

Pantheon Report

Generated at 2018-03-05 22:05:29 (UTC).

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

Repeated the test of 17 congestion control schemes 3 times.

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

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

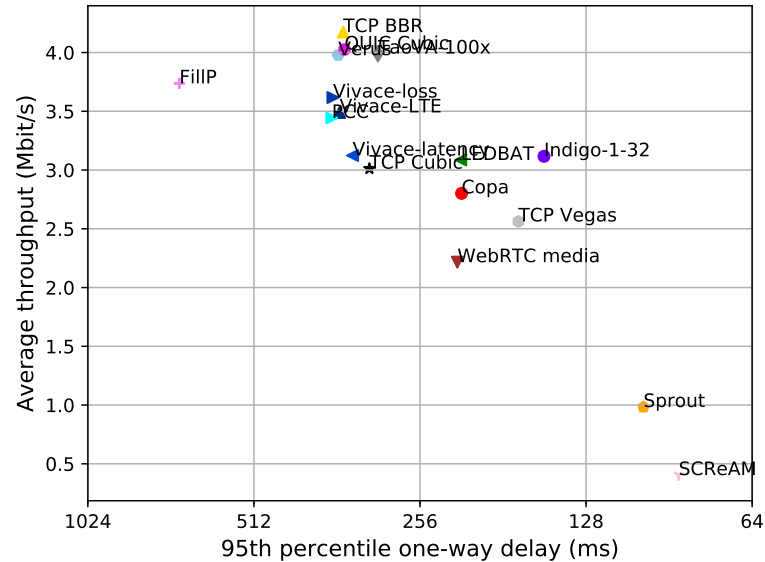
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

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

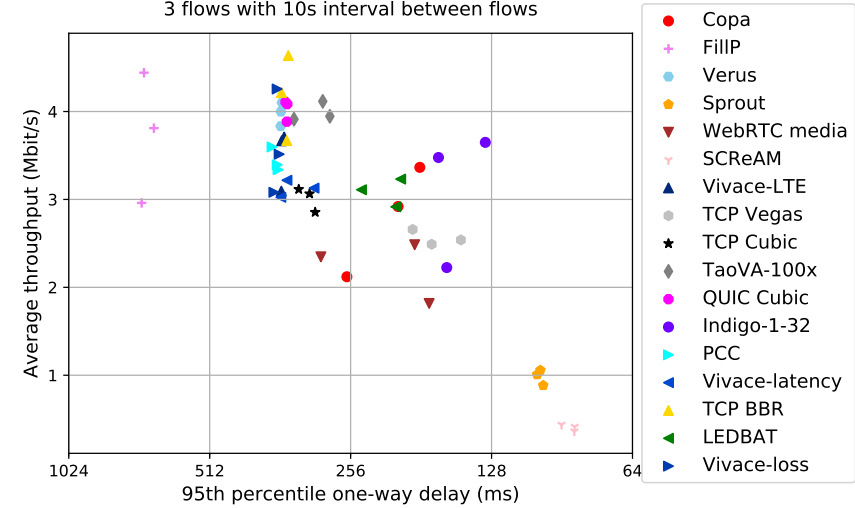
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  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 @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



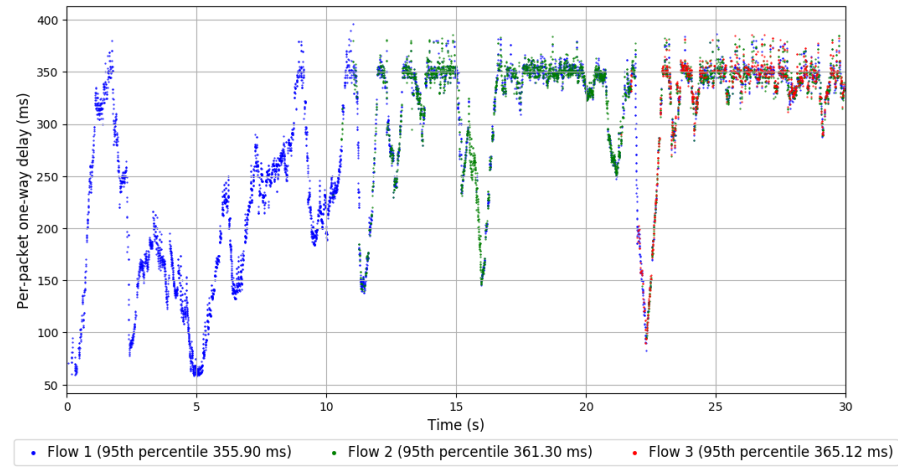
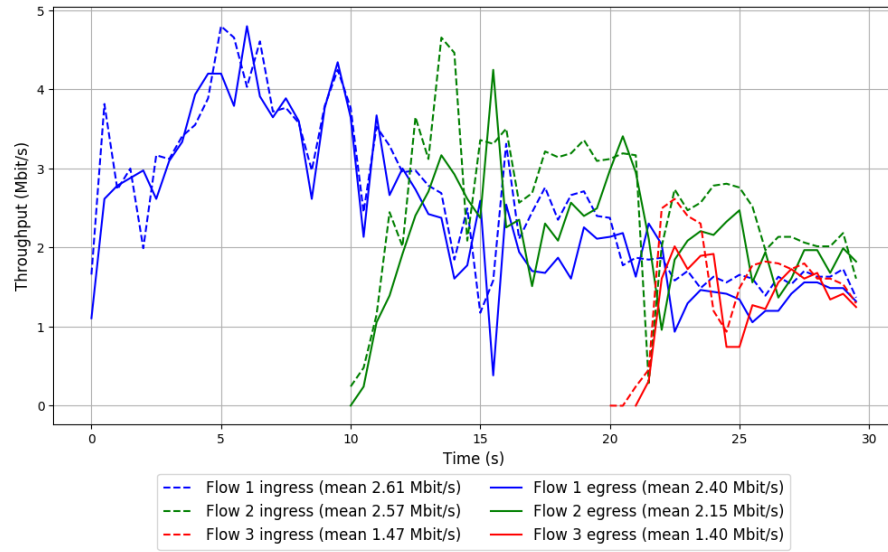
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	3	2.64	1.62	1.49	350.12	353.75	357.31	4.77	9.33	12.52
TCP Cubic	3	1.96	1.17	0.85	316.33	312.66	274.96	1.49	2.51	3.22
LEDBAT	3	1.89	1.23	1.16	206.17	231.19	208.84	1.29	1.38	1.80
PCC	3	1.79	1.70	1.60	358.24	369.83	488.46	14.07	21.89	44.21
QUIC Cubic	3	2.86	1.19	1.21	350.39	352.47	351.18	3.54	5.11	7.64
SCReAM	3	0.20	0.20	0.22	80.02	78.09	82.07	0.24	0.19	0.75
WebRTC media	3	1.37	0.61	0.25	210.07	226.79	202.94	0.56	0.90	1.80
Sprout	3	0.50	0.49	0.50	98.35	101.49	103.34	1.03	1.19	1.93
TaoVA-100x	3	2.29	1.90	1.36	290.64	306.99	329.26	1.97	1.70	17.05
TCP Vegas	3	1.44	1.09	1.21	185.03	137.72	150.51	1.19	1.77	2.24
Verus	3	3.07	1.21	0.38	359.17	370.57	354.37	42.08	53.91	60.27
Copa	3	1.68	1.08	1.22	204.71	236.67	228.57	0.87	2.15	4.03
FillP	3	2.29	1.51	1.46	534.99	812.06	624.27	93.05	96.97	98.40
Indigo-1-32	3	1.73	1.32	1.56	145.91	154.25	179.99	2.12	2.07	3.31
Vivace-latency	3	1.59	1.65	1.36	327.68	341.58	350.86	4.34	7.00	9.71
Vivace-loss	3	2.11	1.69	1.26	367.85	366.35	373.57	26.06	22.73	25.54
Vivace-LTE	3	2.23	1.35	1.15	355.90	360.01	367.13	13.60	17.76	23.54

Run 1: Statistics of TCP BBR

Start at: 2018-03-05 20:17:58
End at: 2018-03-05 20:18:28
Local clock offset: 3.472 ms
Remote clock offset: -2.824 ms

Below is generated by plot.py at 2018-03-05 22:04:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 359.829 ms
Loss rate: 12.51%
-- Flow 1:
Average throughput: 2.40 Mbit/s
95th percentile per-packet one-way delay: 355.899 ms
Loss rate: 8.36%
-- Flow 2:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 361.302 ms
Loss rate: 17.45%
-- Flow 3:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 365.117 ms
Loss rate: 17.40%

Run 1: Report of TCP BBR — Data Link

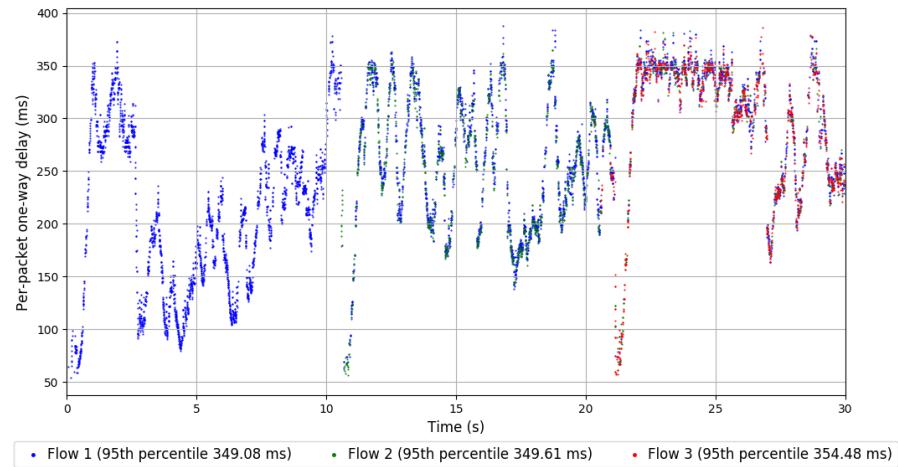
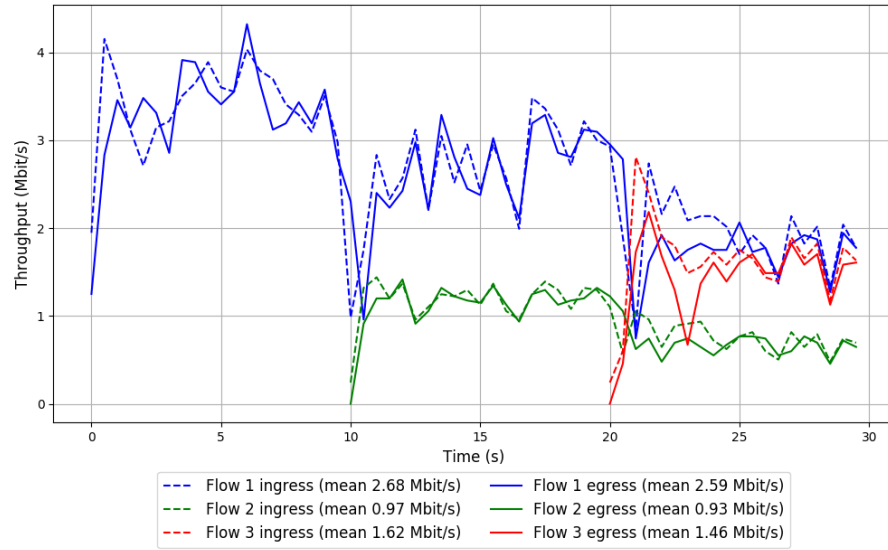


Run 2: Statistics of TCP BBR

Start at: 2018-03-05 20:37:53
End at: 2018-03-05 20:38:23
Local clock offset: 2.101 ms
Remote clock offset: -5.905 ms

Below is generated by plot.py at 2018-03-05 22:04:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 350.480 ms
Loss rate: 5.30%
-- Flow 1:
Average throughput: 2.59 Mbit/s
95th percentile per-packet one-way delay: 349.082 ms
Loss rate: 3.58%
-- Flow 2:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 349.608 ms
Loss rate: 5.99%
-- Flow 3:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 354.483 ms
Loss rate: 13.00%

Run 2: Report of TCP BBR — Data Link

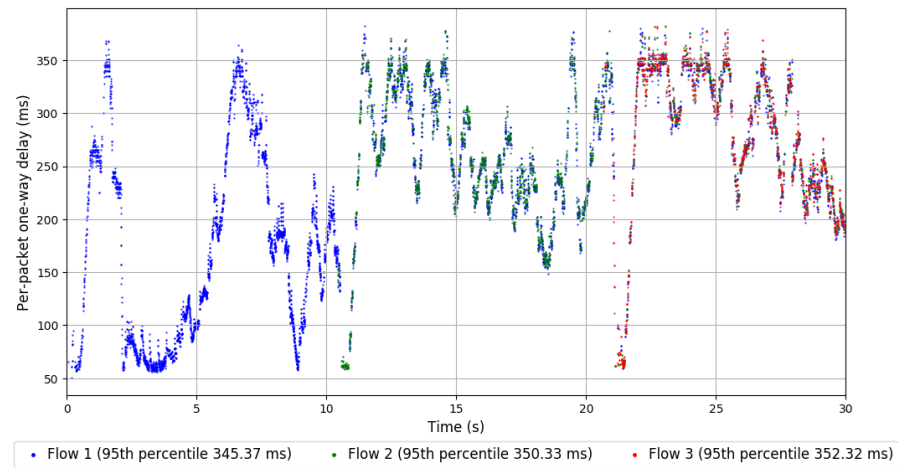
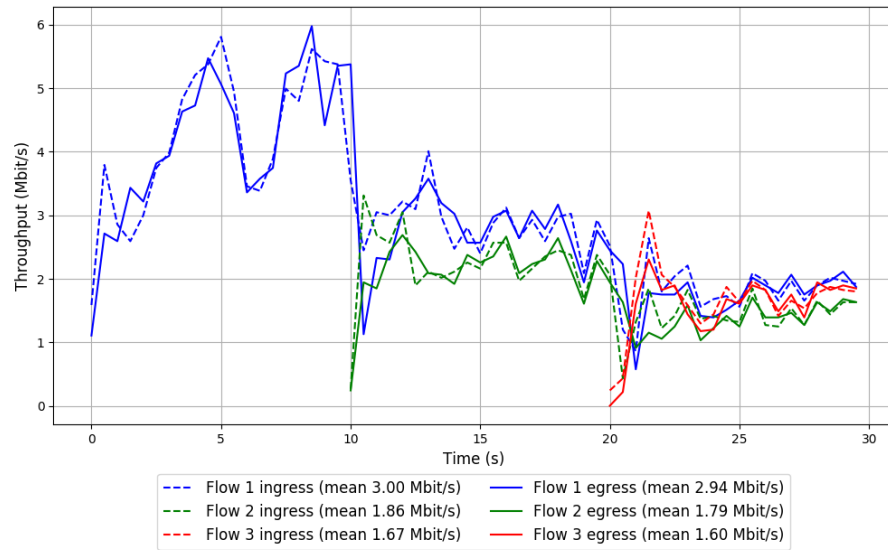


Run 3: Statistics of TCP BBR

Start at: 2018-03-05 20:57:46
End at: 2018-03-05 20:58:16
Local clock offset: 1.17 ms
Remote clock offset: -6.499 ms

Below is generated by plot.py at 2018-03-05 22:04:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.64 Mbit/s
95th percentile per-packet one-way delay: 347.795 ms
Loss rate: 3.49%
-- Flow 1:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 345.373 ms
Loss rate: 2.38%
-- Flow 2:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 350.326 ms
Loss rate: 4.54%
-- Flow 3:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 352.318 ms
Loss rate: 7.16%

Run 3: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-03-05 20:10:15

End at: 2018-03-05 20:10:45

Local clock offset: 1.507 ms

Remote clock offset: -3.81 ms

Below is generated by plot.py at 2018-03-05 22:04:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.06 Mbit/s

95th percentile per-packet one-way delay: 313.306 ms

Loss rate: 1.70%

-- Flow 1:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 328.677 ms

Loss rate: 1.54%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 278.517 ms

Loss rate: 1.74%

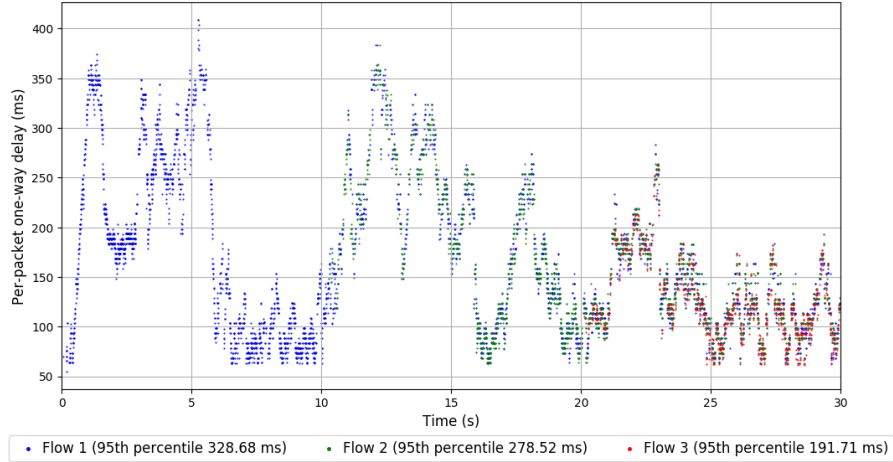
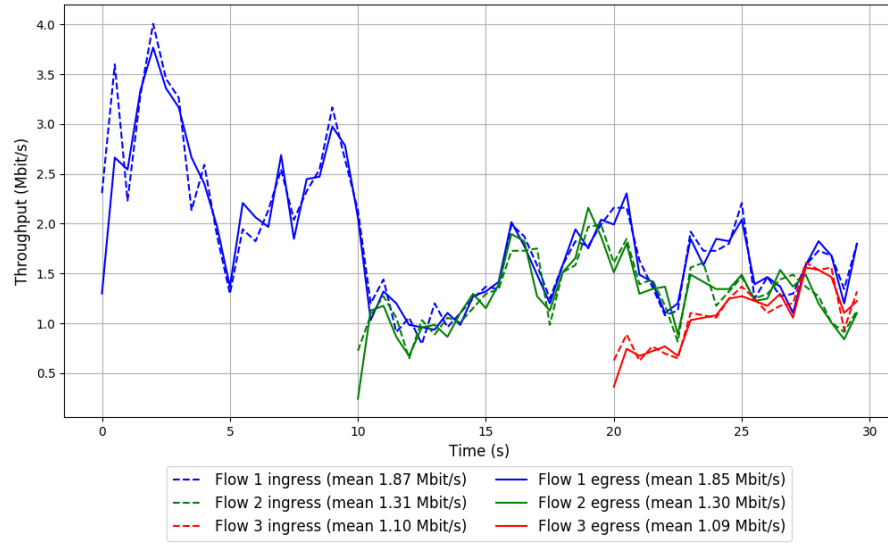
-- Flow 3:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 191.713 ms

Loss rate: 2.42%

Run 1: Report of TCP Cubic — Data Link

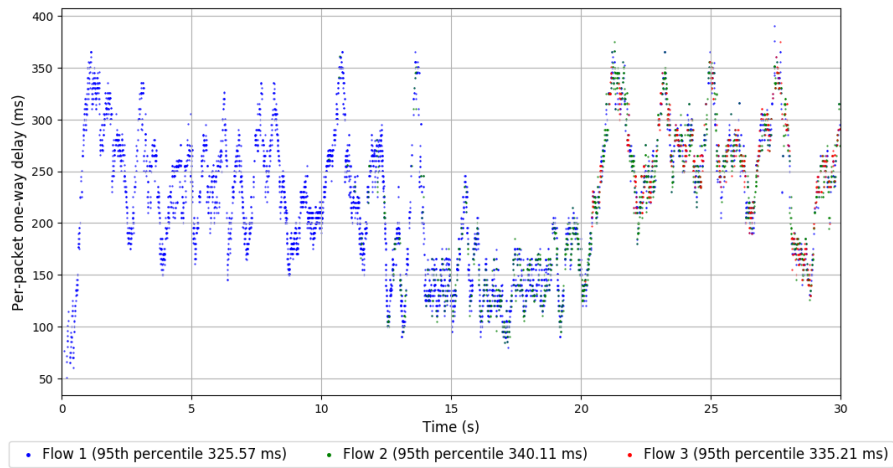
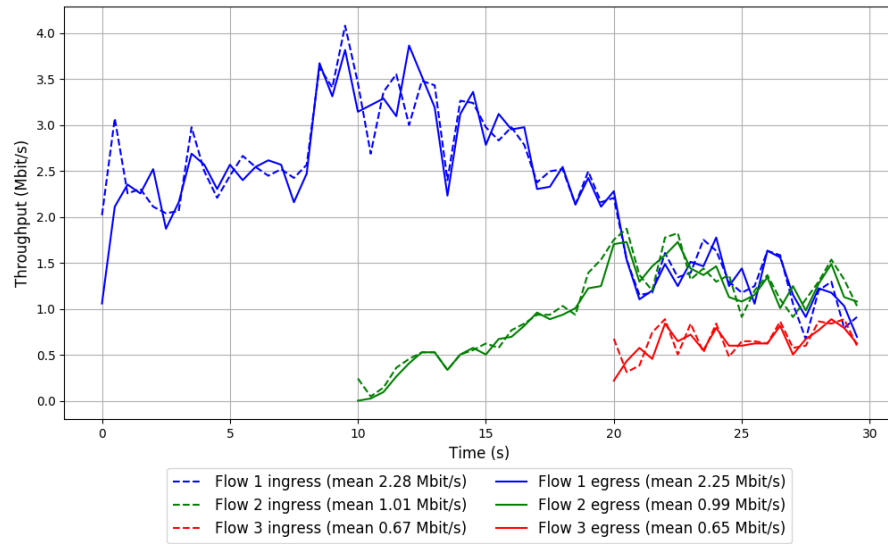


Run 2: Statistics of TCP Cubic

Start at: 2018-03-05 20:30:10
End at: 2018-03-05 20:30:40
Local clock offset: 2.258 ms
Remote clock offset: -4.993 ms

Below is generated by plot.py at 2018-03-05 22:04:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.12 Mbit/s
95th percentile per-packet one-way delay: 330.462 ms
Loss rate: 2.13%
-- Flow 1:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 325.574 ms
Loss rate: 1.53%
-- Flow 2:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 340.109 ms
Loss rate: 3.40%
-- Flow 3:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 335.212 ms
Loss rate: 4.50%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-03-05 20:50:03

