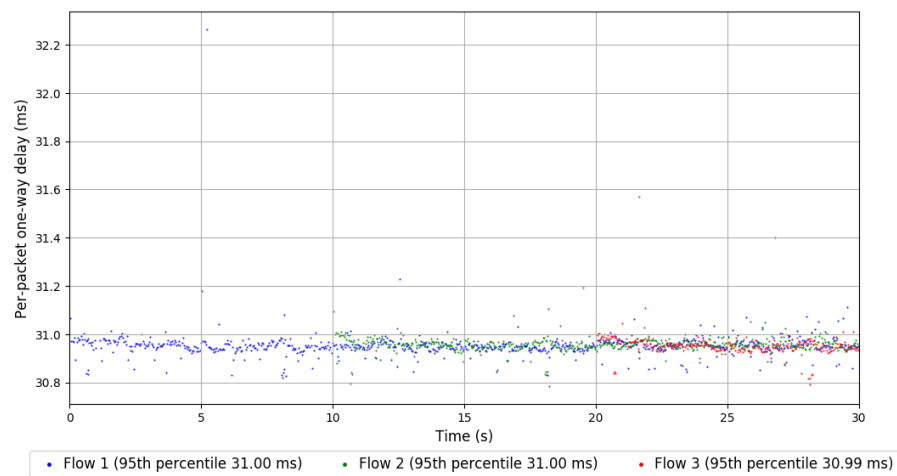
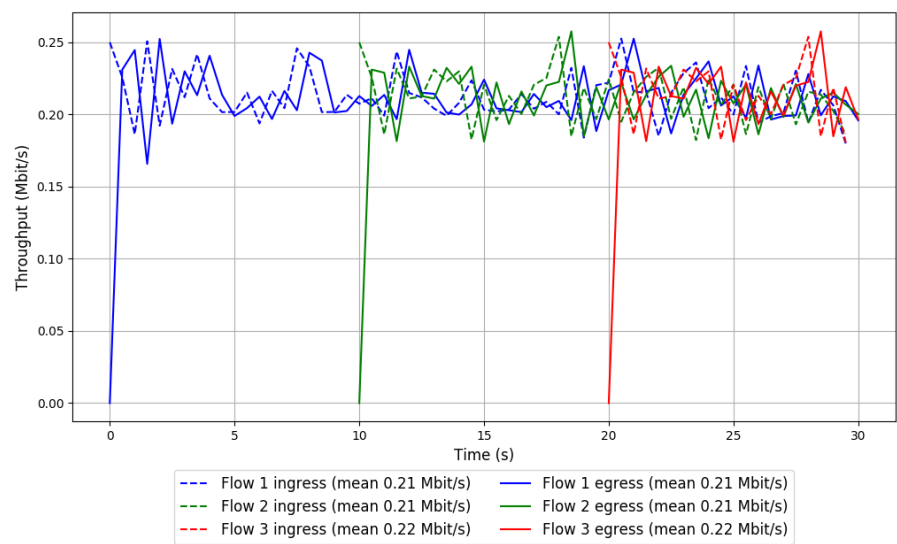


```
Run 1: Statistics of SReAM

Start at: 2019-03-19 02:53:30
End at: 2019-03-19 02:54:00
Local clock offset: 1.599 ms
Remote clock offset: -1.975 ms

# Below is generated by plot.py at 2019-03-19 04:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 30.995 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.997 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.996 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.991 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

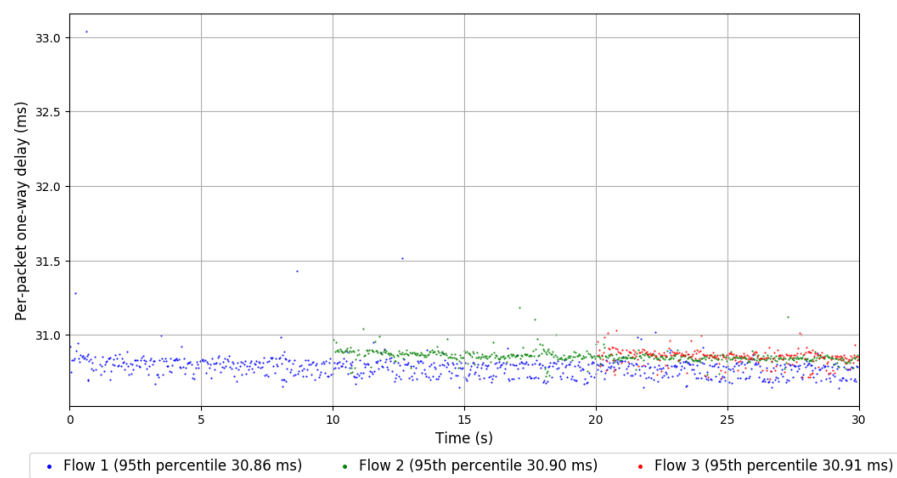
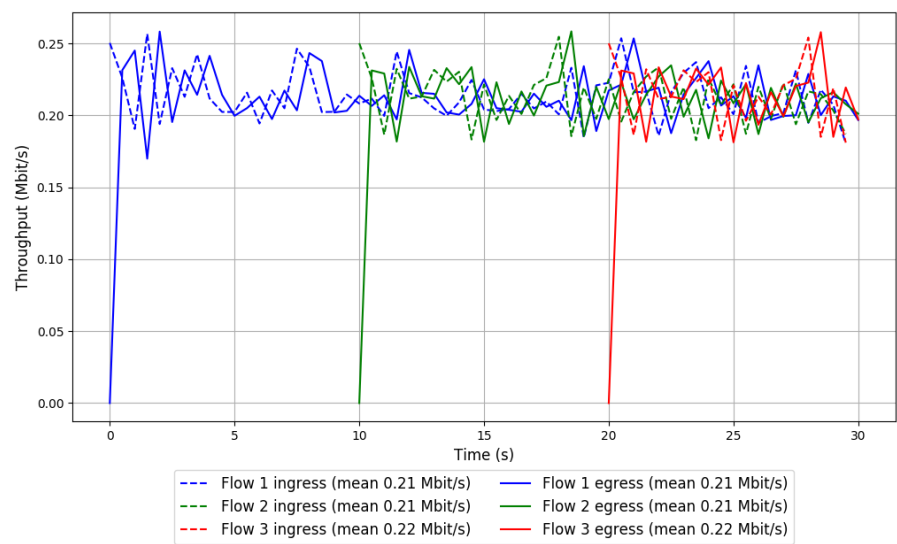


Run 2: Statistics of SReAM

Start at: 2019-03-19 03:19:56
End at: 2019-03-19 03:20:26
Local clock offset: 1.56 ms
Remote clock offset: -1.125 ms

Below is generated by plot.py at 2019-03-19 04:53:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 30.899 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.856 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.902 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.914 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

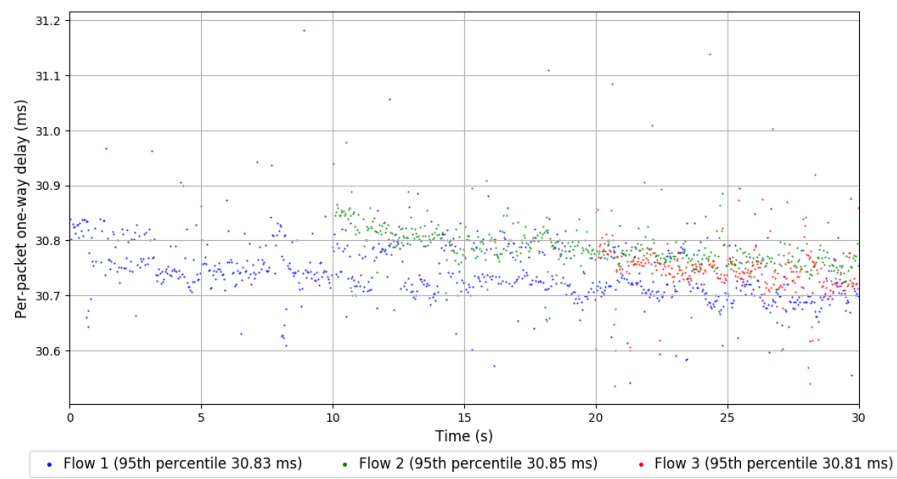
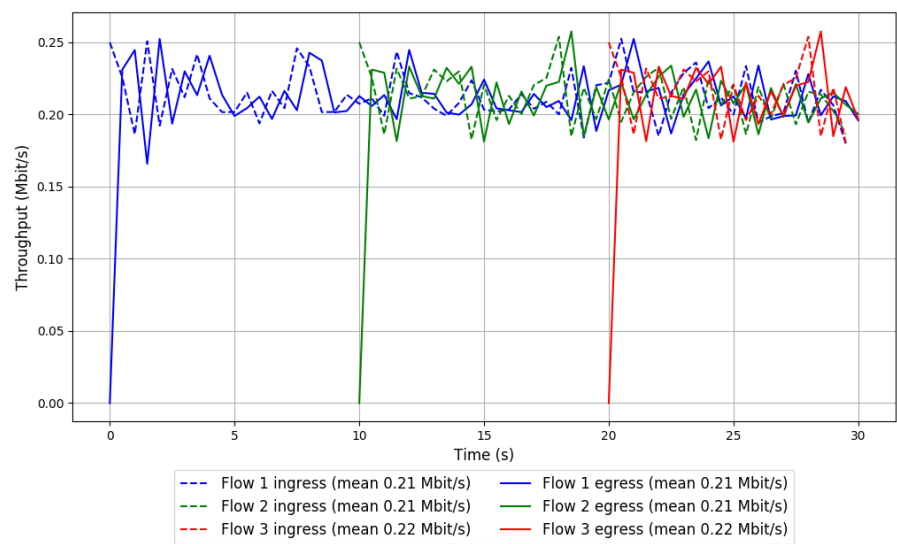


Run 3: Statistics of SReAM

Start at: 2019-03-19 03:46:29
End at: 2019-03-19 03:46:59
Local clock offset: 1.102 ms
Remote clock offset: -0.742 ms

Below is generated by plot.py at 2019-03-19 04:53:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 30.839 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.830 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.852 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.807 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

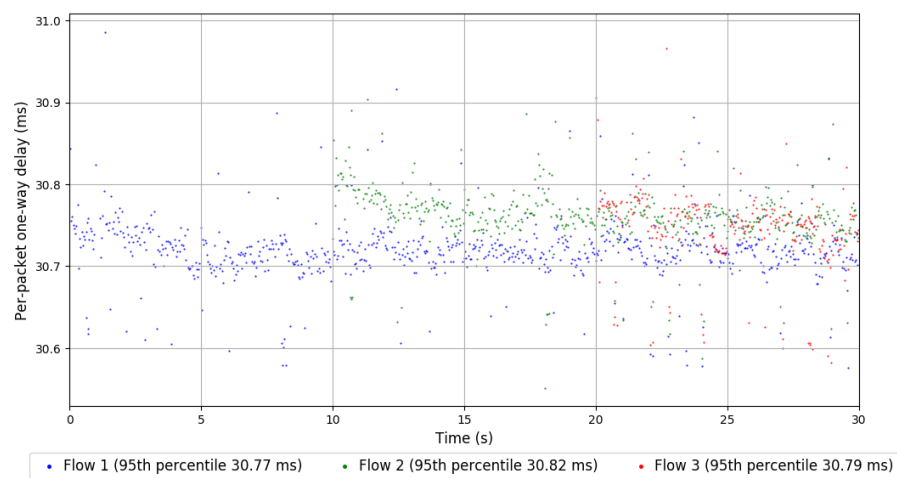
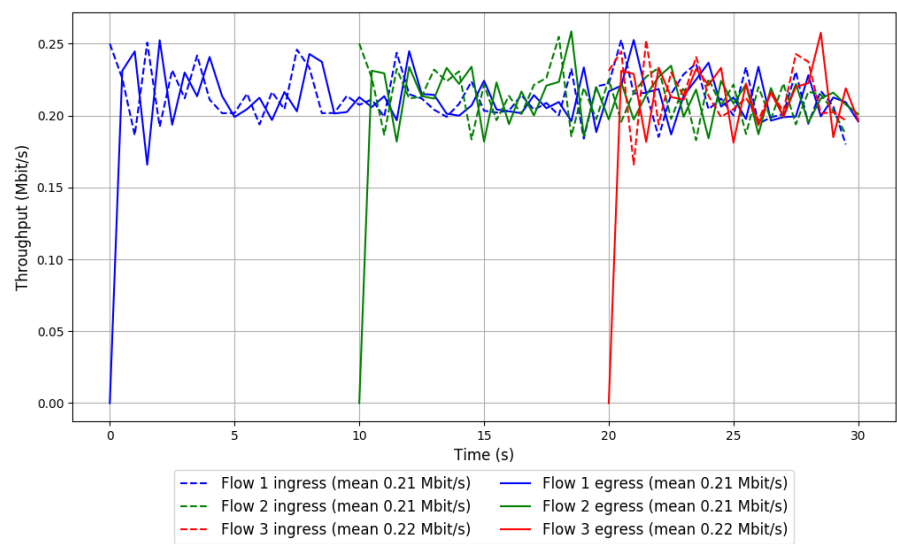


Run 4: Statistics of SReAM

Start at: 2019-03-19 04:12:39
End at: 2019-03-19 04:13:09
Local clock offset: -0.235 ms
Remote clock offset: -0.872 ms

Below is generated by plot.py at 2019-03-19 04:53:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 30.797 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.765 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.819 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.787 ms
Loss rate: 0.00%

Run 4: Report of SCRaM — Data Link

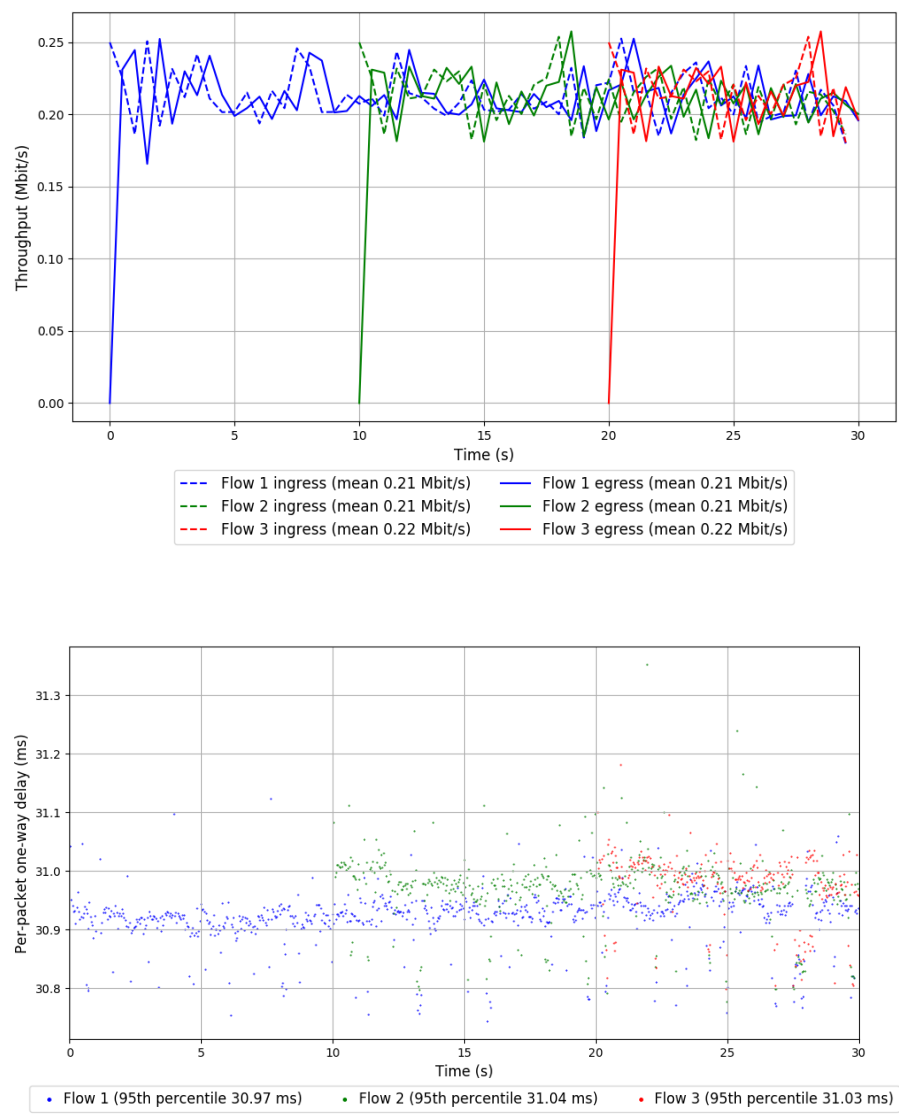


Run 5: Statistics of SReAM

Start at: 2019-03-19 04:39:00
End at: 2019-03-19 04:39:30
Local clock offset: 0.582 ms
Remote clock offset: -0.977 ms

Below is generated by plot.py at 2019-03-19 04:53:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 31.024 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.973 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 31.037 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 31.031 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-03-19 02:30:42

End at: 2019-03-19 02:31:12

Local clock offset: 1.293 ms

Remote clock offset: -2.85 ms

Below is generated by plot.py at 2019-03-19 04:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 23.57 Mbit/s

95th percentile per-packet one-way delay: 38.156 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 11.86 Mbit/s

