

Pantheon Report

Generated at 2019-03-27 03:28:10 (UTC).

Data path: AWS Brazil 2 on **ens5** (*local*) → Colombia on **p4p1** (*remote*).

Repeated the test of 21 congestion control schemes 5 times.

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

NTP offsets were measured against **gps.ntp.br** and have been applied to correct the timestamps in logs.

System info:

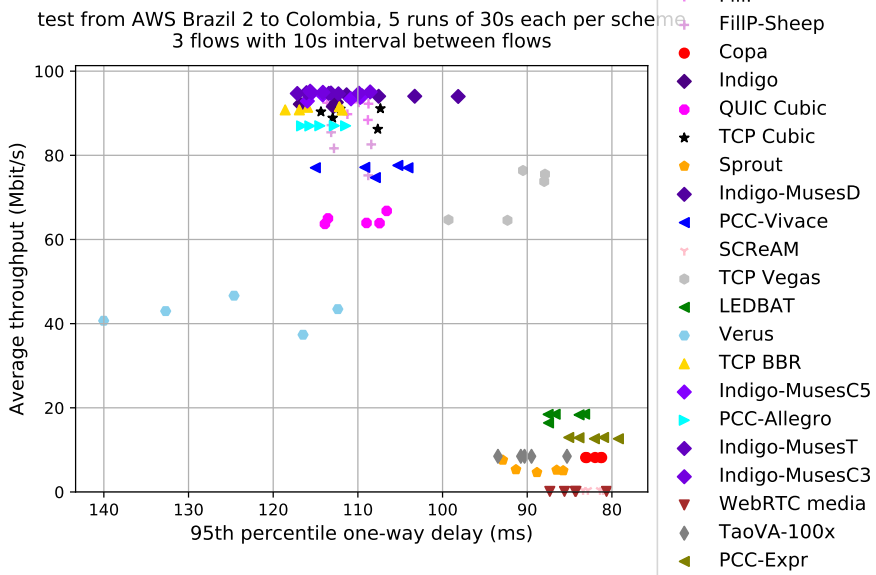
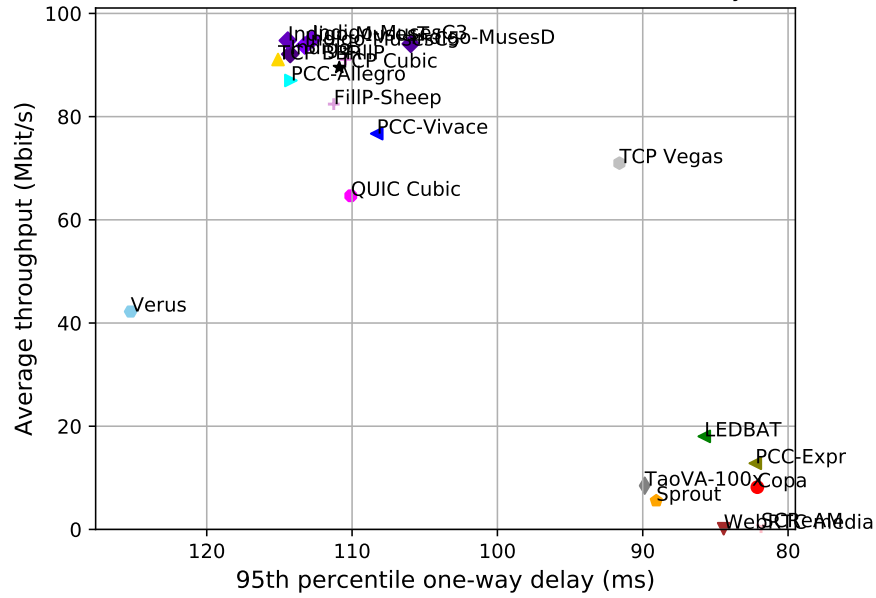
```
Linux 4.15.0-1034-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf5e58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

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

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



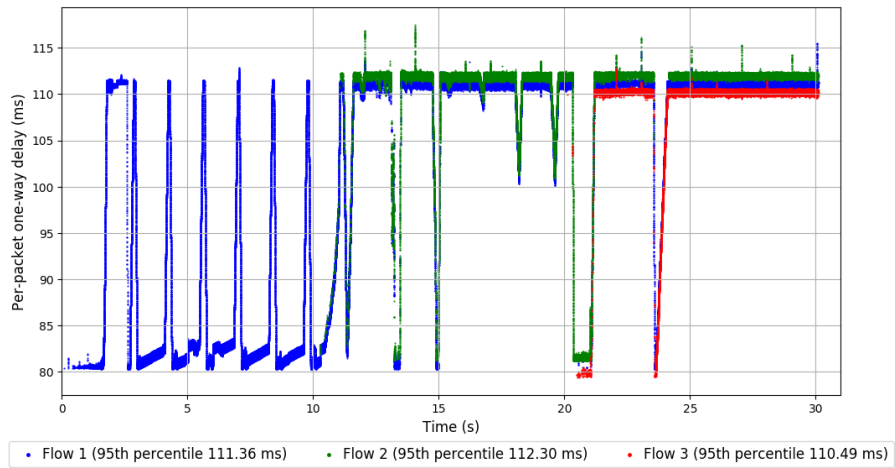
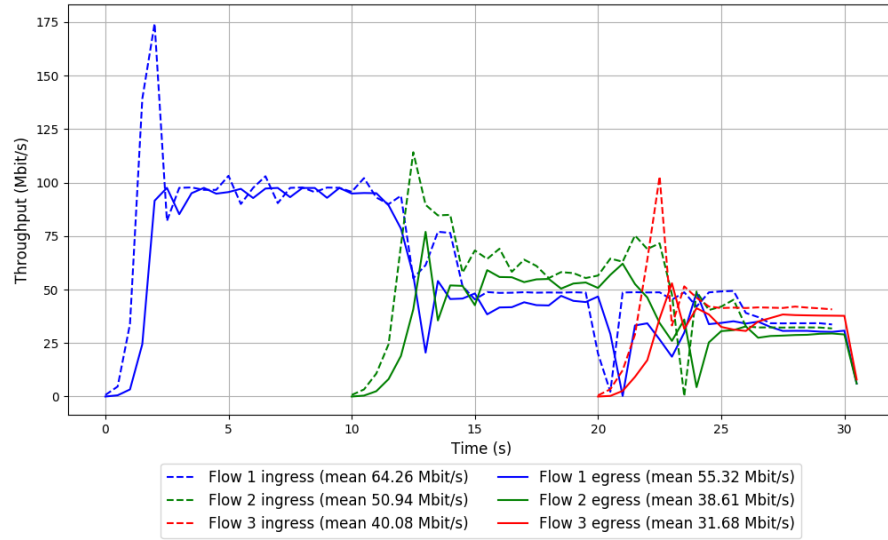
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	5	55.60	38.04	30.60	114.87	114.27	113.99	13.93	21.32	27.21
Copa	5	0.00	9.64	5.34	80.38	82.33	80.12	98.41	74.66	79.84
TCP Cubic	5	70.09	19.39	19.54	110.80	110.23	109.74	0.84	0.25	0.25
FillP	5	55.12	41.96	24.32	110.31	109.34	109.92	13.43	25.11	26.96
FillP-Sheep	5	25.19	70.84	30.64	108.92	111.32	110.77	6.65	7.72	11.53
Indigo	5	63.69	25.31	36.39	112.98	113.88	114.13	13.89	31.53	66.05
Indigo-MusesC3	5	49.53	52.30	37.91	112.50	112.25	112.95	1.68	1.78	3.04
Indigo-MusesC5	5	55.81	53.46	10.25	112.28	113.42	113.19	1.18	2.77	4.98
Indigo-MusesD	5	60.21	39.29	27.61	103.19	106.43	109.00	0.58	0.45	1.70
Indigo-MusesT	5	54.95	47.36	30.01	113.93	113.81	114.07	6.03	5.01	8.50
LEDBAT	5	11.90	7.32	3.86	85.87	85.54	84.96	0.01	0.05	0.00
PCC-Allegro	5	78.80	8.39	7.96	114.17	113.43	114.13	2.77	4.15	6.28
PCC-Expr	5	8.40	5.23	2.83	81.58	82.29	81.57	51.27	36.39	48.31
QUIC Cubic	5	45.89	19.66	17.50	110.62	109.02	105.52	0.78	0.49	1.29
SCReAM	5	0.22	0.22	0.22	81.14	80.52	80.79	0.00	0.00	0.00
Sprout	5	3.00	3.00	1.72	89.22	88.87	86.26	0.01	0.01	0.00
TaoVA-100x	5	0.00	10.14	5.18	84.13	92.91	84.28	95.92	31.07	23.94
TCP Vegas	5	37.76	26.13	47.54	91.23	94.65	92.90	1.36	1.01	1.72
Verus	5	21.19	23.96	16.17	126.59	119.02	135.35	33.23	40.89	55.48
PCC-Vivace	5	65.62	12.33	8.73	108.41	106.64	105.35	0.20	0.36	0.82
WebRTC media	5	0.05	0.04	0.04	84.56	83.89	84.09	0.00	0.01	0.00

Run 1: Statistics of TCP BBR

Start at: 2019-03-27 01:14:44
End at: 2019-03-27 01:15:14
Local clock offset: -6.679 ms
Remote clock offset: -4.867 ms

Below is generated by plot.py at 2019-03-27 03:19:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.57 Mbit/s
95th percentile per-packet one-way delay: 112.185 ms
Loss rate: 17.80%
-- Flow 1:
Average throughput: 55.32 Mbit/s
95th percentile per-packet one-way delay: 111.362 ms
Loss rate: 13.82%
-- Flow 2:
Average throughput: 38.61 Mbit/s
95th percentile per-packet one-way delay: 112.298 ms
Loss rate: 24.11%
-- Flow 3:
Average throughput: 31.68 Mbit/s
95th percentile per-packet one-way delay: 110.486 ms
Loss rate: 20.97%

Run 1: Report of TCP BBR — Data Link

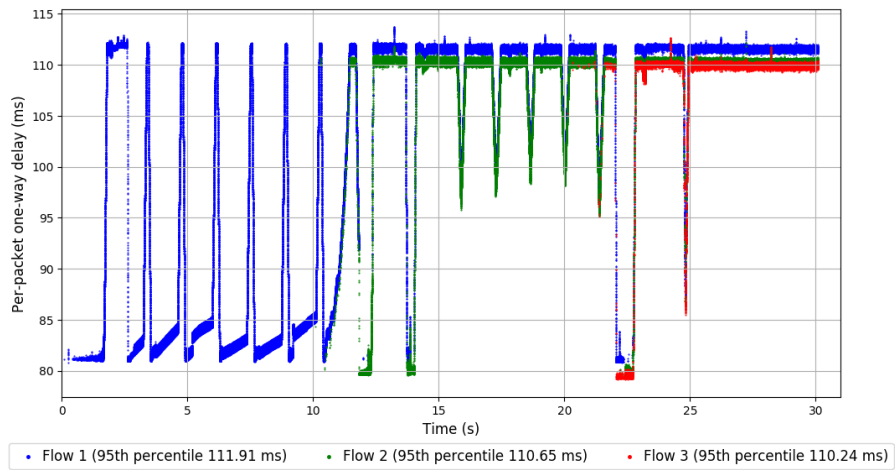
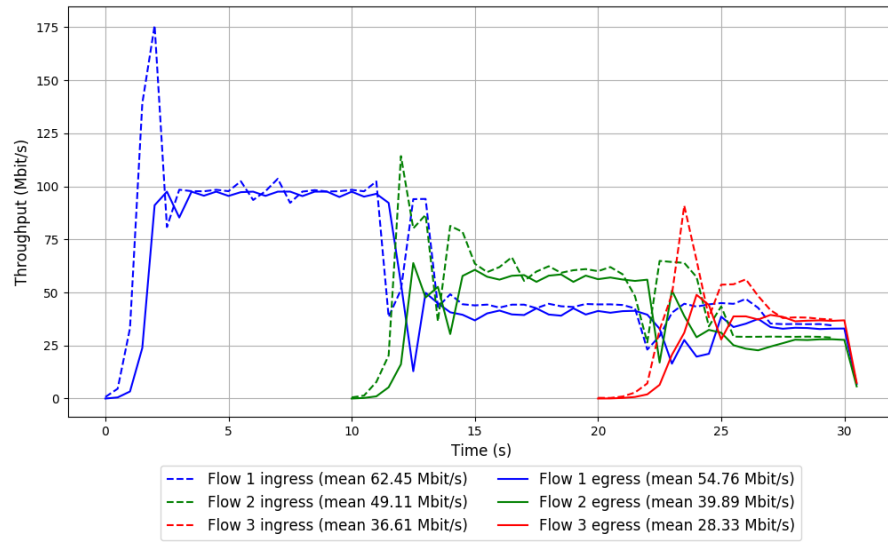


Run 2: Statistics of TCP BBR

Start at: 2019-03-27 01:41:18
End at: 2019-03-27 01:41:48
Local clock offset: -3.143 ms
Remote clock offset: 12.152 ms

Below is generated by plot.py at 2019-03-27 03:19:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.76 Mbit/s
95th percentile per-packet one-way delay: 111.850 ms
Loss rate: 15.37%
-- Flow 1:
Average throughput: 54.76 Mbit/s
95th percentile per-packet one-way delay: 111.914 ms
Loss rate: 12.23%
-- Flow 2:
Average throughput: 39.89 Mbit/s
95th percentile per-packet one-way delay: 110.646 ms
Loss rate: 18.67%
-- Flow 3:
Average throughput: 28.33 Mbit/s
95th percentile per-packet one-way delay: 110.244 ms
Loss rate: 22.58%

Run 2: Report of TCP BBR — Data Link

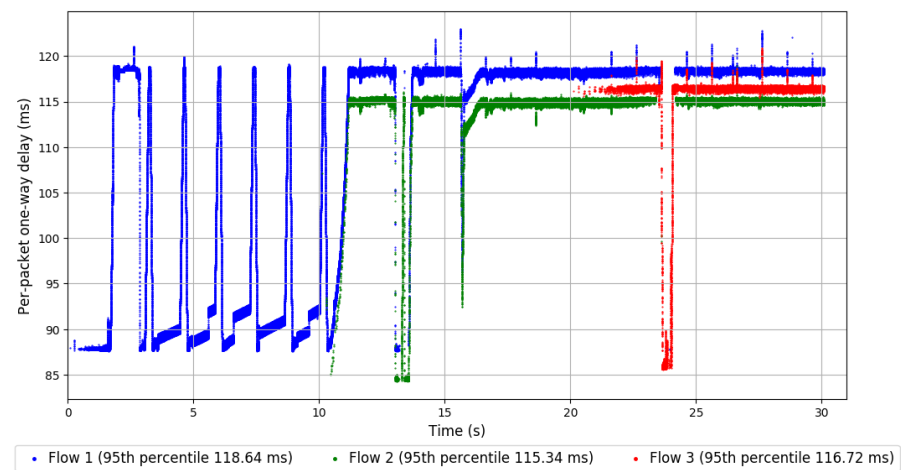
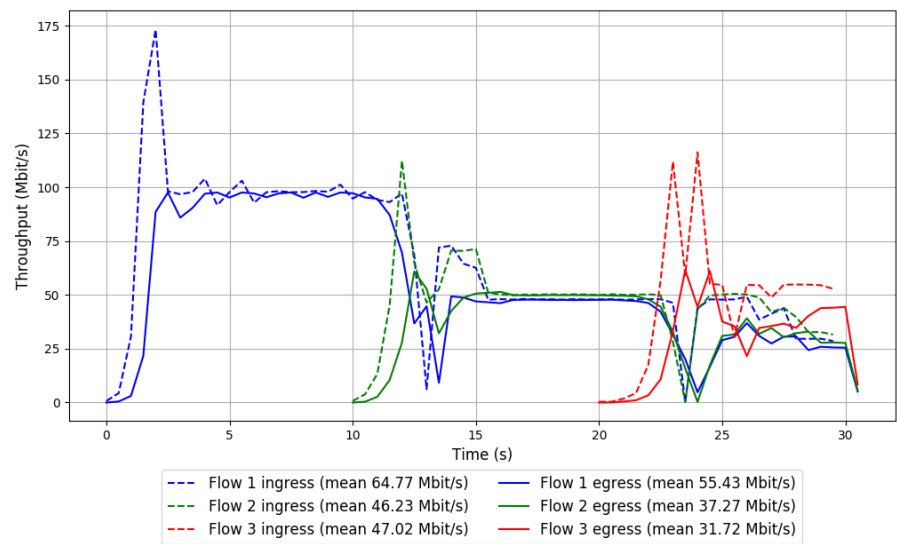


Run 3: Statistics of TCP BBR

Start at: 2019-03-27 02:07:52
End at: 2019-03-27 02:08:22
Local clock offset: -2.084 ms
Remote clock offset: 24.311 ms

Below is generated by plot.py at 2019-03-27 03:19:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.80 Mbit/s
95th percentile per-packet one-way delay: 118.583 ms
Loss rate: 18.29%
-- Flow 1:
Average throughput: 55.43 Mbit/s
95th percentile per-packet one-way delay: 118.645 ms
Loss rate: 14.34%
-- Flow 2:
Average throughput: 37.27 Mbit/s
95th percentile per-packet one-way delay: 115.344 ms
Loss rate: 19.36%
-- Flow 3:
Average throughput: 31.72 Mbit/s
95th percentile per-packet one-way delay: 116.722 ms
Loss rate: 32.53%

Run 3: Report of TCP BBR — Data Link

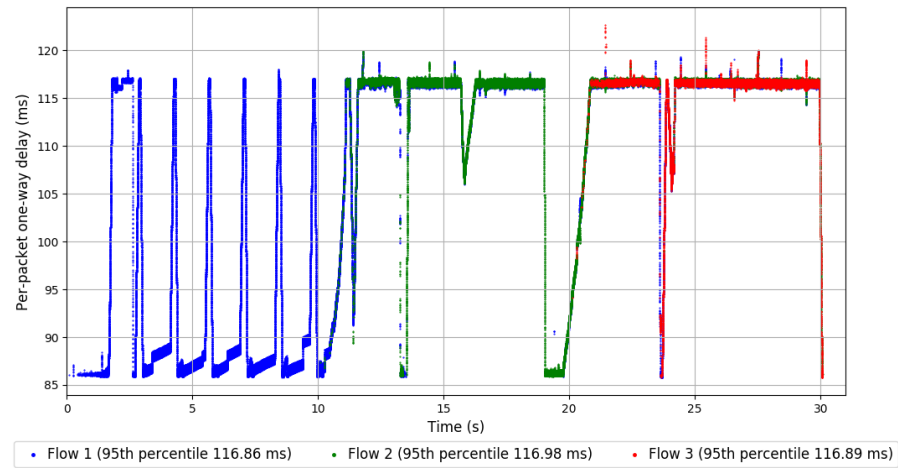
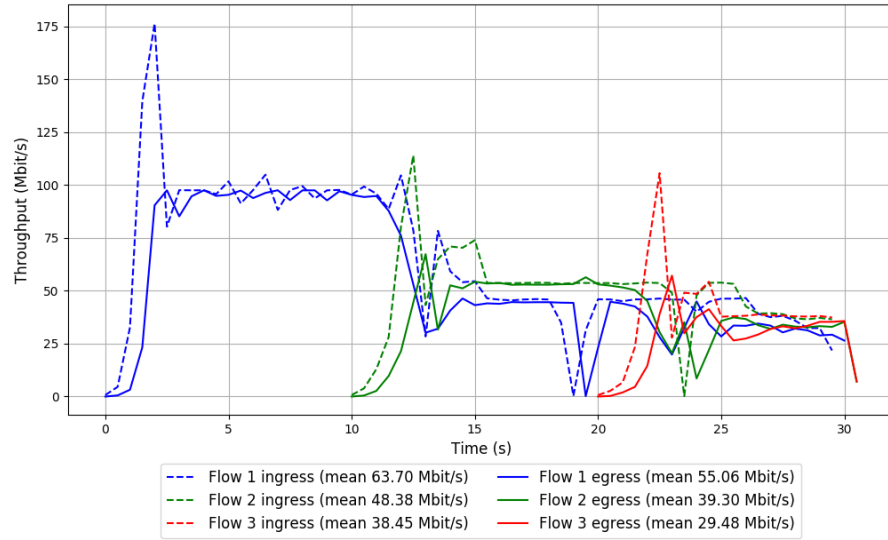


Run 4: Statistics of TCP BBR

Start at: 2019-03-27 02:34:32
End at: 2019-03-27 02:35:02
Local clock offset: -1.914 ms
Remote clock offset: 30.286 ms

Below is generated by plot.py at 2019-03-27 03:19:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.80 Mbit/s
95th percentile per-packet one-way delay: 116.910 ms
Loss rate: 16.22%
-- Flow 1:
Average throughput: 55.06 Mbit/s
95th percentile per-packet one-way delay: 116.862 ms
Loss rate: 13.47%
-- Flow 2:
Average throughput: 39.30 Mbit/s
95th percentile per-packet one-way delay: 116.978 ms
Loss rate: 18.77%
-- Flow 3:
Average throughput: 29.48 Mbit/s
95th percentile per-packet one-way delay: 116.885 ms
Loss rate: 23.42%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2019-03-27 03:01:06

End at: 2019-03-27 03:01:36

Local clock offset: -7.431 ms

Remote clock offset: 35.03 ms

Below is generated by plot.py at 2019-03-27 03:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.42 Mbit/s

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

Loss rate: 21.42%

-- Flow 1:

Average throughput: 57.45 Mbit/s

95th percentile per-packet one-way delay: 115.557 ms

Loss rate: 15.77%

-- Flow 2:

Average throughput: 35.13 Mbit/s

95th percentile per-packet one-way delay: 116.068 ms

Loss rate: 25.67%

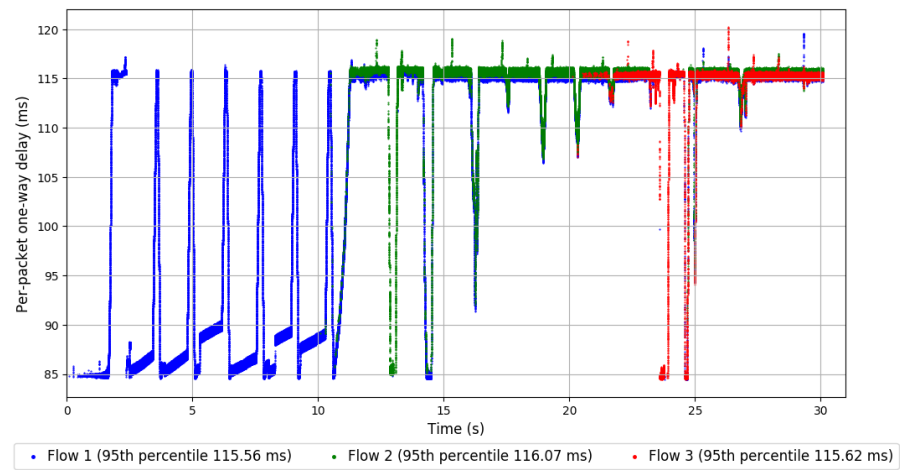
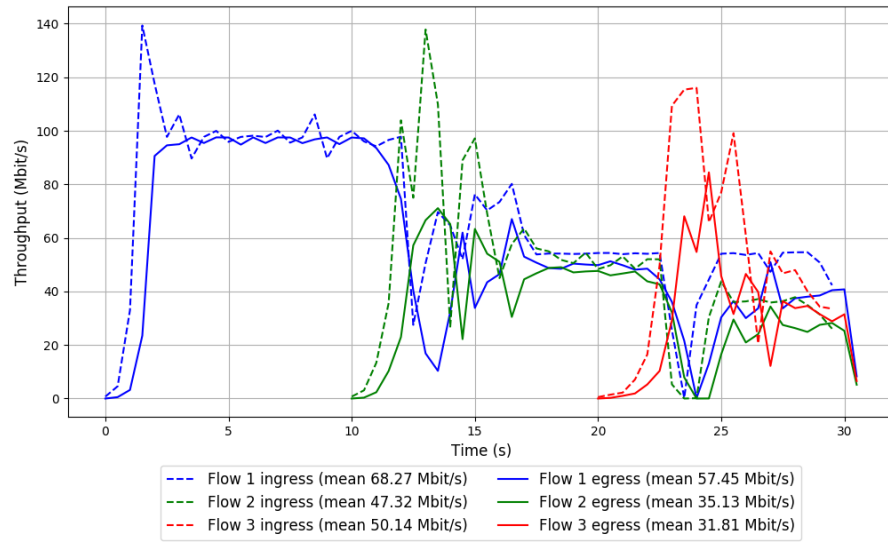
-- Flow 3:

Average throughput: 31.81 Mbit/s

95th percentile per-packet one-way delay: 115.622 ms

Loss rate: 36.56%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-03-27 01:09:38

End at: 2019-03-27 01:10:08

Local clock offset: -7.13 ms

Remote clock offset: -5.73 ms

Below is generated by plot.py at 2019-03-27 03:19:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.18 Mbit/s

95th percentile per-packet one-way delay: 81.294 ms

Loss rate: 76.16%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 79.168 ms

Loss rate: 98.33%

-- Flow 2:

Average throughput: 10.80 Mbit/s

95th percentile per-packet one-way delay: 81.568 ms

Loss rate: 76.04%

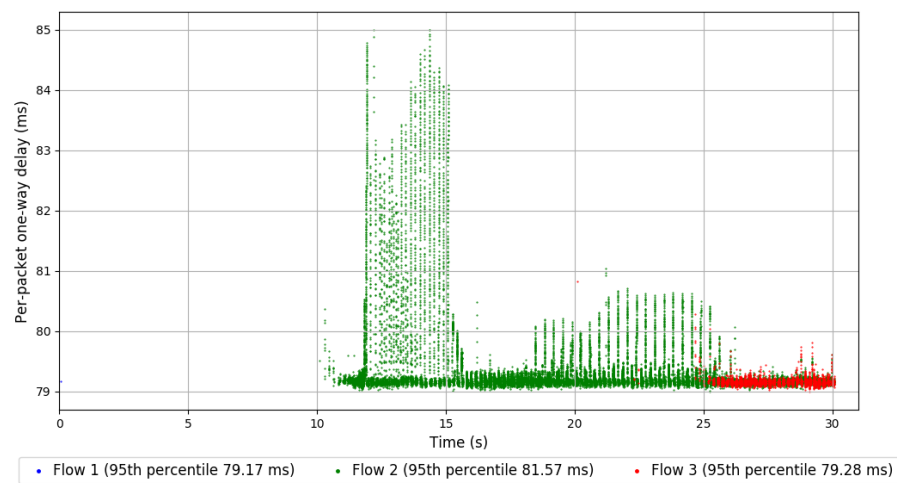
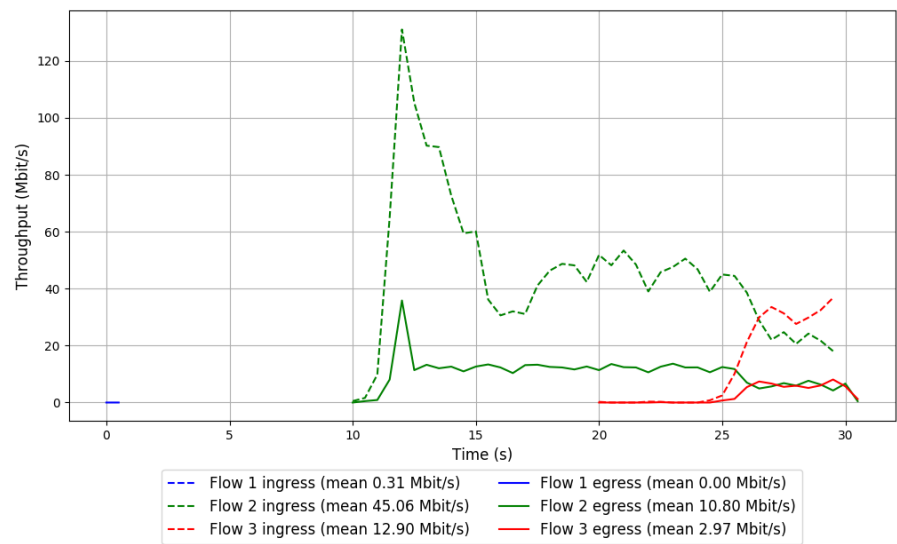
-- Flow 3:

Average throughput: 2.97 Mbit/s

95th percentile per-packet one-way delay: 79.275 ms

Loss rate: 76.97%

Run 1: Report of Copa — Data Link

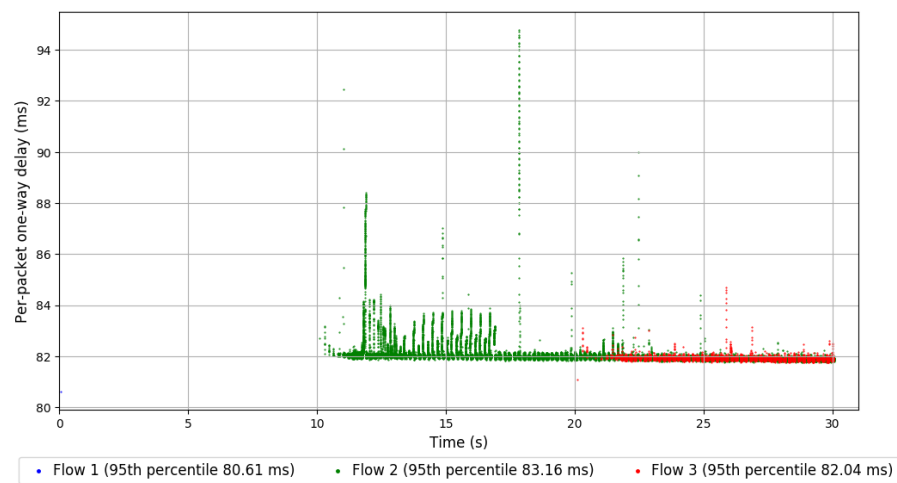
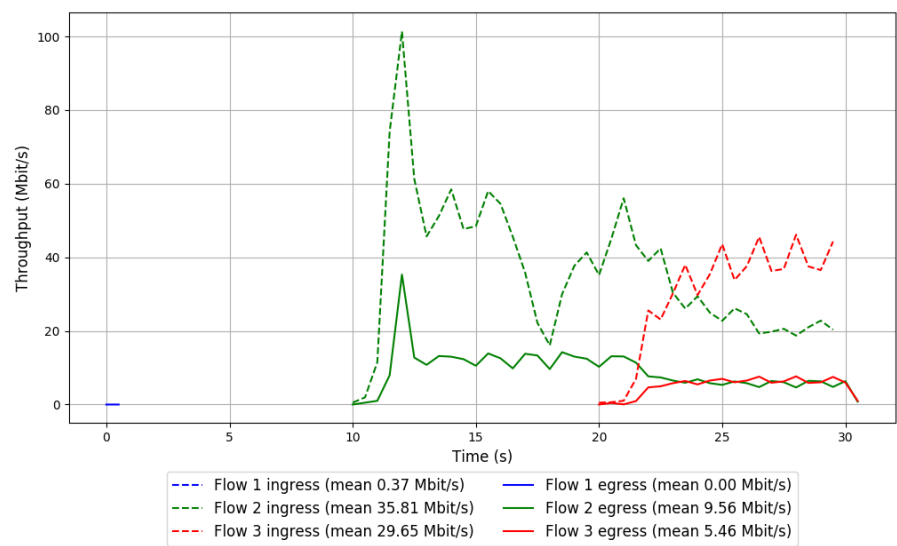


Run 2: Statistics of Copa

Start at: 2019-03-27 01:36:13
End at: 2019-03-27 01:36:43
Local clock offset: -3.46 ms
Remote clock offset: 10.918 ms

Below is generated by plot.py at 2019-03-27 03:19:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.18 Mbit/s
95th percentile per-packet one-way delay: 82.985 ms
Loss rate: 75.72%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 80.607 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 9.56 Mbit/s
95th percentile per-packet one-way delay: 83.162 ms
Loss rate: 73.31%
-- Flow 3:
Average throughput: 5.46 Mbit/s
95th percentile per-packet one-way delay: 82.040 ms
Loss rate: 81.57%

Run 2: Report of Copa — Data Link

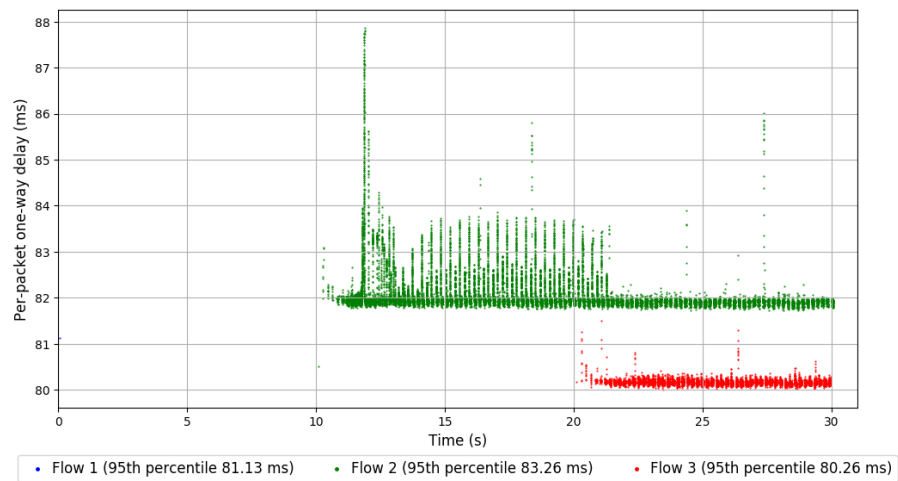
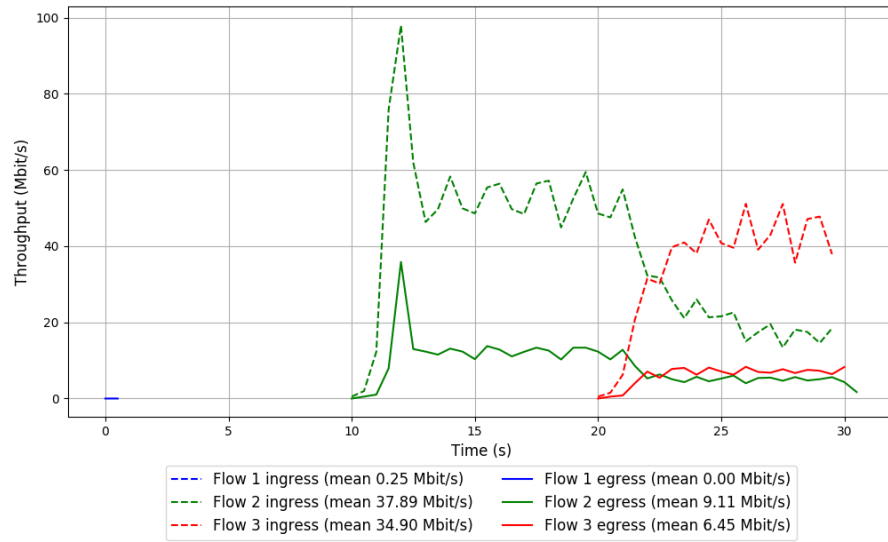


Run 3: Statistics of Copa

Start at: 2019-03-27 02:02:47
End at: 2019-03-27 02:03:17
Local clock offset: -2.219 ms
Remote clock offset: 19.298 ms

Below is generated by plot.py at 2019-03-27 03:19:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 83.099 ms
Loss rate: 77.71%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 81.127 ms
Loss rate: 97.92%
-- Flow 2:
Average throughput: 9.11 Mbit/s
95th percentile per-packet one-way delay: 83.264 ms
Loss rate: 75.97%
-- Flow 3:
Average throughput: 6.45 Mbit/s
95th percentile per-packet one-way delay: 80.264 ms
Loss rate: 81.52%

Run 3: Report of Copa — Data Link

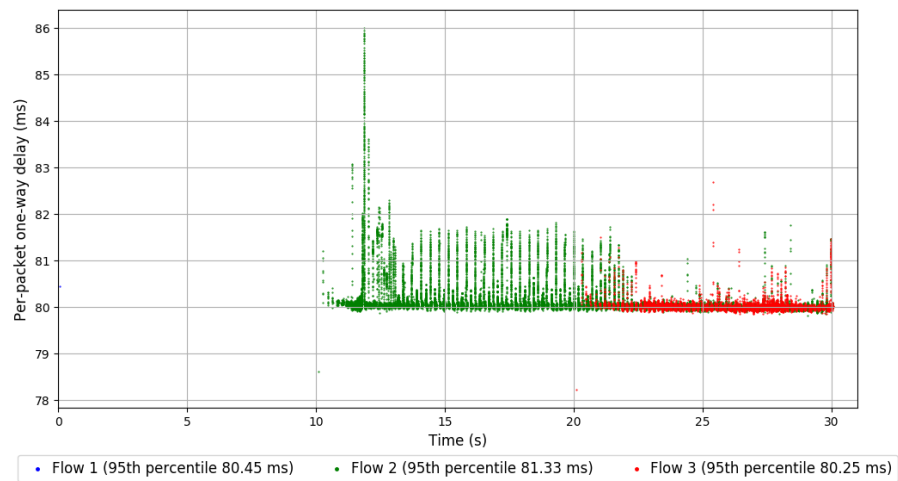
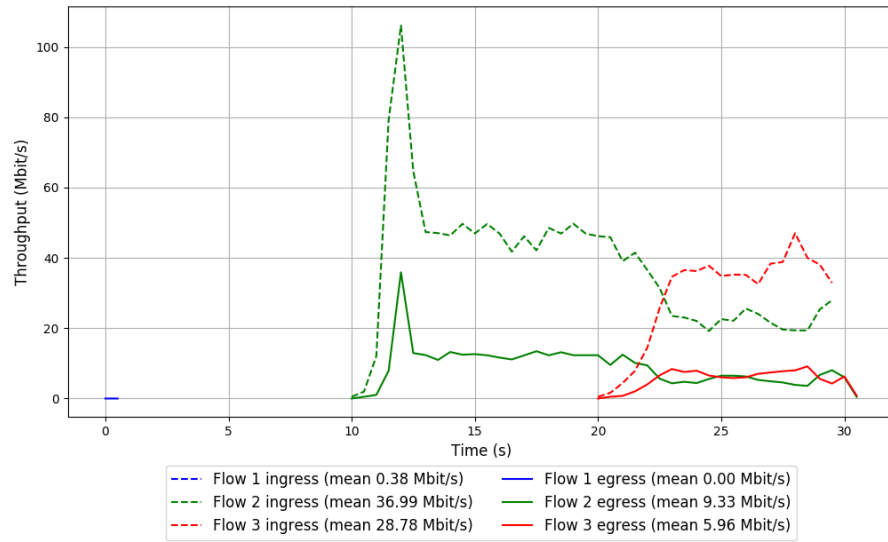


Run 4: Statistics of Copa

Start at: 2019-03-27 02:29:27
End at: 2019-03-27 02:29:57
Local clock offset: -1.11 ms
Remote clock offset: 24.143 ms

Below is generated by plot.py at 2019-03-27 03:19:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 81.212 ms
Loss rate: 76.05%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 80.454 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 9.33 Mbit/s
95th percentile per-packet one-way delay: 81.328 ms
Loss rate: 74.79%
-- Flow 3:
Average throughput: 5.96 Mbit/s
95th percentile per-packet one-way delay: 80.250 ms
Loss rate: 79.30%

Run 4: Report of Copa — Data Link

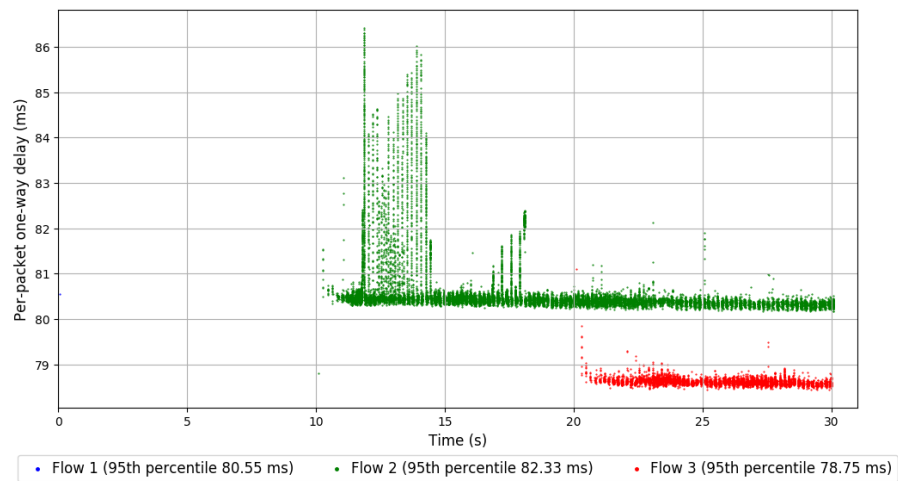
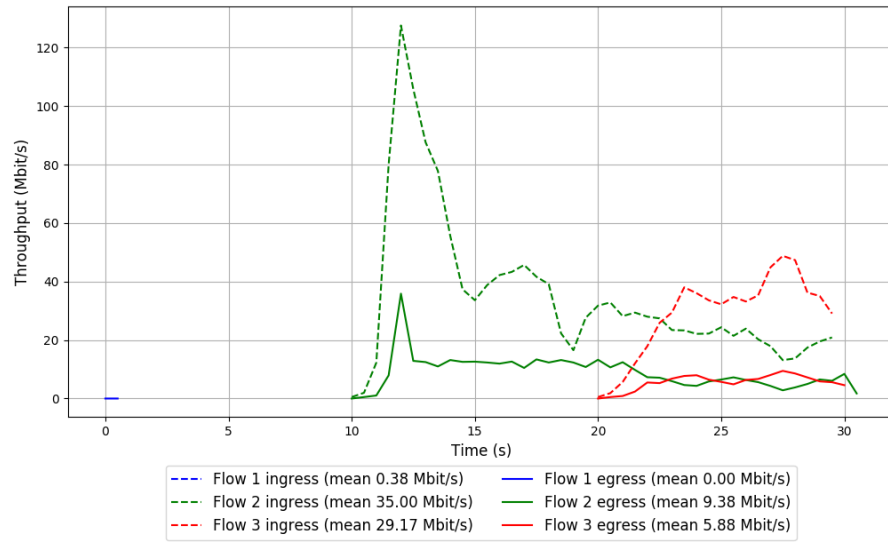


Run 5: Statistics of Copa

Start at: 2019-03-27 02:56:02
End at: 2019-03-27 02:56:32
Local clock offset: -6.315 ms
Remote clock offset: 29.716 ms

Below is generated by plot.py at 2019-03-27 03:19:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 81.983 ms
Loss rate: 75.14%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 80.550 ms
Loss rate: 98.60%
-- Flow 2:
Average throughput: 9.38 Mbit/s
95th percentile per-packet one-way delay: 82.327 ms
Loss rate: 73.19%
-- Flow 3:
Average throughput: 5.88 Mbit/s
95th percentile per-packet one-way delay: 78.749 ms
Loss rate: 79.85%

Run 5: Report of Copa — Data Link

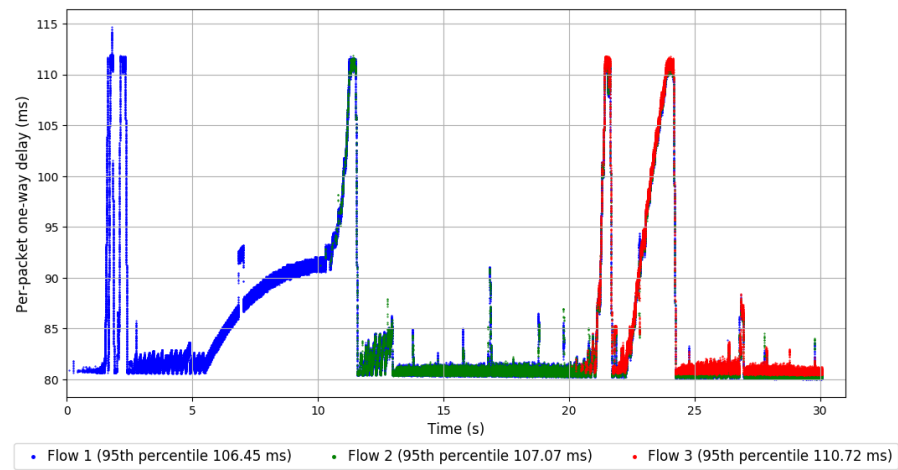
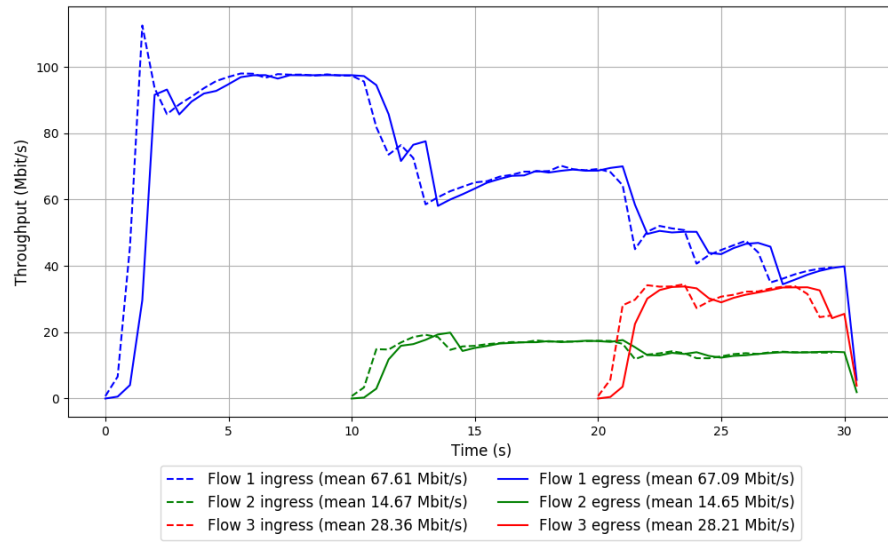


Run 1: Statistics of TCP Cubic

Start at: 2019-03-27 01:24:47
End at: 2019-03-27 01:25:17
Local clock offset: -4.743 ms
Remote clock offset: -0.718 ms

Below is generated by plot.py at 2019-03-27 03:19:38
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.22 Mbit/s
95th percentile per-packet one-way delay: 107.652 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 67.09 Mbit/s
95th percentile per-packet one-way delay: 106.455 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 14.65 Mbit/s
95th percentile per-packet one-way delay: 107.071 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 28.21 Mbit/s
95th percentile per-packet one-way delay: 110.716 ms
Loss rate: 0.55%

Run 1: Report of TCP Cubic — Data Link

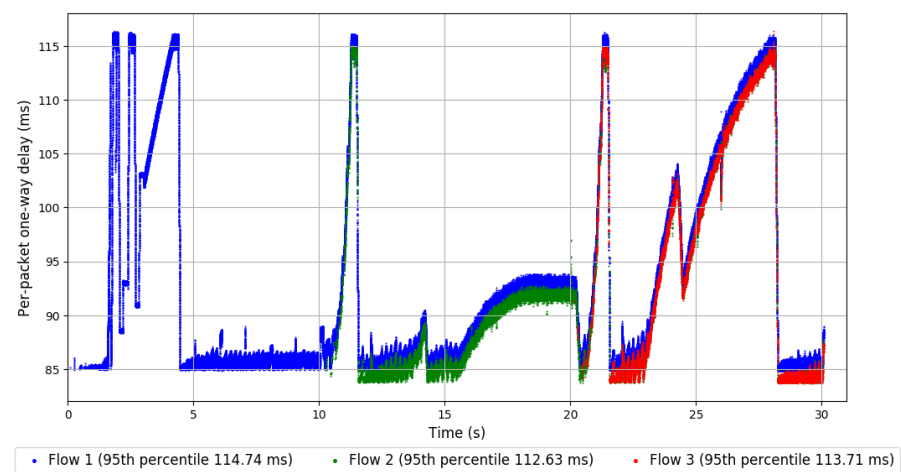
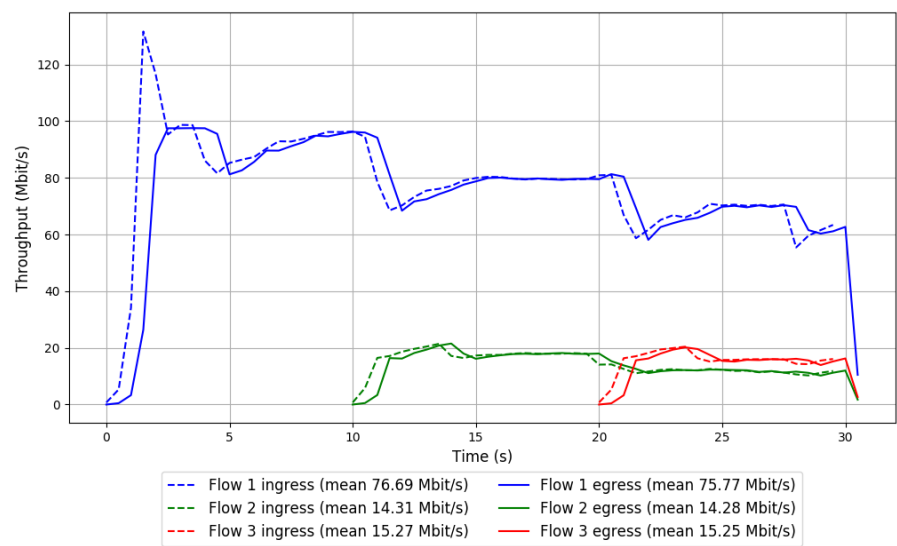


Run 2: Statistics of TCP Cubic

Start at: 2019-03-27 01:51:22
End at: 2019-03-27 01:51:52
Local clock offset: -1.845 ms
Remote clock offset: 20.372 ms

Below is generated by plot.py at 2019-03-27 03:19:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.35 Mbit/s
95th percentile per-packet one-way delay: 114.362 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 75.77 Mbit/s
95th percentile per-packet one-way delay: 114.736 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 14.28 Mbit/s
95th percentile per-packet one-way delay: 112.628 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 15.25 Mbit/s
95th percentile per-packet one-way delay: 113.714 ms
Loss rate: 0.20%

Run 2: Report of TCP Cubic — Data Link

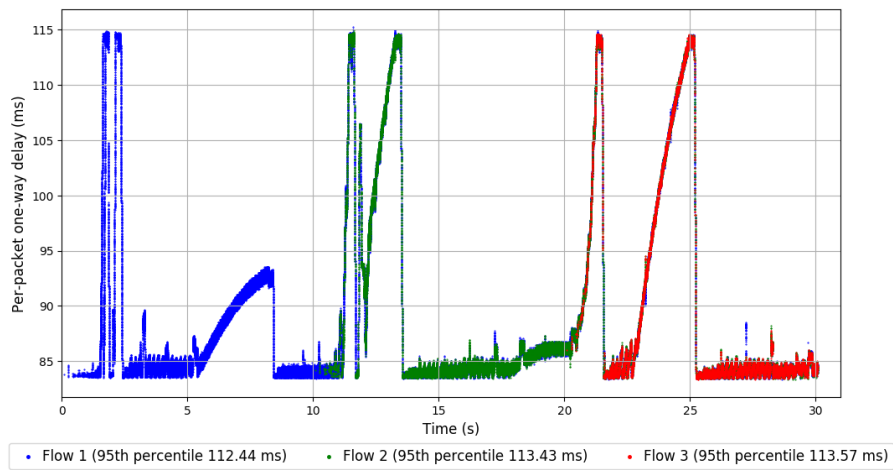
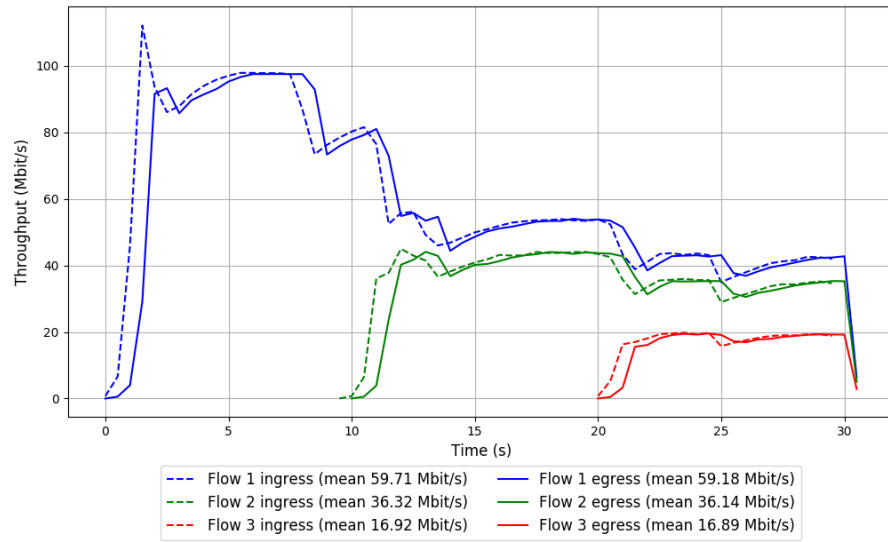


Run 3: Statistics of TCP Cubic

Start at: 2019-03-27 02:18:00
End at: 2019-03-27 02:18:30
Local clock offset: -1.081 ms
Remote clock offset: 25.233 ms

Below is generated by plot.py at 2019-03-27 03:19:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.88 Mbit/s
95th percentile per-packet one-way delay: 112.979 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 59.18 Mbit/s
95th percentile per-packet one-way delay: 112.443 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 36.14 Mbit/s
95th percentile per-packet one-way delay: 113.431 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 16.89 Mbit/s
95th percentile per-packet one-way delay: 113.566 ms
Loss rate: 0.21%

Run 3: Report of TCP Cubic — Data Link

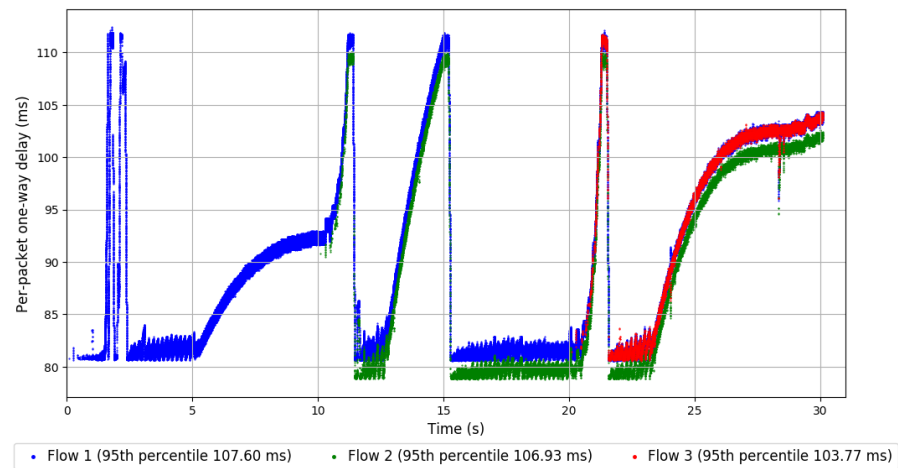
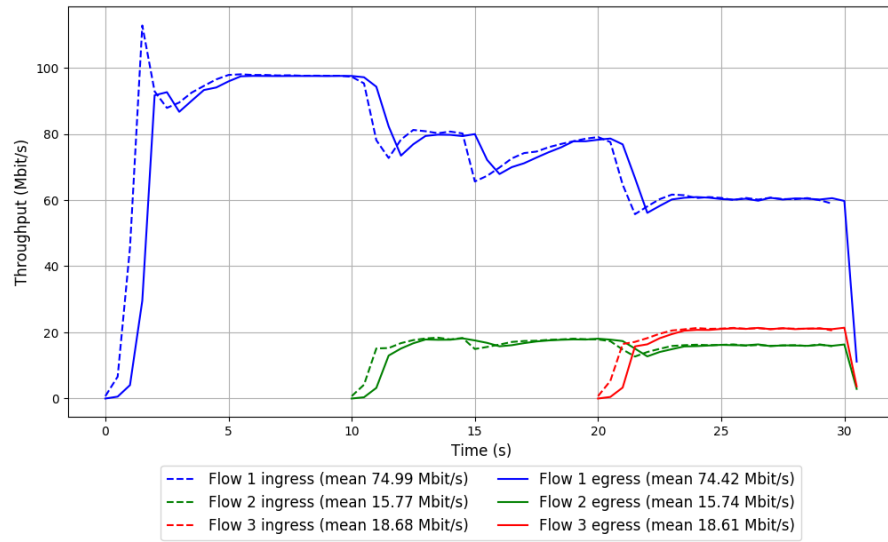