End at: 2018-03-05 20:50:33

Local clock offset: 3.033 ms

Remote clock offset: -6.44 ms

Below is generated by plot.py at 2018-03-05 22:04:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 304.741 ms

Loss rate: 1.80%

-- Flow 1:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 294.726 ms

Loss rate: 1.40%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 319.349 ms

Loss rate: 2.38%

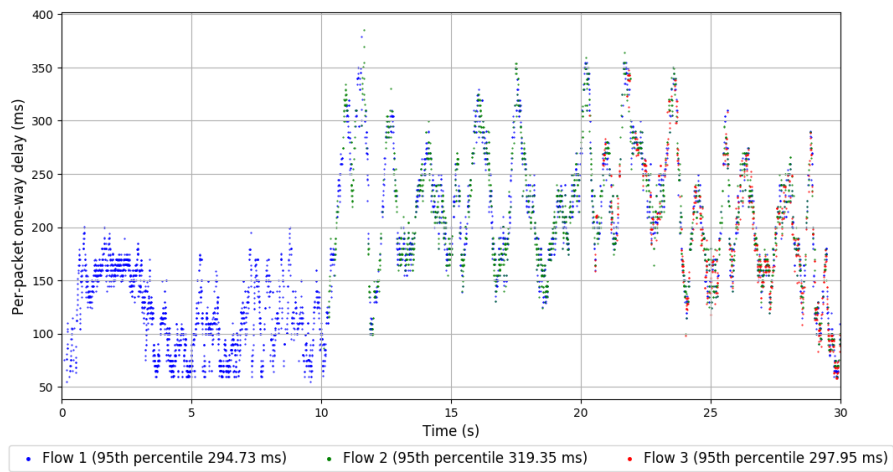
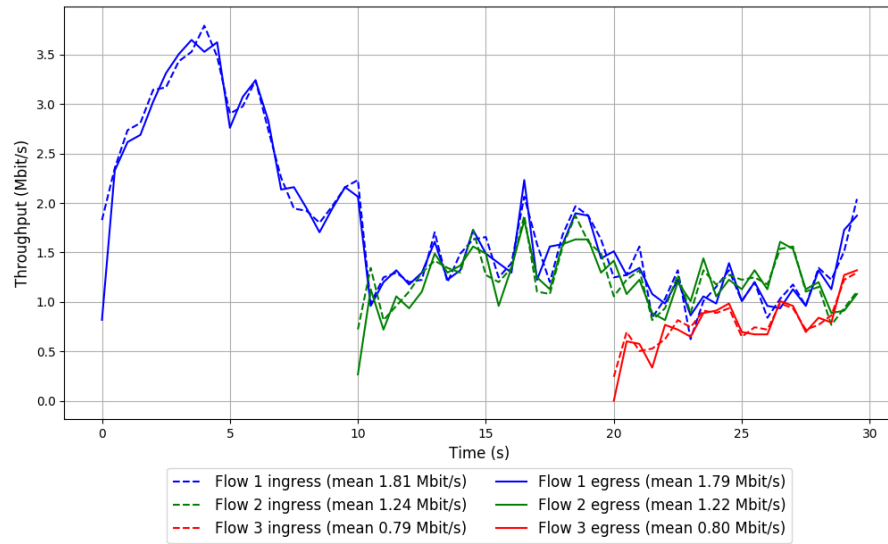
-- Flow 3:

Average throughput: 0.80 Mbit/s

95th percentile per-packet one-way delay: 297.952 ms

Loss rate: 2.74%

Run 3: Report of TCP Cubic — Data Link

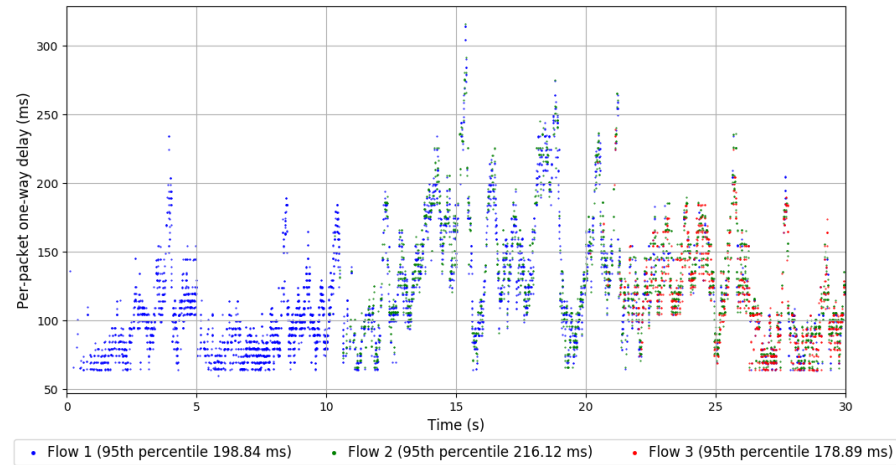
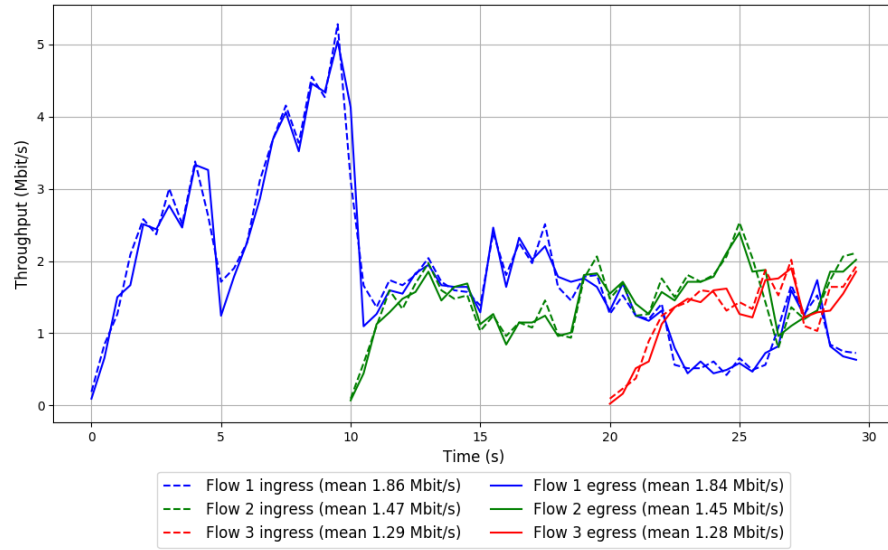


Run 1: Statistics of LEDBAT

Start at: 2018-03-05 20:08:03
End at: 2018-03-05 20:08:33
Local clock offset: 3.101 ms
Remote clock offset: -3.049 ms

Below is generated by plot.py at 2018-03-05 22:04:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 200.160 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 198.837 ms
Loss rate: 1.39%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 216.122 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 178.887 ms
Loss rate: 2.38%

Run 1: Report of LEDBAT — Data Link

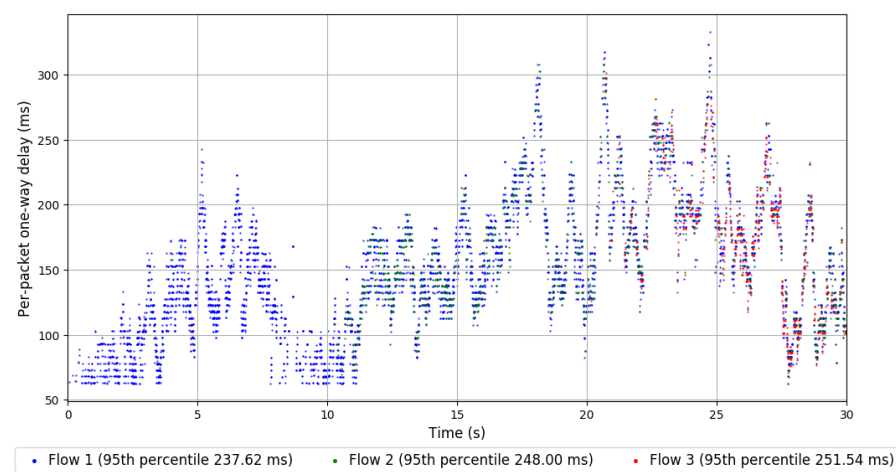
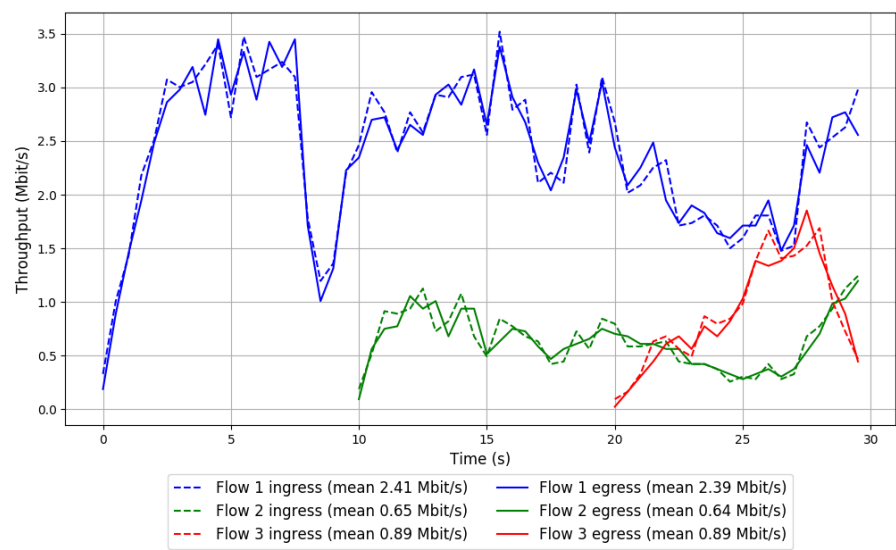


Run 2: Statistics of LEDBAT

Start at: 2018-03-05 20:27:57
End at: 2018-03-05 20:28:27
Local clock offset: 1.949 ms
Remote clock offset: -5.671 ms

Below is generated by plot.py at 2018-03-05 22:04:33
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.11 Mbit/s
95th percentile per-packet one-way delay: 242.736 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 237.620 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 248.002 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 251.542 ms
Loss rate: 1.45%

Run 2: Report of LEDBAT — Data Link

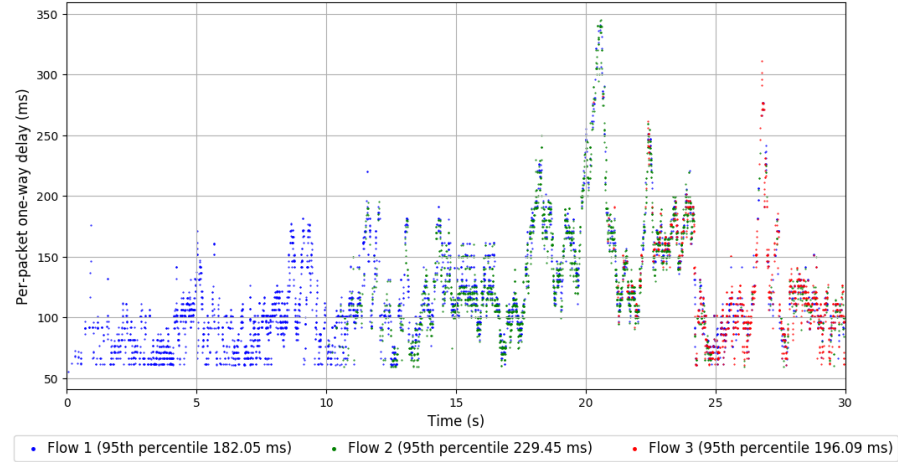
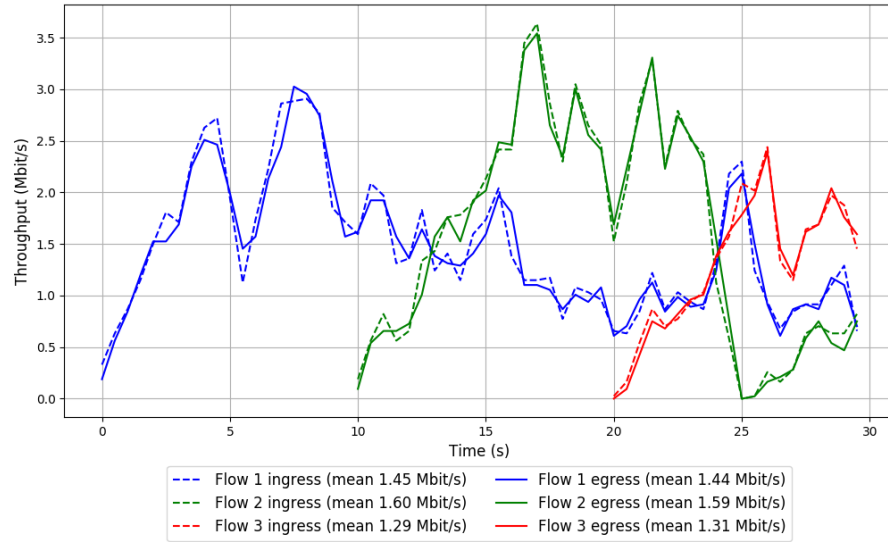


Run 3: Statistics of LEDBAT

Start at: 2018-03-05 20:47:50
End at: 2018-03-05 20:48:20
Local clock offset: 3.734 ms
Remote clock offset: -6.708 ms

```
# Below is generated by plot.py at 2018-03-05 22:04:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.92 Mbit/s
95th percentile per-packet one-way delay: 205.065 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 182.053 ms
Loss rate: 1.45%
-- Flow 2:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 229.451 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 196.086 ms
Loss rate: 1.56%
```

Run 3: Report of LEDBAT — Data Link

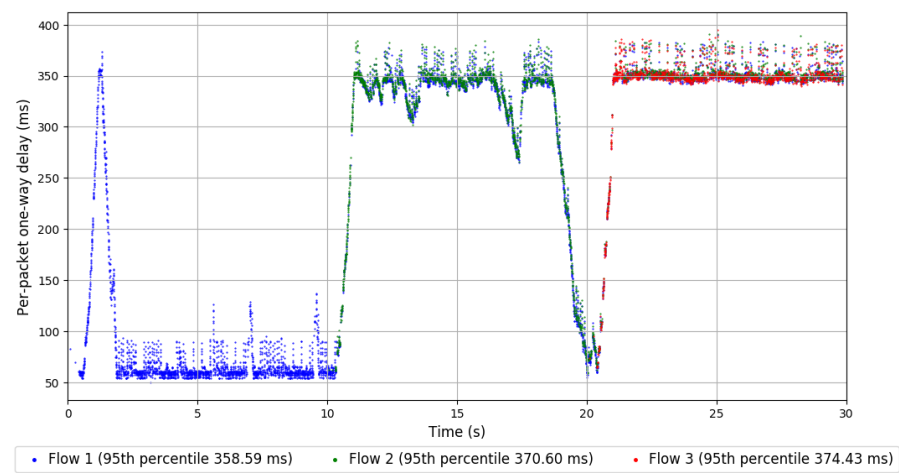
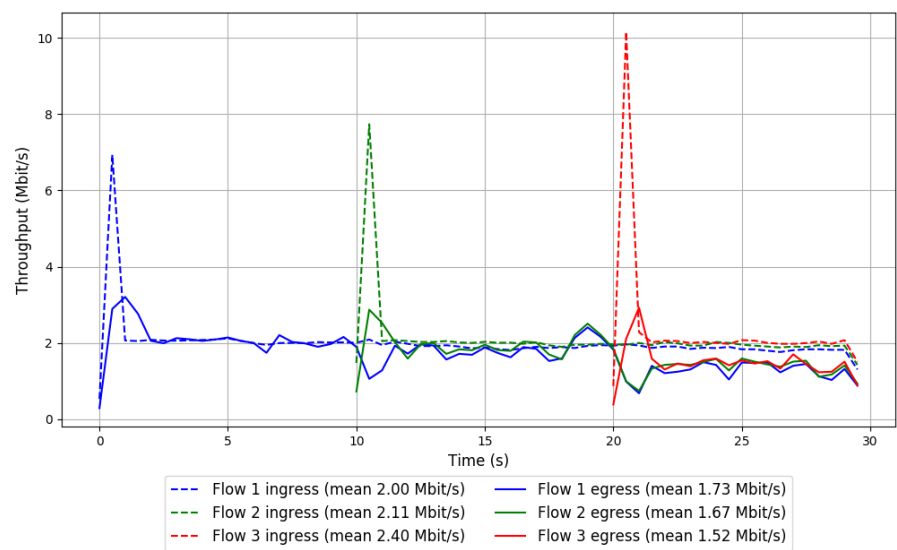


Run 1: Statistics of PCC

Start at: 2018-03-05 20:13:33
End at: 2018-03-05 20:14:03
Local clock offset: 0.266 ms
Remote clock offset: -3.932 ms

Below is generated by plot.py at 2018-03-05 22:04:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 365.737 ms
Loss rate: 20.60%
-- Flow 1:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 358.586 ms
Loss rate: 13.72%
-- Flow 2:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 370.604 ms
Loss rate: 21.08%
-- Flow 3:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 374.429 ms
Loss rate: 37.17%

Run 1: Report of PCC — Data Link

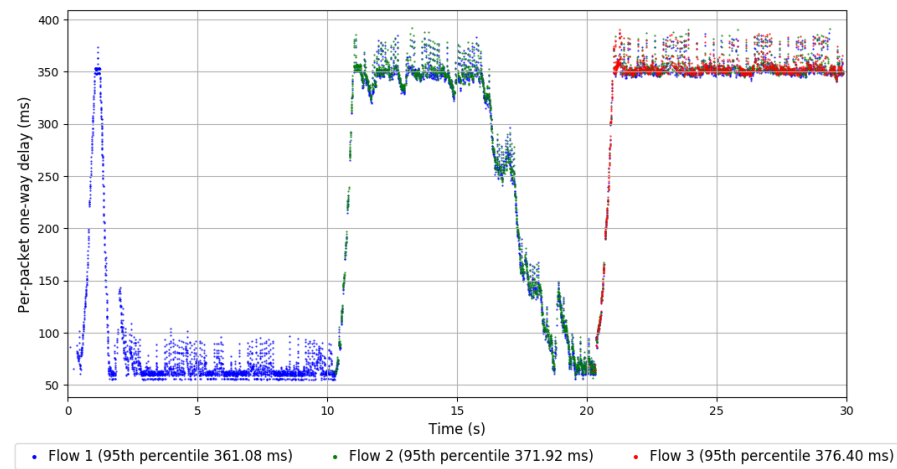
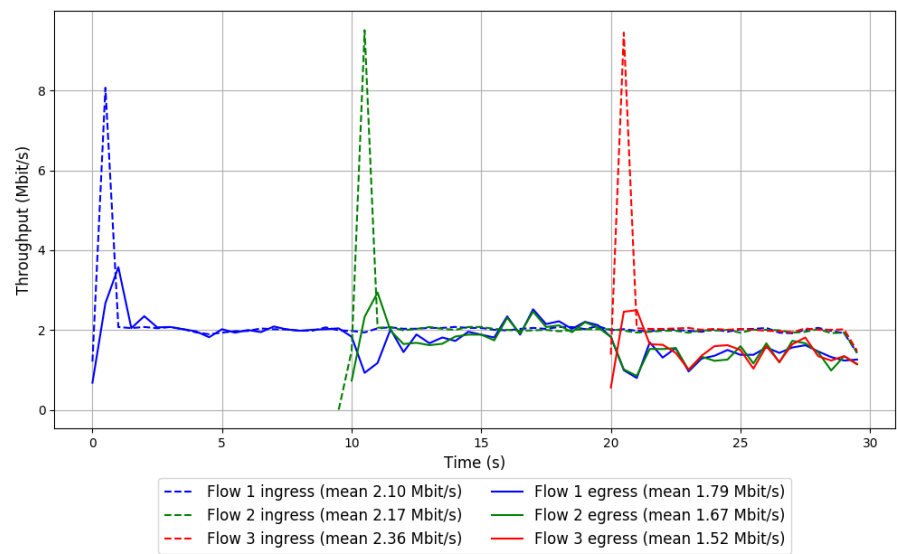


Run 2: Statistics of PCC

Start at: 2018-03-05 20:33:29
End at: 2018-03-05 20:33:59
Local clock offset: 3.683 ms
Remote clock offset: -5.479 ms

Below is generated by plot.py at 2018-03-05 22:04:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.39 Mbit/s
95th percentile per-packet one-way delay: 367.277 ms
Loss rate: 21.75%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 361.081 ms
Loss rate: 15.14%
-- Flow 2:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 371.918 ms
Loss rate: 23.51%
-- Flow 3:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 376.397 ms
Loss rate: 36.28%

Run 2: Report of PCC — Data Link

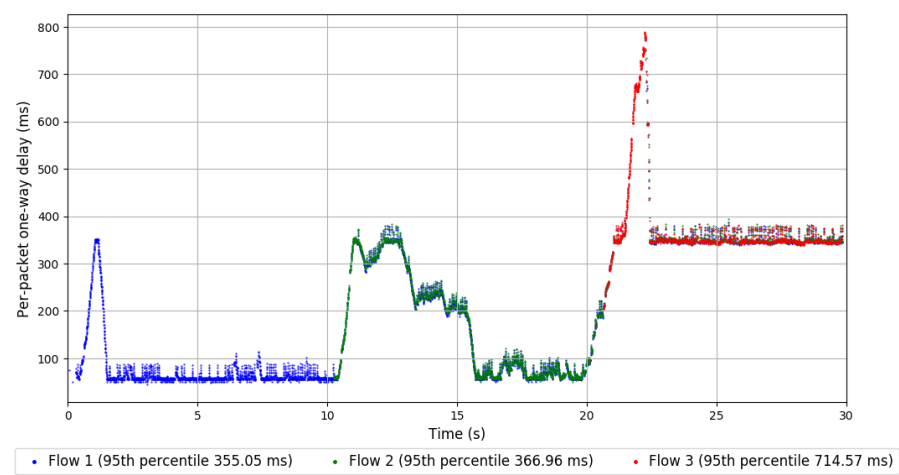
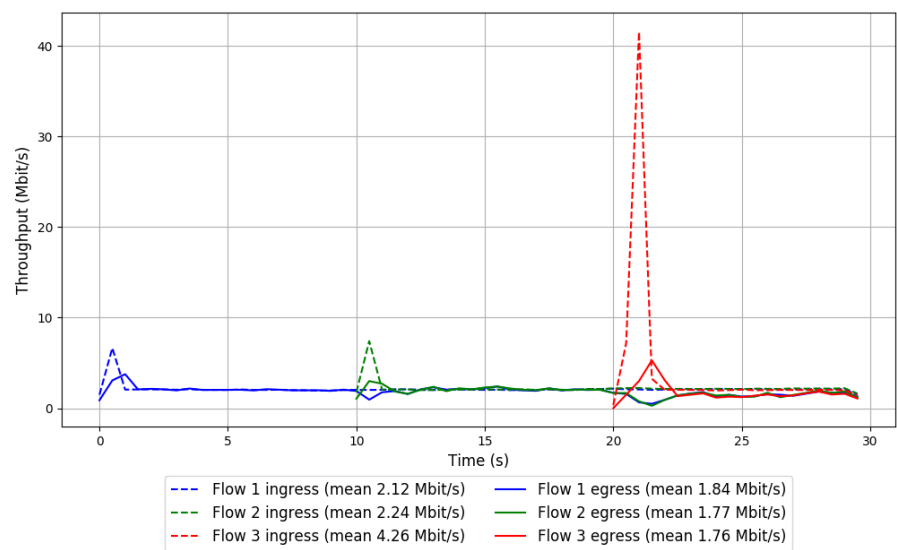