95th percentile per-packet one-way delay: 37.425 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 11.81 Mbit/s

95th percentile per-packet one-way delay: 38.535 ms

Loss rate: 0.00%

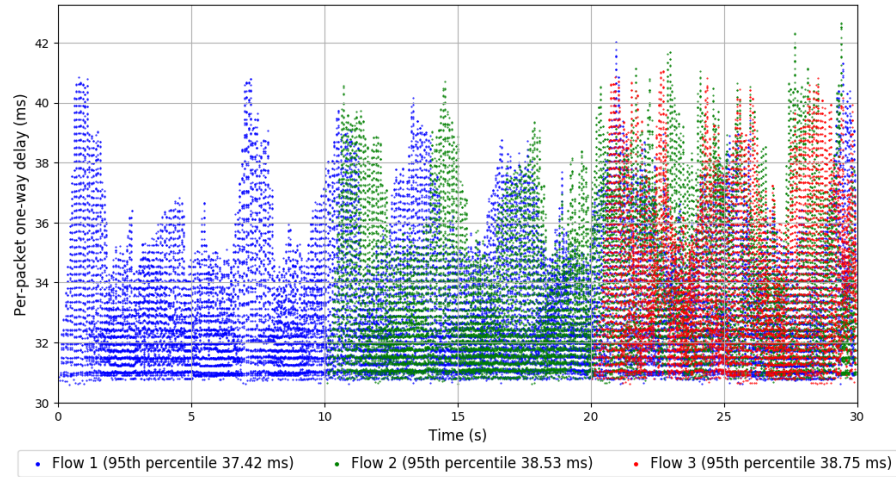
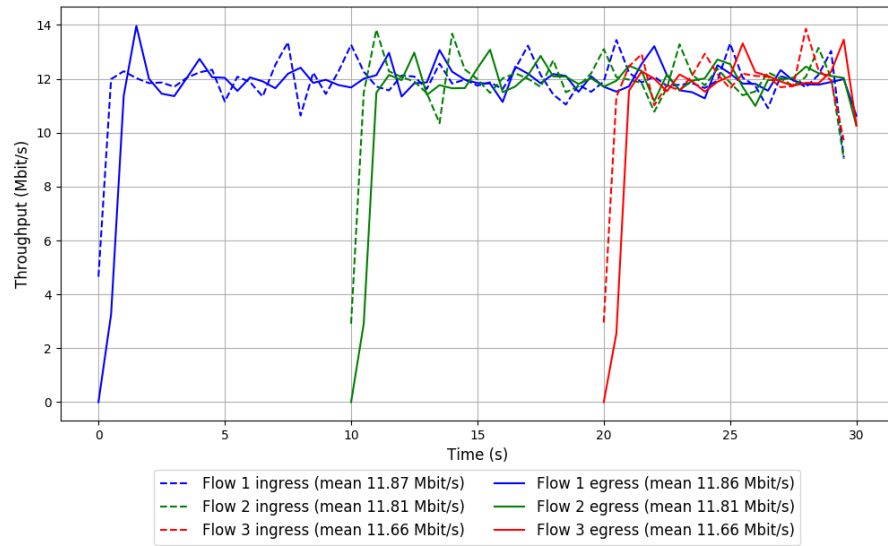
-- Flow 3:

Average throughput: 11.66 Mbit/s

95th percentile per-packet one-way delay: 38.749 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

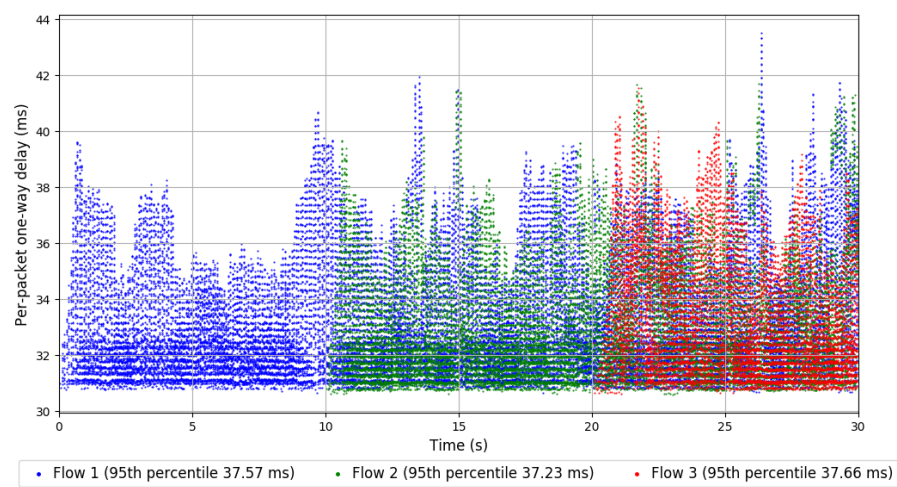
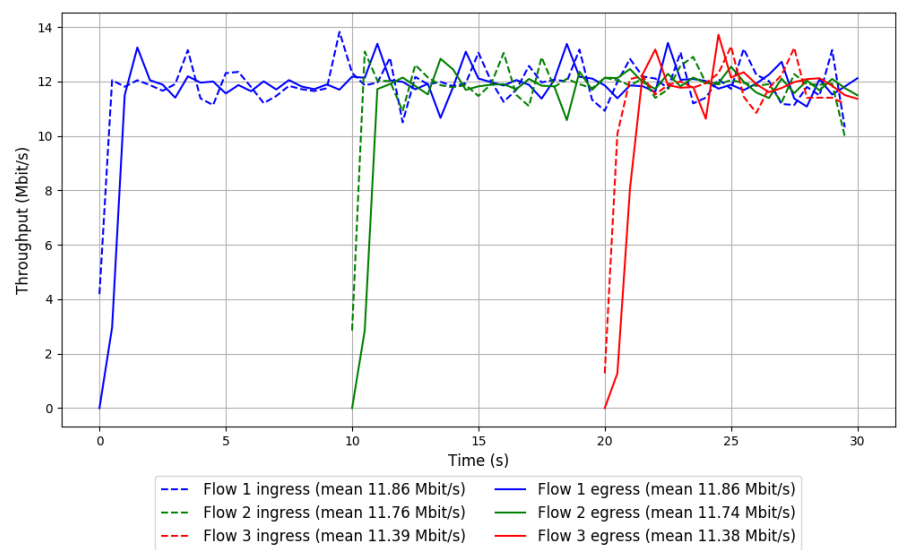


Run 2: Statistics of Sprout

Start at: 2019-03-19 02:57:08
End at: 2019-03-19 02:57:38
Local clock offset: 1.648 ms
Remote clock offset: -1.921 ms

```
# Below is generated by plot.py at 2019-03-19 04:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.43 Mbit/s
95th percentile per-packet one-way delay: 37.480 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 37.566 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 37.229 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 11.38 Mbit/s
95th percentile per-packet one-way delay: 37.662 ms
Loss rate: 0.00%
```

Run 2: Report of Sprout — Data Link

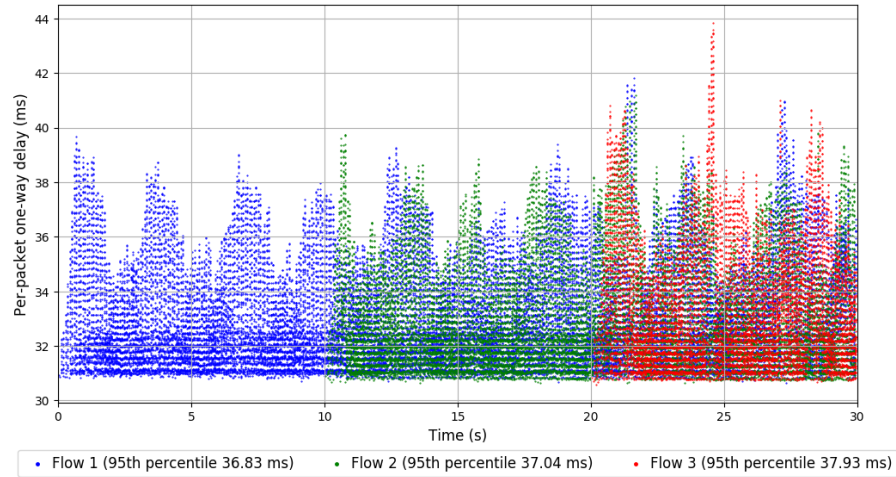
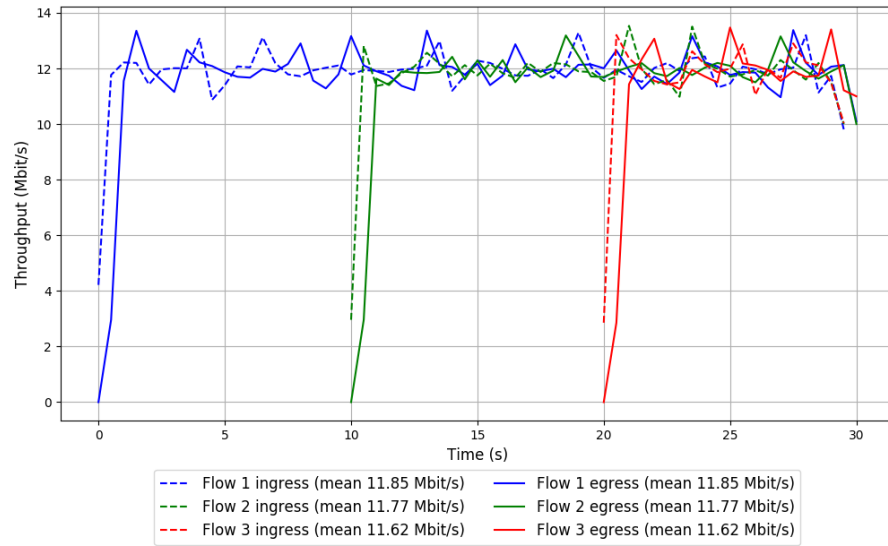


Run 3: Statistics of Sprout

Start at: 2019-03-19 03:23:40
End at: 2019-03-19 03:24:10
Local clock offset: 1.396 ms
Remote clock offset: -1.03 ms

```
# Below is generated by plot.py at 2019-03-19 04:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.51 Mbit/s
95th percentile per-packet one-way delay: 37.061 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.85 Mbit/s
95th percentile per-packet one-way delay: 36.830 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.77 Mbit/s
95th percentile per-packet one-way delay: 37.042 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 37.929 ms
Loss rate: 0.00%
```

Run 3: Report of Sprout — Data Link

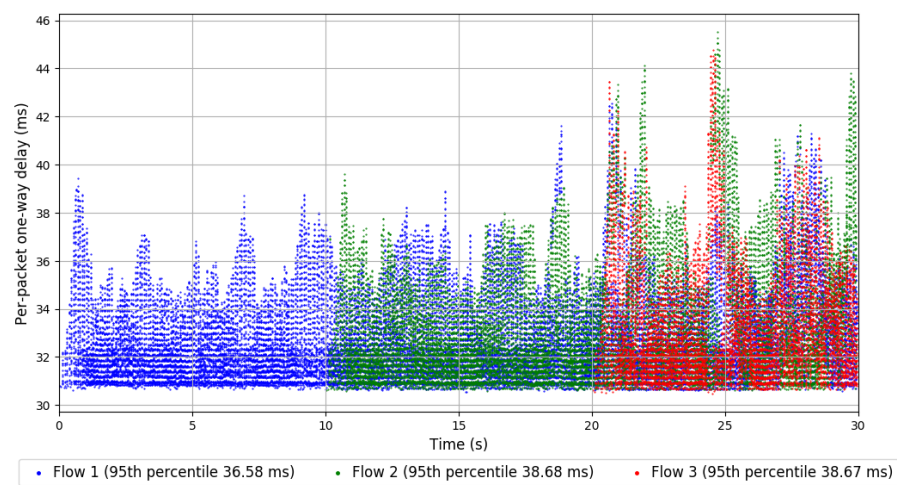
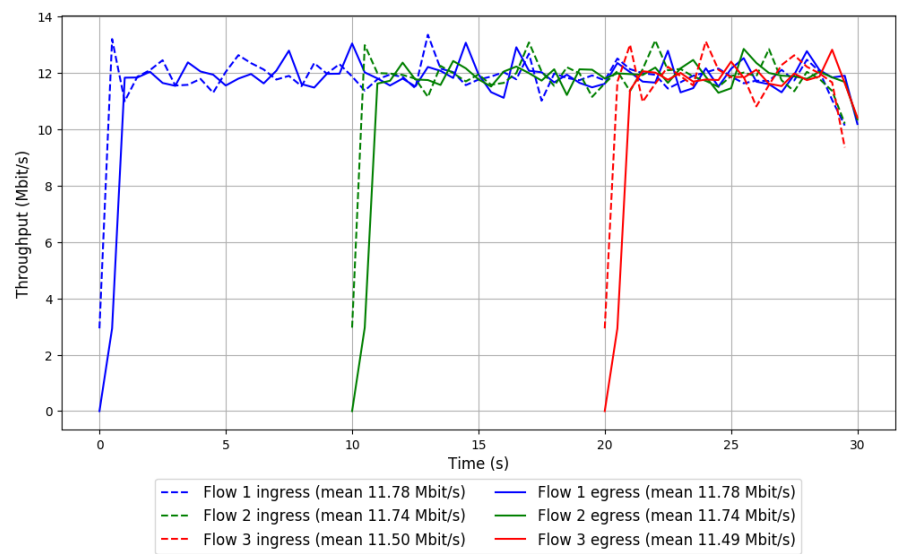


Run 4: Statistics of Sprout

Start at: 2019-03-19 03:50:09
End at: 2019-03-19 03:50:39
Local clock offset: 0.705 ms
Remote clock offset: -0.688 ms

```
# Below is generated by plot.py at 2019-03-19 04:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.38 Mbit/s
95th percentile per-packet one-way delay: 37.671 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.78 Mbit/s
95th percentile per-packet one-way delay: 36.579 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 38.682 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.49 Mbit/s
95th percentile per-packet one-way delay: 38.673 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

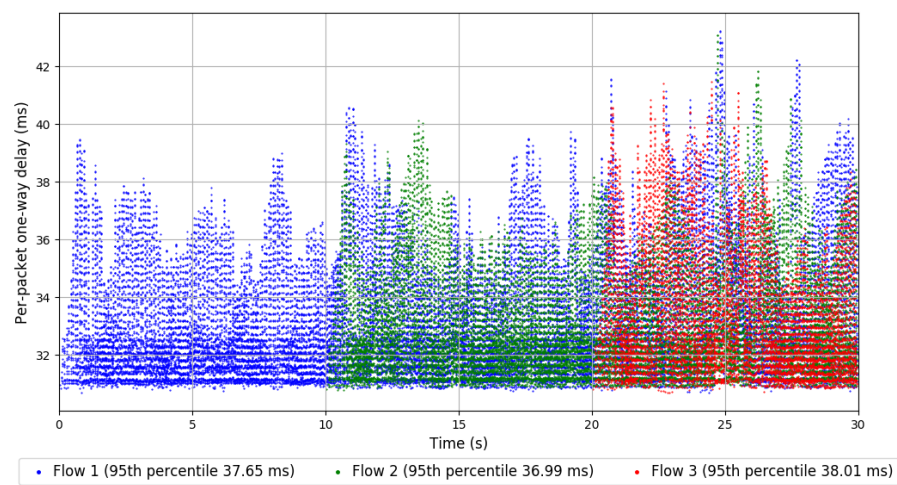
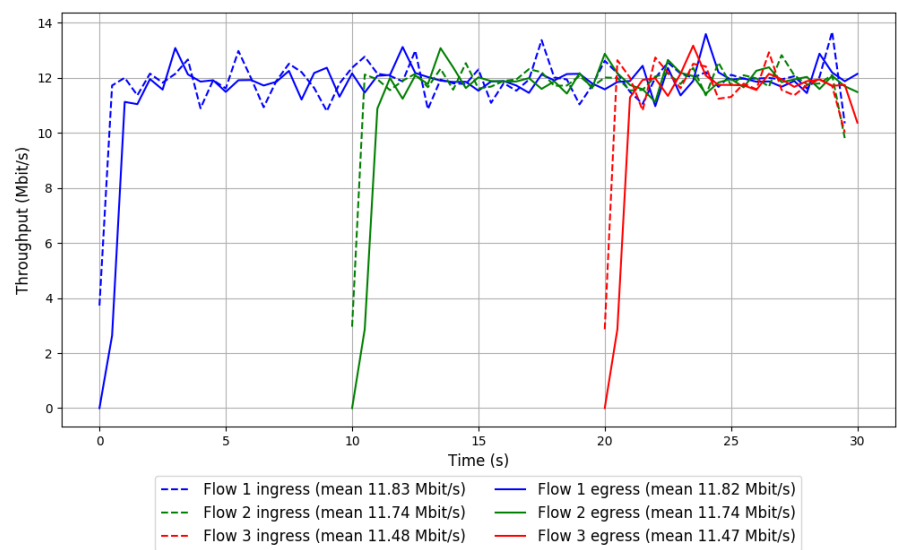


Run 5: Statistics of Sprout

Start at: 2019-03-19 04:16:21
End at: 2019-03-19 04:16:51
Local clock offset: -0.286 ms
Remote clock offset: -0.704 ms

```
# Below is generated by plot.py at 2019-03-19 04:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.41 Mbit/s
95th percentile per-packet one-way delay: 37.506 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 11.82 Mbit/s
