

Pantheon Report

Generated at 2019-01-19 14:18:10 (UTC).

Data path: India on `em1` (*remote*) → AWS India 1 on `ens5` (*local*).

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 `nets.org.sg` and have been applied to correct the timestamps in logs.

System info:

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

Git summary:

```
branch: muses @ c80a283586bf7b0cc1fe08c69c8f60d56498f81c
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ c3eee875824760ec5b2fd207fefe166e1afe2170
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

Scatter plot showing Average throughput (mbit/s) vs 95th percentile one-way delay (ms) for various protocols. The x-axis is logarithmic, ranging from 4096 to 64 ms. The y-axis ranges from 0 to 100 mbit/s. Protocols include PCC-Allegro, PCC-Expr, PCC-Vivace, TCP BB, Indigo-MusesT, Indigo-MusesD, Indigo-MusesC3, PCC-Cubic, X-Copa, QUIC Cubic, TCP Vegas, LEDBAT, Sprout, WebRTC media, and Scream.



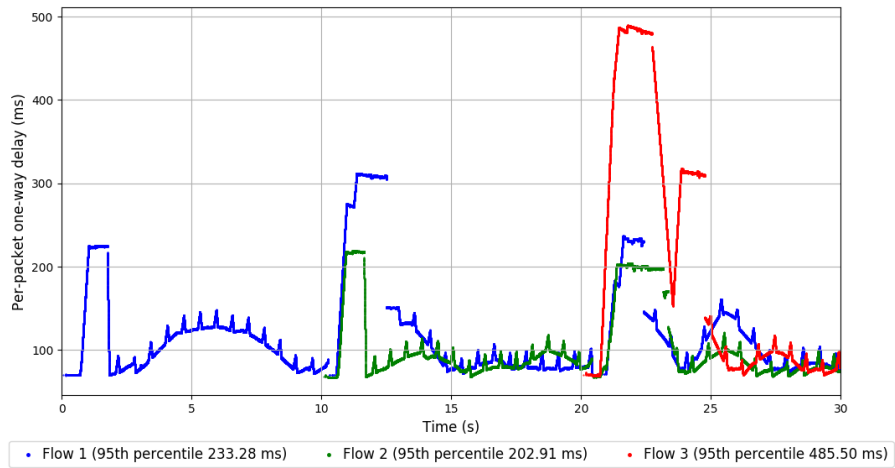
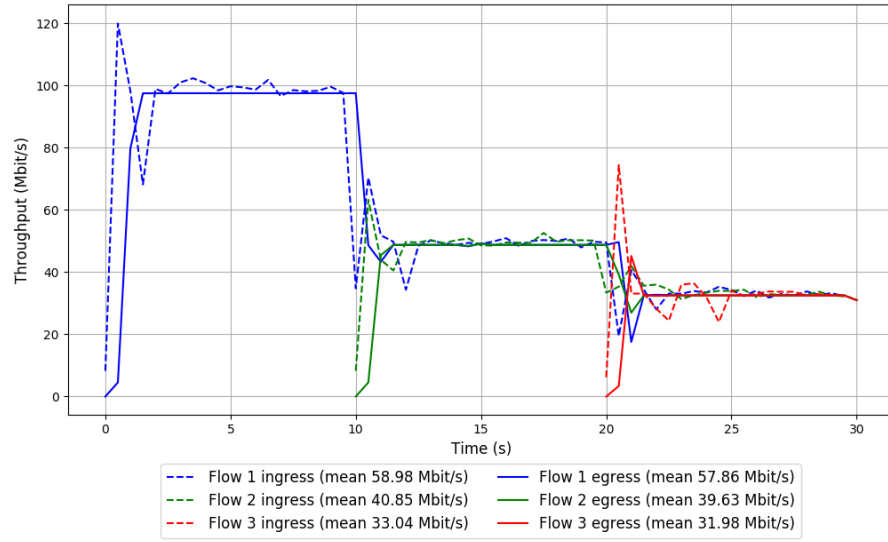
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	59.06	38.91	30.44	235.84	294.98	369.00	2.65	3.17	3.59
Copa	5	51.34	32.78	30.47	84.63	79.64	77.24	0.17	0.30	0.83
TCP Cubic	5	49.30	36.27	36.41	83.33	82.28	95.97	0.19	0.32	0.81
FillP	5	55.31	44.38	28.44	141.18	150.04	144.50	0.31	3.10	4.21
FillP-Sheep	5	57.00	38.91	32.24	140.05	137.89	167.21	0.33	0.66	1.93
Indigo	5	58.60	37.92	28.29	85.57	81.25	79.05	0.25	0.42	0.99
Indigo-MusesC3	5	59.02	35.37	22.27	85.68	78.97	78.76	0.18	0.23	1.84
Indigo-MusesC5	5	58.23	39.77	30.48	165.62	149.55	139.68	2.98	4.89	5.52
Indigo-MusesD	5	28.25	34.17	4.81	72.35	76.43	71.52	0.04	0.22	0.99
Indigo-MusesT	5	61.90	39.72	30.79	166.47	206.49	111.29	2.56	4.61	2.80
LEDBAT	5	37.49	27.93	16.14	77.06	76.96	77.12	0.22	0.47	0.86
PCC-Allegro	5	55.01	31.76	30.96	2293.31	120.33	1017.15	8.66	0.84	8.72
PCC-Expr	5	59.47	38.76	21.10	1014.49	1190.99	241.18	24.41	9.95	2.87
QUIC Cubic	5	40.80	35.52	26.62	126.11	131.07	147.36	0.31	0.48	1.14
SCReAM	5	0.22	0.21	0.22	68.82	69.34	69.44	0.26	0.44	0.70
Sprout	5	10.07	10.05	9.75	77.53	77.92	78.97	0.26	0.44	0.72
TaoVA-100x	5	56.27	38.40	34.06	152.77	164.32	154.82	0.69	1.31	3.44
TCP Vegas	5	40.75	38.03	27.14	74.05	77.39	74.89	0.33	0.36	0.89
Verus	5	51.10	32.62	29.62	178.44	224.74	386.05	0.35	0.52	1.05
PCC-Vivace	5	50.80	29.87	17.81	906.31	336.59	108.00	2.86	3.05	1.11
WebRTC media	5	1.60	0.92	0.37	68.99	69.20	69.92	0.18	0.38	1.59

Run 1: Statistics of TCP BBR

Start at: 2019-01-19 11:38:39
End at: 2019-01-19 11:39:09
Local clock offset: 0.109 ms
Remote clock offset: -3.991 ms

Below is generated by plot.py at 2019-01-19 14:05:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.80 Mbit/s
95th percentile per-packet one-way delay: 307.975 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 57.86 Mbit/s
95th percentile per-packet one-way delay: 233.283 ms
Loss rate: 2.16%
-- Flow 2:
Average throughput: 39.63 Mbit/s
95th percentile per-packet one-way delay: 202.909 ms
Loss rate: 3.38%
-- Flow 3:
Average throughput: 31.98 Mbit/s
95th percentile per-packet one-way delay: 485.500 ms
Loss rate: 4.01%

Run 1: Report of TCP BBR — Data Link

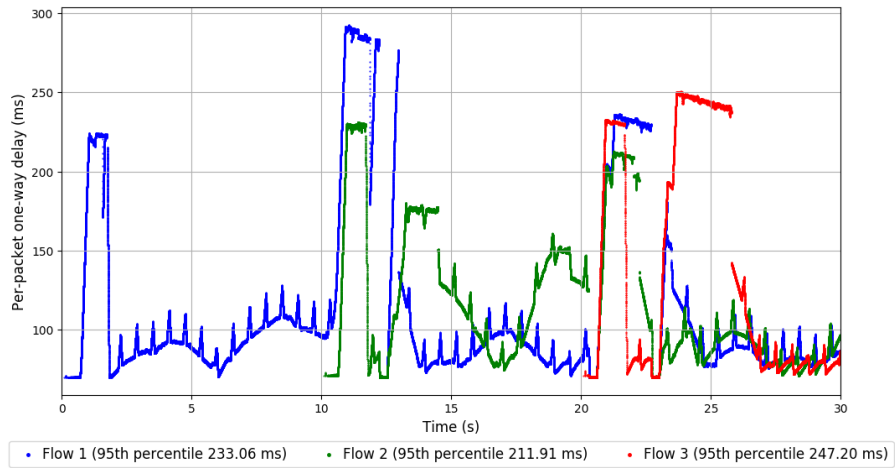
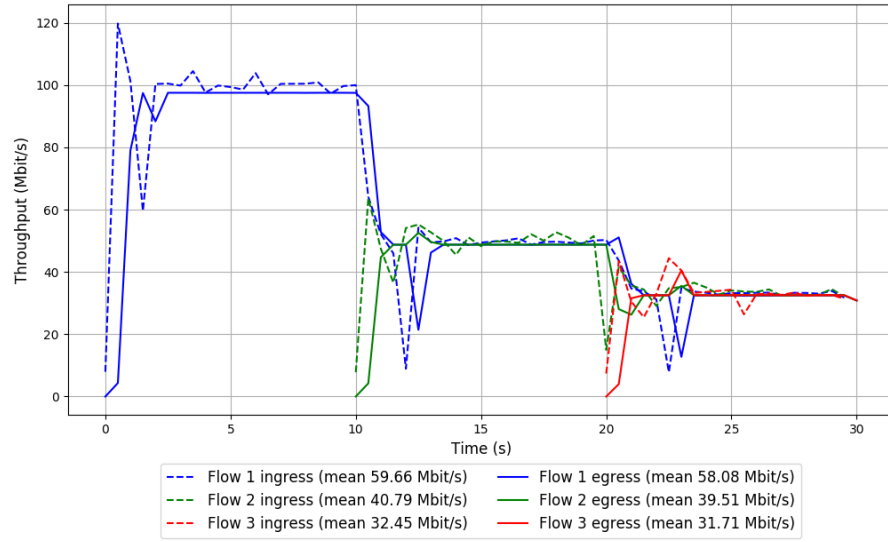


Run 2: Statistics of TCP BBR

Start at: 2019-01-19 12:08:17
End at: 2019-01-19 12:08:47
Local clock offset: 1.878 ms
Remote clock offset: -2.485 ms

Below is generated by plot.py at 2019-01-19 14:05:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.87 Mbit/s
95th percentile per-packet one-way delay: 235.497 ms
Loss rate: 3.08%
-- Flow 1:
Average throughput: 58.08 Mbit/s
95th percentile per-packet one-way delay: 233.063 ms
Loss rate: 2.89%
-- Flow 2:
Average throughput: 39.51 Mbit/s
95th percentile per-packet one-way delay: 211.913 ms
Loss rate: 3.52%
-- Flow 3:
Average throughput: 31.71 Mbit/s
95th percentile per-packet one-way delay: 247.197 ms
Loss rate: 3.05%

Run 2: Report of TCP BBR — Data Link

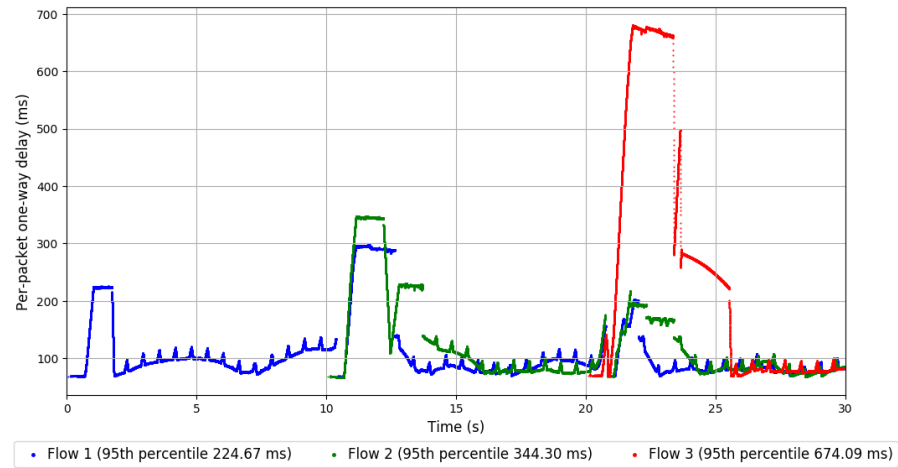
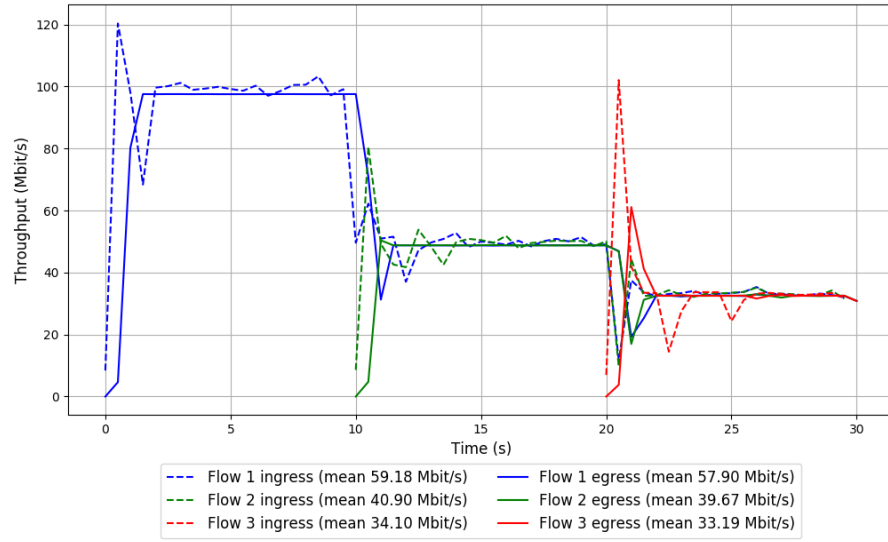


Run 3: Statistics of TCP BBR

Start at: 2019-01-19 12:38:26
End at: 2019-01-19 12:38:56
Local clock offset: -1.169 ms
Remote clock offset: -2.879 ms

Below is generated by plot.py at 2019-01-19 14:05:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 295.823 ms
Loss rate: 2.80%
-- Flow 1:
Average throughput: 57.90 Mbit/s
95th percentile per-packet one-way delay: 224.672 ms
Loss rate: 2.42%
-- Flow 2:
Average throughput: 39.67 Mbit/s
95th percentile per-packet one-way delay: 344.298 ms
Loss rate: 3.36%
-- Flow 3:
Average throughput: 33.19 Mbit/s
95th percentile per-packet one-way delay: 674.090 ms
Loss rate: 3.42%

Run 3: Report of TCP BBR — Data Link

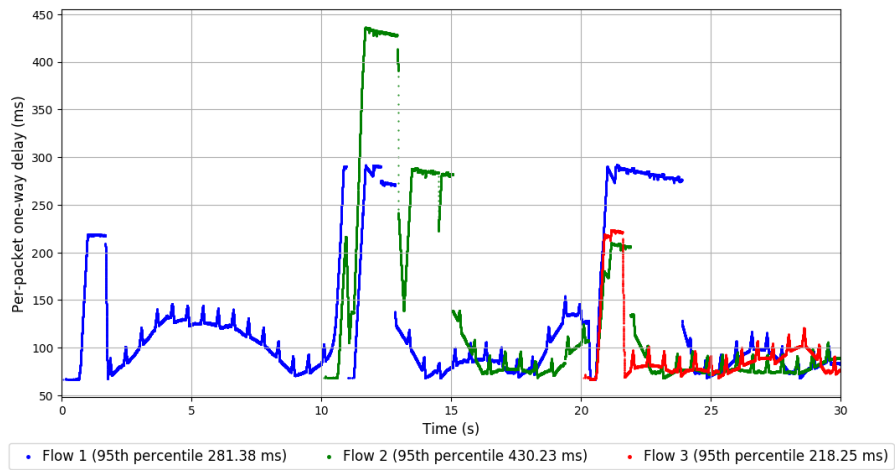
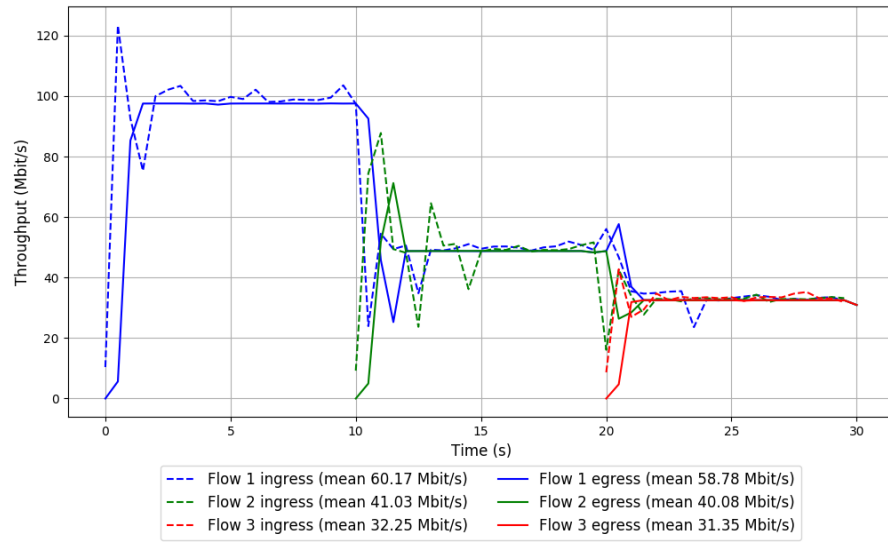


Run 4: Statistics of TCP BBR

Start at: 2019-01-19 13:09:12
End at: 2019-01-19 13:09:42
Local clock offset: -1.202 ms
Remote clock offset: -4.547 ms

Below is generated by plot.py at 2019-01-19 14:05:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 285.727 ms
Loss rate: 2.69%
-- Flow 1:
Average throughput: 58.78 Mbit/s
95th percentile per-packet one-way delay: 281.380 ms
Loss rate: 2.54%
-- Flow 2:
Average throughput: 40.08 Mbit/s
95th percentile per-packet one-way delay: 430.230 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 31.35 Mbit/s
95th percentile per-packet one-way delay: 218.246 ms
Loss rate: 3.53%

Run 4: Report of TCP BBR — Data Link

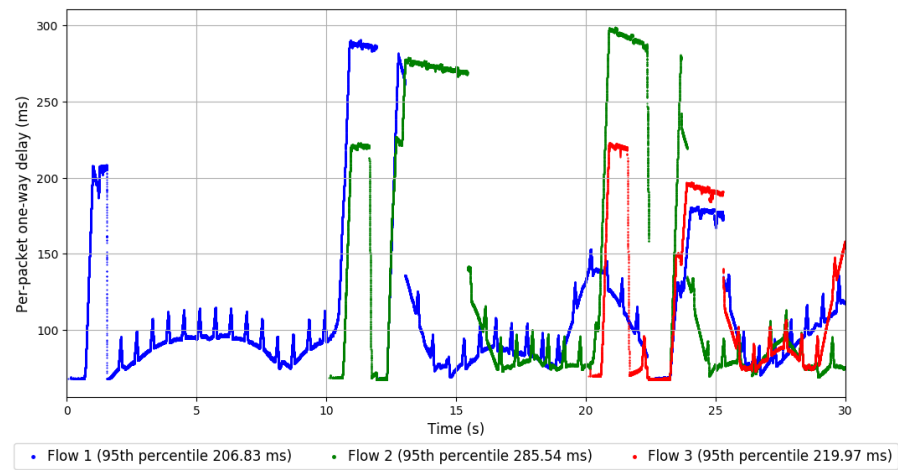
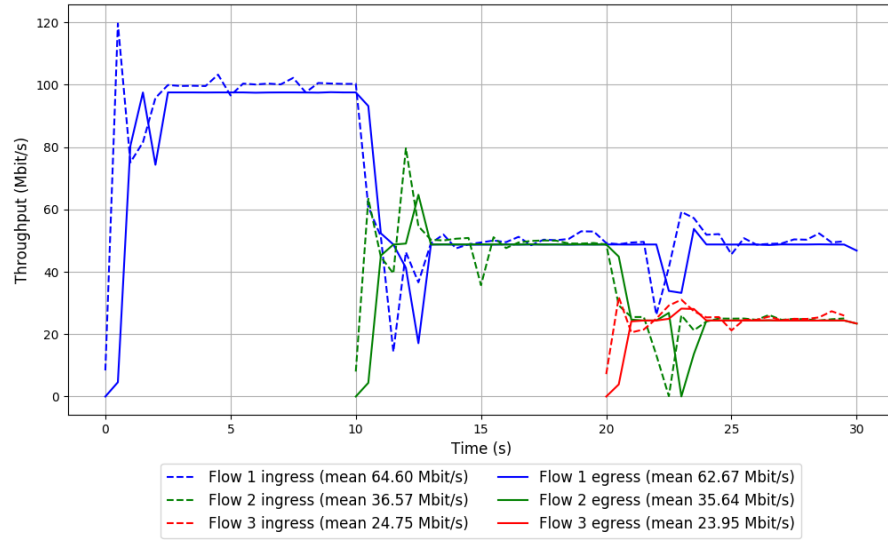


Run 5: Statistics of TCP BBR

Start at: 2019-01-19 13:37:25
End at: 2019-01-19 13:37:55
Local clock offset: -1.248 ms
Remote clock offset: -2.528 ms

Below is generated by plot.py at 2019-01-19 14:05:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.30 Mbit/s
95th percentile per-packet one-way delay: 273.678 ms
Loss rate: 3.21%
-- Flow 1:
Average throughput: 62.67 Mbit/s
95th percentile per-packet one-way delay: 206.827 ms
Loss rate: 3.23%
-- Flow 2:
Average throughput: 35.64 Mbit/s
95th percentile per-packet one-way delay: 285.543 ms
Loss rate: 2.91%
-- Flow 3:
Average throughput: 23.95 Mbit/s
95th percentile per-packet one-way delay: 219.975 ms
Loss rate: 3.96%

Run 5: Report of TCP BBR — Data Link

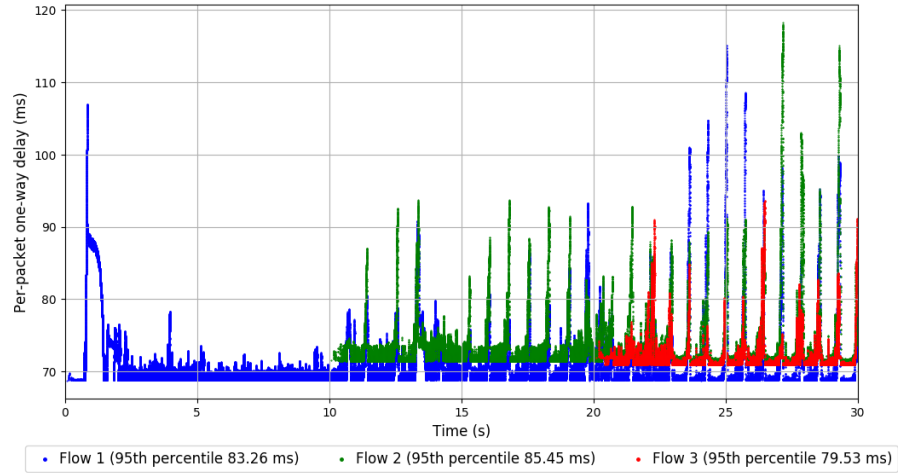
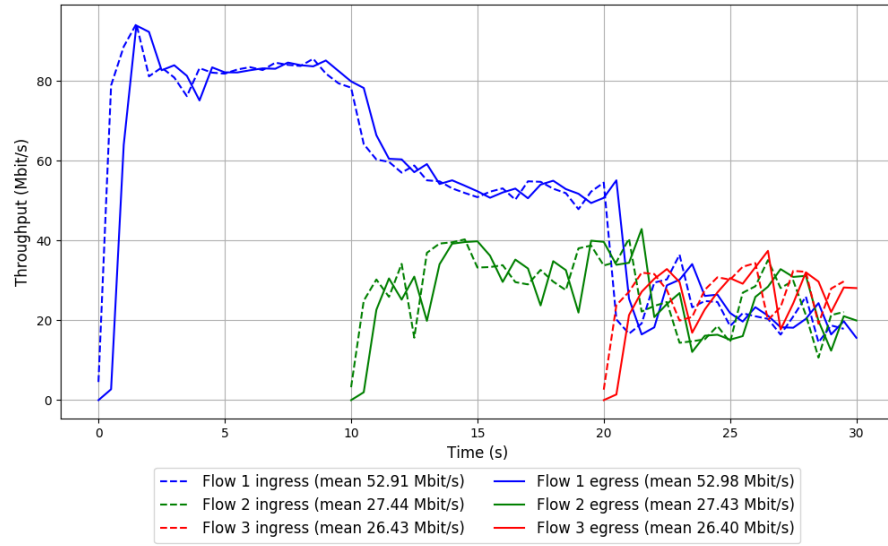


Run 1: Statistics of Copa

Start at: 2019-01-19 11:47:57
End at: 2019-01-19 11:48:27
Local clock offset: 1.825 ms
Remote clock offset: -4.095 ms

Below is generated by plot.py at 2019-01-19 14:06:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 79.96 Mbit/s
95th percentile per-packet one-way delay: 83.435 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 52.98 Mbit/s
95th percentile per-packet one-way delay: 83.261 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 27.43 Mbit/s
95th percentile per-packet one-way delay: 85.452 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 26.40 Mbit/s
95th percentile per-packet one-way delay: 79.532 ms
Loss rate: 0.91%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-01-19 12:18:24

End at: 2019-01-19 12:18:54

Local clock offset: 0.407 ms

Remote clock offset: -3.56 ms

Below is generated by plot.py at 2019-01-19 14:06:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.79 Mbit/s

95th percentile per-packet one-way delay: 86.583 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 46.23 Mbit/s

95th percentile per-packet one-way delay: 89.711 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 37.36 Mbit/s

95th percentile per-packet one-way delay: 84.318 ms

Loss rate: 0.26%

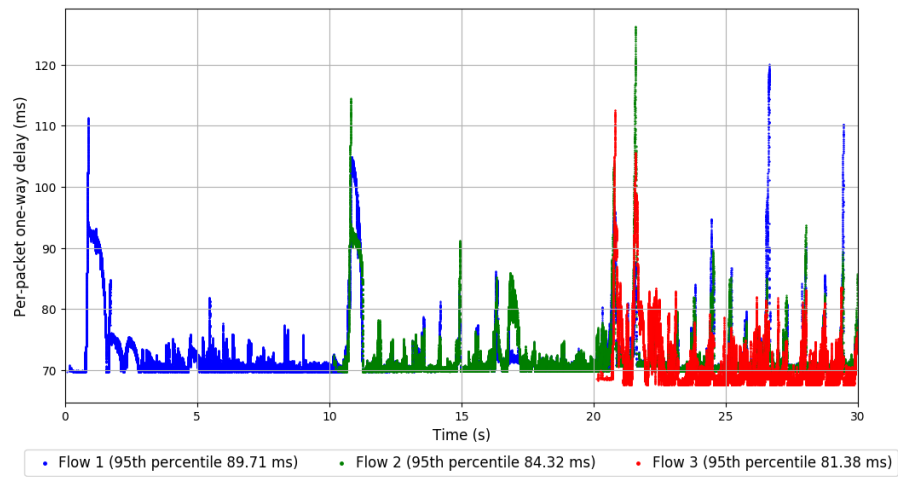
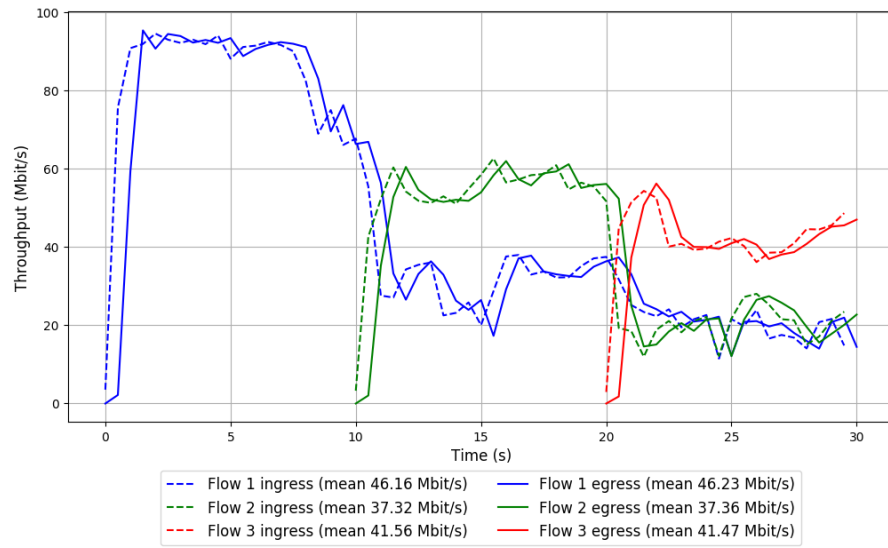
-- Flow 3:

Average throughput: 41.47 Mbit/s

95th percentile per-packet one-way delay: 81.379 ms

Loss rate: 0.97%

Run 2: Report of Copa — Data Link

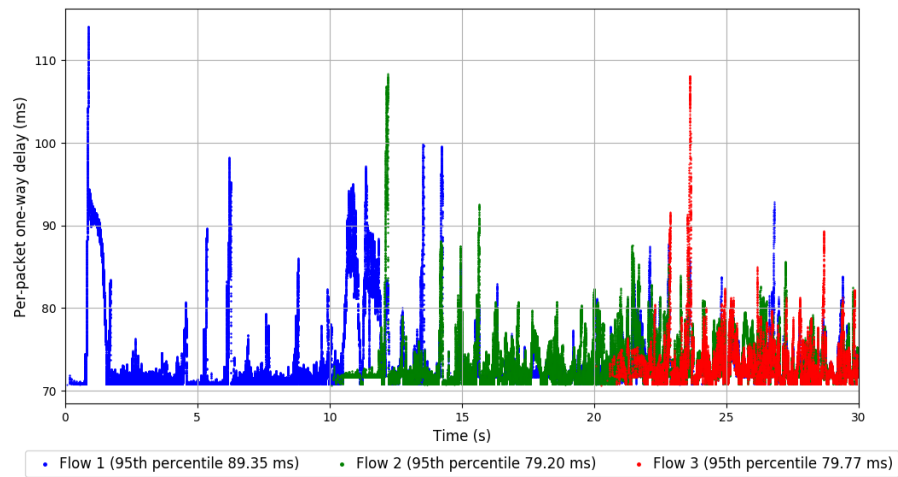
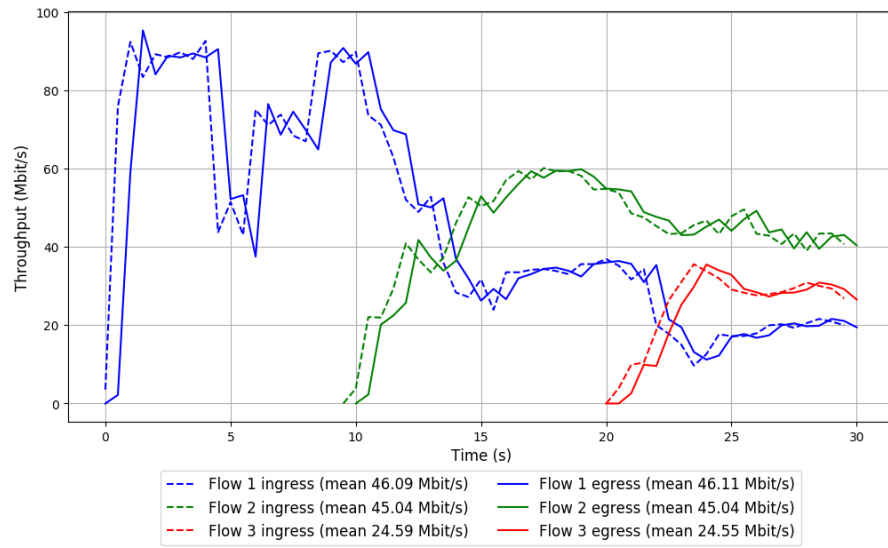


Run 3: Statistics of Copa

Start at: 2019-01-19 12:48:08
End at: 2019-01-19 12:48:38
Local clock offset: 0.601 ms
Remote clock offset: -3.022 ms

Below is generated by plot.py at 2019-01-19 14:06:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 84.21 Mbit/s
95th percentile per-packet one-way delay: 85.200 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 46.11 Mbit/s
95th percentile per-packet one-way delay: 89.347 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 45.04 Mbit/s
95th percentile per-packet one-way delay: 79.198 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 24.55 Mbit/s
95th percentile per-packet one-way delay: 79.773 ms
Loss rate: 0.94%

Run 3: Report of Copa — Data Link

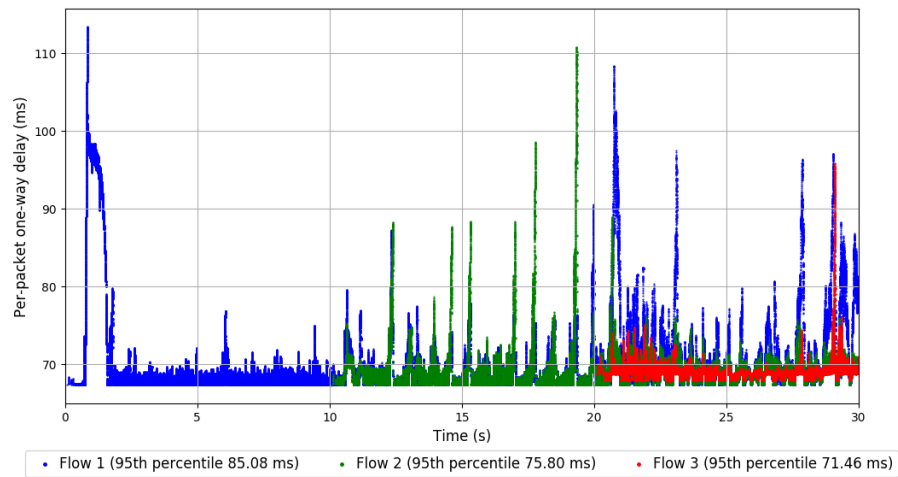
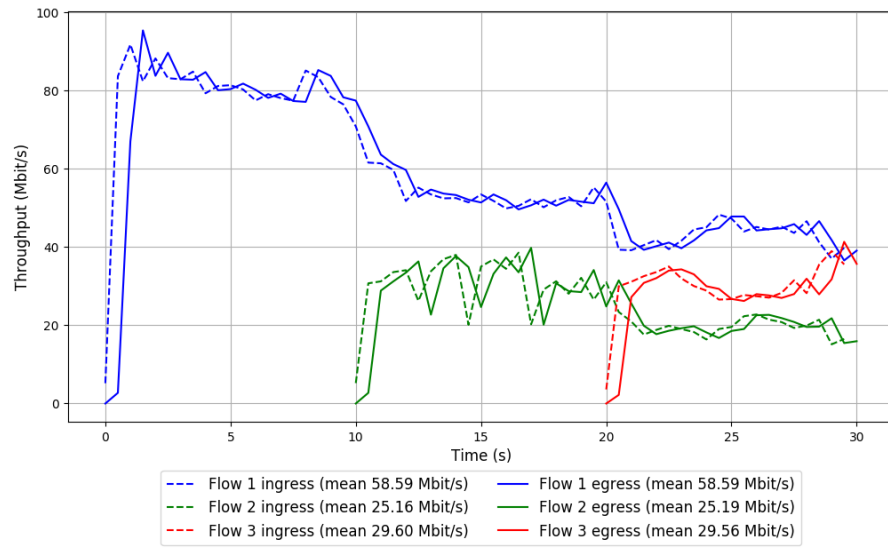


Run 4: Statistics of Copa

Start at: 2019-01-19 13:18:13
End at: 2019-01-19 13:18:43
Local clock offset: -0.865 ms
Remote clock offset: -4.496 ms

Below is generated by plot.py at 2019-01-19 14:07:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.13 Mbit/s
95th percentile per-packet one-way delay: 80.346 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 58.59 Mbit/s
95th percentile per-packet one-way delay: 85.076 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 25.19 Mbit/s
95th percentile per-packet one-way delay: 75.797 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 29.56 Mbit/s
95th percentile per-packet one-way delay: 71.461 ms
Loss rate: 0.90%

Run 4: Report of Copa — Data Link

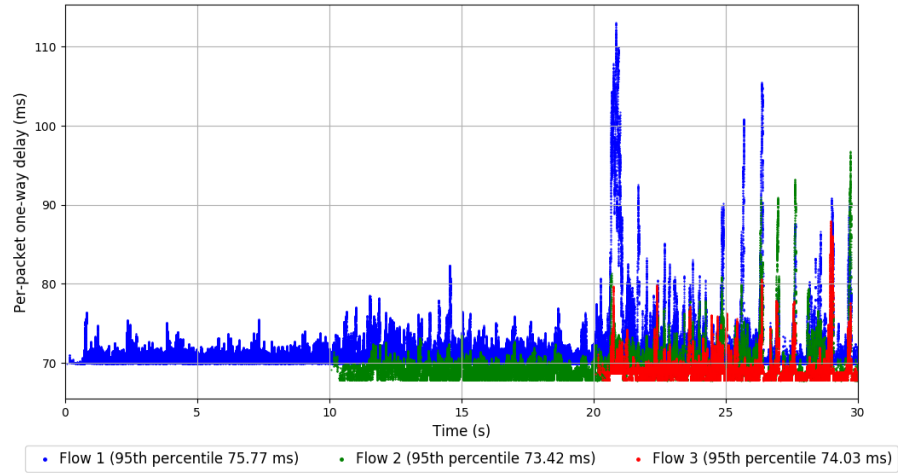
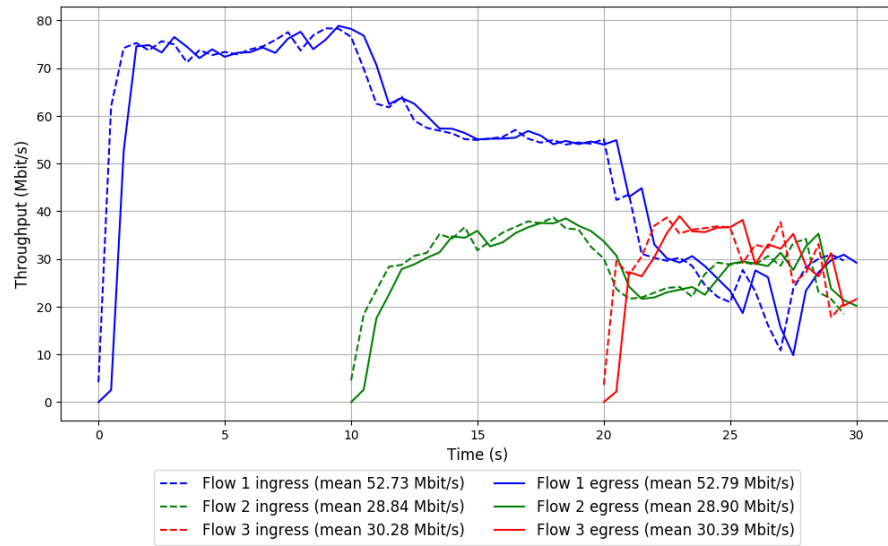


Run 5: Statistics of Copa

Start at: 2019-01-19 13:46:20
End at: 2019-01-19 13:46:50
Local clock offset: 0.667 ms
Remote clock offset: -2.638 ms

Below is generated by plot.py at 2019-01-19 14:07:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 82.07 Mbit/s
95th percentile per-packet one-way delay: 75.125 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 52.79 Mbit/s
95th percentile per-packet one-way delay: 75.771 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 28.90 Mbit/s
95th percentile per-packet one-way delay: 73.422 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 30.39 Mbit/s