Run 3: Statistics of PCC

Start at: 2018-03-05 20:53:21
End at: 2018-03-05 20:53:51
Local clock offset: 0.338 ms
Remote clock offset: -7.097 ms

Below is generated by plot.py at 2018-03-05 22:04:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.60 Mbit/s
95th percentile per-packet one-way delay: 376.686 ms
Loss rate: 28.48%
-- Flow 1:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 355.050 ms
Loss rate: 13.36%
-- Flow 2:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 366.957 ms
Loss rate: 21.08%
-- Flow 3:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 714.568 ms
Loss rate: 59.18%

Run 3: Report of PCC — Data Link

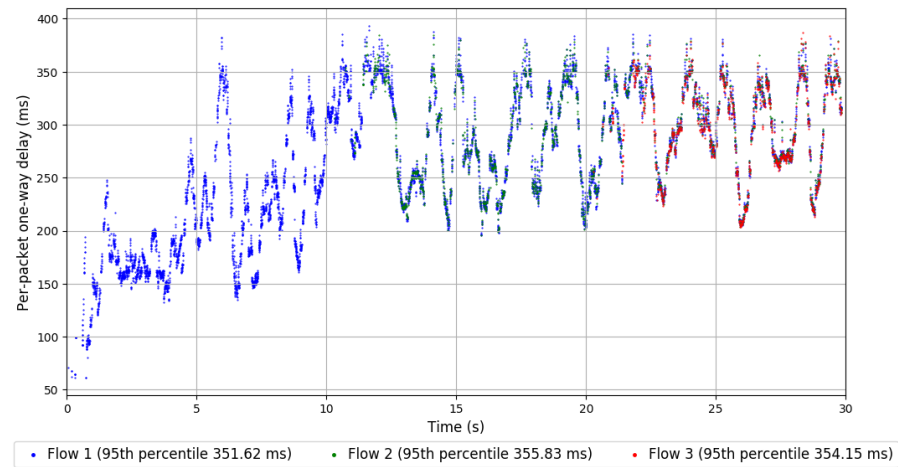
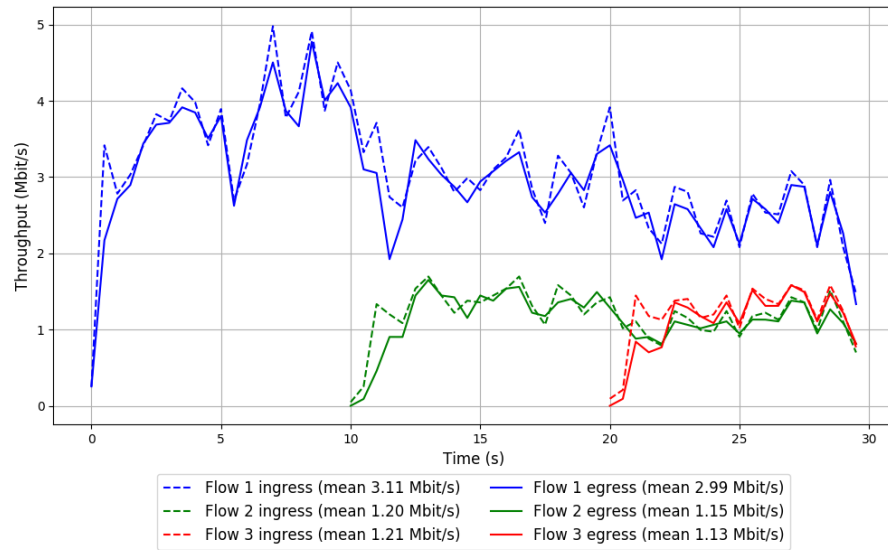


Run 1: Statistics of QUIC Cubic

Start at: 2018-03-05 20:19:05
End at: 2018-03-05 20:19:35
Local clock offset: 3.218 ms
Remote clock offset: -3.508 ms

Below is generated by plot.py at 2018-03-05 22:04:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 352.597 ms
Loss rate: 4.75%
-- Flow 1:
Average throughput: 2.99 Mbit/s
95th percentile per-packet one-way delay: 351.624 ms
Loss rate: 3.94%
-- Flow 2:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 355.829 ms
Loss rate: 5.71%
-- Flow 3:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 354.154 ms
Loss rate: 9.14%

Run 1: Report of QUIC Cubic — Data Link

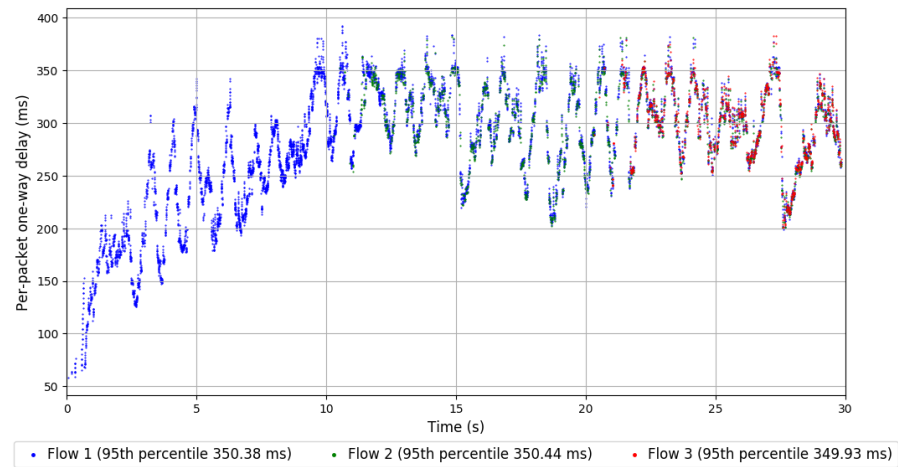
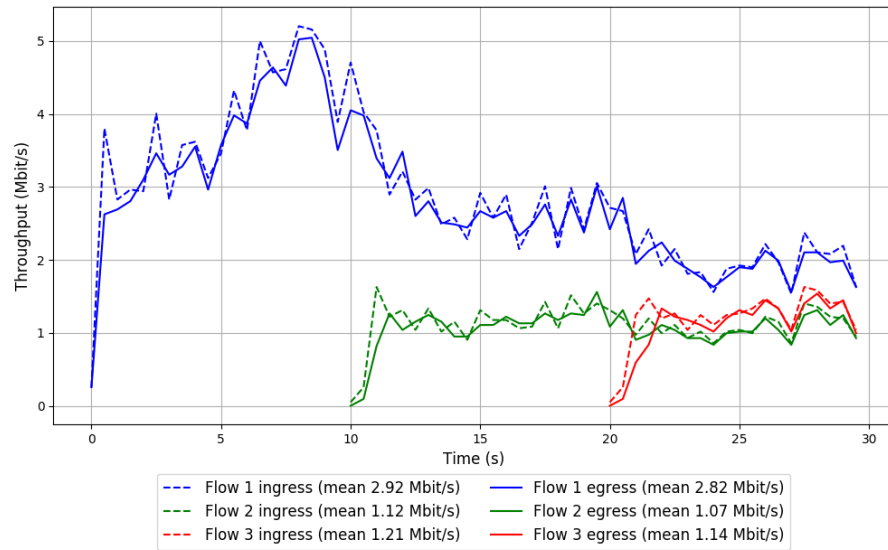


Run 2: Statistics of QUIC Cubic

Start at: 2018-03-05 20:38:59
End at: 2018-03-05 20:39:29
Local clock offset: 1.451 ms
Remote clock offset: -7.302 ms

Below is generated by plot.py at 2018-03-05 22:04:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 350.341 ms
Loss rate: 4.56%
-- Flow 1:
Average throughput: 2.82 Mbit/s
95th percentile per-packet one-way delay: 350.376 ms
Loss rate: 3.78%
-- Flow 2:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 350.437 ms
Loss rate: 5.55%
-- Flow 3:
Average throughput: 1.14 Mbit/s
95th percentile per-packet one-way delay: 349.925 ms
Loss rate: 8.42%

Run 2: Report of QUIC Cubic — Data Link

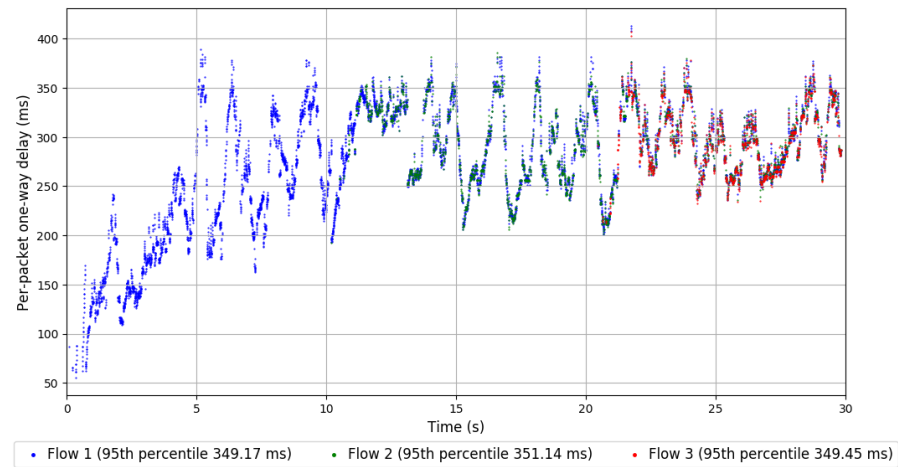
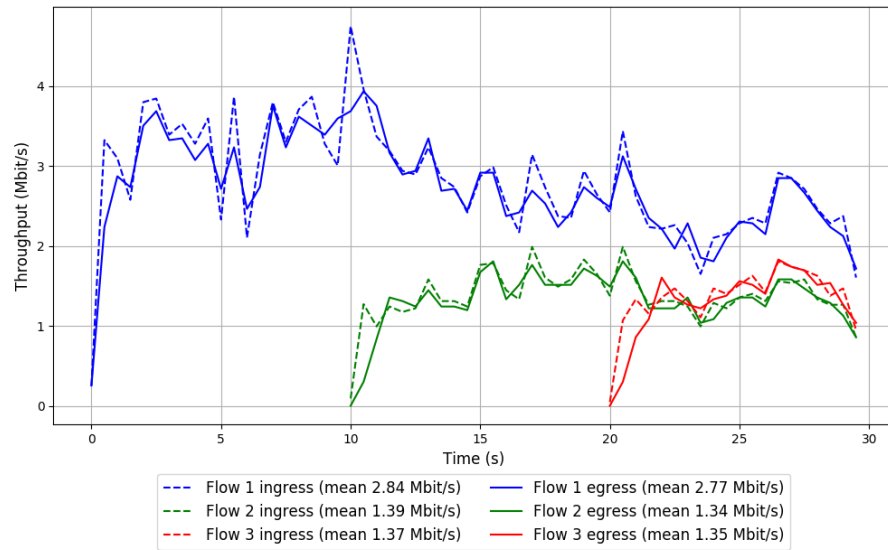


Run 3: Statistics of QUIC Cubic

Start at: 2018-03-05 20:58:52
End at: 2018-03-05 20:59:22
Local clock offset: 0.756 ms
Remote clock offset: -6.494 ms

Below is generated by plot.py at 2018-03-05 22:04:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 349.608 ms
Loss rate: 3.42%
-- Flow 1:
Average throughput: 2.77 Mbit/s
95th percentile per-packet one-way delay: 349.165 ms
Loss rate: 2.90%
-- Flow 2:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 351.144 ms
Loss rate: 4.07%
-- Flow 3:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 349.451 ms
Loss rate: 5.37%

Run 3: Report of QUIC Cubic — Data Link

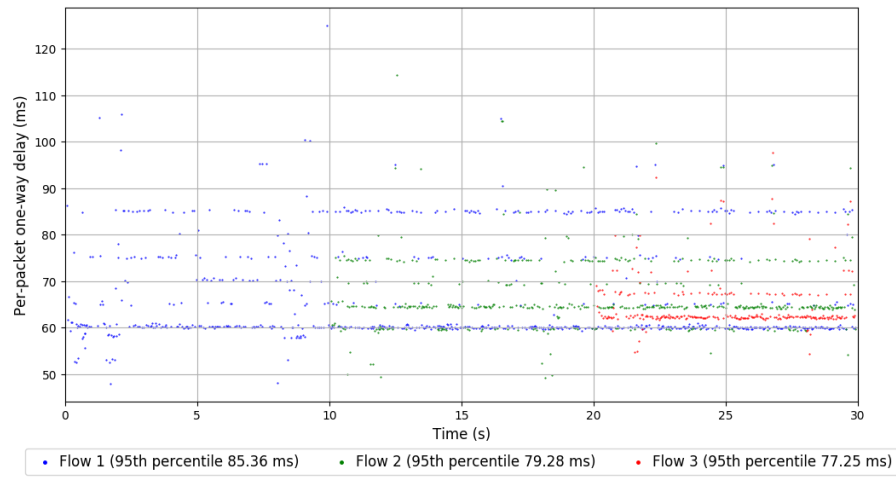
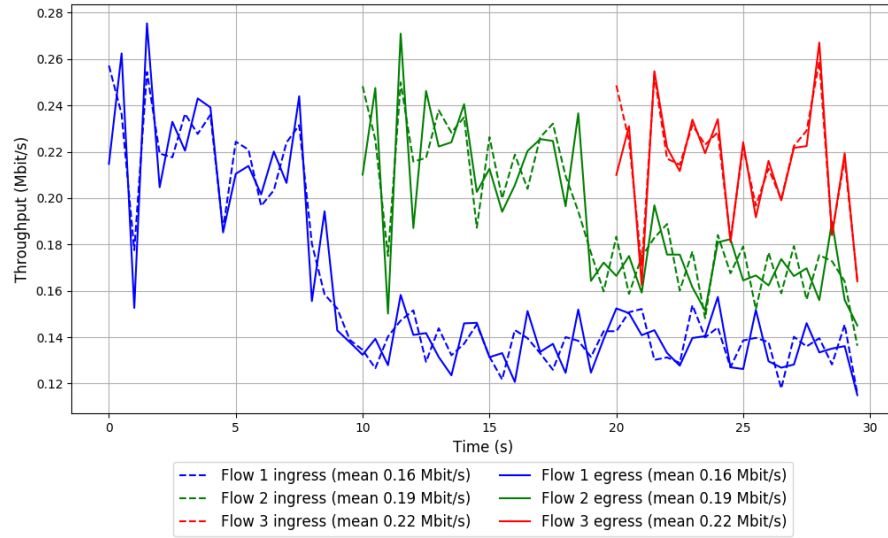


Run 1: Statistics of SCReAM

Start at: 2018-03-05 20:06:57
End at: 2018-03-05 20:07:27
Local clock offset: 1.597 ms
Remote clock offset: -3.316 ms

Below is generated by plot.py at 2018-03-05 22:04:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 85.200 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 85.361 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 79.280 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.254 ms
Loss rate: 0.74%

Run 1: Report of SReAM — Data Link

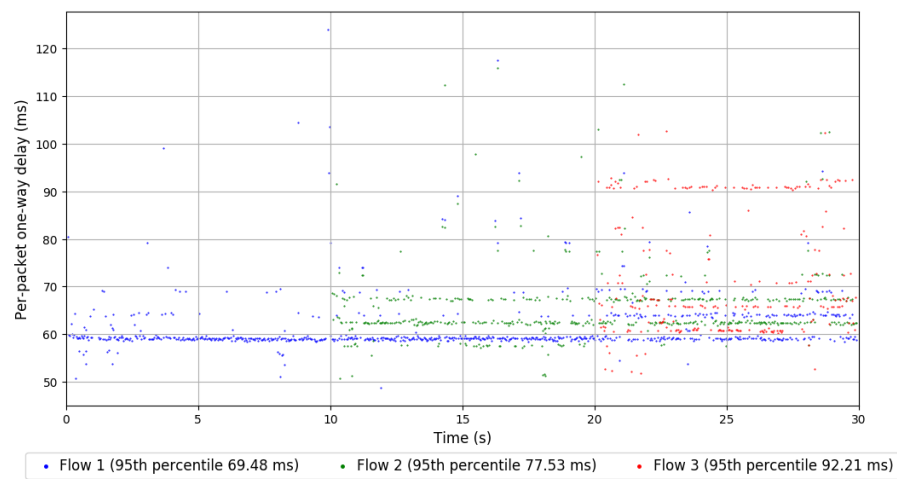
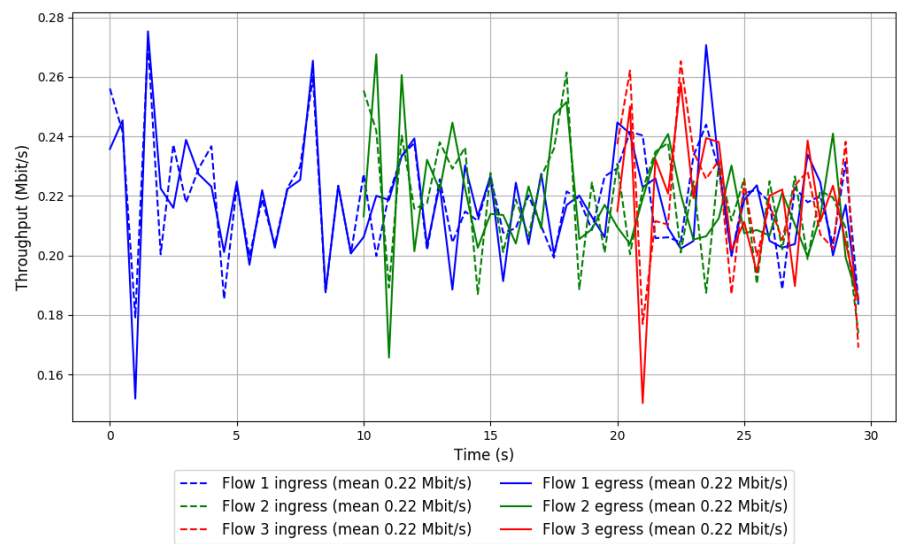


Run 2: Statistics of SReAM

Start at: 2018-03-05 20:26:52
End at: 2018-03-05 20:27:22
Local clock offset: 2.346 ms
Remote clock offset: -4.834 ms

Below is generated by plot.py at 2018-03-05 22:04:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 90.707 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.481 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.526 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.209 ms
Loss rate: 0.76%

Run 2: Report of SReAM — Data Link

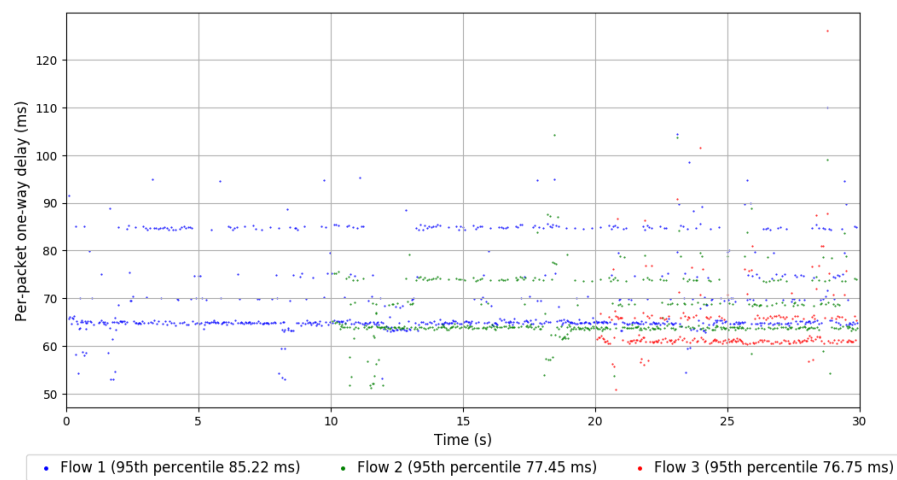
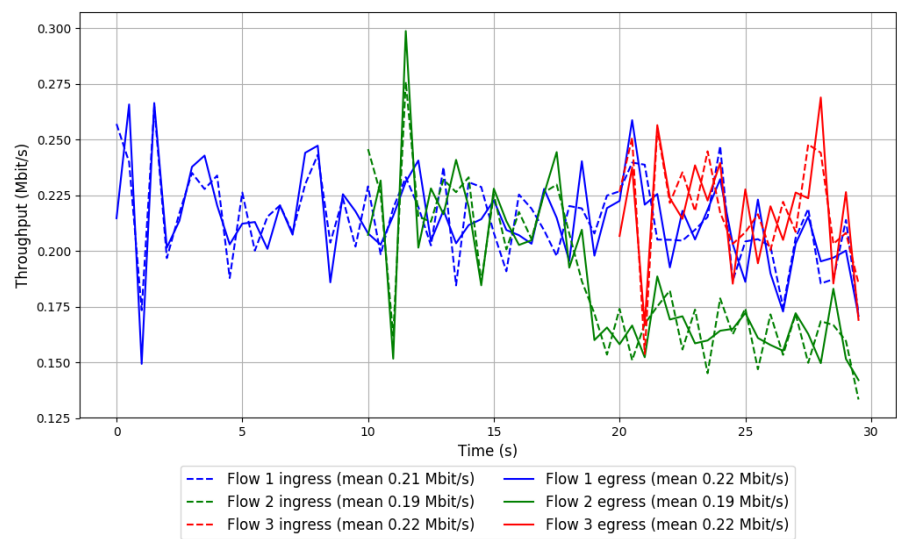