95th percentile per-packet one-way delay: 37.650 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 36.989 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.47 Mbit/s
95th percentile per-packet one-way delay: 38.014 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

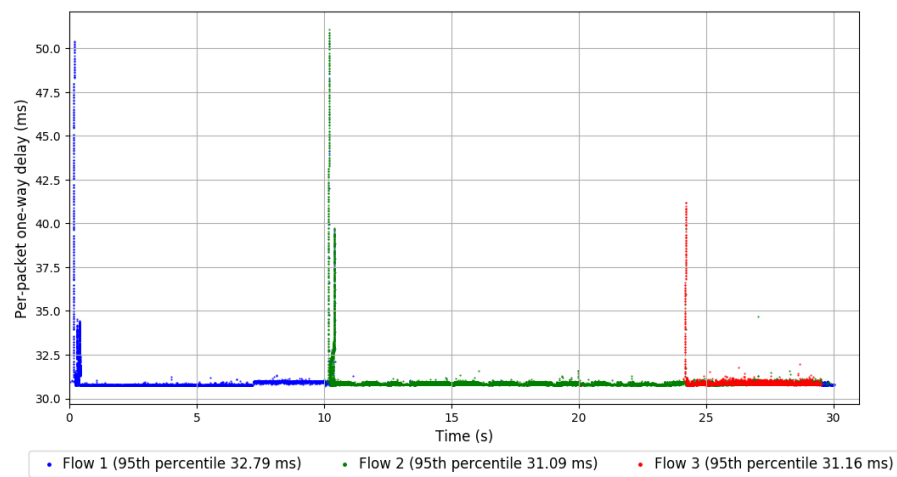
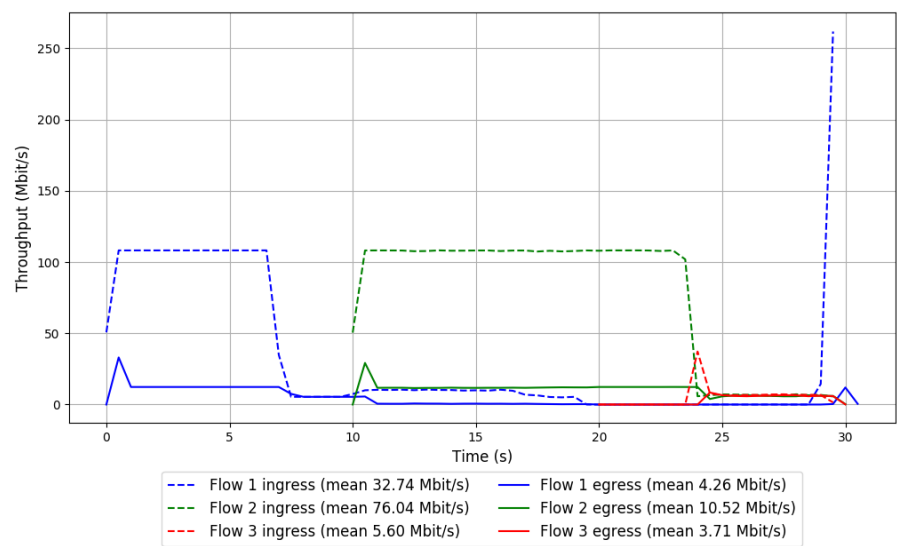


Run 1: Statistics of TaoVA-100x

Start at: 2019-03-19 02:48:39
End at: 2019-03-19 02:49:09
Local clock offset: 1.541 ms
Remote clock offset: -2.103 ms

Below is generated by plot.py at 2019-03-19 04:53:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.40 Mbit/s
95th percentile per-packet one-way delay: 31.948 ms
Loss rate: 85.45%
-- Flow 1:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 32.787 ms
Loss rate: 87.00%
-- Flow 2:
Average throughput: 10.52 Mbit/s
95th percentile per-packet one-way delay: 31.087 ms
Loss rate: 86.24%
-- Flow 3:
Average throughput: 3.71 Mbit/s
95th percentile per-packet one-way delay: 31.163 ms
Loss rate: 34.75%

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

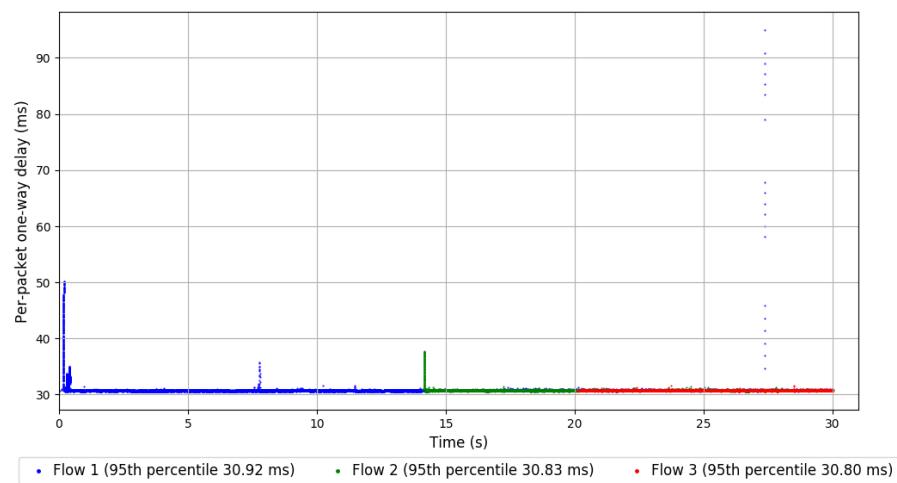
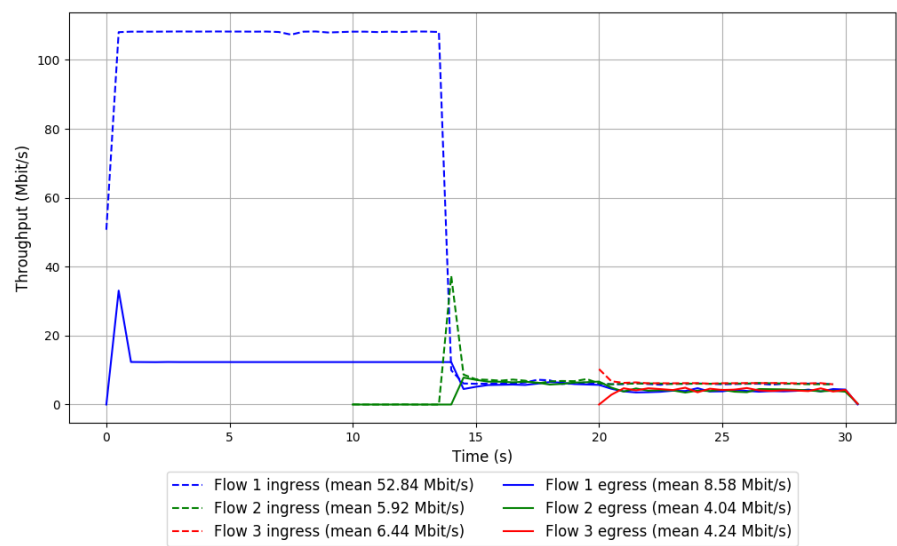


Run 2: Statistics of TaoVA-100x

Start at: 2019-03-19 03:15:02
End at: 2019-03-19 03:15:32
Local clock offset: 1.814 ms
Remote clock offset: -1.401 ms

Below is generated by plot.py at 2019-03-19 04:53:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 30.855 ms
Loss rate: 78.48%
-- Flow 1:
Average throughput: 8.58 Mbit/s
95th percentile per-packet one-way delay: 30.916 ms
Loss rate: 83.76%
-- Flow 2:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 30.832 ms
Loss rate: 31.79%
-- Flow 3:
Average throughput: 4.24 Mbit/s
95th percentile per-packet one-way delay: 30.803 ms
Loss rate: 34.15%

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

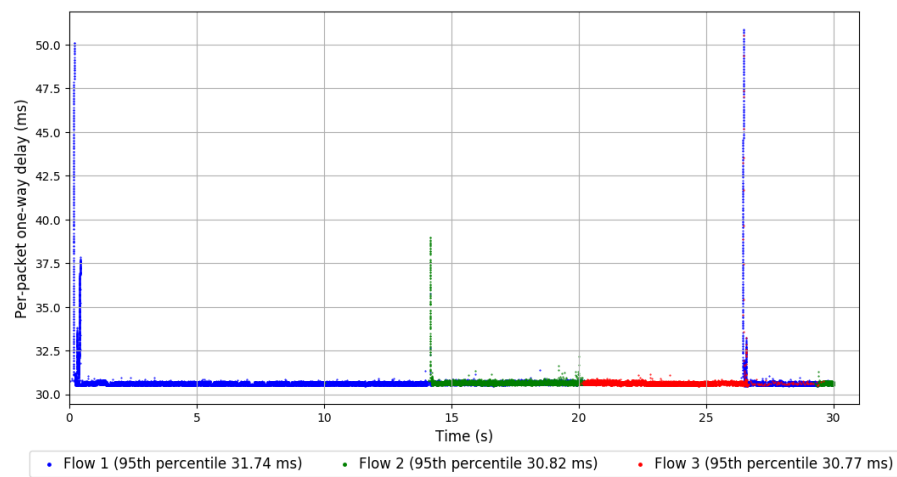
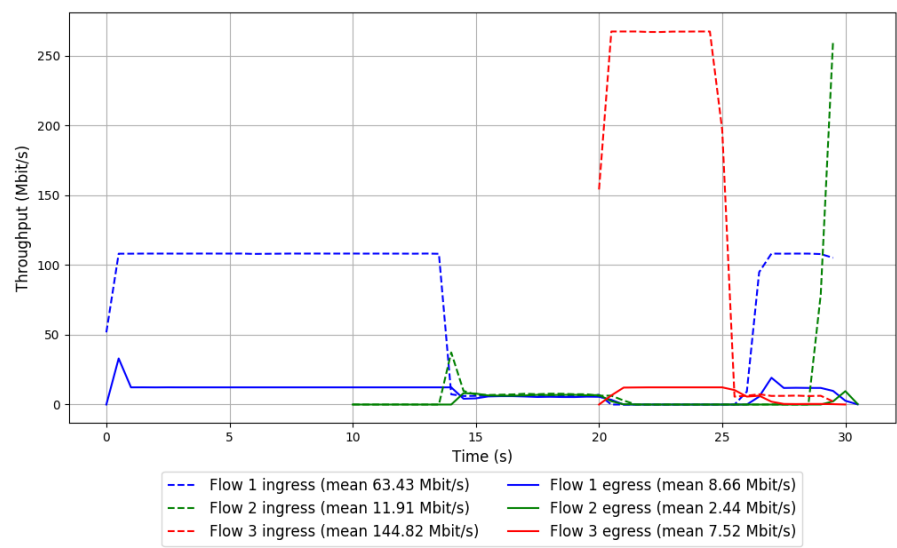


Run 3: Statistics of TaoVA-100x

Start at: 2019-03-19 03:41:37
End at: 2019-03-19 03:42:07
Local clock offset: 1.138 ms
Remote clock offset: -1.023 ms

Below is generated by plot.py at 2019-03-19 04:54:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 30.896 ms
Loss rate: 89.27%
-- Flow 1:
Average throughput: 8.66 Mbit/s
95th percentile per-packet one-way delay: 31.743 ms
Loss rate: 86.35%
-- Flow 2:
Average throughput: 2.44 Mbit/s
95th percentile per-packet one-way delay: 30.822 ms
Loss rate: 79.47%
-- Flow 3:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 30.770 ms
Loss rate: 94.89%

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

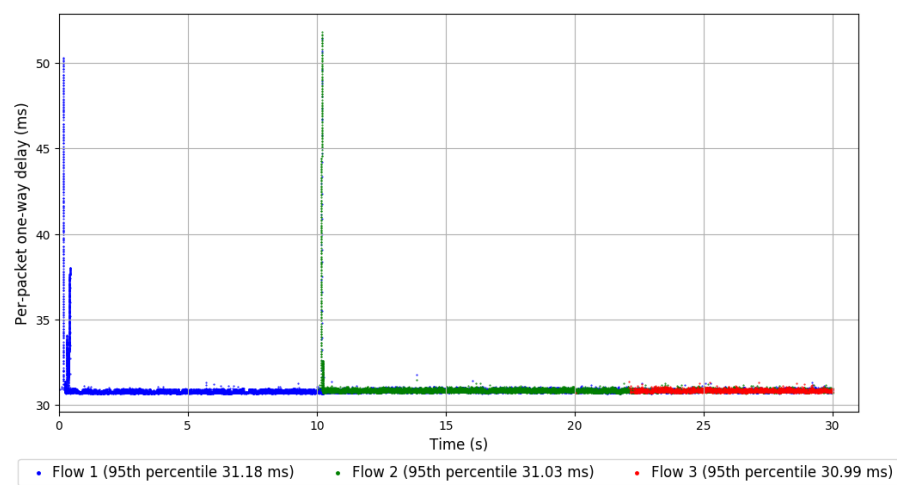
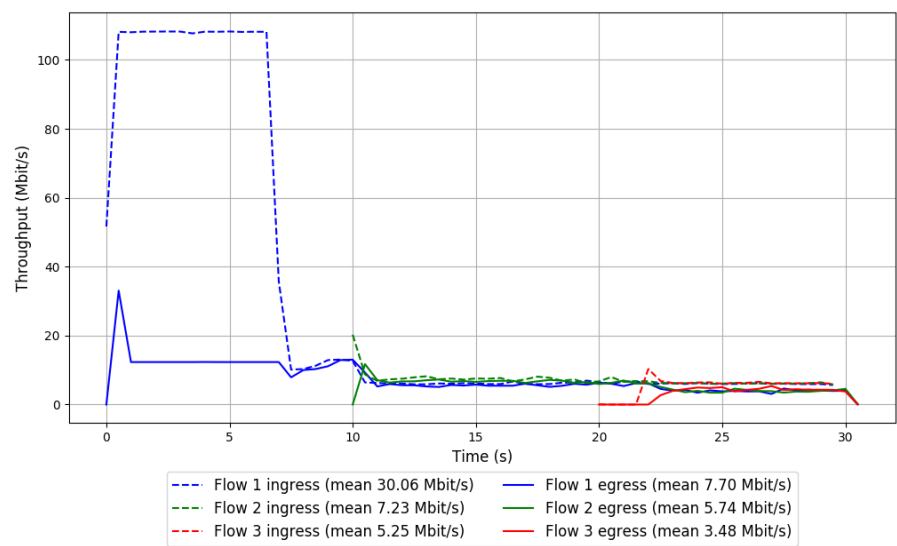


Run 4: Statistics of TaoVA-100x

Start at: 2019-03-19 04:07:46
End at: 2019-03-19 04:08:16
Local clock offset: -0.122 ms
Remote clock offset: -0.616 ms

Below is generated by plot.py at 2019-03-19 04:54:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 31.037 ms
Loss rate: 65.37%
-- Flow 1:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 31.183 ms
Loss rate: 74.37%
-- Flow 2:
Average throughput: 5.74 Mbit/s
95th percentile per-packet one-way delay: 31.031 ms
Loss rate: 20.64%