95th percentile per-packet one-way delay: 74.035 ms
Loss rate: 0.41%

Run 5: Report of Copa — Data Link

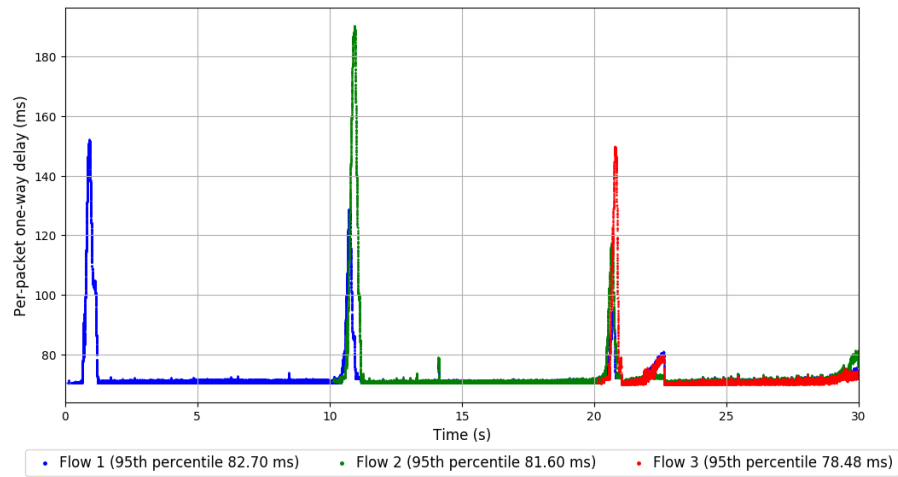
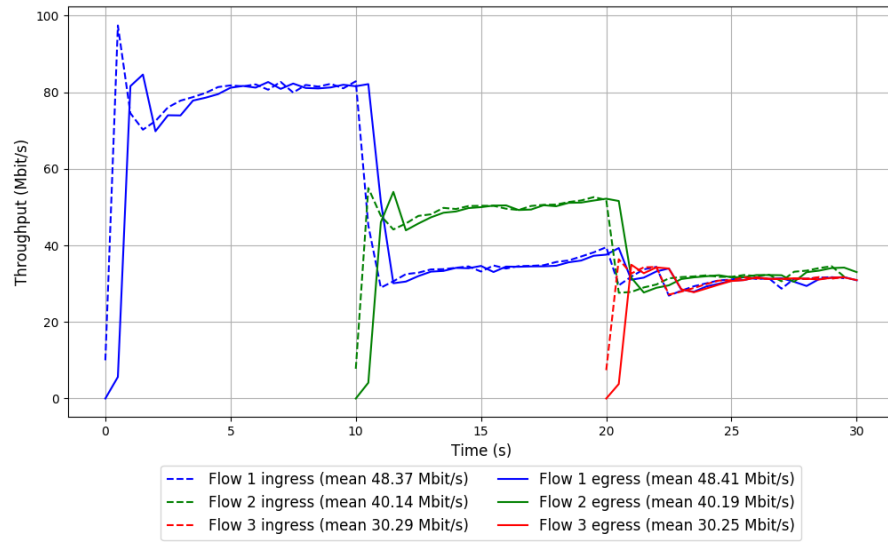


Run 1: Statistics of TCP Cubic

Start at: 2019-01-19 11:55:27
End at: 2019-01-19 11:55:57
Local clock offset: 1.137 ms
Remote clock offset: -3.447 ms

Below is generated by plot.py at 2019-01-19 14:07:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.13 Mbit/s
95th percentile per-packet one-way delay: 80.754 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 48.41 Mbit/s
95th percentile per-packet one-way delay: 82.704 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 40.19 Mbit/s
95th percentile per-packet one-way delay: 81.600 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 30.25 Mbit/s
95th percentile per-packet one-way delay: 78.480 ms
Loss rate: 0.87%

Run 1: Report of TCP Cubic — Data Link

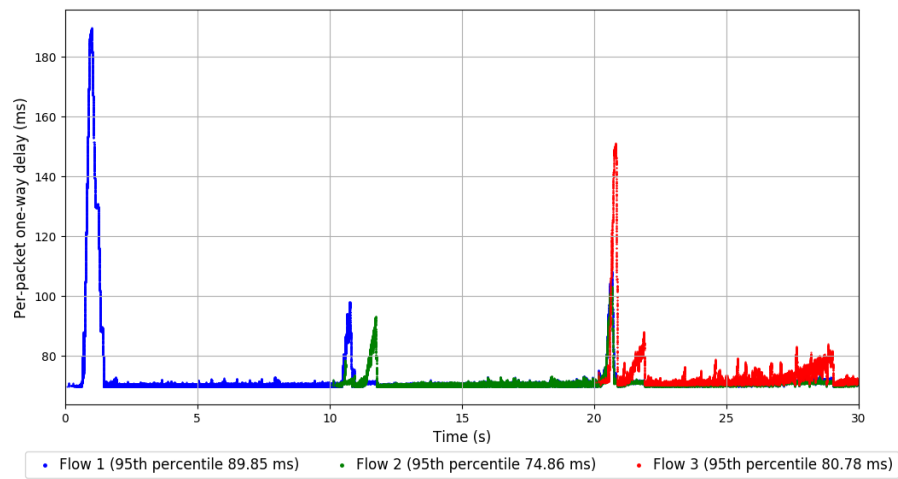
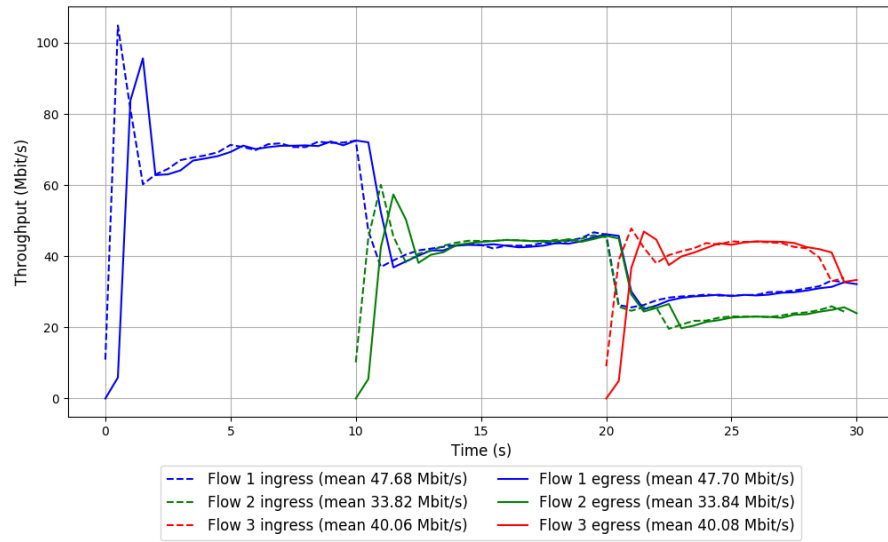


Run 2: Statistics of TCP Cubic

Start at: 2019-01-19 12:25:53
End at: 2019-01-19 12:26:23
Local clock offset: 0.56 ms
Remote clock offset: -2.865 ms

Below is generated by plot.py at 2019-01-19 14:07:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 83.48 Mbit/s
95th percentile per-packet one-way delay: 82.327 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 47.70 Mbit/s
95th percentile per-packet one-way delay: 89.851 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 33.84 Mbit/s
95th percentile per-packet one-way delay: 74.855 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 40.08 Mbit/s
95th percentile per-packet one-way delay: 80.775 ms
Loss rate: 0.75%

Run 2: Report of TCP Cubic — Data Link

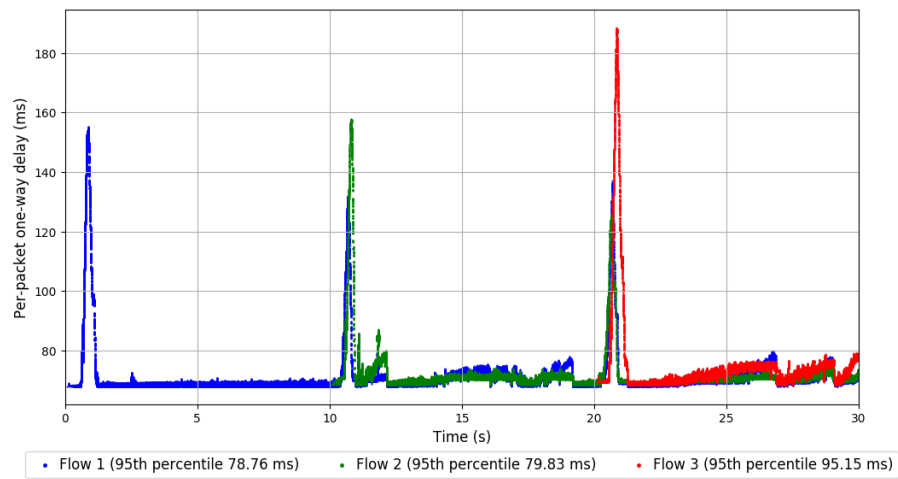
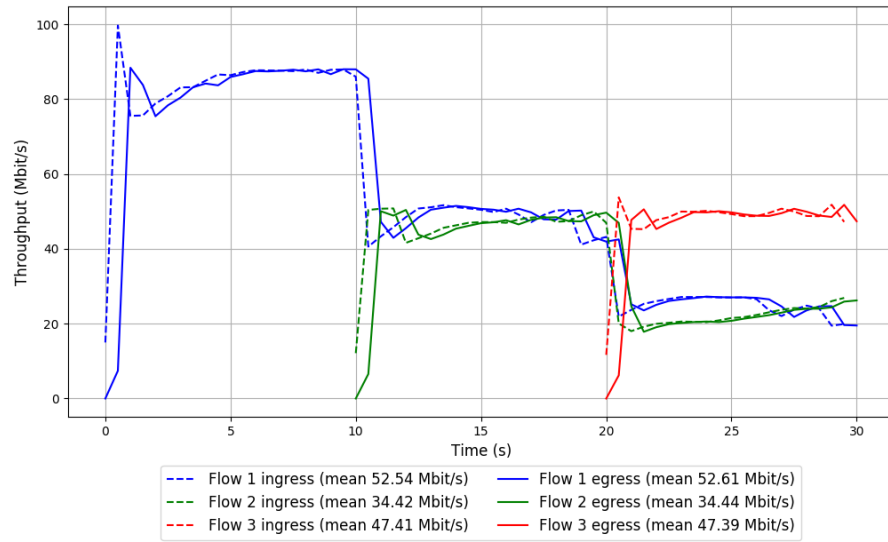


Run 3: Statistics of TCP Cubic

Start at: 2019-01-19 12:56:14
End at: 2019-01-19 12:56:44
Local clock offset: 0.281 ms
Remote clock offset: -4.717 ms

Below is generated by plot.py at 2019-01-19 14:07:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.20 Mbit/s
95th percentile per-packet one-way delay: 80.515 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 52.61 Mbit/s
95th percentile per-packet one-way delay: 78.764 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 34.44 Mbit/s
95th percentile per-packet one-way delay: 79.825 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 47.39 Mbit/s
95th percentile per-packet one-way delay: 95.154 ms
Loss rate: 0.80%

Run 3: Report of TCP Cubic — Data Link

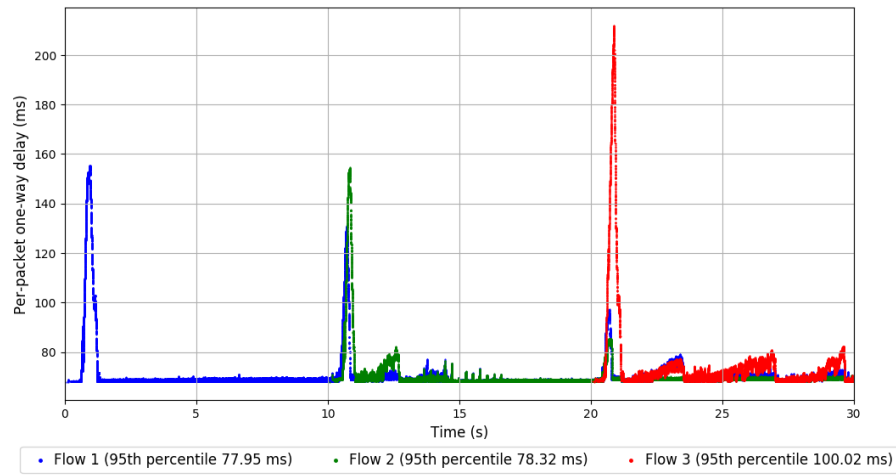
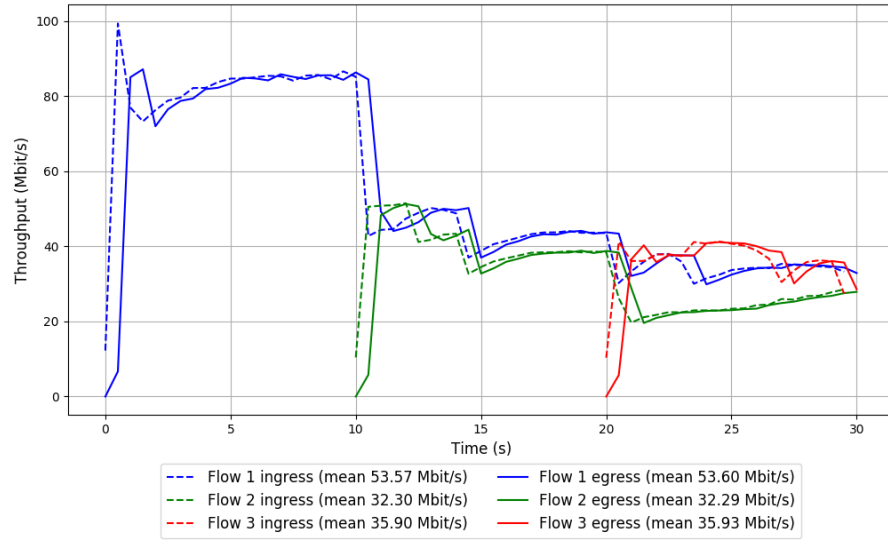


Run 4: Statistics of TCP Cubic

Start at: 2019-01-19 13:25:07
End at: 2019-01-19 13:25:37
Local clock offset: -0.906 ms
Remote clock offset: -2.626 ms

Below is generated by plot.py at 2019-01-19 14:07:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.97 Mbit/s
95th percentile per-packet one-way delay: 79.798 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 53.60 Mbit/s
95th percentile per-packet one-way delay: 77.946 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 32.29 Mbit/s
95th percentile per-packet one-way delay: 78.316 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 35.93 Mbit/s
95th percentile per-packet one-way delay: 100.016 ms
Loss rate: 0.66%

Run 4: Report of TCP Cubic — Data Link

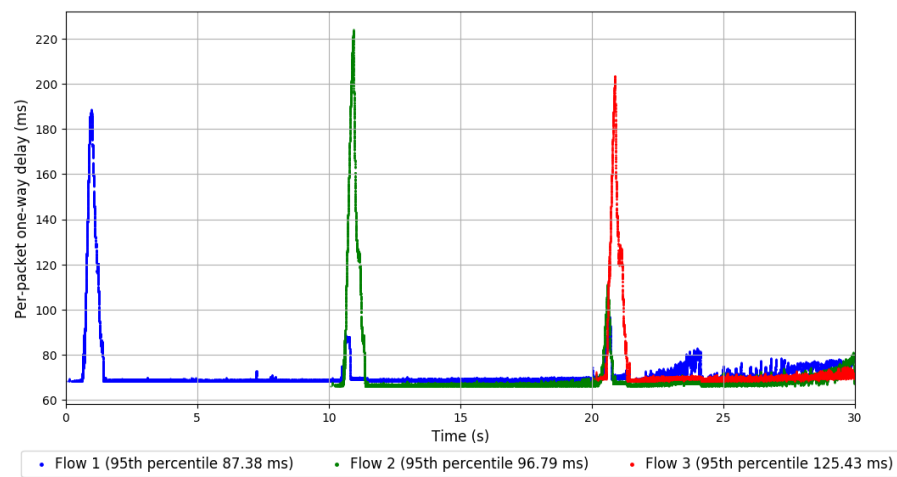
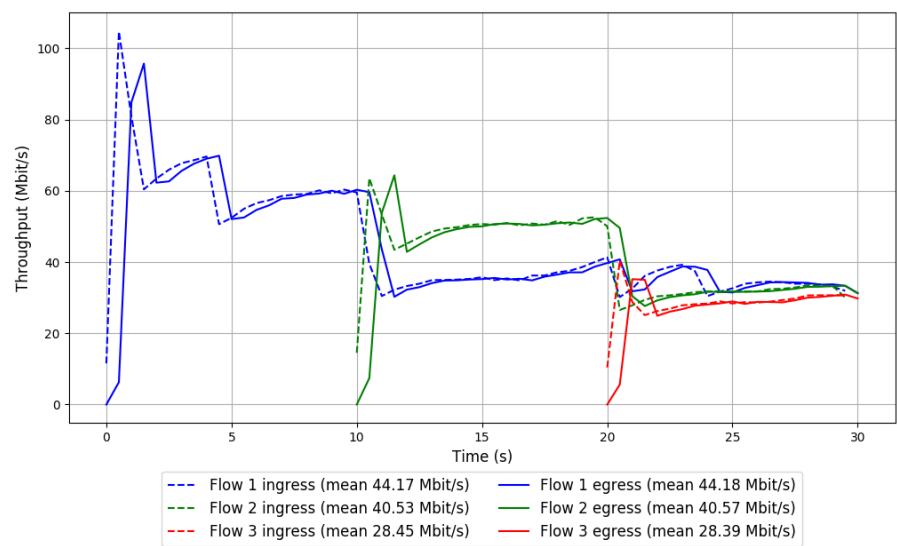


Run 5: Statistics of TCP Cubic

Start at: 2019-01-19 13:53:38
End at: 2019-01-19 13:54:08
Local clock offset: -0.444 ms
Remote clock offset: -2.329 ms

Below is generated by plot.py at 2019-01-19 14:07:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 80.58 Mbit/s
95th percentile per-packet one-way delay: 93.248 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 44.18 Mbit/s
95th percentile per-packet one-way delay: 87.378 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 40.57 Mbit/s
95th percentile per-packet one-way delay: 96.787 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 28.39 Mbit/s
95th percentile per-packet one-way delay: 125.433 ms
Loss rate: 0.98%

Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-01-19 12:02:25

End at: 2019-01-19 12:02:55

Local clock offset: 0.501 ms

Remote clock offset: -3.09 ms

Below is generated by plot.py at 2019-01-19 14:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.35 Mbit/s

95th percentile per-packet one-way delay: 145.736 ms

Loss rate: 1.70%

-- Flow 1:

Average throughput: 56.40 Mbit/s

95th percentile per-packet one-way delay: 140.556 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 41.39 Mbit/s

95th percentile per-packet one-way delay: 148.161 ms

Loss rate: 3.84%

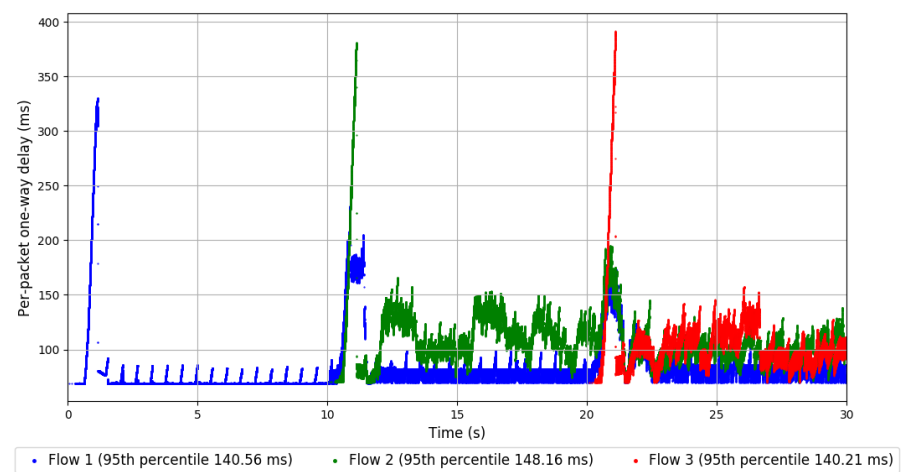
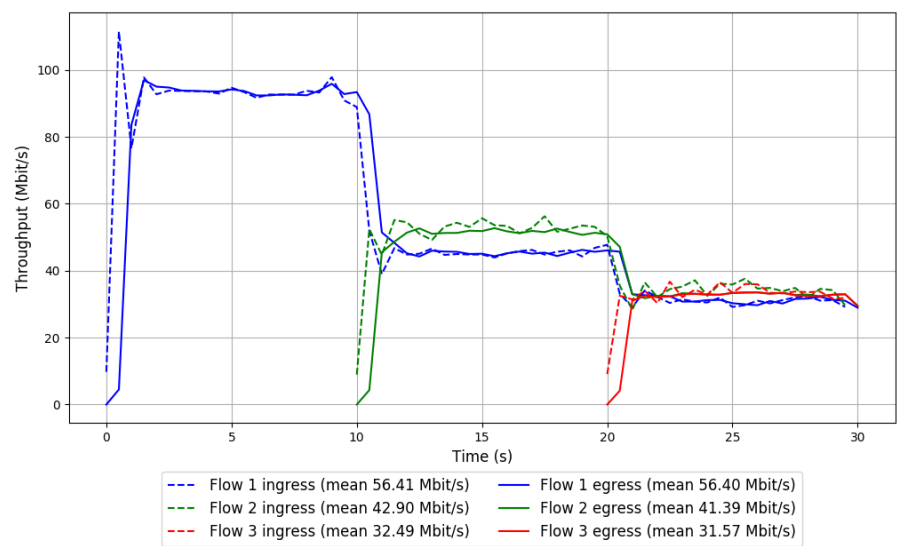
-- Flow 3:

Average throughput: 31.57 Mbit/s

95th percentile per-packet one-way delay: 140.210 ms

Loss rate: 3.57%

Run 1: Report of FillP — Data Link

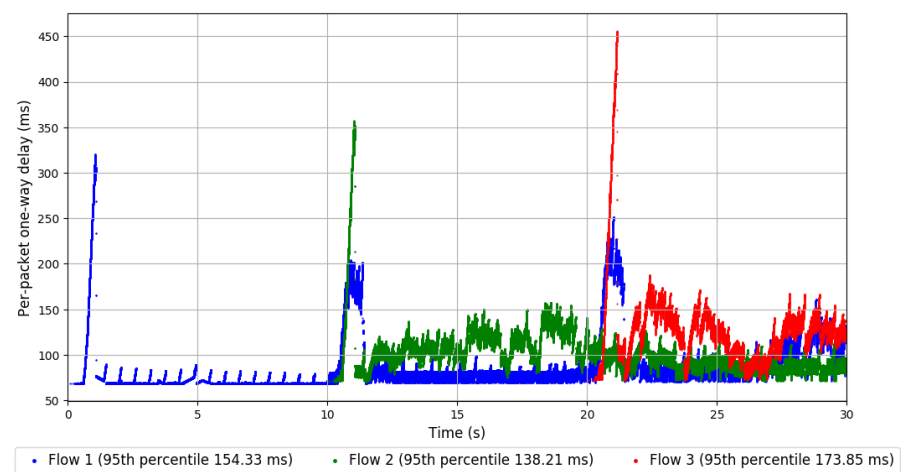
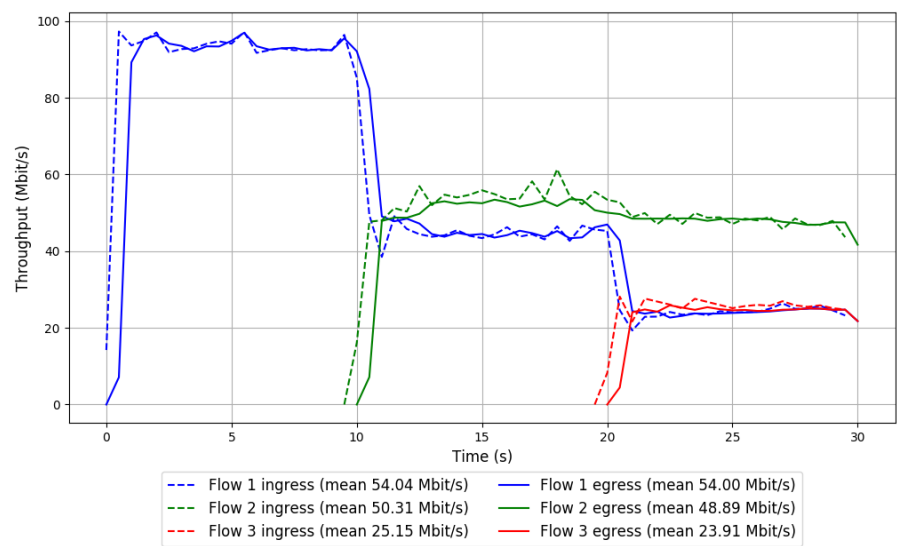


Run 2: Statistics of FillP

Start at: 2019-01-19 12:33:11
End at: 2019-01-19 12:33:41
Local clock offset: 1.161 ms
Remote clock offset: -2.833 ms

Below is generated by plot.py at 2019-01-19 14:07:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.45 Mbit/s
95th percentile per-packet one-way delay: 150.288 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 54.00 Mbit/s
95th percentile per-packet one-way delay: 154.327 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 48.89 Mbit/s
95th percentile per-packet one-way delay: 138.209 ms
Loss rate: 3.15%
-- Flow 3:
Average throughput: 23.91 Mbit/s
95th percentile per-packet one-way delay: 173.848 ms
Loss rate: 5.62%

Run 2: Report of FillP — Data Link

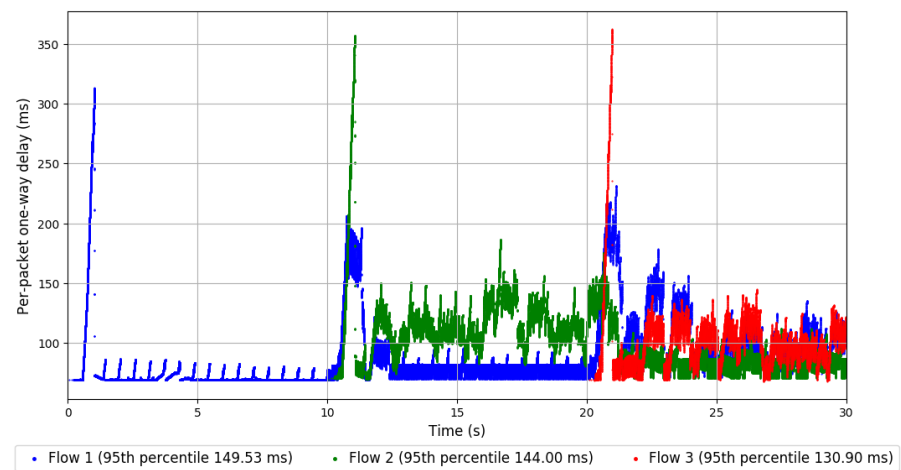
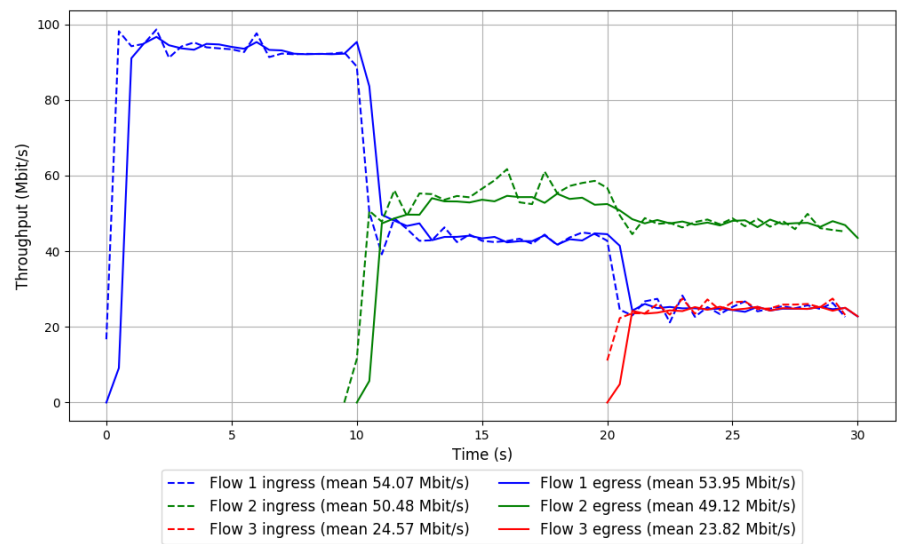


Run 3: Statistics of FillP

Start at: 2019-01-19 13:04:03
End at: 2019-01-19 13:04:33
Local clock offset: 1.265 ms
Remote clock offset: -4.476 ms

Below is generated by plot.py at 2019-01-19 14:07:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.51 Mbit/s
95th percentile per-packet one-way delay: 144.465 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 53.95 Mbit/s
95th percentile per-packet one-way delay: 149.531 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 49.12 Mbit/s
95th percentile per-packet one-way delay: 143.996 ms
Loss rate: 3.04%
-- Flow 3:
Average throughput: 23.82 Mbit/s
95th percentile per-packet one-way delay: 130.903 ms
Loss rate: 3.72%

Run 3: Report of FillP — Data Link

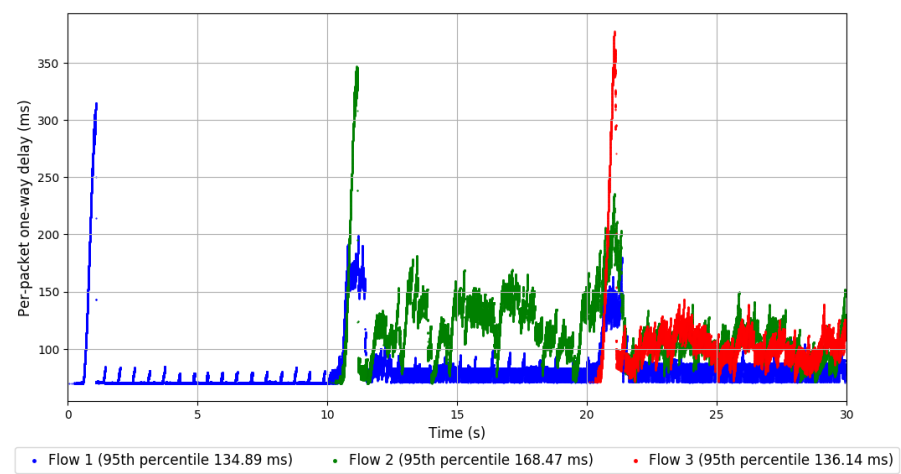
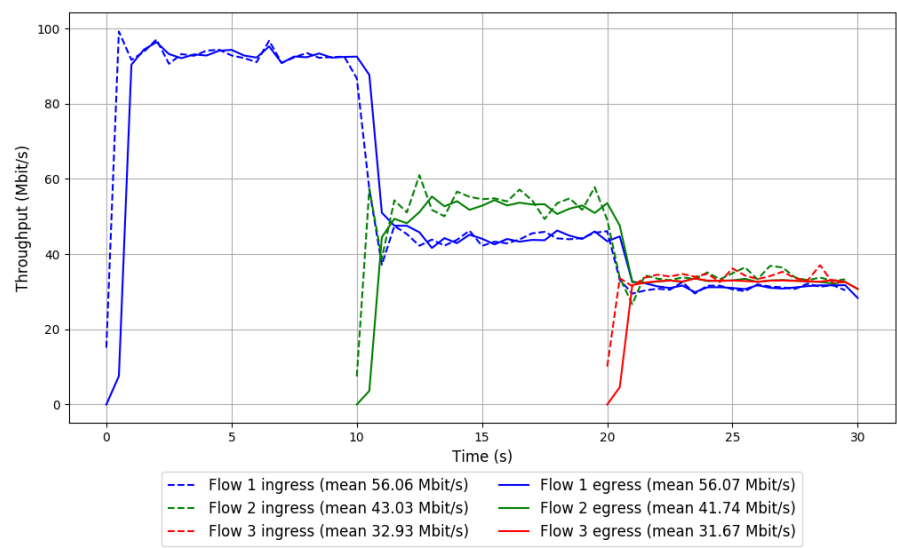


Run 4: Statistics of FillP

Start at: 2019-01-19 13:32:23
End at: 2019-01-19 13:32:53
Local clock offset: 0.645 ms
Remote clock offset: -2.904 ms

Below is generated by plot.py at 2019-01-19 14:08:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.29 Mbit/s
95th percentile per-packet one-way delay: 154.966 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 56.07 Mbit/s
95th percentile per-packet one-way delay: 134.887 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 41.74 Mbit/s
95th percentile per-packet one-way delay: 168.470 ms
Loss rate: 3.29%
-- Flow 3:
Average throughput: 31.67 Mbit/s
95th percentile per-packet one-way delay: 136.144 ms
Loss rate: 4.53%

Run 4: Report of FillP — Data Link

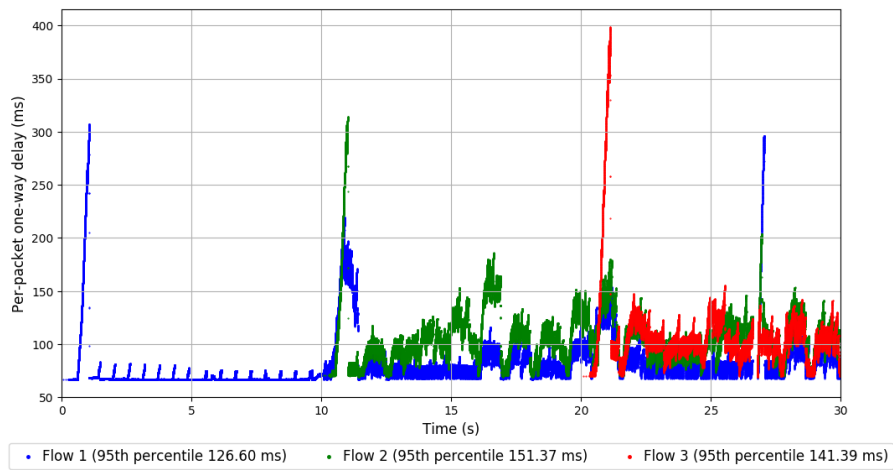
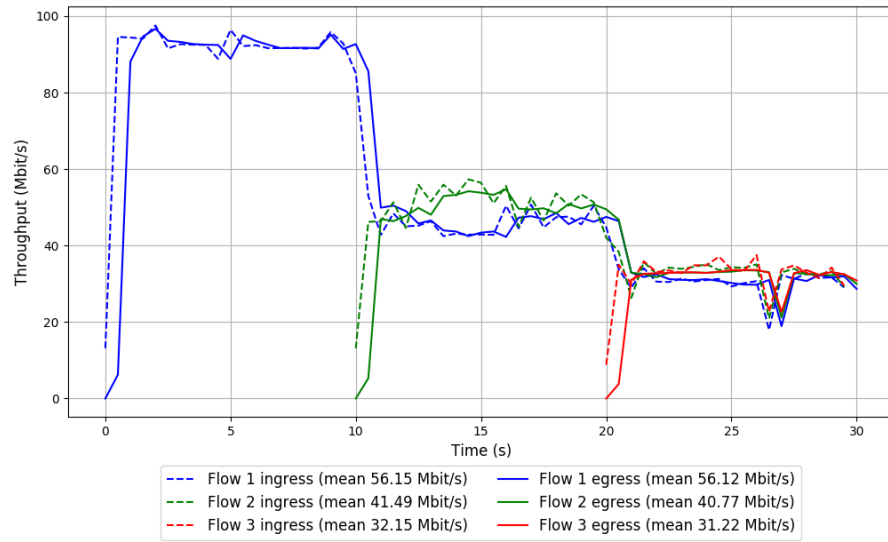


Run 5: Statistics of FillP

Start at: 2019-01-19 14:00:27
End at: 2019-01-19 14:00:57
Local clock offset: -1.061 ms
Remote clock offset: -3.578 ms

Below is generated by plot.py at 2019-01-19 14:08:38
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.53 Mbit/s
95th percentile per-packet one-way delay: 143.160 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 56.12 Mbit/s
95th percentile per-packet one-way delay: 126.601 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 40.77 Mbit/s
95th percentile per-packet one-way delay: 151.365 ms
Loss rate: 2.19%
-- Flow 3:
Average throughput: 31.22 Mbit/s
95th percentile per-packet one-way delay: 141.390 ms
Loss rate: 3.63%

Run 5: Report of FillP — Data Link

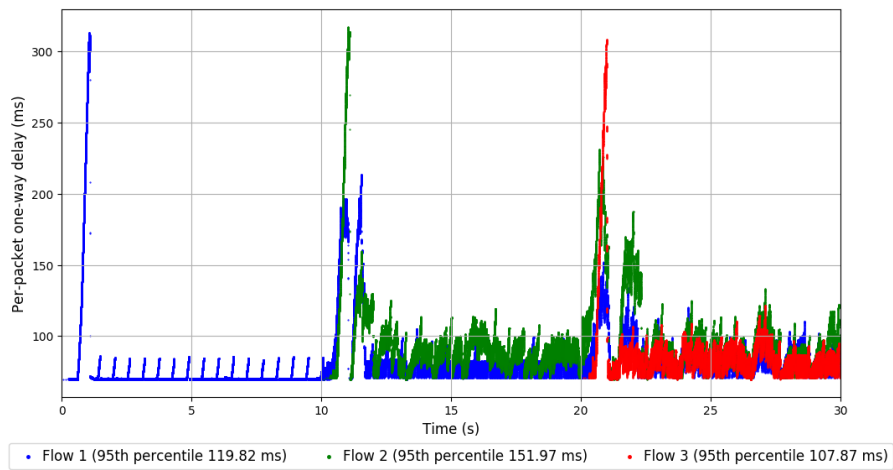
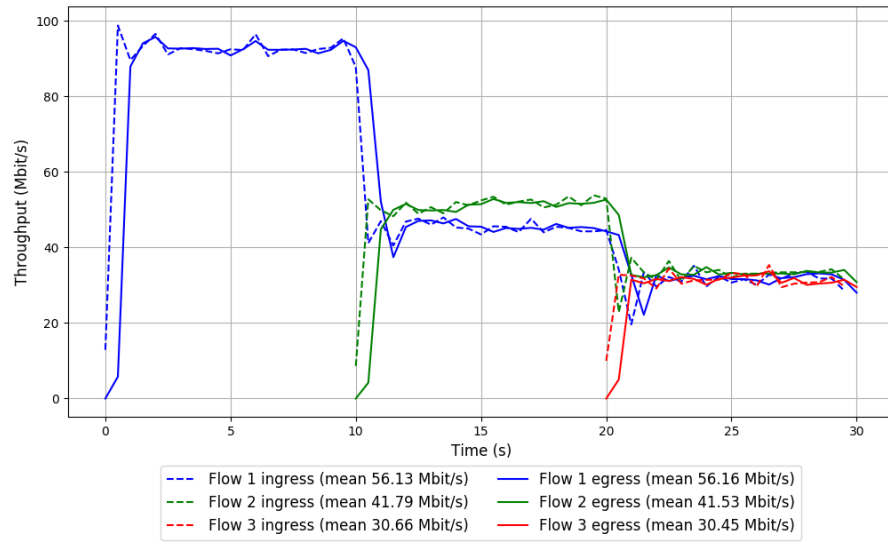


Run 1: Statistics of FillP-Sheep

Start at: 2019-01-19 11:42:52
End at: 2019-01-19 11:43:22
Local clock offset: 1.555 ms
Remote clock offset: -3.441 ms

Below is generated by plot.py at 2019-01-19 14:08:38
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.83 Mbit/s
95th percentile per-packet one-way delay: 135.821 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 56.16 Mbit/s
95th percentile per-packet one-way delay: 119.817 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 41.53 Mbit/s
95th percentile per-packet one-way delay: 151.968 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 30.45 Mbit/s
95th percentile per-packet one-way delay: 107.871 ms
Loss rate: 1.43%

Run 1: Report of FillP-Sheep — Data Link

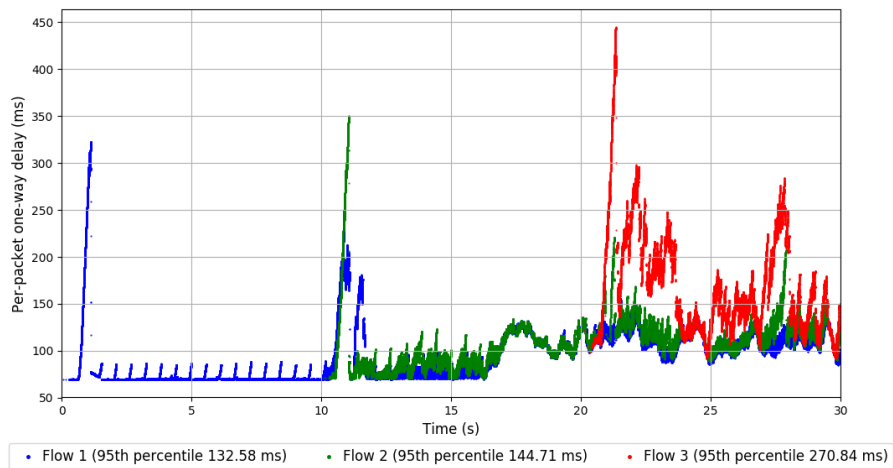
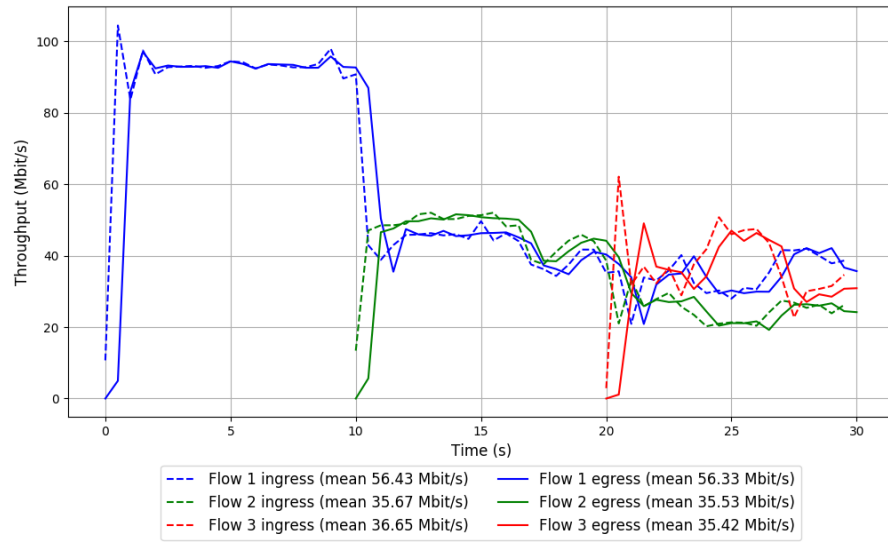


Run 2: Statistics of FillP-Sheep

Start at: 2019-01-19 12:12:38
End at: 2019-01-19 12:13:08
Local clock offset: 0.551 ms
Remote clock offset: -3.193 ms

Below is generated by plot.py at 2019-01-19 14:08:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.59 Mbit/s
95th percentile per-packet one-way delay: 195.766 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 56.33 Mbit/s
95th percentile per-packet one-way delay: 132.581 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 35.53 Mbit/s
95th percentile per-packet one-way delay: 144.705 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 35.42 Mbit/s
95th percentile per-packet one-way delay: 270.836 ms
Loss rate: 4.61%

Run 2: Report of FillP-Sheep — Data Link

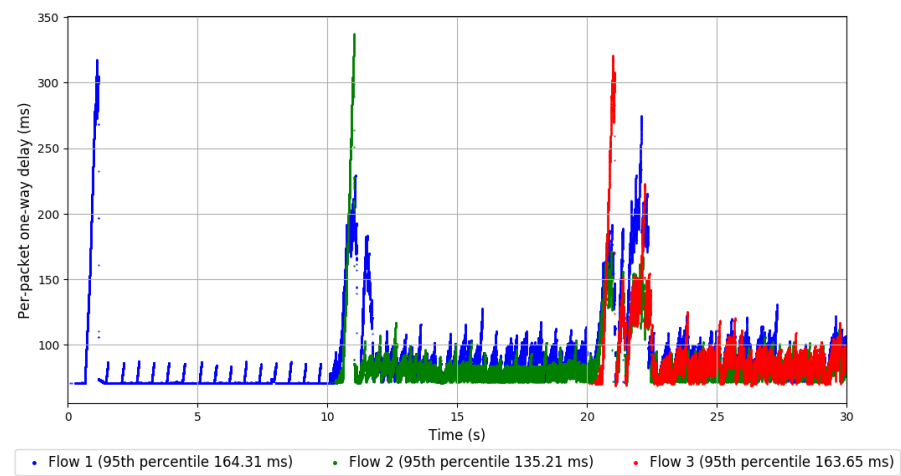
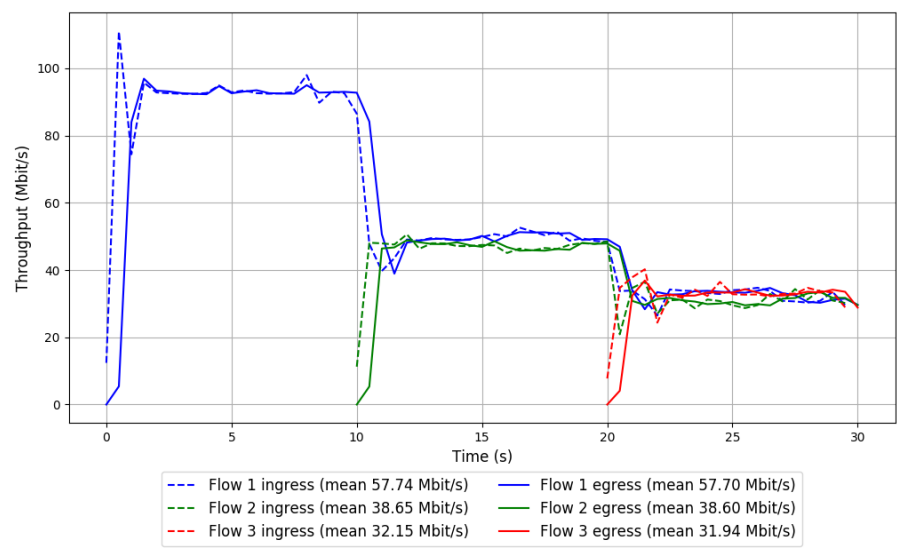


Run 3: Statistics of FillP-Sheep

Start at: 2019-01-19 12:42:55
End at: 2019-01-19 12:43:25
Local clock offset: 1.239 ms
Remote clock offset: -2.547 ms

Below is generated by plot.py at 2019-01-19 14:08:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.93 Mbit/s