Run 3: Statistics of SReAM

Start at: 2018-03-05 20:46:44
End at: 2018-03-05 20:47:14
Local clock offset: 4.566 ms
Remote clock offset: -7.744 ms

Below is generated by plot.py at 2018-03-05 22:04:43
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 85.022 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.219 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 77.455 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 76.753 ms
Loss rate: 0.74%

Run 3: Report of SReAM — Data Link

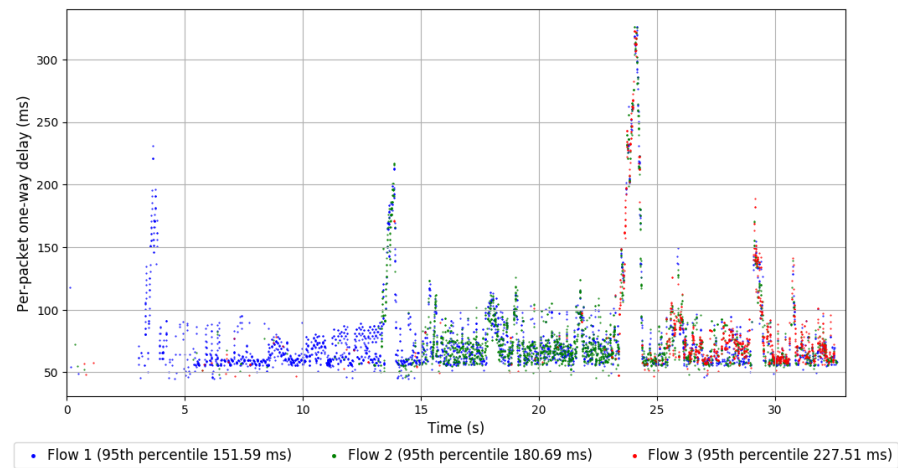
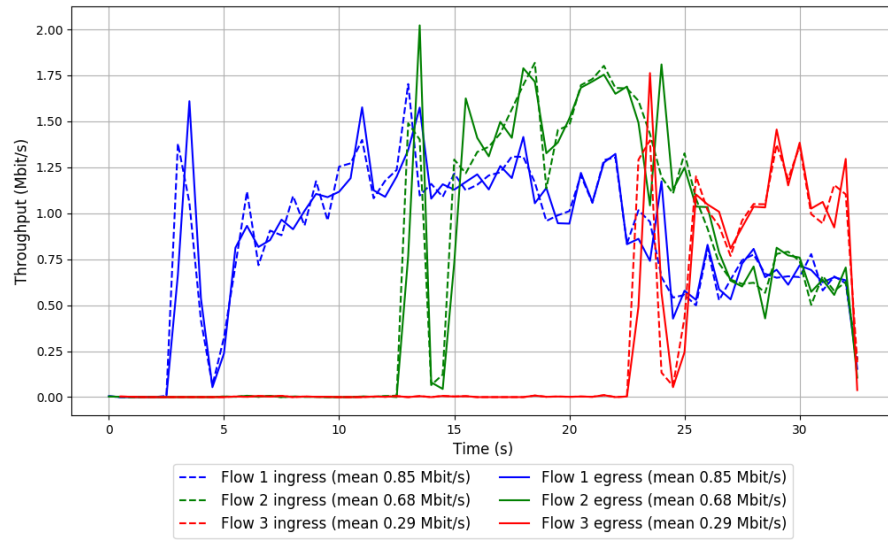


Run 1: Statistics of WebRTC media

Start at: 2018-03-05 20:05:51
End at: 2018-03-05 20:06:21
Local clock offset: -1.913 ms
Remote clock offset: -3.508 ms

Below is generated by plot.py at 2018-03-05 22:04:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 173.971 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 151.589 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 180.693 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 227.507 ms
Loss rate: 1.01%

Run 1: Report of WebRTC media — Data Link

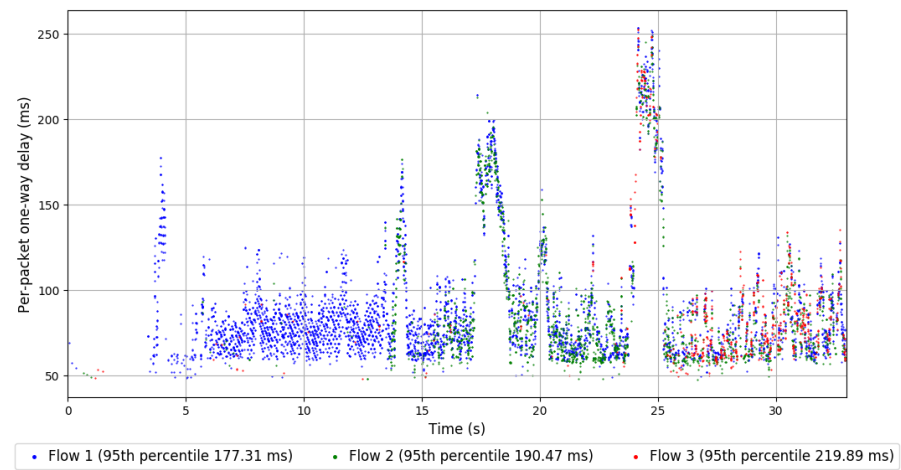
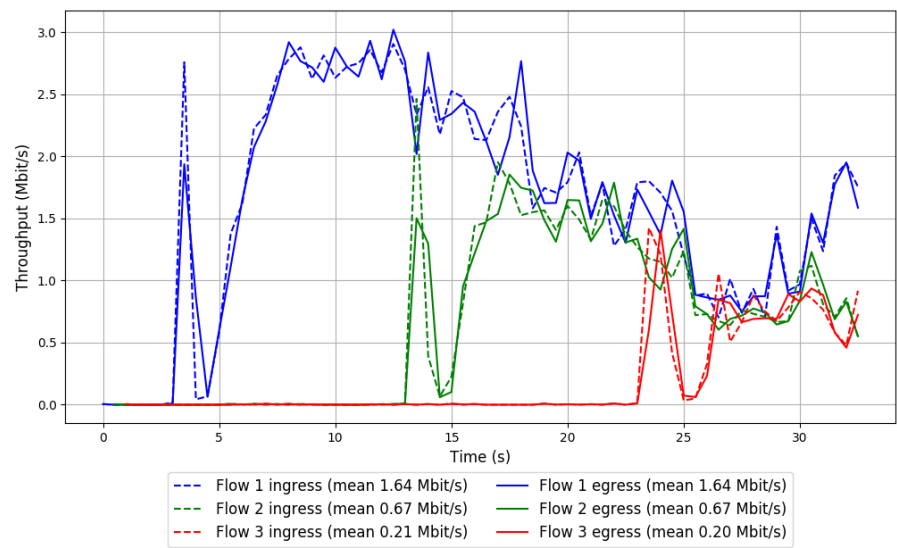


Run 2: Statistics of WebRTC media

Start at: 2018-03-05 20:25:45
End at: 2018-03-05 20:26:15
Local clock offset: 2.617 ms
Remote clock offset: -3.874 ms

Below is generated by plot.py at 2018-03-05 22:04:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.48 Mbit/s
95th percentile per-packet one-way delay: 186.814 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 177.315 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 190.468 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 219.893 ms
Loss rate: 3.57%

Run 2: Report of WebRTC media — Data Link

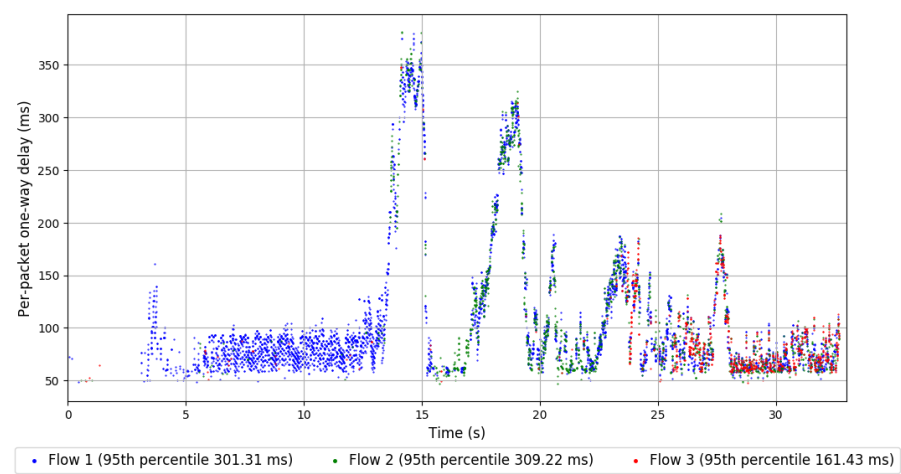
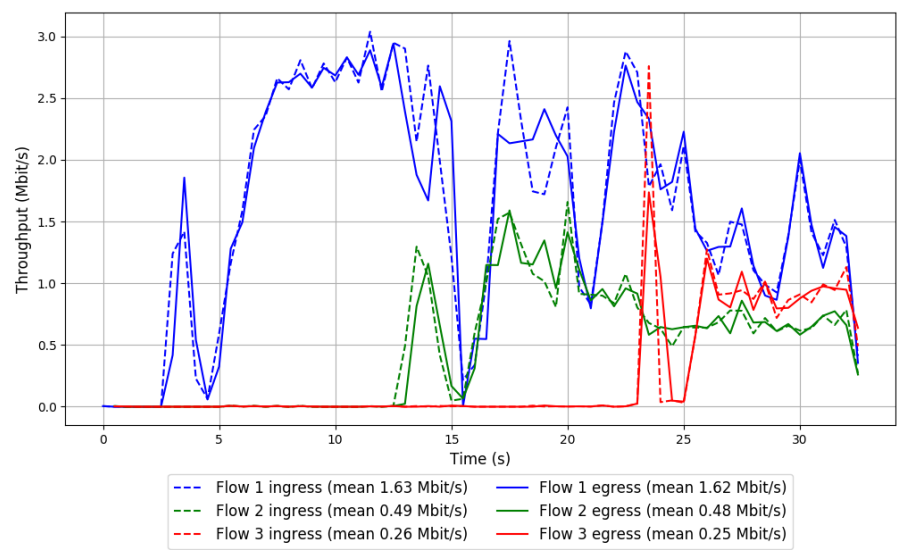


Run 3: Statistics of WebRTC media

Start at: 2018-03-05 20:45:38
End at: 2018-03-05 20:46:08
Local clock offset: 0.793 ms
Remote clock offset: -7.564 ms

Below is generated by plot.py at 2018-03-05 22:04:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 296.294 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 301.307 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 309.222 ms
Loss rate: 1.94%
-- Flow 3:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 161.432 ms
Loss rate: 0.81%

Run 3: Report of WebRTC media — Data Link

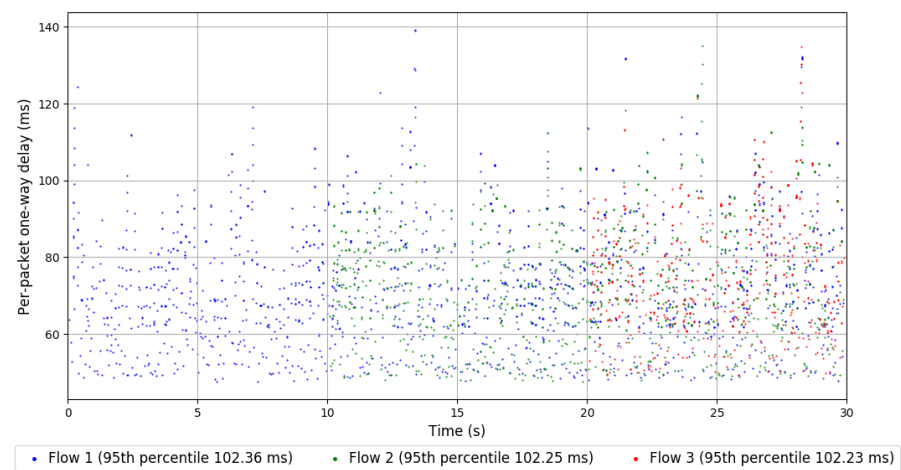
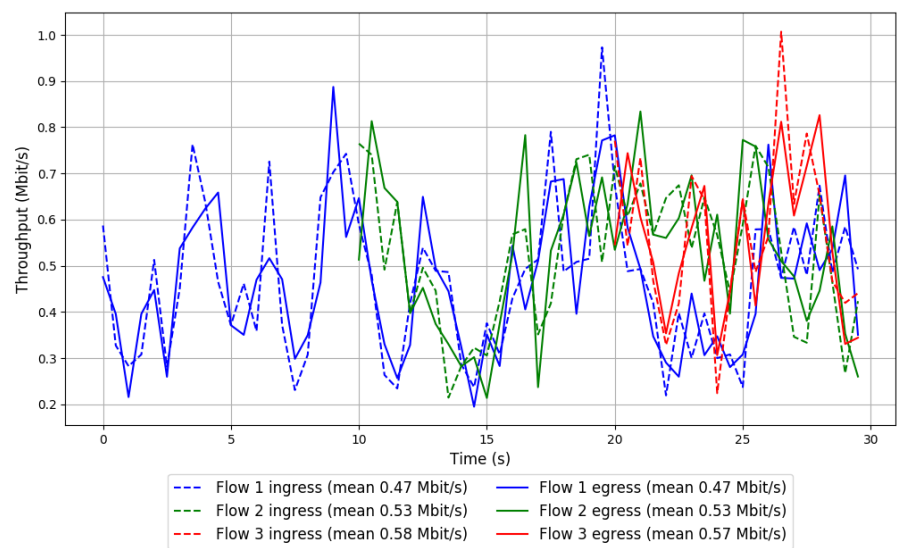


Run 1: Statistics of Sprout

Start at: 2018-03-05 20:20:11
End at: 2018-03-05 20:20:41
Local clock offset: 2.844 ms
Remote clock offset: -3.778 ms

Below is generated by plot.py at 2018-03-05 22:04:50
Datalink statistics
-- Total of 3 flows:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 102.295 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 102.356 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 102.250 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 102.227 ms
Loss rate: 2.32%

Run 1: Report of Sprout — Data Link

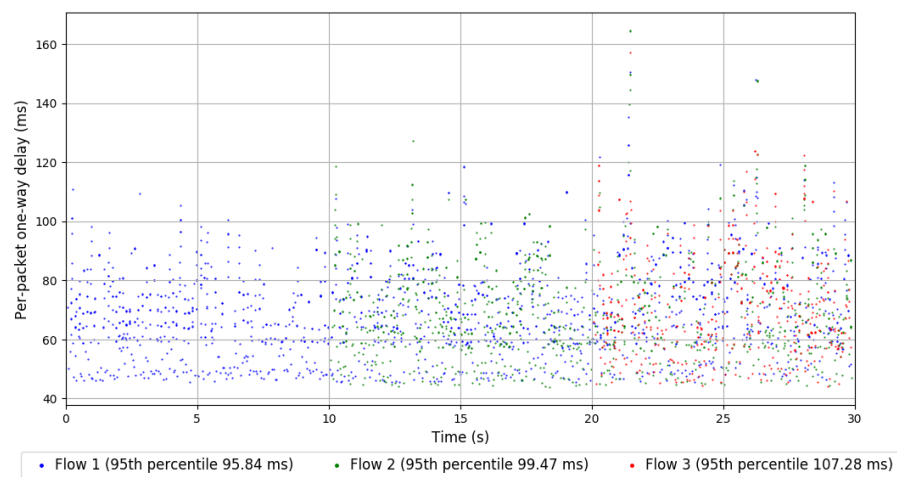
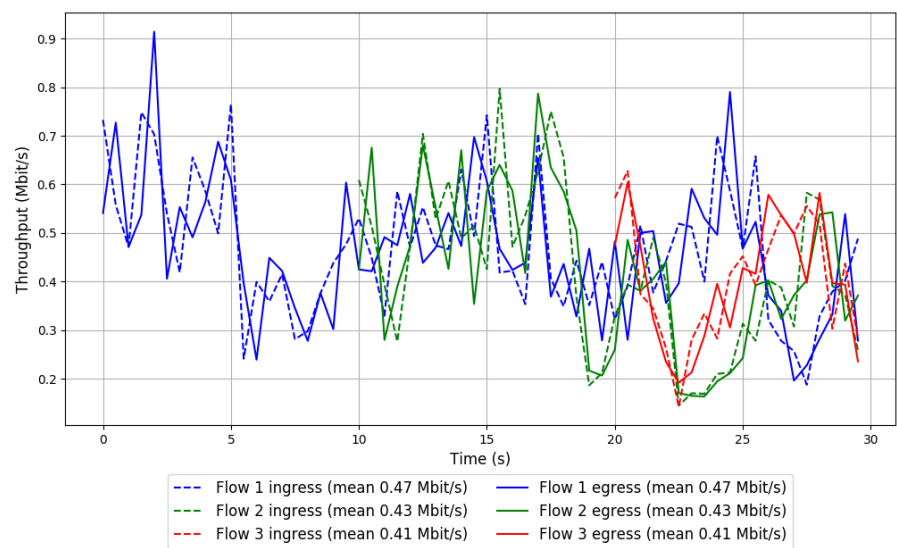


Run 2: Statistics of Sprout

Start at: 2018-03-05 20:40:05
End at: 2018-03-05 20:40:35
Local clock offset: 0.324 ms
Remote clock offset: -6.236 ms

```
# Below is generated by plot.py at 2018-03-05 22:04:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.88 Mbit/s
95th percentile per-packet one-way delay: 99.280 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 95.844 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 99.471 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 107.282 ms
Loss rate: 1.39%
```

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-03-05 20:59:58

End at: 2018-03-05 21:00:28

Local clock offset: 2.45 ms

Remote clock offset: -4.48 ms

Below is generated by plot.py at 2018-03-05 22:04:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 100.662 ms

Loss rate: 2.01%

-- Flow 1:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 96.864 ms

Loss rate: 1.60%

-- Flow 2:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 102.756 ms

Loss rate: 2.66%

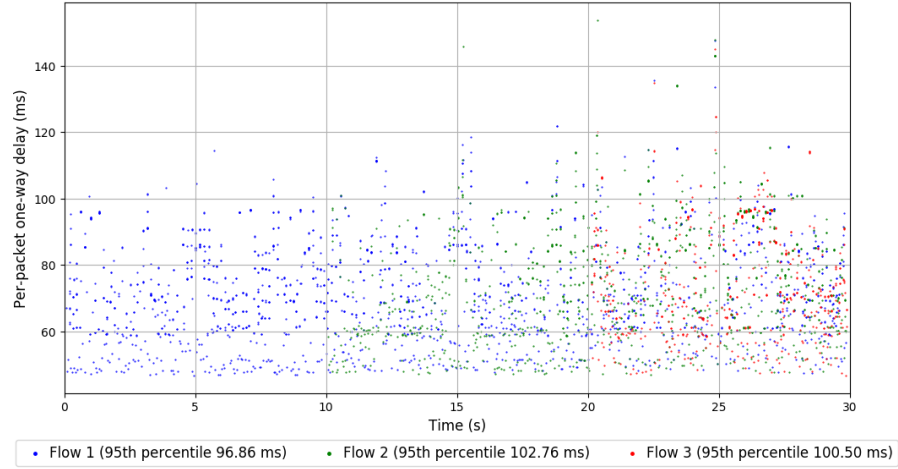
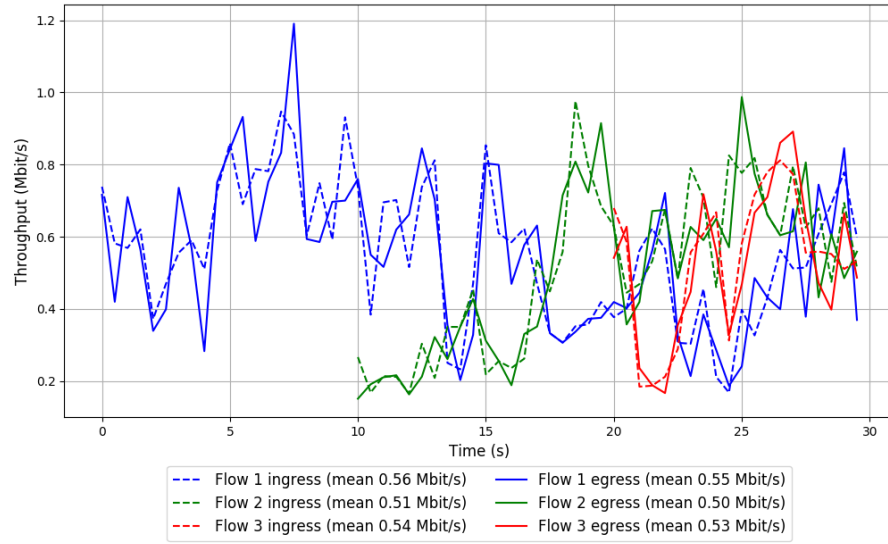
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 100.505 ms

Loss rate: 2.07%

Run 3: Report of Sprout — Data Link

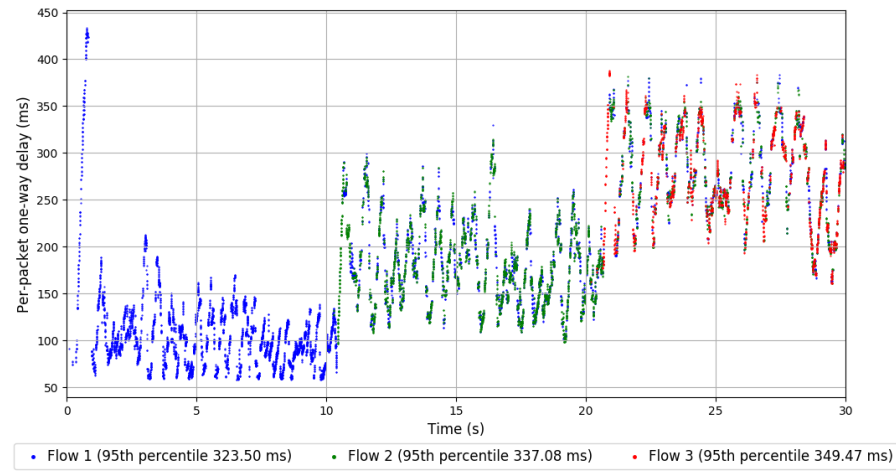
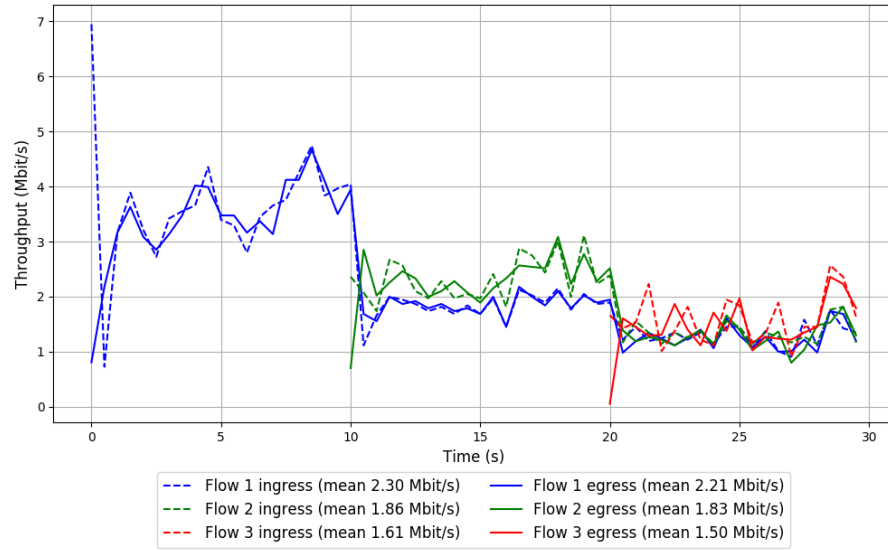