Run 4: Statistics of TCP Cubic

Start at: 2019-03-27 02:44:35
End at: 2019-03-27 02:45:05
Local clock offset: -1.66 ms
Remote clock offset: 27.405 ms

Below is generated by plot.py at 2019-03-27 03:20:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.10 Mbit/s
95th percentile per-packet one-way delay: 107.339 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 74.42 Mbit/s
95th percentile per-packet one-way delay: 107.601 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 15.74 Mbit/s
95th percentile per-packet one-way delay: 106.926 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 18.61 Mbit/s
95th percentile per-packet one-way delay: 103.766 ms
Loss rate: 0.17%

Run 4: Report of TCP Cubic — Data Link

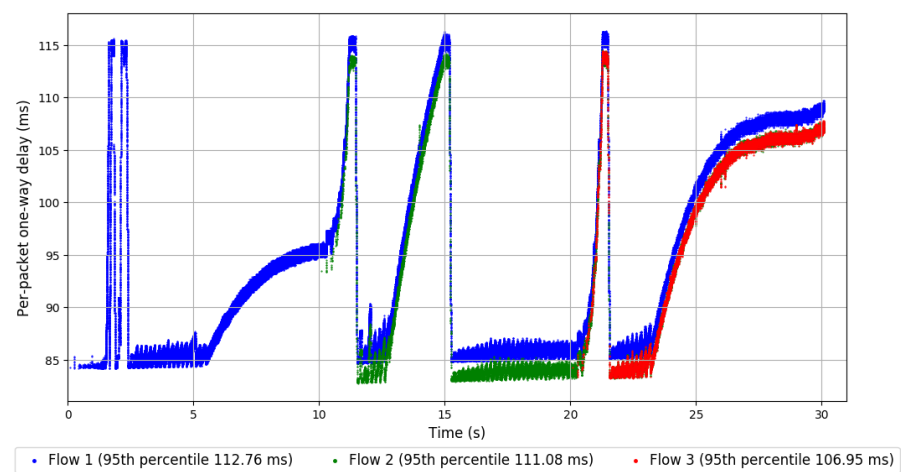
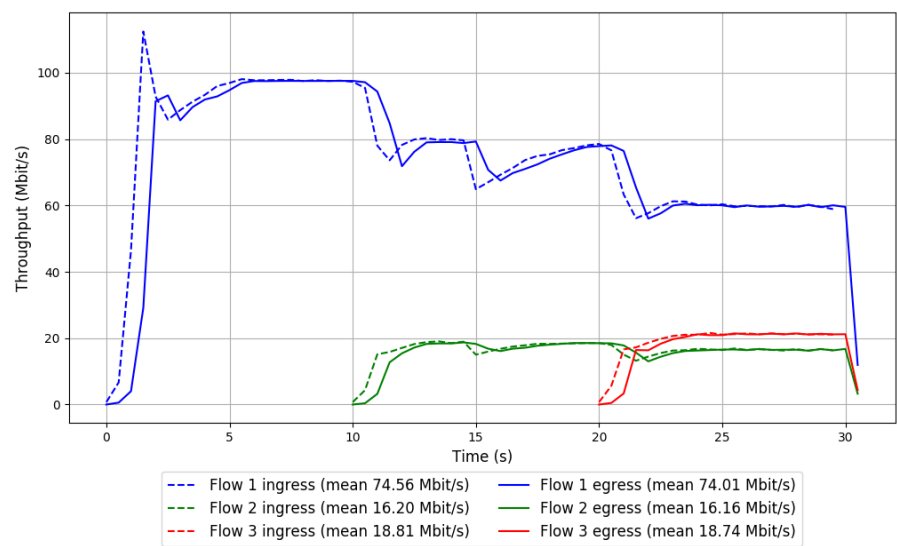


Run 5: Statistics of TCP Cubic

Start at: 2019-03-27 03:11:11
End at: 2019-03-27 03:11:41
Local clock offset: -7.975 ms
Remote clock offset: 25.958 ms

Below is generated by plot.py at 2019-03-27 03:20:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.01 Mbit/s
95th percentile per-packet one-way delay: 112.072 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 74.01 Mbit/s
95th percentile per-packet one-way delay: 112.761 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 16.16 Mbit/s
95th percentile per-packet one-way delay: 111.076 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 18.74 Mbit/s
95th percentile per-packet one-way delay: 106.954 ms
Loss rate: 0.12%

Run 5: Report of TCP Cubic — Data Link

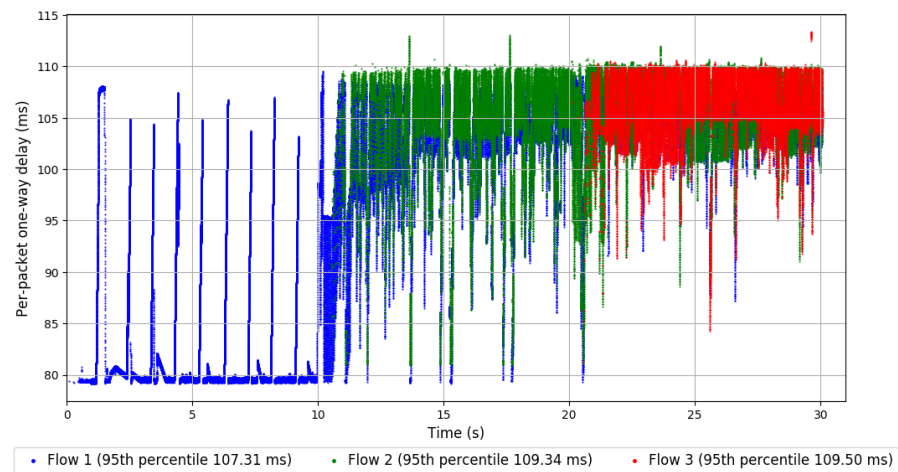
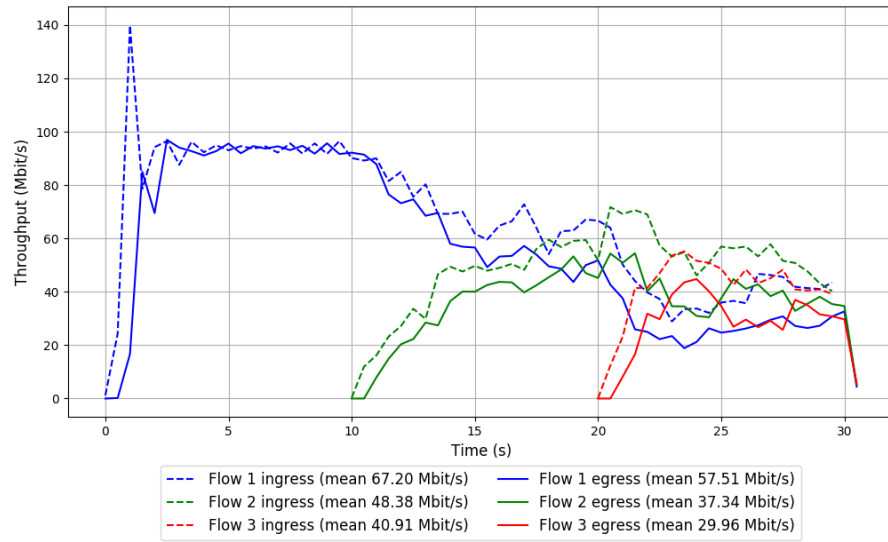


Run 1: Statistics of FillP

Start at: 2019-03-27 01:10:52
End at: 2019-03-27 01:11:22
Local clock offset: -6.454 ms
Remote clock offset: -4.673 ms

Below is generated by plot.py at 2019-03-27 03:20:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.25 Mbit/s
95th percentile per-packet one-way delay: 108.745 ms
Loss rate: 18.26%
-- Flow 1:
Average throughput: 57.51 Mbit/s
95th percentile per-packet one-way delay: 107.315 ms
Loss rate: 14.36%
-- Flow 2:
Average throughput: 37.34 Mbit/s
95th percentile per-packet one-way delay: 109.336 ms
Loss rate: 22.79%
-- Flow 3:
Average throughput: 29.96 Mbit/s
95th percentile per-packet one-way delay: 109.497 ms
Loss rate: 26.80%

Run 1: Report of FillP — Data Link

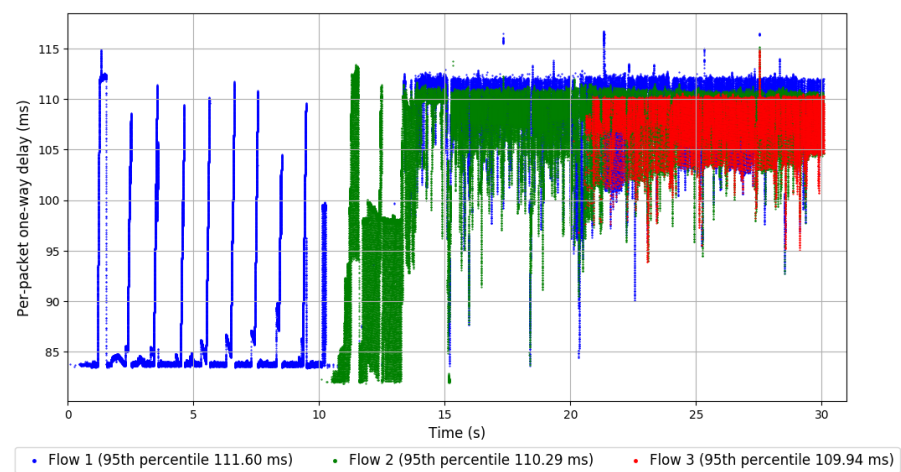
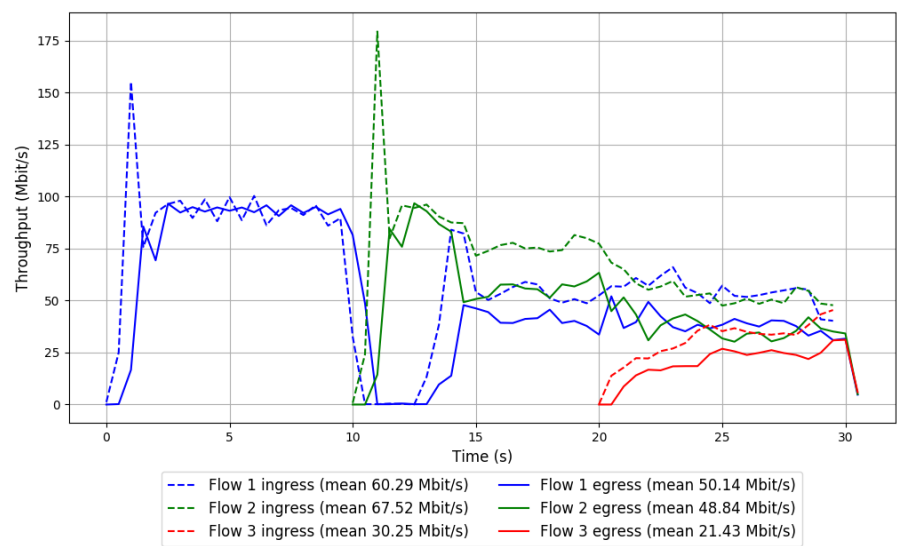


Run 2: Statistics of FillP

Start at: 2019-03-27 01:37:26
End at: 2019-03-27 01:37:56
Local clock offset: -2.568 ms
Remote clock offset: 14.047 ms

Below is generated by plot.py at 2019-03-27 03:20:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.78 Mbit/s
95th percentile per-packet one-way delay: 111.235 ms
Loss rate: 22.07%
-- Flow 1:
Average throughput: 50.14 Mbit/s
95th percentile per-packet one-way delay: 111.601 ms
Loss rate: 16.75%
-- Flow 2:
Average throughput: 48.84 Mbit/s
95th percentile per-packet one-way delay: 110.293 ms
Loss rate: 27.60%
-- Flow 3:
Average throughput: 21.43 Mbit/s
95th percentile per-packet one-way delay: 109.937 ms
Loss rate: 29.17%

Run 2: Report of FillP — Data Link

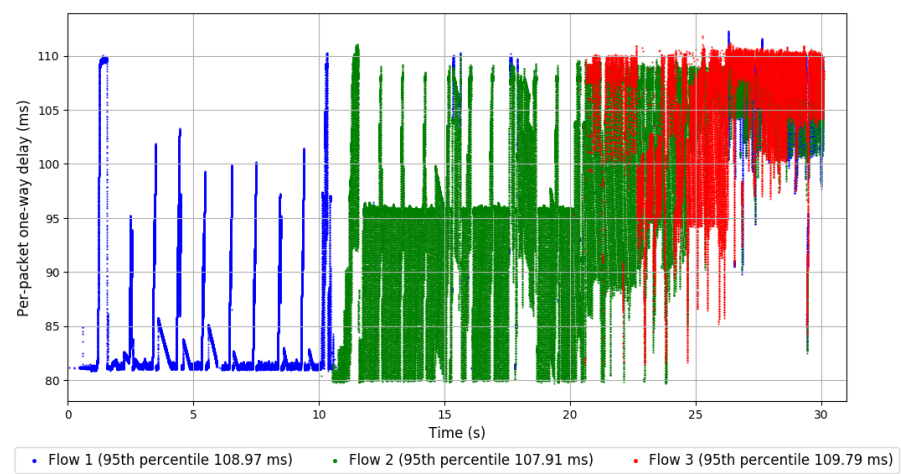
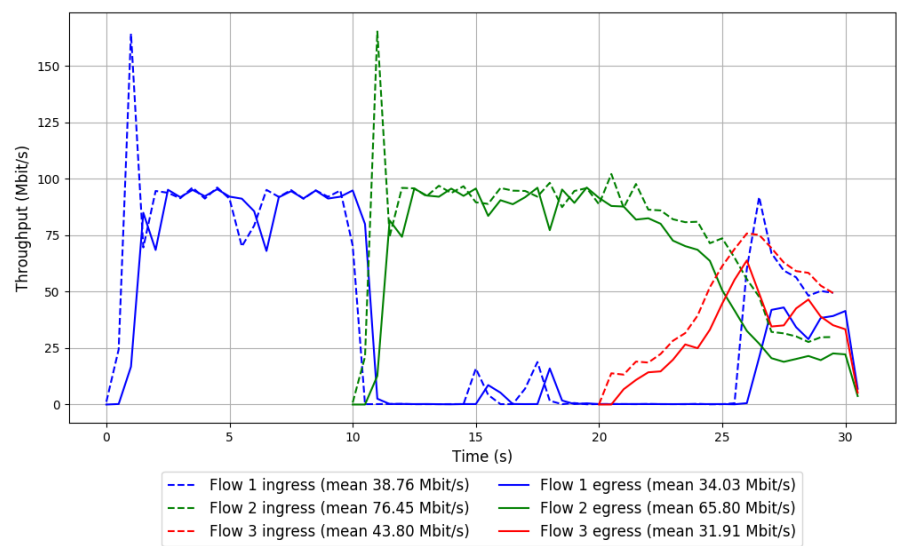


Run 3: Statistics of FillP

Start at: 2019-03-27 02:04:01
End at: 2019-03-27 02:04:31
Local clock offset: -1.424 ms
Remote clock offset: 19.559 ms

Below is generated by plot.py at 2019-03-27 03:20:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.41 Mbit/s
95th percentile per-packet one-way delay: 108.815 ms
Loss rate: 15.05%
-- Flow 1:
Average throughput: 34.03 Mbit/s
95th percentile per-packet one-way delay: 108.970 ms
Loss rate: 12.13%
-- Flow 2:
Average throughput: 65.80 Mbit/s
95th percentile per-packet one-way delay: 107.905 ms
Loss rate: 13.84%
-- Flow 3:
Average throughput: 31.91 Mbit/s
95th percentile per-packet one-way delay: 109.787 ms
Loss rate: 27.06%

Run 3: Report of FillP — Data Link

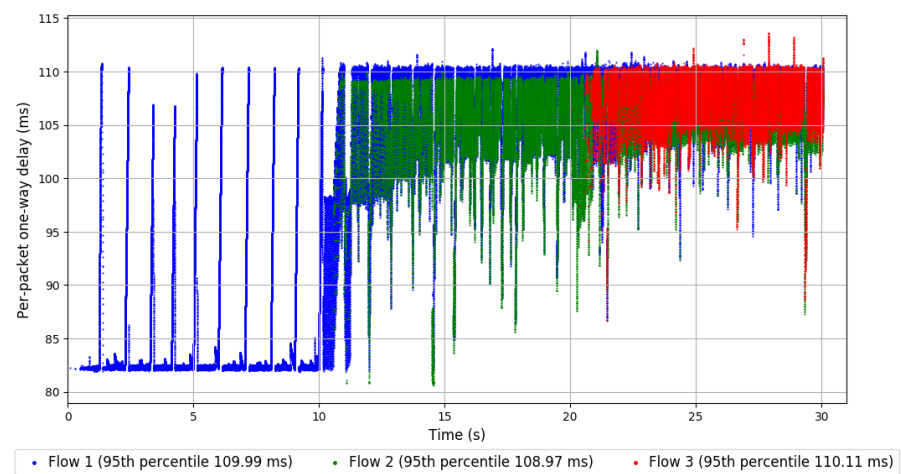
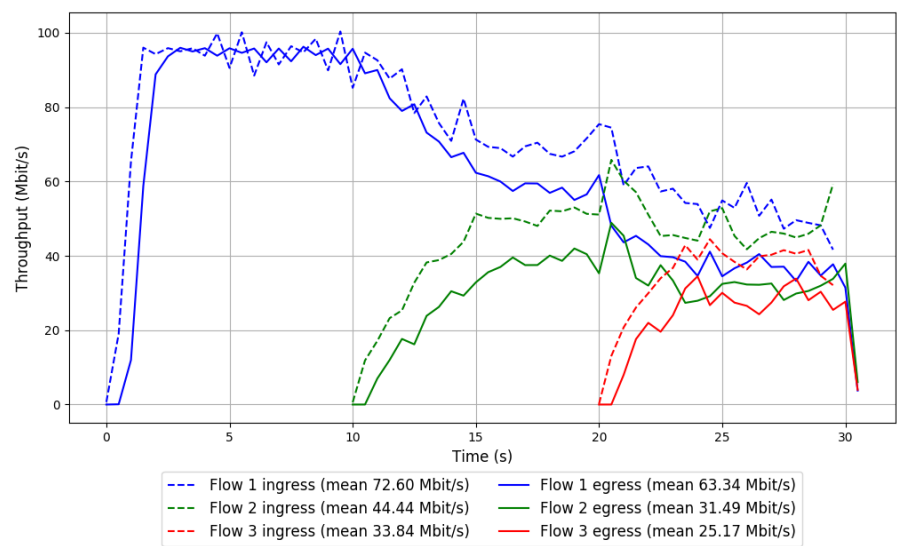


Run 4: Statistics of FillP

Start at: 2019-03-27 02:30:41
End at: 2019-03-27 02:31:11
Local clock offset: -1.891 ms
Remote clock offset: 25.624 ms

Below is generated by plot.py at 2019-03-27 03:20:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.58 Mbit/s
95th percentile per-packet one-way delay: 109.905 ms
Loss rate: 18.26%
-- Flow 1:
Average throughput: 63.34 Mbit/s
95th percentile per-packet one-way delay: 109.992 ms
Loss rate: 12.69%
-- Flow 2:
Average throughput: 31.49 Mbit/s
95th percentile per-packet one-way delay: 108.968 ms
Loss rate: 29.16%
-- Flow 3:
Average throughput: 25.17 Mbit/s
95th percentile per-packet one-way delay: 110.105 ms
Loss rate: 25.63%

Run 4: Report of FillP — Data Link

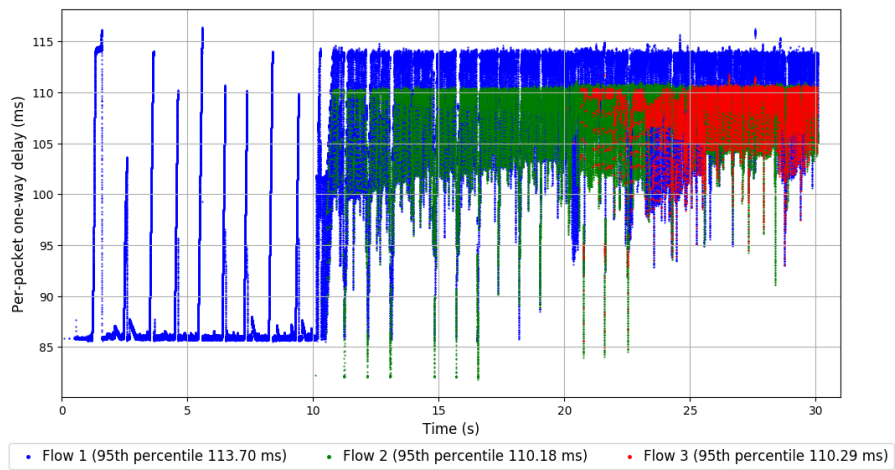
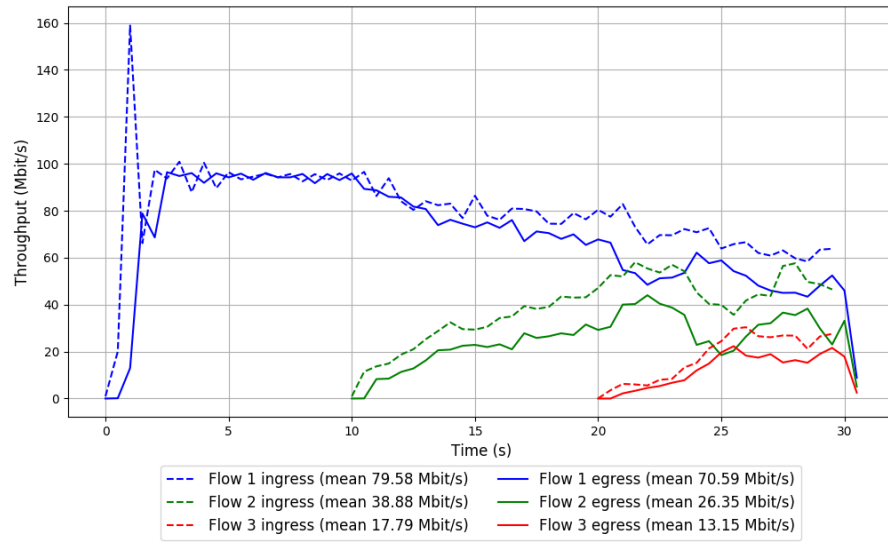


Run 5: Statistics of FillP

Start at: 2019-03-27 02:57:15
End at: 2019-03-27 02:57:45
Local clock offset: -5.824 ms
Remote clock offset: 34.247 ms

Below is generated by plot.py at 2019-03-27 03:21:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.49 Mbit/s
95th percentile per-packet one-way delay: 113.627 ms
Loss rate: 16.87%
-- Flow 1:
Average throughput: 70.59 Mbit/s
95th percentile per-packet one-way delay: 113.696 ms
Loss rate: 11.22%
-- Flow 2:
Average throughput: 26.35 Mbit/s
95th percentile per-packet one-way delay: 110.178 ms
Loss rate: 32.15%
-- Flow 3:
Average throughput: 13.15 Mbit/s
95th percentile per-packet one-way delay: 110.294 ms
Loss rate: 26.14%

Run 5: Report of FillP — Data Link

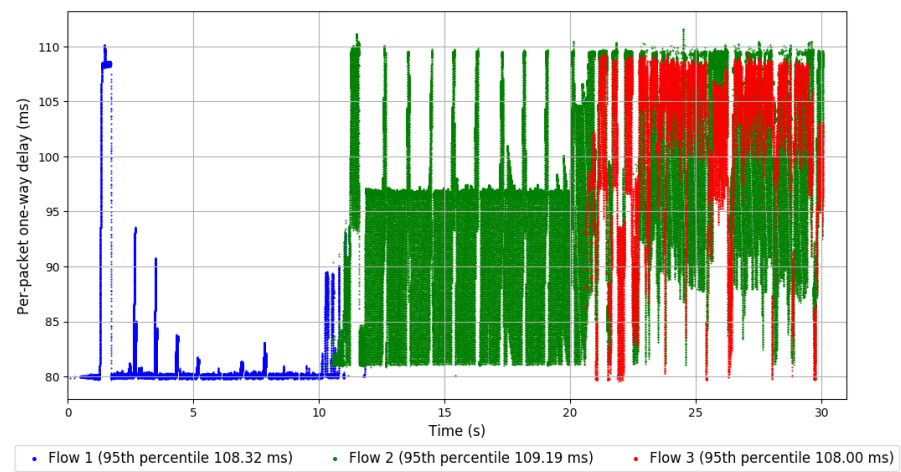
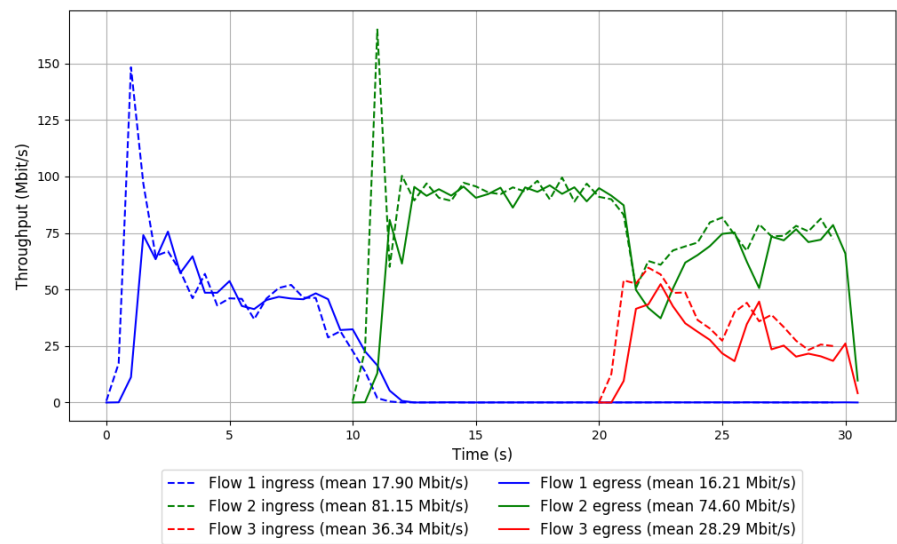


Run 1: Statistics of FillP-Sheep

Start at: 2019-03-27 01:19:50
End at: 2019-03-27 01:20:20
Local clock offset: -6.002 ms
Remote clock offset: -6.227 ms

Below is generated by plot.py at 2019-03-27 03:21:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 75.23 Mbit/s
95th percentile per-packet one-way delay: 108.778 ms
Loss rate: 10.29%
-- Flow 1:
Average throughput: 16.21 Mbit/s
95th percentile per-packet one-way delay: 108.322 ms
Loss rate: 9.34%
-- Flow 2:
Average throughput: 74.60 Mbit/s
95th percentile per-packet one-way delay: 109.186 ms
Loss rate: 7.95%
-- Flow 3:
Average throughput: 28.29 Mbit/s
95th percentile per-packet one-way delay: 107.999 ms
Loss rate: 22.19%

Run 1: Report of FillP-Sheep — Data Link

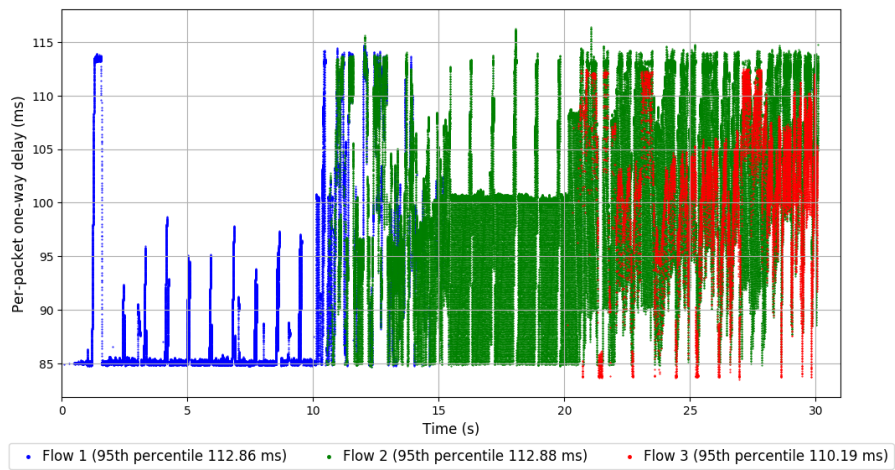
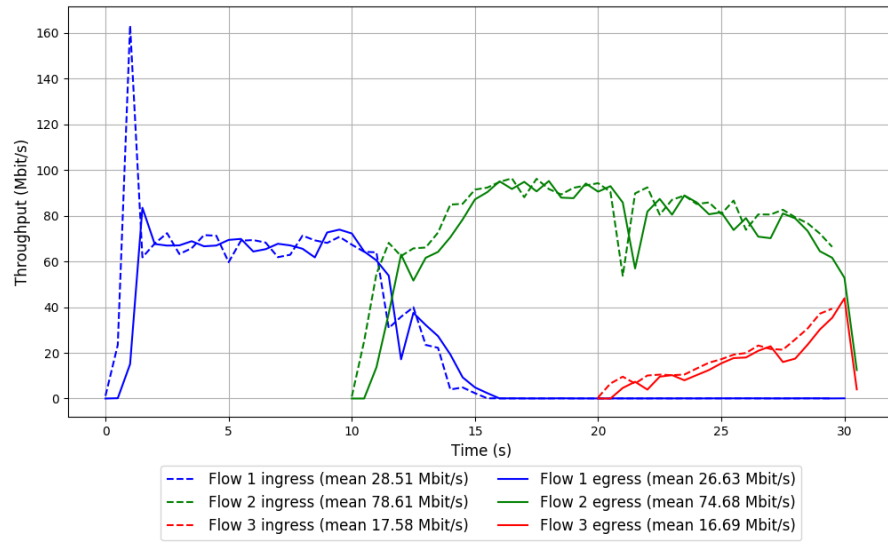


Run 2: Statistics of FillP-Sheep

Start at: 2019-03-27 01:46:25
End at: 2019-03-27 01:46:55
Local clock offset: -2.144 ms
Remote clock offset: 18.809 ms

Below is generated by plot.py at 2019-03-27 03:21:32
Datalink statistics
-- Total of 3 flows:
Average throughput: 81.66 Mbit/s
95th percentile per-packet one-way delay: 112.823 ms
Loss rate: 5.41%
-- Flow 1:
Average throughput: 26.63 Mbit/s
95th percentile per-packet one-way delay: 112.857 ms
Loss rate: 6.50%
-- Flow 2:
Average throughput: 74.68 Mbit/s
95th percentile per-packet one-way delay: 112.878 ms
Loss rate: 4.87%
-- Flow 3:
Average throughput: 16.69 Mbit/s
95th percentile per-packet one-way delay: 110.193 ms
Loss rate: 4.93%

Run 2: Report of FillP-Sheep — Data Link

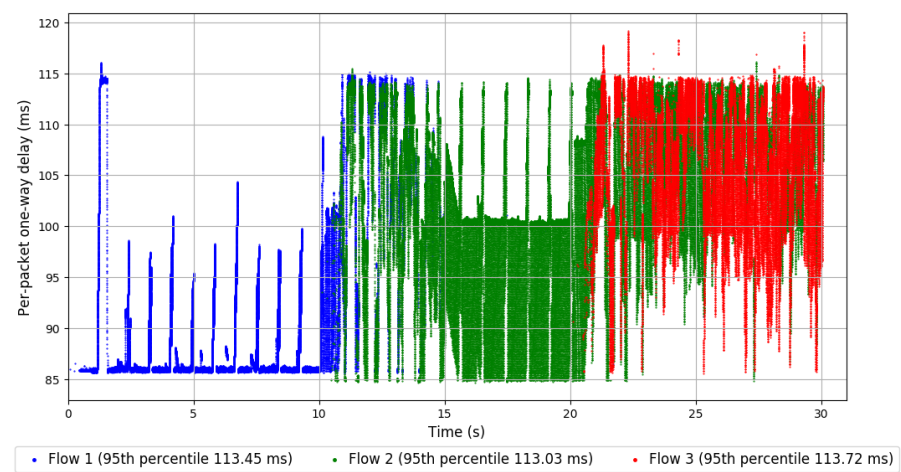
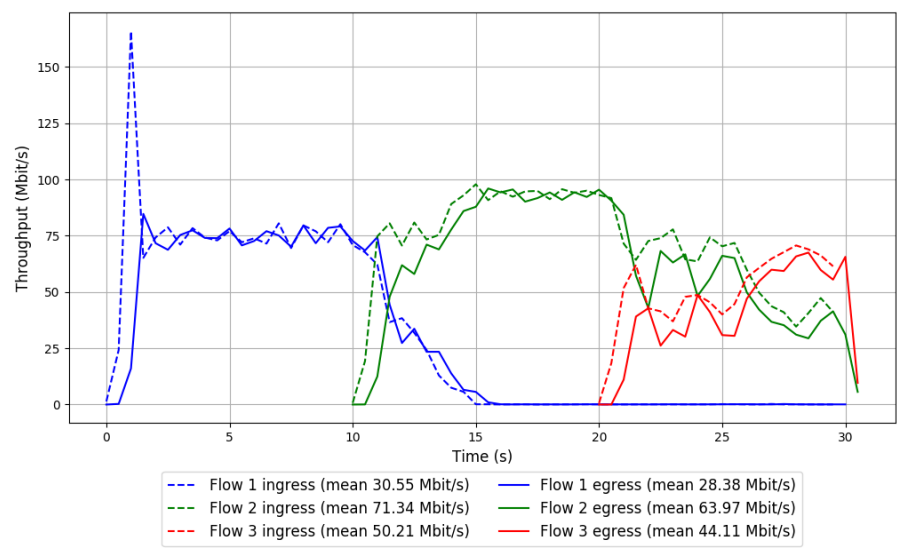


Run 3: Statistics of FillP-Sheep

Start at: 2019-03-27 02:13:03
End at: 2019-03-27 02:13:33
Local clock offset: -1.962 ms
Remote clock offset: 25.494 ms

Below is generated by plot.py at 2019-03-27 03:21:36
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.46 Mbit/s
95th percentile per-packet one-way delay: 113.156 ms
Loss rate: 9.51%
-- Flow 1:
Average throughput: 28.38 Mbit/s
95th percentile per-packet one-way delay: 113.449 ms
Loss rate: 7.02%
-- Flow 2:
Average throughput: 63.97 Mbit/s
95th percentile per-packet one-way delay: 113.030 ms
Loss rate: 10.24%
-- Flow 3:
Average throughput: 44.11 Mbit/s
95th percentile per-packet one-way delay: 113.724 ms
Loss rate: 11.95%

Run 3: Report of FillP-Sheep — Data Link

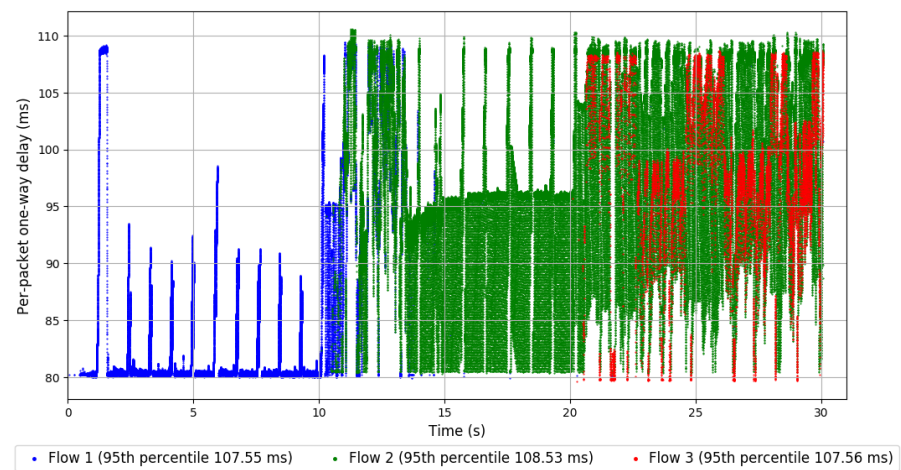
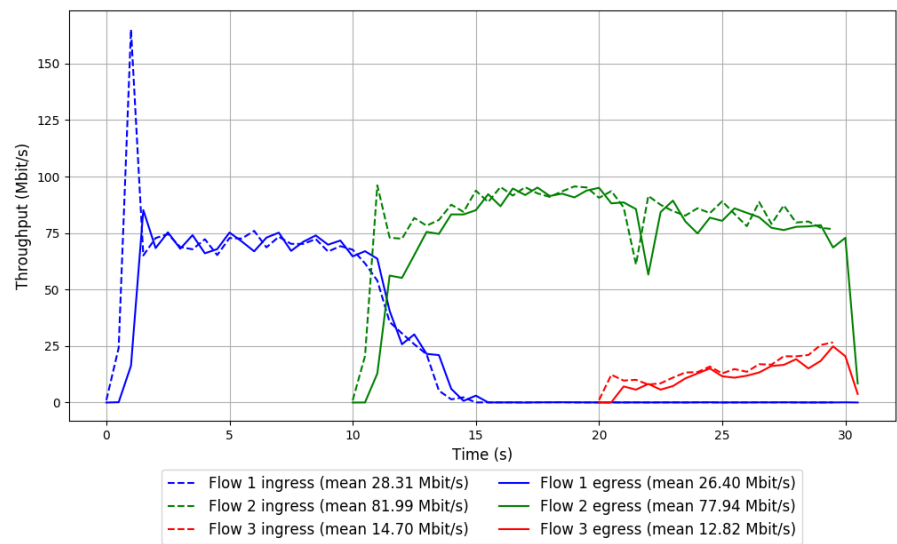


Run 4: Statistics of FillP-Sheep

Start at: 2019-03-27 02:39:38
End at: 2019-03-27 02:40:08
Local clock offset: -1.054 ms
Remote clock offset: 26.151 ms

Below is generated by plot.py at 2019-03-27 03:21:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 82.59 Mbit/s
95th percentile per-packet one-way delay: 108.421 ms
Loss rate: 5.92%
-- Flow 1:
Average throughput: 26.40 Mbit/s
95th percentile per-packet one-way delay: 107.552 ms
Loss rate: 6.71%
-- Flow 2:
Average throughput: 77.94 Mbit/s
95th percentile per-packet one-way delay: 108.525 ms
Loss rate: 4.90%
-- Flow 3:
Average throughput: 12.82 Mbit/s
95th percentile per-packet one-way delay: 107.564 ms
Loss rate: 12.71%

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2019-03-27 03:06:14

End at: 2019-03-27 03:06:44

Local clock offset: -8.205 ms

Remote clock offset: 38.24 ms

Below is generated by plot.py at 2019-03-27 03:22:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.17 Mbit/s

95th percentile per-packet one-way delay: 113.120 ms

Loss rate: 7.58%

-- Flow 1:

Average throughput: 28.33 Mbit/s

95th percentile per-packet one-way delay: 102.422 ms

Loss rate: 3.68%

-- Flow 2:

Average throughput: 63.02 Mbit/s

95th percentile per-packet one-way delay: 112.966 ms

Loss rate: 10.66%

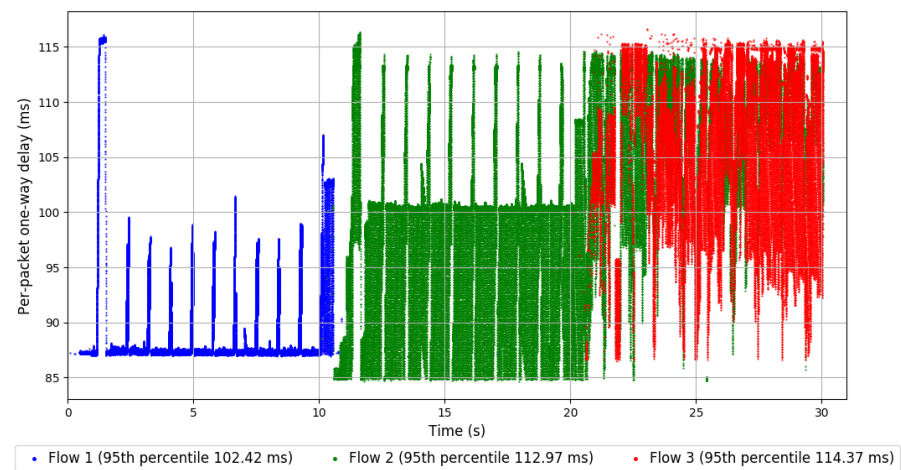
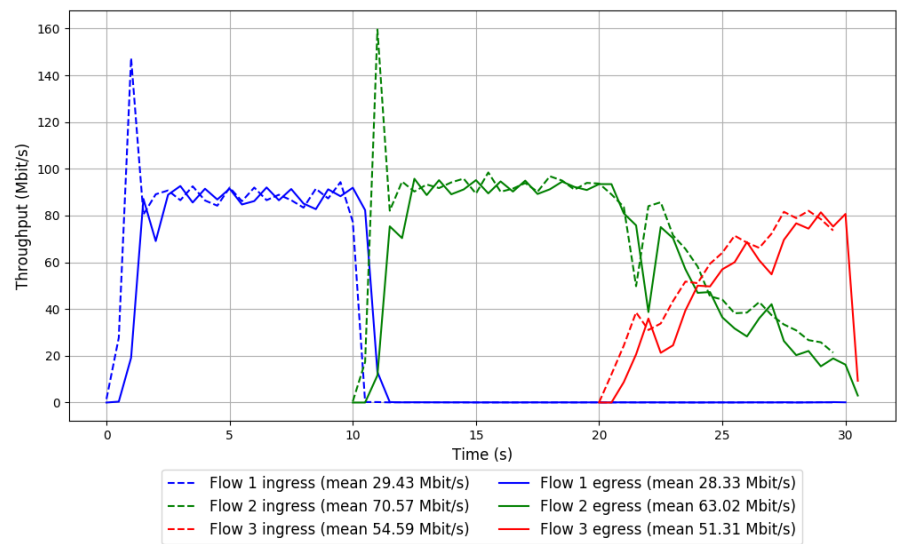
-- Flow 3:

Average throughput: 51.31 Mbit/s

95th percentile per-packet one-way delay: 114.373 ms

Loss rate: 5.88%

Run 5: Report of FillP-Sheep — Data Link



Run 1: Statistics of Indigo

Start at: 2019-03-27 01:28:37

End at: 2019-03-27 01:29:08

Local clock offset: -4.134 ms

Remote clock offset: 5.037 ms

Below is generated by plot.py at 2019-03-27 03:22:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.92 Mbit/s

95th percentile per-packet one-way delay: 112.732 ms

Loss rate: 30.38%

-- Flow 1:

Average throughput: 60.77 Mbit/s

95th percentile per-packet one-way delay: 110.729 ms

Loss rate: 15.63%

-- Flow 2:

Average throughput: 26.48 Mbit/s

95th percentile per-packet one-way delay: 112.512 ms

Loss rate: 27.96%

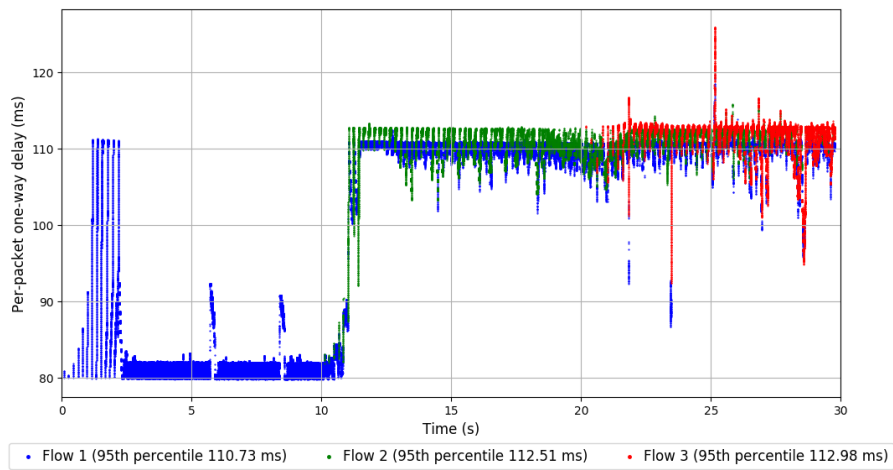
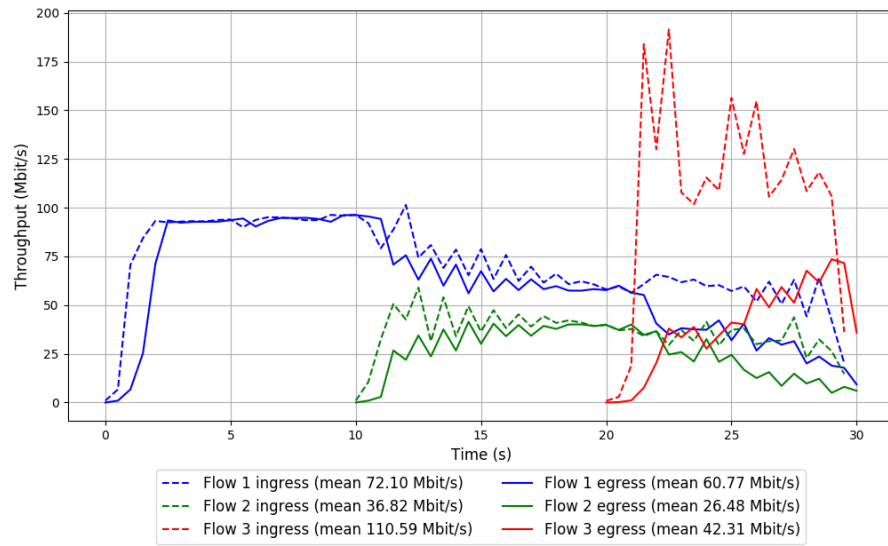
-- Flow 3:

Average throughput: 42.31 Mbit/s

95th percentile per-packet one-way delay: 112.977 ms

Loss rate: 61.76%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-03-27 01:55:12

End at: 2019-03-27 01:55:42

Local clock offset: -2.48 ms

Remote clock offset: 17.6 ms

Below is generated by plot.py at 2019-03-27 03:22:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.58 Mbit/s

95th percentile per-packet one-way delay: 112.901 ms

Loss rate: 33.36%

-- Flow 1:

Average throughput: 64.50 Mbit/s

95th percentile per-packet one-way delay: 112.049 ms

Loss rate: 13.45%

-- Flow 2:

Average throughput: 21.34 Mbit/s

95th percentile per-packet one-way delay: 112.192 ms

Loss rate: 40.36%

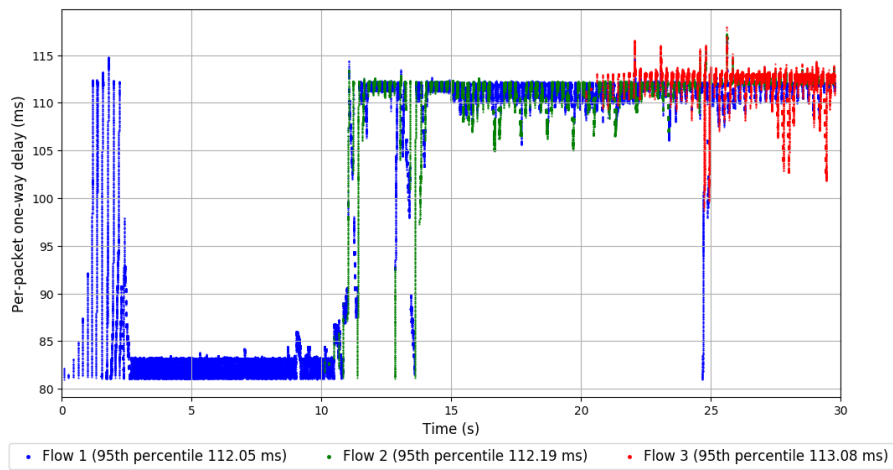
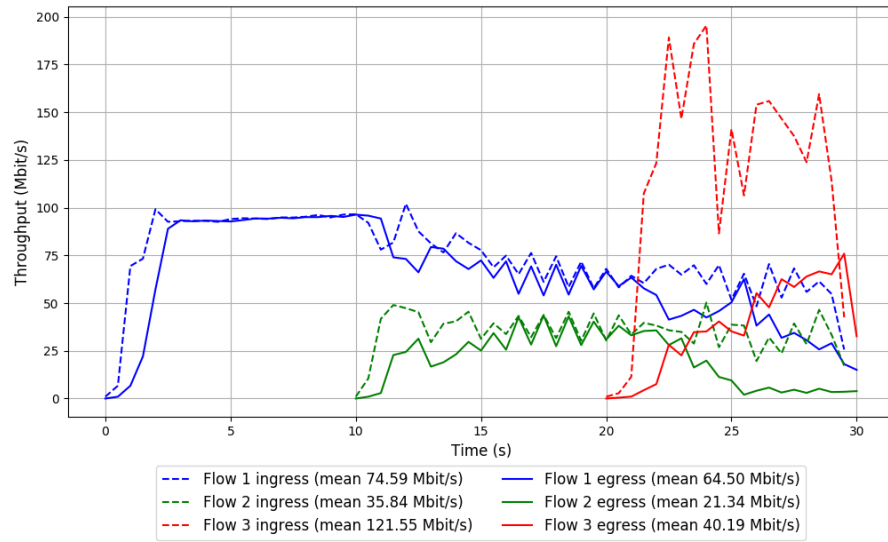
-- Flow 3:

Average throughput: 40.19 Mbit/s

95th percentile per-packet one-way delay: 113.084 ms

Loss rate: 66.93%

Run 2: Report of Indigo — Data Link

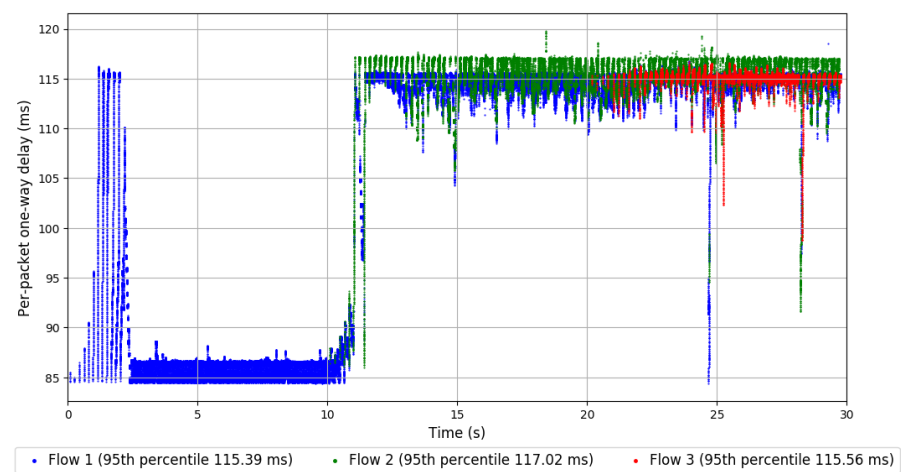
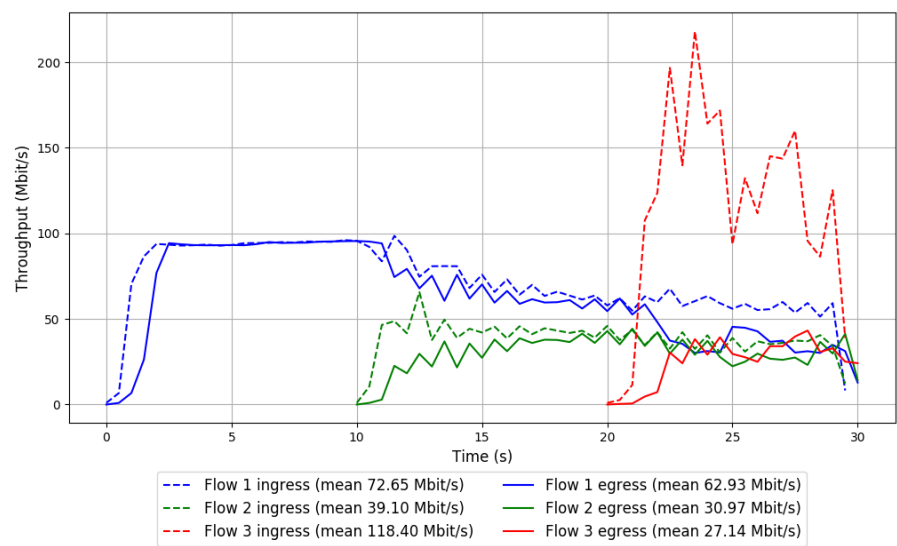


Run 3: Statistics of Indigo

Start at: 2019-03-27 02:21:51
End at: 2019-03-27 02:22:21
Local clock offset: -1.148 ms
Remote clock offset: 28.539 ms

Below is generated by plot.py at 2019-03-27 03:22:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.16 Mbit/s
95th percentile per-packet one-way delay: 116.797 ms
Loss rate: 32.54%
-- Flow 1:
Average throughput: 62.93 Mbit/s
95th percentile per-packet one-way delay: 115.394 ms
Loss rate: 13.29%
-- Flow 2:
Average throughput: 30.97 Mbit/s
95th percentile per-packet one-way delay: 117.024 ms
Loss rate: 20.69%
-- Flow 3:
Average throughput: 27.14 Mbit/s
95th percentile per-packet one-way delay: 115.556 ms
Loss rate: 77.07%

Run 3: Report of Indigo — Data Link

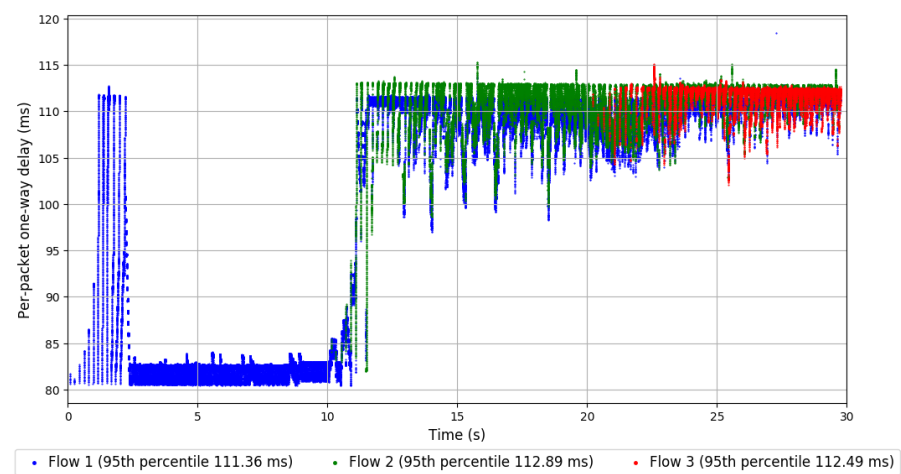
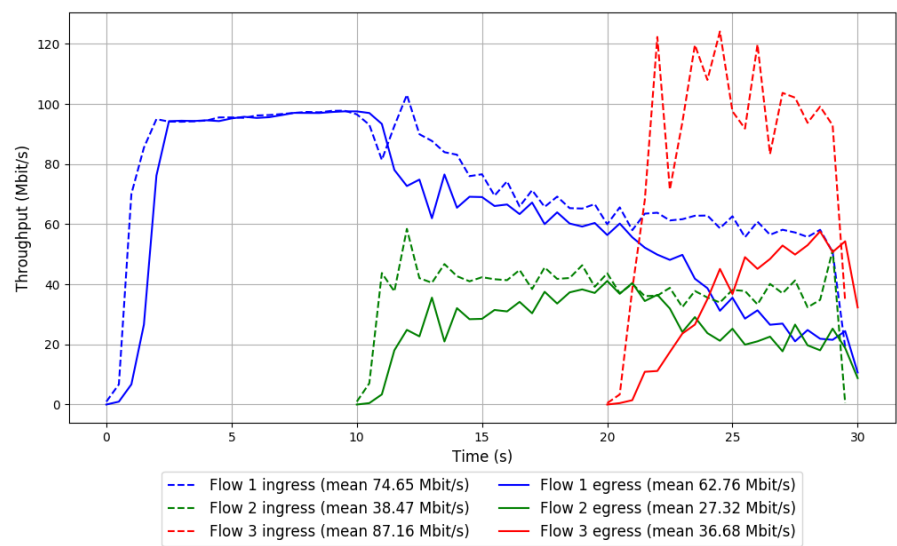


Run 4: Statistics of Indigo

Start at: 2019-03-27 02:48:26
End at: 2019-03-27 02:48:56
Local clock offset: -3.191 ms
Remote clock offset: 29.466 ms