95th percentile per-packet one-way delay: 150.670 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 57.70 Mbit/s
95th percentile per-packet one-way delay: 164.313 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 38.60 Mbit/s
95th percentile per-packet one-way delay: 135.206 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 31.94 Mbit/s
95th percentile per-packet one-way delay: 163.649 ms
Loss rate: 1.22%

Run 3: Report of FillP-Sheep — Data Link

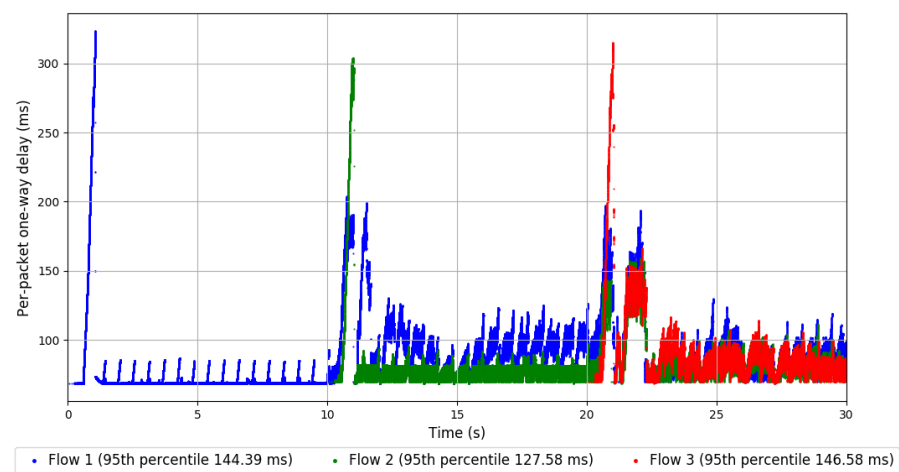
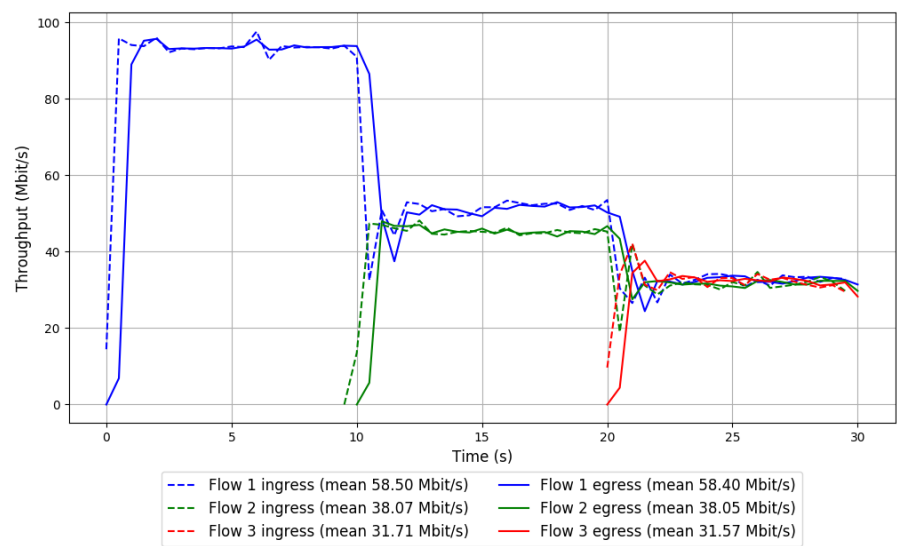


Run 4: Statistics of FillP-Sheep

Start at: 2019-01-19 13:13:10
End at: 2019-01-19 13:13:40
Local clock offset: 0.571 ms
Remote clock offset: -4.434 ms

Below is generated by plot.py at 2019-01-19 14:09:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 139.813 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 58.40 Mbit/s
95th percentile per-packet one-way delay: 144.387 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 38.05 Mbit/s
95th percentile per-packet one-way delay: 127.581 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 31.57 Mbit/s
95th percentile per-packet one-way delay: 146.580 ms
Loss rate: 1.07%

Run 4: Report of FillP-Sheep — Data Link

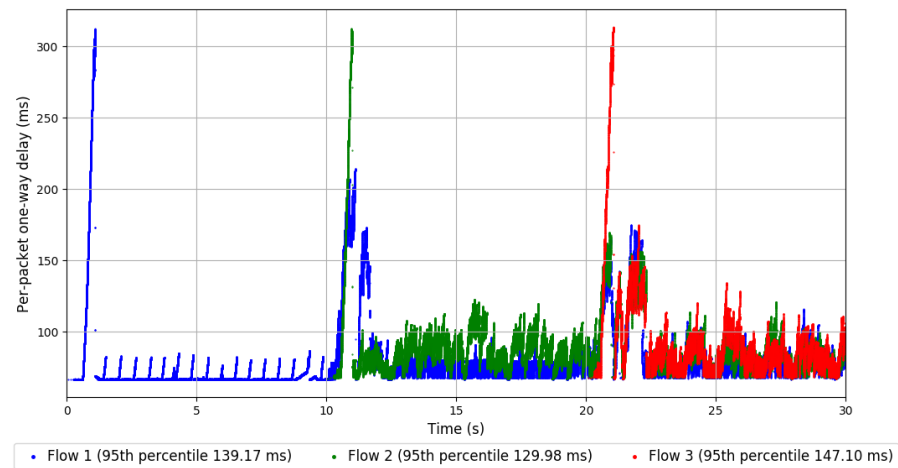
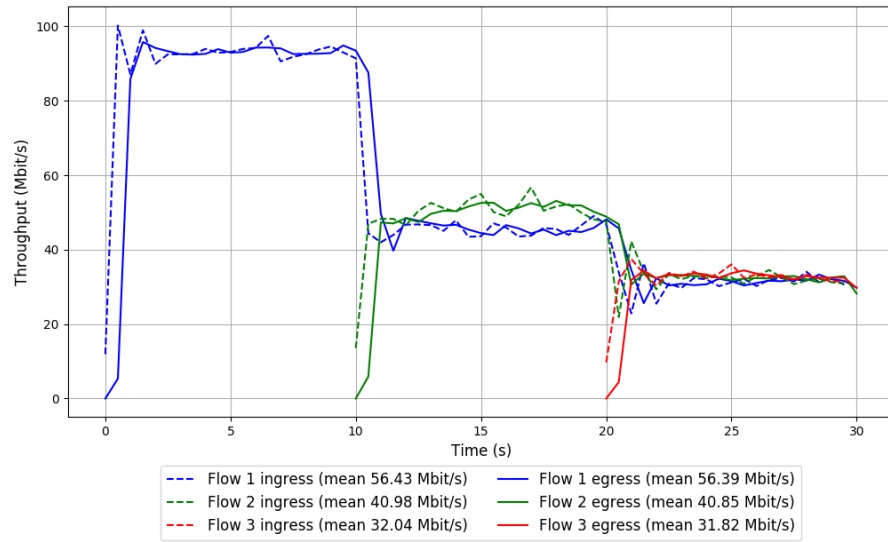


Run 5: Statistics of FillP-Sheep

Start at: 2019-01-19 13:41:26
End at: 2019-01-19 13:41:56
Local clock offset: -1.859 ms
Remote clock offset: -2.014 ms

Below is generated by plot.py at 2019-01-19 14:09:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.07 Mbit/s
95th percentile per-packet one-way delay: 137.196 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 56.39 Mbit/s
95th percentile per-packet one-way delay: 139.171 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 40.85 Mbit/s
95th percentile per-packet one-way delay: 129.978 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 31.82 Mbit/s
95th percentile per-packet one-way delay: 147.102 ms
Loss rate: 1.34%

Run 5: Report of FillP-Sheep — Data Link

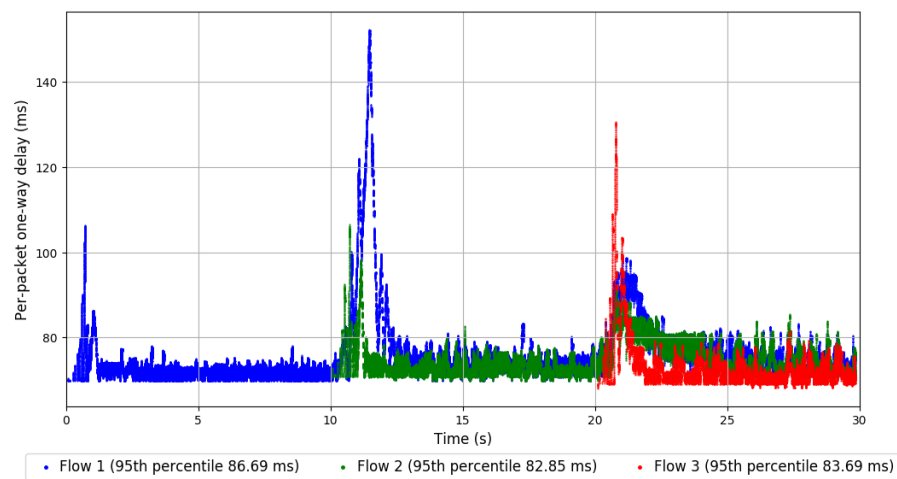
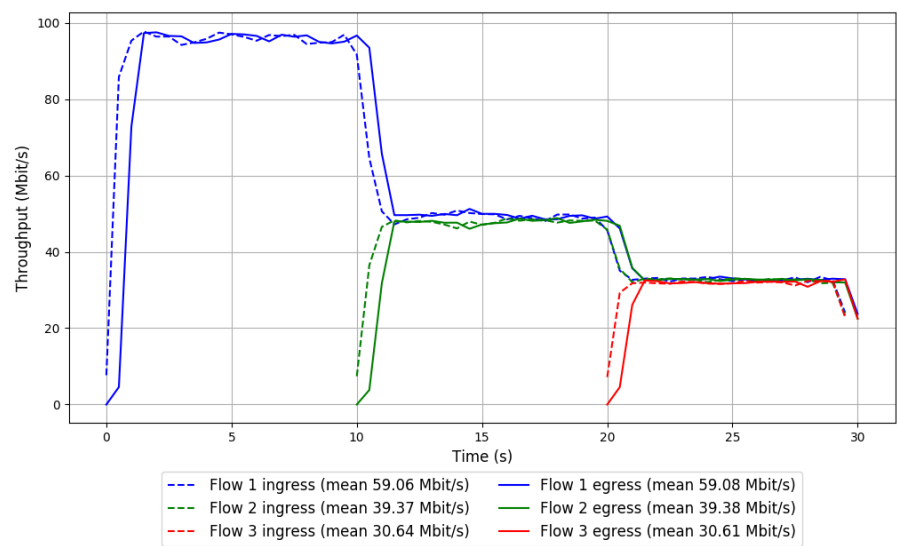


Run 1: Statistics of Indigo

Start at: 2019-01-19 11:51:02
End at: 2019-01-19 11:51:32
Local clock offset: 1.258 ms
Remote clock offset: -3.324 ms

Below is generated by plot.py at 2019-01-19 14:09:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.25 Mbit/s
95th percentile per-packet one-way delay: 84.421 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 59.08 Mbit/s
95th percentile per-packet one-way delay: 86.695 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 39.38 Mbit/s
95th percentile per-packet one-way delay: 82.851 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 30.61 Mbit/s
95th percentile per-packet one-way delay: 83.688 ms
Loss rate: 0.82%

Run 1: Report of Indigo — Data Link

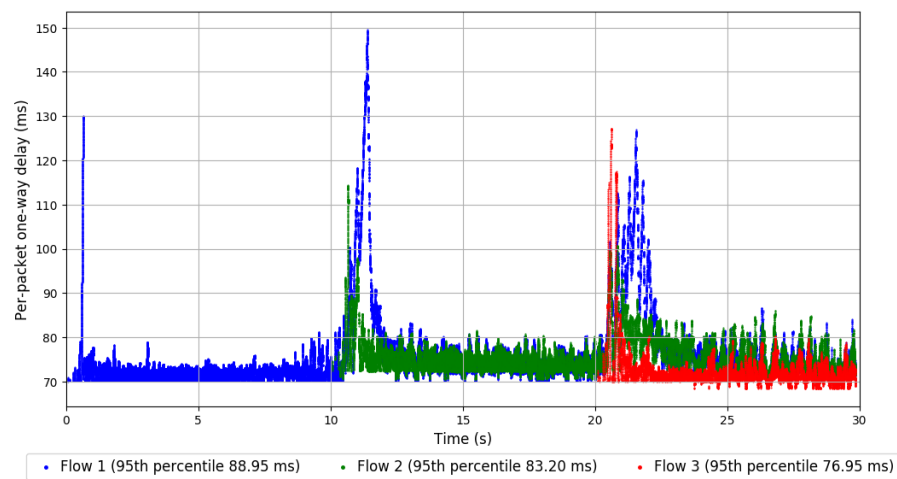
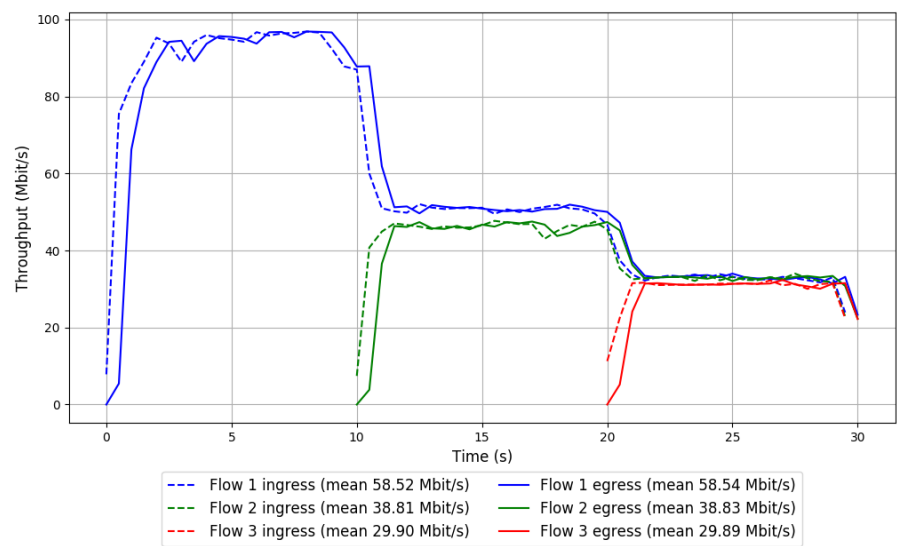


Run 2: Statistics of Indigo

Start at: 2019-01-19 12:21:22
End at: 2019-01-19 12:21:52
Local clock offset: 0.907 ms
Remote clock offset: -3.061 ms

Below is generated by plot.py at 2019-01-19 14:09:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.09 Mbit/s
95th percentile per-packet one-way delay: 84.814 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 58.54 Mbit/s
95th percentile per-packet one-way delay: 88.950 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 38.83 Mbit/s
95th percentile per-packet one-way delay: 83.205 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 29.89 Mbit/s
95th percentile per-packet one-way delay: 76.951 ms
Loss rate: 0.82%

Run 2: Report of Indigo — Data Link

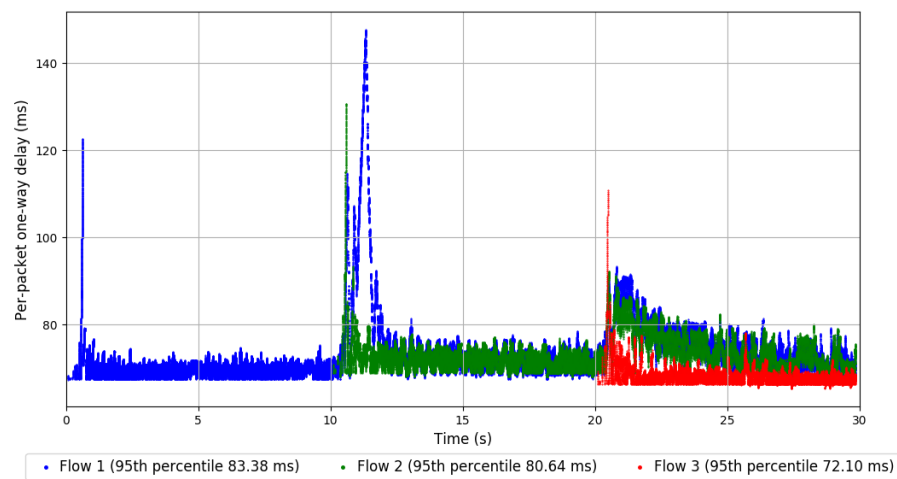
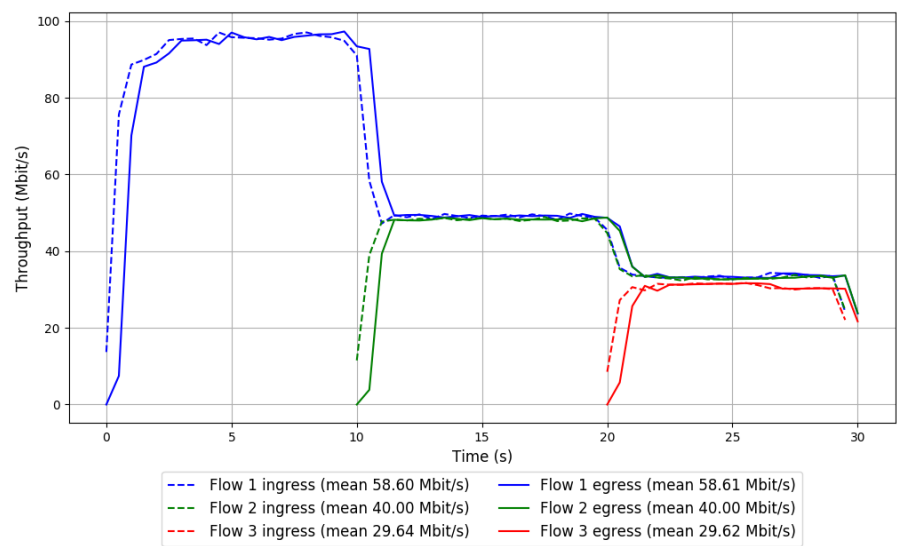


Run 3: Statistics of Indigo

Start at: 2019-01-19 12:51:37
End at: 2019-01-19 12:52:07
Local clock offset: -1.446 ms
Remote clock offset: -3.971 ms

Below is generated by plot.py at 2019-01-19 14:09:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.84 Mbit/s
95th percentile per-packet one-way delay: 80.960 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 58.61 Mbit/s
95th percentile per-packet one-way delay: 83.376 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 40.00 Mbit/s
95th percentile per-packet one-way delay: 80.635 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 29.62 Mbit/s
95th percentile per-packet one-way delay: 72.102 ms
Loss rate: 0.76%

Run 3: Report of Indigo — Data Link

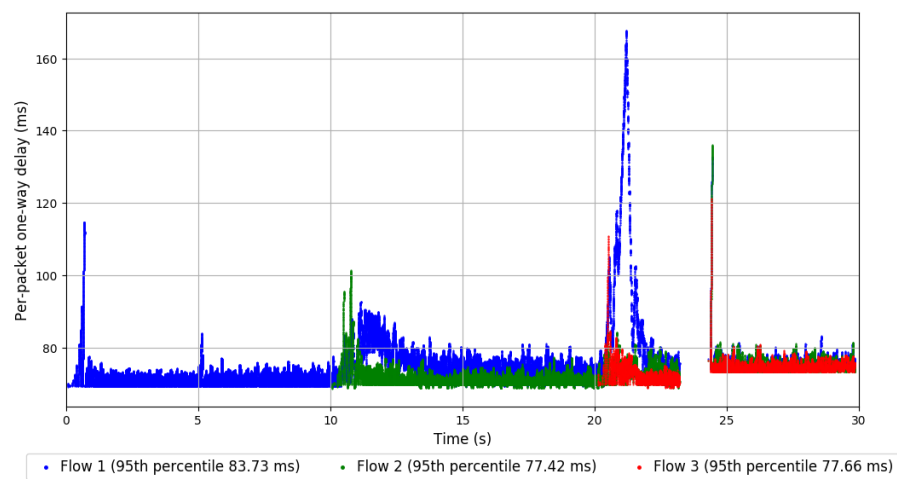
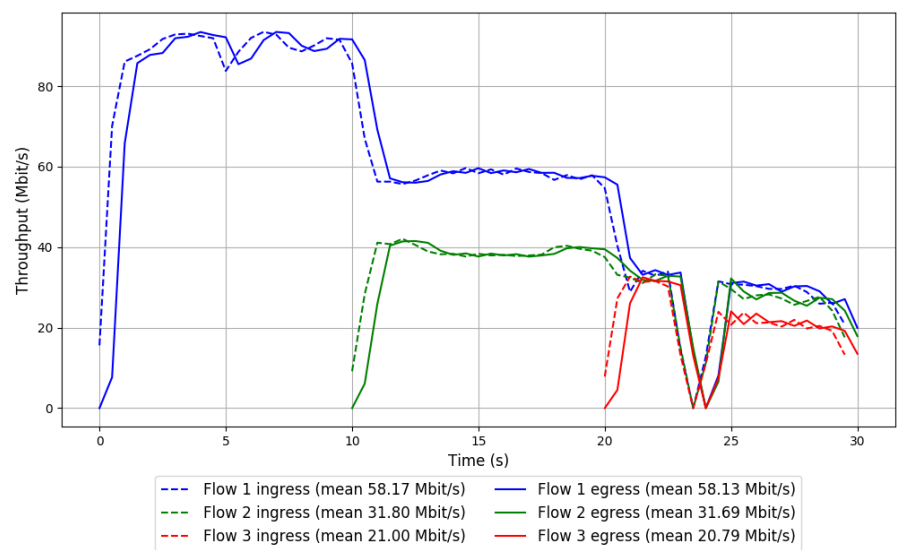


Run 4: Statistics of Indigo

Start at: 2019-01-19 13:21:09
End at: 2019-01-19 13:21:39
Local clock offset: 0.945 ms
Remote clock offset: -4.133 ms

Below is generated by plot.py at 2019-01-19 14:09:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.95 Mbit/s
95th percentile per-packet one-way delay: 81.445 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 58.13 Mbit/s
95th percentile per-packet one-way delay: 83.731 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 31.69 Mbit/s
95th percentile per-packet one-way delay: 77.422 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 20.79 Mbit/s
95th percentile per-packet one-way delay: 77.663 ms
Loss rate: 1.75%

Run 4: Report of Indigo — Data Link

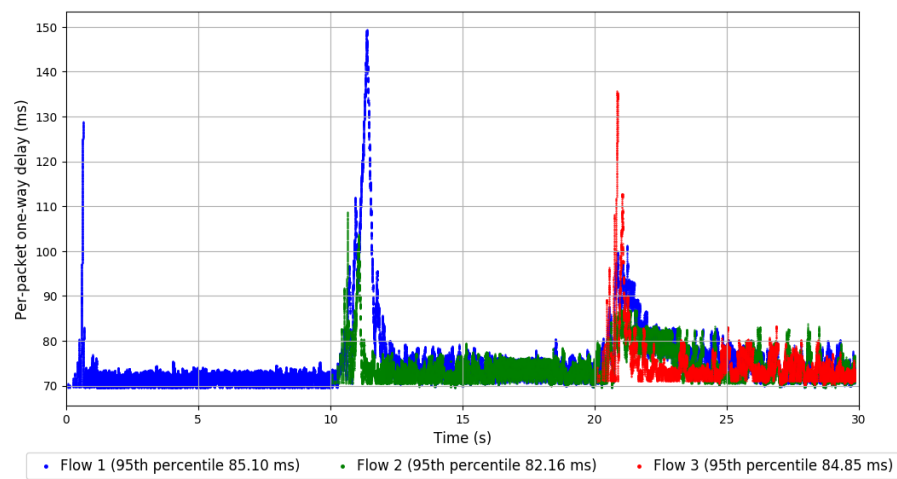
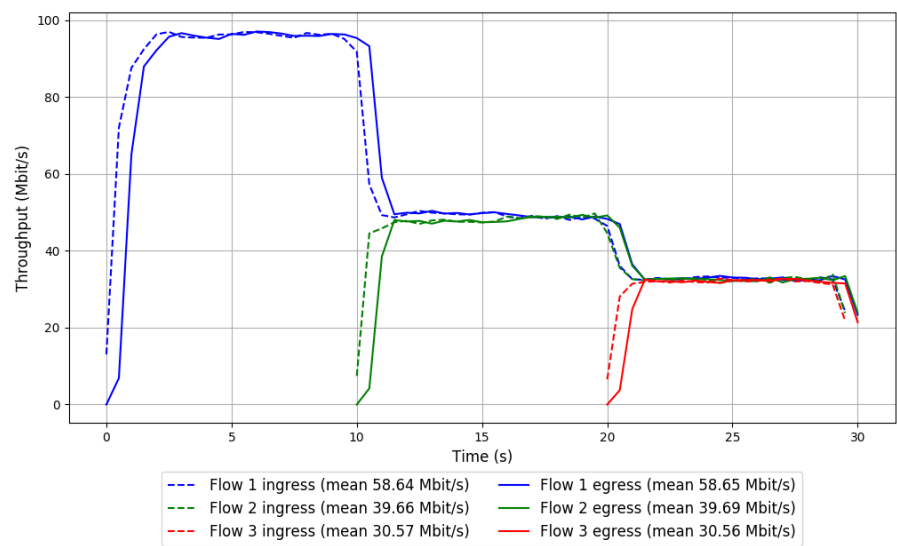


Run 5: Statistics of Indigo

Start at: 2019-01-19 13:49:22
End at: 2019-01-19 13:49:52
Local clock offset: 0.524 ms
Remote clock offset: -2.516 ms

Below is generated by plot.py at 2019-01-19 14:09:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.01 Mbit/s
95th percentile per-packet one-way delay: 82.889 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 58.65 Mbit/s
95th percentile per-packet one-way delay: 85.099 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 39.69 Mbit/s
95th percentile per-packet one-way delay: 82.160 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 30.56 Mbit/s
95th percentile per-packet one-way delay: 84.852 ms
Loss rate: 0.82%

Run 5: Report of Indigo — Data Link

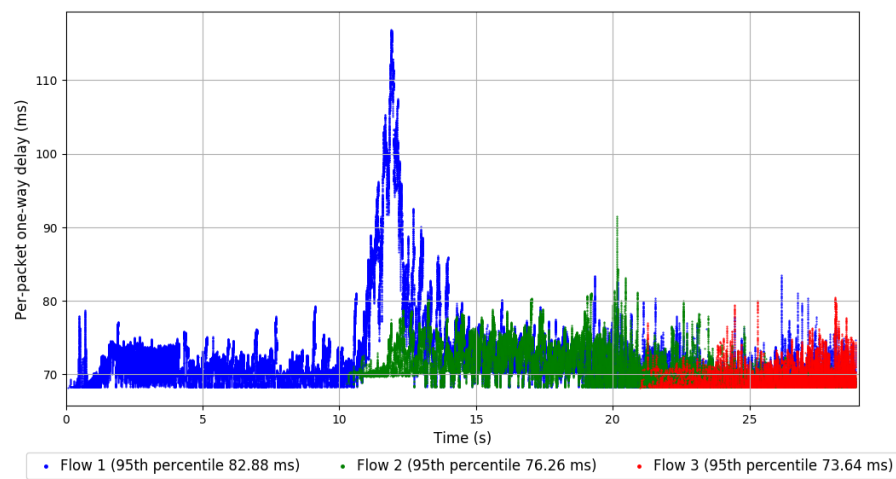
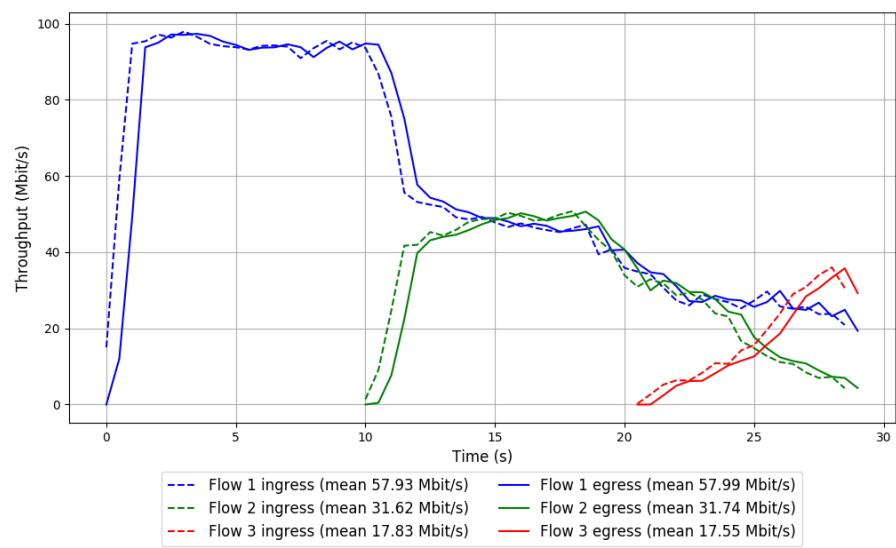


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-19 12:00:57
End at: 2019-01-19 12:01:27
Local clock offset: -0.264 ms
Remote clock offset: -3.044 ms

Below is generated by plot.py at 2019-01-19 14:09:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 83.31 Mbit/s
95th percentile per-packet one-way delay: 79.410 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 57.99 Mbit/s
95th percentile per-packet one-way delay: 82.877 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 31.74 Mbit/s
95th percentile per-packet one-way delay: 76.262 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 17.55 Mbit/s
95th percentile per-packet one-way delay: 73.641 ms
Loss rate: 2.43%

Run 1: Report of Indigo-MusesC3 — Data Link

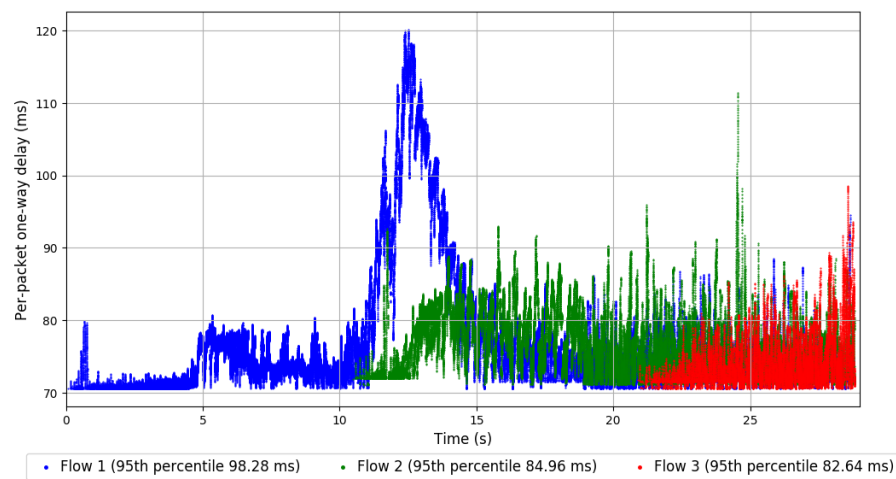
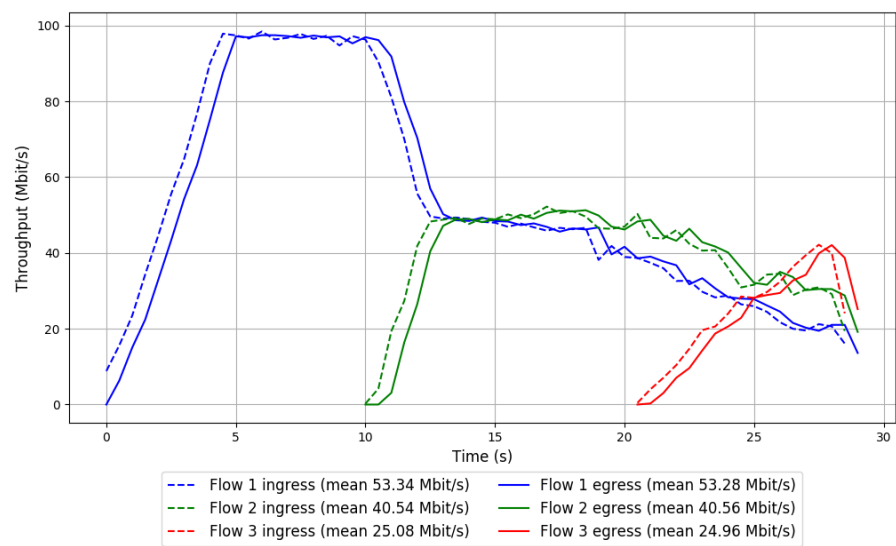


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-19 12:31:40
End at: 2019-01-19 12:32:10
Local clock offset: 1.128 ms
Remote clock offset: -2.673 ms

Below is generated by plot.py at 2019-01-19 14:10:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.02 Mbit/s
95th percentile per-packet one-way delay: 91.453 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 53.28 Mbit/s
95th percentile per-packet one-way delay: 98.280 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 40.56 Mbit/s
95th percentile per-packet one-way delay: 84.957 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 24.96 Mbit/s
95th percentile per-packet one-way delay: 82.636 ms
Loss rate: 1.43%

Run 2: Report of Indigo-MusesC3 — Data Link

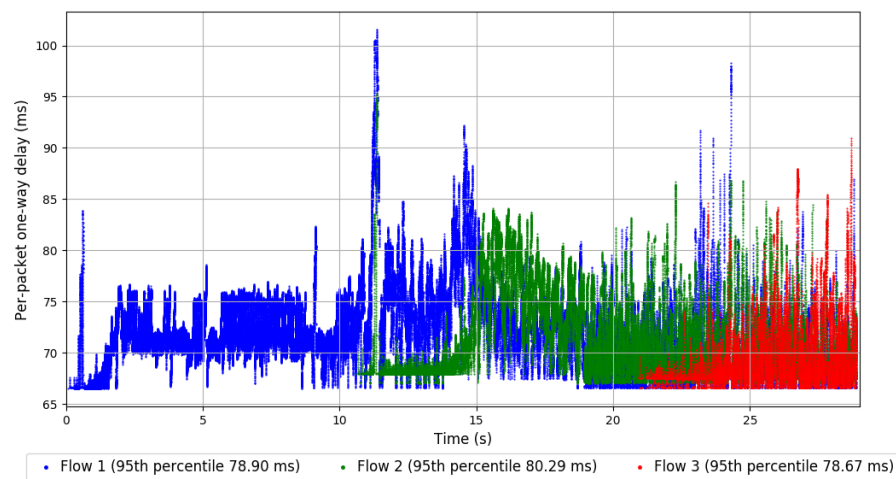
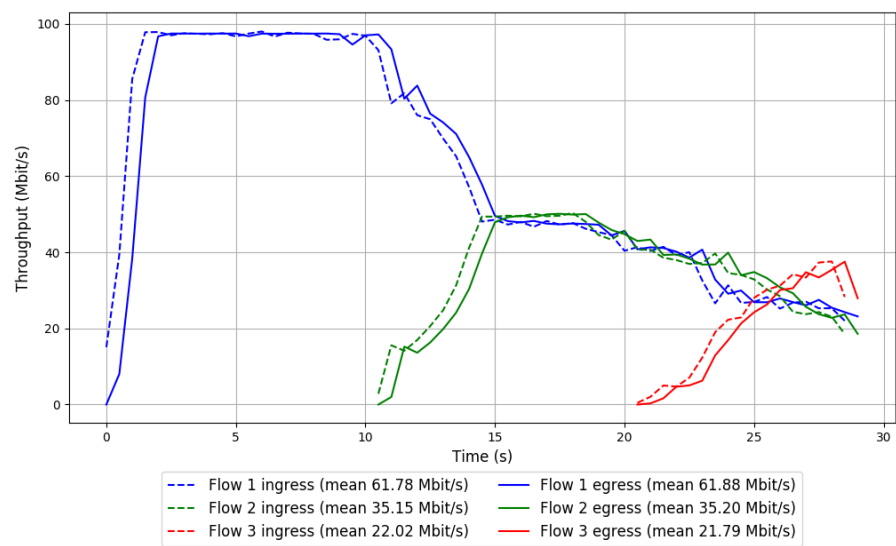


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-19 13:02:37
End at: 2019-01-19 13:03:07
Local clock offset: -1.705 ms
Remote clock offset: -4.976 ms

Below is generated by plot.py at 2019-01-19 14:10:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.28 Mbit/s
95th percentile per-packet one-way delay: 79.449 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 61.88 Mbit/s
95th percentile per-packet one-way delay: 78.897 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 35.20 Mbit/s
95th percentile per-packet one-way delay: 80.294 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 21.79 Mbit/s
95th percentile per-packet one-way delay: 78.671 ms
Loss rate: 1.89%

Run 3: Report of Indigo-MusesC3 — Data Link

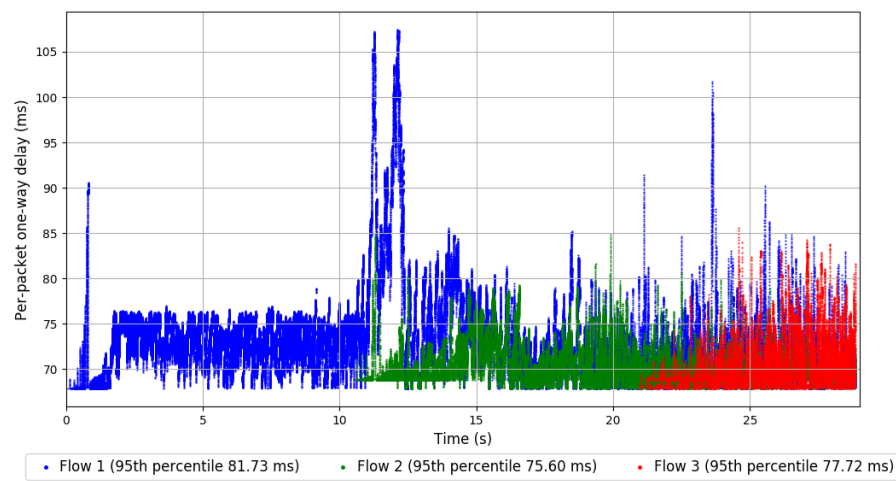
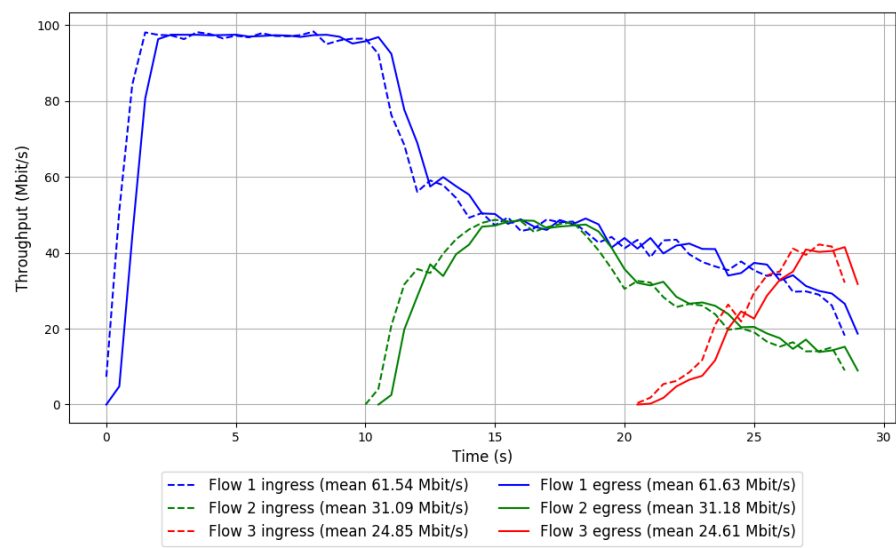


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-19 13:30:45
End at: 2019-01-19 13:31:15
Local clock offset: -1.112 ms
Remote clock offset: -2.572 ms

Below is generated by plot.py at 2019-01-19 14:10:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.24 Mbit/s
95th percentile per-packet one-way delay: 79.845 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 61.63 Mbit/s
95th percentile per-packet one-way delay: 81.728 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 31.18 Mbit/s
95th percentile per-packet one-way delay: 75.604 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 24.61 Mbit/s
95th percentile per-packet one-way delay: 77.718 ms
Loss rate: 1.86%

Run 4: Report of Indigo-MusesC3 — Data Link

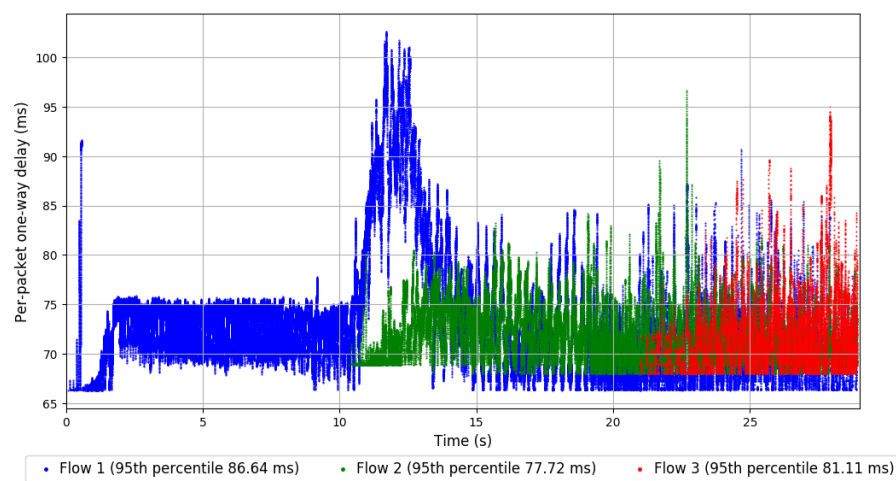
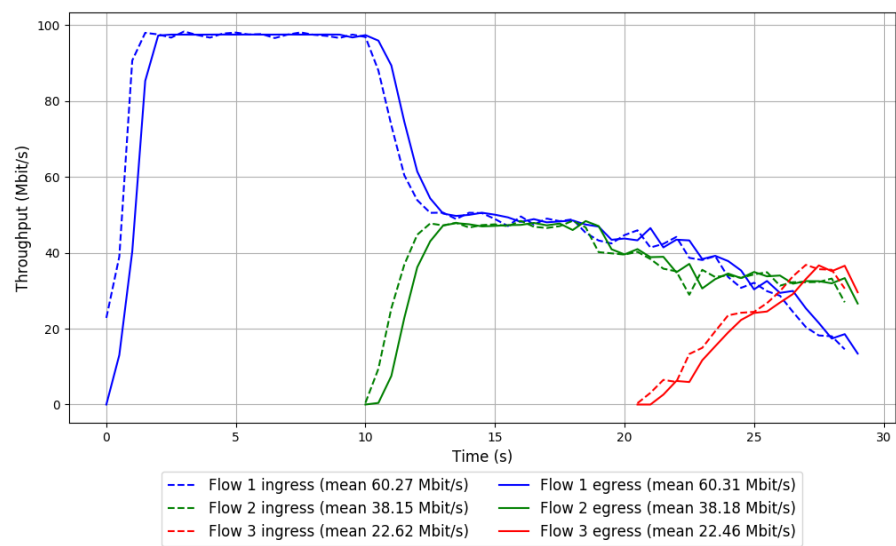


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-19 13:58:54
End at: 2019-01-19 13:59:24
Local clock offset: -0.616 ms
Remote clock offset: -2.124 ms

Below is generated by plot.py at 2019-01-19 14:10:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.12 Mbit/s
95th percentile per-packet one-way delay: 83.339 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 60.31 Mbit/s
95th percentile per-packet one-way delay: 86.636 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 38.18 Mbit/s
95th percentile per-packet one-way delay: 77.724 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 22.46 Mbit/s
95th percentile per-packet one-way delay: 81.114 ms
Loss rate: 1.57%

