

Pantheon Report

Generated at 2018-03-28 06:41:26 (UTC).

Data path: GCE London Ethernet (*local*) → GCE Tokyo Ethernet (*remote*).

Repeated the test of 17 congestion control schemes 10 times.

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

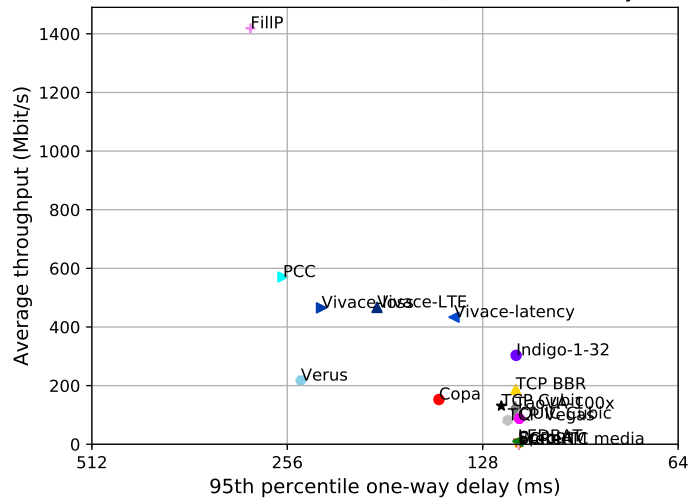
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

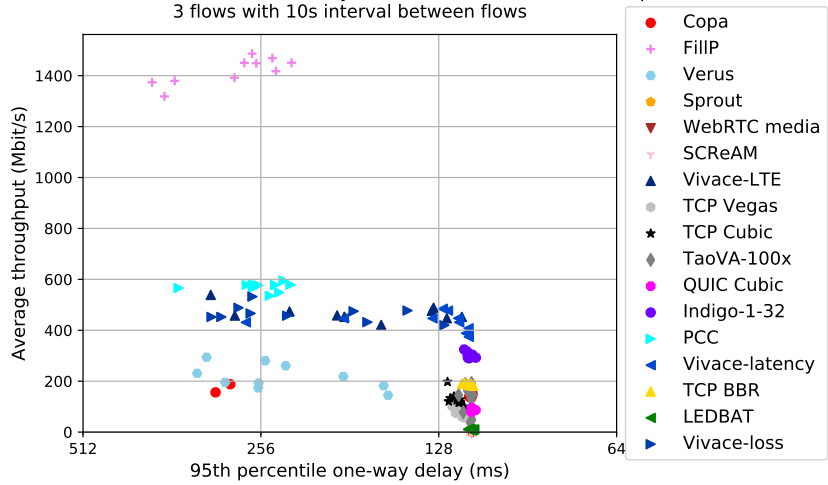
Git summary:

```
branch: master @ 503f51fe03f703a4c0a826a0792a4fead3e7d1b0
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-quick @ 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 @ f271183af822eee5d0031620f4bebf38aedc5581
```

test from GCE London Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from GCE London Ethernet to GCE Tokyo Ethernet, 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	96.43	93.64	86.95	113.62	114.06	113.69	0.00	0.00	0.00
TCP Cubic	10	74.69	58.00	52.45	119.45	118.52	122.39	0.00	0.01	0.08
LEDBAT	10	6.48	4.26	2.01	113.15	112.85	112.51	0.00	0.00	0.00
PCC	10	474.62	126.47	35.64	267.03	224.23	221.74	3.51	2.31	1.92
QUIC Cubic	10	49.93	43.99	26.02	112.18	111.62	111.65	0.00	0.00	0.01
SCReAM	10	0.22	0.21	0.21	112.40	112.29	112.03	0.04	0.00	0.00
WebRTC media	10	0.06	0.06	0.05	112.01	112.50	111.71	0.01	0.01	0.00
Sprout	10	2.51	2.27	1.83	112.60	112.85	112.52	0.00	0.00	0.00
TaoVA-100x	10	28.12	97.71	89.33	112.66	114.95	113.03	0.00	0.01	0.00
TCP Vegas	10	37.30	48.34	37.13	115.37	117.21	116.90	0.11	0.16	0.02
Verus	10	132.66	103.26	51.28	222.48	231.07	237.02	1.19	2.12	3.28
Copa	10	91.97	67.58	92.23	132.20	112.32	132.58	3.15	0.02	2.94
FillP	10	747.11	706.50	608.13	252.94	292.48	317.88	10.05	11.07	12.78
Indigo-1-32	10	154.53	155.74	142.15	113.09	114.39	115.47	0.00	0.00	0.00
Vivace-latency	10	260.89	190.74	139.06	120.91	133.92	149.47	0.00	0.19	0.06
Vivace-loss	10	269.81	219.43	151.11	231.87	159.84	192.54	0.85	0.68	1.02
Vivace-LTE	10	284.44	207.79	134.58	186.44	144.42	148.96	0.31	0.43	0.00

Run 1: Statistics of TCP BBR

Start at: 2018-03-27 23:37:49

End at: 2018-03-27 23:38:19

Below is generated by plot.py at 2018-03-28 04:55:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.80 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 97.67 Mbit/s

95th percentile per-packet one-way delay: 113.044 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.42 Mbit/s

95th percentile per-packet one-way delay: 114.505 ms

Loss rate: 0.00%

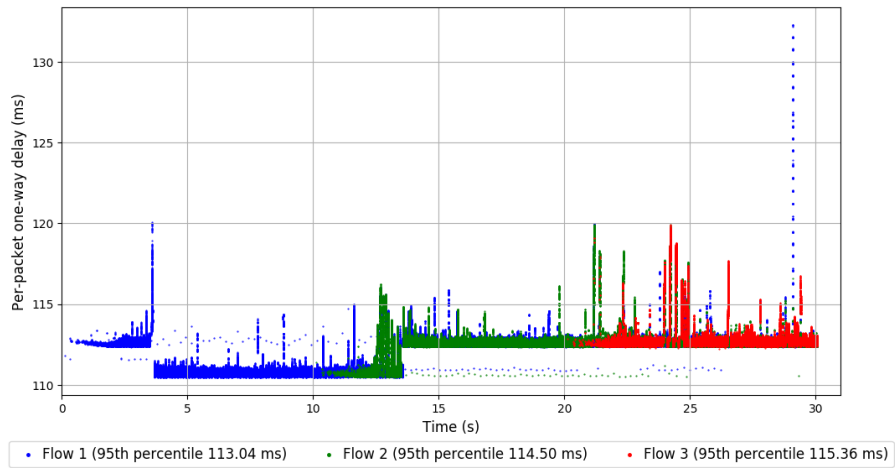
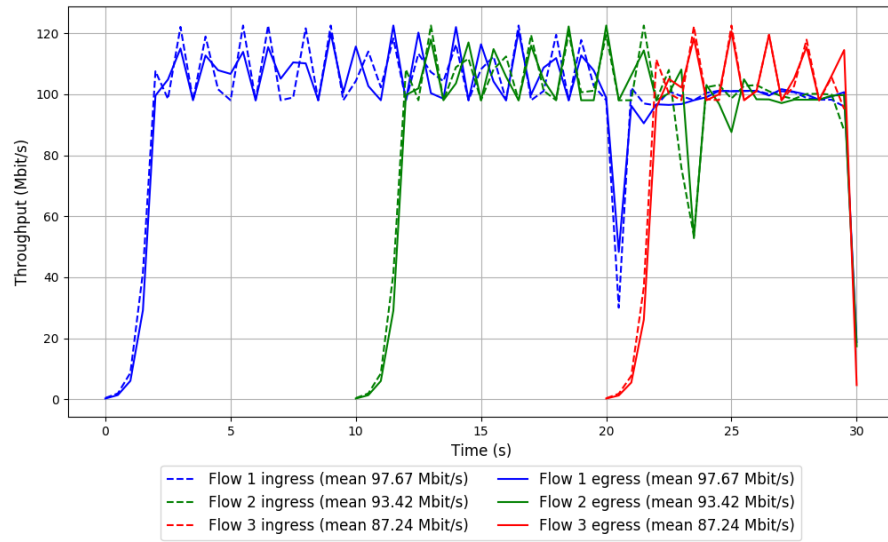
-- Flow 3:

Average throughput: 87.24 Mbit/s

95th percentile per-packet one-way delay: 115.356 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-03-27 23:56:59

End at: 2018-03-27 23:57:29

Below is generated by plot.py at 2018-03-28 04:55:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.90 Mbit/s

95th percentile per-packet one-way delay: 113.053 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 95.22 Mbit/s

95th percentile per-packet one-way delay: 113.005 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 96.93 Mbit/s

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

Loss rate: 0.00%

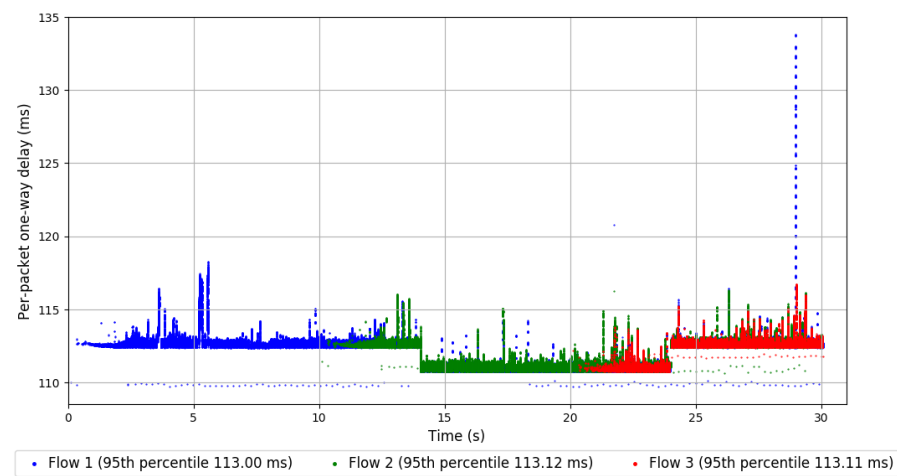
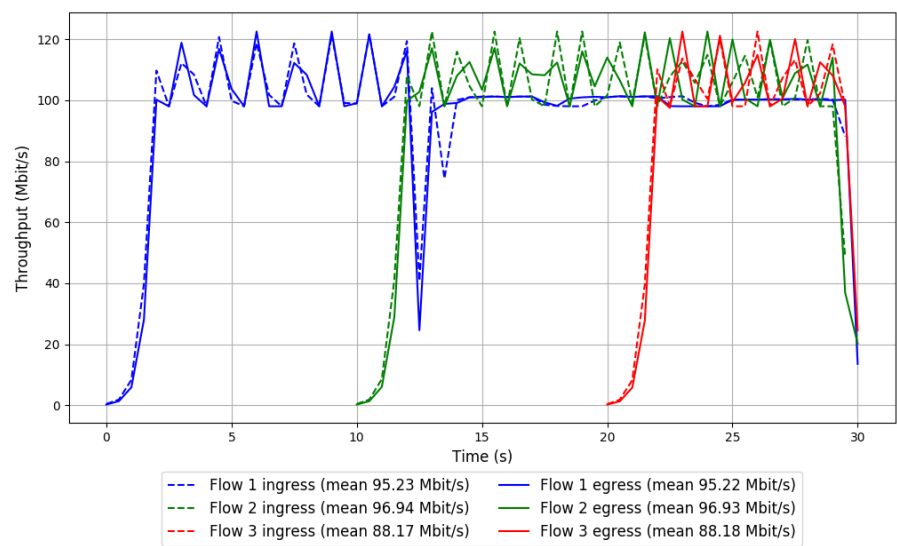
-- Flow 3:

Average throughput: 88.18 Mbit/s

95th percentile per-packet one-way delay: 113.105 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-03-28 00:16:20

End at: 2018-03-28 00:16:50

Below is generated by plot.py at 2018-03-28 04:55:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.86 Mbit/s

95th percentile per-packet one-way delay: 113.986 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 97.87 Mbit/s

95th percentile per-packet one-way delay: 113.817 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 91.63 Mbit/s

95th percentile per-packet one-way delay: 113.381 ms

Loss rate: 0.02%

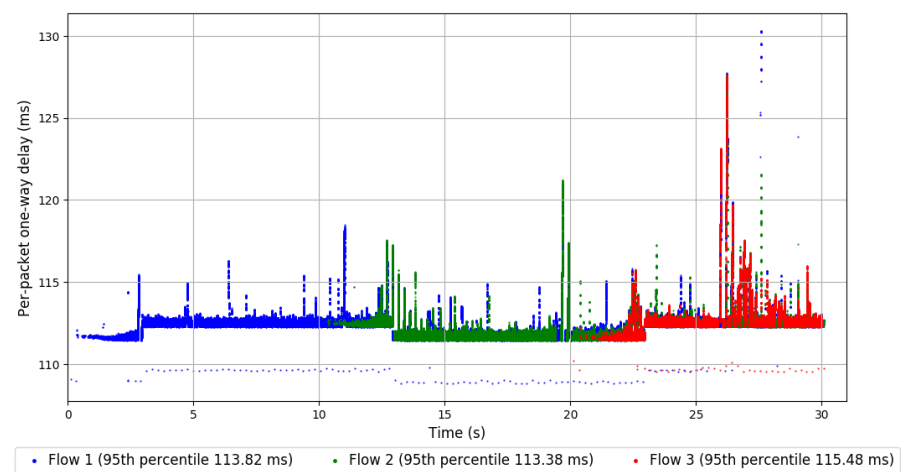
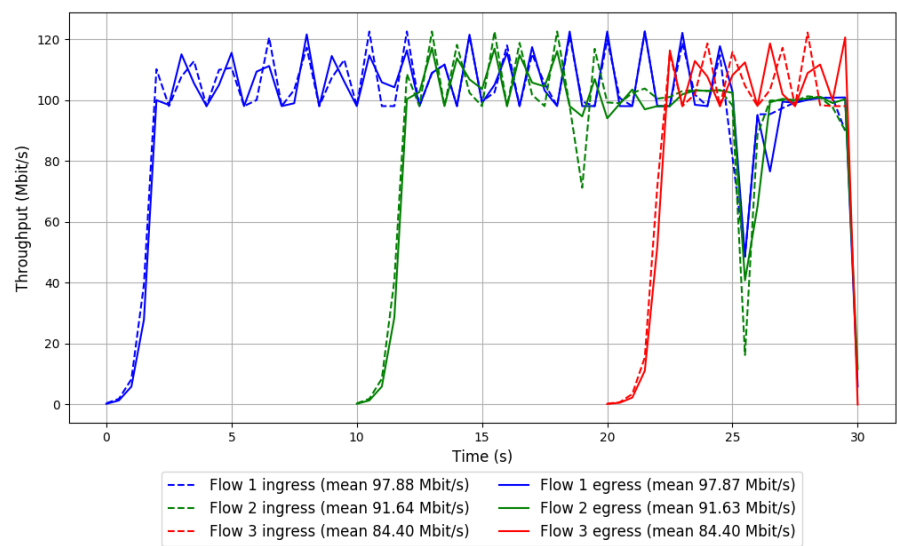
-- Flow 3:

Average throughput: 84.40 Mbit/s

95th percentile per-packet one-way delay: 115.476 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-03-28 00:35:34

End at: 2018-03-28 00:36:04

Below is generated by plot.py at 2018-03-28 04:55:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.50 Mbit/s

95th percentile per-packet one-way delay: 111.918 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 93.97 Mbit/s

95th percentile per-packet one-way delay: 111.818 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.11 Mbit/s

95th percentile per-packet one-way delay: 112.090 ms

Loss rate: 0.00%

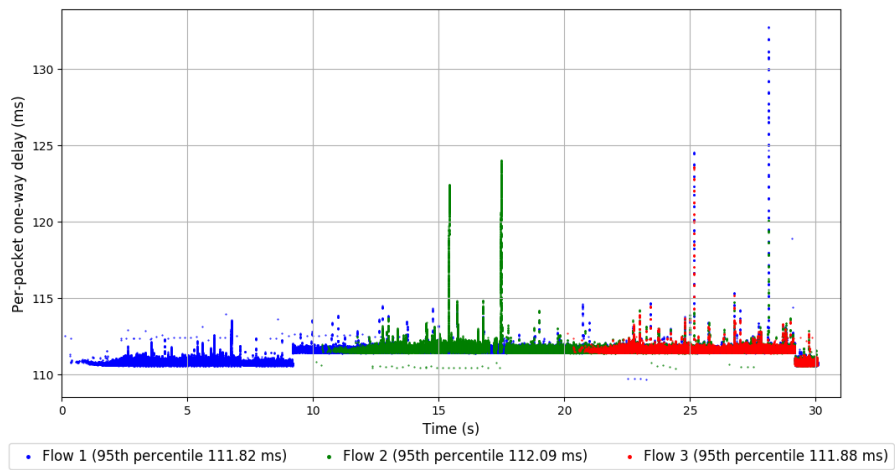
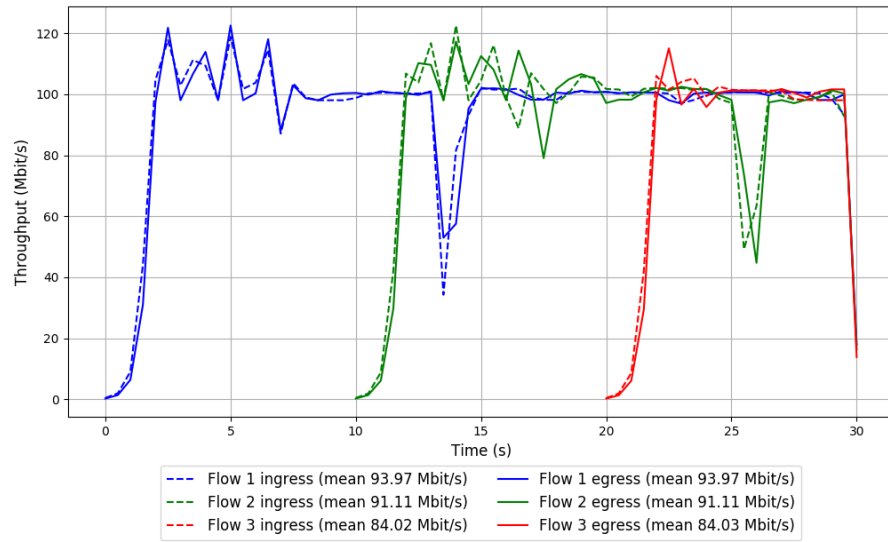
-- Flow 3:

Average throughput: 84.03 Mbit/s

95th percentile per-packet one-way delay: 111.882 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-03-28 00:54:39

End at: 2018-03-28 00:55:09

Below is generated by plot.py at 2018-03-28 04:55:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 192.03 Mbit/s

95th percentile per-packet one-way delay: 115.605 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 98.06 Mbit/s

95th percentile per-packet one-way delay: 115.683 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.15 Mbit/s

95th percentile per-packet one-way delay: 116.215 ms

Loss rate: 0.00%

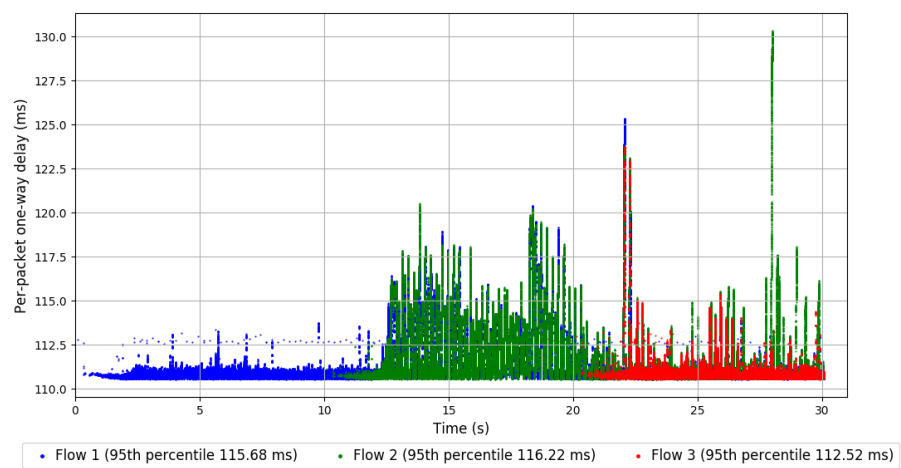
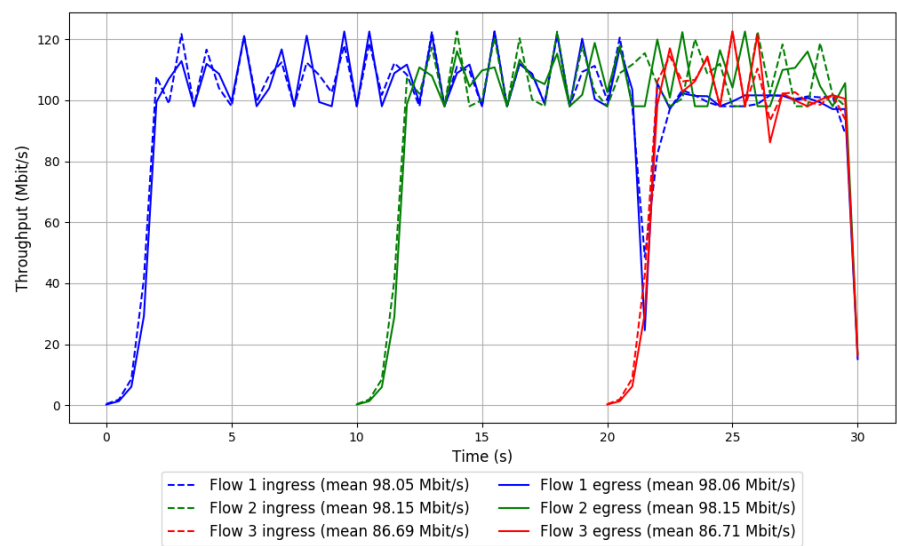
-- Flow 3:

Average throughput: 86.71 Mbit/s

95th percentile per-packet one-way delay: 112.518 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-03-28 01:13:48

End at: 2018-03-28 01:14:18

Below is generated by plot.py at 2018-03-28 04:55:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.47 Mbit/s

95th percentile per-packet one-way delay: 113.388 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 92.81 Mbit/s

95th percentile per-packet one-way delay: 113.072 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 94.68 Mbit/s

95th percentile per-packet one-way delay: 113.184 ms

Loss rate: 0.00%

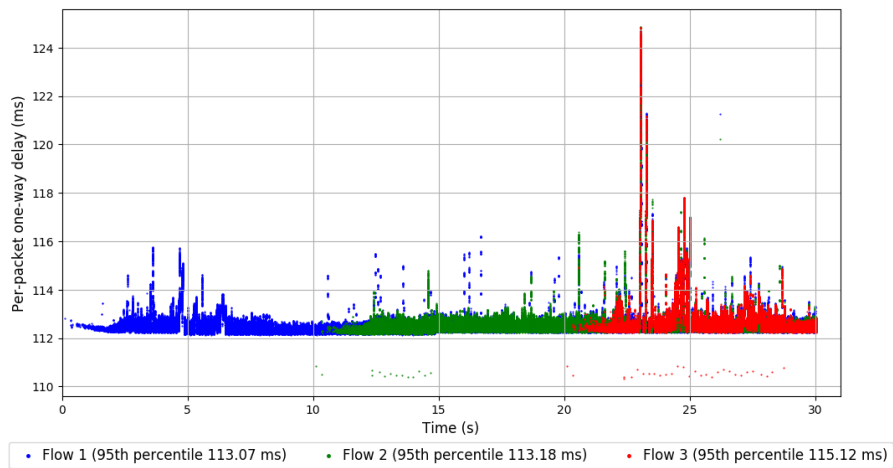
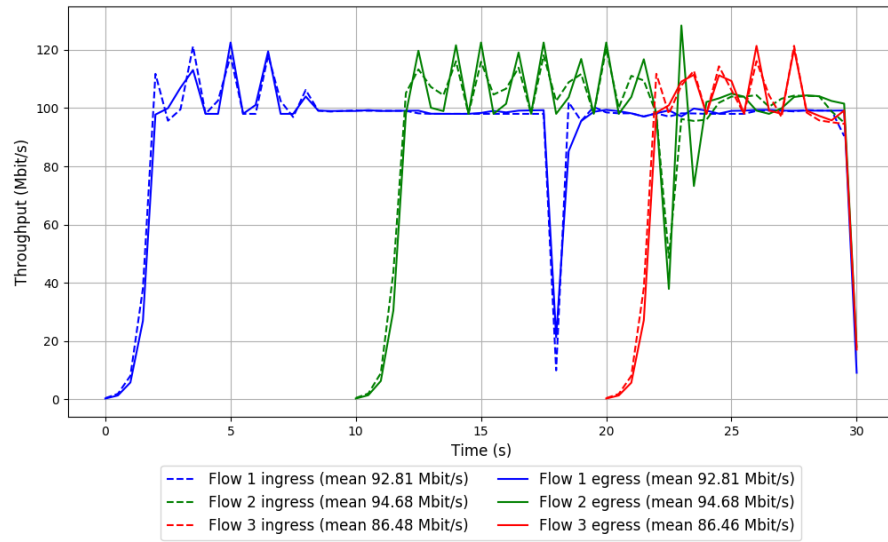
-- Flow 3:

Average throughput: 86.46 Mbit/s

95th percentile per-packet one-way delay: 115.119 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-03-28 01:32:49

End at: 2018-03-28 01:33:19

Below is generated by plot.py at 2018-03-28 04:55:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.02 Mbit/s

95th percentile per-packet one-way delay: 113.246 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 98.62 Mbit/s

95th percentile per-packet one-way delay: 113.155 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.34 Mbit/s

95th percentile per-packet one-way delay: 113.315 ms

Loss rate: 0.01%

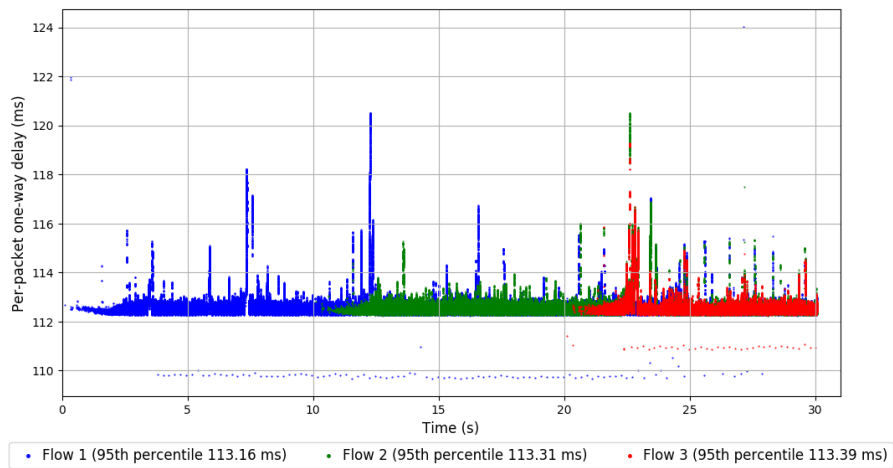
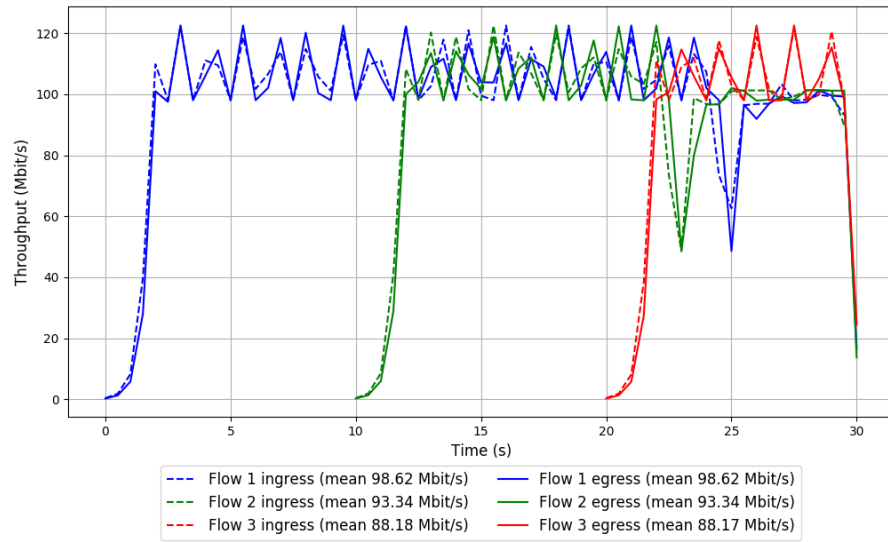
-- Flow 3:

Average throughput: 88.17 Mbit/s

95th percentile per-packet one-way delay: 113.393 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-03-28 01:52:18

End at: 2018-03-28 01:52:48

Below is generated by plot.py at 2018-03-28 04:55:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.85 Mbit/s

95th percentile per-packet one-way delay: 117.000 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 100.18 Mbit/s

95th percentile per-packet one-way delay: 116.574 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 90.95 Mbit/s

95th percentile per-packet one-way delay: 118.531 ms

Loss rate: 0.00%

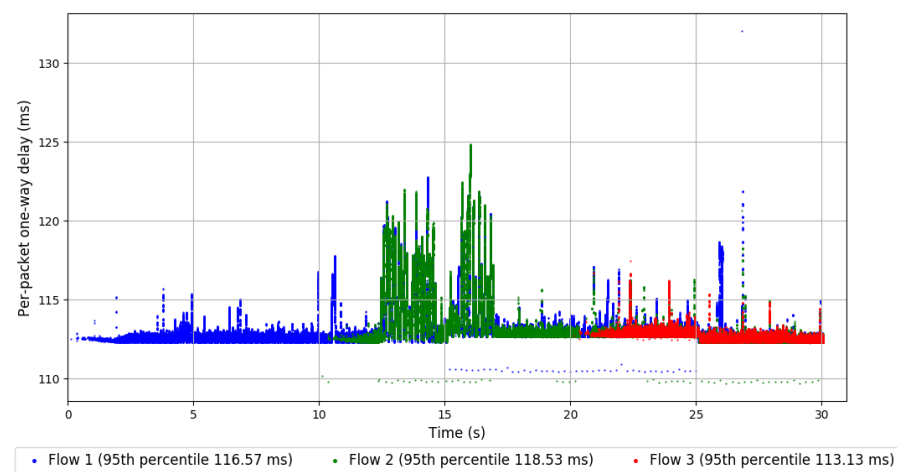
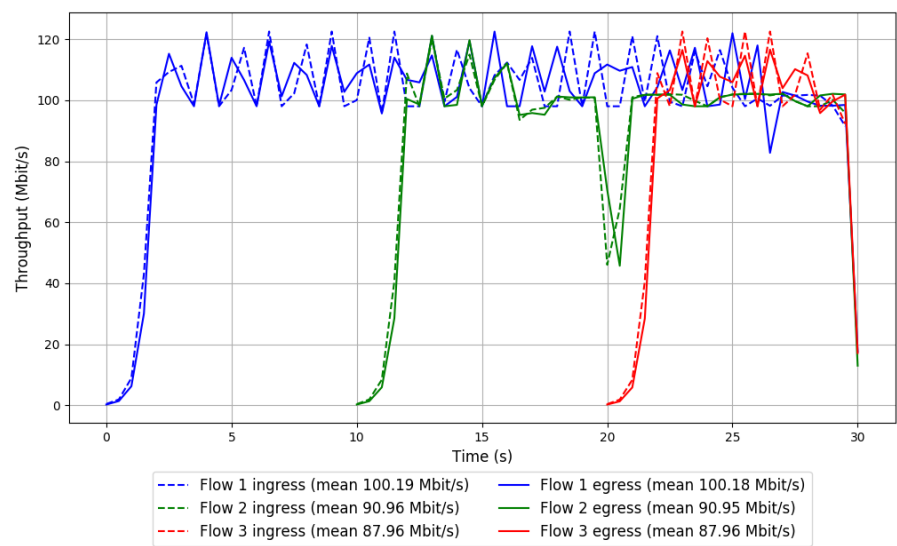
-- Flow 3:

Average throughput: 87.96 Mbit/s

95th percentile per-packet one-way delay: 113.131 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-03-28 02:11:39

End at: 2018-03-28 02:12:09

Below is generated by plot.py at 2018-03-28 04:58:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.27 Mbit/s

95th percentile per-packet one-way delay: 114.284 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 95.25 Mbit/s

95th percentile per-packet one-way delay: 114.179 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 96.43 Mbit/s

95th percentile per-packet one-way delay: 114.815 ms

Loss rate: 0.00%

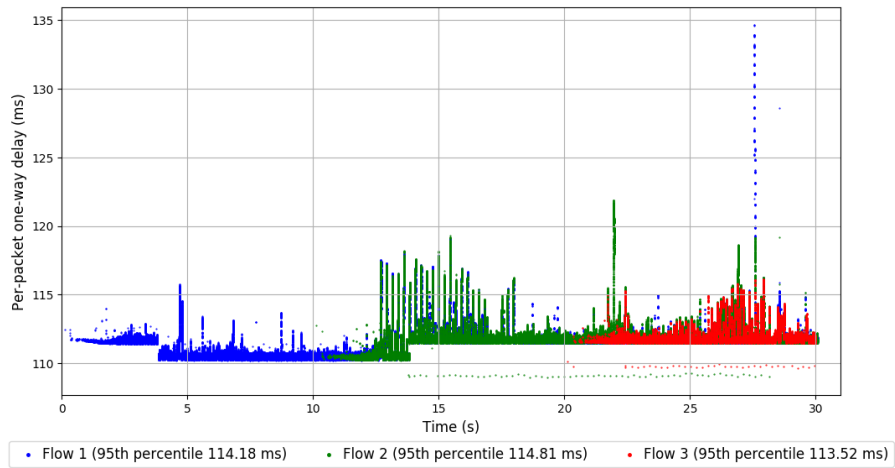
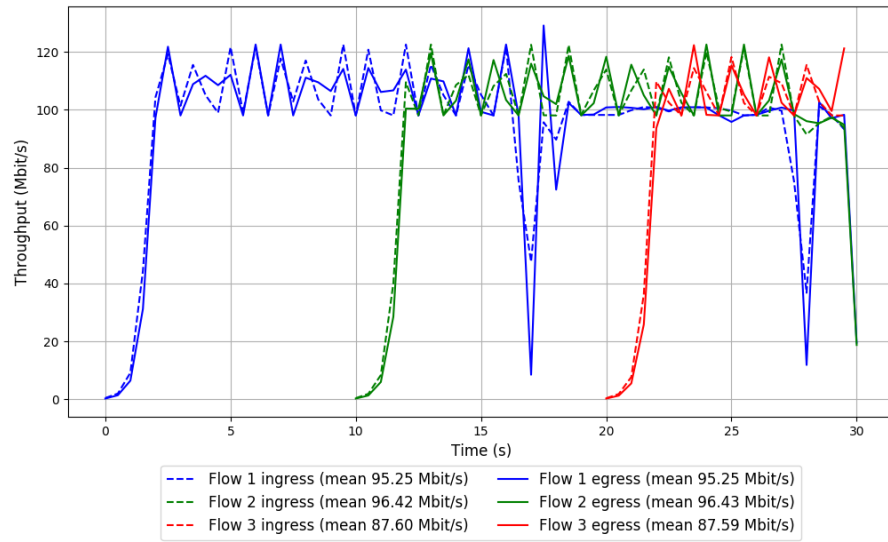
-- Flow 3:

Average throughput: 87.59 Mbit/s

95th percentile per-packet one-way delay: 113.515 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-03-28 02:30:57

End at: 2018-03-28 02:31:27

Below is generated by plot.py at 2018-03-28 04:58:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.66 Mbit/s

95th percentile per-packet one-way delay: 112.040 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.61 Mbit/s

95th percentile per-packet one-way delay: 111.895 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 89.79 Mbit/s

95th percentile per-packet one-way delay: 111.459 ms

Loss rate: 0.00%

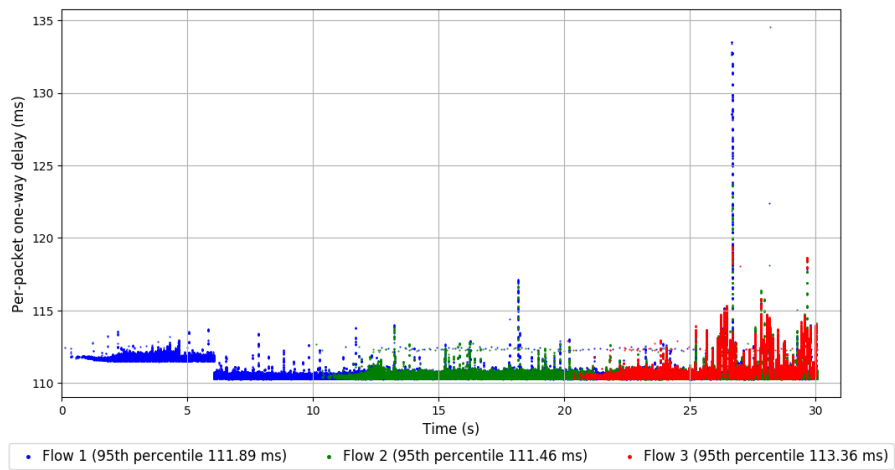
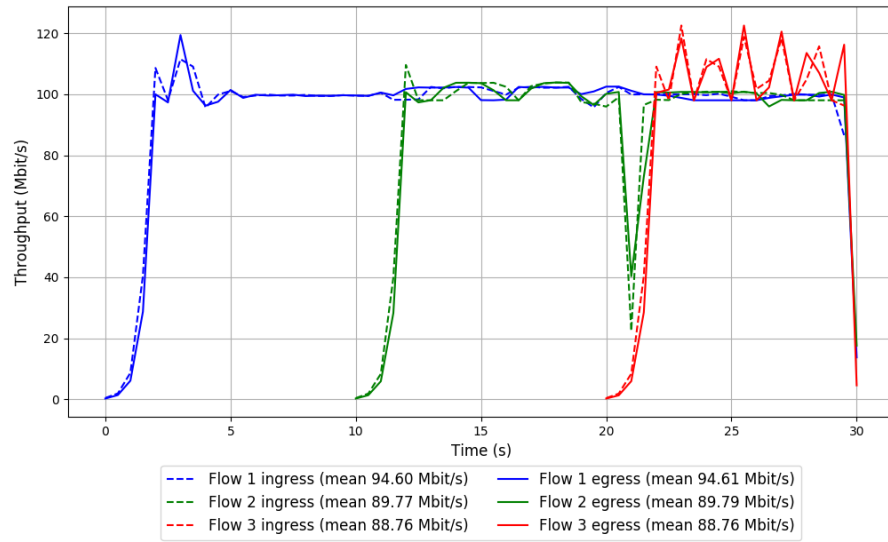
-- Flow 3:

Average throughput: 88.76 Mbit/s

95th percentile per-packet one-way delay: 113.365 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-03-27 23:55:17

End at: 2018-03-27 23:55:47

Below is generated by plot.py at 2018-03-28 04:58:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.62 Mbit/s

95th percentile per-packet one-way delay: 123.109 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.75 Mbit/s

95th percentile per-packet one-way delay: 121.145 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.77 Mbit/s

95th percentile per-packet one-way delay: 123.153 ms

Loss rate: 0.00%

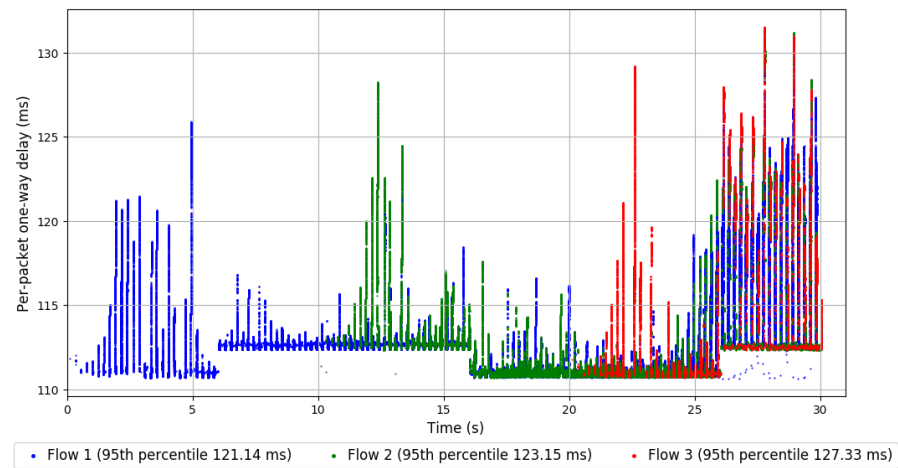
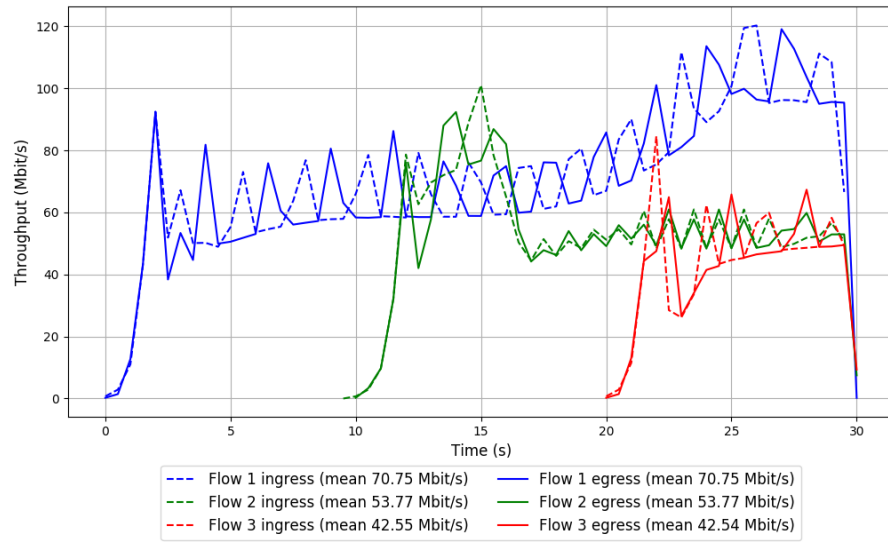
-- Flow 3:

Average throughput: 42.54 Mbit/s

95th percentile per-packet one-way delay: 127.329 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-03-28 00:14:39

End at: 2018-03-28 00:15:09

Below is generated by plot.py at 2018-03-28 04:58:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.06 Mbit/s

95th percentile per-packet one-way delay: 118.429 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.06 Mbit/s

95th percentile per-packet one-way delay: 118.213 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.48 Mbit/s

95th percentile per-packet one-way delay: 118.572 ms

Loss rate: 0.00%

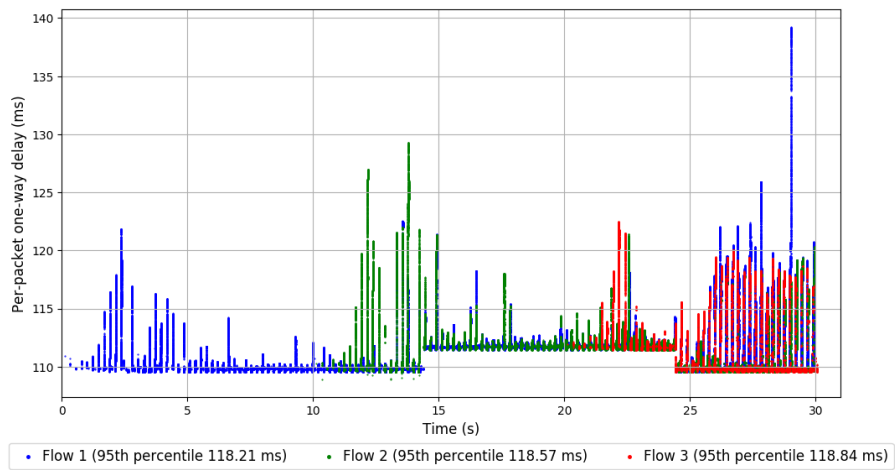
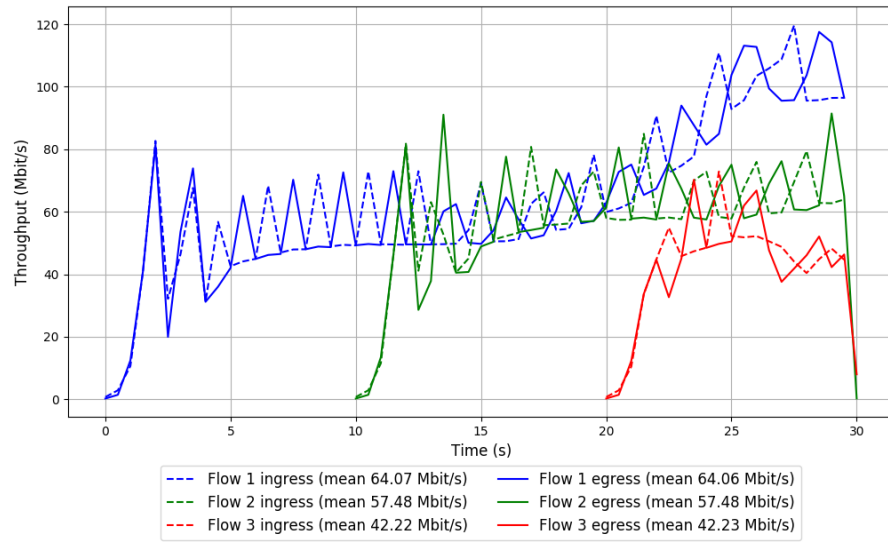
-- Flow 3:

Average throughput: 42.23 Mbit/s

95th percentile per-packet one-way delay: 118.839 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-03-28 00:33:52

End at: 2018-03-28 00:34:22

Below is generated by plot.py at 2018-03-28 04:58:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.01 Mbit/s

95th percentile per-packet one-way delay: 117.769 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.17 Mbit/s

95th percentile per-packet one-way delay: 118.409 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.18 Mbit/s

95th percentile per-packet one-way delay: 114.740 ms

Loss rate: 0.00%

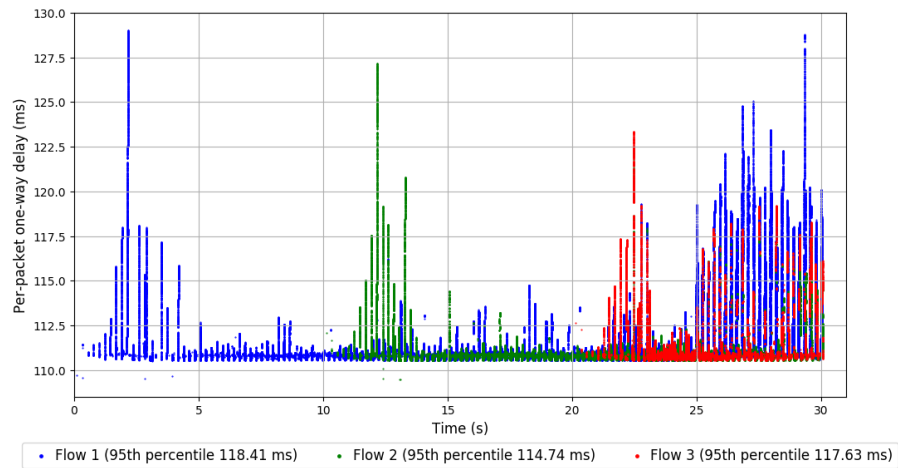
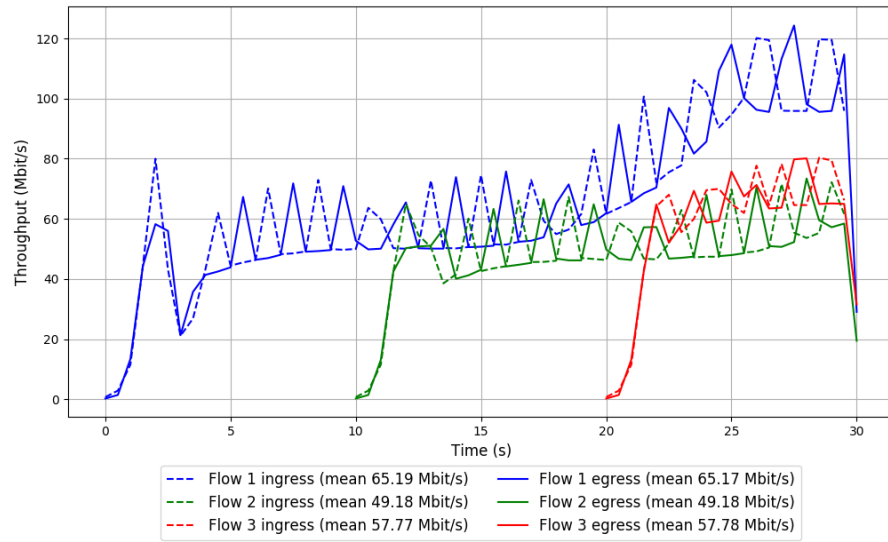
-- Flow 3:

Average throughput: 57.78 Mbit/s

95th percentile per-packet one-way delay: 117.633 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-03-28 00:52:58

End at: 2018-03-28 00:53:28

Below is generated by plot.py at 2018-03-28 04:58:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.53 Mbit/s

95th percentile per-packet one-way delay: 115.876 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 84.16 Mbit/s

95th percentile per-packet one-way delay: 116.219 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.45 Mbit/s

95th percentile per-packet one-way delay: 113.700 ms

Loss rate: 0.02%

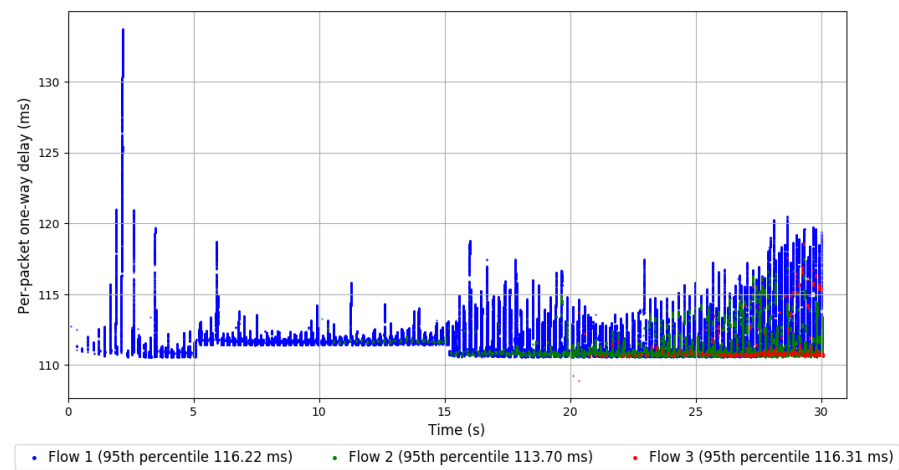
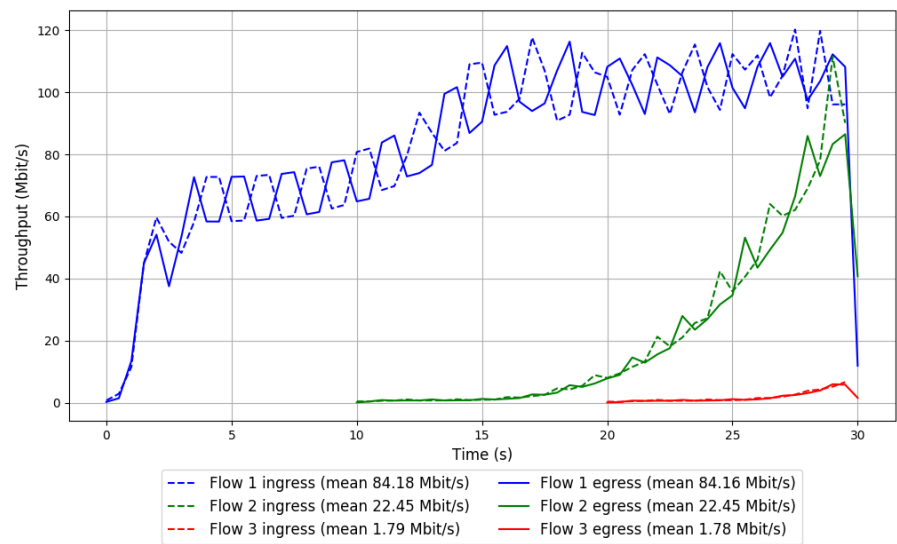
-- Flow 3:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 116.314 ms

Loss rate: 0.54%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-03-28 01:12:01

End at: 2018-03-28 01:12:31

Below is generated by plot.py at 2018-03-28 04:59:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 197.27 Mbit/s

95th percentile per-packet one-way delay: 123.698 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 101.84 Mbit/s

95th percentile per-packet one-way delay: 123.790 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.78 Mbit/s

95th percentile per-packet one-way delay: 121.620 ms

Loss rate: 0.03%

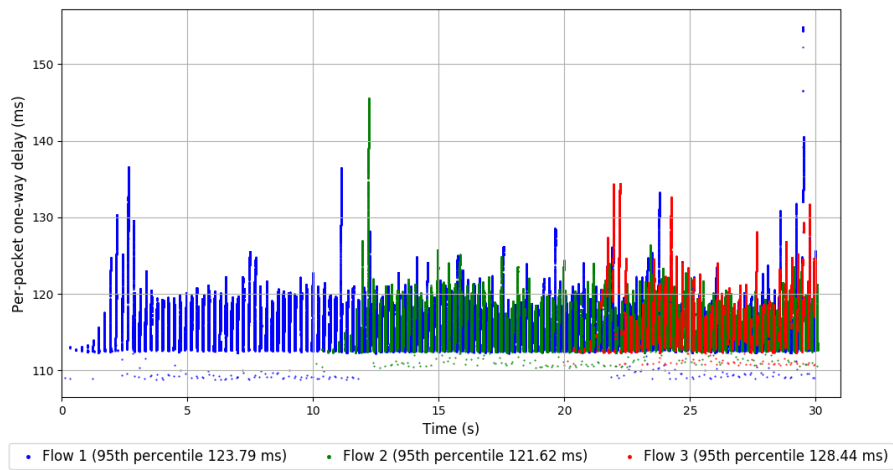
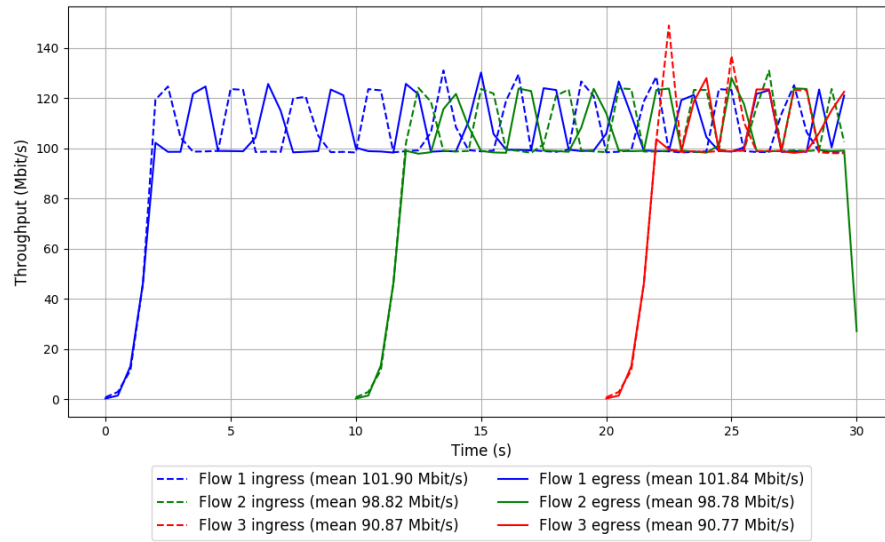
-- Flow 3:

Average throughput: 90.77 Mbit/s

95th percentile per-packet one-way delay: 128.442 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-03-28 01:31:06

End at: 2018-03-28 01:31:36

Below is generated by plot.py at 2018-03-28 04:59:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.90 Mbit/s

95th percentile per-packet one-way delay: 122.377 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 80.07 Mbit/s

95th percentile per-packet one-way delay: 121.362 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.46 Mbit/s

95th percentile per-packet one-way delay: 122.091 ms

Loss rate: 0.00%

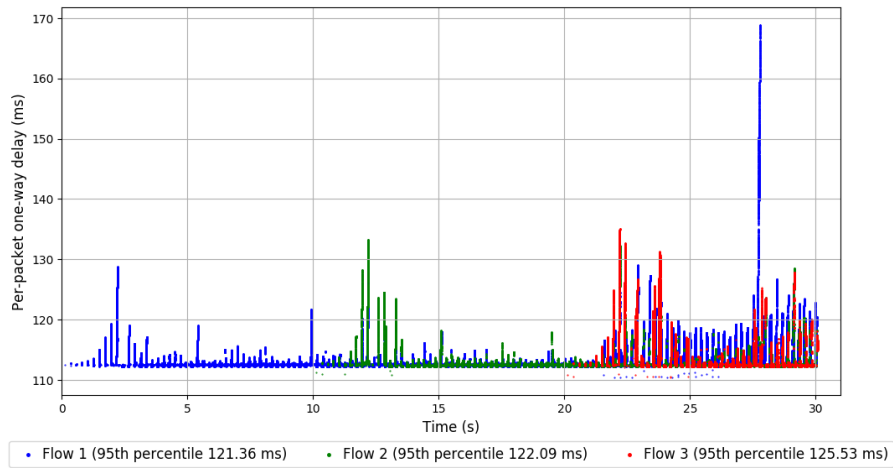
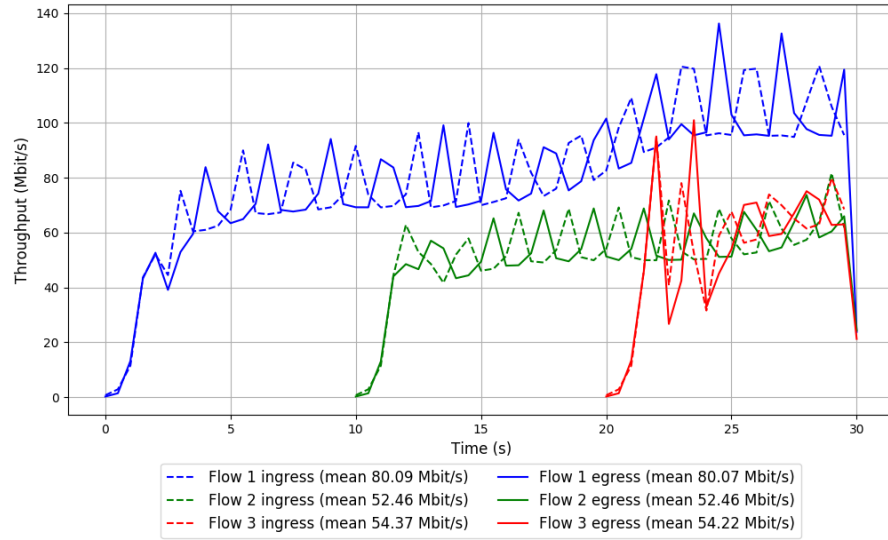
-- Flow 3:

Average throughput: 54.22 Mbit/s

95th percentile per-packet one-way delay: 125.527 ms

Loss rate: 0.24%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-03-28 01:50:35

End at: 2018-03-28 01:51:05

Below is generated by plot.py at 2018-03-28 04:59:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.57 Mbit/s

95th percentile per-packet one-way delay: 117.823 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.81 Mbit/s

95th percentile per-packet one-way delay: 118.879 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 65.03 Mbit/s

95th percentile per-packet one-way delay: 116.191 ms

Loss rate: 0.00%

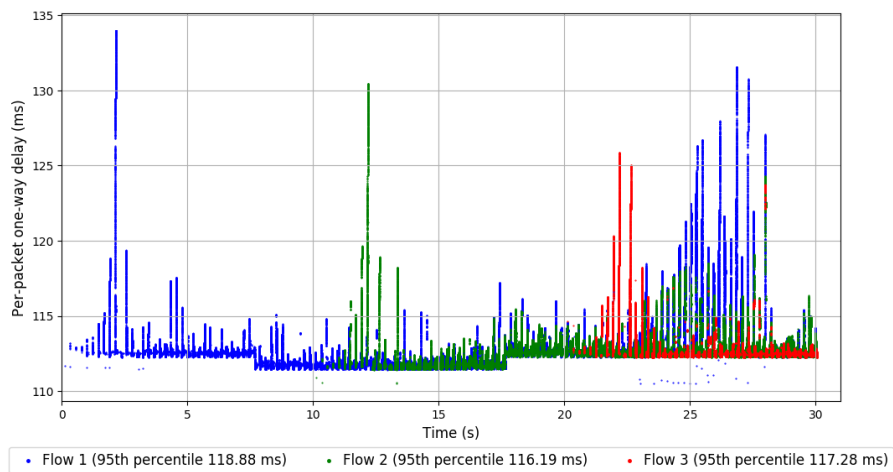
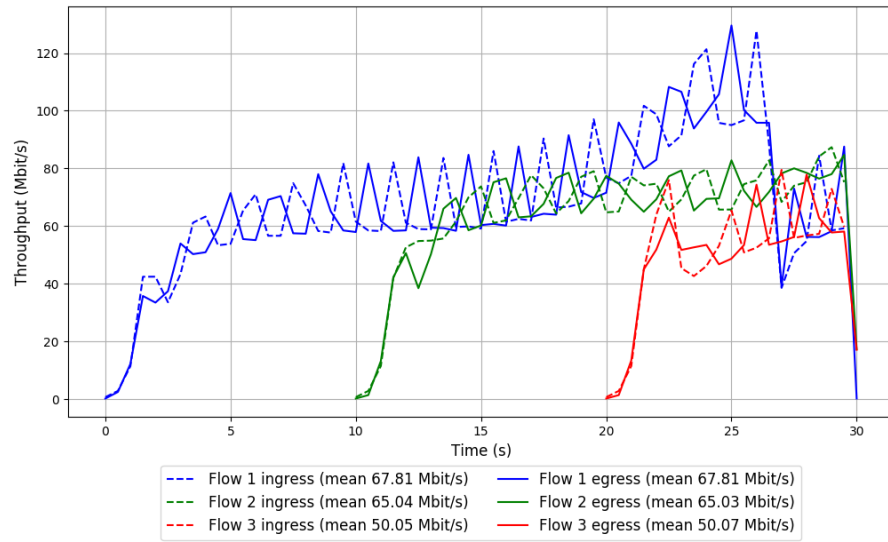
-- Flow 3:

Average throughput: 50.07 Mbit/s

95th percentile per-packet one-way delay: 117.275 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-03-28 02:09:57

End at: 2018-03-28 02:10:27

Below is generated by plot.py at 2018-03-28 04:59:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.72 Mbit/s

95th percentile per-packet one-way delay: 119.318 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.69 Mbit/s

95th percentile per-packet one-way delay: 118.991 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.73 Mbit/s

95th percentile per-packet one-way delay: 119.410 ms

Loss rate: 0.00%

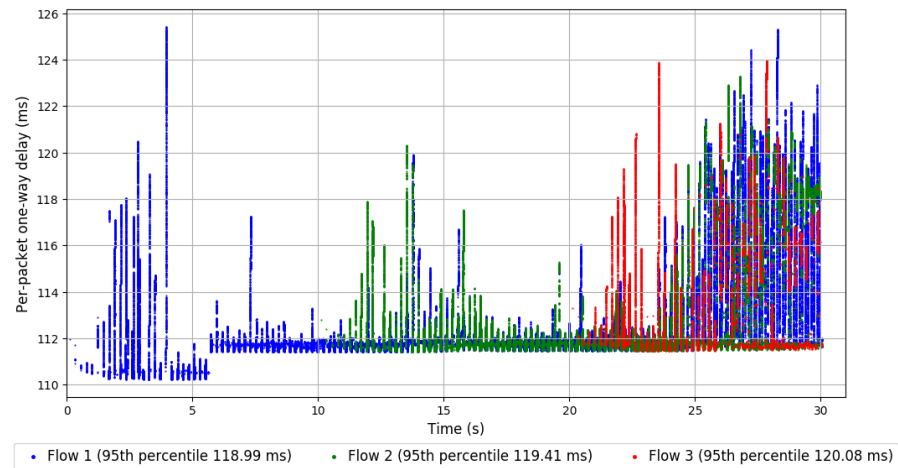
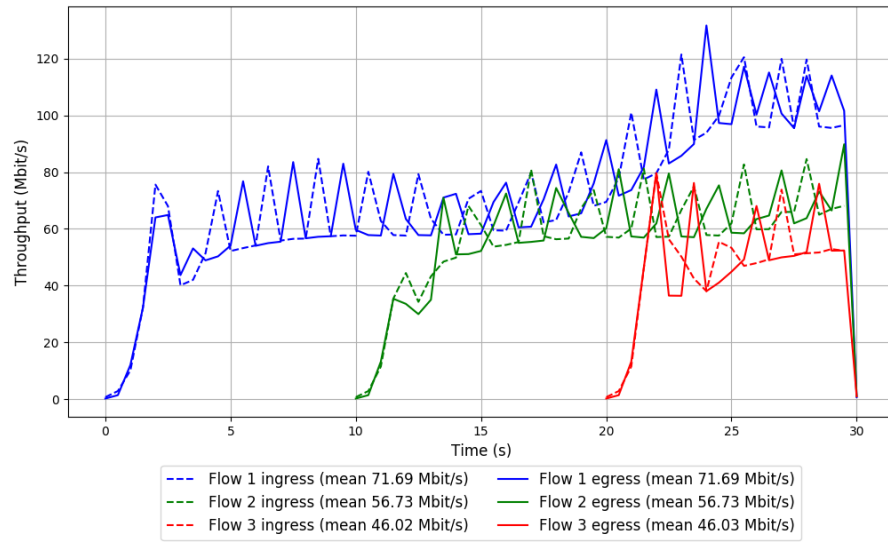
-- Flow 3:

Average throughput: 46.03 Mbit/s

95th percentile per-packet one-way delay: 120.076 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-03-28 02:29:12

End at: 2018-03-28 02:29:42

Below is generated by plot.py at 2018-03-28 05:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.79 Mbit/s

95th percentile per-packet one-way delay: 120.636 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 63.85 Mbit/s

95th percentile per-packet one-way delay: 119.041 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.80 Mbit/s

95th percentile per-packet one-way delay: 117.219 ms

Loss rate: 0.00%

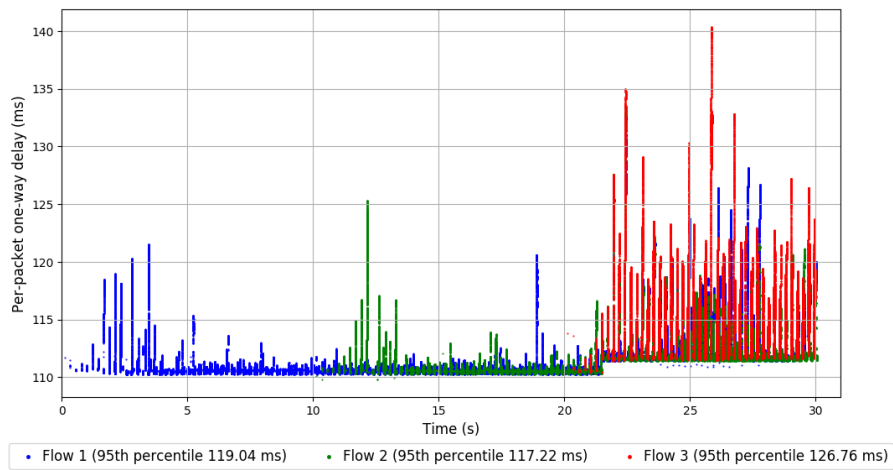
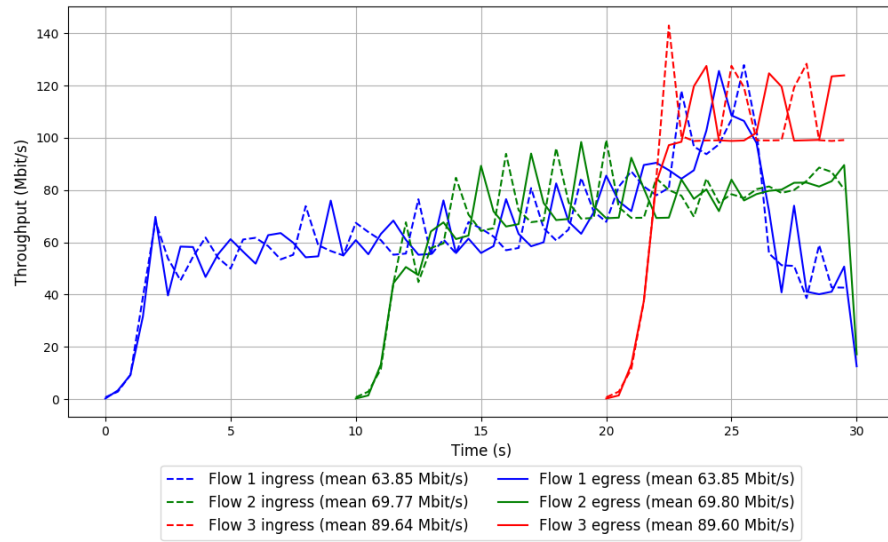
-- Flow 3:

Average throughput: 89.60 Mbit/s

95th percentile per-packet one-way delay: 126.762 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-03-28 02:48:23

End at: 2018-03-28 02:48:53

Below is generated by plot.py at 2018-03-28 05:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.96 Mbit/s

95th percentile per-packet one-way delay: 119.072 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 77.52 Mbit/s

95th percentile per-packet one-way delay: 118.402 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.28 Mbit/s

95th percentile per-packet one-way delay: 118.519 ms

Loss rate: 0.00%

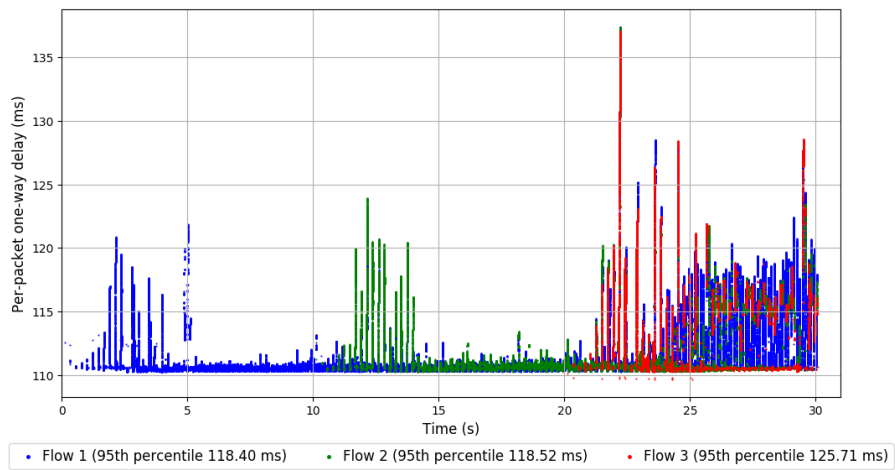
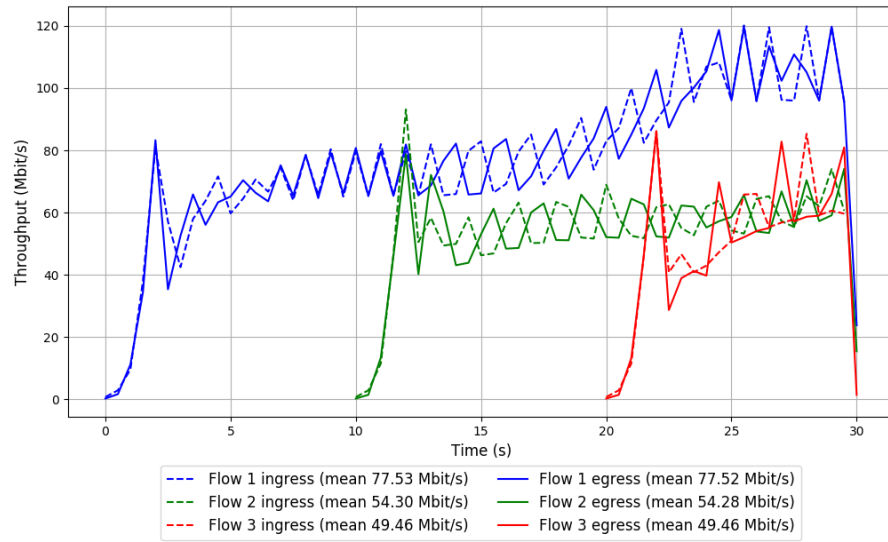
-- Flow 3:

Average throughput: 49.46 Mbit/s

95th percentile per-packet one-way delay: 125.714 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