Below is generated by plot.py at 2019-03-27 03:22:17
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.59 Mbit/s
95th percentile per-packet one-way delay: 112.542 ms
Loss rate: 27.66%
-- Flow 1:
Average throughput: 62.76 Mbit/s
95th percentile per-packet one-way delay: 111.361 ms
Loss rate: 15.84%
-- Flow 2:
Average throughput: 27.32 Mbit/s
95th percentile per-packet one-way delay: 112.887 ms
Loss rate: 28.87%
-- Flow 3:
Average throughput: 36.68 Mbit/s
95th percentile per-packet one-way delay: 112.489 ms
Loss rate: 57.92%

Run 4: Report of Indigo — Data Link

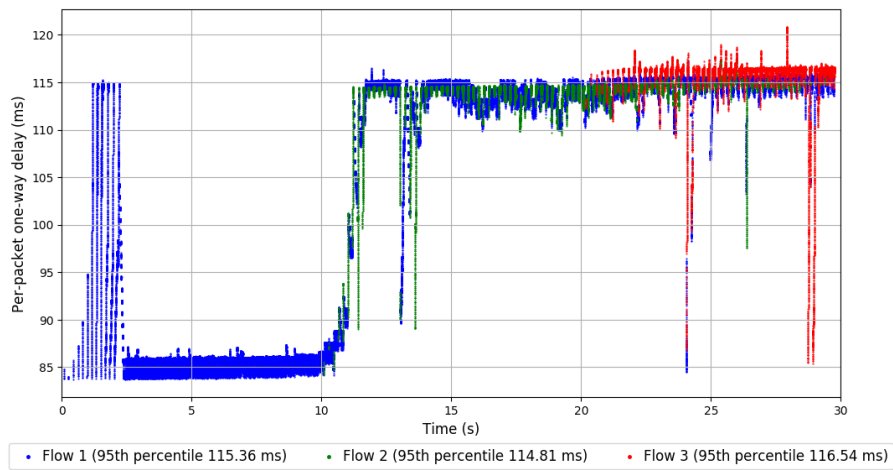
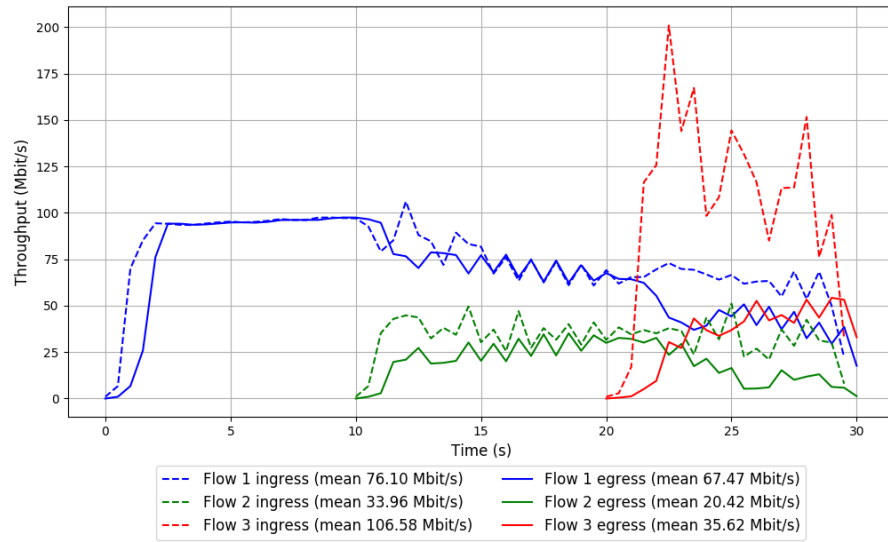


Run 5: Statistics of Indigo

Start at: 2019-03-27 03:15:01
End at: 2019-03-27 03:15:31
Local clock offset: -8.376 ms
Remote clock offset: 16.936 ms

Below is generated by plot.py at 2019-03-27 03:22:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.33 Mbit/s
95th percentile per-packet one-way delay: 116.304 ms
Loss rate: 30.41%
-- Flow 1:
Average throughput: 67.47 Mbit/s
95th percentile per-packet one-way delay: 115.356 ms
Loss rate: 11.24%
-- Flow 2:
Average throughput: 20.42 Mbit/s
95th percentile per-packet one-way delay: 114.810 ms
Loss rate: 39.78%
-- Flow 3:
Average throughput: 35.62 Mbit/s
95th percentile per-packet one-way delay: 116.542 ms
Loss rate: 66.57%

Run 5: Report of Indigo — Data Link

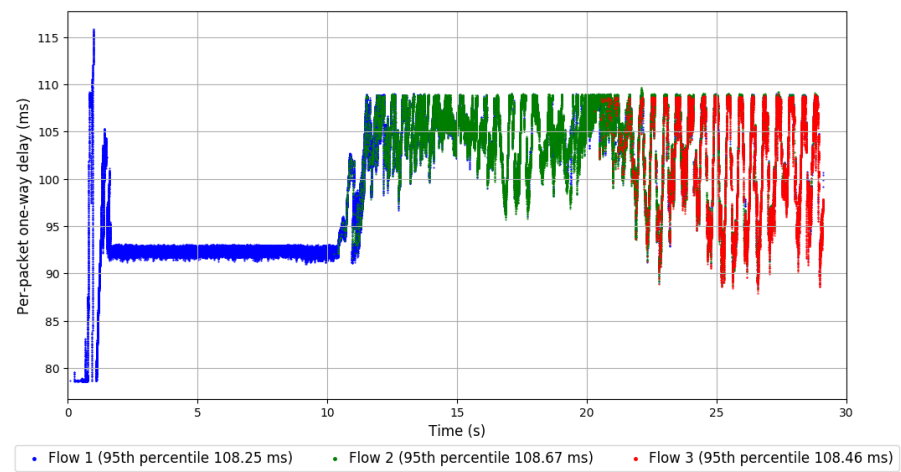
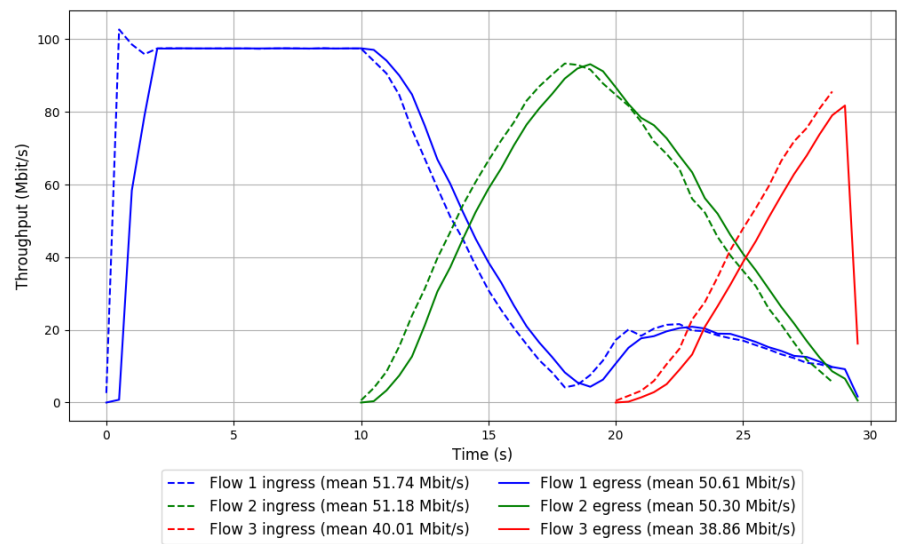


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-03-27 01:12:10
End at: 2019-03-27 01:12:40
Local clock offset: -6.499 ms
Remote clock offset: -5.781 ms

Below is generated by plot.py at 2019-03-27 03:22:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.06 Mbit/s
95th percentile per-packet one-way delay: 108.547 ms
Loss rate: 2.08%
-- Flow 1:
Average throughput: 50.61 Mbit/s
95th percentile per-packet one-way delay: 108.245 ms
Loss rate: 2.12%
-- Flow 2:
Average throughput: 50.30 Mbit/s
95th percentile per-packet one-way delay: 108.669 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 38.86 Mbit/s
95th percentile per-packet one-way delay: 108.456 ms
Loss rate: 2.97%

Run 1: Report of Indigo-MusesC3 — Data Link

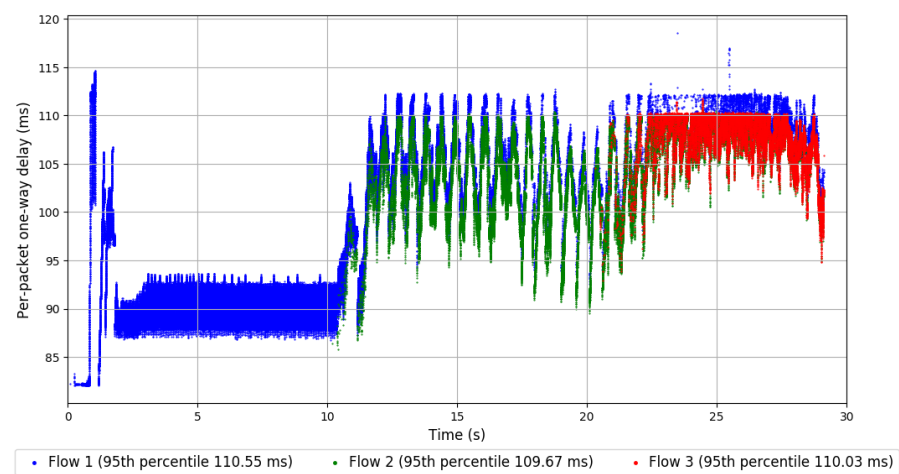
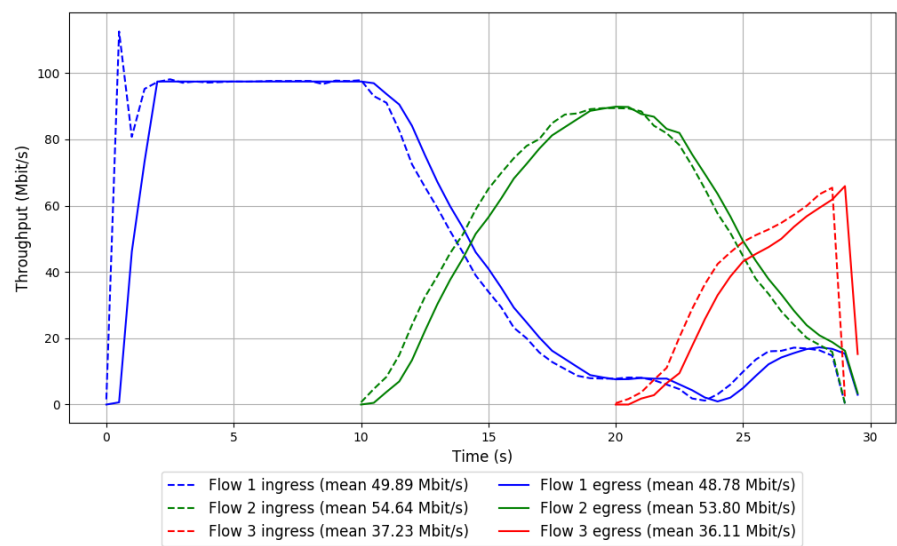


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-03-27 01:38:44
End at: 2019-03-27 01:39:14
Local clock offset: -3.224 ms
Remote clock offset: 11.865 ms

Below is generated by plot.py at 2019-03-27 03:22:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.75 Mbit/s
95th percentile per-packet one-way delay: 109.871 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 48.78 Mbit/s
95th percentile per-packet one-way delay: 110.553 ms
Loss rate: 2.17%
-- Flow 2:
Average throughput: 53.80 Mbit/s
95th percentile per-packet one-way delay: 109.667 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 36.11 Mbit/s
95th percentile per-packet one-way delay: 110.030 ms
Loss rate: 2.98%

Run 2: Report of Indigo-MusesC3 — Data Link

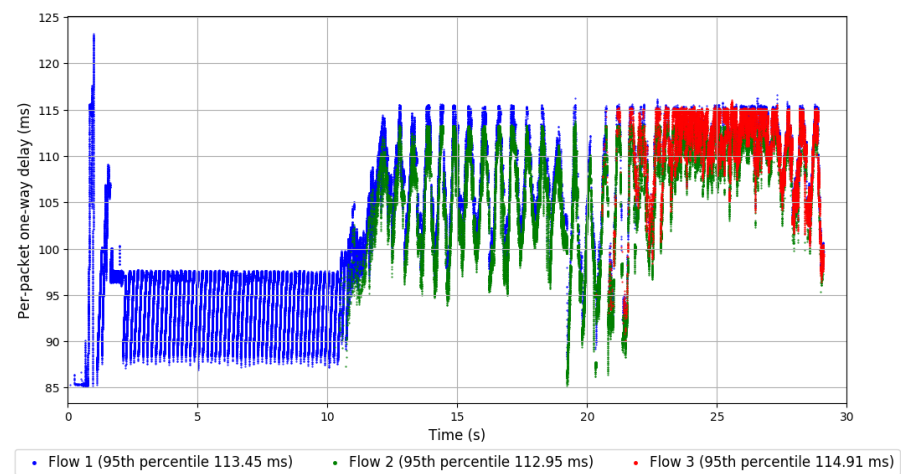
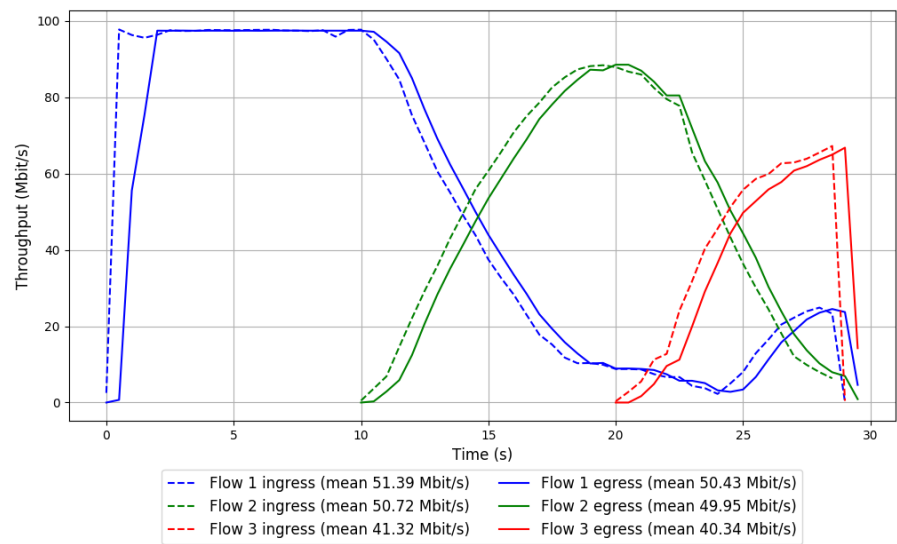


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-03-27 02:05:18
End at: 2019-03-27 02:05:48
Local clock offset: -1.376 ms
Remote clock offset: 23.645 ms

Below is generated by plot.py at 2019-03-27 03:23:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.97 Mbit/s
95th percentile per-packet one-way delay: 114.131 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 50.43 Mbit/s
95th percentile per-packet one-way delay: 113.452 ms
Loss rate: 1.82%
-- Flow 2:
Average throughput: 49.95 Mbit/s
95th percentile per-packet one-way delay: 112.955 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 40.34 Mbit/s
95th percentile per-packet one-way delay: 114.909 ms
Loss rate: 2.32%

Run 3: Report of Indigo-MusesC3 — Data Link

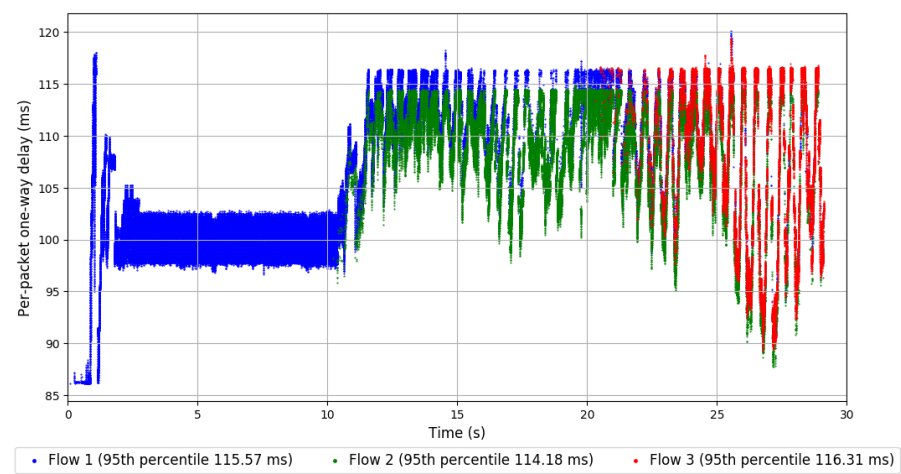
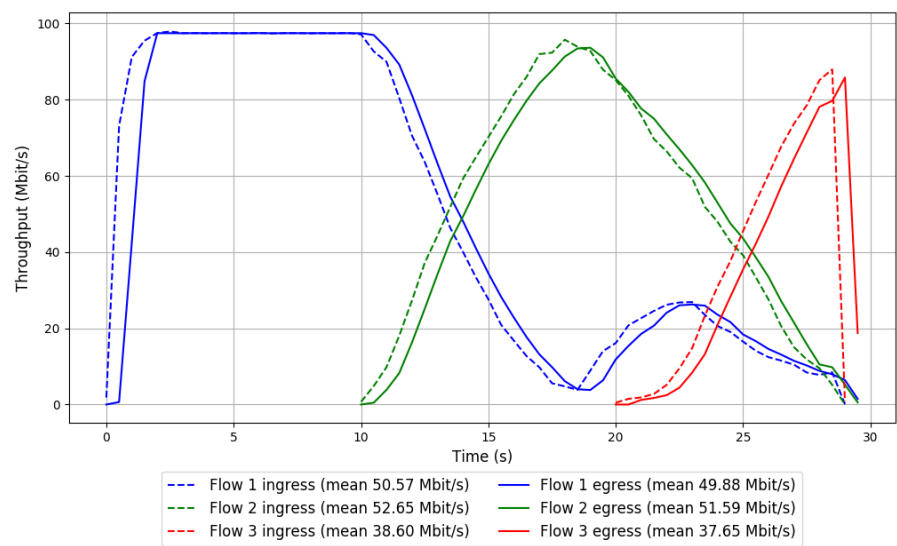


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-03-27 02:31:58
End at: 2019-03-27 02:32:28
Local clock offset: -1.923 ms
Remote clock offset: 29.562 ms

Below is generated by plot.py at 2019-03-27 03:23:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.92 Mbit/s
95th percentile per-packet one-way delay: 115.505 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 49.88 Mbit/s
95th percentile per-packet one-way delay: 115.572 ms
Loss rate: 1.30%
-- Flow 2:
Average throughput: 51.59 Mbit/s
95th percentile per-packet one-way delay: 114.183 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 37.65 Mbit/s
95th percentile per-packet one-way delay: 116.315 ms
Loss rate: 2.58%

Run 4: Report of Indigo-MusesC3 — Data Link

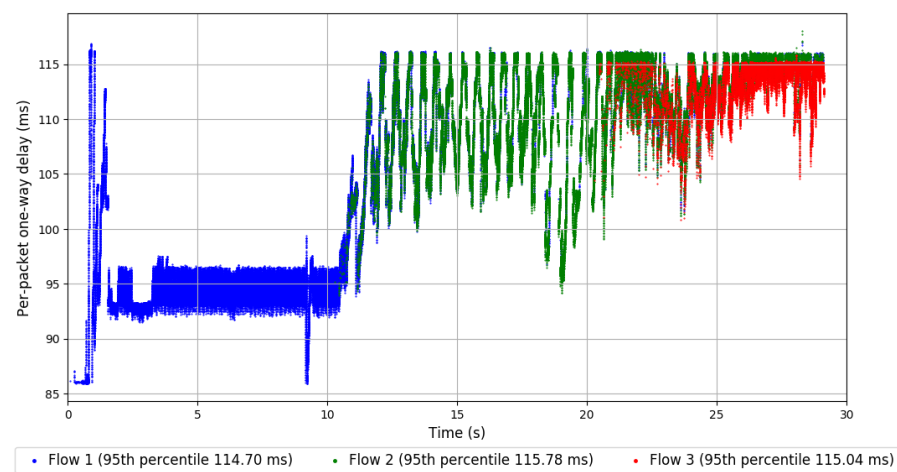
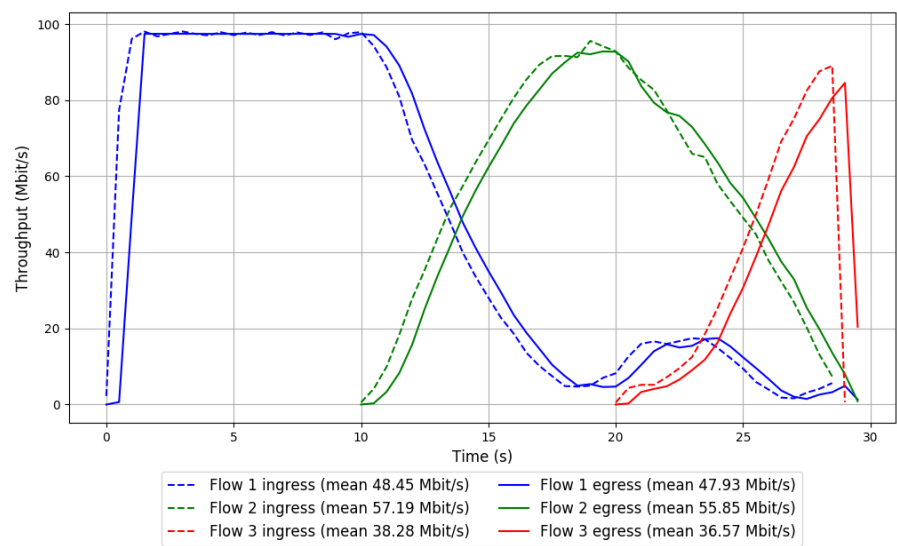


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-03-27 02:58:32
End at: 2019-03-27 02:59:02
Local clock offset: -6.924 ms
Remote clock offset: 36.596 ms

Below is generated by plot.py at 2019-03-27 03:23:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 95.24 Mbit/s
95th percentile per-packet one-way delay: 115.631 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 47.93 Mbit/s
95th percentile per-packet one-way delay: 114.702 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 55.85 Mbit/s
95th percentile per-packet one-way delay: 115.775 ms
Loss rate: 2.24%
-- Flow 3:
Average throughput: 36.57 Mbit/s
95th percentile per-packet one-way delay: 115.039 ms
Loss rate: 4.37%

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-03-27 01:27:20

End at: 2019-03-27 01:27:50

Local clock offset: -4.336 ms

Remote clock offset: 3.695 ms

Below is generated by plot.py at 2019-03-27 03:23:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.76 Mbit/s

95th percentile per-packet one-way delay: 109.709 ms

Loss rate: 1.51%

-- Flow 1:

Average throughput: 56.06 Mbit/s

95th percentile per-packet one-way delay: 108.152 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 53.70 Mbit/s

95th percentile per-packet one-way delay: 109.953 ms

Loss rate: 2.21%

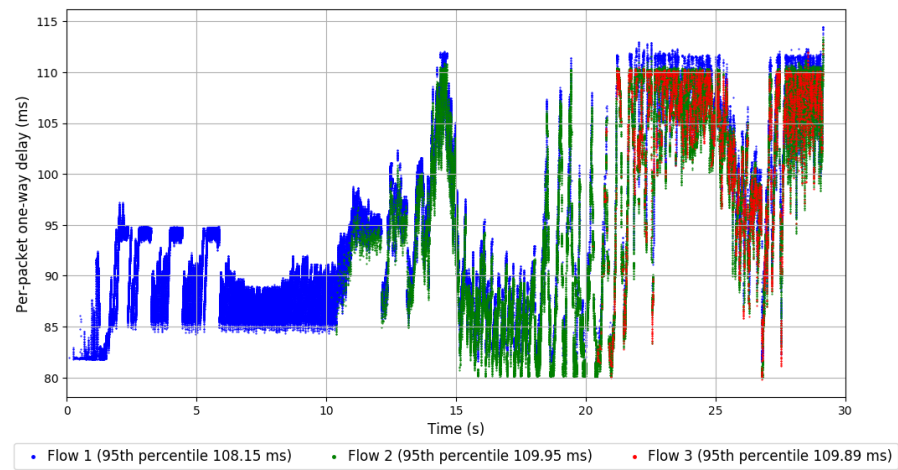
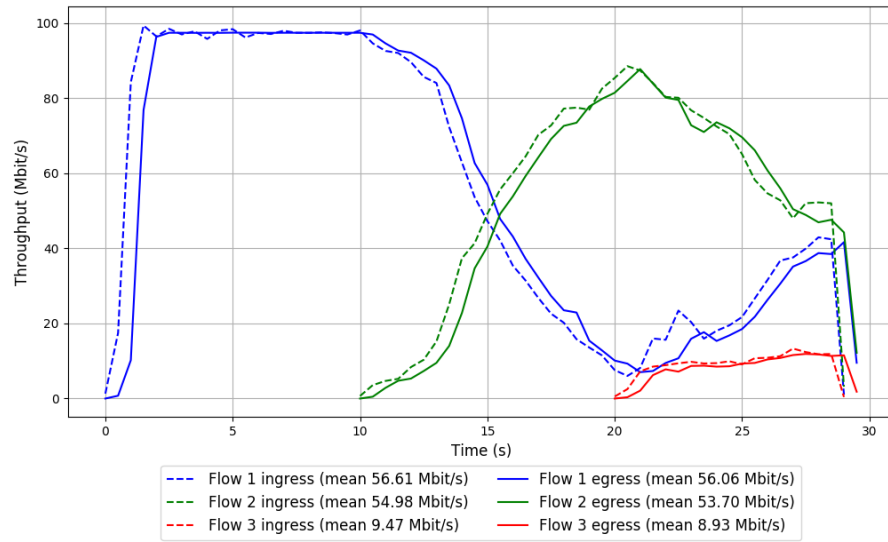
-- Flow 3:

Average throughput: 8.93 Mbit/s

95th percentile per-packet one-way delay: 109.890 ms

Loss rate: 5.50%

Run 1: Report of Indigo-MusesC5 — Data Link

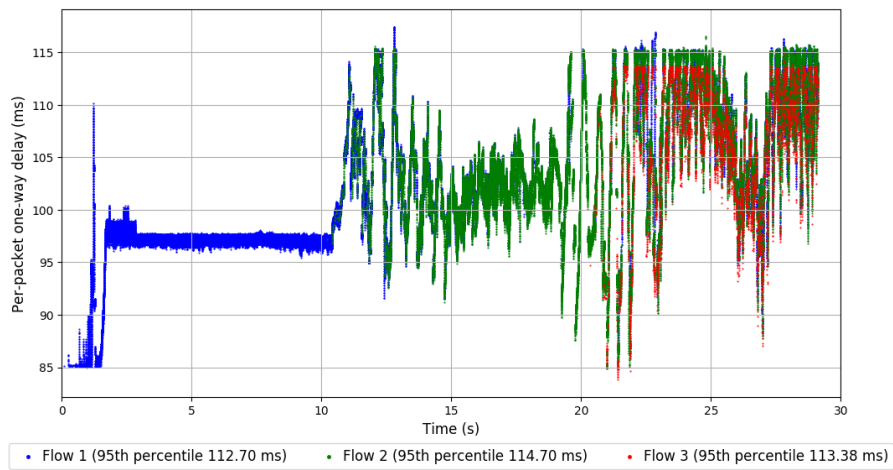
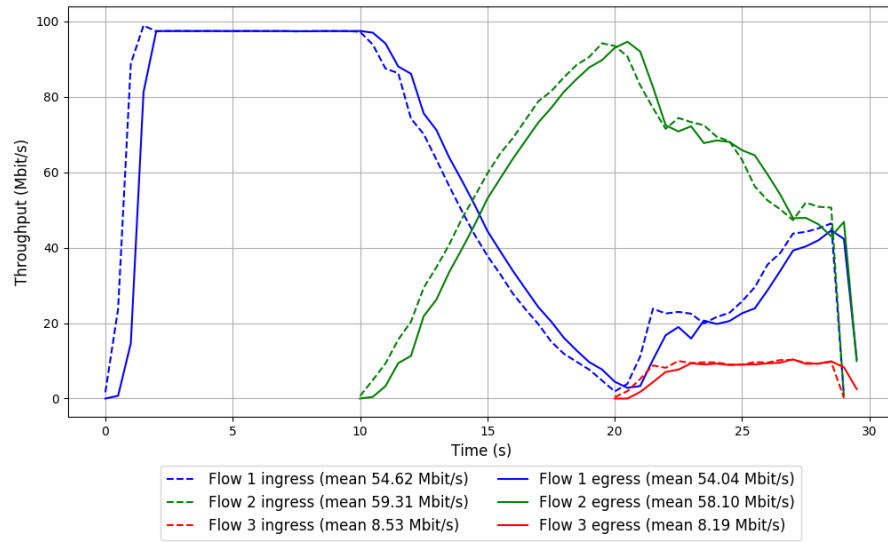


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-03-27 01:53:55
End at: 2019-03-27 01:54:25
Local clock offset: -2.531 ms
Remote clock offset: 19.893 ms

Below is generated by plot.py at 2019-03-27 03:23:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.35 Mbit/s
95th percentile per-packet one-way delay: 114.155 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 54.04 Mbit/s
95th percentile per-packet one-way delay: 112.698 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 58.10 Mbit/s
95th percentile per-packet one-way delay: 114.705 ms
Loss rate: 1.96%
-- Flow 3:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 113.378 ms
Loss rate: 3.74%

Run 2: Report of Indigo-MusesC5 — Data Link

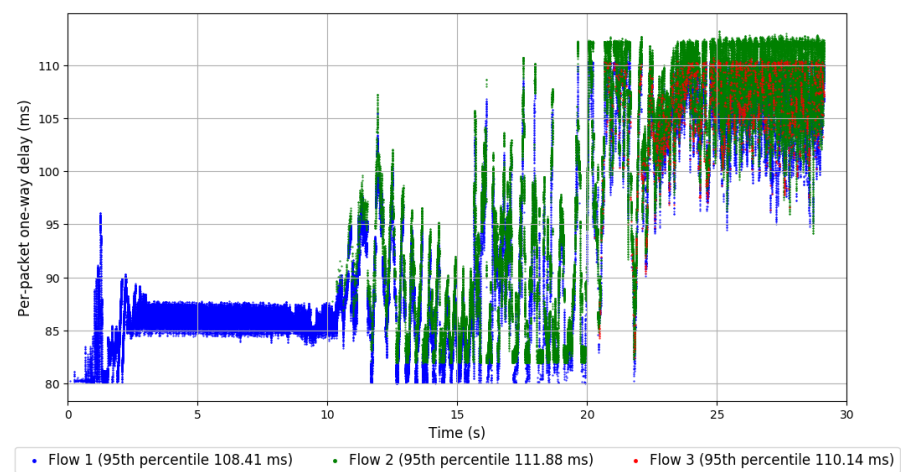
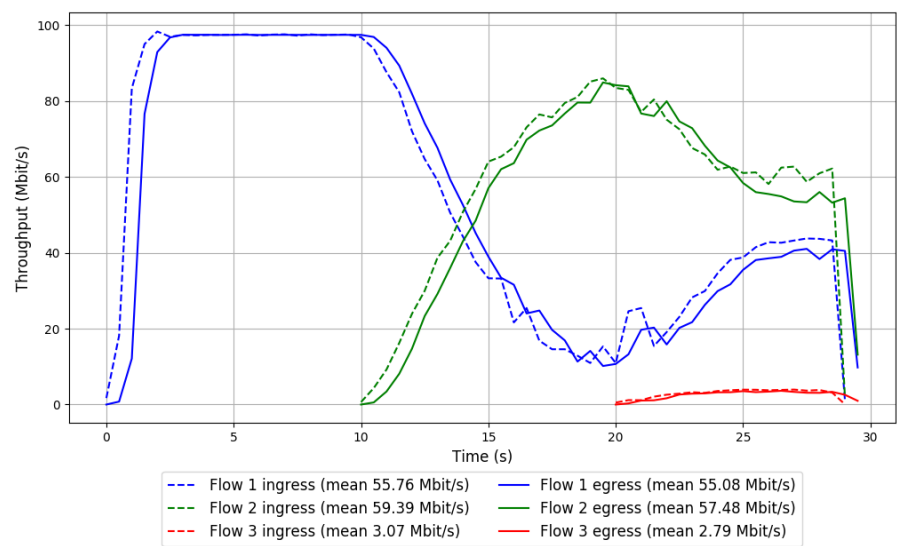


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-03-27 02:20:34
End at: 2019-03-27 02:21:04
Local clock offset: -1.897 ms
Remote clock offset: 23.374 ms

Below is generated by plot.py at 2019-03-27 03:23:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.42 Mbit/s
95th percentile per-packet one-way delay: 110.813 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 55.08 Mbit/s
95th percentile per-packet one-way delay: 108.411 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 57.48 Mbit/s
95th percentile per-packet one-way delay: 111.880 ms
Loss rate: 3.10%
-- Flow 3:
Average throughput: 2.79 Mbit/s
95th percentile per-packet one-way delay: 110.137 ms
Loss rate: 8.89%

Run 3: Report of Indigo-MusesC5 — Data Link

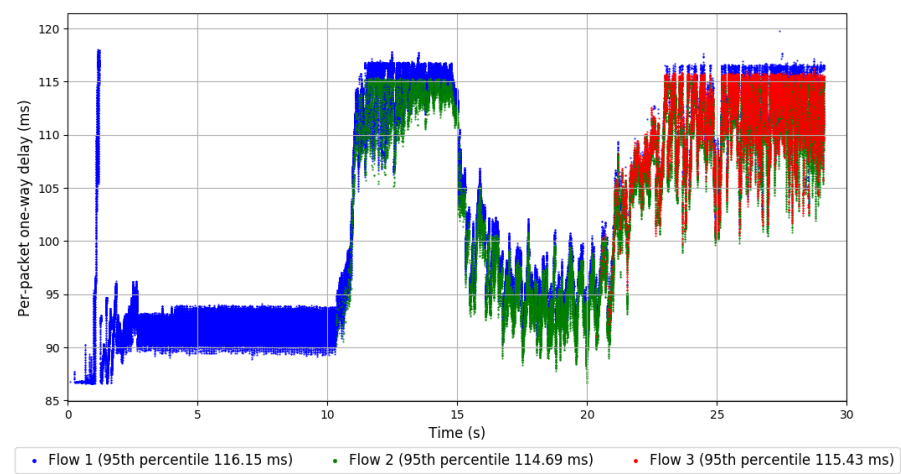
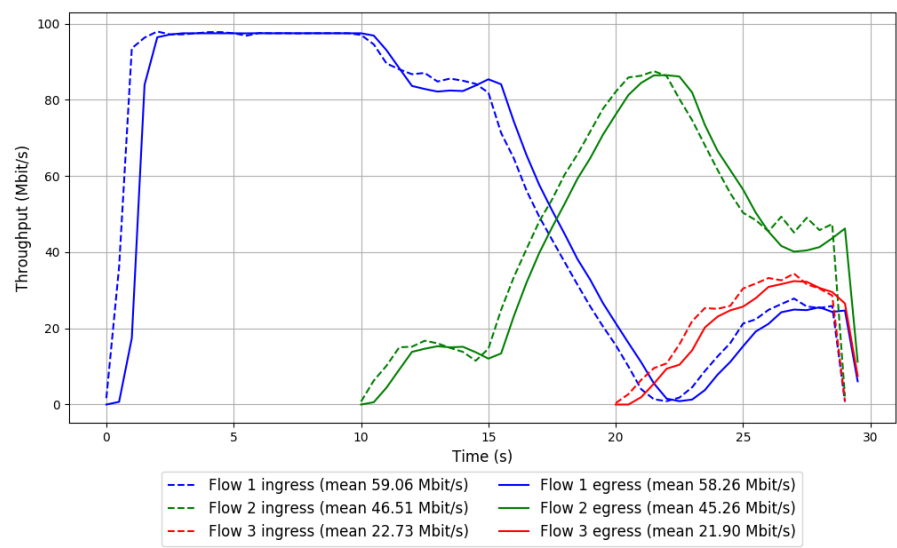


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-03-27 02:47:08
End at: 2019-03-27 02:47:38
Local clock offset: -2.436 ms
Remote clock offset: 34.103 ms

Below is generated by plot.py at 2019-03-27 03:23:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.45 Mbit/s
95th percentile per-packet one-way delay: 115.631 ms
Loss rate: 1.82%
-- Flow 1:
Average throughput: 58.26 Mbit/s
95th percentile per-packet one-way delay: 116.149 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 45.26 Mbit/s
95th percentile per-packet one-way delay: 114.694 ms
Loss rate: 2.56%
-- Flow 3:
Average throughput: 21.90 Mbit/s
95th percentile per-packet one-way delay: 115.430 ms
Loss rate: 3.36%

Run 4: Report of Indigo-MusesC5 — Data Link

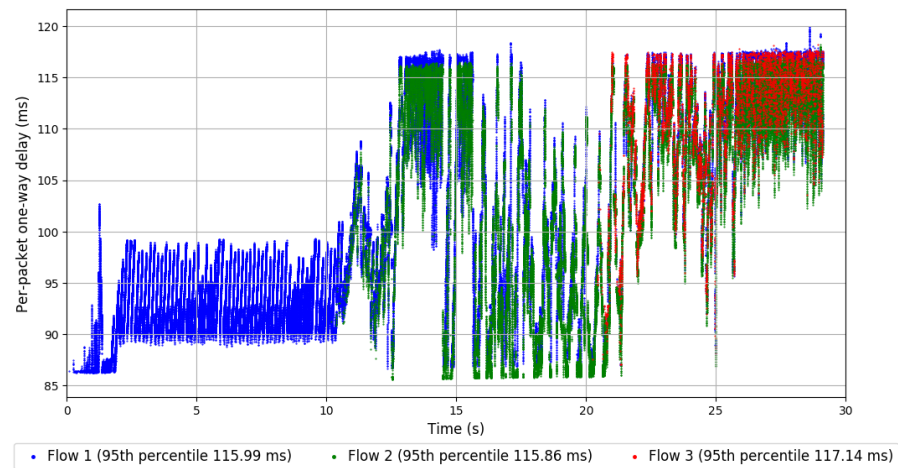
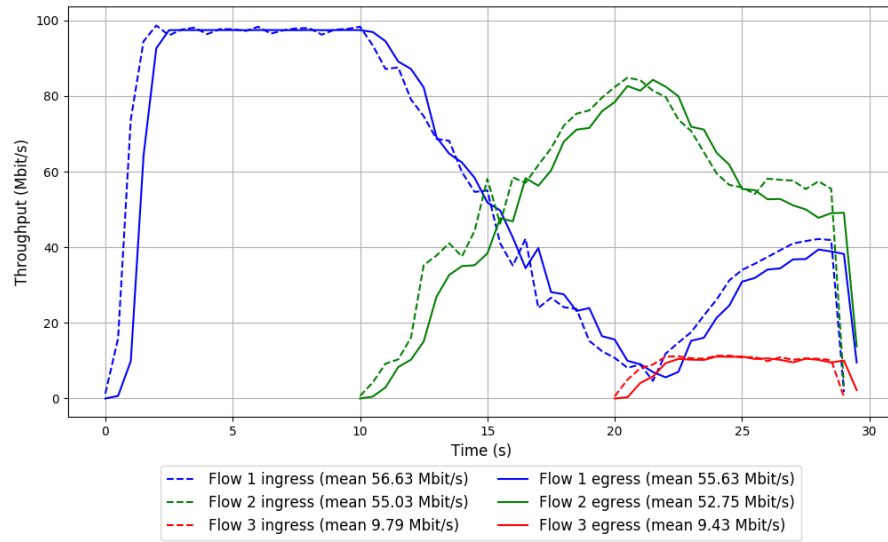


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-03-27 03:13:44
End at: 2019-03-27 03:14:14
Local clock offset: -9.017 ms
Remote clock offset: 20.612 ms

Below is generated by plot.py at 2019-03-27 03:24:03
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.89 Mbit/s
95th percentile per-packet one-way delay: 115.968 ms
Loss rate: 2.61%
-- Flow 1:
Average throughput: 55.63 Mbit/s
95th percentile per-packet one-way delay: 115.991 ms
Loss rate: 1.68%
-- Flow 2:
Average throughput: 52.75 Mbit/s
95th percentile per-packet one-way delay: 115.857 ms
Loss rate: 4.03%
-- Flow 3:
Average throughput: 9.43 Mbit/s
95th percentile per-packet one-way delay: 117.138 ms
Loss rate: 3.41%

Run 5: Report of Indigo-MusesC5 — Data Link

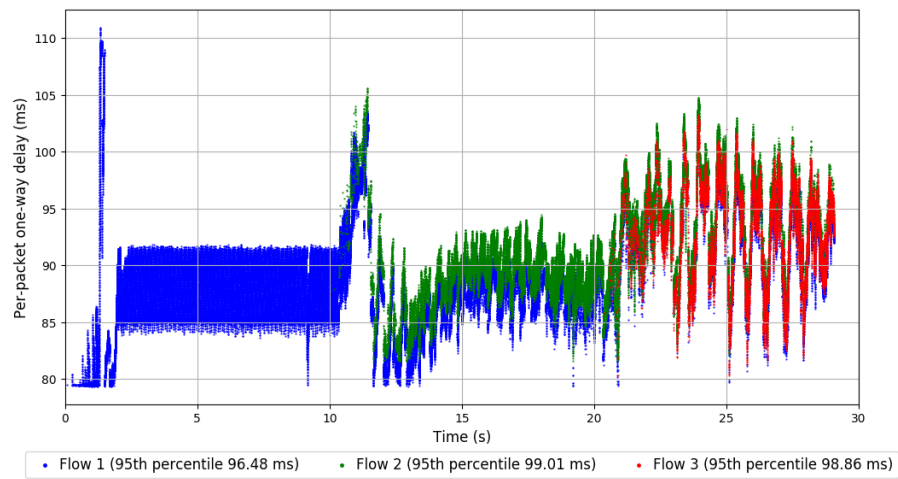
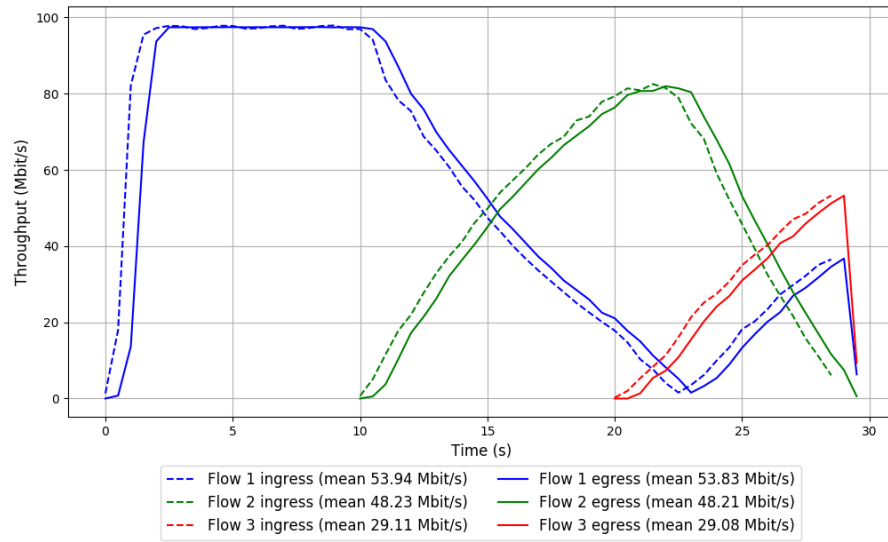


Run 1: Statistics of Indigo-MusesD

Start at: 2019-03-27 01:04:33
End at: 2019-03-27 01:05:03
Local clock offset: -6.063 ms
Remote clock offset: -4.354 ms

Below is generated by plot.py at 2019-03-27 03:24:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.98 Mbit/s
95th percentile per-packet one-way delay: 98.153 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 53.83 Mbit/s
95th percentile per-packet one-way delay: 96.482 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 48.21 Mbit/s
95th percentile per-packet one-way delay: 99.009 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.08 Mbit/s
95th percentile per-packet one-way delay: 98.855 ms
Loss rate: 0.00%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-03-27 01:31:09

End at: 2019-03-27 01:31:39

Local clock offset: -3.068 ms

Remote clock offset: 7.426 ms

Below is generated by plot.py at 2019-03-27 03:24:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.38 Mbit/s

95th percentile per-packet one-way delay: 111.335 ms

Loss rate: 2.89%

-- Flow 1:

Average throughput: 82.22 Mbit/s

95th percentile per-packet one-way delay: 111.306 ms

Loss rate: 2.57%

-- Flow 2:

Average throughput: 9.58 Mbit/s

95th percentile per-packet one-way delay: 109.091 ms

Loss rate: 2.19%

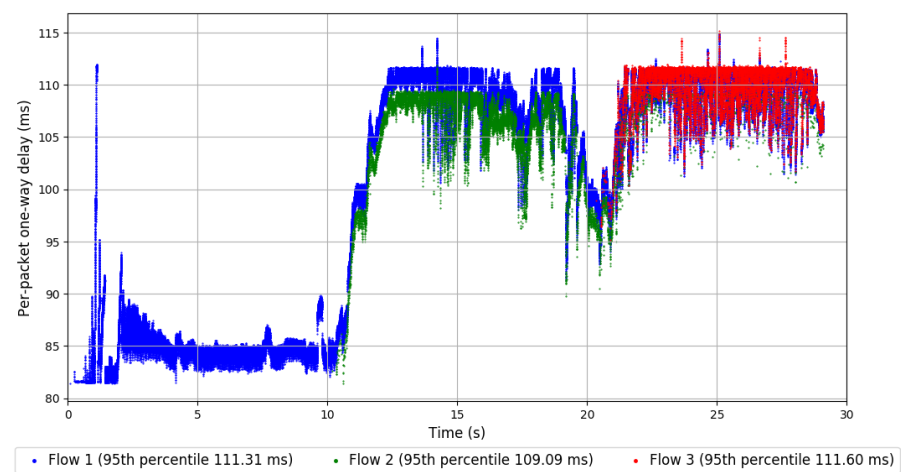
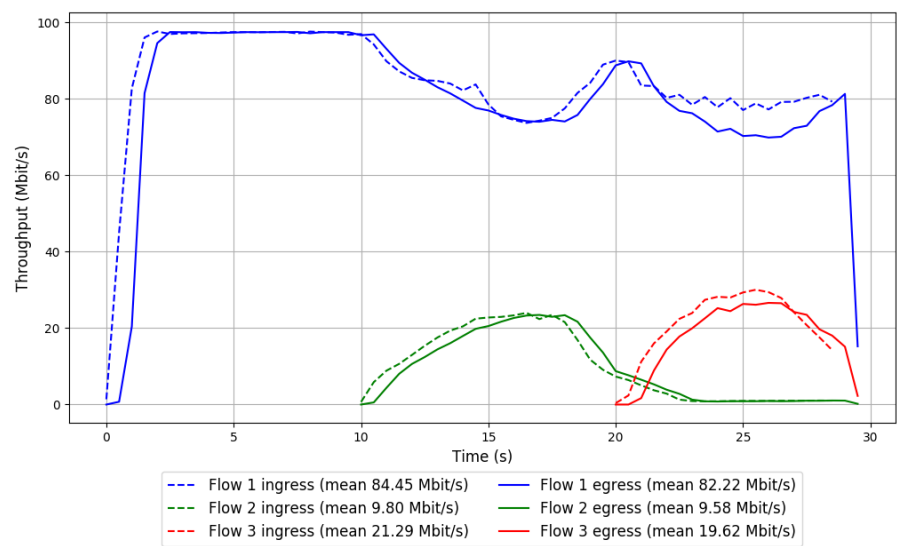
-- Flow 3:

Average throughput: 19.62 Mbit/s

95th percentile per-packet one-way delay: 111.596 ms

Loss rate: 7.81%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-03-27 01:57:44

End at: 2019-03-27 01:58:14

Local clock offset: -2.4 ms

Remote clock offset: 17.02 ms

Below is generated by plot.py at 2019-03-27 03:24:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.03 Mbit/s

95th percentile per-packet one-way delay: 103.286 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 55.47 Mbit/s

95th percentile per-packet one-way delay: 97.777 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 46.59 Mbit/s

95th percentile per-packet one-way delay: 107.107 ms

Loss rate: 0.02%

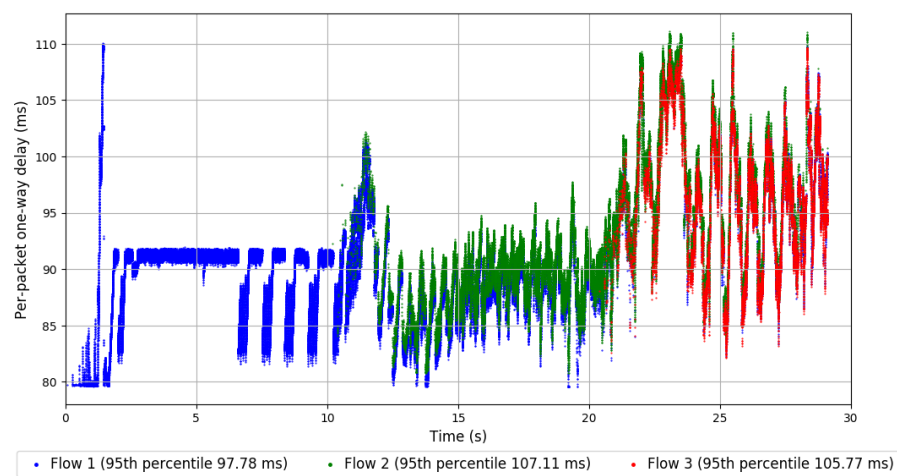
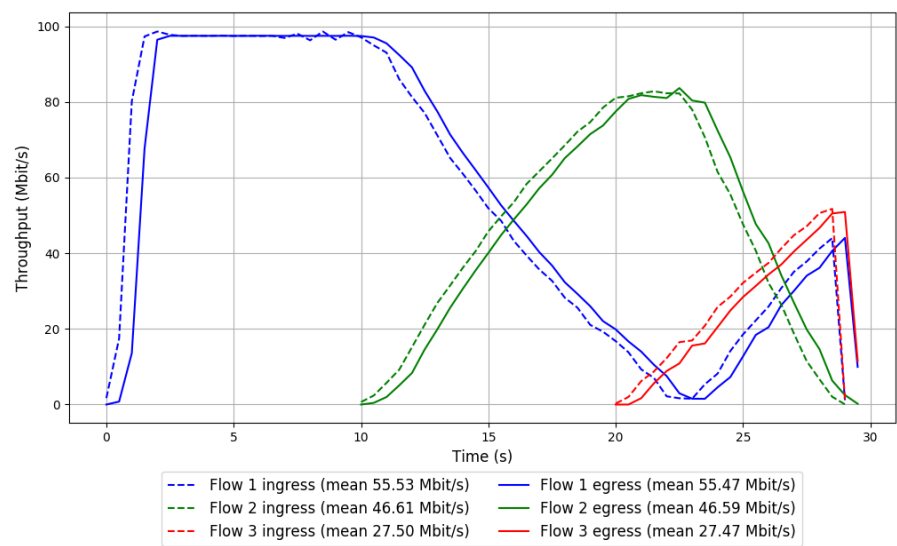
-- Flow 3:

Average throughput: 27.47 Mbit/s

95th percentile per-packet one-way delay: 105.768 ms

Loss rate: 0.07%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-03-27 02:24:23

End at: 2019-03-27 02:24:53

Local clock offset: -1.917 ms

Remote clock offset: 28.92 ms

Below is generated by plot.py at 2019-03-27 03:24:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.12 Mbit/s

95th percentile per-packet one-way delay: 109.497 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 55.30 Mbit/s