Run 5: Report of Indigo-MusesC3 — Data Link

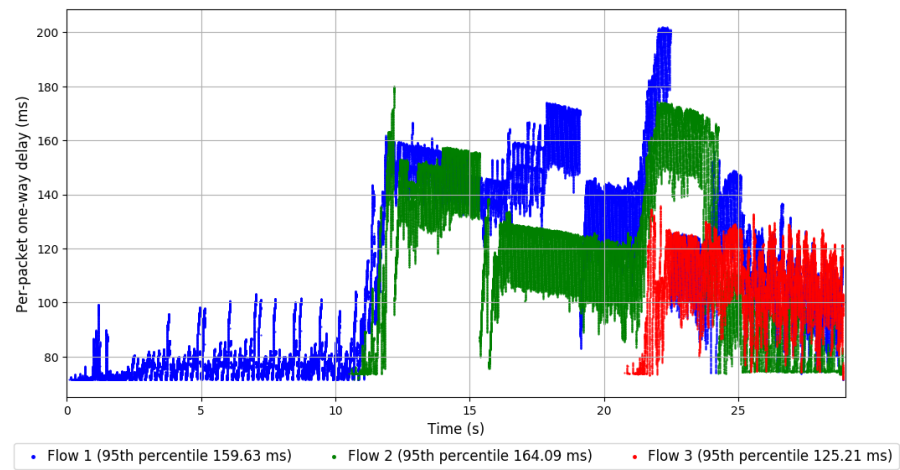
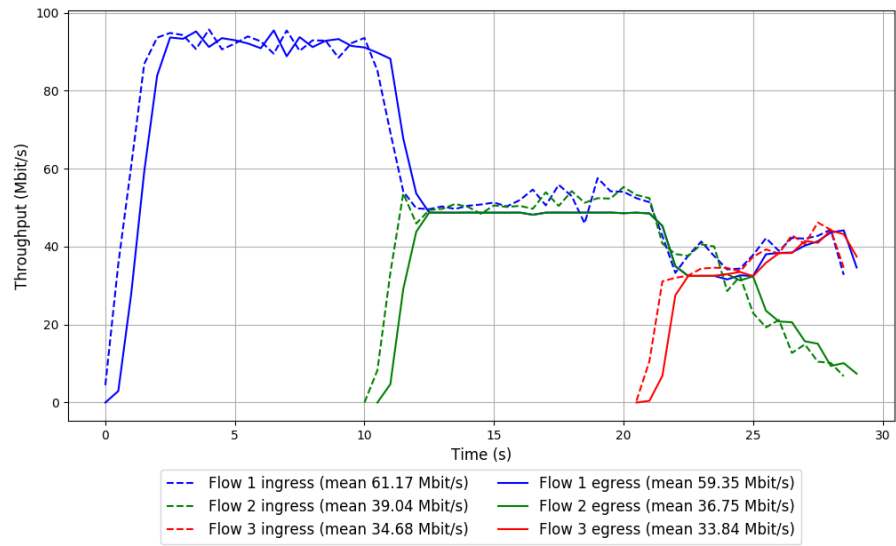


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-19 11:56:48
End at: 2019-01-19 11:57:18
Local clock offset: 2.864 ms
Remote clock offset: -3.381 ms

Below is generated by plot.py at 2019-01-19 14:10:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.32 Mbit/s
95th percentile per-packet one-way delay: 159.691 ms
Loss rate: 4.02%
-- Flow 1:
Average throughput: 59.35 Mbit/s
95th percentile per-packet one-way delay: 159.633 ms
Loss rate: 3.23%
-- Flow 2:
Average throughput: 36.75 Mbit/s
95th percentile per-packet one-way delay: 164.085 ms
Loss rate: 6.38%
-- Flow 3:
Average throughput: 33.84 Mbit/s
95th percentile per-packet one-way delay: 125.212 ms
Loss rate: 2.93%

Run 1: Report of Indigo-MusesC5 — Data Link

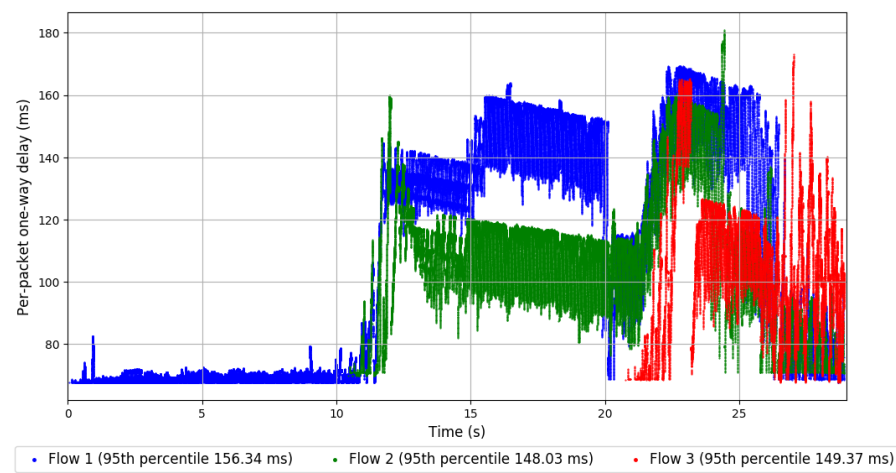
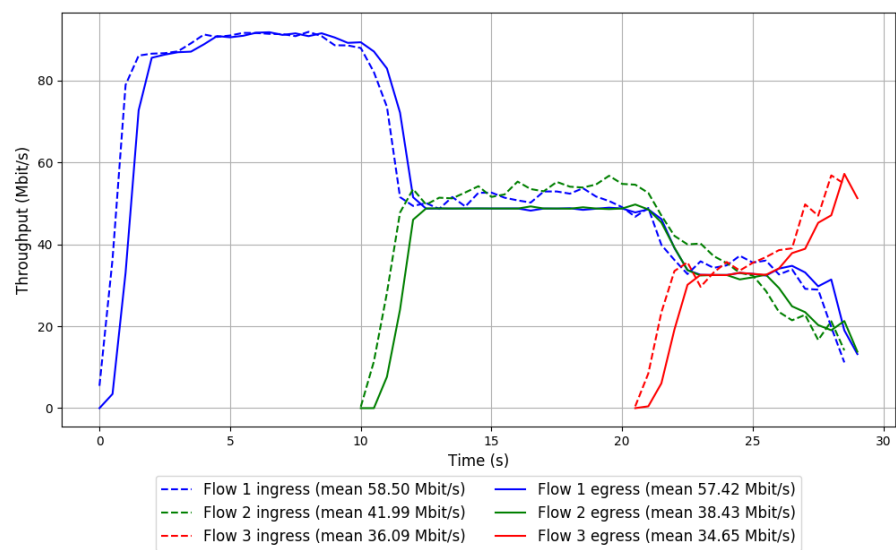


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-19 12:27:21
End at: 2019-01-19 12:27:51
Local clock offset: -0.203 ms
Remote clock offset: -3.499 ms

Below is generated by plot.py at 2019-01-19 14:10:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.80 Mbit/s
95th percentile per-packet one-way delay: 154.963 ms
Loss rate: 4.28%
-- Flow 1:
Average throughput: 57.42 Mbit/s
95th percentile per-packet one-way delay: 156.339 ms
Loss rate: 2.10%
-- Flow 2:
Average throughput: 38.43 Mbit/s
95th percentile per-packet one-way delay: 148.025 ms
Loss rate: 8.84%
-- Flow 3:
Average throughput: 34.65 Mbit/s
95th percentile per-packet one-way delay: 149.366 ms
Loss rate: 4.78%

Run 2: Report of Indigo-MusesC5 — Data Link

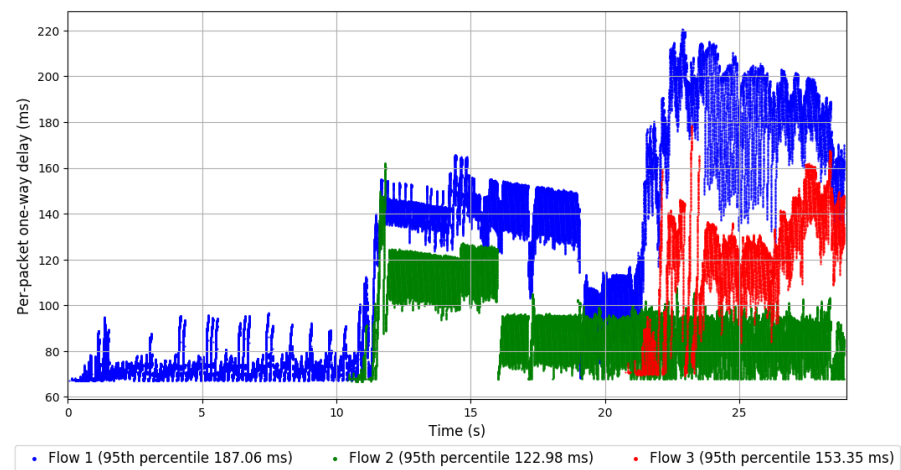
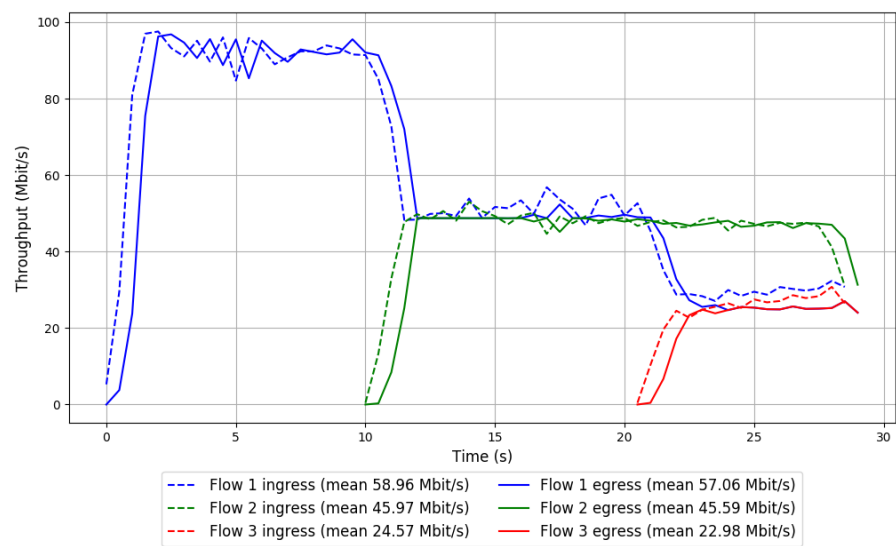


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-19 12:57:38
End at: 2019-01-19 12:58:08
Local clock offset: -1.554 ms
Remote clock offset: -5.256 ms

Below is generated by plot.py at 2019-01-19 14:10:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.81 Mbit/s
95th percentile per-packet one-way delay: 170.963 ms
Loss rate: 3.02%
-- Flow 1:
Average throughput: 57.06 Mbit/s
95th percentile per-packet one-way delay: 187.057 ms
Loss rate: 3.48%
-- Flow 2:
Average throughput: 45.59 Mbit/s
95th percentile per-packet one-way delay: 122.981 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 22.98 Mbit/s
95th percentile per-packet one-way delay: 153.354 ms
Loss rate: 7.25%

Run 3: Report of Indigo-MusesC5 — Data Link

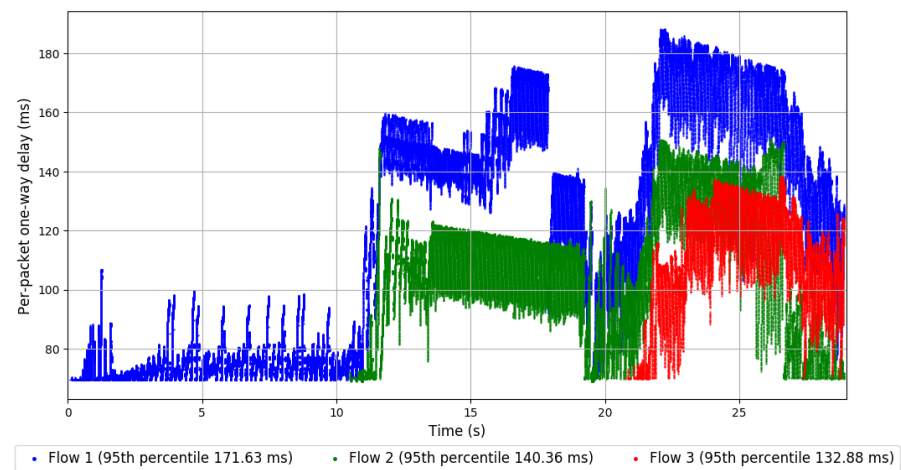
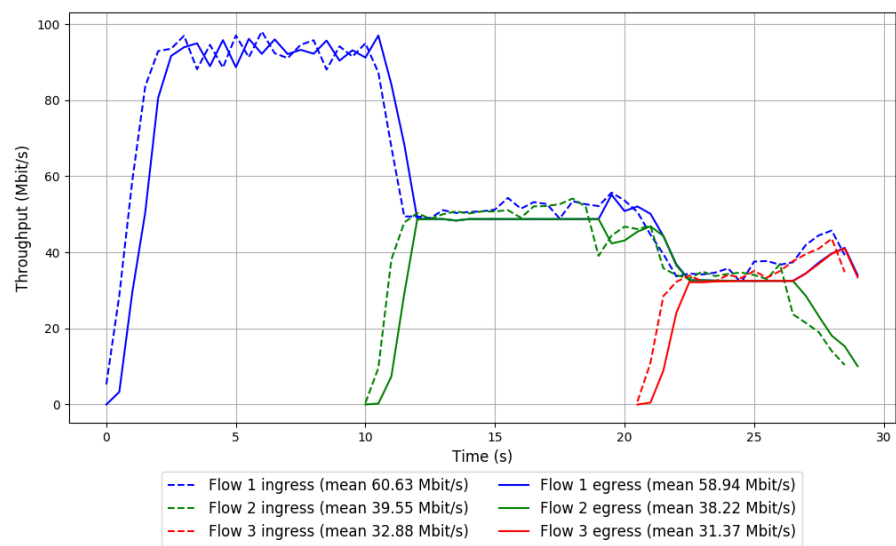


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-19 13:26:23
End at: 2019-01-19 13:26:53
Local clock offset: 0.837 ms
Remote clock offset: -1.824 ms

Below is generated by plot.py at 2019-01-19 14:11:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.31 Mbit/s
95th percentile per-packet one-way delay: 166.046 ms
Loss rate: 3.39%
-- Flow 1:
Average throughput: 58.94 Mbit/s
95th percentile per-packet one-way delay: 171.628 ms
Loss rate: 3.02%
-- Flow 2:
Average throughput: 38.22 Mbit/s
95th percentile per-packet one-way delay: 140.364 ms
Loss rate: 3.63%
-- Flow 3:
Average throughput: 31.37 Mbit/s
95th percentile per-packet one-way delay: 132.879 ms
Loss rate: 5.21%

Run 4: Report of Indigo-MusesC5 — Data Link

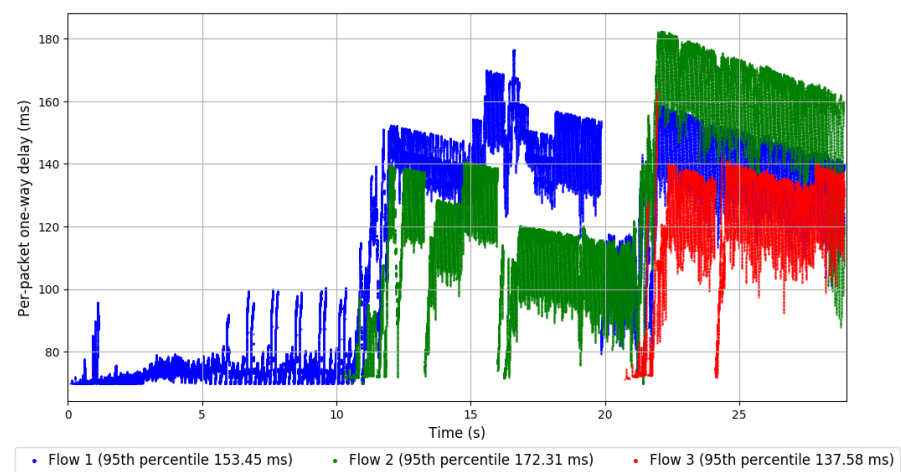
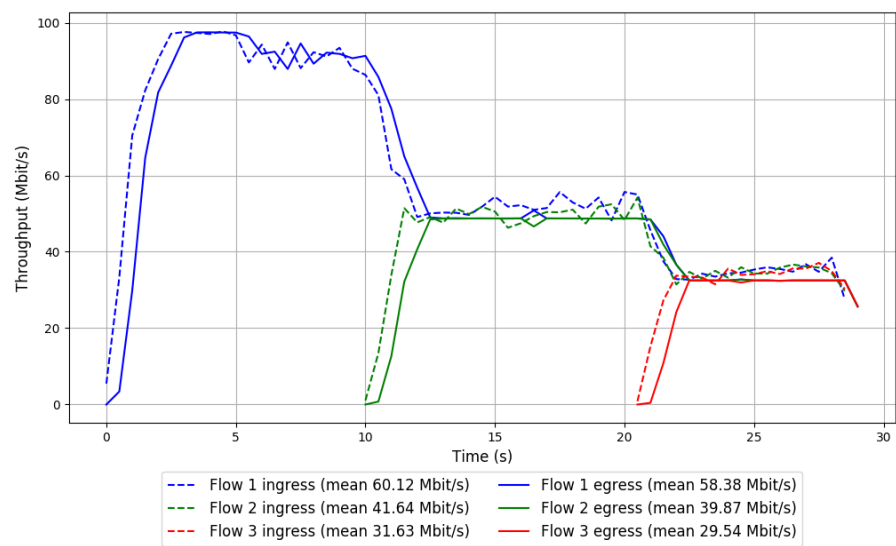


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-19 13:54:56
End at: 2019-01-19 13:55:26
Local clock offset: 1.386 ms
Remote clock offset: -1.975 ms

Below is generated by plot.py at 2019-01-19 14:11:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.56 Mbit/s
95th percentile per-packet one-way delay: 162.831 ms
Loss rate: 3.88%
-- Flow 1:
Average throughput: 58.38 Mbit/s
95th percentile per-packet one-way delay: 153.448 ms
Loss rate: 3.07%
-- Flow 2:
Average throughput: 39.87 Mbit/s
95th percentile per-packet one-way delay: 172.307 ms
Loss rate: 4.50%
-- Flow 3:
Average throughput: 29.54 Mbit/s
95th percentile per-packet one-way delay: 137.582 ms
Loss rate: 7.43%

Run 5: Report of Indigo-MusesC5 — Data Link

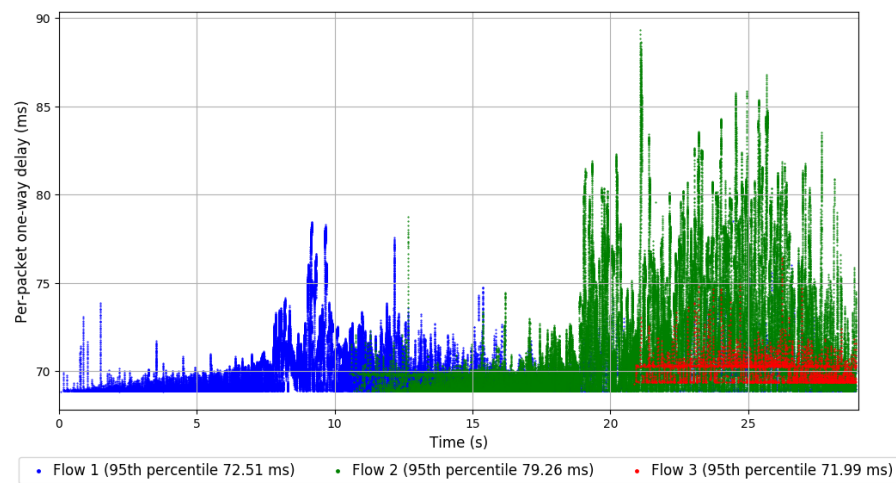
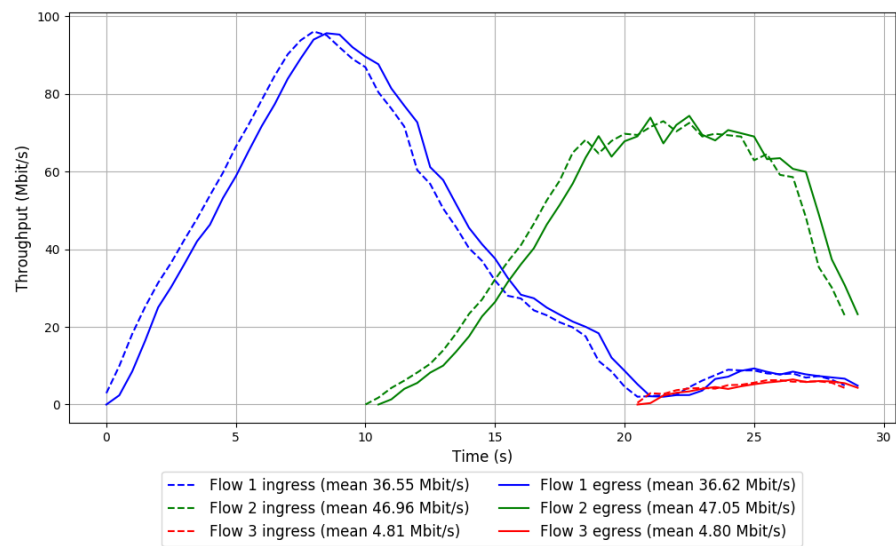


Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-19 11:45:30
End at: 2019-01-19 11:46:00
Local clock offset: 2.011 ms
Remote clock offset: -4.088 ms

Below is generated by plot.py at 2019-01-19 14:11:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 67.92 Mbit/s
95th percentile per-packet one-way delay: 77.012 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 36.62 Mbit/s
95th percentile per-packet one-way delay: 72.513 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 47.05 Mbit/s
95th percentile per-packet one-way delay: 79.259 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 4.80 Mbit/s
95th percentile per-packet one-way delay: 71.993 ms
Loss rate: 1.10%

Run 1: Report of Indigo-MusesD — Data Link

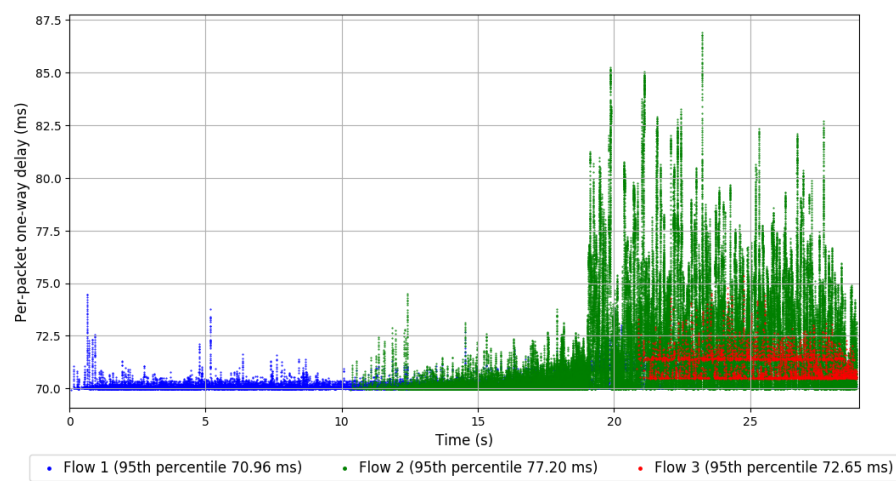
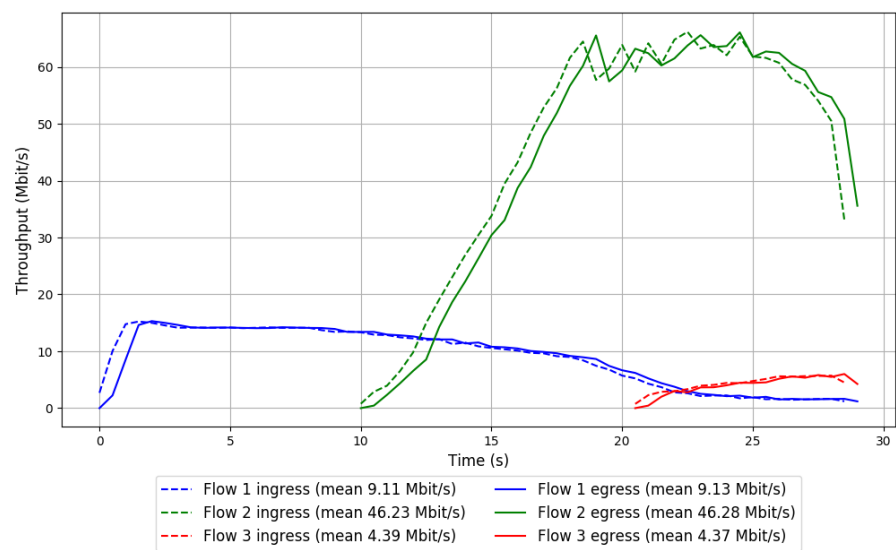


Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-19 12:15:58
End at: 2019-01-19 12:16:28
Local clock offset: 1.141 ms
Remote clock offset: -3.259 ms

Below is generated by plot.py at 2019-01-19 14:11:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 40.19 Mbit/s
95th percentile per-packet one-way delay: 76.503 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 9.13 Mbit/s
95th percentile per-packet one-way delay: 70.962 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 46.28 Mbit/s
95th percentile per-packet one-way delay: 77.197 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 72.652 ms
Loss rate: 1.37%

Run 2: Report of Indigo-MusesD — Data Link

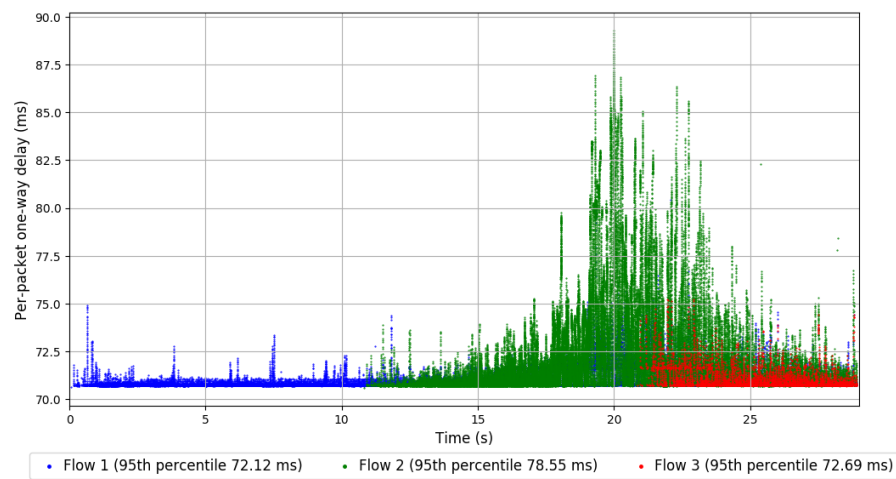
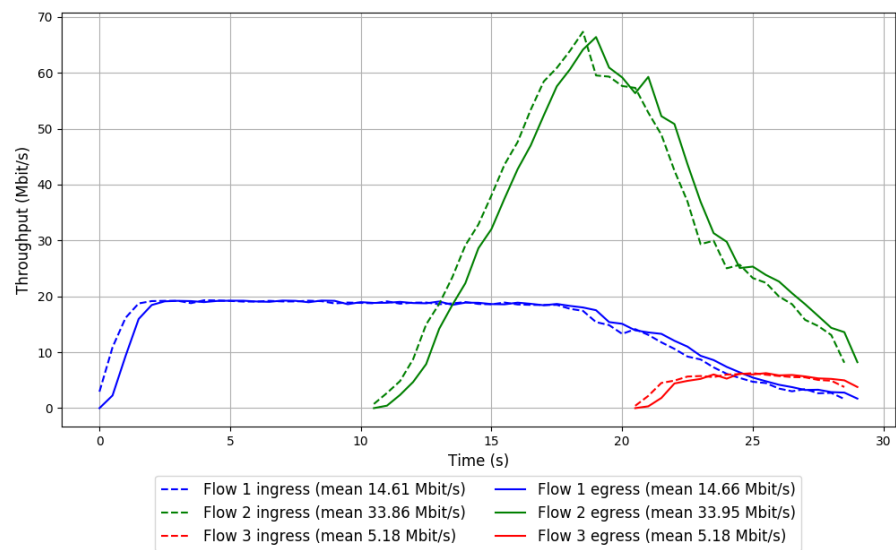


Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-19 12:45:42
End at: 2019-01-19 12:46:12
Local clock offset: 0.307 ms
Remote clock offset: -3.279 ms

Below is generated by plot.py at 2019-01-19 14:11:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 37.39 Mbit/s
95th percentile per-packet one-way delay: 76.591 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 14.66 Mbit/s
95th percentile per-packet one-way delay: 72.124 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 33.95 Mbit/s
95th percentile per-packet one-way delay: 78.552 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 72.690 ms
Loss rate: 0.78%

Run 3: Report of Indigo-MusesD — Data Link

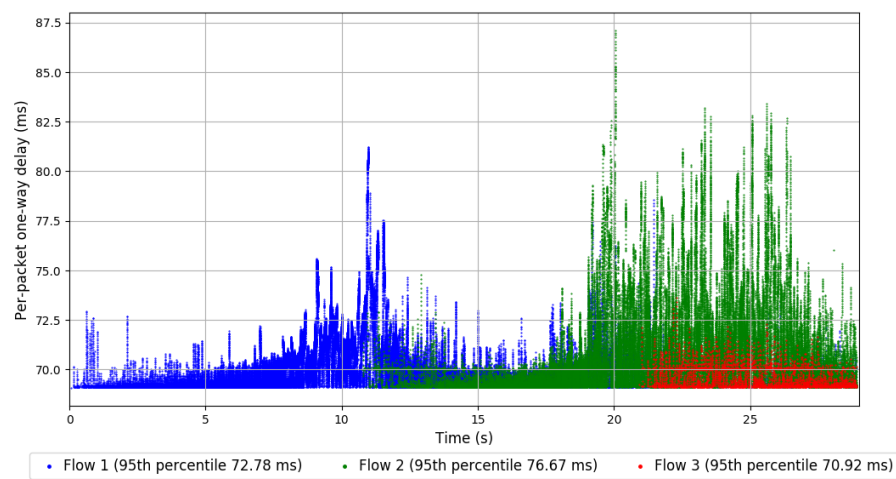
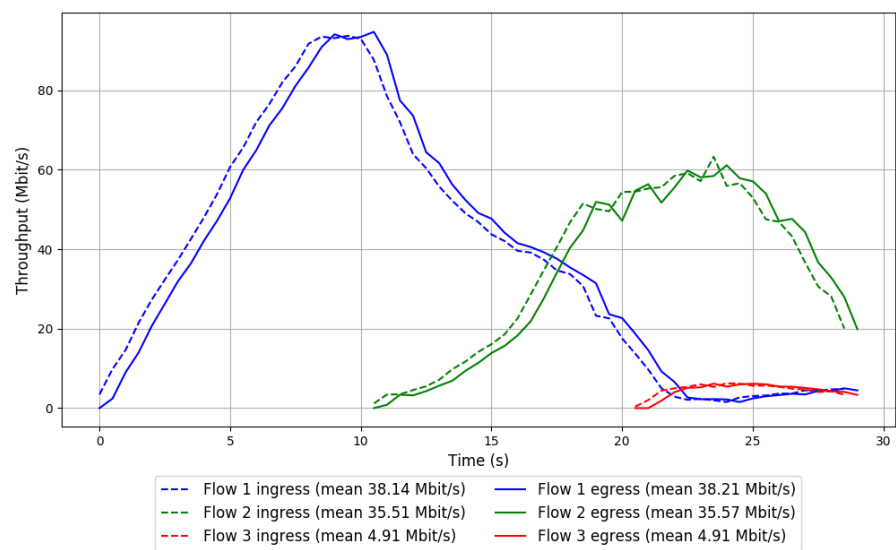


Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-19 13:15:49
End at: 2019-01-19 13:16:19
Local clock offset: 0.929 ms
Remote clock offset: -4.428 ms

Below is generated by plot.py at 2019-01-19 14:11:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 61.99 Mbit/s
95th percentile per-packet one-way delay: 74.495 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 38.21 Mbit/s
95th percentile per-packet one-way delay: 72.777 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 35.57 Mbit/s
95th percentile per-packet one-way delay: 76.665 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 4.91 Mbit/s
95th percentile per-packet one-way delay: 70.919 ms
Loss rate: 0.80%

Run 4: Report of Indigo-MusesD — Data Link

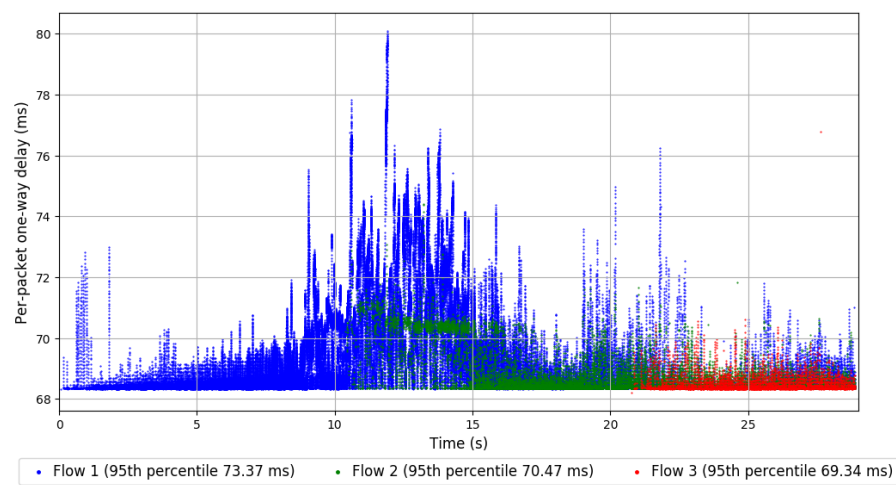
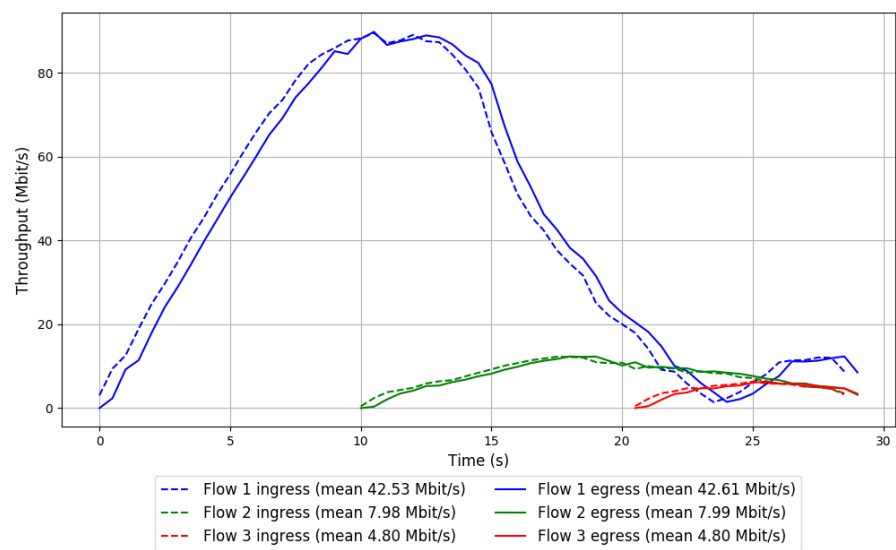


Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-19 13:43:58
End at: 2019-01-19 13:44:28
Local clock offset: -0.067 ms
Remote clock offset: -1.814 ms

Below is generated by plot.py at 2019-01-19 14:11:25
Datalink statistics
-- Total of 3 flows:
Average throughput: 49.09 Mbit/s
95th percentile per-packet one-way delay: 73.130 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 42.61 Mbit/s
95th percentile per-packet one-way delay: 73.371 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 70.471 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 4.80 Mbit/s
95th percentile per-packet one-way delay: 69.338 ms
Loss rate: 0.89%

Run 5: Report of Indigo-MusesD — Data Link

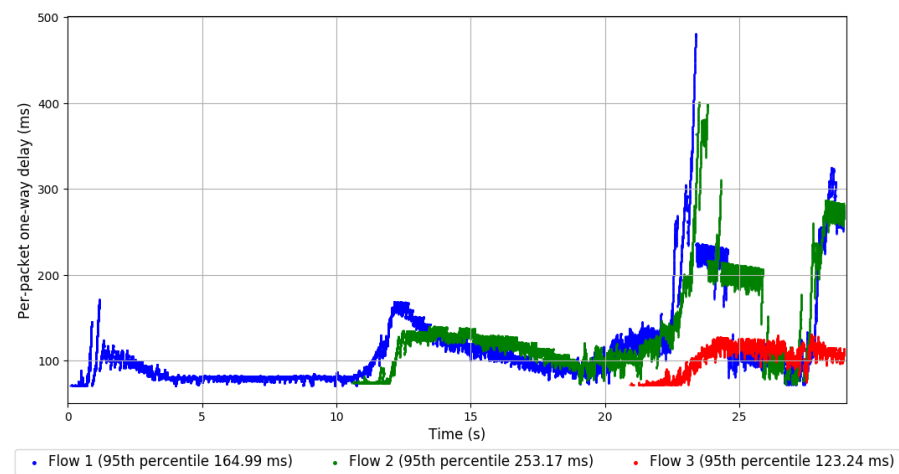
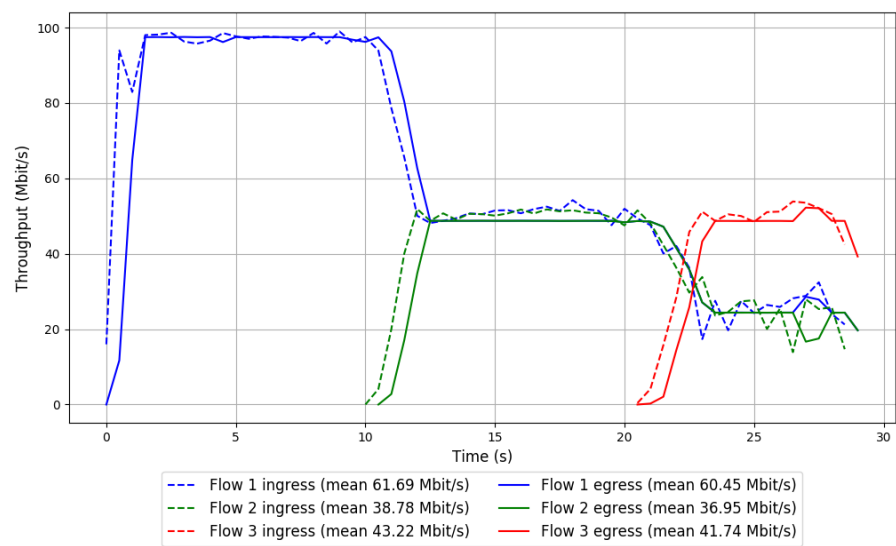


Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-19 11:37:11
End at: 2019-01-19 11:37:41
Local clock offset: 3.089 ms
Remote clock offset: -3.443 ms

Below is generated by plot.py at 2019-01-19 14:11:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.53 Mbit/s
95th percentile per-packet one-way delay: 205.379 ms
Loss rate: 3.07%
-- Flow 1:
Average throughput: 60.45 Mbit/s
95th percentile per-packet one-way delay: 164.993 ms
Loss rate: 2.25%
-- Flow 2:
Average throughput: 36.95 Mbit/s
95th percentile per-packet one-way delay: 253.173 ms
Loss rate: 4.52%
-- Flow 3:
Average throughput: 41.74 Mbit/s
95th percentile per-packet one-way delay: 123.238 ms
Loss rate: 4.34%

Run 1: Report of Indigo-MusesT — Data Link

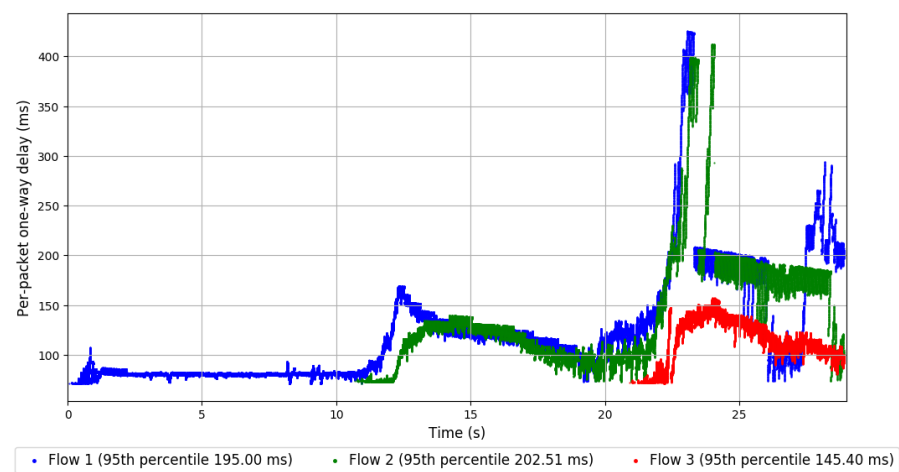
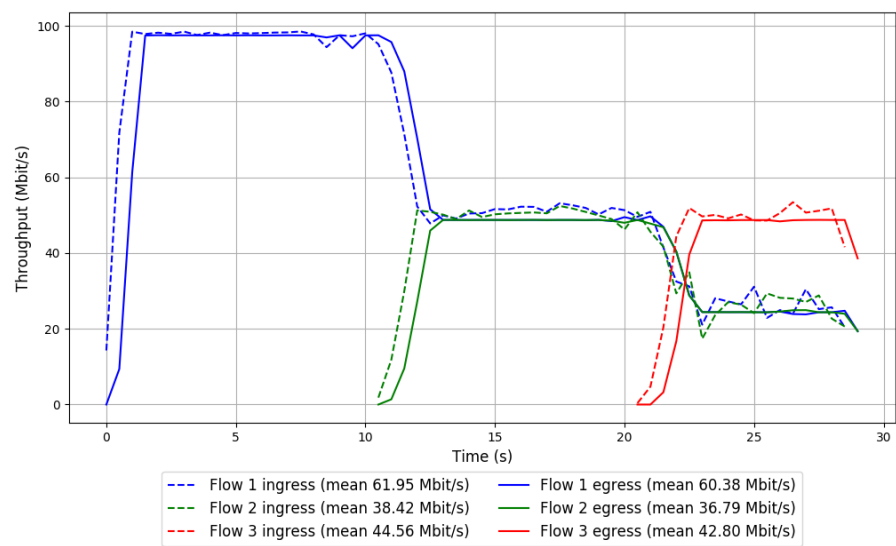


Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-19 12:06:43
End at: 2019-01-19 12:07:13
Local clock offset: 2.322 ms
Remote clock offset: -3.658 ms

Below is generated by plot.py at 2019-01-19 14:12:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.45 Mbit/s
95th percentile per-packet one-way delay: 195.484 ms
Loss rate: 3.49%
-- Flow 1:
Average throughput: 60.38 Mbit/s
95th percentile per-packet one-way delay: 195.002 ms
Loss rate: 2.78%
-- Flow 2:
Average throughput: 36.79 Mbit/s
95th percentile per-packet one-way delay: 202.511 ms
Loss rate: 4.59%
-- Flow 3:
Average throughput: 42.80 Mbit/s
95th percentile per-packet one-way delay: 145.396 ms
Loss rate: 4.88%

Run 2: Report of Indigo-MusesT — Data Link

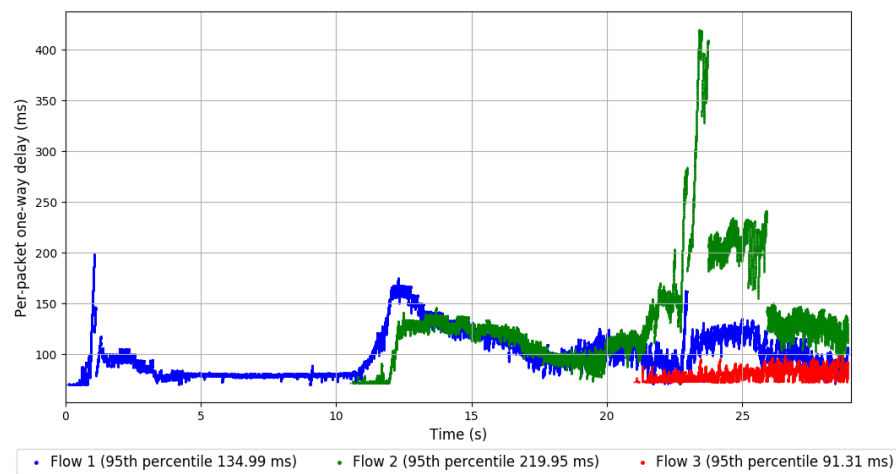
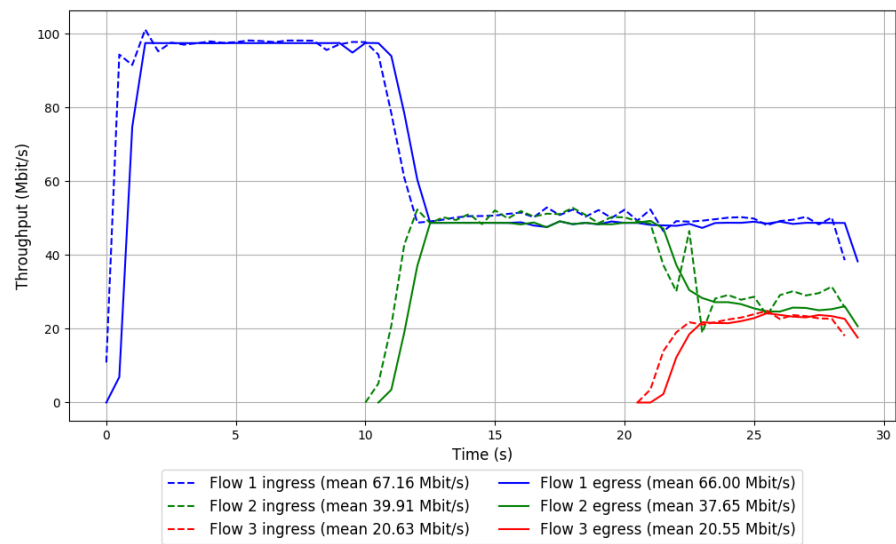


Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-19 12:37:05
End at: 2019-01-19 12:37:35
Local clock offset: -0.165 ms
Remote clock offset: -3.139 ms

Below is generated by plot.py at 2019-01-19 14:12:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.62 Mbit/s
95th percentile per-packet one-way delay: 156.098 ms
Loss rate: 3.00%
-- Flow 1:
Average throughput: 66.00 Mbit/s
95th percentile per-packet one-way delay: 134.985 ms
Loss rate: 1.99%
-- Flow 2:
Average throughput: 37.65 Mbit/s
95th percentile per-packet one-way delay: 219.950 ms
Loss rate: 6.05%
-- Flow 3:
Average throughput: 20.55 Mbit/s
95th percentile per-packet one-way delay: 91.305 ms
Loss rate: 1.30%

Run 3: Report of Indigo-MusesT — Data Link

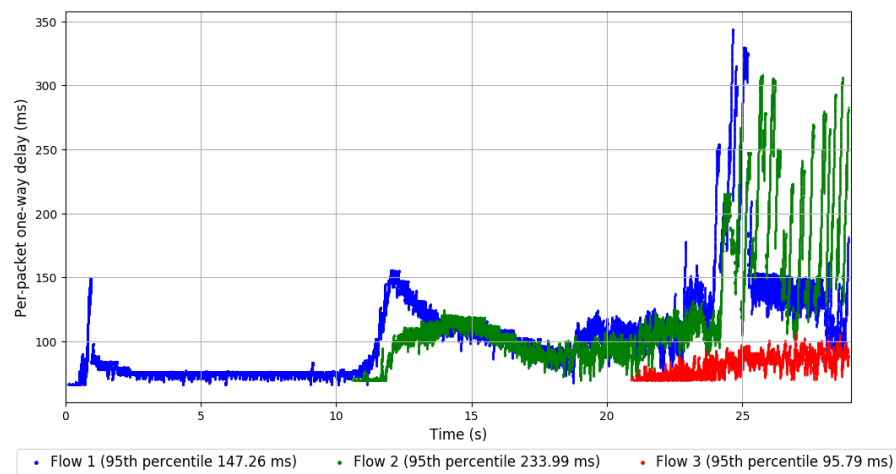
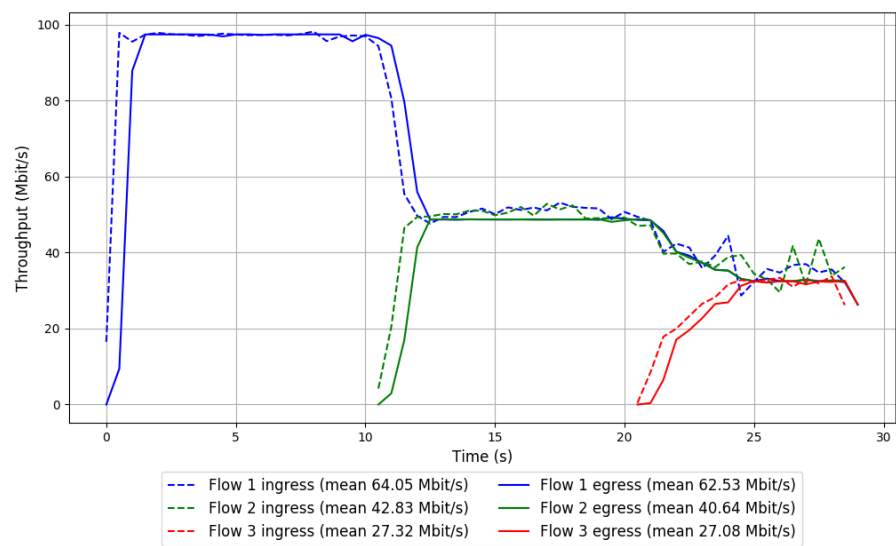


Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-19 13:07:49
End at: 2019-01-19 13:08:19
Local clock offset: 0.482 ms
Remote clock offset: -4.461 ms

Below is generated by plot.py at 2019-01-19 14:12:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.91 Mbit/s
95th percentile per-packet one-way delay: 168.069 ms
Loss rate: 3.31%
-- Flow 1:
Average throughput: 62.53 Mbit/s
95th percentile per-packet one-way delay: 147.256 ms
Loss rate: 2.62%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 233.988 ms
Loss rate: 5.39%
-- Flow 3:
Average throughput: 27.08 Mbit/s
95th percentile per-packet one-way delay: 95.789 ms
Loss rate: 1.78%

Run 4: Report of Indigo-MusesT — Data Link

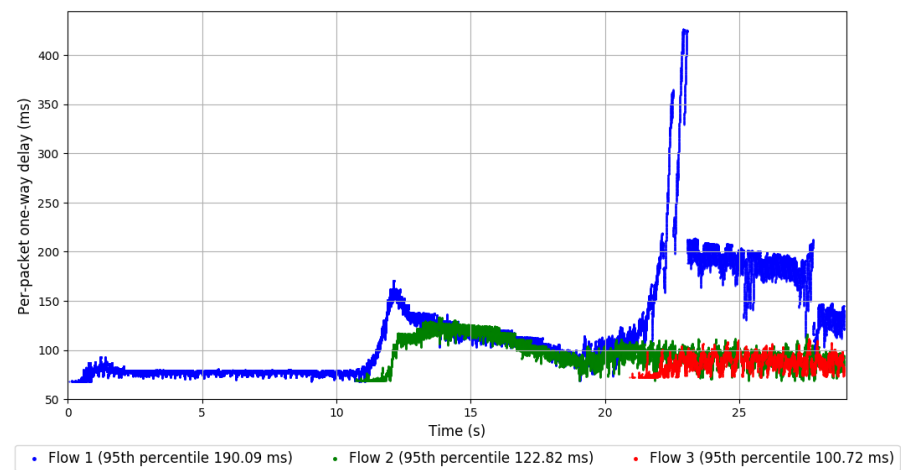
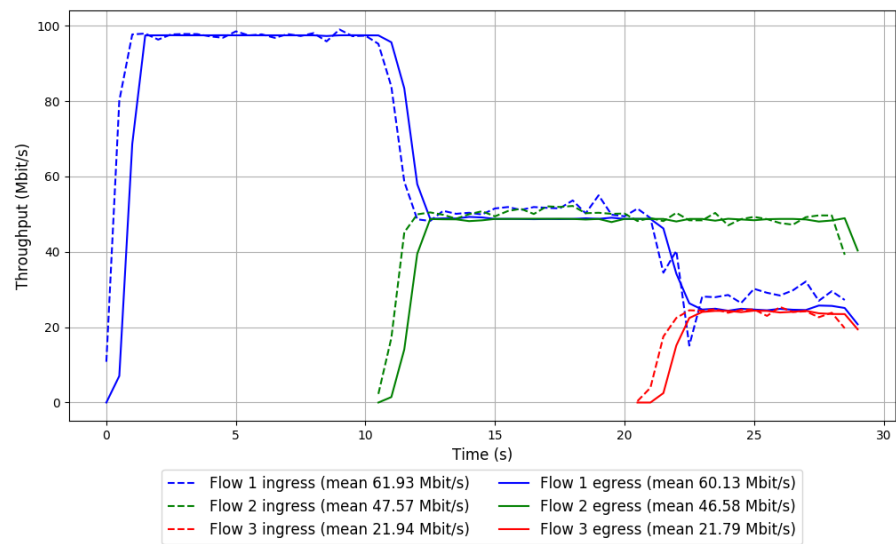


Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-19 13:36:04
End at: 2019-01-19 13:36:34
Local clock offset: 1.269 ms
Remote clock offset: -2.482 ms

Below is generated by plot.py at 2019-01-19 14:12:12
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 167.103 ms
Loss rate: 2.84%
-- Flow 1:
Average throughput: 60.13 Mbit/s
95th percentile per-packet one-way delay: 190.093 ms
Loss rate: 3.14%
-- Flow 2:
Average throughput: 46.58 Mbit/s
95th percentile per-packet one-way delay: 122.824 ms
Loss rate: 2.48%
-- Flow 3:
Average throughput: 21.79 Mbit/s
95th percentile per-packet one-way delay: 100.718 ms
Loss rate: 1.68%

Run 5: Report of Indigo-MusesT — Data Link

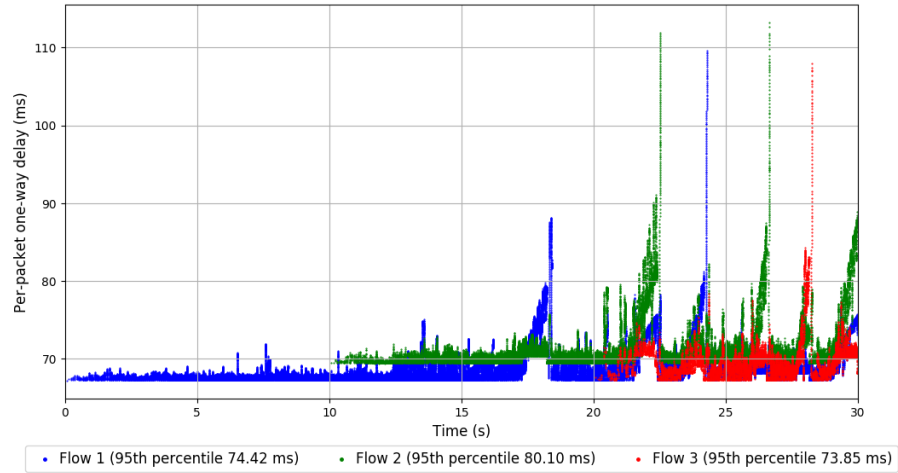
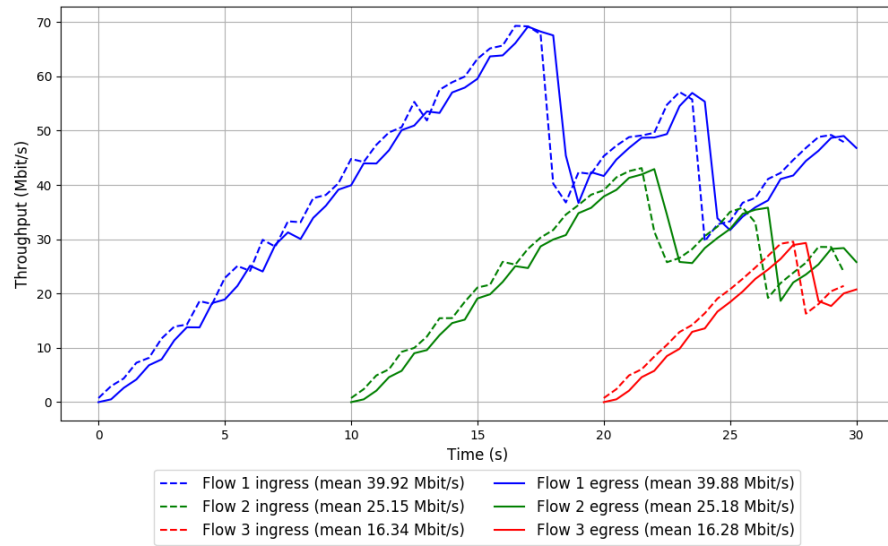


Run 1: Statistics of LEDBAT

Start at: 2019-01-19 11:44:12
End at: 2019-01-19 11:44:42
Local clock offset: 1.667 ms
Remote clock offset: -2.834 ms

Below is generated by plot.py at 2019-01-19 14:12:12
Datalink statistics
-- Total of 3 flows:
Average throughput: 62.02 Mbit/s
95th percentile per-packet one-way delay: 75.739 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 39.88 Mbit/s
95th percentile per-packet one-way delay: 74.416 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 25.18 Mbit/s
95th percentile per-packet one-way delay: 80.103 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 16.28 Mbit/s
95th percentile per-packet one-way delay: 73.852 ms
Loss rate: 1.10%

Run 1: Report of LEDBAT — Data Link

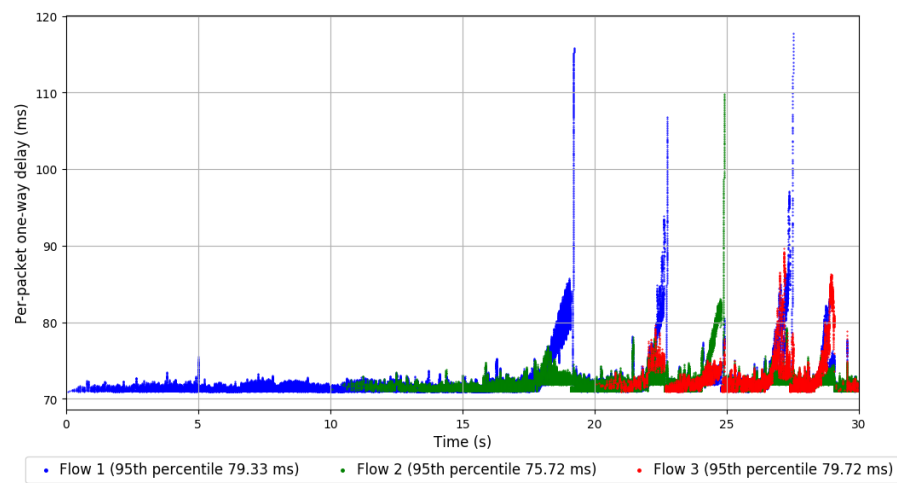
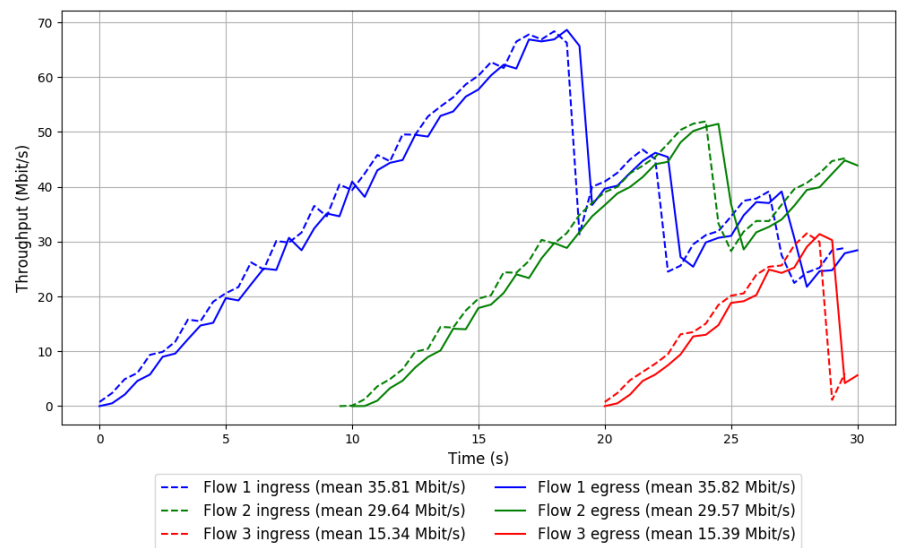


Run 2: Statistics of LEDBAT

Start at: 2019-01-19 12:14:30
End at: 2019-01-19 12:15:00
Local clock offset: 2.424 ms
Remote clock offset: -2.981 ms

Below is generated by plot.py at 2019-01-19 14:12:12
Datalink statistics
-- Total of 3 flows:
Average throughput: 60.58 Mbit/s
95th percentile per-packet one-way delay: 78.352 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 35.82 Mbit/s
95th percentile per-packet one-way delay: 79.328 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 29.57 Mbit/s
95th percentile per-packet one-way delay: 75.717 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 15.39 Mbit/s
95th percentile per-packet one-way delay: 79.721 ms
Loss rate: 0.50%

Run 2: Report of LEDBAT — Data Link

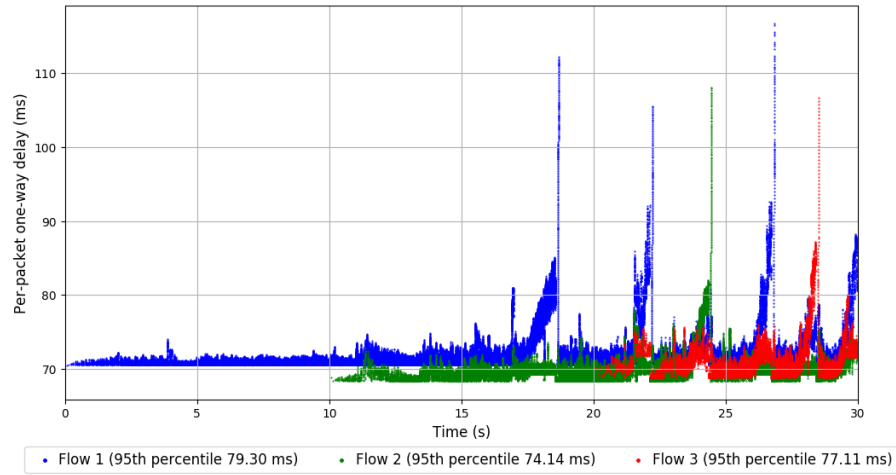
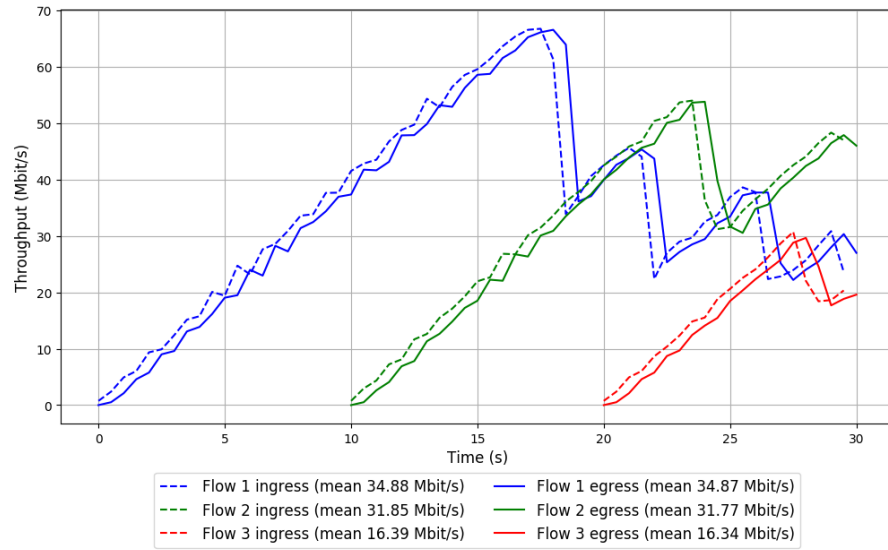


Run 3: Statistics of LEDBAT

Start at: 2019-01-19 12:44:17
End at: 2019-01-19 12:44:47
Local clock offset: 0.295 ms
Remote clock offset: -3.169 ms

Below is generated by plot.py at 2019-01-19 14:12:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 61.42 Mbit/s
95th percentile per-packet one-way delay: 77.828 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 34.87 Mbit/s
95th percentile per-packet one-way delay: 79.298 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 31.77 Mbit/s
95th percentile per-packet one-way delay: 74.141 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 16.34 Mbit/s
95th percentile per-packet one-way delay: 77.114 ms
Loss rate: 1.05%

Run 3: Report of LEDBAT — Data Link

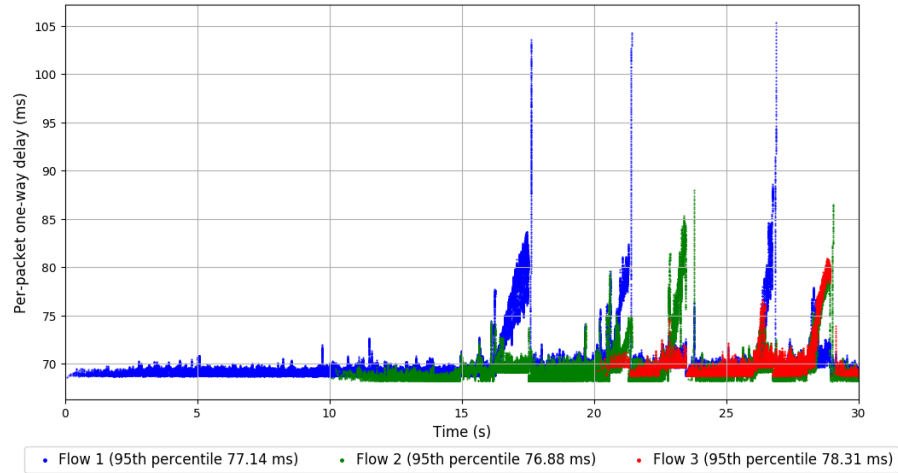
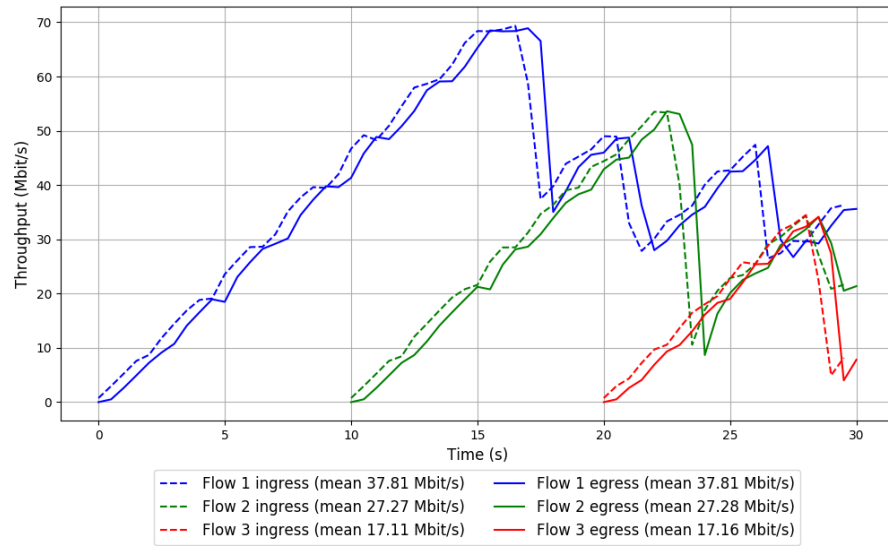


Run 4: Statistics of LEDBAT

Start at: 2019-01-19 13:14:31
End at: 2019-01-19 13:15:01
Local clock offset: 0.918 ms
Remote clock offset: -3.629 ms

Below is generated by plot.py at 2019-01-19 14:12:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 61.62 Mbit/s
95th percentile per-packet one-way delay: 77.184 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 37.81 Mbit/s
95th percentile per-packet one-way delay: 77.136 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 27.28 Mbit/s
95th percentile per-packet one-way delay: 76.884 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 17.16 Mbit/s
95th percentile per-packet one-way delay: 78.315 ms
Loss rate: 0.42%

Run 4: Report of LEDBAT — Data Link

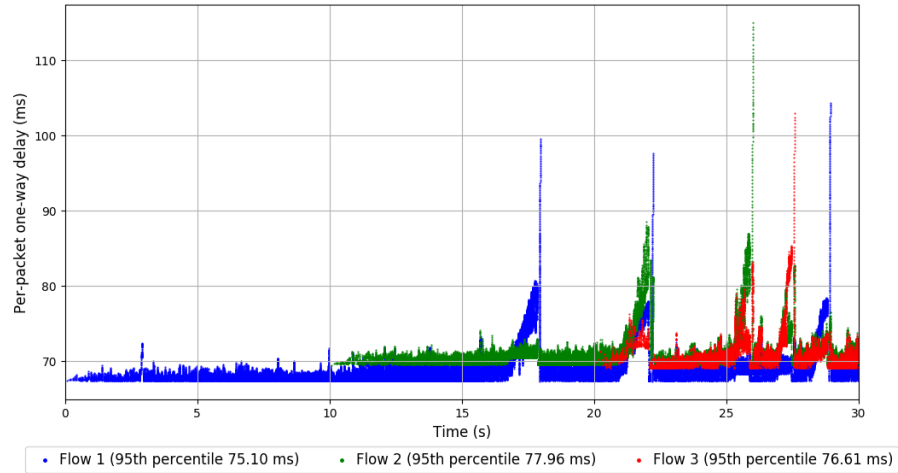
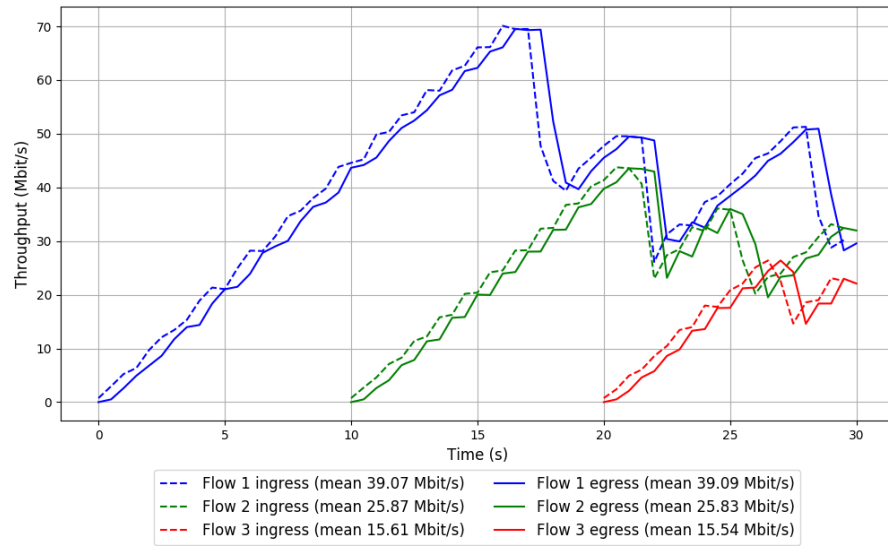


Run 5: Statistics of LEDBAT

Start at: 2019-01-19 13:42:42
End at: 2019-01-19 13:43:12
Local clock offset: 0.816 ms
Remote clock offset: -1.721 ms

Below is generated by plot.py at 2019-01-19 14:12:40
Datalink statistics
-- Total of 3 flows:
Average throughput: 61.41 Mbit/s
95th percentile per-packet one-way delay: 75.855 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 39.09 Mbit/s
95th percentile per-packet one-way delay: 75.099 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 25.83 Mbit/s
95th percentile per-packet one-way delay: 77.964 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 15.54 Mbit/s
95th percentile per-packet one-way delay: 76.613 ms
Loss rate: 1.22%

Run 5: Report of LEDBAT — Data Link

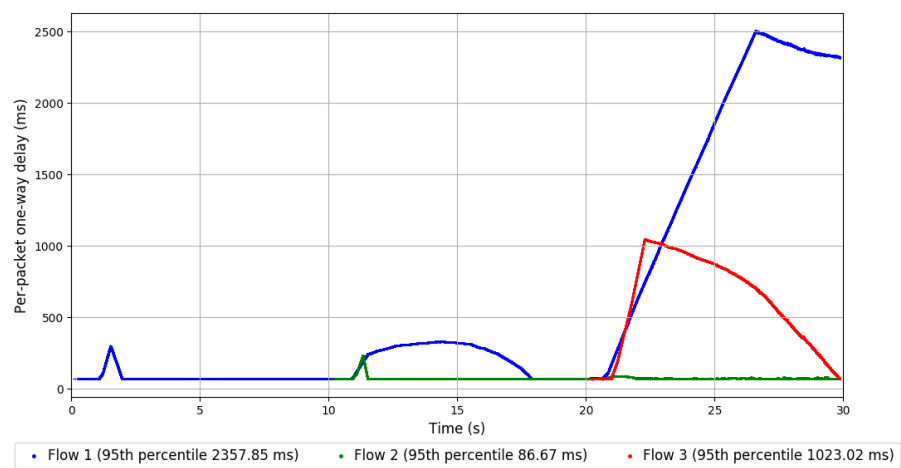
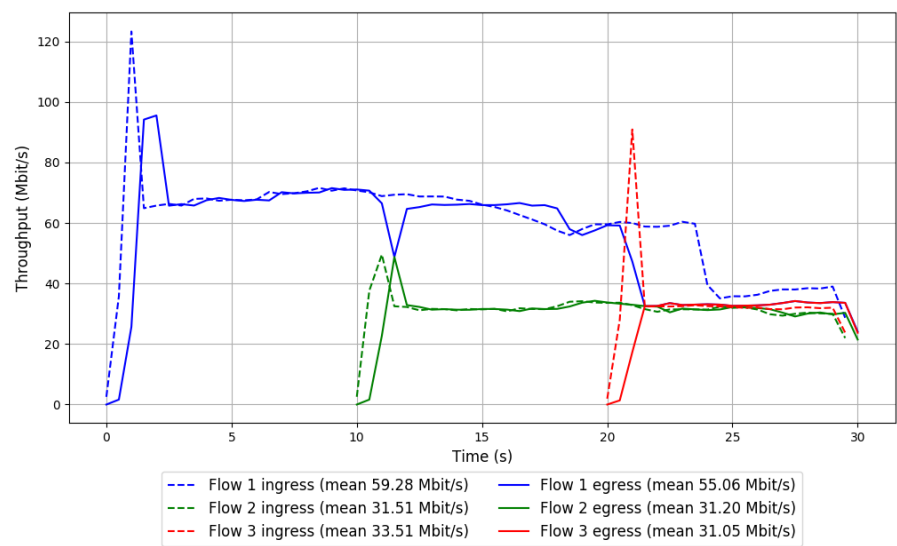


Run 1: Statistics of PCC-Allegro

Start at: 2019-01-19 11:54:04
End at: 2019-01-19 11:54:34
Local clock offset: 0.005 ms
Remote clock offset: -2.924 ms

Below is generated by plot.py at 2019-01-19 14:13:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.96 Mbit/s
95th percentile per-packet one-way delay: 2263.753 ms
Loss rate: 6.06%
-- Flow 1:
Average throughput: 55.06 Mbit/s
95th percentile per-packet one-way delay: 2357.853 ms
Loss rate: 7.36%
-- Flow 2:
Average throughput: 31.20 Mbit/s
95th percentile per-packet one-way delay: 86.674 ms
Loss rate: 1.37%
-- Flow 3:
Average throughput: 31.05 Mbit/s
95th percentile per-packet one-way delay: 1023.021 ms
Loss rate: 8.02%

Run 1: Report of PCC-Allegro — Data Link

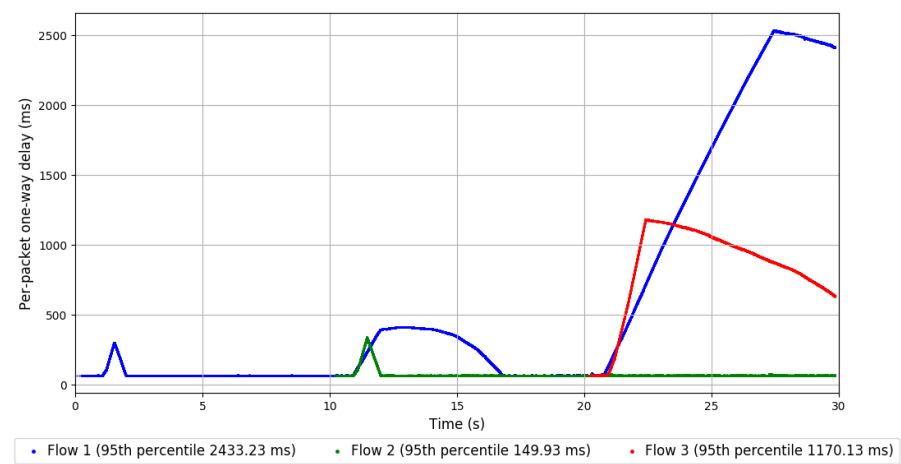
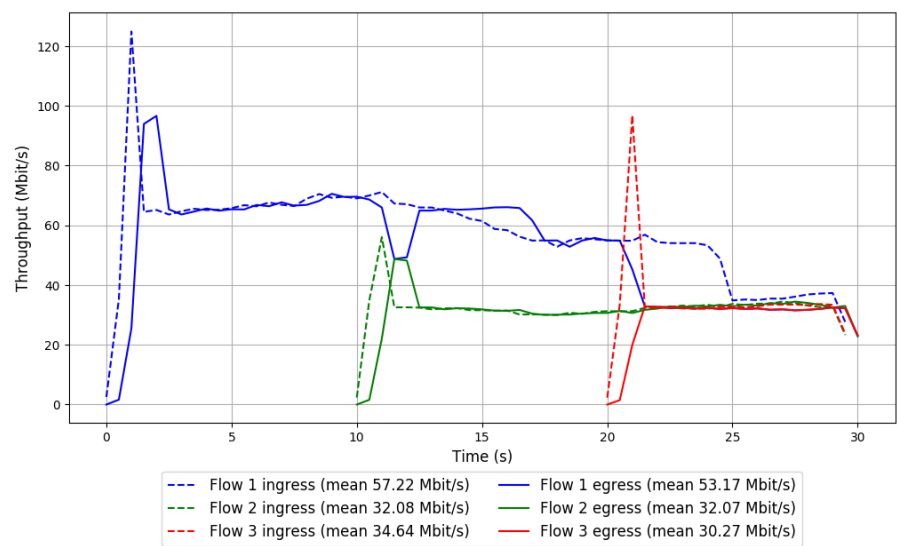


Run 2: Statistics of PCC-Allegro

Start at: 2019-01-19 12:24:26
End at: 2019-01-19 12:24:56
Local clock offset: -0.777 ms
Remote clock offset: -2.157 ms

Below is generated by plot.py at 2019-01-19 14:13:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 84.39 Mbit/s
95th percentile per-packet one-way delay: 2002.423 ms
Loss rate: 6.45%
-- Flow 1:
Average throughput: 53.17 Mbit/s
95th percentile per-packet one-way delay: 2433.228 ms
Loss rate: 7.32%
-- Flow 2:
Average throughput: 32.07 Mbit/s
95th percentile per-packet one-way delay: 149.934 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 30.27 Mbit/s
95th percentile per-packet one-way delay: 1170.131 ms
Loss rate: 13.29%

Run 2: Report of PCC-Allegro — Data Link

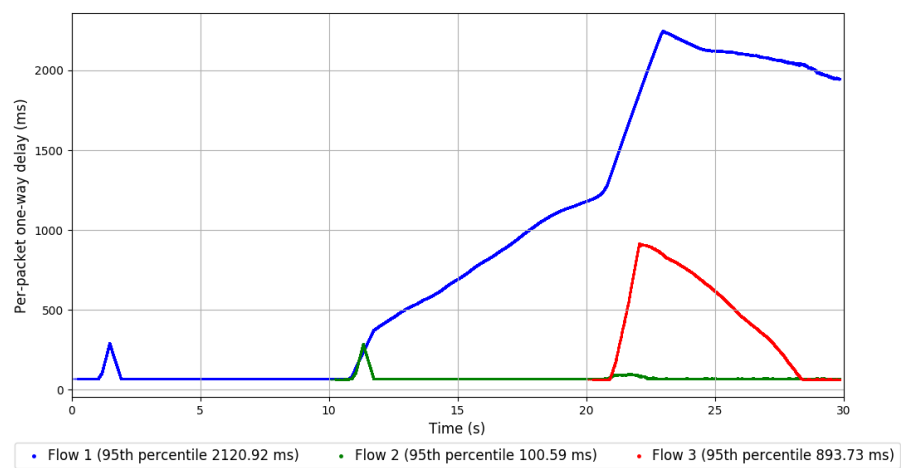
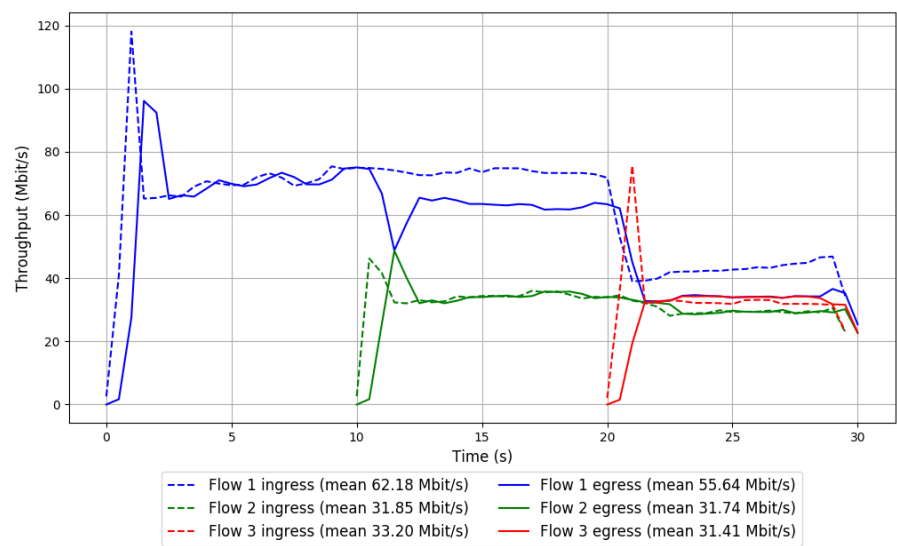


Run 3: Statistics of PCC-Allegro

Start at: 2019-01-19 12:54:46
End at: 2019-01-19 12:55:16
Local clock offset: -1.472 ms
Remote clock offset: -4.075 ms

Below is generated by plot.py at 2019-01-19 14:13:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.02 Mbit/s
95th percentile per-packet one-way delay: 2093.437 ms
Loss rate: 7.93%
-- Flow 1:
Average throughput: 55.64 Mbit/s
95th percentile per-packet one-way delay: 2120.917 ms
Loss rate: 10.72%
-- Flow 2:
Average throughput: 31.74 Mbit/s
95th percentile per-packet one-way delay: 100.589 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 31.41 Mbit/s
95th percentile per-packet one-way delay: 893.726 ms
Loss rate: 6.09%

Run 3: Report of PCC-Allegro — Data Link

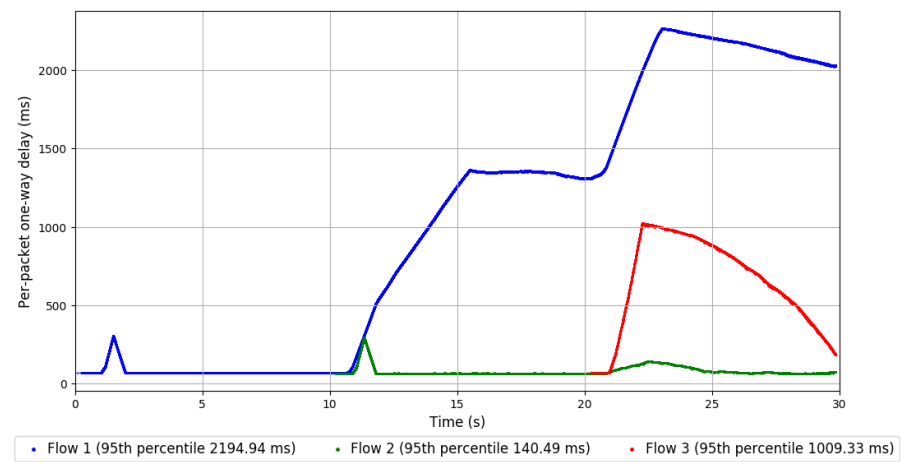
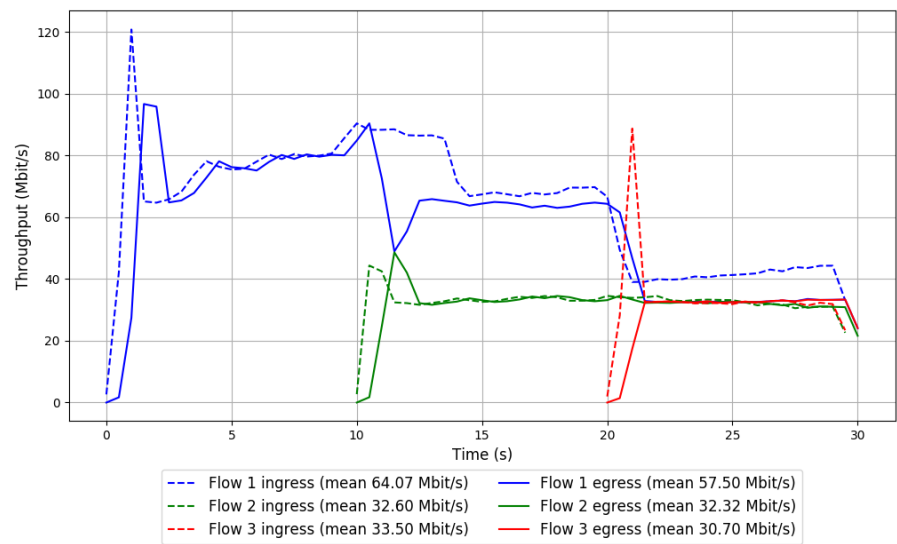


Run 4: Statistics of PCC-Allegro

Start at: 2019-01-19 13:23:52
End at: 2019-01-19 13:24:22
Local clock offset: -1.119 ms
Remote clock offset: -2.636 ms

Below is generated by plot.py at 2019-01-19 14:13:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.03 Mbit/s
95th percentile per-packet one-way delay: 2151.030 ms
Loss rate: 8.25%
-- Flow 1:
Average throughput: 57.50 Mbit/s
95th percentile per-packet one-way delay: 2194.937 ms
Loss rate: 10.47%
-- Flow 2:
Average throughput: 32.32 Mbit/s
95th percentile per-packet one-way delay: 140.485 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 30.70 Mbit/s
95th percentile per-packet one-way delay: 1009.327 ms
Loss rate: 9.13%

Run 4: Report of PCC-Allegro — Data Link

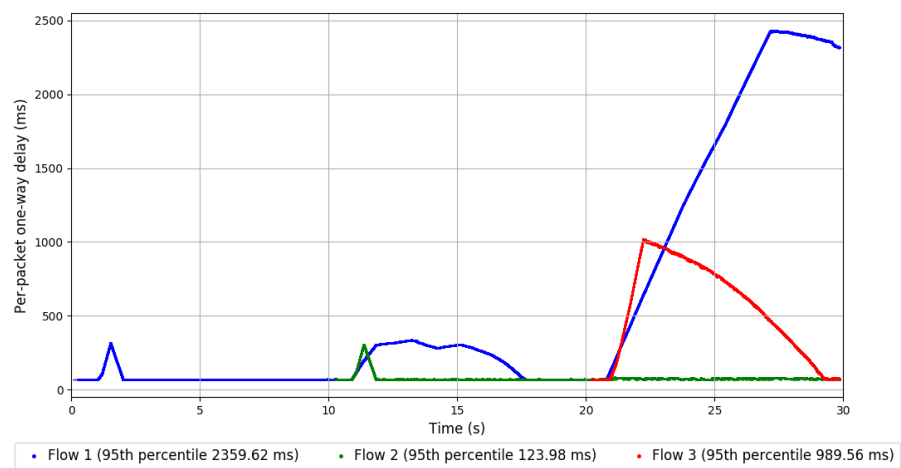
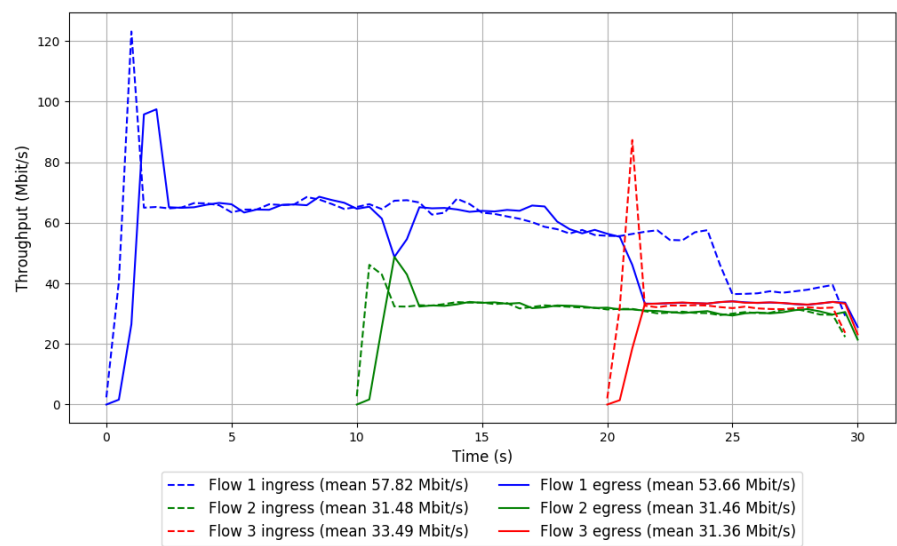


Run 5: Statistics of PCC-Allegro

Start at: 2019-01-19 13:52:21
End at: 2019-01-19 13:52:51
Local clock offset: 1.245 ms
Remote clock offset: -2.837 ms

Below is generated by plot.py at 2019-01-19 14:13:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 84.84 Mbit/s
95th percentile per-packet one-way delay: 2029.043 ms
Loss rate: 5.75%
-- Flow 1:
Average throughput: 53.66 Mbit/s
95th percentile per-packet one-way delay: 2359.622 ms
Loss rate: 7.43%
-- Flow 2:
Average throughput: 31.46 Mbit/s
95th percentile per-packet one-way delay: 123.976 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 31.36 Mbit/s
95th percentile per-packet one-way delay: 989.563 ms
Loss rate: 7.07%

Run 5: Report of PCC-Allegro — Data Link

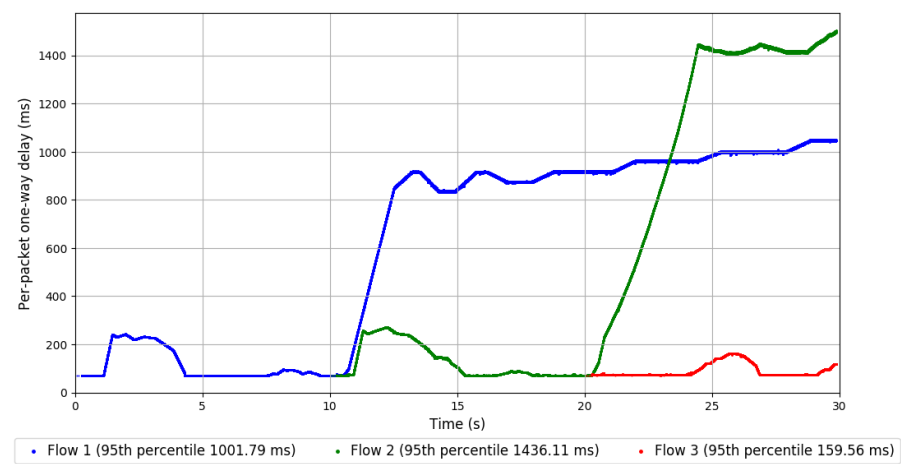
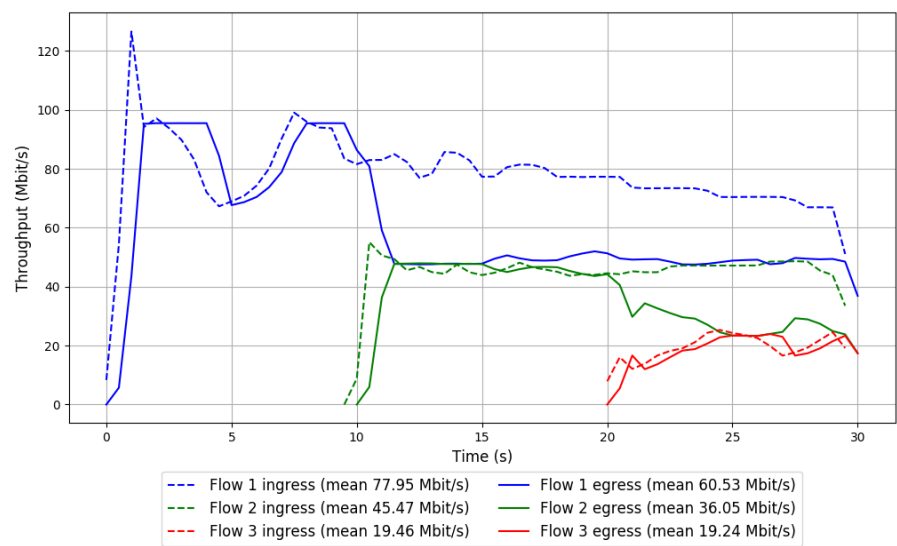