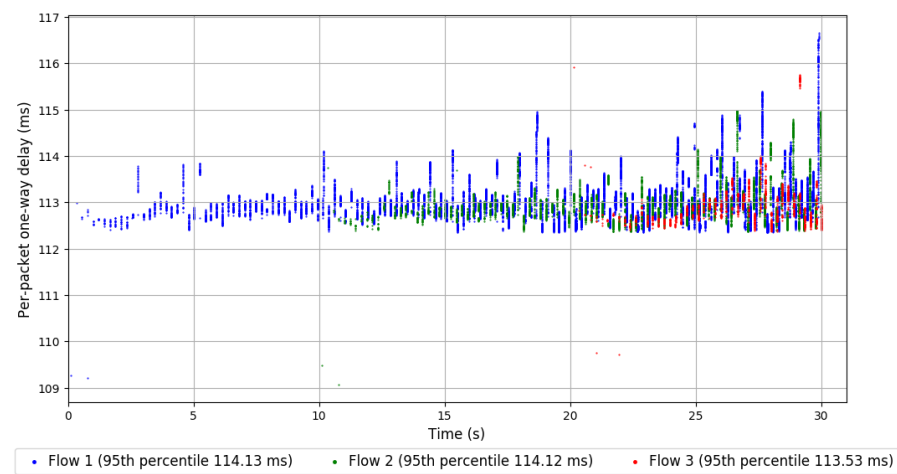
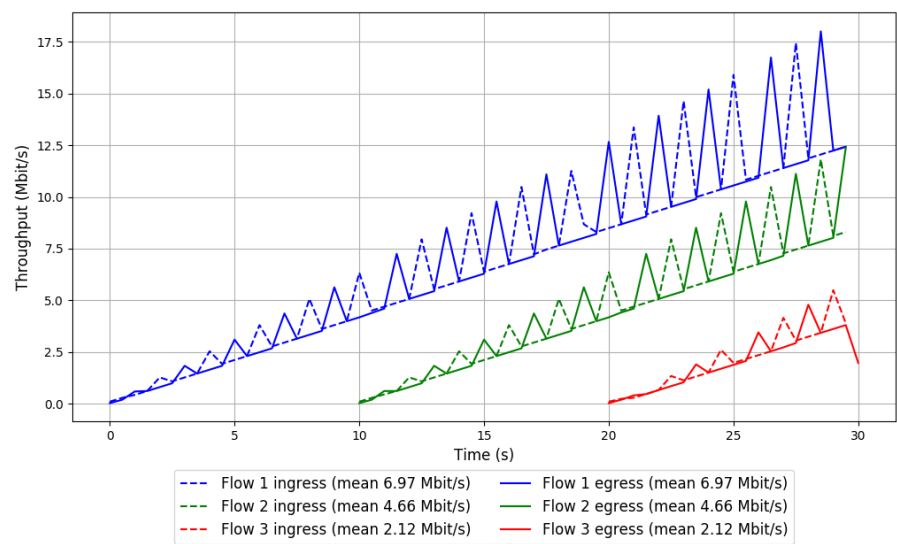


```
Run 1: Statistics of LEDBAT

Start at: 2018-03-27 23:37:02
End at: 2018-03-27 23:37:32

# Below is generated by plot.py at 2018-03-28 05:00:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.73 Mbit/s
95th percentile per-packet one-way delay: 114.108 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 114.127 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 114.124 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 113.528 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

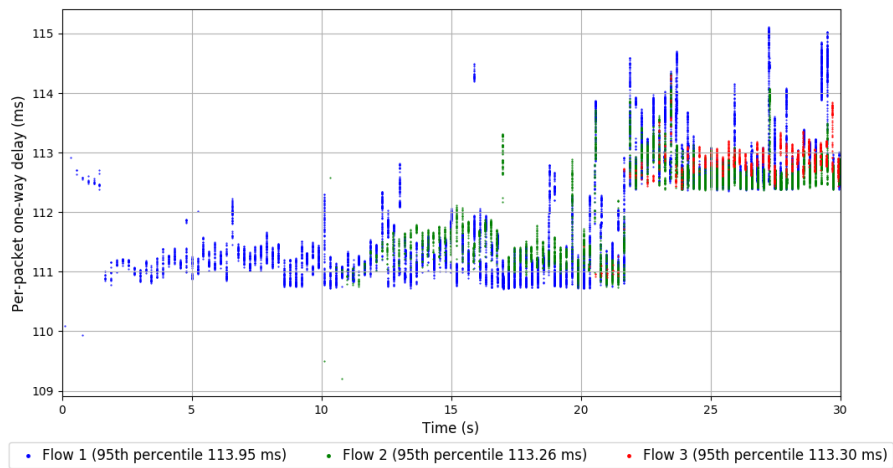
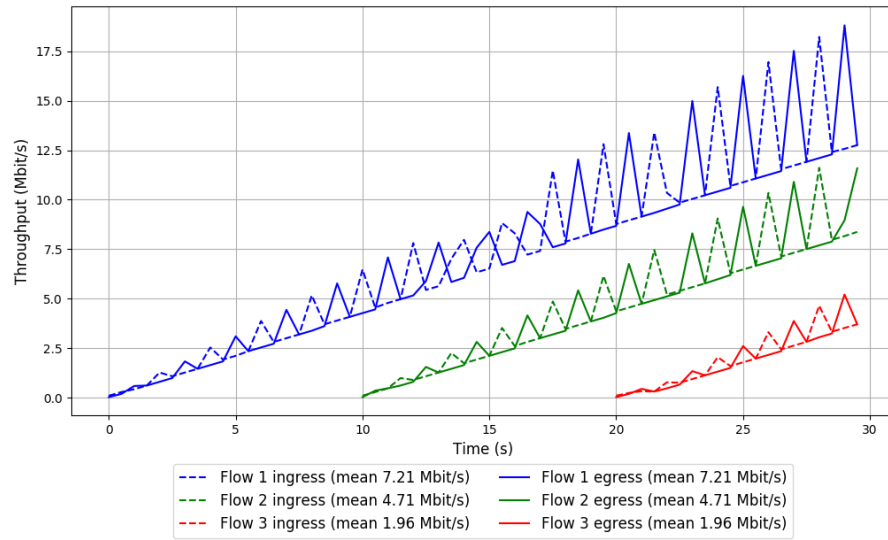


```
Run 2: Statistics of LEDBAT

Start at: 2018-03-27 23:56:11
End at: 2018-03-27 23:56:41

# Below is generated by plot.py at 2018-03-28 05:00:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.98 Mbit/s
95th percentile per-packet one-way delay: 113.789 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 113.951 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 113.262 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 113.299 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-03-28 00:15:33

End at: 2018-03-28 00:16:03

Below is generated by plot.py at 2018-03-28 05:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.95 Mbit/s

95th percentile per-packet one-way delay: 112.926 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.15 Mbit/s

95th percentile per-packet one-way delay: 112.927 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.59 Mbit/s

95th percentile per-packet one-way delay: 113.110 ms

Loss rate: 0.00%

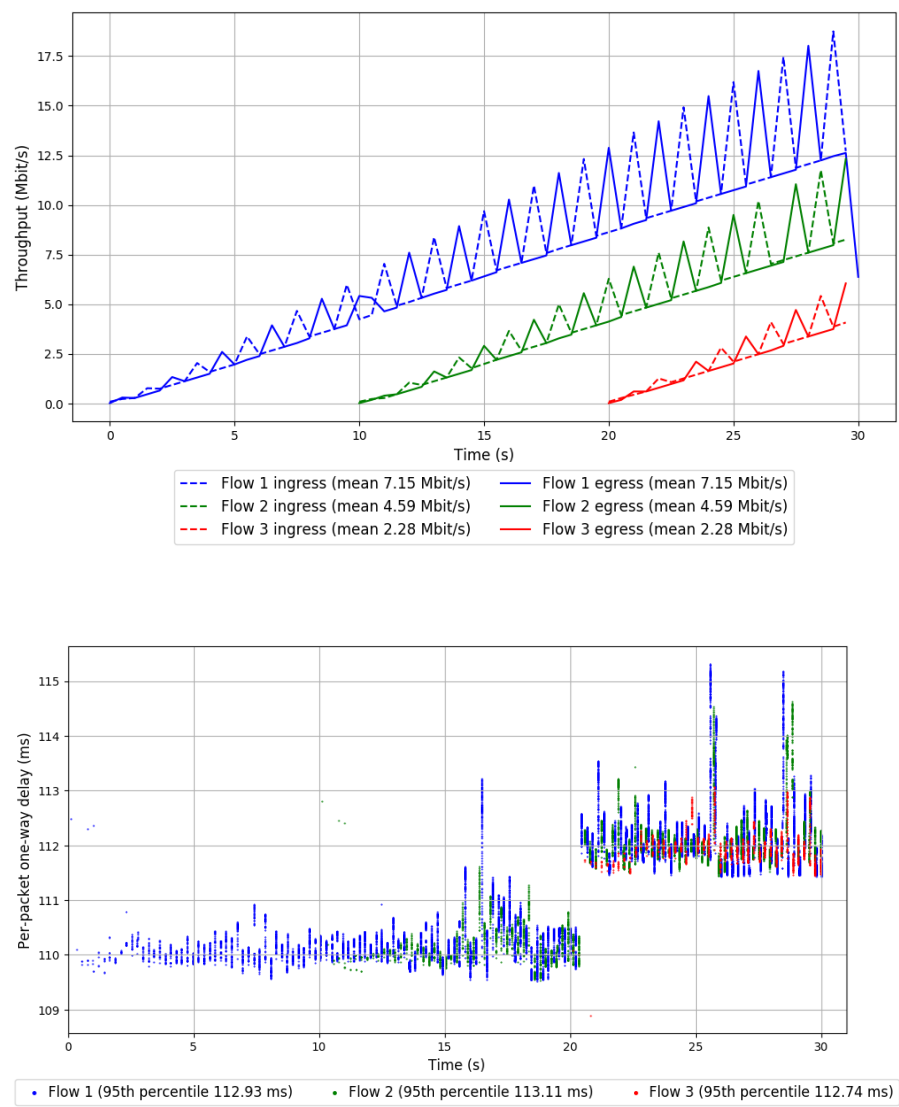
-- Flow 3:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 112.741 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-03-28 00:34:46

End at: 2018-03-28 00:35:16

Below is generated by plot.py at 2018-03-28 05:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.84 Mbit/s

95th percentile per-packet one-way delay: 112.332 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.76 Mbit/s

95th percentile per-packet one-way delay: 112.446 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 112.102 ms

Loss rate: 0.00%

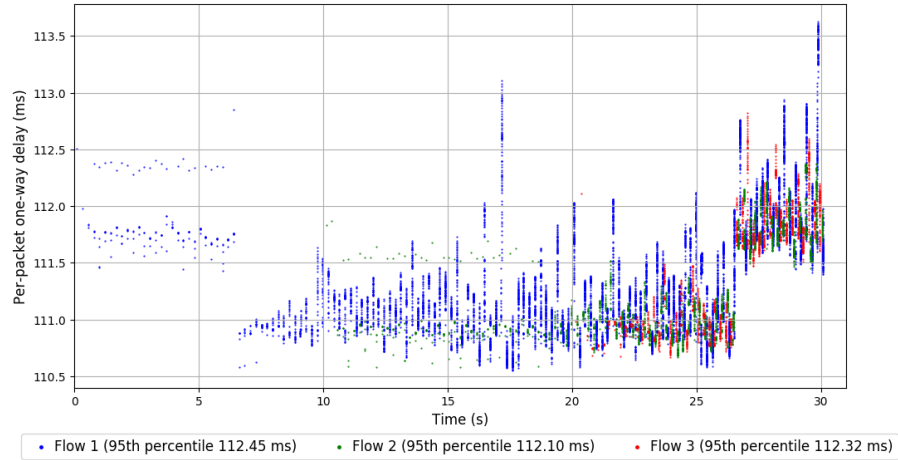
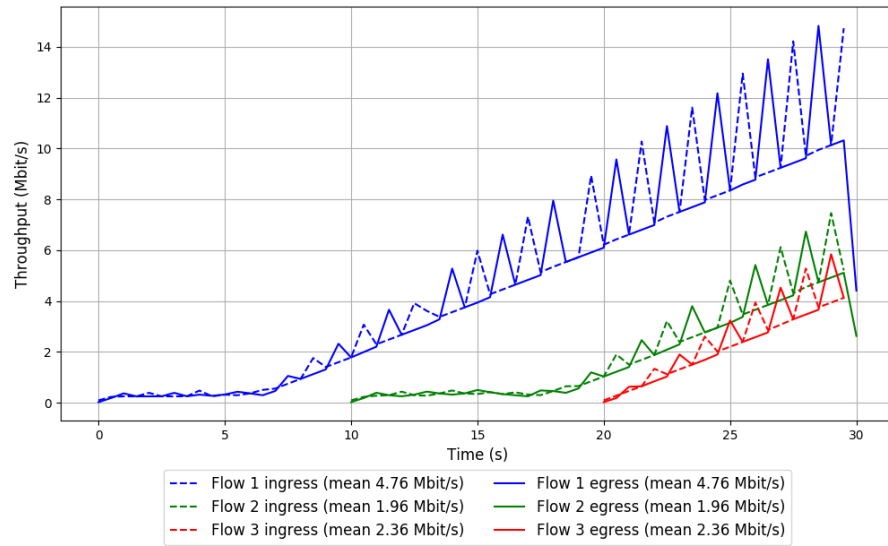
-- Flow 3:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 112.317 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-03-28 00:53:51

End at: 2018-03-28 00:54:21

Below is generated by plot.py at 2018-03-28 05:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.09 Mbit/s

95th percentile per-packet one-way delay: 112.062 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.99 Mbit/s

95th percentile per-packet one-way delay: 112.111 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.51 Mbit/s

95th percentile per-packet one-way delay: 111.943 ms

Loss rate: 0.00%

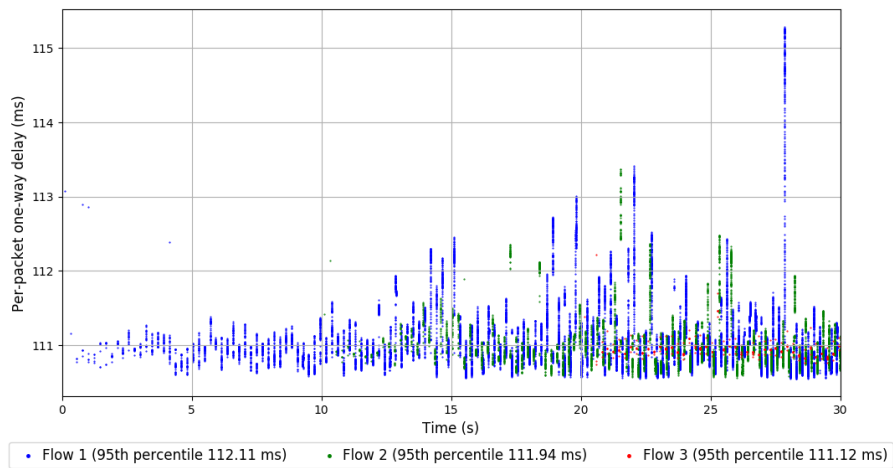
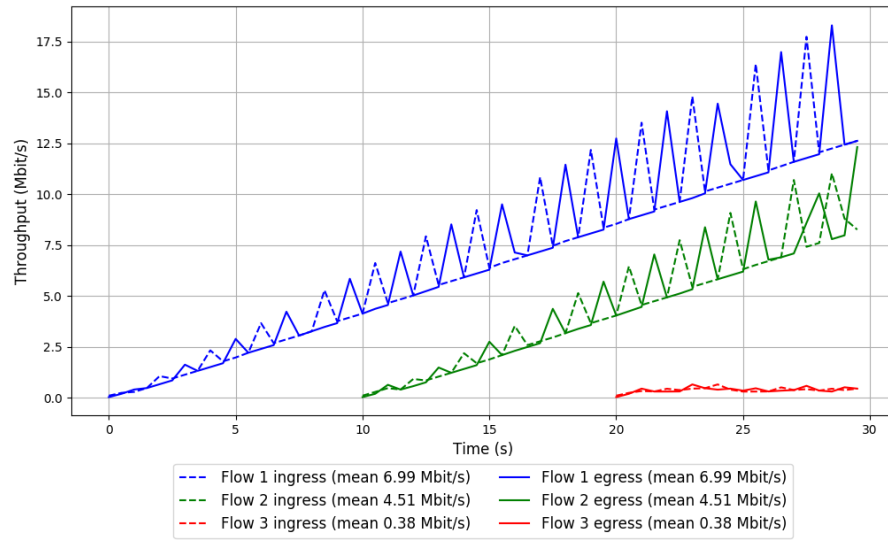
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 111.122 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-03-28 01:13:01

End at: 2018-03-28 01:13:31

Below is generated by plot.py at 2018-03-28 05:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.82 Mbit/s

95th percentile per-packet one-way delay: 114.072 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.99 Mbit/s

95th percentile per-packet one-way delay: 114.365 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.72 Mbit/s

95th percentile per-packet one-way delay: 113.306 ms

Loss rate: 0.00%

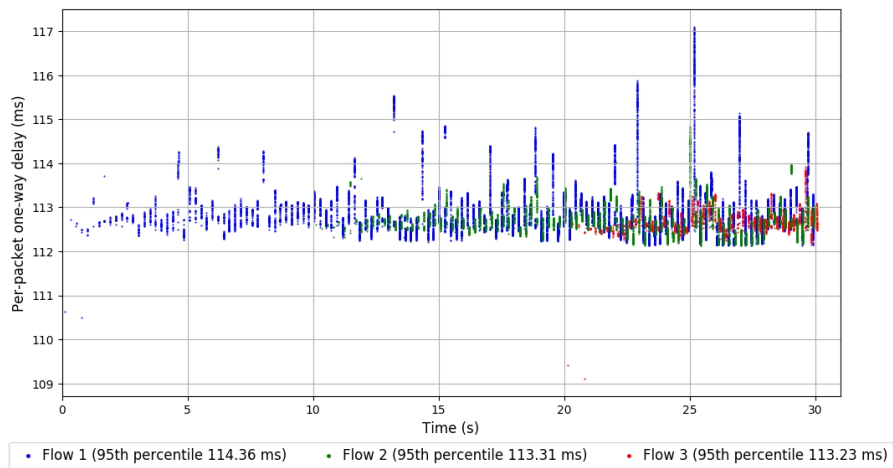
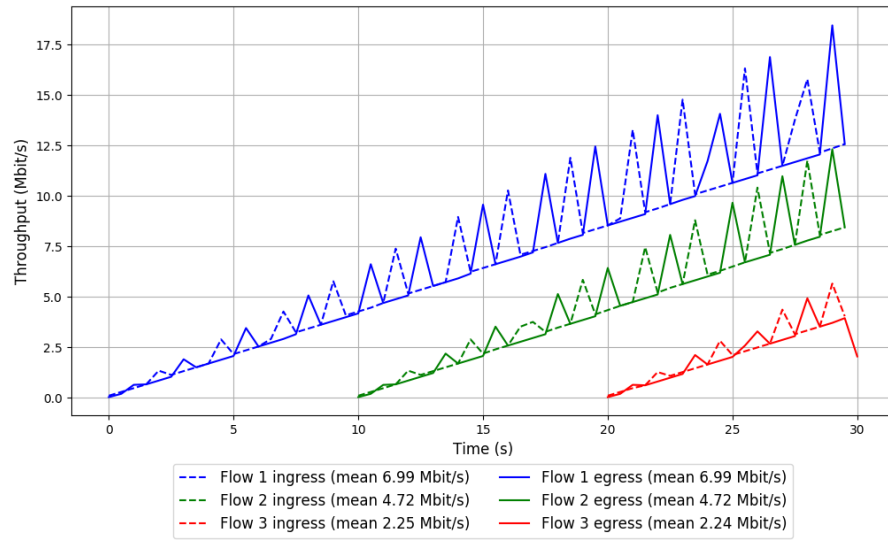
-- Flow 3:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 113.233 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link

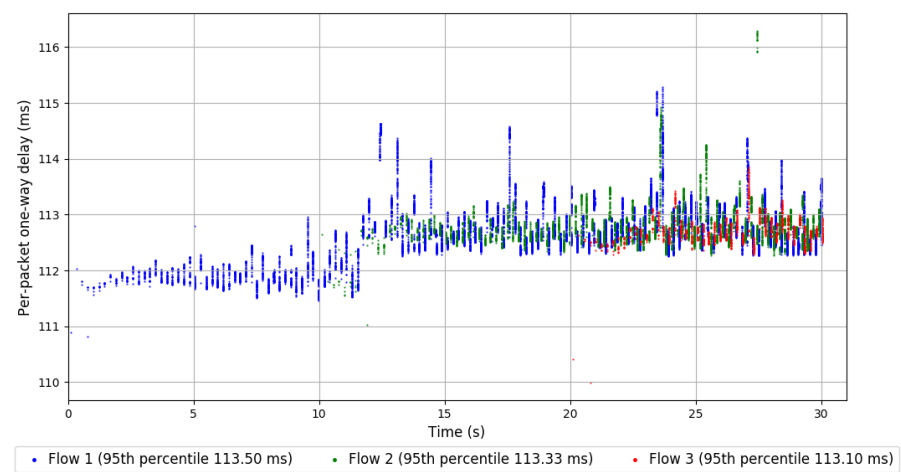
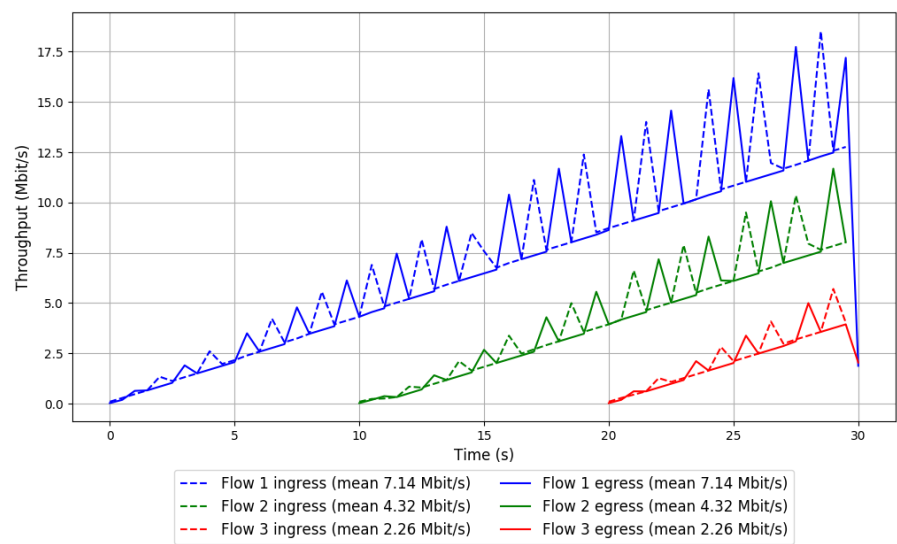


```
Run 7: Statistics of LEDBAT

Start at: 2018-03-28 01:32:01
End at: 2018-03-28 01:32:31

# Below is generated by plot.py at 2018-03-28 05:00:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.74 Mbit/s
95th percentile per-packet one-way delay: 113.433 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.14 Mbit/s
95th percentile per-packet one-way delay: 113.495 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 113.333 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 113.096 ms
Loss rate: 0.00%
```

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-03-28 01:51:30

End at: 2018-03-28 01:52:00

Below is generated by plot.py at 2018-03-28 05:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.09 Mbit/s

95th percentile per-packet one-way delay: 113.874 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.15 Mbit/s

95th percentile per-packet one-way delay: 114.106 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.81 Mbit/s

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

Loss rate: 0.00%

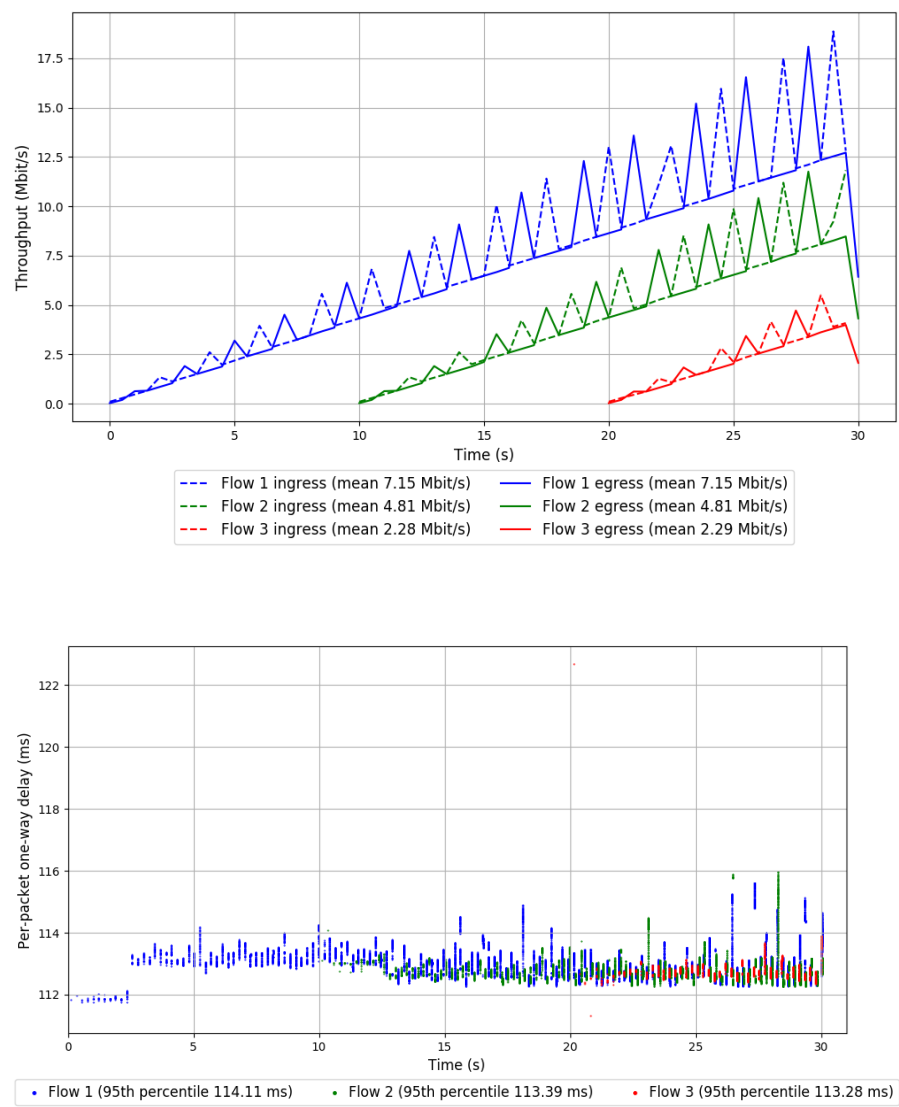
-- Flow 3:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 113.277 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-03-28 02:10:52

End at: 2018-03-28 02:11:22

Below is generated by plot.py at 2018-03-28 05:00:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.98 Mbit/s

95th percentile per-packet one-way delay: 112.385 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.34 Mbit/s

95th percentile per-packet one-way delay: 112.398 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 112.462 ms

Loss rate: 0.00%

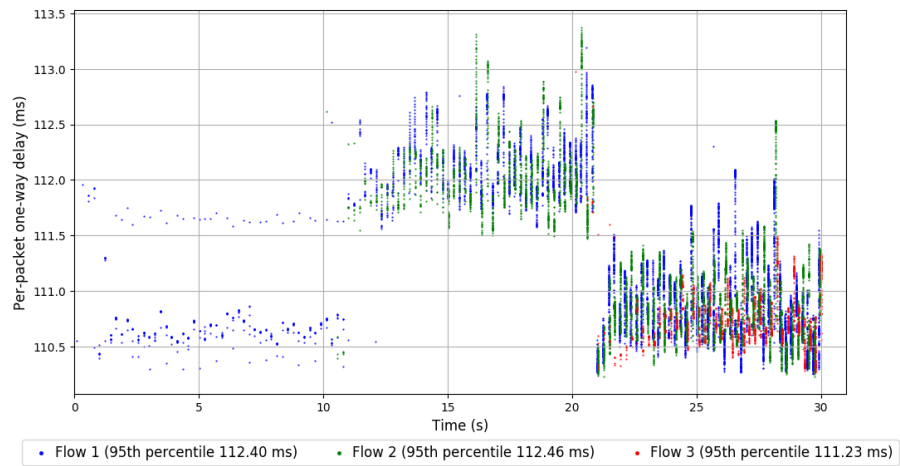
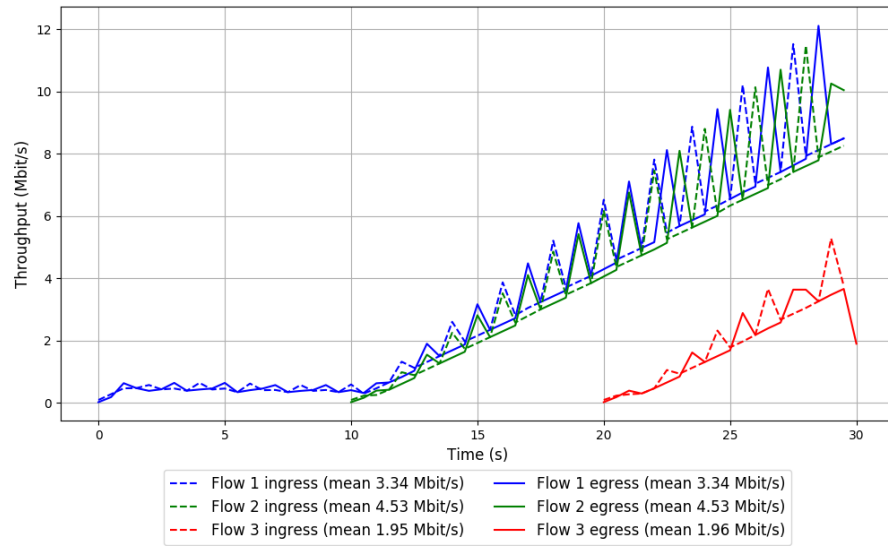
-- Flow 3:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 111.229 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

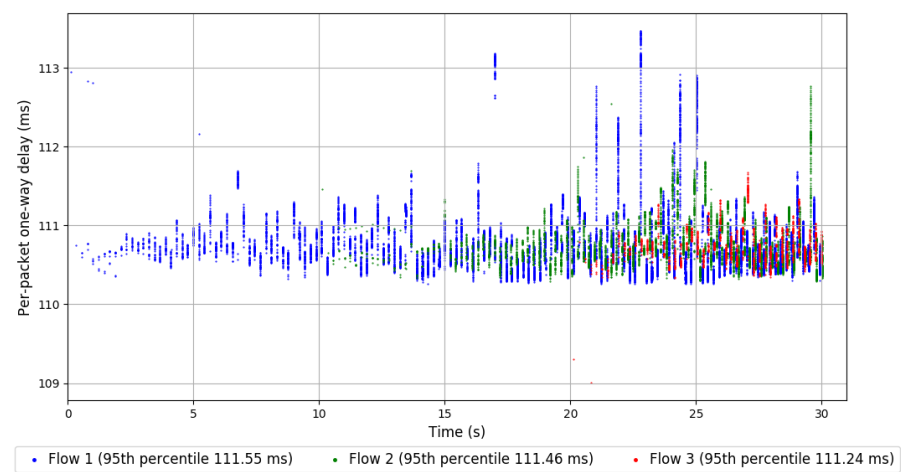
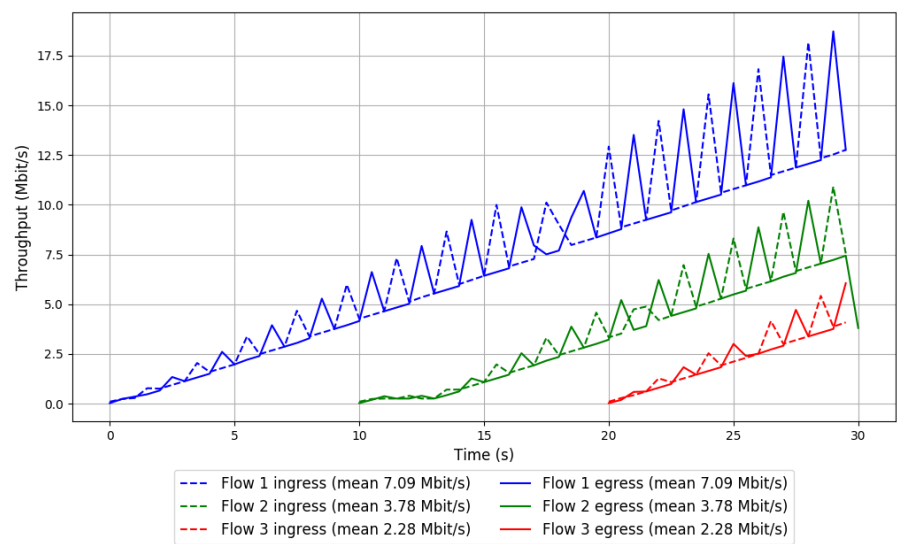


```
Run 10: Statistics of LEDBAT

Start at: 2018-03-28 02:30:09
End at: 2018-03-28 02:30:39

# Below is generated by plot.py at 2018-03-28 05:00:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.33 Mbit/s
95th percentile per-packet one-way delay: 111.461 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 111.554 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: 111.460 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 111.243 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

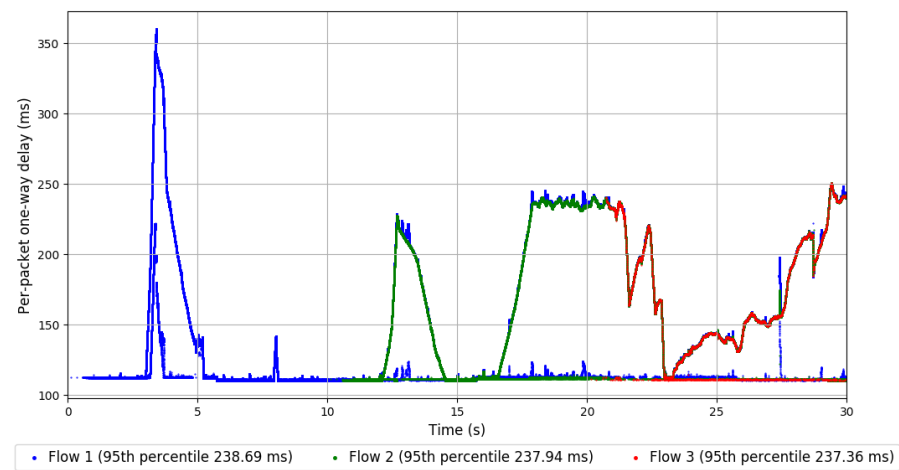
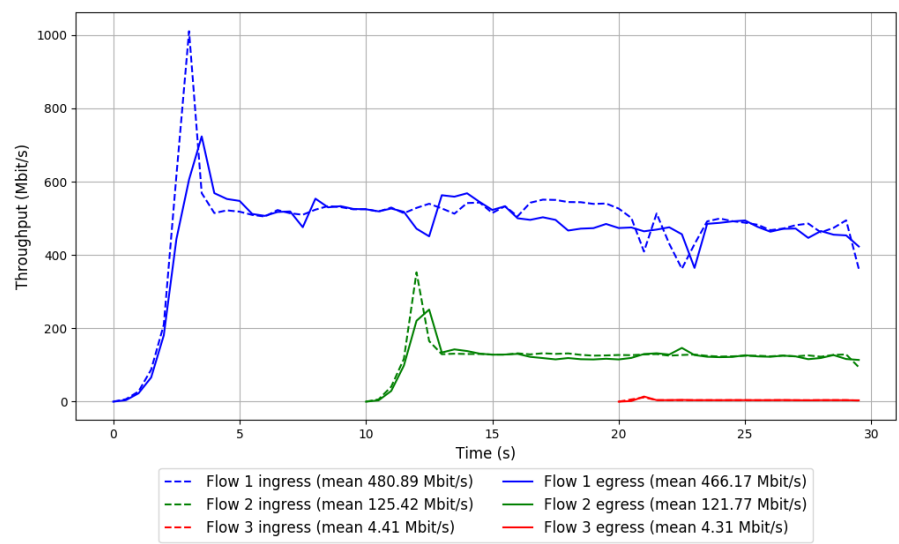


```
Run 1: Statistics of PCC

Start at: 2018-03-27 23:41:57
End at: 2018-03-27 23:42:27

# Below is generated by plot.py at 2018-03-28 05:08:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 548.48 Mbit/s
95th percentile per-packet one-way delay: 238.447 ms
Loss rate: 3.03%
-- Flow 1:
Average throughput: 466.17 Mbit/s
95th percentile per-packet one-way delay: 238.690 ms
Loss rate: 3.06%
-- Flow 2:
Average throughput: 121.77 Mbit/s
95th percentile per-packet one-way delay: 237.937 ms
Loss rate: 2.89%
-- Flow 3:
Average throughput: 4.31 Mbit/s
95th percentile per-packet one-way delay: 237.363 ms
Loss rate: 2.16%
```

Run 1: Report of PCC — Data Link

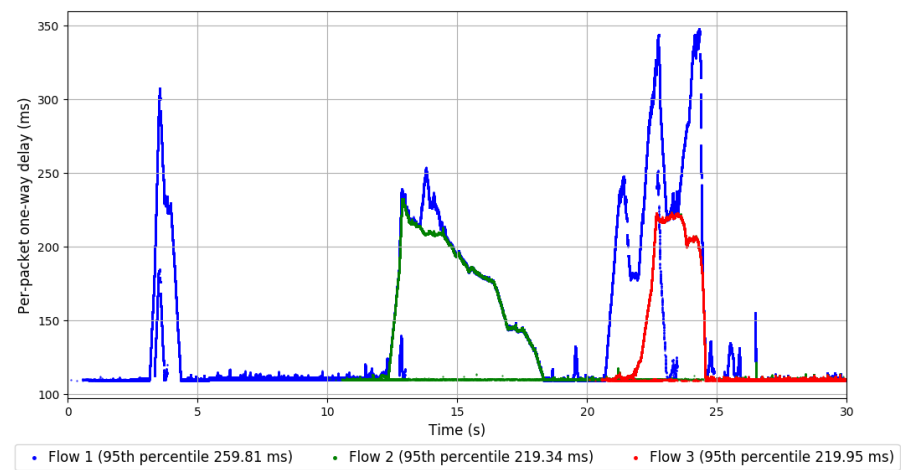
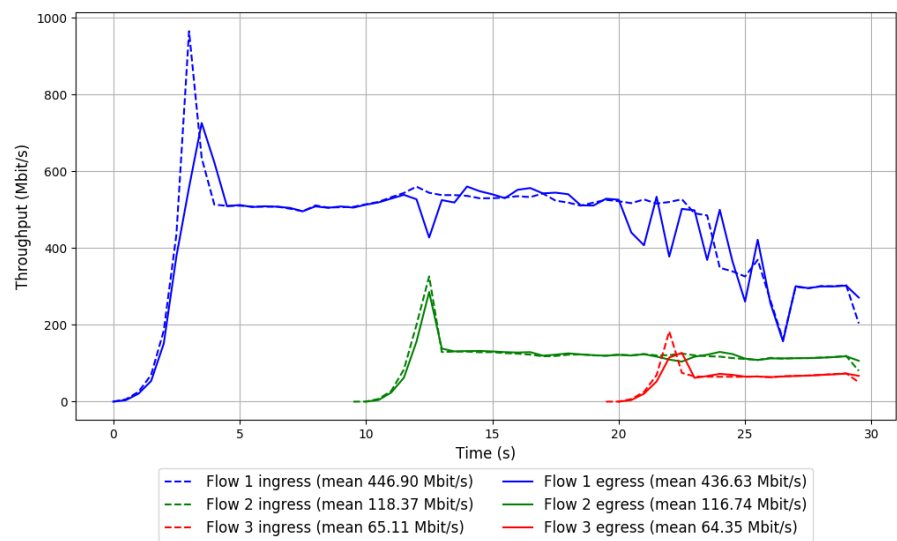


```
Run 2: Statistics of PCC

Start at: 2018-03-28 00:01:07
End at: 2018-03-28 00:01:37

# Below is generated by plot.py at 2018-03-28 05:08:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 535.53 Mbit/s
95th percentile per-packet one-way delay: 247.173 ms
Loss rate: 2.12%
-- Flow 1:
Average throughput: 436.63 Mbit/s
95th percentile per-packet one-way delay: 259.805 ms
Loss rate: 2.30%
-- Flow 2:
Average throughput: 116.74 Mbit/s
95th percentile per-packet one-way delay: 219.342 ms
Loss rate: 1.37%
-- Flow 3:
Average throughput: 64.35 Mbit/s
95th percentile per-packet one-way delay: 219.954 ms
Loss rate: 1.18%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-03-28 00:20:32

End at: 2018-03-28 00:21:02

Below is generated by plot.py at 2018-03-28 05:08:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 578.90 Mbit/s

95th percentile per-packet one-way delay: 228.106 ms

Loss rate: 2.65%

-- Flow 1:

Average throughput: 470.94 Mbit/s

95th percentile per-packet one-way delay: 234.190 ms

Loss rate: 2.96%

-- Flow 2:

Average throughput: 131.05 Mbit/s

95th percentile per-packet one-way delay: 220.459 ms

Loss rate: 1.52%

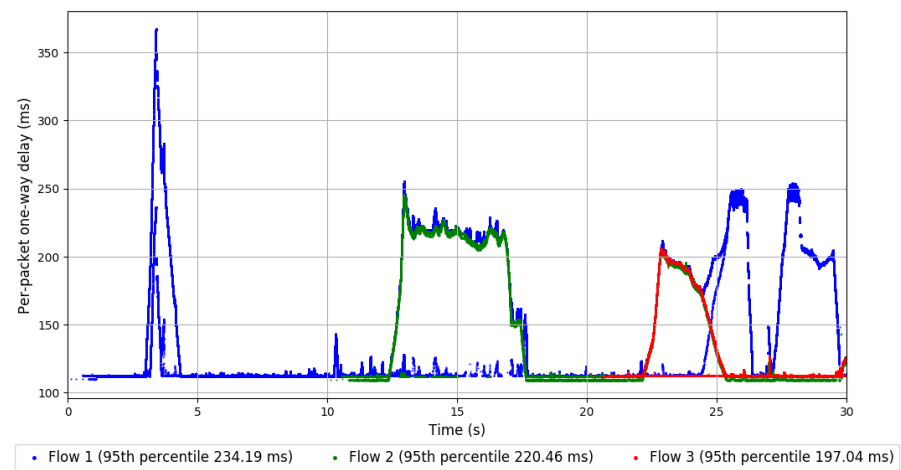
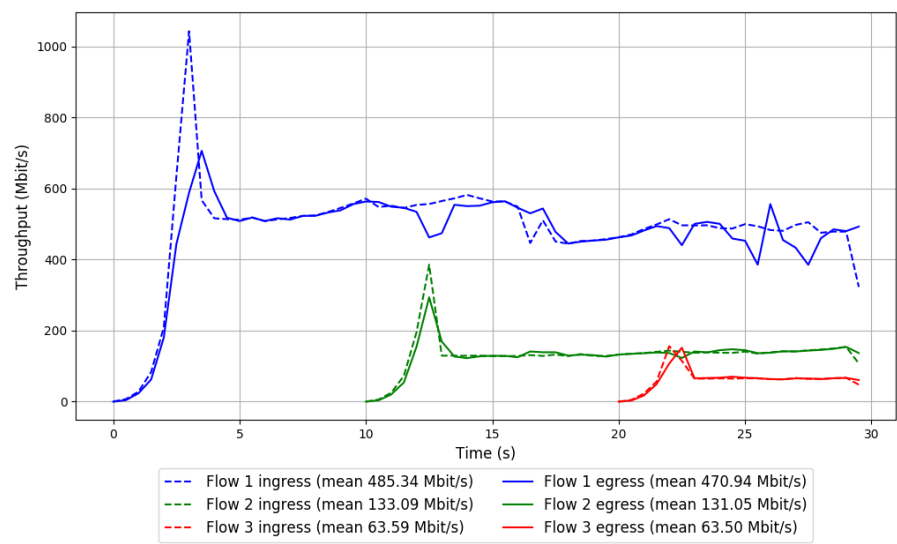
-- Flow 3:

Average throughput: 63.50 Mbit/s

95th percentile per-packet one-way delay: 197.045 ms

Loss rate: 0.15%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-03-28 00:39:43

End at: 2018-03-28 00:40:13

Below is generated by plot.py at 2018-03-28 05:09:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 595.15 Mbit/s

95th percentile per-packet one-way delay: 234.306 ms

Loss rate: 2.38%

-- Flow 1:

Average throughput: 480.66 Mbit/s

95th percentile per-packet one-way delay: 239.039 ms

Loss rate: 2.48%

-- Flow 2:

Average throughput: 141.32 Mbit/s

95th percentile per-packet one-way delay: 216.876 ms

Loss rate: 1.68%

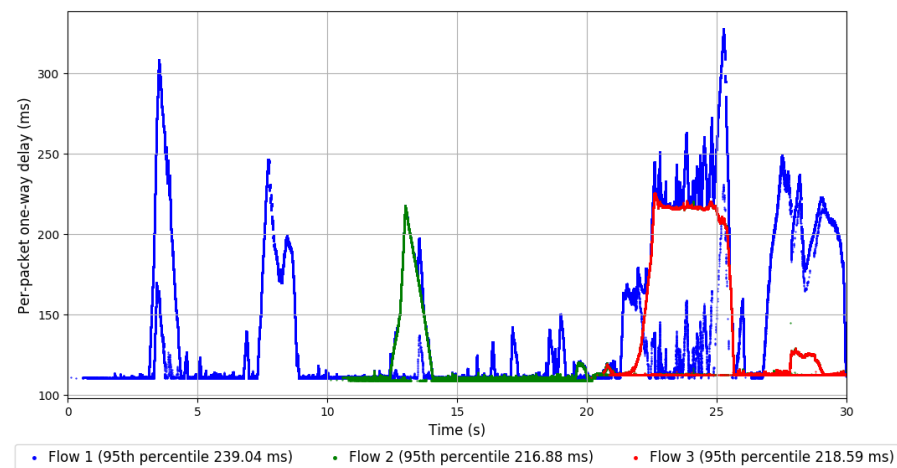
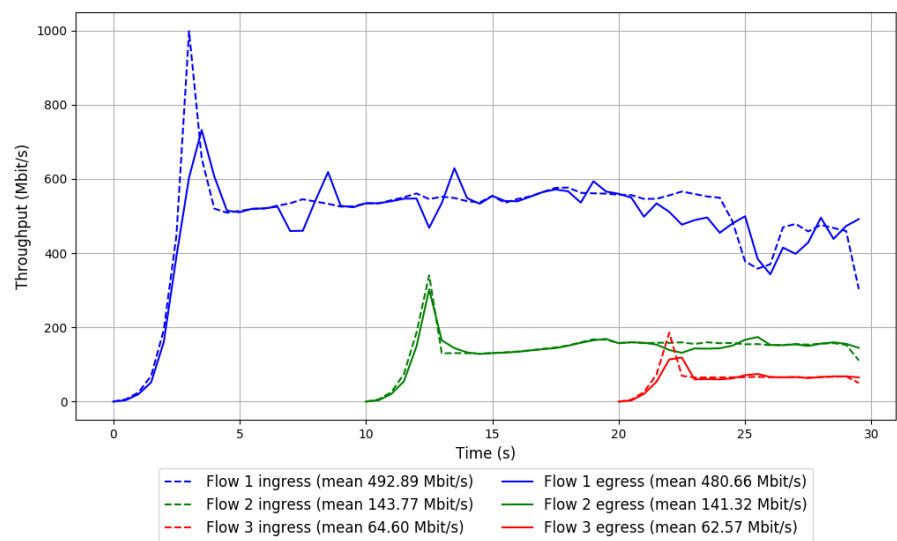
-- Flow 3:

Average throughput: 62.57 Mbit/s

95th percentile per-packet one-way delay: 218.589 ms

Loss rate: 3.14%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-03-28 00:58:48

End at: 2018-03-28 00:59:18

Below is generated by plot.py at 2018-03-28 05:09:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 565.91 Mbit/s

95th percentile per-packet one-way delay: 352.701 ms

Loss rate: 7.42%

-- Flow 1:

Average throughput: 481.87 Mbit/s

95th percentile per-packet one-way delay: 356.383 ms

Loss rate: 8.16%

-- Flow 2:

Average throughput: 124.31 Mbit/s

95th percentile per-packet one-way delay: 225.421 ms

Loss rate: 2.92%

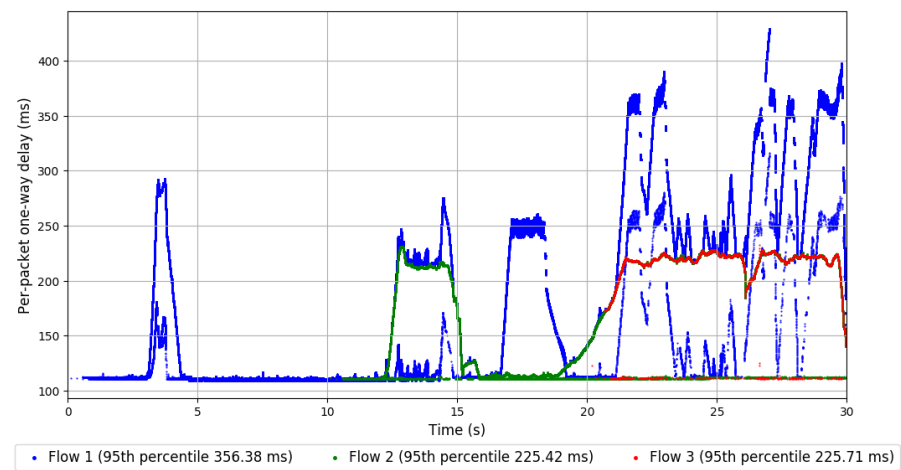
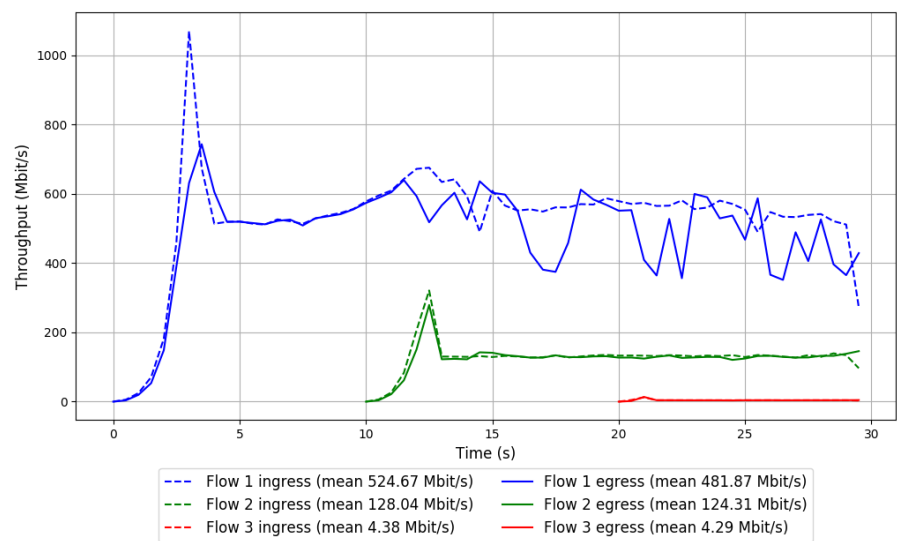
-- Flow 3:

Average throughput: 4.29 Mbit/s

95th percentile per-packet one-way delay: 225.707 ms

Loss rate: 2.23%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-03-28 01:17:55

End at: 2018-03-28 01:18:25

Below is generated by plot.py at 2018-03-28 05:09:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 576.66 Mbit/s

95th percentile per-packet one-way delay: 258.597 ms

Loss rate: 3.29%

-- Flow 1:

Average throughput: 498.18 Mbit/s

95th percentile per-packet one-way delay: 274.285 ms

Loss rate: 3.41%

-- Flow 2:

Average throughput: 116.90 Mbit/s

95th percentile per-packet one-way delay: 225.469 ms

Loss rate: 2.50%

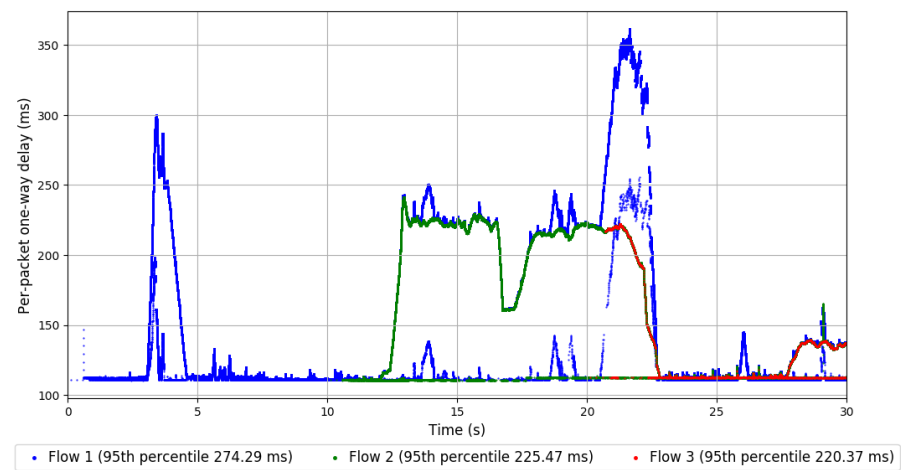
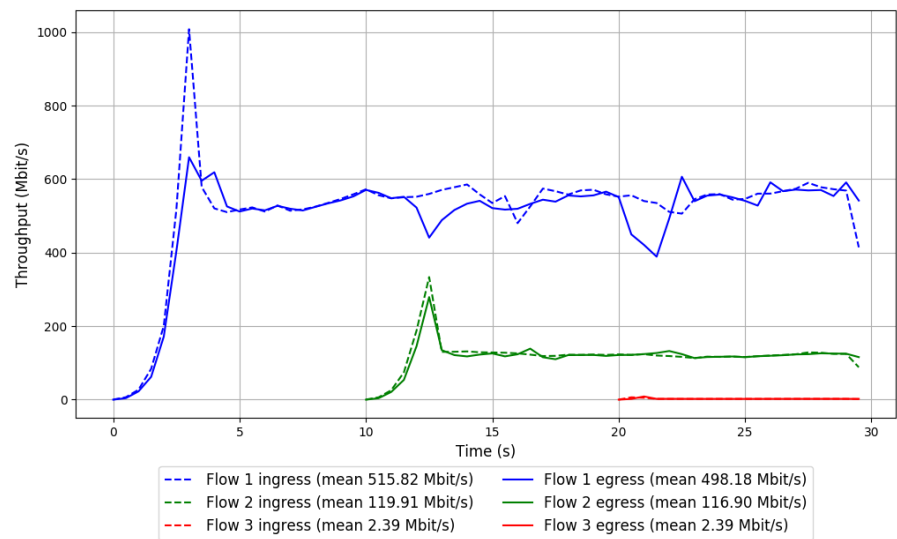
-- Flow 3:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 220.372 ms

Loss rate: 0.31%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-03-28 01:37:03

End at: 2018-03-28 01:37:33

Below is generated by plot.py at 2018-03-28 05:09:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 577.81 Mbit/s

95th percentile per-packet one-way delay: 242.163 ms

Loss rate: 2.10%

-- Flow 1:

Average throughput: 471.81 Mbit/s

95th percentile per-packet one-way delay: 248.981 ms

Loss rate: 2.11%

-- Flow 2:

Average throughput: 128.92 Mbit/s

95th percentile per-packet one-way delay: 223.190 ms

Loss rate: 1.83%

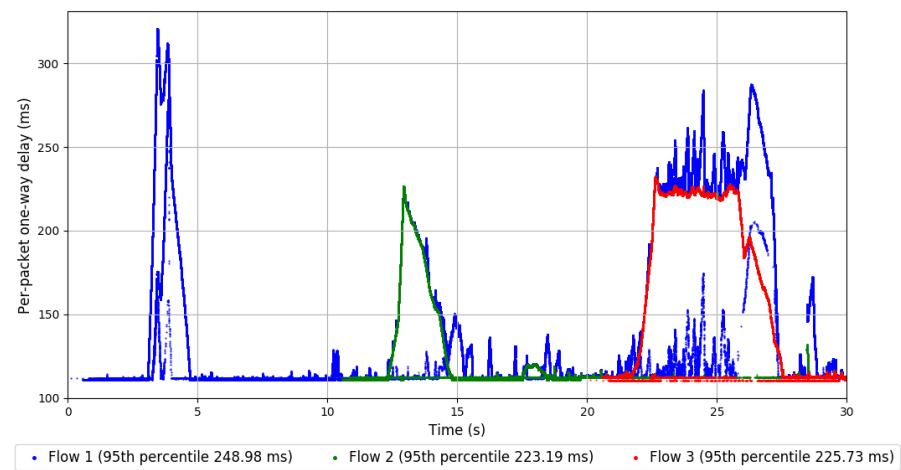
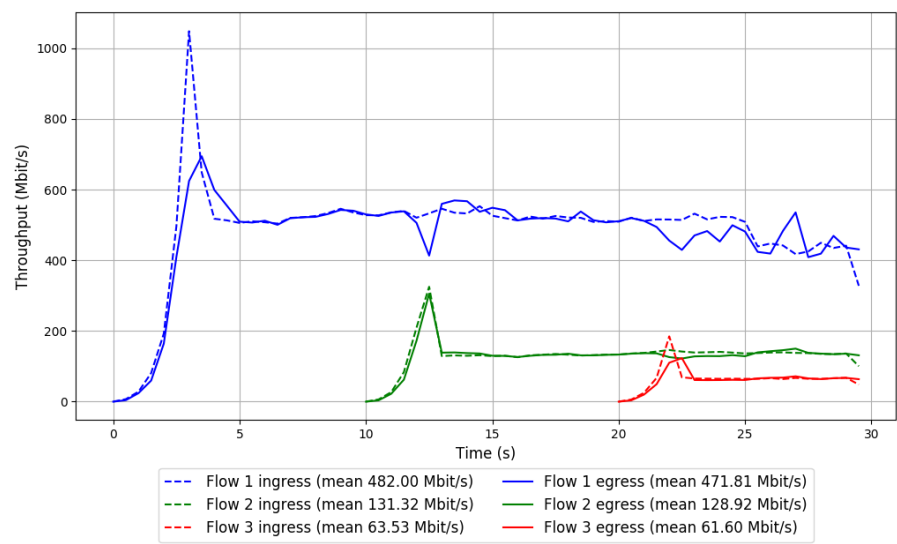
-- Flow 3:

Average throughput: 61.60 Mbit/s

95th percentile per-packet one-way delay: 225.731 ms

Loss rate: 3.02%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-03-28 01:56:29

End at: 2018-03-28 01:56:59

Below is generated by plot.py at 2018-03-28 05:09:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 567.45 Mbit/s

95th percentile per-packet one-way delay: 263.768 ms

Loss rate: 2.69%

-- Flow 1:

Average throughput: 463.41 Mbit/s

95th percentile per-packet one-way delay: 273.365 ms

Loss rate: 2.84%

-- Flow 2:

Average throughput: 126.98 Mbit/s

95th percentile per-packet one-way delay: 226.056 ms

Loss rate: 2.16%

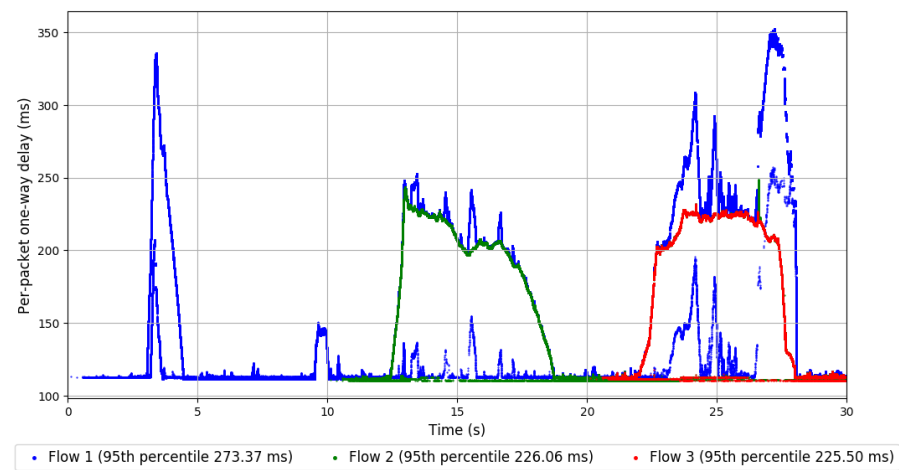
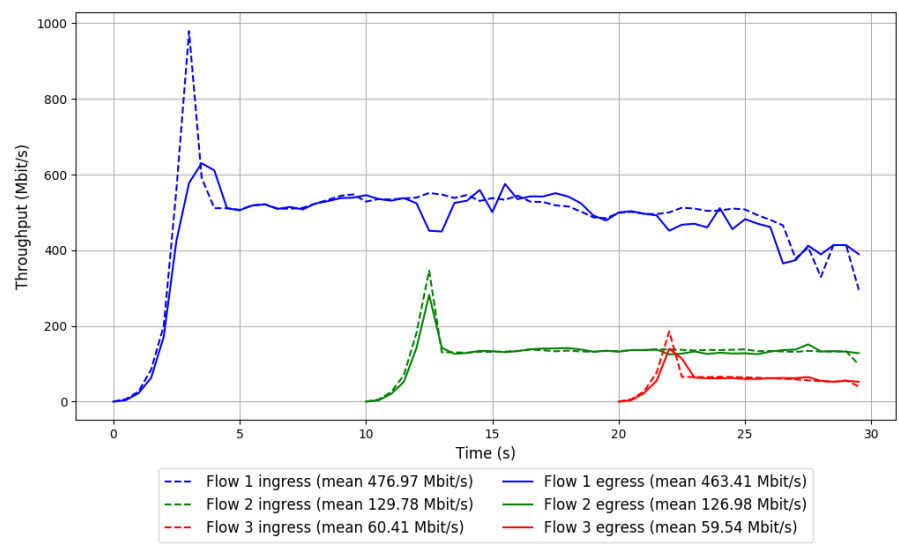
-- Flow 3:

Average throughput: 59.54 Mbit/s

95th percentile per-packet one-way delay: 225.502 ms

Loss rate: 1.43%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-03-28 02:15:49

End at: 2018-03-28 02:16:19

Below is generated by plot.py at 2018-03-28 05:18:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 577.85 Mbit/s

95th percentile per-packet one-way delay: 270.385 ms

Loss rate: 3.71%

-- Flow 1:

Average throughput: 477.08 Mbit/s

95th percentile per-packet one-way delay: 276.102 ms

Loss rate: 4.02%

-- Flow 2:

Average throughput: 135.99 Mbit/s

95th percentile per-packet one-way delay: 223.616 ms

Loss rate: 2.24%

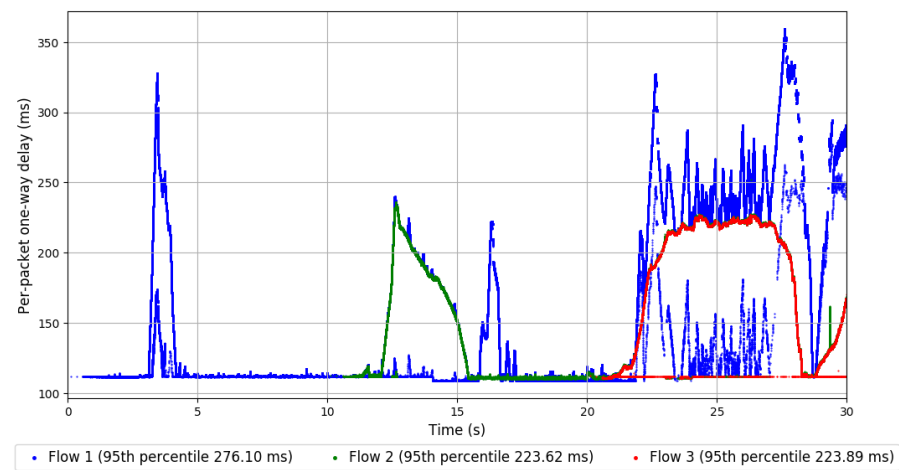
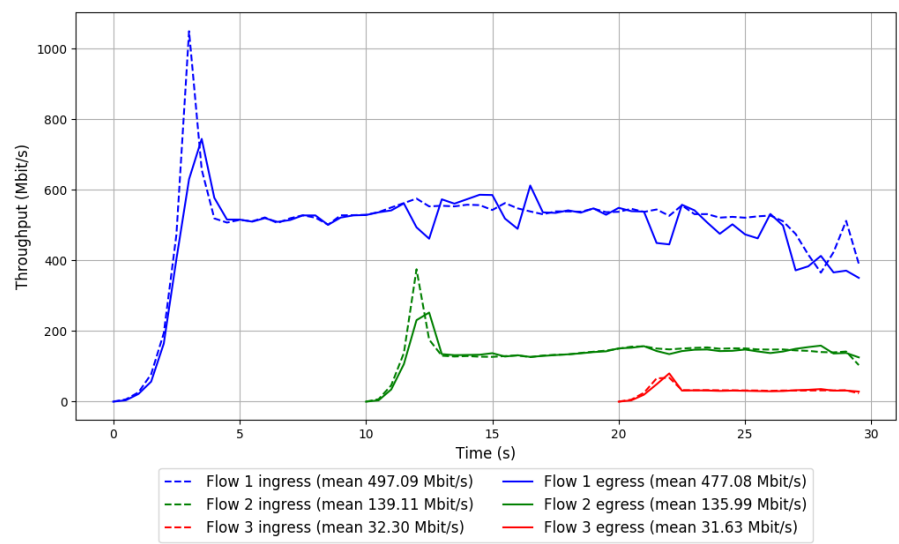
-- Flow 3:

Average throughput: 31.63 Mbit/s

95th percentile per-packet one-way delay: 223.888 ms

Loss rate: 2.05%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-03-28 02:35:06

End at: 2018-03-28 02:35:36

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 580.37 Mbit/s

95th percentile per-packet one-way delay: 263.947 ms

Loss rate: 3.75%

-- Flow 1:

Average throughput: 499.41 Mbit/s

95th percentile per-packet one-way delay: 269.419 ms

Loss rate: 3.72%

-- Flow 2:

Average throughput: 120.77 Mbit/s

95th percentile per-packet one-way delay: 223.904 ms

Loss rate: 3.95%

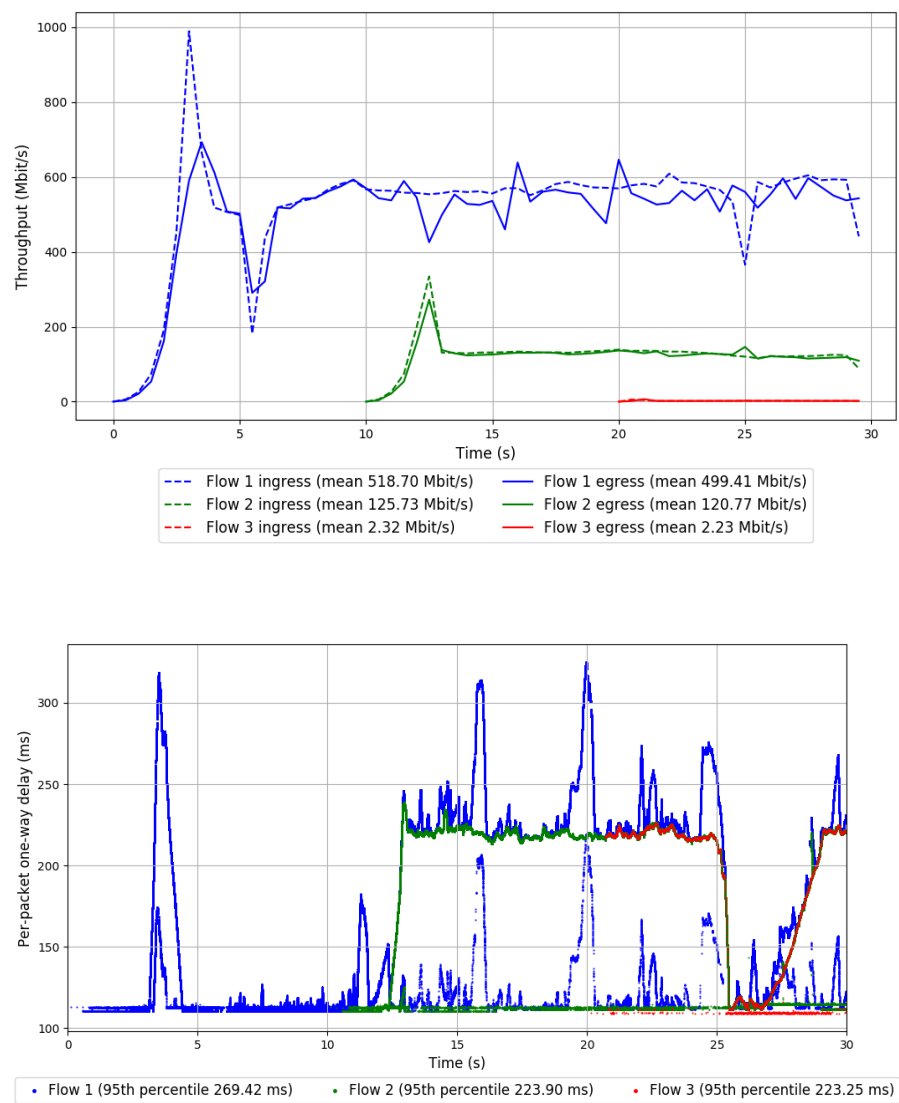
-- Flow 3:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 223.247 ms

Loss rate: 3.48%

Run 10: Report of PCC — Data Link

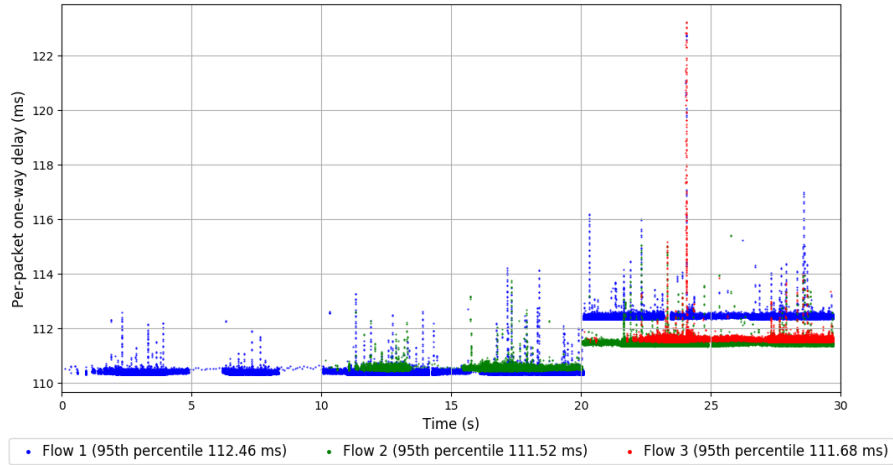
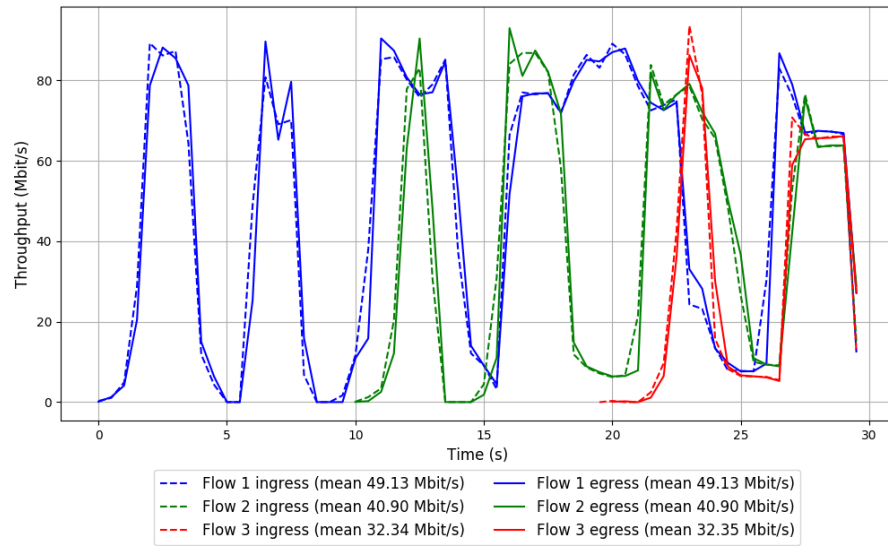


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-03-27 23:46:23
End at: 2018-03-27 23:46:53

# Below is generated by plot.py at 2018-03-28 05:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.65 Mbit/s
95th percentile per-packet one-way delay: 112.434 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.13 Mbit/s
95th percentile per-packet one-way delay: 112.456 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.90 Mbit/s
95th percentile per-packet one-way delay: 111.517 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.35 Mbit/s
95th percentile per-packet one-way delay: 111.682 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-03-28 00:05:35