95th percentile per-packet one-way delay: 105.149 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 45.46 Mbit/s

95th percentile per-packet one-way delay: 110.414 ms

Loss rate: 0.04%

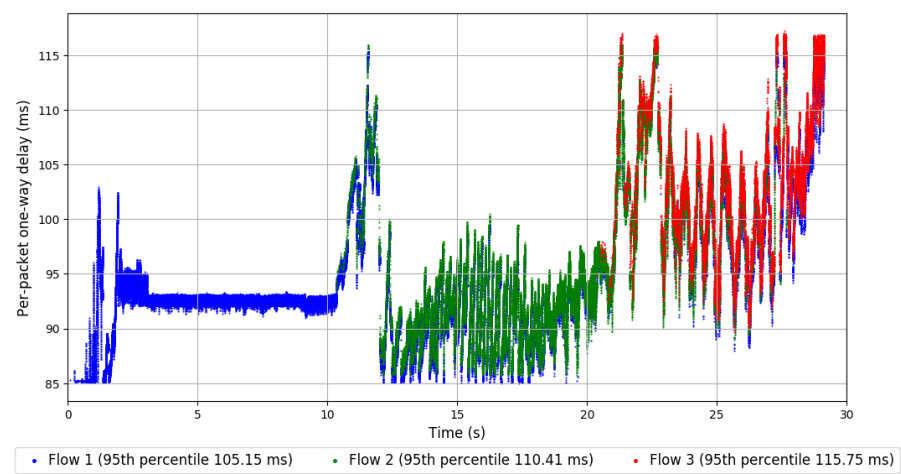
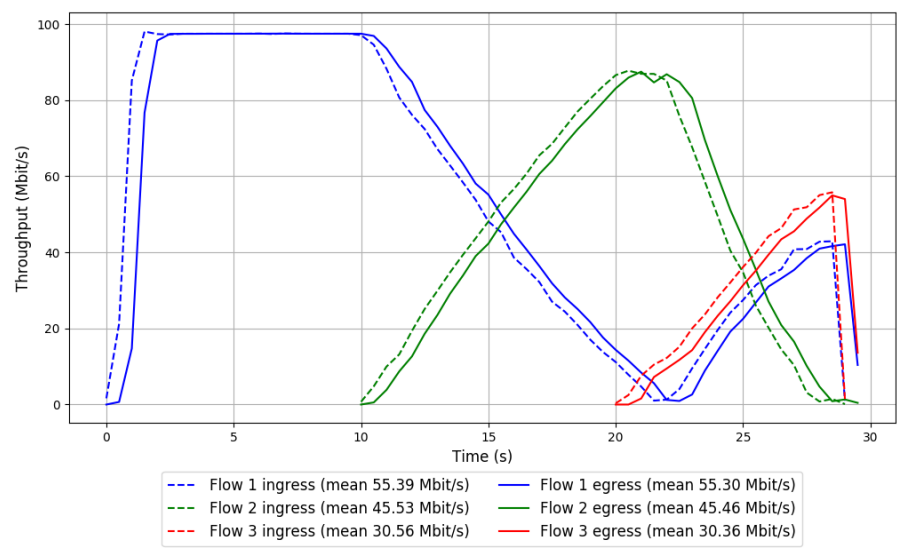
-- Flow 3:

Average throughput: 30.36 Mbit/s

95th percentile per-packet one-way delay: 115.754 ms

Loss rate: 0.42%

Run 4: Report of Indigo-MusesD — Data Link

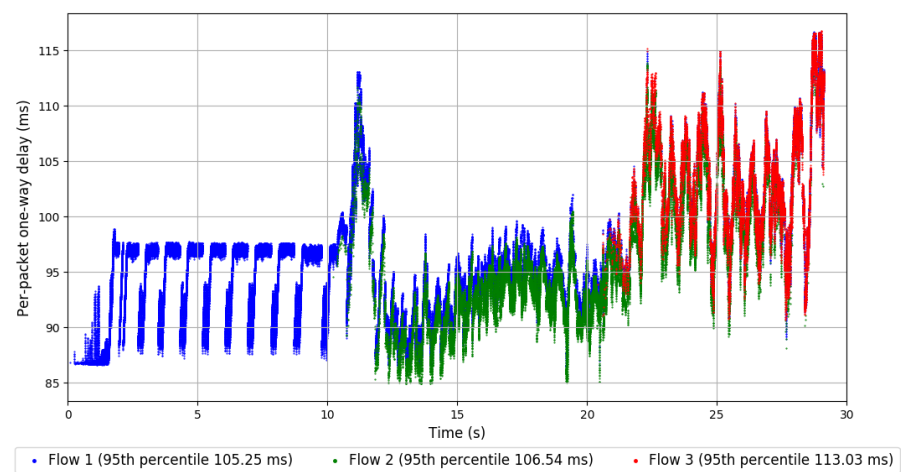
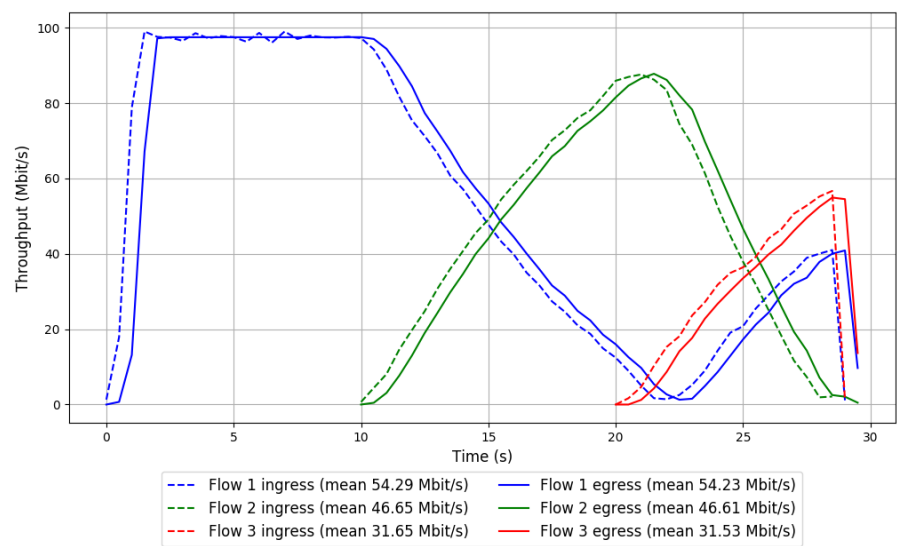


Run 5: Statistics of Indigo-MusesD

Start at: 2019-03-27 02:50:57
End at: 2019-03-27 02:51:27
Local clock offset: -4.419 ms
Remote clock offset: 34.965 ms

Below is generated by plot.py at 2019-03-27 03:24:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 107.548 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 54.23 Mbit/s
95th percentile per-packet one-way delay: 105.254 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 46.61 Mbit/s
95th percentile per-packet one-way delay: 106.541 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 31.53 Mbit/s
95th percentile per-packet one-way delay: 113.026 ms
Loss rate: 0.19%

Run 5: Report of Indigo-MusesD — Data Link

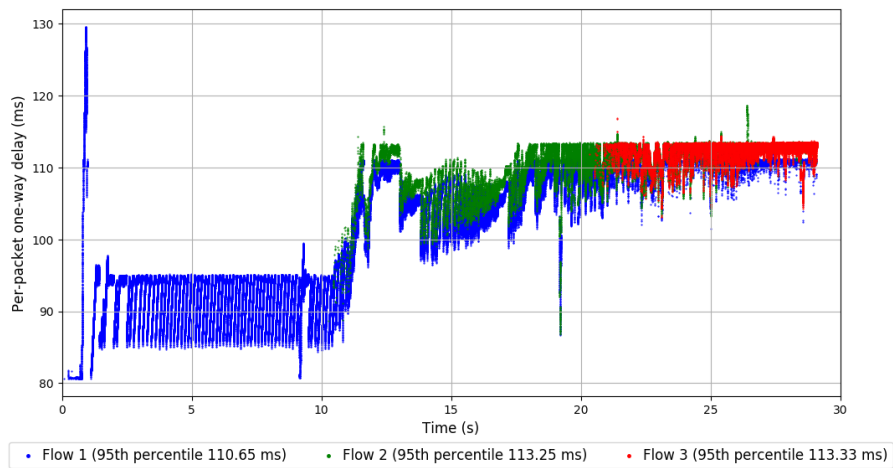
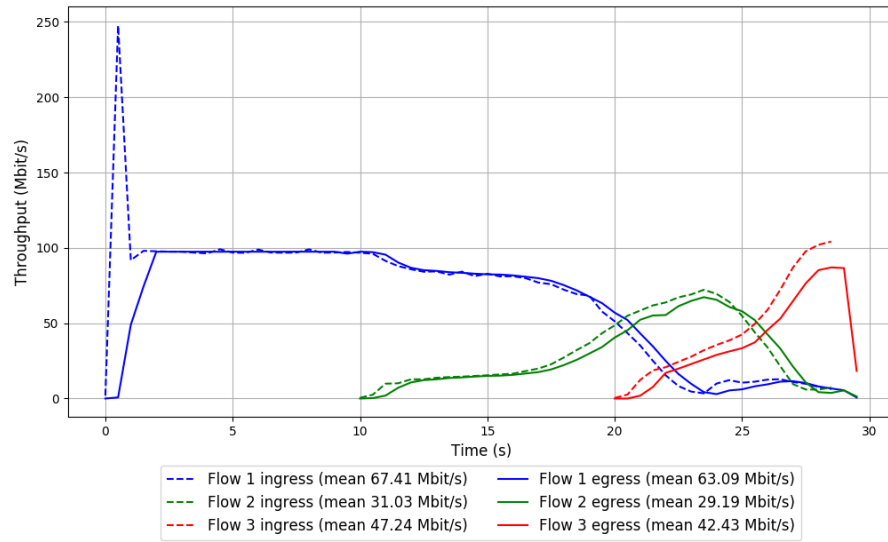


Run 1: Statistics of Indigo-MusesT

Start at: 2019-03-27 01:16:02
End at: 2019-03-27 01:16:32
Local clock offset: -7.448 ms
Remote clock offset: -4.869 ms

Below is generated by plot.py at 2019-03-27 03:24:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.80 Mbit/s
95th percentile per-packet one-way delay: 113.179 ms
Loss rate: 6.76%
-- Flow 1:
Average throughput: 63.09 Mbit/s
95th percentile per-packet one-way delay: 110.646 ms
Loss rate: 6.32%
-- Flow 2:
Average throughput: 29.19 Mbit/s
95th percentile per-packet one-way delay: 113.246 ms
Loss rate: 5.80%
-- Flow 3:
Average throughput: 42.43 Mbit/s
95th percentile per-packet one-way delay: 113.335 ms
Loss rate: 10.18%

Run 1: Report of Indigo-MusesT — Data Link

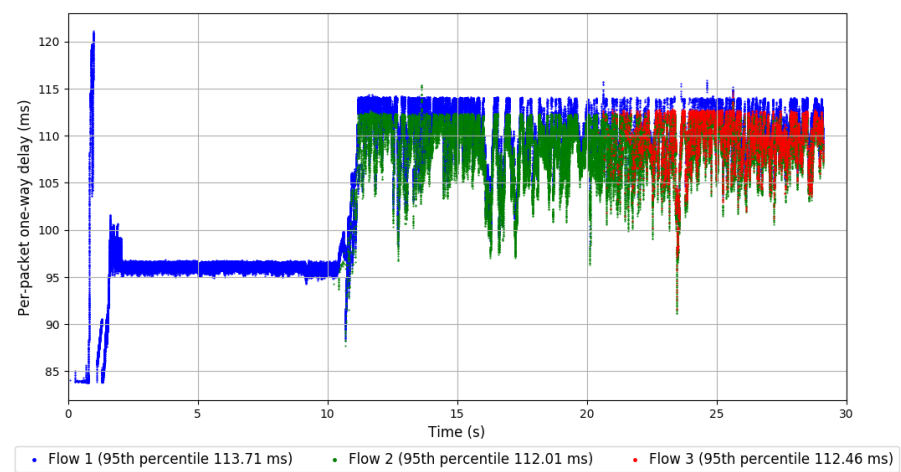
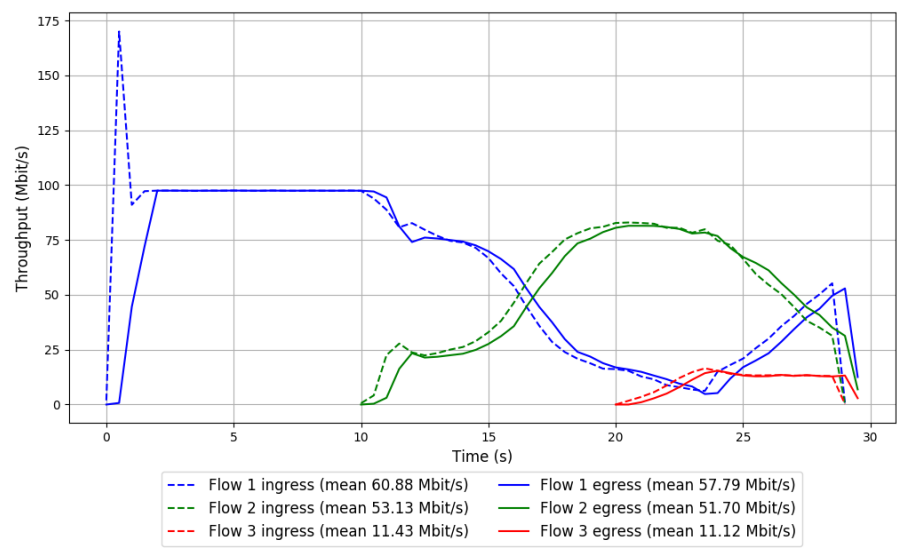


Run 2: Statistics of Indigo-MusesT

Start at: 2019-03-27 01:42:37
End at: 2019-03-27 01:43:07
Local clock offset: -2.235 ms
Remote clock offset: 16.473 ms

Below is generated by plot.py at 2019-03-27 03:25:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.72 Mbit/s
95th percentile per-packet one-way delay: 113.430 ms
Loss rate: 4.09%
-- Flow 1:
Average throughput: 57.79 Mbit/s
95th percentile per-packet one-way delay: 113.712 ms
Loss rate: 5.00%
-- Flow 2:
Average throughput: 51.70 Mbit/s
95th percentile per-packet one-way delay: 112.009 ms
Loss rate: 2.63%
-- Flow 3:
Average throughput: 11.12 Mbit/s
95th percentile per-packet one-way delay: 112.462 ms
Loss rate: 2.75%

Run 2: Report of Indigo-MusesT — Data Link

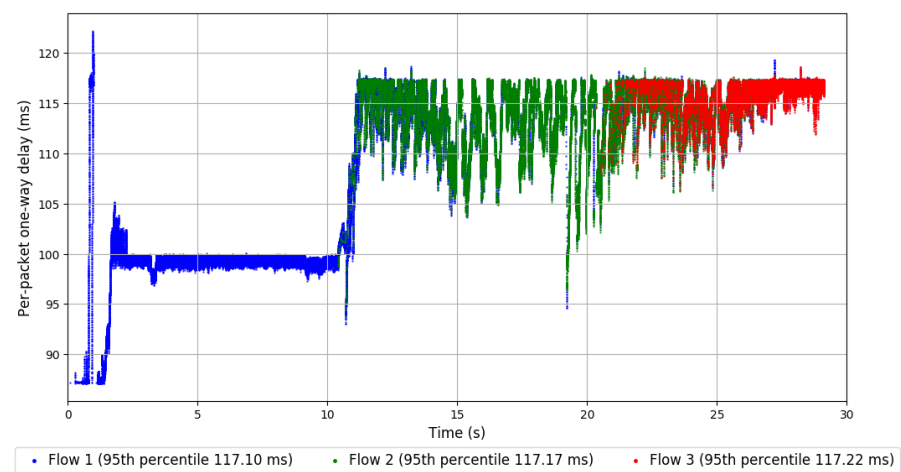
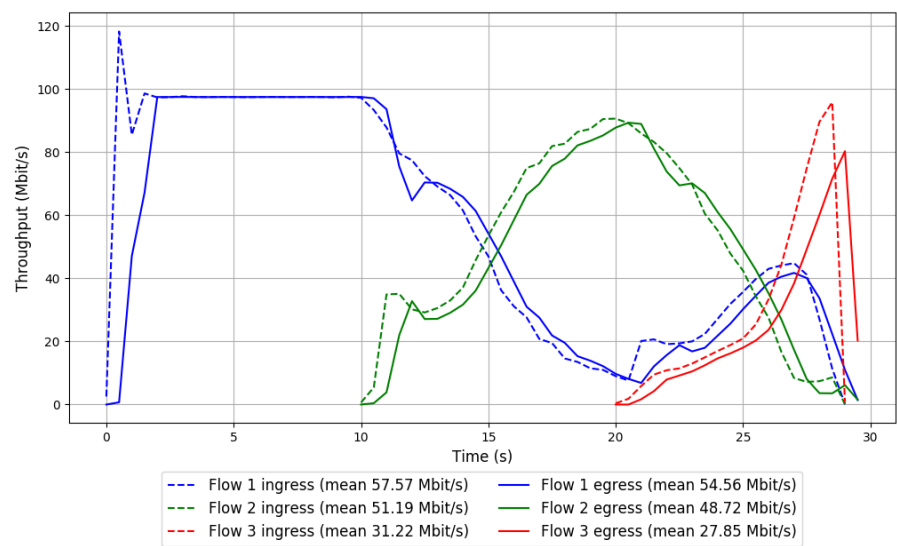


Run 3: Statistics of Indigo-MusesT

Start at: 2019-03-27 02:09:15
End at: 2019-03-27 02:09:45
Local clock offset: -2.081 ms
Remote clock offset: 25.912 ms

Below is generated by plot.py at 2019-03-27 03:25:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.69 Mbit/s
95th percentile per-packet one-way delay: 117.155 ms
Loss rate: 5.53%
-- Flow 1:
Average throughput: 54.56 Mbit/s
95th percentile per-packet one-way delay: 117.099 ms
Loss rate: 5.14%
-- Flow 2:
Average throughput: 48.72 Mbit/s
95th percentile per-packet one-way delay: 117.170 ms
Loss rate: 4.72%
-- Flow 3:
Average throughput: 27.85 Mbit/s
95th percentile per-packet one-way delay: 117.218 ms
Loss rate: 10.78%

Run 3: Report of Indigo-MusesT — Data Link

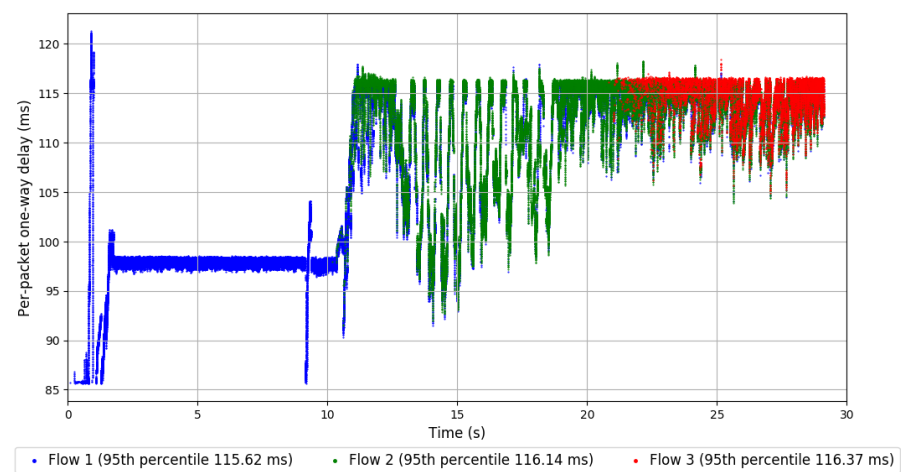
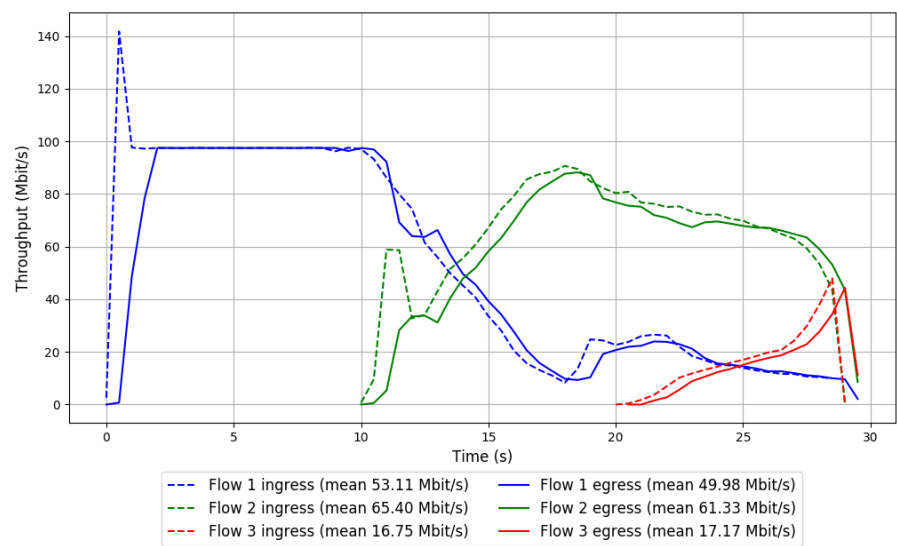


Run 4: Statistics of Indigo-MusesT

Start at: 2019-03-27 02:35:51
End at: 2019-03-27 02:36:21
Local clock offset: -1.8 ms
Remote clock offset: 30.413 ms

Below is generated by plot.py at 2019-03-27 03:25:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.89 Mbit/s
95th percentile per-packet one-way delay: 116.066 ms
Loss rate: 5.85%
-- Flow 1:
Average throughput: 49.98 Mbit/s
95th percentile per-packet one-way delay: 115.621 ms
Loss rate: 5.81%
-- Flow 2:
Average throughput: 61.33 Mbit/s
95th percentile per-packet one-way delay: 116.144 ms
Loss rate: 6.18%
-- Flow 3:
Average throughput: 17.17 Mbit/s
95th percentile per-packet one-way delay: 116.368 ms
Loss rate: 3.38%

Run 4: Report of Indigo-MusesT — Data Link

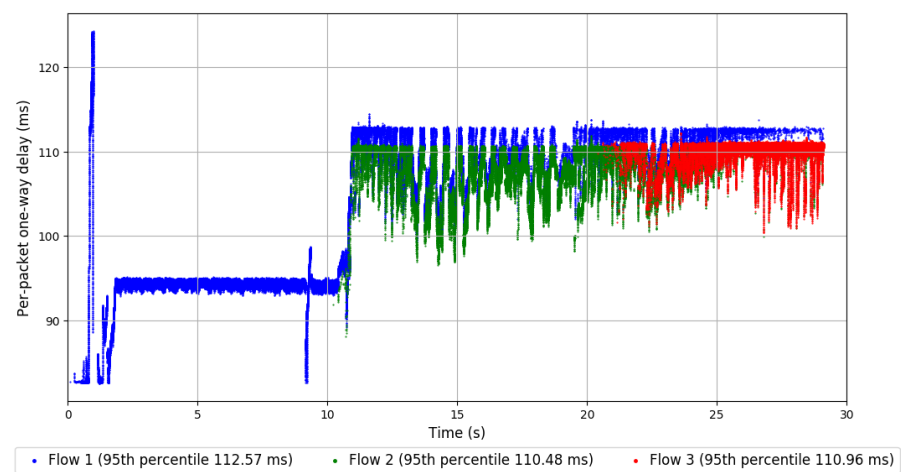
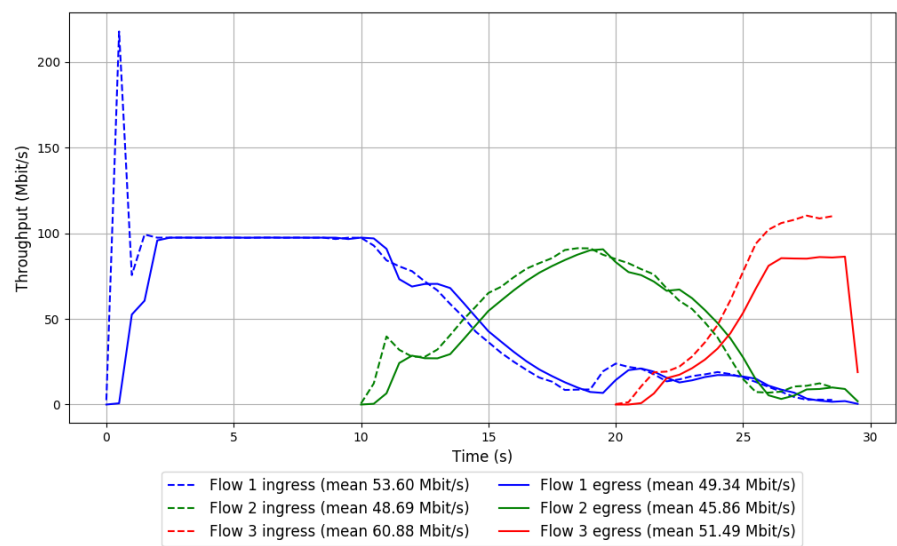


Run 5: Statistics of Indigo-MusesT

Start at: 2019-03-27 03:02:25
End at: 2019-03-27 03:02:55
Local clock offset: -7.734 ms
Remote clock offset: 32.504 ms

Below is generated by plot.py at 2019-03-27 03:25:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.62 Mbit/s
95th percentile per-packet one-way delay: 112.293 ms
Loss rate: 8.54%
-- Flow 1:
Average throughput: 49.34 Mbit/s
95th percentile per-packet one-way delay: 112.572 ms
Loss rate: 7.86%
-- Flow 2:
Average throughput: 45.86 Mbit/s
95th percentile per-packet one-way delay: 110.478 ms
Loss rate: 5.72%
-- Flow 3:
Average throughput: 51.49 Mbit/s
95th percentile per-packet one-way delay: 110.961 ms
Loss rate: 15.40%

Run 5: Report of Indigo-MusesT — Data Link

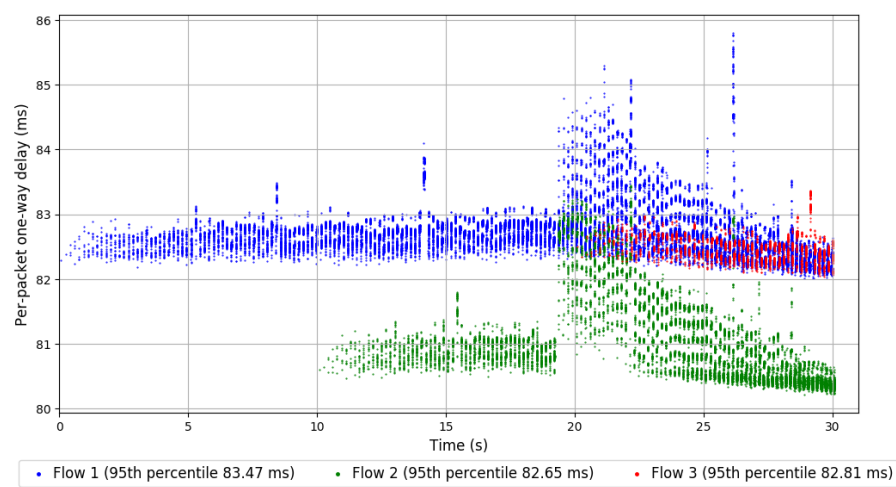
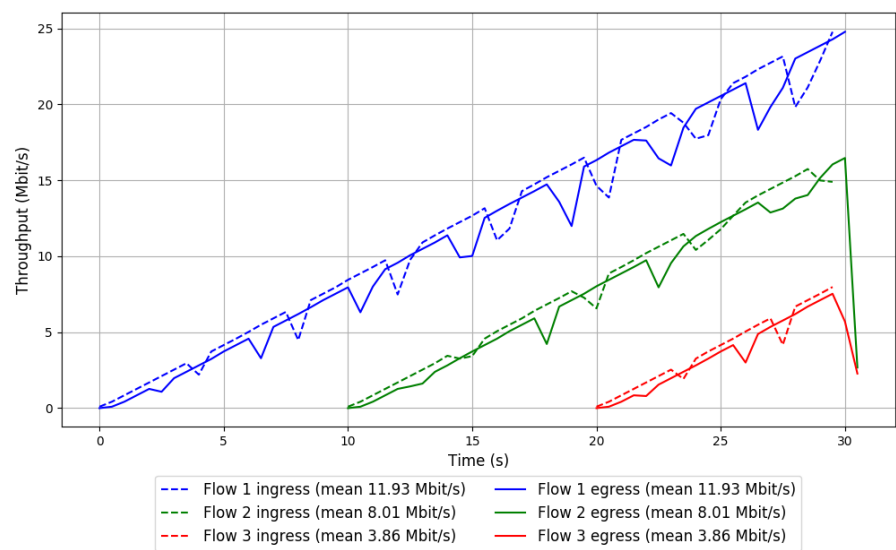


Run 1: Statistics of LEDBAT

Start at: 2019-03-27 01:21:06
End at: 2019-03-27 01:21:37
Local clock offset: -5.683 ms
Remote clock offset: -5.097 ms

Below is generated by plot.py at 2019-03-27 03:25:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 18.50 Mbit/s
95th percentile per-packet one-way delay: 83.226 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.93 Mbit/s
95th percentile per-packet one-way delay: 83.469 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.01 Mbit/s
95th percentile per-packet one-way delay: 82.654 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 82.805 ms
Loss rate: 0.00%

Run 1: Report of LEDBAT — Data Link

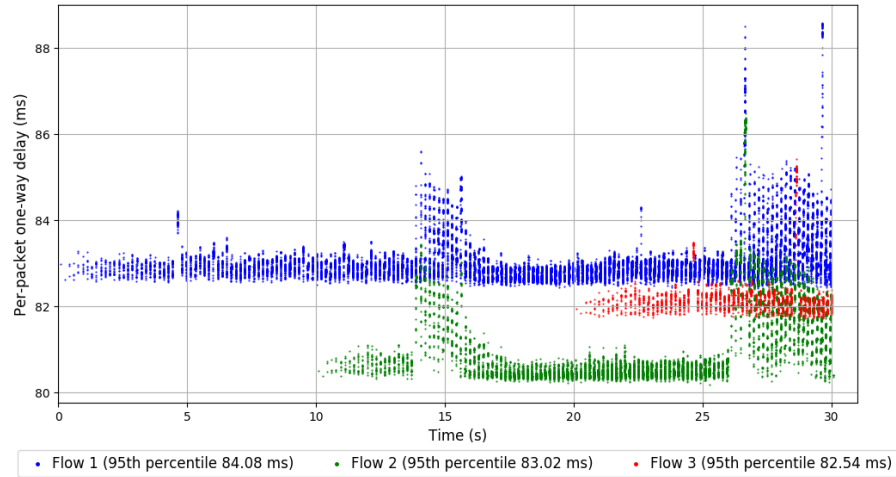
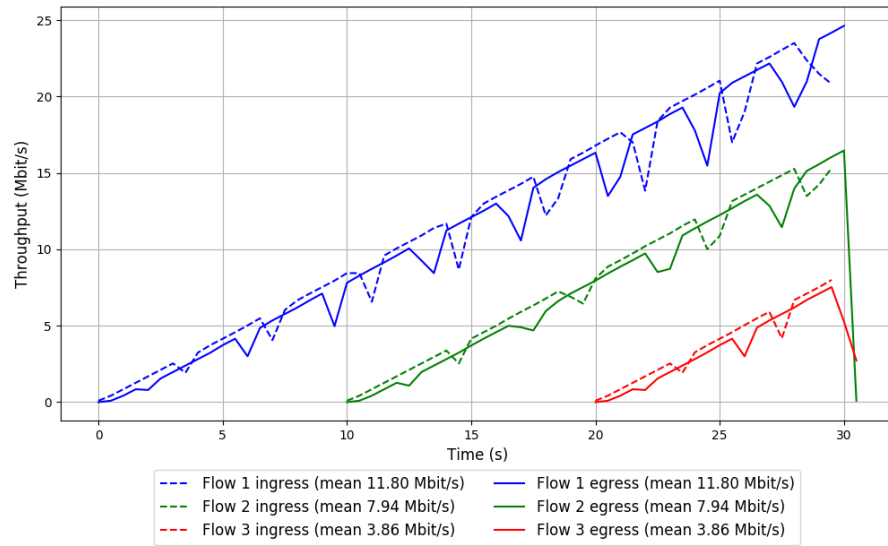


Run 2: Statistics of LEDBAT

Start at: 2019-03-27 01:47:41
End at: 2019-03-27 01:48:11
Local clock offset: -2.789 ms
Remote clock offset: 15.457 ms

Below is generated by plot.py at 2019-03-27 03:25:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 18.33 Mbit/s
95th percentile per-packet one-way delay: 83.877 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 84.080 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.94 Mbit/s
95th percentile per-packet one-way delay: 83.015 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 82.541 ms
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link

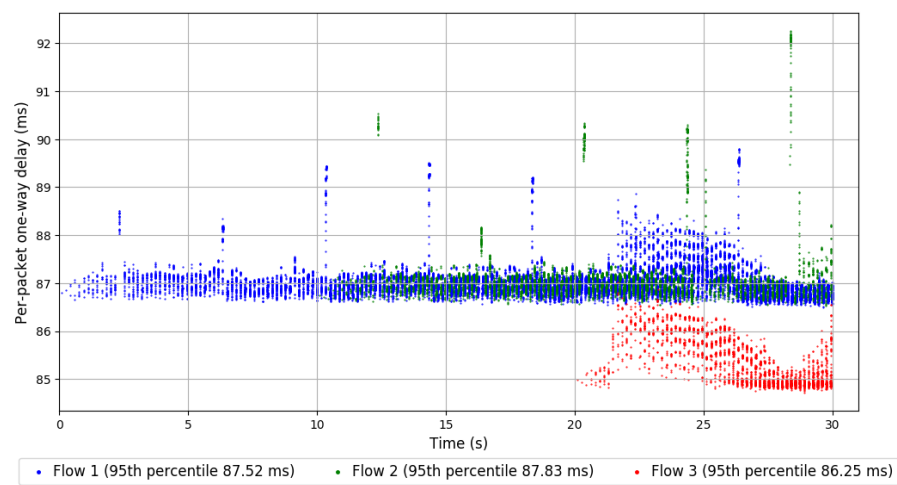
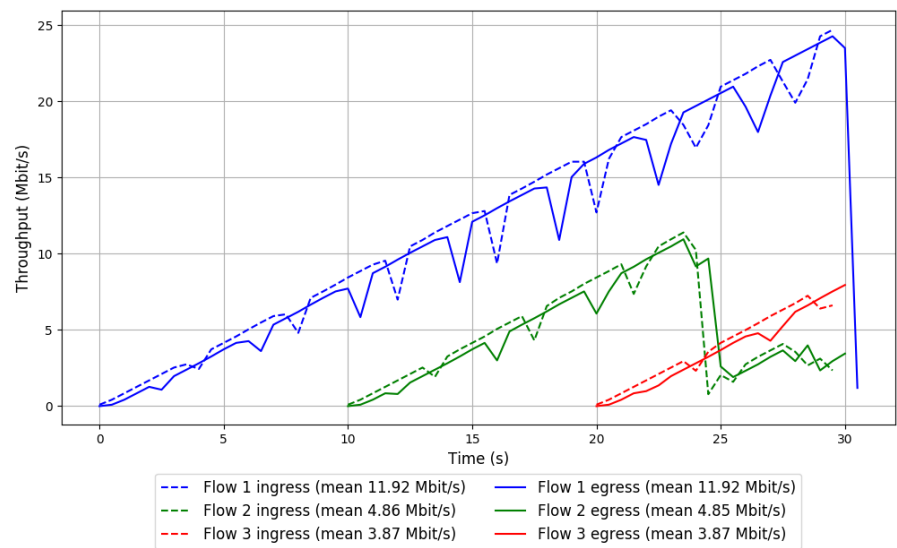


Run 3: Statistics of LEDBAT

Start at: 2019-03-27 02:14:20
End at: 2019-03-27 02:14:50
Local clock offset: -1.844 ms
Remote clock offset: 26.722 ms

Below is generated by plot.py at 2019-03-27 03:25:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 16.41 Mbit/s
95th percentile per-packet one-way delay: 87.489 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 11.92 Mbit/s
95th percentile per-packet one-way delay: 87.520 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.85 Mbit/s
95th percentile per-packet one-way delay: 87.828 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 86.245 ms
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

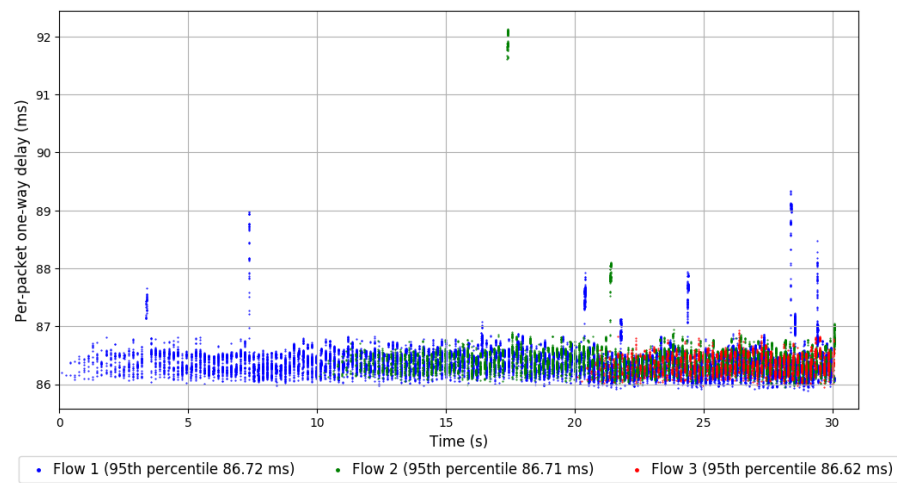
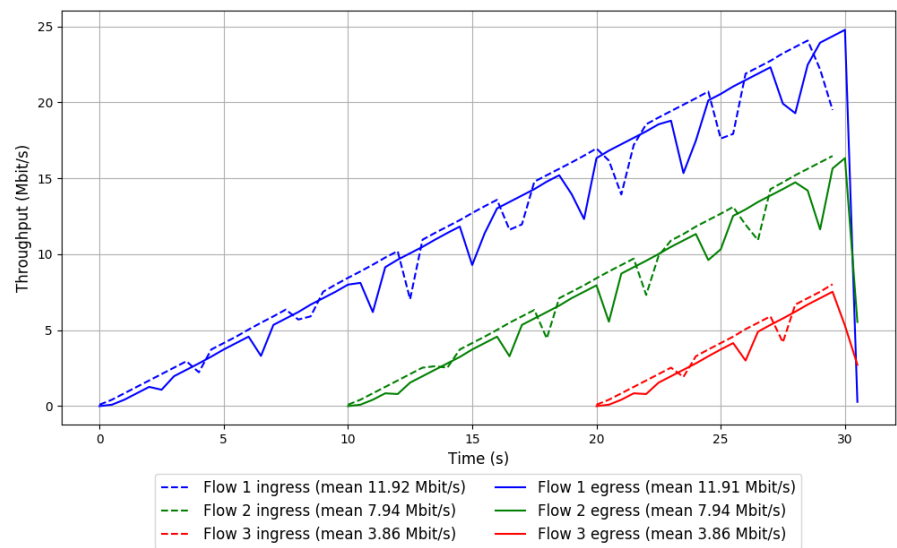


Run 4: Statistics of LEDBAT

Start at: 2019-03-27 02:40:54
End at: 2019-03-27 02:41:24
Local clock offset: -0.95 ms
Remote clock offset: 32.777 ms

Below is generated by plot.py at 2019-03-27 03:25:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 18.48 Mbit/s
95th percentile per-packet one-way delay: 86.706 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 11.91 Mbit/s
95th percentile per-packet one-way delay: 86.720 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 7.94 Mbit/s
95th percentile per-packet one-way delay: 86.708 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 86.617 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

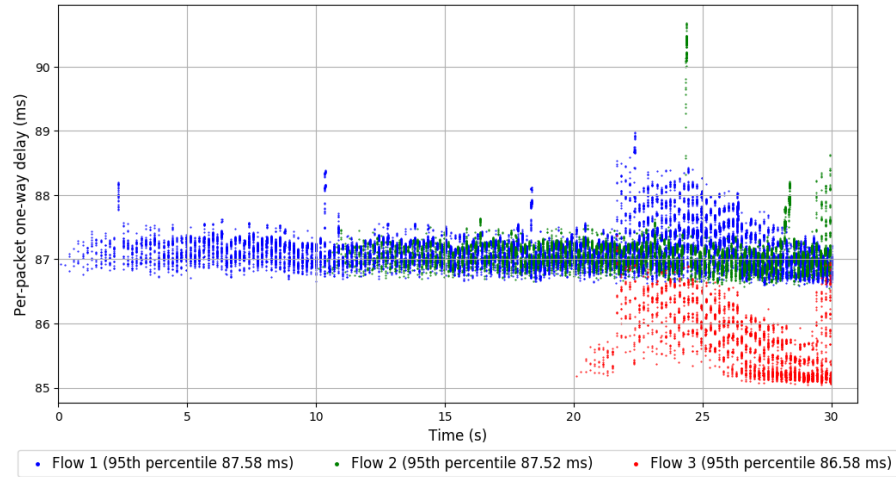
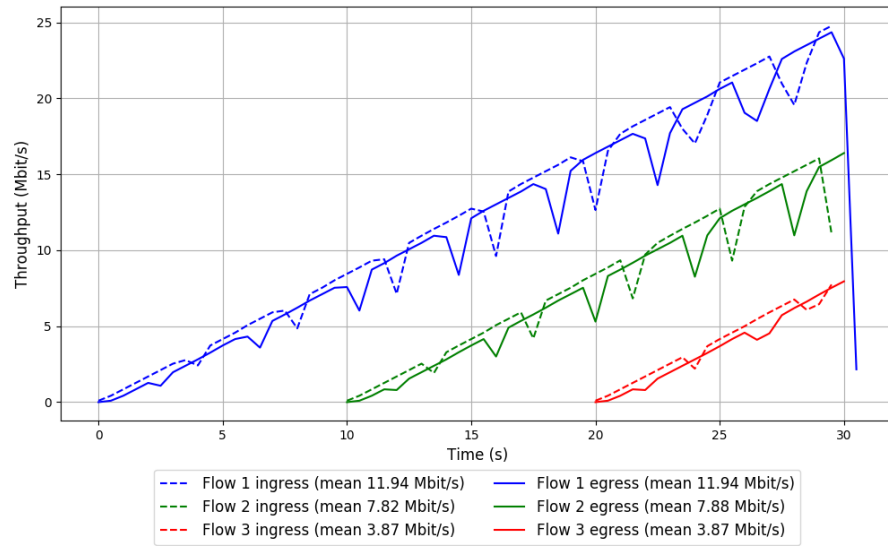


Run 5: Statistics of LEDBAT

Start at: 2019-03-27 03:07:30
End at: 2019-03-27 03:08:00
Local clock offset: -8.343 ms
Remote clock offset: 38.557 ms

Below is generated by plot.py at 2019-03-27 03:25:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 18.44 Mbit/s
95th percentile per-packet one-way delay: 87.534 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 87.577 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.88 Mbit/s
95th percentile per-packet one-way delay: 87.515 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 86.581 ms
Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-03-27 01:26:04

End at: 2019-03-27 01:26:34

Local clock offset: -3.74 ms

Remote clock offset: 6.075 ms

Below is generated by plot.py at 2019-03-27 03:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.98 Mbit/s

95th percentile per-packet one-way delay: 115.669 ms

Loss rate: 2.94%

-- Flow 1:

Average throughput: 78.59 Mbit/s

95th percentile per-packet one-way delay: 115.638 ms

Loss rate: 2.73%

-- Flow 2:

Average throughput: 8.99 Mbit/s

95th percentile per-packet one-way delay: 114.082 ms

Loss rate: 4.01%

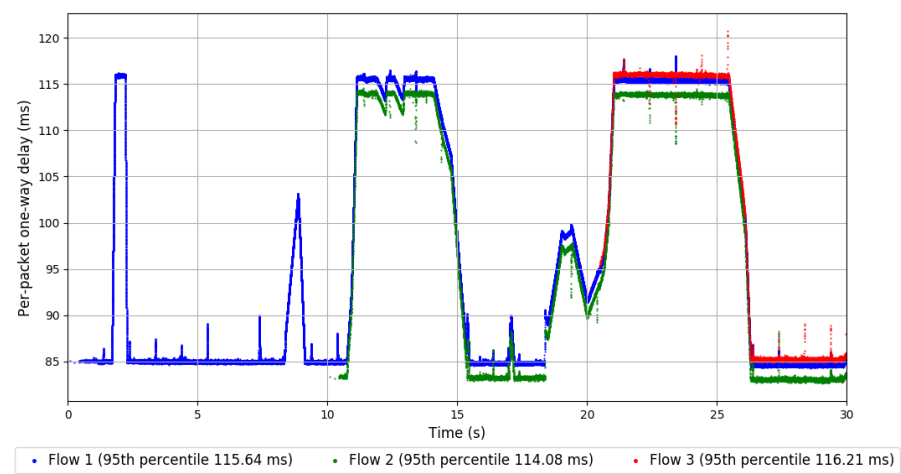
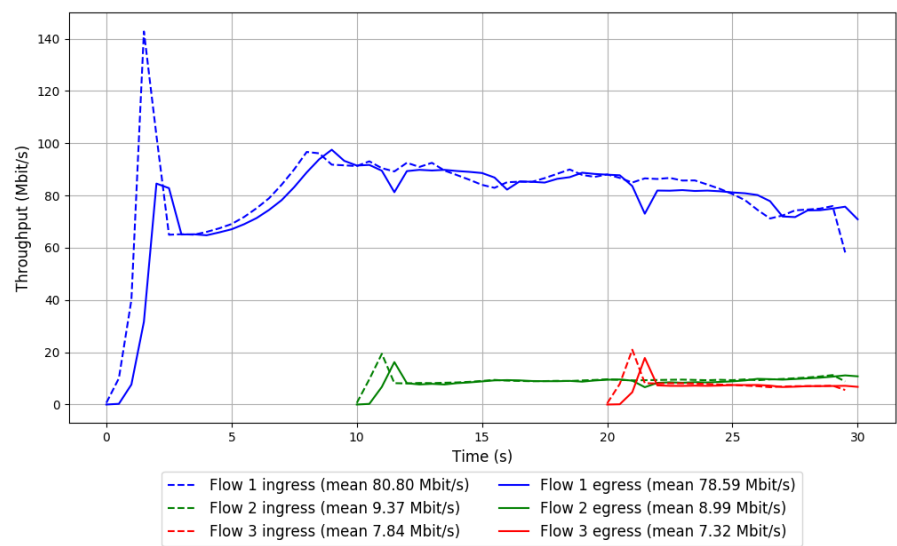
-- Flow 3:

Average throughput: 7.32 Mbit/s

95th percentile per-packet one-way delay: 116.209 ms

Loss rate: 6.72%

Run 1: Report of PCC-Allegro — Data Link

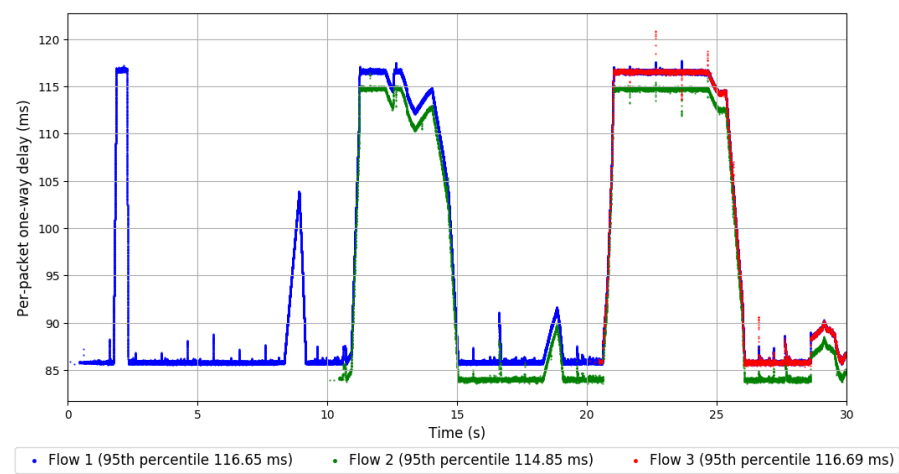
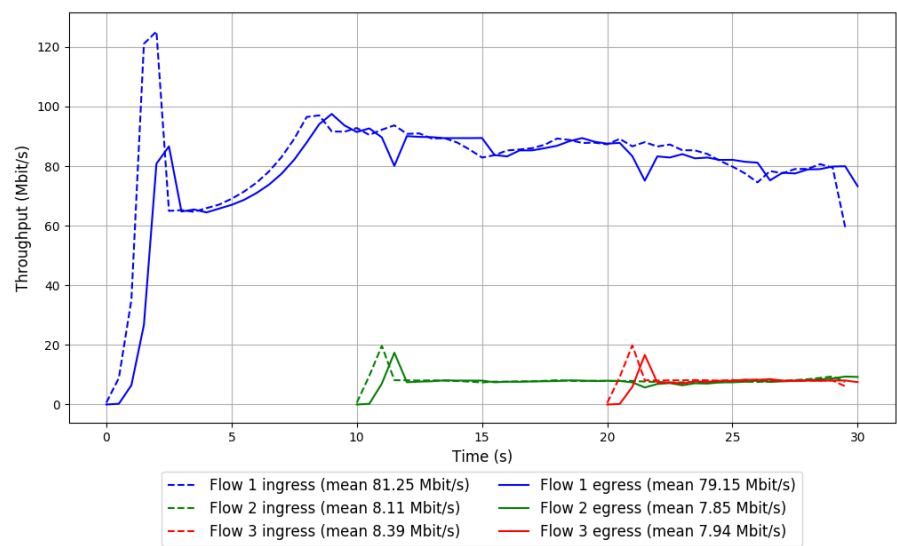


Run 2: Statistics of PCC-Allegro

Start at: 2019-03-27 01:52:39
End at: 2019-03-27 01:53:09
Local clock offset: -2.58 ms
Remote clock offset: 20.669 ms

Below is generated by plot.py at 2019-03-27 03:25:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.99 Mbit/s
95th percentile per-packet one-way delay: 116.648 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 79.15 Mbit/s
95th percentile per-packet one-way delay: 116.652 ms
Loss rate: 2.59%
-- Flow 2:
Average throughput: 7.85 Mbit/s
95th percentile per-packet one-way delay: 114.853 ms
Loss rate: 3.20%
-- Flow 3:
Average throughput: 7.94 Mbit/s
95th percentile per-packet one-way delay: 116.694 ms
Loss rate: 5.34%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-03-27 02:19:18

End at: 2019-03-27 02:19:48

Local clock offset: -1.963 ms

Remote clock offset: 22.9 ms

Below is generated by plot.py at 2019-03-27 03:25:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.03 Mbit/s

95th percentile per-packet one-way delay: 112.785 ms

Loss rate: 2.75%

-- Flow 1:

Average throughput: 78.63 Mbit/s

95th percentile per-packet one-way delay: 112.751 ms

Loss rate: 2.57%

-- Flow 2:

Average throughput: 8.34 Mbit/s

95th percentile per-packet one-way delay: 113.394 ms

Loss rate: 4.01%

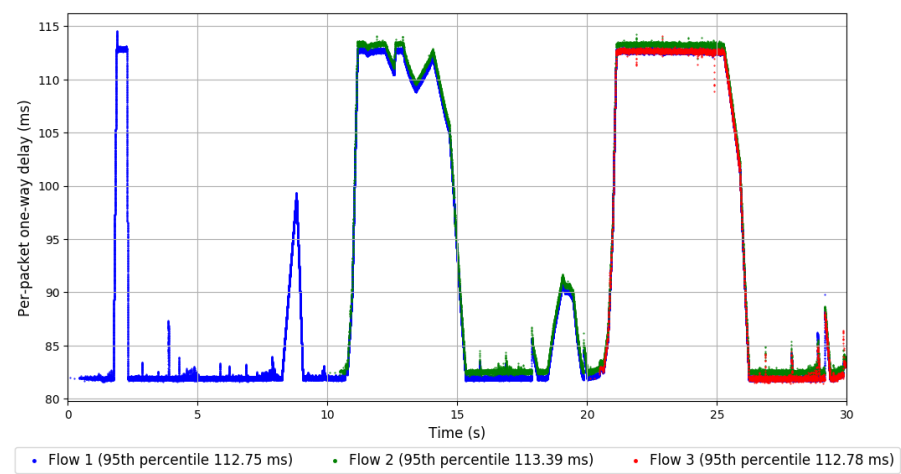
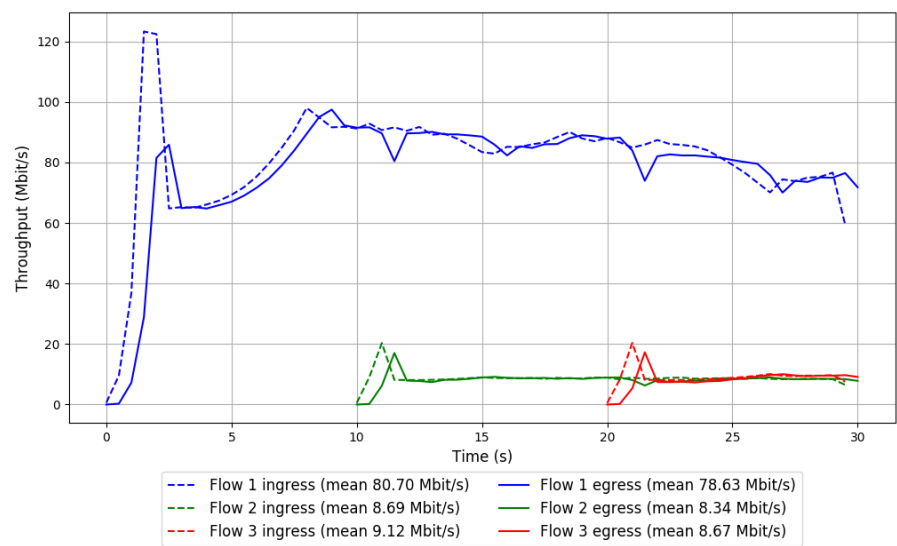
-- Flow 3:

Average throughput: 8.67 Mbit/s

95th percentile per-packet one-way delay: 112.784 ms

Loss rate: 4.92%

Run 3: Report of PCC-Allegro — Data Link

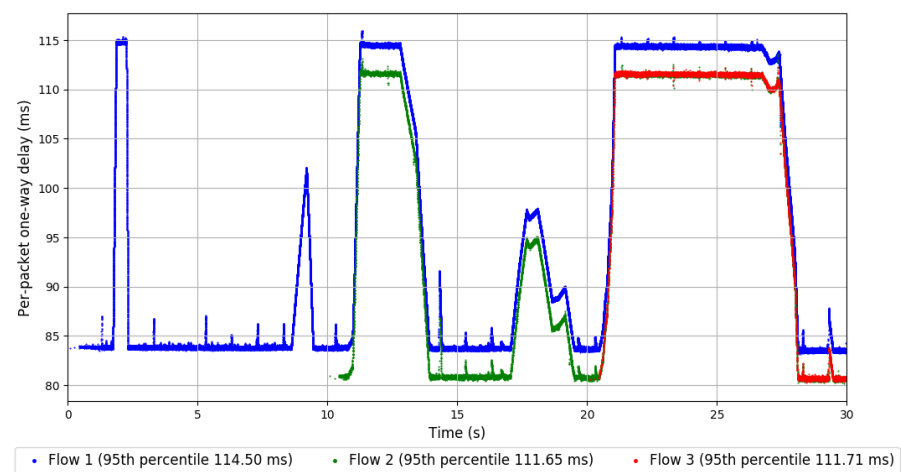
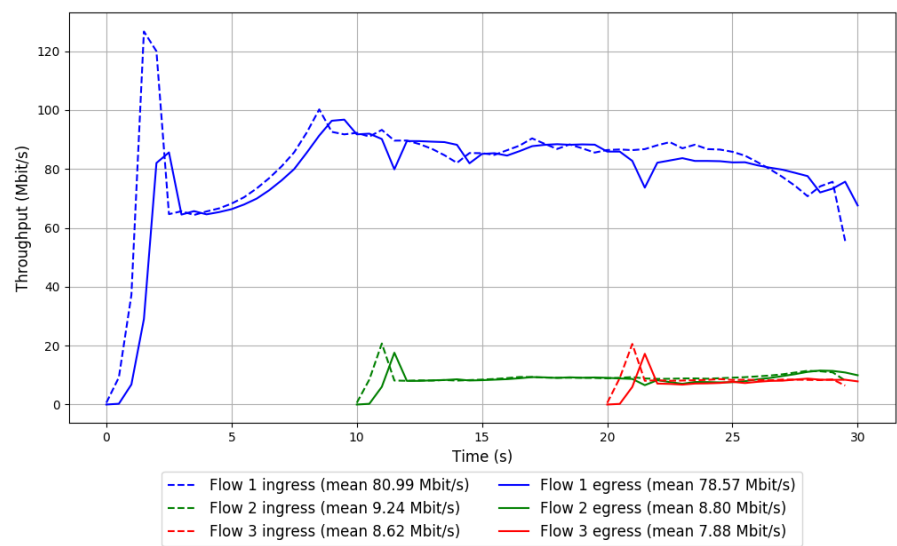


Run 4: Statistics of PCC-Allegro

Start at: 2019-03-27 02:45:52
End at: 2019-03-27 02:46:22
Local clock offset: -1.727 ms
Remote clock offset: 28.922 ms

Below is generated by plot.py at 2019-03-27 03:26:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.02 Mbit/s
95th percentile per-packet one-way delay: 114.493 ms
Loss rate: 3.30%
-- Flow 1:
Average throughput: 78.57 Mbit/s
95th percentile per-packet one-way delay: 114.505 ms
Loss rate: 3.00%
-- Flow 2:
Average throughput: 8.80 Mbit/s
95th percentile per-packet one-way delay: 111.654 ms
Loss rate: 4.81%
-- Flow 3:
Average throughput: 7.88 Mbit/s
95th percentile per-packet one-way delay: 111.714 ms
Loss rate: 8.62%

Run 4: Report of PCC-Allegro — Data Link

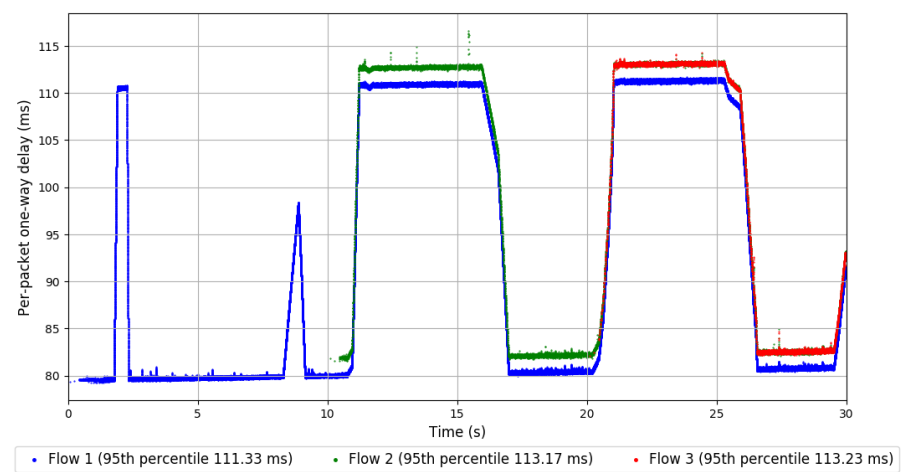
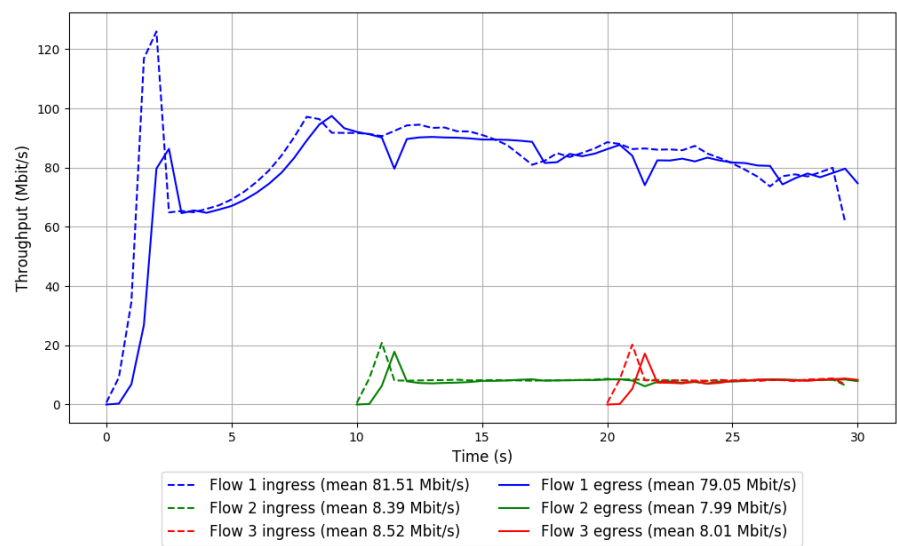


Run 5: Statistics of PCC-Allegro

Start at: 2019-03-27 03:12:28
End at: 2019-03-27 03:12:58
Local clock offset: -8.917 ms
Remote clock offset: 18.734 ms