Run 1: Statistics of TaoVA-100x

Start at: 2018-03-05 20:12:27
End at: 2018-03-05 20:12:57
Local clock offset: 0.434 ms
Remote clock offset: -3.806 ms

Below is generated by plot.py at 2018-03-05 22:04:57
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 338.224 ms
Loss rate: 4.27%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 323.500 ms
Loss rate: 4.25%
-- Flow 2:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 337.082 ms
Loss rate: 2.30%
-- Flow 3:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 349.473 ms
Loss rate: 8.94%

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

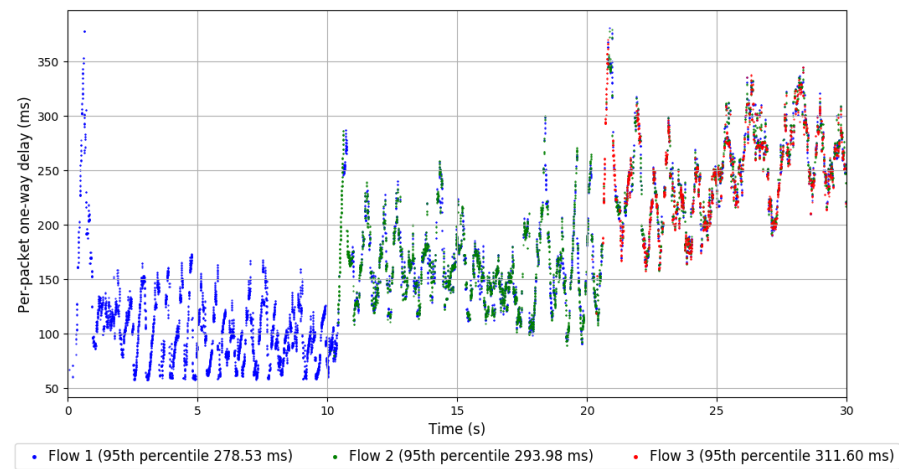
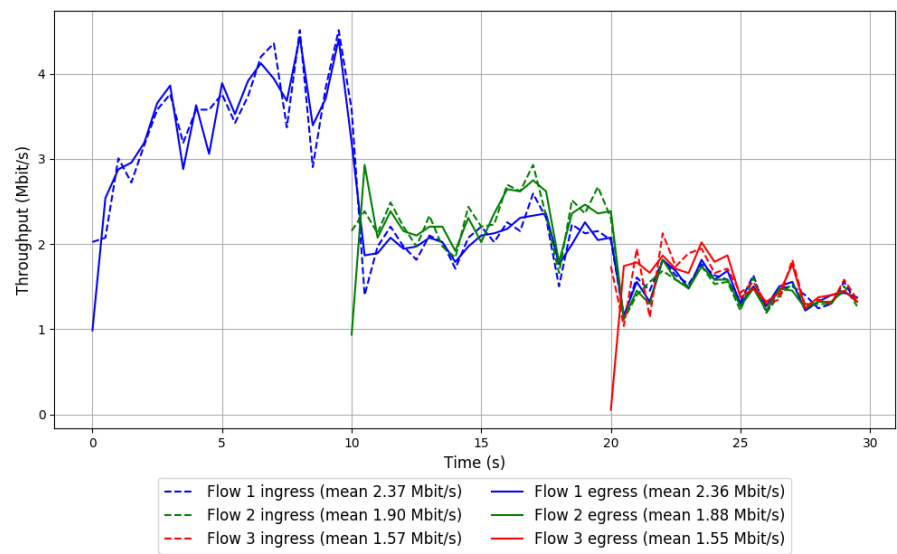


Run 2: Statistics of TaoVA-100x

Start at: 2018-03-05 20:32:23
End at: 2018-03-05 20:32:53
Local clock offset: 0.277 ms
Remote clock offset: -5.812 ms

Below is generated by plot.py at 2018-03-05 22:04:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 293.601 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 278.526 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 293.975 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 311.603 ms
Loss rate: 2.91%

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

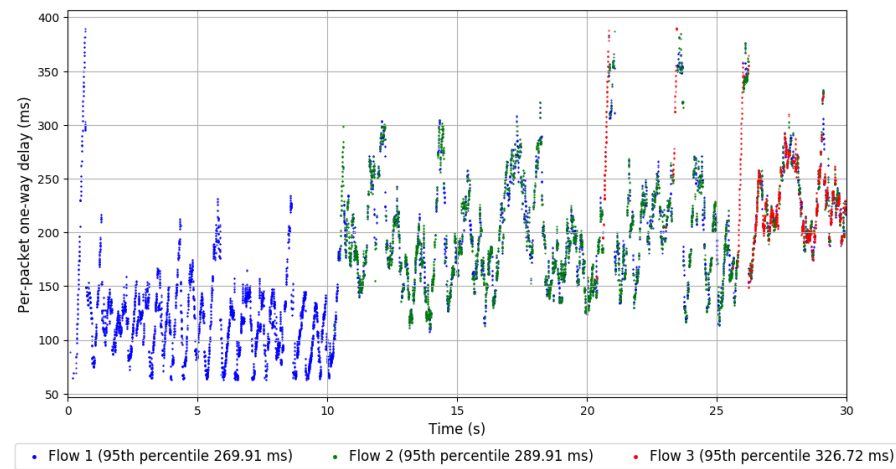
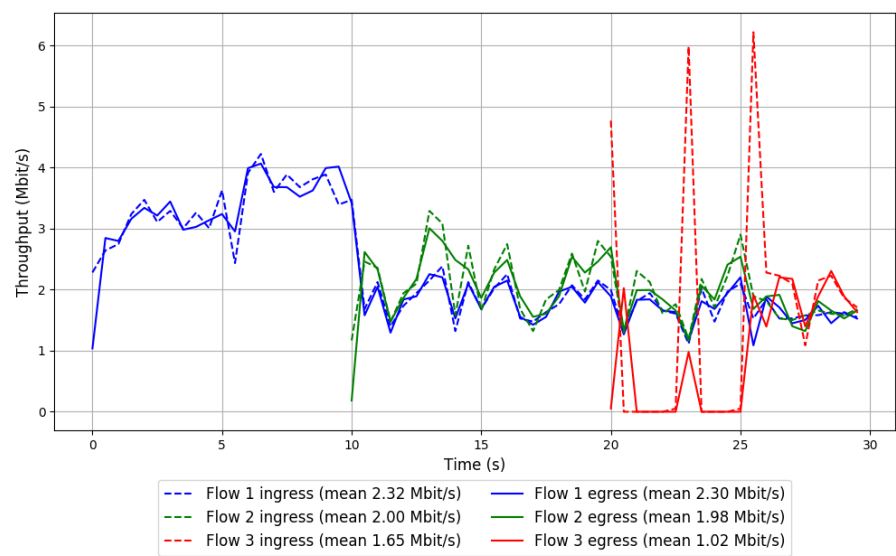


Run 3: Statistics of TaoVA-100x

Start at: 2018-03-05 20:52:15
End at: 2018-03-05 20:52:45
Local clock offset: 4.17 ms
Remote clock offset: -10.32 ms

Below is generated by plot.py at 2018-03-05 22:05:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.95 Mbit/s
95th percentile per-packet one-way delay: 283.525 ms
Loss rate: 6.22%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 269.906 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 289.914 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 326.717 ms
Loss rate: 39.30%

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

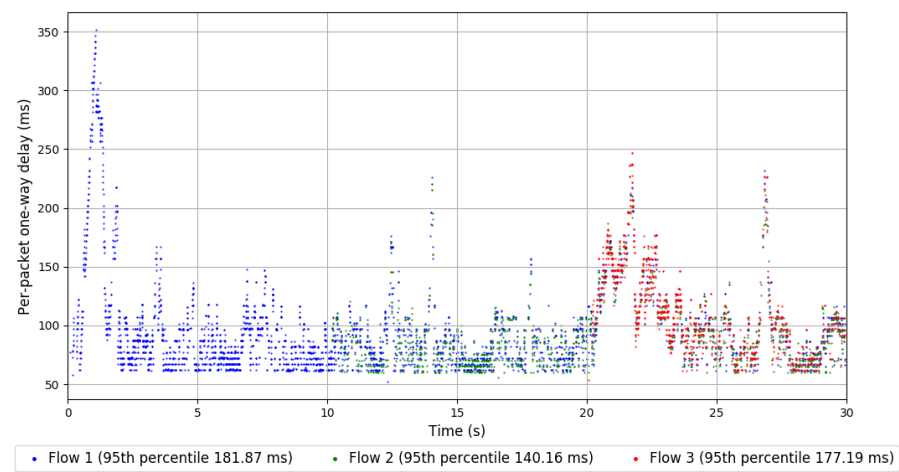
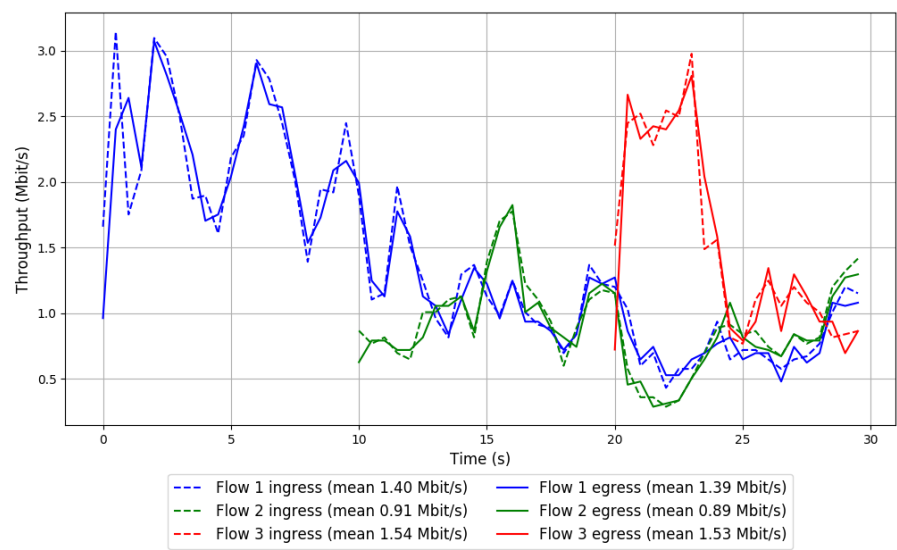


Run 1: Statistics of TCP Vegas

Start at: 2018-03-05 20:04:45
End at: 2018-03-05 20:05:15
Local clock offset: 1.011 ms
Remote clock offset: -4.053 ms

Below is generated by plot.py at 2018-03-05 22:05:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 171.828 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 181.872 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 140.164 ms
Loss rate: 2.45%
-- Flow 3:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 177.189 ms
Loss rate: 1.41%

Run 1: Report of TCP Vegas — Data Link

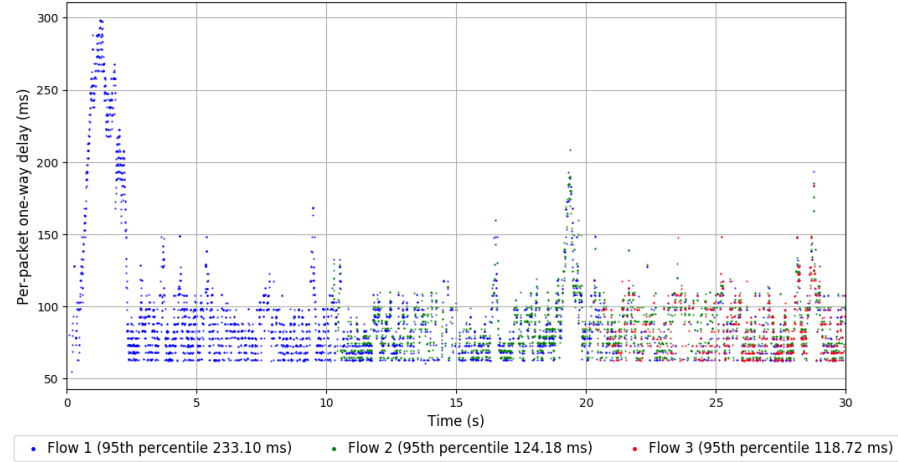
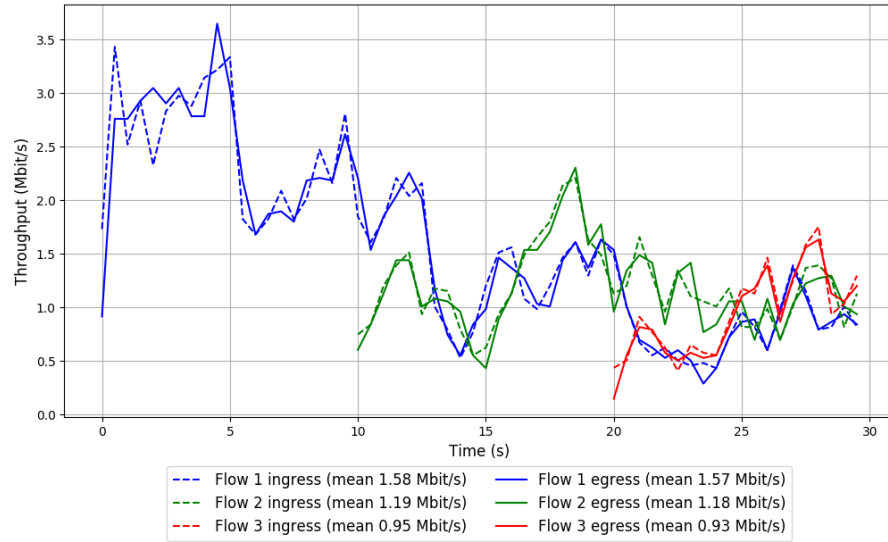


Run 2: Statistics of TCP Vegas

Start at: 2018-03-05 20:24:39
End at: 2018-03-05 20:25:09
Local clock offset: 3.304 ms
Remote clock offset: -4.249 ms

Below is generated by plot.py at 2018-03-05 22:05:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 188.711 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 233.096 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 124.184 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 118.715 ms
Loss rate: 3.18%

Run 2: Report of TCP Vegas — Data Link

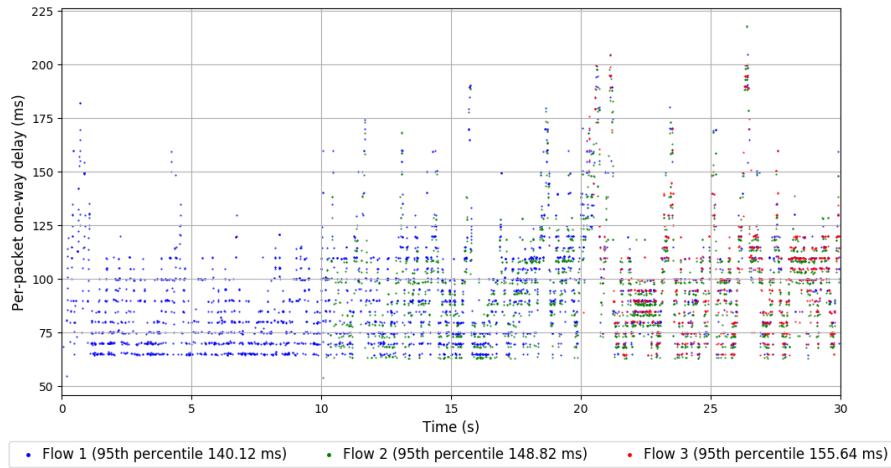
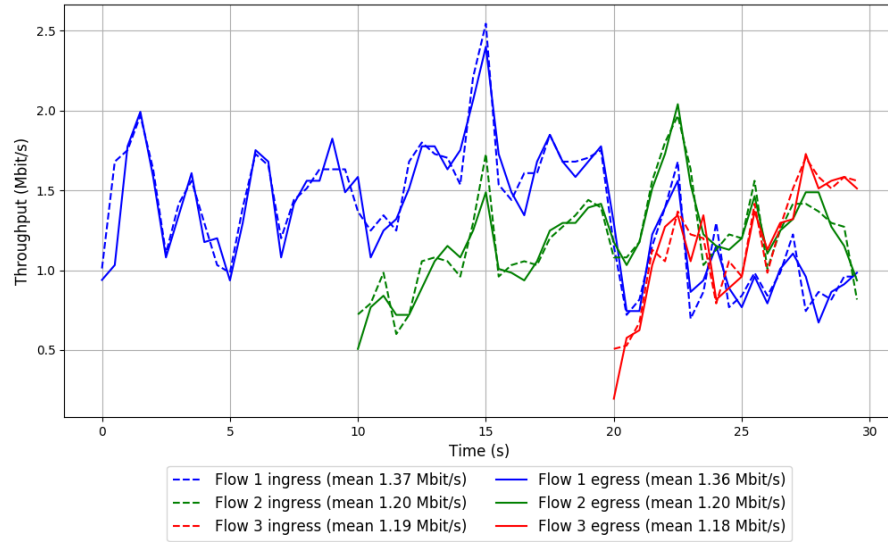


Run 3: Statistics of TCP Vegas

Start at: 2018-03-05 20:44:32
End at: 2018-03-05 20:45:02
Local clock offset: 3.845 ms
Remote clock offset: -8.416 ms

Below is generated by plot.py at 2018-03-05 22:05:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 148.820 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 1.36 Mbit/s
95th percentile per-packet one-way delay: 140.115 ms
Loss rate: 1.43%
-- Flow 2:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 148.817 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 155.639 ms
Loss rate: 2.13%

Run 3: Report of TCP Vegas — Data Link

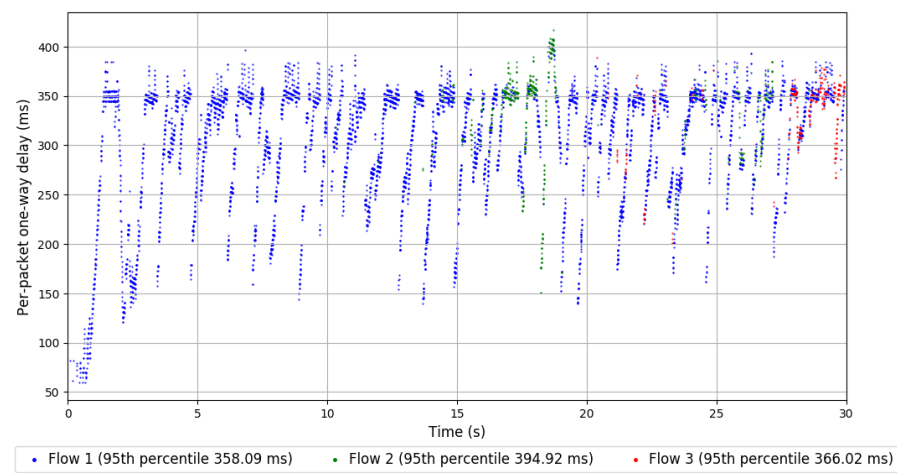
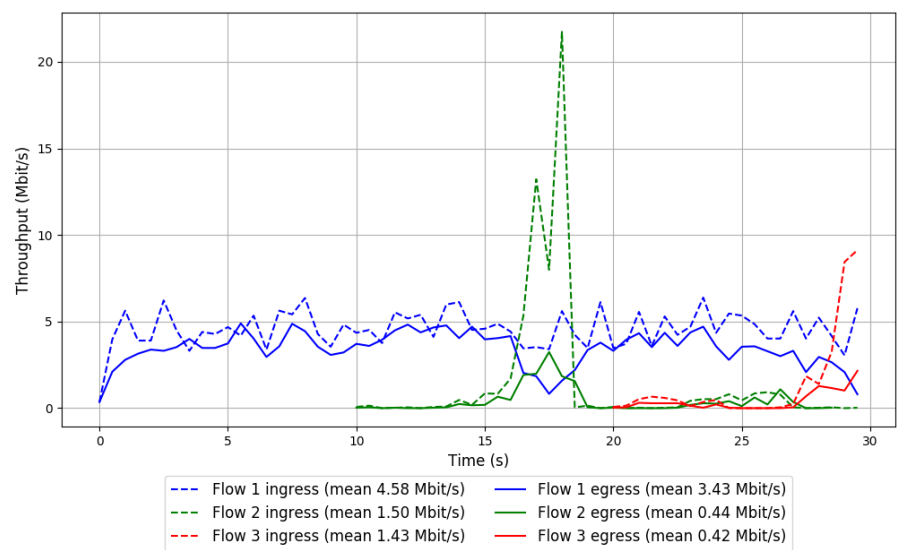


Run 1: Statistics of Verus

Start at: 2018-03-05 20:16:52
End at: 2018-03-05 20:17:22
Local clock offset: 1.782 ms
Remote clock offset: -3.209 ms

Below is generated by plot.py at 2018-03-05 22:05:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.83 Mbit/s
95th percentile per-packet one-way delay: 361.060 ms
Loss rate: 36.55%
-- Flow 1:
Average throughput: 3.43 Mbit/s
95th percentile per-packet one-way delay: 358.094 ms
Loss rate: 25.35%
-- Flow 2:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 394.921 ms
Loss rate: 72.54%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 366.019 ms
Loss rate: 71.27%

