

Pantheon Report

Generated at 2018-03-14 07:03:21 (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.

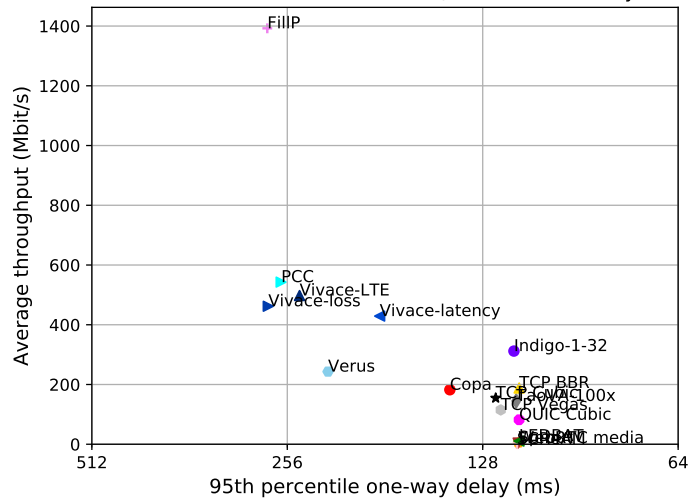
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

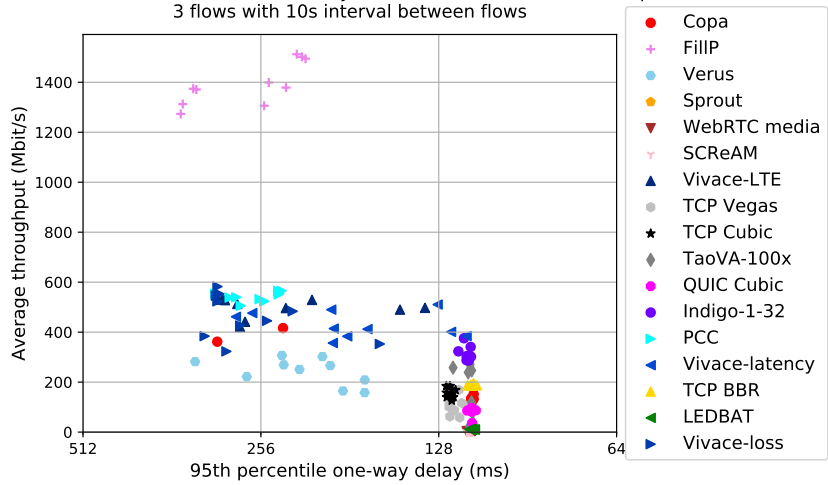
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-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 @ a488197ddd041ace68a42849b2540ad834825f42
```

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	96.33	94.65	87.75	112.05	112.74	113.13	0.00	0.00	0.00
TCP Cubic	10	91.00	71.10	50.69	122.10	120.62	120.81	0.01	0.01	0.28
LEDBAT	10	6.80	4.65	2.16	112.64	112.53	112.16	0.00	0.00	0.00
PCC	10	467.48	87.95	51.18	268.17	229.78	216.32	3.86	1.79	2.39
QUIC Cubic	10	45.06	41.75	28.55	112.39	111.75	111.40	0.00	0.00	0.00
SCReAM	10	0.21	0.21	0.22	112.69	112.22	112.02	0.00	0.00	0.00
WebRTC media	10	2.08	1.29	0.47	112.47	111.84	112.31	0.00	0.01	0.02
Sprout	10	2.73	2.57	1.73	112.76	112.77	112.86	0.00	0.00	0.00
TaoVA-100x	10	86.16	46.95	83.16	113.48	113.04	113.27	0.00	0.00	0.00
TCP Vegas	10	66.57	46.25	53.14	118.69	118.86	120.07	0.00	0.02	0.00
Verus	10	149.85	107.23	70.19	216.07	234.20	192.05	1.12	1.92	0.80
Copa	10	125.56	58.65	53.76	143.35	136.32	134.36	6.44	1.39	0.96
FillP	10	735.24	687.92	602.35	259.00	262.70	277.83	9.09	10.02	14.85
Indigo-1-32	10	159.20	164.37	137.22	113.99	115.31	115.31	0.00	0.00	0.00
Vivace-latency	10	244.64	203.39	149.50	160.77	178.33	175.29	0.42	0.60	0.06
Vivace-loss	10	260.05	230.74	147.54	273.05	237.86	255.99	3.12	2.20	4.71
Vivace-LTE	10	307.10	216.71	142.42	253.02	178.18	178.04	0.95	0.87	0.39

Run 1: Statistics of TCP BBR

Start at: 2018-03-13 23:54:07

End at: 2018-03-13 23:54:37

Below is generated by plot.py at 2018-03-14 05:08:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.28 Mbit/s

95th percentile per-packet one-way delay: 114.470 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 92.70 Mbit/s

95th percentile per-packet one-way delay: 111.868 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 97.49 Mbit/s

95th percentile per-packet one-way delay: 115.558 ms

Loss rate: 0.00%

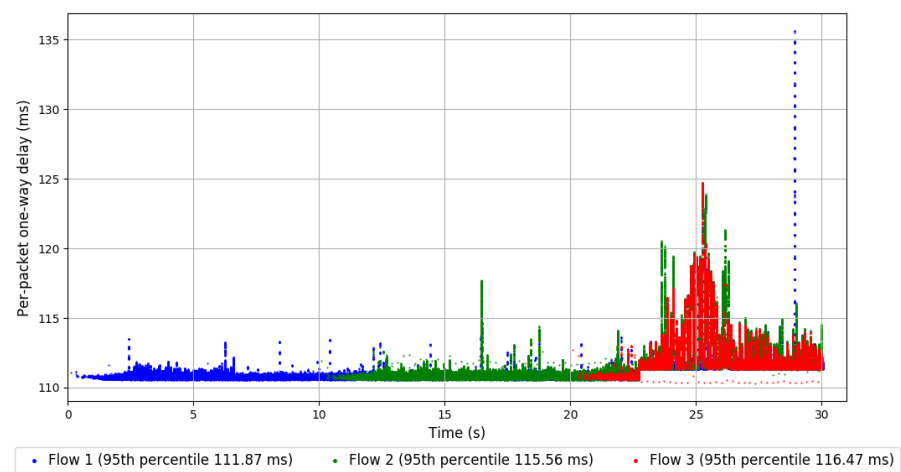
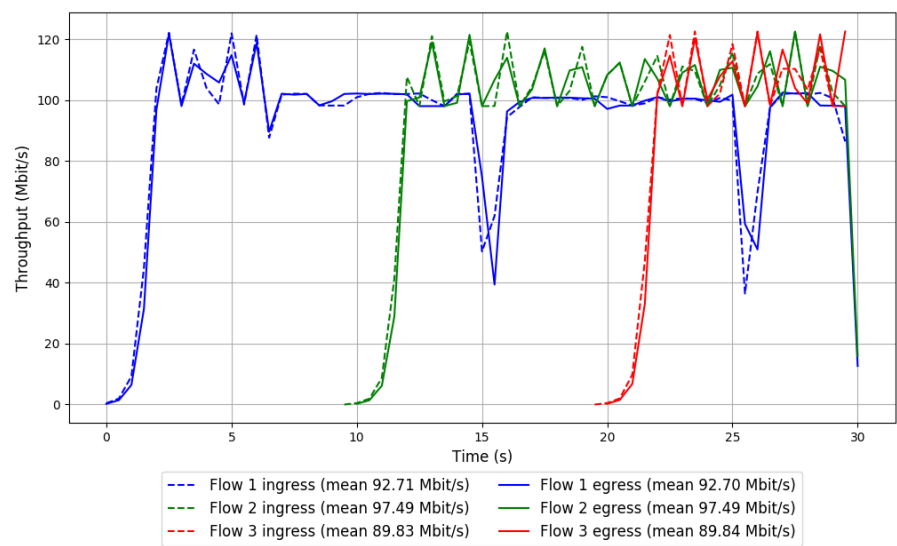
-- Flow 3:

Average throughput: 89.84 Mbit/s

95th percentile per-packet one-way delay: 116.475 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-03-14 00:13:39

End at: 2018-03-14 00:14:09

Below is generated by plot.py at 2018-03-14 05:08:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.06 Mbit/s

95th percentile per-packet one-way delay: 112.045 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 98.47 Mbit/s

95th percentile per-packet one-way delay: 111.247 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 92.63 Mbit/s

95th percentile per-packet one-way delay: 111.501 ms

Loss rate: 0.00%

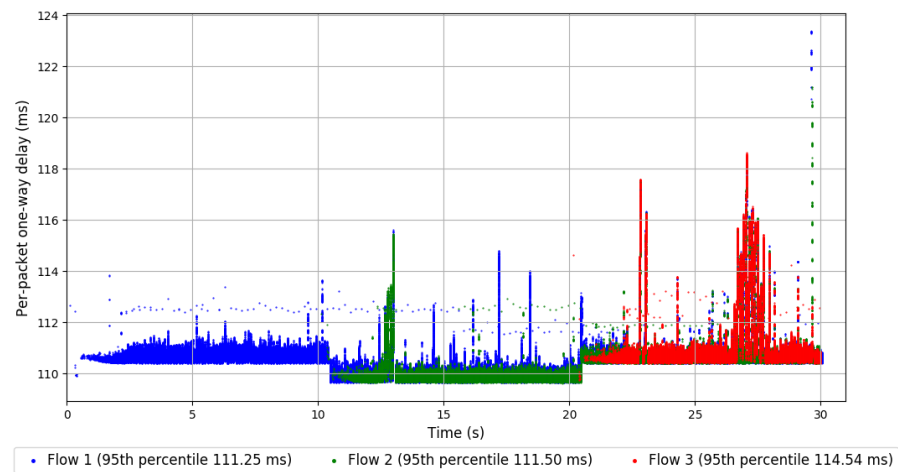
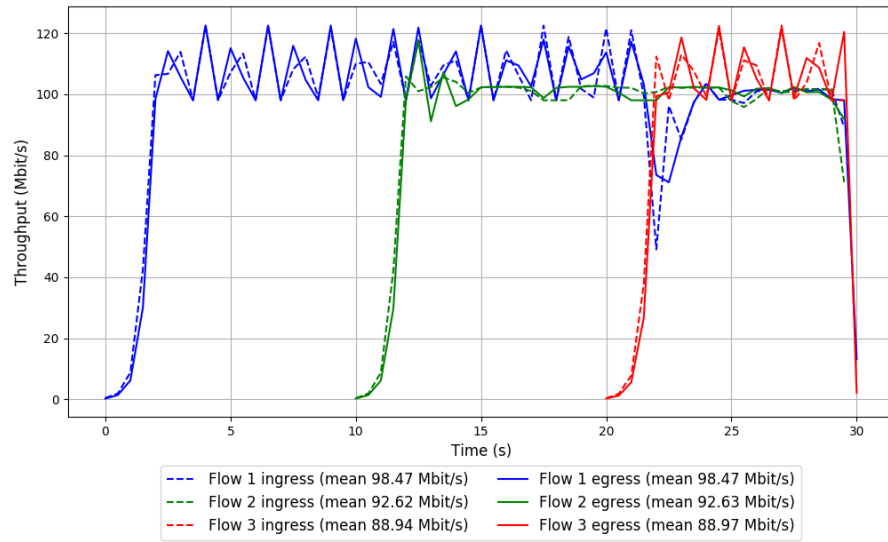
-- Flow 3:

Average throughput: 88.97 Mbit/s

95th percentile per-packet one-way delay: 114.540 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-03-14 00:32:59

End at: 2018-03-14 00:33:29

Below is generated by plot.py at 2018-03-14 05:08:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.69 Mbit/s

95th percentile per-packet one-way delay: 113.002 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.02 Mbit/s

95th percentile per-packet one-way delay: 112.668 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 95.25 Mbit/s

95th percentile per-packet one-way delay: 114.399 ms

Loss rate: 0.00%

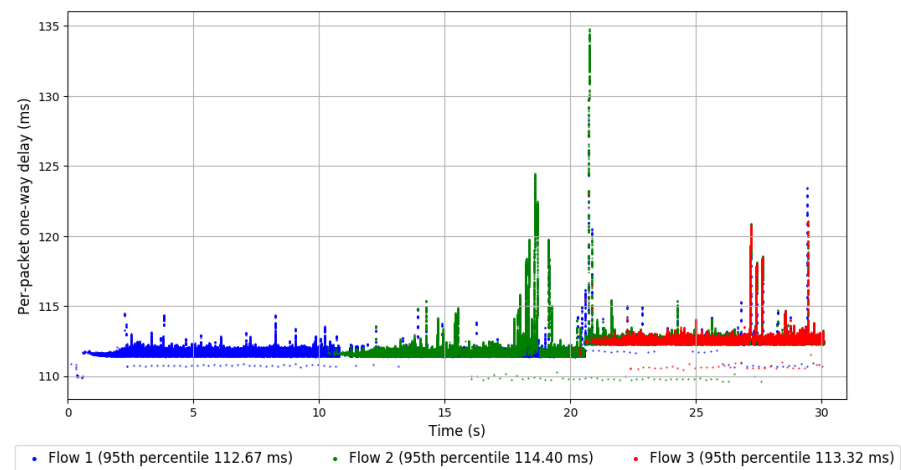
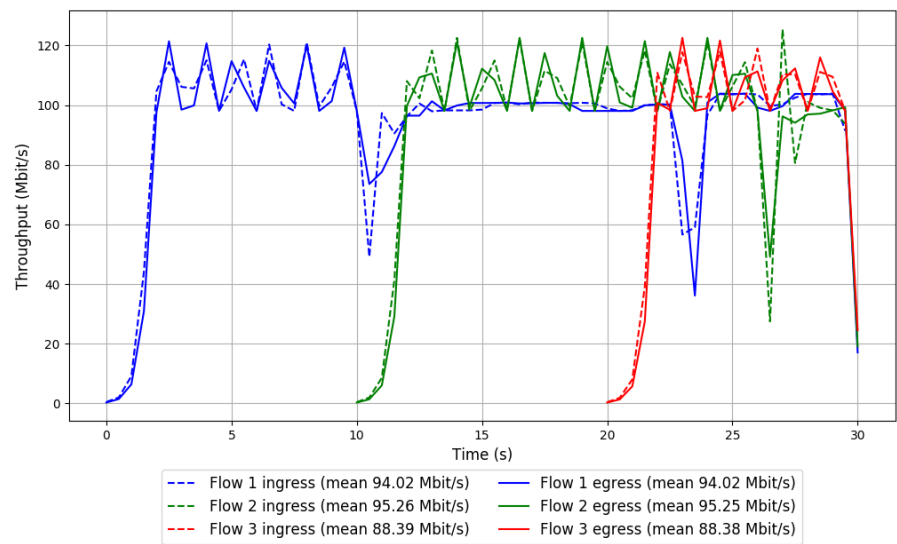
-- Flow 3:

Average throughput: 88.38 Mbit/s

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

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-03-14 00:52:34

End at: 2018-03-14 00:53:04

Below is generated by plot.py at 2018-03-14 05:08:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 195.48 Mbit/s

95th percentile per-packet one-way delay: 111.762 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.17 Mbit/s

95th percentile per-packet one-way delay: 111.817 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 97.98 Mbit/s

95th percentile per-packet one-way delay: 111.251 ms

Loss rate: 0.00%

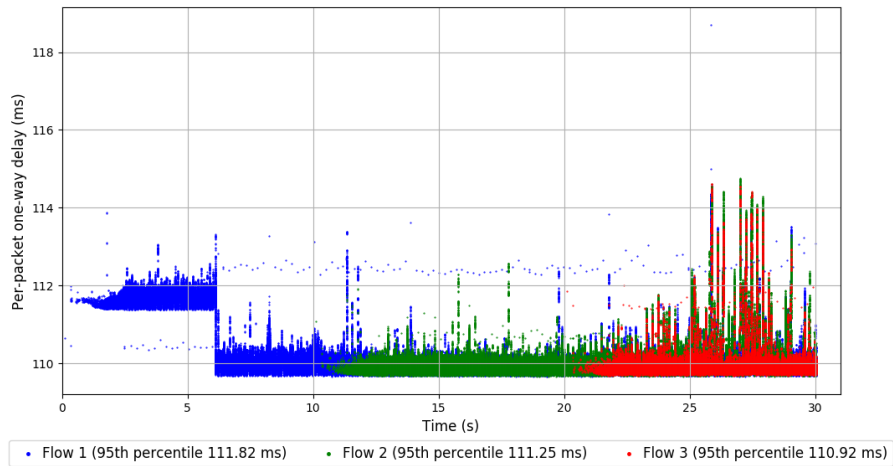
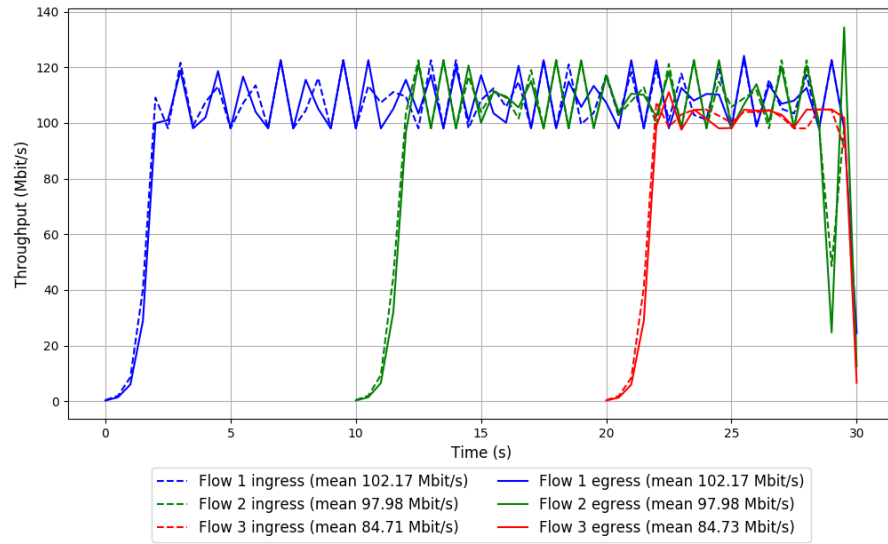
-- Flow 3:

Average throughput: 84.73 Mbit/s

95th percentile per-packet one-way delay: 110.924 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-03-14 01:11:48

End at: 2018-03-14 01:12:18

Below is generated by plot.py at 2018-03-14 05:08:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.02 Mbit/s

95th percentile per-packet one-way delay: 112.023 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 97.10 Mbit/s

95th percentile per-packet one-way delay: 112.033 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 90.53 Mbit/s

95th percentile per-packet one-way delay: 111.986 ms

Loss rate: 0.01%

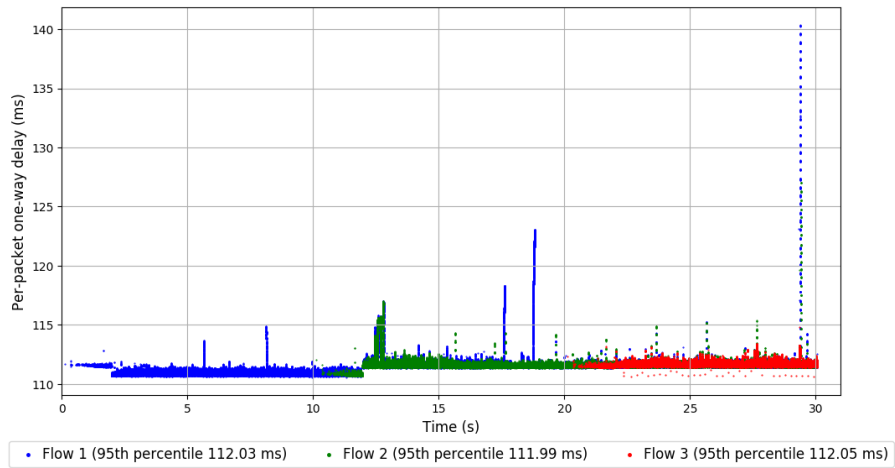
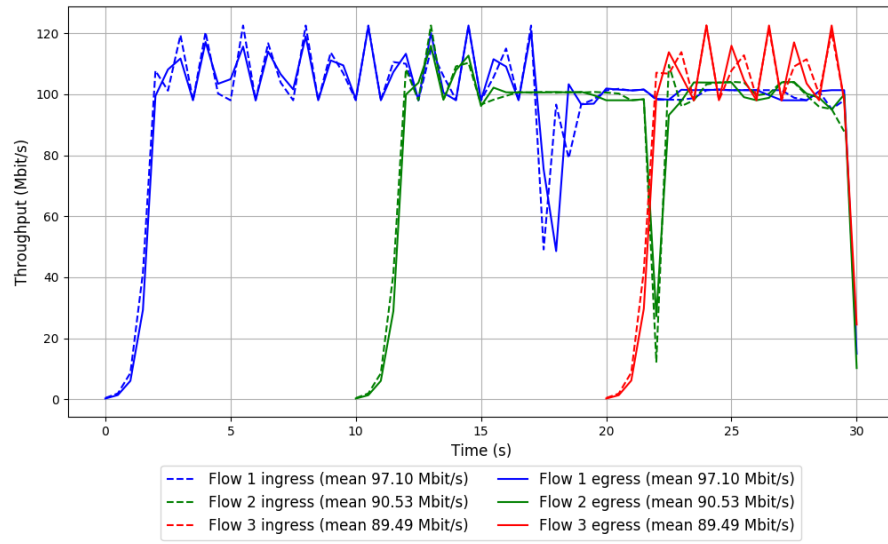
-- Flow 3:

Average throughput: 89.49 Mbit/s

95th percentile per-packet one-way delay: 112.051 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-03-14 01:31:16

End at: 2018-03-14 01:31:46

Below is generated by plot.py at 2018-03-14 05:08:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.17 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 98.34 Mbit/s

95th percentile per-packet one-way delay: 113.034 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 96.49 Mbit/s

95th percentile per-packet one-way delay: 112.940 ms

Loss rate: 0.00%

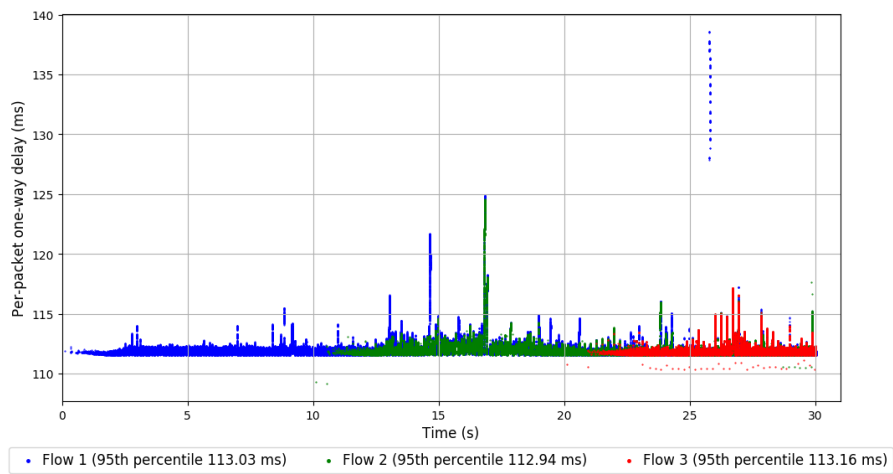
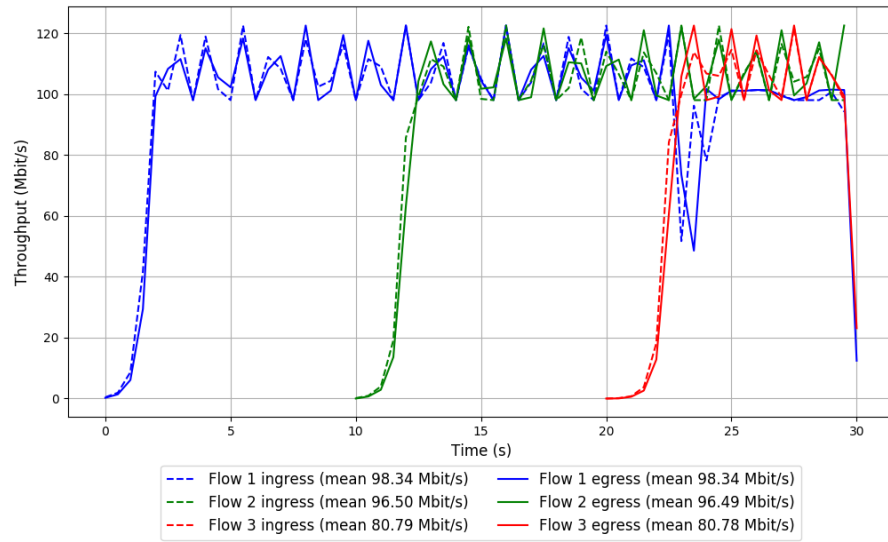
-- Flow 3:

Average throughput: 80.78 Mbit/s

95th percentile per-packet one-way delay: 113.162 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-03-14 01:51:17

End at: 2018-03-14 01:51:47

Below is generated by plot.py at 2018-03-14 05:08:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.84 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.35 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.02 Mbit/s

95th percentile per-packet one-way delay: 113.015 ms

Loss rate: 0.00%

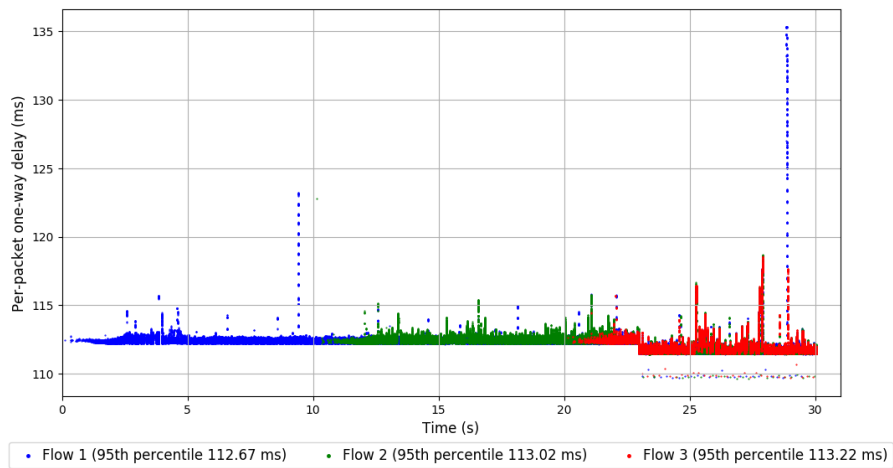
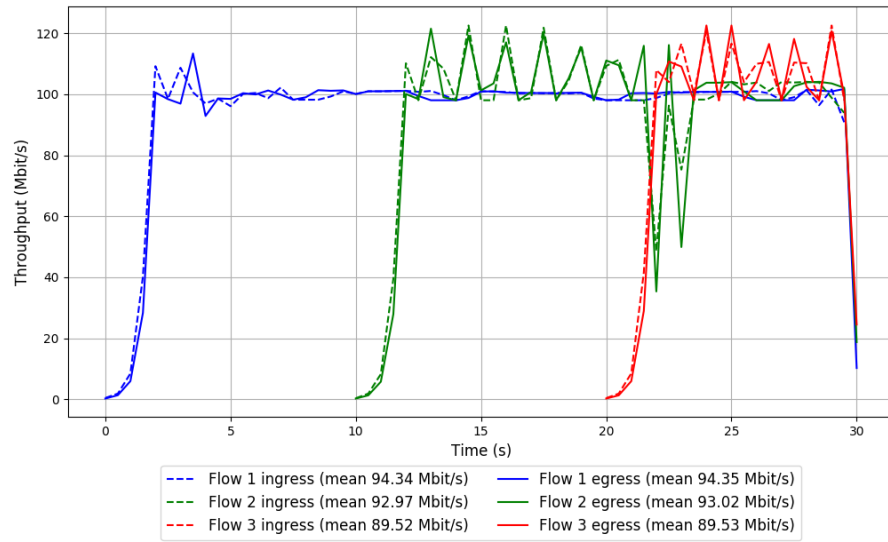
-- Flow 3:

Average throughput: 89.53 Mbit/s

95th percentile per-packet one-way delay: 113.222 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-03-14 02:10:51

End at: 2018-03-14 02:11:21

Below is generated by plot.py at 2018-03-14 05:08:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.46 Mbit/s

95th percentile per-packet one-way delay: 112.626 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 94.81 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 94.66 Mbit/s

95th percentile per-packet one-way delay: 112.586 ms

Loss rate: 0.00%

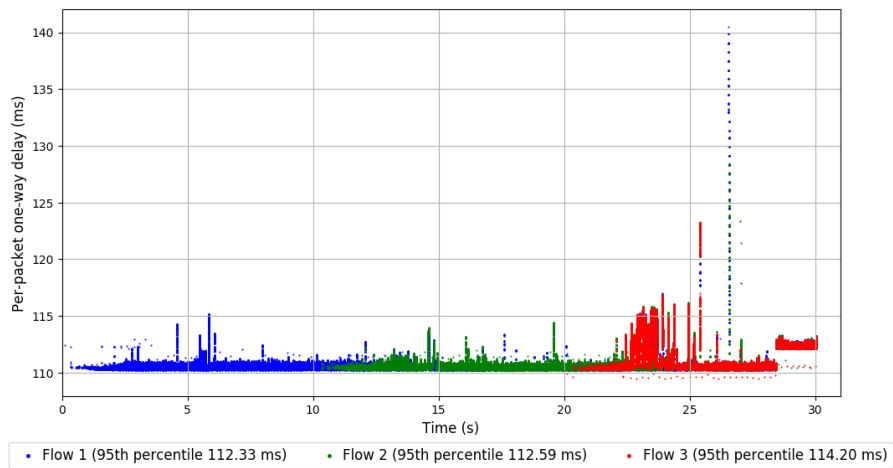
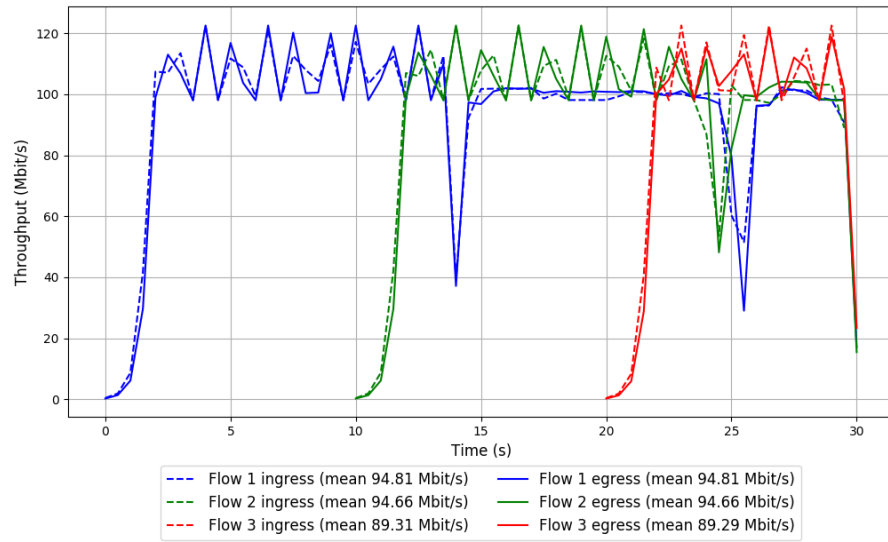
-- Flow 3:

Average throughput: 89.29 Mbit/s

95th percentile per-packet one-way delay: 114.201 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-03-14 02:30:14

End at: 2018-03-14 02:30:44

Below is generated by plot.py at 2018-03-14 05:11:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.70 Mbit/s

95th percentile per-packet one-way delay: 110.280 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 95.51 Mbit/s

95th percentile per-packet one-way delay: 110.133 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 92.40 Mbit/s

95th percentile per-packet one-way delay: 110.208 ms

Loss rate: 0.00%

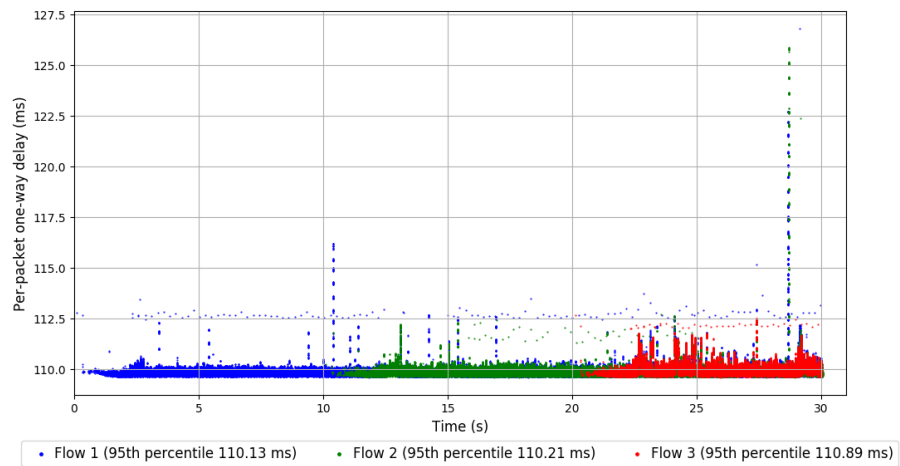
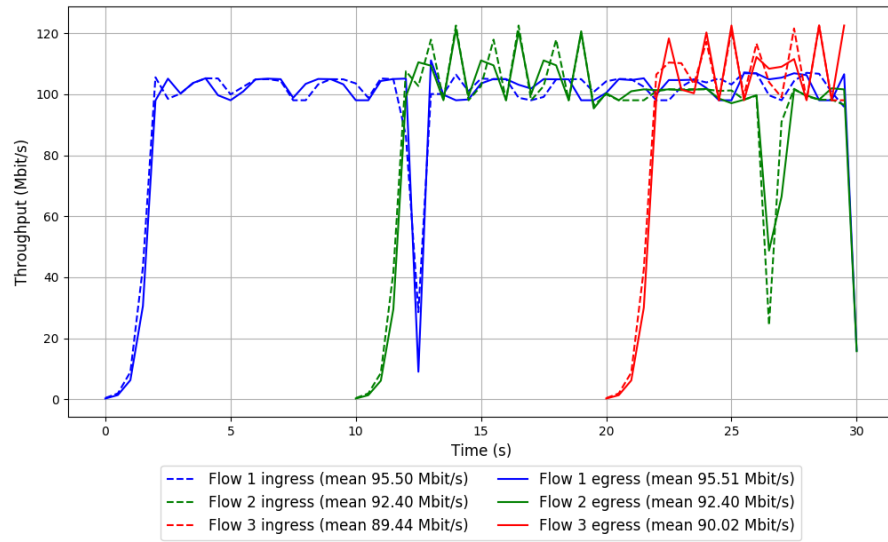
-- Flow 3:

Average throughput: 90.02 Mbit/s

95th percentile per-packet one-way delay: 110.885 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-03-14 02:49:15

End at: 2018-03-14 02:49:45

Below is generated by plot.py at 2018-03-14 05:11:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.42 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 95.87 Mbit/s

95th percentile per-packet one-way delay: 112.704 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 96.05 Mbit/s

95th percentile per-packet one-way delay: 113.941 ms

Loss rate: 0.00%

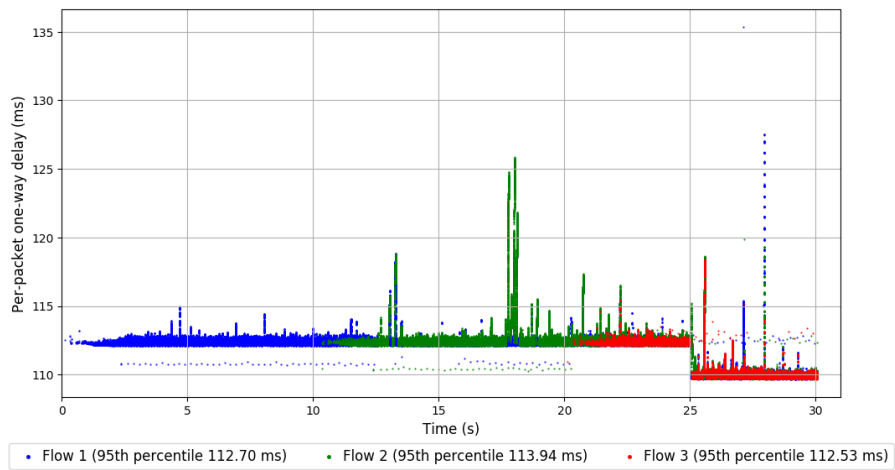
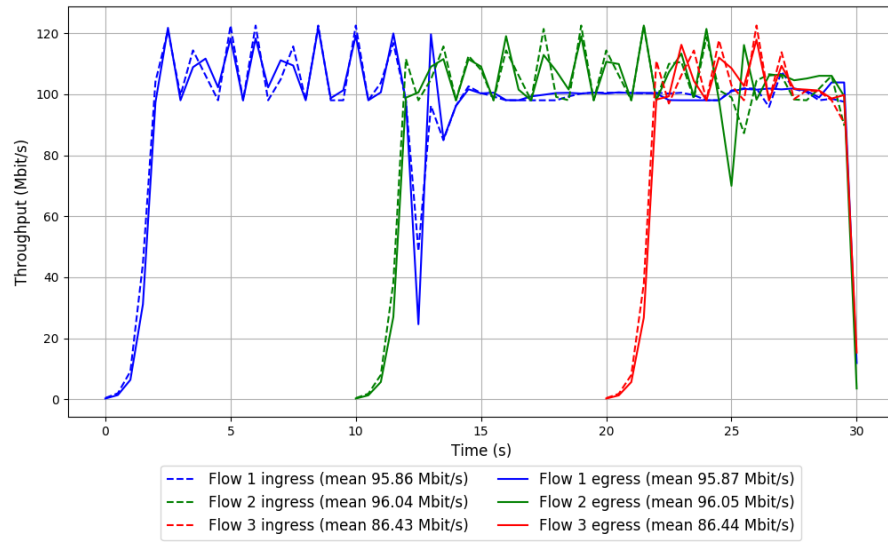
-- Flow 3:

Average throughput: 86.44 Mbit/s

95th percentile per-packet one-way delay: 112.528 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-03-13 23:47:41

End at: 2018-03-13 23:48:11

Below is generated by plot.py at 2018-03-14 05:11:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 157.66 Mbit/s

95th percentile per-packet one-way delay: 124.204 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 61.43 Mbit/s

95th percentile per-packet one-way delay: 123.050 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.70 Mbit/s

95th percentile per-packet one-way delay: 125.081 ms

Loss rate: 0.08%

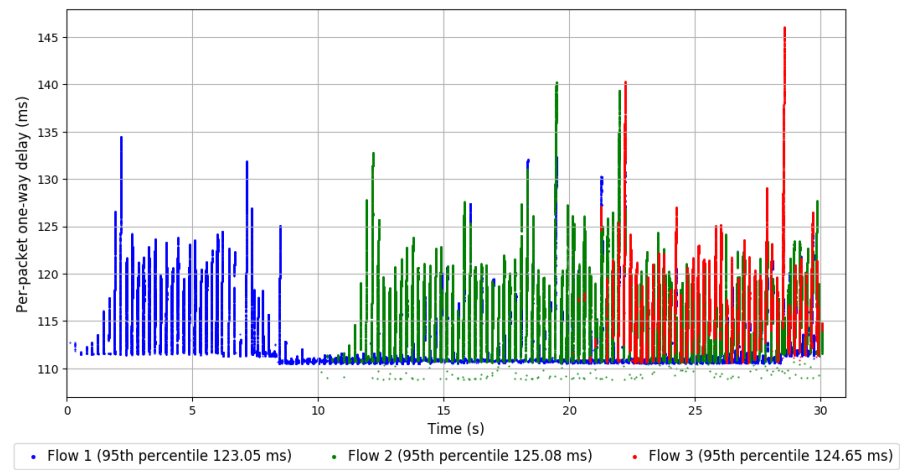
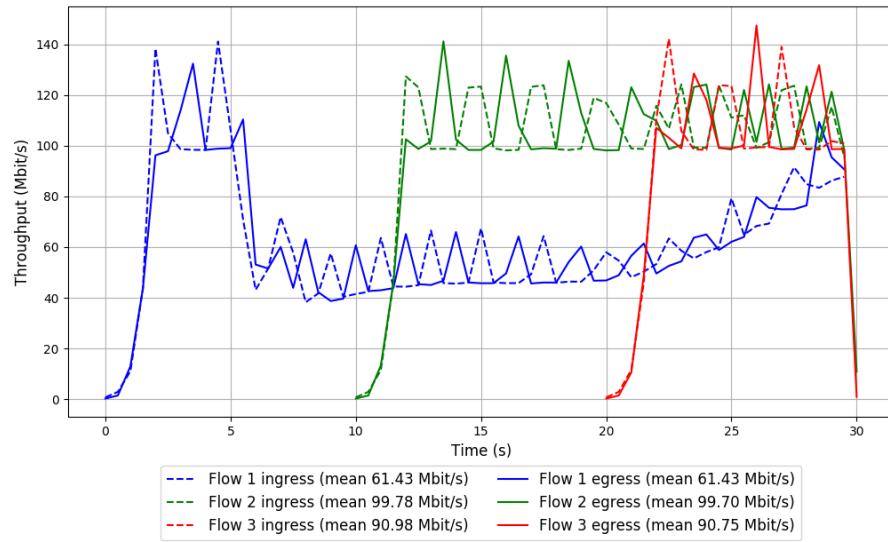
-- Flow 3:

Average throughput: 90.75 Mbit/s

95th percentile per-packet one-way delay: 124.648 ms

Loss rate: 0.25%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-03-14 00:07:10

End at: 2018-03-14 00:07:40

Below is generated by plot.py at 2018-03-14 05:11:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.45 Mbit/s

95th percentile per-packet one-way delay: 120.917 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 103.75 Mbit/s

95th percentile per-packet one-way delay: 121.360 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.74 Mbit/s

95th percentile per-packet one-way delay: 116.602 ms

Loss rate: 0.00%

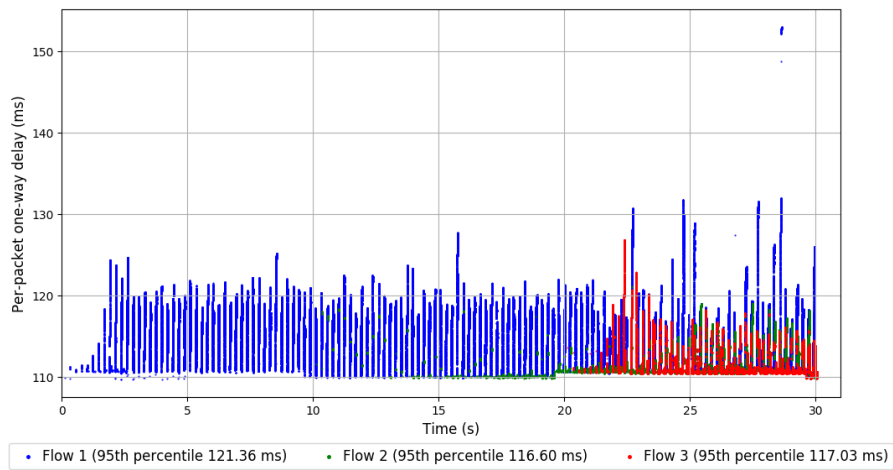
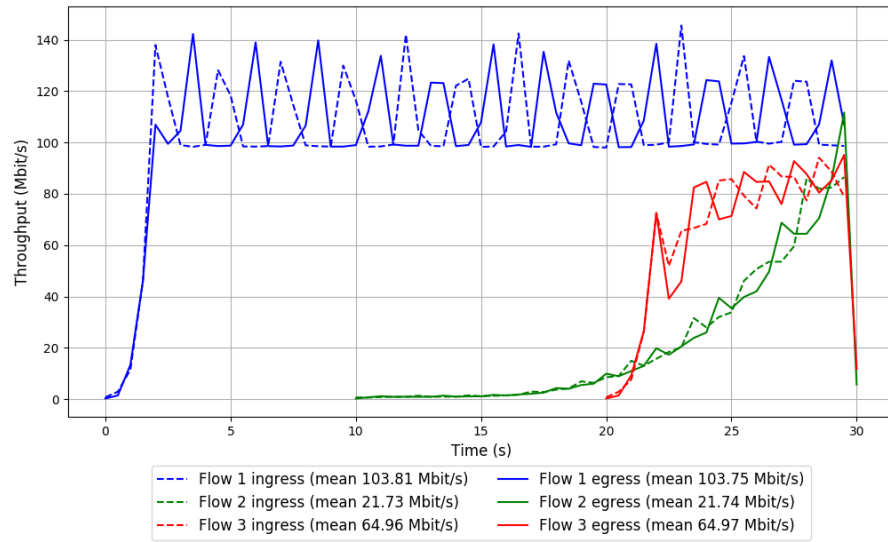
-- Flow 3:

Average throughput: 64.97 Mbit/s

95th percentile per-packet one-way delay: 117.029 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-03-14 00:26:25

End at: 2018-03-14 00:26:55

Below is generated by plot.py at 2018-03-14 05:11:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 168.48 Mbit/s

95th percentile per-packet one-way delay: 119.883 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 78.85 Mbit/s

95th percentile per-packet one-way delay: 120.200 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 88.74 Mbit/s

95th percentile per-packet one-way delay: 114.782 ms

Loss rate: 0.00%

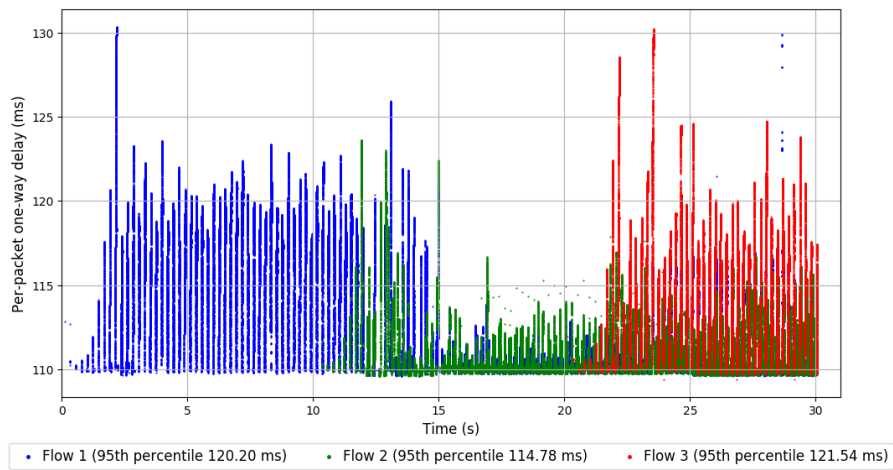
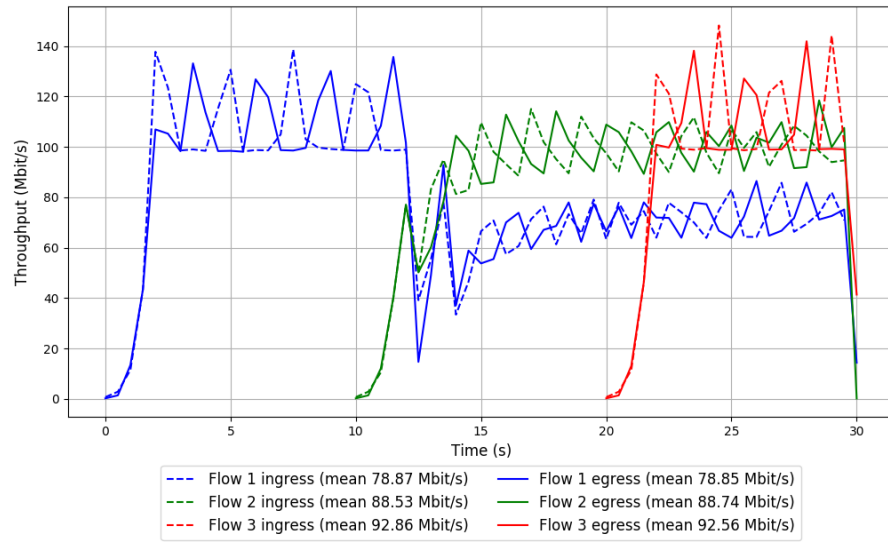
-- Flow 3:

Average throughput: 92.56 Mbit/s

95th percentile per-packet one-way delay: 121.539 ms

Loss rate: 0.33%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-03-14 00:46:21

End at: 2018-03-14 00:46:51

Below is generated by plot.py at 2018-03-14 05:11:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.27 Mbit/s

95th percentile per-packet one-way delay: 121.646 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 86.90 Mbit/s

95th percentile per-packet one-way delay: 121.914 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 23.15 Mbit/s

95th percentile per-packet one-way delay: 112.449 ms

Loss rate: 0.01%

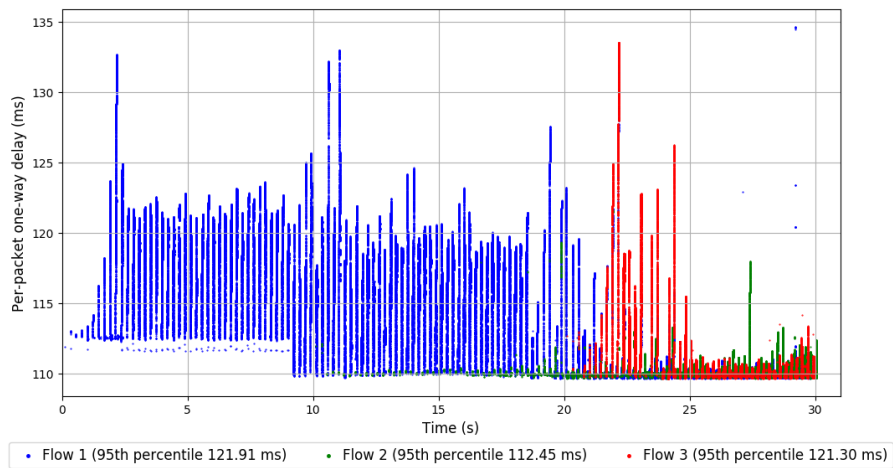
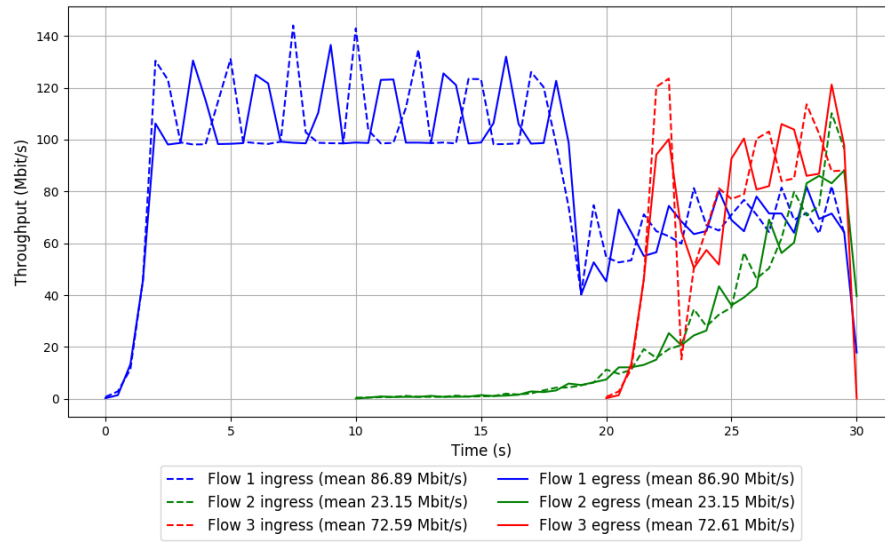
-- Flow 3:

Average throughput: 72.61 Mbit/s

95th percentile per-packet one-way delay: 121.296 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-03-14 01:05:16

End at: 2018-03-14 01:05:46

Below is generated by plot.py at 2018-03-14 05:11:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.52 Mbit/s

95th percentile per-packet one-way delay: 124.305 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.48 Mbit/s

95th percentile per-packet one-way delay: 124.983 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.47 Mbit/s

95th percentile per-packet one-way delay: 122.822 ms

Loss rate: 0.01%

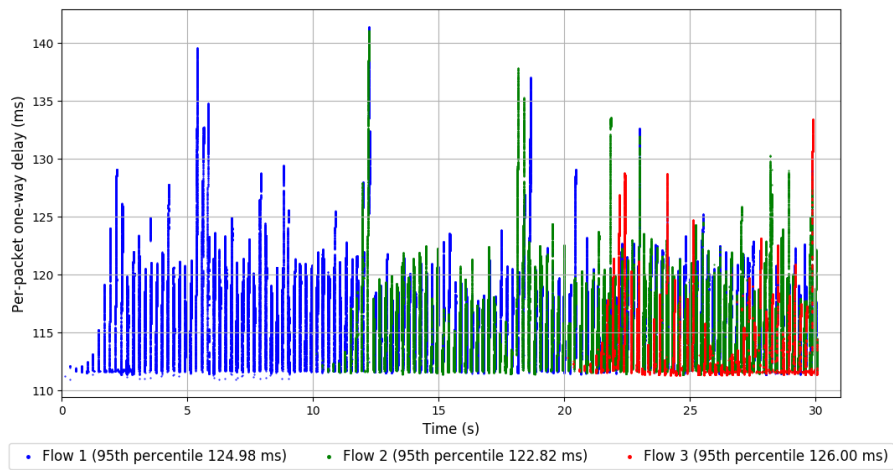
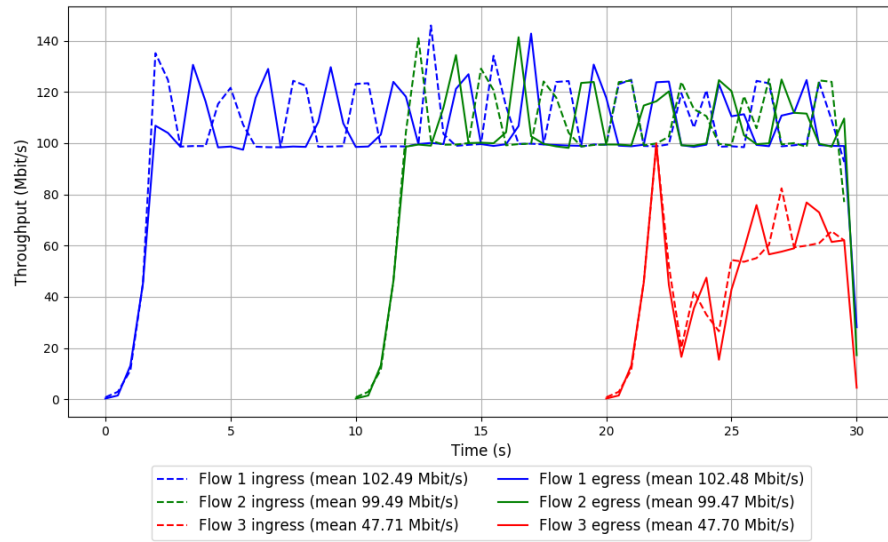
-- Flow 3:

Average throughput: 47.70 Mbit/s

95th percentile per-packet one-way delay: 126.003 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-03-14 01:24:50

End at: 2018-03-14 01:25:20

Below is generated by plot.py at 2018-03-14 05:11:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.46 Mbit/s

95th percentile per-packet one-way delay: 122.519 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 99.91 Mbit/s

95th percentile per-packet one-way delay: 122.114 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.46 Mbit/s

95th percentile per-packet one-way delay: 122.594 ms

Loss rate: 0.00%

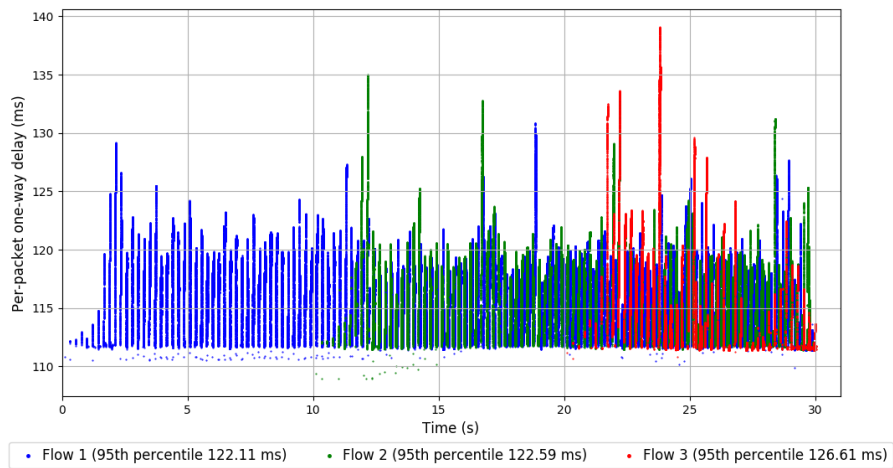
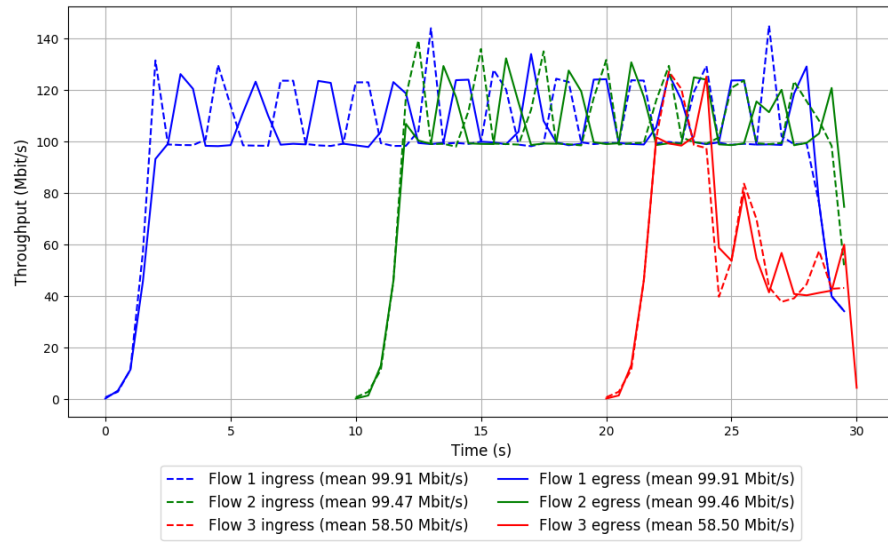
-- Flow 3:

Average throughput: 58.50 Mbit/s

95th percentile per-packet one-way delay: 126.606 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-03-14 01:44:40

End at: 2018-03-14 01:45:10

Below is generated by plot.py at 2018-03-14 05:13:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 167.73 Mbit/s

95th percentile per-packet one-way delay: 121.357 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 103.23 Mbit/s

95th percentile per-packet one-way delay: 121.819 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 97.69 Mbit/s

95th percentile per-packet one-way delay: 120.042 ms

Loss rate: 0.00%

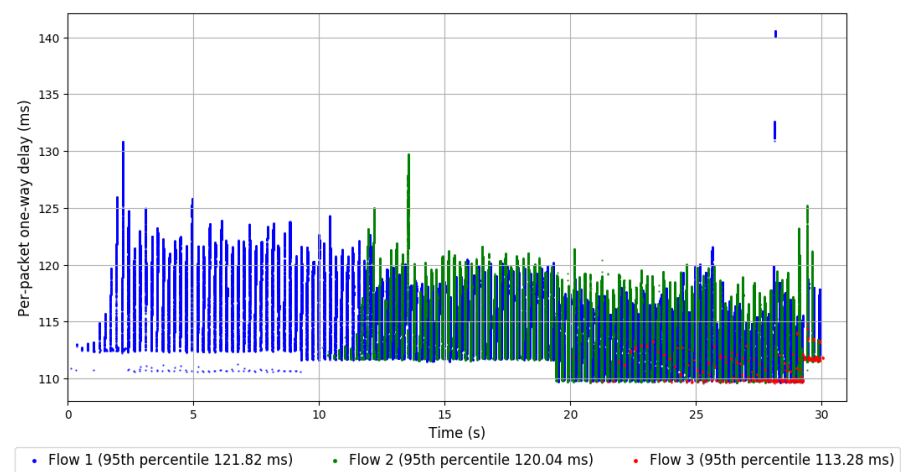
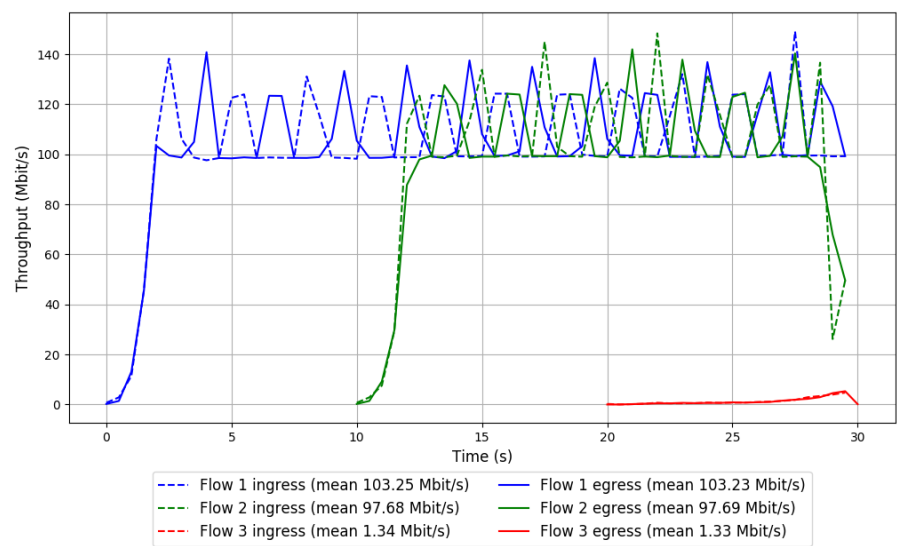
-- Flow 3:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 113.285 ms

Loss rate: 0.90%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-03-14 02:04:15

End at: 2018-03-14 02:04:45

Below is generated by plot.py at 2018-03-14 05:13:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.90 Mbit/s

95th percentile per-packet one-way delay: 121.909 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 101.87 Mbit/s

95th percentile per-packet one-way delay: 122.040 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 25.68 Mbit/s

95th percentile per-packet one-way delay: 120.387 ms

Loss rate: 0.02%

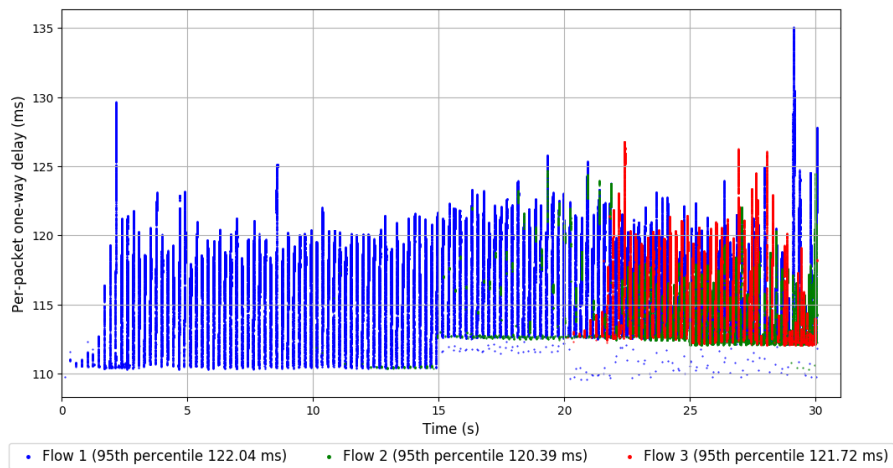
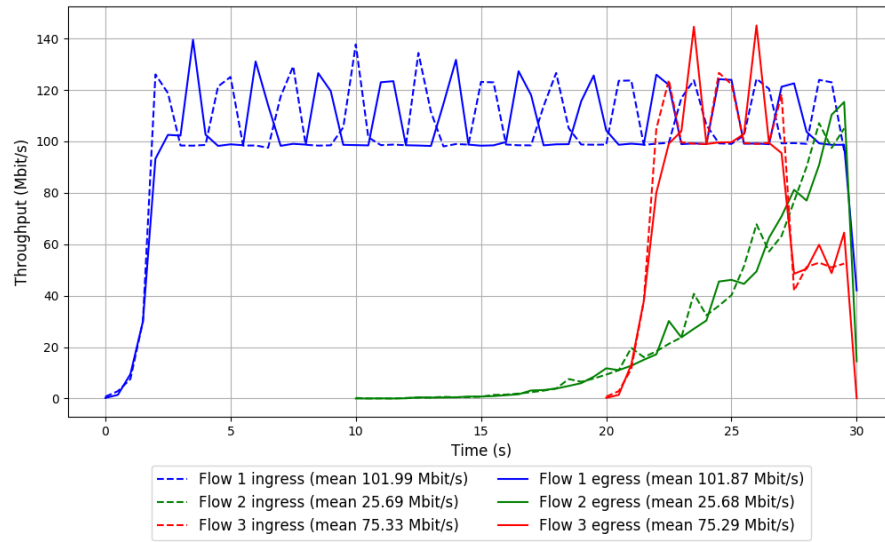
-- Flow 3:

Average throughput: 75.29 Mbit/s

95th percentile per-packet one-way delay: 121.725 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-03-14 02:23:45

End at: 2018-03-14 02:24:15

Below is generated by plot.py at 2018-03-14 05:13:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.66 Mbit/s

95th percentile per-packet one-way delay: 121.687 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.57 Mbit/s

95th percentile per-packet one-way delay: 120.069 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.34 Mbit/s

95th percentile per-packet one-way delay: 122.504 ms

Loss rate: 0.00%

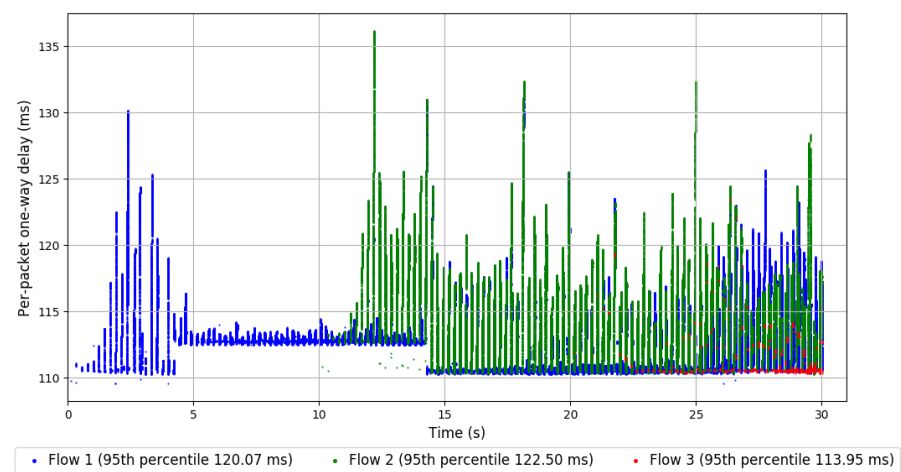
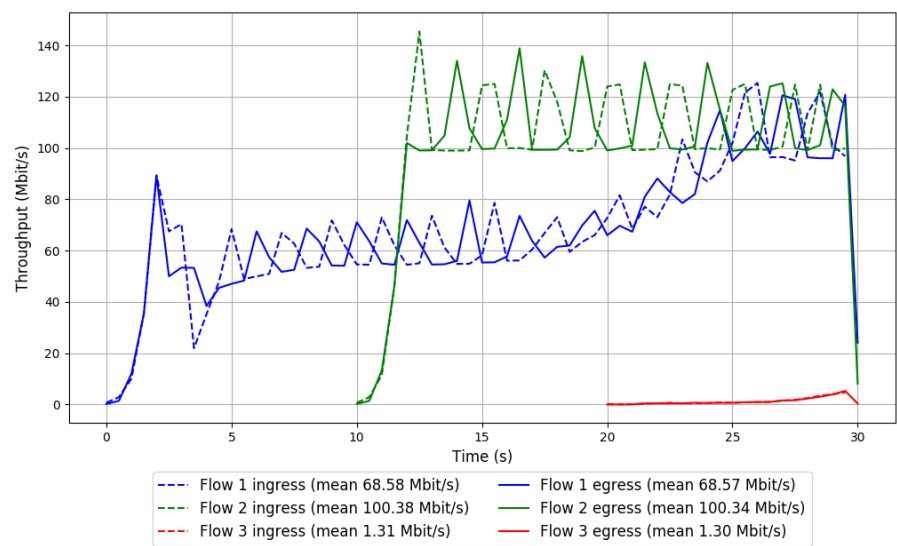
-- Flow 3:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 113.951 ms

Loss rate: 0.92%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-03-14 02:42:49

End at: 2018-03-14 02:43:19

Below is generated by plot.py at 2018-03-14 05:13:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.72 Mbit/s

95th percentile per-packet one-way delay: 124.073 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.98 Mbit/s

95th percentile per-packet one-way delay: 123.419 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.04 Mbit/s

95th percentile per-packet one-way delay: 128.920 ms

Loss rate: 0.00%

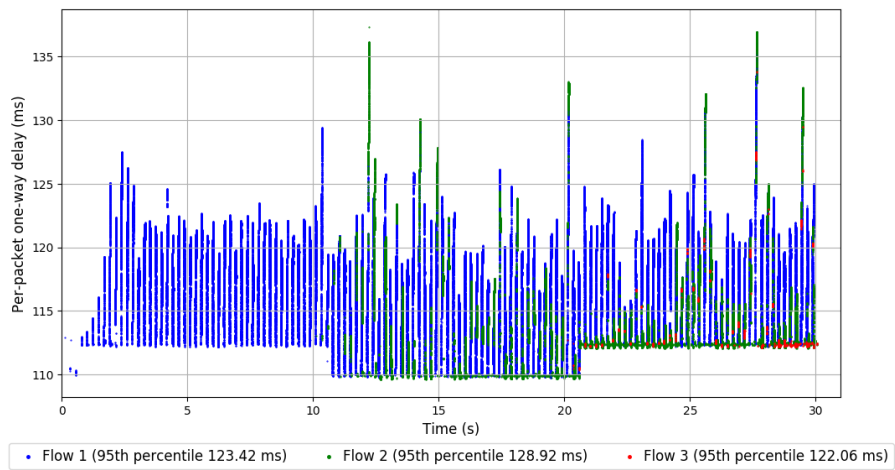
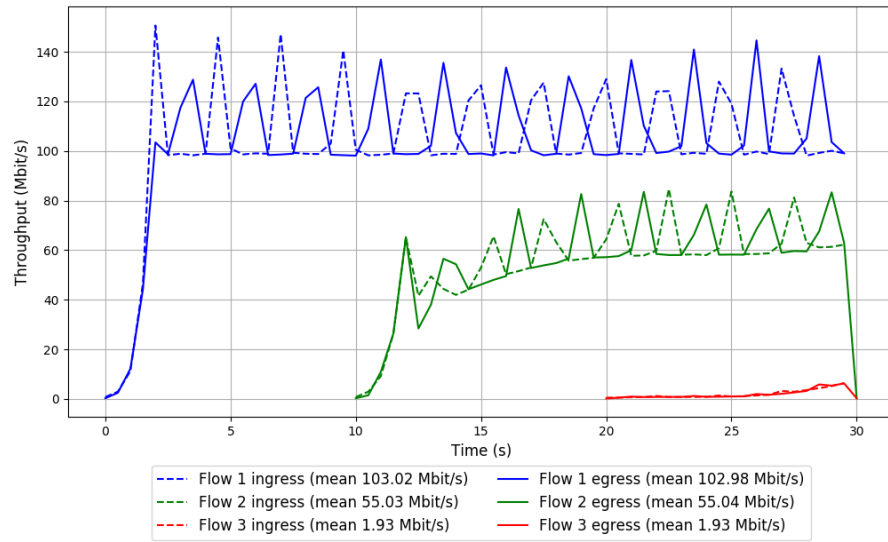
-- Flow 3:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 122.065 ms

Loss rate: 0.37%

Run 10: Report of TCP Cubic — Data Link

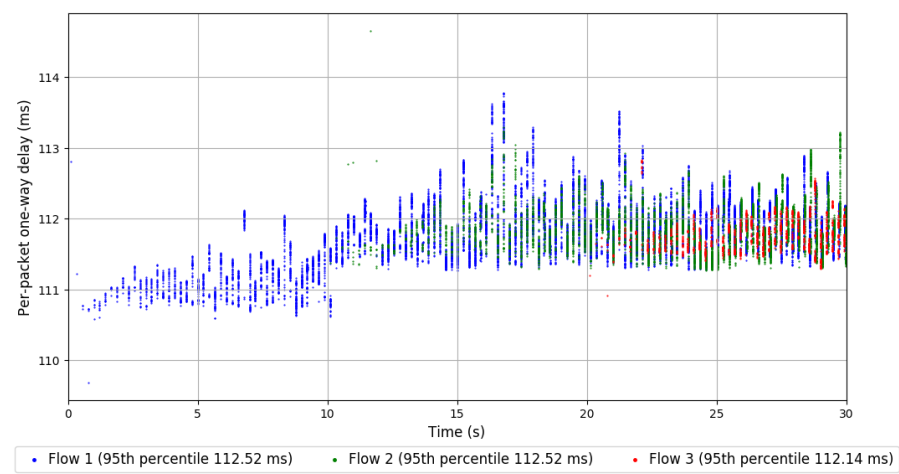
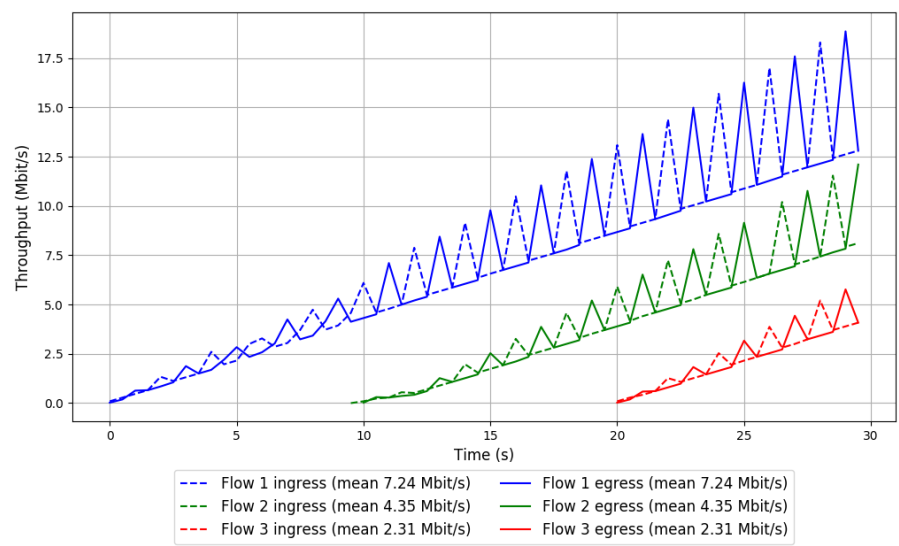