-- Flow 3:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 30.988 ms
Loss rate: 33.75%

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

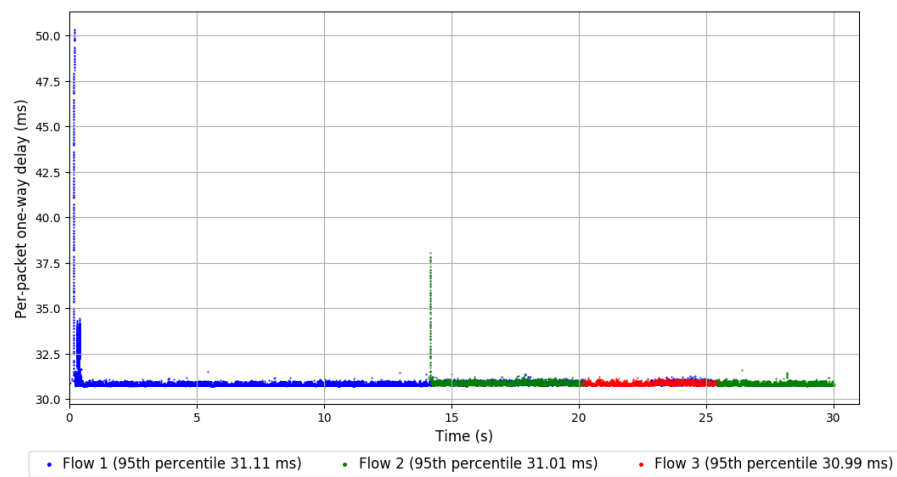
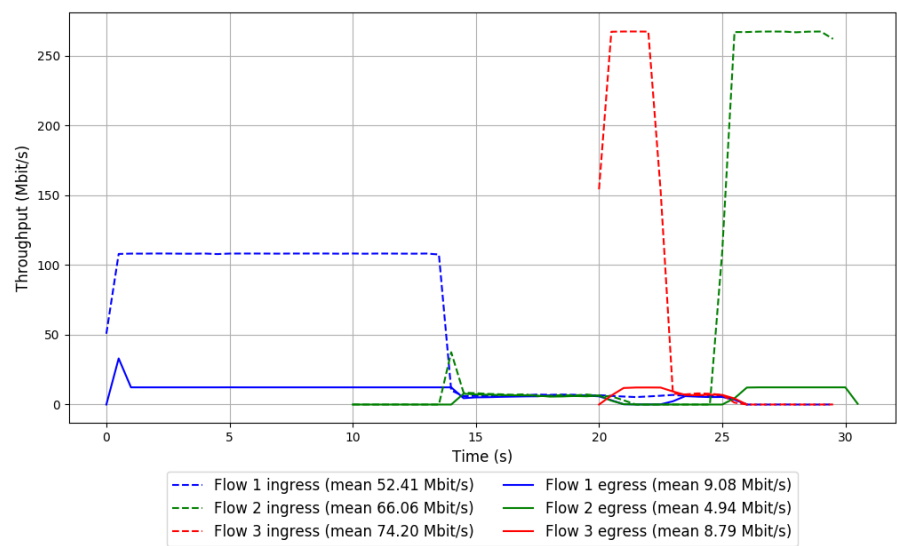


Run 5: Statistics of TaoVA-100x

Start at: 2019-03-19 04:34:02
End at: 2019-03-19 04:34:32
Local clock offset: 0.54 ms
Remote clock offset: -0.766 ms

Below is generated by plot.py at 2019-03-19 04:54:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 31.046 ms
Loss rate: 89.40%
-- Flow 1:
Average throughput: 9.08 Mbit/s
95th percentile per-packet one-way delay: 31.115 ms
Loss rate: 85.04%
-- Flow 2:
Average throughput: 4.94 Mbit/s
95th percentile per-packet one-way delay: 31.012 ms
Loss rate: 92.53%
-- Flow 3:
Average throughput: 8.79 Mbit/s
95th percentile per-packet one-way delay: 30.988 ms
Loss rate: 93.21%

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

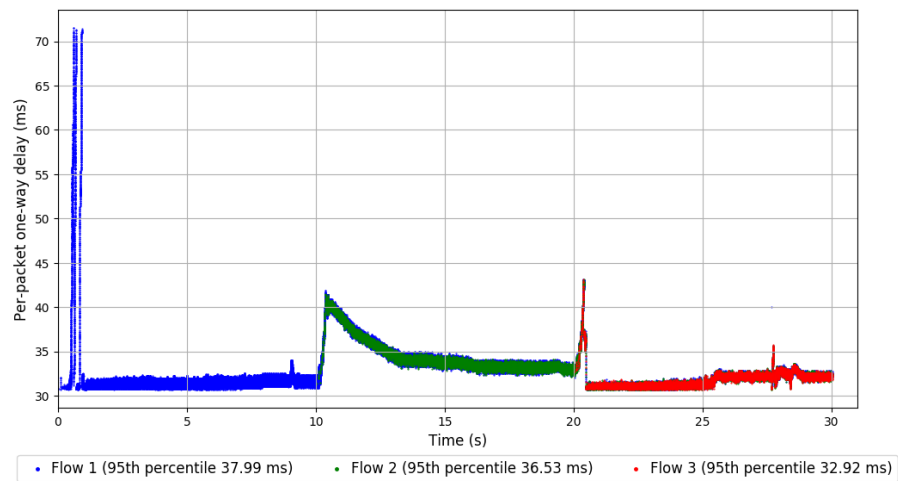
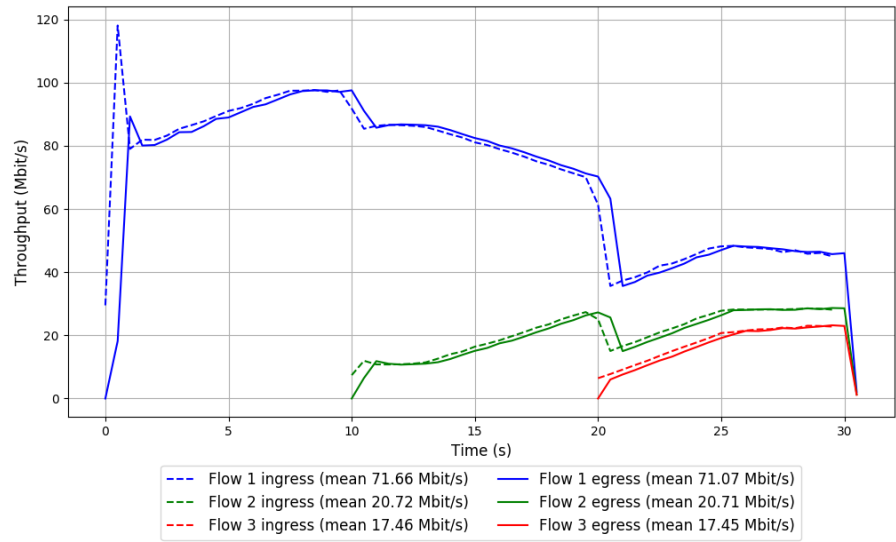


Run 1: Statistics of TCP Vegas

Start at: 2019-03-19 02:46:10
End at: 2019-03-19 02:46:40
Local clock offset: 1.517 ms
Remote clock offset: -2.249 ms

Below is generated by plot.py at 2019-03-19 04:54:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.67 Mbit/s
95th percentile per-packet one-way delay: 37.643 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 71.07 Mbit/s
95th percentile per-packet one-way delay: 37.988 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 20.71 Mbit/s
95th percentile per-packet one-way delay: 36.534 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 17.45 Mbit/s
95th percentile per-packet one-way delay: 32.921 ms
Loss rate: 0.01%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-03-19 03:12:34

End at: 2019-03-19 03:13:04

Local clock offset: 1.763 ms

Remote clock offset: -1.28 ms

Below is generated by plot.py at 2019-03-19 04:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.50 Mbit/s

95th percentile per-packet one-way delay: 38.964 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 74.30 Mbit/s

95th percentile per-packet one-way delay: 39.116 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 18.68 Mbit/s

95th percentile per-packet one-way delay: 39.142 ms

Loss rate: 0.00%

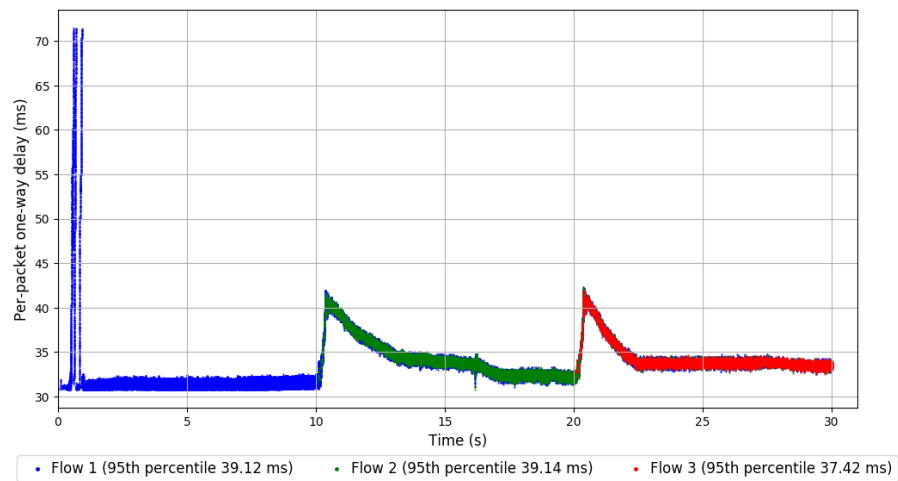
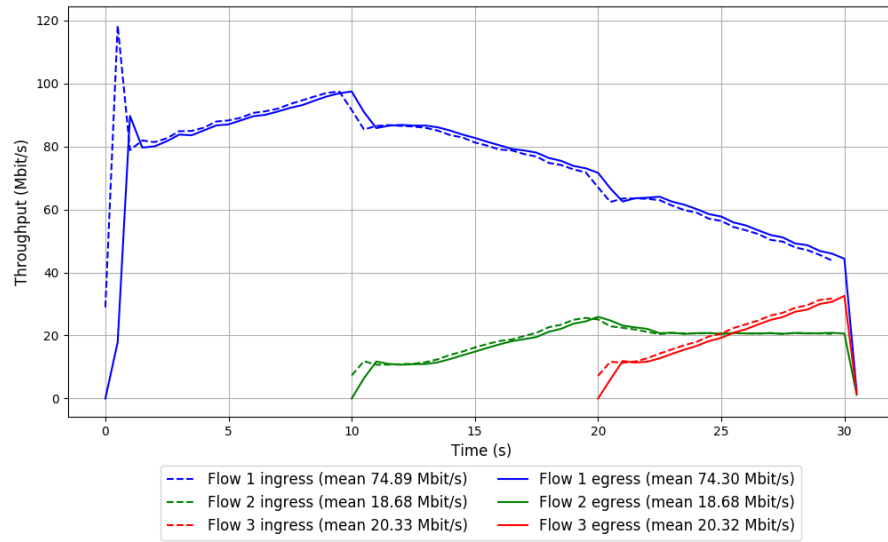
-- Flow 3:

Average throughput: 20.32 Mbit/s

95th percentile per-packet one-way delay: 37.422 ms

Loss rate: 0.01%

Run 2: Report of TCP Vegas — Data Link

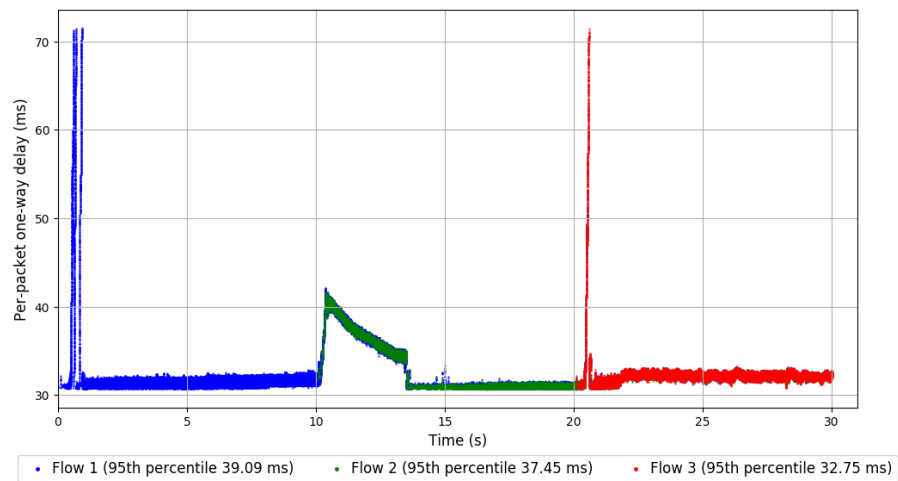
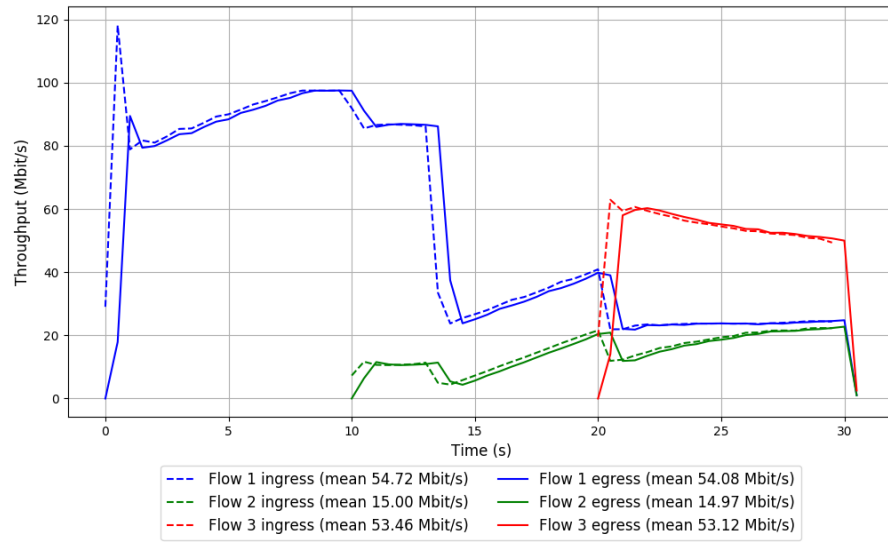


Run 3: Statistics of TCP Vegas

Start at: 2019-03-19 03:39:08
End at: 2019-03-19 03:39:38
Local clock offset: 1.164 ms
Remote clock offset: -0.885 ms

Below is generated by plot.py at 2019-03-19 04:54:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 81.71 Mbit/s
95th percentile per-packet one-way delay: 38.190 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 54.08 Mbit/s
95th percentile per-packet one-way delay: 39.090 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 14.97 Mbit/s
95th percentile per-packet one-way delay: 37.446 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 53.12 Mbit/s