Run 1: Report of Verus — Data Link

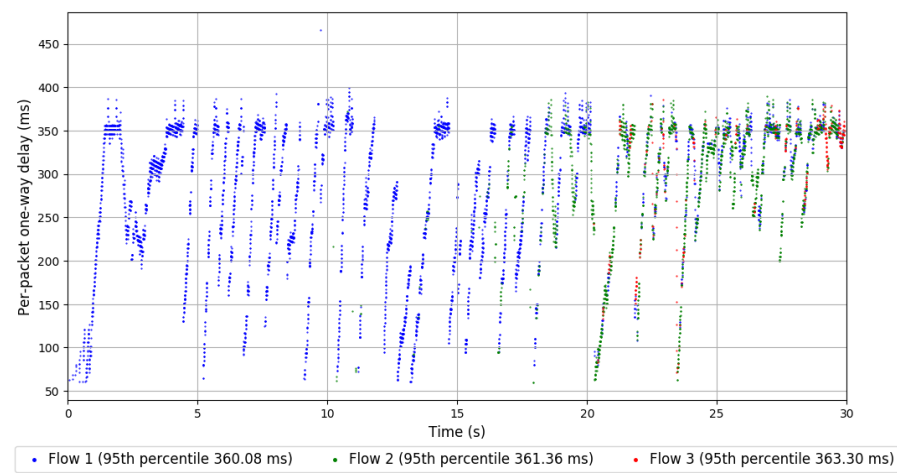
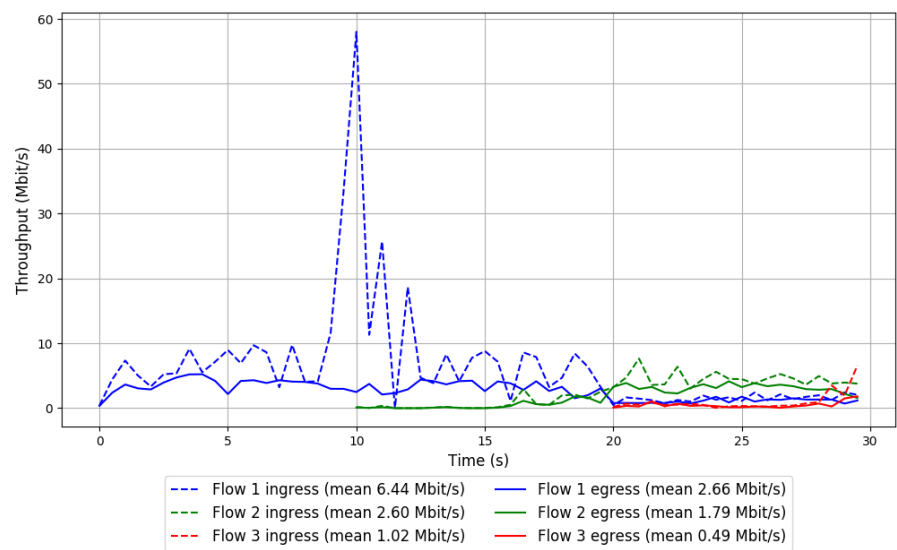


Run 2: Statistics of Verus

Start at: 2018-03-05 20:36:47
End at: 2018-03-05 20:37:17
Local clock offset: 3.149 ms
Remote clock offset: -6.483 ms

Below is generated by plot.py at 2018-03-05 22:05:02
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.00 Mbit/s
95th percentile per-packet one-way delay: 360.742 ms
Loss rate: 53.11%
-- Flow 1:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 360.079 ms
Loss rate: 58.83%
-- Flow 2:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 361.362 ms
Loss rate: 31.87%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 363.296 ms
Loss rate: 52.36%

Run 2: Report of Verus — Data Link

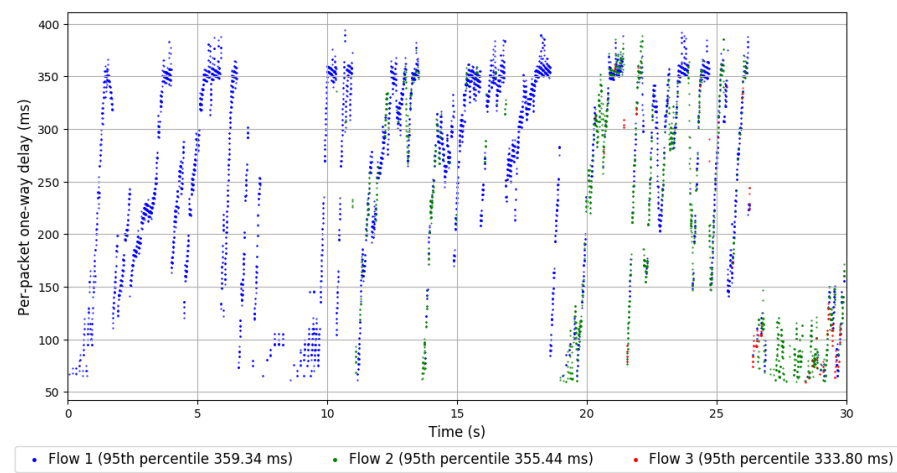
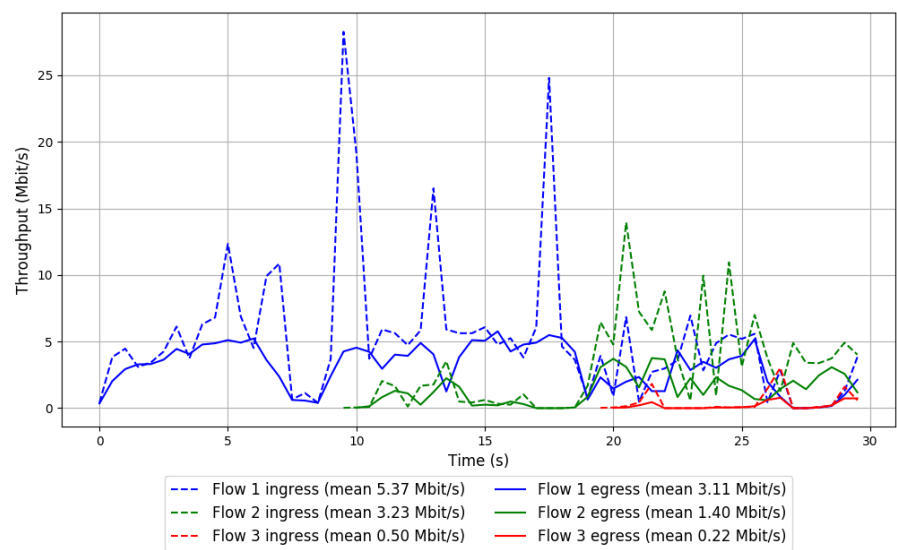


Run 3: Statistics of Verus

Start at: 2018-03-05 20:56:39
End at: 2018-03-05 20:57:09
Local clock offset: 3.624 ms
Remote clock offset: -8.263 ms

```
# Below is generated by plot.py at 2018-03-05 22:05:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 358.888 ms
Loss rate: 46.66%
-- Flow 1:
Average throughput: 3.11 Mbit/s
95th percentile per-packet one-way delay: 359.339 ms
Loss rate: 42.07%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 355.439 ms
Loss rate: 57.32%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 333.796 ms
Loss rate: 57.18%
```

Run 3: Report of Verus — Data Link

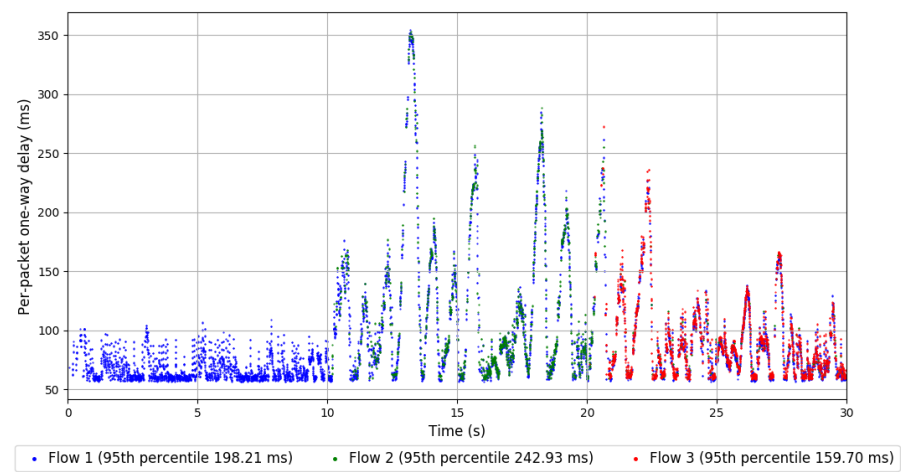
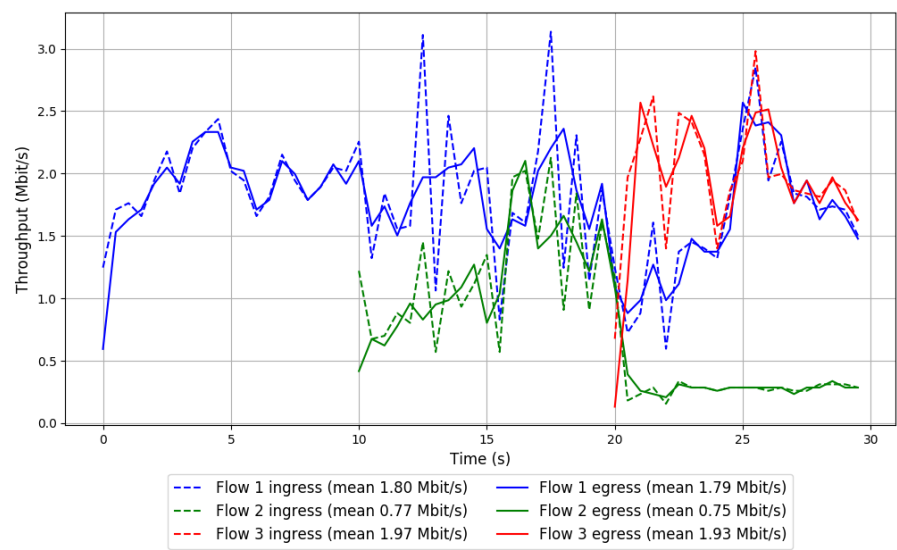


Run 1: Statistics of Copa

Start at: 2018-03-05 20:09:09
End at: 2018-03-05 20:09:39
Local clock offset: 0.336 ms
Remote clock offset: -3.308 ms

Below is generated by plot.py at 2018-03-05 22:05:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.92 Mbit/s
95th percentile per-packet one-way delay: 202.723 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 198.212 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 242.926 ms
Loss rate: 3.15%
-- Flow 3:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 159.702 ms
Loss rate: 2.96%

Run 1: Report of Copa — Data Link

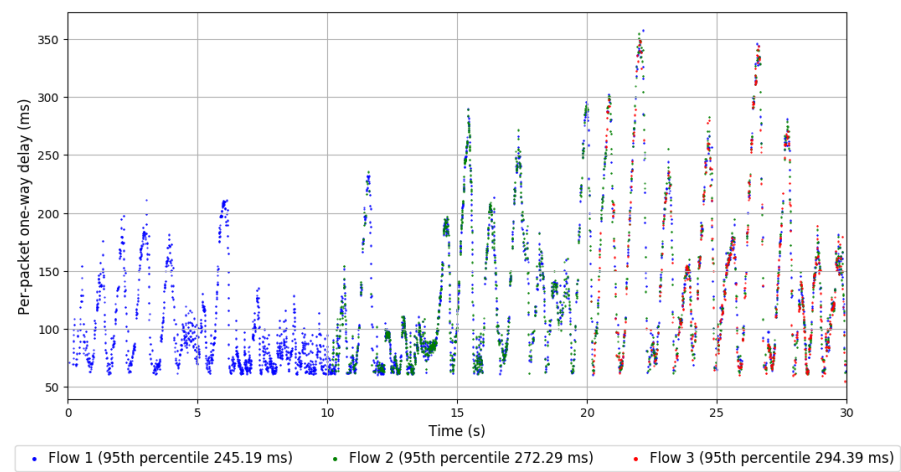
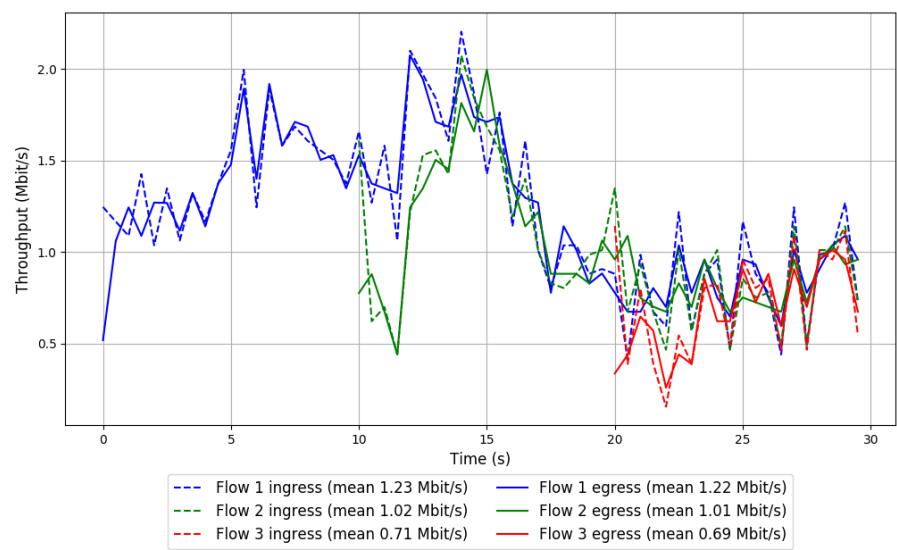


Run 2: Statistics of Copa

Start at: 2018-03-05 20:29:04
End at: 2018-03-05 20:29:34
Local clock offset: 3.049 ms
Remote clock offset: -5.853 ms

Below is generated by plot.py at 2018-03-05 22:05:04
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 260.771 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 245.191 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 272.290 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 294.392 ms
Loss rate: 4.95%

Run 2: Report of Copa — Data Link

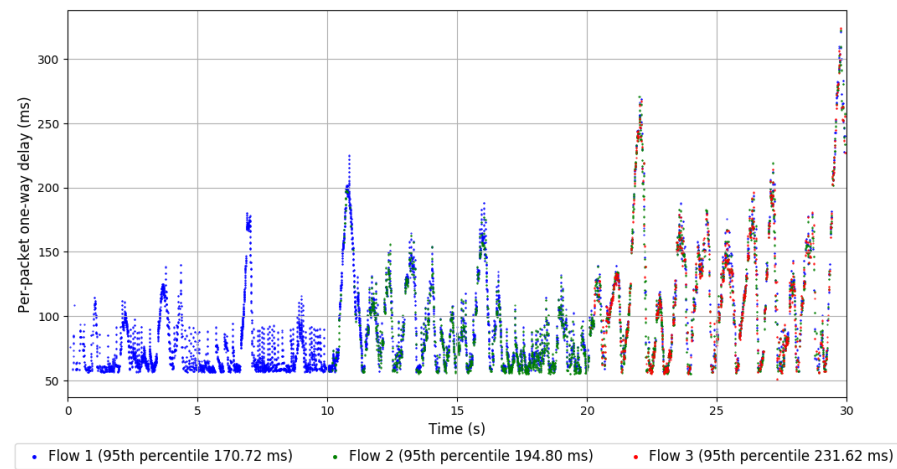
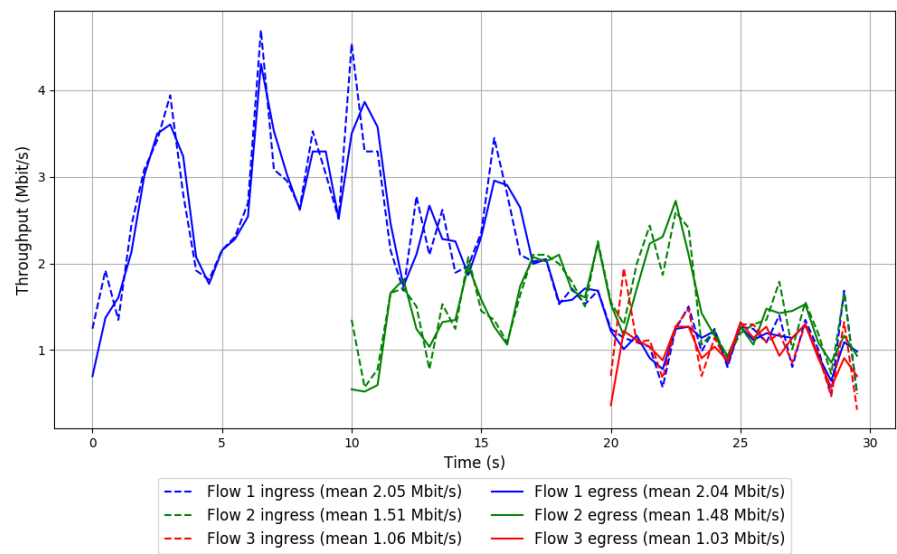


Run 3: Statistics of Copa

Start at: 2018-03-05 20:48:56
End at: 2018-03-05 20:49:26
Local clock offset: 0.552 ms
Remote clock offset: -7.298 ms

Below is generated by plot.py at 2018-03-05 22:05:08
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.36 Mbit/s
95th percentile per-packet one-way delay: 182.155 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 170.718 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 194.802 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 231.615 ms
Loss rate: 4.19%

Run 3: Report of Copa — Data Link

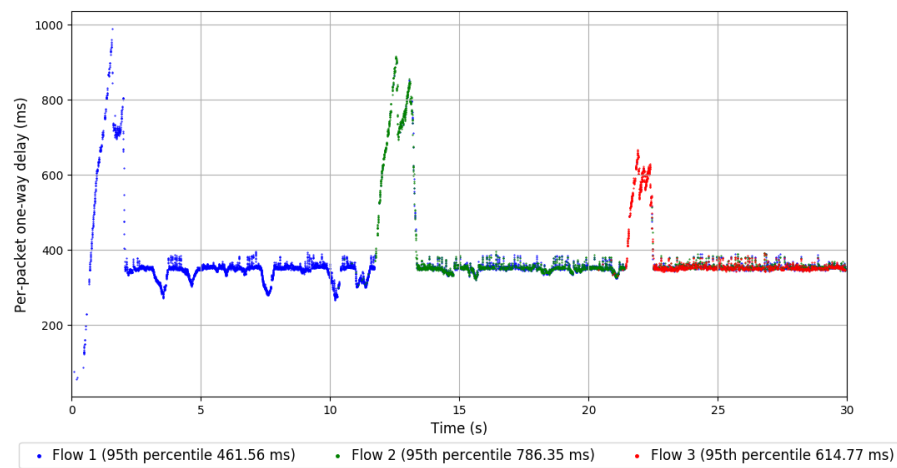
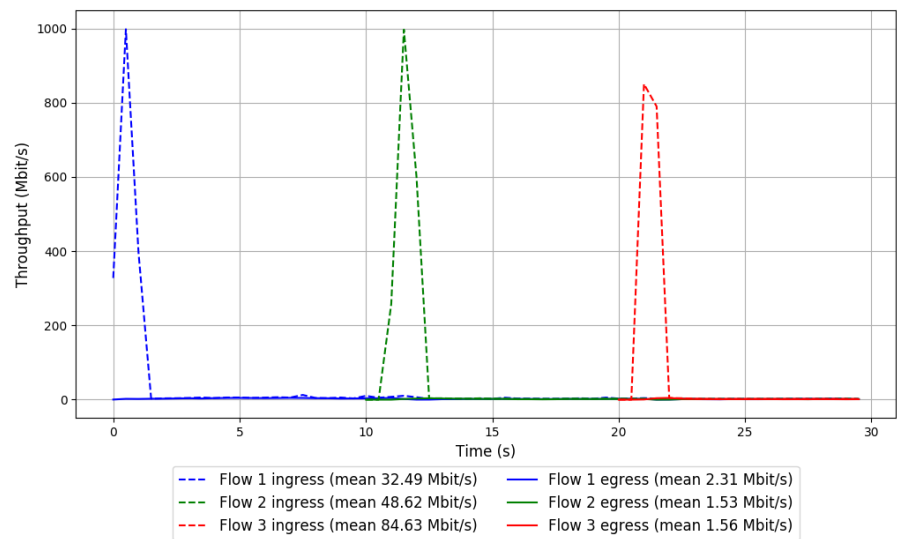


Run 1: Statistics of FillP

Start at: 2018-03-05 20:22:23
End at: 2018-03-05 20:22:53
Local clock offset: 3.123 ms
Remote clock offset: -3.828 ms

Below is generated by plot.py at 2018-03-05 22:05:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 673.652 ms
Loss rate: 95.91%
-- Flow 1:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 461.563 ms
Loss rate: 92.91%
-- Flow 2:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 786.347 ms
Loss rate: 96.91%
-- Flow 3:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 614.771 ms
Loss rate: 98.23%