```
# Below is generated by plot.py at 2019-03-27 03:26:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.01 Mbit/s
95th percentile per-packet one-way delay: 111.450 ms
Loss rate: 3.17%
-- Flow 1:
Average throughput: 79.05 Mbit/s
95th percentile per-packet one-way delay: 111.326 ms
Loss rate: 2.97%
-- Flow 2:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 113.175 ms
Loss rate: 4.71%
-- Flow 3:
Average throughput: 8.01 Mbit/s
95th percentile per-packet one-way delay: 113.232 ms
Loss rate: 5.82%
```

Run 5: Report of PCC-Allegro — Data Link

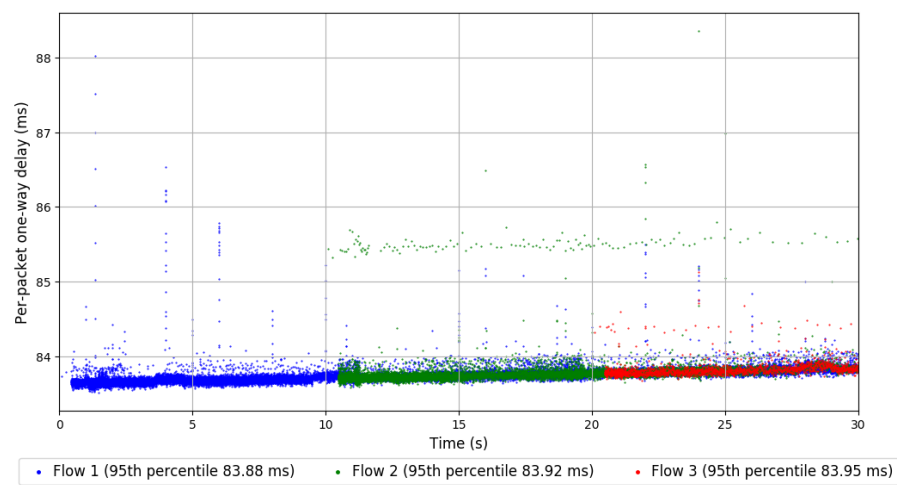
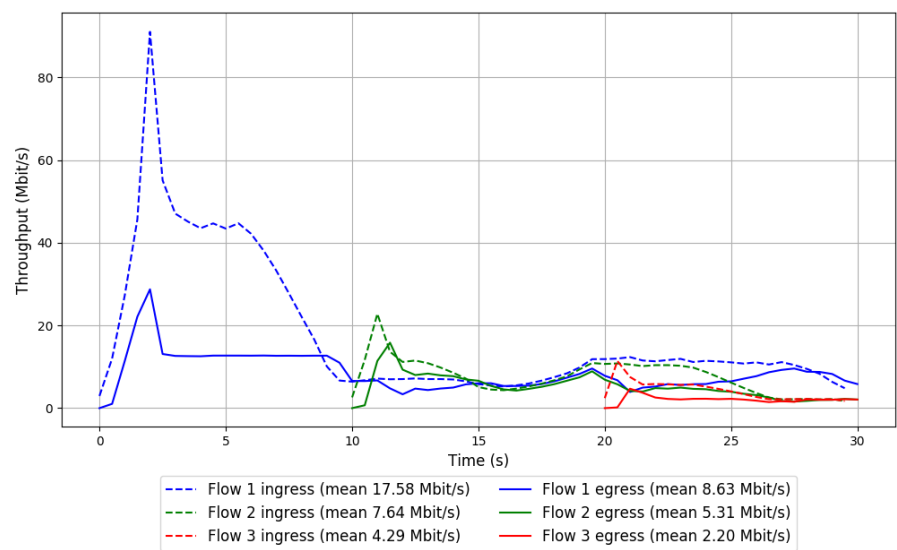