95th percentile per-packet one-way delay: 32.749 ms
Loss rate: 0.63%

Run 3: Report of TCP Vegas — Data Link

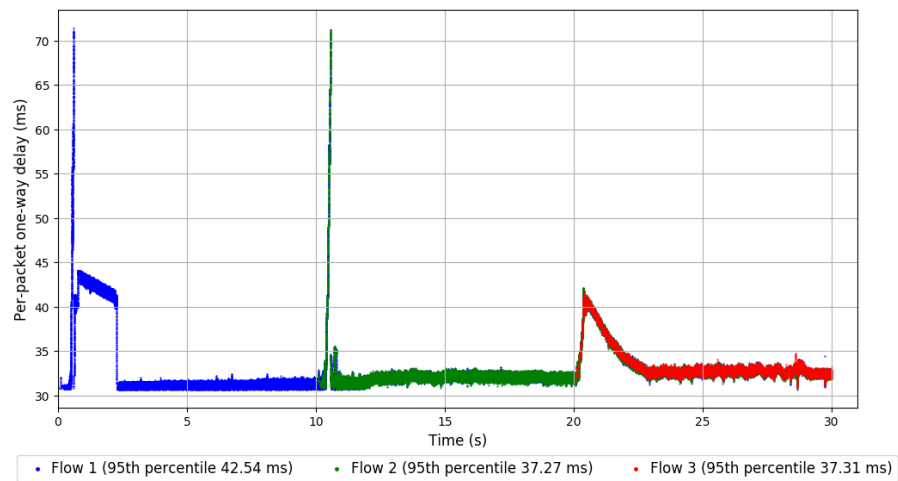
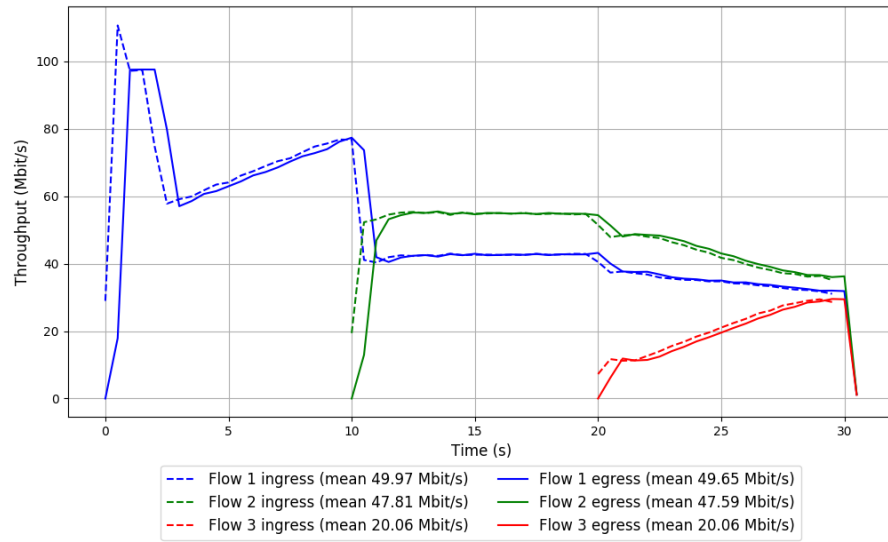


Run 4: Statistics of TCP Vegas

Start at: 2019-03-19 04:05:17
End at: 2019-03-19 04:05:47
Local clock offset: -0.06 ms
Remote clock offset: -0.558 ms

Below is generated by plot.py at 2019-03-19 04:54:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.02 Mbit/s
95th percentile per-packet one-way delay: 41.687 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 49.65 Mbit/s
95th percentile per-packet one-way delay: 42.538 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 47.59 Mbit/s
95th percentile per-packet one-way delay: 37.268 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 20.06 Mbit/s
95th percentile per-packet one-way delay: 37.308 ms
Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link

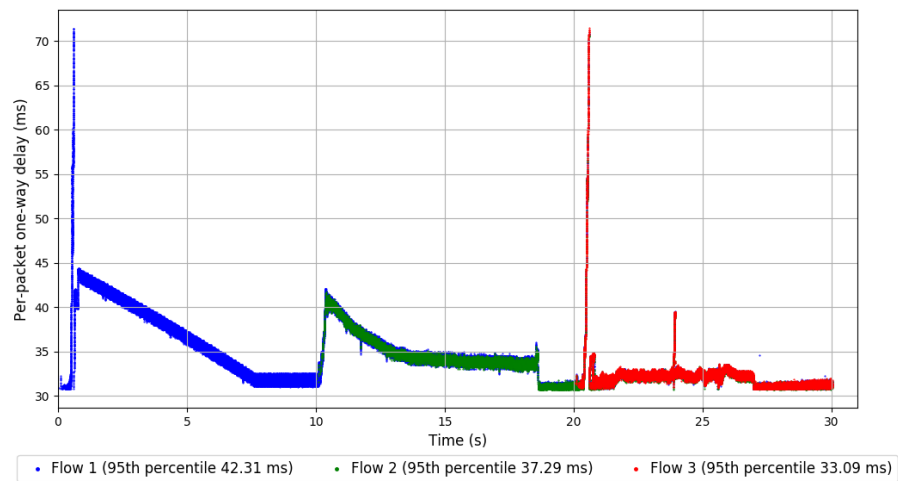
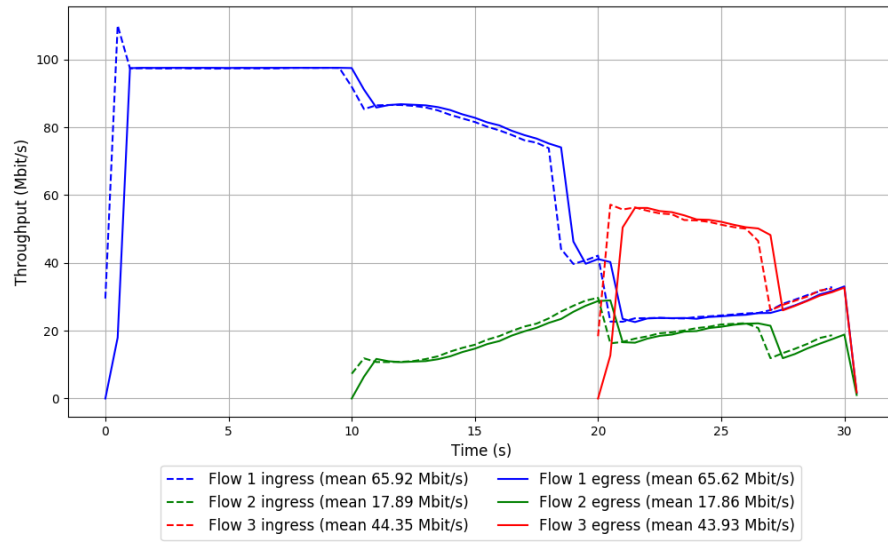


Run 5: Statistics of TCP Vegas

Start at: 2019-03-19 04:31:33
End at: 2019-03-19 04:32:03
Local clock offset: 0.483 ms
Remote clock offset: -0.783 ms

Below is generated by plot.py at 2019-03-19 04:55:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.12 Mbit/s
95th percentile per-packet one-way delay: 41.784 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 65.62 Mbit/s
95th percentile per-packet one-way delay: 42.310 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 17.86 Mbit/s
95th percentile per-packet one-way delay: 37.292 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 43.93 Mbit/s
95th percentile per-packet one-way delay: 33.087 ms
Loss rate: 0.95%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-03-19 02:39:45

End at: 2019-03-19 02:40:15

Local clock offset: 1.454 ms

Remote clock offset: -2.6 ms

Below is generated by plot.py at 2019-03-19 04:55:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.24 Mbit/s

95th percentile per-packet one-way delay: 66.231 ms

Loss rate: 31.37%

-- Flow 1:

Average throughput: 42.09 Mbit/s

95th percentile per-packet one-way delay: 65.963 ms

Loss rate: 25.44%

-- Flow 2:

Average throughput: 17.57 Mbit/s

95th percentile per-packet one-way delay: 65.556 ms

Loss rate: 29.75%

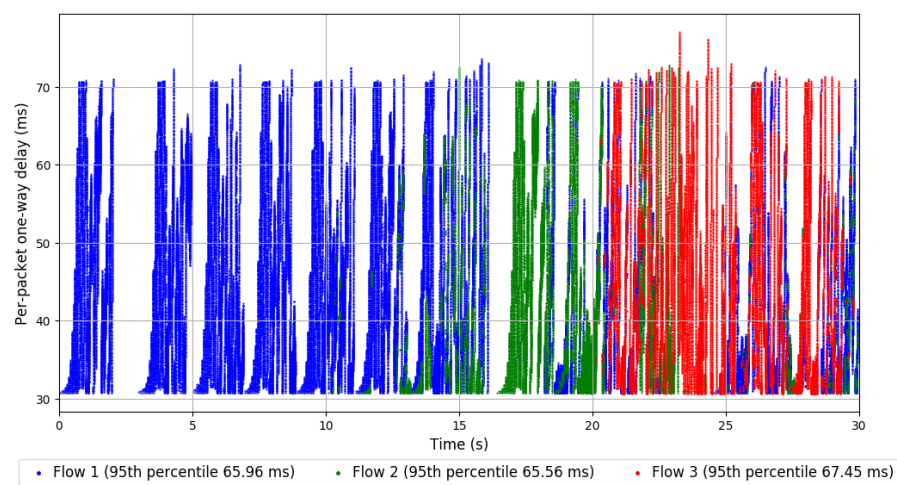
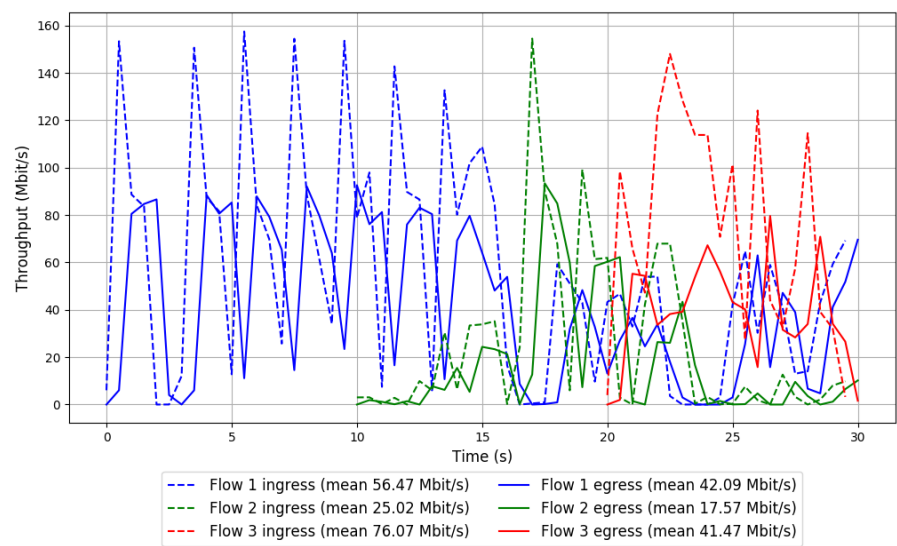
-- Flow 3:

Average throughput: 41.47 Mbit/s

95th percentile per-packet one-way delay: 67.455 ms

Loss rate: 45.89%

Run 1: Report of Verus — Data Link

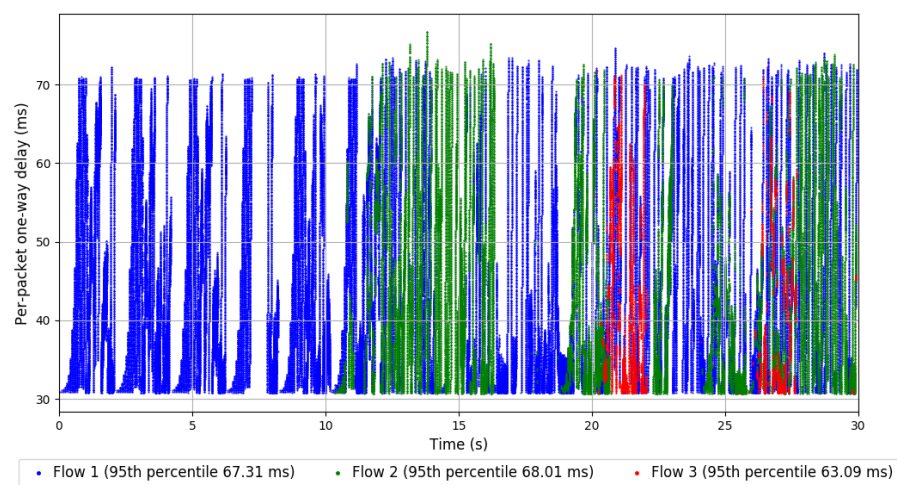
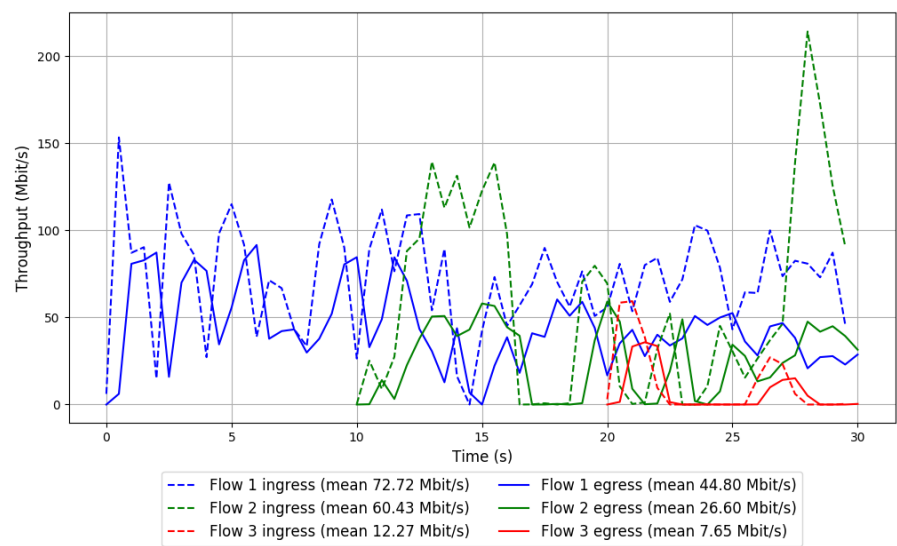


Run 2: Statistics of Verus

Start at: 2019-03-19 03:06:00
End at: 2019-03-19 03:06:30
Local clock offset: 1.74 ms
Remote clock offset: -1.529 ms

Below is generated by plot.py at 2019-03-19 04:55:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 64.72 Mbit/s
95th percentile per-packet one-way delay: 67.436 ms
Loss rate: 44.29%
-- Flow 1:
Average throughput: 44.80 Mbit/s
95th percentile per-packet one-way delay: 67.315 ms
Loss rate: 38.32%
-- Flow 2:
Average throughput: 26.60 Mbit/s