End at: 2018-03-28 00:06:05

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.34 Mbit/s

95th percentile per-packet one-way delay: 110.770 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.50 Mbit/s

95th percentile per-packet one-way delay: 110.722 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.42 Mbit/s

95th percentile per-packet one-way delay: 110.742 ms

Loss rate: 0.00%

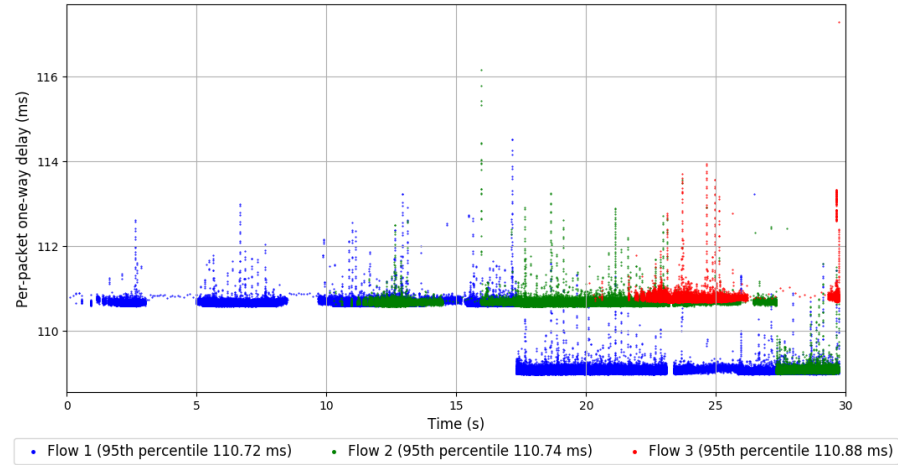
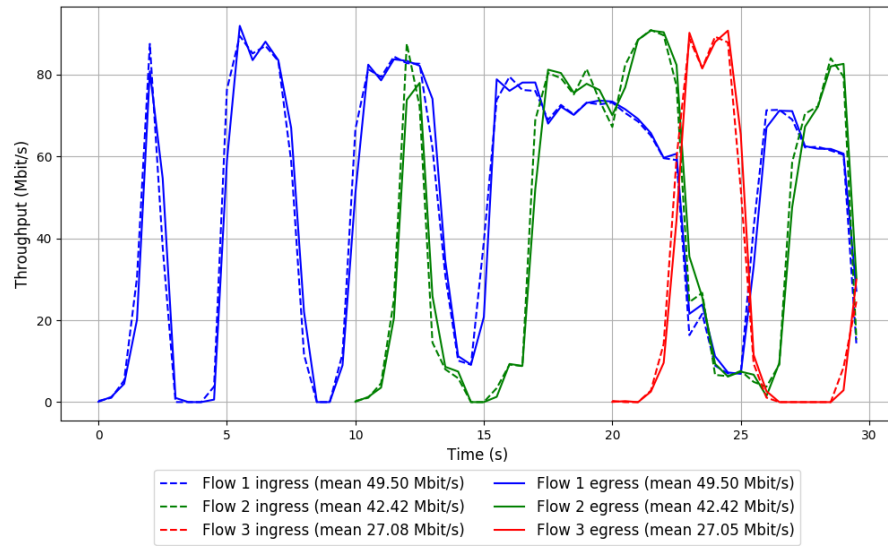
-- Flow 3:

Average throughput: 27.05 Mbit/s

95th percentile per-packet one-way delay: 110.884 ms

Loss rate: 0.04%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-03-28 00:24:59

End at: 2018-03-28 00:25:29

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.40 Mbit/s

95th percentile per-packet one-way delay: 112.693 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.56 Mbit/s

95th percentile per-packet one-way delay: 112.714 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.81 Mbit/s

95th percentile per-packet one-way delay: 112.200 ms

Loss rate: 0.00%

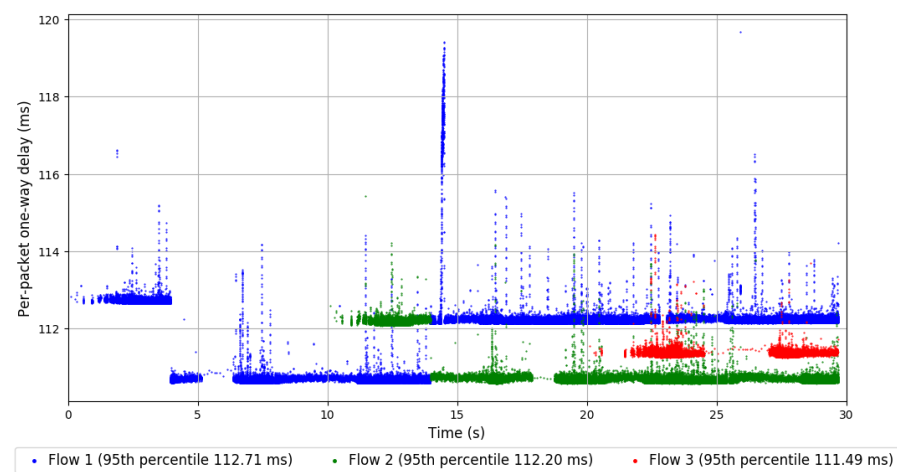
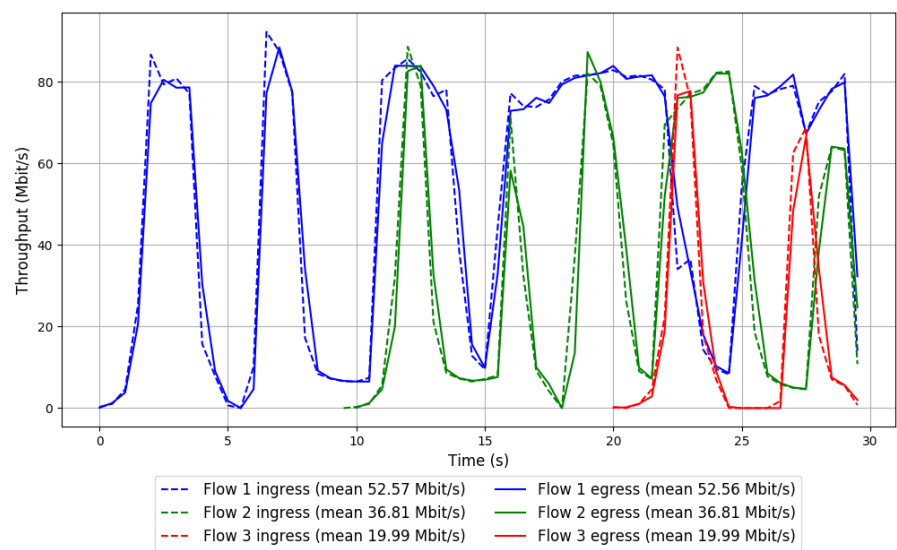
-- Flow 3:

Average throughput: 19.99 Mbit/s

95th percentile per-packet one-way delay: 111.488 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-03-28 00:44:12

End at: 2018-03-28 00:44:42

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.88 Mbit/s

95th percentile per-packet one-way delay: 112.755 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.88 Mbit/s

95th percentile per-packet one-way delay: 110.913 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.83 Mbit/s

95th percentile per-packet one-way delay: 112.800 ms

Loss rate: 0.01%

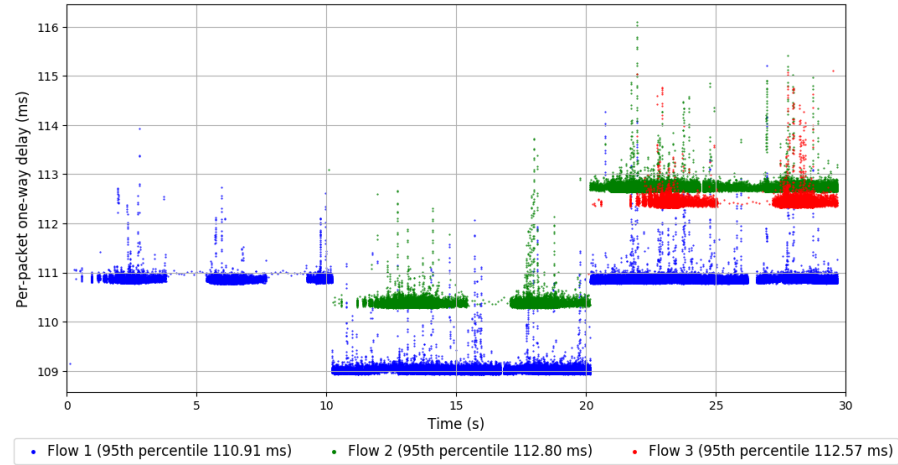
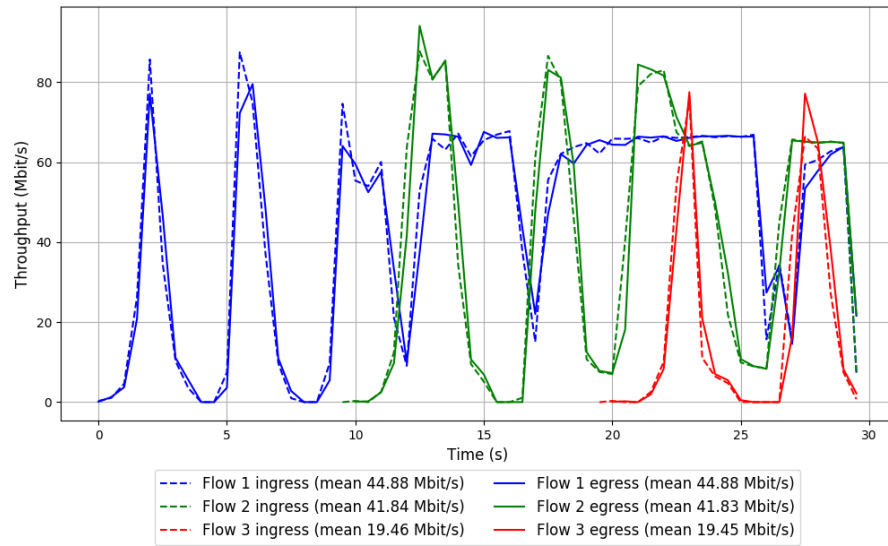
-- Flow 3:

Average throughput: 19.45 Mbit/s

95th percentile per-packet one-way delay: 112.568 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-03-28 01:03:15

End at: 2018-03-28 01:03:45

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.48 Mbit/s

95th percentile per-packet one-way delay: 112.613 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.70 Mbit/s

95th percentile per-packet one-way delay: 112.639 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.24 Mbit/s

95th percentile per-packet one-way delay: 111.582 ms

Loss rate: 0.00%

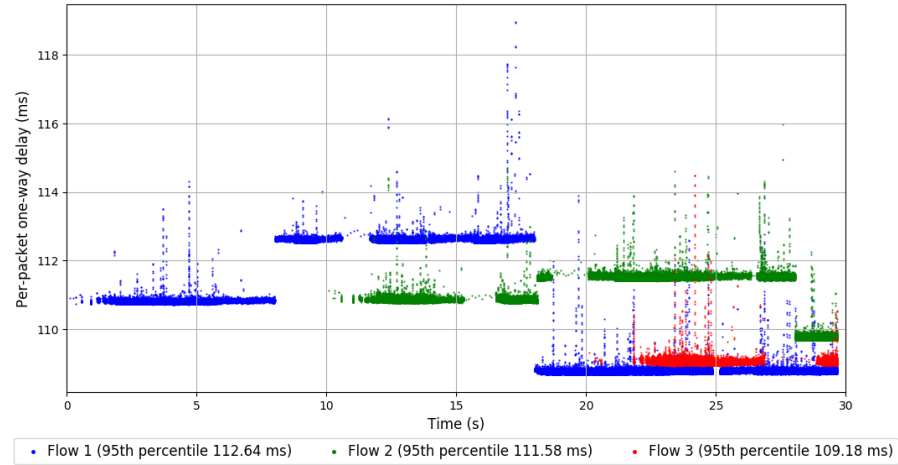
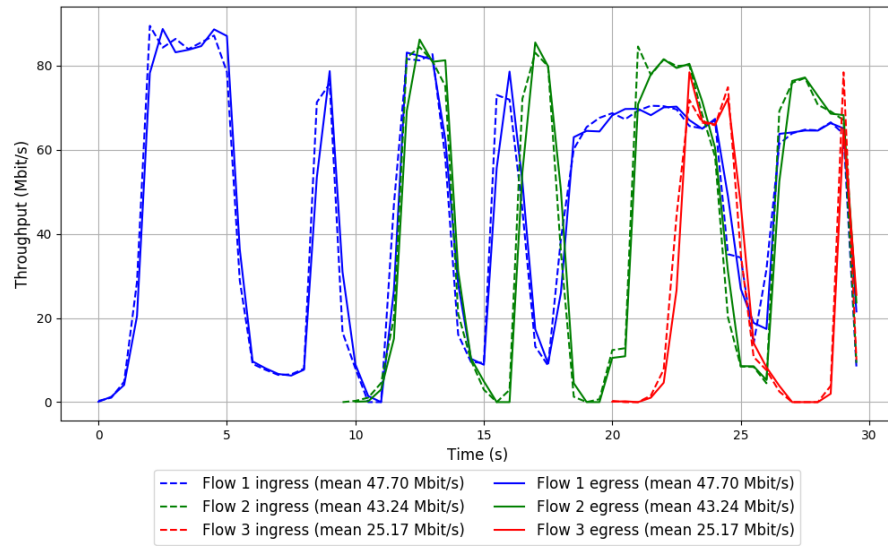
-- Flow 3:

Average throughput: 25.17 Mbit/s

95th percentile per-packet one-way delay: 109.178 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-03-28 01:22:16

End at: 2018-03-28 01:22:46

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.30 Mbit/s

95th percentile per-packet one-way delay: 112.374 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 58.66 Mbit/s

95th percentile per-packet one-way delay: 112.335 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.73 Mbit/s

95th percentile per-packet one-way delay: 112.297 ms

Loss rate: 0.00%

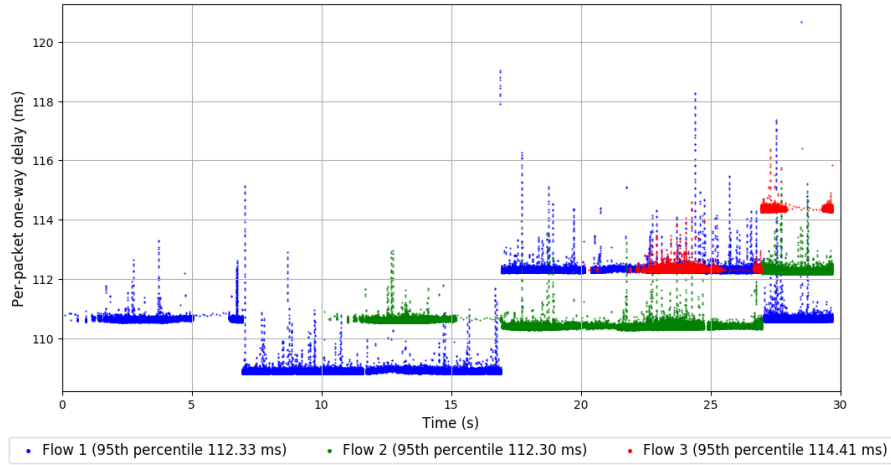
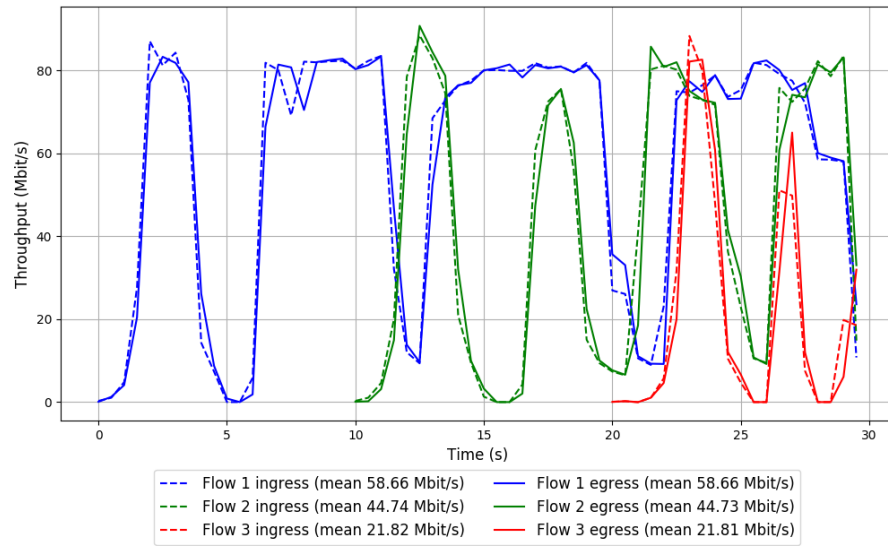
-- Flow 3:

Average throughput: 21.81 Mbit/s

95th percentile per-packet one-way delay: 114.406 ms

Loss rate: 0.07%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-03-28 01:41:37

End at: 2018-03-28 01:42:07

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.70 Mbit/s

95th percentile per-packet one-way delay: 112.576 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 55.39 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.86 Mbit/s

95th percentile per-packet one-way delay: 112.623 ms

Loss rate: 0.00%

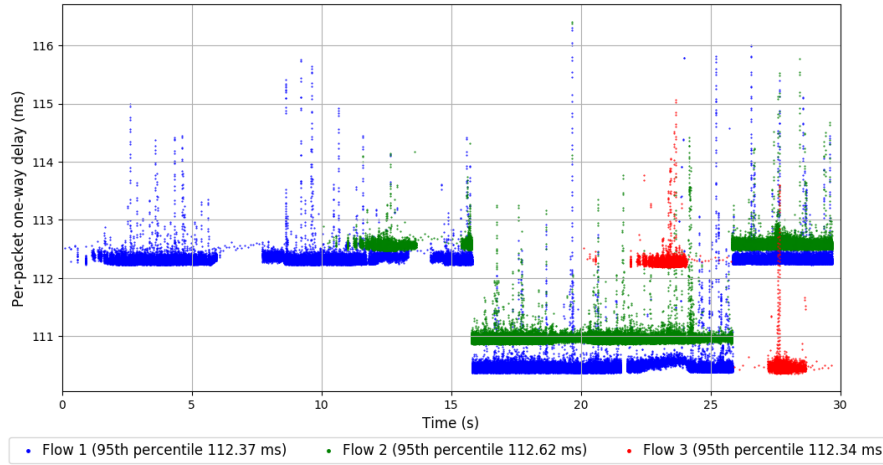
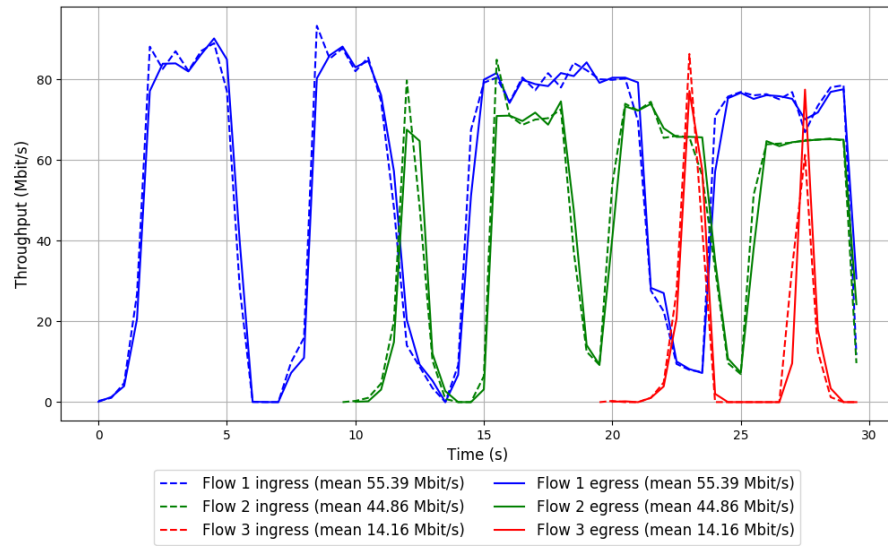
-- Flow 3:

Average throughput: 14.16 Mbit/s

95th percentile per-packet one-way delay: 112.338 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-03-28 02:01:03

End at: 2018-03-28 02:01:33

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.01 Mbit/s

95th percentile per-packet one-way delay: 112.280 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.65 Mbit/s

95th percentile per-packet one-way delay: 112.313 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.19 Mbit/s

95th percentile per-packet one-way delay: 110.487 ms

Loss rate: 0.00%

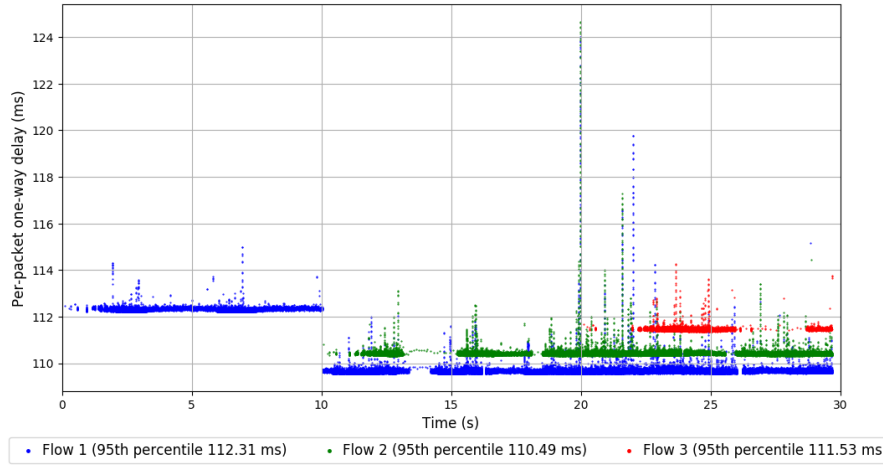
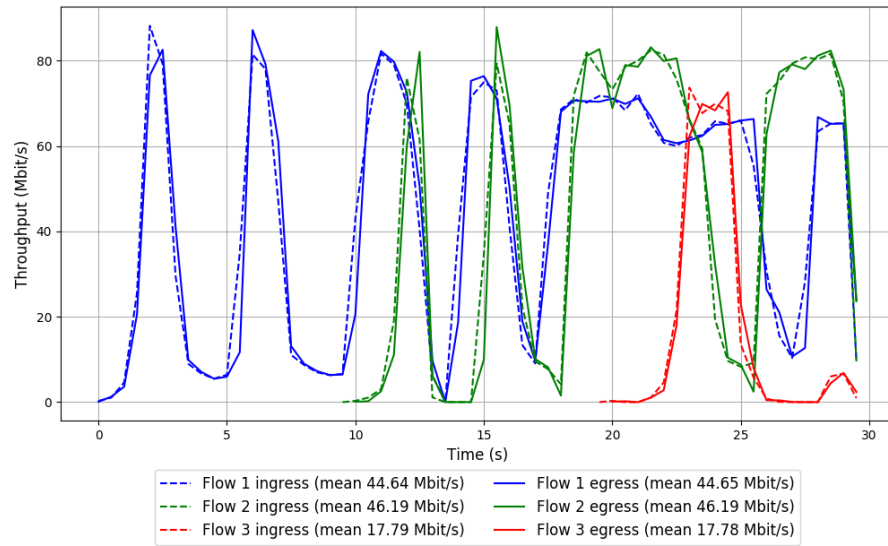
-- Flow 3:

Average throughput: 17.78 Mbit/s

95th percentile per-packet one-way delay: 111.532 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-03-28 02:20:23

End at: 2018-03-28 02:20:53

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.32 Mbit/s

95th percentile per-packet one-way delay: 112.594 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.51 Mbit/s

95th percentile per-packet one-way delay: 112.622 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.80 Mbit/s

95th percentile per-packet one-way delay: 109.761 ms

Loss rate: 0.00%

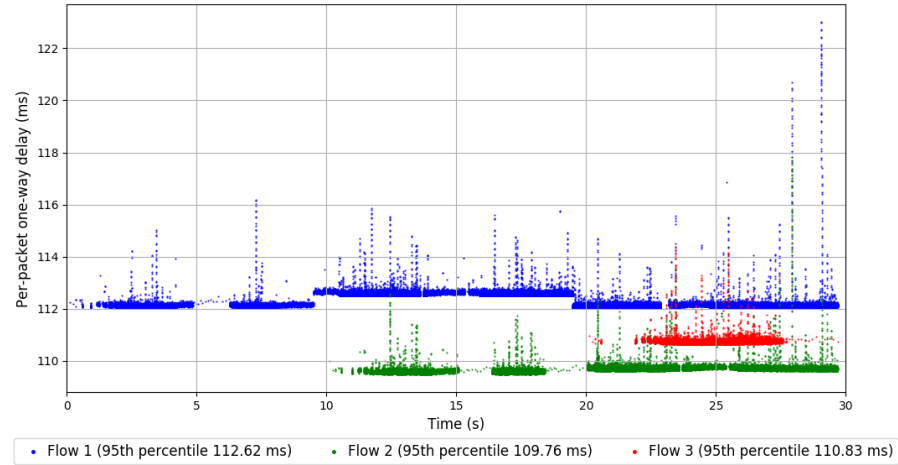
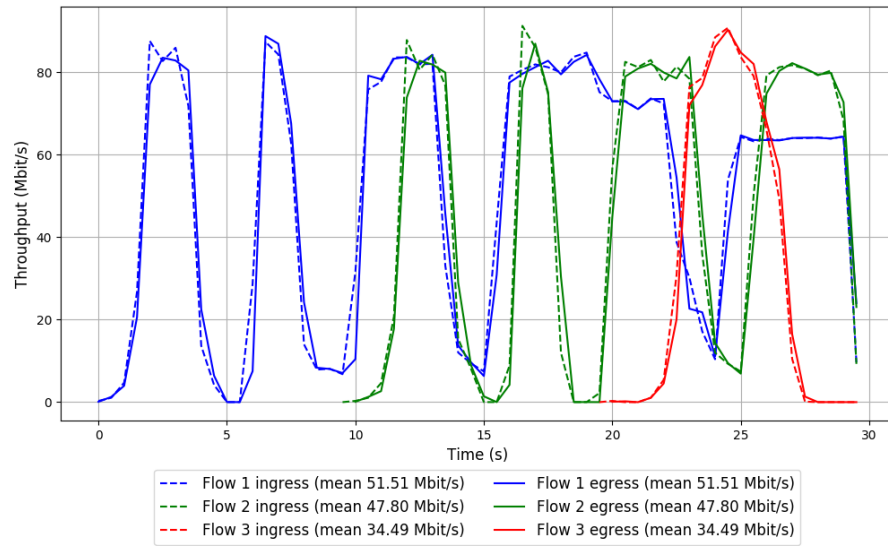
-- Flow 3:

Average throughput: 34.49 Mbit/s

95th percentile per-packet one-way delay: 110.827 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

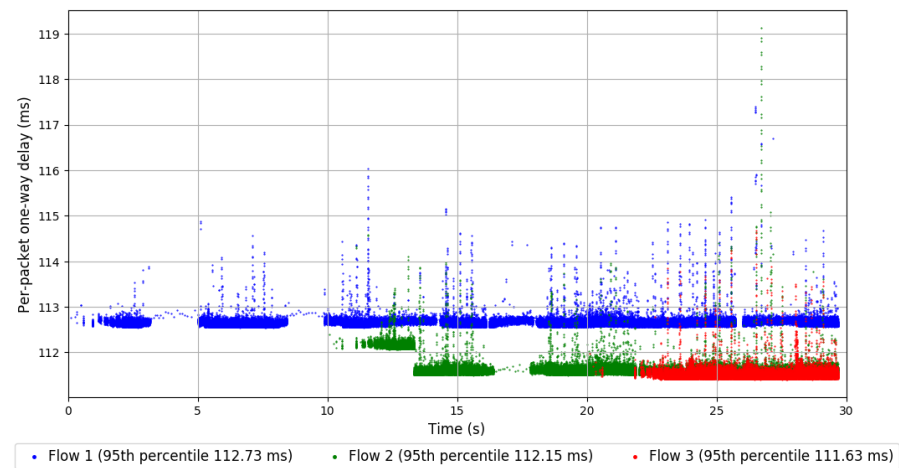
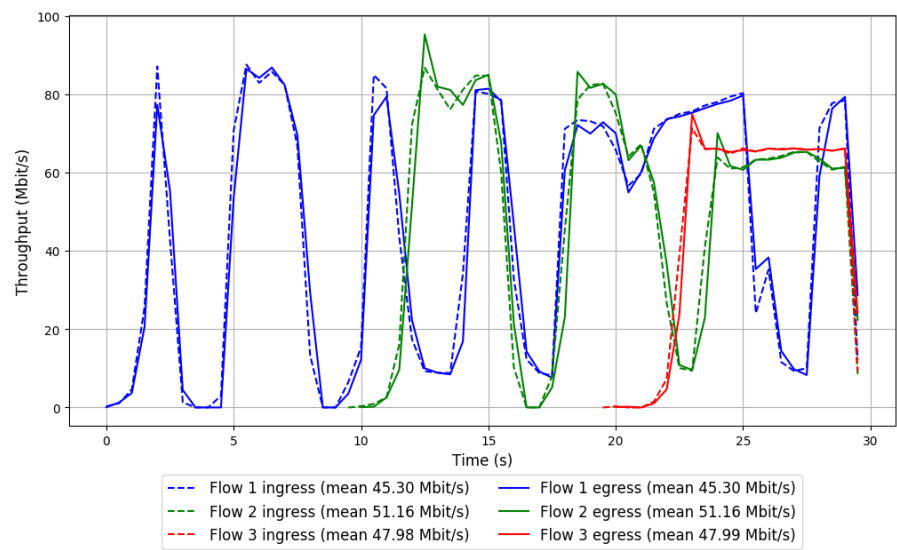


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-03-28 02:39:29
End at: 2018-03-28 02:39:59

# Below is generated by plot.py at 2018-03-28 05:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.73 Mbit/s
95th percentile per-packet one-way delay: 112.704 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.30 Mbit/s
95th percentile per-packet one-way delay: 112.735 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 51.16 Mbit/s
95th percentile per-packet one-way delay: 112.148 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 47.99 Mbit/s
95th percentile per-packet one-way delay: 111.632 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

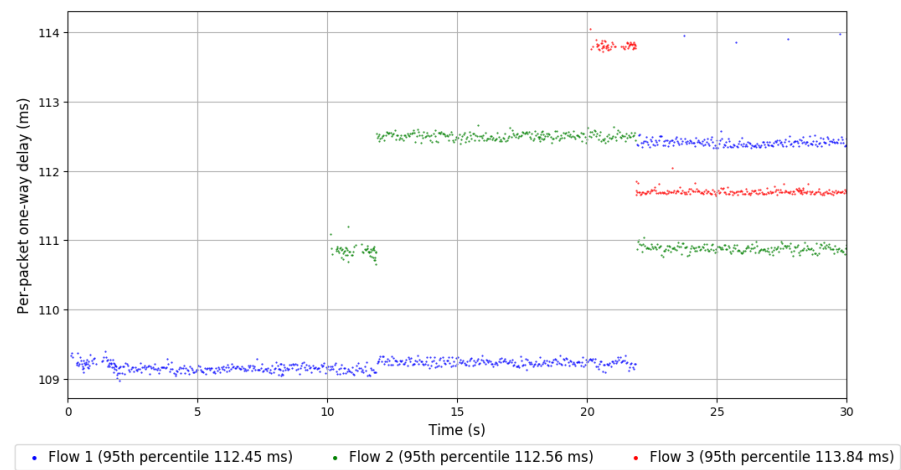
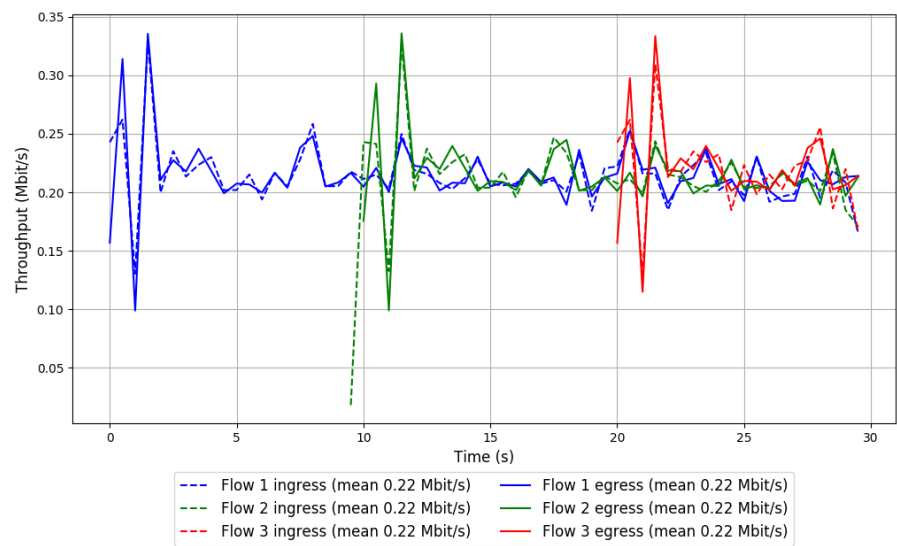


```
Run 1: Statistics of SCReAM

Start at: 2018-03-27 23:54:31
End at: 2018-03-27 23:55:01

# Below is generated by plot.py at 2018-03-28 05:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.572 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.451 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.563 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.838 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

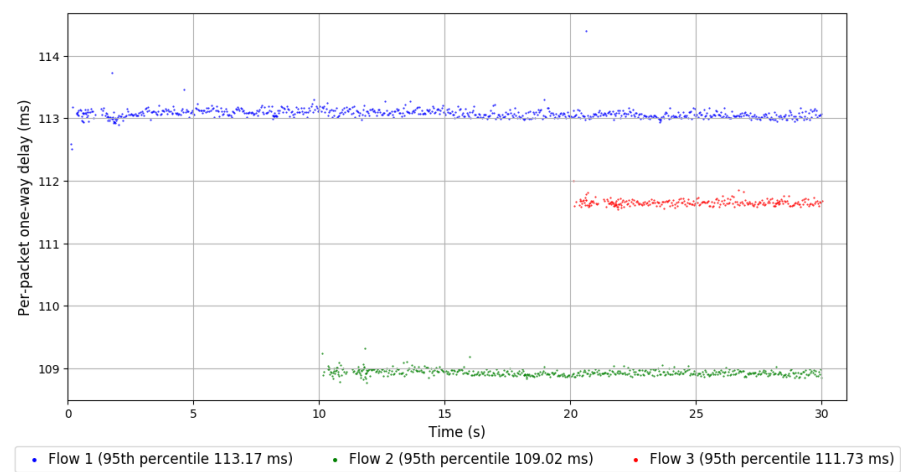
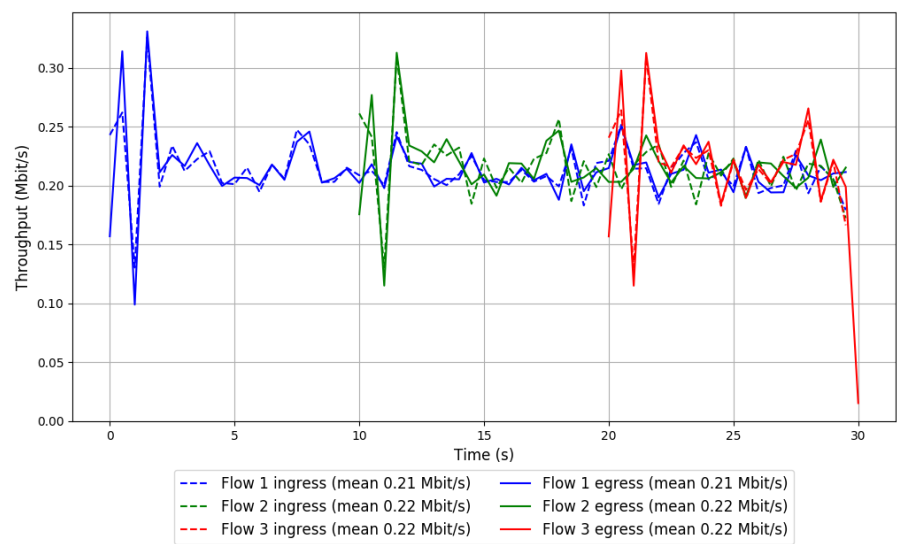


```
Run 2: Statistics of SCReAM

Start at: 2018-03-28 00:13:53
End at: 2018-03-28 00:14:23

# Below is generated by plot.py at 2018-03-28 05:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.156 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.175 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.022 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.729 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-03-28 00:33:07

End at: 2018-03-28 00:33:37

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 113.085 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.110 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.699 ms

Loss rate: 0.00%

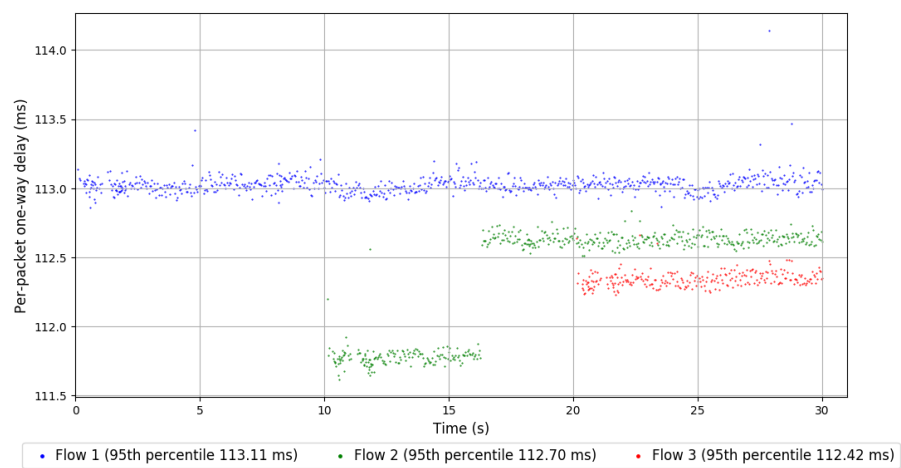
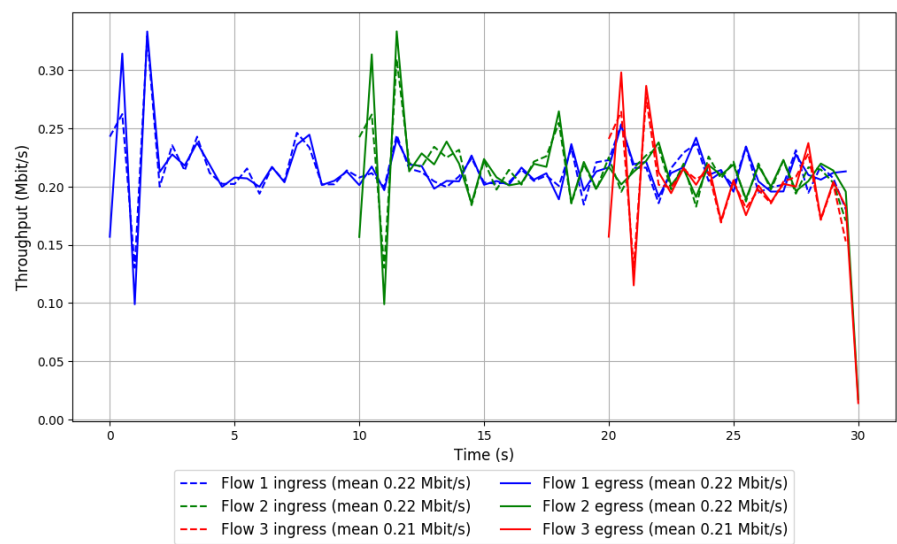
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.422 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

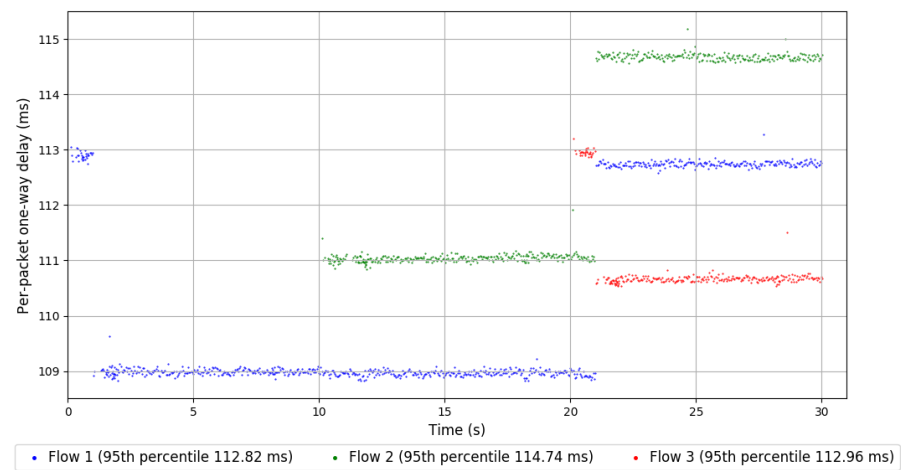
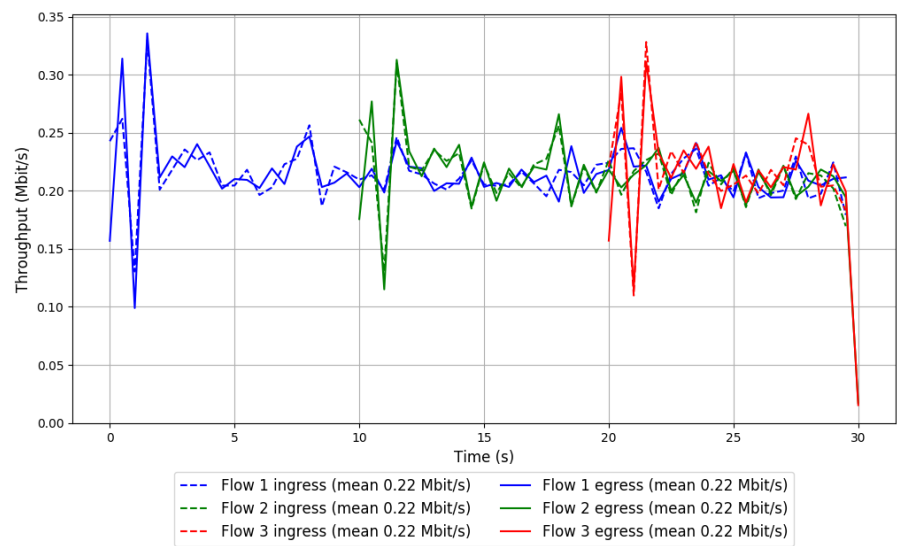


```
Run 4: Statistics of SCReAM

Start at: 2018-03-28 00:52:12
End at: 2018-03-28 00:52:42

# Below is generated by plot.py at 2018-03-28 05:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 114.703 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.817 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.736 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.956 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-03-28 01:11:15

End at: 2018-03-28 01:11:45

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 112.477 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.494 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 112.452 ms

Loss rate: 0.00%

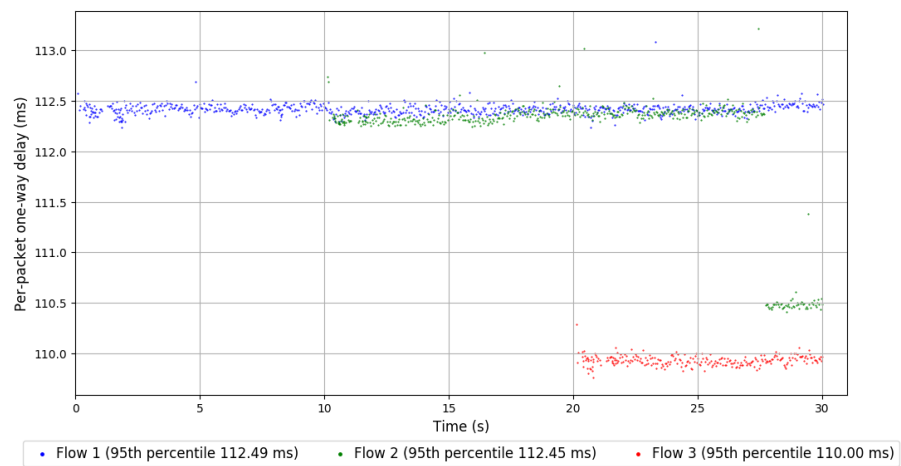
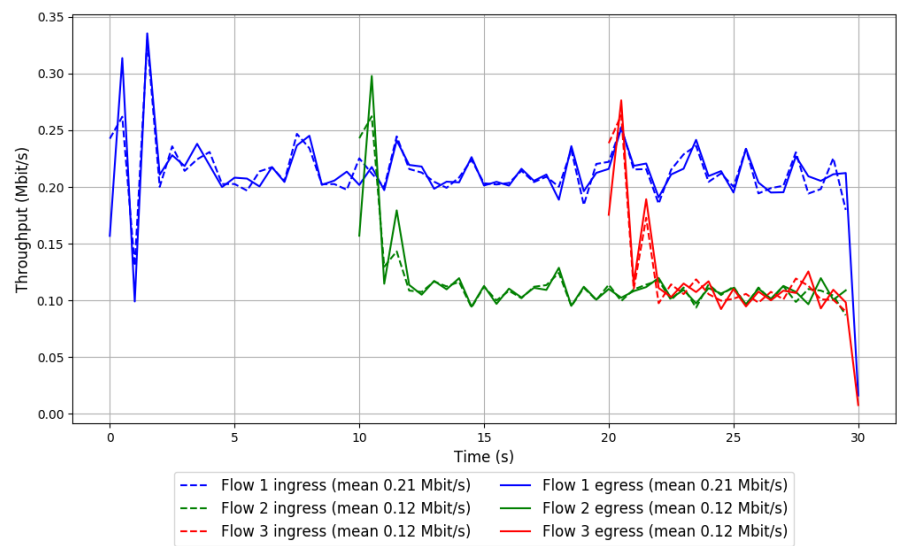
-- Flow 3:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 110.001 ms

Loss rate: 0.00%

Run 5: Report of SCReAM — Data Link

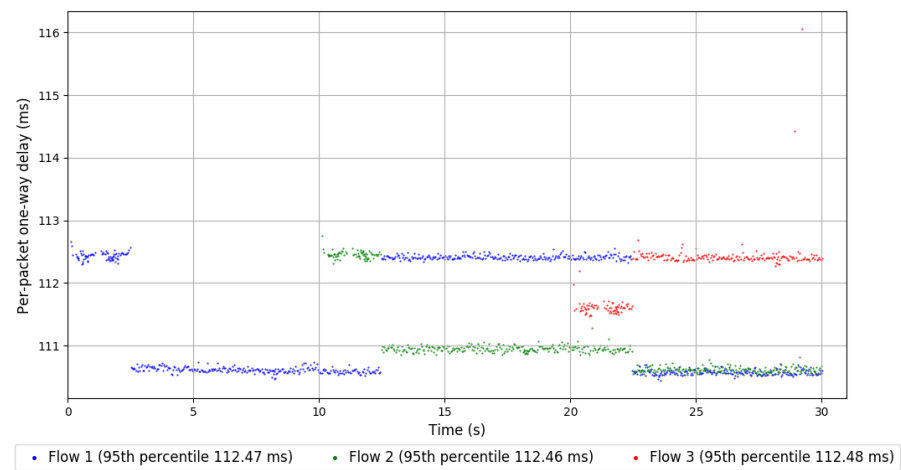
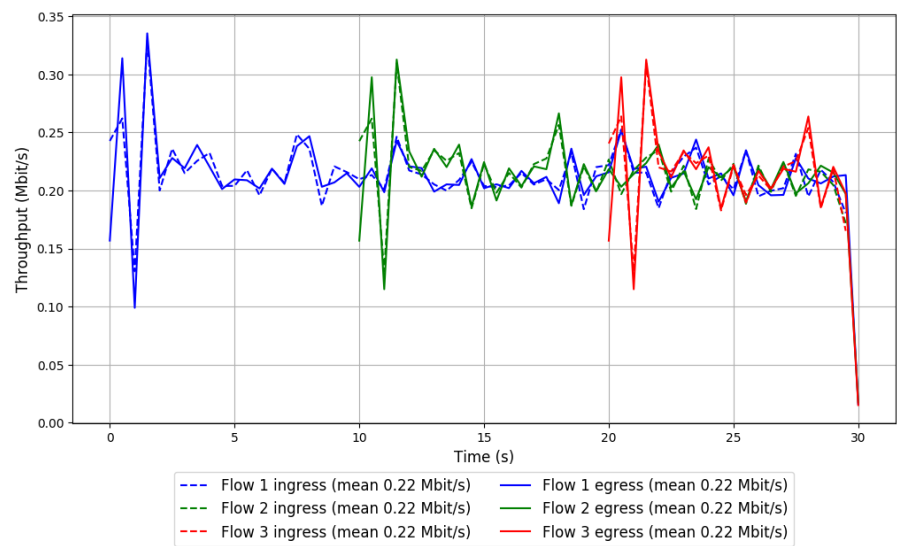


```
Run 6: Statistics of SReAM

Start at: 2018-03-28 01:30:20
End at: 2018-03-28 01:30:50

# Below is generated by plot.py at 2018-03-28 05:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.472 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.471 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.464 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.484 ms
Loss rate: 0.00%
```

Run 6: Report of SReAM — Data Link

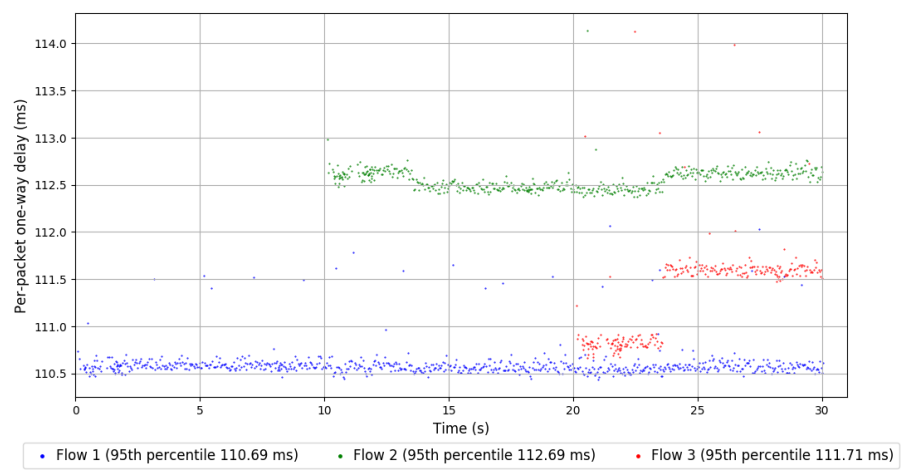
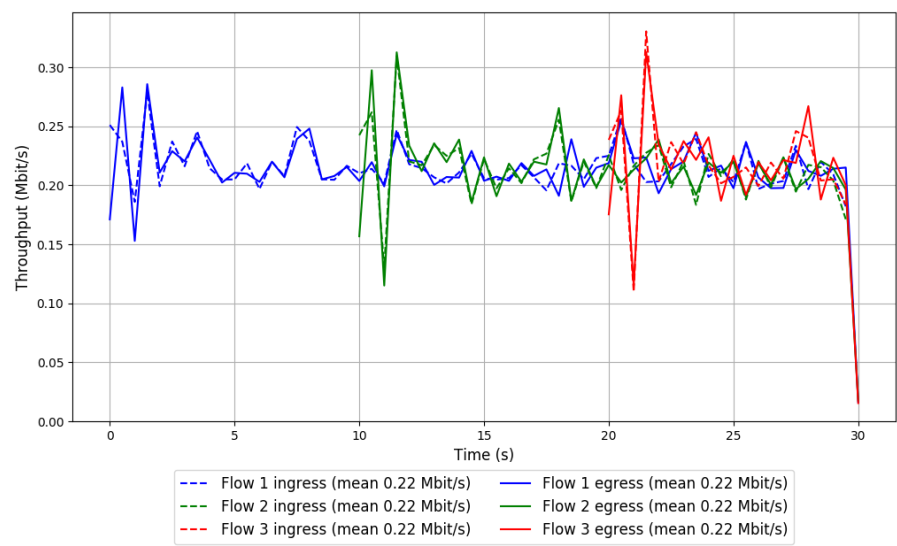


```
Run 7: Statistics of SReAM

Start at: 2018-03-28 01:49:49
End at: 2018-03-28 01:50:19

# Below is generated by plot.py at 2018-03-28 05:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.657 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.692 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.690 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.707 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-03-28 02:09:12

End at: 2018-03-28 02:09:42

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.941 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.907 ms

Loss rate: 0.00%

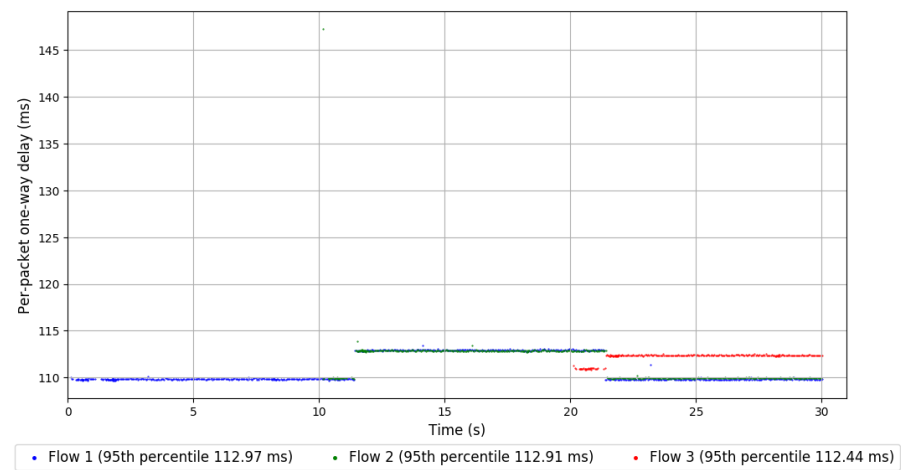
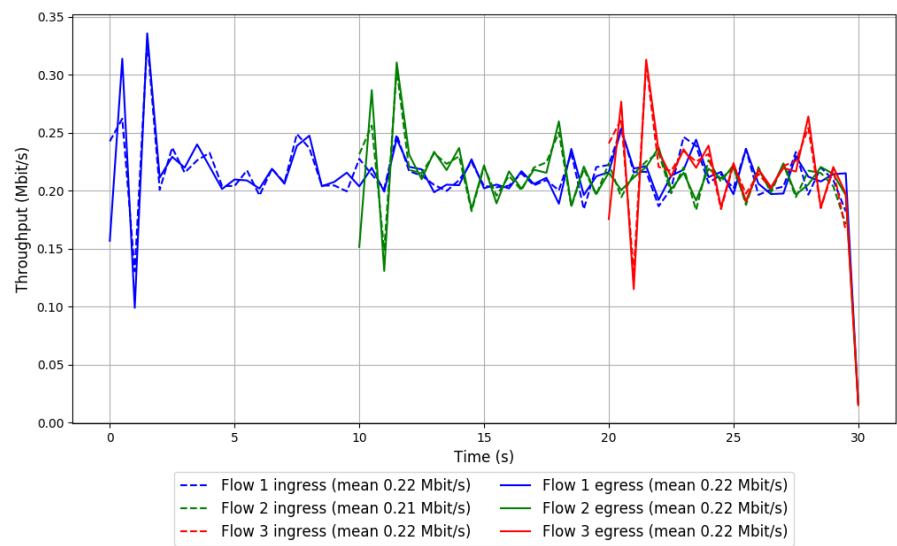
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.443 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link

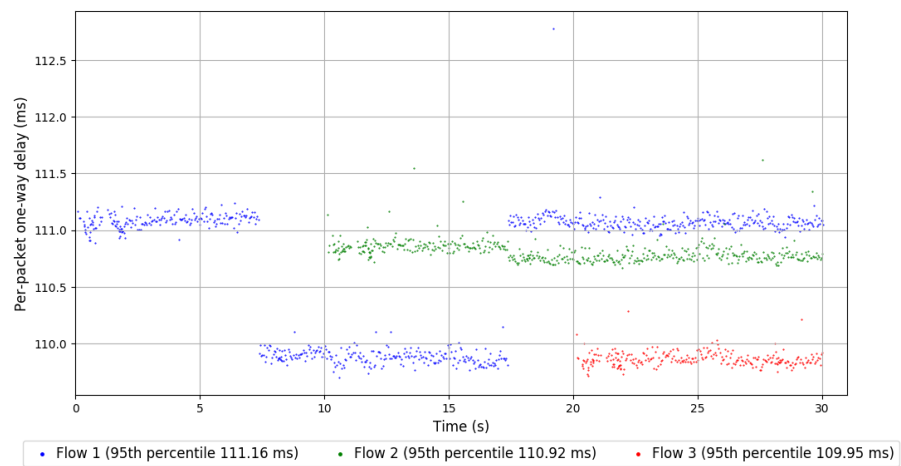
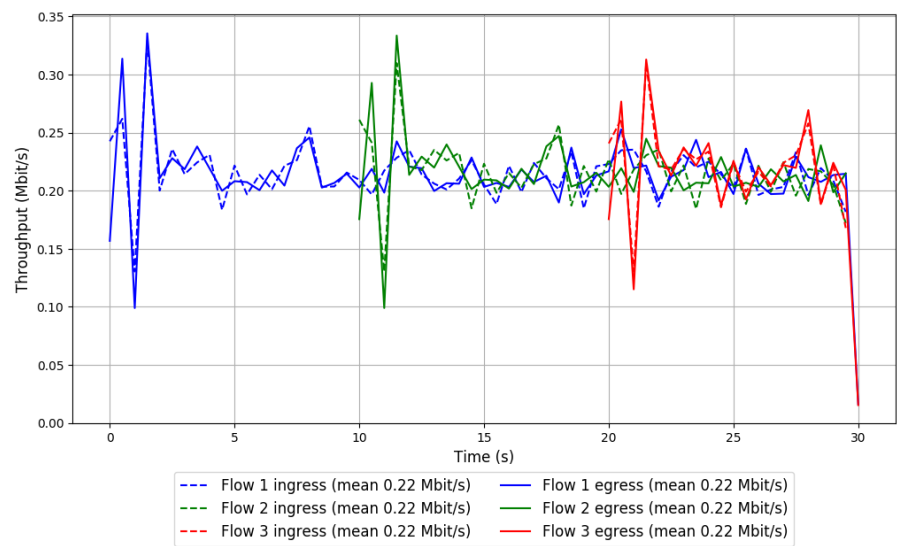


```
Run 9: Statistics of SReAM

Start at: 2018-03-28 02:28:26
End at: 2018-03-28 02:28:56

# Below is generated by plot.py at 2018-03-28 05:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 111.132 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.158 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.916 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.953 ms
Loss rate: 0.00%
```

Run 9: Report of SReAM — Data Link

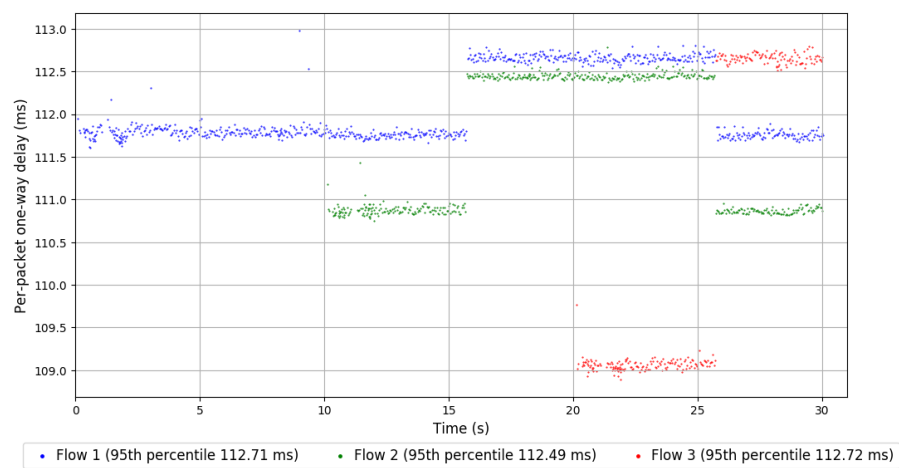
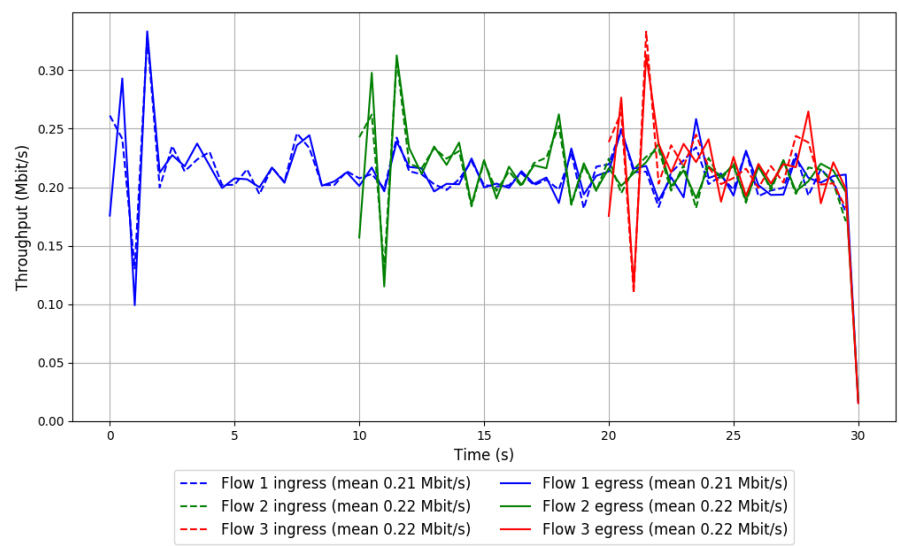


```
Run 10: Statistics of SReAM

Start at: 2018-03-28 02:47:37
End at: 2018-03-28 02:48:07

# Below is generated by plot.py at 2018-03-28 05:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.699 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.711 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.491 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.722 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link

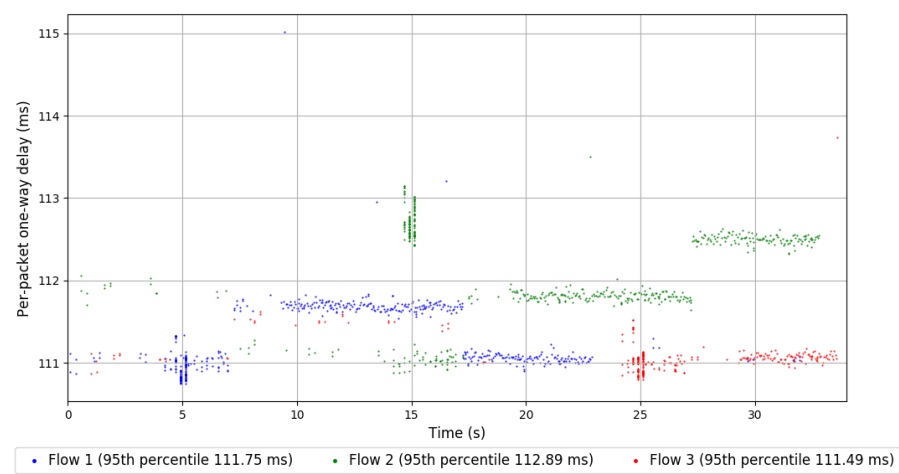
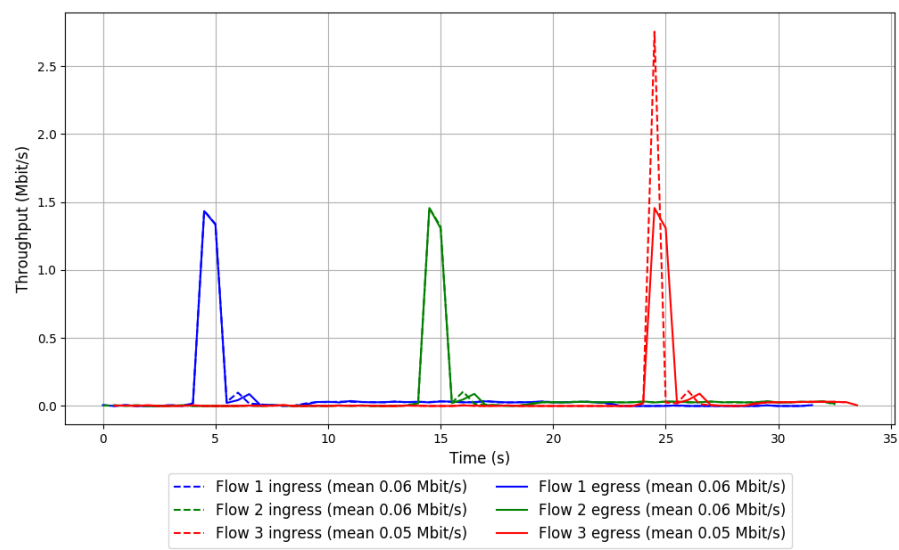


```
Run 1: Statistics of WebRTC media

Start at: 2018-03-27 23:40:09
End at: 2018-03-27 23:40:39

# Below is generated by plot.py at 2018-03-28 05:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 112.665 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 111.746 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.890 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 111.490 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link