```
Run 1: Statistics of PCC-Expr

Start at: 2019-03-27 01:18:37
End at: 2019-03-27 01:19:07
Local clock offset: -5.743 ms
Remote clock offset: -1.193 ms

# Below is generated by plot.py at 2019-03-27 03:26:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.88 Mbit/s
95th percentile per-packet one-way delay: 83.891 ms
Loss rate: 46.49%
-- Flow 1:
Average throughput: 8.63 Mbit/s
95th percentile per-packet one-way delay: 83.878 ms
Loss rate: 50.94%
-- Flow 2:
Average throughput: 5.31 Mbit/s
95th percentile per-packet one-way delay: 83.917 ms
Loss rate: 30.47%
-- Flow 3:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 83.955 ms
Loss rate: 48.72%
```

Run 1: Report of PCC-Expr — Data Link

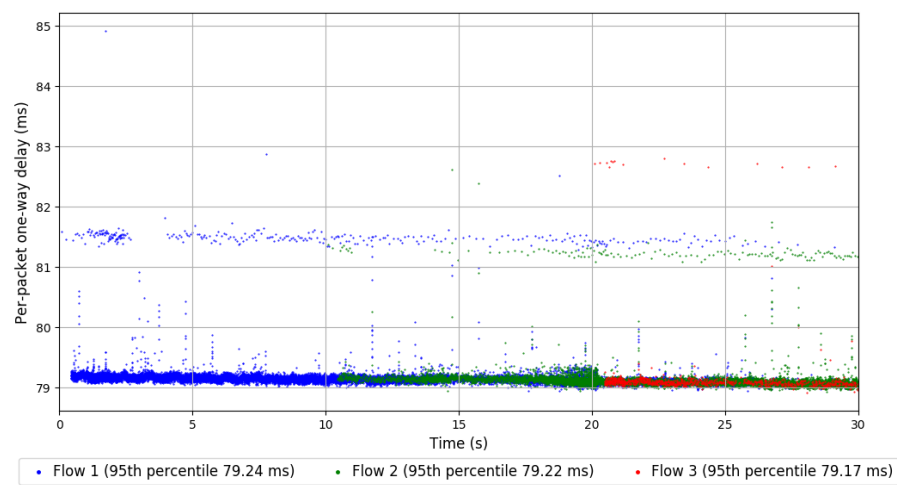
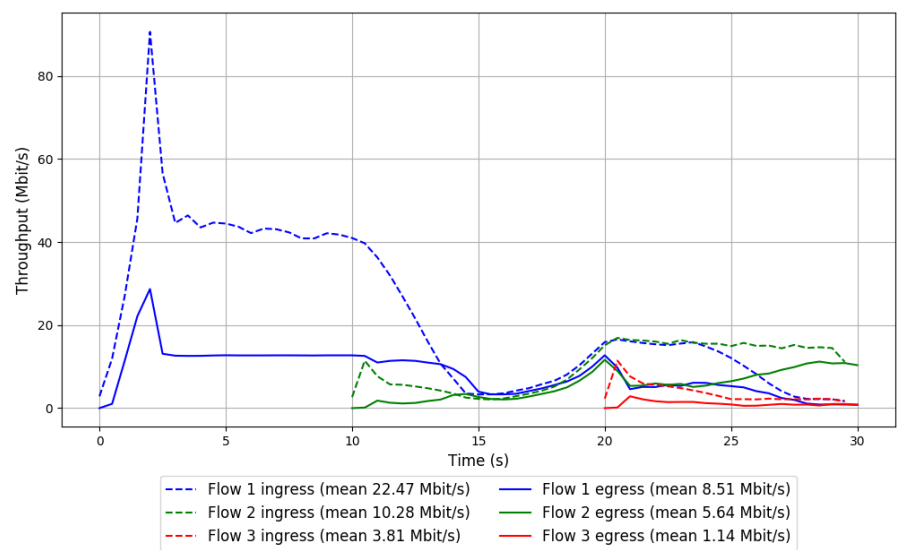


Run 2: Statistics of PCC-Expr

Start at: 2019-03-27 01:45:11
End at: 2019-03-27 01:45:41
Local clock offset: -2.906 ms
Remote clock offset: 13.572 ms

Below is generated by plot.py at 2019-03-27 03:26:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.64 Mbit/s
95th percentile per-packet one-way delay: 79.236 ms
Loss rate: 58.64%
-- Flow 1:
Average throughput: 8.51 Mbit/s
95th percentile per-packet one-way delay: 79.240 ms
Loss rate: 62.12%
-- Flow 2:
Average throughput: 5.64 Mbit/s
95th percentile per-packet one-way delay: 79.223 ms
Loss rate: 45.13%
-- Flow 3:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 79.169 ms
Loss rate: 69.97%

Run 2: Report of PCC-Expr — Data Link

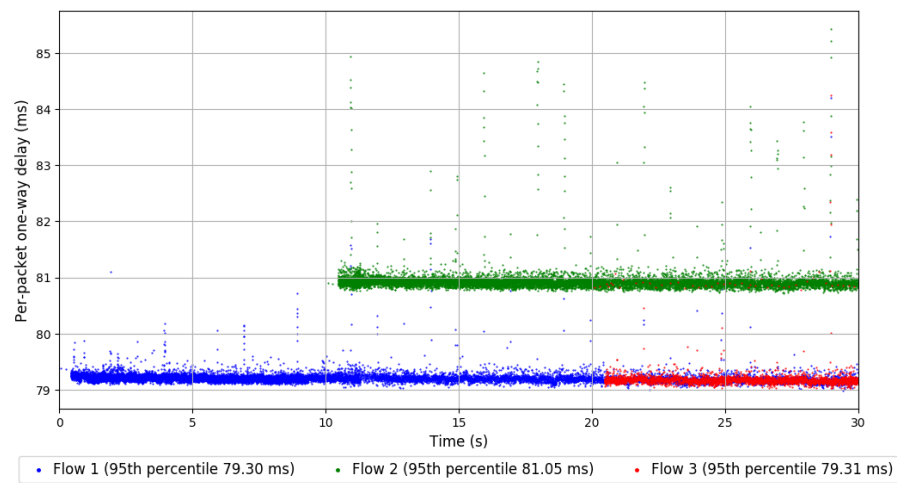
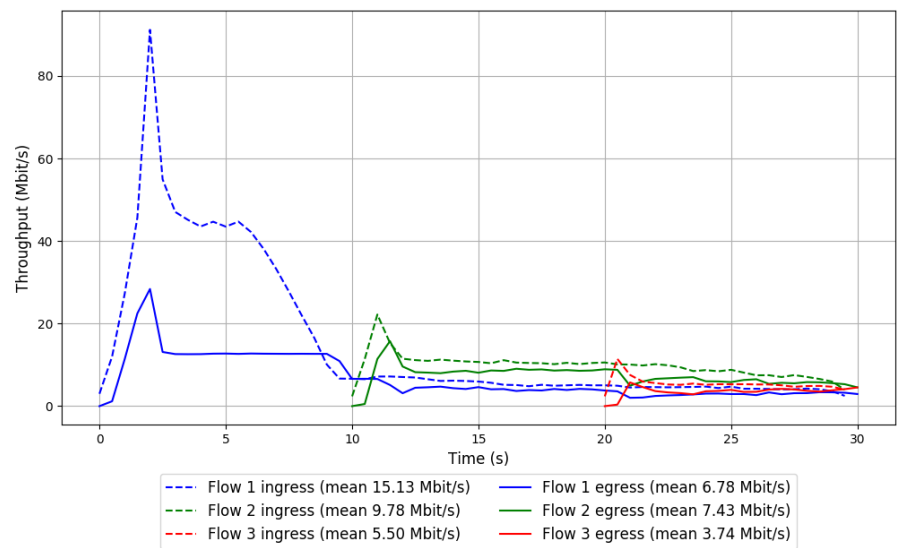


Run 3: Statistics of PCC-Expr

Start at: 2019-03-27 02:11:50
End at: 2019-03-27 02:12:20
Local clock offset: -1.165 ms
Remote clock offset: 21.119 ms

Below is generated by plot.py at 2019-03-27 03:26:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.95 Mbit/s
95th percentile per-packet one-way delay: 80.986 ms
Loss rate: 44.75%
-- Flow 1:
Average throughput: 6.78 Mbit/s
95th percentile per-packet one-way delay: 79.302 ms
Loss rate: 55.19%
-- Flow 2:
Average throughput: 7.43 Mbit/s
95th percentile per-packet one-way delay: 81.052 ms
Loss rate: 24.02%
-- Flow 3:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 79.310 ms
Loss rate: 32.03%

Run 3: Report of PCC-Expr — Data Link

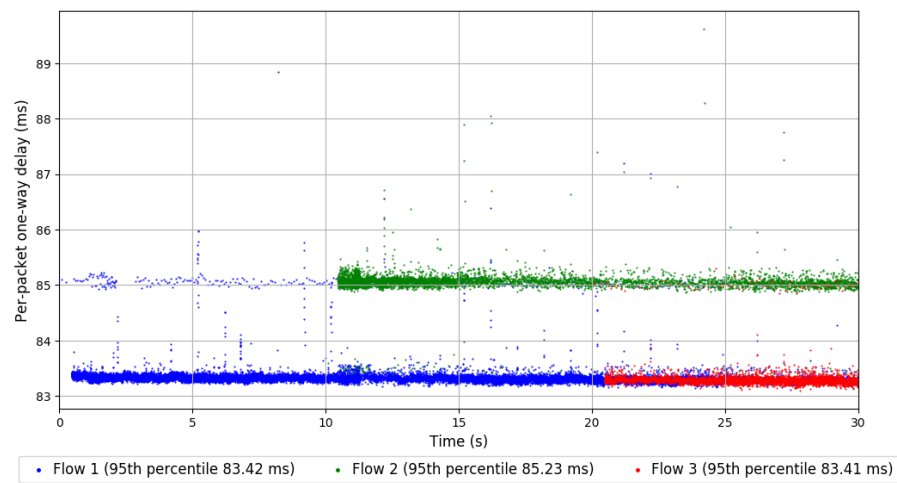
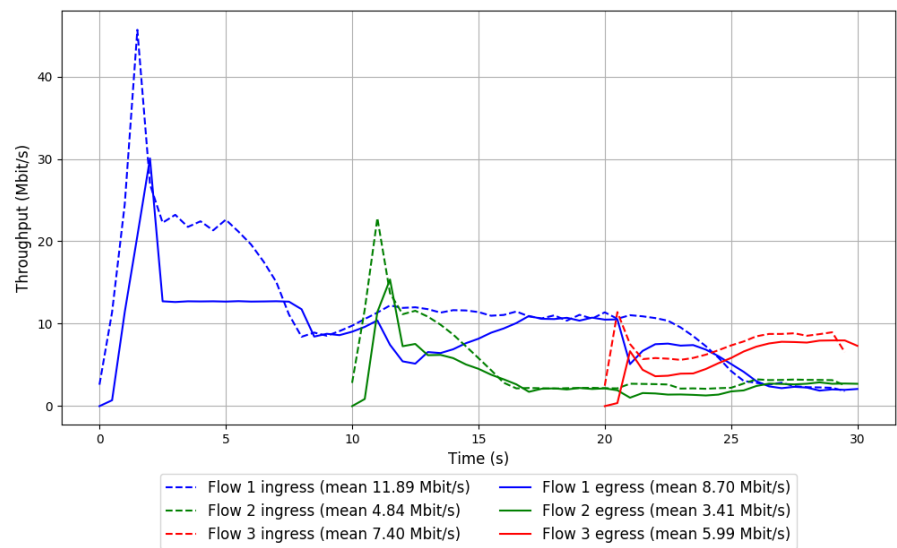


Run 4: Statistics of PCC-Expr

Start at: 2019-03-27 02:38:24
End at: 2019-03-27 02:38:54
Local clock offset: -1.016 ms
Remote clock offset: 31.095 ms

Below is generated by plot.py at 2019-03-27 03:26:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.95 Mbit/s
95th percentile per-packet one-way delay: 85.099 ms
Loss rate: 26.22%
-- Flow 1:
Average throughput: 8.70 Mbit/s
95th percentile per-packet one-way delay: 83.422 ms
Loss rate: 26.79%
-- Flow 2:
Average throughput: 3.41 Mbit/s
95th percentile per-packet one-way delay: 85.226 ms
Loss rate: 29.57%
-- Flow 3:
Average throughput: 5.99 Mbit/s
95th percentile per-packet one-way delay: 83.411 ms
Loss rate: 19.08%

Run 4: Report of PCC-Expr — Data Link

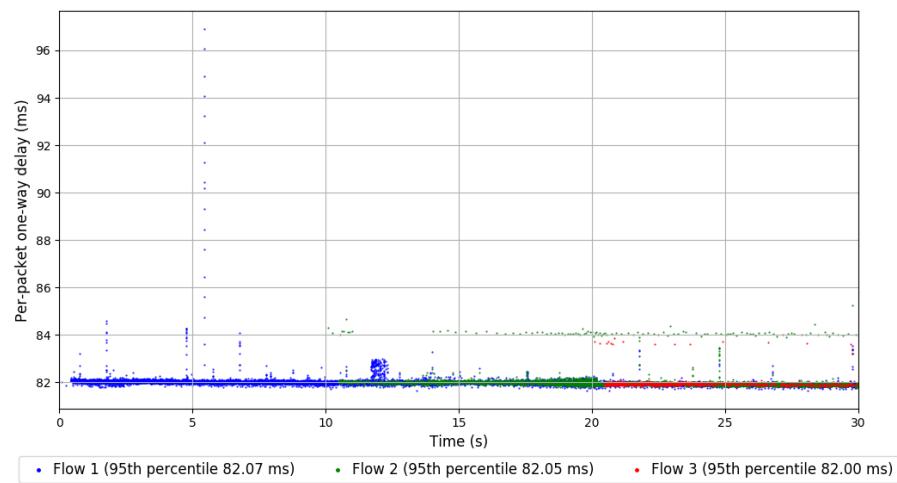
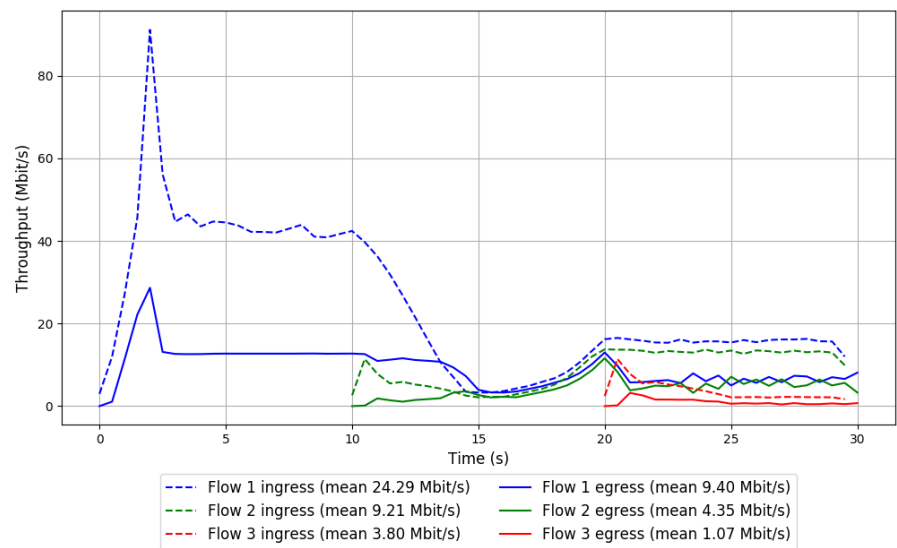


Run 5: Statistics of PCC-Expr

Start at: 2019-03-27 03:05:00
End at: 2019-03-27 03:05:30
Local clock offset: -7.272 ms
Remote clock offset: 35.657 ms

Below is generated by plot.py at 2019-03-27 03:26:10
Datalink statistics
-- Total of 3 flows:
Average throughput: 12.65 Mbit/s
95th percentile per-packet one-way delay: 82.069 ms
Loss rate: 60.07%
-- Flow 1:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 82.072 ms
Loss rate: 61.30%
-- Flow 2:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 82.054 ms
Loss rate: 52.78%
-- Flow 3:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 81.998 ms
Loss rate: 71.75%

Run 5: Report of PCC-Expr — Data Link

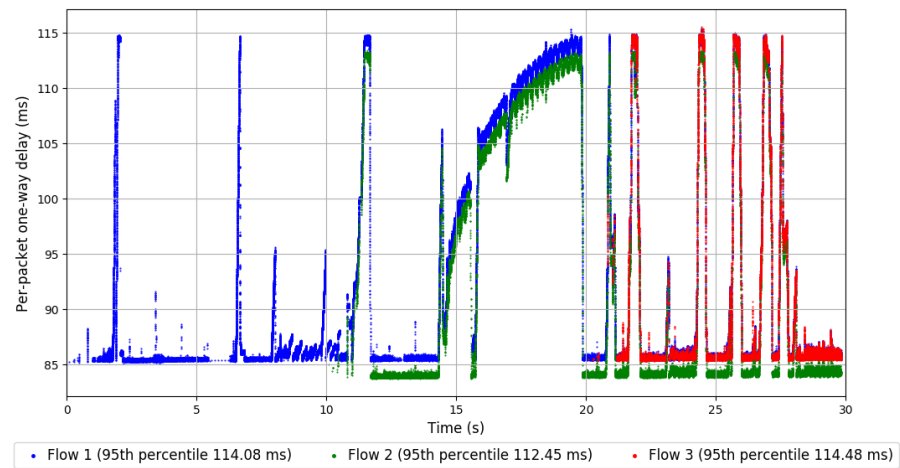
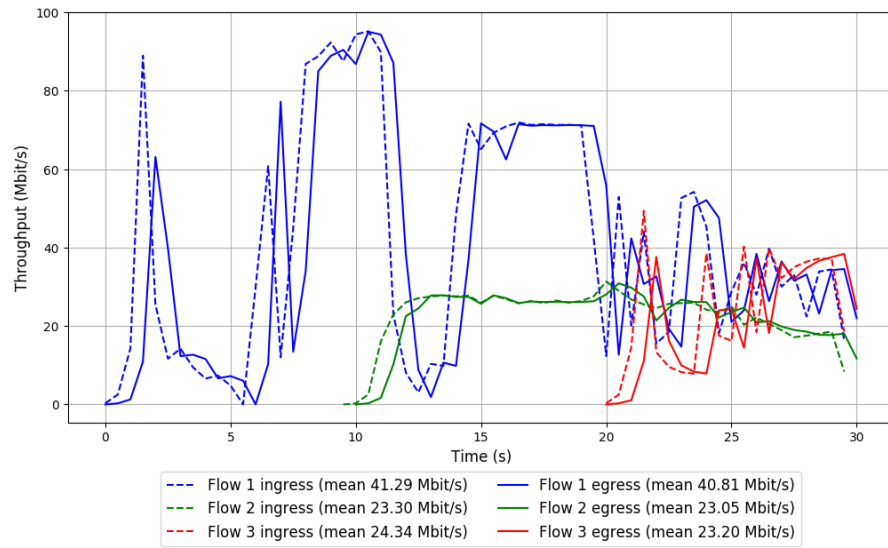


Run 1: Statistics of QUIC Cubic

Start at: 2019-03-27 01:17:20
End at: 2019-03-27 01:17:50
Local clock offset: -6.149 ms
Remote clock offset: -1.075 ms

Below is generated by plot.py at 2019-03-27 03:26:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 63.70 Mbit/s
95th percentile per-packet one-way delay: 113.893 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 40.81 Mbit/s
95th percentile per-packet one-way delay: 114.082 ms
Loss rate: 1.18%
-- Flow 2:
Average throughput: 23.05 Mbit/s
95th percentile per-packet one-way delay: 112.448 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 23.20 Mbit/s
95th percentile per-packet one-way delay: 114.483 ms
Loss rate: 4.71%

Run 1: Report of QUIC Cubic — Data Link

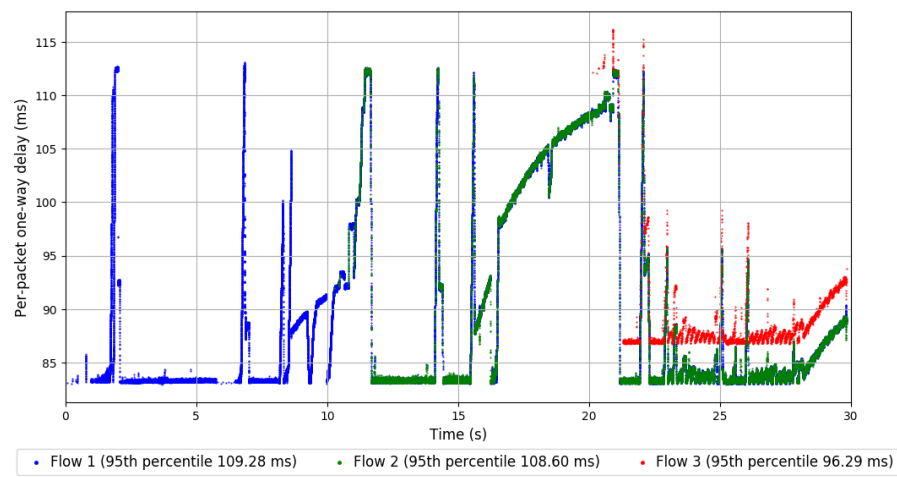
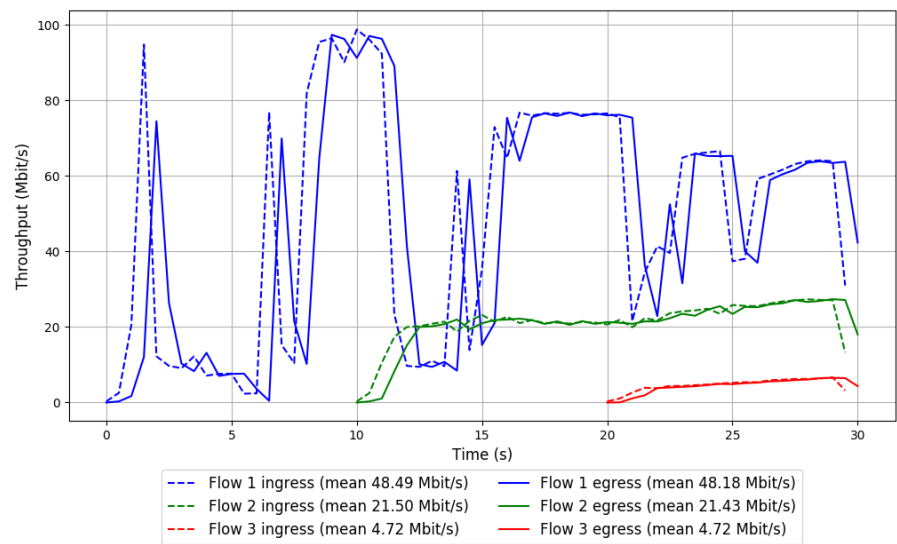


Run 2: Statistics of QUIC Cubic

Start at: 2019-03-27 01:43:55
End at: 2019-03-27 01:44:25
Local clock offset: -2.202 ms
Remote clock offset: 18.055 ms

Below is generated by plot.py at 2019-03-27 03:26:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 63.93 Mbit/s
95th percentile per-packet one-way delay: 108.978 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 48.18 Mbit/s
95th percentile per-packet one-way delay: 109.275 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 21.43 Mbit/s
95th percentile per-packet one-way delay: 108.597 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 4.72 Mbit/s
95th percentile per-packet one-way delay: 96.293 ms
Loss rate: 0.27%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-03-27 02:10:33

End at: 2019-03-27 02:11:03

Local clock offset: -1.21 ms

Remote clock offset: 25.11 ms

Below is generated by plot.py at 2019-03-27 03:26:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.79 Mbit/s

95th percentile per-packet one-way delay: 106.597 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 48.98 Mbit/s

95th percentile per-packet one-way delay: 106.003 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 19.50 Mbit/s

95th percentile per-packet one-way delay: 107.153 ms

Loss rate: 0.19%

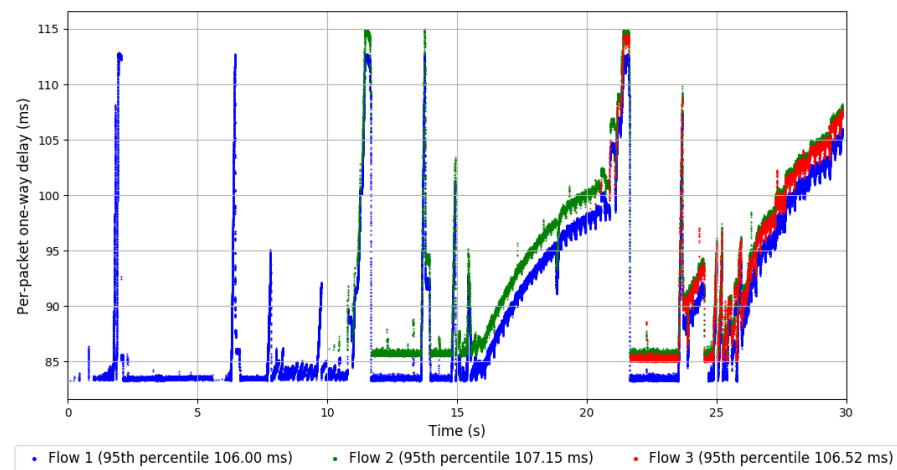
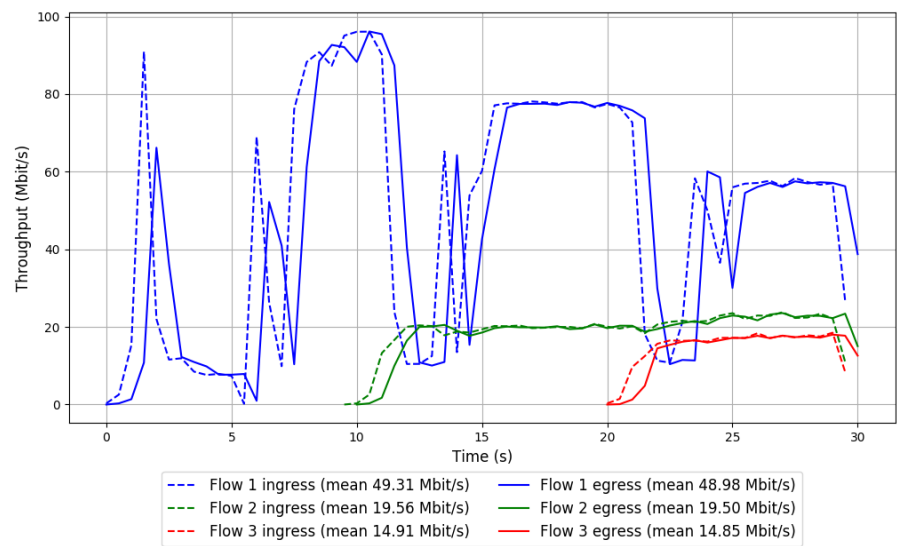
-- Flow 3:

Average throughput: 14.85 Mbit/s

95th percentile per-packet one-way delay: 106.519 ms

Loss rate: 0.31%

Run 3: Report of QUIC Cubic — Data Link

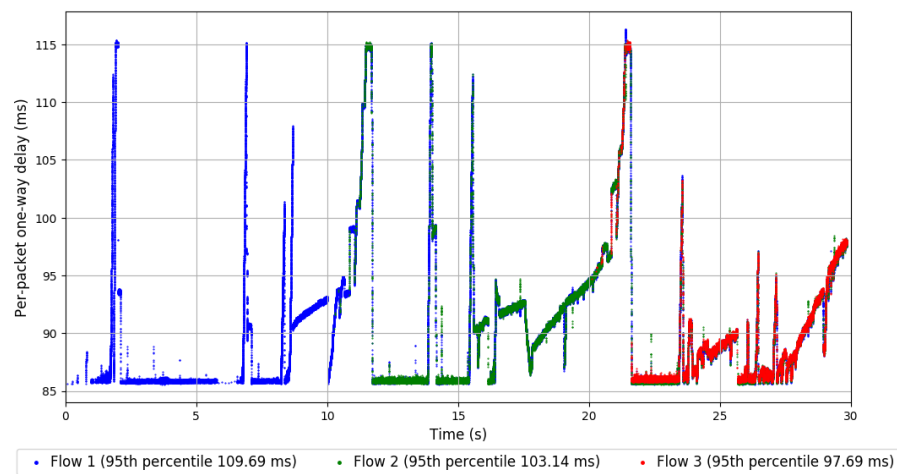
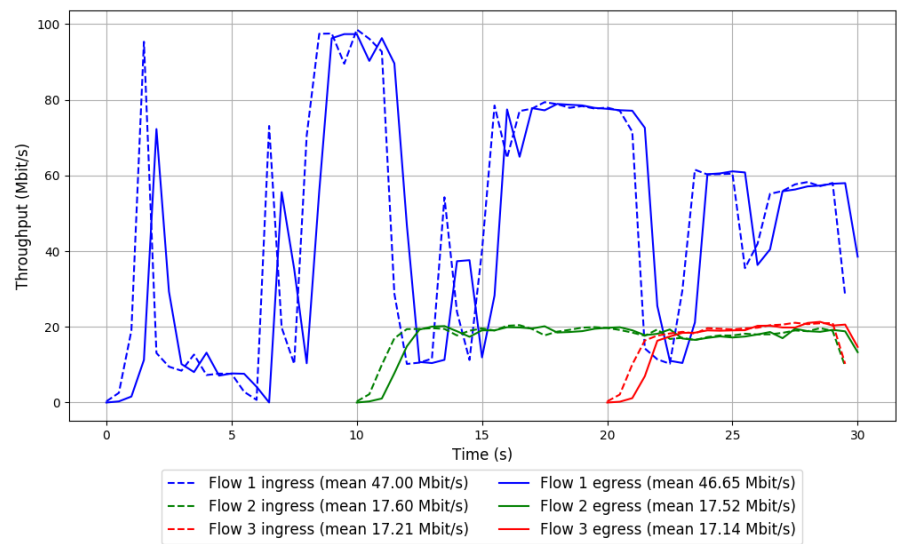


Run 4: Statistics of QUIC Cubic

Start at: 2019-03-27 02:37:08
End at: 2019-03-27 02:37:38
Local clock offset: -1.793 ms
Remote clock offset: 30.794 ms

Below is generated by plot.py at 2019-03-27 03:26:39
Datalink statistics
-- Total of 3 flows:
Average throughput: 63.88 Mbit/s
95th percentile per-packet one-way delay: 107.439 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 46.65 Mbit/s
95th percentile per-packet one-way delay: 109.687 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 17.52 Mbit/s
95th percentile per-packet one-way delay: 103.143 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 17.14 Mbit/s
95th percentile per-packet one-way delay: 97.692 ms
Loss rate: 0.34%

Run 4: Report of QUIC Cubic — Data Link

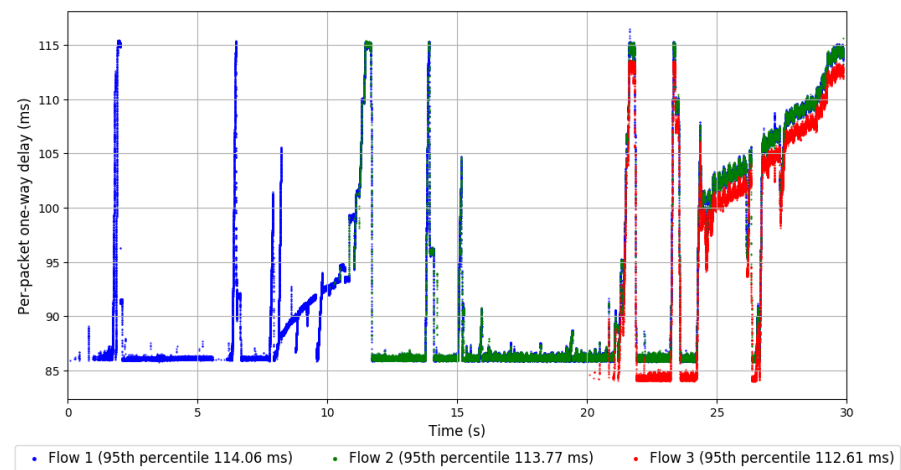
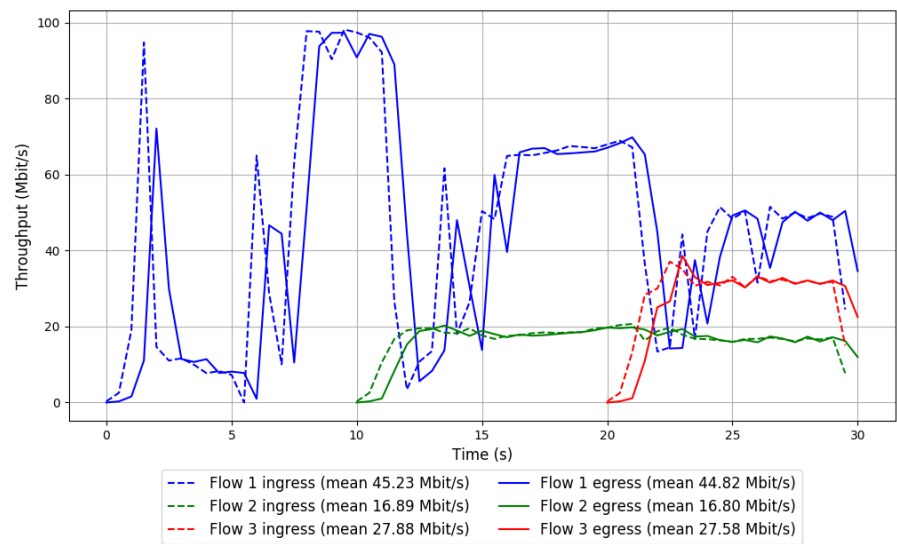


Run 5: Statistics of QUIC Cubic

Start at: 2019-03-27 03:03:43
End at: 2019-03-27 03:04:13
Local clock offset: -7.086 ms
Remote clock offset: 37.702 ms

Below is generated by plot.py at 2019-03-27 03:26:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 65.01 Mbit/s
95th percentile per-packet one-way delay: 113.533 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 44.82 Mbit/s
95th percentile per-packet one-way delay: 114.058 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 16.80 Mbit/s
95th percentile per-packet one-way delay: 113.767 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 27.58 Mbit/s
95th percentile per-packet one-way delay: 112.605 ms
Loss rate: 0.82%

Run 5: Report of QUIC Cubic — Data Link

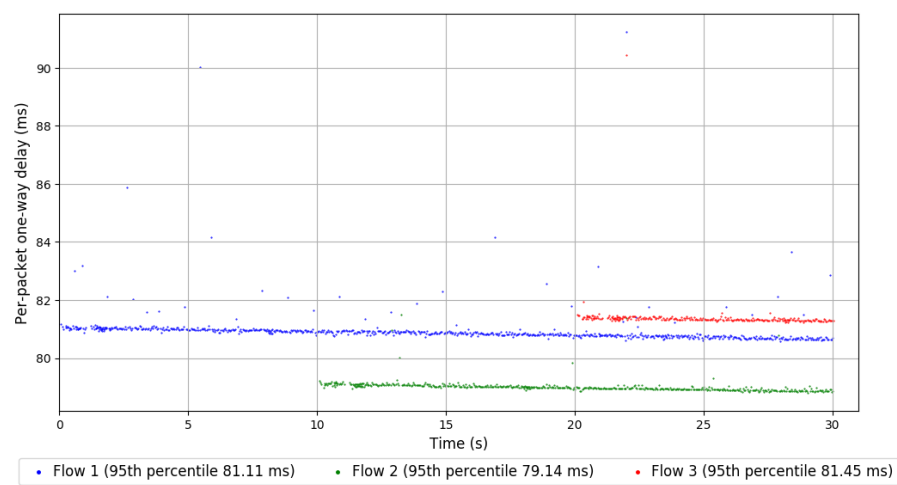
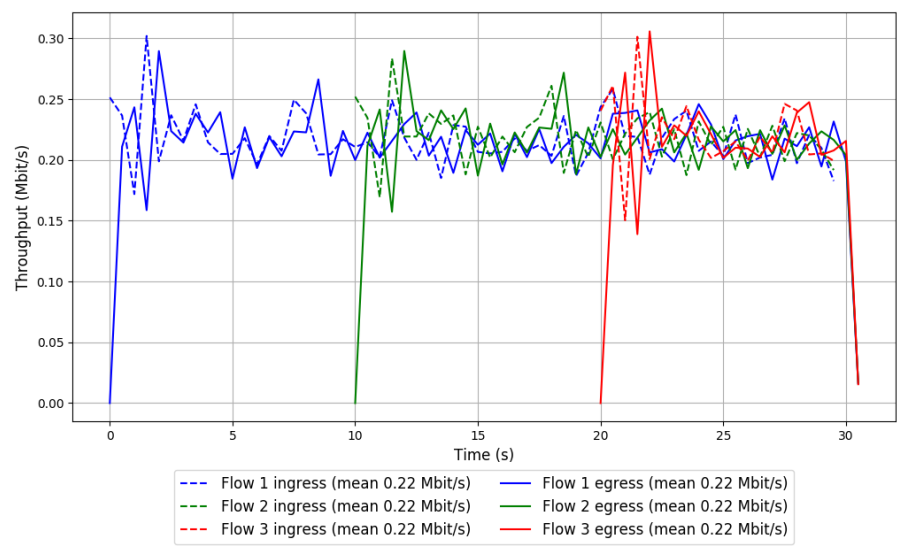


```
Run 1: Statistics of SReAM

Start at: 2019-03-27 01:29:57
End at: 2019-03-27 01:30:27
Local clock offset: -3.195 ms
Remote clock offset: 6.3 ms

# Below is generated by plot.py at 2019-03-27 03:26:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 81.408 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.109 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.135 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.448 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

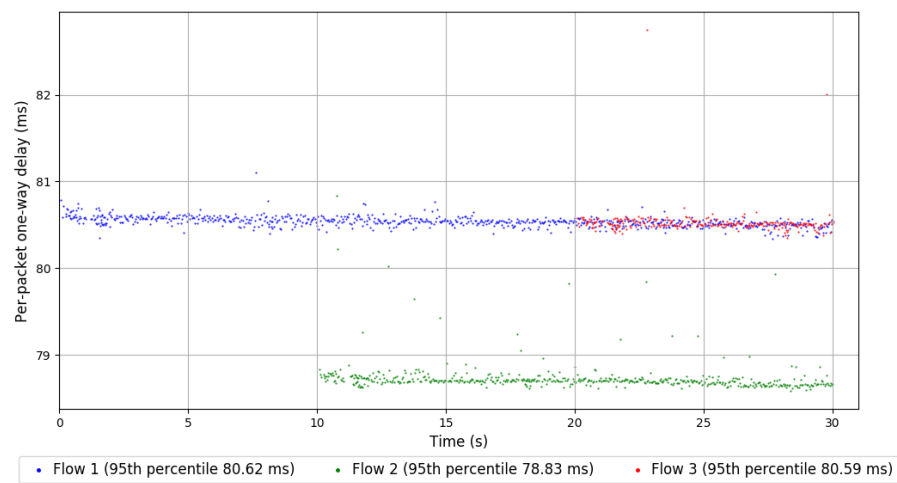
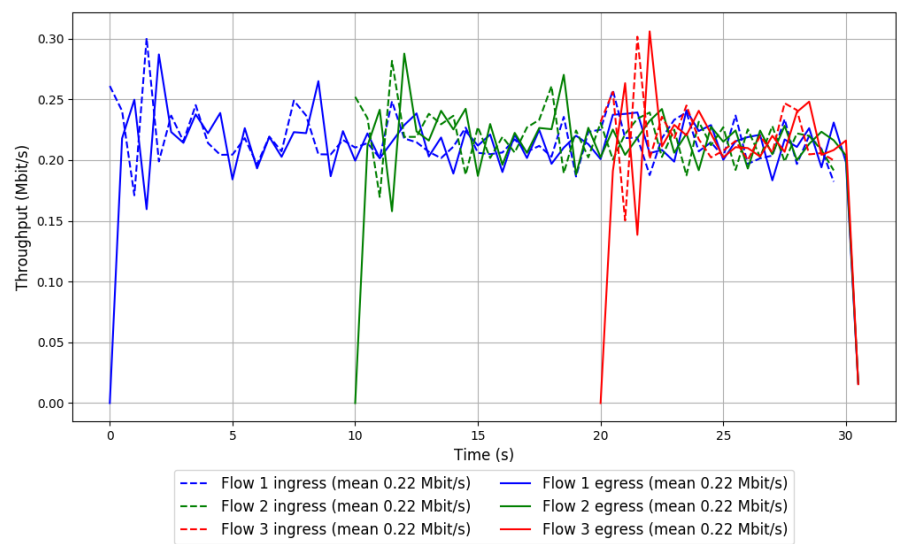


Run 2: Statistics of SReAM

Start at: 2019-03-27 01:56:32
End at: 2019-03-27 01:57:02
Local clock offset: -1.654 ms
Remote clock offset: 16.605 ms

Below is generated by plot.py at 2019-03-27 03:26:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 80.605 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.625 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.833 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.588 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

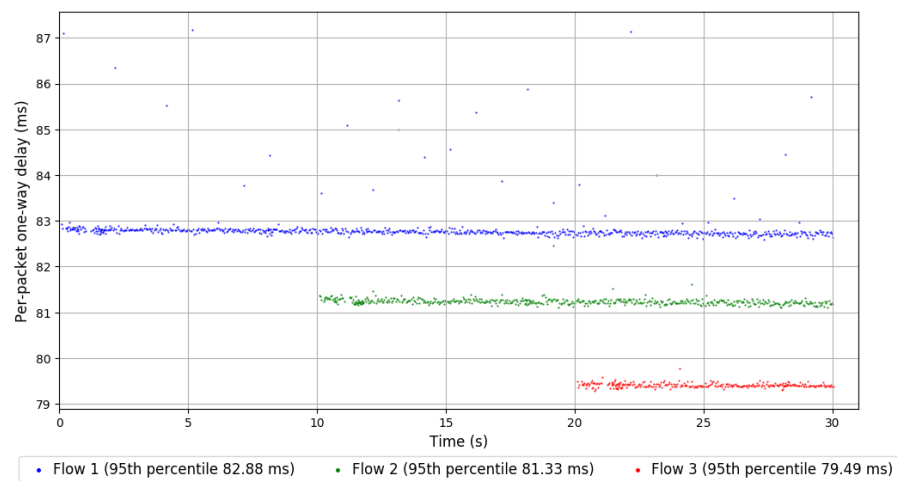
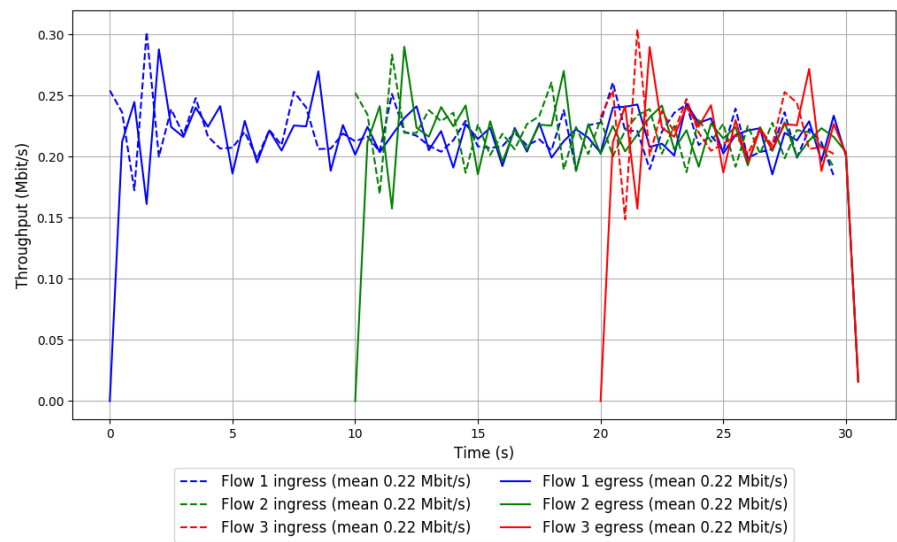


Run 3: Statistics of SReAM

Start at: 2019-03-27 02:23:10
End at: 2019-03-27 02:23:40
Local clock offset: -1.919 ms
Remote clock offset: 22.816 ms

Below is generated by plot.py at 2019-03-27 03:26:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 82.835 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.875 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.326 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.489 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

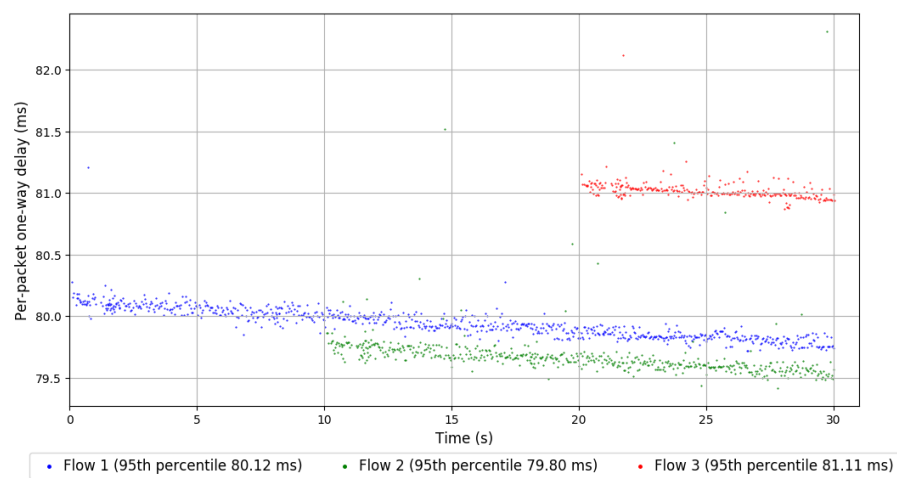
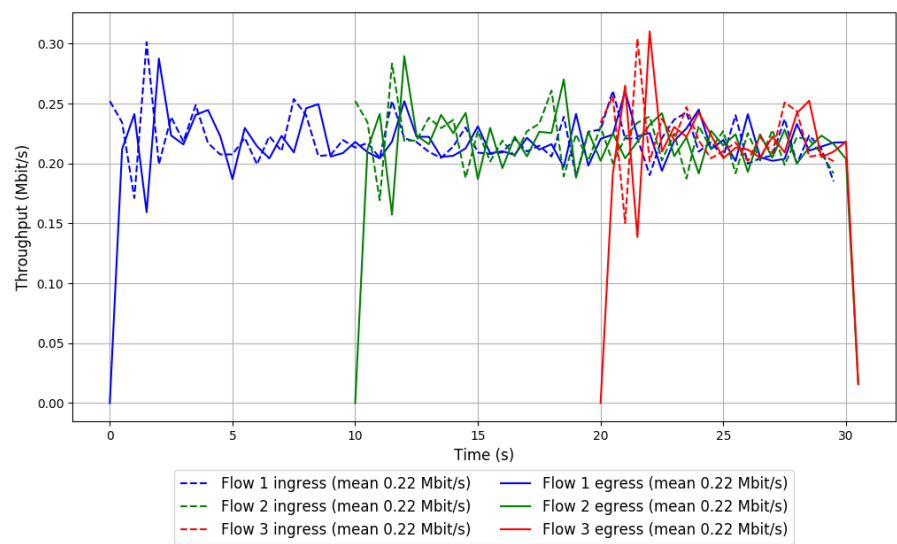


Run 4: Statistics of SReAM

Start at: 2019-03-27 02:49:45
End at: 2019-03-27 02:50:15
Local clock offset: -3.118 ms
Remote clock offset: 29.682 ms

Below is generated by plot.py at 2019-03-27 03:26:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 81.042 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.119 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.796 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.108 ms
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2019-03-27 03:16:21

End at: 2019-03-27 03:16:51

Local clock offset: -8.202 ms

Remote clock offset: 11.24 ms

Below is generated by plot.py at 2019-03-27 03:26:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 83.404 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 80.971 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.495 ms

Loss rate: 0.00%

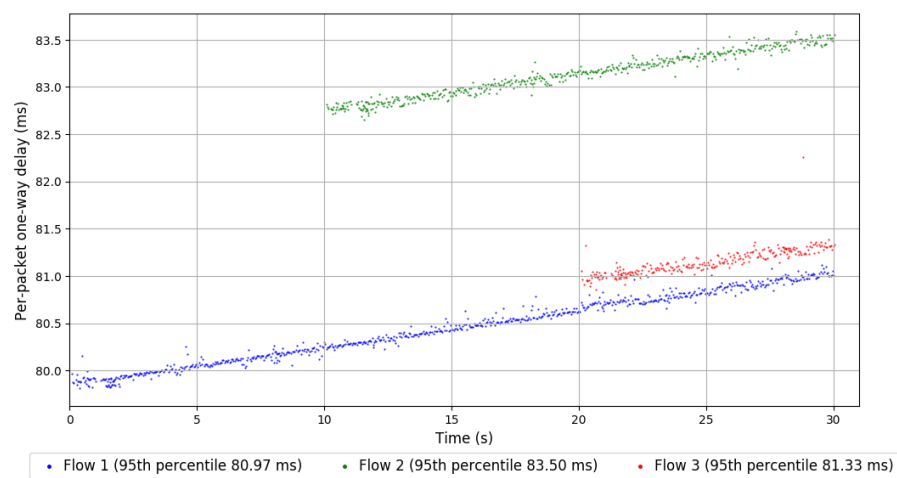
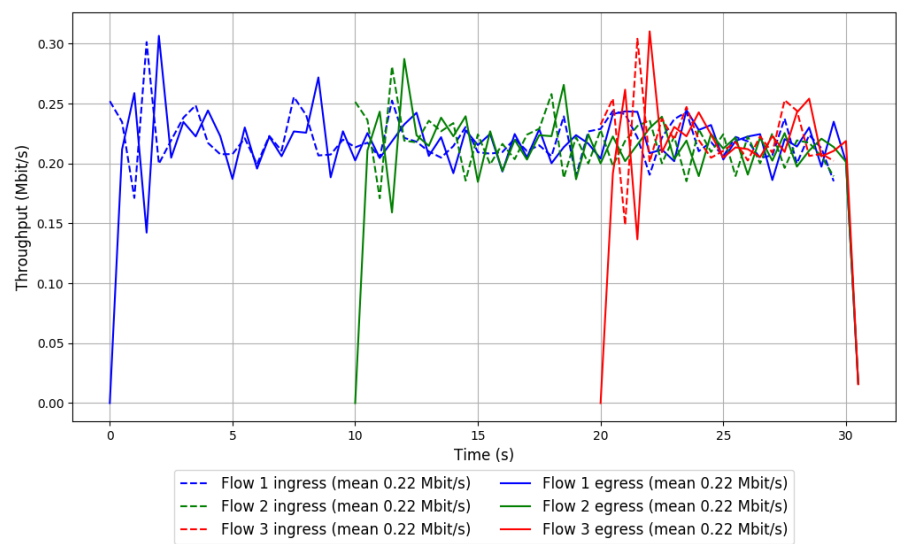
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 81.325 ms

Loss rate: 0.00%

Run 5: Report of SCRaM — Data Link

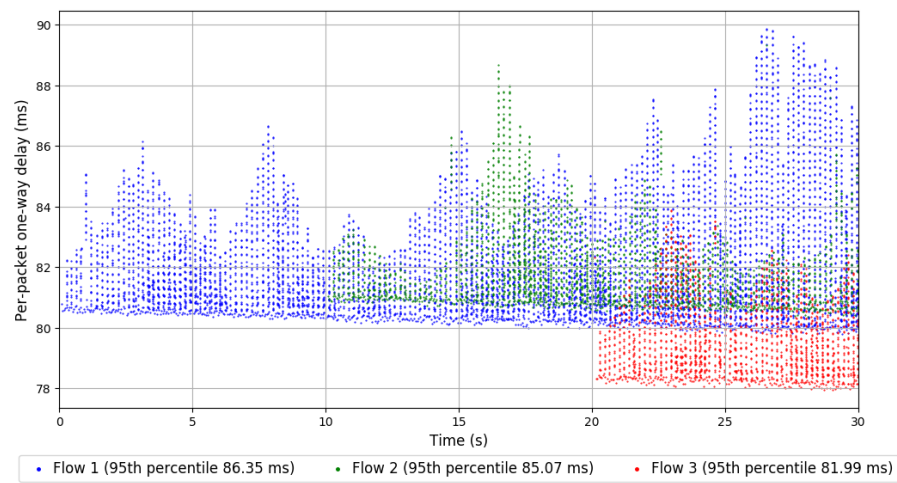
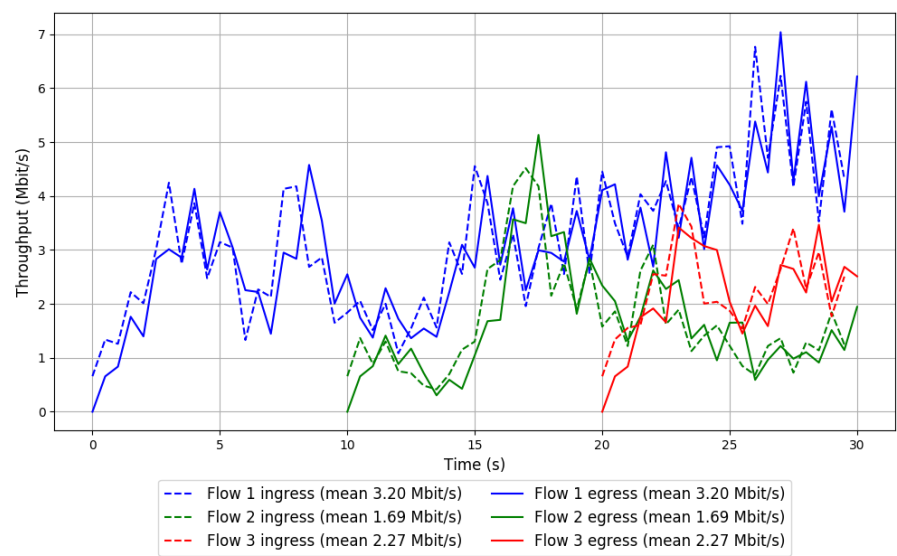


Run 1: Statistics of Sprout

Start at: 2019-03-27 01:23:34
End at: 2019-03-27 01:24:04
Local clock offset: -5.084 ms
Remote clock offset: -2.781 ms

Below is generated by plot.py at 2019-03-27 03:26:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 5.07 Mbit/s
95th percentile per-packet one-way delay: 85.755 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.20 Mbit/s
95th percentile per-packet one-way delay: 86.352 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.69 Mbit/s
95th percentile per-packet one-way delay: 85.071 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 81.991 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

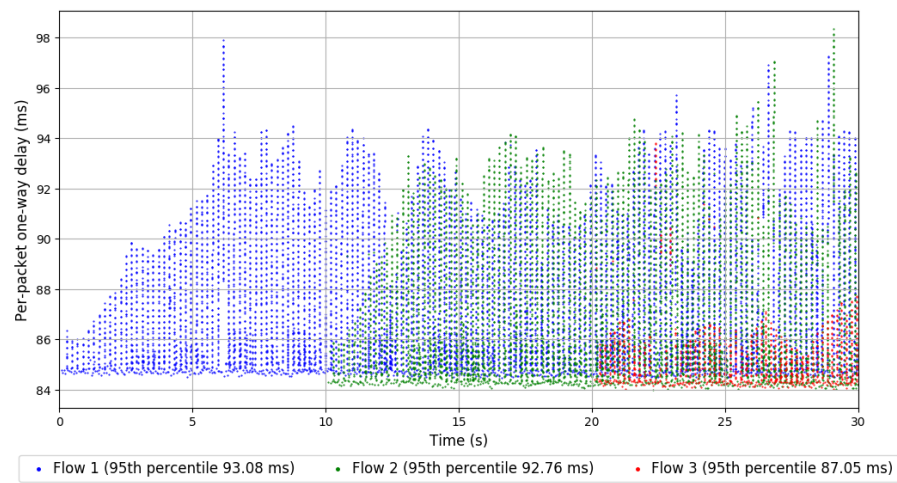
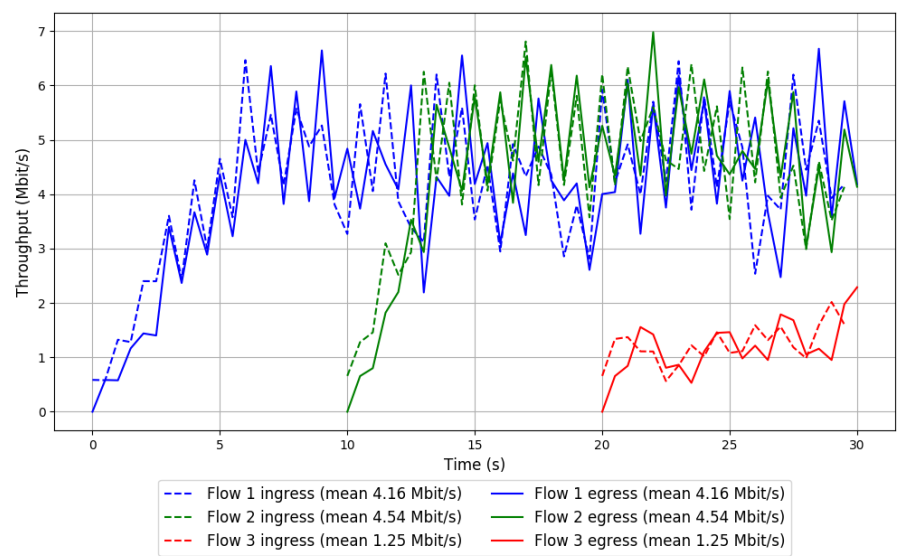


Run 2: Statistics of Sprout

Start at: 2019-03-27 01:50:08
End at: 2019-03-27 01:50:38
Local clock offset: -2.741 ms
Remote clock offset: 20.078 ms

Below is generated by plot.py at 2019-03-27 03:26:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 7.59 Mbit/s
95th percentile per-packet one-way delay: 92.887 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 93.083 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.54 Mbit/s
95th percentile per-packet one-way delay: 92.756 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 87.050 ms
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