```
Run 1: Statistics of LEDBAT

Start at: 2018-03-13 23:53:19
End at: 2018-03-13 23:53:49

# Below is generated by plot.py at 2018-03-14 05:13:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.88 Mbit/s
95th percentile per-packet one-way delay: 112.501 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.24 Mbit/s
95th percentile per-packet one-way delay: 112.515 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 112.517 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 112.135 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

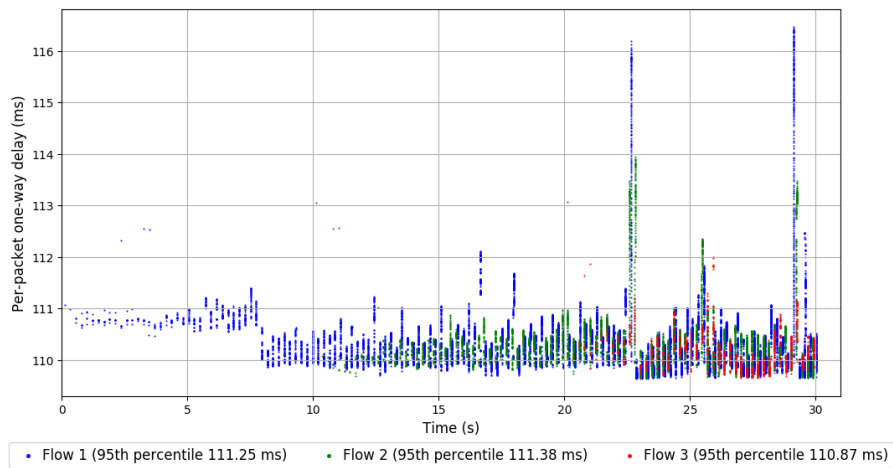
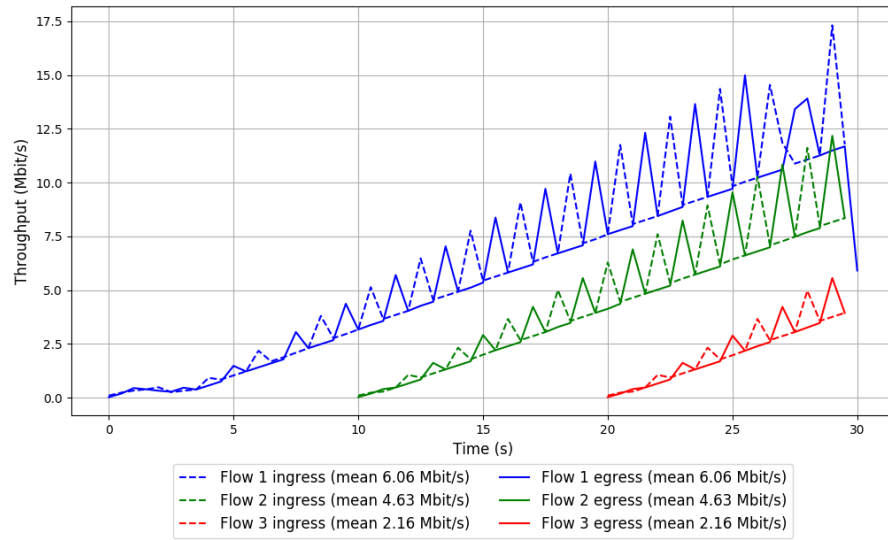


```
Run 2: Statistics of LEDBAT

Start at: 2018-03-14 00:12:52
End at: 2018-03-14 00:13:22

# Below is generated by plot.py at 2018-03-14 05:13:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.83 Mbit/s
95th percentile per-packet one-way delay: 111.199 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.06 Mbit/s
95th percentile per-packet one-way delay: 111.249 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.63 Mbit/s
95th percentile per-packet one-way delay: 111.380 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 110.870 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

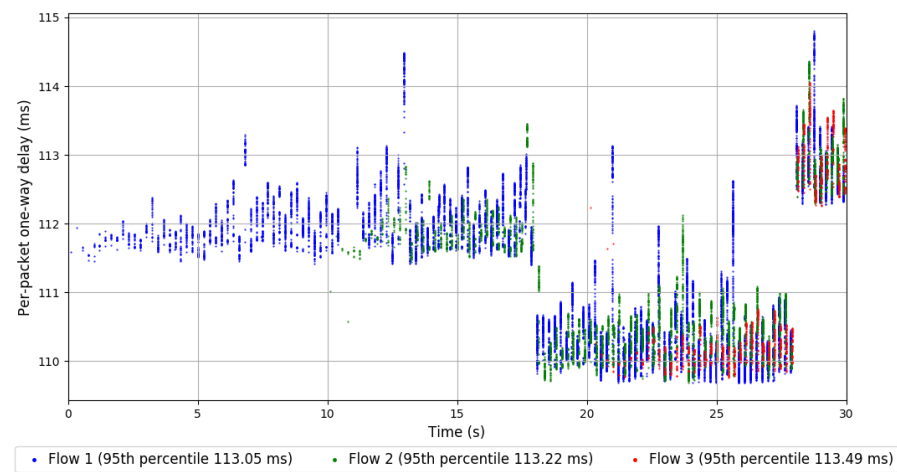
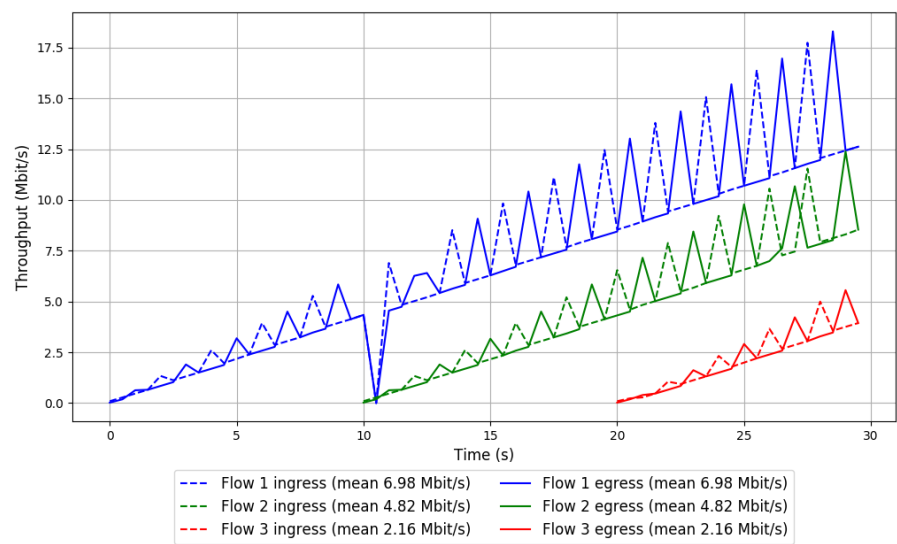


```
Run 3: Statistics of LEDBAT

Start at: 2018-03-14 00:32:12
End at: 2018-03-14 00:32:42

# Below is generated by plot.py at 2018-03-14 05:13:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.87 Mbit/s
95th percentile per-packet one-way delay: 113.166 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.98 Mbit/s
95th percentile per-packet one-way delay: 113.053 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 113.225 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 113.490 ms
Loss rate: 0.00%
```

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-03-14 00:51:46

End at: 2018-03-14 00:52:16

Below is generated by plot.py at 2018-03-14 05:13:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.68 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.14 Mbit/s

95th percentile per-packet one-way delay: 113.186 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.61 Mbit/s

95th percentile per-packet one-way delay: 112.922 ms

Loss rate: 0.00%

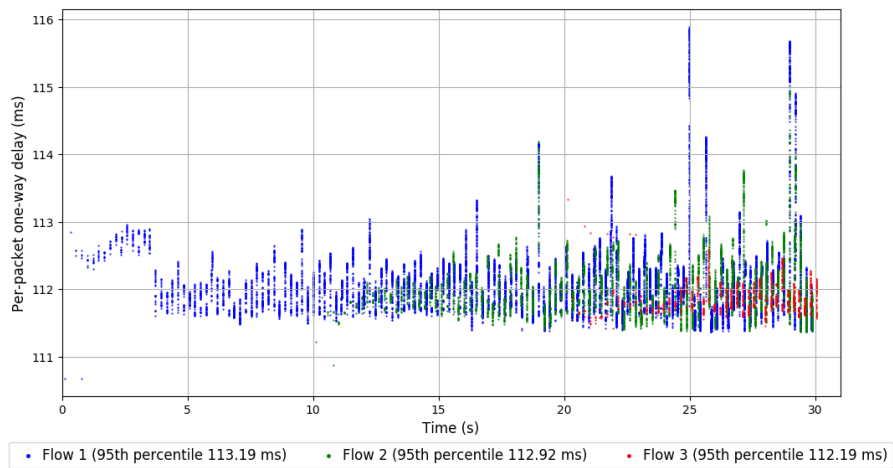
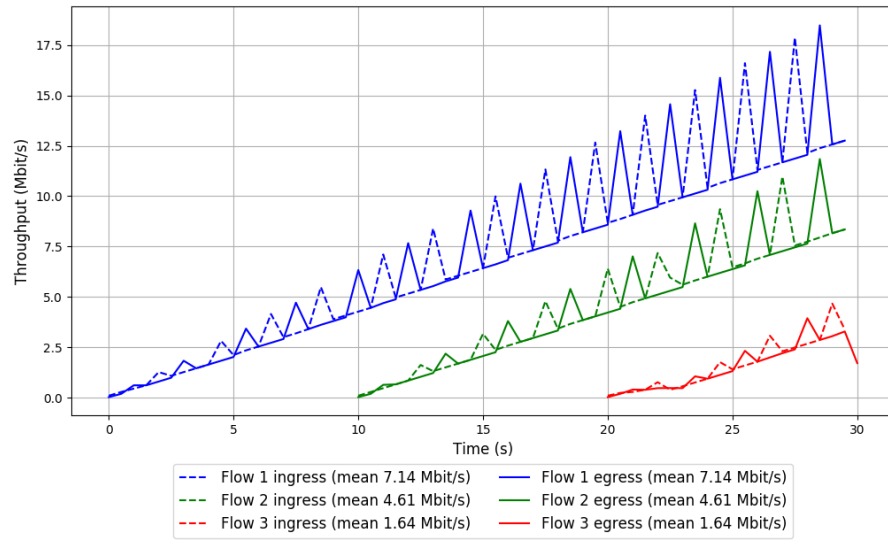
-- Flow 3:

Average throughput: 1.64 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

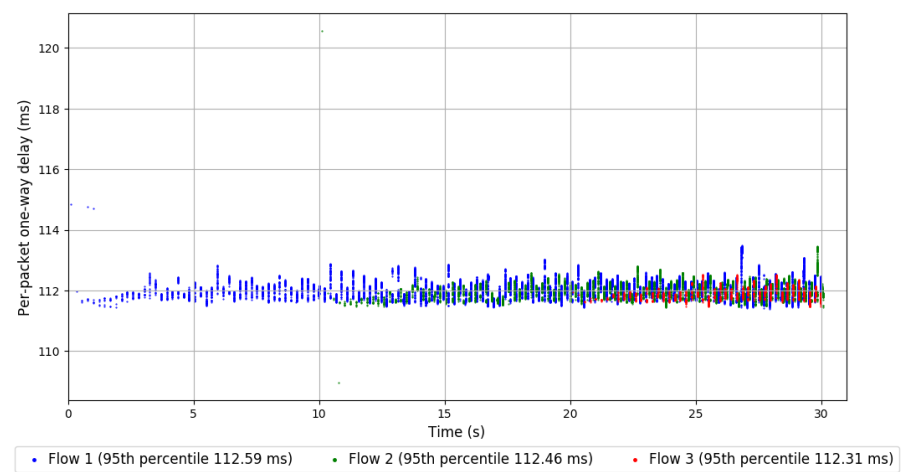
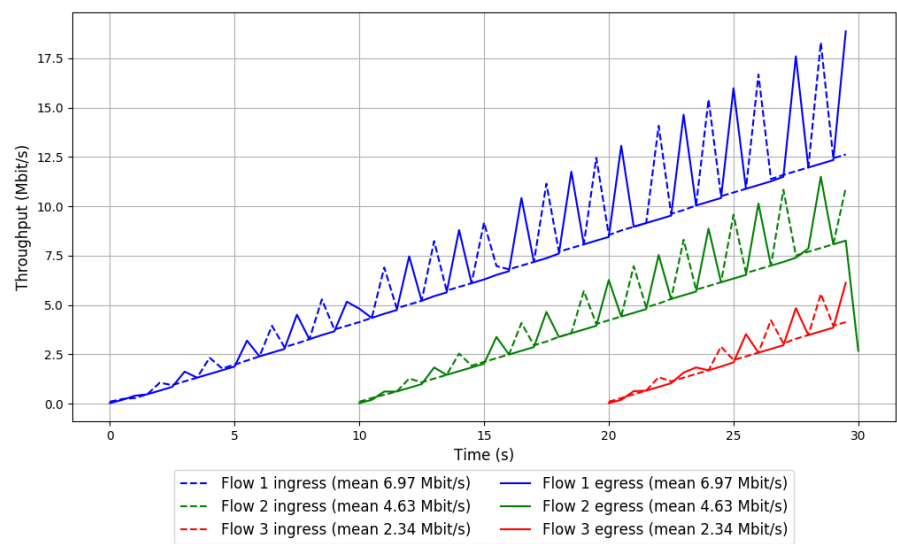


```
Run 5: Statistics of LEDBAT

Start at: 2018-03-14 01:11:00
End at: 2018-03-14 01:11:30

# Below is generated by plot.py at 2018-03-14 05:13:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.80 Mbit/s
95th percentile per-packet one-way delay: 112.536 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 112.587 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.63 Mbit/s
95th percentile per-packet one-way delay: 112.463 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 112.307 ms
Loss rate: 0.00%
```


Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-03-14 01:30:29

End at: 2018-03-14 01:30:59

Below is generated by plot.py at 2018-03-14 05:13:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.40 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.56 Mbit/s

95th percentile per-packet one-way delay: 112.822 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.68 Mbit/s

95th percentile per-packet one-way delay: 112.771 ms

Loss rate: 0.00%

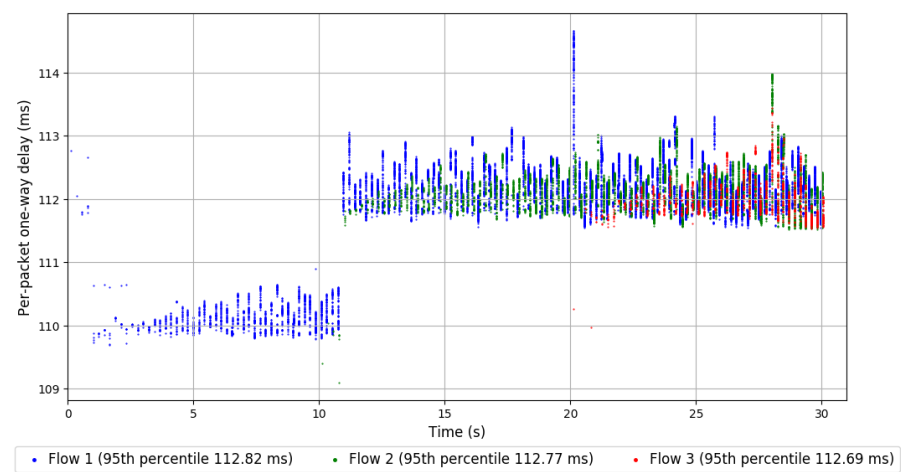
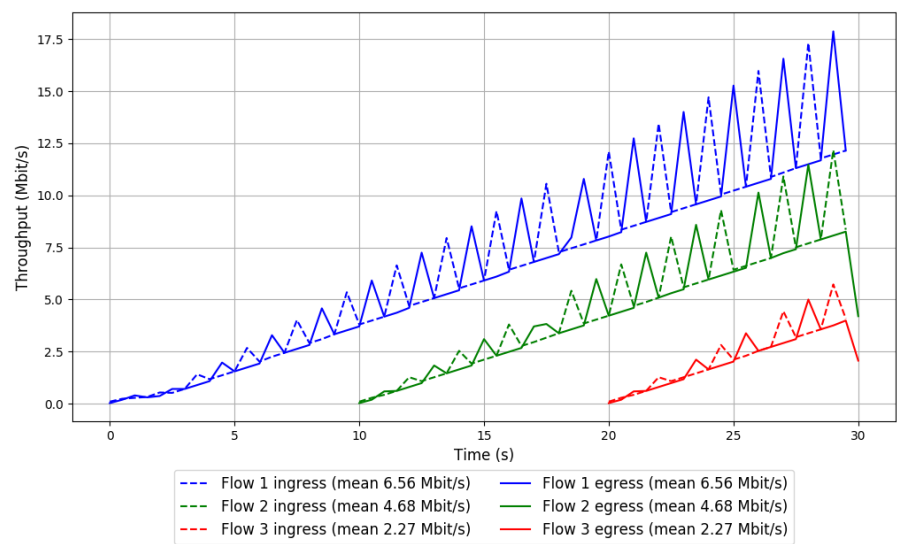
-- Flow 3:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 112.687 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-03-14 01:50:29

End at: 2018-03-14 01:50:59

Below is generated by plot.py at 2018-03-14 05:13:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.82 Mbit/s

95th percentile per-packet one-way delay: 112.403 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.92 Mbit/s

95th percentile per-packet one-way delay: 112.468 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.84 Mbit/s

95th percentile per-packet one-way delay: 112.235 ms

Loss rate: 0.00%

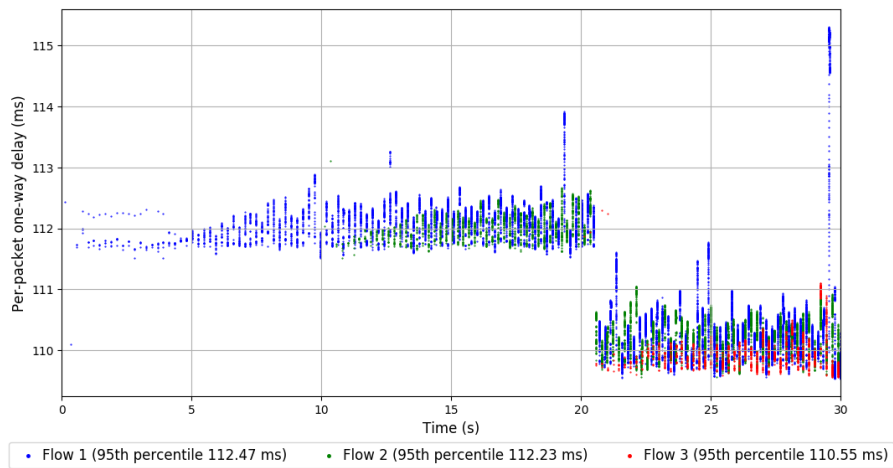
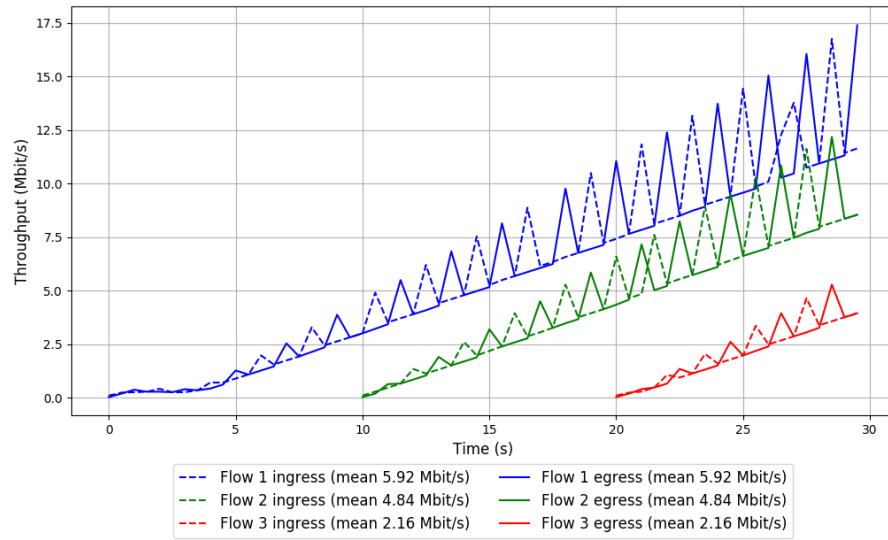
-- Flow 3:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 110.547 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-03-14 02:10:04

End at: 2018-03-14 02:10:34

Below is generated by plot.py at 2018-03-14 05:13:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.77 Mbit/s

95th percentile per-packet one-way delay: 113.633 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.97 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.66 Mbit/s

95th percentile per-packet one-way delay: 113.503 ms

Loss rate: 0.00%

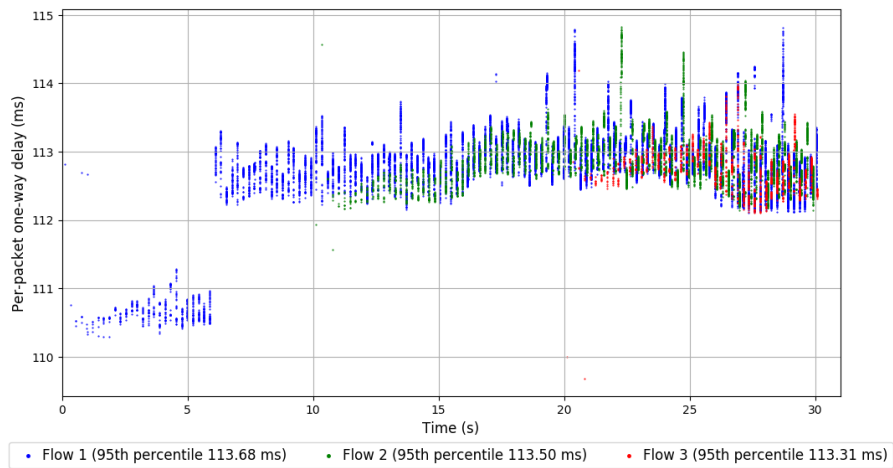
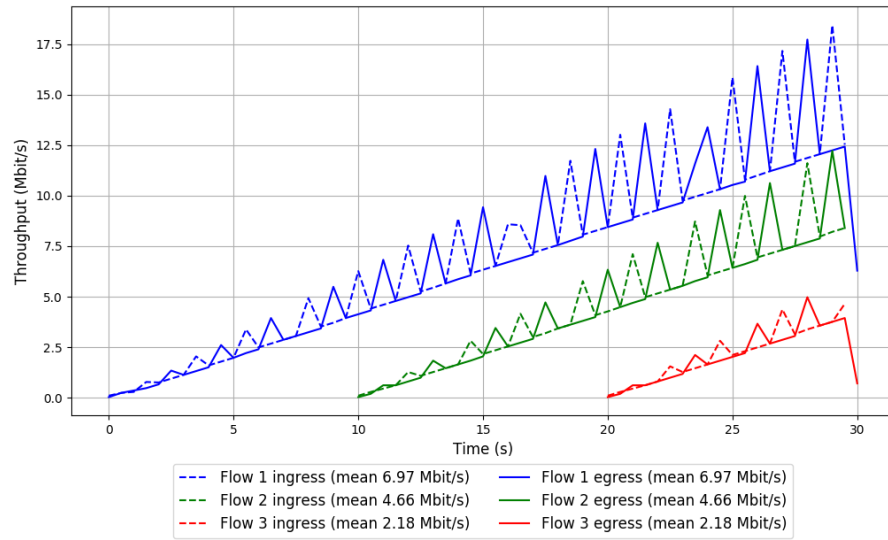
-- Flow 3:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 113.312 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-03-14 02:29:26

End at: 2018-03-14 02:29:56

Below is generated by plot.py at 2018-03-14 05:13:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.91 Mbit/s

95th percentile per-packet one-way delay: 113.456 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.09 Mbit/s

95th percentile per-packet one-way delay: 113.629 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.70 Mbit/s

95th percentile per-packet one-way delay: 113.236 ms

Loss rate: 0.00%

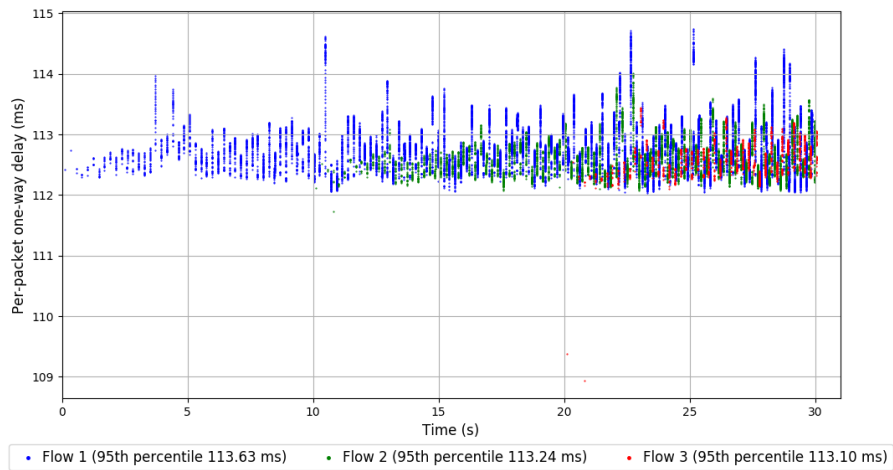
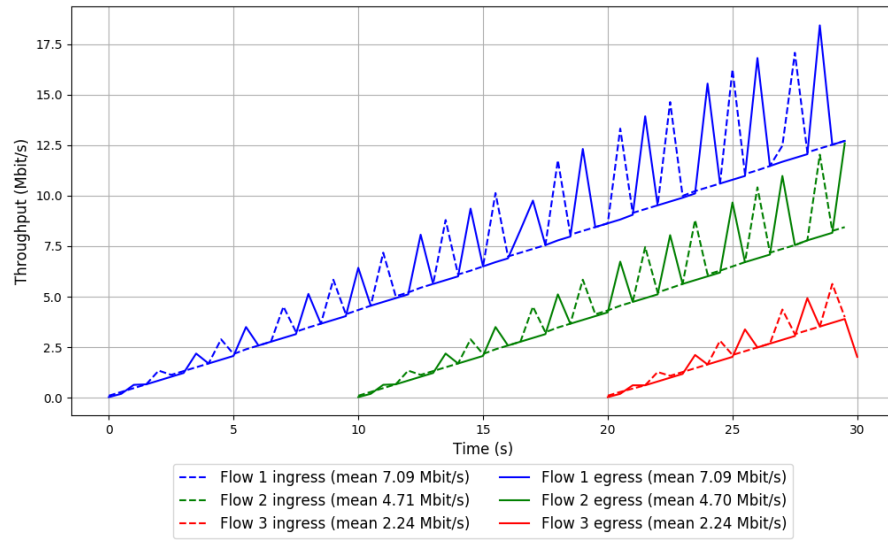
-- Flow 3:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 113.102 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

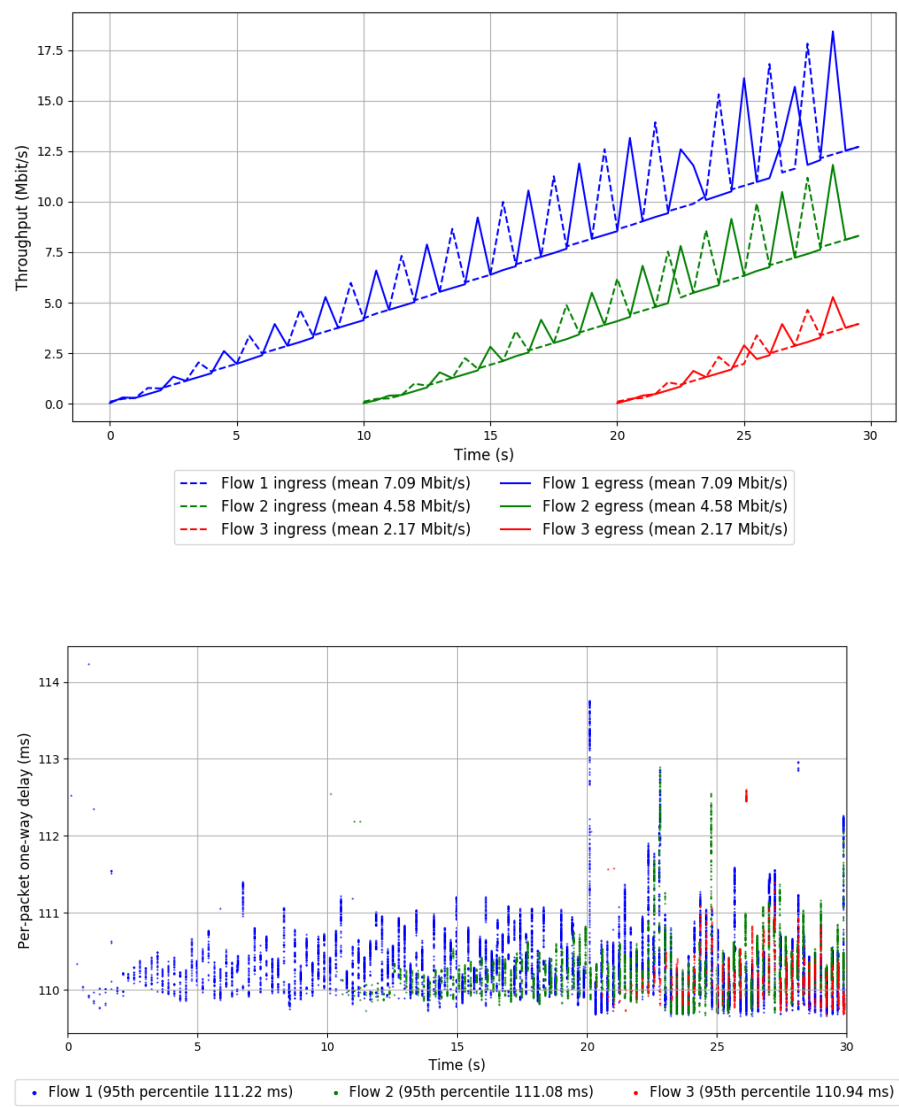


```
Run 10: Statistics of LEDBAT

Start at: 2018-03-14 02:48:27
End at: 2018-03-14 02:48:57

# Below is generated by plot.py at 2018-03-14 05:13:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.84 Mbit/s
95th percentile per-packet one-way delay: 111.182 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 111.215 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 111.077 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 110.939 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

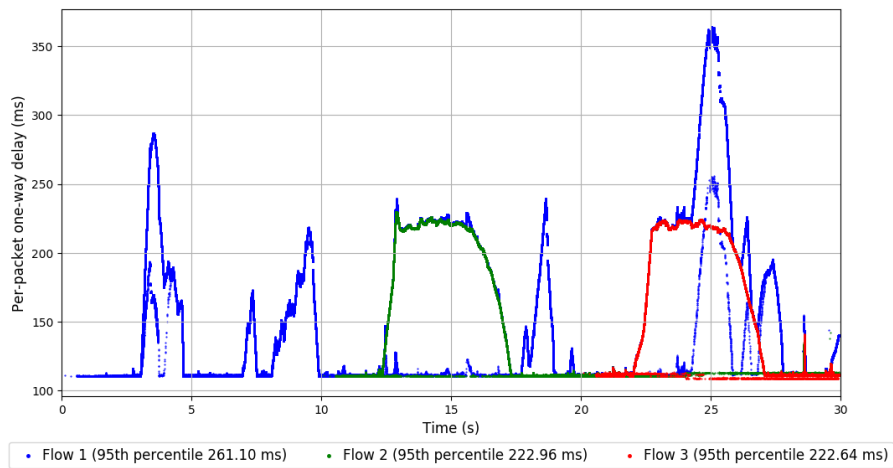
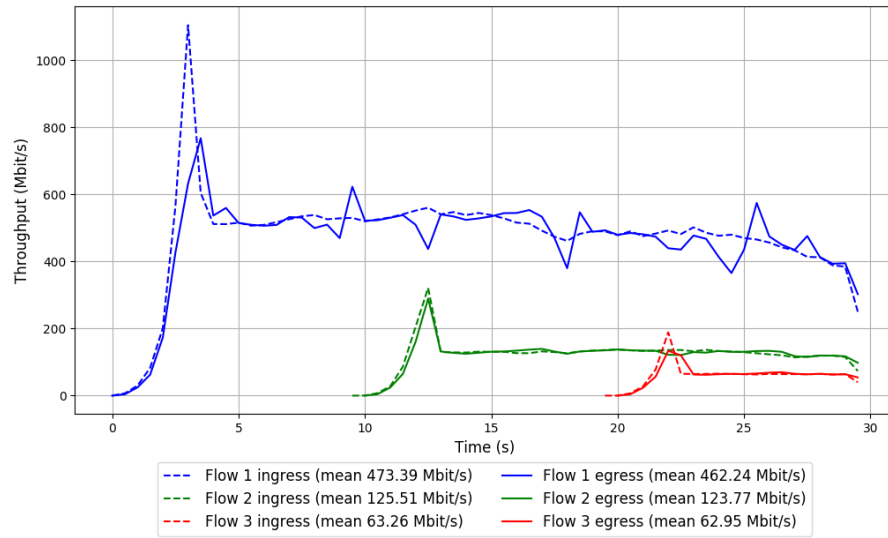


```
Run 1: Statistics of PCC

Start at: 2018-03-13 23:56:15
End at: 2018-03-13 23:56:45

# Below is generated by plot.py at 2018-03-14 05:21:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 565.37 Mbit/s
95th percentile per-packet one-way delay: 236.115 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 462.24 Mbit/s
95th percentile per-packet one-way delay: 261.096 ms
Loss rate: 2.35%
-- Flow 2:
Average throughput: 123.77 Mbit/s
95th percentile per-packet one-way delay: 222.962 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 62.95 Mbit/s
95th percentile per-packet one-way delay: 222.641 ms
Loss rate: 0.51%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-03-14 00:15:49

End at: 2018-03-14 00:16:19

Below is generated by plot.py at 2018-03-14 05:21:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 554.18 Mbit/s

95th percentile per-packet one-way delay: 305.910 ms

Loss rate: 4.42%

-- Flow 1:

Average throughput: 489.67 Mbit/s

95th percentile per-packet one-way delay: 316.681 ms

Loss rate: 4.76%

-- Flow 2:

Average throughput: 65.97 Mbit/s

95th percentile per-packet one-way delay: 224.243 ms

Loss rate: 1.33%

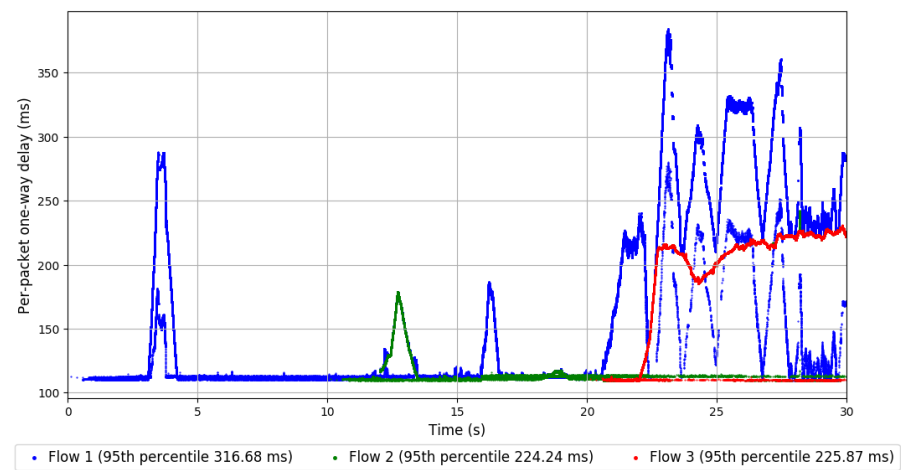
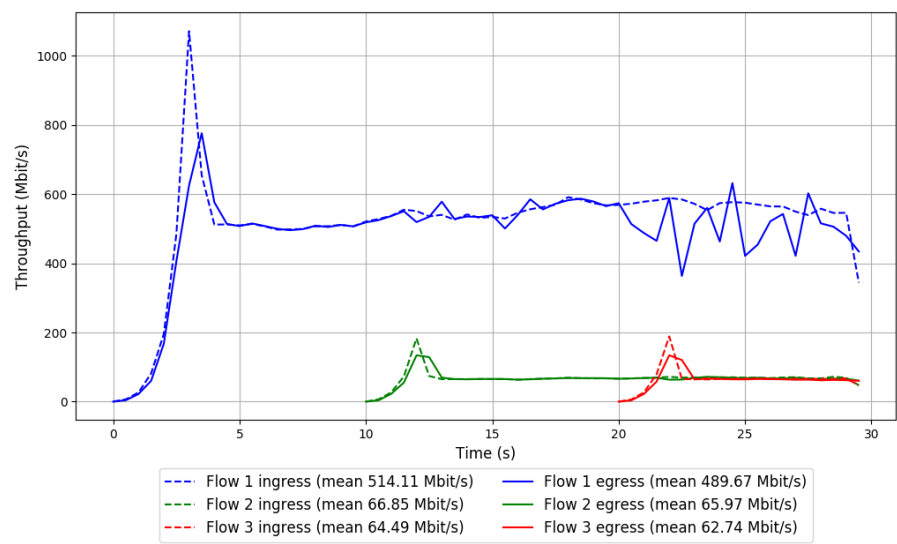
-- Flow 3:

Average throughput: 62.74 Mbit/s

95th percentile per-packet one-way delay: 225.865 ms

Loss rate: 2.73%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-03-14 00:35:08

End at: 2018-03-14 00:35:38

Below is generated by plot.py at 2018-03-14 05:21:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 551.03 Mbit/s

95th percentile per-packet one-way delay: 238.860 ms

Loss rate: 2.32%

-- Flow 1:

Average throughput: 507.86 Mbit/s

95th percentile per-packet one-way delay: 240.065 ms

Loss rate: 2.44%

-- Flow 2:

Average throughput: 63.79 Mbit/s

95th percentile per-packet one-way delay: 230.537 ms

Loss rate: 0.85%

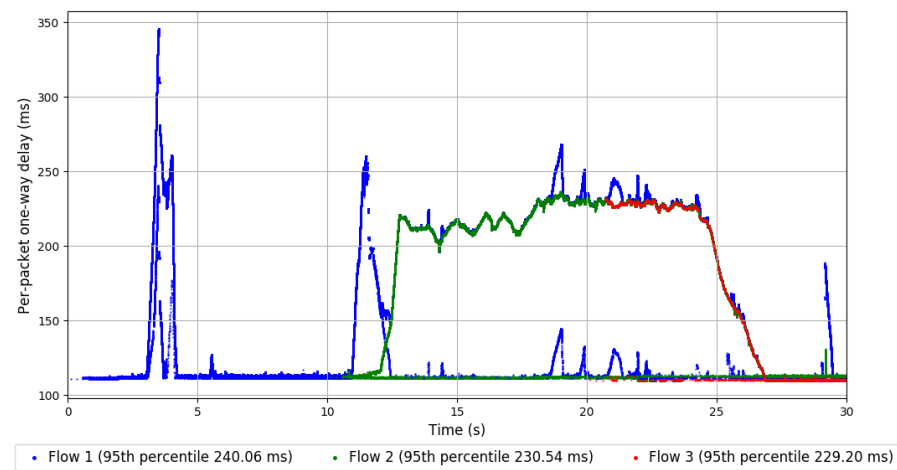
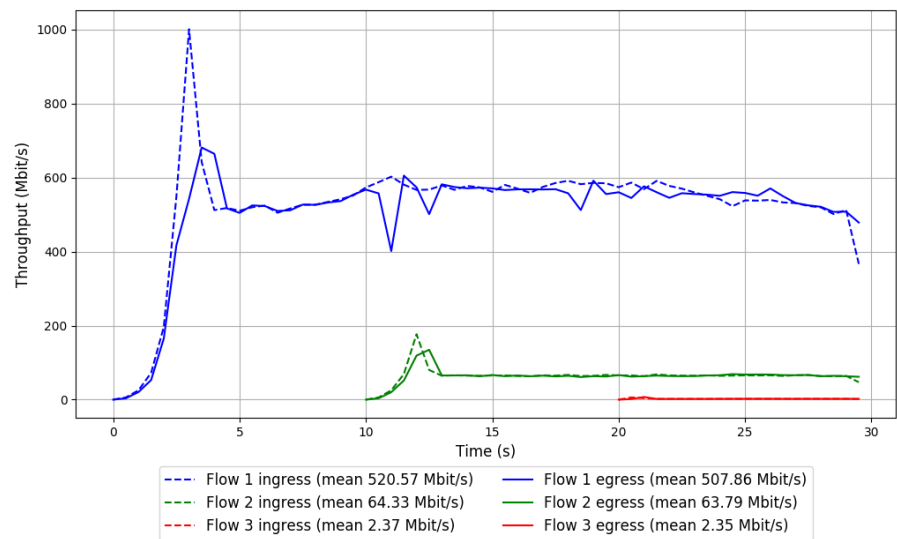
-- Flow 3:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 229.202 ms

Loss rate: 1.13%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-03-14 00:54:43

End at: 2018-03-14 00:55:13

Below is generated by plot.py at 2018-03-14 05:21:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 505.35 Mbit/s

95th percentile per-packet one-way delay: 276.914 ms

Loss rate: 5.80%

-- Flow 1:

Average throughput: 432.02 Mbit/s

95th percentile per-packet one-way delay: 278.699 ms

Loss rate: 5.97%

-- Flow 2:

Average throughput: 109.33 Mbit/s

95th percentile per-packet one-way delay: 265.629 ms

Loss rate: 4.78%

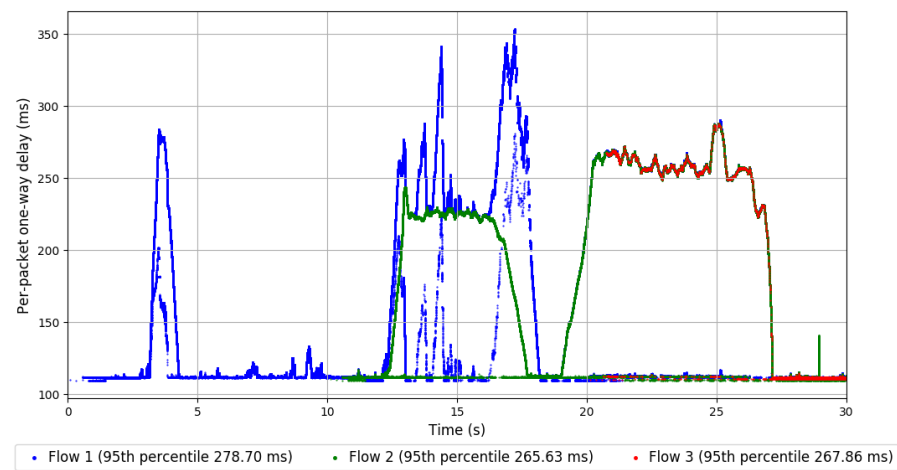
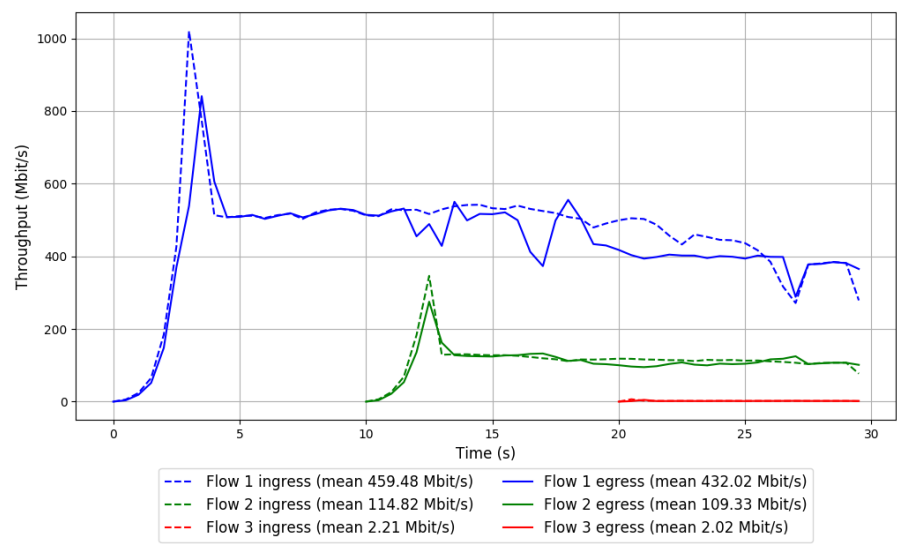
-- Flow 3:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 267.860 ms

Loss rate: 8.30%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-03-14 01:13:57

End at: 2018-03-14 01:14:27

Below is generated by plot.py at 2018-03-14 05:22:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 564.78 Mbit/s

95th percentile per-packet one-way delay: 239.199 ms

Loss rate: 3.02%

-- Flow 1:

Average throughput: 475.63 Mbit/s

95th percentile per-packet one-way delay: 242.161 ms

Loss rate: 3.15%

-- Flow 2:

Average throughput: 125.54 Mbit/s

95th percentile per-packet one-way delay: 222.288 ms

Loss rate: 2.48%

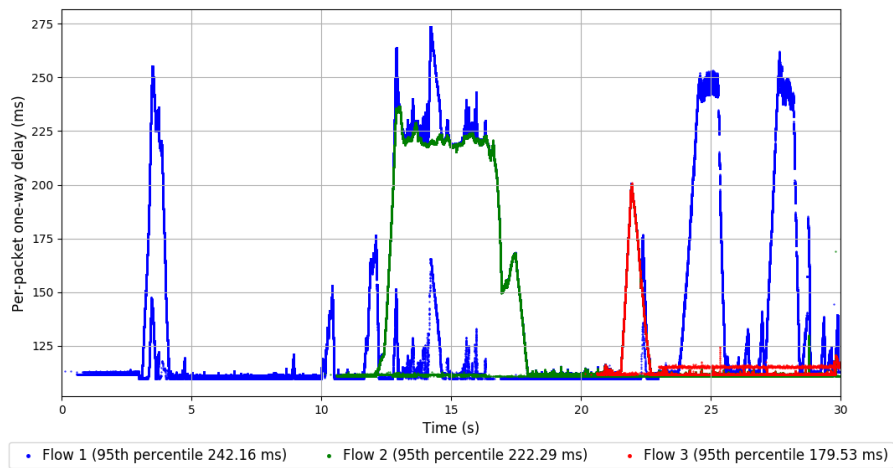
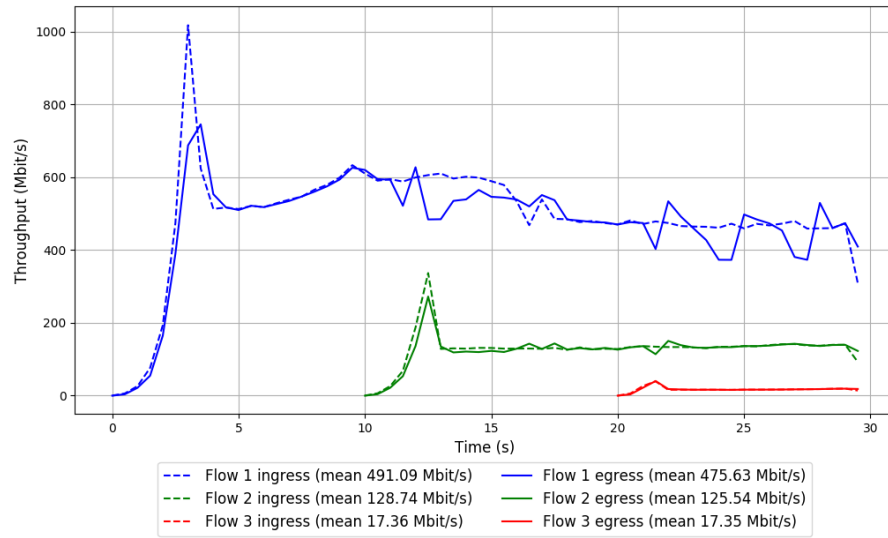
-- Flow 3:

Average throughput: 17.35 Mbit/s

95th percentile per-packet one-way delay: 179.525 ms

Loss rate: 0.05%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-03-14 01:33:27

End at: 2018-03-14 01:33:57

Below is generated by plot.py at 2018-03-14 05:22:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 554.11 Mbit/s

95th percentile per-packet one-way delay: 238.437 ms

Loss rate: 3.12%

-- Flow 1:

Average throughput: 463.43 Mbit/s

95th percentile per-packet one-way delay: 242.009 ms

Loss rate: 3.47%

-- Flow 2:

Average throughput: 134.31 Mbit/s

95th percentile per-packet one-way delay: 219.277 ms

Loss rate: 1.33%

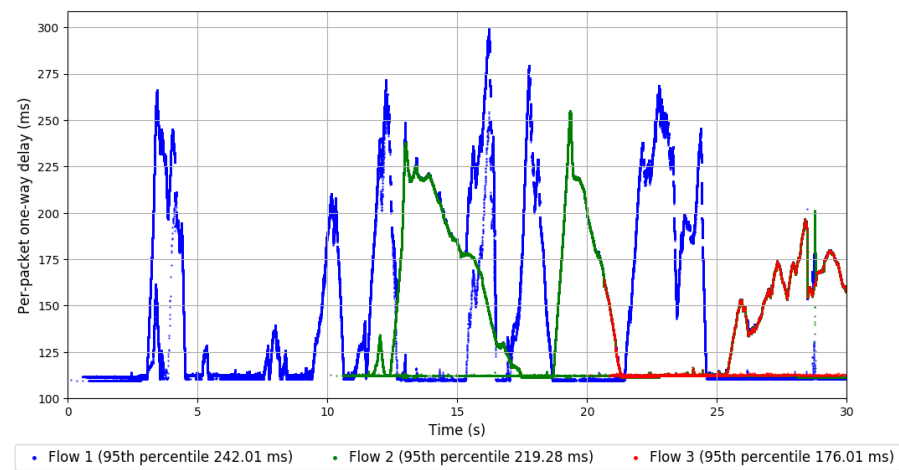
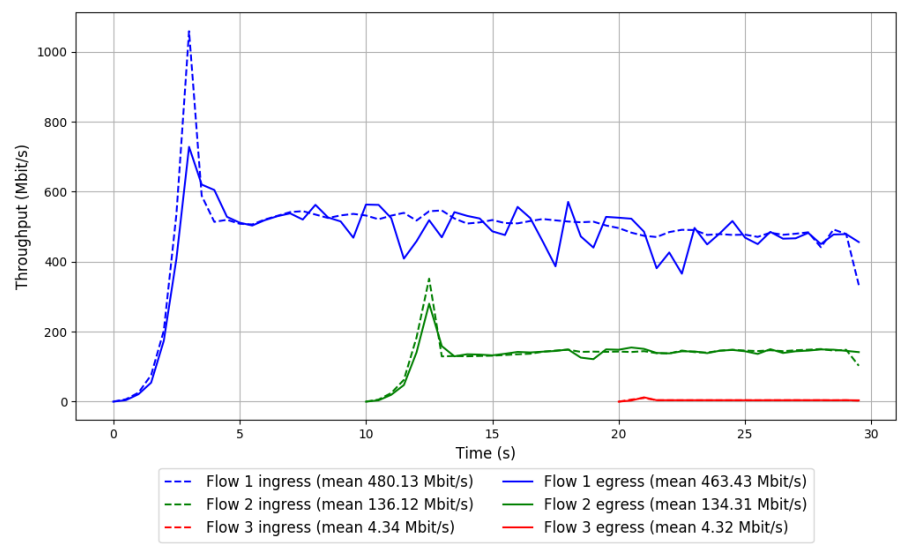
-- Flow 3:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 176.010 ms

Loss rate: 0.39%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-03-14 01:53:26

End at: 2018-03-14 01:53:56

Below is generated by plot.py at 2018-03-14 05:22:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 523.40 Mbit/s

95th percentile per-packet one-way delay: 252.646 ms

Loss rate: 3.00%

-- Flow 1:

Average throughput: 480.74 Mbit/s

95th percentile per-packet one-way delay: 253.520 ms

Loss rate: 3.16%

-- Flow 2:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 224.999 ms

Loss rate: 0.56%

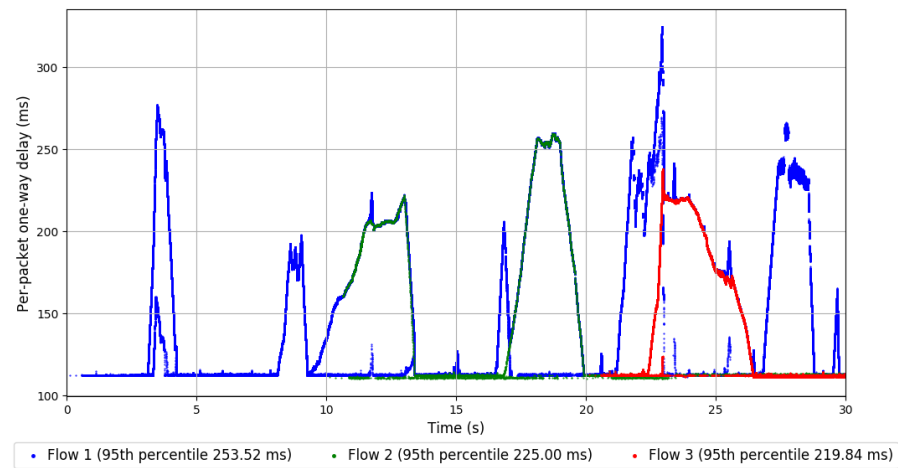
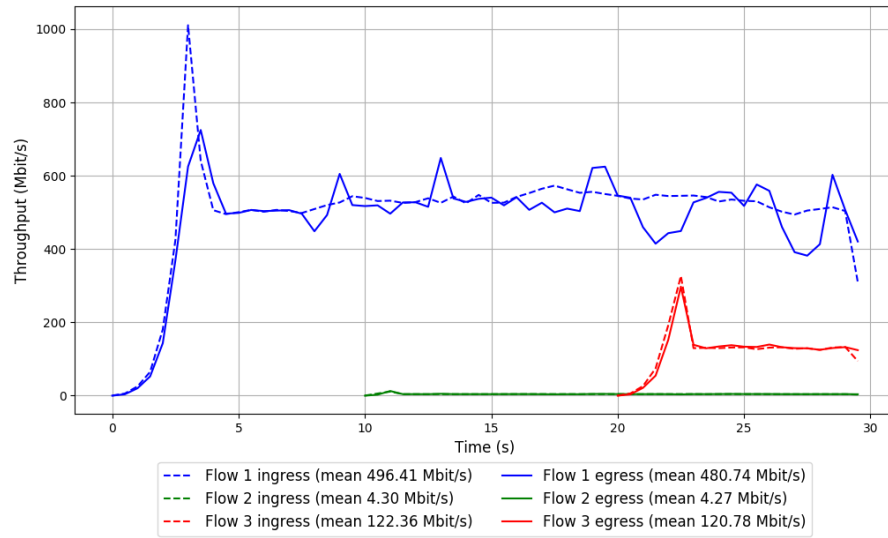
-- Flow 3:

Average throughput: 120.78 Mbit/s

95th percentile per-packet one-way delay: 219.841 ms

Loss rate: 1.30%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-03-14 02:13:01

End at: 2018-03-14 02:13:31

Below is generated by plot.py at 2018-03-14 05:23:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 538.28 Mbit/s

95th percentile per-packet one-way delay: 289.120 ms

Loss rate: 4.66%

-- Flow 1:

Average throughput: 453.58 Mbit/s

95th percentile per-packet one-way delay: 308.716 ms

Loss rate: 5.26%

-- Flow 2:

Average throughput: 125.32 Mbit/s

95th percentile per-packet one-way delay: 226.316 ms

Loss rate: 1.31%

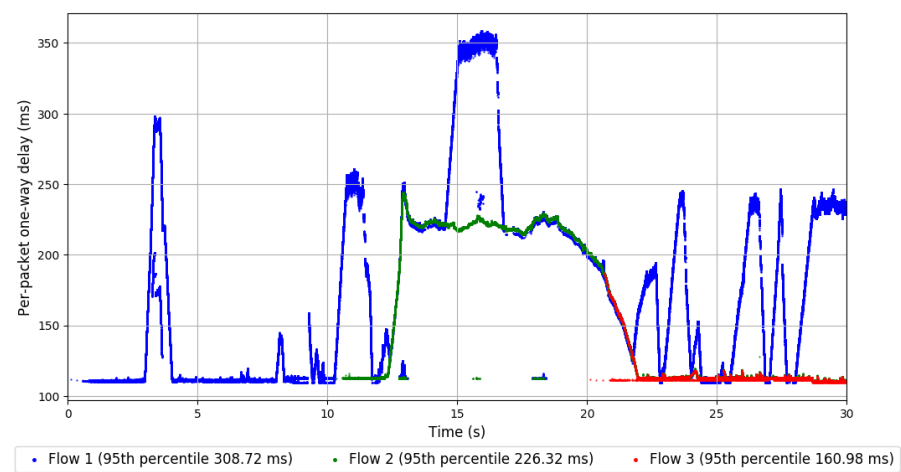
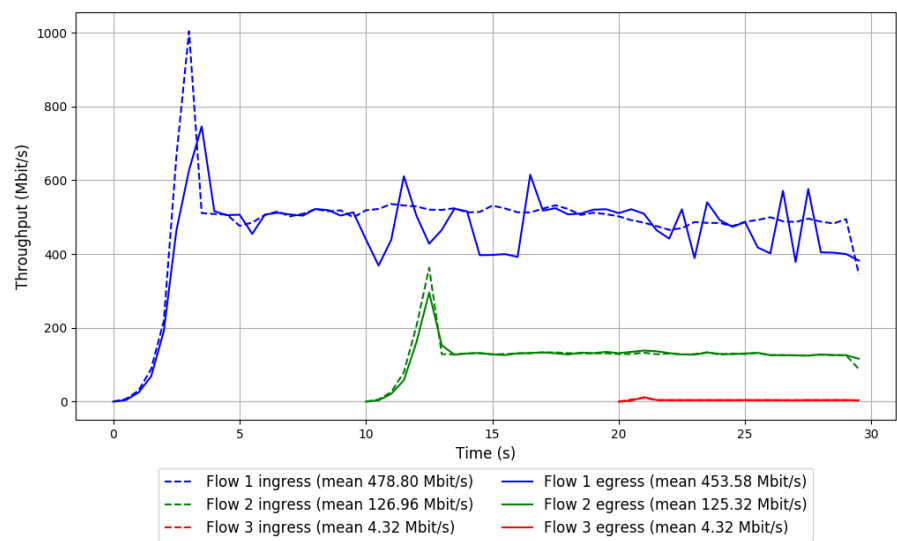
-- Flow 3:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 160.979 ms

Loss rate: 0.03%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-03-14 02:32:23

End at: 2018-03-14 02:32:53

Below is generated by plot.py at 2018-03-14 05:31:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 539.37 Mbit/s

95th percentile per-packet one-way delay: 281.732 ms

Loss rate: 3.48%

-- Flow 1:

Average throughput: 491.07 Mbit/s

95th percentile per-packet one-way delay: 285.340 ms

Loss rate: 3.65%

-- Flow 2:

Average throughput: 64.82 Mbit/s

95th percentile per-packet one-way delay: 223.688 ms

Loss rate: 1.66%

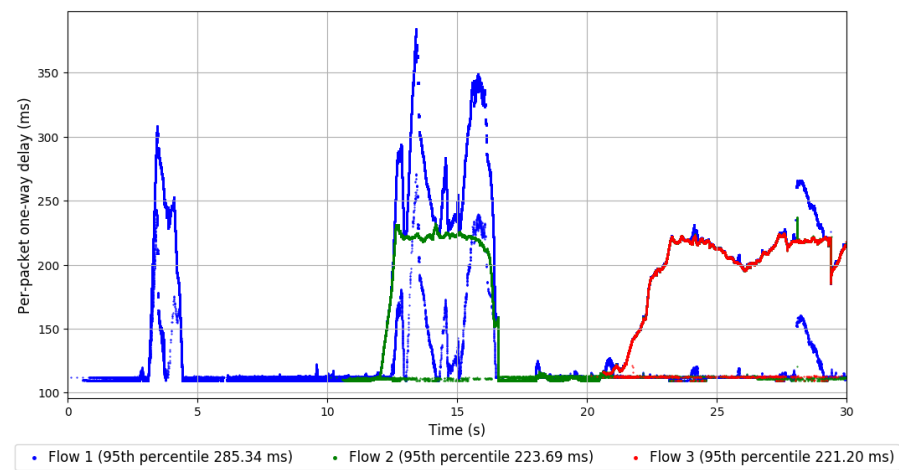
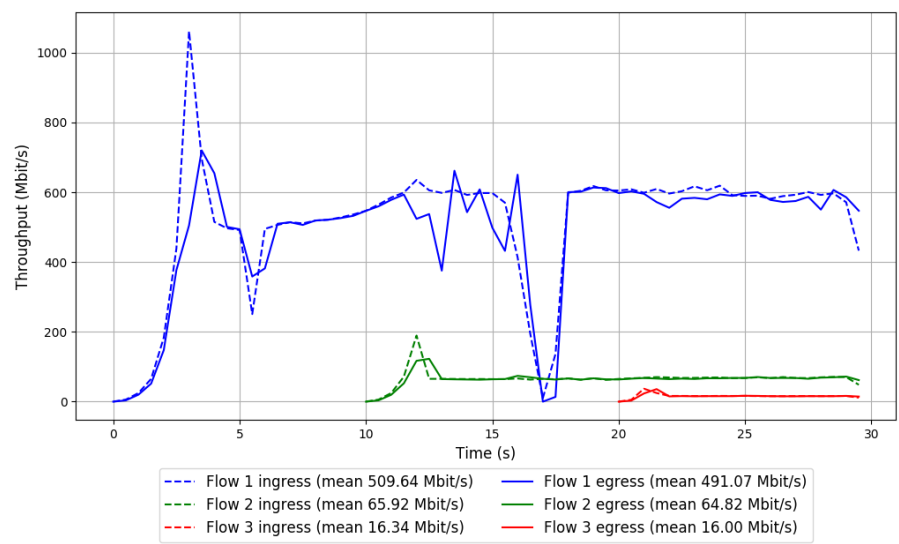
-- Flow 3:

Average throughput: 16.00 Mbit/s

95th percentile per-packet one-way delay: 221.203 ms

Loss rate: 2.07%

Run 9: Report of PCC — Data Link

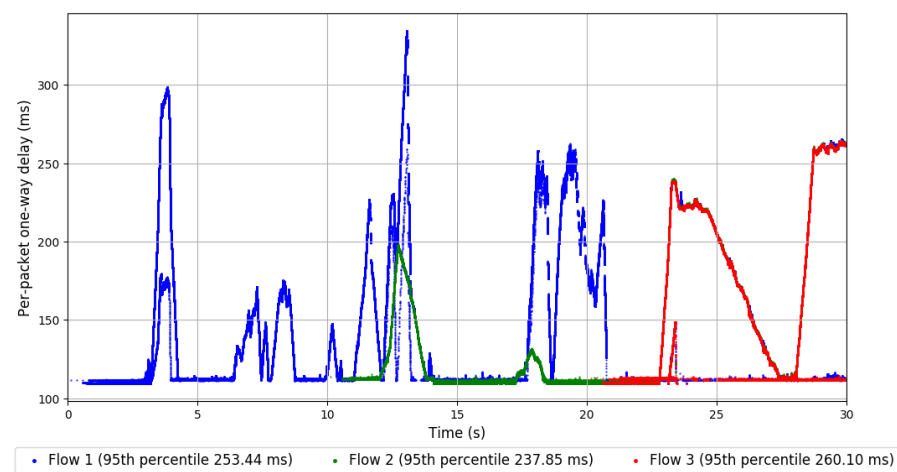
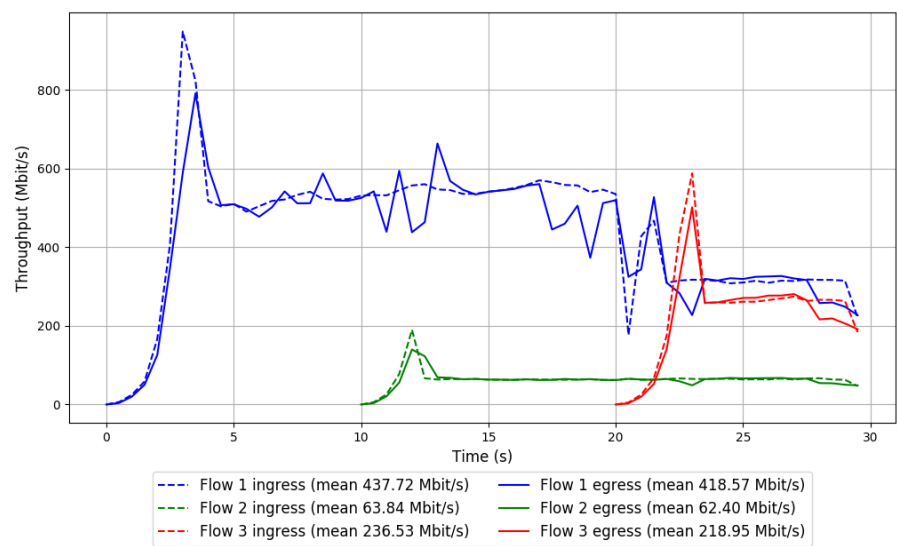