Run 1: Report of FillP — Data Link

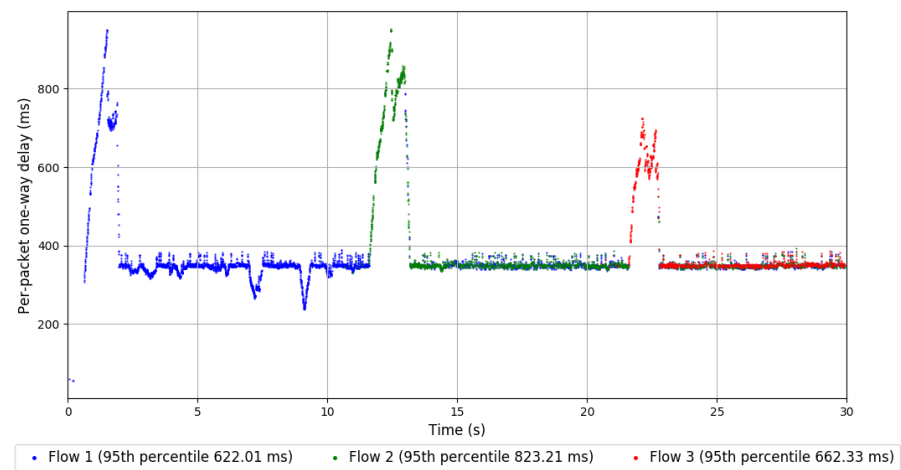
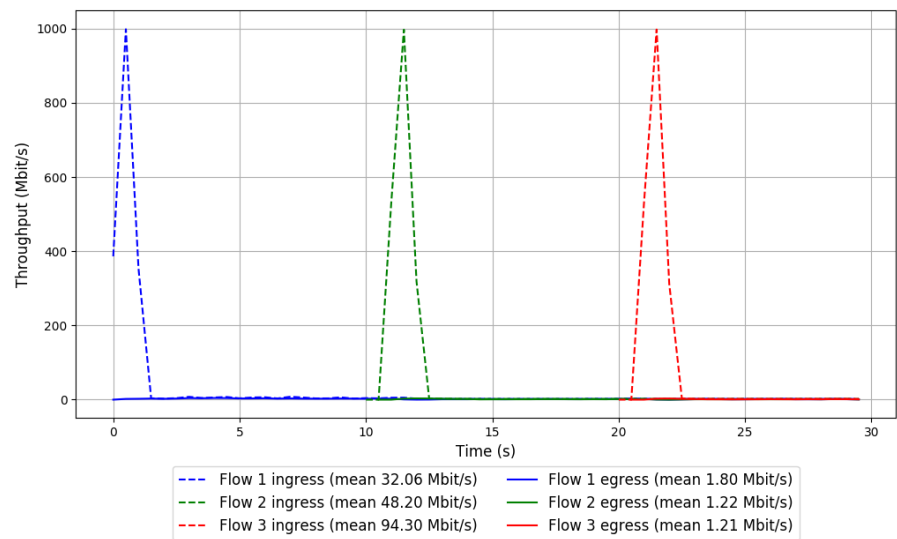


Run 2: Statistics of FillP

Start at: 2018-03-05 20:42:17
End at: 2018-03-05 20:42:47
Local clock offset: 1.746 ms
Remote clock offset: -6.752 ms

Below is generated by plot.py at 2018-03-05 22:05:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 715.608 ms
Loss rate: 96.91%
-- Flow 1:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 622.013 ms
Loss rate: 94.41%
-- Flow 2:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 823.212 ms
Loss rate: 97.56%
-- Flow 3:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 662.330 ms
Loss rate: 98.79%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-03-05 21:02:11

End at: 2018-03-05 21:02:41

Local clock offset: 0.236 ms

Remote clock offset: -2.92 ms

Below is generated by plot.py at 2018-03-05 22:05:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 707.442 ms

Loss rate: 95.30%

-- Flow 1:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 521.407 ms

Loss rate: 91.83%

-- Flow 2:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 826.611 ms

Loss rate: 96.43%

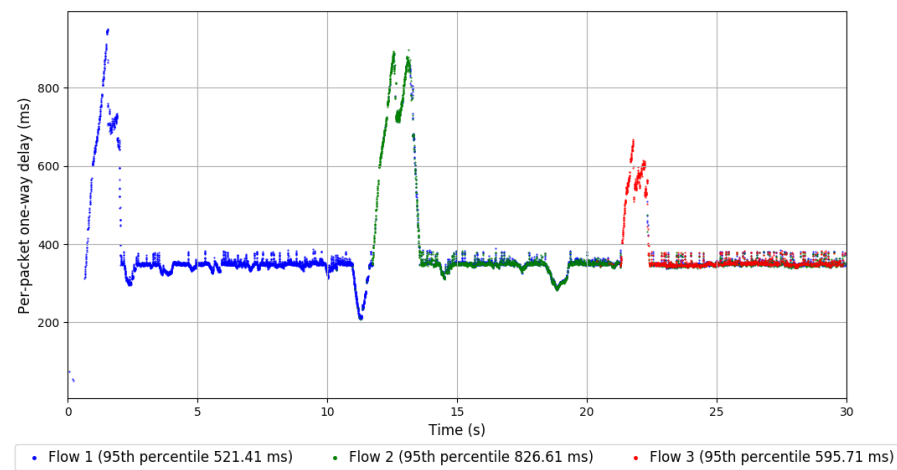
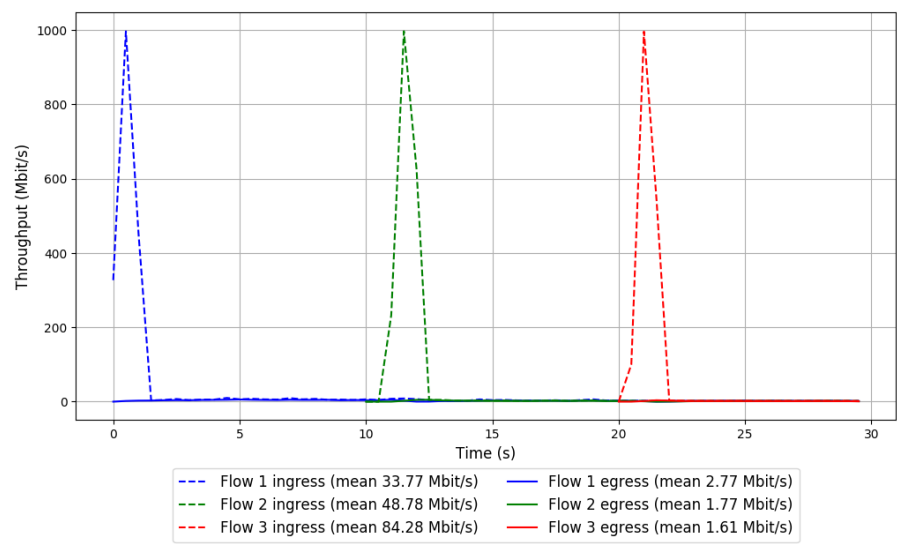
-- Flow 3:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 595.705 ms

Loss rate: 98.17%

Run 3: Report of FillP — Data Link

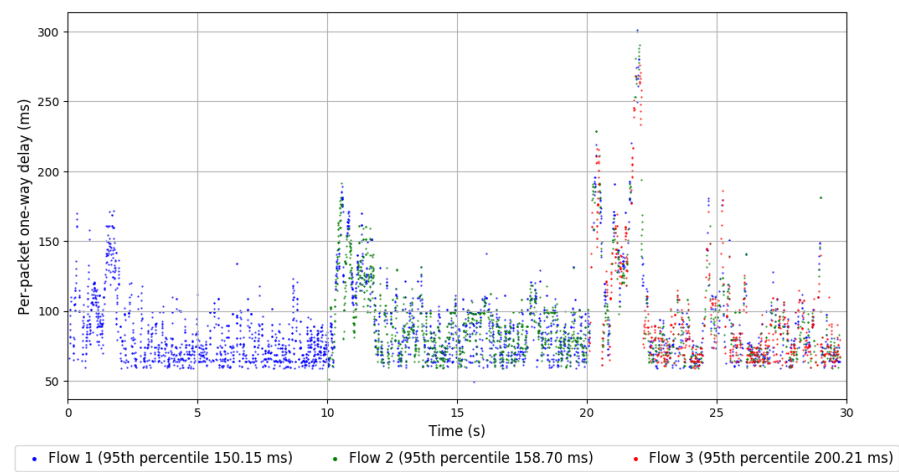
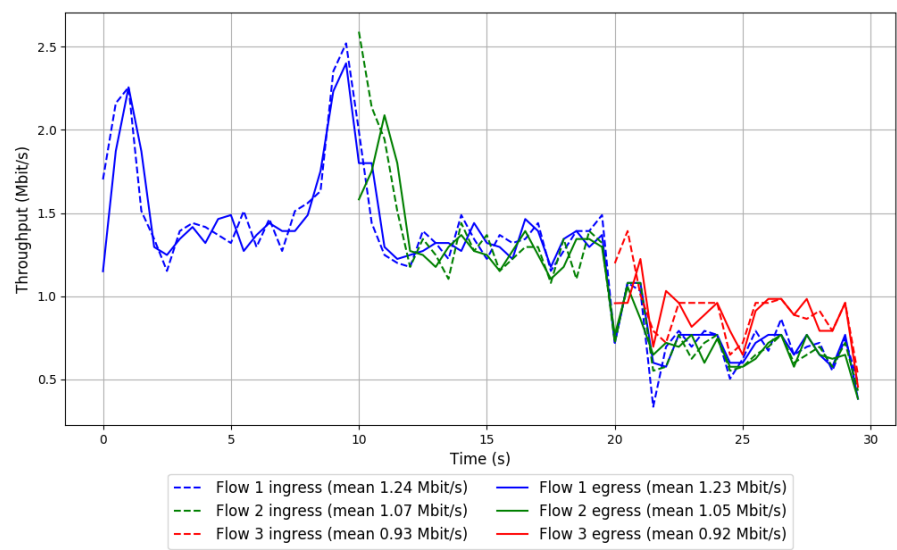


Run 1: Statistics of Indigo-1-32

Start at: 2018-03-05 20:15:46
End at: 2018-03-05 20:16:16
Local clock offset: 1.893 ms
Remote clock offset: -3.349 ms

Below is generated by plot.py at 2018-03-05 22:05:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 159.557 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 150.147 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 158.700 ms
Loss rate: 2.22%
-- Flow 3:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 200.211 ms
Loss rate: 2.64%

Run 1: Report of Indigo-1-32 — Data Link

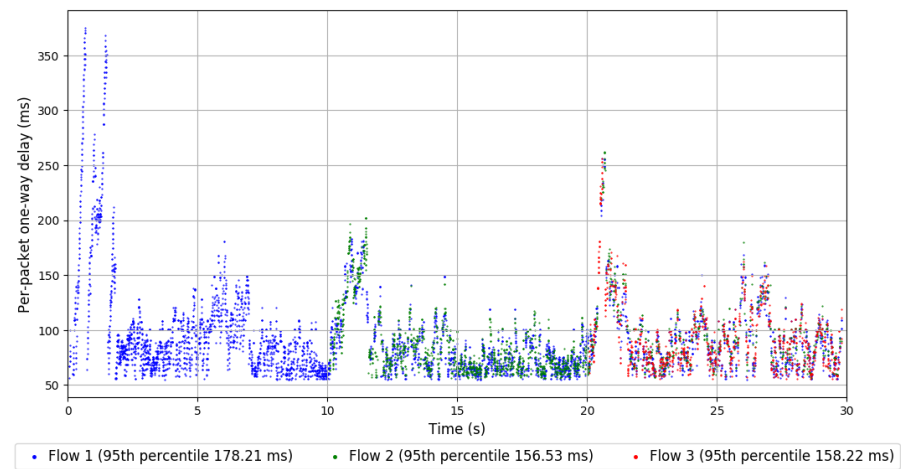
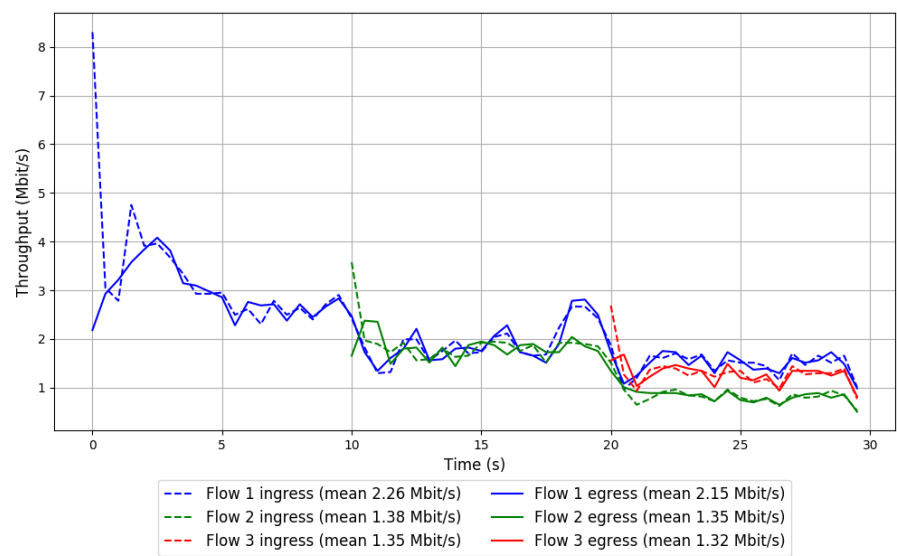


Run 2: Statistics of Indigo-1-32

Start at: 2018-03-05 20:35:41
End at: 2018-03-05 20:36:11
Local clock offset: -0.002 ms
Remote clock offset: -5.656 ms

Below is generated by plot.py at 2018-03-05 22:05:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 166.201 ms
Loss rate: 4.01%
-- Flow 1:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 178.213 ms
Loss rate: 4.98%
-- Flow 2:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 156.533 ms
Loss rate: 2.24%
-- Flow 3:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 158.223 ms
Loss rate: 2.74%

Run 2: Report of Indigo-1-32 — Data Link

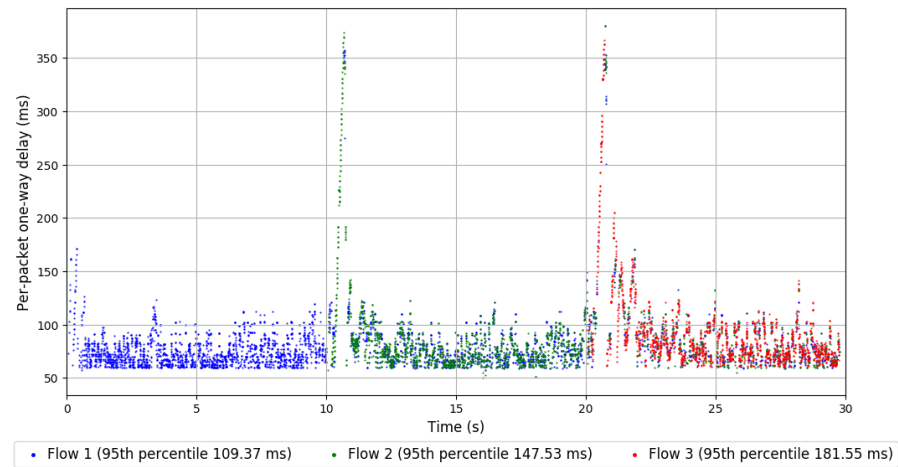
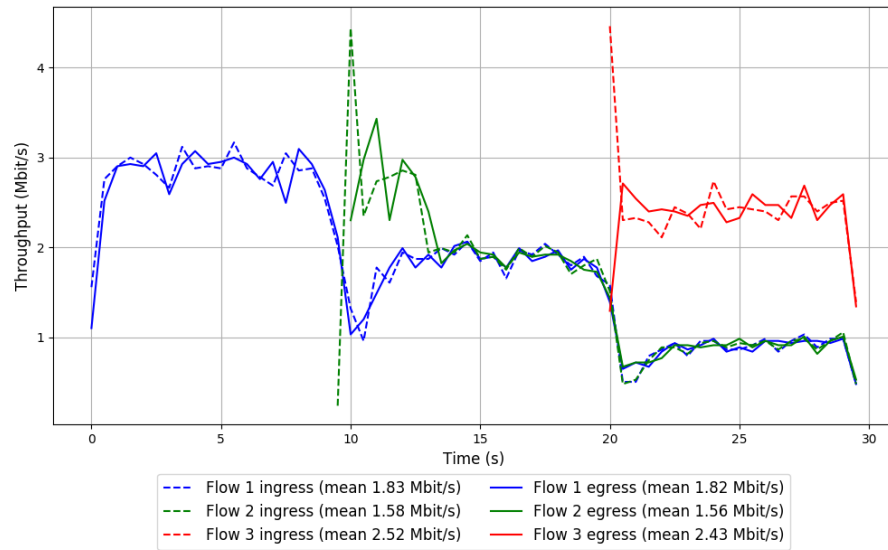


Run 3: Statistics of Indigo-1-32

Start at: 2018-03-05 20:55:33
End at: 2018-03-05 20:56:03
Local clock offset: 3.691 ms
Remote clock offset: -7.336 ms

Below is generated by plot.py at 2018-03-05 22:05:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.65 Mbit/s
95th percentile per-packet one-way delay: 131.977 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 109.368 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 147.530 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 181.550 ms
Loss rate: 4.54%

Run 3: Report of Indigo-1-32 — Data Link

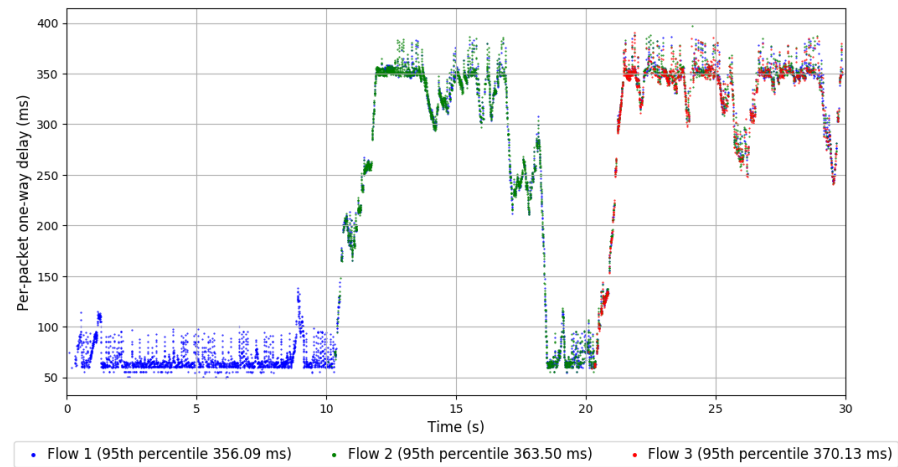
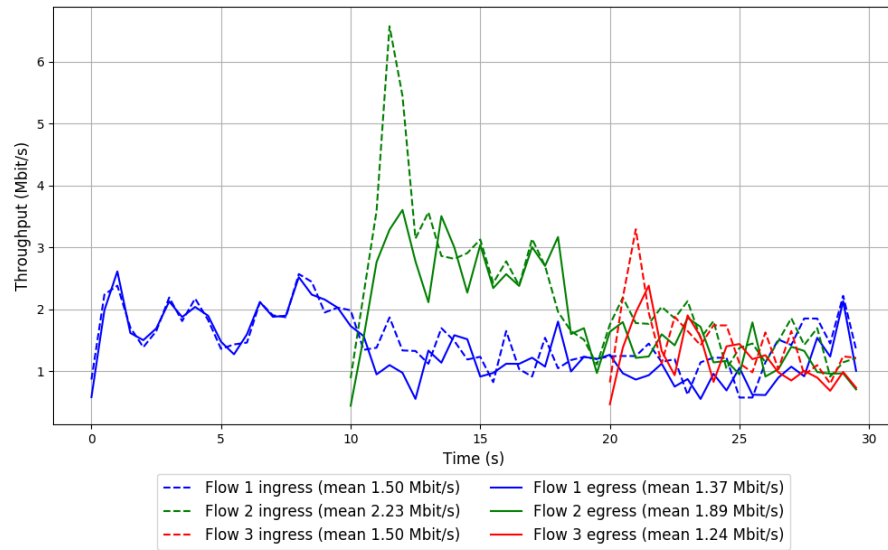


Run 1: Statistics of Vivace-latency

Start at: 2018-03-05 20:23:33
End at: 2018-03-05 20:24:03
Local clock offset: 3.535 ms
Remote clock offset: -3.847 ms

Below is generated by plot.py at 2018-03-05 22:05:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 360.924 ms
Loss rate: 13.26%
-- Flow 1:
Average throughput: 1.37 Mbit/s
95th percentile per-packet one-way delay: 356.087 ms
Loss rate: 9.32%
-- Flow 2:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 363.505 ms
Loss rate: 15.64%
-- Flow 3:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 370.128 ms
Loss rate: 18.14%

Run 1: Report of Vivace-latency — Data Link

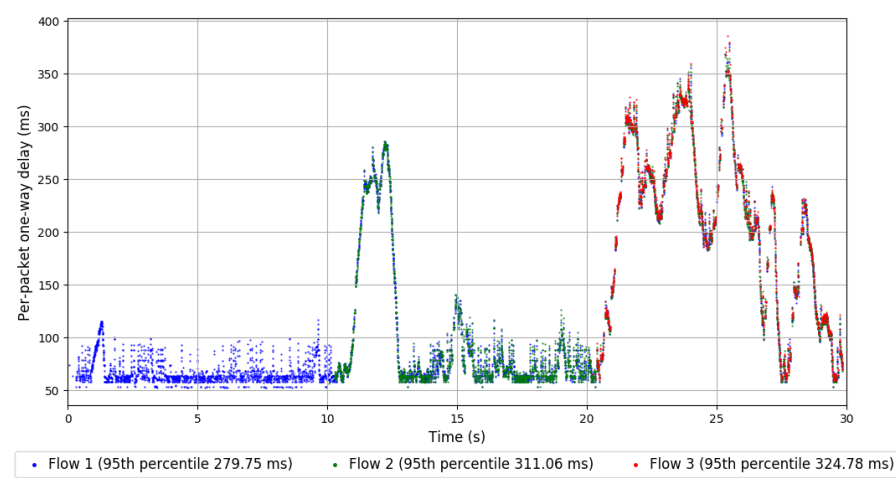
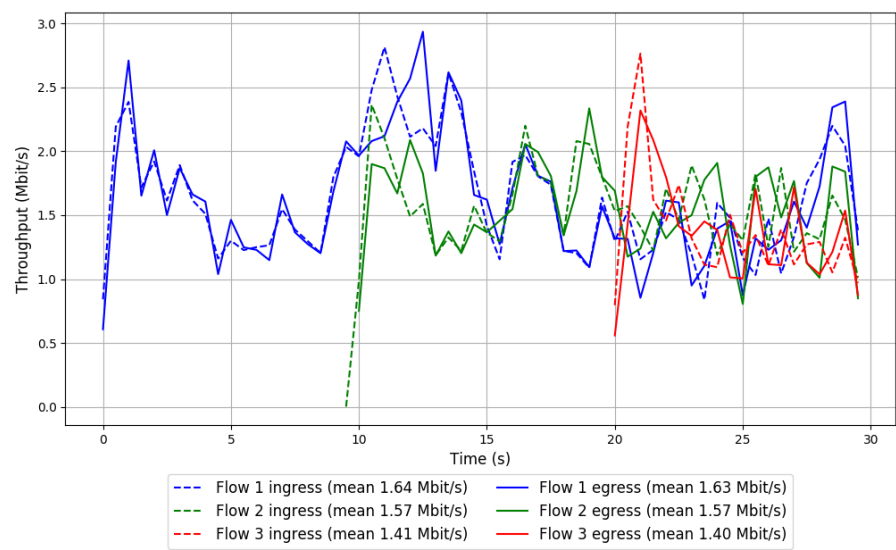