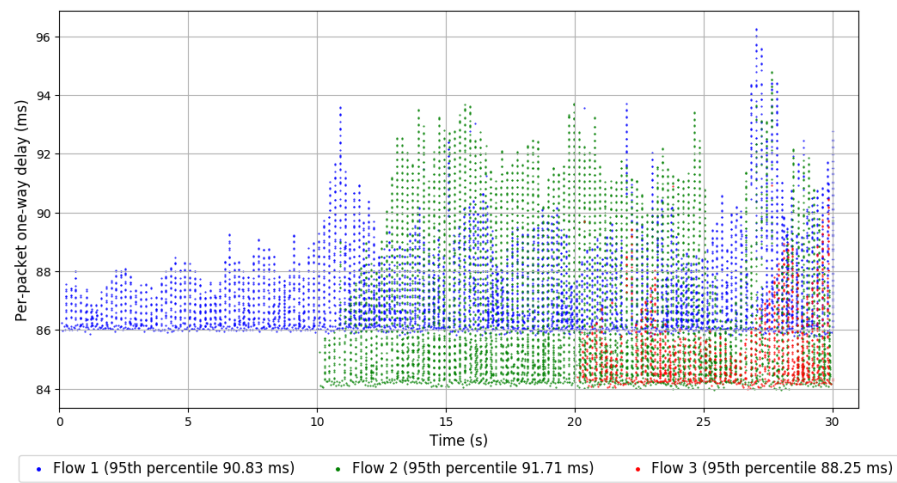
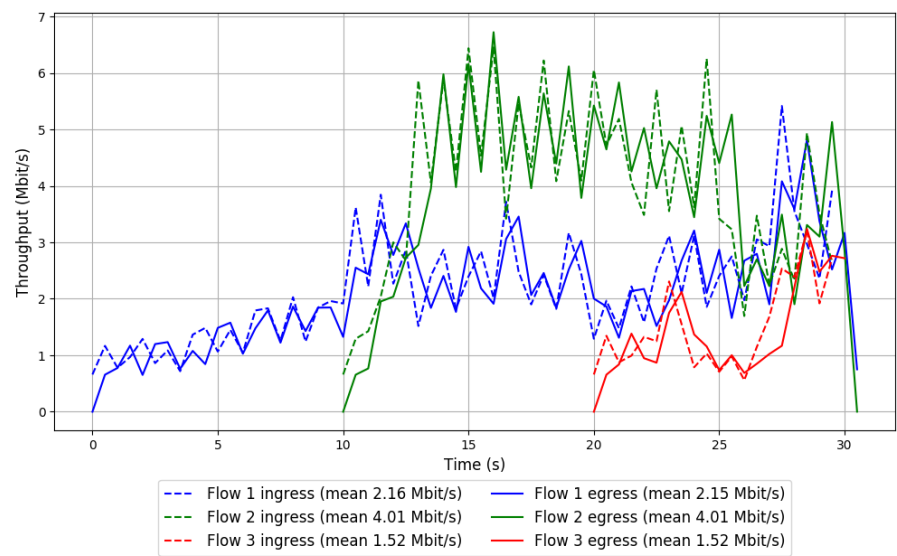


Run 3: Statistics of Sprout

Start at: 2019-03-27 02:16:47
End at: 2019-03-27 02:17:17
Local clock offset: -1.062 ms
Remote clock offset: 27.473 ms

Below is generated by plot.py at 2019-03-27 03:26:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 5.32 Mbit/s
95th percentile per-packet one-way delay: 91.330 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 90.831 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 91.707 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 88.250 ms
Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

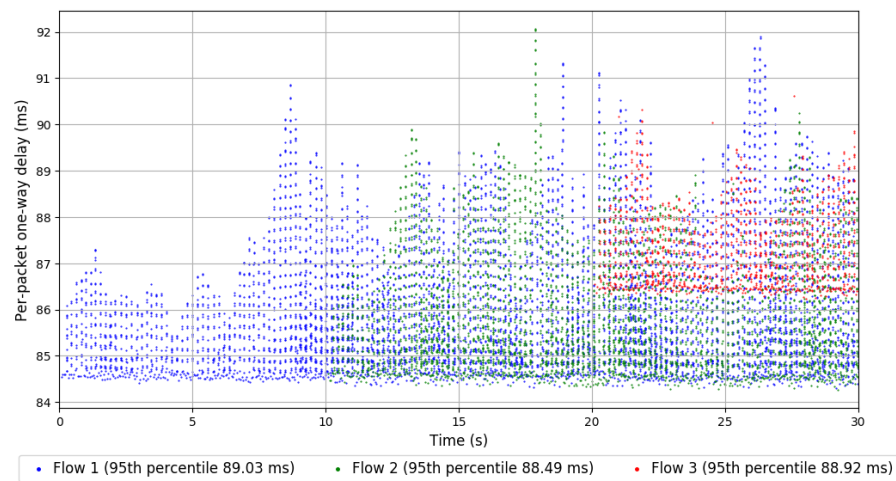
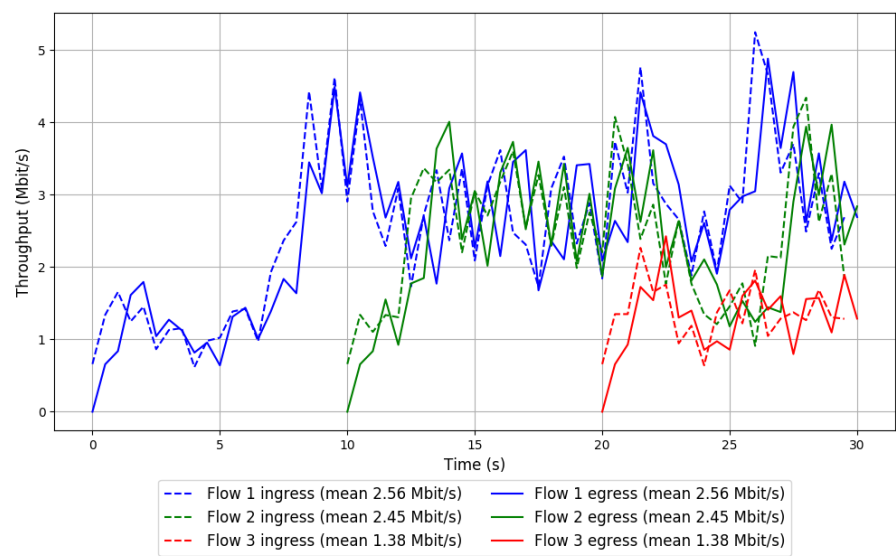


Run 4: Statistics of Sprout

Start at: 2019-03-27 02:43:22
End at: 2019-03-27 02:43:52
Local clock offset: -1.7 ms
Remote clock offset: 30.997 ms

```
# Below is generated by plot.py at 2019-03-27 03:26:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.65 Mbit/s
95th percentile per-packet one-way delay: 88.850 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 89.030 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.45 Mbit/s
95th percentile per-packet one-way delay: 88.492 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 88.923 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link

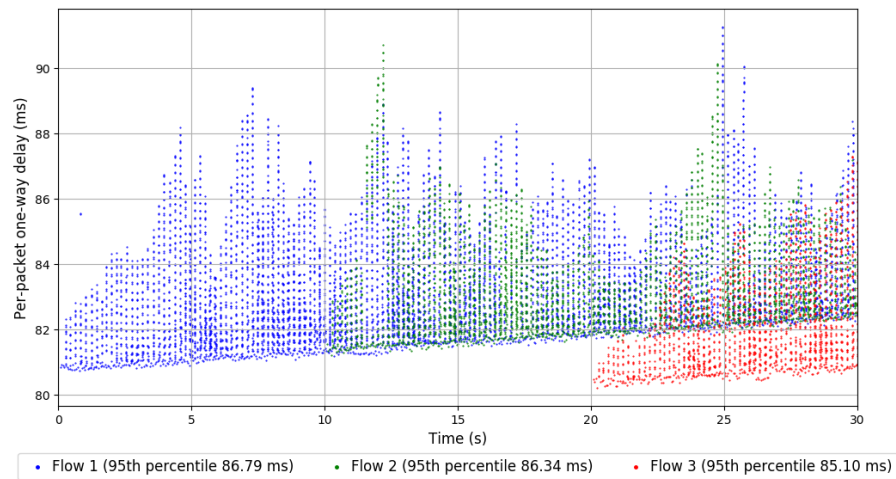
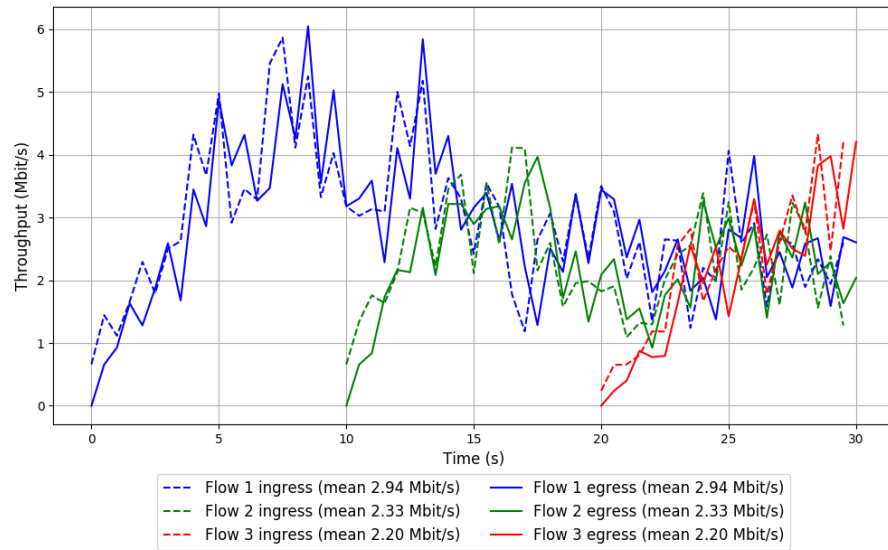


Run 5: Statistics of Sprout

Start at: 2019-03-27 03:09:58
End at: 2019-03-27 03:10:28
Local clock offset: -8.661 ms
Remote clock offset: 25.745 ms

```
# Below is generated by plot.py at 2019-03-27 03:26:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.21 Mbit/s
95th percentile per-packet one-way delay: 86.520 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 86.786 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 86.343 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 85.098 ms
Loss rate: 0.00%
```

Run 5: Report of Sprout — Data Link

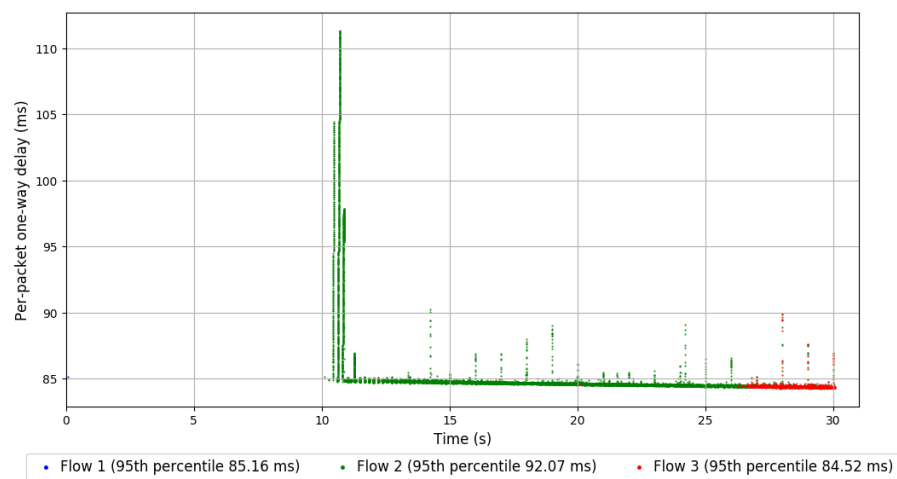
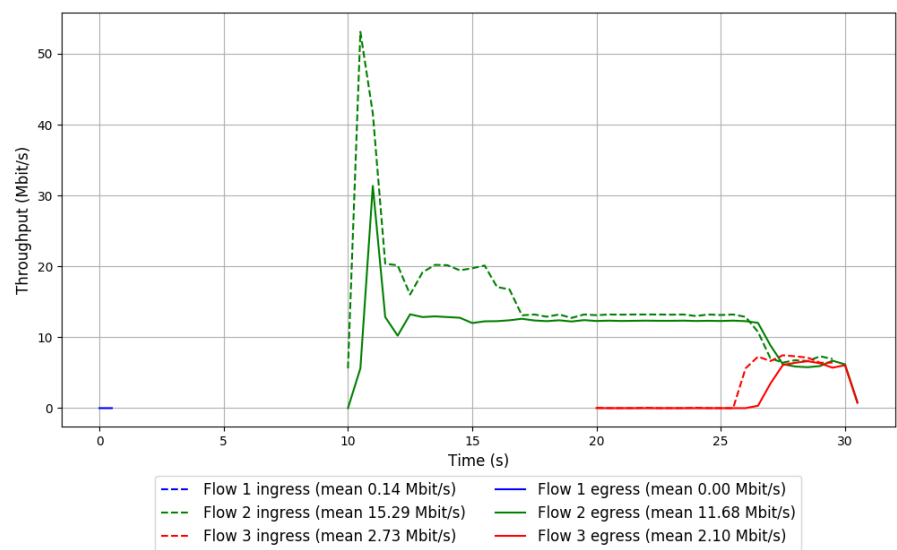



```
Run 1: Statistics of TaoVA-100x

Start at: 2019-03-27 01:22:21
End at: 2019-03-27 01:22:51
Local clock offset: -4.604 ms
Remote clock offset: 0.249 ms