```
Run 10: Statistics of PCC

Start at: 2018-03-14 02:51:26
End at: 2018-03-14 02:51:56

# Below is generated by plot.py at 2018-03-14 05:31:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 532.04 Mbit/s
95th percentile per-packet one-way delay: 257.248 ms
Loss rate: 4.64%
-- Flow 1:
Average throughput: 418.57 Mbit/s
95th percentile per-packet one-way delay: 253.444 ms
Loss rate: 4.37%
-- Flow 2:
Average throughput: 62.40 Mbit/s
95th percentile per-packet one-way delay: 237.849 ms
Loss rate: 2.26%
-- Flow 3:
Average throughput: 218.95 Mbit/s
95th percentile per-packet one-way delay: 260.097 ms
Loss rate: 7.43%
```

Run 10: Report of PCC — Data Link

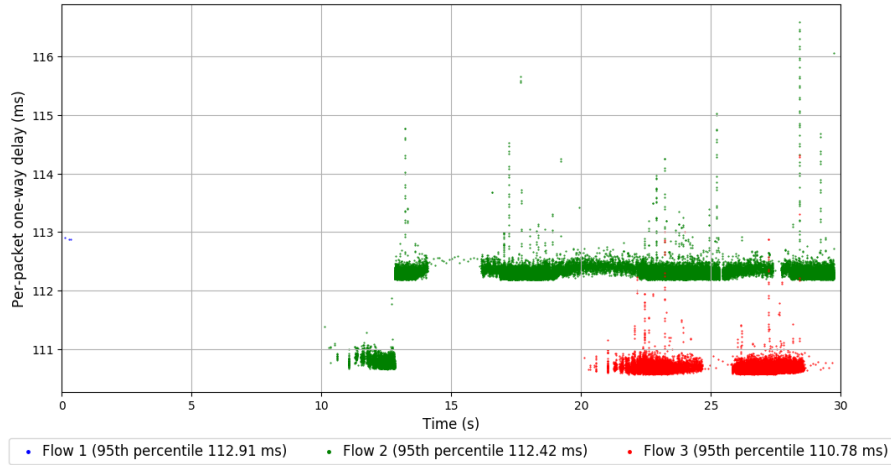
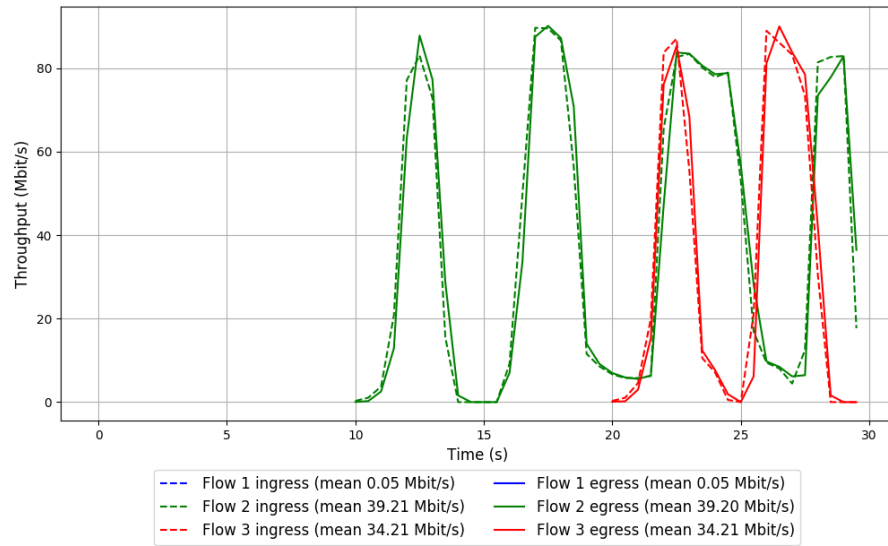


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-03-13 23:50:02
End at: 2018-03-13 23:50:32

# Below is generated by plot.py at 2018-03-14 05:31:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.98 Mbit/s
95th percentile per-packet one-way delay: 112.394 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 112.906 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.20 Mbit/s
95th percentile per-packet one-way delay: 112.415 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 34.21 Mbit/s
95th percentile per-packet one-way delay: 110.784 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-03-14 00:09:34

End at: 2018-03-14 00:10:04

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.97 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.16 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.67 Mbit/s

95th percentile per-packet one-way delay: 112.264 ms

Loss rate: 0.01%

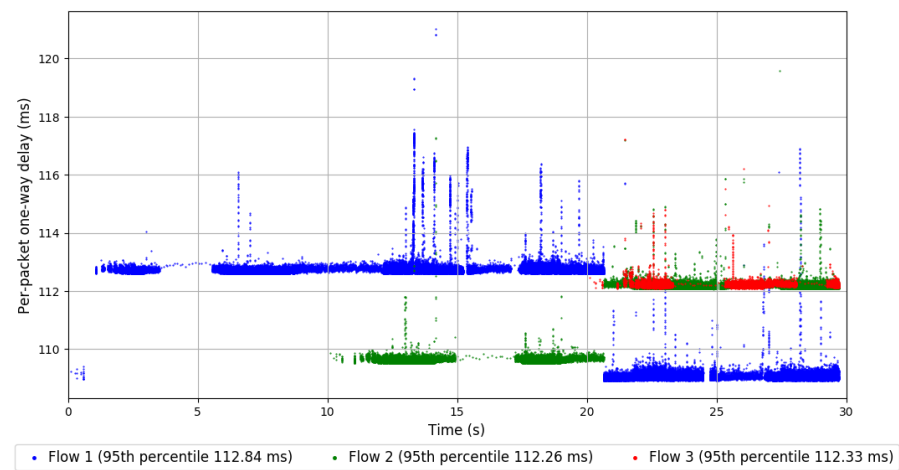
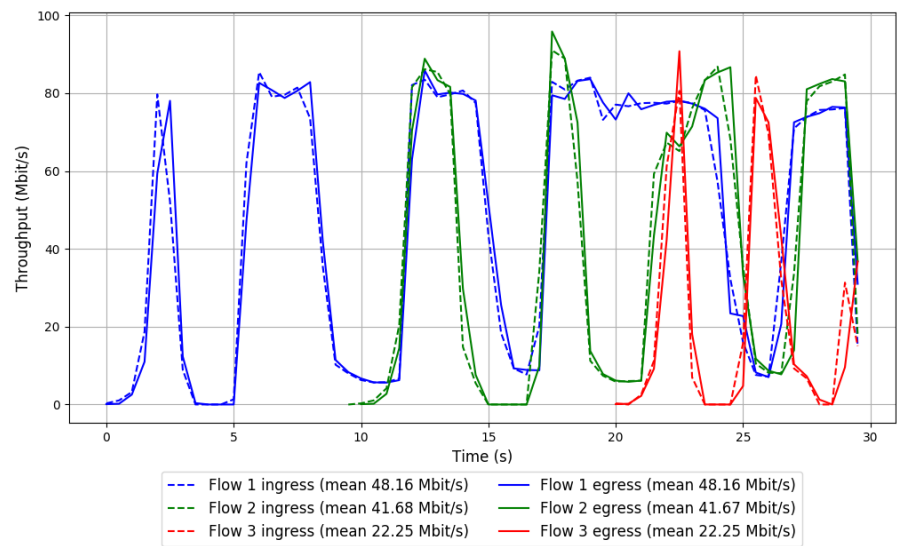
-- Flow 3:

Average throughput: 22.25 Mbit/s

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

Loss rate: 0.01%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-03-14 00:28:48

End at: 2018-03-14 00:29:18

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.35 Mbit/s

95th percentile per-packet one-way delay: 112.626 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.56 Mbit/s

95th percentile per-packet one-way delay: 112.292 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.01 Mbit/s

95th percentile per-packet one-way delay: 112.728 ms

Loss rate: 0.00%

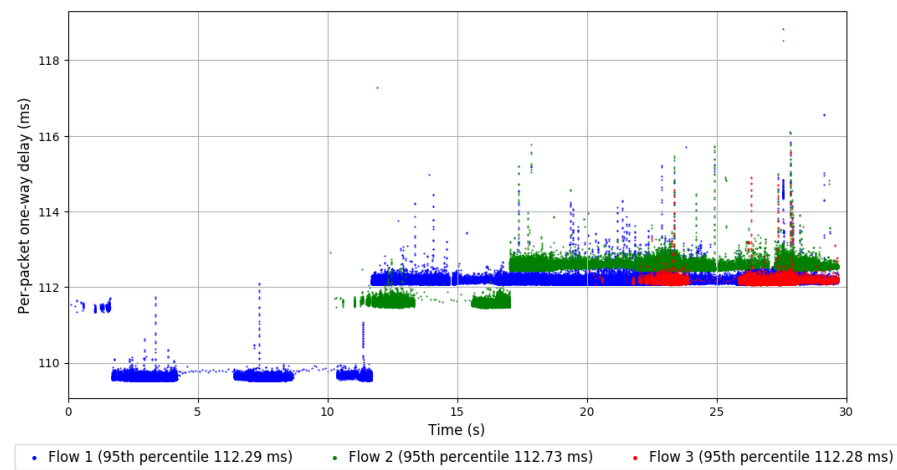
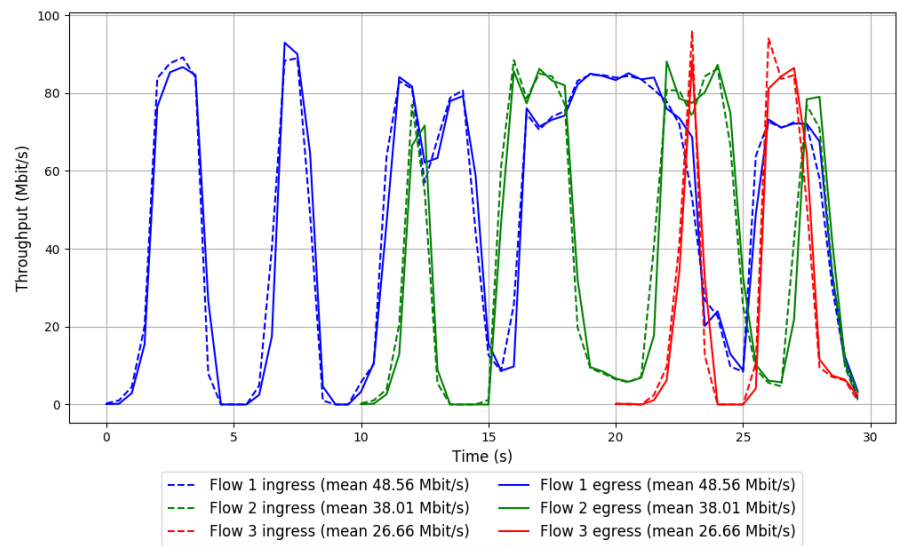
-- Flow 3:

Average throughput: 26.66 Mbit/s

95th percentile per-packet one-way delay: 112.277 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-03-14 00:48:42

End at: 2018-03-14 00:49:12

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.27 Mbit/s

95th percentile per-packet one-way delay: 111.554 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.59 Mbit/s

95th percentile per-packet one-way delay: 111.501 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.17 Mbit/s

95th percentile per-packet one-way delay: 110.611 ms

Loss rate: 0.00%

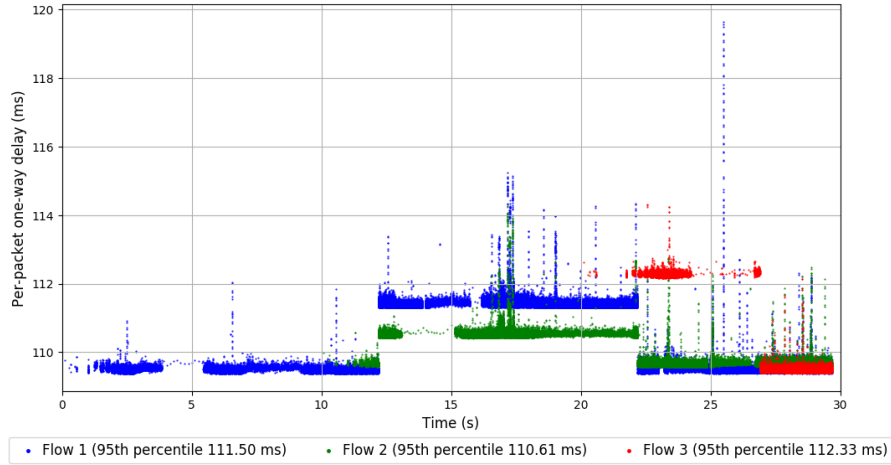
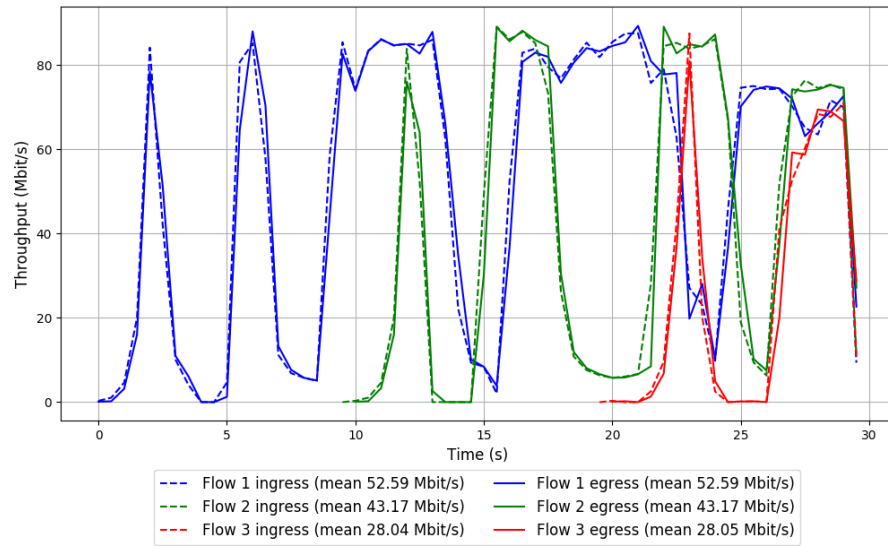
-- Flow 3:

Average throughput: 28.05 Mbit/s

95th percentile per-packet one-way delay: 112.333 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-03-14 01:07:33

End at: 2018-03-14 01:08:03

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.60 Mbit/s

95th percentile per-packet one-way delay: 114.601 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.37 Mbit/s

95th percentile per-packet one-way delay: 114.657 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.37 Mbit/s

95th percentile per-packet one-way delay: 112.322 ms

Loss rate: 0.00%

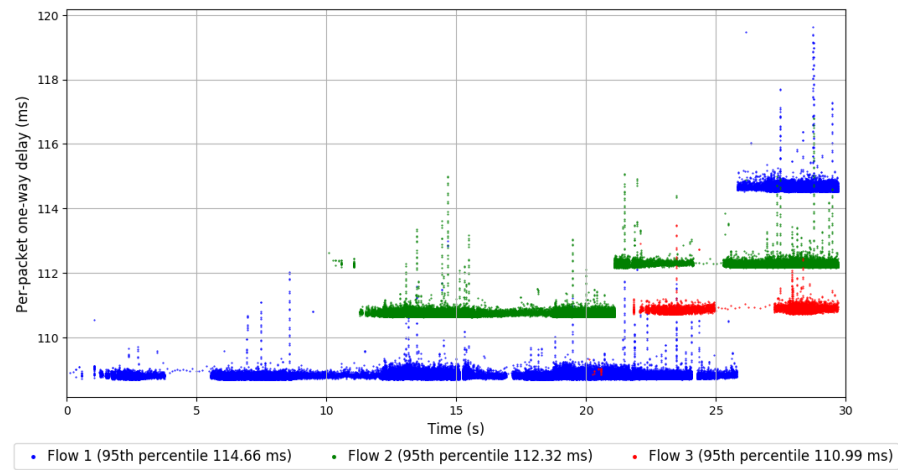
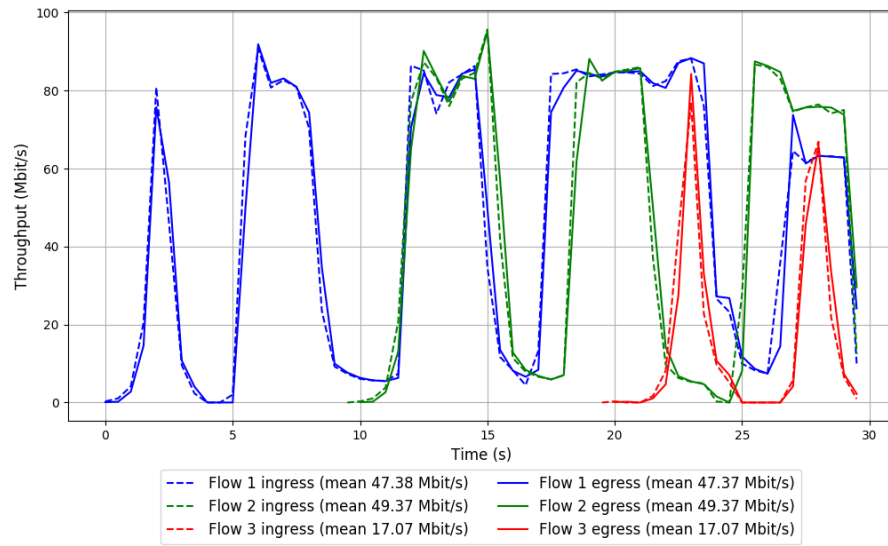
-- Flow 3:

Average throughput: 17.07 Mbit/s

95th percentile per-packet one-way delay: 110.987 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-03-14 01:27:13

End at: 2018-03-14 01:27:43

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.66 Mbit/s

95th percentile per-packet one-way delay: 112.607 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.00 Mbit/s

95th percentile per-packet one-way delay: 112.635 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.03 Mbit/s

95th percentile per-packet one-way delay: 109.757 ms

Loss rate: 0.00%

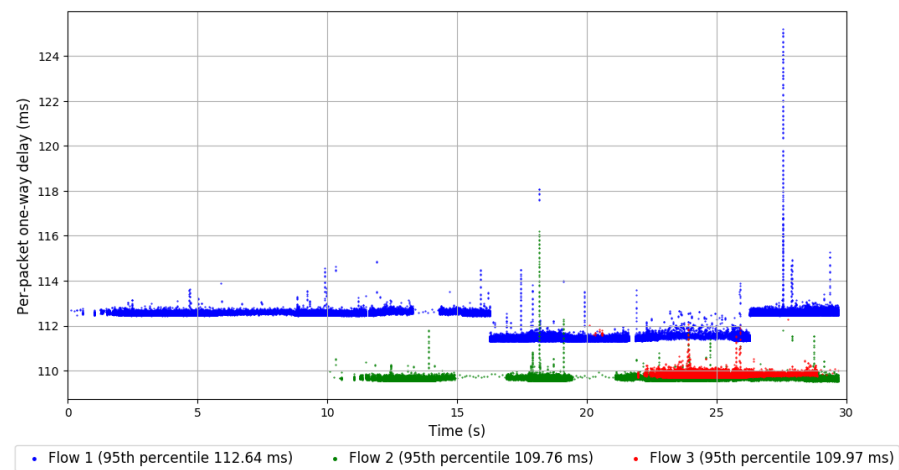
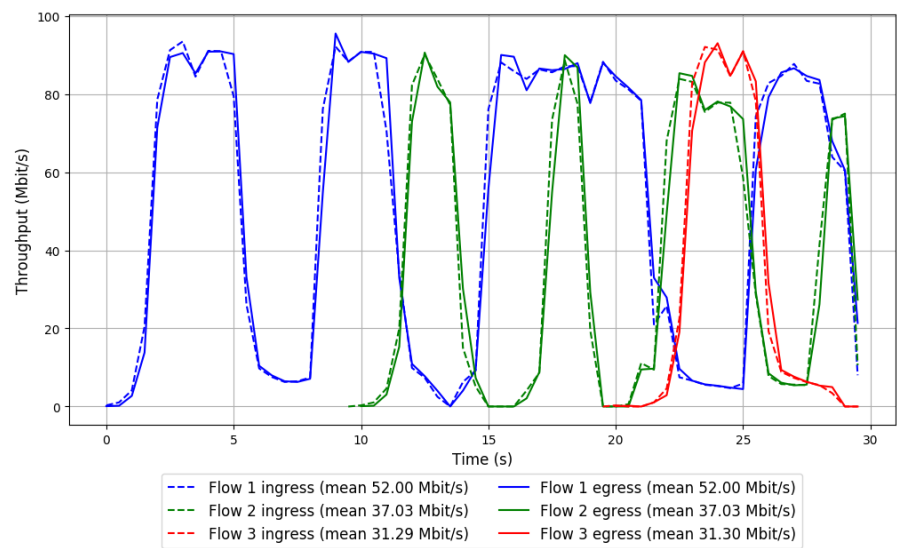
-- Flow 3:

Average throughput: 31.30 Mbit/s

95th percentile per-packet one-way delay: 109.970 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-03-14 01:47:04

End at: 2018-03-14 01:47:34

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.03 Mbit/s

95th percentile per-packet one-way delay: 110.736 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.33 Mbit/s

95th percentile per-packet one-way delay: 110.409 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.67 Mbit/s

95th percentile per-packet one-way delay: 111.538 ms

Loss rate: 0.00%

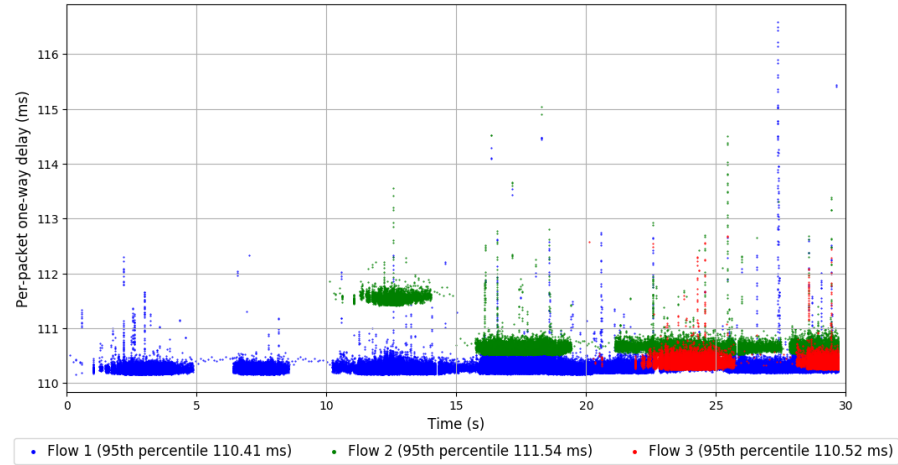
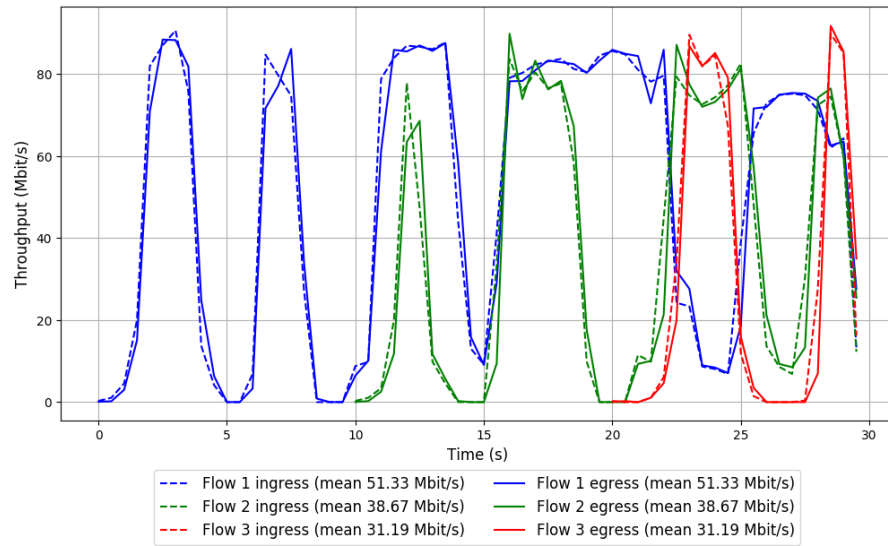
-- Flow 3:

Average throughput: 31.19 Mbit/s

95th percentile per-packet one-way delay: 110.518 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-03-14 02:06:36

End at: 2018-03-14 02:07:06

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.32 Mbit/s

95th percentile per-packet one-way delay: 112.555 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.04 Mbit/s

95th percentile per-packet one-way delay: 111.430 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.38 Mbit/s

95th percentile per-packet one-way delay: 112.644 ms

Loss rate: 0.00%

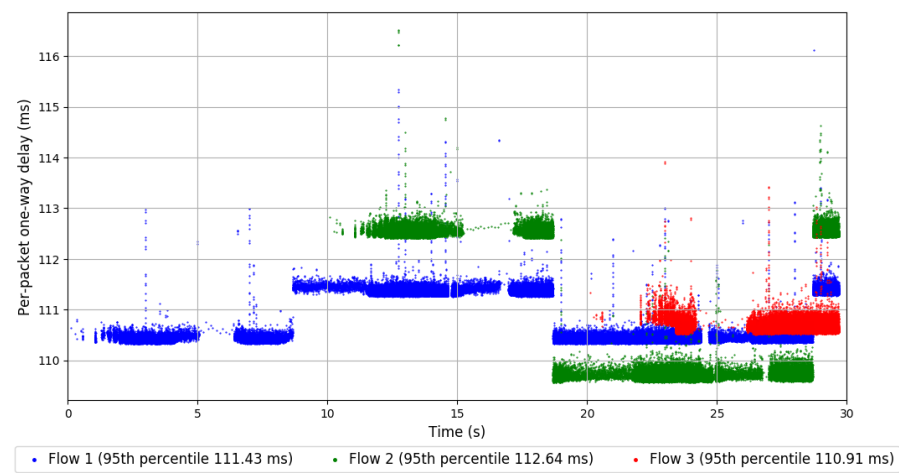
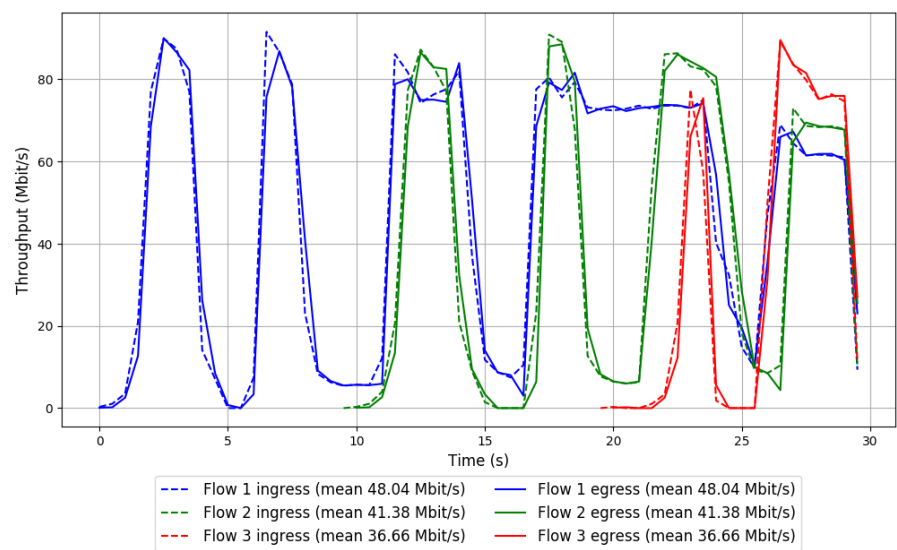
-- Flow 3:

Average throughput: 36.66 Mbit/s

95th percentile per-packet one-way delay: 110.912 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-03-14 02:26:01

End at: 2018-03-14 02:26:31

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.07 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 54.10 Mbit/s

95th percentile per-packet one-way delay: 112.843 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.61 Mbit/s

95th percentile per-packet one-way delay: 110.789 ms

Loss rate: 0.00%

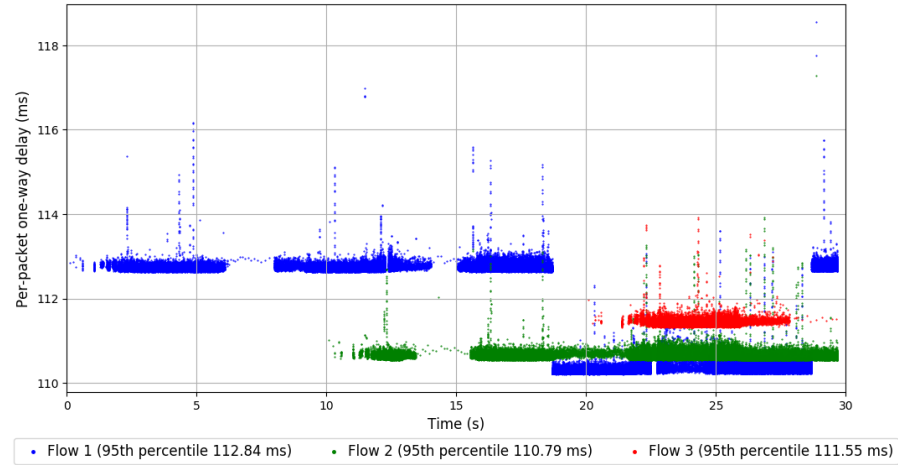
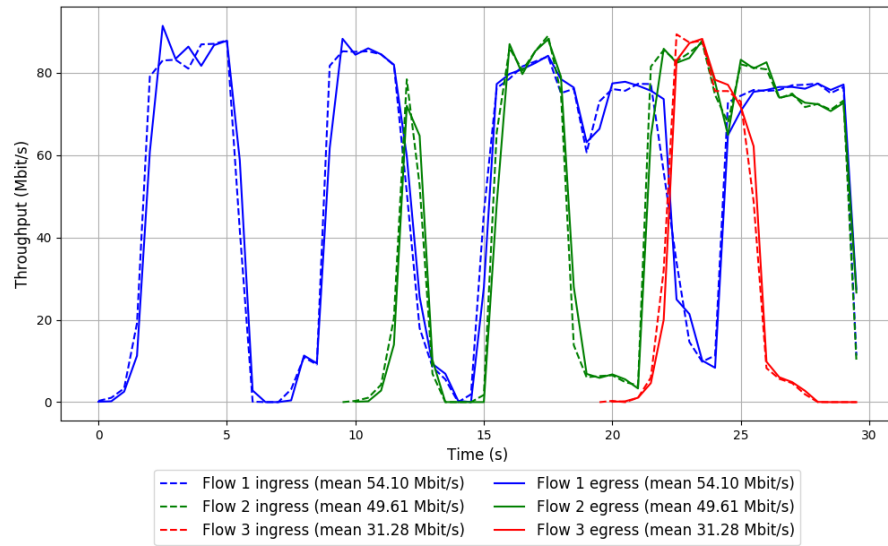
-- Flow 3:

Average throughput: 31.28 Mbit/s

95th percentile per-packet one-way delay: 111.553 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-03-14 02:45:12

End at: 2018-03-14 02:45:42

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.18 Mbit/s

95th percentile per-packet one-way delay: 112.401 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 48.43 Mbit/s

95th percentile per-packet one-way delay: 112.405 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.38 Mbit/s

95th percentile per-packet one-way delay: 112.407 ms

Loss rate: 0.01%

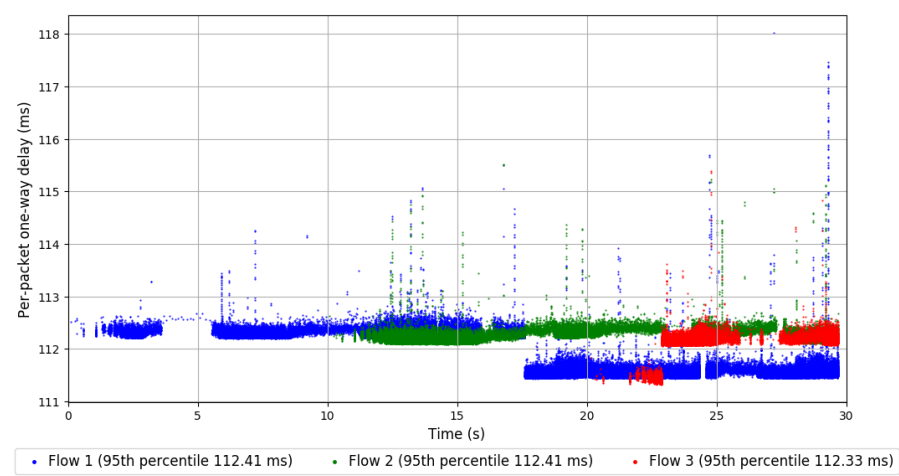
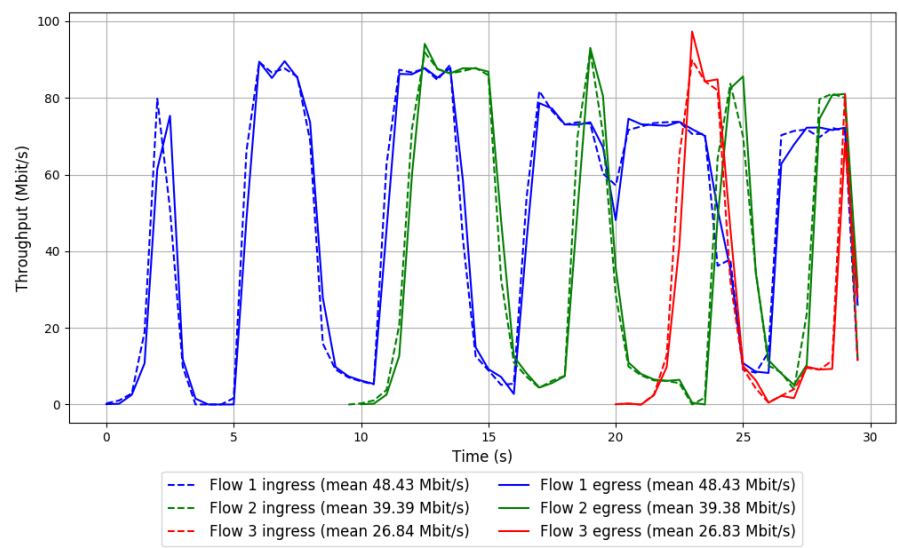
-- Flow 3:

Average throughput: 26.83 Mbit/s

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

Loss rate: 0.03%

Run 10: Report of QUIC Cubic — Data Link

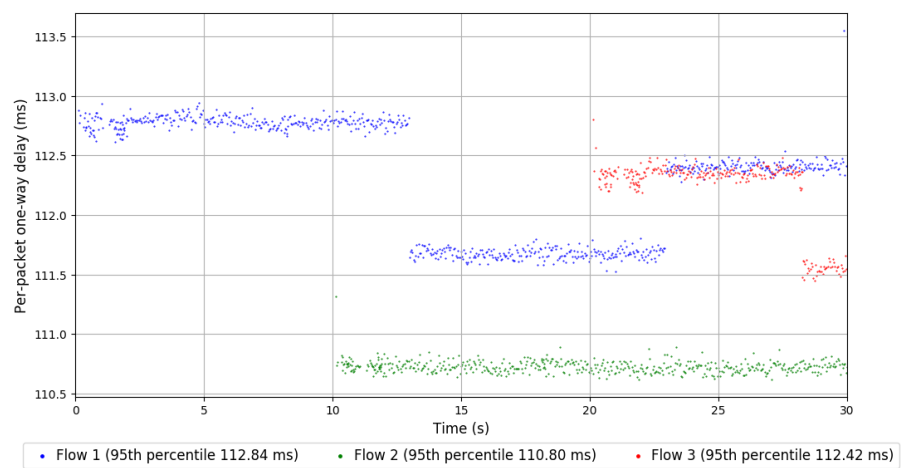
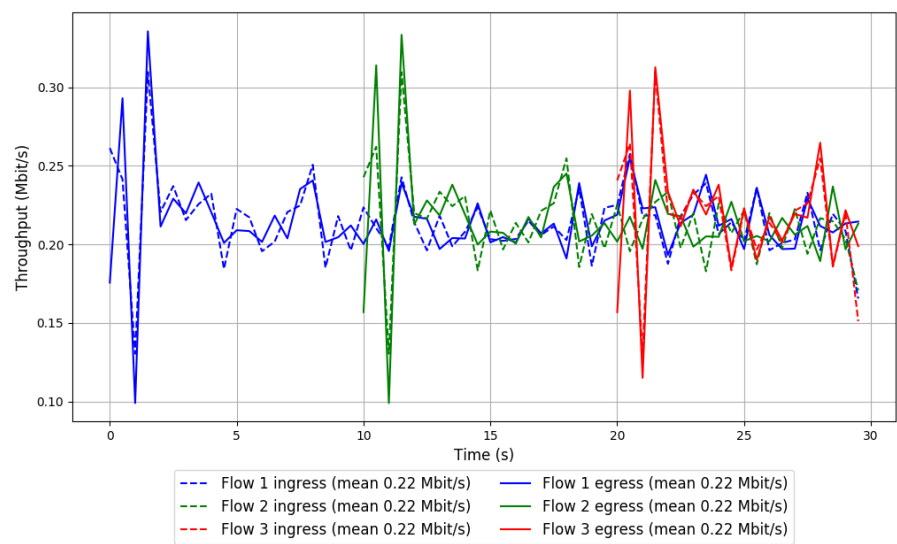


```
Run 1: Statistics of SCReAM

Start at: 2018-03-13 23:38:57
End at: 2018-03-13 23:39:27

# Below is generated by plot.py at 2018-03-14 05:31:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.817 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.842 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.804 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.424 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

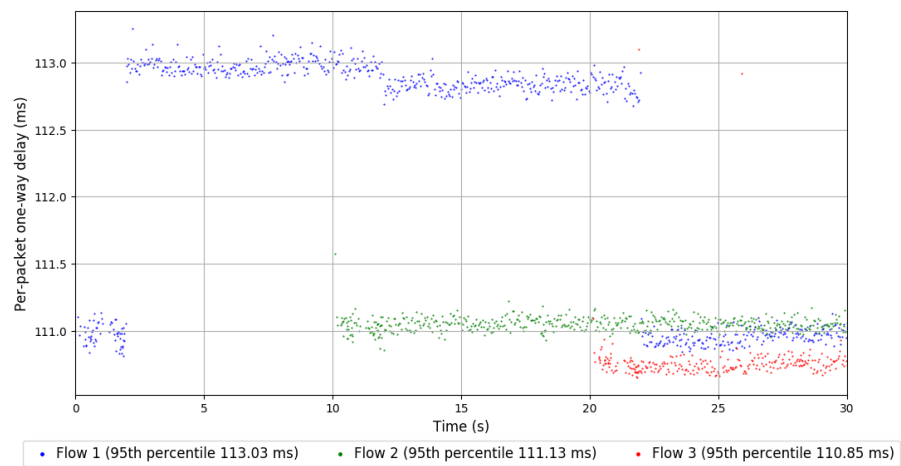
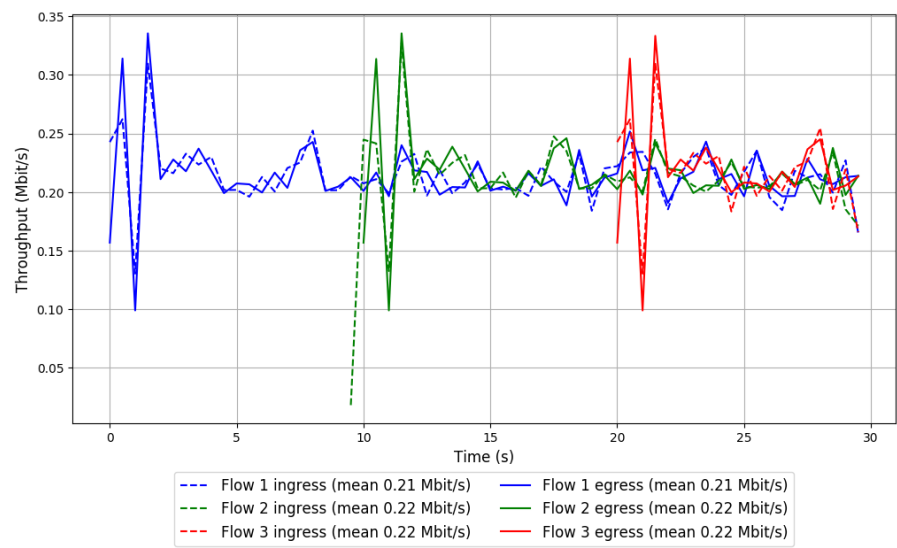


```
Run 2: Statistics of SCReAM

Start at: 2018-03-13 23:58:13
End at: 2018-03-13 23:58:43

# Below is generated by plot.py at 2018-03-14 05:31:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.008 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.034 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.130 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.848 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

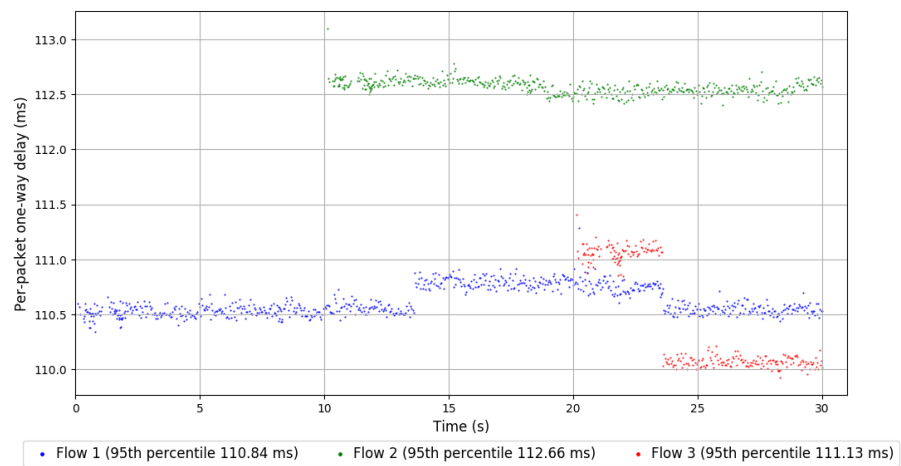
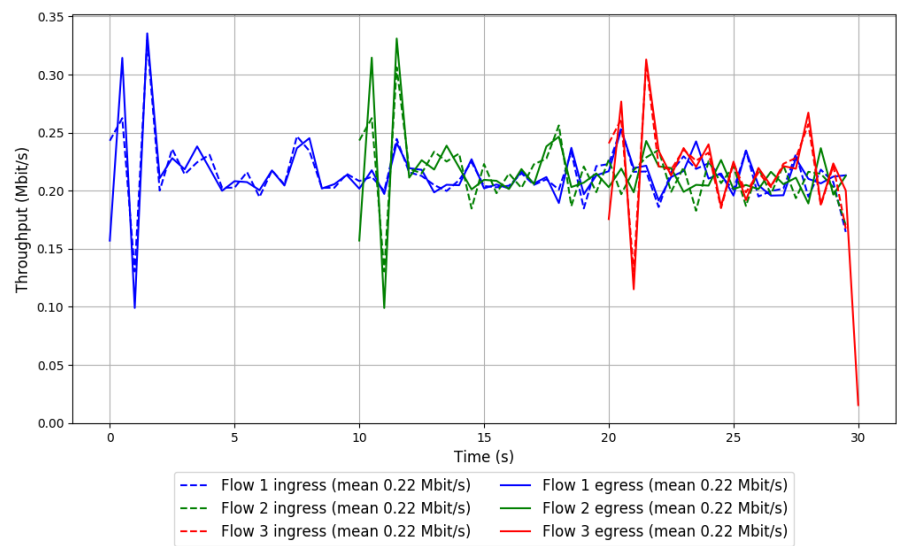


```
Run 3: Statistics of SReAM

Start at: 2018-03-14 00:17:46
End at: 2018-03-14 00:18:16

# Below is generated by plot.py at 2018-03-14 05:31:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.633 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.837 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.661 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.132 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

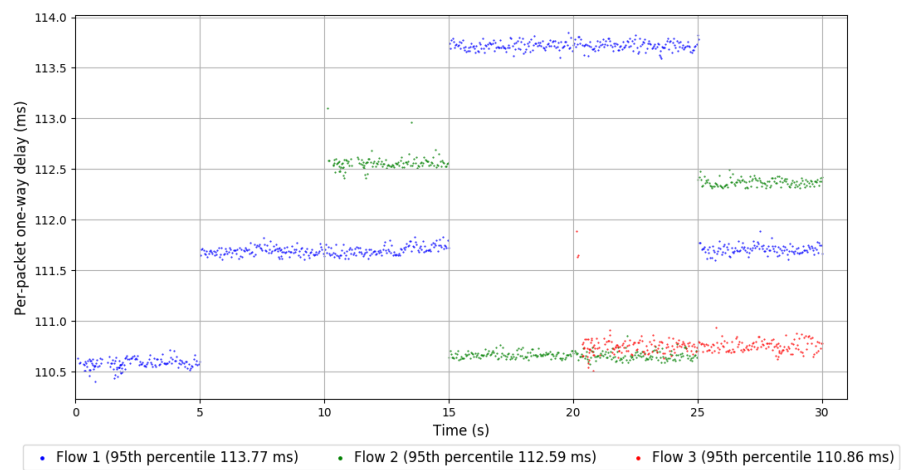
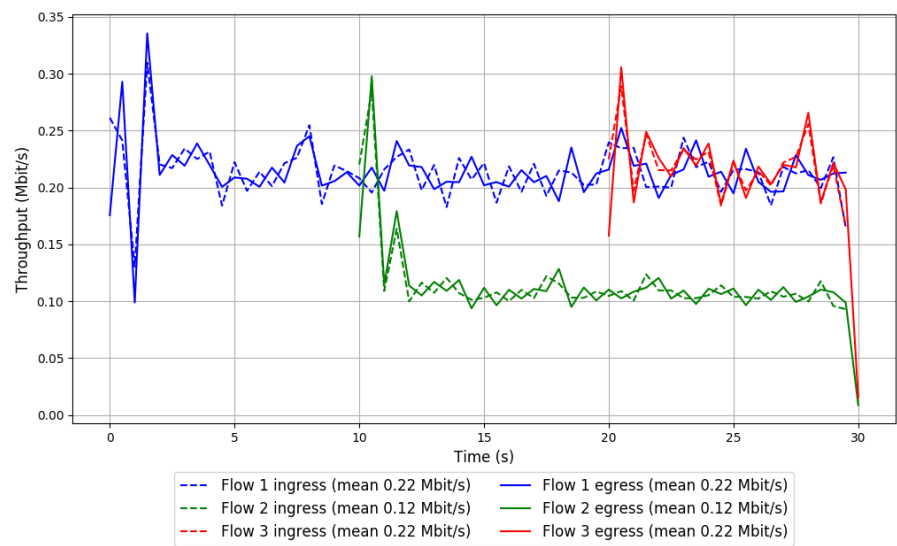


```
Run 4: Statistics of SCReAM

Start at: 2018-03-14 00:37:05
End at: 2018-03-14 00:37:35

# Below is generated by plot.py at 2018-03-14 05:31:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 113.741 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.767 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 112.588 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.855 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-03-14 00:56:39

End at: 2018-03-14 00:57:09

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.524 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.055 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.601 ms

Loss rate: 0.00%

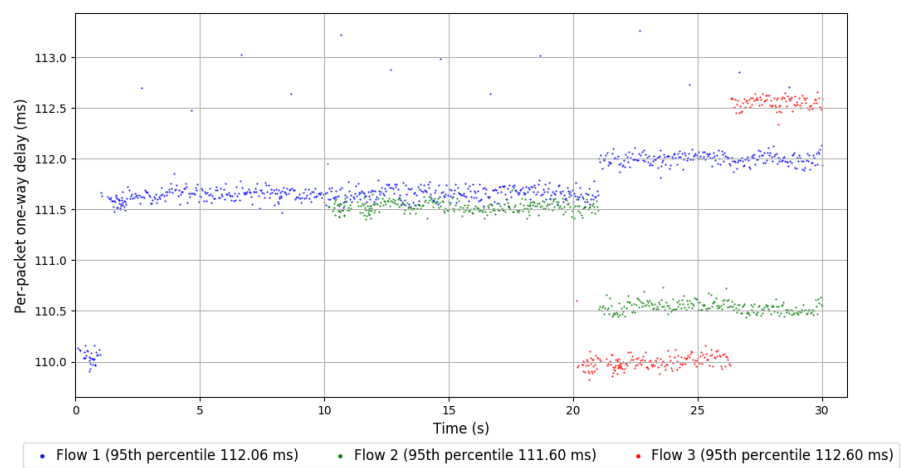
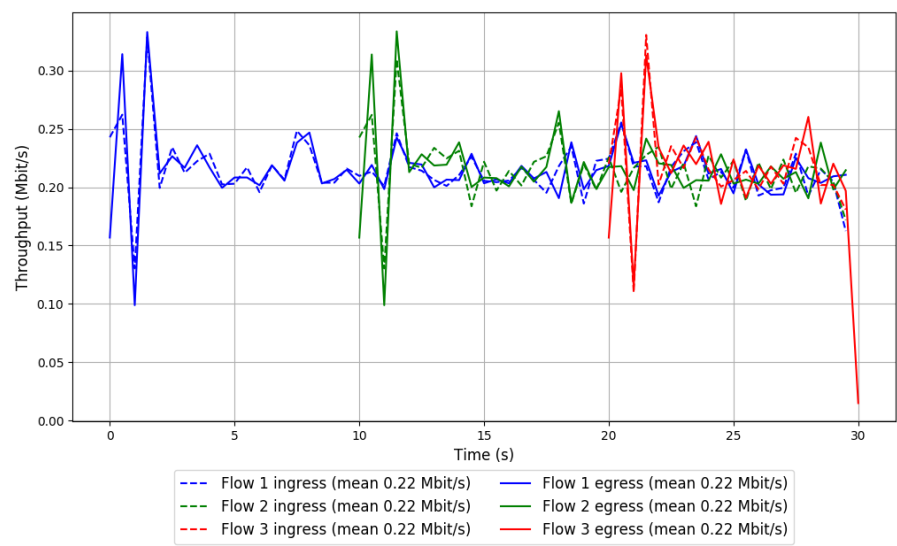
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.601 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-03-14 01:15:54

End at: 2018-03-14 01:16:24

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.990 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.959 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.012 ms

Loss rate: 0.00%

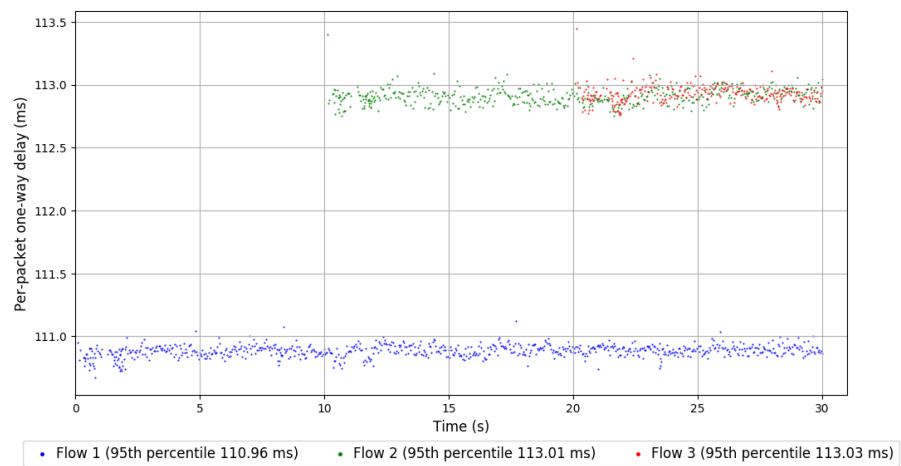
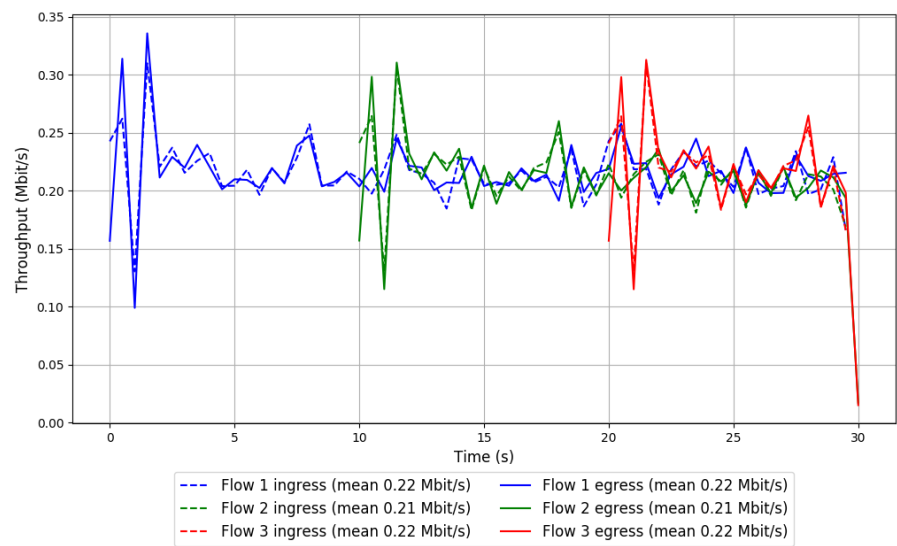
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.031 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

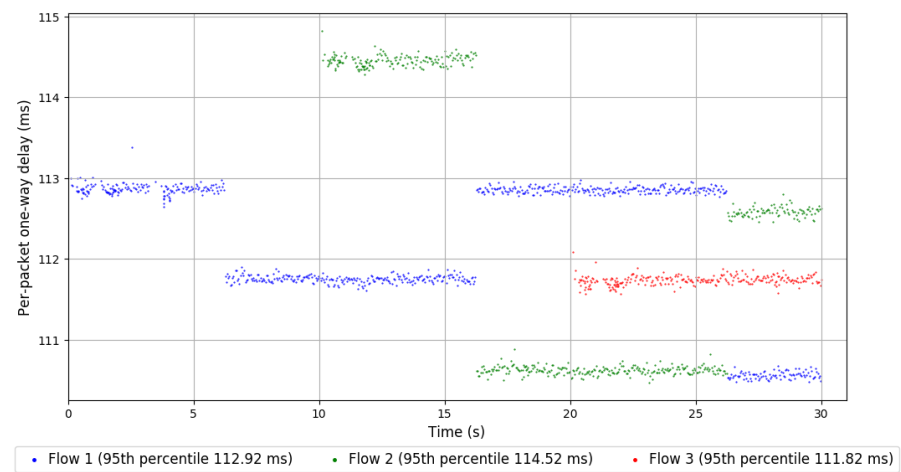
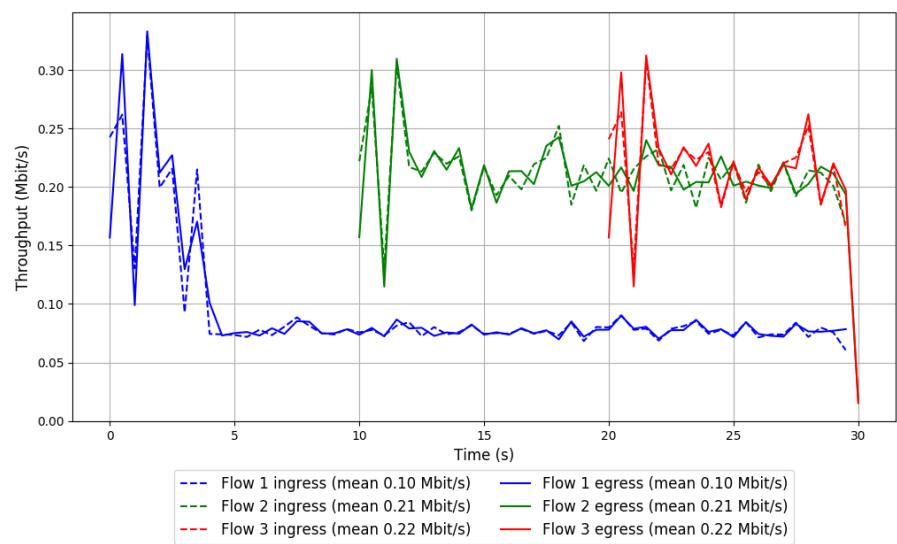


```
Run 7: Statistics of SReAM

Start at: 2018-03-14 01:35:23
End at: 2018-03-14 01:35:53

# Below is generated by plot.py at 2018-03-14 05:31:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 114.463 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 112.924 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.523 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.821 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-03-14 01:55:22

End at: 2018-03-14 01:55:52

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 114.757 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.777 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.471 ms

Loss rate: 0.00%

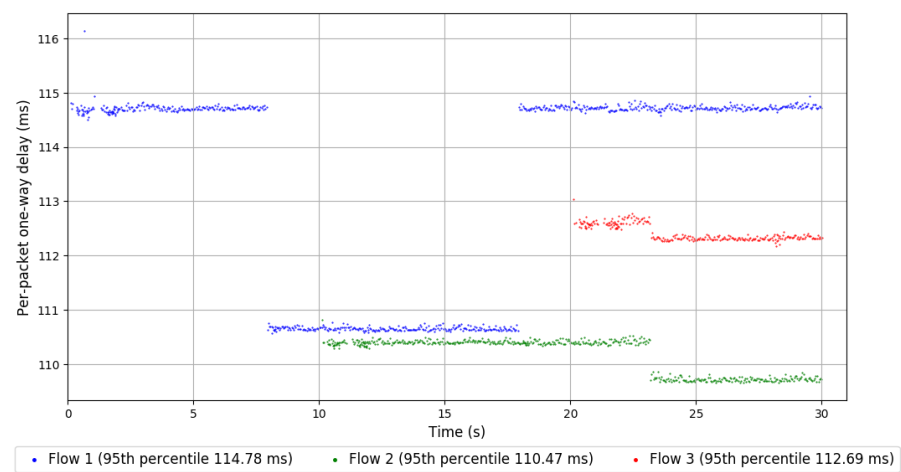
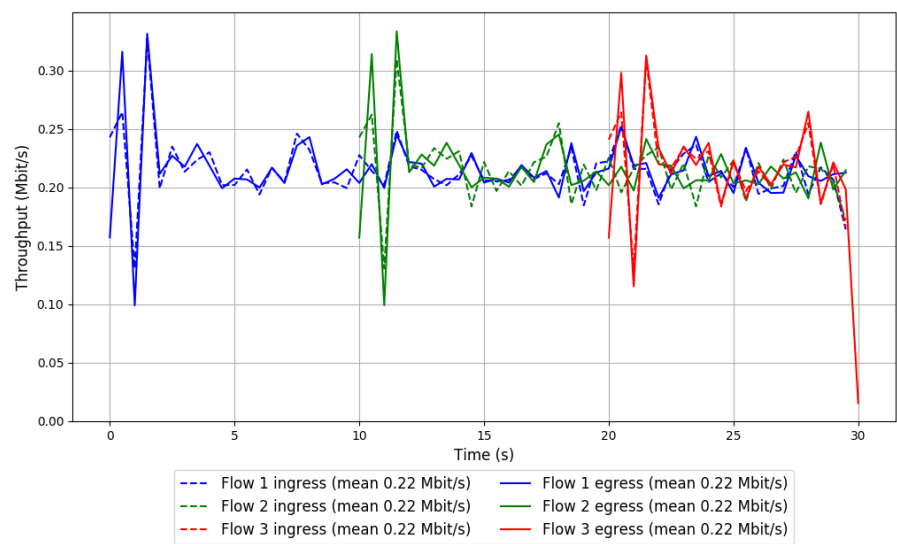
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.687 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-03-14 02:14:58

End at: 2018-03-14 02:15:28

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.862 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.759 ms

Loss rate: 0.00%

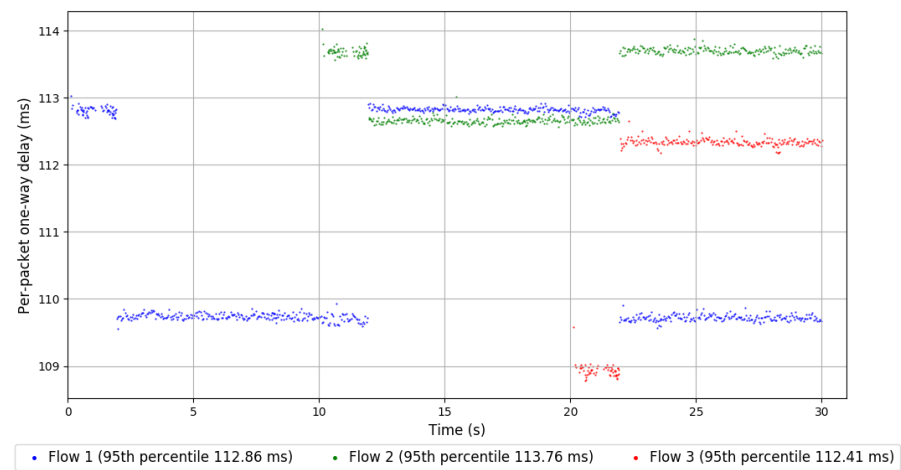
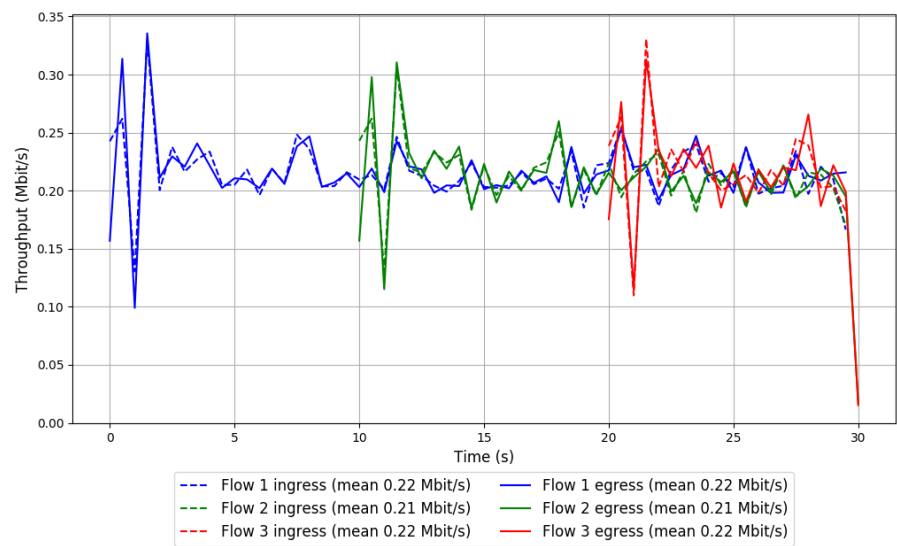
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.410 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

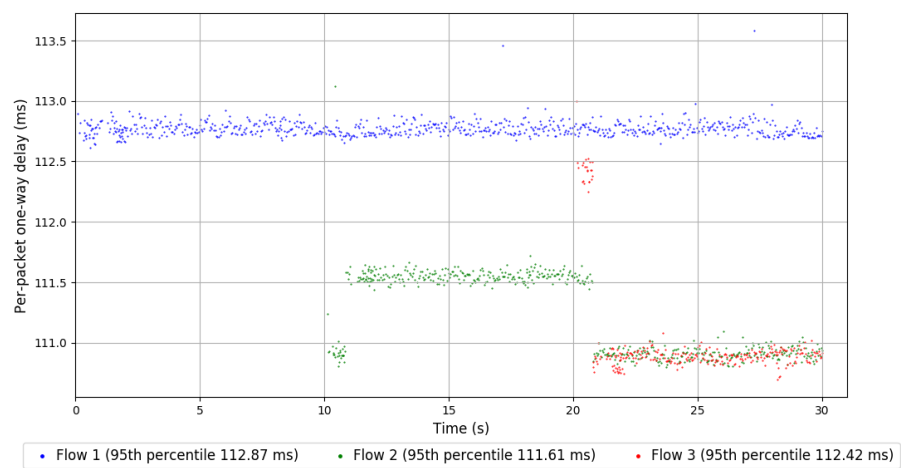
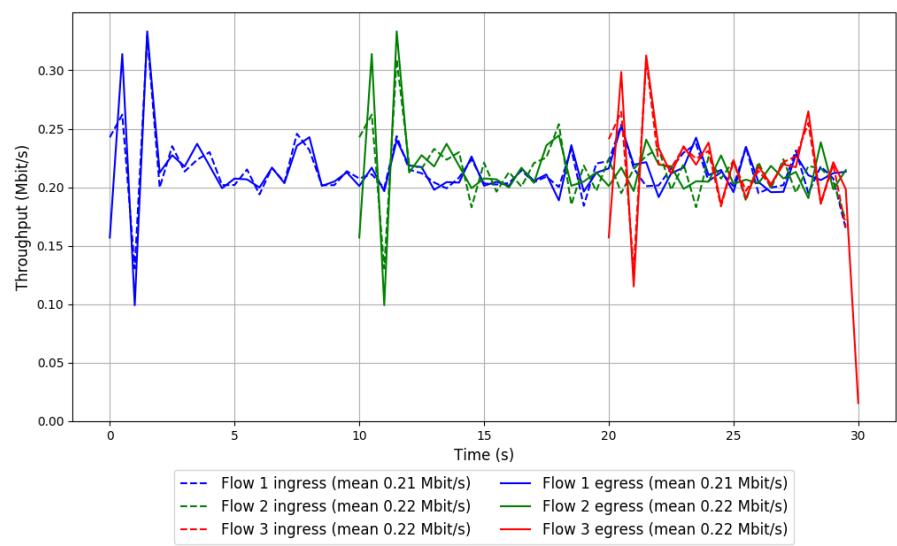


```
Run 10: Statistics of SCReAM

Start at: 2018-03-14 02:34:19
End at: 2018-03-14 02:34:49

# Below is generated by plot.py at 2018-03-14 05:31:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.841 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.866 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.610 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.424 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

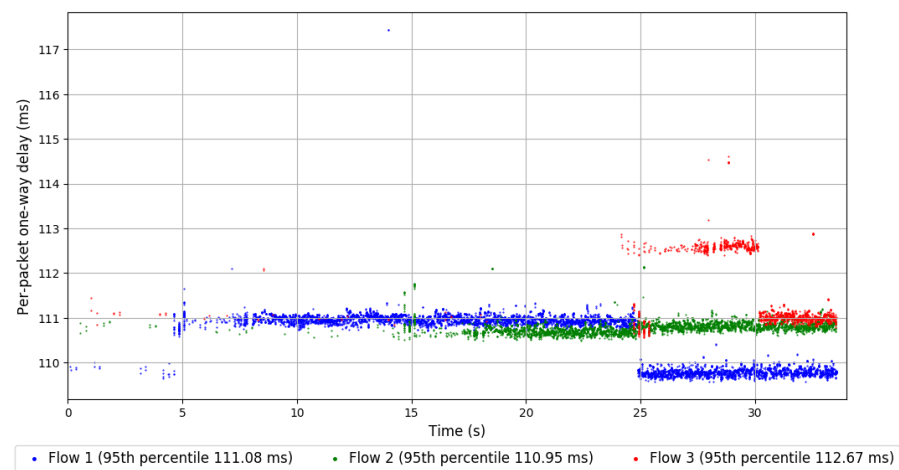
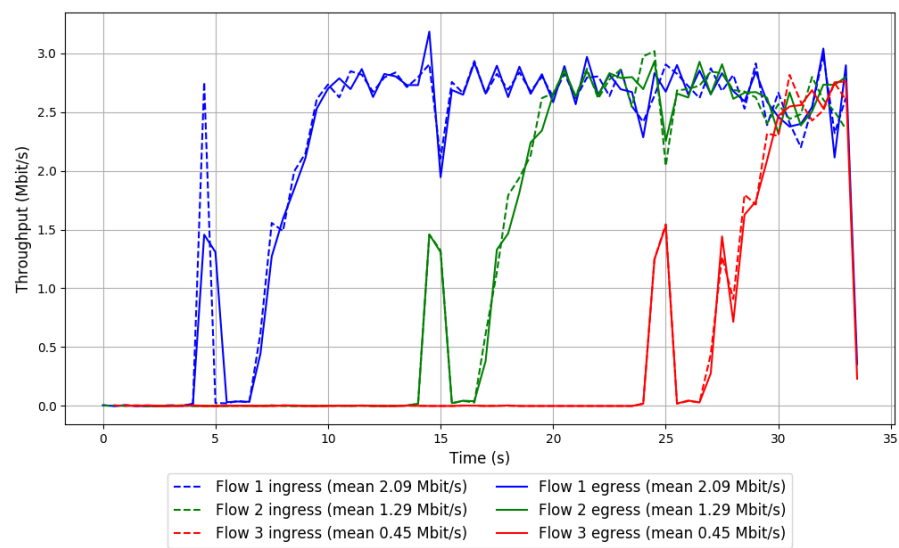


```
Run 1: Statistics of WebRTC media

Start at: 2018-03-13 23:45:08
End at: 2018-03-13 23:45:38

# Below is generated by plot.py at 2018-03-14 05:31:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 111.173 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 111.082 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 110.948 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 112.675 ms
Loss rate: 0.07%
```


Run 1: Report of WebRTC media — Data Link

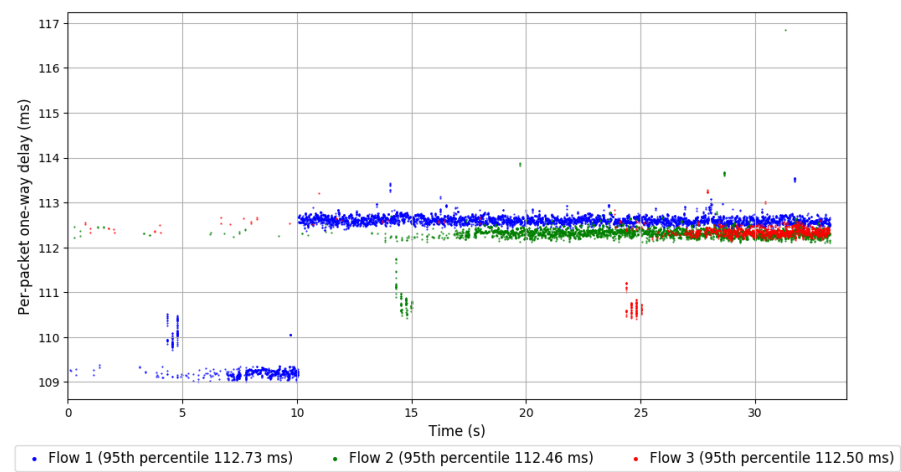
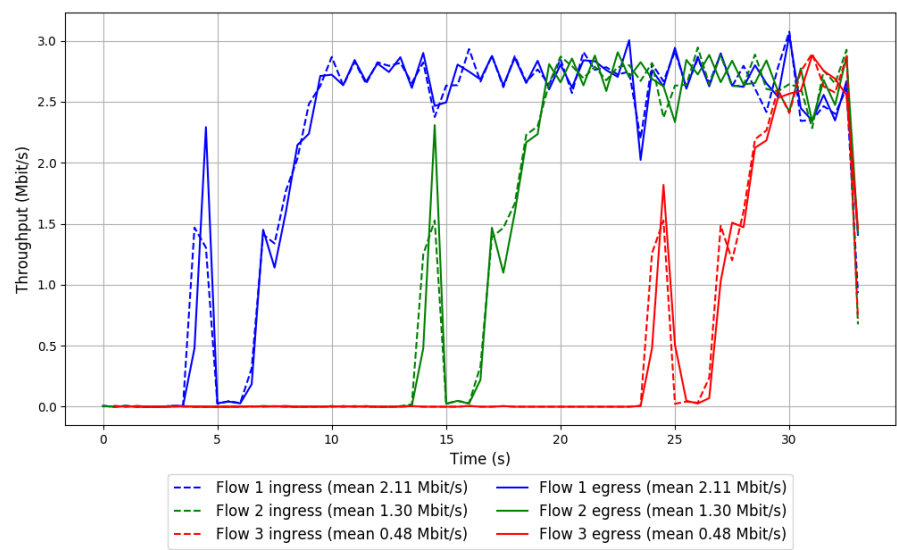


```
Run 2: Statistics of WebRTC media

Start at: 2018-03-14 00:04:33
End at: 2018-03-14 00:05:03

# Below is generated by plot.py at 2018-03-14 05:31:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 112.711 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 112.732 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 112.460 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 112.504 ms
Loss rate: 0.06%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-03-14 00:23:52

End at: 2018-03-14 00:24:22

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 112.587 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.626 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 110.897 ms

Loss rate: 0.00%

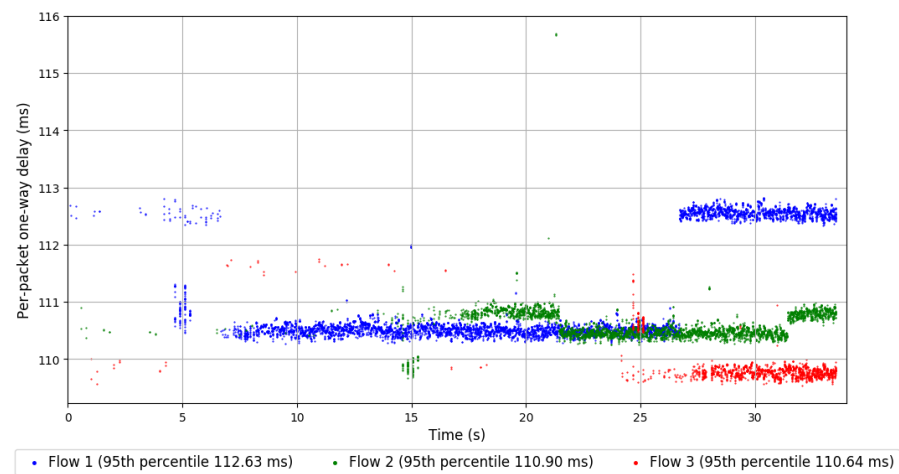
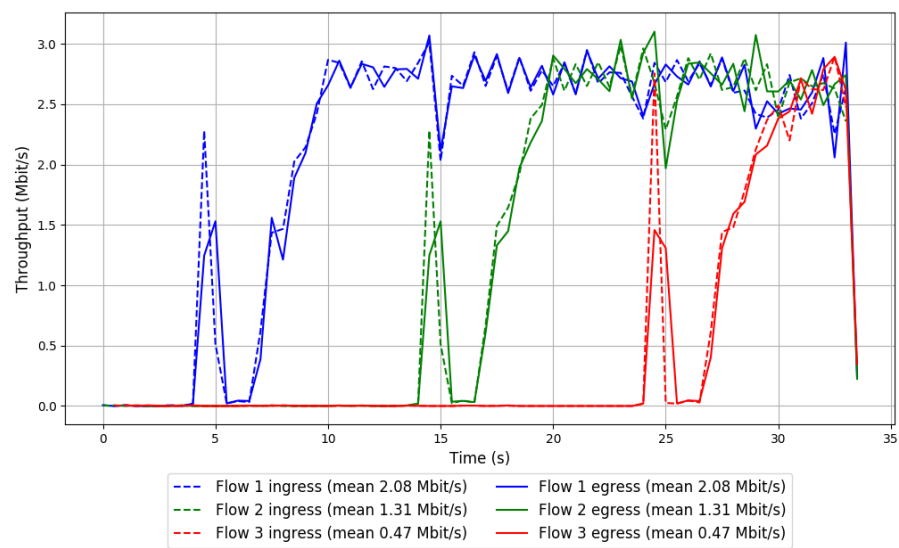
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 110.639 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-03-14 00:43:48

End at: 2018-03-14 00:44:18

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 110.674 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 112.658 ms

Loss rate: 0.00%

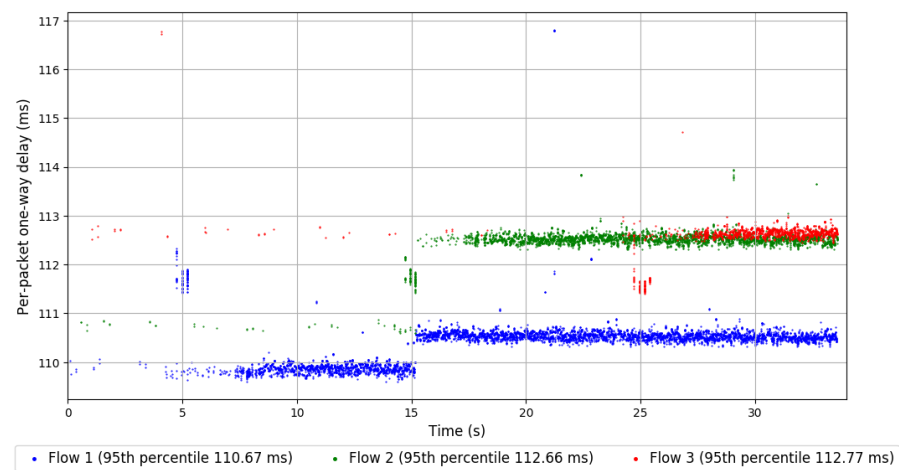
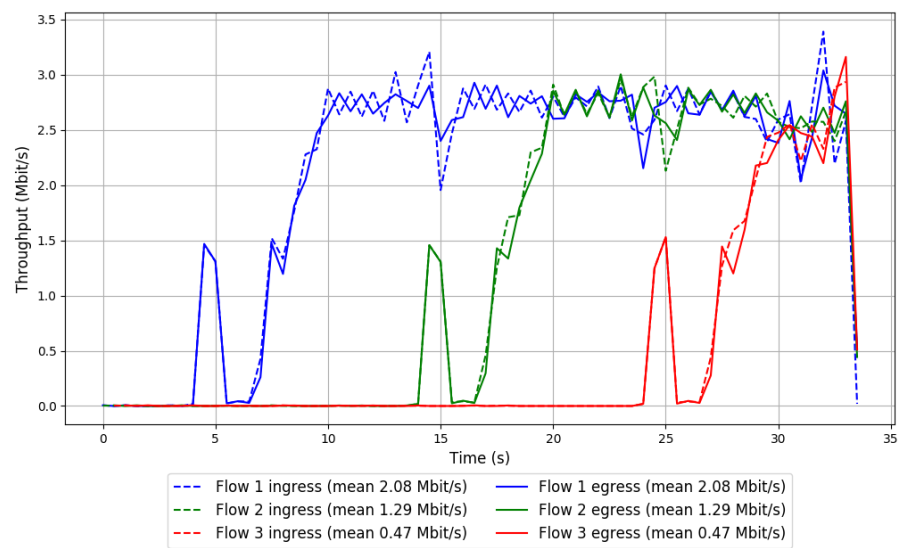
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 112.774 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-03-14 01:02:43

End at: 2018-03-14 01:03:13

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 114.825 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 113.876 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 111.879 ms

