

Pantheon Report

Generated at 2018-06-06 06:31:00 (UTC).

Data path: Colombia Ethernet (*remote*) → AWS Brazil 2 Ethernet (*local*).

Repeated the test of 16 congestion control schemes 10 times.

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

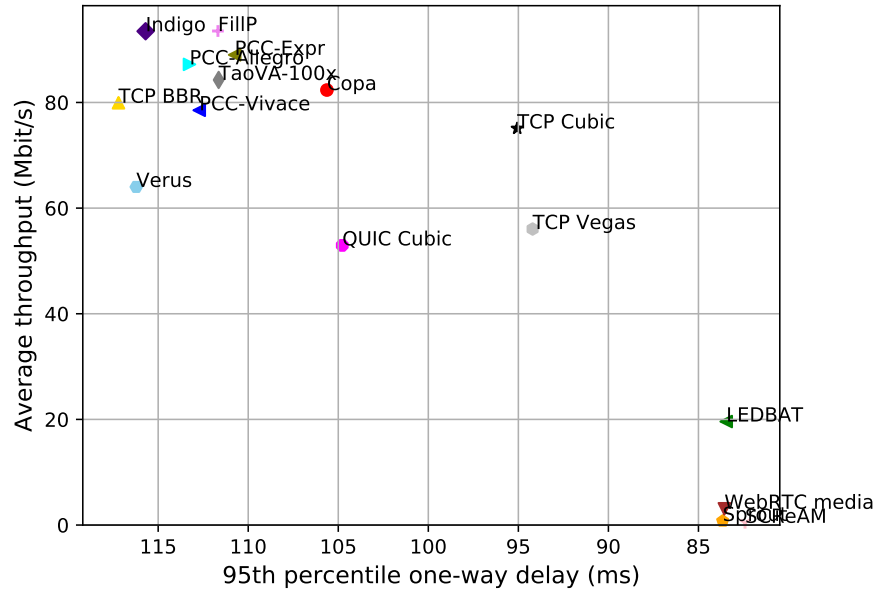
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