```
Run 1: Statistics of PCC-Expr

Start at: 2019-01-19 11:58:05
End at: 2019-01-19 11:58:35
Local clock offset: 1.669 ms
Remote clock offset: -3.698 ms

# Below is generated by plot.py at 2019-01-19 14:14:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.80 Mbit/s
95th percentile per-packet one-way delay: 1361.874 ms
Loss rate: 21.01%
-- Flow 1:
Average throughput: 60.53 Mbit/s
95th percentile per-packet one-way delay: 1001.793 ms
Loss rate: 22.57%
-- Flow 2:
Average throughput: 36.05 Mbit/s
95th percentile per-packet one-way delay: 1436.113 ms
Loss rate: 21.03%
-- Flow 3:
Average throughput: 19.24 Mbit/s
95th percentile per-packet one-way delay: 159.557 ms
Loss rate: 1.93%
```

Run 1: Report of PCC-Expr — Data Link

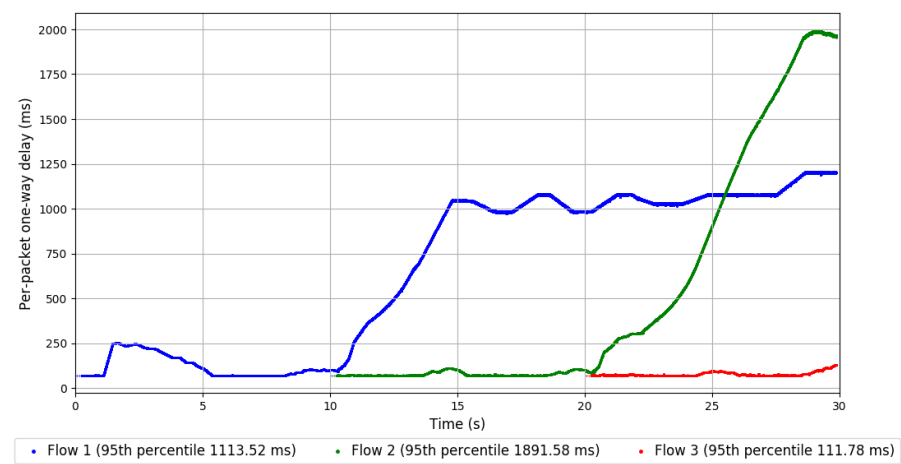
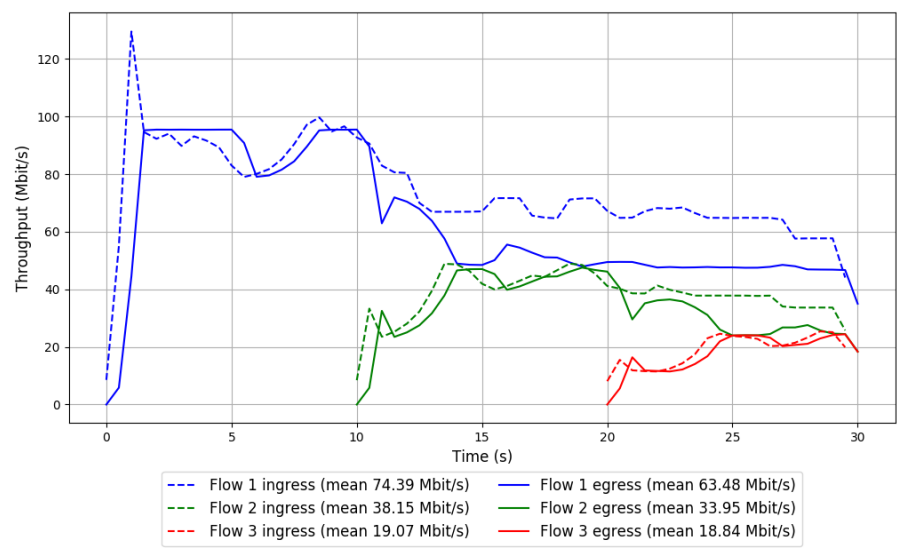


Run 2: Statistics of PCC-Expr

Start at: 2019-01-19 12:28:48
End at: 2019-01-19 12:29:18
Local clock offset: 0.934 ms
Remote clock offset: -2.716 ms

Below is generated by plot.py at 2019-01-19 14:14:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.23 Mbit/s
95th percentile per-packet one-way delay: 1200.050 ms
Loss rate: 13.28%
-- Flow 1:
Average throughput: 63.48 Mbit/s
95th percentile per-packet one-way delay: 1113.520 ms
Loss rate: 14.89%
-- Flow 2:
Average throughput: 33.95 Mbit/s
95th percentile per-packet one-way delay: 1891.576 ms
Loss rate: 11.37%
-- Flow 3:
Average throughput: 18.84 Mbit/s
95th percentile per-packet one-way delay: 111.776 ms
Loss rate: 1.95%

Run 2: Report of PCC-Expr — Data Link

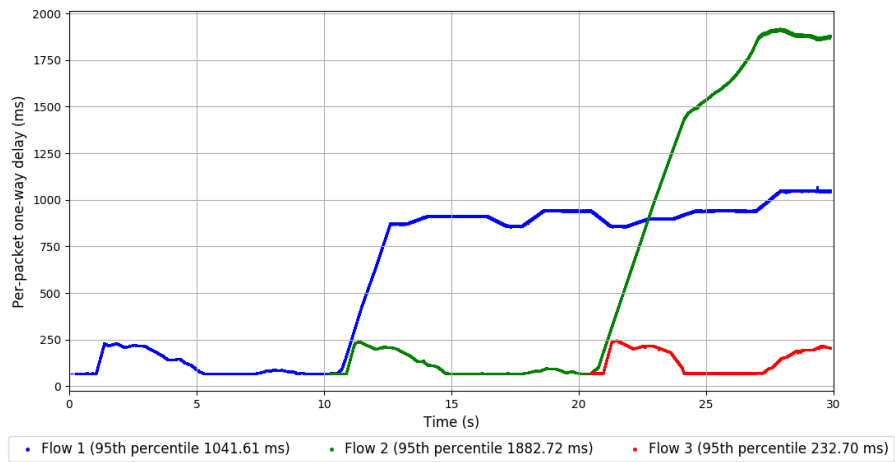
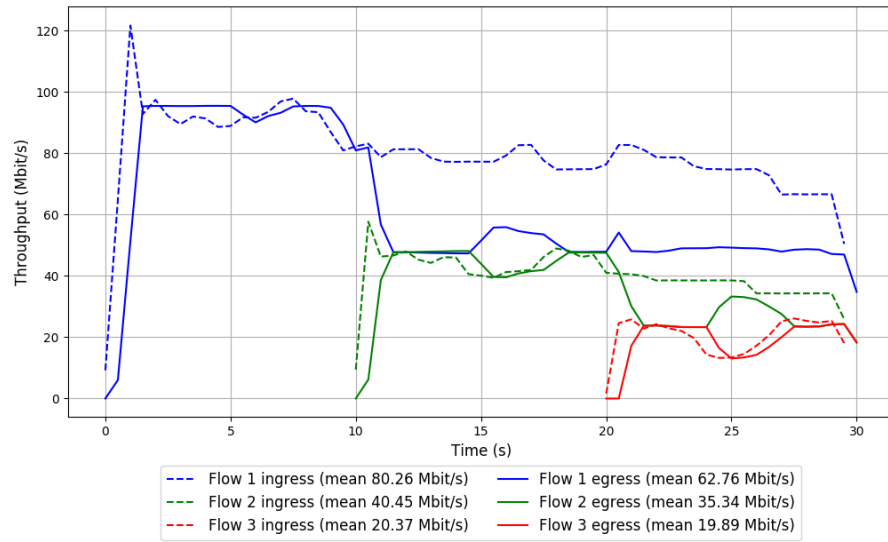


Run 3: Statistics of PCC-Expr

Start at: 2019-01-19 12:59:20
End at: 2019-01-19 12:59:50
Local clock offset: -0.242 ms
Remote clock offset: -4.843 ms

Below is generated by plot.py at 2019-01-19 14:14:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.77 Mbit/s
95th percentile per-packet one-way delay: 1501.163 ms
Loss rate: 18.74%
-- Flow 1:
Average throughput: 62.76 Mbit/s
95th percentile per-packet one-way delay: 1041.605 ms
Loss rate: 21.99%
-- Flow 2:
Average throughput: 35.34 Mbit/s
95th percentile per-packet one-way delay: 1882.723 ms
Loss rate: 12.95%
-- Flow 3:
Average throughput: 19.89 Mbit/s
95th percentile per-packet one-way delay: 232.701 ms
Loss rate: 3.11%

Run 3: Report of PCC-Expr — Data Link

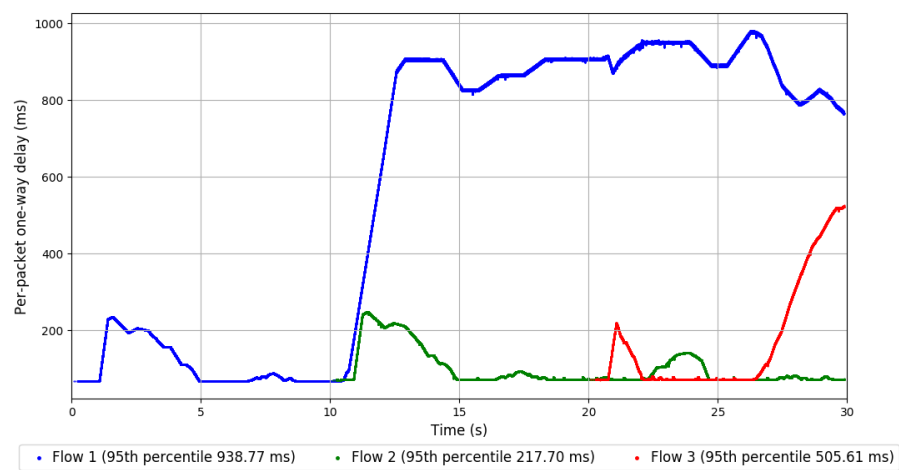
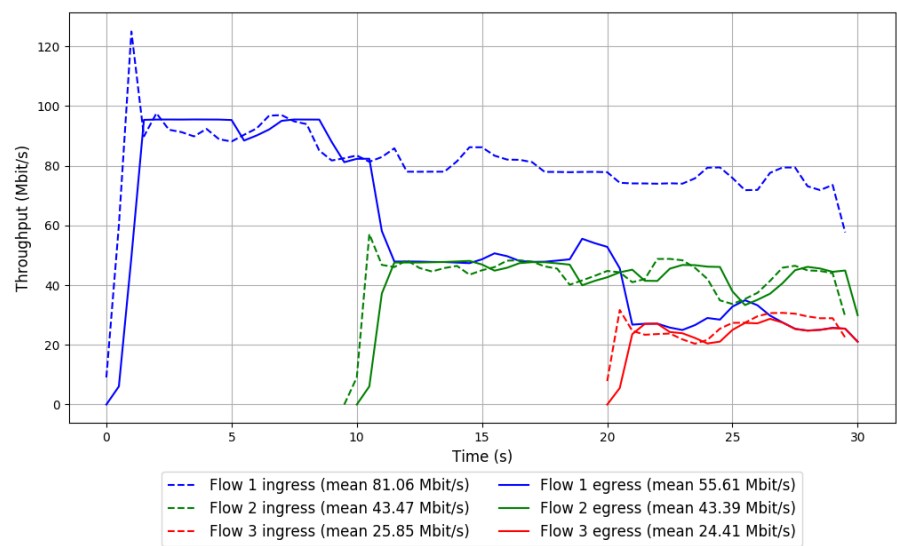


Run 4: Statistics of PCC-Expr

Start at: 2019-01-19 13:27:38
End at: 2019-01-19 13:28:08
Local clock offset: 0.909 ms
Remote clock offset: -3.017 ms

Below is generated by plot.py at 2019-01-19 14:15:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.46 Mbit/s
95th percentile per-packet one-way delay: 909.111 ms
Loss rate: 22.18%
-- Flow 1:
Average throughput: 55.61 Mbit/s
95th percentile per-packet one-way delay: 938.769 ms
Loss rate: 31.56%
-- Flow 2:
Average throughput: 43.39 Mbit/s
95th percentile per-packet one-way delay: 217.701 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 24.41 Mbit/s
95th percentile per-packet one-way delay: 505.613 ms
Loss rate: 6.31%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2019-01-19 13:56:10

End at: 2019-01-19 13:56:40

Local clock offset: -5.724 ms

Remote clock offset: -7.54 ms

Below is generated by plot.py at 2019-01-19 14:15:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.53 Mbit/s

95th percentile per-packet one-way delay: 939.715 ms

Loss rate: 21.94%

-- Flow 1:

Average throughput: 54.99 Mbit/s

95th percentile per-packet one-way delay: 976.763 ms

Loss rate: 31.03%

-- Flow 2:

Average throughput: 45.05 Mbit/s

95th percentile per-packet one-way delay: 526.851 ms

Loss rate: 3.80%

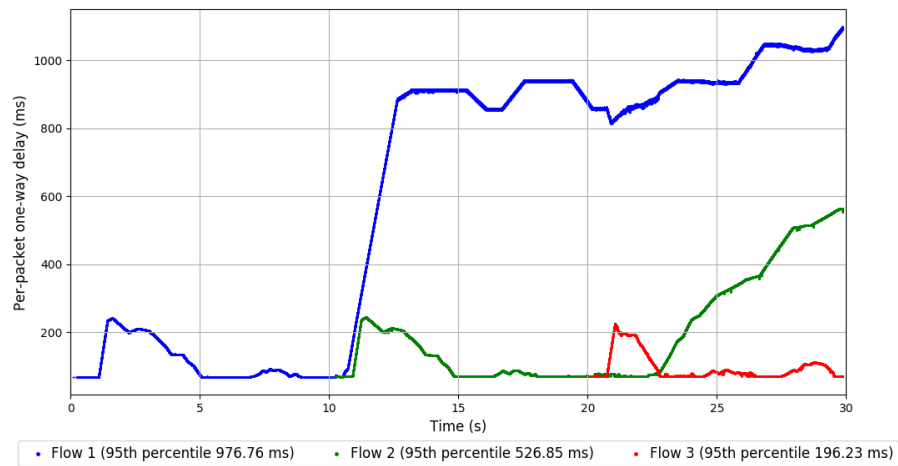
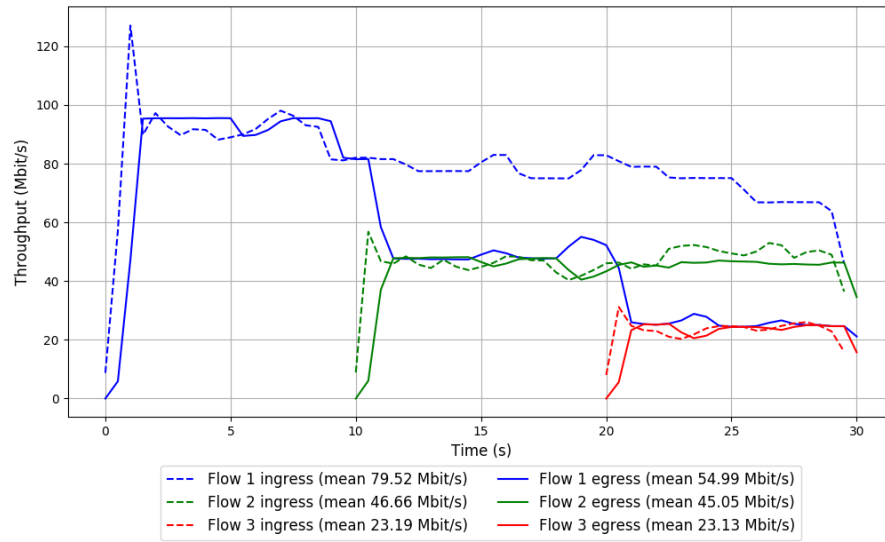
-- Flow 3:

Average throughput: 23.13 Mbit/s

95th percentile per-packet one-way delay: 196.232 ms

Loss rate: 1.05%

Run 5: Report of PCC-Expr — Data Link

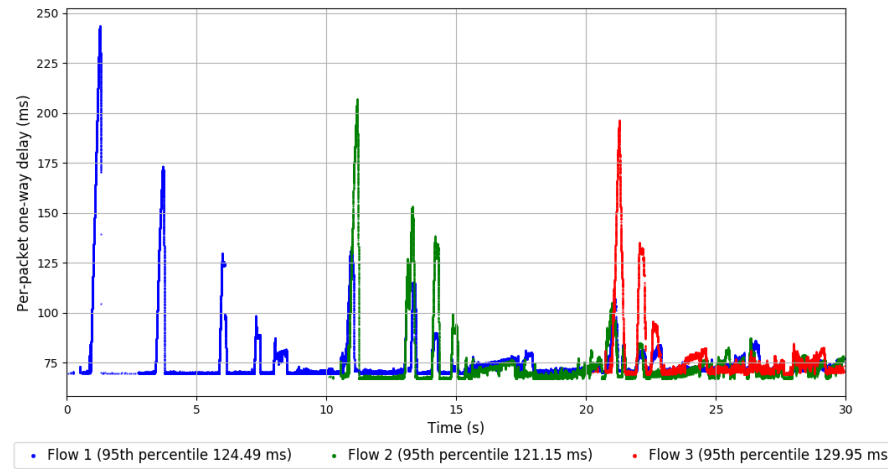
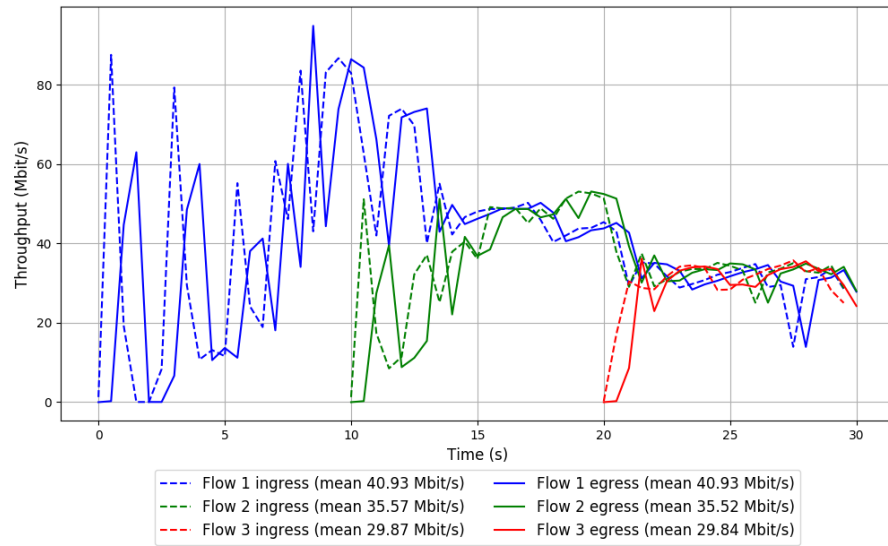


Run 1: Statistics of QUIC Cubic

Start at: 2019-01-19 11:59:36
End at: 2019-01-19 12:00:06
Local clock offset: 0.607 ms
Remote clock offset: -3.258 ms

Below is generated by plot.py at 2019-01-19 14:15:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 74.19 Mbit/s
95th percentile per-packet one-way delay: 124.416 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 40.93 Mbit/s
95th percentile per-packet one-way delay: 124.489 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 35.52 Mbit/s
95th percentile per-packet one-way delay: 121.150 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 29.84 Mbit/s
95th percentile per-packet one-way delay: 129.948 ms
Loss rate: 0.92%

Run 1: Report of QUIC Cubic — Data Link

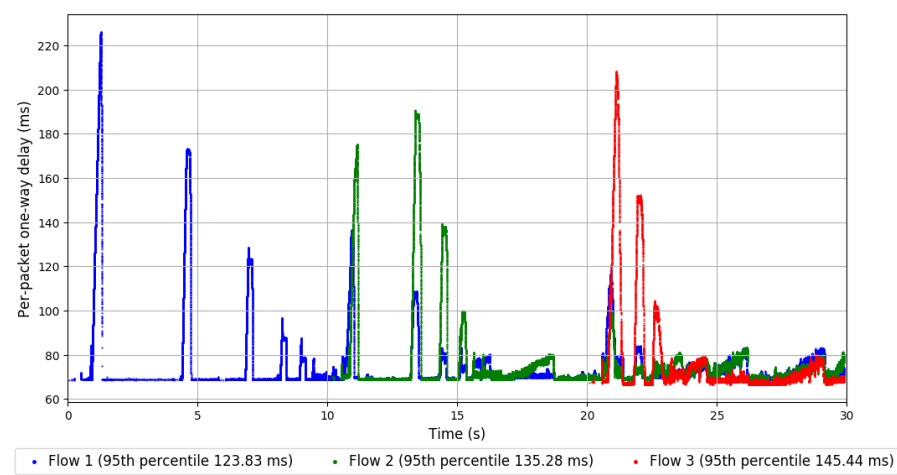
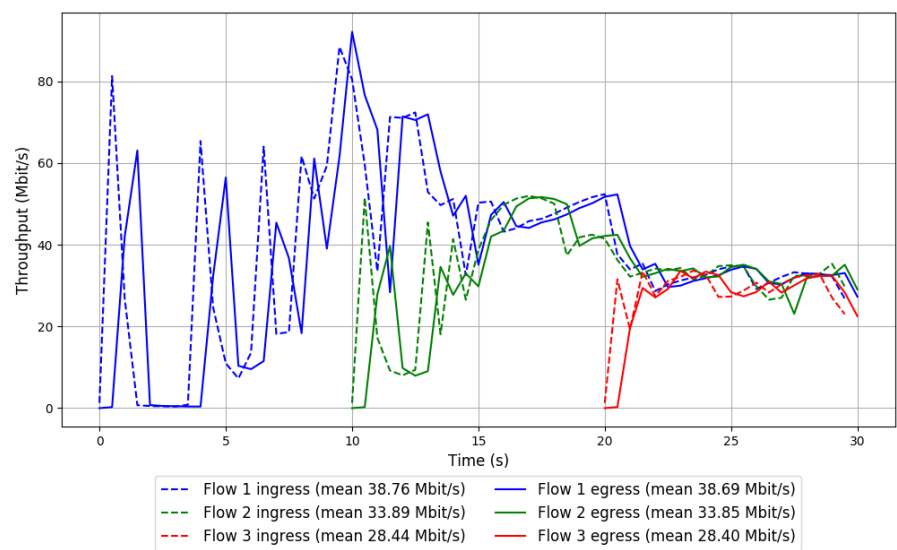


Run 2: Statistics of QUIC Cubic

Start at: 2019-01-19 12:30:21
End at: 2019-01-19 12:30:51
Local clock offset: -0.65 ms
Remote clock offset: -2.756 ms

Below is generated by plot.py at 2019-01-19 14:15:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 70.52 Mbit/s
95th percentile per-packet one-way delay: 132.114 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 38.69 Mbit/s
95th percentile per-packet one-way delay: 123.827 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 33.85 Mbit/s
95th percentile per-packet one-way delay: 135.280 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 28.40 Mbit/s
95th percentile per-packet one-way delay: 145.445 ms
Loss rate: 0.90%

Run 2: Report of QUIC Cubic — Data Link

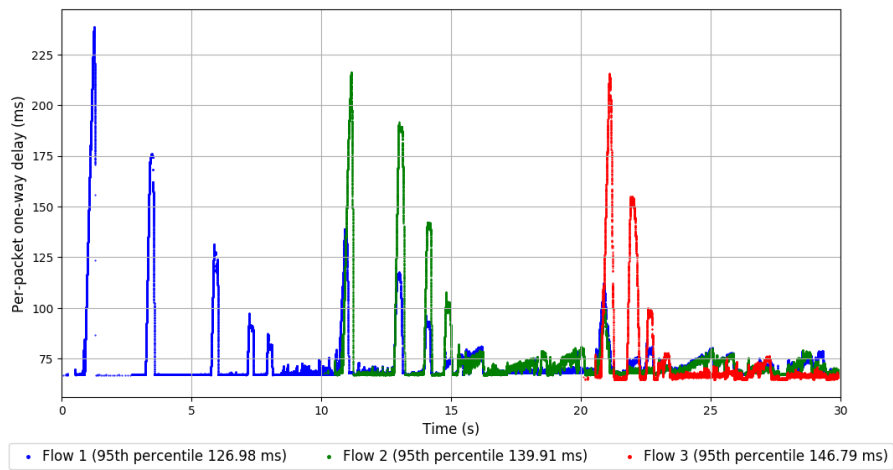
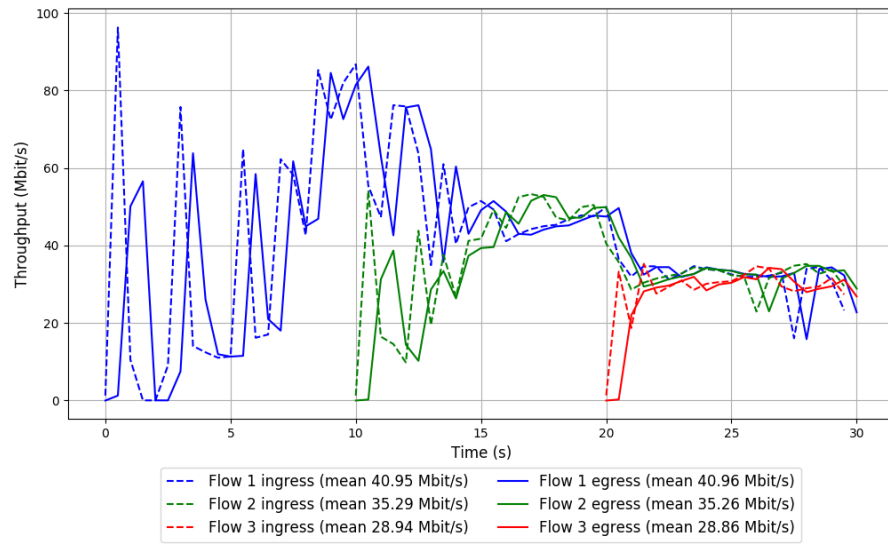


Run 3: Statistics of QUIC Cubic

Start at: 2019-01-19 13:01:04
End at: 2019-01-19 13:01:34
Local clock offset: -0.893 ms
Remote clock offset: -4.633 ms

Below is generated by plot.py at 2019-01-19 14:15:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 73.89 Mbit/s
95th percentile per-packet one-way delay: 132.938 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 40.96 Mbit/s
95th percentile per-packet one-way delay: 126.983 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 35.26 Mbit/s
95th percentile per-packet one-way delay: 139.911 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 28.86 Mbit/s
95th percentile per-packet one-way delay: 146.793 ms
Loss rate: 0.98%

Run 3: Report of QUIC Cubic — Data Link

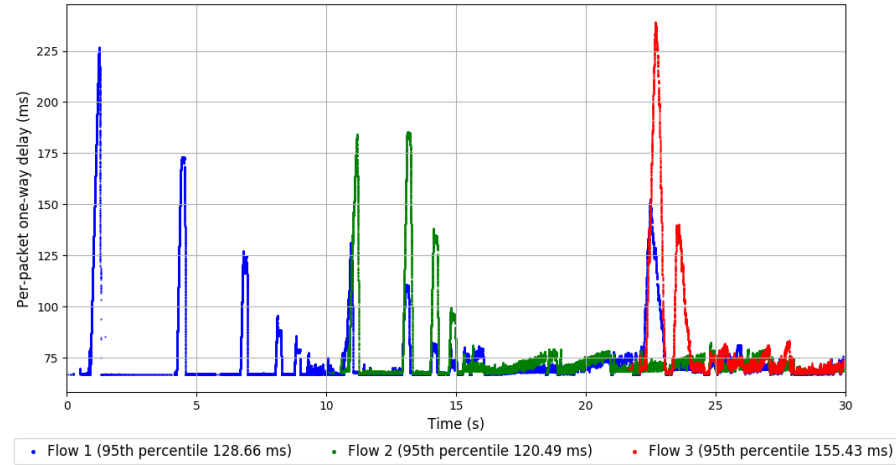
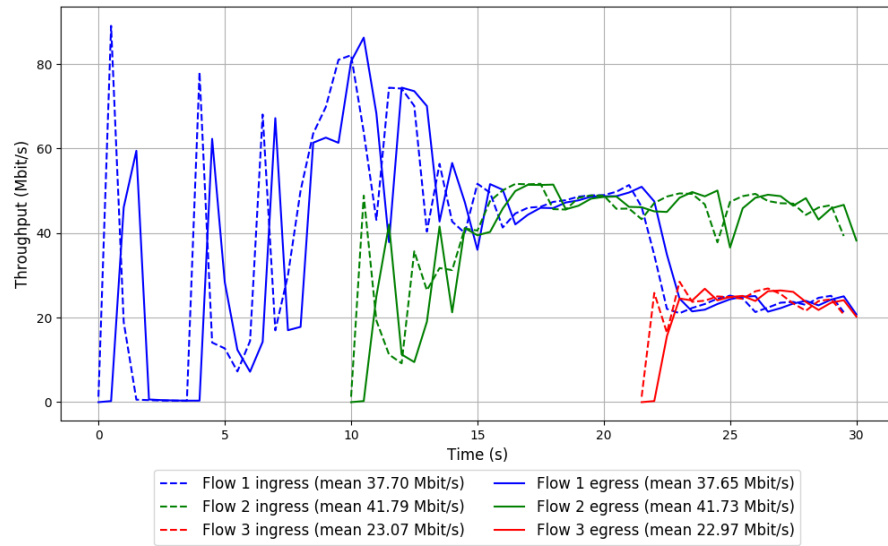


Run 4: Statistics of QUIC Cubic

Start at: 2019-01-19 13:29:19
End at: 2019-01-19 13:29:49
Local clock offset: -1.63 ms
Remote clock offset: -2.176 ms

Below is generated by plot.py at 2019-01-19 14:15:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 71.77 Mbit/s
95th percentile per-packet one-way delay: 130.438 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 37.65 Mbit/s
95th percentile per-packet one-way delay: 128.656 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 41.73 Mbit/s
95th percentile per-packet one-way delay: 120.489 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 22.97 Mbit/s
95th percentile per-packet one-way delay: 155.429 ms
Loss rate: 1.36%

Run 4: Report of QUIC Cubic — Data Link

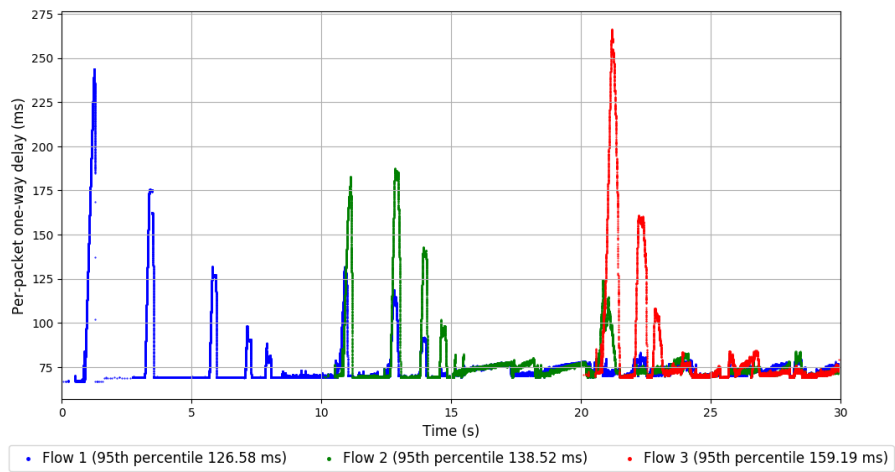
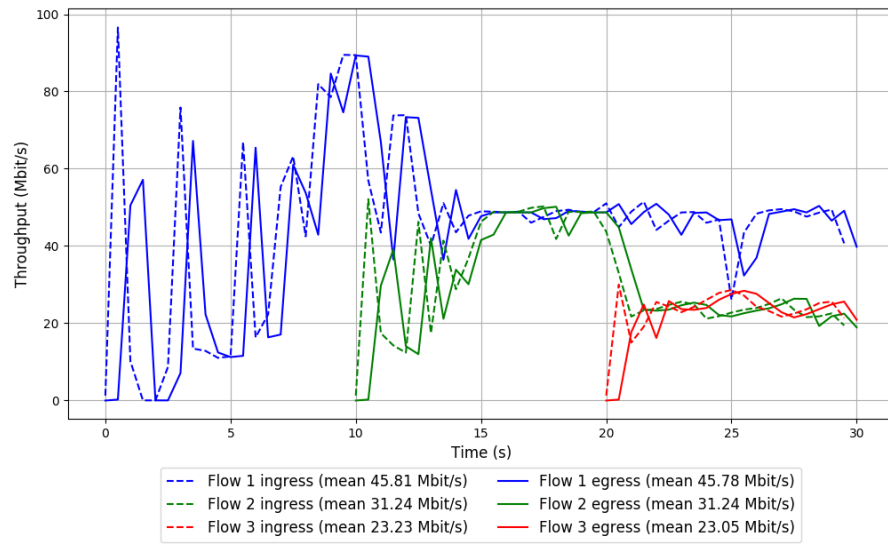


Run 5: Statistics of QUIC Cubic

Start at: 2019-01-19 13:57:38
End at: 2019-01-19 13:58:08
Local clock offset: 0.181 ms
Remote clock offset: -2.383 ms

Below is generated by plot.py at 2019-01-19 14:15:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 74.11 Mbit/s
95th percentile per-packet one-way delay: 130.594 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 45.78 Mbit/s
95th percentile per-packet one-way delay: 126.583 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 31.24 Mbit/s
95th percentile per-packet one-way delay: 138.522 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 23.05 Mbit/s
95th percentile per-packet one-way delay: 159.191 ms
Loss rate: 1.52%

Run 5: Report of QUIC Cubic — Data Link

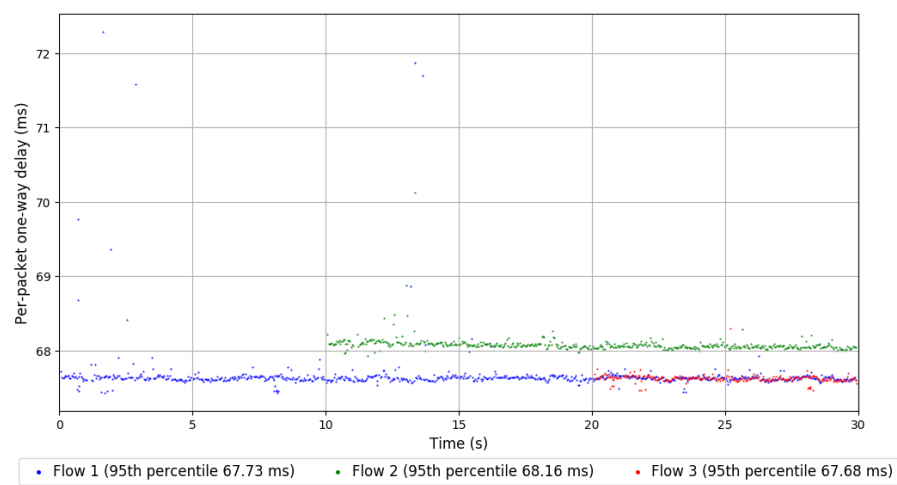
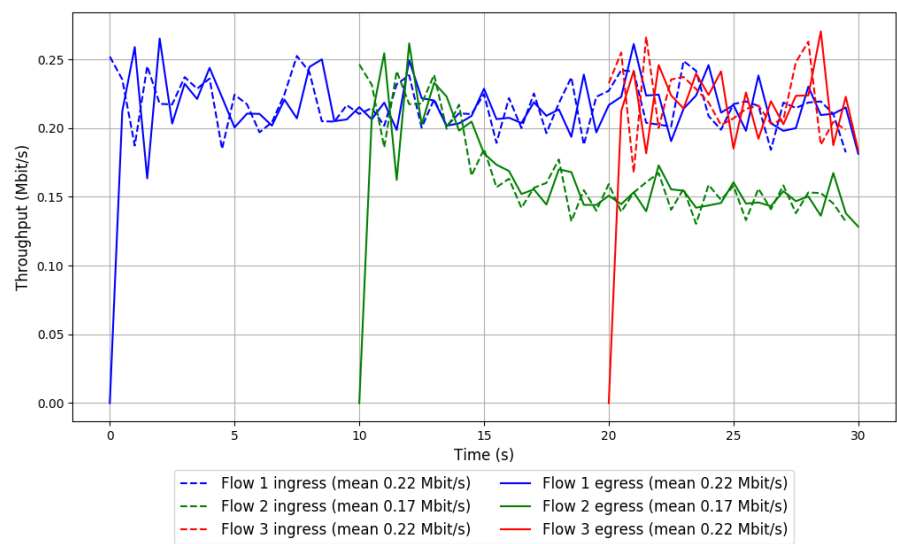


```
Run 1: Statistics of SCReAM

Start at: 2019-01-19 11:36:02
End at: 2019-01-19 11:36:32
Local clock offset: -0.332 ms
Remote clock offset: -3.113 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 68.118 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.730 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 68.159 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.683 ms
Loss rate: 0.70%
```

Run 1: Report of SReAM — Data Link

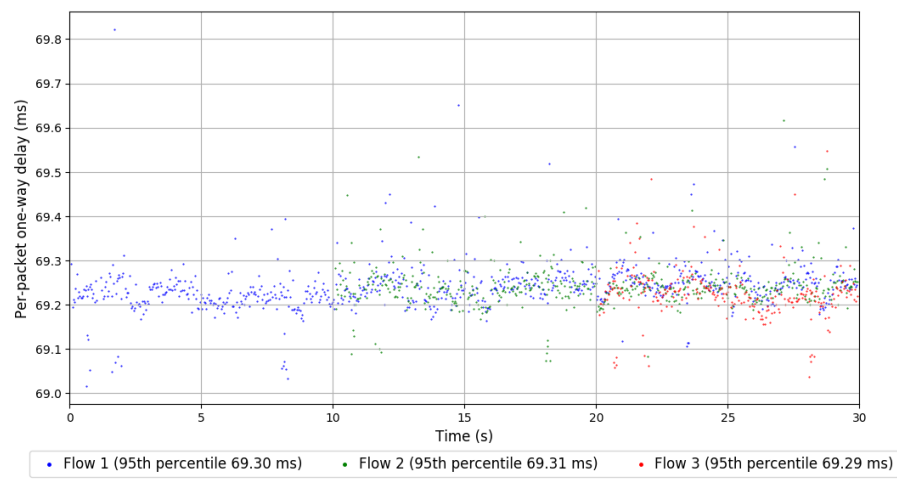
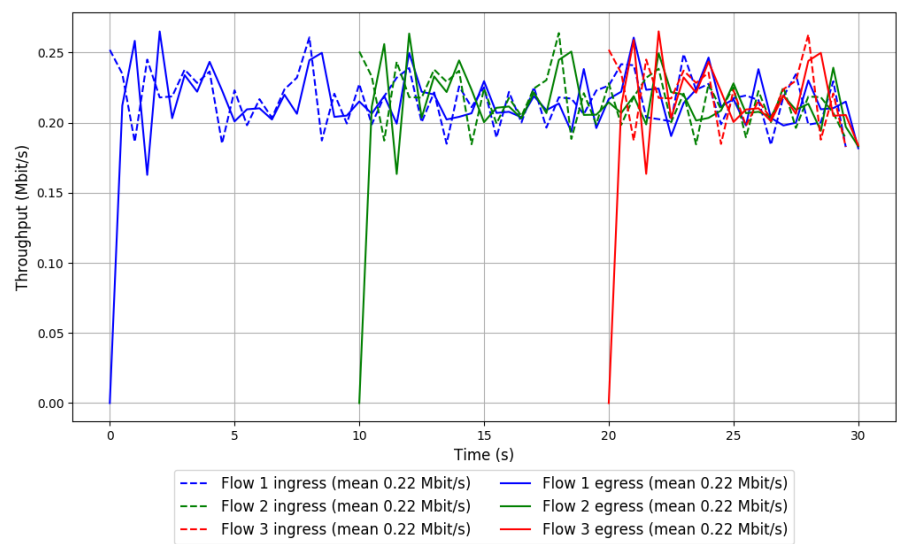


Run 2: Statistics of SReAM

Start at: 2019-01-19 12:05:35
End at: 2019-01-19 12:06:05
Local clock offset: 0.774 ms
Remote clock offset: -2.926 ms

Below is generated by plot.py at 2019-01-19 14:15:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 69.304 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.302 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.307 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.289 ms
Loss rate: 0.70%

Run 2: Report of SReAM — Data Link

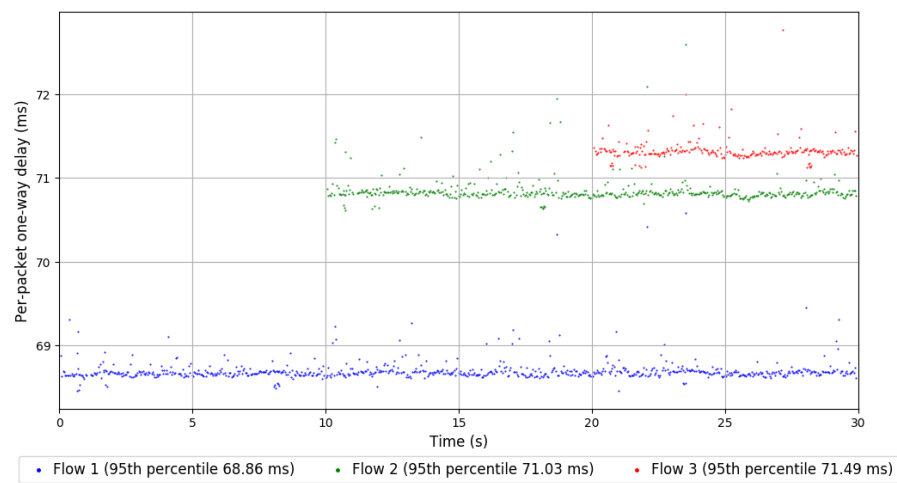
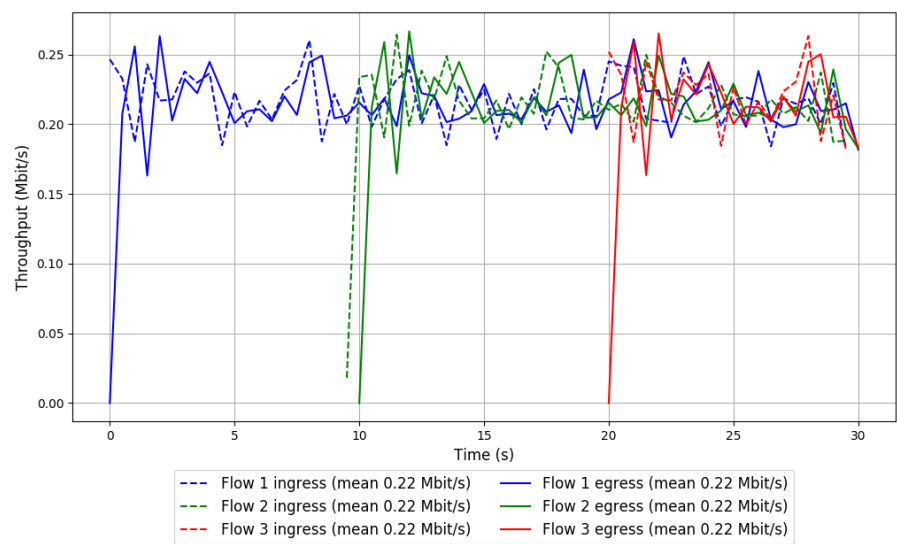


Run 3: Statistics of SReAM

Start at: 2019-01-19 12:35:57
End at: 2019-01-19 12:36:27
Local clock offset: 0.803 ms
Remote clock offset: -3.014 ms

Below is generated by plot.py at 2019-01-19 14:15:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 71.336 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 68.855 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 71.033 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 71.490 ms
Loss rate: 0.70%

Run 3: Report of SReAM — Data Link

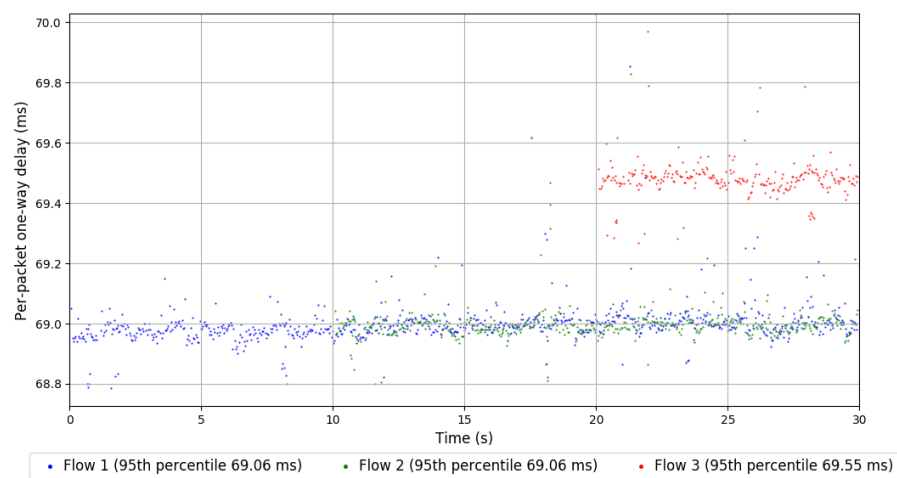
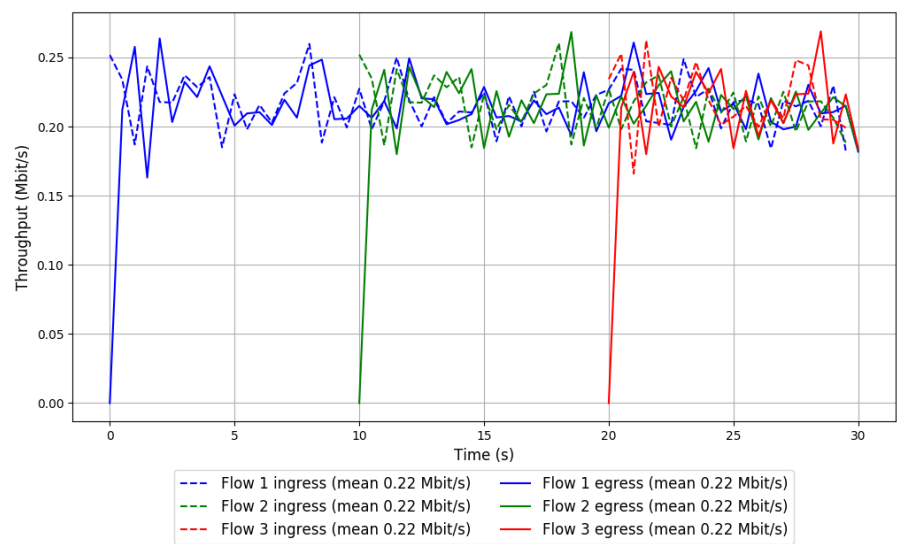


Run 4: Statistics of SReAM

Start at: 2019-01-19 13:06:41
End at: 2019-01-19 13:07:11
Local clock offset: 0.595 ms
Remote clock offset: -4.926 ms

Below is generated by plot.py at 2019-01-19 14:15:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 69.494 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.060 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.057 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.554 ms
Loss rate: 0.70%

Run 4: Report of SReAM — Data Link

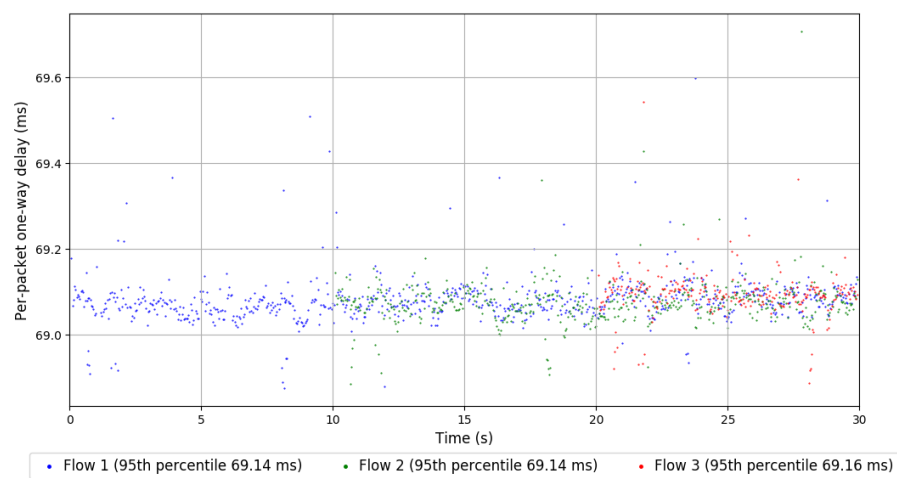
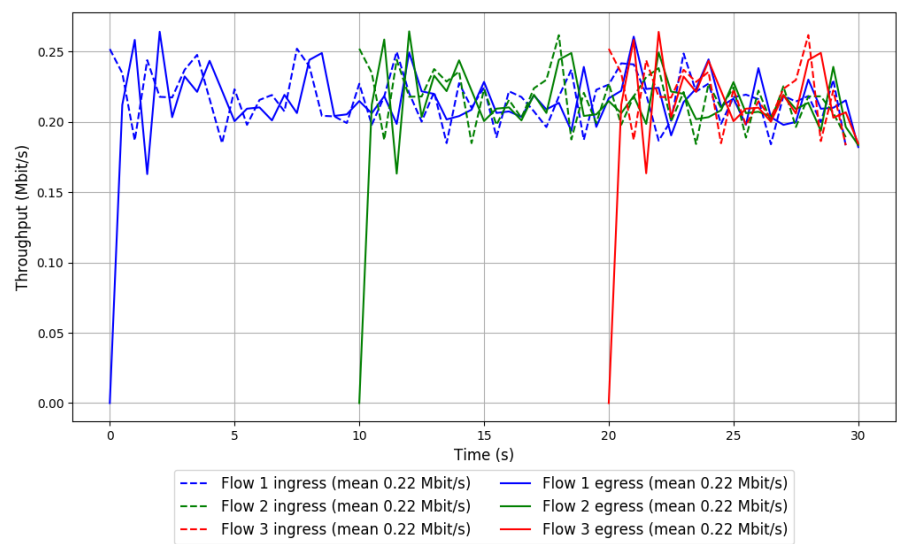


Run 5: Statistics of SReAM

Start at: 2019-01-19 13:34:55
End at: 2019-01-19 13:35:25
Local clock offset: 0.238 ms
Remote clock offset: -2.368 ms

Below is generated by plot.py at 2019-01-19 14:15:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 69.144 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.144 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.135 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.161 ms
Loss rate: 0.71%

Run 5: Report of SReAM — Data Link

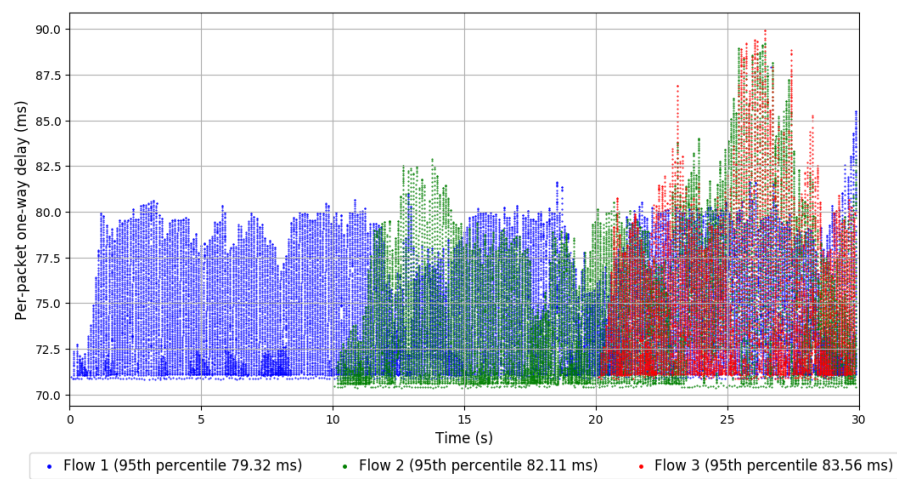
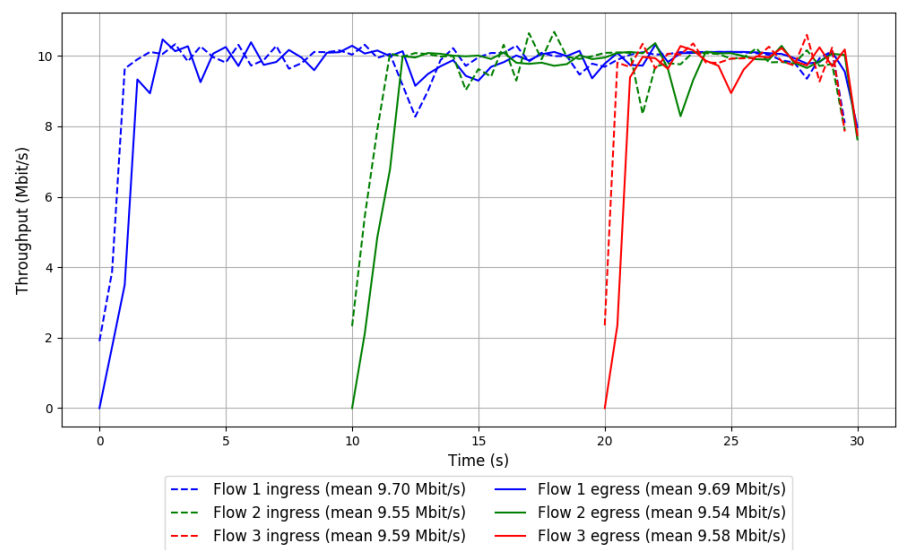


Run 1: Statistics of Sprout

Start at: 2019-01-19 11:41:42
End at: 2019-01-19 11:42:12
Local clock offset: 1.761 ms
Remote clock offset: -3.879 ms

Below is generated by plot.py at 2019-01-19 14:15:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.17 Mbit/s
95th percentile per-packet one-way delay: 80.537 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 9.69 Mbit/s
95th percentile per-packet one-way delay: 79.316 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 82.113 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 9.58 Mbit/s
95th percentile per-packet one-way delay: 83.562 ms
Loss rate: 1.07%

Run 1: Report of Sprout — Data Link

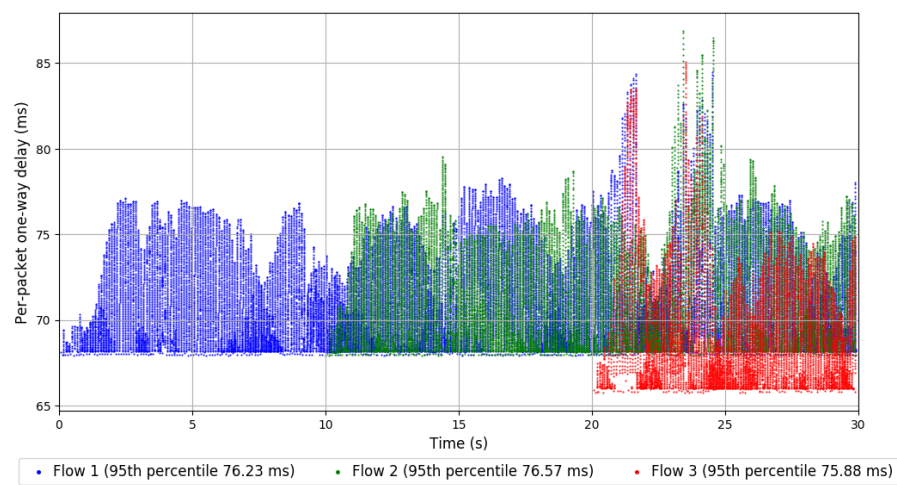
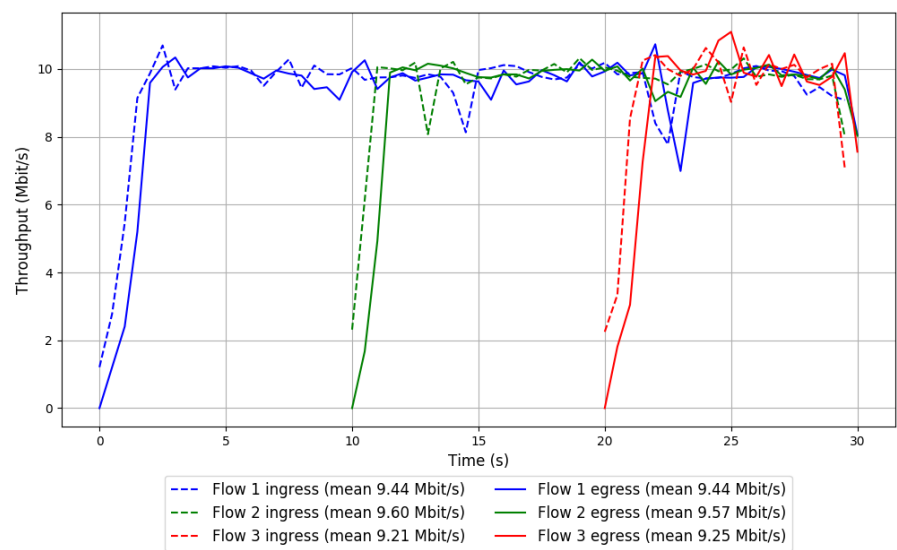


Run 2: Statistics of Sprout

Start at: 2019-01-19 12:11:25
End at: 2019-01-19 12:11:55
Local clock offset: -0.417 ms
Remote clock offset: -2.977 ms

Below is generated by plot.py at 2019-01-19 14:15:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 18.84 Mbit/s
95th percentile per-packet one-way delay: 76.347 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 9.44 Mbit/s
95th percentile per-packet one-way delay: 76.232 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 9.57 Mbit/s
95th percentile per-packet one-way delay: 76.572 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 9.25 Mbit/s
95th percentile per-packet one-way delay: 75.884 ms
Loss rate: 0.21%

Run 2: Report of Sprout — Data Link

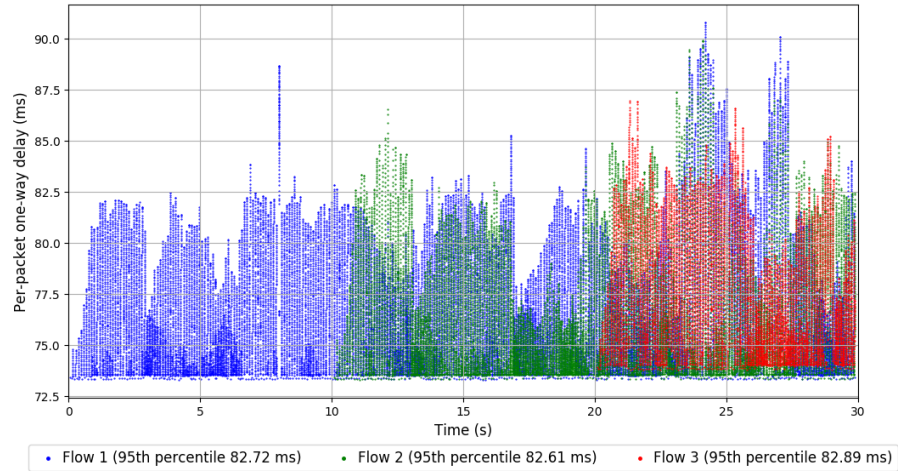
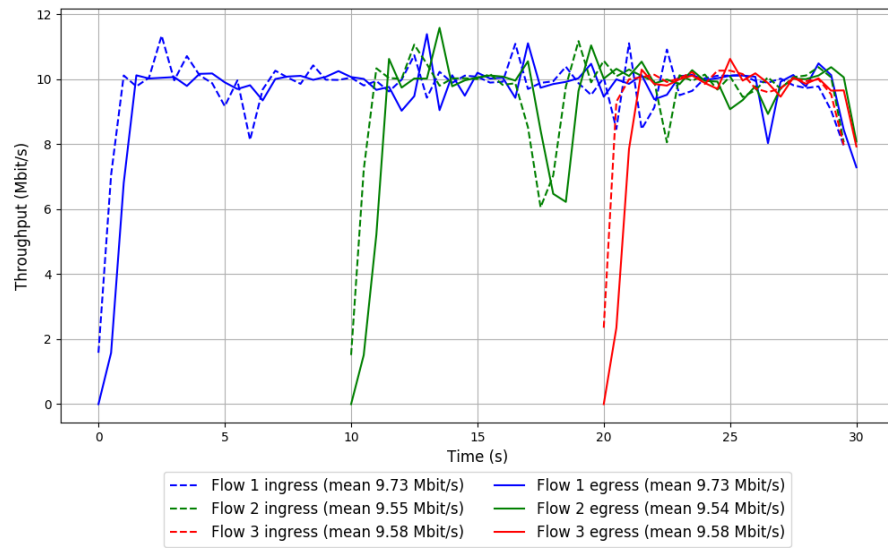


Run 3: Statistics of Sprout

Start at: 2019-01-19 12:41:43
End at: 2019-01-19 12:42:13
Local clock offset: -2.393 ms
Remote clock offset: -8.89 ms