Loss rate: 0.02%

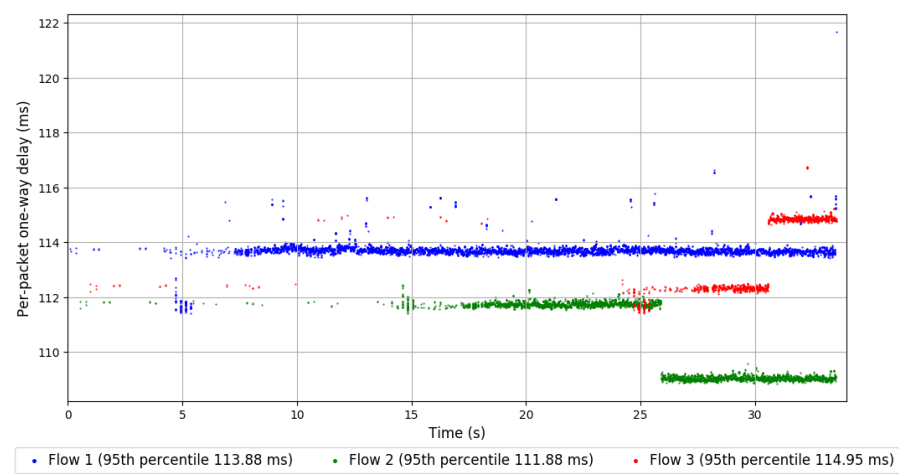
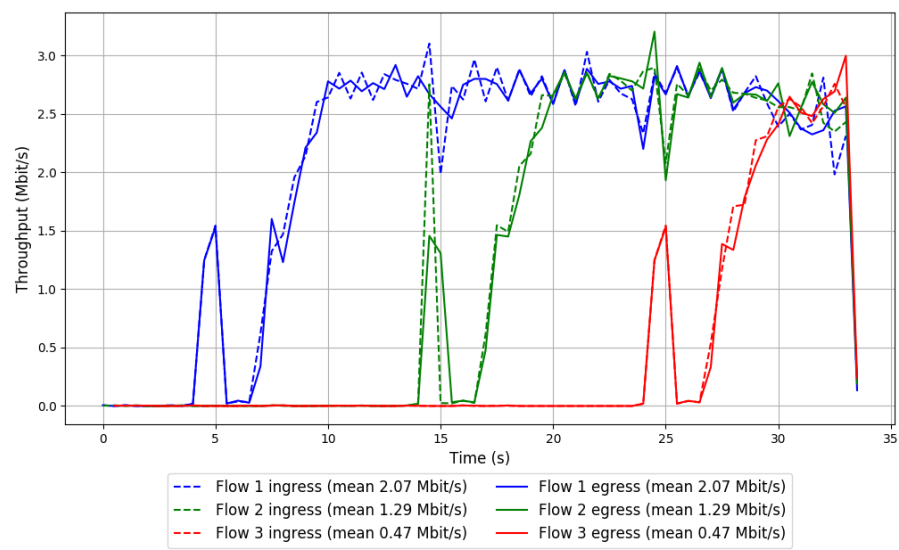
-- Flow 3:

Average throughput: 0.47 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-03-14 01:22:14

End at: 2018-03-14 01:22:44

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 113.047 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.09 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 112.922 ms

Loss rate: 0.02%

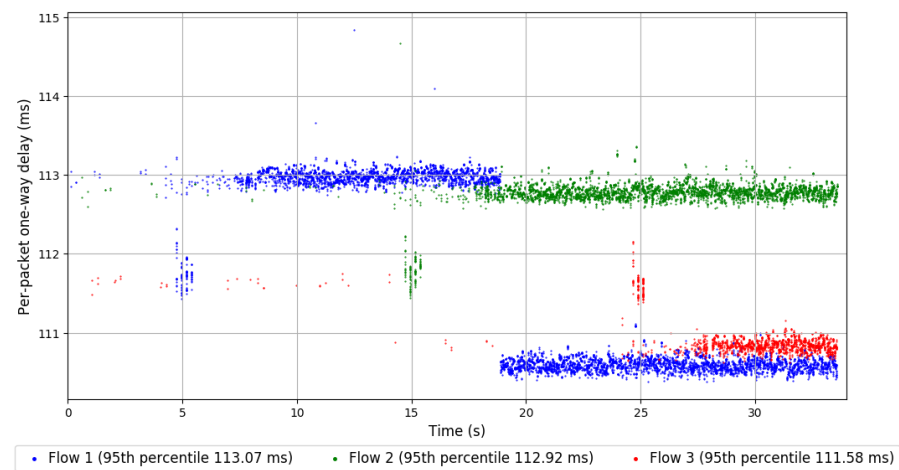
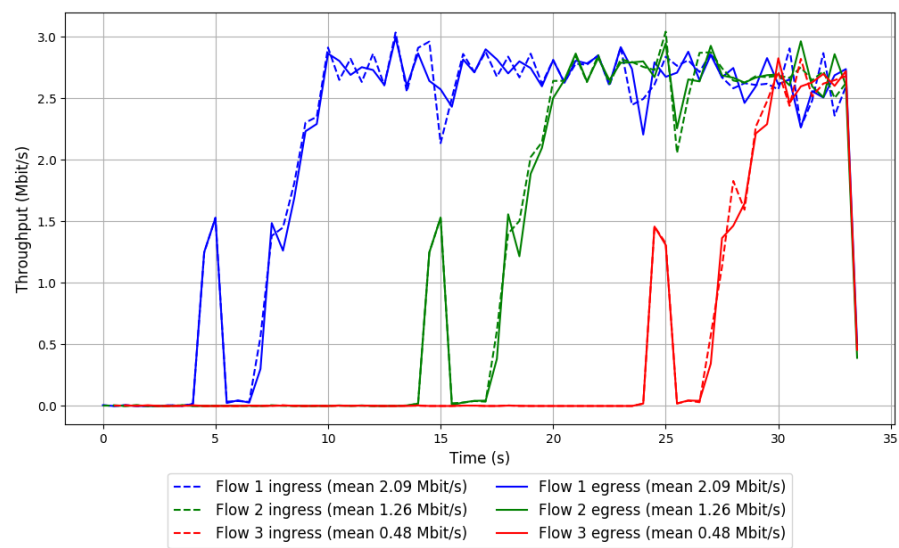
-- Flow 3:

Average throughput: 0.48 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-03-14 01:42:04

End at: 2018-03-14 01:42:34

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 112.478 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.502 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 111.732 ms

Loss rate: 0.00%

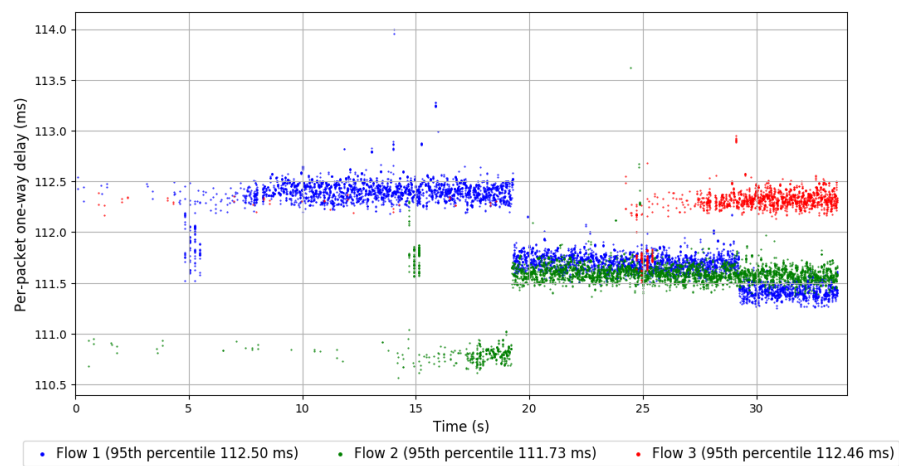
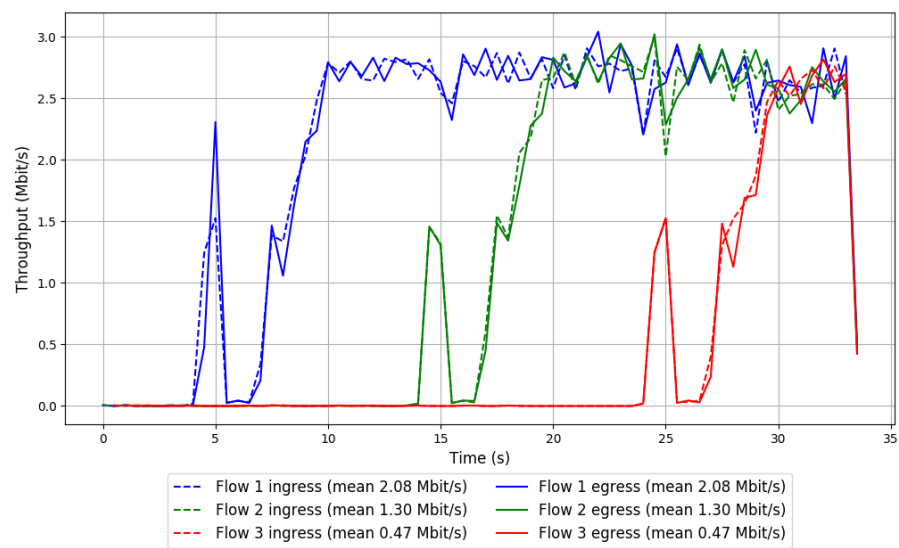
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 112.459 ms

Loss rate: 0.06%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-03-14 02:01:38

End at: 2018-03-14 02:02:08

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 114.493 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 114.525 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 110.555 ms

Loss rate: 0.02%

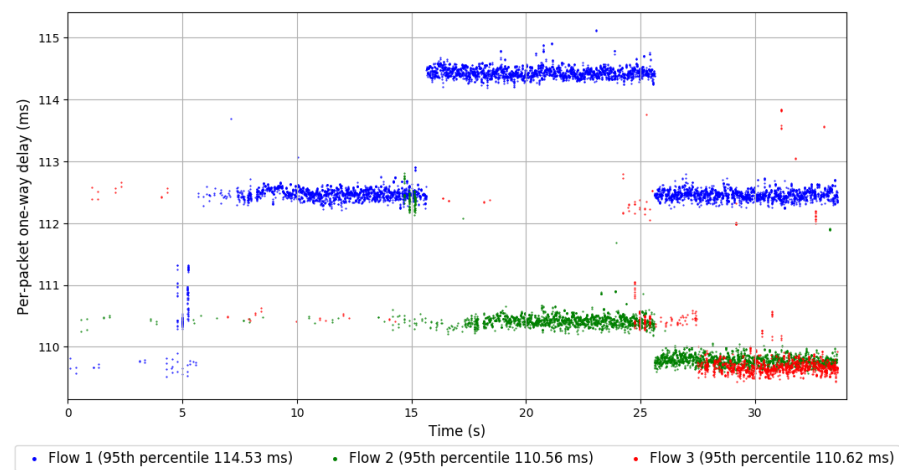
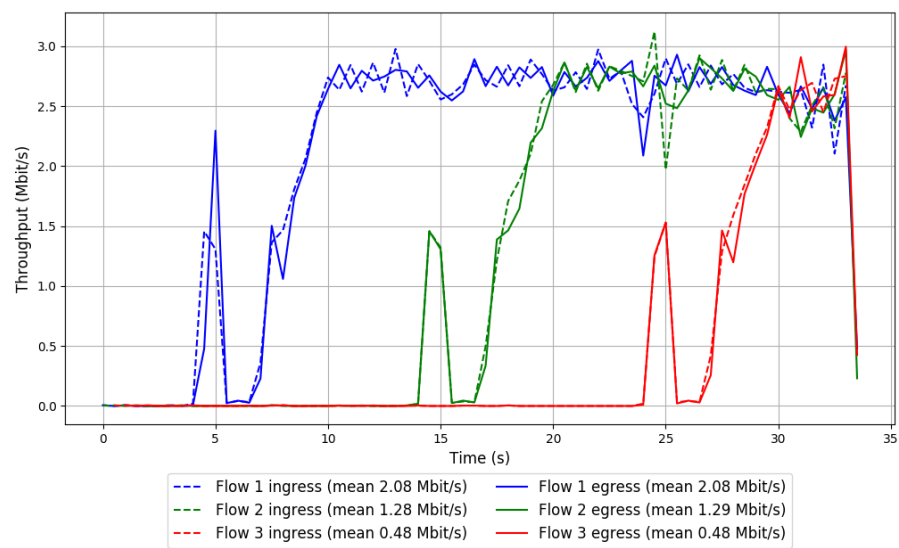
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 110.622 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-03-14 02:21:11

End at: 2018-03-14 02:21:41

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.84 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 111.067 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 111.713 ms

Loss rate: 0.00%

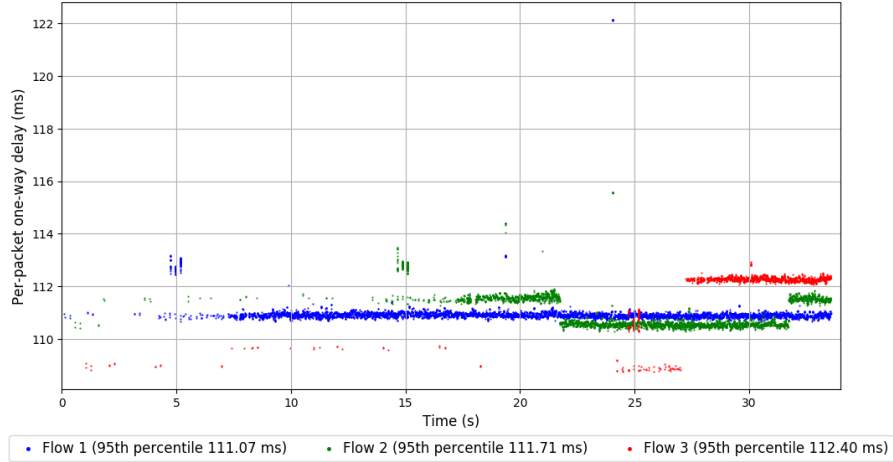
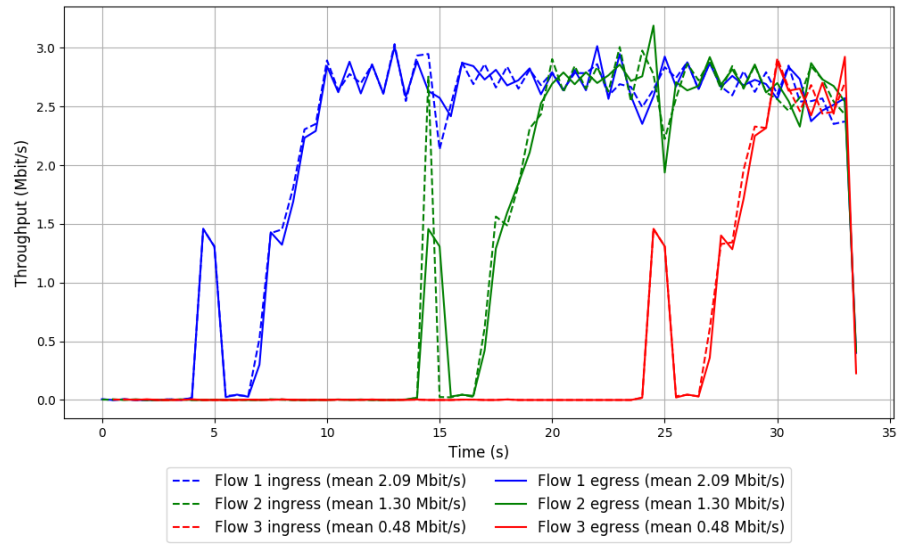
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 112.403 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-03-14 02:40:19

End at: 2018-03-14 02:40:49

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 112.565 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.530 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 112.598 ms

Loss rate: 0.00%

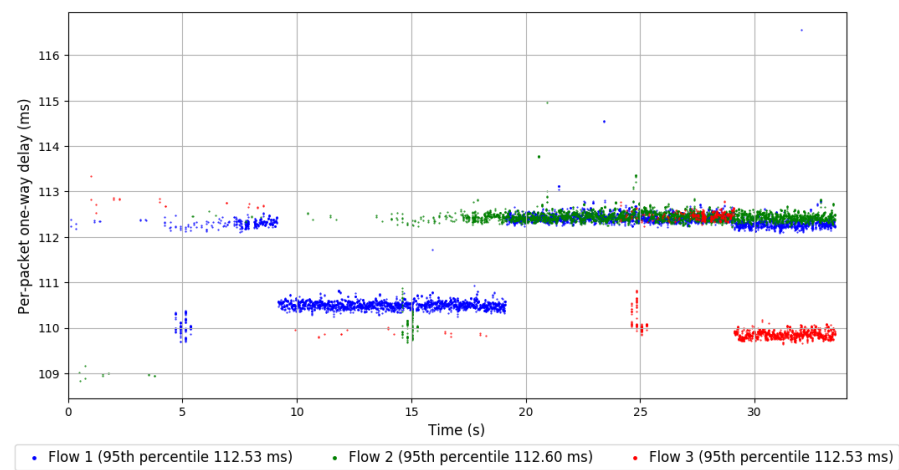
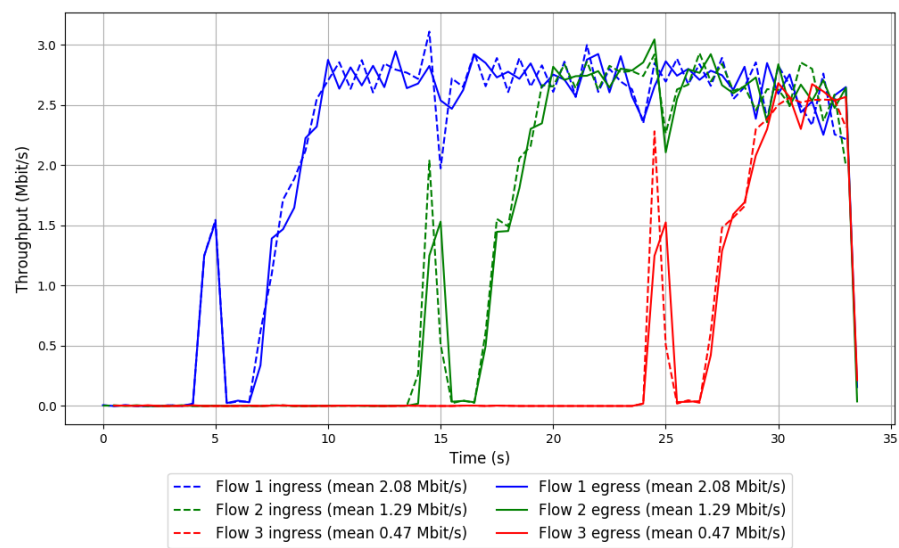
-- Flow 3:

Average throughput: 0.47 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

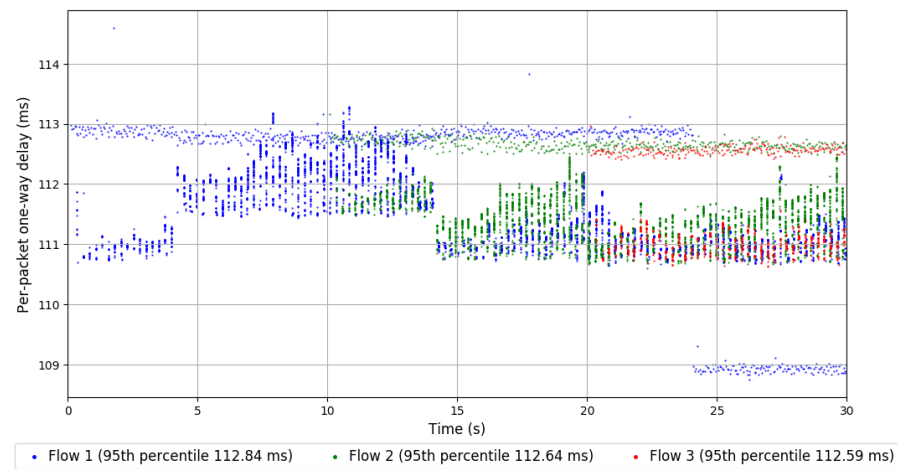
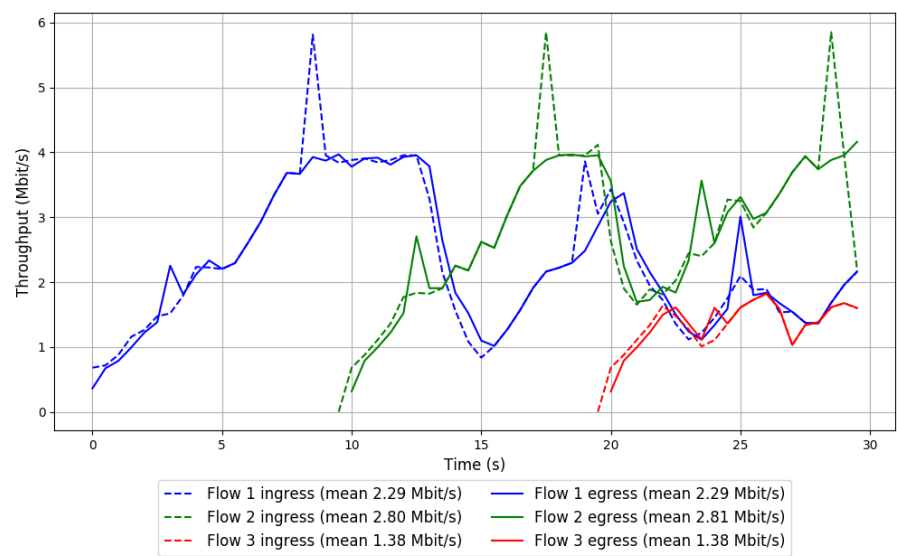


```
Run 1: Statistics of Sprout

Start at: 2018-03-13 23:57:25
End at: 2018-03-13 23:57:55

# Below is generated by plot.py at 2018-03-14 05:31:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.61 Mbit/s
95th percentile per-packet one-way delay: 112.757 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 112.843 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.81 Mbit/s
95th percentile per-packet one-way delay: 112.635 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 112.587 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-03-14 00:16:59

End at: 2018-03-14 00:17:29

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.03 Mbit/s

95th percentile per-packet one-way delay: 111.123 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.35 Mbit/s

95th percentile per-packet one-way delay: 111.119 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.06 Mbit/s

95th percentile per-packet one-way delay: 111.055 ms

Loss rate: 0.00%

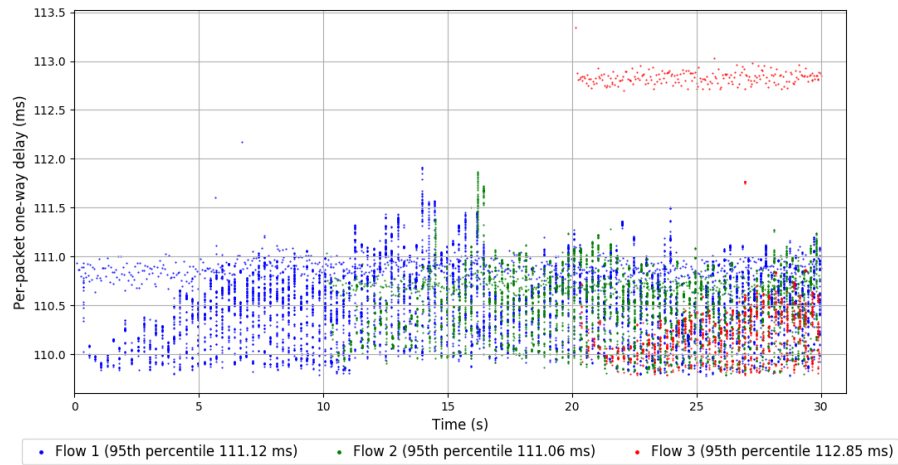
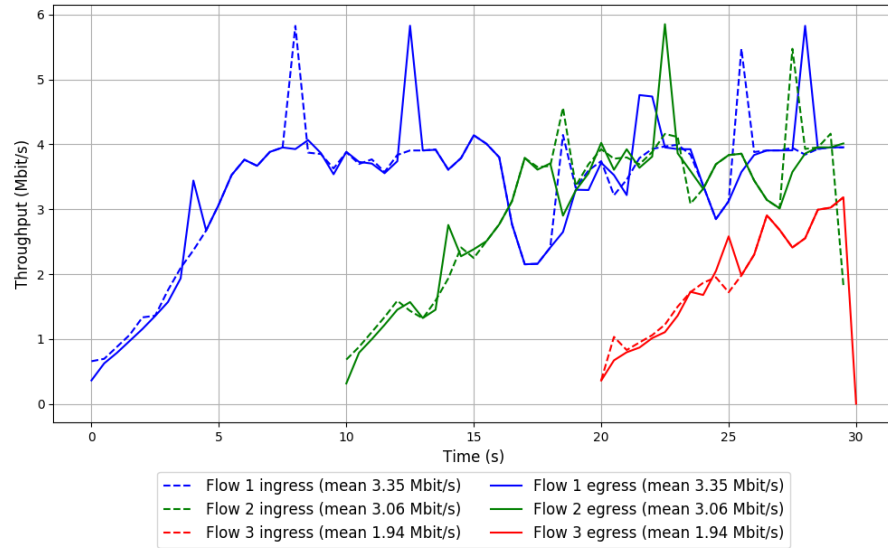
-- Flow 3:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 112.848 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-03-14 00:36:17

End at: 2018-03-14 00:36:47

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.05 Mbit/s

95th percentile per-packet one-way delay: 113.482 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.15 Mbit/s

95th percentile per-packet one-way delay: 113.403 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 113.649 ms

Loss rate: 0.00%

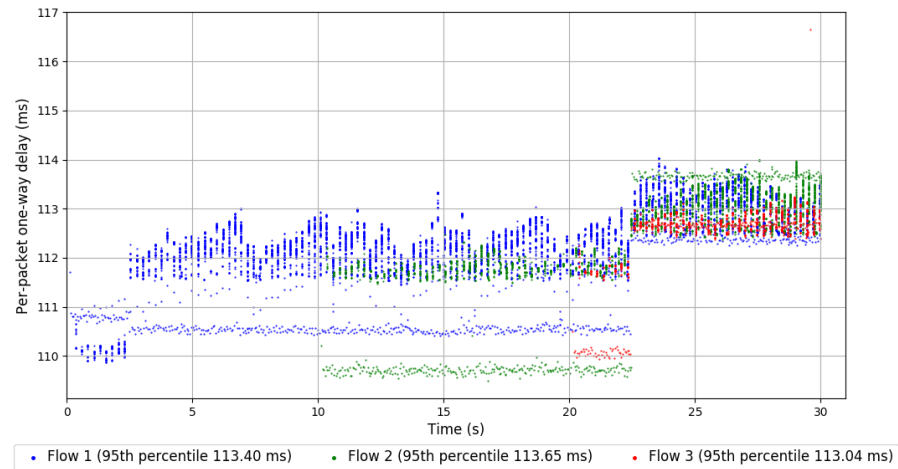
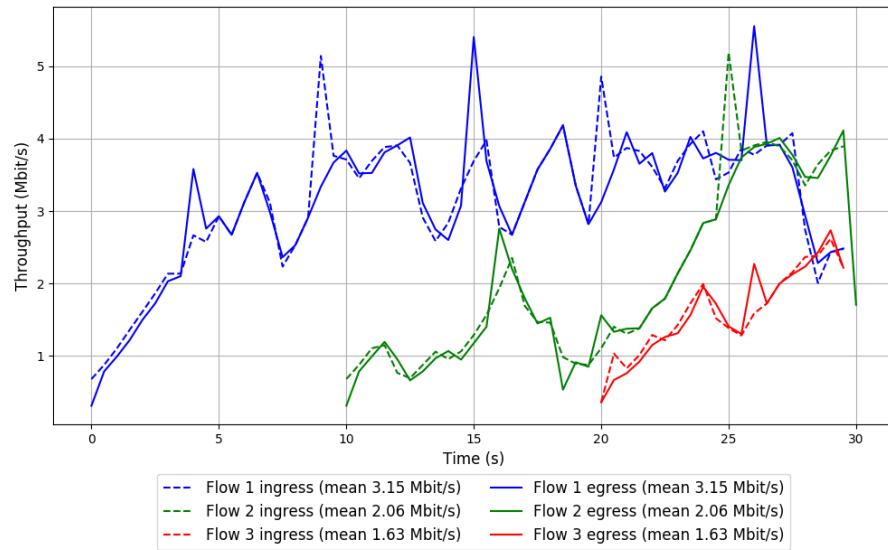
-- Flow 3:

Average throughput: 1.63 Mbit/s

95th percentile per-packet one-way delay: 113.037 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-03-14 00:55:51

End at: 2018-03-14 00:56:21

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.52 Mbit/s

95th percentile per-packet one-way delay: 113.245 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.82 Mbit/s

95th percentile per-packet one-way delay: 113.353 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 113.049 ms

Loss rate: 0.00%

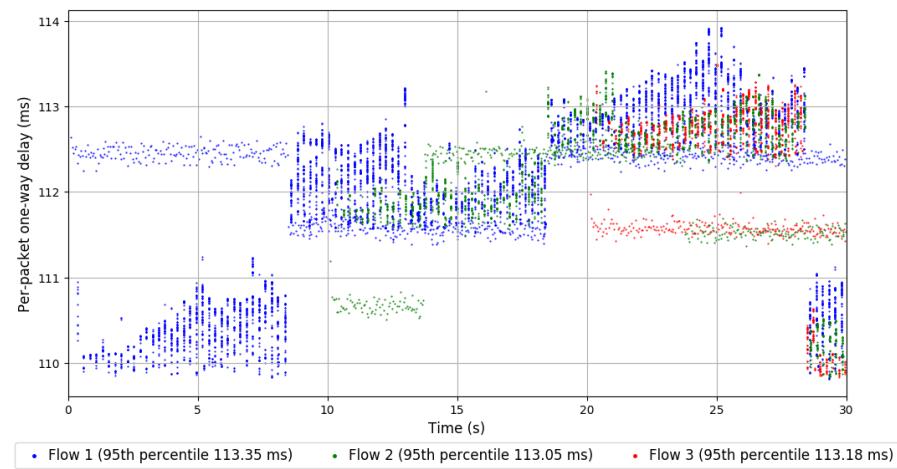
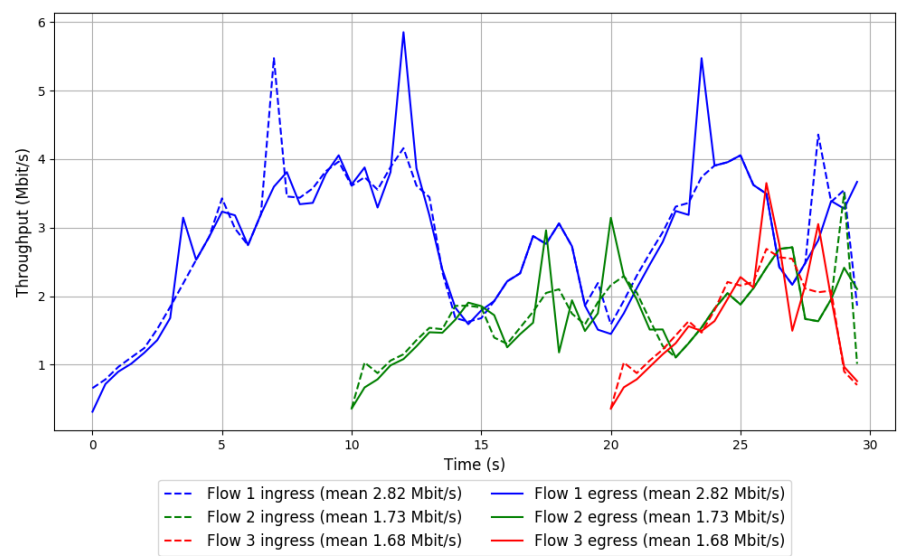
-- Flow 3:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 113.180 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-03-14 01:15:07

End at: 2018-03-14 01:15:37

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.97 Mbit/s

95th percentile per-packet one-way delay: 111.886 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 111.771 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.84 Mbit/s

95th percentile per-packet one-way delay: 111.856 ms

Loss rate: 0.00%

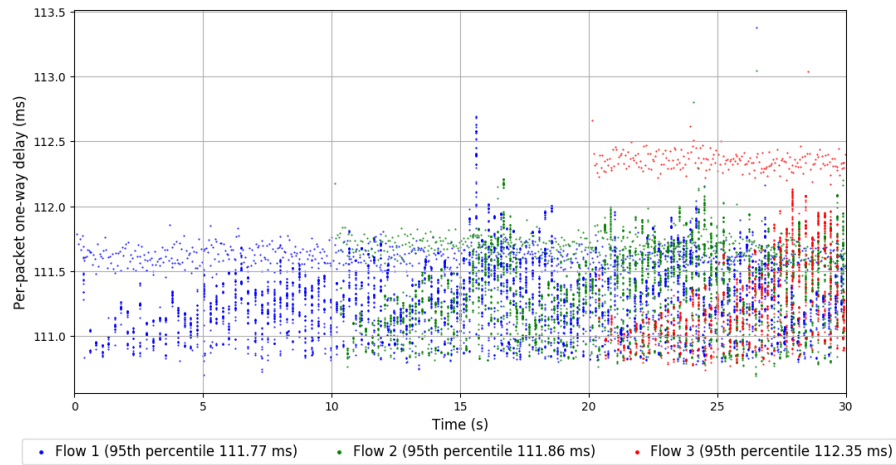
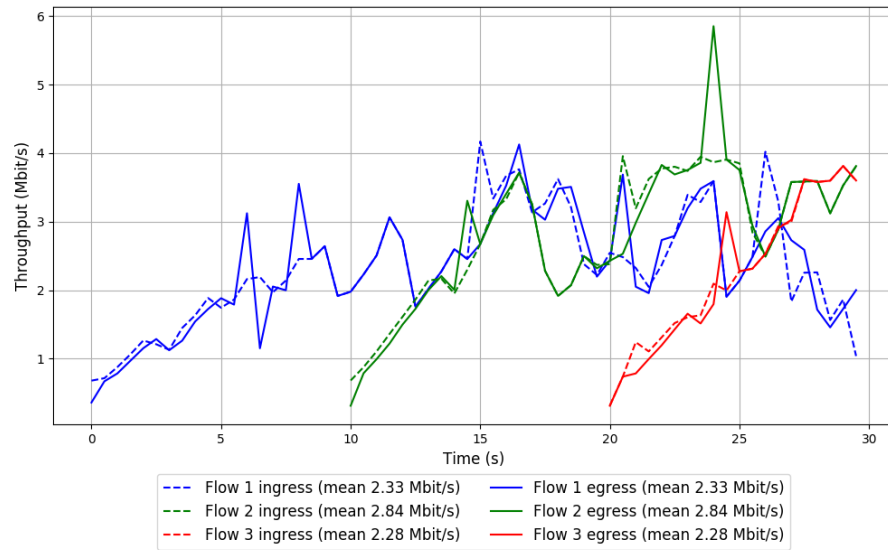
-- Flow 3:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 112.349 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-03-14 01:34:36

End at: 2018-03-14 01:35:06

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.24 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 112.989 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.74 Mbit/s

95th percentile per-packet one-way delay: 112.756 ms

Loss rate: 0.00%

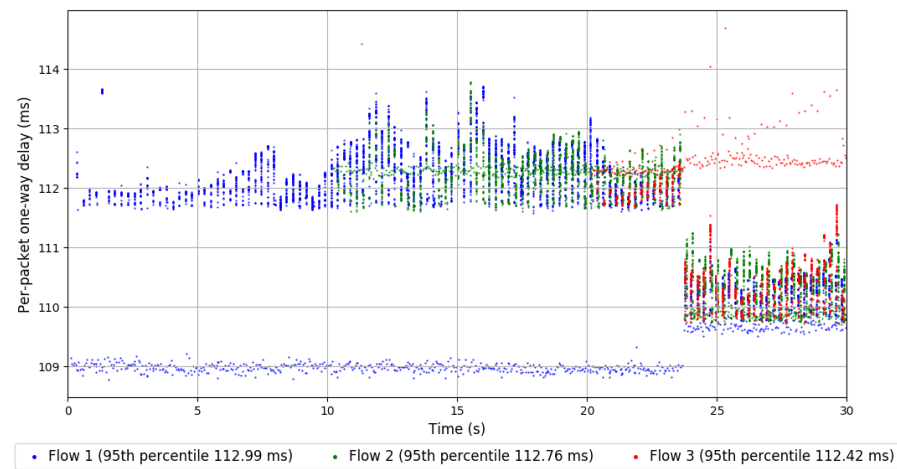
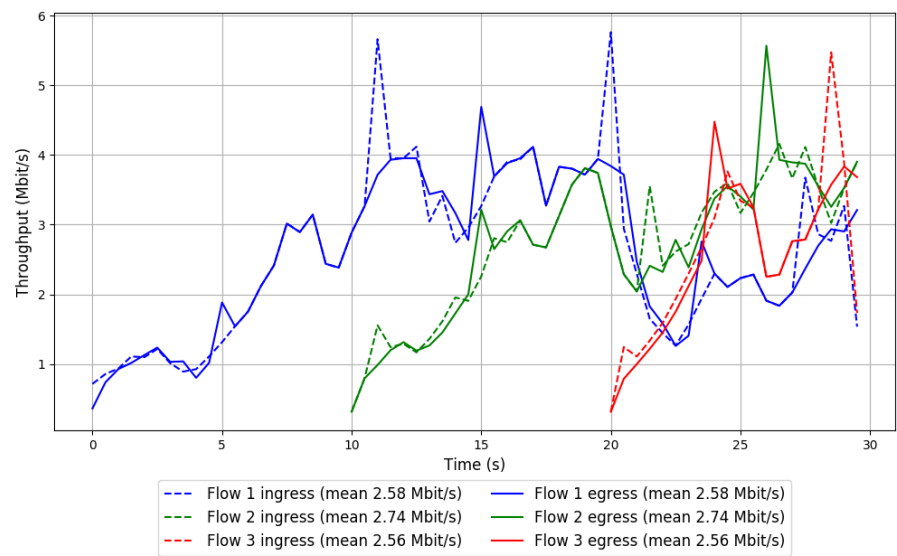
-- Flow 3:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 112.424 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-03-14 01:54:34

End at: 2018-03-14 01:55:04

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.17 Mbit/s

95th percentile per-packet one-way delay: 112.734 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 112.826 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 112.690 ms

Loss rate: 0.00%

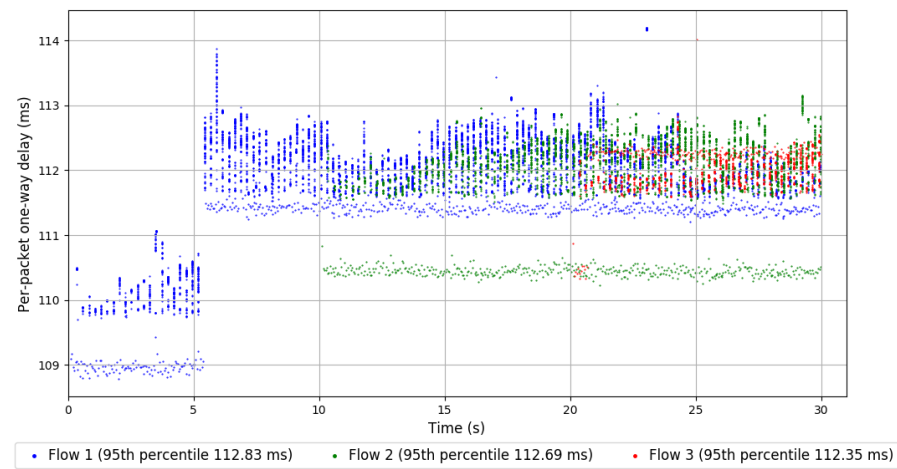
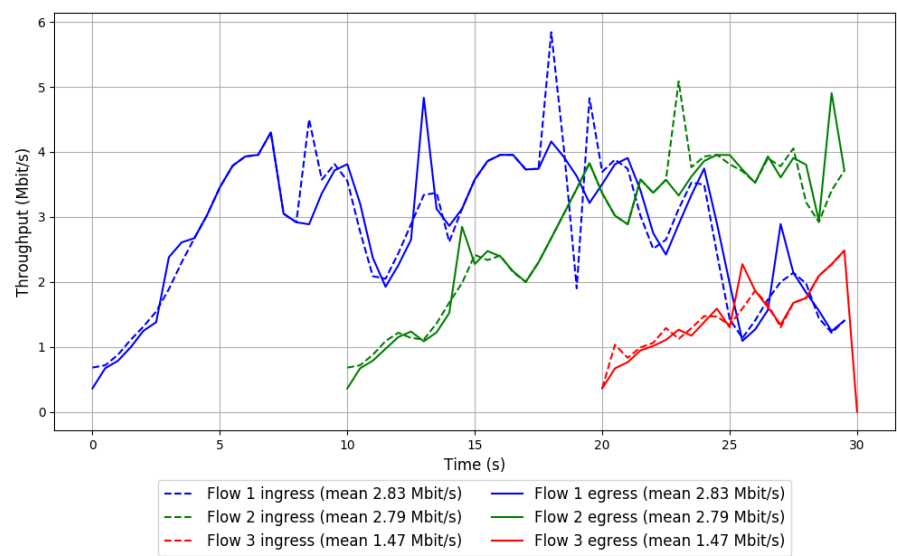
-- Flow 3:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 112.346 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-03-14 02:14:10

End at: 2018-03-14 02:14:40

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.35 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 112.855 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 113.312 ms

Loss rate: 0.00%

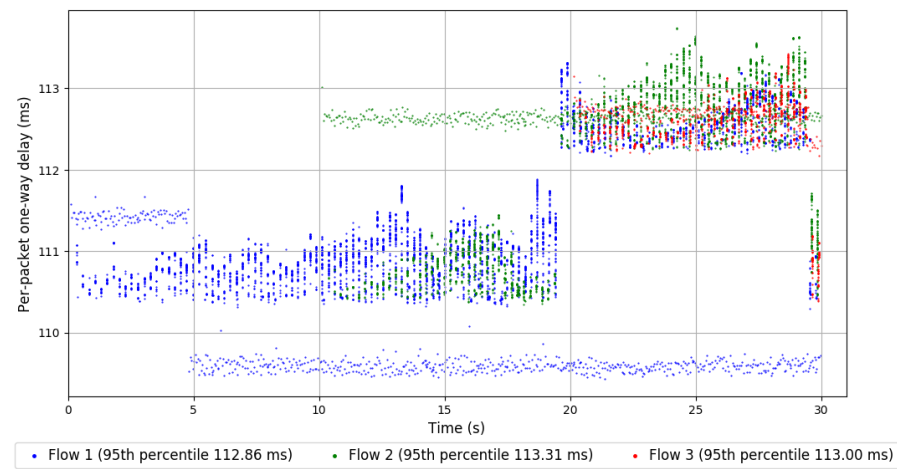
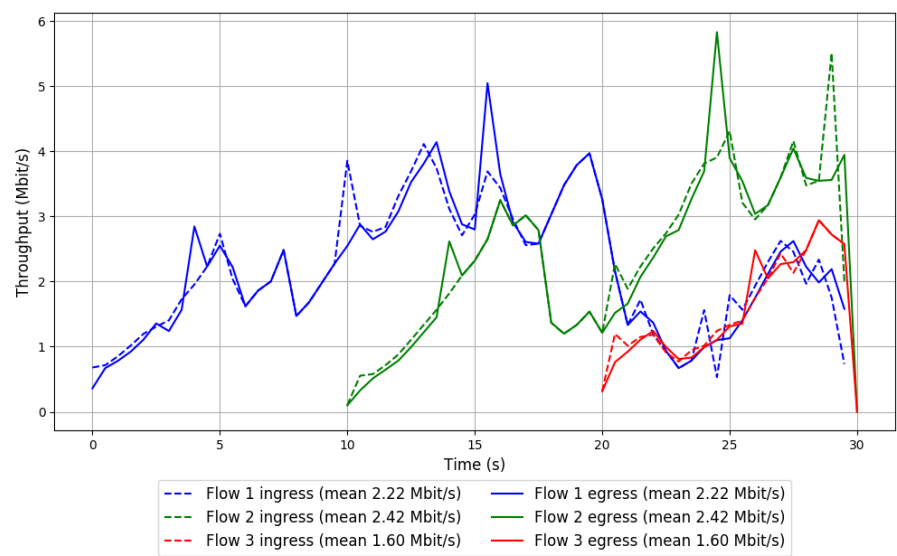
-- Flow 3:

Average throughput: 1.60 Mbit/s

95th percentile per-packet one-way delay: 113.000 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-03-14 02:33:32

End at: 2018-03-14 02:34:02

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.48 Mbit/s

95th percentile per-packet one-way delay: 113.362 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.16 Mbit/s

95th percentile per-packet one-way delay: 113.309 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 113.338 ms

Loss rate: 0.00%

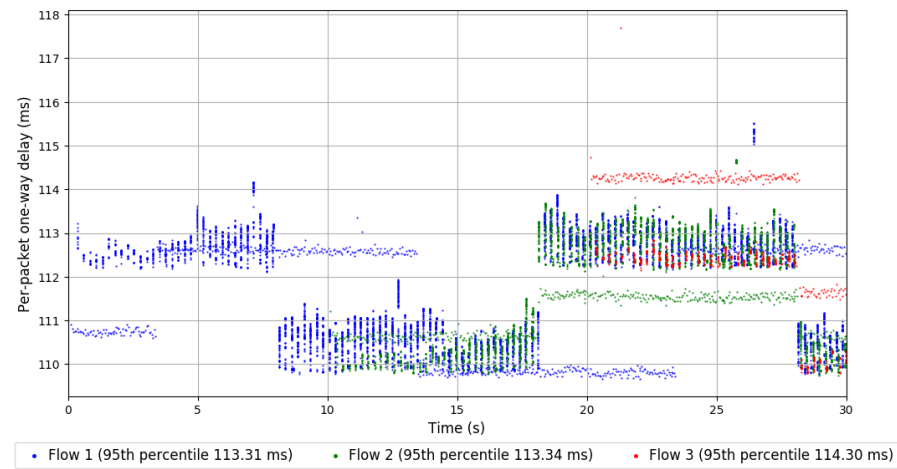
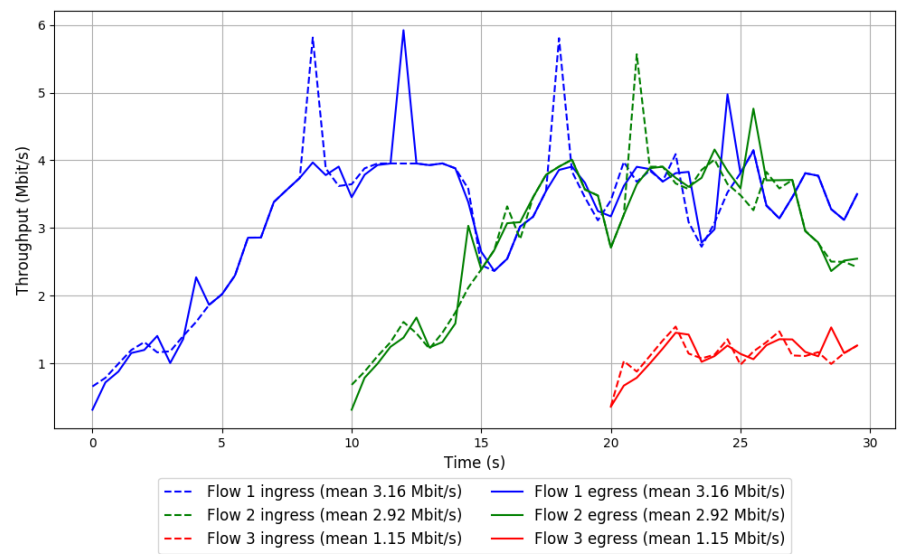
-- Flow 3:

Average throughput: 1.15 Mbit/s

95th percentile per-packet one-way delay: 114.298 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-03-14 02:52:34

End at: 2018-03-14 02:53:04

Below is generated by plot.py at 2018-03-14 05:31:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.67 Mbit/s

95th percentile per-packet one-way delay: 113.258 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 113.173 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 113.378 ms

Loss rate: 0.00%

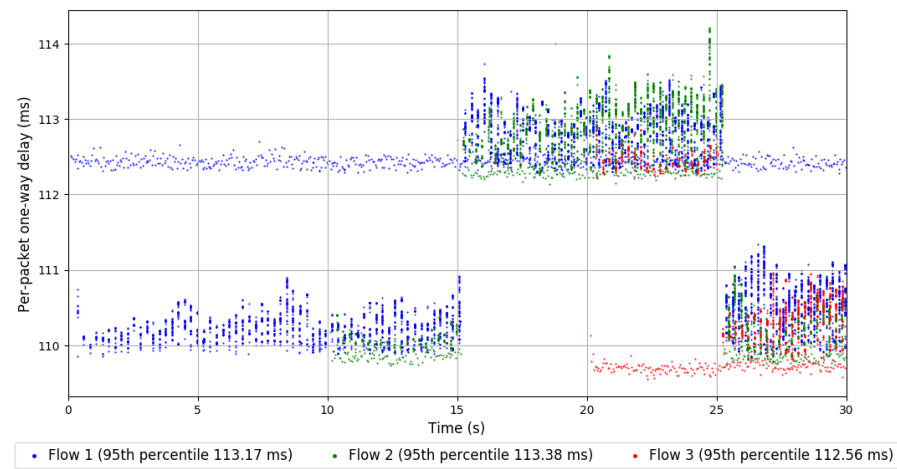
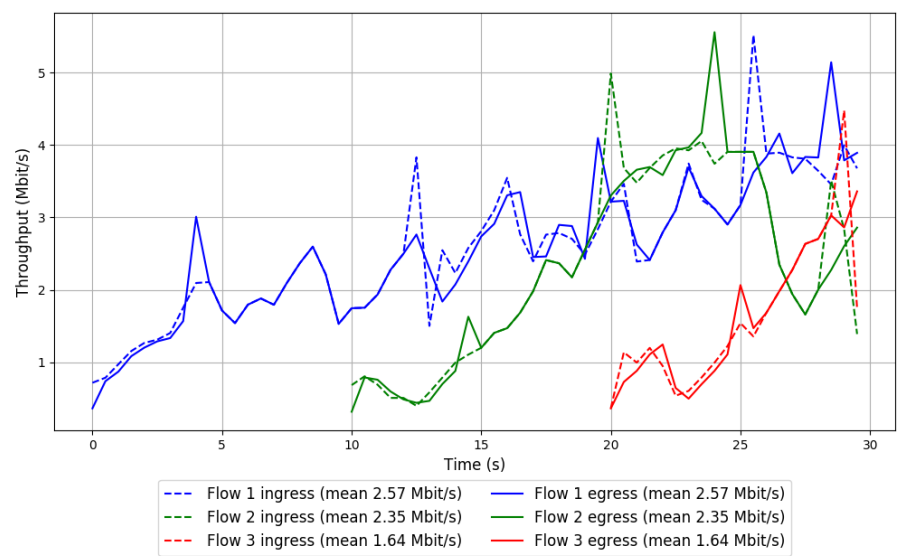
-- Flow 3:

Average throughput: 1.64 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

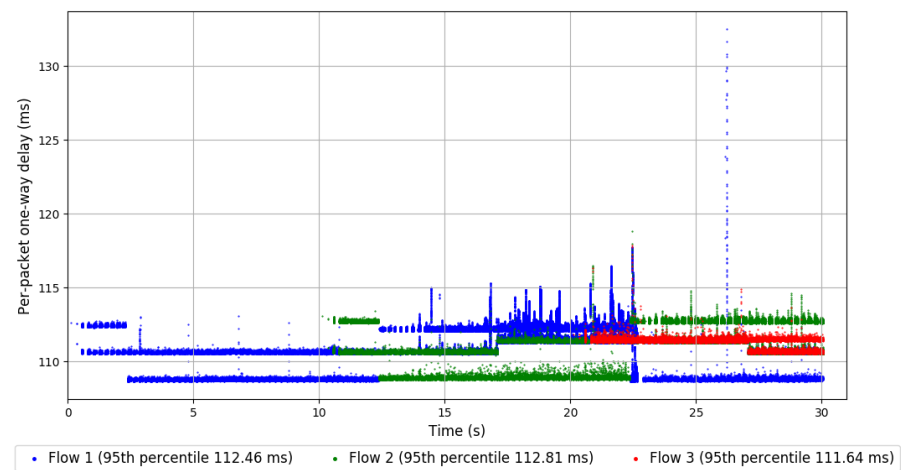
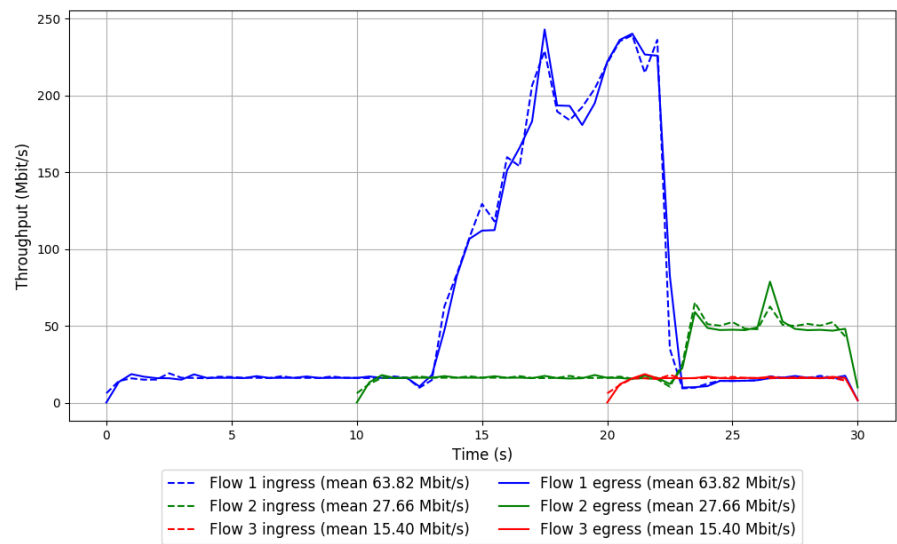


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-03-13 23:39:43
End at: 2018-03-13 23:40:13

# Below is generated by plot.py at 2018-03-14 05:31:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.34 Mbit/s
95th percentile per-packet one-way delay: 112.726 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.82 Mbit/s
95th percentile per-packet one-way delay: 112.456 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.66 Mbit/s
95th percentile per-packet one-way delay: 112.807 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.40 Mbit/s
95th percentile per-packet one-way delay: 111.645 ms
Loss rate: 0.00%
```


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

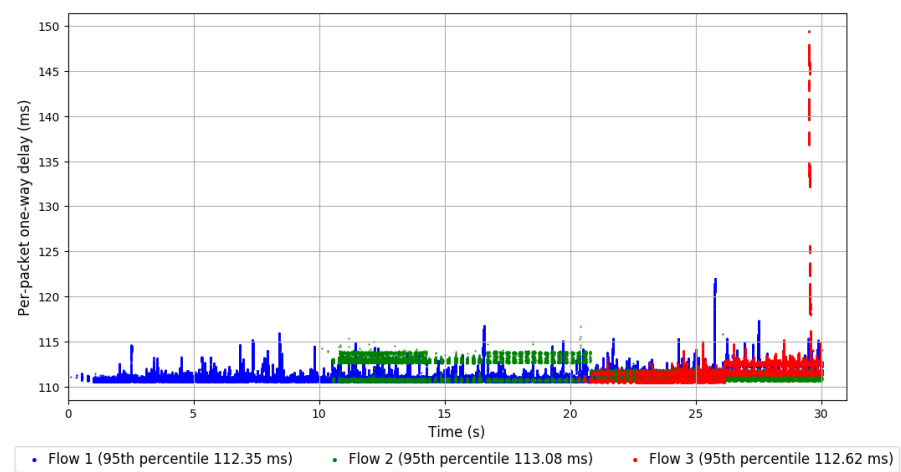
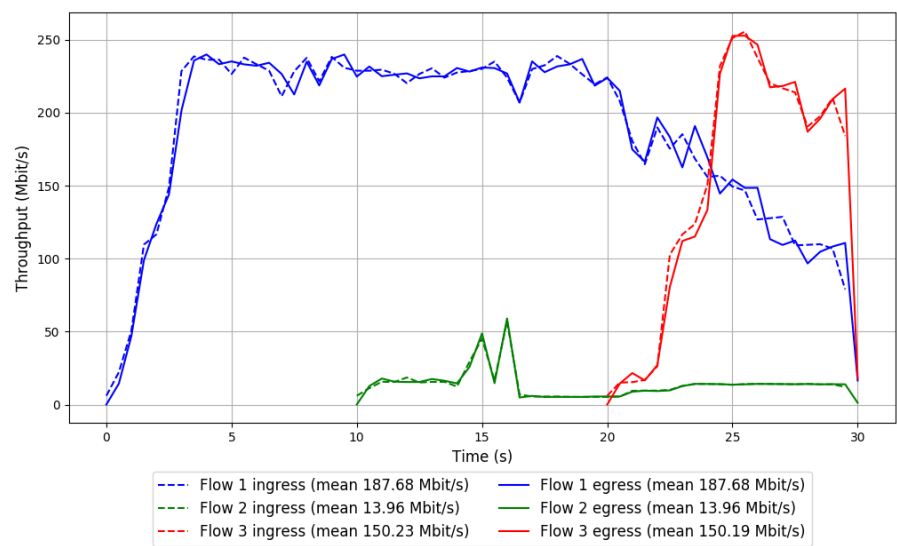


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-03-13 23:58:59
End at: 2018-03-13 23:59:29

# Below is generated by plot.py at 2018-03-14 05:33:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 246.78 Mbit/s
95th percentile per-packet one-way delay: 112.560 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.68 Mbit/s
95th percentile per-packet one-way delay: 112.346 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 13.96 Mbit/s
95th percentile per-packet one-way delay: 113.078 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 150.19 Mbit/s
95th percentile per-packet one-way delay: 112.617 ms
Loss rate: 0.00%
```

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

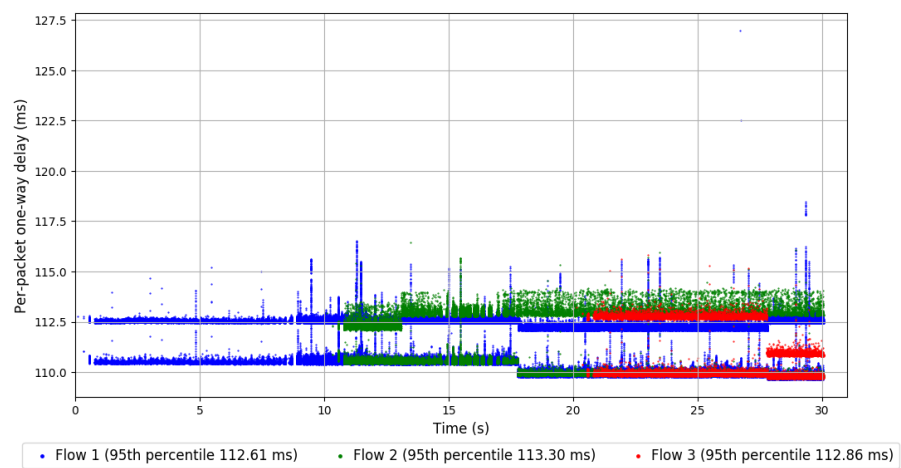
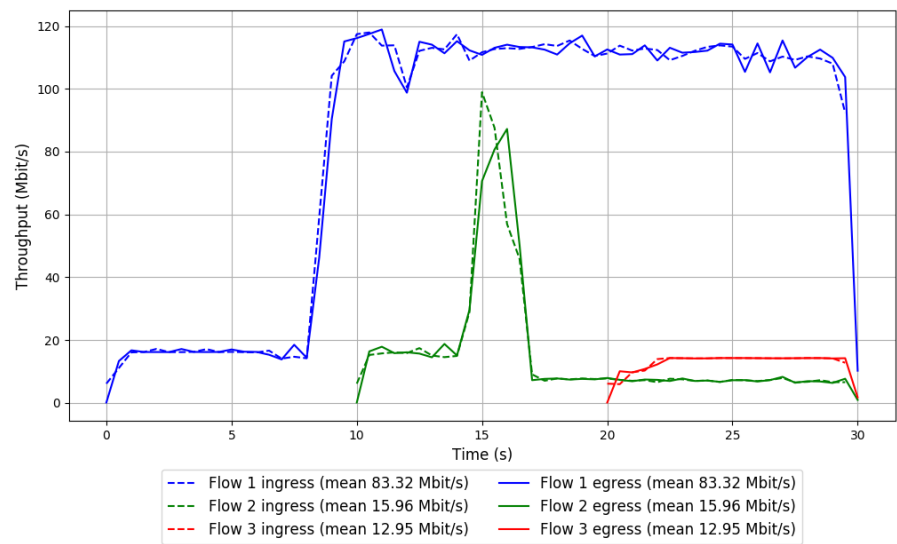


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-03-14 00:18:32
End at: 2018-03-14 00:19:02

# Below is generated by plot.py at 2018-03-14 05:33:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 98.23 Mbit/s
95th percentile per-packet one-way delay: 112.851 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 83.32 Mbit/s
95th percentile per-packet one-way delay: 112.611 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.96 Mbit/s
95th percentile per-packet one-way delay: 113.295 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.95 Mbit/s
95th percentile per-packet one-way delay: 112.865 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-03-14 00:37:51

End at: 2018-03-14 00:38:21

Below is generated by plot.py at 2018-03-14 05:34:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 269.32 Mbit/s

95th percentile per-packet one-way delay: 113.261 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 205.62 Mbit/s

95th percentile per-packet one-way delay: 113.527 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 72.04 Mbit/s

95th percentile per-packet one-way delay: 112.547 ms

Loss rate: 0.00%

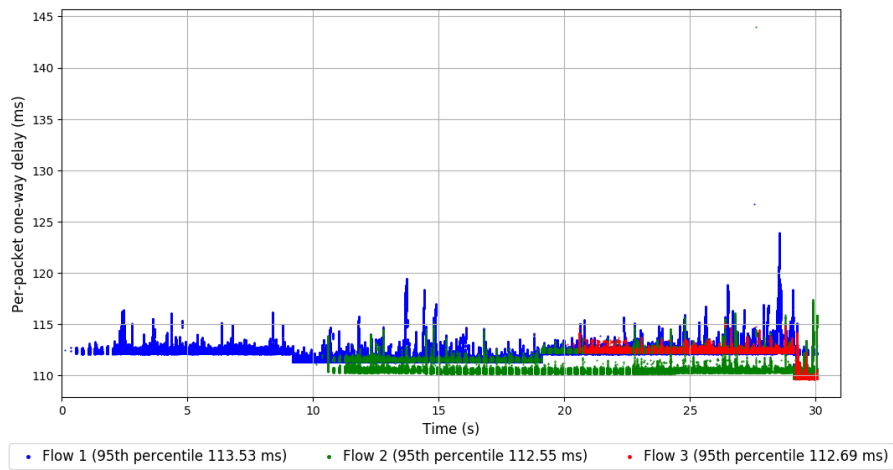
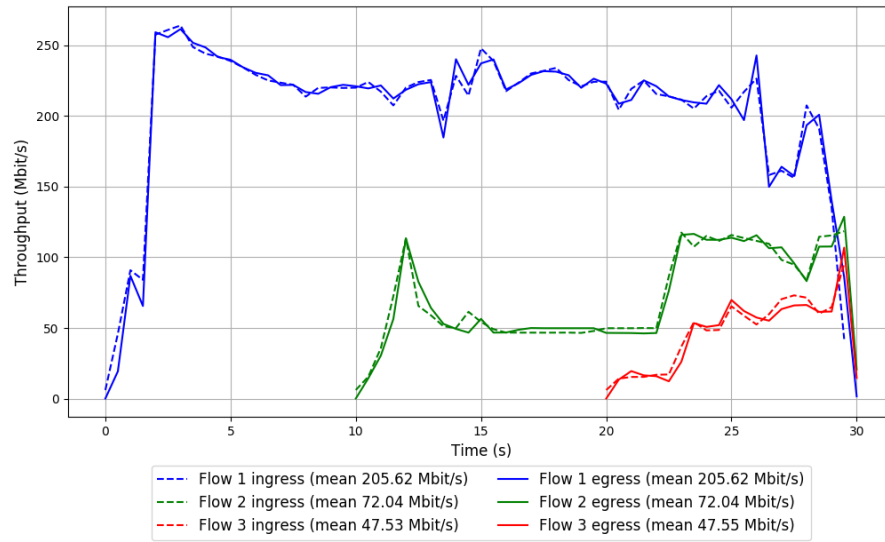
-- Flow 3:

Average throughput: 47.55 Mbit/s

95th percentile per-packet one-way delay: 112.688 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-03-14 00:57:25

End at: 2018-03-14 00:57:55

Below is generated by plot.py at 2018-03-14 05:34:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 23.61 Mbit/s

95th percentile per-packet one-way delay: 113.486 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.56 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.38 Mbit/s

95th percentile per-packet one-way delay: 112.269 ms

Loss rate: 0.00%

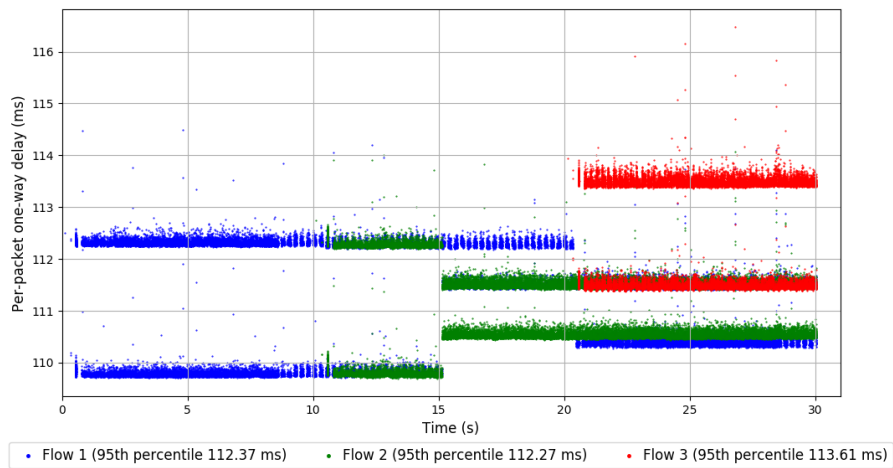
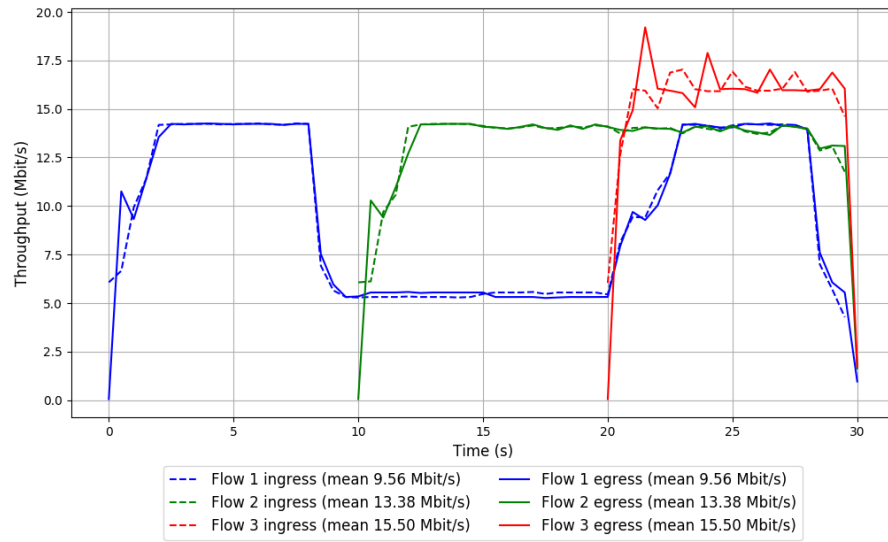
-- Flow 3:

Average throughput: 15.50 Mbit/s

95th percentile per-packet one-way delay: 113.611 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-03-14 01:16:40

End at: 2018-03-14 01:17:10

Below is generated by plot.py at 2018-03-14 05:34:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.12 Mbit/s

95th percentile per-packet one-way delay: 111.623 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 13.24 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.13 Mbit/s

95th percentile per-packet one-way delay: 111.634 ms

Loss rate: 0.00%

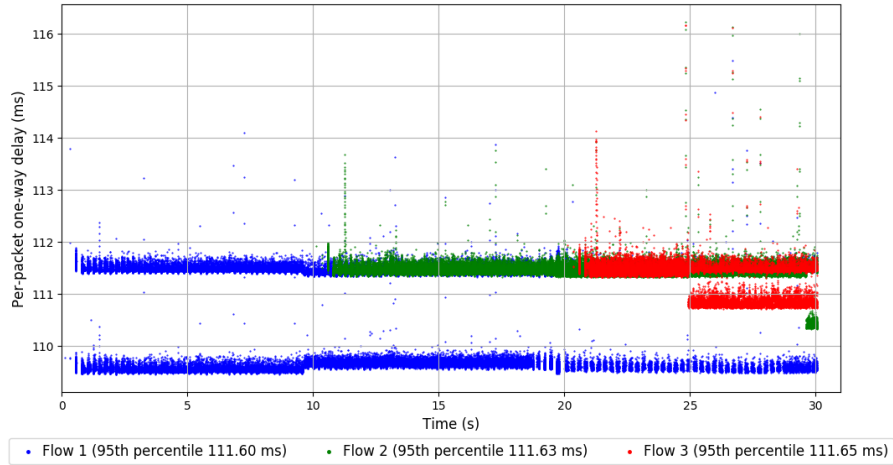
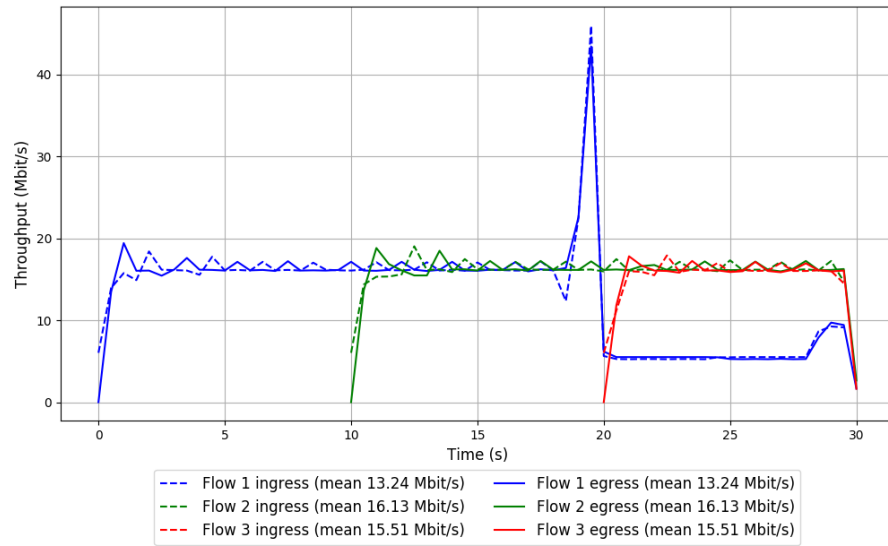
-- Flow 3:

Average throughput: 15.51 Mbit/s

95th percentile per-packet one-way delay: 111.648 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-03-14 01:36:09

End at: 2018-03-14 01:36:39

Below is generated by plot.py at 2018-03-14 05:34:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 238.91 Mbit/s

95th percentile per-packet one-way delay: 114.125 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.32 Mbit/s

95th percentile per-packet one-way delay: 113.702 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 163.64 Mbit/s

95th percentile per-packet one-way delay: 117.681 ms

Loss rate: 0.00%

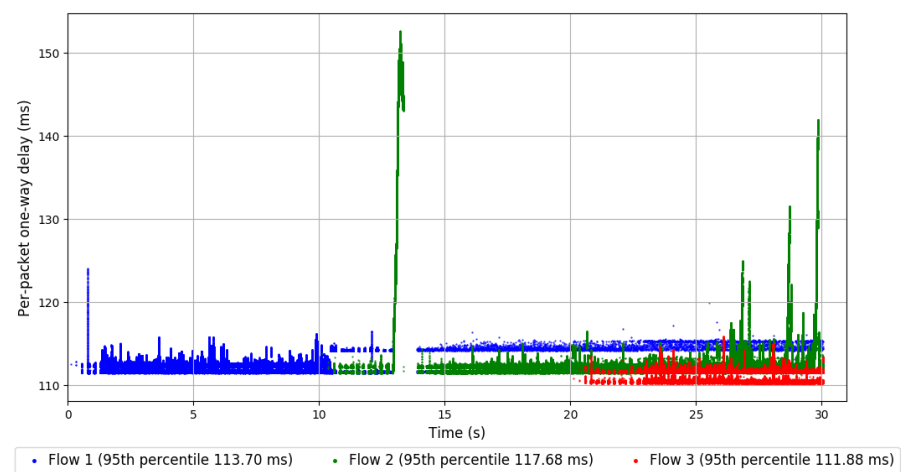
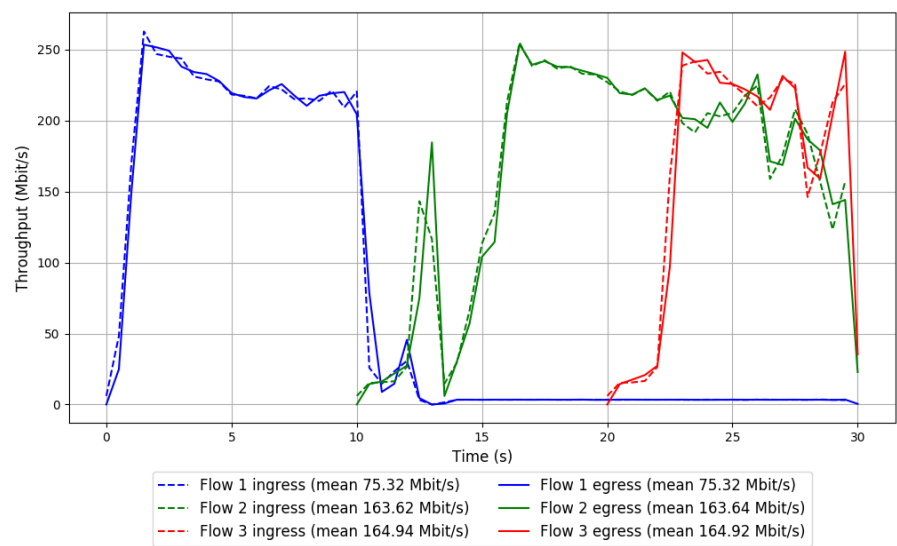
-- Flow 3:

Average throughput: 164.92 Mbit/s

95th percentile per-packet one-way delay: 111.876 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-03-14 01:56:08

End at: 2018-03-14 01:56:38

Below is generated by plot.py at 2018-03-14 05:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 257.96 Mbit/s

95th percentile per-packet one-way delay: 121.062 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 196.28 Mbit/s

95th percentile per-packet one-way delay: 121.429 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 15.99 Mbit/s

95th percentile per-packet one-way delay: 112.287 ms

Loss rate: 0.00%

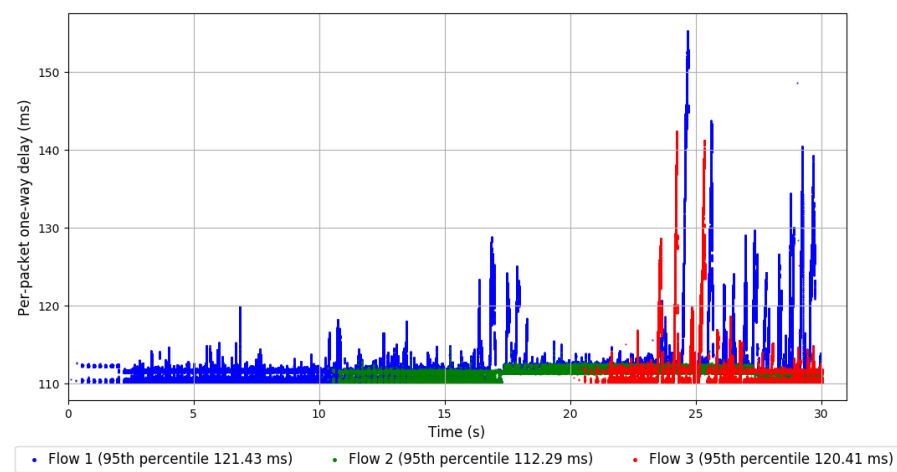
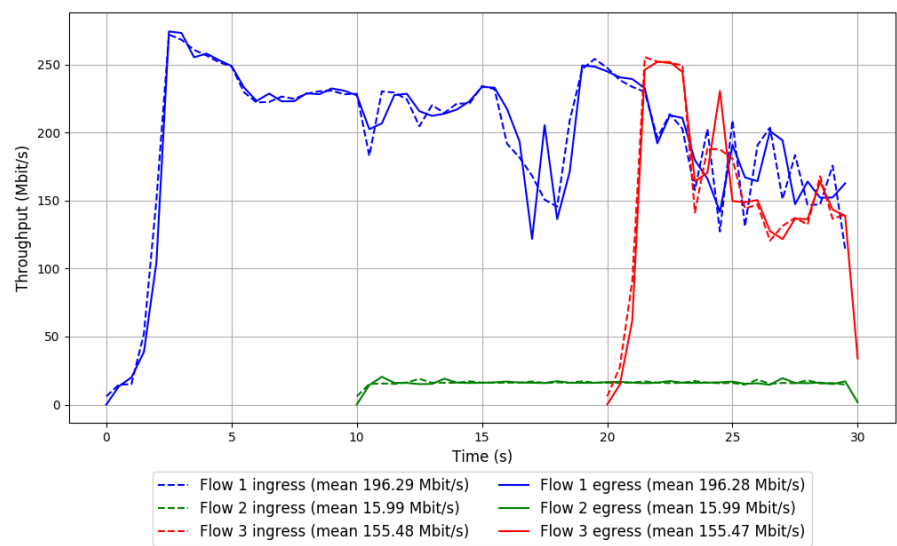
-- Flow 3:

Average throughput: 155.47 Mbit/s

95th percentile per-packet one-way delay: 120.413 ms

Loss rate: 0.00%

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

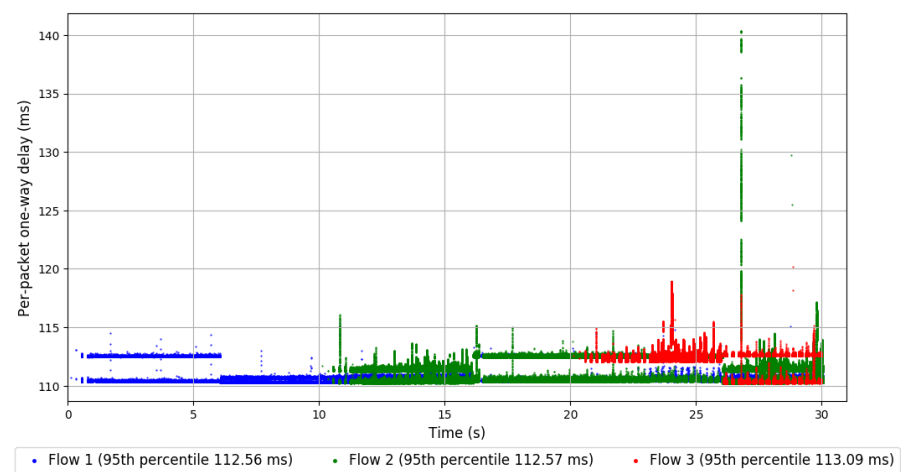
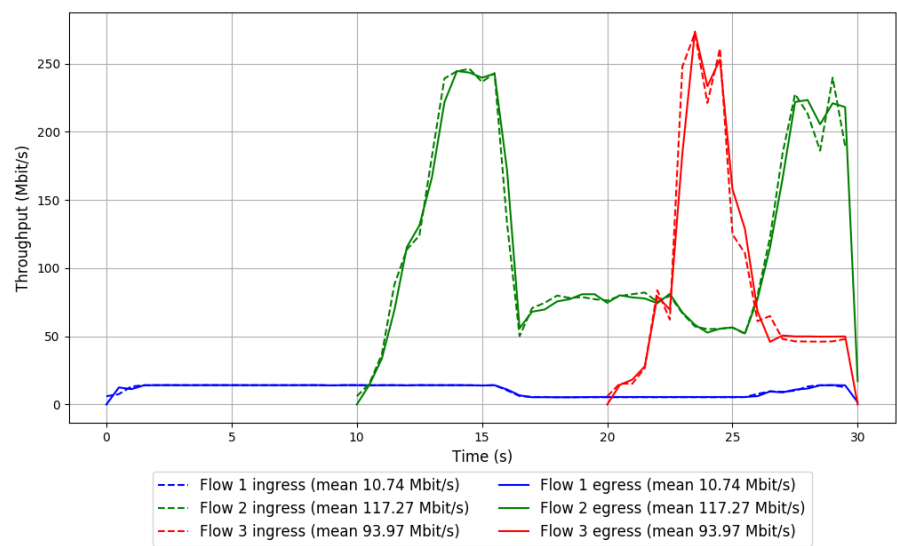


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-03-14 02:15:44
End at: 2018-03-14 02:16:14

# Below is generated by plot.py at 2018-03-14 05:35:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 119.79 Mbit/s
95th percentile per-packet one-way delay: 112.671 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.74 Mbit/s
95th percentile per-packet one-way delay: 112.565 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 117.27 Mbit/s
95th percentile per-packet one-way delay: 112.566 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 93.97 Mbit/s
95th percentile per-packet one-way delay: 113.091 ms
Loss rate: 0.00%
```