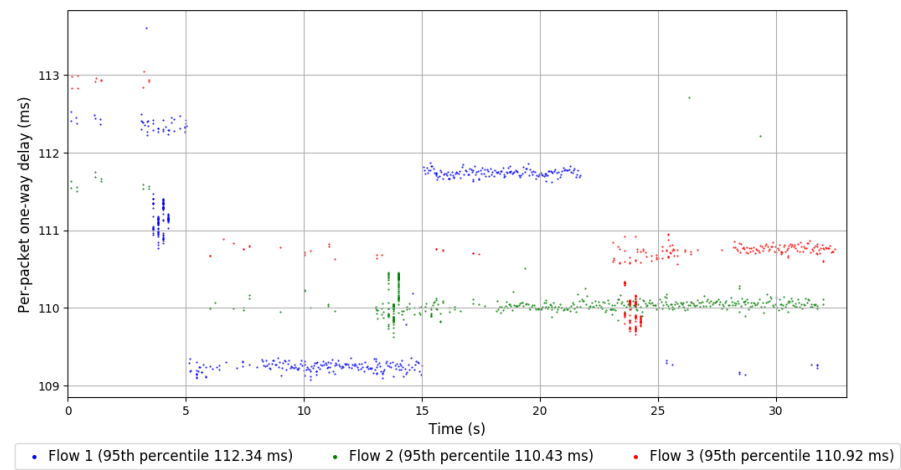
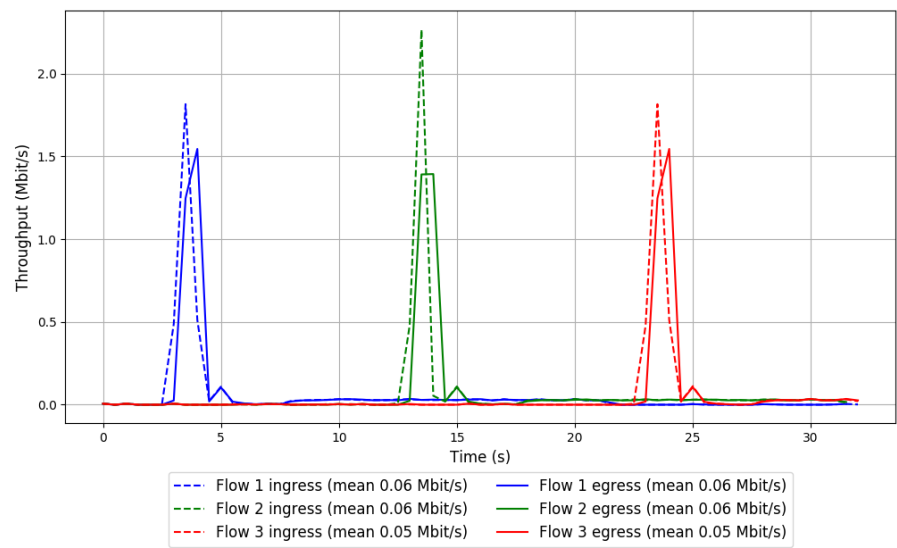


```
Run 2: Statistics of WebRTC media

Start at: 2018-03-27 23:59:20
End at: 2018-03-27 23:59:50

# Below is generated by plot.py at 2018-03-28 05:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 111.818 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.337 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 110.427 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 110.917 ms
Loss rate: 0.00%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-03-28 00:18:44

End at: 2018-03-28 00:19:14

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 113.087 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 110.604 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 113.118 ms

Loss rate: 0.00%

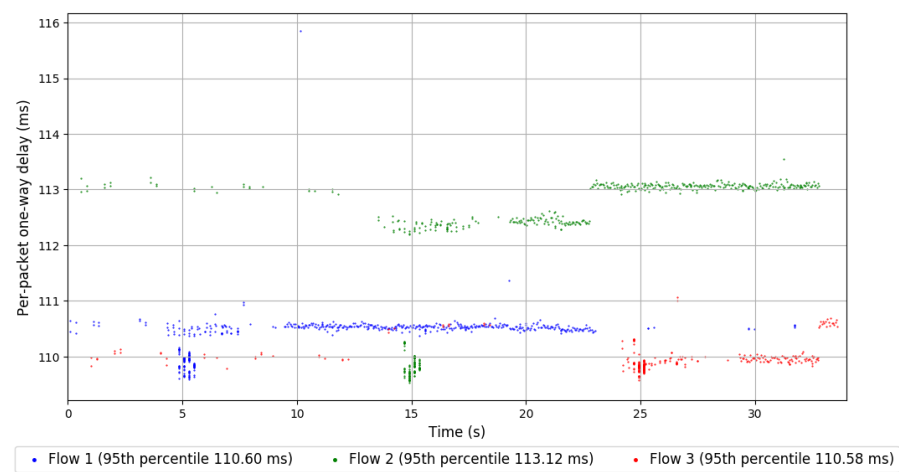
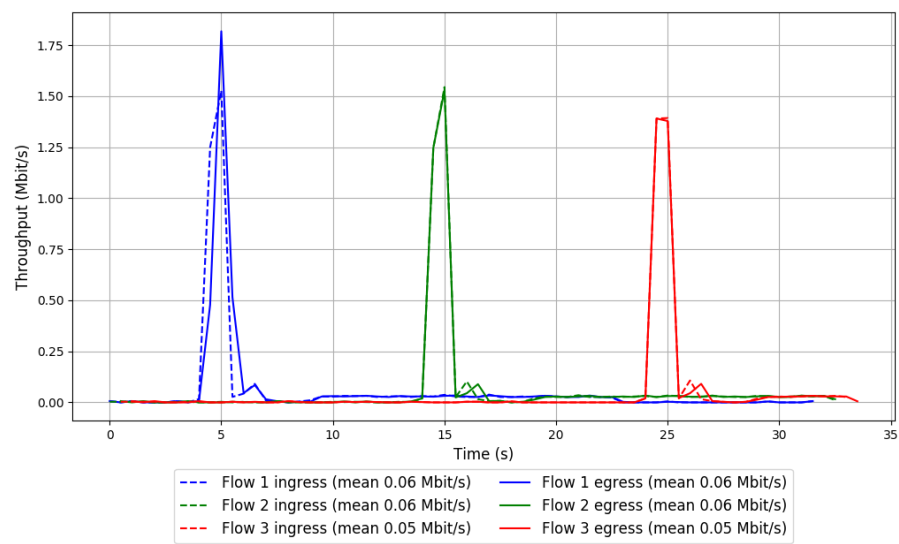
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 110.583 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-03-28 00:37:54

End at: 2018-03-28 00:38:24

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 112.795 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 111.677 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.820 ms

Loss rate: 0.00%

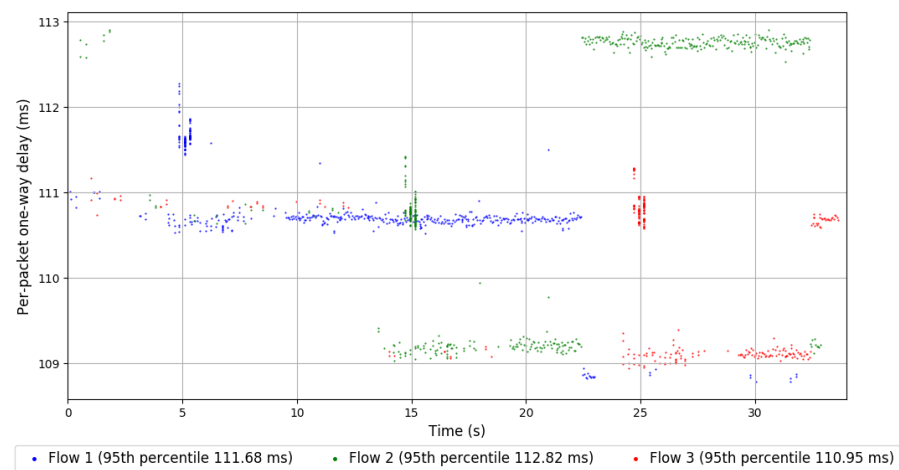
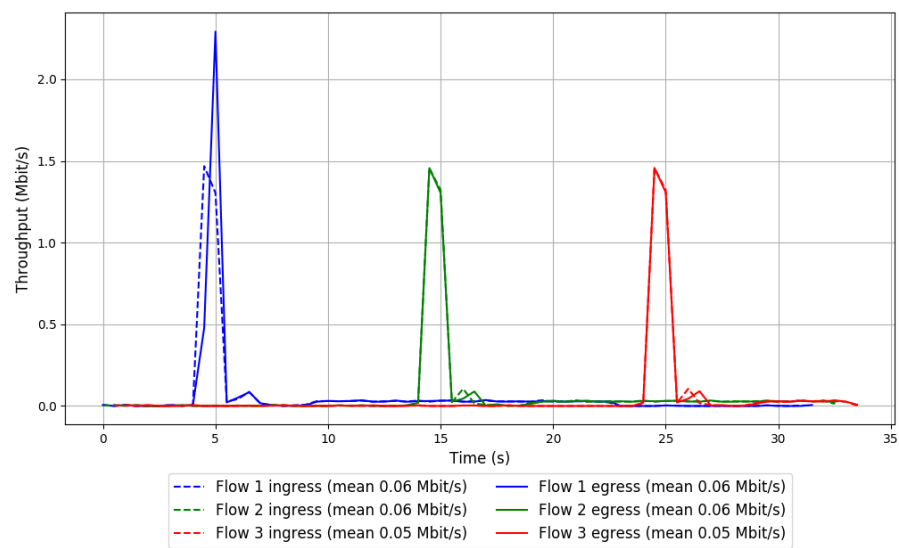
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 110.951 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-03-28 00:57:01

End at: 2018-03-28 00:57:31

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 112.496 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.560 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.474 ms

Loss rate: 0.04%

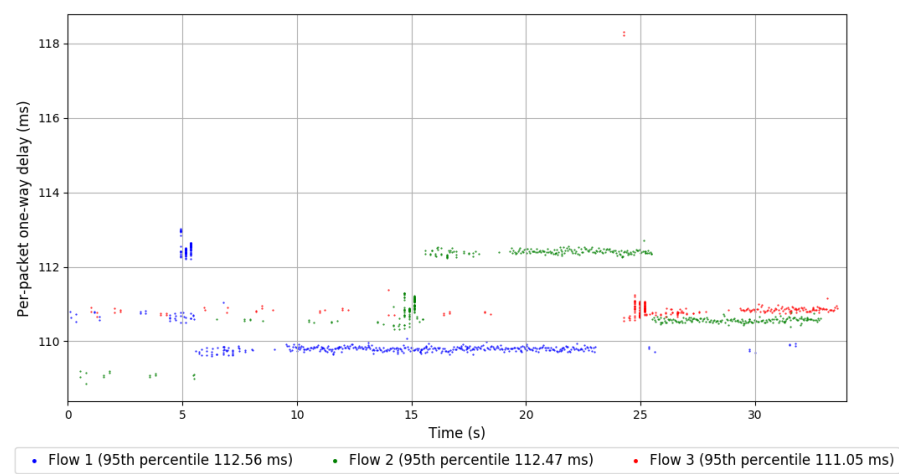
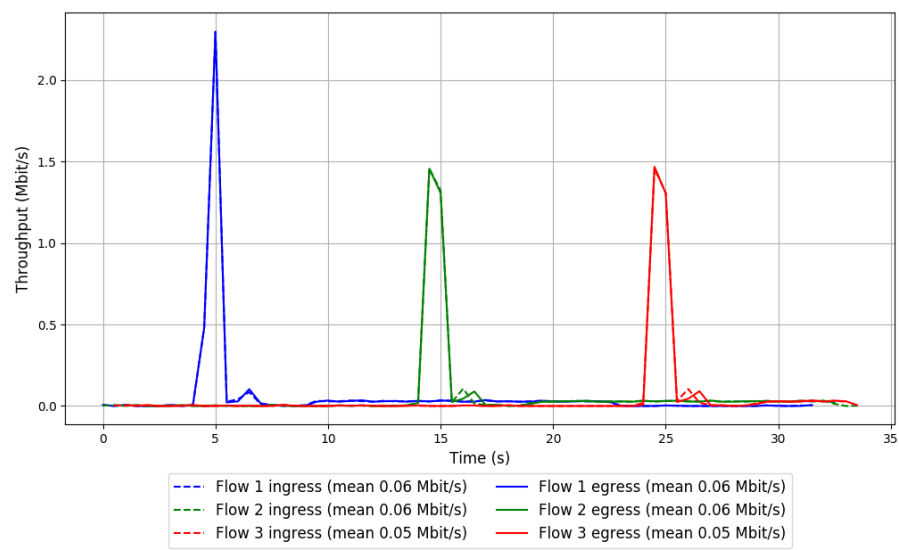
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 111.052 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-03-28 01:16:07

End at: 2018-03-28 01:16:37

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 112.667 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.06 Mbit/s

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

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.602 ms

Loss rate: 0.00%

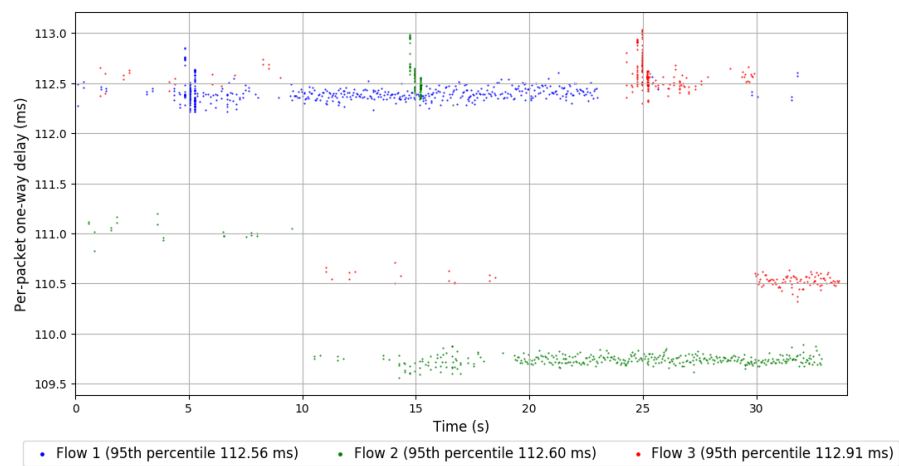
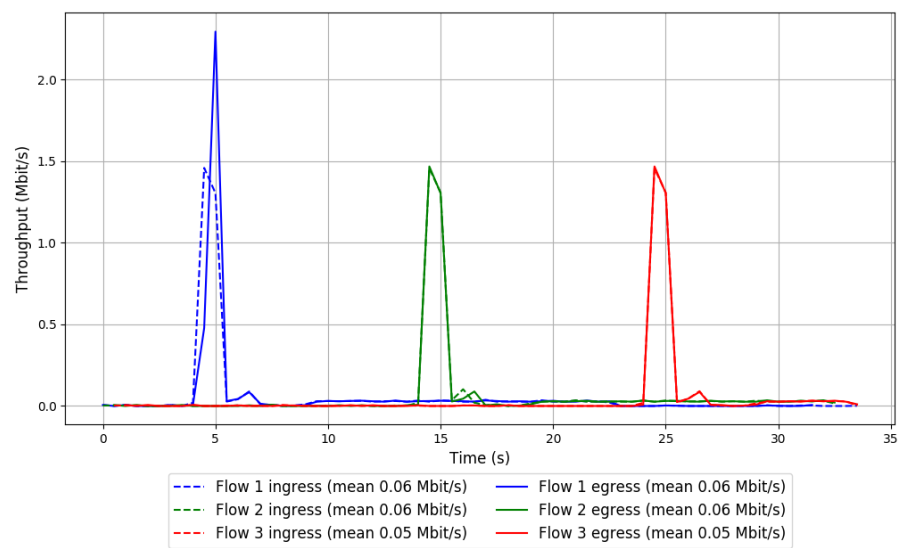
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.907 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-03-28 01:35:15

End at: 2018-03-28 01:35:45

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 112.770 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.761 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.558 ms

Loss rate: 0.00%

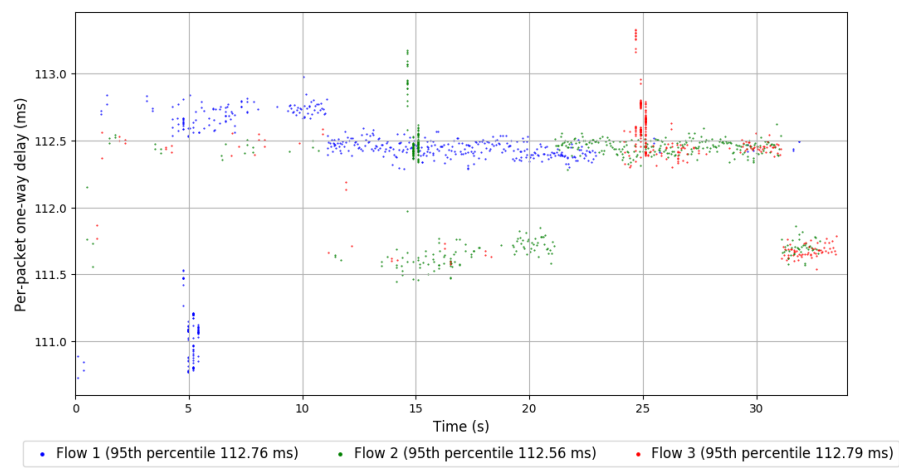
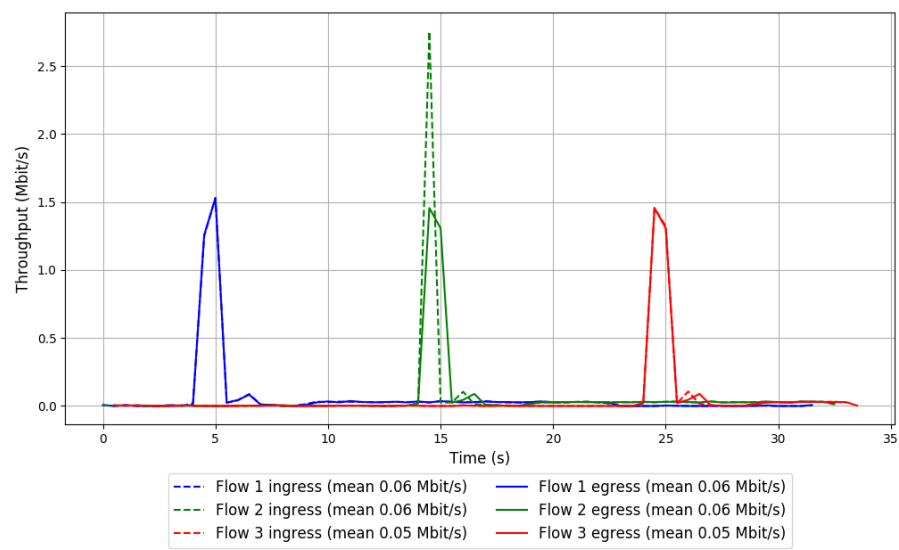
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.792 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-03-28 01:54:38

End at: 2018-03-28 01:55:08

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 112.749 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.054 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

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

Loss rate: 0.00%

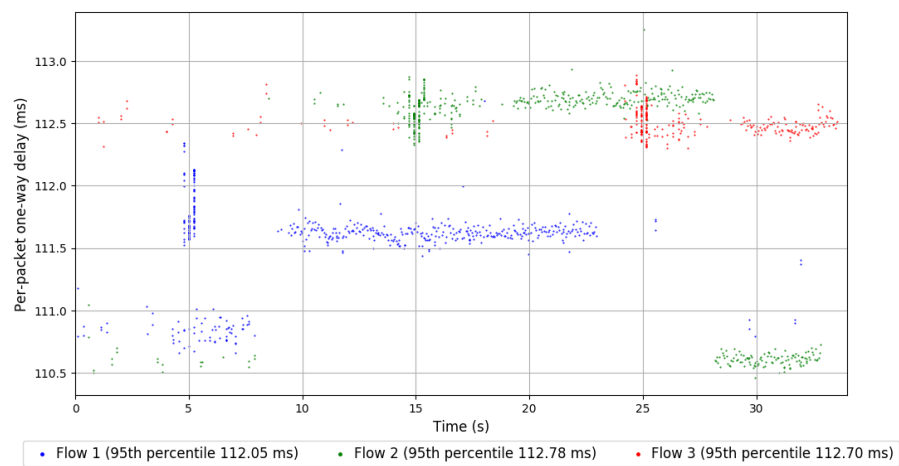
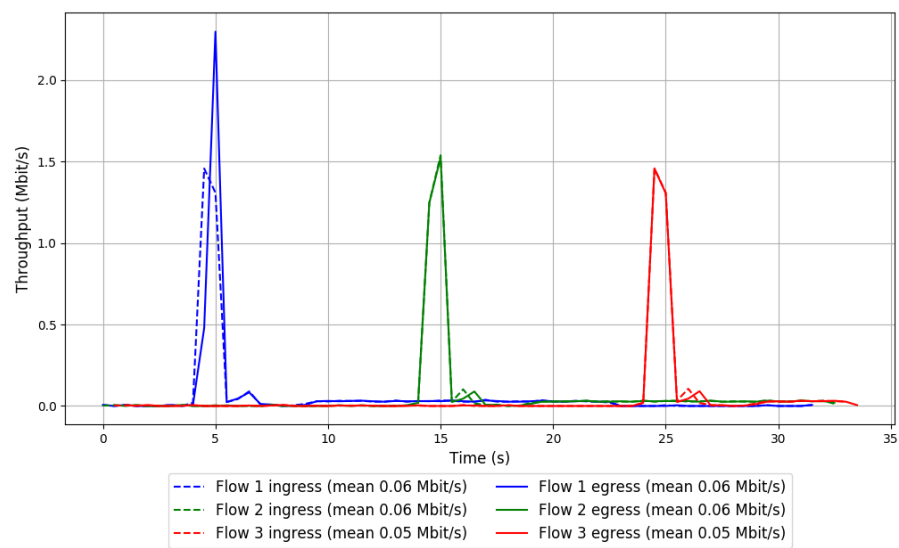
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.696 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-03-28 02:14:00

End at: 2018-03-28 02:14:30

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 112.754 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.499 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.867 ms

Loss rate: 0.00%

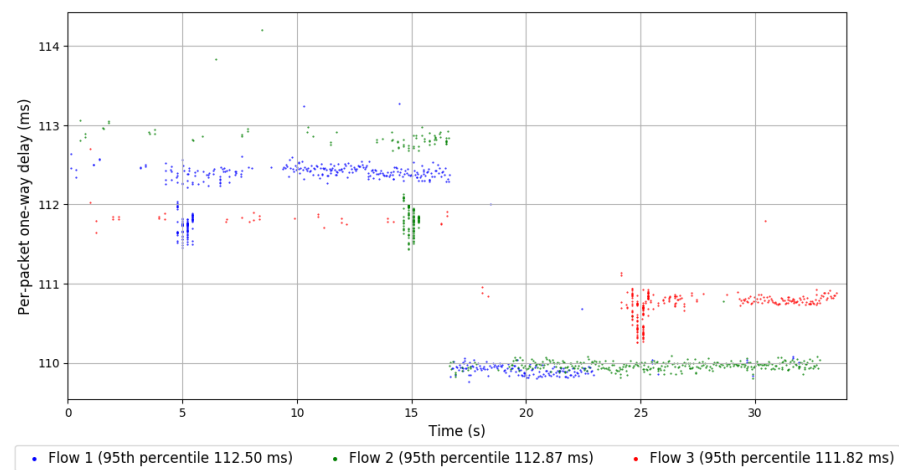
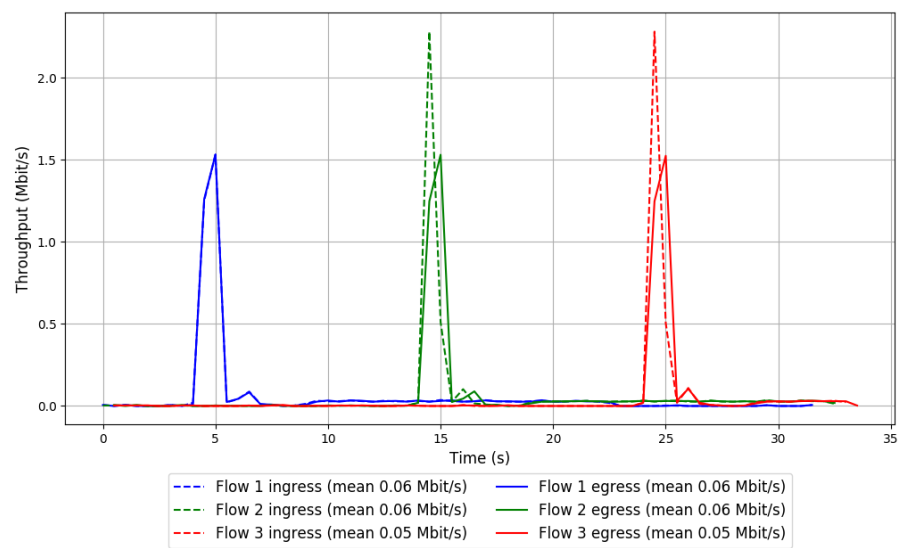
-- Flow 3:

Average throughput: 0.05 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-03-28 02:33:20

End at: 2018-03-28 02:33:50

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 112.389 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 111.270 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.450 ms

Loss rate: 0.04%

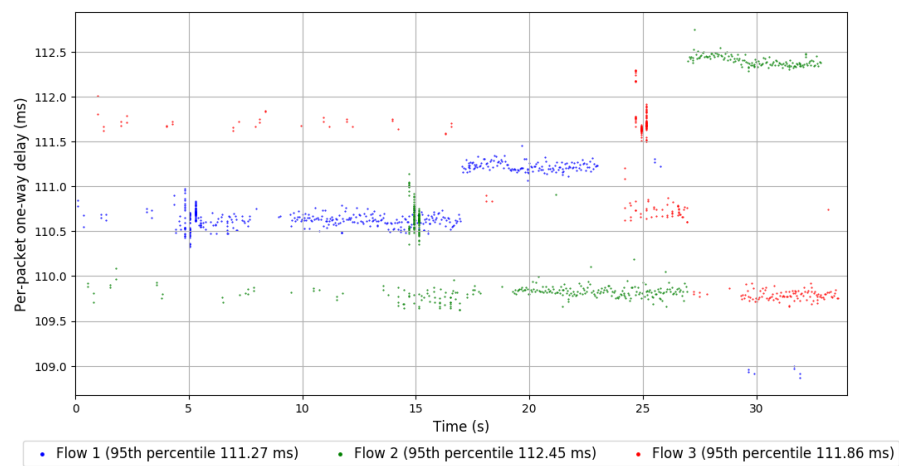
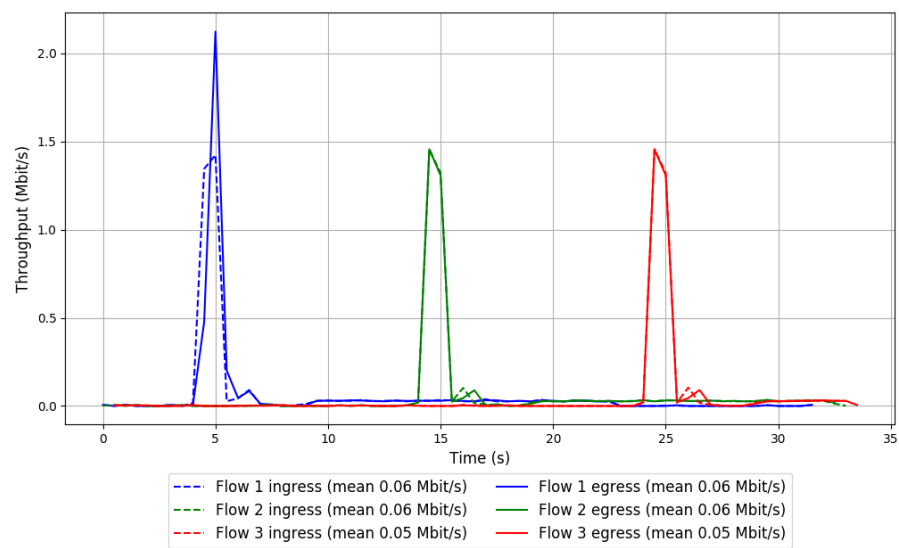
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 111.864 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

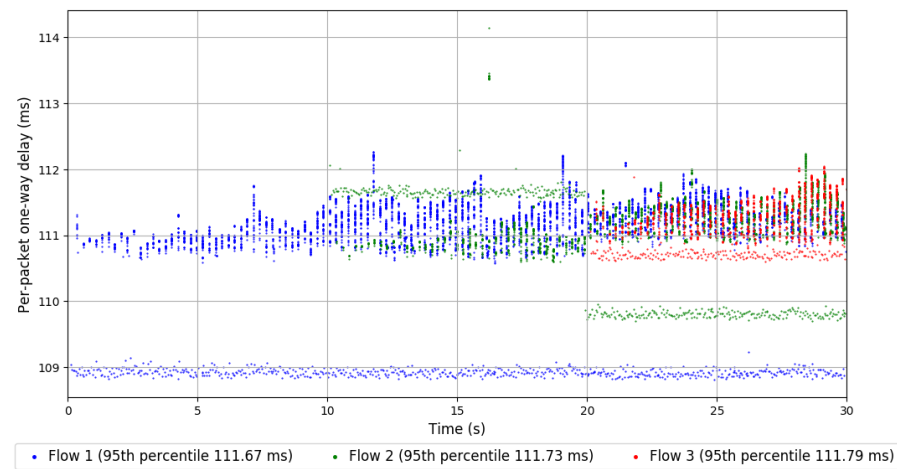
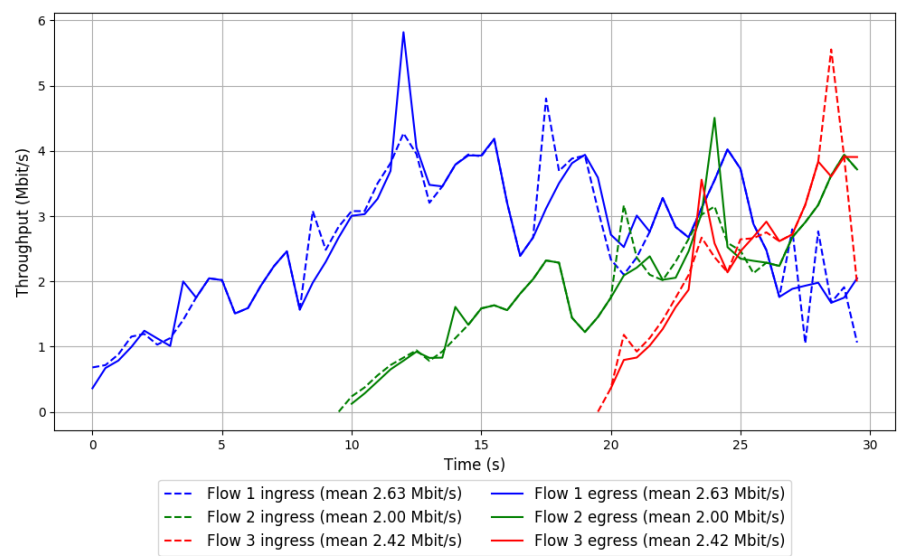


```
Run 1: Statistics of Sprout

Start at: 2018-03-27 23:52:33
End at: 2018-03-27 23:53:03

# Below is generated by plot.py at 2018-03-28 05:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.75 Mbit/s
95th percentile per-packet one-way delay: 111.719 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.63 Mbit/s
95th percentile per-packet one-way delay: 111.666 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 111.733 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 111.794 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-03-28 00:11:55

End at: 2018-03-28 00:12:25

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.18 Mbit/s

95th percentile per-packet one-way delay: 113.010 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 112.515 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 113.119 ms

Loss rate: 0.00%

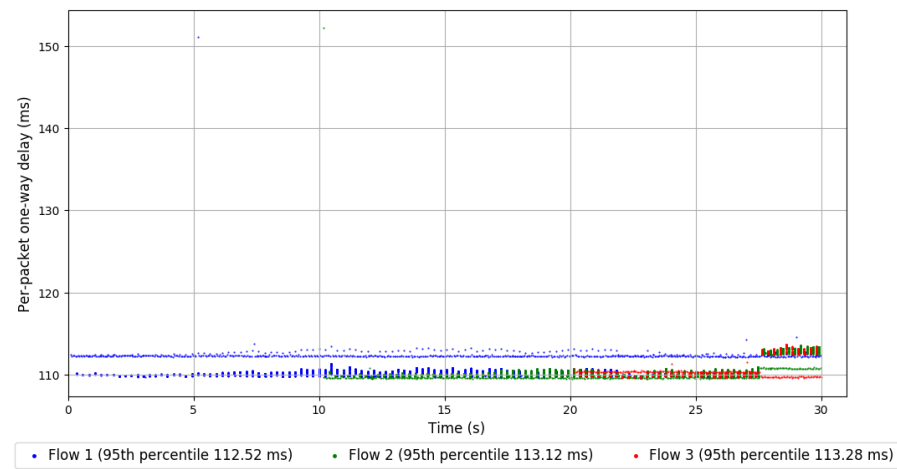
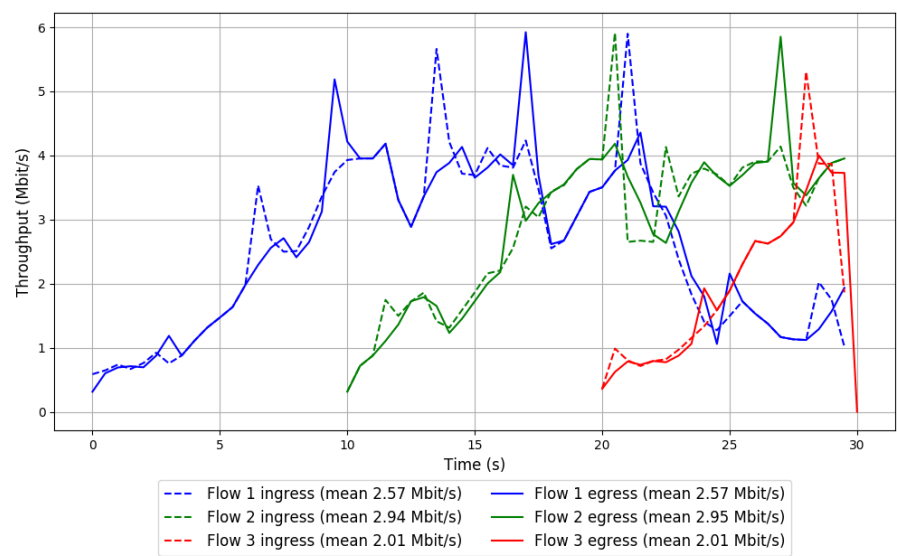
-- Flow 3:

Average throughput: 2.01 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-03-28 00:31:10

End at: 2018-03-28 00:31:40

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 112.279 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 112.174 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 112.326 ms

Loss rate: 0.00%

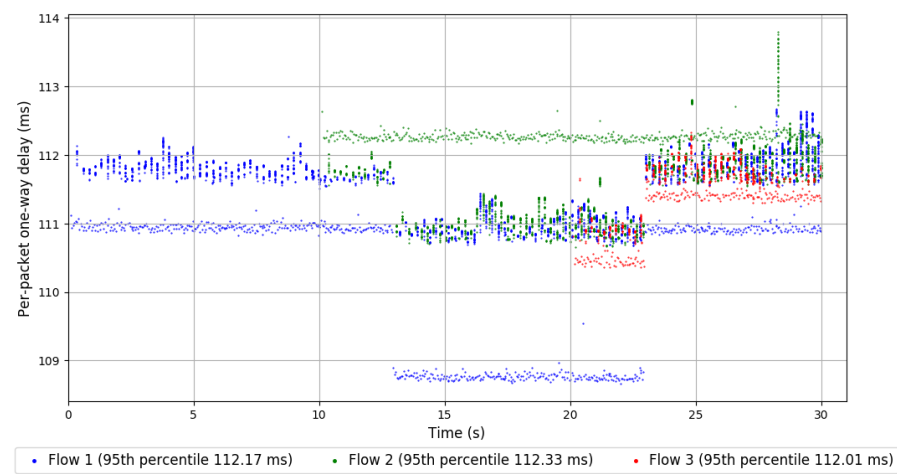
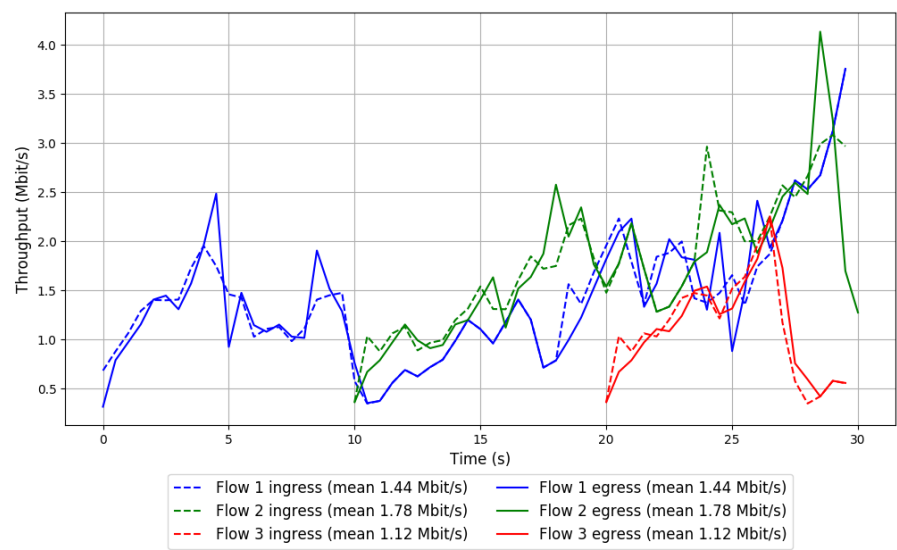
-- Flow 3:

Average throughput: 1.12 Mbit/s

95th percentile per-packet one-way delay: 112.009 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-03-28 00:50:14

End at: 2018-03-28 00:50:44

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 112.916 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 112.735 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 112.851 ms

Loss rate: 0.00%

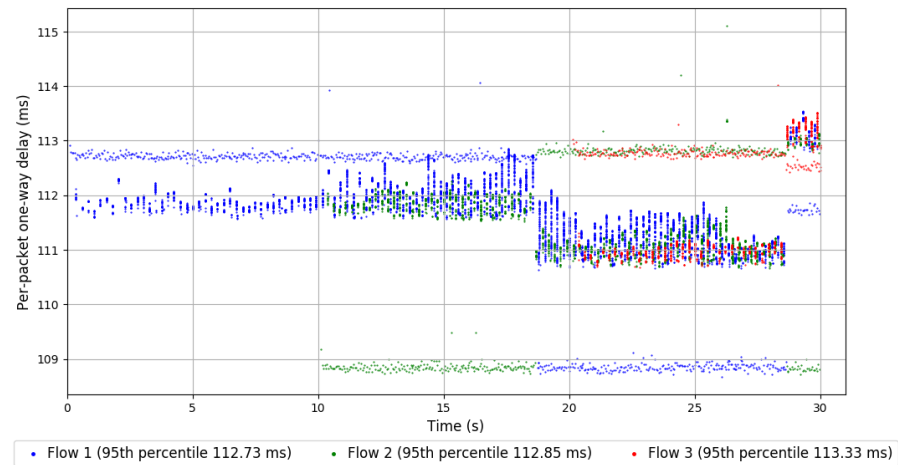
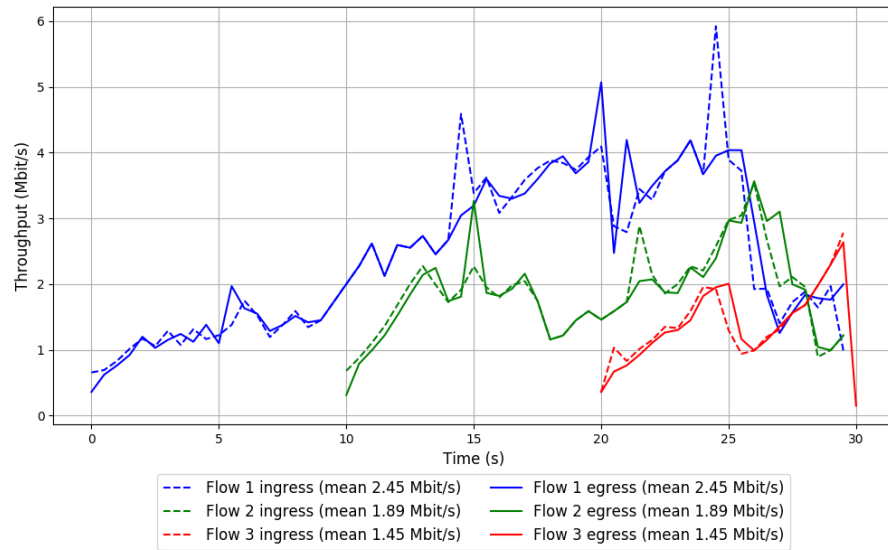
-- Flow 3:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 113.331 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-03-28 01:09:17

End at: 2018-03-28 01:09:47

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 113.274 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 113.286 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 113.298 ms

Loss rate: 0.00%

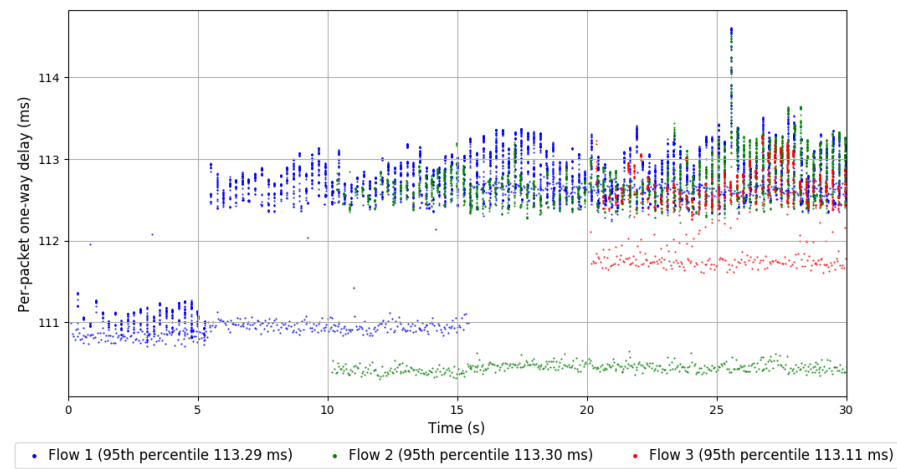
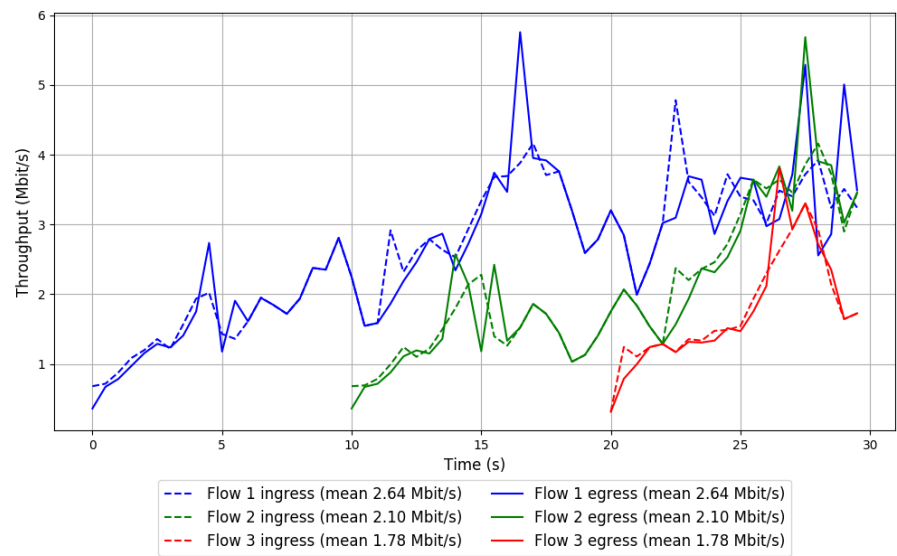
-- Flow 3:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 113.106 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-03-28 01:28:23

End at: 2018-03-28 01:28:53

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 113.070 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 112.908 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 113.152 ms

Loss rate: 0.02%

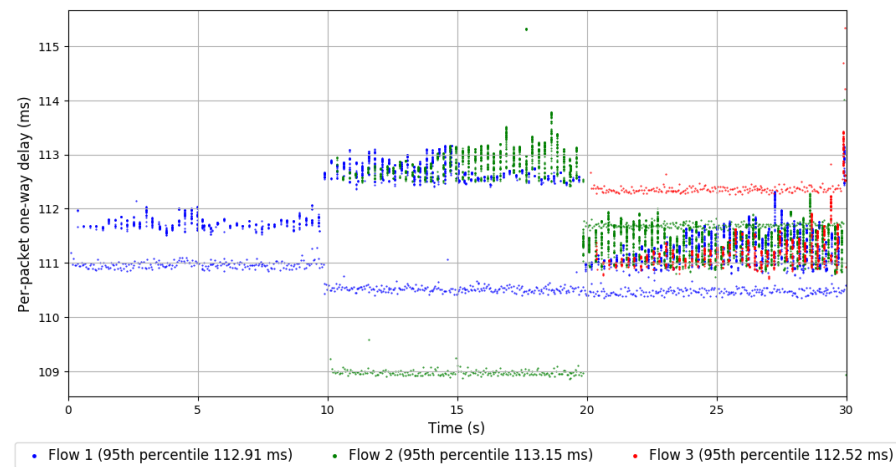
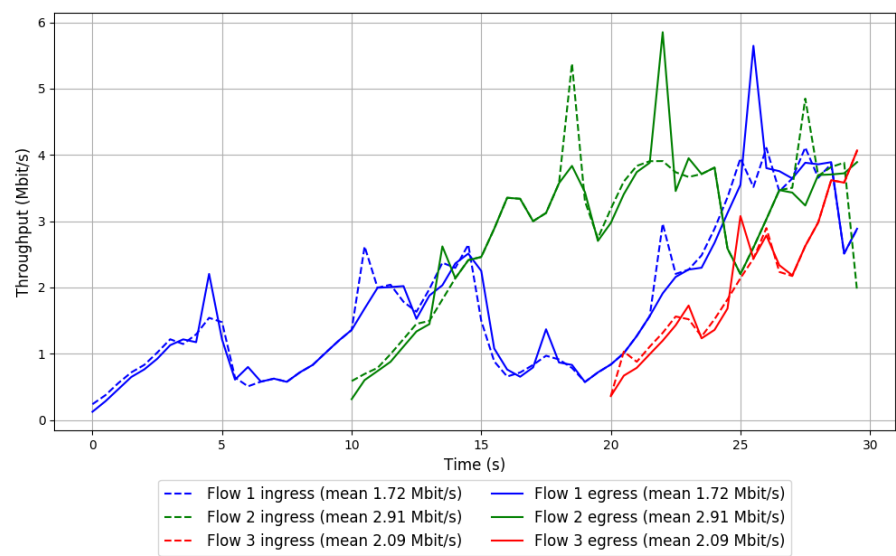
-- Flow 3:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 112.523 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-03-28 01:47:52

End at: 2018-03-28 01:48:22

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.82 Mbit/s

95th percentile per-packet one-way delay: 113.065 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.06 Mbit/s

95th percentile per-packet one-way delay: 113.005 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 114.437 ms

Loss rate: 0.00%

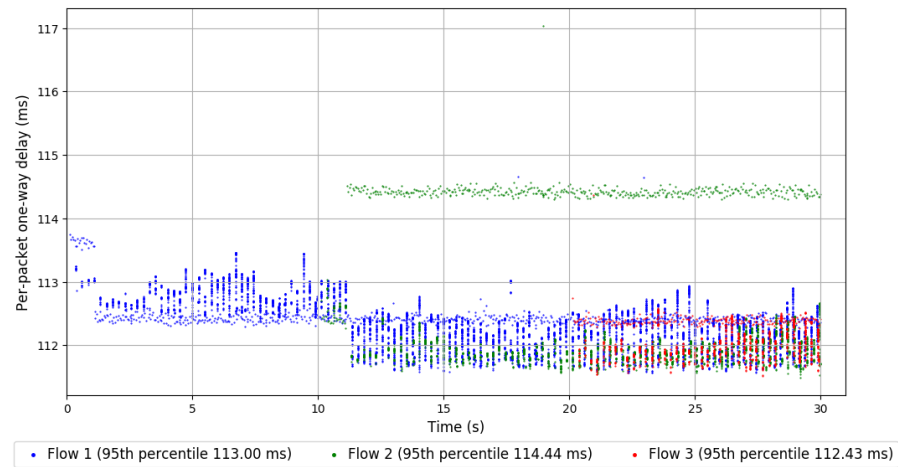
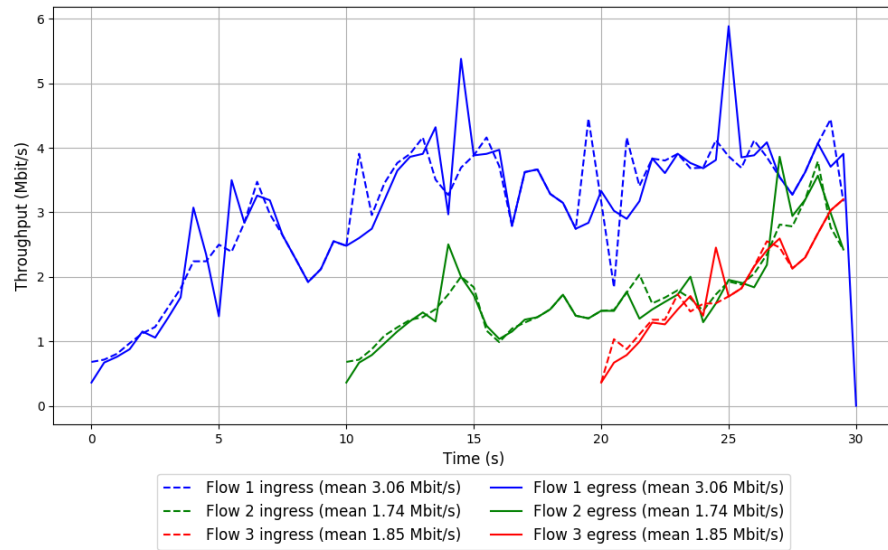
-- Flow 3:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 112.432 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-03-28 02:07:15

End at: 2018-03-28 02:07:45

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.91 Mbit/s

95th percentile per-packet one-way delay: 112.314 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 112.423 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 112.146 ms

Loss rate: 0.00%

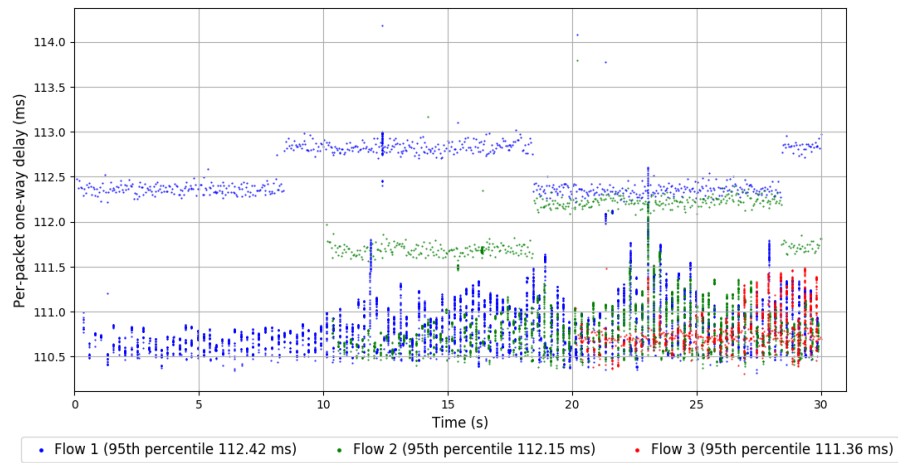
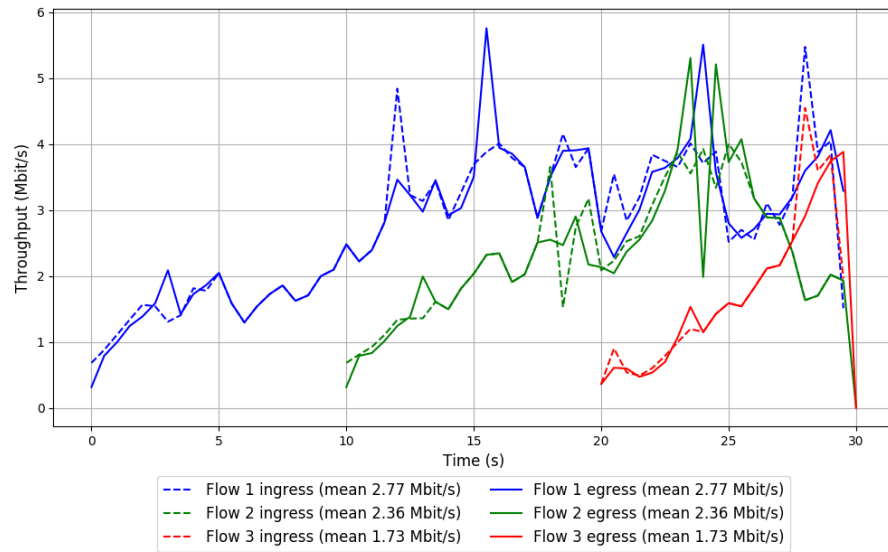
-- Flow 3:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 111.355 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-03-28 02:26:25

End at: 2018-03-28 02:26:55

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.25 Mbit/s

95th percentile per-packet one-way delay: 112.618 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 112.546 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.71 Mbit/s

95th percentile per-packet one-way delay: 112.636 ms

Loss rate: 0.00%

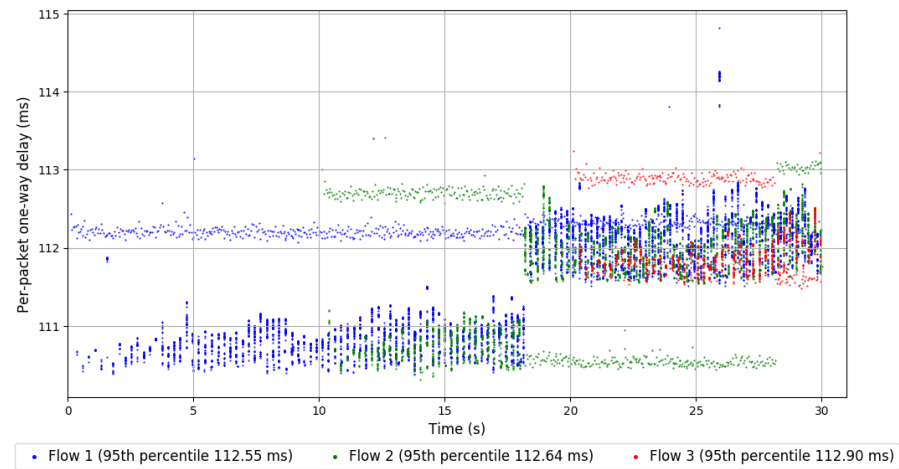
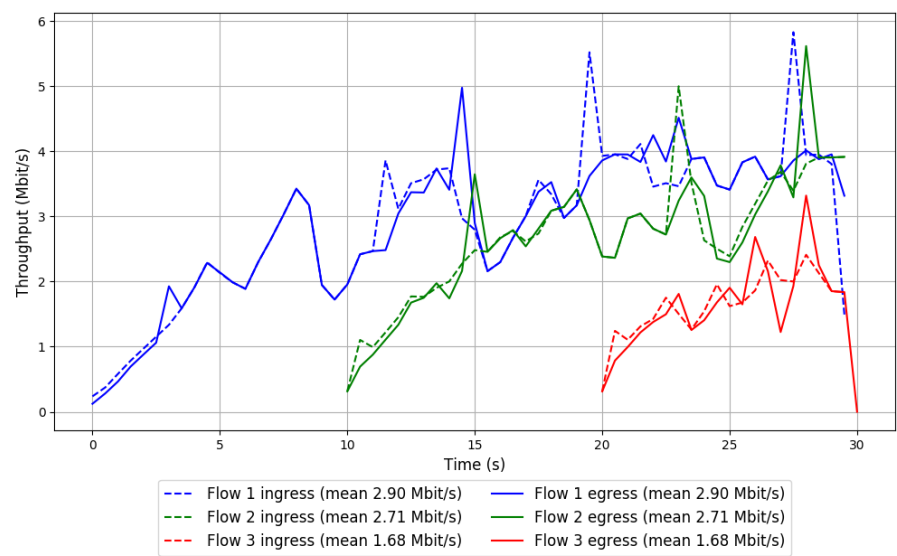
-- Flow 3:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 112.896 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-03-28 02:45:40

End at: 2018-03-28 02:46:10

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 112.744 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.97 Mbit/s

95th percentile per-packet one-way delay: 112.724 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.31 Mbit/s

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

Loss rate: 0.00%

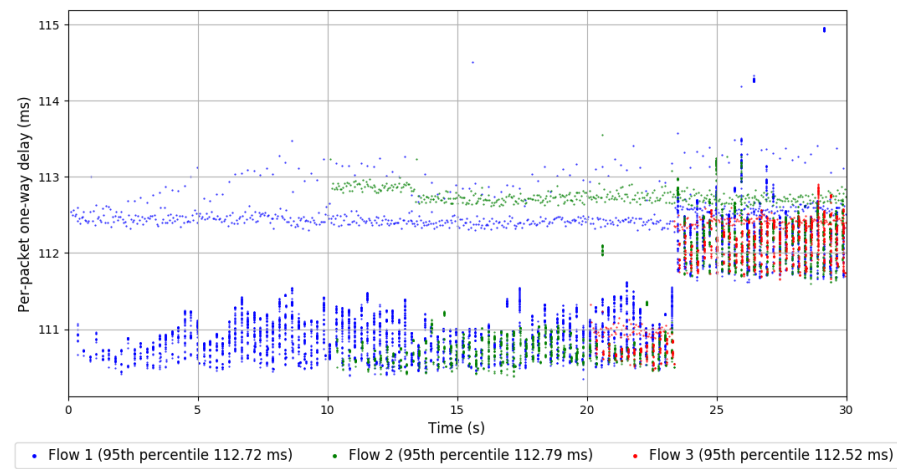
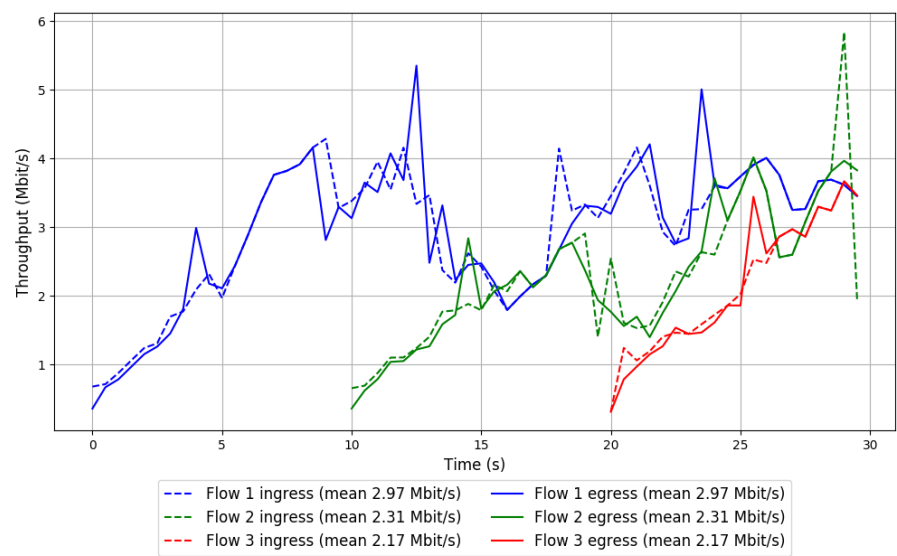
-- Flow 3:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 112.518 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

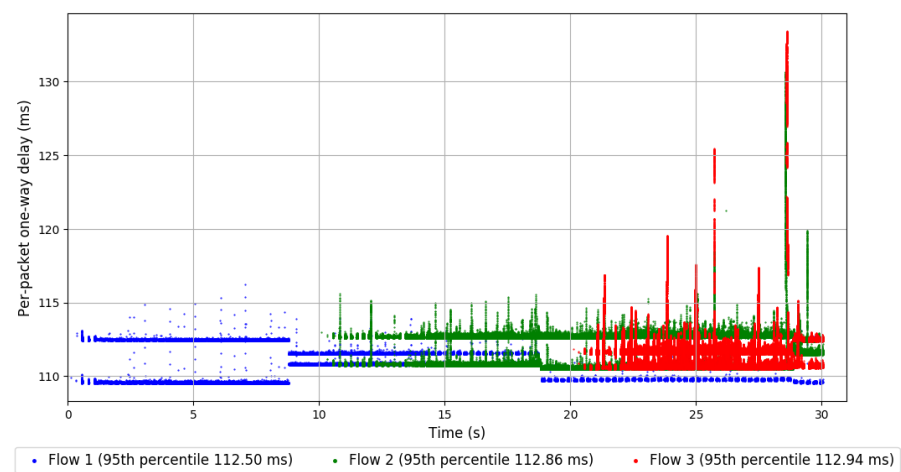
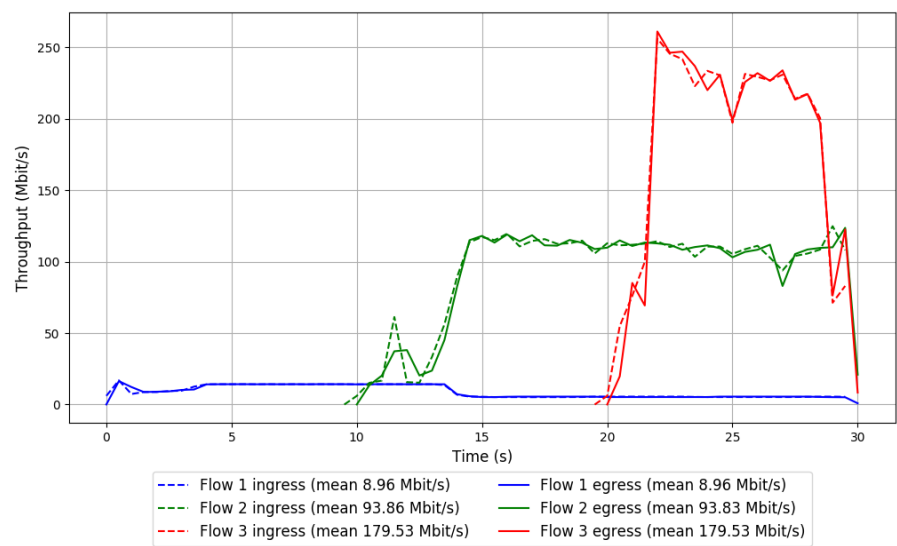


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-03-27 23:47:14
End at: 2018-03-27 23:47:44

# Below is generated by plot.py at 2018-03-28 05:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 131.08 Mbit/s
95th percentile per-packet one-way delay: 112.858 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 8.96 Mbit/s
95th percentile per-packet one-way delay: 112.501 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 93.83 Mbit/s
95th percentile per-packet one-way delay: 112.865 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 179.53 Mbit/s
95th percentile per-packet one-way delay: 112.941 ms
Loss rate: 0.02%
```


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

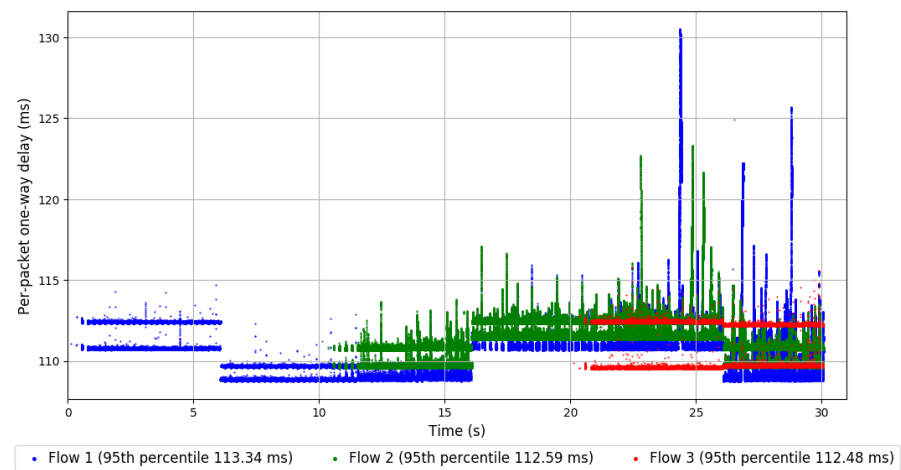
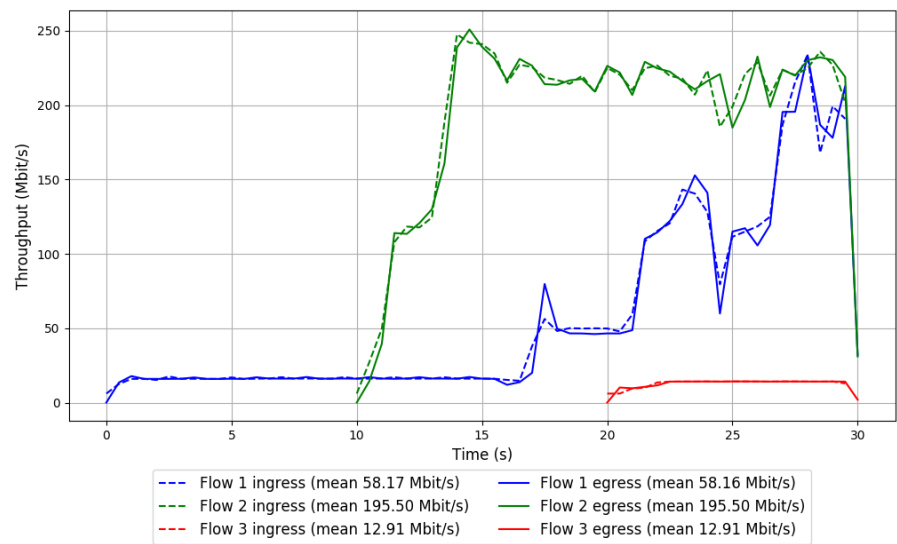


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-03-28 00:06:27
End at: 2018-03-28 00:06:57

# Below is generated by plot.py at 2018-03-28 05:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 192.62 Mbit/s
95th percentile per-packet one-way delay: 112.682 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 58.16 Mbit/s
95th percentile per-packet one-way delay: 113.336 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 195.50 Mbit/s
95th percentile per-packet one-way delay: 112.594 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.91 Mbit/s
95th percentile per-packet one-way delay: 112.478 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-03-28 00:25:50

End at: 2018-03-28 00:26:20

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 145.98 Mbit/s

95th percentile per-packet one-way delay: 111.956 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 29.78 Mbit/s

95th percentile per-packet one-way delay: 111.578 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 103.12 Mbit/s

95th percentile per-packet one-way delay: 111.704 ms

Loss rate: 0.01%

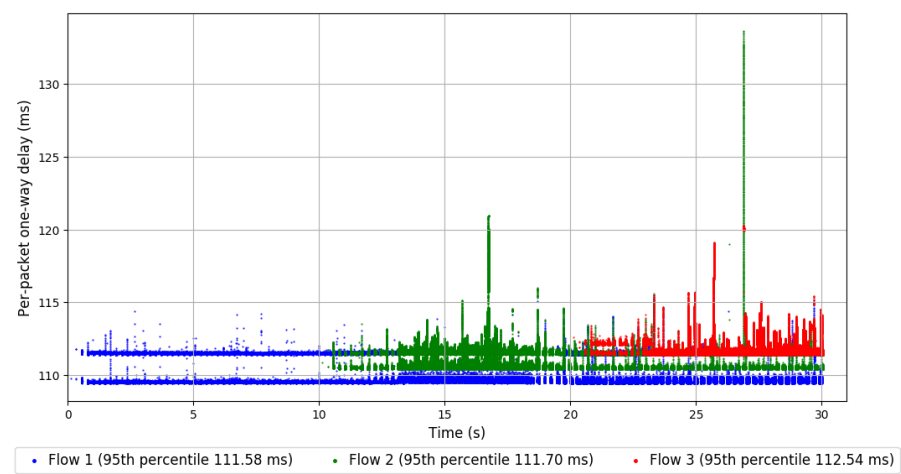
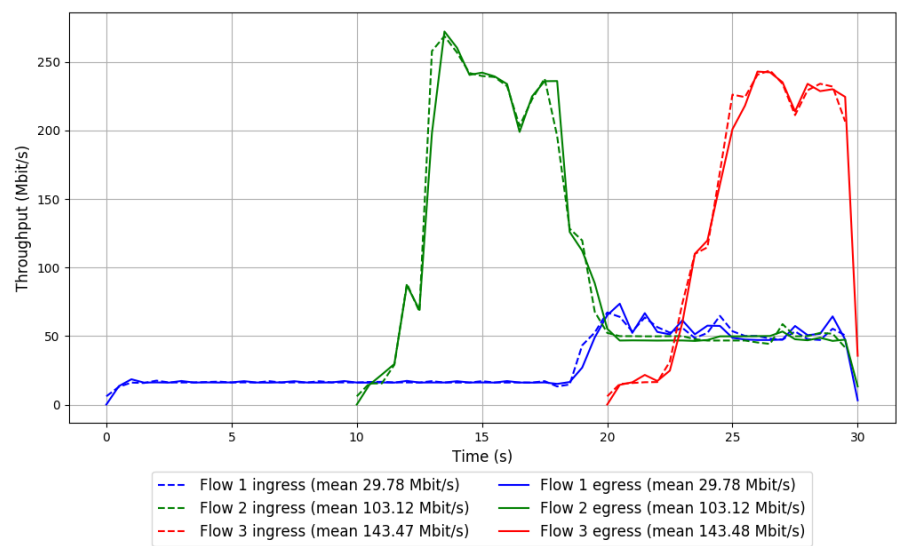
-- Flow 3:

Average throughput: 143.48 Mbit/s

95th percentile per-packet one-way delay: 112.538 ms

Loss rate: 0.01%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-03-28 00:45:03

End at: 2018-03-28 00:45:33

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.78 Mbit/s

95th percentile per-packet one-way delay: 113.270 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 13.69 Mbit/s

95th percentile per-packet one-way delay: 112.746 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 28.37 Mbit/s

95th percentile per-packet one-way delay: 114.080 ms

Loss rate: 0.00%

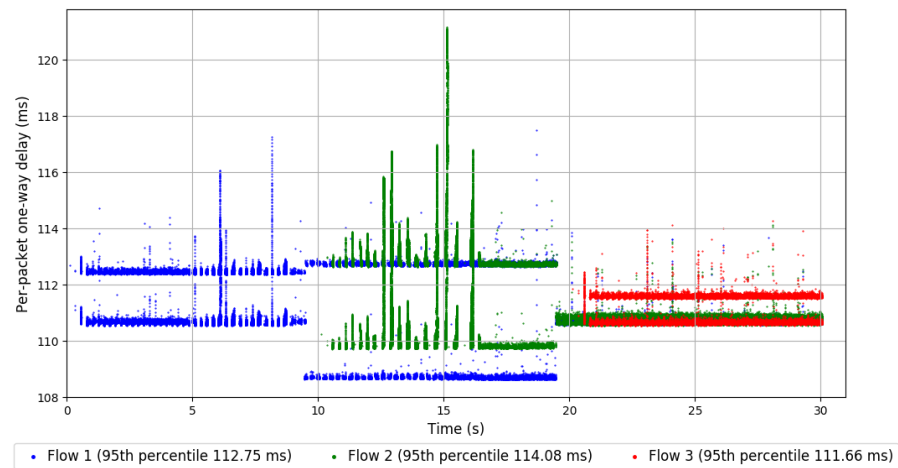
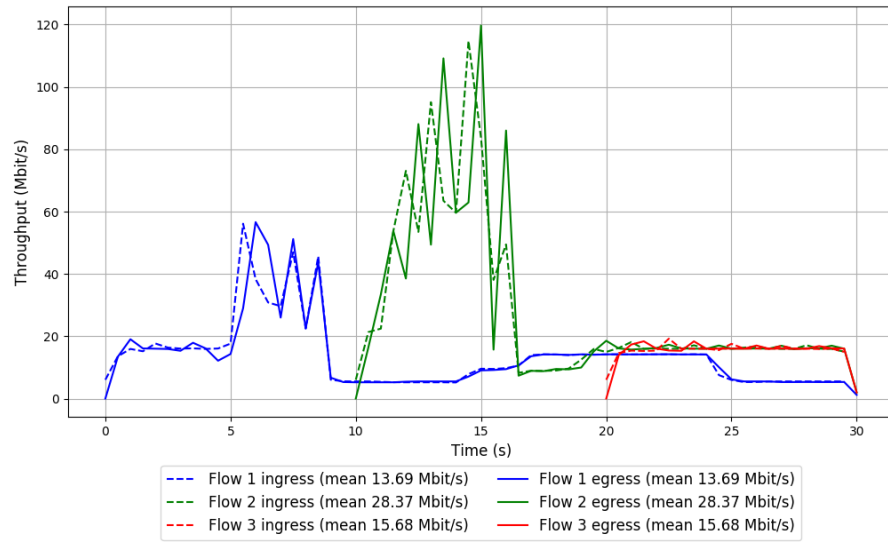
-- Flow 3:

Average throughput: 15.68 Mbit/s

95th percentile per-packet one-way delay: 111.661 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-03-28 01:04:06

End at: 2018-03-28 01:04:36

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 48.43 Mbit/s

95th percentile per-packet one-way delay: 112.491 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 18.79 Mbit/s

95th percentile per-packet one-way delay: 112.413 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.77 Mbit/s

95th percentile per-packet one-way delay: 112.546 ms

Loss rate: 0.00%

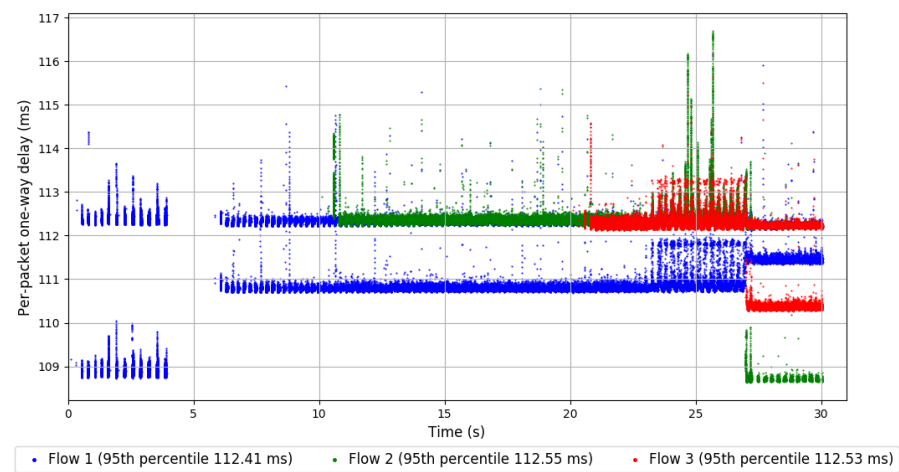
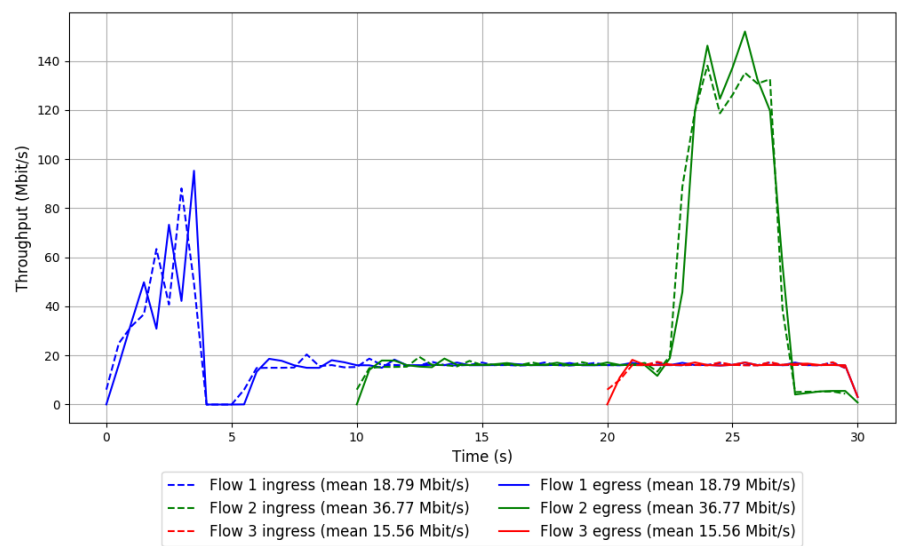
-- Flow 3:

Average throughput: 15.56 Mbit/s

95th percentile per-packet one-way delay: 112.527 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-03-28 01:23:08

End at: 2018-03-28 01:23:38

Below is generated by plot.py at 2018-03-28 05:18:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.20 Mbit/s

95th percentile per-packet one-way delay: 116.393 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 22.29 Mbit/s

95th percentile per-packet one-way delay: 114.429 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 66.00 Mbit/s

95th percentile per-packet one-way delay: 118.939 ms

Loss rate: 0.00%

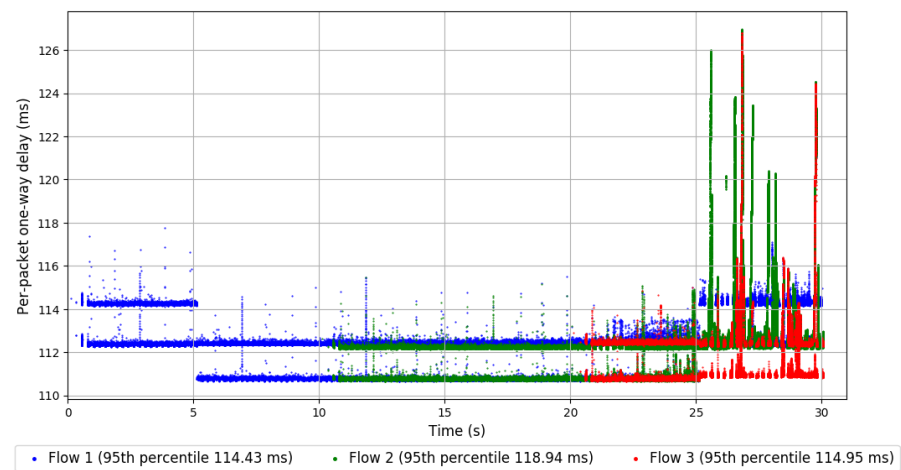
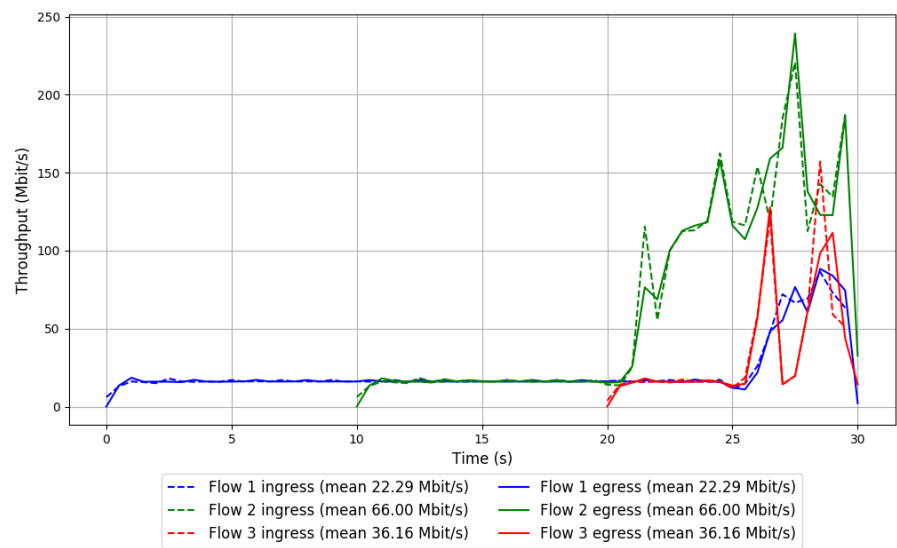
-- Flow 3:

Average throughput: 36.16 Mbit/s

95th percentile per-packet one-way delay: 114.947 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-03-28 01:42:29

End at: 2018-03-28 01:42:59

Below is generated by plot.py at 2018-03-28 05:19:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.98 Mbit/s

95th percentile per-packet one-way delay: 115.463 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.69 Mbit/s

95th percentile per-packet one-way delay: 112.806 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 195.39 Mbit/s

95th percentile per-packet one-way delay: 116.721 ms

Loss rate: 0.00%

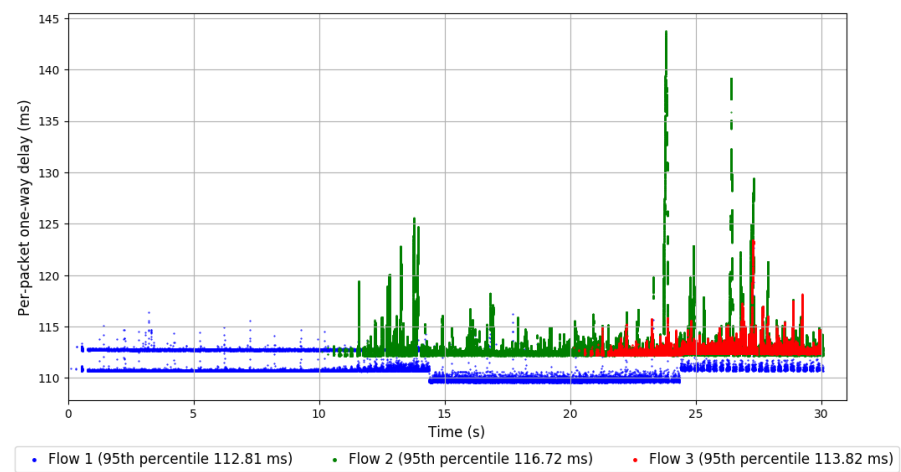
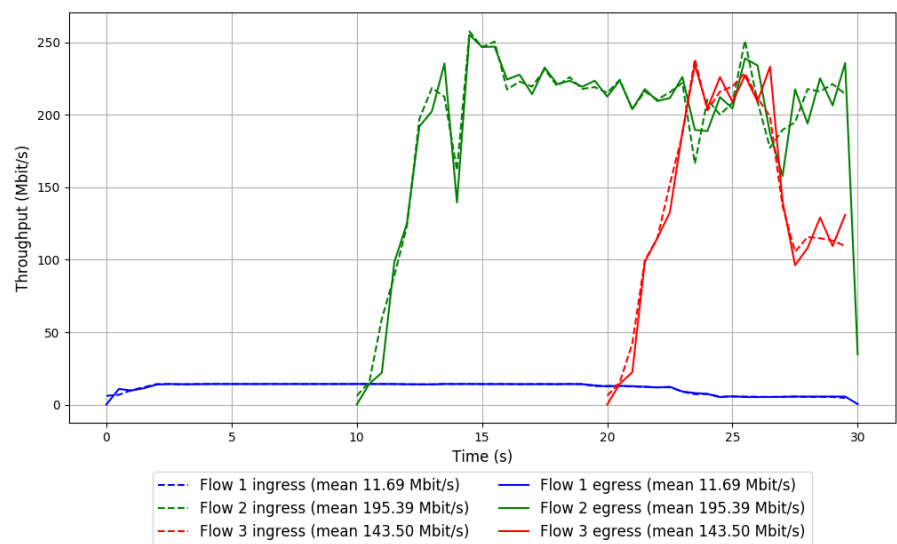
-- Flow 3:

Average throughput: 143.50 Mbit/s

95th percentile per-packet one-way delay: 113.823 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-03-28 02:01:54

End at: 2018-03-28 02:02:24

Below is generated by plot.py at 2018-03-28 05:19:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 163.00 Mbit/s

95th percentile per-packet one-way delay: 114.483 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 85.54 Mbit/s

95th percentile per-packet one-way delay: 112.752 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.66 Mbit/s

95th percentile per-packet one-way delay: 117.440 ms

Loss rate: 0.00%

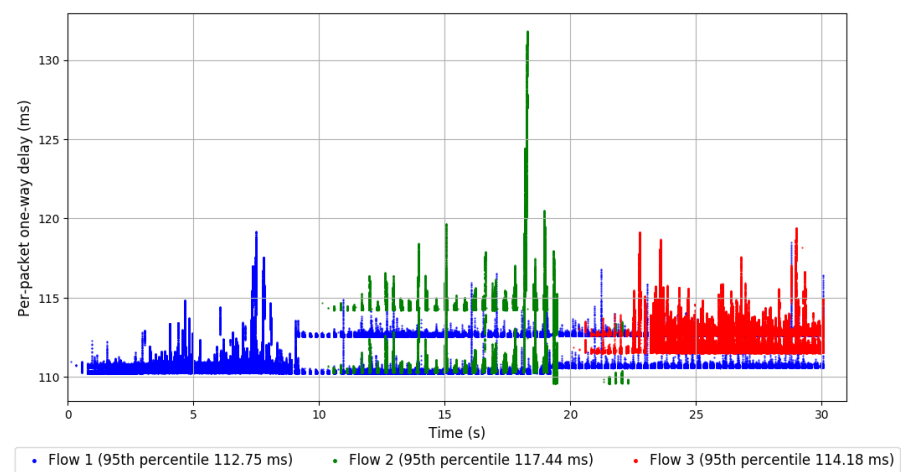
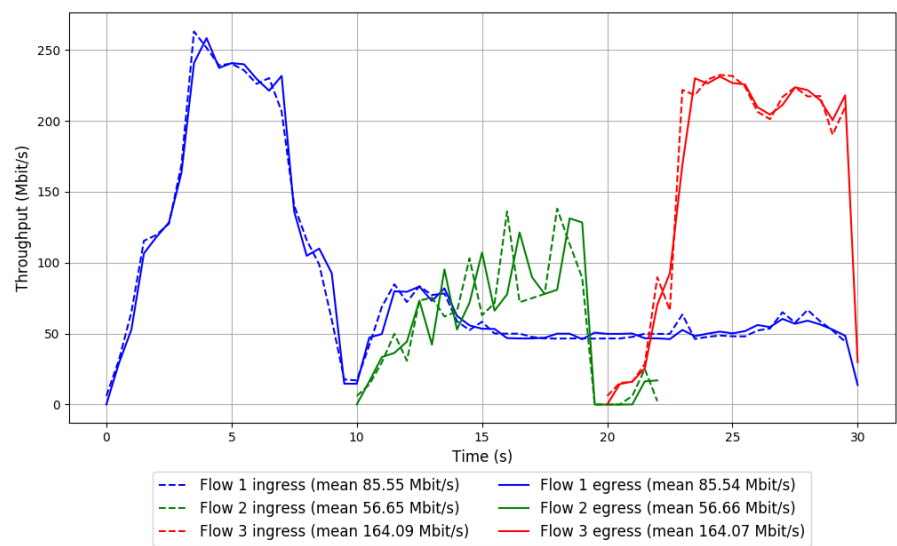
-- Flow 3:

Average throughput: 164.07 Mbit/s

95th percentile per-packet one-way delay: 114.184 ms

Loss rate: 0.01%

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

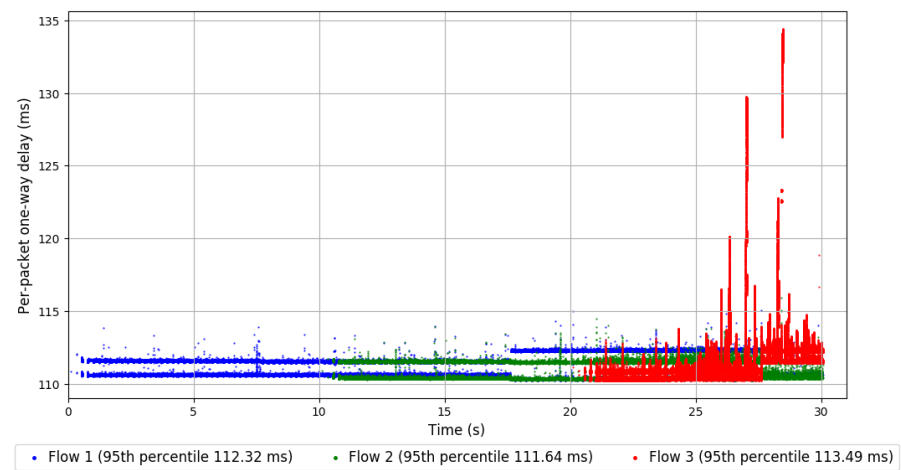
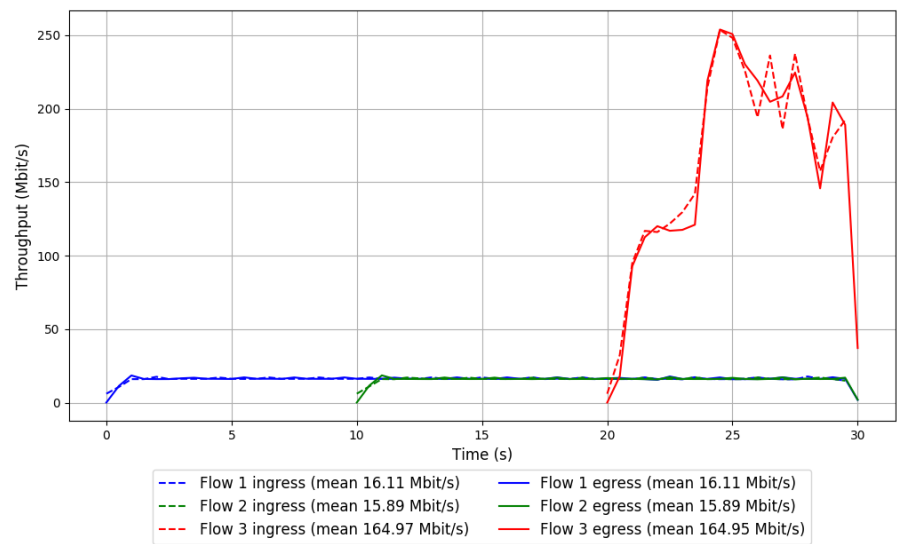


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-03-28 02:21:15
End at: 2018-03-28 02:21:45

# Below is generated by plot.py at 2018-03-28 05:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.42 Mbit/s
95th percentile per-packet one-way delay: 112.778 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 16.11 Mbit/s
95th percentile per-packet one-way delay: 112.321 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.89 Mbit/s
95th percentile per-packet one-way delay: 111.644 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 164.95 Mbit/s
95th percentile per-packet one-way delay: 113.494 ms
Loss rate: 0.00%
```