# Below is generated by plot.py at 2019-03-27 03:26:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 90.753 ms
Loss rate: 23.59%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 85.163 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 11.68 Mbit/s
95th percentile per-packet one-way delay: 92.066 ms
Loss rate: 23.62%
-- Flow 3:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 84.521 ms
Loss rate: 23.23%
```

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

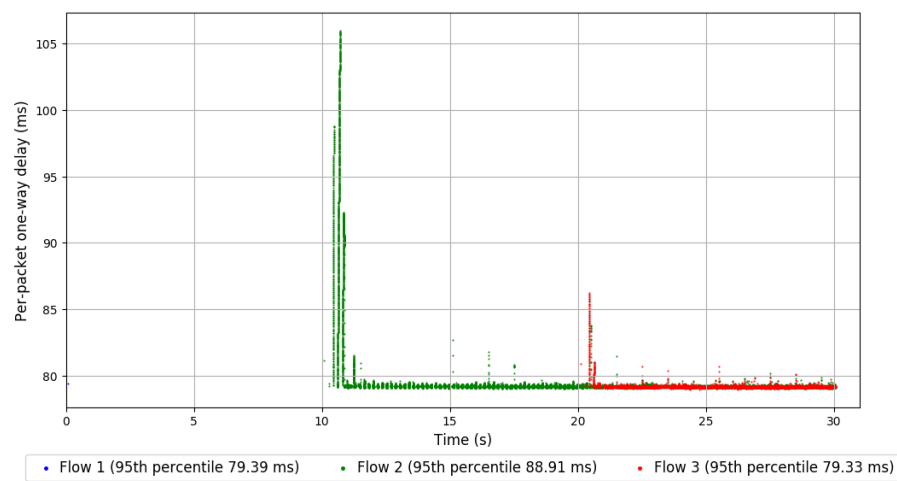
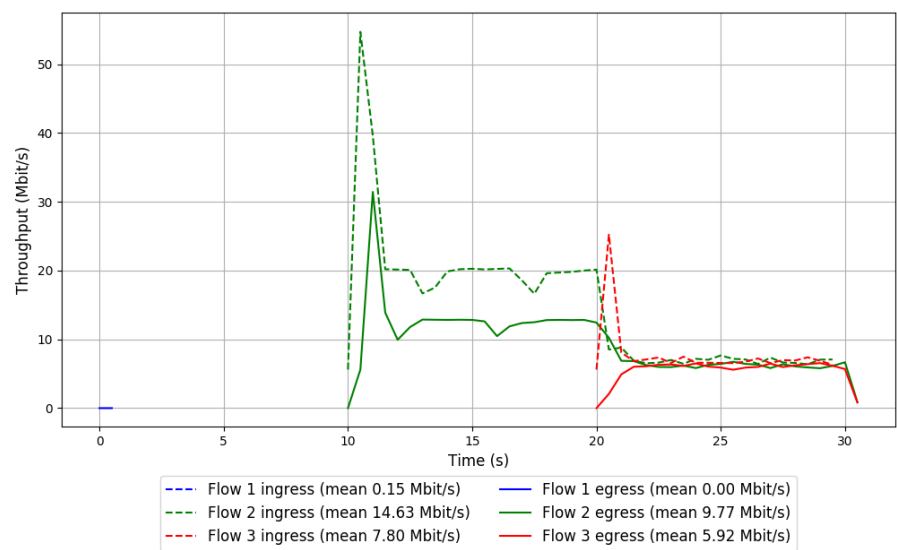


Run 2: Statistics of TaoVA-100x

Start at: 2019-03-27 01:48:55
End at: 2019-03-27 01:49:25
Local clock offset: -2.814 ms
Remote clock offset: 14.731 ms

Below is generated by plot.py at 2019-03-27 03:26:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 85.301 ms
Loss rate: 31.28%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 79.389 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.77 Mbit/s
95th percentile per-packet one-way delay: 88.909 ms
Loss rate: 33.19%
-- Flow 3:
Average throughput: 5.92 Mbit/s
95th percentile per-packet one-way delay: 79.334 ms
Loss rate: 24.10%

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

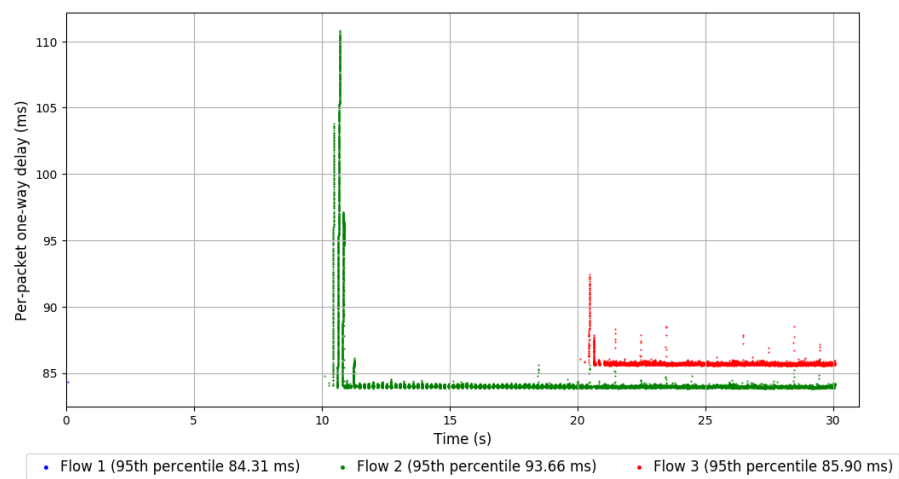
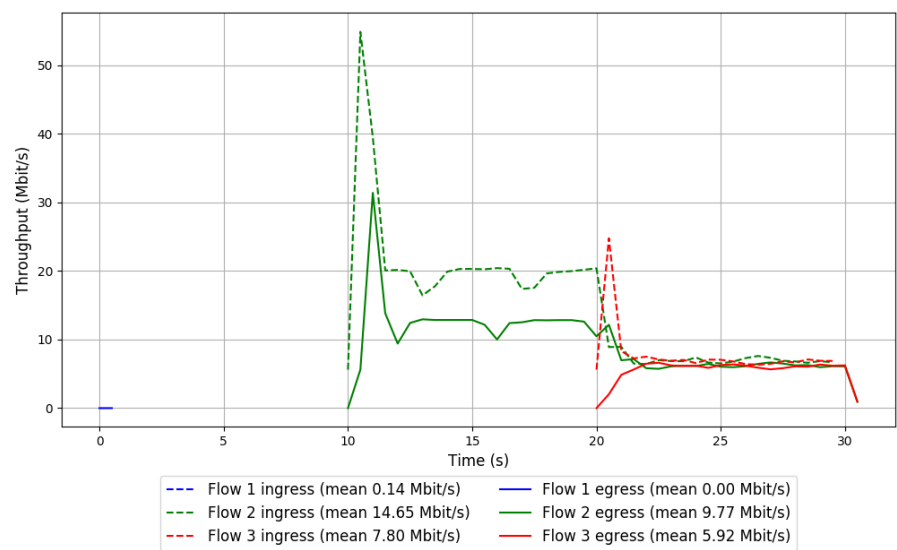


Run 3: Statistics of TaoVA-100x

Start at: 2019-03-27 02:15:34
End at: 2019-03-27 02:16:04
Local clock offset: -1.841 ms
Remote clock offset: 26.005 ms

Below is generated by plot.py at 2019-03-27 03:26:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 90.320 ms
Loss rate: 31.38%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 84.307 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.77 Mbit/s
95th percentile per-packet one-way delay: 93.664 ms
Loss rate: 33.32%
-- Flow 3:
Average throughput: 5.92 Mbit/s
95th percentile per-packet one-way delay: 85.902 ms
Loss rate: 24.07%

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

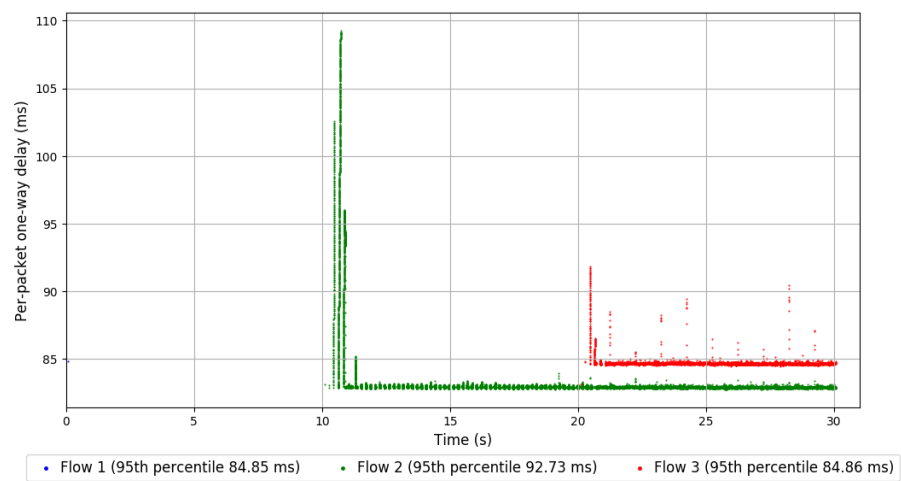
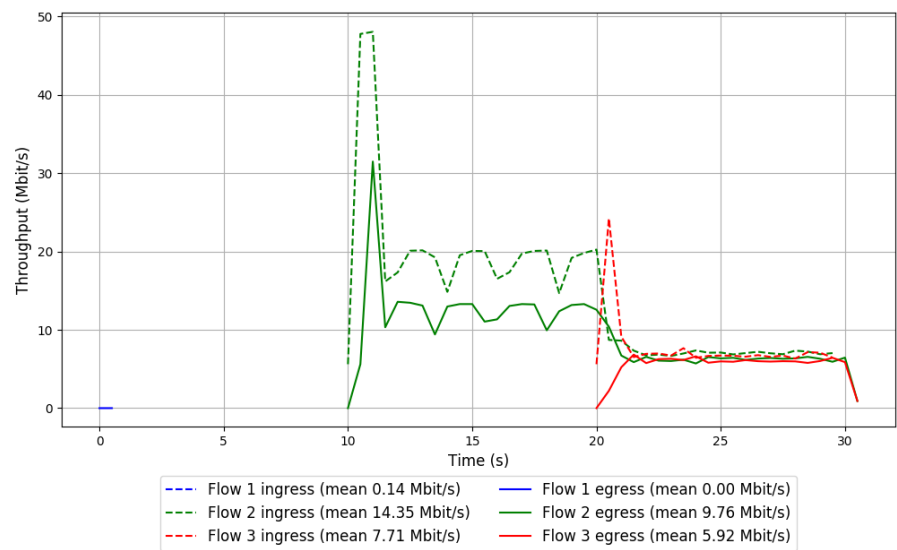


Run 4: Statistics of TaoVA-100x

Start at: 2019-03-27 02:42:08
End at: 2019-03-27 02:42:38
Local clock offset: -1.714 ms
Remote clock offset: 30.797 ms

Below is generated by plot.py at 2019-03-27 03:26:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.47 Mbit/s
95th percentile per-packet one-way delay: 89.496 ms
Loss rate: 30.11%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 84.850 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.76 Mbit/s
95th percentile per-packet one-way delay: 92.728 ms
Loss rate: 31.95%
-- Flow 3:
Average throughput: 5.92 Mbit/s
95th percentile per-packet one-way delay: 84.865 ms
Loss rate: 23.25%

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

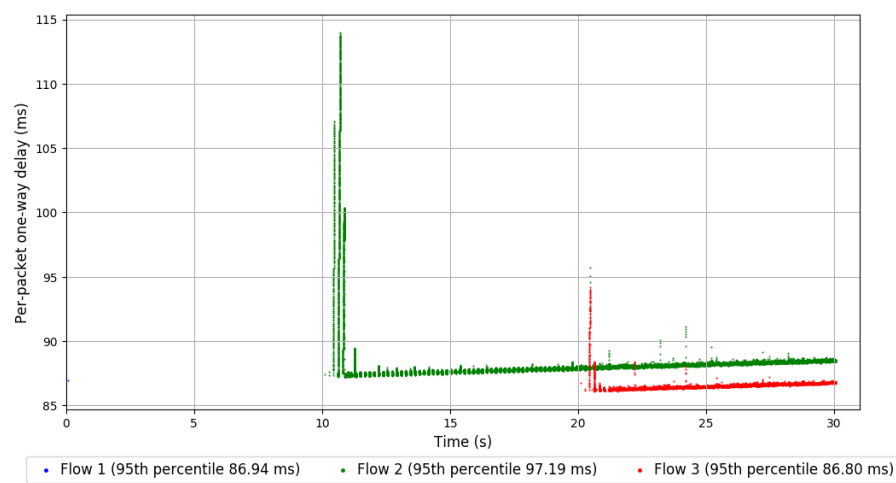
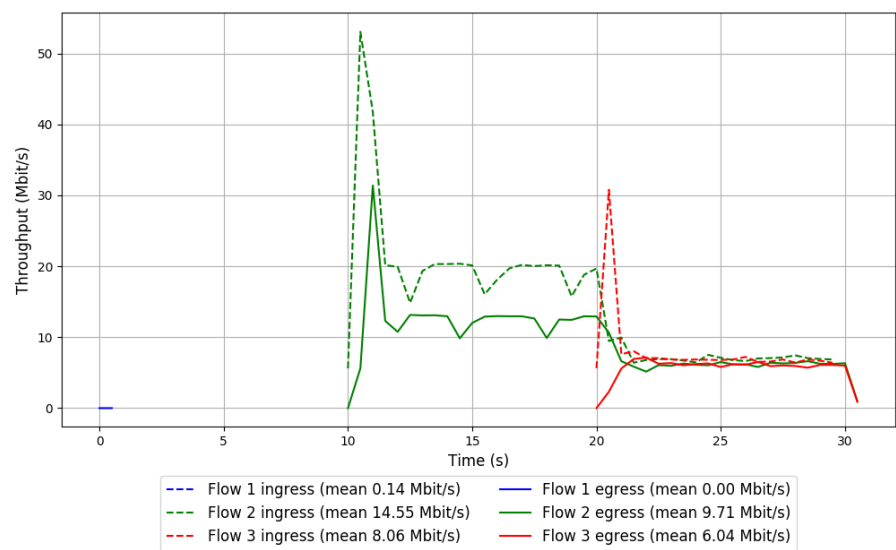


Run 5: Statistics of TaoVA-100x

Start at: 2019-03-27 03:08:44
End at: 2019-03-27 03:09:14
Local clock offset: -7.807 ms
Remote clock offset: 36.654 ms

Below is generated by plot.py at 2019-03-27 03:26:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 93.457 ms
Loss rate: 31.48%
-- Flow 1:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 86.937 ms
Loss rate: 95.92%
-- Flow 2:
Average throughput: 9.71 Mbit/s
95th percentile per-packet one-way delay: 97.187 ms
Loss rate: 33.25%
-- Flow 3:
Average throughput: 6.04 Mbit/s
95th percentile per-packet one-way delay: 86.801 ms
Loss rate: 25.07%

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

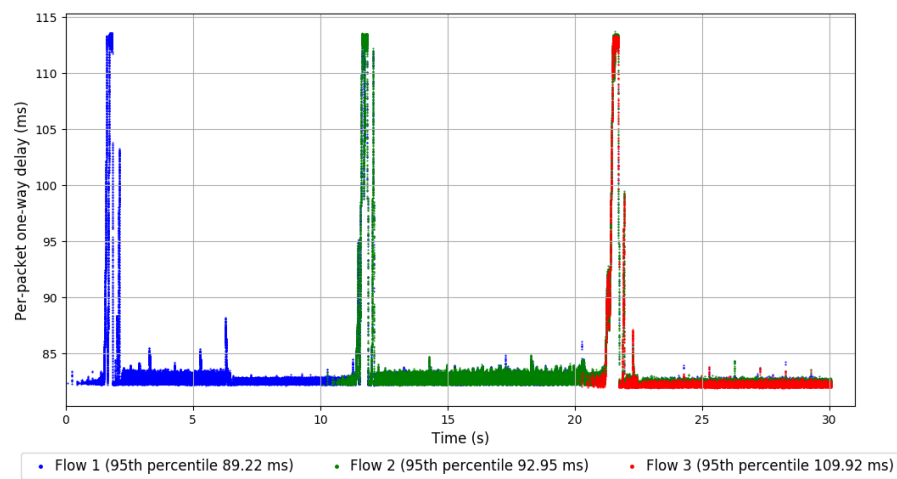
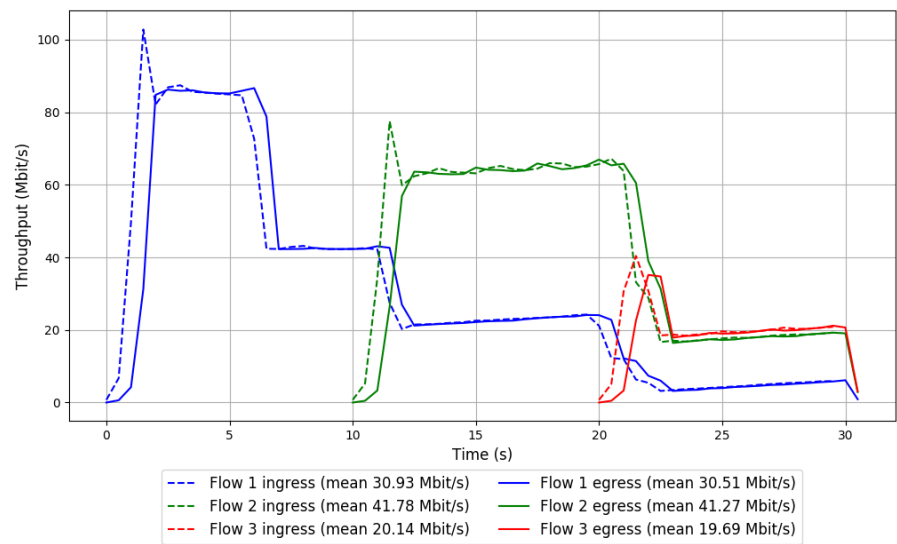


Run 1: Statistics of TCP Vegas

Start at: 2019-03-27 01:13:27
End at: 2019-03-27 01:13:57
Local clock offset: -6.554 ms
Remote clock offset: -2.133 ms

Below is generated by plot.py at 2019-03-27 03:27:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 64.55 Mbit/s
95th percentile per-packet one-way delay: 92.332 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 30.51 Mbit/s
95th percentile per-packet one-way delay: 89.217 ms
Loss rate: 1.38%
-- Flow 2:
Average throughput: 41.27 Mbit/s
95th percentile per-packet one-way delay: 92.946 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 19.69 Mbit/s
95th percentile per-packet one-way delay: 109.919 ms
Loss rate: 2.23%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-03-27 01:40:02

End at: 2019-03-27 01:40:32

Local clock offset: -3.197 ms

Remote clock offset: 12.72 ms

Below is generated by plot.py at 2019-03-27 03:27:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.39 Mbit/s

95th percentile per-packet one-way delay: 90.498 ms

Loss rate: 1.33%

-- Flow 1:

Average throughput: 35.67 Mbit/s

95th percentile per-packet one-way delay: 89.355 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 36.46 Mbit/s

95th percentile per-packet one-way delay: 93.325 ms

Loss rate: 1.26%

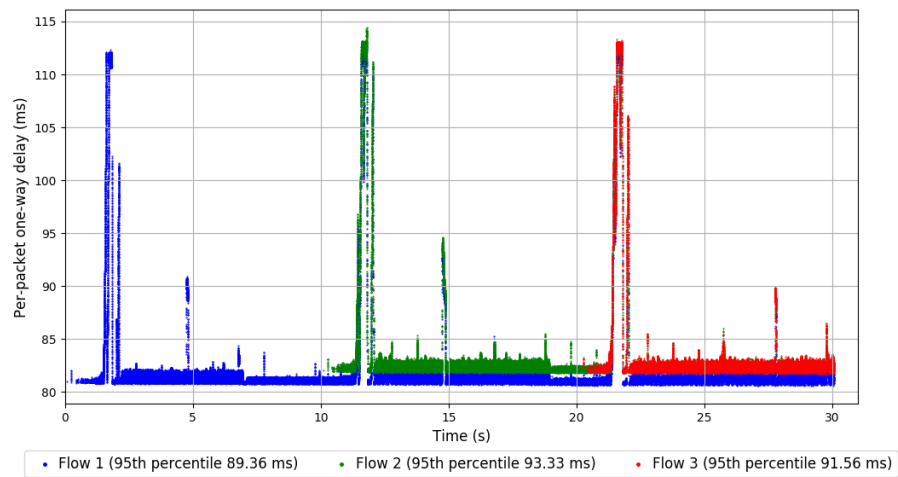
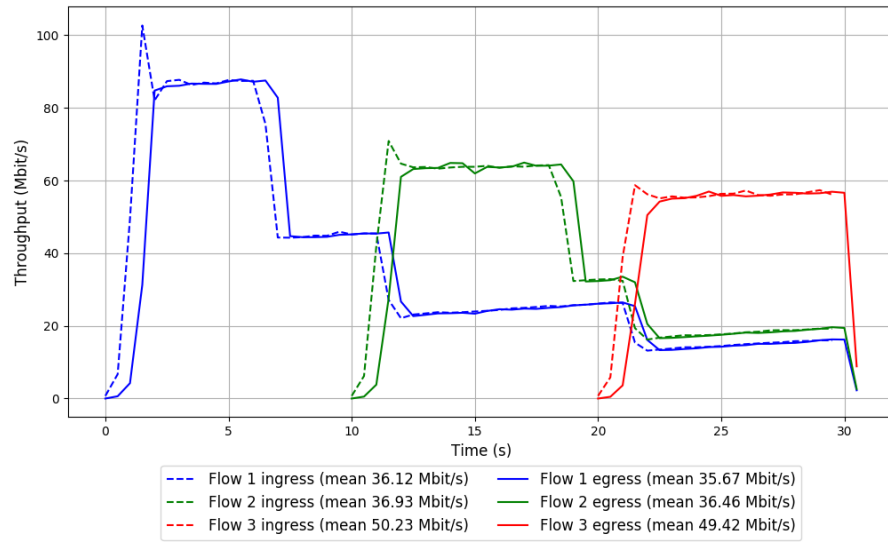
-- Flow 3:

Average throughput: 49.42 Mbit/s

95th percentile per-packet one-way delay: 91.558 ms

Loss rate: 1.60%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-03-27 02:06:36

End at: 2019-03-27 02:07:06

Local clock offset: -2.102 ms

Remote clock offset: 24.29 ms

Below is generated by plot.py at 2019-03-27 03:27:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.67 Mbit/s

95th percentile per-packet one-way delay: 99.298 ms

Loss rate: 1.79%

-- Flow 1:

Average throughput: 33.75 Mbit/s

95th percentile per-packet one-way delay: 102.687 ms

Loss rate: 2.12%

-- Flow 2:

Average throughput: 19.76 Mbit/s

95th percentile per-packet one-way delay: 103.420 ms

Loss rate: 1.12%

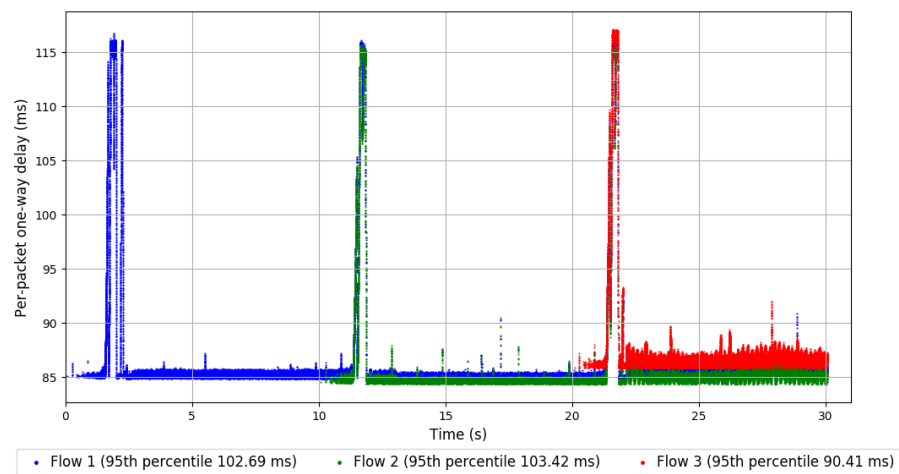
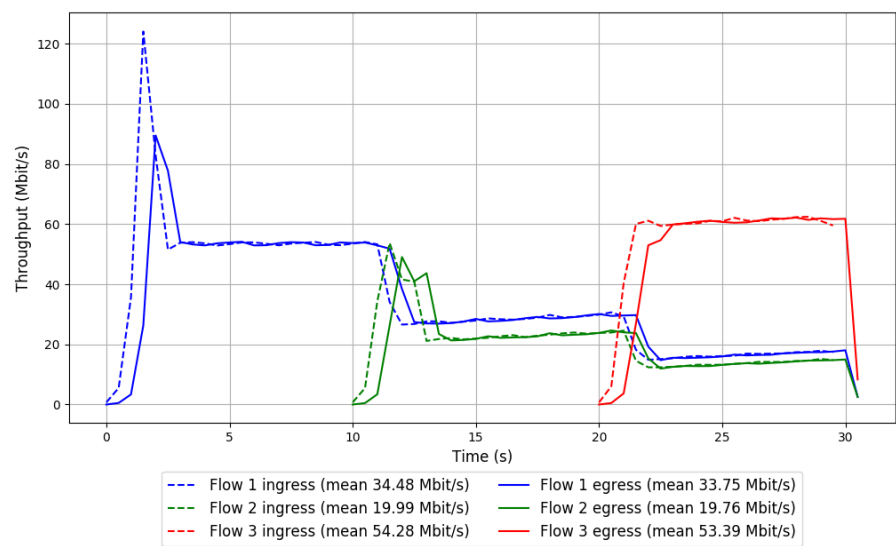
-- Flow 3:

Average throughput: 53.39 Mbit/s

95th percentile per-packet one-way delay: 90.410 ms

Loss rate: 1.66%

Run 3: Report of TCP Vegas — Data Link

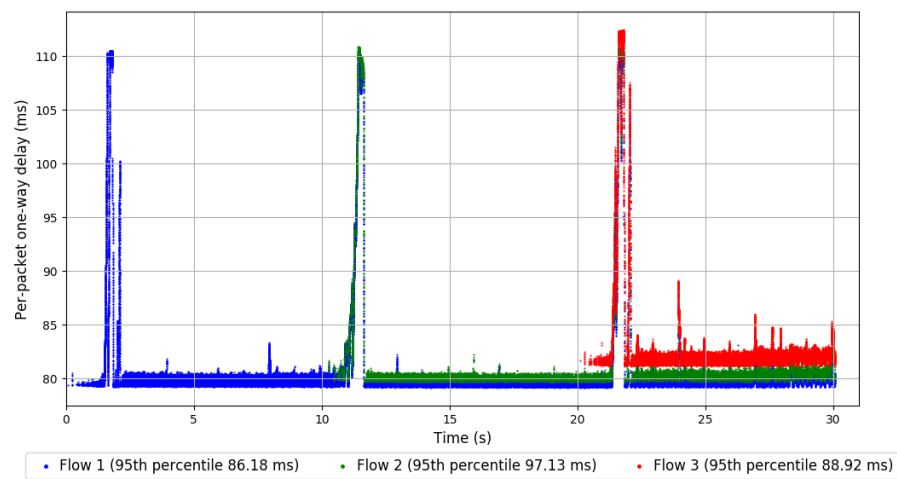
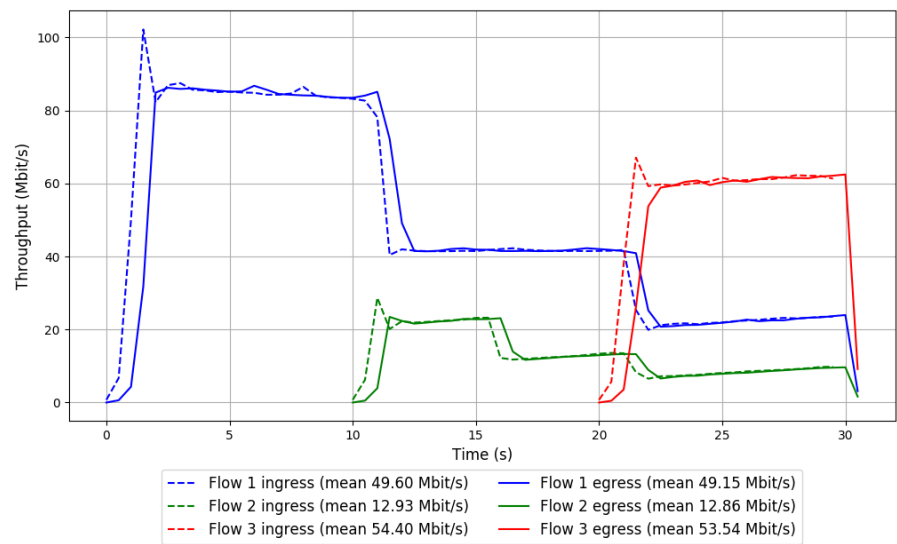


Run 4: Statistics of TCP Vegas

Start at: 2019-03-27 02:33:16
End at: 2019-03-27 02:33:46
Local clock offset: -1.914 ms
Remote clock offset: 24.749 ms

Below is generated by plot.py at 2019-03-27 03:27:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 75.51 Mbit/s
95th percentile per-packet one-way delay: 87.905 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 49.15 Mbit/s
95th percentile per-packet one-way delay: 86.176 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 12.86 Mbit/s
95th percentile per-packet one-way delay: 97.126 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 53.54 Mbit/s
95th percentile per-packet one-way delay: 88.922 ms
Loss rate: 1.61%

Run 4: Report of TCP Vegas — Data Link

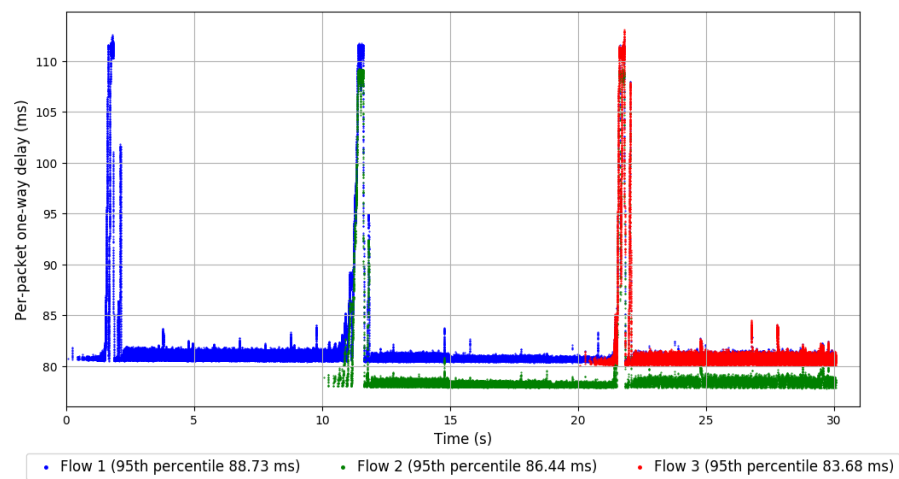
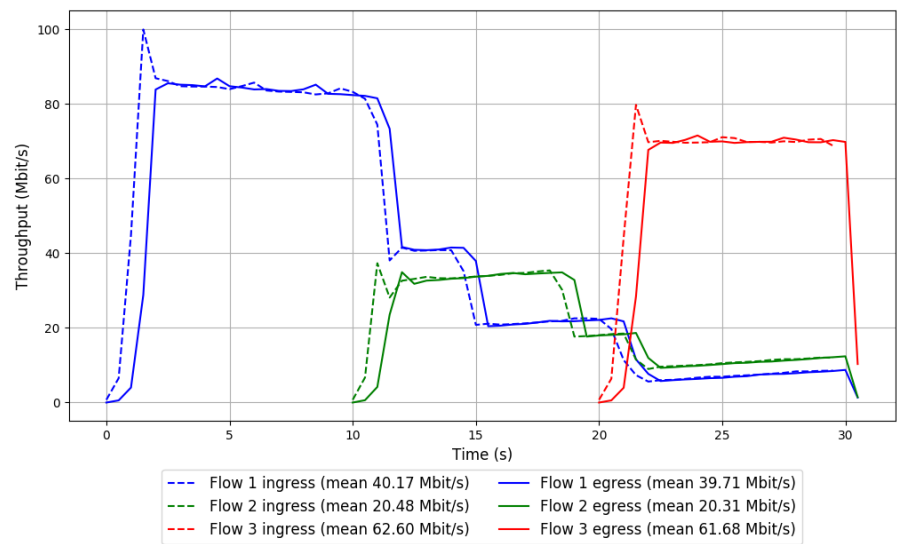


Run 5: Statistics of TCP Vegas

Start at: 2019-03-27 02:59:50
End at: 2019-03-27 03:00:20
Local clock offset: -6.466 ms
Remote clock offset: 30.702 ms

Below is generated by plot.py at 2019-03-27 03:27:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 73.78 Mbit/s
95th percentile per-packet one-way delay: 87.993 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 39.71 Mbit/s
95th percentile per-packet one-way delay: 88.728 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 20.31 Mbit/s
95th percentile per-packet one-way delay: 86.439 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 61.68 Mbit/s
95th percentile per-packet one-way delay: 83.680 ms
Loss rate: 1.50%

Run 5: Report of TCP Vegas — Data Link

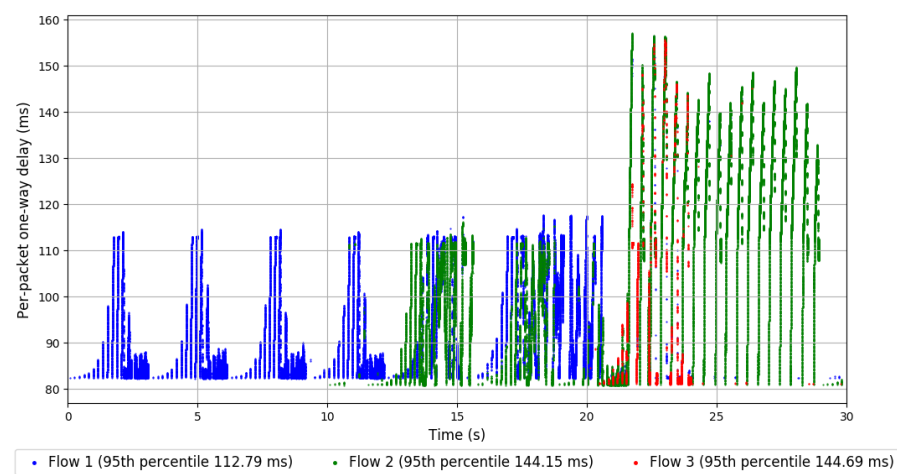
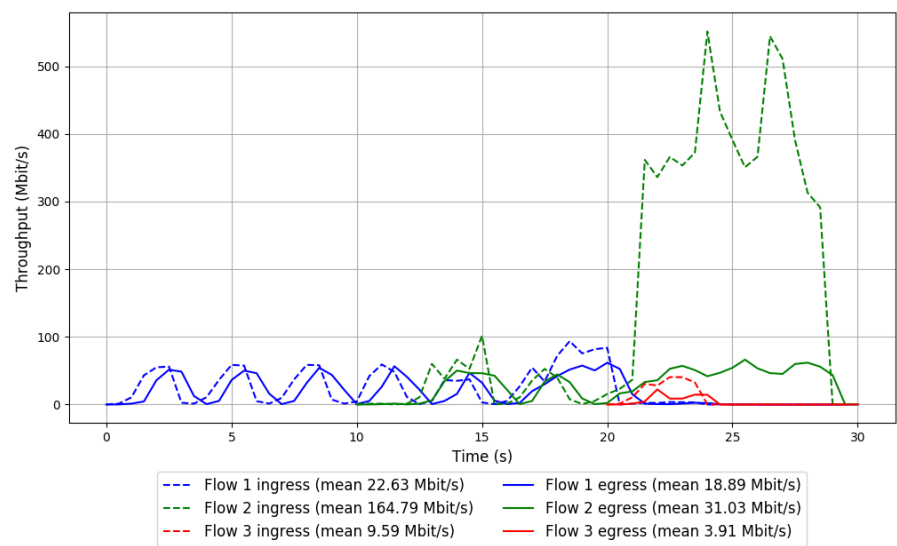


Run 1: Statistics of Verus

Start at: 2019-03-27 01:05:51
End at: 2019-03-27 01:06:21
Local clock offset: -6.882 ms
Remote clock offset: -4.415 ms

Below is generated by plot.py at 2019-03-27 03:27:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 40.69 Mbit/s
95th percentile per-packet one-way delay: 140.021 ms
Loss rate: 69.85%
-- Flow 1:
Average throughput: 18.89 Mbit/s
95th percentile per-packet one-way delay: 112.790 ms
Loss rate: 16.52%
-- Flow 2:
Average throughput: 31.03 Mbit/s
95th percentile per-packet one-way delay: 144.147 ms
Loss rate: 81.17%
-- Flow 3:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 144.685 ms
Loss rate: 59.24%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-03-27 01:32:27

End at: 2019-03-27 01:32:57

Local clock offset: -3.702 ms

Remote clock offset: 8.31 ms

Below is generated by plot.py at 2019-03-27 03:27:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 43.45 Mbit/s

95th percentile per-packet one-way delay: 112.370 ms

Loss rate: 37.48%

-- Flow 1:

Average throughput: 19.00 Mbit/s

95th percentile per-packet one-way delay: 136.701 ms

Loss rate: 43.63%

-- Flow 2:

Average throughput: 26.83 Mbit/s

95th percentile per-packet one-way delay: 112.132 ms

Loss rate: 24.28%

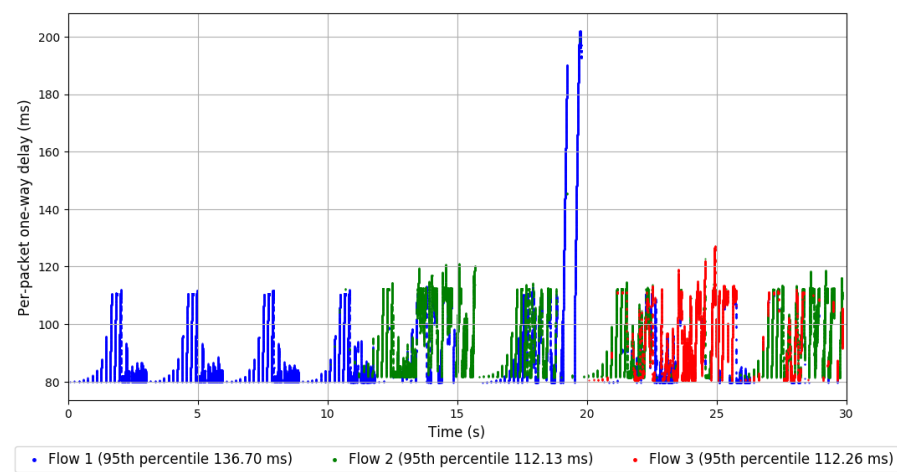
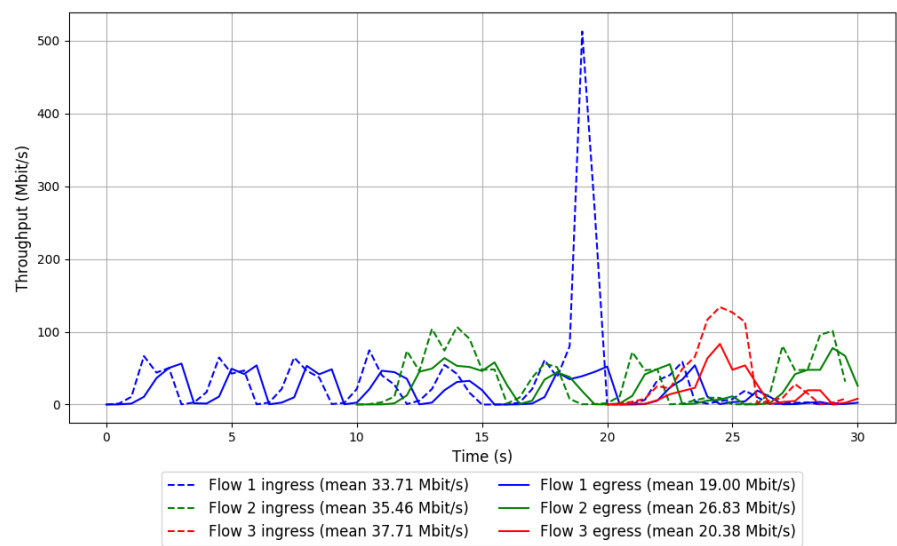
-- Flow 3:

Average throughput: 20.38 Mbit/s

95th percentile per-packet one-way delay: 112.258 ms

Loss rate: 45.83%

Run 2: Report of Verus — Data Link

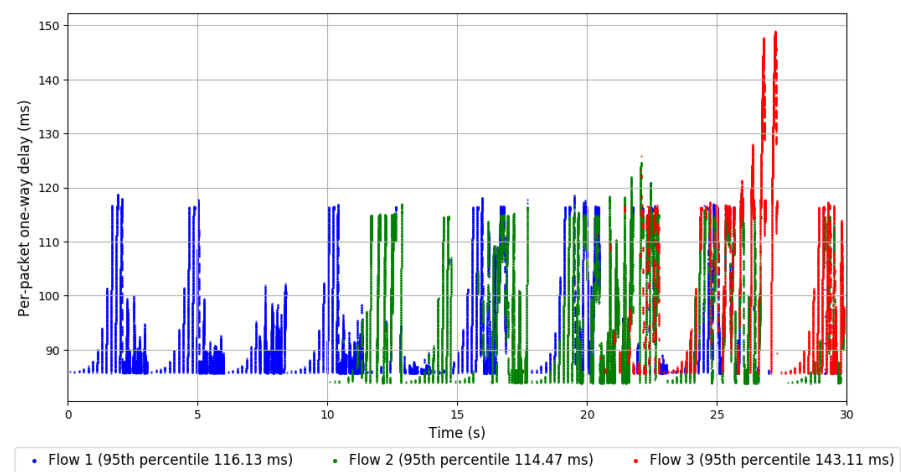
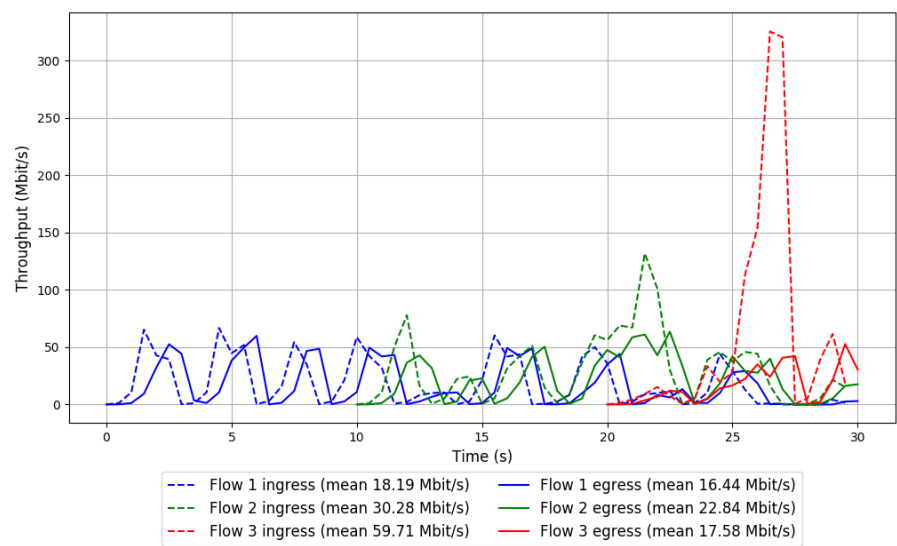


Run 3: Statistics of Verus

Start at: 2019-03-27 01:59:02
End at: 2019-03-27 01:59:32
Local clock offset: -2.344 ms
Remote clock offset: 22.279 ms

Below is generated by plot.py at 2019-03-27 03:27:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 37.36 Mbit/s
95th percentile per-packet one-way delay: 116.475 ms
Loss rate: 35.37%
-- Flow 1:
Average throughput: 16.44 Mbit/s
95th percentile per-packet one-way delay: 116.129 ms
Loss rate: 9.59%
-- Flow 2:
Average throughput: 22.84 Mbit/s
95th percentile per-packet one-way delay: 114.470 ms
Loss rate: 24.51%
-- Flow 3:
Average throughput: 17.58 Mbit/s
95th percentile per-packet one-way delay: 143.108 ms
Loss rate: 70.55%

Run 3: Report of Verus — Data Link

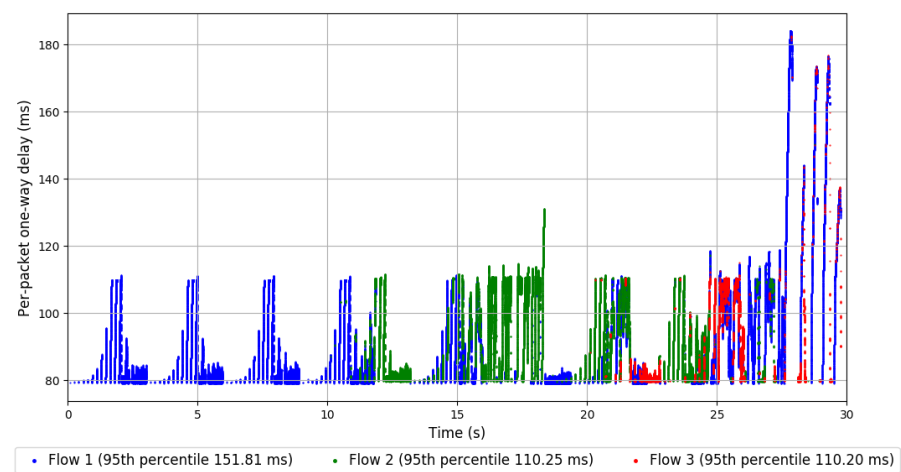
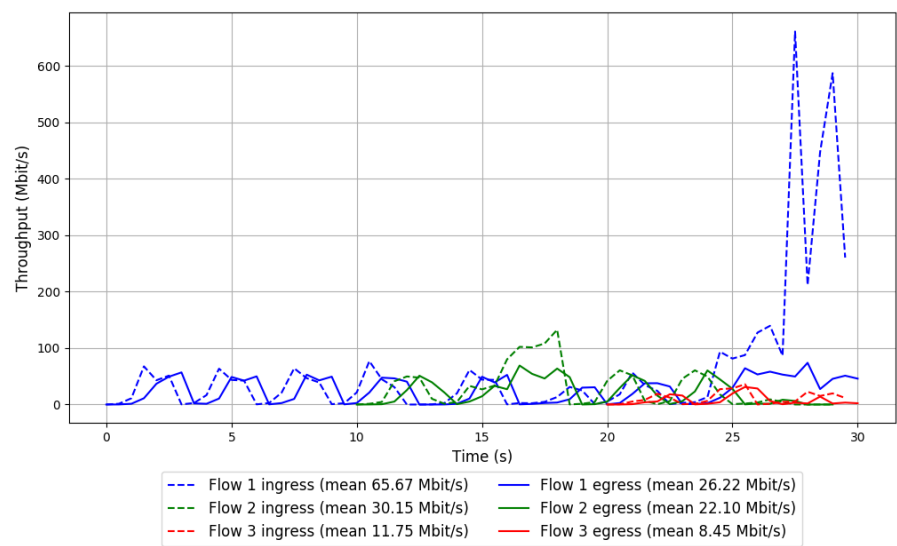


Run 4: Statistics of Verus

Start at: 2019-03-27 02:25:40
End at: 2019-03-27 02:26:10
Local clock offset: -1.926 ms
Remote clock offset: 23.377 ms

Below is generated by plot.py at 2019-03-27 03:27:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 42.98 Mbit/s
95th percentile per-packet one-way delay: 132.697 ms
Loss rate: 51.54%
-- Flow 1:
Average throughput: 26.22 Mbit/s
95th percentile per-packet one-way delay: 151.810 ms
Loss rate: 60.01%
-- Flow 2:
Average throughput: 22.10 Mbit/s
95th percentile per-packet one-way delay: 110.245 ms
Loss rate: 27.41%
-- Flow 3:
Average throughput: 8.45 Mbit/s
95th percentile per-packet one-way delay: 110.196 ms
Loss rate: 28.03%

Run 4: Report of Verus — Data Link

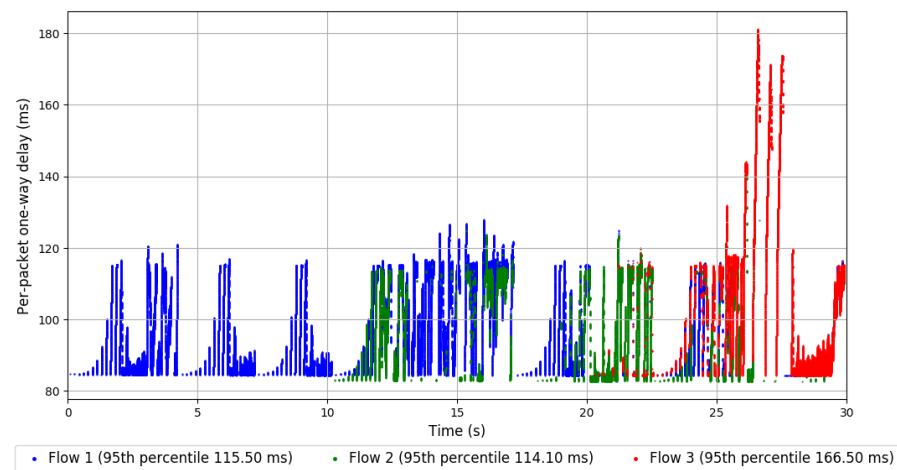
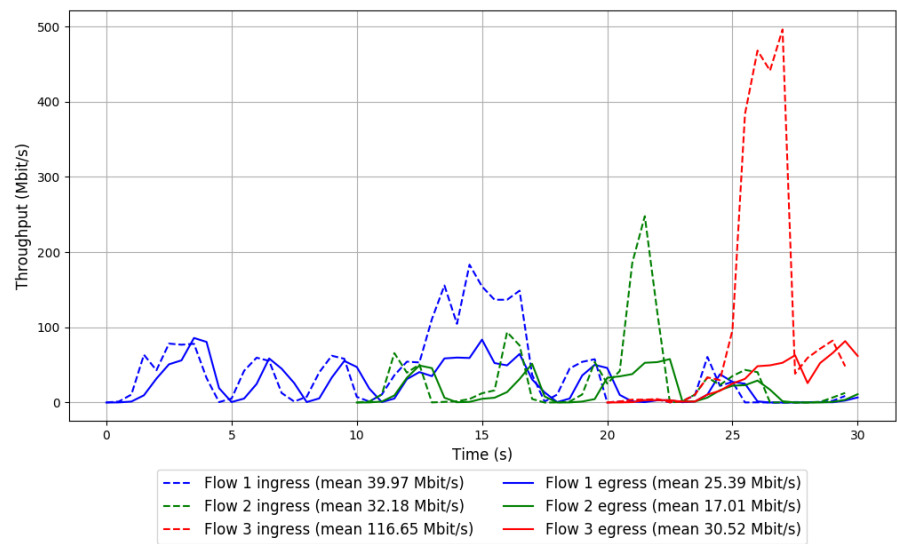


Run 5: Statistics of Verus

Start at: 2019-03-27 02:52:15
End at: 2019-03-27 02:52:45
Local clock offset: -4.223 ms
Remote clock offset: 33.87 ms

Below is generated by plot.py at 2019-03-27 03:27:53
Datalink statistics
-- Total of 3 flows:
Average throughput: 46.64 Mbit/s
95th percentile per-packet one-way delay: 124.624 ms
Loss rate: 53.04%
-- Flow 1:
Average throughput: 25.39 Mbit/s
95th percentile per-packet one-way delay: 115.501 ms
Loss rate: 36.41%
-- Flow 2:
Average throughput: 17.01 Mbit/s
95th percentile per-packet one-way delay: 114.097 ms
Loss rate: 47.08%
-- Flow 3:
Average throughput: 30.52 Mbit/s
95th percentile per-packet one-way delay: 166.500 ms
Loss rate: 73.76%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-03-27 01:08:20

End at: 2019-03-27 01:08:50

Local clock offset: -6.291 ms

Remote clock offset: 0.501 ms

Below is generated by plot.py at 2019-03-27 03:28:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.70 Mbit/s

95th percentile per-packet one-way delay: 107.941 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 60.34 Mbit/s

95th percentile per-packet one-way delay: 106.488 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 14.43 Mbit/s

95th percentile per-packet one-way delay: 108.199 ms

Loss rate: 0.42%

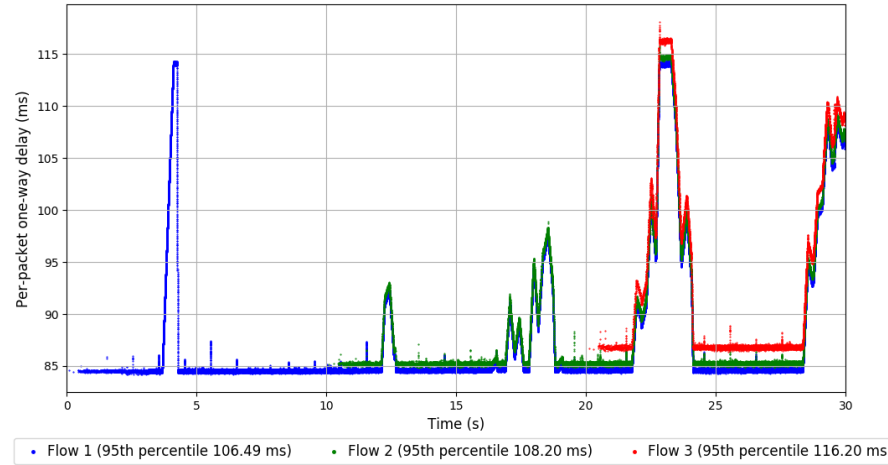
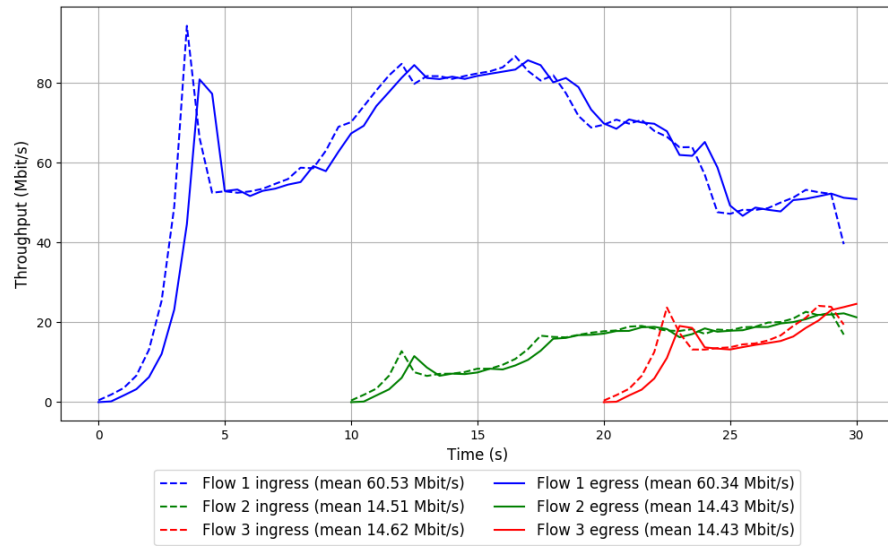
-- Flow 3:

Average throughput: 14.43 Mbit/s

95th percentile per-packet one-way delay: 116.200 ms

Loss rate: 1.09%

Run 1: Report of PCC-Vivace — Data Link

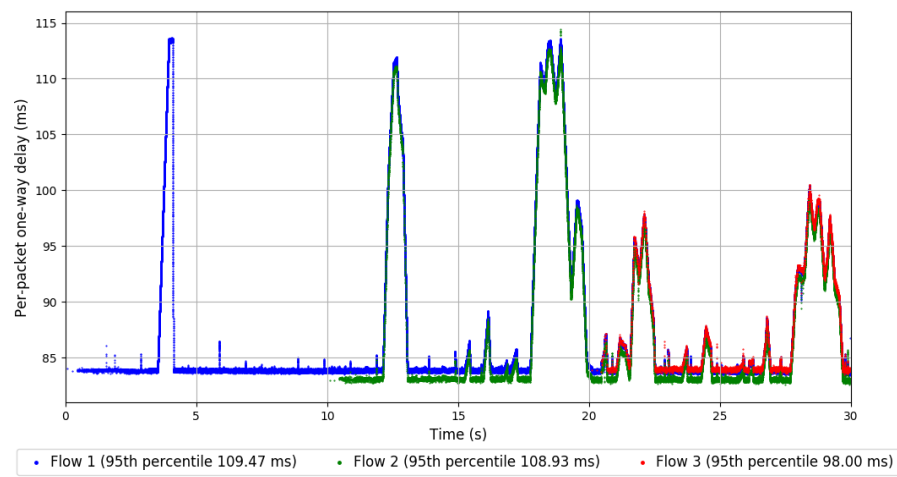
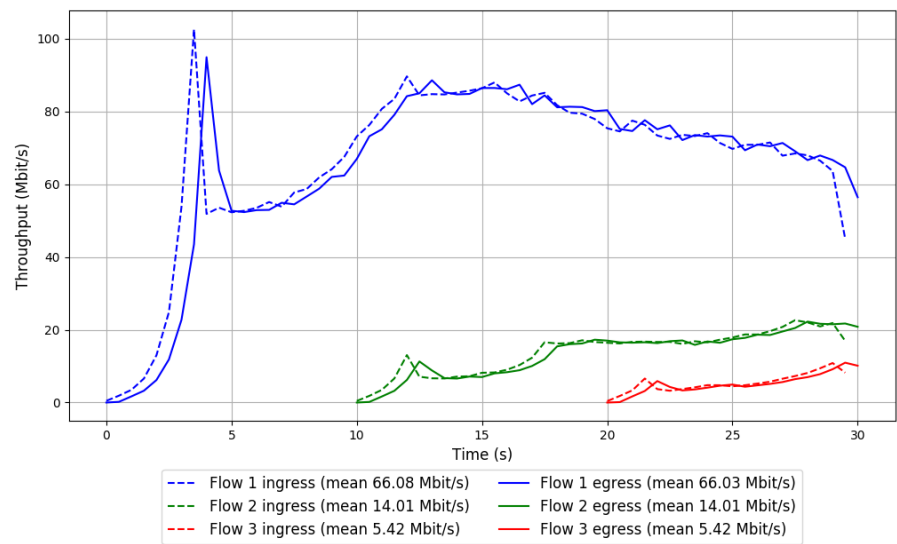


Run 2: Statistics of PCC-Vivace

Start at: 2019-03-27 01:34:55
End at: 2019-03-27 01:35:25
Local clock offset: -2.729 ms
Remote clock offset: 13.838 ms

Below is generated by plot.py at 2019-03-27 03:28:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.14 Mbit/s
95th percentile per-packet one-way delay: 109.185 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 66.03 Mbit/s
95th percentile per-packet one-way delay: 109.467 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 14.01 Mbit/s
95th percentile per-packet one-way delay: 108.929 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 5.42 Mbit/s
95th percentile per-packet one-way delay: 98.004 ms
Loss rate: 0.02%

Run 2: Report of PCC-Vivace — Data Link

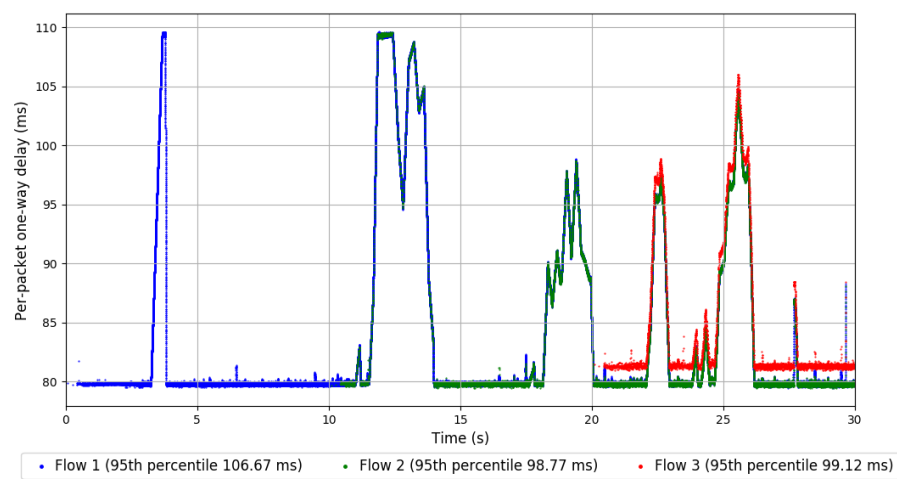
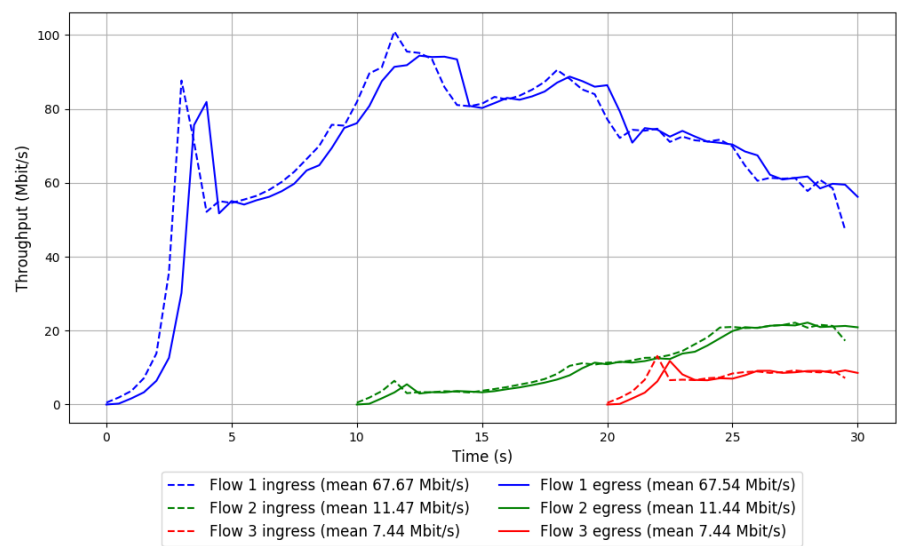


Run 3: Statistics of PCC-Vivace

Start at: 2019-03-27 02:01:29
End at: 2019-03-27 02:01:59
Local clock offset: -1.553 ms
Remote clock offset: 19.037 ms

Below is generated by plot.py at 2019-03-27 03:28:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.60 Mbit/s
95th percentile per-packet one-way delay: 105.281 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 67.54 Mbit/s
95th percentile per-packet one-way delay: 106.665 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 11.44 Mbit/s
95th percentile per-packet one-way delay: 98.765 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: 99.122 ms
Loss rate: 0.02%

Run 3: Report of PCC-Vivace — Data Link

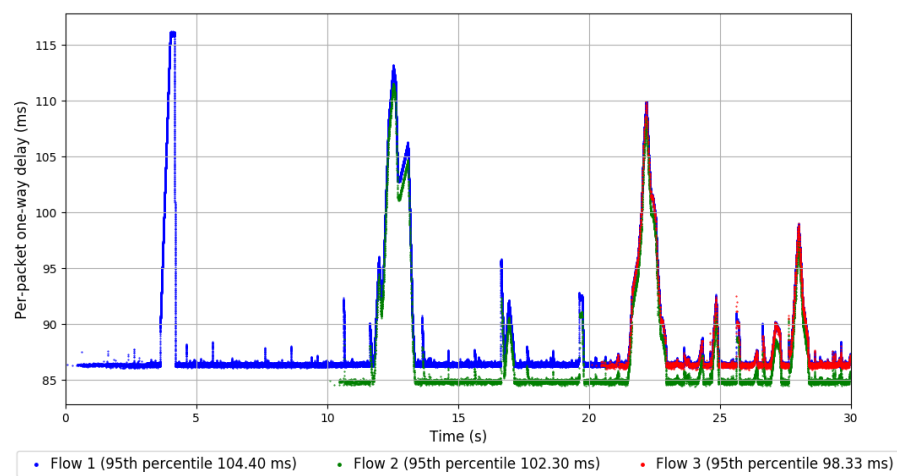
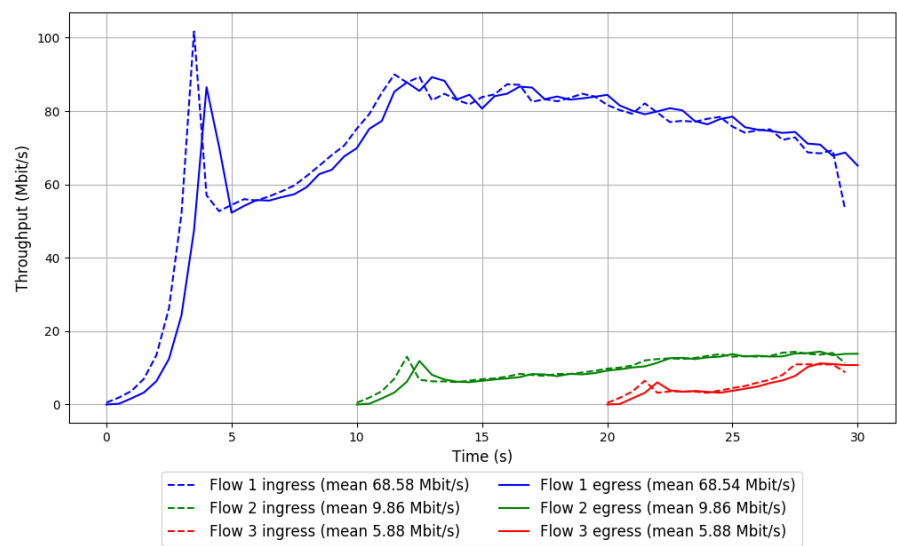


Run 4: Statistics of PCC-Vivace

Start at: 2019-03-27 02:28:09
End at: 2019-03-27 02:28:39
Local clock offset: -1.12 ms
Remote clock offset: 30.135 ms

Below is generated by plot.py at 2019-03-27 03:28:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.04 Mbit/s
95th percentile per-packet one-way delay: 104.086 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 68.54 Mbit/s
95th percentile per-packet one-way delay: 104.396 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 9.86 Mbit/s
95th percentile per-packet one-way delay: 102.296 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 5.88 Mbit/s
95th percentile per-packet one-way delay: 98.334 ms
Loss rate: 0.08%

Run 4: Report of PCC-Vivace — Data Link

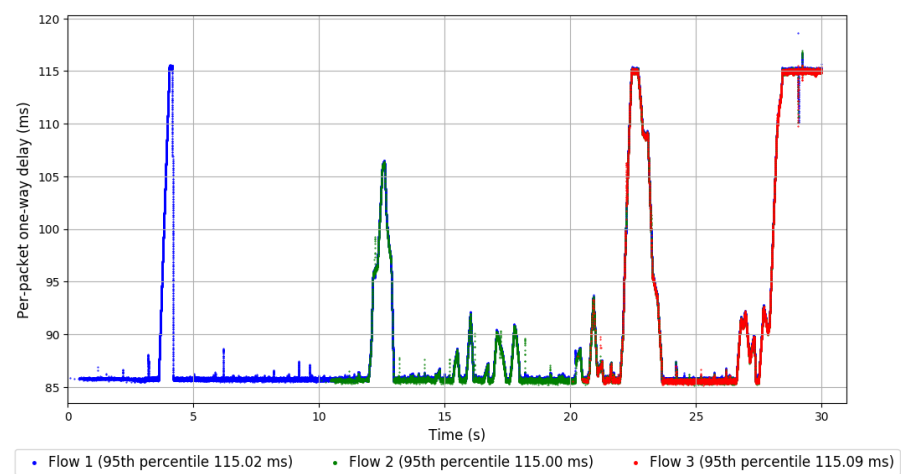
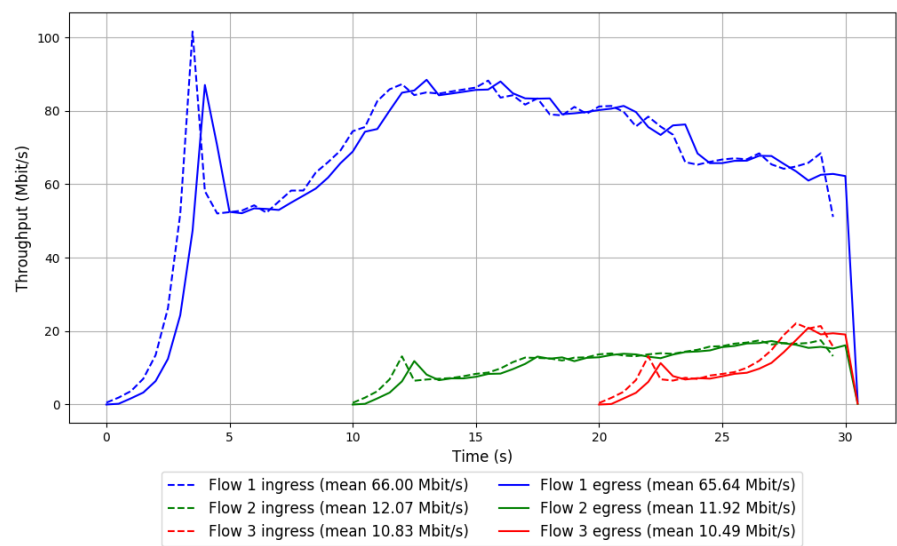


Run 5: Statistics of PCC-Vivace

Start at: 2019-03-27 02:54:43
End at: 2019-03-27 02:55:13
Local clock offset: -5.912 ms
Remote clock offset: 34.603 ms

Below is generated by plot.py at 2019-03-27 03:28:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.04 Mbit/s
95th percentile per-packet one-way delay: 115.027 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 65.64 Mbit/s
95th percentile per-packet one-way delay: 115.017 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 11.92 Mbit/s
95th percentile per-packet one-way delay: 115.003 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 10.49 Mbit/s
95th percentile per-packet one-way delay: 115.093 ms
Loss rate: 2.91%

Run 5: Report of PCC-Vivace — Data Link

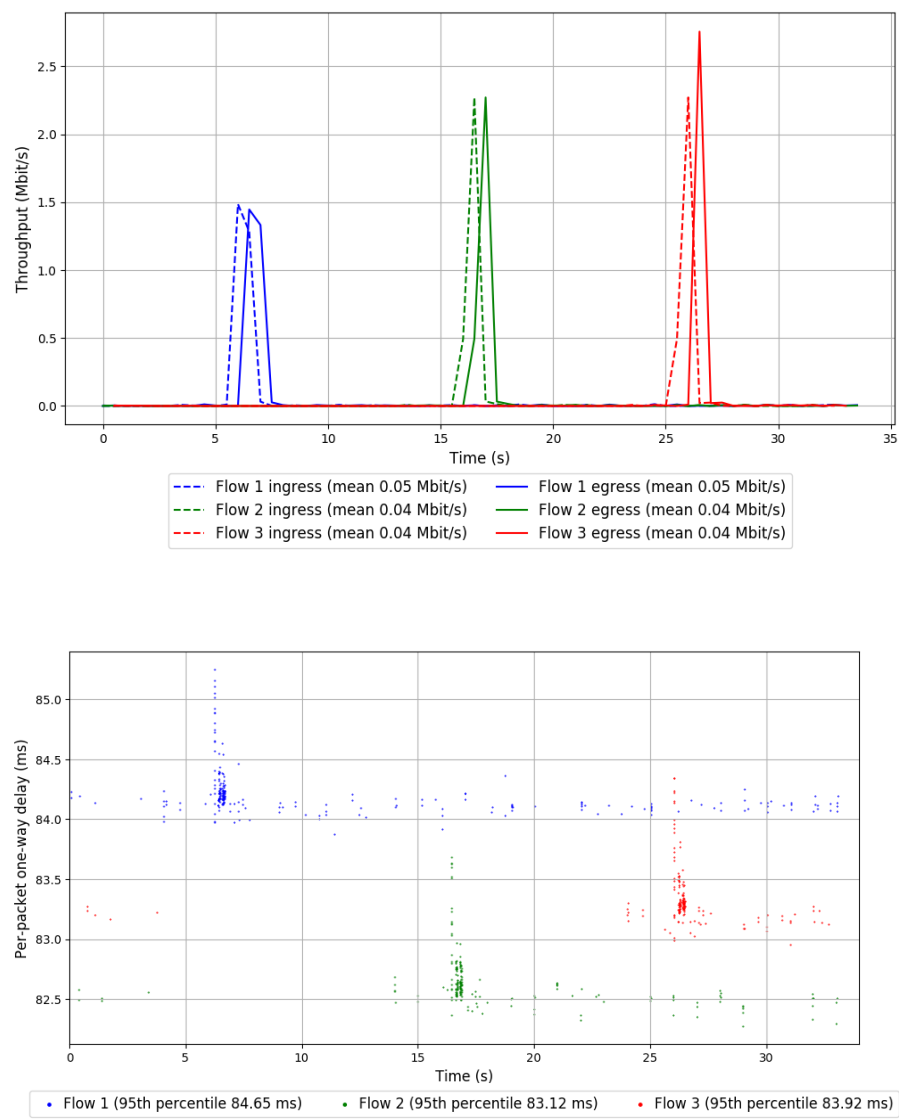


Run 1: Statistics of WebRTC media

Start at: 2019-03-27 01:07:08
End at: 2019-03-27 01:07:38
Local clock offset: -6.217 ms
Remote clock offset: -1.598 ms

Below is generated by plot.py at 2019-03-27 03:28:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 84.343 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 84.650 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 83.124 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 83.922 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

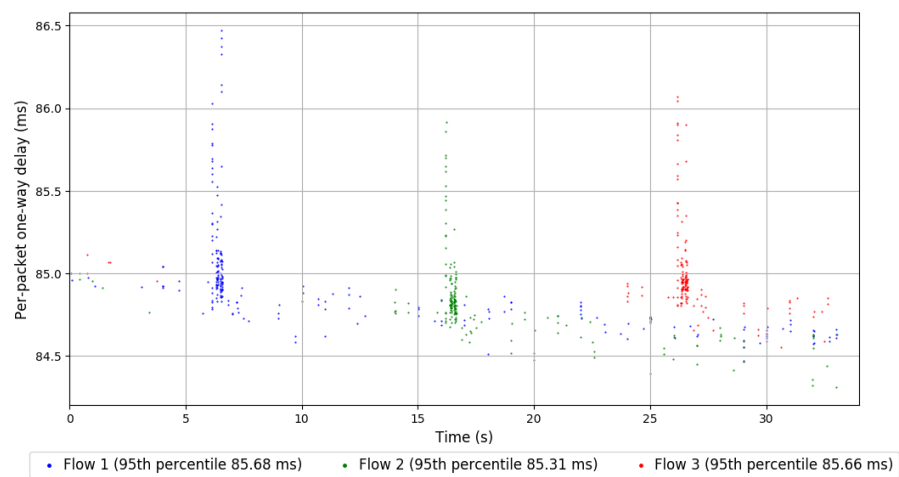
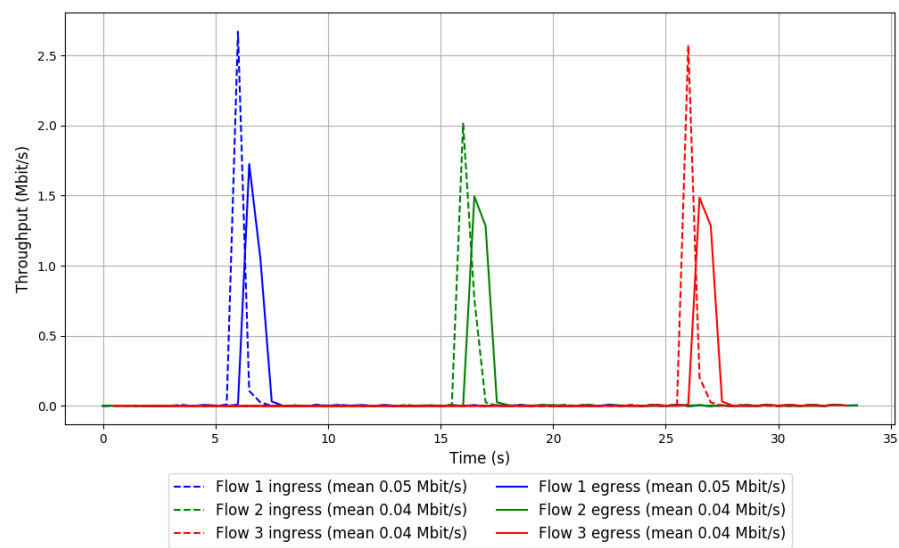


Run 2: Statistics of WebRTC media

Start at: 2019-03-27 01:33:43
End at: 2019-03-27 01:34:13
Local clock offset: -2.819 ms
Remote clock offset: 13.062 ms

Below is generated by plot.py at 2019-03-27 03:28:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 85.600 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 85.681 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 85.305 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 85.662 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

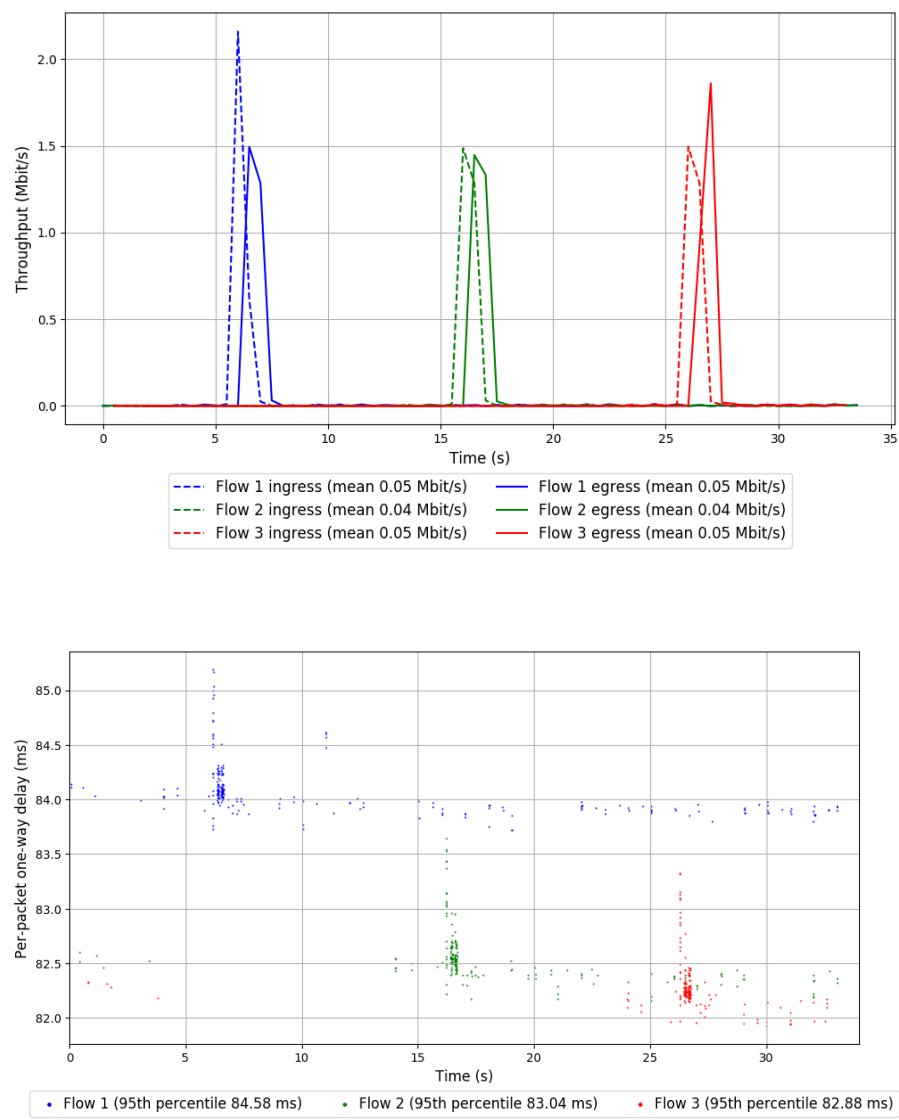


Run 3: Statistics of WebRTC media

Start at: 2019-03-27 02:00:17
End at: 2019-03-27 02:00:47
Local clock offset: -1.589 ms
Remote clock offset: 21.474 ms

Below is generated by plot.py at 2019-03-27 03:28:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 84.245 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 84.585 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 83.037 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 82.876 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

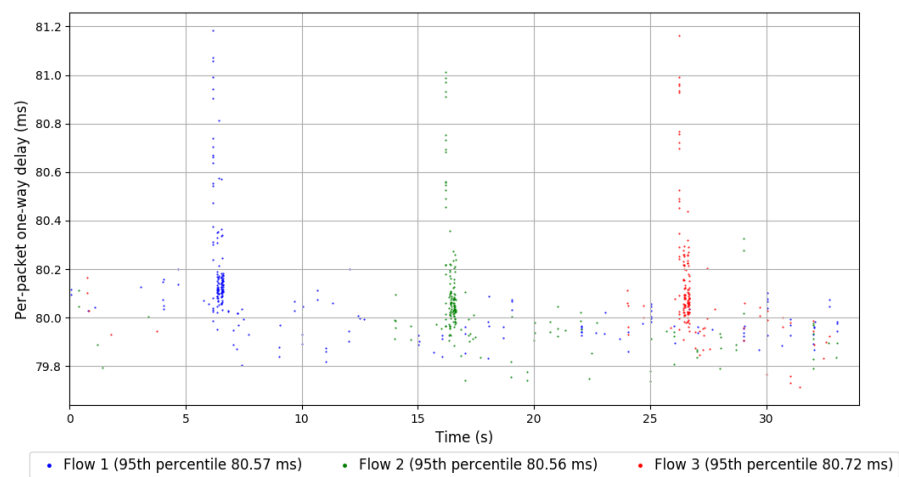
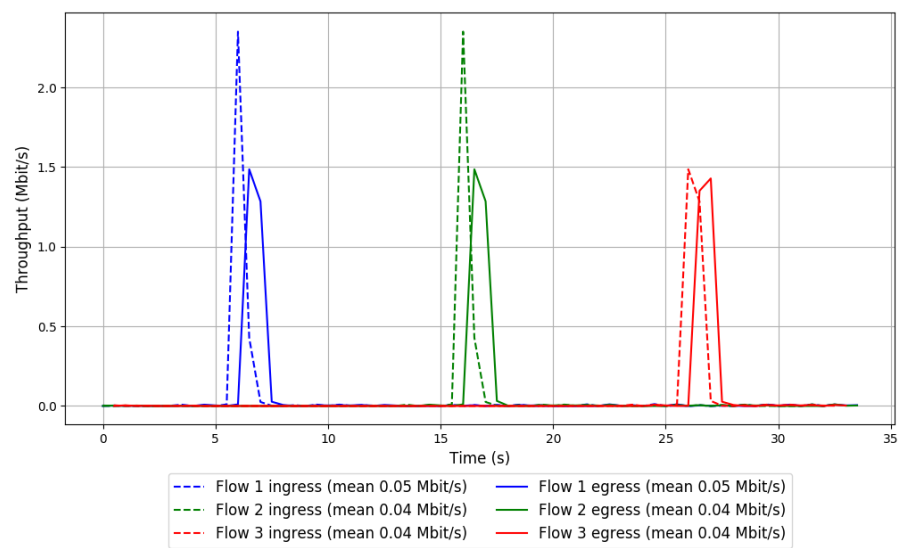


Run 4: Statistics of WebRTC media

Start at: 2019-03-27 02:26:57
End at: 2019-03-27 02:27:27
Local clock offset: -1.155 ms
Remote clock offset: 23.564 ms

Below is generated by plot.py at 2019-03-27 03:28:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 80.637 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 80.573 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 80.555 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 80.721 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-03-27 02:53:31
End at: 2019-03-27 02:54:01
Local clock offset: -5.549 ms
Remote clock offset: 35.467 ms

Below is generated by plot.py at 2019-03-27 03:28:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 87.333 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 87.315 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 87.452 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 87.291 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