95th percentile per-packet one-way delay: 68.008 ms
Loss rate: 55.94%
-- Flow 3:
Average throughput: 7.65 Mbit/s
95th percentile per-packet one-way delay: 63.092 ms
Loss rate: 37.71%

Run 2: Report of Verus — Data Link

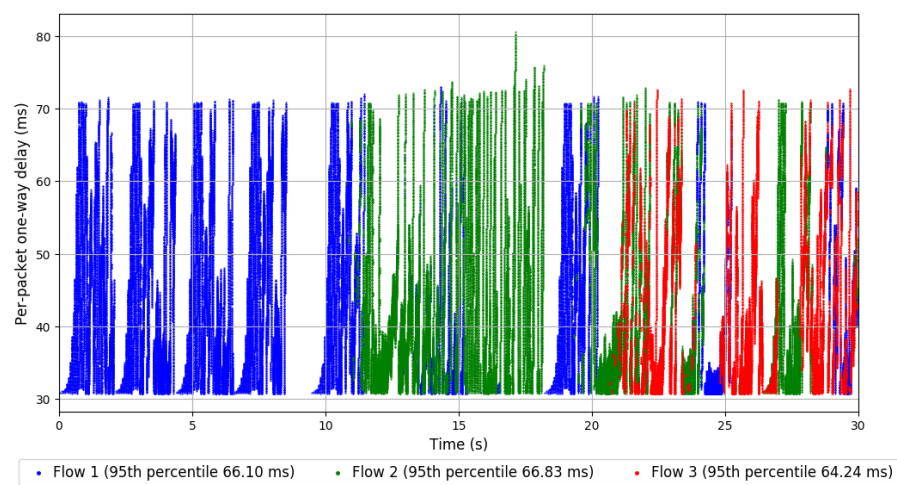
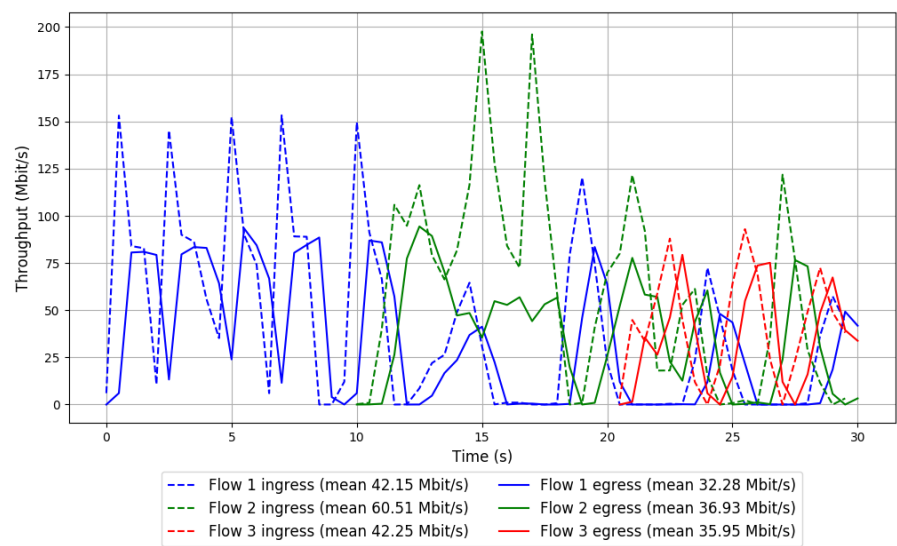


Run 3: Statistics of Verus

Start at: 2019-03-19 03:32:43
End at: 2019-03-19 03:33:13
Local clock offset: 1.2 ms
Remote clock offset: -0.861 ms

Below is generated by plot.py at 2019-03-19 04:55:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 68.06 Mbit/s
95th percentile per-packet one-way delay: 66.068 ms
Loss rate: 28.75%
-- Flow 1:
Average throughput: 32.28 Mbit/s
95th percentile per-packet one-way delay: 66.102 ms
Loss rate: 23.39%
-- Flow 2:
Average throughput: 36.93 Mbit/s
95th percentile per-packet one-way delay: 66.827 ms
Loss rate: 38.93%
-- Flow 3:
Average throughput: 35.95 Mbit/s
95th percentile per-packet one-way delay: 64.244 ms
Loss rate: 14.81%

Run 3: Report of Verus — Data Link

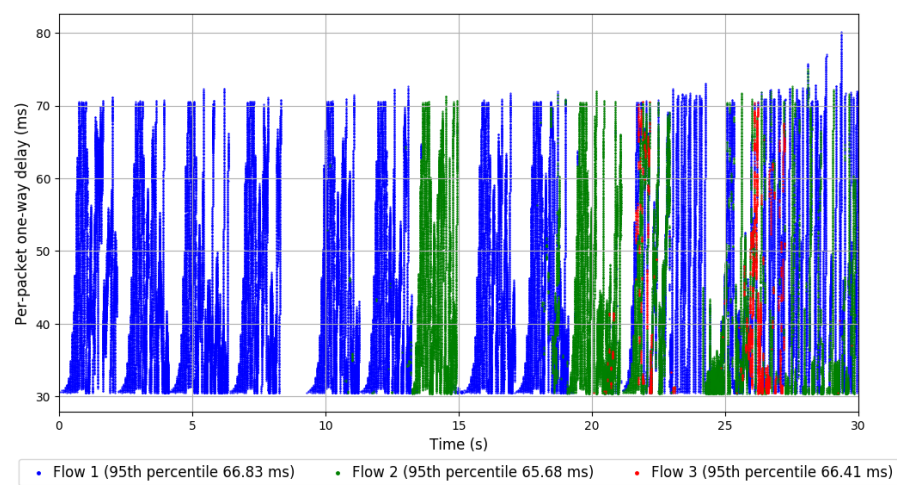
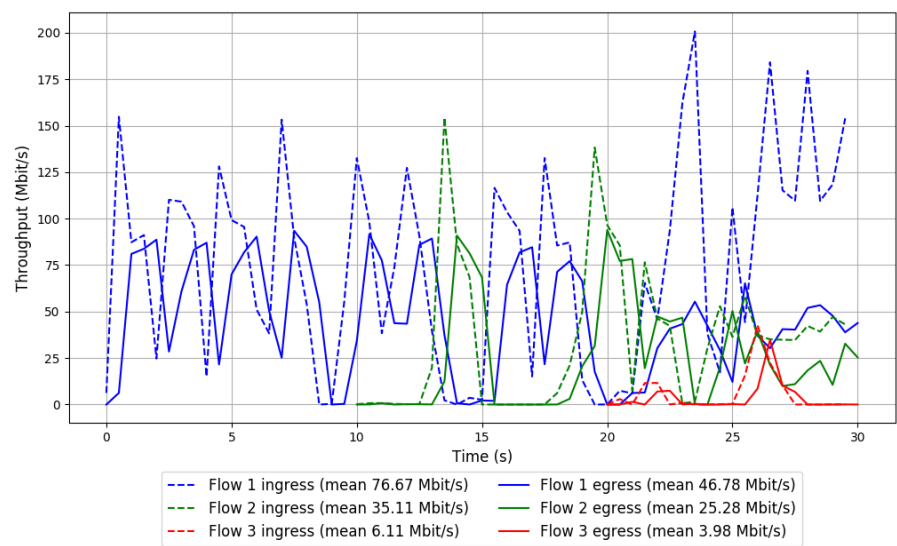


Run 4: Statistics of Verus

Start at: 2019-03-19 03:59:01
End at: 2019-03-19 03:59:31
Local clock offset: 0.172 ms
Remote clock offset: -0.755 ms

Below is generated by plot.py at 2019-03-19 04:55:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 64.80 Mbit/s
95th percentile per-packet one-way delay: 66.559 ms
Loss rate: 36.39%
-- Flow 1:
Average throughput: 46.78 Mbit/s
95th percentile per-packet one-way delay: 66.825 ms
Loss rate: 38.91%
-- Flow 2:
Average throughput: 25.28 Mbit/s
95th percentile per-packet one-way delay: 65.681 ms
Loss rate: 28.18%
-- Flow 3:
Average throughput: 3.98 Mbit/s
95th percentile per-packet one-way delay: 66.408 ms
Loss rate: 35.25%

Run 4: Report of Verus — Data Link

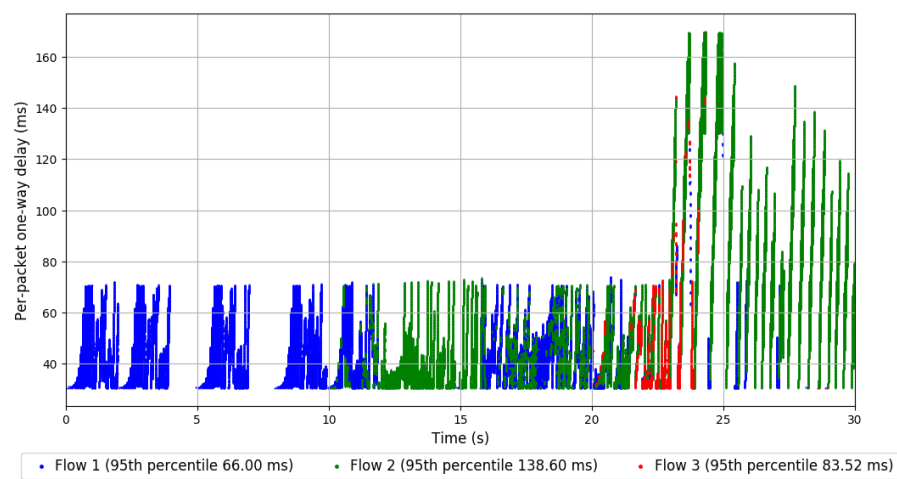
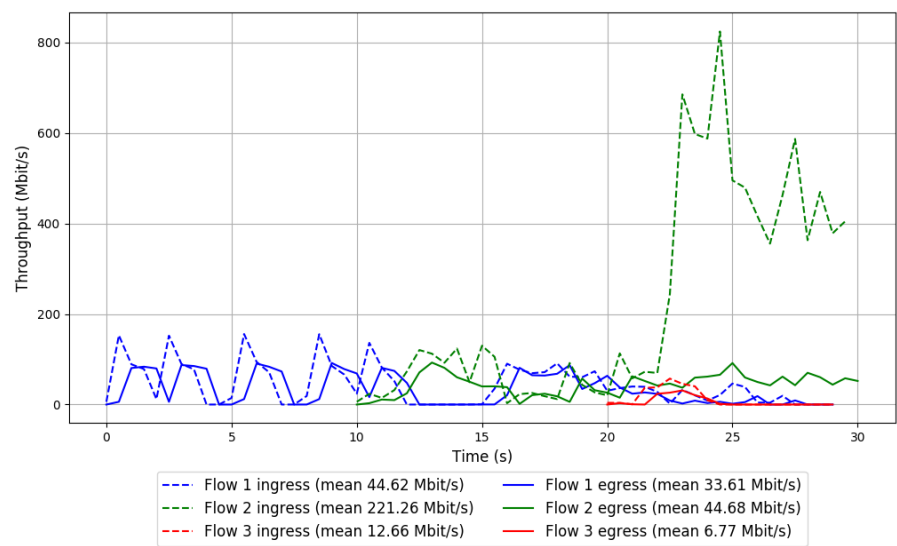


Run 5: Statistics of Verus

Start at: 2019-03-19 04:25:07
End at: 2019-03-19 04:25:37
Local clock offset: 0.307 ms
Remote clock offset: -0.848 ms

Below is generated by plot.py at 2019-03-19 04:56:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 64.22 Mbit/s
95th percentile per-packet one-way delay: 116.912 ms
Loss rate: 67.01%
-- Flow 1:
Average throughput: 33.61 Mbit/s
95th percentile per-packet one-way delay: 65.995 ms
Loss rate: 25.67%
-- Flow 2:
Average throughput: 44.68 Mbit/s
95th percentile per-packet one-way delay: 138.602 ms
Loss rate: 79.77%
-- Flow 3:
Average throughput: 6.77 Mbit/s
95th percentile per-packet one-way delay: 83.522 ms
Loss rate: 48.84%

Run 5: Report of Verus — Data Link

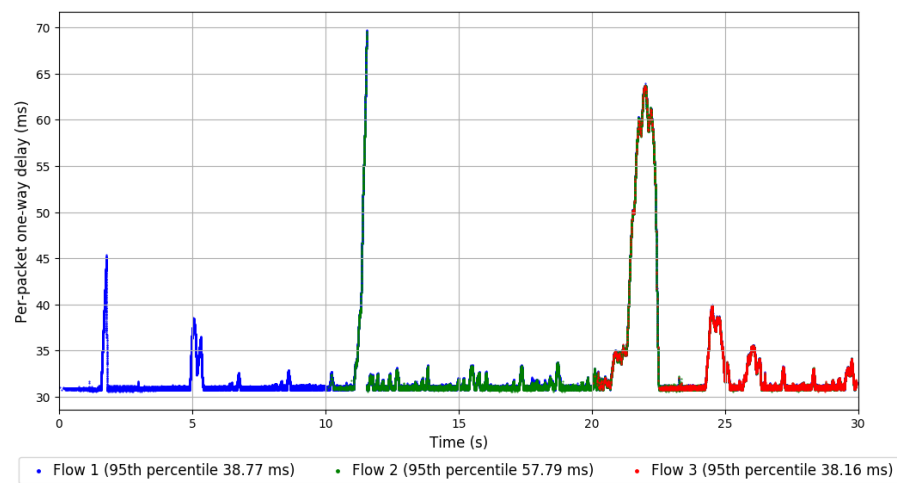
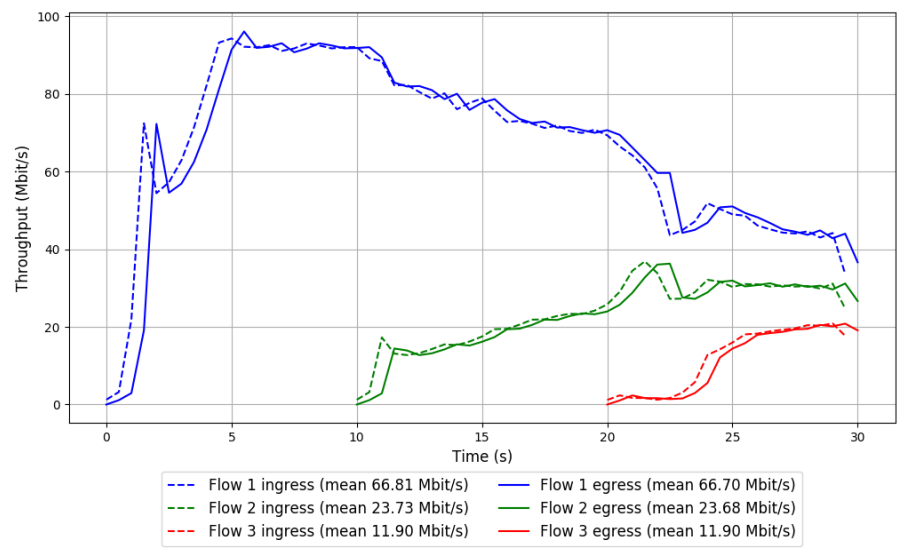


Run 1: Statistics of PCC-Vivace

Start at: 2019-03-19 02:35:47
End at: 2019-03-19 02:36:17
Local clock offset: 1.396 ms
Remote clock offset: -2.763 ms

Below is generated by plot.py at 2019-03-19 04:56:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.39 Mbit/s
95th percentile per-packet one-way delay: 41.201 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 66.70 Mbit/s
95th percentile per-packet one-way delay: 38.773 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 23.68 Mbit/s