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

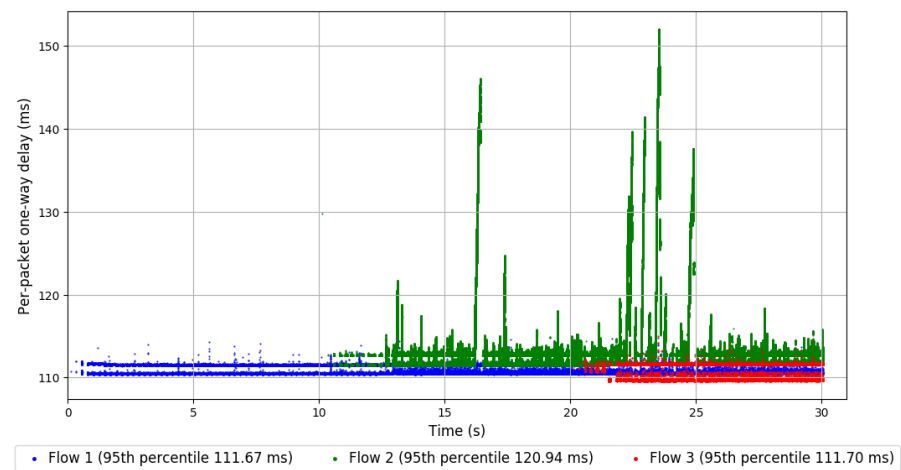
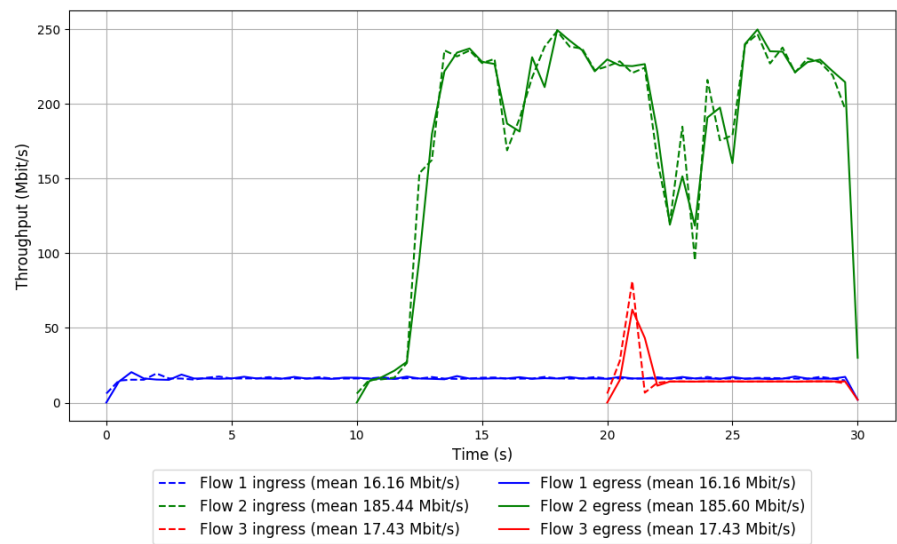


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-03-28 02:40:22
End at: 2018-03-28 02:40:52

# Below is generated by plot.py at 2018-03-28 05:21:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 145.41 Mbit/s
95th percentile per-packet one-way delay: 118.464 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 16.16 Mbit/s
95th percentile per-packet one-way delay: 111.668 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 185.60 Mbit/s
95th percentile per-packet one-way delay: 120.935 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.43 Mbit/s
95th percentile per-packet one-way delay: 111.704 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-03-27 23:45:33

End at: 2018-03-27 23:46:03

Below is generated by plot.py at 2018-03-28 05:21:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.30 Mbit/s

95th percentile per-packet one-way delay: 116.832 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 21.51 Mbit/s

95th percentile per-packet one-way delay: 113.452 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 30.31 Mbit/s

95th percentile per-packet one-way delay: 119.814 ms

Loss rate: 0.00%

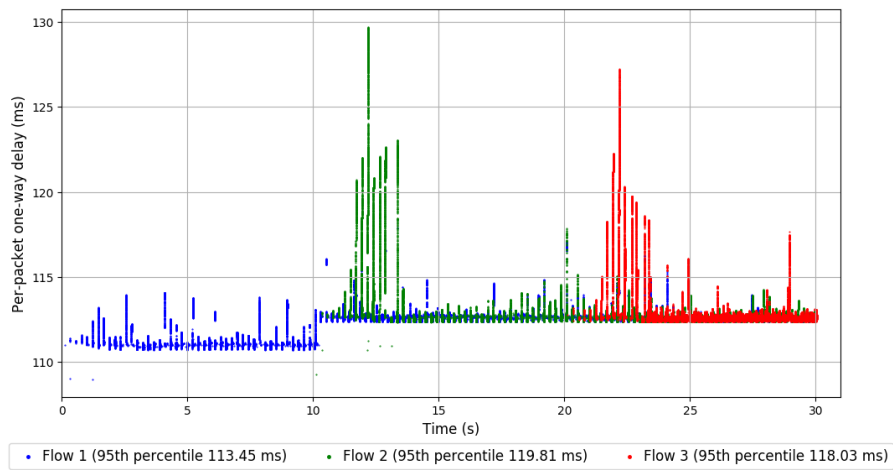
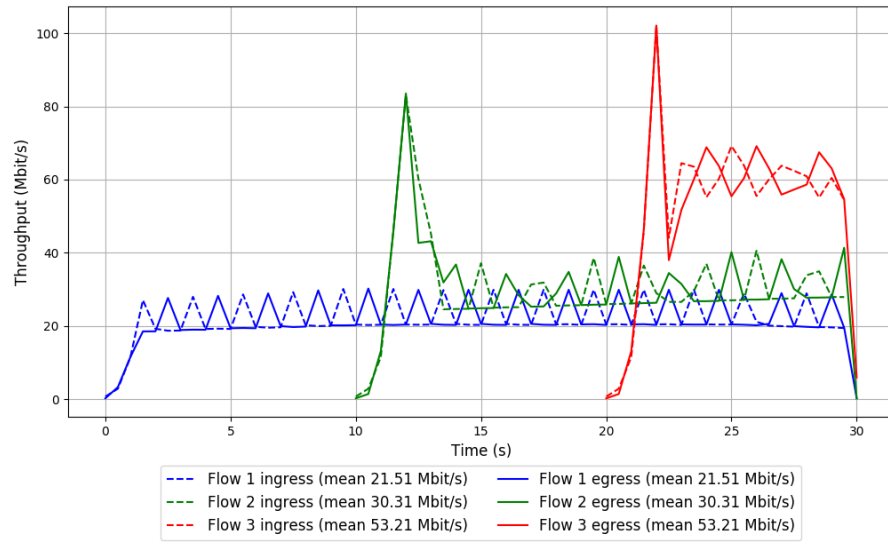
-- Flow 3:

Average throughput: 53.21 Mbit/s

95th percentile per-packet one-way delay: 118.029 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-03-28 00:04:46

End at: 2018-03-28 00:05:16

Below is generated by plot.py at 2018-03-28 05:21:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.71 Mbit/s

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

Loss rate: 0.02%

-- Flow 1:

Average throughput: 22.13 Mbit/s

95th percentile per-packet one-way delay: 113.866 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.64 Mbit/s

95th percentile per-packet one-way delay: 119.016 ms

Loss rate: 0.07%

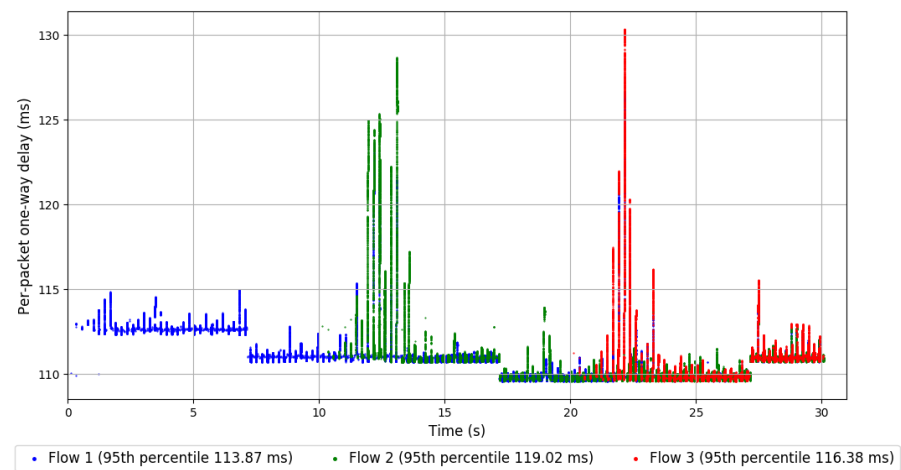
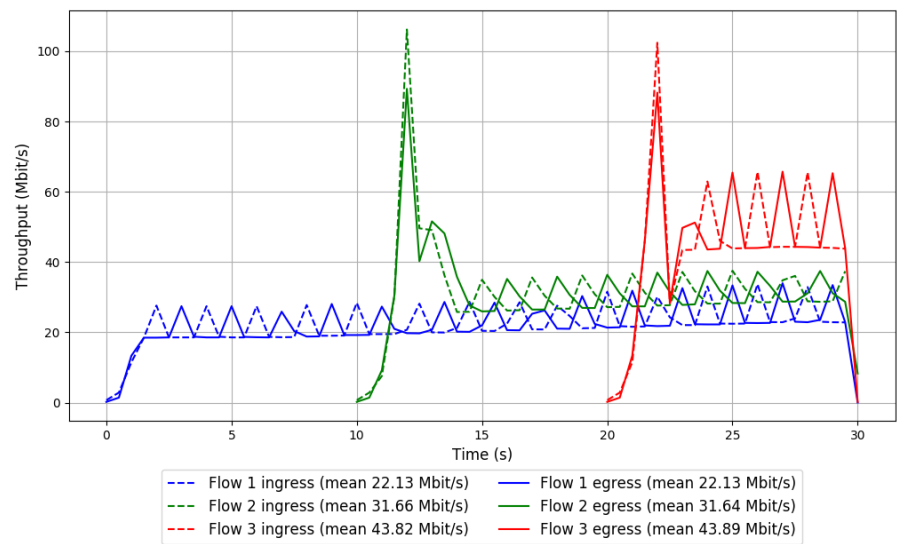
-- Flow 3:

Average throughput: 43.89 Mbit/s

95th percentile per-packet one-way delay: 116.382 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-03-28 00:24:08

End at: 2018-03-28 00:24:38

Below is generated by plot.py at 2018-03-28 05:21:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.61 Mbit/s

95th percentile per-packet one-way delay: 115.126 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 29.36 Mbit/s

95th percentile per-packet one-way delay: 115.459 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.58 Mbit/s

95th percentile per-packet one-way delay: 114.909 ms

Loss rate: 0.00%

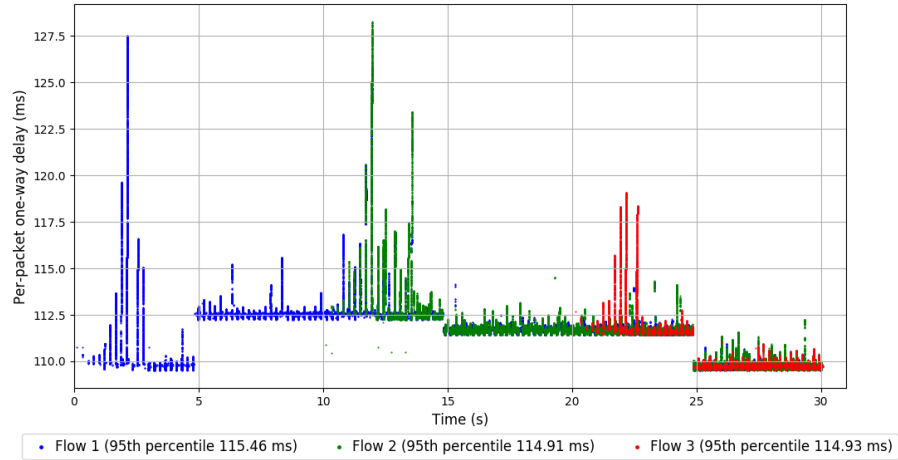
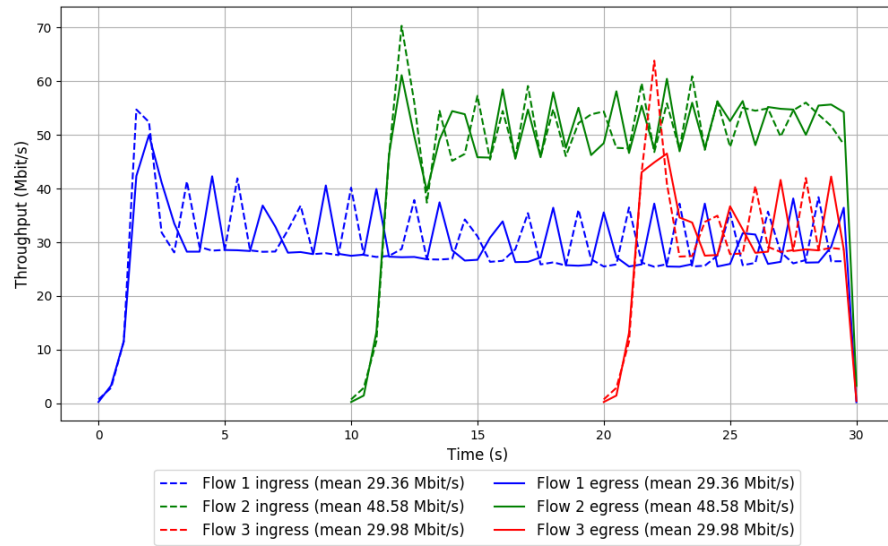
-- Flow 3:

Average throughput: 29.98 Mbit/s

95th percentile per-packet one-way delay: 114.927 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-03-28 00:43:20

End at: 2018-03-28 00:43:50

Below is generated by plot.py at 2018-03-28 05:21:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.57 Mbit/s

95th percentile per-packet one-way delay: 121.449 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 69.77 Mbit/s

95th percentile per-packet one-way delay: 122.162 ms

Loss rate: 1.14%

-- Flow 2:

Average throughput: 31.46 Mbit/s

95th percentile per-packet one-way delay: 116.360 ms

Loss rate: 1.49%

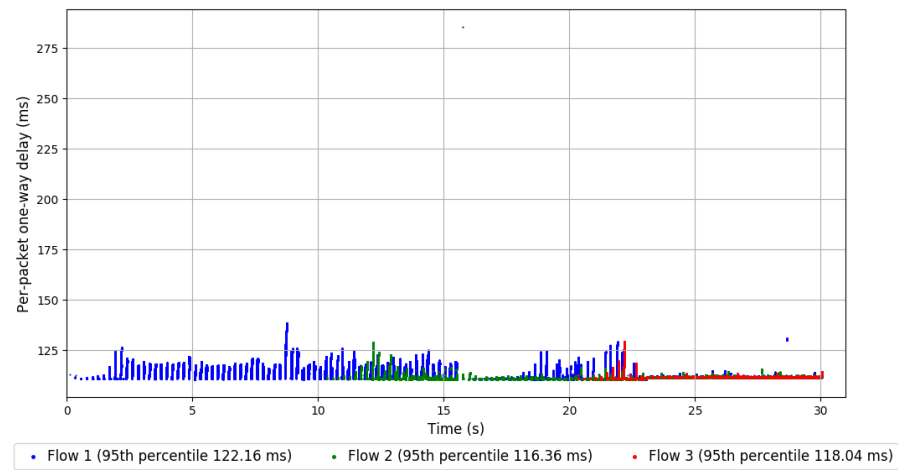
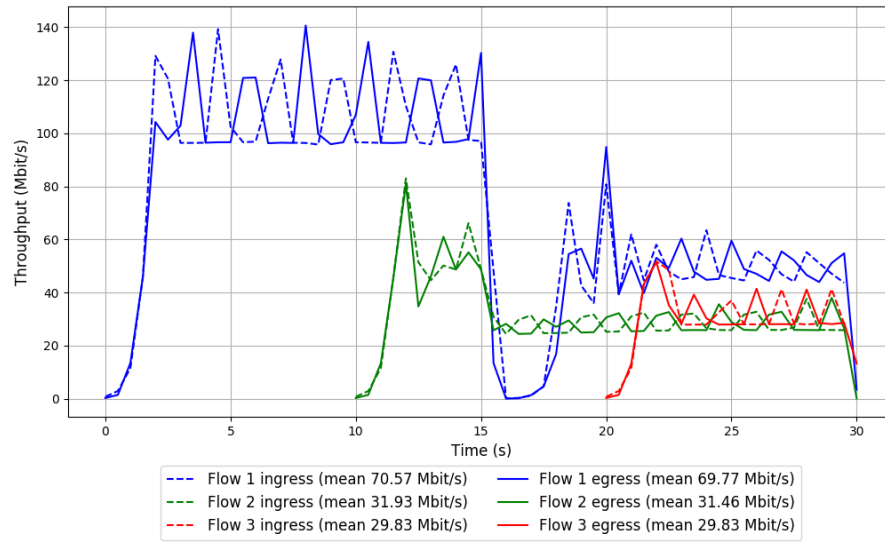
-- Flow 3:

Average throughput: 29.83 Mbit/s

95th percentile per-packet one-way delay: 118.042 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-03-28 01:02:24

End at: 2018-03-28 01:02:54

Below is generated by plot.py at 2018-03-28 05:21:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.94 Mbit/s

95th percentile per-packet one-way delay: 119.897 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 18.20 Mbit/s

95th percentile per-packet one-way delay: 115.823 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.61 Mbit/s

95th percentile per-packet one-way delay: 116.262 ms

Loss rate: 0.00%

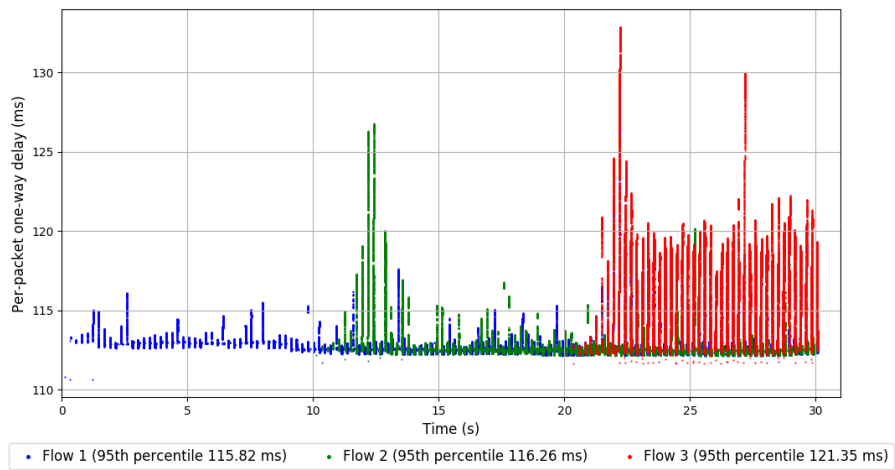
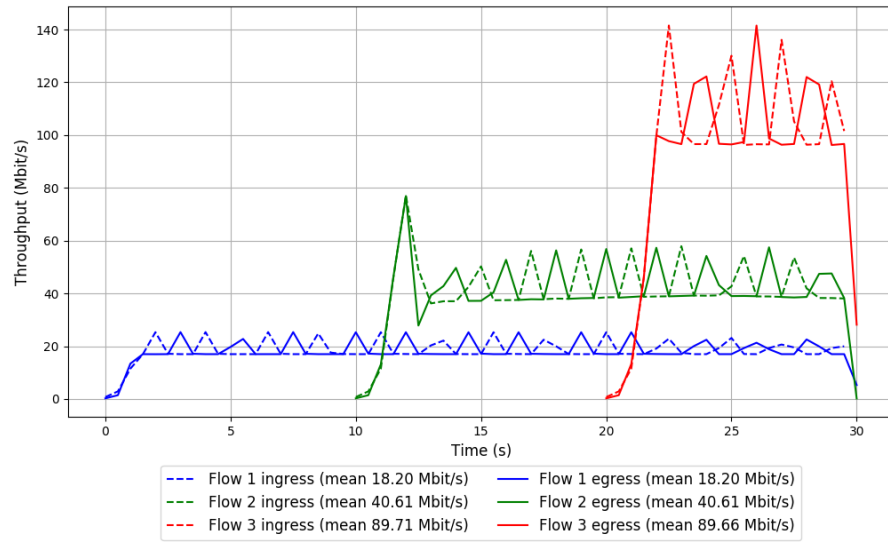
-- Flow 3:

Average throughput: 89.66 Mbit/s

95th percentile per-packet one-way delay: 121.351 ms

Loss rate: 0.05%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-03-28 01:21:25

End at: 2018-03-28 01:21:55

Below is generated by plot.py at 2018-03-28 05:21:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.57 Mbit/s

95th percentile per-packet one-way delay: 114.489 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 28.87 Mbit/s

95th percentile per-packet one-way delay: 114.133 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.05 Mbit/s

95th percentile per-packet one-way delay: 115.440 ms

Loss rate: 0.00%

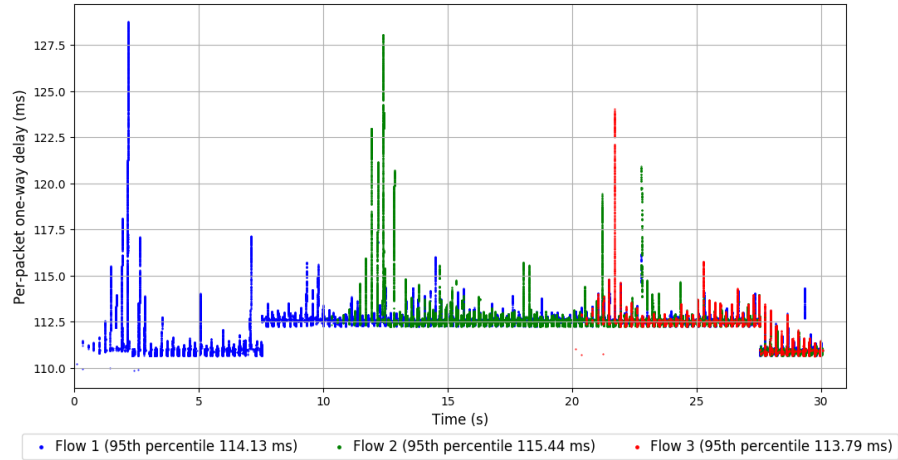
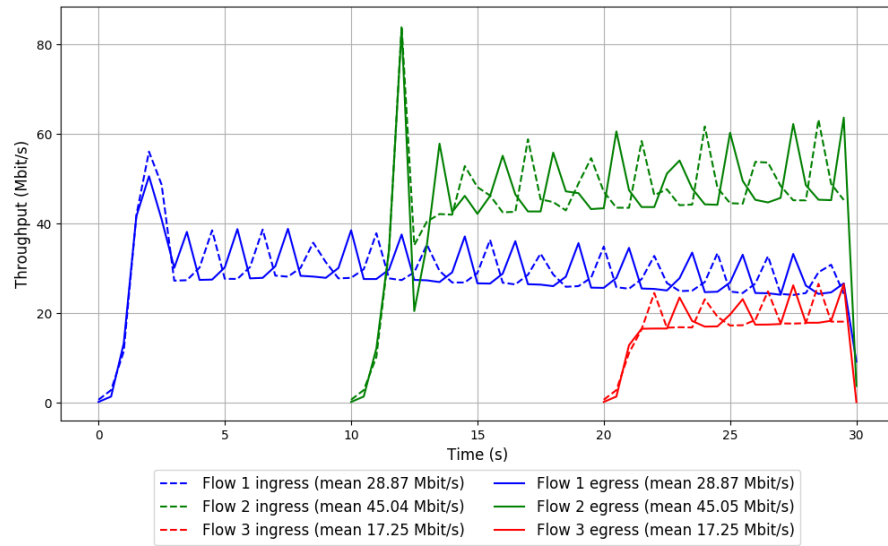
-- Flow 3:

Average throughput: 17.25 Mbit/s

95th percentile per-packet one-way delay: 113.790 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-03-28 01:40:46

End at: 2018-03-28 01:41:16

Below is generated by plot.py at 2018-03-28 05:21:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.68 Mbit/s

95th percentile per-packet one-way delay: 115.755 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 46.77 Mbit/s

95th percentile per-packet one-way delay: 115.162 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 19.73 Mbit/s

95th percentile per-packet one-way delay: 114.606 ms

Loss rate: 0.00%

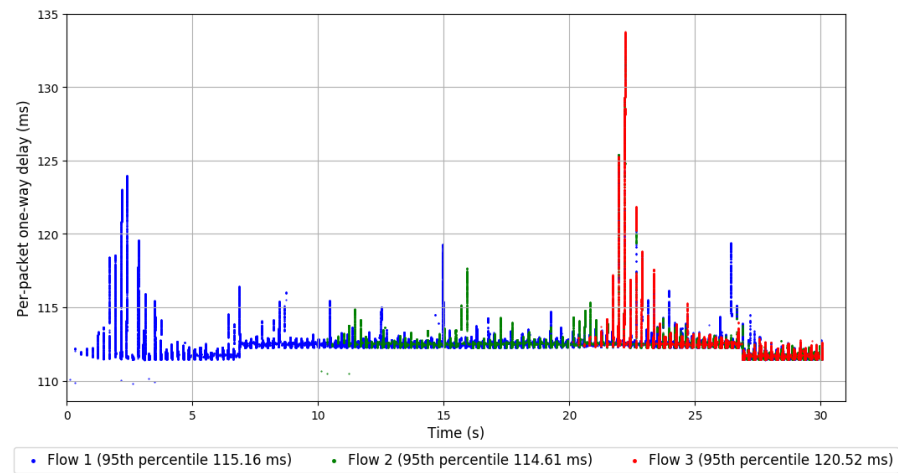
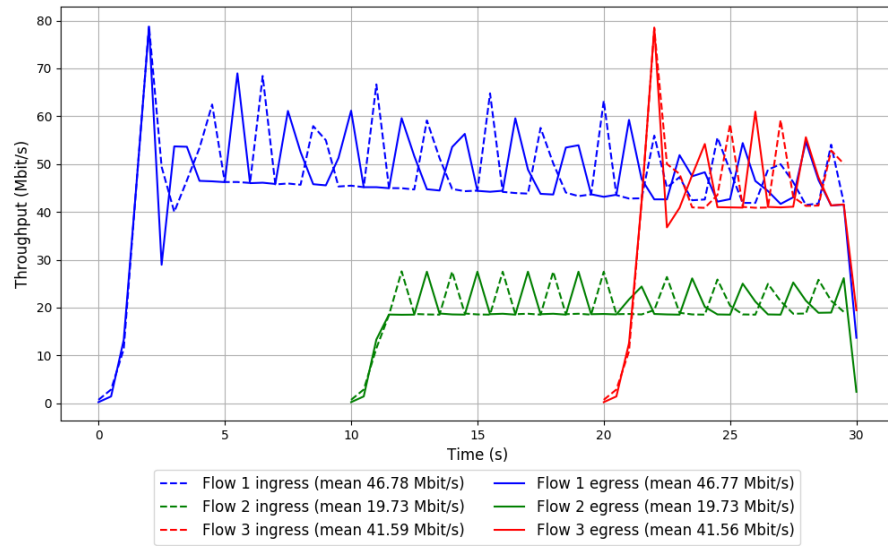
-- Flow 3:

Average throughput: 41.56 Mbit/s

95th percentile per-packet one-way delay: 120.515 ms

Loss rate: 0.08%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-03-28 02:00:10

End at: 2018-03-28 02:00:40

Below is generated by plot.py at 2018-03-28 05:21:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.30 Mbit/s

95th percentile per-packet one-way delay: 118.584 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.33 Mbit/s

95th percentile per-packet one-way delay: 113.381 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.22 Mbit/s

95th percentile per-packet one-way delay: 119.335 ms

Loss rate: 0.00%

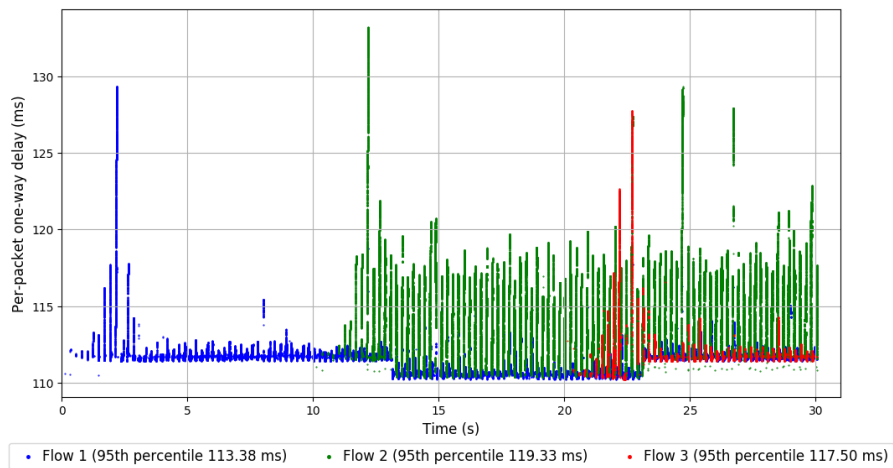
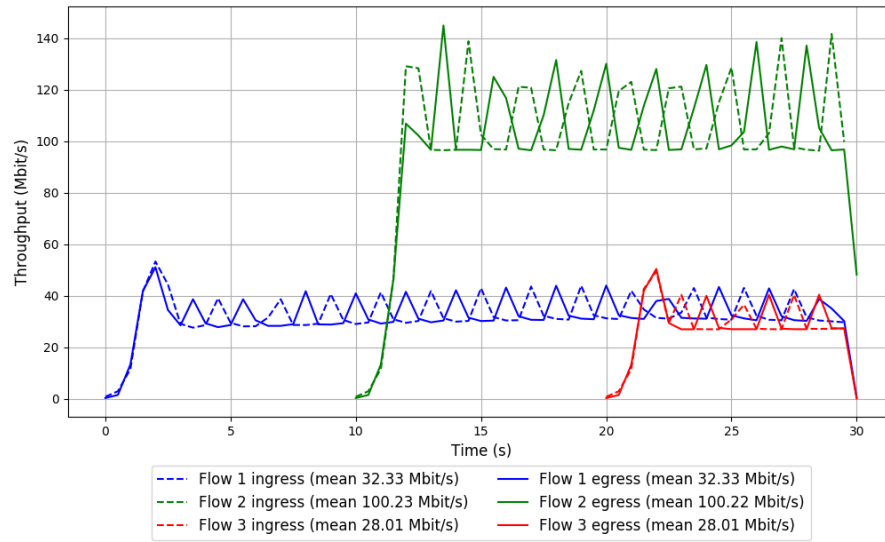
-- Flow 3:

Average throughput: 28.01 Mbit/s

95th percentile per-packet one-way delay: 117.496 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-03-28 02:19:29

End at: 2018-03-28 02:19:59

Below is generated by plot.py at 2018-03-28 05:22:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.97 Mbit/s

95th percentile per-packet one-way delay: 119.882 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.86 Mbit/s

95th percentile per-packet one-way delay: 117.983 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.64 Mbit/s

95th percentile per-packet one-way delay: 121.060 ms

Loss rate: 0.00%

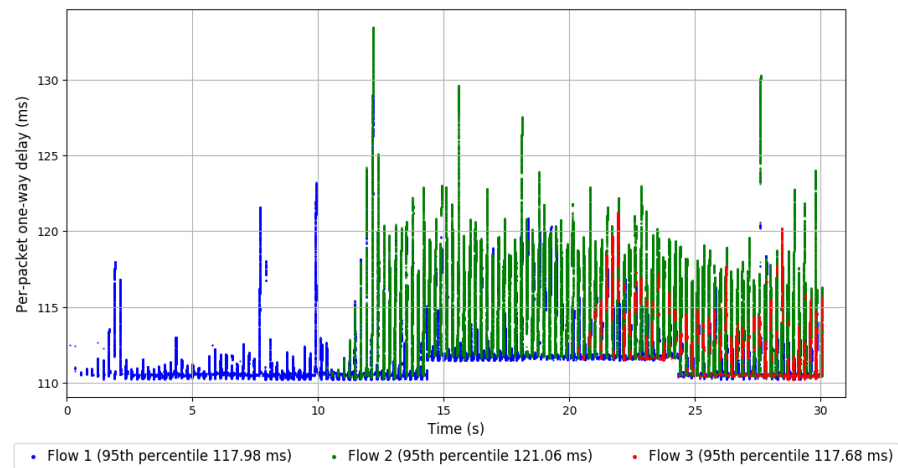
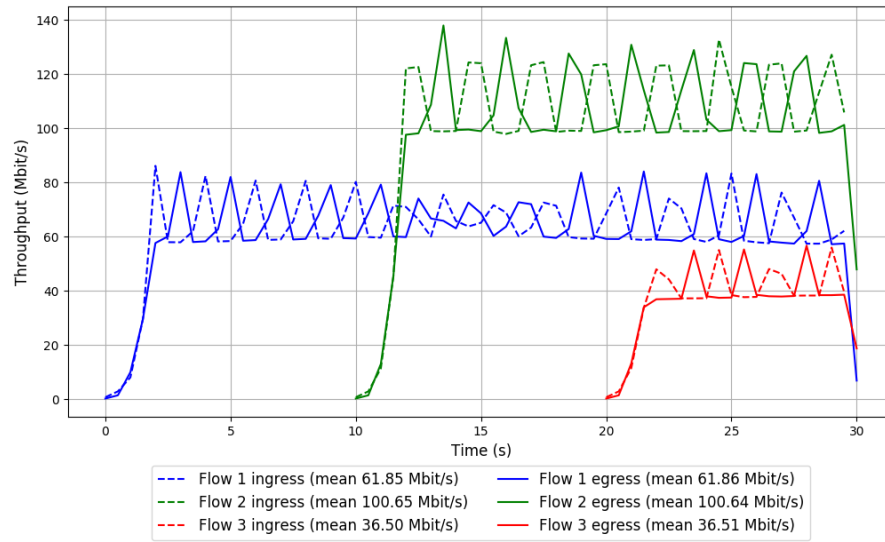
-- Flow 3:

Average throughput: 36.51 Mbit/s

95th percentile per-packet one-way delay: 117.678 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-03-28 02:38:39

End at: 2018-03-28 02:39:09

Below is generated by plot.py at 2018-03-28 05:22:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.06 Mbit/s

95th percentile per-packet one-way delay: 113.197 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.16 Mbit/s

95th percentile per-packet one-way delay: 112.313 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.19 Mbit/s

95th percentile per-packet one-way delay: 115.253 ms

Loss rate: 0.00%

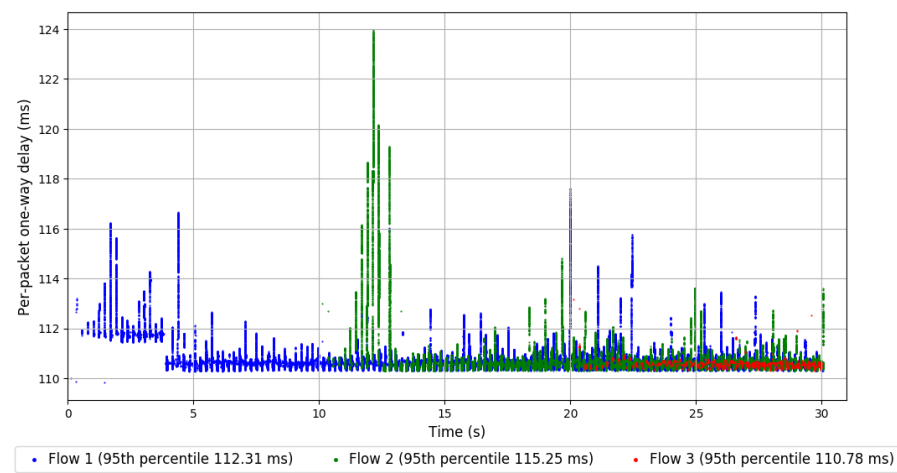
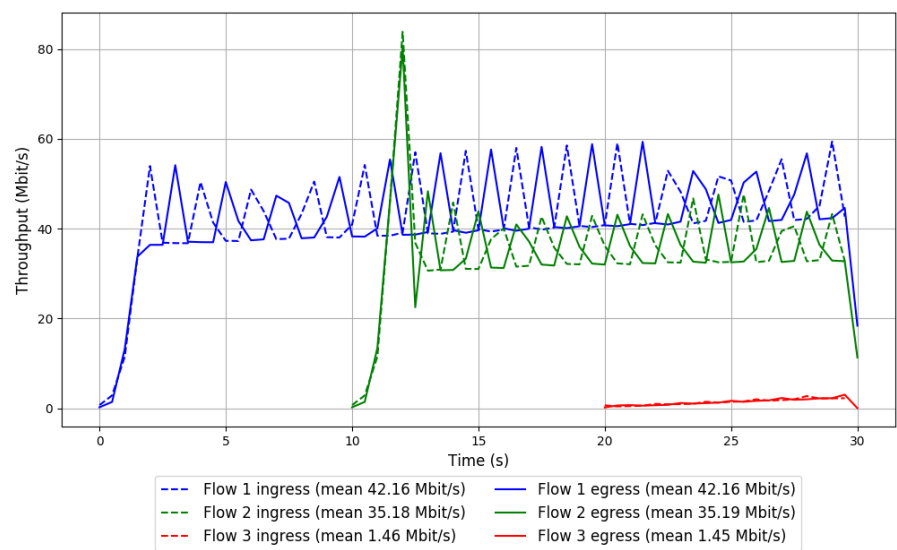
-- Flow 3:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 110.777 ms