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

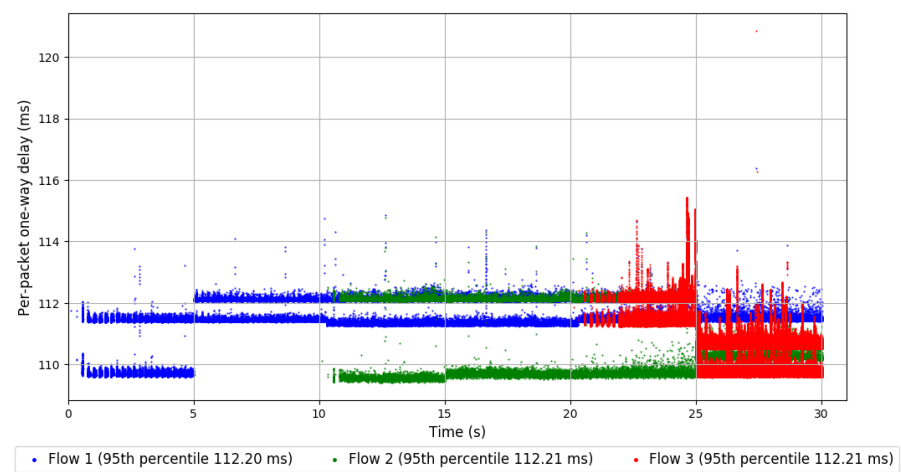
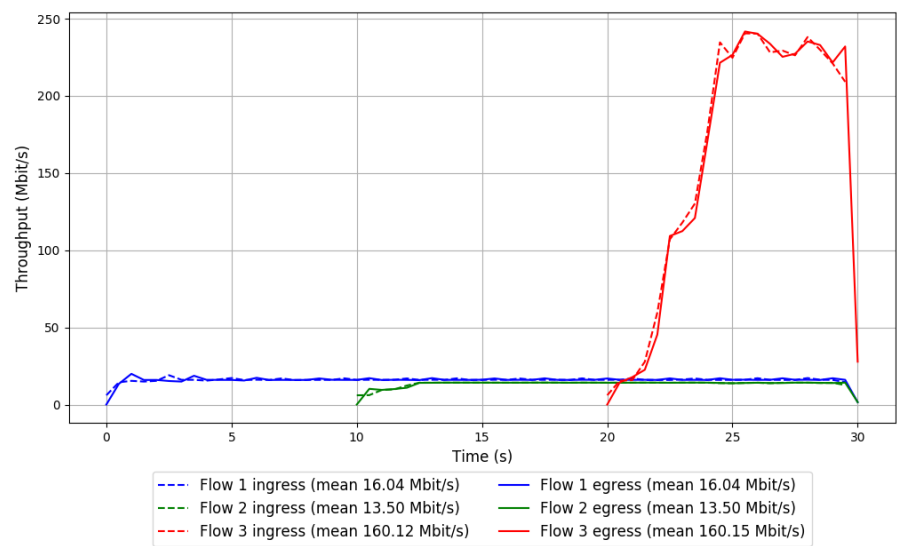


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-03-14 02:35:05
End at: 2018-03-14 02:35:35

# Below is generated by plot.py at 2018-03-14 05:35:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.11 Mbit/s
95th percentile per-packet one-way delay: 112.208 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 16.04 Mbit/s
95th percentile per-packet one-way delay: 112.205 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 13.50 Mbit/s
95th percentile per-packet one-way delay: 112.207 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 160.15 Mbit/s
95th percentile per-packet one-way delay: 112.209 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-03-13 23:44:16

End at: 2018-03-13 23:44:46

Below is generated by plot.py at 2018-03-14 05:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.81 Mbit/s

95th percentile per-packet one-way delay: 122.912 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 29.32 Mbit/s

95th percentile per-packet one-way delay: 123.072 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.27 Mbit/s

95th percentile per-packet one-way delay: 122.645 ms

Loss rate: 0.15%

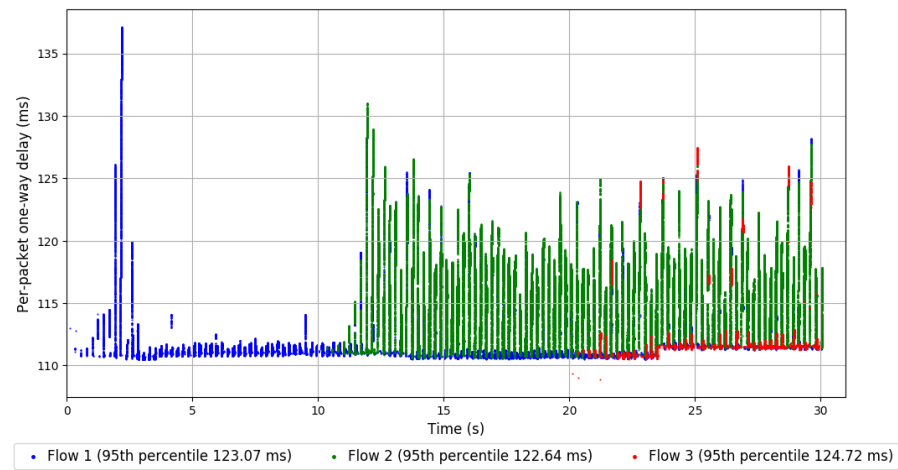
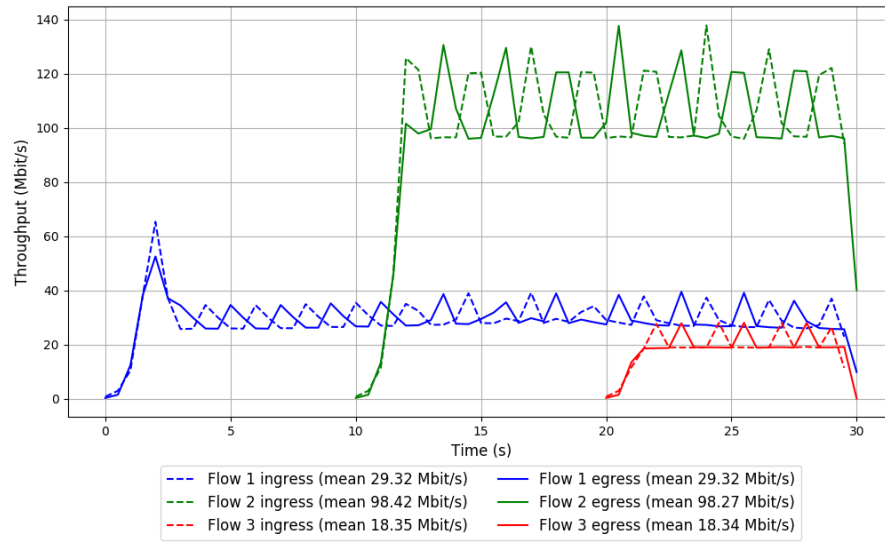
-- Flow 3:

Average throughput: 18.34 Mbit/s

95th percentile per-packet one-way delay: 124.725 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-03-14 00:03:40

End at: 2018-03-14 00:04:10

Below is generated by plot.py at 2018-03-14 05:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.61 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.19 Mbit/s

95th percentile per-packet one-way delay: 111.466 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 29.96 Mbit/s

95th percentile per-packet one-way delay: 116.257 ms

Loss rate: 0.00%

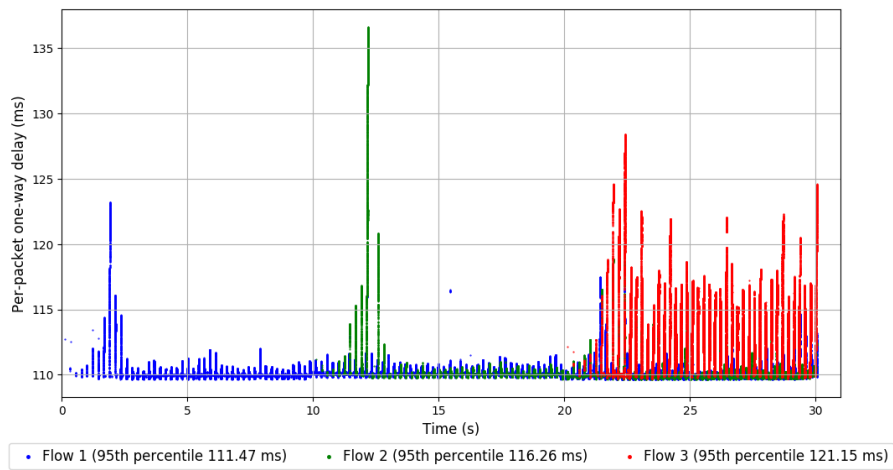
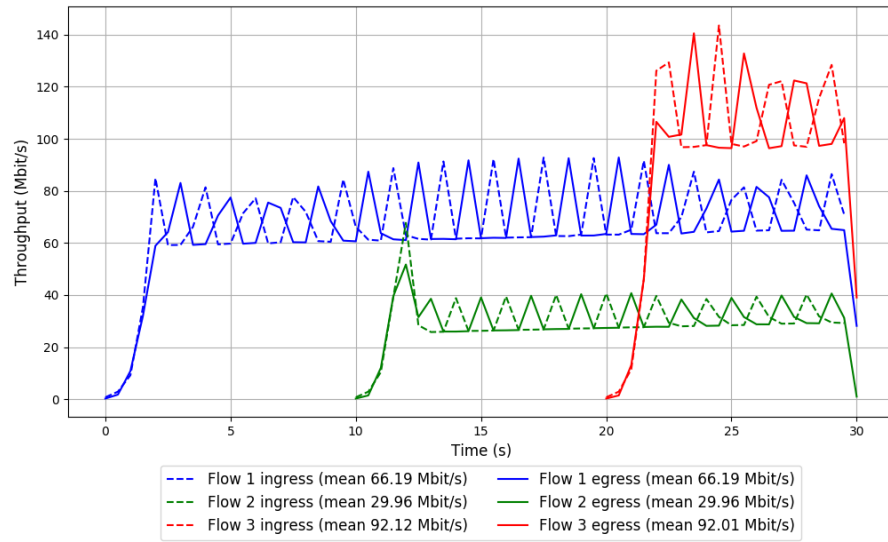
-- Flow 3:

Average throughput: 92.01 Mbit/s

95th percentile per-packet one-way delay: 121.152 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-03-14 00:22:55

End at: 2018-03-14 00:23:25

Below is generated by plot.py at 2018-03-14 05:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 169.05 Mbit/s

95th percentile per-packet one-way delay: 118.360 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 103.29 Mbit/s

95th percentile per-packet one-way delay: 118.978 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.29 Mbit/s

95th percentile per-packet one-way delay: 112.552 ms

Loss rate: 0.00%

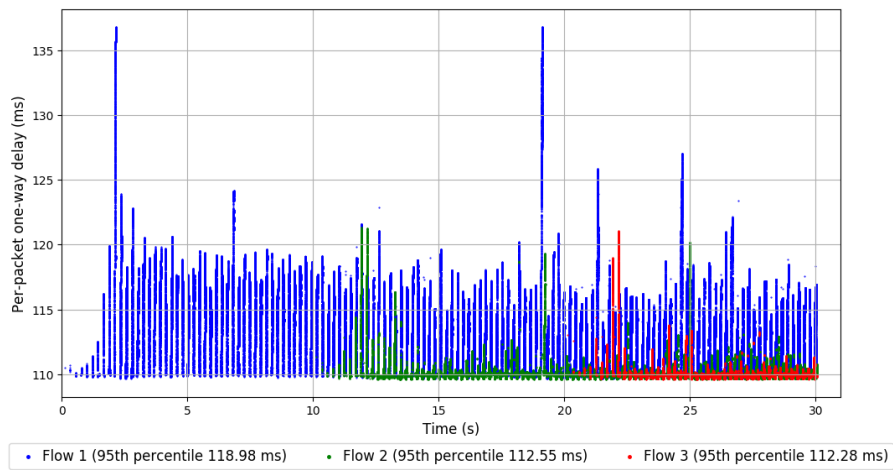
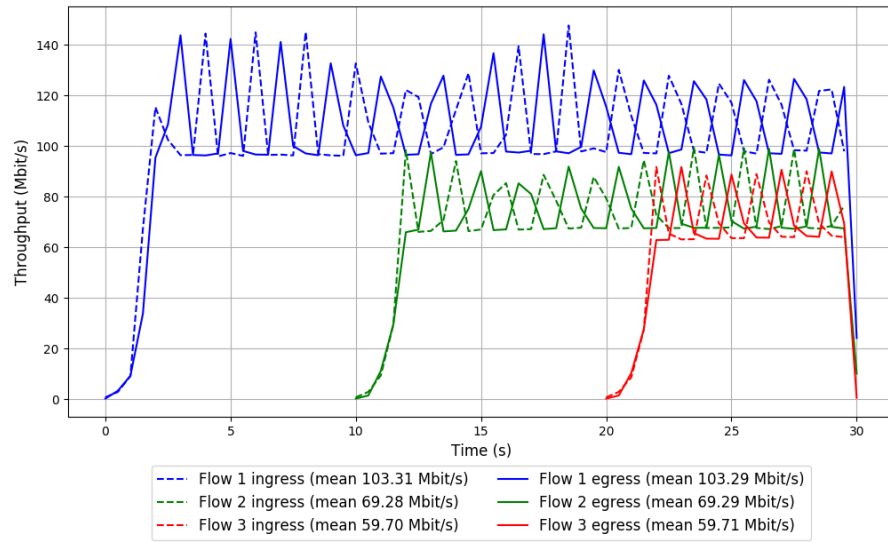
-- Flow 3:

Average throughput: 59.71 Mbit/s

95th percentile per-packet one-way delay: 112.278 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-03-14 00:42:54

End at: 2018-03-14 00:43:24

Below is generated by plot.py at 2018-03-14 05:35:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.90 Mbit/s

95th percentile per-packet one-way delay: 122.893 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 100.92 Mbit/s

95th percentile per-packet one-way delay: 122.686 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 120.951 ms

Loss rate: 0.07%

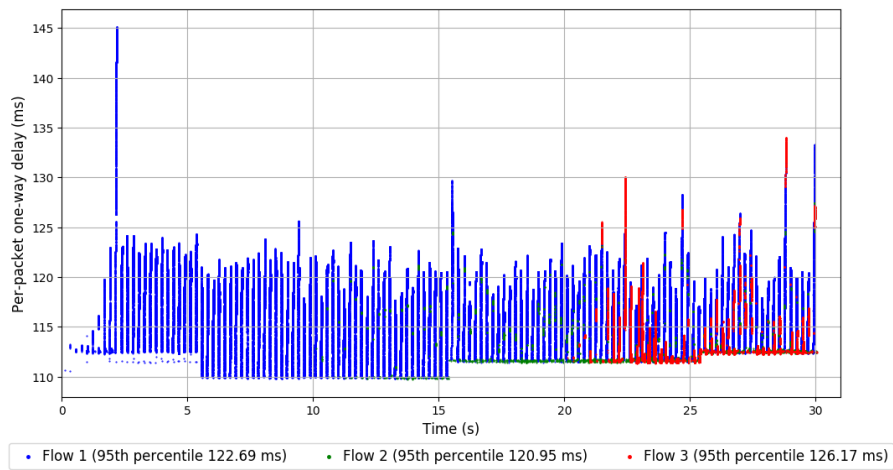
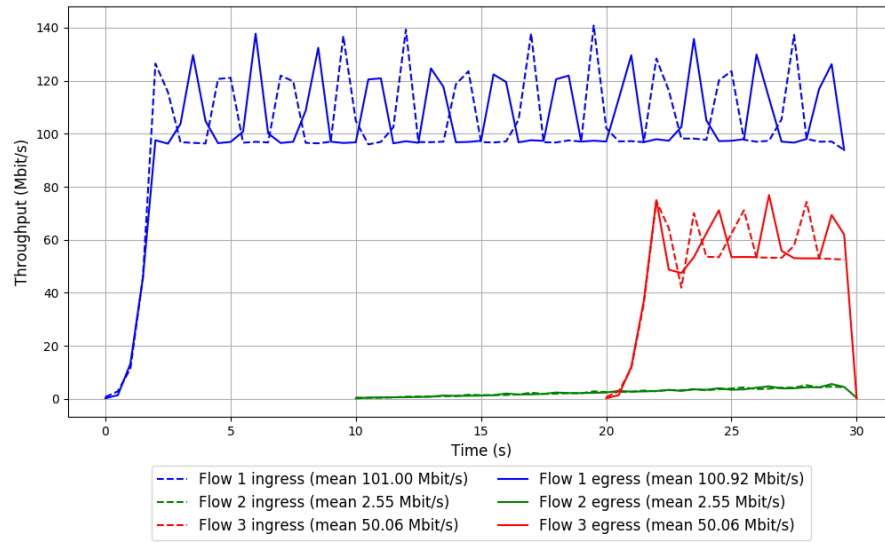
-- Flow 3:

Average throughput: 50.06 Mbit/s

95th percentile per-packet one-way delay: 126.170 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-03-14 01:01:47

End at: 2018-03-14 01:02:17

Below is generated by plot.py at 2018-03-14 05:36:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.74 Mbit/s

95th percentile per-packet one-way delay: 121.556 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.36 Mbit/s

95th percentile per-packet one-way delay: 121.810 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.35 Mbit/s

95th percentile per-packet one-way delay: 121.343 ms

Loss rate: 0.00%

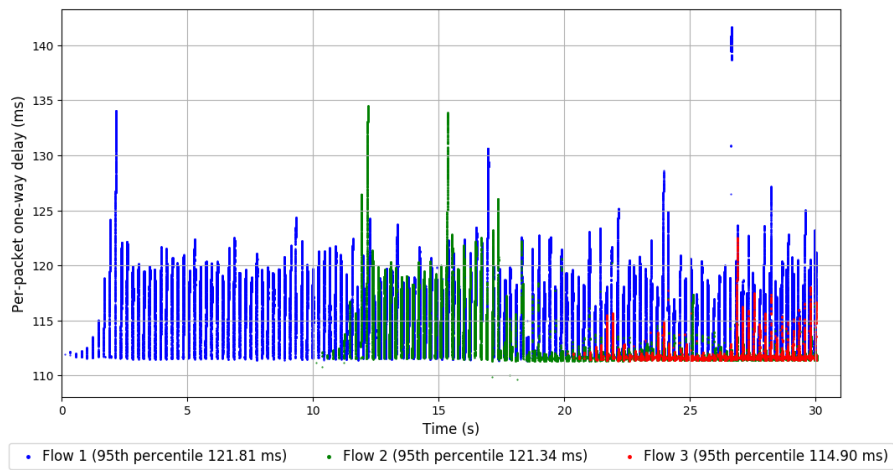
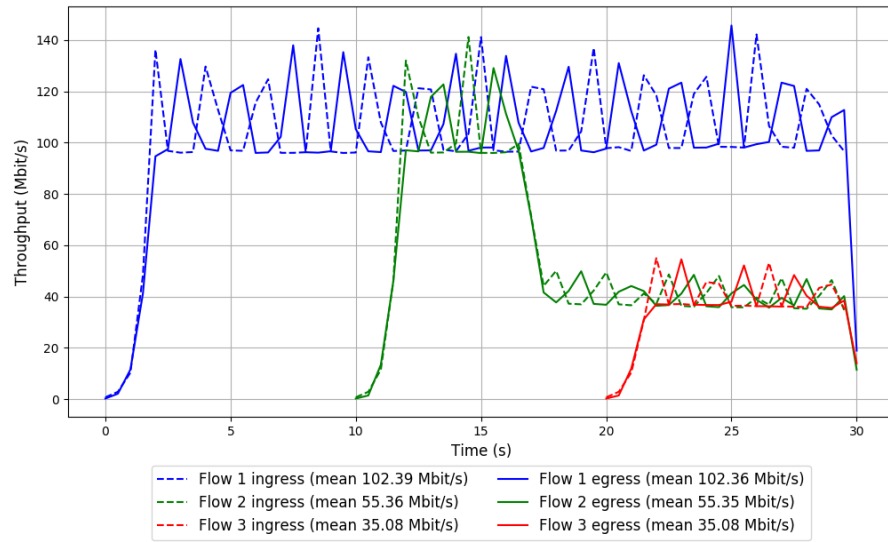
-- Flow 3:

Average throughput: 35.08 Mbit/s

95th percentile per-packet one-way delay: 114.903 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-03-14 01:21:14

End at: 2018-03-14 01:21:44

Below is generated by plot.py at 2018-03-14 05:36:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.96 Mbit/s

95th percentile per-packet one-way delay: 122.643 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 93.78 Mbit/s

95th percentile per-packet one-way delay: 122.818 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.76 Mbit/s

95th percentile per-packet one-way delay: 122.565 ms

Loss rate: 0.00%

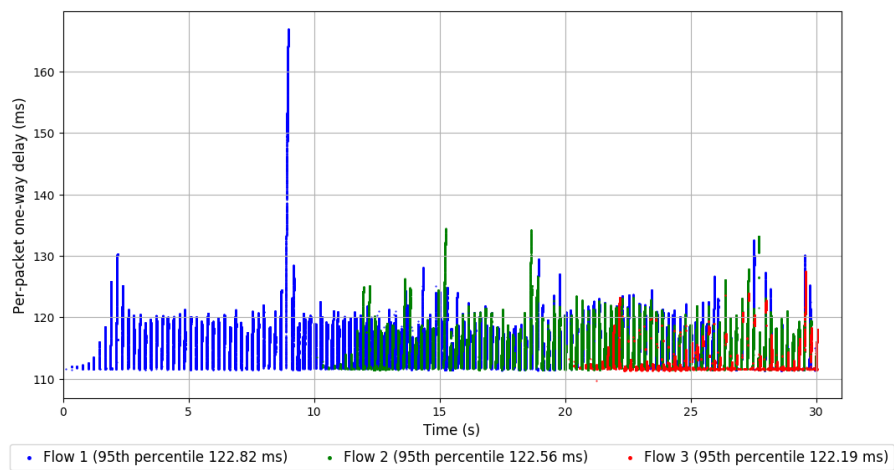
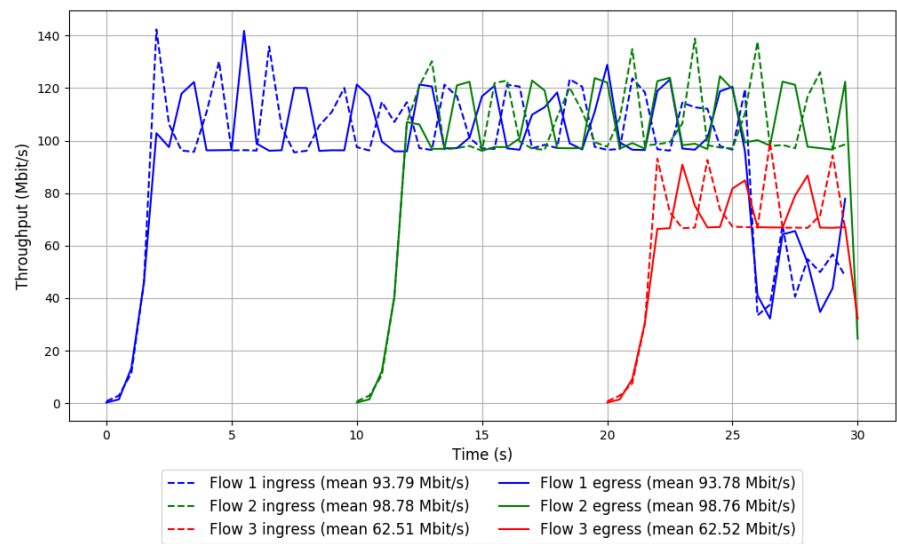
-- Flow 3:

Average throughput: 62.52 Mbit/s

95th percentile per-packet one-way delay: 122.193 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-03-14 01:41:12

End at: 2018-03-14 01:41:42

Below is generated by plot.py at 2018-03-14 05:36:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.22 Mbit/s

95th percentile per-packet one-way delay: 120.464 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.88 Mbit/s

95th percentile per-packet one-way delay: 114.951 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.09 Mbit/s

95th percentile per-packet one-way delay: 117.503 ms

Loss rate: 0.00%

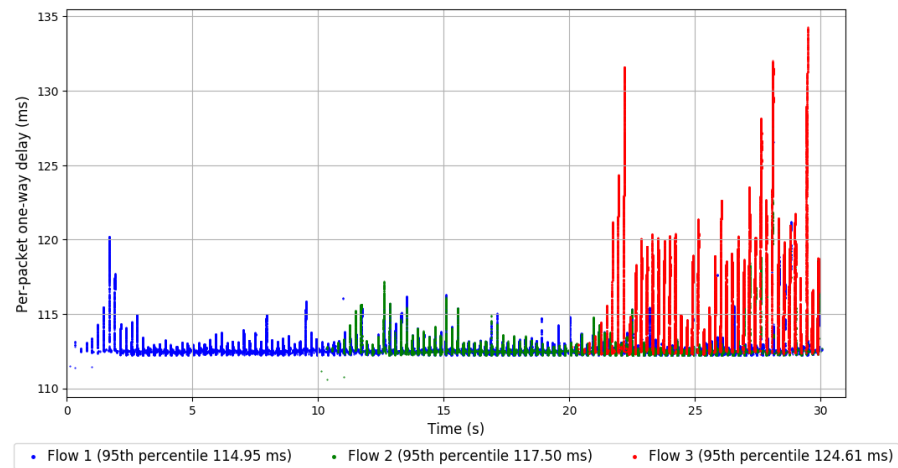
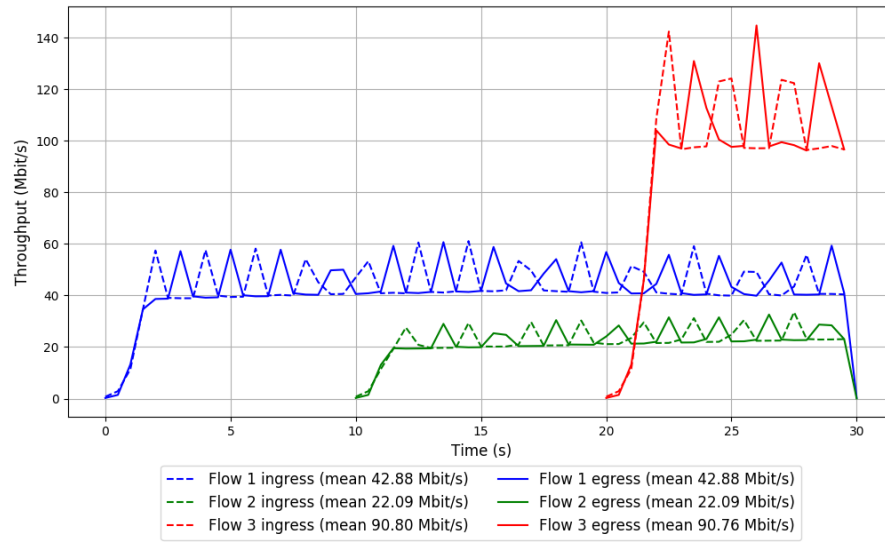
-- Flow 3:

Average throughput: 90.76 Mbit/s

95th percentile per-packet one-way delay: 124.607 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-03-14 02:00:48

End at: 2018-03-14 02:01:18

Below is generated by plot.py at 2018-03-14 05:36:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.12 Mbit/s

95th percentile per-packet one-way delay: 117.939 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.94 Mbit/s

95th percentile per-packet one-way delay: 118.846 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 28.67 Mbit/s

95th percentile per-packet one-way delay: 118.686 ms

Loss rate: 0.00%

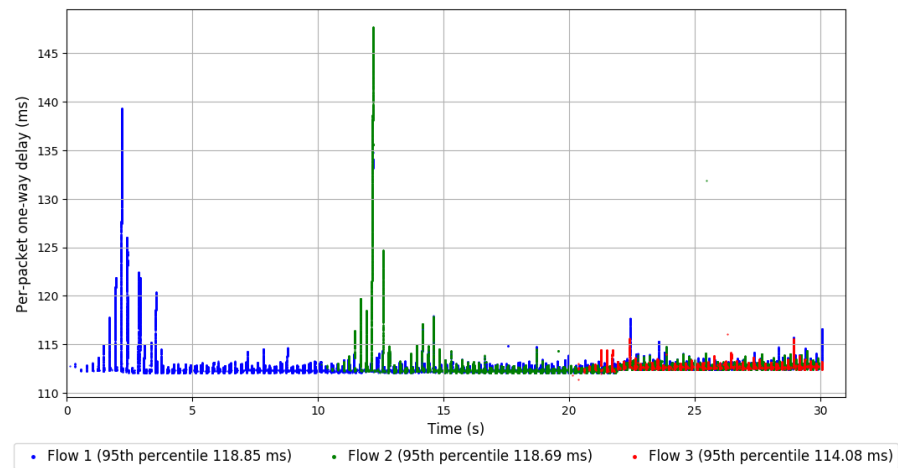
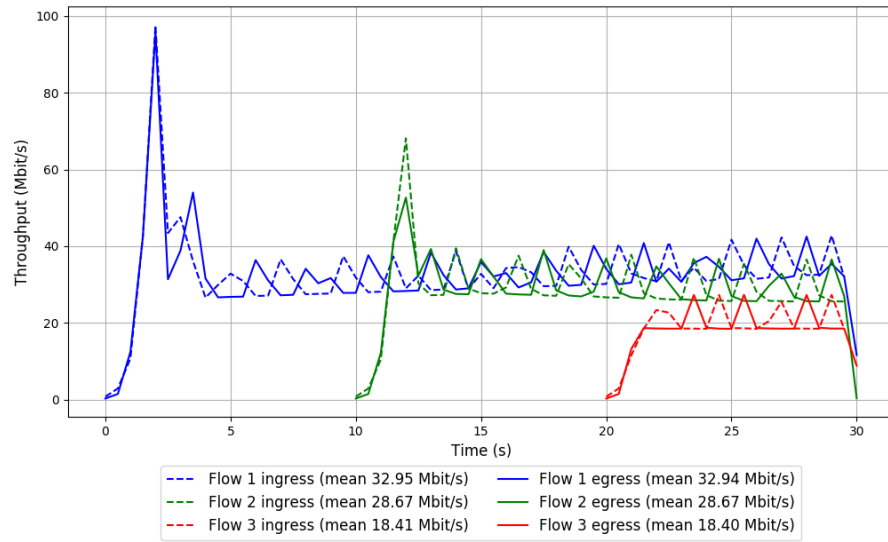
-- Flow 3:

Average throughput: 18.40 Mbit/s

95th percentile per-packet one-way delay: 114.081 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-03-14 02:20:19

End at: 2018-03-14 02:20:49

Below is generated by plot.py at 2018-03-14 05:36:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.38 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.19 Mbit/s

95th percentile per-packet one-way delay: 114.305 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.33 Mbit/s

95th percentile per-packet one-way delay: 114.160 ms

Loss rate: 0.00%

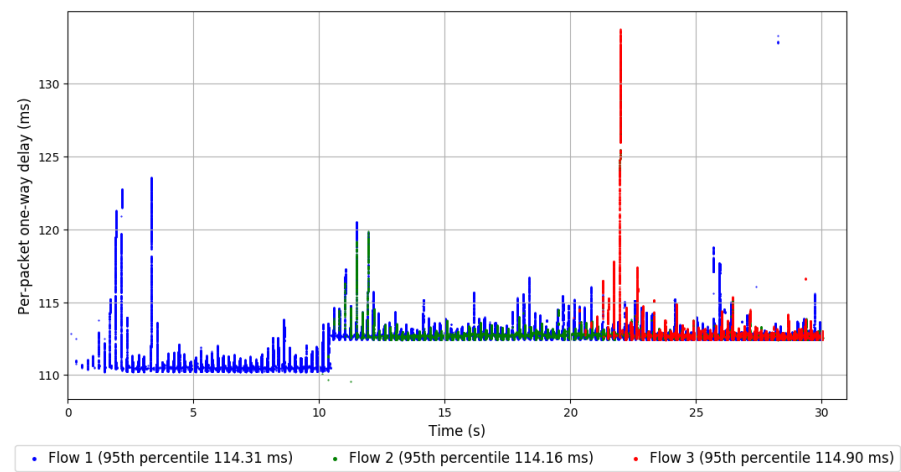
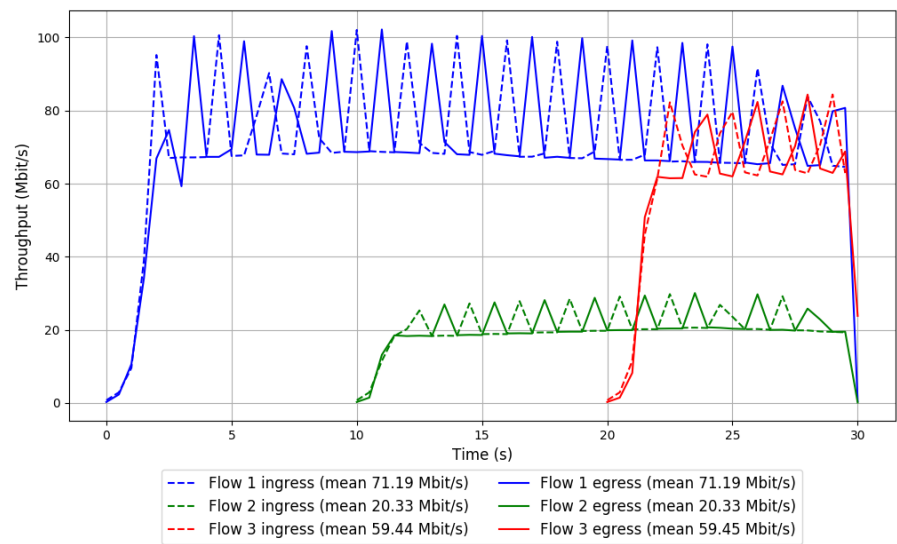
-- Flow 3:

Average throughput: 59.45 Mbit/s

95th percentile per-packet one-way delay: 114.898 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-03-14 02:39:30

End at: 2018-03-14 02:40:00

Below is generated by plot.py at 2018-03-14 05:36:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.46 Mbit/s

95th percentile per-packet one-way delay: 122.572 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 22.80 Mbit/s

95th percentile per-packet one-way delay: 117.998 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 37.19 Mbit/s

95th percentile per-packet one-way delay: 121.912 ms

Loss rate: 0.00%

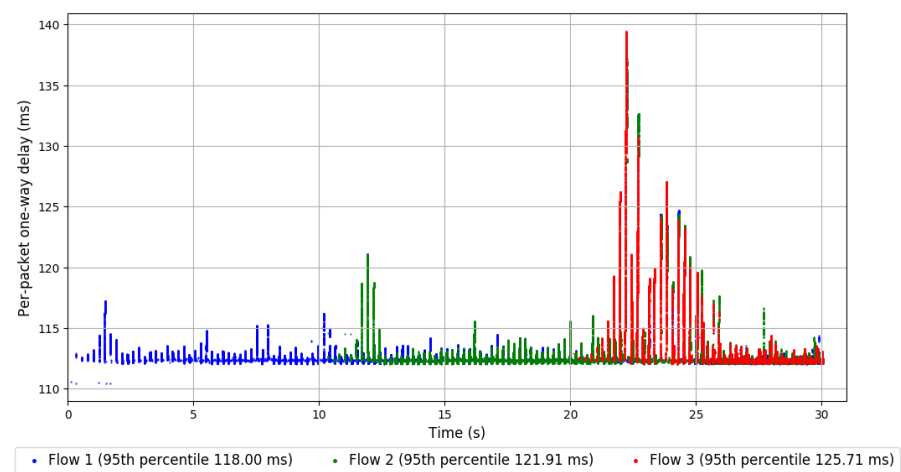
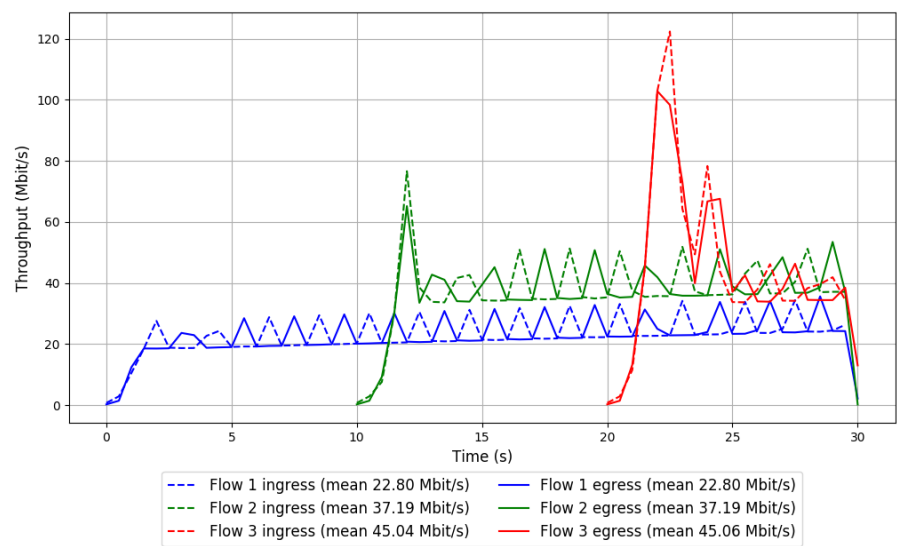
-- Flow 3:

Average throughput: 45.06 Mbit/s

95th percentile per-packet one-way delay: 125.706 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-03-13 23:50:51

End at: 2018-03-13 23:51:21

Below is generated by plot.py at 2018-03-14 05:37:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 158.06 Mbit/s

95th percentile per-packet one-way delay: 170.875 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.49 Mbit/s

95th percentile per-packet one-way delay: 196.278 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 101.52 Mbit/s

95th percentile per-packet one-way delay: 144.429 ms

Loss rate: 0.00%

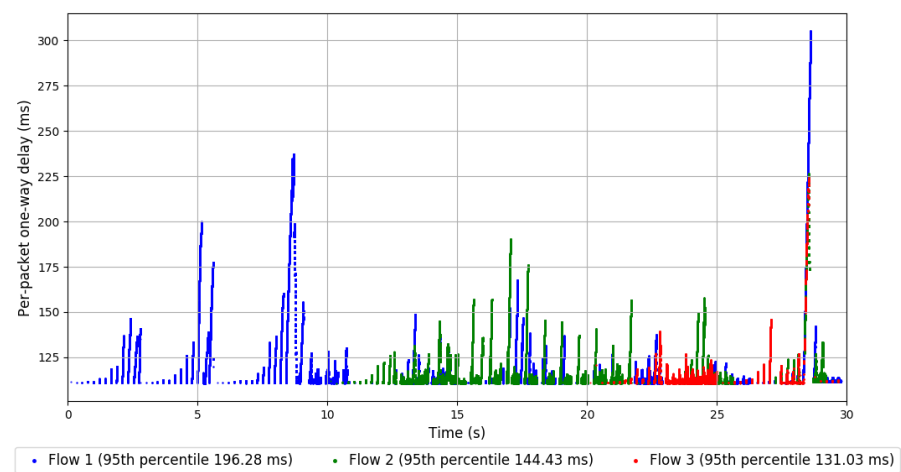
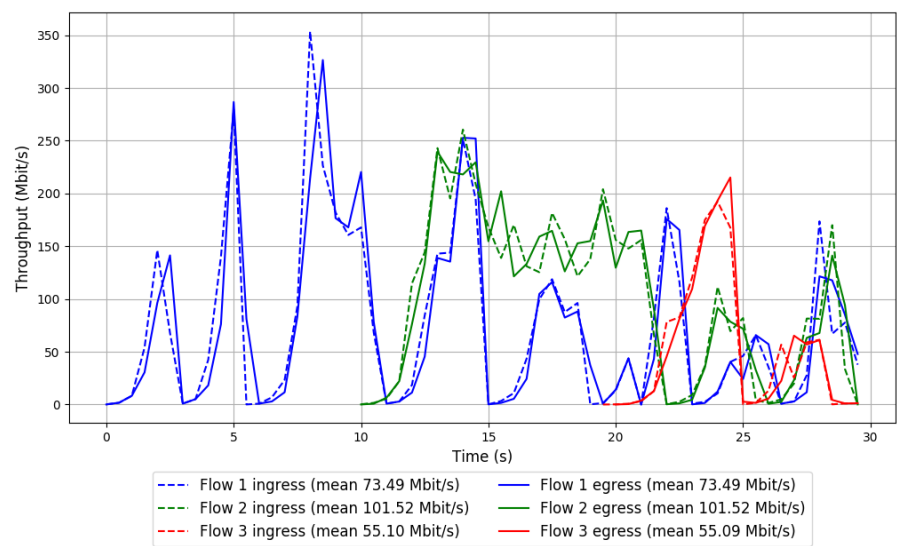
-- Flow 3:

Average throughput: 55.09 Mbit/s

95th percentile per-packet one-way delay: 131.027 ms

Loss rate: 0.00%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-03-14 00:10:25

End at: 2018-03-14 00:10:55

Below is generated by plot.py at 2018-03-14 05:40:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 269.26 Mbit/s

95th percentile per-packet one-way delay: 234.180 ms

Loss rate: 2.45%

-- Flow 1:

Average throughput: 182.02 Mbit/s

95th percentile per-packet one-way delay: 223.061 ms

Loss rate: 1.51%

-- Flow 2:

Average throughput: 87.42 Mbit/s

95th percentile per-packet one-way delay: 356.067 ms

Loss rate: 5.29%

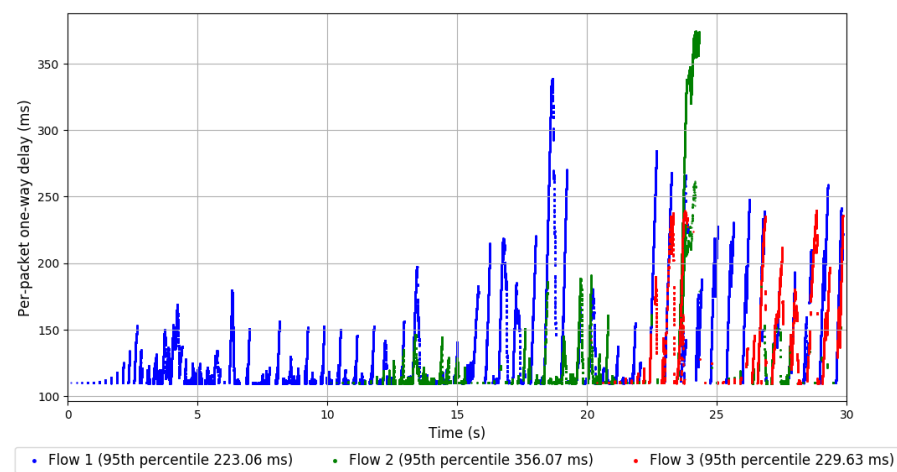
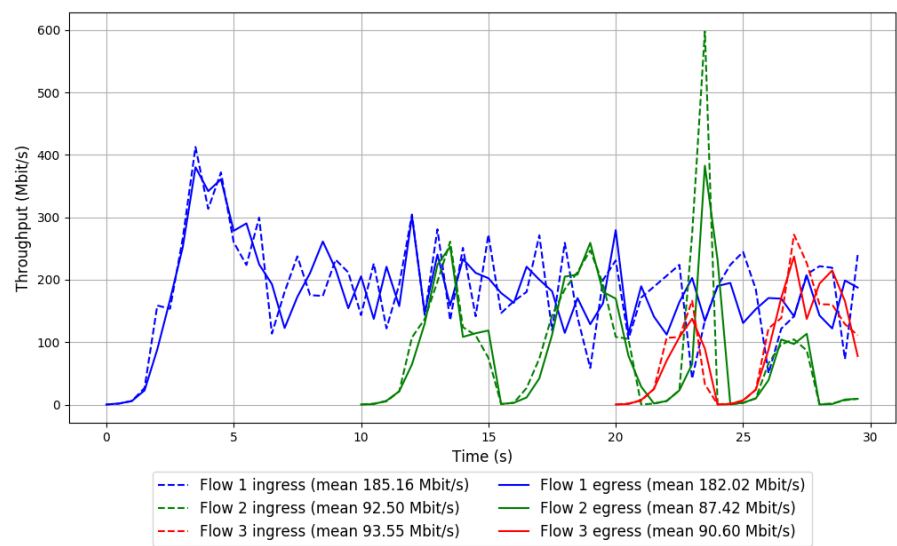
-- Flow 3:

Average throughput: 90.60 Mbit/s

95th percentile per-packet one-way delay: 229.628 ms

Loss rate: 2.42%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-03-14 00:29:39

End at: 2018-03-14 00:30:09

Below is generated by plot.py at 2018-03-14 05:40:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 282.05 Mbit/s

95th percentile per-packet one-way delay: 330.798 ms

Loss rate: 5.33%

-- Flow 1:

Average throughput: 149.72 Mbit/s

95th percentile per-packet one-way delay: 210.608 ms

Loss rate: 1.40%

-- Flow 2:

Average throughput: 190.08 Mbit/s

95th percentile per-packet one-way delay: 361.144 ms

Loss rate: 9.66%

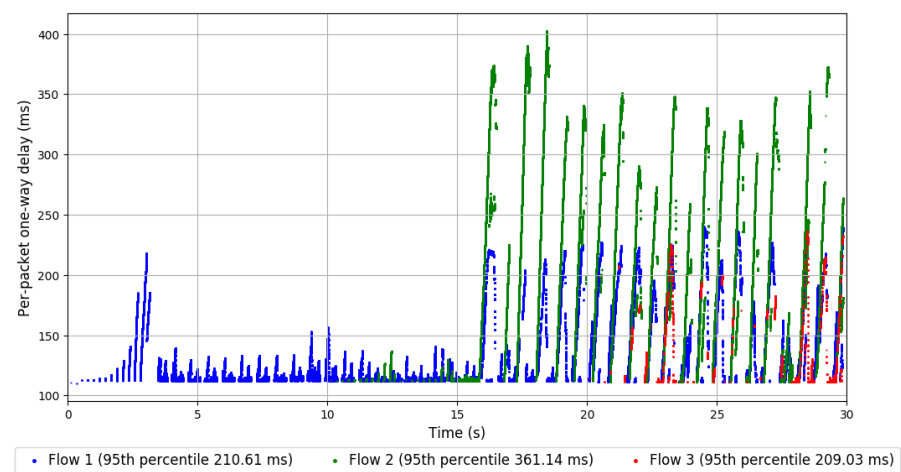
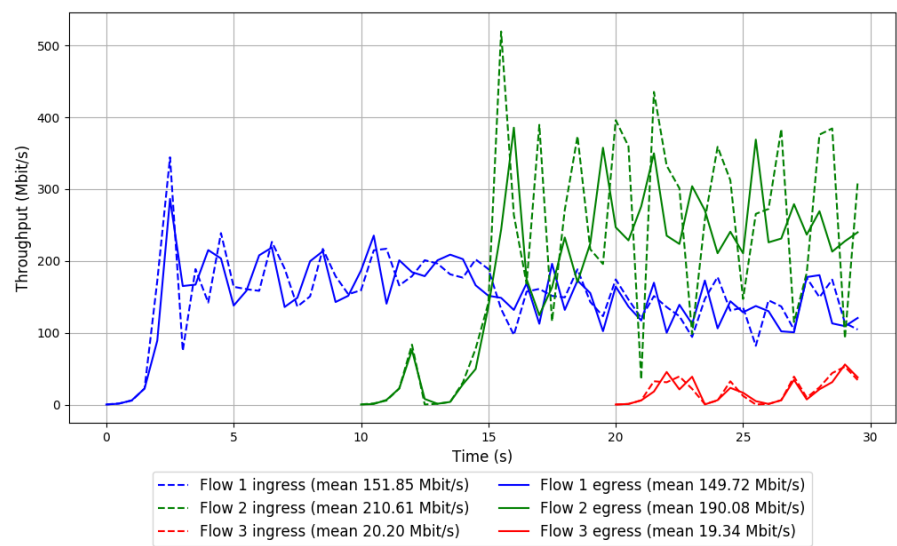
-- Flow 3:

Average throughput: 19.34 Mbit/s

95th percentile per-packet one-way delay: 209.031 ms

Loss rate: 4.29%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-03-14 00:49:34

End at: 2018-03-14 00:50:04

Below is generated by plot.py at 2018-03-14 05:40:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 164.82 Mbit/s

95th percentile per-packet one-way delay: 185.920 ms

Loss rate: 1.80%

-- Flow 1:

Average throughput: 82.38 Mbit/s

95th percentile per-packet one-way delay: 236.281 ms

Loss rate: 3.33%

-- Flow 2:

Average throughput: 73.01 Mbit/s

95th percentile per-packet one-way delay: 150.011 ms

Loss rate: 0.37%

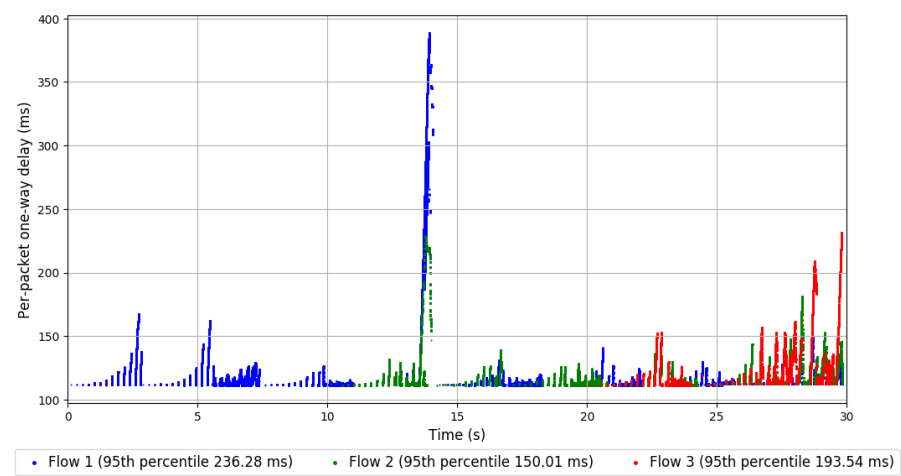
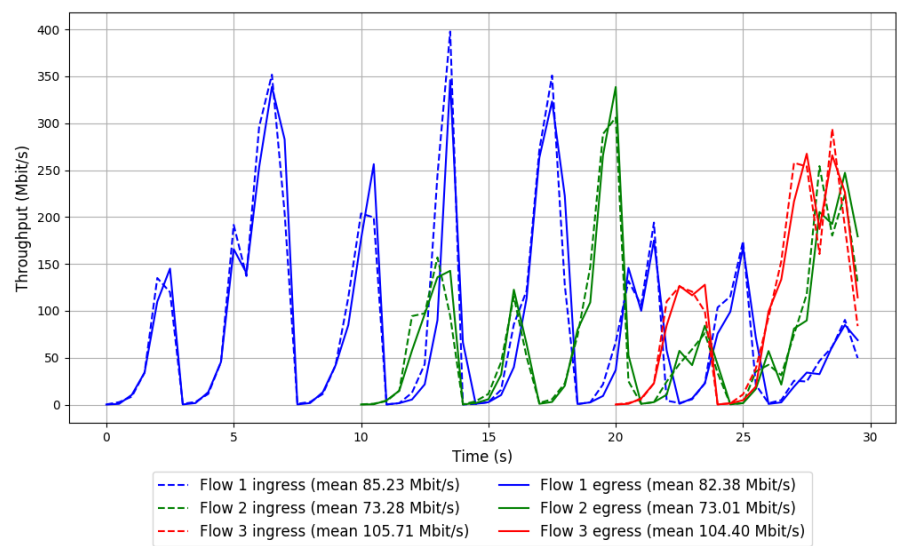
-- Flow 3:

Average throughput: 104.40 Mbit/s

95th percentile per-packet one-way delay: 193.545 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-03-14 01:08:25

End at: 2018-03-14 01:08:55

Below is generated by plot.py at 2018-03-14 05:40:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 250.99 Mbit/s

95th percentile per-packet one-way delay: 220.226 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 116.09 Mbit/s

95th percentile per-packet one-way delay: 246.345 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 150.96 Mbit/s

95th percentile per-packet one-way delay: 225.472 ms

Loss rate: 0.00%

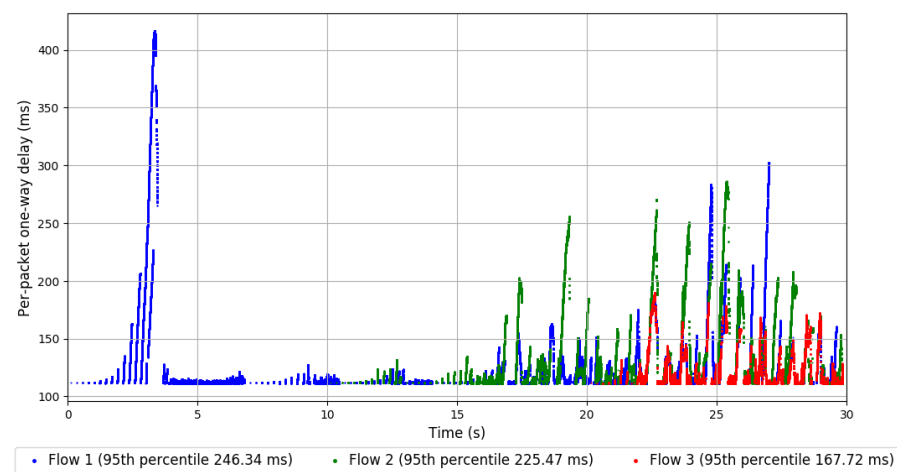
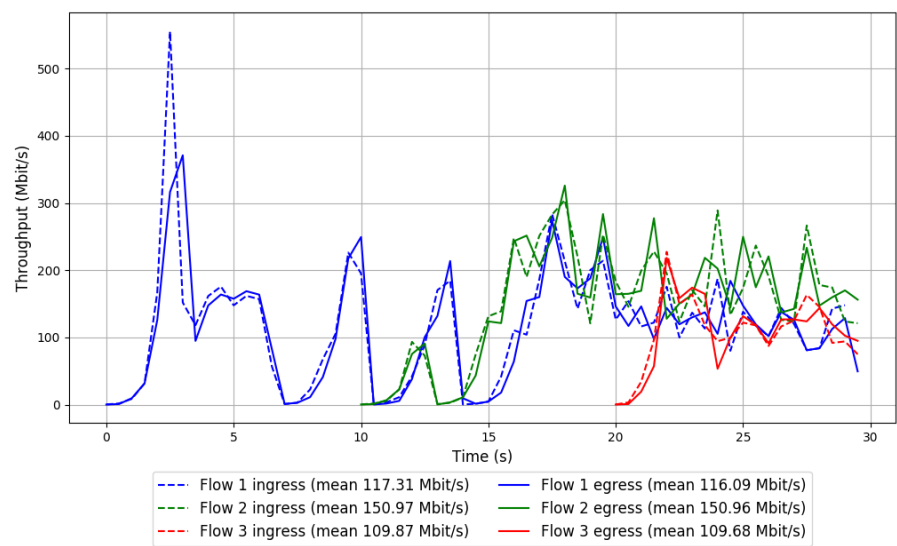
-- Flow 3:

Average throughput: 109.68 Mbit/s

95th percentile per-packet one-way delay: 167.724 ms

Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-03-14 01:28:05

End at: 2018-03-14 01:28:35

Below is generated by plot.py at 2018-03-14 05:40:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.33 Mbit/s

95th percentile per-packet one-way delay: 195.366 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 176.13 Mbit/s

95th percentile per-packet one-way delay: 216.708 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 98.96 Mbit/s

95th percentile per-packet one-way delay: 163.233 ms

Loss rate: 0.00%

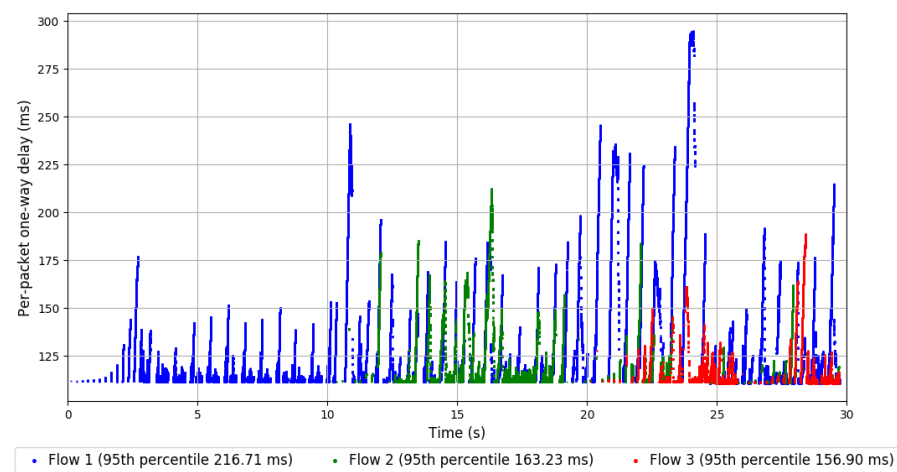
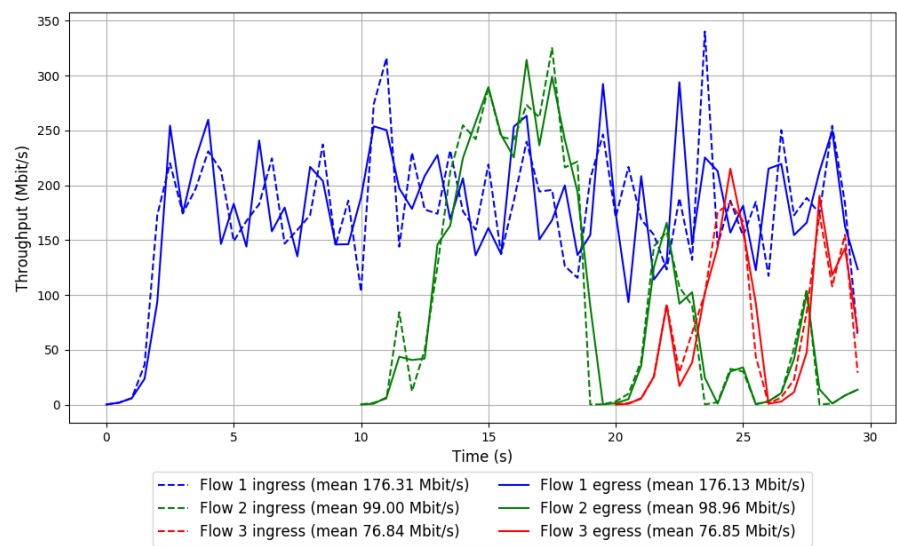
-- Flow 3:

Average throughput: 76.85 Mbit/s

95th percentile per-packet one-way delay: 156.899 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-03-14 01:47:56

End at: 2018-03-14 01:48:26

Below is generated by plot.py at 2018-03-14 05:41:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 306.89 Mbit/s

95th percentile per-packet one-way delay: 235.833 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 181.91 Mbit/s

95th percentile per-packet one-way delay: 196.874 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 173.16 Mbit/s

95th percentile per-packet one-way delay: 259.855 ms

Loss rate: 1.16%

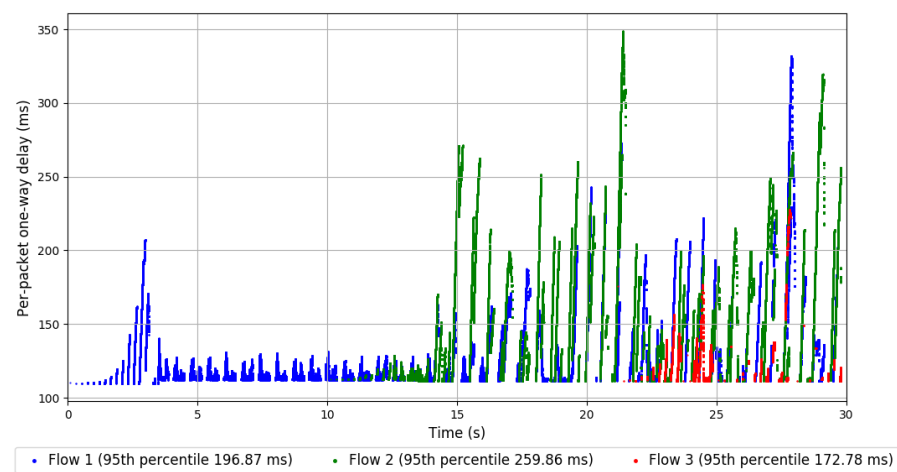
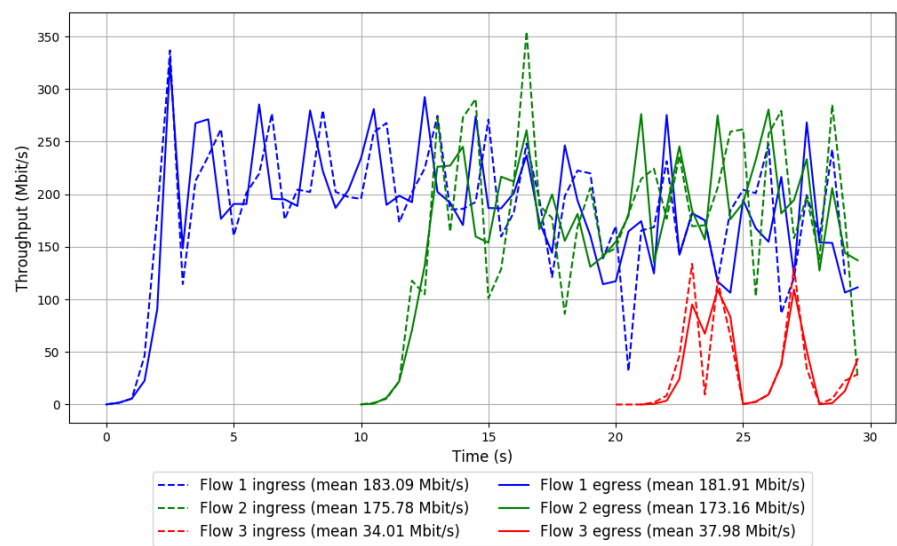
-- Flow 3:

Average throughput: 37.98 Mbit/s

95th percentile per-packet one-way delay: 172.777 ms

Loss rate: 0.55%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-03-14 02:07:28

End at: 2018-03-14 02:07:58

Below is generated by plot.py at 2018-03-14 05:41:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 208.92 Mbit/s

95th percentile per-packet one-way delay: 170.765 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 128.82 Mbit/s

95th percentile per-packet one-way delay: 170.760 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 72.39 Mbit/s

95th percentile per-packet one-way delay: 154.375 ms

Loss rate: 0.00%

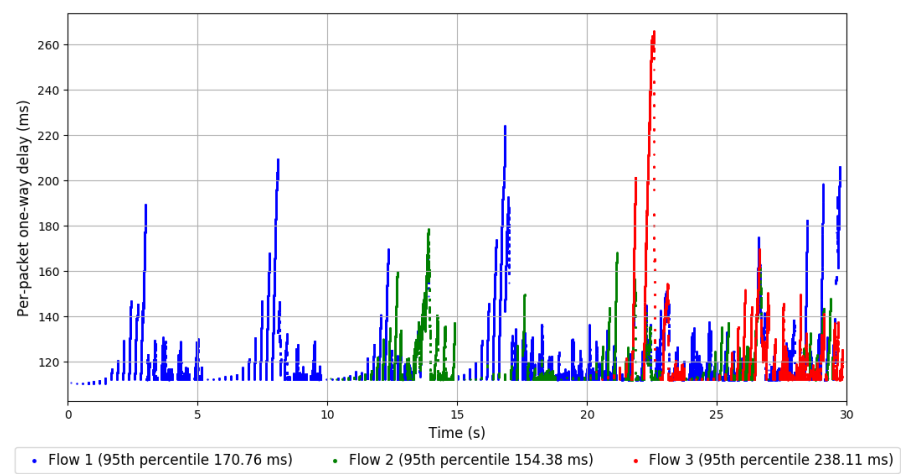
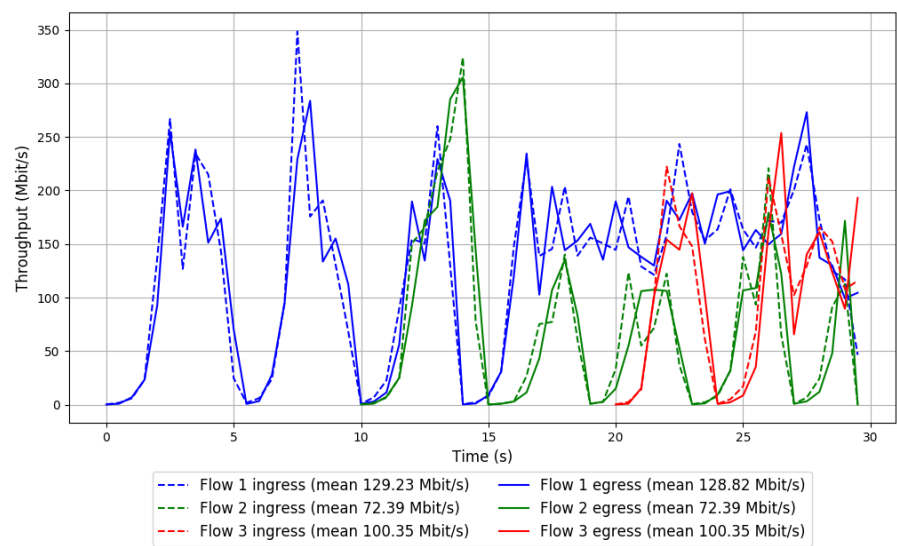
-- Flow 3:

Average throughput: 100.35 Mbit/s

95th percentile per-packet one-way delay: 238.108 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-03-14 02:26:53

End at: 2018-03-14 02:27:23

Below is generated by plot.py at 2018-03-14 05:41:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 221.81 Mbit/s

95th percentile per-packet one-way delay: 270.410 ms

Loss rate: 2.82%

-- Flow 1:

Average throughput: 161.79 Mbit/s

95th percentile per-packet one-way delay: 276.716 ms

Loss rate: 3.54%

-- Flow 2:

Average throughput: 60.76 Mbit/s

95th percentile per-packet one-way delay: 229.363 ms

Loss rate: 0.90%

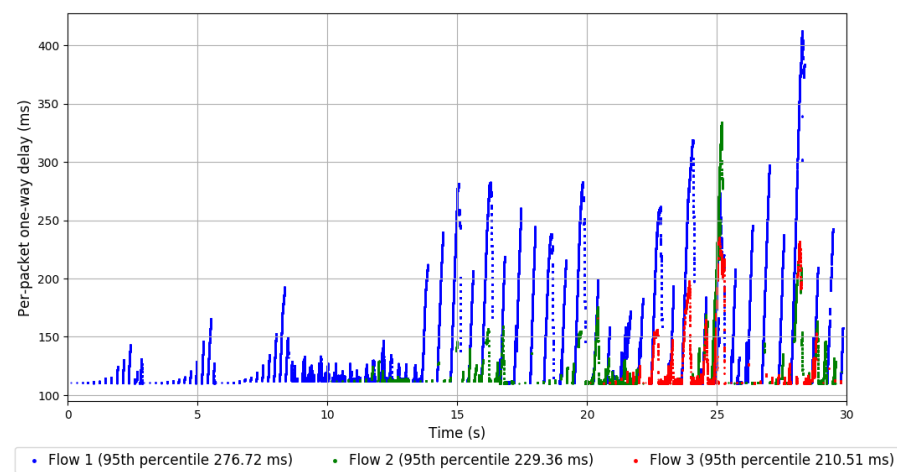
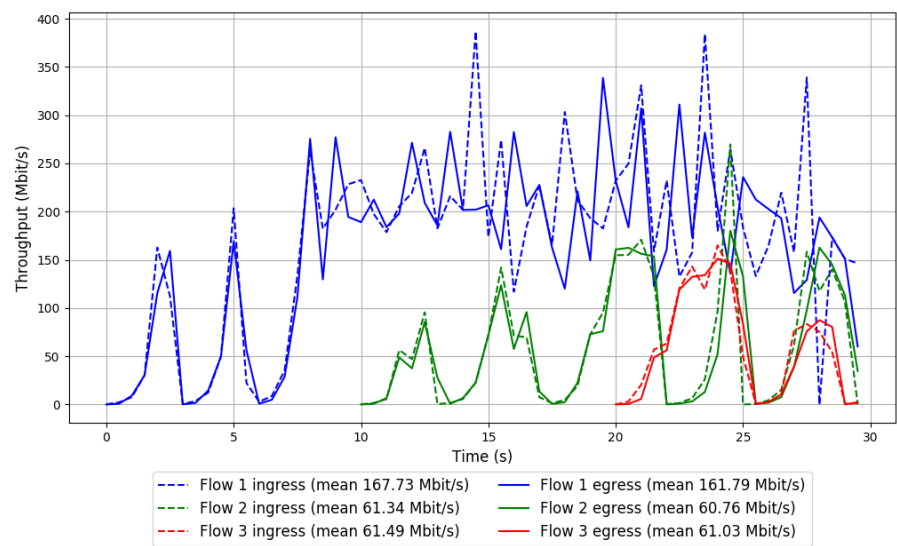
-- Flow 3:

Average throughput: 61.03 Mbit/s

95th percentile per-packet one-way delay: 210.508 ms

Loss rate: 0.72%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

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

End at: 2018-03-14 02:46:33

Below is generated by plot.py at 2018-03-14 05:44:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.26 Mbit/s

95th percentile per-packet one-way delay: 201.389 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 246.20 Mbit/s

95th percentile per-packet one-way delay: 187.041 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 64.08 Mbit/s

95th percentile per-packet one-way delay: 298.009 ms

Loss rate: 1.79%

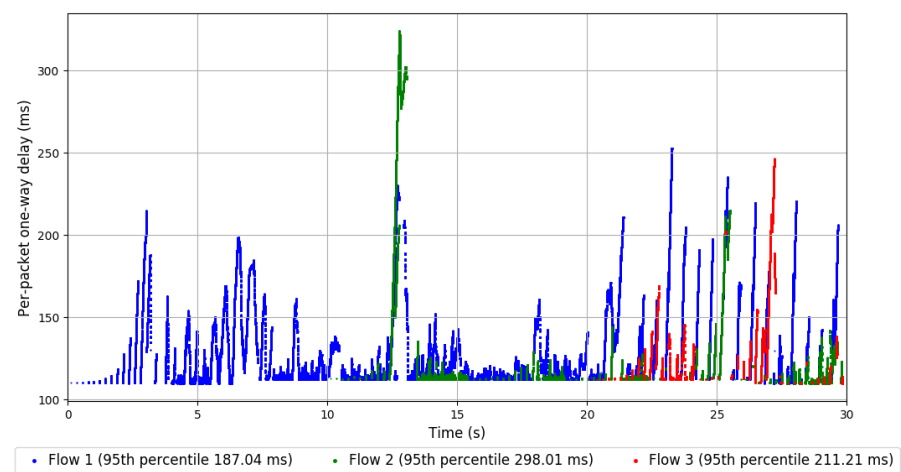
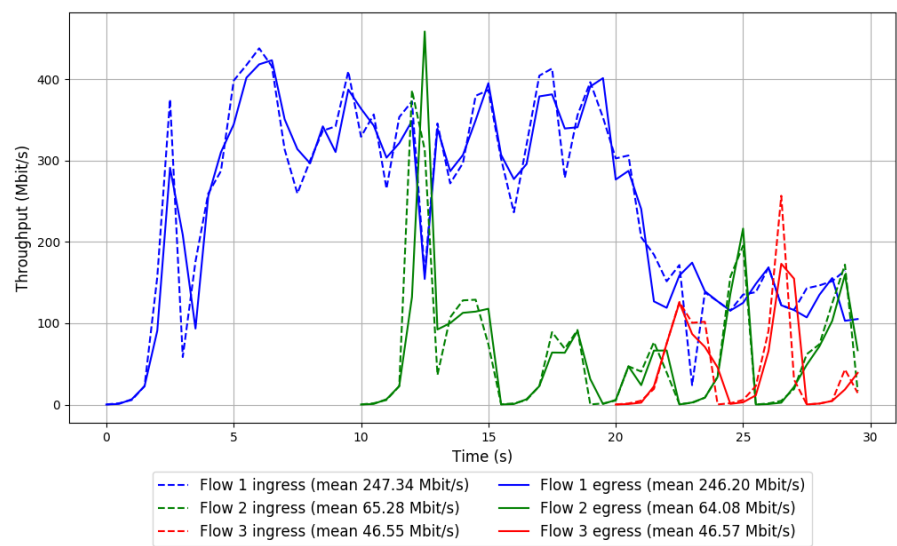
-- Flow 3:

Average throughput: 46.57 Mbit/s

95th percentile per-packet one-way delay: 211.205 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link

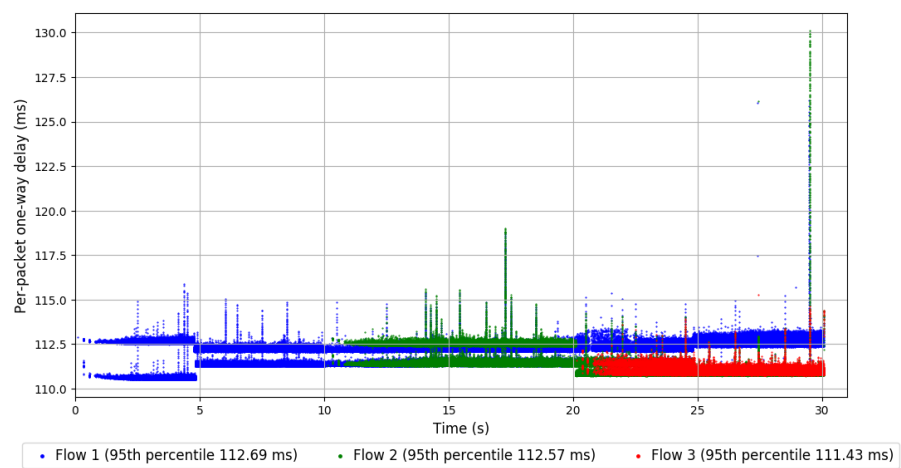
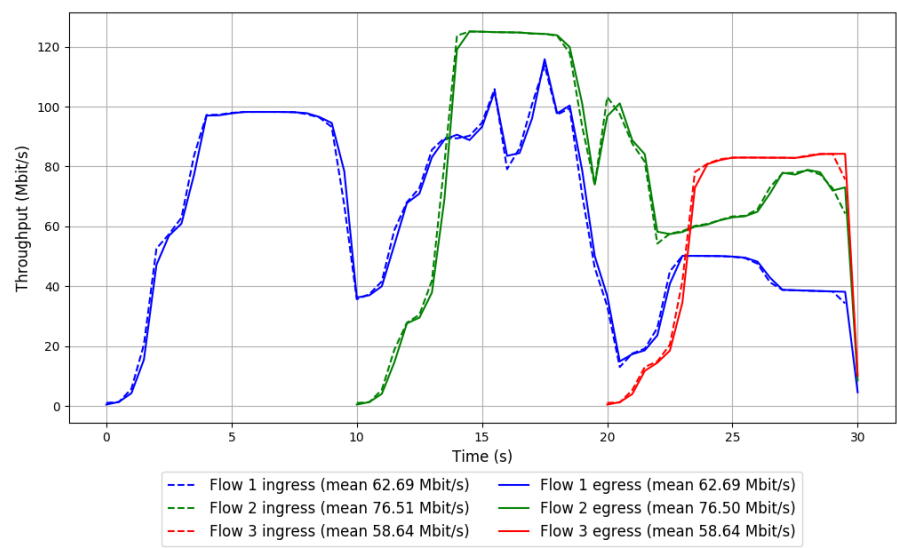


```
Run 1: Statistics of Copa

Start at: 2018-03-13 23:43:15
End at: 2018-03-13 23:43:45

# Below is generated by plot.py at 2018-03-14 05:44:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 133.06 Mbit/s
95th percentile per-packet one-way delay: 112.604 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 62.69 Mbit/s
95th percentile per-packet one-way delay: 112.688 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 76.50 Mbit/s
95th percentile per-packet one-way delay: 112.573 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 58.64 Mbit/s
95th percentile per-packet one-way delay: 111.426 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-03-14 00:02:38

End at: 2018-03-14 00:03:08

Below is generated by plot.py at 2018-03-14 05:44:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.90 Mbit/s

95th percentile per-packet one-way delay: 112.683 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.57 Mbit/s

95th percentile per-packet one-way delay: 112.808 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 72.20 Mbit/s

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

Loss rate: 0.00%

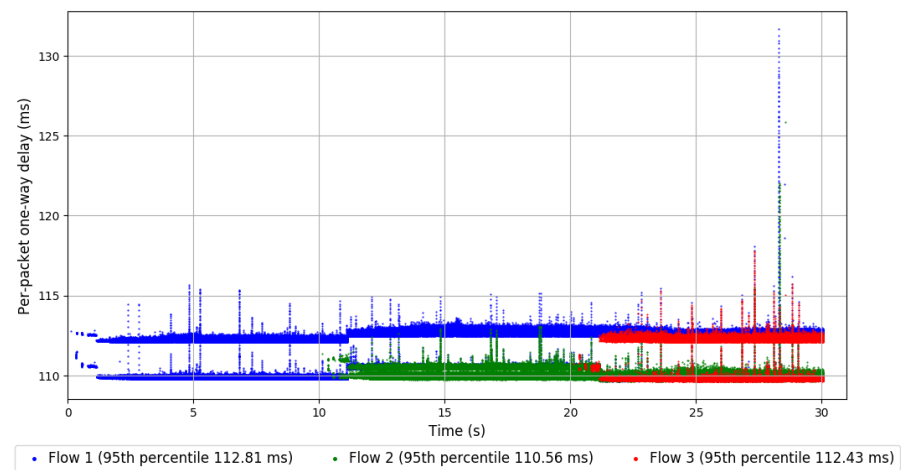
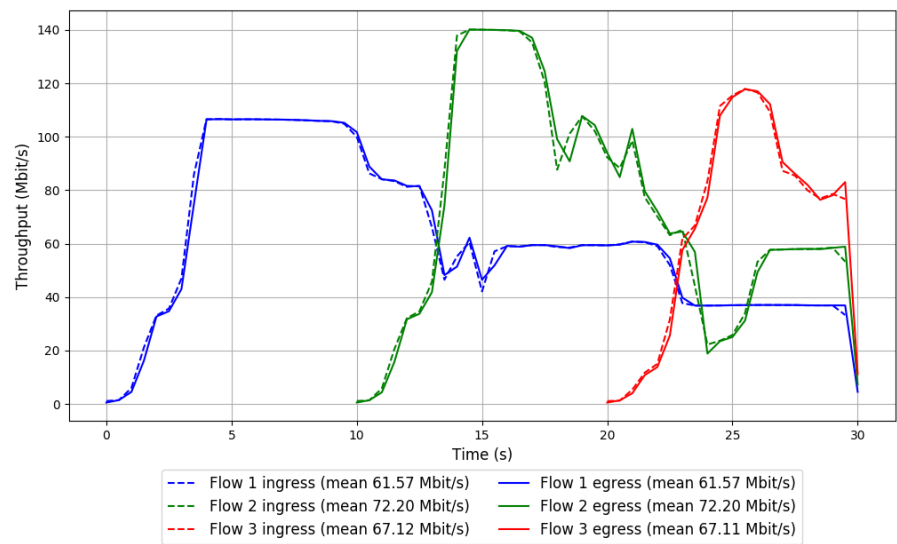
-- Flow 3:

Average throughput: 67.11 Mbit/s

95th percentile per-packet one-way delay: 112.428 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-03-14 00:21:54

End at: 2018-03-14 00:22:24

Below is generated by plot.py at 2018-03-14 05:44:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.59 Mbit/s

95th percentile per-packet one-way delay: 112.679 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.31 Mbit/s

95th percentile per-packet one-way delay: 112.599 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 65.41 Mbit/s

95th percentile per-packet one-way delay: 112.796 ms

Loss rate: 0.00%

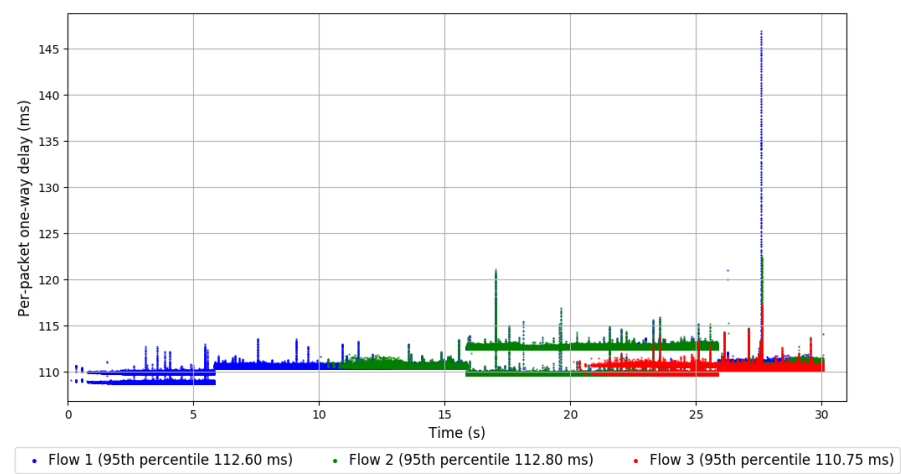
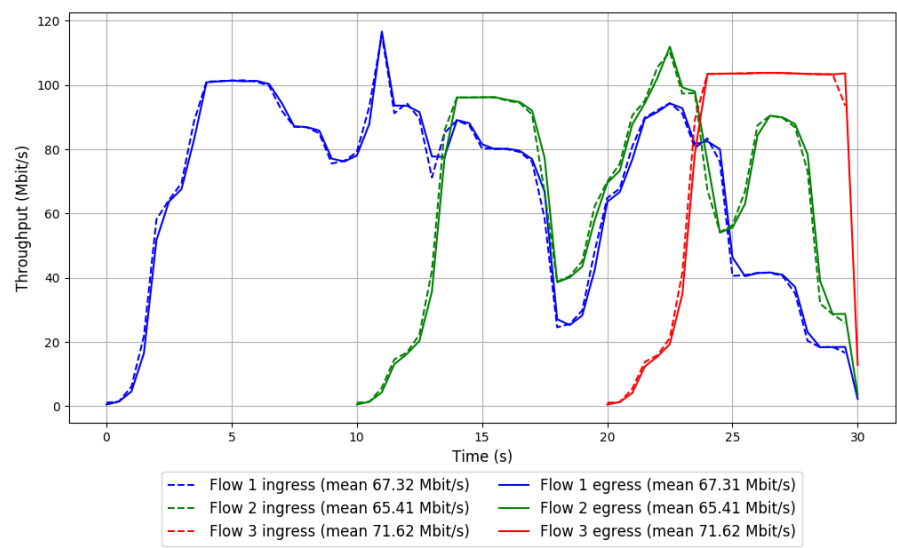
-- Flow 3:

Average throughput: 71.62 Mbit/s

95th percentile per-packet one-way delay: 110.755 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-03-14 00:41:37

End at: 2018-03-14 00:42:07

Below is generated by plot.py at 2018-03-14 05:53:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 361.77 Mbit/s

95th percentile per-packet one-way delay: 303.438 ms

Loss rate: 35.28%

-- Flow 1:

Average throughput: 358.65 Mbit/s

95th percentile per-packet one-way delay: 303.578 ms

Loss rate: 35.48%

-- Flow 2:

Average throughput: 3.68 Mbit/s

95th percentile per-packet one-way delay: 222.923 ms

Loss rate: 1.35%

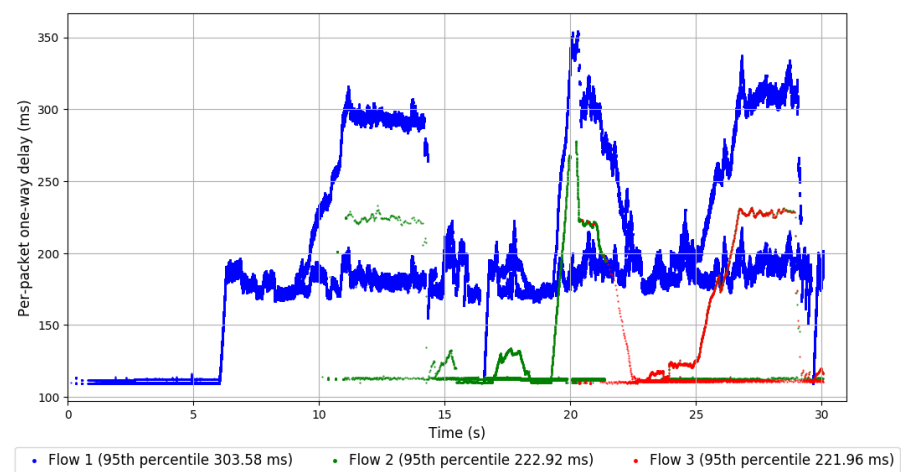
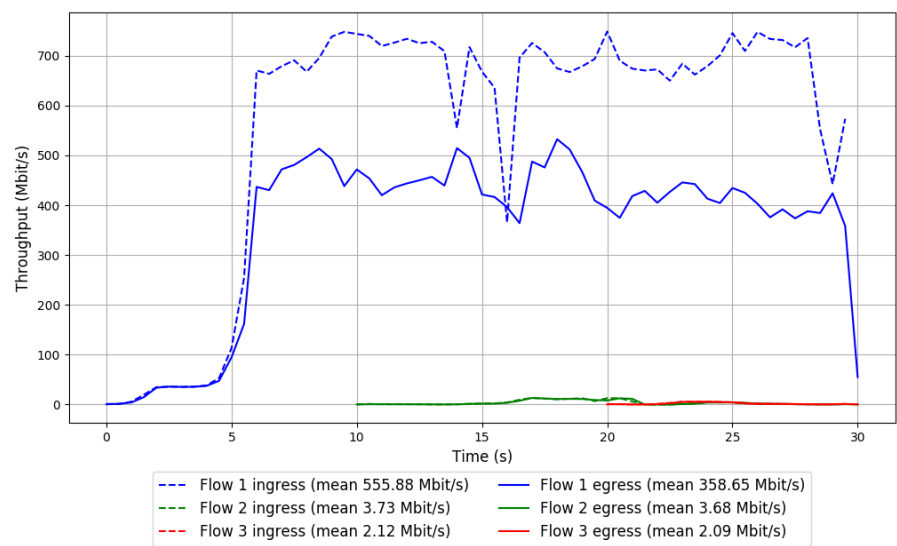
-- Flow 3:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 221.957 ms

Loss rate: 1.31%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-03-14 01:00:46

End at: 2018-03-14 01:01:16

Below is generated by plot.py at 2018-03-14 05:53:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.72 Mbit/s

95th percentile per-packet one-way delay: 111.708 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.94 Mbit/s

95th percentile per-packet one-way delay: 111.698 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.15 Mbit/s

95th percentile per-packet one-way delay: 111.748 ms

Loss rate: 0.00%

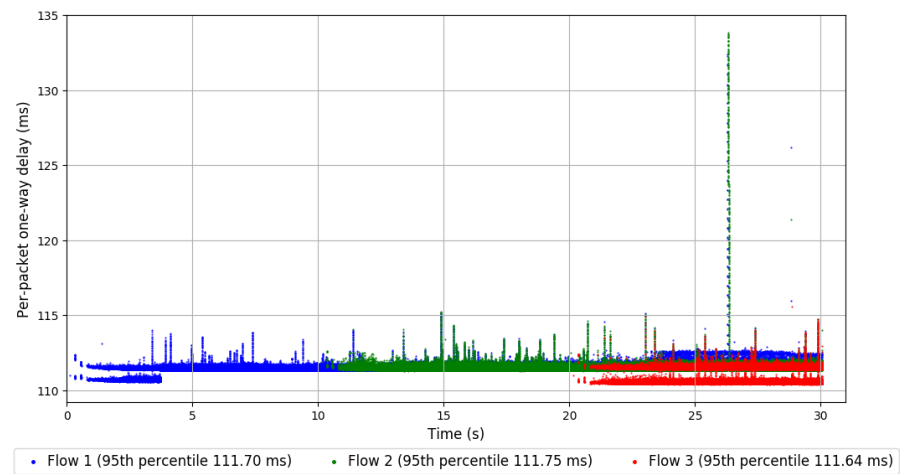
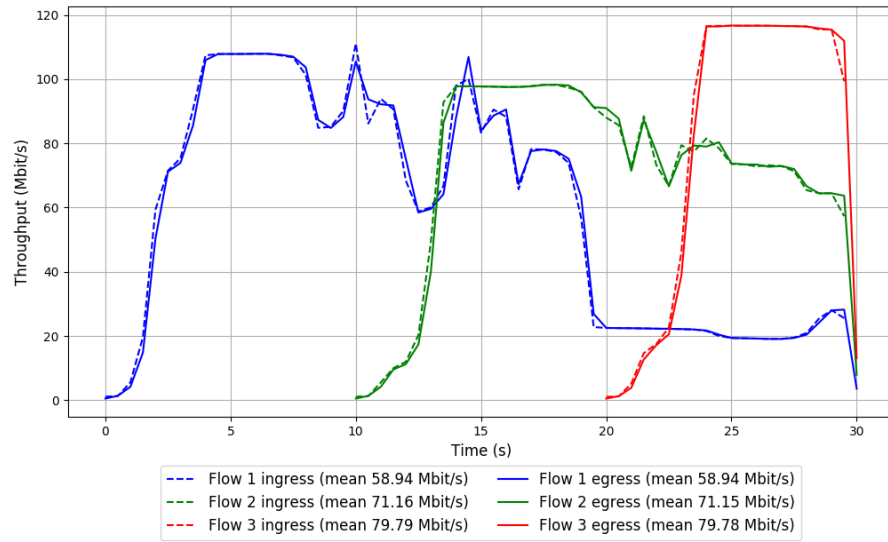
-- Flow 3:

Average throughput: 79.78 Mbit/s

95th percentile per-packet one-way delay: 111.636 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-03-14 01:20:05

End at: 2018-03-14 01:20:35

Below is generated by plot.py at 2018-03-14 05:53:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.70 Mbit/s

95th percentile per-packet one-way delay: 111.712 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 81.28 Mbit/s

95th percentile per-packet one-way delay: 112.123 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 75.92 Mbit/s

95th percentile per-packet one-way delay: 111.668 ms

Loss rate: 0.00%

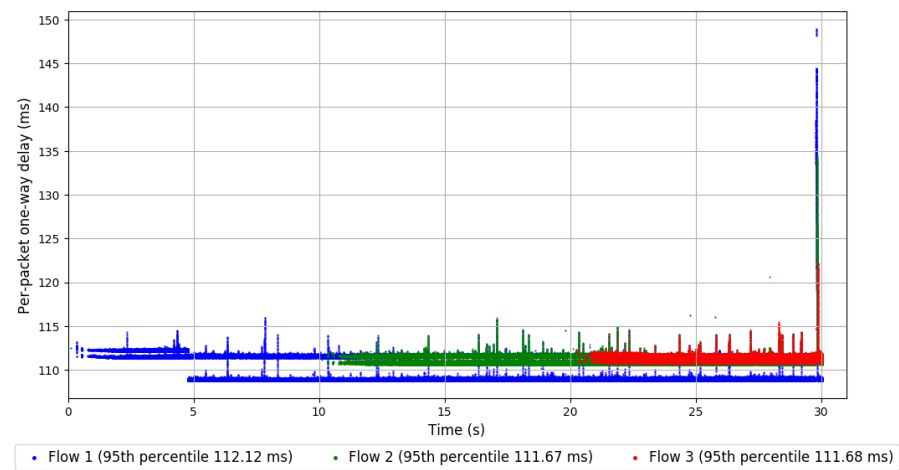
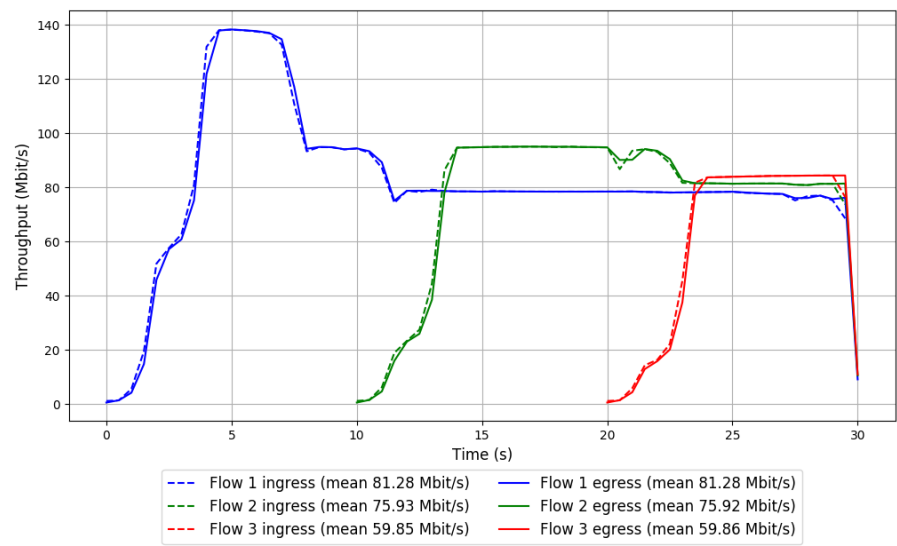
-- Flow 3:

Average throughput: 59.86 Mbit/s

95th percentile per-packet one-way delay: 111.679 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-03-14 01:39:48

End at: 2018-03-14 01:40:18

Below is generated by plot.py at 2018-03-14 05:55:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 416.37 Mbit/s

95th percentile per-packet one-way delay: 234.829 ms

Loss rate: 26.70%

-- Flow 1:

Average throughput: 350.34 Mbit/s

95th percentile per-packet one-way delay: 230.923 ms

Loss rate: 28.96%

-- Flow 2:

Average throughput: 82.39 Mbit/s

95th percentile per-packet one-way delay: 242.796 ms

Loss rate: 12.49%

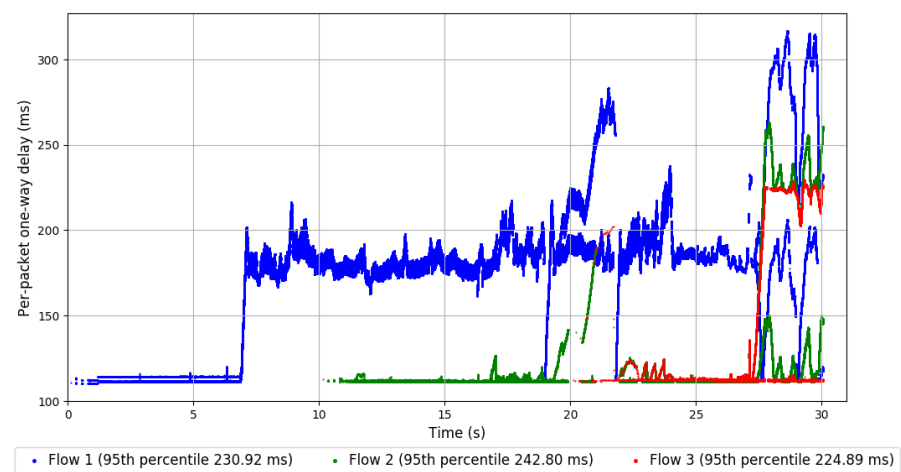
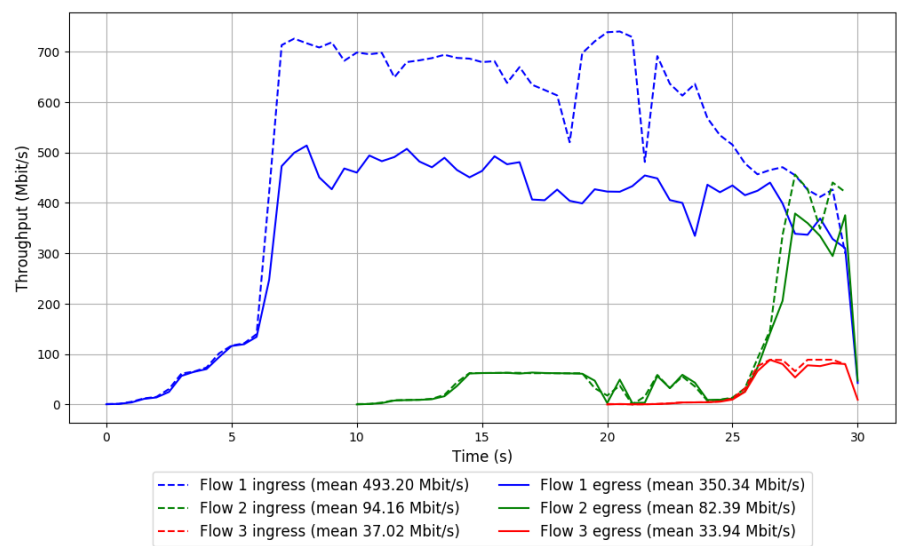
-- Flow 3:

Average throughput: 33.94 Mbit/s

95th percentile per-packet one-way delay: 224.893 ms

Loss rate: 8.30%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-03-14 01:59:47

End at: 2018-03-14 02:00:17

Below is generated by plot.py at 2018-03-14 05:55:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.78 Mbit/s

95th percentile per-packet one-way delay: 112.743 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.95 Mbit/s

95th percentile per-packet one-way delay: 112.599 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.34 Mbit/s

95th percentile per-packet one-way delay: 112.943 ms

Loss rate: 0.00%

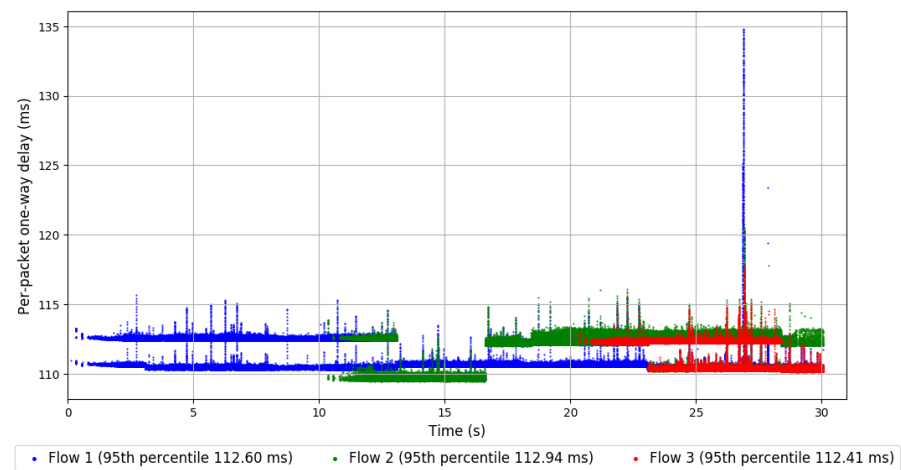
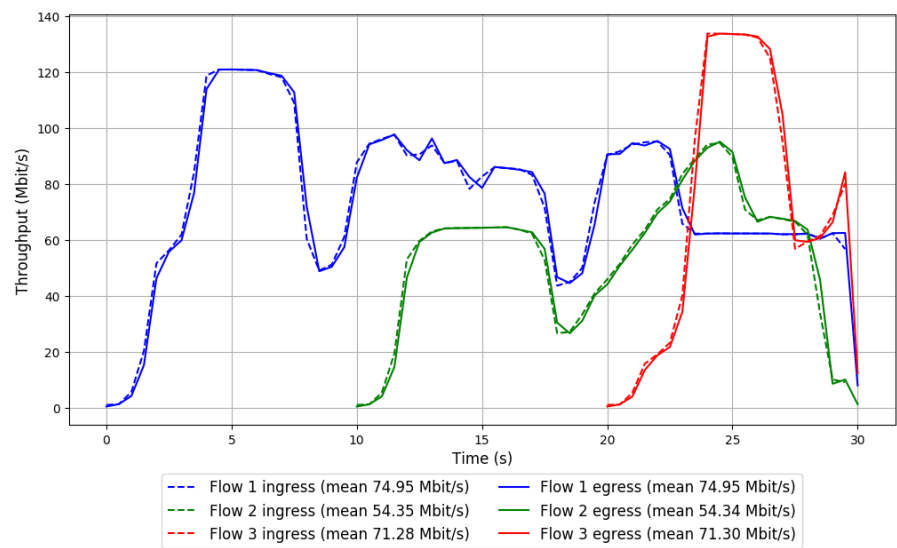
-- Flow 3:

Average throughput: 71.30 Mbit/s

95th percentile per-packet one-way delay: 112.405 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-03-14 02:19:20

End at: 2018-03-14 02:19:50

Below is generated by plot.py at 2018-03-14 05:55:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.03 Mbit/s

95th percentile per-packet one-way delay: 113.111 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 77.41 Mbit/s

95th percentile per-packet one-way delay: 112.189 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.70 Mbit/s

95th percentile per-packet one-way delay: 112.873 ms

Loss rate: 0.00%

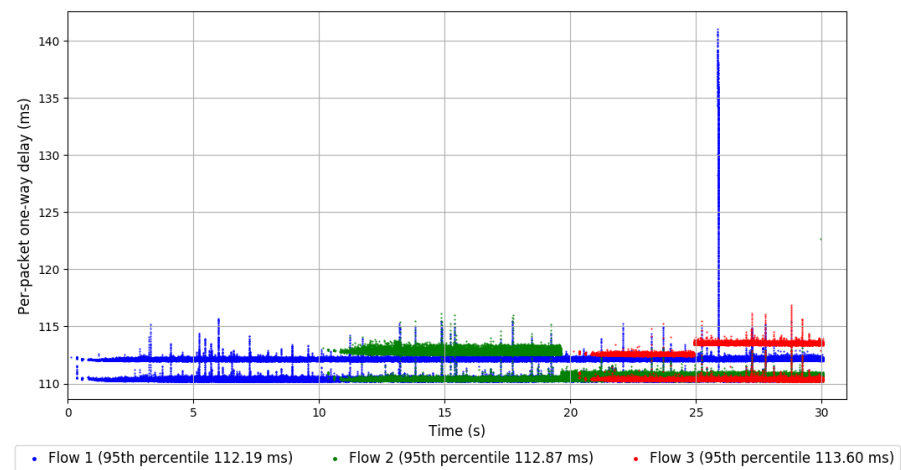
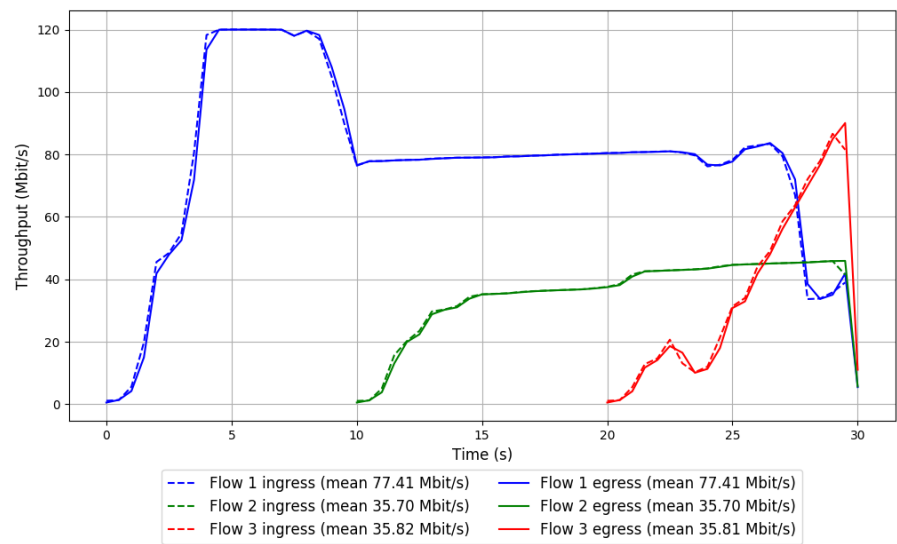
-- Flow 3:

Average throughput: 35.81 Mbit/s

95th percentile per-packet one-way delay: 113.599 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-03-14 02:38:31

End at: 2018-03-14 02:39:01

Below is generated by plot.py at 2018-03-14 05:55:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.25 Mbit/s

95th percentile per-packet one-way delay: 112.748 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 62.46 Mbit/s

95th percentile per-packet one-way delay: 112.339 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.17 Mbit/s

95th percentile per-packet one-way delay: 112.366 ms

Loss rate: 0.00%

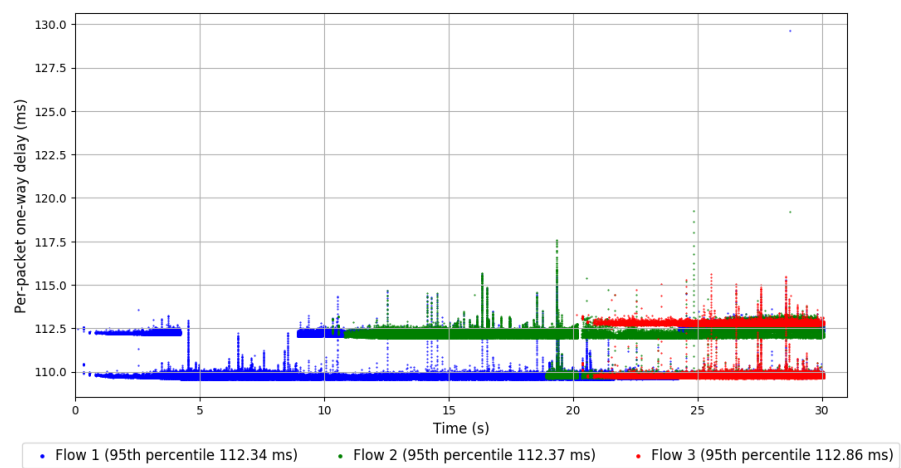
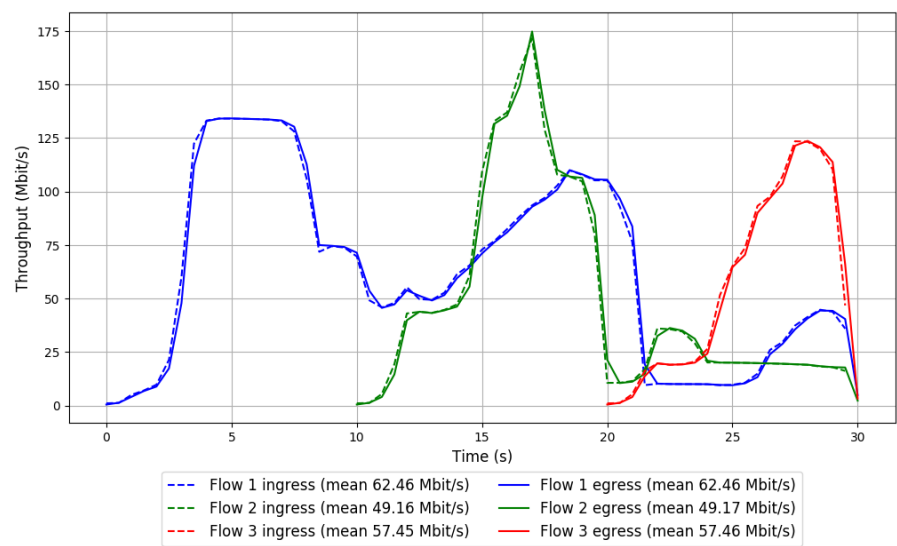
-- Flow 3:

Average throughput: 57.46 Mbit/s

95th percentile per-packet one-way delay: 112.858 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

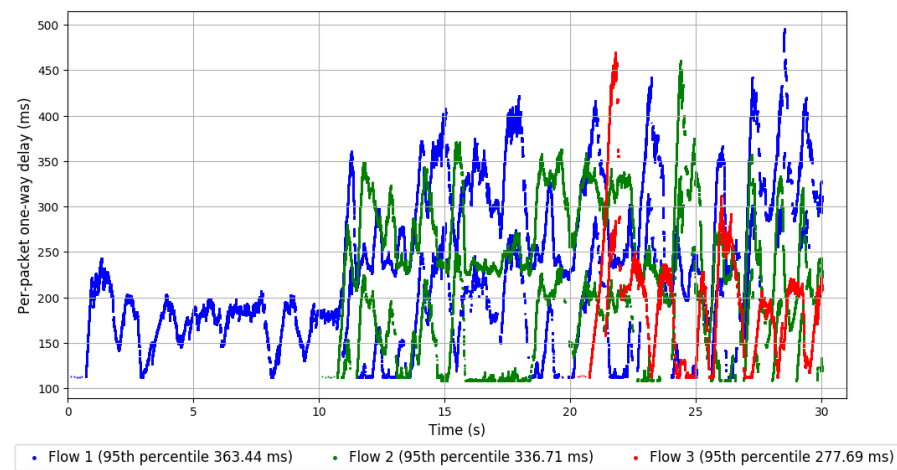
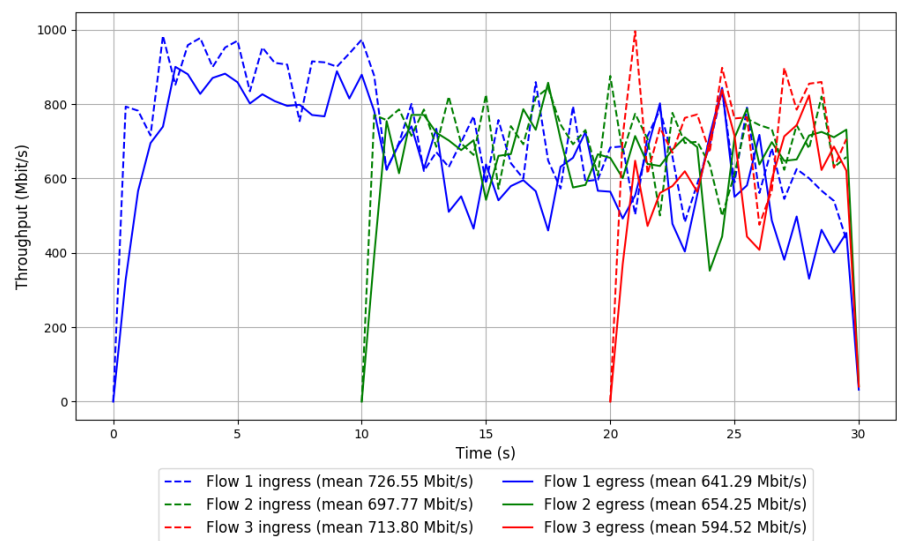


```
Run 1: Statistics of FillP

Start at: 2018-03-13 23:45:55
End at: 2018-03-13 23:46:25

# Below is generated by plot.py at 2018-03-14 06:08:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1273.30 Mbit/s
95th percentile per-packet one-way delay: 349.833 ms
Loss rate: 10.78%
-- Flow 1:
Average throughput: 641.29 Mbit/s
95th percentile per-packet one-way delay: 363.439 ms
Loss rate: 11.74%
-- Flow 2:
Average throughput: 654.25 Mbit/s
95th percentile per-packet one-way delay: 336.708 ms
Loss rate: 6.24%
-- Flow 3:
Average throughput: 594.52 Mbit/s
95th percentile per-packet one-way delay: 277.695 ms
Loss rate: 16.73%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-03-14 00:05:19

End at: 2018-03-14 00:05:49

Below is generated by plot.py at 2018-03-14 06:12:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 1512.15 Mbit/s

95th percentile per-packet one-way delay: 222.565 ms

Loss rate: 8.81%

-- Flow 1:

Average throughput: 768.64 Mbit/s

95th percentile per-packet one-way delay: 220.986 ms

Loss rate: 8.82%

-- Flow 2:

Average throughput: 820.04 Mbit/s

95th percentile per-packet one-way delay: 188.234 ms

Loss rate: 5.72%

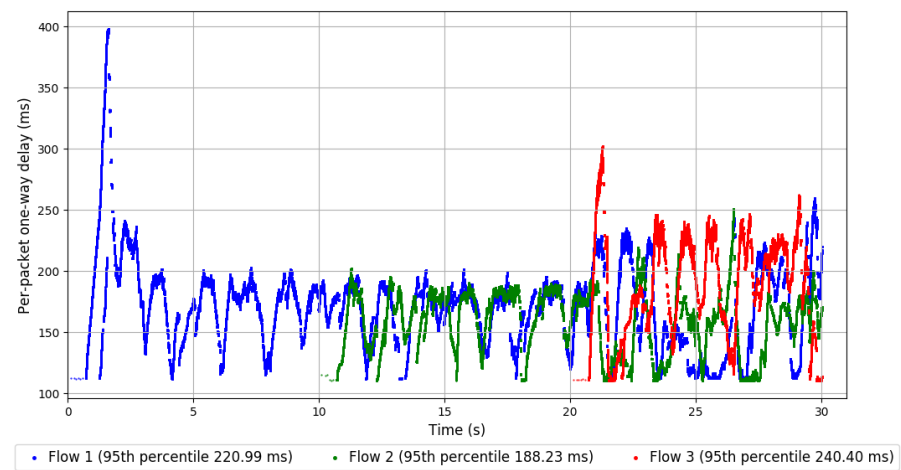
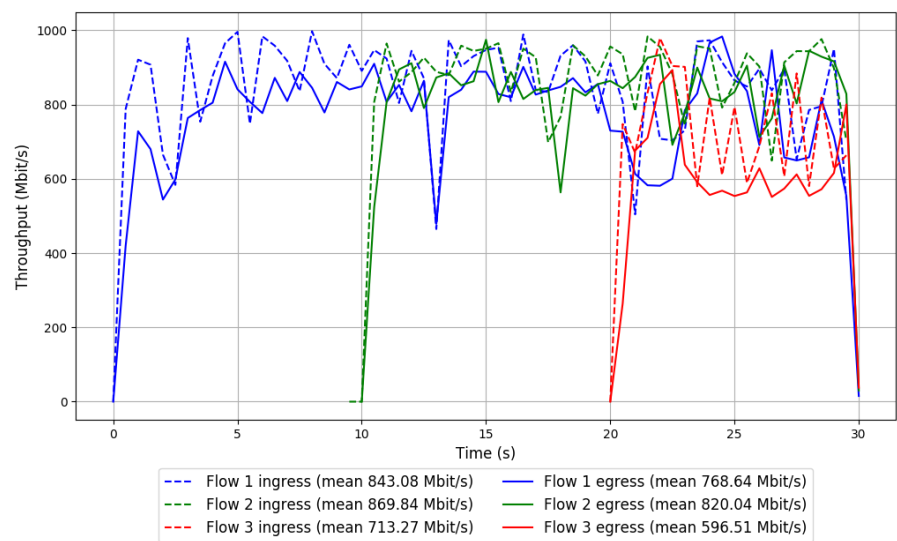
-- Flow 3:

Average throughput: 596.51 Mbit/s

95th percentile per-packet one-way delay: 240.402 ms

Loss rate: 16.35%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-03-14 00:24:38

End at: 2018-03-14 00:25:08

Below is generated by plot.py at 2018-03-14 06:12:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 1378.73 Mbit/s

95th percentile per-packet one-way delay: 232.113 ms

Loss rate: 11.59%

-- Flow 1:

Average throughput: 709.10 Mbit/s

95th percentile per-packet one-way delay: 226.382 ms

Loss rate: 11.38%

-- Flow 2:

Average throughput: 685.22 Mbit/s

95th percentile per-packet one-way delay: 207.451 ms

Loss rate: 10.97%

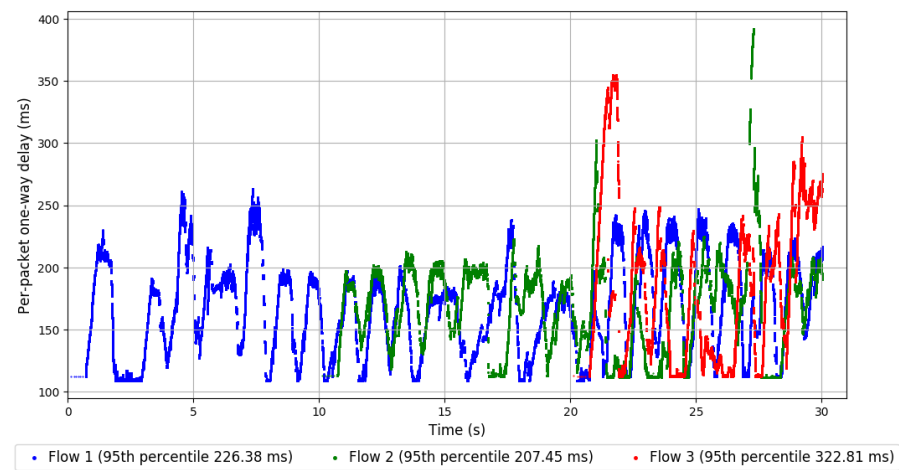
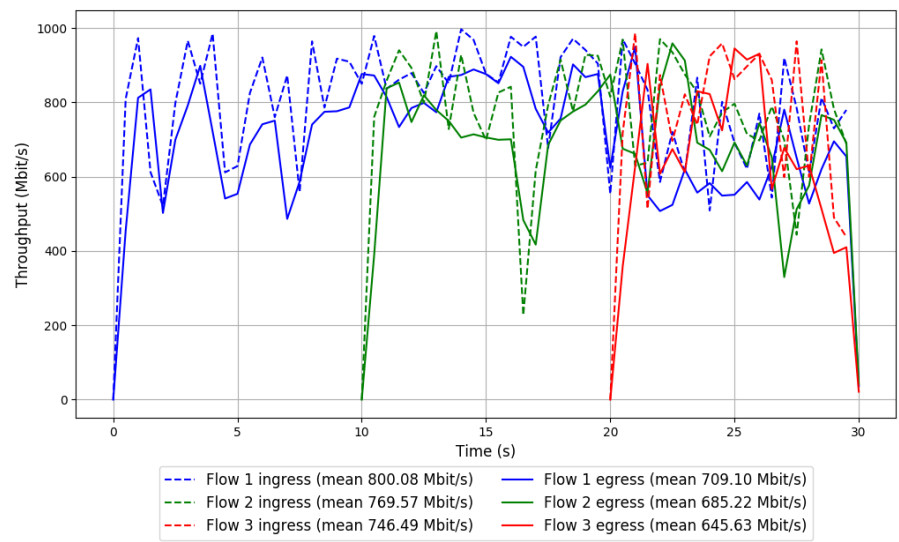
-- Flow 3:

Average throughput: 645.63 Mbit/s

95th percentile per-packet one-way delay: 322.813 ms

Loss rate: 13.53%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-03-14 00:44:35

End at: 2018-03-14 00:45:05

Below is generated by plot.py at 2018-03-14 06:12:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 1371.13 Mbit/s

95th percentile per-packet one-way delay: 329.180 ms

Loss rate: 9.97%

-- Flow 1:

Average throughput: 765.30 Mbit/s

95th percentile per-packet one-way delay: 213.162 ms

Loss rate: 7.69%

-- Flow 2:

Average throughput: 655.23 Mbit/s

95th percentile per-packet one-way delay: 330.377 ms

Loss rate: 10.24%

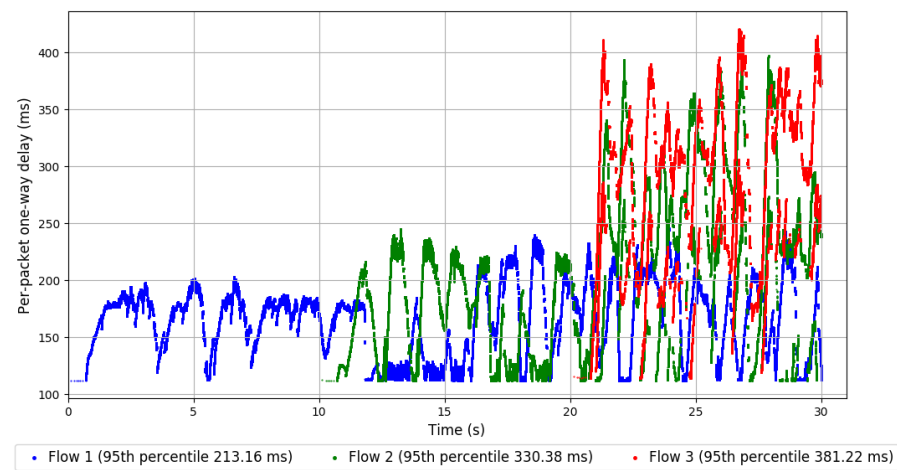
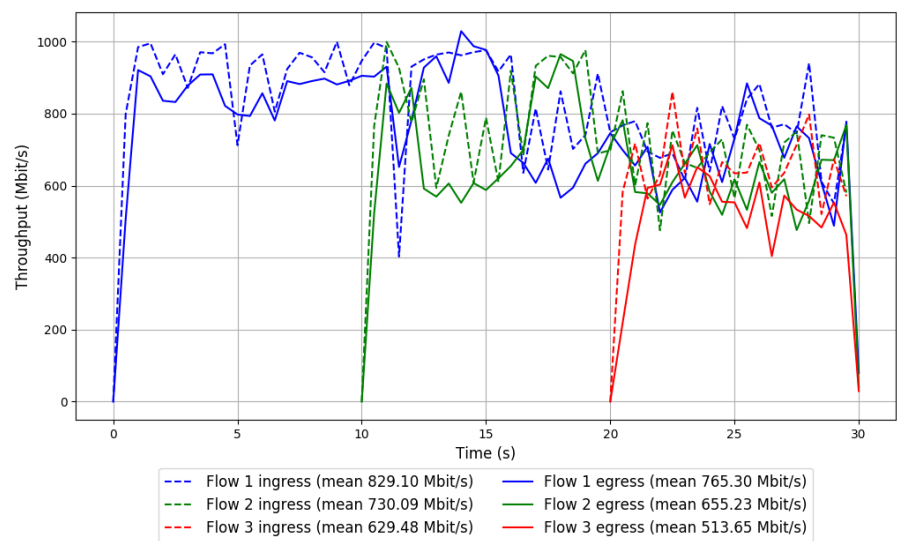
-- Flow 3:

Average throughput: 513.65 Mbit/s

95th percentile per-packet one-way delay: 381.217 ms

Loss rate: 18.42%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-03-14 01:03:29

End at: 2018-03-14 01:03:59

Below is generated by plot.py at 2018-03-14 06:12:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 1312.88 Mbit/s

95th percentile per-packet one-way delay: 347.099 ms

Loss rate: 9.56%

-- Flow 1:

Average throughput: 706.95 Mbit/s

95th percentile per-packet one-way delay: 339.183 ms

Loss rate: 7.51%

-- Flow 2:

Average throughput: 600.82 Mbit/s

95th percentile per-packet one-way delay: 376.138 ms

Loss rate: 10.73%

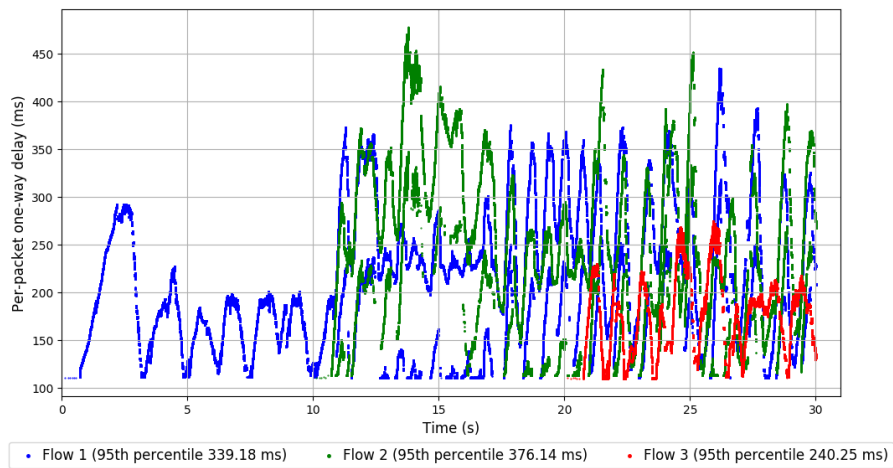
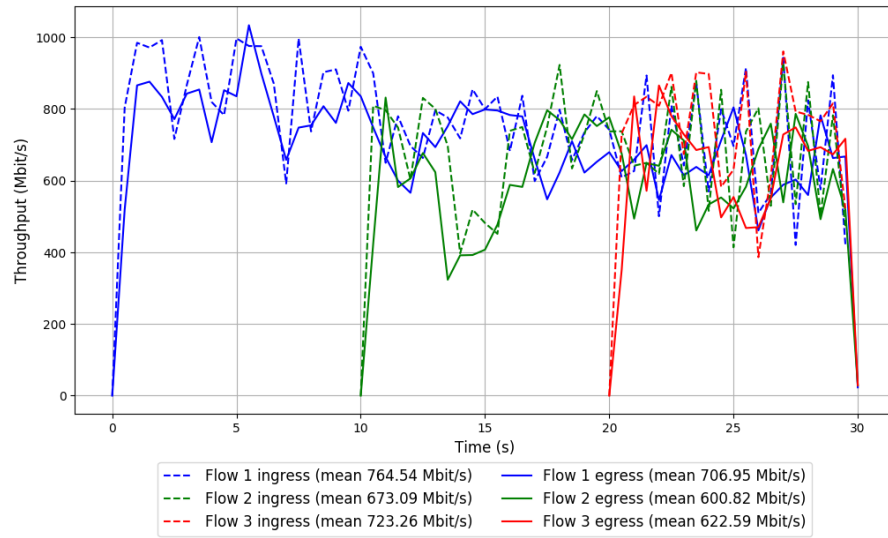
-- Flow 3:

Average throughput: 622.59 Mbit/s

95th percentile per-packet one-way delay: 240.249 ms

Loss rate: 13.89%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-03-14 01:23:01

End at: 2018-03-14 01:23:31

Below is generated by plot.py at 2018-03-14 06:15:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 1399.14 Mbit/s

95th percentile per-packet one-way delay: 248.200 ms

Loss rate: 10.89%

-- Flow 1:

Average throughput: 700.99 Mbit/s

95th percentile per-packet one-way delay: 269.596 ms

Loss rate: 11.30%

-- Flow 2:

Average throughput: 703.09 Mbit/s

95th percentile per-packet one-way delay: 216.164 ms

Loss rate: 10.57%

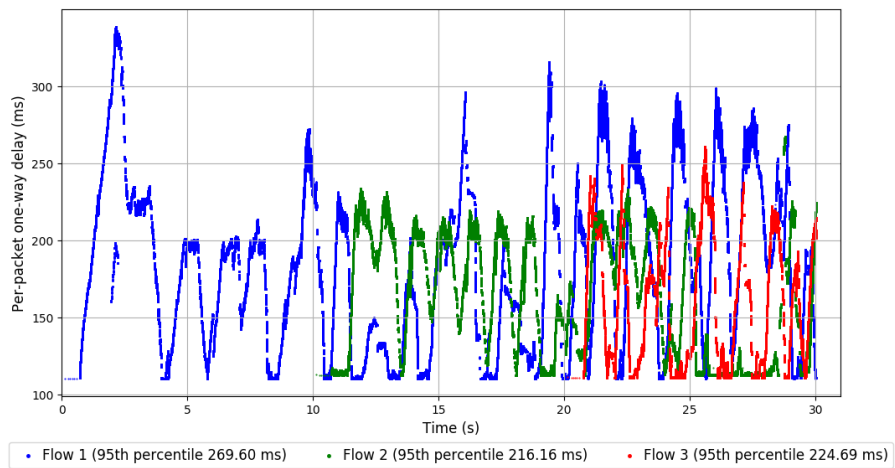
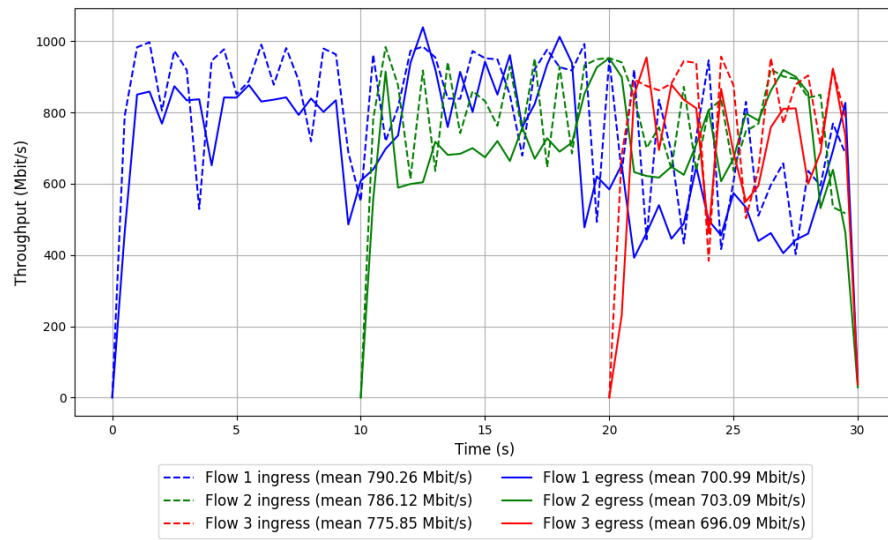
-- Flow 3:

Average throughput: 696.09 Mbit/s

95th percentile per-packet one-way delay: 224.685 ms

Loss rate: 10.28%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-03-14 01:42:51

End at: 2018-03-14 01:43:21

Below is generated by plot.py at 2018-03-14 06:23:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 1494.38 Mbit/s

95th percentile per-packet one-way delay: 215.117 ms

Loss rate: 8.32%

-- Flow 1:

Average throughput: 773.38 Mbit/s

95th percentile per-packet one-way delay: 212.052 ms

Loss rate: 8.29%

-- Flow 2:

Average throughput: 752.65 Mbit/s

95th percentile per-packet one-way delay: 213.937 ms

Loss rate: 7.30%

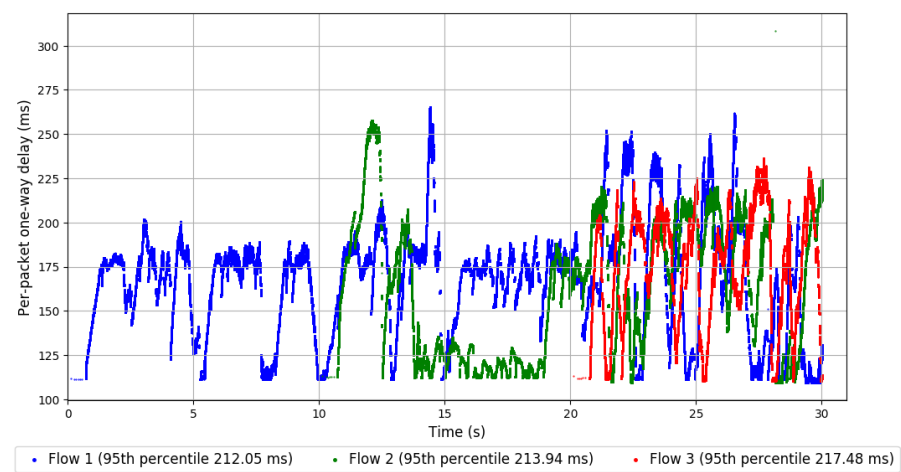
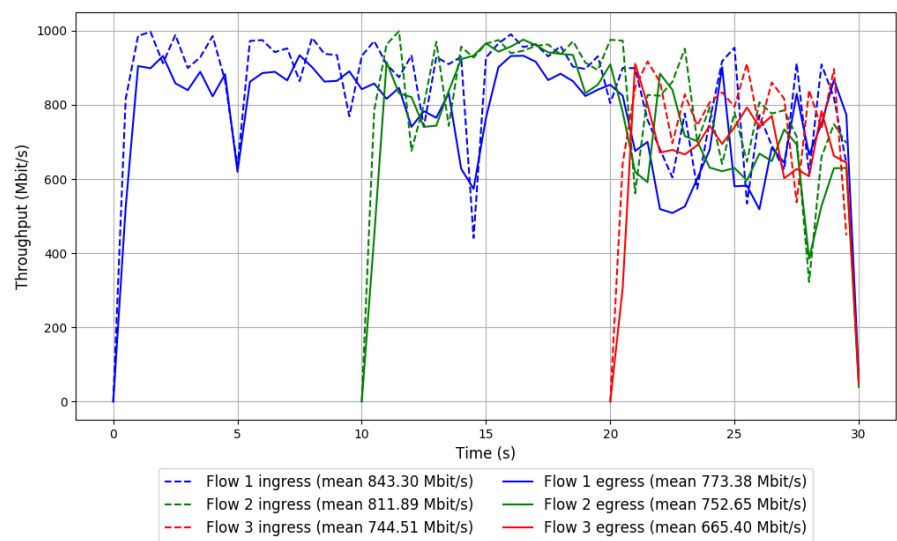
-- Flow 3:

Average throughput: 665.40 Mbit/s

95th percentile per-packet one-way delay: 217.482 ms

Loss rate: 10.64%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-03-14 02:02:24

End at: 2018-03-14 02:02:54

Below is generated by plot.py at 2018-03-14 06:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 1501.66 Mbit/s

95th percentile per-packet one-way delay: 218.169 ms

Loss rate: 8.28%

-- Flow 1:

Average throughput: 833.29 Mbit/s

95th percentile per-packet one-way delay: 198.506 ms

Loss rate: 4.68%

-- Flow 2:

Average throughput: 690.78 Mbit/s

95th percentile per-packet one-way delay: 227.802 ms

Loss rate: 12.06%

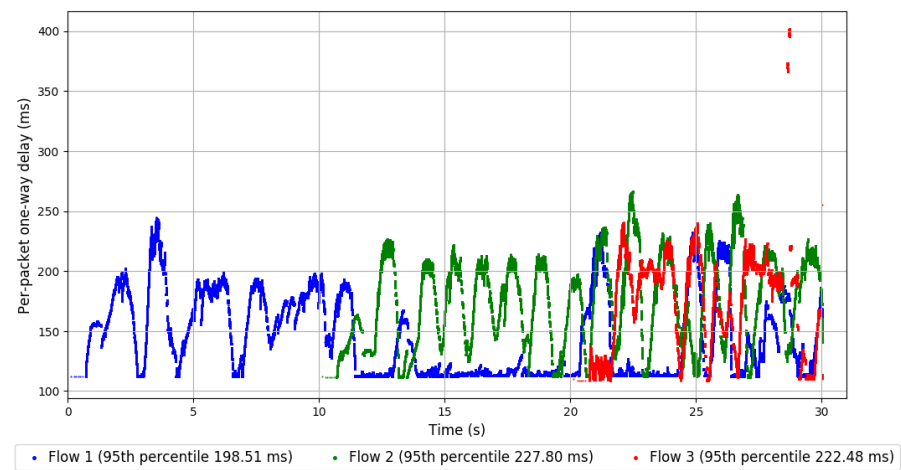
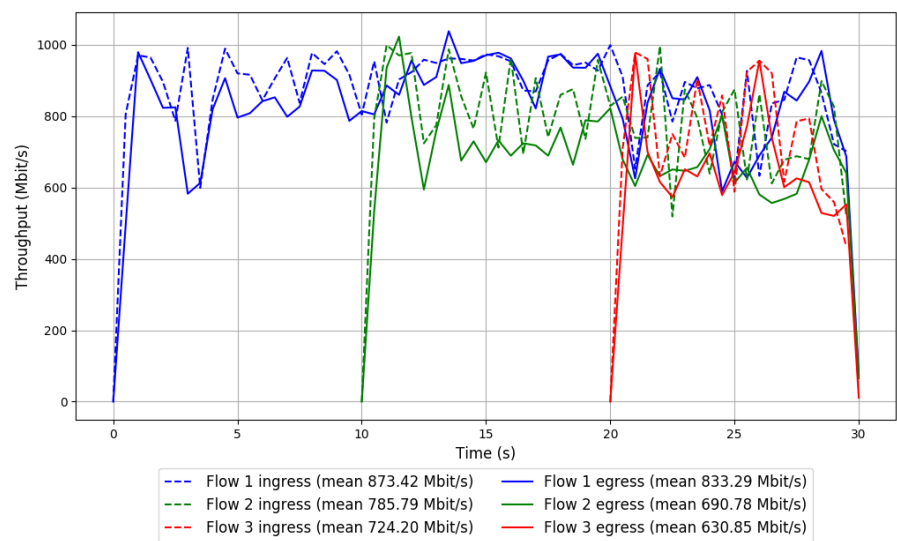
-- Flow 3:

Average throughput: 630.85 Mbit/s

95th percentile per-packet one-way delay: 222.483 ms

Loss rate: 13.16%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-03-14 02:21:58

End at: 2018-03-14 02:22:28

Below is generated by plot.py at 2018-03-14 06:37:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 1374.20 Mbit/s

95th percentile per-packet one-way delay: 333.248 ms

Loss rate: 11.45%

-- Flow 1:

Average throughput: 758.46 Mbit/s

95th percentile per-packet one-way delay: 305.946 ms

Loss rate: 8.03%

-- Flow 2:

Average throughput: 668.20 Mbit/s

95th percentile per-packet one-way delay: 248.097 ms

Loss rate: 13.79%

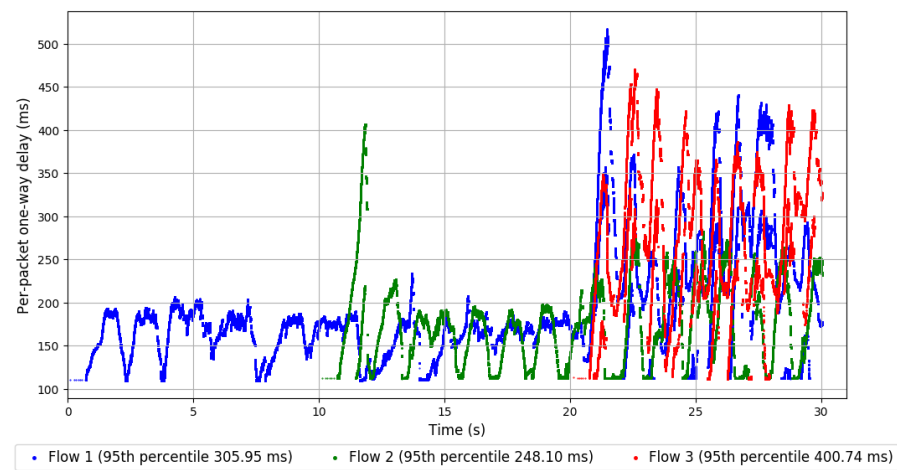
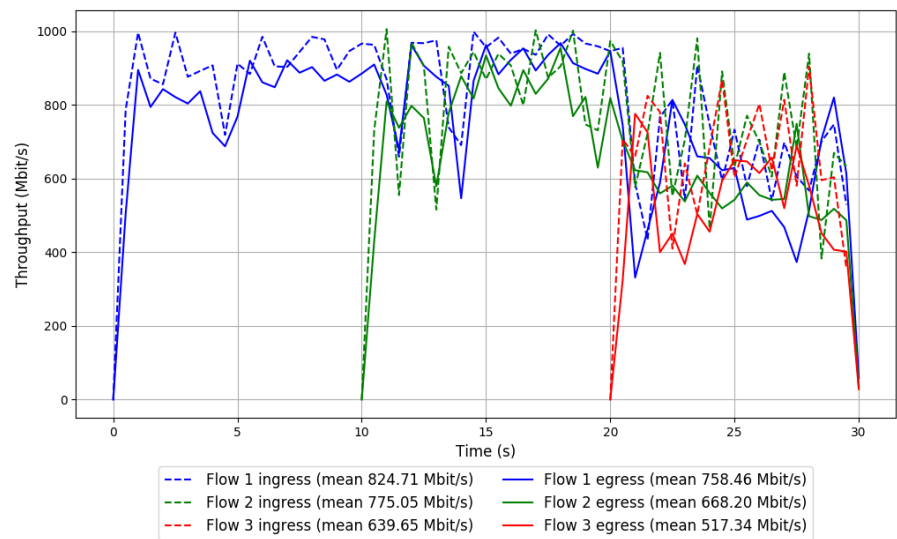
-- Flow 3:

Average throughput: 517.34 Mbit/s

95th percentile per-packet one-way delay: 400.739 ms

Loss rate: 19.12%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-03-14 02:41:06

End at: 2018-03-14 02:41:36

Below is generated by plot.py at 2018-03-14 06:39:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 1306.11 Mbit/s

95th percentile per-packet one-way delay: 252.728 ms

Loss rate: 12.52%

-- Flow 1:

Average throughput: 695.03 Mbit/s

95th percentile per-packet one-way delay: 240.785 ms

Loss rate: 11.45%

-- Flow 2:

Average throughput: 648.88 Mbit/s

95th percentile per-packet one-way delay: 282.073 ms

Loss rate: 12.53%

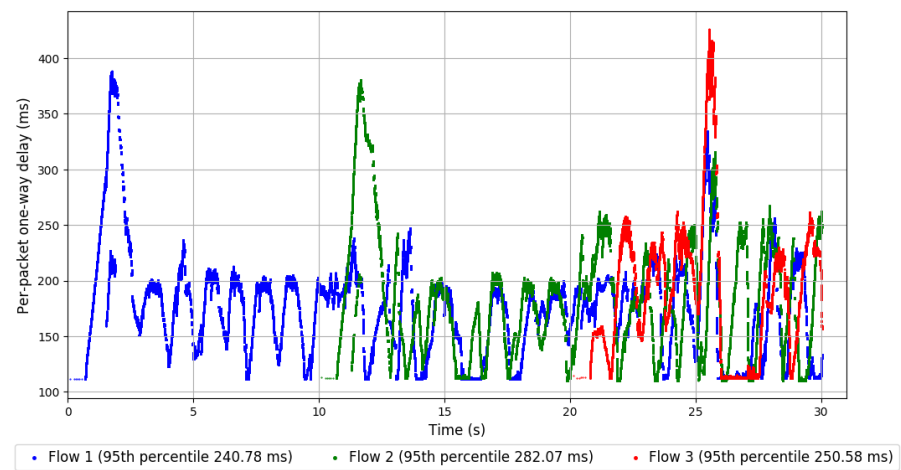
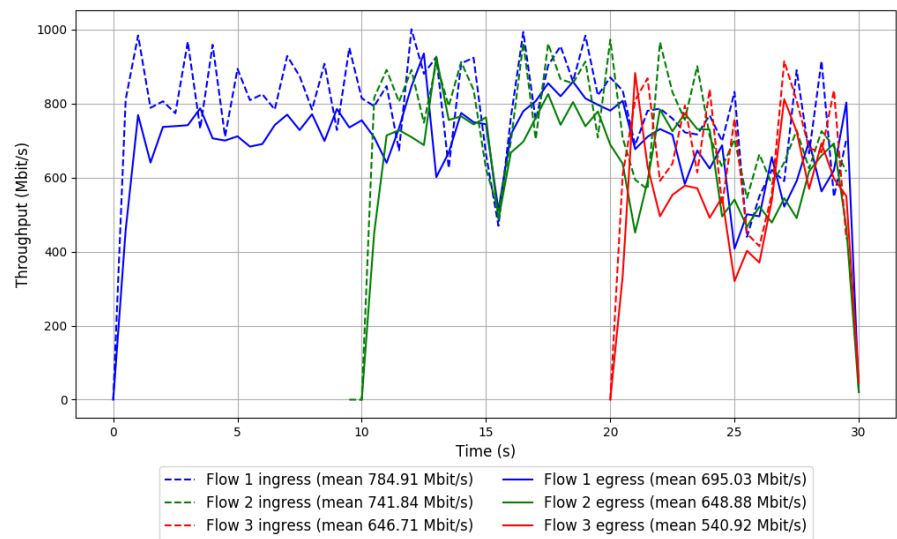
-- Flow 3:

Average throughput: 540.92 Mbit/s

95th percentile per-packet one-way delay: 250.577 ms

Loss rate: 16.38%

Run 10: Report of FillP — Data Link

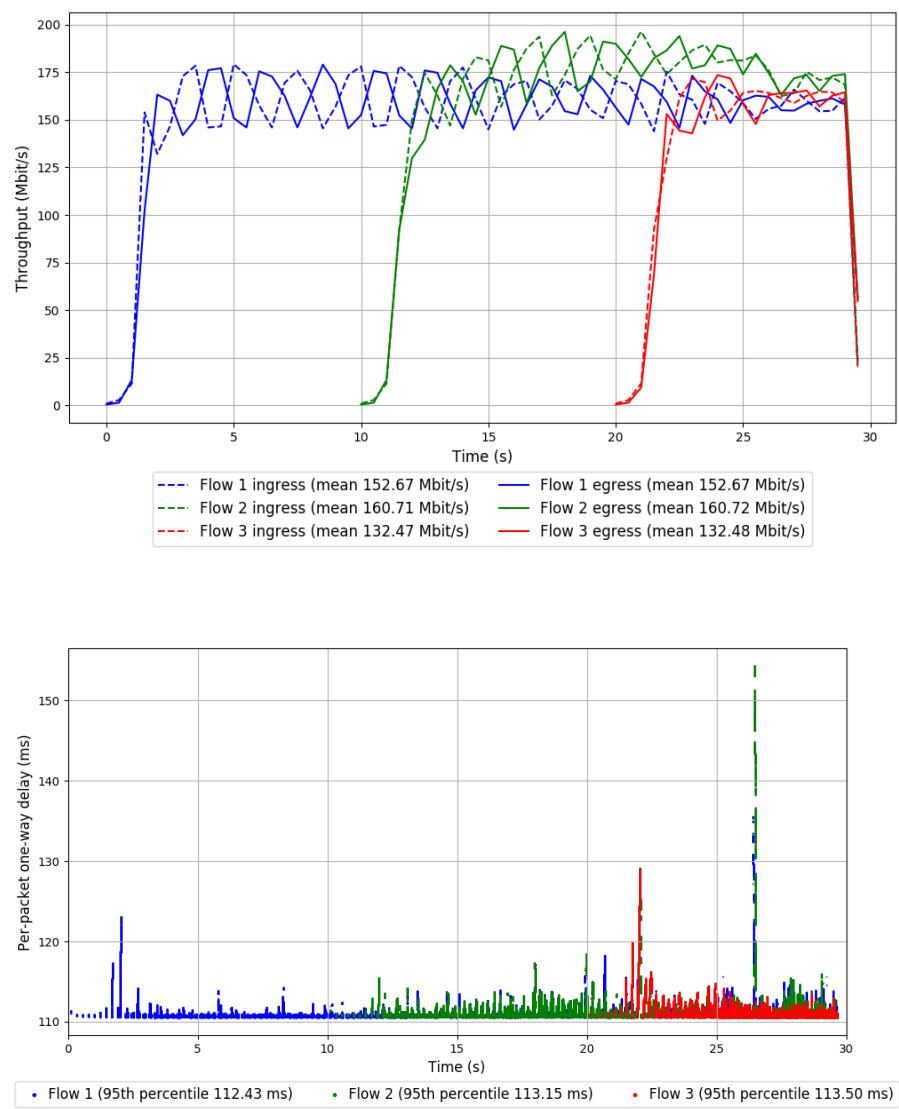


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-03-13 23:40:38
End at: 2018-03-13 23:41:08

# Below is generated by plot.py at 2018-03-14 06:39:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 301.74 Mbit/s
95th percentile per-packet one-way delay: 112.885 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 152.67 Mbit/s
95th percentile per-packet one-way delay: 112.433 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 160.72 Mbit/s
95th percentile per-packet one-way delay: 113.151 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 132.48 Mbit/s
95th percentile per-packet one-way delay: 113.499 ms
Loss rate: 0.00%
```

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

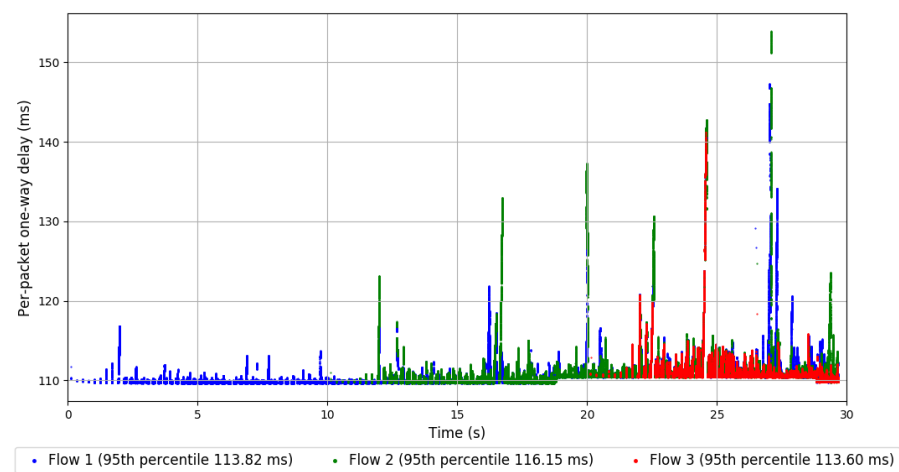
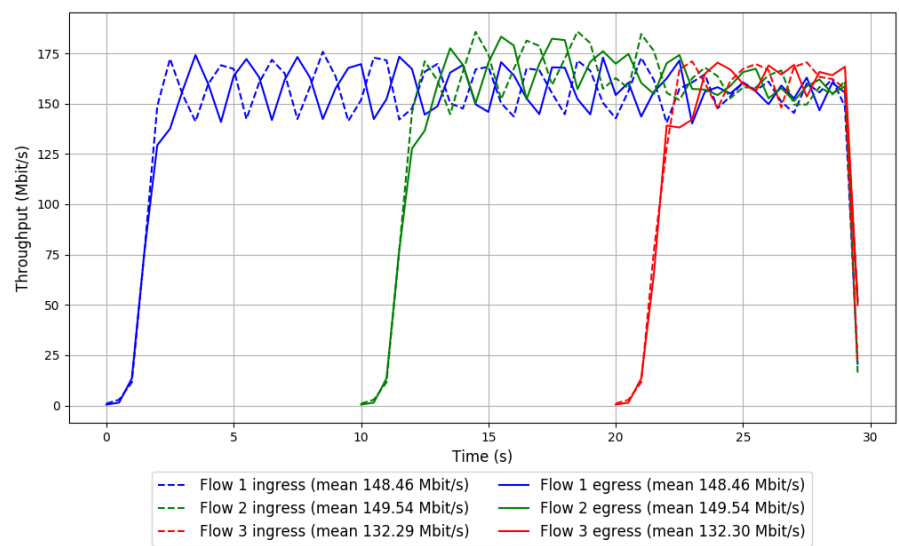


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-03-14 00:00:10
End at: 2018-03-14 00:00:40

# Below is generated by plot.py at 2018-03-14 06:39:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 290.04 Mbit/s
95th percentile per-packet one-way delay: 114.376 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 148.46 Mbit/s
95th percentile per-packet one-way delay: 113.822 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 149.54 Mbit/s
95th percentile per-packet one-way delay: 116.151 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 132.30 Mbit/s
95th percentile per-packet one-way delay: 113.599 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-03-14 00:19:29

End at: 2018-03-14 00:19:59

Below is generated by plot.py at 2018-03-14 06:39:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 304.94 Mbit/s

95th percentile per-packet one-way delay: 113.965 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 160.91 Mbit/s

95th percentile per-packet one-way delay: 113.316 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 153.86 Mbit/s

95th percentile per-packet one-way delay: 114.217 ms

Loss rate: 0.00%

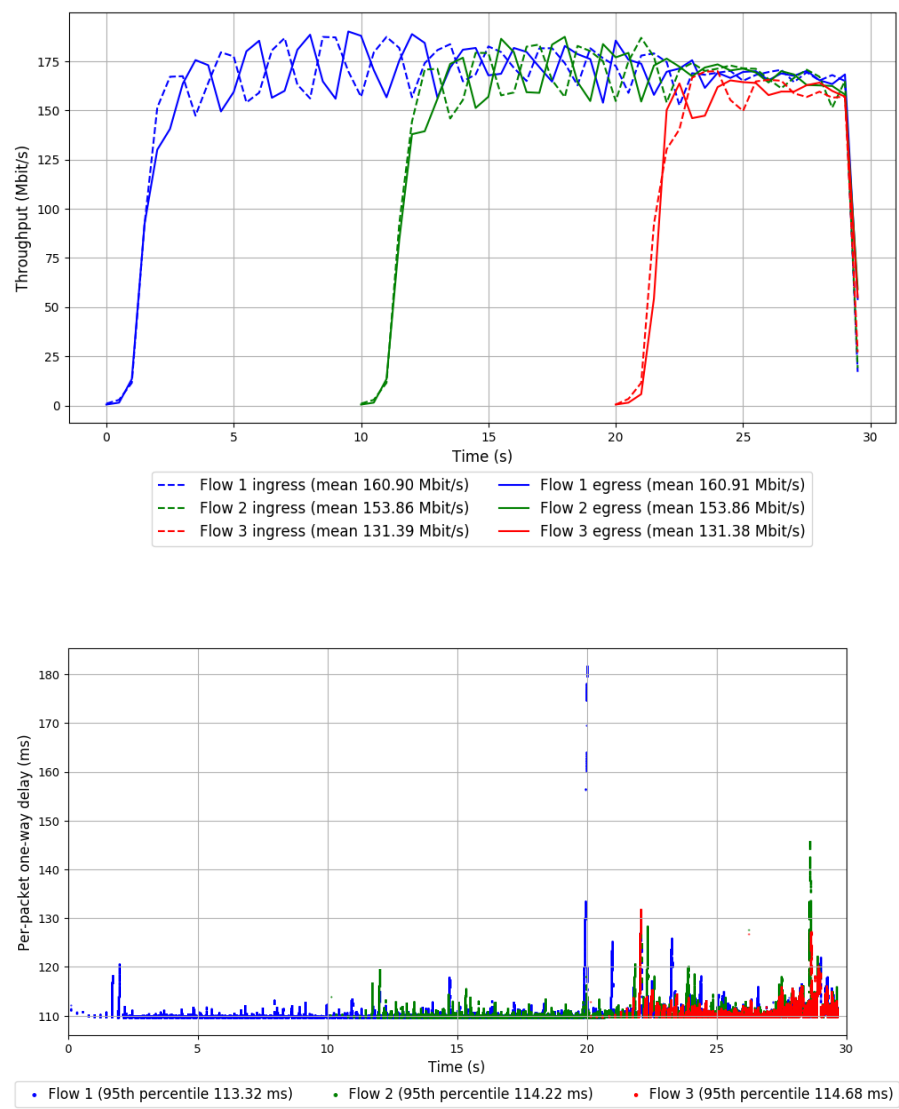
-- Flow 3:

Average throughput: 131.38 Mbit/s

95th percentile per-packet one-way delay: 114.682 ms

Loss rate: 0.00%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-03-14 00:39:04

End at: 2018-03-14 00:39:34

Below is generated by plot.py at 2018-03-14 06:39:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 375.60 Mbit/s

95th percentile per-packet one-way delay: 116.027 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 202.12 Mbit/s

95th percentile per-packet one-way delay: 115.765 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 198.51 Mbit/s

95th percentile per-packet one-way delay: 118.372 ms

Loss rate: 0.00%

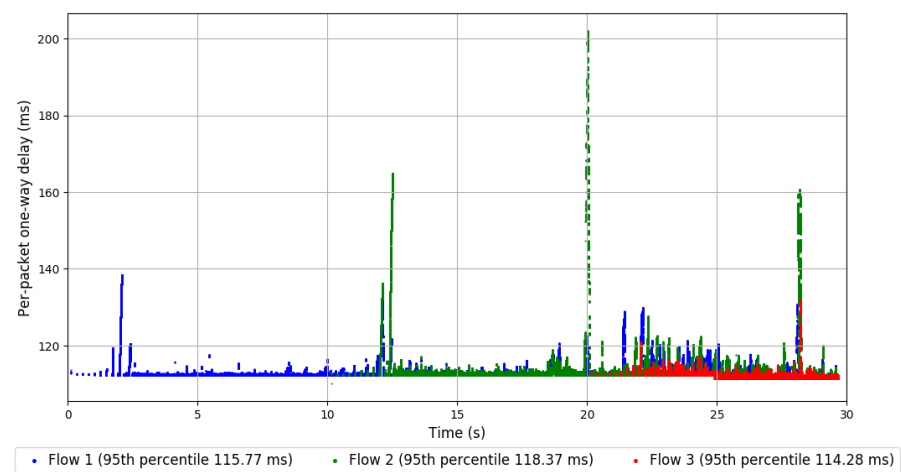
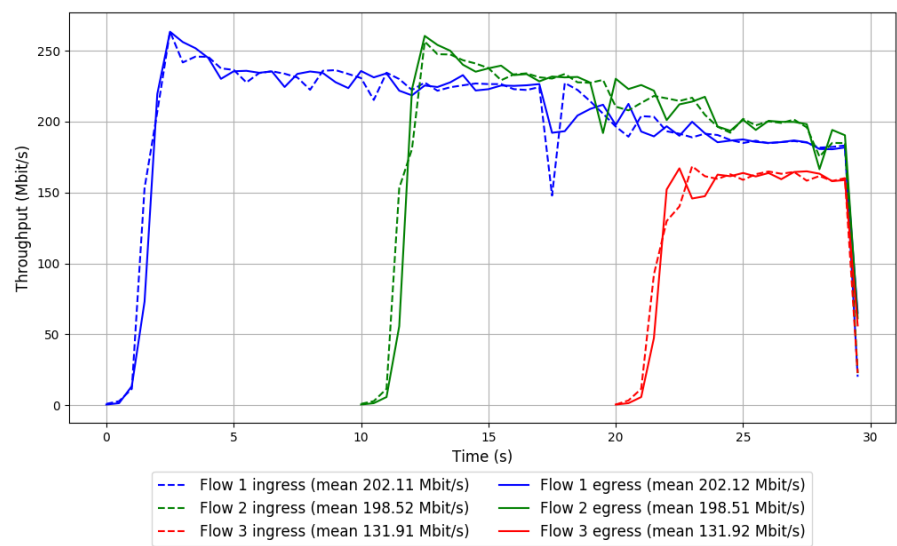
-- Flow 3:

Average throughput: 131.92 Mbit/s

95th percentile per-packet one-way delay: 114.285 ms

Loss rate: 0.00%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-03-14 00:58:13

End at: 2018-03-14 00:58:43

Below is generated by plot.py at 2018-03-14 06:39:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 303.77 Mbit/s

95th percentile per-packet one-way delay: 114.820 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 152.46 Mbit/s

95th percentile per-packet one-way delay: 114.202 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 141.10 Mbit/s

95th percentile per-packet one-way delay: 115.284 ms

Loss rate: 0.00%

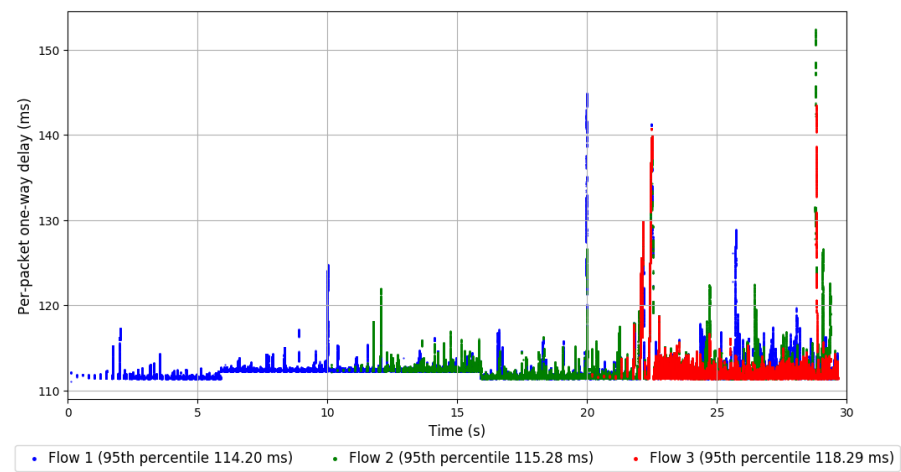
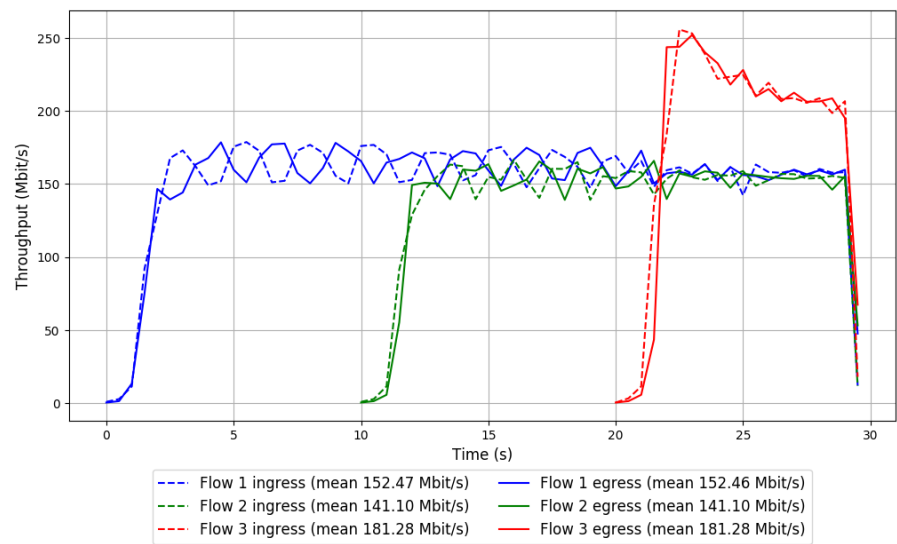
-- Flow 3:

Average throughput: 181.28 Mbit/s

95th percentile per-packet one-way delay: 118.289 ms

Loss rate: 0.00%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-03-14 01:17:30

End at: 2018-03-14 01:18:00

Below is generated by plot.py at 2018-03-14 06:39:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 304.35 Mbit/s

95th percentile per-packet one-way delay: 113.451 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 168.43 Mbit/s

95th percentile per-packet one-way delay: 113.069 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 141.01 Mbit/s

95th percentile per-packet one-way delay: 113.686 ms

Loss rate: 0.00%

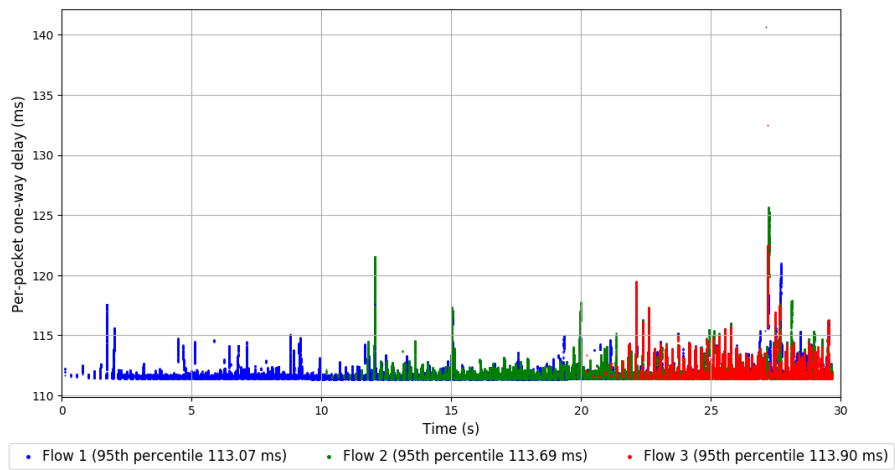
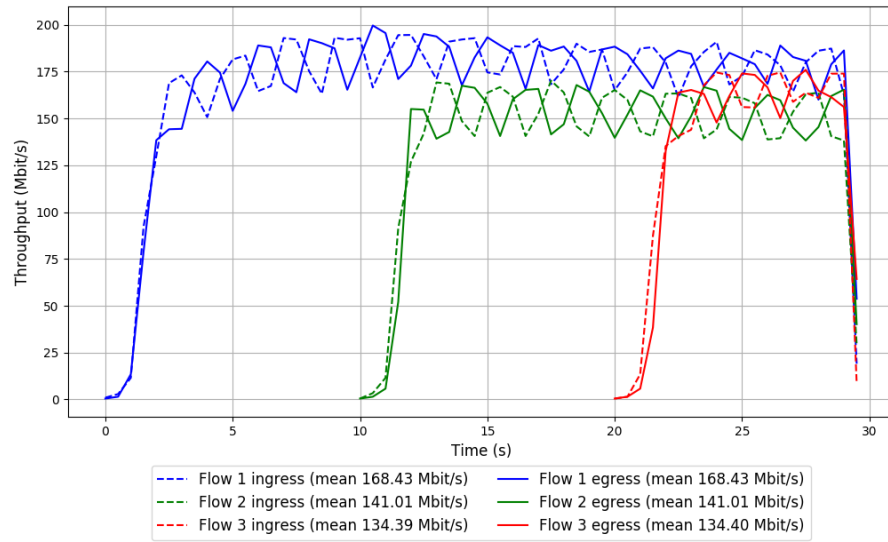
-- Flow 3:

Average throughput: 134.40 Mbit/s

95th percentile per-packet one-way delay: 113.900 ms

Loss rate: 0.00%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-03-14 01:37:21

End at: 2018-03-14 01:37:51

Below is generated by plot.py at 2018-03-14 06:39:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 287.75 Mbit/s

95th percentile per-packet one-way delay: 114.868 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 146.93 Mbit/s

95th percentile per-packet one-way delay: 114.763 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 149.81 Mbit/s

95th percentile per-packet one-way delay: 114.495 ms

Loss rate: 0.00%

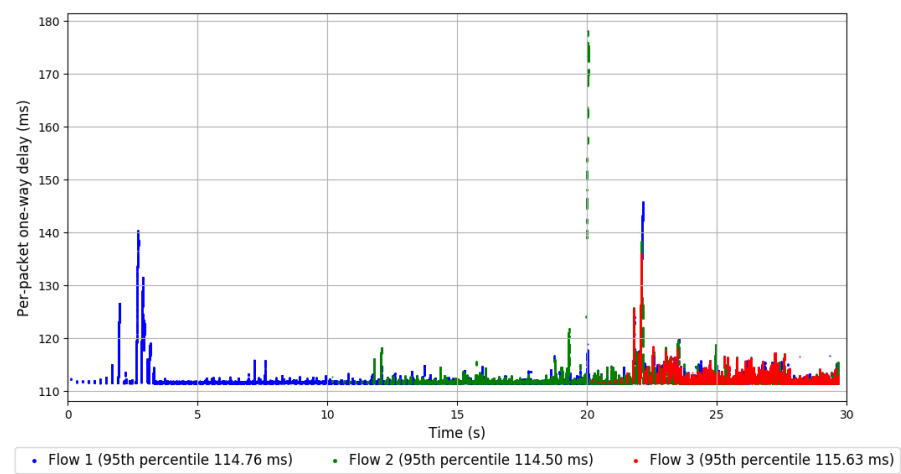
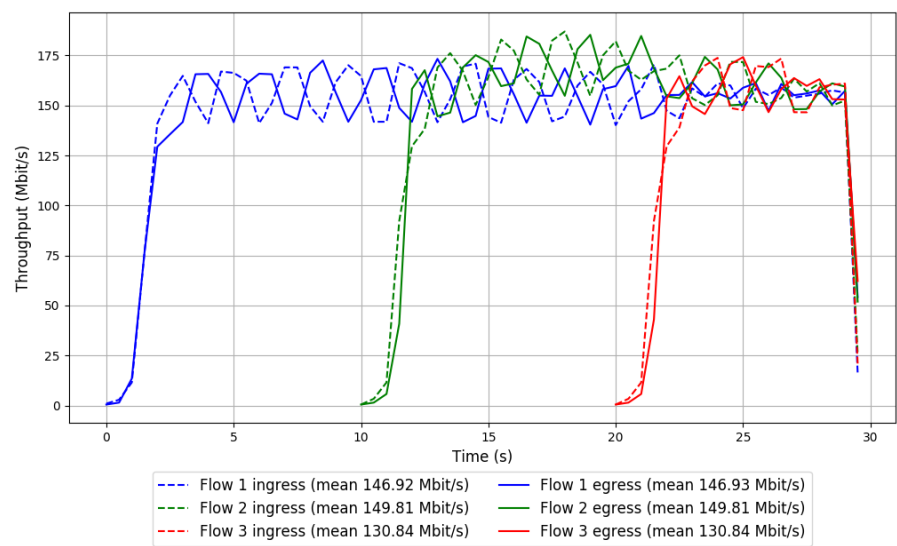
-- Flow 3:

Average throughput: 130.84 Mbit/s

95th percentile per-packet one-way delay: 115.626 ms

Loss rate: 0.00%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-03-14 01:57:21

End at: 2018-03-14 01:57:51

Below is generated by plot.py at 2018-03-14 06:39:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.42 Mbit/s

95th percentile per-packet one-way delay: 113.868 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 152.20 Mbit/s

95th percentile per-packet one-way delay: 113.425 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 138.65 Mbit/s

95th percentile per-packet one-way delay: 113.905 ms

Loss rate: 0.00%

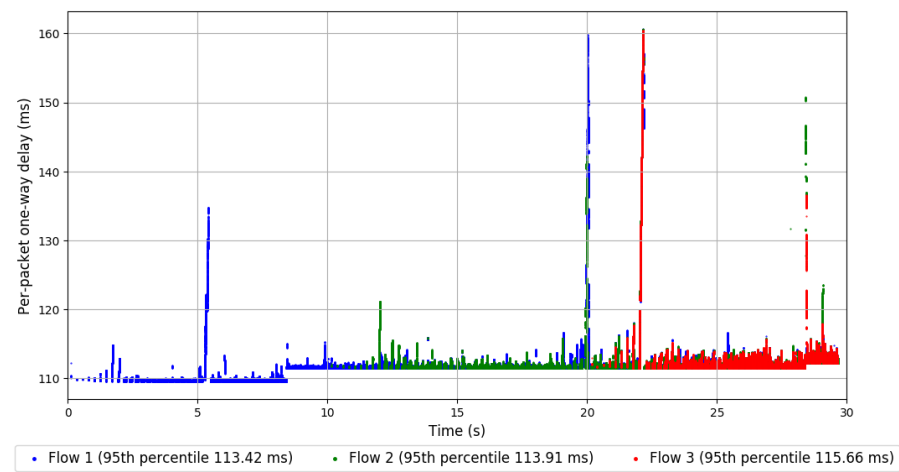
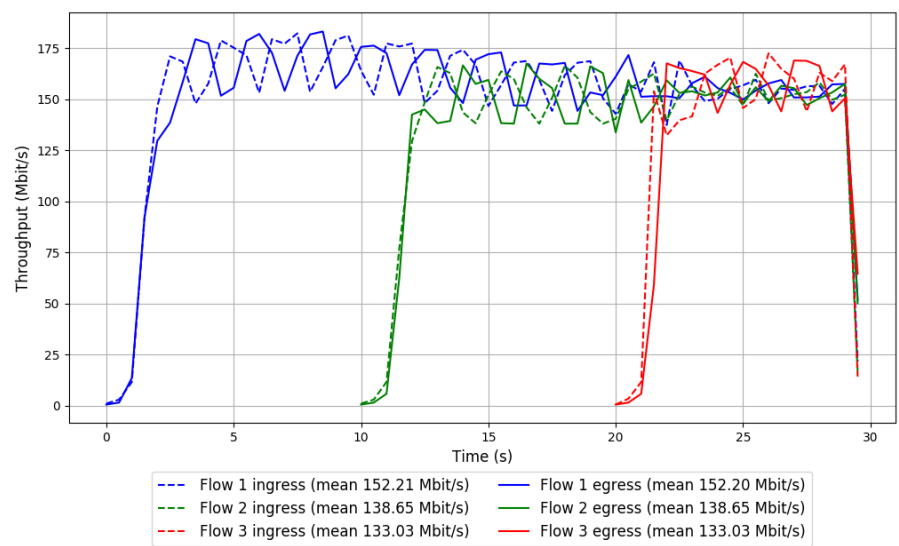
-- Flow 3:

Average throughput: 133.03 Mbit/s

95th percentile per-packet one-way delay: 115.664 ms

Loss rate: 0.00%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-03-14 02:16:43

End at: 2018-03-14 02:17:13

Below is generated by plot.py at 2018-03-14 06:39:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 323.23 Mbit/s

95th percentile per-packet one-way delay: 118.576 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 146.31 Mbit/s

95th percentile per-packet one-way delay: 116.844 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 204.28 Mbit/s

95th percentile per-packet one-way delay: 118.723 ms

Loss rate: 0.00%

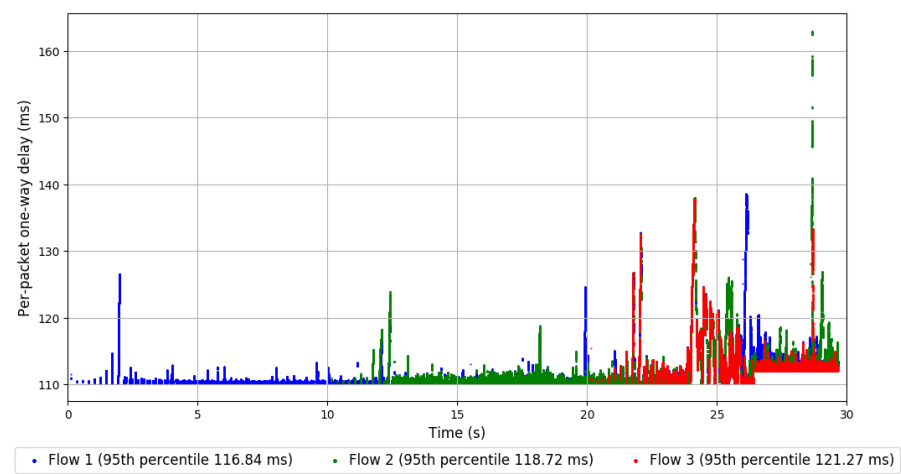
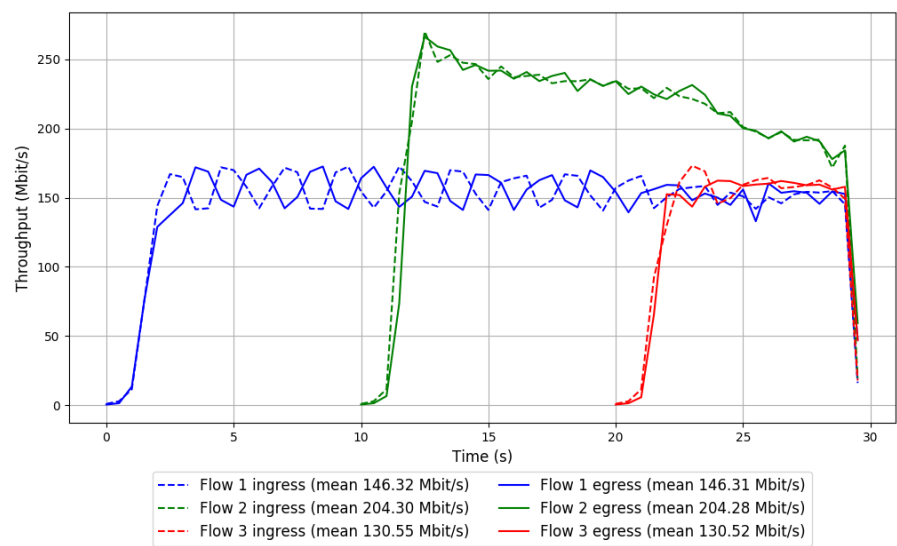
-- Flow 3:

Average throughput: 130.52 Mbit/s

95th percentile per-packet one-way delay: 121.271 ms

Loss rate: 0.00%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-03-14 02:35:59

End at: 2018-03-14 02:36:29

Below is generated by plot.py at 2018-03-14 06:39:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.90 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 161.51 Mbit/s

95th percentile per-packet one-way delay: 112.278 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 206.26 Mbit/s

95th percentile per-packet one-way delay: 115.156 ms

Loss rate: 0.00%

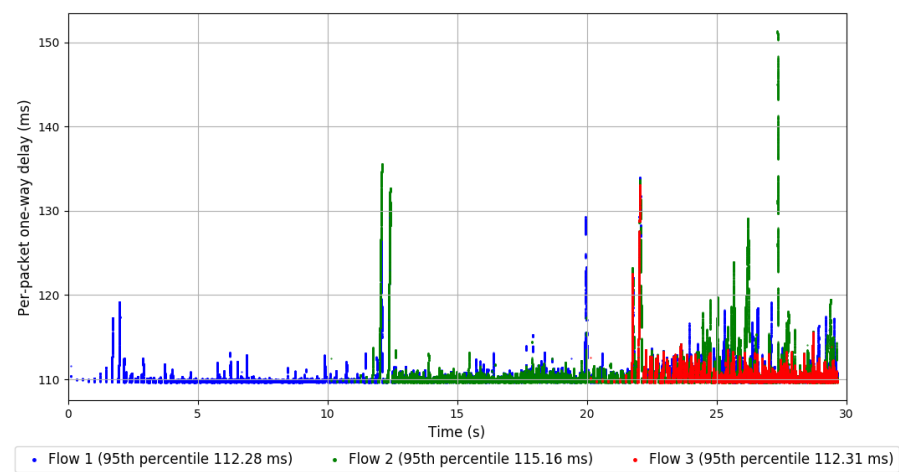
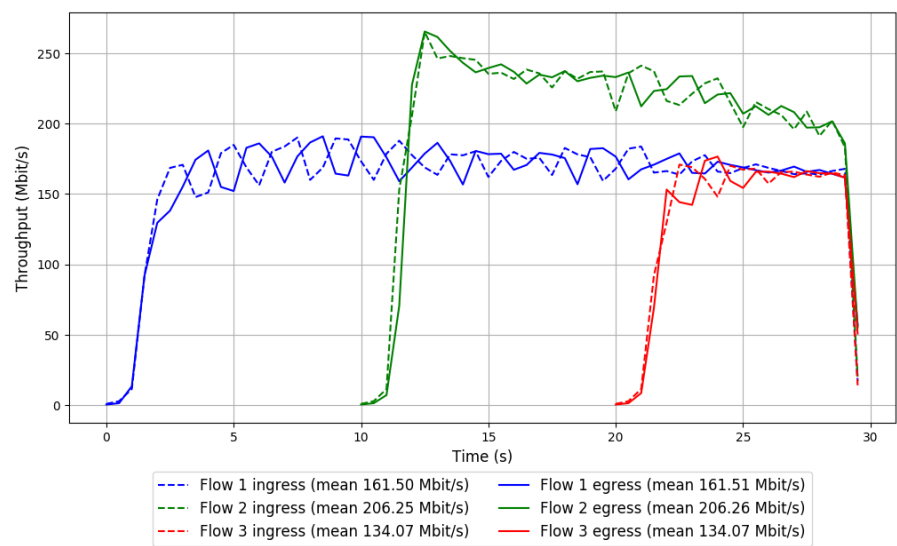
-- Flow 3:

Average throughput: 134.07 Mbit/s

95th percentile per-packet one-way delay: 112.310 ms

Loss rate: 0.00%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-03-13 23:41:48

End at: 2018-03-13 23:42:18

Below is generated by plot.py at 2018-03-14 06:39:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 510.40 Mbit/s

95th percentile per-packet one-way delay: 128.561 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 289.61 Mbit/s

95th percentile per-packet one-way delay: 127.883 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 262.12 Mbit/s

95th percentile per-packet one-way delay: 124.994 ms

Loss rate: 0.06%

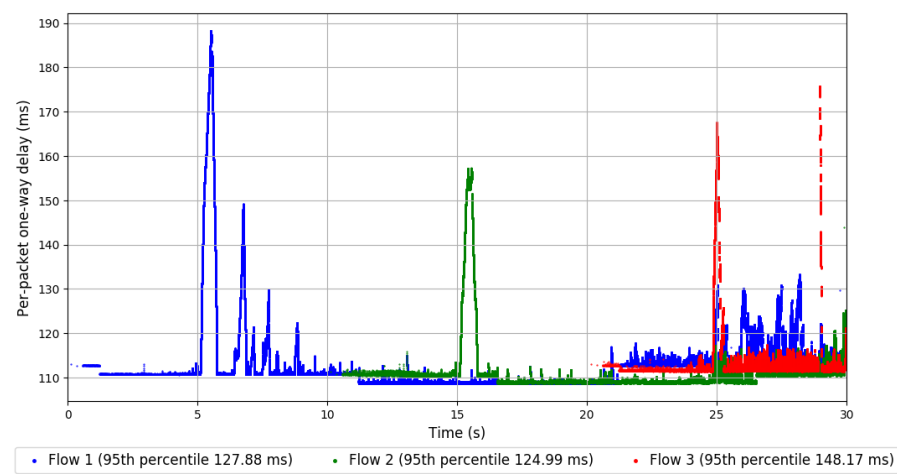
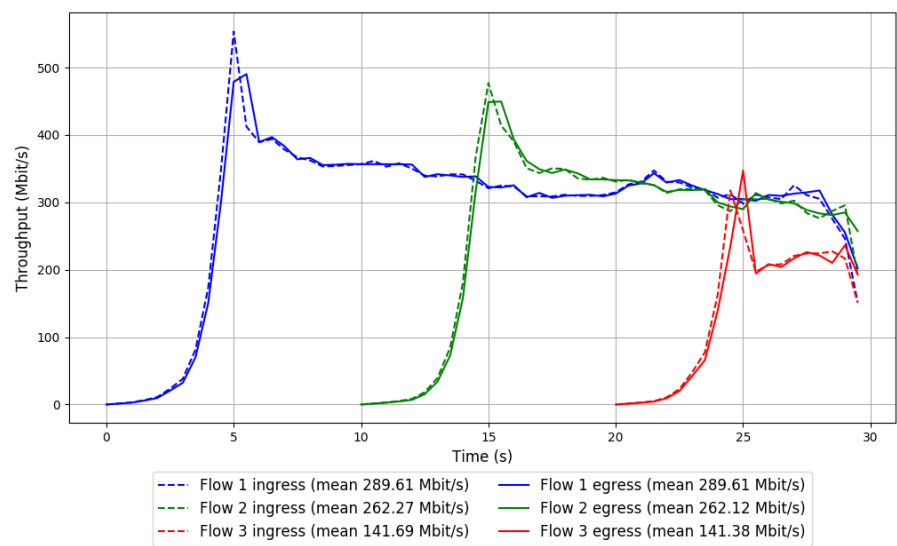
-- Flow 3:

Average throughput: 141.38 Mbit/s

95th percentile per-packet one-way delay: 148.173 ms

Loss rate: 0.24%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-03-14 00:01:19

End at: 2018-03-14 00:01:49

Below is generated by plot.py at 2018-03-14 06:39:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 414.32 Mbit/s

95th percentile per-packet one-way delay: 192.727 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 245.73 Mbit/s

95th percentile per-packet one-way delay: 208.690 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 188.29 Mbit/s

95th percentile per-packet one-way delay: 115.241 ms

Loss rate: 0.00%

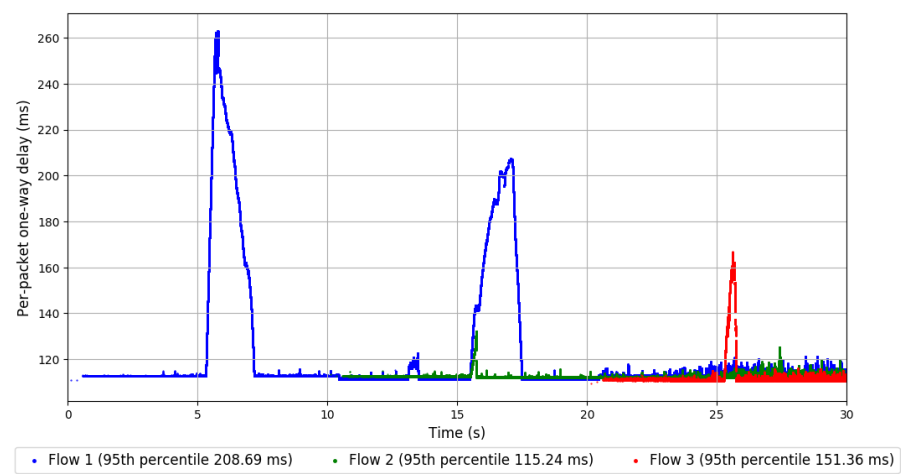
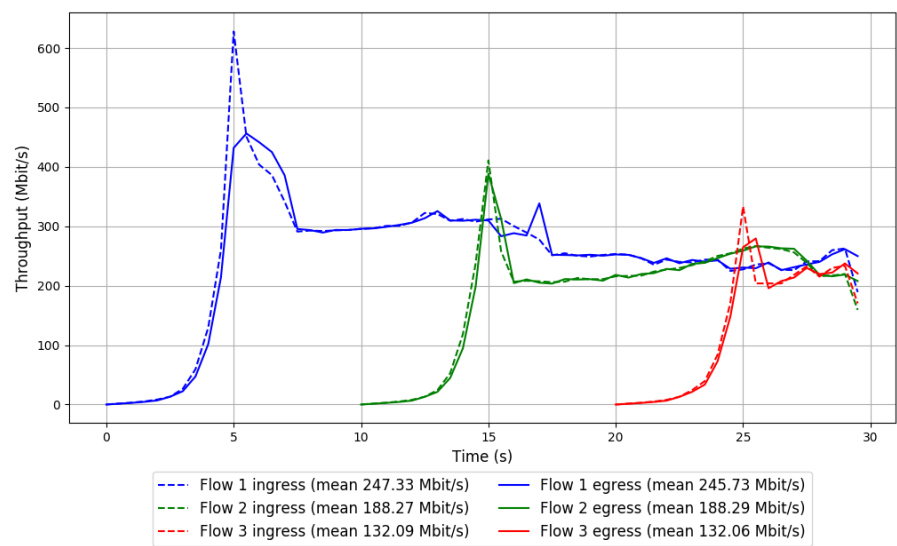
-- Flow 3:

Average throughput: 132.06 Mbit/s

95th percentile per-packet one-way delay: 151.356 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-03-14 00:20:38

End at: 2018-03-14 00:21:08

Below is generated by plot.py at 2018-03-14 06:39:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 356.47 Mbit/s

95th percentile per-packet one-way delay: 193.407 ms

Loss rate: 1.61%

-- Flow 1:

Average throughput: 181.15 Mbit/s

95th percentile per-packet one-way delay: 188.778 ms

Loss rate: 2.48%

-- Flow 2:

Average throughput: 198.10 Mbit/s

95th percentile per-packet one-way delay: 218.202 ms

Loss rate: 0.90%

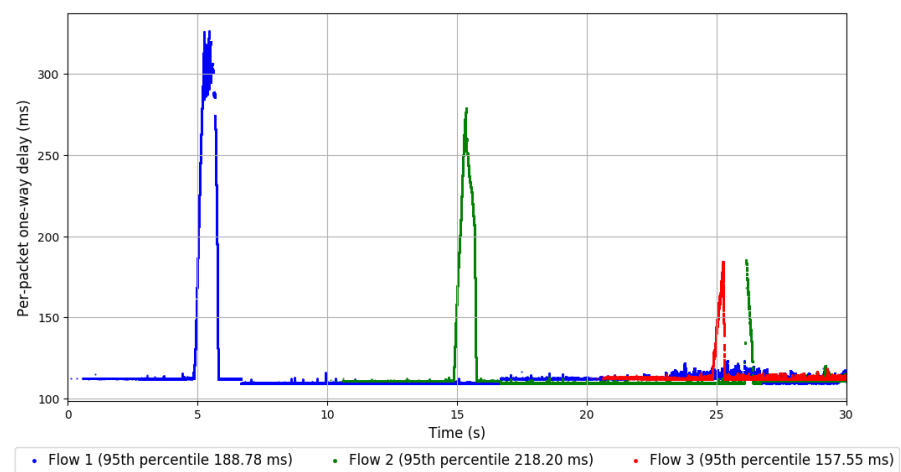
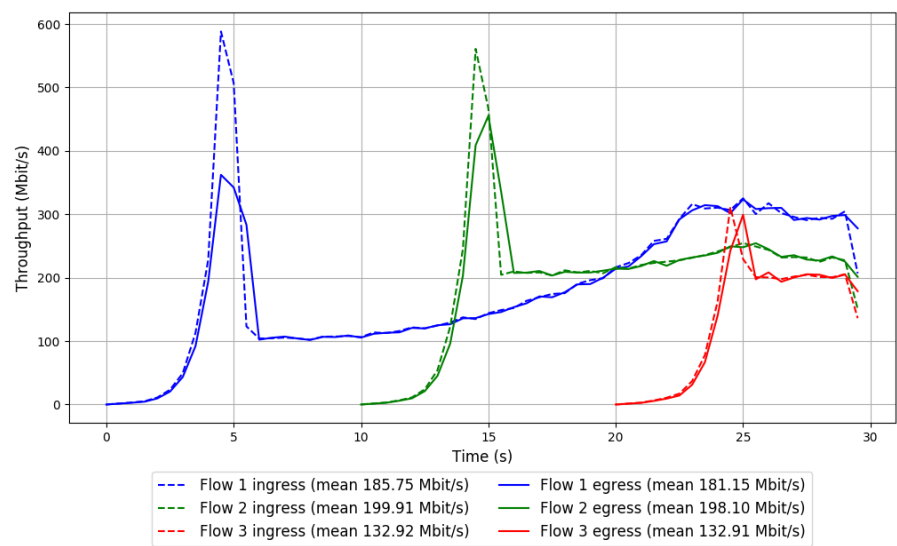
-- Flow 3:

Average throughput: 132.91 Mbit/s

95th percentile per-packet one-way delay: 157.547 ms

Loss rate: 0.02%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-03-14 00:40:20

End at: 2018-03-14 00:40:50

Below is generated by plot.py at 2018-03-14 06:39:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 384.34 Mbit/s

95th percentile per-packet one-way delay: 114.844 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 221.93 Mbit/s

95th percentile per-packet one-way delay: 115.299 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 178.85 Mbit/s

95th percentile per-packet one-way delay: 111.327 ms

Loss rate: 0.00%

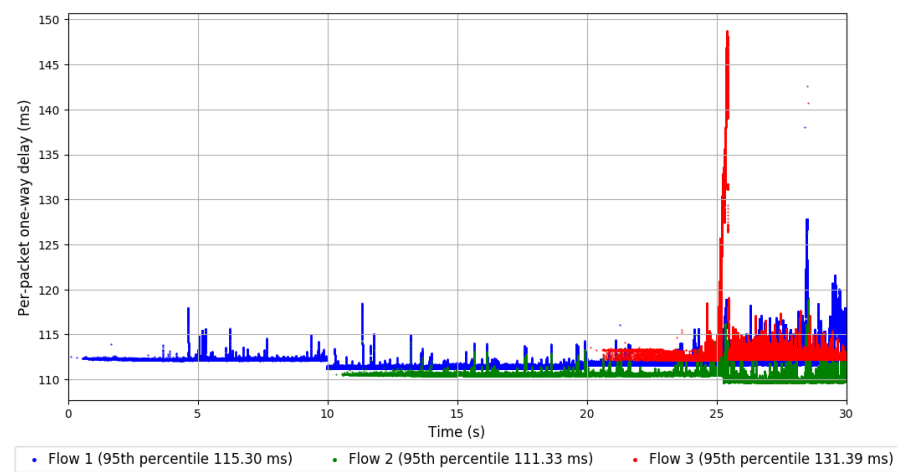
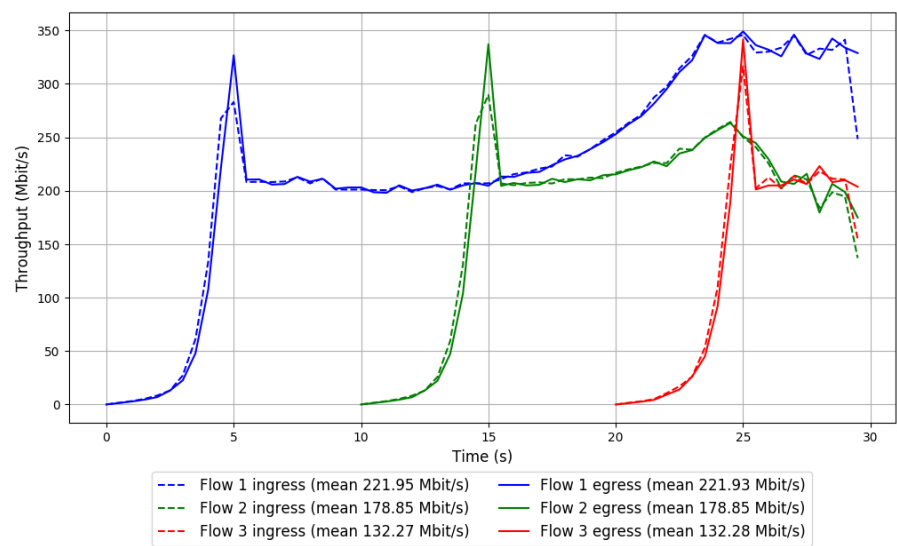
-- Flow 3:

Average throughput: 132.28 Mbit/s

95th percentile per-packet one-way delay: 131.394 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-03-14 00:59:23

End at: 2018-03-14 00:59:53

Below is generated by plot.py at 2018-03-14 06:39:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 461.65 Mbit/s

95th percentile per-packet one-way delay: 282.159 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 228.16 Mbit/s

95th percentile per-packet one-way delay: 113.875 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 285.25 Mbit/s

95th percentile per-packet one-way delay: 296.521 ms

Loss rate: 2.22%

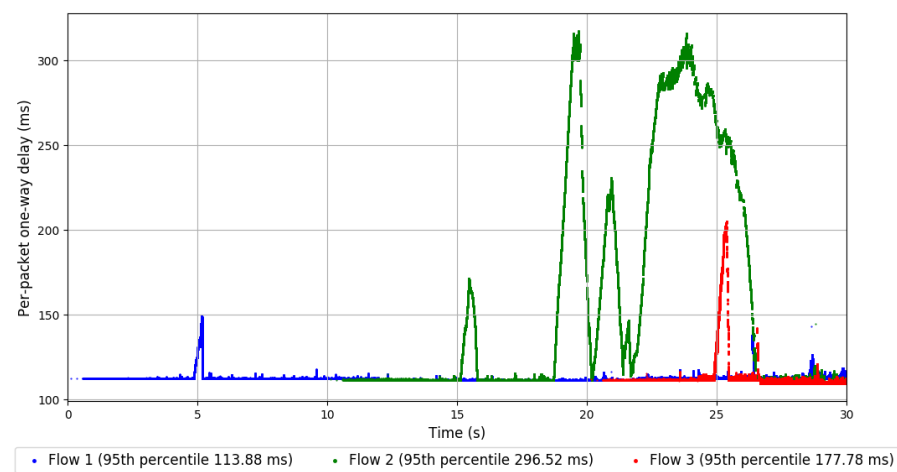
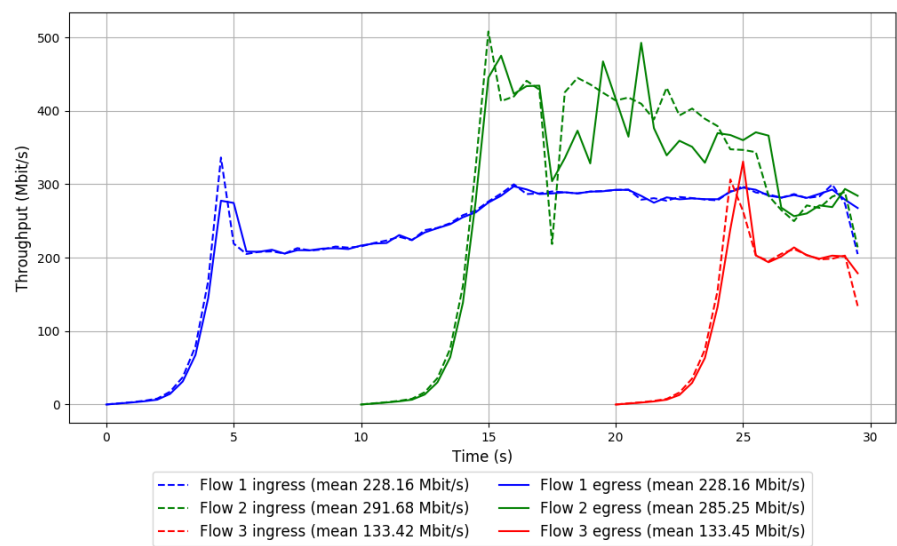
-- Flow 3:

Average throughput: 133.45 Mbit/s

95th percentile per-packet one-way delay: 177.784 ms

Loss rate: 0.00%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-03-14 01:18:40

End at: 2018-03-14 01:19:10

Below is generated by plot.py at 2018-03-14 06:39:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 476.33 Mbit/s

95th percentile per-packet one-way delay: 264.742 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 285.83 Mbit/s

95th percentile per-packet one-way delay: 246.102 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 224.09 Mbit/s

95th percentile per-packet one-way delay: 271.279 ms

Loss rate: 0.22%

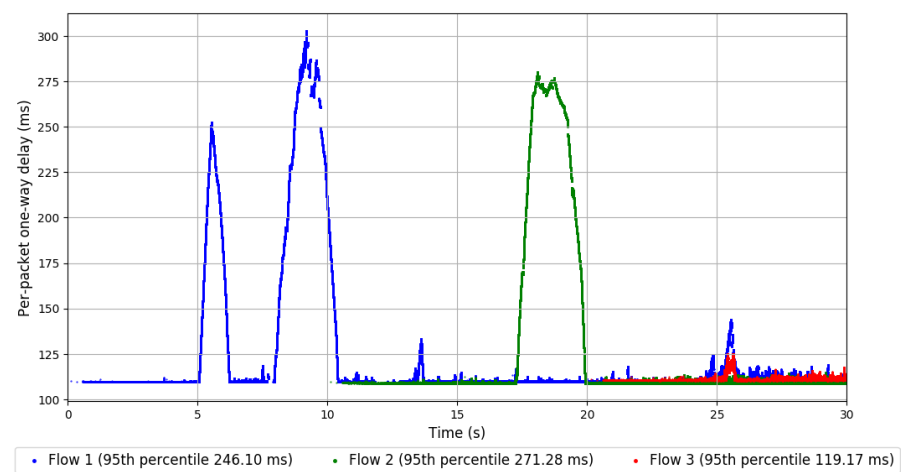
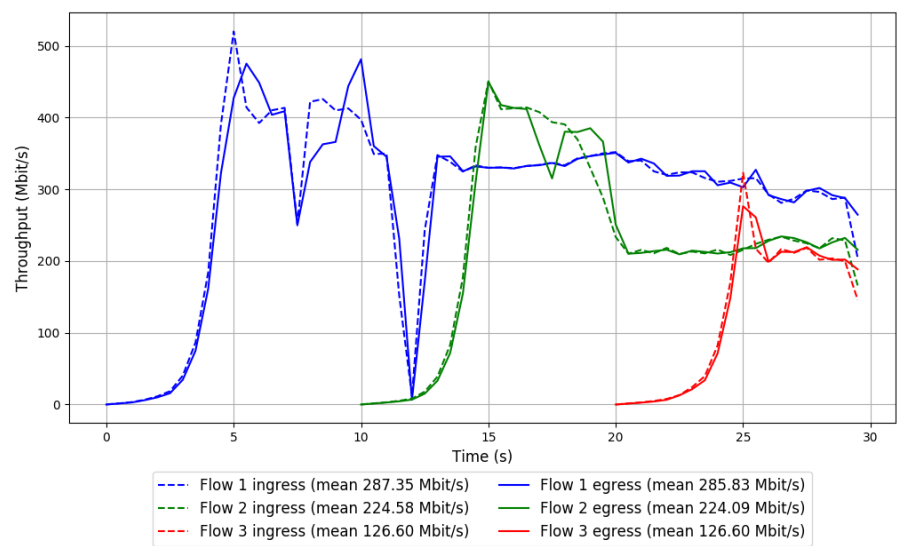
-- Flow 3:

Average throughput: 126.60 Mbit/s

95th percentile per-packet one-way delay: 119.168 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-03-14 01:38:30

End at: 2018-03-14 01:39:00

Below is generated by plot.py at 2018-03-14 06:39:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 401.12 Mbit/s

95th percentile per-packet one-way delay: 122.003 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 225.95 Mbit/s

95th percentile per-packet one-way delay: 121.164 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 196.15 Mbit/s

95th percentile per-packet one-way delay: 114.526 ms

Loss rate: 0.00%

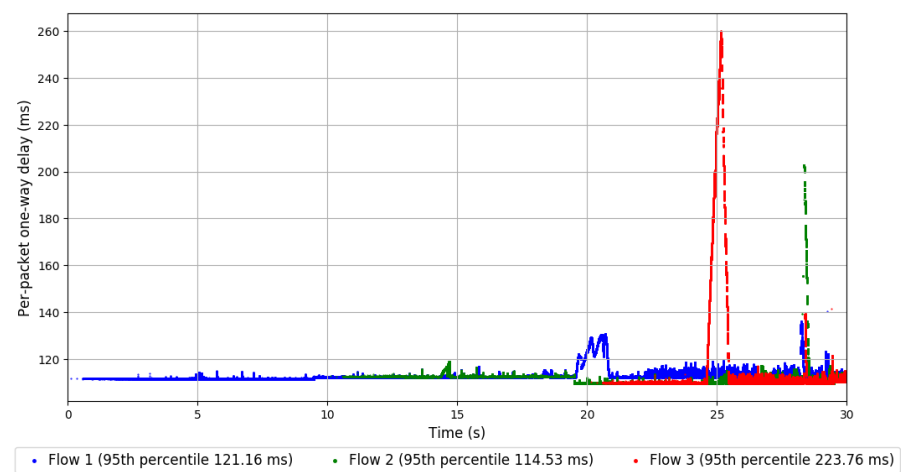
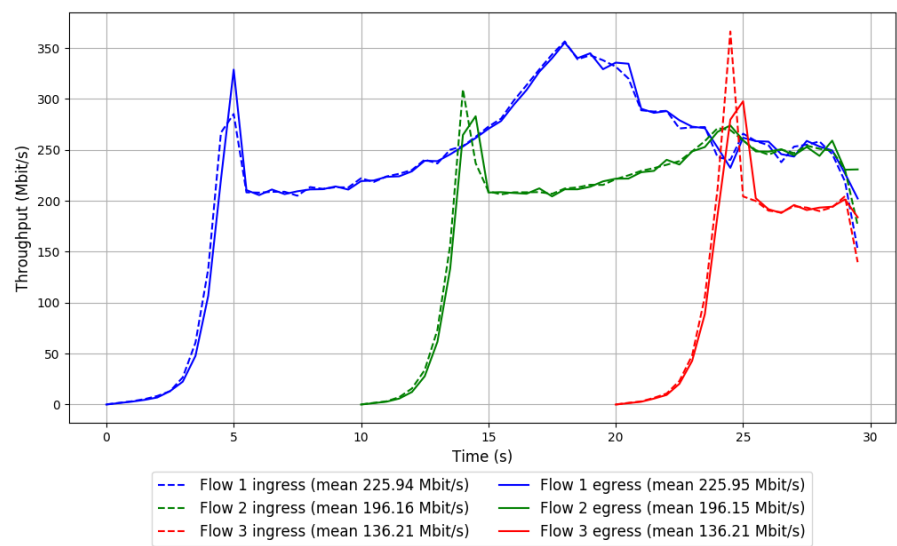
-- Flow 3:

Average throughput: 136.21 Mbit/s

95th percentile per-packet one-way delay: 223.761 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-03-14 01:58:30

End at: 2018-03-14 01:59:00

Below is generated by plot.py at 2018-03-14 06:41:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 383.24 Mbit/s

95th percentile per-packet one-way delay: 182.844 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 233.32 Mbit/s

95th percentile per-packet one-way delay: 153.297 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 116.17 Mbit/s

95th percentile per-packet one-way delay: 113.091 ms

Loss rate: 0.00%

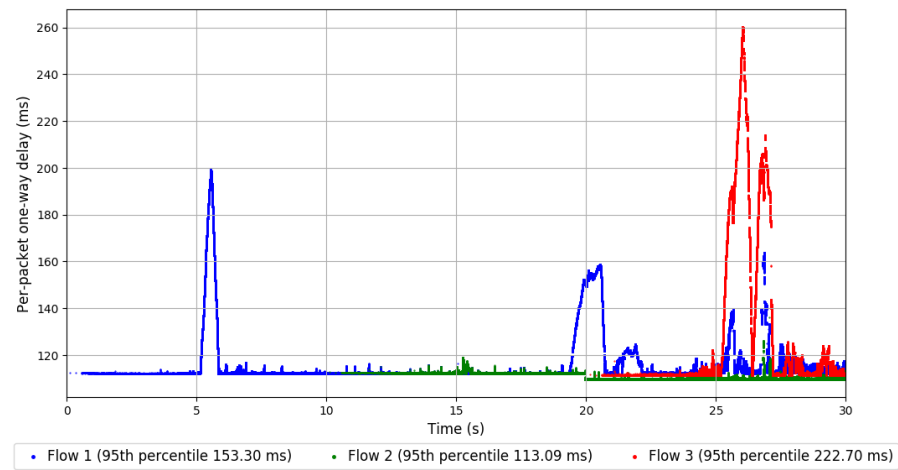
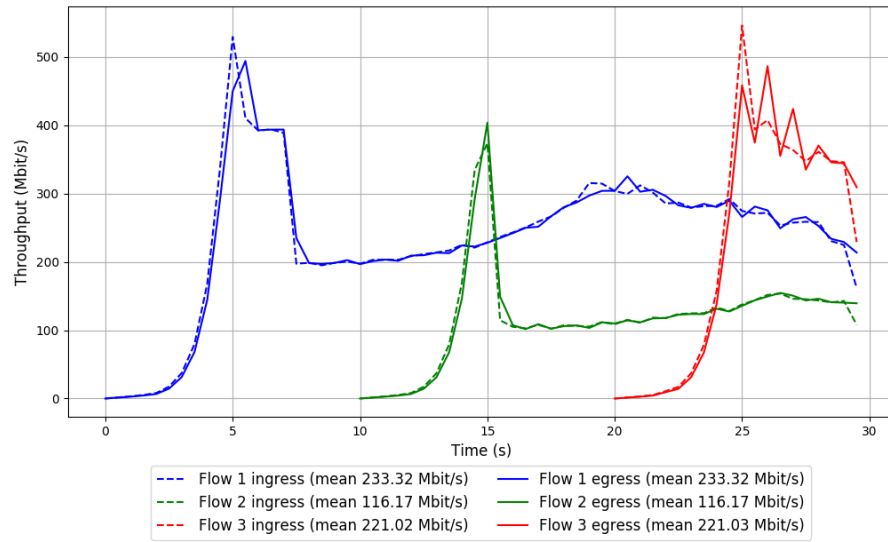
-- Flow 3:

Average throughput: 221.03 Mbit/s

95th percentile per-packet one-way delay: 222.702 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-03-14 02:17:54

End at: 2018-03-14 02:18:24

Below is generated by plot.py at 2018-03-14 06:43:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 489.94 Mbit/s

95th percentile per-packet one-way delay: 194.606 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 297.84 Mbit/s

95th percentile per-packet one-way delay: 173.427 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 188.54 Mbit/s

95th percentile per-packet one-way delay: 251.707 ms

Loss rate: 2.55%

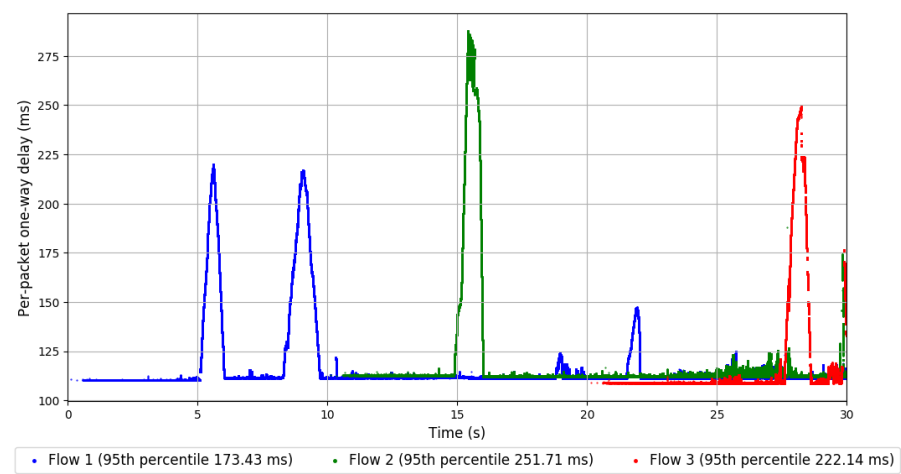
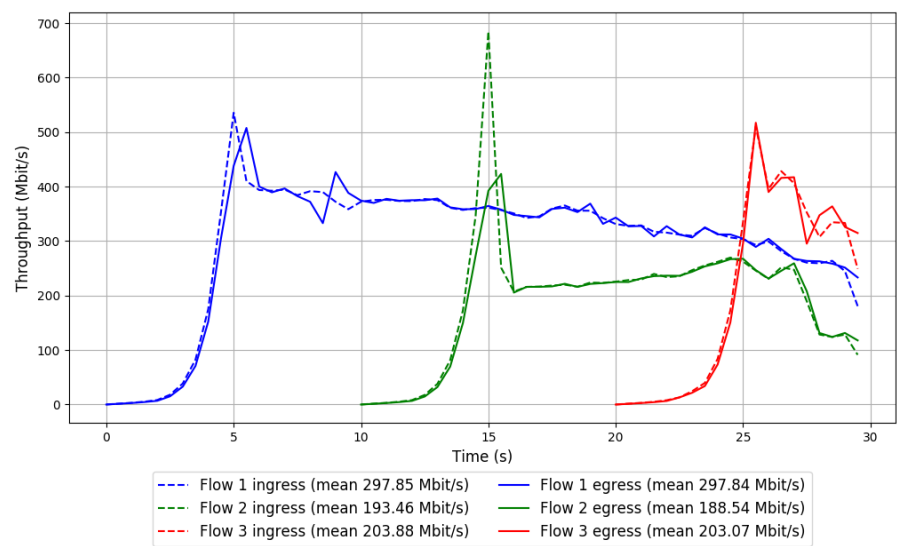
-- Flow 3:

Average throughput: 203.07 Mbit/s

95th percentile per-packet one-way delay: 222.141 ms

Loss rate: 0.35%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-03-14 02:37:11

End at: 2018-03-14 02:37:41

Below is generated by plot.py at 2018-03-14 06:43:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 412.16 Mbit/s

95th percentile per-packet one-way delay: 168.976 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 236.92 Mbit/s

95th percentile per-packet one-way delay: 159.227 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 196.33 Mbit/s

95th percentile per-packet one-way delay: 166.448 ms

Loss rate: 0.01%

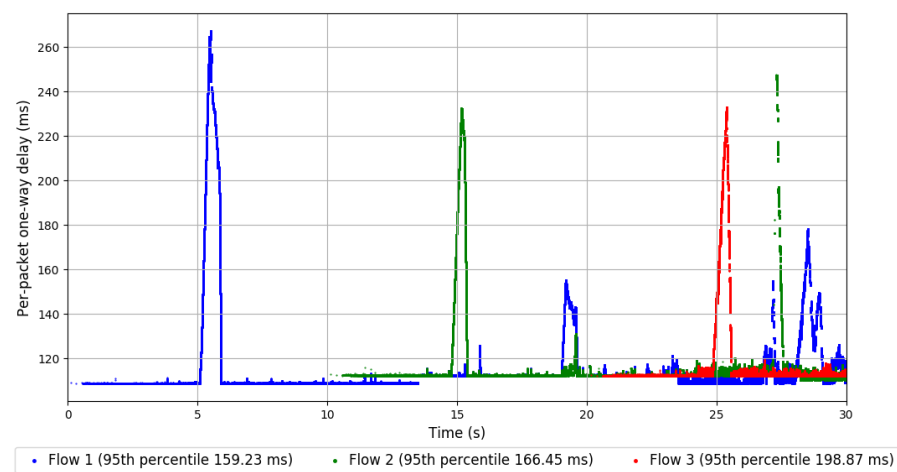
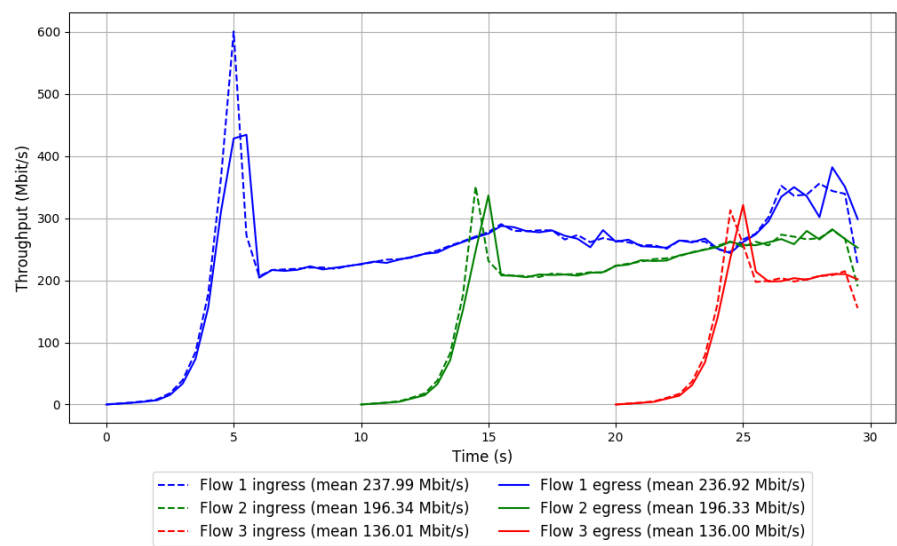
-- Flow 3:

Average throughput: 136.00 Mbit/s

95th percentile per-packet one-way delay: 198.869 ms

Loss rate: 0.02%

Run 10: Report of Vivace-latency — Data Link

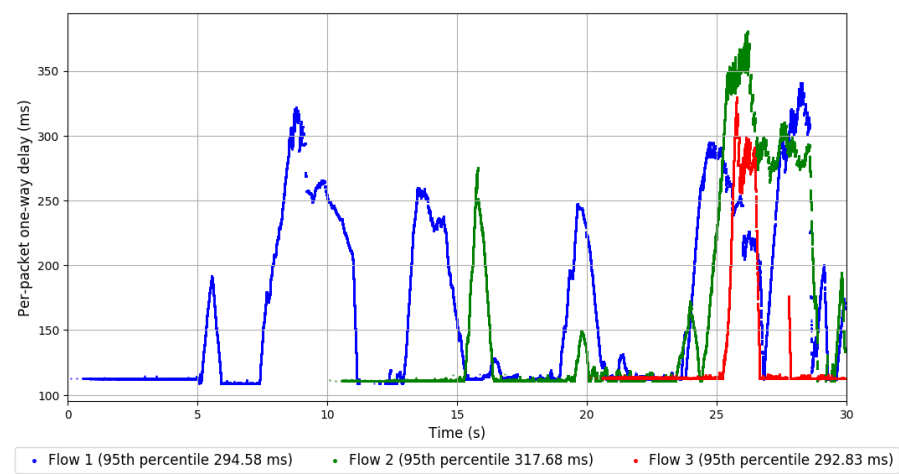
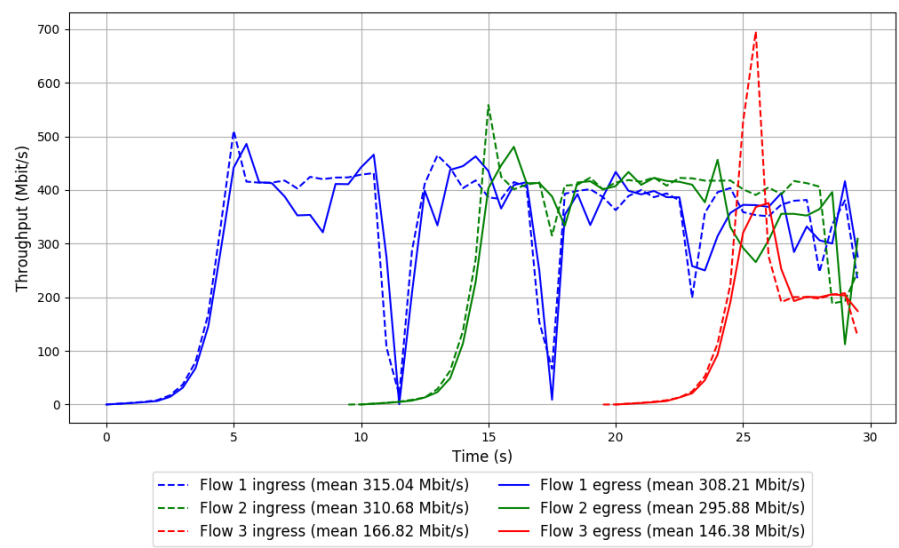