Run 2: Statistics of Vivace-latency

Start at: 2018-03-05 20:43:26
End at: 2018-03-05 20:43:56
Local clock offset: 4.368 ms
Remote clock offset: -7.245 ms

Below is generated by plot.py at 2018-03-05 22:05:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.13 Mbit/s
95th percentile per-packet one-way delay: 306.496 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 279.750 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 311.056 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 324.779 ms
Loss rate: 1.53%

Run 2: Report of Vivace-latency — Data Link

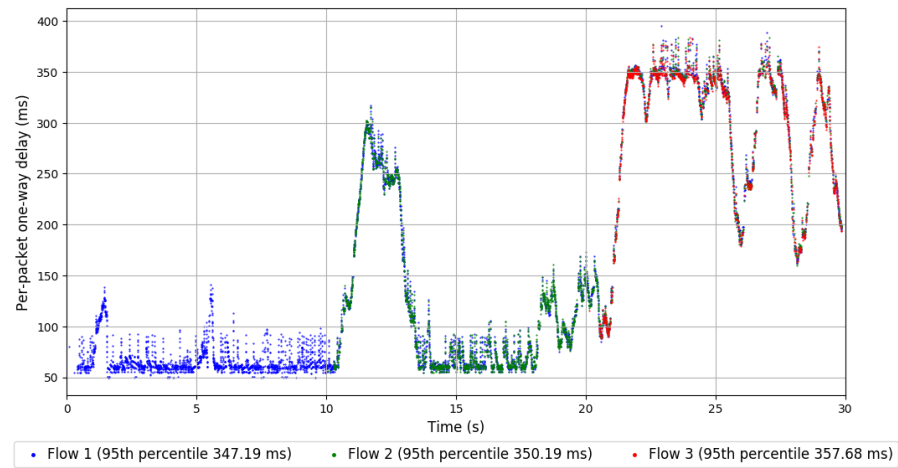
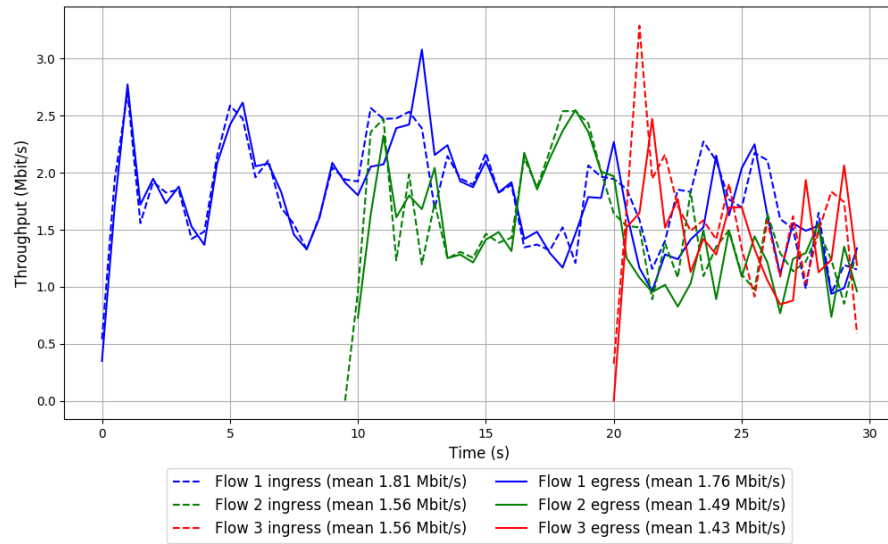


Run 3: Statistics of Vivace-latency

Start at: 2018-03-05 21:03:20
End at: 2018-03-05 21:03:50
Local clock offset: 2.14 ms
Remote clock offset: -0.628 ms

Below is generated by plot.py at 2018-03-05 22:05:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.22 Mbit/s
95th percentile per-packet one-way delay: 350.183 ms
Loss rate: 4.58%
-- Flow 1:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 347.189 ms
Loss rate: 3.05%
-- Flow 2:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 350.194 ms
Loss rate: 4.81%
-- Flow 3:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 357.684 ms
Loss rate: 9.47%

Run 3: Report of Vivace-latency — Data Link

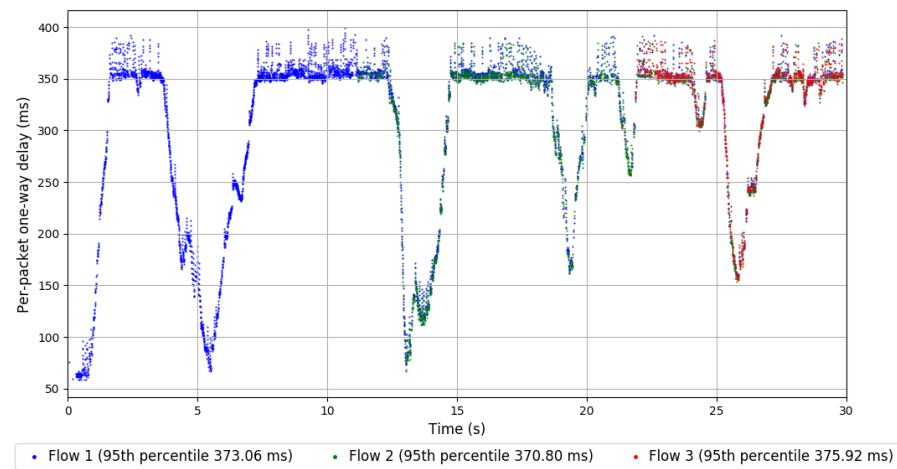
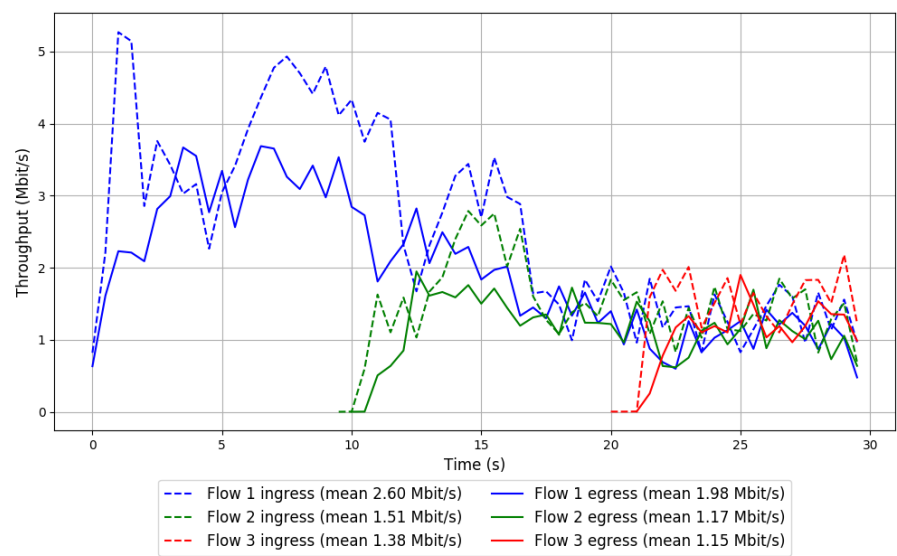


Run 1: Statistics of Vivace-loss

Start at: 2018-03-05 20:14:39
End at: 2018-03-05 20:15:09
Local clock offset: 3.138 ms
Remote clock offset: -3.961 ms

Below is generated by plot.py at 2018-03-05 22:05:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 373.326 ms
Loss rate: 24.25%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 373.057 ms
Loss rate: 23.95%
-- Flow 2:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 370.804 ms
Loss rate: 23.96%
-- Flow 3:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 375.922 ms
Loss rate: 26.63%

Run 1: Report of Vivace-loss — Data Link

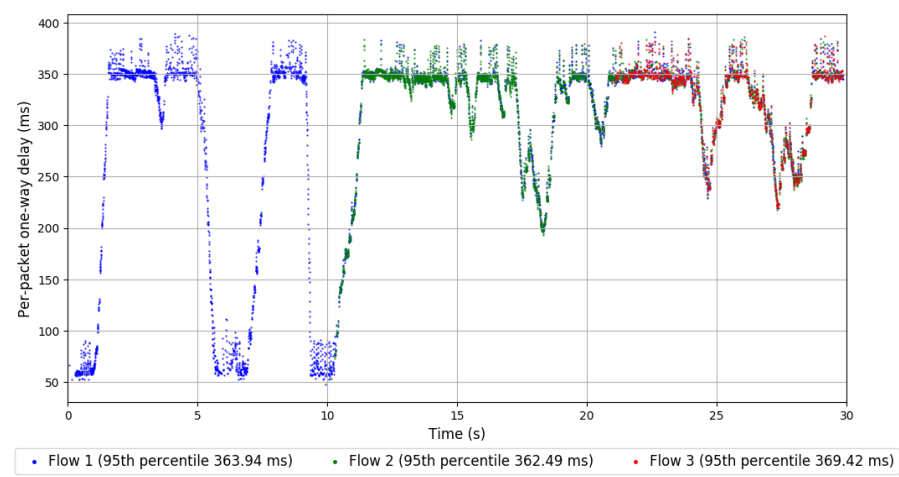
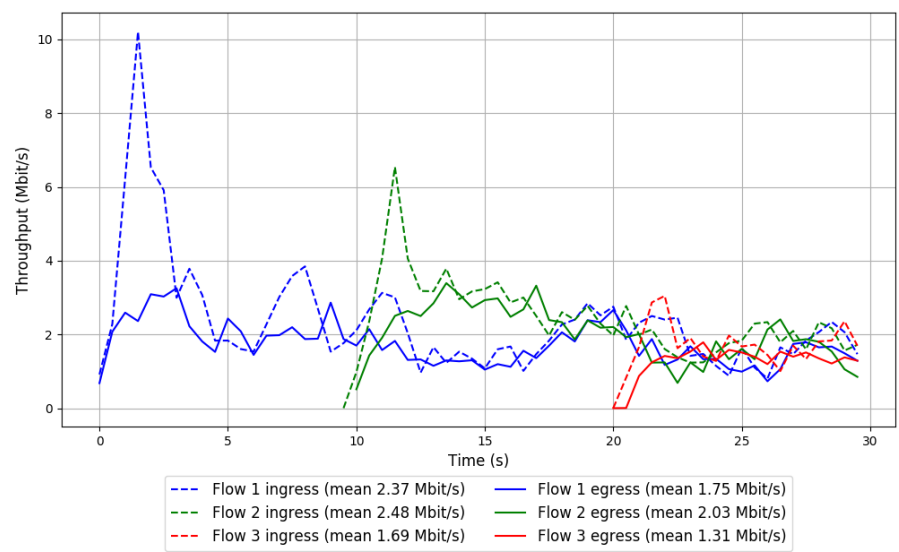


Run 2: Statistics of Vivace-loss

Start at: 2018-03-05 20:34:35
End at: 2018-03-05 20:35:05
Local clock offset: 0.536 ms
Remote clock offset: -6.384 ms

Below is generated by plot.py at 2018-03-05 22:05:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 363.789 ms
Loss rate: 23.40%
-- Flow 1:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 363.944 ms
Loss rate: 26.31%
-- Flow 2:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 362.489 ms
Loss rate: 18.72%
-- Flow 3:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 369.423 ms
Loss rate: 24.95%

Run 2: Report of Vivace-loss — Data Link

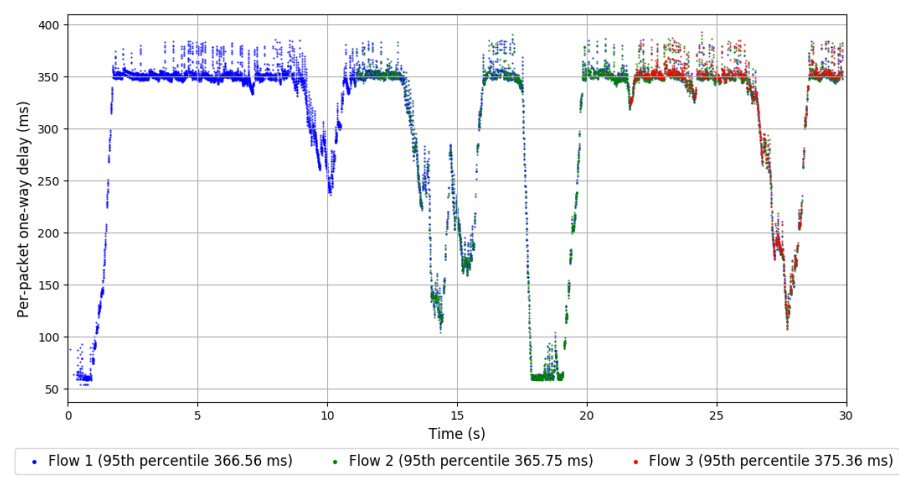
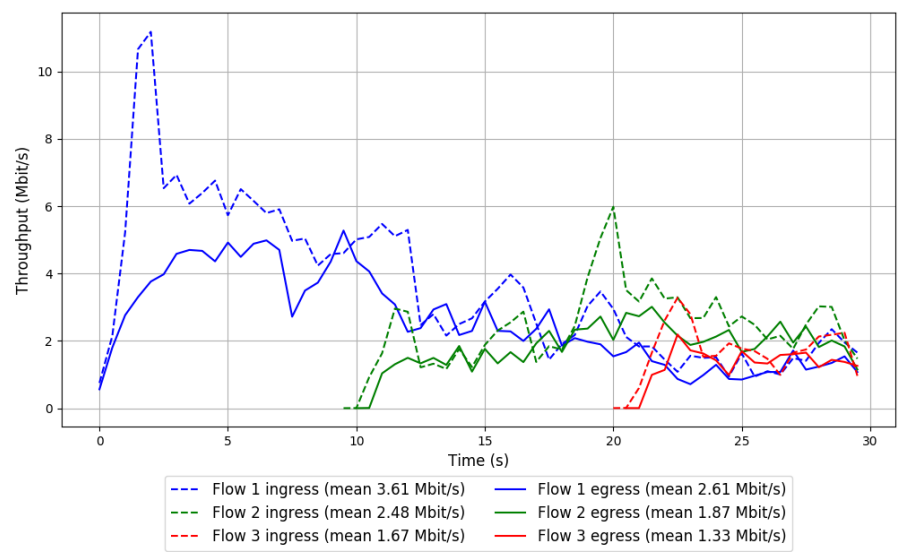


Run 3: Statistics of Vivace-loss

Start at: 2018-03-05 20:54:27
End at: 2018-03-05 20:54:57
Local clock offset: 5.177 ms
Remote clock offset: -6.707 ms

Below is generated by plot.py at 2018-03-05 22:05:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 367.411 ms
Loss rate: 26.96%
-- Flow 1:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 366.563 ms
Loss rate: 27.92%
-- Flow 2:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 365.753 ms
Loss rate: 25.50%
-- Flow 3:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 375.358 ms
Loss rate: 25.03%

Run 3: Report of Vivace-loss — Data Link

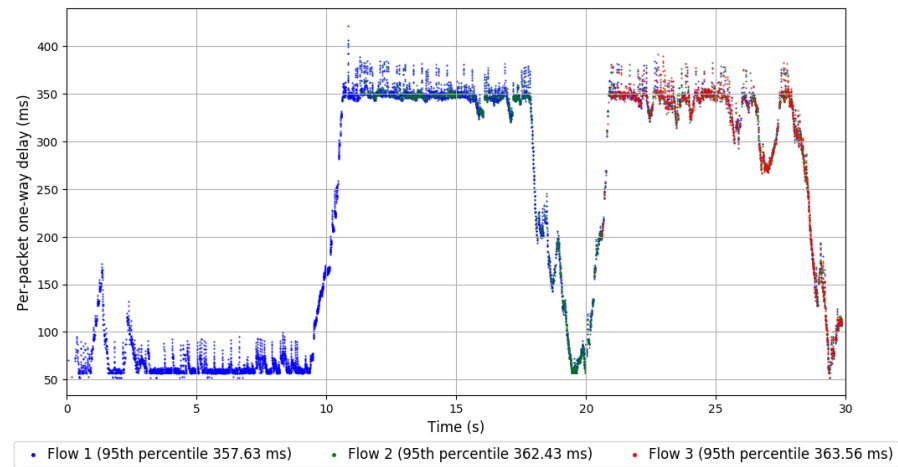
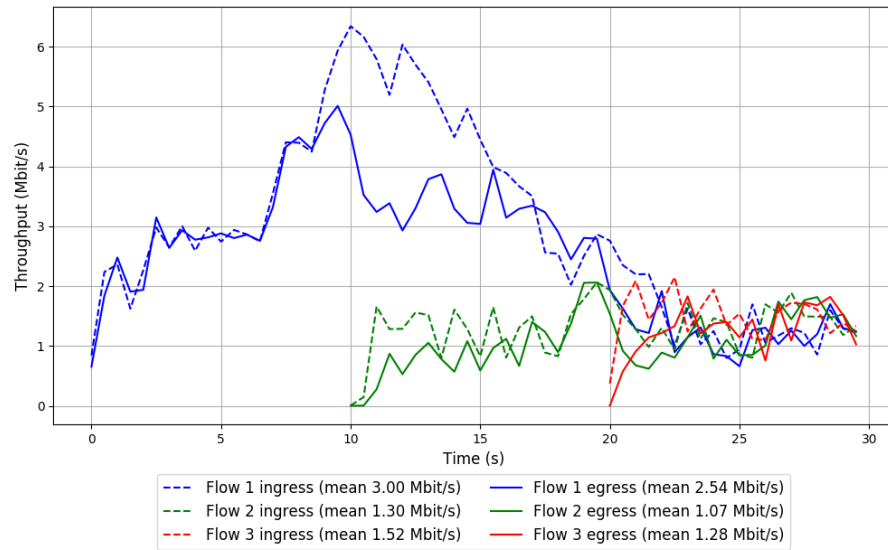


Run 1: Statistics of Vivace-LTE

Start at: 2018-03-05 20:21:17
End at: 2018-03-05 20:21:47
Local clock offset: -0.246 ms
Remote clock offset: -3.772 ms

Below is generated by plot.py at 2018-03-05 22:05:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 359.321 ms
Loss rate: 16.17%
-- Flow 1:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 357.628 ms
Loss rate: 15.34%
-- Flow 2:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 362.430 ms
Loss rate: 18.84%
-- Flow 3:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 363.563 ms
Loss rate: 16.51%

Run 1: Report of Vivace-LTE — Data Link

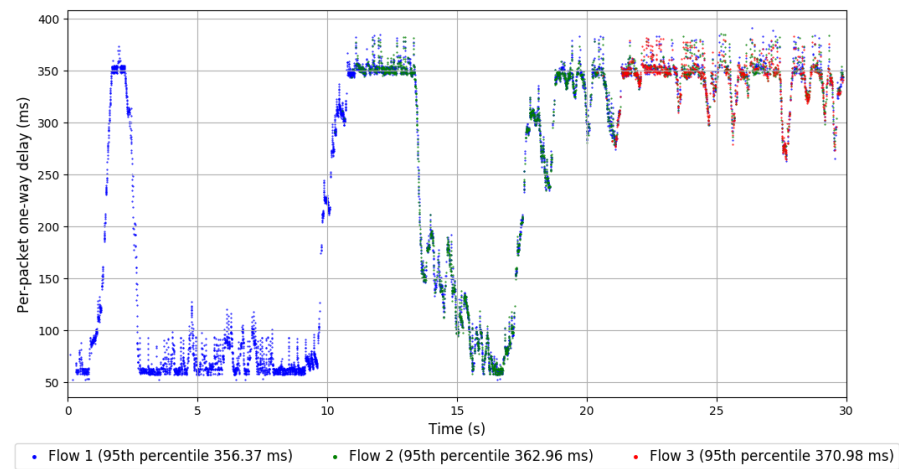
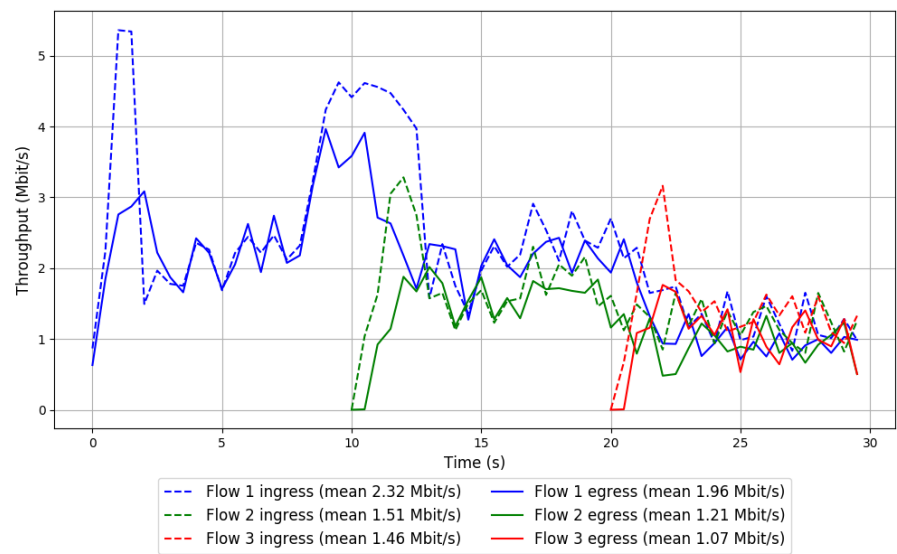


Run 2: Statistics of Vivace-LTE

Start at: 2018-03-05 20:41:11
End at: 2018-03-05 20:41:41
Local clock offset: 3.992 ms
Remote clock offset: -6.263 ms

Below is generated by plot.py at 2018-03-05 22:05:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 359.990 ms
Loss rate: 19.01%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 356.370 ms
Loss rate: 15.92%
-- Flow 2:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 362.958 ms
Loss rate: 21.08%
-- Flow 3:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 370.982 ms
Loss rate: 29.64%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-03-05 21:01:04
End at: 2018-03-05 21:01:34
Local clock offset: 2.612 ms
Remote clock offset: -3.614 ms

Below is generated by plot.py at 2018-03-05 22:05:27
Datalink statistics
-- Total of 3 flows:
Average throughput: 3.71 Mbit/s
95th percentile per-packet one-way delay: 354.971 ms
Loss rate: 12.45%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 353.688 ms
Loss rate: 9.55%
-- Flow 2:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 354.644 ms
Loss rate: 13.37%
-- Flow 3:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 366.853 ms
Loss rate: 24.48%

Run 3: Report of Vivace-LTE — Data Link