Loss rate: 0.08%

Run 10: Report of TCP Vegas — Data Link

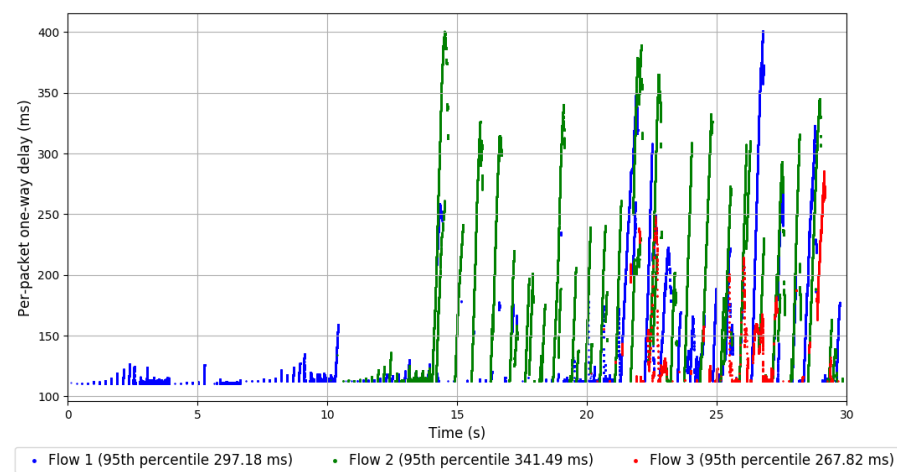
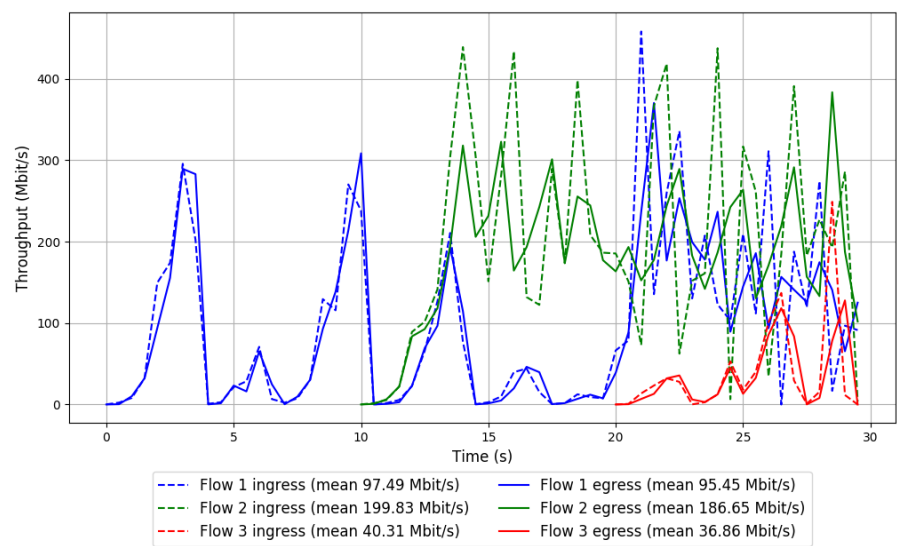


```
Run 1: Statistics of Verus

Start at: 2018-03-27 23:43:06
End at: 2018-03-27 23:43:36

# Below is generated by plot.py at 2018-03-28 05:24:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 230.71 Mbit/s
95th percentile per-packet one-way delay: 328.114 ms
Loss rate: 4.81%
-- Flow 1:
Average throughput: 95.45 Mbit/s
95th percentile per-packet one-way delay: 297.179 ms
Loss rate: 1.87%
-- Flow 2:
Average throughput: 186.65 Mbit/s
95th percentile per-packet one-way delay: 341.485 ms
Loss rate: 6.59%
-- Flow 3:
Average throughput: 36.86 Mbit/s
95th percentile per-packet one-way delay: 267.825 ms
Loss rate: 8.62%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-03-28 00:02:16

End at: 2018-03-28 00:02:46

Below is generated by plot.py at 2018-03-28 05:24:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.60 Mbit/s

95th percentile per-packet one-way delay: 232.405 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 182.30 Mbit/s

95th percentile per-packet one-way delay: 248.062 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 88.36 Mbit/s

95th percentile per-packet one-way delay: 196.569 ms

Loss rate: 0.54%

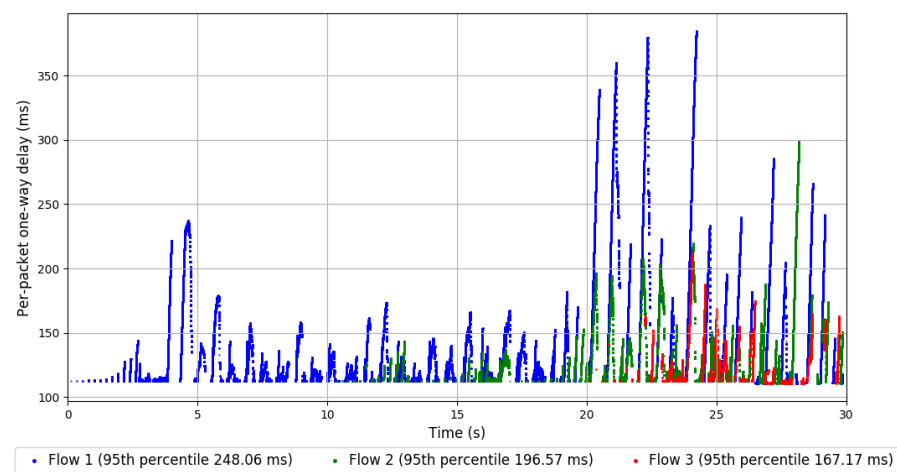
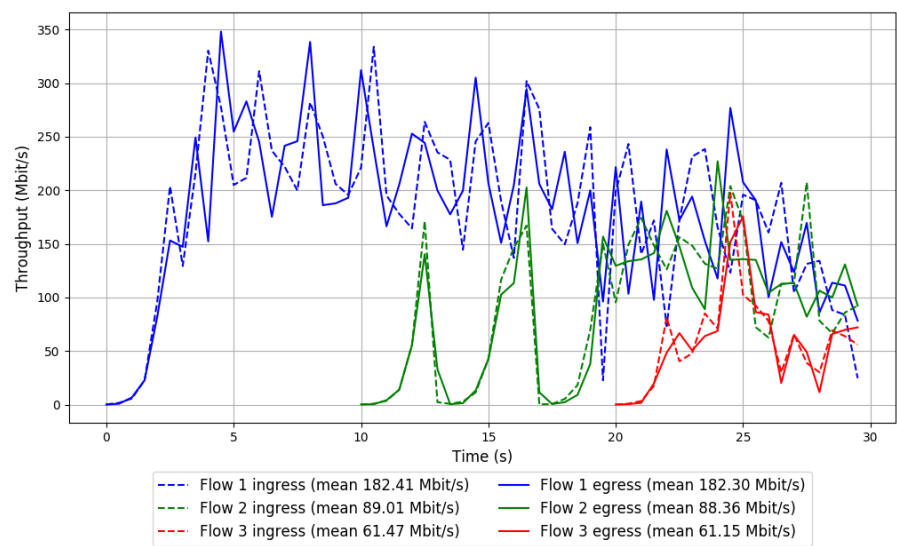
-- Flow 3:

Average throughput: 61.15 Mbit/s

95th percentile per-packet one-way delay: 167.170 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-03-28 00:21:43

End at: 2018-03-28 00:22:13

Below is generated by plot.py at 2018-03-28 05:24:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.28 Mbit/s

95th percentile per-packet one-way delay: 185.616 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 155.56 Mbit/s

95th percentile per-packet one-way delay: 198.485 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 67.66 Mbit/s

95th percentile per-packet one-way delay: 137.613 ms

Loss rate: 0.00%

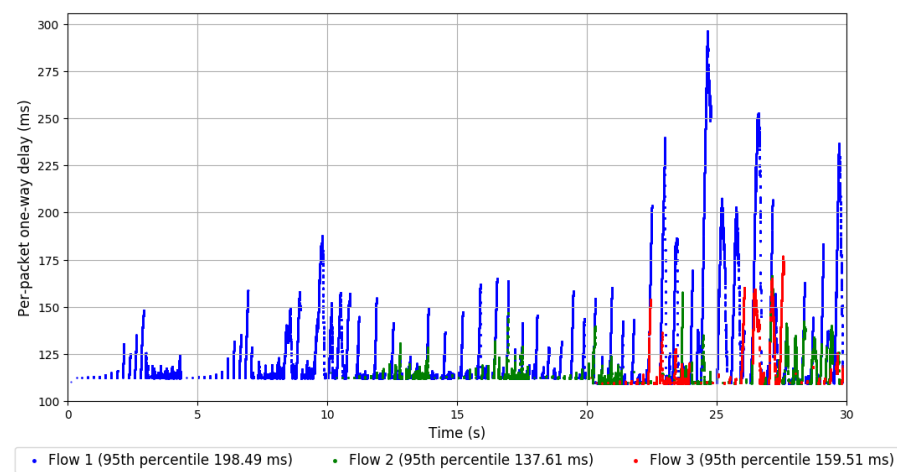
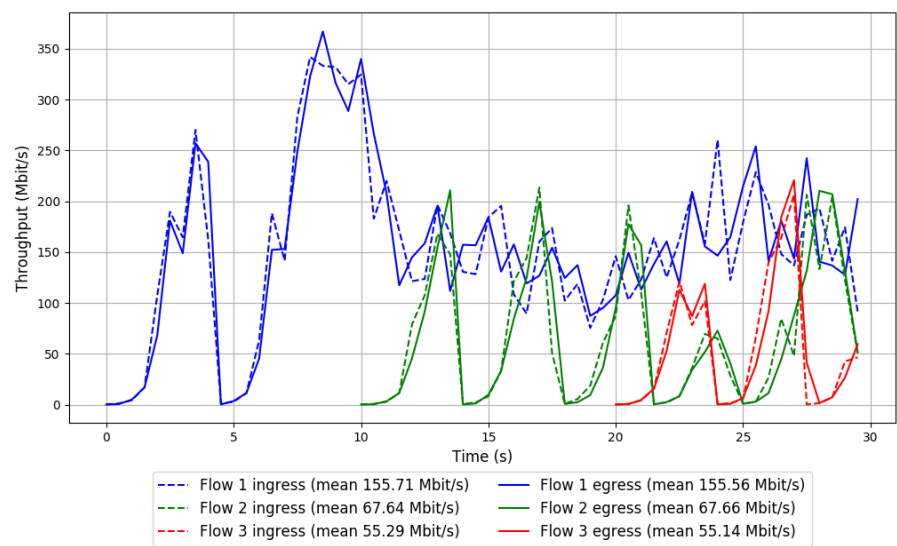
-- Flow 3:

Average throughput: 55.14 Mbit/s

95th percentile per-packet one-way delay: 159.514 ms

Loss rate: 0.28%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-03-28 00:40:54

End at: 2018-03-28 00:41:24

Below is generated by plot.py at 2018-03-28 05:24:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 192.77 Mbit/s

95th percentile per-packet one-way delay: 258.190 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 149.87 Mbit/s

95th percentile per-packet one-way delay: 266.159 ms

Loss rate: 1.73%

-- Flow 2:

Average throughput: 45.45 Mbit/s

95th percentile per-packet one-way delay: 151.746 ms

Loss rate: 0.00%

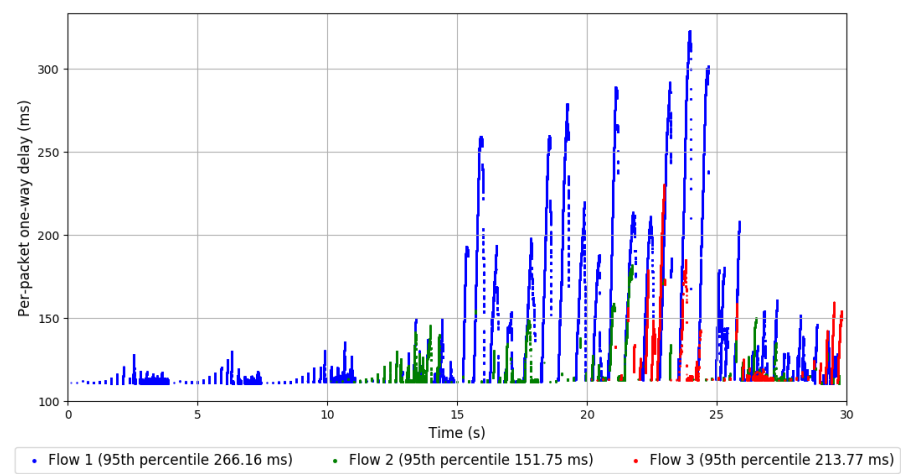
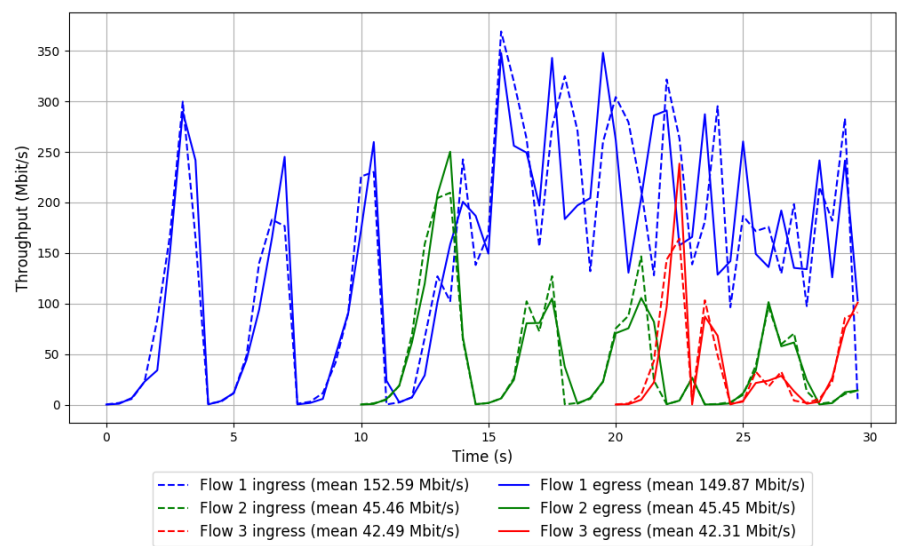
-- Flow 3:

Average throughput: 42.31 Mbit/s

95th percentile per-packet one-way delay: 213.773 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-03-28 00:59:58

End at: 2018-03-28 01:00:28

Below is generated by plot.py at 2018-03-28 05:24:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 195.58 Mbit/s

95th percentile per-packet one-way delay: 294.175 ms

Loss rate: 4.15%

-- Flow 1:

Average throughput: 73.53 Mbit/s

95th percentile per-packet one-way delay: 205.473 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 164.35 Mbit/s

95th percentile per-packet one-way delay: 327.701 ms

Loss rate: 6.52%

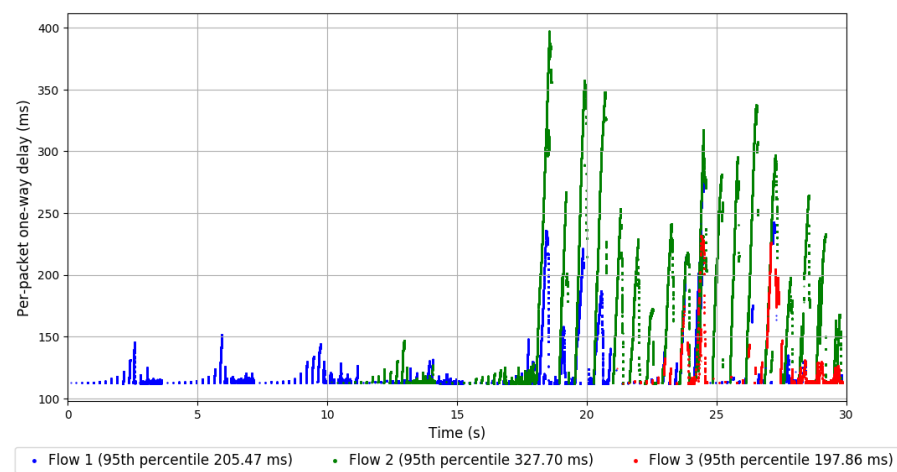
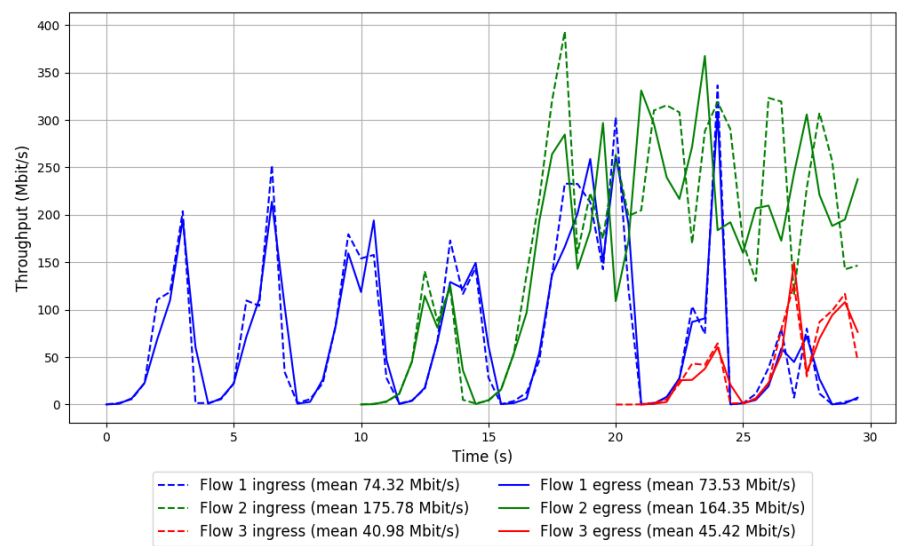
-- Flow 3:

Average throughput: 45.42 Mbit/s

95th percentile per-packet one-way delay: 197.863 ms

Loss rate: 0.75%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-03-28 01:19:06

End at: 2018-03-28 01:19:36

Below is generated by plot.py at 2018-03-28 05:24:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 144.81 Mbit/s

95th percentile per-packet one-way delay: 155.937 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 89.65 Mbit/s

95th percentile per-packet one-way delay: 138.953 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.03 Mbit/s

95th percentile per-packet one-way delay: 163.051 ms

Loss rate: 0.00%

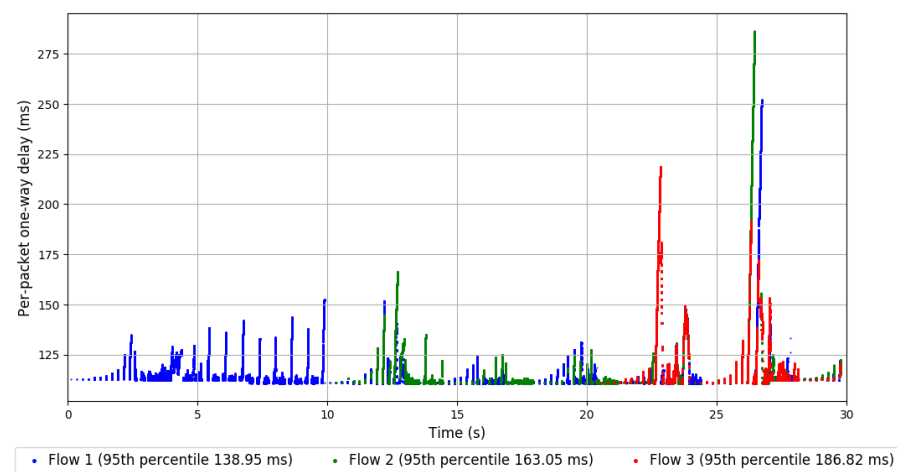
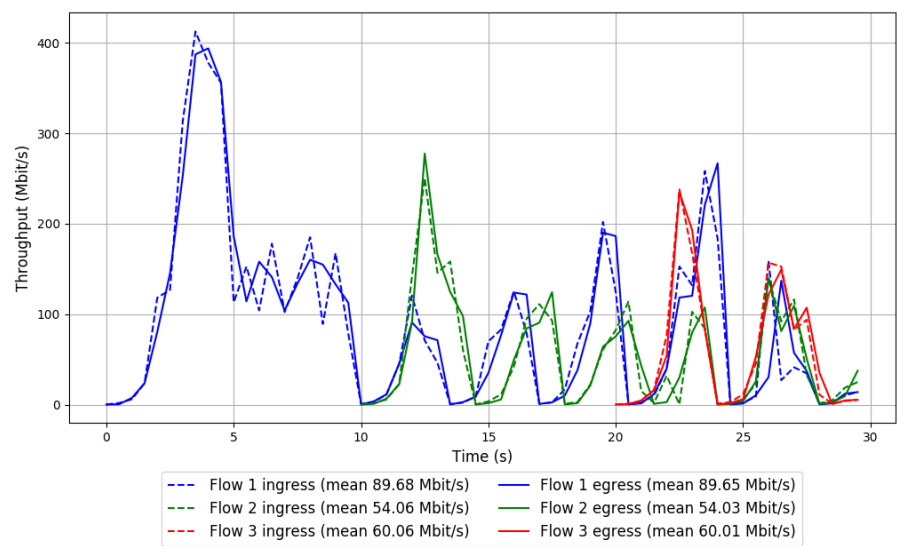
-- Flow 3:

Average throughput: 60.01 Mbit/s

95th percentile per-packet one-way delay: 186.819 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-03-28 01:38:14

End at: 2018-03-28 01:38:44

Below is generated by plot.py at 2018-03-28 05:26:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.32 Mbit/s

95th percentile per-packet one-way delay: 251.741 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 175.36 Mbit/s

95th percentile per-packet one-way delay: 261.725 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 130.48 Mbit/s

95th percentile per-packet one-way delay: 225.121 ms

Loss rate: 0.69%

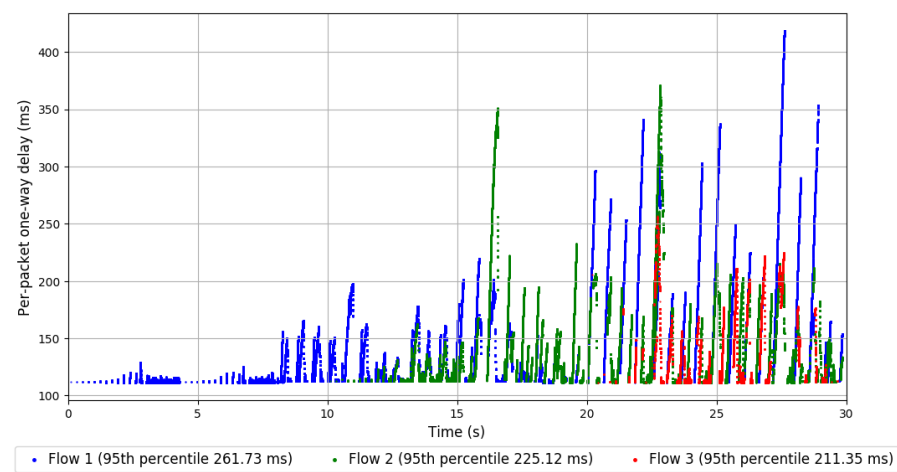
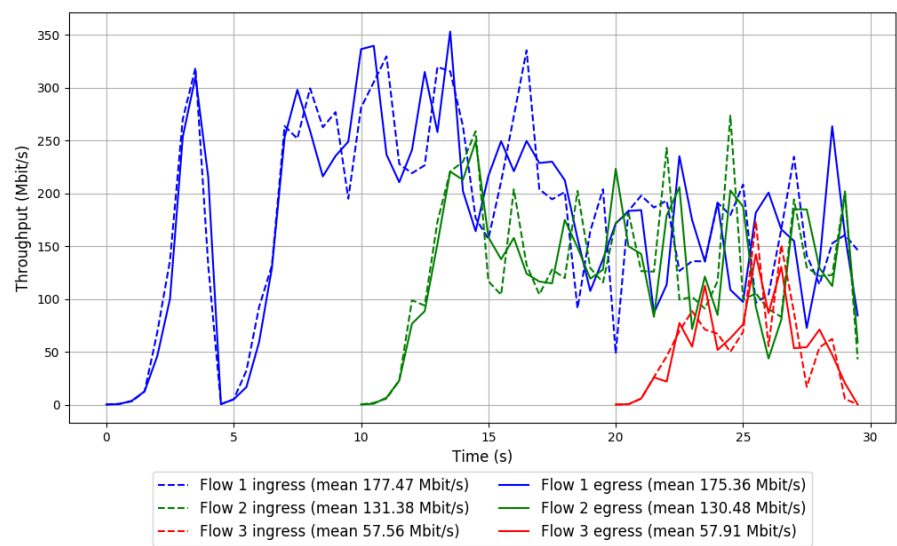
-- Flow 3:

Average throughput: 57.91 Mbit/s

95th percentile per-packet one-way delay: 211.354 ms

Loss rate: 0.36%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-03-28 01:57:40

End at: 2018-03-28 01:58:10

Below is generated by plot.py at 2018-03-28 05:26:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.37 Mbit/s

95th percentile per-packet one-way delay: 158.650 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 101.75 Mbit/s

95th percentile per-packet one-way delay: 135.864 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.04 Mbit/s

95th percentile per-packet one-way delay: 161.457 ms

Loss rate: 0.00%

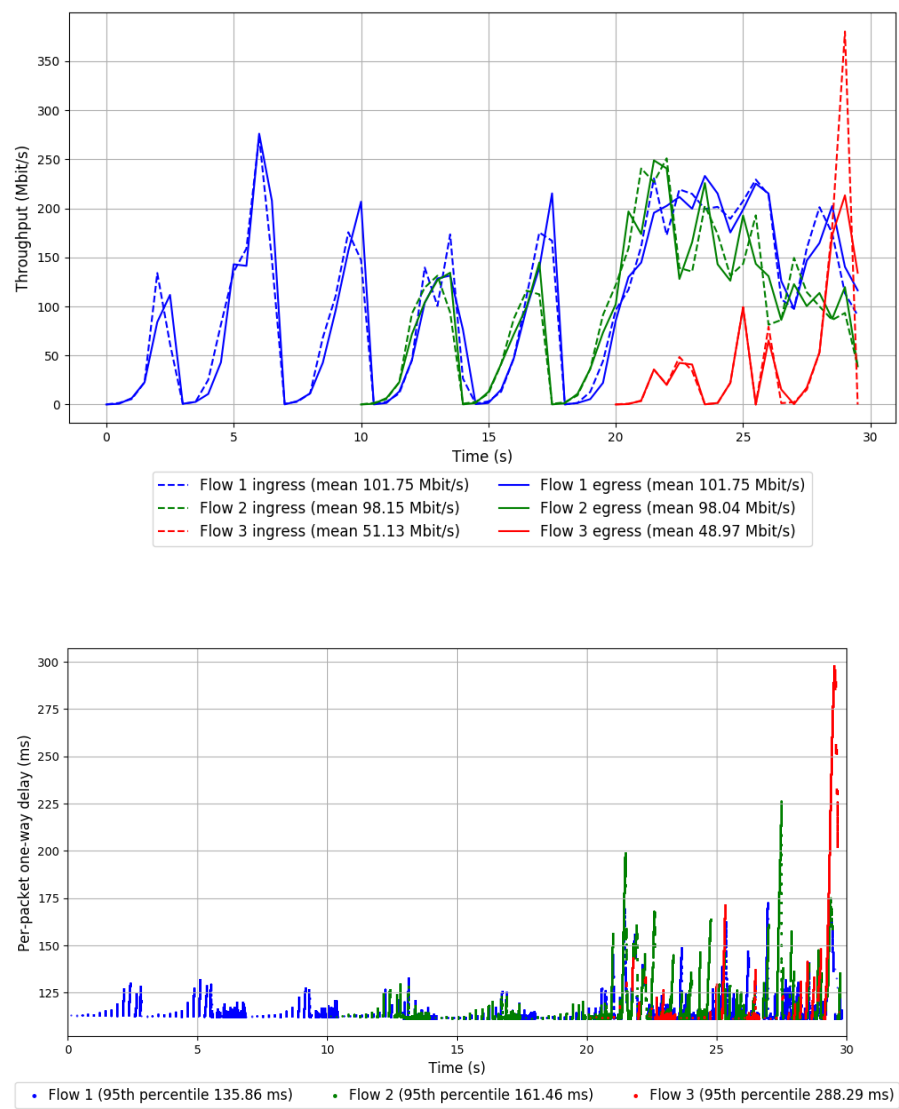
-- Flow 3:

Average throughput: 48.97 Mbit/s

95th percentile per-packet one-way delay: 288.285 ms

Loss rate: 4.19%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-03-28 02:17:00

End at: 2018-03-28 02:17:30

Below is generated by plot.py at 2018-03-28 05:28:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.94 Mbit/s

95th percentile per-packet one-way delay: 316.293 ms

Loss rate: 5.54%

-- Flow 1:

Average throughput: 191.46 Mbit/s

95th percentile per-packet one-way delay: 323.123 ms

Loss rate: 5.73%

-- Flow 2:

Average throughput: 121.82 Mbit/s

95th percentile per-packet one-way delay: 271.948 ms

Loss rate: 2.74%

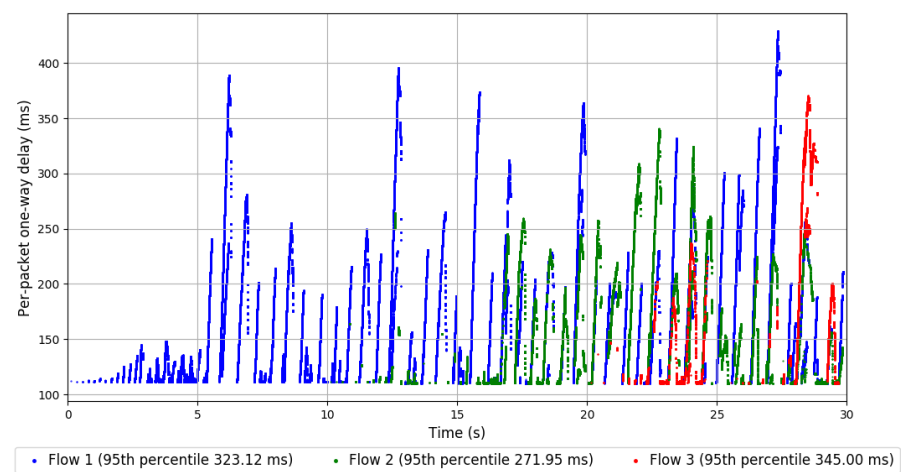
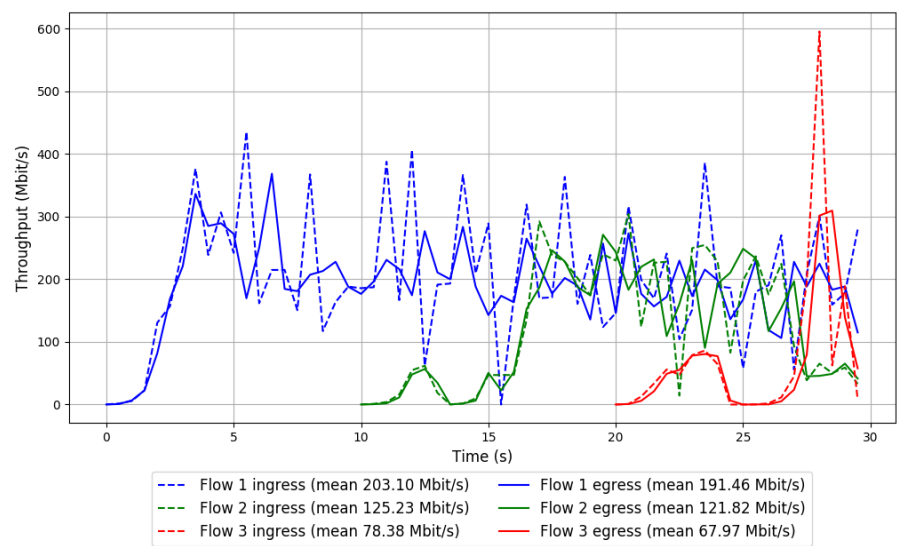
-- Flow 3:

Average throughput: 67.97 Mbit/s

95th percentile per-packet one-way delay: 344.996 ms

Loss rate: 13.28%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-03-28 02:36:17

End at: 2018-03-28 02:36:47

Below is generated by plot.py at 2018-03-28 05:28:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 173.61 Mbit/s

95th percentile per-packet one-way delay: 258.702 ms

Loss rate: 1.74%

-- Flow 1:

Average throughput: 111.65 Mbit/s

95th percentile per-packet one-way delay: 149.784 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 75.79 Mbit/s

95th percentile per-packet one-way delay: 334.015 ms

Loss rate: 4.09%

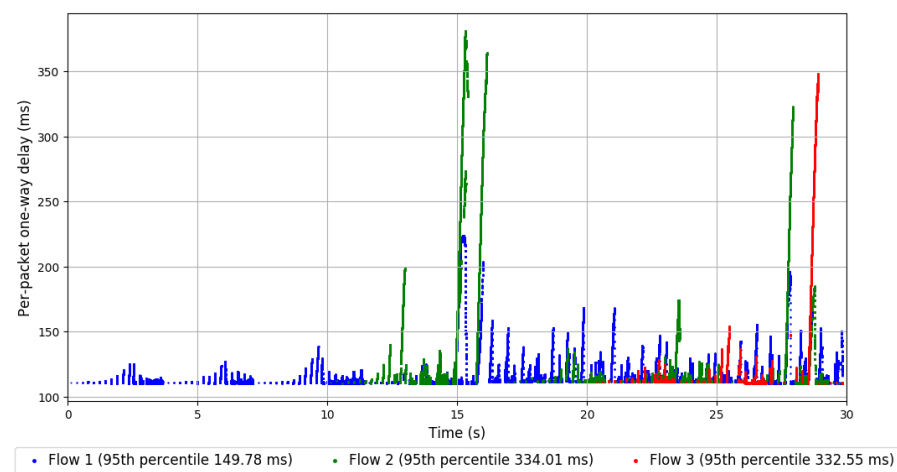
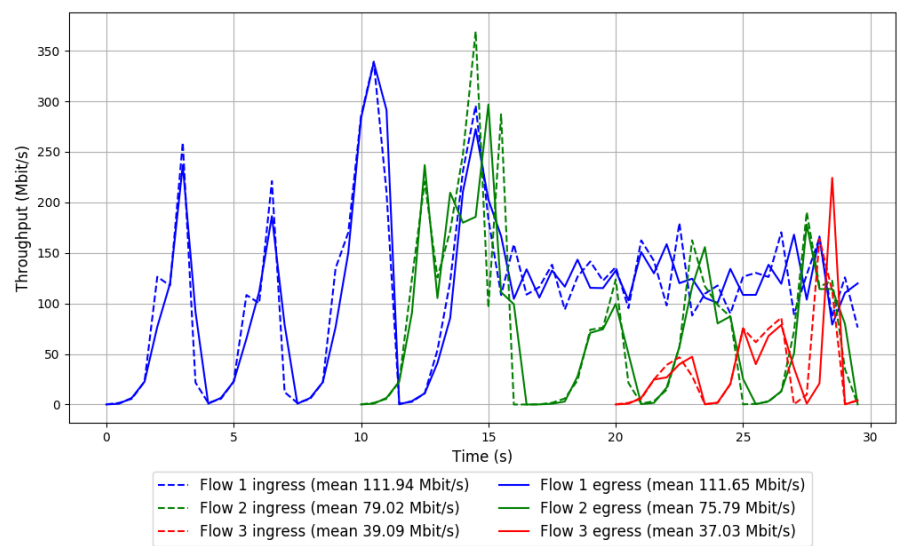
-- Flow 3:

Average throughput: 37.03 Mbit/s

95th percentile per-packet one-way delay: 332.551 ms

Loss rate: 5.31%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-03-27 23:40:55

End at: 2018-03-27 23:41:25

Below is generated by plot.py at 2018-03-28 05:28:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.77 Mbit/s

95th percentile per-packet one-way delay: 112.504 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.12 Mbit/s

95th percentile per-packet one-way delay: 112.488 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 87.96 Mbit/s

95th percentile per-packet one-way delay: 112.509 ms

Loss rate: 0.00%

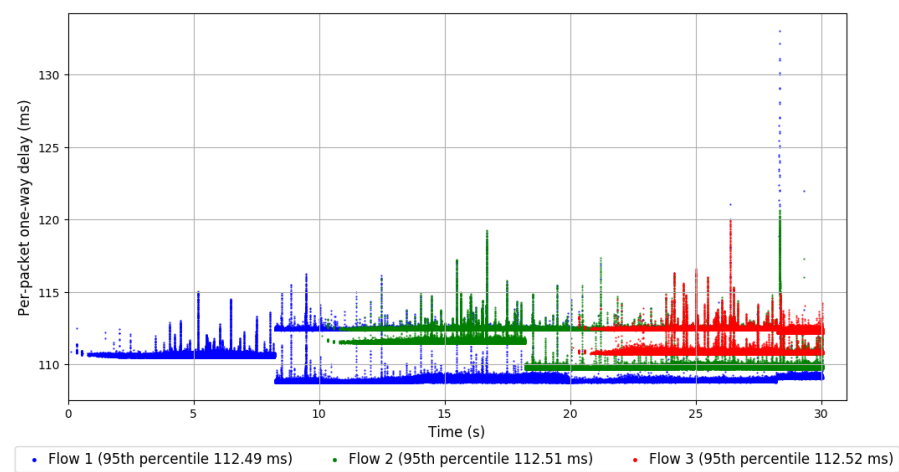
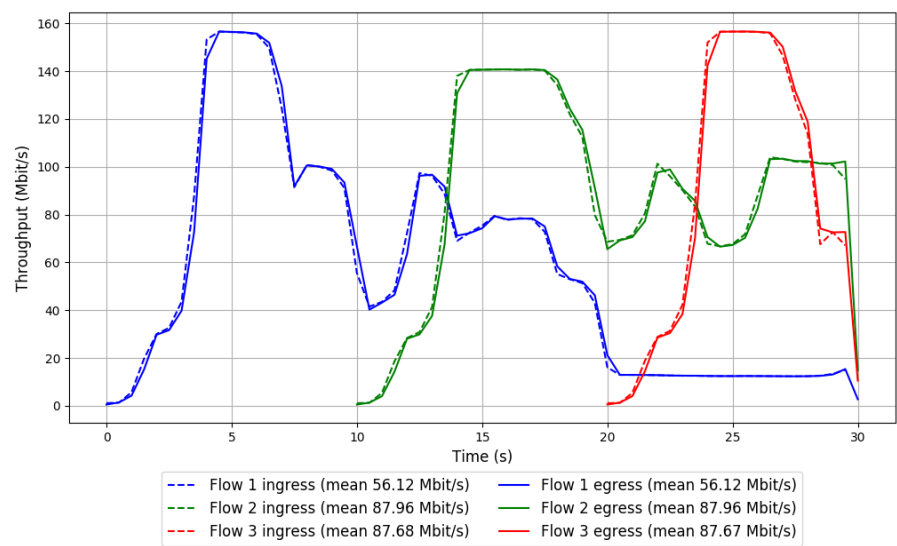
-- Flow 3:

Average throughput: 87.67 Mbit/s

95th percentile per-packet one-way delay: 112.517 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-03-28 00:00:06

End at: 2018-03-28 00:00:36

Below is generated by plot.py at 2018-03-28 05:28:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.04 Mbit/s

95th percentile per-packet one-way delay: 113.710 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.87 Mbit/s

95th percentile per-packet one-way delay: 113.829 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.55 Mbit/s

95th percentile per-packet one-way delay: 112.442 ms

Loss rate: 0.00%

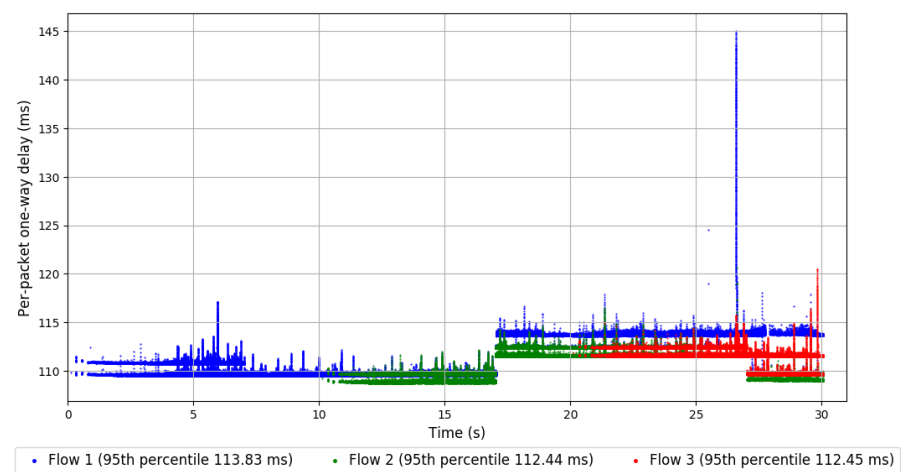
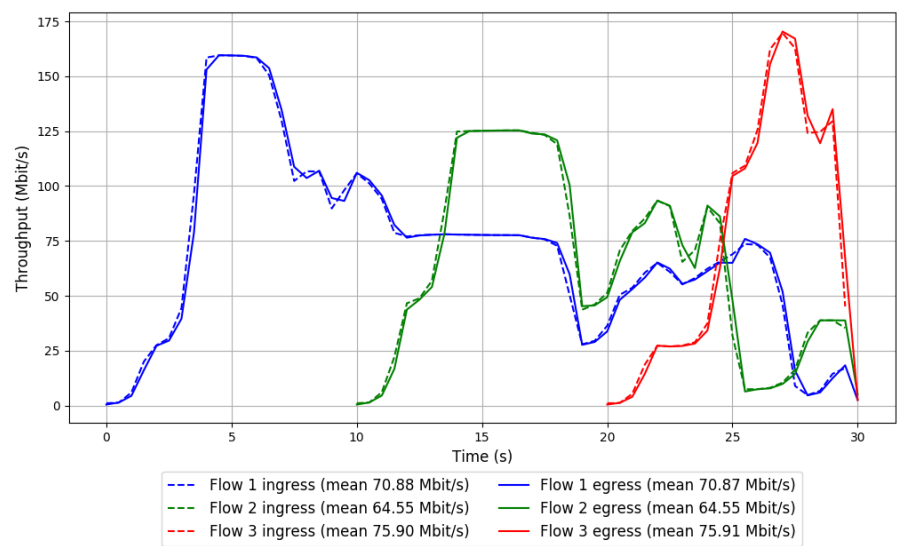
-- Flow 3:

Average throughput: 75.91 Mbit/s

95th percentile per-packet one-way delay: 112.451 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-03-28 00:19:29

End at: 2018-03-28 00:19:59

Below is generated by plot.py at 2018-03-28 05:28:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 145.59 Mbit/s

95th percentile per-packet one-way delay: 112.281 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 80.77 Mbit/s

95th percentile per-packet one-way delay: 112.268 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.18 Mbit/s

95th percentile per-packet one-way delay: 112.442 ms

Loss rate: 0.00%

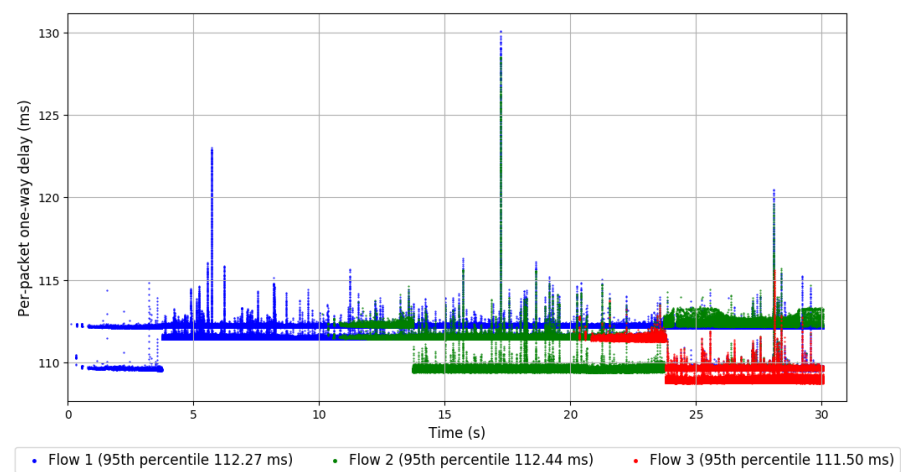
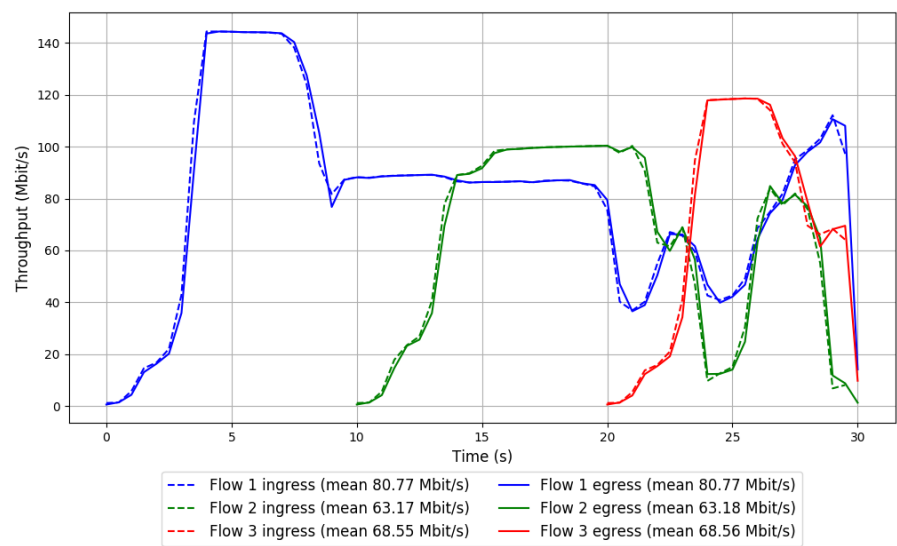
-- Flow 3:

Average throughput: 68.56 Mbit/s

95th percentile per-packet one-way delay: 111.497 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-03-28 00:38:40

End at: 2018-03-28 00:39:10

Below is generated by plot.py at 2018-03-28 05:29:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.46 Mbit/s

95th percentile per-packet one-way delay: 112.399 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 83.24 Mbit/s

95th percentile per-packet one-way delay: 112.442 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.20 Mbit/s

95th percentile per-packet one-way delay: 110.780 ms

Loss rate: 0.00%

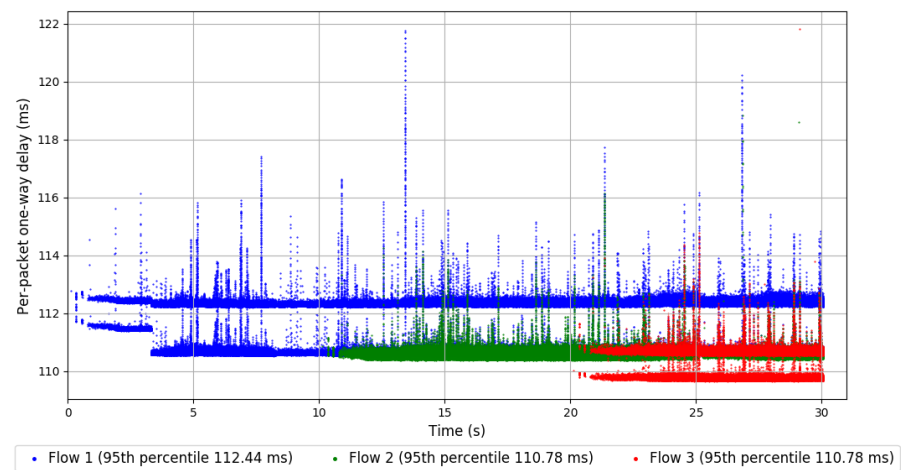
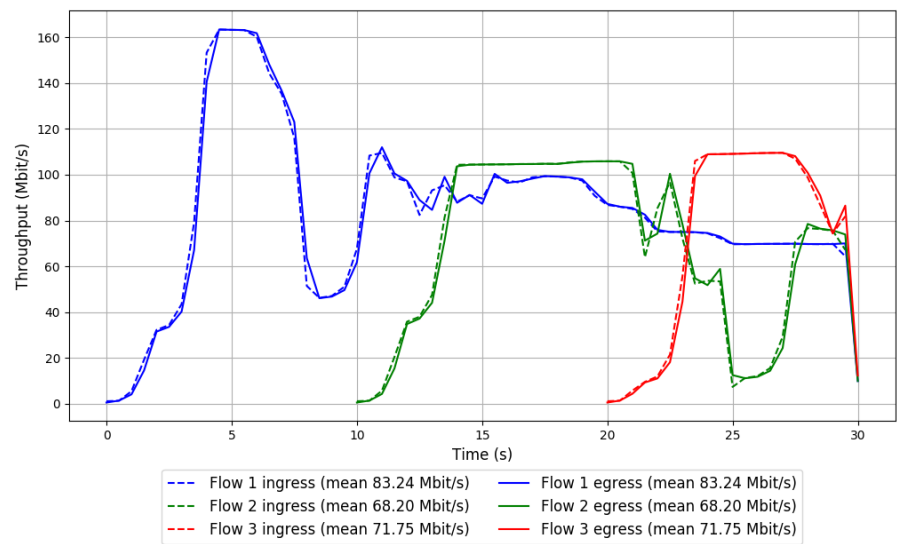
-- Flow 3:

Average throughput: 71.75 Mbit/s

95th percentile per-packet one-way delay: 110.778 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-03-28 00:57:47

End at: 2018-03-28 00:58:17

Below is generated by plot.py at 2018-03-28 05:30:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 165.33 Mbit/s

95th percentile per-packet one-way delay: 112.511 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 111.38 Mbit/s

95th percentile per-packet one-way delay: 112.533 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.59 Mbit/s

95th percentile per-packet one-way delay: 112.324 ms

Loss rate: 0.00%

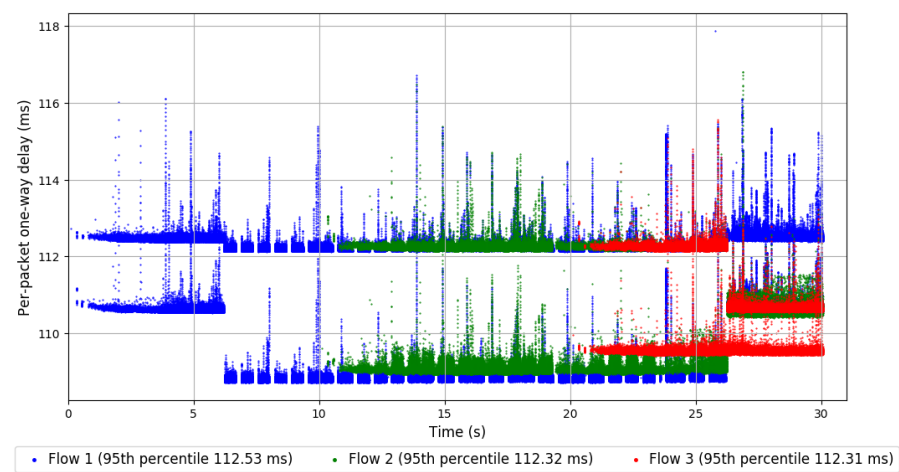
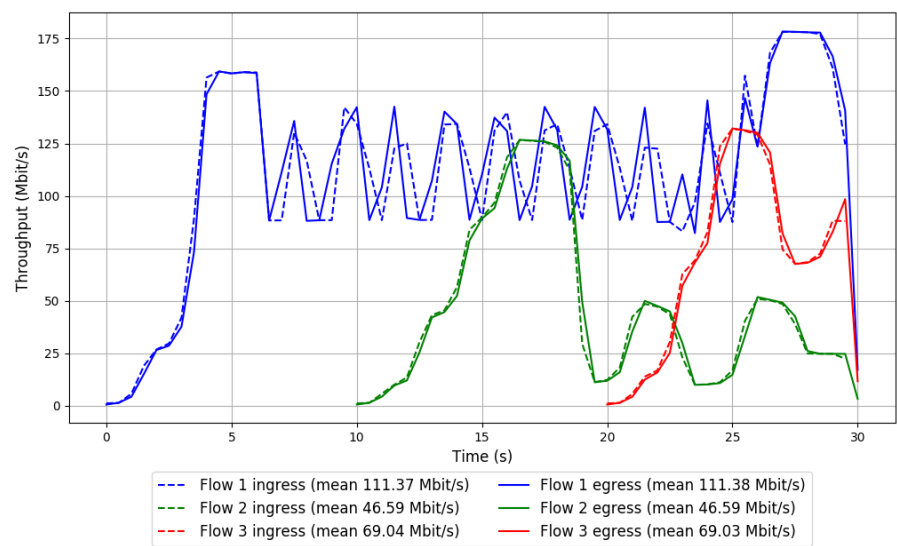
-- Flow 3:

Average throughput: 69.03 Mbit/s

95th percentile per-packet one-way delay: 112.307 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-03-28 01:16:52

End at: 2018-03-28 01:17:22

Below is generated by plot.py at 2018-03-28 05:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.86 Mbit/s

95th percentile per-packet one-way delay: 112.437 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.73 Mbit/s

95th percentile per-packet one-way delay: 112.337 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 79.66 Mbit/s

95th percentile per-packet one-way delay: 112.509 ms

Loss rate: 0.00%

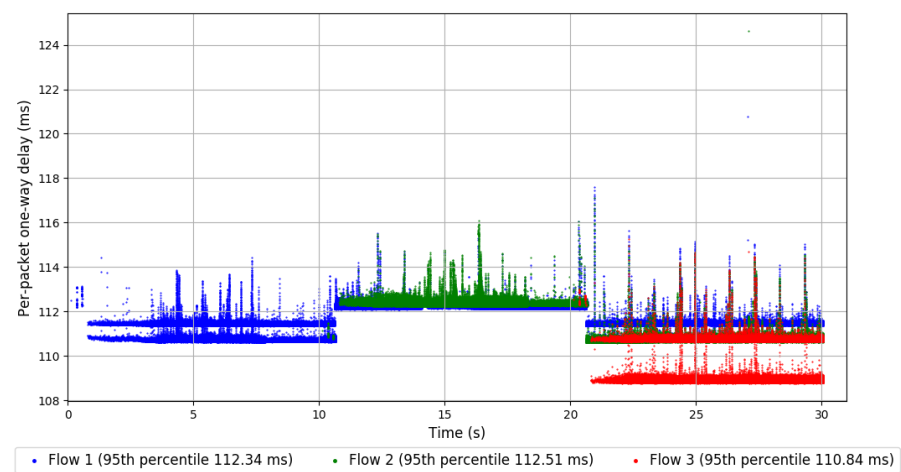
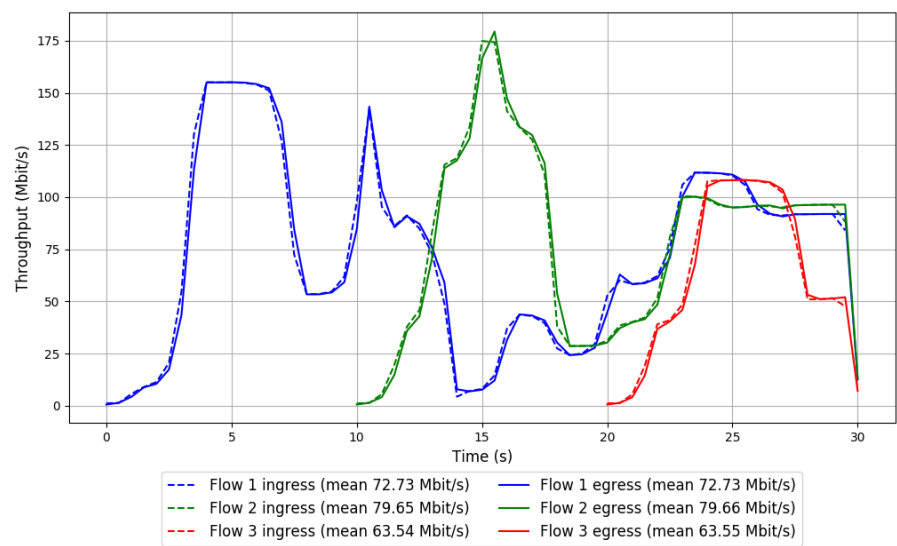
-- Flow 3:

Average throughput: 63.55 Mbit/s

95th percentile per-packet one-way delay: 110.839 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-03-28 01:36:01

End at: 2018-03-28 01:36:31

Below is generated by plot.py at 2018-03-28 05:31:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 156.02 Mbit/s

95th percentile per-packet one-way delay: 305.479 ms

Loss rate: 18.69%

-- Flow 1:

Average throughput: 227.54 Mbit/s

95th percentile per-packet one-way delay: 308.162 ms

Loss rate: 31.52%

-- Flow 2:

Average throughput: 73.29 Mbit/s

95th percentile per-packet one-way delay: 112.451 ms

Loss rate: 0.01%

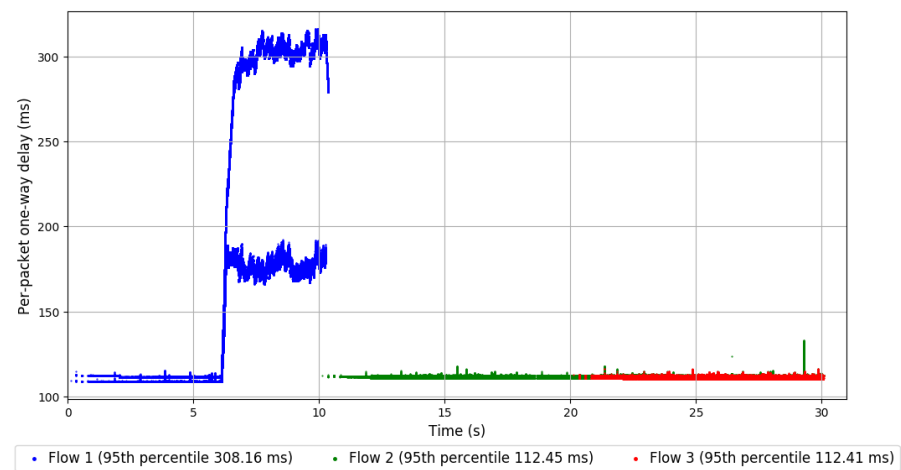
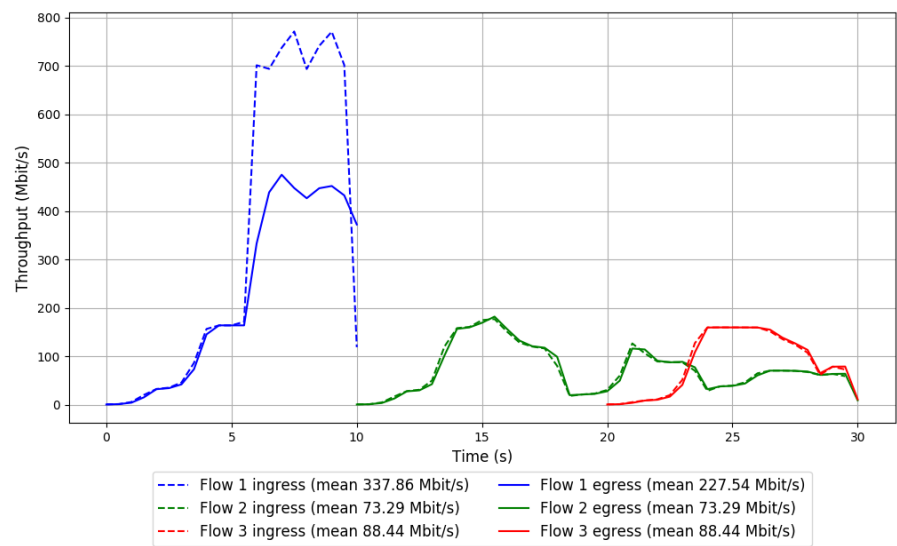
-- Flow 3:

Average throughput: 88.44 Mbit/s

95th percentile per-packet one-way delay: 112.409 ms

Loss rate: 0.01%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-03-28 01:55:24

End at: 2018-03-28 01:55:54

Below is generated by plot.py at 2018-03-28 05:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.06 Mbit/s

95th percentile per-packet one-way delay: 288.421 ms

Loss rate: 14.98%

-- Flow 1:

Average throughput: 61.60 Mbit/s

95th percentile per-packet one-way delay: 112.778 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 70.73 Mbit/s

95th percentile per-packet one-way delay: 112.804 ms

Loss rate: 0.18%

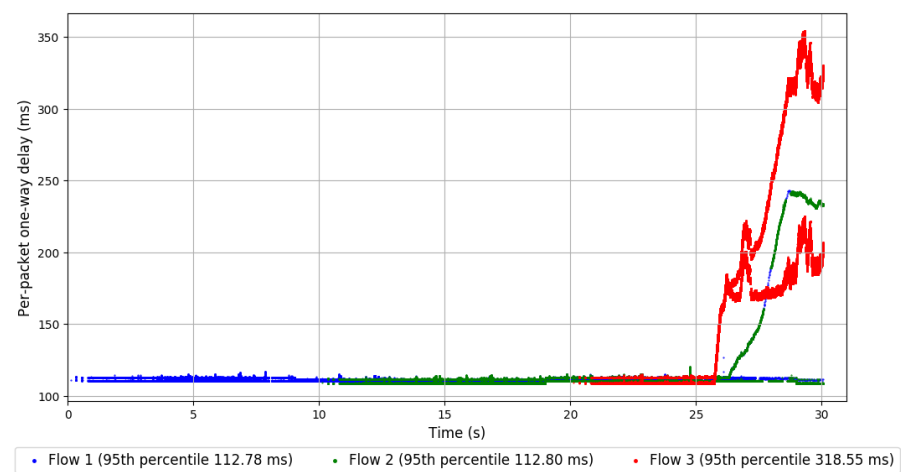
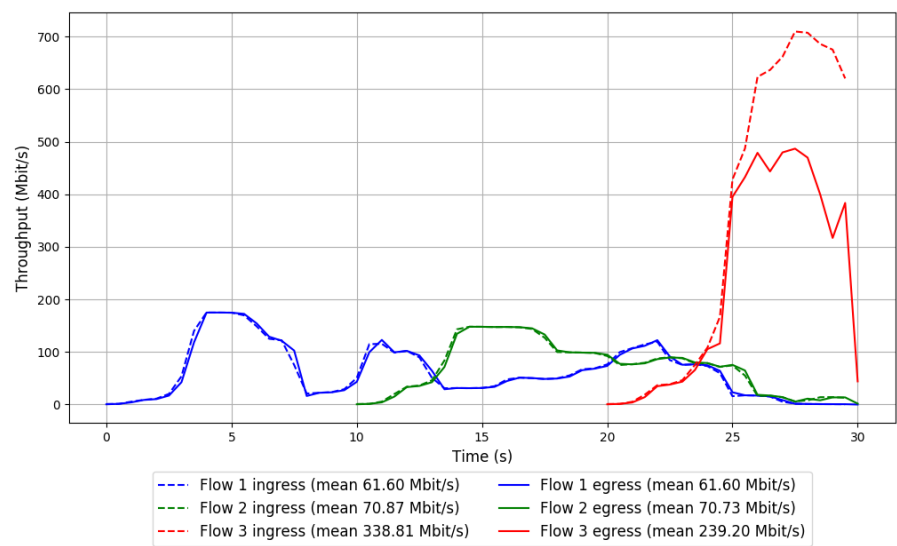
-- Flow 3:

Average throughput: 239.20 Mbit/s

95th percentile per-packet one-way delay: 318.553 ms

Loss rate: 29.39%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-03-28 02:14:46

End at: 2018-03-28 02:15:16

Below is generated by plot.py at 2018-03-28 05:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 154.41 Mbit/s

95th percentile per-packet one-way delay: 112.324 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.49 Mbit/s

95th percentile per-packet one-way delay: 112.391 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 76.06 Mbit/s

95th percentile per-packet one-way delay: 112.190 ms

Loss rate: 0.00%

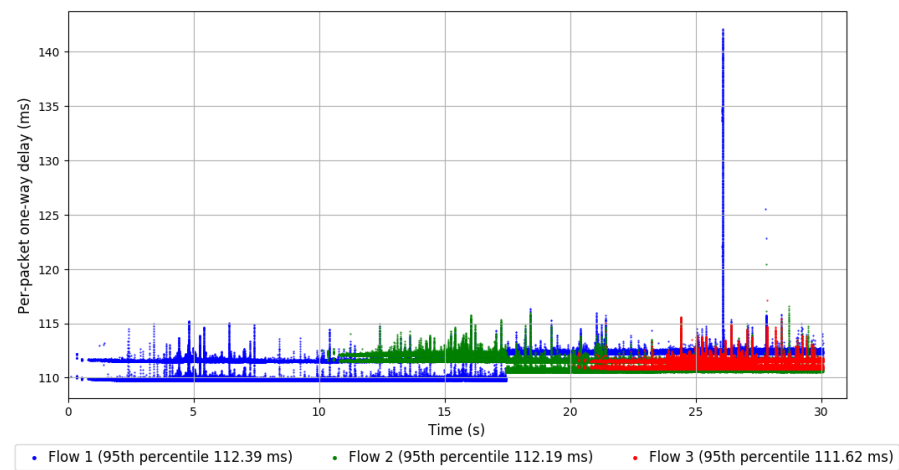
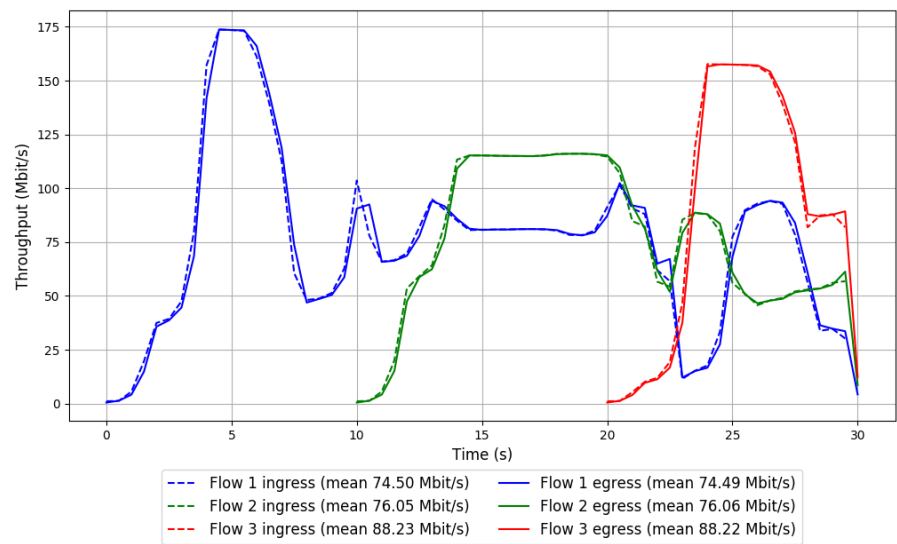
-- Flow 3:

Average throughput: 88.22 Mbit/s

95th percentile per-packet one-way delay: 111.620 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-03-28 02:34:05

End at: 2018-03-28 02:34:35

Below is generated by plot.py at 2018-03-28 05:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.55 Mbit/s

95th percentile per-packet one-way delay: 112.802 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 81.01 Mbit/s

95th percentile per-packet one-way delay: 112.793 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.56 Mbit/s

95th percentile per-packet one-way delay: 112.795 ms

Loss rate: 0.00%

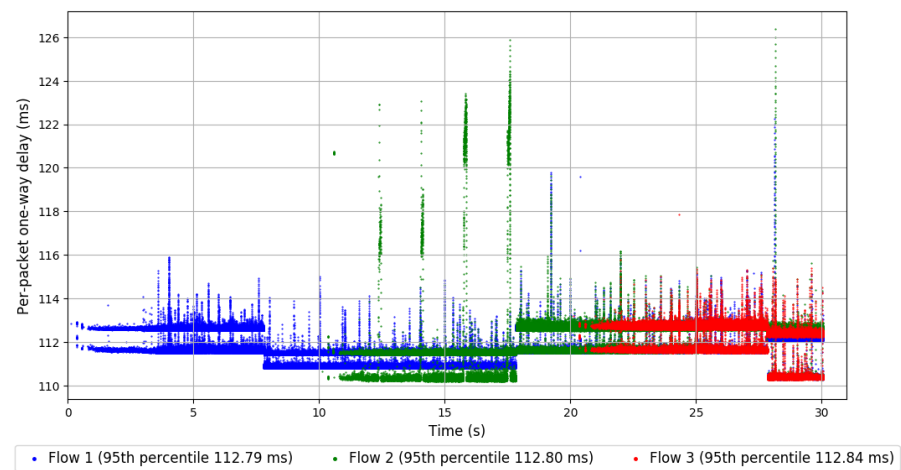
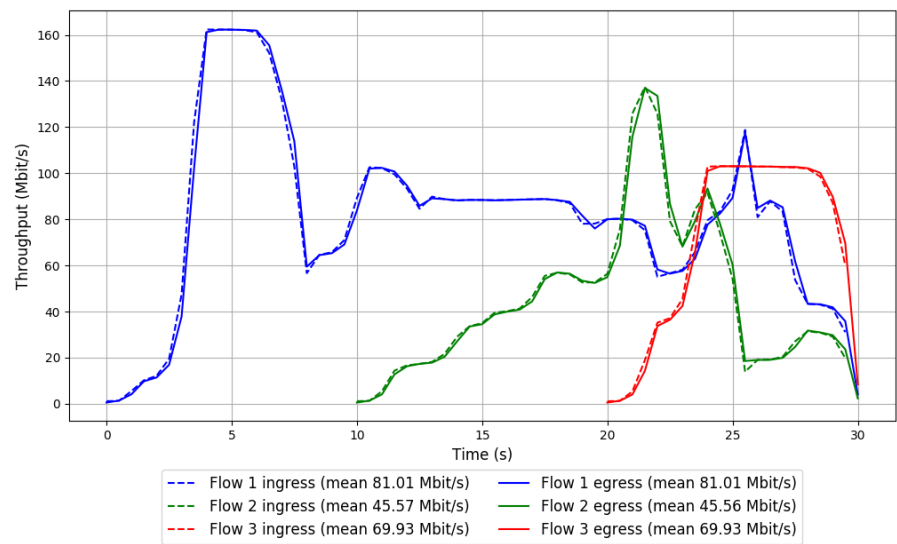
-- Flow 3:

Average throughput: 69.93 Mbit/s

95th percentile per-packet one-way delay: 112.841 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

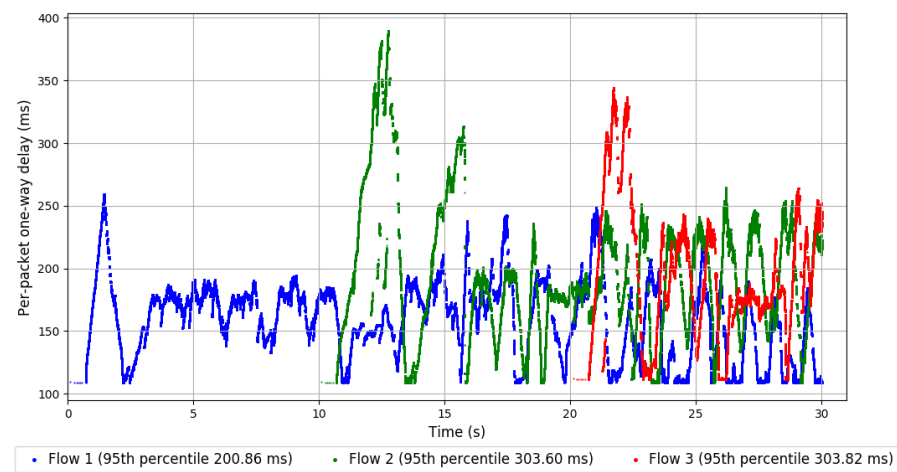
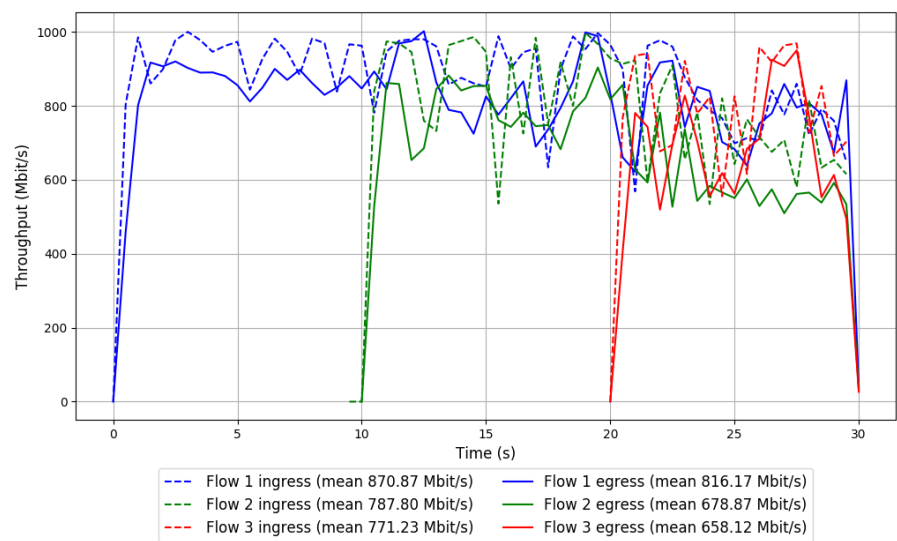


```
Run 1: Statistics of FillP

Start at: 2018-03-27 23:50:43
End at: 2018-03-27 23:51:13

# Below is generated by plot.py at 2018-03-28 05:56:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1486.33 Mbit/s
95th percentile per-packet one-way delay: 264.893 ms
Loss rate: 9.98%
-- Flow 1:
Average throughput: 816.17 Mbit/s
95th percentile per-packet one-way delay: 200.864 ms
Loss rate: 6.28%
-- Flow 2:
Average throughput: 678.87 Mbit/s
95th percentile per-packet one-way delay: 303.600 ms
Loss rate: 13.83%
-- Flow 3:
Average throughput: 658.12 Mbit/s
95th percentile per-packet one-way delay: 303.822 ms
Loss rate: 14.69%
```


Run 1: Report of FillP — Data Link

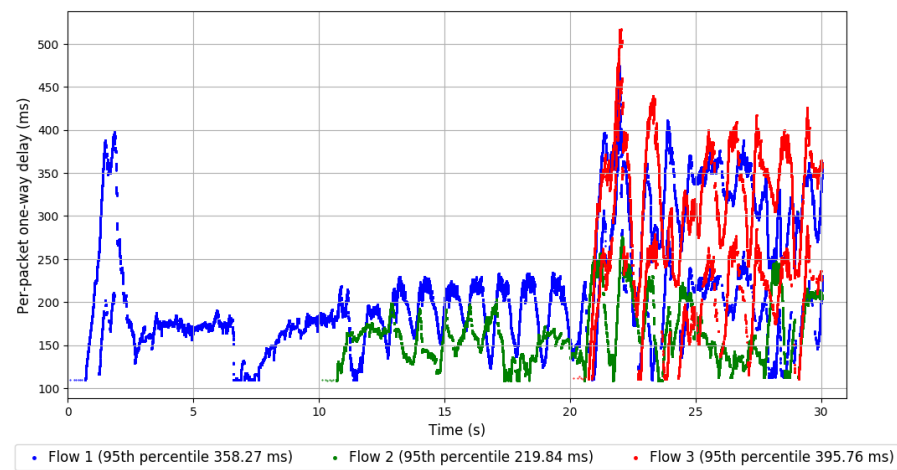
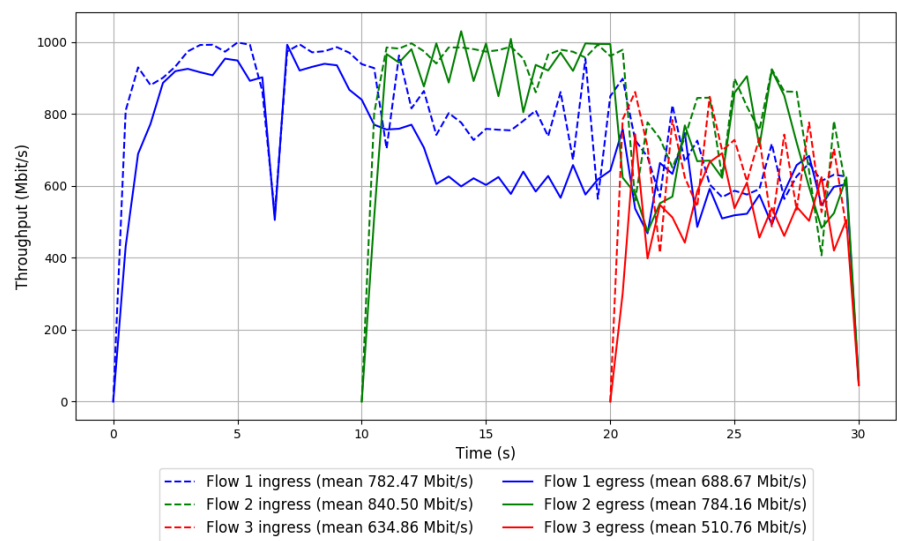


```
Run 2: Statistics of FillP

Start at: 2018-03-28 00:10:07
End at: 2018-03-28 00:10:37

# Below is generated by plot.py at 2018-03-28 05:56:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1379.85 Mbit/s
95th percentile per-packet one-way delay: 358.113 ms
Loss rate: 11.11%
-- Flow 1:
Average throughput: 688.67 Mbit/s
95th percentile per-packet one-way delay: 358.274 ms
Loss rate: 11.99%
-- Flow 2:
Average throughput: 784.16 Mbit/s
95th percentile per-packet one-way delay: 219.841 ms
Loss rate: 6.70%
-- Flow 3:
Average throughput: 510.76 Mbit/s
95th percentile per-packet one-way delay: 395.762 ms
Loss rate: 19.55%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-03-28 00:29:22

End at: 2018-03-28 00:29:52

Below is generated by plot.py at 2018-03-28 05:57:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 1450.30 Mbit/s

95th percentile per-packet one-way delay: 273.017 ms

Loss rate: 9.74%

-- Flow 1:

Average throughput: 717.64 Mbit/s

95th percentile per-packet one-way delay: 326.570 ms

Loss rate: 11.65%

-- Flow 2:

Average throughput: 787.18 Mbit/s

95th percentile per-packet one-way delay: 234.017 ms

Loss rate: 7.26%

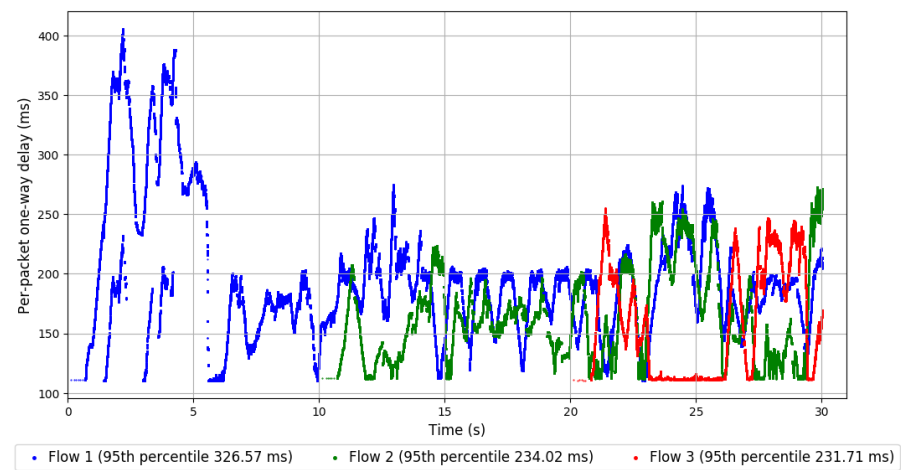
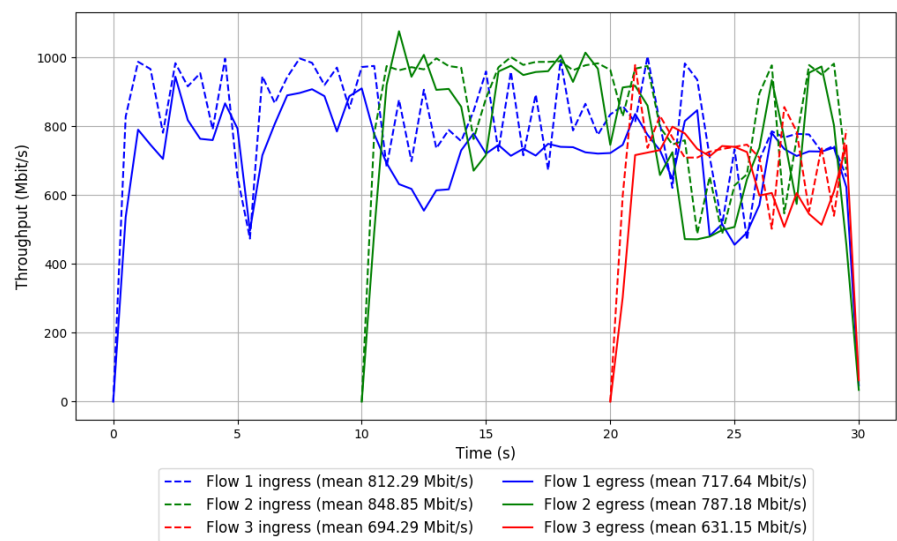
-- Flow 3:

Average throughput: 631.15 Mbit/s

95th percentile per-packet one-way delay: 231.709 ms

Loss rate: 9.08%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-03-28 00:48:24

End at: 2018-03-28 00:48:54

Below is generated by plot.py at 2018-03-28 05:57:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 1448.82 Mbit/s

95th percentile per-packet one-way delay: 260.644 ms

Loss rate: 11.61%

-- Flow 1:

Average throughput: 783.94 Mbit/s

95th percentile per-packet one-way delay: 275.611 ms

Loss rate: 8.80%

-- Flow 2:

Average throughput: 713.86 Mbit/s

95th percentile per-packet one-way delay: 222.753 ms

Loss rate: 12.44%

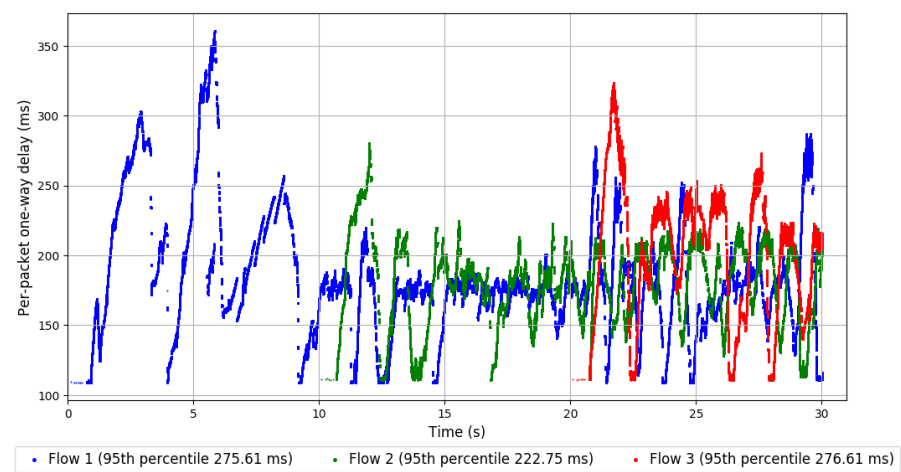
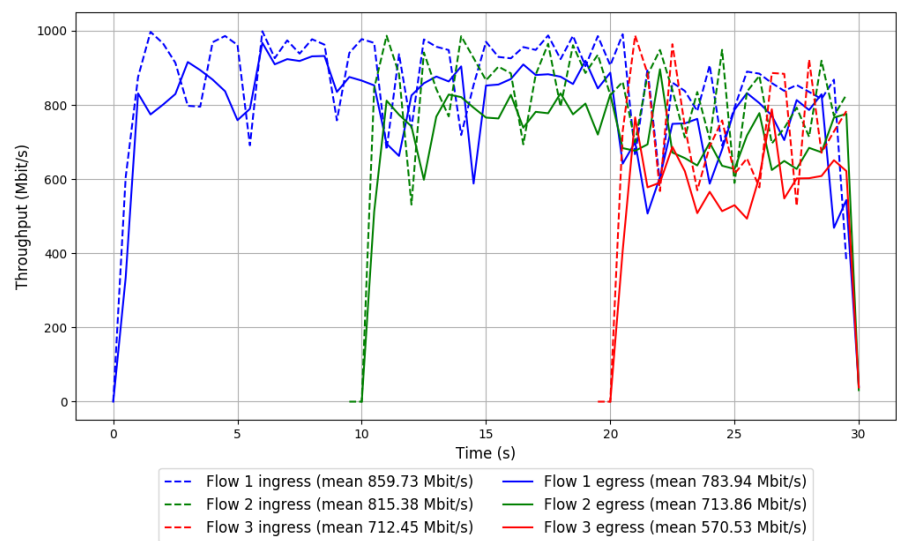
-- Flow 3:

Average throughput: 570.53 Mbit/s

95th percentile per-packet one-way delay: 276.611 ms

Loss rate: 19.91%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-03-28 01:07:31

End at: 2018-03-28 01:08:01

Below is generated by plot.py at 2018-03-28 05:57:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 1391.94 Mbit/s

95th percentile per-packet one-way delay: 283.703 ms

Loss rate: 11.91%

-- Flow 1:

Average throughput: 698.60 Mbit/s

95th percentile per-packet one-way delay: 231.992 ms

Loss rate: 13.87%

-- Flow 2:

Average throughput: 735.33 Mbit/s

95th percentile per-packet one-way delay: 311.195 ms

Loss rate: 9.09%

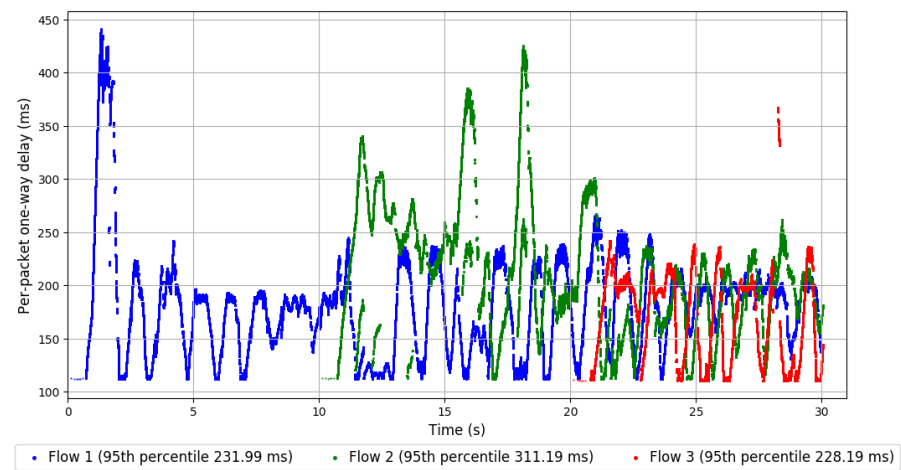
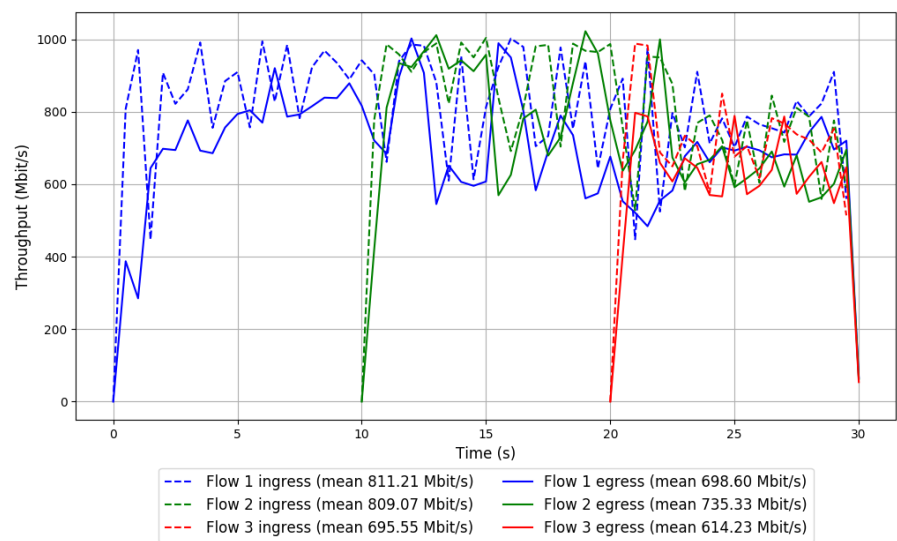
-- Flow 3:

Average throughput: 614.23 Mbit/s

95th percentile per-packet one-way delay: 228.195 ms

Loss rate: 11.63%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-03-28 01:26:33

End at: 2018-03-28 01:27:03

Below is generated by plot.py at 2018-03-28 05:59:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 1450.79 Mbit/s

95th percentile per-packet one-way delay: 227.167 ms

Loss rate: 11.16%

-- Flow 1:

Average throughput: 760.83 Mbit/s

95th percentile per-packet one-way delay: 210.977 ms

Loss rate: 9.95%

-- Flow 2:

Average throughput: 757.78 Mbit/s

95th percentile per-packet one-way delay: 221.170 ms

Loss rate: 9.51%

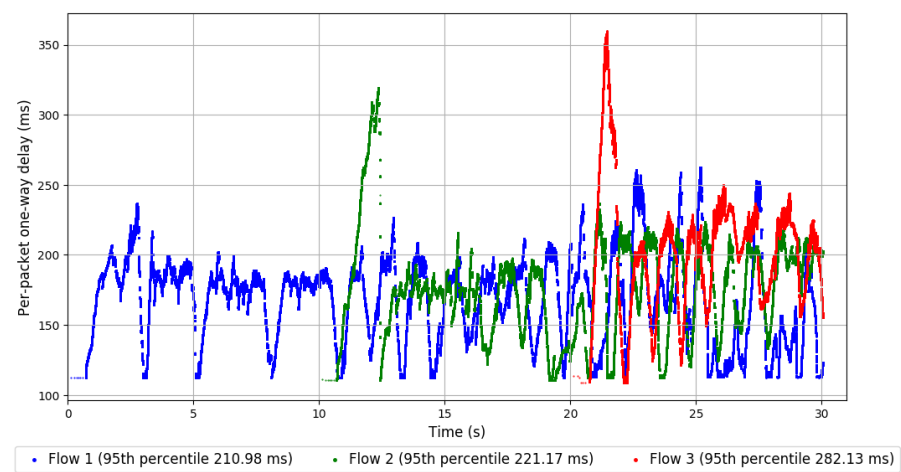
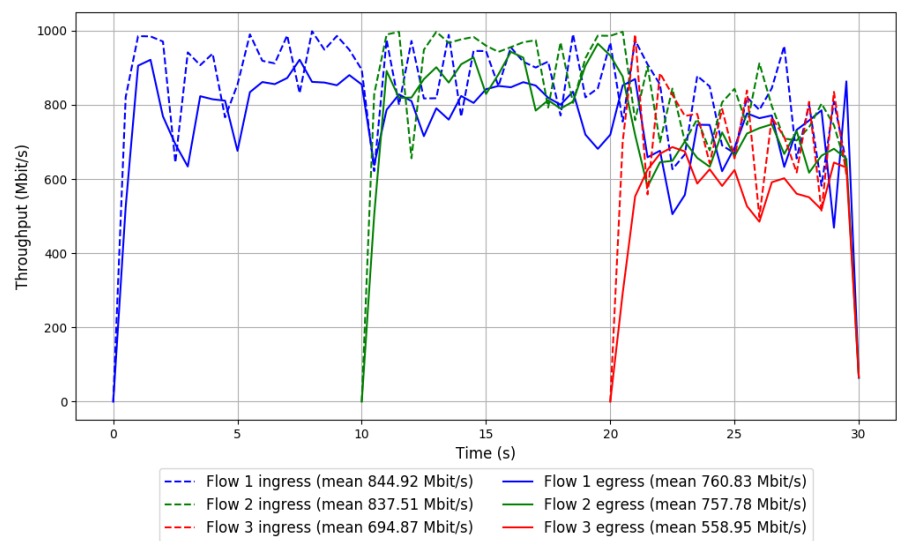
-- Flow 3:

Average throughput: 558.95 Mbit/s

95th percentile per-packet one-way delay: 282.128 ms

Loss rate: 19.57%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-03-28 01:46:05

End at: 2018-03-28 01:46:35

Below is generated by plot.py at 2018-03-28 05:59:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 1417.51 Mbit/s

95th percentile per-packet one-way delay: 241.422 ms

Loss rate: 11.65%

-- Flow 1:

Average throughput: 740.85 Mbit/s

95th percentile per-packet one-way delay: 219.594 ms

Loss rate: 10.63%

-- Flow 2:

Average throughput: 656.62 Mbit/s

95th percentile per-packet one-way delay: 255.404 ms

Loss rate: 14.85%

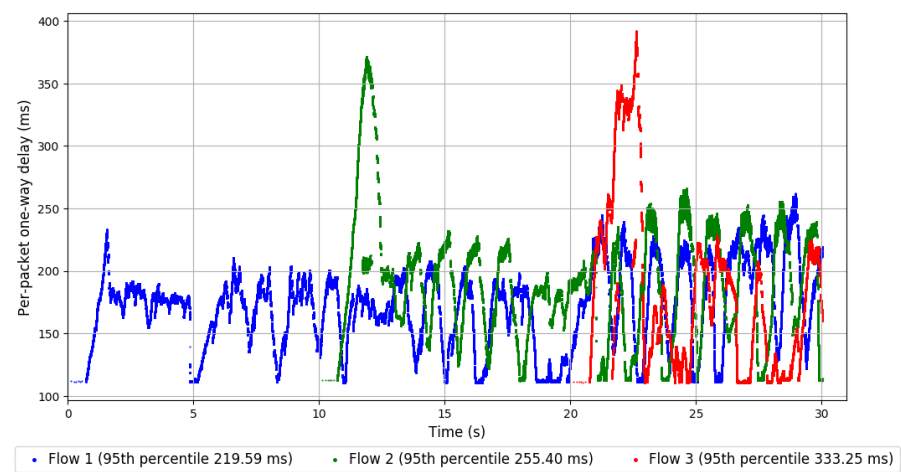
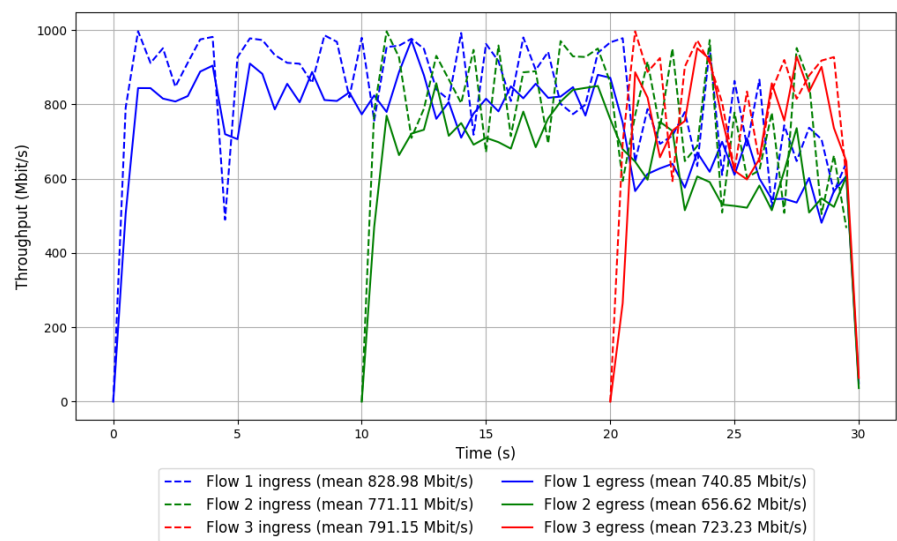
-- Flow 3:

Average throughput: 723.23 Mbit/s

95th percentile per-packet one-way delay: 333.254 ms

Loss rate: 8.57%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-03-28 02:05:27

End at: 2018-03-28 02:05:57

Below is generated by plot.py at 2018-03-28 05:59:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 1373.97 Mbit/s

95th percentile per-packet one-way delay: 391.021 ms

Loss rate: 9.41%

-- Flow 1:

Average throughput: 772.58 Mbit/s

95th percentile per-packet one-way delay: 215.326 ms

Loss rate: 7.86%

-- Flow 2:

Average throughput: 621.39 Mbit/s

95th percentile per-packet one-way delay: 424.113 ms

Loss rate: 13.24%

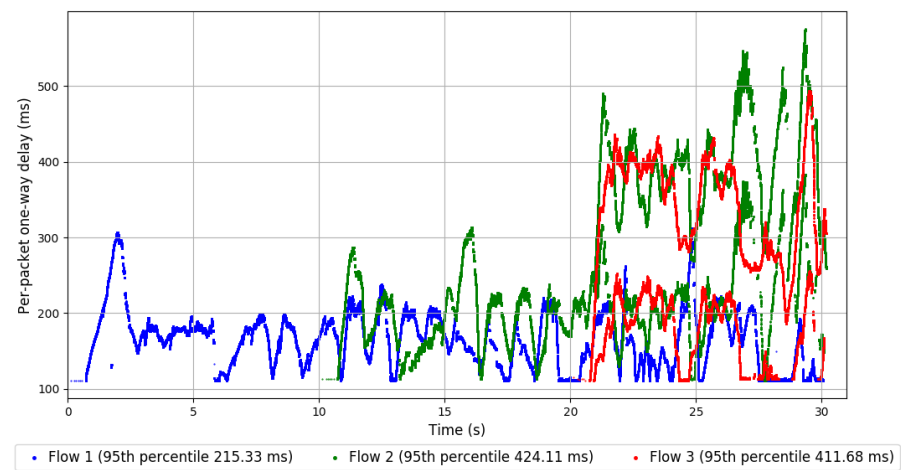
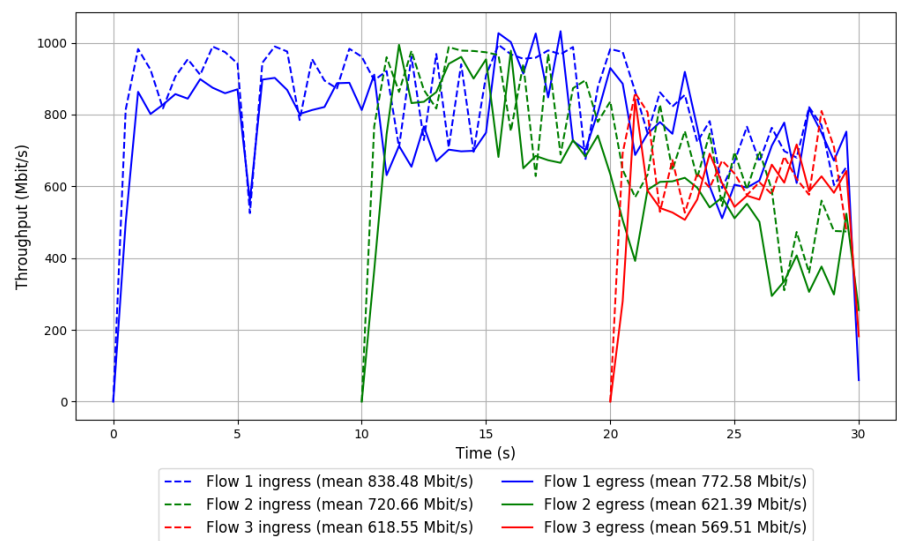
-- Flow 3:

Average throughput: 569.51 Mbit/s

95th percentile per-packet one-way delay: 411.682 ms

Loss rate: 6.80%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-03-28 02:24:40

End at: 2018-03-28 02:25:10

Below is generated by plot.py at 2018-03-28 06:21:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 1318.62 Mbit/s

95th percentile per-packet one-way delay: 372.773 ms

Loss rate: 11.34%

-- Flow 1:

Average throughput: 725.04 Mbit/s

95th percentile per-packet one-way delay: 278.293 ms

Loss rate: 10.33%

-- Flow 2:

Average throughput: 610.43 Mbit/s

95th percentile per-packet one-way delay: 457.817 ms

Loss rate: 14.51%

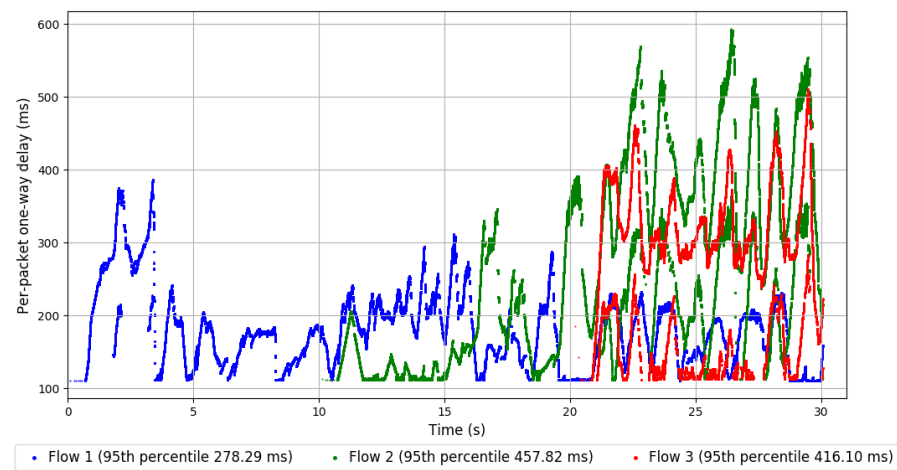
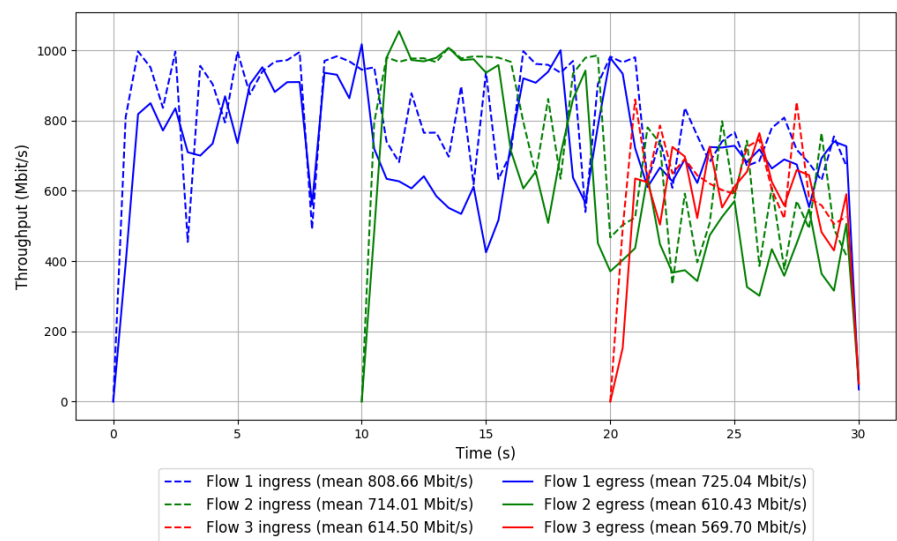
-- Flow 3:

Average throughput: 569.70 Mbit/s

95th percentile per-packet one-way delay: 416.101 ms

Loss rate: 7.97%

Run 9: Report of FillP — Data Link

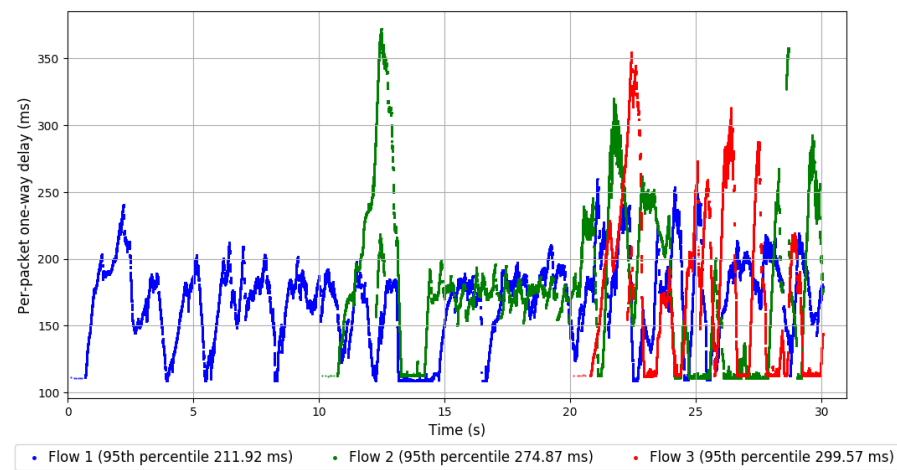
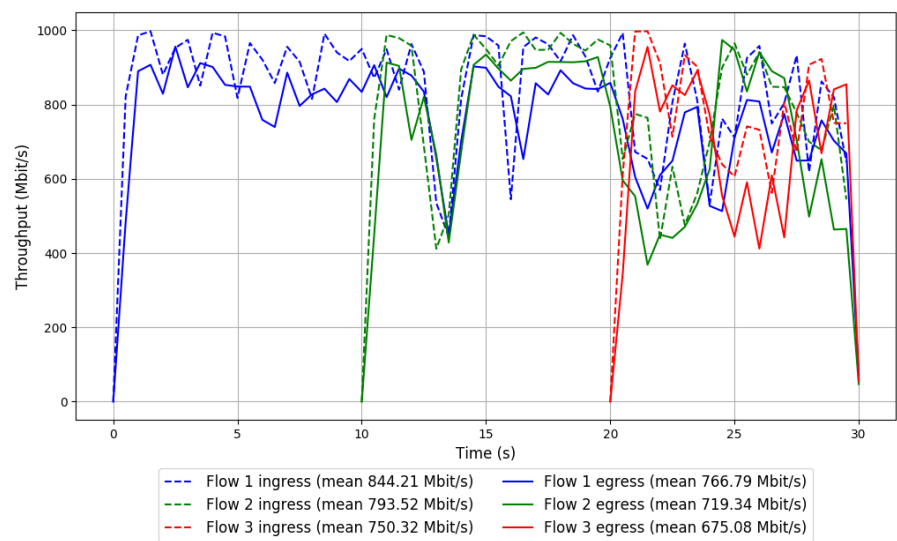


```
Run 10: Statistics of FillP

Start at: 2018-03-28 02:43:50
End at: 2018-03-28 02:44:20

# Below is generated by plot.py at 2018-03-28 06:24:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1468.91 Mbit/s
95th percentile per-packet one-way delay: 244.801 ms
Loss rate: 9.34%
-- Flow 1:
Average throughput: 766.79 Mbit/s
95th percentile per-packet one-way delay: 211.920 ms
Loss rate: 9.17%
-- Flow 2:
Average throughput: 719.34 Mbit/s
95th percentile per-packet one-way delay: 274.868 ms
Loss rate: 9.28%
-- Flow 3:
Average throughput: 675.08 Mbit/s
95th percentile per-packet one-way delay: 299.569 ms
Loss rate: 10.03%
```

Run 10: Report of FillP — Data Link

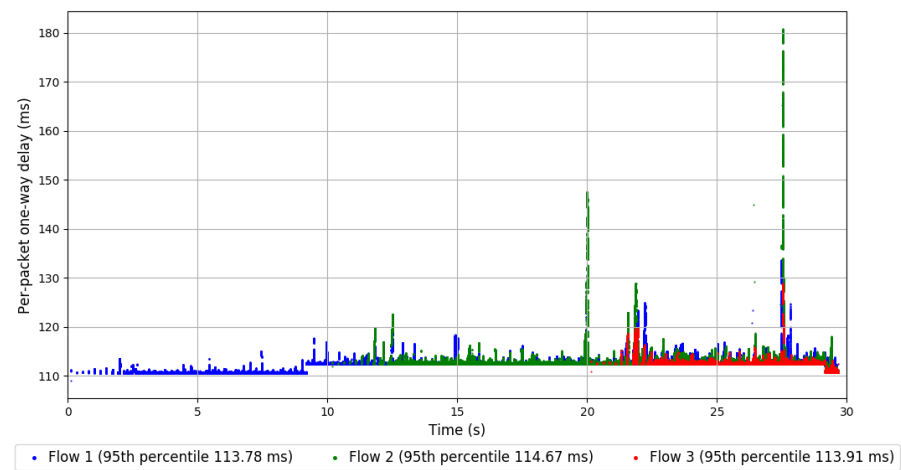
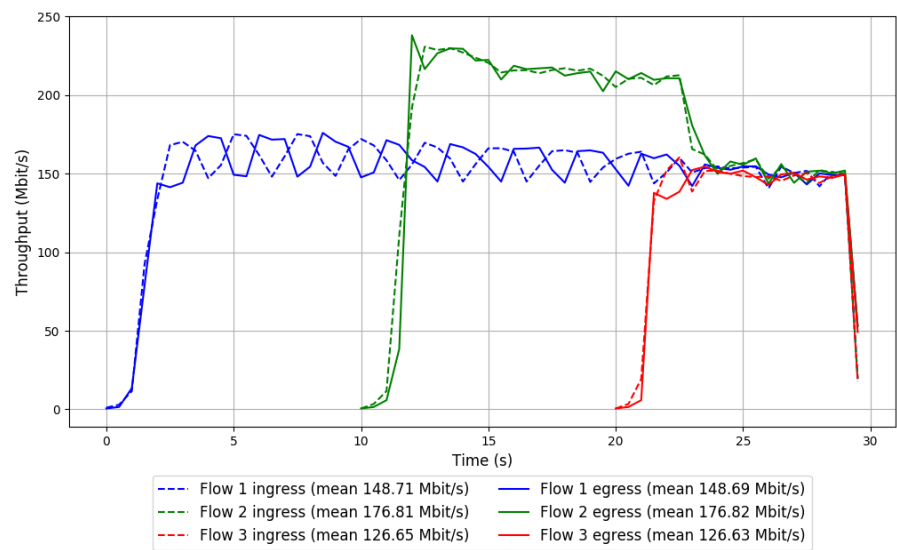


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-03-27 23:49:33
End at: 2018-03-27 23:50:03

# Below is generated by plot.py at 2018-03-28 06:24:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 306.01 Mbit/s
95th percentile per-packet one-way delay: 114.157 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 148.69 Mbit/s
95th percentile per-packet one-way delay: 113.780 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 176.82 Mbit/s
95th percentile per-packet one-way delay: 114.674 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 126.63 Mbit/s
95th percentile per-packet one-way delay: 113.913 ms
Loss rate: 0.02%
```

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

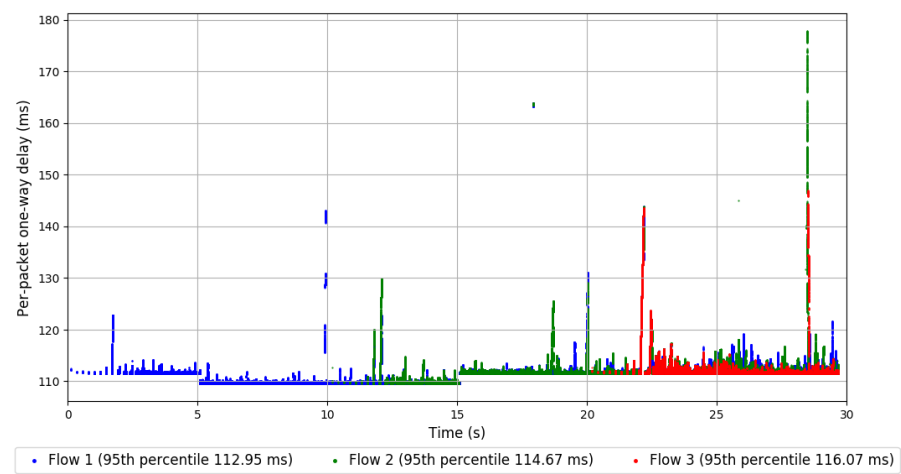
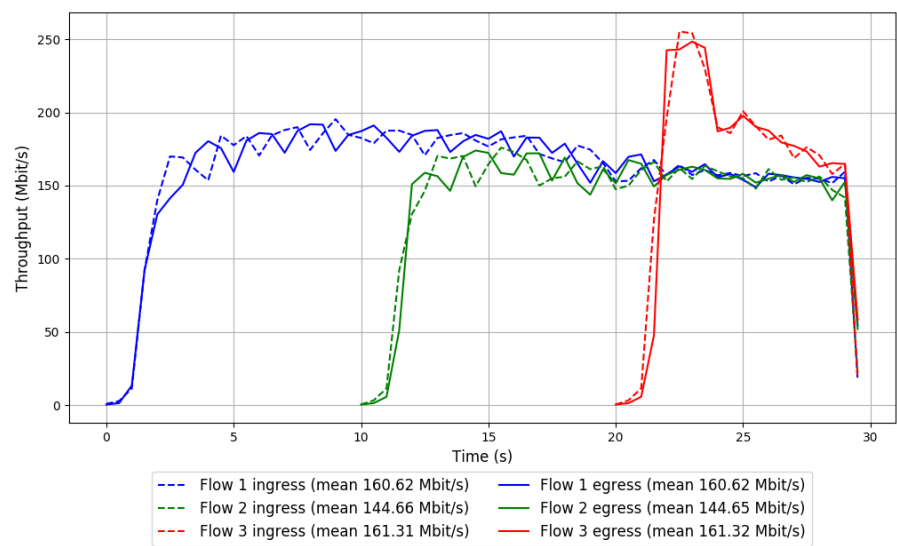


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-03-28 00:08:57
End at: 2018-03-28 00:09:27

# Below is generated by plot.py at 2018-03-28 06:24:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.90 Mbit/s
95th percentile per-packet one-way delay: 113.909 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 160.62 Mbit/s
95th percentile per-packet one-way delay: 112.947 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 144.65 Mbit/s
95th percentile per-packet one-way delay: 114.665 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 161.32 Mbit/s
95th percentile per-packet one-way delay: 116.068 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-03-28 00:28:13

End at: 2018-03-28 00:28:43

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 292.42 Mbit/s

95th percentile per-packet one-way delay: 110.778 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 150.55 Mbit/s

95th percentile per-packet one-way delay: 110.609 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 150.83 Mbit/s

95th percentile per-packet one-way delay: 111.153 ms

Loss rate: 0.00%

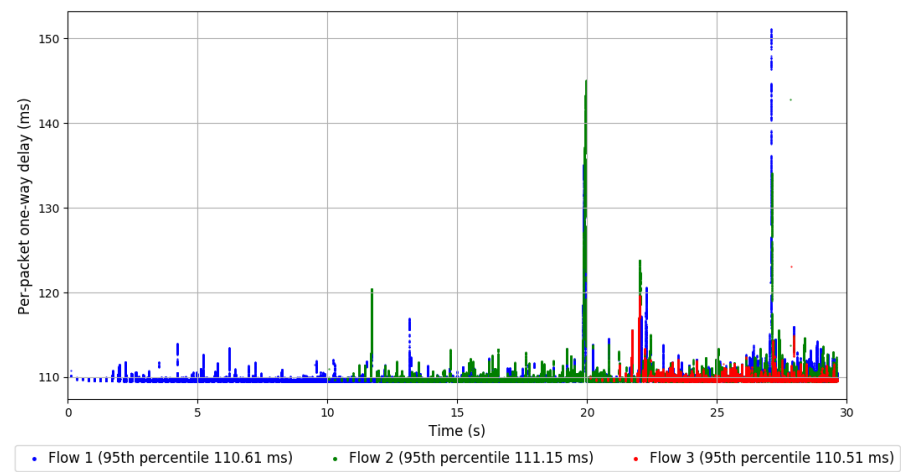
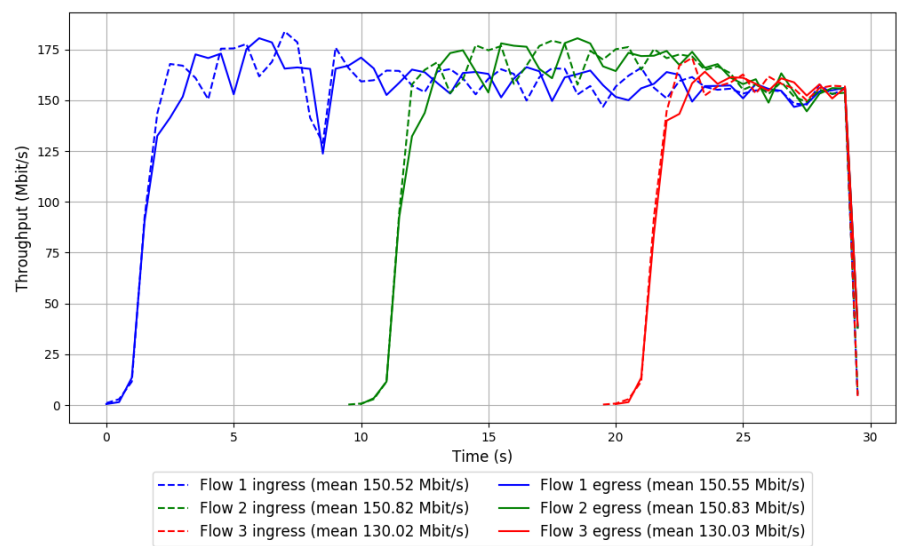
-- Flow 3:

Average throughput: 130.03 Mbit/s

95th percentile per-packet one-way delay: 110.507 ms

Loss rate: 0.00%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-03-28 00:47:15

End at: 2018-03-28 00:47:45

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 298.14 Mbit/s

95th percentile per-packet one-way delay: 114.309 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 153.23 Mbit/s

95th percentile per-packet one-way delay: 113.574 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 144.51 Mbit/s

95th percentile per-packet one-way delay: 117.005 ms

Loss rate: 0.00%

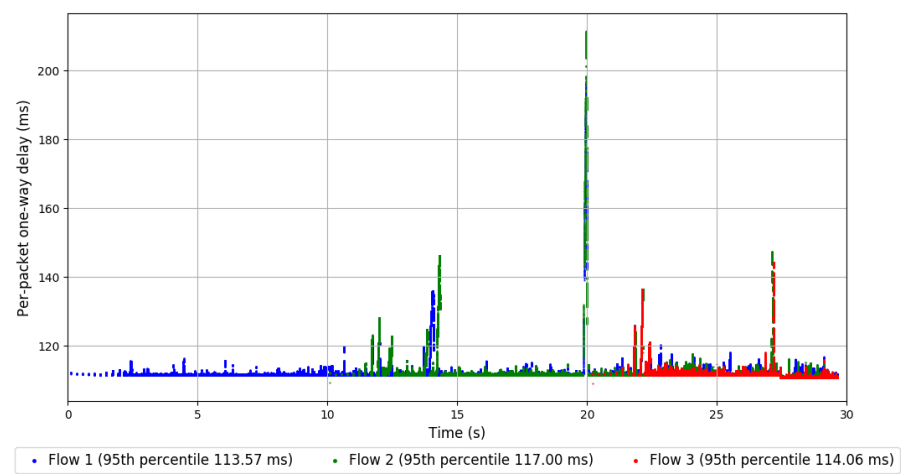
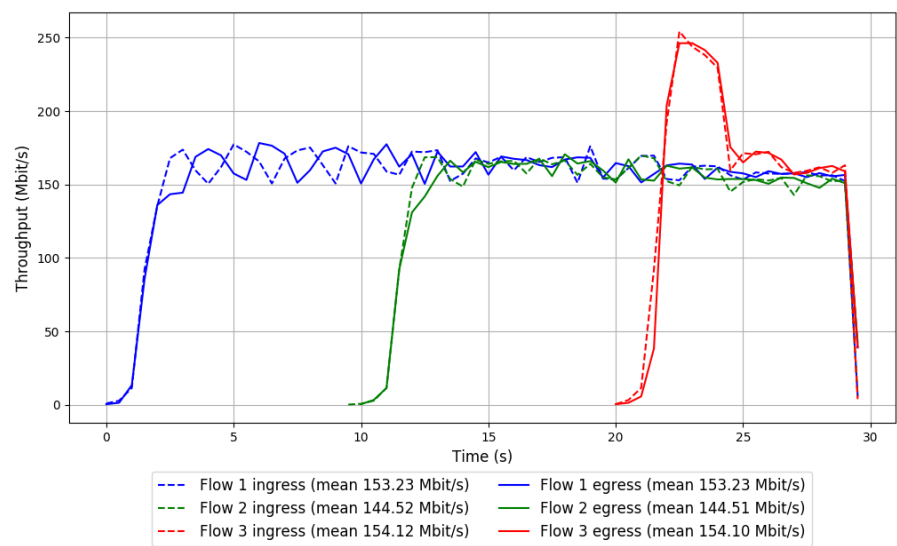
-- Flow 3:

Average throughput: 154.10 Mbit/s

95th percentile per-packet one-way delay: 114.064 ms

Loss rate: 0.00%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-03-28 01:06:22

End at: 2018-03-28 01:06:52

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 291.36 Mbit/s

95th percentile per-packet one-way delay: 114.191 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 154.11 Mbit/s

95th percentile per-packet one-way delay: 113.551 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 144.71 Mbit/s

95th percentile per-packet one-way delay: 115.165 ms

Loss rate: 0.00%

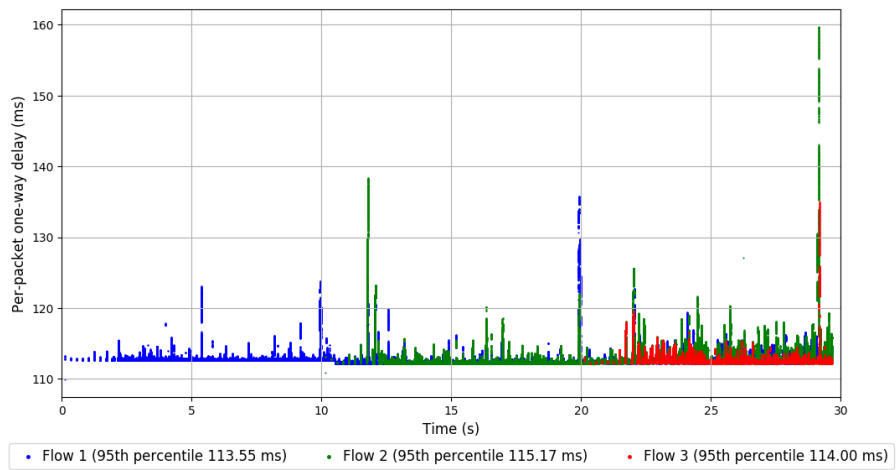
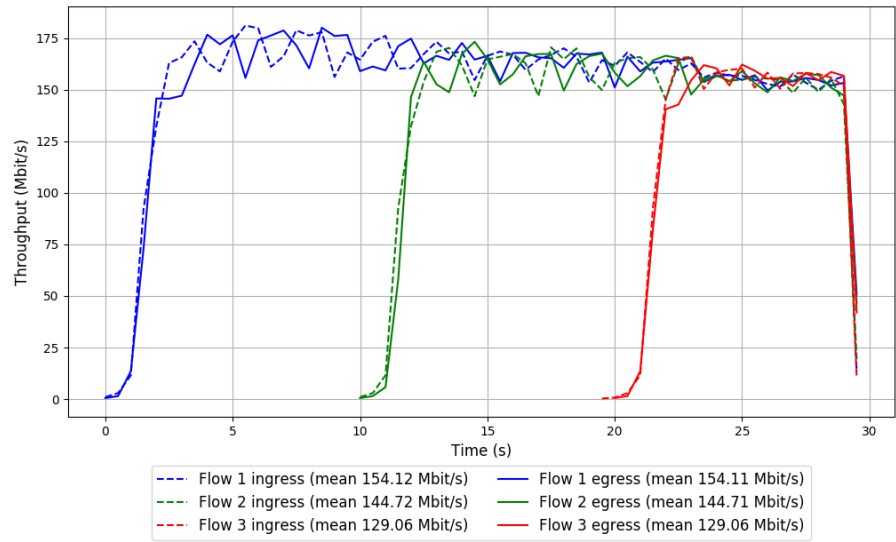
-- Flow 3:

Average throughput: 129.06 Mbit/s

95th percentile per-packet one-way delay: 113.999 ms

Loss rate: 0.00%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-03-28 01:25:21

End at: 2018-03-28 01:25:51

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.92 Mbit/s

95th percentile per-packet one-way delay: 114.587 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 151.49 Mbit/s

95th percentile per-packet one-way delay: 113.704 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 177.39 Mbit/s

95th percentile per-packet one-way delay: 115.772 ms

Loss rate: 0.00%

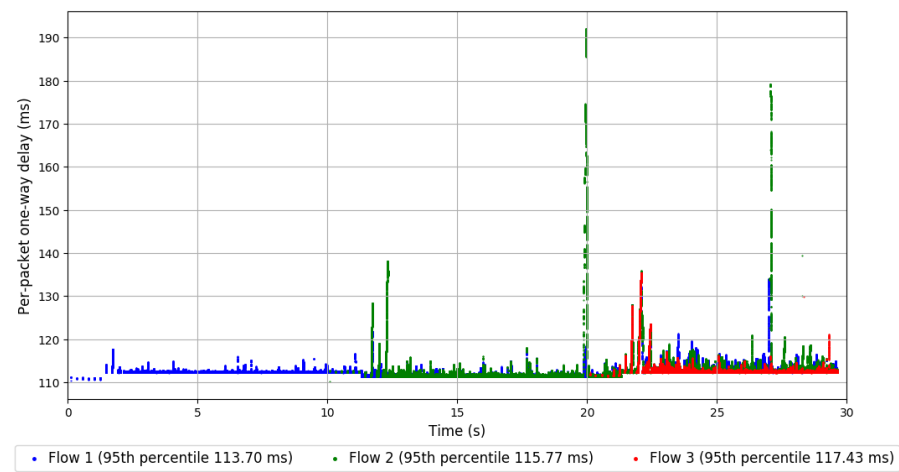
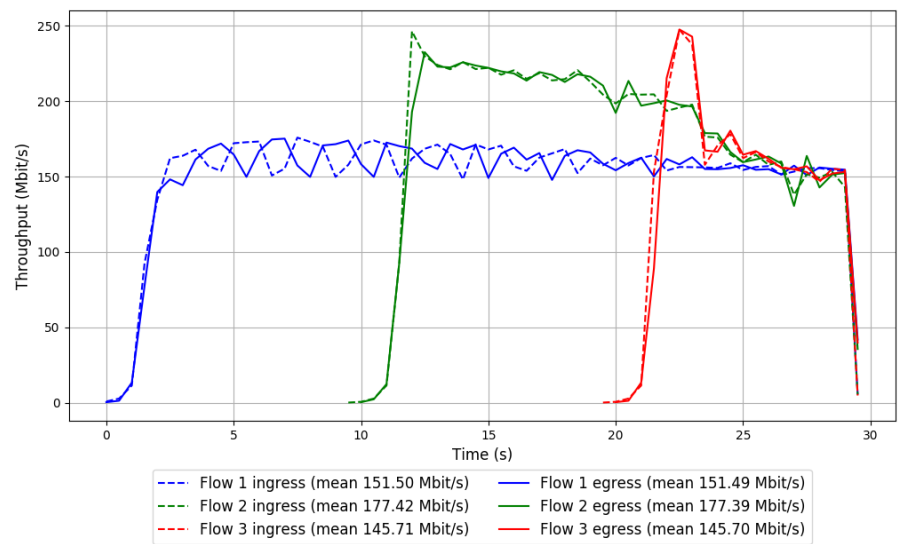
-- Flow 3:

Average throughput: 145.70 Mbit/s

95th percentile per-packet one-way delay: 117.426 ms

Loss rate: 0.00%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-03-28 01:44:56

End at: 2018-03-28 01:45:26

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 290.04 Mbit/s

95th percentile per-packet one-way delay: 113.688 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 149.91 Mbit/s

95th percentile per-packet one-way delay: 113.428 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 149.21 Mbit/s

95th percentile per-packet one-way delay: 113.825 ms

Loss rate: 0.00%

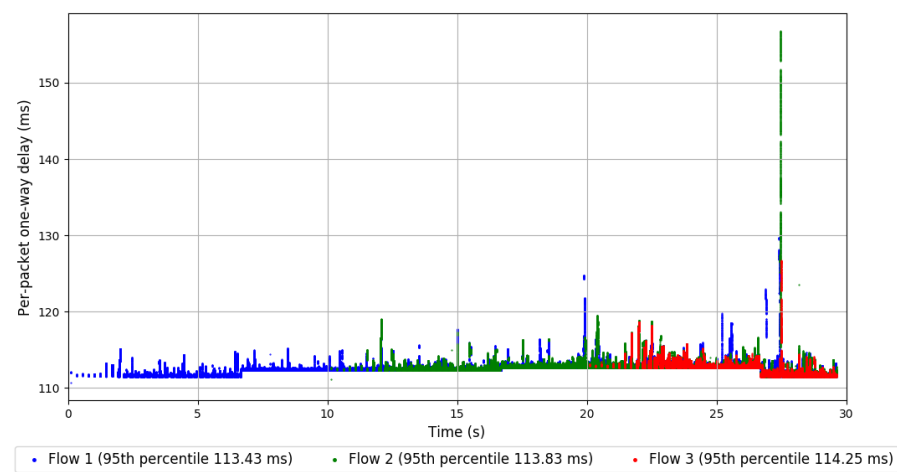
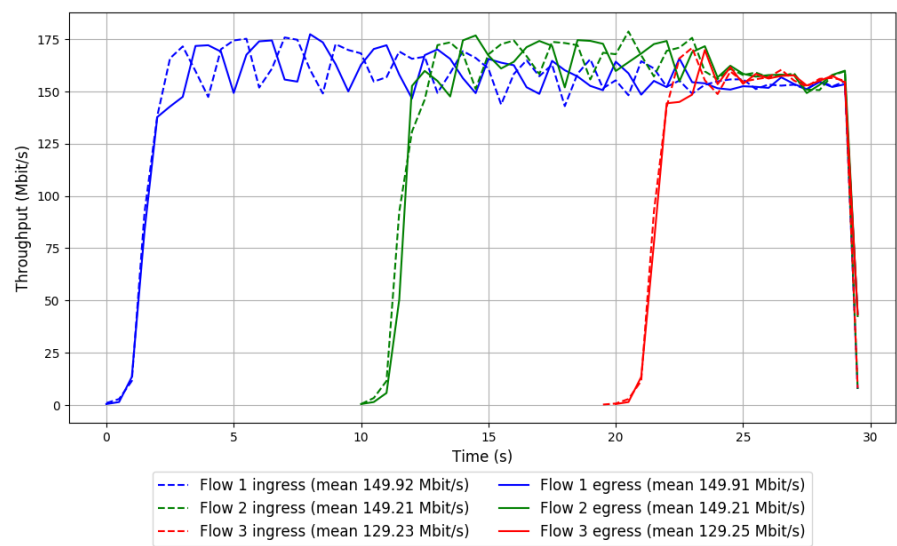
-- Flow 3:

Average throughput: 129.25 Mbit/s

95th percentile per-packet one-way delay: 114.248 ms

Loss rate: 0.00%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-03-28 02:04:18

End at: 2018-03-28 02:04:48

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 303.63 Mbit/s

95th percentile per-packet one-way delay: 112.236 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 158.65 Mbit/s

95th percentile per-packet one-way delay: 111.976 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 148.06 Mbit/s

95th percentile per-packet one-way delay: 112.691 ms

Loss rate: 0.00%

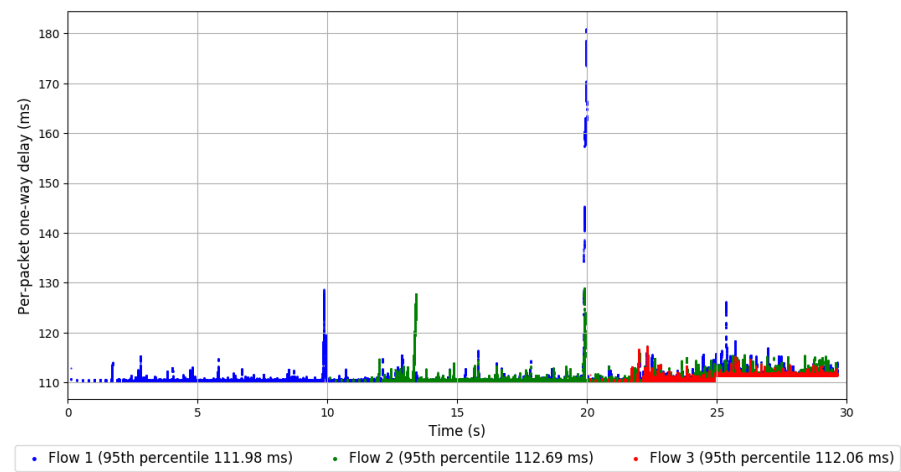
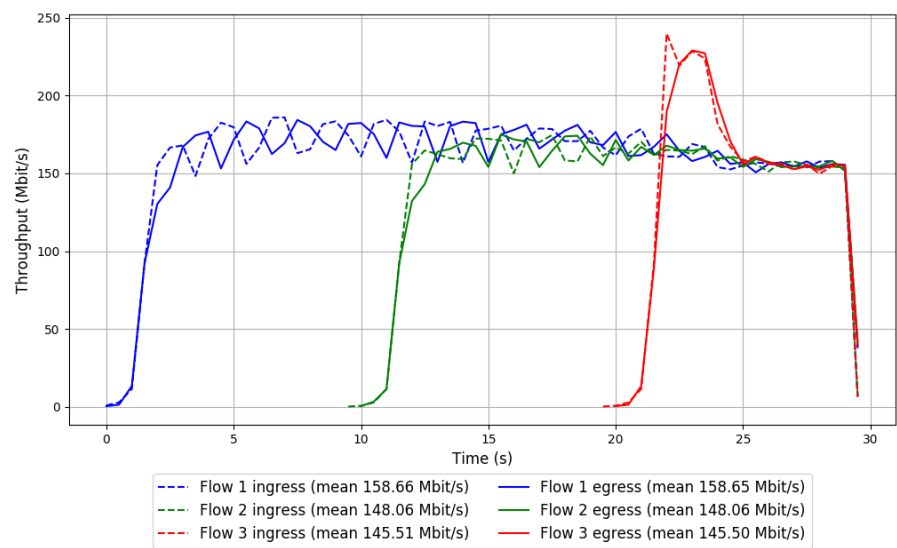
-- Flow 3:

Average throughput: 145.50 Mbit/s

95th percentile per-packet one-way delay: 112.056 ms

Loss rate: 0.00%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-03-28 02:23:29

End at: 2018-03-28 02:23:59

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 324.55 Mbit/s

95th percentile per-packet one-way delay: 115.927 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 159.50 Mbit/s

95th percentile per-packet one-way delay: 114.956 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 180.27 Mbit/s

95th percentile per-packet one-way delay: 115.577 ms

Loss rate: 0.00%

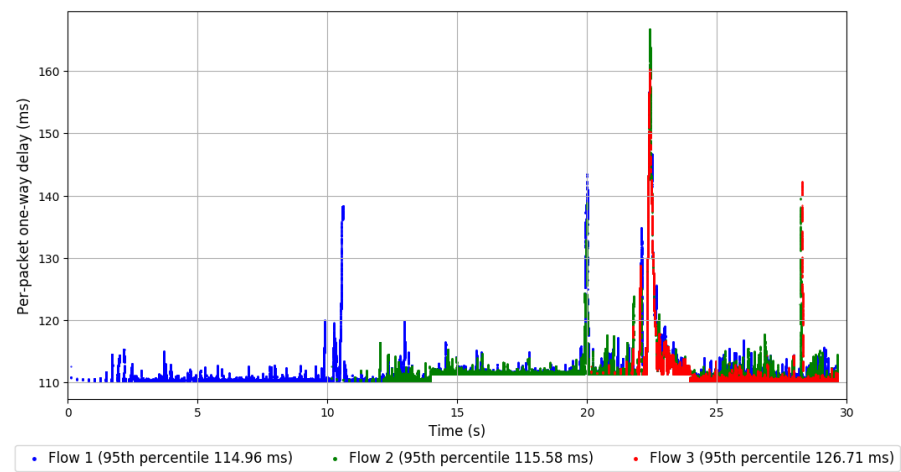
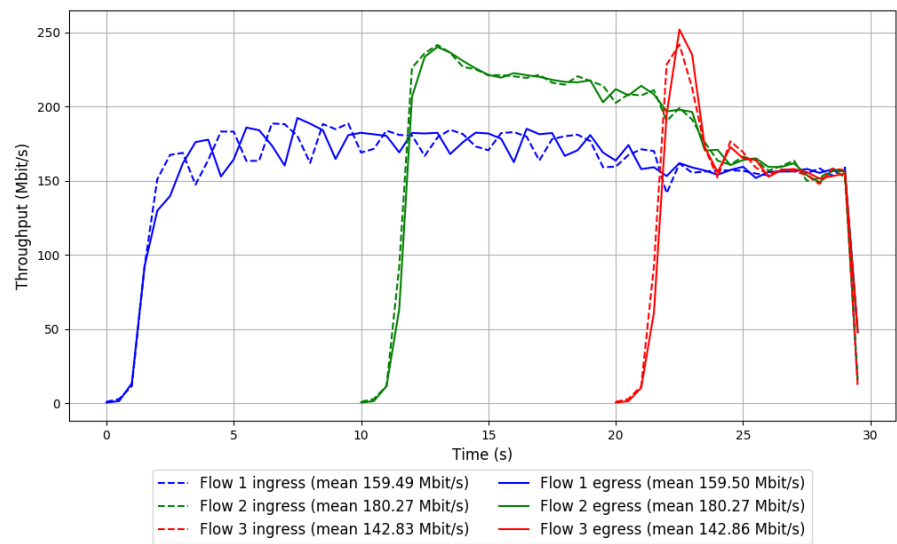
-- Flow 3:

Average throughput: 142.86 Mbit/s

95th percentile per-packet one-way delay: 126.710 ms

Loss rate: 0.00%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-03-28 02:42:40

End at: 2018-03-28 02:43:10

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.37 Mbit/s

95th percentile per-packet one-way delay: 113.209 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 158.54 Mbit/s

95th percentile per-packet one-way delay: 112.377 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 140.91 Mbit/s

95th percentile per-packet one-way delay: 113.362 ms

Loss rate: 0.00%

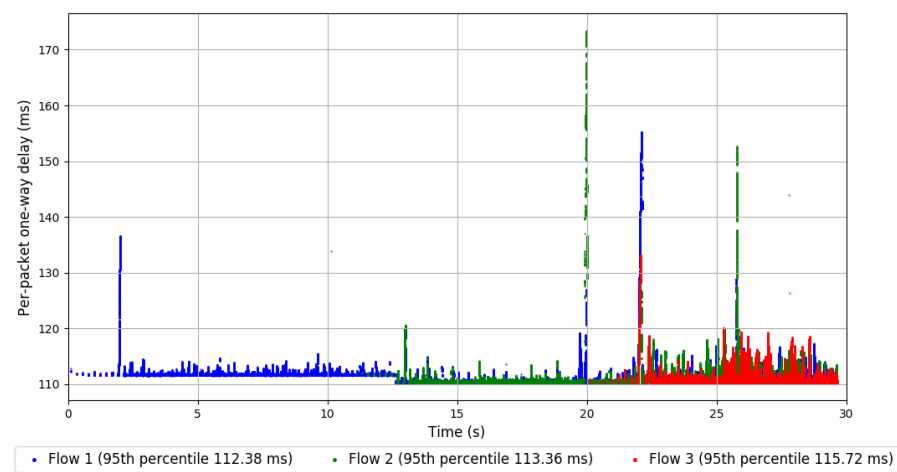
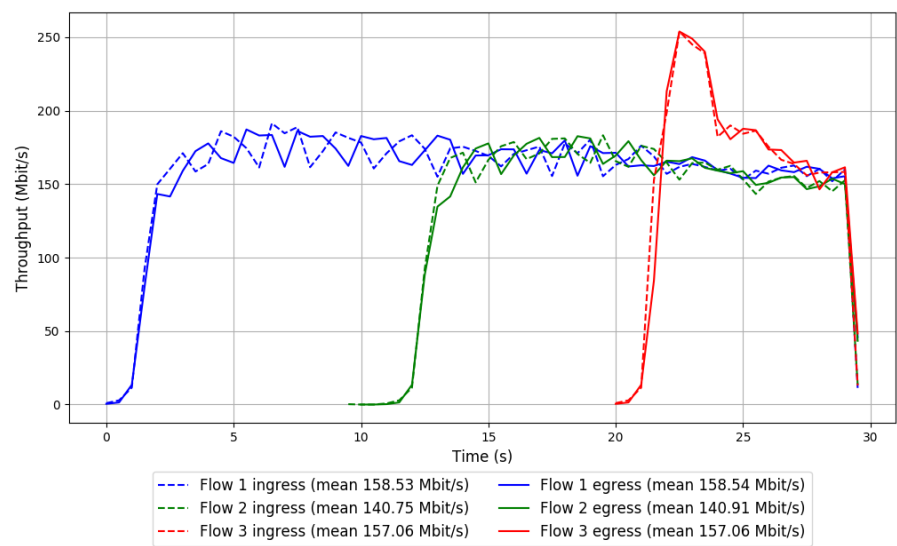
-- Flow 3:

Average throughput: 157.06 Mbit/s

95th percentile per-packet one-way delay: 115.723 ms

Loss rate: 0.00%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-03-27 23:48:13

End at: 2018-03-27 23:48:43

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 431.08 Mbit/s

95th percentile per-packet one-way delay: 271.459 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 222.06 Mbit/s

95th percentile per-packet one-way delay: 114.418 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 245.73 Mbit/s

95th percentile per-packet one-way delay: 308.439 ms

Loss rate: 1.88%

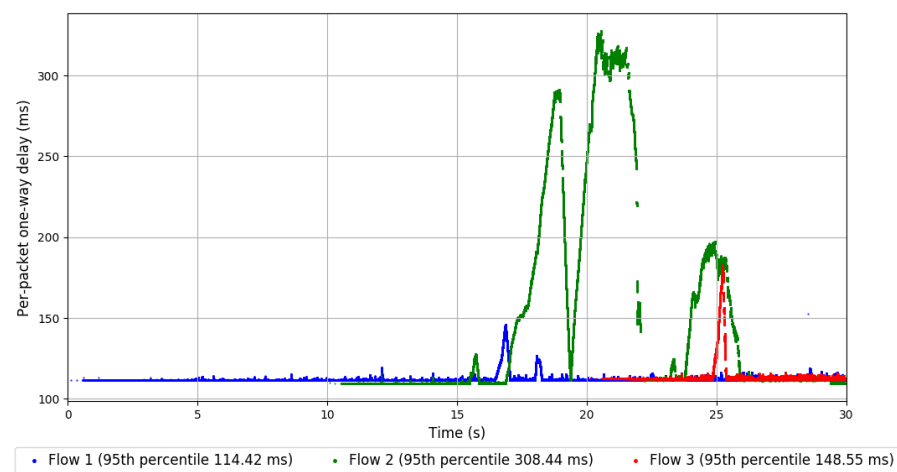
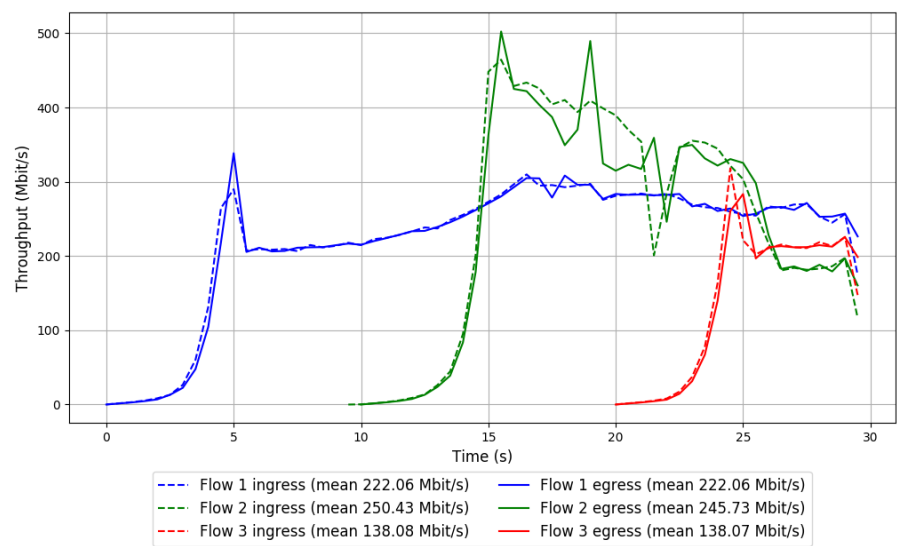
-- Flow 3:

Average throughput: 138.07 Mbit/s

95th percentile per-packet one-way delay: 148.548 ms

Loss rate: 0.03%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-03-28 00:07:34

End at: 2018-03-28 00:08:04

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 477.17 Mbit/s

95th percentile per-packet one-way delay: 123.487 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 298.98 Mbit/s

95th percentile per-packet one-way delay: 127.591 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 200.59 Mbit/s

95th percentile per-packet one-way delay: 116.360 ms

Loss rate: 0.00%

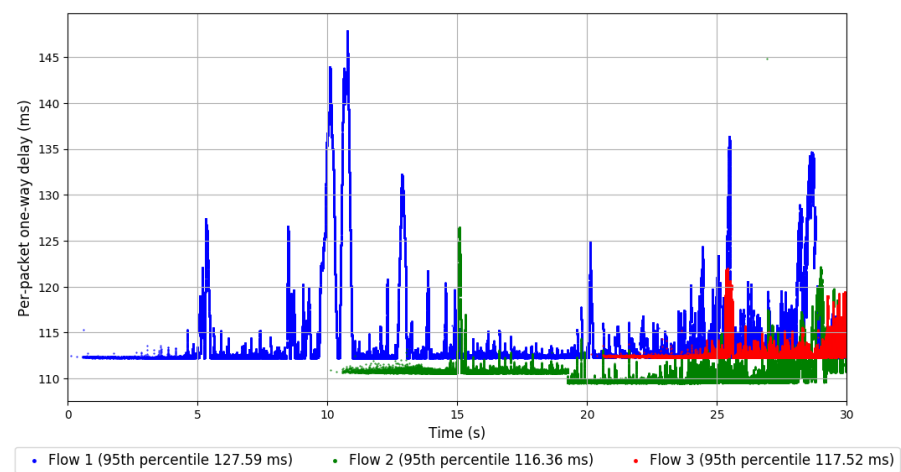
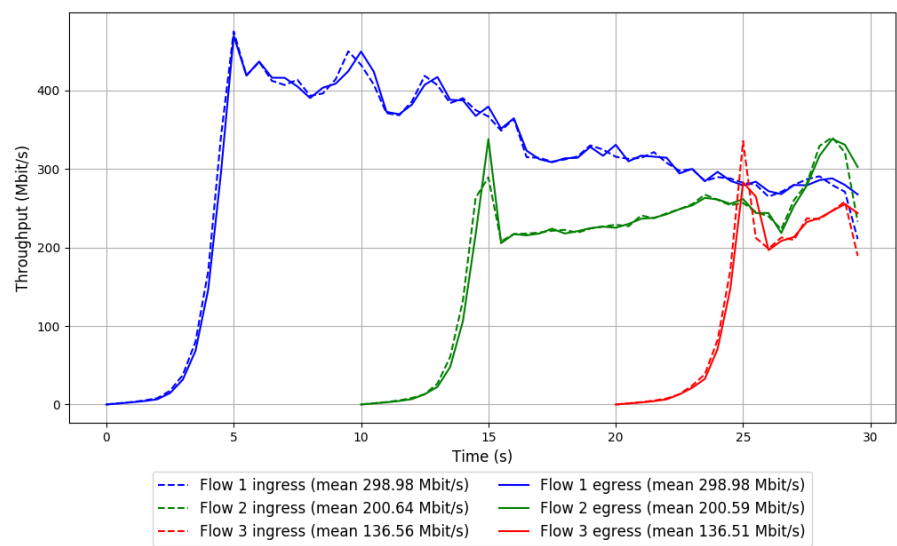
-- Flow 3:

Average throughput: 136.51 Mbit/s

95th percentile per-packet one-way delay: 117.519 ms

Loss rate: 0.06%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-03-28 00:26:51

End at: 2018-03-28 00:27:21

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 446.71 Mbit/s

95th percentile per-packet one-way delay: 185.264 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 265.91 Mbit/s

95th percentile per-packet one-way delay: 121.685 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 184.31 Mbit/s

95th percentile per-packet one-way delay: 114.329 ms

Loss rate: 0.00%

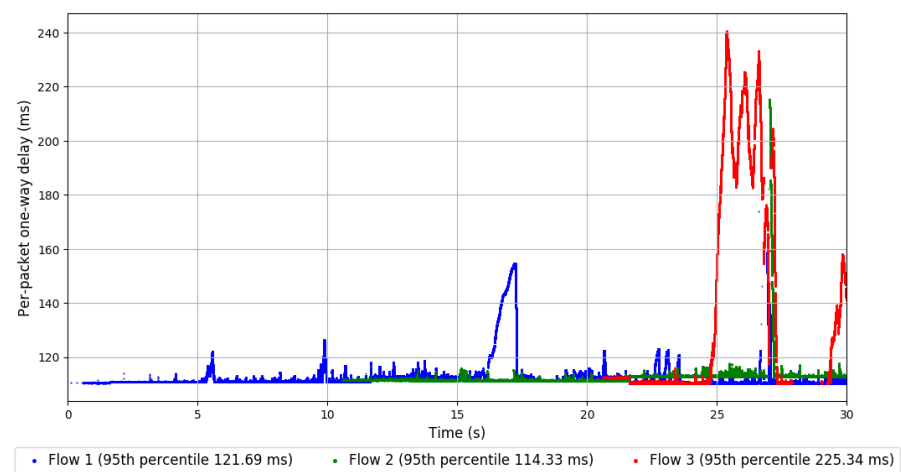
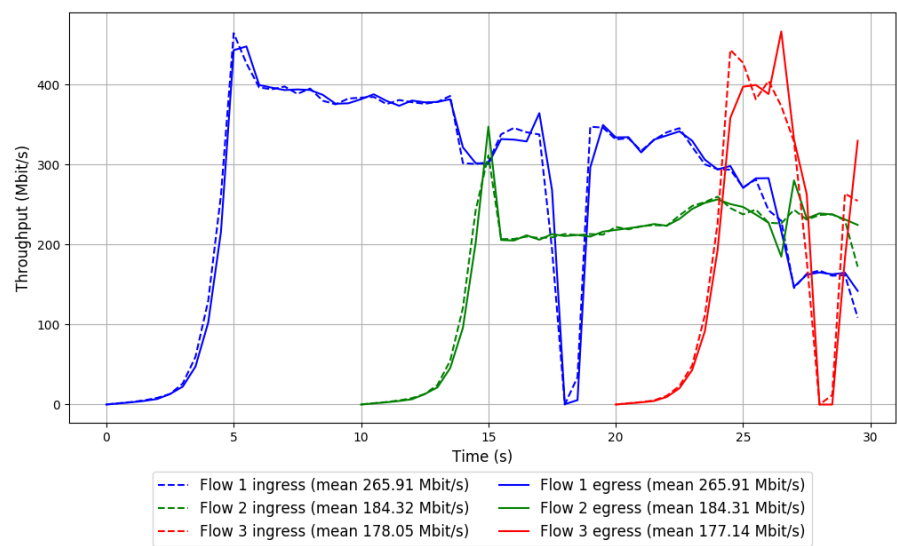
-- Flow 3:

Average throughput: 177.14 Mbit/s

95th percentile per-packet one-way delay: 225.335 ms

Loss rate: 0.51%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-03-28 00:45:53

End at: 2018-03-28 00:46:23

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 446.57 Mbit/s

95th percentile per-packet one-way delay: 131.164 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 282.40 Mbit/s

95th percentile per-packet one-way delay: 133.944 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 182.48 Mbit/s

95th percentile per-packet one-way delay: 115.075 ms

Loss rate: 0.00%

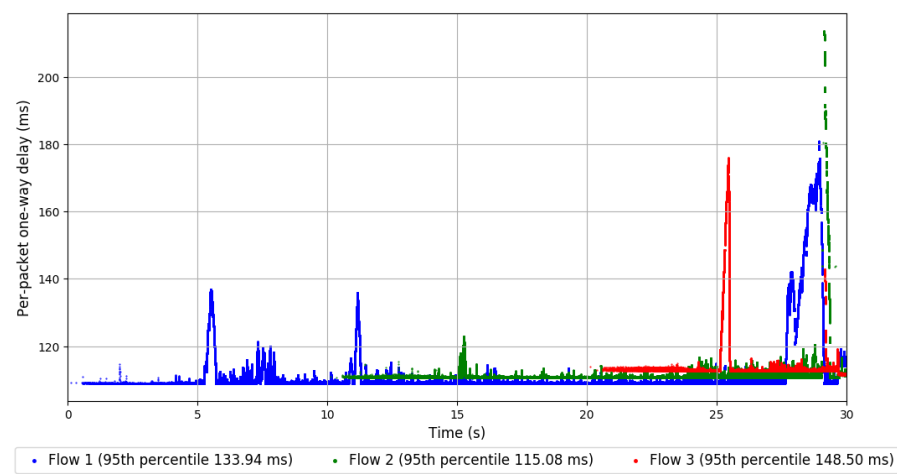
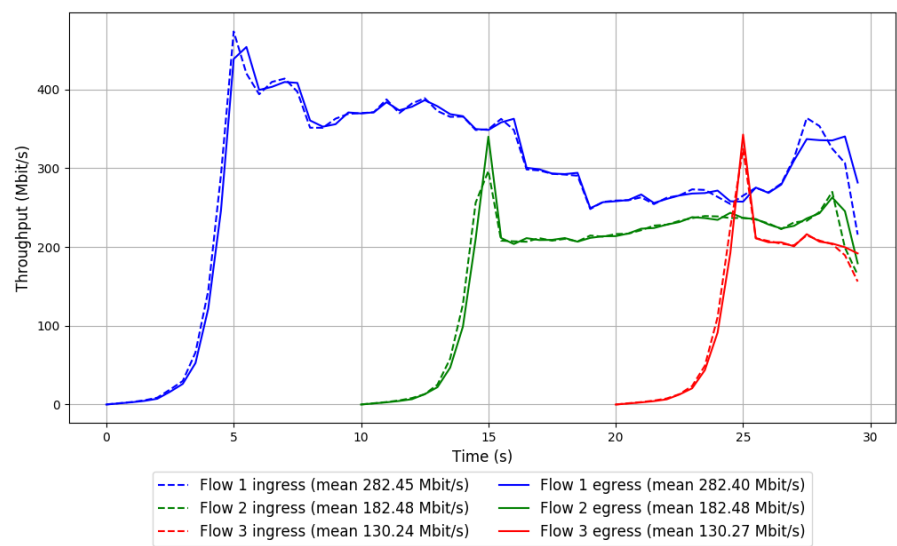
-- Flow 3:

Average throughput: 130.27 Mbit/s

95th percentile per-packet one-way delay: 148.501 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-03-28 01:04:57

End at: 2018-03-28 01:05:27

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 484.45 Mbit/s

95th percentile per-packet one-way delay: 126.024 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 309.60 Mbit/s

95th percentile per-packet one-way delay: 127.693 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 196.30 Mbit/s

95th percentile per-packet one-way delay: 115.462 ms

Loss rate: 0.00%

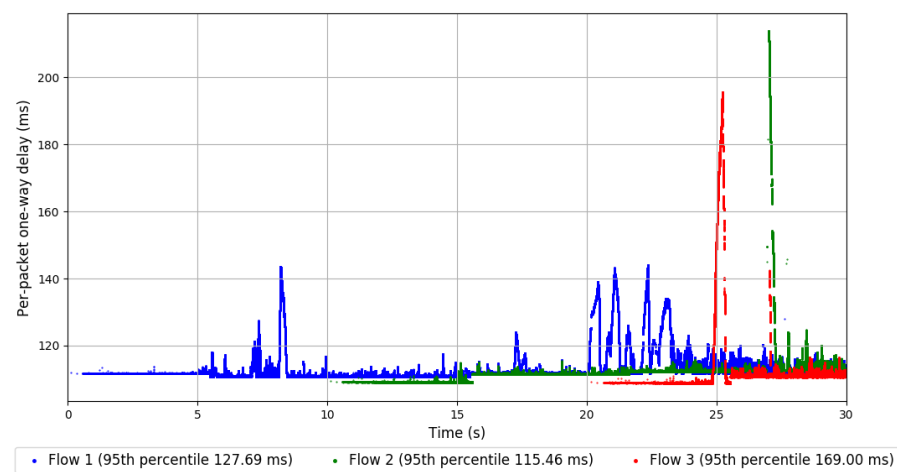
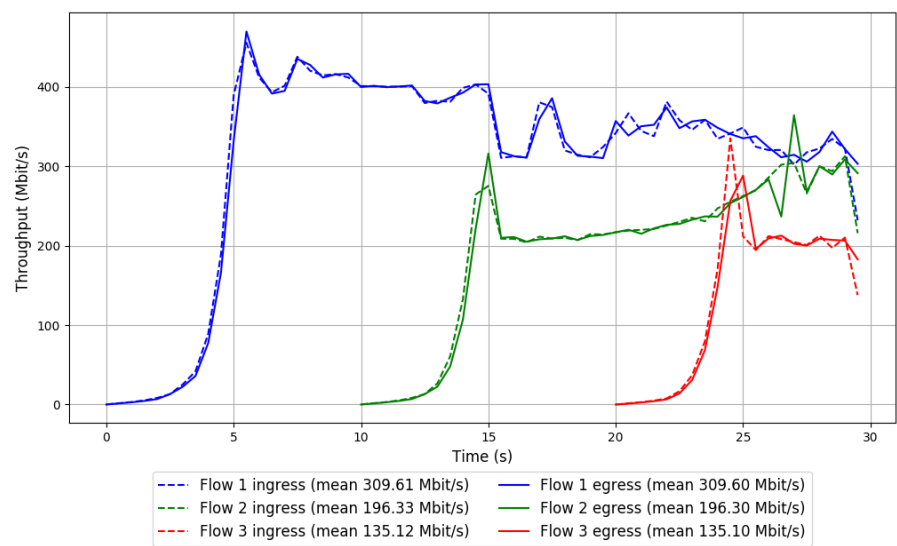
-- Flow 3:

Average throughput: 135.10 Mbit/s

95th percentile per-packet one-way delay: 168.999 ms

Loss rate: 0.00%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-03-28 01:24:03

End at: 2018-03-28 01:24:33

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 388.20 Mbit/s

95th percentile per-packet one-way delay: 115.106 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 227.00 Mbit/s

95th percentile per-packet one-way delay: 114.805 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 174.55 Mbit/s

95th percentile per-packet one-way delay: 118.398 ms

Loss rate: 0.00%

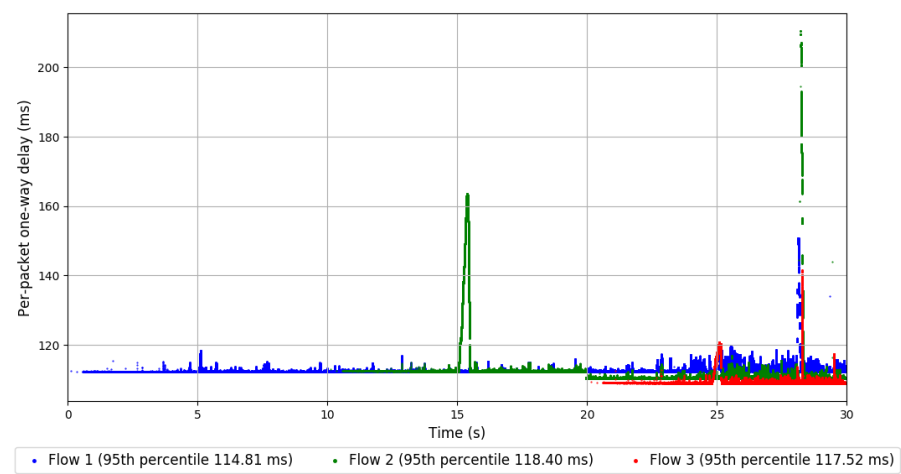
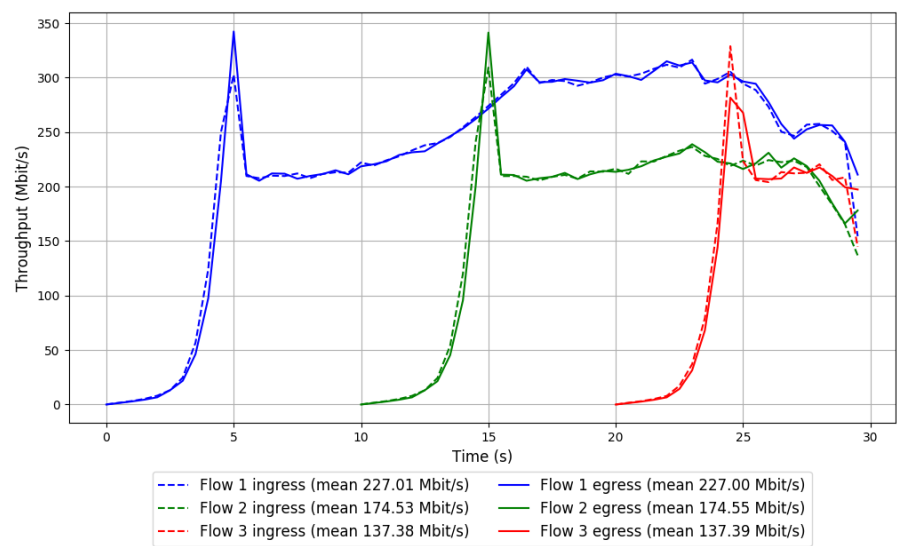
-- Flow 3:

Average throughput: 137.39 Mbit/s

95th percentile per-packet one-way delay: 117.523 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-03-28 01:43:34

End at: 2018-03-28 01:44:04

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 447.11 Mbit/s

95th percentile per-packet one-way delay: 118.671 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 279.05 Mbit/s

95th percentile per-packet one-way delay: 121.972 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 189.94 Mbit/s

95th percentile per-packet one-way delay: 111.590 ms

Loss rate: 0.00%

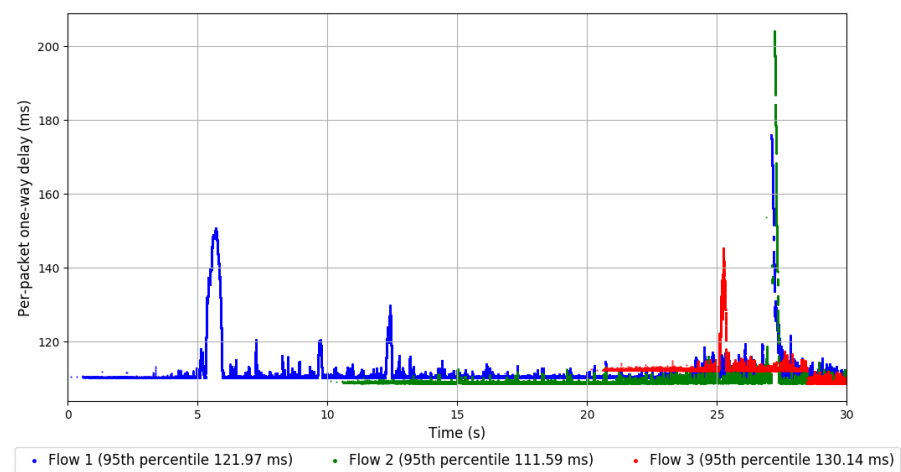
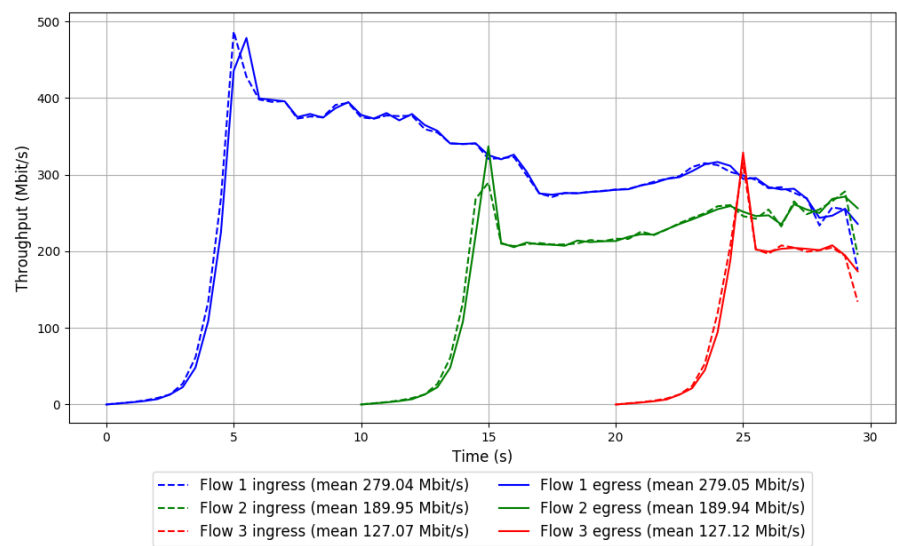
-- Flow 3:

Average throughput: 127.12 Mbit/s

95th percentile per-packet one-way delay: 130.141 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-03-28 02:02:57

End at: 2018-03-28 02:03:27

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 431.23 Mbit/s

95th percentile per-packet one-way delay: 118.228 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 272.75 Mbit/s

95th percentile per-packet one-way delay: 118.921 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 174.57 Mbit/s

95th percentile per-packet one-way delay: 113.073 ms

Loss rate: 0.00%

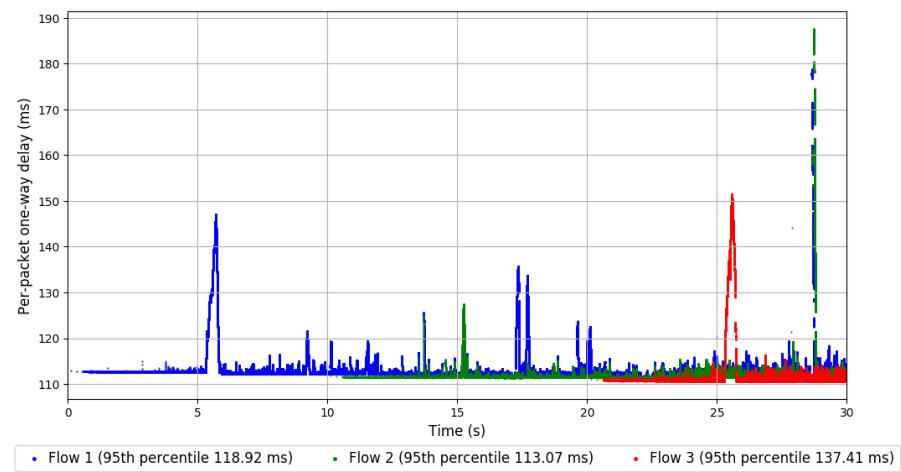
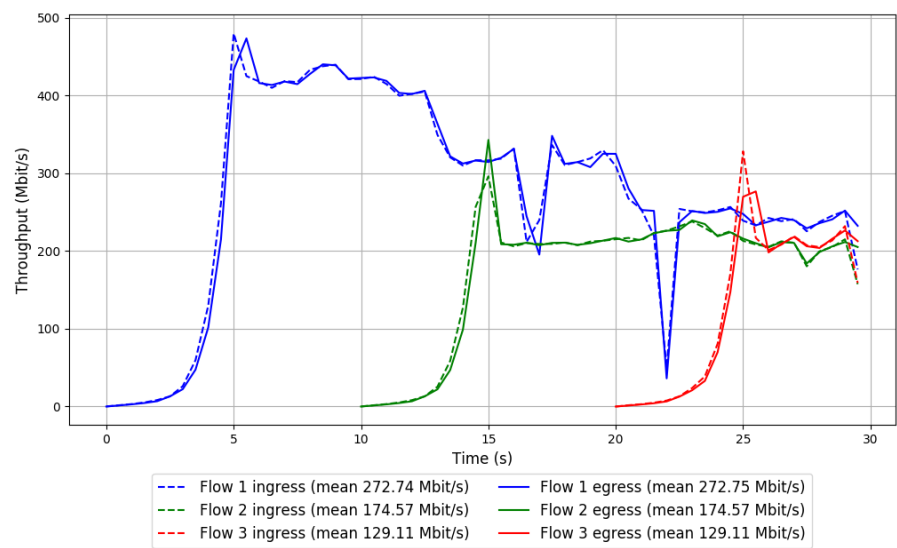
-- Flow 3:

Average throughput: 129.11 Mbit/s

95th percentile per-packet one-way delay: 137.411 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-03-28 02:22:10

End at: 2018-03-28 02:22:40

Below is generated by plot.py at 2018-03-28 06:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 407.67 Mbit/s

95th percentile per-packet one-way delay: 113.966 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 233.62 Mbit/s

95th percentile per-packet one-way delay: 114.602 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 189.88 Mbit/s

95th percentile per-packet one-way delay: 112.640 ms

Loss rate: 0.00%

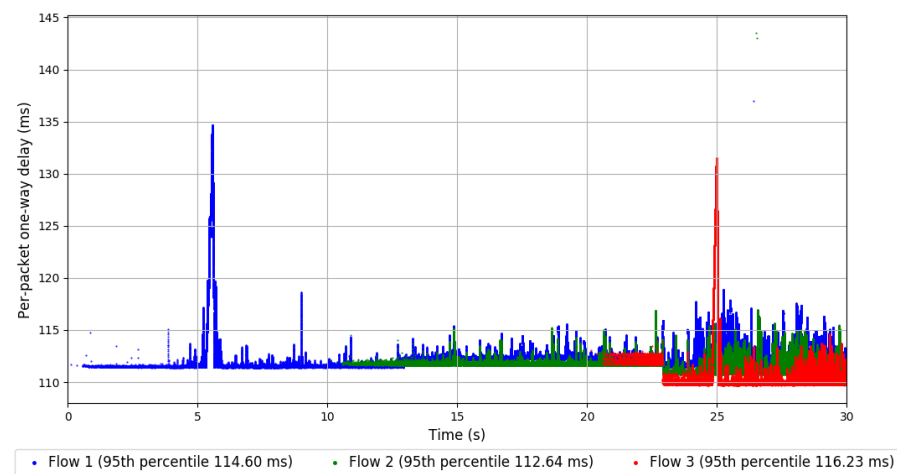
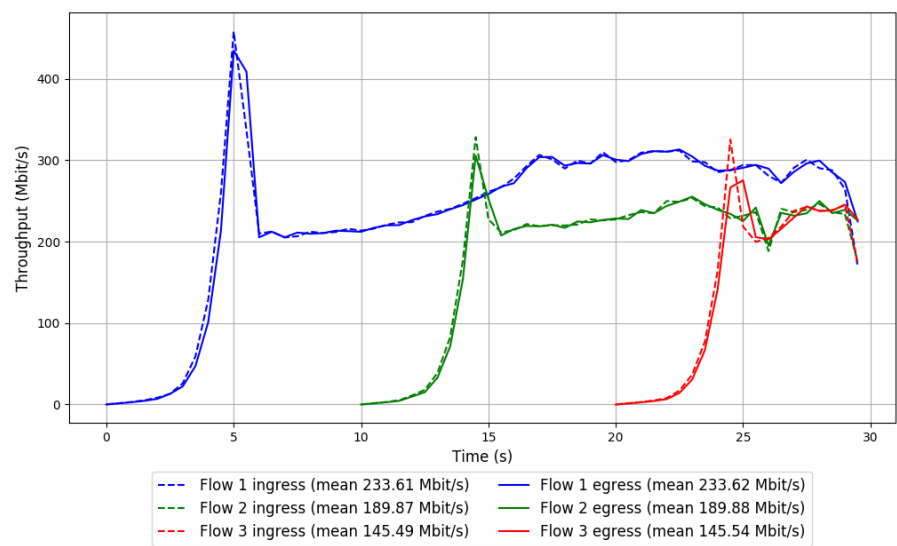
-- Flow 3:

Average throughput: 145.54 Mbit/s

95th percentile per-packet one-way delay: 116.231 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-03-28 02:41:23

End at: 2018-03-28 02:41:53

Below is generated by plot.py at 2018-03-28 06:24:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 374.12 Mbit/s

95th percentile per-packet one-way delay: 113.894 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 217.53 Mbit/s

95th percentile per-packet one-way delay: 113.442 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 169.08 Mbit/s

95th percentile per-packet one-way delay: 113.792 ms

Loss rate: 0.00%

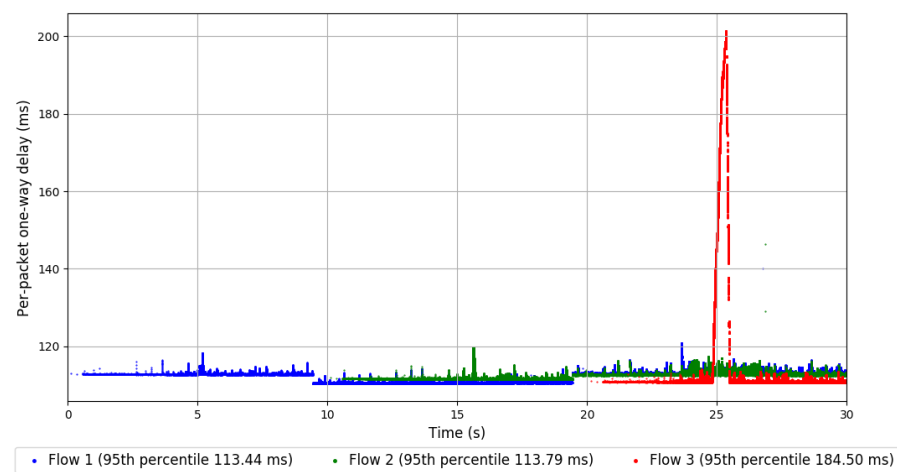
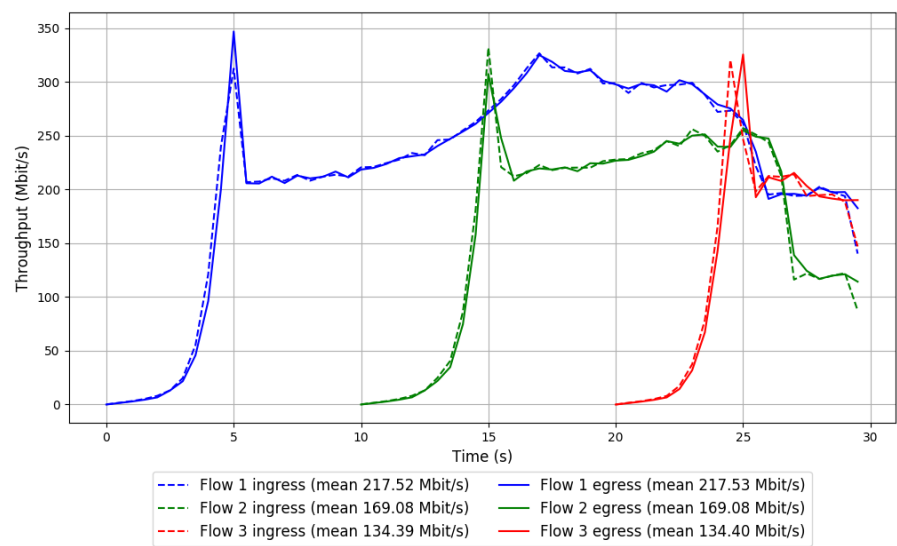
-- Flow 3:

Average throughput: 134.40 Mbit/s

95th percentile per-packet one-way delay: 184.503 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

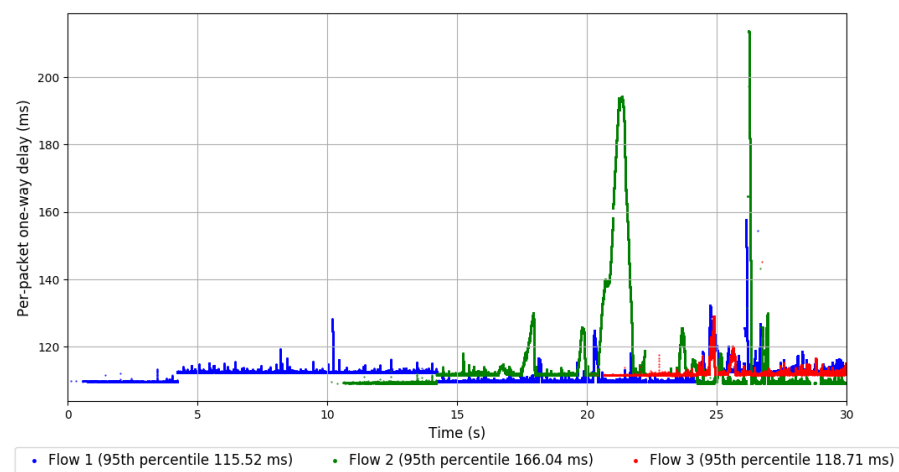
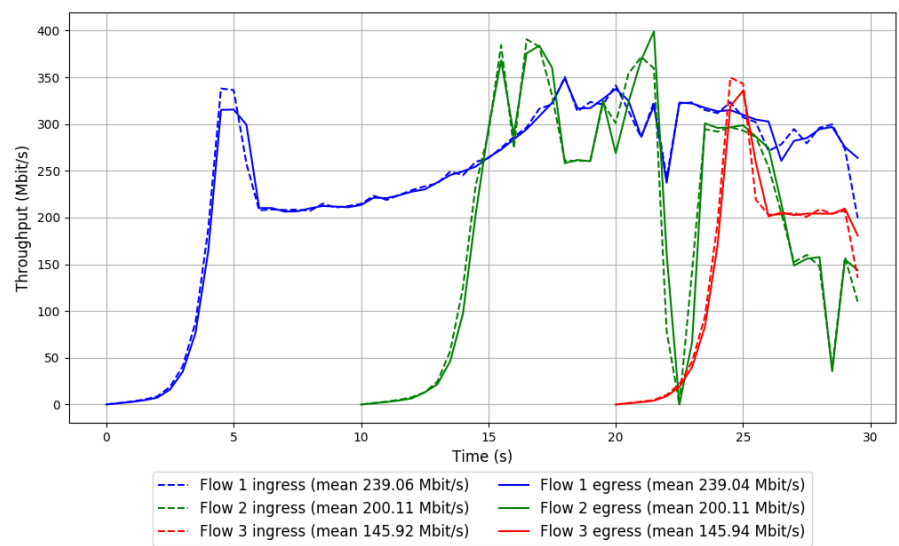