```
Run 1: Statistics of Vivace-loss

Start at: 2018-03-13 23:51:50
End at: 2018-03-13 23:52:20

# Below is generated by plot.py at 2018-03-14 06:48:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 553.34 Mbit/s
95th percentile per-packet one-way delay: 301.006 ms
Loss rate: 4.07%
-- Flow 1:
Average throughput: 308.21 Mbit/s
95th percentile per-packet one-way delay: 294.579 ms
Loss rate: 2.18%
-- Flow 2:
Average throughput: 295.88 Mbit/s
95th percentile per-packet one-way delay: 317.681 ms
Loss rate: 4.77%
-- Flow 3:
Average throughput: 146.38 Mbit/s
95th percentile per-packet one-way delay: 292.831 ms
Loss rate: 12.28%
```

Run 1: Report of Vivace-loss — Data Link

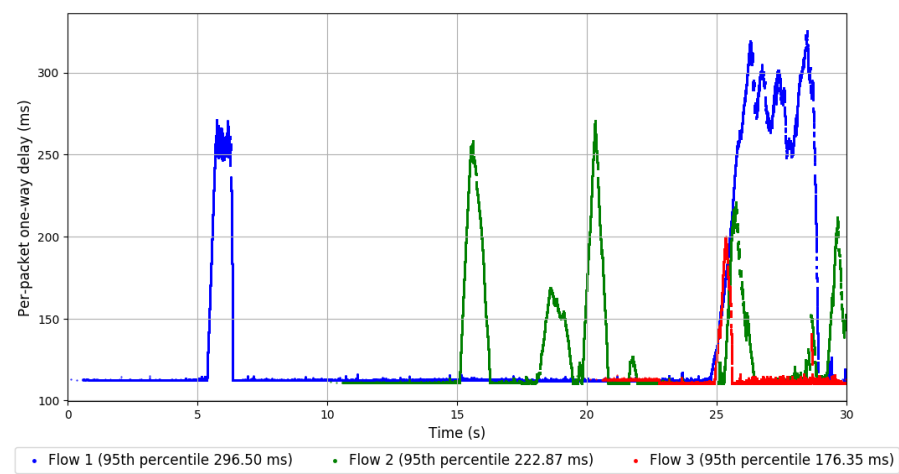
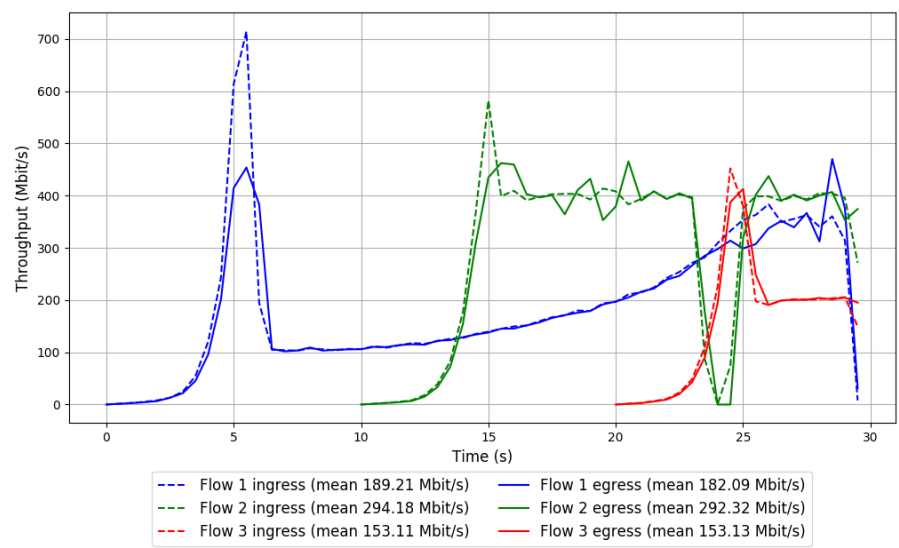


```
Run 2: Statistics of Vivace-loss

Start at: 2018-03-14 00:11:32
End at: 2018-03-14 00:12:02

# Below is generated by plot.py at 2018-03-14 06:48:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 426.63 Mbit/s
95th percentile per-packet one-way delay: 277.491 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 182.09 Mbit/s
95th percentile per-packet one-way delay: 296.499 ms
Loss rate: 3.74%
-- Flow 2:
Average throughput: 292.32 Mbit/s
95th percentile per-packet one-way delay: 222.873 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 153.13 Mbit/s
95th percentile per-packet one-way delay: 176.352 ms
Loss rate: 0.01%
```

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-03-14 00:30:47

End at: 2018-03-14 00:31:17

Below is generated by plot.py at 2018-03-14 06:48:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 483.52 Mbit/s

95th percentile per-packet one-way delay: 226.124 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 307.71 Mbit/s

95th percentile per-packet one-way delay: 233.589 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 195.92 Mbit/s

95th percentile per-packet one-way delay: 146.767 ms

Loss rate: 0.00%

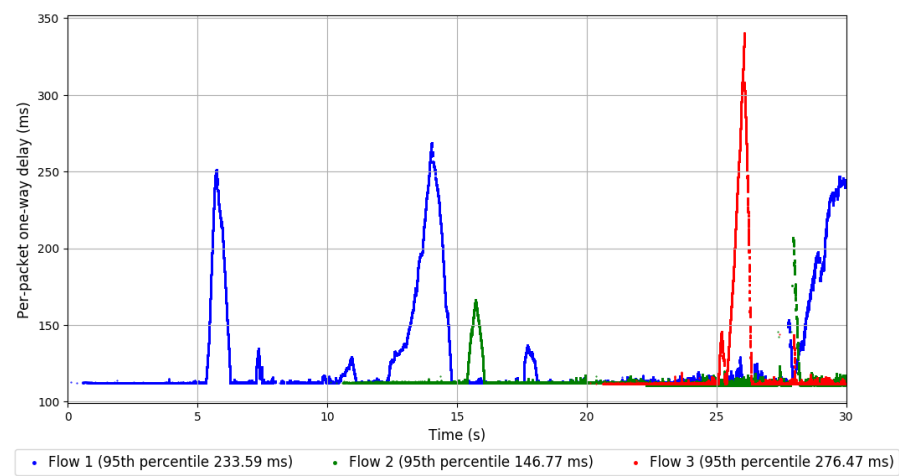
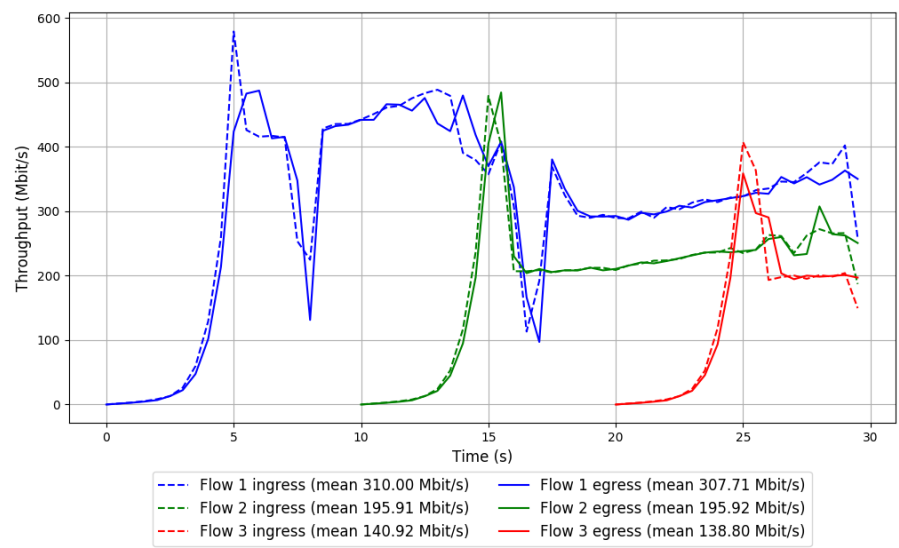
-- Flow 3:

Average throughput: 138.80 Mbit/s

95th percentile per-packet one-way delay: 276.468 ms

Loss rate: 1.52%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-03-14 00:50:33

End at: 2018-03-14 00:51:03

Below is generated by plot.py at 2018-03-14 06:48:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.94 Mbit/s

95th percentile per-packet one-way delay: 292.746 ms

Loss rate: 5.07%

-- Flow 1:

Average throughput: 196.38 Mbit/s

95th percentile per-packet one-way delay: 297.531 ms

Loss rate: 7.48%

-- Flow 2:

Average throughput: 119.24 Mbit/s

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

Loss rate: 0.00%

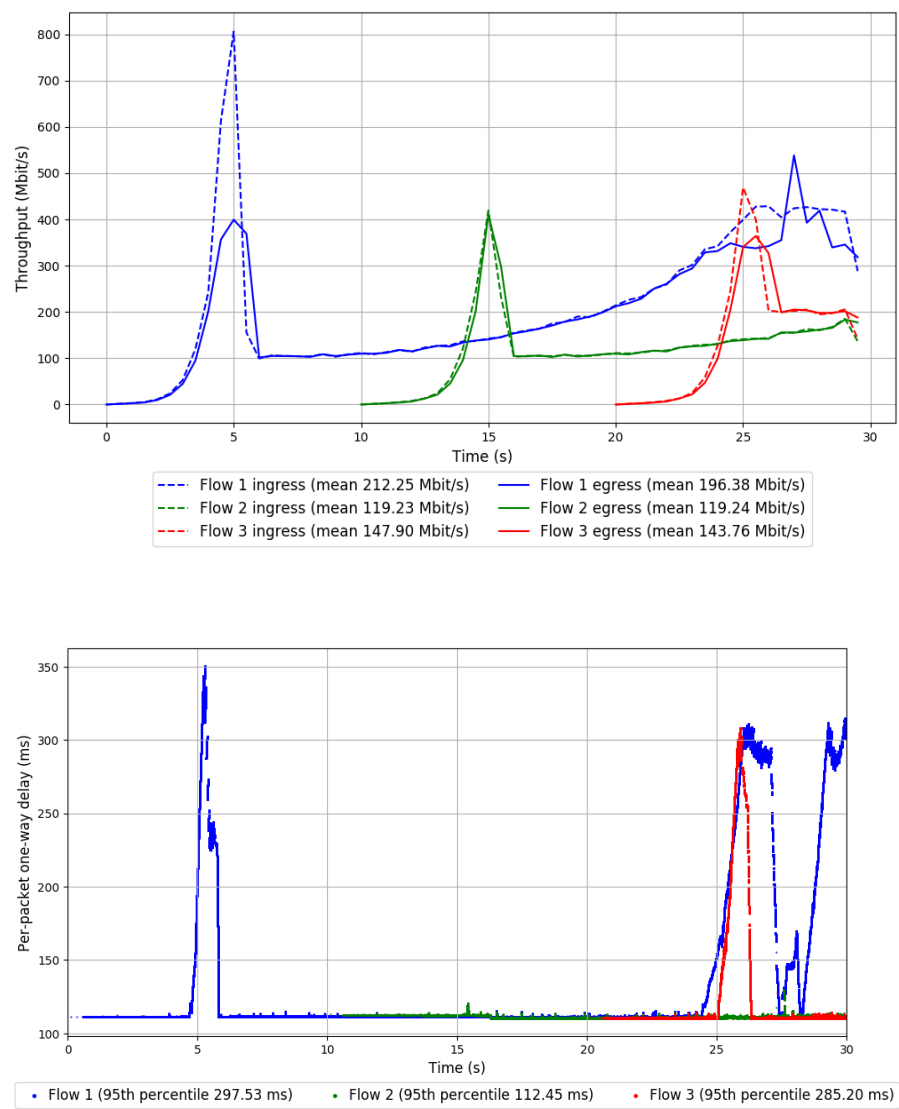
-- Flow 3:

Average throughput: 143.76 Mbit/s

95th percentile per-packet one-way delay: 285.197 ms

Loss rate: 2.80%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-03-14 01:09:32

End at: 2018-03-14 01:10:02

Below is generated by plot.py at 2018-03-14 06:49:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 523.13 Mbit/s

95th percentile per-packet one-way delay: 303.218 ms

Loss rate: 2.57%

-- Flow 1:

Average throughput: 345.38 Mbit/s

95th percentile per-packet one-way delay: 295.808 ms

Loss rate: 1.65%

-- Flow 2:

Average throughput: 219.84 Mbit/s

95th percentile per-packet one-way delay: 306.451 ms

Loss rate: 5.20%

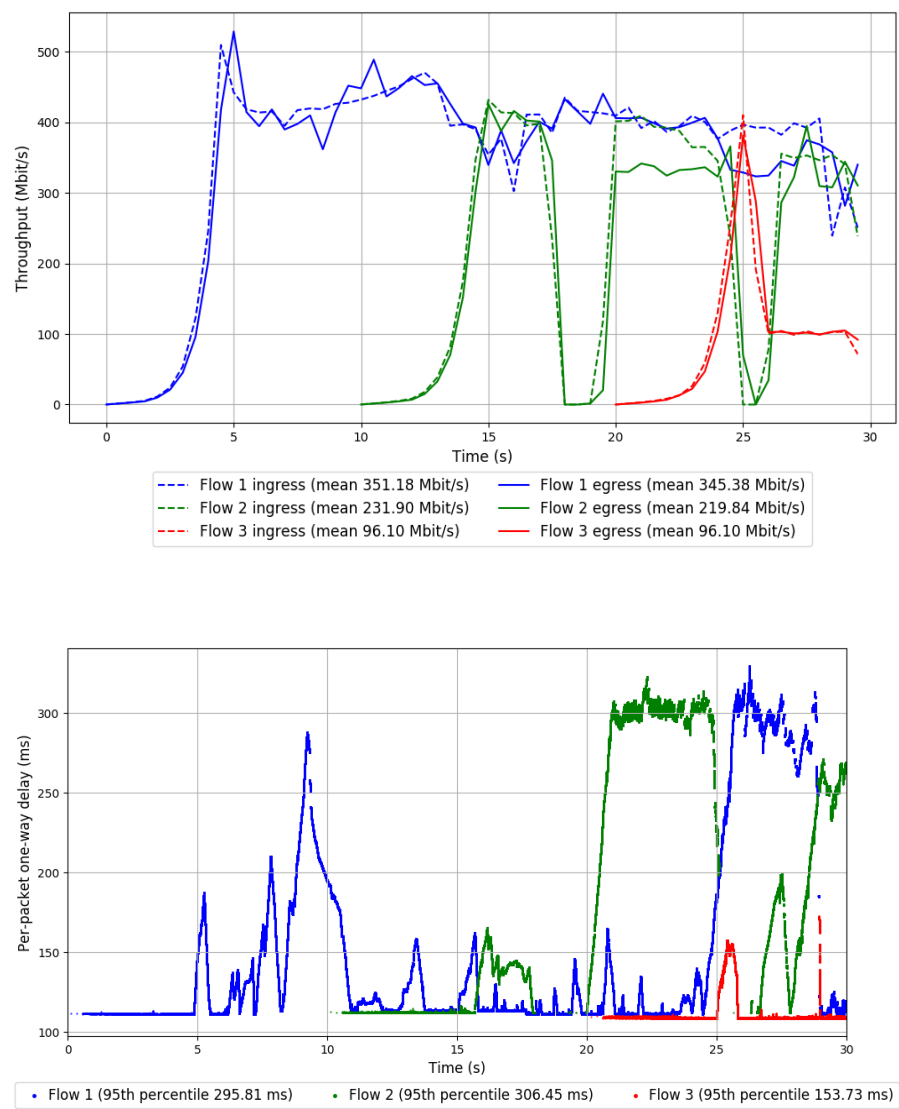
-- Flow 3:

Average throughput: 96.10 Mbit/s

95th percentile per-packet one-way delay: 153.727 ms

Loss rate: 0.00%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-03-14 01:29:11

End at: 2018-03-14 01:29:41

Below is generated by plot.py at 2018-03-14 06:49:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 383.97 Mbit/s

95th percentile per-packet one-way delay: 318.735 ms

Loss rate: 6.98%

-- Flow 1:

Average throughput: 169.85 Mbit/s

95th percentile per-packet one-way delay: 286.796 ms

Loss rate: 8.29%

-- Flow 2:

Average throughput: 229.62 Mbit/s

95th percentile per-packet one-way delay: 323.295 ms

Loss rate: 3.23%

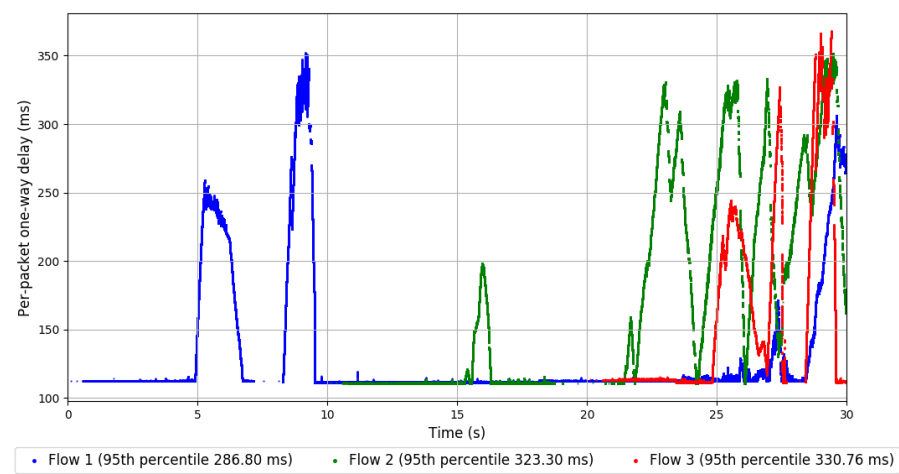
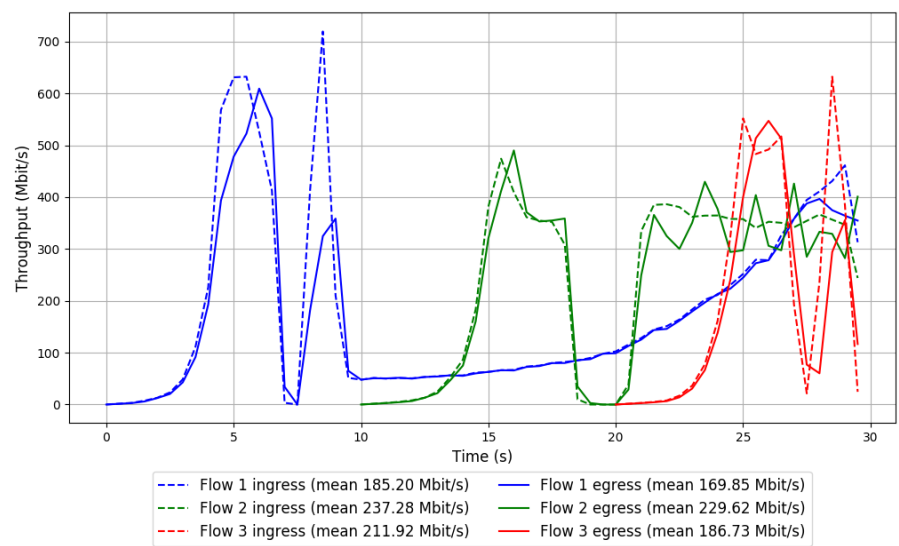
-- Flow 3:

Average throughput: 186.73 Mbit/s

95th percentile per-packet one-way delay: 330.765 ms

Loss rate: 11.95%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-03-14 01:49:07

End at: 2018-03-14 01:49:37

Below is generated by plot.py at 2018-03-14 06:51:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 445.41 Mbit/s

95th percentile per-packet one-way delay: 249.908 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 283.99 Mbit/s

95th percentile per-packet one-way delay: 256.621 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 201.43 Mbit/s

95th percentile per-packet one-way delay: 195.972 ms

Loss rate: 1.08%

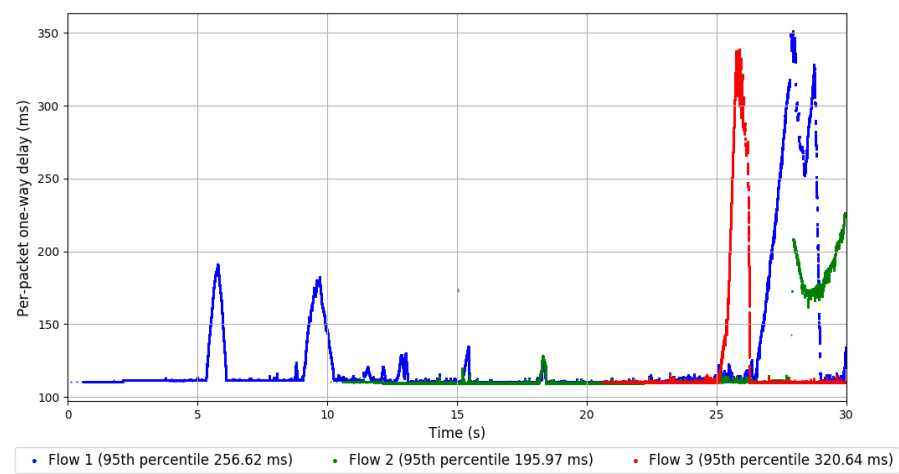
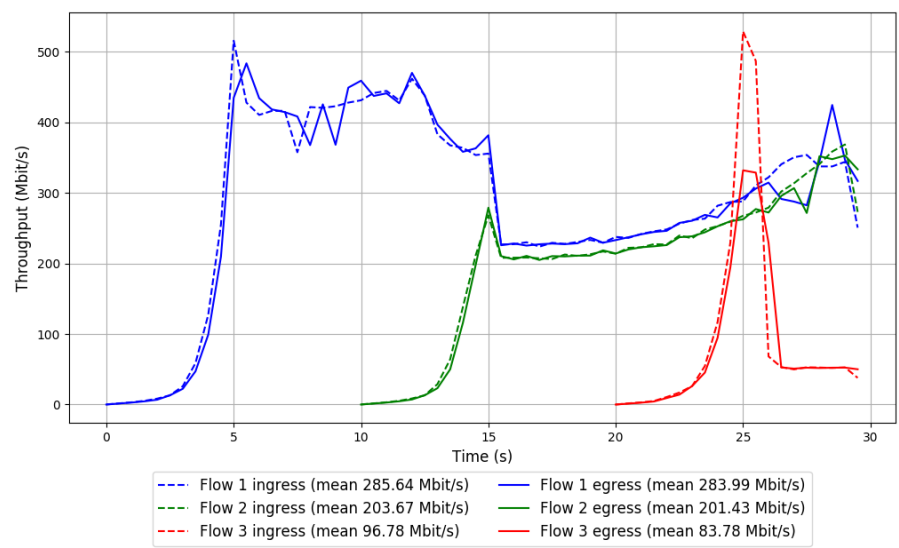
-- Flow 3:

Average throughput: 83.78 Mbit/s

95th percentile per-packet one-way delay: 320.637 ms

Loss rate: 13.43%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-03-14 02:08:32

End at: 2018-03-14 02:09:02

Below is generated by plot.py at 2018-03-14 06:54:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 582.41 Mbit/s

95th percentile per-packet one-way delay: 303.141 ms

Loss rate: 2.48%

-- Flow 1:

Average throughput: 323.33 Mbit/s

95th percentile per-packet one-way delay: 277.527 ms

Loss rate: 2.01%

-- Flow 2:

Average throughput: 284.73 Mbit/s

95th percentile per-packet one-way delay: 308.457 ms

Loss rate: 3.54%

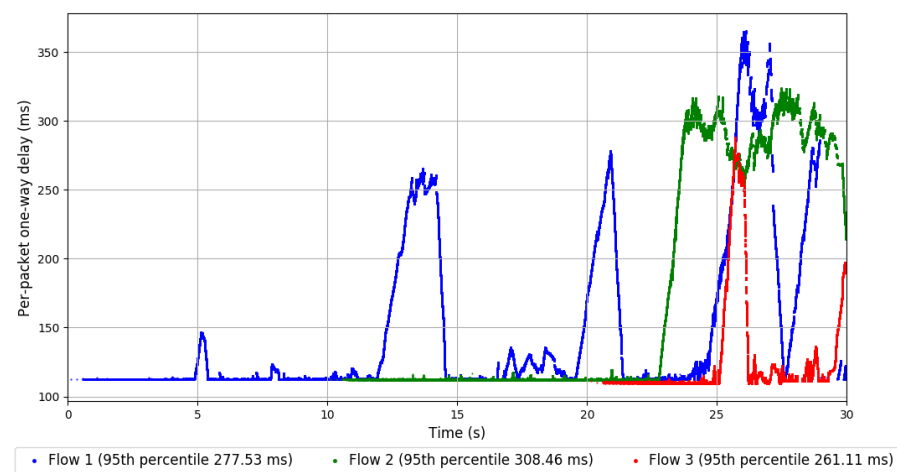
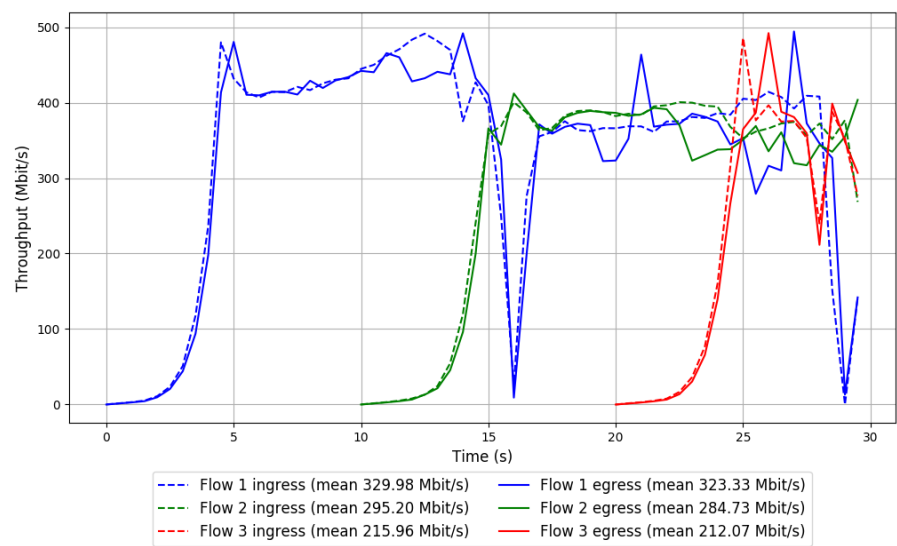
-- Flow 3:

Average throughput: 212.07 Mbit/s

95th percentile per-packet one-way delay: 261.109 ms

Loss rate: 1.76%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-03-14 02:27:57

End at: 2018-03-14 02:28:27

Below is generated by plot.py at 2018-03-14 06:56:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 545.66 Mbit/s

95th percentile per-packet one-way delay: 305.081 ms

Loss rate: 1.97%

-- Flow 1:

Average throughput: 331.10 Mbit/s

95th percentile per-packet one-way delay: 248.750 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 247.13 Mbit/s

95th percentile per-packet one-way delay: 313.936 ms

Loss rate: 3.45%

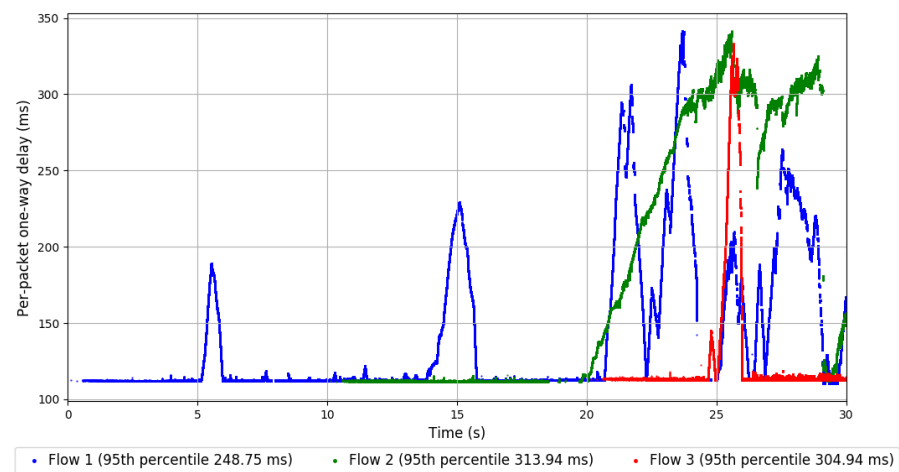
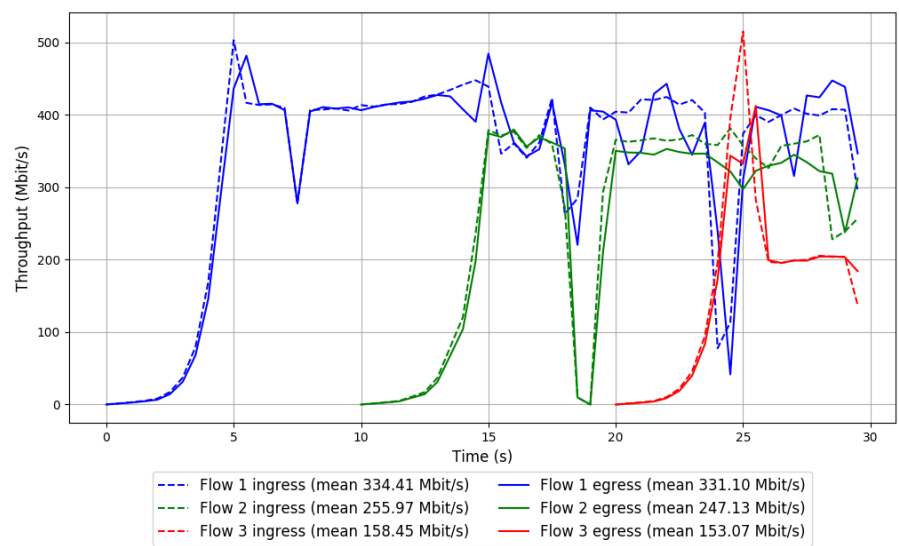
-- Flow 3:

Average throughput: 153.07 Mbit/s

95th percentile per-packet one-way delay: 304.941 ms

Loss rate: 3.38%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-03-14 02:47:12

End at: 2018-03-14 02:47:42

Below is generated by plot.py at 2018-03-14 06:56:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 352.65 Mbit/s

95th percentile per-packet one-way delay: 161.011 ms

Loss rate: 1.59%

-- Flow 1:

Average throughput: 152.44 Mbit/s

95th percentile per-packet one-way delay: 242.764 ms

Loss rate: 3.55%

-- Flow 2:

Average throughput: 221.24 Mbit/s

95th percentile per-packet one-way delay: 130.698 ms

Loss rate: 0.06%

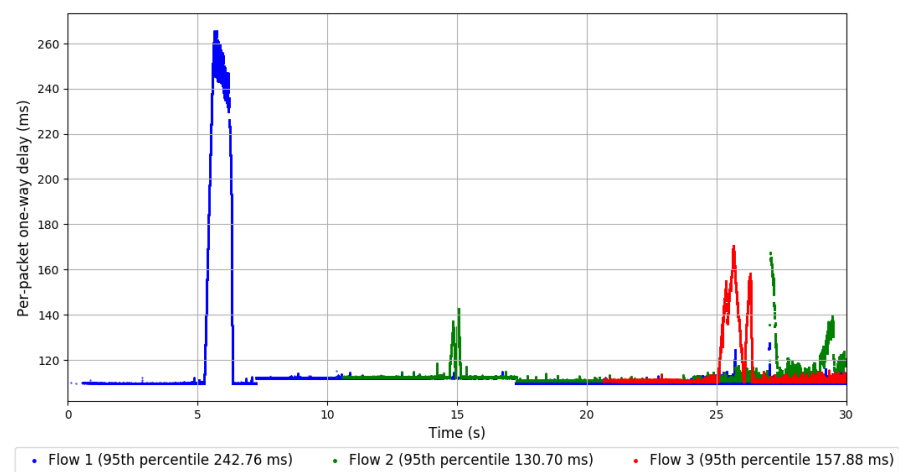
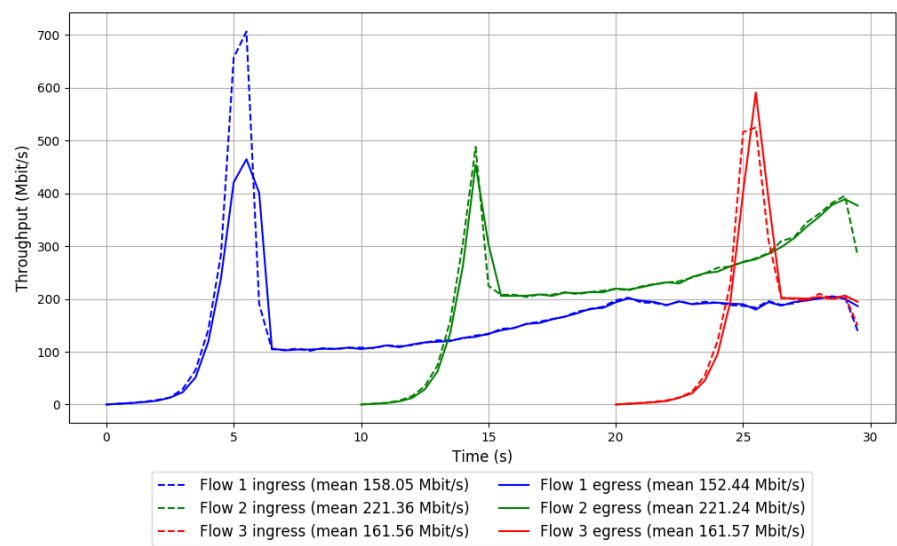
-- Flow 3:

Average throughput: 161.57 Mbit/s

95th percentile per-packet one-way delay: 157.879 ms

Loss rate: 0.00%

Run 10: Report of Vivace-loss — Data Link

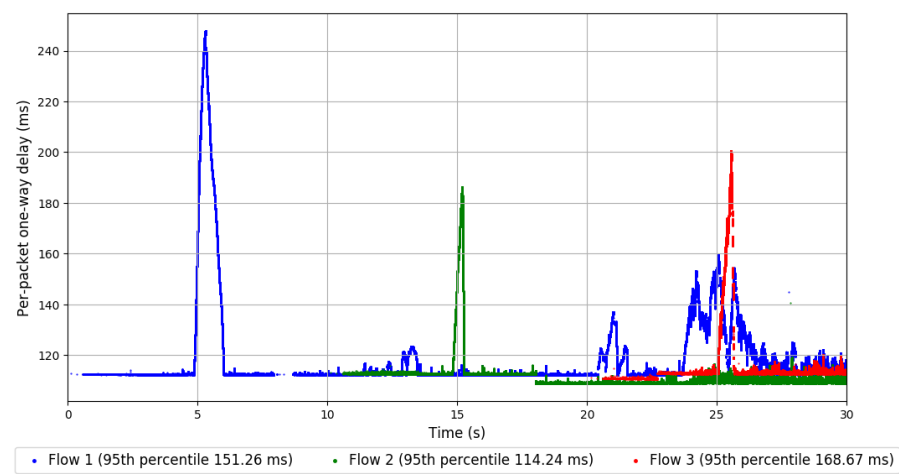
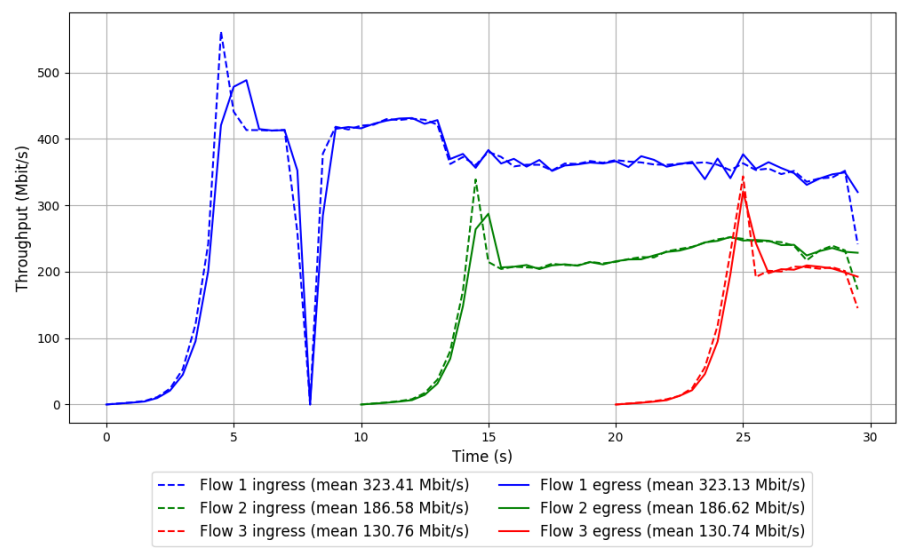


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-03-13 23:48:37
End at: 2018-03-13 23:49:07

# Below is generated by plot.py at 2018-03-14 06:57:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 490.11 Mbit/s
95th percentile per-packet one-way delay: 148.872 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 323.13 Mbit/s
95th percentile per-packet one-way delay: 151.256 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 186.62 Mbit/s
95th percentile per-packet one-way delay: 114.243 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 130.74 Mbit/s
95th percentile per-packet one-way delay: 168.672 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-03-14 00:08:04

End at: 2018-03-14 00:08:34

Below is generated by plot.py at 2018-03-14 06:58:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 532.77 Mbit/s

95th percentile per-packet one-way delay: 297.381 ms

Loss rate: 1.67%

-- Flow 1:

Average throughput: 292.60 Mbit/s

95th percentile per-packet one-way delay: 313.091 ms

Loss rate: 2.83%

-- Flow 2:

Average throughput: 295.10 Mbit/s

95th percentile per-packet one-way delay: 229.906 ms

Loss rate: 0.25%

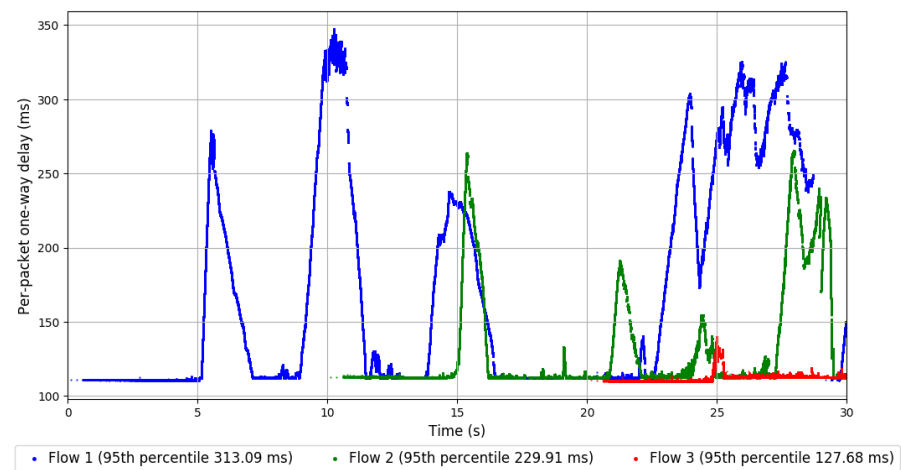
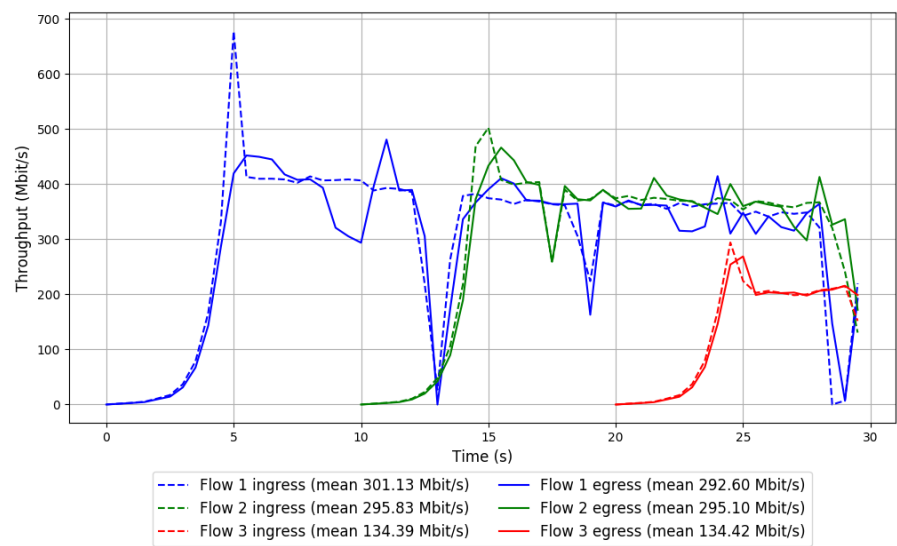
-- Flow 3:

Average throughput: 134.42 Mbit/s

95th percentile per-packet one-way delay: 127.684 ms

Loss rate: 0.02%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-03-14 00:27:21

End at: 2018-03-14 00:27:51

Below is generated by plot.py at 2018-03-14 06:58:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 512.83 Mbit/s

95th percentile per-packet one-way delay: 280.697 ms

Loss rate: 1.59%

-- Flow 1:

Average throughput: 304.03 Mbit/s

95th percentile per-packet one-way delay: 307.326 ms

Loss rate: 1.74%

-- Flow 2:

Average throughput: 202.27 Mbit/s

95th percentile per-packet one-way delay: 252.480 ms

Loss rate: 0.79%

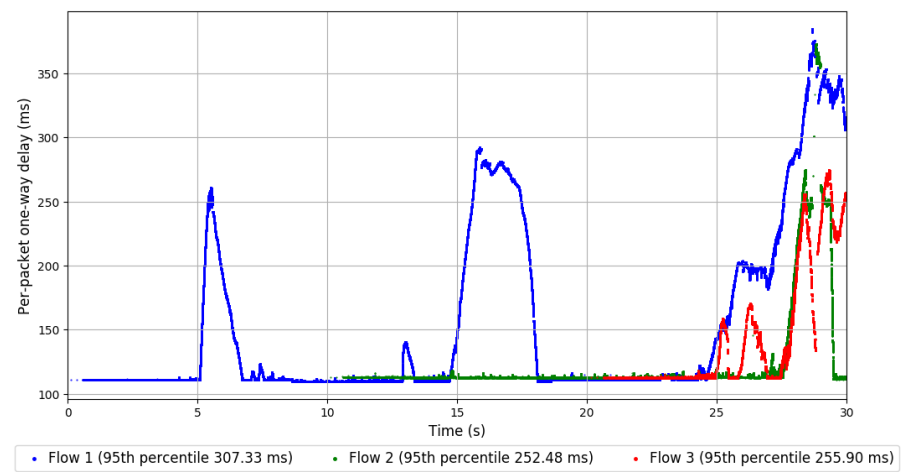
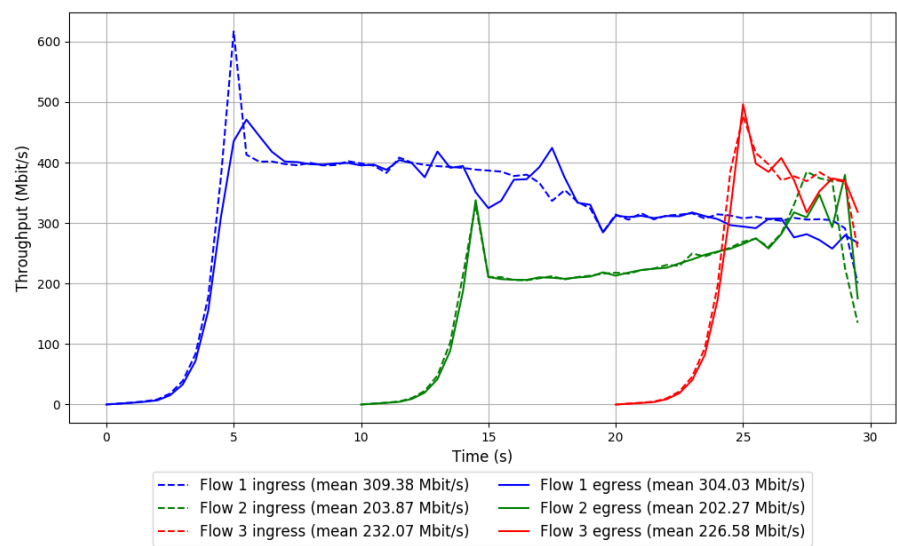
-- Flow 3:

Average throughput: 226.58 Mbit/s

95th percentile per-packet one-way delay: 255.900 ms

Loss rate: 2.41%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-03-14 00:47:15

End at: 2018-03-14 00:47:45

Below is generated by plot.py at 2018-03-14 07:00:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 530.10 Mbit/s

95th percentile per-packet one-way delay: 302.584 ms

Loss rate: 2.40%

-- Flow 1:

Average throughput: 316.28 Mbit/s

95th percentile per-packet one-way delay: 262.578 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 259.90 Mbit/s

95th percentile per-packet one-way delay: 310.301 ms

Loss rate: 6.65%

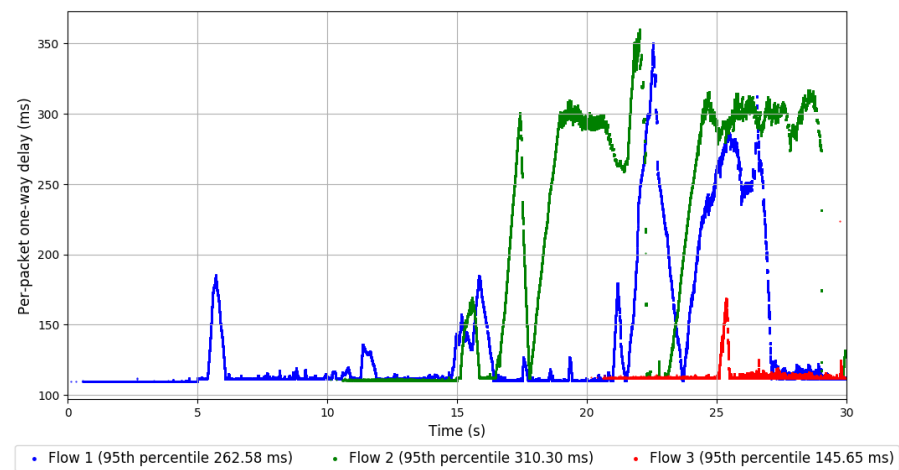
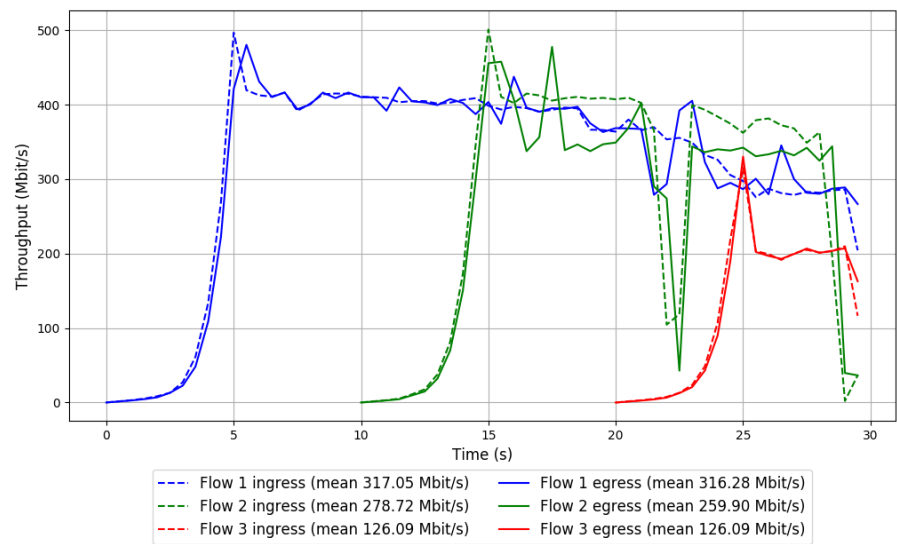
-- Flow 3:

Average throughput: 126.09 Mbit/s

95th percentile per-packet one-way delay: 145.649 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-03-14 01:06:13

End at: 2018-03-14 01:06:43

Below is generated by plot.py at 2018-03-14 07:00:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 420.87 Mbit/s

95th percentile per-packet one-way delay: 277.716 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 246.97 Mbit/s

95th percentile per-packet one-way delay: 288.700 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 188.06 Mbit/s

95th percentile per-packet one-way delay: 114.563 ms

Loss rate: 0.00%

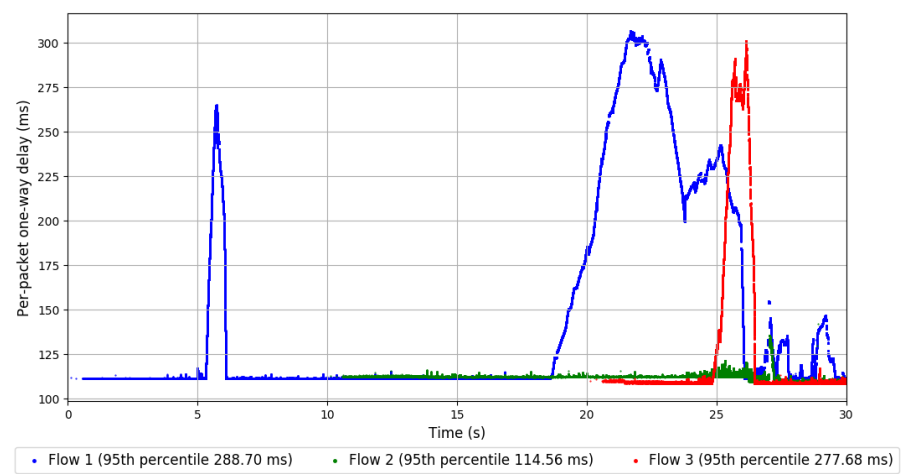
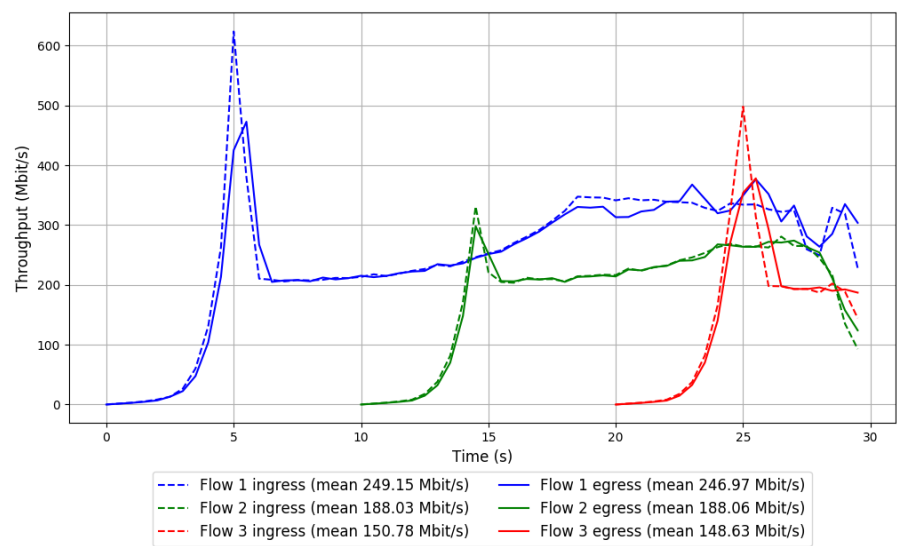
-- Flow 3:

Average throughput: 148.63 Mbit/s

95th percentile per-packet one-way delay: 277.682 ms

Loss rate: 1.43%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-03-14 01:25:48

End at: 2018-03-14 01:26:18

Below is generated by plot.py at 2018-03-14 07:01:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 497.25 Mbit/s

95th percentile per-packet one-way delay: 135.052 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 317.75 Mbit/s

95th percentile per-packet one-way delay: 134.317 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 204.12 Mbit/s

95th percentile per-packet one-way delay: 116.998 ms

Loss rate: 0.00%

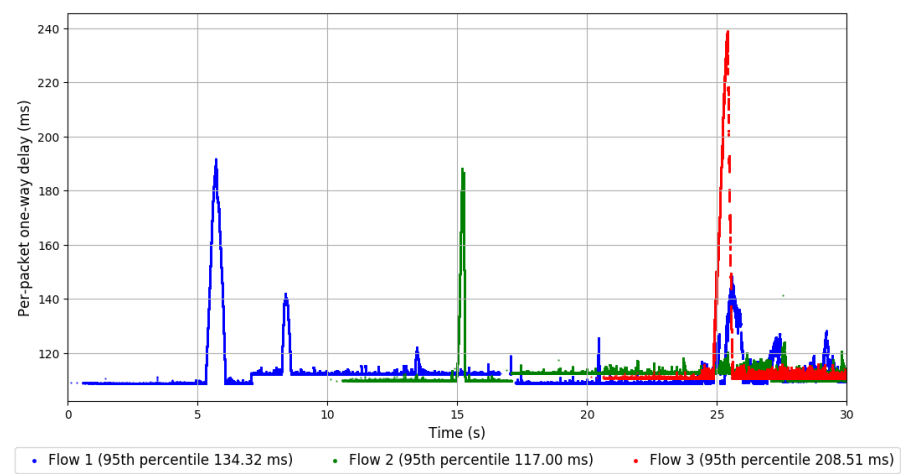
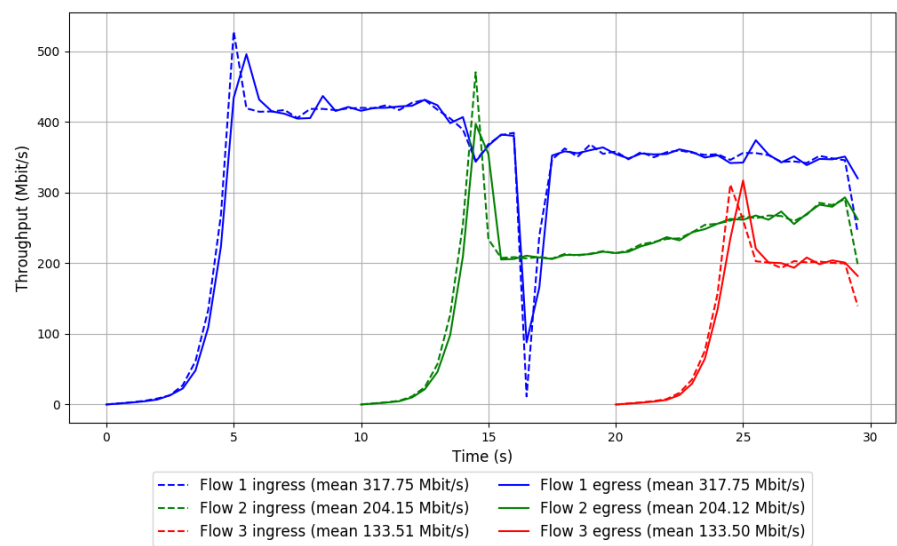
-- Flow 3:

Average throughput: 133.50 Mbit/s

95th percentile per-packet one-way delay: 208.506 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-03-14 01:45:37

End at: 2018-03-14 01:46:07

Below is generated by plot.py at 2018-03-14 07:02:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 528.02 Mbit/s

95th percentile per-packet one-way delay: 294.395 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 308.35 Mbit/s

95th percentile per-packet one-way delay: 298.848 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 265.02 Mbit/s

95th percentile per-packet one-way delay: 244.673 ms

Loss rate: 0.94%

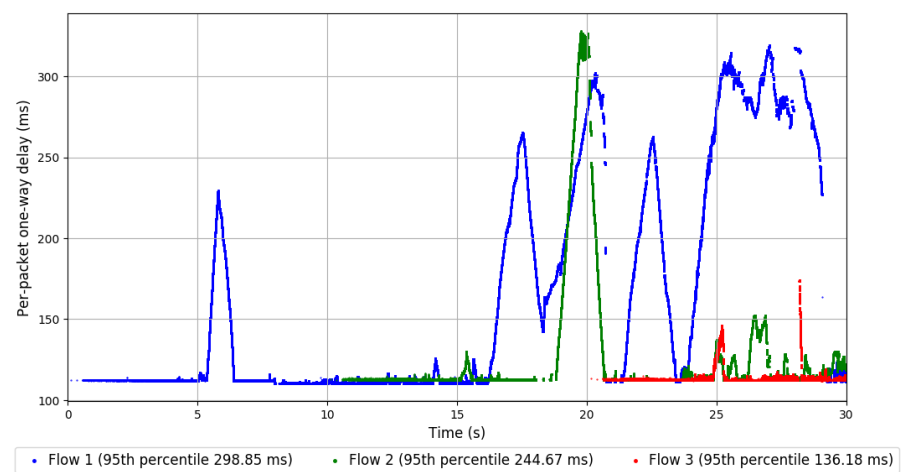
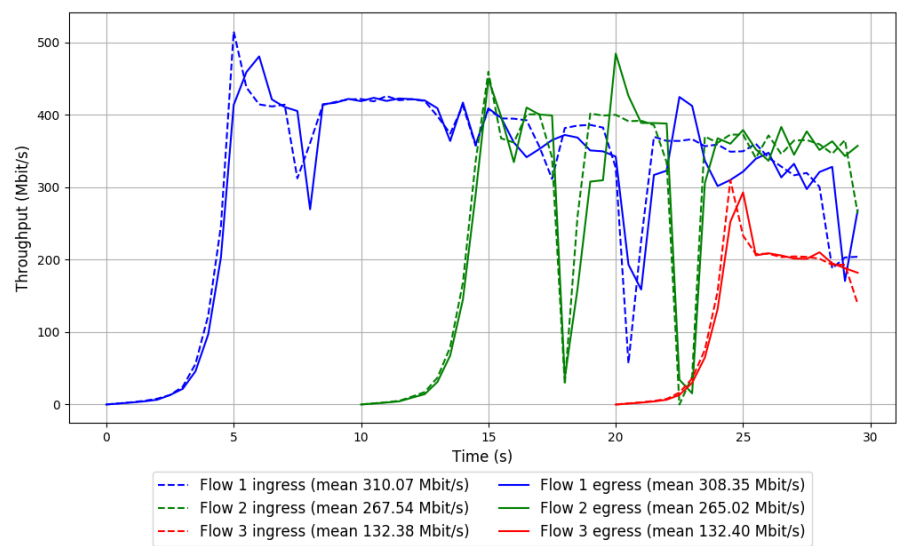
-- Flow 3:

Average throughput: 132.40 Mbit/s

95th percentile per-packet one-way delay: 136.179 ms

Loss rate: 0.00%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-03-14 02:05:10

End at: 2018-03-14 02:05:40

Below is generated by plot.py at 2018-03-14 07:02:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 496.38 Mbit/s

95th percentile per-packet one-way delay: 232.259 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 318.98 Mbit/s

95th percentile per-packet one-way delay: 246.395 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 204.82 Mbit/s

95th percentile per-packet one-way delay: 122.857 ms

Loss rate: 0.00%

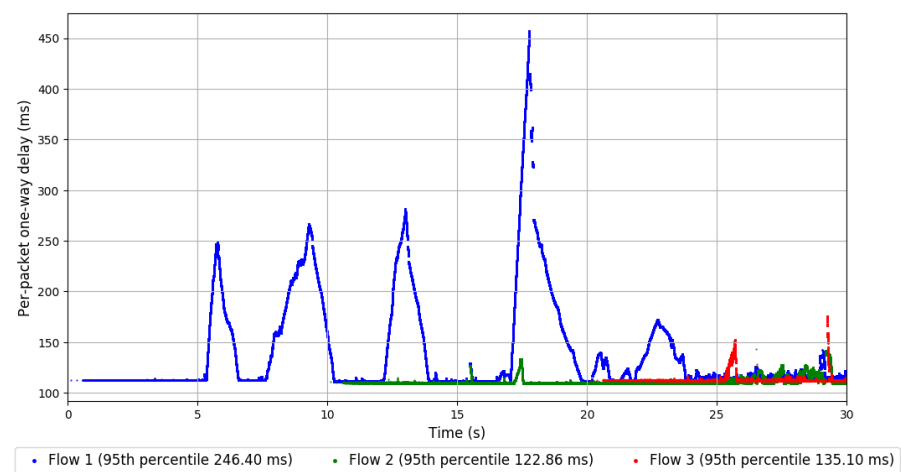
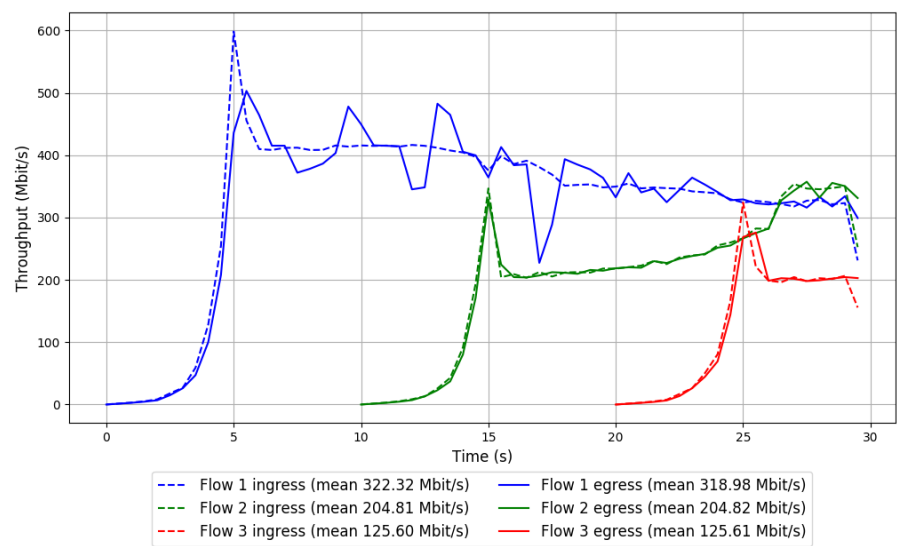
-- Flow 3:

Average throughput: 125.61 Mbit/s

95th percentile per-packet one-way delay: 135.102 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-03-14 02:24:40

End at: 2018-03-14 02:25:10

Below is generated by plot.py at 2018-03-14 07:03:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 441.51 Mbit/s

95th percentile per-packet one-way delay: 272.284 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 320.17 Mbit/s

95th percentile per-packet one-way delay: 288.324 ms

Loss rate: 1.27%

-- Flow 2:

Average throughput: 115.24 Mbit/s

95th percentile per-packet one-way delay: 113.098 ms

Loss rate: 0.00%

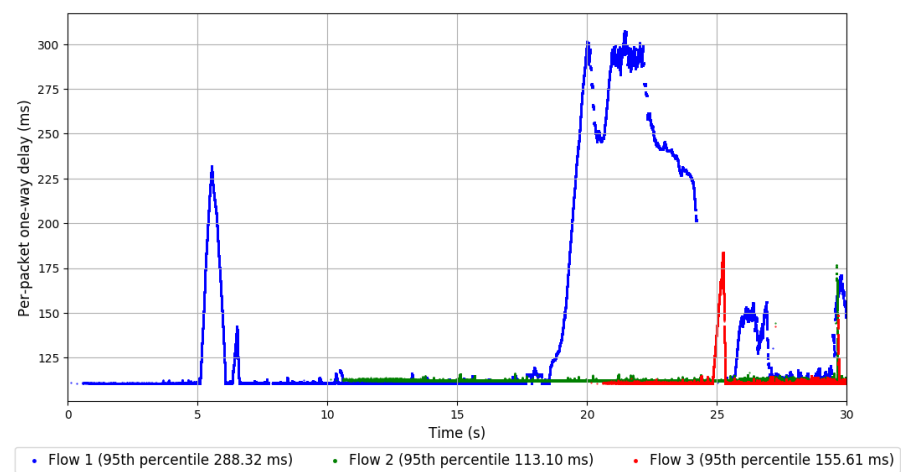
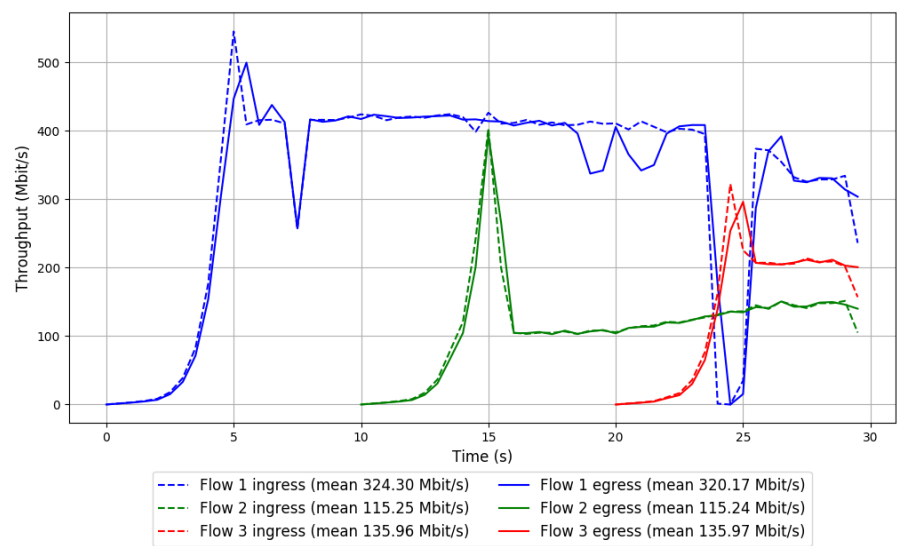
-- Flow 3:

Average throughput: 135.97 Mbit/s

95th percentile per-packet one-way delay: 155.611 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-03-14 02:43:44

End at: 2018-03-14 02:44:14

Below is generated by plot.py at 2018-03-14 07:03:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 529.09 Mbit/s

95th percentile per-packet one-way delay: 209.736 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 322.70 Mbit/s

95th percentile per-packet one-way delay: 239.397 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 245.94 Mbit/s

95th percentile per-packet one-way delay: 162.633 ms

Loss rate: 0.05%

-- Flow 3:

Average throughput: 130.30 Mbit/s

95th percentile per-packet one-way delay: 169.463 ms

Loss rate: 0.00%

Run 10: Report of Vivace-LTE — Data Link