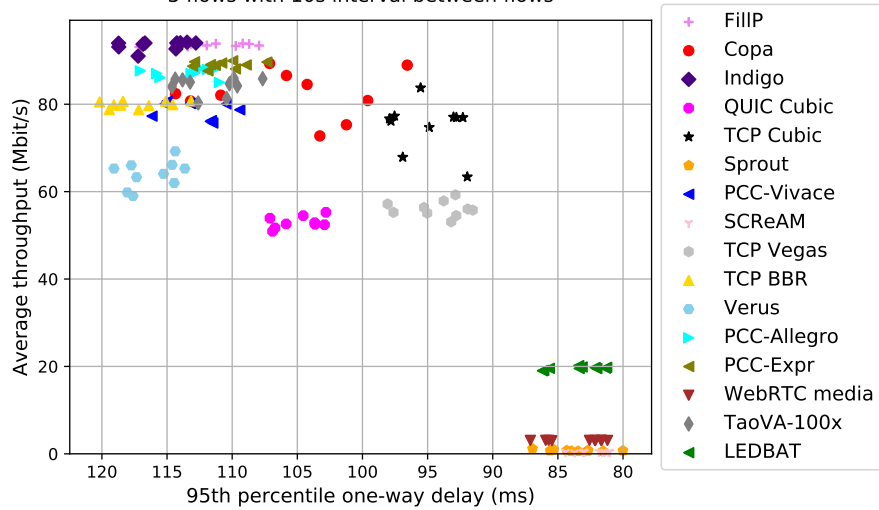
Git summary:

```
branch: master @ 227fdf9a3757f17b88537cceed5743a33037a3d2
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ c838669682f0c19f6baf92afc9a596a406d48c1f
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 Colombia to AWS Brazil 2, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from Colombia to AWS Brazil 2, 10 runs of 30s each per scheme
 3 flows with 10s interval between flows



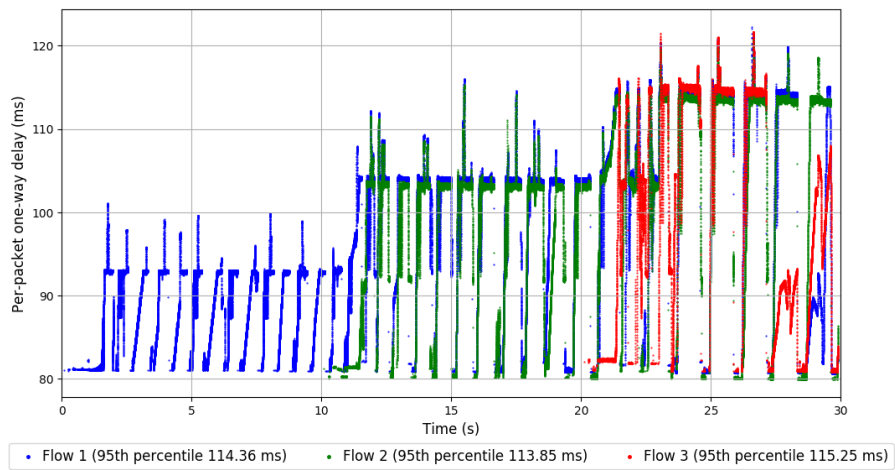
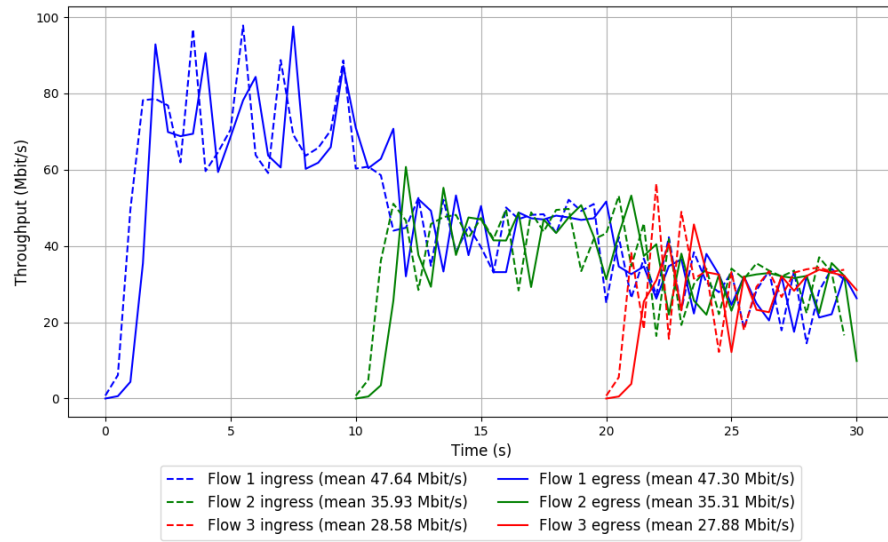
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	47.11	35.80	27.58	116.98	116.96	117.92	1.22	2.25	4.24
Copa	10	49.22	35.38	29.26	100.64	105.82	110.51	0.38	0.78	2.00
TCP Cubic	10	45.56	32.00	25.18	94.93	98.41	104.34	0.37	0.69	1.94
FillP	10	57.87	39.03	29.76	110.59	111.81	112.87	1.54	3.42	4.93
Indigo	10	58.24	38.74	29.48	114.18	116.40	106.10	4.34	1.08	1.97
LEDBAT	10	12.69	8.44	4.02	83.24	83.71	83.32	1.12	1.68	3.40
PCC-Allegro	10	56.01	32.49	29.61	109.66	111.97	115.13	6.29	4.49	4.33
PCC-Expr	10	54.79	38.48	26.62	109.68	110.97	111.25	0.96	1.34	2.50
QUIC Cubic	10	30.55	23.91	19.96	101.25	105.39	114.42	0.64	1.20	2.88
SCReAM	10	0.21	0.22	0.22	81.88	81.99	82.24	0.50	0.95	1.77
Sprout	10	0.38	0.38	0.44	83.35	83.58	83.42	0.42	0.56	1.30
TaoVA-100x	10	49.85	37.19	29.73	111.46	111.46	112.00	0.47	0.83	2.36
TCP Vegas	10	32.97	25.73	18.21	92.30	95.90	110.30	0.38	0.87	1.99
Verus	10	36.31	30.47	23.23	111.56	116.92	117.76	0.56	1.33	1.87
PCC-Vivace	10	50.35	30.93	23.43	109.36	114.00	115.94	3.78	3.54	2.82
WebRTC media	10	1.74	0.98	0.38	83.35	83.65	83.56	0.39	0.78	1.87

Run 1: Statistics of TCP BBR

Start at: 2018-06-06 02:51:52
End at: 2018-06-06 02:52:22
Local clock offset: -3.138 ms
Remote clock offset: 12.965 ms

Below is generated by plot.py at 2018-06-06 06:12:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 79.90 Mbit/s
95th percentile per-packet one-way delay: 114.569 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 47.30 Mbit/s
95th percentile per-packet one-way delay: 114.359 ms
Loss rate: 1.27%
-- Flow 2:
Average throughput: 35.31 Mbit/s
95th percentile per-packet one-way delay: 113.853 ms
Loss rate: 2.59%
-- Flow 3:
Average throughput: 27.88 Mbit/s
95th percentile per-packet one-way delay: 115.251 ms
Loss rate: 4.13%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-06-06 03:11:51

End at: 2018-06-06 03:12:21

Local clock offset: -1.033 ms

Remote clock offset: 4.09 ms

Below is generated by plot.py at 2018-06-06 06:12:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.84 Mbit/s

95th percentile per-packet one-way delay: 119.077 ms

Loss rate: 1.80%

-- Flow 1:

Average throughput: 47.02 Mbit/s

95th percentile per-packet one-way delay: 119.074 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 35.95 Mbit/s

95th percentile per-packet one-way delay: 118.926 ms

Loss rate: 2.24%

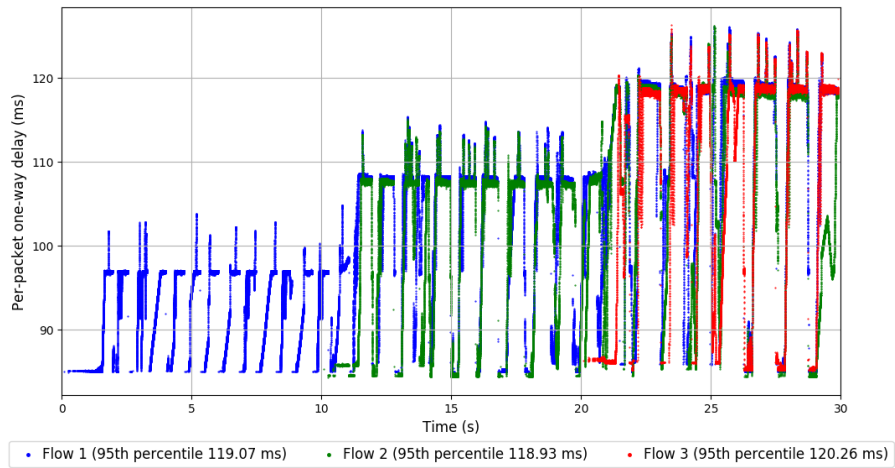
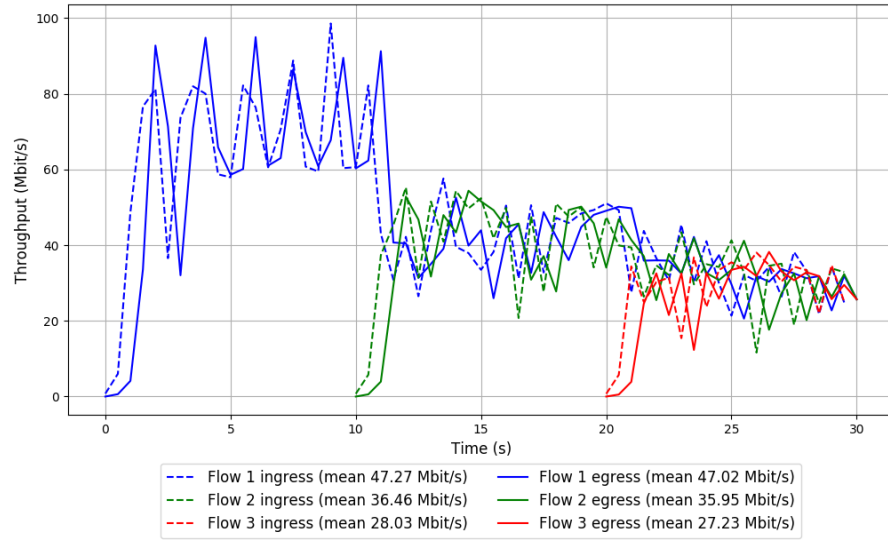
-- Flow 3:

Average throughput: 27.23 Mbit/s

95th percentile per-packet one-way delay: 120.264 ms

Loss rate: 4.44%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-06-06 03:31:49

End at: 2018-06-06 03:32:19

Local clock offset: -0.826 ms

Remote clock offset: 3.732 ms

Below is generated by plot.py at 2018-06-06 06:12:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.77 Mbit/s

95th percentile per-packet one-way delay: 119.433 ms

Loss rate: 1.89%

-- Flow 1:

Average throughput: 46.41 Mbit/s

95th percentile per-packet one-way delay: 118.940 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 34.88 Mbit/s

95th percentile per-packet one-way delay: 119.678 ms

Loss rate: 2.21%

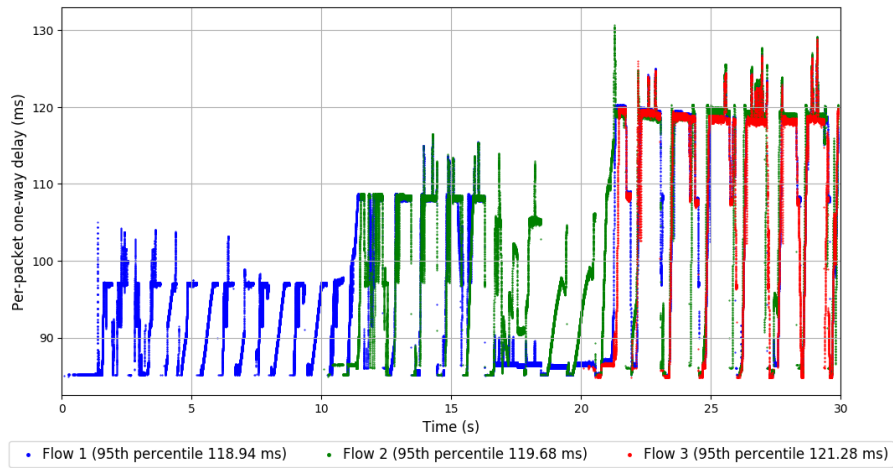
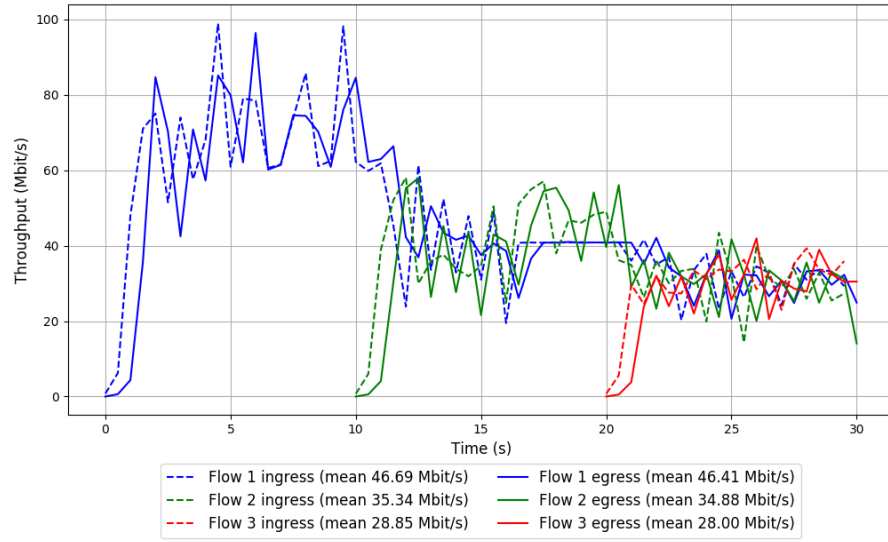
-- Flow 3:

Average throughput: 28.00 Mbit/s

95th percentile per-packet one-way delay: 121.283 ms

Loss rate: 4.73%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-06-06 03:51:48

End at: 2018-06-06 03:52:18

Local clock offset: -2.544 ms

Remote clock offset: 8.263 ms

Below is generated by plot.py at 2018-06-06 06:12:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.76 Mbit/s

95th percentile per-packet one-way delay: 113.163 ms

Loss rate: 1.97%

-- Flow 1:

Average throughput: 47.48 Mbit/s

95th percentile per-packet one-way delay: 113.289 ms

Loss rate: 1.39%

-- Flow 2:

Average throughput: 36.38 Mbit/s

95th percentile per-packet one-way delay: 113.146 ms

Loss rate: 2.36%

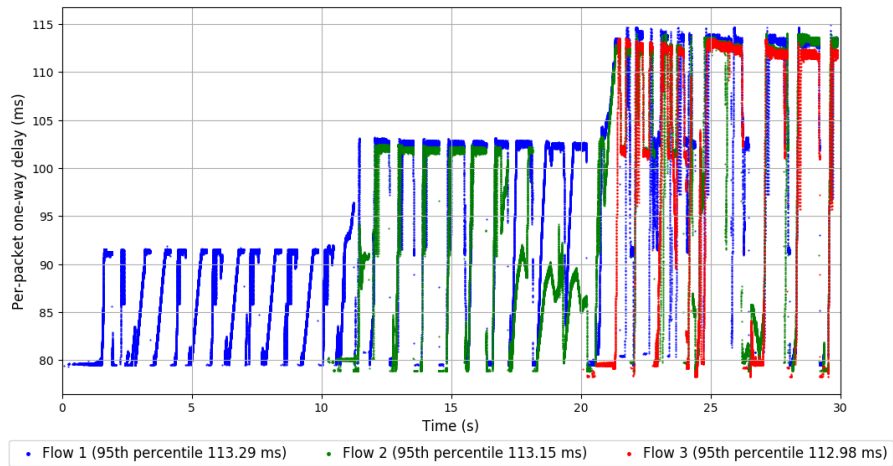
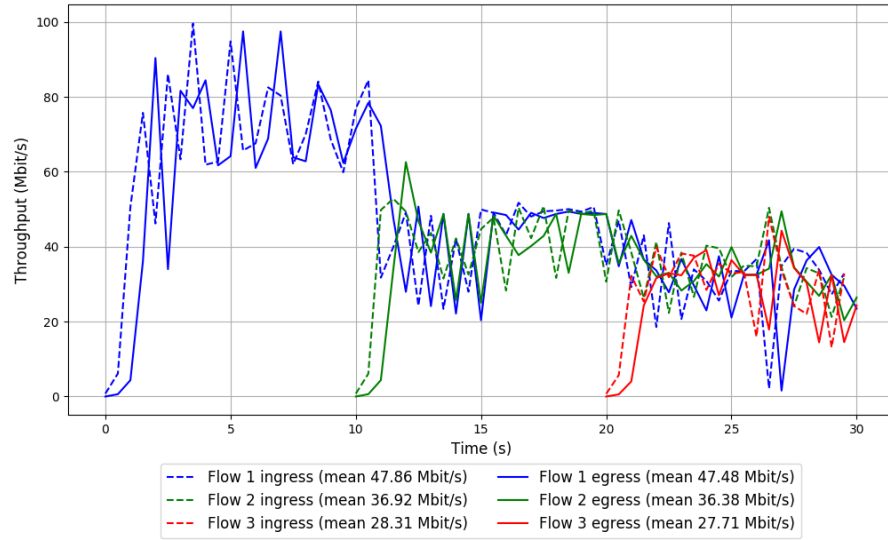
-- Flow 3:

Average throughput: 27.71 Mbit/s

95th percentile per-packet one-way delay: 112.980 ms

Loss rate: 3.92%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-06-06 04:11:47

End at: 2018-06-06 04:12:17

Local clock offset: -1.748 ms

Remote clock offset: 9.894 ms

Below is generated by plot.py at 2018-06-06 06:12:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.80 Mbit/s

95th percentile per-packet one-way delay: 118.555 ms

Loss rate: 1.86%

-- Flow 1:

Average throughput: 46.75 Mbit/s

95th percentile per-packet one-way delay: 118.009 ms

Loss rate: 1.30%

-- Flow 2:

Average throughput: 35.68 Mbit/s

95th percentile per-packet one-way delay: 117.889 ms

Loss rate: 2.05%

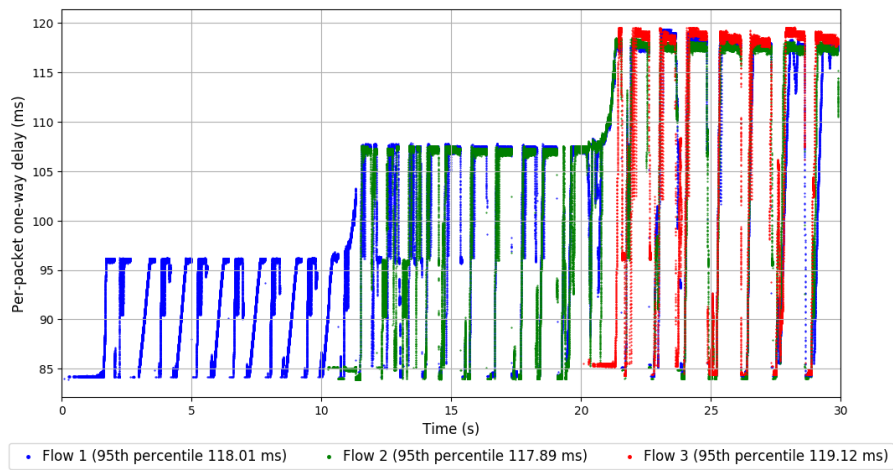
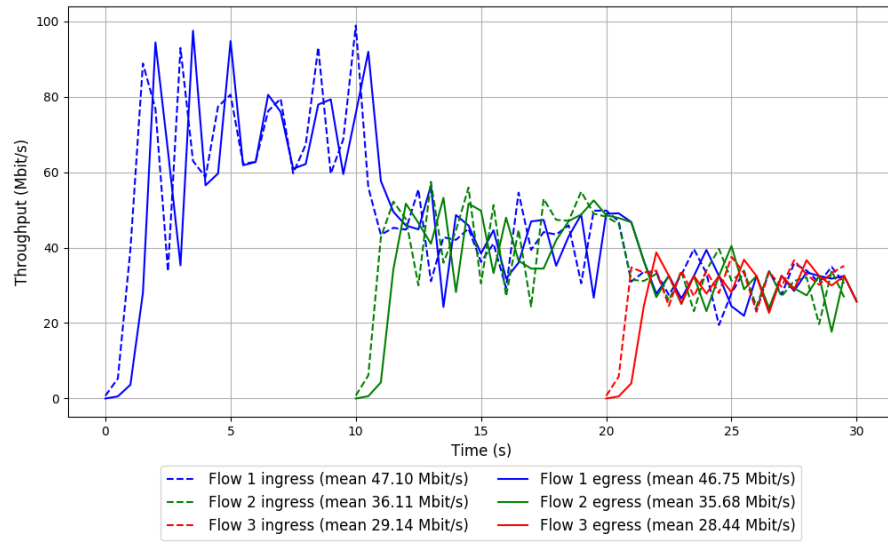
-- Flow 3:

Average throughput: 28.44 Mbit/s

95th percentile per-packet one-way delay: 119.118 ms

Loss rate: 4.11%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-06-06 04:31:46

End at: 2018-06-06 04:32:16

Local clock offset: -1.745 ms

Remote clock offset: 13.45 ms

Below is generated by plot.py at 2018-06-06 06:12:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.65 Mbit/s

95th percentile per-packet one-way delay: 118.377 ms

Loss rate: 1.80%

-- Flow 1:

Average throughput: 46.62 Mbit/s

95th percentile per-packet one-way delay: 118.236 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 37.31 Mbit/s

95th percentile per-packet one-way delay: 118.294 ms

Loss rate: 2.28%

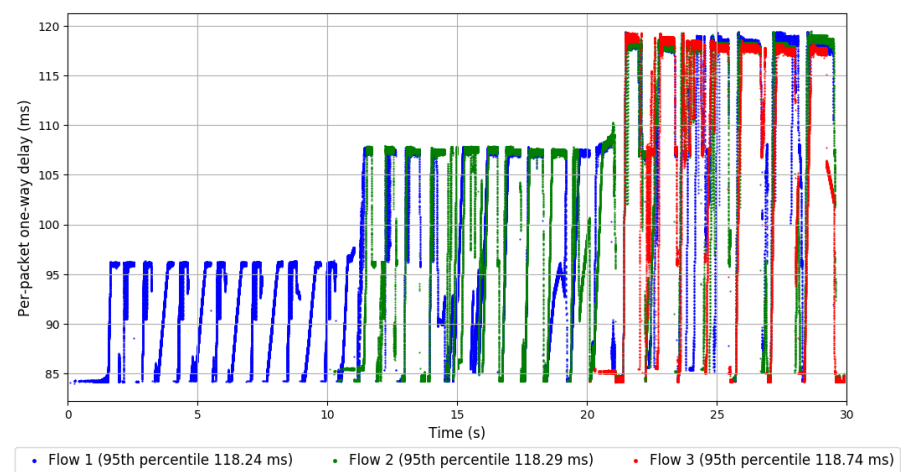
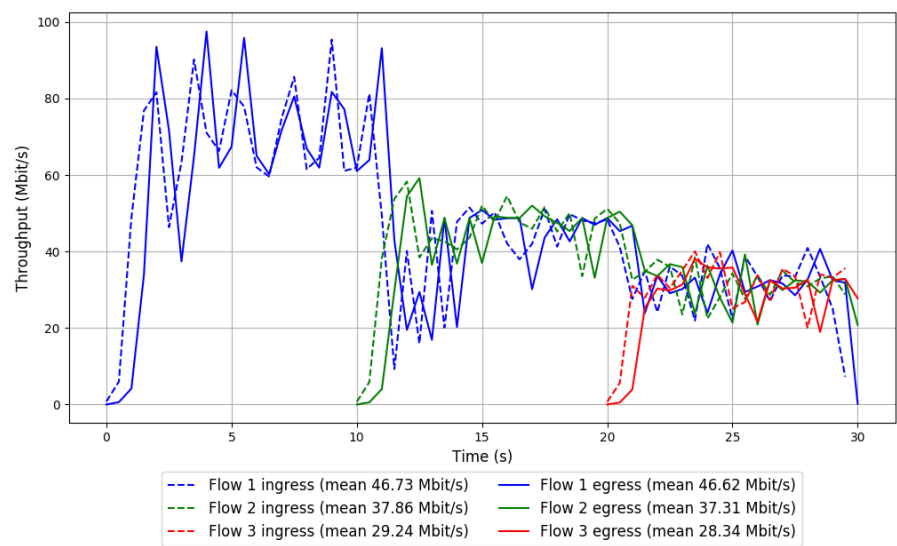
-- Flow 3:

Average throughput: 28.34 Mbit/s

95th percentile per-packet one-way delay: 118.740 ms

Loss rate: 4.72%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-06-06 04:51:45

End at: 2018-06-06 04:52:15

Local clock offset: -4.291 ms

Remote clock offset: 5.069 ms

Below is generated by plot.py at 2018-06-06 06:12:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.77 Mbit/s

95th percentile per-packet one-way delay: 117.175 ms

Loss rate: 1.50%

-- Flow 1:

Average throughput: 47.05 Mbit/s

95th percentile per-packet one-way delay: 117.171 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 35.38 Mbit/s

95th percentile per-packet one-way delay: 116.321 ms

Loss rate: 1.75%

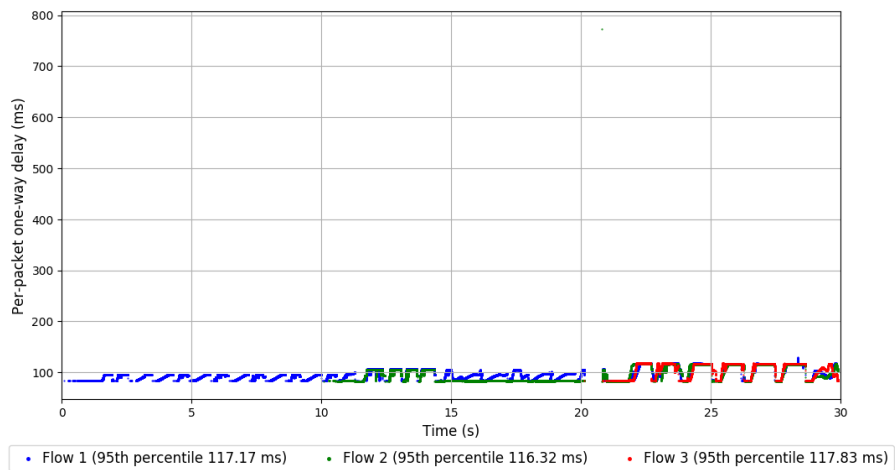
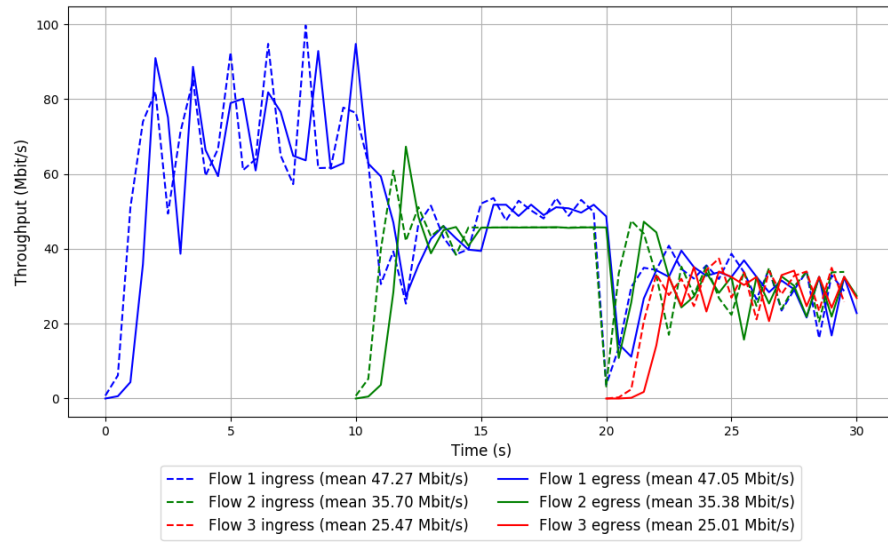
-- Flow 3:

Average throughput: 25.01 Mbit/s

95th percentile per-packet one-way delay: 117.831 ms

Loss rate: 3.48%

Run 7: Report of TCP BBR — Data Link

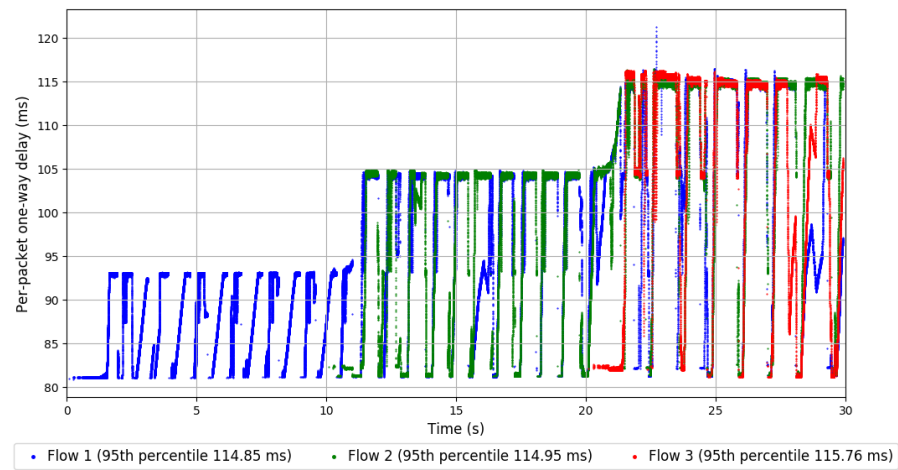
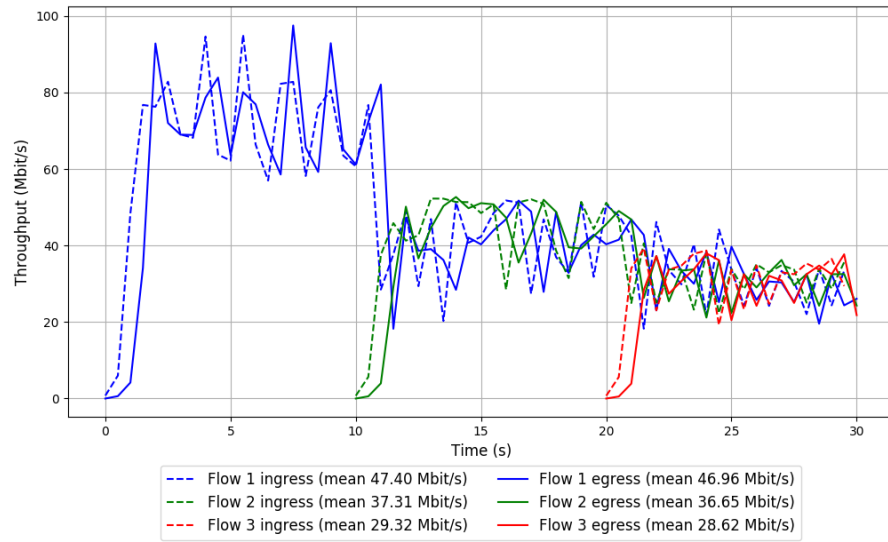


Run 8: Statistics of TCP BBR

Start at: 2018-06-06 05:12:00
End at: 2018-06-06 05:12:30
Local clock offset: -6.27 ms
Remote clock offset: 10.098 ms

Below is generated by plot.py at 2018-06-06 06:13:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 80.70 Mbit/s
95th percentile per-packet one-way delay: 115.102 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 46.96 Mbit/s
95th percentile per-packet one-way delay: 114.853 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 36.65 Mbit/s
95th percentile per-packet one-way delay: 114.955 ms
Loss rate: 2.68%
-- Flow 3:
Average throughput: 28.62 Mbit/s
95th percentile per-packet one-way delay: 115.760 ms
Loss rate: 4.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-06-06 05:32:01

End at: 2018-06-06 05:32:31

Local clock offset: -7.87 ms

Remote clock offset: 9.43 ms

Below is generated by plot.py at 2018-06-06 06:13:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.53 Mbit/s

95th percentile per-packet one-way delay: 120.178 ms

Loss rate: 1.83%

-- Flow 1:

Average throughput: 48.21 Mbit/s

95th percentile per-packet one-way delay: 119.856 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 35.00 Mbit/s

95th percentile per-packet one-way delay: 120.212 ms

Loss rate: 2.03%

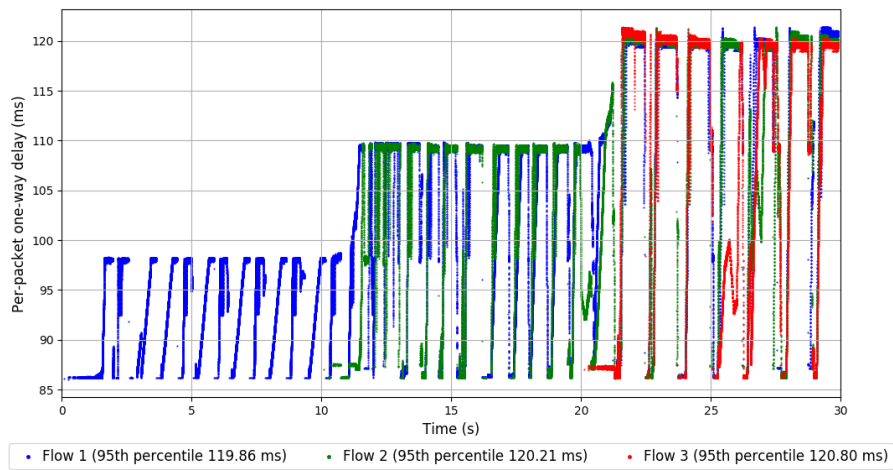
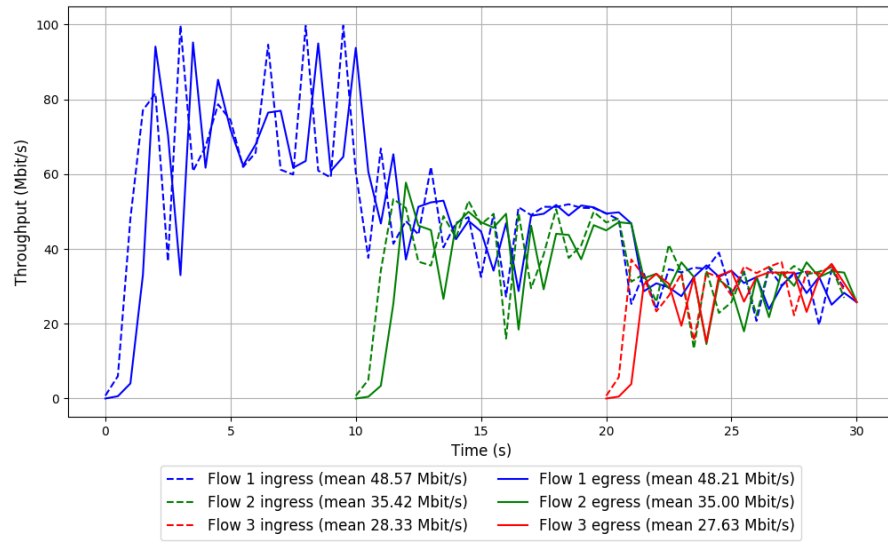
-- Flow 3:

Average throughput: 27.63 Mbit/s

95th percentile per-packet one-way delay: 120.795 ms

Loss rate: 4.14%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-06-06 05:52:03

End at: 2018-06-06 05:52:33

Local clock offset: -2.053 ms

Remote clock offset: 8.585 ms

Below is generated by plot.py at 2018-06-06 06:13:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.70 Mbit/s

95th percentile per-packet one-way delay: 116.402 ms

Loss rate: 1.99%

-- Flow 1:

Average throughput: 47.31 Mbit/s

95th percentile per-packet one-way delay: 116.034 ms

Loss rate: 1.32%

-- Flow 2:

Average throughput: 35.46 Mbit/s

95th percentile per-packet one-way delay: 116.355 ms

Loss rate: 2.28%

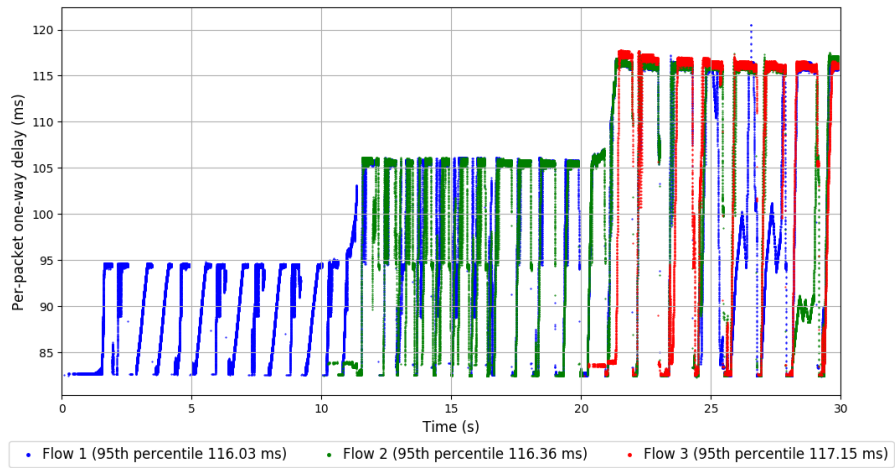
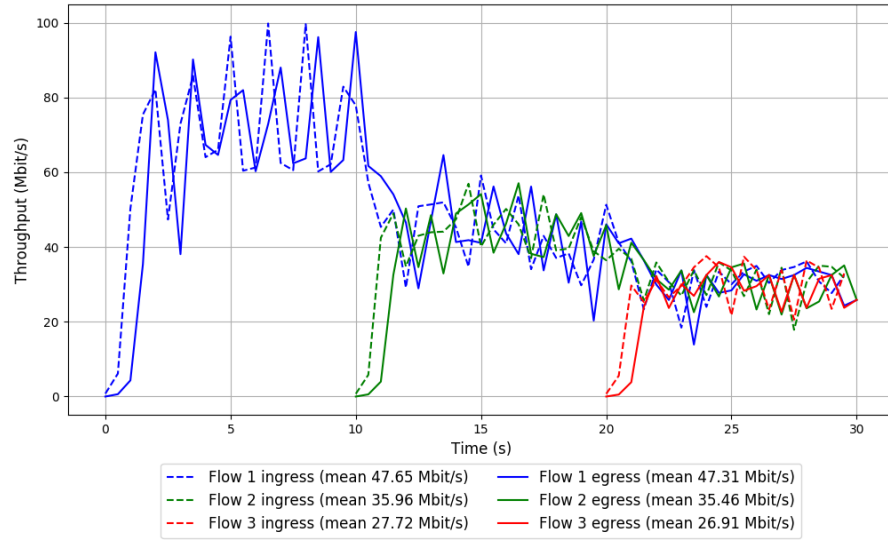
-- Flow 3:

Average throughput: 26.91 Mbit/s

95th percentile per-packet one-way delay: 117.147 ms

Loss rate: 4.72%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2018-06-06 03:04:24

End at: 2018-06-06 03:04:54

Local clock offset: -2.388 ms

Remote clock offset: 8.642 ms

Below is generated by plot.py at 2018-06-06 06:14:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.85 Mbit/s

95th percentile per-packet one-way delay: 99.601 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 49.59 Mbit/s

95th percentile per-packet one-way delay: 98.968 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 36.14 Mbit/s

95th percentile per-packet one-way delay: 100.458 ms

Loss rate: 0.75%

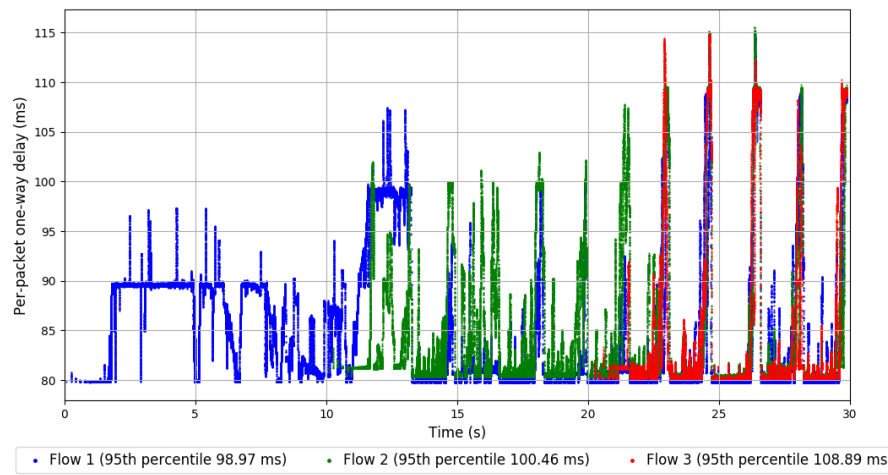
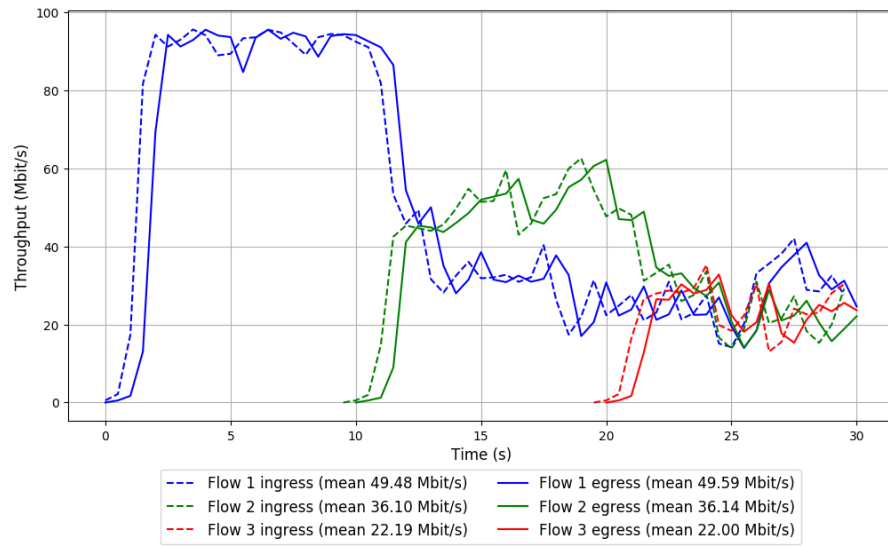
-- Flow 3:

Average throughput: 22.00 Mbit/s

95th percentile per-packet one-way delay: 108.890 ms

Loss rate: 2.55%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-06-06 03:24:21

End at: 2018-06-06 03:24:51

Local clock offset: -1.701 ms

Remote clock offset: 3.178 ms

Below is generated by plot.py at 2018-06-06 06:14:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.33 Mbit/s

95th percentile per-packet one-way delay: 107.127 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 51.88 Mbit/s

95th percentile per-packet one-way delay: 103.594 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 39.35 Mbit/s

95th percentile per-packet one-way delay: 103.243 ms

Loss rate: 0.65%

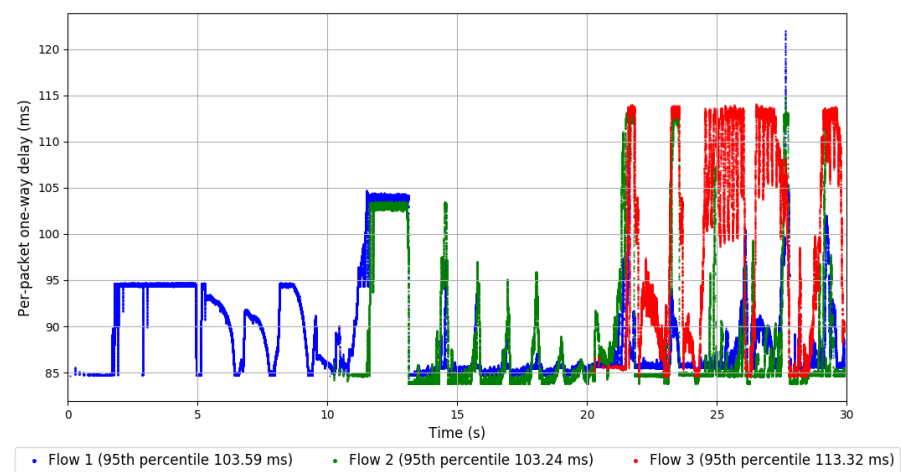
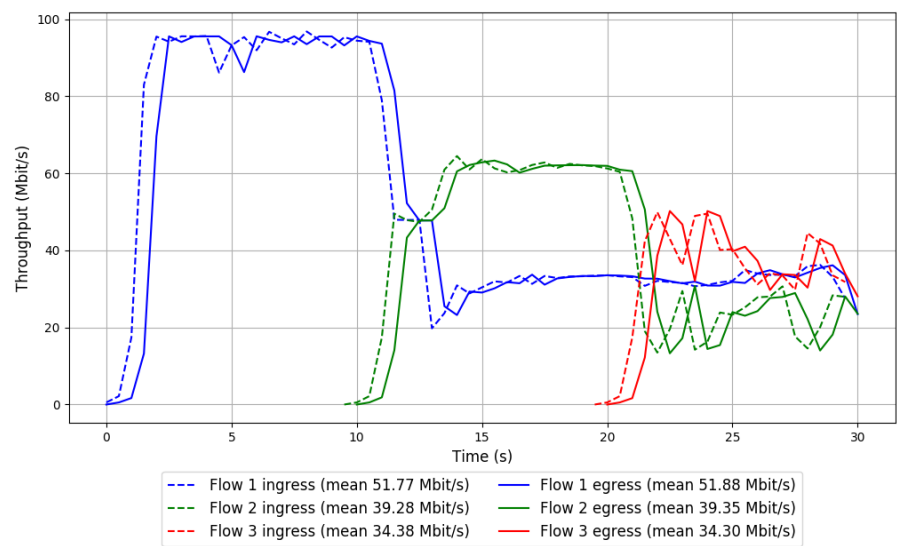
-- Flow 3:

Average throughput: 34.30 Mbit/s

95th percentile per-packet one-way delay: 113.320 ms

Loss rate: 1.90%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-06-06 03:44:20

End at: 2018-06-06 03:44:50

Local clock offset: -1.722 ms

Remote clock offset: 7.524 ms

Below is generated by plot.py at 2018-06-06 06:14:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.95 Mbit/s

95th percentile per-packet one-way delay: 96.565 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 55.68 Mbit/s

95th percentile per-packet one-way delay: 92.246 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 33.48 Mbit/s

95th percentile per-packet one-way delay: 97.331 ms

Loss rate: 0.90%

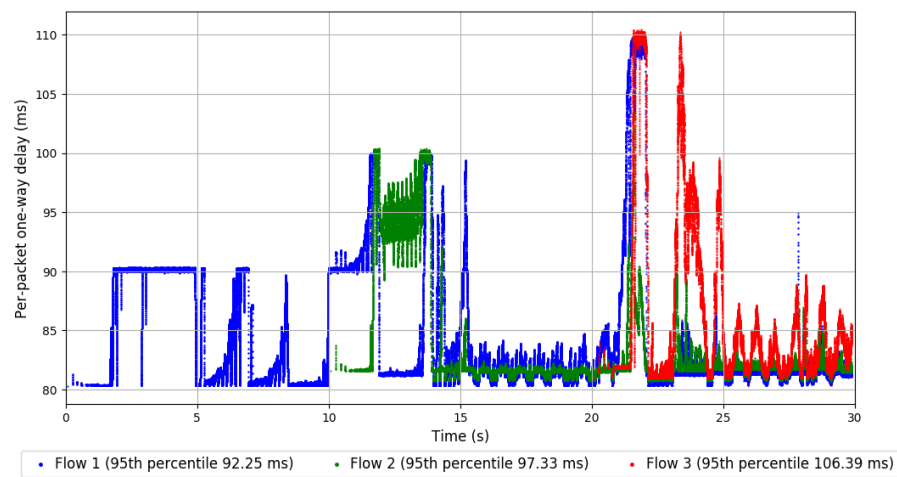
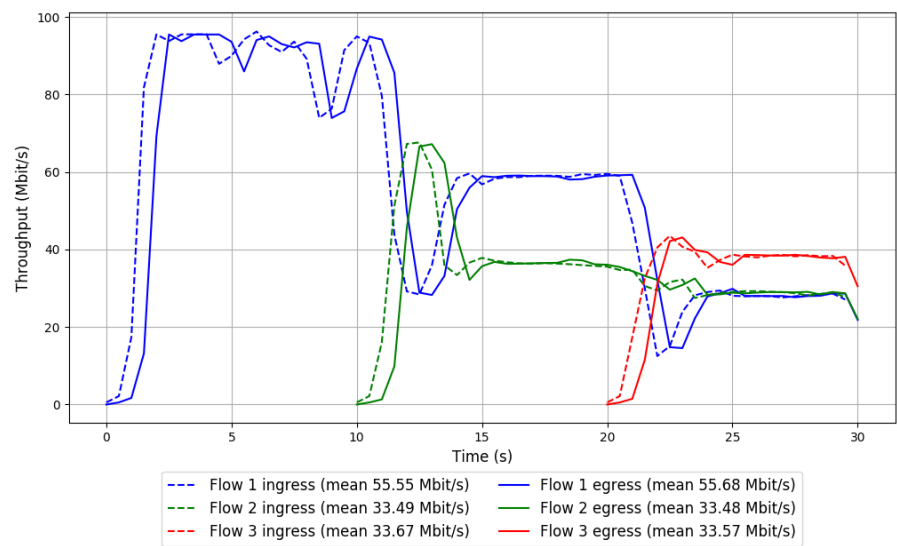
-- Flow 3:

Average throughput: 33.57 Mbit/s

95th percentile per-packet one-way delay: 106.393 ms

Loss rate: 1.96%

Run 3: Report of Copa — Data Link

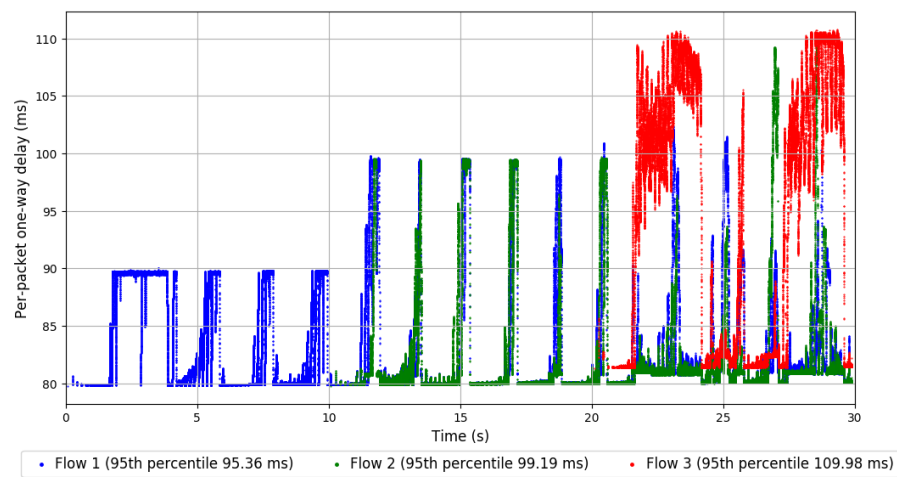
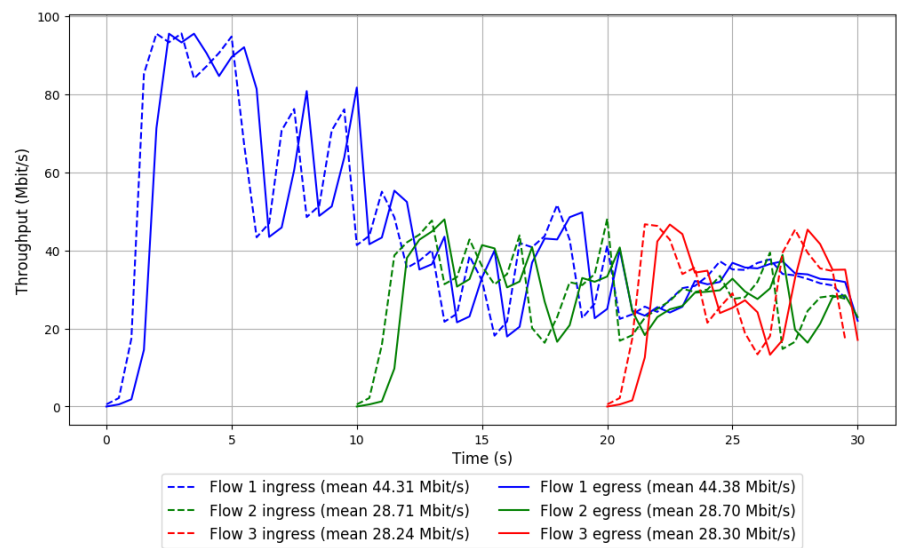


Run 4: Statistics of Copa

Start at: 2018-06-06 04:04:20
End at: 2018-06-06 04:04:50
Local clock offset: -1.615 ms
Remote clock offset: 10.994 ms

Below is generated by plot.py at 2018-06-06 06:14:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 72.75 Mbit/s
95th percentile per-packet one-way delay: 103.273 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 44.38 Mbit/s
95th percentile per-packet one-way delay: 95.361 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 28.70 Mbit/s
95th percentile per-packet one-way delay: 99.189 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 28.30 Mbit/s
95th percentile per-packet one-way delay: 109.982 ms
Loss rate: 1.46%

Run 4: Report of Copa — Data Link

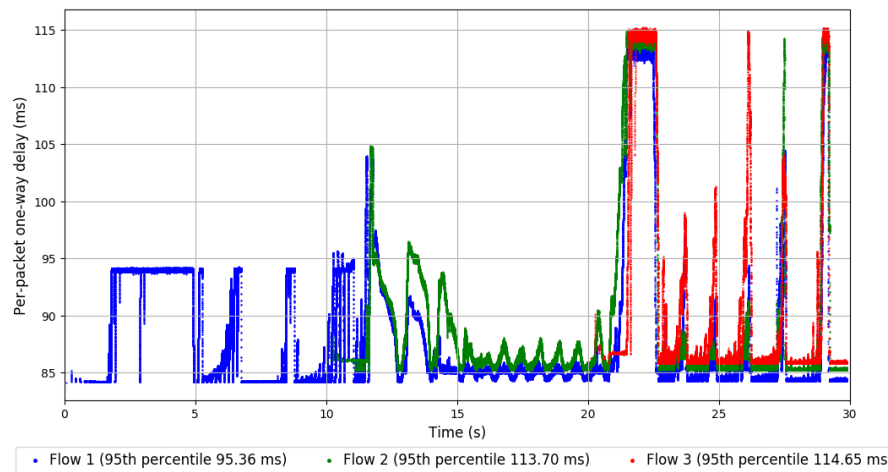
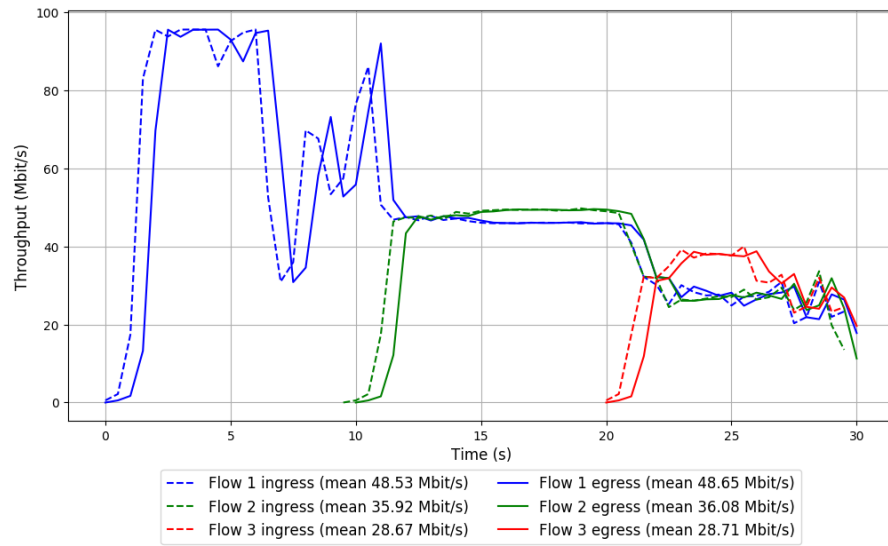


Run 5: Statistics of Copa

Start at: 2018-06-06 04:24:18
End at: 2018-06-06 04:24:48
Local clock offset: -1.014 ms
Remote clock offset: 12.335 ms

Below is generated by plot.py at 2018-06-06 06:14:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 82.07 Mbit/s
95th percentile per-packet one-way delay: 110.877 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 48.65 Mbit/s
95th percentile per-packet one-way delay: 95.364 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 36.08 Mbit/s
95th percentile per-packet one-way delay: 113.696 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 28.71 Mbit/s
95th percentile per-packet one-way delay: 114.647 ms
Loss rate: 1.52%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-06-06 04:44:17

End at: 2018-06-06 04:44:47

Local clock offset: -2.328 ms

Remote clock offset: 6.714 ms

Below is generated by plot.py at 2018-06-06 06:14:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.53 Mbit/s

95th percentile per-packet one-way delay: 104.248 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 50.31 Mbit/s

95th percentile per-packet one-way delay: 94.922 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 36.67 Mbit/s

95th percentile per-packet one-way delay: 103.866 ms

Loss rate: 0.81%

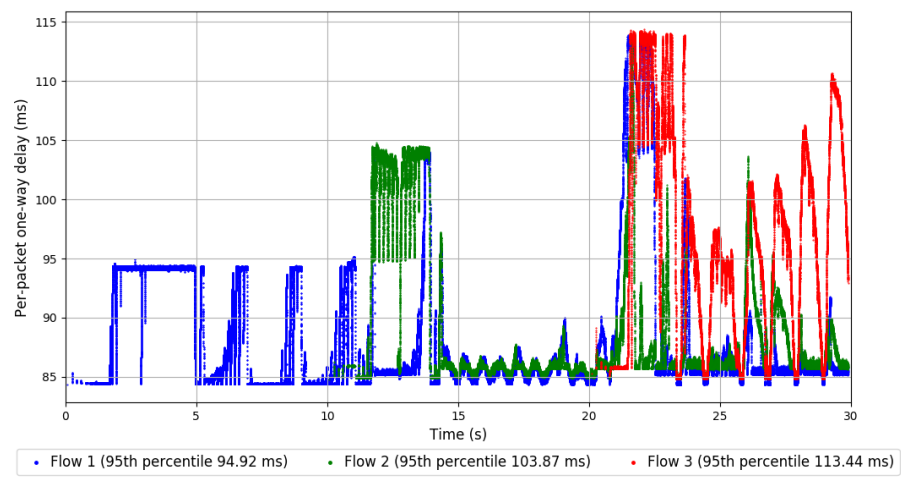
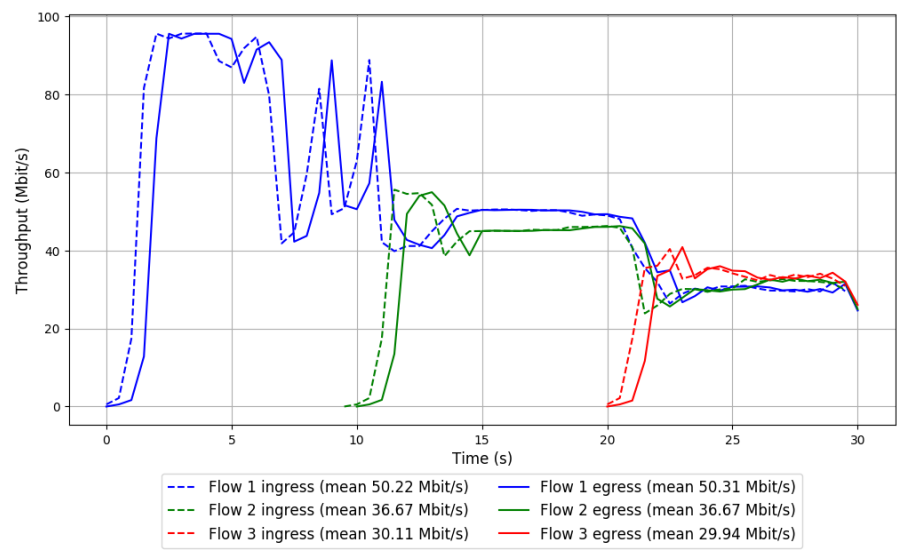
-- Flow 3:

Average throughput: 29.94 Mbit/s

95th percentile per-packet one-way delay: 113.440 ms

Loss rate: 2.22%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-06-06 05:04:16

End at: 2018-06-06 05:04:46

Local clock offset: -4.052 ms

Remote clock offset: 3.492 ms

Below is generated by plot.py at 2018-06-06 06:15:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.57 Mbit/s

95th percentile per-packet one-way delay: 105.836 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 50.26 Mbit/s

95th percentile per-packet one-way delay: 103.634 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 39.50 Mbit/s

95th percentile per-packet one-way delay: 112.675 ms

Loss rate: 0.74%

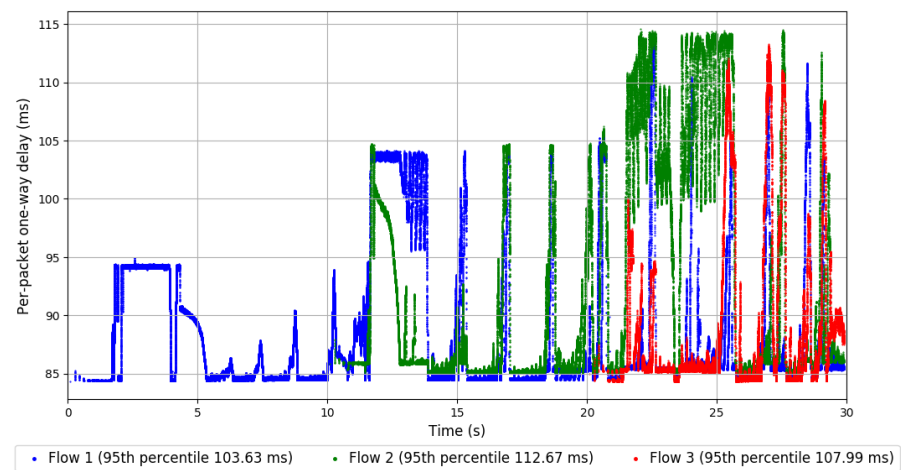
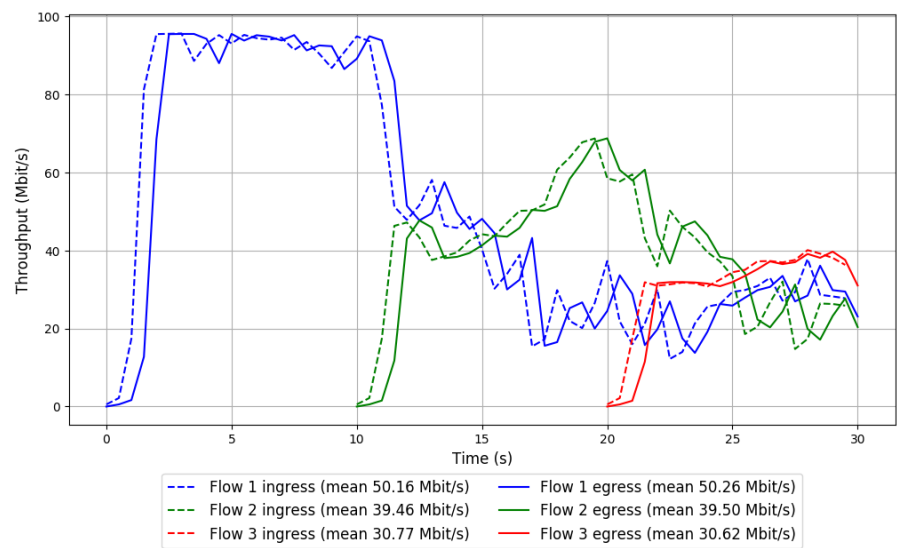
-- Flow 3:

Average throughput: 30.62 Mbit/s

95th percentile per-packet one-way delay: 107.992 ms

Loss rate: 2.16%

Run 7: Report of Copa — Data Link

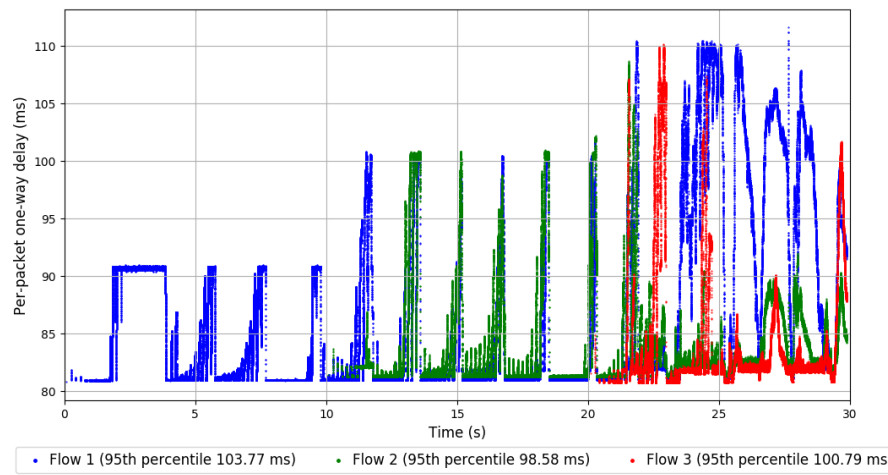
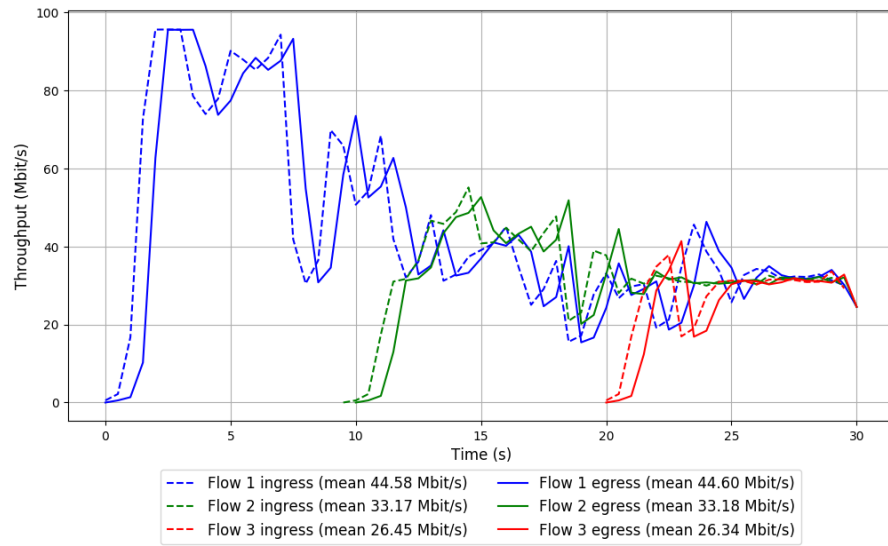


Run 8: Statistics of Copa

Start at: 2018-06-06 05:24:33
End at: 2018-06-06 05:25:03
Local clock offset: -8.821 ms
Remote clock offset: 12.015 ms

Below is generated by plot.py at 2018-06-06 06:15:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 75.30 Mbit/s
95th percentile per-packet one-way delay: 101.234 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 44.60 Mbit/s
95th percentile per-packet one-way delay: 103.768 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 33.18 Mbit/s
95th percentile per-packet one-way delay: 98.578 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 26.34 Mbit/s
95th percentile per-packet one-way delay: 100.793 ms
Loss rate: 2.08%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-06-06 05:44:36

End at: 2018-06-06 05:45:06

Local clock offset: -3.319 ms

Remote clock offset: 8.101 ms

Below is generated by plot.py at 2018-06-06 06:16:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.41 Mbit/s

95th percentile per-packet one-way delay: 114.345 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 50.33 Mbit/s

95th percentile per-packet one-way delay: 113.597 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 33.97 Mbit/s

95th percentile per-packet one-way delay: 114.377 ms

Loss rate: 0.94%

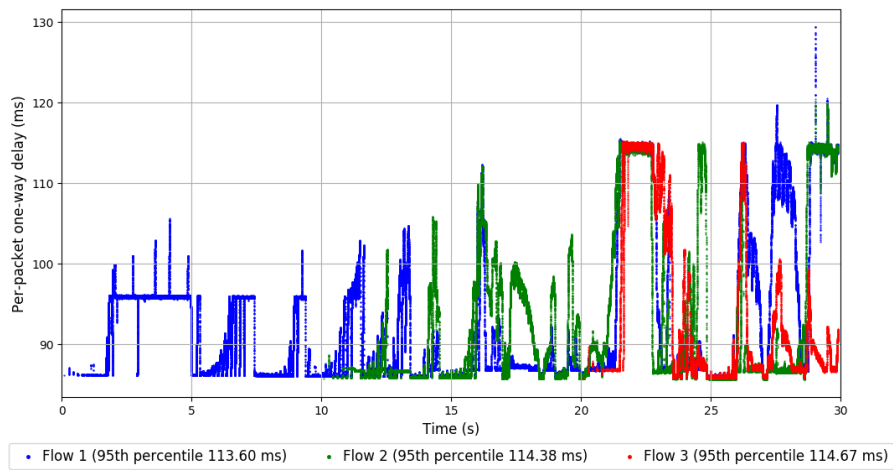
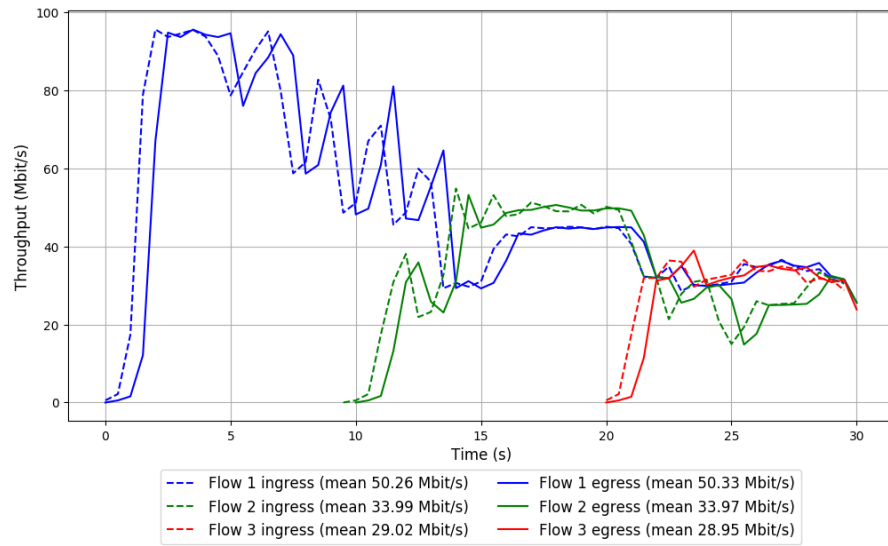
-- Flow 3:

Average throughput: 28.95 Mbit/s

95th percentile per-packet one-way delay: 114.671 ms

Loss rate: 1.91%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-06-06 06:04:35

End at: 2018-06-06 06:05:05

Local clock offset: -1.067 ms

Remote clock offset: 2.915 ms

Below is generated by plot.py at 2018-06-06 06:16:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.76 Mbit/s

95th percentile per-packet one-way delay: 113.198 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 46.51 Mbit/s

95th percentile per-packet one-way delay: 104.933 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 36.77 Mbit/s

95th percentile per-packet one-way delay: 114.803 ms

Loss rate: 0.95%

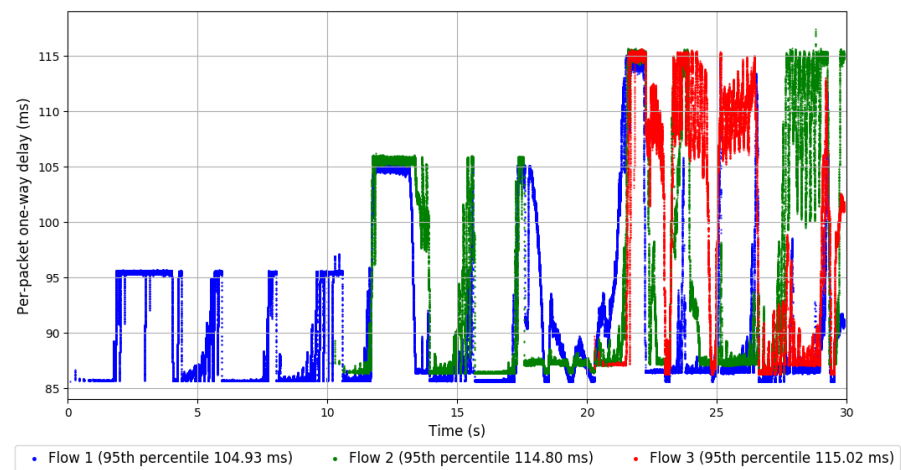
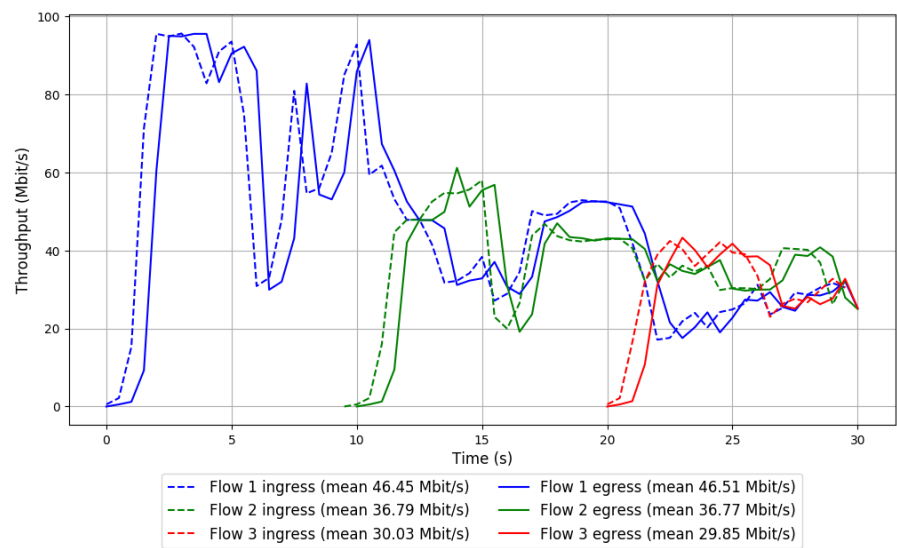
-- Flow 3:

Average throughput: 29.85 Mbit/s

95th percentile per-packet one-way delay: 115.017 ms

Loss rate: 2.27%

Run 10: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-06-06 02:50:37

End at: 2018-06-06 02:51:07

Local clock offset: -2.527 ms

Remote clock offset: 9.796 ms

Below is generated by plot.py at 2018-06-06 06:16:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.15 Mbit/s

95th percentile per-packet one-way delay: 97.814 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 46.25 Mbit/s

95th percentile per-packet one-way delay: 97.729 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 34.70 Mbit/s

95th percentile per-packet one-way delay: 101.737 ms

Loss rate: 0.70%

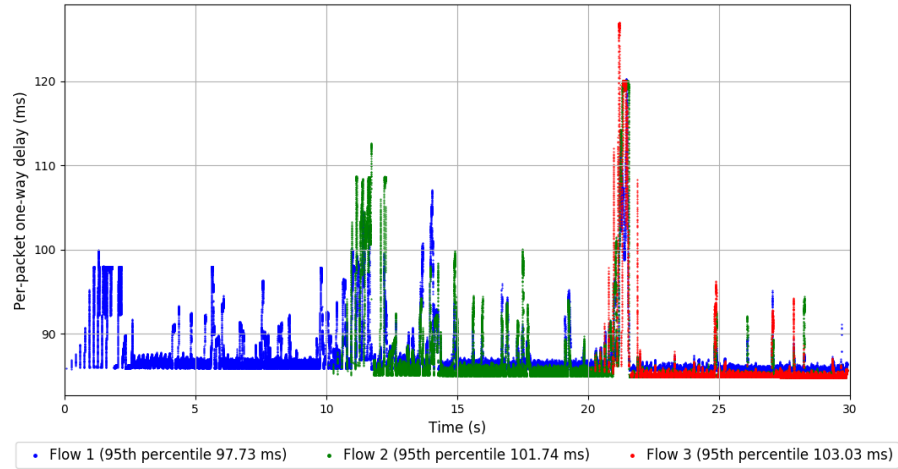
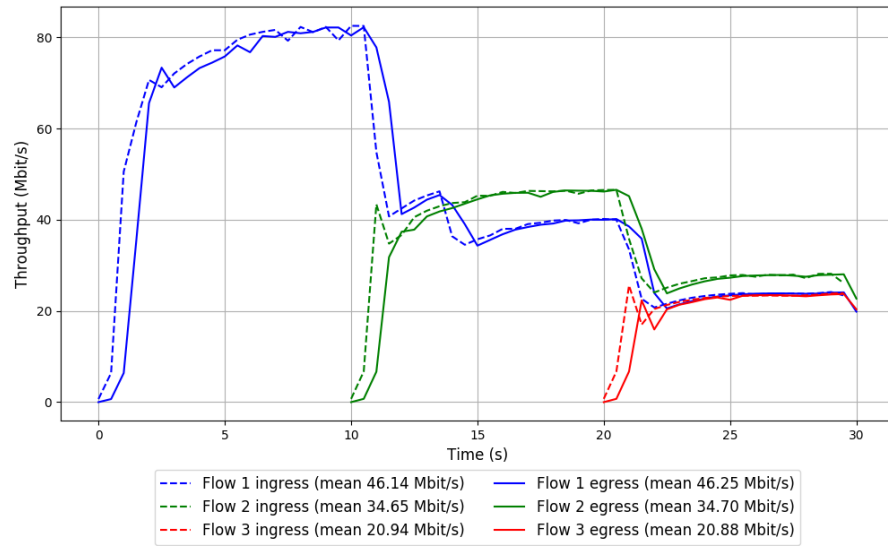
-- Flow 3:

Average throughput: 20.88 Mbit/s

95th percentile per-packet one-way delay: 103.031 ms

Loss rate: 1.96%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-06-06 03:10:37

End at: 2018-06-06 03:11:07

Local clock offset: -1.777 ms

Remote clock offset: 8.142 ms

Below is generated by plot.py at 2018-06-06 06:16:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.39 Mbit/s

95th percentile per-packet one-way delay: 91.954 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 37.07 Mbit/s

95th percentile per-packet one-way delay: 91.878 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 27.68 Mbit/s

95th percentile per-packet one-way delay: 96.476 ms

Loss rate: 0.67%

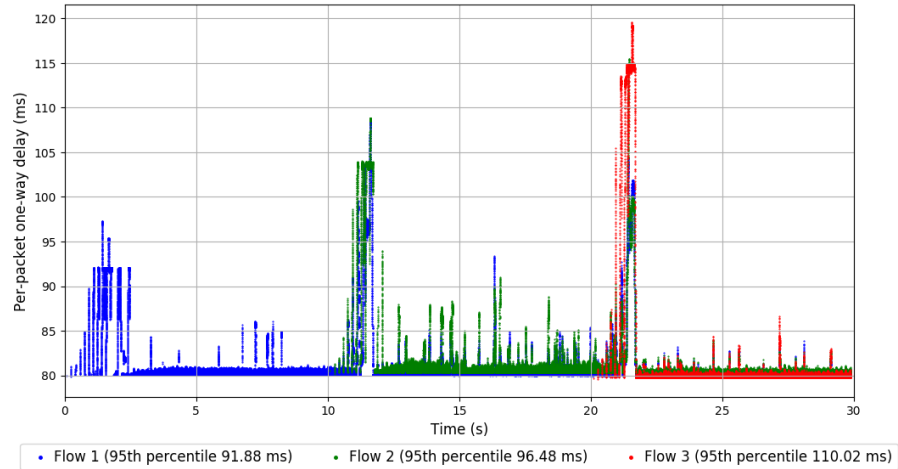
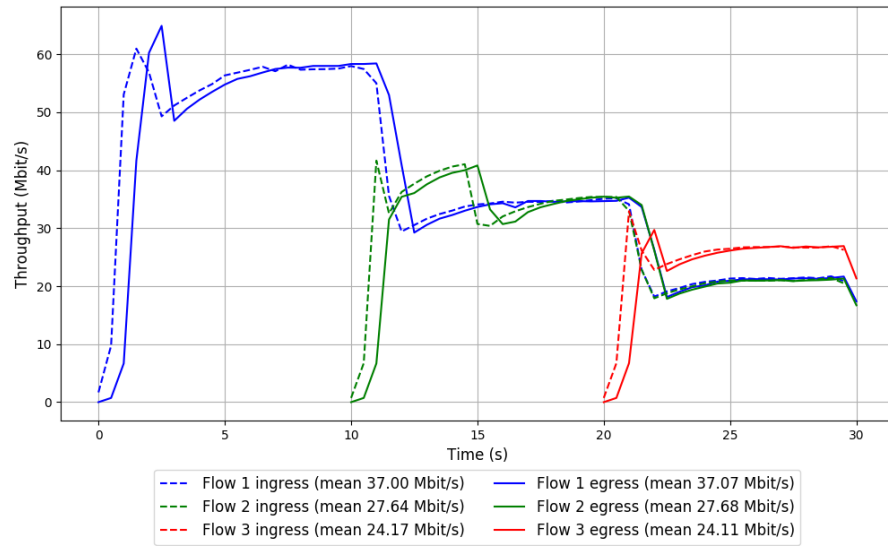
-- Flow 3:

Average throughput: 24.11 Mbit/s

95th percentile per-packet one-way delay: 110.020 ms

Loss rate: 1.91%

Run 2: Report of TCP Cubic — Data Link

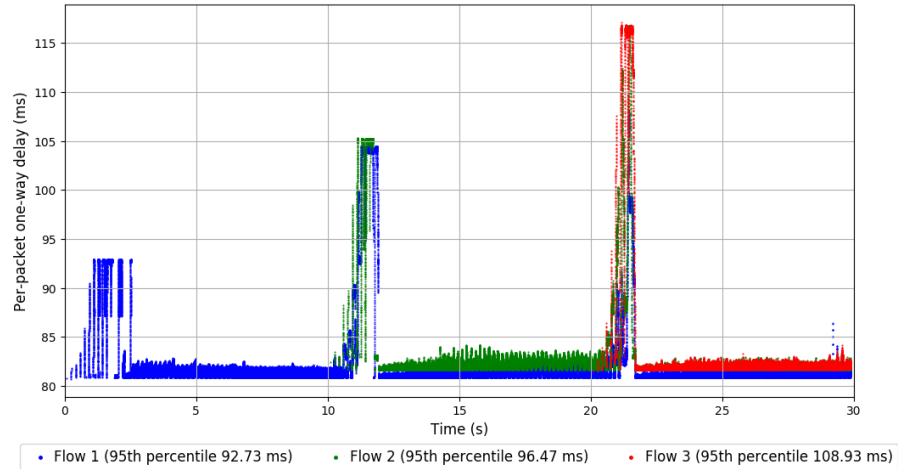
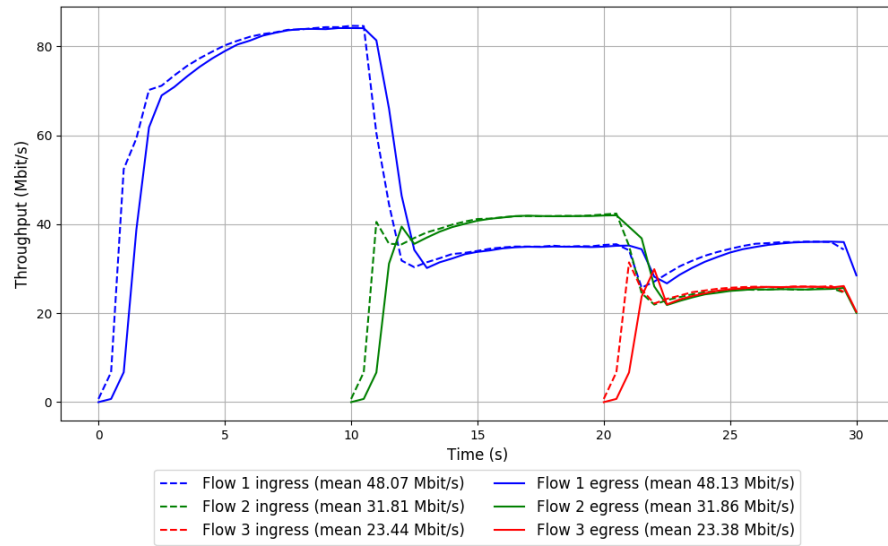


Run 3: Statistics of TCP Cubic

Start at: 2018-06-06 03:30:34
End at: 2018-06-06 03:31:04
Local clock offset: -0.846 ms
Remote clock offset: 7.59 ms

Below is generated by plot.py at 2018-06-06 06:16:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 76.98 Mbit/s
95th percentile per-packet one-way delay: 92.790 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 48.13 Mbit/s
95th percentile per-packet one-way delay: 92.731 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 31.86 Mbit/s
95th percentile per-packet one-way delay: 96.473 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 23.38 Mbit/s
95th percentile per-packet one-way delay: 108.926 ms
Loss rate: 1.91%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-06-06 03:50:34

End at: 2018-06-06 03:51:04

Local clock offset: -1.711 ms

Remote clock offset: 3.98 ms

Below is generated by plot.py at 2018-06-06 06:16:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.88 Mbit/s

95th percentile per-packet one-way delay: 96.908 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 38.20 Mbit/s

95th percentile per-packet one-way delay: 96.831 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 32.97 Mbit/s

95th percentile per-packet one-way delay: 103.259 ms

Loss rate: 0.70%

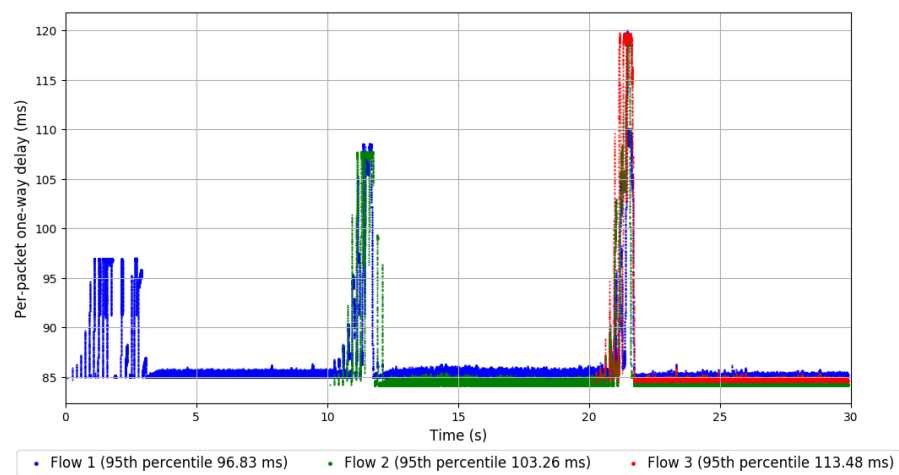
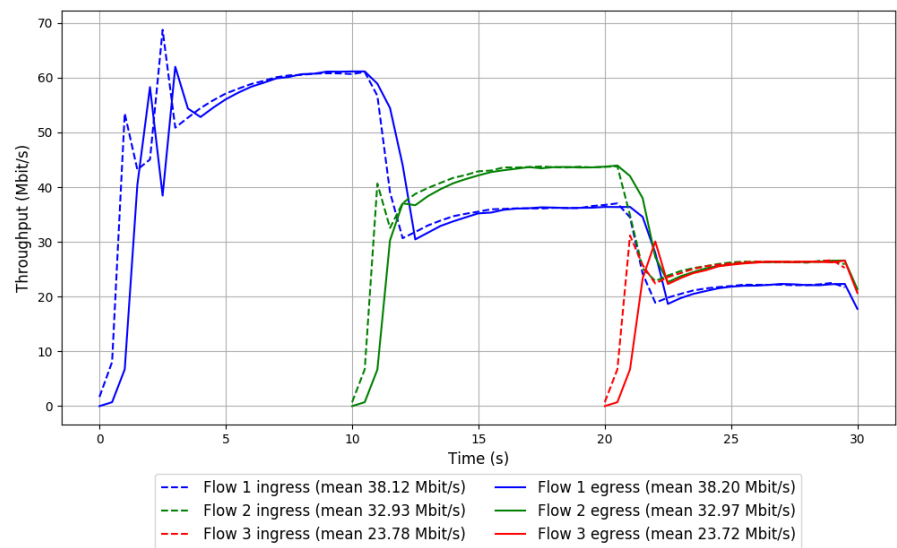
-- Flow 3:

Average throughput: 23.72 Mbit/s

95th percentile per-packet one-way delay: 113.483 ms

Loss rate: 1.90%

Run 4: Report of TCP Cubic — Data Link

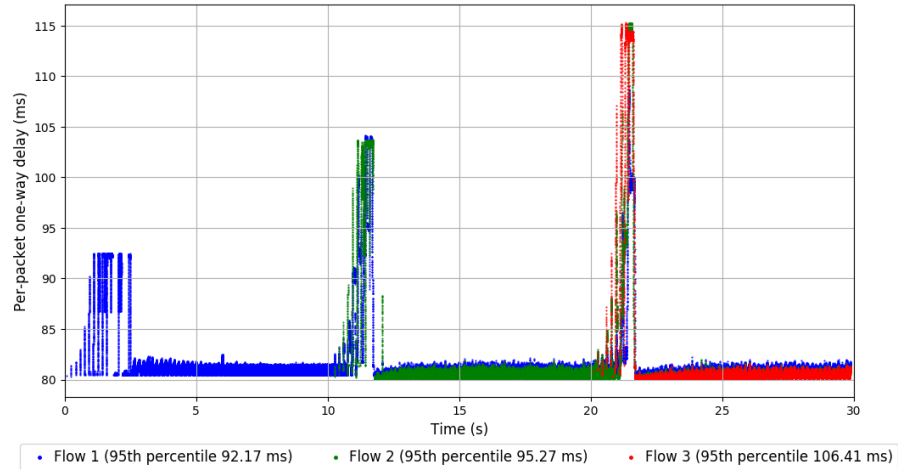
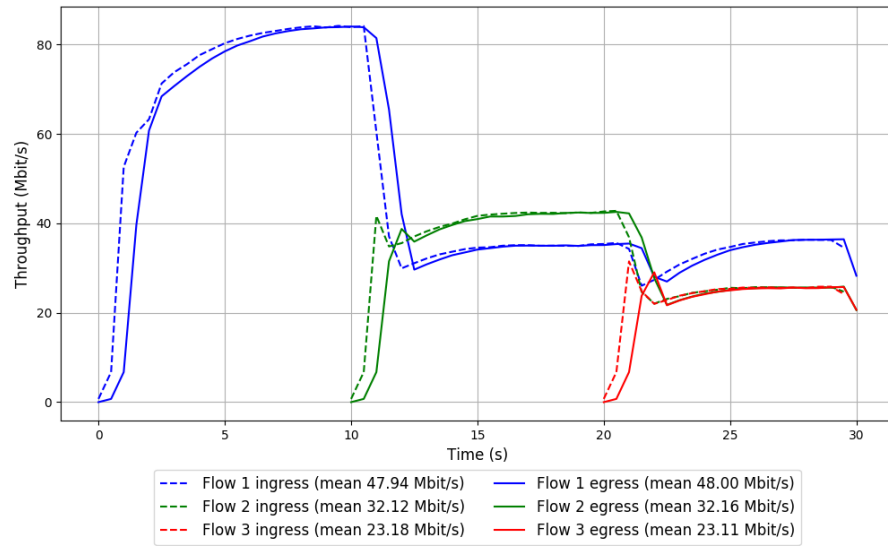


Run 5: Statistics of TCP Cubic

Start at: 2018-06-06 04:10:32
End at: 2018-06-06 04:11:02
Local clock offset: -1.732 ms
Remote clock offset: 13.812 ms

Below is generated by plot.py at 2018-06-06 06:16:29
Datalink statistics
-- Total of 3 flows:
Average throughput: 76.95 Mbit/s
95th percentile per-packet one-way delay: 92.293 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 48.00 Mbit/s
95th percentile per-packet one-way delay: 92.168 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 32.16 Mbit/s
95th percentile per-packet one-way delay: 95.272 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 23.11 Mbit/s
95th percentile per-packet one-way delay: 106.412 ms
Loss rate: 1.98%

Run 5: Report of TCP Cubic — Data Link

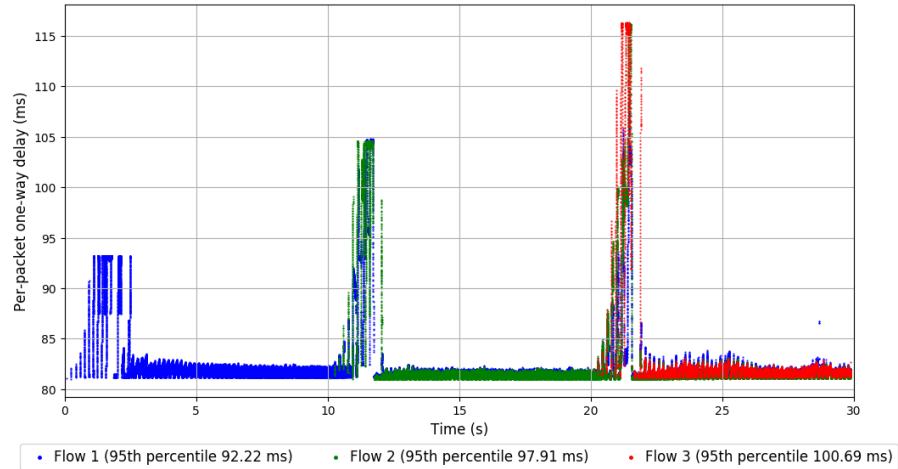
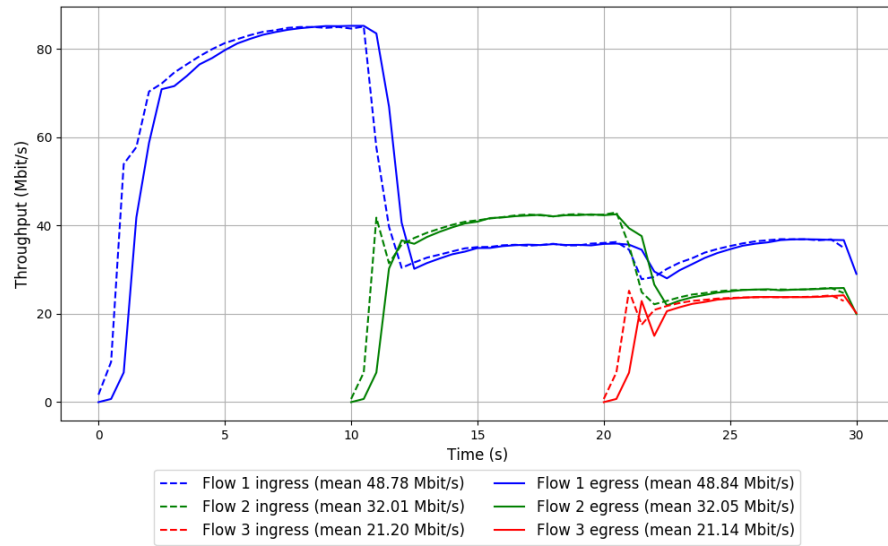


Run 6: Statistics of TCP Cubic

Start at: 2018-06-06 04:30:31
End at: 2018-06-06 04:31:01
Local clock offset: -0.982 ms
Remote clock offset: 17.704 ms

Below is generated by plot.py at 2018-06-06 06:16:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.06 Mbit/s
95th percentile per-packet one-way delay: 93.014 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 48.84 Mbit/s
95th percentile per-packet one-way delay: 92.223 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 32.05 Mbit/s
95th percentile per-packet one-way delay: 97.912 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 21.14 Mbit/s
95th percentile per-packet one-way delay: 100.695 ms
Loss rate: 1.96%

Run 6: Report of TCP Cubic — Data Link

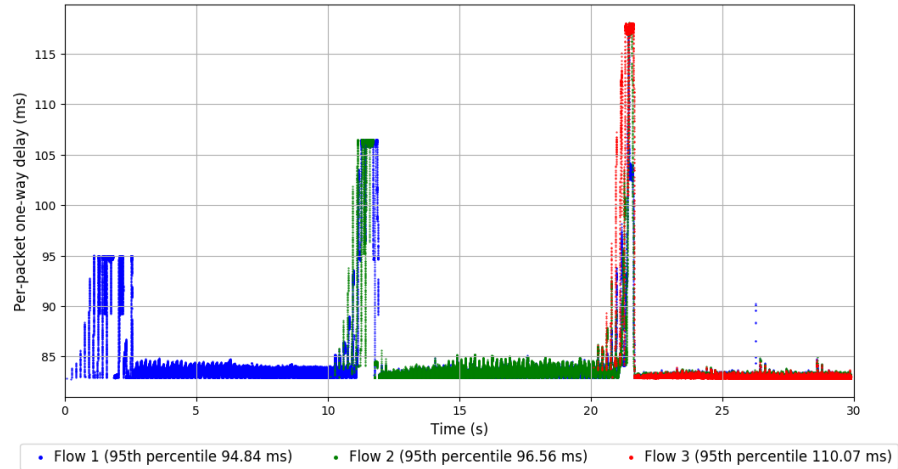
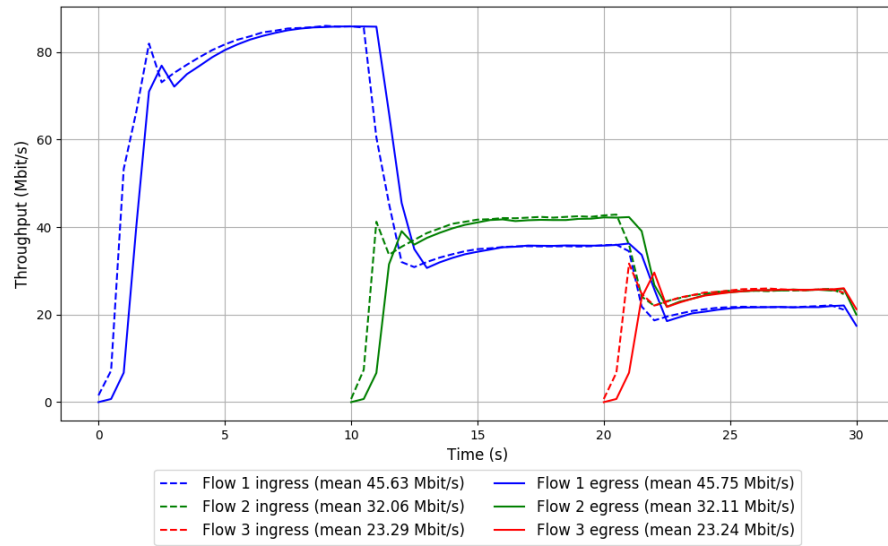


Run 7: Statistics of TCP Cubic

Start at: 2018-06-06 04:50:30
End at: 2018-06-06 04:51:00
Local clock offset: -4.276 ms
Remote clock offset: 4.919 ms

Below is generated by plot.py at 2018-06-06 06:16:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 74.71 Mbit/s
95th percentile per-packet one-way delay: 94.871 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 45.75 Mbit/s
95th percentile per-packet one-way delay: 94.840 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 32.11 Mbit/s
95th percentile per-packet one-way delay: 96.557 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 23.24 Mbit/s
95th percentile per-packet one-way delay: 110.074 ms
Loss rate: 1.87%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-06-06 05:10:45

End at: 2018-06-06 05:11:15

Local clock offset: -5.261 ms

Remote clock offset: 5.824 ms

Below is generated by plot.py at 2018-06-06 06:16:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.76 Mbit/s

95th percentile per-packet one-way delay: 95.539 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 51.73 Mbit/s

95th percentile per-packet one-way delay: 95.462 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 32.03 Mbit/s

95th percentile per-packet one-way delay: 97.375 ms

Loss rate: 0.70%

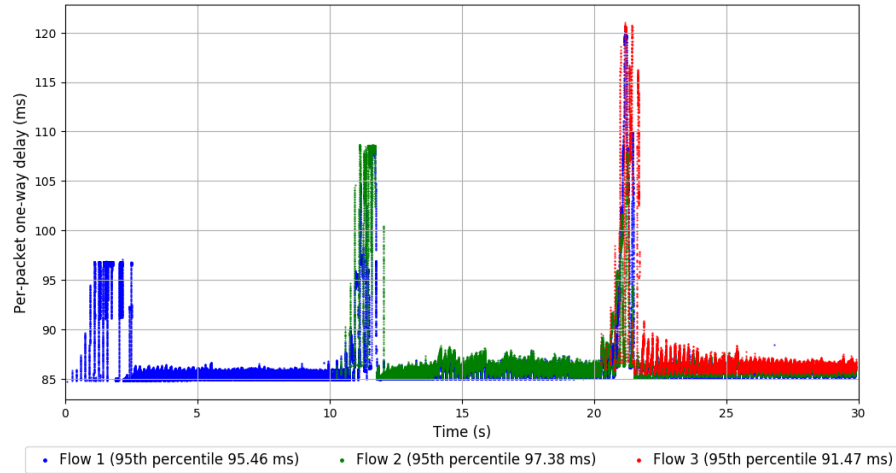
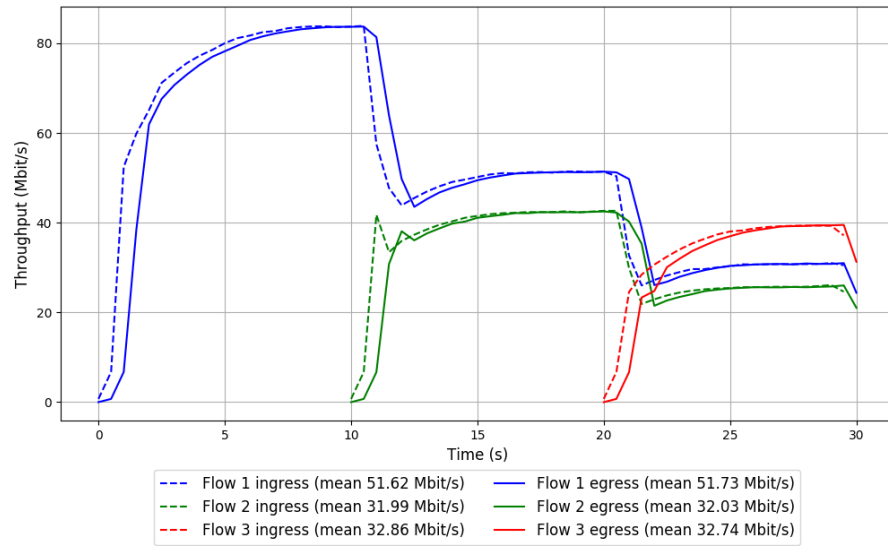
-- Flow 3:

Average throughput: 32.74 Mbit/s

95th percentile per-packet one-way delay: 91.470 ms

Loss rate: 2.02%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-06-06 05:30:46

End at: 2018-06-06 05:31:16

Local clock offset: -8.549 ms

Remote clock offset: 9.285 ms

Below is generated by plot.py at 2018-06-06 06:16:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.31 Mbit/s

95th percentile per-packet one-way delay: 97.540 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 48.53 Mbit/s

95th percentile per-packet one-way delay: 97.464 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 31.80 Mbit/s

95th percentile per-packet one-way delay: 100.623 ms

Loss rate: 0.72%

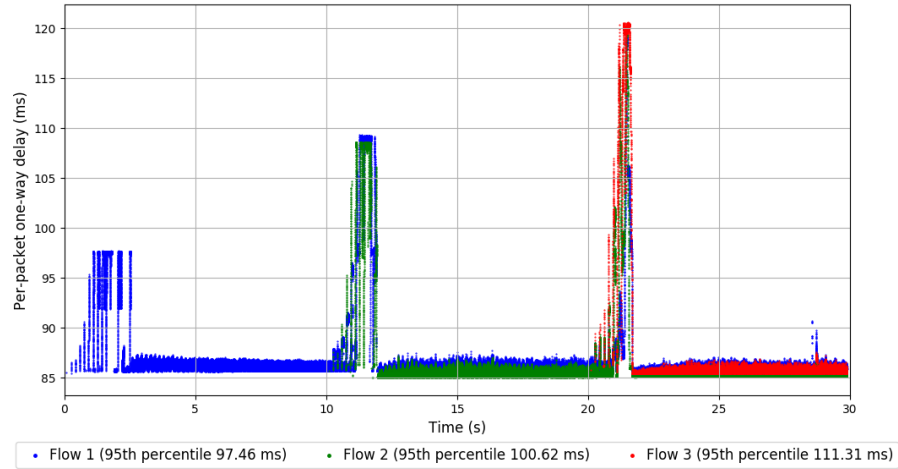
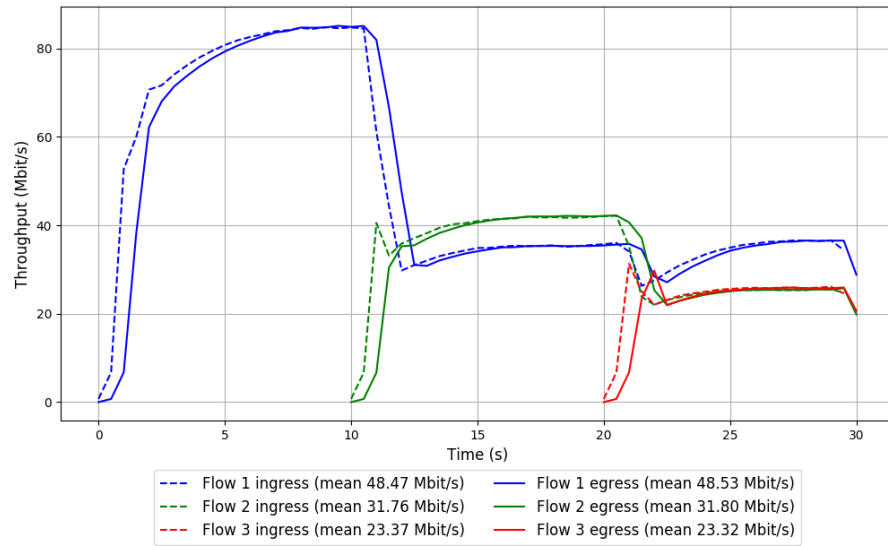
-- Flow 3:

Average throughput: 23.32 Mbit/s

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

Loss rate: 1.90%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-06-06 05:50:49

End at: 2018-06-06 05:51:19

Local clock offset: -2.292 ms

Remote clock offset: 5.378 ms

Below is generated by plot.py at 2018-06-06 06:16:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.68 Mbit/s

95th percentile per-packet one-way delay: 97.927 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 43.14 Mbit/s

95th percentile per-packet one-way delay: 97.934 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 32.60 Mbit/s

95th percentile per-packet one-way delay: 98.367 ms

Loss rate: 0.70%

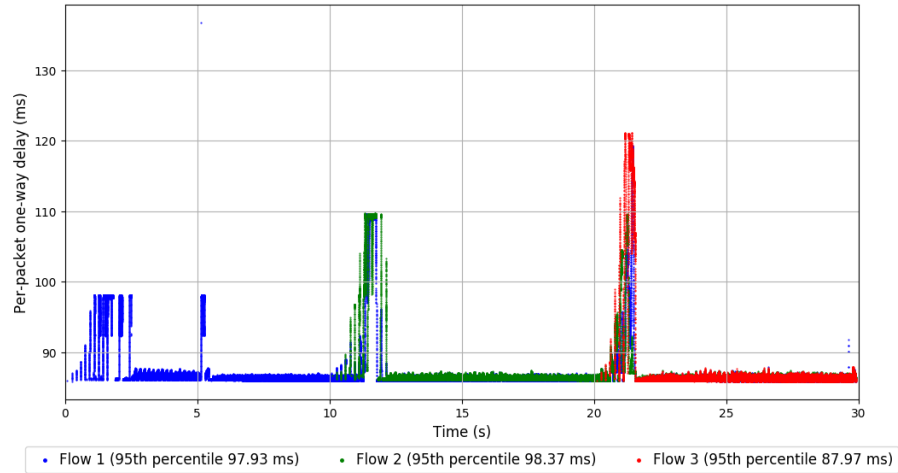
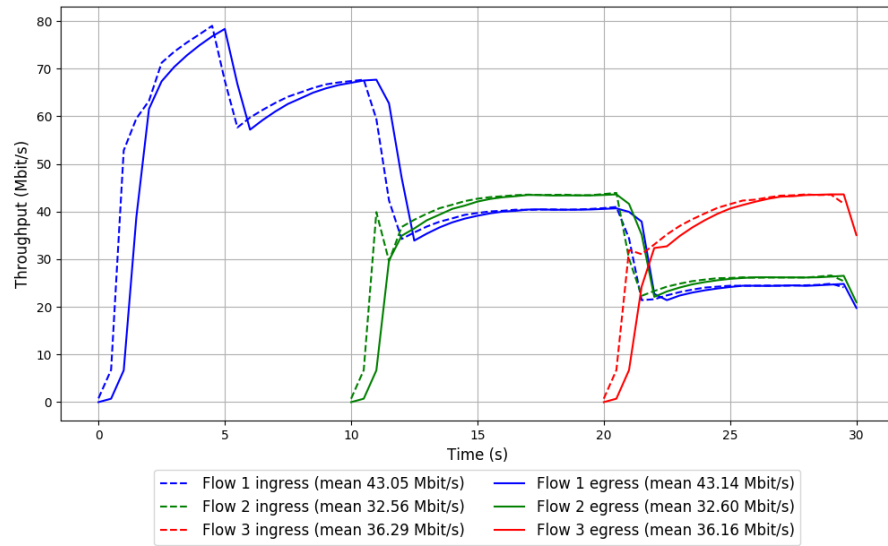
-- Flow 3:

Average throughput: 36.16 Mbit/s

95th percentile per-packet one-way delay: 87.971 ms

Loss rate: 2.00%

Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-06-06 02:59:17

End at: 2018-06-06 02:59:47

Local clock offset: -2.582 ms

Remote clock offset: 0.703 ms

Below is generated by plot.py at 2018-06-06 06:17:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.09 Mbit/s

95th percentile per-packet one-way delay: 117.128 ms

Loss rate: 2.25%

-- Flow 1:

Average throughput: 57.76 Mbit/s

95th percentile per-packet one-way delay: 116.064 ms

Loss rate: 1.45%

-- Flow 2:

Average throughput: 38.70 Mbit/s

95th percentile per-packet one-way delay: 117.176 ms

Loss rate: 2.91%

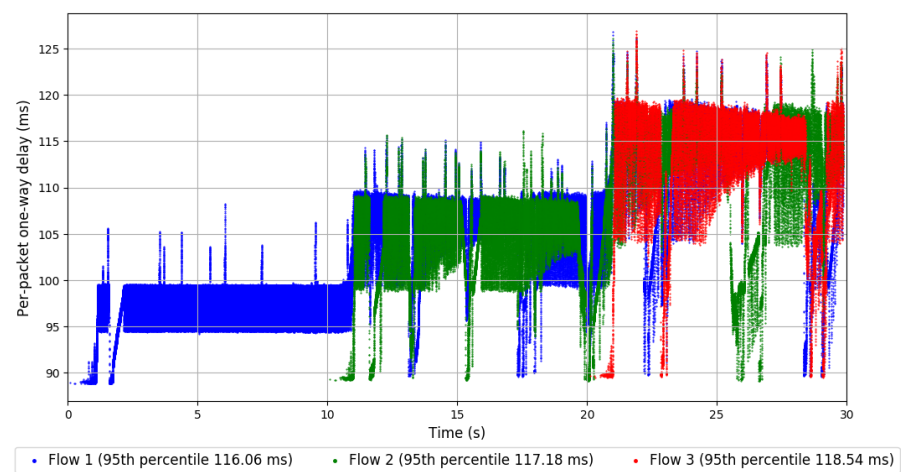
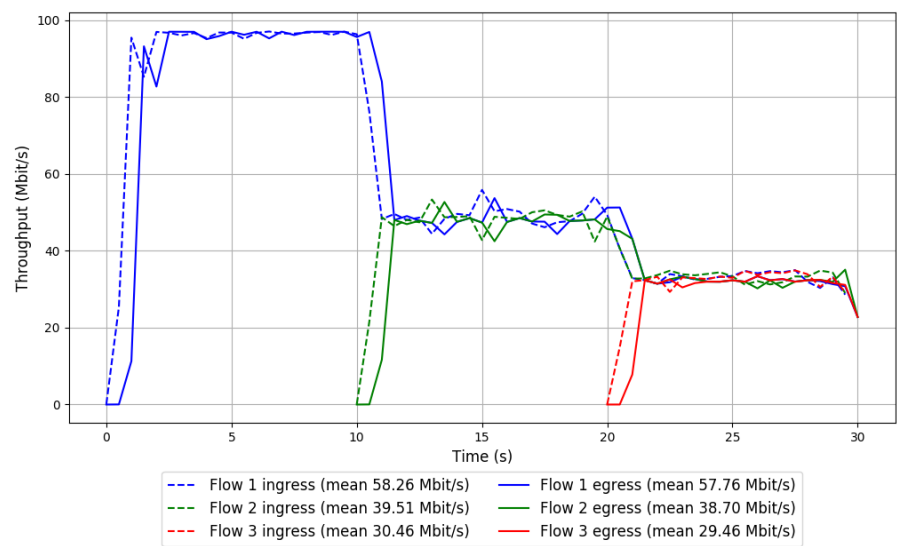
-- Flow 3:

Average throughput: 29.46 Mbit/s

95th percentile per-packet one-way delay: 118.541 ms

Loss rate: 5.09%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-06-06 03:19:16

End at: 2018-06-06 03:19:46

Local clock offset: -0.966 ms

Remote clock offset: 3.455 ms

Below is generated by plot.py at 2018-06-06 06:17:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.20 Mbit/s

95th percentile per-packet one-way delay: 113.408 ms

Loss rate: 2.57%

-- Flow 1:

Average throughput: 57.69 Mbit/s

95th percentile per-packet one-way delay: 112.024 ms

Loss rate: 1.58%

-- Flow 2:

Average throughput: 39.04 Mbit/s

95th percentile per-packet one-way delay: 113.557 ms

Loss rate: 3.94%

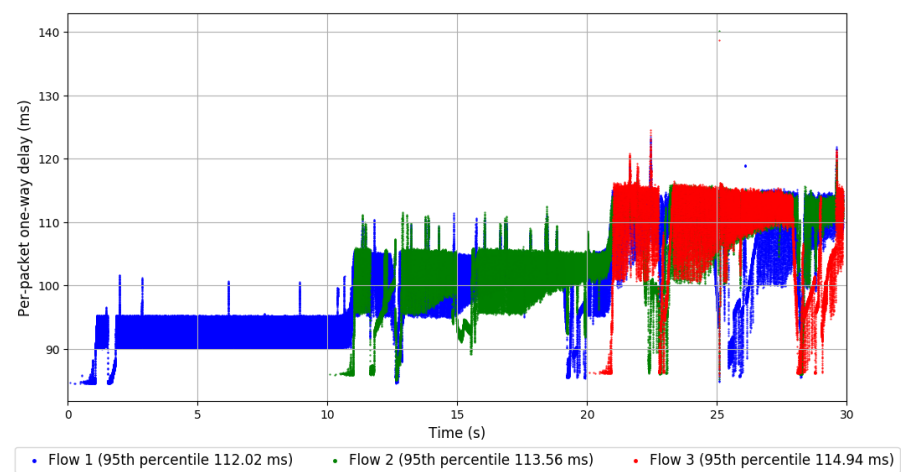
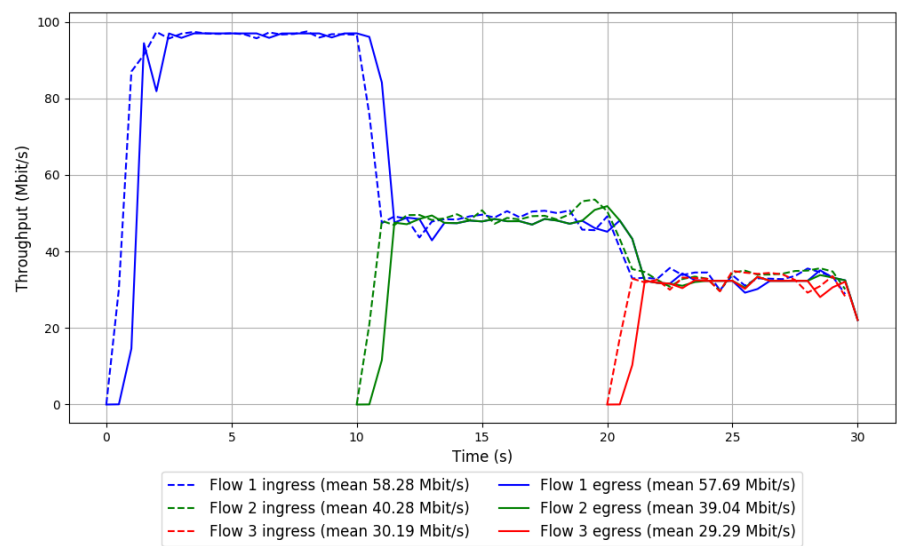
-- Flow 3:

Average throughput: 29.29 Mbit/s

95th percentile per-packet one-way delay: 114.942 ms

Loss rate: 4.70%

Run 2: Report of FillP — Data Link

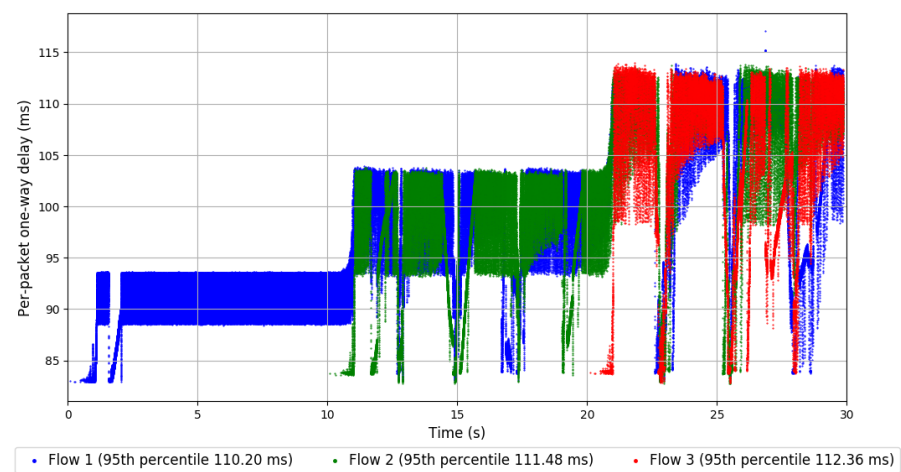
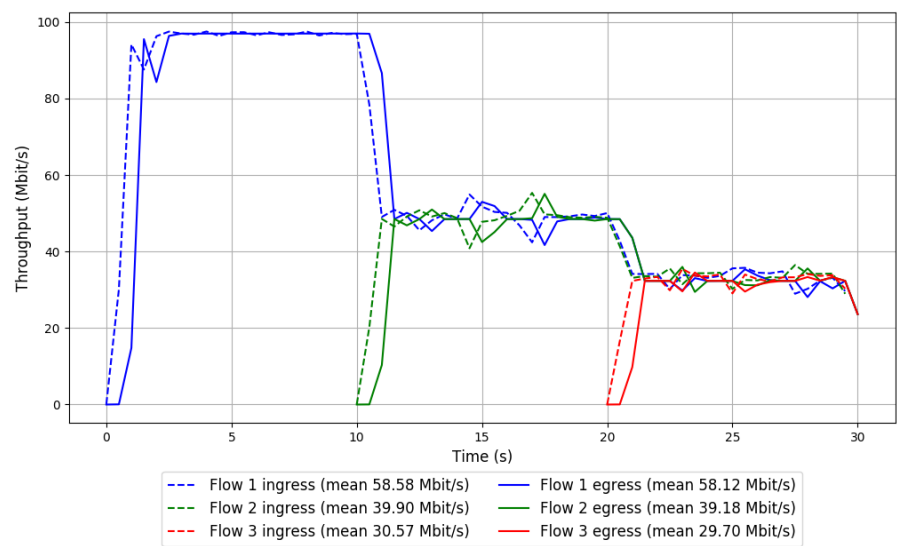


Run 3: Statistics of FillP

Start at: 2018-06-06 03:39:14
End at: 2018-06-06 03:39:44
Local clock offset: -2.51 ms
Remote clock offset: 4.399 ms

Below is generated by plot.py at 2018-06-06 06:17:52
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.87 Mbit/s
95th percentile per-packet one-way delay: 111.253 ms
Loss rate: 2.07%
-- Flow 1:
Average throughput: 58.12 Mbit/s
95th percentile per-packet one-way delay: 110.196 ms
Loss rate: 1.38%
-- Flow 2:
Average throughput: 39.18 Mbit/s
95th percentile per-packet one-way delay: 111.482 ms
Loss rate: 2.63%
-- Flow 3:
Average throughput: 29.70 Mbit/s
95th percentile per-packet one-way delay: 112.357 ms
Loss rate: 4.57%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-06-06 03:59:14

End at: 2018-06-06 03:59:44

Local clock offset: -2.439 ms

Remote clock offset: 7.697 ms

Below is generated by plot.py at 2018-06-06 06:17:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.79 Mbit/s

95th percentile per-packet one-way delay: 108.699 ms

Loss rate: 2.39%

-- Flow 1:

Average throughput: 57.99 Mbit/s

95th percentile per-packet one-way delay: 106.652 ms

Loss rate: 1.50%

-- Flow 2:

Average throughput: 39.20 Mbit/s

95th percentile per-packet one-way delay: 109.397 ms

Loss rate: 2.94%

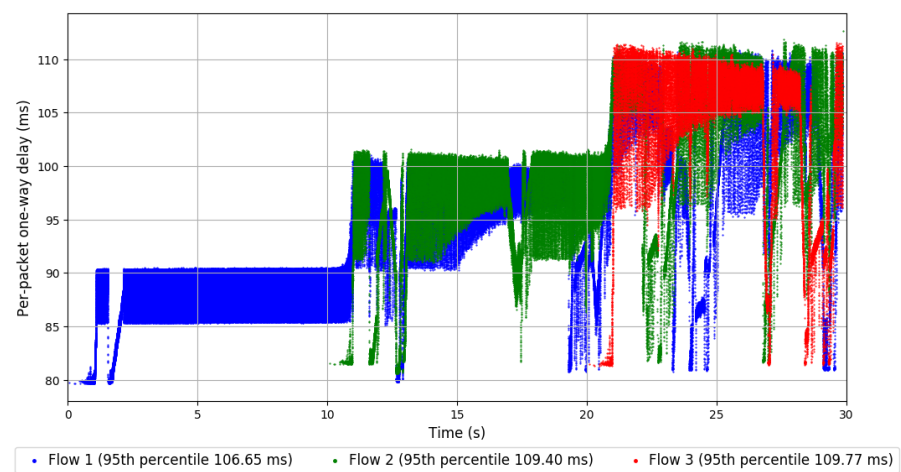
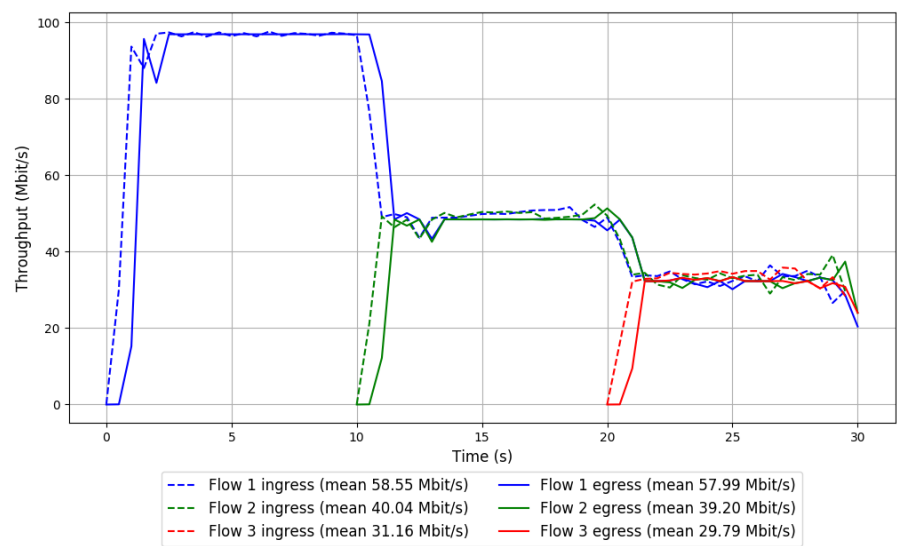
-- Flow 3:

Average throughput: 29.79 Mbit/s

95th percentile per-packet one-way delay: 109.772 ms

Loss rate: 6.04%

Run 4: Report of FillP — Data Link

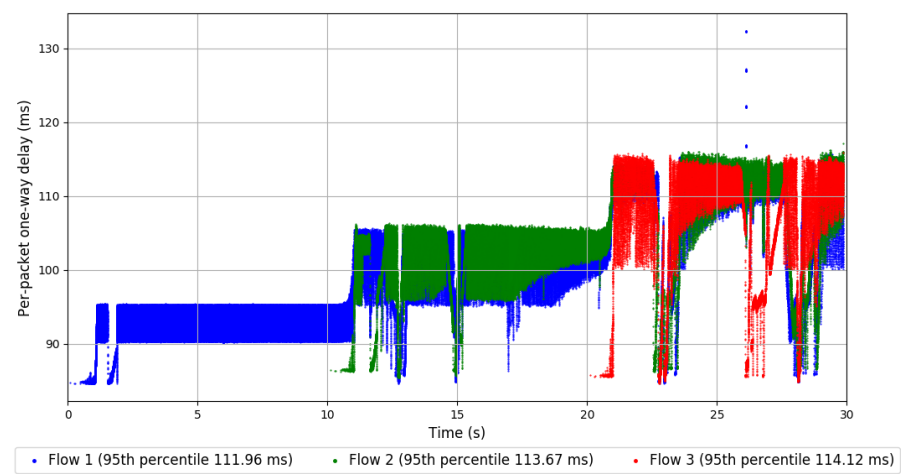
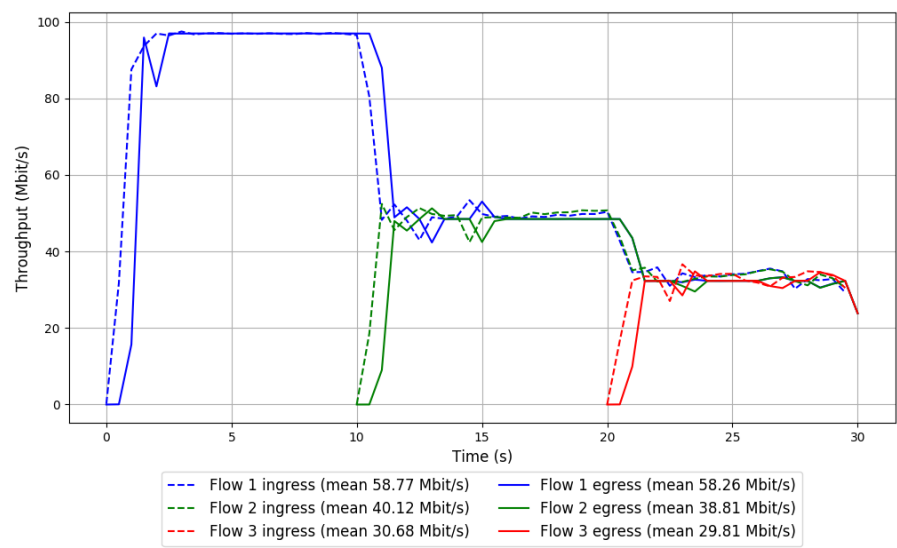


Run 5: Statistics of FillP

Start at: 2018-06-06 04:19:12
End at: 2018-06-06 04:19:42
Local clock offset: -1.014 ms
Remote clock offset: 11.605 ms

Below is generated by plot.py at 2018-06-06 06:17:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.79 Mbit/s
95th percentile per-packet one-way delay: 113.140 ms
Loss rate: 2.53%
-- Flow 1:
Average throughput: 58.26 Mbit/s
95th percentile per-packet one-way delay: 111.959 ms
Loss rate: 1.45%
-- Flow 2:
Average throughput: 38.81 Mbit/s
95th percentile per-packet one-way delay: 113.670 ms
Loss rate: 4.14%
-- Flow 3:
Average throughput: 29.81 Mbit/s
95th percentile per-packet one-way delay: 114.122 ms
Loss rate: 4.59%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-06-06 04:39:11

End at: 2018-06-06 04:39:41

Local clock offset: -2.571 ms

Remote clock offset: 9.13 ms

Below is generated by plot.py at 2018-06-06 06:18:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.45 Mbit/s

95th percentile per-packet one-way delay: 111.946 ms

Loss rate: 2.38%

-- Flow 1:

Average throughput: 57.41 Mbit/s

95th percentile per-packet one-way delay: 111.144 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 39.42 Mbit/s

95th percentile per-packet one-way delay: 111.749 ms

Loss rate: 3.64%

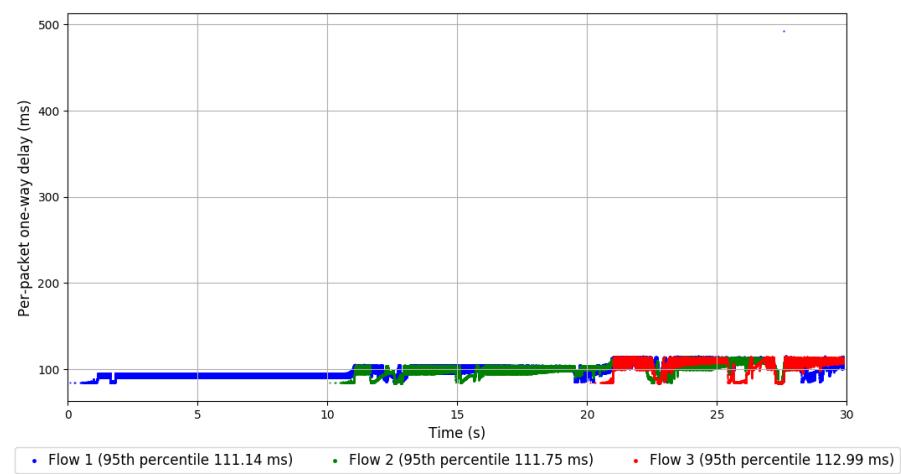
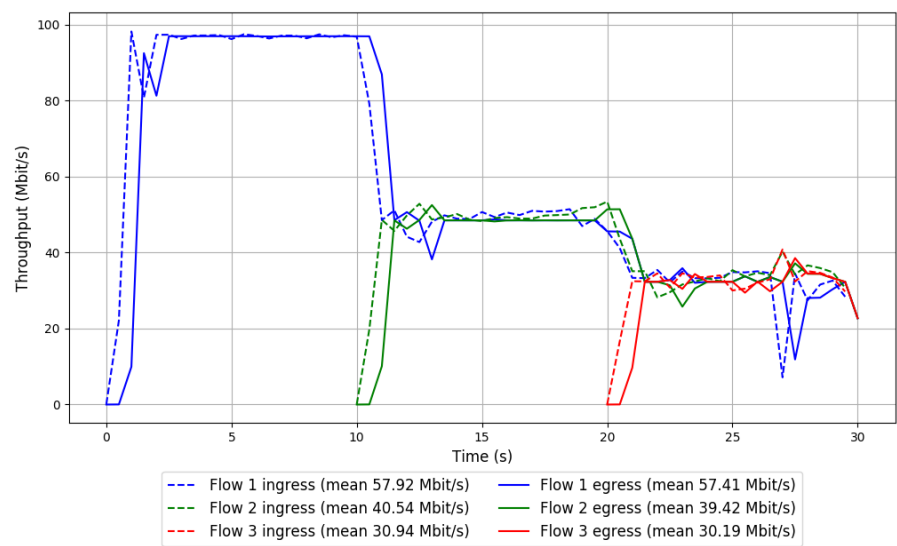
-- Flow 3:

Average throughput: 30.19 Mbit/s

95th percentile per-packet one-way delay: 112.987 ms

Loss rate: 4.18%

Run 6: Report of FillP — Data Link

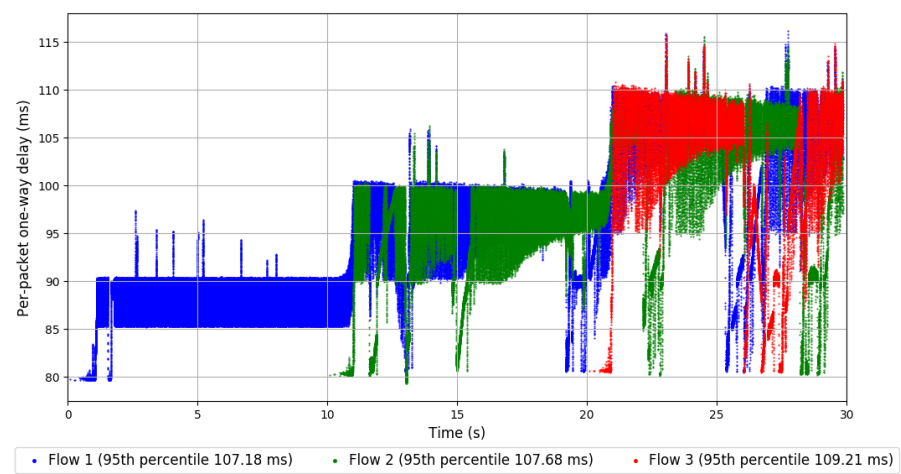
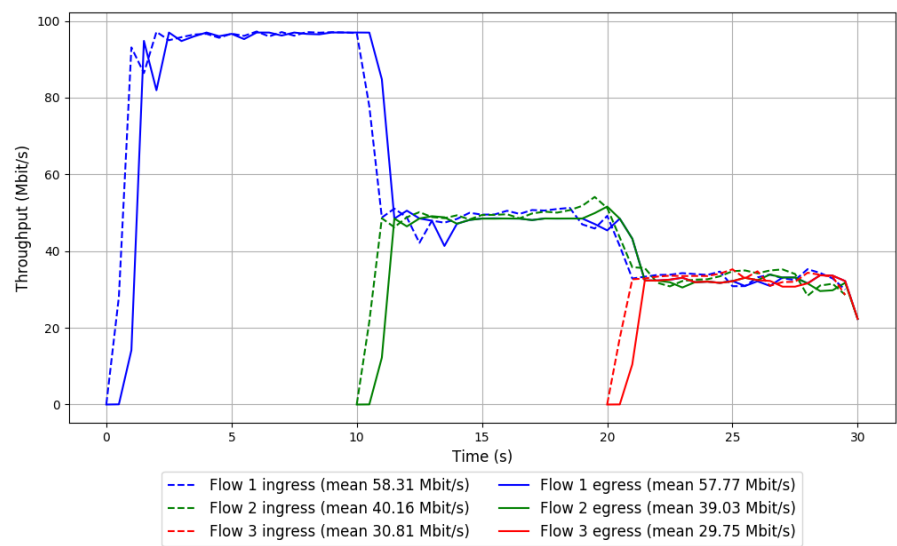


Run 7: Statistics of FillP

Start at: 2018-06-06 04:59:10
End at: 2018-06-06 04:59:40
Local clock offset: -3.775 ms
Remote clock offset: 8.048 ms

Below is generated by plot.py at 2018-06-06 06:18:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.43 Mbit/s
95th percentile per-packet one-way delay: 107.938 ms
Loss rate: 2.50%
-- Flow 1:
Average throughput: 57.77 Mbit/s
95th percentile per-packet one-way delay: 107.179 ms
Loss rate: 1.53%
-- Flow 2:
Average throughput: 39.03 Mbit/s
95th percentile per-packet one-way delay: 107.676 ms
Loss rate: 3.62%
-- Flow 3:
Average throughput: 29.75 Mbit/s
95th percentile per-packet one-way delay: 109.212 ms
Loss rate: 5.11%

Run 7: Report of FillP — Data Link

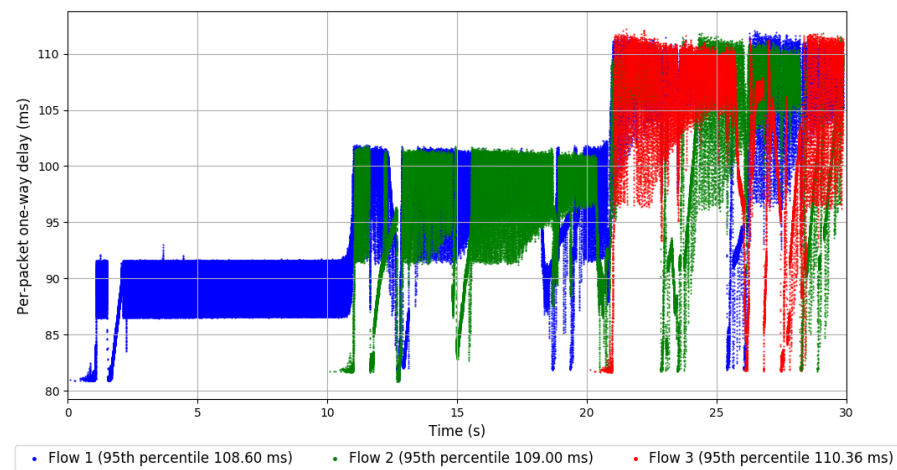
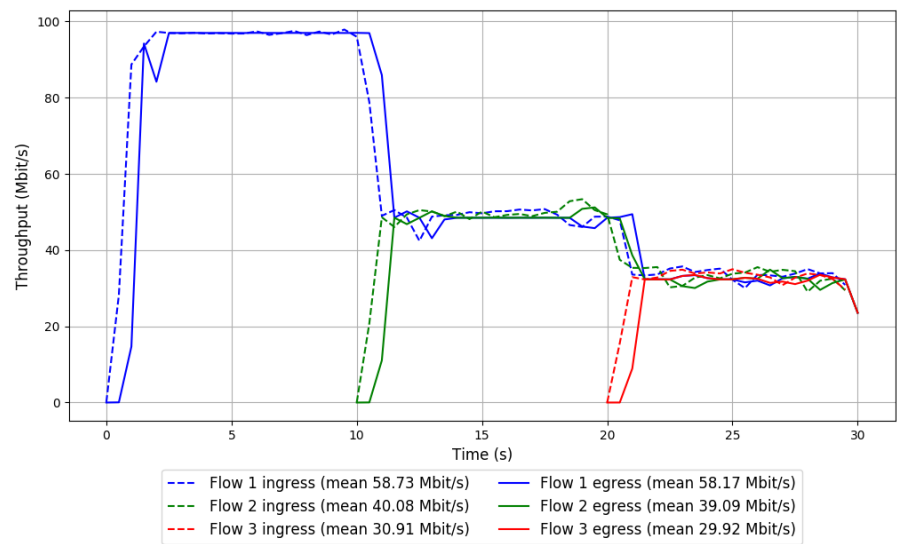


Run 8: Statistics of FillP

Start at: 2018-06-06 05:19:27
End at: 2018-06-06 05:19:57
Local clock offset: -7.448 ms
Remote clock offset: 12.173 ms

Below is generated by plot.py at 2018-06-06 06:18:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.90 Mbit/s
95th percentile per-packet one-way delay: 109.191 ms
Loss rate: 2.39%
-- Flow 1:
Average throughput: 58.17 Mbit/s
95th percentile per-packet one-way delay: 108.603 ms
Loss rate: 1.54%
-- Flow 2:
Average throughput: 39.09 Mbit/s
95th percentile per-packet one-way delay: 109.001 ms
Loss rate: 3.31%
-- Flow 3:
Average throughput: 29.92 Mbit/s
95th percentile per-packet one-way delay: 110.356 ms
Loss rate: 4.85%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-06-06 05:39:29

End at: 2018-06-06 05:39:59

Local clock offset: -5.728 ms

Remote clock offset: 13.61 ms

Below is generated by plot.py at 2018-06-06 06:19:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.34 Mbit/s

95th percentile per-packet one-way delay: 109.725 ms

Loss rate: 2.88%

-- Flow 1:

Average throughput: 57.77 Mbit/s

95th percentile per-packet one-way delay: 108.691 ms

Loss rate: 2.15%

-- Flow 2:

Average throughput: 38.87 Mbit/s

95th percentile per-packet one-way delay: 110.138 ms

Loss rate: 3.54%

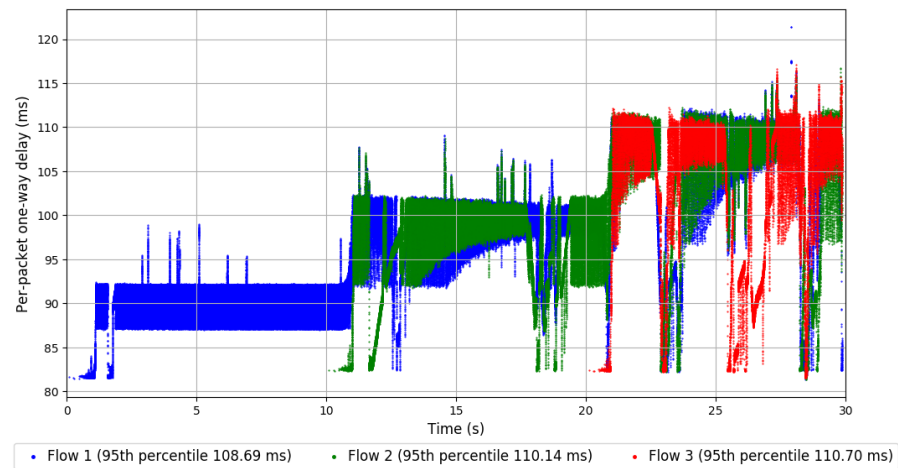
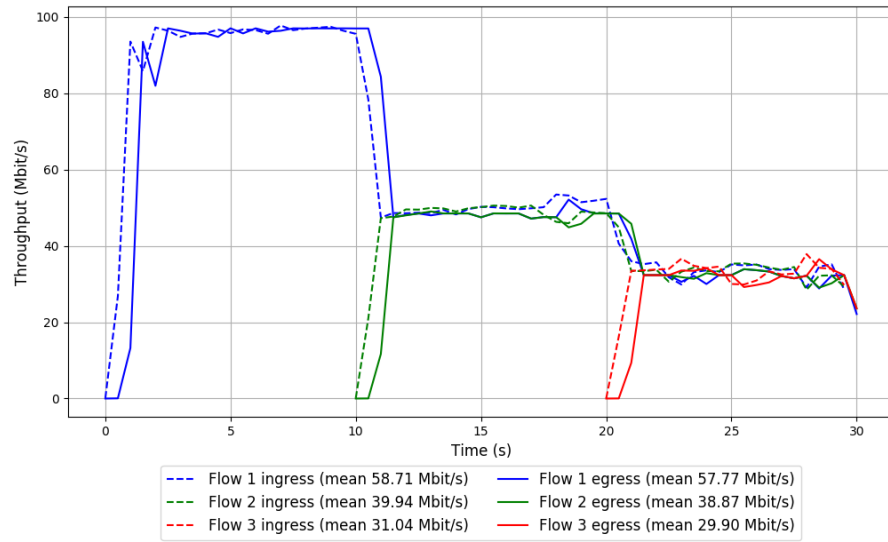
-- Flow 3:

Average throughput: 29.90 Mbit/s

95th percentile per-packet one-way delay: 110.704 ms

Loss rate: 5.33%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-06-06 05:59:29

End at: 2018-06-06 05:59:59

Local clock offset: -1.395 ms

Remote clock offset: 3.629 ms

Below is generated by plot.py at 2018-06-06 06:19:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.41 Mbit/s

95th percentile per-packet one-way delay: 114.386 ms

Loss rate: 2.30%

-- Flow 1:

Average throughput: 57.79 Mbit/s

95th percentile per-packet one-way delay: 113.341 ms

Loss rate: 1.30%

-- Flow 2:

Average throughput: 39.00 Mbit/s

95th percentile per-packet one-way delay: 114.290 ms

Loss rate: 3.49%

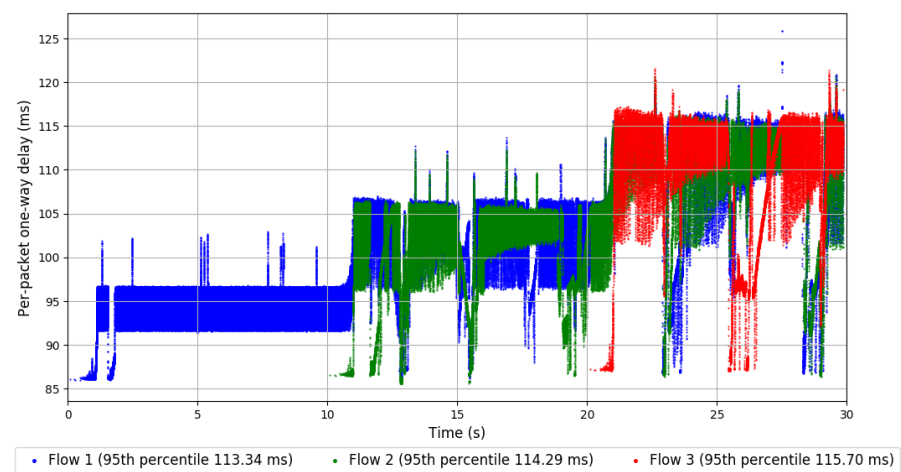
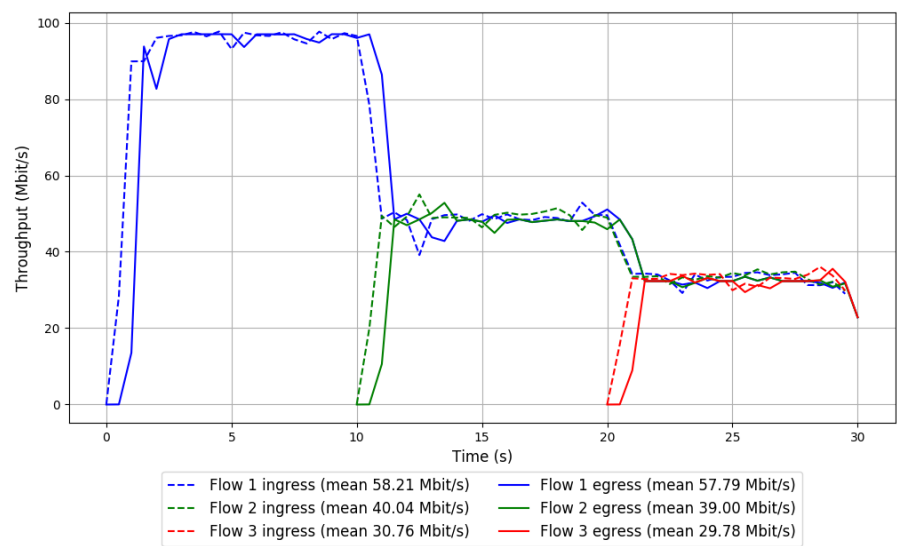
-- Flow 3:

Average throughput: 29.78 Mbit/s

95th percentile per-packet one-way delay: 115.698 ms

Loss rate: 4.88%

Run 10: Report of FillP — Data Link

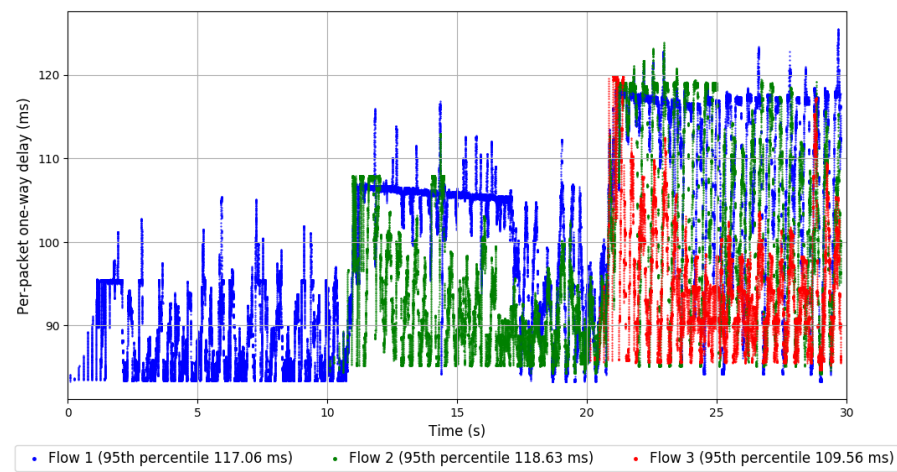
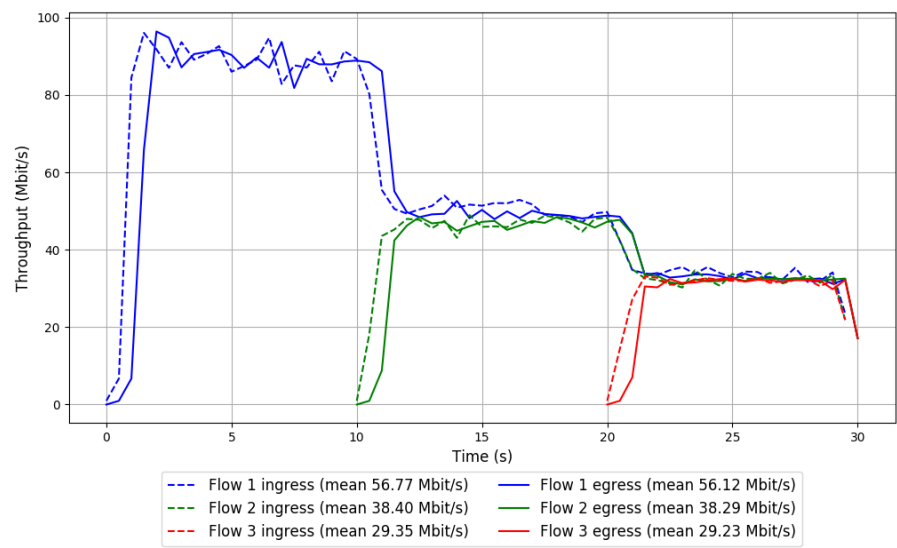