```
# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.21 Mbit/s
95th percentile per-packet one-way delay: 82.745 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 9.73 Mbit/s
95th percentile per-packet one-way delay: 82.717 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 82.606 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 9.58 Mbit/s
95th percentile per-packet one-way delay: 82.895 ms
Loss rate: 1.03%
```

Run 3: Report of Sprout — Data Link

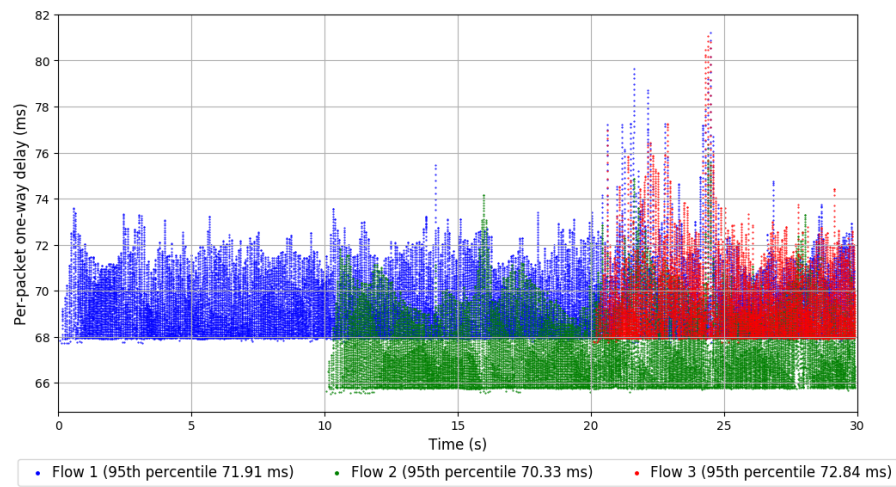
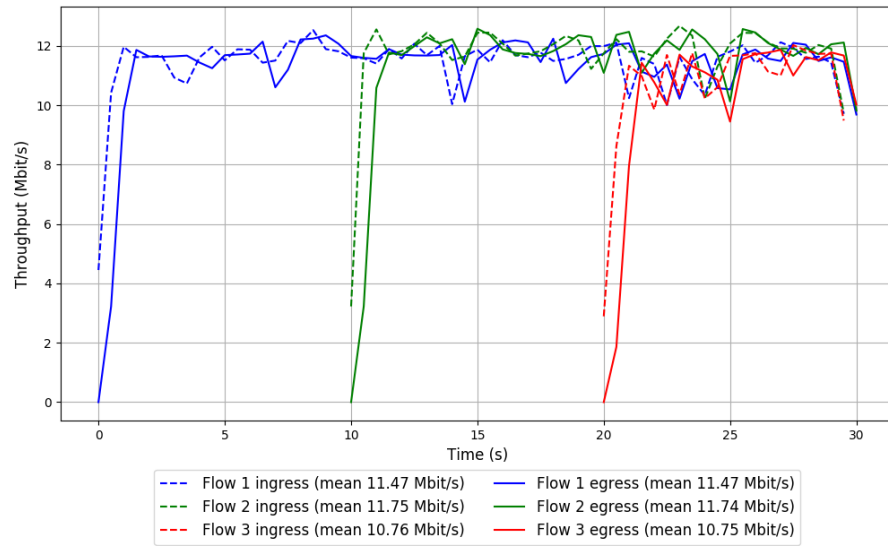


Run 4: Statistics of Sprout

Start at: 2019-01-19 13:11:59
End at: 2019-01-19 13:12:29
Local clock offset: -0.399 ms
Remote clock offset: -4.682 ms

```
# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.79 Mbit/s
95th percentile per-packet one-way delay: 71.791 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 11.47 Mbit/s
95th percentile per-packet one-way delay: 71.914 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 70.328 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 10.75 Mbit/s
95th percentile per-packet one-way delay: 72.843 ms
Loss rate: 0.66%
```

Run 4: Report of Sprout — Data Link

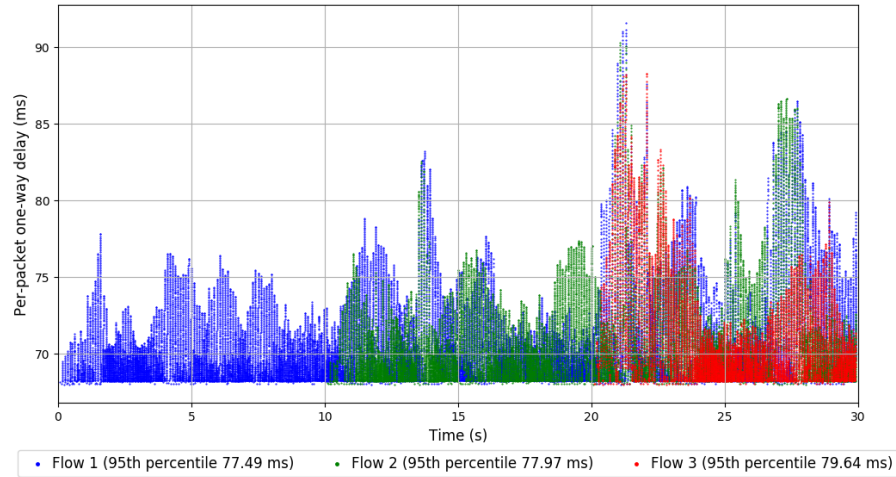
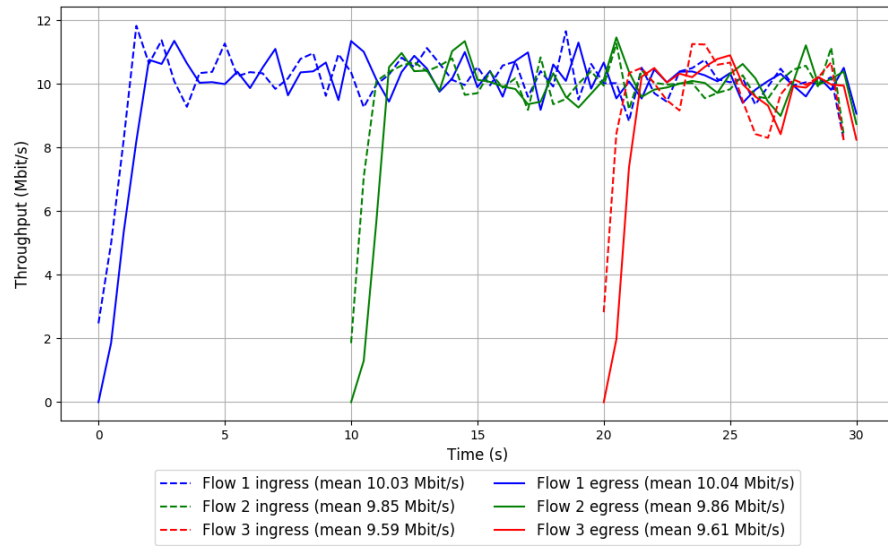


Run 5: Statistics of Sprout

Start at: 2019-01-19 13:40:16
End at: 2019-01-19 13:40:46
Local clock offset: -0.63 ms
Remote clock offset: -2.237 ms

Below is generated by plot.py at 2019-01-19 14:15:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.75 Mbit/s
95th percentile per-packet one-way delay: 78.062 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 10.04 Mbit/s
95th percentile per-packet one-way delay: 77.489 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 9.86 Mbit/s
95th percentile per-packet one-way delay: 77.969 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 9.61 Mbit/s
95th percentile per-packet one-way delay: 79.645 ms
Loss rate: 0.64%

Run 5: Report of Sprout — Data Link

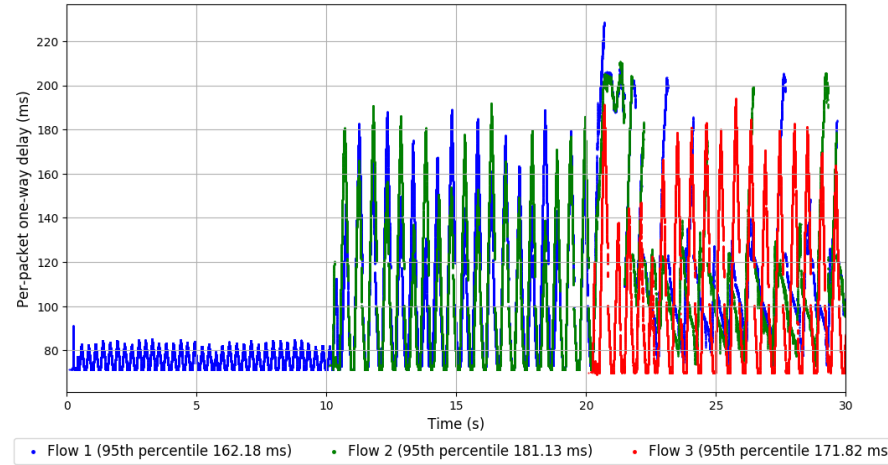
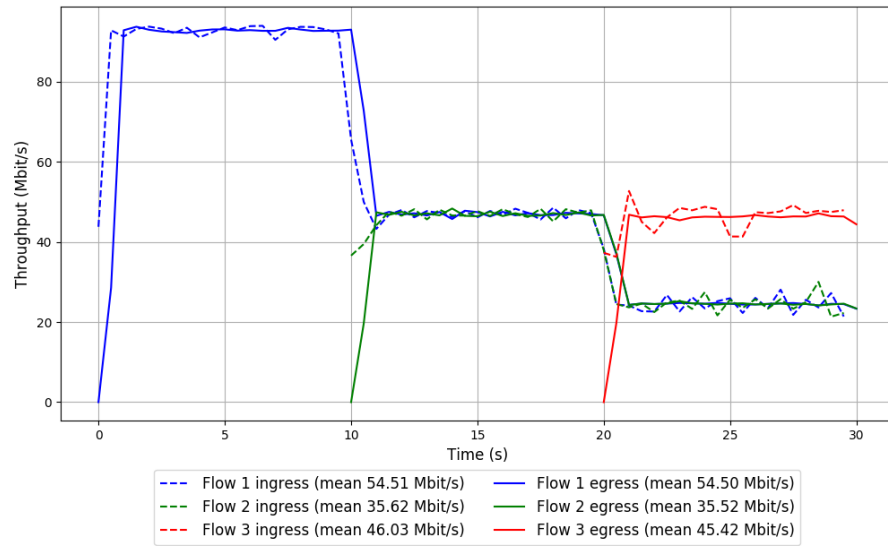


Run 1: Statistics of TaoVA-100x

Start at: 2019-01-19 11:40:05
End at: 2019-01-19 11:40:35
Local clock offset: 2.174 ms
Remote clock offset: -4.222 ms

Below is generated by plot.py at 2019-01-19 14:16:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.15 Mbit/s
95th percentile per-packet one-way delay: 171.558 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 54.50 Mbit/s
95th percentile per-packet one-way delay: 162.177 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 35.52 Mbit/s
95th percentile per-packet one-way delay: 181.130 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 45.42 Mbit/s
95th percentile per-packet one-way delay: 171.825 ms
Loss rate: 2.10%

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

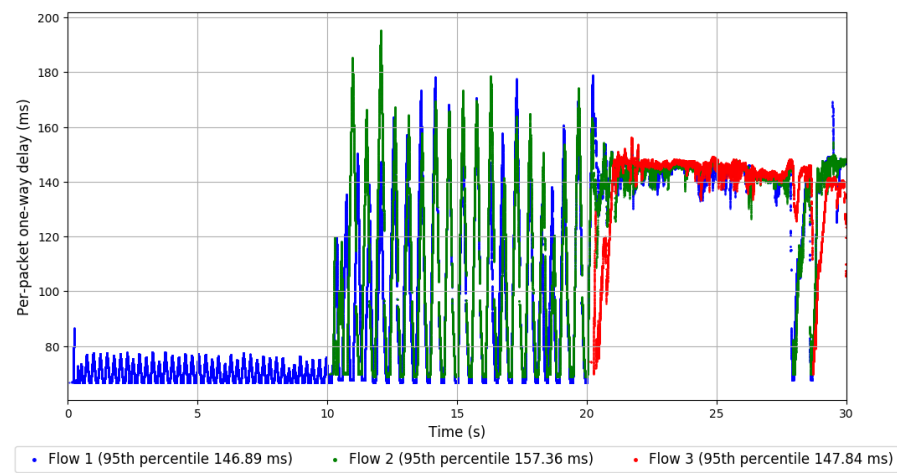
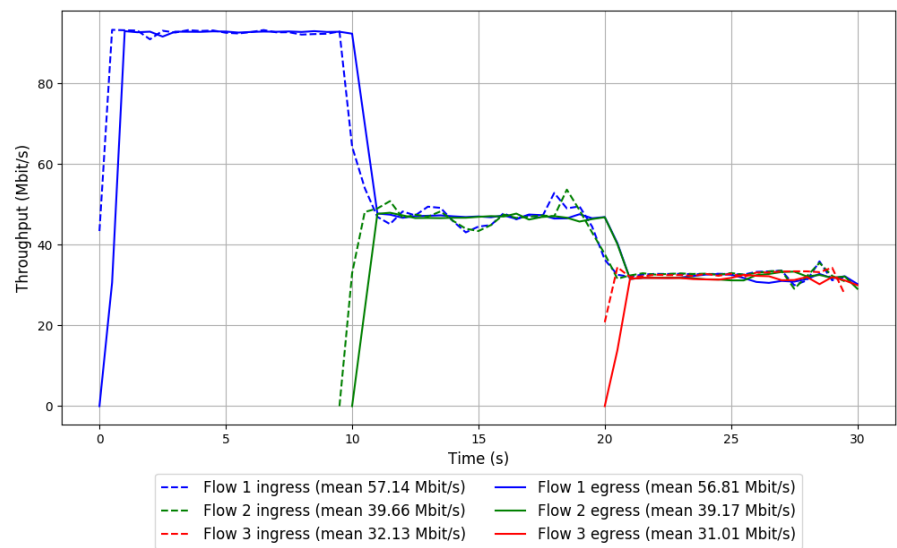


Run 2: Statistics of TaoVA-100x

Start at: 2019-01-19 12:09:45
End at: 2019-01-19 12:10:15
Local clock offset: 0.274 ms
Remote clock offset: -3.108 ms

Below is generated by plot.py at 2019-01-19 14:16:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.13 Mbit/s
95th percentile per-packet one-way delay: 148.622 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 56.81 Mbit/s
95th percentile per-packet one-way delay: 146.887 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 39.17 Mbit/s
95th percentile per-packet one-way delay: 157.359 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 31.01 Mbit/s
95th percentile per-packet one-way delay: 147.835 ms
Loss rate: 4.28%

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

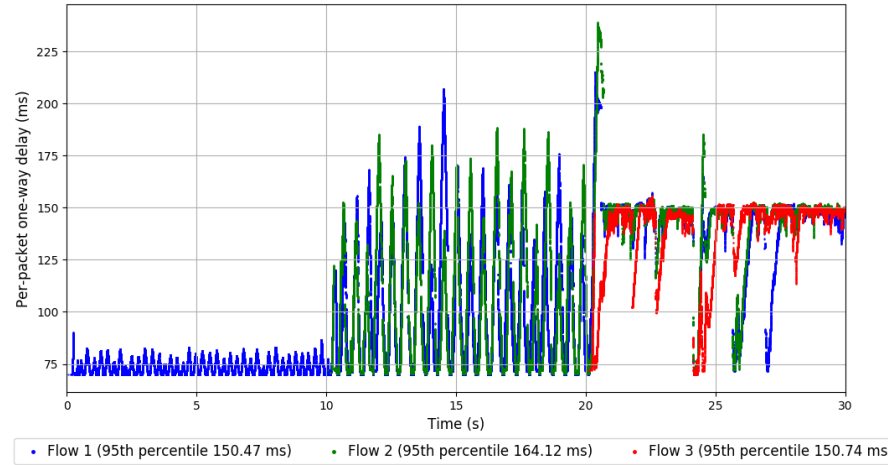
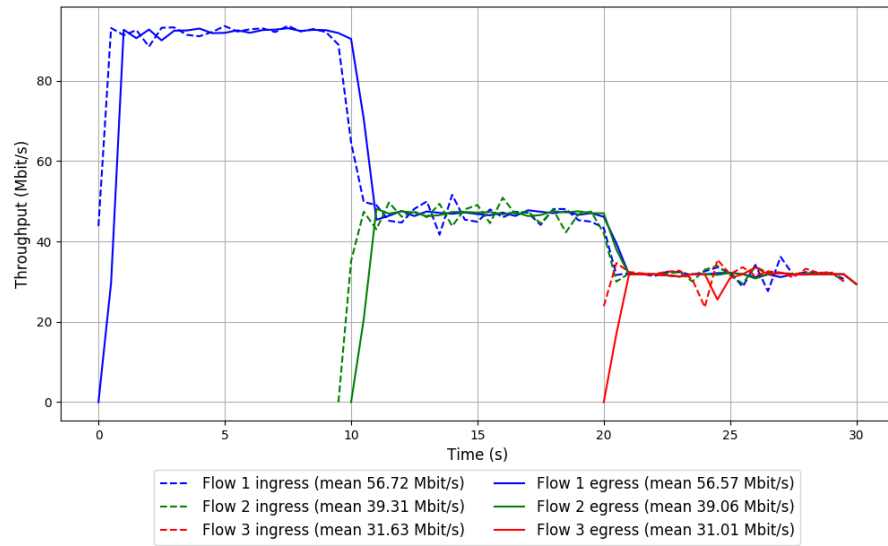


Run 3: Statistics of TaoVA-100x

Start at: 2019-01-19 12:39:57
End at: 2019-01-19 12:40:27
Local clock offset: -0.188 ms
Remote clock offset: -3.328 ms

Below is generated by plot.py at 2019-01-19 14:16:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.83 Mbit/s
95th percentile per-packet one-way delay: 151.393 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 56.57 Mbit/s
95th percentile per-packet one-way delay: 150.467 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 39.06 Mbit/s
95th percentile per-packet one-way delay: 164.117 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 31.01 Mbit/s
95th percentile per-packet one-way delay: 150.738 ms
Loss rate: 2.71%

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

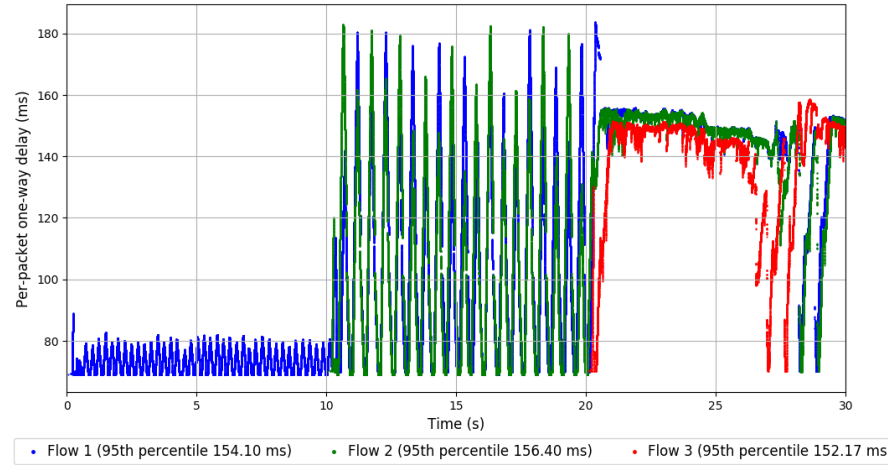
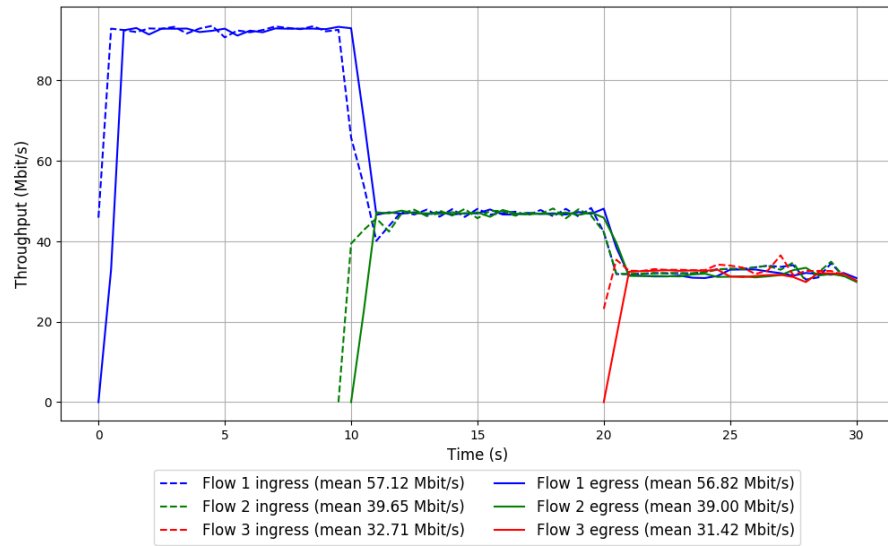


Run 4: Statistics of TaoVA-100x

Start at: 2019-01-19 13:10:33
End at: 2019-01-19 13:11:03
Local clock offset: 0.924 ms
Remote clock offset: -4.645 ms

Below is generated by plot.py at 2019-01-19 14:16:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.18 Mbit/s
95th percentile per-packet one-way delay: 154.346 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 56.82 Mbit/s
95th percentile per-packet one-way delay: 154.102 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 39.00 Mbit/s
95th percentile per-packet one-way delay: 156.404 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 31.42 Mbit/s
95th percentile per-packet one-way delay: 152.168 ms
Loss rate: 4.63%

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

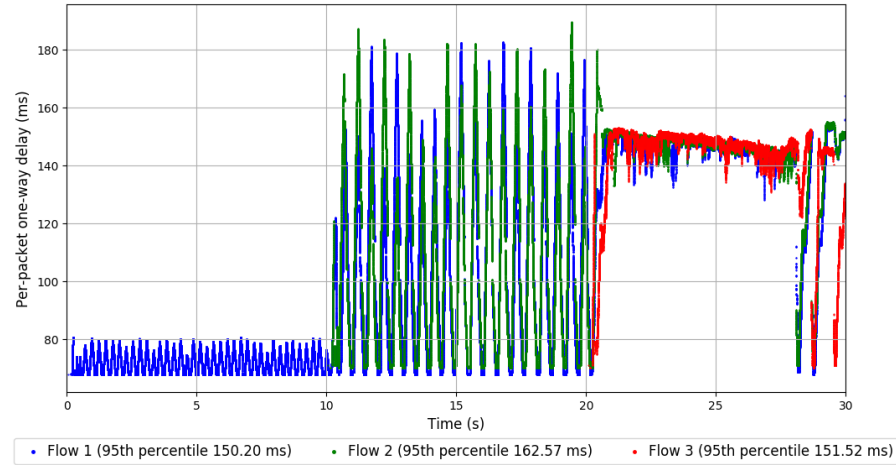
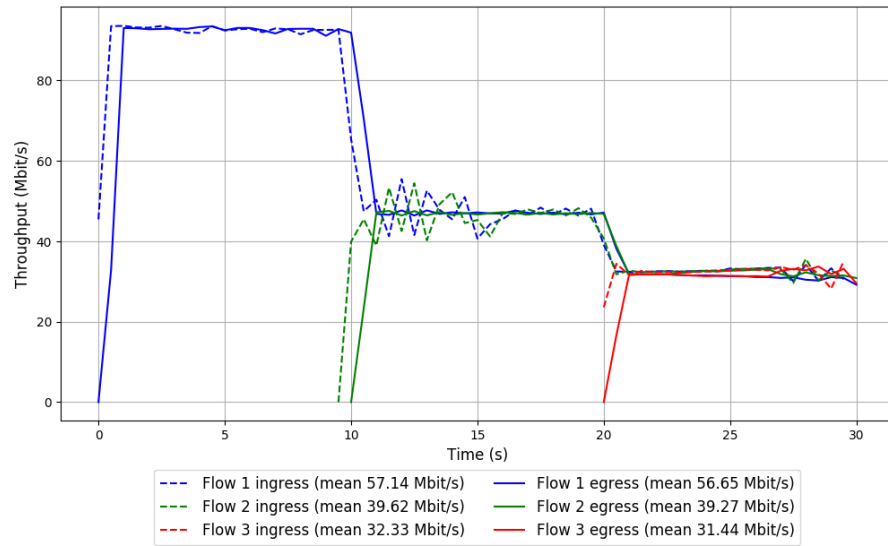


Run 5: Statistics of TaoVA-100x

Start at: 2019-01-19 13:38:55
End at: 2019-01-19 13:39:25
Local clock offset: 1.084 ms
Remote clock offset: -2.334 ms

Below is generated by plot.py at 2019-01-19 14:17:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.18 Mbit/s
95th percentile per-packet one-way delay: 152.112 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 56.65 Mbit/s
95th percentile per-packet one-way delay: 150.203 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 39.27 Mbit/s
95th percentile per-packet one-way delay: 162.569 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 31.44 Mbit/s
95th percentile per-packet one-way delay: 151.524 ms
Loss rate: 3.49%

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

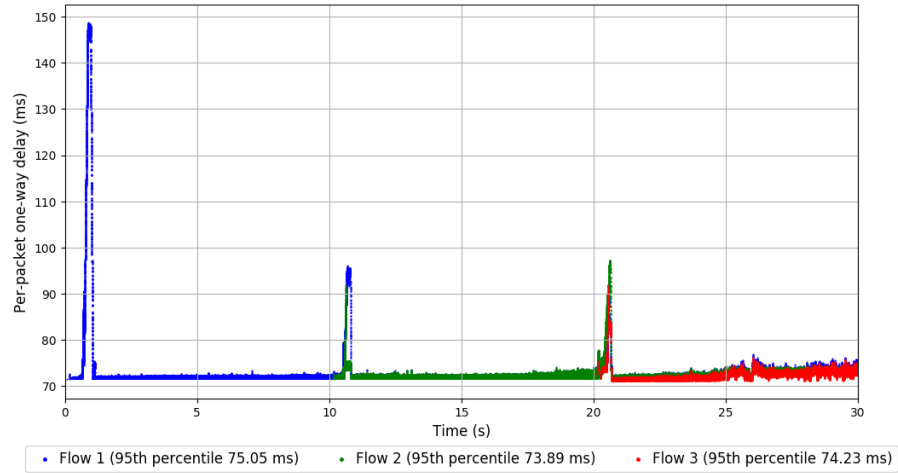
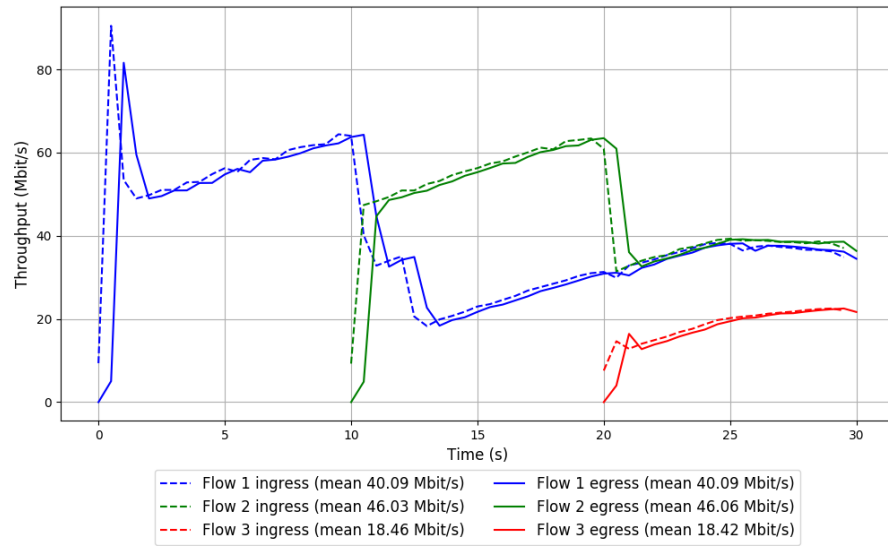


Run 1: Statistics of TCP Vegas

Start at: 2019-01-19 12:03:51
End at: 2019-01-19 12:04:21
Local clock offset: 1.783 ms
Remote clock offset: -3.943 ms

Below is generated by plot.py at 2019-01-19 14:17:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 76.82 Mbit/s
95th percentile per-packet one-way delay: 74.330 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 40.09 Mbit/s
95th percentile per-packet one-way delay: 75.046 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 46.06 Mbit/s
95th percentile per-packet one-way delay: 73.893 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 18.42 Mbit/s
95th percentile per-packet one-way delay: 74.228 ms
Loss rate: 1.00%

Run 1: Report of TCP Vegas — Data Link

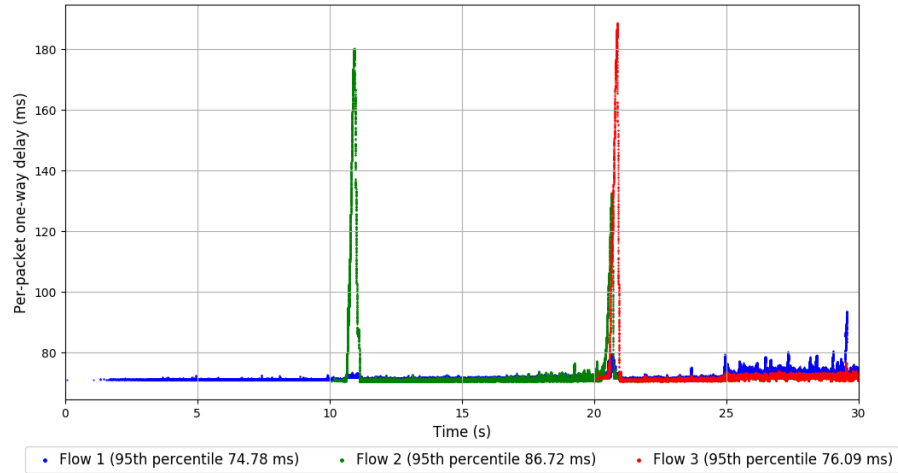
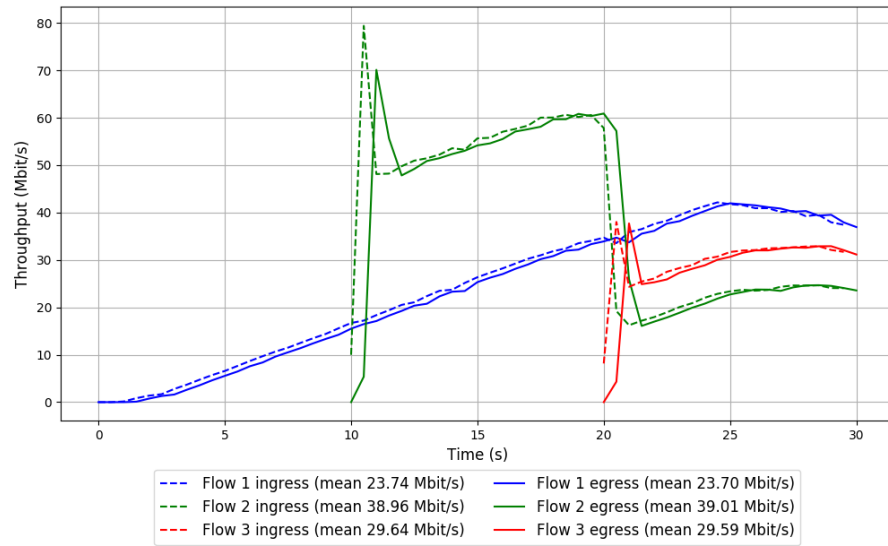


Run 2: Statistics of TCP Vegas

Start at: 2019-01-19 12:34:39
End at: 2019-01-19 12:35:09
Local clock offset: 0.043 ms
Remote clock offset: -3.475 ms

Below is generated by plot.py at 2019-01-19 14:17:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 59.43 Mbit/s
95th percentile per-packet one-way delay: 75.784 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 23.70 Mbit/s
95th percentile per-packet one-way delay: 74.781 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 39.01 Mbit/s
95th percentile per-packet one-way delay: 86.724 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 29.59 Mbit/s
95th percentile per-packet one-way delay: 76.086 ms
Loss rate: 0.91%

Run 2: Report of TCP Vegas — Data Link

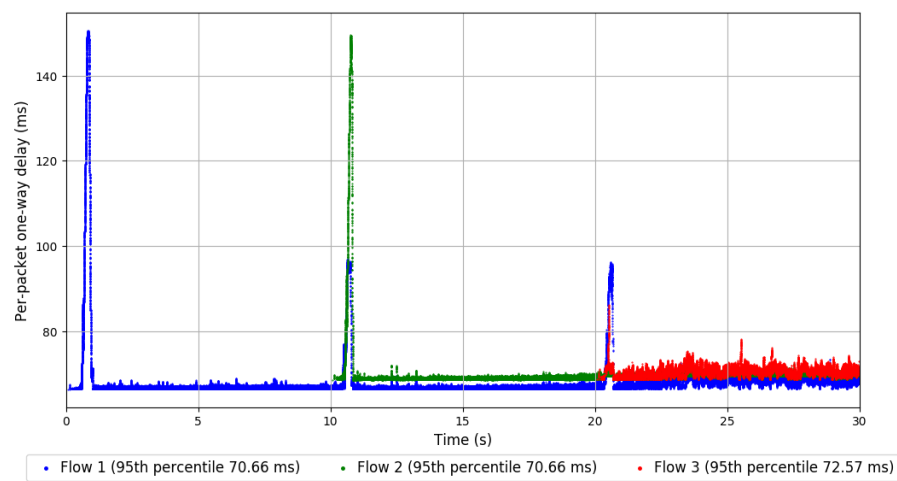
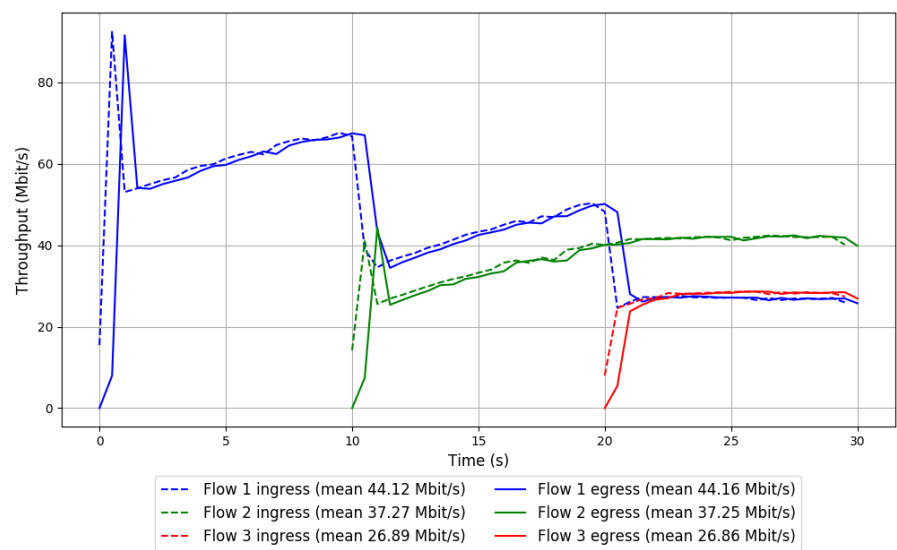


Run 3: Statistics of TCP Vegas

Start at: 2019-01-19 13:05:24
End at: 2019-01-19 13:05:54
Local clock offset: 0.331 ms
Remote clock offset: -4.933 ms

Below is generated by plot.py at 2019-01-19 14:17:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.82 Mbit/s
95th percentile per-packet one-way delay: 71.700 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 44.16 Mbit/s
95th percentile per-packet one-way delay: 70.657 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 37.25 Mbit/s
95th percentile per-packet one-way delay: 70.662 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 26.86 Mbit/s
95th percentile per-packet one-way delay: 72.566 ms
Loss rate: 0.80%

Run 3: Report of TCP Vegas — Data Link

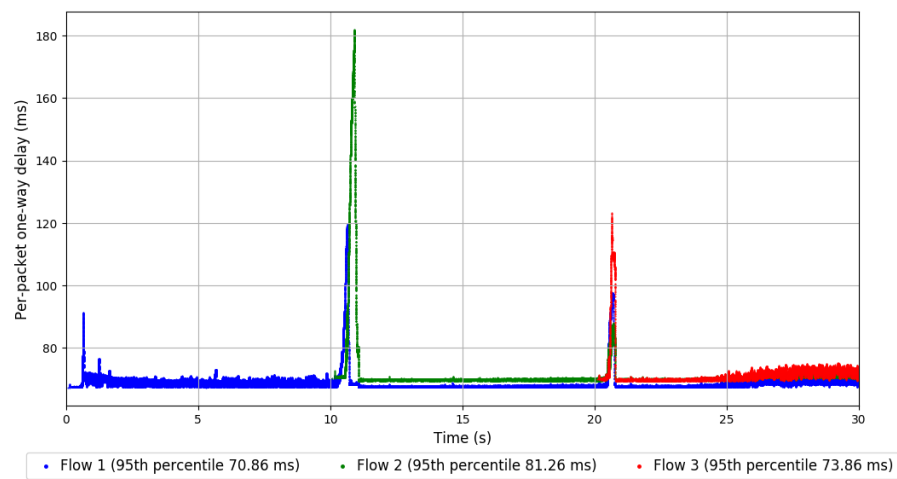
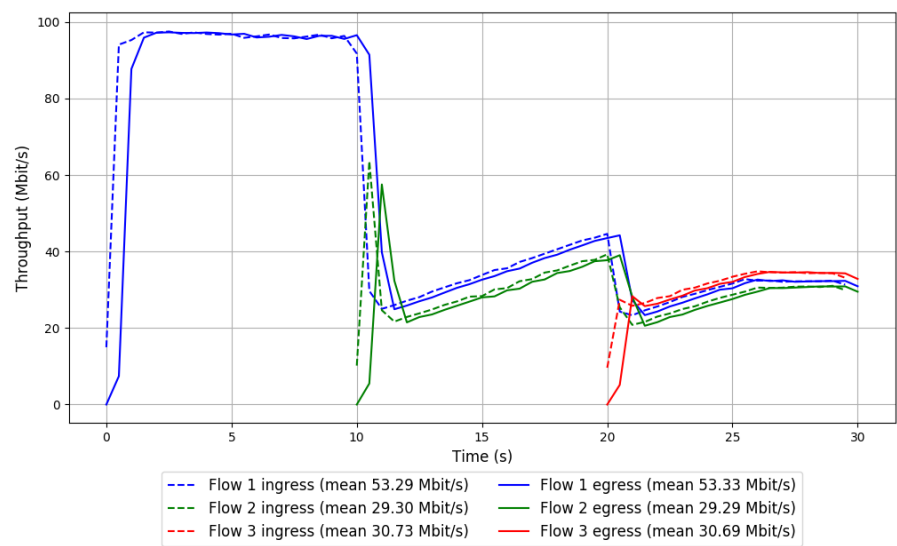


Run 4: Statistics of TCP Vegas

Start at: 2019-01-19 13:33:41
End at: 2019-01-19 13:34:11
Local clock offset: 0.647 ms
Remote clock offset: -2.489 ms

Below is generated by plot.py at 2019-01-19 14:17:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 82.96 Mbit/s
95th percentile per-packet one-way delay: 72.964 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 53.33 Mbit/s
95th percentile per-packet one-way delay: 70.864 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 29.29 Mbit/s
95th percentile per-packet one-way delay: 81.263 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 30.69 Mbit/s
95th percentile per-packet one-way delay: 73.862 ms
Loss rate: 0.88%

Run 4: Report of TCP Vegas — Data Link

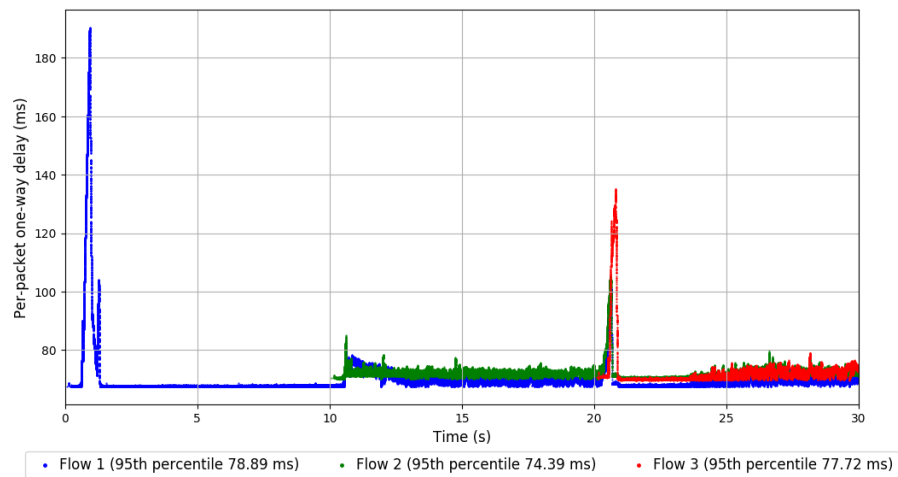
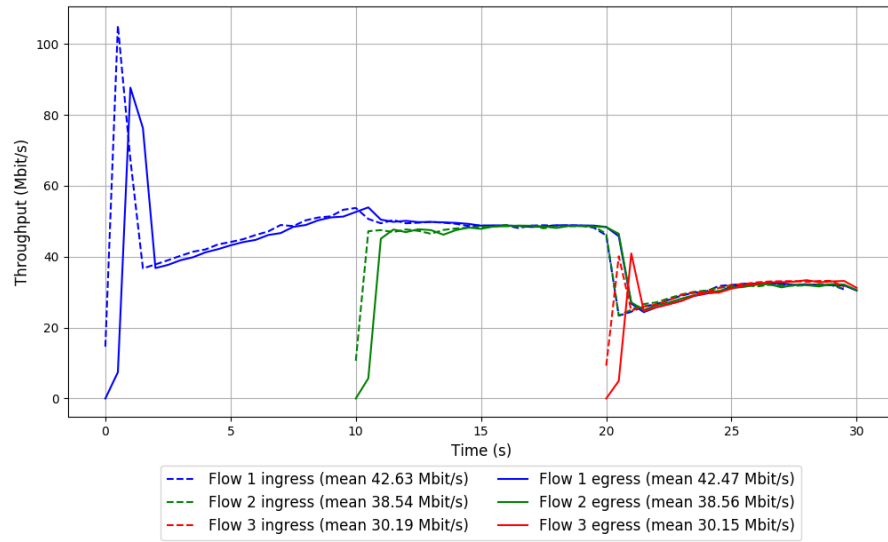


Run 5: Statistics of TCP Vegas

Start at: 2019-01-19 14:01:48
End at: 2019-01-19 14:02:18
Local clock offset: 0.796 ms
Remote clock offset: -2.358 ms

Below is generated by plot.py at 2019-01-19 14:17:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 78.09 Mbit/s
95th percentile per-packet one-way delay: 75.828 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 42.47 Mbit/s
95th percentile per-packet one-way delay: 78.890 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 38.56 Mbit/s
95th percentile per-packet one-way delay: 74.391 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 30.15 Mbit/s
95th percentile per-packet one-way delay: 77.724 ms
Loss rate: 0.87%

Run 5: Report of TCP Vegas — Data Link

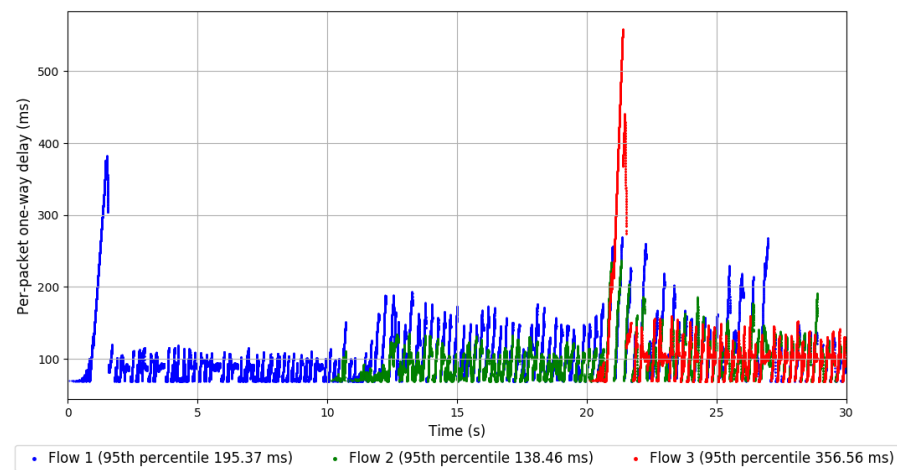
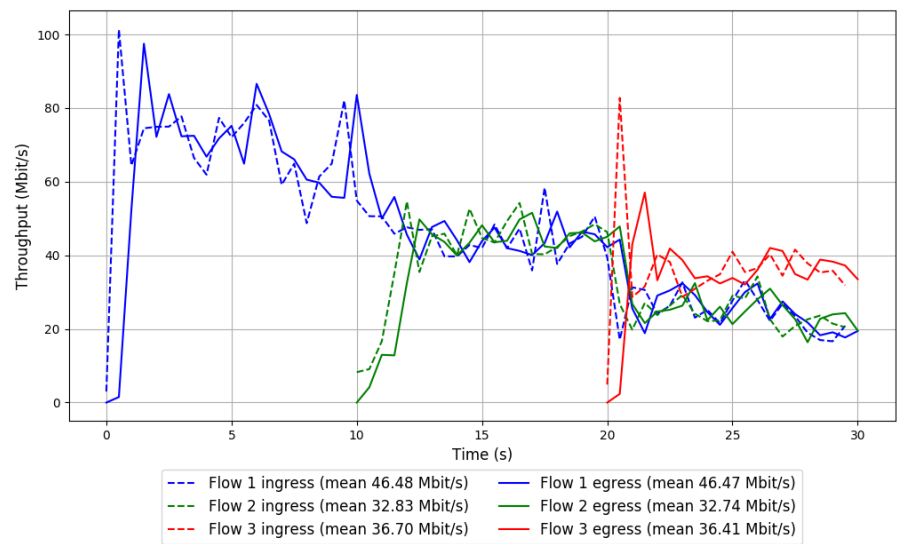


Run 1: Statistics of Verus

Start at: 2019-01-19 11:52:37
End at: 2019-01-19 11:53:07
Local clock offset: 0.016 ms
Remote clock offset: -3.409 ms

Below is generated by plot.py at 2019-01-19 14:17:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 80.25 Mbit/s
95th percentile per-packet one-way delay: 186.735 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 46.47 Mbit/s
95th percentile per-packet one-way delay: 195.368 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 32.74 Mbit/s
95th percentile per-packet one-way delay: 138.459 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 36.41 Mbit/s
95th percentile per-packet one-way delay: 356.562 ms
Loss rate: 0.83%

Run 1: Report of Verus — Data Link

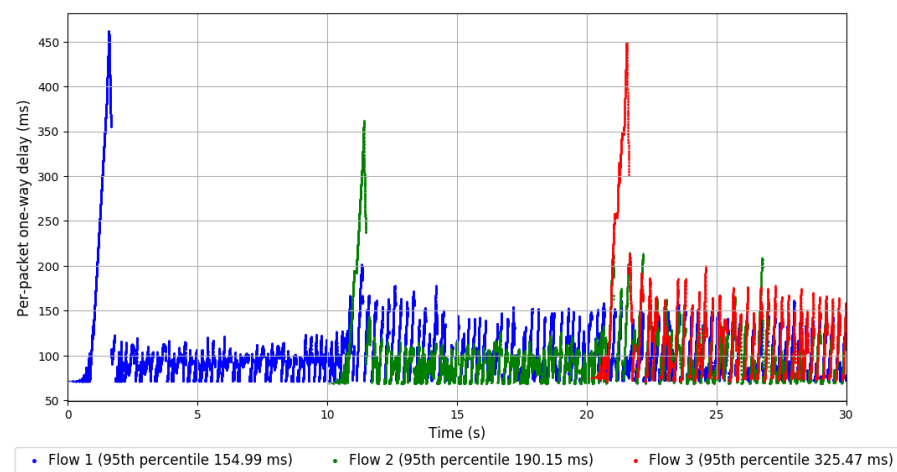
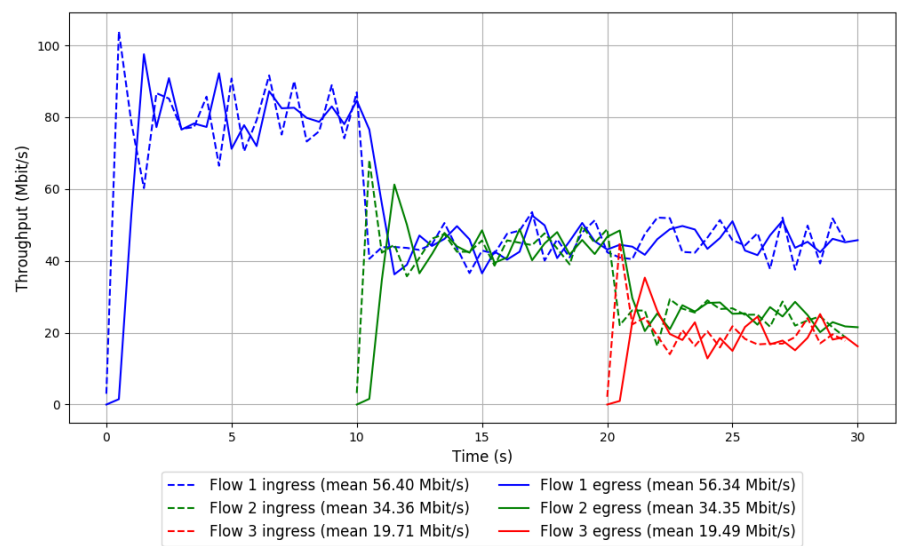


Run 2: Statistics of Verus

Start at: 2019-01-19 12:22:55
End at: 2019-01-19 12:23:25
Local clock offset: 1.89 ms
Remote clock offset: -3.007 ms

Below is generated by plot.py at 2019-01-19 14:17:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.63 Mbit/s
95th percentile per-packet one-way delay: 174.364 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 56.34 Mbit/s
95th percentile per-packet one-way delay: 154.989 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 34.35 Mbit/s
95th percentile per-packet one-way delay: 190.154 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 19.49 Mbit/s
95th percentile per-packet one-way delay: 325.466 ms
Loss rate: 0.90%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2019-01-19 12:53:03

End at: 2019-01-19 12:53:33

Local clock offset: -0.164 ms

Remote clock offset: -3.85 ms

Below is generated by plot.py at 2019-01-19 14:17:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.41 Mbit/s

95th percentile per-packet one-way delay: 214.460 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 47.59 Mbit/s

95th percentile per-packet one-way delay: 193.317 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 34.55 Mbit/s

95th percentile per-packet one-way delay: 234.765 ms

Loss rate: 0.61%

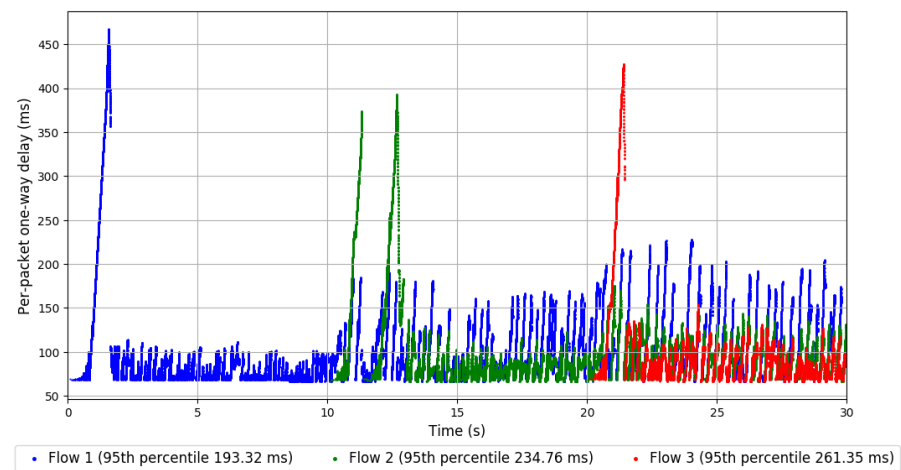
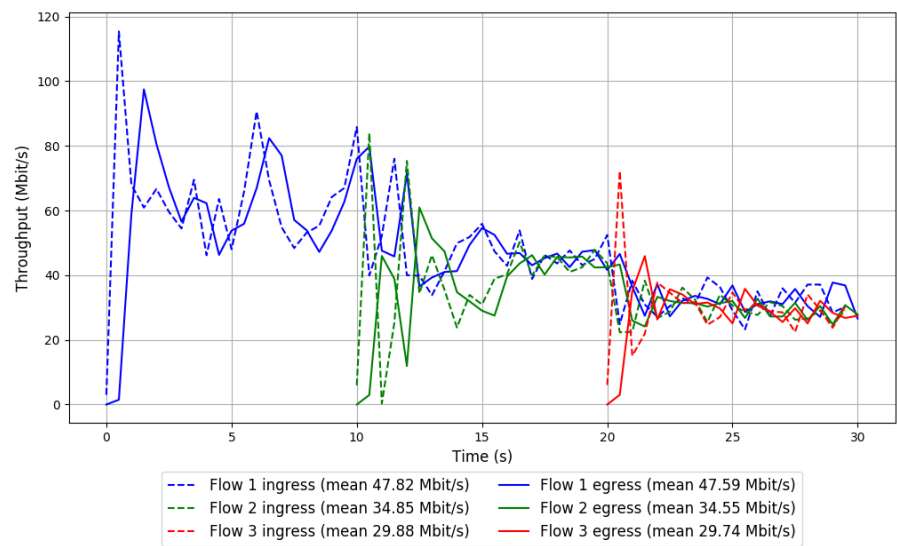
-- Flow 3:

Average throughput: 29.74 Mbit/s

95th percentile per-packet one-way delay: 261.353 ms

Loss rate: 1.15%

Run 3: Report of Verus — Data Link

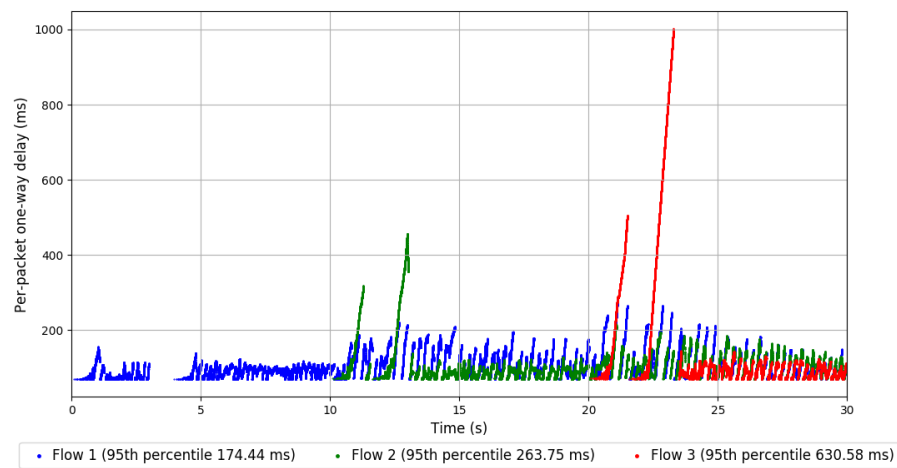
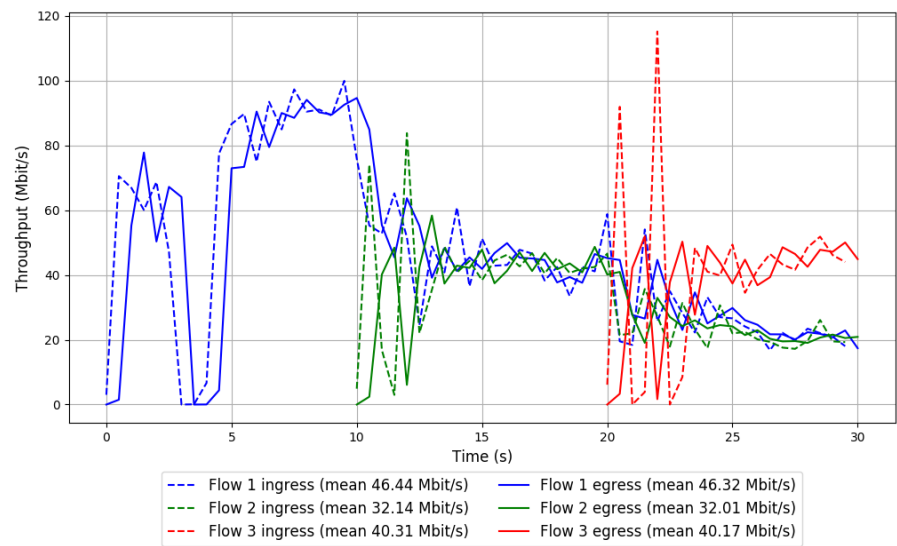


Run 4: Statistics of Verus

Start at: 2019-01-19 13:22:34
End at: 2019-01-19 13:23:04
Local clock offset: 0.702 ms
Remote clock offset: -3.309 ms

Below is generated by plot.py at 2019-01-19 14:17:51
Datalink statistics
-- Total of 3 flows:
Average throughput: 80.87 Mbit/s
95th percentile per-packet one-way delay: 213.783 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 46.32 Mbit/s
95th percentile per-packet one-way delay: 174.444 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 32.01 Mbit/s
95th percentile per-packet one-way delay: 263.745 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 40.17 Mbit/s
95th percentile per-packet one-way delay: 630.581 ms
Loss rate: 1.10%

Run 4: Report of Verus — Data Link

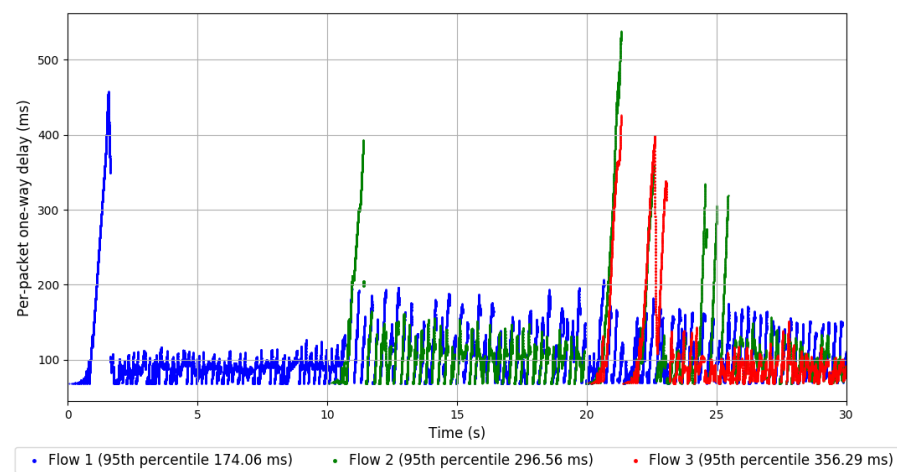
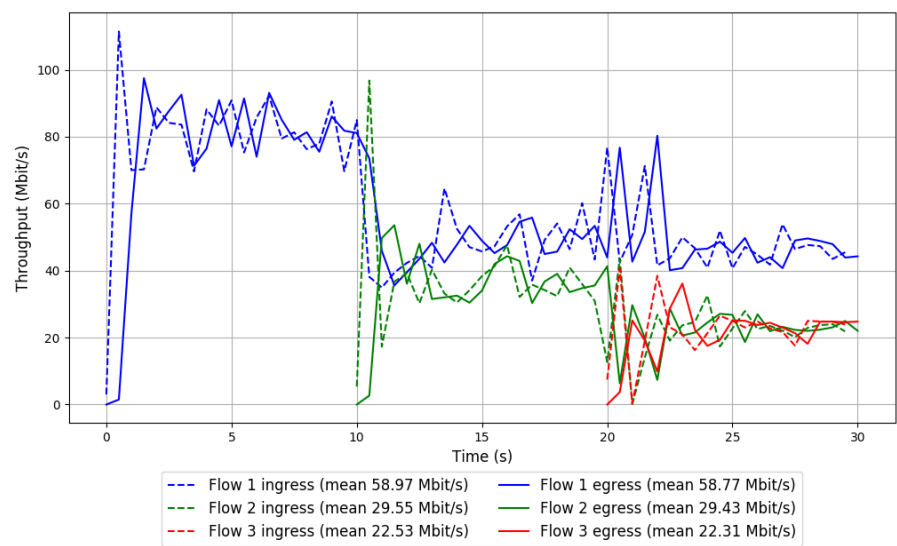


Run 5: Statistics of Verus

Start at: 2019-01-19 13:50:52
End at: 2019-01-19 13:51:22
Local clock offset: 0.066 ms
Remote clock offset: -1.729 ms