```
Run 1: Statistics of Vivace-loss

Start at: 2018-03-27 23:38:49
End at: 2018-03-27 23:39:19

# Below is generated by plot.py at 2018-03-28 06:24:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 419.65 Mbit/s
95th percentile per-packet one-way delay: 125.219 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 239.04 Mbit/s
95th percentile per-packet one-way delay: 115.523 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 200.11 Mbit/s
95th percentile per-packet one-way delay: 166.036 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 145.94 Mbit/s
95th percentile per-packet one-way delay: 118.707 ms
Loss rate: 0.01%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-03-27 23:57:56

End at: 2018-03-27 23:58:26

Below is generated by plot.py at 2018-03-28 06:25:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 477.26 Mbit/s

95th percentile per-packet one-way delay: 144.539 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 285.02 Mbit/s

95th percentile per-packet one-way delay: 144.908 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 196.39 Mbit/s

95th percentile per-packet one-way delay: 113.365 ms

Loss rate: 0.01%

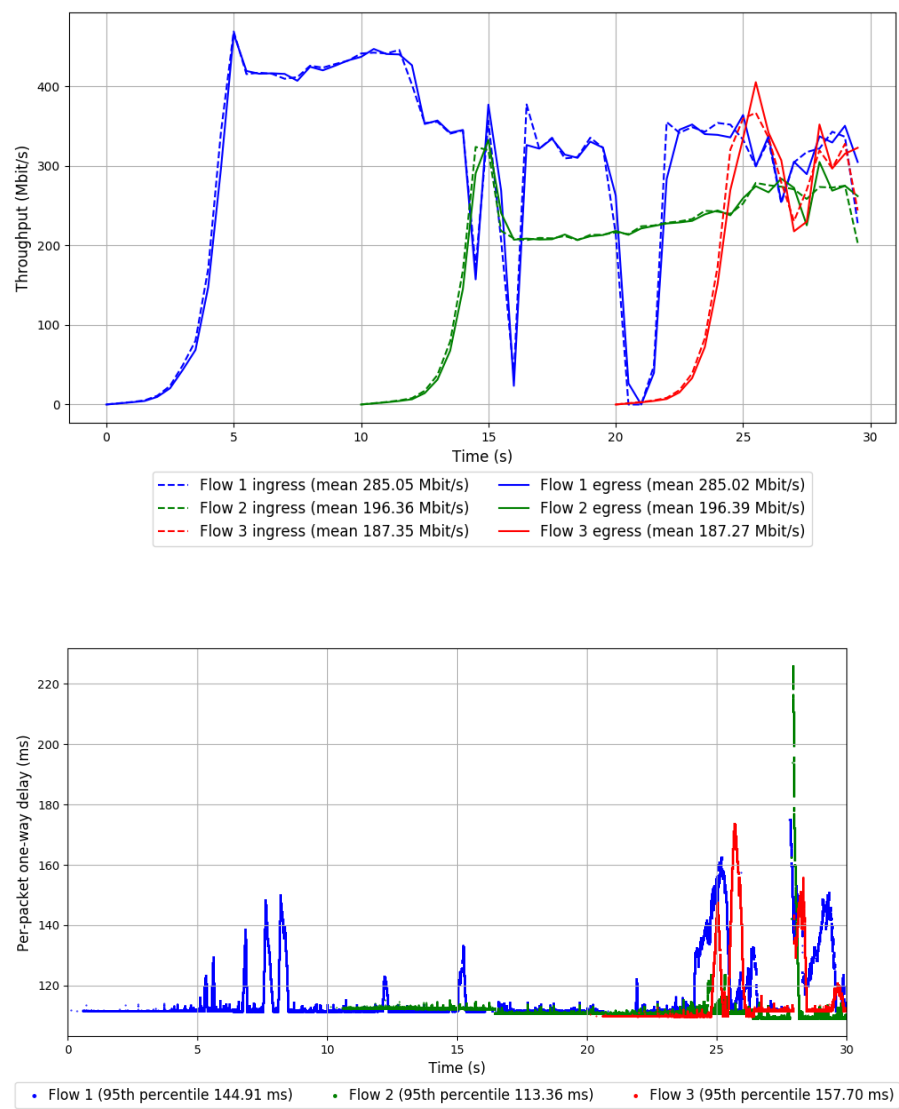
-- Flow 3:

Average throughput: 187.27 Mbit/s

95th percentile per-packet one-way delay: 157.701 ms

Loss rate: 0.06%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-03-28 00:17:18

End at: 2018-03-28 00:17:48

Below is generated by plot.py at 2018-03-28 06:28:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 488.22 Mbit/s

95th percentile per-packet one-way delay: 279.284 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 300.75 Mbit/s

95th percentile per-packet one-way delay: 305.420 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 214.72 Mbit/s

95th percentile per-packet one-way delay: 132.473 ms

Loss rate: 0.25%

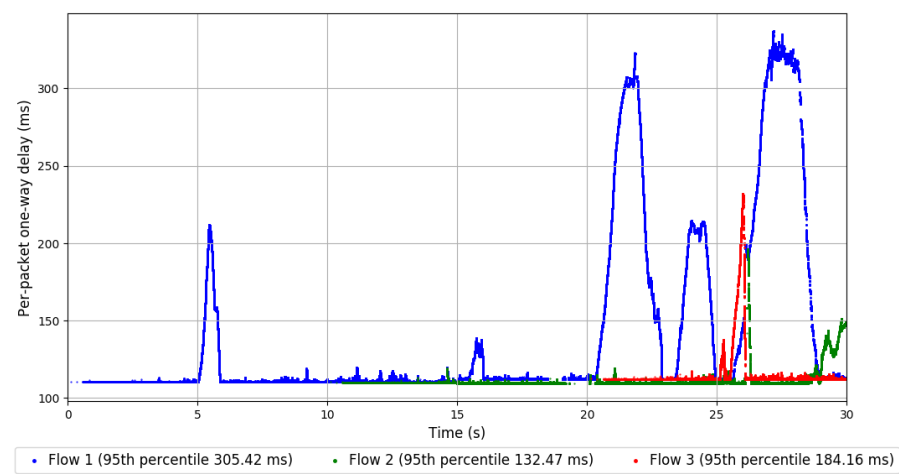
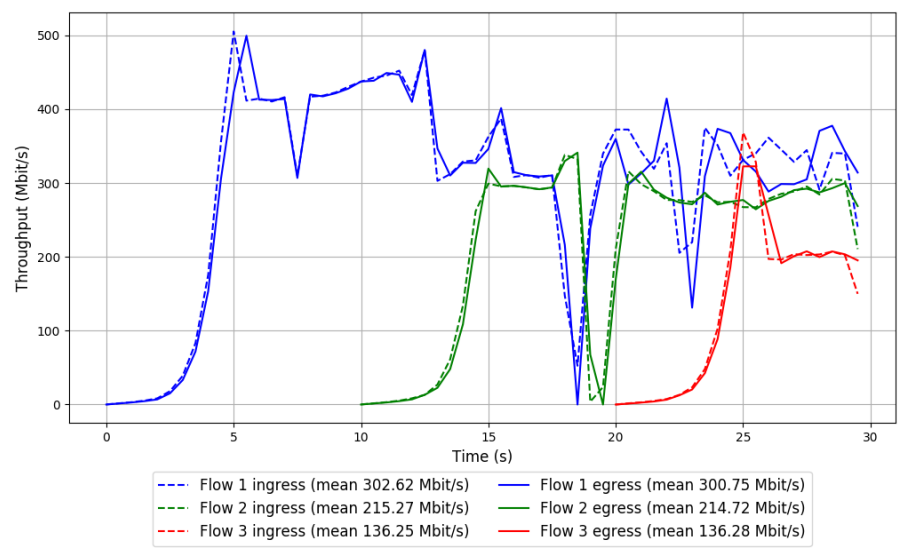
-- Flow 3:

Average throughput: 136.28 Mbit/s

95th percentile per-packet one-way delay: 184.163 ms

Loss rate: 0.00%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-03-28 00:36:31

End at: 2018-03-28 00:37:01

Below is generated by plot.py at 2018-03-28 06:28:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 452.29 Mbit/s

95th percentile per-packet one-way delay: 310.235 ms

Loss rate: 2.39%

-- Flow 1:

Average throughput: 271.04 Mbit/s

95th percentile per-packet one-way delay: 317.725 ms

Loss rate: 1.31%

-- Flow 2:

Average throughput: 203.71 Mbit/s

95th percentile per-packet one-way delay: 281.019 ms

Loss rate: 5.25%

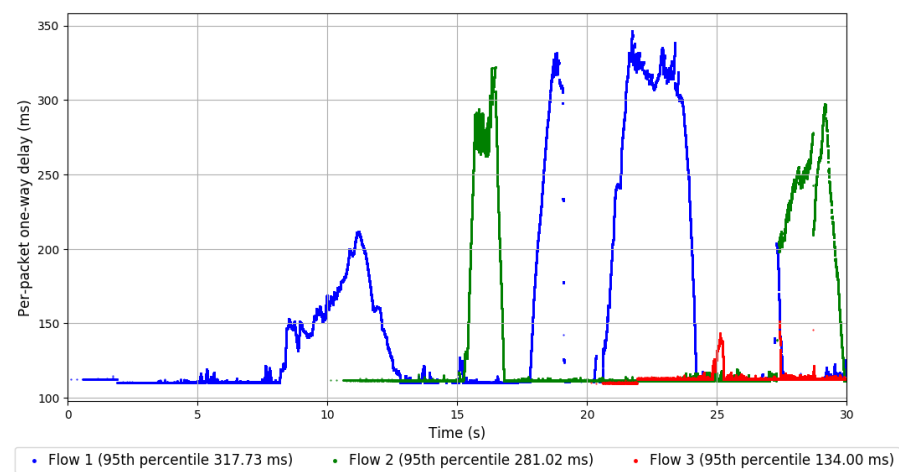
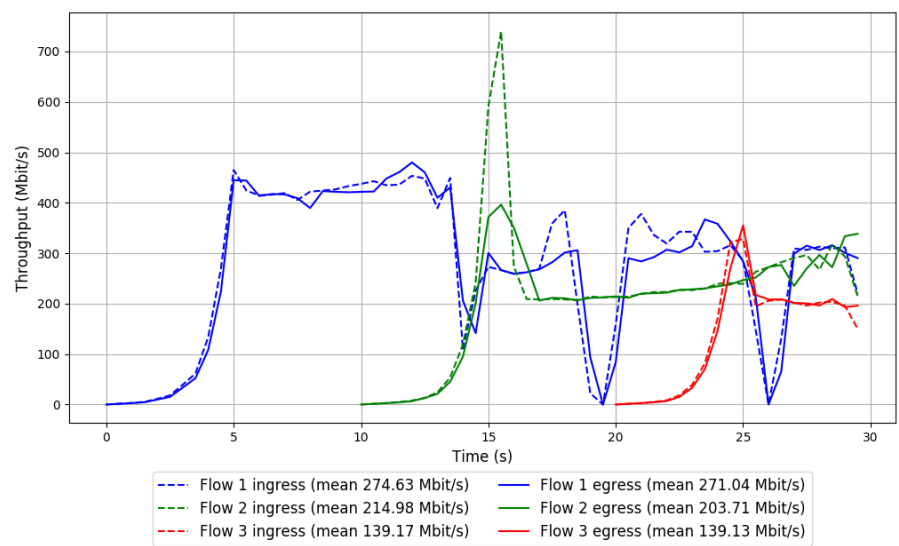
-- Flow 3:

Average throughput: 139.13 Mbit/s

95th percentile per-packet one-way delay: 134.001 ms

Loss rate: 0.00%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-03-28 00:55:37

End at: 2018-03-28 00:56:07

Below is generated by plot.py at 2018-03-28 06:29:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 474.69 Mbit/s

95th percentile per-packet one-way delay: 178.336 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 255.04 Mbit/s

95th percentile per-packet one-way delay: 190.665 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 259.00 Mbit/s

95th percentile per-packet one-way delay: 178.735 ms

Loss rate: 0.26%

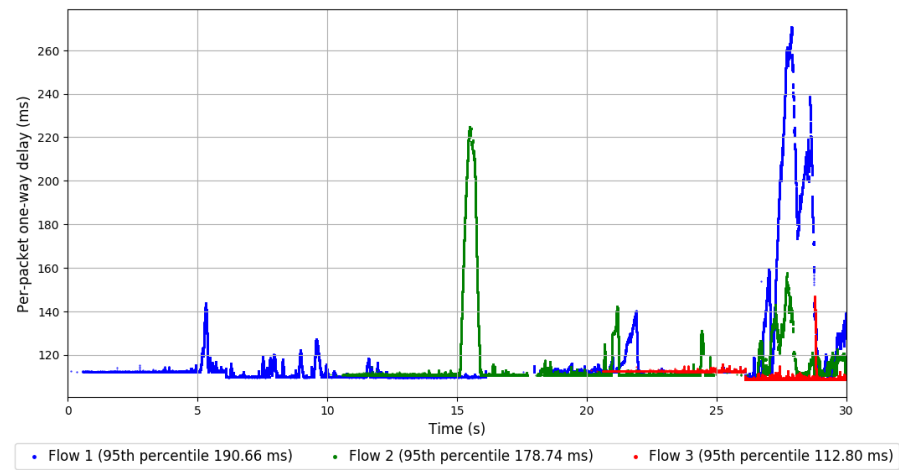
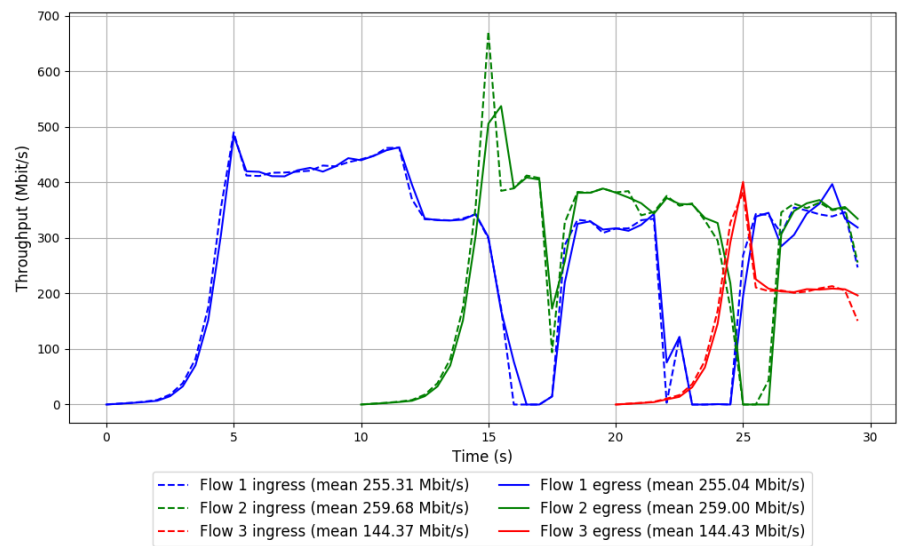
-- Flow 3:

Average throughput: 144.43 Mbit/s

95th percentile per-packet one-way delay: 112.798 ms

Loss rate: 0.00%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-03-28 01:14:45

End at: 2018-03-28 01:15:15

Below is generated by plot.py at 2018-03-28 06:29:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 431.93 Mbit/s

95th percentile per-packet one-way delay: 169.006 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 268.80 Mbit/s

95th percentile per-packet one-way delay: 163.241 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 193.93 Mbit/s

95th percentile per-packet one-way delay: 129.152 ms

Loss rate: 0.11%

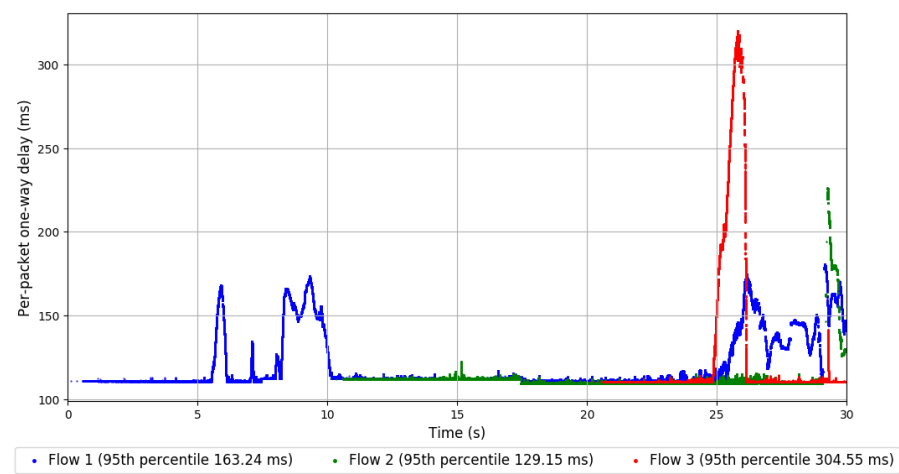
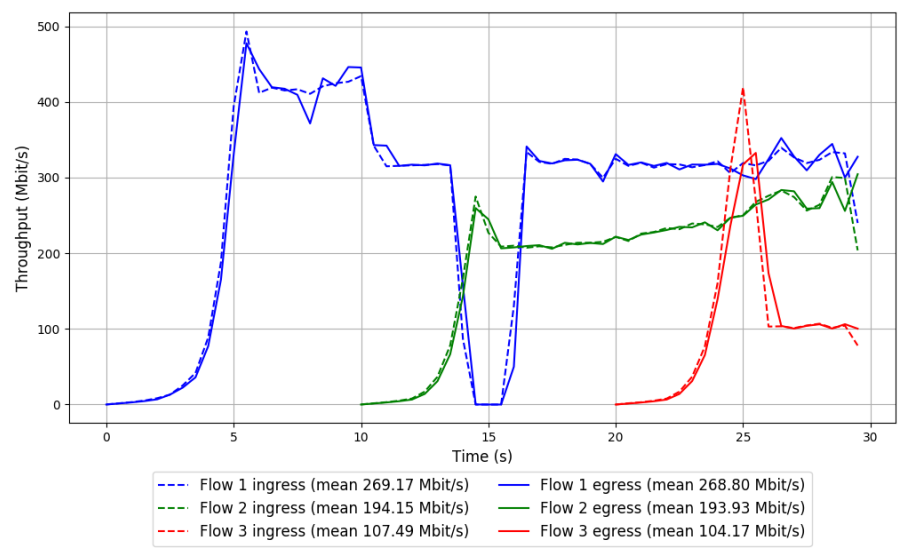
-- Flow 3:

Average throughput: 104.17 Mbit/s

95th percentile per-packet one-way delay: 304.554 ms

Loss rate: 3.10%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-03-28 01:33:47

End at: 2018-03-28 01:34:17

Below is generated by plot.py at 2018-03-28 06:32:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 532.11 Mbit/s

95th percentile per-packet one-way delay: 264.552 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 318.06 Mbit/s

95th percentile per-packet one-way delay: 277.195 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 245.00 Mbit/s

95th percentile per-packet one-way delay: 191.604 ms

Loss rate: 0.87%

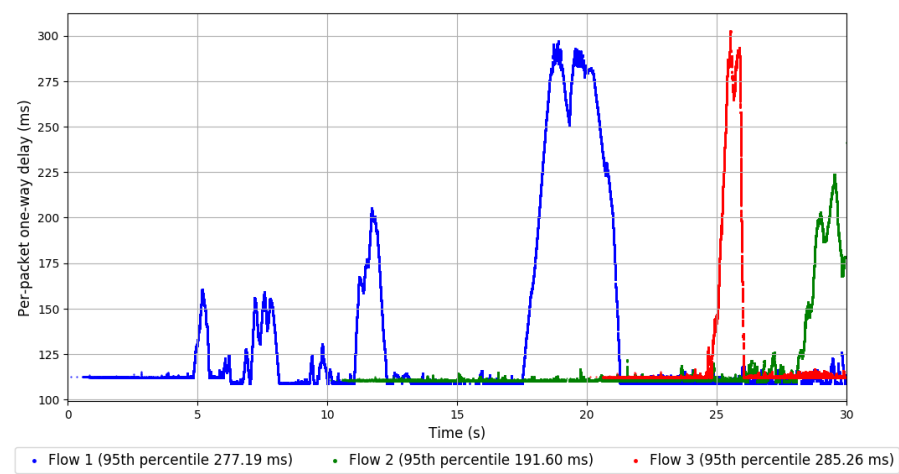
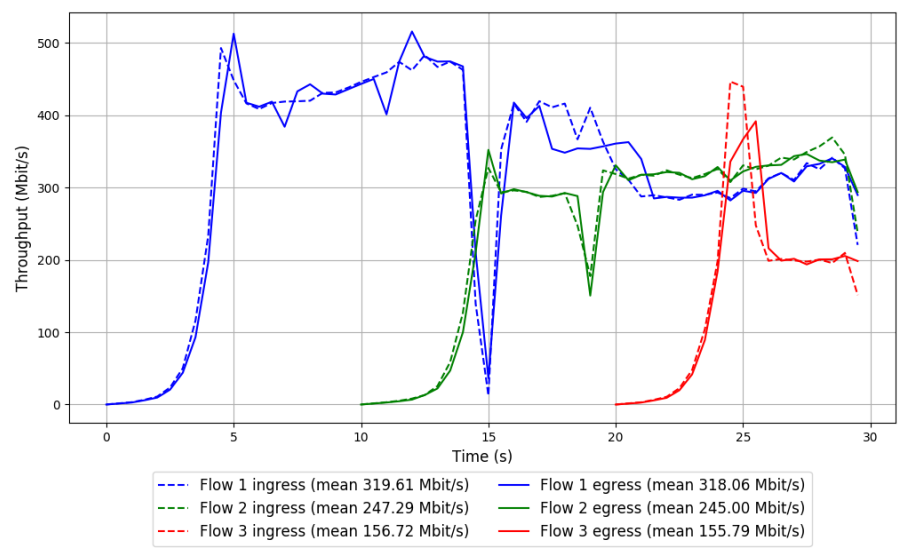
-- Flow 3:

Average throughput: 155.79 Mbit/s

95th percentile per-packet one-way delay: 285.262 ms

Loss rate: 0.60%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-03-28 01:53:16

End at: 2018-03-28 01:53:46

Below is generated by plot.py at 2018-03-28 06:32:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 457.18 Mbit/s

95th percentile per-packet one-way delay: 231.072 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 235.73 Mbit/s

95th percentile per-packet one-way delay: 265.080 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 262.19 Mbit/s

95th percentile per-packet one-way delay: 139.546 ms

Loss rate: 0.00%

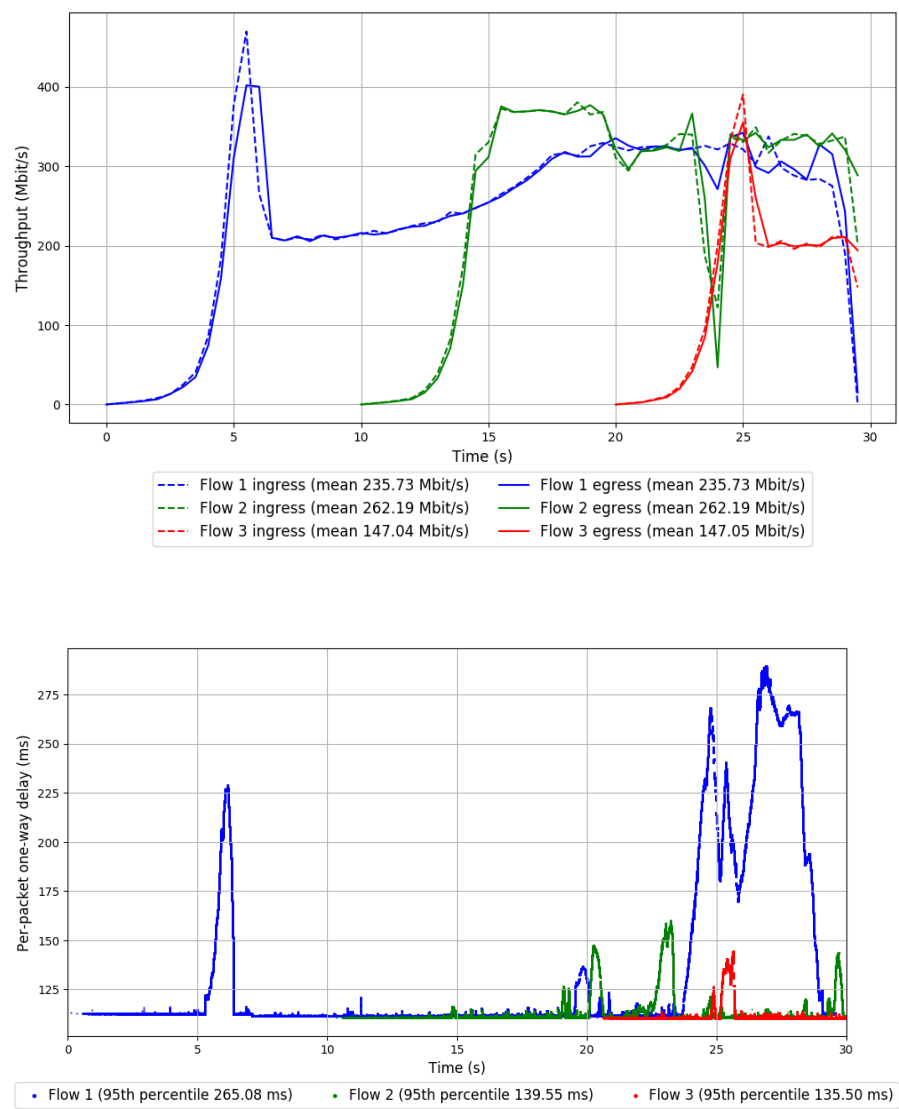
-- Flow 3:

Average throughput: 147.05 Mbit/s

95th percentile per-packet one-way delay: 135.495 ms

Loss rate: 0.00%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-03-28 02:12:37

End at: 2018-03-28 02:13:07

Below is generated by plot.py at 2018-03-28 06:32:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 452.24 Mbit/s

95th percentile per-packet one-way delay: 298.573 ms

Loss rate: 3.14%

-- Flow 1:

Average throughput: 285.77 Mbit/s

95th percentile per-packet one-way delay: 302.751 ms

Loss rate: 4.89%

-- Flow 2:

Average throughput: 179.57 Mbit/s

95th percentile per-packet one-way delay: 113.412 ms

Loss rate: 0.00%

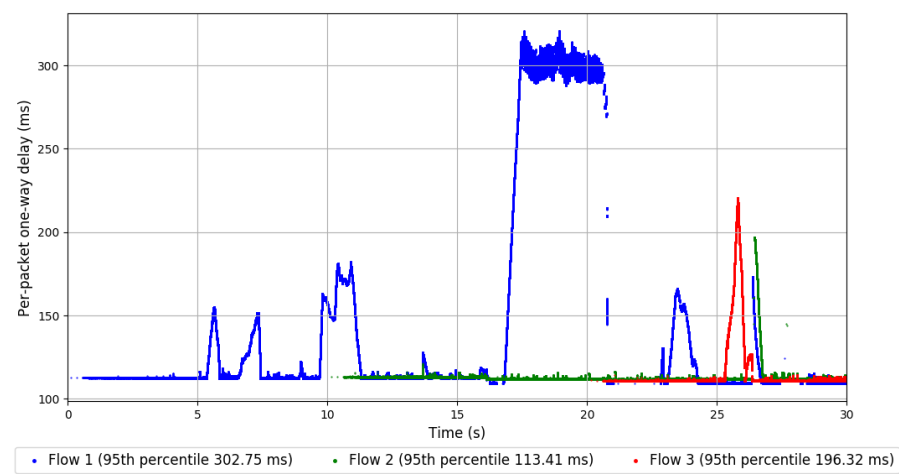
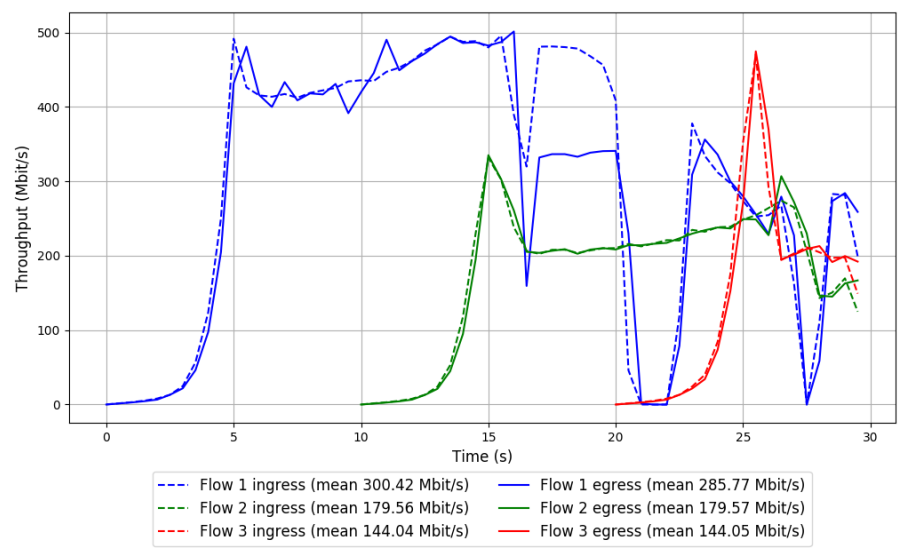
-- Flow 3:

Average throughput: 144.05 Mbit/s

95th percentile per-packet one-way delay: 196.325 ms

Loss rate: 0.00%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-03-28 02:31:56

End at: 2018-03-28 02:32:26

Below is generated by plot.py at 2018-03-28 06:34:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 466.23 Mbit/s

95th percentile per-packet one-way delay: 266.422 ms

Loss rate: 1.51%

-- Flow 1:

Average throughput: 238.85 Mbit/s

95th percentile per-packet one-way delay: 236.202 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 239.72 Mbit/s

95th percentile per-packet one-way delay: 153.082 ms

Loss rate: 0.07%

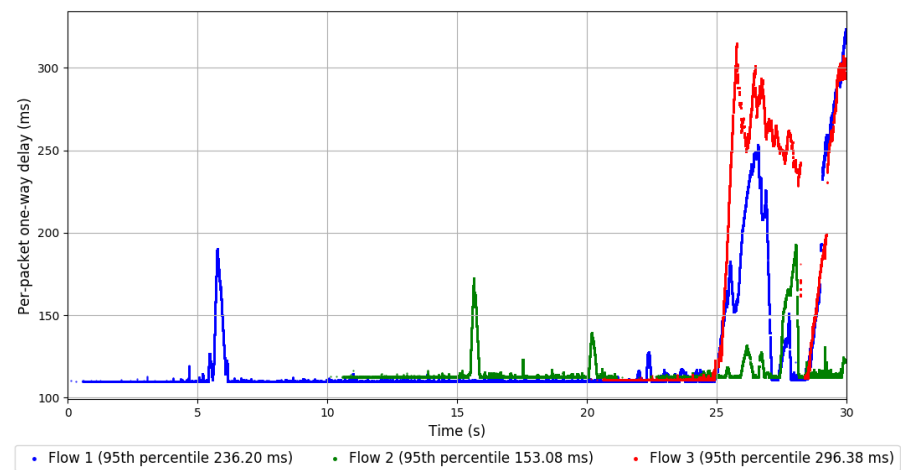
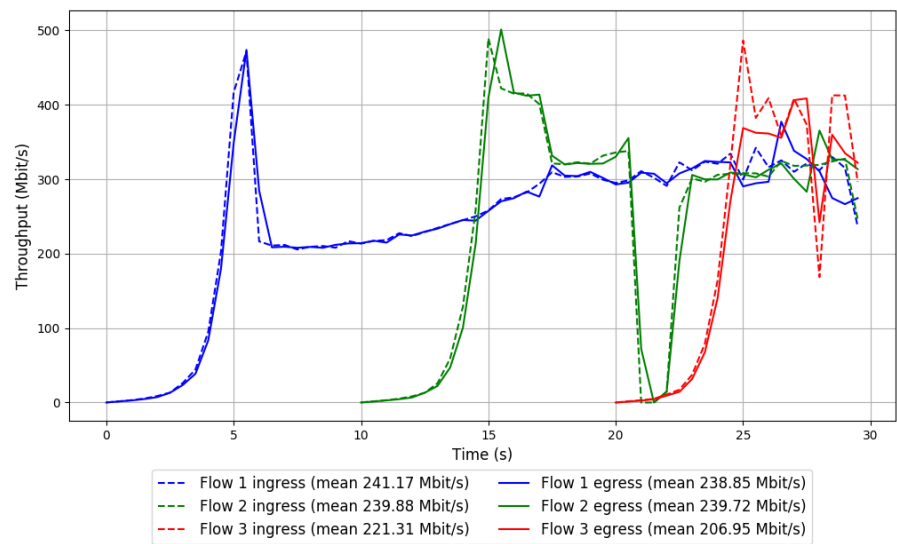
-- Flow 3:

Average throughput: 206.95 Mbit/s

95th percentile per-packet one-way delay: 296.379 ms

Loss rate: 6.48%

Run 10: Report of Vivace-loss — Data Link

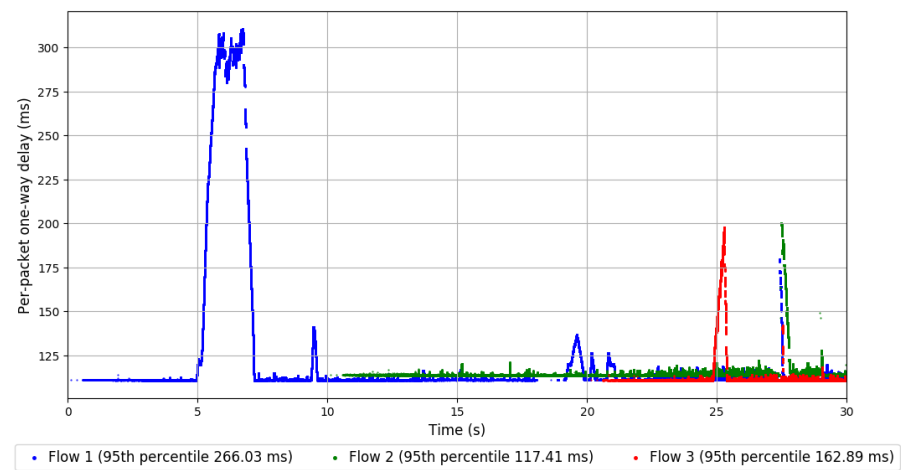
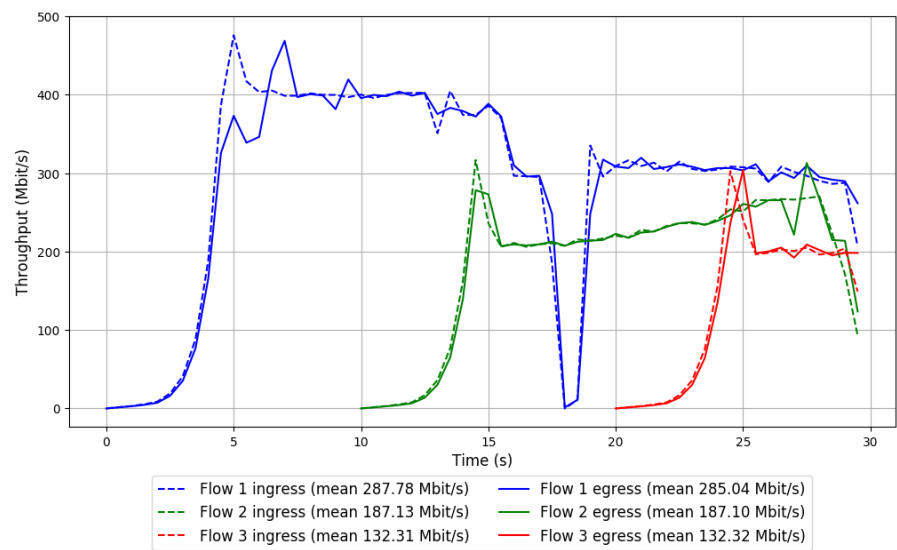


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-03-27 23:44:11
End at: 2018-03-27 23:44:41

# Below is generated by plot.py at 2018-03-28 06:37:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 452.85 Mbit/s
95th percentile per-packet one-way delay: 184.902 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 285.04 Mbit/s
95th percentile per-packet one-way delay: 266.027 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 187.10 Mbit/s
95th percentile per-packet one-way delay: 117.408 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 132.32 Mbit/s
95th percentile per-packet one-way delay: 162.887 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-03-28 00:03:22

End at: 2018-03-28 00:03:52

Below is generated by plot.py at 2018-03-28 06:37:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 476.76 Mbit/s

95th percentile per-packet one-way delay: 131.490 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 242.36 Mbit/s

95th percentile per-packet one-way delay: 124.036 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 284.66 Mbit/s

95th percentile per-packet one-way delay: 142.860 ms

Loss rate: 0.00%

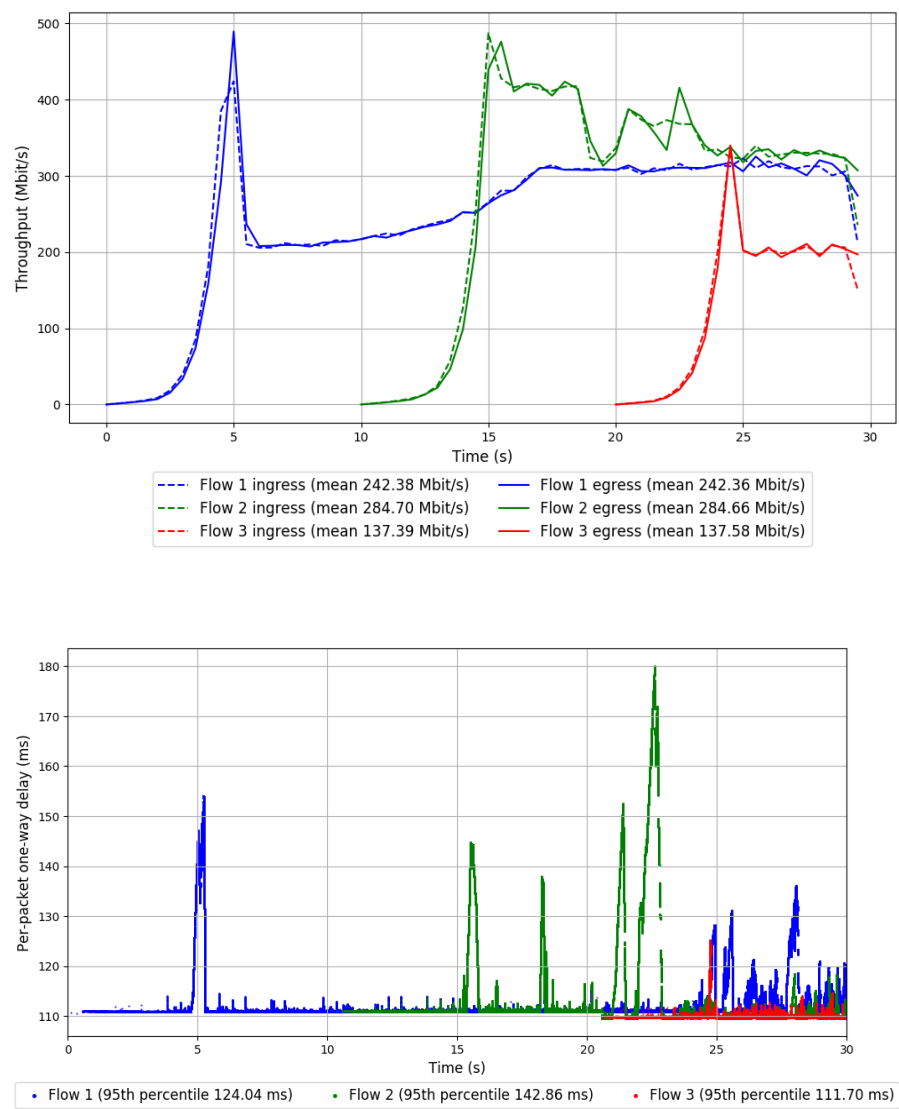
-- Flow 3:

Average throughput: 137.58 Mbit/s

95th percentile per-packet one-way delay: 111.703 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-03-28 00:22:46

End at: 2018-03-28 00:23:16

Below is generated by plot.py at 2018-03-28 06:37:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 458.42 Mbit/s

95th percentile per-packet one-way delay: 190.188 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 291.16 Mbit/s

95th percentile per-packet one-way delay: 210.546 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 187.92 Mbit/s

95th percentile per-packet one-way delay: 115.298 ms

Loss rate: 0.00%

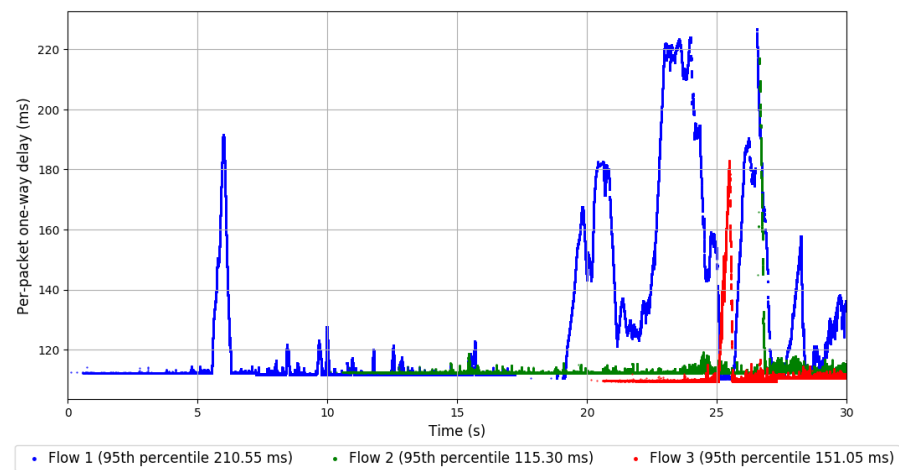
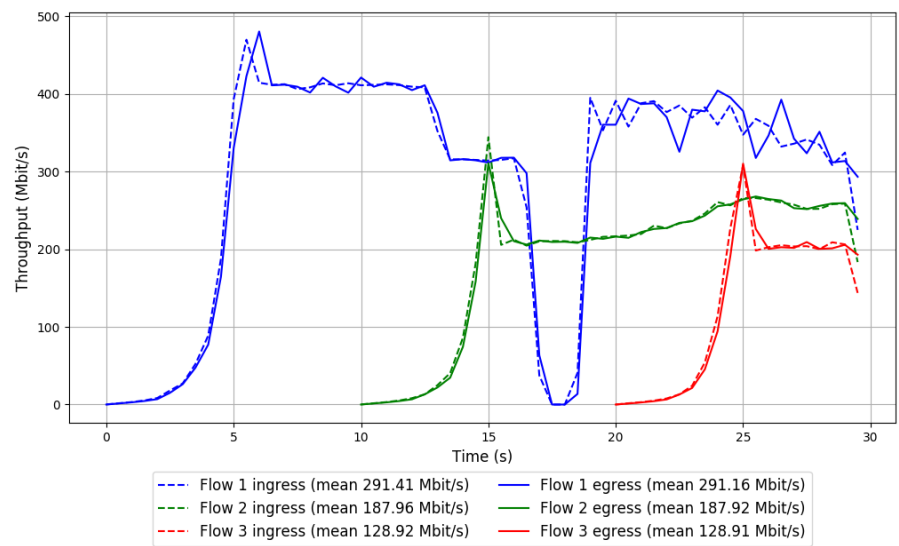
-- Flow 3:

Average throughput: 128.91 Mbit/s

95th percentile per-packet one-way delay: 151.052 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-03-28 00:41:55

End at: 2018-03-28 00:42:25

Below is generated by plot.py at 2018-03-28 06:38:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 488.89 Mbit/s

95th percentile per-packet one-way delay: 130.621 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 320.39 Mbit/s

95th percentile per-packet one-way delay: 134.602 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 185.01 Mbit/s

95th percentile per-packet one-way delay: 115.511 ms

Loss rate: 0.00%

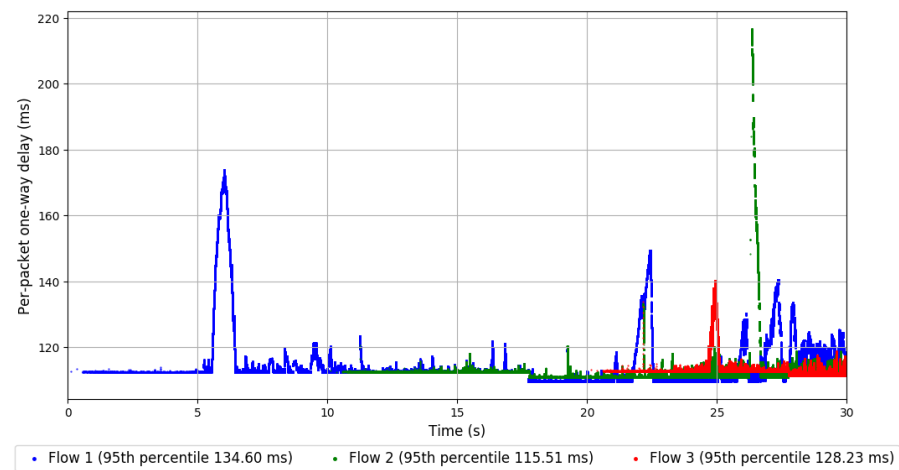
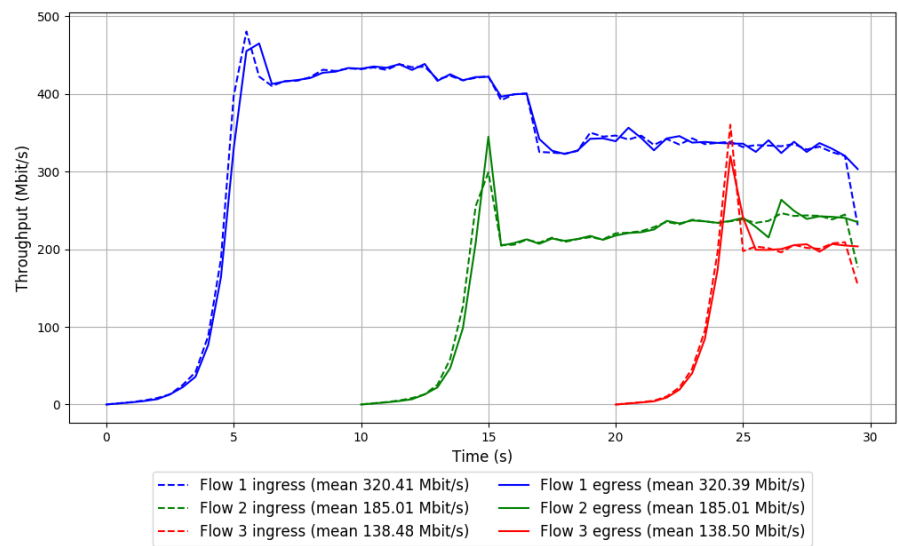
-- Flow 3:

Average throughput: 138.50 Mbit/s

95th percentile per-packet one-way delay: 128.234 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-03-28 01:01:01

End at: 2018-03-28 01:01:31

Below is generated by plot.py at 2018-03-28 06:39:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 457.77 Mbit/s

95th percentile per-packet one-way delay: 283.384 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 291.05 Mbit/s

95th percentile per-packet one-way delay: 286.504 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 186.42 Mbit/s

95th percentile per-packet one-way delay: 115.773 ms

Loss rate: 0.00%

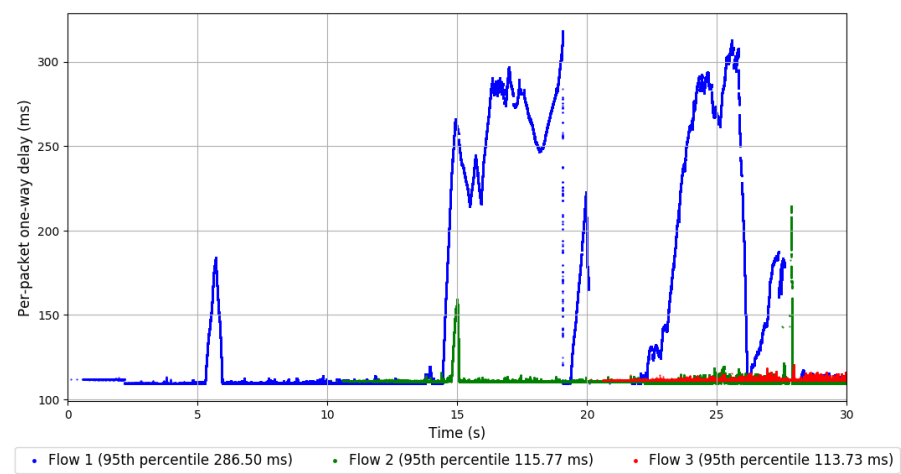
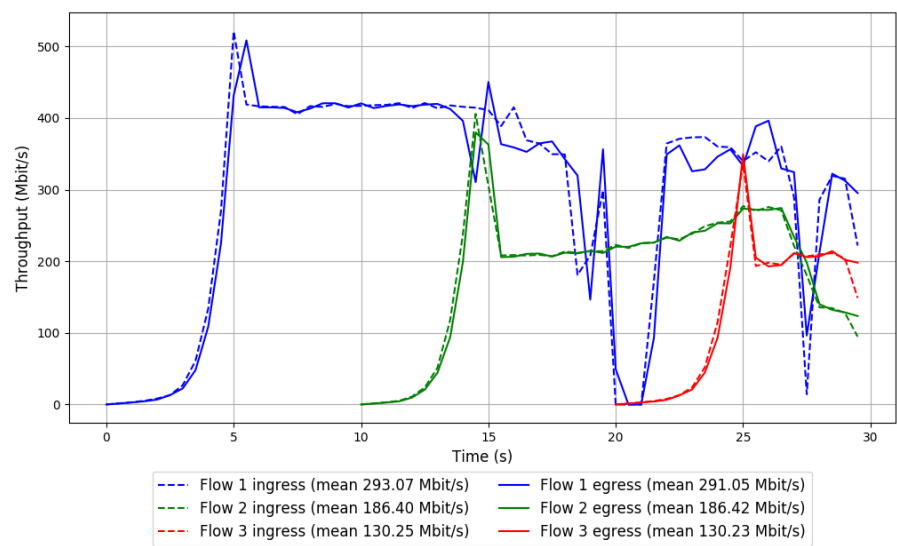
-- Flow 3:

Average throughput: 130.23 Mbit/s

95th percentile per-packet one-way delay: 113.731 ms

Loss rate: 0.00%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-03-28 01:20:04

End at: 2018-03-28 01:20:34

Below is generated by plot.py at 2018-03-28 06:39:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 447.03 Mbit/s

95th percentile per-packet one-way delay: 124.023 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 273.77 Mbit/s

95th percentile per-packet one-way delay: 126.090 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 194.20 Mbit/s

95th percentile per-packet one-way delay: 115.081 ms

Loss rate: 0.00%

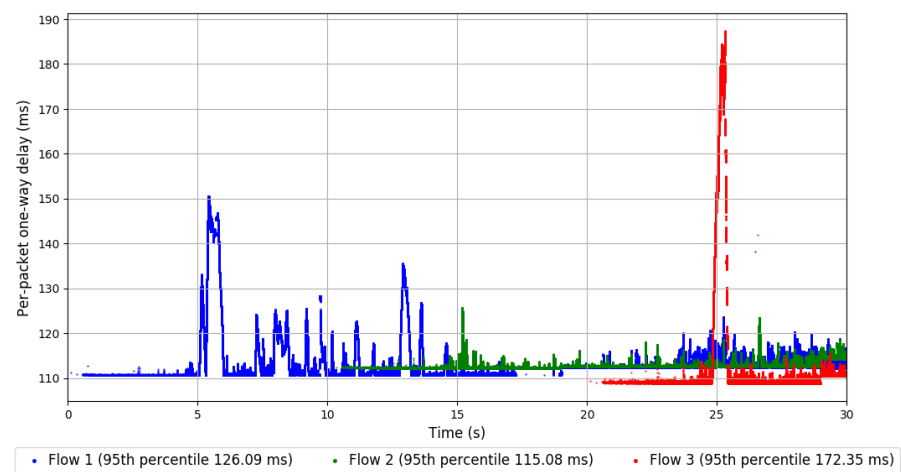
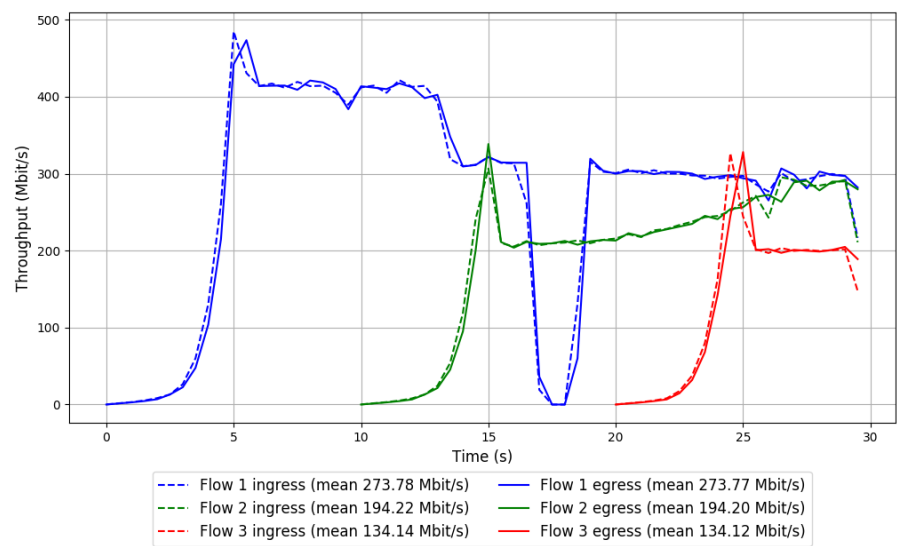
-- Flow 3:

Average throughput: 134.12 Mbit/s

95th percentile per-packet one-way delay: 172.354 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-03-28 01:39:23

End at: 2018-03-28 01:39:53

Below is generated by plot.py at 2018-03-28 06:40:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 473.85 Mbit/s

95th percentile per-packet one-way delay: 228.982 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 293.13 Mbit/s

95th percentile per-packet one-way delay: 296.254 ms

Loss rate: 1.37%

-- Flow 2:

Average throughput: 205.78 Mbit/s

95th percentile per-packet one-way delay: 115.132 ms

Loss rate: 0.01%

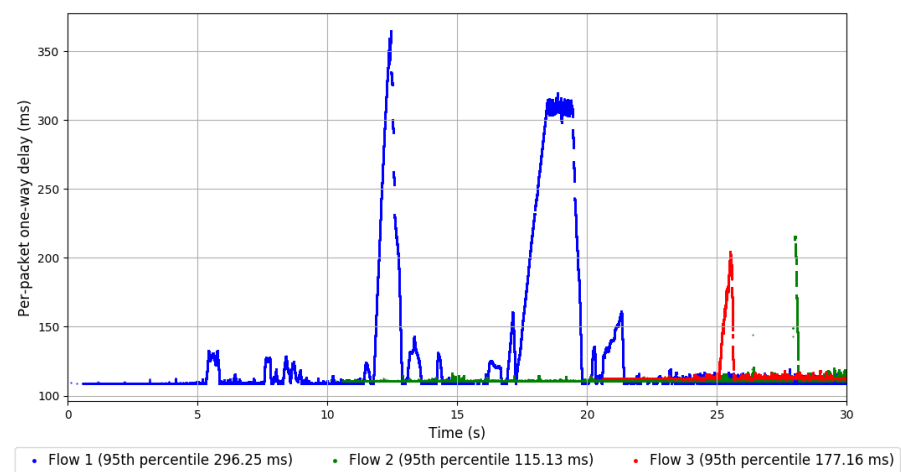
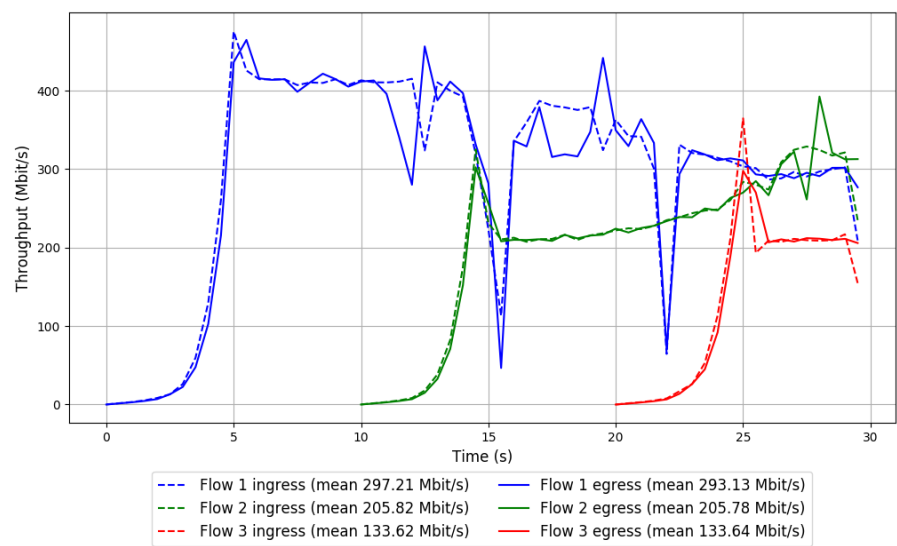
-- Flow 3:

Average throughput: 133.64 Mbit/s

95th percentile per-packet one-way delay: 177.165 ms

Loss rate: 0.00%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-03-28 01:58:42

End at: 2018-03-28 01:59:12

Below is generated by plot.py at 2018-03-28 06:41:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 538.85 Mbit/s

95th percentile per-packet one-way delay: 311.215 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 324.40 Mbit/s

95th percentile per-packet one-way delay: 143.802 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 252.63 Mbit/s

95th percentile per-packet one-way delay: 327.832 ms

Loss rate: 4.34%

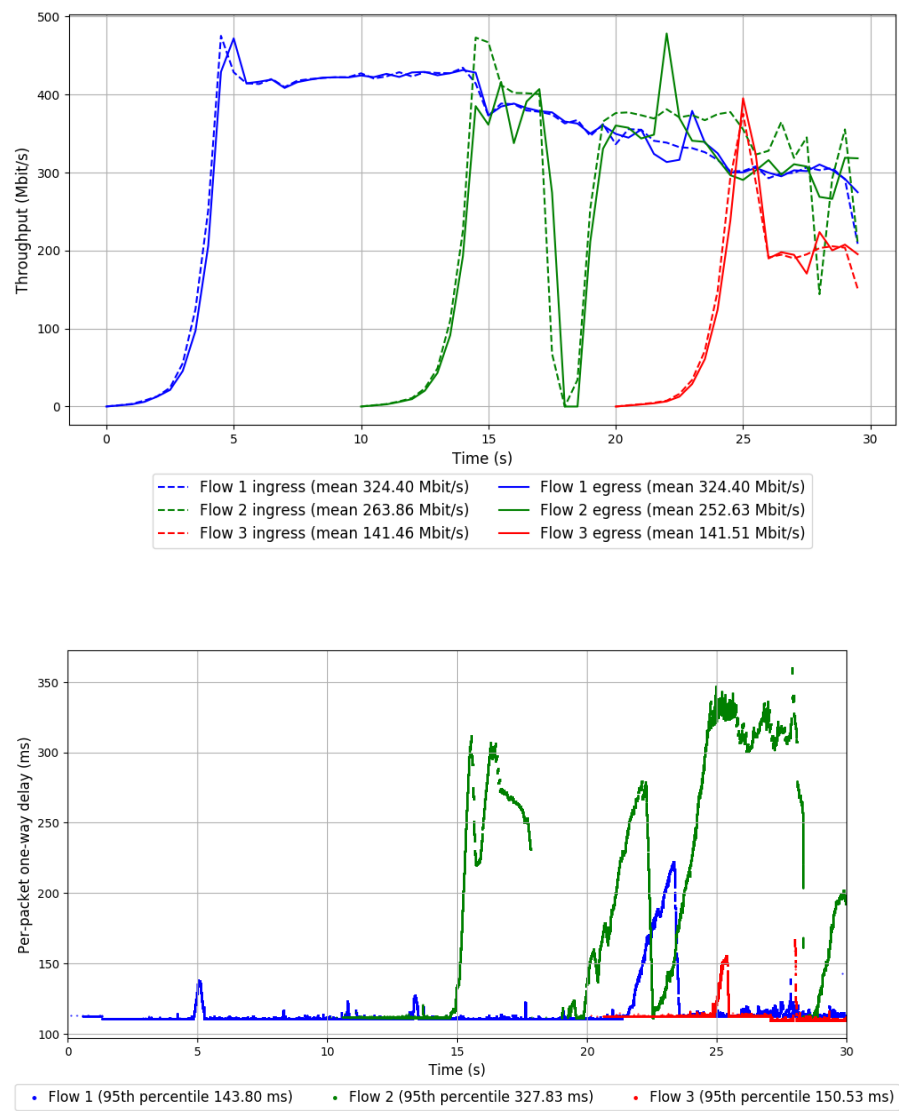
-- Flow 3:

Average throughput: 141.51 Mbit/s

95th percentile per-packet one-way delay: 150.526 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-03-28 02:18:09

End at: 2018-03-28 02:18:39

Below is generated by plot.py at 2018-03-28 06:41:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 420.99 Mbit/s

95th percentile per-packet one-way delay: 160.180 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 249.83 Mbit/s

95th percentile per-packet one-way delay: 159.667 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 190.91 Mbit/s

95th percentile per-packet one-way delay: 163.730 ms

Loss rate: 0.00%

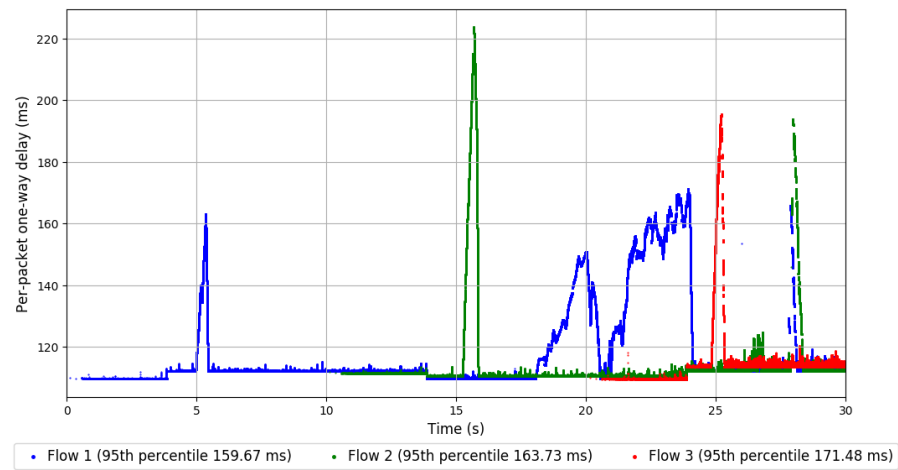
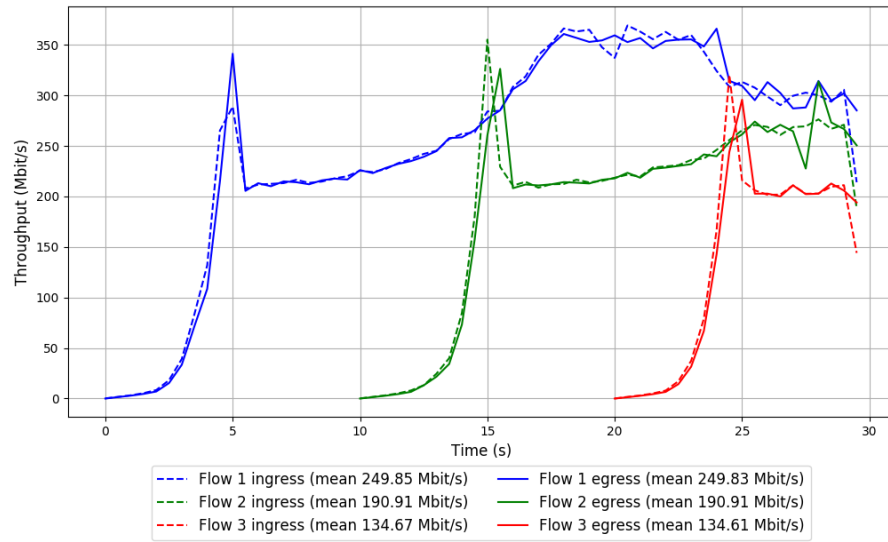
-- Flow 3:

Average throughput: 134.61 Mbit/s

95th percentile per-packet one-way delay: 171.480 ms

Loss rate: 0.01%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-03-28 02:37:17
End at: 2018-03-28 02:37:47

# Below is generated by plot.py at 2018-03-28 06:41:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 452.76 Mbit/s
95th percentile per-packet one-way delay: 116.986 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 273.27 Mbit/s
95th percentile per-packet one-way delay: 116.869 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 203.31 Mbit/s
95th percentile per-packet one-way delay: 115.536 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 134.40 Mbit/s
95th percentile per-packet one-way delay: 150.432 ms
Loss rate: 0.00%
```

Run 10: Report of Vivace-LTE — Data Link