```
Run 1: Statistics of Indigo

Start at: 2018-06-06 03:00:32
End at: 2018-06-06 03:01:02
Local clock offset: -1.688 ms
Remote clock offset: 6.08 ms

# Below is generated by plot.py at 2018-06-06 06:19:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.01 Mbit/s
95th percentile per-packet one-way delay: 117.221 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 56.12 Mbit/s
95th percentile per-packet one-way delay: 117.063 ms
Loss rate: 1.74%
-- Flow 2:
Average throughput: 38.29 Mbit/s
95th percentile per-packet one-way delay: 118.629 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 29.23 Mbit/s
95th percentile per-packet one-way delay: 109.562 ms
Loss rate: 2.09%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-06-06 03:20:31

End at: 2018-06-06 03:21:01

Local clock offset: -0.961 ms

Remote clock offset: 7.726 ms

Below is generated by plot.py at 2018-06-06 06:19:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.66 Mbit/s

95th percentile per-packet one-way delay: 114.320 ms

Loss rate: 1.48%

-- Flow 1:

Average throughput: 57.40 Mbit/s

95th percentile per-packet one-way delay: 113.814 ms

Loss rate: 1.58%

-- Flow 2:

Average throughput: 38.79 Mbit/s

95th percentile per-packet one-way delay: 114.989 ms

Loss rate: 1.10%

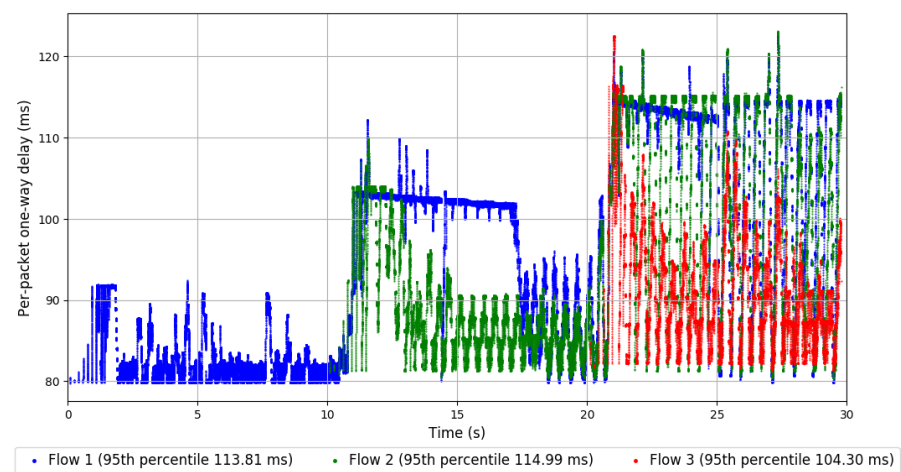
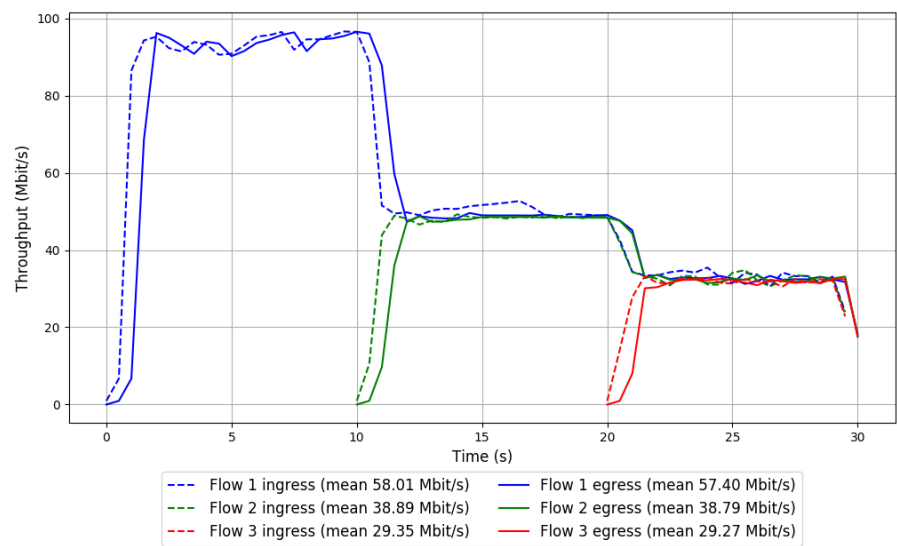
-- Flow 3:

Average throughput: 29.27 Mbit/s

95th percentile per-packet one-way delay: 104.297 ms

Loss rate: 1.94%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-06-06 03:40:29

End at: 2018-06-06 03:40:59

Local clock offset: -0.917 ms

Remote clock offset: 7.535 ms

Below is generated by plot.py at 2018-06-06 06:19:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.02 Mbit/s

95th percentile per-packet one-way delay: 112.791 ms

Loss rate: 6.87%

-- Flow 1:

Average throughput: 58.44 Mbit/s

95th percentile per-packet one-way delay: 109.794 ms

Loss rate: 9.79%

-- Flow 2:

Average throughput: 39.13 Mbit/s

95th percentile per-packet one-way delay: 116.298 ms

Loss rate: 1.47%

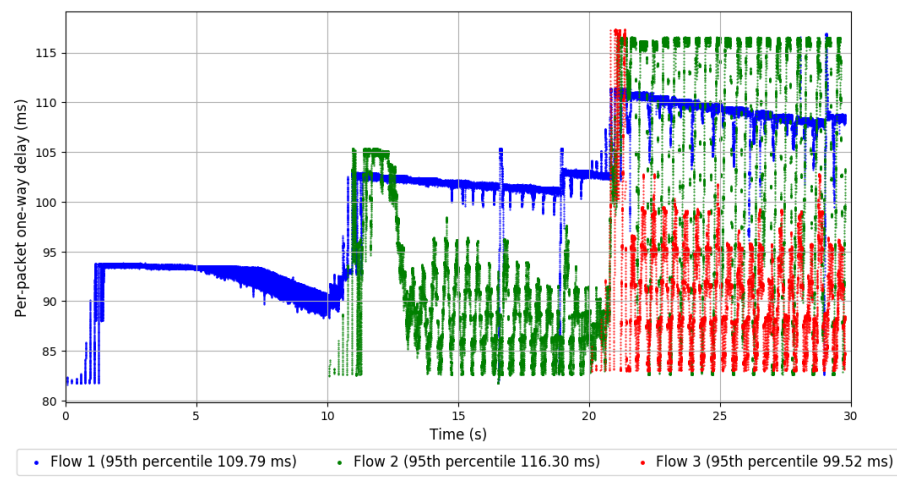
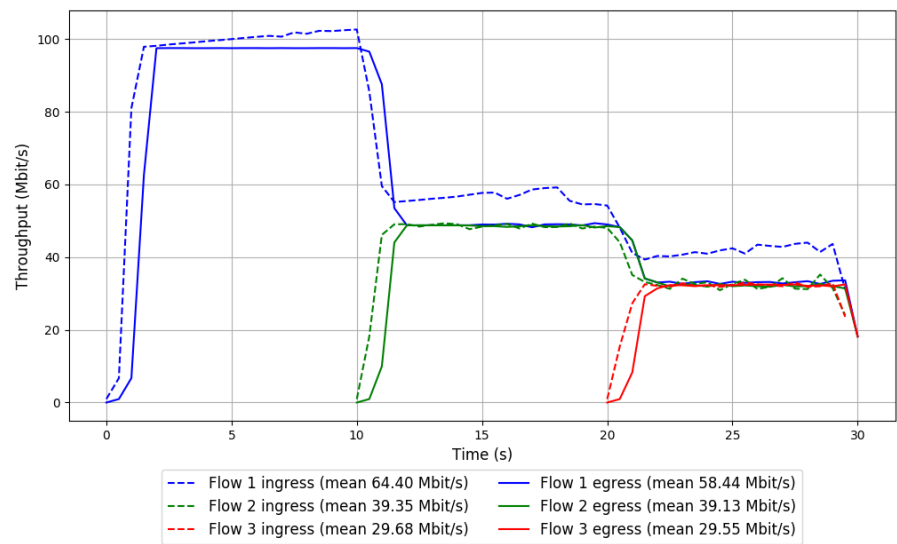
-- Flow 3:

Average throughput: 29.55 Mbit/s

95th percentile per-packet one-way delay: 99.520 ms

Loss rate: 2.09%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-06-06 04:00:29

End at: 2018-06-06 04:00:59

Local clock offset: -1.641 ms

Remote clock offset: 8.647 ms

Below is generated by plot.py at 2018-06-06 06:19:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.04 Mbit/s

95th percentile per-packet one-way delay: 114.253 ms

Loss rate: 1.80%

-- Flow 1:

Average throughput: 58.49 Mbit/s

95th percentile per-packet one-way delay: 114.212 ms

Loss rate: 2.05%

-- Flow 2:

Average throughput: 39.02 Mbit/s

95th percentile per-packet one-way delay: 114.732 ms

Loss rate: 0.99%

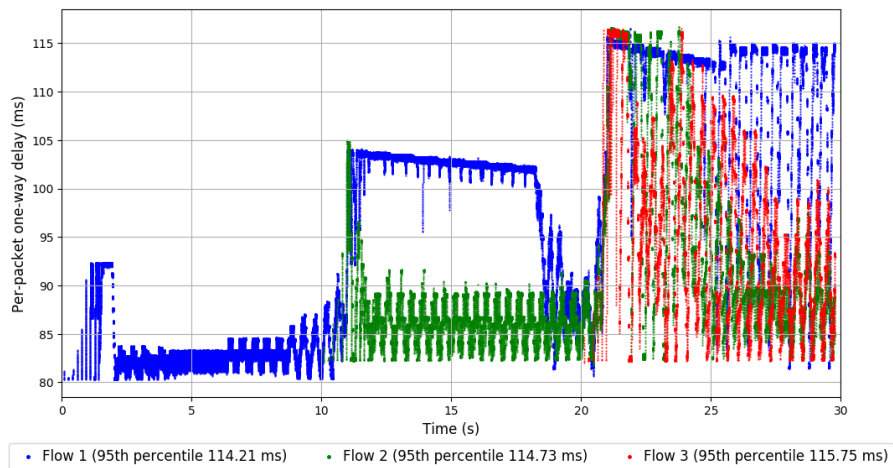
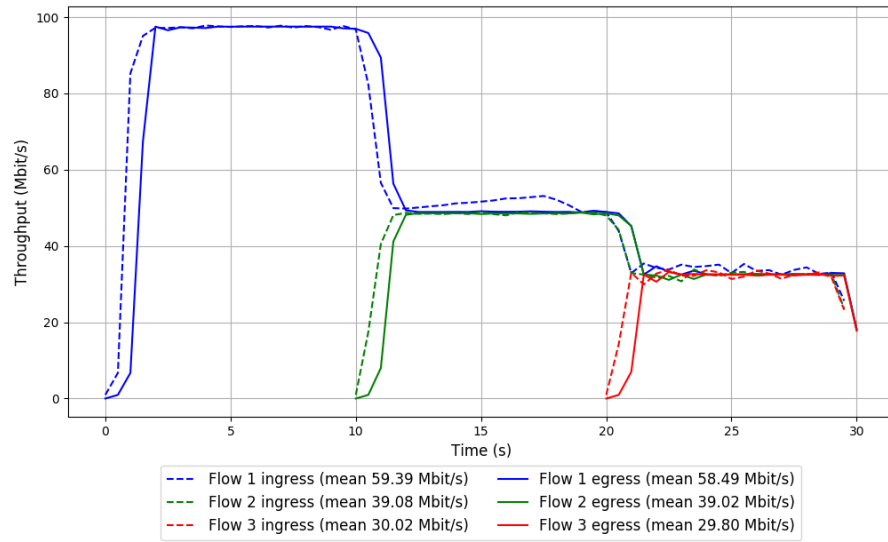
-- Flow 3:

Average throughput: 29.80 Mbit/s

95th percentile per-packet one-way delay: 115.751 ms

Loss rate: 2.40%

Run 4: Report of Indigo — Data Link

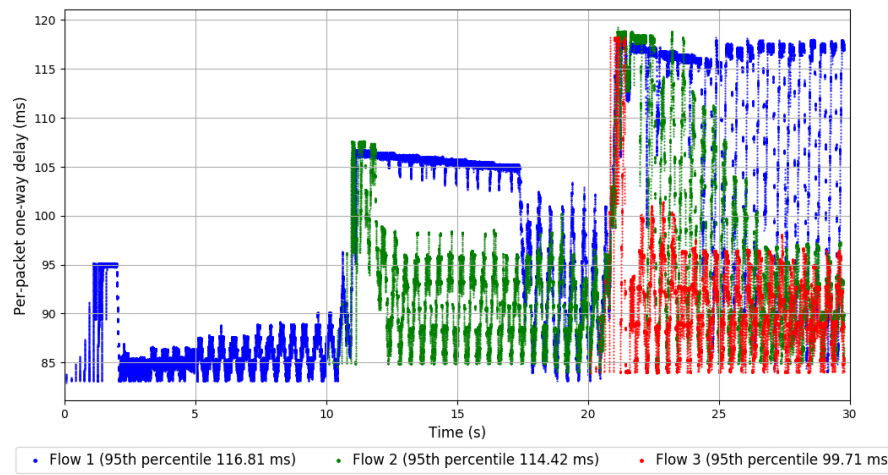
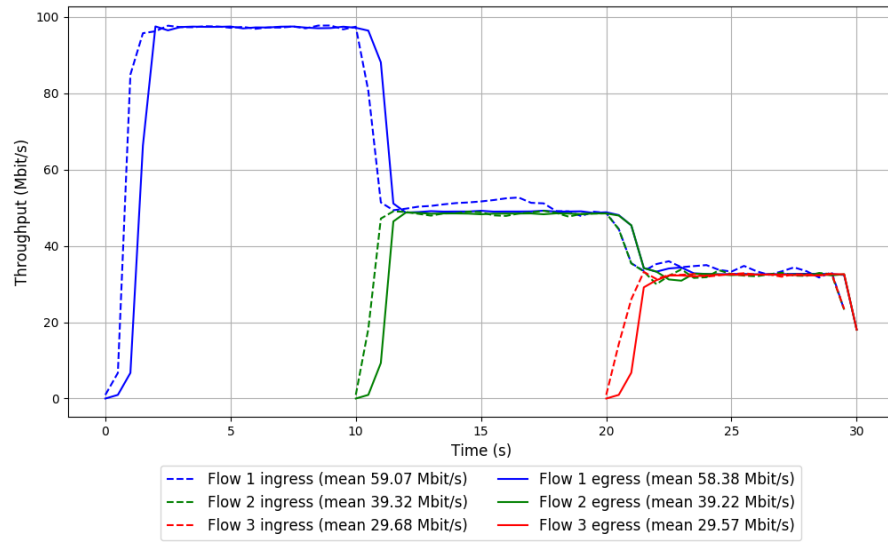


Run 5: Statistics of Indigo

Start at: 2018-06-06 04:20:28
End at: 2018-06-06 04:20:58
Local clock offset: -2.626 ms
Remote clock offset: 11.753 ms

Below is generated by plot.py at 2018-06-06 06:19:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.00 Mbit/s
95th percentile per-packet one-way delay: 116.694 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 58.38 Mbit/s
95th percentile per-packet one-way delay: 116.811 ms
Loss rate: 1.71%
-- Flow 2:
Average throughput: 39.22 Mbit/s
95th percentile per-packet one-way delay: 114.420 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 29.57 Mbit/s
95th percentile per-packet one-way delay: 99.713 ms
Loss rate: 2.02%

Run 5: Report of Indigo — Data Link

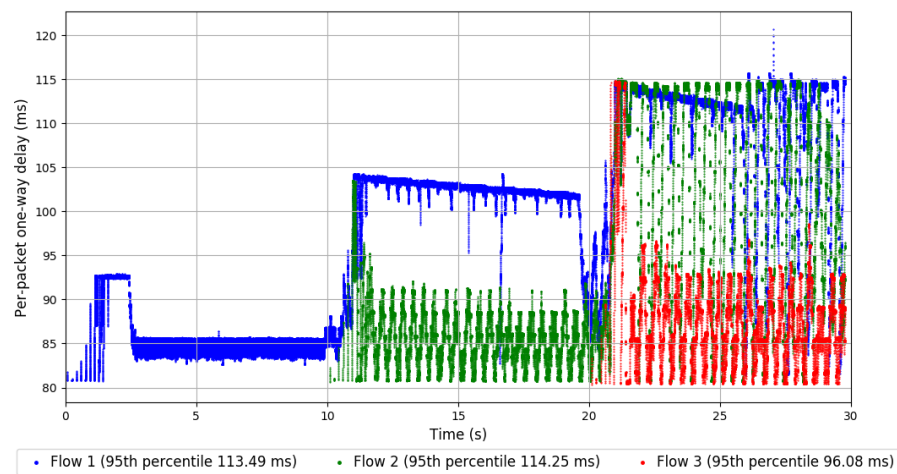
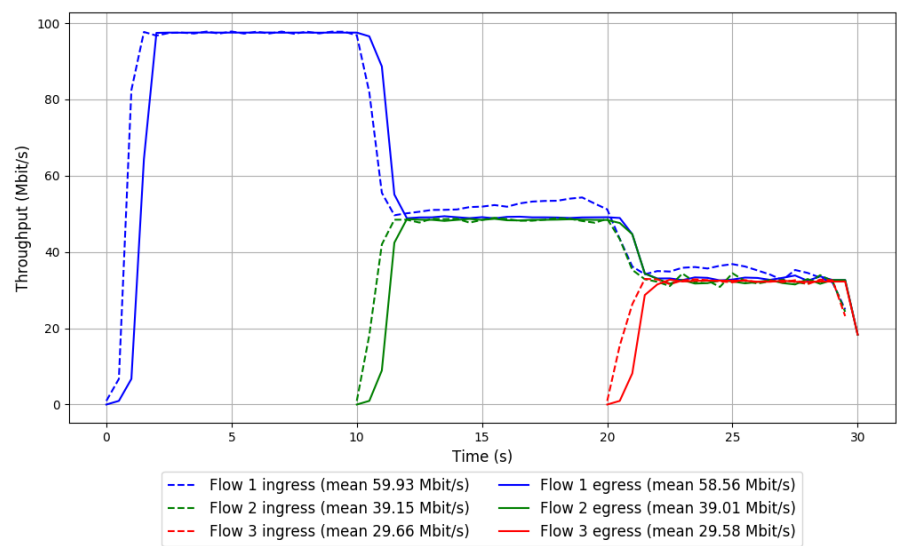


Run 6: Statistics of Indigo

Start at: 2018-06-06 04:40:26
End at: 2018-06-06 04:40:56
Local clock offset: -2.746 ms
Remote clock offset: 12.002 ms

Below is generated by plot.py at 2018-06-06 06:19:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.06 Mbit/s
95th percentile per-packet one-way delay: 113.978 ms
Loss rate: 2.30%
-- Flow 1:
Average throughput: 58.56 Mbit/s
95th percentile per-packet one-way delay: 113.494 ms
Loss rate: 2.84%
-- Flow 2:
Average throughput: 39.01 Mbit/s
95th percentile per-packet one-way delay: 114.252 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 29.58 Mbit/s
95th percentile per-packet one-way delay: 96.084 ms
Loss rate: 1.93%

Run 6: Report of Indigo — Data Link

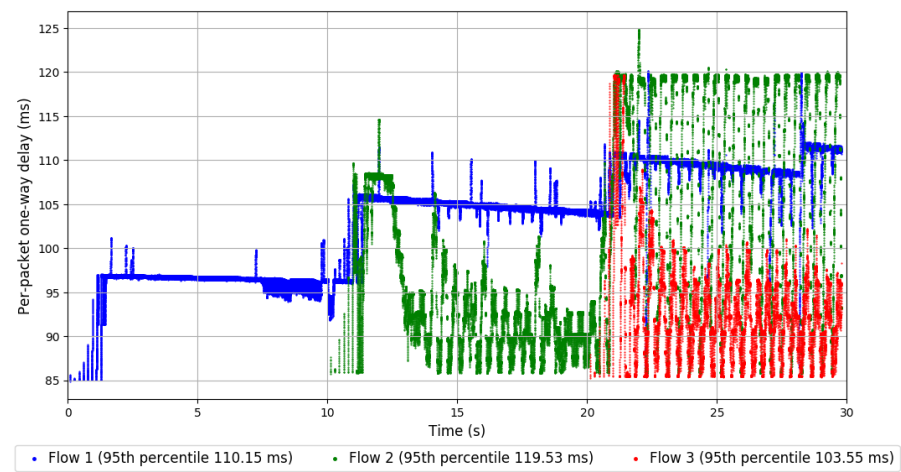
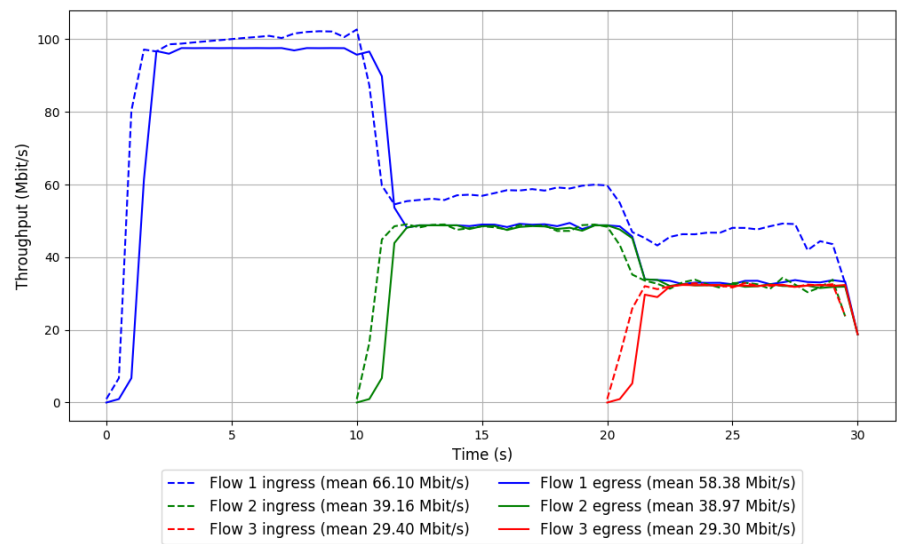


Run 7: Statistics of Indigo

Start at: 2018-06-06 05:00:25
End at: 2018-06-06 05:00:55
Local clock offset: -3.802 ms
Remote clock offset: 3.741 ms

Below is generated by plot.py at 2018-06-06 06:20:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.74 Mbit/s
95th percentile per-packet one-way delay: 116.844 ms
Loss rate: 8.47%
-- Flow 1:
Average throughput: 58.38 Mbit/s
95th percentile per-packet one-way delay: 110.147 ms
Loss rate: 12.20%
-- Flow 2:
Average throughput: 38.97 Mbit/s
95th percentile per-packet one-way delay: 119.525 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 29.30 Mbit/s
95th percentile per-packet one-way delay: 103.550 ms
Loss rate: 2.06%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-06-06 05:20:42

End at: 2018-06-06 05:21:12

Local clock offset: -6.826 ms

Remote clock offset: 8.898 ms

Below is generated by plot.py at 2018-06-06 06:20:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.98 Mbit/s

95th percentile per-packet one-way delay: 118.722 ms

Loss rate: 1.80%

-- Flow 1:

Average throughput: 59.24 Mbit/s

95th percentile per-packet one-way delay: 117.997 ms

Loss rate: 2.66%

-- Flow 2:

Average throughput: 38.40 Mbit/s

95th percentile per-packet one-way delay: 119.886 ms

Loss rate: 0.32%

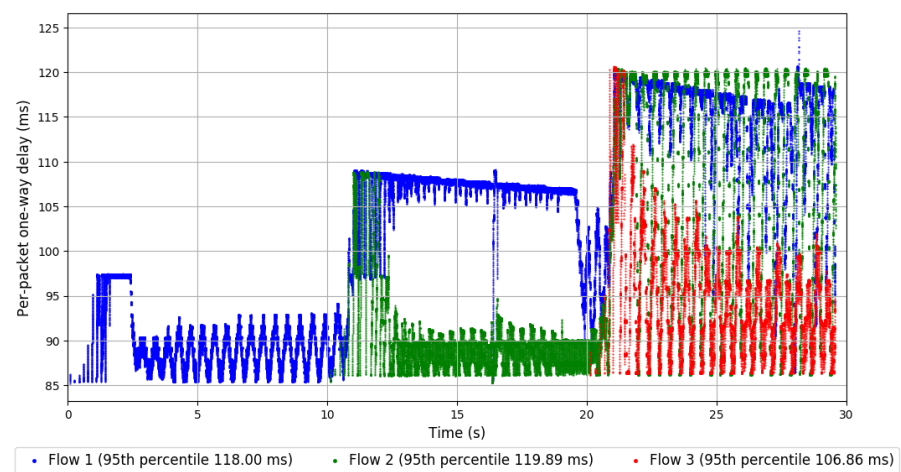
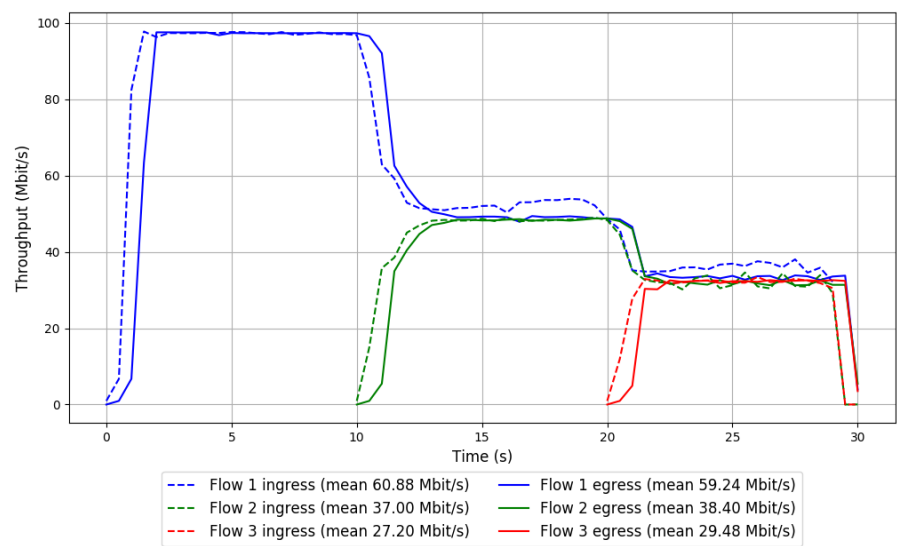
-- Flow 3:

Average throughput: 29.48 Mbit/s

95th percentile per-packet one-way delay: 106.857 ms

Loss rate: 0.20%

Run 8: Report of Indigo — Data Link

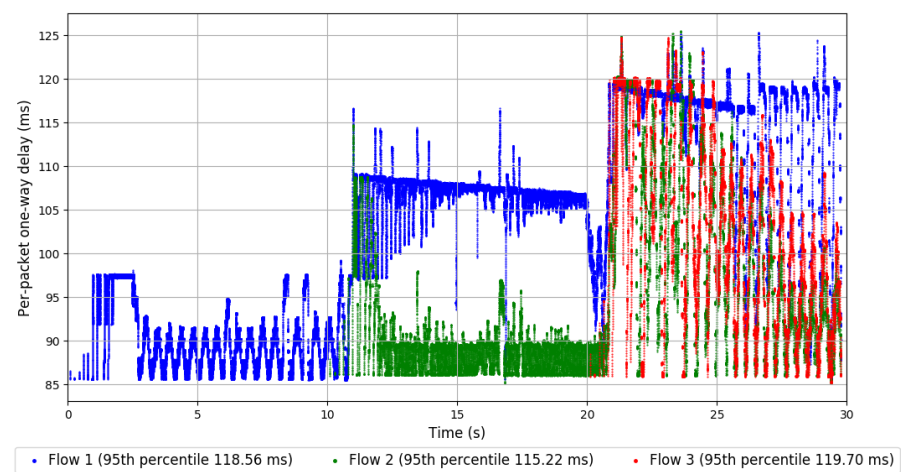
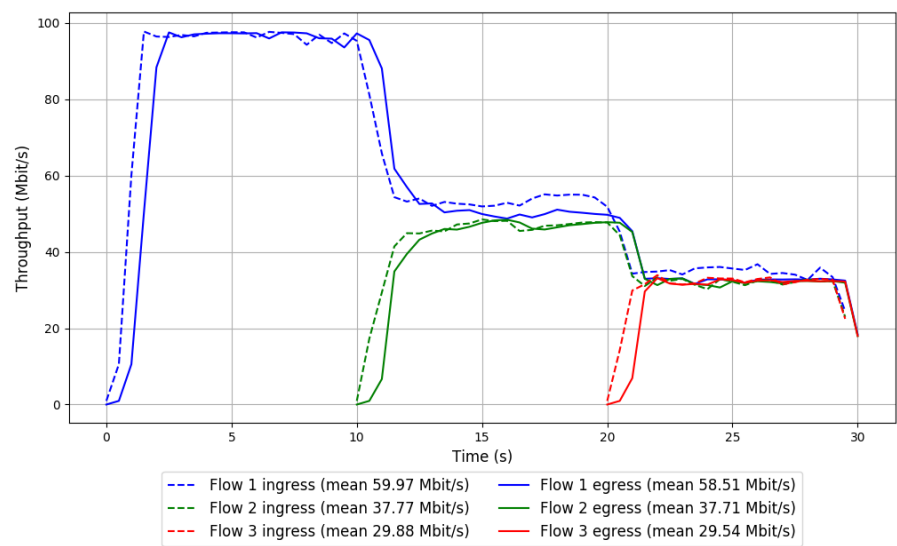


Run 9: Statistics of Indigo

Start at: 2018-06-06 05:40:45
End at: 2018-06-06 05:41:15
Local clock offset: -5.292 ms
Remote clock offset: 10.136 ms

Below is generated by plot.py at 2018-06-06 06:20:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.12 Mbit/s
95th percentile per-packet one-way delay: 118.707 ms
Loss rate: 2.46%
-- Flow 1:
Average throughput: 58.51 Mbit/s
95th percentile per-packet one-way delay: 118.563 ms
Loss rate: 3.02%
-- Flow 2:
Average throughput: 37.71 Mbit/s
95th percentile per-packet one-way delay: 115.224 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 29.54 Mbit/s
95th percentile per-packet one-way delay: 119.698 ms
Loss rate: 2.81%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-06-06 06:00:44

End at: 2018-06-06 06:01:14

Local clock offset: -2.097 ms

Remote clock offset: 6.904 ms

Below is generated by plot.py at 2018-06-06 06:20:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.19 Mbit/s

95th percentile per-packet one-way delay: 113.461 ms

Loss rate: 4.20%

-- Flow 1:

Average throughput: 58.85 Mbit/s

95th percentile per-packet one-way delay: 109.869 ms

Loss rate: 5.80%

-- Flow 2:

Average throughput: 38.86 Mbit/s

95th percentile per-packet one-way delay: 116.026 ms

Loss rate: 1.14%

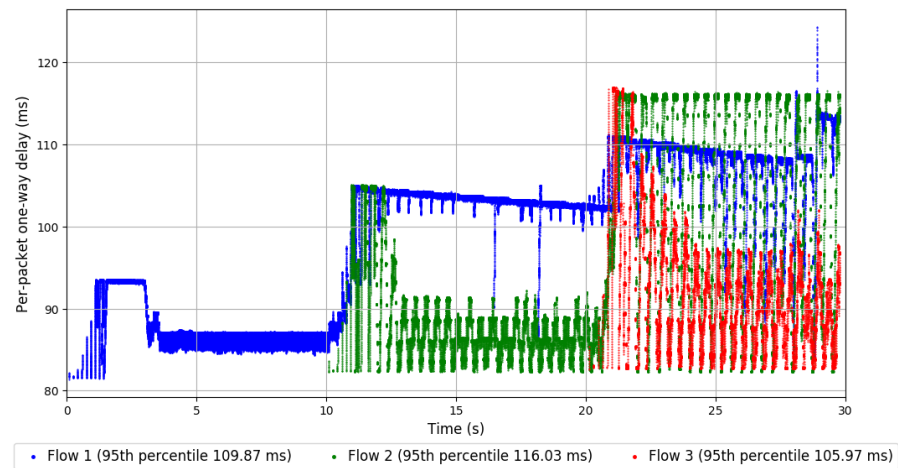
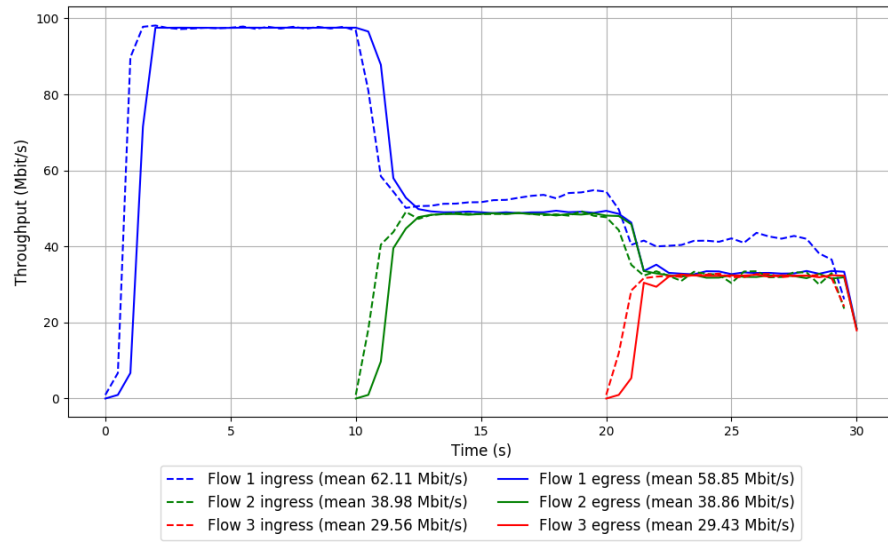
-- Flow 3:

Average throughput: 29.43 Mbit/s

95th percentile per-packet one-way delay: 105.965 ms

Loss rate: 2.16%

Run 10: Report of Indigo — Data Link

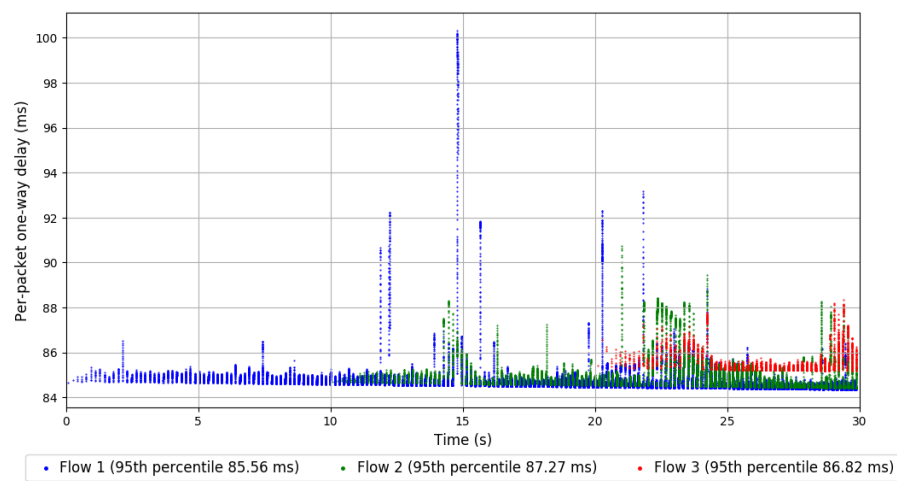
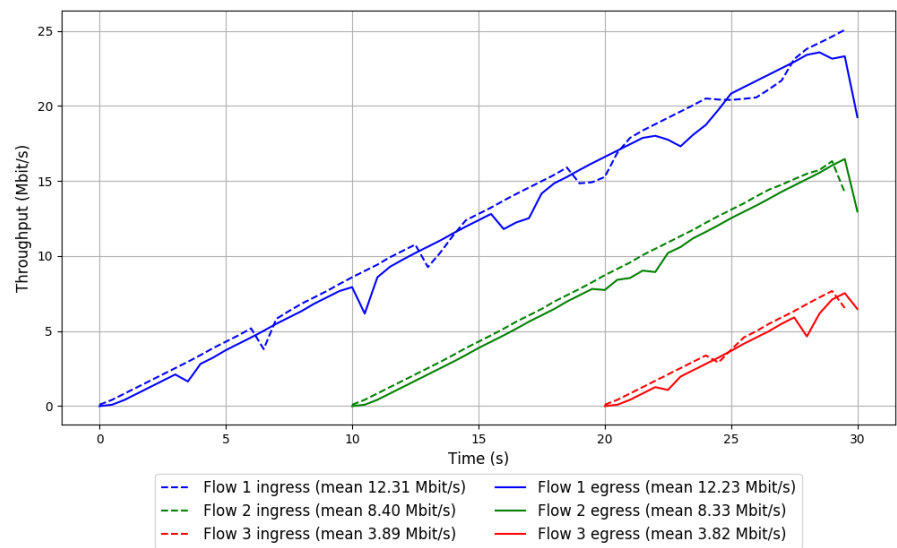


```
Run 1: Statistics of LEDBAT

Start at: 2018-06-06 02:53:08
End at: 2018-06-06 02:53:38
Local clock offset: -3.001 ms
Remote clock offset: 7.855 ms

# Below is generated by plot.py at 2018-06-06 06:20:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.01 Mbit/s
95th percentile per-packet one-way delay: 86.188 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 12.23 Mbit/s
95th percentile per-packet one-way delay: 85.558 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 87.270 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 86.824 ms
Loss rate: 3.45%
```

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-06-06 03:13:07

End at: 2018-06-06 03:13:37

Local clock offset: -1.745 ms

Remote clock offset: 8.253 ms

Below is generated by plot.py at 2018-06-06 06:20:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.59 Mbit/s

95th percentile per-packet one-way delay: 81.344 ms

Loss rate: 1.44%

-- Flow 1:

Average throughput: 12.66 Mbit/s

95th percentile per-packet one-way delay: 80.488 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 8.47 Mbit/s

95th percentile per-packet one-way delay: 81.901 ms

Loss rate: 1.69%

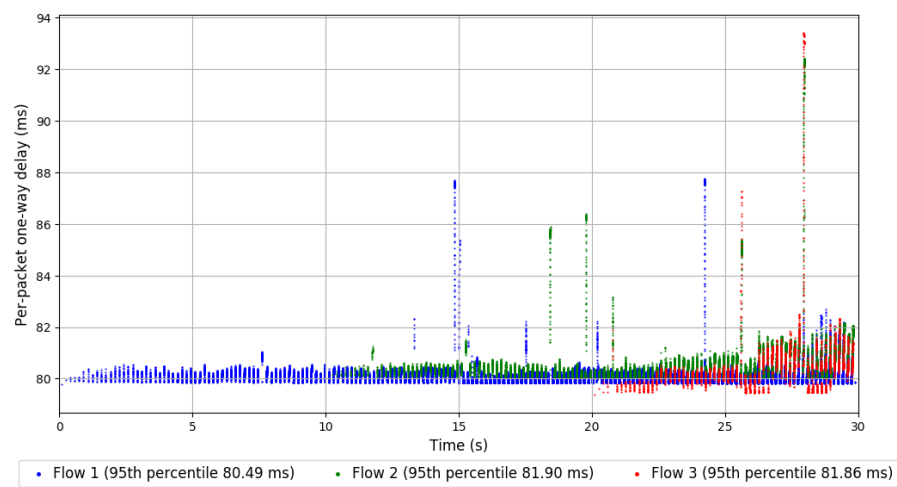
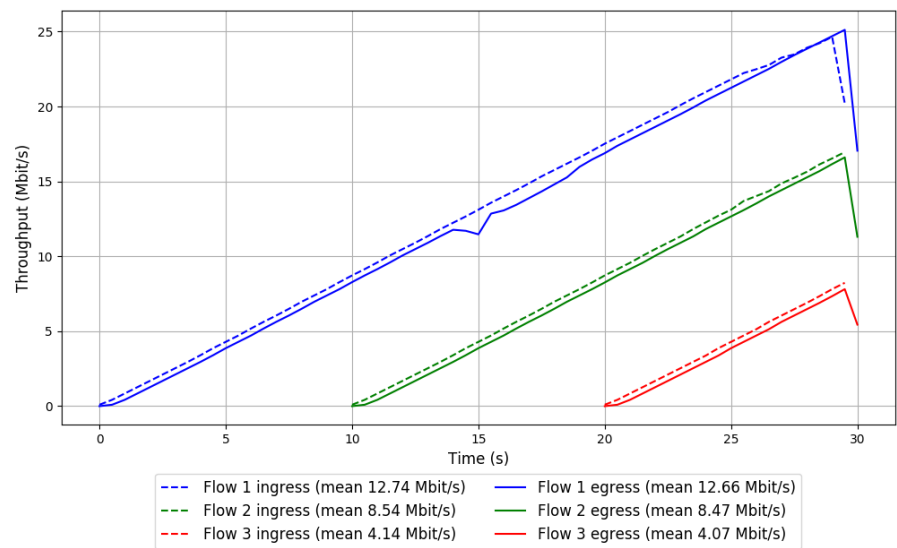
-- Flow 3:

Average throughput: 4.07 Mbit/s

95th percentile per-packet one-way delay: 81.864 ms

Loss rate: 3.41%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-06-06 03:33:05

End at: 2018-06-06 03:33:35

Local clock offset: -1.631 ms

Remote clock offset: 7.708 ms

Below is generated by plot.py at 2018-06-06 06:20:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.54 Mbit/s

95th percentile per-packet one-way delay: 83.367 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 12.70 Mbit/s

95th percentile per-packet one-way delay: 83.366 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 8.38 Mbit/s

95th percentile per-packet one-way delay: 83.735 ms

Loss rate: 1.67%

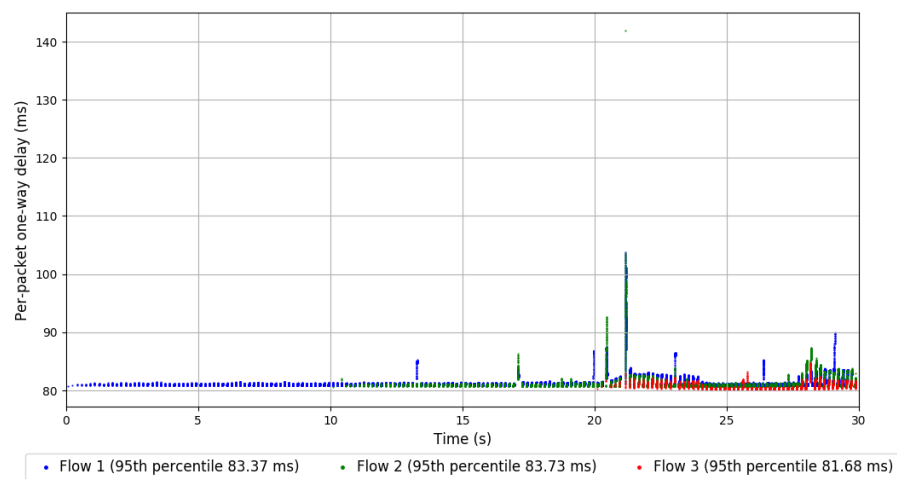
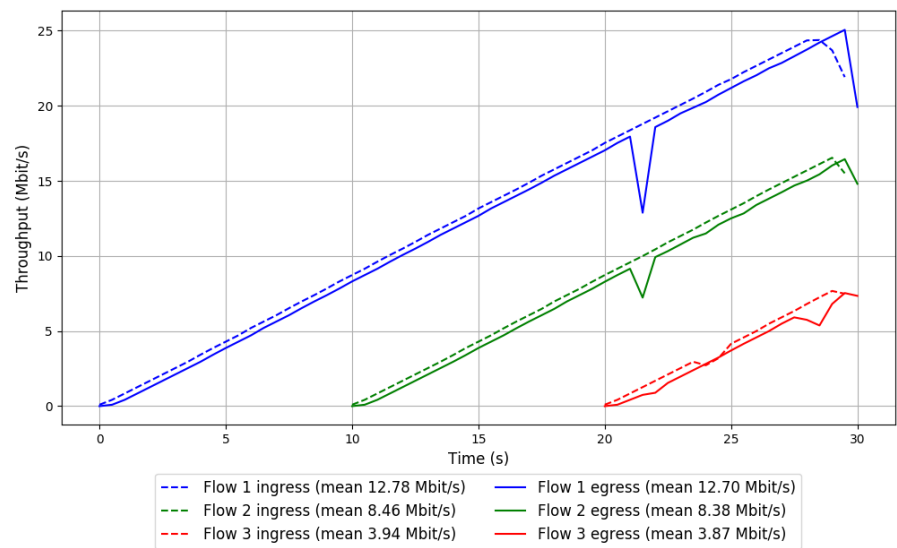
-- Flow 3:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 81.679 ms

Loss rate: 3.50%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-06-06 03:53:04

End at: 2018-06-06 03:53:34

Local clock offset: -0.937 ms

Remote clock offset: 7.959 ms

Below is generated by plot.py at 2018-06-06 06:20:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.77 Mbit/s

95th percentile per-packet one-way delay: 82.143 ms

Loss rate: 1.44%

-- Flow 1:

Average throughput: 12.82 Mbit/s

95th percentile per-packet one-way delay: 82.150 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 8.48 Mbit/s

95th percentile per-packet one-way delay: 82.132 ms

Loss rate: 1.68%

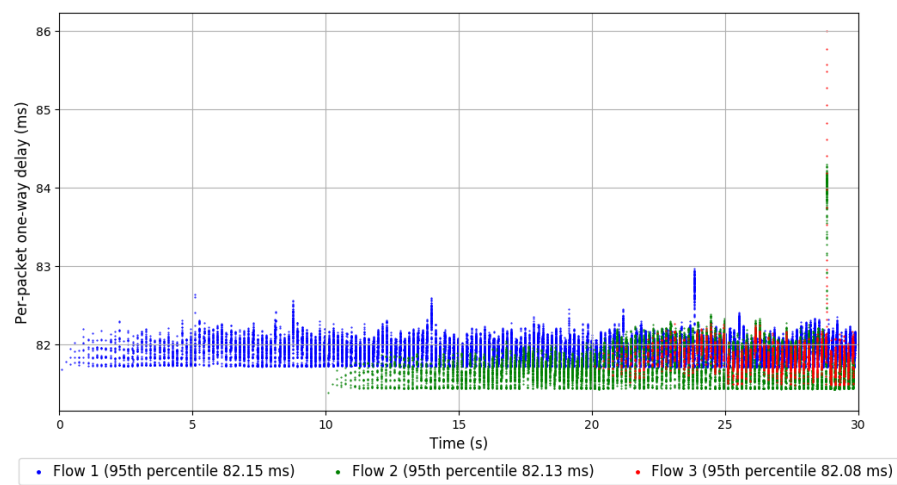
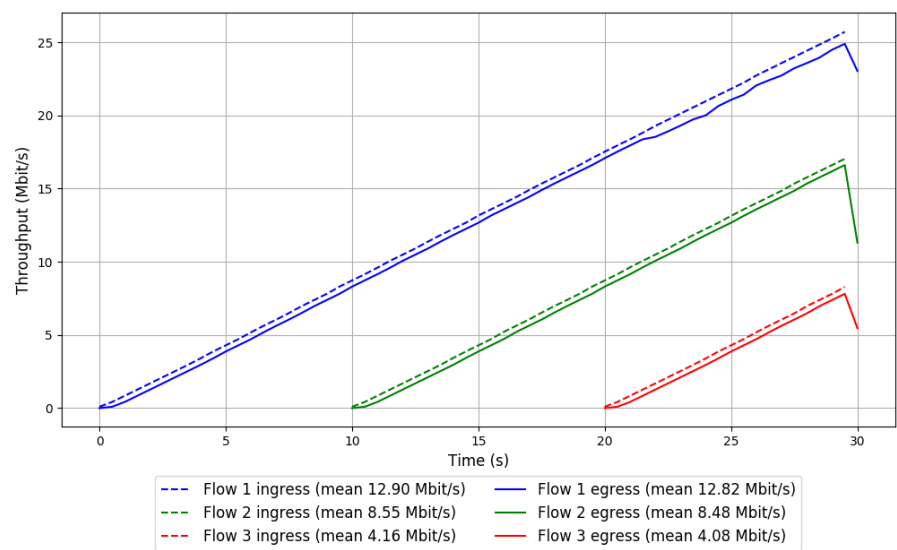
-- Flow 3:

Average throughput: 4.08 Mbit/s

95th percentile per-packet one-way delay: 82.083 ms

Loss rate: 3.43%

Run 4: Report of LEDBAT — Data Link

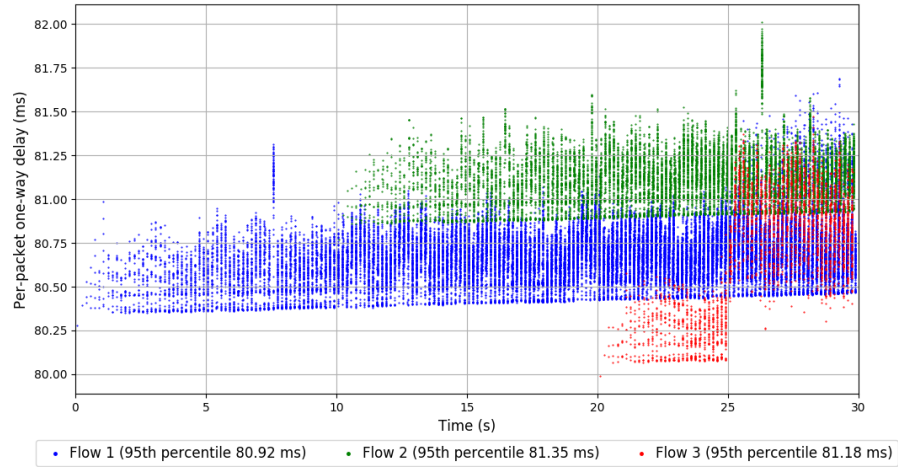
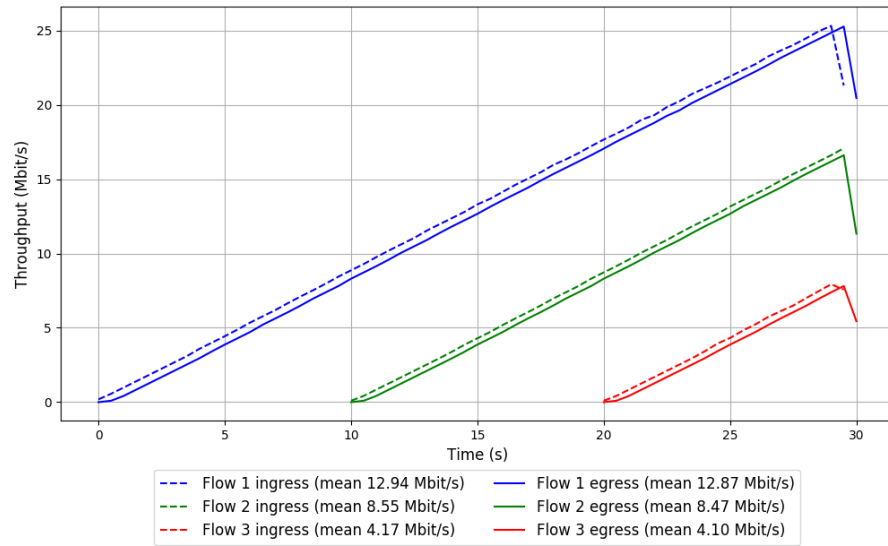


Run 5: Statistics of LEDBAT

Start at: 2018-06-06 04:13:03
End at: 2018-06-06 04:13:33
Local clock offset: -1.755 ms
Remote clock offset: 14.287 ms

Below is generated by plot.py at 2018-06-06 06:20:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.80 Mbit/s
95th percentile per-packet one-way delay: 81.255 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 12.87 Mbit/s
95th percentile per-packet one-way delay: 80.922 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 8.47 Mbit/s
95th percentile per-packet one-way delay: 81.350 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 81.177 ms
Loss rate: 3.41%

Run 5: Report of LEDBAT — Data Link

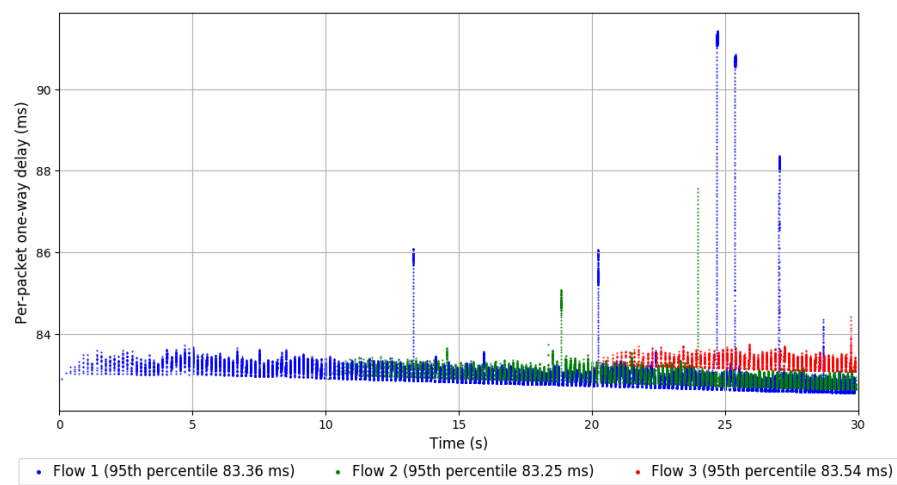
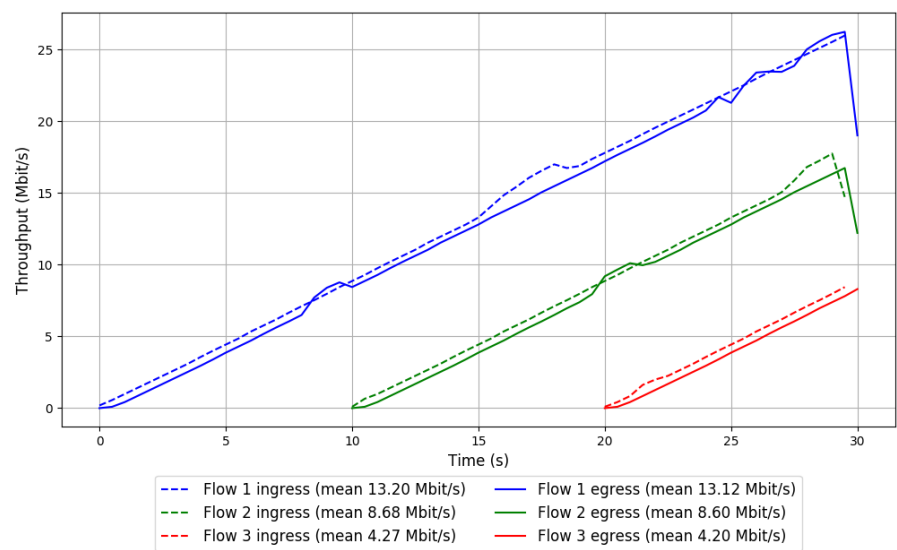


Run 6: Statistics of LEDBAT

Start at: 2018-06-06 04:33:02
End at: 2018-06-06 04:33:32
Local clock offset: -2.519 ms
Remote clock offset: 14.149 ms

Below is generated by plot.py at 2018-06-06 06:20:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 20.19 Mbit/s
95th percentile per-packet one-way delay: 83.402 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 83.365 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 8.60 Mbit/s
95th percentile per-packet one-way delay: 83.248 ms
Loss rate: 1.66%
-- Flow 3:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 83.538 ms
Loss rate: 3.37%

Run 6: Report of LEDBAT — Data Link

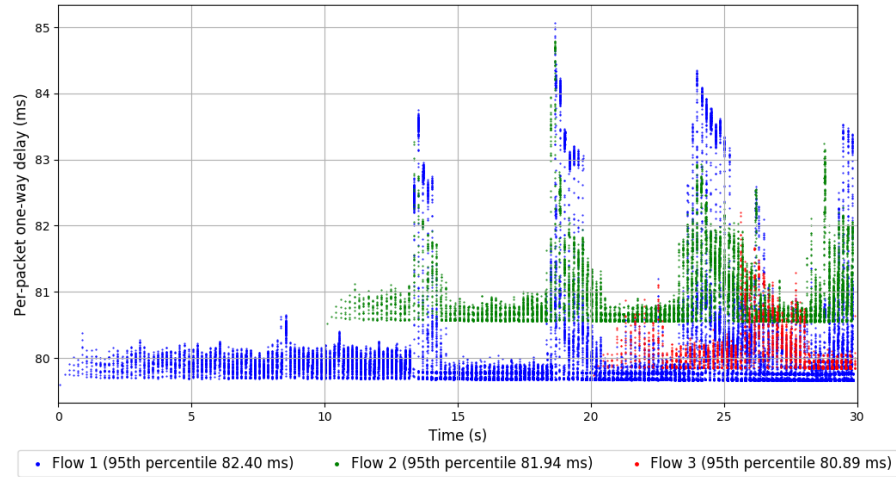
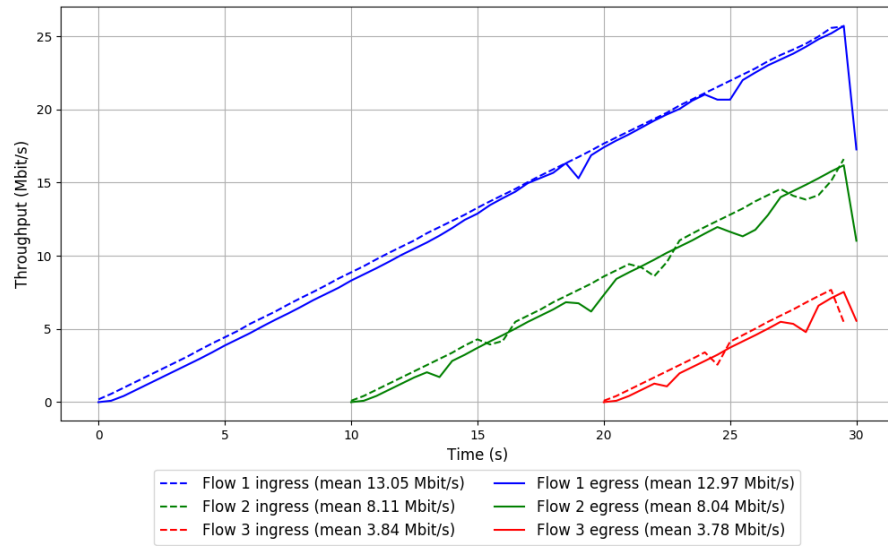


Run 7: Statistics of LEDBAT

Start at: 2018-06-06 04:53:01
End at: 2018-06-06 04:53:31
Local clock offset: -3.569 ms
Remote clock offset: 8.472 ms

Below is generated by plot.py at 2018-06-06 06:20:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.51 Mbit/s
95th percentile per-packet one-way delay: 82.015 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 12.97 Mbit/s
95th percentile per-packet one-way delay: 82.401 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 8.04 Mbit/s
95th percentile per-packet one-way delay: 81.939 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: 80.889 ms
Loss rate: 3.28%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-06-06 05:13:17

End at: 2018-06-06 05:13:47

Local clock offset: -6.546 ms

Remote clock offset: 6.911 ms

Below is generated by plot.py at 2018-06-06 06:20:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.57 Mbit/s

95th percentile per-packet one-way delay: 85.655 ms

Loss rate: 1.44%

-- Flow 1:

Average throughput: 12.68 Mbit/s

95th percentile per-packet one-way delay: 85.538 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 8.46 Mbit/s

95th percentile per-packet one-way delay: 85.798 ms

Loss rate: 1.68%

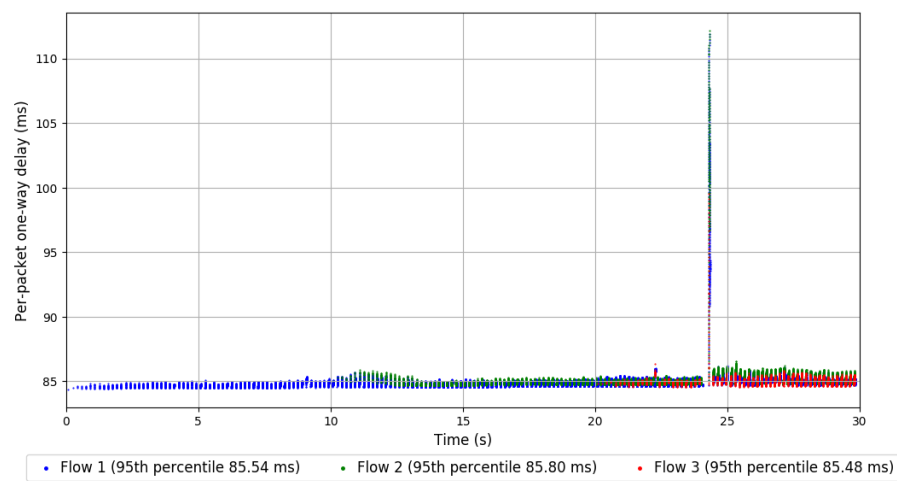
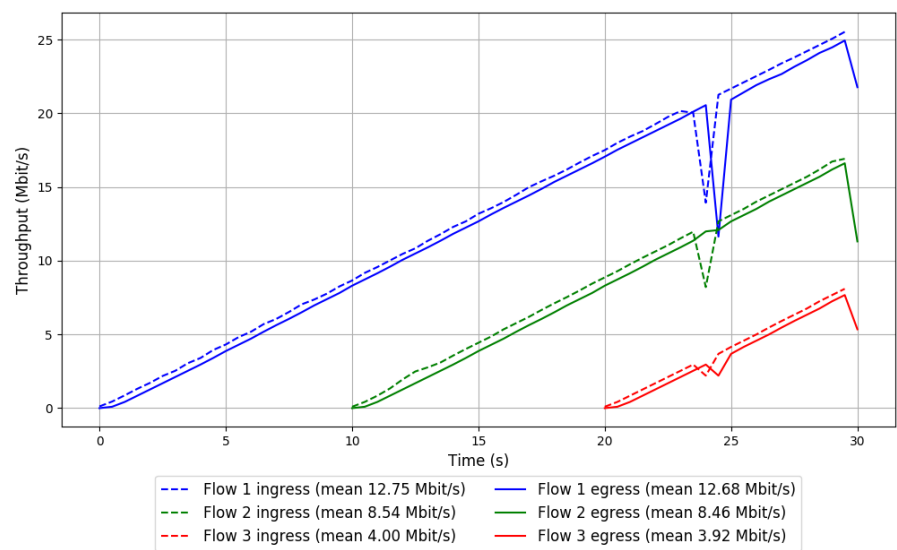
-- Flow 3:

Average throughput: 3.92 Mbit/s

95th percentile per-packet one-way delay: 85.482 ms

Loss rate: 3.47%

Run 8: Report of LEDBAT — Data Link

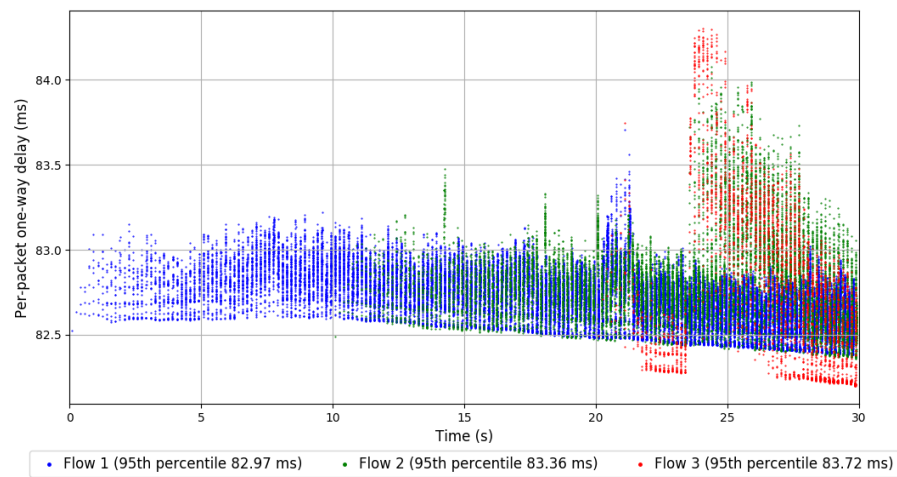
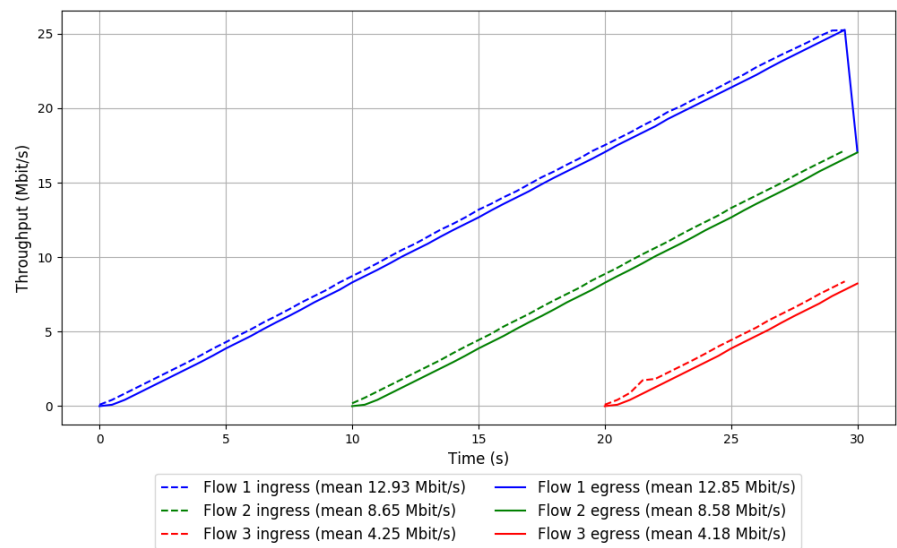


Run 9: Statistics of LEDBAT

Start at: 2018-06-06 05:33:18
End at: 2018-06-06 05:33:48
Local clock offset: -7.957 ms
Remote clock offset: 13.088 ms

Below is generated by plot.py at 2018-06-06 06:20:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 19.88 Mbit/s
95th percentile per-packet one-way delay: 83.140 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 12.85 Mbit/s
95th percentile per-packet one-way delay: 82.972 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 8.58 Mbit/s
95th percentile per-packet one-way delay: 83.363 ms
Loss rate: 1.67%
-- Flow 3:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 83.718 ms
Loss rate: 3.35%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-06-06 05:53:19

End at: 2018-06-06 05:53:49

Local clock offset: -3.448 ms

Remote clock offset: 4.668 ms

Below is generated by plot.py at 2018-06-06 06:20:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.10 Mbit/s

95th percentile per-packet one-way delay: 86.086 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 12.04 Mbit/s

95th percentile per-packet one-way delay: 85.629 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 8.60 Mbit/s

95th percentile per-packet one-way delay: 86.406 ms

Loss rate: 1.67%

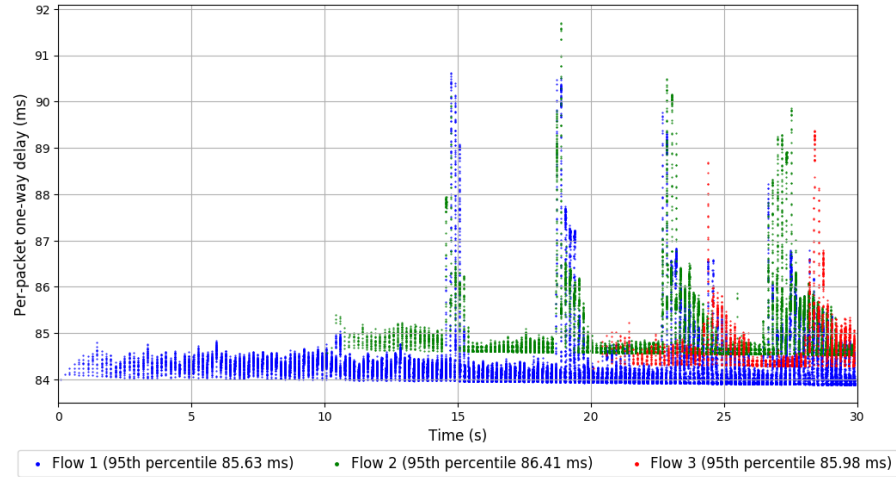
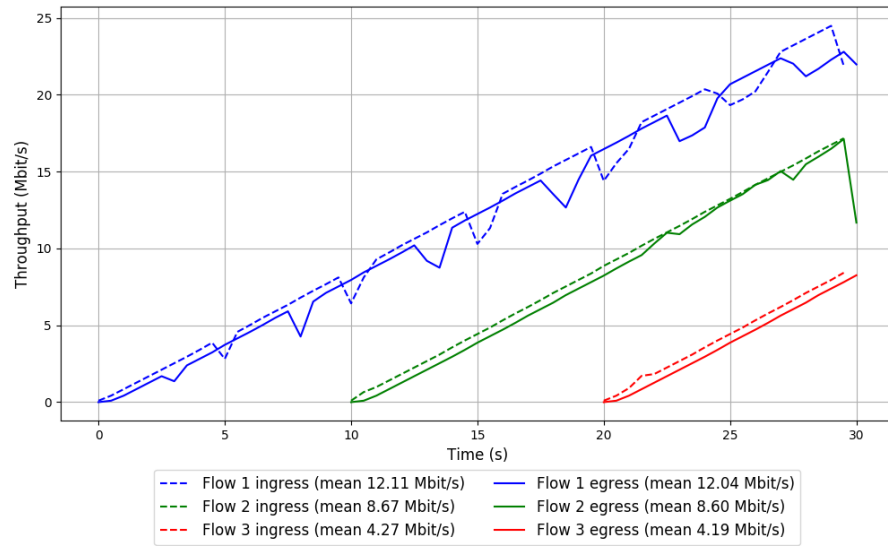
-- Flow 3:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 85.977 ms

Loss rate: 3.37%

Run 10: Report of LEDBAT — Data Link

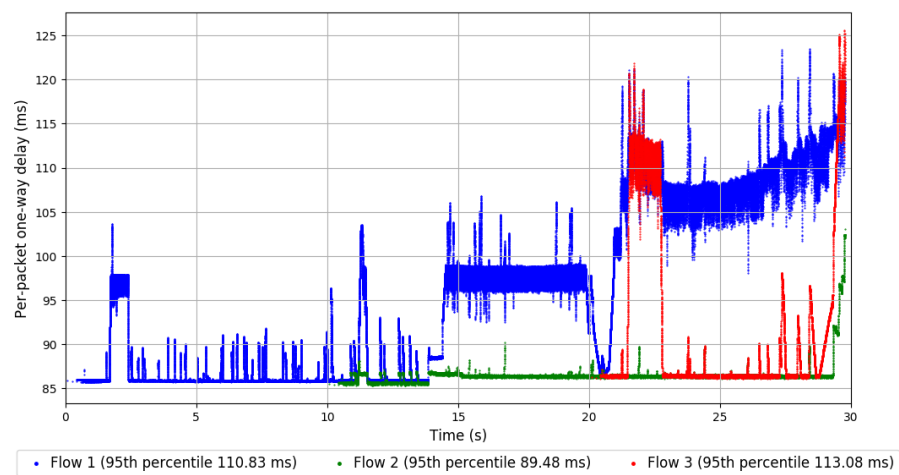
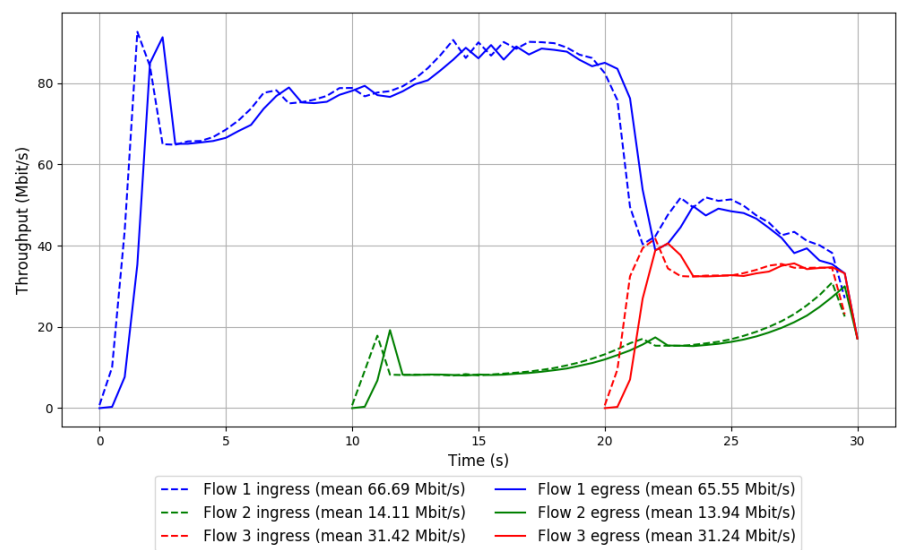


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-06 03:01:50
End at: 2018-06-06 03:02:20
Local clock offset: -1.63 ms
Remote clock offset: 4.024 ms

# Below is generated by plot.py at 2018-06-06 06:20:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.98 Mbit/s
95th percentile per-packet one-way delay: 110.983 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 65.55 Mbit/s
95th percentile per-packet one-way delay: 110.825 ms
Loss rate: 2.29%
-- Flow 2:
Average throughput: 13.94 Mbit/s
95th percentile per-packet one-way delay: 89.479 ms
Loss rate: 2.02%
-- Flow 3:
Average throughput: 31.24 Mbit/s
95th percentile per-packet one-way delay: 113.075 ms
Loss rate: 2.38%
```


Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-06-06 03:21:48

End at: 2018-06-06 03:22:18

Local clock offset: -0.956 ms

Remote clock offset: 3.679 ms

Below is generated by plot.py at 2018-06-06 06:21:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.02 Mbit/s

95th percentile per-packet one-way delay: 115.803 ms

Loss rate: 5.85%

-- Flow 1:

Average throughput: 54.25 Mbit/s

95th percentile per-packet one-way delay: 112.246 ms

Loss rate: 6.67%

-- Flow 2:

Average throughput: 35.04 Mbit/s

95th percentile per-packet one-way delay: 116.526 ms

Loss rate: 4.36%

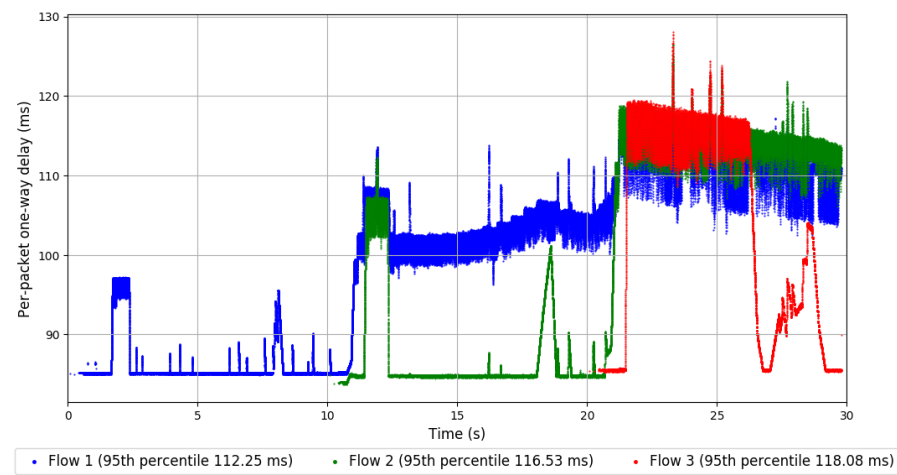
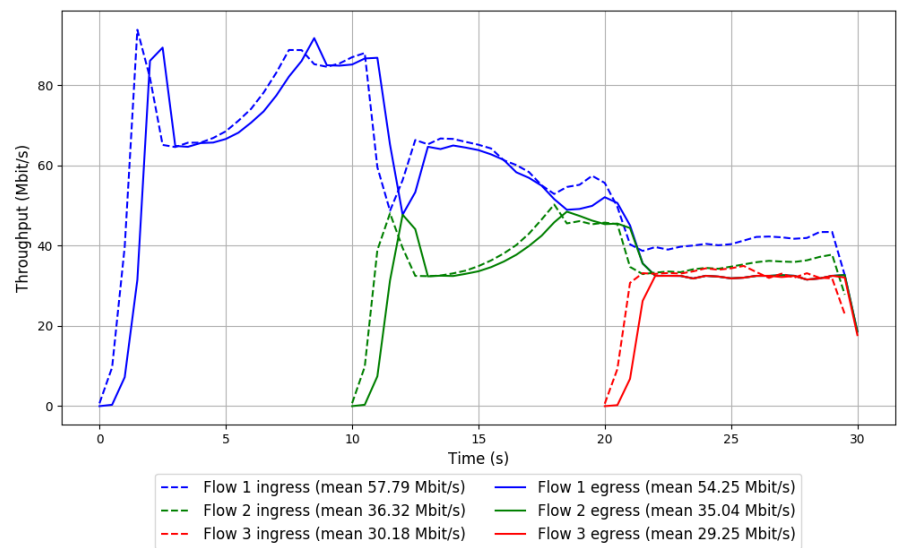
-- Flow 3:

Average throughput: 29.25 Mbit/s

95th percentile per-packet one-way delay: 118.082 ms

Loss rate: 4.73%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-06-06 03:41:47

End at: 2018-06-06 03:42:17

Local clock offset: -1.703 ms

Remote clock offset: 7.44 ms

Below is generated by plot.py at 2018-06-06 06:21:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.17 Mbit/s

95th percentile per-packet one-way delay: 112.465 ms

Loss rate: 5.79%

-- Flow 1:

Average throughput: 55.26 Mbit/s

95th percentile per-packet one-way delay: 108.689 ms

Loss rate: 6.60%

-- Flow 2:

Average throughput: 35.15 Mbit/s

95th percentile per-packet one-way delay: 113.344 ms

Loss rate: 4.44%

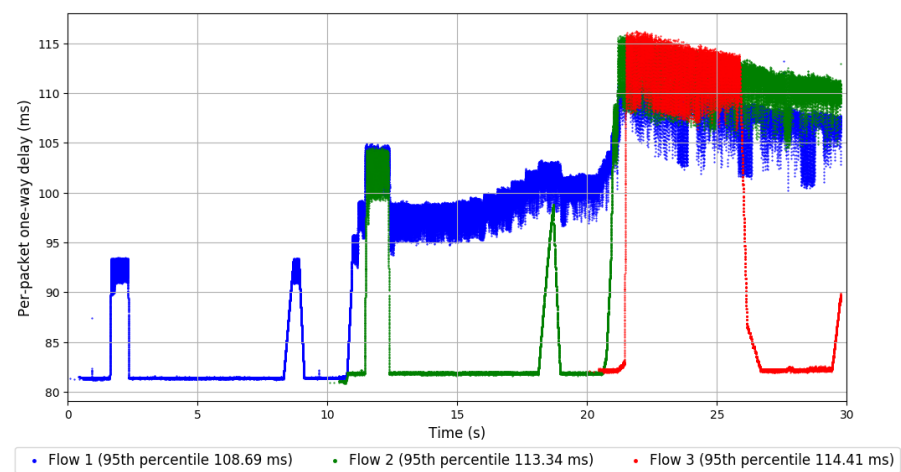
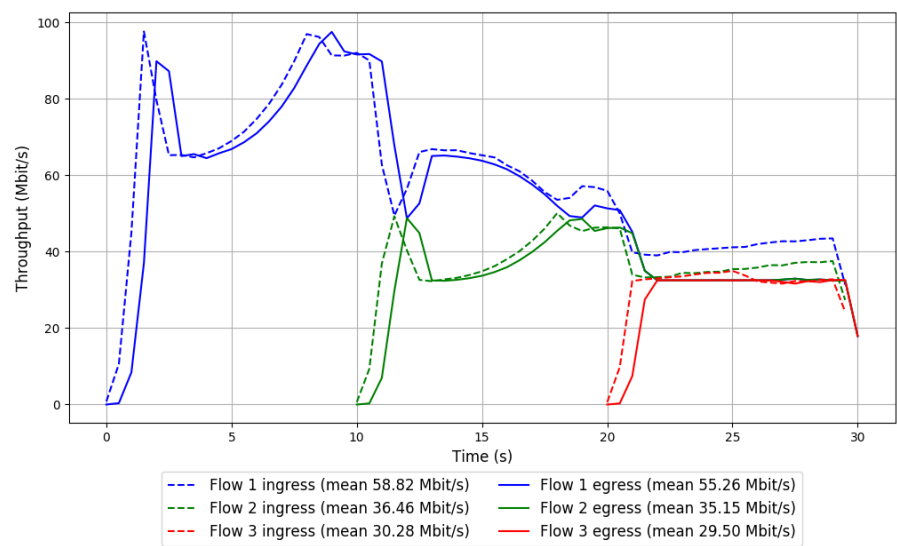
-- Flow 3:

Average throughput: 29.50 Mbit/s

95th percentile per-packet one-way delay: 114.405 ms

Loss rate: 4.28%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-06-06 04:01:47

End at: 2018-06-06 04:02:17

Local clock offset: -0.861 ms

Remote clock offset: 9.186 ms

Below is generated by plot.py at 2018-06-06 06:21:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.01 Mbit/s

95th percentile per-packet one-way delay: 113.158 ms

Loss rate: 6.14%

-- Flow 1:

Average throughput: 54.12 Mbit/s

95th percentile per-packet one-way delay: 109.082 ms

Loss rate: 7.18%

-- Flow 2:

Average throughput: 35.09 Mbit/s

95th percentile per-packet one-way delay: 113.962 ms

Loss rate: 4.42%

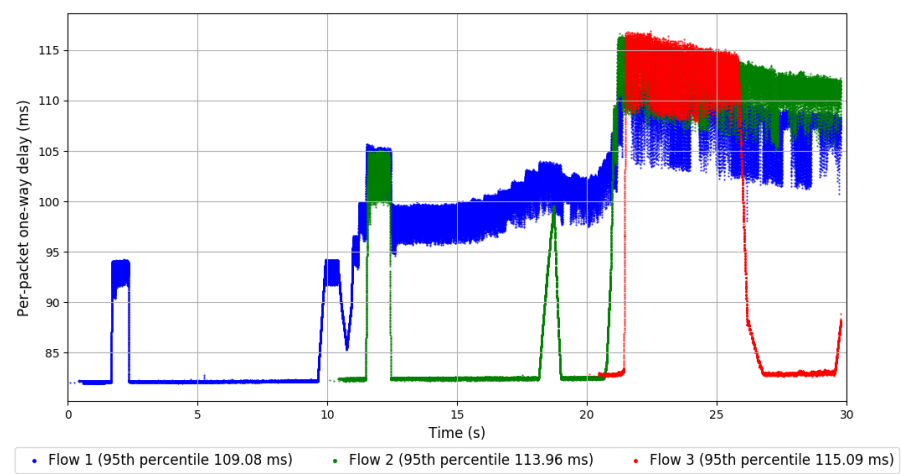
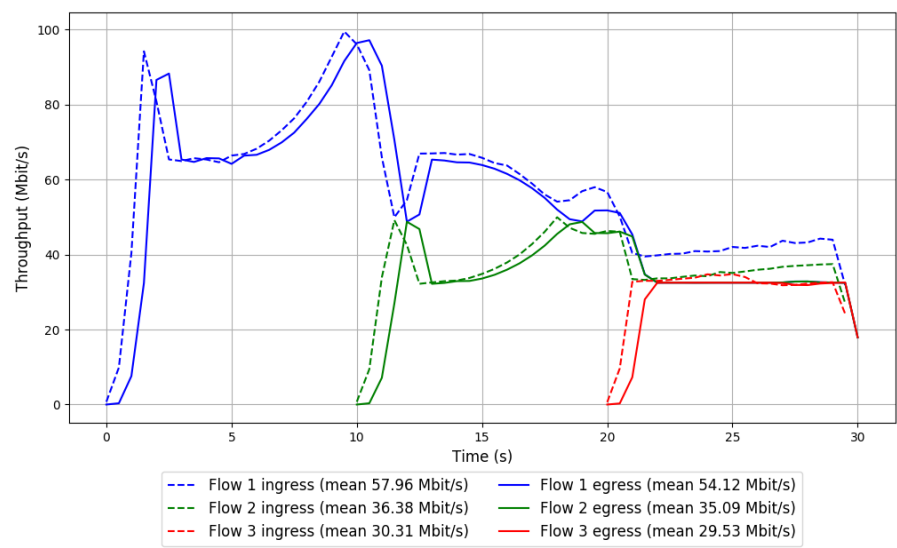
-- Flow 3:

Average throughput: 29.53 Mbit/s

95th percentile per-packet one-way delay: 115.089 ms

Loss rate: 4.27%

Run 4: Report of PCC-Allegro — Data Link

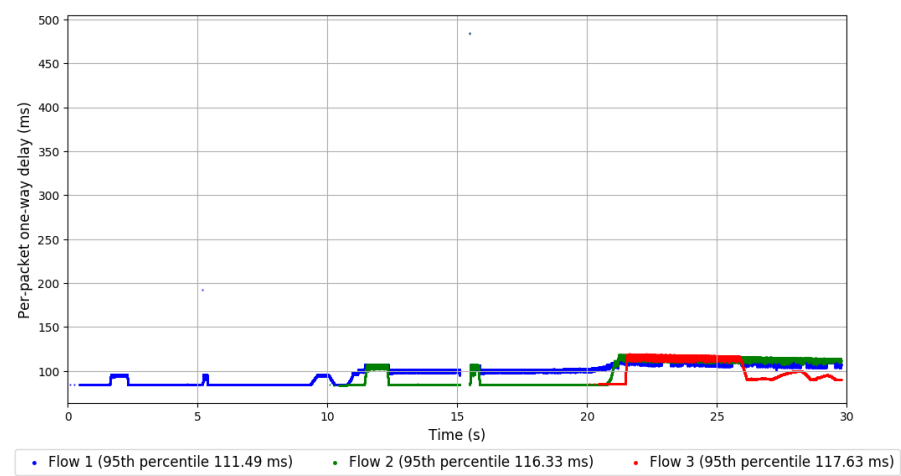
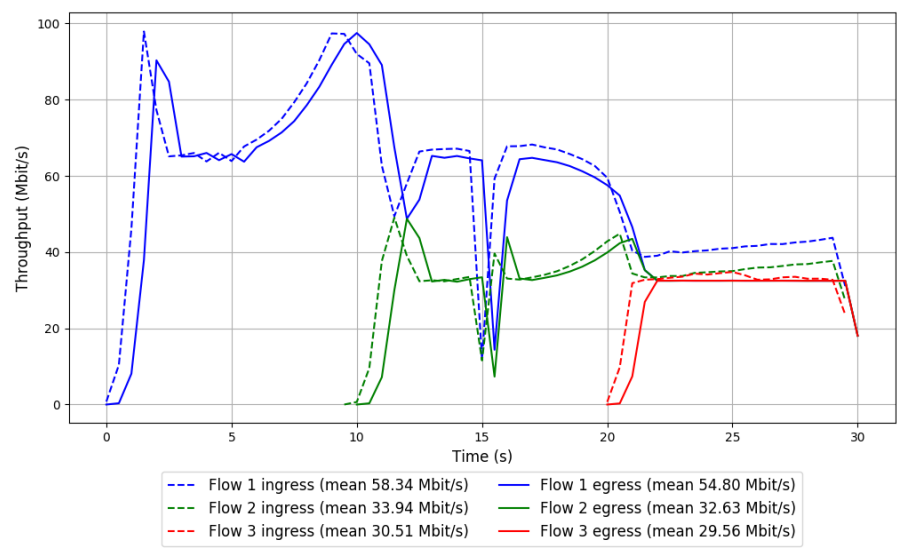


Run 5: Statistics of PCC-Allegro

Start at: 2018-06-06 04:21:45
End at: 2018-06-06 04:22:15
Local clock offset: -1.779 ms
Remote clock offset: 11.945 ms

Below is generated by plot.py at 2018-06-06 06:21:21
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.08 Mbit/s
95th percentile per-packet one-way delay: 115.542 ms
Loss rate: 5.94%
-- Flow 1:
Average throughput: 54.80 Mbit/s
95th percentile per-packet one-way delay: 111.491 ms
Loss rate: 6.61%
-- Flow 2:
Average throughput: 32.63 Mbit/s
95th percentile per-packet one-way delay: 116.329 ms
Loss rate: 4.72%
-- Flow 3:
Average throughput: 29.56 Mbit/s
95th percentile per-packet one-way delay: 117.626 ms
Loss rate: 4.79%

Run 5: Report of PCC-Allegro — Data Link

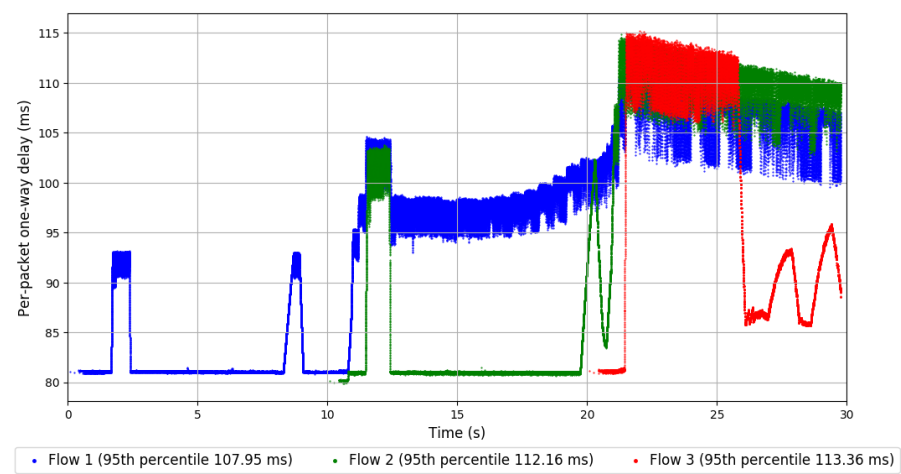
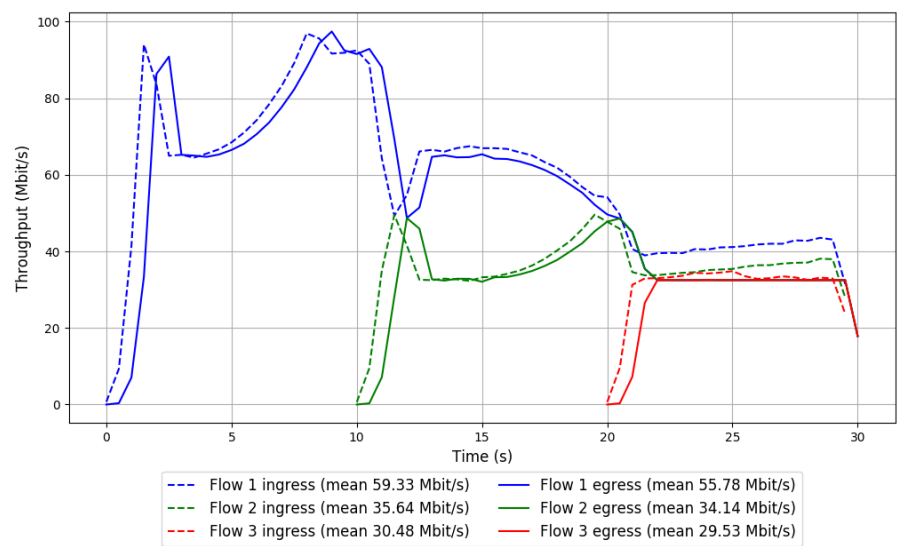


Run 6: Statistics of PCC-Allegro

Start at: 2018-06-06 04:41:44
End at: 2018-06-06 04:42:14
Local clock offset: -2.865 ms
Remote clock offset: 11.191 ms

Below is generated by plot.py at 2018-06-06 06:21:24
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.06 Mbit/s
95th percentile per-packet one-way delay: 111.326 ms
Loss rate: 5.95%
-- Flow 1:
Average throughput: 55.78 Mbit/s
95th percentile per-packet one-way delay: 107.950 ms
Loss rate: 6.51%
-- Flow 2:
Average throughput: 34.14 Mbit/s
95th percentile per-packet one-way delay: 112.155 ms
Loss rate: 5.05%
-- Flow 3:
Average throughput: 29.53 Mbit/s
95th percentile per-packet one-way delay: 113.357 ms
Loss rate: 4.78%

Run 6: Report of PCC-Allegro — Data Link



Run 7: Statistics of PCC-Allegro

Start at: 2018-06-06 05:01:42

End at: 2018-06-06 05:02:12

Local clock offset: -3.845 ms

Remote clock offset: 7.569 ms

Below is generated by plot.py at 2018-06-06 06:21:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.96 Mbit/s

95th percentile per-packet one-way delay: 111.914 ms

Loss rate: 5.86%

-- Flow 1:

Average throughput: 55.26 Mbit/s

95th percentile per-packet one-way delay: 107.773 ms

Loss rate: 6.60%

-- Flow 2:

Average throughput: 34.87 Mbit/s

95th percentile per-packet one-way delay: 113.337 ms

Loss rate: 4.48%

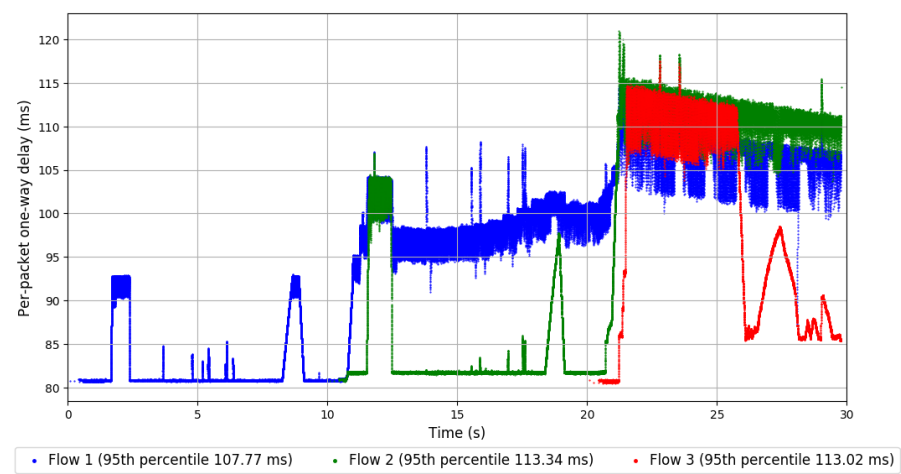
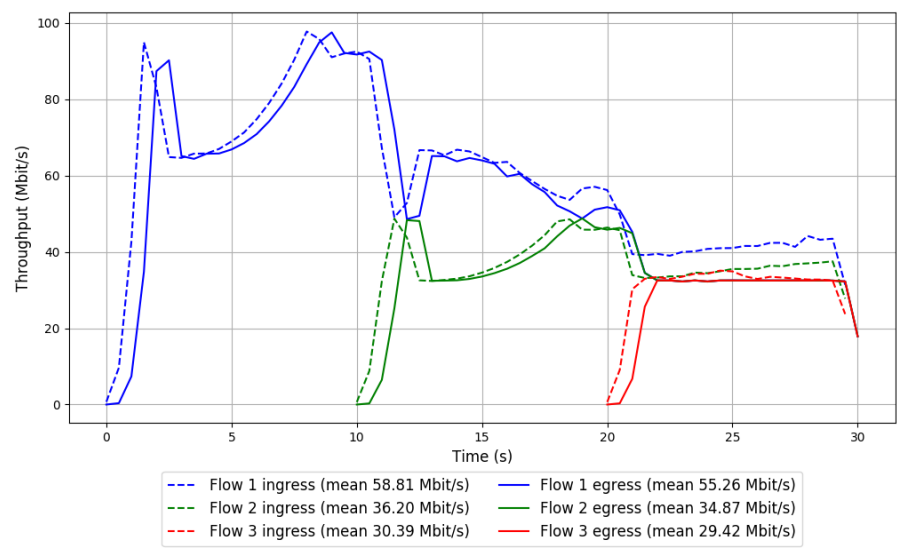
-- Flow 3:

Average throughput: 29.42 Mbit/s

95th percentile per-packet one-way delay: 113.020 ms

Loss rate: 4.89%

Run 7: Report of PCC-Allegro — Data Link

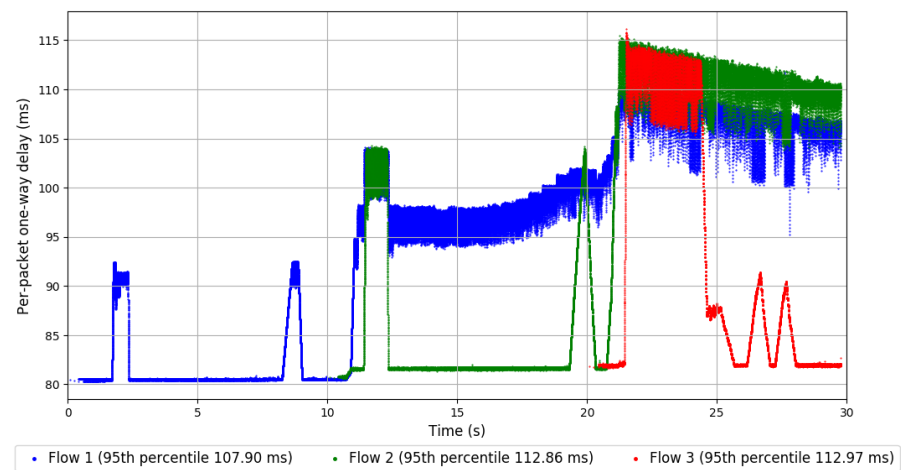
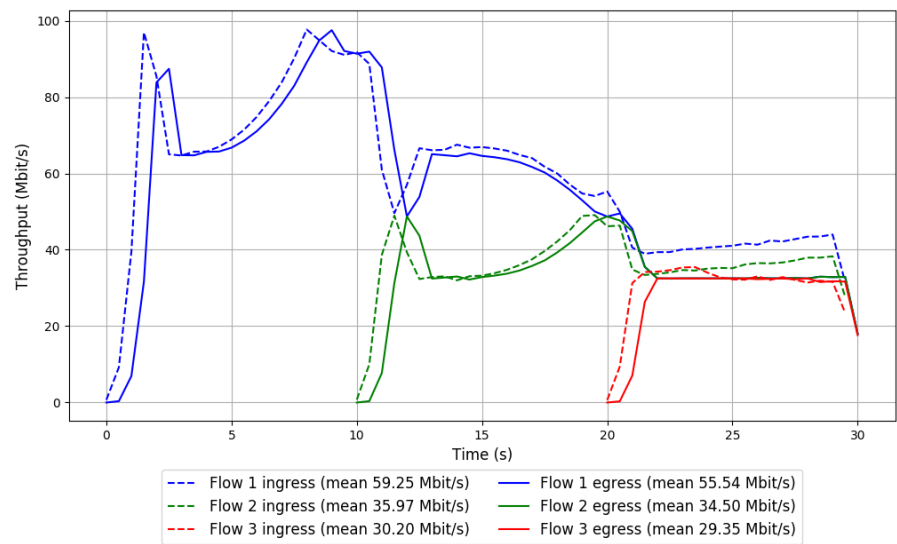


Run 8: Statistics of PCC-Allegro

Start at: 2018-06-06 05:22:00
End at: 2018-06-06 05:22:30
Local clock offset: -7.726 ms
Remote clock offset: 12.811 ms

Below is generated by plot.py at 2018-06-06 06:21:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.99 Mbit/s
95th percentile per-packet one-way delay: 111.504 ms
Loss rate: 6.08%
-- Flow 1:
Average throughput: 55.54 Mbit/s
95th percentile per-packet one-way delay: 107.899 ms
Loss rate: 6.81%
-- Flow 2:
Average throughput: 34.50 Mbit/s
95th percentile per-packet one-way delay: 112.858 ms
Loss rate: 4.93%
-- Flow 3:
Average throughput: 29.35 Mbit/s
95th percentile per-packet one-way delay: 112.972 ms
Loss rate: 4.49%

Run 8: Report of PCC-Allegro — Data Link



Run 9: Statistics of PCC-Allegro

Start at: 2018-06-06 05:42:02

End at: 2018-06-06 05:42:32

Local clock offset: -4.063 ms

Remote clock offset: 9.674 ms

Below is generated by plot.py at 2018-06-06 06:21:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.65 Mbit/s

95th percentile per-packet one-way delay: 117.046 ms

Loss rate: 6.02%

-- Flow 1:

Average throughput: 55.54 Mbit/s

95th percentile per-packet one-way delay: 112.180 ms

Loss rate: 6.56%

-- Flow 2:

Average throughput: 33.97 Mbit/s

95th percentile per-packet one-way delay: 118.057 ms

Loss rate: 5.27%

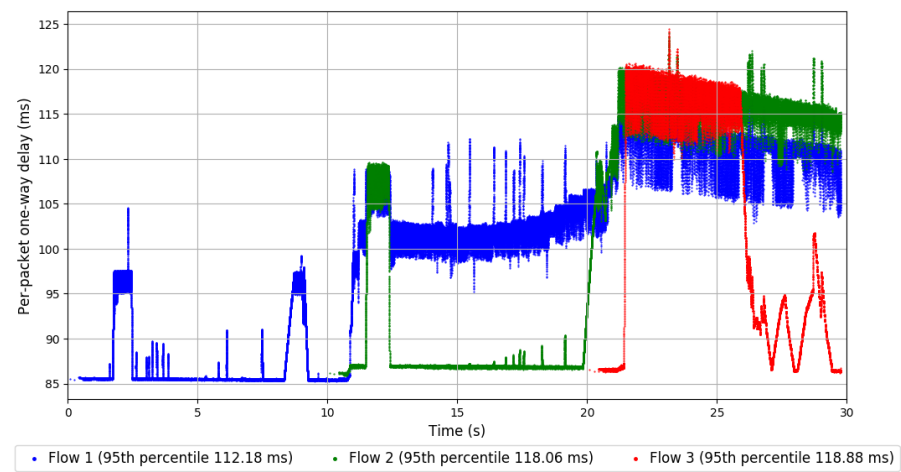
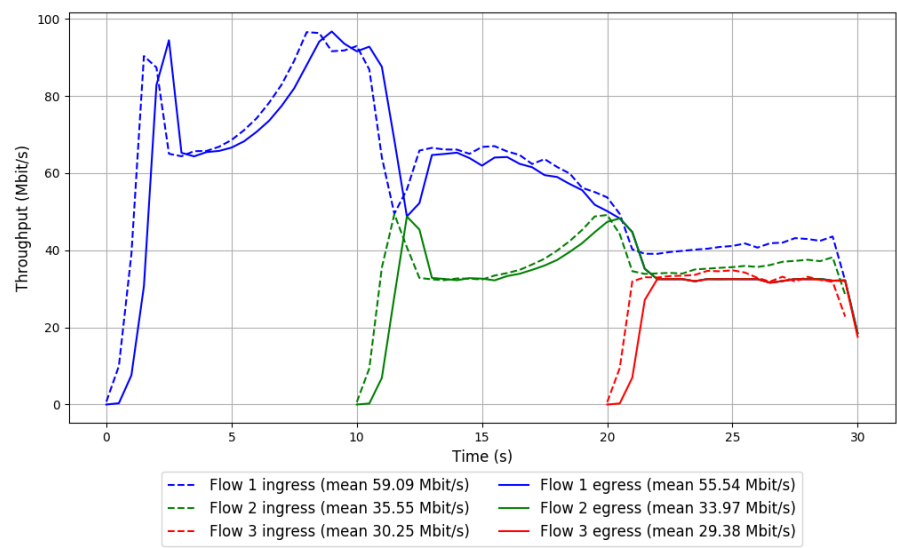
-- Flow 3:

Average throughput: 29.38 Mbit/s

95th percentile per-packet one-way delay: 118.881 ms

Loss rate: 4.56%

Run 9: Report of PCC-Allegro — Data Link



Run 10: Statistics of PCC-Allegro

Start at: 2018-06-06 06:02:01

End at: 2018-06-06 06:02:31

Local clock offset: -2.09 ms

Remote clock offset: 6.856 ms

Below is generated by plot.py at 2018-06-06 06:22:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.16 Mbit/s

95th percentile per-packet one-way delay: 112.865 ms

Loss rate: 6.30%

-- Flow 1:

Average throughput: 54.01 Mbit/s

95th percentile per-packet one-way delay: 108.426 ms

Loss rate: 7.11%

-- Flow 2:

Average throughput: 35.57 Mbit/s

95th percentile per-packet one-way delay: 113.678 ms

Loss rate: 5.24%

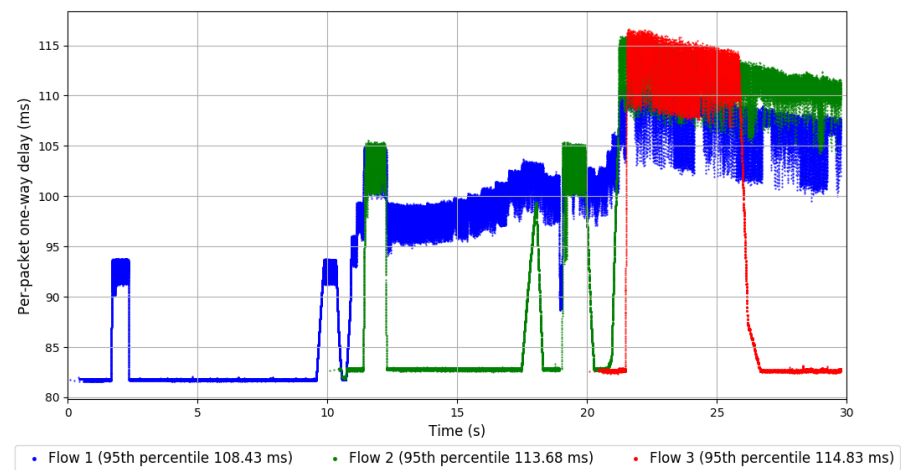
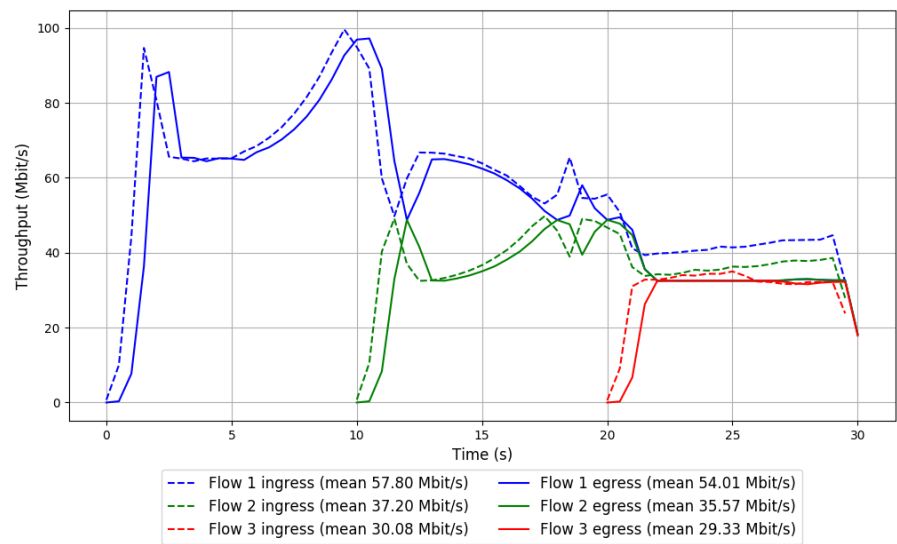
-- Flow 3:

Average throughput: 29.33 Mbit/s

95th percentile per-packet one-way delay: 114.835 ms

Loss rate: 4.18%

Run 10: Report of PCC-Allegro — Data Link

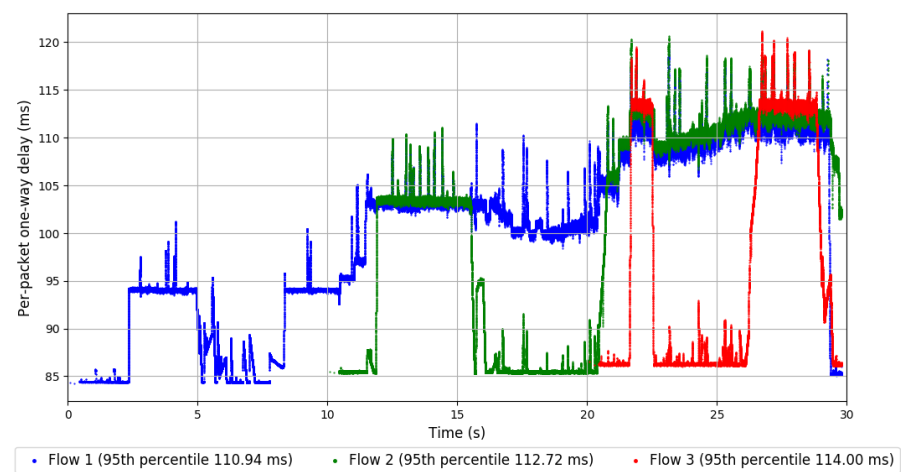
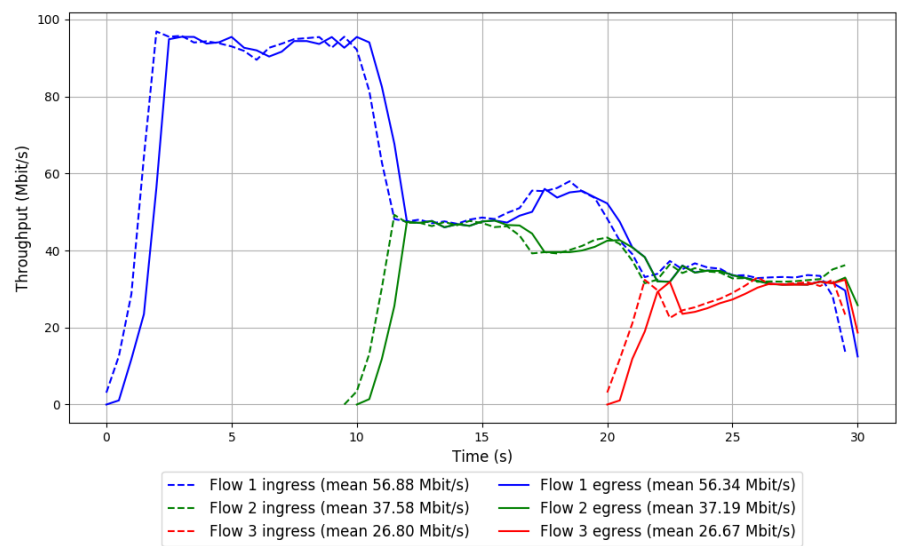


```
Run 1: Statistics of PCC-Expr

Start at: 2018-06-06 03:03:05
End at: 2018-06-06 03:03:35
Local clock offset: -0.804 ms
Remote clock offset: 5.672 ms

# Below is generated by plot.py at 2018-06-06 06:23:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.71 Mbit/s
95th percentile per-packet one-way delay: 112.892 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 56.34 Mbit/s
95th percentile per-packet one-way delay: 110.945 ms
Loss rate: 1.51%
-- Flow 2:
Average throughput: 37.19 Mbit/s
95th percentile per-packet one-way delay: 112.723 ms
Loss rate: 1.91%
-- Flow 3:
Average throughput: 26.67 Mbit/s
95th percentile per-packet one-way delay: 113.998 ms
Loss rate: 2.22%
```

Run 1: Report of PCC-Expr — Data Link

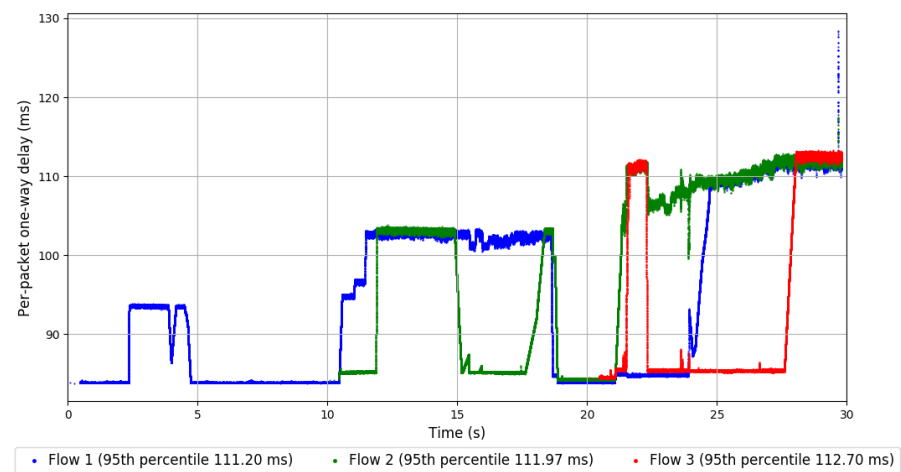
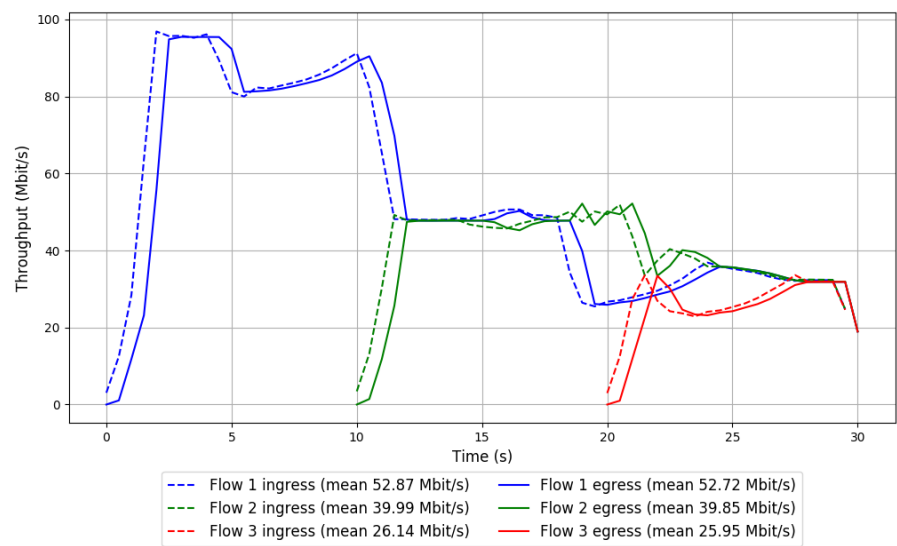


```
Run 2: Statistics of PCC-Expr

Start at: 2018-06-06 03:23:03
End at: 2018-06-06 03:23:33
Local clock offset: -0.954 ms
Remote clock offset: 3.55 ms

# Below is generated by plot.py at 2018-06-06 06:23:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.63 Mbit/s
95th percentile per-packet one-way delay: 111.860 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 52.72 Mbit/s
95th percentile per-packet one-way delay: 111.203 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 39.85 Mbit/s
95th percentile per-packet one-way delay: 111.975 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 25.95 Mbit/s
95th percentile per-packet one-way delay: 112.704 ms
Loss rate: 2.57%
```

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-06-06 03:43:01

End at: 2018-06-06 03:43:31

Local clock offset: -1.711 ms

Remote clock offset: 8.277 ms

Below is generated by plot.py at 2018-06-06 06:23:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.65 Mbit/s

95th percentile per-packet one-way delay: 107.339 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 54.50 Mbit/s

95th percentile per-packet one-way delay: 105.262 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 40.20 Mbit/s

95th percentile per-packet one-way delay: 107.441 ms

Loss rate: 1.70%

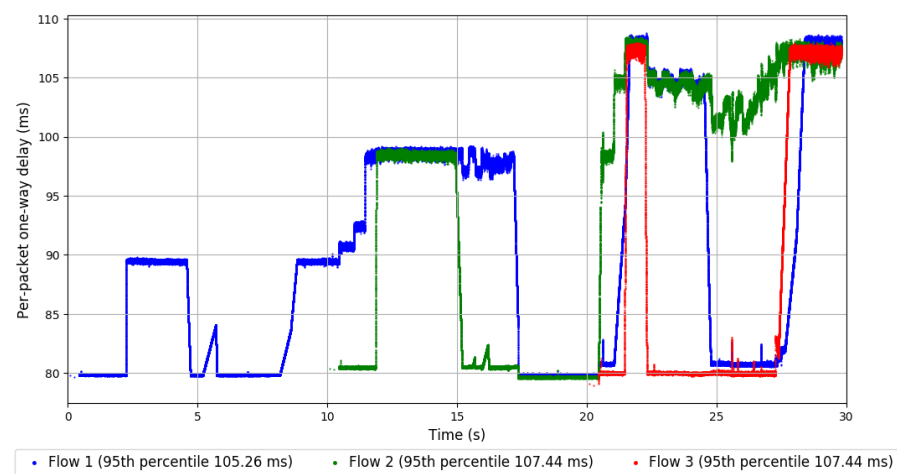
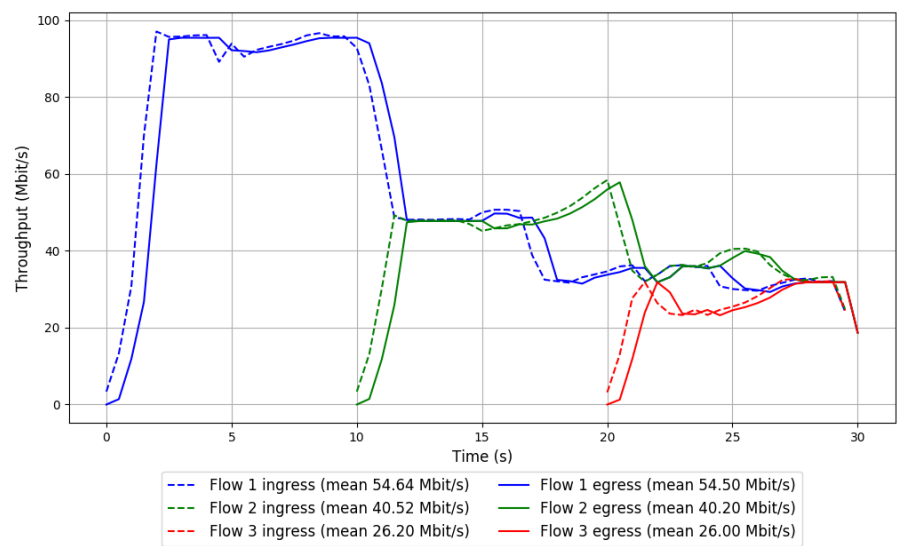
-- Flow 3:

Average throughput: 26.00 Mbit/s

95th percentile per-packet one-way delay: 107.439 ms

Loss rate: 2.55%

Run 3: Report of PCC-Expr — Data Link

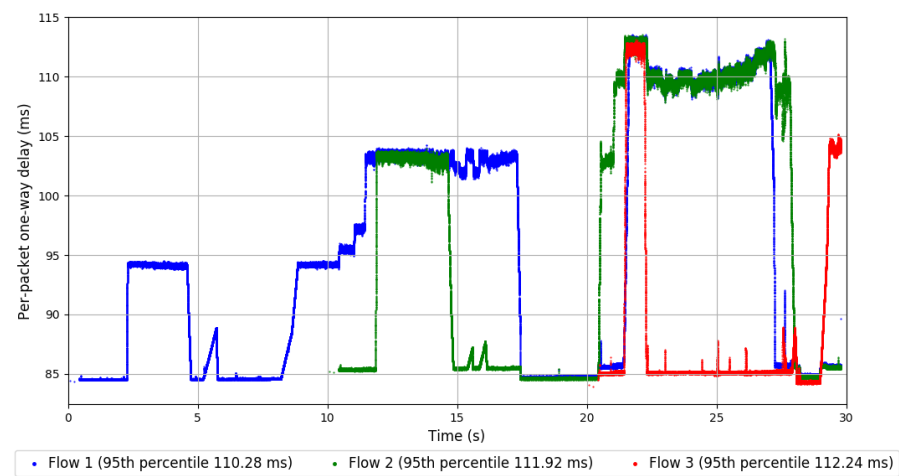
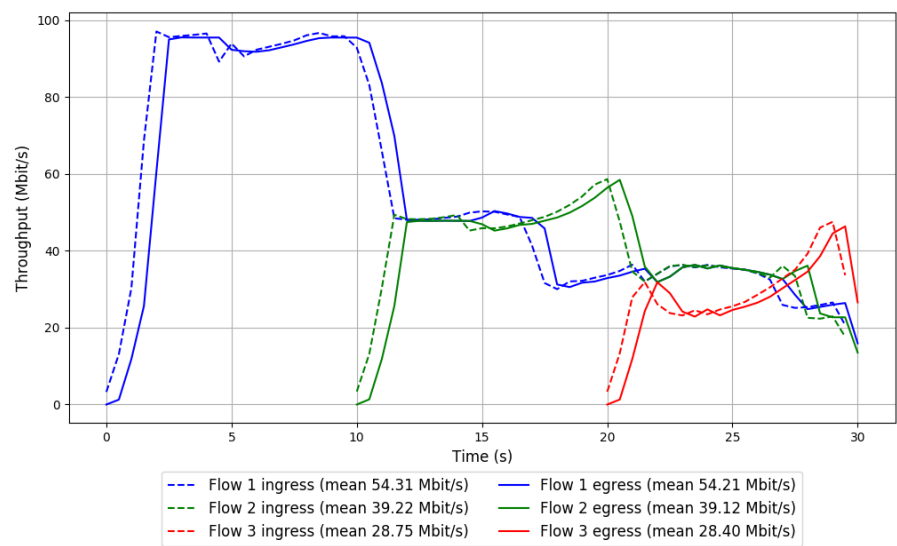


```
Run 4: Statistics of PCC-Expr

Start at: 2018-06-06 04:03:01
End at: 2018-06-06 04:03:31
Local clock offset: -0.853 ms
Remote clock offset: 6.804 ms