95th percentile per-packet one-way delay: 57.787 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 11.90 Mbit/s
95th percentile per-packet one-way delay: 38.157 ms
Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link

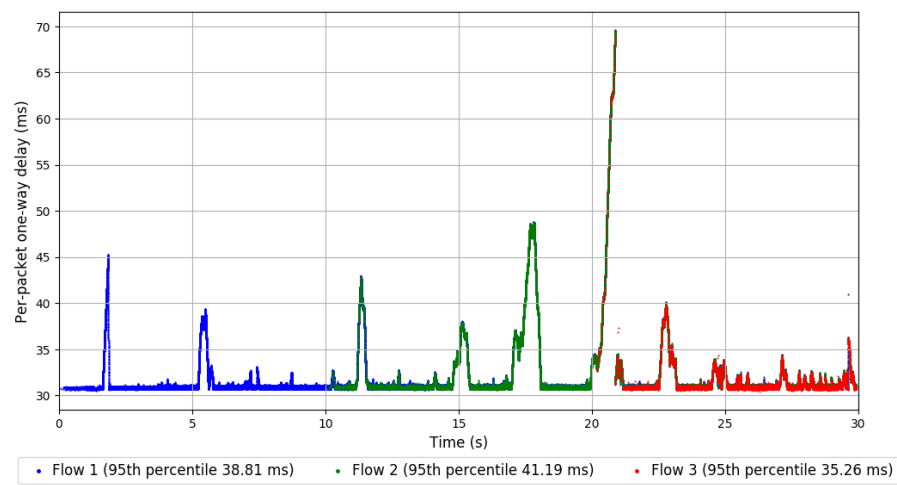
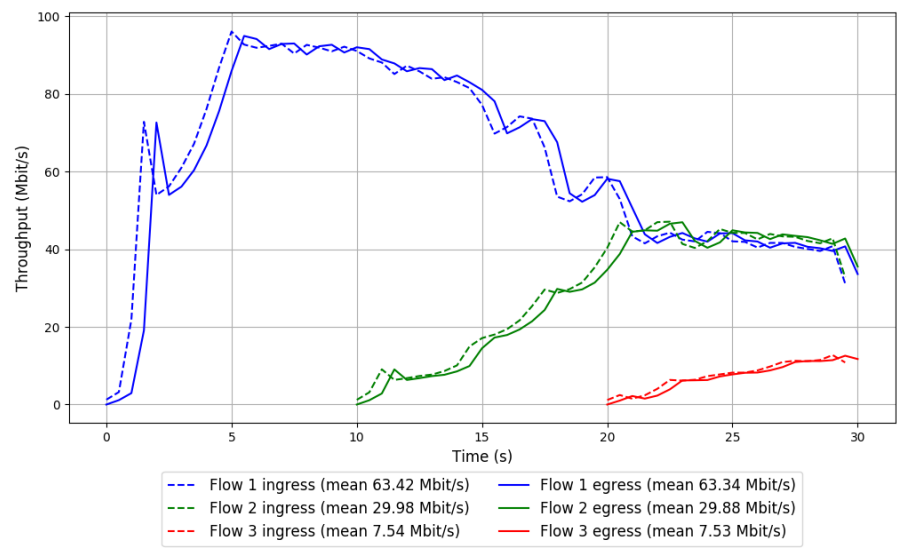


Run 2: Statistics of PCC-Vivace

Start at: 2019-03-19 03:02:01
End at: 2019-03-19 03:02:31
Local clock offset: 1.736 ms
Remote clock offset: -1.789 ms

Below is generated by plot.py at 2019-03-19 04:56:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.70 Mbit/s
95th percentile per-packet one-way delay: 39.226 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 63.34 Mbit/s
95th percentile per-packet one-way delay: 38.807 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 29.88 Mbit/s
95th percentile per-packet one-way delay: 41.185 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 7.53 Mbit/s
95th percentile per-packet one-way delay: 35.255 ms
Loss rate: 0.17%

Run 2: Report of PCC-Vivace — Data Link

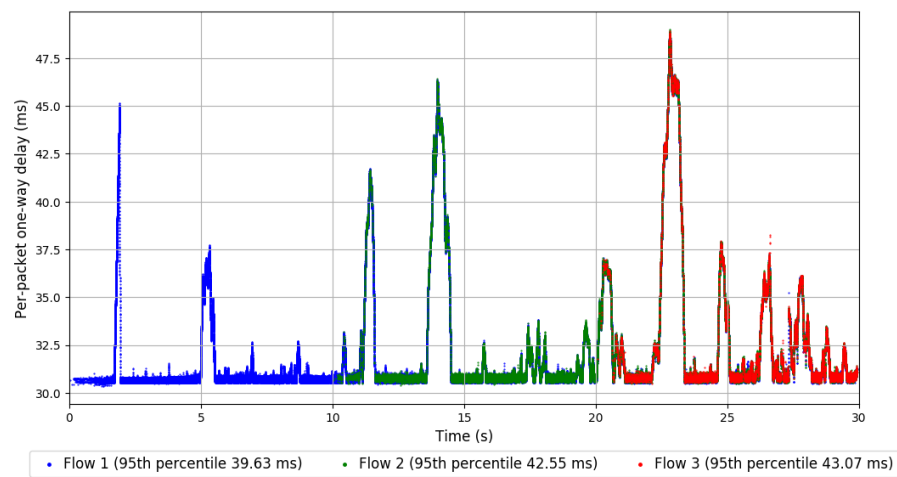
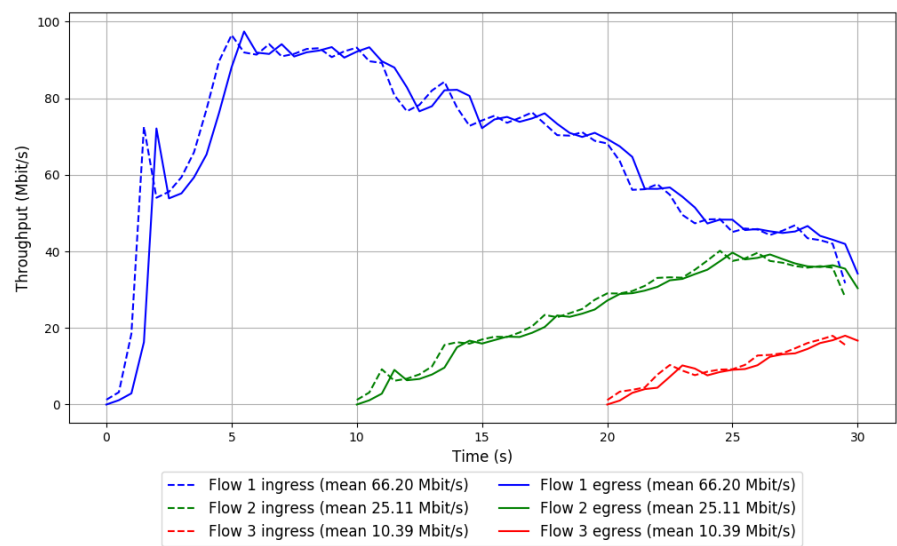


Run 3: Statistics of PCC-Vivace

Start at: 2019-03-19 03:28:46
End at: 2019-03-19 03:29:16
Local clock offset: 1.276 ms
Remote clock offset: -1.185 ms

Below is generated by plot.py at 2019-03-19 04:56:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.33 Mbit/s
95th percentile per-packet one-way delay: 40.424 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.20 Mbit/s
95th percentile per-packet one-way delay: 39.626 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.11 Mbit/s
95th percentile per-packet one-way delay: 42.551 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 10.39 Mbit/s
95th percentile per-packet one-way delay: 43.067 ms
Loss rate: 0.01%

Run 3: Report of PCC-Vivace — Data Link

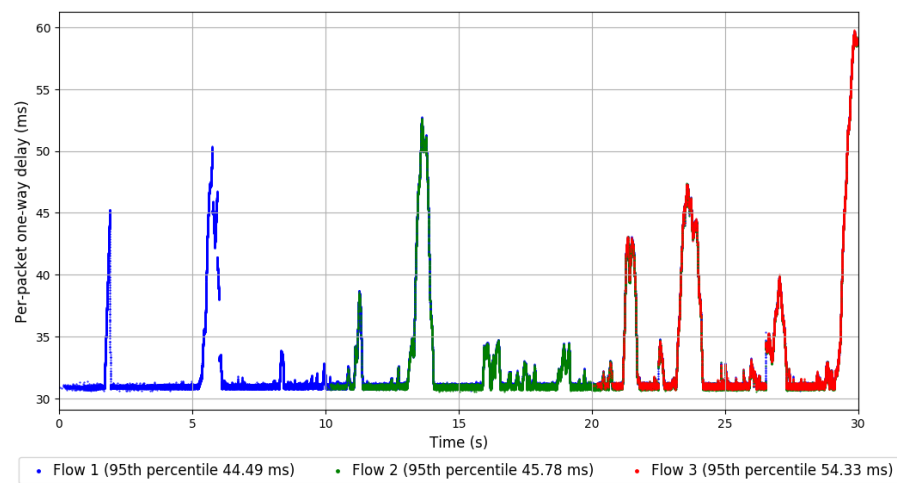
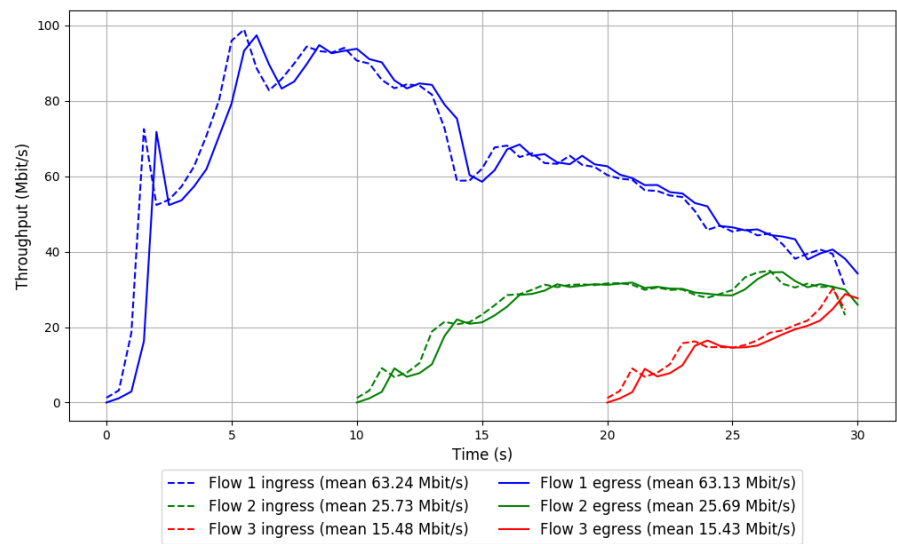


Run 4: Statistics of PCC-Vivace

Start at: 2019-03-19 03:55:09
End at: 2019-03-19 03:55:39
Local clock offset: 0.328 ms
Remote clock offset: -0.529 ms

Below is generated by plot.py at 2019-03-19 04:56:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.33 Mbit/s
95th percentile per-packet one-way delay: 45.389 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 63.13 Mbit/s
95th percentile per-packet one-way delay: 44.488 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 25.69 Mbit/s
95th percentile per-packet one-way delay: 45.783 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.43 Mbit/s
95th percentile per-packet one-way delay: 54.328 ms
Loss rate: 0.00%

Run 4: Report of PCC-Vivace — Data Link

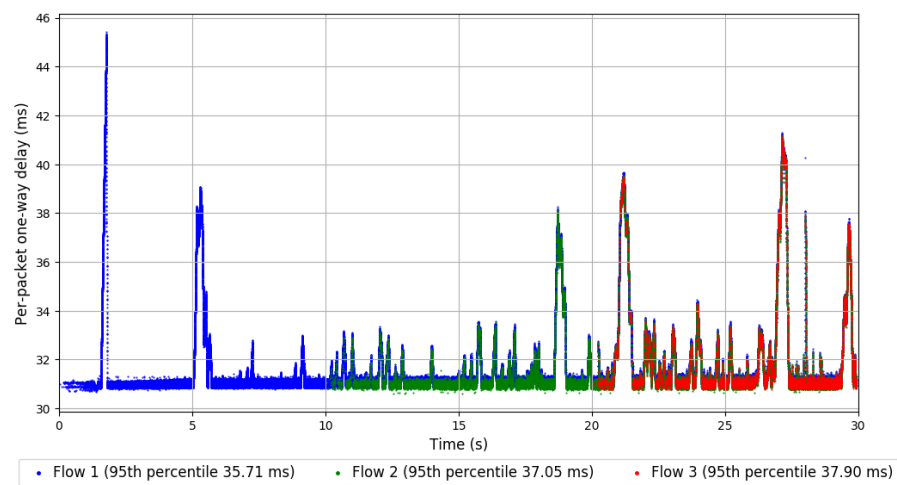
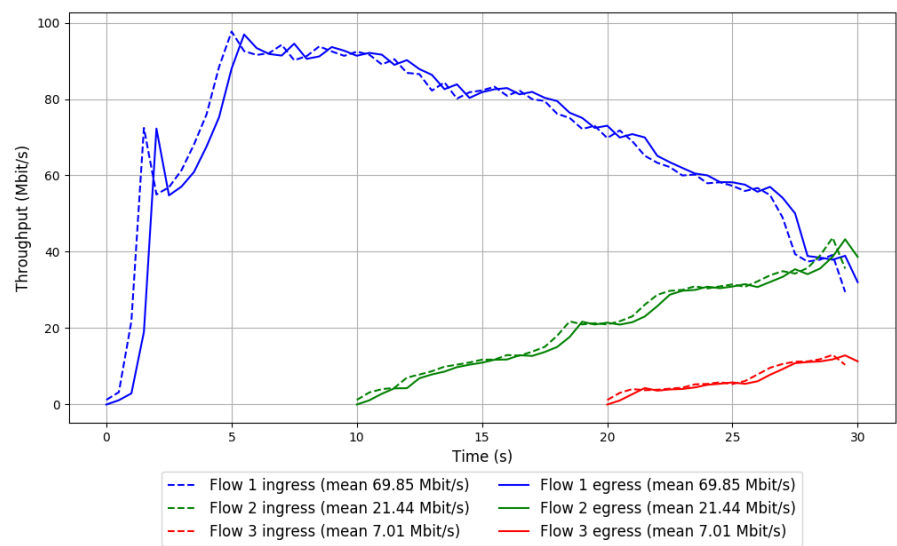


Run 5: Statistics of PCC-Vivace

Start at: 2019-03-19 04:21:16
End at: 2019-03-19 04:21:46
Local clock offset: 0.137 ms
Remote clock offset: -0.659 ms

Below is generated by plot.py at 2019-03-19 04:56:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.42 Mbit/s
95th percentile per-packet one-way delay: 36.269 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.85 Mbit/s