```
# Below is generated by plot.py at 2019-01-19 14:17:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.73 Mbit/s
95th percentile per-packet one-way delay: 230.474 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 58.77 Mbit/s
95th percentile per-packet one-way delay: 174.064 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 29.43 Mbit/s
95th percentile per-packet one-way delay: 296.562 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 22.31 Mbit/s
95th percentile per-packet one-way delay: 356.291 ms
Loss rate: 1.28%
```

Run 5: Report of Verus — Data Link

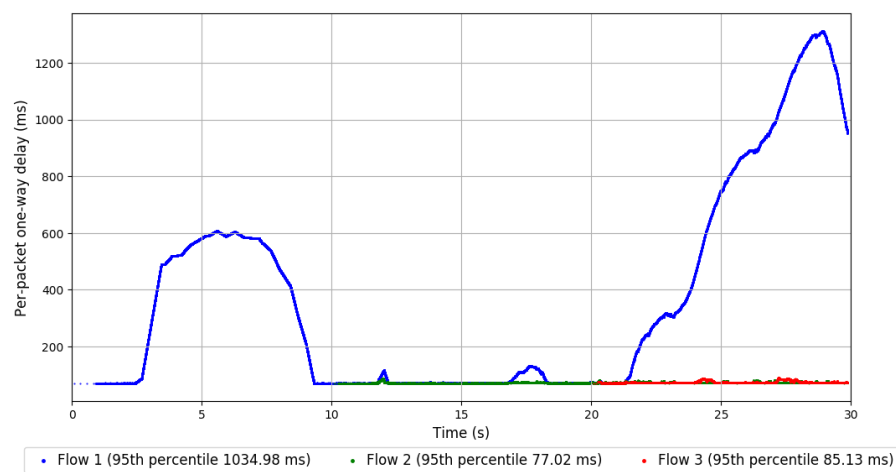
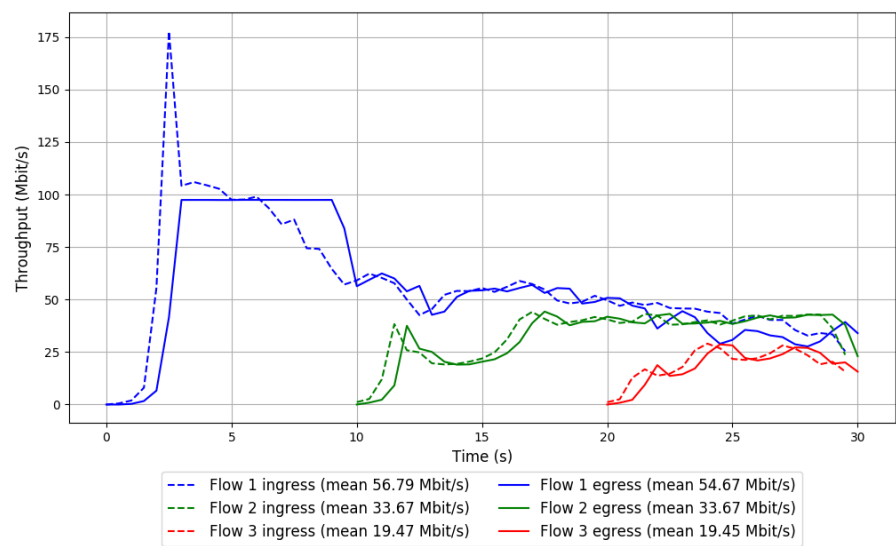


Run 1: Statistics of PCC-Vivace

Start at: 2019-01-19 11:49:39
End at: 2019-01-19 11:50:09
Local clock offset: 2.259 ms
Remote clock offset: -3.421 ms

Below is generated by plot.py at 2019-01-19 14:18:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 83.43 Mbit/s
95th percentile per-packet one-way delay: 886.508 ms
Loss rate: 2.80%
-- Flow 1:
Average throughput: 54.67 Mbit/s
95th percentile per-packet one-way delay: 1034.976 ms
Loss rate: 3.97%
-- Flow 2:
Average throughput: 33.67 Mbit/s
95th percentile per-packet one-way delay: 77.024 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 19.45 Mbit/s
95th percentile per-packet one-way delay: 85.133 ms
Loss rate: 0.88%

Run 1: Report of PCC-Vivace — Data Link

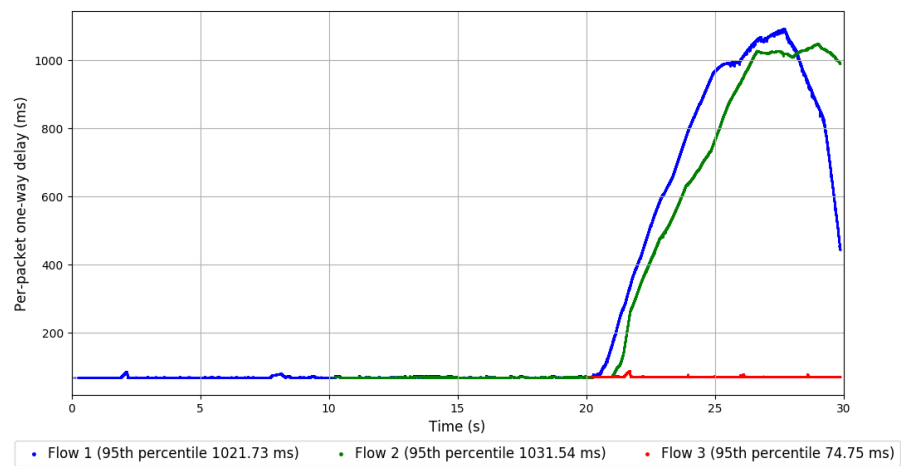
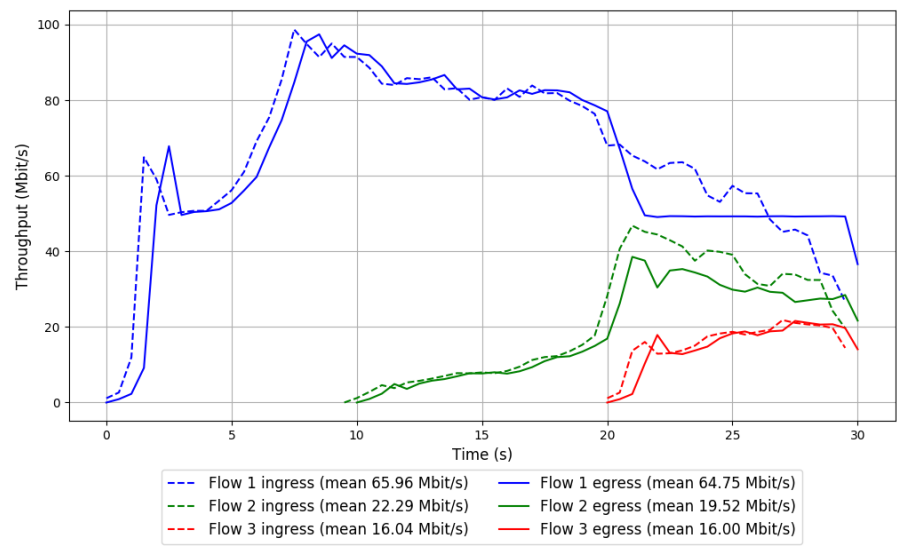


Run 2: Statistics of PCC-Vivace

Start at: 2019-01-19 12:19:59
End at: 2019-01-19 12:20:29
Local clock offset: 1.098 ms
Remote clock offset: -2.989 ms

Below is generated by plot.py at 2019-01-19 14:18:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 82.98 Mbit/s
95th percentile per-packet one-way delay: 1026.834 ms
Loss rate: 3.88%
-- Flow 1:
Average throughput: 64.75 Mbit/s
95th percentile per-packet one-way delay: 1021.729 ms
Loss rate: 2.10%
-- Flow 2:
Average throughput: 19.52 Mbit/s
95th percentile per-packet one-way delay: 1031.538 ms
Loss rate: 12.81%
-- Flow 3:
Average throughput: 16.00 Mbit/s
95th percentile per-packet one-way delay: 74.749 ms
Loss rate: 1.05%

Run 2: Report of PCC-Vivace — Data Link

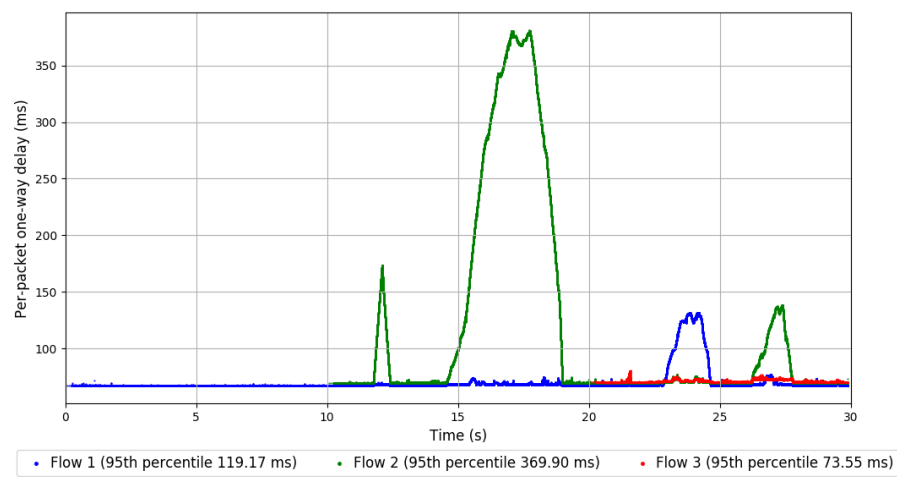
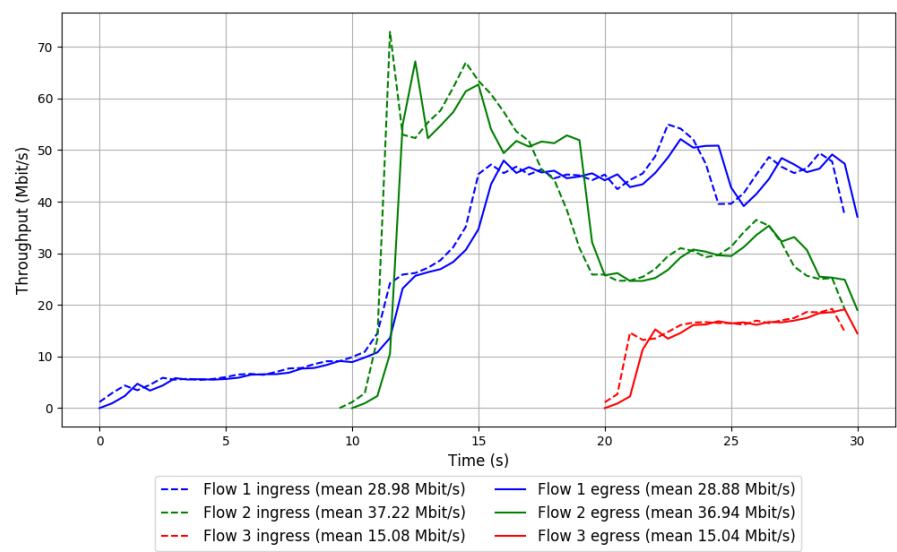


Run 3: Statistics of PCC-Vivace

Start at: 2019-01-19 12:50:03
End at: 2019-01-19 12:50:33
Local clock offset: 0.968 ms
Remote clock offset: -3.668 ms

Below is generated by plot.py at 2019-01-19 14:18:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 58.37 Mbit/s
95th percentile per-packet one-way delay: 315.182 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 28.88 Mbit/s
95th percentile per-packet one-way delay: 119.170 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 36.94 Mbit/s
95th percentile per-packet one-way delay: 369.903 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 15.04 Mbit/s
95th percentile per-packet one-way delay: 73.552 ms
Loss rate: 1.04%

Run 3: Report of PCC-Vivace — Data Link

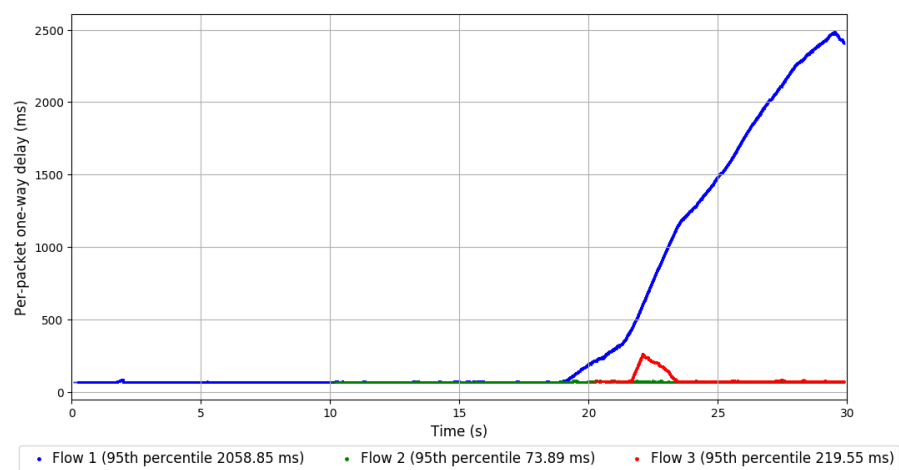
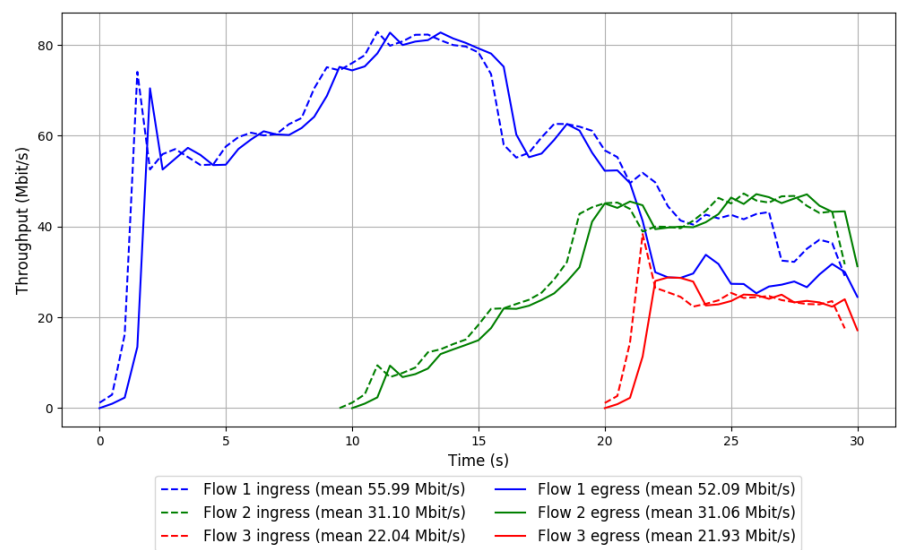


Run 4: Statistics of PCC-Vivace

Start at: 2019-01-19 13:19:45
End at: 2019-01-19 13:20:15
Local clock offset: 1.088 ms
Remote clock offset: -3.908 ms

Below is generated by plot.py at 2019-01-19 14:18:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 79.94 Mbit/s
95th percentile per-packet one-way delay: 1628.479 ms
Loss rate: 5.03%
-- Flow 1:
Average throughput: 52.09 Mbit/s
95th percentile per-packet one-way delay: 2058.848 ms
Loss rate: 7.18%
-- Flow 2:
Average throughput: 31.06 Mbit/s
95th percentile per-packet one-way delay: 73.885 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 21.93 Mbit/s
95th percentile per-packet one-way delay: 219.552 ms
Loss rate: 1.26%

Run 4: Report of PCC-Vivace — Data Link

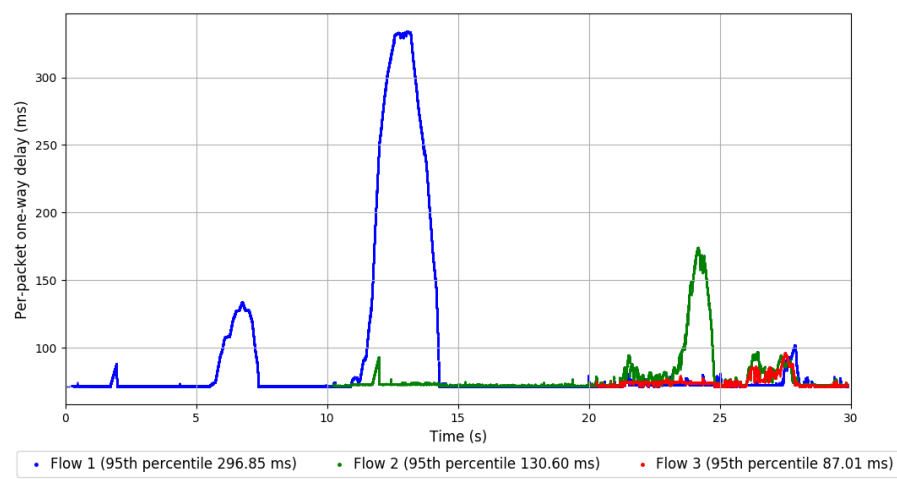
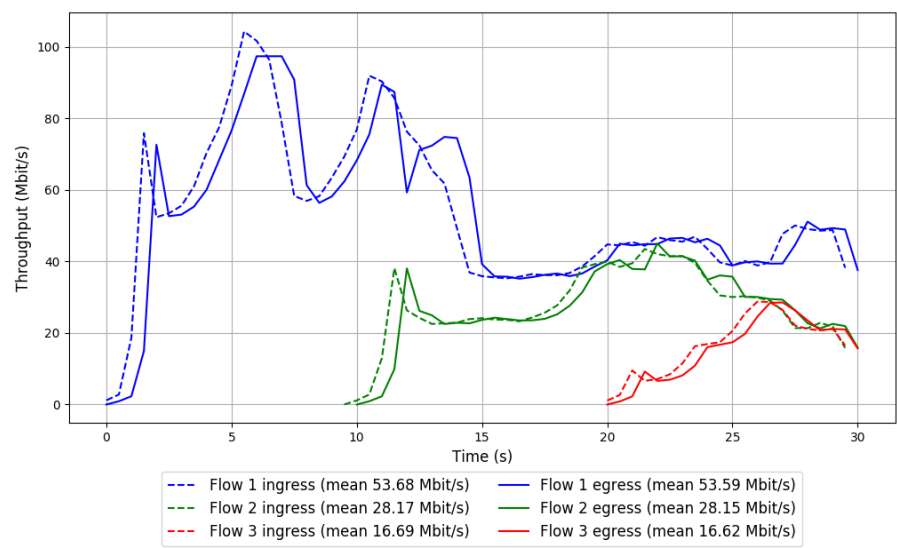


Run 5: Statistics of PCC-Vivace

Start at: 2019-01-19 13:48:01
End at: 2019-01-19 13:48:31
Local clock offset: 0.917 ms
Remote clock offset: -3.921 ms

Below is generated by plot.py at 2019-01-19 14:18:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.74 Mbit/s
95th percentile per-packet one-way delay: 254.614 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 53.59 Mbit/s
95th percentile per-packet one-way delay: 296.850 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 28.15 Mbit/s
95th percentile per-packet one-way delay: 130.601 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 16.62 Mbit/s
95th percentile per-packet one-way delay: 87.008 ms
Loss rate: 1.31%

Run 5: Report of PCC-Vivace — Data Link

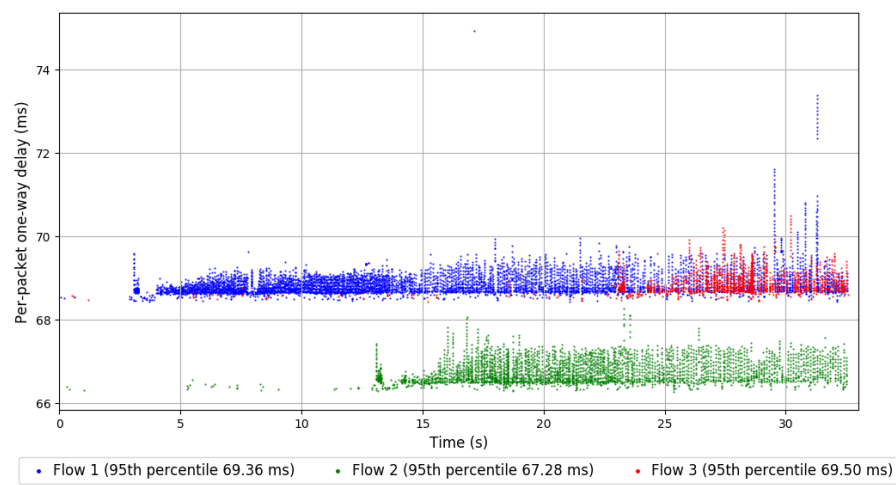
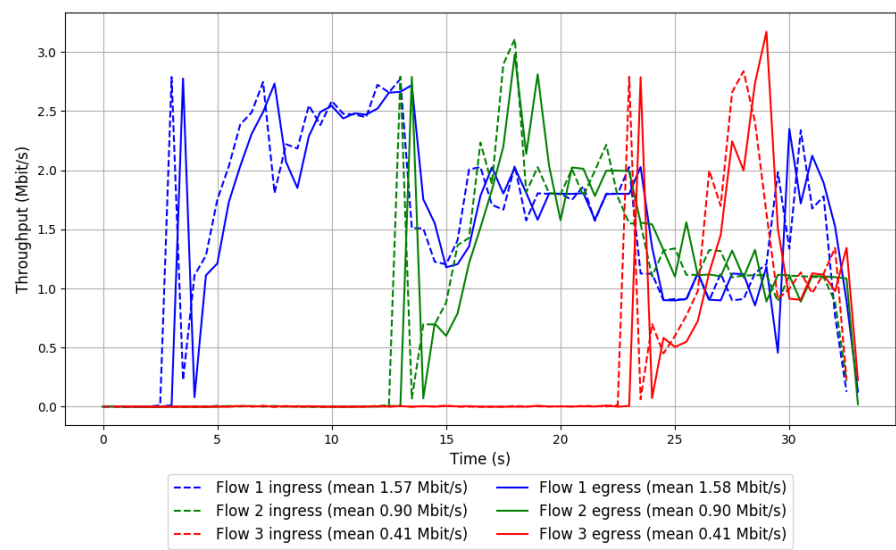


Run 1: Statistics of WebRTC media

Start at: 2019-01-19 11:46:48
End at: 2019-01-19 11:47:18
Local clock offset: -0.487 ms
Remote clock offset: -4.125 ms

Below is generated by plot.py at 2019-01-19 14:18:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.87 Mbit/s
95th percentile per-packet one-way delay: 69.289 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 69.359 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.90 Mbit/s
95th percentile per-packet one-way delay: 67.279 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 69.497 ms
Loss rate: 0.88%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-01-19 12:17:15

End at: 2019-01-19 12:17:45

Local clock offset: 1.142 ms

Remote clock offset: -3.66 ms

Below is generated by plot.py at 2019-01-19 14:18:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 71.165 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 69.116 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.94 Mbit/s

95th percentile per-packet one-way delay: 71.269 ms

Loss rate: 0.00%

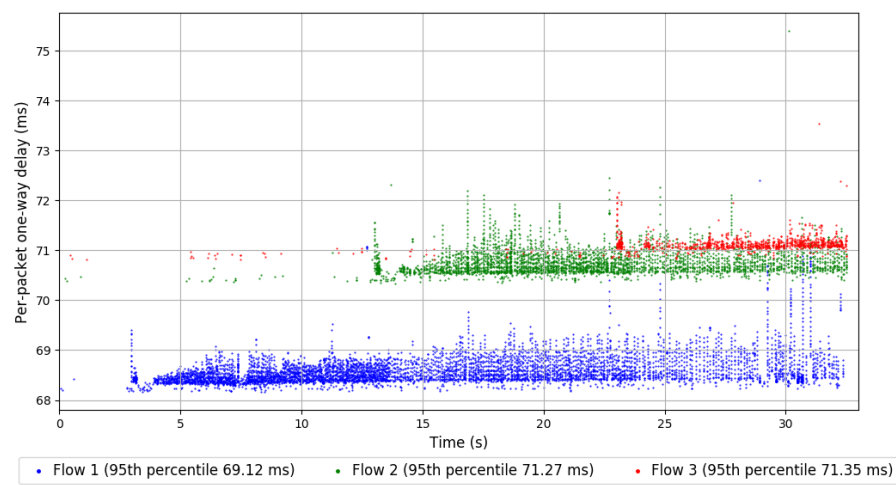
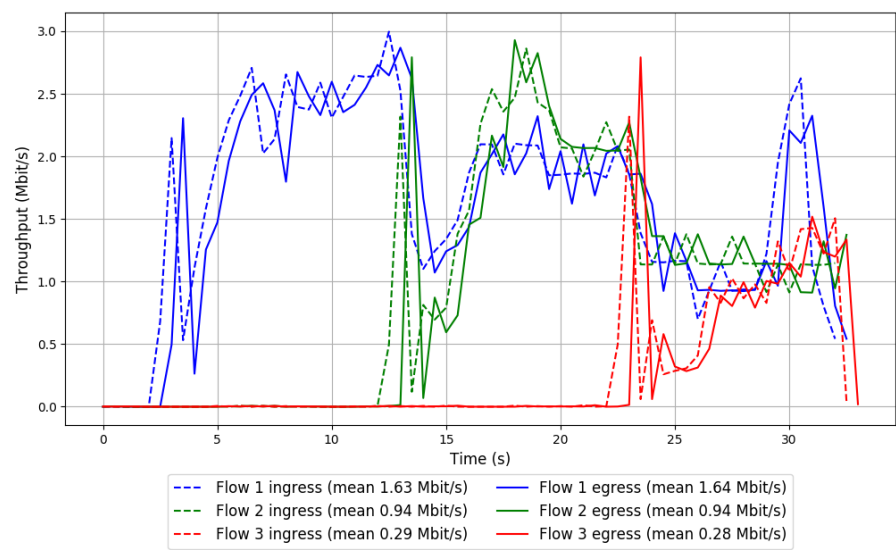
-- Flow 3:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 71.350 ms

Loss rate: 2.93%

Run 2: Report of WebRTC media — Data Link

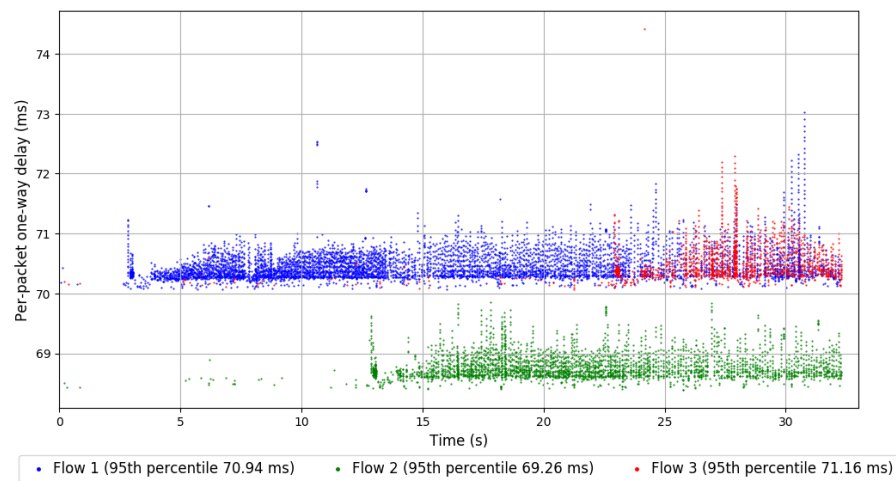
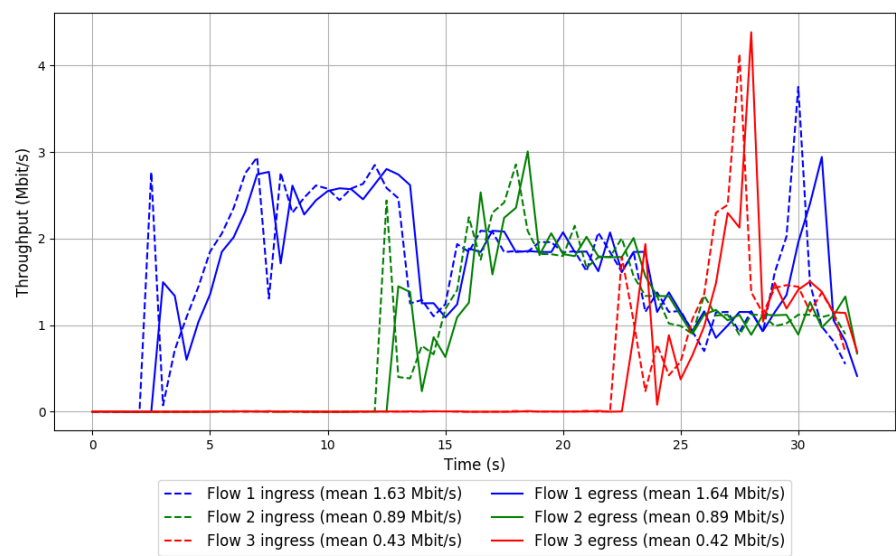


Run 3: Statistics of WebRTC media

Start at: 2019-01-19 12:46:59
End at: 2019-01-19 12:47:29
Local clock offset: -0.347 ms
Remote clock offset: -3.445 ms

Below is generated by plot.py at 2019-01-19 14:18:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 70.891 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 70.939 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 69.258 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 71.160 ms
Loss rate: 0.83%

Run 3: Report of WebRTC media — Data Link

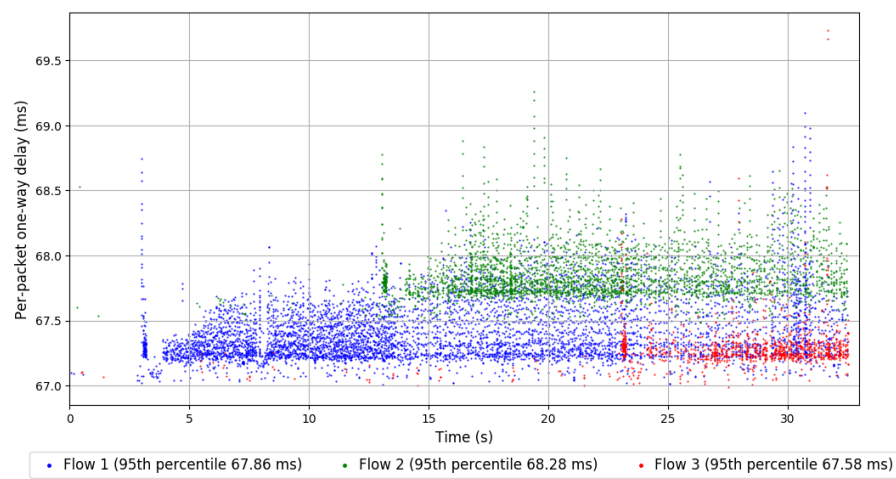
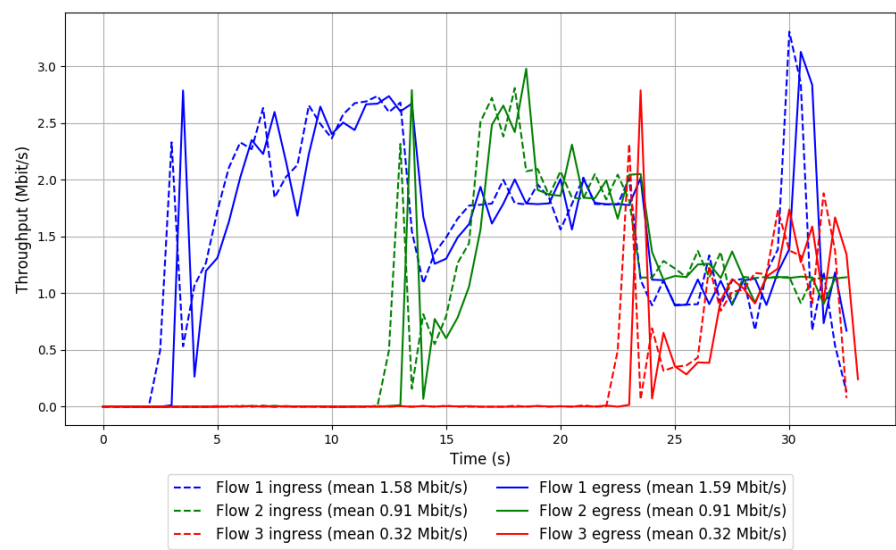


Run 4: Statistics of WebRTC media

Start at: 2019-01-19 13:17:04
End at: 2019-01-19 13:17:34
Local clock offset: -1.503 ms
Remote clock offset: -4.931 ms

Below is generated by plot.py at 2019-01-19 14:18:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: 68.086 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 67.861 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 68.279 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 67.582 ms
Loss rate: 0.39%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-01-19 13:45:10
End at: 2019-01-19 13:45:40
Local clock offset: 0.692 ms
Remote clock offset: -1.814 ms

Below is generated by plot.py at 2019-01-19 14:18:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 69.768 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 67.675 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 69.919 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 70.033 ms
Loss rate: 2.93%

Run 5: Report of WebRTC media — Data Link