# Below is generated by plot.py at 2018-06-06 06:23:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.43 Mbit/s
95th percentile per-packet one-way delay: 110.805 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 54.21 Mbit/s
95th percentile per-packet one-way delay: 110.283 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 39.12 Mbit/s
95th percentile per-packet one-way delay: 111.924 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 28.40 Mbit/s
95th percentile per-packet one-way delay: 112.242 ms
Loss rate: 2.95%
```

Run 4: Report of PCC-Expr — Data Link

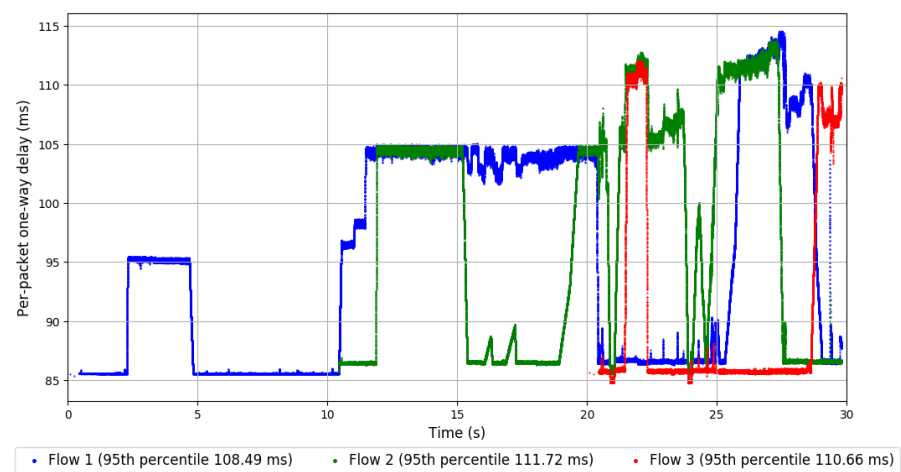
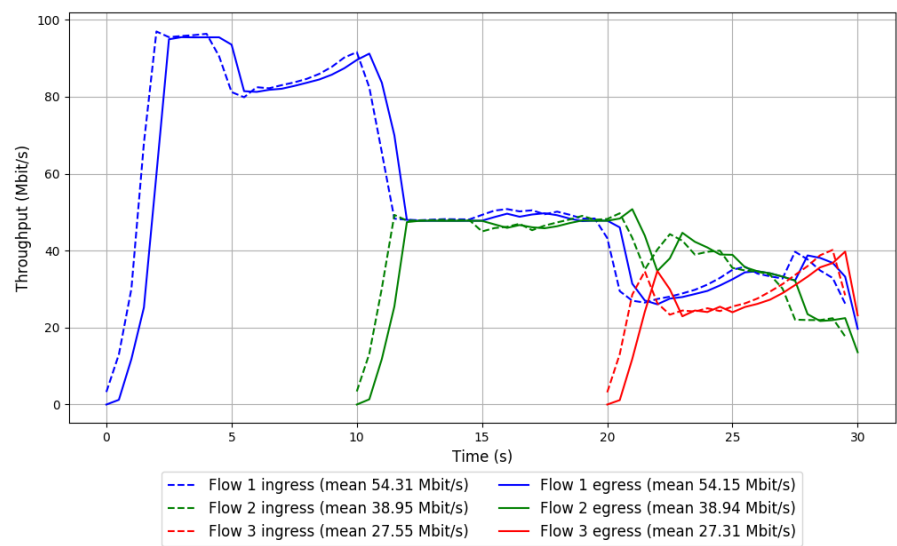


Run 5: Statistics of PCC-Expr

Start at: 2018-06-06 04:22:59
End at: 2018-06-06 04:23:29
Local clock offset: -1.013 ms
Remote clock offset: 12.216 ms

Below is generated by plot.py at 2018-06-06 06:23:19
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.90 Mbit/s
95th percentile per-packet one-way delay: 111.295 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 54.15 Mbit/s
95th percentile per-packet one-way delay: 108.488 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 38.94 Mbit/s
95th percentile per-packet one-way delay: 111.715 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 27.31 Mbit/s
95th percentile per-packet one-way delay: 110.662 ms
Loss rate: 2.61%

Run 5: Report of PCC-Expr — Data Link



Run 6: Statistics of PCC-Expr

Start at: 2018-06-06 04:42:58

End at: 2018-06-06 04:43:28

Local clock offset: -3.058 ms

Remote clock offset: 7.294 ms

Below is generated by plot.py at 2018-06-06 06:23:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.06 Mbit/s

95th percentile per-packet one-way delay: 111.671 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 53.76 Mbit/s

95th percentile per-packet one-way delay: 111.657 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 40.44 Mbit/s

95th percentile per-packet one-way delay: 110.967 ms

Loss rate: 1.30%

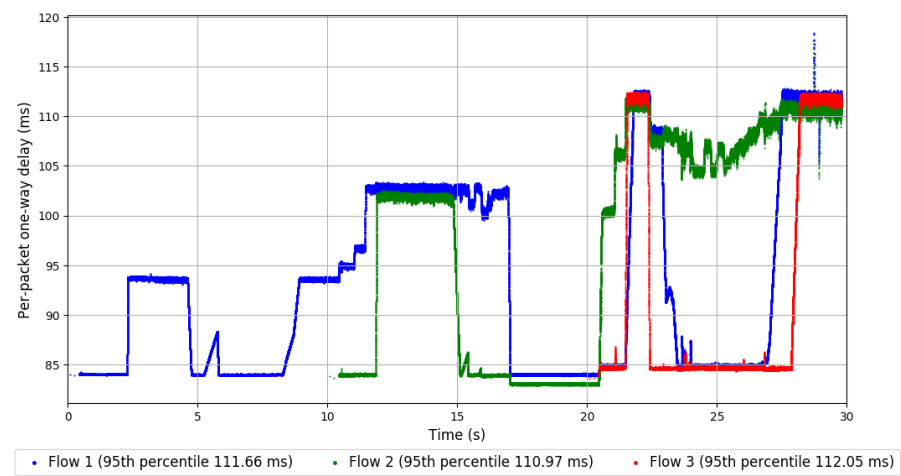
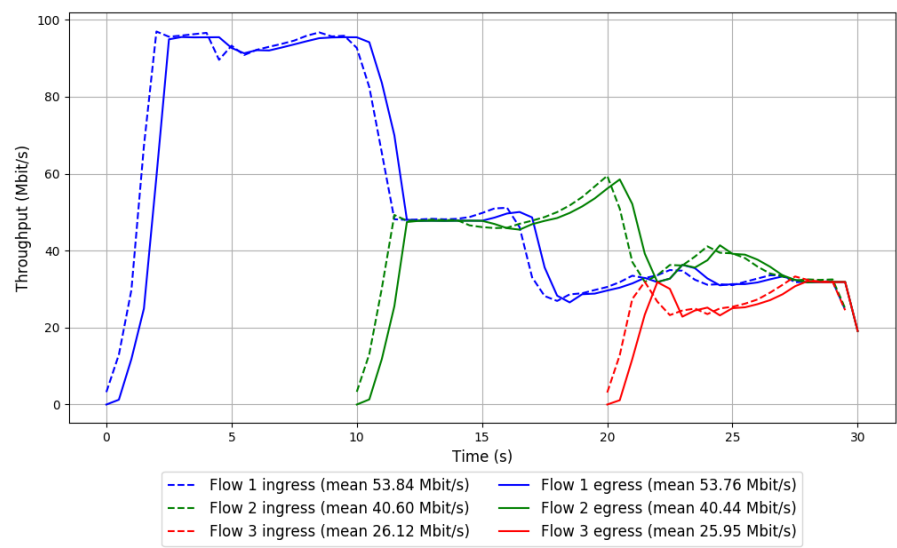
-- Flow 3:

Average throughput: 25.95 Mbit/s

95th percentile per-packet one-way delay: 112.046 ms

Loss rate: 2.49%

Run 6: Report of PCC-Expr — Data Link



Run 7: Statistics of PCC-Expr

Start at: 2018-06-06 05:02:57

End at: 2018-06-06 05:03:27

Local clock offset: -3.108 ms

Remote clock offset: 7.491 ms

Below is generated by plot.py at 2018-06-06 06:24:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.99 Mbit/s

95th percentile per-packet one-way delay: 108.921 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 55.39 Mbit/s

95th percentile per-packet one-way delay: 108.676 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 37.86 Mbit/s

95th percentile per-packet one-way delay: 109.018 ms

Loss rate: 1.43%

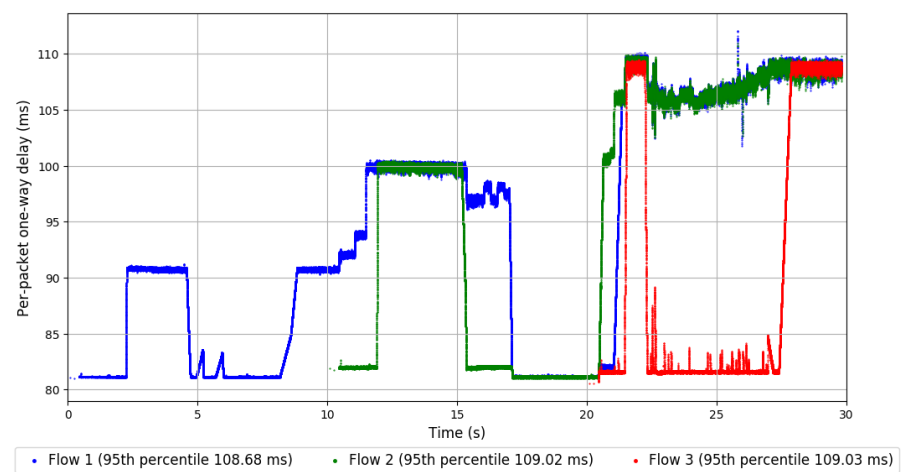
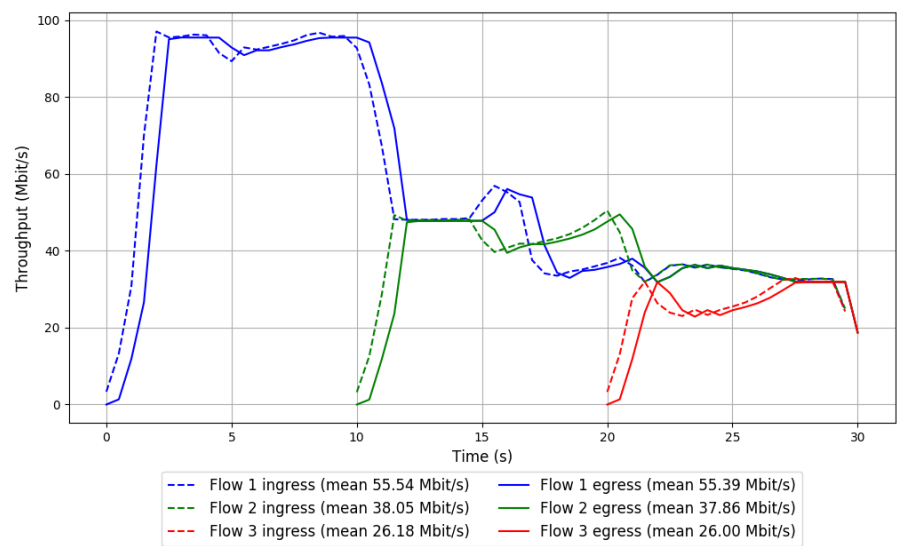
-- Flow 3:

Average throughput: 26.00 Mbit/s

95th percentile per-packet one-way delay: 109.035 ms

Loss rate: 2.48%

Run 7: Report of PCC-Expr — Data Link

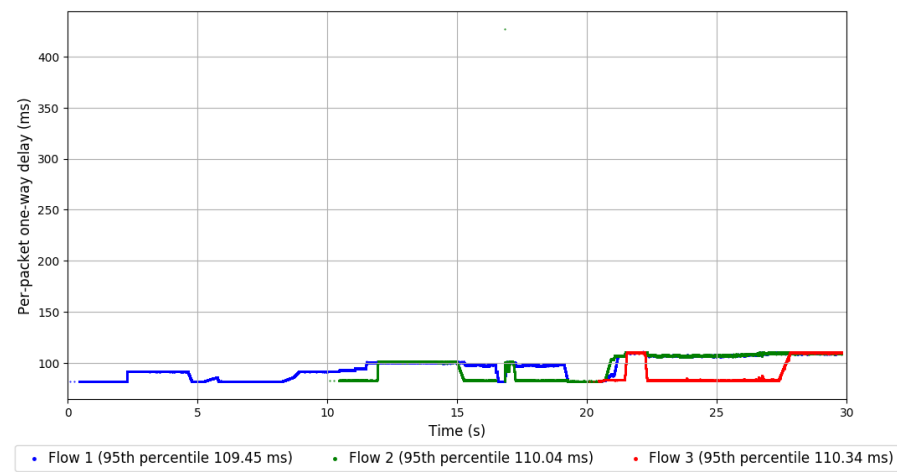
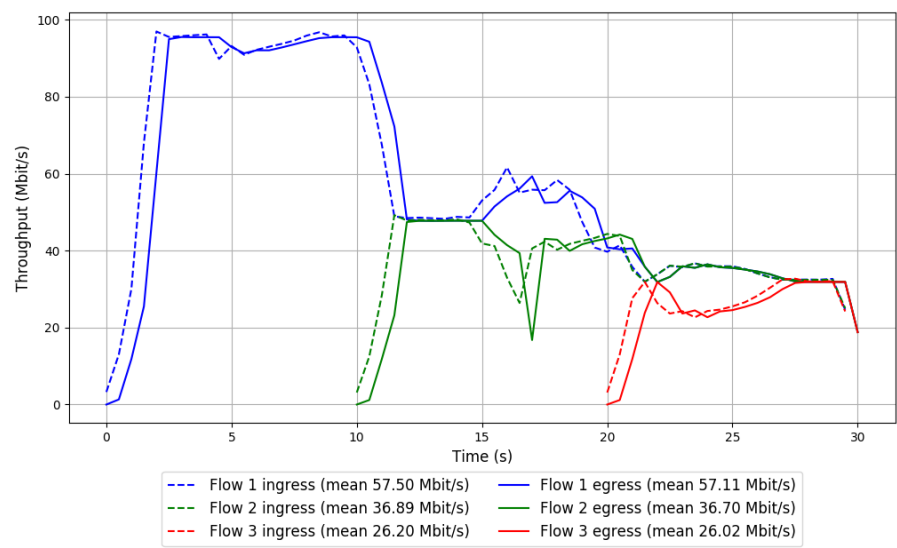


Run 8: Statistics of PCC-Expr

Start at: 2018-06-06 05:23:14
End at: 2018-06-06 05:23:44
Local clock offset: -7.866 ms
Remote clock offset: 11.908 ms

Below is generated by plot.py at 2018-06-06 06:24:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.95 Mbit/s
95th percentile per-packet one-way delay: 109.961 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 57.11 Mbit/s
95th percentile per-packet one-way delay: 109.446 ms
Loss rate: 1.27%
-- Flow 2:
Average throughput: 36.70 Mbit/s
95th percentile per-packet one-way delay: 110.036 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 26.02 Mbit/s
95th percentile per-packet one-way delay: 110.336 ms
Loss rate: 2.50%

Run 8: Report of PCC-Expr — Data Link



Run 9: Statistics of PCC-Expr

Start at: 2018-06-06 05:43:17

End at: 2018-06-06 05:43:47

Local clock offset: -3.644 ms

Remote clock offset: 9.004 ms

Below is generated by plot.py at 2018-06-06 06:25:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.71 Mbit/s

95th percentile per-packet one-way delay: 113.041 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 54.47 Mbit/s

95th percentile per-packet one-way delay: 112.564 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 38.94 Mbit/s

95th percentile per-packet one-way delay: 113.278 ms

Loss rate: 1.53%

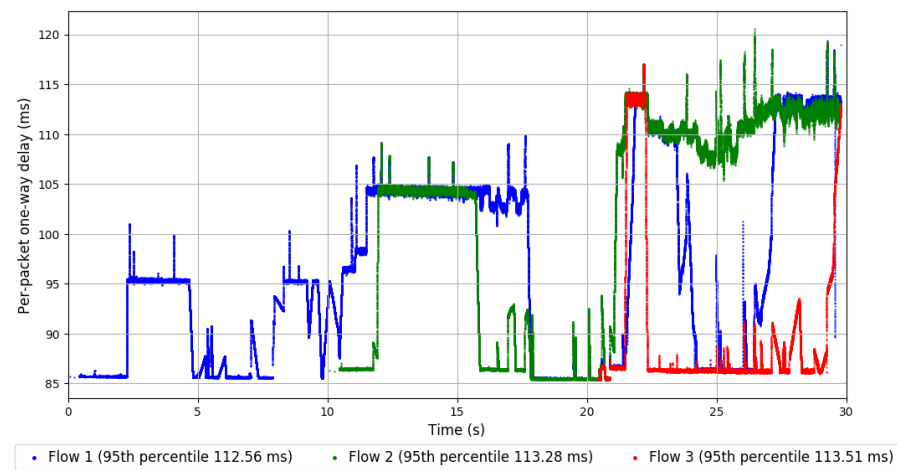
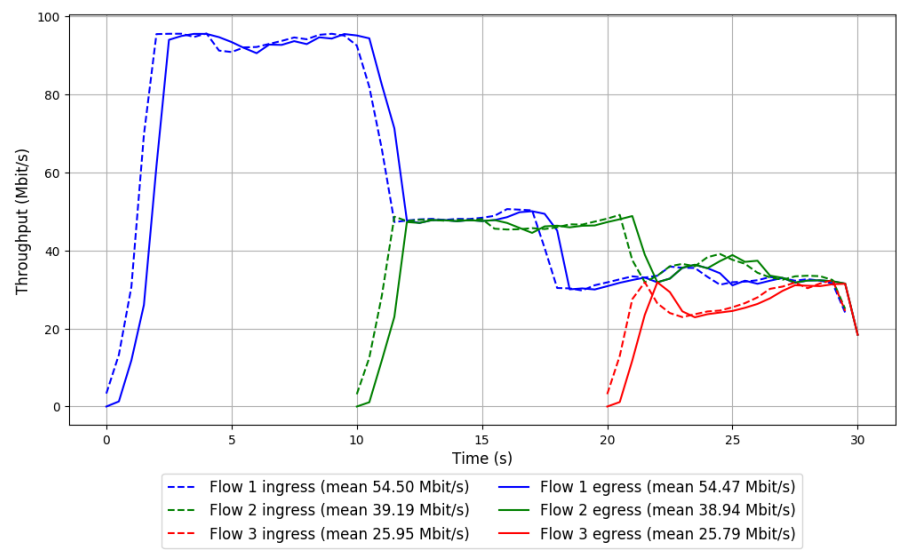
-- Flow 3:

Average throughput: 25.79 Mbit/s

95th percentile per-packet one-way delay: 113.513 ms

Loss rate: 2.46%

Run 9: Report of PCC-Expr — Data Link



Run 10: Statistics of PCC-Expr

Start at: 2018-06-06 06:03:16

End at: 2018-06-06 06:03:46

Local clock offset: -1.258 ms

Remote clock offset: 6.641 ms

Below is generated by plot.py at 2018-06-06 06:25:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.08 Mbit/s

95th percentile per-packet one-way delay: 109.753 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 55.29 Mbit/s

95th percentile per-packet one-way delay: 108.274 ms

Loss rate: 1.27%

-- Flow 2:

Average throughput: 35.57 Mbit/s

95th percentile per-packet one-way delay: 110.661 ms

Loss rate: 0.86%

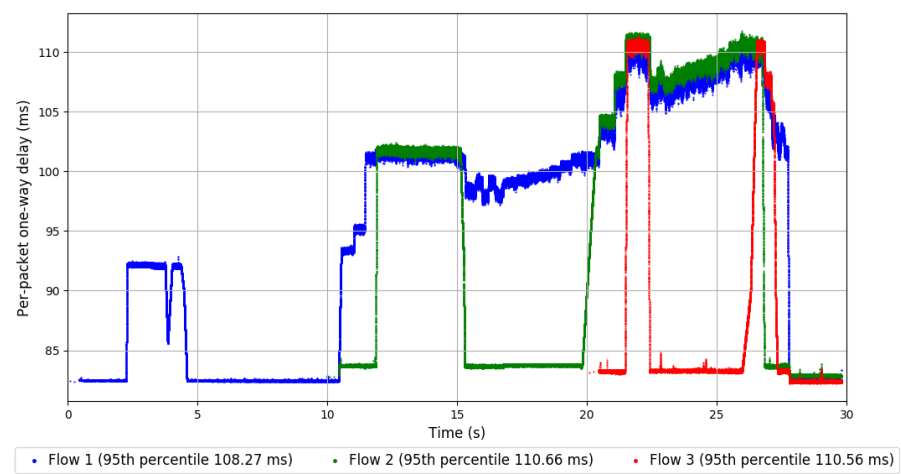
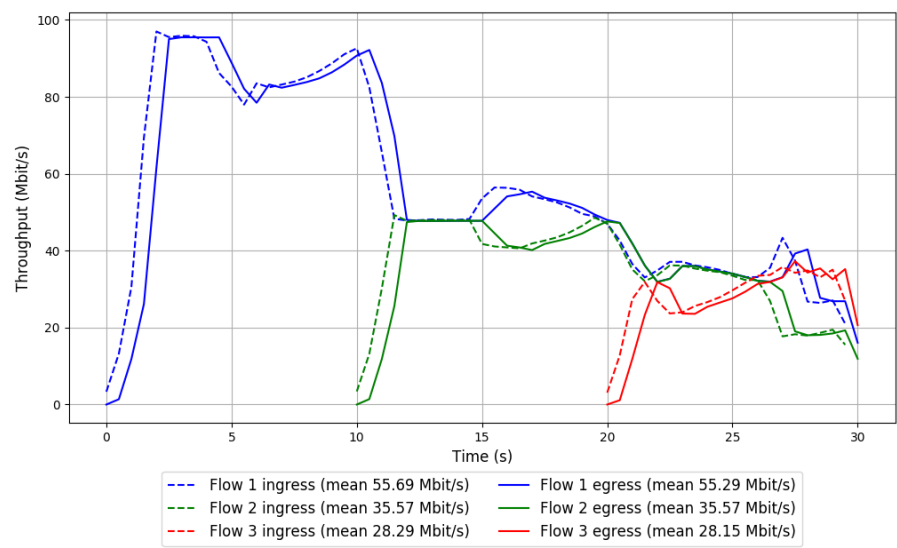
-- Flow 3:

Average throughput: 28.15 Mbit/s

95th percentile per-packet one-way delay: 110.560 ms

Loss rate: 2.21%

Run 10: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-06-06 03:08:09

End at: 2018-06-06 03:08:39

Local clock offset: -0.913 ms

Remote clock offset: 8.147 ms

Below is generated by plot.py at 2018-06-06 06:25:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.60 Mbit/s

95th percentile per-packet one-way delay: 103.629 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 31.75 Mbit/s

95th percentile per-packet one-way delay: 101.371 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 24.11 Mbit/s

95th percentile per-packet one-way delay: 103.353 ms

Loss rate: 1.10%

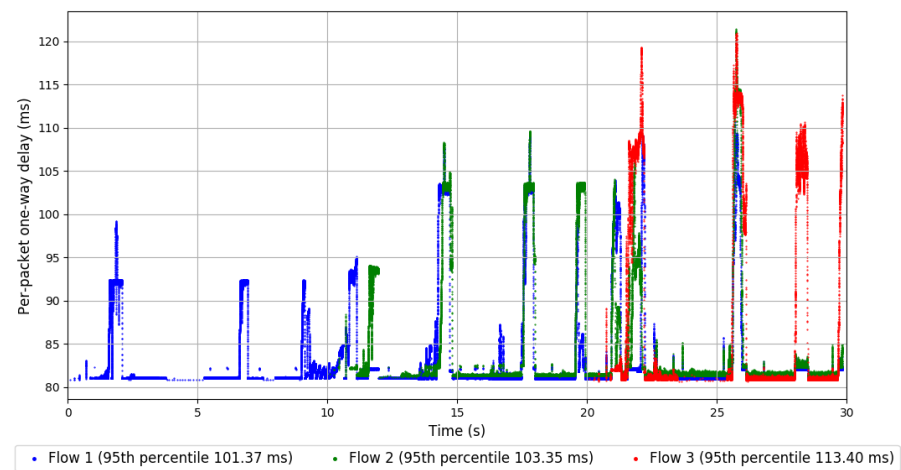
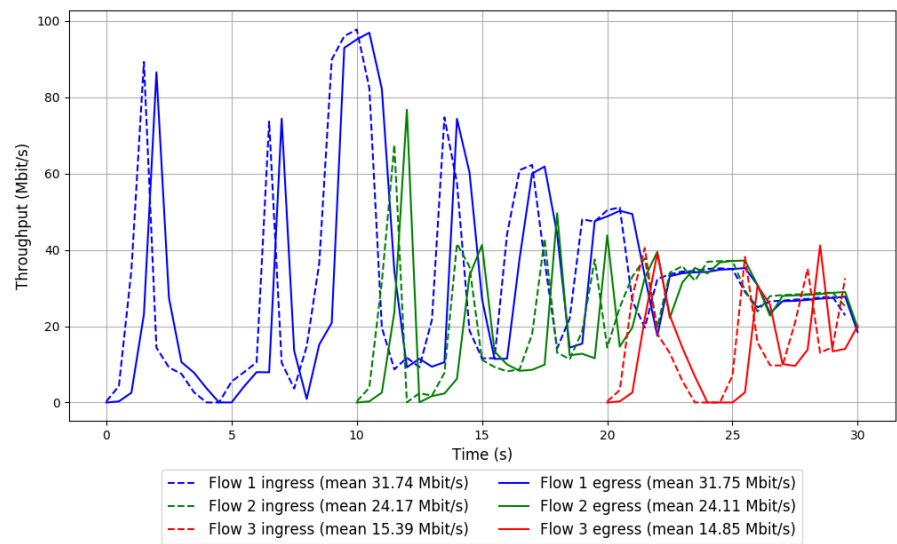
-- Flow 3:

Average throughput: 14.85 Mbit/s

95th percentile per-packet one-way delay: 113.404 ms

Loss rate: 5.13%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-06-06 03:28:07

End at: 2018-06-06 03:28:37

Local clock offset: -1.641 ms

Remote clock offset: 3.534 ms

Below is generated by plot.py at 2018-06-06 06:25:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.92 Mbit/s

95th percentile per-packet one-way delay: 107.101 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 34.76 Mbit/s

95th percentile per-packet one-way delay: 98.455 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 21.87 Mbit/s

95th percentile per-packet one-way delay: 107.589 ms

Loss rate: 1.33%

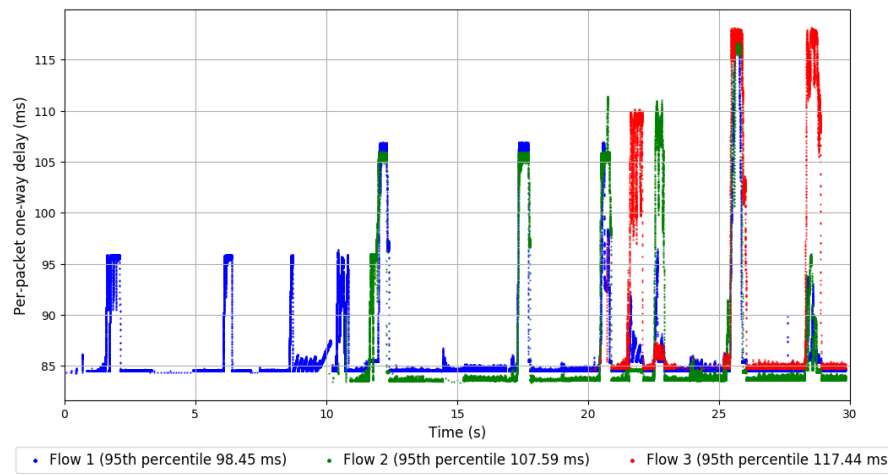
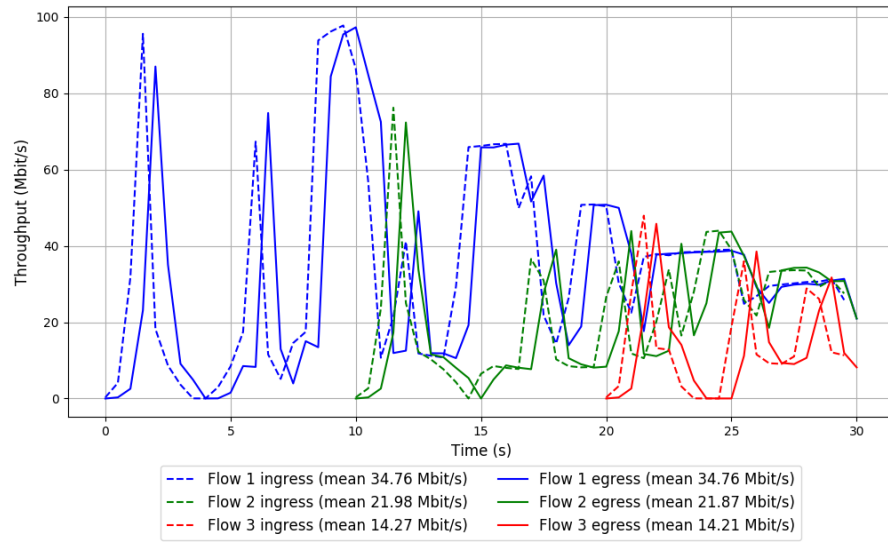
-- Flow 3:

Average throughput: 14.21 Mbit/s

95th percentile per-packet one-way delay: 117.444 ms

Loss rate: 2.12%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-06-06 03:48:06

End at: 2018-06-06 03:48:36

Local clock offset: -1.789 ms

Remote clock offset: 4.346 ms

Below is generated by plot.py at 2018-06-06 06:25:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.70 Mbit/s

95th percentile per-packet one-way delay: 106.714 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 28.70 Mbit/s

95th percentile per-packet one-way delay: 106.309 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 23.23 Mbit/s

95th percentile per-packet one-way delay: 106.804 ms

Loss rate: 1.28%

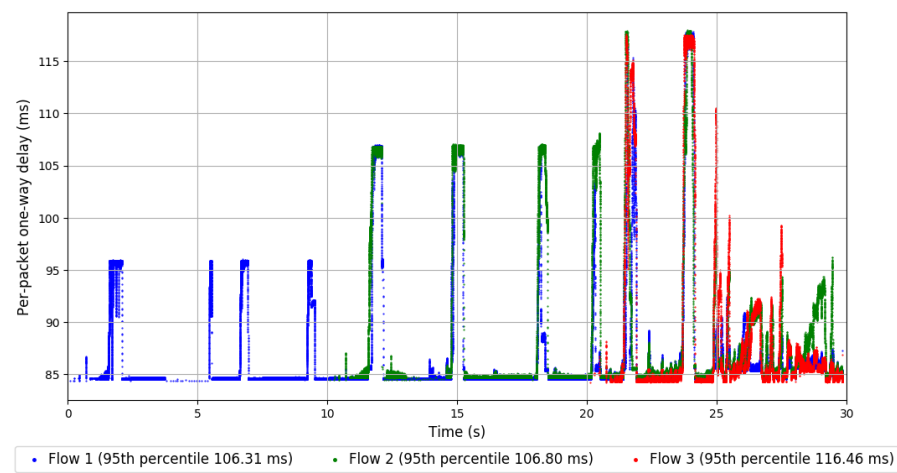
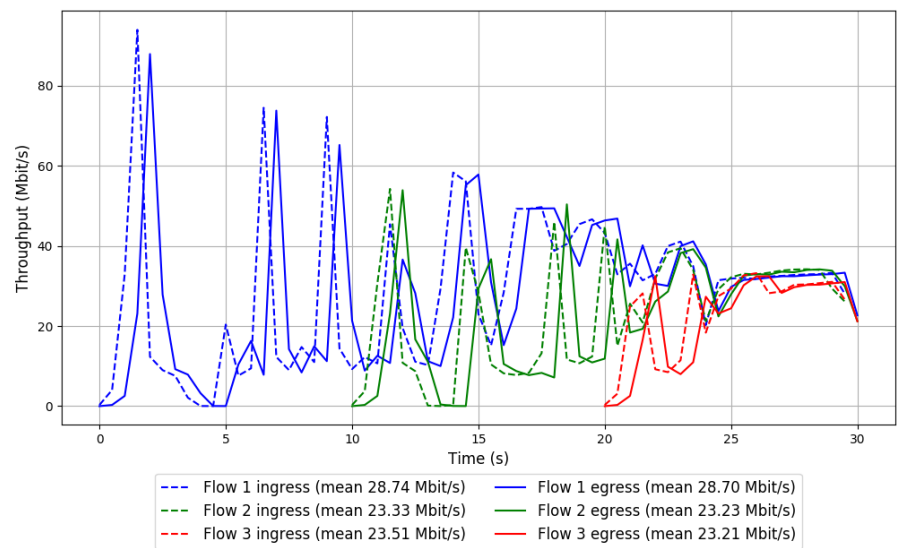
-- Flow 3:

Average throughput: 23.21 Mbit/s

95th percentile per-packet one-way delay: 116.460 ms

Loss rate: 2.89%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-06-06 04:08:04

End at: 2018-06-06 04:08:34

Local clock offset: -1.717 ms

Remote clock offset: 9.225 ms

Below is generated by plot.py at 2018-06-06 06:25:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.60 Mbit/s

95th percentile per-packet one-way delay: 105.856 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 28.92 Mbit/s

95th percentile per-packet one-way delay: 105.234 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 24.65 Mbit/s

95th percentile per-packet one-way delay: 105.907 ms

Loss rate: 1.23%

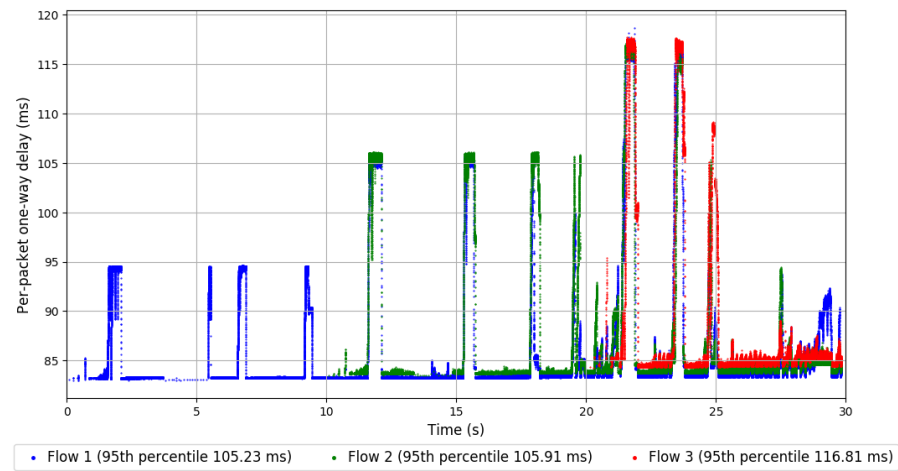
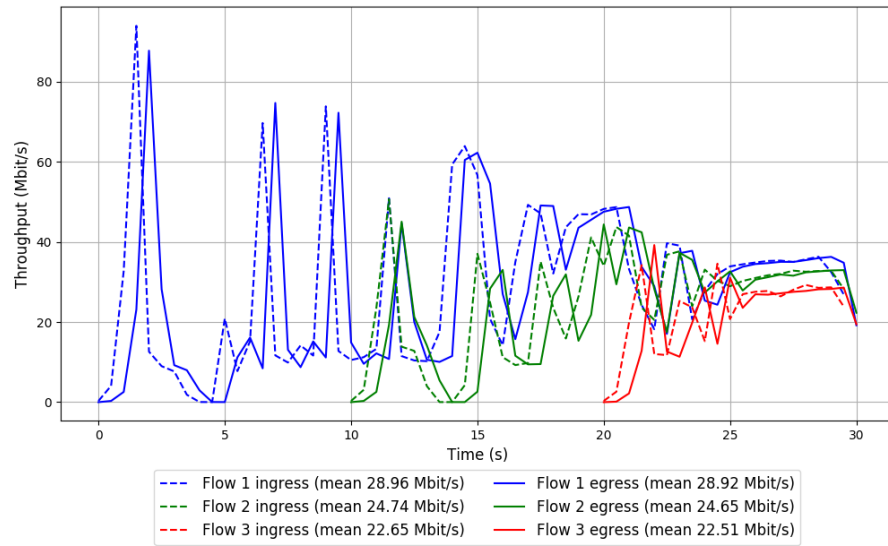
-- Flow 3:

Average throughput: 22.51 Mbit/s

95th percentile per-packet one-way delay: 116.810 ms

Loss rate: 2.37%

Run 4: Report of QUIC Cubic — Data Link

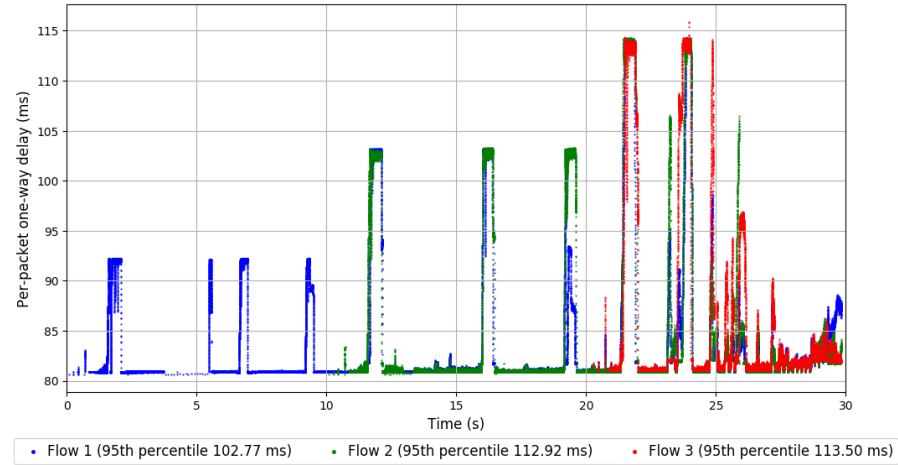
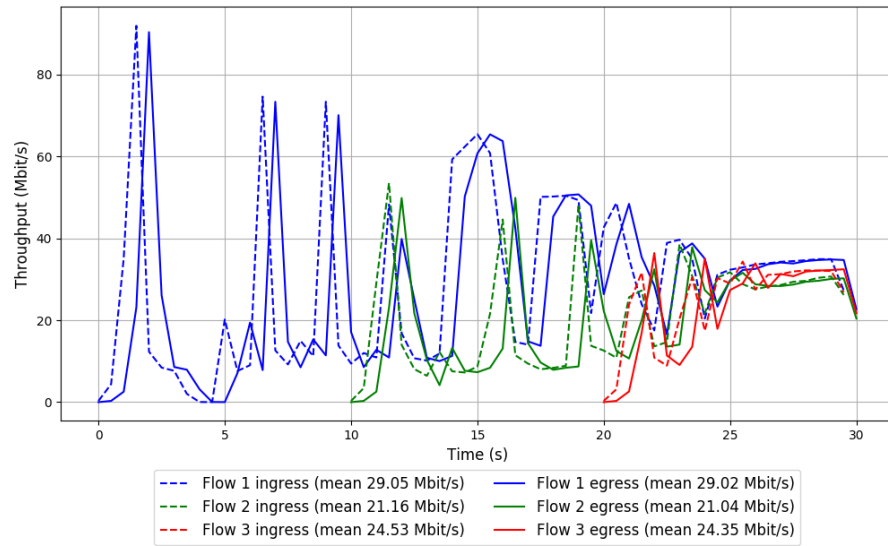


Run 5: Statistics of QUIC Cubic

Start at: 2018-06-06 04:28:03
End at: 2018-06-06 04:28:33
Local clock offset: -1.021 ms
Remote clock offset: 16.916 ms

Below is generated by plot.py at 2018-06-06 06:25:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 50.93 Mbit/s
95th percentile per-packet one-way delay: 106.902 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 29.02 Mbit/s
95th percentile per-packet one-way delay: 102.772 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 21.04 Mbit/s
95th percentile per-packet one-way delay: 112.921 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 24.35 Mbit/s
95th percentile per-packet one-way delay: 113.498 ms
Loss rate: 2.41%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-06-06 04:48:03

End at: 2018-06-06 04:48:33

Local clock offset: -3.404 ms

Remote clock offset: 9.269 ms

Below is generated by plot.py at 2018-06-06 06:25:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.43 Mbit/s

95th percentile per-packet one-way delay: 102.915 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 28.80 Mbit/s

95th percentile per-packet one-way delay: 101.781 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 23.87 Mbit/s

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

Loss rate: 1.24%

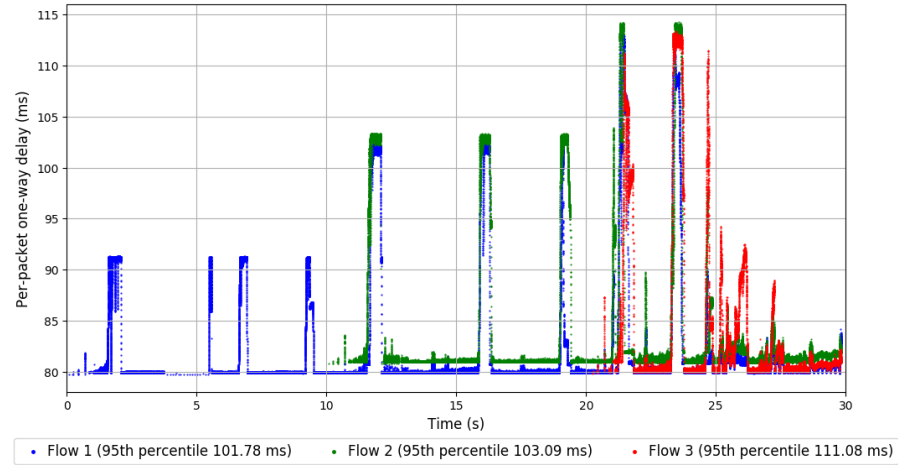
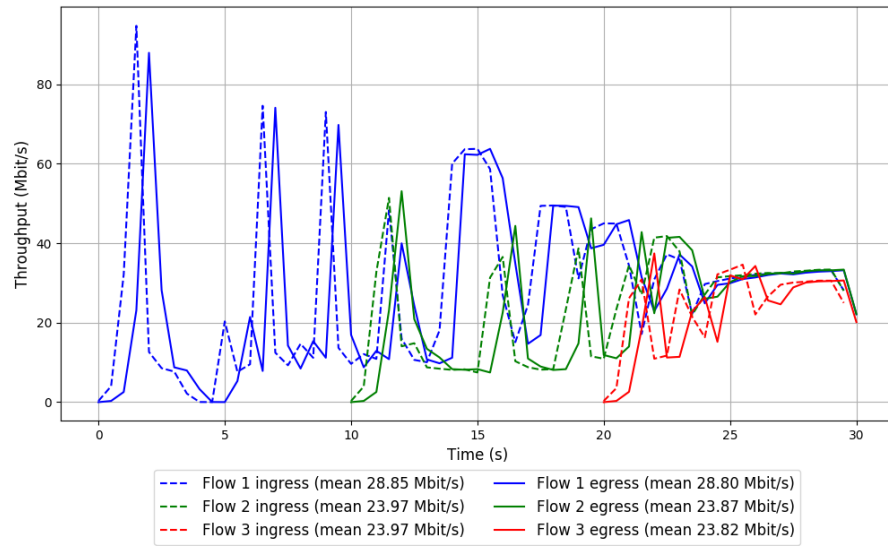
-- Flow 3:

Average throughput: 23.82 Mbit/s

95th percentile per-packet one-way delay: 111.076 ms

Loss rate: 2.27%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-06-06 05:08:15

End at: 2018-06-06 05:08:45

Local clock offset: -4.602 ms

Remote clock offset: 7.847 ms

Below is generated by plot.py at 2018-06-06 06:25:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.89 Mbit/s

95th percentile per-packet one-way delay: 103.668 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 28.29 Mbit/s

95th percentile per-packet one-way delay: 100.080 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 24.86 Mbit/s

95th percentile per-packet one-way delay: 103.534 ms

Loss rate: 1.19%

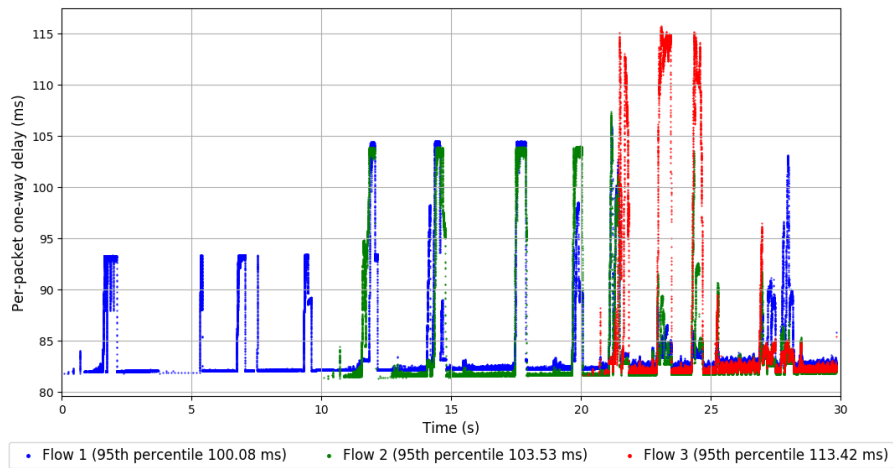
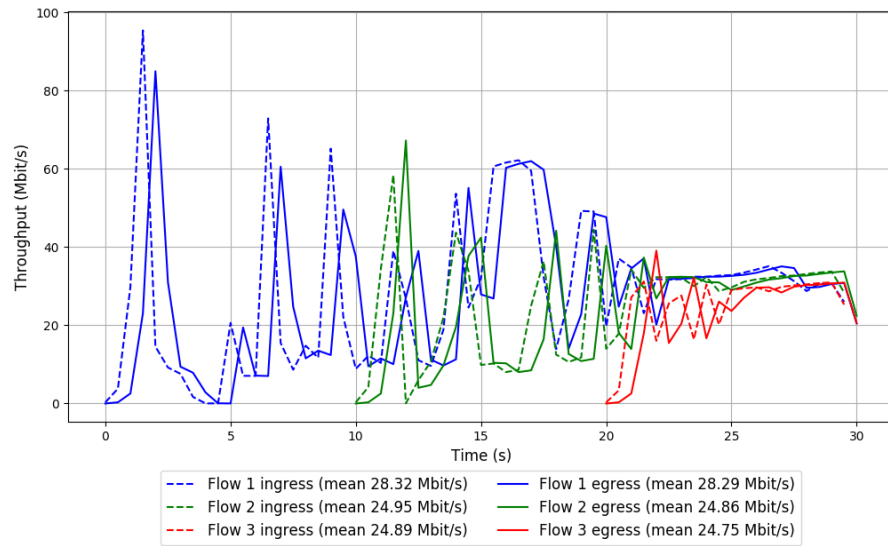
-- Flow 3:

Average throughput: 24.75 Mbit/s

95th percentile per-packet one-way delay: 113.422 ms

Loss rate: 2.20%

Run 7: Report of QUIC Cubic — Data Link

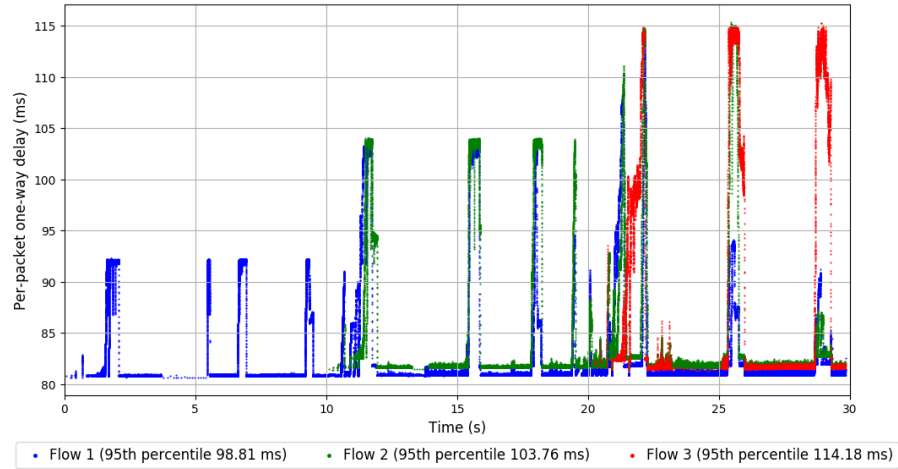
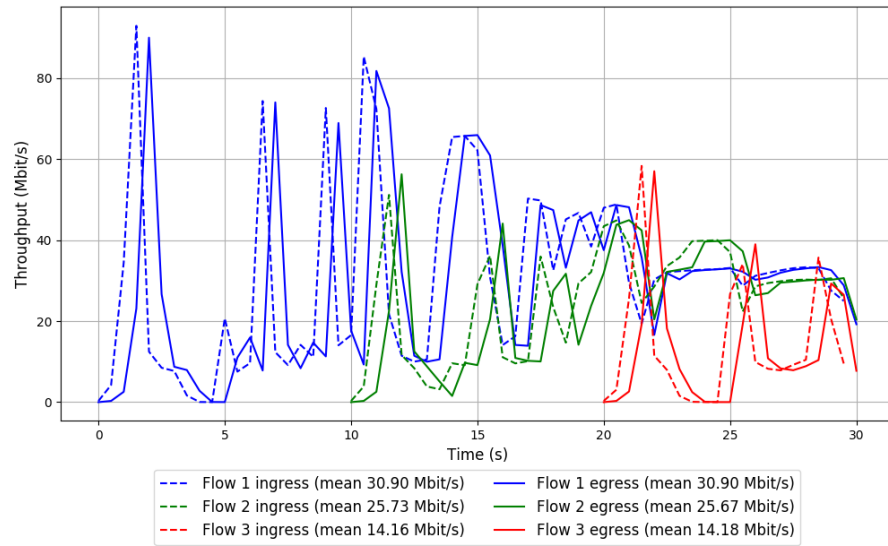


Run 8: Statistics of QUIC Cubic

Start at: 2018-06-06 05:28:18
End at: 2018-06-06 05:28:48
Local clock offset: -9.098 ms
Remote clock offset: 12.608 ms

Below is generated by plot.py at 2018-06-06 06:25:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 52.57 Mbit/s
95th percentile per-packet one-way delay: 103.639 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 30.90 Mbit/s
95th percentile per-packet one-way delay: 98.809 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 25.67 Mbit/s
95th percentile per-packet one-way delay: 103.762 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 14.18 Mbit/s
95th percentile per-packet one-way delay: 114.176 ms
Loss rate: 1.56%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-06-06 05:48:21

End at: 2018-06-06 05:48:51

Local clock offset: -2.548 ms

Remote clock offset: 9.864 ms

Below is generated by plot.py at 2018-06-06 06:25:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.50 Mbit/s

95th percentile per-packet one-way delay: 104.551 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 32.24 Mbit/s

95th percentile per-packet one-way delay: 97.208 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 24.52 Mbit/s

95th percentile per-packet one-way delay: 104.316 ms

Loss rate: 1.11%

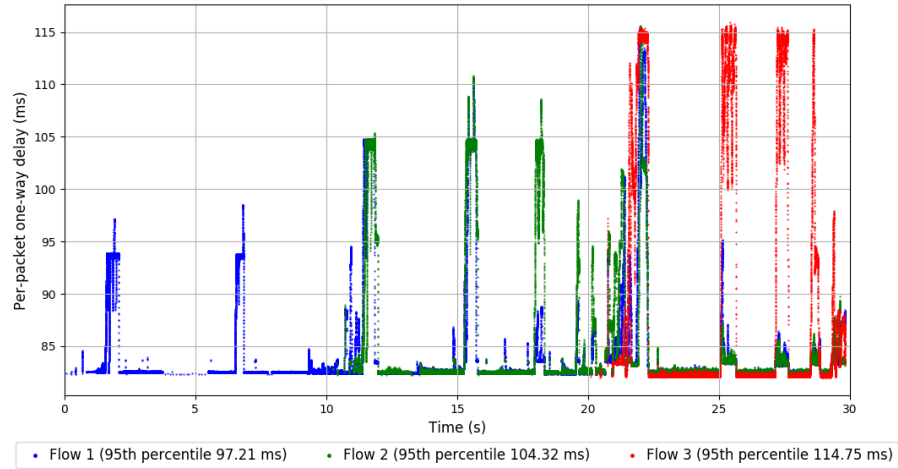
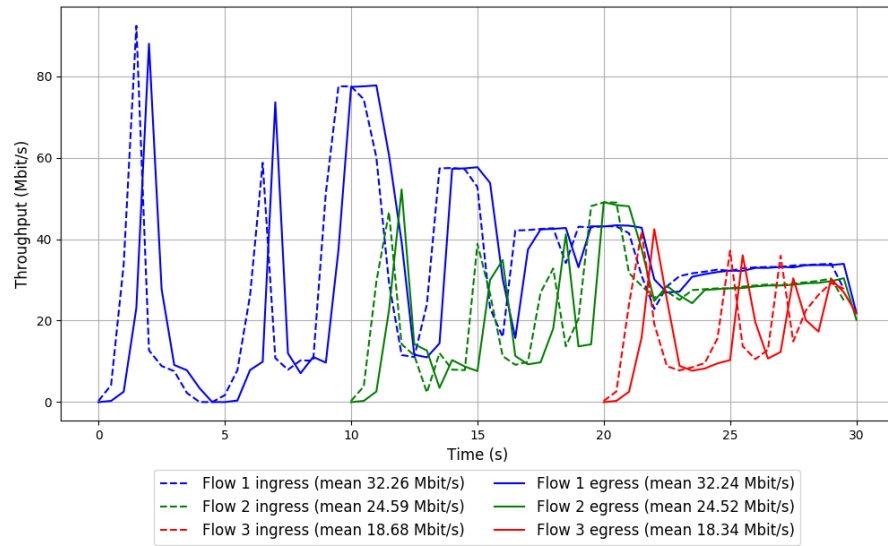
-- Flow 3:

Average throughput: 18.34 Mbit/s

95th percentile per-packet one-way delay: 114.749 ms

Loss rate: 3.49%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-06-06 06:08:20

End at: 2018-06-06 06:08:50

Local clock offset: -2.242 ms

Remote clock offset: 6.21 ms

Below is generated by plot.py at 2018-06-06 06:25:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.26 Mbit/s

95th percentile per-packet one-way delay: 102.808 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 32.14 Mbit/s

95th percentile per-packet one-way delay: 100.500 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 25.31 Mbit/s

95th percentile per-packet one-way delay: 102.625 ms

Loss rate: 1.09%

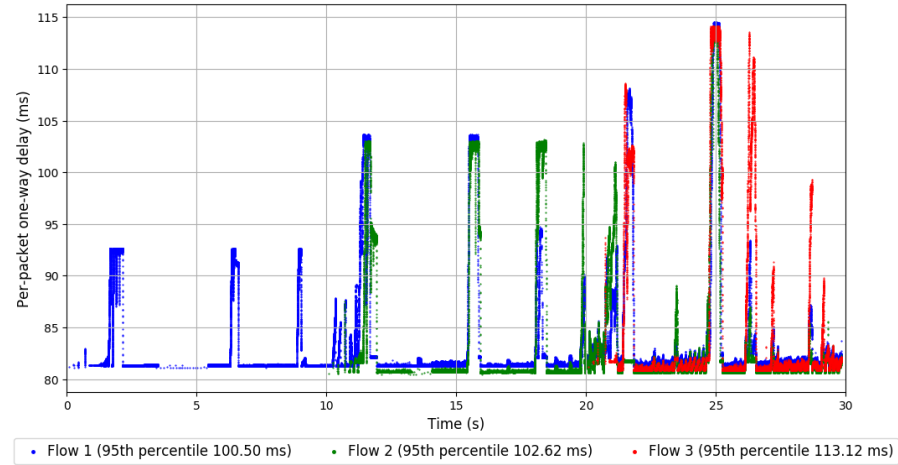
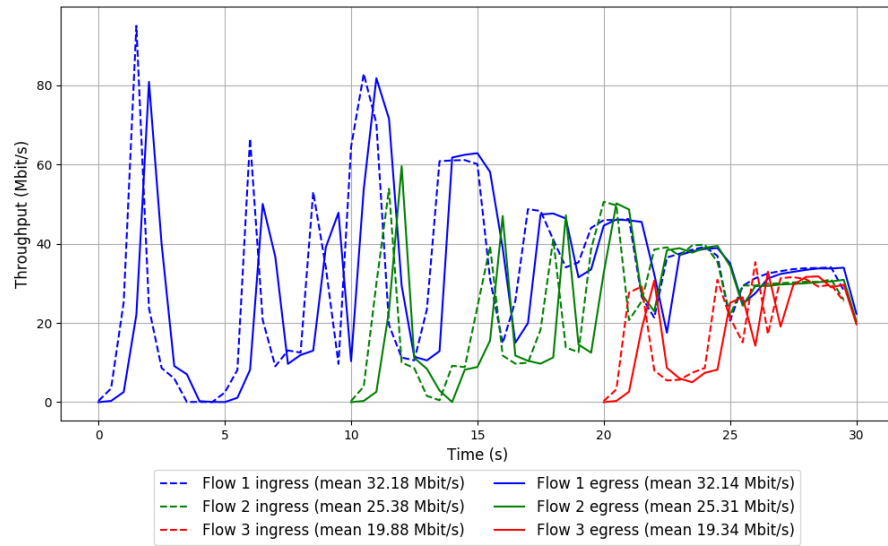
-- Flow 3:

Average throughput: 19.34 Mbit/s

95th percentile per-packet one-way delay: 113.123 ms

Loss rate: 4.36%

Run 10: Report of QUIC Cubic — Data Link

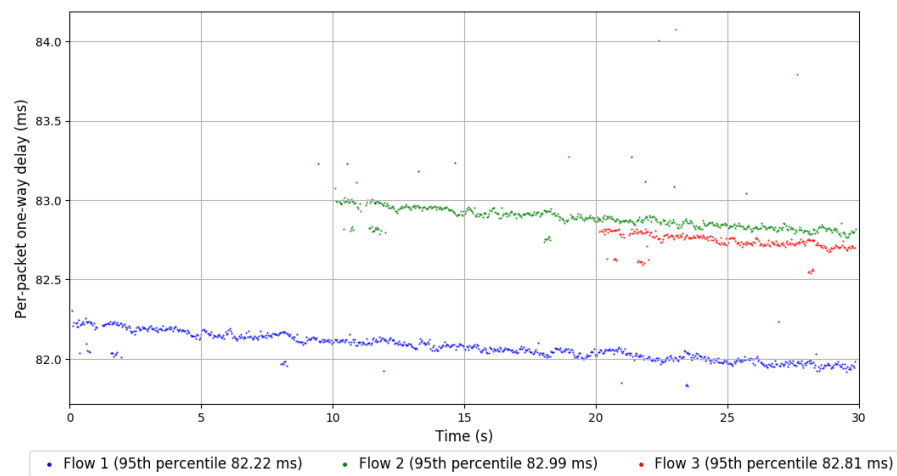
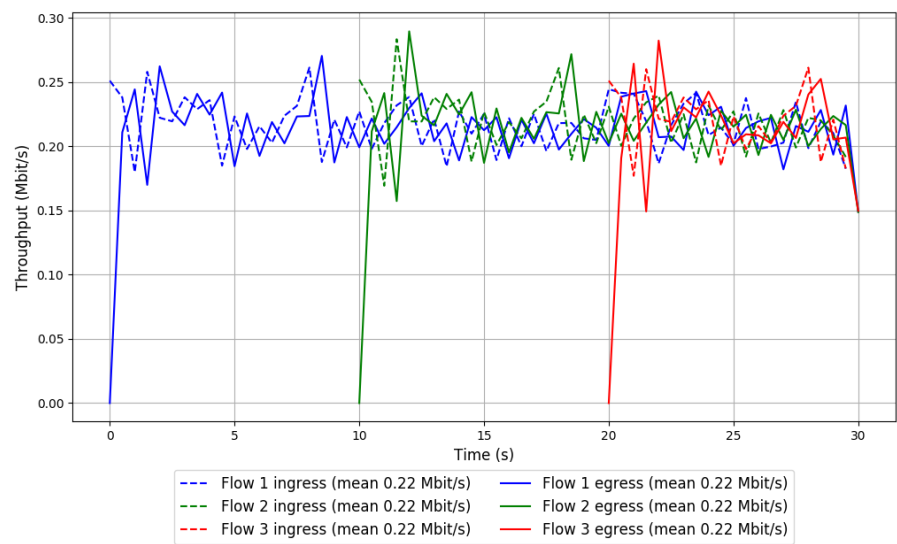


```
Run 1: Statistics of SReAM

Start at: 2018-06-06 02:55:39
End at: 2018-06-06 02:56:09
Local clock offset: -2.022 ms
Remote clock offset: 9.329 ms

# Below is generated by plot.py at 2018-06-06 06:25:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 82.955 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.218 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.986 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.810 ms
Loss rate: 1.84%
```

Run 1: Report of SReAM — Data Link

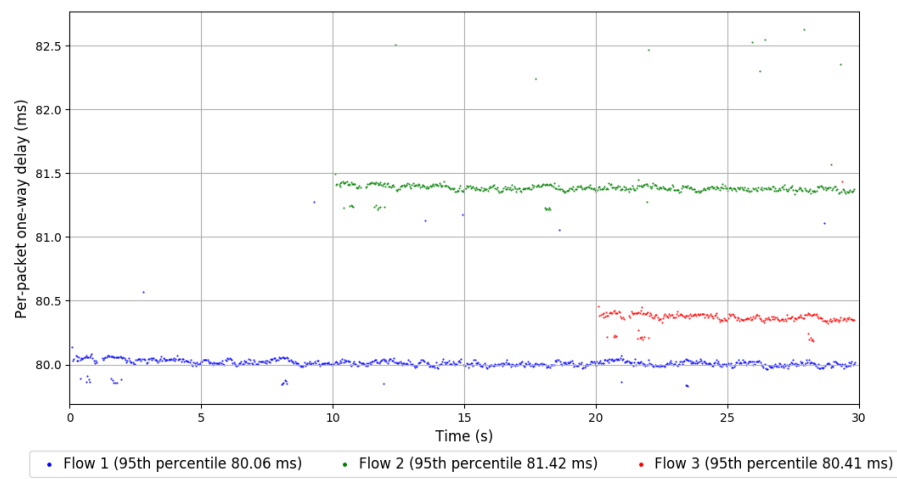
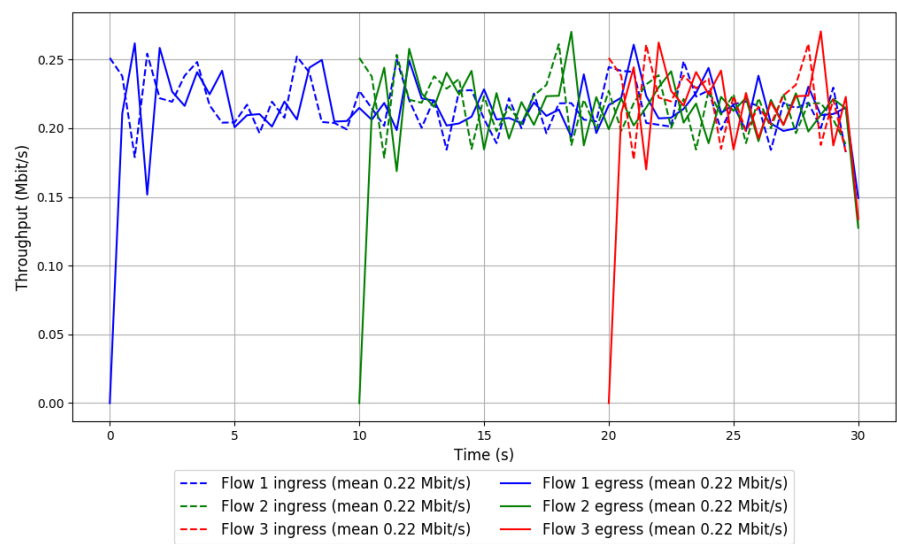


```
Run 2: Statistics of SReAM

Start at: 2018-06-06 03:15:38
End at: 2018-06-06 03:16:08
Local clock offset: -1.747 ms
Remote clock offset: 7.244 ms

# Below is generated by plot.py at 2018-06-06 06:25:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 81.408 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.056 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.424 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.407 ms
Loss rate: 1.84%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2018-06-06 03:35:36

End at: 2018-06-06 03:36:06

Local clock offset: -1.604 ms

Remote clock offset: 3.861 ms

Below is generated by plot.py at 2018-06-06 06:25:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 84.411 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.841 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.662 ms

Loss rate: 0.82%

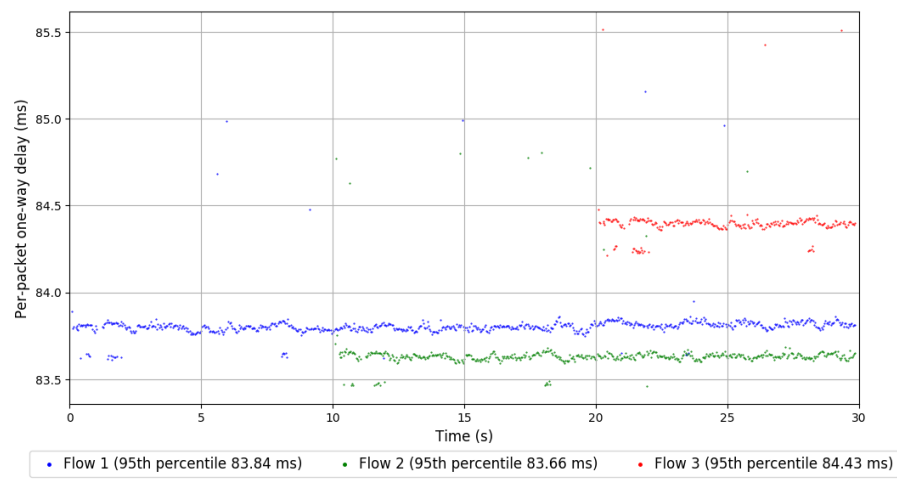
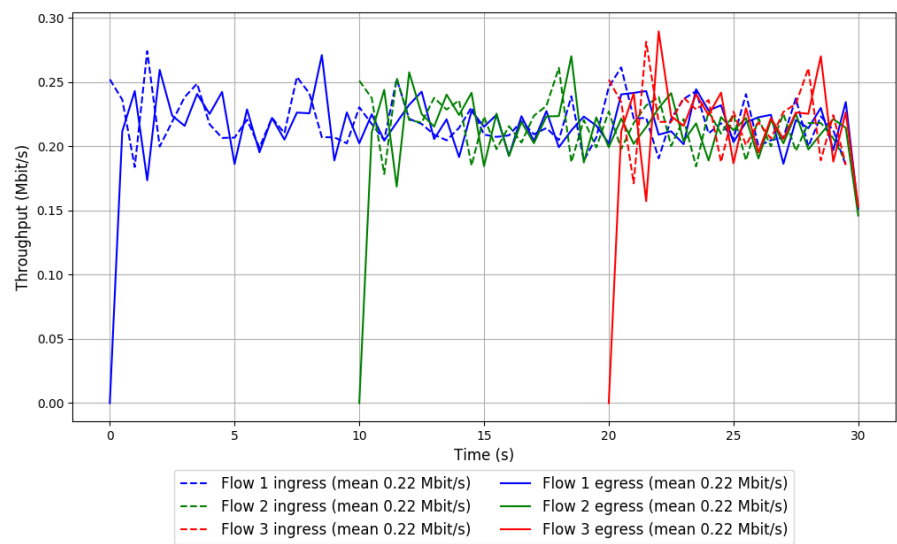
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 84.427 ms

Loss rate: 1.46%

Run 3: Report of SReAM — Data Link

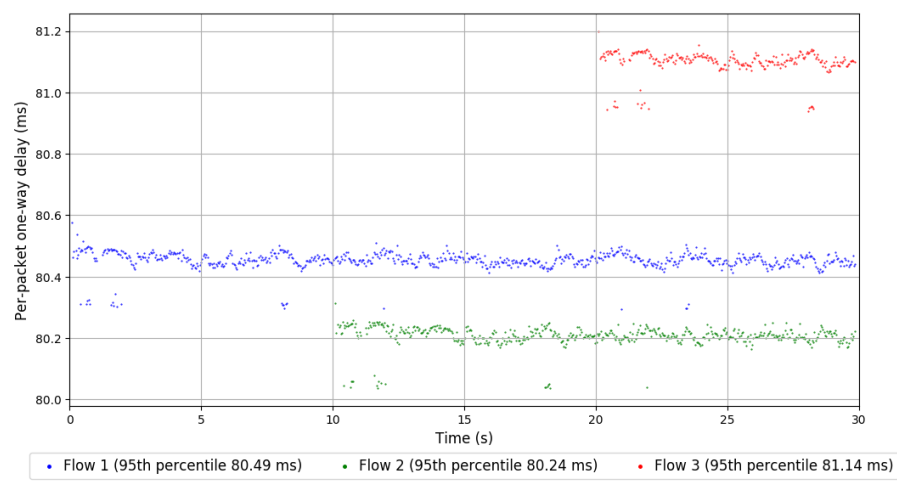
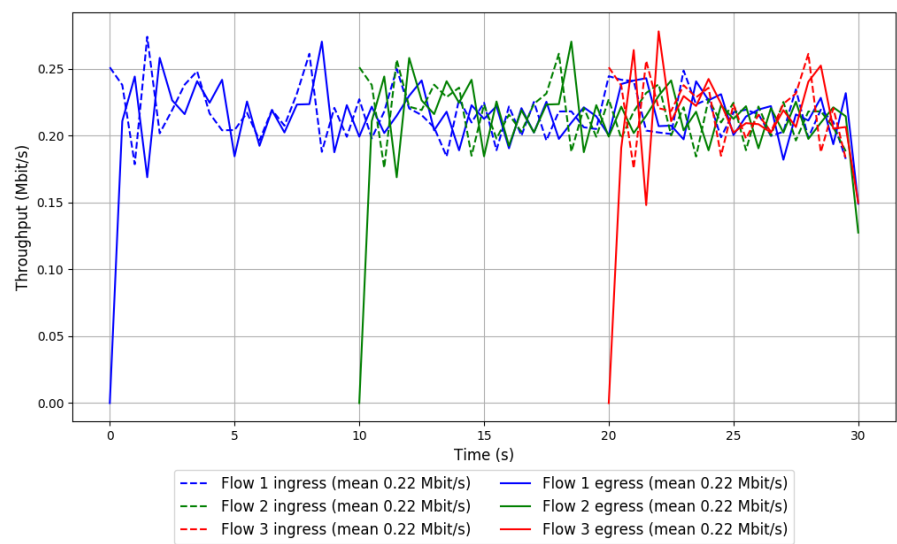


Run 4: Statistics of SReAM

Start at: 2018-06-06 03:55:36
End at: 2018-06-06 03:56:06
Local clock offset: -0.975 ms
Remote clock offset: 8.235 ms

Below is generated by plot.py at 2018-06-06 06:25:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 81.116 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.487 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.244 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.135 ms
Loss rate: 1.84%

Run 4: Report of SReAM — Data Link

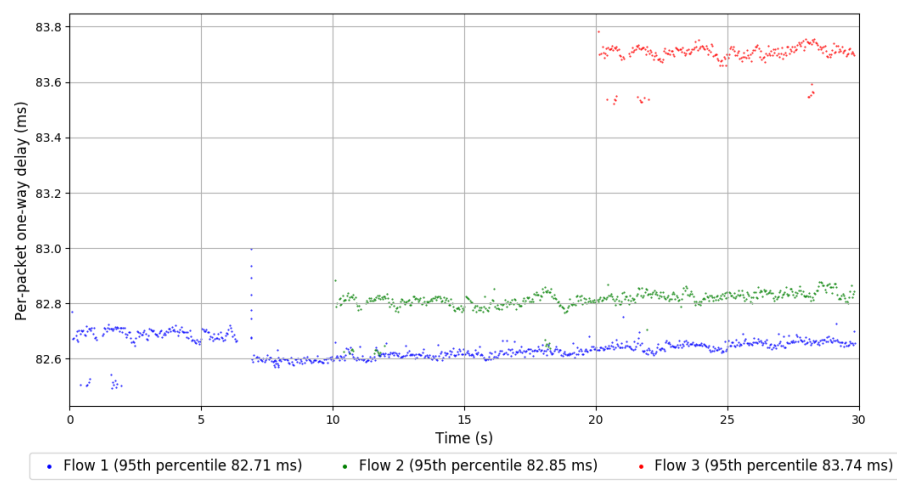
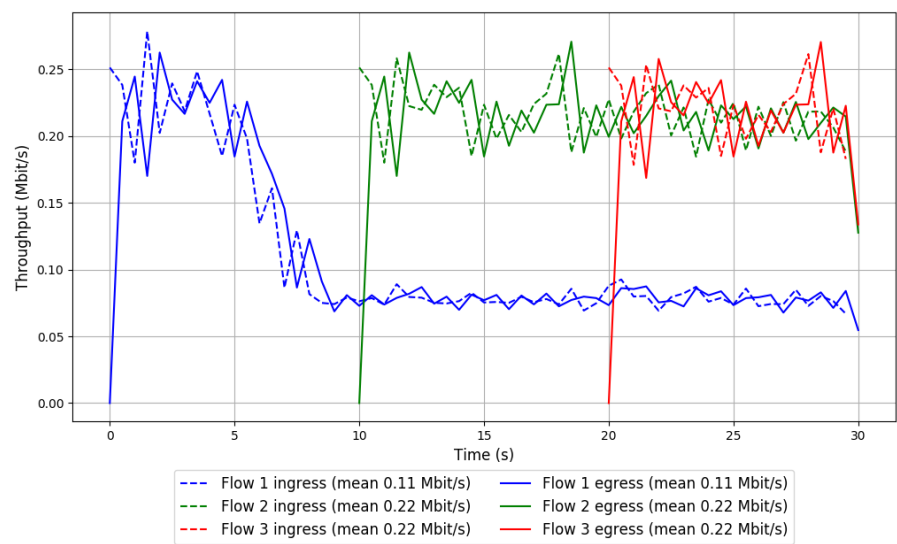


Run 5: Statistics of SReAM

Start at: 2018-06-06 04:15:34
End at: 2018-06-06 04:16:04
Local clock offset: -2.54 ms
Remote clock offset: 11.258 ms

Below is generated by plot.py at 2018-06-06 06:25:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 83.720 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 82.707 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.854 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.742 ms
Loss rate: 1.84%

Run 5: Report of SReAM — Data Link

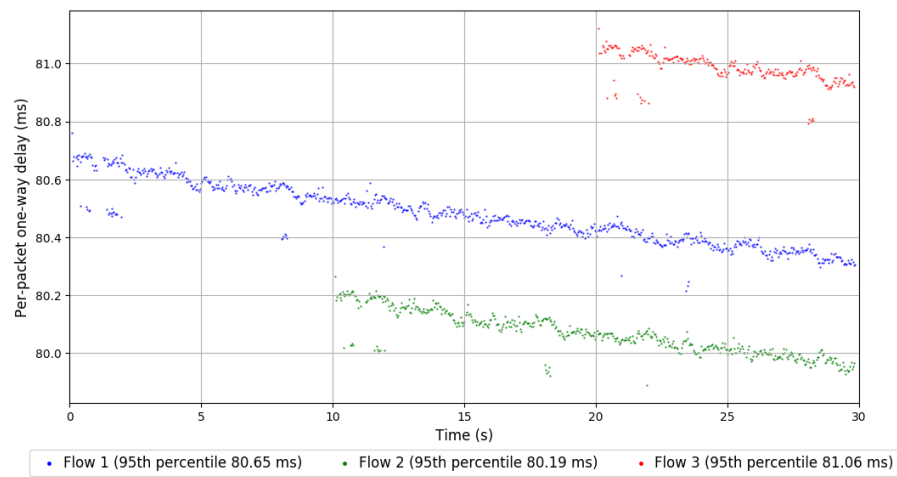
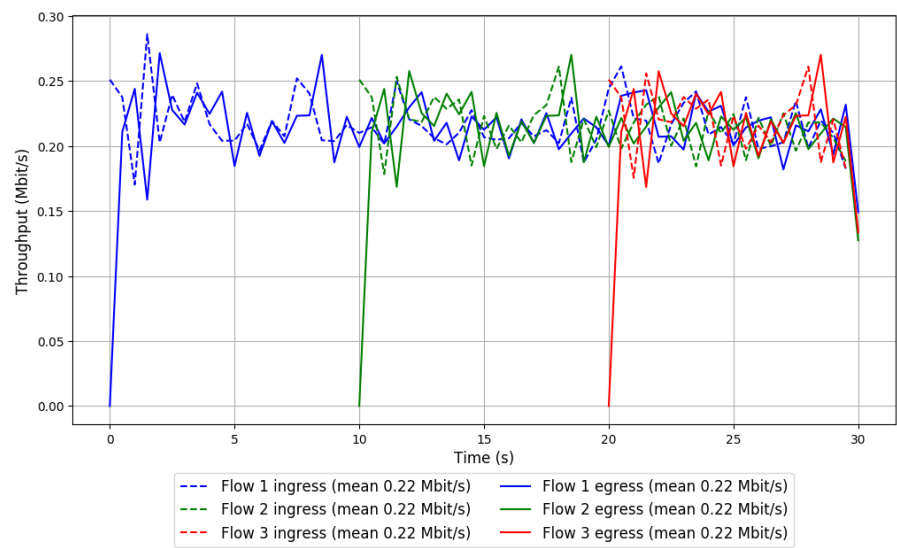


Run 6: Statistics of SReAM

Start at: 2018-06-06 04:35:33
End at: 2018-06-06 04:36:03
Local clock offset: -1.299 ms
Remote clock offset: 15.708 ms

Below is generated by plot.py at 2018-06-06 06:25:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 81.013 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.650 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.195 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.058 ms
Loss rate: 1.84%

Run 6: Report of SReAM — Data Link

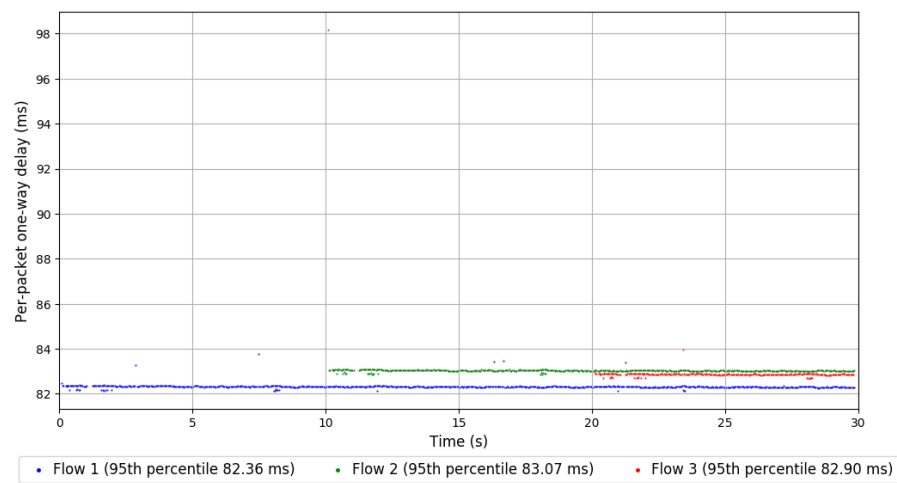
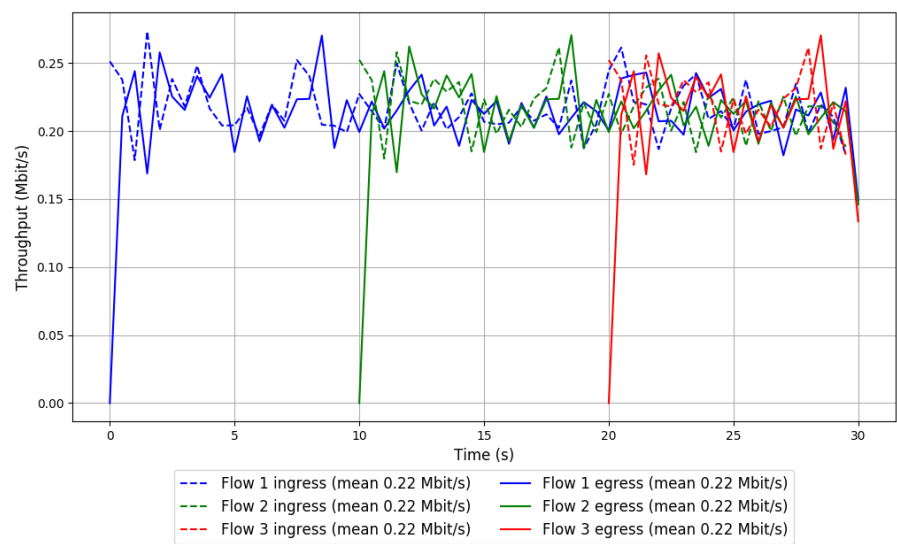


Run 7: Statistics of SReAM

Start at: 2018-06-06 04:55:31
End at: 2018-06-06 04:56:01
Local clock offset: -4.427 ms
Remote clock offset: 4.568 ms

Below is generated by plot.py at 2018-06-06 06:25:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 83.057 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.359 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.071 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.897 ms
Loss rate: 1.84%

Run 7: Report of SReAM — Data Link

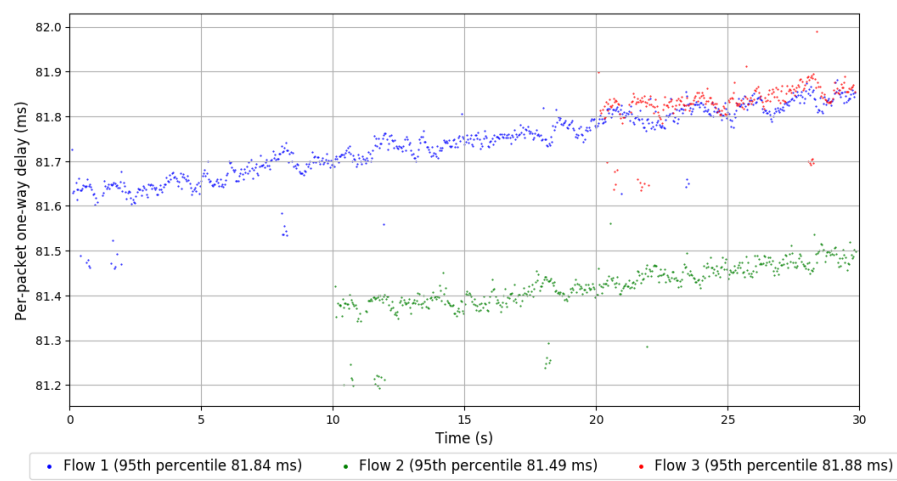
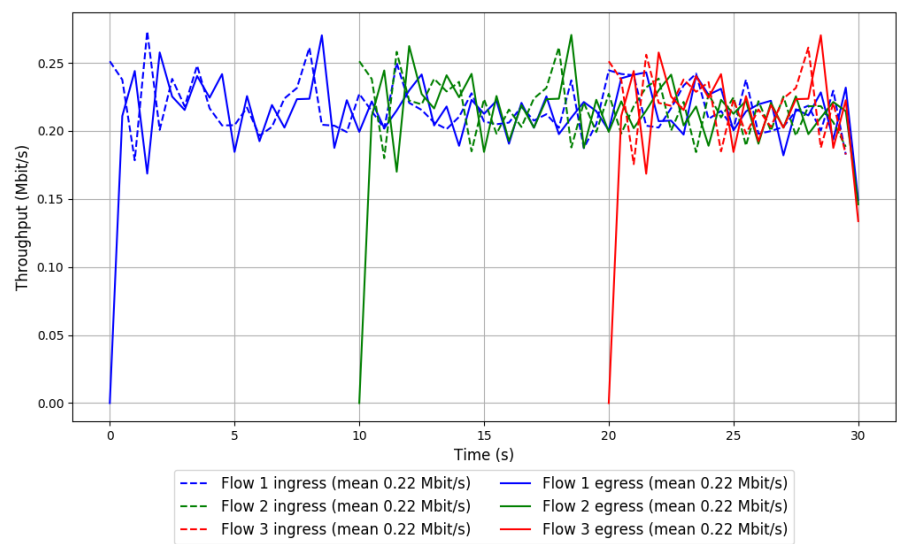


Run 8: Statistics of SReAM

Start at: 2018-06-06 05:15:48
End at: 2018-06-06 05:16:18
Local clock offset: -6.156 ms
Remote clock offset: 11.289 ms

Below is generated by plot.py at 2018-06-06 06:25:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 81.855 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.843 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.492 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.882 ms
Loss rate: 1.84%