95th percentile per-packet one-way delay: 35.714 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.44 Mbit/s
95th percentile per-packet one-way delay: 37.046 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.01 Mbit/s
95th percentile per-packet one-way delay: 37.902 ms
Loss rate: 0.00%

Run 5: Report of PCC-Vivace — Data Link

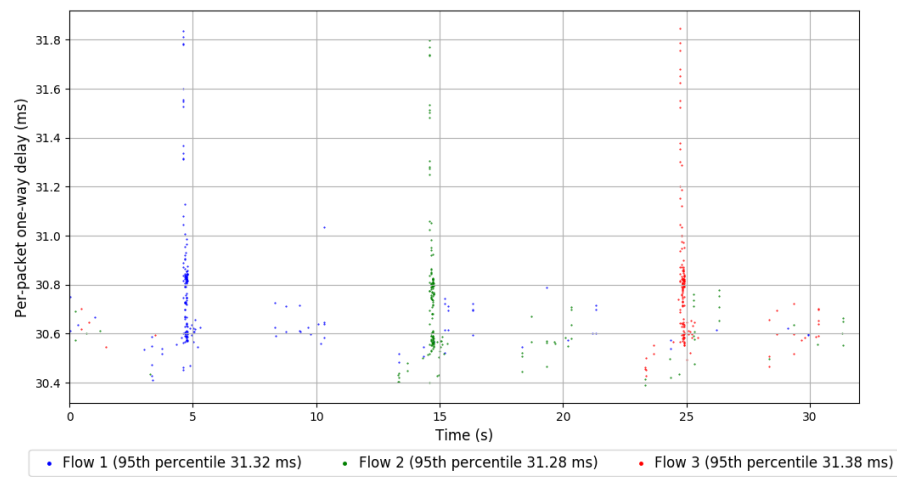
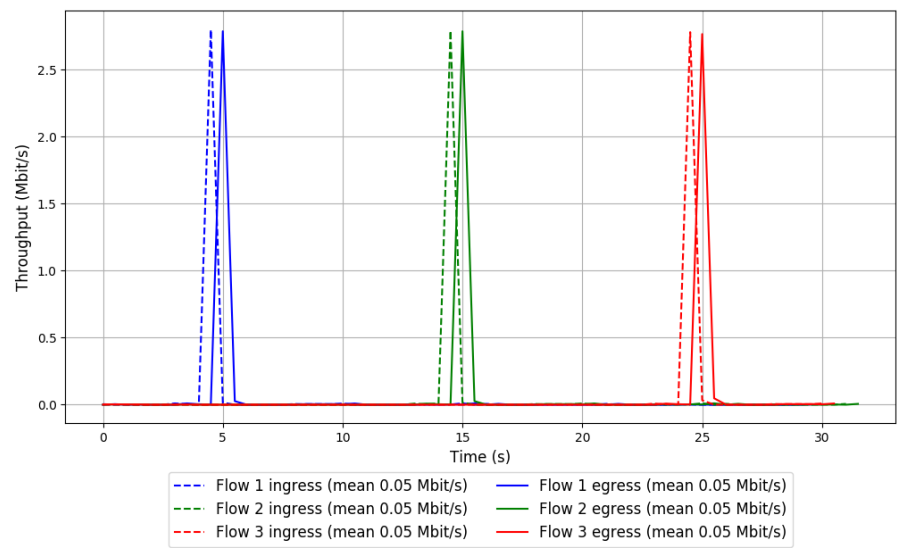


Run 1: Statistics of WebRTC media

Start at: 2019-03-19 02:52:21
End at: 2019-03-19 02:52:51
Local clock offset: 1.577 ms
Remote clock offset: -2.214 ms

Below is generated by plot.py at 2019-03-19 04:56:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 31.337 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.315 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.282 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.378 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

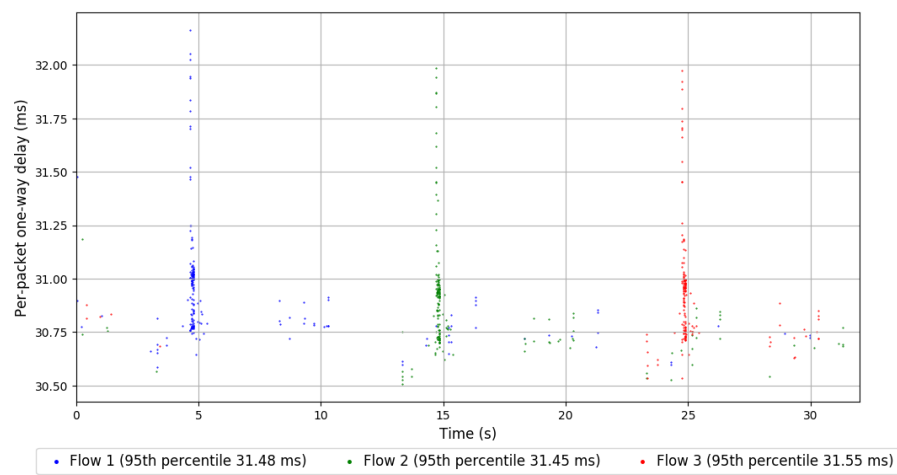
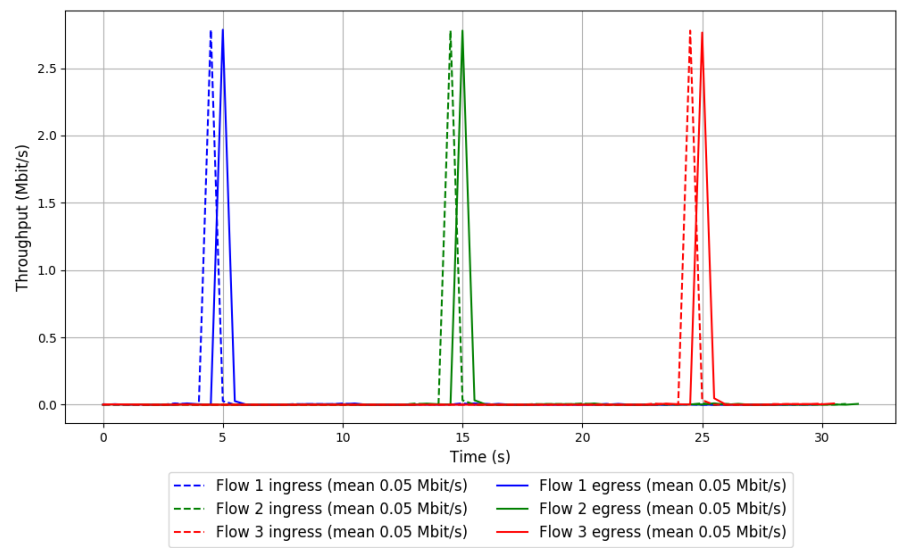


Run 2: Statistics of WebRTC media

Start at: 2019-03-19 03:18:47
End at: 2019-03-19 03:19:17
Local clock offset: 1.62 ms
Remote clock offset: -1.166 ms

Below is generated by plot.py at 2019-03-19 04:56:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 31.479 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.479 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.449 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.550 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

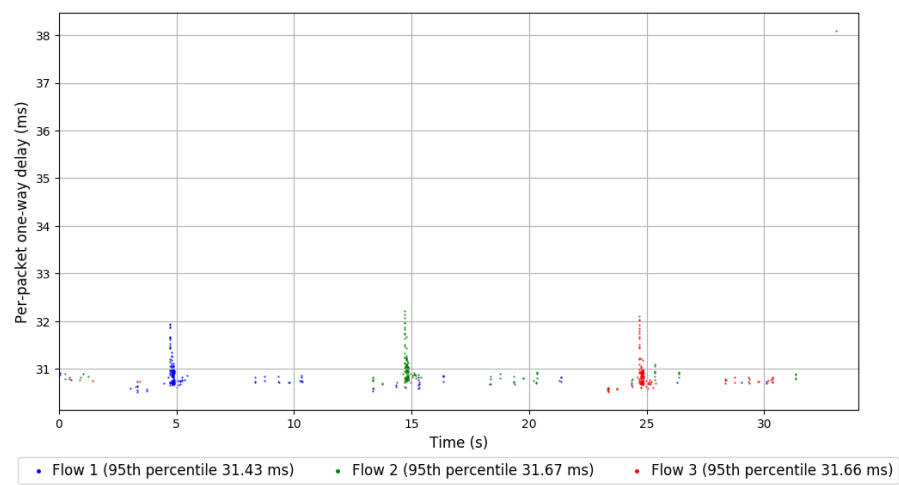
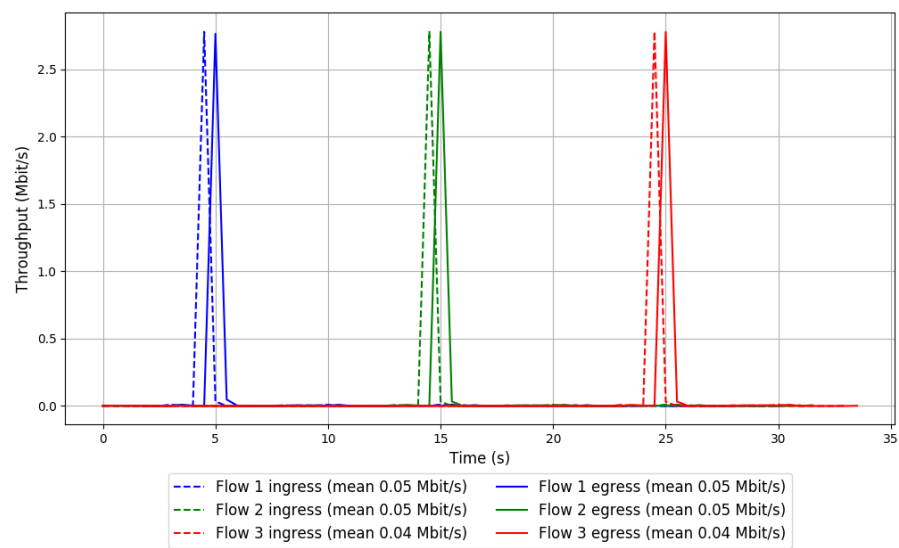


Run 3: Statistics of WebRTC media

Start at: 2019-03-19 03:45:20
End at: 2019-03-19 03:45:50
Local clock offset: 1.14 ms
Remote clock offset: -0.741 ms

Below is generated by plot.py at 2019-03-19 04:56:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 31.629 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.433 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.671 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 31.664 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

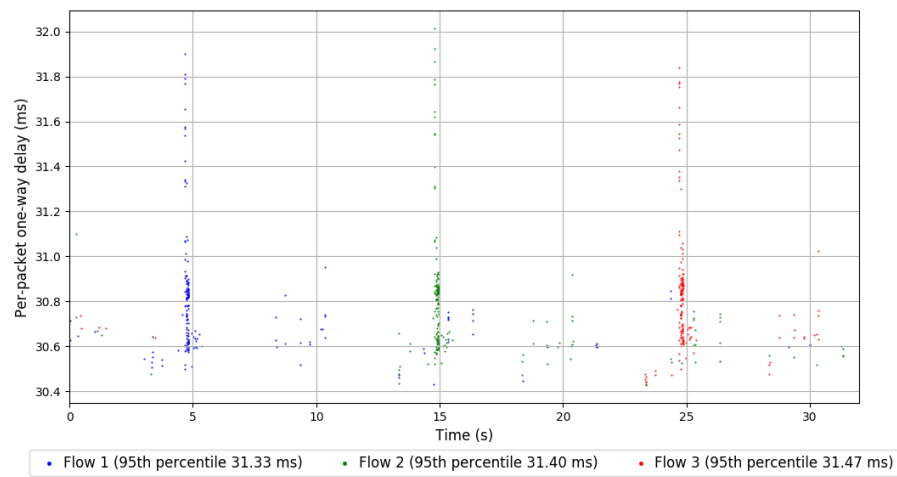
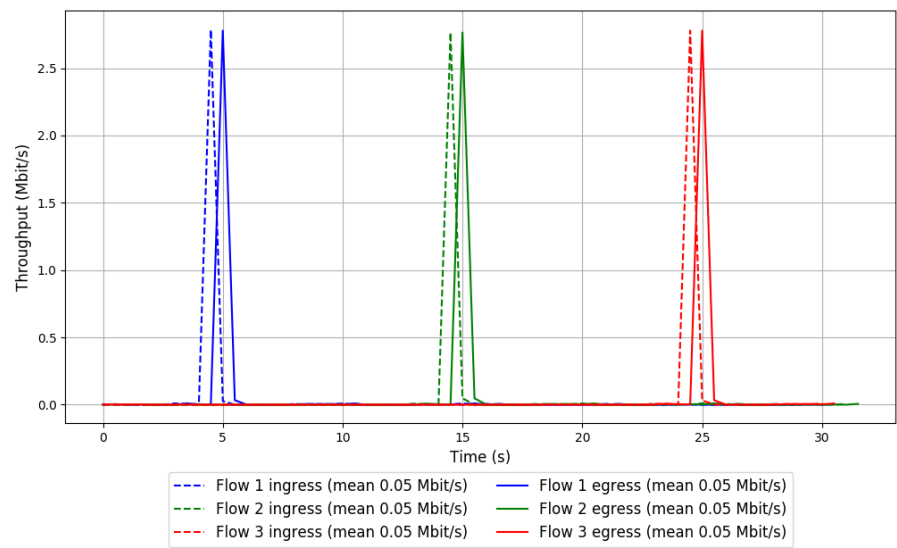


Run 4: Statistics of WebRTC media

Start at: 2019-03-19 04:11:31
End at: 2019-03-19 04:12:01
Local clock offset: -0.209 ms
Remote clock offset: -0.884 ms

Below is generated by plot.py at 2019-03-19 04:56:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 31.398 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.332 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.398 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.473 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-03-19 04:37:51
End at: 2019-03-19 04:38:21
Local clock offset: 0.571 ms
Remote clock offset: -0.957 ms

Below is generated by plot.py at 2019-03-19 04:56:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 31.566 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.422 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.412 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 31.706 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