Run 8: Report of SReAM — Data Link

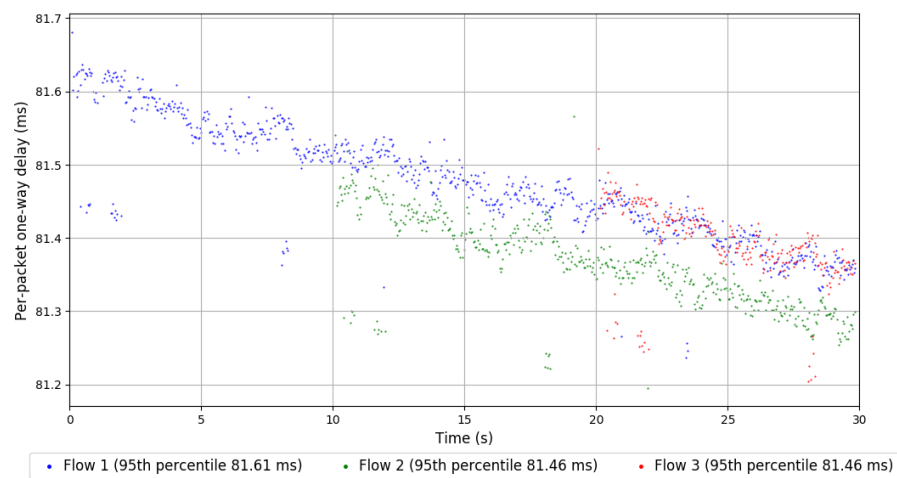
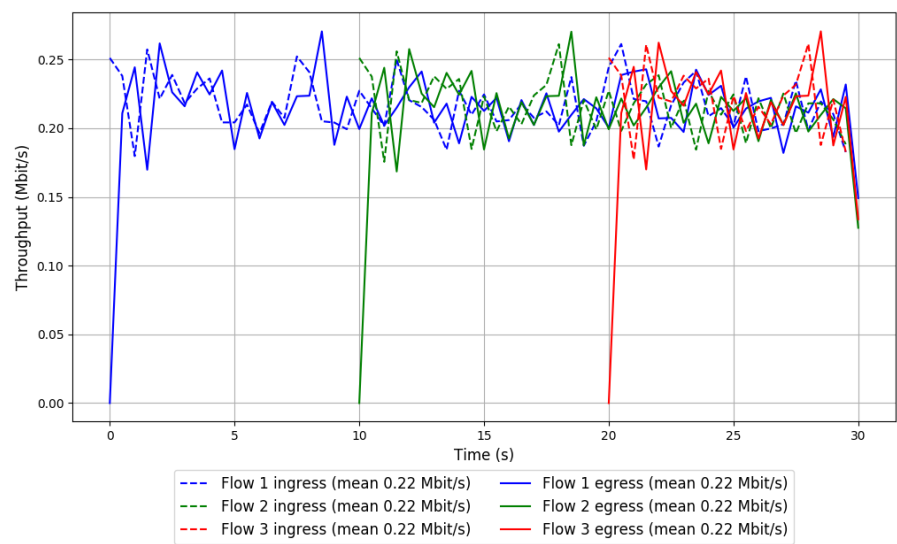


Run 9: Statistics of SReAM

Start at: 2018-06-06 05:35:50
End at: 2018-06-06 05:36:20
Local clock offset: -7.467 ms
Remote clock offset: 13.436 ms

Below is generated by plot.py at 2018-06-06 06:25:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 81.581 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.608 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.464 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.458 ms
Loss rate: 1.84%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-06-06 05:55:51

End at: 2018-06-06 05:56:21

Local clock offset: -1.669 ms

Remote clock offset: 7.679 ms

Below is generated by plot.py at 2018-06-06 06:25:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 83.026 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 83.038 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 82.541 ms

Loss rate: 1.03%

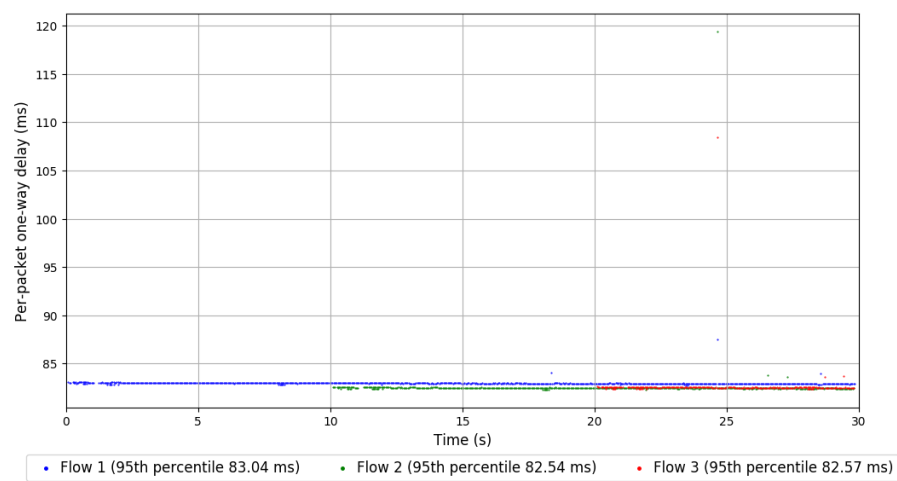
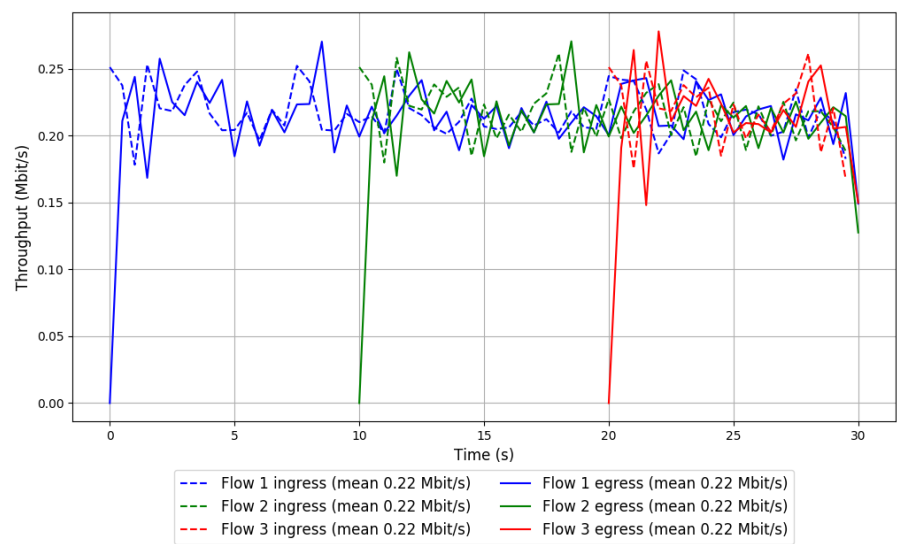
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 82.568 ms

Loss rate: 1.50%

Run 10: Report of SCReAM — Data Link

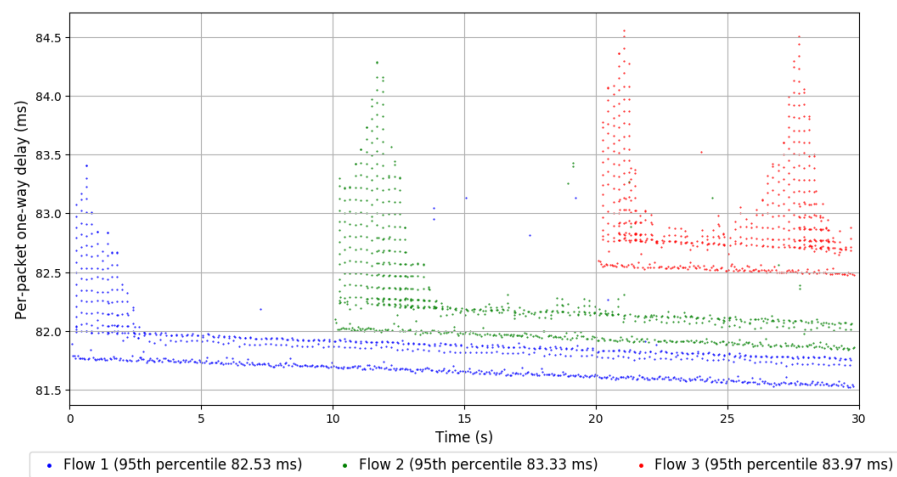
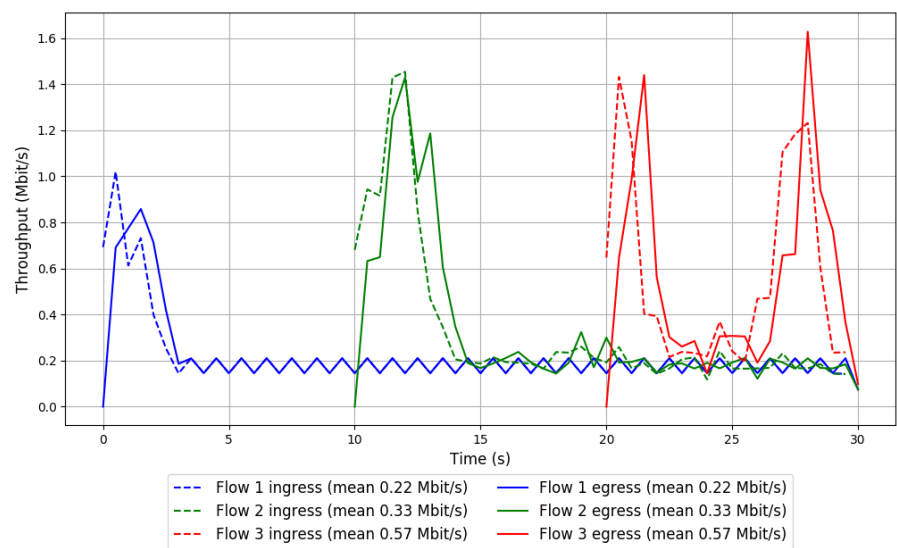


Run 1: Statistics of Sprout

Start at: 2018-06-06 02:56:50
End at: 2018-06-06 02:57:20
Local clock offset: -1.148 ms
Remote clock offset: 10.132 ms

Below is generated by plot.py at 2018-06-06 06:25:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 83.450 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 82.532 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 83.325 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 83.974 ms
Loss rate: 1.23%

Run 1: Report of Sprout — Data Link

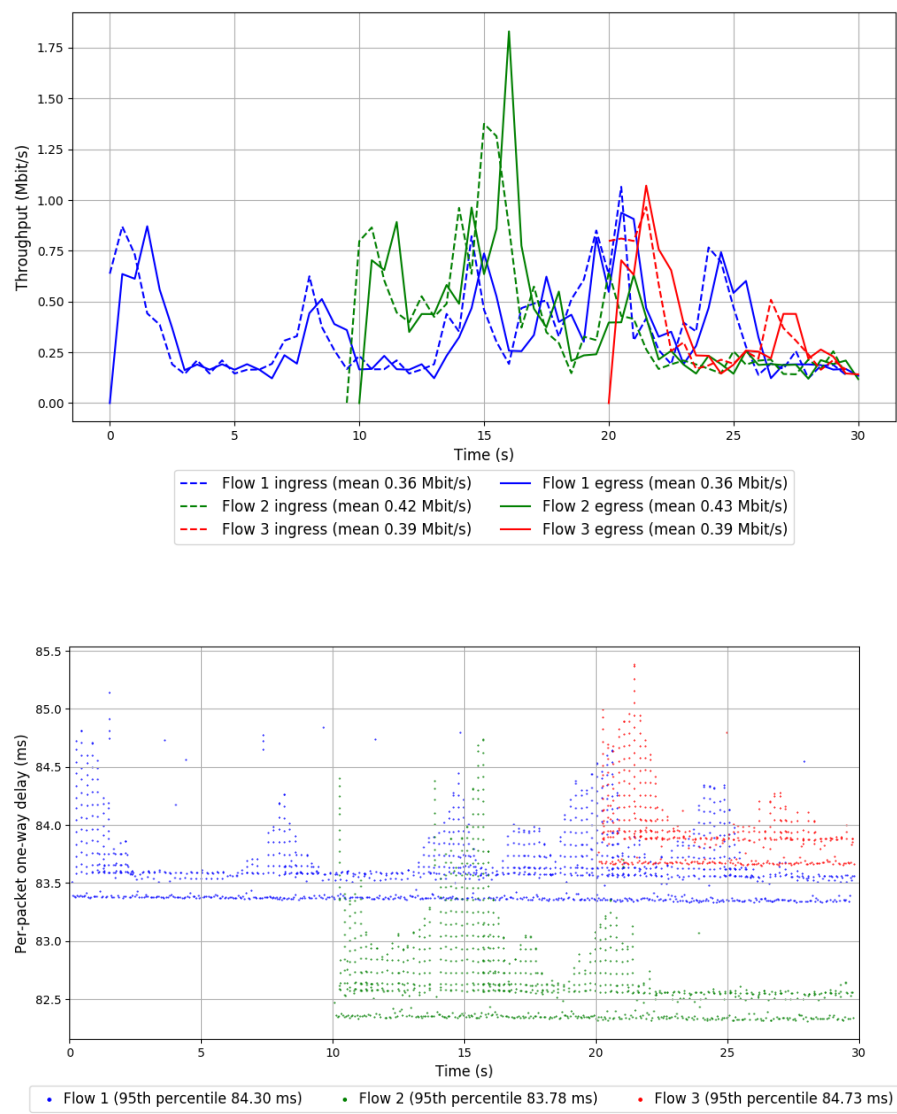


Run 2: Statistics of Sprout

Start at: 2018-06-06 03:16:48
End at: 2018-06-06 03:17:18
Local clock offset: -2.522 ms
Remote clock offset: 4.075 ms

```
# Below is generated by plot.py at 2018-06-06 06:25:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 84.323 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 84.300 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 83.778 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 84.732 ms
Loss rate: 1.20%
```

Run 2: Report of Sprout — Data Link

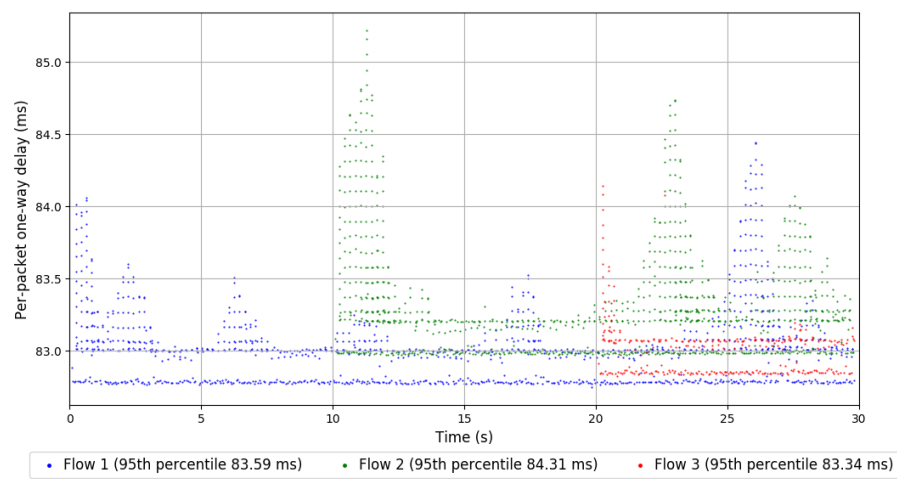
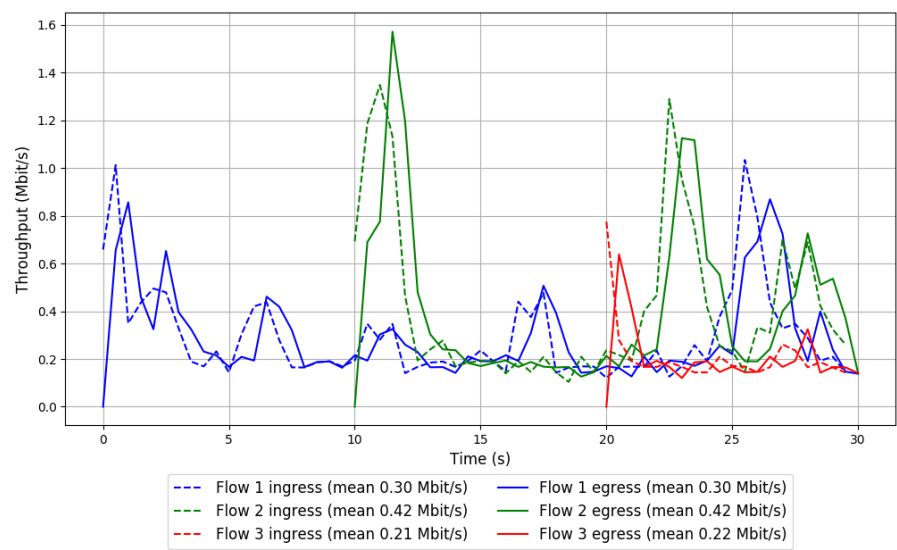


Run 3: Statistics of Sprout

Start at: 2018-06-06 03:36:47
End at: 2018-06-06 03:37:17
Local clock offset: -2.474 ms
Remote clock offset: 3.953 ms

```
# Below is generated by plot.py at 2018-06-06 06:25:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 83.962 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 83.588 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 84.309 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.337 ms
Loss rate: 1.12%
```

Run 3: Report of Sprout — Data Link

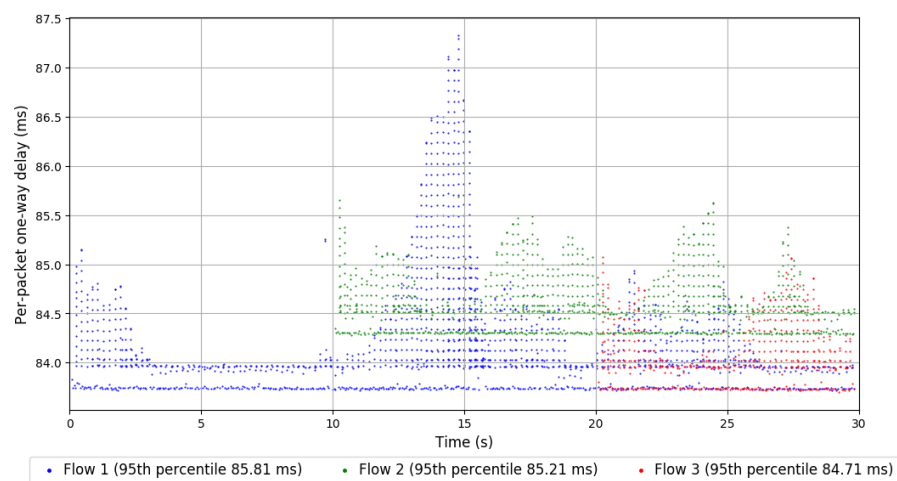
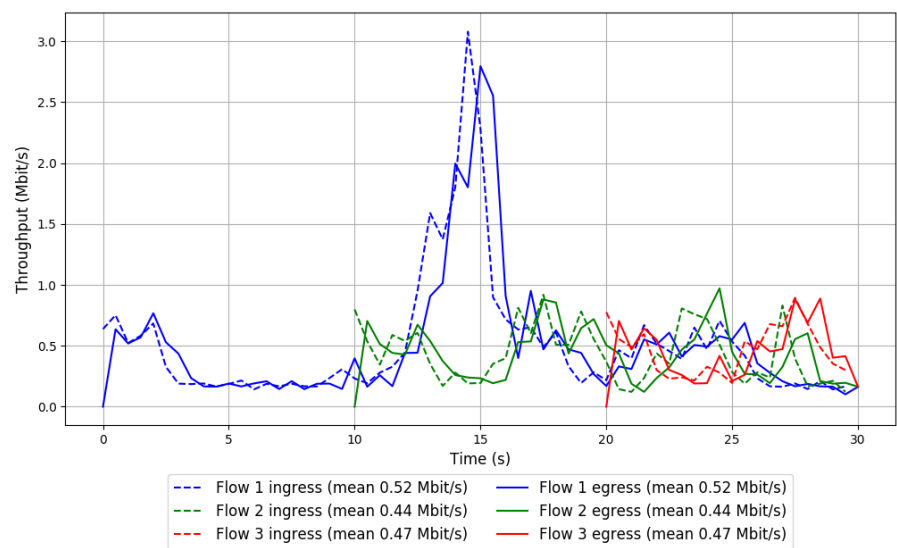


Run 4: Statistics of Sprout

Start at: 2018-06-06 03:56:46
End at: 2018-06-06 03:57:16
Local clock offset: -1.675 ms
Remote clock offset: 3.938 ms

```
# Below is generated by plot.py at 2018-06-06 06:25:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 85.308 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 85.810 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 85.211 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 84.708 ms
Loss rate: 1.74%
```

Run 4: Report of Sprout — Data Link

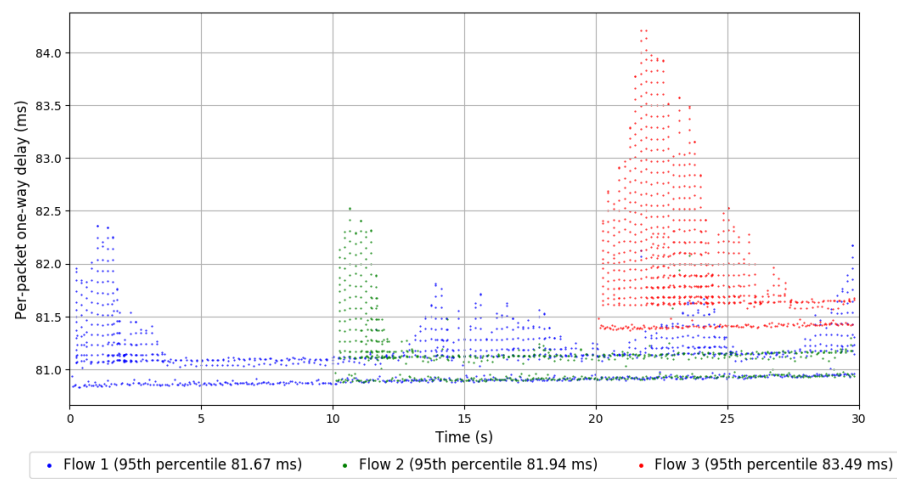
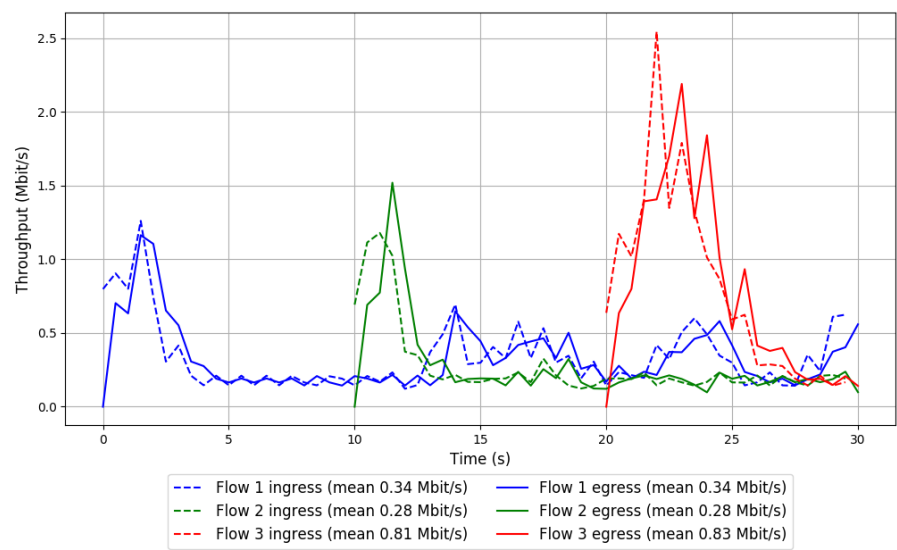


Run 5: Statistics of Sprout

Start at: 2018-06-06 04:16:45
End at: 2018-06-06 04:17:15
Local clock offset: -1.009 ms
Remote clock offset: 14.647 ms

Below is generated by plot.py at 2018-06-06 06:25:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 82.675 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 81.672 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 81.940 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 83.492 ms
Loss rate: 0.18%

Run 5: Report of Sprout — Data Link

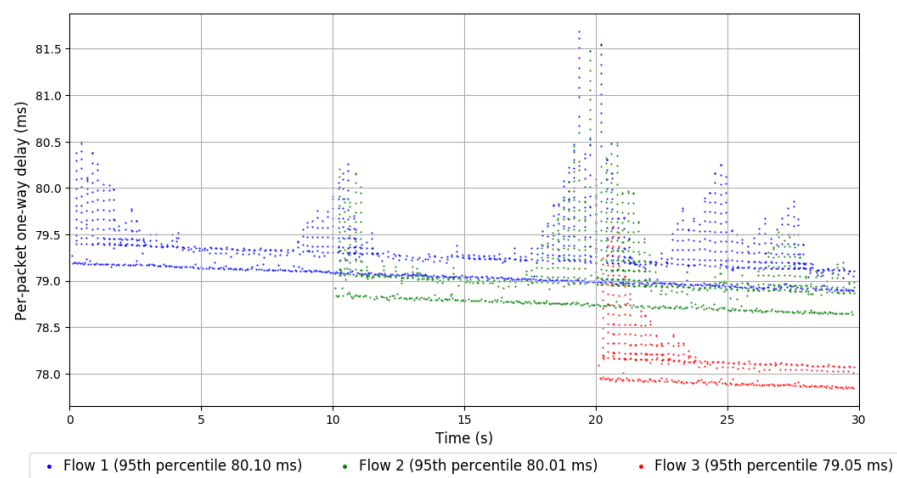
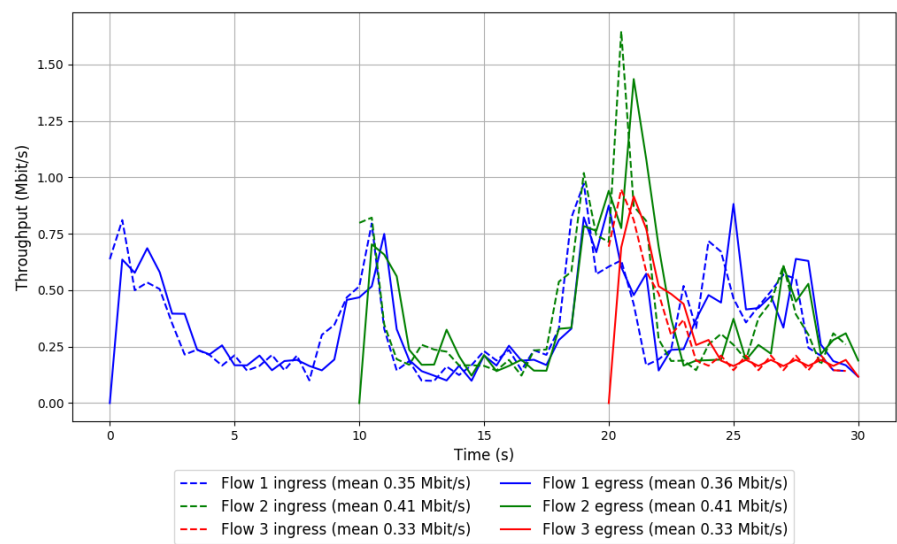


Run 6: Statistics of Sprout

Start at: 2018-06-06 04:36:44
End at: 2018-06-06 04:37:14
Local clock offset: -2.994 ms
Remote clock offset: 14.822 ms

Below is generated by plot.py at 2018-06-06 06:25:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.73 Mbit/s
95th percentile per-packet one-way delay: 80.011 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 80.101 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 80.014 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 79.051 ms
Loss rate: 0.44%

Run 6: Report of Sprout — Data Link

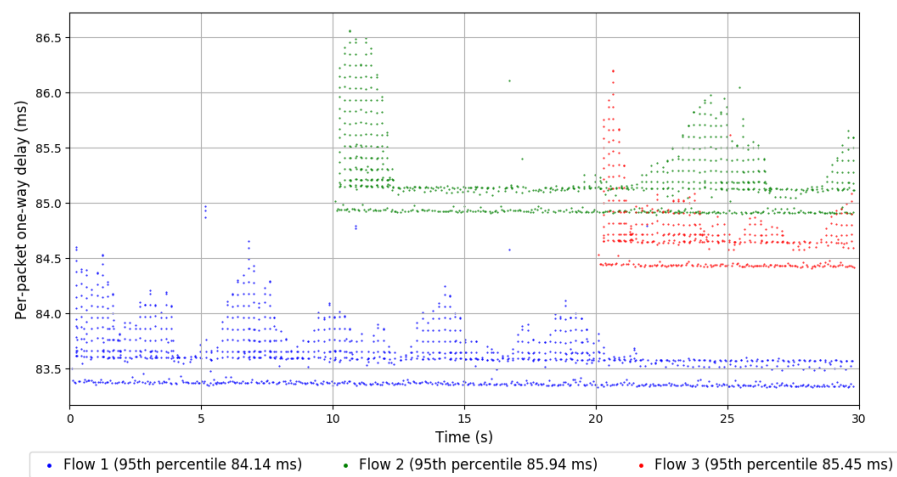
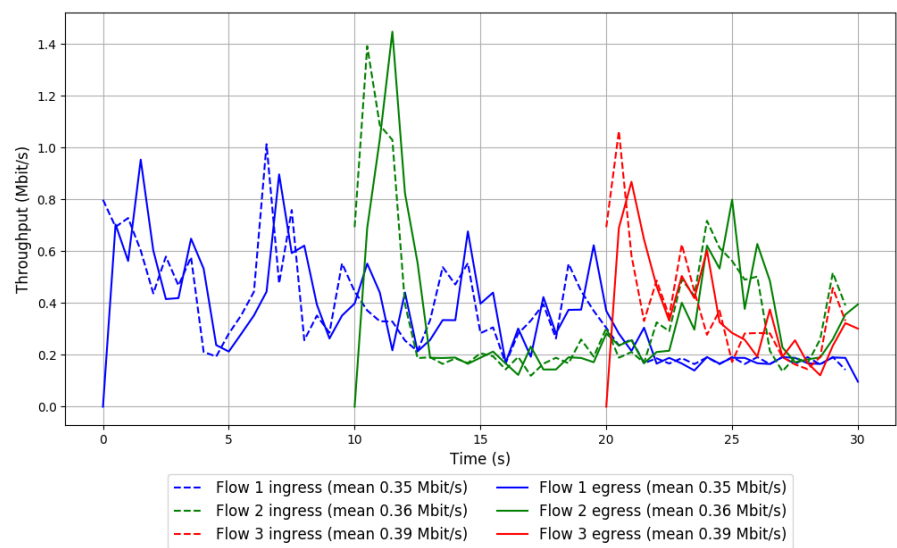


Run 7: Statistics of Sprout

Start at: 2018-06-06 04:56:42
End at: 2018-06-06 04:57:12
Local clock offset: -3.725 ms
Remote clock offset: 4.096 ms

Below is generated by plot.py at 2018-06-06 06:25:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 85.595 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 84.145 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 85.944 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 85.447 ms
Loss rate: 2.17%

Run 7: Report of Sprout — Data Link

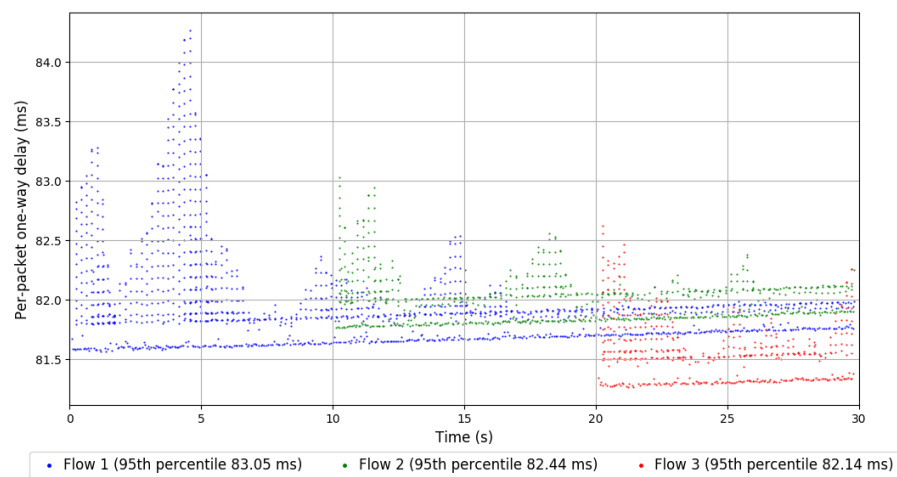
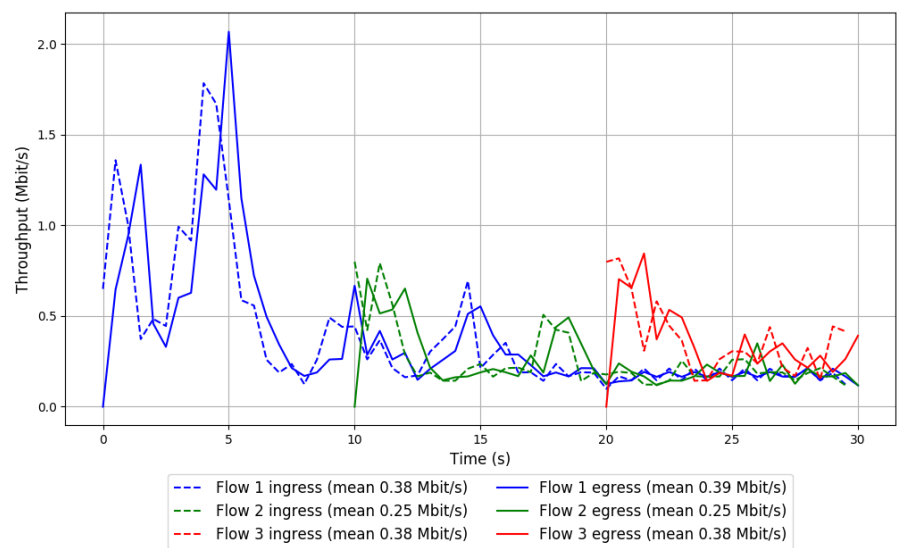


Run 8: Statistics of Sprout

Start at: 2018-06-06 05:16:59
End at: 2018-06-06 05:17:29
Local clock offset: -6.319 ms
Remote clock offset: 11.595 ms

```
# Below is generated by plot.py at 2018-06-06 06:25:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 82.734 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 83.047 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 82.442 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 82.139 ms
Loss rate: 2.76%
```

Run 8: Report of Sprout — Data Link

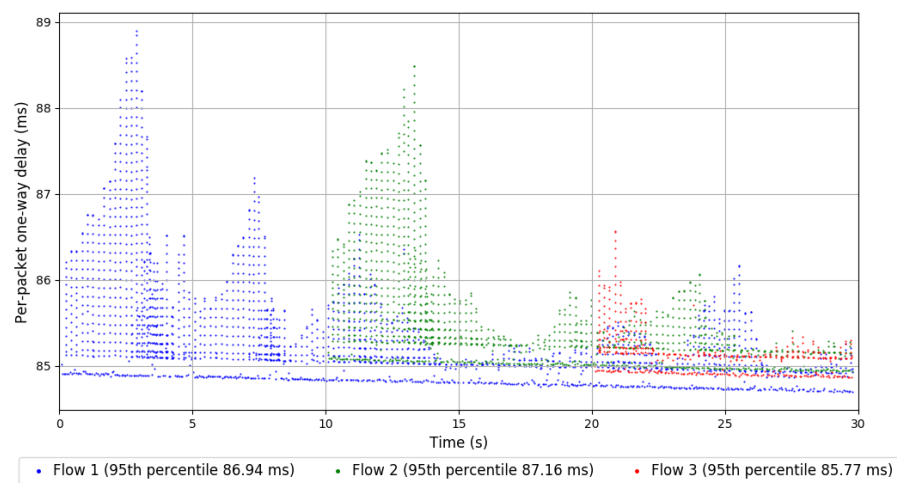
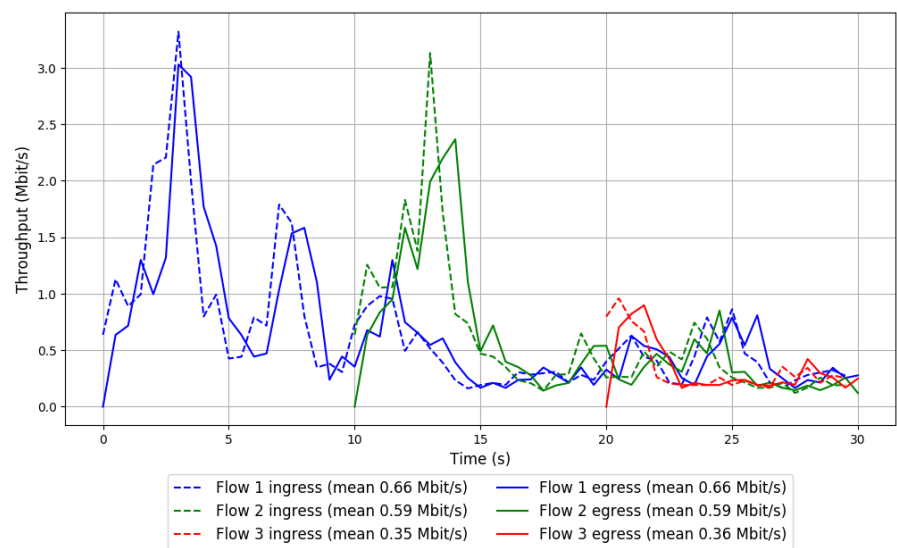


Run 9: Statistics of Sprout

Start at: 2018-06-06 05:37:01
End at: 2018-06-06 05:37:31
Local clock offset: -6.917 ms
Remote clock offset: 9.888 ms

Below is generated by plot.py at 2018-06-06 06:25:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 86.950 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 86.942 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 87.155 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 85.773 ms
Loss rate: 1.66%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-06-06 05:57:02

End at: 2018-06-06 05:57:32

Local clock offset: -3.12 ms

Remote clock offset: 7.38 ms

Below is generated by plot.py at 2018-06-06 06:25:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 81.542 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 81.380 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 81.695 ms

Loss rate: 0.54%

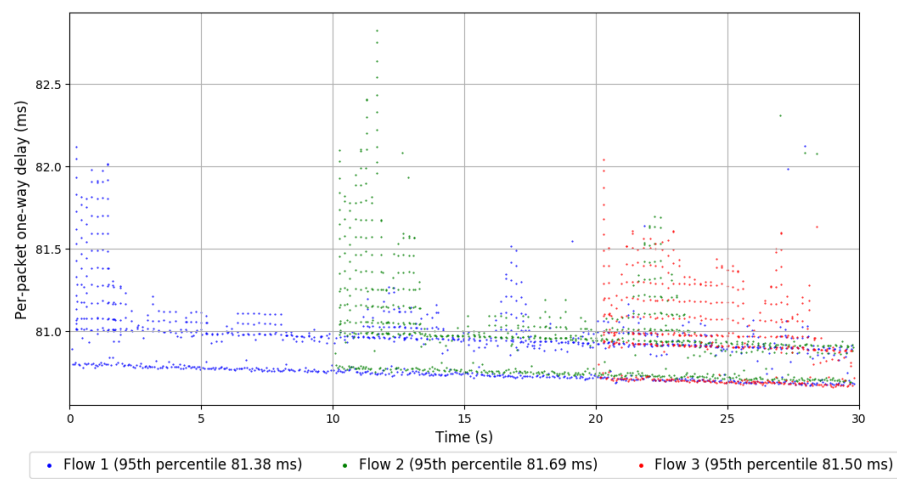
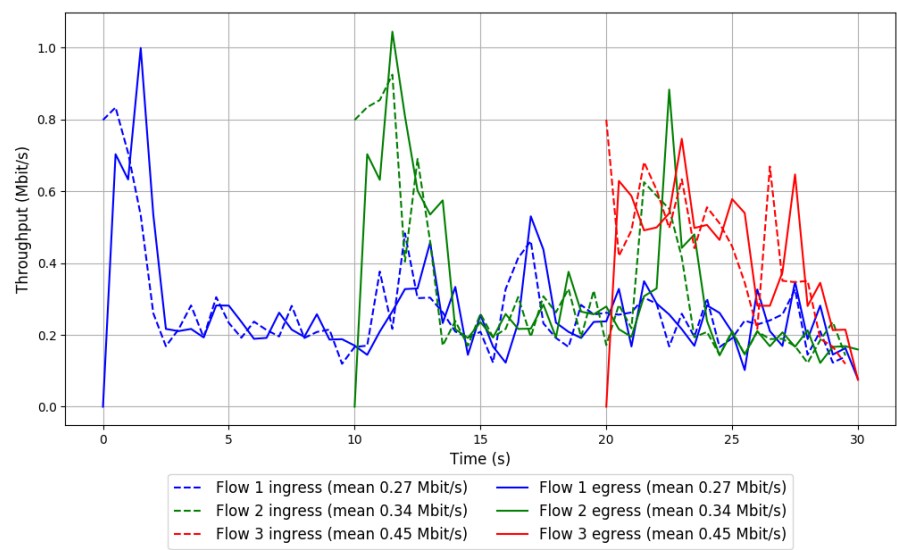
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 81.497 ms

Loss rate: 0.52%

Run 10: Report of Sprout — Data Link

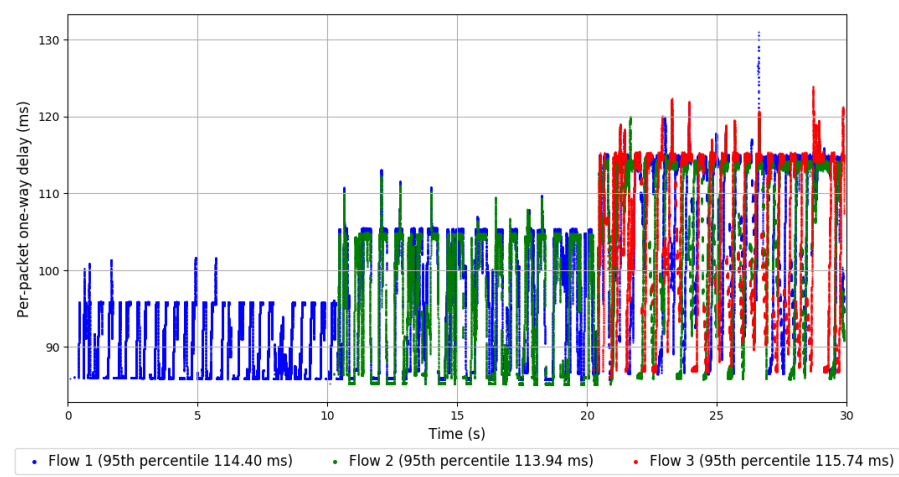
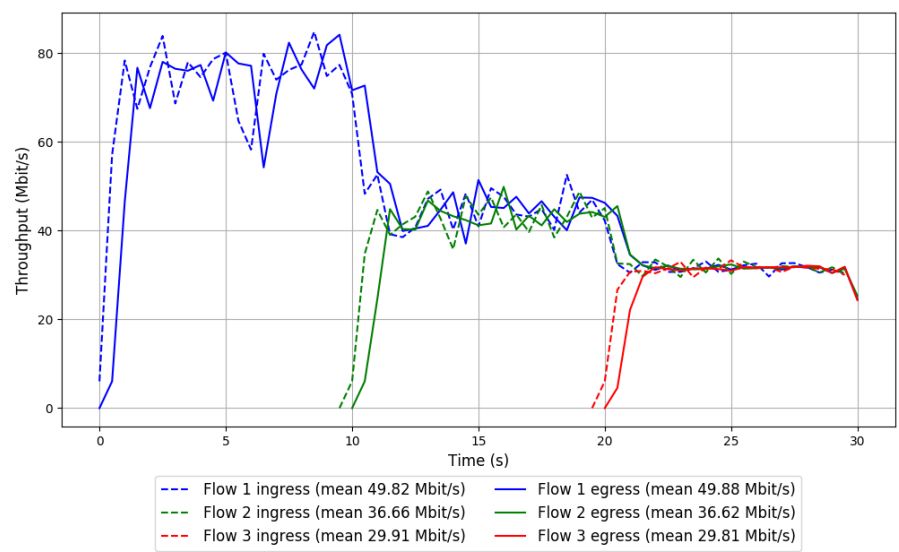


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-06 02:54:20
End at: 2018-06-06 02:54:51
Local clock offset: -1.361 ms
Remote clock offset: 7.481 ms

# Below is generated by plot.py at 2018-06-06 06:26:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.03 Mbit/s
95th percentile per-packet one-way delay: 114.621 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 49.88 Mbit/s
95th percentile per-packet one-way delay: 114.399 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 36.62 Mbit/s
95th percentile per-packet one-way delay: 113.941 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 29.81 Mbit/s
95th percentile per-packet one-way delay: 115.736 ms
Loss rate: 2.05%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-06-06 03:14:19

End at: 2018-06-06 03:14:49

Local clock offset: -1.751 ms

Remote clock offset: 4.186 ms

Below is generated by plot.py at 2018-06-06 06:26:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.29 Mbit/s

95th percentile per-packet one-way delay: 112.605 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 49.13 Mbit/s

95th percentile per-packet one-way delay: 112.654 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 35.05 Mbit/s

95th percentile per-packet one-way delay: 112.194 ms

Loss rate: 0.12%

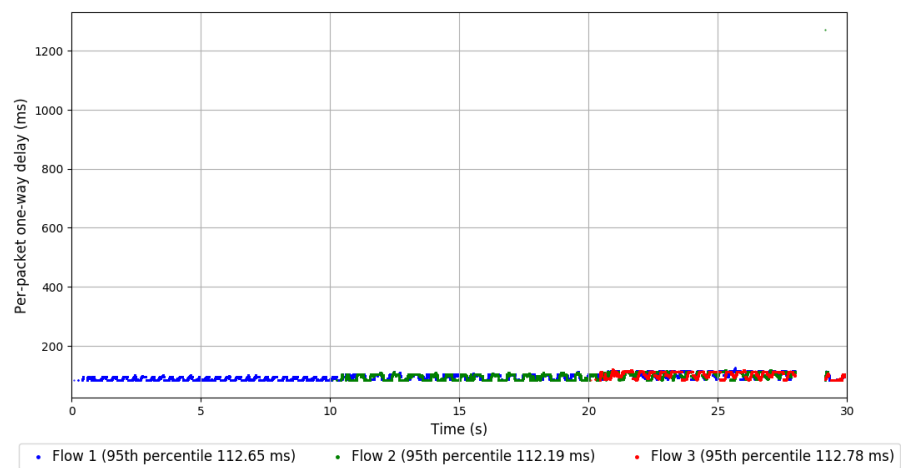
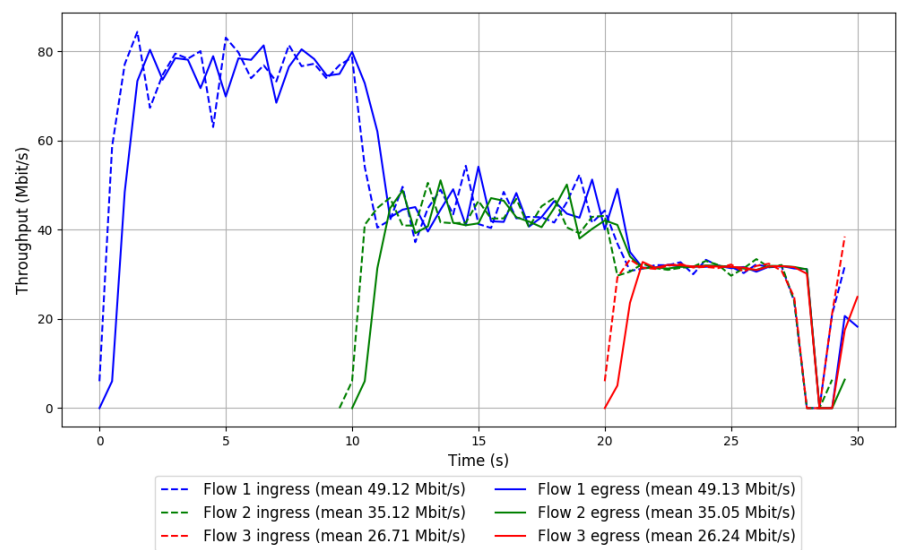
-- Flow 3:

Average throughput: 26.24 Mbit/s

95th percentile per-packet one-way delay: 112.781 ms

Loss rate: 3.43%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-06-06 03:34:17

End at: 2018-06-06 03:34:47

Local clock offset: -1.577 ms

Remote clock offset: 7.887 ms

Below is generated by plot.py at 2018-06-06 06:26:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.20 Mbit/s

95th percentile per-packet one-way delay: 109.608 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 49.70 Mbit/s

95th percentile per-packet one-way delay: 109.362 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 37.20 Mbit/s

95th percentile per-packet one-way delay: 109.106 ms

Loss rate: 0.93%

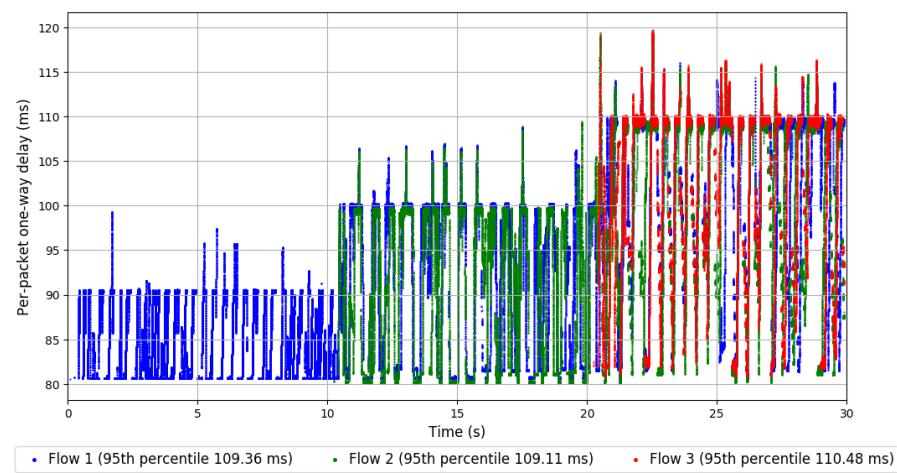
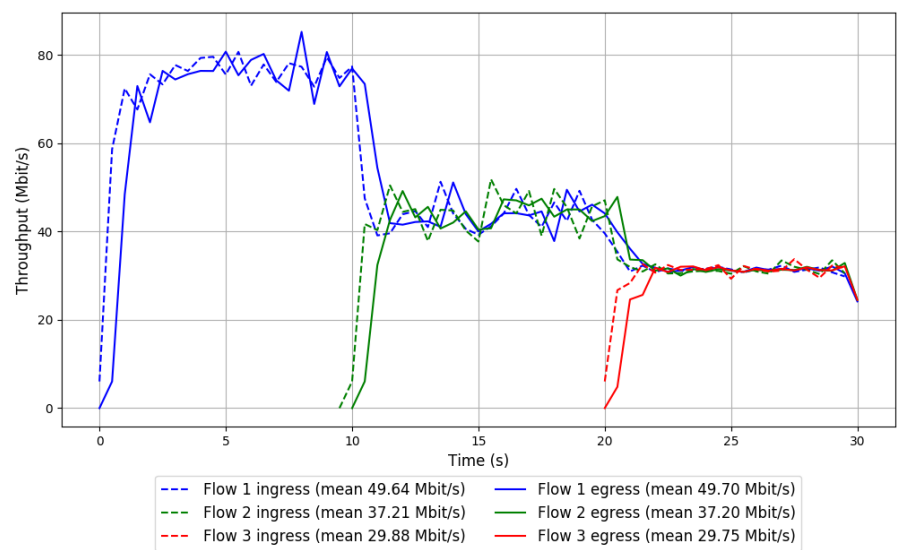
-- Flow 3:

Average throughput: 29.75 Mbit/s

95th percentile per-packet one-way delay: 110.484 ms

Loss rate: 2.27%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-06-06 03:54:17

End at: 2018-06-06 03:54:47

Local clock offset: -0.928 ms

Remote clock offset: 4.295 ms

Below is generated by plot.py at 2018-06-06 06:26:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.06 Mbit/s

95th percentile per-packet one-way delay: 113.229 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 50.35 Mbit/s

95th percentile per-packet one-way delay: 112.833 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 37.30 Mbit/s

95th percentile per-packet one-way delay: 113.519 ms

Loss rate: 0.84%

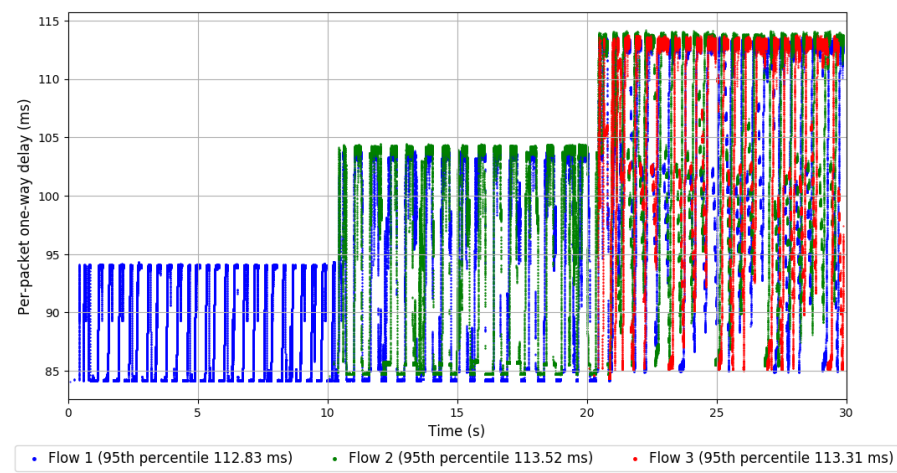
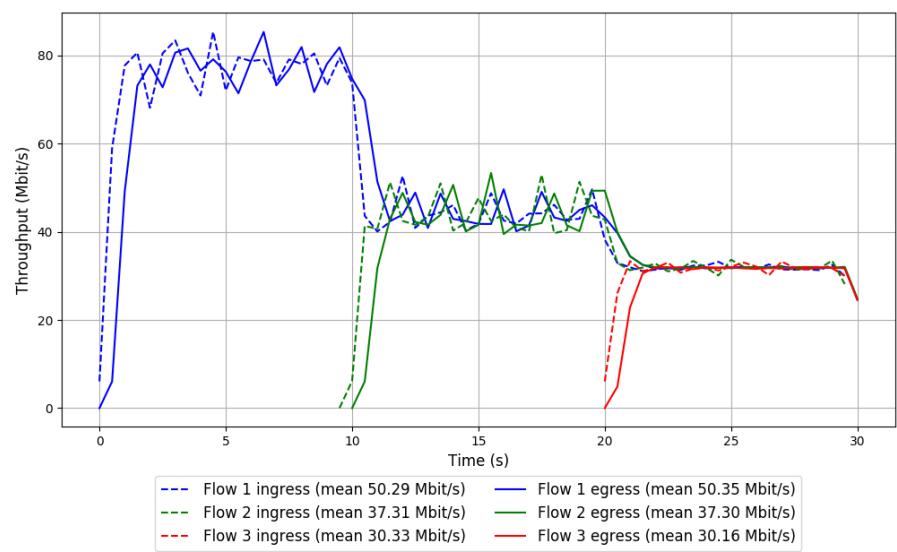
-- Flow 3:

Average throughput: 30.16 Mbit/s

95th percentile per-packet one-way delay: 113.314 ms

Loss rate: 2.29%

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

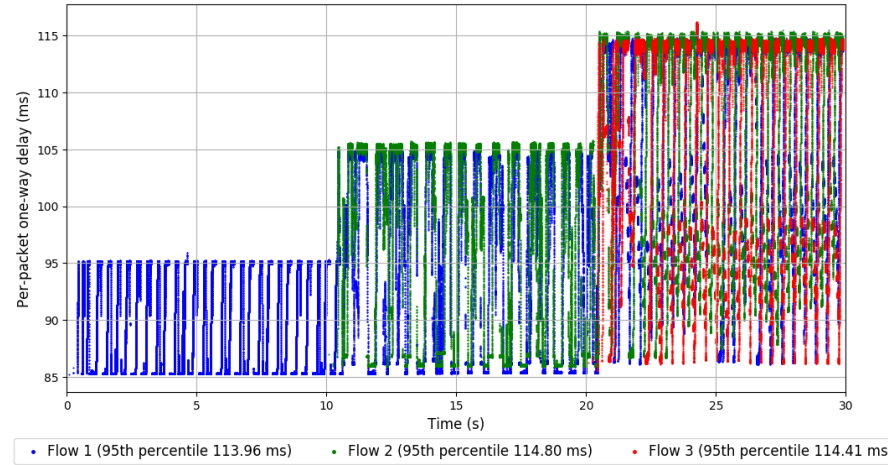
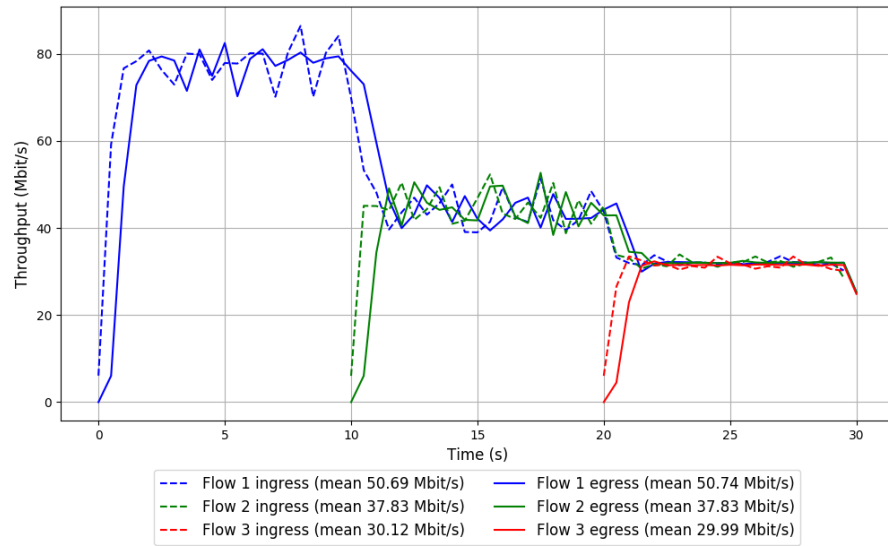


Run 5: Statistics of TaoVA-100x

Start at: 2018-06-06 04:14:15
End at: 2018-06-06 04:14:45
Local clock offset: -0.999 ms
Remote clock offset: 10.439 ms

Below is generated by plot.py at 2018-06-06 06:27:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.74 Mbit/s
95th percentile per-packet one-way delay: 114.370 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 50.74 Mbit/s
95th percentile per-packet one-way delay: 113.963 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 37.83 Mbit/s
95th percentile per-packet one-way delay: 114.799 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 29.99 Mbit/s
95th percentile per-packet one-way delay: 114.407 ms
Loss rate: 2.12%

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

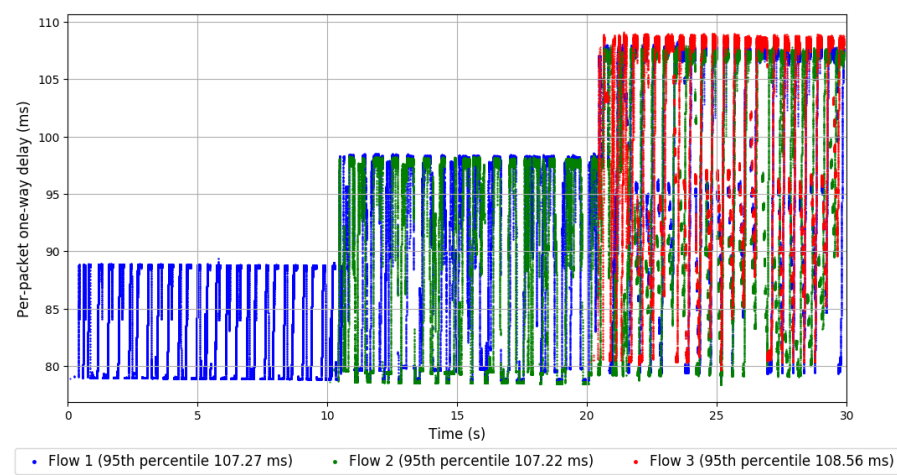
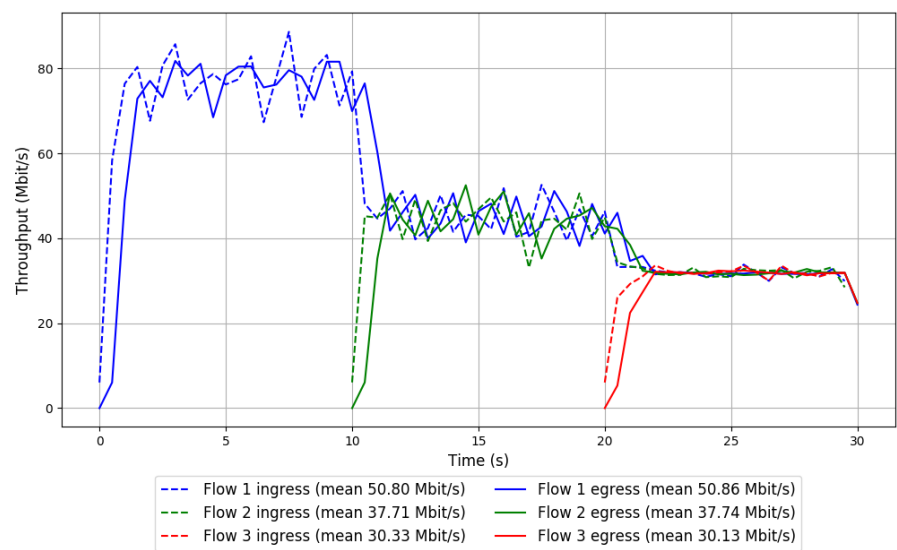


Run 6: Statistics of TaoVA-100x

Start at: 2018-06-06 04:34:14
End at: 2018-06-06 04:34:44
Local clock offset: -2.613 ms
Remote clock offset: 16.582 ms

Below is generated by plot.py at 2018-06-06 06:27:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.84 Mbit/s
95th percentile per-packet one-way delay: 107.661 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 50.86 Mbit/s
95th percentile per-packet one-way delay: 107.272 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 37.74 Mbit/s
95th percentile per-packet one-way delay: 107.224 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 30.13 Mbit/s
95th percentile per-packet one-way delay: 108.562 ms
Loss rate: 2.35%

Run 6: Report of TaoVA-100x — Data Link



Run 7: Statistics of TaoVA-100x

Start at: 2018-06-06 04:54:13

End at: 2018-06-06 04:54:43

Local clock offset: -2.836 ms

Remote clock offset: 7.877 ms

Below is generated by plot.py at 2018-06-06 06:27:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.31 Mbit/s

95th percentile per-packet one-way delay: 110.426 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 46.30 Mbit/s

95th percentile per-packet one-way delay: 110.699 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 37.67 Mbit/s

95th percentile per-packet one-way delay: 110.240 ms

Loss rate: 0.97%

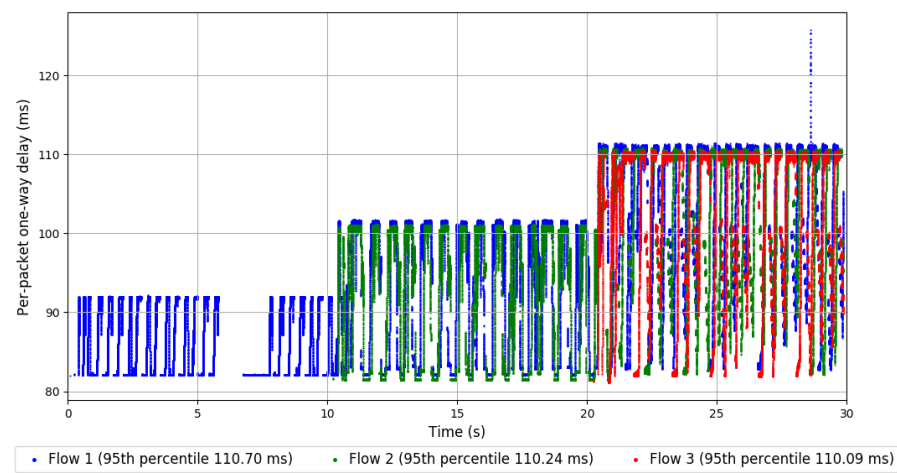
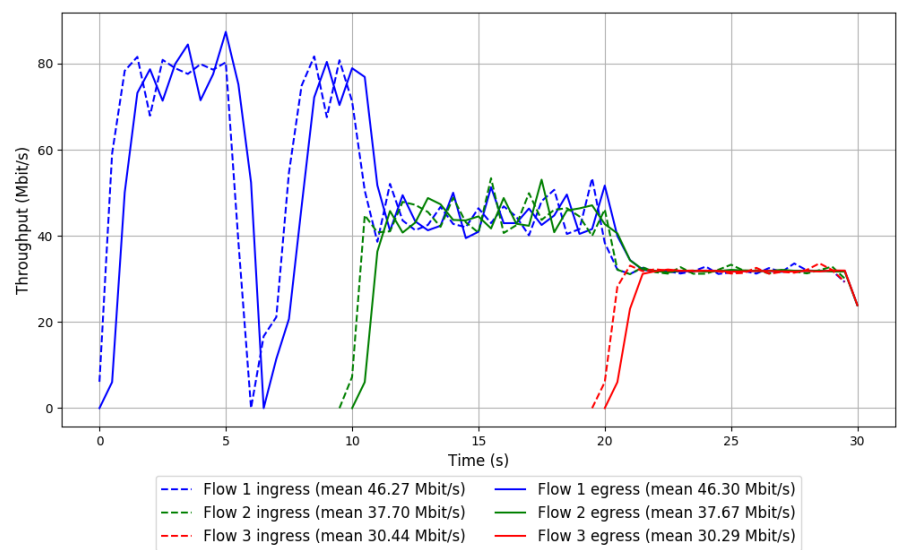
-- Flow 3:

Average throughput: 30.29 Mbit/s

95th percentile per-packet one-way delay: 110.092 ms

Loss rate: 2.27%

Run 7: Report of TaoVA-100x — Data Link



Run 8: Statistics of TaoVA-100x

Start at: 2018-06-06 05:14:29

End at: 2018-06-06 05:14:59

Local clock offset: -6.726 ms

Remote clock offset: 10.95 ms

Below is generated by plot.py at 2018-06-06 06:27:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.93 Mbit/s

95th percentile per-packet one-way delay: 109.872 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 51.00 Mbit/s

95th percentile per-packet one-way delay: 109.813 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 37.54 Mbit/s

95th percentile per-packet one-way delay: 109.550 ms

Loss rate: 0.95%

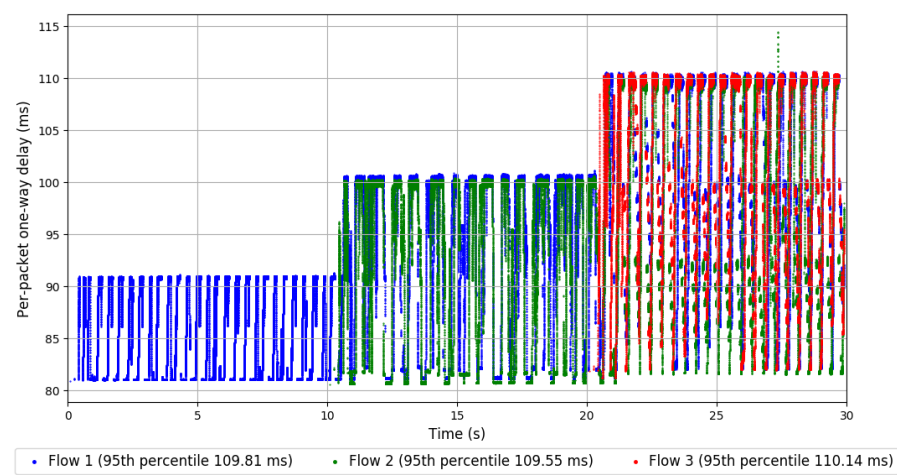
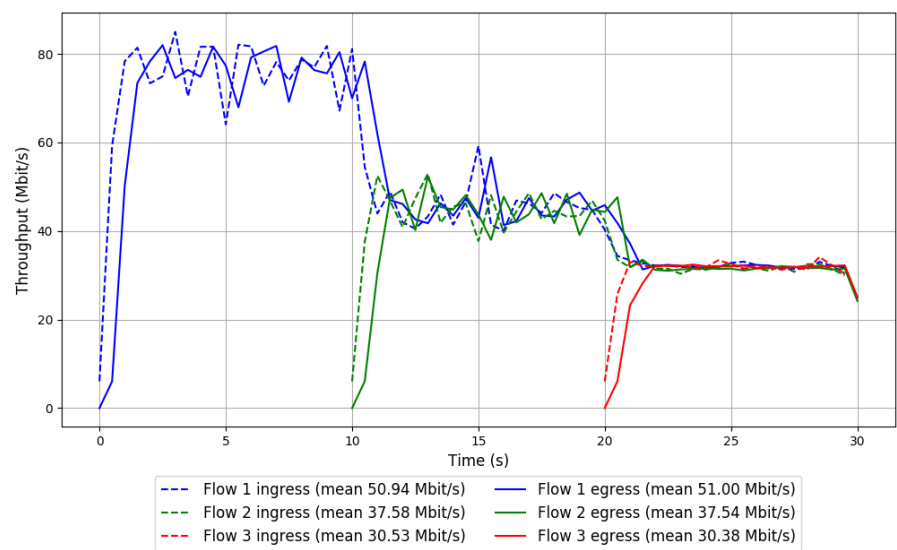
-- Flow 3:

Average throughput: 30.38 Mbit/s

95th percentile per-packet one-way delay: 110.144 ms

Loss rate: 2.30%

Run 8: Report of TaoVA-100x — Data Link



Run 9: Statistics of TaoVA-100x

Start at: 2018-06-06 05:34:30

End at: 2018-06-06 05:35:00

Local clock offset: -8.438 ms

Remote clock offset: 9.706 ms

Below is generated by plot.py at 2018-06-06 06:28:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.56 Mbit/s

95th percentile per-packet one-way delay: 113.812 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 50.46 Mbit/s

95th percentile per-packet one-way delay: 113.722 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 37.87 Mbit/s

95th percentile per-packet one-way delay: 113.678 ms

Loss rate: 0.96%

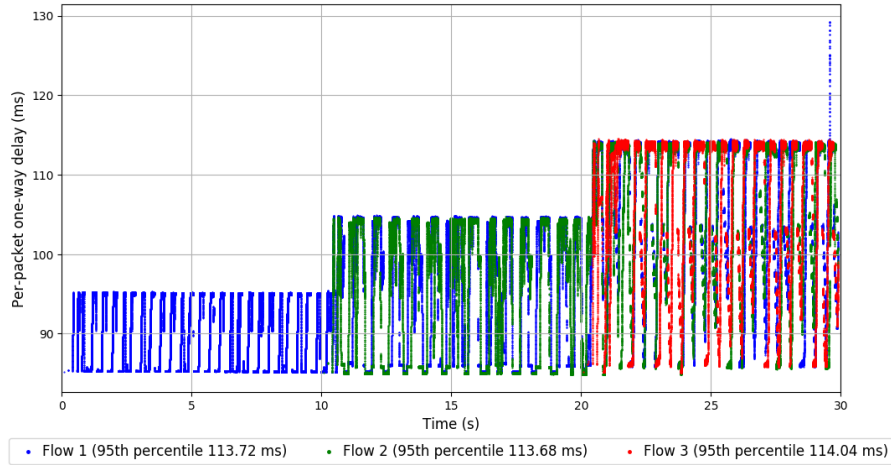
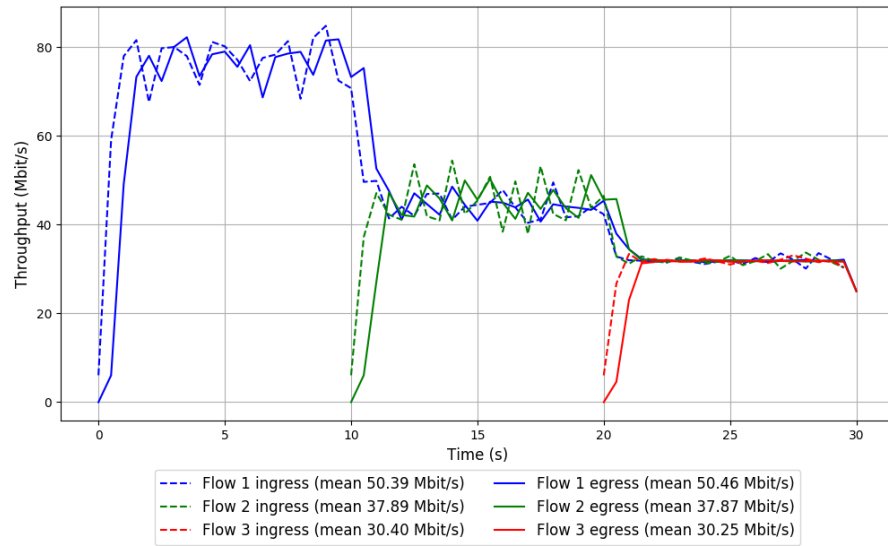
-- Flow 3:

Average throughput: 30.25 Mbit/s

95th percentile per-packet one-way delay: 114.044 ms

Loss rate: 2.31%

Run 9: Report of TaoVA-100x — Data Link

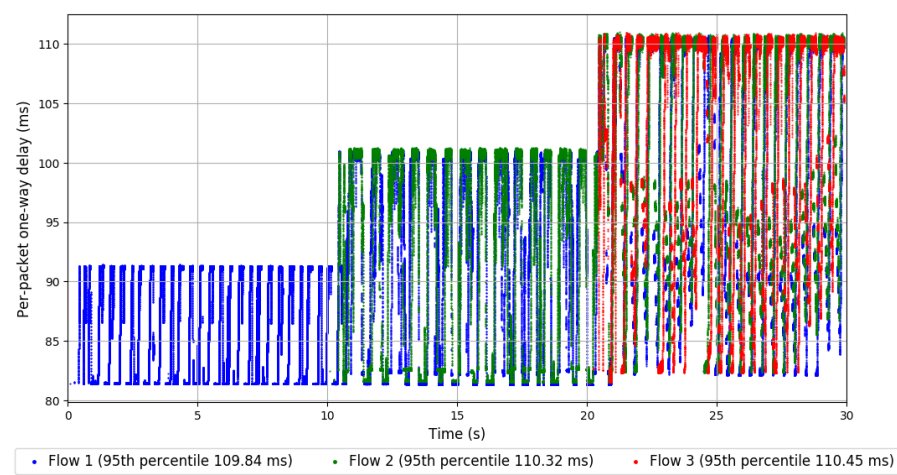
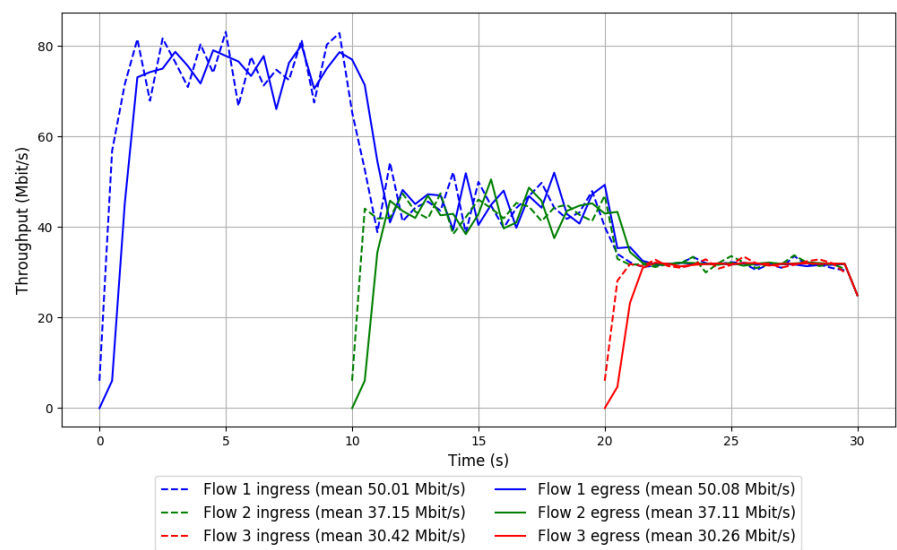


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-06-06 05:54:32
End at: 2018-06-06 05:55:02
Local clock offset: -2.548 ms
Remote clock offset: 8.009 ms

# Below is generated by plot.py at 2018-06-06 06:28:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.68 Mbit/s
95th percentile per-packet one-way delay: 110.210 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 50.08 Mbit/s
95th percentile per-packet one-way delay: 109.838 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 37.11 Mbit/s
95th percentile per-packet one-way delay: 110.324 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 30.26 Mbit/s
95th percentile per-packet one-way delay: 110.446 ms
Loss rate: 2.23%
```

Run 10: Report of TaoVA-100x — Data Link

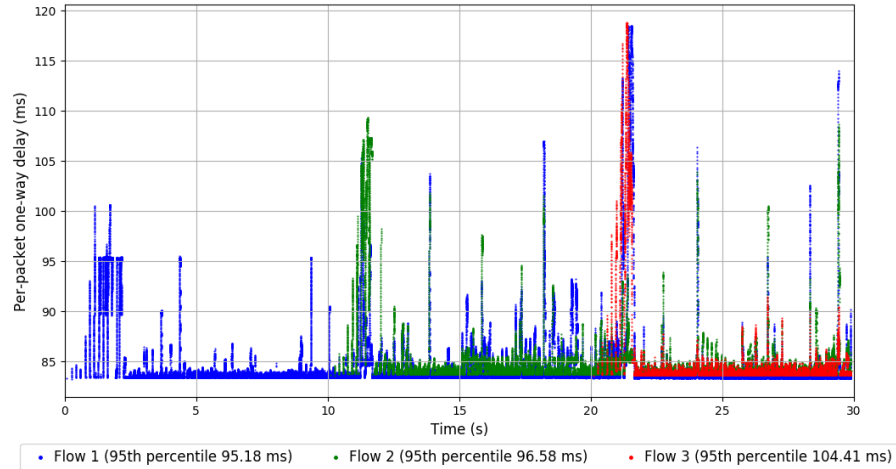
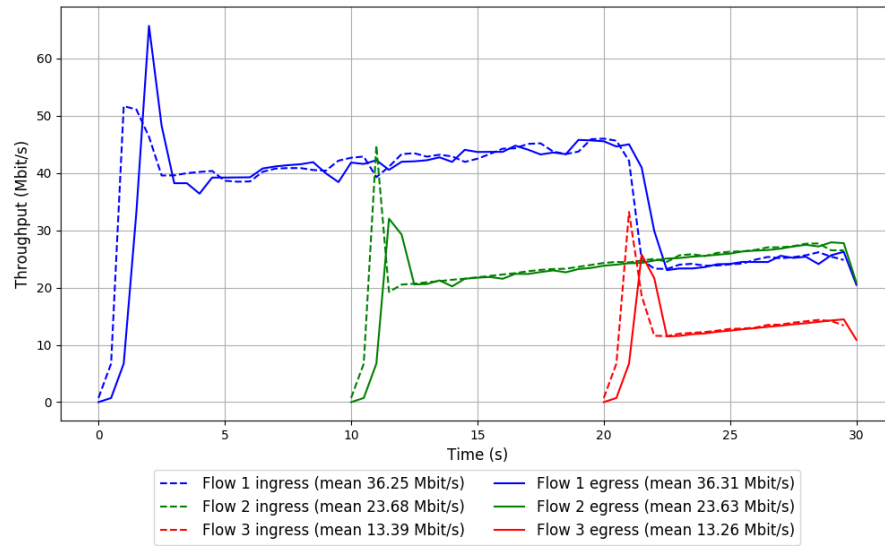


Run 1: Statistics of TCP Vegas

Start at: 2018-06-06 02:49:23
End at: 2018-06-06 02:49:53
Local clock offset: -2.72 ms
Remote clock offset: 11.361 ms

Below is generated by plot.py at 2018-06-06 06:28:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 56.36 Mbit/s
95th percentile per-packet one-way delay: 95.276 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 36.31 Mbit/s
95th percentile per-packet one-way delay: 95.183 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 23.63 Mbit/s
95th percentile per-packet one-way delay: 96.580 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 13.26 Mbit/s
95th percentile per-packet one-way delay: 104.413 ms
Loss rate: 2.66%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-06-06 03:09:23

End at: 2018-06-06 03:09:53

Local clock offset: -2.532 ms

Remote clock offset: 7.86 ms

Below is generated by plot.py at 2018-06-06 06:28:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 56.03 Mbit/s

95th percentile per-packet one-way delay: 91.925 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 33.78 Mbit/s

95th percentile per-packet one-way delay: 91.503 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 24.28 Mbit/s

95th percentile per-packet one-way delay: 89.283 ms

Loss rate: 0.99%

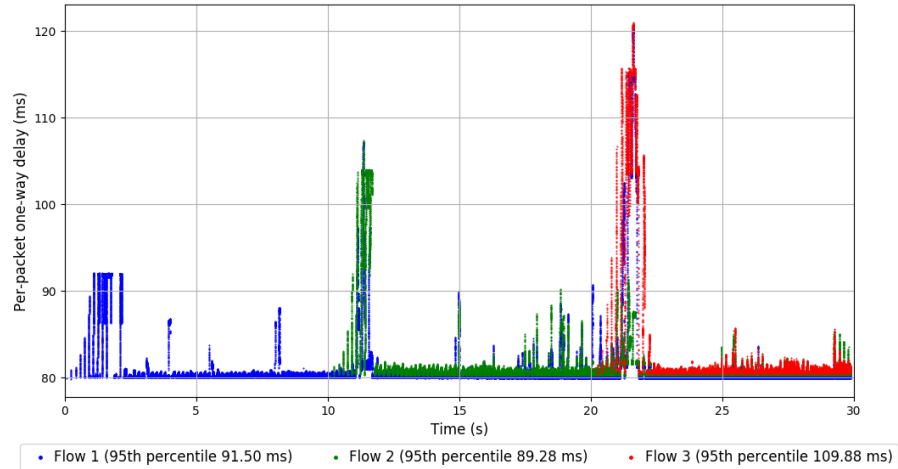
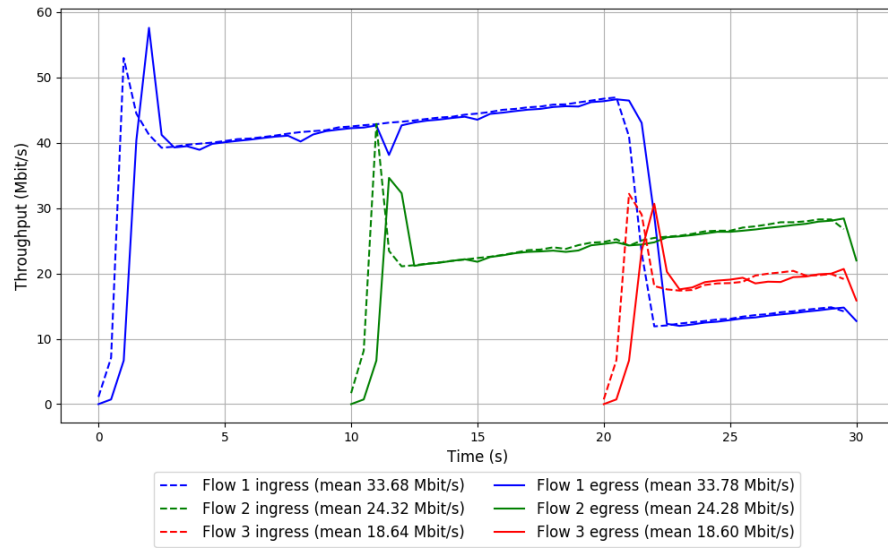
-- Flow 3:

Average throughput: 18.60 Mbit/s

95th percentile per-packet one-way delay: 109.877 ms

Loss rate: 1.96%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-06-06 03:29:21

End at: 2018-06-06 03:29:51

Local clock offset: -0.865 ms

Remote clock offset: 7.914 ms

Below is generated by plot.py at 2018-06-06 06:28:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.07 Mbit/s

95th percentile per-packet one-way delay: 95.034 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 34.29 Mbit/s

95th percentile per-packet one-way delay: 91.883 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 21.96 Mbit/s

95th percentile per-packet one-way delay: 102.666 ms

Loss rate: 0.97%

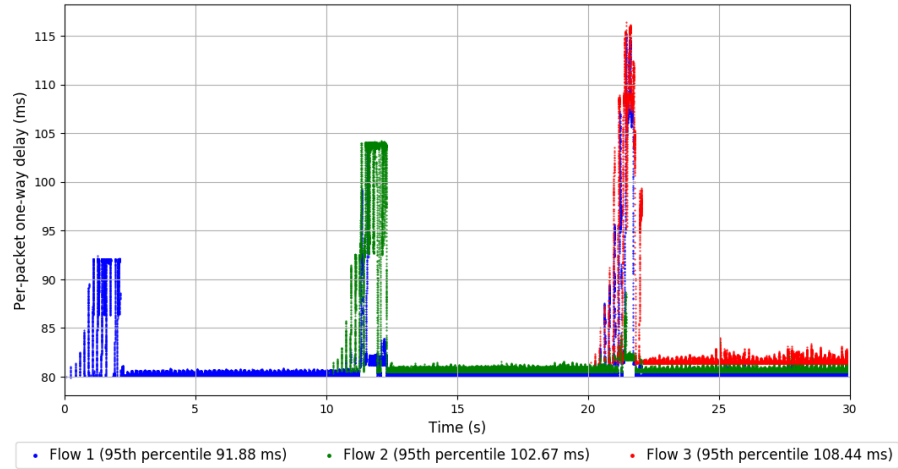
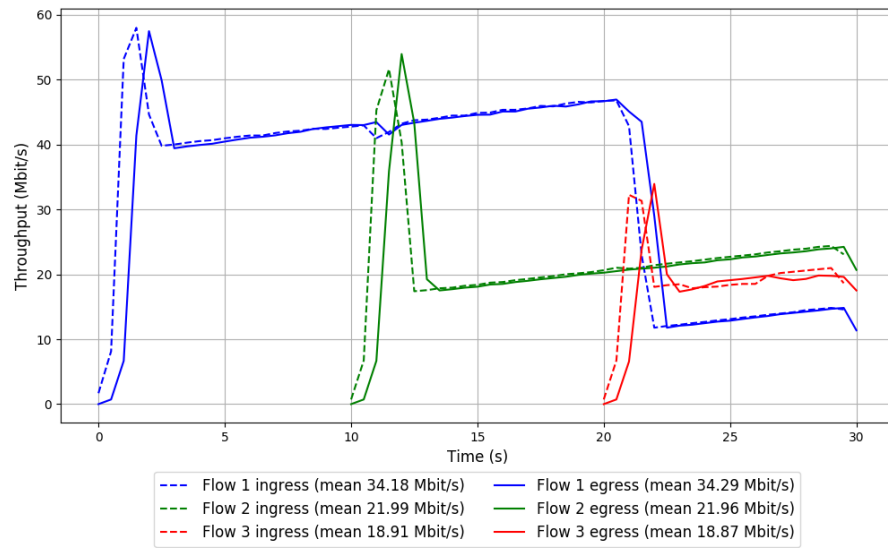
-- Flow 3:

Average throughput: 18.87 Mbit/s

95th percentile per-packet one-way delay: 108.441 ms

Loss rate: 1.94%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-06-06 03:49:20

End at: 2018-06-06 03:49:50

Local clock offset: -1.789 ms

Remote clock offset: 7.871 ms

Below is generated by plot.py at 2018-06-06 06:28:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.77 Mbit/s

95th percentile per-packet one-way delay: 91.539 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 33.92 Mbit/s

95th percentile per-packet one-way delay: 91.175 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 23.35 Mbit/s

95th percentile per-packet one-way delay: 94.206 ms

Loss rate: 1.01%

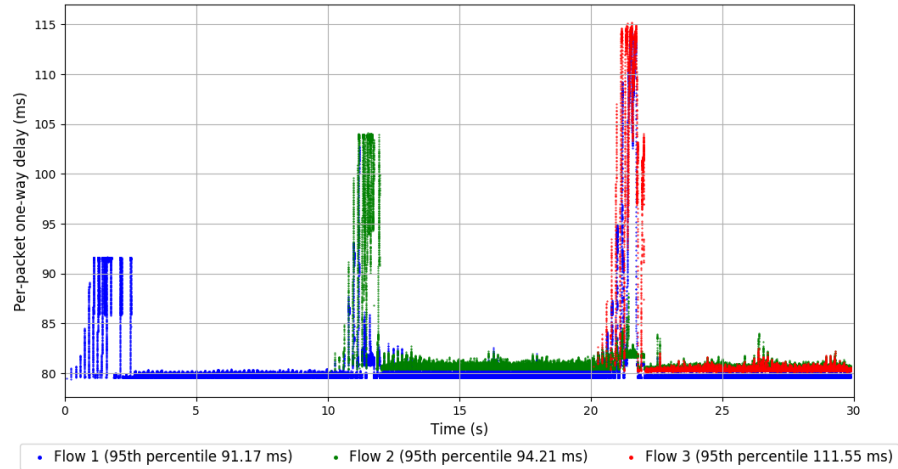
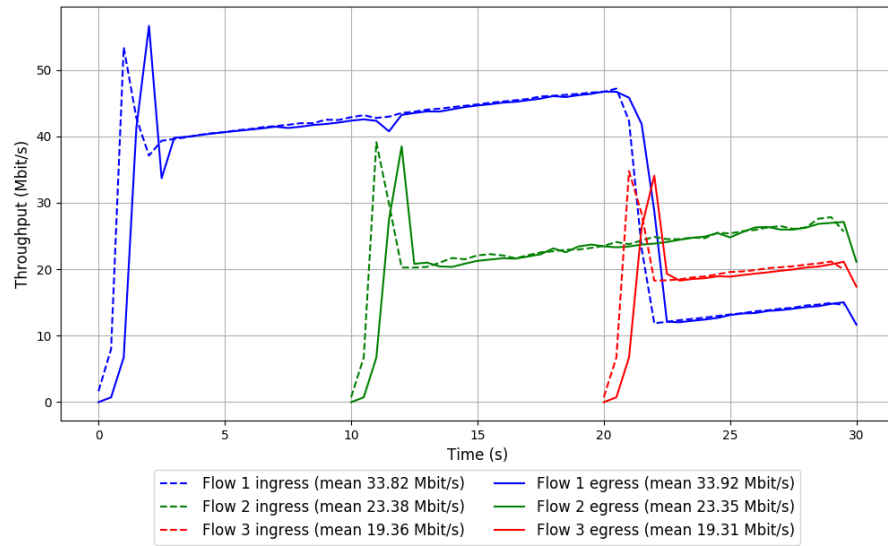
-- Flow 3:

Average throughput: 19.31 Mbit/s

95th percentile per-packet one-way delay: 111.548 ms

Loss rate: 1.89%

Run 4: Report of TCP Vegas — Data Link

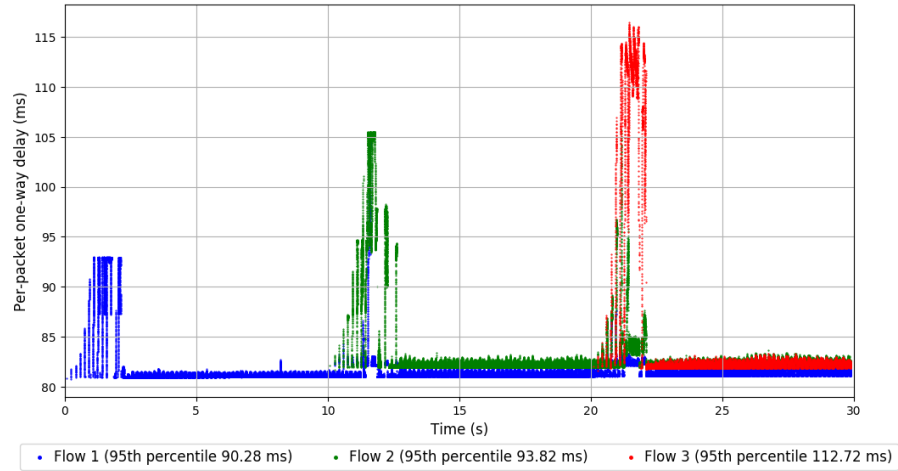
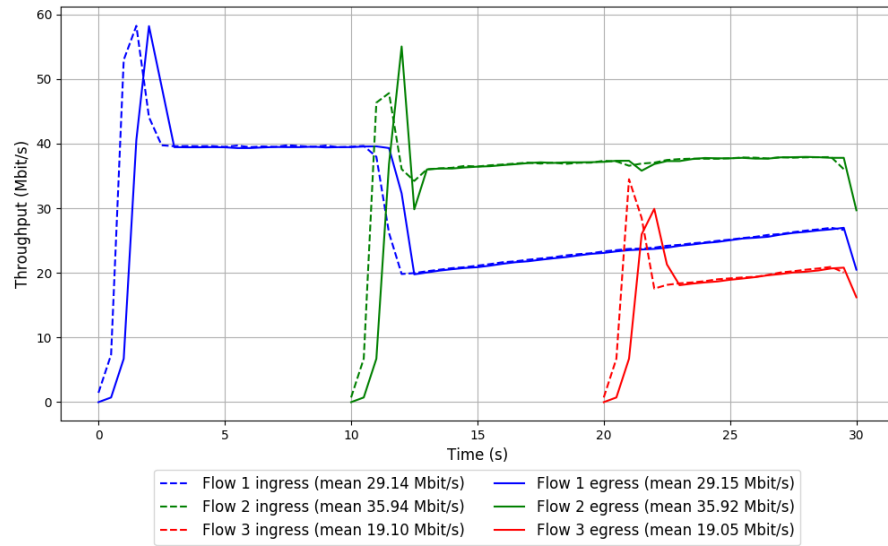


Run 5: Statistics of TCP Vegas

Start at: 2018-06-06 04:09:18
End at: 2018-06-06 04:09:48
Local clock offset: -0.953 ms
Remote clock offset: 13.118 ms

Below is generated by plot.py at 2018-06-06 06:28:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 59.27 Mbit/s
95th percentile per-packet one-way delay: 92.866 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 29.15 Mbit/s
95th percentile per-packet one-way delay: 90.278 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 35.92 Mbit/s
95th percentile per-packet one-way delay: 93.816 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 19.05 Mbit/s
95th percentile per-packet one-way delay: 112.719 ms
Loss rate: 1.92%

Run 5: Report of TCP Vegas — Data Link

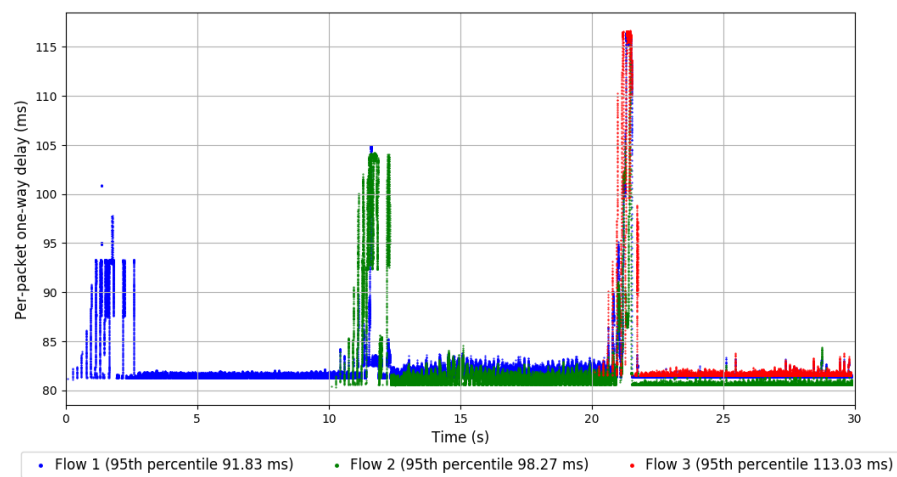
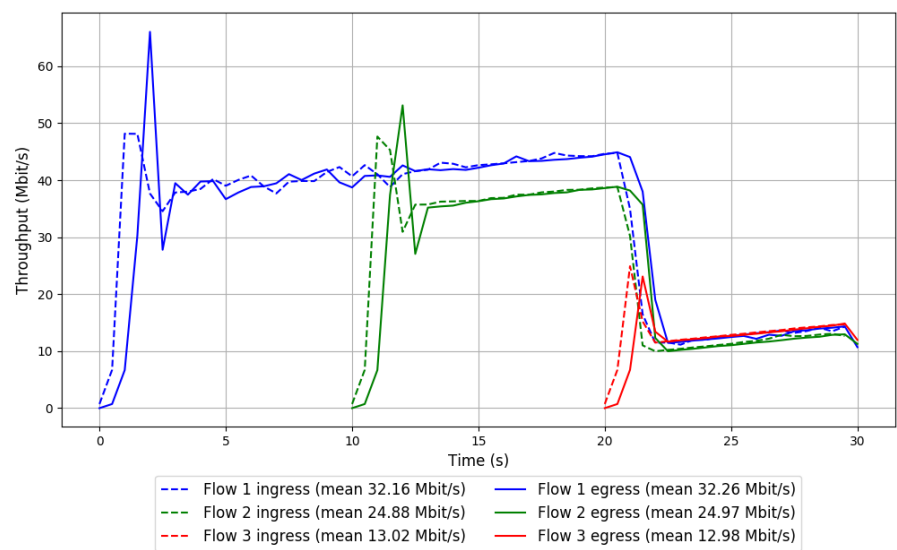


Run 6: Statistics of TCP Vegas

Start at: 2018-06-06 04:29:17
End at: 2018-06-06 04:29:47
Local clock offset: -1.772 ms
Remote clock offset: 16.684 ms

Below is generated by plot.py at 2018-06-06 06:28:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 53.09 Mbit/s
95th percentile per-packet one-way delay: 93.188 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 32.26 Mbit/s
95th percentile per-packet one-way delay: 91.834 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 24.97 Mbit/s
95th percentile per-packet one-way delay: 98.273 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 12.98 Mbit/s
95th percentile per-packet one-way delay: 113.035 ms
Loss rate: 1.95%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-06-06 04:49:16

End at: 2018-06-06 04:49:46

Local clock offset: -3.406 ms

Remote clock offset: 8.587 ms

Below is generated by plot.py at 2018-06-06 06:28:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.51 Mbit/s

95th percentile per-packet one-way delay: 92.804 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 29.15 Mbit/s

95th percentile per-packet one-way delay: 89.464 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 28.81 Mbit/s

95th percentile per-packet one-way delay: 93.477 ms

Loss rate: 0.64%

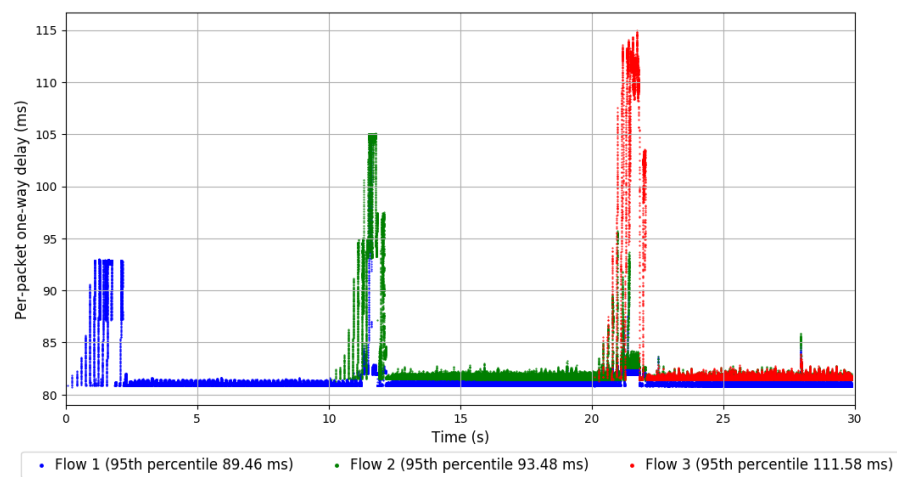
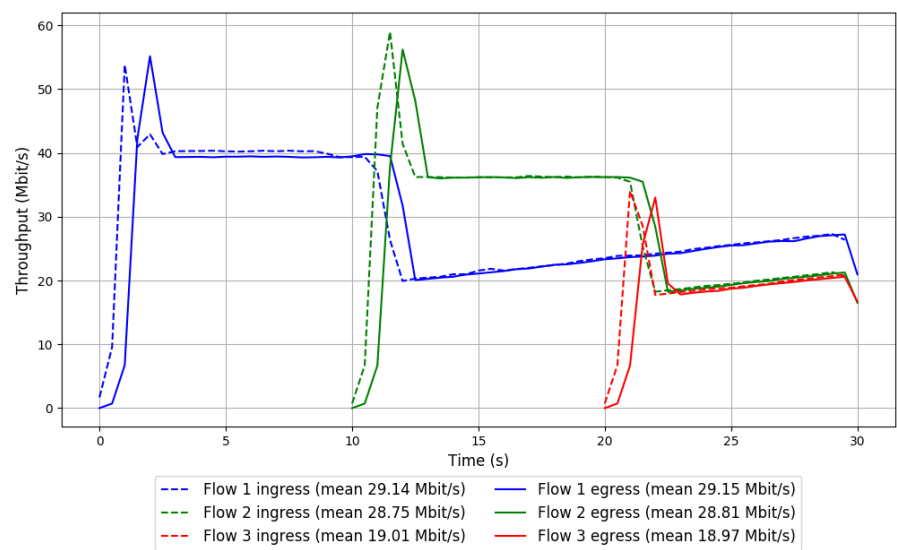
-- Flow 3:

Average throughput: 18.97 Mbit/s

95th percentile per-packet one-way delay: 111.581 ms

Loss rate: 1.91%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-06-06 05:09:30

End at: 2018-06-06 05:10:00

Local clock offset: -4.945 ms

Remote clock offset: 8.693 ms

Below is generated by plot.py at 2018-06-06 06:28:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.89 Mbit/s

95th percentile per-packet one-way delay: 93.767 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 35.83 Mbit/s

95th percentile per-packet one-way delay: 92.803 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 23.44 Mbit/s

95th percentile per-packet one-way delay: 91.823 ms

Loss rate: 0.99%

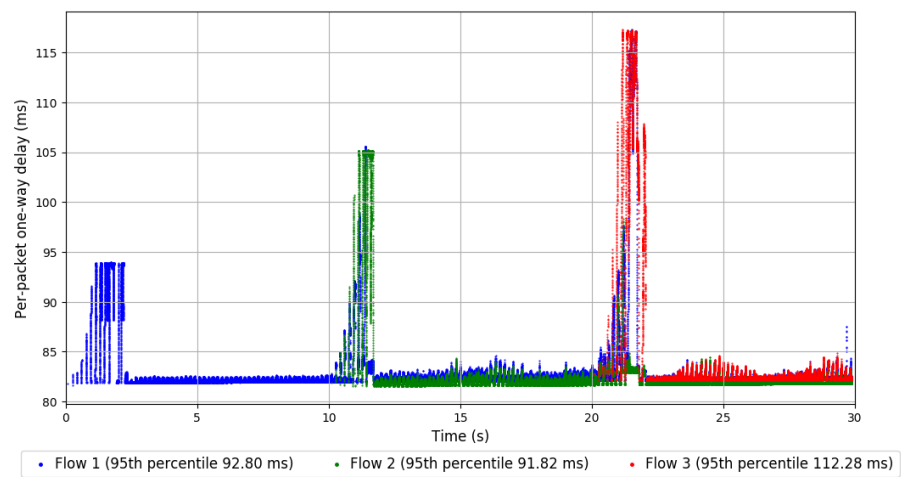
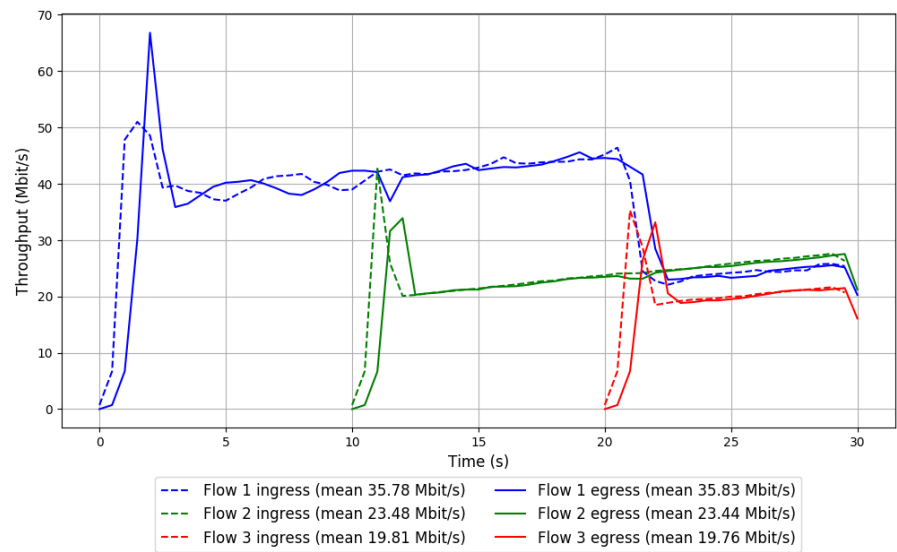
-- Flow 3:

Average throughput: 19.76 Mbit/s

95th percentile per-packet one-way delay: 112.276 ms

Loss rate: 1.90%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-06-06 05:29:32

End at: 2018-06-06 05:30:02

Local clock offset: -8.412 ms

Remote clock offset: 9.159 ms

Below is generated by plot.py at 2018-06-06 06:28:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.24 Mbit/s

95th percentile per-packet one-way delay: 97.617 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 34.10 Mbit/s

95th percentile per-packet one-way delay: 94.366 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 21.90 Mbit/s

95th percentile per-packet one-way delay: 99.306 ms

Loss rate: 1.03%

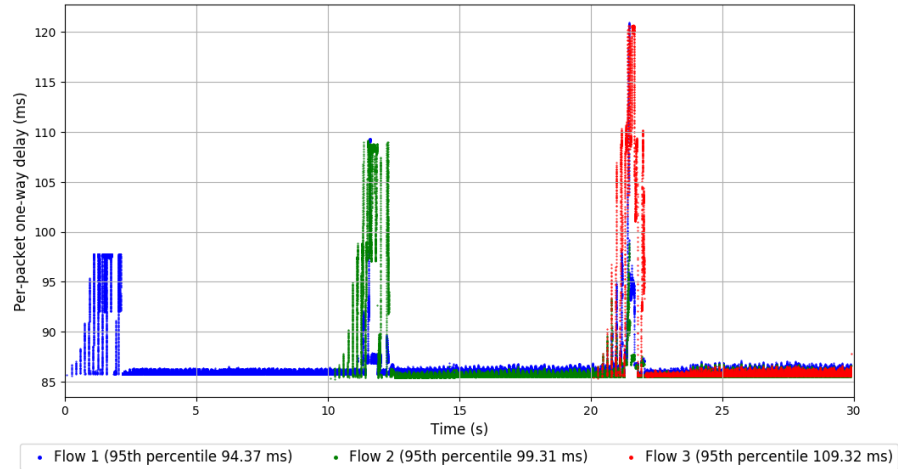
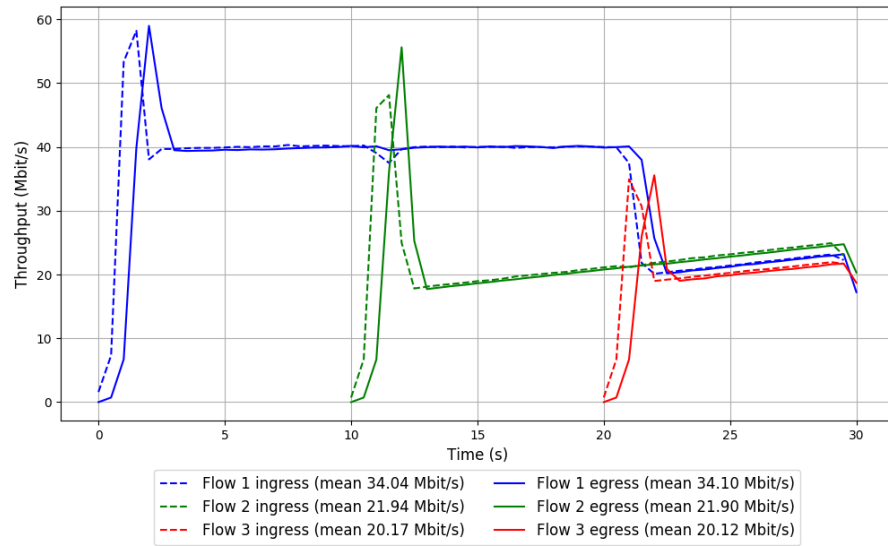
-- Flow 3:

Average throughput: 20.12 Mbit/s

95th percentile per-packet one-way delay: 109.321 ms

Loss rate: 1.89%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-06-06 05:49:35

End at: 2018-06-06 05:50:05

Local clock offset: -2.378 ms

Remote clock offset: 5.789 ms

Below is generated by plot.py at 2018-06-06 06:28:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.17 Mbit/s

95th percentile per-packet one-way delay: 98.069 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 30.94 Mbit/s

95th percentile per-packet one-way delay: 94.499 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 29.02 Mbit/s

95th percentile per-packet one-way delay: 99.559 ms

Loss rate: 0.70%

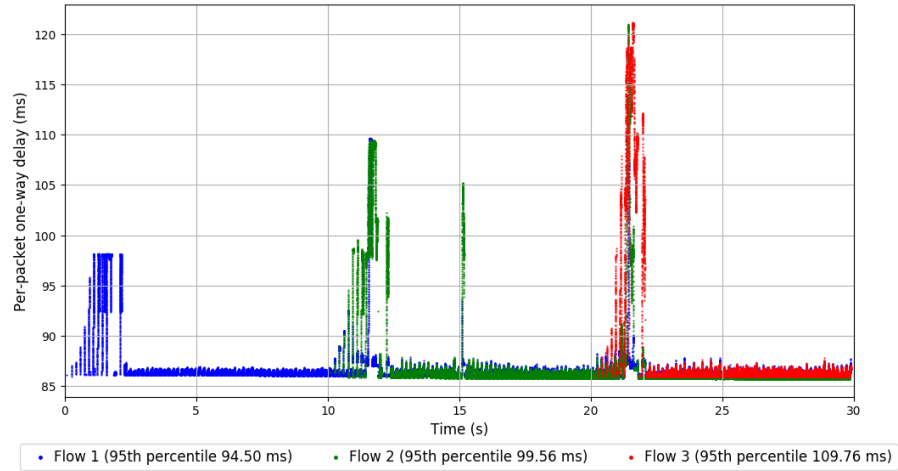
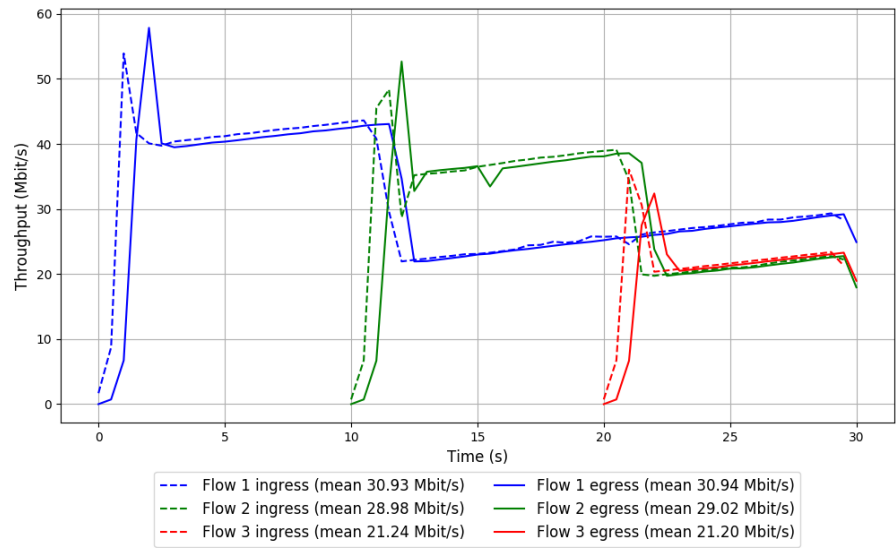
-- Flow 3:

Average throughput: 21.20 Mbit/s

95th percentile per-packet one-way delay: 109.764 ms

Loss rate: 1.89%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-06-06 03:06:54

End at: 2018-06-06 03:07:24

Local clock offset: -0.888 ms

Remote clock offset: 4.663 ms

Below is generated by plot.py at 2018-06-06 06:28:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.82 Mbit/s

95th percentile per-packet one-way delay: 118.052 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 34.03 Mbit/s

95th percentile per-packet one-way delay: 115.031 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 31.06 Mbit/s

95th percentile per-packet one-way delay: 118.395 ms

Loss rate: 0.86%

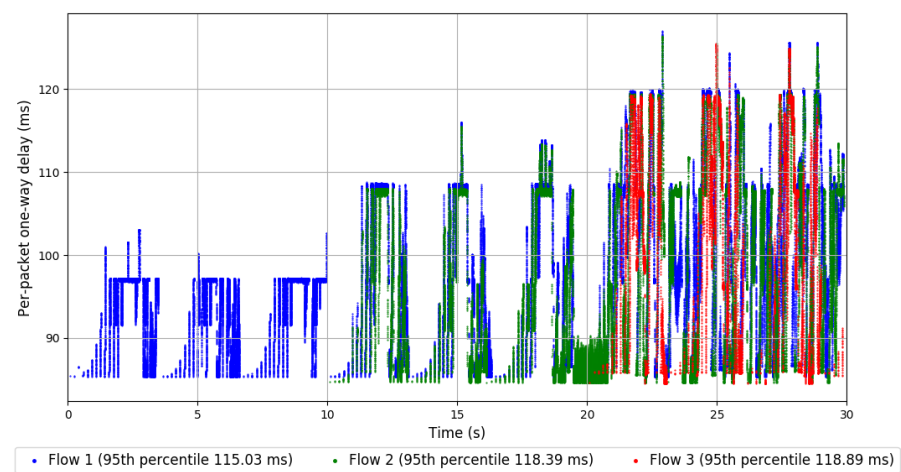
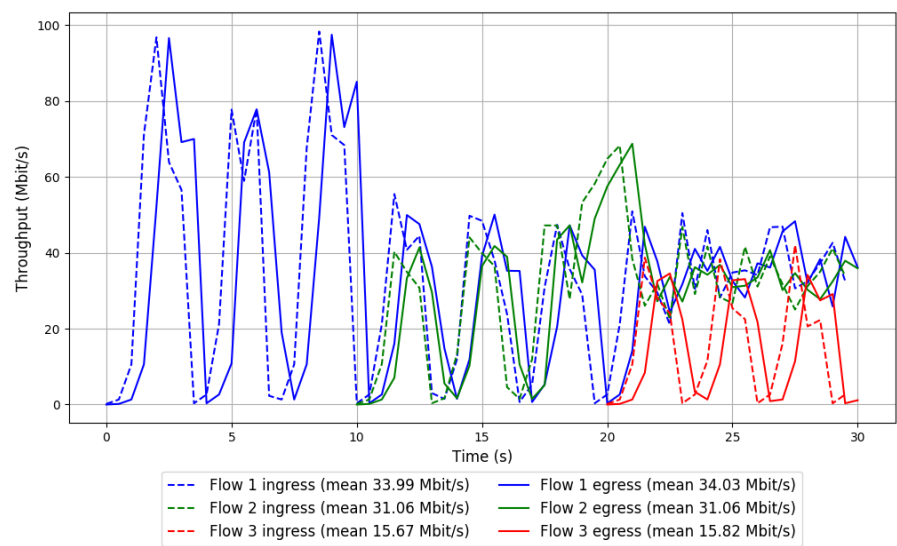
-- Flow 3:

Average throughput: 15.82 Mbit/s

95th percentile per-packet one-way delay: 118.895 ms

Loss rate: 0.80%

Run 1: Report of Verus — Data Link

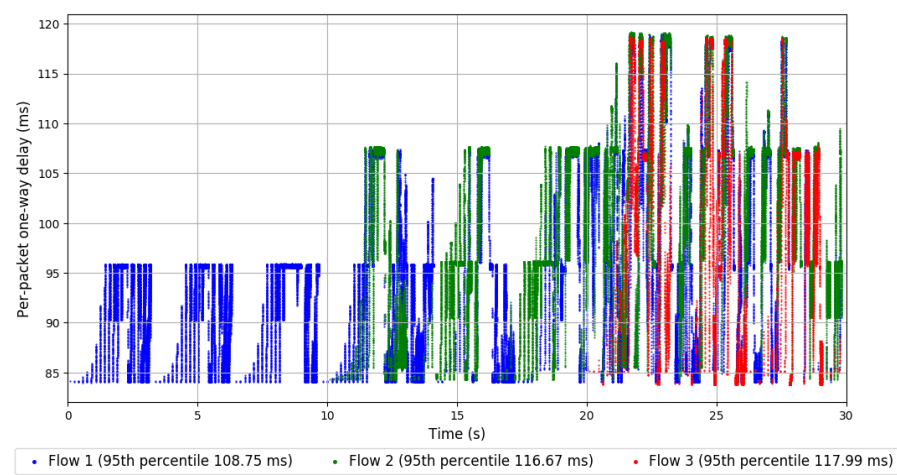
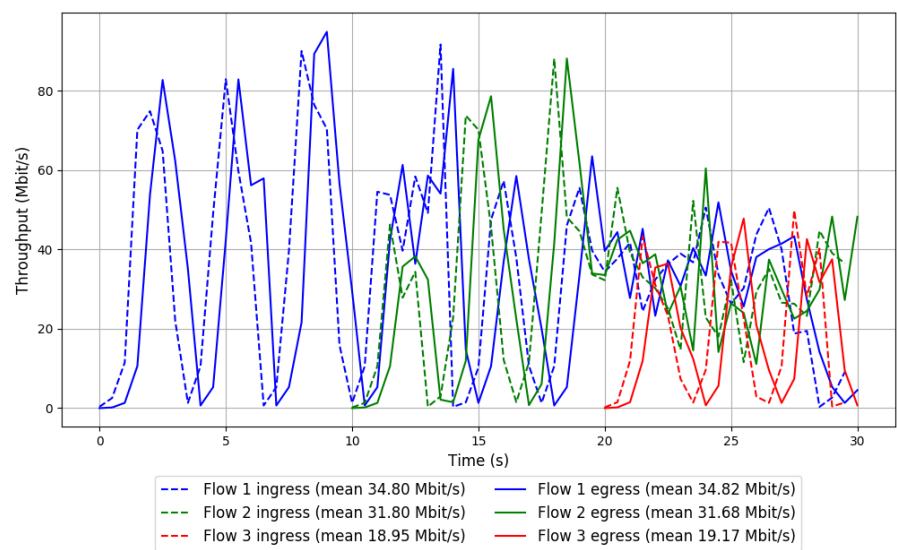


Run 2: Statistics of Verus

Start at: 2018-06-06 03:26:52
End at: 2018-06-06 03:27:22
Local clock offset: -1.669 ms
Remote clock offset: 3.349 ms

Below is generated by plot.py at 2018-06-06 06:28:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 61.98 Mbit/s
95th percentile per-packet one-way delay: 114.452 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 34.82 Mbit/s
95th percentile per-packet one-way delay: 108.749 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 31.68 Mbit/s
95th percentile per-packet one-way delay: 116.675 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 19.17 Mbit/s
95th percentile per-packet one-way delay: 117.993 ms
Loss rate: 0.50%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-06-06 03:46:50

End at: 2018-06-06 03:47:20

Local clock offset: -0.952 ms

Remote clock offset: 8.271 ms

Below is generated by plot.py at 2018-06-06 06:29:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.23 Mbit/s

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

Loss rate: 1.09%

-- Flow 1:

Average throughput: 37.18 Mbit/s

95th percentile per-packet one-way delay: 111.105 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 37.37 Mbit/s

95th percentile per-packet one-way delay: 114.817 ms

Loss rate: 1.12%

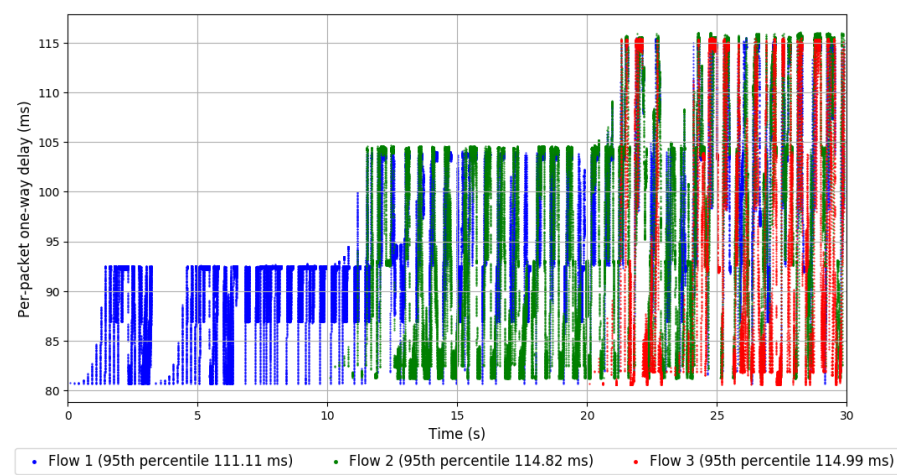
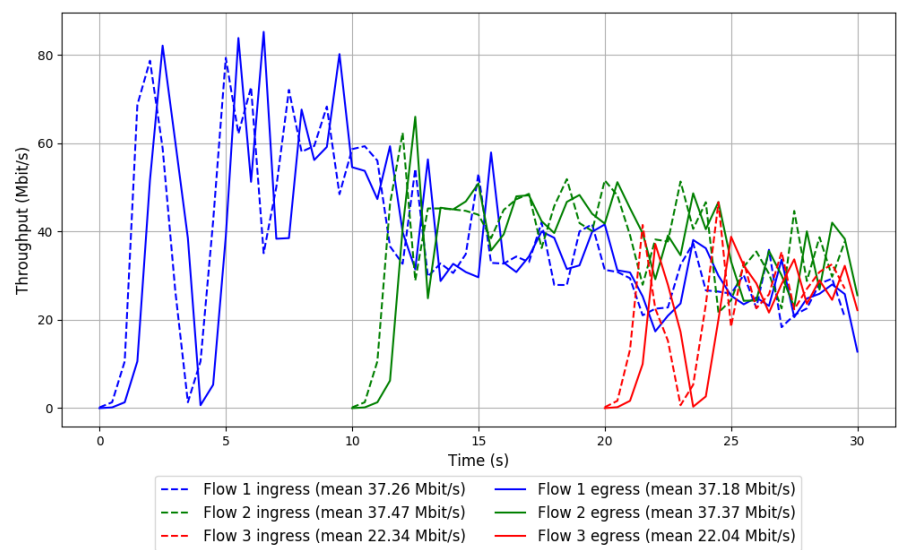
-- Flow 3:

Average throughput: 22.04 Mbit/s

95th percentile per-packet one-way delay: 114.992 ms

Loss rate: 3.13%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-06-06 04:06:49

End at: 2018-06-06 04:07:19

Local clock offset: -2.505 ms

Remote clock offset: 8.664 ms

Below is generated by plot.py at 2018-06-06 06:29:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.08 Mbit/s

95th percentile per-packet one-way delay: 115.270 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 40.71 Mbit/s

95th percentile per-packet one-way delay: 106.046 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 23.34 Mbit/s

95th percentile per-packet one-way delay: 117.218 ms

Loss rate: 2.22%

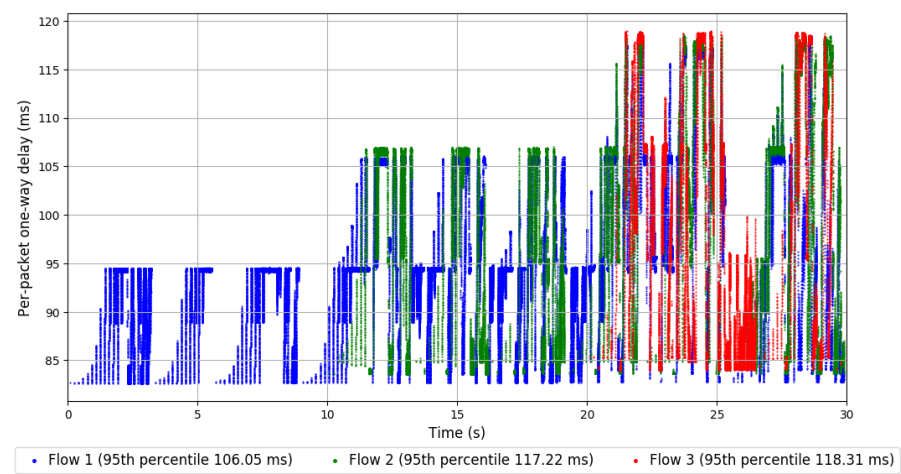
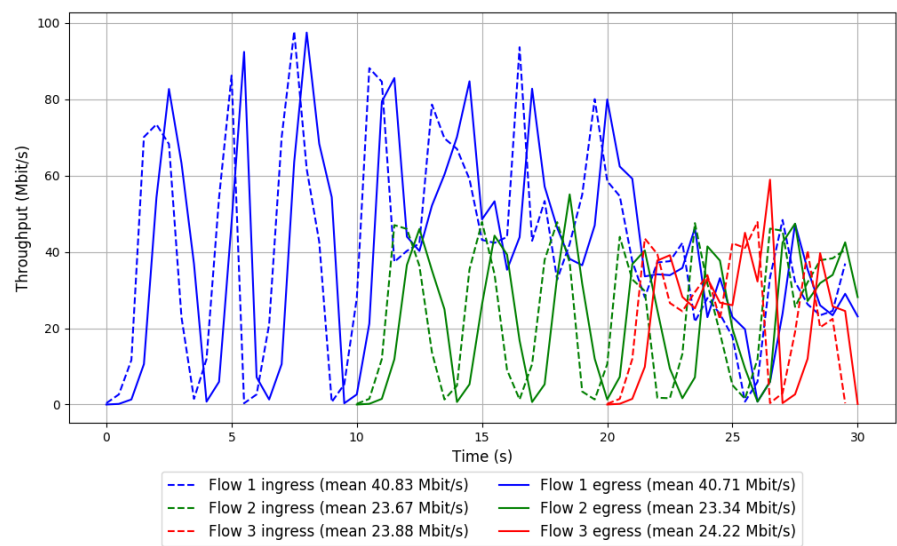
-- Flow 3:

Average throughput: 24.22 Mbit/s

95th percentile per-packet one-way delay: 118.309 ms

Loss rate: 0.27%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-06-06 04:26:48

End at: 2018-06-06 04:27:18

Local clock offset: -1.78 ms

Remote clock offset: 13.19 ms

Below is generated by plot.py at 2018-06-06 06:29:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.02 Mbit/s

95th percentile per-packet one-way delay: 117.611 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 29.85 Mbit/s

95th percentile per-packet one-way delay: 115.058 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 25.14 Mbit/s

95th percentile per-packet one-way delay: 117.584 ms

Loss rate: 1.60%

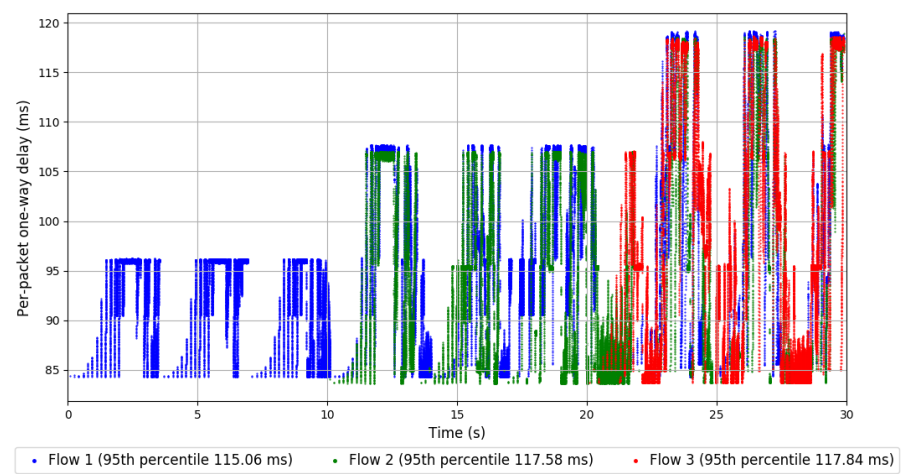
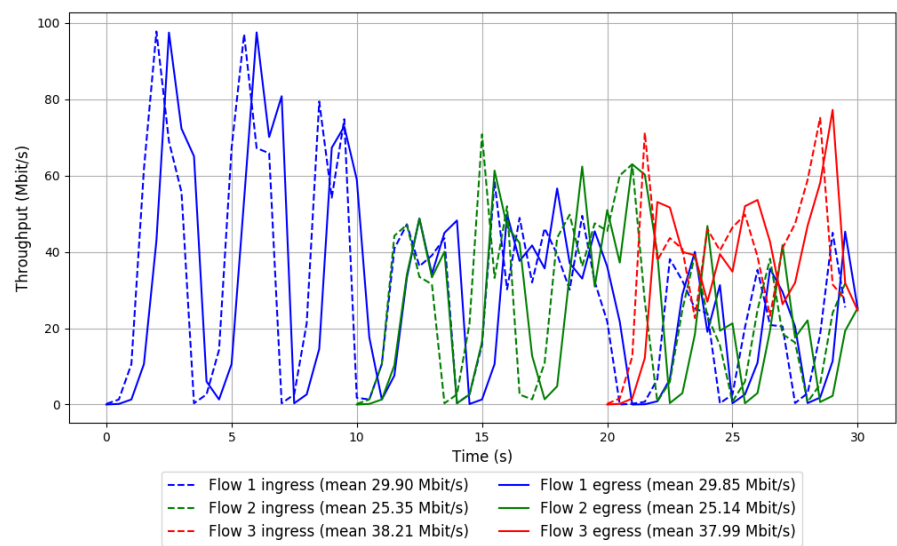
-- Flow 3:

Average throughput: 37.99 Mbit/s

95th percentile per-packet one-way delay: 117.836 ms

Loss rate: 1.63%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-06-06 04:46:47

End at: 2018-06-06 04:47:17

Local clock offset: -4.012 ms

Remote clock offset: 6.038 ms

Below is generated by plot.py at 2018-06-06 06:29:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.30 Mbit/s

95th percentile per-packet one-way delay: 117.344 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 30.66 Mbit/s

95th percentile per-packet one-way delay: 114.387 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 37.92 Mbit/s

95th percentile per-packet one-way delay: 117.551 ms

Loss rate: 1.55%

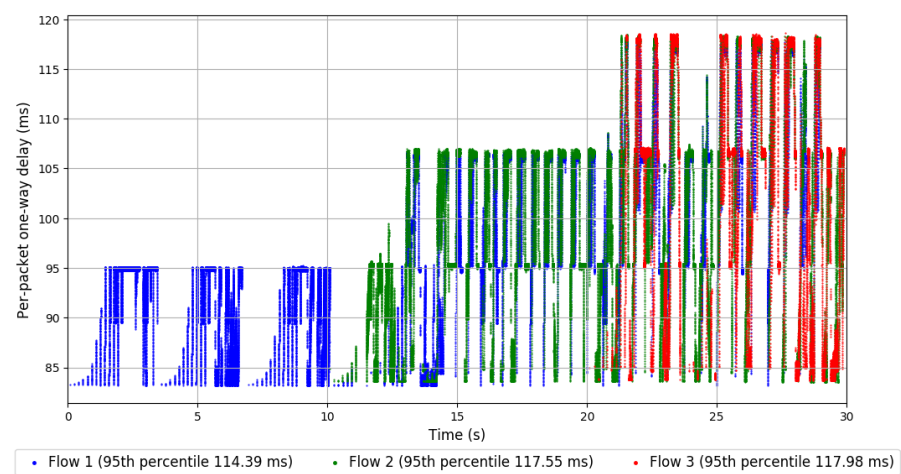
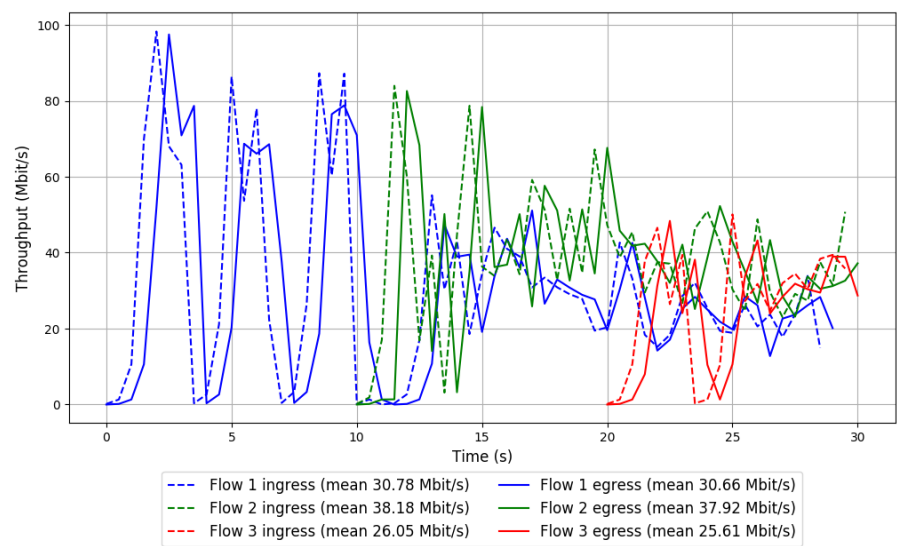
-- Flow 3:

Average throughput: 25.61 Mbit/s

95th percentile per-packet one-way delay: 117.979 ms

Loss rate: 3.35%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-06-06 05:06:55

End at: 2018-06-06 05:07:25

Local clock offset: -4.237 ms

Remote clock offset: 7.406 ms

Below is generated by plot.py at 2018-06-06 06:29:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.28 Mbit/s

95th percentile per-packet one-way delay: 113.634 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 38.99 Mbit/s

95th percentile per-packet one-way delay: 109.544 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 27.51 Mbit/s

95th percentile per-packet one-way delay: 113.799 ms

Loss rate: 1.71%

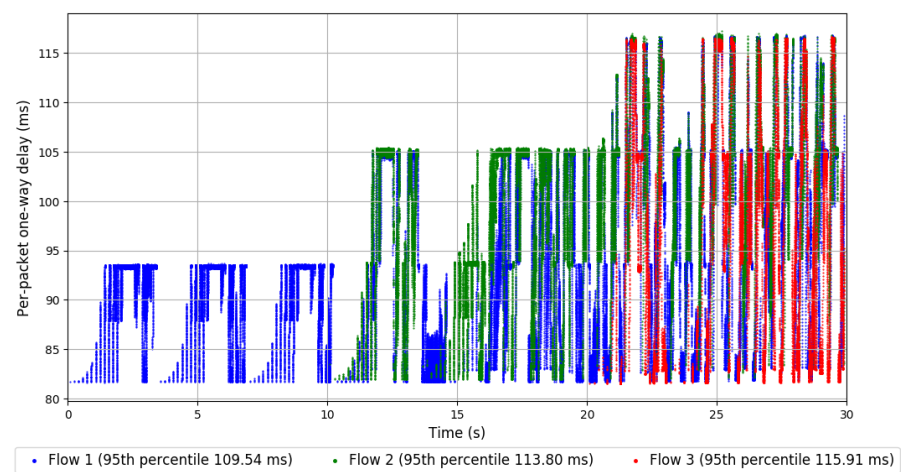
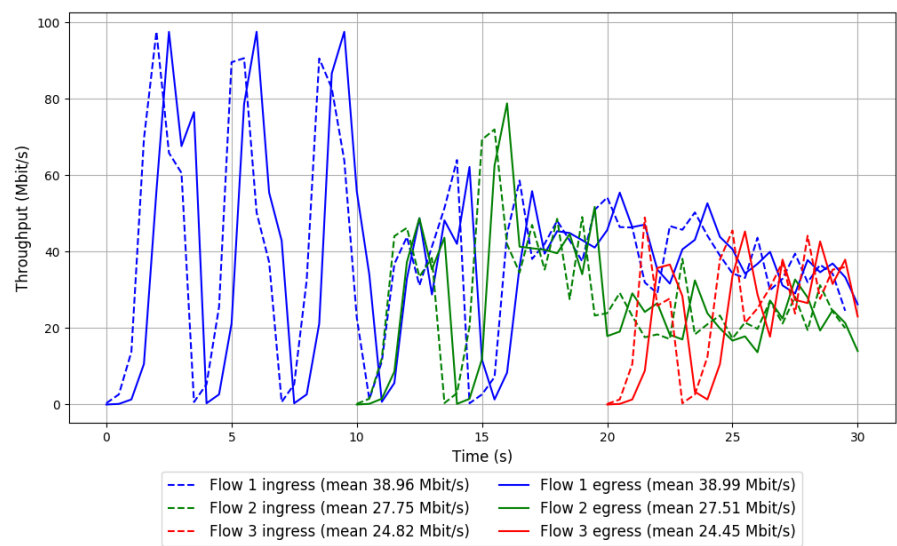
-- Flow 3:

Average throughput: 24.45 Mbit/s

95th percentile per-packet one-way delay: 115.907 ms

Loss rate: 3.25%

Run 7: Report of Verus — Data Link

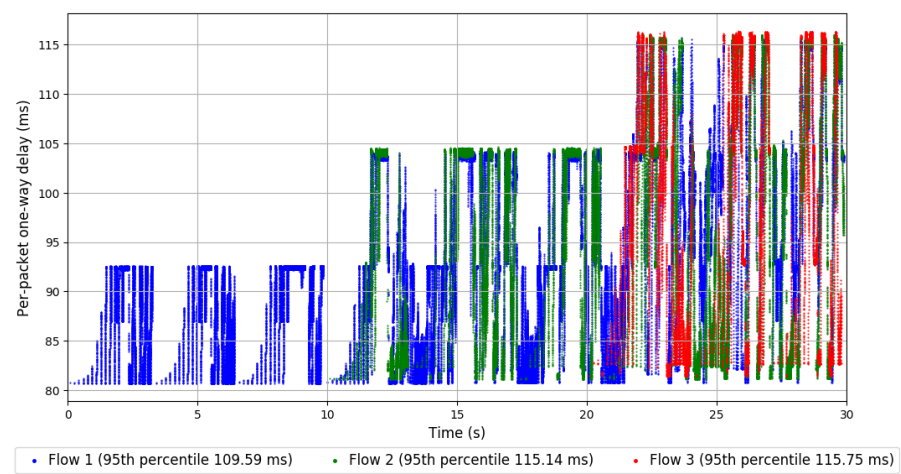
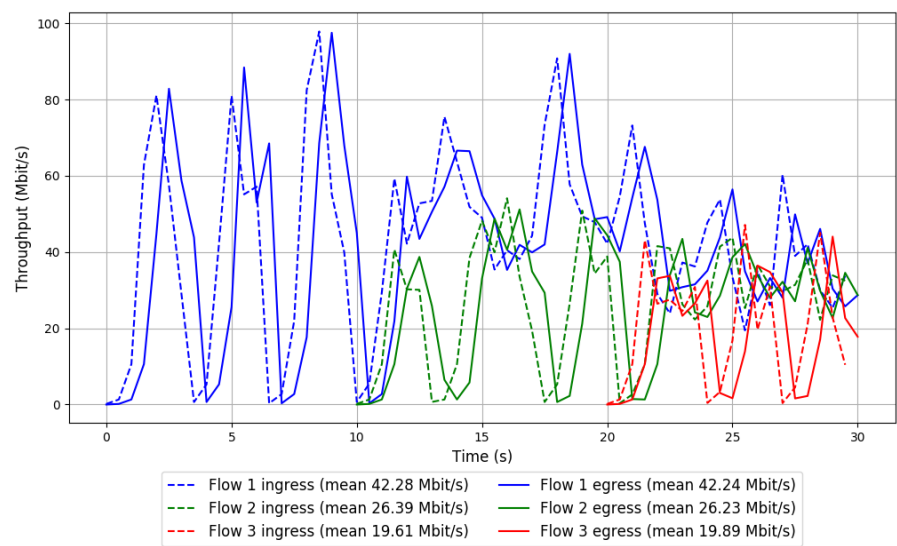


Run 8: Statistics of Verus

Start at: 2018-06-06 05:27:03
End at: 2018-06-06 05:27:33
Local clock offset: -8.999 ms
Remote clock offset: 12.369 ms

Below is generated by plot.py at 2018-06-06 06:29:37
Datalink statistics
-- Total of 3 flows:
Average throughput: 66.13 Mbit/s
95th percentile per-packet one-way delay: 114.613 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 42.24 Mbit/s
95th percentile per-packet one-way delay: 109.588 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 26.23 Mbit/s
95th percentile per-packet one-way delay: 115.142 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 19.89 Mbit/s
95th percentile per-packet one-way delay: 115.752 ms
Loss rate: 0.27%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-06-06 05:47:05

End at: 2018-06-06 05:47:35

Local clock offset: -2.787 ms

Remote clock offset: 6.901 ms

Below is generated by plot.py at 2018-06-06 06:29:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.02 Mbit/s

95th percentile per-packet one-way delay: 117.745 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 34.74 Mbit/s

95th percentile per-packet one-way delay: 109.380 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 34.80 Mbit/s

95th percentile per-packet one-way delay: 118.778 ms

Loss rate: 2.07%

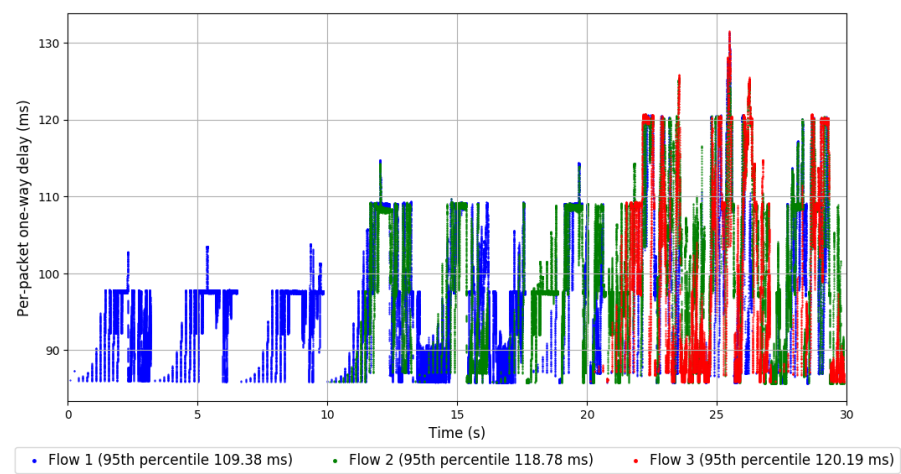
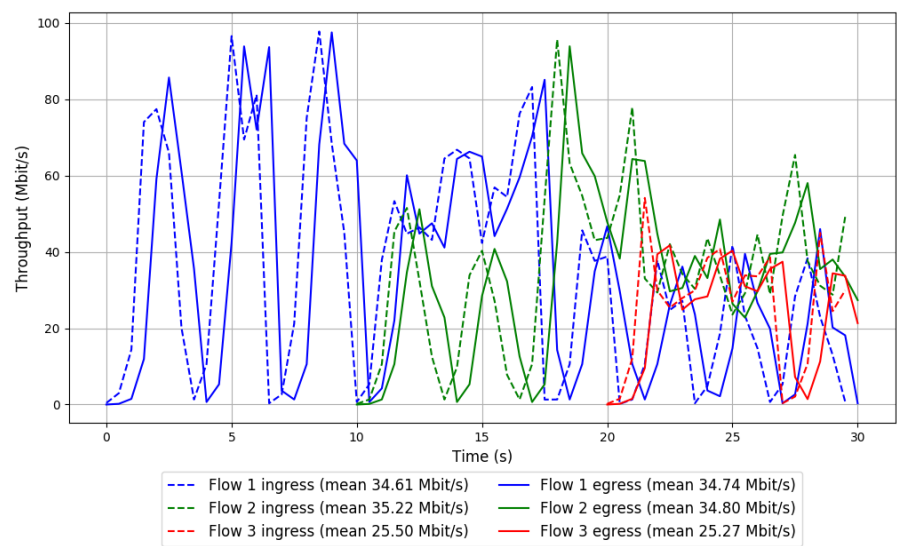
-- Flow 3:

Average throughput: 25.27 Mbit/s

95th percentile per-packet one-way delay: 120.191 ms

Loss rate: 2.19%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-06-06 06:07:04

End at: 2018-06-06 06:07:34

Local clock offset: -1.654 ms

Remote clock offset: 2.716 ms

Below is generated by plot.py at 2018-06-06 06:29:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.27 Mbit/s

95th percentile per-packet one-way delay: 119.073 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 39.90 Mbit/s

95th percentile per-packet one-way delay: 116.708 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 29.67 Mbit/s

95th percentile per-packet one-way delay: 119.263 ms

Loss rate: 0.59%

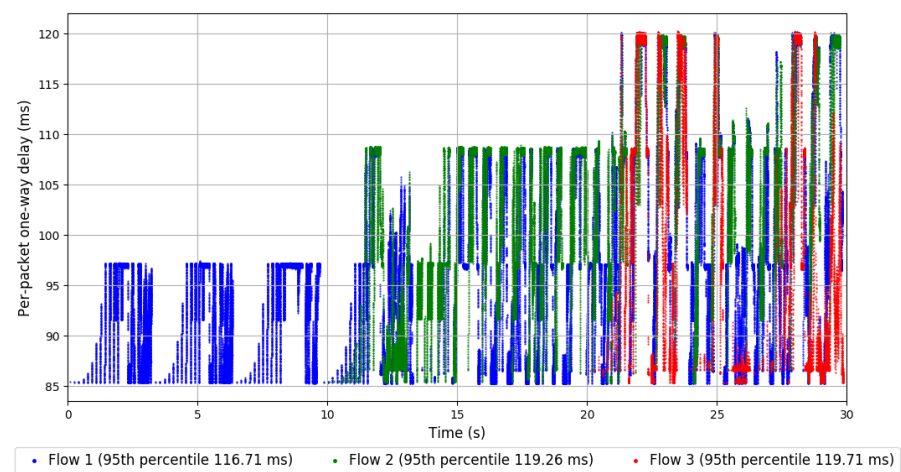
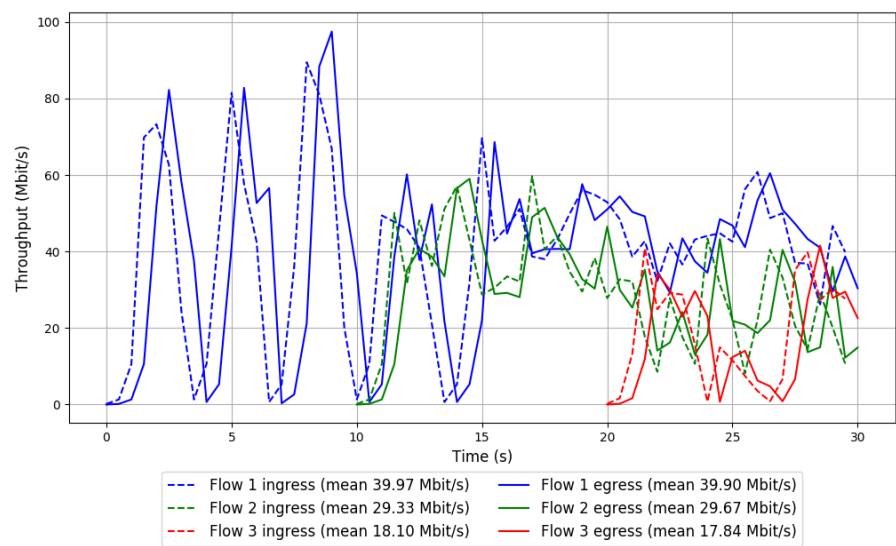
-- Flow 3:

Average throughput: 17.84 Mbit/s

95th percentile per-packet one-way delay: 119.709 ms

Loss rate: 3.33%

Run 10: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-06-06 02:58:01

End at: 2018-06-06 02:58:31

Local clock offset: -1.849 ms

Remote clock offset: 3.8 ms

Below is generated by plot.py at 2018-06-06 06:30:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.28 Mbit/s

95th percentile per-packet one-way delay: 116.155 ms

Loss rate: 3.09%

-- Flow 1:

Average throughput: 48.31 Mbit/s

95th percentile per-packet one-way delay: 113.296 ms

Loss rate: 3.28%

-- Flow 2:

Average throughput: 31.66 Mbit/s

95th percentile per-packet one-way delay: 117.467 ms

Loss rate: 2.46%

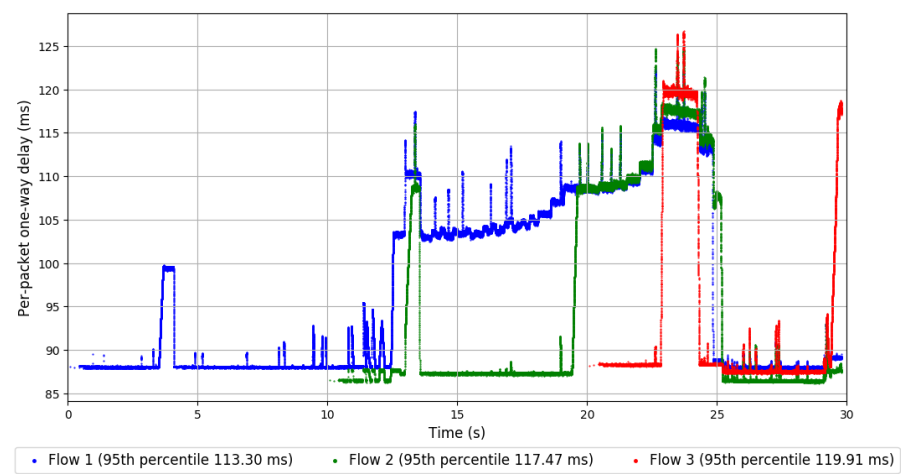
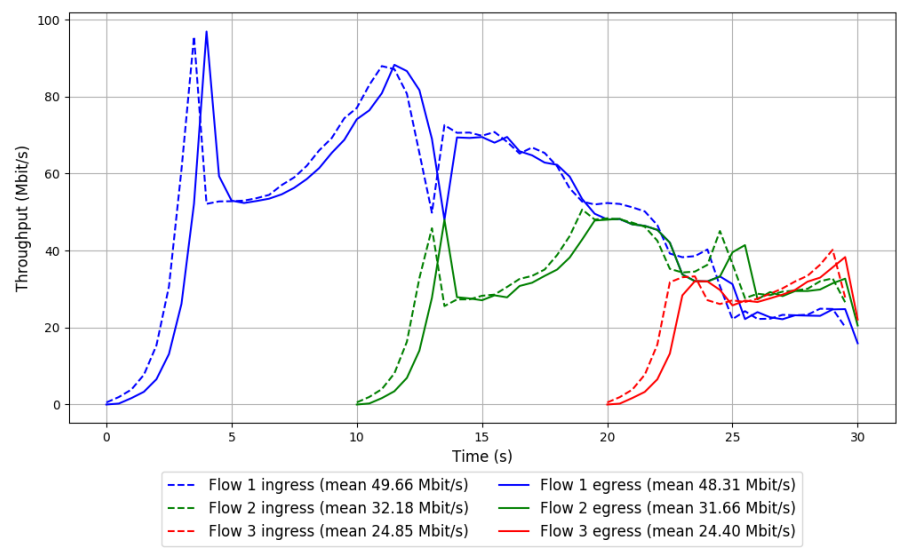
-- Flow 3:

Average throughput: 24.40 Mbit/s

95th percentile per-packet one-way delay: 119.905 ms

Loss rate: 3.57%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-06-06 03:17:59

End at: 2018-06-06 03:18:29

Local clock offset: -0.982 ms

Remote clock offset: 7.469 ms

Below is generated by plot.py at 2018-06-06 06:30:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.72 Mbit/s

95th percentile per-packet one-way delay: 109.419 ms

Loss rate: 4.93%

-- Flow 1:

Average throughput: 51.85 Mbit/s

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

Loss rate: 6.13%

-- Flow 2:

Average throughput: 29.43 Mbit/s

95th percentile per-packet one-way delay: 112.052 ms

Loss rate: 2.40%

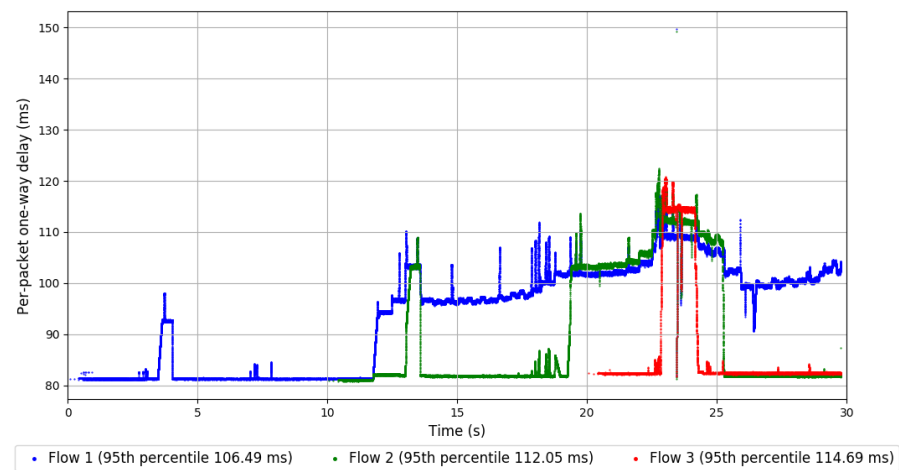
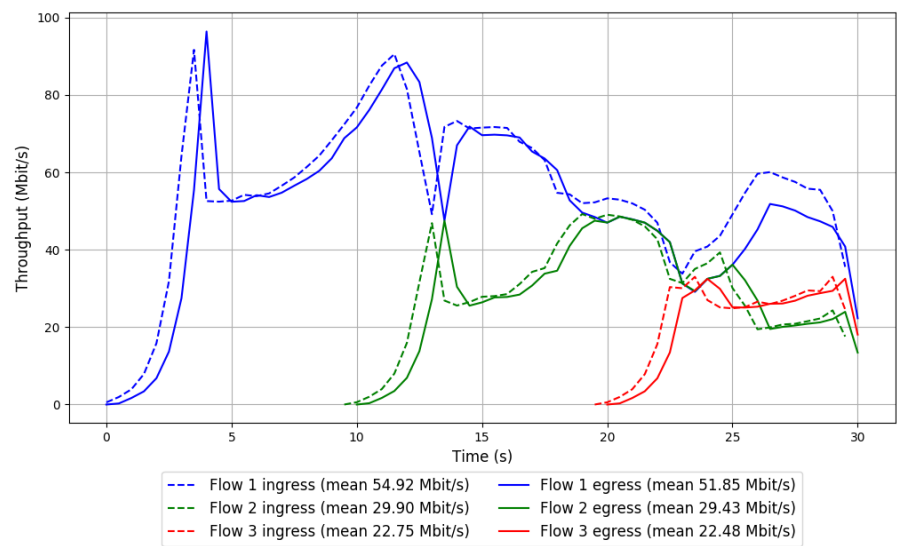
-- Flow 3:

Average throughput: 22.48 Mbit/s

95th percentile per-packet one-way delay: 114.687 ms

Loss rate: 2.89%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-06-06 03:37:57

End at: 2018-06-06 03:38:27

Local clock offset: -2.491 ms

Remote clock offset: 4.38 ms

Below is generated by plot.py at 2018-06-06 06:30:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.08 Mbit/s

95th percentile per-packet one-way delay: 111.680 ms

Loss rate: 3.15%

-- Flow 1:

Average throughput: 49.92 Mbit/s

95th percentile per-packet one-way delay: 109.029 ms

Loss rate: 3.68%

-- Flow 2:

Average throughput: 28.42 Mbit/s

95th percentile per-packet one-way delay: 114.154 ms

Loss rate: 1.84%

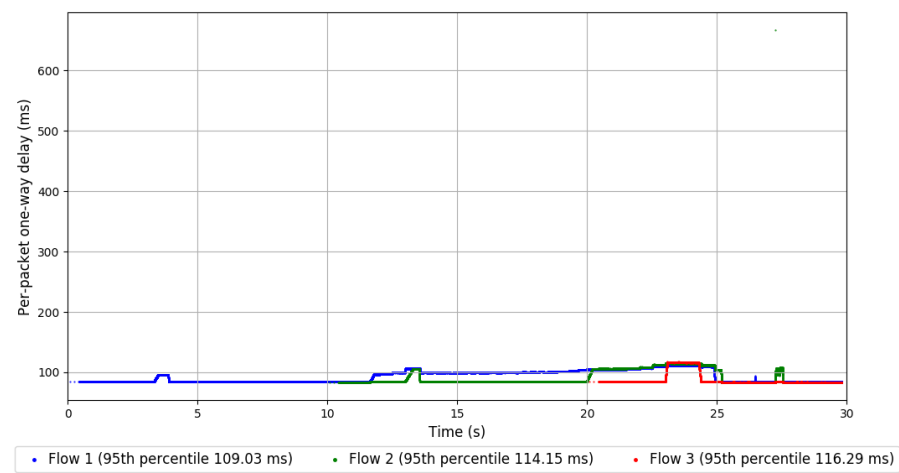
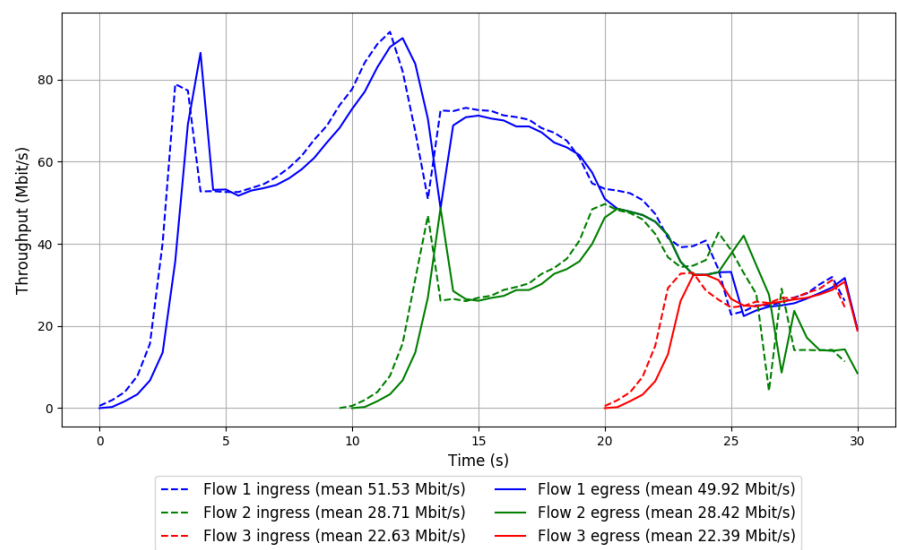
-- Flow 3:

Average throughput: 22.39 Mbit/s

95th percentile per-packet one-way delay: 116.293 ms

Loss rate: 2.79%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-06-06 03:57:57

End at: 2018-06-06 03:58:27

Local clock offset: -1.668 ms

Remote clock offset: 7.743 ms

Below is generated by plot.py at 2018-06-06 06:30:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.25 Mbit/s

95th percentile per-packet one-way delay: 111.592 ms

Loss rate: 2.05%

-- Flow 1:

Average throughput: 48.77 Mbit/s

95th percentile per-packet one-way delay: 108.947 ms

Loss rate: 1.65%

-- Flow 2:

Average throughput: 29.42 Mbit/s

95th percentile per-packet one-way delay: 111.822 ms

Loss rate: 2.50%

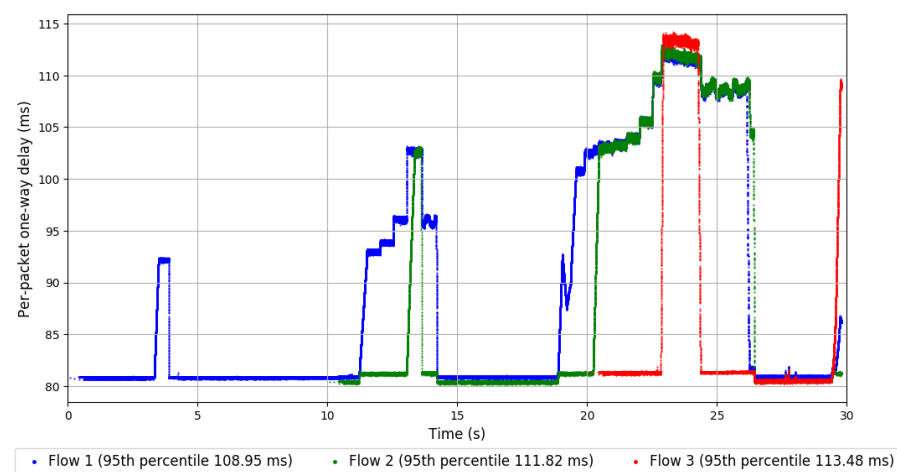
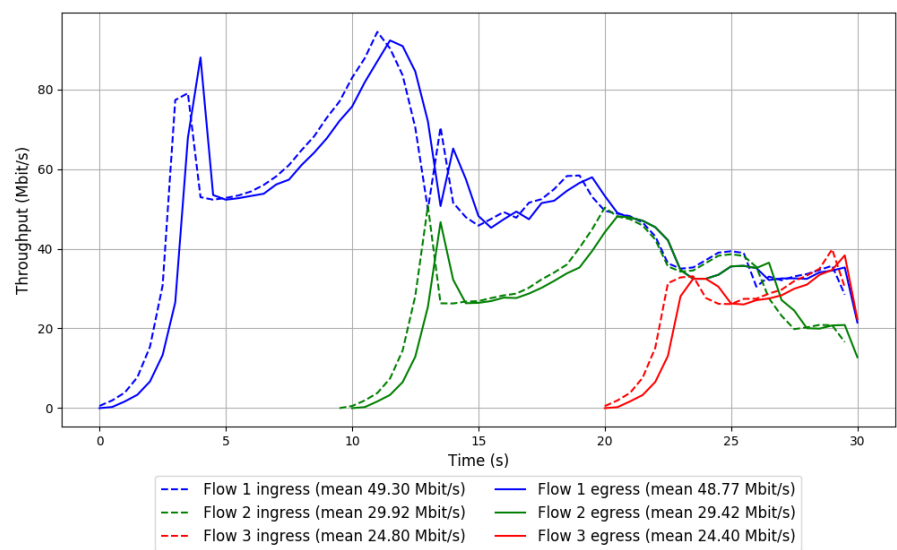
-- Flow 3:

Average throughput: 24.40 Mbit/s

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

Loss rate: 3.39%

Run 4: Report of PCC-Vivace — Data Link

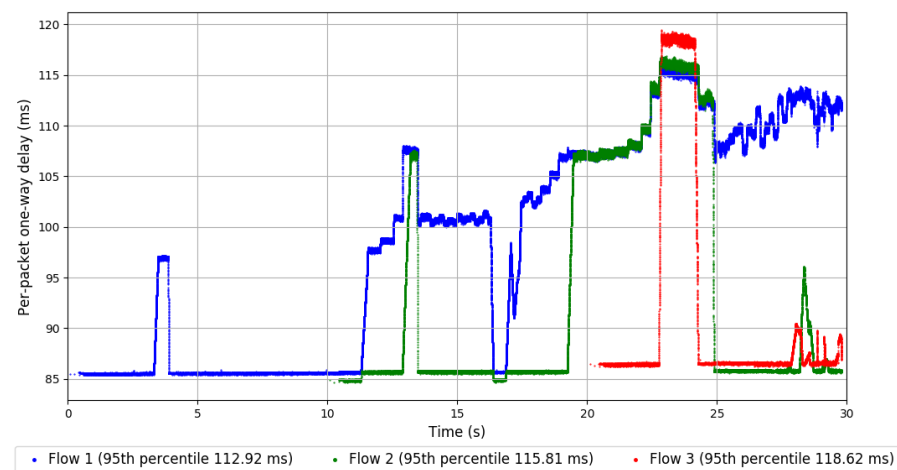
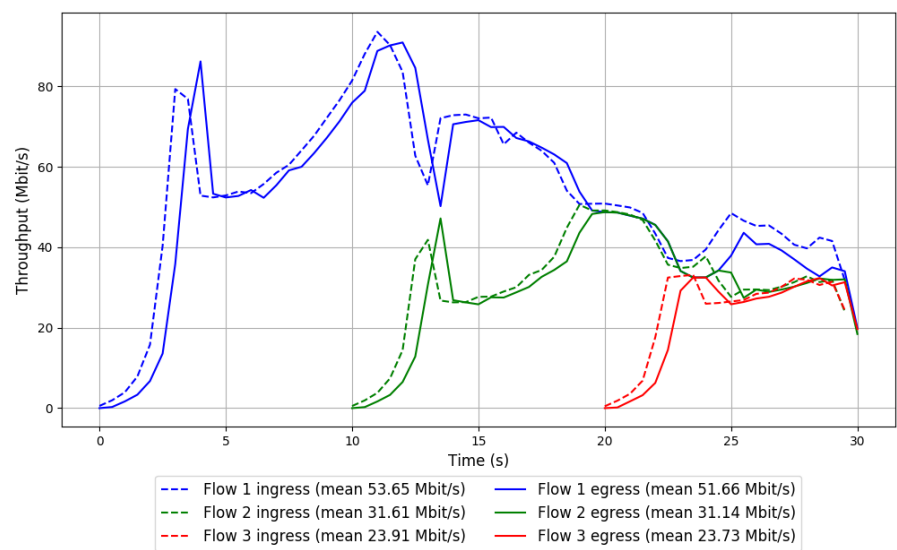


Run 5: Statistics of PCC-Vivace

Start at: 2018-06-06 04:17:56
End at: 2018-06-06 04:18:26
Local clock offset: -1.017 ms
Remote clock offset: 11.339 ms

Below is generated by plot.py at 2018-06-06 06:30:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 80.06 Mbit/s
95th percentile per-packet one-way delay: 115.159 ms
Loss rate: 3.60%
-- Flow 1:
Average throughput: 51.66 Mbit/s
95th percentile per-packet one-way delay: 112.917 ms
Loss rate: 4.26%
-- Flow 2:
Average throughput: 31.14 Mbit/s
95th percentile per-packet one-way delay: 115.805 ms
Loss rate: 2.34%
-- Flow 3:
Average throughput: 23.73 Mbit/s
95th percentile per-packet one-way delay: 118.618 ms
Loss rate: 2.50%

Run 5: Report of PCC-Vivace — Data Link

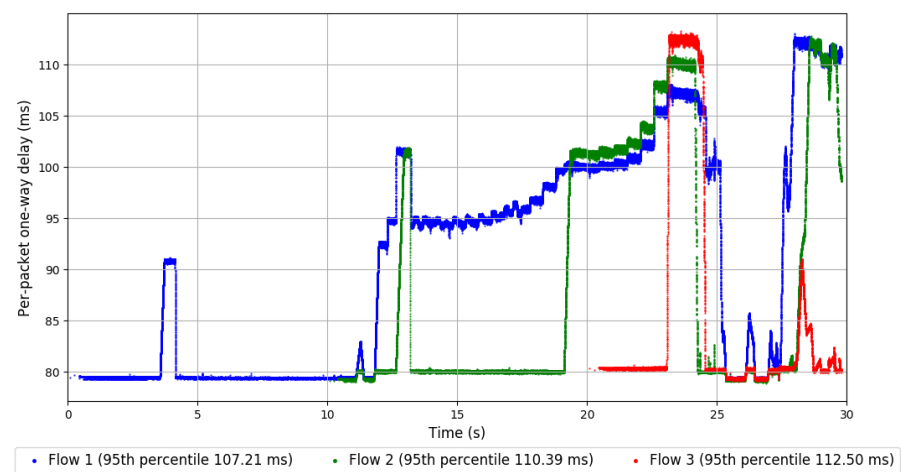
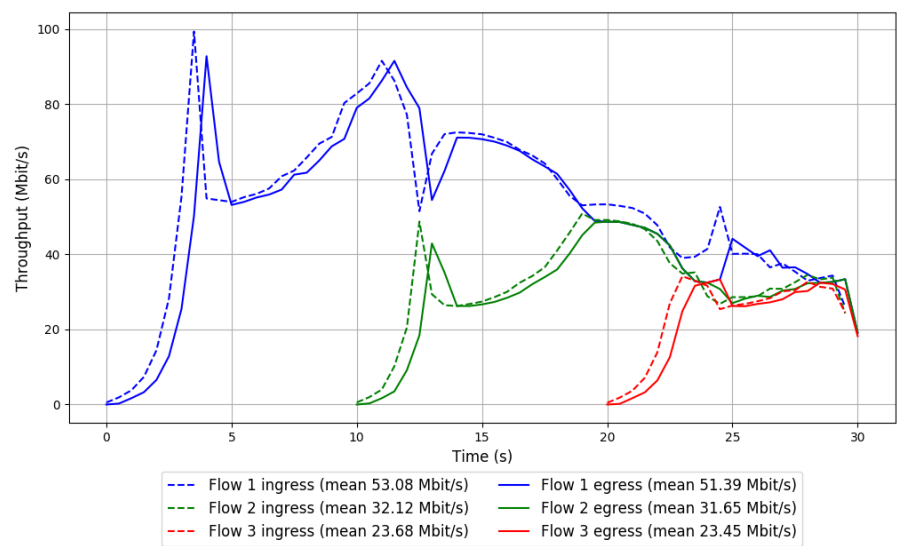


Run 6: Statistics of PCC-Vivace

Start at: 2018-06-06 04:37:54
End at: 2018-06-06 04:38:24
Local clock offset: -2.42 ms
Remote clock offset: 13.976 ms

Below is generated by plot.py at 2018-06-06 06:30:49
Datalink statistics
-- Total of 3 flows:
Average throughput: 80.04 Mbit/s
95th percentile per-packet one-way delay: 110.443 ms
Loss rate: 3.28%
-- Flow 1:
Average throughput: 51.39 Mbit/s
95th percentile per-packet one-way delay: 107.212 ms
Loss rate: 3.76%
-- Flow 2:
Average throughput: 31.65 Mbit/s
95th percentile per-packet one-way delay: 110.389 ms
Loss rate: 2.28%
-- Flow 3:
Average throughput: 23.45 Mbit/s
95th percentile per-packet one-way delay: 112.503 ms
Loss rate: 2.71%

Run 6: Report of PCC-Vivace — Data Link



Run 7: Statistics of PCC-Vivace

Start at: 2018-06-06 04:57:53

End at: 2018-06-06 04:58:23

Local clock offset: -3.738 ms

Remote clock offset: 4.342 ms

Below is generated by plot.py at 2018-06-06 06:30:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.17 Mbit/s

95th percentile per-packet one-way delay: 113.204 ms

Loss rate: 4.29%

-- Flow 1:

Average throughput: 50.99 Mbit/s

95th percentile per-packet one-way delay: 108.386 ms

Loss rate: 3.86%

-- Flow 2:

Average throughput: 32.53 Mbit/s

95th percentile per-packet one-way delay: 115.279 ms

Loss rate: 5.85%

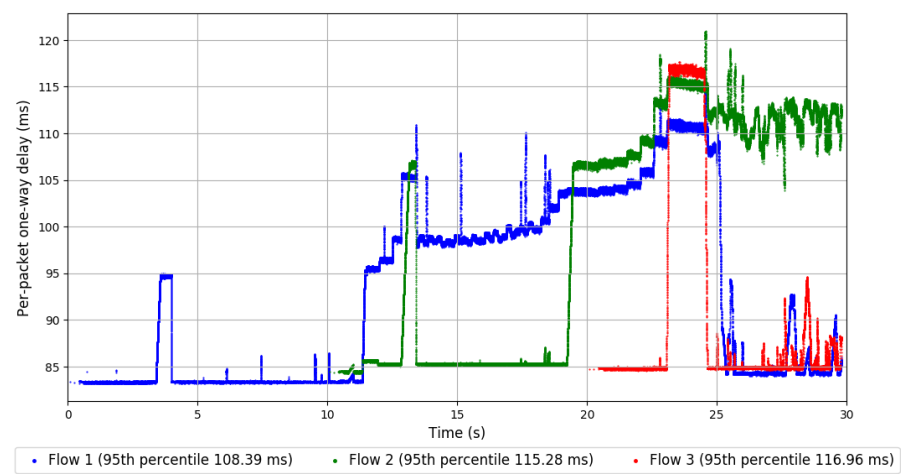
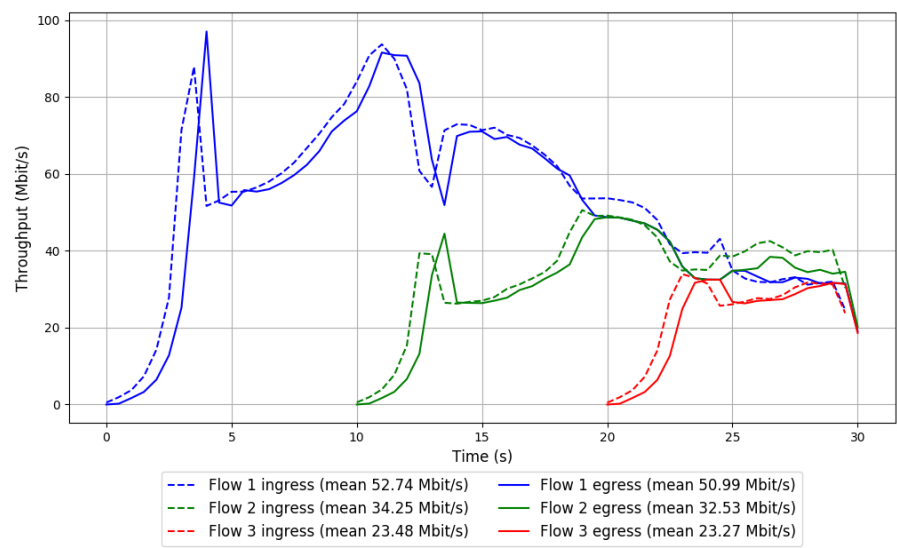
-- Flow 3:

Average throughput: 23.27 Mbit/s

95th percentile per-packet one-way delay: 116.962 ms

Loss rate: 2.61%

Run 7: Report of PCC-Vivace — Data Link



Run 8: Statistics of PCC-Vivace

Start at: 2018-06-06 05:18:10

End at: 2018-06-06 05:18:40

Local clock offset: -6.486 ms

Remote clock offset: 8.484 ms

Below is generated by plot.py at 2018-06-06 06:30:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.67 Mbit/s

95th percentile per-packet one-way delay: 115.000 ms

Loss rate: 5.85%

-- Flow 1:

Average throughput: 52.09 Mbit/s

95th percentile per-packet one-way delay: 111.291 ms

Loss rate: 6.52%

-- Flow 2:

Average throughput: 31.19 Mbit/s

95th percentile per-packet one-way delay: 117.014 ms

Loss rate: 5.38%

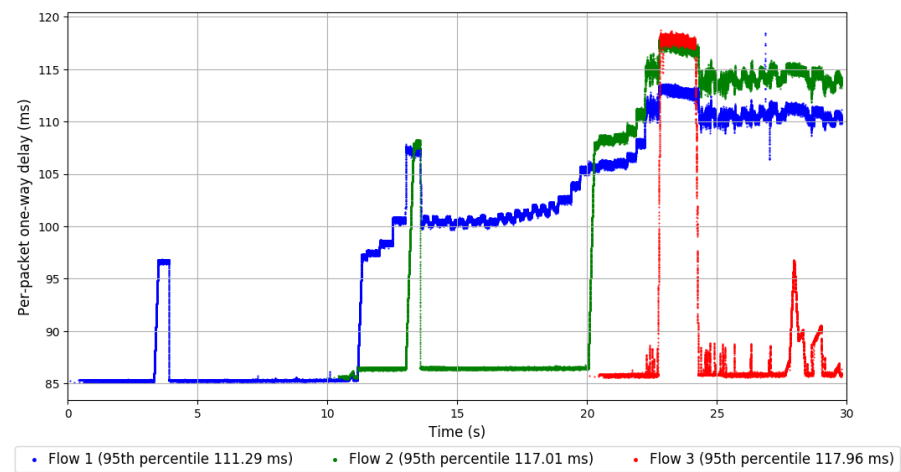
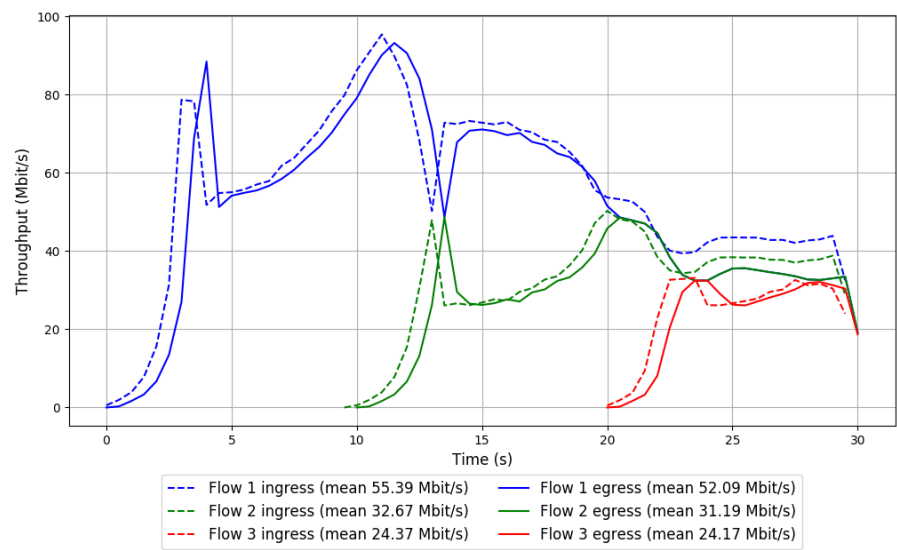
-- Flow 3:

Average throughput: 24.17 Mbit/s

95th percentile per-packet one-way delay: 117.961 ms

Loss rate: 2.54%

Run 8: Report of PCC-Vivace — Data Link



Run 9: Statistics of PCC-Vivace

Start at: 2018-06-06 05:38:12

End at: 2018-06-06 05:38:42

Local clock offset: -5.565 ms

Remote clock offset: 13.46 ms

Below is generated by plot.py at 2018-06-06 06:30:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.25 Mbit/s

95th percentile per-packet one-way delay: 113.067 ms

Loss rate: 3.96%

-- Flow 1:

Average throughput: 51.92 Mbit/s

95th percentile per-packet one-way delay: 110.696 ms

Loss rate: 3.63%

-- Flow 2:

Average throughput: 31.66 Mbit/s

95th percentile per-packet one-way delay: 113.832 ms

Loss rate: 5.20%

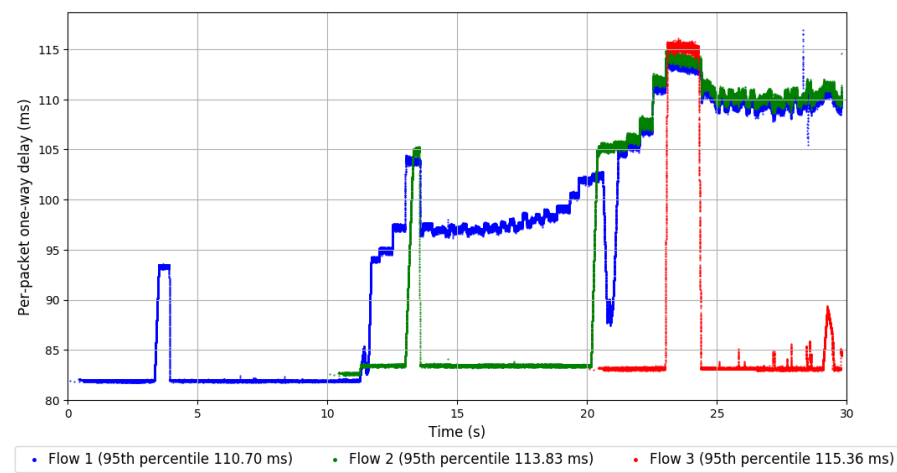
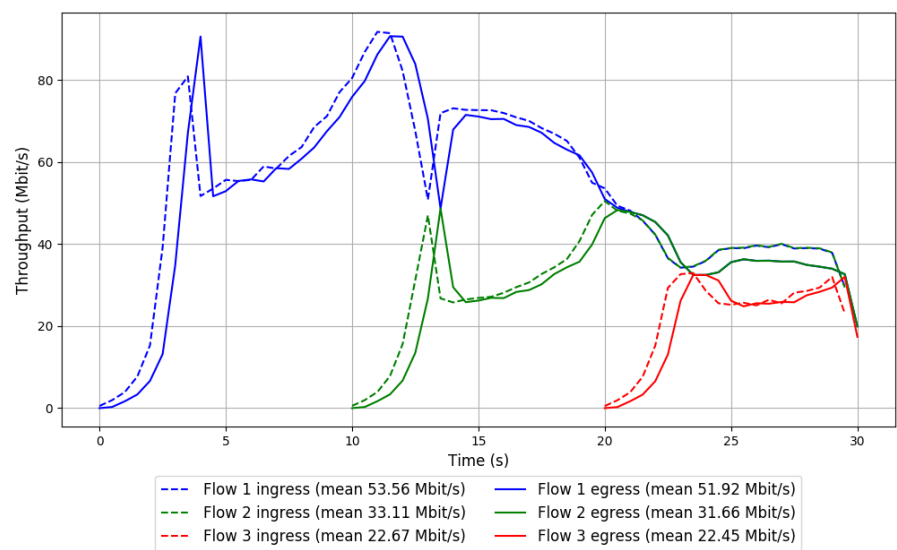
-- Flow 3:

Average throughput: 22.45 Mbit/s

95th percentile per-packet one-way delay: 115.361 ms

Loss rate: 2.67%

Run 9: Report of PCC-Vivace — Data Link



Run 10: Statistics of PCC-Vivace

Start at: 2018-06-06 05:58:12

End at: 2018-06-06 05:58:42

Local clock offset: -3.091 ms

Remote clock offset: 7.3 ms

Below is generated by plot.py at 2018-06-06 06:30:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.69 Mbit/s

95th percentile per-packet one-way delay: 111.486 ms

Loss rate: 2.37%

-- Flow 1:

Average throughput: 46.63 Mbit/s

95th percentile per-packet one-way delay: 105.310 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 32.21 Mbit/s

95th percentile per-packet one-way delay: 112.164 ms

Loss rate: 5.15%

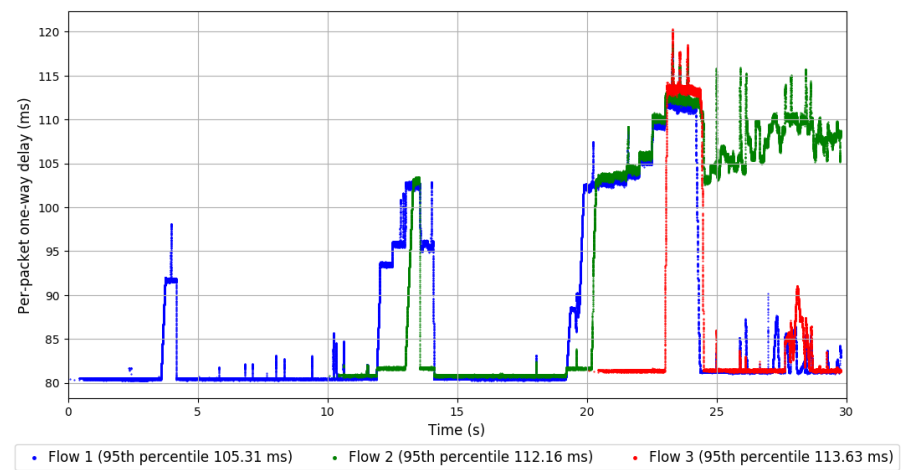
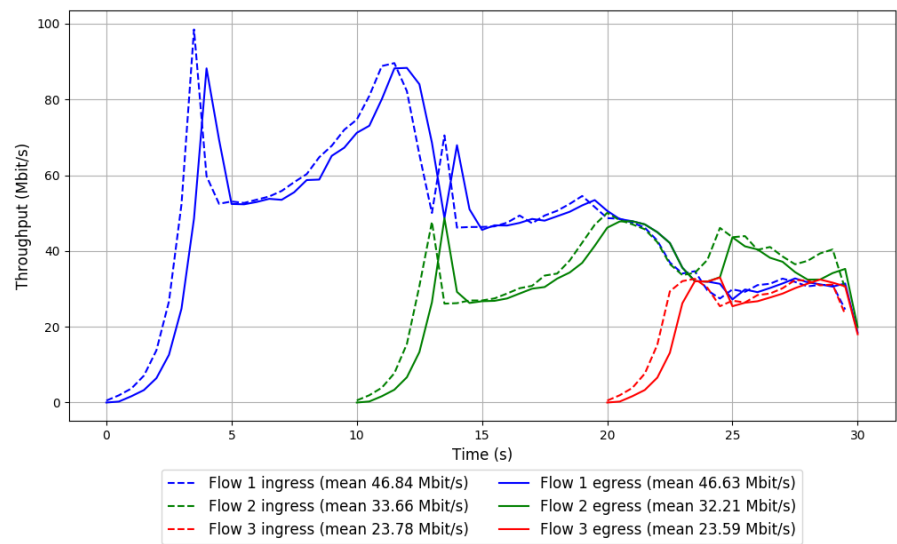
-- Flow 3:

Average throughput: 23.59 Mbit/s

95th percentile per-packet one-way delay: 113.631 ms

Loss rate: 2.55%

Run 10: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-06-06 03:05:43

End at: 2018-06-06 03:06:13

Local clock offset: -0.836 ms

Remote clock offset: 8.772 ms

Below is generated by plot.py at 2018-06-06 06:30:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 82.174 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 82.129 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 82.298 ms

Loss rate: 0.70%

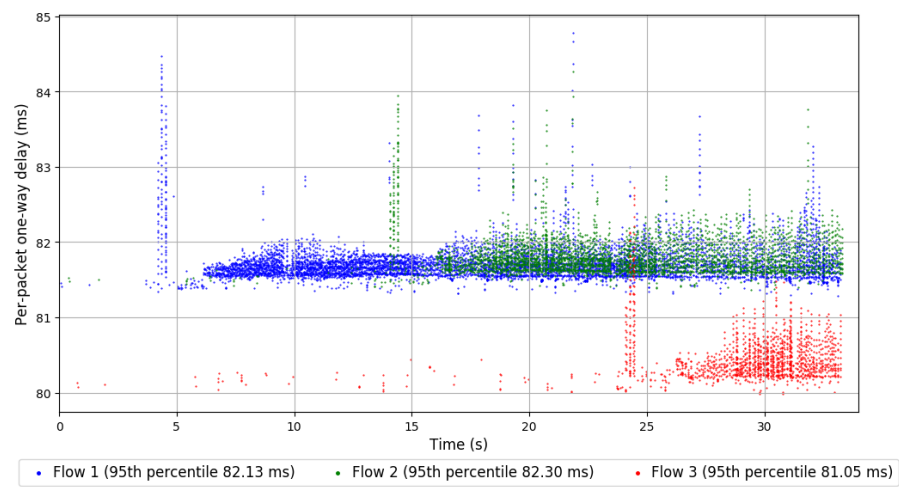
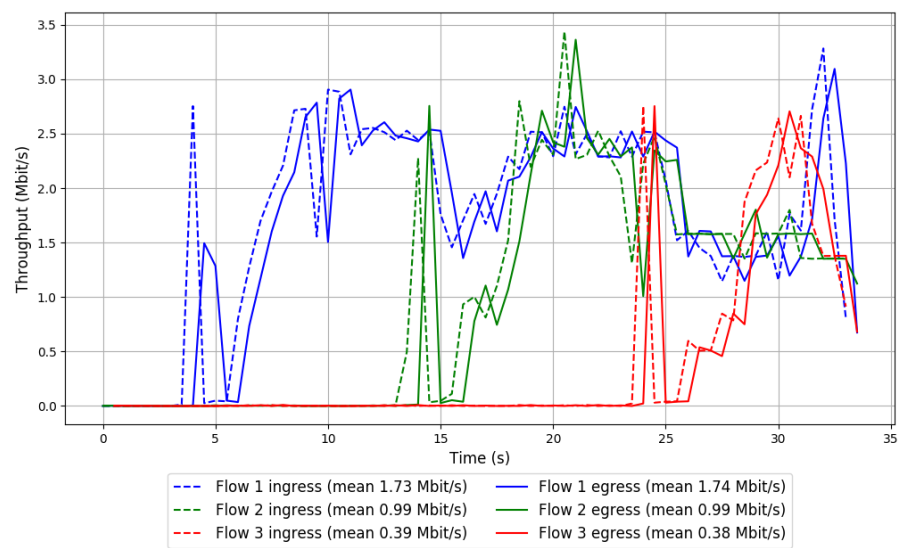
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 81.052 ms

Loss rate: 1.81%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-06-06 03:25:40

End at: 2018-06-06 03:26:10

Local clock offset: -0.92 ms

Remote clock offset: 7.24 ms

Below is generated by plot.py at 2018-06-06 06:30:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 81.640 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 81.565 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 0.96 Mbit/s

95th percentile per-packet one-way delay: 81.713 ms

Loss rate: 0.72%

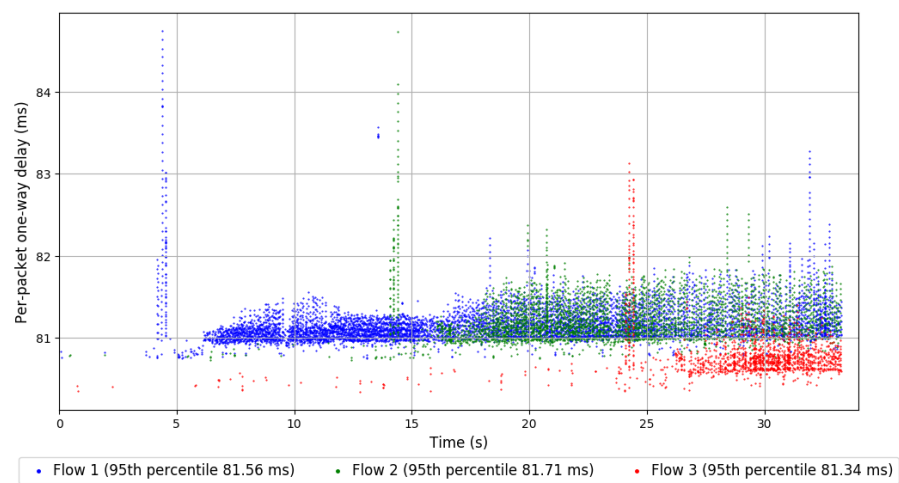
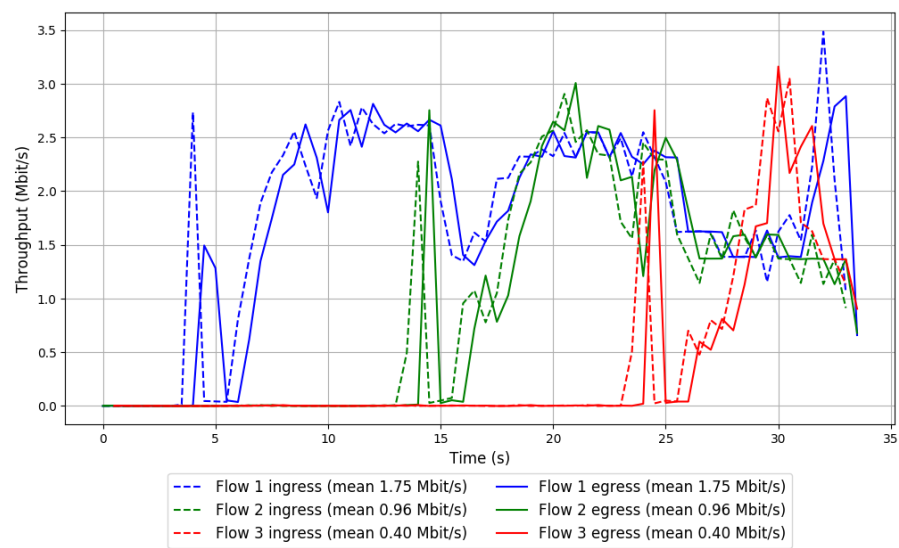
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 81.344 ms

Loss rate: 1.73%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-06-06 03:45:39

End at: 2018-06-06 03:46:09

Local clock offset: -0.937 ms

Remote clock offset: 4.323 ms

Below is generated by plot.py at 2018-06-06 06:30:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 85.708 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 85.739 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 85.658 ms

Loss rate: 0.69%

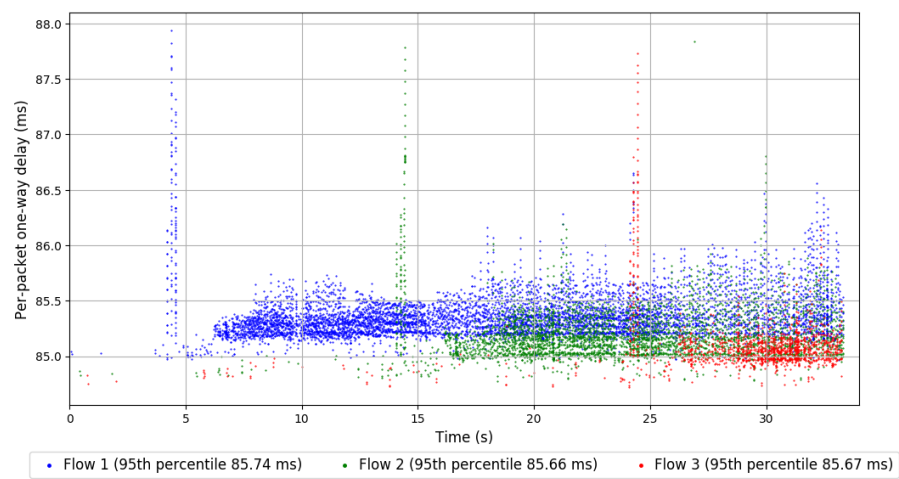
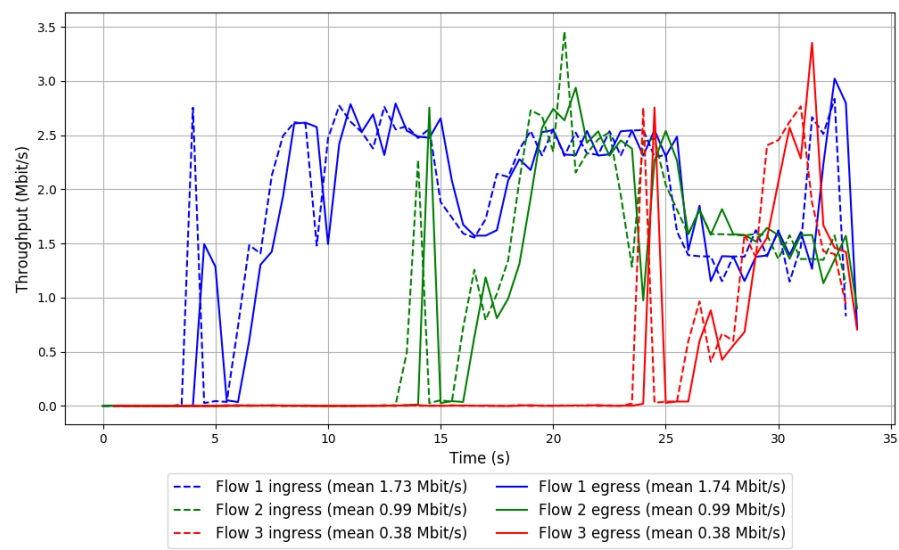
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 85.673 ms

Loss rate: 1.86%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-06-06 04:05:38

End at: 2018-06-06 04:06:08

Local clock offset: -1.657 ms

Remote clock offset: 7.729 ms

Below is generated by plot.py at 2018-06-06 06:30:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.01 Mbit/s

95th percentile per-packet one-way delay: 85.460 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 84.730 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 85.655 ms

Loss rate: 1.04%

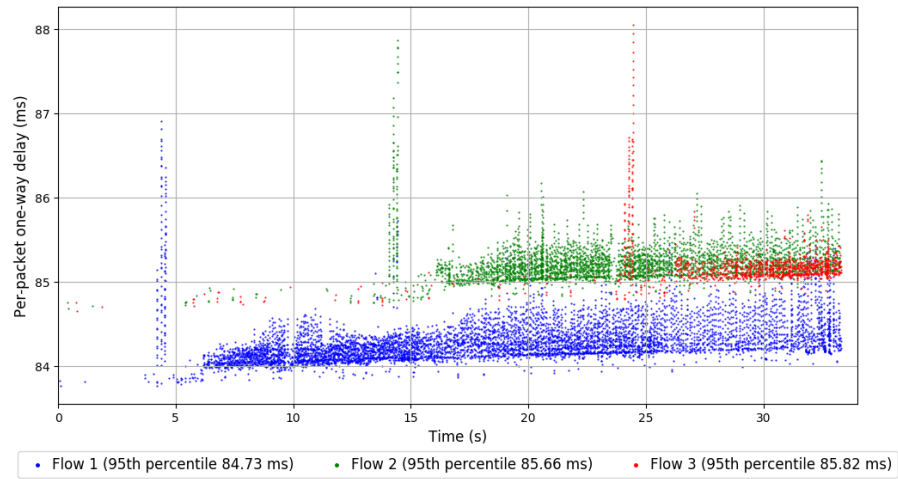
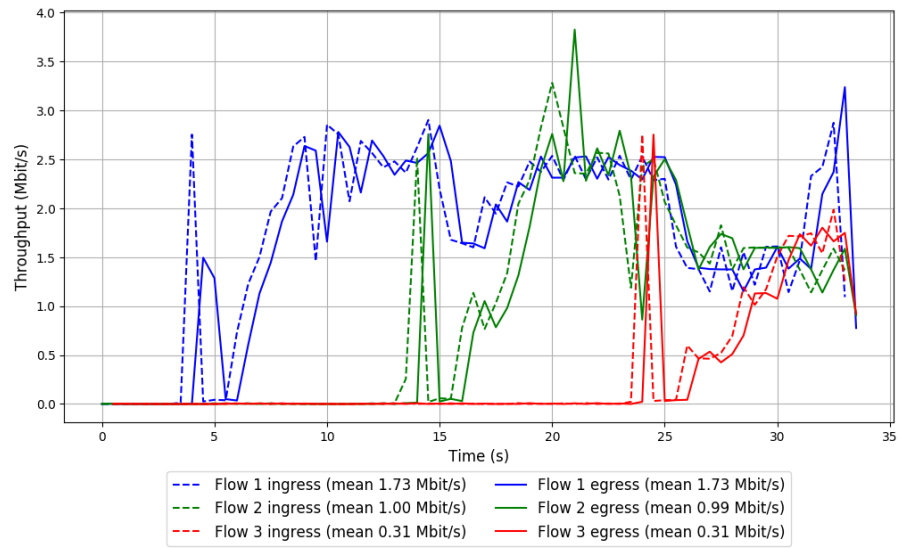
-- Flow 3:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 85.824 ms

Loss rate: 3.21%

Run 4: Report of WebRTC media — Data Link

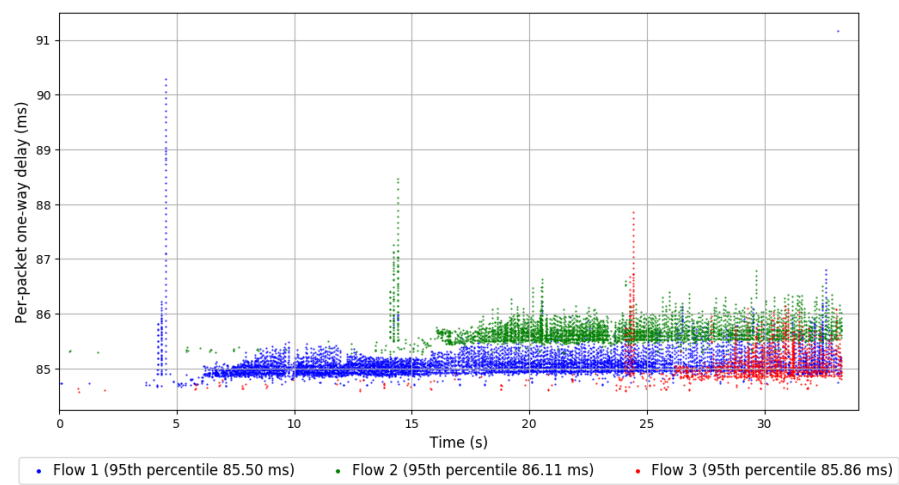
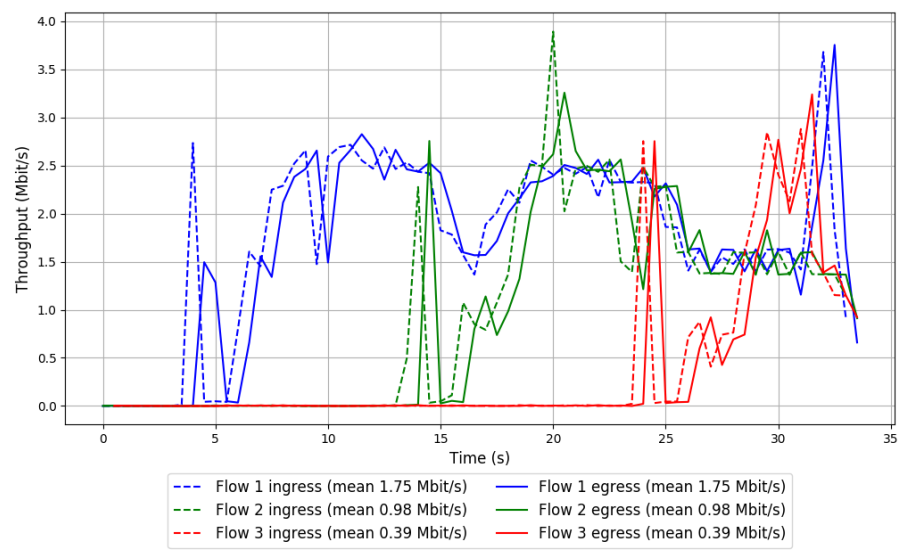


Run 5: Statistics of WebRTC media

Start at: 2018-06-06 04:25:37
End at: 2018-06-06 04:26:07
Local clock offset: -1.019 ms
Remote clock offset: 12.638 ms

Below is generated by plot.py at 2018-06-06 06:30:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 85.935 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 85.504 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 86.108 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 85.864 ms
Loss rate: 1.78%

Run 5: Report of WebRTC media — Data Link

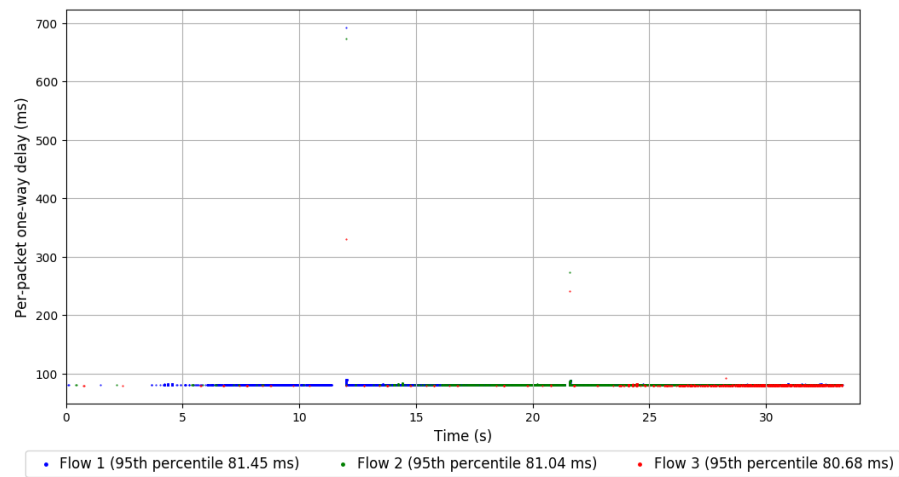
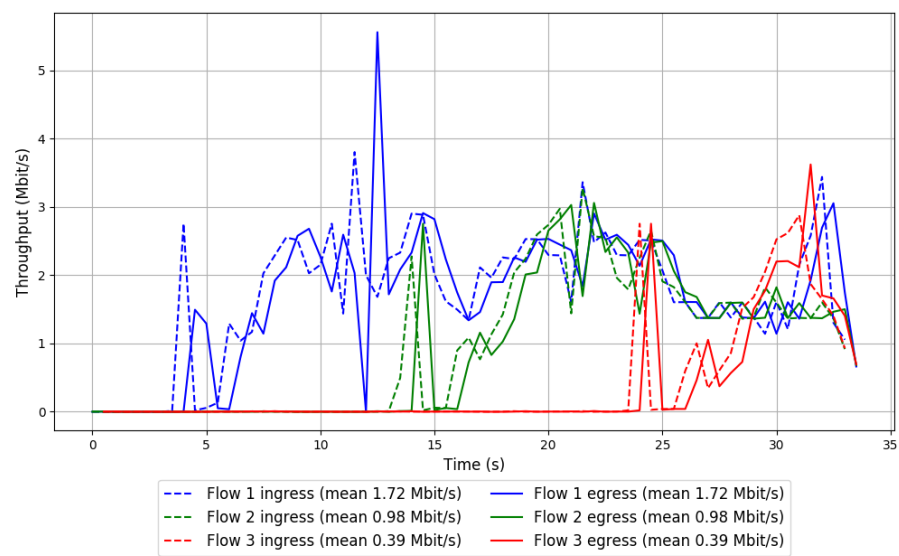


Run 6: Statistics of WebRTC media

Start at: 2018-06-06 04:45:36
End at: 2018-06-06 04:46:06
Local clock offset: -3.178 ms
Remote clock offset: 10.171 ms

Below is generated by plot.py at 2018-06-06 06:30:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.07 Mbit/s
95th percentile per-packet one-way delay: 81.195 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 81.447 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 81.040 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 80.678 ms
Loss rate: 1.82%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-06-06 05:05:35

End at: 2018-06-06 05:06:05

Local clock offset: -3.751 ms

Remote clock offset: 7.413 ms

Below is generated by plot.py at 2018-06-06 06:30:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 82.576 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 81.929 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 0.95 Mbit/s

95th percentile per-packet one-way delay: 83.058 ms

Loss rate: 0.81%

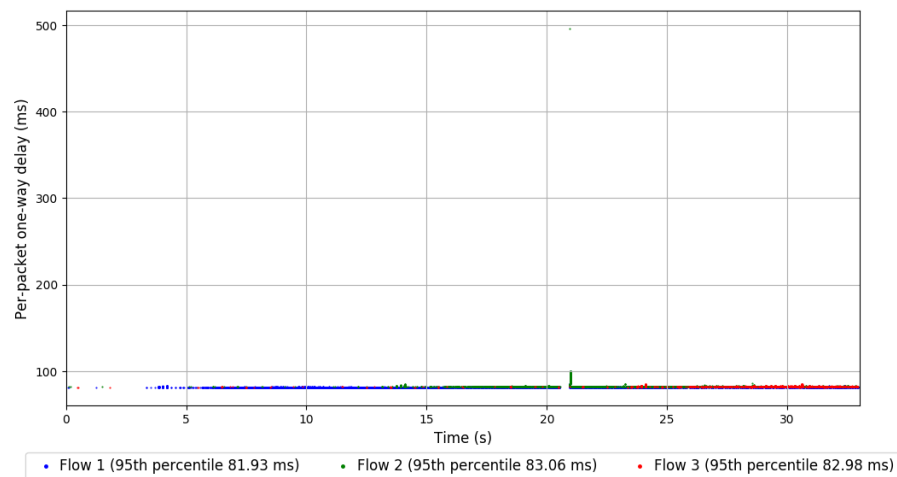
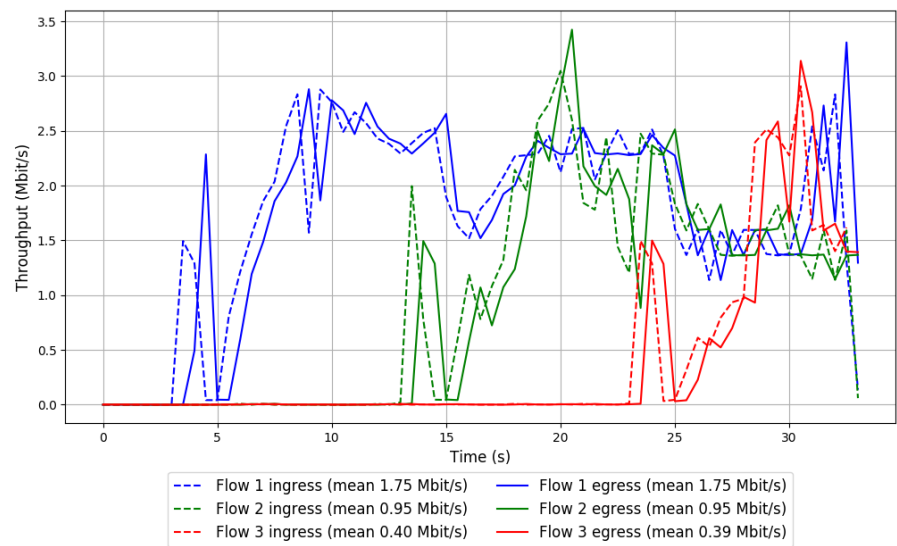
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 82.981 ms

Loss rate: 1.78%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-06-06 05:25:51

End at: 2018-06-06 05:26:21

Local clock offset: -7.35 ms

Remote clock offset: 8.688 ms

Below is generated by plot.py at 2018-06-06 06:30:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 87.113 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 87.053 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 87.030 ms

Loss rate: 1.03%

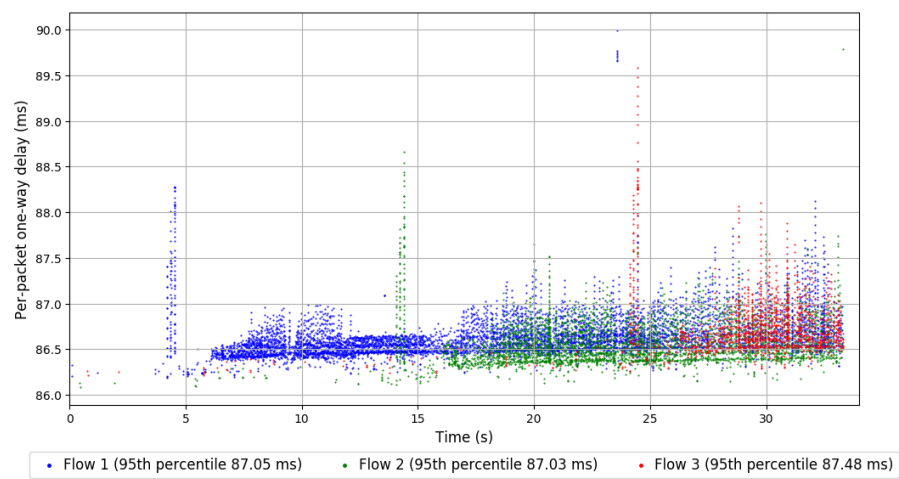
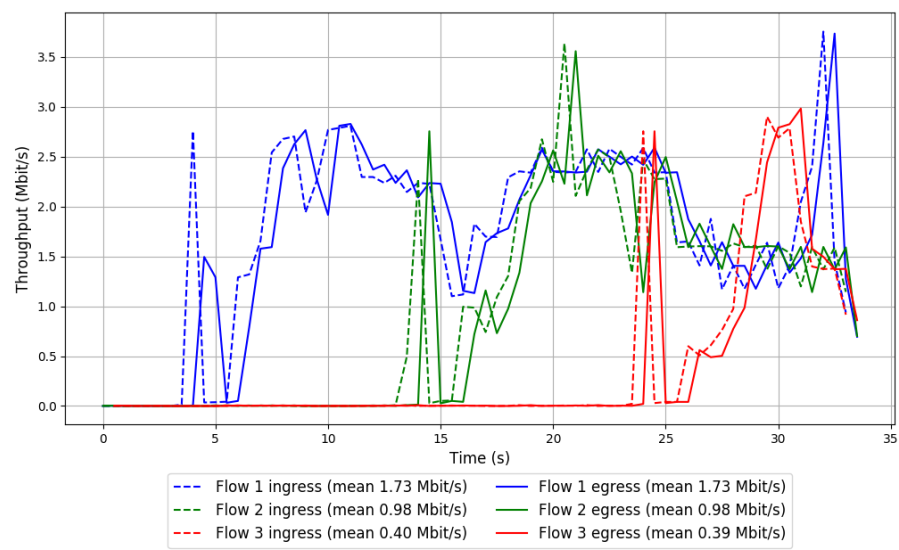
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 87.479 ms

Loss rate: 1.10%

Run 8: Report of WebRTC media — Data Link

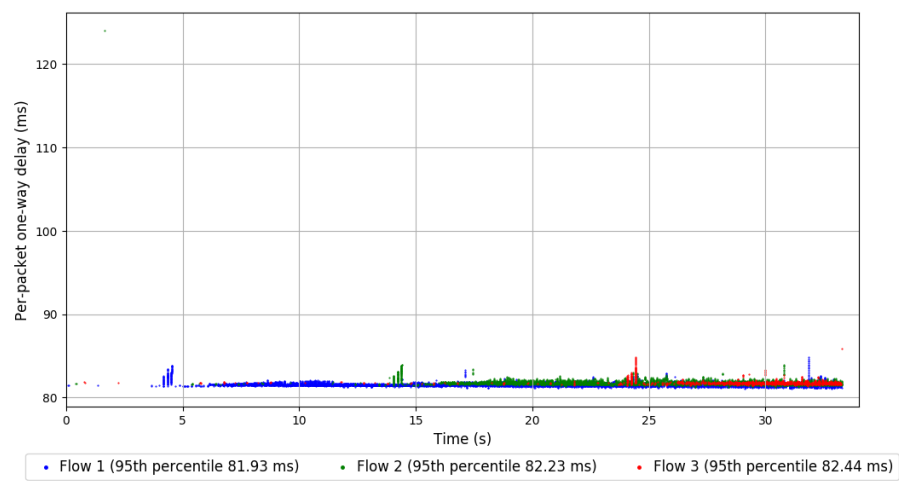
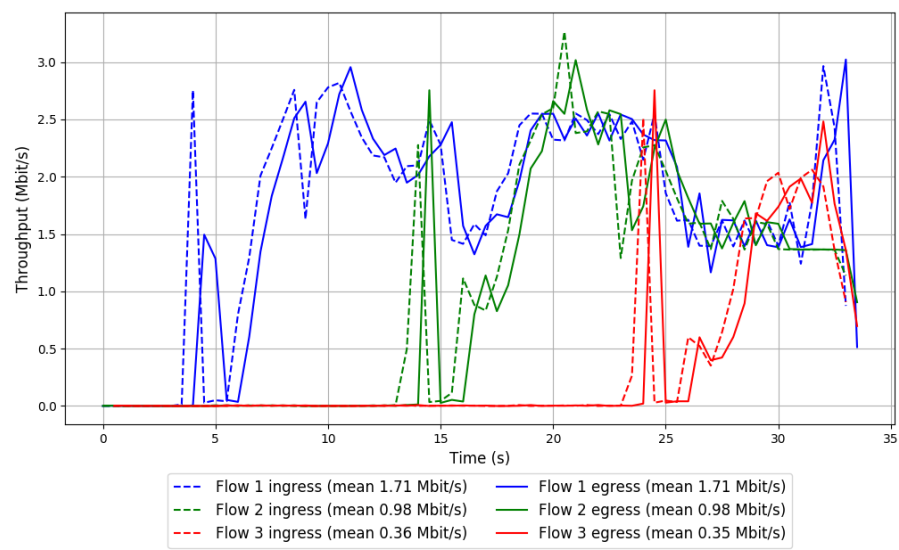


Run 9: Statistics of WebRTC media

Start at: 2018-06-06 05:45:54
End at: 2018-06-06 05:46:24
Local clock offset: -3.79 ms
Remote clock offset: 10.726 ms

Below is generated by plot.py at 2018-06-06 06:30:59
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 82.125 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 81.932 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 82.233 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 82.437 ms
Loss rate: 1.86%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-06-06 06:05:53

End at: 2018-06-06 06:06:23

Local clock offset: -2.486 ms

Remote clock offset: 6.42 ms

Below is generated by plot.py at 2018-06-06 06:30:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.09 Mbit/s

95th percentile per-packet one-way delay: 81.699 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 81.469 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 81.698 ms

Loss rate: 0.70%

-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 82.291 ms

Loss rate: 1.77%

Run 10: Report of WebRTC media — Data Link

